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Experimental Thermal Conductivity Values for Mixtures of R32, R125, R134a, and Propane

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NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Raymond G. Kammer, Director

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Experimental thermal conductivity values for mixtures of R32, R125, R134a, and propane

R.A. Perkins, E. Schwarzberg, X. Gao

Experimental measurements are reported for the thermal conductivity of eight binary and two ternary mixtures containing difluoromethane (R32), pentafluoroethane (R125), 1,1,1,2-tetrafluoroethane (R134a), and propane (R290). The mixtures were prepared gravimetrically from the pure components for accurate knowledge of the composition. Both the vapor and liquid phases of each mixture were studied over a temperature range from 245 K to 345 K with maximum pressures of 10 MPa – 20 MPa. The thermal conductivity data for the vapor phase of each mixture was obtained using transient and steady-state hot wires. Bare tungsten hot wires (4 μm diameter) were used for the vapor-phase measurements with both the transient and steady-state modes of operation. The extremely small wire diameter minimized corrections to the transient results that account for the finite wire diameter. Steady-state measurements allowed measurements at lower pressures where the transient thermal wave penetrates to the outer cell wall in less than 1 s. Comparison between the transient and steady-state vapor results provides a cross-check of the reliability of the vapor results. Anodized tantalum hot wires (25 μm diameter) were used for the liquid-phase measurements with the transient mode of operation. The anodized layer of tantalum pentoxide provides the electrical insulation required for accurate measurements in these highly polar and moderately electrically conducting liquids. The measurements cover the temperature region from 229 K to 347 K in the subcritical-vapor and compressed-liquid phases. A total of 5683 measurements are reported with an estimated uncertainty of ±3 %. The data are compared with REFPROP version 6.01, a wide range extended corresponding states correlation for the thermophysical properties of alternative refrigerants and their mixtures.

Key Words: hot wire; mixtures; propane; R32; R125; R134a; steady state; thermal conductivity; transient.

1. Introduction

This report is the archival record for the results of steady-state and transient hot-wire measurements on eight binary and two ternary mixtures containing difluoromethane (R32), pentafluoroethane (R125), 1,1,1,2-tetrafluoroethane (R134a), and propane (R290). The 10 mixtures were prepared gravimetrically from the pure gas samples. Each of the pure gas samples was verified to have a molar purity greater than 99.9 mol % using gas chromatography. All mixture compositions reported in this work are on a molar basis. The quantity of data obtained is so large that an electronically accessible version is necessary to facilitate use of the data. All of the hot-wire results described in this Interagency Report are available in an ASCII form at the NIST anonymous ftp site:

`ftp://ftp.boulder.nist.gov/pub/fluids/NIST_Data/Hot-Wire/`

Each of the two hot-wire instruments used in this study have been described elsewhere [1, 2]. These hot-wire instruments have two hot wires of different lengths, normally bare 12.7 μm diameter hot wires made from platinum, which are operated in a differential mode using a Wheatstone bridge circuit to eliminate effects due to axial conduction near the ends of the wires. These transient hot-wire instruments are highly automated and cover a wide range of fluid conditions with a combined temperature range of 30 K to

750 K and pressures from 0.05 MPa to 70 MPa. The low-temperature system [1] has been used previously to study the thermal conductivity of oxygen [3], hydrogen [4, 5], methane [4, 6], ethane [4, 7], methane-ethane mixtures [8, 9], propane [4, 10], argon [11–15], nitrogen [11, 16], nitrogen-oxygen-argon mixtures [17], neon-nitrogen mixtures [18], R134a [19, 20], and R123 [21]. The high-temperature instrument [2] has been used to study nitrogen, argon, toluene, R134a [19, 20], and R123 [21].

The present measurements did not rely on the polarization technique [19–21] that we have used previously with bare hot wires to minimize errors due to the electrical conductivity of the liquid phase of these refrigerants. Instead, the present liquid-phase measurements used an anodized tantalum pentoxide layer to provide direct electrical insulation between the tantalum hot wires (25 μm diameter) and the fluid [22]. The vapor phase of these refrigerant mixtures was studied tungsten hot wires of with extremely small diameter (4 μm) operating in both transient and steady-state modes. The small wire diameter minimizes corrections to the transient results, while the use of two different measurement modes allows an assessment of the reliability of the measurements through intercomparison of the results. Finally, replicated measurements are made at each fixed cell temperature and pressure, with about five different applied powers, to provide a check of the reproducibility of the measurements. It should be noted that each different power level yields a thermal conductivity result at a slightly different experimental temperature, thus each individual thermal conductivity datum is reported separately rather than averaged.

Measurements of the thermal conductivity of polar mixtures are more difficult and less reliable than the measurements on nonpolar gas mixtures, such as methane and ethane, that were studied previously. Since the present mixtures are significantly below their critical point at room temperature, they must be prepared and stored as a single-phase gas, below the mixture dew point, at a relatively low pressure. The equation of state model used to predict the properties of these mixtures [23] is not nearly as accurate as those used for other pure fluids, yet is required for corrections to the transient results. Finally, the uncertainty increases due to the polar nature of the refrigerant mixtures. These polar fluids are very good solvents, with a moderate electrical conductivity. Combined, these factors lead to a degradation in the uncertainty estimated for the thermal conductivity, about ± 3 %, and thermal diffusivity is not reported since the uncertainty is estimated to be about ± 30 %. The uncertainty of the thermal diffusivity increases further in the dilute vapor phase where large corrections are required for the finite wire diameter that are based on the mixture predictions of REFPROP [23] for both density and heat capacity.

Recorded in the tables are the run-point numbers; the pressure P_{exp}, temperature (ITS 90) T_{exp}, and the calculated density ρ_{calc} [23] of the fluid to which the thermal conductivity is assigned; the applied power per unit length of the wire Q; the experimental thermal conductivity λ_{exp} and its 2 σ uncertainty value (STAT); the cell temperature T_{cell}, which is provided to characterize the experiment temperature rise. STAT is the uncertainty of the slope, at the 2 σ level, as determined in the data reduction program [1, 15]. STAT is a direct measure of the precision of the thermal conductivity. A STAT of 0.001, for example, corresponds to a precision of 0.1 % in thermal conductivity. The tables of steady-state hot-wire results also include the start time t_{start}, and end time t_{end}, of the steady-state temperature rise measurment that was used to determine the thermal conductivity. Also included are the average wire temperature rise ΔT_{avg}, and the Rayleigh number N_{Ra}, which characterizes the sensitivity of the fluid to the onset of convection. Larger Rayleigh numbers indicate that convection will occur at shorter experiment times and will be more significant. Finally, the precision of the steady-state experiment is characterized by TBAND which is the relative uncertainty in percent of the measured temperature rise, and hence the experimental thermal conductivity, at 3 σ confidence over the time interval from t_{start} to t_{end}. Deviations of the thermal conductivity data from the extended corresponding states predictions in REFPROP 6.01 [23] are plotted as a function of the fluid density for the liquid measurements and as a function of temperature for the vapor measurements.

2. Transient Results Using Anodized Tantalum Wires

The ten mixture supply cylinders were maintained in the single-phase gas state during storage and use. The cylinders were heated during use to increase the supply pressure and to minimize adsorption. The supply pressure was not adequate to operate the air-driven diaphragm compressors that are normally used to increase the pressure in the hot-wire cells. Thus, liquid-phase measurements required condensation of the sample into the cell at the lowest temperature studied. The cell was then pressurized solely by increasing the temperature to the next isotherm. This allowed uniform characterization of the fluid in terms of density, but restricted study to the region in the vicinity of the saturated liquid since the measurements are at relatively high reduced temperatures and the fluid becomes increasingly compressible near the critical point.

The measurements in the liquid phase were made using relatively large (25 μm diameter) tantalum hot wires that were anodized insitu to obtain an electrically insulating layer of tantalum pentoxide for good isolation from the electrically conducting liquid phases of these mixtures. The relatively large diameter requires excessively large corrections for the finite wire diameter for the gas phase, but the magnitude of the corrections remains acceptable for liquid-phase measurements, even considering the relatively large uncertainty of the thermophysical properties used for the corrections. The densities reported in the tables have been calculated using the mixture model REFPROP 6.01 [23]. The relatively large wire diameter has the added advantage of reducing the electrical field strength in the vicinity of the wire during hot-wire measurements.

The temperature of the tantalum hot-wire cell was maintained with a refrigerated liquid circulator that allowed measurements from about 250 K to 350 K. This circulator provided convenient control of the temperature over the range needed for the present measurements. Furthermore, the minimum temperature of 250 K allowed all of the mixtures to be condensed into the measurement cell at pressures above the bubble point of the mixtures. However, temperature gradient was observed in the measurement cell at the highest temperatures that was larger than is normally present when the measurement cells are used in a furnace. This temperature gradient made the liquids more susceptible to convection at the highest temperatures.

2.1 30 % R125 / 70 % R134a Mixture

The precise molar composition of the mixture was 0.30015 R125 + 0.69985 R134a. Results for 142 measurements, at temperatures from 244 K to 347 K, are reported in Table 1. Deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 1. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

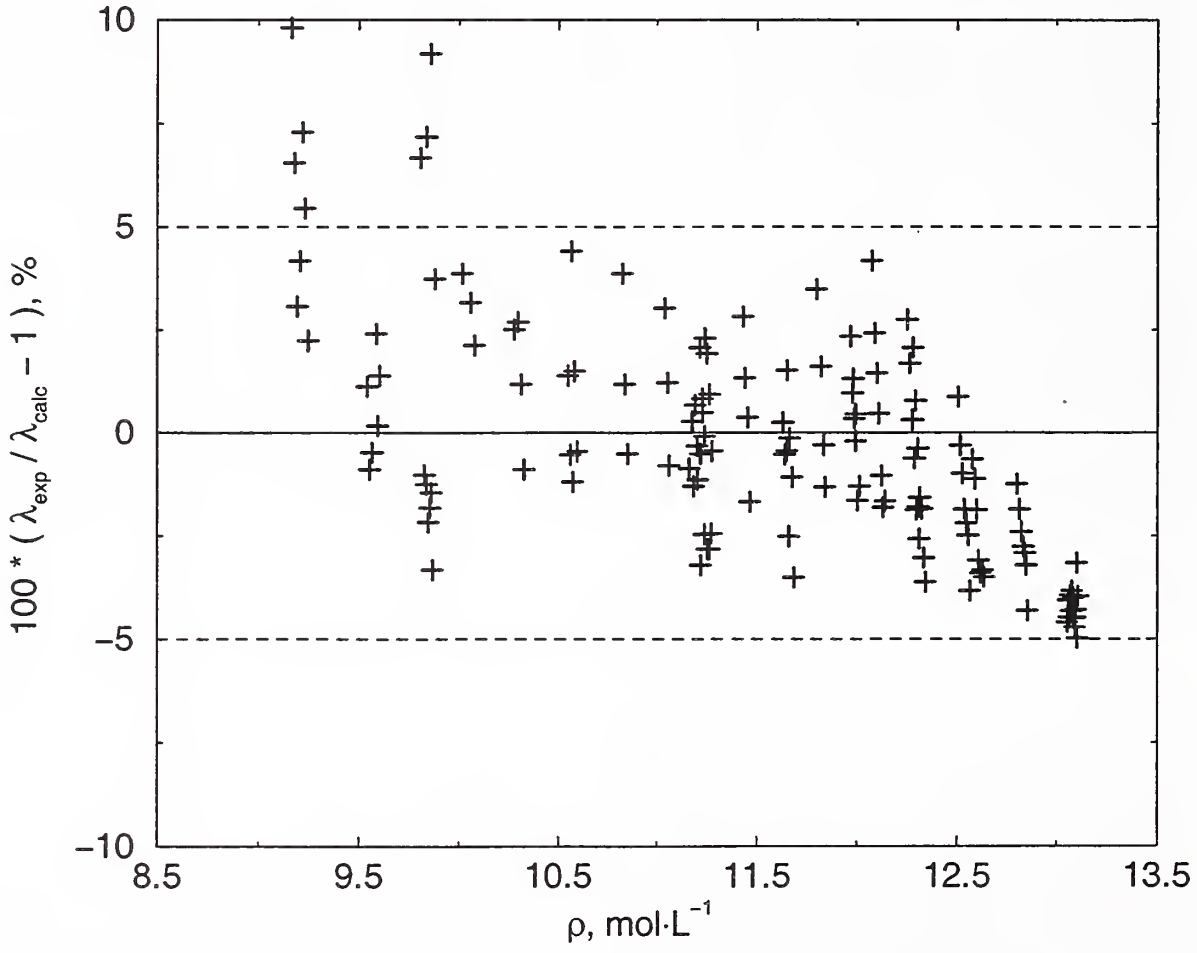

Figure 1. Relative deviations of the thermal conductivity data for the binary 30 % R125 / 70 % R134a mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.2 70 % R125 / 30 % R134a Mixture

The precise molar composition of the mixture was 0.70000 R125 + 0.30000 R134a. Results for 136 measurements, at temperatures from 247 K to 330 K, are reported in Table 2. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 2. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

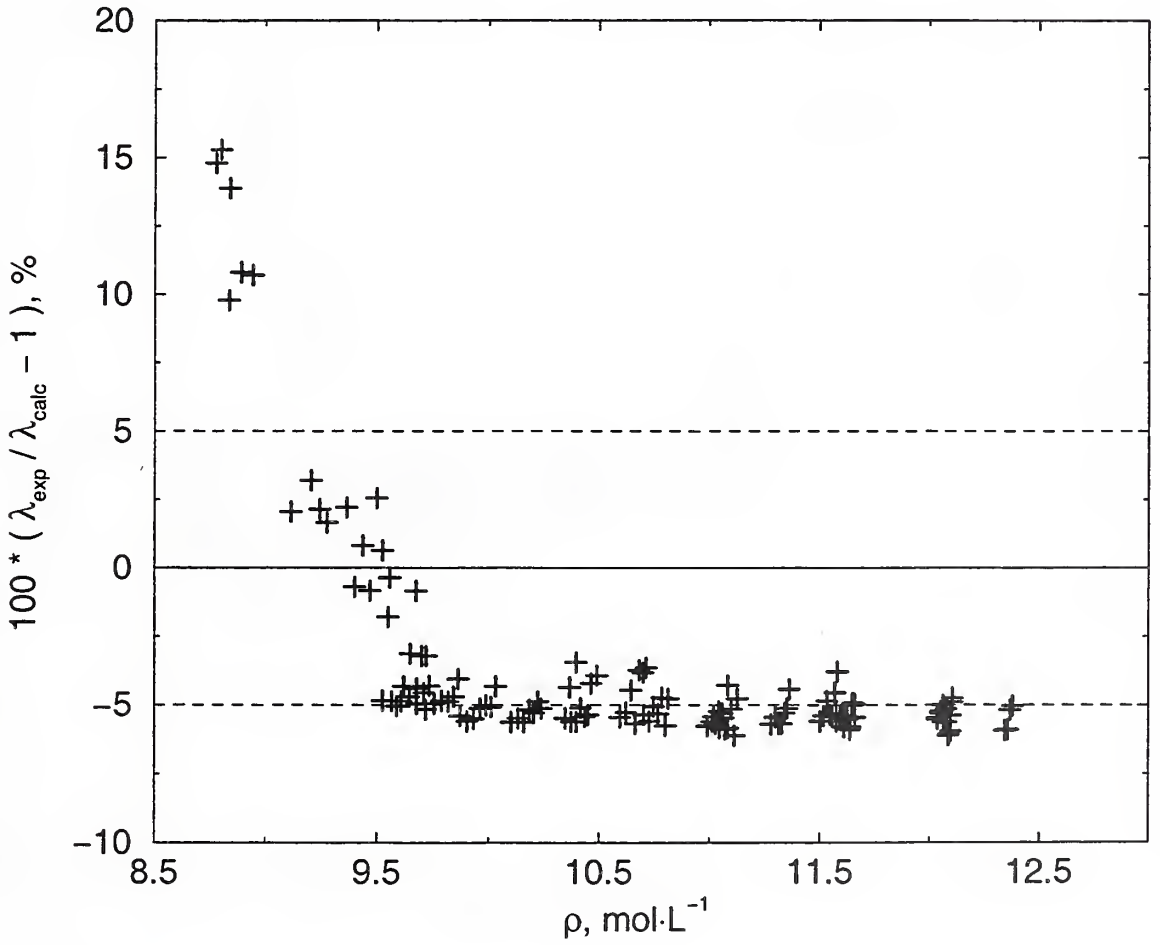

Figure 2. Relative deviations of the thermal conductivity data for the binary 70 % R125 / 30 % R134a mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.3 30 % R32 / 70 % Propane Mixture

The precise molar composition of the mixture was 0.29992 R32 + 0.70008 propane. Results for 159 measurements, at temperatures from 245 K to 347 K, are reported in Table 3. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 3. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

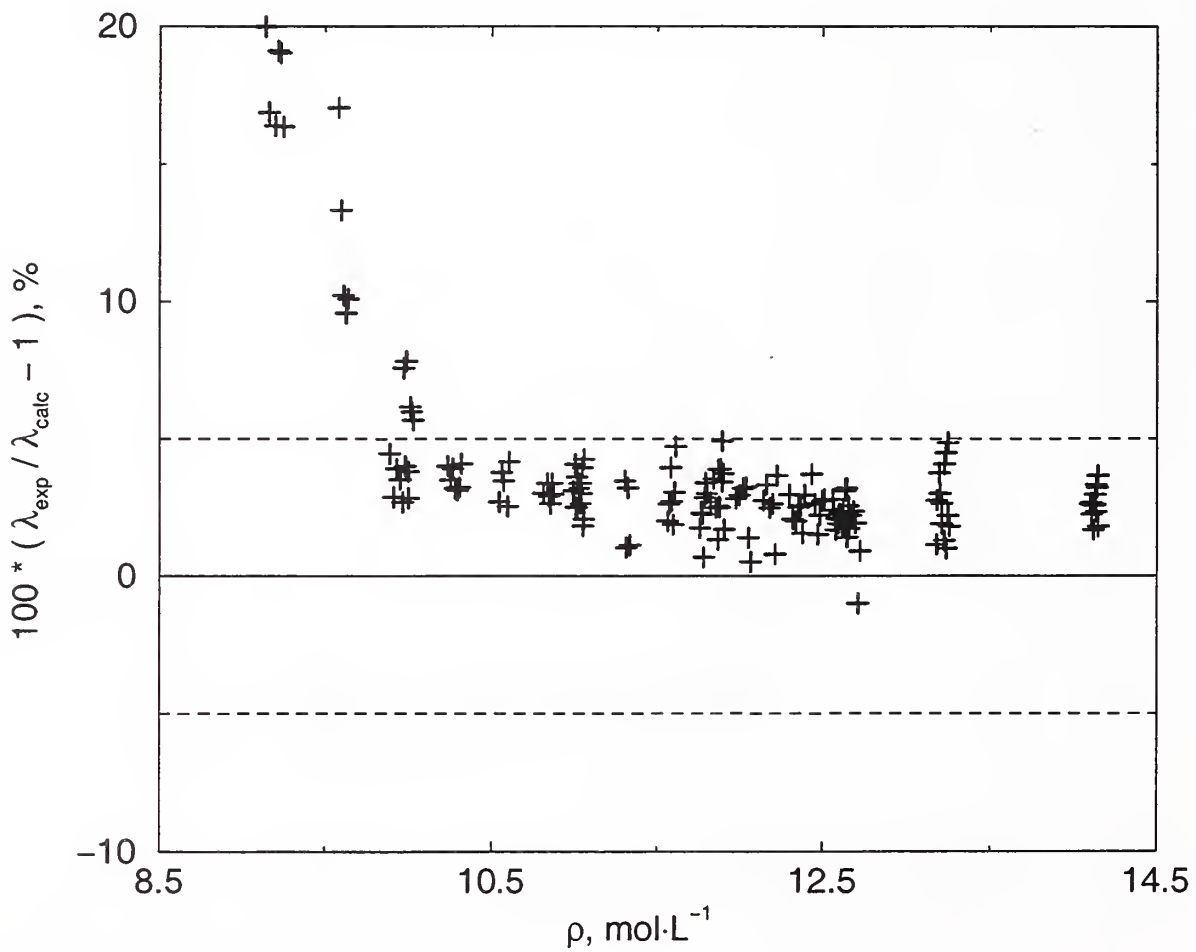

Figure 3. Relative deviations of the thermal conductivity data for the binary 30 % R32 / 70 % propane mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.4 70 % R32 / 30 % Propane Mixture

The precise molar composition of the mixture was 0.70005 R32 + 0.29995 propane. Results for 148 measurements, at temperatures from 254 K to 330 K, are reported in Table 4. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 4. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

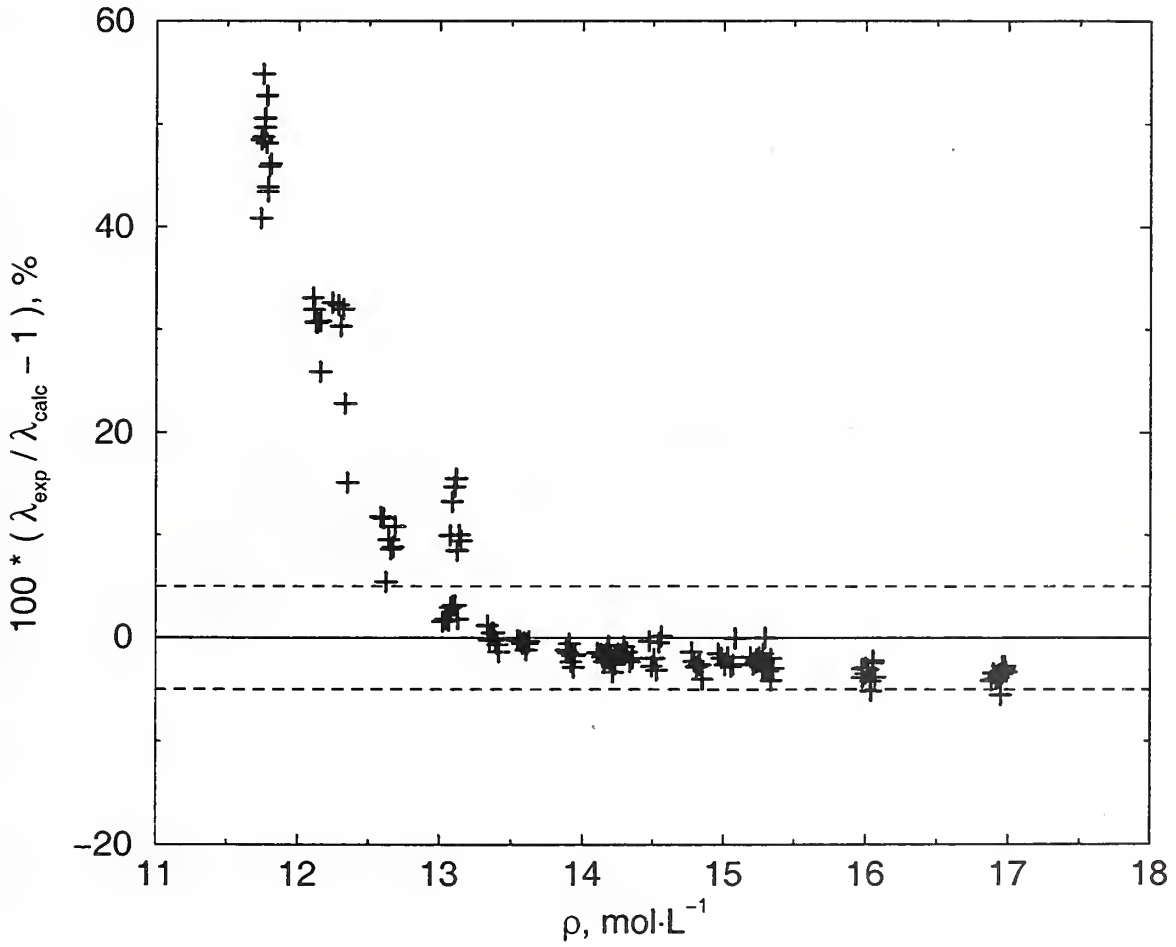

Figure 4. Relative deviations of the thermal conductivity data for the binary 70 % R32 / 30 % propane mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.5 30 % R32 / 70 % R134a Mixture

The precise molar composition of the mixture was 0.29955 R32 + 0.70044 R134a. Results for 179 measurements, at temperatures from 255 K to 360 K, are reported in Table 5. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 5. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

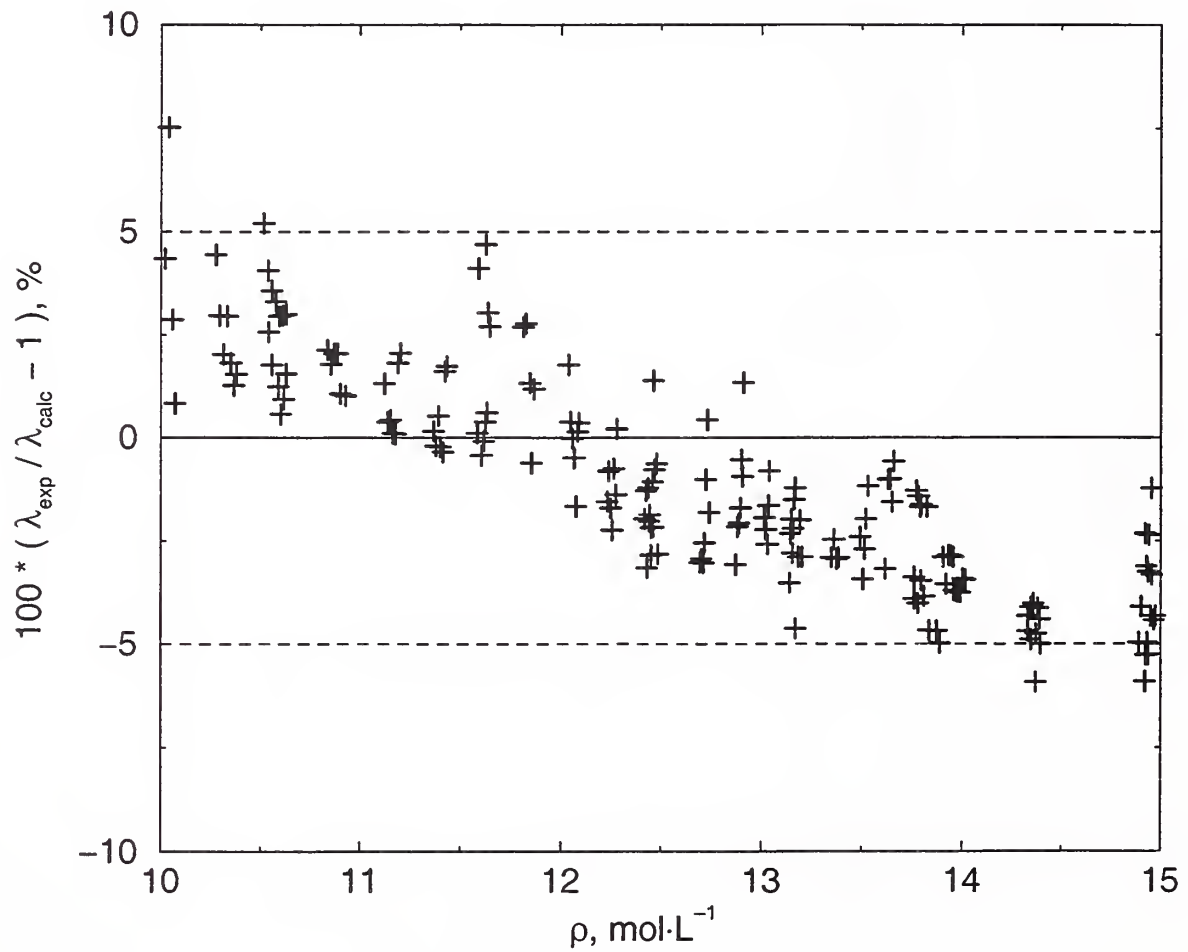

Figure 5. Relative deviations of the thermal conductivity data for the binary 30 % R32 / 70 % R134a mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.6 70 % R32 / 30 % R134a Mixture

The precise molar composition of the mixture was 0.70031 R32 + 0.29969 R134a. Results for 130 measurements, at temperatures from 254 K to 346 K, are reported in Table 6. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 6. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

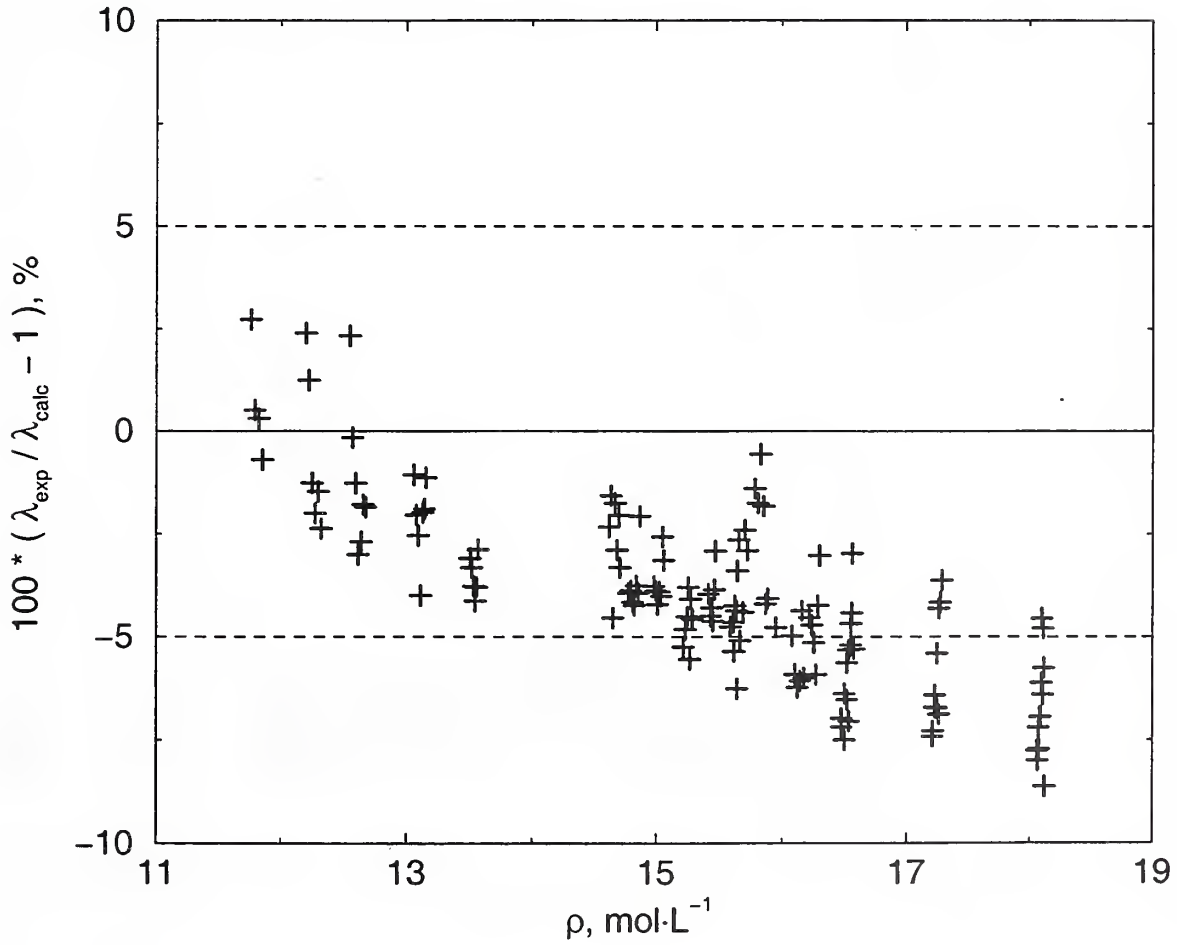

Figure 6. Relative deviations of the thermal conductivity data for the binary 70 % R32 / 30 % R134a mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.7 30 % R134a / 70 % Propane Mixture

The precise molar composition of the mixture was 0.30033 R134a + 0.69966 propane. Results for 165 measurements, at temperatures from 254 K to 347 K, are reported in Table 7. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 7. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

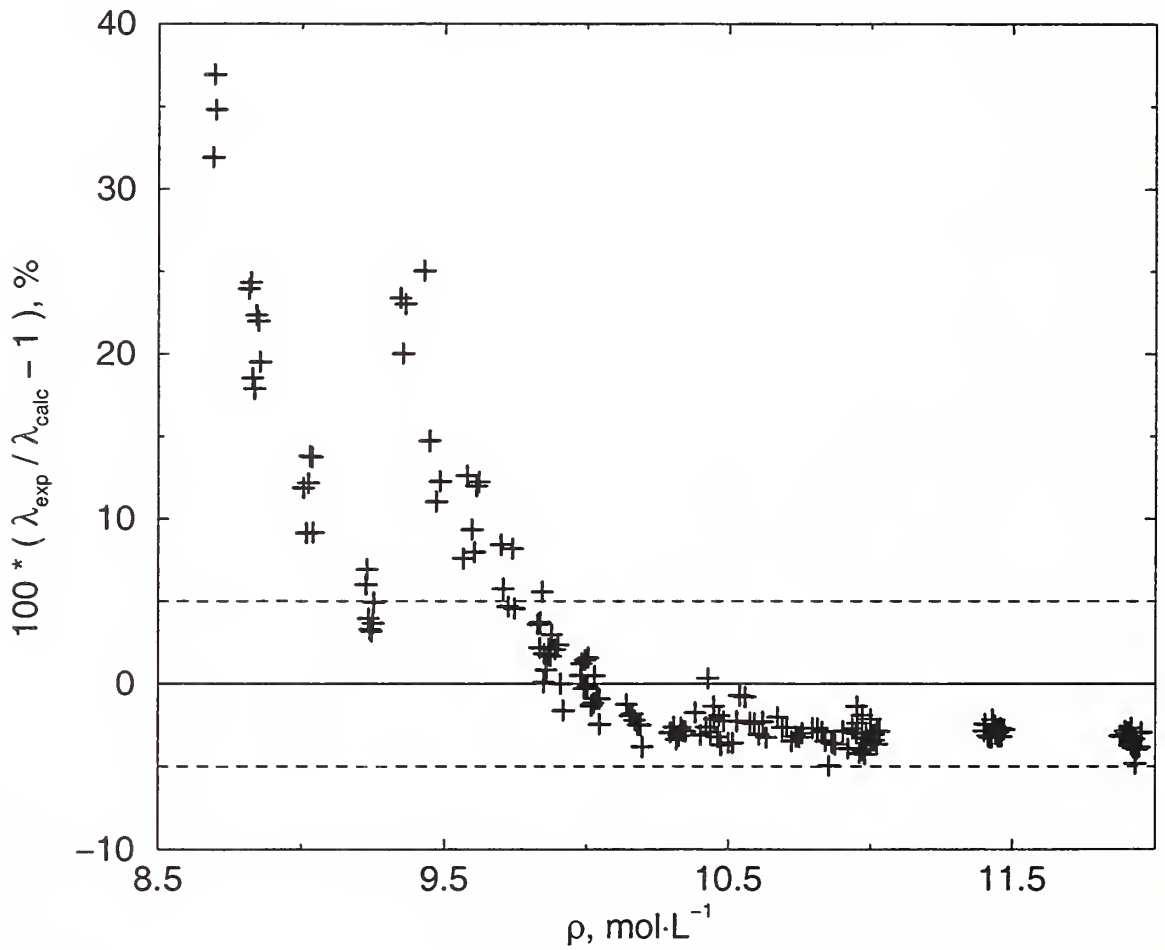

Figure 7. Relative deviations of the thermal conductivity data for the binary 30 % R134a / 70 % propane mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.8 70 % R134a / 30 % Propane Mixture

The precise molar composition of the mixture was 0.70138 R134a + 0.29862 propane. The hot-wire cell failed during this measurement series with assembly 1 measurements obtained prior to this failure and assembly 2 measurements obtained with the rebuilt hot-wire cell. Results for 138 measurements, using assembly 1 at temperatures from 250 K to 319 K, are reported in Table 8. Results for 108 measurements, using assembly 2 at temperatures from 316 to 347 K, are reported in Table 9. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 8. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant. Good agreement is found between 2 separate hot-wire cells for this mixture.

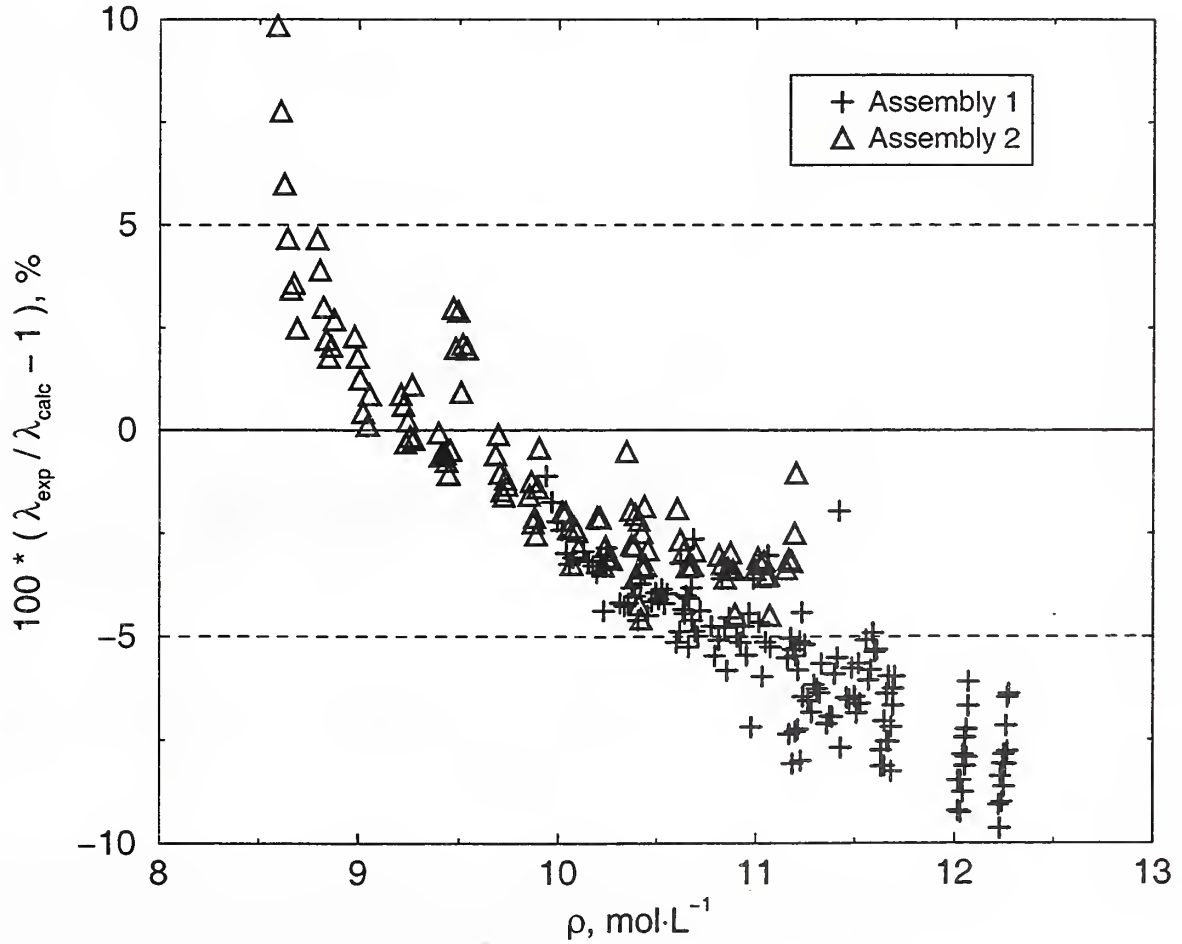

Figure 8. Relative deviations of the thermal conductivity data for the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.9 33 % R32 / 33 % R125 / 33 % R134a Mixture

The precise molar composition of the mixture was 0.33298 R32 + 0.33342 R125 + 0.33359 R134a. Results for 175 measurements, at temperatures from 250 K to 344 K, are reported in Table 10. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 9. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

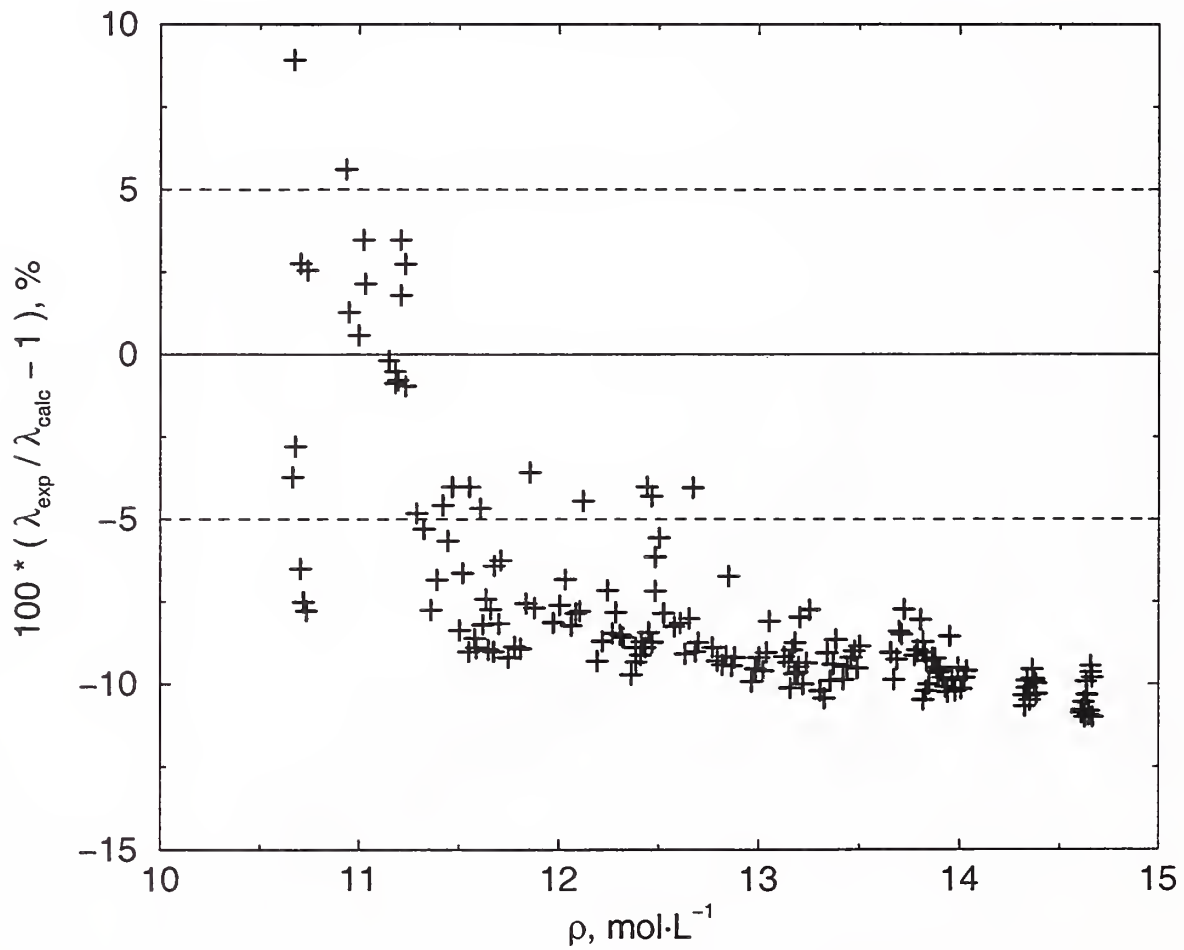

Figure 9. Relative deviations of the thermal conductivity data for the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

2.10 30 % R32 / 10 % R125 / 60 % R134a Mixture

The precise molar composition of the mixture was 0.30027 R32 + 0.09995 R125 + 0.59977 R134a. Results for 182 measurements, at temperatures from 250 K to 345 K, are reported in Table 11. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 10. The lower densities correspond to the higher temperatures where the thermal conductivity critical enhancement becomes significant.

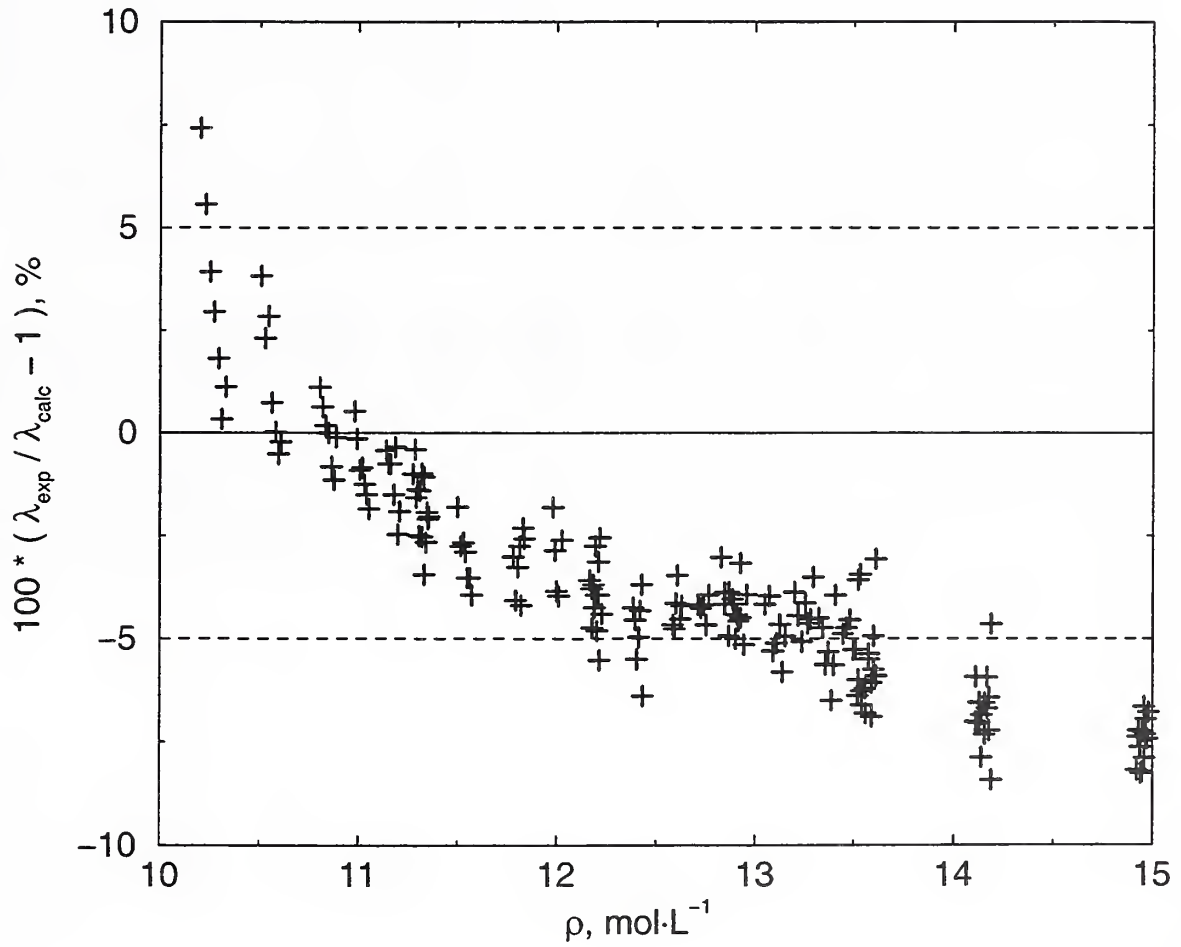

Figure 10. Relative deviations of the thermal conductivity data for the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the compressed liquid phase from the predictions of REFPROP 6.01.

3. Transient Results Using Bare Tungsten Wires

The ten mixture supply cylinders were maintained in the single-phase gas state during storage and use. The cylinders were heated during use to increase the supply pressure and minimize effects due to adsorption. The supply pressure was not adequate to operate the air-driven diaphragm compressors that are normally used to increase the pressure in the hot-wire cells. The vapor measurements were made at pressures up to the heated sample bottle pressure and do not extend to the saturated vapor at the highest temperatures.

The measurements in the vapor phase were made using extremely small 4 μm diameter tungsten hot wires. These bare tungsten hot wires are much smaller than the bare 12 μm diameter platinum hot wires that have been used for the measurements on nonpolar fluids. Corrections for the finite wire diameter are much larger for vapors than they are for liquids due to the greater difference between the volumetric specific heat of the fluid relative to that of the wire. The relatively small diameter wire requires much smaller corrections for the finite wire diameter, which becomes very important considering the magnitude of the correction in the vapor phase and the relatively large uncertainty in the thermophysical properties of these mixtures that are required for the corrections. However, the extremely small wire diameter dramatically increases the electrical field strength in the vicinity of the wire during hot-wire measurements. This did not impact the vapor measurements, but did make the bare tungsten wires unusable for liquid phase measurements in these refrigerant mixtures. The fluid polarization effect with the 4 μm diameter tungsten wires was much more pronounced than that observed for 12 μm diameter platinum hot wires in a pure R134a liquid sample.

The temperature of the tantalum hot-wire cell was maintained with a refrigerated liquid circulator that allowed measurements from about 250 K to 350 K. This circulator provided convenient control of the temperature over the range needed for the present measurements. The pressure and density of the gas phase mixtures were quite low at the lowest temperatures. This makes vapor measurements very difficult since the thermal diffusivity, and hence the rate at which the transient thermal wave penetrates to the outer cell wall, increase dramatically at these low pressures. This penetration time was less than 1 second for vapor measurements at the lowest temperatures. At these very low densities, the steady-state hot-wire measurements reported in section 4 are considered more reliable. The densities reported in the tables have been calculated using the mixture model REFPROP 6.01 [23].

3.1 30 % R125 / 70 % R134a Mixture

The precise molar composition of the mixture was 0.30015 R125 + 0.69985 R134a. Results for 248 measurements, at temperatures from 263 K to 345 K (0.14 MPa to 0.55 MPa), are reported in Table 13. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 11. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 11.

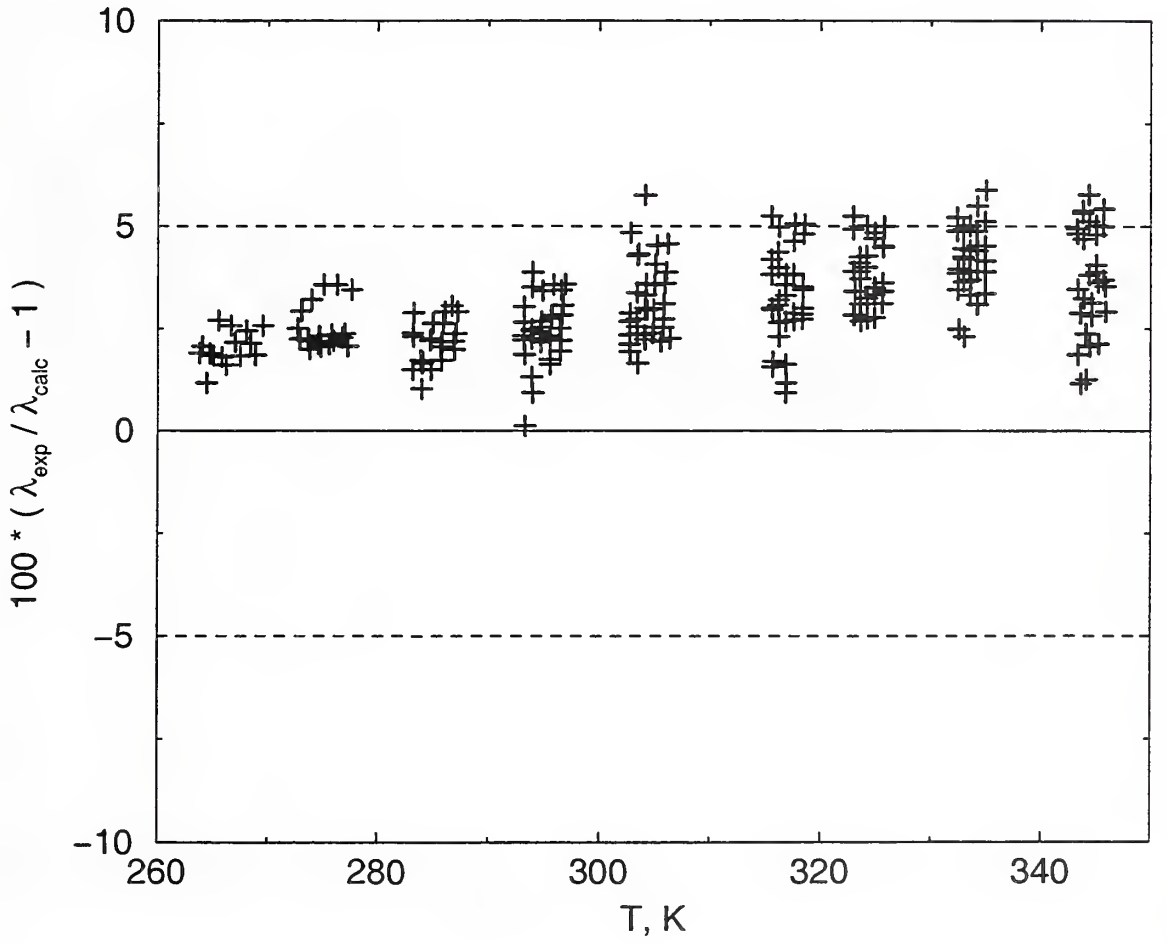

Figure 11. Relative deviations of the transient thermal conductivity data for the binary 30 % R125 / 70 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

3.2 70 % R125 / 30 % R134a Mixture

The precise molar composition of the mixture was 0.70000 R125 + 0.30000 R134a. Results for 202 measurements, at temperatures from 260 K to 344 K (0.09 MPa to 0.62 MPa), are reported in Table 14. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 12. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 12.

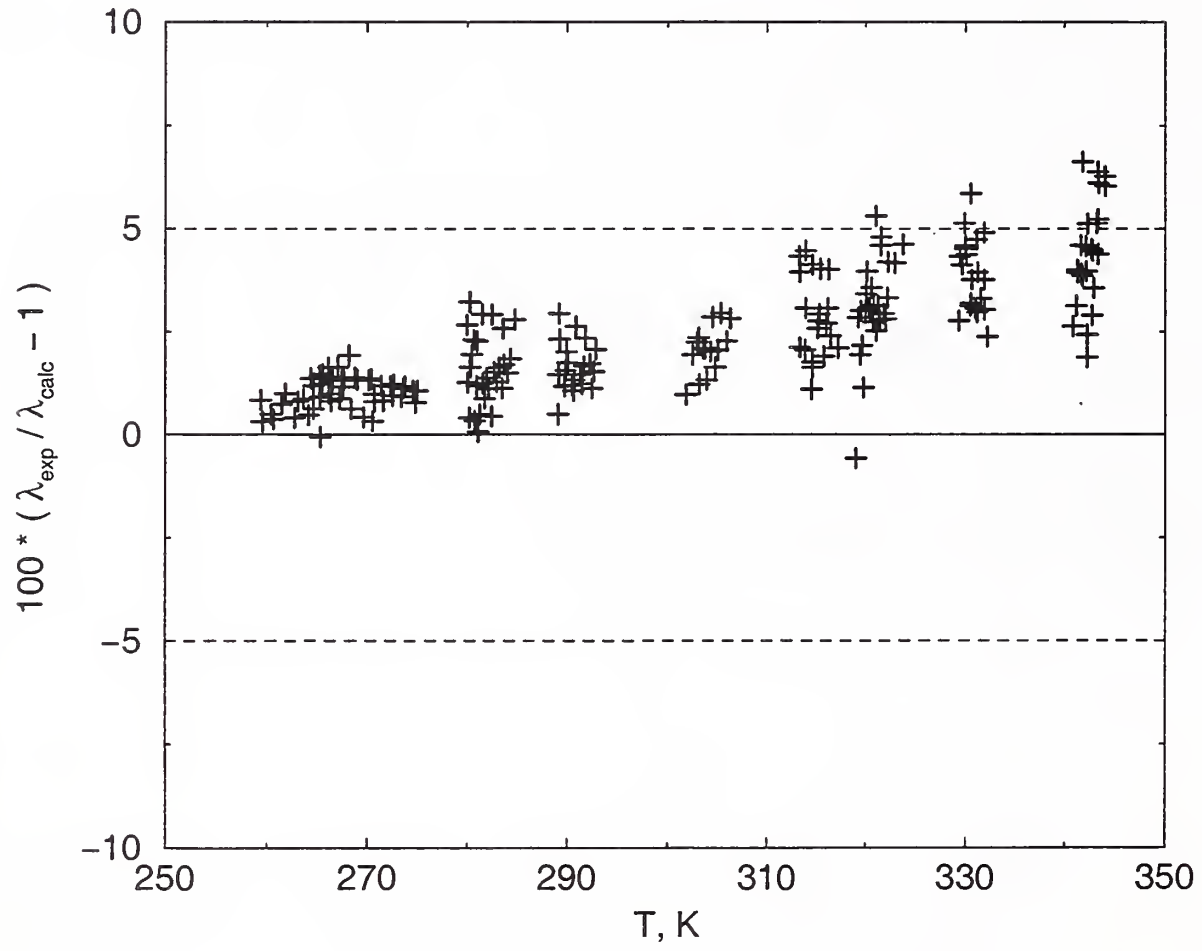

Figure 12. Relative deviations of the transient thermal conductivity data for the binary 70 % R125 / 30 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

3.3 30 % R32 / 70 % Propane Mixture

The precise molar composition of the mixture was 0.29992 R32 + 0.70008 propane. Results for 139 measurements, at temperatures from 229 K to 341 K (0.03 MPa to 1.1 MPa), are reported in Table 15. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 13. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 13.

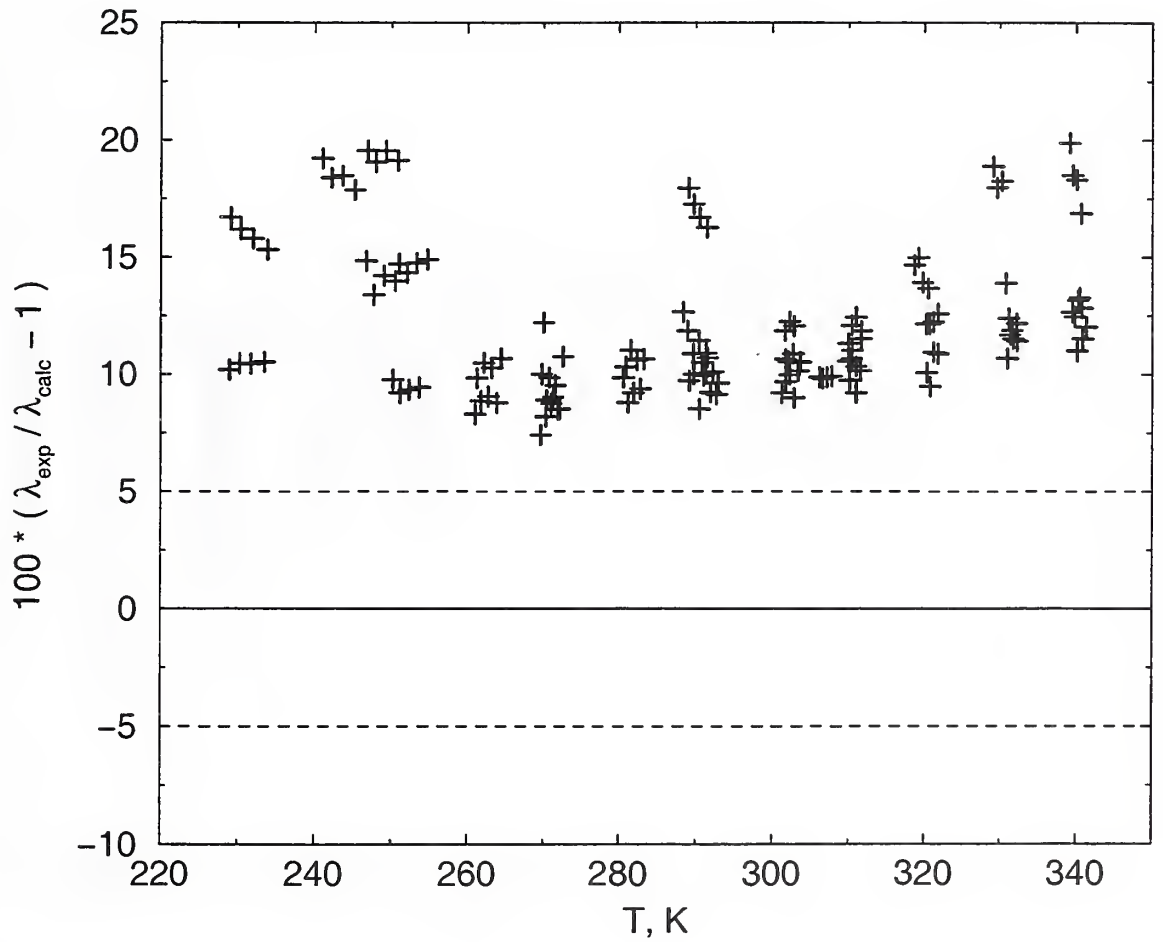

Figure 13. Relative deviations of the transient thermal conductivity data for the binary 30 % R32 / 70 % propane mixture in the vapor phase from the predictions of REFPROP 6.01.

3.4 70 % R32 / 30 % Propane Mixture

The precise molar composition of the mixture was 0.70005 R32 + 0.29995 propane. Results for 395 measurements, at temperatures from 258 K to 336 K (0.09 MPa to 0.32 MPa), are reported in Table 16. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 14. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 14.

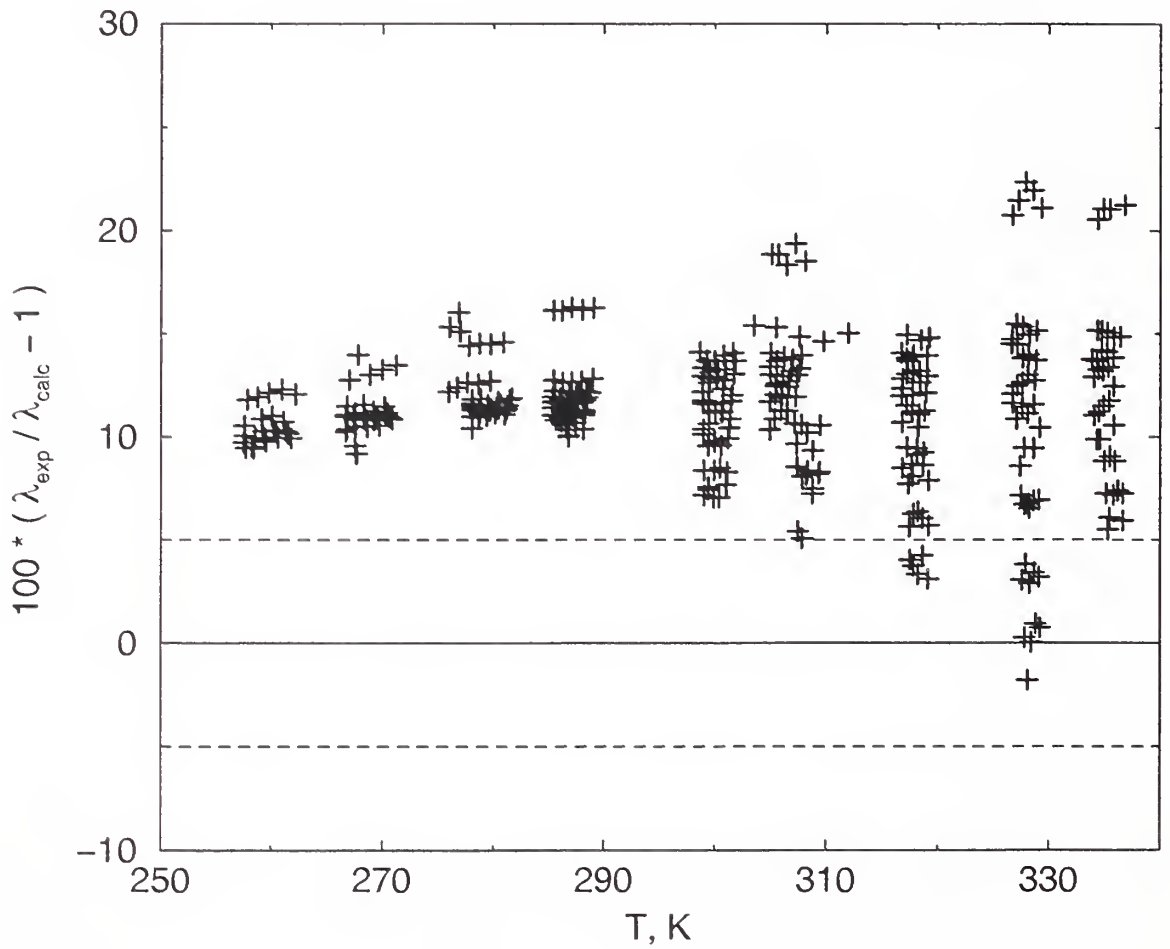

Figure 14. Relative deviations of the transient thermal conductivity data for the binary 70 % R32 / 30 % propane mixture in the vapor phase from the predictions of REFPROP 6.01.

3.5 30 % R32 / 70 % R134a Mixture

The precise molar composition of the mixture was 0.29955 R32 + 0.70044 R134a. Results for 235 measurements, at temperatures from 258 K to 343 K (0.09 MPa to 0.45 MPa), are reported in Table 17. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 15. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 15.

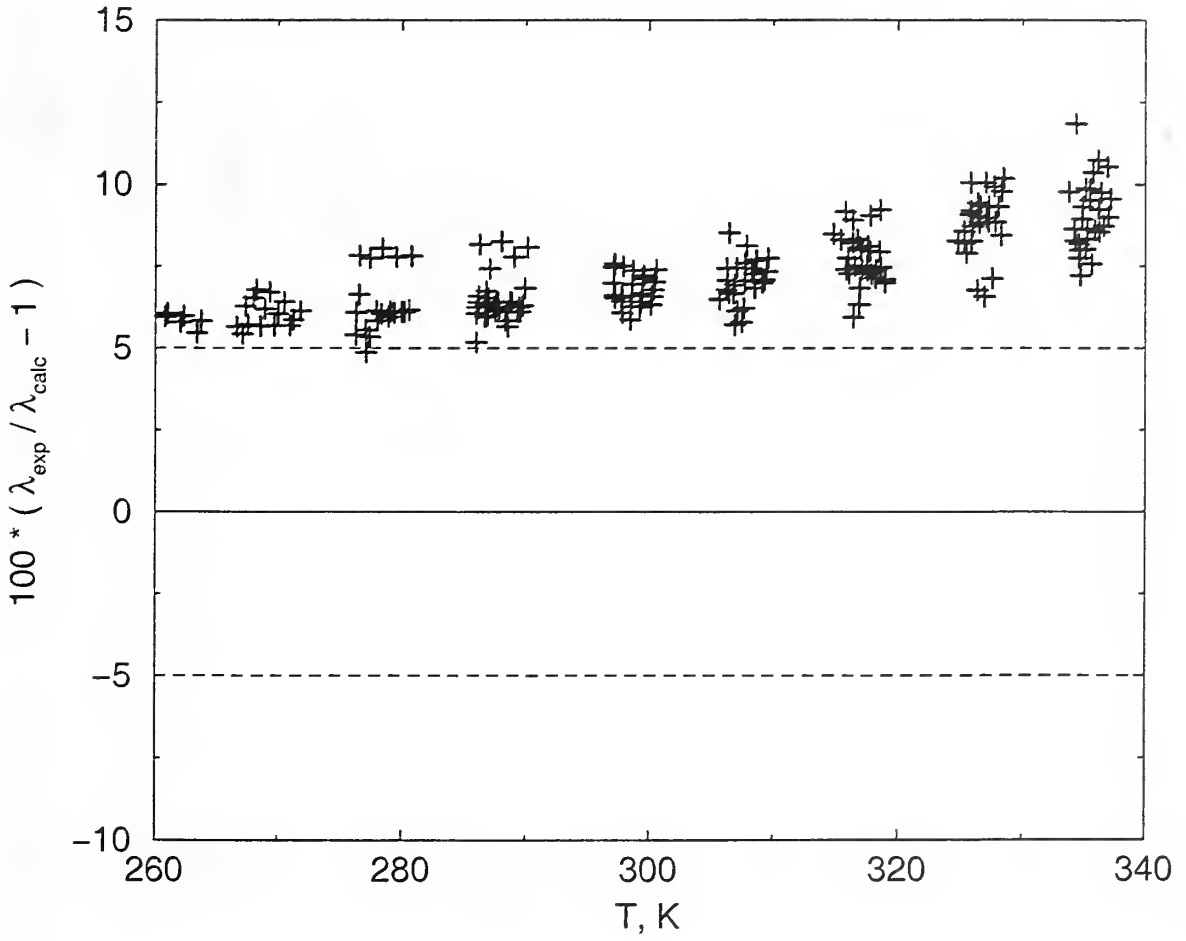

Figure 15. Relative deviations of the transient thermal conductivity data for the binary 30 % R32 / 70 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

3.6 70 % R32 / 30 % R134a Mixture

The precise molar composition of the mixture was 0.70031 R32 + 0.29969 R134a. Results for 231 measurements, at temperatures from 259 K to 348 K (0.09 MPa to 0.56 MPa), are reported in Table 18. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 16. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 16.

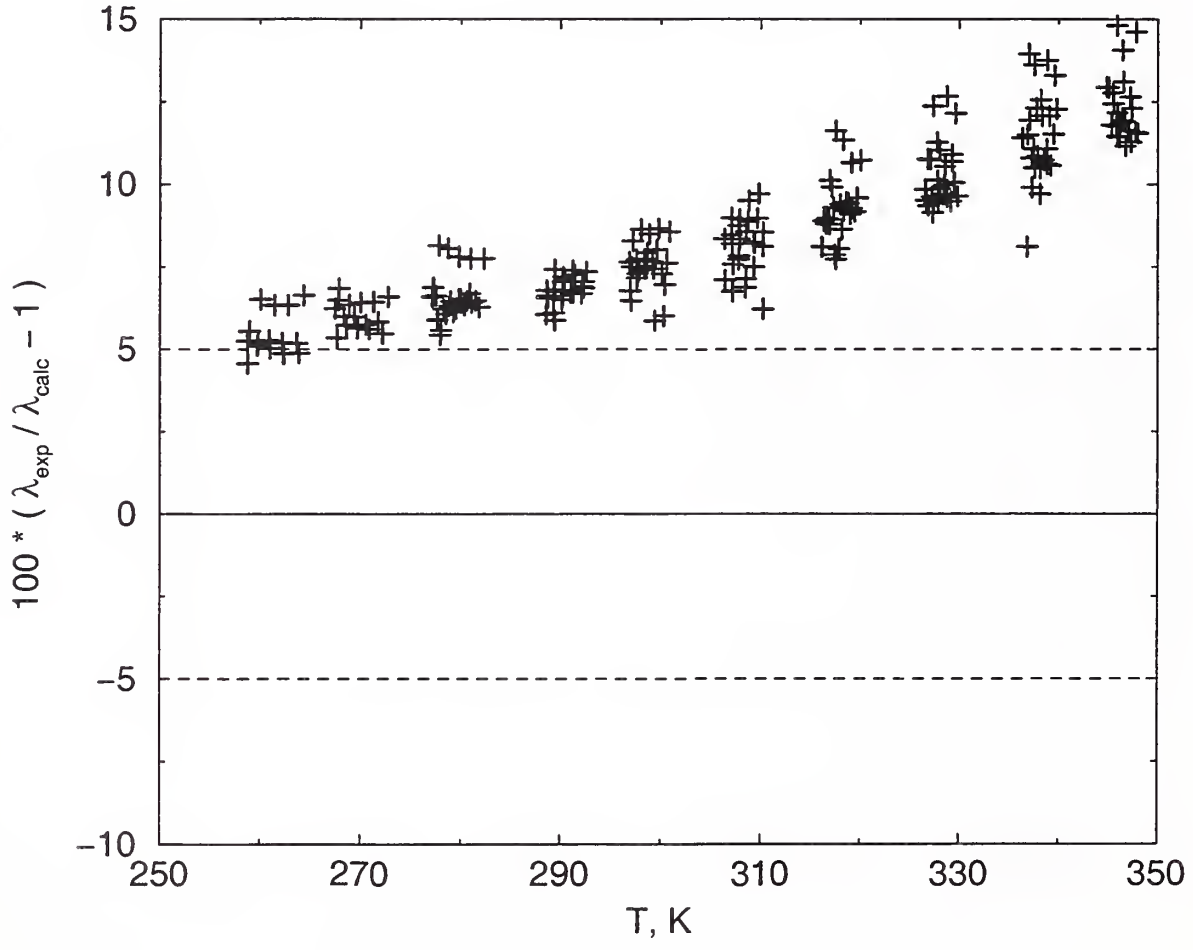

Figure 16. Relative deviations of the transient thermal conductivity data for the binary 70 % R32 / 30 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

3.7 30 % R134a / 70 % Propane Mixture

The precise molar composition of the mixture was 0.30033 R134a + 0.69966 propane. Results for 51 measurements, at temperatures from 243 K to 302 K (0.12 MPa to 0.72 MPa), are reported in Table 19. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 17. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 17.

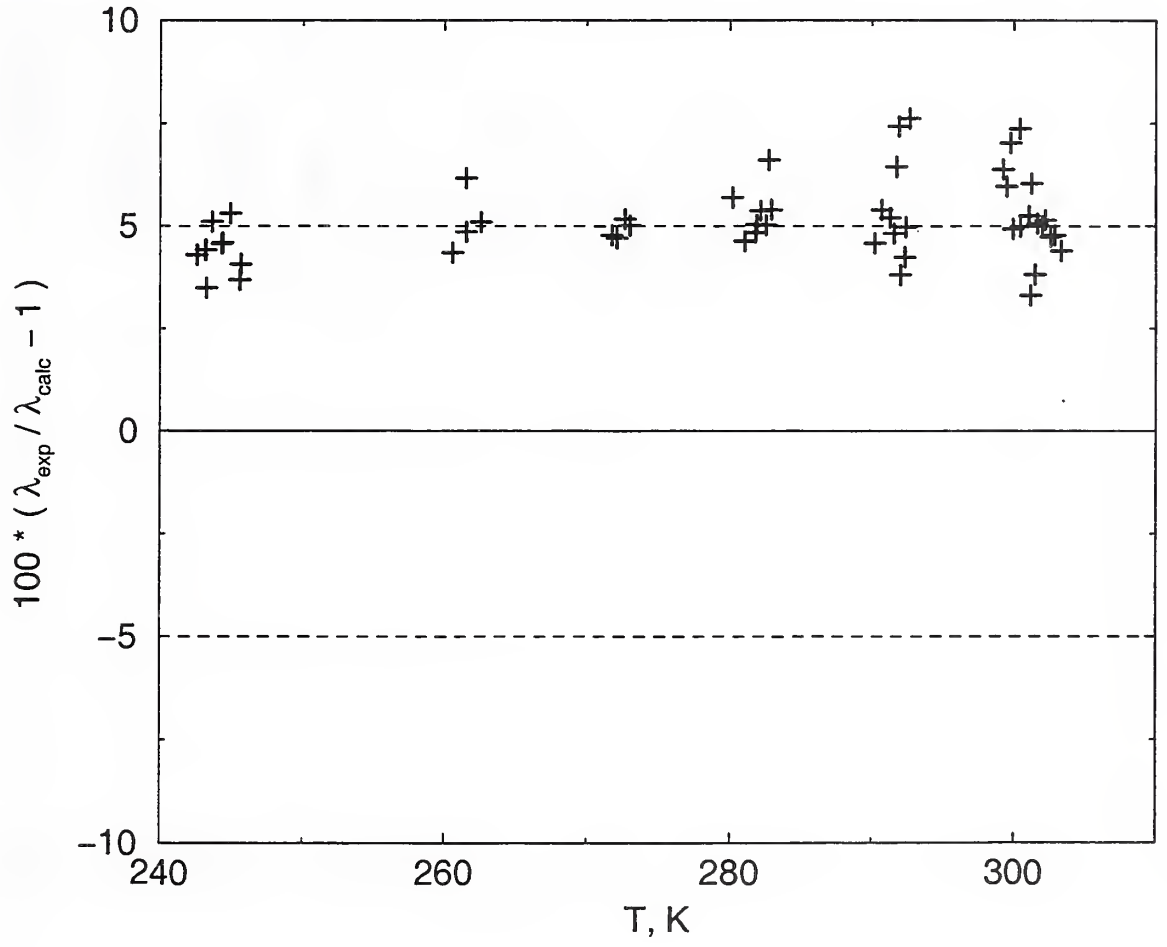

Figure 17. Relative deviations of the transient thermal conductivity data for the binary 30 % R134a / 70 % propane mixture in the vapor phase from the predictions of REFPROP 6.01.

3.8 70 % R134a / 30 % Propane Mixture

The precise molar composition of the mixture was 0.69948 R134a + 0.30052 propane. Results for 233 measurements, at temperatures from 258 K to 348 K (0.09 MPa to 0.56 MPa), are reported in Table 20. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 18. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 18.

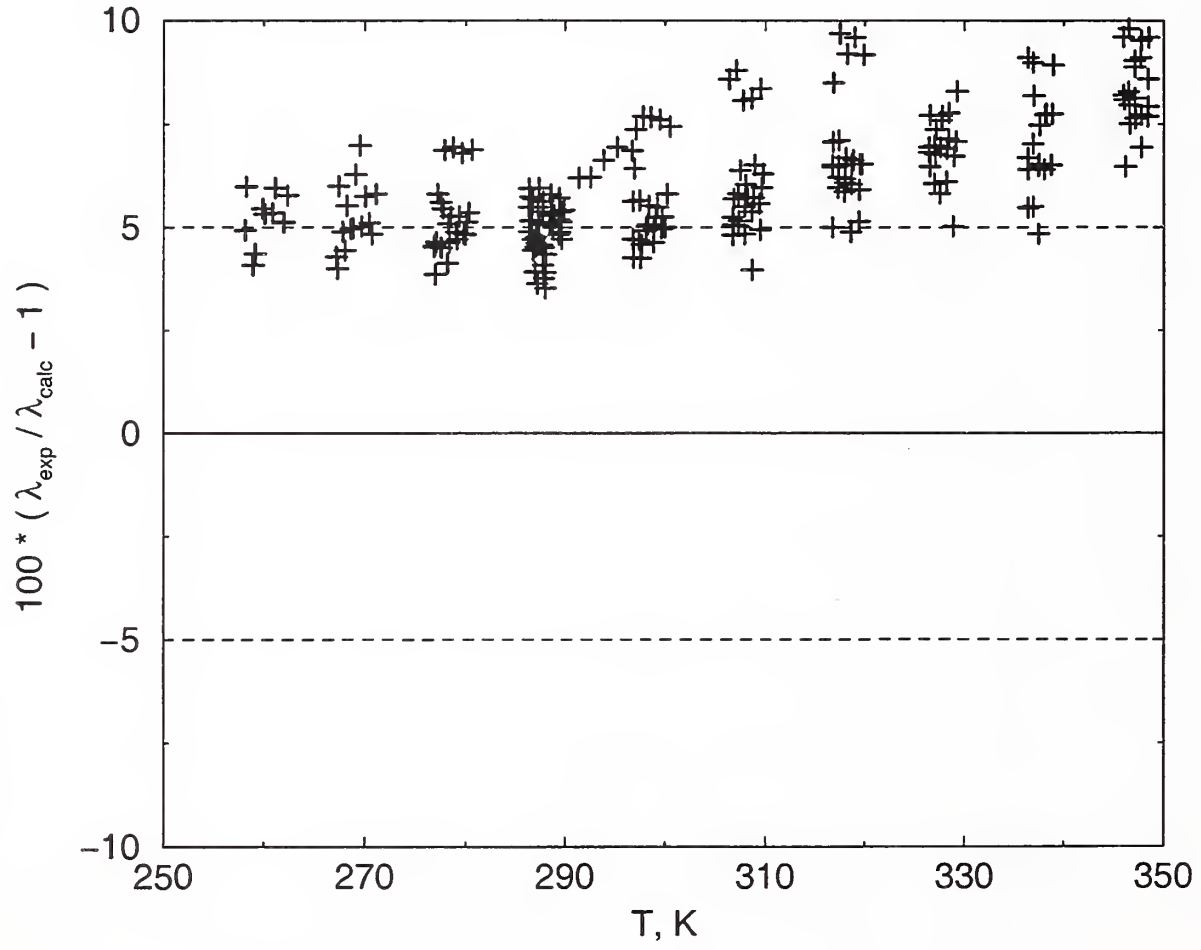

Figure 18. Relative deviations of the transient thermal conductivity data for the binary 70 % R134a / 30 % propane mixture in the vapor phase from the predictions of REFPROP 6.01.

3.9 33 % R32 / 33 % R125 / 33 % R134a Mixture

The precise molar composition of the mixture was 0.33298 R32 + 0.33342 R125 + 0.33359 R134a. Results for 81 measurements, at temperatures from 263 K to 341 K (0.10 MPa to 0.30 MPa), are reported in Table 21. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 19. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 19.

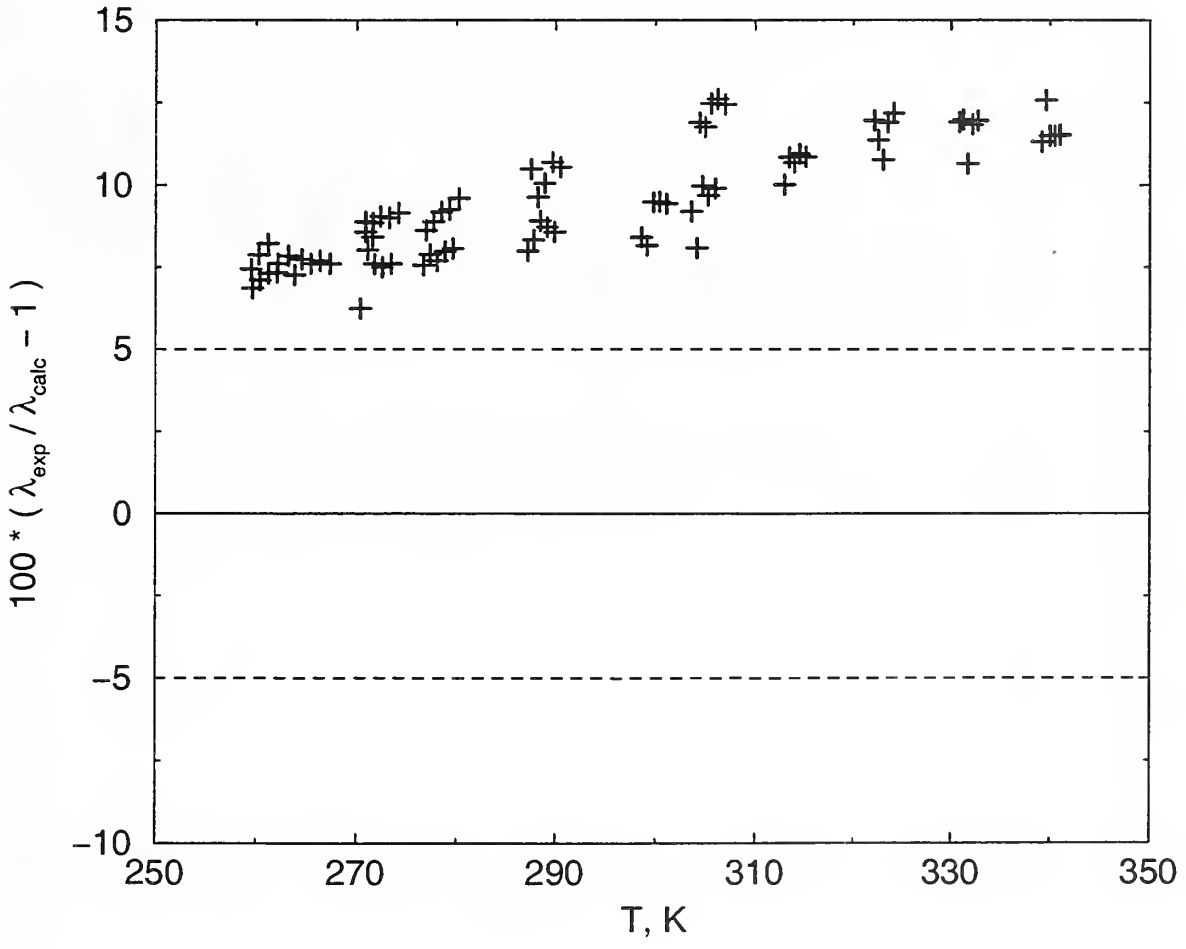

Figure 19. Relative deviations of the transient thermal conductivity data for the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

3.10 30 % R32 / 10 % R125 / 60 % R134a Mixture

The precise molar composition of the mixture was 0.30027 R32 + 0.09995 R125 + 0.59977 R134a. Results for 230 measurements, at temperatures from 258 K to 345 K (0.09 MPa to 0.53 MPa), are reported in Table 22. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 20. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 20.

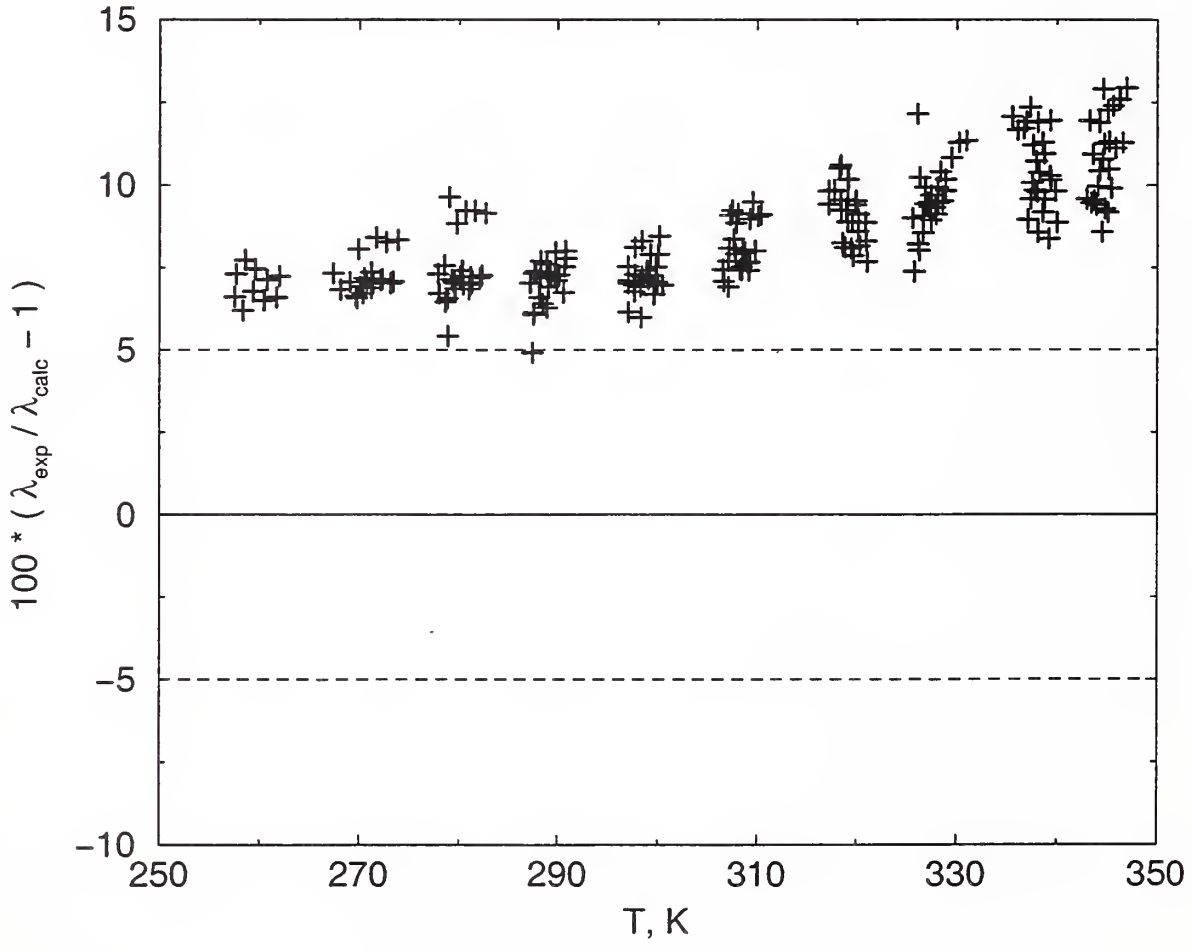

Figure 20. Relative deviations of transient thermal conductivity data for the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

4. Steady-State Results Using Bare Tungsten Wires

The ten mixture supply cylinders were maintained in the single-phase gas state during storage and use. The cylinders were heated during use to increase the supply pressure and to minimize effects due to adsorption. The supply pressure was not adequate to operate the air-driven diaphragm compressors that are normally used to increase the pressure in the hot-wire cells. The vapor measurements were made at pressures up to the heated sample bottle pressure and do not extend to the saturated vapor at the highest temperatures. The temperature of the tantalum hot-wire cell was maintained with a refrigerated liquid circulator that allowed measurements from about 250 K to 350 K. This circulator provided convenient control of the temperature over the range needed for the present measurements.

The tables of steady-state results include several new parameters that were not included in the transient tables. First, TBAND is a direct measure of the precision of the temperature rise measurement, and hence the thermal conductivity, at a 3 σ uncertainty level over the steady-state fit limits from t_{start} to t_{end} that are also provided in the tables for reference. Fluid convection is the key concern with steady-state measurements of thermal conductivity. The hot-wire cells are designed for transient measurements, so the fluid gap between the inner wire and the outer concentric cell wall where the fluid resides is larger than is optimum for steady-state measurements. The hot-wire cells can be used reliably only for steady-state measurements of low-pressure gases where convection is not likely. The measure of the convective stability of the gas is the Rayleigh number N_{Ra} and is included in the tables for each point for reference. Experience has shown that N_{Ra} should be less than 70000 for our measurement geometry. The absence of fluid convection can further be verified by examination of the consistency of measurements at different applied power levels. At least four different applied power levels were measured at each initial fluid state point.

The agreement between the transient results of the previous section and the steady-state results presented here is quite good. At very low densities, the steady-state hot-wire measurements are considered more reliable than the transient measurements, since no corrections are required for either the finite wire diameter or the outer boundary. The densities reported in the tables have been calculated using the mixture model REFPROP 6.01 [23].

4.1 30 % R125 / 70 % R134a Mixture

The precise molar composition of the mixture was 0.30015 R125 + 0.69985 R134a. Results for 160 measurements, at temperatures from 263 K to 345 K (0.07 MPa to 0.54 MPa), are reported in Table 23. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 21. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 21.

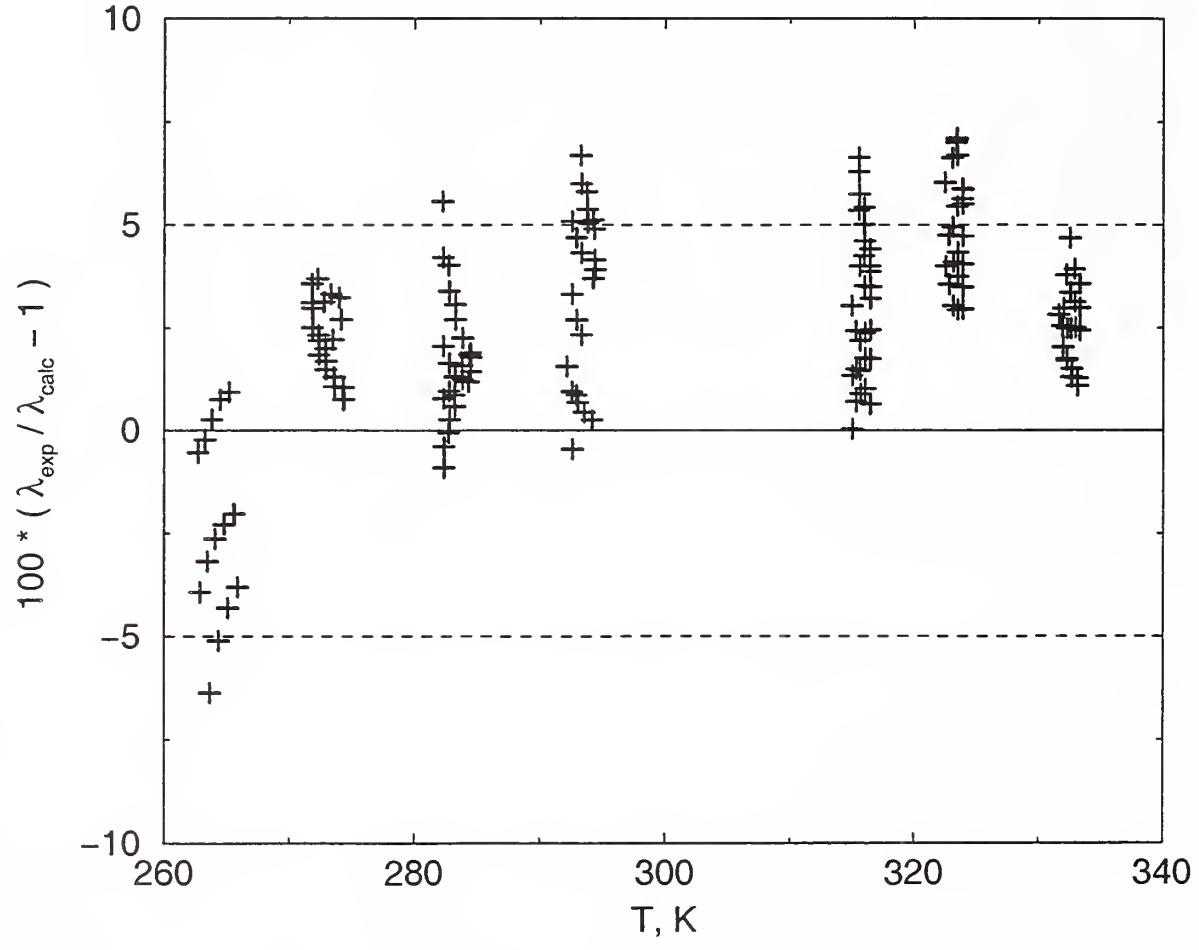

Figure 21. Relative deviations of the steady-state thermal conductivity data for the binary 30 % R125 / 70 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

4.2 70 % R125 / 30 % R134a Mixture

The precise molar composition of the mixture was 0.70000 R125 + 0.30000 R134a. Results for 205 measurements, at temperatures from 260 K to 344 K (0.09 MPa to 0.62 MPa), are reported in Table 24. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 22. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 22.

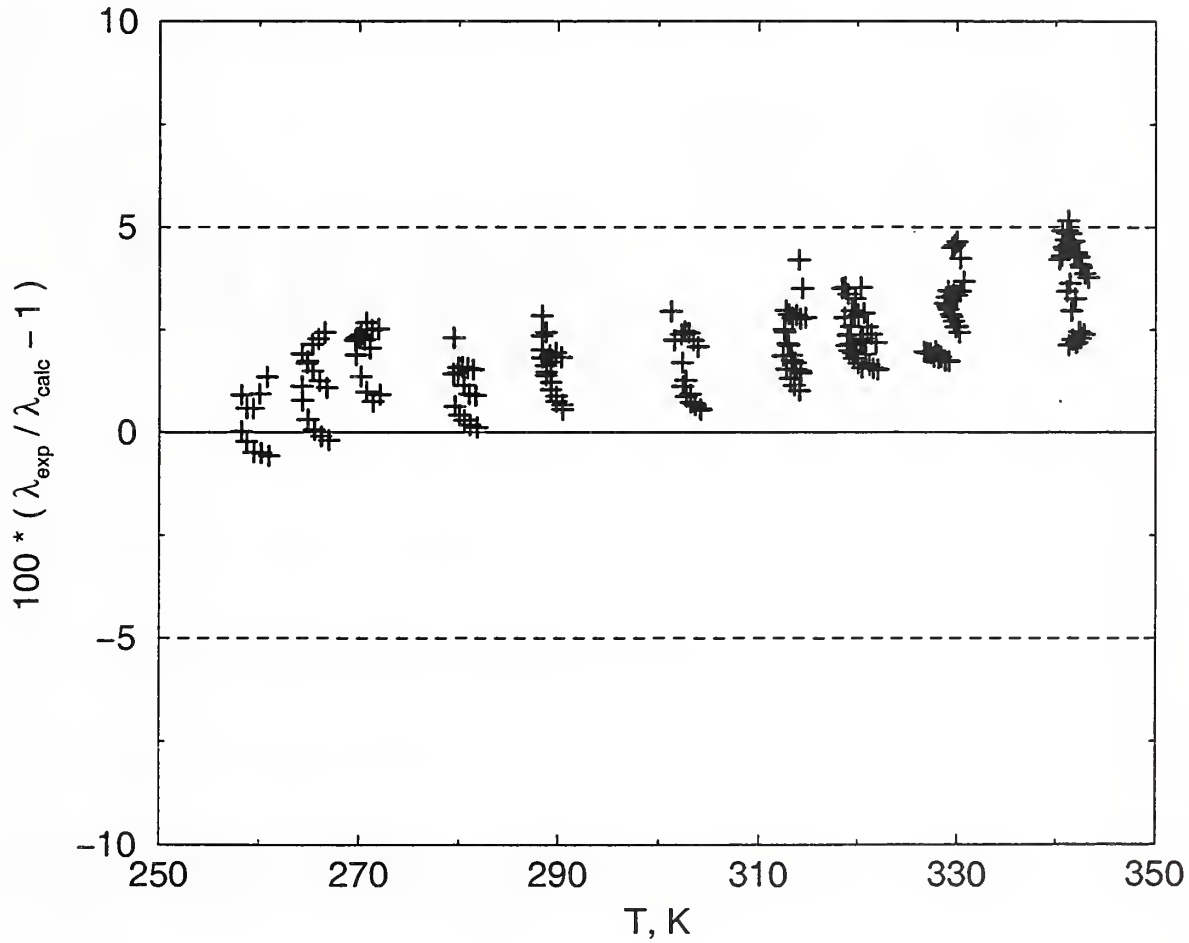

Figure 22. Relative deviations of the steady-state thermal conductivity data for the binary 70 % R125 / 30 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

4.3 30 % R32 / 70 % Propane Mixture

The precise molar composition of the mixture was 0.29992 R32 + 0.70008 propane. Results for 225 measurements, at temperatures from 229 K to 341 K (0.03 MPa to 1.12 MPa), are reported in Table 25. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 23. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 23.

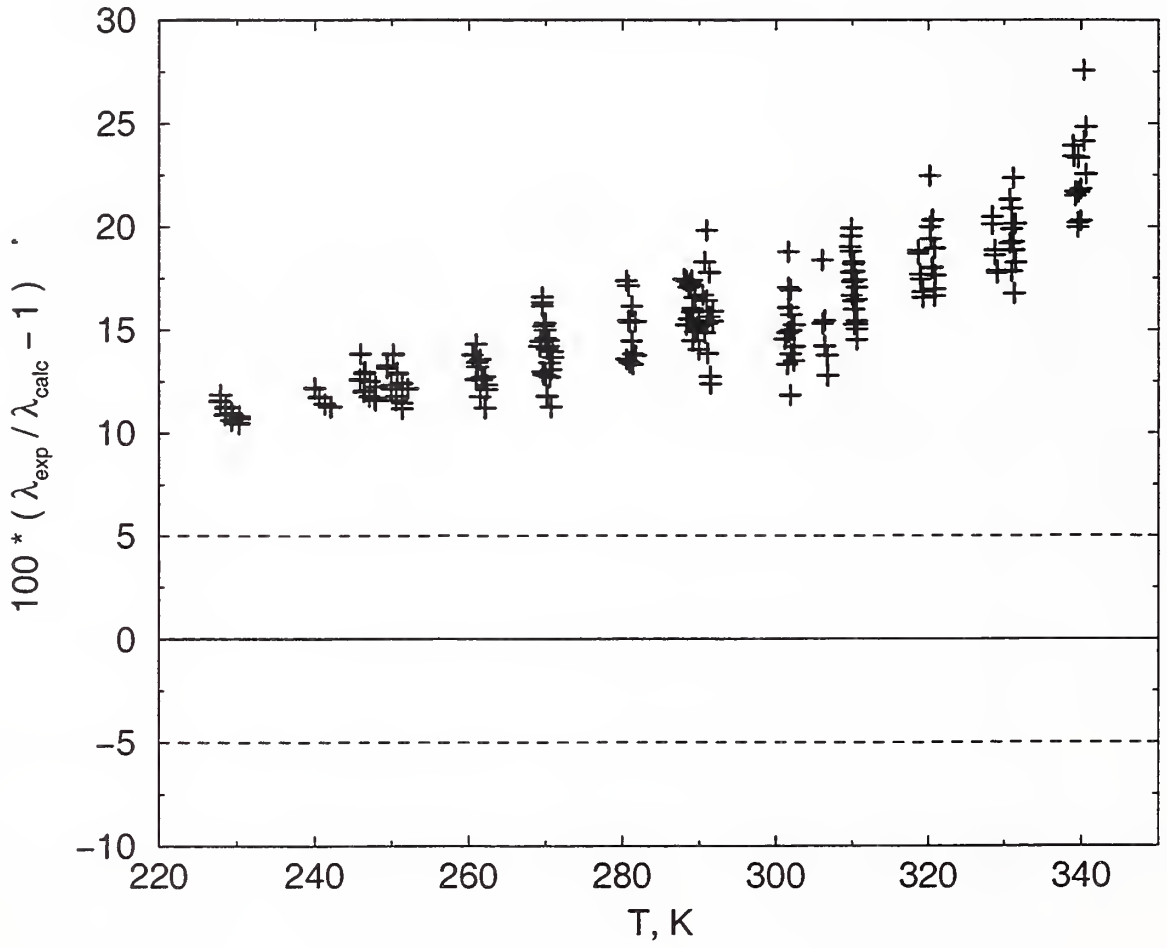

Figure 23. Relative deviations of the steady-state thermal conductivity data for the binary 30 % R32 / 70 % propane mixture in the vapor phase from the predictions of REFPROP 6.01.

4.4 70 % R32 / 30 % Propane Mixture

The precise molar composition of the mixture was 0.70005 R32 + 0.29995 propane. Results for 193 measurements, at temperatures from 258 K to 328 K (0.10 MPa to 1.33 MPa), are reported in Table 26. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 24. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 24.

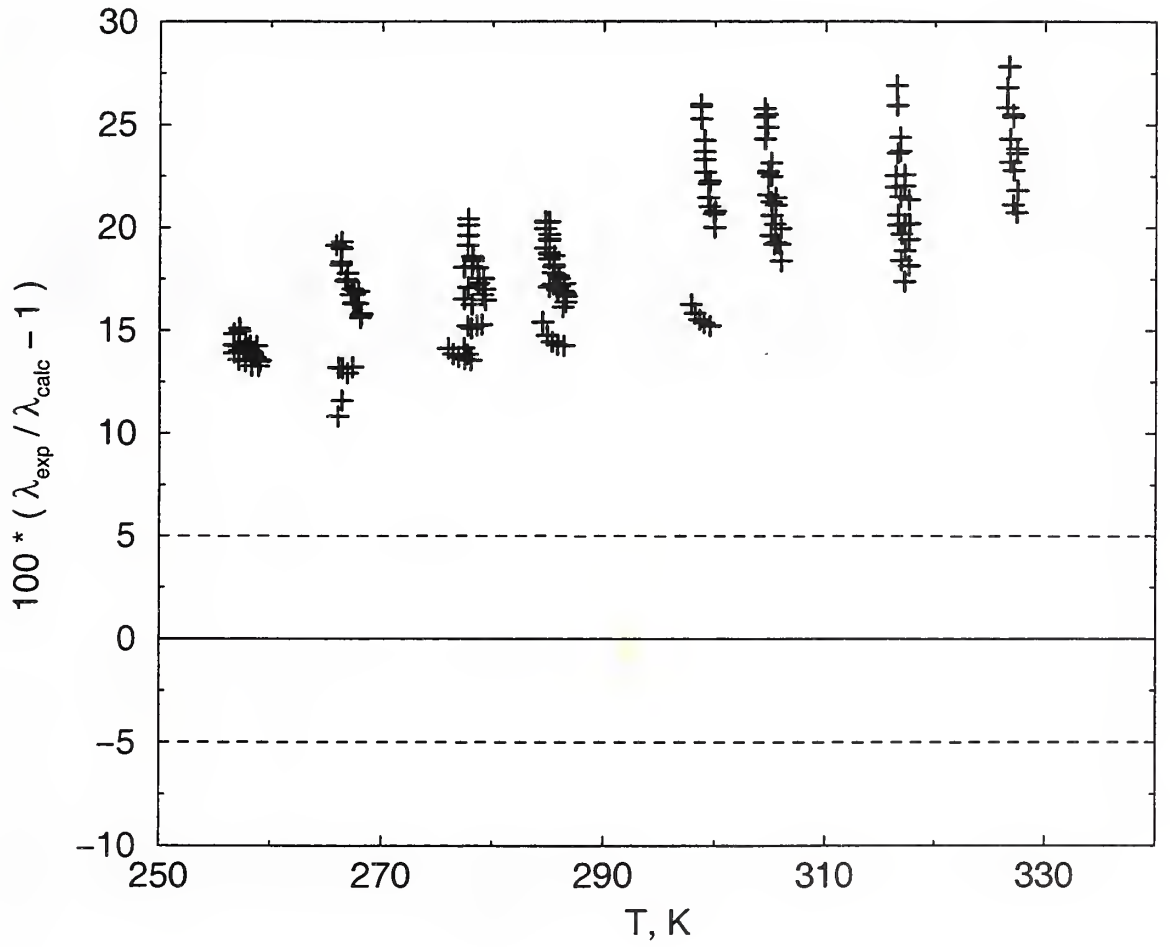

Figure 24. Relative deviations of the steady-state thermal conductivity data for the binary 70 % R32 / 30 % mixture in the vapor phase from the predictions of REFPROP 6.01.

4.5 30 % R32 / 70 % R134a Mixture

The precise molar composition of the mixture was 0.29955 R32 + 0.70044 R134a. Results for 266 measurements, at temperatures from 258 K to 343 K (0.09 MPa to 0.45 MPa), are reported in Table 27. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 25. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 25.

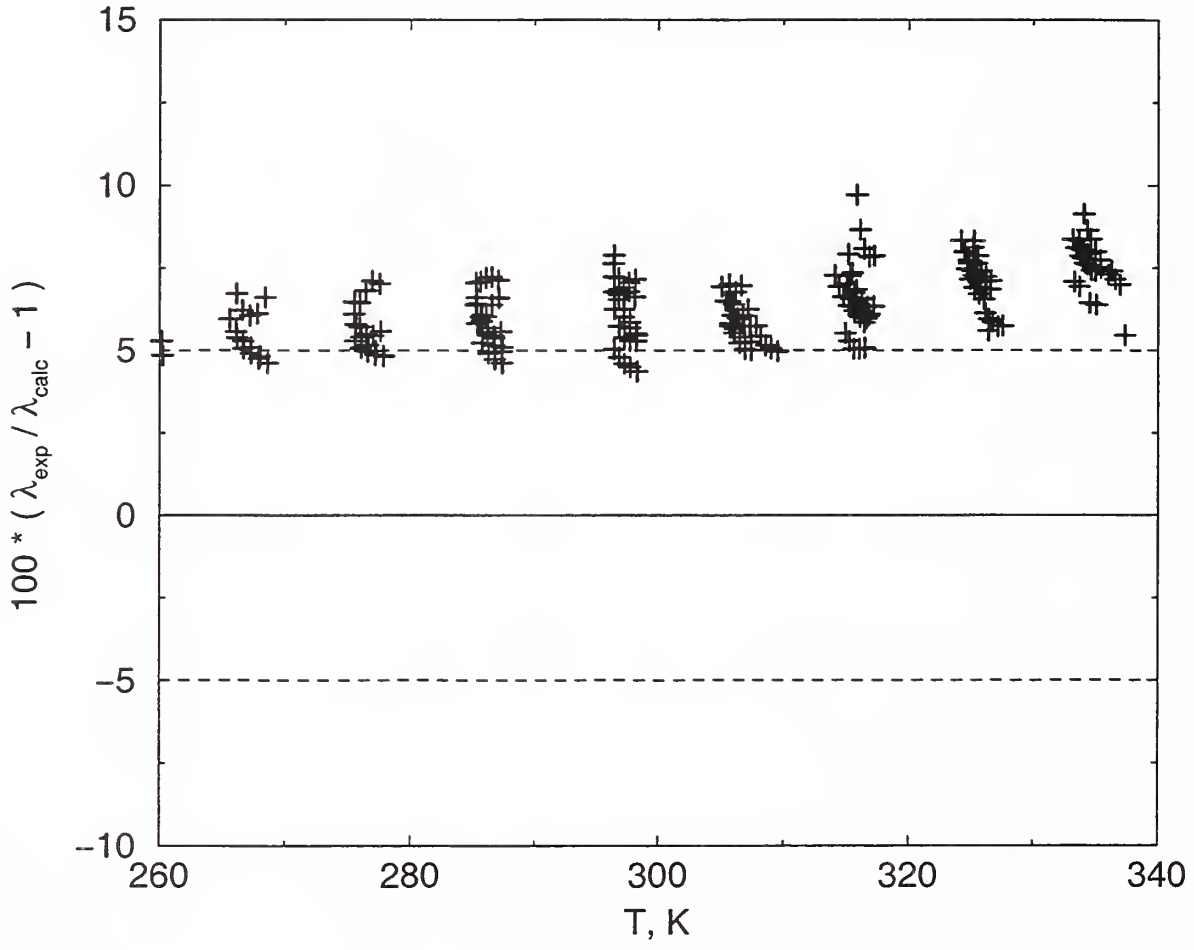

Figure 25. Relative deviations of the steady-state thermal conductivity data for the binary 30 % R32 / 70 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

4.6 70 % R32 / 30 % R134a Mixture

The precise molar composition of the mixture was 0.70031 R32 + 0.29969 R134a. Results for 267 measurements, at temperatures from 259 K to 348 K (0.09 MPa to 0.56 MPa), are reported in Table 28. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 26. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 26.

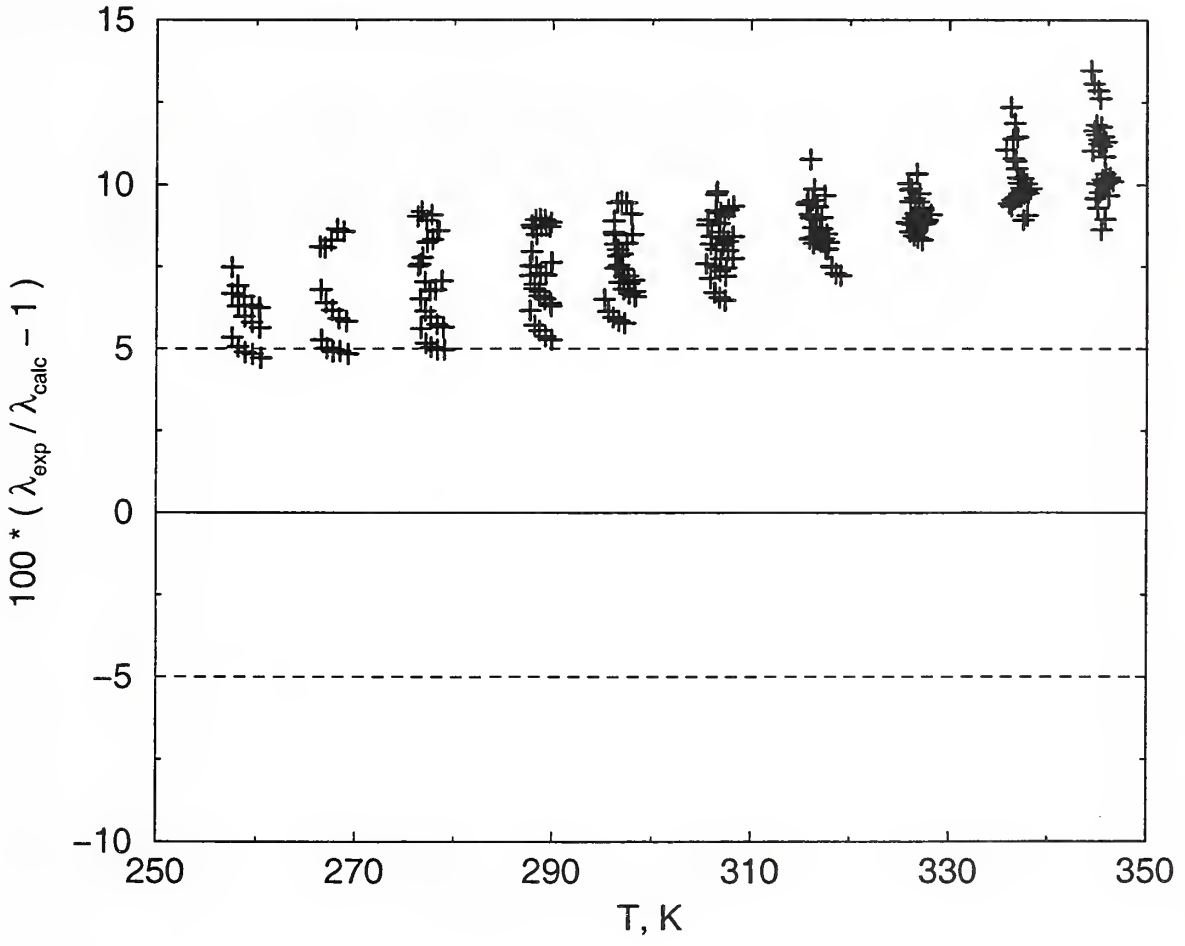

Figure 26. Relative deviations of the steady-state thermal conductivity data for the binary 70 % R32 / 30 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

4.7 30 % R134a / 70 % Propane Mixture

The precise molar composition of the mixture was 0.30033 R134a + 0.69966 propane. Results for 55 measurements, at temperatures from 243 K to 302 K (0.11 MPa to 0.30 MPa), are reported in Table 29. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 27. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 27.

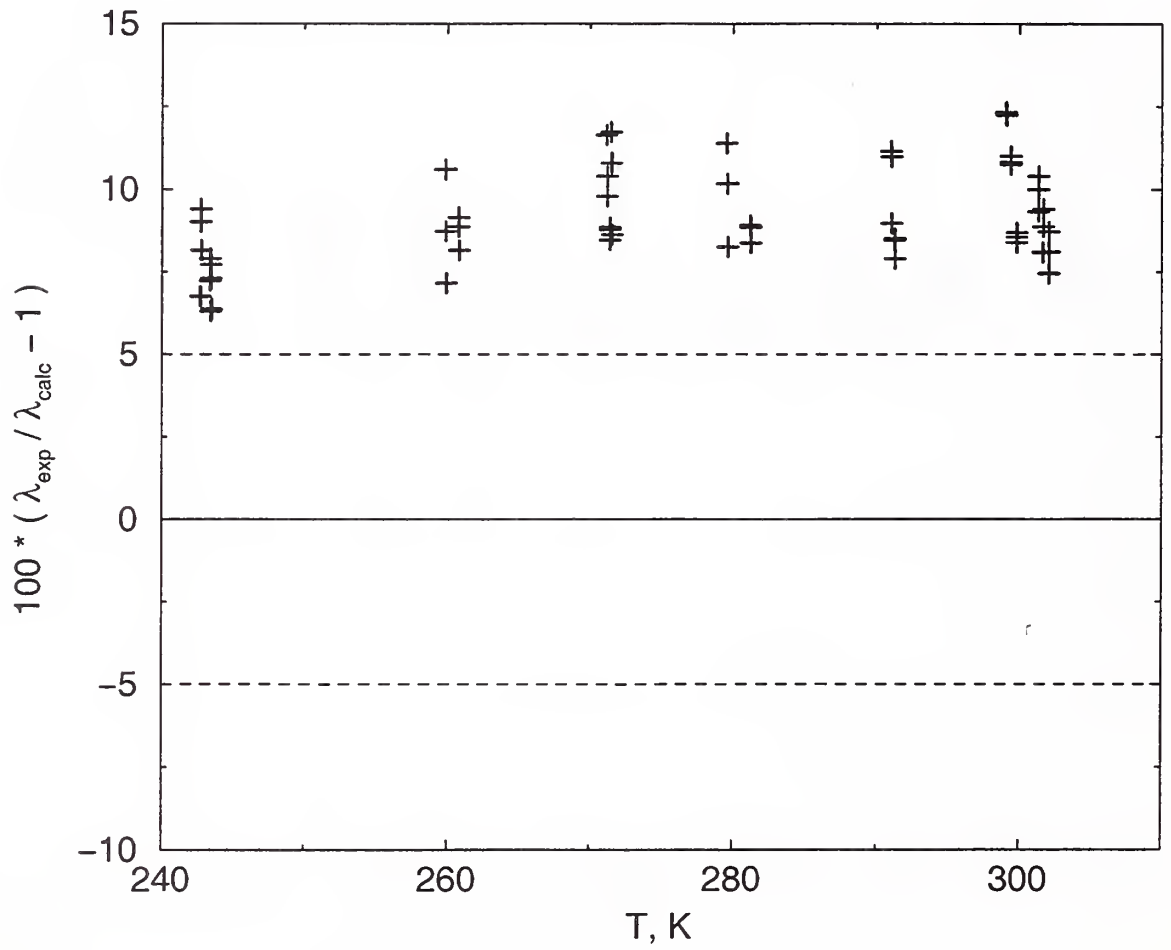

Figure 27. Relative deviations of the steady-state thermal conductivity data for the binary 30 % R134a / 70 % propane mixture in the vapor phase from the predictions of REFPROP 6.01.

4.8 70 % R134a / 30 % Propane Mixture

The precise molar composition of the mixture was 0.69948 R134a + 0.30051 propane. Results for 235 measurements, at temperatures from 258 K to 348 K (0.09 MPa to 0.56 MPa), are reported in Table 30. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 28. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 28.

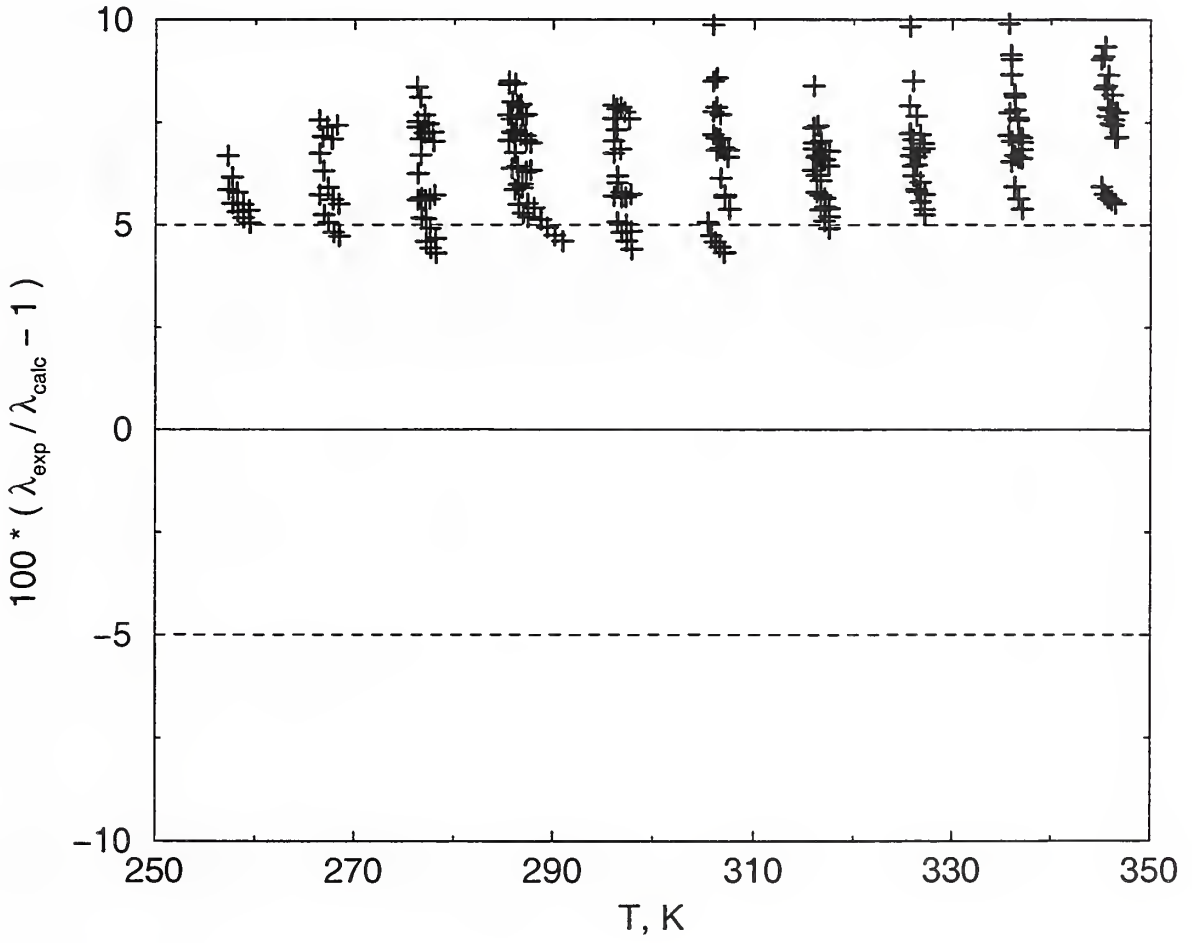

Figure 28. Relative deviations of the steady-state thermal conductivity data for the binary 70 % R134a / 30 % propane mixture in the vapor phase from the predictions of REFPROP 6.01.

4.9 33 % R32 / 33 % R125 / 33 % R134a Mixture

The precise molar composition of the mixture was 0.33298 R32 + 0.33342 R125 + 0.33359 R134a. Results for 107 measurements, at temperatures from 263 K to 341 K (0.10 MPa to 0.30 MPa), are reported in Table 31. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 29. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 29.

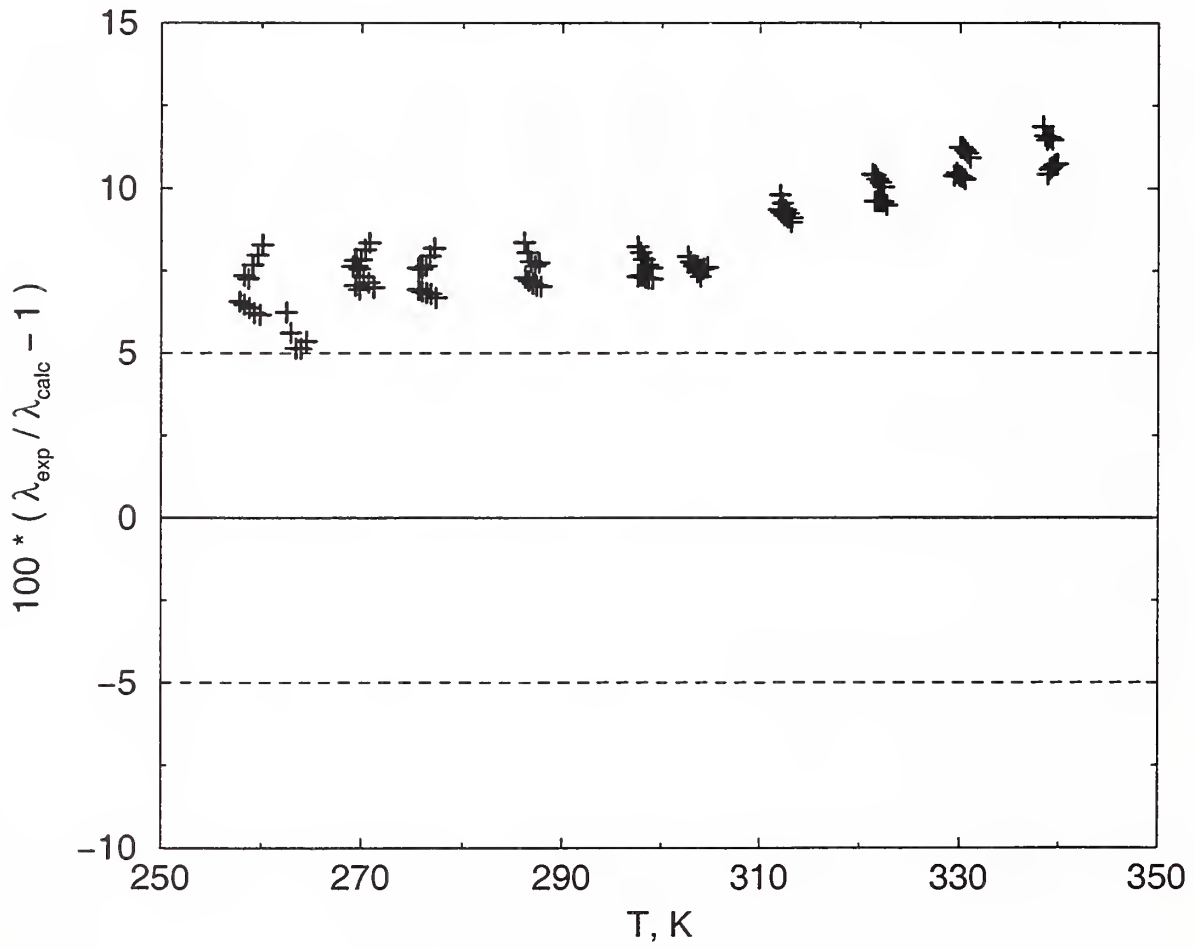

Figure 29. Relative deviations of the steady-state thermal conductivity data for the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

4.10 30 % R32 / 10 % R125 / 60 % R134a Mixture

The precise molar composition of the mixture was 0.30027 R32 + 0.09995 R125 + 0.59977 R134a. Results for 263 measurements, at temperatures from 258 K to 345 K (0.09 MPa to 0.53 MPa), are reported in Table 32. Relative deviations between the measured thermal conductivity and the predictions of the mixture model REFPROP 6.01 [23] are shown in Figure 30. The thermal conductivity critical enhancement becomes more significant as the temperature increases and is likely responsible for the increasing deviations in Figure 30.

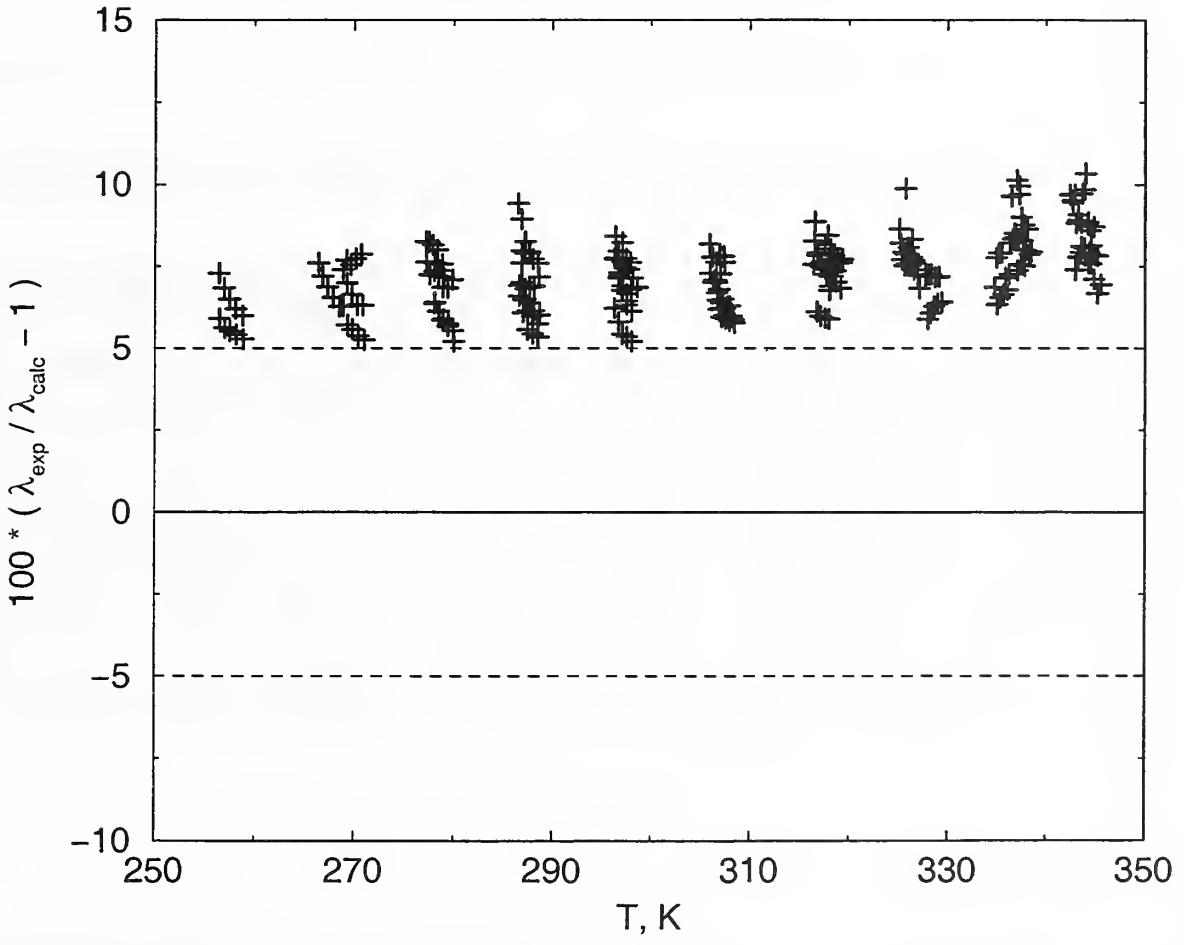

Figure 30. Relative deviations of the steady-state thermal conductivity data for the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase from the predictions of REFPROP 6.01.

5. Summary of Deviations Relative to REFPROP 6.01

The mixture data have been compared to the NIST REFPROP 6.01 database [23], with deviations plots provided for each mixture. A summary of the statistics of these deviations is provided in Table 1. In the vapor phase, REFPROP 6.01 predicts the thermal conductivity much better for mixtures of polar refrigerants that it does for polar refrigerants mixtures with nonpolar propane. REFPROP 6.01 does better at predicting the thermal conductivity of the liquid phase than the vapor phase. The data is generally higher than the REFPROP predictions in both the liquid and vapor phases as the critical point is approached. This is likely due to an increasing contribution from the critical enhancement of the thermal conductivity. The deviations are characterized in terms of the average absolute deviations (AAD), where

$$AAD = \frac{1}{n_{points}} \sum_{k=1}^{n_{points}} 100 \left| \frac{\lambda_{exp} - \lambda_{calc}}{\lambda_{calc}} \right|. \quad (1)$$

Table 1. Summary of deviations between the thermal conductivity data for each mixture and REFPROP 6.01.

Mixture	Composition (mole fraction)	Data range		Number of points, AAD (%)					
		T(K)	ρ (mol·L^{-1})	liquid (transient)		vapor (steady-state)		vapor (transient)	
R125/R134a	0.3002/0.6998	244–347	0.027–13.1	142	3.01	160	3.14	248	2.28
	0.7000/0.3000	247–344	0.034–12.4	136	5.10	205	2.23	202	2.37
R32/propane	0.2999/0.7001	229–347	0.012–14.2	159	5.10	225	15.4	139	12.1
	0.7001/0.2999	254–336	0.040–17.0	136	8.83	193	18.5	395	11.4
R32/134a	0.2996/0.7004	255–360	0.032–14.9	179	2.39	266	6.61	235	7.65
	0.7003/0.2997	254–348	0.033–18.1	130	4.11	267	8.38	231	8.65
R134a/propane	0.3003/0.6997	243–347	0.037–12.3	165	5.64	55	6.67	51	6.06
	0.7012/0.2986	250–348	0.057–11.9	246	5.46	235	9.18	233	5.10
R32/125/134a	0.333/0.333/0.334	250–344	0.033–14.7	175	8.04	107	8.40	81	9.43
	0.300/0.100/0.600	250–345	0.033–15.0	182	4.02	263	7.26	230	8.52

6. Acknowledgments

The support of the U.S. Department of Energy, Office of Building Technologies for this work on the thermophysical properties of alternative refrigerant mixtures is gratefully acknowledged. The data presented here will be used for further development of the NIST thermophysical-property database for alternative refrigerant mixtures - REFPROP.

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8. Tables of transient results for anodized tantalum wires

Table 2. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.353	0.17781	244.420	13.1040	0.09385	0.005	243.632
1003	0.345	0.22535	244.640	13.0971	0.09437	0.004	243.633
1005	0.346	0.27846	244.871	13.0902	0.09388	0.003	243.629
1007	0.338	0.33721	245.125	13.0824	0.09440	0.003	243.625
1009	0.336	0.40161	245.412	13.0737	0.09399	0.002	243.621
1011	0.336	0.47168	245.709	13.0647	0.09372	0.003	243.611
1013	0.333	0.54749	246.051	13.0543	0.09345	0.003	243.608
1015	0.355	0.17778	244.302	13.1076	0.09481	0.005	243.522
1017	0.353	0.22524	244.516	13.1011	0.09546	0.003	243.522
1019	0.351	0.27829	244.765	13.0935	0.09414	0.004	243.525
1021	0.349	0.33698	245.019	13.0858	0.09401	0.003	243.516
1023	0.347	0.40134	245.315	13.0769	0.09447	0.003	243.520
1025	0.345	0.47129	245.617	13.0678	0.09424	0.003	243.514
1027	0.344	0.54714	245.956	13.0575	0.09398	0.003	243.512
1029	0.850	0.18357	253.054	12.8562	0.09087	0.005	252.225
1031	0.859	0.23251	253.299	12.8489	0.09173	0.003	252.234
1033	0.865	0.28727	253.553	12.8413	0.09189	0.002	252.237
1035	0.854	0.34794	253.837	12.8322	0.09189	0.003	252.241
1037	0.843	0.41439	254.144	12.8223	0.09207	0.002	252.245
1039	0.839	0.48675	254.476	12.8119	0.09242	0.002	252.246
1041	0.851	0.56483	254.818	12.8017	0.09283	0.002	252.239
1043	0.908	0.18840	260.209	12.6343	0.08846	0.005	259.332
1045	0.909	0.23870	260.456	12.6265	0.08850	0.003	259.338
1047	0.907	0.29493	260.728	12.6177	0.08832	0.003	259.340
1049	0.902	0.35712	261.031	12.6079	0.08845	0.003	259.353
1051	0.899	0.42528	261.355	12.5974	0.08938	0.002	259.350
1053	0.899	0.49940	261.698	12.5865	0.08988	0.002	259.356
1055	0.905	0.57955	262.083	12.5744	0.09014	0.003	259.360
1057	7.458	0.19493	269.851	12.5627	0.08781	0.006	268.941
1059	7.459	0.24685	270.106	12.5551	0.08887	0.004	268.950
1061	7.440	0.30483	270.400	12.5457	0.08901	0.003	268.964
1063	7.419	0.36904	270.696	12.5362	0.08916	0.003	268.967
1065	7.410	0.43949	271.034	12.5258	0.08979	0.004	268.968
1067	7.435	0.51609	271.389	12.5160	0.09027	0.004	268.969
1069	7.462	0.59898	271.773	12.5054	0.09121	0.005	268.973
1071	1.539	0.19504	269.945	12.3429	0.08455	0.005	268.996
1073	1.530	0.24687	270.200	12.3341	0.08491	0.004	269.000
1075	1.523	0.30486	270.495	12.3241	0.08577	0.003	269.009
1077	1.522	0.36926	270.813	12.3136	0.08586	0.004	269.010
1079	1.545	0.43987	271.146	12.3034	0.08675	0.004	269.009
1081	1.562	0.51661	271.513	12.2920	0.08760	0.005	269.015

Table 2. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1083	1.576	0.59963	271.910	12.2793	0.08859	0.006	269.018
1085	8.787	0.20145	279.768	12.3123	0.08576	0.005	278.784
1087	8.827	0.25495	280.017	12.3062	0.08633	0.004	278.789
1089	8.846	0.31489	280.313	12.2980	0.08617	0.004	278.789
1091	8.818	0.38133	280.630	12.2873	0.08710	0.004	278.791
1093	8.804	0.45422	280.977	12.2763	0.08775	0.005	278.787
1095	8.787	0.53360	281.359	12.2641	0.08881	0.006	278.795
1097	8.779	0.61929	281.750	12.2519	0.08962	0.008	278.786
1099	4.423	0.20153	279.749	12.1398	0.08387	0.006	278.747
1101	4.397	0.25515	280.033	12.1295	0.08361	0.004	278.763
1103	4.385	0.31502	280.316	12.1196	0.08413	0.004	278.763
1105	4.378	0.38148	280.647	12.1085	0.08525	0.005	278.763
1107	4.392	0.45427	281.008	12.0972	0.08596	0.006	278.766
1109	4.426	0.53348	281.382	12.0863	0.08667	0.008	278.767
1111	4.443	0.61919	281.791	12.0735	0.08810	0.009	278.775
1113	1.552	0.20157	279.746	12.0113	0.08225	0.004	278.730
1115	1.550	0.25511	280.033	12.0012	0.08184	0.004	278.746
1117	1.545	0.31494	280.332	11.9905	0.08288	0.004	278.751
1119	1.525	0.38136	280.661	11.9779	0.08398	0.004	278.754
1127	8.014	0.15907	289.124	11.9915	0.08419	0.006	288.342
1129	8.021	0.20774	289.398	11.9831	0.08400	0.004	288.355
1131	8.067	0.26288	289.666	11.9765	0.08444	0.003	288.355
1133	8.086	0.32464	289.998	11.9668	0.08551	0.004	288.374
1141	4.769	0.15909	289.196	11.8398	0.08054	0.006	288.373
1143	4.774	0.20771	289.437	11.8318	0.08125	0.004	288.381
1145	4.739	0.26294	289.746	11.8194	0.08267	0.003	288.395
1149	4.719	0.39338	290.403	11.7958	0.08399	0.005	288.405
1155	1.896	0.15915	289.366	11.6835	0.07668	0.005	288.516
1157	1.886	0.20792	289.603	11.6742	0.07843	0.004	288.517
1159	1.872	0.26318	289.905	11.6622	0.07902	0.004	288.522
1161	1.861	0.32508	290.235	11.6493	0.08019	0.004	288.535
1169	7.886	0.16400	299.246	11.6553	0.07786	0.005	298.384
1171	7.878	0.21435	299.506	11.6462	0.07936	0.004	298.389
1173	7.902	0.27143	299.808	11.6373	0.07919	0.004	298.391
1175	7.922	0.33523	300.137	11.6273	0.07970	0.006	298.391
1183	4.391	0.16435	299.229	11.4636	0.07593	0.005	298.350
1185	4.381	0.21461	299.509	11.4527	0.07737	0.004	298.363
1187	4.368	0.27156	299.825	11.4402	0.07796	0.003	298.371
1189	4.404	0.33528	300.156	11.4301	0.07906	0.004	298.366
1197	1.476	0.16435	299.233	11.2740	0.07438	0.005	298.330
1199	1.469	0.21455	299.523	11.2616	0.07528	0.003	298.346
1201	1.469	0.27136	299.837	11.2487	0.07589	0.003	298.349
1211	1.484	0.16431	299.276	11.2728	0.07292	0.005	298.369

Table 2. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1213	1.496	0.21443	299.556	11.2622	0.07254	0.003	298.372
1215	1.522	0.27119	299.874	11.2510	0.07243	0.003	298.382
1217	1.518	0.33498	300.229	11.2361	0.07252	0.002	298.388
1219	1.509	0.40589	300.634	11.2186	0.07182	0.004	298.395
1221	1.500	0.48363	301.047	11.2008	0.07369	0.003	298.385
1223	1.490	0.56801	301.493	11.1814	0.07278	0.003	298.393
1225	9.814	0.17194	314.583	11.2402	0.07732	0.006	313.645
1227	9.784	0.22454	314.884	11.2280	0.07579	0.004	313.657
1229	9.779	0.28416	315.219	11.2160	0.07491	0.003	313.655
1231	9.778	0.35102	315.597	11.2029	0.07431	0.002	313.665
1233	9.809	0.42487	315.993	11.1910	0.07554	0.002	313.668
1235	9.820	0.50595	316.445	11.1759	0.07509	0.002	313.675
1237	9.830	0.59378	316.942	11.1592	0.07408	0.002	313.684
1239	9.790	0.17211	314.626	11.2373	0.07545	0.005	313.678
1241	9.779	0.22462	314.912	11.2267	0.07603	0.004	313.684
1243	9.772	0.28423	315.238	11.2149	0.07687	0.004	313.691
1253	7.014	0.17216	314.591	11.0595	0.07271	0.005	313.624
1255	7.039	0.22468	314.888	11.0500	0.07410	0.004	313.636
1257	7.040	0.28433	315.214	11.0378	0.07535	0.004	313.632
1267	4.249	0.17212	314.553	10.8503	0.07042	0.004	313.563
1269	4.259	0.22475	314.858	10.8383	0.07149	0.003	313.571
1271	4.257	0.28442	315.192	10.8239	0.07334	0.003	313.571
1281	1.528	0.17217	314.511	10.5951	0.06756	0.004	313.494
1283	1.524	0.22482	314.822	10.5792	0.06874	0.003	313.507
1285	1.519	0.28450	315.178	10.5609	0.07066	0.003	313.506
1295	8.099	0.17944	329.200	10.5731	0.06799	0.004	328.145
1297	8.111	0.23417	329.549	10.5601	0.06832	0.003	328.159
1299	8.124	0.29632	329.920	10.5461	0.06952	0.003	328.161
1309	5.553	0.17947	329.216	10.3261	0.06557	0.004	328.117
1311	5.570	0.23424	329.546	10.3127	0.06683	0.004	328.117
1313	5.578	0.29637	329.930	10.2958	0.06771	0.004	328.126
1315	5.583	0.36608	330.365	10.2760	0.06741	0.003	328.130
1323	3.511	0.17948	329.205	10.0780	0.06503	0.007	328.091
1325	3.512	0.23426	329.557	10.0591	0.06557	0.005	328.105
1329	3.535	0.36631	330.398	10.0164	0.06569	0.005	328.113
1337	2.216	0.17946	329.211	9.8794	0.06419	0.006	328.083
1339	2.226	0.23414	329.558	9.8596	0.06786	0.009	328.092
1341	2.235	0.29622	329.956	9.8362	0.06620	0.007	328.100
1343	2.240	0.36606	330.415	9.8082	0.06560	0.007	328.108
1353	8.363	0.16160	346.058	9.8707	0.06092	0.010	345.036
1355	8.359	0.18762	346.234	9.8620	0.06198	0.006	345.043
1357	8.364	0.21545	346.416	9.8542	0.06170	0.005	345.042
1359	8.375	0.24516	346.599	9.8471	0.06144	0.004	345.033

Table 2. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1361	8.380	0.27677	346.816	9.8375	0.06192	0.003	345.042
1363	8.382	0.31039	347.041	9.8272	0.06198	0.004	345.043
1365	6.384	0.13789	345.871	9.6022	0.06135	0.009	344.988
1367	6.383	0.16162	346.050	9.5922	0.06053	0.007	345.006
1369	6.394	0.18734	346.207	9.5854	0.06187	0.007	344.999
1373	6.402	0.24502	346.620	9.5642	0.05994	0.004	345.014
1375	6.402	0.27681	346.826	9.5529	0.05962	0.004	345.012
1377	6.397	0.31054	347.043	9.5400	0.06073	0.004	345.019
1379	4.505	0.13780	345.870	9.2461	0.05890	0.009	344.961
1381	4.496	0.16148	346.043	9.2321	0.06081	0.010	344.975
1383	4.493	0.18728	346.196	9.2209	0.06193	0.010	344.969
1385	4.491	0.21523	346.407	9.2058	0.05981	0.007	344.979
1387	4.495	0.24502	346.625	9.1916	0.05903	0.006	344.987
1389	4.503	0.27671	346.819	9.1798	0.06115	0.007	344.988
1391	4.506	0.31031	347.044	9.1647	0.06324	0.010	344.995

Table 3. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1007	0.326	0.33687	247.603	12.3804	0.08405	0.003	245.753
1009	0.319	0.40147	247.950	12.3691	0.08378	0.002	245.751
1011	0.313	0.47180	248.341	12.3563	0.08304	0.002	245.747
1013	0.308	0.54789	248.756	12.3428	0.08284	0.002	245.742
1015	0.500	0.14141	256.286	12.1037	0.08048	0.011	255.502
1017	0.501	0.18457	256.533	12.0955	0.07957	0.006	255.508
1019	0.502	0.23355	256.828	12.0857	0.07933	0.005	255.514
1021	0.503	0.28844	257.136	12.0754	0.07992	0.004	255.511
1023	0.503	0.34924	257.499	12.0632	0.07988	0.003	255.515
1025	0.502	0.41603	257.873	12.0507	0.07954	0.002	255.510
1027	0.501	0.48845	258.302	12.0362	0.07914	0.002	255.511
1029	0.488	0.14146	256.268	12.1038	0.08060	0.010	255.482
1031	0.486	0.18452	256.510	12.0957	0.08001	0.007	255.483
1033	0.485	0.23319	256.798	12.0860	0.07937	0.005	255.489
1035	0.485	0.28804	257.121	12.0752	0.07956	0.003	255.497
1037	0.484	0.34920	257.476	12.0633	0.07940	0.003	255.492
1039	0.482	0.41618	257.853	12.0505	0.07949	0.002	255.492
1041	0.480	0.48902	258.269	12.0364	0.07918	0.002	255.487
1043	1.207	0.14845	270.116	11.6579	0.07464	0.009	269.245
1045	1.212	0.19352	270.400	11.6481	0.07489	0.006	269.254
1047	1.219	0.24480	270.721	11.6369	0.07415	0.004	269.260
1049	1.215	0.30248	271.081	11.6238	0.07420	0.003	269.265
1051	1.212	0.36650	271.478	11.6093	0.07383	0.002	269.265
1053	1.204	0.43683	271.914	11.5931	0.07388	0.002	269.270
1055	1.199	0.51350	272.377	11.5760	0.07379	0.002	269.260
1057	1.198	0.14845	270.123	11.6573	0.07498	0.009	269.250
1059	1.206	0.19355	270.412	11.6473	0.07484	0.006	269.262
1061	1.206	0.24497	270.727	11.6360	0.07407	0.004	269.261
1063	1.203	0.30289	271.087	11.6230	0.07424	0.003	269.266
1065	1.200	0.36700	271.481	11.6086	0.07410	0.002	269.266
1067	1.194	0.43735	271.910	11.5927	0.07393	0.002	269.265
1069	1.188	0.51373	272.381	11.5753	0.07358	0.002	269.259
1071	9.949	0.15553	284.622	11.5797	0.07603	0.009	283.707
1073	9.941	0.20296	284.932	11.5695	0.07536	0.005	283.722
1075	9.908	0.25716	285.259	11.5578	0.07459	0.004	283.723
1077	9.899	0.31790	285.631	11.5456	0.07452	0.003	283.723
1079	9.889	0.38529	286.047	11.5320	0.07471	0.002	283.721
1081	9.885	0.45899	286.495	11.5175	0.07416	0.002	283.719
1083	9.893	0.53909	286.995	11.5020	0.07386	0.001	283.724
1085	5.461	0.15607	284.629	11.3616	0.07254	0.008	283.674
1087	5.451	0.20353	284.924	11.3507	0.07195	0.005	283.683
1089	5.453	0.25734	285.282	11.3382	0.07170	0.004	283.697
1091	5.478	0.31797	285.673	11.3258	0.07130	0.003	283.693

Table 3. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1093	5.494	0.38530	286.092	11.3119	0.07115	0.002	283.699
1095	5.503	0.45927	286.561	11.2958	0.07114	0.002	283.693
1097	5.503	0.53960	287.069	11.2777	0.07078	0.001	283.699
1099	1.463	0.15595	284.621	11.1256	0.06921	0.008	283.638
1101	1.472	0.20346	284.944	11.1133	0.06820	0.005	283.659
1103	1.479	0.25714	285.308	11.0991	0.06868	0.004	283.661
1105	1.480	0.31787	285.704	11.0832	0.06807	0.003	283.664
1107	1.473	0.38532	286.155	11.0645	0.06811	0.002	283.673
1109	1.456	0.45926	286.643	11.0435	0.06805	0.002	283.676
1111	1.444	0.53975	287.168	11.0212	0.06768	0.002	283.675
1113	9.709	0.16297	299.399	11.0850	0.07032	0.008	298.377
1115	9.689	0.21267	299.727	11.0727	0.06913	0.005	298.383
1117	9.681	0.26945	300.104	11.0594	0.06938	0.004	298.391
1119	9.674	0.33327	300.517	11.0449	0.06889	0.003	298.391
1121	9.669	0.40357	300.969	11.0291	0.06883	0.002	298.394
1123	9.668	0.48069	301.473	11.0118	0.06871	0.002	298.389
1125	9.670	0.56486	302.029	10.9927	0.06842	0.001	298.394
1127	5.448	0.16351	299.405	10.8154	0.06668	0.010	298.336
1129	5.450	0.21337	299.739	10.8025	0.06593	0.005	298.343
1131	5.448	0.26980	300.150	10.7862	0.06642	0.004	298.365
1133	5.447	0.33340	300.570	10.7696	0.06589	0.003	298.356
1135	5.435	0.40394	301.048	10.7498	0.06586	0.002	298.359
1137	5.425	0.48147	301.575	10.7282	0.06533	0.002	298.360
1139	5.420	0.56590	302.149	10.7049	0.06525	0.001	298.355
1141	4.129	0.16351	299.425	10.7161	0.06621	0.007	298.339
1143	4.125	0.21332	299.759	10.7020	0.06596	0.005	298.346
1145	4.116	0.26971	300.162	10.6845	0.06586	0.004	298.356
1147	4.116	0.33355	300.602	10.6662	0.06447	0.002	298.355
1149	4.109	0.40415	301.086	10.6454	0.06501	0.002	298.355
1151	4.110	0.48175	301.612	10.6233	0.06432	0.002	298.351
1153	4.107	0.56604	302.202	10.5980	0.06398	0.001	298.362
1157	1.728	0.21327	299.794	10.4913	0.06350	0.005	298.329
1165	1.705	0.48179	301.683	10.3988	0.06293	0.002	298.338
1167	1.702	0.56618	302.290	10.3689	0.06211	0.001	298.342
1169	8.826	0.17100	314.955	10.4658	0.06434	0.007	313.803
1171	8.830	0.22294	315.325	10.4518	0.06352	0.005	313.809
1173	8.837	0.28249	315.736	10.4365	0.06336	0.003	313.804
1175	8.844	0.34931	316.219	10.4185	0.06339	0.003	313.810
1177	8.847	0.42324	316.730	10.3989	0.06292	0.002	313.800
1179	8.846	0.50426	317.298	10.3766	0.06273	0.001	313.795
1181	8.821	0.59278	317.924	10.3501	0.06257	0.001	313.794
1183	6.194	0.17121	314.905	10.2397	0.06136	0.007	313.702
1185	6.203	0.22329	315.280	10.2242	0.06138	0.005	313.710

Table 3. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1187	6.208	0.28252	315.704	10.2063	0.06098	0.003	313.710
1189	6.210	0.34935	316.189	10.1851	0.06087	0.002	313.700
1191	6.207	0.42342	316.736	10.1607	0.06041	0.002	313.713
1193	6.191	0.50453	317.305	10.1339	0.06027	0.001	313.698
1195	6.176	0.59296	317.942	10.1038	0.05994	0.001	313.688
1197	4.192	0.17103	314.773	10.0332	0.05972	0.007	313.554
1199	4.170	0.22305	315.158	10.0115	0.05911	0.004	313.551
1201	4.162	0.28229	315.602	9.9885	0.05896	0.003	313.549
1203	4.156	0.34917	316.093	9.9631	0.05868	0.002	313.548
1205	4.151	0.42340	316.645	9.9346	0.05824	0.002	313.541
1207	4.163	0.50452	317.246	9.9054	0.05797	0.001	313.539
1209	4.172	0.59278	317.897	9.8731	0.05782	0.001	313.531
1211	2.793	0.17096	314.562	9.8641	0.05821	0.007	313.318
1213	2.807	0.22292	314.948	9.8447	0.05770	0.004	313.321
1215	2.812	0.28206	315.400	9.8201	0.05741	0.003	313.320
1217	2.808	0.34868	315.902	9.7912	0.05721	0.002	313.320
1219	2.790	0.42269	316.459	9.7567	0.05688	0.002	313.320
1221	2.784	0.50402	317.089	9.7193	0.05647	0.001	313.318
1223	2.780	0.59257	317.754	9.6796	0.05629	0.001	313.312
1225	1.923	0.17095	314.514	9.7348	0.05687	0.006	313.251
1227	1.926	0.22314	314.925	9.7102	0.05655	0.004	313.264
1229	1.912	0.28247	315.374	9.6800	0.05640	0.003	313.269
1231	1.905	0.34919	315.898	9.6459	0.05598	0.002	313.265
1233	1.901	0.42320	316.457	9.6095	0.05563	0.002	313.260
1235	1.897	0.50438	317.094	9.5676	0.05532	0.001	313.265
1237	1.912	0.59260	317.766	9.5261	0.05502	0.002	313.260
1239	7.435	0.17824	329.392	9.7204	0.05854	0.006	328.100
1241	7.437	0.23259	329.821	9.7005	0.05839	0.004	328.104
1243	7.428	0.29455	330.288	9.6772	0.05958	0.003	328.108
1245	7.414	0.36423	330.843	9.6491	0.05805	0.002	328.113
1247	7.408	0.44142	331.433	9.6200	0.05717	0.002	328.109
1249	7.408	0.52606	332.078	9.5888	0.05655	0.001	328.104
1251	7.423	0.61799	332.758	9.5577	0.05896	0.001	328.108
1253	6.155	0.17839	329.384	9.5506	0.05778	0.006	328.064
1255	6.150	0.23271	329.813	9.5276	0.05902	0.005	328.083
1257	6.137	0.29458	330.296	9.5003	0.05997	0.004	328.083
1259	6.132	0.36443	330.856	9.4700	0.05773	0.006	328.090
1261	6.130	0.44179	331.447	9.4382	0.05845	0.002	328.087
1263	6.137	0.52647	332.120	9.4029	0.05732	0.002	328.090
1265	6.147	0.61858	332.816	9.3668	0.05875	0.002	328.095
1271	4.815	0.29493	330.340	9.2779	0.05747	0.003	328.070
1273	4.817	0.36464	330.881	9.2452	0.05752	0.003	328.072
1275	4.813	0.44183	331.497	9.2064	0.05786	0.003	328.082

Table 3. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1279	4.799	0.61891	332.907	9.1145	0.05653	0.003	328.070
1287	3.483	0.36465	330.915	8.9431	0.06040	0.006	328.072
1289	3.476	0.44198	331.530	8.8934	0.06013	0.007	328.071
1291	3.475	0.52667	332.234	8.8368	0.05904	0.007	328.076
1293	3.472	0.61890	332.936	8.7786	0.06212	0.010	328.068
1295	2.718	0.17839	329.410	8.8422	0.06173	0.009	328.046
1297	2.710	0.23264	329.852	8.8002	0.06247	0.010	328.059

Table 4. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.444	0.13799	245.516	14.1535	0.11761	0.010	244.857
1003	0.444	0.13794	245.519	14.1534	0.11537	0.010	244.852
1005	0.445	0.18018	245.675	14.1476	0.11697	0.007	244.851
1007	0.445	0.18009	245.658	14.1482	0.11748	0.007	244.836
1009	0.445	0.22805	245.853	14.1410	0.11580	0.005	244.843
1011	0.445	0.22809	245.847	14.1412	0.11698	0.005	244.830
1013	0.445	0.28176	246.061	14.1332	0.11597	0.004	244.829
1015	0.445	0.28180	246.060	14.1332	0.11642	0.010	244.823
1017	0.445	0.34121	246.295	14.1245	0.11581	0.003	244.814
1019	0.444	0.34126	246.297	14.1244	0.11475	0.003	244.817
1021	0.444	0.40643	246.556	14.1147	0.11527	0.002	244.809
1023	0.444	0.40645	246.550	14.1149	0.11574	0.002	244.806
1025	0.444	0.47741	246.848	14.1037	0.11553	0.002	244.796
1027	0.444	0.47739	246.824	14.1046	0.11552	0.001	244.791
1031	1.606	0.15070	269.819	13.2566	0.10169	0.008	269.024
1033	1.604	0.19690	270.023	13.2478	0.10198	0.006	269.030
1035	1.592	0.19686	270.013	13.2474	0.10482	0.006	269.029
1037	1.586	0.24920	270.247	13.2371	0.10060	0.004	269.031
1039	1.586	0.24927	270.266	13.2363	0.10425	0.004	269.035
1041	1.576	0.30790	270.518	13.2250	0.10070	0.003	269.026
1043	1.583	0.30789	270.535	13.2247	0.10363	0.003	269.037
1045	1.581	0.37284	270.827	13.2121	0.10194	0.002	269.033
1047	1.579	0.37287	270.819	13.2123	0.10116	0.002	269.029
1049	1.574	0.44403	271.149	13.1979	0.10212	0.002	269.030
1051	1.561	0.44406	271.156	13.1968	0.10289	0.002	269.034
1053	1.561	0.52158	271.529	13.1808	0.09996	0.003	269.037
1055	1.561	0.52163	271.533	13.1806	0.10160	0.002	269.036
1057	3.064	0.15837	284.469	12.7211	0.09385	0.009	283.612
1059	3.064	0.20681	284.712	12.7100	0.09193	0.005	283.611
1061	3.037	0.26181	284.971	12.6960	0.09449	0.003	283.614
1063	3.057	0.32338	285.259	12.6844	0.09475	0.003	283.614
1065	3.065	0.39162	285.600	12.6695	0.09444	0.002	283.615
1067	3.066	0.46645	285.968	12.6526	0.09455	0.002	283.615
1069	3.071	0.54775	286.386	12.6338	0.09490	0.001	283.620
1071	2.289	0.15837	284.456	12.6574	0.09373	0.007	283.599
1073	2.278	0.20696	284.687	12.6456	0.09328	0.005	283.603
1075	2.278	0.26182	284.963	12.6326	0.09475	0.003	283.608
1077	2.281	0.32349	285.272	12.6183	0.09338	0.002	283.611
1079	2.279	0.39172	285.617	12.6018	0.09356	0.002	283.613
1081	2.271	0.46655	286.000	12.5829	0.09314	0.002	283.615
1083	2.272	0.54790	286.406	12.5636	0.09318	0.001	283.618
1085	10.307	0.16600	299.300	12.6427	0.09600	0.007	298.381
1087	10.311	0.21515	299.538	12.6335	0.09452	0.005	298.386

Table 4. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1089	10.316	0.27416	299.838	12.6219	0.09490	0.004	298.391
1091	10.313	0.33926	300.141	12.6096	0.09449	0.003	298.393
1093	10.318	0.41083	300.502	12.5955	0.09418	0.002	298.391
1095	10.320	0.48923	300.918	12.5789	0.09376	0.002	298.389
1097	10.318	0.57446	301.331	12.5622	0.09462	0.001	298.394
1101	8.684	0.21697	299.538	12.5111	0.09378	0.005	298.367
1103	8.686	0.27461	299.828	12.4991	0.09359	0.004	298.374
1105	8.692	0.33932	300.167	12.4854	0.09294	0.002	298.380
1107	8.697	0.41094	300.507	12.4714	0.09211	0.002	298.377
1109	8.701	0.48941	300.921	12.4542	0.09297	0.002	298.380
1111	8.706	0.57472	301.363	12.4359	0.09381	0.002	298.382
1113	7.145	0.16605	299.297	12.3956	0.09235	0.007	298.353
1115	7.144	0.21688	299.559	12.3840	0.09090	0.005	298.359
1117	7.147	0.27466	299.848	12.3714	0.09170	0.003	298.364
1119	7.147	0.33938	300.179	12.3567	0.09148	0.002	298.371
1121	7.149	0.41107	300.549	12.3404	0.09081	0.002	298.375
1123	7.151	0.48960	300.953	12.3225	0.09068	0.002	298.377
1125	7.153	0.57502	301.405	12.3025	0.09128	0.001	298.377
1129	5.305	0.16592	299.299	12.2289	0.09079	0.007	298.351
1131	5.304	0.21681	299.573	12.2158	0.08803	0.005	298.359
1133	5.301	0.27465	299.883	12.2007	0.08951	0.003	298.362
1135	5.298	0.33941	300.213	12.1845	0.08919	0.002	298.369
1137	5.297	0.41091	300.578	12.1669	0.08976	0.002	298.363
1139	5.295	0.48951	300.989	12.1469	0.08901	0.002	298.368
1143	3.729	0.16592	299.274	12.0689	0.08589	0.006	298.344
1145	3.731	0.21683	299.561	12.0544	0.08650	0.004	298.359
1147	3.735	0.27463	299.851	12.0399	0.08799	0.003	298.357
1149	3.737	0.33931	300.211	12.0214	0.08774	0.002	298.363
1151	3.742	0.41086	300.586	12.0024	0.08730	0.002	298.360
1153	3.745	0.48928	301.010	11.9805	0.08695	0.001	298.363
1157	2.264	0.15659	299.266	11.8987	0.08769	0.007	298.353
1159	2.262	0.19562	299.455	11.8878	0.08664	0.005	298.349
1161	2.262	0.23914	299.707	11.8736	0.08646	0.004	298.360
1163	2.265	0.28711	299.958	11.8597	0.08507	0.003	298.359
1165	2.271	0.33940	300.237	11.8445	0.08583	0.002	298.362
1167	2.276	0.39607	300.548	11.8275	0.08490	0.002	298.360
1169	9.287	0.12768	314.564	11.9081	0.08615	0.009	313.813
1171	9.289	0.14981	314.681	11.9030	0.08793	0.008	313.807
1173	9.289	0.17378	314.828	11.8963	0.08757	0.006	313.822
1177	9.290	0.22702	315.102	11.8838	0.08661	0.005	313.824
1179	9.292	0.25632	315.269	11.8764	0.08656	0.004	313.829
1181	9.293	0.28742	315.415	11.8699	0.08543	0.003	313.823
1183	8.281	0.12776	314.577	11.8033	0.08603	0.009	313.807

Table 4. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1185	8.280	0.14994	314.705	11.7971	0.08631	0.008	313.818
1187	8.283	0.17376	314.828	11.7916	0.08578	0.006	313.824
1189	8.283	0.19950	314.976	11.7845	0.08382	0.006	313.830
1191	8.283	0.22720	315.131	11.7771	0.08510	0.004	313.834
1193	8.284	0.25654	315.287	11.7697	0.08505	0.004	313.830
1195	8.277	0.28767	315.468	11.7602	0.08449	0.003	313.841
1197	6.612	0.12773	314.555	11.6123	0.08524	0.009	313.809
1199	6.613	0.14988	314.707	11.6045	0.08370	0.006	313.828
1201	6.614	0.17377	314.862	11.5964	0.08260	0.008	313.827
1203	6.615	0.19956	315.010	11.5888	0.08325	0.007	313.840
1205	6.616	0.22706	315.149	11.5817	0.08423	0.004	313.828
1207	6.615	0.25641	315.310	11.5731	0.08301	0.003	313.837
1209	6.615	0.28756	315.490	11.5636	0.08240	0.003	313.841
1217	4.804	0.19949	315.011	11.3396	0.07911	0.007	313.822
1219	4.807	0.22708	315.180	11.3299	0.08071	0.006	313.827
1221	4.806	0.25644	315.357	11.3193	0.07885	0.005	313.835
1223	4.808	0.28756	315.522	11.3098	0.08073	0.003	313.828
1225	3.031	0.12773	314.624	11.0603	0.07860	0.008	313.805
1227	3.032	0.14988	314.750	11.0517	0.07827	0.007	313.810
1229	3.033	0.17368	314.895	11.0417	0.07771	0.006	313.819
1231	3.035	0.19943	315.055	11.0307	0.07747	0.005	313.832
1233	3.036	0.22706	315.214	11.0196	0.07769	0.004	313.831
1235	3.036	0.25645	315.383	11.0077	0.07797	0.003	313.828
1237	3.039	0.28760	315.559	10.9956	0.07707	0.003	313.837
1239	8.834	0.13361	330.592	11.0619	0.07829	0.009	329.730
1241	8.835	0.15709	330.715	11.0554	0.07803	0.008	329.727
1243	8.833	0.18244	330.873	11.0466	0.07890	0.006	329.744
1245	8.832	0.20953	331.022	11.0385	0.07854	0.005	329.741
1247	8.836	0.23846	331.187	11.0301	0.07905	0.004	329.739
1249	8.837	0.26924	331.375	11.0200	0.07827	0.003	329.747
1251	8.838	0.30191	331.553	11.0106	0.07819	0.003	329.740
1253	7.630	0.13373	330.570	10.8732	0.07709	0.009	329.704
1255	7.630	0.15723	330.720	10.8642	0.07732	0.007	329.723
1257	7.630	0.18245	330.862	10.8558	0.07667	0.007	329.710
1259	7.629	0.20946	331.029	10.8459	0.07681	0.004	329.731
1261	7.631	0.23839	331.192	10.8365	0.07709	0.004	329.729
1265	7.633	0.30183	331.578	10.8139	0.07663	0.004	329.736
1269	6.270	0.15719	330.720	10.6084	0.07550	0.007	329.699
1271	6.270	0.18236	330.876	10.5979	0.07416	0.006	329.708
1275	6.270	0.23832	331.188	10.5767	0.07471	0.004	329.694
1277	6.271	0.26914	331.395	10.5628	0.07483	0.003	329.711
1279	6.272	0.30177	331.597	10.5493	0.07390	0.003	329.720
1281	5.005	0.13374	330.585	10.3196	0.07297	0.009	329.685

Table 4. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1283	5.005	0.15716	330.737	10.3075	0.07224	0.007	329.703
1285	5.006	0.18230	330.888	10.2956	0.07209	0.005	329.703
1287	5.007	0.20935	331.054	10.2825	0.07205	0.004	329.709
1289	5.007	0.23825	331.229	10.2684	0.07249	0.003	329.709
1291	5.009	0.26911	331.425	10.2529	0.07208	0.003	329.711
1293	5.009	0.30176	331.626	10.2365	0.07236	0.003	329.714
1295	3.978	0.13370	330.584	9.9990	0.06998	0.008	329.672
1297	3.978	0.15714	330.738	9.9836	0.07075	0.007	329.690
1299	3.979	0.18229	330.893	9.9685	0.06974	0.005	329.695
1301	3.979	0.20931	331.055	9.9520	0.07027	0.004	329.696
1303	3.979	0.23825	331.248	9.9326	0.07047	0.003	329.699
1305	3.980	0.26904	331.428	9.9142	0.06965	0.003	329.702
1307	3.980	0.30169	331.647	9.8916	0.07073	0.003	329.710
1311	8.348	0.11724	346.097	10.0312	0.07338	0.011	345.305
1313	8.349	0.13957	346.246	10.0211	0.07355	0.008	345.308
1315	8.349	0.16381	346.388	10.0112	0.07364	0.007	345.305
1317	8.349	0.19003	346.554	9.9997	0.07177	0.006	345.304
1319	8.348	0.21817	346.726	9.9876	0.07483	0.006	345.311
1321	8.348	0.24828	346.925	9.9736	0.07455	0.005	345.315
1327	7.024	0.13952	346.225	9.6405	0.07443	0.009	345.278
1329	7.024	0.16372	346.383	9.6272	0.07395	0.007	345.281
1331	7.025	0.18996	346.538	9.6142	0.07442	0.007	345.279
1333	7.025	0.21814	346.711	9.5995	0.07702	0.007	345.277
1335	7.026	0.24822	346.887	9.5844	0.08043	0.008	345.282
1337	5.972	0.09677	345.908	9.2455	0.07837	0.016	345.241
1339	5.972	0.11721	346.062	9.2285	0.08092	0.013	345.256
1341	5.972	0.13951	346.194	9.2141	0.08097	0.014	345.258
1343	5.973	0.16376	346.361	9.1959	0.07831	0.011	345.261
1347	5.974	0.21812	346.702	9.1582	0.07867	0.009	345.265
1349	5.975	0.24823	346.888	9.1375	0.08170	0.011	345.265

Table 5. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1001	0.703	0.23593	254.064	16.9738	0.12192	0.007	253.113
1003	0.704	0.29088	254.280	16.9624	0.12206	0.004	253.108
1005	0.704	0.35201	254.543	16.9485	0.12104	0.003	253.111
1007	0.705	0.41939	254.820	16.9339	0.12078	0.003	253.109
1009	0.705	0.49254	255.130	16.9174	0.12013	0.002	253.116
1011	0.704	0.57149	255.453	16.9003	0.12052	0.001	253.113
1013	0.704	0.65686	255.811	16.8811	0.11946	0.001	253.114
1017	0.703	0.18614	253.854	16.9848	0.12176	0.008	253.118
1019	0.703	0.23563	254.051	16.9744	0.12221	0.005	253.111
1021	0.704	0.29107	254.287	16.9620	0.12126	0.004	253.117
1023	0.704	0.35257	254.542	16.9485	0.11873	0.005	253.103
1025	0.704	0.42014	254.825	16.9336	0.12044	0.003	253.105
1027	0.705	0.49352	255.133	16.9173	0.12007	0.002	253.102
1033	1.201	0.25005	271.203	16.0527	0.11153	0.005	270.114
1035	1.199	0.30880	271.469	16.0366	0.10850	0.004	270.120
1037	1.196	0.37397	271.777	16.0179	0.11043	0.003	270.119
1039	1.193	0.44560	272.075	15.9998	0.11043	0.002	270.119
1041	1.191	0.52331	272.436	15.9778	0.11008	0.002	270.113
1045	1.182	0.19762	270.957	16.0657	0.11020	0.006	270.104
1047	1.180	0.25015	271.196	16.0512	0.11175	0.005	270.109
1049	1.177	0.30929	271.454	16.0356	0.10944	0.009	270.099
1051	1.175	0.37475	271.758	16.0172	0.11047	0.003	270.101
1053	1.173	0.44627	272.077	15.9979	0.10981	0.005	270.094
1055	1.171	0.52387	272.421	15.9770	0.10916	0.002	270.101
1057	2.578	0.15846	284.587	15.3532	0.10328	0.008	283.875
1059	2.576	0.20693	284.833	15.3370	0.10196	0.007	283.882
1061	2.575	0.26218	285.109	15.3188	0.10269	0.005	283.880
1065	2.587	0.39238	285.716	15.2802	0.10269	0.003	283.879
1067	2.592	0.46724	286.101	15.2552	0.10299	0.002	283.897
1069	2.593	0.54878	286.472	15.2307	0.10289	0.002	283.885
1073	2.569	0.20716	284.840	15.3357	0.10406	0.006	283.885
1075	2.567	0.26209	285.108	15.3179	0.10279	0.004	283.887
1077	2.562	0.32398	285.398	15.2983	0.10246	0.003	283.884
1079	2.563	0.39251	285.746	15.2756	0.10228	0.002	283.889
1081	2.558	0.46754	286.086	15.2524	0.10334	0.002	283.889
1083	2.558	0.54909	286.488	15.2257	0.10252	0.002	283.900
1085	10.720	0.16635	299.161	15.2954	0.10593	0.007	298.388
1087	10.712	0.21699	299.421	15.2802	0.10419	0.005	298.405
1089	10.716	0.27440	299.702	15.2650	0.10327	0.003	298.405
1091	10.738	0.33896	300.008	15.2500	0.10331	0.002	298.403
1093	10.747	0.41075	300.355	15.2314	0.10288	0.002	298.398
1095	10.752	0.48970	300.725	15.2112	0.10242	0.001	298.404
1097	10.758	0.57510	301.140	15.1884	0.10292	0.002	298.406

Table 5. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1099	8.545	0.16619	299.127	15.0836	0.10360	0.008	298.361
1101	8.551	0.21703	299.404	15.0676	0.10089	0.005	298.378
1103	8.557	0.27468	299.694	15.0510	0.10049	0.003	298.383
1105	8.561	0.33931	300.033	15.0310	0.10119	0.002	298.396
1107	8.556	0.41075	300.378	15.0098	0.10023	0.002	298.390
1109	8.551	0.48937	300.759	14.9863	0.10066	0.002	298.388
1111	8.533	0.57539	301.178	14.9590	0.10079	0.001	298.391
1115	6.421	0.15675	299.114	14.8477	0.09722	0.007	298.364
1117	6.413	0.19576	299.325	14.8330	0.09838	0.007	298.375
1119	6.419	0.23920	299.526	14.8206	0.09823	0.004	298.366
1121	6.445	0.28716	299.777	14.8074	0.09796	0.003	298.376
1123	6.453	0.33970	300.037	14.7914	0.09828	0.002	298.371
1125	6.461	0.39640	300.325	14.7735	0.09897	0.002	298.375
1129	4.215	0.15658	299.098	14.5613	0.09828	0.007	298.348
1131	4.202	0.19568	299.329	14.5427	0.09747	0.005	298.360
1133	4.195	0.23913	299.553	14.5253	0.09478	0.004	298.361
1135	4.197	0.28710	299.786	14.5085	0.09568	0.003	298.356
1137	4.228	0.33952	300.074	14.4919	0.09481	0.003	298.361
1139	4.238	0.39648	300.351	14.4730	0.09689	0.002	298.359
1143	2.869	0.15670	299.116	14.3542	0.09410	0.007	298.347
1145	2.865	0.19563	299.327	14.3368	0.09367	0.007	298.350
1147	2.857	0.23925	299.564	14.3166	0.09432	0.004	298.350
1149	2.853	0.28714	299.811	14.2962	0.09462	0.003	298.363
1151	2.878	0.33927	300.085	14.2784	0.09379	0.002	298.363
1153	2.889	0.39604	300.382	14.2562	0.09367	0.002	298.356
1155	2.094	0.12221	298.955	14.2343	0.09245	0.010	298.360
1157	2.093	0.15674	299.149	14.2180	0.09158	0.007	298.375
1159	2.093	0.19571	299.373	14.1990	0.09248	0.005	298.379
1161	2.093	0.23922	299.585	14.1810	0.09246	0.005	298.371
1163	2.093	0.28738	299.843	14.1590	0.09248	0.003	298.373
1165	2.093	0.33974	300.122	14.1352	0.09246	0.003	298.377
1167	2.094	0.39630	300.416	14.1099	0.09230	0.002	298.385
1169	8.929	0.12765	313.797	14.2030	0.09317	0.010	313.158
1171	8.943	0.14942	313.916	14.1969	0.09333	0.008	313.165
1173	8.952	0.17323	314.045	14.1895	0.09406	0.007	313.163
1175	8.955	0.19923	314.182	14.1807	0.09355	0.005	313.166
1177	8.956	0.22706	314.328	14.1710	0.09317	0.004	313.162
1179	8.945	0.25672	314.484	14.1589	0.09238	0.003	313.169
1181	8.936	0.28777	314.662	14.1455	0.09262	0.003	313.172
1183	7.250	0.12771	313.787	13.9491	0.09089	0.009	313.133
1185	7.246	0.14974	313.896	13.9404	0.08976	0.008	313.138
1187	7.244	0.17372	314.041	13.9293	0.09065	0.008	313.140
1189	7.255	0.19942	314.182	13.9205	0.09003	0.005	313.141

Table 5. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1191	7.259	0.22686	314.338	13.9097	0.09149	0.005	313.153
1193	7.263	0.25619	314.489	13.8991	0.09063	0.003	313.147
1195	7.266	0.28727	314.655	13.8871	0.09076	0.003	313.140
1197	5.461	0.12765	313.750	13.6277	0.08906	0.009	313.078
1199	5.462	0.14970	313.891	13.6160	0.08872	0.007	313.110
1201	5.464	0.17362	314.037	13.6039	0.08807	0.006	313.120
1203	5.467	0.19939	314.167	13.5935	0.08868	0.005	313.112
1205	5.467	0.22704	314.335	13.5793	0.08840	0.004	313.123
1207	5.459	0.25652	314.498	13.5636	0.08855	0.003	313.123
1209	5.453	0.28778	314.675	13.5471	0.08842	0.003	313.131
1211	4.507	0.12773	313.772	13.4190	0.08625	0.009	313.101
1213	4.504	0.14985	313.902	13.4063	0.08675	0.007	313.112
1215	4.505	0.17373	314.043	13.3933	0.08698	0.006	313.110
1217	4.513	0.19949	314.188	13.3815	0.08754	0.005	313.117
1219	4.517	0.22701	314.344	13.3679	0.08744	0.004	313.121
1221	4.520	0.25628	314.513	13.3528	0.08671	0.003	313.129
1223	4.523	0.28732	314.674	13.3382	0.08781	0.003	313.121
1225	3.380	0.12764	313.754	13.1283	0.08645	0.011	313.080
1227	3.382	0.14968	313.897	13.1134	0.08755	0.008	313.098
1229	3.384	0.17355	314.042	13.0982	0.08739	0.006	313.110
1231	3.385	0.19931	314.192	13.0822	0.08709	0.005	313.117
1233	3.385	0.22689	314.343	13.0657	0.08584	0.004	313.107
1235	3.384	0.25641	314.512	13.0469	0.08578	0.003	313.106
1237	3.378	0.28777	314.705	13.0234	0.08538	0.003	313.127
1239	9.151	0.13337	328.697	13.1526	0.09448	0.010	327.994
1241	9.140	0.15649	328.853	13.1380	0.09495	0.008	328.011
1243	9.138	0.18139	328.978	13.1274	0.09331	0.006	328.000
1245	9.149	0.20821	329.133	13.1174	0.10094	0.007	328.009
1247	9.156	0.23693	329.271	13.1078	0.09988	0.007	327.998
1249	9.158	0.26750	329.464	13.0927	0.09811	0.005	328.005
1251	9.160	0.29985	329.655	13.0776	0.09436	0.005	328.012
1253	7.191	0.13333	328.688	12.6865	0.09159	0.011	327.963
1255	7.193	0.15635	328.821	12.6742	0.08945	0.008	327.968
1257	7.193	0.18114	328.978	12.6590	0.08915	0.006	327.973
1259	7.188	0.20811	329.136	12.6422	0.08992	0.006	327.980
1261	7.184	0.23693	329.307	12.6241	0.08589	0.004	327.977
1263	7.182	0.26755	329.473	12.6073	0.09175	0.005	327.971
1265	7.181	0.30024	329.669	12.5877	0.09174	0.005	327.978
1267	6.110	0.13336	328.677	12.3509	0.09317	0.011	327.960
1269	6.110	0.15635	328.817	12.3349	0.10234	0.012	327.966
1271	6.108	0.18121	328.946	12.3196	0.11602	0.012	327.974
1273	6.109	0.20817	329.104	12.3017	0.11305	0.013	327.974
1275	6.114	0.23691	329.274	12.2840	0.11631	0.013	327.986

Table 5. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1279	6.119	0.29997	329.630	12.2443	0.11628	0.014	327.979
1281	5.540	0.09255	328.455	12.1611	0.11238	0.023	327.964
1283	5.539	0.10388	328.495	12.1555	0.10479	0.017	327.971
1287	5.541	0.12862	328.665	12.1351	0.11194	0.017	327.985
1289	5.544	0.14213	328.749	12.1258	0.11193	0.015	327.982
1291	5.545	0.15629	328.836	12.1149	0.11382	0.015	327.989
1293	5.546	0.17107	328.918	12.1047	0.11564	0.016	327.994
1299	4.778	0.11581	328.555	11.7856	0.13342	0.027	327.971
1301	4.780	0.12859	328.625	11.7755	0.14553	0.026	327.976
1303	4.782	0.14205	328.712	11.7631	0.15245	0.029	327.980
1305	4.784	0.15626	328.789	11.7523	0.14704	0.030	327.976
1307	4.785	0.17114	328.899	11.7350	0.12707	0.018	327.974
1309	4.780	0.09256	328.427	11.8066	0.14041	0.032	327.978
1311	4.782	0.10389	328.500	11.7962	0.13967	0.026	327.982
1313	4.783	0.11588	328.586	11.7838	0.13443	0.022	327.988
1315	4.785	0.12869	328.628	11.7782	0.15978	0.025	327.981
1317	4.786	0.14220	328.729	11.7627	0.14972	0.027	327.997
1319	4.787	0.15627	328.789	11.7537	0.16691	0.030	327.992
1321	4.788	0.17101	328.890	11.7383	0.14610	0.026	327.989

Table 6. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1003	0.324	0.18777	255.431	14.9369	0.10774	0.007	254.483
1005	0.324	0.23774	255.633	14.9295	0.10778	0.006	254.476
1007	0.325	0.29368	255.879	14.9205	0.10851	0.004	254.471
1011	0.326	0.42342	256.439	14.9001	0.10638	0.002	254.448
1013	0.325	0.49716	256.746	14.8888	0.10534	0.002	254.435
1021	0.323	0.29244	254.983	14.9532	0.11014	0.004	253.598
1023	0.324	0.35405	255.290	14.9420	0.10876	0.003	253.621
1025	0.324	0.42150	255.598	14.9308	0.10590	0.002	253.615
1027	0.324	0.49479	255.917	14.9191	0.10480	0.002	253.612
1031	0.325	0.18665	254.405	14.9743	0.10716	0.007	253.485
1033	0.325	0.23647	254.616	14.9666	0.10695	0.005	253.478
1035	0.325	0.29239	254.888	14.9567	0.10795	0.004	253.504
1037	0.325	0.35398	255.137	14.9477	0.10679	0.003	253.476
1039	0.325	0.42158	255.438	14.9367	0.10570	0.002	253.478
1041	0.325	0.49514	255.772	14.9245	0.10552	0.002	253.471
1045	0.980	0.19804	270.641	14.3914	0.09890	0.006	269.605
1047	0.969	0.25081	270.897	14.3809	0.09960	0.005	269.607
1049	0.957	0.30986	271.178	14.3695	0.09886	0.004	269.610
1051	0.969	0.37506	271.485	14.3581	0.09942	0.002	269.607
1053	0.989	0.44649	271.829	14.3455	0.09918	0.004	269.607
1055	1.001	0.52418	272.214	14.3310	0.09880	0.002	269.614
1059	0.987	0.19795	270.655	14.3911	0.09947	0.006	269.612
1063	0.969	0.30976	271.174	14.3702	0.09778	0.004	269.614
1065	0.963	0.37509	271.491	14.3576	0.09933	0.007	269.615
1067	0.960	0.44656	271.821	14.3445	0.09842	0.006	269.609
1069	0.982	0.52430	272.217	14.3301	0.09844	0.001	269.615
1075	5.037	0.26309	285.159	14.0159	0.09601	0.004	283.766
1077	5.039	0.32490	285.486	14.0033	0.09589	0.003	283.779
1079	4.984	0.39345	285.777	13.9893	0.09541	0.003	283.744
1081	4.961	0.46862	286.172	13.9728	0.09523	0.003	283.768
1083	4.987	0.54999	286.576	13.9583	0.09508	0.001	283.761
1085	3.387	0.15869	284.594	13.9561	0.09570	0.008	283.704
1087	3.346	0.20766	284.892	13.9421	0.09557	0.006	283.764
1089	3.325	0.26299	285.155	13.9305	0.09544	0.004	283.756
1091	3.313	0.32487	285.467	13.9173	0.09464	0.004	283.758
1093	3.302	0.39346	285.802	13.9032	0.09507	0.003	283.753
1095	3.295	0.46851	286.195	13.8870	0.09300	0.002	283.756
1097	3.297	0.55012	286.604	13.8706	0.09308	0.001	283.757
1101	1.328	0.20763	284.879	13.8352	0.09256	0.006	283.743
1103	1.322	0.26287	285.163	13.8230	0.09513	0.004	283.742
1105	1.314	0.32472	285.483	13.8091	0.09298	0.003	283.748
1107	1.315	0.39327	285.833	13.7943	0.09315	0.004	283.750
1109	1.320	0.46837	286.189	13.7796	0.09248	0.002	283.726
1111	1.345	0.55010	286.631	13.7623	0.09239	0.002	283.745

Table 6. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1117	11.673	0.19615	299.505	13.7980	0.09559	0.007	298.422
1119	11.681	0.23963	299.711	13.7909	0.09545	0.004	298.417
1121	11.683	0.28753	299.952	13.7821	0.09559	0.003	298.418
1123	11.694	0.33988	300.240	13.7722	0.09560	0.002	298.424
1125	11.691	0.39659	300.508	13.7622	0.09354	0.002	298.424
1131	8.937	0.19598	299.496	13.6600	0.09478	0.006	298.402
1133	8.959	0.23949	299.726	13.6523	0.09377	0.004	298.410
1135	8.963	0.28751	299.949	13.6439	0.09420	0.003	298.403
1137	8.975	0.33999	300.226	13.6339	0.09407	0.002	298.405
1139	8.975	0.39669	300.540	13.6218	0.09194	0.002	298.417
1145	6.595	0.19614	299.501	13.5303	0.09256	0.006	298.389
1147	6.618	0.23967	299.730	13.5224	0.09175	0.004	298.399
1149	6.632	0.28769	299.975	13.5132	0.09100	0.003	298.395
1151	6.650	0.34001	300.256	13.5029	0.09025	0.003	298.400
1153	6.658	0.39666	300.542	13.4918	0.09103	0.002	298.394
1161	4.310	0.23956	299.730	13.3818	0.08920	0.005	298.382
1163	4.315	0.28759	299.969	13.3718	0.08907	0.005	298.367
1165	4.330	0.34002	300.268	13.3599	0.08934	0.003	298.382
1167	4.343	0.39676	300.569	13.3478	0.08883	0.002	298.383
1171	1.446	0.15695	299.308	13.2044	0.08707	0.008	298.360
1173	1.440	0.19597	299.506	13.1947	0.08772	0.006	298.356
1175	1.436	0.23960	299.741	13.1833	0.08684	0.005	298.357
1177	1.430	0.28770	299.998	13.1707	0.08528	0.003	298.354
1179	1.428	0.34020	300.276	13.1574	0.08665	0.002	298.355
1181	1.433	0.39704	300.602	13.1424	0.08588	0.002	298.366
1187	10.745	0.17408	314.669	13.1700	0.08890	0.006	313.675
1189	10.735	0.19980	314.785	13.1647	0.08860	0.005	313.661
1191	10.729	0.22730	314.927	13.1587	0.08792	0.004	313.647
1193	10.714	0.25667	315.072	13.1519	0.08805	0.004	313.643
1195	10.696	0.28790	315.229	13.1446	0.08768	0.003	313.628
1201	8.607	0.17383	314.450	13.0395	0.08770	0.006	313.451
1203	8.617	0.19961	314.576	13.0348	0.08693	0.005	313.444
1205	8.621	0.22731	314.730	13.0287	0.08607	0.004	313.440
1207	8.625	0.25672	314.894	13.0220	0.08629	0.003	313.447
1209	8.630	0.28794	315.045	13.0159	0.08647	0.003	313.429
1211	6.618	0.12785	314.117	12.9115	0.08805	0.009	313.355
1213	6.621	0.14994	314.262	12.9052	0.08600	0.008	313.366
1215	6.626	0.17385	314.397	12.8996	0.08629	0.006	313.373
1217	6.633	0.19964	314.519	12.8947	0.08525	0.005	313.363
1219	6.637	0.22728	314.690	12.8873	0.08487	0.004	313.369
1221	6.645	0.25664	314.842	12.8811	0.08474	0.003	313.364
1223	6.647	0.28781	315.019	12.8733	0.08390	0.003	313.360
1225	4.441	0.12775	314.082	12.7388	0.08338	0.009	313.301

Table 6. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1227	4.437	0.14998	314.211	12.7323	0.08520	0.008	313.311
1229	4.433	0.17394	314.348	12.7253	0.08390	0.006	313.313
1231	4.432	0.19971	314.506	12.7176	0.08257	0.005	313.322
1233	4.438	0.22734	314.648	12.7112	0.08211	0.004	313.306
1235	4.443	0.25670	314.826	12.7031	0.08211	0.004	313.315
1237	4.449	0.28790	315.000	12.6950	0.08196	0.003	313.316
1239	1.729	0.12771	314.050	12.4848	0.07982	0.009	313.253
1241	1.716	0.14996	314.190	12.4757	0.08146	0.007	313.266
1243	1.712	0.17385	314.337	12.4672	0.08127	0.006	313.276
1245	1.709	0.19964	314.474	12.4593	0.08008	0.004	313.268
1247	1.706	0.22734	314.650	12.4494	0.07998	0.004	313.275
1249	1.704	0.25678	314.814	12.4400	0.08000	0.003	313.268
1251	1.701	0.28800	315.004	12.4292	0.07903	0.003	313.275
1253	9.385	0.13322	329.033	12.4625	0.08378	0.009	328.191
1255	9.391	0.15620	329.175	12.4567	0.08168	0.009	328.196
1257	9.388	0.18125	329.329	12.4494	0.08021	0.006	328.213
1259	9.377	0.20827	329.481	12.4416	0.08091	0.005	328.206
1261	9.371	0.23718	329.641	12.4338	0.08135	0.004	328.203
1263	9.366	0.26797	329.825	12.4250	0.08121	0.003	328.208
1265	9.365	0.30059	330.024	12.4158	0.08058	0.003	328.216
1267	7.370	0.13329	329.027	12.2788	0.08082	0.009	328.169
1269	7.368	0.15641	329.168	12.2717	0.07947	0.007	328.185
1271	7.365	0.18133	329.325	12.2637	0.07989	0.006	328.192
1273	7.364	0.20837	329.485	12.2557	0.07866	0.004	328.193
1275	7.365	0.23734	329.652	12.2475	0.07900	0.004	328.192
1277	7.368	0.26816	329.841	12.2385	0.07962	0.003	328.192
1279	7.372	0.30074	330.028	12.2296	0.07895	0.003	328.195
1281	5.579	0.13328	329.039	12.0904	0.07896	0.009	328.164
1283	5.578	0.15640	329.177	12.0828	0.07873	0.008	328.173
1285	5.576	0.18145	329.338	12.0740	0.07724	0.006	328.174
1287	5.575	0.20841	329.500	12.0652	0.07807	0.009	328.182
1289	5.578	0.23733	329.671	12.0562	0.07834	0.004	328.177
1291	5.583	0.26807	329.860	12.0467	0.07857	0.003	328.189
1293	5.591	0.30061	330.043	12.0376	0.07959	0.003	328.185
1297	3.826	0.15640	329.191	11.8660	0.07735	0.009	328.160
1299	3.825	0.18146	329.346	11.8566	0.07589	0.006	328.168
1301	3.827	0.20842	329.513	11.8468	0.07729	0.005	328.171
1305	3.837	0.26798	329.878	11.8261	0.07824	0.004	328.185
1307	3.842	0.30053	330.075	11.8148	0.07808	0.003	328.184
1309	2.290	0.13325	329.030	11.6484	0.07639	0.008	328.143
1311	2.288	0.15635	329.173	11.6384	0.07656	0.007	328.151
1313	2.287	0.18146	329.338	11.6269	0.07779	0.006	328.159
1319	2.288	0.26809	329.882	11.5896	0.07698	0.004	328.177

Table 6. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1325	8.655	0.16301	344.399	11.6335	0.07543	0.007	343.297
1327	8.656	0.18917	344.562	11.6249	0.07518	0.006	343.300
1329	8.657	0.21725	344.721	11.6166	0.07476	0.005	343.290
1331	8.662	0.24732	344.919	11.6065	0.07443	0.004	343.293
1335	8.668	0.31324	345.320	11.5856	0.07464	0.003	343.290
1337	7.111	0.13882	344.233	11.4333	0.07437	0.010	343.246
1339	7.109	0.16298	344.389	11.4237	0.07419	0.007	343.252
1341	7.109	0.18914	344.554	11.4139	0.07267	0.006	343.261
1343	7.107	0.21736	344.739	11.4027	0.07266	0.006	343.263
1345	7.109	0.24745	344.931	11.3915	0.07312	0.004	343.266
1347	7.113	0.27943	345.127	11.3804	0.07250	0.004	343.264
1349	7.114	0.31331	345.342	11.3677	0.07265	0.003	343.260
1351	5.657	0.13878	344.219	11.1998	0.07246	0.009	343.219
1353	5.657	0.16294	344.384	11.1887	0.07219	0.007	343.227
1355	5.652	0.18916	344.556	11.1765	0.07085	0.006	343.235
1357	5.651	0.21733	344.742	11.1637	0.07076	0.005	343.242
1359	5.651	0.24739	344.938	11.1505	0.07089	0.004	343.249
1361	5.649	0.27945	345.146	11.1361	0.07074	0.004	343.248
1363	5.648	0.31347	345.373	11.1205	0.07128	0.003	343.257
1365	4.294	0.13881	344.223	10.9280	0.06937	0.009	343.205
1369	4.294	0.18921	344.555	10.9021	0.06921	0.006	343.219
1371	4.295	0.21736	344.751	10.8869	0.06978	0.005	343.228
1373	4.296	0.24745	344.956	10.8708	0.06965	0.004	343.233
1375	4.297	0.27945	345.160	10.8549	0.06934	0.004	343.225
1377	4.299	0.31338	345.370	10.8386	0.06946	0.004	343.220
1379	3.141	0.13878	344.214	10.6296	0.06836	0.010	343.187
1381	3.141	0.16302	344.383	10.6134	0.06823	0.006	343.203
1383	3.141	0.18923	344.565	10.5959	0.06808	0.006	343.214
1385	3.140	0.21734	344.754	10.5776	0.06820	0.005	343.216
1387	3.141	0.24744	344.948	10.5587	0.06825	0.004	343.214
1389	3.143	0.27940	345.173	10.5371	0.06844	0.005	343.218
1391	3.145	0.31335	345.385	10.5168	0.06911	0.005	343.215
1393	7.998	0.14446	359.354	10.6293	0.06798	0.008	358.255
1395	7.991	0.16971	359.519	10.6167	0.06747	0.007	358.261
1397	7.992	0.19693	359.719	10.6032	0.06713	0.006	358.268
1399	7.992	0.22614	359.906	10.5902	0.06749	0.005	358.272
1403	7.985	0.29078	360.344	10.5583	0.06762	0.004	358.276
1405	7.984	0.32613	360.582	10.5415	0.06805	0.003	358.272
1407	6.895	0.14444	359.313	10.3773	0.06600	0.008	358.196
1409	6.896	0.16955	359.490	10.3638	0.06572	0.007	358.212
1411	6.896	0.19672	359.687	10.3483	0.06597	0.005	358.224
1413	6.896	0.22602	359.900	10.3314	0.06663	0.005	358.239
1415	6.895	0.25742	360.140	10.3123	0.06587	0.004	358.262

Table 6. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1417	6.898	0.29080	360.404	10.2920	0.06636	0.004	358.296
1419	6.903	0.32621	360.675	10.2716	0.06723	0.004	358.324
1421	5.979	0.14449	359.771	10.0726	0.06334	0.008	358.630
1423	5.992	0.16965	360.000	10.0560	0.06455	0.006	358.689
1425	6.005	0.19687	360.235	10.0384	0.06768	0.005	358.744
1427	6.017	0.22615	360.493	10.0186	0.06530	0.005	358.793

Table 7. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1003	0.401	0.18622	253.784	18.1163	0.12946	0.007	253.093
1005	0.402	0.23602	253.978	18.1070	0.12857	0.005	253.081
1007	0.403	0.29134	254.183	18.0972	0.12881	0.004	253.078
1009	0.402	0.35269	254.430	18.0854	0.12766	0.003	253.067
1011	0.401	0.41998	254.685	18.0731	0.12721	0.002	253.057
1013	0.400	0.49358	254.948	18.0604	0.12641	0.002	253.040
1017	0.400	0.18615	253.710	18.1197	0.12609	0.007	253.023
1019	0.400	0.23574	253.890	18.1111	0.13059	0.005	253.005
1021	0.401	0.29130	254.109	18.1007	0.13077	0.004	253.001
1023	0.401	0.35273	254.364	18.0885	0.12772	0.003	252.997
1025	0.401	0.41977	254.602	18.0771	0.12665	0.002	252.991
1027	0.401	0.49287	254.880	18.0638	0.12617	0.002	252.981
1035	0.597	0.30897	271.096	17.2623	0.11830	0.011	269.820
1037	0.597	0.37411	271.399	17.2464	0.11830	0.007	269.838
1039	0.597	0.44562	271.688	17.2312	0.11847	0.002	269.832
1041	0.598	0.52341	272.013	17.2142	0.11733	0.001	269.838
1045	0.598	0.19810	270.646	17.2859	0.12229	0.006	269.851
1047	0.598	0.25040	270.889	17.2732	0.12151	0.005	269.856
1049	0.596	0.30944	271.146	17.2597	0.12119	0.003	269.863
1051	0.596	0.37472	271.415	17.2455	0.11978	0.002	269.864
1053	0.598	0.44593	271.732	17.2289	0.11812	0.002	269.879
1055	0.597	0.52361	272.057	17.2118	0.11716	0.001	269.874
1057	1.335	0.15915	284.590	16.5750	0.11260	0.008	283.909
1059	1.319	0.20758	284.822	16.5606	0.11340	0.005	283.921
1061	1.346	0.26218	285.057	16.5491	0.11242	0.004	283.913
1063	1.369	0.32394	285.335	16.5350	0.11035	0.003	283.914
1065	1.384	0.39241	285.642	16.5185	0.11071	0.002	283.915
1067	1.366	0.46747	285.983	16.4976	0.10949	0.002	283.924
1069	1.338	0.54880	286.360	16.4738	0.10957	0.001	283.934
1073	1.345	0.20749	284.806	16.5633	0.11502	0.005	283.914
1075	1.355	0.26226	285.066	16.5493	0.11299	0.004	283.920
1077	1.366	0.32393	285.337	16.5346	0.11214	0.003	283.916
1079	1.371	0.39252	285.647	16.5173	0.11163	0.002	283.922
1081	1.374	0.46744	286.001	16.4971	0.11065	0.002	283.929
1083	1.372	0.54889	286.363	16.4761	0.10981	0.001	283.926
1087	8.723	0.21686	299.355	16.3004	0.11225	0.005	298.406
1089	8.717	0.27434	299.627	16.2857	0.11080	0.004	298.404
1091	8.724	0.33868	299.925	16.2705	0.10888	0.003	298.412
1093	8.752	0.40974	300.258	16.2548	0.10952	0.002	298.412
1095	8.762	0.48803	300.617	16.2366	0.10978	0.002	298.413
1097	8.769	0.57367	300.993	16.2171	0.10977	0.002	298.403
1101	6.974	0.21717	299.349	16.1716	0.10776	0.005	298.387
1103	6.978	0.27443	299.621	16.1569	0.10930	0.004	298.381
1105	6.983	0.33904	299.933	16.1401	0.10737	0.003	298.381

Table 7. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1107	6.990	0.41076	300.265	16.1224	0.10704	0.002	298.397
1109	6.975	0.48894	300.617	16.1016	0.10715	0.002	298.398
1111	6.945	0.57431	301.028	16.0764	0.10785	0.001	298.405
1123	5.086	0.48930	300.628	15.9463	0.10672	0.002	298.368
1129	3.555	0.21720	299.397	15.8851	0.10680	0.006	298.393
1131	3.543	0.27476	299.676	15.8671	0.10649	0.009	298.379
1133	3.559	0.33989	299.968	15.8507	0.10882	0.010	298.371
1135	3.570	0.41167	300.321	15.8301	0.10997	0.008	298.400
1137	3.580	0.48967	300.686	15.8086	0.10846	0.005	298.383
1139	3.591	0.57462	301.077	15.7855	0.10860	0.005	298.374
1141	1.689	0.16650	299.125	15.7249	0.10637	0.007	298.366
1143	1.688	0.21691	299.406	15.7065	0.10671	0.009	298.381
1145	1.670	0.27451	299.670	15.6875	0.10448	0.003	298.383
1147	1.658	0.33938	299.985	15.6657	0.10358	0.002	298.386
1149	1.657	0.41083	300.333	15.6427	0.10222	0.002	298.387
1151	1.649	0.48953	300.704	15.6172	0.10286	0.002	298.378
1153	1.657	0.57590	301.121	15.5904	0.10317	0.002	298.382
1159	11.236	0.23865	314.994	15.6572	0.10615	0.004	313.876
1161	11.227	0.27483	315.183	15.6462	0.10528	0.003	313.883
1163	11.222	0.31404	315.363	15.6358	0.10420	0.003	313.873
1165	11.232	0.35593	315.565	15.6257	0.10423	0.002	313.869
1167	11.236	0.40005	315.778	15.6144	0.10370	0.002	313.879
1171	9.027	0.20517	314.841	15.4699	0.10399	0.007	313.857
1173	9.035	0.23871	314.997	15.4616	0.10296	0.005	313.858
1175	9.049	0.27498	315.184	15.4520	0.10213	0.006	313.864
1177	9.054	0.31399	315.378	15.4412	0.10234	0.003	313.868
1179	9.062	0.35590	315.570	15.4307	0.10203	0.002	313.855
1181	9.056	0.40049	315.805	15.4165	0.10242	0.003	313.868
1183	7.063	0.17092	314.623	15.2895	0.10058	0.007	313.798
1185	7.055	0.20197	314.797	15.2778	0.10094	0.005	313.822
1187	7.061	0.23622	314.980	15.2669	0.09944	0.005	313.827
1189	7.080	0.27326	315.158	15.2579	0.10103	0.003	313.824
1191	7.087	0.31272	315.356	15.2463	0.10023	0.003	313.824
1193	7.079	0.35495	315.562	15.2326	0.09981	0.002	313.828
1195	7.062	0.39958	315.793	15.2163	0.09925	0.002	313.828
1197	5.033	0.17359	314.631	15.0631	0.09979	0.007	313.784
1199	5.034	0.20443	314.794	15.0521	0.10024	0.005	313.796
1201	5.023	0.23837	314.973	15.0387	0.09872	0.004	313.797
1203	5.013	0.27503	315.160	15.0247	0.09870	0.003	313.798
1205	5.011	0.31421	315.357	15.0110	0.09828	0.003	313.804
1207	5.012	0.35571	315.581	14.9959	0.09846	0.002	313.804
1209	5.032	0.39955	315.795	14.9837	0.09844	0.002	313.805
1211	3.493	0.17422	314.622	14.8683	0.09898	0.007	313.758

Table 7. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1213	3.498	0.20514	314.789	14.8566	0.09709	0.005	313.772
1215	3.484	0.23893	314.980	14.8406	0.09711	0.004	313.784
1217	3.475	0.27542	315.176	14.8249	0.09653	0.003	313.784
1219	3.474	0.31450	315.370	14.8105	0.09647	0.003	313.782
1221	3.471	0.35626	315.575	14.7948	0.09659	0.003	313.779
1223	3.469	0.40052	315.809	14.7771	0.09637	0.003	313.788
1225	2.372	0.17432	314.600	14.7098	0.09633	0.006	313.727
1227	2.380	0.20515	314.759	14.6984	0.09743	0.005	313.731
1229	2.384	0.23883	314.938	14.6849	0.09650	0.004	313.741
1231	2.388	0.27514	315.132	14.6702	0.09745	0.003	313.745
1233	2.390	0.31382	315.345	14.6536	0.09470	0.004	313.749
1235	2.396	0.35534	315.549	14.6382	0.09733	0.003	313.748
1237	2.395	0.39967	315.782	14.6195	0.09644	0.003	313.746
1311	9.969	0.16344	345.504	13.5736	0.08721	0.007	344.614
1313	9.964	0.18974	345.670	13.5602	0.08634	0.006	344.619
1315	9.963	0.21803	345.833	13.5475	0.08596	0.005	344.624
1317	9.967	0.24808	345.999	13.5356	0.08616	0.004	344.622
1319	9.972	0.28010	346.185	13.5223	0.08644	0.003	344.626
1321	9.974	0.31425	346.373	13.5085	0.08651	0.003	344.621
1323	7.862	0.13951	345.350	13.1563	0.08530	0.010	344.572
1325	7.869	0.16360	345.507	13.1437	0.08457	0.008	344.588
1327	7.872	0.18970	345.653	13.1314	0.08441	0.008	344.582
1329	7.864	0.21799	345.825	13.1139	0.08263	0.005	344.587
1331	7.859	0.24812	346.017	13.0956	0.08367	0.004	344.603
1333	7.859	0.28015	346.201	13.0787	0.08395	0.003	344.607
1335	7.858	0.31407	346.388	13.0614	0.08463	0.004	344.600
1337	6.101	0.13944	345.325	12.6756	0.08107	0.009	344.530
1339	6.103	0.16363	345.521	12.6545	0.08097	0.007	344.579
1341	6.103	0.18967	345.669	12.6378	0.08014	0.005	344.571
1343	6.099	0.21784	345.840	12.6171	0.07974	0.005	344.579
1345	6.098	0.24806	346.019	12.5962	0.08097	0.005	344.579
1347	6.097	0.28021	346.218	12.5732	0.08169	0.004	344.588
1349	6.102	0.31412	346.414	12.5524	0.08361	0.005	344.594
1351	5.164	0.13942	345.354	12.3223	0.07823	0.008	344.548
1353	5.161	0.16356	345.515	12.2992	0.07877	0.007	344.569
1355	5.159	0.18958	345.682	12.2754	0.07818	0.006	344.574
1357	5.158	0.21763	345.857	12.2509	0.07859	0.007	344.584
1359	5.158	0.24772	346.041	12.2252	0.08041	0.005	344.588
1361	5.163	0.27968	346.223	12.2020	0.08119	0.005	344.585
1365	4.286	0.13947	345.393	11.8537	0.07661	0.009	344.588
1367	4.284	0.16360	345.536	11.8261	0.07720	0.008	344.599
1369	4.283	0.18949	345.709	11.7933	0.07717	0.006	344.608
1371	4.283	0.21760	345.876	11.7615	0.07872	0.007	344.607

Table 8. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.425	0.14348	254.557	11.9309	0.09463	0.007	253.856
1003	0.424	0.18757	254.793	11.9240	0.09540	0.005	253.853
1005	0.424	0.23755	255.055	11.9163	0.09540	0.004	253.843
1007	0.424	0.29339	255.320	11.9086	0.09597	0.002	253.825
1009	0.424	0.35523	255.633	11.8994	0.09570	0.004	253.816
1011	0.425	0.42313	255.977	11.8893	0.09541	0.002	253.797
1013	0.425	0.49702	256.349	11.8784	0.09526	0.001	253.787
1015	0.427	0.14324	253.848	11.9517	0.09671	0.008	253.145
1017	0.426	0.18719	254.098	11.9444	0.09577	0.005	253.160
1019	0.426	0.23694	254.365	11.9366	0.09553	0.008	253.167
1021	0.425	0.29263	254.673	11.9275	0.09594	0.003	253.178
1023	0.424	0.35418	255.005	11.9178	0.09638	0.002	253.184
1025	0.425	0.42160	255.360	11.9074	0.09573	0.002	253.182
1027	0.425	0.49502	255.739	11.8963	0.09583	0.001	253.187
1029	1.186	0.15209	270.935	11.4701	0.08892	0.009	270.122
1031	1.184	0.19859	271.191	11.4621	0.08846	0.005	270.119
1033	1.144	0.25153	271.491	11.4509	0.08846	0.004	270.131
1035	1.118	0.31087	271.844	11.4386	0.08863	0.002	270.131
1037	1.113	0.37655	272.212	11.4268	0.08783	0.002	270.130
1039	1.117	0.44842	272.611	11.4145	0.08773	0.001	270.125
1041	1.124	0.52688	273.074	11.4003	0.08775	0.002	270.138
1045	1.097	0.19867	271.193	11.4579	0.08880	0.005	270.113
1047	1.130	0.25124	271.485	11.4504	0.08824	0.003	270.117
1049	1.160	0.31052	271.828	11.4411	0.08823	0.003	270.123
1051	1.174	0.37646	272.200	11.4301	0.08881	0.002	270.119
1053	1.184	0.44836	272.610	11.4178	0.08771	0.002	270.127
1055	1.186	0.52690	273.060	11.4037	0.08817	0.002	270.126
1057	1.357	0.15947	284.846	11.0304	0.08221	0.006	283.936
1059	1.393	0.20828	285.146	11.0224	0.08214	0.004	283.946
1061	1.404	0.26356	285.475	11.0119	0.08182	0.003	283.943
1063	1.408	0.32528	285.849	10.9996	0.08132	0.002	283.948
1065	1.410	0.39358	286.264	10.9857	0.08125	0.002	283.947
1067	1.412	0.46876	286.718	10.9704	0.08109	0.001	283.954
1069	1.412	0.55067	287.216	10.9534	0.08152	0.001	283.949
1073	1.397	0.20834	285.150	11.0225	0.08148	0.004	283.946
1075	1.399	0.26364	285.486	11.0113	0.08151	0.003	283.945
1077	1.403	0.32542	285.849	10.9992	0.08237	0.002	283.943
1079	1.396	0.39410	286.271	10.9846	0.08152	0.002	283.947
1081	1.402	0.46912	286.724	10.9695	0.08213	0.002	283.950
1083	1.396	0.55100	287.234	10.9518	0.08232	0.003	283.956
1085	8.767	0.16693	299.362	10.9783	0.08220	0.008	298.405
1087	8.787	0.21778	299.675	10.9700	0.08232	0.004	298.412
1089	8.795	0.27562	300.022	10.9601	0.08201	0.003	298.417

Table 8. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1091	8.801	0.34049	300.407	10.9489	0.08283	0.002	298.415
1093	8.798	0.41223	300.854	10.9353	0.08289	0.002	298.420
1095	8.763	0.49101	301.314	10.9196	0.08171	0.001	298.420
1097	8.749	0.57685	301.846	10.9029	0.08232	0.001	298.431
1099	6.874	0.16699	299.371	10.8750	0.08084	0.006	298.397
1101	6.861	0.21819	299.689	10.8643	0.08076	0.004	298.400
1103	6.855	0.27578	300.037	10.8531	0.07956	0.003	298.399
1105	6.884	0.34039	300.434	10.8422	0.08056	0.002	298.409
1107	6.891	0.41179	300.869	10.8289	0.08084	0.002	298.412
1109	6.894	0.49027	301.360	10.8136	0.08081	0.002	298.414
1111	6.898	0.57631	301.883	10.7972	0.08058	0.001	298.406
1113	4.939	0.16691	299.376	10.7601	0.07934	0.006	298.381
1115	4.936	0.21798	299.709	10.7490	0.07901	0.004	298.395
1117	4.936	0.27539	300.044	10.7378	0.07889	0.003	298.386
1119	4.918	0.34041	300.460	10.7228	0.07848	0.002	298.396
1121	4.904	0.41229	300.921	10.7065	0.07891	0.002	298.398
1123	4.903	0.49102	301.404	10.6903	0.07868	0.001	298.397
1125	4.927	0.57673	301.944	10.6737	0.07893	0.002	298.401
1127	3.007	0.16688	299.383	10.6337	0.07693	0.005	298.370
1129	3.007	0.21791	299.721	10.6217	0.07749	0.004	298.388
1131	2.980	0.27538	300.087	10.6069	0.07671	0.003	298.390
1133	2.970	0.34040	300.507	10.5912	0.07700	0.002	298.393
1135	2.974	0.41200	300.963	10.5752	0.07684	0.002	298.397
1137	2.996	0.49064	301.470	10.5585	0.07780	0.003	298.395
1139	3.005	0.57710	302.027	10.5391	0.07762	0.002	298.392
1141	1.558	0.16689	299.403	10.5286	0.07585	0.005	298.367
1143	1.539	0.21773	299.717	10.5154	0.07473	0.003	298.374
1145	1.525	0.27529	300.111	10.4995	0.07451	0.003	298.379
1147	1.520	0.34026	300.540	10.4829	0.07525	0.002	298.389
1149	1.545	0.41220	300.998	10.4674	0.07530	0.002	298.384
1151	1.555	0.49154	301.506	10.4488	0.07549	0.002	298.389
1153	1.564	0.57772	302.066	10.4281	0.07649	0.003	298.387
1155	8.614	0.17504	315.325	10.4738	0.07630	0.005	314.252
1157	8.621	0.22806	315.664	10.4634	0.07652	0.003	314.253
1159	8.626	0.28856	316.060	10.4508	0.07717	0.004	314.261
1161	8.631	0.35667	316.512	10.4365	0.07643	0.002	314.267
1163	8.628	0.43224	316.975	10.4212	0.07648	0.002	314.252
1165	8.611	0.51555	317.523	10.4021	0.07588	0.001	314.260
1167	8.605	0.60558	318.106	10.3826	0.07665	0.002	314.259
1169	6.795	0.17518	315.309	10.3473	0.07483	0.005	314.213
1171	6.789	0.20589	315.513	10.3398	0.07475	0.004	314.220
1173	6.803	0.23916	315.738	10.3331	0.07482	0.003	314.222
1175	6.811	0.27564	315.986	10.3251	0.07437	0.003	314.231

Table 8. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1177	6.815	0.31465	316.226	10.3171	0.07412	0.003	314.221
1179	6.815	0.35666	316.497	10.3077	0.07455	0.002	314.216
1181	6.802	0.40142	316.791	10.2965	0.07420	0.002	314.218
1183	4.865	0.17518	315.292	10.1969	0.07176	0.005	314.127
1185	4.867	0.20607	315.497	10.1894	0.07260	0.004	314.156
1187	4.877	0.23925	315.729	10.1816	0.07253	0.003	314.175
1189	4.879	0.27565	316.013	10.1711	0.07260	0.004	314.187
1191	4.881	0.31493	316.232	10.1630	0.07277	0.002	314.176
1193	4.881	0.35697	316.504	10.1528	0.07257	0.002	314.168
1195	4.882	0.40159	316.804	10.1416	0.07294	0.002	314.171
1197	3.162	0.17508	315.262	10.0465	0.07034	0.005	314.123
1199	3.165	0.20720	320.299	9.8363	0.07118	0.004	314.135
1201	3.170	0.23962	315.734	10.0280	0.07219	0.006	314.141
1203	3.169	0.27615	315.992	10.0174	0.07077	0.005	314.135
1205	3.155	0.31502	316.262	10.0050	0.07144	0.007	314.147
1207	3.149	0.35679	316.551	9.9925	0.07120	0.003	314.139
1209	3.150	0.40122	316.850	9.9802	0.07163	0.004	314.140
1211	3.155	0.17452	315.278	10.0452	0.07137	0.005	314.132
1213	3.151	0.20588	315.500	10.0357	0.07127	0.005	314.138
1215	3.149	0.23990	315.742	10.0257	0.07099	0.004	314.144
1217	3.157	0.27632	315.966	10.0173	0.07081	0.003	314.135
1219	3.163	0.31539	316.240	10.0067	0.07274	0.003	314.144
1221	3.167	0.35711	316.527	9.9952	0.07250	0.003	314.140
1223	3.171	0.40139	316.827	9.9833	0.07221	0.003	314.137
1225	1.899	0.17503	315.266	9.9187	0.06894	0.005	314.101
1227	1.898	0.20616	315.496	9.9086	0.06993	0.004	314.114
1229	1.907	0.23932	315.709	9.9002	0.07151	0.003	314.117
1231	1.913	0.27553	315.976	9.8890	0.07119	0.004	314.118
1233	1.916	0.31491	316.243	9.8775	0.07171	0.003	314.114
1235	1.918	0.35697	316.535	9.8647	0.07065	0.003	314.116
1237	1.907	0.40150	316.850	9.8494	0.06930	0.003	314.114
1239	6.962	0.13370	328.834	9.8731	0.07285	0.008	327.960
1241	6.961	0.15659	328.995	9.8669	0.07313	0.006	327.971
1243	6.958	0.18142	329.197	9.8590	0.07208	0.005	327.986
1245	6.958	0.20827	329.386	9.8518	0.07272	0.005	327.991
1247	6.961	0.23699	329.569	9.8451	0.07553	0.005	327.995
1249	6.961	0.26800	329.793	9.8366	0.07400	0.004	327.996
1251	6.963	0.30091	330.022	9.8280	0.07381	0.004	327.992
1253	5.684	0.13370	328.861	9.7458	0.07305	0.009	327.976
1255	5.684	0.15686	329.026	9.7390	0.07584	0.007	327.982
1259	5.683	0.20853	329.411	9.7232	0.07290	0.010	328.002
1263	5.685	0.26780	329.833	9.7062	0.07353	0.004	328.008
1265	5.684	0.30033	330.042	9.6976	0.07556	0.006	327.998

Table 8. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1267	4.551	0.13371	328.886	9.6195	0.07731	0.011	327.995
1269	4.551	0.15682	329.051	9.6123	0.07702	0.009	327.997
1271	4.551	0.18157	329.233	9.6043	0.07358	0.007	327.997
1273	4.551	0.20851	329.424	9.5959	0.07459	0.007	327.997
1277	4.552	0.26791	329.839	9.5779	0.07717	0.007	328.014
1279	4.555	0.30038	330.096	9.5668	0.07283	0.005	328.013
1281	3.477	0.13373	328.895	9.4853	0.07519	0.011	327.995
1285	3.481	0.18152	329.255	9.4687	0.07395	0.007	328.006
1289	3.470	0.23739	329.645	9.4486	0.07690	0.007	328.011
1293	3.476	0.30089	330.078	9.4285	0.08723	0.012	328.014
1295	2.614	0.13368	328.890	9.3638	0.08355	0.013	327.991
1297	2.615	0.15666	329.068	9.3547	0.08030	0.011	328.000
1299	2.616	0.18146	329.241	9.3458	0.08372	0.011	328.000
1309	7.574	0.11723	345.889	9.2543	0.06927	0.010	345.083
1311	7.575	0.13017	346.005	9.2495	0.06831	0.009	345.100
1313	7.570	0.14411	346.105	9.2446	0.06793	0.008	345.102
1315	7.568	0.15870	346.223	9.2392	0.06796	0.006	345.107
1317	7.564	0.17404	346.327	9.2342	0.06836	0.006	345.101
1319	7.566	0.19014	346.433	9.2300	0.07052	0.006	345.090
1321	7.572	0.20670	346.564	9.2251	0.06980	0.005	345.096
1323	6.060	0.11746	345.883	9.0408	0.06954	0.010	345.058
1325	6.061	0.13044	345.985	9.0360	0.07322	0.010	345.072
1327	6.055	0.14418	346.104	9.0294	0.07319	0.009	345.083
1329	6.052	0.15870	346.207	9.0238	0.07177	0.008	345.080
1331	6.052	0.17405	346.329	9.0179	0.06932	0.007	345.080
1335	6.059	0.20676	346.570	9.0072	0.07138	0.007	345.077
1337	4.969	0.11741	345.864	8.8561	0.07583	0.013	345.045
1339	4.971	0.13029	345.969	8.8506	0.07817	0.013	345.059
1341	4.971	0.14399	346.084	8.8444	0.07847	0.012	345.064
1343	4.971	0.15852	346.213	8.8372	0.07413	0.010	345.075
1345	4.967	0.17391	346.326	8.8302	0.07467	0.011	345.071
1347	4.966	0.19001	346.433	8.8241	0.08033	0.013	345.065
1349	4.965	0.20683	346.550	8.8174	0.07985	0.012	345.069
1351	4.203	0.11741	345.863	8.7010	0.09111	0.020	345.056
1353	4.203	0.13035	345.957	8.6954	0.09414	0.019	345.058
1355	4.204	0.14398	346.074	8.6883	0.08713	0.017	345.062

Table 9. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase obtained with wire assembly 1.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1003	0.456	0.18030	250.965	12.2673	0.09048	0.007	250.046
1005	0.455	0.22845	251.216	12.2599	0.08977	0.005	250.048
1007	0.456	0.28226	251.480	12.2520	0.08909	0.004	250.030
1009	0.456	0.34181	251.781	12.2430	0.08877	0.005	250.012
1011	0.457	0.40718	252.096	12.2337	0.08837	0.002	250.000
1013	0.458	0.47805	252.452	12.2231	0.08764	0.002	249.986
1017	0.457	0.18004	250.710	12.2749	0.09067	0.007	249.796
1019	0.457	0.22803	250.960	12.2675	0.08939	0.005	249.795
1021	0.457	0.28174	251.247	12.2590	0.08900	0.004	249.785
1023	0.457	0.34109	251.535	12.2504	0.08842	0.003	249.780
1025	0.457	0.40634	251.878	12.2402	0.08796	0.002	249.770
1027	0.457	0.47739	252.235	12.2296	0.08728	0.003	249.761
1031	0.783	0.18535	257.992	12.0686	0.08730	0.007	257.021
1033	0.786	0.23464	258.255	12.0608	0.08672	0.005	257.023
1035	0.787	0.28979	258.548	12.0520	0.08643	0.004	257.016
1037	0.789	0.35086	258.888	12.0417	0.08594	0.003	257.024
1039	0.786	0.41775	259.243	12.0308	0.08529	0.002	257.026
1041	0.783	0.49061	259.637	12.0187	0.08511	0.002	257.024
1045	0.784	0.18533	257.985	12.0689	0.08778	0.007	257.018
1047	0.781	0.23448	258.253	12.0607	0.08618	0.005	257.016
1049	0.784	0.28958	258.545	12.0519	0.08588	0.004	257.020
1051	0.781	0.35059	258.883	12.0416	0.08522	0.003	257.023
1053	0.781	0.41749	259.238	12.0308	0.08469	0.002	257.018
1055	0.779	0.49025	259.631	12.0188	0.08454	0.002	257.024
1059	1.075	0.19386	270.640	11.6889	0.08214	0.006	269.594
1061	1.075	0.24534	270.936	11.6795	0.08130	0.004	269.595
1063	1.075	0.30294	271.275	11.6688	0.08208	0.003	269.596
1065	1.077	0.36658	271.625	11.6577	0.08162	0.002	269.599
1067	1.077	0.43645	272.032	11.6447	0.08092	0.002	269.607
1069	1.077	0.51256	272.444	11.6315	0.08022	0.002	269.598
1071	1.079	0.14854	270.372	11.6977	0.08250	0.009	269.583
1073	1.080	0.19392	270.643	11.6891	0.08183	0.006	269.600
1075	1.081	0.24534	270.948	11.6794	0.08049	0.004	269.596
1077	1.080	0.30294	271.277	11.6689	0.08089	0.003	269.607
1079	1.080	0.36684	271.639	11.6573	0.08073	0.002	269.606
1081	1.082	0.43693	272.039	11.6447	0.08011	0.002	269.607
1083	1.080	0.51312	272.469	11.6308	0.07991	0.002	269.611
1087	9.163	0.20341	284.931	11.6082	0.08298	0.006	283.818
1089	9.165	0.25738	285.253	11.5991	0.08282	0.004	283.832
1091	9.159	0.31784	285.595	11.5890	0.08304	0.003	283.827
1093	9.161	0.38483	285.973	11.5782	0.08220	0.002	283.831
1095	9.162	0.45817	286.398	11.5660	0.08185	0.002	283.826
1097	9.160	0.53809	286.850	11.5528	0.08242	0.002	283.827

Table 9. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase obtained with wire assembly 1 (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1099	7.020	0.15584	284.659	11.5238	0.08052	0.008	283.800
1101	7.020	0.20340	284.938	11.5154	0.08114	0.006	283.801
1103	7.023	0.25725	285.251	11.5062	0.08012	0.004	283.809
1105	7.022	0.31756	285.607	11.4955	0.08027	0.003	283.809
1107	7.023	0.38457	285.993	11.4840	0.08065	0.002	283.816
1109	7.026	0.45820	286.417	11.4714	0.07990	0.002	283.818
1111	7.024	0.53815	286.892	11.4570	0.07975	0.002	283.821
1113	4.949	0.15580	284.659	11.4280	0.07815	0.008	283.781
1115	4.947	0.20337	284.943	11.4190	0.08241	0.007	283.797
1117	4.947	0.25712	285.279	11.4085	0.07950	0.005	283.804
1119	4.947	0.31734	285.612	11.3981	0.07906	0.003	283.798
1121	4.946	0.38441	286.013	11.3855	0.07814	0.002	283.807
1123	4.948	0.45789	286.435	11.3723	0.07797	0.002	283.804
1125	4.945	0.53783	286.906	11.3574	0.07765	0.001	283.808
1129	3.196	0.20333	284.956	11.3313	0.07808	0.006	283.792
1131	3.196	0.25715	285.281	11.3207	0.07742	0.005	283.802
1133	3.188	0.31750	285.639	11.3086	0.07733	0.003	283.804
1135	3.169	0.38463	286.050	11.2942	0.07721	0.002	283.813
1137	3.157	0.45775	286.482	11.2794	0.07654	0.002	283.809
1139	3.144	0.53720	286.937	11.2637	0.07654	0.001	283.812
1141	1.432	0.15604	284.677	11.2461	0.07699	0.008	283.783
1143	1.429	0.20387	284.975	11.2358	0.07594	0.006	283.788
1145	1.424	0.25804	285.289	11.2248	0.07471	0.004	283.791
1147	1.415	0.31861	285.658	11.2117	0.07507	0.003	283.790
1149	1.414	0.38559	286.056	11.1980	0.07486	0.002	283.795
1151	1.411	0.45904	286.493	11.1828	0.07413	0.002	283.792
1153	1.418	0.53869	286.962	11.1670	0.07442	0.002	283.797
1155	10.084	0.16294	299.329	11.2298	0.07892	0.009	298.388
1157	10.084	0.21292	299.626	11.2210	0.07829	0.005	298.395
1159	10.087	0.26950	299.981	11.2106	0.07765	0.004	298.404
1161	10.082	0.33259	300.359	11.1991	0.07776	0.003	298.402
1163	10.083	0.40245	300.770	11.1869	0.07773	0.002	298.400
1165	10.082	0.47897	301.243	11.1727	0.07775	0.002	298.407
1167	10.084	0.56259	301.725	11.1585	0.07722	0.001	298.400
1173	7.399	0.26925	300.001	11.0716	0.07586	0.009	298.376
1175	7.402	0.33237	300.416	11.0586	0.07732	0.008	298.386
1177	7.402	0.40252	300.811	11.0461	0.07563	0.002	298.386
1179	7.402	0.47977	301.287	11.0310	0.07486	0.002	298.388
1181	7.407	0.56348	301.789	11.0153	0.07560	0.002	298.387
1183	5.536	0.16316	299.334	10.9883	0.07566	0.008	298.365
1185	5.534	0.21278	299.644	10.9780	0.07300	0.005	298.367
1187	5.536	0.26890	300.002	10.9662	0.07479	0.004	298.368
1189	5.535	0.33219	300.391	10.9532	0.07391	0.003	298.376

Table 9. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase obtained with wire assembly 1 (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1191	5.534	0.40241	300.833	10.9384	0.07422	0.002	298.379
1193	5.533	0.47952	301.300	10.9227	0.07376	0.002	298.376
1195	5.535	0.56345	301.831	10.9051	0.07365	0.001	298.384
1197	3.548	0.16315	299.340	10.8663	0.07308	0.008	298.353
1199	3.551	0.21278	299.655	10.8554	0.07206	0.005	298.361
1201	3.552	0.26902	300.017	10.8427	0.07263	0.004	298.365
1203	3.556	0.33228	300.418	10.8288	0.07329	0.005	298.368
1205	3.555	0.40243	300.864	10.8129	0.07206	0.002	298.373
1207	3.551	0.47952	301.352	10.7953	0.07159	0.001	298.372
1209	3.550	0.56363	301.867	10.7769	0.07186	0.001	298.373
1211	1.411	0.16315	299.359	10.7190	0.07093	0.008	298.344
1213	1.411	0.21288	299.695	10.7062	0.07037	0.006	298.349
1215	1.410	0.26907	300.086	10.6913	0.07027	0.007	298.364
1217	1.410	0.33227	300.461	10.6770	0.07028	0.005	298.365
1219	1.414	0.40264	300.907	10.6601	0.06965	0.002	298.365
1221	1.410	0.48002	301.395	10.6411	0.06997	0.002	298.364
1223	1.411	0.56389	301.939	10.6200	0.07053	0.003	298.368
1225	9.298	0.17116	315.547	10.6854	0.07358	0.007	314.484
1227	9.300	0.22336	315.891	10.6744	0.07262	0.005	314.495
1229	9.301	0.28259	316.266	10.6623	0.07232	0.003	314.498
1231	9.303	0.34886	316.706	10.6481	0.07220	0.003	314.510
1233	9.305	0.42240	317.170	10.6331	0.07180	0.002	314.509
1235	9.306	0.50296	317.699	10.6159	0.07124	0.001	314.516
1237	9.307	0.59054	318.260	10.5976	0.07088	0.001	314.512
1239	7.263	0.17140	315.569	10.5504	0.07065	0.007	314.495
1241	7.265	0.22363	315.930	10.5381	0.07036	0.005	314.508
1243	7.267	0.28280	316.326	10.5246	0.07045	0.004	314.522
1245	7.268	0.34912	316.762	10.5095	0.07012	0.002	314.525
1247	7.270	0.42278	317.254	10.4926	0.07003	0.002	314.529
1249	7.271	0.50365	317.777	10.4745	0.06969	0.001	314.525
1251	7.273	0.59164	318.369	10.4538	0.06925	0.001	314.537
1253	5.506	0.17140	315.685	10.4174	0.06890	0.007	314.579
1255	5.506	0.22352	316.043	10.4043	0.06818	0.005	314.596
1257	5.506	0.28251	316.445	10.3895	0.06840	0.003	314.601
1259	5.507	0.34908	316.889	10.3730	0.06834	0.002	314.606
1261	5.508	0.42309	317.379	10.3549	0.06791	0.002	314.605
1263	5.509	0.50415	317.928	10.3345	0.06764	0.001	314.611
1265	5.510	0.59224	318.514	10.3126	0.06745	0.001	314.608
1267	3.431	0.17135	315.698	10.2440	0.06699	0.007	314.573
1269	3.431	0.22335	316.063	10.2293	0.06586	0.004	314.582
1271	3.431	0.28235	316.478	10.2125	0.06645	0.003	314.593
1273	3.430	0.34906	316.929	10.1940	0.06606	0.002	314.588
1275	3.431	0.42300	317.436	10.1733	0.06594	0.002	314.597

Table 9. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase obtained with wire assembly 1 (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1277	3.430	0.50404	317.992	10.1504	0.06577	0.002	314.601
1279	3.430	0.59214	318.596	10.1254	0.06565	0.002	314.604
1281	1.677	0.17127	315.702	10.0736	0.06448	0.006	314.549
1283	1.677	0.22319	316.090	10.0562	0.06419	0.004	314.571
1285	1.677	0.28225	316.484	10.0385	0.06417	0.004	314.565
1287	1.677	0.34914	316.959	10.0171	0.06429	0.002	314.570
1289	1.677	0.42336	317.467	9.9940	0.06417	0.002	314.565
1291	1.677	0.50443	318.031	9.9682	0.06419	0.002	314.563
1293	1.677	0.59256	318.636	9.9402	0.06430	0.002	314.572

Table 10. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase obtained with wire assembly 2.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
2019	19.667	0.29355	316.257	11.2013	0.08294	0.003	314.544
2021	19.674	0.36257	316.693	11.1902	0.08162	0.002	314.558
2023	19.677	0.43884	317.146	11.1786	0.08094	0.001	314.554
2025	19.682	0.52226	317.671	11.1651	0.08083	0.001	314.568
2027	19.687	0.61302	318.210	11.1513	0.08049	0.001	314.574
2029	16.412	0.17771	315.667	11.0702	0.07808	0.005	314.616
2031	16.415	0.23195	316.004	11.0611	0.07871	0.003	314.624
2033	16.418	0.29329	316.386	11.0508	0.07856	0.002	314.629
2035	16.419	0.36261	316.822	11.0388	0.07871	0.002	314.639
2037	16.421	0.43946	317.306	11.0256	0.07849	0.001	314.647
2039	16.421	0.52333	317.829	11.0112	0.07844	0.001	314.652
2041	16.422	0.61475	318.396	10.9955	0.07805	0.001	314.661
2043	12.975	0.17777	315.727	10.8958	0.07542	0.005	314.645
2045	12.980	0.23218	316.076	10.8858	0.07610	0.003	314.651
2047	12.986	0.29361	316.478	10.8742	0.07627	0.002	314.668
2049	12.987	0.36293	316.909	10.8616	0.07585	0.002	314.663
2051	12.991	0.43966	317.410	10.8469	0.07551	0.001	314.674
2053	12.992	0.52342	317.936	10.8314	0.07557	0.001	314.677
2055	12.993	0.61461	318.520	10.8140	0.07554	0.001	314.682
2057	9.463	0.17776	315.769	10.6921	0.07346	0.008	314.659
2059	9.465	0.23214	316.133	10.6804	0.07308	0.003	314.664
2061	9.466	0.29349	316.552	10.6670	0.07293	0.002	314.683
2063	9.471	0.36258	317.007	10.6526	0.07275	0.002	314.684
2065	9.474	0.43910	317.509	10.6365	0.07283	0.001	314.687
2067	9.477	0.52314	318.051	10.6190	0.07283	0.001	314.691
2069	9.480	0.61449	318.659	10.5994	0.07316	0.001	314.694
2071	6.007	0.17769	315.838	10.4538	0.06996	0.005	314.677
2073	6.010	0.23200	316.199	10.4410	0.06956	0.003	314.688
2075	6.012	0.29332	316.639	10.4252	0.06993	0.002	314.706
2077	6.014	0.36245	317.107	10.4083	0.06995	0.002	314.699
2079	6.016	0.43899	317.633	10.3892	0.06983	0.001	314.714
2081	6.017	0.52284	318.204	10.3684	0.06967	0.001	314.715
2083	6.017	0.61414	318.821	10.3457	0.07040	0.002	314.724
2085	12.052	0.13553	328.952	10.4365	0.07204	0.007	328.100
2086	12.051	0.17390	329.219	10.4279	0.07091	0.005	328.095
2087	12.050	0.21704	329.509	10.4186	0.06998	0.005	328.095
2088	12.051	0.26519	329.840	10.4082	0.07012	0.003	328.104
2089	12.052	0.31838	330.176	10.3975	0.07050	0.002	328.095
2090	12.050	0.37648	330.591	10.3841	0.07083	0.002	328.111
2091	12.049	0.43956	331.007	10.3707	0.07071	0.001	328.104
2092	9.679	0.13559	328.962	10.2684	0.06880	0.007	328.069
2094	9.680	0.17395	329.224	10.2595	0.06874	0.005	328.079
2096	9.679	0.21698	329.521	10.2492	0.06859	0.004	328.085

Table 10. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase obtained with wire assembly 2 (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
2098	9.680	0.26539	329.857	10.2377	0.06869	0.003	328.084
2100	9.680	0.31869	330.234	10.2247	0.06824	0.002	328.087
2102	9.680	0.37683	330.632	10.2109	0.06887	0.002	328.090
2104	9.680	0.43971	331.077	10.1955	0.06873	0.001	328.095
2106	7.605	0.13556	328.955	10.1016	0.06666	0.006	328.056
2108	7.604	0.17402	329.231	10.0912	0.06683	0.005	328.066
2110	7.606	0.21723	329.558	10.0792	0.06677	0.003	328.073
2112	7.607	0.26552	329.887	10.0669	0.06607	0.002	328.076
2114	7.607	0.31874	330.266	10.0527	0.06648	0.002	328.082
2116	7.607	0.37692	330.692	10.0367	0.06658	0.001	328.087
2118	7.607	0.43966	331.125	10.0204	0.06642	0.002	328.083
2120	5.497	0.13557	328.974	9.9036	0.06555	0.006	328.052
2122	5.498	0.15888	329.151	9.8965	0.06486	0.005	328.058
2124	5.500	0.18402	329.341	9.8888	0.06407	0.004	328.061
2126	5.501	0.21143	329.550	9.8803	0.06425	0.003	328.065
2128	5.502	0.24062	329.748	9.8721	0.06409	0.003	328.066
2130	5.503	0.27177	329.985	9.8623	0.06461	0.002	328.072
2132	5.504	0.30482	330.217	9.8527	0.06430	0.002	328.068
2134	4.009	0.13558	328.981	9.7404	0.06282	0.006	328.037
2136	4.010	0.15890	329.171	9.7319	0.06282	0.005	328.050
2138	4.010	0.18397	329.349	9.7239	0.06250	0.004	328.047
2140	4.013	0.21125	329.571	9.7141	0.06247	0.003	328.064
2142	4.014	0.24066	329.789	9.7043	0.06264	0.003	328.065
2144	4.016	0.27183	330.016	9.6940	0.06313	0.002	328.065
2146	4.017	0.30497	330.258	9.6830	0.06271	0.002	328.067
2148	2.458	0.13556	328.994	9.5384	0.06237	0.006	328.034
2152	2.459	0.18404	329.380	9.5184	0.06224	0.005	328.054
2154	2.459	0.21132	329.590	9.5076	0.06141	0.003	328.052
2156	2.461	0.24079	329.812	9.4963	0.06254	0.005	328.056
2158	2.462	0.27196	330.052	9.4840	0.06186	0.003	328.061
2160	2.464	0.30498	330.301	9.4711	0.06235	0.003	328.063
2162	7.836	0.14146	345.821	9.4567	0.06206	0.006	344.816
2164	7.837	0.16569	346.017	9.4484	0.06164	0.005	344.827
2166	7.837	0.19218	346.228	9.4394	0.06174	0.004	344.836
2168	7.837	0.22075	346.443	9.4304	0.06177	0.003	344.835
2170	7.837	0.25130	346.672	9.4206	0.06166	0.003	344.833
2172	7.839	0.28376	346.930	9.4097	0.06156	0.002	344.845
2174	7.841	0.31815	347.185	9.3990	0.06181	0.002	344.845
2176	6.450	0.14179	345.858	9.2761	0.06006	0.006	344.824
2178	6.450	0.16618	346.047	9.2672	0.06078	0.005	344.836
2180	6.451	0.19249	346.272	9.2567	0.05994	0.004	344.850
2182	6.451	0.22081	346.504	9.2459	0.06007	0.004	344.853
2184	6.452	0.25148	346.728	9.2353	0.05966	0.003	344.846

Table 10. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the compressed liquid phase obtained with wire assembly 2 (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
2186	6.453	0.28412	346.983	9.2234	0.06010	0.002	344.854
2188	6.453	0.31858	347.261	9.2102	0.06015	0.002	344.856
2190	5.044	0.14180	345.923	9.0554	0.05821	0.006	344.860
2192	5.045	0.16604	346.129	9.0446	0.05769	0.006	344.872
2196	5.047	0.22096	346.576	9.0208	0.05768	0.003	344.889
2198	5.048	0.25165	346.813	9.0082	0.05805	0.003	344.886
2200	5.049	0.28423	347.074	8.9941	0.05824	0.003	344.890
2202	5.050	0.31895	347.348	8.9792	0.05842	0.003	344.892
2204	4.100	0.14179	345.929	8.8776	0.05748	0.006	344.855
2206	4.100	0.16611	346.155	8.8640	0.05699	0.005	344.878
2208	4.102	0.19254	346.360	8.8519	0.05675	0.004	344.880
2210	4.103	0.22114	346.593	8.8378	0.05689	0.003	344.887
2212	4.104	0.25177	346.839	8.8228	0.05724	0.004	344.888
2214	4.104	0.28431	347.096	8.8071	0.05766	0.003	344.888
2216	4.105	0.31879	347.371	8.7901	0.05799	0.004	344.886
2218	3.275	0.14174	345.934	8.6887	0.05608	0.006	344.858
2220	3.276	0.16604	346.133	8.6749	0.05664	0.005	344.873
2222	3.276	0.19248	346.351	8.6596	0.05649	0.004	344.880
2224	3.276	0.22099	346.583	8.6432	0.05715	0.005	344.884
2226	3.277	0.25171	346.827	8.6259	0.05788	0.005	344.891
2228	3.278	0.28418	347.079	8.6078	0.05892	0.006	344.889
2230	3.279	0.31859	347.340	8.5890	0.06021	0.008	344.886

Table 11. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1003	0.449	0.17952	249.522	14.6630	0.09745	0.008	248.667
1005	0.448	0.22696	249.751	14.6543	0.09766	0.006	248.667
1007	0.447	0.28023	250.010	14.6444	0.09622	0.004	248.663
1009	0.446	0.33957	250.295	14.6336	0.09697	0.003	248.657
1011	0.445	0.40445	250.610	14.6216	0.09627	0.002	248.644
1013	0.446	0.47533	250.949	14.6088	0.09582	0.002	248.646
1017	0.449	0.17955	249.425	14.6666	0.09646	0.008	248.574
1019	0.449	0.22708	249.654	14.6580	0.09754	0.005	248.573
1021	0.448	0.28047	249.923	14.6478	0.09637	0.004	248.571
1023	0.446	0.33979	250.205	14.6370	0.09666	0.003	248.569
1025	0.445	0.40473	250.524	14.6249	0.09593	0.002	248.567
1027	0.445	0.47545	250.868	14.6118	0.09594	0.002	248.561
1031	1.163	0.18516	257.569	14.3830	0.09384	0.007	256.667
1033	1.149	0.23429	257.821	14.3726	0.09382	0.005	256.667
1035	1.171	0.28932	258.121	14.3619	0.09394	0.004	256.676
1037	1.182	0.35024	258.411	14.3510	0.09313	0.003	256.672
1039	1.193	0.41708	258.751	14.3382	0.09336	0.003	256.673
1041	1.202	0.48992	259.127	14.3239	0.09282	0.002	256.673
1045	1.156	0.18485	257.573	14.3826	0.09355	0.008	256.667
1047	1.156	0.23407	257.835	14.3724	0.09376	0.005	256.676
1049	1.177	0.28910	258.108	14.3626	0.09370	0.004	256.676
1051	1.189	0.35013	258.415	14.3512	0.09301	0.003	256.678
1053	1.198	0.41712	258.757	14.3382	0.09317	0.002	256.670
1055	1.203	0.49007	259.119	14.3243	0.09254	0.002	256.675
1059	4.656	0.19364	270.472	14.0342	0.09018	0.007	269.488
1061	4.664	0.24505	270.753	14.0236	0.08990	0.005	269.497
1063	4.590	0.30270	271.061	14.0082	0.08945	0.004	269.497
1065	4.561	0.36656	271.389	13.9939	0.08980	0.003	269.501
1067	4.539	0.43665	271.763	13.9782	0.08904	0.003	269.497
1069	4.529	0.51308	272.162	13.9620	0.08912	0.002	269.493
1073	2.911	0.19386	270.478	13.9512	0.08998	0.007	269.481
1075	2.947	0.24515	270.752	13.9419	0.08851	0.005	269.476
1077	2.991	0.30268	271.060	13.9316	0.08852	0.003	269.483
1079	3.009	0.36664	271.400	13.9188	0.08861	0.003	269.477
1081	3.024	0.43675	271.766	13.9047	0.08860	0.002	269.481
1083	2.984	0.51307	272.172	13.8862	0.08848	0.002	269.485
1087	1.754	0.19372	270.469	13.8939	0.08836	0.007	269.473
1089	1.681	0.24519	270.751	13.8785	0.08853	0.005	269.472
1091	1.656	0.30292	271.053	13.8646	0.08839	0.004	269.471
1093	1.636	0.36687	271.404	13.8490	0.08758	0.002	269.472
1095	1.639	0.43704	271.777	13.8336	0.08724	0.002	269.472
1097	1.704	0.51325	272.199	13.8193	0.08686	0.001	269.477
1101	12.172	0.20325	284.840	13.8377	0.08866	0.006	283.787

Table 11. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1103	12.196	0.25741	285.123	13.8285	0.08876	0.005	283.784
1105	12.241	0.31793	285.451	13.8186	0.08892	0.003	283.790
1107	12.252	0.38492	285.799	13.8065	0.08934	0.002	283.784
1109	12.265	0.45832	286.209	13.7922	0.08842	0.002	283.792
1111	12.263	0.53840	286.622	13.7770	0.08812	0.002	283.791
1115	9.753	0.20347	284.831	13.7243	0.08852	0.007	283.767
1117	9.742	0.25724	285.142	13.7119	0.08776	0.005	283.776
1119	9.739	0.31798	285.457	13.6998	0.08769	0.003	283.775
1121	9.770	0.38500	285.822	13.6875	0.08688	0.002	283.765
1123	9.800	0.45863	286.222	13.6738	0.08625	0.002	283.774
1125	9.818	0.53873	286.651	13.6583	0.08673	0.001	283.769
1129	5.499	0.20322	284.835	13.5005	0.08489	0.006	283.738
1131	5.522	0.25711	285.146	13.4888	0.08425	0.004	283.743
1133	5.535	0.31789	285.477	13.4759	0.08451	0.003	283.749
1135	5.520	0.38506	285.840	13.4598	0.08419	0.002	283.748
1137	5.468	0.45896	286.275	13.4387	0.08374	0.002	283.751
1139	5.456	0.53922	286.724	13.4191	0.08323	0.002	283.755
1143	3.564	0.20341	284.840	13.3857	0.08367	0.006	283.730
1145	3.552	0.25745	285.151	13.3713	0.08296	0.004	283.737
1147	3.574	0.31811	285.508	13.3571	0.08243	0.003	283.742
1149	3.616	0.38525	285.872	13.3437	0.08293	0.002	283.743
1151	3.635	0.45867	286.293	13.3265	0.08172	0.002	283.742
1153	3.646	0.53874	286.749	13.3071	0.08169	0.001	283.747
1157	1.563	0.20343	284.848	13.2555	0.08285	0.006	283.730
1159	1.574	0.25734	285.170	13.2414	0.08148	0.004	283.739
1161	1.546	0.31809	285.511	13.2236	0.08083	0.003	283.738
1163	1.506	0.38553	285.912	13.2021	0.08099	0.002	283.742
1165	1.490	0.45940	286.349	13.1805	0.08061	0.002	283.748
1167	1.486	0.53977	286.807	13.1586	0.08007	0.002	283.745
1171	10.775	0.21322	299.568	13.2076	0.08288	0.006	298.384
1173	10.786	0.26973	299.887	13.1955	0.08150	0.004	298.381
1175	10.825	0.33312	300.249	13.1834	0.08206	0.003	298.389
1177	10.839	0.40341	300.659	13.1679	0.08173	0.002	298.398
1179	10.848	0.48041	301.096	13.1510	0.08127	0.002	298.393
1181	10.815	0.56436	301.573	13.1299	0.08121	0.001	298.390
1185	8.318	0.21313	299.564	13.0555	0.08105	0.006	298.363
1187	8.292	0.26973	299.887	13.0402	0.08020	0.004	298.365
1189	8.259	0.33334	300.273	13.0216	0.07961	0.003	298.374
1191	8.247	0.40382	300.681	13.0034	0.07971	0.002	298.376
1193	8.260	0.48103	301.130	12.9851	0.07929	0.002	298.370
1195	8.296	0.56479	301.624	12.9664	0.07883	0.001	298.372
1197	5.610	0.16336	299.267	12.8801	0.07829	0.009	298.336
1199	5.611	0.21327	299.578	12.8659	0.07797	0.005	298.346

Table 11. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1201	5.654	0.26975	299.905	12.8542	0.07986	0.004	298.354
1203	5.673	0.33313	300.289	12.8379	0.07791	0.003	298.350
1205	5.683	0.40355	300.720	12.8187	0.07755	0.002	298.359
1207	5.638	0.48100	301.172	12.7943	0.07739	0.002	298.359
1209	5.620	0.56535	301.681	12.7693	0.07743	0.001	298.361
1211	3.341	0.16331	299.288	12.6984	0.07667	0.008	298.329
1213	3.335	0.21319	299.592	12.6827	0.07633	0.006	298.338
1215	3.374	0.26970	299.925	12.6694	0.07985	0.004	298.338
1217	3.390	0.33313	300.320	12.6510	0.07673	0.003	298.346
1219	3.403	0.40363	300.759	12.6300	0.07579	0.002	298.349
1221	3.390	0.48084	301.208	12.6061	0.07621	0.002	298.349
1223	3.355	0.56516	301.729	12.5764	0.07586	0.001	298.354
1225	1.433	0.16330	299.287	12.5234	0.07547	0.008	298.323
1227	1.397	0.21322	299.611	12.5022	0.07690	0.009	298.335
1229	1.386	0.26988	299.959	12.4819	0.07555	0.004	298.336
1231	1.418	0.33329	300.348	12.4636	0.07746	0.003	298.341
1233	1.439	0.40350	300.771	12.4424	0.07748	0.003	298.342
1235	1.447	0.48077	301.266	12.4156	0.07387	0.002	298.347
1237	1.442	0.56487	301.789	12.3856	0.07348	0.001	298.348
1239	9.378	0.17058	314.510	12.4802	0.07702	0.008	313.494
1241	9.381	0.22273	314.839	12.4655	0.07506	0.005	313.501
1243	9.386	0.28207	315.204	12.4493	0.07512	0.004	313.496
1245	9.390	0.34858	315.619	12.4308	0.07464	0.003	313.503
1247	9.392	0.42212	316.071	12.4104	0.07430	0.002	313.502
1249	9.389	0.50290	316.570	12.3873	0.07395	0.001	313.506
1251	9.389	0.59091	317.121	12.3620	0.07347	0.001	313.507
1253	7.545	0.17091	314.511	12.3222	0.07369	0.007	313.470
1255	7.554	0.22308	314.846	12.3067	0.07360	0.005	313.485
1257	7.557	0.28219	315.221	12.2888	0.07391	0.003	313.491
1259	7.558	0.34833	315.636	12.2687	0.07329	0.003	313.493
1261	7.539	0.42214	316.092	12.2446	0.07399	0.002	313.493
1263	7.534	0.50324	316.602	12.2190	0.07269	0.002	313.489
1265	7.531	0.59146	317.180	12.1901	0.07205	0.001	313.497
1267	5.504	0.17089	314.507	12.1215	0.07457	0.007	313.454
1269	5.511	0.22293	314.850	12.1040	0.07209	0.005	313.469
1271	5.515	0.28191	315.228	12.0841	0.07188	0.003	313.468
1273	5.514	0.34832	315.655	12.0610	0.07143	0.002	313.470
1275	5.496	0.42226	316.138	12.0330	0.07212	0.002	313.476
1277	5.491	0.50334	316.661	12.0040	0.07135	0.001	313.482
1279	5.493	0.59160	317.228	11.9731	0.07074	0.001	313.476
1281	3.427	0.17091	314.513	11.8771	0.07000	0.008	313.425
1283	3.441	0.22289	314.848	11.8587	0.07263	0.005	313.436
1285	3.448	0.28195	315.251	11.8352	0.06974	0.003	313.446

Table 11. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1287	3.451	0.34859	315.679	11.8093	0.06865	0.002	313.444
1289	3.453	0.42239	316.171	11.7793	0.06844	0.002	313.442
1291	3.455	0.50321	316.698	11.7467	0.06797	0.002	313.444
1293	3.434	0.59157	317.260	11.7085	0.06952	0.002	313.442
1295	2.160	0.17088	314.495	11.6997	0.06810	0.007	313.392
1297	2.156	0.22293	314.854	11.6751	0.06737	0.004	313.416
1299	2.156	0.28205	315.260	11.6475	0.06719	0.003	313.421
1301	2.170	0.34865	315.680	11.6211	0.06745	0.003	313.417
1303	2.174	0.42242	316.177	11.5874	0.06674	0.002	313.414
1305	2.176	0.50352	316.718	11.5501	0.06637	0.001	313.414
1307	2.159	0.59185	317.311	11.5052	0.06642	0.001	313.421
1309	8.511	0.17824	329.204	11.6783	0.06974	0.007	328.059
1311	8.514	0.23240	329.572	11.6592	0.06873	0.005	328.069
1313	8.506	0.29428	329.992	11.6357	0.06874	0.003	328.075
1315	8.489	0.36400	330.464	11.6083	0.07032	0.006	328.076
1317	8.483	0.44097	330.974	11.5800	0.06754	0.002	328.081
1319	8.496	0.52521	331.500	11.5530	0.07031	0.002	328.074
1321	8.504	0.61700	332.130	11.5197	0.06832	0.001	328.081
1323	6.874	0.17828	329.188	11.4687	0.06941	0.007	328.023
1325	6.877	0.23253	329.575	11.4463	0.06817	0.005	328.046
1327	6.878	0.29410	329.995	11.4216	0.06866	0.003	328.053
1329	6.876	0.36359	330.469	11.3932	0.06701	0.002	328.051
1331	6.875	0.44056	330.997	11.3613	0.06618	0.002	328.057
1333	6.874	0.52498	331.560	11.3272	0.06746	0.002	328.059
1335	6.873	0.61677	332.178	11.2894	0.06747	0.002	328.057
1337	5.351	0.17826	329.201	11.2340	0.06939	0.007	328.013
1339	5.353	0.23250	329.568	11.2100	0.07115	0.005	328.027
1341	5.355	0.29412	330.000	11.1813	0.06904	0.004	328.036
1343	5.355	0.36352	330.475	11.1493	0.06925	0.003	328.031
1349	5.354	0.61693	332.186	11.0310	0.06996	0.003	328.035
1355	5.338	0.17760	329.222	11.2303	0.07202	0.008	328.049
1359	5.355	0.23234	329.587	11.2090	0.07238	0.006	328.049
1361	5.359	0.26243	329.811	11.1947	0.06921	0.004	328.055
1363	5.361	0.29445	330.033	11.1802	0.06928	0.004	328.055
1365	4.107	0.13083	328.879	11.0246	0.07072	0.011	328.015
1369	4.109	0.17760	329.234	10.9984	0.06846	0.007	328.042
1375	4.095	0.26261	329.814	10.9509	0.06858	0.005	328.034
1377	4.101	0.29456	330.031	10.9353	0.07158	0.005	328.042
1381	2.968	0.15334	329.066	10.7412	0.06776	0.009	328.032
1385	2.965	0.20426	329.437	10.7066	0.06764	0.006	328.037
1389	2.976	0.26261	329.829	10.6733	0.07198	0.007	328.035
1393	7.590	0.13584	342.720	10.7362	0.06170	0.015	341.791
1395	7.581	0.15931	342.907	10.7218	0.06176	0.012	341.794

Table 11. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1397	7.576	0.18474	343.097	10.7080	0.06224	0.012	341.797
1401	7.586	0.24128	343.512	10.6816	0.06431	0.016	341.805
1403	7.589	0.27259	343.741	10.6664	0.06363	0.009	341.806

Table 12. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the compressed liquid phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1003	0.416	0.18275	249.003	14.9669	0.10438	0.006	248.144
1005	0.416	0.23167	249.205	14.9597	0.10373	0.004	248.126
1007	0.416	0.28646	249.433	14.9515	0.10422	0.003	248.101
1009	0.416	0.34707	249.698	14.9419	0.10313	0.002	248.076
1011	0.415	0.41343	249.970	14.9321	0.10401	0.002	248.047
1013	0.414	0.48560	250.296	14.9203	0.10292	0.001	248.029
1015	0.412	0.14003	248.631	14.9802	0.10509	0.008	247.955
1017	0.412	0.18298	248.800	14.9741	0.10438	0.005	247.936
1019	0.412	0.23165	248.991	14.9672	0.10474	0.004	247.909
1021	0.412	0.28612	249.230	14.9586	0.10492	0.003	247.891
1023	0.412	0.34645	249.486	14.9494	0.10328	0.002	247.868
1025	0.413	0.41250	249.763	14.9395	0.10371	0.002	247.847
1027	0.413	0.48437	250.085	14.9279	0.10379	0.001	247.833
1029	0.425	0.15099	269.737	14.1871	0.09683	0.007	268.963
1031	0.424	0.15103	269.771	14.1856	0.09345	0.007	268.981
1033	0.422	0.19732	270.007	14.1762	0.09508	0.005	268.985
1035	0.423	0.19726	269.998	14.1766	0.09438	0.005	268.985
1037	0.424	0.24979	270.273	14.1657	0.09471	0.003	268.996
1039	0.425	0.24975	270.262	14.1662	0.09538	0.004	268.989
1041	0.425	0.30849	270.562	14.1543	0.09470	0.003	268.996
1043	0.425	0.30857	270.559	14.1544	0.09402	0.003	268.995
1045	0.425	0.37374	270.918	14.1401	0.09338	0.002	269.008
1047	0.424	0.37374	270.913	14.1402	0.09427	0.002	269.003
1049	0.423	0.44513	271.270	14.1259	0.09437	0.002	269.000
1051	0.422	0.44510	271.256	14.1264	0.09393	0.001	269.007
1053	0.422	0.52270	271.665	14.1100	0.09473	0.001	269.014
1055	0.422	0.52257	271.651	14.1106	0.09377	0.001	269.010
1057	1.062	0.15866	284.488	13.6116	0.08897	0.006	283.618
1059	1.053	0.15855	284.502	13.6105	0.09142	0.006	283.620
1061	1.048	0.20716	284.774	13.5984	0.08964	0.004	283.635
1063	1.060	0.20709	284.769	13.5994	0.08896	0.004	283.625
1065	1.070	0.26223	285.051	13.5877	0.08857	0.003	283.627
1067	1.074	0.26221	285.056	13.5878	0.08789	0.003	283.630
1069	1.082	0.32388	285.381	13.5742	0.08901	0.002	283.632
1071	1.086	0.32390	285.390	13.5741	0.08889	0.002	283.637
1073	1.072	0.39239	285.751	13.5575	0.08762	0.002	283.637
1075	1.058	0.39245	285.742	13.5571	0.08811	0.002	283.630
1077	1.050	0.46748	286.149	13.5389	0.08758	0.001	283.634
1079	1.042	0.46766	286.147	13.5385	0.08785	0.001	283.632
1081	1.046	0.54933	286.590	13.5194	0.08754	0.001	283.631
1083	1.061	0.54911	286.585	13.5205	0.08788	0.001	283.638
1085	10.377	0.16605	299.295	13.5307	0.09083	0.006	298.378
1087	10.385	0.21663	299.559	13.5211	0.09061	0.004	298.382

Table 12. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1089	10.387	0.27454	299.873	13.5092	0.08902	0.003	298.389
1091	10.381	0.33945	300.226	13.4956	0.08886	0.002	298.391
1093	10.343	0.41138	300.602	13.4792	0.08931	0.002	298.393
1095	10.331	0.49002	301.018	13.4626	0.08896	0.001	298.397
1097	10.320	0.57553	301.484	13.4443	0.08863	0.001	298.395
1099	8.101	0.16621	299.289	13.4065	0.08886	0.006	298.362
1101	8.110	0.21688	299.565	13.3960	0.08731	0.004	298.369
1103	8.122	0.27506	299.889	13.3838	0.08649	0.003	298.379
1105	8.133	0.34008	300.241	13.3704	0.08731	0.002	298.383
1107	8.145	0.41187	300.629	13.3556	0.08689	0.002	298.383
1109	8.154	0.49058	301.054	13.3391	0.08746	0.001	298.377
1111	8.161	0.57638	301.515	13.3210	0.08746	0.001	298.377
1113	6.103	0.16610	299.281	13.2881	0.08780	0.006	298.349
1115	6.109	0.21713	299.560	13.2769	0.08681	0.004	298.351
1117	6.120	0.27518	299.888	13.2638	0.08659	0.003	298.358
1119	6.129	0.34000	300.235	13.2498	0.08685	0.003	298.364
1121	6.132	0.41183	300.646	13.2327	0.08589	0.002	298.365
1123	6.136	0.49050	301.088	13.2143	0.08621	0.001	298.372
1125	6.140	0.57607	301.550	13.1950	0.08649	0.001	298.377
1127	3.985	0.16618	299.301	13.1494	0.08495	0.006	298.340
1129	3.990	0.21721	299.592	13.1369	0.08412	0.004	298.345
1131	3.997	0.27525	299.907	13.1233	0.08491	0.003	298.357
1133	4.005	0.34009	300.270	13.1077	0.08438	0.002	298.363
1135	4.020	0.41180	300.699	13.0895	0.08404	0.002	298.366
1137	4.035	0.49040	301.124	13.0714	0.08493	0.002	298.367
1139	4.040	0.57605	301.603	13.0502	0.08454	0.001	298.372
1141	1.381	0.16610	299.288	12.9582	0.08356	0.006	298.323
1143	1.375	0.21718	299.614	12.9419	0.08243	0.004	298.348
1145	1.376	0.27524	299.934	12.9264	0.08279	0.003	298.349
1147	1.383	0.34006	300.307	12.9086	0.08266	0.002	298.347
1149	1.398	0.41181	300.706	12.8903	0.08268	0.002	298.345
1151	1.410	0.49056	301.159	12.8688	0.08269	0.002	298.348
1153	1.420	0.57615	301.634	12.8461	0.08223	0.002	298.348
1155	10.201	0.17372	314.405	12.9256	0.08460	0.006	313.382
1157	10.217	0.22705	314.699	12.9146	0.08336	0.004	313.388
1159	10.214	0.28769	315.049	12.9000	0.08287	0.005	313.390
1161	10.222	0.35547	315.434	12.8847	0.08348	0.002	313.400
1163	10.224	0.43042	315.867	12.8669	0.08260	0.002	313.408
1165	10.202	0.51278	316.321	12.8466	0.08323	0.001	313.399
1167	10.195	0.60249	316.836	12.8247	0.08369	0.001	313.404
1173	8.009	0.20489	314.556	12.7645	0.08216	0.004	313.344
1175	7.993	0.25068	314.806	12.7523	0.08147	0.003	313.345
1177	7.987	0.30095	315.084	12.7396	0.08172	0.003	313.331

Table 12. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1179	7.980	0.35589	315.409	12.7247	0.08150	0.002	313.339
1181	7.975	0.41528	315.742	12.7097	0.08143	0.002	313.334
1183	5.977	0.12756	314.050	12.6275	0.08042	0.008	313.266
1185	5.972	0.14980	314.195	12.6203	0.08010	0.008	313.281
1189	5.966	0.19971	314.487	12.6060	0.08078	0.006	313.288
1191	5.965	0.22736	314.638	12.5988	0.08018	0.004	313.282
1193	5.961	0.25679	314.814	12.5902	0.07962	0.004	313.281
1195	5.964	0.28797	314.988	12.5822	0.07962	0.003	313.280
1197	3.781	0.12755	314.028	12.4320	0.07673	0.008	313.224
1199	3.787	0.14973	314.161	12.4258	0.07866	0.007	313.234
1201	3.791	0.17381	314.305	12.4187	0.07811	0.005	313.232
1203	3.794	0.19960	314.458	12.4112	0.07756	0.007	313.235
1205	3.800	0.22720	314.629	12.4029	0.07709	0.005	313.241
1207	3.804	0.25662	314.811	12.3938	0.07771	0.003	313.249
1209	3.807	0.28774	314.986	12.3851	0.07785	0.003	313.243
1213	1.875	0.14979	314.160	12.2247	0.07606	0.006	313.206
1215	1.878	0.17383	314.307	12.2166	0.07736	0.005	313.219
1217	1.882	0.19957	314.464	12.2081	0.07624	0.004	313.224
1219	1.885	0.22715	314.634	12.1987	0.07616	0.003	313.219
1221	1.889	0.25651	314.806	12.1893	0.07583	0.004	313.215
1223	1.892	0.28774	315.001	12.1783	0.07539	0.003	313.228
1225	9.197	0.13315	328.900	12.2142	0.07589	0.007	328.134
1227	9.206	0.15625	329.045	12.2083	0.07759	0.008	328.134
1229	9.207	0.18124	329.213	12.2006	0.07629	0.005	328.147
1231	9.208	0.20814	329.379	12.1929	0.07774	0.004	328.150
1233	9.209	0.23696	329.559	12.1845	0.07696	0.003	328.152
1235	9.209	0.26756	329.758	12.1752	0.07681	0.003	328.154
1237	9.209	0.30009	329.953	12.1660	0.07687	0.002	328.151
1241	7.386	0.15624	329.067	12.0280	0.07616	0.008	328.130
1245	7.395	0.20810	329.440	12.0100	0.07500	0.005	328.137
1247	7.398	0.23690	329.636	12.0005	0.07501	0.003	328.147
1249	7.403	0.26754	329.810	11.9920	0.07565	0.003	328.134
1251	7.406	0.30006	330.006	11.9824	0.07634	0.005	328.133
1253	5.673	0.13314	328.978	11.8387	0.07431	0.007	328.103
1255	5.673	0.15628	329.126	11.8305	0.07443	0.007	328.113
1257	5.681	0.18130	329.289	11.8224	0.07301	0.005	328.118
1259	5.684	0.20822	329.447	11.8139	0.07397	0.004	328.124
1261	5.689	0.23705	329.635	11.8040	0.07351	0.003	328.126
1263	5.692	0.26769	329.831	11.7935	0.07285	0.003	328.124
1265	5.695	0.30027	330.045	11.7817	0.07349	0.003	328.134
1267	3.718	0.13310	328.966	11.5734	0.07086	0.007	328.080
1269	3.717	0.15628	329.133	11.5626	0.07106	0.006	328.096
1271	3.717	0.18131	329.307	11.5514	0.07096	0.005	328.115

Table 12. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1273	3.721	0.20827	329.481	11.5409	0.07131	0.004	328.109
1275	3.725	0.23703	329.647	11.5306	0.07139	0.004	328.107
1277	3.727	0.26772	329.850	11.5179	0.07121	0.003	328.109
1279	3.731	0.30024	330.064	11.5046	0.07178	0.002	328.108
1281	2.439	0.13310	328.984	11.3575	0.07025	0.007	328.082
1283	2.438	0.15629	329.133	11.3464	0.07023	0.006	328.089
1285	2.437	0.18131	329.314	11.3329	0.06910	0.005	328.104
1287	2.442	0.20824	329.484	11.3213	0.06962	0.004	328.103
1289	2.445	0.23703	329.677	11.3076	0.06953	0.003	328.109
1291	2.448	0.26767	329.884	11.2929	0.07004	0.005	328.113
1293	2.451	0.30023	330.092	11.2779	0.07033	0.003	328.113
1295	8.432	0.13885	344.143	11.3514	0.07088	0.008	343.204
1297	8.434	0.16292	344.318	11.3418	0.07042	0.007	343.220
1299	8.435	0.18902	344.479	11.3329	0.07146	0.005	343.214
1301	8.437	0.21716	344.660	11.3230	0.07143	0.004	343.215
1303	8.439	0.24724	344.857	11.3120	0.07105	0.004	343.219
1305	8.442	0.27921	345.072	11.3004	0.07097	0.003	343.222
1307	8.444	0.31314	345.283	11.2887	0.07157	0.003	343.212
1309	7.472	0.13885	344.140	11.2105	0.06976	0.008	343.190
1311	7.471	0.16298	344.311	11.2001	0.06930	0.007	343.200
1313	7.465	0.18914	344.482	11.1888	0.07067	0.005	343.208
1315	7.472	0.21719	344.678	11.1781	0.06978	0.004	343.213
1317	7.476	0.24724	344.871	11.1670	0.07021	0.004	343.209
1319	7.479	0.27921	345.080	11.1547	0.07012	0.003	343.211
1321	7.480	0.31315	345.301	11.1415	0.07024	0.003	343.206
1323	6.522	0.13880	344.135	11.0540	0.06845	0.008	343.176
1325	6.525	0.16297	344.312	11.0429	0.06859	0.006	343.186
1327	6.526	0.18908	344.483	11.0321	0.06868	0.005	343.189
1329	6.529	0.21716	344.669	11.0203	0.06887	0.004	343.184
1331	6.531	0.24723	344.879	11.0069	0.06872	0.004	343.194
1333	6.532	0.27925	345.089	10.9932	0.06914	0.003	343.192
1335	6.533	0.31321	345.318	10.9783	0.06949	0.003	343.195
1337	5.637	0.13882	344.151	10.8858	0.06822	0.008	343.177
1339	5.639	0.16298	344.318	10.8744	0.06743	0.006	343.180
1341	5.641	0.18908	344.497	10.8620	0.06755	0.005	343.187
1343	5.642	0.21721	344.691	10.8482	0.06800	0.004	343.191
1345	5.645	0.24722	344.888	10.8346	0.06802	0.004	343.193
1347	5.646	0.27921	345.105	10.8191	0.06822	0.004	343.189
1349	5.647	0.31313	345.334	10.8028	0.06842	0.003	343.190
1351	4.429	0.13880	344.162	10.6085	0.06595	0.009	343.170
1353	4.428	0.16300	344.322	10.5948	0.06565	0.006	343.174
1355	4.429	0.18902	344.510	10.5793	0.06589	0.005	343.183
1357	4.432	0.21712	344.704	10.5633	0.06625	0.004	343.184

Table 12. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the compressed liquid phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1359	4.433	0.24717	344.907	10.5463	0.06756	0.007	343.186
1361	4.435	0.27917	345.114	10.5290	0.06706	0.004	343.176
1363	4.438	0.31317	345.357	10.5085	0.06797	0.004	343.182
1365	3.488	0.13878	344.157	10.3270	0.06478	0.008	343.155
1367	3.488	0.16299	344.337	10.3087	0.06414	0.006	343.178
1369	3.488	0.18905	344.516	10.2902	0.06499	0.005	343.175
1371	3.489	0.21717	344.730	10.2682	0.06560	0.005	343.187
1373	3.490	0.24716	344.935	10.2469	0.06612	0.005	343.196
1375	3.492	0.27907	345.149	10.2246	0.06712	0.006	343.180
1377	3.494	0.31293	345.373	10.2009	0.06830	0.007	343.181

9. Tables of transient results for bare tungsten wires

Table 13. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.217	0.02783	263.777	0.1059	0.01116	0.011	261.132
1004	0.215	0.03782	264.739	0.1044	0.01123	0.008	261.145
1007	0.215	0.04931	265.843	0.1040	0.01131	0.005	261.171
1010	0.217	0.06228	267.058	0.1042	0.01145	0.004	261.179
1013	0.218	0.07674	268.427	0.1041	0.01155	0.003	261.215
1016	0.147	0.02780	264.062	0.0700	0.01116	0.013	261.229
1019	0.147	0.03780	265.062	0.0699	0.01121	0.009	261.249
1022	0.146	0.04929	266.228	0.0691	0.01128	0.006	261.289
1025	0.145	0.06225	267.486	0.0682	0.01140	0.005	261.290
1028	0.146	0.07668	268.893	0.0681	0.01151	0.004	261.305
1031	0.074	0.02779	264.452	0.0344	0.01105	0.012	261.378
1034	0.075	0.03776	265.514	0.0349	0.01131	0.008	261.396
1037	0.077	0.04924	266.713	0.0353	0.01139	0.006	261.408
1040	0.076	0.06220	268.063	0.0347	0.01148	0.005	261.424
1043	0.074	0.07660	269.544	0.0337	0.01161	0.004	261.436
1046	0.297	0.02692	272.745	0.1424	0.01199	0.013	270.456
1049	0.297	0.03661	273.606	0.1420	0.01202	0.009	270.483
1052	0.300	0.04775	274.545	0.1431	0.01208	0.006	270.476
1055	0.301	0.06032	275.599	0.1427	0.01216	0.005	270.467
1058	0.298	0.07434	276.772	0.1402	0.01228	0.005	270.466
1064	0.216	0.03660	273.699	0.1005	0.01198	0.009	270.469
1067	0.219	0.04772	274.689	0.1017	0.01206	0.007	270.469
1070	0.221	0.06030	275.793	0.1021	0.01216	0.005	270.465
1073	0.219	0.07433	277.013	0.1005	0.01225	0.005	270.462
1076	0.151	0.02691	272.901	0.0694	0.01188	0.014	270.444
1079	0.148	0.03660	273.810	0.0676	0.01192	0.009	270.450
1082	0.146	0.04771	274.840	0.0663	0.01200	0.006	270.452
1085	0.149	0.06028	275.995	0.0675	0.01212	0.005	270.457
1088	0.151	0.07429	277.266	0.0682	0.01220	0.004	270.456
1091	0.078	0.02690	273.028	0.0351	0.01194	0.014	270.429
1094	0.077	0.03656	273.992	0.0344	0.01205	0.009	270.434
1097	0.074	0.04769	275.088	0.0329	0.01218	0.006	270.444
1100	0.075	0.06026	276.291	0.0332	0.01228	0.005	270.431
1103	0.078	0.07424	277.650	0.0343	0.01237	0.004	270.443
1106	0.433	0.02593	283.205	0.2058	0.01278	0.015	281.163
1109	0.434	0.03527	283.950	0.2050	0.01287	0.010	281.168
1112	0.431	0.04603	284.787	0.2030	0.01300	0.007	281.174
1115	0.427	0.05816	285.721	0.1997	0.01304	0.005	281.179
1118	0.426	0.07169	286.744	0.1984	0.01326	0.005	281.163
1121	0.346	0.02594	283.255	0.1599	0.01282	0.015	281.143
1127	0.350	0.04602	284.879	0.1610	0.01284	0.007	281.159
1130	0.350	0.05815	285.822	0.1600	0.01295	0.006	281.141

Table 13. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1133	0.347	0.07170	286.895	0.1576	0.01309	0.004	281.152
1136	0.286	0.02593	283.237	0.1302	0.01279	0.015	281.111
1139	0.283	0.03527	284.014	0.1284	0.01267	0.010	281.118
1142	0.285	0.04601	284.889	0.1287	0.01290	0.007	281.112
1145	0.288	0.05813	285.838	0.1294	0.01296	0.005	281.075
1148	0.287	0.07166	286.956	0.1283	0.01303	0.004	281.104
1151	0.216	0.02593	283.253	0.0966	0.01274	0.014	281.082
1154	0.213	0.03526	284.053	0.0947	0.01271	0.010	281.087
1160	0.218	0.05812	285.973	0.0963	0.01300	0.005	281.091
1163	0.216	0.07165	287.099	0.0948	0.01305	0.004	281.096
1166	0.150	0.02592	283.290	0.0659	0.01278	0.016	281.080
1169	0.146	0.03525	284.113	0.0641	0.01269	0.009	281.083
1172	0.146	0.04597	285.047	0.0638	0.01289	0.007	281.081
1175	0.149	0.05809	286.102	0.0645	0.01301	0.006	281.086
1178	0.148	0.07158	287.244	0.0638	0.01310	0.004	281.069
1196	0.548	0.02504	293.301	0.2550	0.01347	0.017	291.489
1199	0.547	0.03407	293.969	0.2533	0.01363	0.012	291.498
1202	0.549	0.04445	294.697	0.2534	0.01389	0.009	291.487
1205	0.550	0.05619	295.529	0.2529	0.01385	0.006	291.491
1208	0.549	0.06926	296.455	0.2511	0.01404	0.005	291.494
1214	0.485	0.03406	293.906	0.2212	0.01375	0.013	291.447
1217	0.488	0.04445	294.689	0.2220	0.01381	0.009	291.473
1220	0.486	0.05617	295.526	0.2200	0.01381	0.007	291.460
1223	0.483	0.06925	296.462	0.2173	0.01391	0.006	291.457
1226	0.424	0.02504	293.267	0.1908	0.01360	0.018	291.456
1229	0.420	0.03405	293.915	0.1885	0.01357	0.013	291.437
1232	0.420	0.04443	294.686	0.1877	0.01375	0.009	291.439
1235	0.423	0.05617	295.562	0.1886	0.01383	0.006	291.454
1238	0.425	0.06925	296.507	0.1886	0.01390	0.005	291.441
1241	0.359	0.02503	293.178	0.1591	0.01361	0.017	291.404
1244	0.356	0.03404	293.872	0.1571	0.01368	0.011	291.409
1247	0.353	0.04441	294.658	0.1553	0.01374	0.008	291.407
1250	0.355	0.05614	295.557	0.1555	0.01379	0.006	291.422
1253	0.358	0.06922	296.578	0.1563	0.01404	0.056	291.406
1256	0.278	0.02503	293.183	0.1210	0.01355	0.017	291.376
1259	0.282	0.03404	293.899	0.1223	0.01364	0.011	291.384
1262	0.284	0.04441	294.717	0.1228	0.01372	0.008	291.388
1265	0.280	0.05615	295.635	0.1208	0.01382	0.006	291.397
1268	0.278	0.06922	296.624	0.1191	0.01391	0.005	291.378
1271	0.218	0.02502	293.204	0.0935	0.01358	0.018	291.364
1274	0.217	0.03403	293.934	0.0927	0.01376	0.011	291.363
1277	0.213	0.04441	294.772	0.0906	0.01370	0.008	291.369
1280	0.214	0.05613	295.695	0.0908	0.01380	0.006	291.358

Table 13. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1283	0.217	0.06918	296.729	0.0917	0.01392	0.005	291.358
1286	0.149	0.02502	293.243	0.0629	0.01360	0.019	291.343
1289	0.149	0.03404	293.999	0.0626	0.01378	0.011	291.341
1292	0.145	0.04440	294.865	0.0607	0.01379	0.008	291.339
1295	0.144	0.05610	295.840	0.0603	0.01389	0.006	291.347
1298	0.148	0.06917	296.913	0.0616	0.01398	0.005	291.338
1316	0.538	0.02414	303.461	0.2371	0.01445	0.020	301.836
1319	0.540	0.03283	304.069	0.2375	0.01460	0.013	301.842
1322	0.538	0.04285	304.774	0.2354	0.01466	0.010	301.854
1325	0.535	0.05418	305.542	0.2333	0.01469	0.007	301.848
1328	0.538	0.06681	306.374	0.2337	0.01476	0.005	301.821
1331	0.487	0.02417	302.769	0.2127	0.01440	0.021	301.369
1334	0.488	0.03286	303.386	0.2126	0.01451	0.014	301.373
1337	0.484	0.04288	304.100	0.2101	0.01454	0.010	301.388
1340	0.482	0.05421	304.883	0.2085	0.01465	0.007	301.381
1343	0.486	0.06684	305.745	0.2093	0.01472	0.005	301.370
1346	0.415	0.02416	302.738	0.1787	0.01437	0.021	301.338
1349	0.417	0.03286	303.402	0.1791	0.01449	0.014	301.381
1352	0.420	0.04288	304.144	0.1798	0.01504	0.062	301.383
1355	0.418	0.05419	304.879	0.1784	0.01467	0.007	301.343
1358	0.415	0.06683	305.796	0.1764	0.01470	0.005	301.373
1361	0.354	0.02416	302.725	0.1503	0.01436	0.021	301.326
1364	0.352	0.03285	303.382	0.1489	0.01447	0.013	301.353
1367	0.353	0.04287	304.116	0.1491	0.01457	0.009	301.359
1373	0.355	0.06683	305.815	0.1490	0.01473	0.006	301.331
1376	0.283	0.02416	302.720	0.1183	0.01437	0.020	301.303
1379	0.285	0.03285	303.389	0.1191	0.01453	0.013	301.320
1382	0.282	0.04286	304.159	0.1173	0.01459	0.009	301.347
1385	0.279	0.05418	304.989	0.1158	0.01469	0.006	301.335
1388	0.281	0.06682	305.930	0.1161	0.01477	0.005	301.348
1391	0.219	0.02415	302.782	0.0903	0.01438	0.019	301.329
1394	0.218	0.03285	303.452	0.0900	0.01465	0.013	301.325
1397	0.215	0.04286	304.224	0.0882	0.01460	0.009	301.327
1400	0.214	0.05418	305.070	0.0877	0.01474	0.007	301.310
1403	0.216	0.06680	306.027	0.0883	0.01479	0.006	301.313
1406	0.142	0.02415	302.845	0.0577	0.01465	0.020	301.317
1409	0.144	0.03285	303.543	0.0585	0.01463	0.013	301.320
1412	0.147	0.04286	304.309	0.0594	0.01449	0.009	301.290
1415	0.144	0.05417	305.211	0.0581	0.01480	0.007	301.300
1418	0.141	0.06678	306.174	0.0569	0.01488	0.005	301.278
1436	0.535	0.02322	315.652	0.2228	0.01540	0.023	314.144
1439	0.538	0.03159	316.183	0.2238	0.01554	0.015	314.103
1442	0.536	0.04122	316.832	0.2224	0.01541	0.010	314.116

Table 13. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1445	0.532	0.05211	317.550	0.2199	0.01571	0.008	314.125
1448	0.534	0.06428	318.319	0.2201	0.01578	0.006	314.109
1451	0.484	0.02322	315.602	0.1996	0.01535	0.023	314.084
1454	0.486	0.03159	316.182	0.2001	0.01556	0.016	314.102
1457	0.489	0.04121	316.814	0.2010	0.01535	0.011	314.089
1460	0.488	0.05211	317.543	0.1997	0.01568	0.007	314.100
1463	0.484	0.06429	318.317	0.1974	0.01577	0.006	314.075
1466	0.421	0.02322	315.587	0.1719	0.01553	0.023	314.061
1469	0.419	0.03159	316.170	0.1707	0.01561	0.015	314.074
1472	0.423	0.04122	316.803	0.1719	0.01542	0.011	314.056
1475	0.425	0.05211	317.538	0.1723	0.01567	0.008	314.060
1478	0.421	0.06427	318.372	0.1700	0.01576	0.006	314.083
1481	0.348	0.02322	315.555	0.1401	0.01549	0.023	314.037
1484	0.352	0.03158	316.134	0.1415	0.01570	0.016	314.039
1487	0.350	0.04120	316.800	0.1404	0.01554	0.012	314.042
1490	0.346	0.05210	317.521	0.1385	0.01579	0.008	314.020
1493	0.349	0.06426	318.358	0.1390	0.01581	0.006	314.027
1496	0.288	0.02321	315.492	0.1148	0.01559	0.023	313.985
1499	0.284	0.03158	316.111	0.1131	0.01552	0.016	314.015
1502	0.282	0.04121	316.767	0.1119	0.01565	0.011	313.991
1505	0.286	0.05209	317.538	0.1130	0.01575	0.009	314.002
1508	0.288	0.06424	318.374	0.1137	0.01577	0.006	313.994
1511	0.219	0.02321	315.494	0.0862	0.01562	0.025	313.967
1514	0.218	0.03157	316.111	0.0857	0.01570	0.016	313.972
1517	0.213	0.04120	316.798	0.0837	0.01558	0.011	313.964
1520	0.214	0.05210	317.585	0.0839	0.01586	0.008	313.968
1523	0.218	0.06424	318.455	0.0849	0.01597	0.006	313.969
1526	0.146	0.02321	315.526	0.0568	0.01577	0.024	313.952
1529	0.148	0.03156	316.160	0.0575	0.01578	0.016	313.956
1532	0.146	0.04118	316.854	0.0568	0.01565	0.011	313.934
1535	0.142	0.05208	317.669	0.0551	0.01592	0.008	313.941
1538	0.144	0.06423	318.566	0.0556	0.01599	0.006	313.944
1556	0.536	0.02262	323.069	0.2163	0.01627	0.026	321.678
1559	0.536	0.03076	323.594	0.2161	0.01619	0.017	321.682
1562	0.537	0.04015	324.165	0.2158	0.01625	0.012	321.656
1565	0.537	0.05077	324.847	0.2154	0.01631	0.008	321.666
1568	0.537	0.06263	325.577	0.2147	0.01643	0.006	321.653
1571	0.488	0.02262	323.025	0.1956	0.01614	0.026	321.650
1574	0.490	0.03077	323.562	0.1960	0.01623	0.016	321.657
1577	0.491	0.04016	324.164	0.1960	0.01631	0.011	321.653
1580	0.492	0.05077	324.834	0.1957	0.01638	0.008	321.641
1583	0.491	0.06262	325.581	0.1949	0.01649	0.007	321.636
1586	0.422	0.02261	322.989	0.1671	0.01628	0.026	321.607

Table 13. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1589	0.423	0.03076	323.543	0.1675	0.01630	0.016	321.627
1595	0.424	0.05078	324.860	0.1670	0.01637	0.008	321.640
1598	0.423	0.06263	325.597	0.1661	0.01642	0.006	321.609
1601	0.353	0.02261	322.960	0.1384	0.01607	0.025	321.590
1604	0.354	0.03076	323.502	0.1385	0.01629	0.017	321.584
1607	0.355	0.04013	324.123	0.1388	0.01641	0.011	321.584
1610	0.355	0.05077	324.878	0.1382	0.01634	0.049	321.604
1613	0.352	0.06262	325.627	0.1366	0.01657	0.006	321.602
1616	0.279	0.02260	322.933	0.1083	0.01639	0.027	321.565
1619	0.278	0.03075	323.504	0.1076	0.01629	0.016	321.580
1622	0.278	0.04014	324.134	0.1075	0.01633	0.011	321.573
1625	0.280	0.05076	324.856	0.1079	0.01651	0.009	321.568
1628	0.281	0.06260	325.648	0.1081	0.01654	0.007	321.565
1631	0.212	0.02260	322.925	0.0813	0.01642	0.027	321.534
1634	0.210	0.03075	323.519	0.0805	0.01629	0.016	321.555
1637	0.209	0.04014	324.177	0.0799	0.01648	0.012	321.559
1640	0.209	0.05076	324.908	0.0795	0.01651	0.008	321.550
1643	0.210	0.06259	325.720	0.0799	0.01661	0.007	321.546
1676	0.538	0.02218	332.489	0.2095	0.01688	0.027	331.174
1679	0.539	0.03017	332.982	0.2093	0.01689	0.017	331.177
1682	0.540	0.03938	333.533	0.2092	0.01717	0.012	331.163
1685	0.540	0.04981	334.163	0.2088	0.01712	0.008	331.157
1688	0.540	0.06145	334.874	0.2082	0.01722	0.006	331.166
1691	0.488	0.02218	332.451	0.1885	0.01710	0.026	331.143
1694	0.489	0.03017	332.937	0.1885	0.01709	0.019	331.131
1697	0.489	0.03938	333.514	0.1882	0.01708	0.012	331.136
1700	0.489	0.04982	334.171	0.1876	0.01724	0.010	331.148
1703	0.488	0.06144	334.880	0.1869	0.01729	0.007	331.148
1706	0.420	0.02218	332.408	0.1607	0.01698	0.029	331.110
1709	0.420	0.03017	332.935	0.1602	0.01716	0.019	331.122
1712	0.420	0.03939	333.503	0.1599	0.01735	0.013	331.119
1715	0.420	0.04979	334.161	0.1598	0.01729	0.009	331.122
1718	0.421	0.06141	334.875	0.1596	0.01731	0.007	331.113
1721	0.352	0.02217	332.398	0.1334	0.01702	0.028	331.107
1724	0.352	0.03018	332.891	0.1330	0.01713	0.019	331.084
1727	0.352	0.03938	333.485	0.1328	0.01712	0.013	331.091
1730	0.353	0.04979	334.142	0.1329	0.01728	0.009	331.082
1733	0.353	0.06141	334.871	0.1327	0.01734	0.006	331.074
1736	0.282	0.02217	332.349	0.1059	0.01717	0.029	331.060
1739	0.282	0.03017	332.892	0.1055	0.01713	0.018	331.079
1742	0.282	0.03938	333.499	0.1052	0.01718	0.013	331.084
1745	0.282	0.04978	334.155	0.1054	0.01732	0.009	331.061
1748	0.283	0.06141	334.905	0.1054	0.01742	0.007	331.060

Table 13. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1751	0.214	0.02217	332.359	0.0794	0.01720	0.029	331.064
1754	0.212	0.03017	332.903	0.0788	0.01719	0.019	331.068
1757	0.213	0.03937	333.504	0.0787	0.01726	0.012	331.051
1760	0.213	0.04977	334.192	0.0789	0.01740	0.010	331.039
1763	0.214	0.06140	334.965	0.0789	0.01755	0.008	331.044
1796	0.536	0.02154	343.614	0.2001	0.01754	0.030	341.500
1799	0.534	0.02931	344.088	0.1988	0.01759	0.020	341.505
1802	0.534	0.03825	344.600	0.1985	0.01798	0.013	341.488
1805	0.536	0.04838	345.192	0.1987	0.01784	0.009	341.493
1808	0.536	0.05968	345.876	0.1985	0.01804	0.007	341.517
1811	0.491	0.02154	343.573	0.1821	0.01782	0.030	341.477
1814	0.491	0.02931	344.042	0.1819	0.01777	0.020	341.475
1817	0.489	0.03825	344.580	0.1808	0.01790	0.013	341.476
1820	0.489	0.04838	345.166	0.1804	0.01809	0.010	341.463
1823	0.491	0.05968	345.814	0.1806	0.01813	0.007	341.446
1826	0.421	0.02155	343.351	0.1549	0.01759	0.030	341.313
1829	0.421	0.02932	343.854	0.1545	0.01788	0.021	341.339
1832	0.421	0.03827	344.391	0.1542	0.01771	0.014	341.331
1835	0.421	0.04840	345.001	0.1539	0.01810	0.010	341.335
1838	0.421	0.05970	345.674	0.1537	0.01812	0.007	341.330
1841	0.352	0.02155	343.318	0.1283	0.01785	0.032	341.290
1844	0.352	0.02932	343.816	0.1281	0.01812	0.021	341.304
1847	0.351	0.03827	344.350	0.1277	0.01800	0.014	341.283
1850	0.351	0.04840	344.977	0.1273	0.01810	0.010	341.293
1856	0.283	0.02155	343.285	0.1025	0.01807	0.032	341.268
1859	0.283	0.02932	343.788	0.1022	0.01822	0.021	341.274
1862	0.282	0.03827	344.341	0.1018	0.01822	0.014	341.264
1865	0.282	0.04839	344.977	0.1015	0.01821	0.010	341.269
1868	0.282	0.05968	345.664	0.1012	0.01831	0.008	341.255
1871	0.214	0.02155	343.245	0.0770	0.01807	0.031	341.230
1874	0.215	0.02931	343.766	0.0769	0.01818	0.021	341.246
1877	0.214	0.03826	344.333	0.0767	0.01832	0.014	341.236
1880	0.214	0.04839	344.986	0.0764	0.01823	0.010	341.240
1883	0.213	0.05968	345.697	0.0760	0.01837	0.007	341.234

Table 14. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.088	0.02837	259.583	0.0418	0.01093	0.009	256.661
1004	0.089	0.03856	260.646	0.0418	0.01102	0.007	256.668
1007	0.090	0.05026	261.838	0.0423	0.01117	0.006	256.665
1010	0.091	0.06348	263.169	0.0424	0.01125	0.004	256.659
1013	0.089	0.07821	264.660	0.0416	0.01134	0.004	256.676
1016	0.178	0.02838	259.413	0.0867	0.01102	0.012	256.682
1019	0.177	0.03856	260.431	0.0859	0.01106	0.007	256.711
1022	0.175	0.05028	261.527	0.0846	0.01116	0.005	256.688
1025	0.176	0.06352	262.806	0.0845	0.01122	0.003	256.710
1028	0.177	0.07825	264.185	0.0847	0.01133	0.003	256.698
1031	0.180	0.02796	263.712	0.0861	0.01134	0.010	261.195
1034	0.180	0.03801	264.443	0.0860	0.01145	0.008	261.051
1037	0.179	0.04957	265.334	0.0852	0.01147	0.005	260.933
1040	0.178	0.06266	266.346	0.0841	0.01160	0.004	260.804
1043	0.180	0.07721	267.499	0.0845	0.01167	0.003	260.683
1046	0.181	0.02783	264.697	0.0861	0.01145	0.010	262.216
1049	0.180	0.03785	265.352	0.0857	0.01153	0.007	262.034
1052	0.180	0.04937	266.158	0.0852	0.01161	0.005	261.859
1055	0.181	0.06239	267.112	0.0852	0.01168	0.004	261.707
1058	0.180	0.07692	268.203	0.0844	0.01180	0.003	261.556
1061	0.092	0.02774	265.546	0.0427	0.01148	0.010	262.831
1064	0.093	0.03769	266.486	0.0431	0.01150	0.007	262.793
1067	0.096	0.04914	267.590	0.0440	0.01162	0.005	262.778
1070	0.096	0.06207	268.807	0.0441	0.01174	0.004	262.749
1073	0.096	0.07646	270.167	0.0439	0.01183	0.003	262.722
1076	0.091	0.02774	265.609	0.0422	0.01151	0.011	262.878
1079	0.091	0.03769	266.615	0.0421	0.01157	0.007	262.890
1082	0.091	0.04915	267.725	0.0420	0.01165	0.005	262.872
1085	0.092	0.06207	268.983	0.0419	0.01175	0.004	262.871
1088	0.092	0.07648	270.380	0.0419	0.01185	0.003	262.873
1091	0.258	0.02775	265.358	0.1252	0.01140	0.012	262.868
1094	0.257	0.03772	266.248	0.1243	0.01159	0.008	262.870
1097	0.257	0.04919	267.264	0.1239	0.01165	0.005	262.871
1100	0.258	0.06214	268.388	0.1236	0.01170	0.004	262.858
1103	0.257	0.07657	269.644	0.1224	0.01177	0.003	262.854
1106	0.264	0.02718	270.713	0.1254	0.01192	0.012	268.379
1109	0.265	0.03695	271.586	0.1253	0.01196	0.008	268.406
1112	0.263	0.04820	272.534	0.1240	0.01205	0.006	268.388
1115	0.263	0.06091	273.618	0.1234	0.01215	0.004	268.383
1118	0.265	0.07504	274.796	0.1233	0.01220	0.004	268.356
1121	0.174	0.02718	270.744	0.0808	0.01185	0.011	268.307
1124	0.175	0.03694	271.636	0.0810	0.01192	0.008	268.313
1127	0.176	0.04817	272.638	0.0811	0.01204	0.005	268.303
1130	0.177	0.06087	273.763	0.0810	0.01212	0.004	268.295

Table 14. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1133	0.175	0.07501	275.027	0.0795	0.01220	0.003	268.304
1136	0.326	0.02718	270.563	0.1578	0.01187	0.012	268.277
1139	0.326	0.03695	271.401	0.1570	0.01204	0.007	268.280
1142	0.326	0.04819	272.339	0.1563	0.01210	0.005	268.278
1145	0.326	0.06090	273.409	0.1554	0.01215	0.004	268.287
1148	0.326	0.07505	274.574	0.1546	0.01226	0.003	268.278
1151	0.092	0.02625	280.251	0.0401	0.01284	0.015	277.941
1154	0.092	0.03569	280.992	0.0399	0.01277	0.010	277.870
1157	0.092	0.02628	280.008	0.0403	0.01275	0.014	277.680
1158	0.093	0.02618	280.660	0.0407	0.01275	0.014	278.299
1161	0.093	0.03559	281.527	0.0407	0.01290	0.009	278.307
1164	0.094	0.04642	282.489	0.0409	0.01298	0.007	278.293
1167	0.095	0.05865	283.592	0.0409	0.01302	0.005	278.299
1170	0.094	0.07228	284.801	0.0406	0.01314	0.004	278.298
1173	0.196	0.02619	280.458	0.0876	0.01273	0.014	278.260
1176	0.196	0.03561	281.261	0.0874	0.01261	0.009	278.258
1179	0.196	0.04643	282.168	0.0871	0.01276	0.007	278.246
1182	0.196	0.05868	283.206	0.0865	0.01290	0.005	278.252
1185	0.195	0.07235	284.359	0.0857	0.01302	0.004	278.264
1188	0.325	0.02620	280.331	0.1498	0.01276	0.014	278.230
1191	0.324	0.03562	281.108	0.1489	0.01261	0.009	278.238
1194	0.324	0.04645	281.976	0.1486	0.01284	0.006	278.231
1197	0.325	0.05872	282.954	0.1482	0.01291	0.005	278.228
1200	0.326	0.07240	284.058	0.1477	0.01302	0.004	278.248
1203	0.463	0.02620	280.209	0.2219	0.01269	0.013	278.204
1206	0.463	0.03563	280.944	0.2208	0.01285	0.008	278.218
1209	0.463	0.04649	281.777	0.2196	0.01287	0.006	278.217
1212	0.463	0.05874	282.705	0.2187	0.01302	0.004	278.215
1215	0.464	0.07242	283.715	0.2180	0.01312	0.003	278.198
1218	0.549	0.02622	280.047	0.2694	0.01288	0.014	278.101
1221	0.548	0.03564	280.754	0.2681	0.01281	0.008	278.105
1224	0.548	0.04650	281.553	0.2667	0.01298	0.007	278.089
1227	0.548	0.05876	282.457	0.2652	0.01294	0.005	278.081
1230	0.547	0.07244	283.470	0.2636	0.01310	0.003	278.085
1233	0.570	0.02539	289.097	0.2680	0.01344	0.014	287.316
1236	0.570	0.03453	289.750	0.2668	0.01358	0.010	287.311
1239	0.570	0.04505	290.501	0.2657	0.01364	0.006	287.307
1242	0.571	0.05694	291.348	0.2650	0.01374	0.004	287.308
1245	0.571	0.07021	292.285	0.2642	0.01385	0.004	287.309
1248	0.448	0.02539	289.167	0.2043	0.01348	0.015	287.306
1251	0.448	0.03452	289.844	0.2038	0.01354	0.010	287.299
1254	0.449	0.04504	290.629	0.2033	0.01354	0.007	287.301
1257	0.449	0.05693	291.497	0.2026	0.01362	0.005	287.291

Table 14. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1260	0.449	0.07018	292.487	0.2017	0.01368	0.004	287.312
1263	0.319	0.02538	289.214	0.1413	0.01360	0.018	287.272
1266	0.320	0.03451	289.936	0.1412	0.01353	0.011	287.279
1269	0.320	0.04503	290.754	0.1407	0.01350	0.008	287.283
1272	0.320	0.05692	291.664	0.1401	0.01361	0.005	287.283
1275	0.319	0.07017	292.690	0.1393	0.01367	0.005	287.298
1278	0.188	0.02539	289.261	0.0809	0.01346	0.016	287.222
1281	0.188	0.03452	290.019	0.0807	0.01344	0.011	287.231
1284	0.188	0.04504	290.868	0.0804	0.01362	0.007	287.219
1287	0.188	0.05692	291.836	0.0801	0.01366	0.005	287.225
1290	0.187	0.07015	292.891	0.0795	0.01370	0.004	287.217
1323	0.241	0.02423	303.095	0.0993	0.01457	0.018	301.311
1326	0.241	0.03295	303.733	0.0991	0.01458	0.012	301.293
1329	0.241	0.04299	304.497	0.0990	0.01475	0.008	301.307
1332	0.242	0.05436	305.331	0.0989	0.01483	0.006	301.300
1335	0.242	0.06703	306.262	0.0985	0.01489	0.005	301.298
1338	0.458	0.02424	302.948	0.1965	0.01465	0.018	301.281
1341	0.457	0.03297	303.563	0.1958	0.01467	0.012	301.285
1344	0.457	0.04302	304.274	0.1950	0.01472	0.009	301.295
1347	0.456	0.05439	305.048	0.1940	0.01478	0.006	301.286
1350	0.456	0.06707	305.916	0.1933	0.01488	0.005	301.279
1353	0.600	0.02425	301.876	0.2661	0.01448	0.018	300.272
1356	0.600	0.03298	302.477	0.2656	0.01466	0.011	300.281
1359	0.601	0.04303	303.153	0.2649	0.01461	0.008	300.276
1362	0.602	0.05440	303.901	0.2645	0.01468	0.007	300.266
1365	0.602	0.06708	304.735	0.2635	0.01479	0.005	300.257
1368	0.627	0.02328	314.617	0.2637	0.01557	0.021	313.177
1371	0.627	0.03167	315.133	0.2632	0.01576	0.013	313.159
1374	0.628	0.04134	315.728	0.2628	0.01570	0.009	313.141
1377	0.628	0.05227	316.428	0.2623	0.01584	0.007	313.148
1380	0.628	0.06446	317.175	0.2614	0.01585	0.005	313.129
1383	0.475	0.02338	313.305	0.1957	0.01545	0.022	311.790
1386	0.475	0.03179	313.876	0.1954	0.01549	0.015	311.800
1389	0.476	0.04149	314.496	0.1951	0.01538	0.010	311.782
1392	0.476	0.05246	315.221	0.1946	0.01571	0.007	311.785
1395	0.475	0.06470	316.005	0.1937	0.01576	0.006	311.769
1398	0.290	0.02339	313.305	0.1160	0.01565	0.022	311.705
1401	0.290	0.03181	313.897	0.1158	0.01556	0.014	311.704
1404	0.290	0.04151	314.557	0.1155	0.01540	0.010	311.691
1407	0.290	0.05248	315.320	0.1150	0.01565	0.007	311.692
1410	0.290	0.06473	316.141	0.1149	0.01574	0.006	311.669
1413	0.173	0.02339	313.280	0.0681	0.01567	0.022	311.607
1416	0.173	0.03181	313.890	0.0679	0.01574	0.015	311.599

Table 14. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1419	0.173	0.04151	314.603	0.0677	0.01574	0.010	311.600
1422	0.172	0.05249	315.386	0.0673	0.01579	0.007	311.590
1425	0.172	0.06473	316.265	0.0670	0.01586	0.006	311.587
1458	0.183	0.02283	321.005	0.0700	0.01647	0.024	319.444
1461	0.182	0.03106	321.575	0.0696	0.01643	0.016	319.437
1464	0.182	0.04052	322.209	0.0695	0.01623	0.011	319.409
1467	0.182	0.05124	322.960	0.0693	0.01644	0.008	319.416
1470	0.182	0.06321	323.775	0.0691	0.01658	0.007	319.407
1473	0.268	0.02278	319.602	0.1045	0.01586	0.022	318.074
1476	0.268	0.03099	320.134	0.1042	0.01620	0.014	318.048
1479	0.268	0.04044	320.773	0.1041	0.01612	0.010	318.044
1482	0.268	0.05113	321.505	0.1038	0.01642	0.007	318.048
1485	0.268	0.06306	322.264	0.1034	0.01642	0.005	318.005
1488	0.345	0.02279	319.429	0.1364	0.01584	0.023	317.929
1491	0.345	0.03100	319.960	0.1360	0.01606	0.015	317.914
1494	0.345	0.04046	320.570	0.1356	0.01620	0.011	317.897
1497	0.345	0.05115	321.273	0.1351	0.01619	0.009	317.898
1500	0.345	0.06309	322.015	0.1350	0.01619	0.006	317.864
1503	0.485	0.02280	319.233	0.1955	0.01604	0.023	317.798
1506	0.485	0.03101	319.766	0.1951	0.01581	0.014	317.798
1509	0.484	0.04048	320.355	0.1944	0.01617	0.010	317.778
1512	0.484	0.05118	321.047	0.1940	0.01614	0.007	317.784
1515	0.484	0.06313	321.790	0.1933	0.01626	0.006	317.772
1518	0.601	0.02280	318.957	0.2473	0.01554	0.021	317.559
1521	0.602	0.03102	319.485	0.2468	0.01616	0.014	317.574
1524	0.601	0.04048	320.038	0.2461	0.01627	0.010	317.541
1527	0.601	0.05118	320.694	0.2454	0.01621	0.007	317.535
1530	0.601	0.06313	321.420	0.2447	0.01628	0.006	317.525
1533	0.620	0.02204	329.991	0.2444	0.01729	0.026	328.722
1536	0.618	0.02998	330.465	0.2431	0.01707	0.017	328.727
1539	0.617	0.03912	330.977	0.2421	0.01710	0.013	328.699
1542	0.619	0.04949	331.552	0.2424	0.01719	0.008	328.664
1545	0.621	0.06105	332.203	0.2428	0.01708	0.006	328.640
1548	0.464	0.02207	329.620	0.1791	0.01709	0.027	328.295
1551	0.464	0.03001	330.074	0.1790	0.01718	0.017	328.262
1554	0.466	0.03917	330.630	0.1795	0.01712	0.012	328.258
1557	0.468	0.04955	331.226	0.1798	0.01720	0.008	328.221
1560	0.468	0.06112	331.932	0.1795	0.01709	0.006	328.223
1563	0.322	0.02207	329.450	0.1222	0.01705	0.027	328.069
1566	0.325	0.03002	329.960	0.1231	0.01713	0.017	328.074
1569	0.326	0.03920	330.530	0.1233	0.01694	0.011	328.061
1572	0.325	0.04957	331.175	0.1229	0.01696	0.009	328.040
1575	0.324	0.06113	331.888	0.1219	0.01716	0.007	328.023

Table 14. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1578	0.211	0.02208	329.355	0.0789	0.01673	0.027	327.924
1581	0.211	0.03004	329.868	0.0789	0.01719	0.017	327.905
1584	0.211	0.03921	330.472	0.0786	0.01737	0.011	327.902
1587	0.209	0.04959	331.138	0.0780	0.01722	0.009	327.885
1590	0.207	0.06116	331.883	0.0769	0.01732	0.006	327.870
1648	0.204	0.02152	341.820	0.0732	0.01848	0.031	340.528
1651	0.204	0.02928	342.276	0.0732	0.01823	0.019	340.496
1654	0.204	0.03822	342.787	0.0732	0.01815	0.013	340.447
1657	0.205	0.04833	343.407	0.0735	0.01852	0.009	340.436
1660	0.206	0.05962	344.101	0.0736	0.01856	0.007	340.426
1663	0.205	0.04832	343.345	0.0732	0.01857	0.009	340.321
1666	0.204	0.05961	344.030	0.0728	0.01861	0.007	340.307
1669	0.347	0.02149	341.156	0.1269	0.01782	0.030	339.909
1672	0.348	0.02924	341.597	0.1271	0.01813	0.019	339.885
1675	0.349	0.03817	342.115	0.1274	0.01817	0.013	339.869
1678	0.349	0.04826	342.677	0.1272	0.01820	0.009	339.840
1681	0.349	0.05954	343.318	0.1267	0.01839	0.007	339.812
1687	0.348	0.05951	343.203	0.1264	0.01837	0.007	339.634
1690	0.484	0.02148	341.241	0.1797	0.01803	0.030	340.031
1693	0.483	0.02922	341.664	0.1791	0.01806	0.019	340.009
1696	0.482	0.03814	342.168	0.1786	0.01812	0.012	340.001
1699	0.483	0.04823	342.758	0.1785	0.01796	0.009	339.972
1702	0.484	0.05950	343.363	0.1784	0.01830	0.007	339.930
1705	0.599	0.02150	340.814	0.2260	0.01781	0.030	339.629
1708	0.598	0.02925	341.248	0.2253	0.01810	0.019	339.621
1711	0.598	0.03818	341.745	0.2246	0.01812	0.013	339.612
1714	0.597	0.04828	342.269	0.2239	0.01789	0.009	339.565
1717	0.597	0.04829	342.264	0.2240	0.01779	0.010	339.535
1720	0.598	0.05958	342.875	0.2240	0.01815	0.007	339.510

Table 15. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1005	0.071	0.02137	228.983	0.0379	0.01108	0.011	226.774
1009	0.069	0.03332	230.228	0.0370	0.01121	0.006	226.762
1013	0.069	0.04787	231.730	0.0364	0.01134	0.005	226.756
1017	0.068	0.06497	233.481	0.0360	0.01147	0.004	226.753
1025	0.029	0.02137	229.065	0.0155	0.01190	0.012	226.712
1029	0.029	0.03332	230.411	0.0151	0.01194	0.007	226.720
1033	0.028	0.04785	232.005	0.0147	0.01201	0.005	226.707
1037	0.028	0.06494	233.873	0.0145	0.01210	0.005	226.712
1045	0.030	0.02037	241.005	0.0150	0.01331	0.014	238.943
1049	0.029	0.03178	242.170	0.0147	0.01324	0.008	238.933
1053	0.030	0.04565	243.581	0.0147	0.01338	0.006	238.931
1057	0.029	0.06199	245.223	0.0145	0.01342	0.005	238.928
1065	0.024	0.01993	246.872	0.0118	0.01384	0.016	244.939
1069	0.024	0.03110	247.983	0.0118	0.01386	0.009	244.936
1073	0.024	0.04469	249.315	0.0117	0.01406	0.006	244.928
1077	0.024	0.06069	250.866	0.0116	0.01413	0.004	244.922
1085	0.058	0.01994	246.719	0.0288	0.01314	0.015	244.872
1089	0.058	0.03110	247.755	0.0285	0.01301	0.008	244.853
1093	0.058	0.04470	249.028	0.0282	0.01324	0.006	244.854
1097	0.057	0.06071	250.510	0.0279	0.01333	0.005	244.855
1105	0.052	0.01961	251.041	0.0250	0.01348	0.017	249.277
1109	0.050	0.03059	252.043	0.0243	0.01351	0.009	249.262
1113	0.051	0.04398	253.268	0.0246	0.01368	0.006	249.257
1117	0.052	0.05974	254.693	0.0247	0.01383	0.005	249.251
1125	0.118	0.01959	250.192	0.0585	0.01275	0.016	248.505
1129	0.118	0.03056	251.151	0.0582	0.01274	0.008	248.493
1133	0.118	0.04393	252.313	0.0577	0.01286	0.005	248.483
1137	0.118	0.05967	253.697	0.0573	0.01298	0.003	248.499
1145	0.123	0.01880	261.318	0.0582	0.01369	0.018	259.826
1149	0.123	0.02934	262.170	0.0578	0.01386	0.010	259.811
1153	0.123	0.04219	263.218	0.0575	0.01392	0.006	259.806
1157	0.123	0.05732	264.425	0.0573	0.01408	0.004	259.790
1165	0.303	0.01881	261.058	0.1491	0.01371	0.018	259.702
1169	0.302	0.02936	261.827	0.1476	0.01386	0.009	259.679
1173	0.300	0.04222	262.778	0.1463	0.01396	0.005	259.670
1177	0.301	0.05737	263.897	0.1456	0.01402	0.003	259.665
1185	0.344	0.01755	280.892	0.1557	0.01581	0.025	279.803
1189	0.343	0.02741	281.527	0.1548	0.01599	0.013	279.793
1193	0.342	0.03943	282.295	0.1541	0.01599	0.008	279.774
1197	0.342	0.05360	283.219	0.1534	0.01608	0.005	279.771
1205	0.622	0.01757	280.576	0.2974	0.01618	0.025	279.566
1209	0.622	0.02743	281.159	0.2965	0.01603	0.013	279.547
1213	0.622	0.03946	281.891	0.2954	0.01617	0.008	279.542
1217	0.622	0.05366	282.750	0.2941	0.01627	0.005	279.542

Table 15. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1225	0.655	0.01697	291.044	0.2994	0.01716	0.034	290.152
1229	0.655	0.02650	291.575	0.2987	0.01736	0.017	290.128
1233	0.656	0.03813	292.227	0.2981	0.01730	0.010	290.110
1237	0.656	0.05184	292.989	0.2973	0.01728	0.006	290.087
1245	0.882	0.01699	290.816	0.4210	0.01769	0.032	289.959
1249	0.880	0.02654	291.335	0.4190	0.01764	0.016	289.952
1253	0.879	0.03819	291.942	0.4167	0.01753	0.009	289.920
1257	0.879	0.05192	292.677	0.4152	0.01758	0.006	289.905
1265	0.347	0.01696	289.183	0.1519	0.01647	0.031	288.178
1269	0.346	0.02648	289.765	0.1511	0.01657	0.018	288.156
1273	0.345	0.03810	290.478	0.1504	0.01690	0.010	288.150
1277	0.345	0.05180	291.336	0.1496	0.01688	0.007	288.146
1285	0.082	0.01695	289.040	0.0344	0.01776	0.032	287.916
1289	0.081	0.02646	289.718	0.0340	0.01769	0.018	287.914
1293	0.080	0.03806	290.518	0.0336	0.01765	0.010	287.895
1297	0.079	0.05175	291.451	0.0331	0.01765	0.007	287.856
1305	0.366	0.01695	288.405	0.1610	0.01697	0.030	287.413
1309	0.365	0.02646	288.986	0.1606	0.01687	0.017	287.390
1313	0.364	0.03806	289.685	0.1595	0.01675	0.020	287.391
1317	0.353	0.05180	290.544	0.1541	0.01638	0.007	287.368
1325	0.150	0.01677	270.067	0.0688	0.01487	0.026	268.858
1329	0.150	0.02618	270.793	0.0686	0.01455	0.014	268.866
1333	0.150	0.03766	271.623	0.0684	0.01457	0.009	268.831
1337	0.151	0.05120	272.632	0.0682	0.01486	0.005	268.825
1345	0.373	0.01677	269.804	0.1787	0.01483	0.025	268.693
1349	0.373	0.02619	270.459	0.1780	0.01471	0.014	268.687
1353	0.373	0.03768	271.264	0.1772	0.01480	0.008	268.688
1357	0.373	0.05123	272.181	0.1764	0.01479	0.005	268.665
1365	0.497	0.01678	269.650	0.2448	0.01462	0.025	268.586
1369	0.497	0.02620	270.294	0.2438	0.01479	0.013	268.598
1373	0.496	0.03769	271.046	0.2427	0.01494	0.008	268.585
1377	0.496	0.05125	271.937	0.2416	0.01498	0.005	268.578
1385	0.759	0.01523	301.662	0.3358	0.01870	0.042	300.911
1389	0.759	0.02379	302.139	0.3350	0.01847	0.024	300.918
1393	0.759	0.03424	302.683	0.3341	0.01859	0.014	300.900
1397	0.759	0.04656	303.348	0.3331	0.01850	0.009	300.898
1405	0.319	0.01523	301.738	0.1326	0.01780	0.042	300.901
1409	0.320	0.02379	302.243	0.1324	0.01818	0.022	300.882
1413	0.320	0.03424	302.863	0.1322	0.01820	0.013	300.882
1417	0.320	0.04656	303.600	0.1318	0.01796	0.008	300.887
1425	1.005	0.01524	301.249	0.4640	0.01858	0.048	300.527
1429	1.005	0.02381	301.710	0.4628	0.01872	0.026	300.546
1433	1.005	0.03427	302.230	0.4616	0.01882	0.016	300.520

Table 15. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1437	1.005	0.04661	302.853	0.4602	0.01868	0.011	300.509
1445	1.041	0.01531	310.037	0.4621	0.01953	0.048	309.363
1449	1.040	0.02392	310.436	0.4610	0.01985	0.025	309.334
1453	1.041	0.03443	310.943	0.4600	0.01975	0.015	309.327
1457	1.041	0.04683	311.569	0.4586	0.01976	0.009	309.346
1465	0.661	0.01531	309.951	0.2778	0.01906	0.047	309.223
1469	0.661	0.02392	310.405	0.2773	0.01913	0.025	309.210
1473	0.661	0.03442	310.954	0.2767	0.01888	0.016	309.209
1477	0.661	0.04681	311.585	0.2760	0.01944	0.011	309.191
1486	0.348	0.01532	309.926	0.1405	0.01879	0.045	309.140
1491	0.348	0.02392	310.409	0.1403	0.01901	0.027	309.129
1496	0.347	0.03443	310.988	0.1398	0.01914	0.017	309.112
1501	0.347	0.04683	311.685	0.1394	0.01909	0.010	309.114
1510	1.061	0.01549	306.138	0.4822	0.01926	0.045	305.434
1514	1.061	0.02420	306.582	0.4810	0.01928	0.024	305.435
1518	1.060	0.03482	307.110	0.4794	0.01934	0.014	305.431
1522	1.060	0.04736	307.729	0.4778	0.01940	0.009	305.427
1530	1.122	0.01547	320.349	0.4794	0.02071	0.049	319.726
1534	1.122	0.02416	320.747	0.4786	0.02061	0.025	319.718
1538	1.121	0.03477	321.230	0.4773	0.02099	0.015	319.713
1542	1.121	0.04730	321.798	0.4758	0.02103	0.010	319.703
1550	0.575	0.01547	320.270	0.2294	0.02034	0.054	319.573
1554	0.574	0.02416	320.681	0.2290	0.02038	0.023	319.551
1558	0.575	0.03476	321.224	0.2288	0.02046	0.015	319.550
1562	0.575	0.04727	321.828	0.2284	0.02061	0.009	319.528
1570	0.220	0.01544	318.723	0.0851	0.02031	0.050	317.937
1574	0.220	0.02412	319.203	0.0850	0.02044	0.026	317.921
1578	0.220	0.03471	319.799	0.0847	0.02026	0.016	317.929
1582	0.220	0.04720	320.486	0.0845	0.02027	0.010	317.918
1590	1.110	0.01506	330.967	0.4515	0.02187	0.061	330.401
1594	1.111	0.02353	331.319	0.4510	0.02216	0.032	330.376
1598	1.111	0.03386	331.712	0.4504	0.02216	0.019	330.315
1602	1.111	0.04607	332.257	0.4492	0.02219	0.012	330.322
1610	0.601	0.01507	330.758	0.2315	0.02193	0.059	330.114
1614	0.601	0.02354	331.133	0.2313	0.02159	0.029	330.073
1618	0.601	0.03388	331.619	0.2308	0.02152	0.018	330.066
1622	0.601	0.04608	332.181	0.2304	0.02165	0.012	330.047
1634	0.117	0.02350	329.067	0.0431	0.02244	0.033	327.834
1638	0.117	0.03382	329.632	0.0431	0.02233	0.020	327.825
1642	0.117	0.04600	330.284	0.0430	0.02249	0.014	327.804
1650	1.087	0.01506	340.155	0.4244	0.02287	0.063	339.642
1654	1.087	0.02352	340.474	0.4237	0.02350	0.037	339.612
1658	1.087	0.03387	340.853	0.4231	0.02307	0.021	339.559

Table 15. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1662	1.087	0.04607	341.320	0.4223	0.02326	0.014	339.523
1683	0.594	0.01505	339.460	0.2214	0.02256	0.060	338.875
1687	0.593	0.02351	339.804	0.2208	0.02255	0.033	338.829
1691	0.593	0.03383	340.238	0.2207	0.02278	0.020	338.797
1695	0.594	0.04602	340.752	0.2206	0.02276	0.013	338.757
1703	0.117	0.01506	339.130	0.0419	0.02403	0.071	338.444
1707	0.117	0.02353	339.562	0.0418	0.02367	0.035	338.426
1711	0.117	0.03386	340.074	0.0418	0.02369	0.022	338.402
1715	0.117	0.04606	340.654	0.0418	0.02334	0.015	338.351

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.502	0.02622	257.491	0.2618	0.01226	0.013	255.468
1004	0.503	0.03567	258.275	0.2610	0.01229	0.010	255.495
1007	0.503	0.04655	259.140	0.2595	0.01253	0.007	255.499
1010	0.501	0.05882	260.094	0.2574	0.01260	0.005	255.489
1013	0.500	0.07251	261.139	0.2552	0.01263	0.003	255.470
1016	0.416	0.02622	257.567	0.2119	0.01223	0.014	255.460
1022	0.414	0.04654	259.237	0.2093	0.01230	0.007	255.469
1025	0.413	0.05881	260.222	0.2073	0.01237	0.006	255.465
1028	0.413	0.07249	261.340	0.2062	0.01244	0.005	255.477
1031	0.312	0.02621	257.653	0.1550	0.01202	0.014	255.476
1034	0.309	0.03566	258.455	0.1531	0.01199	0.010	255.470
1037	0.310	0.04652	259.386	0.1529	0.01212	0.007	255.473
1040	0.312	0.05878	260.434	0.1531	0.01224	0.005	255.486
1043	0.313	0.07247	261.574	0.1527	0.01230	0.003	255.490
1046	0.213	0.02620	257.723	0.1038	0.01183	0.014	255.470
1049	0.214	0.03565	258.581	0.1037	0.01195	0.009	255.473
1052	0.213	0.04649	259.536	0.1029	0.01199	0.006	255.470
1055	0.211	0.05875	260.621	0.1012	0.01209	0.005	255.470
1058	0.212	0.07243	261.825	0.1011	0.01216	0.003	255.475
1061	0.105	0.02620	257.867	0.0498	0.01203	0.012	255.472
1064	0.105	0.03564	258.778	0.0500	0.01211	0.008	255.468
1067	0.108	0.04648	259.825	0.0509	0.01221	0.006	255.478
1070	0.108	0.05872	260.964	0.0510	0.01231	0.005	255.456
1073	0.107	0.07238	262.255	0.0498	0.01237	0.004	255.476
1076	0.752	0.02715	266.843	0.3943	0.01361	0.013	264.930
1079	0.752	0.03694	267.539	0.3928	0.01359	0.009	264.940
1082	0.752	0.04819	268.329	0.3907	0.01370	0.006	264.946
1085	0.753	0.06091	269.194	0.3889	0.01371	0.004	264.926
1088	0.752	0.07509	270.176	0.3861	0.01380	0.003	264.930
1091	0.641	0.02715	266.886	0.3271	0.01330	0.013	264.925
1094	0.642	0.03693	267.592	0.3262	0.01326	0.009	264.919
1097	0.643	0.04818	268.410	0.3253	0.01340	0.006	264.918
1100	0.643	0.06089	269.325	0.3240	0.01344	0.004	264.918
1103	0.642	0.07507	270.347	0.3215	0.01352	0.003	264.924
1106	0.532	0.02715	266.703	0.2653	0.01308	0.014	264.785
1109	0.533	0.03692	267.419	0.2647	0.01312	0.009	264.765
1112	0.533	0.04815	268.290	0.2638	0.01320	0.007	264.783
1115	0.534	0.06085	269.224	0.2626	0.01322	0.005	264.778
1118	0.534	0.07501	270.266	0.2613	0.01332	0.003	264.763
1121	0.421	0.02715	266.708	0.2049	0.01292	0.012	264.747
1124	0.421	0.03693	267.498	0.2042	0.01293	0.008	264.771
1127	0.422	0.04817	268.373	0.2039	0.01300	0.006	264.767
1130	0.423	0.06087	269.335	0.2033	0.01306	0.004	264.743
1133	0.423	0.07502	270.436	0.2025	0.01318	0.003	264.756

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1136	0.314	0.02712	266.760	0.1497	0.01266	0.012	264.739
1139	0.315	0.03691	267.559	0.1496	0.01262	0.007	264.739
1142	0.316	0.04816	268.498	0.1498	0.01287	0.005	264.763
1145	0.317	0.06085	269.506	0.1495	0.01294	0.004	264.744
1148	0.318	0.07499	270.639	0.1489	0.01303	0.003	264.741
1151	0.213	0.02710	266.853	0.0997	0.01256	0.011	264.717
1154	0.216	0.03691	267.704	0.1006	0.01246	0.008	264.739
1157	0.217	0.04815	268.650	0.1009	0.01271	0.005	264.736
1160	0.217	0.06083	269.720	0.1002	0.01279	0.004	264.738
1163	0.213	0.07497	270.884	0.0981	0.01291	0.003	264.720
1166	0.114	0.02709	267.007	0.0522	0.01281	0.013	264.738
1169	0.112	0.03698	267.839	0.0512	0.01305	0.009	264.716
1172	0.109	0.04813	268.873	0.0498	0.01298	0.006	264.722
1175	0.111	0.06081	270.017	0.0504	0.01310	0.005	264.736
1178	0.113	0.07493	271.248	0.0511	0.01322	0.004	264.716
1181	0.930	0.02624	278.053	0.4735	0.01471	0.015	276.428
1184	0.929	0.03567	278.691	0.4707	0.01468	0.010	276.451
1187	0.928	0.04654	279.381	0.4683	0.01469	0.007	276.440
1190	0.929	0.05881	280.141	0.4664	0.01475	0.005	276.419
1193	0.930	0.07253	281.025	0.4646	0.01480	0.004	276.432
1196	0.833	0.02622	278.069	0.4154	0.01438	0.015	276.414
1199	0.833	0.03567	278.692	0.4134	0.01441	0.010	276.409
1202	0.833	0.04653	279.421	0.4119	0.01449	0.007	276.413
1205	0.834	0.05882	280.217	0.4107	0.01459	0.005	276.406
1208	0.835	0.07255	281.128	0.4090	0.01463	0.004	276.420
1211	0.727	0.02622	278.090	0.3547	0.01423	0.015	276.400
1214	0.727	0.03566	278.725	0.3535	0.01425	0.010	276.392
1217	0.729	0.04653	279.466	0.3533	0.01430	0.007	276.392
1220	0.730	0.05883	280.307	0.3524	0.01439	0.005	276.403
1223	0.731	0.07252	281.223	0.3508	0.01444	0.004	276.400
1226	0.629	0.02609	278.084	0.3012	0.01390	0.016	276.370
1229	0.626	0.03566	278.721	0.2984	0.01408	0.010	276.367
1232	0.628	0.04652	279.478	0.2984	0.01417	0.007	276.361
1235	0.630	0.05880	280.329	0.2981	0.01420	0.005	276.361
1238	0.630	0.07250	281.276	0.2969	0.01430	0.004	276.363
1241	0.529	0.02621	278.057	0.2489	0.01392	0.014	276.339
1244	0.529	0.03566	278.740	0.2479	0.01391	0.010	276.339
1247	0.526	0.04652	279.519	0.2454	0.01400	0.007	276.339
1250	0.527	0.05879	280.391	0.2449	0.01411	0.006	276.334
1253	0.529	0.07247	281.355	0.2450	0.01415	0.004	276.328
1256	0.416	0.02621	278.080	0.1919	0.01381	0.016	276.323
1259	0.418	0.03565	278.771	0.1925	0.01375	0.010	276.306
1262	0.420	0.04650	279.592	0.1924	0.01384	0.007	276.317

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1265	0.418	0.05878	280.504	0.1908	0.01391	0.005	276.324
1268	0.415	0.07248	281.496	0.1887	0.01405	0.004	276.313
1271	0.311	0.02621	278.139	0.1408	0.01360	0.015	276.314
1274	0.310	0.03565	278.862	0.1401	0.01373	0.011	276.308
1277	0.312	0.04650	279.699	0.1407	0.01370	0.006	276.304
1280	0.314	0.05876	280.628	0.1409	0.01382	0.005	276.294
1283	0.313	0.07244	281.679	0.1399	0.01395	0.004	276.302
1286	0.213	0.02629	275.974	0.0959	0.01347	0.015	274.817
1289	0.213	0.03575	276.756	0.0955	0.01356	0.010	274.836
1292	0.212	0.04663	277.647	0.0950	0.01366	0.007	274.852
1295	0.212	0.05893	278.617	0.0945	0.01372	0.004	274.838
1298	0.212	0.07264	279.700	0.0941	0.01382	0.004	274.836
1301	0.109	0.02628	276.101	0.0485	0.01387	0.016	274.833
1304	0.110	0.03574	276.896	0.0485	0.01404	0.010	274.819
1306	0.113	0.02616	276.996	0.0499	0.01390	0.015	274.791
1309	0.113	0.03557	277.822	0.0498	0.01385	0.010	274.807
1312	0.112	0.04641	278.760	0.0491	0.01394	0.007	274.822
1315	0.111	0.05865	279.765	0.0486	0.01401	0.006	274.789
1318	0.111	0.07227	280.924	0.0481	0.01411	0.005	274.804
1321	1.390	0.02537	285.641	0.7456	0.01645	0.019	284.274
1324	1.384	0.03451	286.156	0.7381	0.01643	0.012	284.272
1327	1.376	0.04504	286.762	0.7288	0.01634	0.008	284.285
1330	1.371	0.05697	287.409	0.7220	0.01640	0.006	284.278
1333	1.371	0.07027	288.145	0.7176	0.01637	0.005	284.287
1336	1.244	0.02537	285.655	0.6448	0.01590	0.019	284.256
1339	1.246	0.03452	286.188	0.6438	0.01601	0.013	284.259
1342	1.248	0.04505	286.809	0.6420	0.01582	0.009	284.272
1345	1.246	0.05696	287.466	0.6377	0.01600	0.007	284.241
1348	1.244	0.07024	288.224	0.6330	0.01606	0.005	284.238
1351	1.141	0.02537	285.631	0.5787	0.01561	0.018	284.222
1354	1.142	0.03452	286.169	0.5772	0.01559	0.011	284.217
1357	1.145	0.04503	286.798	0.5764	0.01552	0.008	284.216
1360	1.145	0.05694	287.489	0.5738	0.01574	0.006	284.203
1363	1.142	0.07022	288.278	0.5691	0.01579	0.005	284.212
1366	1.026	0.02535	285.366	0.5090	0.01535	0.018	283.883
1369	1.025	0.03449	285.949	0.5064	0.01531	0.013	283.901
1372	1.025	0.04501	286.586	0.5045	0.01527	0.009	283.893
1375	1.026	0.05689	287.306	0.5032	0.01543	0.006	283.886
1378	1.027	0.07016	288.110	0.5013	0.01556	0.005	283.885
1384	0.928	0.03448	285.971	0.4503	0.01519	0.012	283.904
1387	0.928	0.04500	286.634	0.4487	0.01506	0.008	283.903
1393	0.929	0.07015	288.190	0.4454	0.01528	0.004	283.888
1396	0.835	0.02534	285.379	0.3996	0.01487	0.017	283.869

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1399	0.837	0.03448	285.965	0.3991	0.01503	0.011	283.863
1402	0.838	0.04498	286.637	0.3983	0.01495	0.009	283.856
1405	0.838	0.05688	287.395	0.3969	0.01509	0.005	283.853
1408	0.836	0.07015	288.254	0.3943	0.01519	0.004	283.867
1411	0.731	0.02534	285.380	0.3433	0.01473	0.019	283.830
1414	0.728	0.03447	286.013	0.3410	0.01482	0.011	283.854
1417	0.729	0.04499	286.692	0.3400	0.01480	0.008	283.838
1420	0.731	0.05688	287.485	0.3401	0.01498	0.006	283.847
1423	0.732	0.07013	288.331	0.3389	0.01500	0.004	283.827
1426	0.627	0.02534	285.394	0.2897	0.01461	0.017	283.813
1429	0.630	0.03448	286.010	0.2904	0.01466	0.012	283.804
1432	0.630	0.04498	286.731	0.2891	0.01471	0.008	283.808
1435	0.627	0.05686	287.520	0.2866	0.01482	0.006	283.796
1438	0.627	0.07012	288.412	0.2854	0.01491	0.004	283.803
1441	0.526	0.02533	285.377	0.2390	0.01450	0.017	283.768
1444	0.527	0.03447	286.041	0.2388	0.01454	0.011	283.790
1447	0.527	0.04498	286.774	0.2378	0.01452	0.008	283.791
1450	0.524	0.05686	287.575	0.2358	0.01469	0.006	283.771
1453	0.523	0.07011	288.490	0.2341	0.01471	0.005	283.773
1456	0.423	0.02533	285.405	0.1892	0.01432	0.016	283.759
1459	0.423	0.03446	286.072	0.1887	0.01439	0.011	283.769
1462	0.422	0.04497	286.856	0.1876	0.01450	0.007	283.798
1465	0.419	0.05685	287.685	0.1855	0.01452	0.006	283.780
1468	0.420	0.07009	288.587	0.1851	0.01462	0.004	283.747
1471	0.317	0.02534	285.467	0.1393	0.01437	0.016	283.751
1474	0.315	0.03446	286.154	0.1381	0.01426	0.011	283.753
1477	0.314	0.04497	286.944	0.1372	0.01439	0.008	283.757
1480	0.316	0.05685	287.833	0.1378	0.01445	0.006	283.773
1483	0.317	0.07009	288.780	0.1378	0.01451	0.004	283.752
1486	0.213	0.02534	285.557	0.0922	0.01418	0.017	283.748
1489	0.211	0.03447	286.266	0.0911	0.01430	0.011	283.750
1492	0.210	0.04496	287.052	0.0907	0.01436	0.008	283.726
1495	0.212	0.05683	287.975	0.0909	0.01443	0.006	283.742
1498	0.213	0.07008	288.977	0.0912	0.01453	0.005	283.741
1501	0.112	0.02532	285.471	0.0477	0.01472	0.019	283.450
1504	0.111	0.03443	286.229	0.0475	0.01478	0.012	283.461
1507	0.112	0.04491	287.080	0.0474	0.01488	0.010	283.449
1510	0.112	0.05677	288.034	0.0474	0.01493	0.007	283.444
1513	0.112	0.06998	289.085	0.0471	0.01503	0.006	283.436
1516	1.957	0.02437	298.974	1.0741	0.01877	0.023	297.895
1519	1.955	0.03316	299.394	1.0682	0.01882	0.015	297.901
1522	1.951	0.04330	299.896	1.0600	0.01868	0.010	297.927
1525	1.948	0.05477	300.396	1.0533	0.01866	0.007	297.891

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1528	1.949	0.06755	300.994	1.0483	0.01878	0.005	297.892
1531	1.826	0.02438	298.998	0.9712	0.01826	0.024	297.874
1534	1.823	0.03317	299.405	0.9660	0.01806	0.016	297.853
1537	1.823	0.04328	299.912	0.9621	0.01825	0.011	297.868
1540	1.825	0.05475	300.478	0.9590	0.01829	0.008	297.875
1543	1.825	0.06754	301.071	0.9543	0.01825	0.006	297.851
1546	1.599	0.02437	298.964	0.8110	0.01759	0.023	297.825
1549	1.600	0.03316	299.415	0.8088	0.01750	0.016	297.819
1552	1.596	0.04328	299.945	0.8036	0.01755	0.012	297.826
1555	1.594	0.05474	300.536	0.7989	0.01752	0.009	297.826
1558	1.596	0.06753	301.196	0.7967	0.01762	0.007	297.830
1561	1.383	0.02437	298.935	0.6740	0.01690	0.024	297.780
1564	1.386	0.03316	299.439	0.6733	0.01698	0.014	297.803
1567	1.384	0.04328	299.977	0.6703	0.01684	0.010	297.791
1570	1.382	0.05473	300.581	0.6665	0.01715	0.008	297.771
1573	1.385	0.06749	301.263	0.6654	0.01704	0.006	297.766
1576	1.179	0.02437	298.936	0.5550	0.01659	0.027	297.743
1579	1.181	0.03315	299.453	0.5542	0.01663	0.016	297.756
1582	1.181	0.04327	300.020	0.5528	0.01658	0.013	297.749
1585	1.181	0.05472	300.664	0.5509	0.01662	0.010	297.744
1588	1.179	0.06749	301.375	0.5474	0.01660	0.007	297.737
1591	0.971	0.02436	298.917	0.4423	0.01616	0.023	297.708
1594	0.972	0.03315	299.416	0.4422	0.01617	0.015	297.680
1597	0.971	0.04326	300.027	0.4402	0.01615	0.013	297.693
1600	0.970	0.05470	300.723	0.4379	0.01626	0.010	297.712
1603	0.972	0.06747	301.447	0.4374	0.01633	0.007	297.686
1606	0.763	0.02436	298.880	0.3374	0.01587	0.027	297.622
1609	0.764	0.03315	299.428	0.3373	0.01600	0.018	297.622
1615	0.761	0.05471	300.751	0.3335	0.01603	0.009	297.607
1618	0.762	0.06747	301.541	0.3329	0.01603	0.007	297.613
1621	0.558	0.02436	298.917	0.2400	0.01571	0.027	297.588
1624	0.559	0.03315	299.484	0.2401	0.01574	0.018	297.579
1627	0.562	0.04327	300.138	0.2407	0.01581	0.013	297.578
1630	0.562	0.05471	300.876	0.2399	0.01583	0.010	297.580
1633	0.559	0.06746	301.696	0.2379	0.01594	0.008	297.580
1636	0.355	0.02437	298.935	0.1489	0.01554	0.023	297.550
1639	0.357	0.03315	299.549	0.1494	0.01555	0.014	297.559
1642	0.355	0.04325	300.231	0.1480	0.01563	0.010	297.552
1645	0.353	0.05468	300.970	0.1468	0.01569	0.008	297.516
1648	0.356	0.06742	301.835	0.1477	0.01583	0.006	297.522
1651	0.218	0.02432	298.614	0.0900	0.01551	0.021	296.906
1654	0.217	0.03310	299.242	0.0895	0.01549	0.013	296.901
1657	0.214	0.04319	299.970	0.0880	0.01554	0.010	296.900

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1660	0.215	0.05459	300.768	0.0882	0.01565	0.007	296.883
1663	0.217	0.06730	301.647	0.0887	0.01574	0.006	296.860
1666	0.116	0.02416	303.502	0.0464	0.01604	0.023	300.552
1669	0.115	0.03280	305.517	0.0459	0.01619	0.015	301.445
1672	0.114	0.04272	307.600	0.0450	0.01627	0.012	302.322
1675	0.116	0.05391	309.747	0.0456	0.01641	0.010	303.174
1678	0.119	0.06636	311.959	0.0464	0.01667	0.008	304.013
1681	2.157	0.02362	307.464	1.1460	0.01939	0.027	306.450
1684	2.187	0.03214	307.823	1.1662	0.01949	0.018	306.459
1687	2.169	0.04195	308.307	1.1470	0.02006	0.013	306.446
1690	2.131	0.05305	308.772	1.1133	0.01965	0.010	306.441
1693	2.148	0.06546	309.389	1.1200	0.01991	0.008	306.455
1696	1.961	0.02361	307.387	1.0019	0.01901	0.030	306.381
1699	1.969	0.03213	307.823	1.0043	0.01896	0.019	306.410
1702	1.991	0.04195	308.250	1.0163	0.01907	0.013	306.392
1705	1.993	0.05305	308.756	1.0131	0.01890	0.009	306.382
1708	1.990	0.06544	309.327	1.0072	0.01909	0.007	306.378
1711	1.655	0.02360	307.347	0.8007	0.01802	0.029	306.325
1714	1.653	0.03213	307.802	0.7969	0.01822	0.019	306.351
1717	1.654	0.04194	308.288	0.7948	0.01816	0.014	306.344
1720	1.657	0.05304	308.826	0.7938	0.01802	0.009	306.322
1723	1.658	0.06542	309.440	0.7913	0.01830	0.009	306.319
1726	1.396	0.02355	304.939	0.6571	0.01726	0.028	303.784
1729	1.396	0.03204	305.387	0.6553	0.01738	0.021	303.778
1732	1.395	0.04183	305.909	0.6529	0.01749	0.014	303.774
1735	1.395	0.05291	306.515	0.6503	0.01752	0.011	303.788
1738	1.395	0.06527	307.153	0.6481	0.01744	0.008	303.773
1741	1.096	0.02356	304.930	0.4935	0.01681	0.028	303.750
1744	1.097	0.03205	305.417	0.4928	0.01691	0.019	303.751
1747	1.097	0.04184	305.957	0.4915	0.01692	0.013	303.732
1750	1.097	0.05291	306.592	0.4898	0.01706	0.011	303.744
1753	1.097	0.06526	307.264	0.4883	0.01702	0.007	303.722
1756	0.830	0.02356	304.934	0.3605	0.01665	0.025	303.707
1759	0.830	0.03205	305.435	0.3597	0.01651	0.020	303.698
1762	0.831	0.04184	306.034	0.3589	0.01646	0.013	303.714
1765	0.831	0.05290	306.679	0.3581	0.01665	0.010	303.700
1768	0.832	0.06525	307.406	0.3571	0.01676	0.009	303.698
1771	0.557	0.02356	304.981	0.2338	0.01619	0.032	303.672
1774	0.558	0.03205	305.543	0.2334	0.01615	0.019	303.696
1777	0.558	0.04183	306.130	0.2330	0.01626	0.014	303.664
1780	0.558	0.05289	306.849	0.2324	0.01637	0.011	303.686
1783	0.559	0.06523	307.630	0.2320	0.01645	0.008	303.691
1786	0.319	0.02356	305.004	0.1303	0.01611	0.026	303.641

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1789	0.320	0.03205	305.569	0.1303	0.01609	0.017	303.631
1792	0.320	0.04182	306.233	0.1302	0.01617	0.012	303.639
1795	0.320	0.05289	306.973	0.1297	0.01621	0.009	303.634
1798	0.320	0.06523	307.785	0.1291	0.01631	0.007	303.637
1801	0.113	0.02356	305.099	0.0450	0.01685	0.025	303.599
1804	0.115	0.03205	305.713	0.0458	0.01691	0.017	303.598
1807	0.116	0.04182	306.430	0.0463	0.01686	0.013	303.601
1810	0.117	0.05287	307.248	0.0463	0.01715	0.010	303.617
1813	0.115	0.06520	308.108	0.0456	0.01705	0.007	303.587
1831	2.617	0.02263	317.472	1.3960	0.02155	0.033	316.689
1834	2.617	0.03080	317.808	1.3915	0.02145	0.021	316.692
1837	2.611	0.04021	318.174	1.3821	0.02130	0.013	316.680
1840	2.607	0.05086	318.586	1.3736	0.02145	0.010	316.659
1843	2.610	0.06276	319.084	1.3691	0.02118	0.007	316.683
1846	2.370	0.02263	317.453	1.2057	0.02040	0.031	316.665
1849	2.375	0.03080	317.778	1.2055	0.02055	0.020	316.641
1852	2.393	0.04020	318.210	1.2145	0.02066	0.014	316.656
1855	2.403	0.05085	318.605	1.2175	0.02064	0.011	316.618
1858	2.408	0.06274	319.119	1.2162	0.02058	0.009	316.640
1861	2.215	0.02262	317.331	1.0971	0.02009	0.030	316.559
1864	2.222	0.03079	317.721	1.0989	0.02020	0.020	316.583
1867	2.175	0.04021	318.092	1.0644	0.02029	0.015	316.573
1870	2.165	0.05085	318.646	1.0533	0.02008	0.010	316.556
1873	2.179	0.06274	319.145	1.0585	0.01998	0.008	316.571
1876	1.950	0.02259	316.829	0.9288	0.01916	0.031	315.829
1879	1.948	0.03075	317.211	0.9250	0.01938	0.019	315.819
1882	1.945	0.04014	317.629	0.9207	0.01921	0.015	315.798
1885	1.946	0.05077	318.124	0.9185	0.01933	0.010	315.795
1888	1.950	0.06264	318.679	0.9173	0.01939	0.008	315.795
1891	1.597	0.02259	316.759	0.7233	0.01853	0.029	315.726
1894	1.594	0.03075	317.188	0.7197	0.01871	0.019	315.741
1897	1.593	0.04015	317.660	0.7173	0.01868	0.014	315.743
1900	1.596	0.05078	318.178	0.7171	0.01856	0.010	315.732
1903	1.598	0.06264	318.765	0.7154	0.01875	0.008	315.730
1906	1.249	0.02260	316.766	0.5405	0.01806	0.030	315.689
1909	1.245	0.03074	317.216	0.5378	0.01823	0.020	315.699
1912	1.246	0.04013	317.707	0.5366	0.01805	0.014	315.697
1915	1.250	0.05076	318.282	0.5370	0.01791	0.010	315.710
1918	1.249	0.06262	318.895	0.5353	0.01816	0.008	315.699
1921	0.971	0.02259	316.796	0.4067	0.01765	0.029	315.674
1924	0.970	0.03074	317.241	0.4054	0.01786	0.019	315.659
1927	0.968	0.04013	317.755	0.4037	0.01780	0.014	315.652
1930	0.968	0.05075	318.364	0.4028	0.01773	0.011	315.674

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1933	0.971	0.06262	318.995	0.4027	0.01784	0.008	315.654
1936	0.694	0.02259	316.713	0.2823	0.01709	0.029	315.575
1939	0.695	0.03074	317.168	0.2820	0.01749	0.019	315.553
1942	0.697	0.04012	317.724	0.2822	0.01755	0.011	315.559
1945	0.700	0.05072	318.321	0.2828	0.01746	0.009	315.543
1948	0.700	0.06258	319.020	0.2820	0.01766	0.007	315.558
1951	0.390	0.02259	316.722	0.1538	0.01714	0.027	315.532
1954	0.391	0.03073	317.234	0.1538	0.01737	0.017	315.533
1957	0.388	0.04012	317.813	0.1522	0.01721	0.012	315.526
1960	0.387	0.05075	318.473	0.1517	0.01741	0.009	315.529
1963	0.391	0.06260	319.195	0.1526	0.01750	0.007	315.522
1996	3.243	0.02236	327.783	1.7701	0.02428	0.038	327.129
1999	3.243	0.03044	328.064	1.7648	0.02374	0.023	327.121
2003	3.238	0.03974	328.381	1.7544	0.02407	0.016	327.110
2006	3.234	0.05029	328.769	1.7428	0.02418	0.011	327.127
2009	3.233	0.06205	329.171	1.7352	0.02406	0.008	327.119
2012	2.913	0.02236	327.589	1.4959	0.02250	0.035	326.973
2015	2.914	0.03044	327.887	1.4923	0.02267	0.024	326.957
2018	2.911	0.03975	328.261	1.4848	0.02240	0.018	326.973
2021	2.908	0.05028	328.642	1.4775	0.02248	0.011	326.954
2024	2.910	0.06204	329.093	1.4735	0.02242	0.009	326.952
3001	2.533	0.02237	327.482	1.2232	0.02141	0.034	326.869
3004	2.534	0.03044	327.803	1.2214	0.02132	0.022	326.855
3007	2.530	0.03974	328.180	1.2152	0.02125	0.014	326.846
3010	2.528	0.05026	328.603	1.2099	0.02133	0.011	326.831
3013	2.534	0.06202	329.108	1.2097	0.02136	0.008	326.855
3016	2.133	0.02237	327.396	0.9743	0.02017	0.033	326.764
3019	2.175	0.03043	327.757	0.9968	0.02052	0.020	326.766
3022	2.204	0.03974	328.109	1.0120	0.02003	0.014	326.776
3025	2.168	0.05027	328.603	0.9873	0.02052	0.010	326.778
3028	2.175	0.06203	329.156	0.9880	0.02079	0.008	326.765
3031	1.750	0.02233	326.729	0.7647	0.01969	0.031	325.832
3034	1.752	0.03038	327.097	0.7641	0.01955	0.019	325.817
3037	1.750	0.03967	327.556	0.7614	0.01970	0.013	325.834
3040	1.748	0.05019	328.050	0.7585	0.01966	0.010	325.832
3043	1.749	0.06192	328.596	0.7569	0.01978	0.007	325.826
3046	1.332	0.02233	326.709	0.5555	0.01887	0.031	325.772
3049	1.332	0.03040	327.137	0.5543	0.01898	0.018	325.791
3052	1.334	0.03968	327.591	0.5541	0.01905	0.014	325.773
3055	1.335	0.05018	328.084	0.5531	0.01917	0.010	325.739
3058	1.334	0.06190	328.671	0.5514	0.01915	0.008	325.739
3061	0.930	0.02234	326.690	0.3722	0.01877	0.029	325.711
3064	0.929	0.03039	327.123	0.3712	0.01875	0.020	325.704

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
3067	0.928	0.03967	327.629	0.3697	0.01865	0.013	325.710
3070	0.928	0.05017	328.167	0.3692	0.01872	0.010	325.694
3073	0.931	0.06190	328.818	0.3692	0.01872	0.007	325.719
3076	0.518	0.02233	326.631	0.1996	0.01820	0.031	325.636
3079	0.520	0.03039	327.089	0.1999	0.01845	0.020	325.615
3082	0.518	0.03967	327.614	0.1988	0.01846	0.013	325.609
3085	0.516	0.05016	328.195	0.1977	0.01842	0.010	325.590
3088	0.518	0.06187	328.854	0.1978	0.01853	0.009	325.578
3091	0.109	0.02233	326.720	0.0404	0.01922	0.031	325.546
3094	0.110	0.03038	327.276	0.0410	0.01944	0.021	325.570
3097	0.112	0.03965	327.870	0.0416	0.01972	0.015	325.552
3100	0.111	0.05015	328.563	0.0411	0.01968	0.012	325.558
3103	0.109	0.06186	329.324	0.0402	0.01955	0.009	325.561
3136	3.142	0.02174	335.288	1.5660	0.02393	0.041	334.544
3145	3.143	0.04887	336.194	1.5544	0.02436	0.013	334.520
3148	3.134	0.06030	336.655	1.5415	0.02390	0.009	334.530
3151	2.722	0.02174	335.121	1.2776	0.02224	0.035	334.442
3154	2.714	0.02958	335.449	1.2700	0.02193	0.023	334.449
3157	2.710	0.03862	335.784	1.2640	0.02217	0.016	334.421
3160	2.711	0.04887	336.214	1.2609	0.02222	0.012	334.448
3163	2.712	0.06030	336.659	1.2577	0.02220	0.009	334.437
3166	2.303	0.02173	334.314	1.0301	0.02127	0.037	333.504
3169	2.327	0.02956	334.606	1.0422	0.02136	0.023	333.469
3172	2.321	0.03858	334.995	1.0363	0.02111	0.016	333.467
3175	2.292	0.04882	335.475	1.0168	0.02108	0.012	333.494
3178	2.295	0.06025	335.945	1.0157	0.02105	0.008	333.478
3181	1.891	0.02172	334.115	0.8075	0.02034	0.035	333.335
3184	1.890	0.02956	334.488	0.8055	0.02040	0.022	333.352
3187	1.887	0.03860	334.911	0.8023	0.02049	0.016	333.361
3190	1.889	0.04882	335.377	0.8012	0.02057	0.012	333.367
3193	1.891	0.06023	335.858	0.8006	0.02033	0.009	333.334
3196	1.474	0.02172	334.068	0.6030	0.01985	0.033	333.274
3199	1.475	0.02956	334.436	0.6022	0.01996	0.022	333.262
3202	1.472	0.03860	334.850	0.6000	0.01997	0.014	333.246
3205	1.470	0.04883	335.337	0.5977	0.02004	0.011	333.245
3208	1.472	0.06023	335.859	0.5972	0.01987	0.008	333.227
3211	1.055	0.02172	333.891	0.4148	0.01932	0.032	333.128
3214	1.055	0.02957	334.308	0.4142	0.01934	0.021	333.141
3217	1.057	0.03860	334.736	0.4144	0.01949	0.015	333.108
3220	1.057	0.04881	335.228	0.4138	0.01951	0.012	333.082
3223	1.056	0.06022	335.809	0.4121	0.01949	0.008	333.088
3226	0.600	0.02168	334.357	0.2264	0.01909	0.033	333.044
3229	0.598	0.02950	334.787	0.2252	0.01912	0.021	333.046

Table 16. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
3232	0.596	0.03851	335.267	0.2241	0.01914	0.015	333.032
3235	0.597	0.04871	335.817	0.2242	0.01914	0.011	333.021
3238	0.599	0.06008	336.433	0.2245	0.01920	0.007	333.021
3241	0.112	0.02167	334.426	0.0407	0.01989	0.034	332.981
3244	0.114	0.02948	334.918	0.0413	0.02007	0.022	332.978
3247	0.115	0.03848	335.477	0.0418	0.02012	0.016	332.967
3253	0.114	0.06006	336.831	0.0412	0.02031	0.009	332.970

Table 17. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.097	0.02608	258.835	0.0465	0.01055	0.011	256.047
1004	0.097	0.03545	259.858	0.0464	0.01062	0.007	256.063
1007	0.098	0.04623	261.003	0.0464	0.01074	0.005	256.056
1010	0.098	0.05840	262.288	0.0464	0.01083	0.004	256.056
1013	0.098	0.07197	263.719	0.0461	0.01092	0.003	256.065
1016	0.151	0.02609	258.699	0.0738	0.01062	0.011	256.036
1019	0.151	0.03546	259.662	0.0733	0.01062	0.007	256.031
1022	0.151	0.04625	260.777	0.0727	0.01075	0.005	256.046
1025	0.151	0.05844	262.012	0.0723	0.01082	0.004	256.050
1028	0.151	0.07201	263.374	0.0721	0.01088	0.003	256.047
1031	0.157	0.02536	266.617	0.0738	0.01115	0.013	264.151
1034	0.158	0.03447	267.534	0.0741	0.01123	0.008	264.165
1037	0.158	0.04496	268.557	0.0737	0.01130	0.006	264.163
1040	0.158	0.05682	269.695	0.0735	0.01138	0.004	264.154
1043	0.157	0.07004	270.976	0.0725	0.01148	0.004	264.166
1046	0.095	0.02534	267.328	0.0437	0.01124	0.013	264.746
1049	0.094	0.03445	268.257	0.0433	0.01137	0.009	264.736
1052	0.094	0.04494	269.337	0.0432	0.01145	0.007	264.749
1055	0.095	0.05679	270.527	0.0433	0.01150	0.005	264.741
1058	0.095	0.06999	271.848	0.0433	0.01157	0.004	264.741
1061	0.227	0.02535	267.105	0.1089	0.01121	0.013	264.746
1064	0.227	0.03447	267.973	0.1086	0.01141	0.009	264.766
1067	0.227	0.04497	268.938	0.1082	0.01144	0.006	264.755
1070	0.227	0.05683	270.058	0.1076	0.01150	0.005	264.772
1073	0.227	0.07004	271.264	0.1069	0.01157	0.004	264.771
1076	0.236	0.02459	276.365	0.1088	0.01199	0.015	274.198
1079	0.236	0.03343	277.156	0.1083	0.01189	0.010	274.198
1082	0.235	0.04361	278.056	0.1078	0.01208	0.007	274.192
1085	0.236	0.05512	279.096	0.1077	0.01220	0.005	274.221
1088	0.237	0.06796	280.198	0.1075	0.01228	0.004	274.199
1091	0.154	0.02457	276.588	0.0696	0.01202	0.015	274.323
1094	0.154	0.03341	277.420	0.0694	0.01192	0.010	274.328
1097	0.155	0.04358	278.359	0.0696	0.01208	0.007	274.321
1100	0.156	0.05508	279.429	0.0695	0.01216	0.005	274.334
1103	0.155	0.06790	280.581	0.0690	0.01226	0.004	274.313
1106	0.093	0.02457	276.613	0.0413	0.01215	0.014	274.245
1109	0.093	0.03340	277.474	0.0412	0.01220	0.009	274.242
1112	0.093	0.04357	278.458	0.0408	0.01232	0.007	274.241
1115	0.092	0.05507	279.563	0.0406	0.01237	0.005	274.241
1118	0.092	0.06788	280.784	0.0402	0.01246	0.004	274.243
1121	0.316	0.02458	276.306	0.1493	0.01196	0.015	274.226
1124	0.316	0.03343	277.100	0.1485	0.01203	0.010	274.253
1127	0.316	0.04361	277.974	0.1479	0.01217	0.007	274.257
1130	0.315	0.05513	278.938	0.1471	0.01222	0.005	274.243

Table 17. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1133	0.316	0.06797	280.011	0.1466	0.01232	0.004	274.240
1136	0.330	0.02381	286.033	0.1493	0.01278	0.016	284.121
1139	0.329	0.03238	286.720	0.1485	0.01287	0.012	284.107
1142	0.329	0.04225	287.538	0.1480	0.01290	0.007	284.113
1145	0.328	0.05342	288.444	0.1467	0.01296	0.006	284.120
1148	0.329	0.06588	289.444	0.1464	0.01306	0.004	284.117
1151	0.417	0.02381	286.022	0.1928	0.01273	0.018	284.179
1154	0.416	0.03237	286.699	0.1919	0.01288	0.011	284.174
1157	0.415	0.04224	287.479	0.1908	0.01299	0.008	284.170
1160	0.415	0.05342	288.352	0.1896	0.01299	0.006	284.176
1163	0.415	0.06587	289.331	0.1890	0.01310	0.004	284.187
1166	0.224	0.02380	286.202	0.0987	0.01276	0.017	284.201
1169	0.225	0.03237	286.908	0.0989	0.01276	0.011	284.174
1172	0.225	0.04223	287.736	0.0988	0.01288	0.008	284.161
1175	0.226	0.05338	288.728	0.0985	0.01296	0.005	284.205
1178	0.225	0.06582	289.768	0.0979	0.01302	0.004	284.197
1181	0.159	0.02380	286.222	0.0690	0.01275	0.019	284.163
1184	0.158	0.03236	286.983	0.0683	0.01280	0.011	284.159
1187	0.156	0.04222	287.860	0.0674	0.01282	0.009	284.166
1190	0.157	0.05336	288.859	0.0676	0.01293	0.006	284.187
1193	0.159	0.06580	289.938	0.0682	0.01307	0.005	284.188
1196	0.093	0.02379	286.325	0.0398	0.01295	0.017	284.166
1199	0.095	0.03236	287.111	0.0405	0.01290	0.011	284.152
1202	0.095	0.04221	288.049	0.0403	0.01309	0.008	284.178
1205	0.092	0.05335	289.052	0.0391	0.01310	0.006	284.162
1208	0.092	0.06577	290.179	0.0388	0.01323	0.005	284.159
1211	0.284	0.02380	286.129	0.1271	0.01278	0.016	284.186
1214	0.283	0.03237	286.817	0.1264	0.01290	0.010	284.163
1217	0.285	0.04224	287.665	0.1267	0.01292	0.007	284.190
1220	0.286	0.05340	288.556	0.1267	0.01288	0.005	284.167
1223	0.285	0.06585	289.568	0.1256	0.01302	0.004	284.159
1226	0.453	0.02299	297.124	0.2005	0.01392	0.019	295.449
1229	0.455	0.03127	297.736	0.2010	0.01381	0.013	295.443
1232	0.456	0.04081	298.449	0.2010	0.01385	0.009	295.441
1235	0.454	0.05160	299.234	0.1989	0.01390	0.007	295.430
1238	0.451	0.06363	300.129	0.1971	0.01398	0.005	295.440
1241	0.379	0.02298	297.120	0.1653	0.01379	0.019	295.425
1244	0.381	0.03125	297.764	0.1656	0.01378	0.012	295.438
1247	0.384	0.04079	298.469	0.1664	0.01373	0.008	295.416
1250	0.384	0.05158	299.308	0.1660	0.01388	0.006	295.441
1253	0.382	0.06361	300.208	0.1642	0.01397	0.005	295.435
1256	0.311	0.02297	297.177	0.1337	0.01368	0.020	295.416
1259	0.313	0.03125	297.848	0.1339	0.01366	0.012	295.435
1262	0.309	0.04077	298.581	0.1320	0.01380	0.009	295.419

Table 17. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1265	0.308	0.05154	299.428	0.1307	0.01387	0.007	295.430
1268	0.310	0.06358	300.341	0.1312	0.01396	0.005	295.415
1271	0.240	0.02297	297.184	0.1014	0.01379	0.020	295.394
1274	0.240	0.03124	297.843	0.1014	0.01369	0.013	295.383
1277	0.237	0.04077	298.623	0.0996	0.01381	0.009	295.393
1280	0.236	0.05155	299.477	0.0990	0.01390	0.007	295.387
1283	0.239	0.06357	300.431	0.0998	0.01396	0.005	295.389
1286	0.171	0.02297	297.210	0.0714	0.01361	0.019	295.360
1289	0.171	0.03125	297.920	0.0711	0.01379	0.012	295.377
1292	0.173	0.04077	298.723	0.0719	0.01384	0.009	295.388
1295	0.174	0.05155	299.594	0.0721	0.01388	0.006	295.371
1298	0.171	0.06357	300.573	0.0704	0.01399	0.005	295.368
1331	0.180	0.02231	306.479	0.0727	0.01463	0.021	304.753
1334	0.182	0.03035	307.121	0.0733	0.01431	0.014	304.758
1337	0.183	0.03962	307.866	0.0734	0.01468	0.010	304.767
1340	0.183	0.05008	308.673	0.0733	0.01467	0.008	304.757
1343	0.180	0.06175	309.579	0.0718	0.01475	0.006	304.757
1346	0.248	0.02232	306.436	0.1014	0.01438	0.022	304.753
1349	0.247	0.03037	307.061	0.1008	0.01455	0.014	304.758
1352	0.247	0.03964	307.775	0.1003	0.01462	0.011	304.756
1355	0.246	0.05011	308.577	0.0996	0.01470	0.007	304.760
1358	0.245	0.06180	309.456	0.0992	0.01471	0.005	304.752
1361	0.321	0.02233	306.340	0.1330	0.01447	0.023	304.720
1364	0.321	0.03038	306.933	0.1328	0.01450	0.014	304.709
1367	0.321	0.03966	307.635	0.1324	0.01444	0.010	304.716
1370	0.319	0.05013	308.413	0.1309	0.01466	0.007	304.716
1373	0.317	0.06182	309.261	0.1298	0.01470	0.006	304.703
1376	0.390	0.02235	306.239	0.1639	0.01447	0.022	304.646
1379	0.389	0.03039	306.817	0.1631	0.01449	0.014	304.632
1382	0.388	0.03965	307.493	0.1619	0.01441	0.010	304.632
1385	0.387	0.05016	308.263	0.1608	0.01472	0.007	304.645
1388	0.388	0.06186	309.096	0.1608	0.01472	0.006	304.633
1391	0.430	0.02237	305.686	0.1826	0.01441	0.021	304.113
1394	0.432	0.03042	306.275	0.1828	0.01461	0.014	304.115
1397	0.433	0.03969	306.933	0.1825	0.01439	0.009	304.104
1400	0.433	0.05019	307.712	0.1819	0.01465	0.008	304.134
1403	0.432	0.06191	308.521	0.1811	0.01468	0.006	304.110
1406	0.446	0.02166	316.420	0.1815	0.01516	0.026	315.005
1409	0.449	0.02945	316.928	0.1822	0.01534	0.016	314.980
1412	0.451	0.03844	317.536	0.1828	0.01548	0.011	314.974
1415	0.451	0.04863	318.236	0.1821	0.01554	0.008	314.983
1418	0.448	0.05997	318.968	0.1802	0.01553	0.006	314.948
1421	0.450	0.02944	316.890	0.1826	0.01526	0.015	314.894
1424	0.448	0.03844	317.507	0.1815	0.01550	0.011	314.897

Table 17. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1427	0.447	0.04861	318.191	0.1806	0.01549	0.008	314.887
1430	0.447	0.05995	318.944	0.1799	0.01554	0.007	314.873
1433	0.371	0.02164	315.972	0.1493	0.01537	0.026	314.492
1436	0.371	0.02944	316.528	0.1490	0.01537	0.016	314.499
1439	0.369	0.03843	317.134	0.1478	0.01540	0.011	314.473
1442	0.367	0.04858	317.854	0.1467	0.01543	0.008	314.486
1445	0.367	0.05993	318.625	0.1461	0.01553	0.007	314.469
1448	0.306	0.02165	315.809	0.1218	0.01526	0.025	314.305
1451	0.306	0.02946	316.363	0.1219	0.01544	0.016	314.300
1454	0.309	0.03844	317.007	0.1225	0.01547	0.011	314.302
1457	0.310	0.04860	317.764	0.1226	0.01551	0.062	314.276
1460	0.309	0.05996	318.512	0.1222	0.01556	0.006	314.281
1463	0.237	0.02171	314.799	0.0938	0.01532	0.025	313.240
1466	0.237	0.02953	315.383	0.0935	0.01533	0.017	313.240
1469	0.237	0.03855	316.037	0.0934	0.01522	0.011	313.232
1472	0.237	0.04875	316.781	0.0930	0.01545	0.008	313.227
1475	0.237	0.06014	317.592	0.0927	0.01548	0.006	313.207
1478	0.169	0.02166	315.787	0.0658	0.01548	0.025	314.190
1481	0.171	0.02945	316.364	0.0668	0.01548	0.016	314.171
1484	0.172	0.03844	317.021	0.0669	0.01538	0.012	314.152
1487	0.170	0.04863	317.797	0.0661	0.01562	0.009	314.161
1490	0.170	0.05997	318.607	0.0657	0.01572	0.007	314.125
1523	0.175	0.02104	325.826	0.0659	0.01645	0.030	324.370
1526	0.173	0.02861	326.372	0.0653	0.01638	0.018	324.364
1529	0.171	0.03734	326.989	0.0643	0.01655	0.013	324.358
1532	0.173	0.04724	327.688	0.0648	0.01658	0.009	324.350
1535	0.174	0.05827	328.432	0.0653	0.01669	0.007	324.313
1538	0.175	0.05829	328.295	0.0654	0.01661	0.007	324.123
1541	0.244	0.02106	325.451	0.0930	0.01607	0.028	324.027
1544	0.240	0.02864	325.952	0.0916	0.01626	0.017	323.992
1547	0.243	0.03738	326.582	0.0924	0.01642	0.013	324.011
1550	0.245	0.04728	327.260	0.0929	0.01647	0.009	324.000
1553	0.244	0.05831	328.011	0.0925	0.01653	0.006	323.990
1556	0.314	0.02105	325.287	0.1209	0.01615	0.028	323.887
1559	0.313	0.02866	325.793	0.1203	0.01635	0.018	323.872
1562	0.310	0.03740	326.389	0.1191	0.01638	0.013	323.872
1565	0.311	0.04729	327.033	0.1189	0.01643	0.009	323.845
1568	0.313	0.05834	327.775	0.1195	0.01646	0.006	323.840
1571	0.379	0.02108	324.773	0.1477	0.01616	0.028	323.412
1574	0.379	0.02868	325.283	0.1473	0.01625	0.017	323.408
1577	0.378	0.03744	325.840	0.1468	0.01641	0.012	323.382
1580	0.377	0.04735	326.500	0.1460	0.01639	0.009	323.381
1583	0.376	0.05841	327.226	0.1451	0.01646	0.006	323.372
1586	0.434	0.02102	325.848	0.1700	0.01628	0.028	324.518

Table 17. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1589	0.433	0.02859	326.329	0.1691	0.01606	0.018	324.497
1592	0.431	0.03732	326.883	0.1679	0.01606	0.012	324.477
1595	0.430	0.04720	327.533	0.1673	0.01621	0.009	324.476
1598	0.430	0.05823	328.219	0.1668	0.01650	0.006	324.446
1601	0.448	0.02183	334.586	0.1699	0.01697	0.028	333.256
1604	0.445	0.02970	335.090	0.1687	0.01698	0.017	333.267
1607	0.444	0.03877	335.637	0.1679	0.01694	0.012	333.247
1610	0.445	0.04904	336.245	0.1680	0.01717	0.009	333.212
1613	0.446	0.06049	336.955	0.1679	0.01731	0.007	333.208
1616	0.440	0.04930	334.586	0.1667	0.01688	0.008	331.483
1619	0.443	0.06077	335.273	0.1676	0.01711	0.006	331.456
1622	0.383	0.02187	334.205	0.1442	0.01698	0.027	332.840
1625	0.384	0.02974	334.714	0.1447	0.01676	0.017	332.845
1628	0.382	0.03881	335.257	0.1435	0.01701	0.012	332.805
1631	0.378	0.04908	335.900	0.1417	0.01711	0.009	332.794
1634	0.378	0.06054	336.607	0.1412	0.01719	0.007	332.776
1637	0.303	0.02189	333.749	0.1134	0.01712	0.028	332.350
1640	0.303	0.02977	334.263	0.1129	0.01688	0.017	332.348
1643	0.307	0.03886	334.843	0.1142	0.01705	0.012	332.333
1646	0.309	0.04915	335.491	0.1150	0.01727	0.008	332.310
1649	0.303	0.06062	336.223	0.1121	0.01721	0.006	332.261
1652	0.235	0.02183	334.670	0.0869	0.01682	0.027	333.252
1655	0.240	0.02969	335.157	0.0884	0.01722	0.018	333.212
1658	0.242	0.03876	335.747	0.0890	0.01736	0.012	333.195
1661	0.240	0.04901	336.430	0.0882	0.01730	0.009	333.194
1664	0.236	0.06045	337.182	0.0867	0.01732	0.007	333.191
1667	0.169	0.02182	334.366	0.0618	0.01750	0.029	332.909
1670	0.167	0.02967	334.892	0.0611	0.01705	0.018	332.885
1673	0.166	0.03873	335.498	0.0608	0.01714	0.013	332.870
1676	0.166	0.04898	336.164	0.0607	0.01743	0.009	332.829
1679	0.167	0.06040	336.947	0.0606	0.01746	0.007	332.804
1720	0.168	0.02126	342.967	0.0601	0.01810	0.033	341.630
1723	0.168	0.02892	343.433	0.0599	0.01823	0.022	341.590
1726	0.167	0.02892	343.457	0.0596	0.01818	0.022	341.588
1729	0.167	0.03776	343.979	0.0594	0.01833	0.014	341.532
1732	0.168	0.04777	344.638	0.0595	0.01842	0.010	341.498
1735	0.168	0.05892	345.351	0.0595	0.01848	0.008	341.485
1738	0.248	0.02131	342.332	0.0896	0.01810	0.031	341.027
1741	0.248	0.02897	342.857	0.0893	0.01767	0.019	341.063
1744	0.248	0.03782	343.406	0.0891	0.01797	0.014	341.022
1747	0.248	0.04784	344.034	0.0892	0.01823	0.010	341.010
1750	0.249	0.05901	344.679	0.0892	0.01823	0.007	340.944
1751	0.250	0.05906	344.709	0.0895	0.01816	0.007	340.930
1754	0.314	0.02134	342.178	0.1142	0.01777	0.030	340.870

Table 17. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1757	0.314	0.02902	342.599	0.1140	0.01794	0.019	340.810
1760	0.313	0.03788	343.133	0.1137	0.01796	0.013	340.791
1763	0.314	0.04791	343.772	0.1137	0.01797	0.010	340.778
1766	0.315	0.05910	344.462	0.1137	0.01809	0.007	340.774
1769	0.373	0.02136	341.537	0.1370	0.01761	0.030	340.251
1772	0.375	0.02904	342.007	0.1374	0.01776	0.020	340.248
1775	0.377	0.03792	342.535	0.1379	0.01771	0.013	340.224
1778	0.377	0.04797	343.127	0.1376	0.01812	0.017	340.194
1781	0.375	0.05918	343.810	0.1366	0.01790	0.007	340.190
1784	0.430	0.02135	341.514	0.1589	0.01762	0.032	340.272
1787	0.430	0.02907	341.908	0.1588	0.01773	0.019	340.201
1790	0.433	0.02907	341.893	0.1597	0.01743	0.019	340.144
1793	0.432	0.03793	342.391	0.1592	0.01764	0.013	340.102
1796	0.430	0.04797	342.992	0.1582	0.01780	0.010	340.064
1799	0.430	0.05920	343.645	0.1578	0.01804	0.007	340.040

Table 18. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.089	0.02810	259.029	0.0423	0.01050	0.010	255.933
1004	0.089	0.03817	260.136	0.0420	0.01068	0.007	255.919
1007	0.089	0.04974	261.509	0.0418	0.01075	0.069	255.905
1010	0.089	0.06283	262.843	0.0415	0.01083	0.005	255.930
1013	0.089	0.07739	264.410	0.0414	0.01097	0.004	255.928
1016	0.175	0.02810	258.842	0.0850	0.01044	0.010	255.963
1019	0.176	0.03816	259.890	0.0850	0.01057	0.007	255.965
1022	0.176	0.04975	261.059	0.0846	0.01063	0.005	255.944
1025	0.176	0.06281	262.415	0.0841	0.01070	0.004	255.970
1028	0.176	0.07740	263.899	0.0835	0.01079	0.003	255.981
1031	0.214	0.02811	258.765	0.1051	0.01054	0.009	255.964
1034	0.214	0.03816	259.783	0.1046	0.01059	0.006	255.963
1037	0.214	0.04977	260.955	0.1042	0.01068	0.004	255.978
1040	0.215	0.06287	262.264	0.1039	0.01075	0.003	255.986
1043	0.215	0.07740	263.668	0.1036	0.01084	0.003	255.951
1046	0.221	0.02719	267.670	0.1047	0.01112	0.010	265.074
1049	0.222	0.03693	268.601	0.1045	0.01122	0.007	265.058
1052	0.222	0.04819	269.697	0.1042	0.01128	0.005	265.081
1055	0.222	0.06089	270.897	0.1035	0.01136	0.004	265.074
1058	0.222	0.07500	272.205	0.1027	0.01142	0.003	265.047
1061	0.110	0.02718	267.813	0.0505	0.01118	0.011	265.040
1062	0.110	0.02717	267.871	0.0506	0.01123	0.011	265.061
1065	0.110	0.03693	268.887	0.0505	0.01123	0.007	265.057
1068	0.110	0.04814	270.036	0.0500	0.01132	0.006	265.051
1071	0.109	0.06080	271.350	0.0496	0.01141	0.004	265.071
1074	0.110	0.07494	272.775	0.0494	0.01152	0.004	265.061
1077	0.343	0.02720	267.481	0.1675	0.01132	0.020	265.049
1080	0.342	0.03695	268.378	0.1664	0.01135	0.006	265.060
1083	0.342	0.04820	269.410	0.1652	0.01141	0.004	265.079
1086	0.342	0.06088	270.529	0.1643	0.01145	0.003	265.057
1089	0.342	0.07502	271.792	0.1636	0.01155	0.003	265.059
1092	0.106	0.02623	277.797	0.0468	0.01205	0.013	275.227
1095	0.105	0.03561	278.740	0.0462	0.01210	0.008	275.232
1098	0.105	0.04645	279.822	0.0459	0.01213	0.006	275.240
1101	0.105	0.05868	281.014	0.0456	0.01221	0.005	275.240
1104	0.106	0.07232	282.335	0.0459	0.01230	0.004	275.235
1107	0.211	0.02624	277.616	0.0953	0.01182	0.013	275.211
1110	0.212	0.03565	278.512	0.0953	0.01190	0.008	275.229
1113	0.211	0.04649	279.510	0.0946	0.01198	0.005	275.227
1116	0.210	0.05872	280.622	0.0937	0.01209	0.004	275.216
1119	0.210	0.07237	281.878	0.0931	0.01214	0.004	275.231
1122	0.317	0.02624	277.483	0.1464	0.01199	0.013	275.208
1125	0.318	0.03565	278.307	0.1464	0.01199	0.008	275.197
1128	0.317	0.04650	279.279	0.1456	0.01204	0.005	275.216

Table 18. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1131	0.317	0.05878	280.350	0.1444	0.01213	0.004	275.218
1134	0.315	0.07245	281.530	0.1431	0.01223	0.003	275.215
1137	0.426	0.02625	277.228	0.2024	0.01211	0.012	275.042
1140	0.425	0.03566	278.026	0.2011	0.01199	0.008	275.040
1143	0.424	0.04654	278.968	0.1994	0.01217	0.005	275.065
1146	0.423	0.05882	279.979	0.1981	0.01224	0.004	275.052
1149	0.423	0.07248	281.102	0.1970	0.01230	0.003	275.040
1152	0.484	0.02626	277.151	0.2334	0.01214	0.012	275.026
1155	0.486	0.03569	277.936	0.2333	0.01204	0.008	275.033
1158	0.487	0.04656	278.821	0.2329	0.01221	0.005	275.023
1161	0.488	0.05882	279.810	0.2317	0.01230	0.004	275.015
1164	0.486	0.07247	280.933	0.2296	0.01239	0.003	275.030
1167	0.503	0.02524	288.735	0.2295	0.01290	0.015	286.801
1170	0.504	0.03431	289.442	0.2290	0.01297	0.009	286.793
1173	0.505	0.04473	290.267	0.2288	0.01301	0.006	286.798
1176	0.505	0.05652	291.232	0.2277	0.01318	0.056	286.789
1179	0.504	0.06970	292.193	0.2263	0.01317	0.004	286.791
1182	0.554	0.02524	288.641	0.2557	0.01295	0.015	286.736
1185	0.555	0.03430	289.342	0.2551	0.01302	0.009	286.733
1188	0.555	0.04473	290.146	0.2539	0.01304	0.006	286.732
1191	0.554	0.05655	291.060	0.2524	0.01312	0.005	286.739
1194	0.553	0.06974	292.067	0.2506	0.01318	0.004	286.742
1197	0.388	0.02525	288.682	0.1731	0.01279	0.014	286.664
1200	0.387	0.03429	289.436	0.1722	0.01295	0.009	286.675
1203	0.387	0.04475	290.306	0.1711	0.01297	0.006	286.694
1206	0.388	0.05656	291.249	0.1709	0.01297	0.005	286.675
1209	0.388	0.06969	292.310	0.1705	0.01306	0.017	286.677
1212	0.291	0.02526	288.621	0.1276	0.01262	0.014	286.521
1215	0.290	0.03433	289.368	0.1268	0.01268	0.009	286.491
1218	0.291	0.04475	290.264	0.1265	0.01287	0.006	286.501
1221	0.292	0.05656	291.252	0.1265	0.01290	0.004	286.501
1224	0.293	0.06975	292.340	0.1263	0.01301	0.003	286.492
1227	0.190	0.02526	288.662	0.0816	0.01265	0.015	286.458
1230	0.191	0.03433	289.463	0.0819	0.01258	0.010	286.448
1233	0.191	0.04475	290.371	0.0817	0.01281	0.007	286.435
1236	0.190	0.05657	291.432	0.0810	0.01290	0.005	286.462
1239	0.190	0.06974	292.583	0.0804	0.01299	0.004	286.464
1272	0.174	0.02452	297.238	0.0724	0.01344	0.017	295.185
1275	0.175	0.03333	298.009	0.0727	0.01354	0.010	295.197
1278	0.174	0.04348	298.862	0.0718	0.01358	0.007	295.177
1281	0.172	0.05495	299.825	0.0707	0.01367	0.005	295.163
1284	0.172	0.06775	300.928	0.0705	0.01374	0.004	295.190
1287	0.277	0.02454	297.130	0.1171	0.01338	0.016	295.179
1290	0.276	0.03334	297.854	0.1163	0.01342	0.010	295.173

Table 18. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1293	0.274	0.04349	298.683	0.1151	0.01355	0.007	295.166
1296	0.275	0.05496	299.612	0.1148	0.01363	0.005	295.162
1299	0.276	0.06777	300.638	0.1151	0.01364	0.004	295.159
1302	0.384	0.02454	297.024	0.1650	0.01332	0.016	295.152
1305	0.384	0.03335	297.707	0.1645	0.01348	0.010	295.131
1308	0.381	0.04351	298.524	0.1627	0.01357	0.007	295.146
1311	0.381	0.05500	299.419	0.1621	0.01339	0.005	295.137
1314	0.383	0.06781	300.421	0.1623	0.01362	0.004	295.142
1317	0.479	0.02456	296.931	0.2094	0.01344	0.016	295.114
1320	0.478	0.03336	297.626	0.2082	0.01354	0.010	295.121
1323	0.479	0.04352	298.406	0.2082	0.01364	0.006	295.124
1326	0.480	0.05502	299.285	0.2077	0.01370	0.005	295.131
1329	0.478	0.06783	300.308	0.2060	0.01356	0.049	295.125
1332	0.544	0.02455	296.887	0.2407	0.01363	0.016	295.102
1335	0.545	0.03335	297.571	0.2403	0.01369	0.010	295.123
1338	0.544	0.04350	298.319	0.2390	0.01374	0.007	295.120
1341	0.543	0.05503	299.178	0.2375	0.01378	0.005	295.119
1344	0.543	0.06783	300.126	0.2366	0.01379	0.004	295.117
1347	0.564	0.02373	307.235	0.2392	0.01434	0.019	305.602
1350	0.567	0.03225	307.814	0.2396	0.01442	0.012	305.573
1353	0.567	0.04207	308.525	0.2390	0.01436	0.008	305.573
1356	0.565	0.05321	309.321	0.2374	0.01447	0.006	305.577
1359	0.564	0.06563	310.204	0.2358	0.01463	0.005	305.584
1362	0.479	0.02374	307.143	0.2005	0.01413	0.018	305.474
1365	0.476	0.03227	307.769	0.1985	0.01431	0.012	305.462
1368	0.476	0.04209	308.468	0.1980	0.01423	0.008	305.439
1371	0.478	0.05320	309.280	0.1985	0.01450	0.006	305.442
1374	0.478	0.06562	310.260	0.1975	0.01426	0.046	305.452
1377	0.378	0.02374	307.124	0.1558	0.01426	0.019	305.396
1380	0.381	0.03227	307.763	0.1566	0.01439	0.012	305.383
1383	0.381	0.04209	308.496	0.1565	0.01442	0.009	305.370
1386	0.380	0.05321	309.335	0.1553	0.01442	0.006	305.380
1389	0.377	0.06564	310.253	0.1538	0.01454	0.005	305.372
1392	0.292	0.02380	306.401	0.1193	0.01398	0.017	304.610
1395	0.292	0.03234	307.061	0.1190	0.01423	0.013	304.592
1398	0.292	0.04219	307.838	0.1188	0.01427	0.009	304.603
1401	0.293	0.05336	308.718	0.1187	0.01442	0.006	304.618
1404	0.294	0.06578	309.660	0.1188	0.01450	0.005	304.606
1407	0.188	0.02381	306.370	0.0758	0.01409	0.018	304.499
1410	0.187	0.03236	307.084	0.0751	0.01424	0.012	304.513
1413	0.187	0.04220	307.879	0.0747	0.01429	0.009	304.502
1416	0.187	0.05335	308.800	0.0746	0.01445	0.006	304.515
1419	0.188	0.06579	309.784	0.0749	0.01455	0.005	304.501
1452	0.178	0.02300	316.929	0.0690	0.01514	0.022	315.210

Table 18. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1455	0.179	0.03128	317.542	0.0691	0.01544	0.014	315.181
1458	0.177	0.04081	318.291	0.0684	0.01545	0.010	315.186
1461	0.176	0.05160	319.104	0.0678	0.01539	0.007	315.170
1464	0.176	0.06363	320.029	0.0675	0.01547	0.006	315.176
1467	0.274	0.02302	316.664	0.1076	0.01498	0.021	315.023
1470	0.275	0.03130	317.287	0.1075	0.01508	0.014	315.018
1473	0.277	0.04085	317.978	0.1081	0.01515	0.009	314.995
1476	0.278	0.05165	318.773	0.1082	0.01522	0.007	314.993
1479	0.276	0.06368	319.684	0.1072	0.01531	0.005	315.005
1482	0.373	0.02303	316.543	0.1485	0.01502	0.021	314.925
1485	0.373	0.03132	317.133	0.1480	0.01525	0.014	314.912
1488	0.373	0.04088	317.814	0.1477	0.01499	0.010	314.901
1491	0.375	0.05170	318.574	0.1481	0.01528	0.007	314.887
1494	0.377	0.06375	319.429	0.1485	0.01529	0.005	314.882
1497	0.473	0.02305	316.319	0.1908	0.01510	0.021	314.744
1500	0.474	0.03135	316.879	0.1908	0.01512	0.013	314.717
1503	0.472	0.04091	317.549	0.1893	0.01499	0.010	314.706
1506	0.470	0.05174	318.308	0.1881	0.01529	0.007	314.707
1509	0.470	0.06382	319.125	0.1872	0.01536	0.005	314.690
1512	0.541	0.02306	316.161	0.2200	0.01502	0.020	314.611
1515	0.542	0.03136	316.787	0.2200	0.01520	0.052	314.637
1518	0.544	0.04093	317.417	0.2205	0.01507	0.009	314.617
1521	0.545	0.05176	318.146	0.2203	0.01525	0.007	314.609
1524	0.543	0.06384	318.961	0.2185	0.01538	0.005	314.596
1527	0.562	0.02227	327.334	0.2197	0.01601	0.024	325.920
1530	0.565	0.03030	327.844	0.2204	0.01611	0.016	325.901
1533	0.565	0.03955	328.449	0.2198	0.01624	0.011	325.898
1536	0.563	0.05001	329.126	0.2184	0.01620	0.008	325.885
1539	0.560	0.06169	329.860	0.2168	0.01628	0.006	325.857
1542	0.466	0.02231	326.870	0.1803	0.01593	0.025	325.424
1545	0.468	0.03034	327.433	0.1808	0.01598	0.015	325.430
1548	0.470	0.03960	328.057	0.1811	0.01611	0.011	325.430
1551	0.470	0.05008	328.734	0.1806	0.01611	0.008	325.406
1554	0.467	0.06177	329.492	0.1789	0.01625	0.006	325.390
1557	0.385	0.02233	326.667	0.1479	0.01588	0.025	325.177
1560	0.383	0.03036	327.191	0.1467	0.01594	0.015	325.148
1563	0.381	0.03961	327.824	0.1455	0.01607	0.010	325.132
1566	0.385	0.05009	328.531	0.1467	0.01620	0.007	325.120
1569	0.385	0.06179	329.319	0.1464	0.01629	0.006	325.117
1572	0.272	0.02233	326.577	0.1033	0.01586	0.023	325.030
1575	0.270	0.03037	327.129	0.1022	0.01606	0.016	325.010
1578	0.268	0.03964	327.770	0.1013	0.01620	0.011	324.996
1581	0.272	0.05013	328.490	0.1023	0.01597	0.008	324.975
1584	0.273	0.06183	329.294	0.1024	0.01625	0.006	324.958

Table 18. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1587	0.184	0.02235	326.801	0.0689	0.01598	0.025	325.213
1590	0.186	0.03038	327.374	0.0699	0.01632	0.016	325.180
1593	0.189	0.03964	328.030	0.0706	0.01613	0.011	325.156
1596	0.191	0.05010	328.773	0.0712	0.01649	0.008	325.136
1599	0.192	0.06177	329.612	0.0714	0.01646	0.006	325.127
1636	0.179	0.02170	336.999	0.0651	0.01738	0.028	335.514
1639	0.180	0.02951	337.539	0.0651	0.01735	0.019	335.504
1642	0.178	0.03852	338.157	0.0643	0.01719	0.030	335.482
1645	0.176	0.04872	338.823	0.0635	0.01748	0.009	335.447
1648	0.175	0.06009	339.592	0.0629	0.01745	0.007	335.429
1651	0.281	0.02168	337.242	0.1030	0.01684	0.028	335.852
1654	0.283	0.02949	337.755	0.1036	0.01717	0.019	335.830
1657	0.282	0.03848	338.337	0.1030	0.01717	0.013	335.795
1660	0.281	0.04867	339.027	0.1022	0.01722	0.009	335.788
1663	0.279	0.06003	339.759	0.1014	0.01732	0.007	335.766
1666	0.387	0.02170	337.030	0.1435	0.01711	0.028	335.663
1669	0.388	0.02951	337.520	0.1435	0.01687	0.018	335.641
1672	0.390	0.03850	338.104	0.1441	0.01677	0.012	335.633
1675	0.389	0.04870	338.754	0.1434	0.01699	0.008	335.608
1678	0.388	0.06007	339.483	0.1424	0.01722	0.007	335.604
1681	0.537	0.02173	336.796	0.2019	0.01649	0.027	335.480
1684	0.539	0.02954	337.289	0.2026	0.01686	0.018	335.468
1687	0.542	0.03855	337.842	0.2032	0.01708	0.012	335.447
1690	0.542	0.04875	338.468	0.2029	0.01710	0.009	335.426
1693	0.540	0.06014	339.156	0.2017	0.01712	0.006	335.400
1696	0.465	0.02175	336.349	0.1738	0.01701	0.027	335.006
1699	0.463	0.02958	336.842	0.1728	0.01706	0.019	334.974
1702	0.463	0.03860	337.423	0.1726	0.01703	0.012	334.959
1705	0.467	0.04882	338.060	0.1735	0.01696	0.009	334.944
1708	0.467	0.06022	338.758	0.1734	0.01713	0.006	334.922
1711	0.559	0.02114	345.841	0.2044	0.01788	0.032	344.616
1714	0.562	0.02876	346.272	0.2050	0.01794	0.052	344.566
1717	0.564	0.03754	346.774	0.2054	0.01783	0.014	344.553
1720	0.564	0.04746	347.342	0.2051	0.01790	0.010	344.526
1723	0.562	0.05855	347.988	0.2037	0.01800	0.007	344.474
1726	0.468	0.02116	345.533	0.1697	0.01799	0.032	344.292
1729	0.467	0.02878	345.975	0.1690	0.01790	0.020	344.254
1732	0.467	0.03757	346.490	0.1688	0.01790	0.014	344.220
1735	0.468	0.04750	347.129	0.1690	0.01789	0.010	344.218
1738	0.470	0.05861	347.769	0.1692	0.01792	0.007	344.186
1741	0.377	0.02119	345.098	0.1358	0.01793	0.032	343.828
1744	0.377	0.02882	345.563	0.1356	0.01787	0.020	343.807
1747	0.377	0.03762	346.109	0.1353	0.01770	0.014	343.788
1750	0.377	0.04757	346.735	0.1352	0.01785	0.010	343.765

Table 18. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1753	0.379	0.05868	347.407	0.1354	0.01798	0.007	343.735
1756	0.283	0.02121	344.876	0.1013	0.01786	0.033	343.570
1759	0.284	0.02884	345.353	0.1012	0.01766	0.020	343.552
1762	0.285	0.03763	345.920	0.1015	0.01764	0.014	343.528
1765	0.286	0.04759	346.547	0.1016	0.01802	0.010	343.477
1768	0.286	0.05870	347.274	0.1014	0.01799	0.007	343.489
1771	0.186	0.02116	345.473	0.0659	0.01846	0.033	344.106
1774	0.182	0.02878	345.926	0.0642	0.01827	0.021	344.051
1777	0.184	0.03755	346.503	0.0650	0.01816	0.015	344.039
1780	0.188	0.04749	347.174	0.0662	0.01846	0.010	344.038
1783	0.187	0.05859	347.841	0.0658	0.01839	0.008	343.970

Table 19. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1106	0.131	0.02756	243.296	0.0670	0.01172	0.088	240.803
1111	0.131	0.03964	244.419	0.0668	0.01195	0.053	240.812
1116	0.131	0.05386	245.706	0.0665	0.01200	0.034	240.809
1126	0.136	0.02757	243.229	0.0695	0.01183	0.088	240.737
1131	0.136	0.03964	244.338	0.0690	0.01194	0.052	240.737
1136	0.135	0.05388	245.622	0.0686	0.01195	0.034	240.733
1146	0.124	0.02761	242.614	0.0637	0.01175	0.089	240.132
1151	0.125	0.03971	243.693	0.0635	0.01194	0.053	240.105
1156	0.125	0.05397	244.963	0.0631	0.01208	0.034	240.091
1171	0.136	0.03744	261.578	0.0641	0.01356	0.071	258.588
1176	0.135	0.05090	262.632	0.0637	0.01370	0.046	258.563
1191	0.281	0.03755	260.591	0.1376	0.01352	0.071	257.775
1196	0.280	0.05104	261.590	0.1368	0.01383	0.046	257.753
1211	0.294	0.03620	272.127	0.1374	0.01465	0.085	269.625
1216	0.294	0.04923	273.037	0.1366	0.01479	0.054	269.620
1251	0.389	0.03620	271.788	0.1854	0.01470	0.084	269.354
1256	0.389	0.04922	272.692	0.1846	0.01485	0.054	269.361
1271	0.524	0.03511	282.126	0.2453	0.01596	0.099	279.985
1276	0.524	0.04774	282.918	0.2443	0.01604	0.063	279.989
1291	0.668	0.03513	281.775	0.3229	0.01599	0.100	279.729
1296	0.668	0.04778	282.529	0.3217	0.01609	0.063	279.723
1311	0.161	0.03511	281.847	0.0703	0.01556	0.096	279.414
1316	0.158	0.04773	282.731	0.0691	0.01591	0.063	279.399
1331	0.304	0.03531	280.200	0.1372	0.01562	0.095	277.867
1336	0.304	0.04802	281.036	0.1368	0.01553	0.060	277.849
1351	0.692	0.03411	291.711	0.3196	0.01731	0.117	289.832
1356	0.692	0.04640	292.377	0.3186	0.01711	0.074	289.800
1371	0.166	0.03410	291.883	0.0701	0.01701	0.115	289.633
1376	0.166	0.04636	292.670	0.0701	0.01713	0.073	289.603
1391	0.280	0.03414	291.541	0.1202	0.01661	0.113	289.422
1396	0.277	0.04643	292.314	0.1189	0.01658	0.071	289.404
1401	0.521	0.01524	290.189	0.2348	0.01664	0.044	289.309
1406	0.521	0.02379	290.672	0.2342	0.01683	0.023	289.291
1411	0.520	0.03423	291.284	0.2332	0.01686	0.013	289.273
1416	0.520	0.04657	291.992	0.2323	0.01669	0.009	289.245
1421	0.745	0.01535	299.478	0.3349	0.01809	0.049	298.729
1426	0.745	0.02396	299.938	0.3342	0.01794	0.025	298.711
1431	0.745	0.03448	300.450	0.3333	0.01800	0.014	298.657
1436	0.745	0.04689	301.087	0.3322	0.01812	0.009	298.626
1441	0.137	0.01534	299.230	0.0559	0.01757	0.046	298.320
1446	0.137	0.02395	299.744	0.0562	0.01774	0.025	298.276
1451	0.139	0.03446	300.416	0.0568	0.01788	0.015	298.269
1456	0.141	0.04687	301.242	0.0573	0.01772	0.009	298.247
1461	0.227	0.01531	301.478	0.0934	0.01741	0.045	300.590

Table 19. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1466	0.227	0.02391	302.008	0.0931	0.01768	0.024	300.576
1471	0.227	0.03441	302.600	0.0928	0.01770	0.014	300.513
1476	0.226	0.04679	303.347	0.0925	0.01771	0.009	300.487
1481	0.523	0.01533	301.188	0.2248	0.01755	0.047	300.404
1486	0.521	0.02393	301.648	0.2237	0.01792	0.024	300.381
1491	0.521	0.03443	302.213	0.2227	0.01799	0.014	300.348
1496	0.520	0.04683	302.870	0.2218	0.01799	0.009	300.319

Table 20. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1016	0.087	0.02392	258.299	0.0415	0.01187	0.015	256.020
1019	0.088	0.03252	259.156	0.0415	0.01174	0.009	256.040
1022	0.088	0.04244	260.096	0.0415	0.01195	0.007	256.030
1025	0.087	0.05365	261.184	0.0409	0.01213	0.005	256.047
1028	0.087	0.06615	262.343	0.0408	0.01220	0.004	256.033
1031	0.163	0.02394	258.188	0.0788	0.01176	0.016	256.025
1034	0.162	0.03255	258.986	0.0781	0.01173	0.010	256.033
1037	0.162	0.04246	259.897	0.0779	0.01198	0.007	256.046
1040	0.163	0.05367	260.889	0.0779	0.01206	0.005	256.028
1043	0.163	0.06617	262.005	0.0777	0.01212	0.004	256.027
1046	0.094	0.02325	267.417	0.0433	0.01269	0.018	265.332
1049	0.093	0.03161	268.207	0.0427	0.01270	0.011	265.360
1052	0.092	0.04123	269.063	0.0419	0.01288	0.008	265.340
1055	0.093	0.05211	270.023	0.0420	0.01289	0.006	265.324
1058	0.093	0.06425	271.120	0.0422	0.01300	0.005	265.342
1061	0.192	0.02325	267.282	0.0903	0.01246	0.016	265.341
1064	0.193	0.03161	267.988	0.0903	0.01258	0.010	265.334
1067	0.193	0.04125	268.815	0.0902	0.01273	0.007	265.342
1070	0.193	0.05215	269.714	0.0895	0.01281	0.005	265.326
1073	0.192	0.06431	270.742	0.0889	0.01288	0.004	265.344
1076	0.286	0.02326	267.149	0.1376	0.01254	0.016	265.301
1079	0.285	0.03162	267.825	0.1367	0.01268	0.011	265.298
1082	0.285	0.04125	268.620	0.1363	0.01276	0.008	265.308
1085	0.286	0.05216	269.499	0.1362	0.01312	0.015	265.310
1088	0.286	0.06432	270.454	0.1354	0.01294	0.004	265.290
1091	0.083	0.02254	277.227	0.0367	0.01355	0.020	275.314
1094	0.084	0.03065	277.932	0.0370	0.01376	0.014	275.314
1097	0.085	0.04000	278.760	0.0375	0.01385	0.010	275.329
1100	0.086	0.05058	279.660	0.0376	0.01391	0.007	275.318
1103	0.086	0.06238	280.660	0.0375	0.01402	0.006	275.316
1106	0.178	0.02257	277.106	0.0800	0.01342	0.020	275.311
1109	0.179	0.03068	277.778	0.0801	0.01359	0.012	275.320
1112	0.180	0.04002	278.532	0.0805	0.01364	0.008	275.312
1115	0.181	0.05060	279.378	0.0805	0.01371	0.006	275.309
1118	0.180	0.06239	280.327	0.0799	0.01381	0.005	275.314
1121	0.262	0.02257	277.008	0.1199	0.01334	0.019	275.298
1124	0.262	0.03068	277.634	0.1198	0.01349	0.012	275.290
1127	0.261	0.04003	278.371	0.1186	0.01357	0.009	275.293
1130	0.260	0.05062	279.199	0.1180	0.01366	0.006	275.290
1133	0.261	0.06244	280.114	0.1180	0.01380	0.005	275.299
1136	0.341	0.02257	276.946	0.1588	0.01349	0.020	275.287
1139	0.342	0.03070	277.563	0.1587	0.01369	0.013	275.288
1142	0.341	0.04005	278.287	0.1577	0.01368	0.008	275.299
1145	0.339	0.05064	279.077	0.1564	0.01372	0.006	275.297

Table 20. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	STAT	T_{cell} K
1148	0.340	0.06244	279.950	0.1563	0.01379	0.005	275.290
1151	0.411	0.02258	276.892	0.1949	0.01353	0.019	275.274
1154	0.410	0.03070	277.516	0.1938	0.01359	0.012	275.300
1157	0.410	0.04005	278.184	0.1930	0.01359	0.008	275.278
1163	0.411	0.06246	279.835	0.1922	0.01384	0.005	275.287
1166	0.426	0.02270	286.779	0.1932	0.01441	0.021	285.250
1169	0.427	0.03085	287.353	0.1935	0.01456	0.013	285.253
1172	0.431	0.04025	288.005	0.1947	0.01439	0.009	285.249
1175	0.431	0.05089	288.761	0.1943	0.01468	0.007	285.264
1178	0.429	0.06276	289.585	0.1924	0.01478	0.005	285.259
1181	0.555	0.02270	286.737	0.2591	0.01457	0.021	285.246
1184	0.559	0.03085	287.248	0.2606	0.01474	0.014	285.249
1187	0.561	0.04026	287.867	0.2605	0.01464	0.009	285.237
1190	0.556	0.05090	288.594	0.2575	0.01483	0.007	285.248
1193	0.554	0.06278	289.388	0.2553	0.01487	0.005	285.259
1196	0.555	0.02271	286.685	0.2594	0.01463	0.022	285.195
1199	0.559	0.03086	287.264	0.2606	0.01460	0.013	285.224
1202	0.559	0.04026	287.872	0.2599	0.01453	0.009	285.200
1205	0.555	0.05091	288.590	0.2569	0.01482	0.006	285.209
1208	0.555	0.06280	289.375	0.2558	0.01487	0.005	285.208
1211	0.351	0.02268	286.767	0.1568	0.01455	0.021	285.188
1214	0.354	0.03084	287.371	0.1578	0.01465	0.013	285.199
1217	0.353	0.04024	288.041	0.1569	0.01446	0.009	285.190
1223	0.350	0.06276	289.646	0.1543	0.01466	0.005	285.203
1226	0.269	0.02271	286.447	0.1186	0.01439	0.021	284.820
1229	0.269	0.03088	287.067	0.1180	0.01439	0.013	284.823
1232	0.268	0.04029	287.773	0.1176	0.01455	0.009	284.827
1235	0.269	0.05094	288.554	0.1174	0.01468	0.007	284.829
1238	0.270	0.06283	289.413	0.1176	0.01475	0.005	284.827
1241	0.552	0.03103	286.298	0.2582	0.01464	0.014	284.234
1244	0.553	0.04048	286.947	0.2579	0.01446	0.009	284.247
1247	0.552	0.05118	287.659	0.2565	0.01462	0.007	284.240
1250	0.551	0.06312	288.463	0.2550	0.01477	0.005	284.244
1253	0.552	0.07630	289.336	0.2543	0.01481	0.004	284.239
1256	0.446	0.03103	286.370	0.2034	0.01446	0.013	284.237
1259	0.445	0.04048	287.020	0.2027	0.01446	0.009	284.231
1262	0.444	0.05117	287.763	0.2015	0.01446	0.006	284.233
1265	0.443	0.06311	288.565	0.2003	0.01469	0.005	284.216
1268	0.444	0.07627	289.490	0.1999	0.01474	0.004	284.242
1271	0.347	0.03103	286.386	0.1550	0.01455	0.013	284.222
1274	0.346	0.04047	287.064	0.1542	0.01441	0.009	284.225
1277	0.345	0.05116	287.832	0.1532	0.01463	0.006	284.227
1280	0.344	0.06309	288.659	0.1524	0.01466	0.005	284.214

Table 20. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1283	0.345	0.07627	289.610	0.1521	0.01476	0.004	284.238
1286	0.218	0.03102	286.482	0.0951	0.01445	0.014	284.220
1289	0.218	0.04047	287.210	0.0947	0.01420	0.009	284.221
1292	0.218	0.05116	288.027	0.0944	0.01432	0.007	284.234
1295	0.218	0.06309	288.909	0.0944	0.01461	0.006	284.218
1298	0.219	0.07625	289.904	0.0944	0.01472	0.004	284.234
1301	0.101	0.09063	291.387	0.0426	0.01491	0.004	284.217
1304	0.102	0.10618	292.597	0.0424	0.01503	0.003	284.220
1307	0.103	0.12295	293.895	0.0428	0.01522	0.003	284.218
1310	0.104	0.14088	295.271	0.0431	0.01539	0.003	284.218
1313	0.104	0.16000	296.730	0.0427	0.01552	0.003	284.220
1316	0.558	0.03054	296.832	0.2483	0.01548	0.015	294.905
1319	0.557	0.03986	297.431	0.2473	0.01552	0.010	294.907
1322	0.557	0.05040	298.116	0.2466	0.01562	0.007	294.913
1325	0.558	0.06215	298.857	0.2463	0.01565	0.005	294.904
1328	0.560	0.07512	299.678	0.2463	0.01578	0.004	294.904
1331	0.439	0.03054	296.858	0.1913	0.01553	0.016	294.887
1334	0.439	0.03985	297.479	0.1905	0.01560	0.010	294.900
1337	0.438	0.05040	298.164	0.1897	0.01555	0.007	294.885
1340	0.438	0.06216	298.951	0.1890	0.01562	0.006	294.897
1343	0.439	0.07511	299.790	0.1887	0.01574	0.005	294.895
1346	0.315	0.03055	296.912	0.1343	0.01524	0.014	294.862
1349	0.314	0.03985	297.591	0.1333	0.01529	0.010	294.893
1352	0.315	0.05037	298.307	0.1333	0.01549	0.007	294.883
1355	0.316	0.06212	299.103	0.1336	0.01560	0.005	294.873
1358	0.316	0.07511	299.998	0.1331	0.01564	0.004	294.888
1361	0.212	0.03053	296.990	0.0887	0.01553	0.014	294.848
1364	0.213	0.03983	297.673	0.0889	0.01530	0.010	294.858
1367	0.213	0.05037	298.448	0.0885	0.01552	0.008	294.879
1370	0.211	0.06212	299.284	0.0876	0.01559	0.005	294.877
1373	0.210	0.07509	300.201	0.0869	0.01573	0.004	294.869
1376	0.103	0.03053	297.118	0.0425	0.01564	0.015	294.835
1379	0.103	0.03982	297.855	0.0422	0.01577	0.011	294.856
1382	0.104	0.05035	298.651	0.0426	0.01584	0.008	294.853
1385	0.105	0.06210	299.535	0.0430	0.01591	0.006	294.854
1388	0.106	0.07506	300.521	0.0431	0.01598	0.005	294.867
1391	0.555	0.02952	306.708	0.2365	0.01639	0.018	304.932
1394	0.553	0.03852	307.260	0.2348	0.01648	0.012	304.928
1397	0.551	0.04872	307.900	0.2335	0.01651	0.008	304.944
1400	0.553	0.06010	308.589	0.2337	0.01667	0.006	304.939
1403	0.555	0.07268	309.341	0.2339	0.01677	0.005	304.929
1406	0.445	0.02953	306.706	0.1864	0.01639	0.018	304.910
1409	0.445	0.03853	307.273	0.1856	0.01654	0.012	304.912

Table 20. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1412	0.446	0.04871	307.932	0.1859	0.01655	0.008	304.927
1415	0.448	0.06009	308.635	0.1859	0.01635	0.006	304.900
1418	0.447	0.07265	309.440	0.1848	0.01659	0.005	304.924
1421	0.313	0.02953	306.755	0.1282	0.01627	0.018	304.908
1424	0.312	0.03852	307.327	0.1275	0.01634	0.012	304.894
1427	0.310	0.04872	308.010	0.1264	0.01656	0.009	304.902
1430	0.309	0.06010	308.793	0.1254	0.01658	0.006	304.904
1433	0.310	0.07265	309.595	0.1255	0.01670	0.005	304.891
1436	0.216	0.02953	306.820	0.0872	0.01633	0.018	304.876
1439	0.215	0.03853	307.440	0.0866	0.01651	0.011	304.887
1442	0.218	0.04872	308.146	0.0876	0.01646	0.009	304.892
1445	0.220	0.06008	308.897	0.0883	0.01667	0.006	304.876
1448	0.218	0.07261	309.730	0.0871	0.01671	0.005	304.866
1451	0.109	0.02945	306.386	0.0434	0.01674	0.018	304.287
1454	0.105	0.03843	307.044	0.0419	0.01684	0.013	304.294
1457	0.103	0.04860	307.782	0.0410	0.01678	0.009	304.293
1460	0.104	0.05993	308.593	0.0410	0.01686	0.007	304.294
1463	0.107	0.07242	309.485	0.0422	0.01700	0.006	304.298
1466	0.552	0.03050	316.729	0.2256	0.01763	0.017	314.981
1469	0.551	0.03979	317.317	0.2247	0.01764	0.012	315.019
1472	0.551	0.05030	317.913	0.2238	0.01762	0.009	314.991
1475	0.551	0.06204	318.594	0.2235	0.01751	0.006	314.990
1478	0.554	0.07499	319.347	0.2239	0.01763	0.005	314.993
1481	0.427	0.03049	316.756	0.1715	0.01727	0.017	314.975
1484	0.427	0.03978	317.295	0.1708	0.01750	0.012	314.952
1487	0.426	0.05030	317.959	0.1703	0.01758	0.008	314.981
1490	0.428	0.06203	318.638	0.1705	0.01764	0.006	314.956
1493	0.429	0.07500	319.413	0.1707	0.01769	0.005	314.957
1496	0.313	0.03047	316.735	0.1238	0.01747	0.017	314.879
1499	0.316	0.03975	317.316	0.1248	0.01753	0.012	314.879
1502	0.319	0.05028	317.966	0.1255	0.01753	0.009	314.873
1505	0.319	0.06201	318.692	0.1253	0.01767	0.007	314.873
1508	0.316	0.07496	319.494	0.1238	0.01774	0.005	314.874
1511	0.204	0.03047	316.787	0.0796	0.01752	0.018	314.861
1514	0.208	0.03975	317.369	0.0809	0.01758	0.012	314.833
1517	0.209	0.05024	318.072	0.0812	0.01757	0.009	314.854
1520	0.206	0.06197	318.836	0.0797	0.01763	0.007	314.861
1523	0.204	0.07491	319.648	0.0787	0.01769	0.005	314.844
1526	0.102	0.03046	316.842	0.0392	0.01773	0.018	314.807
1529	0.105	0.03974	317.467	0.0405	0.01803	0.013	314.792
1532	0.109	0.05024	318.215	0.0417	0.01801	0.009	314.820
1535	0.106	0.06196	318.996	0.0405	0.01816	0.008	314.802
1538	0.104	0.07489	319.867	0.0396	0.01816	0.006	314.799

Table 20. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1541	0.556	0.03042	326.371	0.2188	0.01862	0.018	324.721
1544	0.558	0.03968	326.907	0.2193	0.01852	0.013	324.728
1547	0.557	0.05017	327.480	0.2183	0.01852	0.009	324.709
1550	0.553	0.06189	328.143	0.2162	0.01864	0.007	324.717
1553	0.555	0.07484	328.850	0.2163	0.01850	0.005	324.712
1556	0.428	0.03042	326.365	0.1656	0.01855	0.019	324.694
1559	0.429	0.03968	326.894	0.1657	0.01861	0.013	324.681
1562	0.425	0.05017	327.519	0.1640	0.01866	0.009	324.698
1565	0.425	0.06189	328.192	0.1636	0.01872	0.007	324.697
1568	0.427	0.07481	328.939	0.1637	0.01875	0.005	324.706
1571	0.303	0.03039	326.454	0.1155	0.01839	0.018	324.675
1574	0.305	0.03966	327.001	0.1160	0.01850	0.013	324.666
1577	0.306	0.05015	327.654	0.1162	0.01873	0.009	324.687
1580	0.305	0.06188	328.349	0.1157	0.01871	0.007	324.692
1583	0.303	0.07481	329.126	0.1145	0.01877	0.005	324.704
1586	0.206	0.03041	326.451	0.0778	0.01858	0.018	324.632
1589	0.207	0.03966	327.051	0.0781	0.01857	0.013	324.654
1592	0.209	0.05015	327.715	0.0784	0.01870	0.009	324.666
1595	0.208	0.06185	328.414	0.0778	0.01878	0.007	324.647
1598	0.206	0.07475	329.197	0.0770	0.01897	0.005	324.638
1616	0.566	0.02945	336.404	0.2150	0.01931	0.021	334.879
1619	0.565	0.03840	336.880	0.2142	0.01936	0.014	334.867
1622	0.564	0.04856	337.427	0.2135	0.01928	0.011	334.866
1625	0.565	0.05991	338.037	0.2133	0.01966	0.008	334.873
1628	0.565	0.07243	338.688	0.2128	0.01974	0.006	334.857
1631	0.439	0.02944	336.364	0.1646	0.01947	0.021	334.825
1634	0.439	0.03839	336.864	0.1641	0.01959	0.015	334.827
1637	0.440	0.04855	337.439	0.1642	0.01953	0.010	334.842
1640	0.440	0.05989	338.052	0.1637	0.01957	0.008	334.831
1643	0.439	0.07241	338.746	0.1631	0.01966	0.006	334.840
1646	0.312	0.02943	336.399	0.1151	0.01934	0.021	334.809
1649	0.311	0.03839	336.908	0.1146	0.01994	0.015	334.810
1652	0.313	0.04854	337.480	0.1153	0.01947	0.011	334.802
1655	0.315	0.05988	338.121	0.1155	0.01978	0.008	334.799
1658	0.314	0.07239	338.832	0.1150	0.01986	0.006	334.807
1661	0.213	0.02943	336.386	0.0780	0.01985	0.022	334.747
1664	0.212	0.03839	336.943	0.0774	0.01971	0.016	334.772
1667	0.213	0.04854	337.551	0.0776	0.01962	0.011	334.782
1670	0.214	0.05988	338.217	0.0777	0.01974	0.008	334.783
1673	0.214	0.07240	338.927	0.0774	0.02007	0.006	334.763
1691	0.554	0.03719	346.114	0.2032	0.02044	0.016	344.260
1694	0.554	0.04702	346.601	0.2028	0.02072	0.012	344.239
1697	0.554	0.05800	347.166	0.2023	0.02080	0.009	344.241

Table 20. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1700	0.554	0.07014	347.763	0.2020	0.02071	0.007	344.224
1703	0.554	0.08340	348.424	0.2016	0.02094	0.005	344.219
1706	0.447	0.03719	346.045	0.1622	0.02073	0.017	344.155
1709	0.447	0.04702	346.572	0.1620	0.02075	0.012	344.174
1712	0.447	0.05799	347.132	0.1616	0.02084	0.009	344.156
1715	0.448	0.07012	347.755	0.1614	0.02081	0.007	344.147
1718	0.448	0.08338	348.439	0.1611	0.02093	0.005	344.145
1721	0.313	0.03718	345.978	0.1119	0.02067	0.017	344.044
1724	0.313	0.04700	346.480	0.1117	0.02073	0.012	344.014
1727	0.312	0.05798	347.098	0.1113	0.02093	0.009	344.034
1730	0.312	0.07011	347.721	0.1112	0.02105	0.007	344.004
1733	0.312	0.08338	348.439	0.1108	0.02100	0.006	344.015
1736	0.210	0.03717	345.952	0.0744	0.02092	0.018	343.930
1739	0.210	0.04699	346.495	0.0741	0.02102	0.012	343.923
1742	0.209	0.05795	347.108	0.0739	0.02091	0.009	343.923
1745	0.209	0.07007	347.770	0.0738	0.02109	0.007	343.909
1748	0.209	0.08333	348.504	0.0736	0.02118	0.006	343.904

Table 21. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.221	0.03460	263.817	0.1066	0.01139	0.009	260.587
1004	0.219	0.04240	264.593	0.1051	0.01150	0.007	260.622
1007	0.221	0.05095	265.459	0.1061	0.01154	0.006	260.673
1010	0.222	0.06024	266.382	0.1059	0.01162	0.005	260.717
1013	0.220	0.07034	267.373	0.1043	0.01168	0.004	260.766
1016	0.214	0.03512	259.684	0.1053	0.01104	0.010	256.348
1019	0.214	0.04300	260.408	0.1049	0.01112	0.008	256.319
1022	0.214	0.05165	261.245	0.1046	0.01120	0.006	256.337
1025	0.214	0.06110	262.121	0.1040	0.01127	0.005	256.336
1031	0.092	0.03518	259.505	0.0438	0.01102	0.008	255.837
1034	0.092	0.04308	260.324	0.0438	0.01113	0.007	255.833
1037	0.092	0.05177	261.210	0.0434	0.01123	0.006	255.823
1040	0.092	0.06123	262.198	0.0432	0.01123	0.005	255.835
1043	0.092	0.07145	263.241	0.0429	0.01133	0.004	255.834
1046	0.096	0.03383	270.908	0.0434	0.01202	0.010	267.626
1049	0.096	0.04143	271.646	0.0435	0.01207	0.008	267.628
1052	0.096	0.03383	270.868	0.0435	0.01198	0.010	267.604
1055	0.096	0.04143	271.602	0.0435	0.01201	0.008	267.602
1058	0.096	0.04979	272.397	0.0435	0.01215	0.007	267.587
1061	0.096	0.05890	273.288	0.0432	0.01221	0.006	267.603
1064	0.095	0.06875	274.222	0.0423	0.01230	0.005	267.593
1067	0.279	0.03388	270.392	0.1328	0.01177	0.012	267.439
1070	0.279	0.04149	271.067	0.1322	0.01204	0.009	267.445
1073	0.279	0.04986	271.798	0.1317	0.01204	0.007	267.447
1076	0.279	0.05898	272.578	0.1313	0.01208	0.006	267.437
1079	0.279	0.06885	273.449	0.1307	0.01216	0.004	267.454
1082	0.285	0.03369	276.748	0.1319	0.01239	0.012	273.916
1085	0.286	0.04125	277.388	0.1318	0.01248	0.009	273.913
1088	0.286	0.04957	278.091	0.1316	0.01251	0.007	273.914
1091	0.286	0.05865	278.854	0.1313	0.01260	0.006	273.916
1094	0.287	0.06850	279.675	0.1313	0.01268	0.005	273.919
1097	0.098	0.03367	277.009	0.0434	0.01244	0.017	273.861
1100	0.097	0.04123	277.731	0.0431	0.01253	0.013	273.870
1103	0.098	0.04953	278.508	0.0433	0.01263	0.012	273.869
1106	0.099	0.05862	279.341	0.0436	0.01270	0.010	273.863
1109	0.100	0.06844	280.259	0.0438	0.01282	0.008	273.876
1112	0.103	0.03276	287.560	0.0440	0.01350	0.016	284.684
1115	0.104	0.04013	288.198	0.0441	0.01342	0.011	284.669
1118	0.104	0.04824	288.902	0.0441	0.01354	0.009	284.660
1121	0.104	0.05706	289.674	0.0439	0.01370	0.007	284.658
1124	0.103	0.06662	290.470	0.0436	0.01374	0.006	284.622
1127	0.280	0.03277	287.193	0.1234	0.01321	0.014	284.584
1130	0.281	0.04015	287.802	0.1236	0.01331	0.010	284.596

Table 21. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1133	0.281	0.04827	288.448	0.1235	0.01344	0.008	284.589
1136	0.281	0.05710	289.156	0.1230	0.01346	0.007	284.581
1139	0.280	0.06666	289.913	0.1224	0.01350	0.006	284.579
1142	0.292	0.03157	298.653	0.1233	0.01414	0.014	296.279
1145	0.292	0.03868	299.188	0.1232	0.01414	0.012	296.274
1148	0.293	0.04652	299.801	0.1231	0.01439	0.009	296.293
1151	0.293	0.05504	300.429	0.1230	0.01444	0.007	296.274
1154	0.293	0.06425	301.112	0.1225	0.01449	0.006	296.268
1172	0.103	0.03103	304.445	0.0413	0.01505	0.016	301.959
1175	0.103	0.03802	304.977	0.0411	0.01507	0.014	301.922
1178	0.102	0.04570	305.582	0.0408	0.01524	0.009	301.907
1181	0.102	0.05406	306.239	0.0407	0.01532	0.009	301.889
1184	0.103	0.06315	306.963	0.0409	0.01535	0.007	301.891
1187	0.284	0.03110	303.583	0.1176	0.01463	0.015	301.290
1190	0.284	0.03810	304.115	0.1174	0.01450	0.012	301.295
1193	0.283	0.04582	304.704	0.1167	0.01485	0.009	301.308
1196	0.282	0.05422	305.301	0.1161	0.01485	0.007	301.280
1199	0.282	0.06330	305.985	0.1157	0.01493	0.007	301.294
1202	0.293	0.03022	312.920	0.1172	0.01550	0.015	310.820
1205	0.293	0.03702	313.399	0.1170	0.01569	0.011	310.819
1208	0.293	0.04450	313.920	0.1168	0.01570	0.009	310.816
1211	0.293	0.05267	314.474	0.1166	0.01579	0.007	310.792
1214	0.293	0.06151	315.081	0.1163	0.01582	0.006	310.782
1247	0.297	0.02942	322.086	0.1151	0.01659	0.019	320.146
1250	0.298	0.03605	322.520	0.1150	0.01652	0.013	320.132
1253	0.297	0.04335	322.993	0.1148	0.01644	0.010	320.118
1256	0.297	0.05130	323.510	0.1143	0.01670	0.008	320.106
1259	0.296	0.05992	324.081	0.1139	0.01680	0.006	320.103
1262	0.305	0.02961	330.817	0.1146	0.01730	0.019	328.951
1265	0.305	0.03628	331.231	0.1147	0.01736	0.013	328.939
1268	0.305	0.04363	331.653	0.1145	0.01713	0.010	328.891
1271	0.306	0.05163	332.169	0.1144	0.01740	0.008	328.900
1274	0.305	0.06031	332.696	0.1139	0.01747	0.007	328.878
1307	0.284	0.02972	339.169	0.1035	0.01787	0.019	337.355
1310	0.283	0.03642	339.561	0.1033	0.01816	0.014	337.330
1313	0.283	0.04378	339.987	0.1031	0.01797	0.011	337.294
1316	0.284	0.05183	340.453	0.1032	0.01801	0.009	337.266
1319	0.284	0.06054	340.962	0.1031	0.01806	0.007	337.238

Table 22. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1001	0.086	0.02304	257.680	0.0413	0.01071	0.015	255.203
1004	0.087	0.03132	258.576	0.0417	0.01082	0.010	255.201
1007	0.087	0.04086	259.591	0.0414	0.01087	0.007	255.192
1010	0.086	0.05165	260.740	0.0407	0.01092	0.006	255.192
1013	0.086	0.06368	262.021	0.0406	0.01102	0.004	255.202
1016	0.138	0.02304	257.528	0.0673	0.01065	0.015	255.187
1019	0.138	0.03133	258.401	0.0668	0.01066	0.010	255.191
1022	0.139	0.04087	259.383	0.0672	0.01081	0.007	255.194
1025	0.140	0.05168	260.478	0.0672	0.01085	0.005	255.188
1028	0.139	0.06372	261.702	0.0666	0.01095	0.004	255.195
1031	0.143	0.02235	267.399	0.0670	0.01147	0.018	265.257
1034	0.143	0.03040	268.170	0.0666	0.01147	0.011	265.251
1037	0.144	0.03968	269.065	0.0668	0.01156	0.007	265.247
1040	0.145	0.05016	270.071	0.0669	0.01162	0.006	265.245
1043	0.145	0.06186	271.195	0.0665	0.01170	0.004	265.250
1046	0.088	0.02228	269.933	0.0402	0.01172	0.017	267.732
1049	0.088	0.03030	270.737	0.0398	0.01166	0.011	267.715
1052	0.087	0.03953	271.669	0.0391	0.01190	0.008	267.722
1055	0.087	0.04998	272.696	0.0394	0.01196	0.006	267.712
1058	0.088	0.06163	273.863	0.0395	0.01206	0.005	267.723
1061	0.212	0.02229	269.735	0.1000	0.01160	0.017	267.709
1064	0.211	0.03031	270.481	0.0991	0.01172	0.011	267.716
1067	0.210	0.03955	271.326	0.0982	0.01177	0.008	267.707
1070	0.211	0.05001	272.291	0.0982	0.01186	0.006	267.716
1073	0.212	0.06168	273.360	0.0981	0.01193	0.004	267.728
1076	0.274	0.02229	269.645	0.1315	0.01164	0.017	267.695
1079	0.273	0.03032	270.363	0.1305	0.01170	0.011	267.695
1082	0.271	0.03956	271.191	0.1293	0.01184	0.007	267.693
1085	0.271	0.05002	272.121	0.1287	0.01188	0.005	267.700
1088	0.273	0.06168	273.135	0.1289	0.01195	0.004	267.686
1091	0.283	0.02170	278.844	0.1303	0.01232	0.019	277.043
1094	0.284	0.02951	279.520	0.1305	0.01243	0.013	277.039
1097	0.285	0.03851	280.302	0.1306	0.01255	0.009	277.055
1100	0.285	0.04870	281.138	0.1301	0.01258	0.006	277.035
1103	0.284	0.06006	282.098	0.1292	0.01265	0.005	277.041
1106	0.087	0.02169	279.043	0.0383	0.01263	0.021	276.998
1109	0.087	0.02949	279.780	0.0379	0.01258	0.013	276.991
1112	0.085	0.03848	280.648	0.0372	0.01270	0.010	276.998
1115	0.086	0.04866	281.610	0.0372	0.01278	0.007	276.997
1118	0.086	0.06002	282.696	0.0374	0.01285	0.006	277.001
1121	0.184	0.02170	278.880	0.0829	0.01211	0.020	276.963
1124	0.184	0.02951	279.585	0.0824	0.01235	0.013	276.964
1127	0.183	0.03850	280.403	0.0817	0.01243	0.008	276.976

Table 22. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1130	0.184	0.04868	281.317	0.0817	0.01251	0.006	276.987
1133	0.185	0.06004	282.290	0.0819	0.01261	0.005	276.956
1136	0.350	0.02169	277.984	0.1651	0.01233	0.019	276.217
1139	0.351	0.02950	278.643	0.1651	0.01235	0.013	276.218
1142	0.350	0.03851	279.400	0.1639	0.01248	0.009	276.220
1145	0.349	0.04870	280.245	0.1626	0.01257	0.006	276.220
1148	0.349	0.06007	281.164	0.1617	0.01260	0.005	276.202
1151	0.407	0.02171	277.902	0.1949	0.01246	0.020	276.173
1154	0.408	0.02951	278.521	0.1952	0.01254	0.013	276.161
1157	0.409	0.03851	279.265	0.1950	0.01254	0.009	276.172
1160	0.408	0.04872	280.106	0.1933	0.01261	0.006	276.192
1163	0.406	0.06009	281.007	0.1917	0.01262	0.005	276.182
1166	0.426	0.02183	287.579	0.1953	0.01302	0.021	285.933
1169	0.425	0.02968	288.212	0.1942	0.01322	0.014	285.943
1172	0.425	0.03874	288.895	0.1936	0.01315	0.009	285.926
1175	0.427	0.04899	289.709	0.1938	0.01335	0.006	285.954
1178	0.428	0.06043	290.570	0.1935	0.01334	0.005	285.938
1181	0.331	0.02183	287.633	0.1483	0.01296	0.021	285.914
1184	0.332	0.02968	288.271	0.1487	0.01316	0.014	285.916
1187	0.333	0.03874	288.991	0.1485	0.01323	0.009	285.906
1190	0.332	0.04898	289.803	0.1477	0.01328	0.006	285.914
1193	0.331	0.06043	290.702	0.1465	0.01338	0.005	285.908
1196	0.249	0.02183	287.635	0.1097	0.01306	0.021	285.869
1199	0.250	0.02968	288.287	0.1096	0.01317	0.014	285.858
1202	0.249	0.03873	289.050	0.1091	0.01312	0.009	285.867
1205	0.248	0.04898	289.905	0.1081	0.01321	0.006	285.879
1208	0.247	0.06041	290.819	0.1070	0.01337	0.005	285.856
1211	0.183	0.02184	287.462	0.0794	0.01268	0.020	285.637
1214	0.183	0.02969	288.148	0.0792	0.01296	0.013	285.631
1217	0.183	0.03874	288.917	0.0789	0.01316	0.009	285.624
1220	0.183	0.04899	289.799	0.0787	0.01328	0.006	285.634
1223	0.183	0.06042	290.768	0.0786	0.01336	0.005	285.640
1241	0.490	0.02185	287.225	0.2290	0.01319	0.021	285.609
1244	0.491	0.02972	287.820	0.2290	0.01328	0.014	285.608
1247	0.492	0.03878	288.525	0.2286	0.01320	0.009	285.625
1250	0.492	0.04903	289.289	0.2276	0.01337	0.007	285.616
1253	0.491	0.06048	290.145	0.2258	0.01344	0.005	285.615
1256	0.524	0.02118	297.729	0.2344	0.01404	0.024	296.252
1259	0.524	0.02881	298.301	0.2336	0.01405	0.016	296.258
1262	0.524	0.03761	298.944	0.2327	0.01415	0.011	296.261
1265	0.525	0.04756	299.635	0.2326	0.01410	0.008	296.241
1268	0.527	0.05868	300.441	0.2328	0.01420	0.006	296.253
1271	0.440	0.02124	297.046	0.1938	0.01395	0.025	295.519

Table 22. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1274	0.439	0.02888	297.620	0.1927	0.01391	0.016	295.522
1277	0.438	0.03769	298.272	0.1916	0.01395	0.011	295.523
1280	0.440	0.04767	299.013	0.1920	0.01406	0.008	295.522
1283	0.441	0.05881	299.813	0.1917	0.01416	0.006	295.507
1286	0.348	0.02124	297.081	0.1505	0.01381	0.024	295.497
1289	0.346	0.02889	297.667	0.1492	0.01382	0.014	295.501
1292	0.347	0.03770	298.339	0.1488	0.01375	0.010	295.504
1295	0.347	0.04767	299.086	0.1488	0.01398	0.007	295.495
1298	0.349	0.05880	299.919	0.1489	0.01403	0.005	295.485
1301	0.257	0.02124	297.112	0.1089	0.01362	0.025	295.481
1304	0.258	0.02888	297.727	0.1094	0.01396	0.017	295.489
1307	0.258	0.03769	298.412	0.1090	0.01388	0.011	295.478
1310	0.257	0.04766	299.185	0.1082	0.01395	0.008	295.464
1313	0.256	0.05879	300.085	0.1073	0.01411	0.006	295.496
1316	0.178	0.02124	297.097	0.0744	0.01372	0.023	295.410
1319	0.177	0.02887	297.727	0.0738	0.01376	0.015	295.411
1322	0.179	0.03768	298.446	0.0744	0.01400	0.011	295.407
1325	0.180	0.04765	299.284	0.0746	0.01401	0.007	295.434
1328	0.178	0.05878	300.154	0.0736	0.01416	0.006	295.402
1361	0.183	0.02132	307.476	0.0737	0.01486	0.025	305.849
1364	0.181	0.02899	308.073	0.0728	0.01489	0.016	305.847
1367	0.181	0.03783	308.770	0.0725	0.01476	0.011	305.853
1370	0.184	0.04783	309.535	0.0734	0.01507	0.008	305.848
1373	0.183	0.05900	310.396	0.0731	0.01508	0.006	305.854
1376	0.269	0.02133	307.273	0.1100	0.01487	0.026	305.701
1379	0.267	0.02900	307.865	0.1088	0.01488	0.016	305.720
1382	0.268	0.03785	308.525	0.1089	0.01480	0.011	305.723
1385	0.270	0.04787	309.241	0.1095	0.01501	0.008	305.692
1388	0.270	0.05906	310.074	0.1092	0.01509	0.006	305.695
1391	0.348	0.02134	307.063	0.1442	0.01468	0.025	305.554
1394	0.347	0.02902	307.632	0.1434	0.01483	0.017	305.539
1397	0.350	0.03788	308.280	0.1442	0.01474	0.011	305.546
1400	0.351	0.04789	309.002	0.1443	0.01482	0.008	305.537
1403	0.349	0.05907	309.783	0.1432	0.01494	0.006	305.514
1406	0.438	0.02133	306.616	0.1846	0.01461	0.026	305.122
1409	0.436	0.02901	307.163	0.1834	0.01481	0.016	305.124
1412	0.435	0.03785	307.793	0.1823	0.01483	0.011	305.129
1415	0.437	0.04787	308.478	0.1828	0.01483	0.008	305.107
1418	0.437	0.05906	309.263	0.1825	0.01491	0.006	305.111
1421	0.492	0.02134	306.540	0.2097	0.01470	0.026	305.084
1424	0.494	0.02901	307.053	0.2102	0.01466	0.016	305.062
1427	0.497	0.03786	307.694	0.2110	0.01490	0.011	305.083
1430	0.495	0.04789	308.393	0.2094	0.01485	0.008	305.081

Table 22. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1433	0.493	0.05908	309.165	0.2078	0.01490	0.006	305.079
1436	0.514	0.02135	318.554	0.2090	0.01578	0.027	317.176
1439	0.517	0.02904	319.067	0.2099	0.01594	0.018	317.182
1442	0.518	0.03790	319.630	0.2098	0.01580	0.012	317.163
1445	0.516	0.04793	320.282	0.2083	0.01591	0.008	317.154
1448	0.514	0.05913	321.012	0.2070	0.01588	0.006	317.151
1451	0.436	0.02136	318.428	0.1752	0.01589	0.028	317.026
1454	0.436	0.02905	318.923	0.1751	0.01593	0.018	317.004
1457	0.435	0.03790	319.529	0.1739	0.01592	0.011	317.019
1460	0.433	0.04794	320.188	0.1728	0.01601	0.008	317.005
1463	0.435	0.05914	320.906	0.1732	0.01592	0.006	316.981
1466	0.344	0.02137	318.271	0.1366	0.01605	0.028	316.831
1469	0.346	0.02906	318.813	0.1372	0.01567	0.017	316.828
1472	0.345	0.03792	319.440	0.1361	0.01571	0.011	316.845
1475	0.342	0.04796	320.100	0.1348	0.01585	0.008	316.820
1478	0.344	0.05915	320.855	0.1353	0.01596	0.006	316.810
1481	0.262	0.02144	317.186	0.1031	0.01571	0.028	315.700
1484	0.260	0.02915	317.756	0.1021	0.01583	0.017	315.708
1487	0.258	0.03804	318.366	0.1008	0.01583	0.012	315.686
1490	0.258	0.04809	319.093	0.1008	0.01589	0.008	315.701
1493	0.262	0.05932	319.865	0.1021	0.01593	0.006	315.673
1496	0.177	0.02143	317.185	0.0689	0.01574	0.030	315.641
1499	0.177	0.02915	317.741	0.0688	0.01579	0.019	315.627
1502	0.180	0.03805	318.391	0.0695	0.01598	0.012	315.623
1505	0.180	0.04813	319.117	0.0697	0.01596	0.008	315.608
1508	0.179	0.05937	319.930	0.0690	0.01591	0.007	315.600
1541	0.179	0.02141	328.401	0.0669	0.01676	0.030	326.932
1544	0.177	0.02912	328.916	0.0661	0.01676	0.018	326.899
1547	0.178	0.03801	329.535	0.0662	0.01693	0.013	326.896
1550	0.179	0.04807	330.223	0.0667	0.01708	0.009	326.883
1553	0.182	0.05929	330.960	0.0677	0.01715	0.007	326.844
1556	0.265	0.02140	326.331	0.1008	0.01660	0.029	324.922
1559	0.261	0.02910	326.850	0.0994	0.01659	0.018	324.912
1562	0.260	0.03798	327.464	0.0988	0.01659	0.012	324.894
1565	0.264	0.04803	328.126	0.0998	0.01670	0.009	324.876
1568	0.265	0.05925	328.904	0.0999	0.01674	0.007	324.876
1571	0.357	0.02131	326.148	0.1376	0.01627	0.029	324.760
1574	0.354	0.02898	326.650	0.1362	0.01637	0.019	324.743
1577	0.351	0.03782	327.218	0.1347	0.01658	0.012	324.727
1580	0.353	0.04783	327.870	0.1353	0.01661	0.009	324.721
1583	0.357	0.05900	328.594	0.1365	0.01671	0.007	324.711
1586	0.431	0.02132	325.771	0.1683	0.01614	0.028	324.431
1589	0.429	0.02900	326.279	0.1671	0.01629	0.018	324.419

Table 22. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1592	0.432	0.03785	326.857	0.1682	0.01660	0.012	324.422
1595	0.434	0.04787	327.479	0.1684	0.01656	0.009	324.394
1598	0.431	0.05905	328.169	0.1670	0.01671	0.007	324.364
1601	0.507	0.02133	325.602	0.2004	0.01647	0.029	324.270
1604	0.509	0.02901	326.113	0.2008	0.01710	0.064	324.275
1607	0.514	0.03786	326.652	0.2023	0.01657	0.013	324.263
1610	0.515	0.04788	327.271	0.2025	0.01667	0.009	324.247
1613	0.513	0.05906	327.953	0.2012	0.01668	0.007	324.228
1616	0.532	0.02125	337.764	0.2012	0.01762	0.032	336.521
1619	0.532	0.02889	338.208	0.2011	0.01776	0.020	336.510
1622	0.533	0.03771	338.719	0.2013	0.01764	0.015	336.479
1625	0.534	0.04770	339.325	0.2012	0.01818	0.063	336.466
1628	0.534	0.05885	339.962	0.2007	0.01761	0.007	336.438
1631	0.442	0.02126	337.610	0.1657	0.01782	0.032	336.337
1634	0.441	0.02891	338.049	0.1649	0.01757	0.020	336.309
1637	0.441	0.03773	338.581	0.1647	0.01750	0.014	336.287
1640	0.443	0.04772	339.185	0.1649	0.01740	0.010	336.267
1643	0.443	0.05887	339.809	0.1648	0.01773	0.007	336.213
1646	0.353	0.02128	337.084	0.1312	0.01729	0.034	335.767
1649	0.354	0.02894	337.516	0.1311	0.01754	0.020	335.725
1652	0.355	0.03778	338.104	0.1315	0.01730	0.013	335.727
1655	0.355	0.04778	338.712	0.1312	0.01781	0.020	335.705
1658	0.354	0.05895	339.393	0.1303	0.01771	0.007	335.688
1661	0.255	0.02130	336.920	0.0937	0.01780	0.033	335.558
1664	0.254	0.02897	337.389	0.0932	0.01738	0.020	335.528
1667	0.253	0.03781	337.942	0.0925	0.01765	0.014	335.506
1670	0.253	0.04781	338.560	0.0926	0.01781	0.010	335.474
1673	0.255	0.05898	339.291	0.0929	0.01767	0.007	335.485
1676	0.176	0.02132	335.567	0.0645	0.01768	0.031	334.165
1679	0.176	0.02899	336.103	0.0643	0.01765	0.019	334.167
1682	0.178	0.03783	336.670	0.0649	0.01770	0.014	334.141
1685	0.179	0.04785	337.320	0.0650	0.01789	0.010	334.116
1688	0.178	0.05903	338.076	0.0644	0.01786	0.008	334.106
1721	0.185	0.02109	344.646	0.0659	0.01863	0.034	343.325
1724	0.187	0.02868	345.101	0.0664	0.01854	0.022	343.303
1727	0.188	0.03743	345.639	0.0667	0.01861	0.015	343.261
1730	0.187	0.04734	346.266	0.0662	0.01871	0.011	343.246
1733	0.186	0.05841	346.955	0.0656	0.01884	0.008	343.205
1736	0.268	0.02112	344.258	0.0962	0.01842	0.033	342.971
1739	0.268	0.02871	344.719	0.0963	0.01833	0.021	342.958
1742	0.270	0.03747	345.244	0.0966	0.01839	0.015	342.944
1745	0.269	0.04740	345.875	0.0962	0.01840	0.011	342.906
1748	0.268	0.05848	346.542	0.0955	0.01849	0.008	342.886

Table 22. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the vapor phase (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	STAT	T_{cell} K
1751	0.353	0.02116	343.582	0.1282	0.01821	0.033	342.329
1754	0.353	0.02877	344.064	0.1281	0.01806	0.021	342.323
1757	0.352	0.03755	344.562	0.1274	0.01826	0.014	342.290
1760	0.351	0.04748	345.167	0.1269	0.01825	0.010	342.270
1763	0.353	0.05858	345.804	0.1273	0.01843	0.008	342.218
1766	0.435	0.02117	343.257	0.1595	0.01844	0.032	342.021
1769	0.433	0.02880	343.708	0.1586	0.01799	0.021	342.011
1772	0.432	0.03759	344.212	0.1579	0.01820	0.049	341.973
1775	0.433	0.04754	344.799	0.1582	0.01802	0.010	341.971
1778	0.434	0.05866	345.422	0.1582	0.01820	0.007	341.909
1781	0.521	0.02119	342.956	0.1934	0.01798	0.033	341.736
1784	0.522	0.02882	343.380	0.1933	0.01799	0.020	341.712
1787	0.520	0.03762	343.902	0.1924	0.01803	0.014	341.697
1790	0.519	0.04758	344.475	0.1916	0.01791	0.010	341.672
1793	0.520	0.05870	345.089	0.1915	0.01808	0.007	341.641

10. Tables of steady-state results for bare tungsten wires

Table 23. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the dilute gas measured with the steady-state technique.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1003	0.216	0.02804	262.687	0.1058	0.01081	0.900	3.118	4.96	40.00	12817.
1006	0.215	0.03810	263.234	0.1051	0.01088	0.590	4.178	4.96	40.00	16740.
1009	0.216	0.04966	263.822	0.1055	0.01098	0.850	5.353	3.36	40.00	21401.
1012	0.218	0.06273	264.483	0.1059	0.01109	0.840	6.637	3.36	40.00	26445.
1015	0.218	0.07729	265.208	0.1055	0.01116	1.480	8.053	1.76	40.00	31408.
1018	0.147	0.02802	262.866	0.0706	0.01043	0.960	3.274	4.96	40.00	5274.
1021	0.147	0.03808	263.438	0.0702	0.01055	0.590	4.386	4.96	40.00	6916.
1024	0.146	0.04964	264.100	0.0693	0.01065	0.420	5.644	4.96	40.00	8579.
1027	0.146	0.06268	264.802	0.0691	0.01074	0.710	7.044	3.36	40.00	10505.
1030	0.147	0.07720	265.581	0.0695	0.01083	0.510	8.569	3.36	40.00	12781.
1036	0.076	0.03805	263.662	0.0355	0.01021	0.980	4.568	1.76	40.00	1649.
1039	0.076	0.04961	264.328	0.0356	0.01039	0.800	5.853	1.76	40.00	2097.
1042	0.074	0.06265	265.065	0.0345	0.01052	0.700	7.294	1.76	40.00	2428.
1045	0.074	0.07713	265.871	0.0342	0.01063	0.750	8.879	1.76	40.00	2869.
1048	0.296	0.02712	271.823	0.1428	0.01205	1.250	2.674	4.96	40.00	19162.
1051	0.299	0.03686	272.270	0.1441	0.01210	1.310	3.577	3.36	40.00	26013.
1054	0.301	0.04806	272.789	0.1447	0.01207	1.180	4.612	3.36	40.00	33546.
1057	0.299	0.06072	273.342	0.1433	0.01214	1.780	5.728	1.76	40.00	40259.
1060	0.296	0.07485	273.961	0.1412	0.01217	1.340	6.964	1.76	40.00	46689.
1063	0.216	0.02712	271.845	0.1014	0.01193	0.990	2.750	6.56	40.00	8733.
1066	0.218	0.03685	272.333	0.1021	0.01188	0.820	3.733	4.96	40.00	11959.
1069	0.220	0.04804	272.889	0.1032	0.01188	0.540	4.832	4.96	40.00	15731.
1072	0.220	0.06071	273.480	0.1028	0.01196	0.650	6.031	3.36	40.00	19287.
1075	0.217	0.07481	274.132	0.1008	0.01207	1.070	7.328	3.36	40.00	22132.
1078	0.149	0.02711	271.857	0.0689	0.01188	1.100	2.788	4.96	40.00	3714.
1081	0.146	0.03685	272.368	0.0671	0.01182	0.670	3.800	4.96	40.00	4751.
1084	0.148	0.04803	272.944	0.0677	0.01181	0.500	4.945	4.96	40.00	6252.
1087	0.151	0.06068	273.576	0.0690	0.01182	0.780	6.224	3.36	40.00	8111.
1090	0.151	0.07478	274.283	0.0687	0.01184	0.620	7.631	3.36	40.00	9761.
1093	0.078	0.02710	271.867	0.0353	0.01179	1.020	2.823	1.76	40.00	901.
1096	0.075	0.03683	272.381	0.0337	0.01175	0.720	3.848	1.76	40.00	1103.
1099	0.074	0.04805	272.954	0.0331	0.01175	0.710	5.015	1.76	40.00	1376.
1102	0.077	0.06068	273.611	0.0345	0.01176	0.810	6.327	1.76	40.00	1873.
1105	0.078	0.07474	274.339	0.0350	0.01178	0.700	7.772	1.76	40.00	2353.
1108	0.434	0.02611	282.379	0.2068	0.01242	1.480	2.424	4.96	40.00	36212.
1111	0.433	0.03552	282.761	0.2061	0.01255	1.370	3.202	3.36	40.00	47035.
1114	0.429	0.04633	283.201	0.2031	0.01270	1.930	4.062	1.76	40.00	57017.
1123	0.346	0.02612	282.400	0.1607	0.01241	1.400	2.498	4.96	40.00	19811.
1126	0.350	0.03552	282.816	0.1622	0.01253	1.300	3.324	3.36	40.00	26787.
1129	0.351	0.04631	283.277	0.1624	0.01260	1.150	4.252	3.36	40.00	34109.
1135	0.346	0.07217	284.338	0.1591	0.01276	1.500	6.393	1.76	40.00	47938.

Table 23. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1138	0.284	0.02612	282.362	0.1298	0.01251	1.040	2.512	6.56	40.00	11988.
1141	0.283	0.03551	282.802	0.1292	0.01257	0.760	3.377	4.96	40.00	15820.
1144	0.287	0.04631	283.279	0.1305	0.01265	1.100	4.337	3.36	40.00	20676.
1147	0.288	0.05851	283.805	0.1306	0.01273	0.960	5.400	3.36	40.00	25563.
1150	0.284	0.07213	284.398	0.1286	0.01281	0.900	6.569	3.36	40.00	29730.
1153	0.214	0.02612	282.345	0.0959	0.01263	1.080	2.516	6.56	40.00	6017.
1156	0.213	0.03551	282.800	0.0953	0.01261	0.820	3.412	4.96	40.00	7981.
1159	0.217	0.04630	283.301	0.0969	0.01261	0.630	4.428	4.96	40.00	10678.
1162	0.217	0.05852	283.865	0.0968	0.01265	0.430	5.554	4.96	40.00	13257.
1165	0.214	0.07212	284.482	0.0951	0.01272	0.670	6.781	3.36	40.00	15420.
1168	0.148	0.02612	282.324	0.0652	0.01288	1.160	2.483	3.36	40.00	2539.
1171	0.145	0.03550	282.772	0.0639	0.01281	0.970	3.389	3.36	40.00	3305.
1174	0.148	0.04630	283.283	0.0651	0.01276	0.760	4.428	3.36	40.00	4462.
1177	0.148	0.05849	283.870	0.0648	0.01275	0.710	5.588	3.36	40.00	5526.
1180	0.148	0.07209	284.501	0.0646	0.01275	0.600	6.871	3.36	40.00	6702.
1183	0.078	0.02611	282.279	0.0339	0.01303	1.390	2.462	1.76	40.00	632.
1186	0.076	0.03551	282.748	0.0330	0.01286	1.010	3.391	1.76	40.00	816.
1189	0.078	0.04631	283.285	0.0339	0.01278	0.770	4.449	1.76	40.00	1125.
1192	0.080	0.05850	283.879	0.0346	0.01272	0.650	5.642	1.76	40.00	1479.
1195	0.078	0.07208	284.539	0.0335	0.01271	0.620	6.955	1.76	40.00	1693.
1198	0.547	0.02522	292.570	0.2553	0.01334	1.660	2.145	3.36	40.00	45652.
1201	0.548	0.03430	292.903	0.2553	0.01354	2.850	2.808	1.76	40.00	59424.
1213	0.484	0.02521	292.542	0.2219	0.01380	1.850	2.124	4.96	40.00	31532.
1216	0.488	0.03429	292.909	0.2235	0.01374	1.320	2.846	3.36	40.00	42734.
1219	0.488	0.04473	293.308	0.2232	0.01372	1.580	3.646	3.36	40.00	54144.
1228	0.422	0.02521	292.530	0.1903	0.01400	1.770	2.131	4.96	40.00	21587.
1231	0.420	0.03428	292.895	0.1891	0.01397	1.400	2.868	4.96	40.00	28426.
1234	0.422	0.04473	293.304	0.1899	0.01395	1.590	3.694	3.36	40.00	36762.
1240	0.424	0.06971	294.241	0.1901	0.01394	1.930	5.588	1.76	40.00	54932.
1249	0.354	0.04472	293.265	0.1565	0.01425	1.320	3.703	3.36	40.00	23196.
1252	0.357	0.05653	293.743	0.1578	0.01416	1.120	4.658	3.36	40.00	29552.
1255	0.359	0.06971	294.257	0.1582	0.01410	1.230	5.703	3.36	40.00	36135.
1264	0.282	0.04473	293.297	0.1227	0.01410	0.670	3.806	4.96	40.00	13590.
1267	0.278	0.05654	293.797	0.1207	0.01405	1.080	4.804	3.36	40.00	16430.
1270	0.279	0.06969	294.342	0.1207	0.01402	0.810	5.896	3.36	40.00	20002.
1282	0.216	0.05651	293.817	0.0923	0.01397	0.560	4.892	4.96	40.00	9185.
1285	0.218	0.06967	294.390	0.0932	0.01389	0.350	6.043	4.96	40.00	11513.
1297	0.146	0.05651	293.811	0.0617	0.01394	0.660	4.953	3.36	40.00	3888.
1300	0.149	0.06966	294.416	0.0627	0.01382	0.550	6.143	3.36	40.00	4958.
1303	0.073	0.02519	292.103	0.0307	0.01328	1.300	2.331	1.76	40.00	432.
1306	0.075	0.03424	292.546	0.0311	0.01323	0.850	3.180	1.76	40.00	603.
1309	0.076	0.04467	293.023	0.0315	0.01323	0.740	4.146	1.76	40.00	803.
1312	0.076	0.05646	293.561	0.0315	0.01325	0.680	5.233	1.76	40.00	1005.

Table 23. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1315	0.074	0.06958	294.161	0.0307	0.01327	0.460	6.436	1.76	40.00	1167.
1438	0.537	0.02337	315.035	0.2245	0.01510	1.750	1.837	6.56	40.00	19779.
1441	0.538	0.03179	315.330	0.2246	0.01523	1.380	2.449	4.96	40.00	26297.
1444	0.534	0.04147	315.685	0.2223	0.01528	1.430	3.148	3.36	40.00	32819.
1447	0.533	0.05244	316.060	0.2215	0.01533	1.350	3.918	3.36	40.00	40308.
1450	0.537	0.06468	316.482	0.2229	0.01531	1.180	4.764	3.36	40.00	49463.
1453	0.484	0.02338	315.008	0.2004	0.01526	1.690	1.833	8.16	40.00	15090.
1456	0.488	0.03179	315.319	0.2017	0.01531	1.440	2.460	4.96	40.00	20494.
1459	0.489	0.04147	315.665	0.2020	0.01534	1.100	3.172	4.96	40.00	26369.
1462	0.485	0.05245	316.053	0.1998	0.01541	1.140	3.953	3.36	40.00	31894.
1465	0.484	0.06469	316.475	0.1991	0.01544	1.280	4.813	3.36	40.00	38275.
1468	0.420	0.02338	314.969	0.1716	0.01549	1.900	1.821	6.56	40.00	10477.
1471	0.421	0.03179	315.293	0.1722	0.01542	0.990	2.471	6.56	40.00	14268.
1474	0.425	0.04147	315.657	0.1735	0.01541	0.900	3.199	4.96	40.00	18703.
1477	0.423	0.05244	316.052	0.1723	0.01547	1.200	4.000	3.36	40.00	22907.
1480	0.419	0.06468	316.489	0.1703	0.01552	0.990	4.883	3.36	40.00	27066.
1489	0.347	0.04147	315.617	0.1400	0.01566	0.800	3.191	6.56	40.00	11469.
1492	0.347	0.05245	316.024	0.1396	0.01562	0.810	4.025	4.96	40.00	14307.
1495	0.351	0.06467	316.481	0.1409	0.01560	0.600	4.936	4.96	40.00	17832.
1504	0.284	0.04148	315.567	0.1132	0.01592	0.980	3.165	4.96	40.00	7118.
1507	0.288	0.05244	316.007	0.1146	0.01576	0.780	4.024	4.96	40.00	9243.
1510	0.286	0.06466	316.466	0.1138	0.01568	0.590	4.971	4.96	40.00	11185.
1519	0.213	0.04149	315.548	0.0839	0.01597	0.850	3.173	4.96	40.00	3733.
1522	0.217	0.05245	315.987	0.0853	0.01580	0.760	4.047	4.96	40.00	4905.
1525	0.219	0.06465	316.467	0.0860	0.01567	0.470	5.018	4.96	40.00	6154.
1534	0.144	0.04147	315.531	0.0560	0.01601	0.750	3.178	3.36	40.00	1587.
1537	0.143	0.05245	315.969	0.0555	0.01584	0.660	4.059	3.36	40.00	1985.
1540	0.147	0.06466	316.455	0.0571	0.01571	0.450	5.039	3.36	40.00	2597.
1549	0.075	0.04148	315.532	0.0291	0.01576	0.760	3.234	1.76	40.00	417.
1552	0.072	0.05243	315.982	0.0276	0.01562	0.590	4.126	1.76	40.00	475.
1555	0.070	0.06465	316.473	0.0271	0.01554	0.440	5.114	1.76	40.00	564.
1558	0.536	0.02276	322.503	0.2169	0.01633	1.990	1.669	6.56	40.00	14989.
1561	0.536	0.03096	322.787	0.2169	0.01627	1.500	2.256	4.96	40.00	20185.
1564	0.537	0.04040	323.127	0.2169	0.01622	1.350	2.924	4.96	40.00	26041.
1567	0.537	0.05108	323.486	0.2166	0.01623	1.240	3.655	3.36	40.00	32296.
1570	0.537	0.06301	323.884	0.2161	0.01626	1.400	4.447	3.36	40.00	38873.
1573	0.489	0.02277	322.465	0.1966	0.01665	1.940	1.646	8.16	40.00	11763.
1576	0.491	0.03096	322.762	0.1969	0.01645	1.270	2.249	6.56	40.00	16071.
1579	0.491	0.04040	323.103	0.1970	0.01636	1.100	2.924	4.96	40.00	20824.
1582	0.492	0.05108	323.464	0.1968	0.01633	1.020	3.671	4.96	40.00	25963.
1585	0.490	0.06300	323.870	0.1958	0.01632	1.020	4.489	3.36	40.00	31227.
1594	0.424	0.04041	323.080	0.1683	0.01647	0.830	2.938	6.56	40.00	14601.
1597	0.424	0.05110	323.460	0.1677	0.01640	0.680	3.708	4.96	40.00	18206.

Table 23. Thermal conductivity of the binary 30 % R125 / 70 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1600	0.422	0.06300	323.881	0.1669	0.01638	1.130	4.546	3.36	40.00	21961.
1609	0.355	0.04040	323.037	0.1393	0.01673	0.950	2.920	6.56	40.00	9506.
1612	0.353	0.05110	323.455	0.1384	0.01656	0.810	3.715	4.96	40.00	11860.
1615	0.350	0.06300	323.887	0.1367	0.01646	0.670	4.587	4.96	40.00	14179.
1627	0.281	0.05109	323.421	0.1088	0.01674	0.900	3.706	4.96	40.00	6990.
1630	0.282	0.06300	323.854	0.1089	0.01657	0.600	4.604	4.96	40.00	8665.
1642	0.210	0.05109	323.399	0.0803	0.01678	0.680	3.720	4.96	40.00	3656.
1645	0.211	0.06299	323.854	0.0807	0.01660	0.960	4.629	3.36	40.00	4578.
1657	0.144	0.05109	323.392	0.0545	0.01675	0.800	3.740	3.36	40.00	1628.
1660	0.143	0.06301	323.834	0.0540	0.01657	0.530	4.659	3.36	40.00	1982.
1672	0.078	0.05109	323.375	0.0293	0.01671	0.690	3.757	1.76	40.00	455.
1675	0.079	0.06299	323.830	0.0298	0.01651	0.500	4.688	1.76	40.00	585.
1678	0.539	0.02232	331.974	0.2100	0.01692	2.070	1.588	6.56	40.00	11746.
1681	0.539	0.03036	332.257	0.2101	0.01686	1.380	2.152	6.56	40.00	15876.
1684	0.540	0.03962	332.559	0.2100	0.01688	1.210	2.782	4.96	40.00	20444.
1687	0.540	0.05012	332.909	0.2098	0.01692	1.010	3.481	4.96	40.00	25414.
1690	0.540	0.06181	333.289	0.2094	0.01694	1.090	4.249	3.36	40.00	30736.
1696	0.489	0.03036	332.209	0.1891	0.01706	1.420	2.140	6.56	40.00	12429.
1699	0.489	0.03963	332.529	0.1889	0.01701	1.040	2.784	6.56	40.00	16064.
1702	0.488	0.05012	332.891	0.1884	0.01699	0.960	3.499	4.96	40.00	19977.
1705	0.488	0.06180	333.273	0.1880	0.01700	1.340	4.280	3.36	40.00	24235.
1714	0.420	0.03963	332.487	0.1606	0.01721	1.070	2.776	6.56	40.00	11132.
1717	0.421	0.05010	332.849	0.1607	0.01710	1.030	3.513	4.96	40.00	14049.
1720	0.421	0.06180	333.269	0.1605	0.01707	0.740	4.317	4.96	40.00	17145.
1768	0.146	0.02235	331.601	0.0539	0.01669	1.930	1.645	1.76	40.00	644.
1771	0.146	0.03039	331.924	0.0538	0.01658	1.170	2.250	3.36	40.00	876.
1774	0.146	0.03966	332.252	0.0540	0.01656	0.850	2.940	3.36	40.00	1147.
1777	0.146	0.05016	332.628	0.0539	0.01655	0.650	3.717	3.36	40.00	1442.
1780	0.146	0.06186	333.063	0.0538	0.01655	0.480	4.583	3.36	40.00	1763.
1786	0.076	0.03040	331.884	0.0279	0.01664	1.390	2.245	1.76	40.00	227.
1789	0.077	0.03967	332.232	0.0281	0.01654	0.910	2.949	1.76	40.00	301.
1792	0.077	0.05015	332.615	0.0279	0.01649	0.630	3.737	1.76	40.00	376.
1795	0.074	0.06186	333.064	0.0271	0.01650	0.470	4.609	1.76	40.00	435.

Table 24. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the dilute gas measured with the steady-state technique.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1003	0.088	0.02860	258.216	0.0420	0.01080	0.770	3.246	3.36	40.00	1817.
1006	0.089	0.03886	258.801	0.0425	0.01082	0.530	4.398	3.36	40.00	2509.
1009	0.091	0.05064	259.450	0.0430	0.01084	0.370	5.712	3.36	40.00	3309.
1012	0.090	0.06396	260.196	0.0428	0.01089	0.350	7.170	3.36	40.00	4070.
1015	0.088	0.07877	261.000	0.0415	0.01094	0.300	8.781	3.36	40.00	4616.
1018	0.178	0.02859	258.226	0.0872	0.01094	0.960	3.163	4.96	40.00	8701.
1021	0.176	0.03885	258.770	0.0860	0.01095	0.560	4.275	4.96	40.00	11317.
1024	0.175	0.05065	259.403	0.0855	0.01099	0.390	5.522	4.96	40.00	14268.
1027	0.177	0.06397	260.080	0.0860	0.01108	0.600	6.875	3.36	40.00	17815.
1030	0.178	0.07879	260.808	0.0861	0.01118	1.710	8.338	1.76	40.00	21417.
1063	0.093	0.02794	264.295	0.0433	0.01146	0.940	2.989	3.36	40.00	1639.
1066	0.095	0.03797	264.810	0.0440	0.01148	0.550	4.050	3.36	40.00	2285.
1069	0.096	0.04949	265.390	0.0447	0.01150	0.400	5.264	3.36	40.00	3055.
1072	0.097	0.06251	266.047	0.0447	0.01152	0.370	6.628	3.36	40.00	3808.
1075	0.096	0.07701	266.777	0.0442	0.01155	0.250	8.130	3.36	40.00	4506.
1078	0.091	0.02794	264.352	0.0425	0.01134	0.700	3.023	3.36	40.00	1593.
1081	0.091	0.03797	264.905	0.0424	0.01132	0.470	4.108	3.36	40.00	2142.
1084	0.092	0.04950	265.516	0.0425	0.01134	0.350	5.340	3.36	40.00	2774.
1087	0.092	0.06251	266.205	0.0426	0.01137	0.280	6.717	3.36	40.00	3481.
1090	0.091	0.07702	266.967	0.0419	0.01142	0.270	8.234	3.36	40.00	4084.
1093	0.257	0.02795	264.291	0.1255	0.01146	0.910	2.910	4.96	40.00	16787.
1096	0.257	0.03798	264.778	0.1253	0.01156	1.080	3.883	3.36	40.00	22122.
1099	0.258	0.04953	265.311	0.1254	0.01166	1.050	4.970	3.36	40.00	28104.
1102	0.257	0.06257	265.920	0.1247	0.01172	1.760	6.180	1.76	40.00	34173.
1105	0.257	0.07709	266.570	0.1242	0.01178	1.410	7.487	1.76	40.00	40580.
1108	0.265	0.02737	269.739	0.1263	0.01201	1.160	2.731	4.96	40.00	14602.
1111	0.264	0.03722	270.198	0.1258	0.01205	0.850	3.668	4.96	40.00	19299.
1114	0.263	0.04854	270.718	0.1249	0.01213	1.060	4.714	3.36	40.00	24205.
1117	0.264	0.06132	271.297	0.1251	0.01215	0.940	5.883	3.36	40.00	30057.
1120	0.265	0.07555	271.920	0.1252	0.01220	1.640	7.141	1.76	40.00	36191.
1123	0.175	0.02737	269.710	0.0814	0.01190	1.130	2.800	4.96	40.00	5557.
1126	0.176	0.03720	270.198	0.0818	0.01188	0.660	3.799	4.96	40.00	7583.
1129	0.177	0.04850	270.760	0.0821	0.01188	0.520	4.935	4.96	40.00	9825.
1132	0.176	0.06127	271.384	0.0813	0.01189	0.350	6.200	4.96	40.00	12001.
1135	0.174	0.07550	272.061	0.0802	0.01196	0.570	7.567	3.36	40.00	14057.
1138	0.326	0.02737	269.591	0.1584	0.01203	1.330	2.677	4.96	40.00	24564.
1141	0.326	0.03721	270.039	0.1581	0.01208	1.240	3.575	3.36	40.00	32380.
1144	0.326	0.04853	270.541	0.1576	0.01211	2.090	4.585	1.76	40.00	40873.
1147	0.326	0.06131	271.101	0.1572	0.01212	1.640	5.697	1.76	40.00	50018.
1160	0.093	0.02638	279.602	0.0409	0.01246	0.960	2.599	3.36	40.00	1042.
1163	0.094	0.03586	280.063	0.0411	0.01247	0.620	3.529	3.36	40.00	1424.
1166	0.094	0.04676	280.586	0.0413	0.01249	0.370	4.589	3.36	40.00	1855.
1169	0.095	0.05907	281.185	0.0412	0.01252	0.340	5.778	3.36	40.00	2312.

Table 24. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1172	0.094	0.07279	281.835	0.0409	0.01256	0.270	7.091	3.36	40.00	2774.
1175	0.196	0.02638	279.525	0.0880	0.01271	1.130	2.529	4.96	40.00	5209.
1178	0.196	0.03585	279.969	0.0879	0.01265	0.730	3.442	4.96	40.00	7017.
1181	0.196	0.04676	280.493	0.0876	0.01263	0.690	4.478	4.96	40.00	9001.
1184	0.195	0.05910	281.067	0.0870	0.01265	0.390	5.632	4.96	40.00	11068.
1187	0.195	0.07283	281.693	0.0866	0.01269	0.650	6.889	3.36	40.00	13298.
1190	0.324	0.02639	279.485	0.1501	0.01266	1.020	2.485	6.56	40.00	17071.
1193	0.324	0.03586	279.899	0.1500	0.01270	1.050	3.334	4.96	40.00	22706.
1196	0.325	0.04677	280.371	0.1499	0.01275	1.010	4.283	3.36	40.00	28925.
1199	0.325	0.05912	280.901	0.1498	0.01279	1.170	5.335	3.36	40.00	35689.
1202	0.326	0.07287	281.466	0.1495	0.01283	1.620	6.477	1.76	40.00	42770.
1250	0.448	0.02558	288.393	0.2051	0.01361	1.540	2.199	4.96	40.00	27611.
1253	0.449	0.03477	288.780	0.2050	0.01358	1.480	2.949	3.36	40.00	36736.
1256	0.449	0.04536	289.197	0.2047	0.01354	1.420	3.794	3.36	40.00	46800.
1265	0.319	0.02557	288.438	0.1420	0.01339	1.250	2.297	6.56	40.00	12165.
1268	0.320	0.03476	288.843	0.1419	0.01337	1.050	3.104	4.96	40.00	16338.
1271	0.319	0.04535	289.288	0.1415	0.01344	1.110	3.997	3.36	40.00	20753.
1274	0.320	0.05732	289.785	0.1412	0.01351	0.970	4.984	3.36	40.00	25600.
1277	0.319	0.07064	290.326	0.1406	0.01354	0.940	6.076	3.36	40.00	30671.
1280	0.188	0.02557	288.388	0.0812	0.01339	1.020	2.333	4.96	40.00	3592.
1283	0.188	0.03477	288.811	0.0810	0.01333	0.730	3.180	4.96	40.00	4850.
1286	0.188	0.04535	289.282	0.0809	0.01331	0.560	4.143	4.96	40.00	6256.
1289	0.187	0.05730	289.834	0.0805	0.01331	0.490	5.222	4.96	40.00	7757.
1292	0.187	0.07062	290.421	0.0802	0.01332	0.380	6.410	4.96	40.00	9361.
1295	0.093	0.02557	288.394	0.0395	0.01331	1.460	2.359	1.76	40.00	792.
1298	0.093	0.03476	288.817	0.0396	0.01326	0.990	3.218	1.76	40.00	1080.
1301	0.094	0.04534	289.310	0.0397	0.01325	0.470	4.198	3.36	40.00	1408.
1304	0.094	0.05729	289.863	0.0397	0.01326	0.790	5.299	1.76	40.00	1770.
1307	0.095	0.07060	290.473	0.0398	0.01327	0.890	6.516	1.76	40.00	2175.
1310	0.099	0.02440	302.377	0.0402	0.01428	1.350	2.100	1.76	40.00	625.
1313	0.099	0.03317	302.758	0.0401	0.01427	1.160	2.855	1.76	40.00	845.
1316	0.099	0.04328	303.185	0.0399	0.01428	0.910	3.721	1.76	40.00	1083.
1319	0.098	0.05471	303.658	0.0396	0.01431	0.880	4.692	1.76	40.00	1336.
1322	0.099	0.06745	304.205	0.0398	0.01434	0.700	5.770	1.76	40.00	1649.
1325	0.241	0.02440	302.344	0.0997	0.01441	1.510	2.067	4.96	40.00	4176.
1328	0.241	0.03318	302.697	0.0995	0.01438	1.040	2.810	4.96	40.00	5640.
1331	0.242	0.04329	303.127	0.0997	0.01436	0.710	3.658	4.96	40.00	7323.
1334	0.242	0.05472	303.601	0.0995	0.01436	0.550	4.608	4.96	40.00	9149.
1337	0.241	0.06746	304.115	0.0992	0.01439	0.450	5.653	4.96	40.00	11067.
1340	0.457	0.02440	302.275	0.1969	0.01462	1.470	1.986	6.56	40.00	18431.
1343	0.457	0.03318	302.619	0.1964	0.01466	1.220	2.665	4.96	40.00	24467.
1346	0.456	0.04330	302.992	0.1958	0.01468	1.270	3.432	3.36	40.00	31122.
1349	0.456	0.05474	303.421	0.1953	0.01468	1.340	4.282	3.36	40.00	38381.

Table 24. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1352	0.456	0.06749	303.872	0.1950	0.01470	2.060	5.205	1.76	40.00	46197.
1355	0.600	0.02441	301.240	0.2671	0.01472	1.640	1.908	4.96	40.00	37294.
1358	0.600	0.03320	301.562	0.2669	0.01464	1.490	2.555	3.36	40.00	49596.
1370	0.627	0.02344	314.016	0.2644	0.01594	1.740	1.723	4.96	40.00	27217.
1373	0.628	0.03189	314.302	0.2644	0.01585	1.380	2.319	4.96	40.00	36498.
1376	0.628	0.04161	314.635	0.2643	0.01576	1.280	2.990	3.36	40.00	46796.
1385	0.475	0.02354	312.711	0.1963	0.01554	1.620	1.814	6.56	40.00	14544.
1388	0.475	0.03201	313.016	0.1961	0.01555	1.590	2.445	4.96	40.00	19478.
1391	0.476	0.04177	313.376	0.1961	0.01556	1.060	3.155	4.96	40.00	25021.
1394	0.475	0.05281	313.767	0.1955	0.01560	1.220	3.939	3.36	40.00	30855.
1397	0.475	0.06512	314.179	0.1952	0.01562	1.170	4.798	3.36	40.00	37247.
1400	0.290	0.02354	312.623	0.1163	0.01536	1.440	1.870	6.56	40.00	4681.
1403	0.290	0.03202	312.948	0.1162	0.01533	1.100	2.539	4.96	40.00	6320.
1406	0.290	0.04179	313.331	0.1159	0.01531	0.830	3.308	4.96	40.00	8152.
1409	0.290	0.05283	313.756	0.1158	0.01530	0.790	4.168	4.96	40.00	10201.
1412	0.290	0.06514	314.213	0.1157	0.01533	0.530	5.111	4.96	40.00	12426.
1415	0.173	0.02355	312.535	0.0682	0.01531	1.410	1.887	3.36	40.00	1516.
1418	0.173	0.03203	312.870	0.0681	0.01529	1.060	2.568	3.36	40.00	2051.
1421	0.173	0.04180	313.252	0.0679	0.01527	0.940	3.351	3.36	40.00	2644.
1424	0.172	0.05284	313.685	0.0676	0.01528	0.750	4.229	3.36	40.00	3297.
1427	0.172	0.06516	314.175	0.0675	0.01529	0.580	5.204	3.36	40.00	4022.
1430	0.088	0.02356	312.429	0.0344	0.01518	1.500	1.909	1.76	40.00	372.
1433	0.089	0.03204	312.769	0.0347	0.01515	0.980	2.599	1.76	40.00	513.
1436	0.089	0.04181	313.156	0.0347	0.01515	0.670	3.391	1.76	40.00	668.
1439	0.089	0.05286	313.589	0.0347	0.01516	0.850	4.283	1.76	40.00	839.
1442	0.089	0.06517	314.086	0.0346	0.01518	0.510	5.272	1.76	40.00	1023.
1445	0.091	0.02298	320.464	0.0347	0.01589	1.620	1.778	1.76	40.00	326.
1448	0.091	0.03125	320.777	0.0346	0.01585	1.330	2.424	1.76	40.00	440.
1451	0.091	0.04078	321.142	0.0346	0.01584	0.930	3.164	1.76	40.00	570.
1454	0.092	0.05155	321.550	0.0349	0.01586	0.730	3.993	1.76	40.00	730.
1457	0.093	0.06359	321.991	0.0352	0.01589	0.520	4.915	1.76	40.00	912.
1460	0.182	0.02299	320.299	0.0700	0.01611	1.820	1.751	3.36	40.00	1368.
1463	0.182	0.03126	320.618	0.0698	0.01603	1.270	2.390	3.36	40.00	1854.
1466	0.182	0.04079	320.966	0.0699	0.01600	1.000	3.121	3.36	40.00	2416.
1469	0.182	0.05158	321.373	0.0696	0.01601	0.800	3.942	3.36	40.00	3014.
1472	0.182	0.06362	321.826	0.0697	0.01601	0.590	4.854	3.36	40.00	3698.
1475	0.268	0.02293	318.935	0.1047	0.01584	1.390	1.770	4.96	40.00	3288.
1478	0.268	0.03118	319.241	0.1047	0.01583	1.040	2.403	4.96	40.00	4449.
1481	0.268	0.04069	319.591	0.1045	0.01580	0.820	3.134	4.96	40.00	5765.
1484	0.268	0.05144	319.996	0.1043	0.01582	0.590	3.948	4.96	40.00	7196.
1487	0.267	0.06344	320.432	0.1039	0.01583	0.540	4.851	4.96	40.00	8730.
1490	0.345	0.02293	318.814	0.1366	0.01582	1.720	1.764	6.56	40.00	5837.
1493	0.345	0.03119	319.114	0.1364	0.01583	1.170	2.389	6.56	40.00	7853.

Table 24. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1496	0.345	0.04070	319.449	0.1360	0.01585	0.900	3.102	4.96	40.00	10102.
1499	0.345	0.05146	319.841	0.1359	0.01589	0.730	3.894	4.96	40.00	12597.
1502	0.346	0.06346	320.259	0.1360	0.01596	0.690	4.756	4.96	40.00	15340.
1505	0.485	0.02294	318.644	0.1960	0.01599	1.510	1.724	6.56	40.00	12778.
1508	0.484	0.03120	318.953	0.1955	0.01595	1.080	2.333	6.56	40.00	17130.
1511	0.485	0.04073	319.281	0.1954	0.01601	1.090	3.008	4.96	40.00	21954.
1514	0.484	0.05150	319.636	0.1949	0.01607	1.220	3.754	3.36	40.00	27126.
1517	0.484	0.06351	320.046	0.1946	0.01611	1.040	4.572	3.36	40.00	32766.
1520	0.601	0.02294	318.385	0.2478	0.01616	1.900	1.680	6.56	40.00	21461.
1523	0.602	0.03121	318.672	0.2476	0.01618	1.400	2.253	4.96	40.00	28612.
1526	0.601	0.04073	318.984	0.2471	0.01618	1.180	2.901	4.96	40.00	36509.
1529	0.601	0.05149	319.348	0.2468	0.01614	0.960	3.622	3.36	40.00	45229.
1532	0.601	0.06352	319.707	0.2463	0.01622	1.740	4.380	3.36	40.00	54193.
1535	0.619	0.02218	329.485	0.2443	0.01724	1.990	1.536	6.56	40.00	16486.
1538	0.617	0.03017	329.732	0.2434	0.01727	1.630	2.066	6.56	40.00	21913.
1541	0.618	0.03937	330.008	0.2434	0.01731	1.270	2.661	4.96	40.00	28130.
1544	0.620	0.04980	330.338	0.2442	0.01726	0.970	3.332	4.96	40.00	35353.
1547	0.623	0.06143	330.697	0.2448	0.01719	0.930	4.072	3.36	40.00	43229.
1550	0.464	0.02221	329.077	0.1795	0.01693	1.730	1.588	8.16	40.00	8533.
1553	0.465	0.03020	329.333	0.1800	0.01693	1.010	2.148	8.16	40.00	11583.
1556	0.467	0.03942	329.637	0.1807	0.01696	0.850	2.781	6.56	40.00	15068.
1559	0.468	0.04986	329.986	0.1808	0.01699	0.880	3.489	4.96	40.00	18858.
1562	0.468	0.06150	330.360	0.1803	0.01704	0.770	4.261	4.96	40.00	22810.
1565	0.324	0.02222	328.879	0.1231	0.01683	1.780	1.613	6.56	40.00	3813.
1568	0.326	0.03023	329.161	0.1238	0.01680	1.390	2.192	4.96	40.00	5231.
1571	0.326	0.03946	329.474	0.1237	0.01679	1.100	2.854	4.96	40.00	6778.
1574	0.324	0.04988	329.837	0.1230	0.01678	0.880	3.601	4.96	40.00	8419.
1577	0.322	0.06151	330.231	0.1221	0.01679	0.690	4.424	4.96	40.00	10130.
1580	0.211	0.02223	328.734	0.0792	0.01674	1.710	1.628	3.36	40.00	1511.
1583	0.211	0.03024	329.008	0.0790	0.01675	1.170	2.212	3.36	40.00	2038.
1586	0.210	0.03947	329.343	0.0787	0.01675	0.990	2.885	3.36	40.00	2628.
1589	0.208	0.04991	329.712	0.0778	0.01675	0.920	3.644	3.36	40.00	3224.
1592	0.207	0.06156	330.113	0.0774	0.01676	0.590	4.486	3.36	40.00	3918.
1595	0.096	0.02221	326.679	0.0358	0.01634	1.510	1.671	1.76	40.00	307.
1598	0.096	0.03020	326.967	0.0356	0.01636	0.990	2.269	1.76	40.00	410.
1601	0.095	0.03941	327.293	0.0353	0.01638	0.810	2.957	1.76	40.00	525.
1604	0.094	0.04984	327.668	0.0350	0.01640	0.640	3.735	1.76	40.00	649.
1607	0.094	0.06147	328.089	0.0349	0.01642	0.560	4.597	1.76	40.00	791.
1611	0.097	0.02206	327.815	0.0361	0.01643	1.630	1.650	1.76	40.00	304.
1614	0.097	0.03000	328.094	0.0359	0.01644	1.100	2.243	1.76	40.00	409.
1617	0.097	0.03916	328.421	0.0358	0.01646	0.740	2.924	1.76	40.00	529.
1620	0.096	0.04952	328.800	0.0356	0.01647	0.680	3.693	1.76	40.00	657.
1623	0.096	0.06107	329.213	0.0355	0.01650	0.620	4.545	1.76	40.00	800.

Table 24. Thermal conductivity of the binary 70 % R125 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1626	0.104	0.02163	342.043	0.0368	0.01803	1.990	1.475	1.76	40.00	249.
1629	0.103	0.02942	342.279	0.0367	0.01804	1.110	2.005	1.76	40.00	335.
1632	0.104	0.03839	342.559	0.0367	0.01801	0.870	2.620	1.76	40.00	438.
1635	0.104	0.04855	342.890	0.0367	0.01801	0.730	3.313	1.76	40.00	550.
1638	0.104	0.05989	343.242	0.0367	0.01802	0.700	4.082	1.76	40.00	675.
1641	0.101	0.03845	342.092	0.0358	0.01763	0.970	2.680	1.76	40.00	427.
1644	0.098	0.04863	342.424	0.0349	0.01768	0.850	3.380	1.76	40.00	508.
1647	0.100	0.05998	342.796	0.0353	0.01773	0.580	4.156	1.76	40.00	640.
1650	0.204	0.02166	341.233	0.0734	0.01815	2.220	1.465	3.36	40.00	1029.
1653	0.204	0.02947	341.467	0.0734	0.01811	1.330	1.996	3.36	40.00	1398.
1656	0.205	0.03846	341.750	0.0737	0.01810	1.000	2.605	3.36	40.00	1834.
1659	0.206	0.04864	342.069	0.0740	0.01807	0.920	3.296	3.36	40.00	2336.
1662	0.207	0.06000	342.444	0.0742	0.01805	0.620	4.067	3.36	40.00	2883.
1665	0.204	0.04862	342.015	0.0734	0.01766	0.750	3.372	3.36	40.00	2351.
1668	0.204	0.05998	342.358	0.0732	0.01774	0.660	4.138	3.36	40.00	2852.
1671	0.347	0.02162	340.628	0.1273	0.01811	2.060	1.460	4.96	40.00	3284.
1674	0.349	0.02942	340.875	0.1278	0.01805	1.330	1.988	6.56	40.00	4500.
1677	0.349	0.03839	341.134	0.1279	0.01815	1.230	2.574	4.96	40.00	5816.
1680	0.349	0.04855	341.462	0.1276	0.01812	0.900	3.251	4.96	40.00	7289.
1683	0.348	0.05989	341.796	0.1272	0.01809	0.790	4.005	4.96	40.00	8885.
1686	0.348	0.04852	341.299	0.1273	0.01765	0.730	3.336	4.96	40.00	7457.
1689	0.348	0.05986	341.649	0.1270	0.01770	0.680	4.091	4.96	40.00	9062.
1692	0.483	0.02161	340.756	0.1799	0.01810	1.950	1.450	8.16	40.00	6884.
1695	0.482	0.02940	340.980	0.1794	0.01815	1.570	1.959	6.56	40.00	9223.
1698	0.482	0.03837	341.251	0.1791	0.01815	0.970	2.544	6.56	40.00	11903.
1701	0.484	0.04852	341.560	0.1795	0.01788	0.950	3.247	4.96	40.00	15217.
1704	0.483	0.05985	341.907	0.1791	0.01796	0.690	3.964	4.96	40.00	18427.
1707	0.599	0.02163	340.360	0.2262	0.01807	1.960	1.442	8.16	40.00	11434.
1710	0.598	0.02942	340.577	0.2257	0.01810	1.510	1.945	6.56	40.00	15308.
1713	0.597	0.03840	340.846	0.2252	0.01815	1.390	2.511	4.96	40.00	19620.
1716	0.596	0.04857	341.122	0.2246	0.01825	1.060	3.133	4.96	40.00	24259.
1719	0.598	0.04858	341.087	0.2252	0.01798	0.970	3.178	4.96	40.00	24760.
1722	0.598	0.05993	341.413	0.2252	0.01805	1.150	3.871	3.36	40.00	30045.

Table 25. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the dilute gas measured with the steady-state technique.

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1008	0.069	0.02155	227.921	0.0375	0.01120	1.110	2.365	1.76	40.00	521.
1011	0.069	0.03361	228.581	0.0371	0.01118	0.620	3.692	1.78	4.00	787.
1012	0.069	0.03360	228.586	0.0370	0.01117	0.590	3.695	1.76	40.00	784.
1015	0.069	0.04827	229.376	0.0368	0.01120	0.470	5.288	1.78	4.00	1092.
1016	0.069	0.04826	229.386	0.0367	0.01119	0.520	5.294	1.76	40.00	1088.
1019	0.068	0.06550	230.298	0.0364	0.01126	0.480	7.139	1.62	4.00	1422.
1020	0.068	0.06549	230.311	0.0363	0.01124	0.390	7.150	1.76	40.00	1417.
1027	0.029	0.02155	227.873	0.0154	0.01111	1.100	2.385	0.66	4.00	83.
1028	0.029	0.02155	227.872	0.0153	0.01112	1.120	2.384	1.76	40.00	81.
1031	0.029	0.03360	228.544	0.0152	0.01109	0.780	3.727	0.66	4.00	124.
1032	0.028	0.03361	228.535	0.0151	0.01108	0.530	3.729	1.76	40.00	123.
1035	0.028	0.04827	229.337	0.0149	0.01111	0.630	5.340	0.66	4.00	169.
1036	0.028	0.04827	229.346	0.0149	0.01111	0.300	5.342	1.76	40.00	169.
1039	0.028	0.06550	230.281	0.0147	0.01117	0.440	7.212	0.66	4.00	221.
1040	0.028	0.06550	230.278	0.0148	0.01116	0.210	7.215	1.76	40.00	223.
1047	0.030	0.02054	240.001	0.0150	0.01215	0.850	2.078	0.66	4.00	58.
1048	0.030	0.02054	240.002	0.0149	0.01216	0.810	2.078	1.76	40.00	57.
1051	0.029	0.03203	240.582	0.0148	0.01212	0.560	3.252	0.66	4.00	88.
1052	0.029	0.03204	240.574	0.0148	0.01211	0.490	3.253	1.76	40.00	88.
1055	0.030	0.04603	241.274	0.0148	0.01213	0.480	4.668	0.66	4.00	125.
1056	0.029	0.04603	241.283	0.0148	0.01212	0.240	4.670	1.76	40.00	124.
1059	0.029	0.06249	242.096	0.0146	0.01217	0.410	6.314	0.66	4.00	162.
1060	0.029	0.06250	242.093	0.0146	0.01217	0.150	6.316	1.76	40.00	163.
1067	0.024	0.02010	245.933	0.0119	0.01284	1.500	1.924	0.66	4.00	31.
1068	0.024	0.02010	245.936	0.0119	0.01284	1.500	1.924	1.76	40.00	31.
1071	0.024	0.03135	246.482	0.0119	0.01275	0.750	3.024	0.66	4.00	49.
1072	0.024	0.03135	246.483	0.0119	0.01276	0.760	3.022	1.76	40.00	48.
1075	0.024	0.04505	247.133	0.0118	0.01275	0.650	4.346	0.50	4.00	68.
1076	0.024	0.04505	247.138	0.0118	0.01275	0.490	4.347	1.76	40.00	68.
1079	0.024	0.06117	247.907	0.0118	0.01278	0.440	5.889	0.50	4.00	91.
1080	0.024	0.06117	247.895	0.0117	0.01277	0.290	5.890	1.76	40.00	90.
1087	0.058	0.02009	245.876	0.0288	0.01274	1.320	1.940	1.14	4.00	190.
1088	0.058	0.02009	245.872	0.0288	0.01273	1.540	1.941	1.76	40.00	190.
1091	0.058	0.03134	246.424	0.0286	0.01270	0.910	3.034	1.30	4.00	292.
1092	0.058	0.03134	246.412	0.0286	0.01269	1.010	3.036	1.76	40.00	291.
1095	0.058	0.04504	247.079	0.0284	0.01271	0.510	4.355	1.30	4.00	407.
1096	0.057	0.04505	247.064	0.0283	0.01271	0.420	4.356	1.76	40.00	405.
1099	0.057	0.06117	247.829	0.0282	0.01276	0.480	5.889	1.14	4.00	536.
1100	0.057	0.06117	247.839	0.0282	0.01275	0.280	5.895	1.76	40.00	537.
1107	0.050	0.01976	250.202	0.0243	0.01327	1.490	1.832	0.98	4.00	120.
1108	0.050	0.01976	250.206	0.0243	0.01327	1.520	1.831	1.76	40.00	120.
1111	0.051	0.03083	250.712	0.0247	0.01318	0.770	2.877	0.98	4.00	193.
1112	0.051	0.03083	250.722	0.0248	0.01317	0.710	2.879	1.76	40.00	194.

Table 25. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1115	0.052	0.04432	251.351	0.0249	0.01316	0.530	4.141	1.14	4.00	281.
1116	0.052	0.04432	251.356	0.0250	0.01315	0.420	4.143	1.76	40.00	282.
1119	0.052	0.06020	252.082	0.0250	0.01318	0.490	5.613	1.14	4.00	379.
1120	0.052	0.06020	252.075	0.0250	0.01318	0.300	5.615	1.76	40.00	380.
1127	0.118	0.01974	249.446	0.0586	0.01320	1.730	1.837	2.10	4.00	760.
1128	0.118	0.01974	249.446	0.0586	0.01318	1.620	1.840	1.76	40.00	761.
1131	0.118	0.03079	249.963	0.0584	0.01310	0.920	2.885	2.26	4.00	1178.
1132	0.118	0.03079	249.962	0.0584	0.01307	1.110	2.891	1.76	40.00	1180.
1135	0.118	0.04426	250.584	0.0581	0.01307	0.640	4.153	2.26	4.00	1660.
1136	0.118	0.04426	250.589	0.0581	0.01304	1.170	4.162	1.76	40.00	1663.
1139	0.118	0.06010	251.325	0.0579	0.01308	0.510	5.629	2.26	4.00	2212.
1140	0.118	0.06010	251.334	0.0579	0.01304	0.300	5.644	3.36	40.00	2217.
1151	0.123	0.02955	261.112	0.0580	0.01424	1.060	2.549	2.10	4.00	882.
1152	0.123	0.02955	261.128	0.0580	0.01420	1.520	2.555	1.76	40.00	884.
1155	0.123	0.04249	261.676	0.0579	0.01416	0.600	3.681	2.26	4.00	1259.
1156	0.123	0.04249	261.660	0.0579	0.01414	0.920	3.687	1.76	40.00	1263.
1159	0.123	0.05772	262.327	0.0577	0.01416	0.610	4.998	2.10	4.00	1687.
1160	0.123	0.05772	262.329	0.0578	0.01413	0.820	5.010	1.76	40.00	1693.
1168	0.302	0.01895	260.505	0.1489	0.01453	2.060	1.591	6.56	40.00	4352.
1171	0.301	0.02957	260.940	0.1479	0.01466	0.890	2.452	3.22	4.00	6554.
1172	0.301	0.02957	260.949	0.1477	0.01437	1.060	2.500	4.96	40.00	6663.
1175	0.301	0.04252	261.460	0.1473	0.01458	0.840	3.528	3.06	4.00	9274.
1176	0.301	0.04251	261.500	0.1473	0.01428	0.800	3.598	4.96	40.00	9448.
1179	0.301	0.05777	262.087	0.1469	0.01449	0.580	4.793	3.22	4.00	12392.
1180	0.301	0.05776	262.120	0.1468	0.01425	0.510	4.873	4.96	40.00	12581.
1191	0.343	0.02761	280.762	0.1552	0.01710	1.500	1.971	3.06	4.00	4376.
1192	0.342	0.02761	280.784	0.1552	0.01676	1.590	2.010	4.96	40.00	4457.
1195	0.342	0.03972	281.195	0.1548	0.01693	0.880	2.852	3.06	4.00	6256.
1196	0.342	0.03971	281.242	0.1547	0.01661	1.160	2.907	4.96	40.00	6367.
1199	0.342	0.05398	281.694	0.1543	0.01683	0.940	3.885	3.06	4.00	8401.
1200	0.342	0.05397	281.737	0.1543	0.01652	0.790	3.957	4.96	40.00	8553.
1211	0.622	0.02762	280.492	0.2976	0.01764	1.400	1.861	3.22	4.00	18755.
1212	0.622	0.02762	280.516	0.2975	0.01687	2.160	1.944	6.56	40.00	19567.
1215	0.622	0.03973	280.879	0.2969	0.01726	1.040	2.698	3.22	4.00	26870.
1216	0.622	0.03973	280.921	0.2968	0.01687	1.330	2.758	4.96	40.00	27414.
1219	0.622	0.05402	281.364	0.2962	0.01699	0.970	3.668	3.06	4.00	36018.
1220	0.622	0.05401	281.372	0.2962	0.01689	1.680	3.687	3.36	40.00	36204.
1231	0.656	0.02669	290.940	0.2998	0.01927	1.880	1.660	3.22	4.00	14451.
1232	0.656	0.02669	290.991	0.2998	0.01849	2.080	1.727	6.56	40.00	15024.
1235	0.656	0.03840	291.294	0.2996	0.01883	1.470	2.415	3.06	4.00	20882.
1236	0.656	0.03839	291.319	0.2997	0.01835	1.680	2.476	4.96	40.00	21407.
1239	0.656	0.05220	291.732	0.2992	0.01845	0.930	3.308	3.22	4.00	28310.
1240	0.657	0.05220	291.729	0.2993	0.01834	1.710	3.325	3.36	40.00	28486.

Table 25. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1248	0.881	0.01711	290.445	0.4215	0.01898	2.670	1.066	9.76	40.00	21747.
1251	0.880	0.02672	290.701	0.4201	0.01936	1.620	1.602	3.22	4.00	32243.
1252	0.879	0.02672	290.733	0.4197	0.01859	2.450	1.666	4.96	40.00	33419.
1255	0.879	0.03844	291.048	0.4189	0.01871	1.060	2.329	3.06	4.00	46234.
1256	0.879	0.03844	291.066	0.4188	0.01840	2.060	2.366	3.36	40.00	46941.
1259	0.879	0.05227	291.469	0.4179	0.01812	0.570	3.182	3.22	4.00	62346.
1260	0.879	0.05227	291.441	0.4180	0.01819	2.110	3.170	3.36	40.00	62206.
1271	0.346	0.02667	289.048	0.1514	0.01798	1.930	1.813	2.90	4.00	3423.
1272	0.346	0.02667	289.069	0.1513	0.01766	1.650	1.846	6.56	40.00	3480.
1275	0.345	0.03837	289.435	0.1510	0.01784	1.210	2.622	2.90	4.00	4893.
1276	0.345	0.03837	289.469	0.1508	0.01749	1.060	2.673	4.96	40.00	4977.
1279	0.345	0.05215	289.916	0.1503	0.01765	0.820	3.591	3.06	4.00	6601.
1280	0.345	0.05215	289.943	0.1503	0.01736	0.780	3.650	4.96	40.00	6705.
1291	0.081	0.02666	288.834	0.0340	0.01759	1.800	1.864	1.14	4.00	154.
1292	0.080	0.02666	288.823	0.0339	0.01757	1.760	1.866	1.76	40.00	153.
1295	0.080	0.03835	289.248	0.0336	0.01734	0.890	2.720	1.30	4.00	217.
1296	0.079	0.03836	289.233	0.0334	0.01735	0.900	2.719	1.76	40.00	216.
1299	0.079	0.05214	289.733	0.0332	0.01724	0.890	3.717	1.14	4.00	288.
1300	0.079	0.05214	289.735	0.0331	0.01723	0.690	3.721	1.76	40.00	287.
1308	0.365	0.01706	287.970	0.1612	0.01791	3.090	1.166	4.96	40.00	2563.
1311	0.365	0.02663	288.289	0.1611	0.01793	2.010	1.814	3.06	4.00	3959.
1312	0.365	0.02663	288.300	0.1606	0.01748	1.930	1.861	8.16	40.00	4035.
1315	0.356	0.03836	288.657	0.1564	0.01788	1.130	2.613	3.06	4.00	5320.
1316	0.353	0.03836	288.688	0.1550	0.01755	1.940	2.662	3.36	40.00	5312.
1319	0.349	0.05215	289.136	0.1528	0.01770	0.860	3.578	3.06	4.00	6878.
1320	0.349	0.05215	289.169	0.1527	0.01738	0.690	3.643	4.96	40.00	6999.
1327	0.150	0.01689	269.531	0.0689	0.01560	2.620	1.330	1.94	4.00	595.
1328	0.150	0.01689	269.542	0.0689	0.01555	3.080	1.334	3.36	40.00	596.
1331	0.150	0.02636	269.903	0.0688	0.01541	1.410	2.101	2.10	4.00	931.
1332	0.150	0.02636	269.926	0.0688	0.01535	1.510	2.109	3.36	40.00	935.
1335	0.150	0.03791	270.377	0.0688	0.01530	0.980	3.041	2.26	4.00	1338.
1336	0.151	0.03791	270.372	0.0688	0.01525	0.900	3.051	3.36	40.00	1346.
1339	0.151	0.05154	270.915	0.0687	0.01525	0.670	4.142	2.42	4.00	1808.
1340	0.151	0.05154	270.918	0.0688	0.01520	0.550	4.156	3.36	40.00	1818.
1348	0.373	0.01688	269.364	0.1790	0.01556	3.120	1.323	6.56	40.00	4813.
1351	0.373	0.02636	269.719	0.1787	0.01573	1.160	2.034	3.22	4.00	7326.
1352	0.373	0.02636	269.740	0.1785	0.01530	1.540	2.090	6.56	40.00	7506.
1355	0.373	0.03792	270.164	0.1781	0.01556	0.920	2.940	3.22	4.00	10443.
1356	0.373	0.03791	270.208	0.1781	0.01517	0.980	3.016	6.56	40.00	10700.
1359	0.373	0.05155	270.695	0.1776	0.01543	0.850	4.005	3.22	4.00	14025.
1360	0.373	0.05154	270.724	0.1776	0.01512	0.810	4.086	4.96	40.00	14292.
1368	0.497	0.01689	269.241	0.2451	0.01574	2.710	1.296	8.16	40.00	9984.
1371	0.497	0.02637	269.562	0.2446	0.01614	1.030	1.956	3.22	4.00	14912.

Table 25. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1372	0.497	0.02636	269.607	0.2446	0.01555	1.400	2.028	6.56	40.00	15440.
1375	0.496	0.03793	270.011	0.2439	0.01588	0.830	2.827	3.22	4.00	21237.
1376	0.496	0.03793	270.030	0.2439	0.01555	1.250	2.884	4.96	40.00	21659.
1379	0.496	0.05157	270.502	0.2432	0.01570	0.810	3.839	3.06	4.00	28392.
1380	0.496	0.05157	270.507	0.2433	0.01558	1.300	3.867	3.36	40.00	28619.
1391	0.759	0.02395	301.608	0.3358	0.02029	2.430	1.415	3.22	4.00	13823.
1392	0.759	0.02394	301.643	0.3357	0.01937	2.450	1.481	9.76	40.00	14448.
1395	0.759	0.03446	301.940	0.3353	0.01987	1.420	2.057	3.22	4.00	19931.
1396	0.759	0.03445	301.960	0.3352	0.01916	1.610	2.130	6.56	40.00	20625.
1399	0.759	0.04687	302.299	0.3347	0.01951	1.060	2.814	3.22	4.00	27021.
1400	0.759	0.04686	302.329	0.3348	0.01912	1.480	2.869	4.96	40.00	27534.
1411	0.320	0.02395	301.626	0.1327	0.01916	1.650	1.532	2.74	4.00	1870.
1412	0.320	0.02395	301.626	0.1327	0.01894	2.460	1.550	3.36	40.00	1891.
1415	0.320	0.03446	301.976	0.1326	0.01890	1.400	2.232	3.06	4.00	2708.
1416	0.320	0.03446	301.996	0.1326	0.01873	1.050	2.252	4.96	40.00	2730.
1419	0.320	0.04686	302.386	0.1323	0.01883	0.920	3.041	2.90	4.00	3655.
1420	0.320	0.04686	302.398	0.1323	0.01860	0.880	3.077	4.96	40.00	3699.
1432	1.005	0.02396	301.187	0.4642	0.01974	3.300	1.413	4.96	40.00	30774.
1435	1.005	0.03448	301.476	0.4635	0.01983	1.940	1.982	3.06	4.00	42809.
1436	1.005	0.03448	301.505	0.4634	0.01949	2.550	2.015	4.96	40.00	43476.
1439	1.005	0.04689	301.857	0.4625	0.01918	1.320	2.716	3.22	4.00	58005.
1452	1.040	0.02407	309.986	0.4621	0.02132	3.670	1.328	4.96	40.00	24938.
1455	1.041	0.03464	310.257	0.4616	0.02148	1.820	1.864	3.06	4.00	34782.
1456	1.041	0.03464	310.255	0.4616	0.02101	2.700	1.904	4.96	40.00	35522.
1459	1.041	0.04712	310.577	0.4609	0.02086	1.420	2.556	3.06	4.00	47280.
1460	1.041	0.04712	310.585	0.4609	0.02081	2.250	2.562	3.36	40.00	47384.
1468	0.661	0.01542	309.659	0.2782	0.02103	5.550	0.894	9.76	40.00	5060.
1471	0.661	0.02408	309.895	0.2779	0.02129	2.450	1.372	3.06	4.00	7726.
1472	0.661	0.02407	309.917	0.2779	0.02046	3.140	1.427	8.16	40.00	8033.
1475	0.661	0.03465	310.202	0.2776	0.02089	1.530	1.999	3.22	4.00	11183.
1476	0.661	0.03465	310.233	0.2775	0.02015	2.080	2.071	6.56	40.00	11576.
1479	0.661	0.04712	310.563	0.2771	0.02063	1.070	2.734	3.22	4.00	15165.
1480	0.661	0.04712	310.586	0.2770	0.02001	1.110	2.815	6.56	40.00	15605.
1493	0.348	0.02409	309.832	0.1405	0.02052	2.470	1.439	2.74	4.00	1808.
1494	0.348	0.02409	309.840	0.1405	0.02026	2.480	1.457	4.96	40.00	1831.
1495	0.347	0.02409	309.816	0.1405	0.02070	1.900	1.427	2.41	3.00	1792.
1498	0.347	0.03466	310.159	0.1403	0.02021	1.550	2.100	2.74	4.00	2620.
1499	0.347	0.03467	310.154	0.1403	0.01996	1.370	2.126	4.96	40.00	2652.
1500	0.347	0.03466	310.153	0.1402	0.02040	1.400	2.080	2.41	3.00	2595.
1503	0.347	0.04714	310.536	0.1401	0.02002	1.200	2.877	2.74	4.00	3564.
1504	0.348	0.04714	310.548	0.1402	0.01978	1.050	2.913	4.96	40.00	3612.
1505	0.348	0.04714	310.526	0.1402	0.02025	1.060	2.845	2.29	3.00	3532.
1516	1.061	0.02435	306.077	0.4822	0.02125	2.680	1.336	3.06	4.00	29646.

Table 25. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1517	1.060	0.02435	306.108	0.4820	0.02049	3.340	1.384	4.96	40.00	30657.
1520	1.060	0.03504	306.380	0.4811	0.02055	1.720	1.945	3.22	4.00	42708.
1521	1.060	0.03503	306.398	0.4811	0.02025	2.630	1.971	3.36	40.00	43267.
1524	1.060	0.04764	306.747	0.4802	0.01995	1.400	2.655	3.06	4.00	57677.
1525	1.060	0.04765	306.729	0.4802	0.02018	3.510	2.628	1.76	40.00	57131.
1537	1.122	0.02433	320.329	0.4795	0.02311	3.780	1.244	6.56	40.00	22067.
1540	1.121	0.03501	320.555	0.4787	0.02339	2.040	1.742	3.06	4.00	30678.
1541	1.121	0.03501	320.595	0.4786	0.02274	2.790	1.790	4.96	40.00	31486.
1544	1.121	0.04762	320.897	0.4780	0.02267	1.110	2.399	3.22	4.00	41895.
1545	1.121	0.04762	320.899	0.4780	0.02249	2.600	2.417	3.36	40.00	42205.
1556	0.575	0.02432	320.178	0.2296	0.02303	2.840	1.289	2.74	4.00	4186.
1557	0.575	0.02432	320.208	0.2297	0.02233	2.570	1.329	6.56	40.00	4318.
1560	0.575	0.03499	320.488	0.2295	0.02245	1.440	1.896	3.22	4.00	6132.
1561	0.575	0.03499	320.508	0.2295	0.02182	1.230	1.950	6.56	40.00	6306.
1564	0.576	0.04759	320.809	0.2294	0.02211	0.930	2.607	3.22	4.00	8396.
1565	0.576	0.04759	320.835	0.2295	0.02150	0.750	2.680	6.56	40.00	8635.
1576	0.220	0.02429	318.615	0.0851	0.02135	2.550	1.398	1.94	4.00	557.
1577	0.220	0.02429	318.612	0.0850	0.02131	2.290	1.401	3.36	40.00	558.
1580	0.220	0.03495	318.905	0.0849	0.02109	1.630	2.036	2.10	4.00	806.
1581	0.220	0.03495	318.931	0.0849	0.02102	1.530	2.042	3.36	40.00	807.
1584	0.220	0.04753	319.279	0.0848	0.02090	1.060	2.791	2.26	4.00	1098.
1585	0.220	0.04753	319.298	0.0848	0.02084	0.970	2.799	3.36	40.00	1101.
1597	1.111	0.02368	330.935	0.4519	0.02469	3.590	1.147	9.76	40.00	15345.
1600	1.111	0.03408	331.153	0.4514	0.02519	2.620	1.602	3.06	4.00	21312.
1601	1.111	0.03408	331.180	0.4514	0.02423	3.190	1.663	4.96	40.00	22111.
1604	1.111	0.04636	331.427	0.4509	0.02452	1.720	2.207	3.06	4.00	29188.
1605	1.111	0.04636	331.461	0.4508	0.02396	2.200	2.256	4.96	40.00	29814.
1616	0.601	0.02369	330.682	0.2316	0.02398	2.480	1.207	2.90	4.00	3560.
1617	0.601	0.02369	330.687	0.2316	0.02336	2.240	1.240	6.56	40.00	3656.
1620	0.601	0.03410	330.938	0.2314	0.02359	1.670	1.762	3.06	4.00	5172.
1621	0.601	0.03410	330.952	0.2314	0.02300	1.310	1.806	6.56	40.00	5299.
1624	0.601	0.04638	331.248	0.2311	0.02332	1.050	2.414	3.22	4.00	7045.
1625	0.601	0.04637	331.281	0.2311	0.02274	0.890	2.476	6.56	40.00	7221.
1636	0.117	0.02366	328.466	0.0432	0.02271	3.420	1.281	1.14	4.00	116.
1637	0.117	0.02366	328.447	0.0432	0.02282	3.310	1.275	1.76	40.00	115.
1640	0.117	0.03405	328.743	0.0432	0.02233	2.060	1.875	1.30	4.00	169.
1641	0.117	0.03405	328.736	0.0432	0.02239	1.960	1.870	1.76	40.00	168.
1644	0.117	0.04631	329.080	0.0431	0.02213	1.050	2.573	1.30	4.00	231.
1645	0.117	0.04631	329.093	0.0431	0.02216	1.460	2.570	1.76	40.00	230.
1660	1.087	0.03408	340.293	0.4240	0.02812	2.430	1.451	3.22	4.00	14940.
1661	1.087	0.03408	340.321	0.4240	0.02684	2.780	1.518	6.56	40.00	15619.
1664	1.086	0.04636	340.561	0.4235	0.02712	1.380	2.025	3.22	4.00	20725.
1665	1.086	0.04636	340.544	0.4235	0.02632	2.190	2.085	4.96	40.00	21342.

Table 25. Thermal conductivity of the binary 30 % R32 / 70 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1693	0.593	0.03406	339.617	0.2213	0.02573	2.140	1.617	3.06	4.00	3933.
1694	0.594	0.03405	339.649	0.2213	0.02518	2.820	1.651	4.96	40.00	4018.
1697	0.594	0.04632	339.906	0.2212	0.02527	1.440	2.232	3.06	4.00	5410.
1698	0.594	0.04632	339.917	0.2212	0.02478	1.730	2.276	4.96	40.00	5516.
1709	0.117	0.02369	338.997	0.0420	0.02512	2.850	1.160	1.14	4.00	89.
1710	0.117	0.02369	338.981	0.0420	0.02529	3.060	1.152	1.76	40.00	89.
1713	0.117	0.03410	339.249	0.0420	0.02454	1.810	1.709	0.98	4.00	131.
1714	0.117	0.03410	339.223	0.0420	0.02460	1.760	1.705	1.76	40.00	131.
1717	0.117	0.04638	339.554	0.0420	0.02411	1.110	2.365	1.14	4.00	182.
1718	0.117	0.04638	339.544	0.0420	0.02417	1.140	2.360	1.76	40.00	181.

Table 26. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the dilute gas measured with the steady-state technique.

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1003	0.503	0.02641	256.675	0.2635	0.01286	1.490	2.415	4.96	40.00	24787.
1006	0.503	0.03592	257.089	0.2627	0.01288	1.720	3.236	3.36	40.00	32614.
1009	0.502	0.04685	257.543	0.2615	0.01288	1.380	4.162	3.36	40.00	41011.
1012	0.501	0.05920	258.051	0.2600	0.01292	1.970	5.165	1.76	40.00	49488.
1015	0.500	0.07299	258.608	0.2588	0.01289	1.640	6.283	1.76	40.00	58738.
1018	0.416	0.02641	256.723	0.2129	0.01266	0.980	2.499	6.56	40.00	14746.
1021	0.415	0.03591	257.156	0.2121	0.01263	0.820	3.375	4.96	40.00	19553.
1024	0.413	0.04684	257.637	0.2105	0.01272	1.130	4.336	3.36	40.00	24419.
1027	0.412	0.05919	258.160	0.2093	0.01280	1.340	5.394	3.36	40.00	29631.
1030	0.413	0.07298	258.751	0.2093	0.01284	2.100	6.563	1.76	40.00	35608.
1033	0.310	0.02641	256.732	0.1549	0.01263	1.070	2.540	6.56	40.00	6930.
1036	0.309	0.03591	257.203	0.1541	0.01254	0.980	3.462	4.96	40.00	9265.
1039	0.311	0.04682	257.725	0.1548	0.01251	0.650	4.505	4.96	40.00	12063.
1042	0.312	0.05917	258.292	0.1550	0.01251	0.430	5.661	4.96	40.00	15054.
1045	0.313	0.07294	258.933	0.1546	0.01255	0.710	6.916	3.36	40.00	18098.
1051	0.214	0.03590	257.208	0.1044	0.01258	0.660	3.487	4.96	40.00	3837.
1054	0.212	0.04681	257.740	0.1030	0.01251	0.710	4.563	3.36	40.00	4833.
1057	0.211	0.05917	258.354	0.1023	0.01248	0.590	5.767	3.36	40.00	5966.
1060	0.213	0.07293	259.014	0.1030	0.01246	0.610	7.101	3.36	40.00	7379.
1066	0.107	0.03590	257.232	0.0511	0.01243	0.850	3.546	1.76	40.00	836.
1069	0.108	0.04681	257.784	0.0516	0.01237	0.720	4.645	1.76	40.00	1110.
1072	0.108	0.05916	258.393	0.0512	0.01235	0.530	5.875	1.76	40.00	1367.
1075	0.105	0.07292	259.085	0.0496	0.01236	0.450	7.237	1.76	40.00	1562.
1078	0.753	0.02736	266.076	0.3967	0.01346	1.740	2.264	3.36	40.00	56603.
1081	0.752	0.03720	266.431	0.3955	0.01360	2.460	2.967	1.76	40.00	72804.
1093	0.641	0.02735	266.103	0.3288	0.01357	1.810	2.330	3.36	40.00	34539.
1096	0.642	0.03719	266.483	0.3287	0.01360	1.580	3.104	3.36	40.00	45565.
1099	0.644	0.04852	266.913	0.3286	0.01359	2.350	3.969	1.76	40.00	57628.
1102	0.643	0.06133	267.376	0.3272	0.01366	2.840	4.894	1.76	40.00	69525.
1108	0.532	0.02736	265.895	0.2667	0.01434	1.310	2.266	6.56	40.00	19537.
1111	0.533	0.03719	266.303	0.2665	0.01420	1.740	3.072	3.36	40.00	26232.
1114	0.534	0.04850	266.758	0.2661	0.01410	1.730	3.983	3.36	40.00	33581.
1117	0.534	0.06129	267.257	0.2654	0.01402	1.480	4.996	3.36	40.00	41429.
1120	0.533	0.07556	267.810	0.2645	0.01399	2.060	6.090	1.76	40.00	49514.
1126	0.421	0.03721	266.349	0.2057	0.01404	0.790	3.176	6.56	40.00	14340.
1129	0.422	0.04852	266.825	0.2057	0.01392	0.680	4.147	4.96	40.00	18567.
1132	0.423	0.06131	267.356	0.2054	0.01389	1.160	5.208	3.36	40.00	23038.
1135	0.423	0.07556	267.928	0.2051	0.01391	2.410	6.355	1.76	40.00	27725.
1141	0.316	0.03720	266.351	0.1509	0.01400	0.790	3.225	4.96	40.00	7075.
1144	0.317	0.04852	266.872	0.1512	0.01378	0.570	4.259	4.96	40.00	9308.
1147	0.318	0.06129	267.448	0.1510	0.01363	0.490	5.416	4.96	40.00	11700.
1150	0.317	0.07552	268.079	0.1504	0.01356	0.250	6.677	4.96	40.00	14149.
1156	0.217	0.03720	266.379	0.1016	0.01387	0.950	3.282	3.36	40.00	2977.

Table 26. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1159	0.218	0.04851	266.910	0.1018	0.01364	0.670	4.343	3.36	40.00	3928.
1162	0.215	0.06128	267.496	0.1001	0.01351	0.530	5.531	3.36	40.00	4787.
1165	0.213	0.07552	268.151	0.0990	0.01346	0.510	6.832	3.36	40.00	5720.
1171	0.110	0.03720	266.377	0.0505	0.01379	0.740	3.313	1.76	40.00	677.
1174	0.110	0.04851	266.926	0.0506	0.01358	0.550	4.387	1.76	40.00	893.
1177	0.112	0.06129	267.519	0.0515	0.01346	0.470	5.591	1.76	40.00	1171.
1180	0.114	0.07550	268.186	0.0520	0.01336	0.450	6.934	1.76	40.00	1471.
1183	0.930	0.02641	277.407	0.4749	0.01510	2.720	1.936	3.36	40.00	60285.
1186	0.928	0.03592	277.733	0.4731	0.01506	3.290	2.563	1.76	40.00	78342.
1198	0.833	0.02642	277.416	0.4167	0.01529	2.020	1.970	4.96	40.00	42753.
1201	0.833	0.03591	277.746	0.4157	0.01508	1.600	2.653	3.36	40.00	56815.
1204	0.833	0.04685	278.108	0.4153	0.01508	2.940	3.377	1.76	40.00	71571.
1213	0.726	0.02641	277.413	0.3555	0.01534	1.960	2.011	4.96	40.00	28725.
1216	0.728	0.03591	277.757	0.3562	0.01519	1.740	2.715	3.36	40.00	38712.
1219	0.730	0.04686	278.155	0.3563	0.01507	2.790	3.505	1.76	40.00	49611.
1222	0.731	0.05923	278.586	0.3559	0.01492	2.040	4.388	1.76	40.00	61442.
1225	0.729	0.07302	279.044	0.3537	0.01495	3.760	5.300	1.76	40.00	72415.
1231	0.626	0.03592	277.733	0.3004	0.01537	1.520	2.745	4.96	40.00	25483.
1234	0.629	0.04684	278.147	0.3012	0.01521	1.660	3.570	3.36	40.00	33089.
1237	0.630	0.05922	278.612	0.3007	0.01509	1.470	4.488	3.36	40.00	41116.
1240	0.629	0.07302	279.106	0.2995	0.01503	2.050	5.478	1.76	40.00	49253.
1246	0.527	0.03592	277.758	0.2480	0.01529	0.840	2.805	6.56	40.00	16336.
1249	0.525	0.04685	278.184	0.2469	0.01513	1.040	3.668	4.96	40.00	20976.
1252	0.528	0.05921	278.644	0.2476	0.01506	1.380	4.610	3.36	40.00	26365.
1255	0.530	0.07299	279.165	0.2480	0.01501	1.320	5.646	3.36	40.00	32128.
1261	0.419	0.03591	277.758	0.1939	0.01522	0.960	2.853	6.56	40.00	9333.
1264	0.419	0.04684	278.215	0.1934	0.01493	0.860	3.774	4.96	40.00	12193.
1267	0.416	0.05920	278.723	0.1913	0.01481	0.490	4.787	4.96	40.00	14962.
1270	0.416	0.07298	279.278	0.1909	0.01475	0.900	5.887	3.36	40.00	18164.
1276	0.311	0.03591	277.766	0.1414	0.01513	1.000	2.896	4.96	40.00	4648.
1279	0.313	0.04683	278.238	0.1421	0.01481	0.630	3.845	4.96	40.00	6199.
1282	0.314	0.05918	278.764	0.1421	0.01464	0.460	4.903	4.96	40.00	7841.
1285	0.310	0.07295	279.334	0.1400	0.01453	0.370	6.072	4.96	40.00	9329.
1308	0.113	0.02636	275.991	0.0502	0.01367	1.090	2.371	1.76	40.00	426.
1311	0.113	0.03585	276.426	0.0498	0.01366	0.660	3.226	1.76	40.00	567.
1314	0.111	0.04676	276.914	0.0492	0.01367	0.450	4.203	1.76	40.00	717.
1317	0.111	0.05908	277.457	0.0488	0.01369	0.530	5.300	1.76	40.00	883.
1320	0.110	0.07281	278.066	0.0485	0.01373	0.400	6.512	1.76	40.00	1063.
1383	0.929	0.02554	284.764	0.4536	0.01650	2.670	1.770	4.96	40.00	41276.
1386	0.928	0.03473	285.083	0.4526	0.01614	1.810	2.402	3.36	40.00	55327.
1398	0.836	0.02554	284.764	0.4014	0.01655	2.390	1.798	4.96	40.00	30459.
1401	0.837	0.03472	285.081	0.4014	0.01620	1.840	2.450	3.36	40.00	41274.
1404	0.838	0.04532	285.438	0.4011	0.01598	2.310	3.177	3.36	40.00	53048.

Table 26. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1407	0.837	0.05731	285.823	0.3999	0.01596	2.900	3.945	1.76	40.00	64887.
1413	0.729	0.02553	284.761	0.3437	0.01625	1.670	1.860	6.56	40.00	21291.
1416	0.728	0.03473	285.103	0.3423	0.01604	1.720	2.530	4.96	40.00	28519.
1419	0.730	0.04532	285.481	0.3430	0.01588	1.540	3.286	3.36	40.00	36969.
1422	0.732	0.05728	285.892	0.3431	0.01576	2.780	4.121	1.76	40.00	46080.
1425	0.731	0.07062	286.351	0.3420	0.01563	2.020	5.041	1.76	40.00	55473.
1428	0.629	0.02554	284.759	0.2916	0.01613	1.370	1.897	8.16	40.00	14537.
1431	0.631	0.03473	285.104	0.2918	0.01585	1.190	2.600	6.56	40.00	19847.
1434	0.628	0.04530	285.500	0.2899	0.01576	1.520	3.379	3.36	40.00	25223.
1437	0.627	0.05727	285.921	0.2885	0.01570	1.430	4.243	3.36	40.00	31108.
1440	0.629	0.07062	286.402	0.2890	0.01560	1.280	5.204	3.36	40.00	37995.
1446	0.527	0.03472	285.098	0.2397	0.01581	0.880	2.640	6.56	40.00	12649.
1449	0.525	0.04530	285.517	0.2385	0.01559	1.010	3.469	4.96	40.00	16334.
1452	0.523	0.05727	285.979	0.2369	0.01552	0.840	4.377	4.96	40.00	20133.
1455	0.524	0.07060	286.466	0.2367	0.01551	1.090	5.357	3.36	40.00	24430.
1461	0.423	0.03472	285.098	0.1896	0.01584	1.010	2.660	6.56	40.00	7438.
1464	0.420	0.04530	285.532	0.1877	0.01555	0.890	3.522	4.96	40.00	9578.
1467	0.419	0.05725	286.017	0.1867	0.01537	0.630	4.482	4.96	40.00	11955.
1470	0.421	0.07057	286.535	0.1874	0.01528	0.380	5.530	4.96	40.00	14775.
1476	0.314	0.03471	285.115	0.1381	0.01557	0.990	2.723	4.96	40.00	3765.
1479	0.315	0.04530	285.550	0.1386	0.01533	0.760	3.602	4.96	40.00	4993.
1482	0.317	0.05725	286.048	0.1393	0.01518	0.480	4.586	4.96	40.00	6385.
1485	0.317	0.07056	286.587	0.1390	0.01508	0.390	5.674	4.96	40.00	7812.
1491	0.210	0.03472	285.118	0.0913	0.01541	0.980	2.764	3.36	40.00	1566.
1494	0.211	0.04528	285.561	0.0915	0.01520	0.640	3.652	3.36	40.00	2066.
1497	0.213	0.05724	286.057	0.0921	0.01508	0.470	4.646	3.36	40.00	2647.
1500	0.213	0.07057	286.605	0.0921	0.01501	0.360	5.747	3.36	40.00	3259.
1503	0.111	0.02552	284.524	0.0478	0.01452	1.310	2.160	1.76	40.00	318.
1506	0.112	0.03469	284.928	0.0478	0.01444	0.840	2.952	1.76	40.00	432.
1509	0.112	0.04525	285.368	0.0478	0.01443	0.620	3.854	1.76	40.00	562.
1512	0.112	0.05719	285.862	0.0478	0.01444	0.450	4.866	1.76	40.00	704.
1515	0.111	0.07050	286.434	0.0474	0.01447	0.460	5.982	1.76	40.00	849.
1596	0.972	0.03339	298.692	0.4437	0.01922	2.760	2.010	4.96	40.00	34350.
1599	0.970	0.04358	299.018	0.4419	0.01860	2.420	2.662	3.36	40.00	44787.
1602	0.971	0.05510	299.369	0.4415	0.01819	2.070	3.376	3.36	40.00	56338.
1611	0.763	0.03339	298.699	0.3380	0.01881	2.080	2.111	4.96	40.00	18572.
1614	0.761	0.04358	299.032	0.3363	0.01827	1.960	2.808	4.96	40.00	24296.
1617	0.761	0.05510	299.416	0.3358	0.01794	1.780	3.576	3.36	40.00	30659.
1620	0.763	0.06795	299.833	0.3361	0.01764	1.570	4.429	3.36	40.00	37816.
1626	0.561	0.03339	298.708	0.2418	0.01829	2.090	2.209	6.56	40.00	8916.
1629	0.563	0.04358	299.072	0.2420	0.01771	1.200	2.961	6.56	40.00	11923.
1632	0.560	0.05509	299.489	0.2403	0.01737	1.120	3.797	4.96	40.00	14964.
1635	0.560	0.06792	299.942	0.2401	0.01718	0.870	4.703	4.96	40.00	18383.

Table 26. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1644	0.353	0.04356	299.043	0.1481	0.01778	1.210	2.992	4.96	40.00	4052.
1647	0.355	0.05507	299.477	0.1484	0.01737	0.870	3.863	4.96	40.00	5228.
1650	0.358	0.06790	299.961	0.1496	0.01709	0.540	4.827	4.96	40.00	6614.
1653	0.218	0.02451	297.848	0.0903	0.01584	1.460	1.900	3.36	40.00	907.
1656	0.215	0.03334	298.194	0.0889	0.01579	0.950	2.592	3.36	40.00	1194.
1659	0.214	0.04350	298.584	0.0885	0.01576	0.720	3.385	3.36	40.00	1537.
1662	0.216	0.05498	299.014	0.0892	0.01577	0.480	4.274	3.36	40.00	1965.
1665	0.218	0.06777	299.510	0.0899	0.01578	0.400	5.258	3.36	40.00	2446.
1743	1.097	0.02373	304.466	0.4950	0.01957	3.500	1.416	4.96	40.00	28948.
1746	1.098	0.03228	304.741	0.4946	0.01892	2.250	1.956	4.96	40.00	39720.
1749	1.097	0.04213	305.037	0.4936	0.01847	2.040	2.562	3.36	40.00	51535.
1752	1.097	0.05328	305.347	0.4929	0.01840	3.330	3.188	1.76	40.00	63584.
1758	0.830	0.02373	304.453	0.3612	0.01928	2.820	1.476	8.16	40.00	13987.
1761	0.830	0.03228	304.748	0.3609	0.01865	2.030	2.056	6.56	40.00	19370.
1764	0.831	0.04213	305.052	0.3606	0.01832	1.840	2.702	4.96	40.00	25300.
1767	0.831	0.05327	305.420	0.3602	0.01810	1.950	3.420	3.36	40.00	31759.
1770	0.832	0.06569	305.816	0.3598	0.01792	1.580	4.209	3.36	40.00	38774.
1773	0.557	0.02373	304.442	0.2344	0.01892	2.900	1.528	8.16	40.00	5339.
1776	0.558	0.03228	304.767	0.2343	0.01819	1.610	2.153	6.56	40.00	7485.
1779	0.558	0.04212	305.108	0.2340	0.01775	1.170	2.867	6.56	40.00	9894.
1782	0.558	0.05325	305.511	0.2339	0.01748	1.040	3.661	4.96	40.00	12560.
1785	0.559	0.06566	305.941	0.2338	0.01733	0.750	4.530	4.96	40.00	15444.
1791	0.320	0.03228	304.699	0.1309	0.01841	1.660	2.149	3.36	40.00	2091.
1794	0.320	0.04212	305.075	0.1306	0.01787	1.520	2.884	3.36	40.00	2782.
1797	0.320	0.05326	305.474	0.1303	0.01759	1.080	3.700	3.36	40.00	3534.
1800	0.319	0.06567	305.932	0.1299	0.01738	0.760	4.612	3.36	40.00	4356.
1806	0.116	0.03228	304.676	0.0464	0.01832	1.550	2.166	1.76	40.00	242.
1809	0.117	0.04213	305.045	0.0466	0.01780	1.010	2.911	1.76	40.00	327.
1812	0.116	0.05326	305.466	0.0462	0.01745	0.690	3.752	1.76	40.00	412.
1908	1.246	0.02275	316.366	0.5405	0.02025	3.260	1.315	4.96	40.00	27792.
1911	1.245	0.03096	316.610	0.5391	0.01979	2.510	1.799	4.96	40.00	37649.
1914	1.248	0.04041	316.878	0.5400	0.01941	1.820	2.349	4.96	40.00	49148.
1917	1.250	0.05111	317.167	0.5402	0.01919	2.230	2.943	3.36	40.00	61388.
1923	0.971	0.02275	316.353	0.4074	0.01983	2.940	1.374	8.16	40.00	14687.
1926	0.969	0.03095	316.610	0.4059	0.01937	2.030	1.896	6.56	40.00	20017.
1929	0.968	0.04040	316.888	0.4051	0.01916	1.670	2.475	4.96	40.00	25903.
1932	0.970	0.05110	317.218	0.4054	0.01900	1.850	3.121	3.36	40.00	32575.
1935	0.971	0.06303	317.563	0.4056	0.01886	1.470	3.829	3.36	40.00	39845.
1941	0.696	0.03095	316.528	0.2831	0.01967	1.680	1.904	8.16	40.00	8770.
1944	0.699	0.04038	316.831	0.2840	0.01917	1.070	2.536	6.56	40.00	11720.
1947	0.700	0.05107	317.178	0.2844	0.01888	0.810	3.237	6.56	40.00	14940.
1950	0.697	0.06301	317.562	0.2826	0.01874	0.790	4.003	4.96	40.00	18123.
1956	0.389	0.03095	316.492	0.1534	0.01986	1.730	1.909	4.96	40.00	2292.

Table 26. Thermal conductivity of the binary 70 % R32 / 30 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1959	0.387	0.04041	316.815	0.1522	0.01931	1.210	2.559	4.96	40.00	3010.
1962	0.389	0.05110	317.176	0.1532	0.01893	0.850	3.297	4.96	40.00	3915.
1965	0.392	0.06301	317.602	0.1539	0.01854	0.670	4.143	4.96	40.00	4948.
1971	0.111	0.03096	316.455	0.0427	0.01981	1.910	1.922	1.76	40.00	161.
1974	0.113	0.04041	316.780	0.0435	0.01918	1.250	2.590	1.76	40.00	225.
1977	0.111	0.05110	317.160	0.0426	0.01876	0.790	3.348	1.76	40.00	278.
1980	0.109	0.06301	317.579	0.0419	0.01851	0.600	4.184	1.76	40.00	333.
3051	1.334	0.03061	326.558	0.5564	0.02235	3.280	1.593	4.96	40.00	31229.
3054	1.335	0.03995	326.811	0.5563	0.02161	2.170	2.114	4.96	40.00	41273.
3057	1.335	0.05052	327.097	0.5555	0.02106	1.680	2.692	3.36	40.00	52188.
3060	1.333	0.06232	327.391	0.5541	0.02098	3.460	3.275	1.76	40.00	62834.
3066	0.929	0.03060	326.562	0.3717	0.02185	1.990	1.683	8.16	40.00	12750.
3069	0.927	0.03994	326.834	0.3708	0.02115	1.330	2.252	6.56	40.00	16911.
3072	0.930	0.05052	327.141	0.3715	0.02077	1.260	2.878	4.96	40.00	21626.
3075	0.930	0.06232	327.488	0.3711	0.02054	1.610	3.558	3.36	40.00	26566.
3084	0.517	0.03994	326.735	0.1989	0.02156	1.510	2.261	6.56	40.00	4255.
3087	0.517	0.05051	327.075	0.1986	0.02089	1.100	2.944	4.96	40.00	5503.
3090	0.520	0.06230	327.445	0.1995	0.02044	0.950	3.701	4.96	40.00	6956.
3099	0.112	0.03994	326.722	0.0417	0.02110	1.500	2.328	1.76	40.00	168.
3102	0.110	0.05052	327.068	0.0408	0.02047	1.040	3.034	1.76	40.00	210.
3105	0.109	0.06231	327.458	0.0404	0.02007	0.580	3.818	1.76	40.00	258.

Table 27. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the dilute gas measured with the steady-state technique with bare tungsten hot wires.

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1003	0.097	0.02627	257.573	0.0469	0.01045	0.810	3.082	3.36	40.00	1577.
1006	0.097	0.03570	258.132	0.0468	0.01046	0.500	4.184	3.36	40.00	2114.
1009	0.098	0.04655	258.754	0.0469	0.01048	0.380	5.436	3.36	40.00	2739.
1012	0.098	0.05881	259.449	0.0470	0.01051	0.360	6.837	3.36	40.00	3418.
1015	0.098	0.07247	260.227	0.0467	0.01055	0.260	8.385	3.36	40.00	4080.
1018	0.151	0.02627	257.549	0.0741	0.01055	0.760	3.038	4.96	40.00	4320.
1021	0.151	0.03571	258.090	0.0736	0.01055	0.520	4.120	4.96	40.00	5718.
1024	0.151	0.04656	258.704	0.0734	0.01057	0.680	5.347	3.36	40.00	7284.
1027	0.151	0.05882	259.395	0.0733	0.01059	0.580	6.722	3.36	40.00	9012.
1030	0.151	0.07247	260.147	0.0732	0.01062	0.530	8.226	3.36	40.00	10858.
1033	0.157	0.02553	265.565	0.0746	0.01111	1.100	2.808	3.36	40.00	3536.
1036	0.158	0.03470	266.060	0.0746	0.01110	0.950	3.812	3.36	40.00	4759.
1039	0.158	0.04526	266.633	0.0744	0.01111	0.380	4.956	4.96	40.00	6101.
1042	0.157	0.05719	267.271	0.0740	0.01113	0.600	6.233	3.36	40.00	7493.
1045	0.157	0.07047	267.983	0.0734	0.01115	0.620	7.645	3.36	40.00	8943.
1048	0.094	0.02552	266.168	0.0437	0.01105	1.300	2.835	1.76	40.00	1098.
1051	0.094	0.03469	266.680	0.0436	0.01105	0.670	3.851	3.36	40.00	1472.
1054	0.095	0.04524	267.255	0.0438	0.01108	0.890	5.007	1.76	40.00	1916.
1057	0.095	0.05716	267.899	0.0438	0.01110	0.280	6.304	3.36	40.00	2396.
1060	0.095	0.07043	268.618	0.0439	0.01114	0.220	7.734	3.36	40.00	2914.
1063	0.227	0.02552	266.123	0.1095	0.01129	1.100	2.738	4.96	40.00	8317.
1066	0.227	0.03470	266.602	0.1094	0.01127	1.010	3.712	4.96	40.00	11146.
1069	0.227	0.04525	267.165	0.1091	0.01129	0.530	4.805	4.96	40.00	14198.
1072	0.227	0.05718	267.761	0.1088	0.01134	0.810	6.009	3.36	40.00	17417.
1075	0.226	0.07047	268.400	0.1082	0.01145	0.840	7.295	3.36	40.00	20639.
1078	0.236	0.02474	275.465	0.1091	0.01192	1.090	2.524	4.96	40.00	6459.
1081	0.235	0.03364	275.906	0.1089	0.01190	0.840	3.422	4.96	40.00	8643.
1084	0.236	0.04389	276.416	0.1088	0.01191	0.630	4.441	4.96	40.00	11104.
1087	0.236	0.05547	276.980	0.1089	0.01195	0.380	5.567	4.96	40.00	13823.
1090	0.237	0.06838	277.589	0.1087	0.01201	0.570	6.793	3.36	40.00	16657.
1093	0.154	0.02474	275.596	0.0699	0.01184	1.110	2.559	3.36	40.00	2392.
1096	0.155	0.03363	276.052	0.0701	0.01183	0.870	3.477	3.36	40.00	3256.
1099	0.156	0.04387	276.584	0.0702	0.01184	0.690	4.524	3.36	40.00	4218.
1102	0.156	0.05544	277.166	0.0701	0.01186	0.480	5.696	3.36	40.00	5244.
1105	0.155	0.06833	277.826	0.0696	0.01189	0.430	6.990	3.36	40.00	6274.
1108	0.093	0.02474	275.566	0.0416	0.01174	0.900	2.588	3.36	40.00	793.
1111	0.093	0.03364	276.029	0.0413	0.01175	0.990	3.514	1.76	40.00	1056.
1114	0.092	0.04387	276.556	0.0410	0.01177	0.690	4.572	1.76	40.00	1345.
1117	0.092	0.05545	277.151	0.0409	0.01181	0.600	5.759	1.76	40.00	1667.
1120	0.092	0.06834	277.808	0.0406	0.01185	0.600	7.067	1.76	40.00	2002.
1123	0.316	0.02474	275.490	0.1497	0.01203	1.090	2.468	6.56	40.00	13455.
1126	0.316	0.03364	275.916	0.1493	0.01206	1.020	3.322	4.96	40.00	17848.
1129	0.316	0.04389	276.378	0.1490	0.01214	0.960	4.268	3.36	40.00	22591.

Table 27. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the dilute gas measured with the steady-state technique with bare tungsten hot wires (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1132	0.316	0.05547	276.906	0.1486	0.01222	1.220	5.313	3.36	40.00	27670.
1135	0.316	0.06838	277.487	0.1486	0.01225	1.000	6.468	3.36	40.00	33327.
1138	0.329	0.02396	285.233	0.1496	0.01276	1.440	2.266	6.56	40.00	10386.
1141	0.329	0.03259	285.638	0.1493	0.01274	0.910	3.067	6.56	40.00	13880.
1144	0.328	0.04252	286.092	0.1486	0.01278	0.810	3.964	4.96	40.00	17614.
1147	0.328	0.05375	286.571	0.1481	0.01286	0.950	4.944	3.36	40.00	21626.
1150	0.329	0.06628	287.101	0.1482	0.01293	1.040	6.015	3.36	40.00	26135.
1153	0.416	0.02396	285.280	0.1934	0.01293	1.330	2.202	6.56	40.00	18906.
1156	0.416	0.03257	285.659	0.1928	0.01296	1.270	2.954	4.96	40.00	24998.
1159	0.415	0.04251	286.081	0.1917	0.01301	1.330	3.798	3.36	40.00	31455.
1162	0.415	0.05375	286.552	0.1913	0.01305	1.440	4.729	3.36	40.00	38619.
1165	0.416	0.06628	287.052	0.1914	0.01307	1.800	5.743	1.76	40.00	46525.
1168	0.225	0.02396	285.329	0.0994	0.01270	1.280	2.304	4.96	40.00	4098.
1171	0.225	0.03258	285.752	0.0996	0.01266	0.910	3.133	4.96	40.00	5559.
1174	0.226	0.04251	286.208	0.0995	0.01264	0.550	4.082	4.96	40.00	7191.
1177	0.225	0.05373	286.750	0.0992	0.01264	0.450	5.145	4.96	40.00	8922.
1180	0.225	0.06624	287.332	0.0987	0.01266	0.320	6.313	4.96	40.00	10738.
1183	0.158	0.02396	285.333	0.0690	0.01269	1.290	2.315	3.36	40.00	1842.
1186	0.157	0.03258	285.755	0.0683	0.01265	0.950	3.154	3.36	40.00	2439.
1189	0.157	0.04250	286.233	0.0680	0.01263	0.820	4.115	3.36	40.00	3133.
1192	0.158	0.05372	286.766	0.0687	0.01263	0.620	5.193	3.36	40.00	4014.
1195	0.160	0.06623	287.371	0.0691	0.01264	0.470	6.388	3.36	40.00	4959.
1198	0.094	0.02396	285.350	0.0405	0.01255	1.330	2.346	1.76	40.00	600.
1201	0.095	0.03258	285.772	0.0410	0.01250	1.000	3.201	1.76	40.00	835.
1204	0.093	0.04250	286.261	0.0400	0.01250	0.810	4.175	1.76	40.00	1028.
1207	0.091	0.05371	286.800	0.0390	0.01251	0.630	5.268	1.76	40.00	1227.
1210	0.094	0.06621	287.405	0.0400	0.01254	0.570	6.474	1.76	40.00	1573.
1213	0.283	0.02396	285.320	0.1271	0.01274	1.080	2.284	6.56	40.00	7120.
1216	0.284	0.03258	285.726	0.1275	0.01270	0.720	3.100	6.56	40.00	9662.
1219	0.286	0.04250	286.189	0.1278	0.01269	0.710	4.027	4.96	40.00	12545.
1222	0.286	0.05373	286.703	0.1275	0.01271	0.490	5.053	4.96	40.00	15522.
1225	0.284	0.06625	287.263	0.1262	0.01277	0.720	6.172	3.36	40.00	18381.
1228	0.454	0.02313	296.450	0.2018	0.01377	1.640	2.009	6.56	40.00	15773.
1231	0.456	0.03146	296.798	0.2024	0.01378	1.290	2.702	4.96	40.00	21249.
1234	0.455	0.04106	297.181	0.2015	0.01382	1.410	3.482	3.36	40.00	26929.
1237	0.451	0.05191	297.616	0.1993	0.01386	1.120	4.348	3.36	40.00	32509.
1240	0.453	0.06401	298.092	0.1998	0.01387	1.330	5.292	3.36	40.00	39509.
1243	0.380	0.02313	296.435	0.1659	0.01387	1.460	2.014	8.16	40.00	9888.
1246	0.383	0.03145	296.795	0.1673	0.01380	1.040	2.735	6.56	40.00	13615.
1249	0.385	0.04105	297.205	0.1676	0.01379	0.810	3.547	4.96	40.00	17626.
1252	0.383	0.05190	297.649	0.1665	0.01384	1.200	4.435	3.36	40.00	21557.
1255	0.380	0.06400	298.144	0.1650	0.01390	1.010	5.411	3.36	40.00	25559.
1258	0.313	0.02313	296.461	0.1346	0.01358	1.310	2.070	6.56	40.00	6252.

Table 27. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the dilute gas measured with the steady-state technique with bare tungsten hot wires (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1261	0.311	0.03145	296.839	0.1336	0.01354	0.970	2.815	6.56	40.00	8304.
1264	0.308	0.04103	297.255	0.1319	0.01352	0.780	3.663	4.96	40.00	10443.
1267	0.309	0.05188	297.730	0.1321	0.01354	0.670	4.602	4.96	40.00	13074.
1270	0.311	0.06398	298.244	0.1330	0.01358	0.410	5.628	4.96	40.00	16116.
1273	0.240	0.02313	296.415	0.1019	0.01374	1.470	2.058	4.96	40.00	3324.
1276	0.238	0.03145	296.794	0.1010	0.01365	1.040	2.811	4.96	40.00	4431.
1279	0.236	0.04104	297.228	0.0997	0.01359	0.640	3.675	4.96	40.00	5597.
1282	0.238	0.05188	297.699	0.1005	0.01357	0.620	4.640	4.96	40.00	7142.
1285	0.240	0.06397	298.241	0.1011	0.01357	0.400	5.707	4.96	40.00	8840.
1288	0.170	0.02313	296.422	0.0712	0.01364	1.620	2.080	3.36	40.00	1538.
1291	0.172	0.03145	296.793	0.0719	0.01357	0.900	2.840	3.36	40.00	2137.
1294	0.174	0.04104	297.238	0.0728	0.01353	0.770	3.713	3.36	40.00	2853.
1297	0.172	0.05188	297.726	0.0717	0.01352	0.530	4.692	3.36	40.00	3465.
1300	0.169	0.06398	298.262	0.0705	0.01352	0.510	5.776	3.36	40.00	4085.
1303	0.099	0.02313	296.445	0.0408	0.01329	1.550	2.139	1.76	40.00	489.
1306	0.099	0.03145	296.826	0.0406	0.01328	1.010	2.909	1.76	40.00	655.
1309	0.094	0.04104	297.276	0.0388	0.01329	0.680	3.793	1.76	40.00	772.
1312	0.095	0.05188	297.764	0.0389	0.01331	0.640	4.786	1.76	40.00	971.
1315	0.098	0.06396	298.324	0.0402	0.01334	0.520	5.885	1.76	40.00	1273.
1318	0.103	0.02234	307.809	0.0409	0.01427	1.750	1.925	1.76	40.00	388.
1321	0.100	0.03039	308.155	0.0397	0.01424	1.140	2.622	1.76	40.00	497.
1324	0.099	0.03964	308.545	0.0394	0.01423	0.880	3.422	1.76	40.00	634.
1327	0.101	0.05012	308.985	0.0399	0.01425	0.670	4.319	1.76	40.00	817.
1330	0.102	0.06182	309.486	0.0404	0.01428	0.470	5.316	1.76	40.00	1028.
1333	0.181	0.02245	305.735	0.0733	0.01414	1.370	1.948	3.36	40.00	1372.
1336	0.182	0.03055	306.090	0.0738	0.01416	1.220	2.645	3.36	40.00	1885.
1339	0.183	0.03987	306.485	0.0740	0.01415	0.810	3.450	3.36	40.00	2458.
1342	0.181	0.05039	306.930	0.0731	0.01416	0.630	4.352	3.36	40.00	3010.
1345	0.179	0.06215	307.415	0.0720	0.01420	0.590	5.349	3.36	40.00	3557.
1348	0.247	0.02247	305.721	0.1015	0.01419	1.540	1.938	4.96	40.00	2756.
1351	0.247	0.03057	306.062	0.1011	0.01417	1.080	2.635	4.96	40.00	3705.
1354	0.246	0.03988	306.468	0.1005	0.01416	0.780	3.435	4.96	40.00	4745.
1357	0.246	0.05042	306.914	0.1002	0.01416	0.550	4.332	4.96	40.00	5907.
1360	0.245	0.06218	307.408	0.0998	0.01419	0.450	5.319	4.96	40.00	7149.
1363	0.321	0.02247	305.662	0.1334	0.01441	1.520	1.900	6.56	40.00	4961.
1366	0.321	0.03057	306.012	0.1333	0.01434	1.320	2.589	4.96	40.00	6718.
1369	0.320	0.03989	306.401	0.1324	0.01431	0.880	3.376	4.96	40.00	8589.
1372	0.317	0.05042	306.830	0.1312	0.01430	0.660	4.253	4.96	40.00	10546.
1375	0.317	0.06219	307.304	0.1307	0.01434	0.540	5.213	4.96	40.00	12734.
1378	0.390	0.02248	305.588	0.1642	0.01437	1.750	1.896	6.56	40.00	7959.
1381	0.389	0.03056	305.923	0.1634	0.01433	0.990	2.573	6.56	40.00	10626.
1384	0.387	0.03990	306.298	0.1623	0.01435	1.130	3.337	4.96	40.00	13509.
1387	0.387	0.05046	306.721	0.1621	0.01439	0.710	4.183	4.96	40.00	16792.

Table 27. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the dilute gas measured with the steady-state technique with bare tungsten hot wires (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1390	0.389	0.06221	307.175	0.1628	0.01446	1.060	5.100	3.36	40.00	20537.
1393	0.431	0.02250	305.054	0.1835	0.01443	1.690	1.882	6.56	40.00	10321.
1396	0.432	0.03059	305.380	0.1837	0.01439	1.180	2.550	6.56	40.00	13950.
1399	0.433	0.03993	305.746	0.1835	0.01442	0.980	3.297	4.96	40.00	17886.
1402	0.432	0.05050	306.157	0.1830	0.01449	1.290	4.119	3.36	40.00	22075.
1405	0.431	0.06227	306.604	0.1822	0.01455	1.110	5.019	3.36	40.00	26460.
1408	0.448	0.02179	315.842	0.1825	0.01575	2.000	1.678	8.16	40.00	7842.
1411	0.450	0.02963	316.138	0.1835	0.01559	1.390	2.292	6.56	40.00	10799.
1414	0.451	0.03868	316.468	0.1837	0.01552	0.850	2.989	6.56	40.00	14061.
1417	0.448	0.04892	316.848	0.1821	0.01551	0.830	3.761	4.96	40.00	17255.
1420	0.447	0.06032	317.251	0.1813	0.01554	1.140	4.599	3.36	40.00	20777.
1423	0.449	0.02962	316.082	0.1829	0.01514	1.230	2.358	6.56	40.00	11034.
1426	0.448	0.03867	316.436	0.1821	0.01514	0.790	3.061	6.56	40.00	14116.
1429	0.447	0.04889	316.813	0.1814	0.01521	0.850	3.832	4.96	40.00	17442.
1432	0.448	0.06030	317.215	0.1817	0.01528	1.200	4.671	3.36	40.00	21224.
1435	0.371	0.02178	315.353	0.1497	0.01524	1.820	1.741	4.96	40.00	5211.
1438	0.370	0.02963	315.663	0.1490	0.01518	1.120	2.371	6.56	40.00	6999.
1441	0.368	0.03865	316.028	0.1480	0.01514	0.880	3.090	6.56	40.00	8940.
1444	0.367	0.04888	316.406	0.1473	0.01514	0.810	3.890	4.96	40.00	11098.
1447	0.368	0.06030	316.845	0.1475	0.01516	0.560	4.772	4.96	40.00	13567.
1450	0.306	0.02179	315.182	0.1222	0.01529	1.990	1.742	4.96	40.00	3327.
1453	0.308	0.02964	315.477	0.1228	0.01522	1.290	2.375	4.96	40.00	4572.
1456	0.309	0.03867	315.830	0.1234	0.01517	0.860	3.101	4.96	40.00	6005.
1459	0.310	0.04891	316.240	0.1234	0.01516	0.680	3.915	4.96	40.00	7539.
1462	0.308	0.06033	316.687	0.1223	0.01515	0.580	4.818	4.96	40.00	9062.
1465	0.237	0.02185	314.117	0.0940	0.01507	2.110	1.778	3.36	40.00	1940.
1468	0.237	0.02973	314.432	0.0939	0.01504	1.440	2.420	3.36	40.00	2623.
1471	0.237	0.03880	314.796	0.0938	0.01501	1.020	3.159	3.36	40.00	3403.
1474	0.237	0.04907	315.201	0.0935	0.01500	0.820	3.992	3.36	40.00	4258.
1477	0.236	0.06051	315.655	0.0933	0.01501	0.760	4.911	3.36	40.00	5183.
1480	0.171	0.02180	315.064	0.0667	0.01506	1.970	1.777	3.36	40.00	924.
1483	0.172	0.02965	315.368	0.0673	0.01502	1.140	2.423	3.36	40.00	1277.
1486	0.171	0.03870	315.736	0.0667	0.01500	0.790	3.164	3.36	40.00	1631.
1489	0.170	0.04893	316.145	0.0664	0.01500	0.570	3.998	3.36	40.00	2035.
1492	0.169	0.06033	316.595	0.0657	0.01501	0.460	4.921	3.36	40.00	2435.
1495	0.083	0.02180	314.932	0.0322	0.01477	1.660	1.815	1.76	40.00	207.
1498	0.085	0.02966	315.252	0.0329	0.01476	1.110	2.470	1.76	40.00	295.
1501	0.087	0.03870	315.627	0.0335	0.01476	0.870	3.224	1.76	40.00	398.
1504	0.087	0.04893	316.034	0.0335	0.01479	0.530	4.067	1.76	40.00	498.
1507	0.086	0.06037	316.491	0.0331	0.01482	0.430	5.004	1.76	40.00	597.
1510	0.088	0.02111	326.167	0.0327	0.01575	1.760	1.648	1.76	40.00	174.
1513	0.088	0.02872	326.451	0.0327	0.01575	1.240	2.243	1.76	40.00	236.
1516	0.089	0.03748	326.782	0.0331	0.01576	0.740	2.924	1.76	40.00	315.

Table 27. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the dilute gas measured with the steady-state technique with bare tungsten hot wires (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1519	0.091	0.04739	327.158	0.0337	0.01577	0.570	3.695	1.76	40.00	411.
1522	0.091	0.05847	327.580	0.0338	0.01580	0.470	4.547	1.76	40.00	506.
1525	0.174	0.02117	325.175	0.0658	0.01605	2.000	1.620	3.36	40.00	736.
1528	0.172	0.02879	325.456	0.0648	0.01599	1.290	2.211	3.36	40.00	969.
1531	0.172	0.03758	325.778	0.0649	0.01597	0.940	2.887	3.36	40.00	1265.
1534	0.174	0.04753	326.152	0.0656	0.01595	0.600	3.654	3.36	40.00	1631.
1537	0.174	0.05861	326.576	0.0654	0.01594	0.540	4.505	3.36	40.00	1990.
1540	0.173	0.05862	326.428	0.0652	0.01572	0.440	4.570	3.36	40.00	2008.
1543	0.242	0.02118	324.838	0.0923	0.01598	2.300	1.626	3.36	40.00	1517.
1546	0.242	0.02881	325.104	0.0924	0.01596	1.520	2.212	3.36	40.00	2061.
1549	0.244	0.03761	325.431	0.0933	0.01595	1.060	2.886	3.36	40.00	2736.
1552	0.245	0.04756	325.812	0.0934	0.01593	0.850	3.648	3.36	40.00	3455.
1555	0.243	0.05865	326.213	0.0923	0.01595	0.770	4.489	3.36	40.00	4129.
1558	0.313	0.02119	324.689	0.1210	0.01597	1.950	1.623	4.96	40.00	2721.
1561	0.311	0.02882	324.963	0.1200	0.01594	1.150	2.209	4.96	40.00	3626.
1564	0.310	0.03761	325.289	0.1194	0.01592	0.920	2.881	4.96	40.00	4661.
1567	0.312	0.04756	325.658	0.1201	0.01592	0.700	3.635	4.96	40.00	5930.
1570	0.313	0.05868	326.065	0.1203	0.01592	0.660	4.473	4.96	40.00	7291.
1573	0.379	0.02121	324.217	0.1480	0.01613	1.930	1.605	4.96	40.00	4212.
1576	0.378	0.02885	324.492	0.1476	0.01609	1.520	2.183	4.96	40.00	5675.
1579	0.377	0.03766	324.811	0.1470	0.01607	0.990	2.845	4.96	40.00	7309.
1582	0.376	0.04763	325.166	0.1464	0.01601	0.810	3.598	4.96	40.00	9119.
1585	0.376	0.05875	325.572	0.1460	0.01601	0.660	4.423	4.96	40.00	11084.
1588	0.434	0.02114	325.273	0.1701	0.01624	2.020	1.585	6.56	40.00	5612.
1591	0.431	0.02876	325.538	0.1690	0.01618	1.350	2.157	6.56	40.00	7498.
1594	0.431	0.03754	325.862	0.1685	0.01613	1.040	2.813	6.56	40.00	9682.
1597	0.430	0.04747	326.218	0.1679	0.01612	0.870	3.543	4.96	40.00	12042.
1600	0.431	0.05856	326.598	0.1680	0.01613	0.820	4.347	4.96	40.00	14729.
1603	0.447	0.02197	334.026	0.1699	0.01710	1.860	1.566	4.96	40.00	4994.
1606	0.444	0.02988	334.312	0.1687	0.01703	1.170	2.132	6.56	40.00	6672.
1609	0.445	0.03901	334.611	0.1688	0.01700	0.820	2.778	6.56	40.00	8673.
1612	0.446	0.04933	334.954	0.1690	0.01696	0.610	3.507	6.56	40.00	10951.
1615	0.446	0.06084	335.334	0.1687	0.01694	0.700	4.311	4.96	40.00	13337.
1618	0.441	0.04956	333.277	0.1681	0.01666	0.740	3.585	4.96	40.00	11266.
1621	0.445	0.06112	333.670	0.1693	0.01667	0.630	4.398	4.96	40.00	13968.
1624	0.384	0.02200	333.632	0.1451	0.01688	2.140	1.593	4.96	40.00	3596.
1627	0.384	0.02993	333.901	0.1448	0.01685	1.150	2.165	4.96	40.00	4857.
1630	0.379	0.03905	334.215	0.1430	0.01682	1.070	2.824	4.96	40.00	6138.
1633	0.377	0.04938	334.566	0.1420	0.01681	0.860	3.562	4.96	40.00	7598.
1636	0.381	0.06091	334.950	0.1432	0.01682	0.620	4.379	4.96	40.00	9469.
1639	0.302	0.02203	333.160	0.1132	0.01680	1.830	1.606	4.96	40.00	2124.
1642	0.305	0.02996	333.435	0.1142	0.01678	1.160	2.185	4.96	40.00	2935.
1645	0.308	0.03911	333.750	0.1154	0.01677	0.790	2.849	4.96	40.00	3903.

Table 27. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the dilute gas measured with the steady-state technique with bare tungsten hot wires (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1648	0.309	0.04946	334.108	0.1153	0.01675	0.620	3.599	4.96	40.00	4902.
1651	0.304	0.06099	334.505	0.1132	0.01656	0.440	4.481	4.96	40.00	5844.
1654	0.238	0.02197	334.031	0.0881	0.01678	2.010	1.607	3.36	40.00	1234.
1657	0.241	0.02989	334.307	0.0893	0.01679	1.340	2.183	3.36	40.00	1718.
1660	0.241	0.03901	334.620	0.0892	0.01678	0.930	2.848	3.36	40.00	2232.
1663	0.238	0.04933	334.983	0.0877	0.01676	0.830	3.601	3.36	40.00	2711.
1666	0.235	0.06084	335.377	0.0866	0.01679	0.660	4.431	3.36	40.00	3232.
1669	0.168	0.02196	333.680	0.0616	0.01673	1.790	1.613	3.36	40.00	586.
1672	0.167	0.02987	333.947	0.0612	0.01670	1.420	2.198	1.76	40.00	784.
1675	0.167	0.03899	334.263	0.0611	0.01669	0.870	2.869	3.36	40.00	1019.
1678	0.166	0.04930	334.627	0.0609	0.01668	0.640	3.626	3.36	40.00	1272.
1681	0.167	0.06079	335.044	0.0611	0.01653	0.950	4.510	1.76	40.00	1588.
1684	0.090	0.02181	335.975	0.0325	0.01674	2.080	1.602	1.76	40.00	152.
1687	0.091	0.02967	336.245	0.0327	0.01678	1.250	2.174	1.76	40.00	209.
1690	0.090	0.03872	336.553	0.0326	0.01676	0.840	2.841	1.76	40.00	270.
1693	0.088	0.04897	336.930	0.0318	0.01676	0.660	3.593	1.76	40.00	325.
1698	0.089	0.06040	337.334	0.0320	0.01651	0.440	4.495	1.76	40.00	410.
1701	0.091	0.02142	342.070	0.0323	0.01737	2.240	1.516	1.76	40.00	134.
1704	0.091	0.02914	342.309	0.0324	0.01732	1.230	2.068	1.76	40.00	185.
1707	0.090	0.03803	342.601	0.0318	0.01734	0.790	2.696	1.76	40.00	231.
1710	0.089	0.04811	342.924	0.0314	0.01736	0.590	3.408	1.76	40.00	284.
1713	0.089	0.05933	343.310	0.0315	0.01735	0.440	4.203	1.76	40.00	351.
1716	0.090	0.04808	342.997	0.0320	0.01720	0.660	3.436	1.76	40.00	297.
1719	0.090	0.05931	343.408	0.0319	0.01702	0.480	4.283	1.76	40.00	365.
1722	0.168	0.02140	342.363	0.0601	0.01797	2.400	1.464	1.76	40.00	466.
1725	0.168	0.02910	342.604	0.0601	0.01791	1.740	1.997	1.76	40.00	632.
1728	0.167	0.02912	342.566	0.0597	0.01755	1.720	2.038	1.76	40.00	637.
1731	0.167	0.03800	342.875	0.0597	0.01754	1.000	2.661	3.36	40.00	830.
1734	0.168	0.04807	343.193	0.0599	0.01734	1.210	3.403	1.76	40.00	1064.
1737	0.168	0.05928	343.564	0.0599	0.01739	0.840	4.184	1.76	40.00	1305.
1740	0.248	0.02144	341.776	0.0896	0.01795	2.440	1.466	3.36	40.00	1080.
1743	0.248	0.02915	342.037	0.0896	0.01781	1.650	2.008	3.36	40.00	1475.
1746	0.248	0.03806	342.327	0.0895	0.01755	1.200	2.658	3.36	40.00	1944.
1749	0.249	0.04813	342.656	0.0898	0.01754	0.980	3.359	3.36	40.00	2463.
1753	0.250	0.05942	343.029	0.0900	0.01730	0.670	4.201	3.36	40.00	3086.
1756	0.314	0.02146	341.592	0.1144	0.01751	2.310	1.503	4.96	40.00	1867.
1759	0.313	0.02920	341.834	0.1141	0.01755	1.420	2.037	4.96	40.00	2511.
1762	0.314	0.03811	342.128	0.1141	0.01736	0.900	2.684	4.96	40.00	3298.
1765	0.315	0.04820	342.462	0.1145	0.01740	0.630	3.382	4.96	40.00	4166.
1768	0.315	0.05945	342.819	0.1143	0.01743	0.520	4.156	4.96	40.00	5092.
1771	0.374	0.02148	341.005	0.1374	0.01754	1.920	1.498	4.96	40.00	2780.
1774	0.376	0.02922	341.256	0.1382	0.01754	1.410	2.035	4.96	40.00	3815.
1777	0.377	0.03815	341.549	0.1384	0.01754	1.050	2.651	4.96	40.00	4965.

Table 27. Thermal conductivity of the binary 30 % R32 / 70 % R134a mixture in the dilute gas measured with the steady-state technique with bare tungsten hot wires (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1780	0.376	0.04825	341.875	0.1378	0.01753	0.730	3.349	4.96	40.00	6195.
1783	0.374	0.05952	342.247	0.1368	0.01753	0.660	4.119	4.96	40.00	7471.
1786	0.430	0.02149	340.968	0.1593	0.01808	2.430	1.452	6.56	40.00	3721.
1789	0.430	0.02924	341.196	0.1592	0.01800	1.910	1.979	4.96	40.00	5054.
1792	0.432	0.02924	341.135	0.1600	0.01744	1.590	2.043	4.96	40.00	5280.
1795	0.431	0.03815	341.416	0.1595	0.01749	0.920	2.650	6.56	40.00	6784.
1798	0.430	0.04826	341.735	0.1586	0.01731	0.860	3.377	4.96	40.00	8508.
1801	0.431	0.05954	342.093	0.1590	0.01735	0.830	4.142	4.96	40.00	10457.

Table 28. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the dilute gas measured with the steady-state technique.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1003	0.089	0.02831	257.587	0.0424	0.01039	0.950	3.349	1.76	40.00	778.
1006	0.089	0.03845	258.178	0.0424	0.01039	0.520	4.543	1.76	40.00	1044.
1009	0.089	0.05011	258.865	0.0423	0.01042	0.610	5.903	1.76	40.00	1335.
1012	0.089	0.06330	259.624	0.0421	0.01046	0.560	7.424	1.76	40.00	1645.
1015	0.089	0.07793	260.457	0.0422	0.01050	0.440	9.099	1.76	40.00	2005.
1018	0.175	0.02829	257.582	0.0858	0.01060	1.070	3.262	3.36	40.00	3575.
1021	0.176	0.03842	258.163	0.0857	0.01059	0.740	4.424	3.36	40.00	4794.
1024	0.176	0.05008	258.829	0.0855	0.01060	0.640	5.748	3.36	40.00	6123.
1027	0.176	0.06324	259.562	0.0853	0.01062	0.510	7.223	3.36	40.00	7548.
1030	0.175	0.07791	260.382	0.0846	0.01065	0.500	8.848	3.36	40.00	8970.
1033	0.214	0.02829	257.556	0.1057	0.01072	0.790	3.213	4.96	40.00	5723.
1036	0.214	0.03843	258.131	0.1056	0.01069	0.520	4.360	4.96	40.00	7678.
1039	0.215	0.05012	258.784	0.1055	0.01069	0.400	5.662	4.96	40.00	9834.
1042	0.215	0.06326	259.512	0.1055	0.01071	0.700	7.106	3.36	40.00	12156.
1045	0.215	0.07788	260.299	0.1052	0.01075	0.430	8.677	3.36	40.00	14552.
1048	0.222	0.02737	266.556	0.1054	0.01122	0.780	2.975	4.96	40.00	4498.
1051	0.222	0.03721	267.089	0.1053	0.01121	0.570	4.039	4.96	40.00	6046.
1054	0.222	0.04852	267.693	0.1051	0.01122	0.380	5.245	4.96	40.00	7743.
1057	0.222	0.06127	268.362	0.1045	0.01123	0.650	6.596	3.36	40.00	9501.
1060	0.222	0.07545	269.106	0.1041	0.01127	0.620	8.069	3.36	40.00	11381.
1064	0.110	0.02738	266.599	0.0510	0.01096	0.810	3.067	3.36	40.00	931.
1067	0.110	0.03719	267.141	0.0506	0.01097	0.860	4.163	1.76	40.00	1236.
1070	0.109	0.04847	267.762	0.0503	0.01099	0.690	5.409	1.76	40.00	1569.
1073	0.109	0.06125	268.463	0.0502	0.01104	0.760	6.801	1.76	40.00	1948.
1076	0.110	0.07545	269.228	0.0503	0.01108	0.680	8.343	1.76	40.00	2375.
1079	0.343	0.02737	266.493	0.1683	0.01149	0.770	2.859	6.56	40.00	13342.
1082	0.342	0.03721	266.984	0.1674	0.01152	0.700	3.850	4.96	40.00	17532.
1085	0.342	0.04851	267.538	0.1667	0.01158	0.880	4.951	3.36	40.00	22074.
1088	0.342	0.06129	268.135	0.1665	0.01166	2.220	6.157	1.76	40.00	27018.
1091	0.343	0.07554	268.804	0.1662	0.01170	1.670	7.497	1.76	40.00	32331.
1094	0.105	0.02640	276.632	0.0468	0.01164	1.050	2.786	1.76	40.00	618.
1097	0.105	0.03587	277.130	0.0464	0.01162	0.920	3.791	1.76	40.00	822.
1100	0.105	0.04678	277.700	0.0462	0.01164	0.610	4.933	1.76	40.00	1052.
1103	0.105	0.05910	278.347	0.0463	0.01168	0.550	6.210	1.76	40.00	1321.
1106	0.106	0.07285	279.048	0.0467	0.01172	0.590	7.621	1.76	40.00	1635.
1109	0.212	0.02642	276.593	0.0960	0.01183	1.100	2.733	3.36	40.00	2865.
1112	0.211	0.03590	277.074	0.0957	0.01181	0.910	3.712	3.36	40.00	3841.
1115	0.211	0.04680	277.633	0.0951	0.01183	0.720	4.824	3.36	40.00	4882.
1118	0.210	0.05912	278.263	0.0944	0.01184	0.580	6.076	3.36	40.00	6004.
1121	0.210	0.07285	278.949	0.0942	0.01187	0.540	7.449	3.36	40.00	7244.
1124	0.317	0.02640	276.552	0.1473	0.01205	0.980	2.659	6.56	40.00	7447.
1127	0.318	0.03590	277.027	0.1473	0.01201	0.550	3.610	6.56	40.00	10022.
1130	0.317	0.04682	277.558	0.1464	0.01201	0.540	4.686	4.96	40.00	12718.

Table 28. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1133	0.316	0.05917	278.156	0.1455	0.01205	0.430	5.871	4.96	40.00	15559.
1136	0.316	0.07291	278.794	0.1451	0.01213	0.590	7.149	3.36	40.00	18615.
1139	0.426	0.02641	276.350	0.2031	0.01214	0.870	2.600	6.56	40.00	15995.
1142	0.425	0.03591	276.786	0.2019	0.01220	0.880	3.486	4.96	40.00	20943.
1145	0.424	0.04686	277.287	0.2008	0.01229	1.180	4.473	3.36	40.00	26264.
1148	0.423	0.05919	277.834	0.2001	0.01234	1.190	5.571	3.36	40.00	32066.
1151	0.424	0.07293	278.423	0.2000	0.01242	1.590	6.748	1.76	40.00	38355.
1154	0.486	0.02643	276.284	0.2350	0.01241	1.240	2.515	4.96	40.00	22559.
1157	0.487	0.03593	276.713	0.2354	0.01246	1.520	3.362	3.36	40.00	29999.
1160	0.488	0.04686	277.197	0.2350	0.01246	1.270	4.324	3.36	40.00	38042.
1163	0.487	0.05919	277.712	0.2339	0.01251	1.830	5.365	1.76	40.00	46087.
1166	0.485	0.07296	278.298	0.2323	0.01248	1.490	6.536	1.76	40.00	54528.
1169	0.503	0.02541	287.960	0.2304	0.01314	1.110	2.311	6.56	40.00	15716.
1172	0.505	0.03453	288.358	0.2307	0.01314	0.930	3.111	4.96	40.00	21099.
1175	0.505	0.04502	288.804	0.2305	0.01321	1.260	3.995	3.36	40.00	26820.
1178	0.505	0.05691	289.289	0.2296	0.01324	1.100	4.984	3.36	40.00	32867.
1181	0.504	0.07017	289.828	0.2285	0.01329	1.980	6.057	1.76	40.00	39105.
1184	0.555	0.02540	287.880	0.2569	0.01321	1.230	2.280	6.56	40.00	20411.
1187	0.555	0.03452	288.262	0.2564	0.01326	1.520	3.051	3.36	40.00	26991.
1190	0.554	0.04503	288.701	0.2556	0.01329	1.320	3.921	3.36	40.00	34147.
1193	0.553	0.05694	289.185	0.2543	0.01332	2.310	4.884	1.76	40.00	41625.
1196	0.552	0.07020	289.703	0.2532	0.01332	1.700	5.940	1.76	40.00	49579.
1199	0.388	0.02540	287.873	0.1736	0.01292	0.930	2.383	6.56	40.00	8192.
1202	0.387	0.03453	288.294	0.1726	0.01288	0.730	3.233	6.56	40.00	10905.
1205	0.387	0.04505	288.775	0.1725	0.01288	0.670	4.194	4.96	40.00	14020.
1208	0.388	0.05691	289.305	0.1726	0.01291	0.470	5.253	4.96	40.00	17440.
1211	0.388	0.07013	289.873	0.1721	0.01300	0.800	6.387	3.36	40.00	20866.
1214	0.291	0.02543	287.728	0.1278	0.01276	0.980	2.433	4.96	40.00	4144.
1217	0.291	0.03455	288.167	0.1275	0.01271	0.790	3.310	4.96	40.00	5573.
1220	0.291	0.04505	288.655	0.1276	0.01272	0.560	4.301	4.96	40.00	7205.
1223	0.293	0.05696	289.220	0.1279	0.01273	0.370	5.415	4.96	40.00	9038.
1226	0.293	0.07019	289.819	0.1276	0.01274	0.370	6.641	4.96	40.00	10938.
1229	0.191	0.02544	287.697	0.0823	0.01264	1.120	2.467	3.36	40.00	1588.
1232	0.191	0.03455	288.138	0.0825	0.01262	0.670	3.355	3.36	40.00	2159.
1235	0.191	0.04507	288.647	0.0821	0.01262	0.540	4.370	3.36	40.00	2766.
1238	0.190	0.05697	289.219	0.0816	0.01265	0.470	5.507	3.36	40.00	3416.
1241	0.190	0.07019	289.845	0.0812	0.01266	0.350	6.768	3.36	40.00	4121.
1244	0.085	0.02543	287.719	0.0362	0.01243	0.980	2.514	1.76	40.00	285.
1247	0.084	0.03455	288.148	0.0357	0.01240	0.680	3.423	1.76	40.00	377.
1250	0.084	0.04506	288.667	0.0356	0.01242	0.420	4.460	1.76	40.00	484.
1253	0.085	0.05695	289.259	0.0358	0.01243	0.350	5.628	1.76	40.00	613.
1256	0.086	0.07017	289.901	0.0361	0.01246	0.310	6.916	1.76	40.00	760.
1259	0.088	0.02477	295.236	0.0365	0.01299	1.160	2.345	1.76	40.00	249.

Table 28. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1262	0.089	0.03368	295.669	0.0367	0.01297	0.740	3.192	1.76	40.00	341.
1265	0.088	0.04394	296.149	0.0362	0.01298	0.520	4.162	1.76	40.00	430.
1268	0.087	0.05553	296.694	0.0356	0.01300	0.330	5.250	1.76	40.00	522.
1271	0.087	0.06843	297.286	0.0357	0.01303	0.380	6.453	1.76	40.00	642.
1274	0.175	0.02469	296.327	0.0730	0.01325	1.280	2.287	3.36	40.00	1026.
1277	0.175	0.03356	296.738	0.0728	0.01322	0.740	3.115	3.36	40.00	1380.
1280	0.173	0.04378	297.213	0.0717	0.01322	0.510	4.061	3.36	40.00	1732.
1283	0.172	0.05533	297.740	0.0711	0.01324	0.380	5.121	3.36	40.00	2135.
1286	0.173	0.06821	298.329	0.0717	0.01327	0.310	6.294	3.36	40.00	2654.
1289	0.277	0.02469	296.303	0.1172	0.01343	1.180	2.251	4.96	40.00	2817.
1292	0.275	0.03356	296.704	0.1163	0.01336	0.750	3.068	4.96	40.00	3750.
1295	0.274	0.04377	297.170	0.1157	0.01335	0.520	3.999	4.96	40.00	4804.
1298	0.276	0.05532	297.690	0.1161	0.01335	0.450	5.041	4.96	40.00	6068.
1301	0.277	0.06821	298.263	0.1164	0.01335	0.300	6.198	4.96	40.00	7447.
1304	0.384	0.02469	296.249	0.1657	0.01356	1.210	2.216	6.56	40.00	6043.
1307	0.382	0.03356	296.648	0.1645	0.01348	1.010	3.017	6.56	40.00	8049.
1310	0.381	0.04378	297.095	0.1636	0.01346	0.790	3.928	4.96	40.00	10283.
1313	0.382	0.05534	297.601	0.1639	0.01346	0.610	4.940	4.96	40.00	12898.
1316	0.384	0.06822	298.164	0.1643	0.01348	0.400	6.049	4.96	40.00	15768.
1319	0.478	0.02470	296.202	0.2096	0.01365	1.220	2.184	6.56	40.00	10322.
1322	0.479	0.03356	296.589	0.2095	0.01360	0.710	2.960	6.56	40.00	13898.
1325	0.480	0.04379	297.038	0.2098	0.01361	0.680	3.831	4.96	40.00	17930.
1328	0.479	0.05536	297.510	0.2090	0.01369	0.990	4.781	3.36	40.00	22000.
1331	0.477	0.06822	298.017	0.2077	0.01376	1.120	5.817	3.36	40.00	26184.
1334	0.545	0.02469	296.179	0.2418	0.01377	1.180	2.149	6.56	40.00	14335.
1337	0.544	0.03356	296.536	0.2412	0.01388	1.200	2.874	4.96	40.00	18954.
1340	0.543	0.04381	296.955	0.2402	0.01391	1.550	3.709	3.36	40.00	24049.
1343	0.542	0.05537	297.428	0.2392	0.01394	1.130	4.635	3.36	40.00	29534.
1346	0.544	0.06824	297.935	0.2396	0.01392	1.100	5.655	3.36	40.00	35873.
1349	0.566	0.02388	306.577	0.2406	0.01465	1.610	1.965	8.16	40.00	11056.
1352	0.567	0.03246	306.921	0.2409	0.01457	1.060	2.667	6.56	40.00	14966.
1355	0.566	0.04236	307.305	0.2398	0.01458	0.940	3.453	4.96	40.00	19071.
1358	0.564	0.05356	307.728	0.2386	0.01464	1.390	4.315	3.36	40.00	23410.
1361	0.564	0.06602	308.195	0.2381	0.01469	1.110	5.257	3.36	40.00	28188.
1364	0.477	0.02389	306.465	0.2002	0.01454	1.440	1.995	8.16	40.00	7312.
1367	0.475	0.03247	306.832	0.1990	0.01442	0.900	2.721	6.56	40.00	9784.
1370	0.478	0.04236	307.225	0.1997	0.01438	0.770	3.540	6.56	40.00	12767.
1373	0.479	0.05355	307.665	0.2000	0.01440	0.650	4.445	4.96	40.00	15978.
1376	0.477	0.06603	308.168	0.1986	0.01445	0.990	5.429	3.36	40.00	19082.
1379	0.379	0.02389	306.415	0.1569	0.01437	1.380	2.029	6.56	40.00	4268.
1382	0.382	0.03248	306.772	0.1577	0.01429	1.040	2.765	4.96	40.00	5856.
1385	0.381	0.04237	307.182	0.1570	0.01426	0.820	3.604	4.96	40.00	7525.
1388	0.378	0.05358	307.641	0.1557	0.01426	0.660	4.543	4.96	40.00	9248.

Table 28. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1391	0.378	0.06605	308.161	0.1552	0.01426	0.490	5.580	4.96	40.00	11210.
1394	0.292	0.02395	305.643	0.1196	0.01420	1.500	2.065	4.96	40.00	2406.
1397	0.292	0.03255	306.010	0.1195	0.01415	0.910	2.813	4.96	40.00	3256.
1400	0.293	0.04249	306.437	0.1196	0.01412	0.650	3.673	4.96	40.00	4235.
1403	0.294	0.05371	306.923	0.1198	0.01411	0.500	4.636	4.96	40.00	5339.
1406	0.294	0.06618	307.452	0.1197	0.01411	0.420	5.702	4.96	40.00	6515.
1409	0.187	0.02396	305.563	0.0756	0.01410	1.720	2.087	3.36	40.00	906.
1412	0.187	0.03257	305.938	0.0753	0.01404	0.920	2.848	3.36	40.00	1221.
1415	0.187	0.04249	306.378	0.0752	0.01396	0.580	3.732	3.36	40.00	1588.
1418	0.187	0.05372	306.870	0.0753	0.01398	0.510	4.710	3.36	40.00	2000.
1421	0.190	0.06621	307.396	0.0762	0.01399	0.400	5.793	3.36	40.00	2505.
1424	0.087	0.02396	305.497	0.0346	0.01386	1.380	2.127	1.76	40.00	181.
1427	0.088	0.03258	305.877	0.0351	0.01382	0.790	2.899	1.76	40.00	253.
1430	0.088	0.04251	306.313	0.0348	0.01378	0.620	3.791	1.76	40.00	324.
1433	0.086	0.05372	306.808	0.0342	0.01379	0.410	4.787	1.76	40.00	394.
1436	0.086	0.06620	307.361	0.0340	0.01382	0.320	5.888	1.76	40.00	474.
1439	0.090	0.02308	317.374	0.0344	0.01504	1.590	1.887	1.76	40.00	141.
1442	0.090	0.03137	317.698	0.0345	0.01480	1.120	2.607	1.76	40.00	195.
1445	0.089	0.04093	318.098	0.0342	0.01474	0.690	3.415	1.76	40.00	250.
1448	0.088	0.05177	318.535	0.0335	0.01474	0.510	4.319	1.76	40.00	303.
1451	0.090	0.06382	319.033	0.0341	0.01476	0.360	5.313	1.76	40.00	384.
1454	0.179	0.02316	316.149	0.0694	0.01498	1.840	1.900	1.76	40.00	614.
1457	0.178	0.03149	316.486	0.0691	0.01491	0.980	2.595	3.36	40.00	830.
1460	0.177	0.04109	316.883	0.0684	0.01488	0.710	3.390	3.36	40.00	1057.
1463	0.176	0.05194	317.323	0.0681	0.01487	0.550	4.287	3.36	40.00	1317.
1466	0.176	0.06403	317.802	0.0681	0.01488	0.360	5.276	3.36	40.00	1611.
1469	0.274	0.02317	315.935	0.1078	0.01523	1.800	1.866	3.36	40.00	1541.
1472	0.276	0.03151	316.281	0.1085	0.01511	1.070	2.556	3.36	40.00	2130.
1475	0.278	0.04112	316.660	0.1090	0.01505	0.900	3.344	3.36	40.00	2803.
1478	0.277	0.05198	317.083	0.1086	0.01502	0.890	4.229	3.36	40.00	3500.
1481	0.275	0.06411	317.581	0.1075	0.01497	0.590	5.226	3.36	40.00	4209.
1484	0.373	0.02318	315.845	0.1487	0.01502	1.650	1.888	4.96	40.00	3142.
1487	0.373	0.03152	316.175	0.1484	0.01497	1.060	2.569	4.96	40.00	4243.
1490	0.374	0.04114	316.561	0.1489	0.01496	0.820	3.349	4.96	40.00	5542.
1493	0.377	0.05202	316.997	0.1495	0.01496	0.700	4.221	4.96	40.00	7019.
1496	0.377	0.06414	317.473	0.1494	0.01496	0.560	5.190	4.96	40.00	8561.
1499	0.474	0.02320	315.641	0.1918	0.01515	1.530	1.865	6.56	40.00	5496.
1502	0.473	0.03155	315.969	0.1910	0.01509	1.040	2.537	6.56	40.00	7377.
1505	0.471	0.04117	316.355	0.1898	0.01502	0.770	3.315	6.56	40.00	9452.
1508	0.470	0.05206	316.784	0.1890	0.01504	0.780	4.168	4.96	40.00	11715.
1511	0.470	0.06420	317.246	0.1885	0.01506	0.550	5.111	4.96	40.00	14207.
1514	0.541	0.02321	315.530	0.2208	0.01519	1.630	1.854	6.56	40.00	7546.
1517	0.543	0.03157	315.867	0.2215	0.01504	1.210	2.534	6.56	40.00	10349.

Table 28. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1520	0.545	0.04119	316.241	0.2220	0.01504	0.760	3.286	6.56	40.00	13421.
1523	0.544	0.05208	316.635	0.2211	0.01509	0.730	4.118	4.96	40.00	16583.
1526	0.541	0.06422	317.088	0.2195	0.01517	1.180	5.023	3.36	40.00	19771.
1529	0.564	0.02242	326.735	0.2211	0.01618	1.720	1.686	6.56	40.00	5989.
1532	0.566	0.03049	327.033	0.2213	0.01609	1.150	2.296	6.56	40.00	8143.
1535	0.564	0.03979	327.370	0.2202	0.01602	0.810	2.997	6.56	40.00	10471.
1538	0.561	0.05032	327.745	0.2189	0.01600	0.610	3.779	6.56	40.00	12963.
1541	0.560	0.06206	328.156	0.2179	0.01605	0.640	4.622	4.96	40.00	15618.
1544	0.467	0.02245	326.288	0.1812	0.01579	7.910	1.736	1.76	40.00	3967.
1547	0.469	0.03053	326.587	0.1818	0.01587	1.040	2.343	6.56	40.00	5374.
1550	0.470	0.03985	326.929	0.1821	0.01588	1.000	3.047	4.96	40.00	6985.
1553	0.468	0.05038	327.305	0.1808	0.01589	0.550	3.840	6.56	40.00	8629.
1556	0.466	0.06214	327.721	0.1796	0.01591	0.620	4.715	4.96	40.00	10394.
1559	0.385	0.02246	326.016	0.1479	0.01589	1.710	1.731	6.56	40.00	2537.
1562	0.381	0.03054	326.322	0.1463	0.01576	1.340	2.369	4.96	40.00	3381.
1565	0.383	0.03985	326.672	0.1468	0.01578	0.990	3.081	4.96	40.00	4414.
1568	0.386	0.05039	327.065	0.1479	0.01581	0.630	3.881	4.96	40.00	5626.
1571	0.383	0.06215	327.494	0.1463	0.01584	0.450	4.766	4.96	40.00	6713.
1574	0.271	0.02247	325.880	0.1031	0.01584	1.870	1.742	3.36	40.00	1175.
1577	0.268	0.03057	326.186	0.1018	0.01583	1.320	2.369	3.36	40.00	1549.
1580	0.270	0.03990	326.533	0.1024	0.01581	0.760	3.093	3.36	40.00	2043.
1583	0.273	0.05046	326.924	0.1034	0.01582	0.820	3.905	3.36	40.00	2622.
1586	0.270	0.06222	327.367	0.1022	0.01582	0.680	4.810	3.36	40.00	3132.
1589	0.185	0.02249	326.070	0.0697	0.01570	1.840	1.760	1.76	40.00	520.
1592	0.188	0.03058	326.376	0.0706	0.01564	1.540	2.402	1.76	40.00	726.
1595	0.190	0.03989	326.724	0.0714	0.01565	1.040	3.129	1.76	40.00	964.
1598	0.192	0.05042	327.110	0.0719	0.01566	0.850	3.951	1.76	40.00	1230.
1601	0.191	0.06216	327.554	0.0715	0.01570	0.930	4.856	1.76	40.00	1487.
1604	0.095	0.02249	325.740	0.0354	0.01552	1.560	1.782	1.76	40.00	130.
1607	0.093	0.03059	326.037	0.0348	0.01549	1.060	2.428	1.76	40.00	171.
1610	0.091	0.03991	326.405	0.0339	0.01550	0.680	3.166	1.76	40.00	211.
1613	0.090	0.05047	326.811	0.0333	0.01552	0.490	3.999	1.76	40.00	256.
1616	0.092	0.06224	327.254	0.0342	0.01554	0.320	4.924	1.76	40.00	331.
1619	0.099	0.02175	336.927	0.0357	0.01660	2.400	1.611	1.76	40.00	108.
1622	0.099	0.02958	337.190	0.0355	0.01662	1.580	2.189	1.76	40.00	144.
1625	0.096	0.03861	337.484	0.0347	0.01664	1.020	2.853	1.76	40.00	179.
1628	0.095	0.04881	337.848	0.0340	0.01664	0.620	3.607	1.76	40.00	217.
1631	0.094	0.06019	338.240	0.0336	0.01664	0.450	4.448	1.76	40.00	261.
1632	0.099	0.04906	337.502	0.0354	0.01641	0.650	3.676	1.76	40.00	241.
1635	0.098	0.06047	337.891	0.0353	0.01646	0.460	4.515	1.76	40.00	294.
1638	0.180	0.02183	336.310	0.0654	0.01644	1.820	1.633	1.76	40.00	382.
1641	0.179	0.02970	336.586	0.0649	0.01650	1.250	2.212	1.76	40.00	508.
1644	0.177	0.03877	336.900	0.0641	0.01654	1.320	2.880	1.76	40.00	643.

Table 28. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1647	0.175	0.04903	337.250	0.0635	0.01657	0.880	3.636	1.76	40.00	793.
1650	0.175	0.06047	337.649	0.0633	0.01661	0.760	4.470	1.76	40.00	966.
1653	0.283	0.02182	336.638	0.1038	0.01700	2.080	1.576	3.36	40.00	968.
1656	0.283	0.02967	336.875	0.1037	0.01693	1.340	2.150	3.36	40.00	1314.
1659	0.282	0.03872	337.217	0.1032	0.01667	0.920	2.848	3.36	40.00	1716.
1662	0.280	0.04896	337.584	0.1024	0.01669	0.710	3.595	3.36	40.00	2121.
1665	0.280	0.06038	337.969	0.1021	0.01669	0.580	4.428	3.36	40.00	2592.
1668	0.387	0.02183	336.444	0.1436	0.01696	2.400	1.578	4.96	40.00	1941.
1671	0.390	0.02968	336.727	0.1445	0.01686	1.420	2.156	4.96	40.00	2679.
1674	0.390	0.03874	337.019	0.1446	0.01675	0.900	2.826	4.96	40.00	3508.
1677	0.389	0.04899	337.378	0.1437	0.01677	0.690	3.564	4.96	40.00	4349.
1680	0.386	0.06042	337.764	0.1427	0.01676	0.480	4.392	4.96	40.00	5258.
1683	0.538	0.02185	336.223	0.2029	0.01725	2.310	1.547	6.56	40.00	4065.
1686	0.541	0.02971	336.515	0.2038	0.01696	1.560	2.132	6.56	40.00	5642.
1689	0.542	0.03877	336.827	0.2042	0.01693	1.090	2.778	6.56	40.00	7355.
1692	0.541	0.04903	337.163	0.2033	0.01681	0.690	3.528	6.56	40.00	9216.
1695	0.539	0.06047	337.571	0.2024	0.01684	0.840	4.328	4.96	40.00	11147.
1698	0.464	0.02188	335.768	0.1737	0.01690	1.930	1.583	6.56	40.00	2968.
1701	0.462	0.02975	336.053	0.1731	0.01661	1.470	2.186	4.96	40.00	4055.
1704	0.465	0.03883	336.363	0.1741	0.01666	0.930	2.839	4.96	40.00	5311.
1707	0.468	0.04910	336.706	0.1748	0.01670	0.800	3.572	4.96	40.00	6719.
1710	0.465	0.06056	337.098	0.1737	0.01673	0.590	4.387	4.96	40.00	8103.
1713	0.561	0.02127	345.326	0.2053	0.01784	2.550	1.457	4.96	40.00	3563.
1716	0.563	0.02893	345.550	0.2060	0.01780	1.470	1.982	6.56	40.00	4871.
1719	0.564	0.03775	345.835	0.2062	0.01779	1.010	2.581	6.56	40.00	6343.
1722	0.563	0.04774	346.148	0.2054	0.01759	0.720	3.291	6.56	40.00	7988.
1725	0.561	0.05889	346.511	0.2044	0.01760	0.550	4.044	6.56	40.00	9672.
1728	0.467	0.02129	345.006	0.1697	0.01797	2.470	1.451	6.56	40.00	2347.
1731	0.467	0.02895	345.247	0.1694	0.01794	1.620	1.974	4.96	40.00	3173.
1734	0.468	0.03778	345.549	0.1696	0.01745	1.120	2.643	4.96	40.00	4247.
1737	0.469	0.04778	345.873	0.1701	0.01748	0.900	3.330	4.96	40.00	5367.
1740	0.470	0.05894	346.233	0.1703	0.01753	0.660	4.086	4.96	40.00	6576.
1743	0.377	0.02132	344.565	0.1360	0.01792	2.510	1.460	3.36	40.00	1473.
1746	0.377	0.02899	344.815	0.1359	0.01762	1.730	2.016	3.36	40.00	2025.
1749	0.377	0.03784	345.098	0.1357	0.01761	1.310	2.630	3.36	40.00	2625.
1752	0.378	0.04784	345.441	0.1360	0.01740	1.030	3.361	3.36	40.00	3363.
1755	0.379	0.05902	345.782	0.1363	0.01746	0.820	4.126	3.36	40.00	4129.
1758	0.283	0.02134	344.302	0.1014	0.01792	2.640	1.463	3.36	40.00	794.
1761	0.284	0.02901	344.562	0.1017	0.01757	1.860	2.027	3.36	40.00	1103.
1764	0.285	0.03786	344.868	0.1020	0.01728	1.090	2.688	3.36	40.00	1469.
1767	0.286	0.04788	345.194	0.1021	0.01725	0.800	3.402	3.36	40.00	1856.
1770	0.286	0.05905	345.561	0.1020	0.01732	0.590	4.176	3.36	40.00	2266.
1773	0.183	0.02129	344.836	0.0650	0.01757	2.450	1.490	1.76	40.00	318.

Table 28. Thermal conductivity of the binary 70 % R32 / 30 % R134a mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1776	0.182	0.02895	345.082	0.0645	0.01747	1.570	2.037	1.76	40.00	427.
1779	0.187	0.03779	345.365	0.0662	0.01748	1.100	2.656	1.76	40.00	586.
1782	0.188	0.04779	345.676	0.0665	0.01744	0.830	3.366	1.76	40.00	749.
1785	0.184	0.05896	346.083	0.0651	0.01724	0.900	4.199	1.76	40.00	889.
1788	0.095	0.02132	344.452	0.0333	0.01733	2.140	1.513	1.76	40.00	82.
1791	0.096	0.02900	344.713	0.0337	0.01708	1.350	2.089	1.76	40.00	116.
1794	0.095	0.03785	345.002	0.0335	0.01705	0.870	2.730	1.76	40.00	149.
1797	0.094	0.04786	345.346	0.0331	0.01695	0.570	3.473	1.76	40.00	185.
1800	0.093	0.05903	345.711	0.0325	0.01703	0.440	4.262	1.76	40.00	218.

Table 29. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the dilute gas measured with the steady-state technique.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1118	0.132	0.05420	243.502	0.0672	0.01227	2.480	5.388	2.29	3.00	4516.
1119	0.132	0.05420	243.511	0.0673	0.01222	2.670	5.411	2.42	4.00	4540.
1120	0.132	0.05419	243.537	0.0673	0.01210	2.460	5.464	3.36	40.00	4587.
1135	0.136	0.03989	242.761	0.0695	0.01208	3.120	4.034	3.36	40.00	3682.
1138	0.135	0.05421	243.433	0.0688	0.01229	2.660	5.378	2.05	3.00	4742.
1139	0.134	0.05421	243.452	0.0683	0.01220	2.980	5.417	2.26	4.00	4703.
1140	0.133	0.05421	243.468	0.0681	0.01208	2.660	5.470	3.36	40.00	4719.
1158	0.124	0.05433	242.777	0.0636	0.01242	2.510	5.340	2.05	3.00	4014.
1159	0.124	0.05433	242.792	0.0636	0.01237	3.040	5.362	1.94	4.00	4029.
1160	0.124	0.05432	242.823	0.0636	0.01226	2.920	5.410	3.36	40.00	4067.
1178	0.135	0.05121	260.800	0.0642	0.01413	3.450	4.437	2.05	3.00	2632.
1179	0.136	0.05121	260.806	0.0643	0.01408	3.980	4.451	1.94	4.00	2642.
1180	0.135	0.05121	260.828	0.0642	0.01398	3.370	4.485	3.36	40.00	2658.
1198	0.280	0.05135	259.874	0.1379	0.01440	3.300	4.279	2.29	3.00	13619.
1199	0.280	0.05134	259.916	0.1379	0.01411	3.640	4.365	3.06	4.00	13875.
1200	0.280	0.05134	259.947	0.1378	0.01387	3.490	4.438	4.96	40.00	14078.
1218	0.294	0.04953	271.513	0.1375	0.01575	4.240	3.796	2.29	3.00	10114.
1219	0.294	0.04952	271.530	0.1375	0.01559	4.300	3.836	2.42	4.00	10209.
1220	0.294	0.04951	271.582	0.1374	0.01522	4.180	3.925	4.96	40.00	10433.
1238	0.111	0.04955	271.442	0.0500	0.01510	3.390	4.027	1.93	3.00	1242.
1239	0.111	0.04955	271.427	0.0500	0.01509	3.340	4.030	1.78	4.00	1244.
1240	0.111	0.04955	271.427	0.0501	0.01504	3.010	4.044	1.76	40.00	1251.
1258	0.389	0.04952	271.205	0.1859	0.01578	4.200	3.724	2.41	3.00	19906.
1259	0.389	0.04951	271.231	0.1860	0.01556	3.690	3.773	2.90	4.00	20174.
1260	0.389	0.04951	271.245	0.1860	0.01546	4.210	3.798	3.36	40.00	20307.
1318	0.160	0.04806	281.237	0.0704	0.01615	3.520	3.647	2.29	3.00	2034.
1319	0.161	0.04809	281.213	0.0705	0.01616	4.080	3.647	1.94	4.00	2041.
1320	0.160	0.04809	281.237	0.0701	0.01607	3.680	3.668	3.36	40.00	2029.
1338	0.304	0.04833	279.583	0.1376	0.01656	4.170	3.535	2.17	3.00	8430.
1339	0.304	0.04833	279.608	0.1375	0.01634	4.210	3.582	2.58	4.00	8534.
1340	0.304	0.04833	279.649	0.1376	0.01600	4.190	3.657	4.96	40.00	8707.
1378	0.167	0.04666	291.258	0.0705	0.01715	4.100	3.337	2.17	3.00	1662.
1379	0.167	0.04666	291.251	0.0705	0.01714	4.780	3.339	1.78	4.00	1663.
1380	0.167	0.04666	291.262	0.0705	0.01703	4.250	3.359	3.36	40.00	1673.
1398	0.277	0.04673	290.999	0.1192	0.01773	4.370	3.213	2.41	3.00	4858.
1399	0.277	0.04673	291.015	0.1191	0.01770	5.300	3.218	1.78	4.00	4859.
1400	0.276	0.04673	291.026	0.1190	0.01731	4.240	3.291	4.96	40.00	4957.
1448	0.138	0.02411	299.091	0.0565	0.01873	2.360	1.582	1.93	3.00	457.
1449	0.138	0.02411	299.068	0.0567	0.01873	2.450	1.582	1.94	4.00	460.
1450	0.139	0.02411	299.065	0.0568	0.01874	2.410	1.581	3.36	40.00	462.
1453	0.140	0.03469	299.419	0.0573	0.01850	1.430	2.303	1.93	3.00	681.
1454	0.140	0.03469	299.415	0.0574	0.01847	1.420	2.308	2.26	4.00	686.
1455	0.140	0.03469	299.413	0.0574	0.01845	1.900	2.310	1.76	40.00	688.

Table 29. Thermal conductivity of the binary 30 % R134a / 70 % propane mixture in the dilute gas measured with the steady-state technique (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1458	0.140	0.04717	299.832	0.0571	0.01808	1.000	3.204	1.93	3.00	937.
1459	0.139	0.04717	299.825	0.0568	0.01805	1.070	3.209	1.94	4.00	929.
1460	0.139	0.04717	299.831	0.0569	0.01802	1.240	3.214	1.76	40.00	935.
1468	0.227	0.02407	301.351	0.0933	0.01868	2.500	1.581	2.29	3.00	1262.
1469	0.227	0.02406	301.353	0.0933	0.01859	2.460	1.588	2.58	4.00	1268.
1470	0.227	0.02406	301.342	0.0933	0.01845	2.300	1.600	3.36	40.00	1278.
1473	0.227	0.03462	301.680	0.0931	0.01851	1.400	2.294	2.29	3.00	1819.
1474	0.227	0.03463	301.682	0.0931	0.01840	1.360	2.307	2.74	4.00	1829.
1475	0.227	0.03463	301.678	0.0931	0.01824	1.560	2.327	3.36	40.00	1844.
1478	0.227	0.04709	302.061	0.0929	0.01841	1.180	3.133	2.29	3.00	2463.
1479	0.226	0.04709	302.065	0.0929	0.01829	0.920	3.153	2.74	4.00	2476.
1480	0.226	0.04709	302.066	0.0929	0.01816	1.050	3.175	3.36	40.00	2493.

Table 30. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the dilute gas measured using the steady-state technique.

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1018	0.087	0.02407	257.272	0.0417	0.01176	0.950	2.513	3.36	40.00	974.
1021	0.088	0.03274	257.728	0.0420	0.01176	0.560	3.415	3.36	40.00	1336.
1024	0.087	0.04271	258.246	0.0416	0.01178	0.380	4.445	3.36	40.00	1690.
1027	0.087	0.05399	258.825	0.0414	0.01182	0.290	5.598	3.36	40.00	2090.
1030	0.088	0.06655	259.455	0.0414	0.01186	0.210	6.872	3.36	40.00	2555.
1033	0.162	0.02409	257.243	0.0789	0.01190	1.100	2.473	4.96	40.00	3788.
1036	0.161	0.03275	257.690	0.0784	0.01187	0.720	3.361	4.96	40.00	5052.
1039	0.162	0.04271	258.208	0.0787	0.01187	0.520	4.372	4.96	40.00	6557.
1042	0.163	0.05399	258.764	0.0789	0.01189	0.430	5.504	4.96	40.00	8231.
1045	0.162	0.06655	259.391	0.0783	0.01192	0.660	6.744	3.36	40.00	9824.
1048	0.094	0.02339	266.473	0.0433	0.01257	1.450	2.285	1.76	40.00	844.
1051	0.092	0.03179	266.894	0.0425	0.01255	1.400	3.111	1.76	40.00	1100.
1054	0.092	0.04148	267.360	0.0423	0.01256	0.910	4.052	1.76	40.00	1413.
1057	0.093	0.05242	267.890	0.0426	0.01258	0.940	5.110	1.76	40.00	1796.
1060	0.093	0.06464	268.473	0.0427	0.01262	0.810	6.277	1.76	40.00	2193.
1063	0.193	0.02339	266.450	0.0908	0.01276	1.070	2.239	4.96	40.00	4043.
1066	0.193	0.03180	266.853	0.0910	0.01273	0.770	3.041	4.96	40.00	5477.
1069	0.193	0.04148	267.329	0.0906	0.01272	0.610	3.960	4.96	40.00	7025.
1072	0.192	0.05245	267.833	0.0900	0.01272	0.440	4.990	4.96	40.00	8642.
1075	0.193	0.06467	268.393	0.0900	0.01276	0.700	6.115	3.36	40.00	10513.
1078	0.285	0.02339	266.398	0.1378	0.01292	1.210	2.186	6.56	40.00	10271.
1081	0.285	0.03180	266.776	0.1374	0.01290	0.870	2.958	4.96	40.00	13705.
1084	0.286	0.04149	267.200	0.1375	0.01297	1.190	3.812	3.36	40.00	17564.
1087	0.286	0.05246	267.687	0.1373	0.01297	1.050	4.783	3.36	40.00	21735.
1090	0.285	0.06468	268.203	0.1365	0.01306	0.970	5.814	3.36	40.00	25826.
1093	0.084	0.02268	276.358	0.0370	0.01344	1.440	2.074	1.76	40.00	487.
1096	0.085	0.03085	276.725	0.0376	0.01341	1.040	2.826	1.76	40.00	682.
1099	0.086	0.04025	277.172	0.0379	0.01337	0.860	3.697	1.76	40.00	906.
1102	0.086	0.05090	277.649	0.0380	0.01339	0.660	4.666	1.76	40.00	1144.
1105	0.085	0.06276	278.188	0.0375	0.01342	0.540	5.739	1.76	40.00	1357.
1108	0.178	0.02270	276.348	0.0803	0.01358	1.540	2.047	3.36	40.00	2454.
1111	0.179	0.03086	276.709	0.0808	0.01353	1.180	2.789	3.36	40.00	3368.
1114	0.181	0.04026	277.129	0.0811	0.01349	0.600	3.642	4.96	40.00	4412.
1117	0.180	0.05089	277.611	0.0809	0.01350	0.800	4.590	3.36	40.00	5493.
1120	0.180	0.06275	278.134	0.0804	0.01351	0.650	5.643	3.36	40.00	6609.
1123	0.263	0.02269	276.288	0.1205	0.01378	1.530	2.003	4.96	40.00	5852.
1126	0.262	0.03085	276.657	0.1198	0.01372	0.960	2.727	4.96	40.00	7820.
1129	0.260	0.04026	277.082	0.1190	0.01360	0.800	3.576	4.96	40.00	10036.
1132	0.261	0.05091	277.535	0.1191	0.01364	0.490	4.488	4.96	40.00	12524.
1135	0.261	0.06278	278.038	0.1191	0.01370	0.770	5.483	3.36	40.00	15184.
1138	0.341	0.02270	276.282	0.1595	0.01386	1.350	1.975	6.56	40.00	10993.
1141	0.341	0.03087	276.624	0.1592	0.01382	1.110	2.674	4.96	40.00	14730.
1144	0.339	0.04028	277.008	0.1580	0.01388	1.390	3.451	3.36	40.00	18552.

Table 30. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1147	0.340	0.05092	277.446	0.1579	0.01392	1.080	4.316	3.36	40.00	23001.
1150	0.341	0.06280	277.921	0.1582	0.01393	0.990	5.271	3.36	40.00	27977.
1153	0.411	0.02270	276.244	0.1953	0.01404	1.650	1.927	4.96	40.00	17514.
1156	0.410	0.03087	276.583	0.1945	0.01403	1.320	2.595	4.96	40.00	23195.
1159	0.410	0.04027	276.971	0.1942	0.01400	1.220	3.354	3.36	40.00	29661.
1162	0.411	0.05092	277.381	0.1943	0.01401	2.340	4.189	1.76	40.00	36768.
1165	0.412	0.06281	277.836	0.1941	0.01402	1.700	5.096	1.76	40.00	44269.
1168	0.426	0.02282	286.171	0.1938	0.01498	1.890	1.827	6.56	40.00	13677.
1171	0.430	0.03103	286.487	0.1955	0.01493	1.200	2.471	4.96	40.00	18795.
1174	0.432	0.04049	286.849	0.1961	0.01493	1.390	3.193	3.36	40.00	24334.
1177	0.430	0.05119	287.275	0.1948	0.01487	1.060	4.013	3.36	40.00	29901.
1180	0.428	0.06314	287.701	0.1933	0.01490	1.220	4.893	3.36	40.00	35527.
1213	0.353	0.02282	286.133	0.1582	0.01466	1.450	1.884	8.16	40.00	8801.
1216	0.354	0.03103	286.480	0.1586	0.01457	0.950	2.563	6.56	40.00	11979.
1219	0.350	0.04050	286.851	0.1565	0.01461	0.750	3.319	4.96	40.00	14968.
1222	0.348	0.05120	287.278	0.1552	0.01469	1.170	4.148	3.36	40.00	18232.
1225	0.352	0.06315	287.724	0.1567	0.01474	0.930	5.059	3.36	40.00	22605.
1228	0.269	0.02284	285.804	0.1187	0.01452	1.520	1.919	6.56	40.00	4728.
1231	0.268	0.03106	286.140	0.1183	0.01447	0.860	2.610	6.56	40.00	6361.
1234	0.269	0.04053	286.533	0.1182	0.01445	0.870	3.399	4.96	40.00	8223.
1237	0.270	0.05125	286.974	0.1185	0.01446	0.530	4.279	4.96	40.00	10337.
1240	0.271	0.06321	287.456	0.1189	0.01449	0.450	5.243	4.96	40.00	12694.
1243	0.553	0.03121	285.440	0.2597	0.01491	1.710	2.407	4.96	40.00	37559.
1246	0.553	0.04071	285.781	0.2592	0.01493	1.660	3.084	3.36	40.00	47579.
1258	0.446	0.03121	285.478	0.2044	0.01472	1.460	2.509	4.96	40.00	21571.
1261	0.445	0.04071	285.839	0.2035	0.01478	1.290	3.226	3.36	40.00	27296.
1264	0.444	0.05146	286.253	0.2025	0.01482	1.450	4.022	3.36	40.00	33400.
1267	0.444	0.06346	286.681	0.2023	0.01485	2.230	4.895	1.76	40.00	40271.
1270	0.445	0.07672	287.159	0.2024	0.01489	1.790	5.826	1.76	40.00	47622.
1273	0.346	0.03121	285.499	0.1554	0.01486	1.190	2.530	6.56	40.00	11446.
1276	0.345	0.04071	285.876	0.1546	0.01483	0.850	3.289	4.96	40.00	14642.
1279	0.344	0.05147	286.299	0.1540	0.01485	1.100	4.125	3.36	40.00	18077.
1282	0.344	0.06348	286.739	0.1538	0.01490	0.960	5.039	3.36	40.00	21869.
1285	0.345	0.07673	287.255	0.1539	0.01491	0.950	6.041	3.36	40.00	26082.
1288	0.218	0.03121	285.504	0.0954	0.01480	1.160	2.576	4.96	40.00	3957.
1291	0.218	0.04072	285.917	0.0951	0.01464	0.830	3.390	4.96	40.00	5150.
1294	0.218	0.05147	286.374	0.0952	0.01455	0.490	4.300	4.96	40.00	6511.
1297	0.219	0.06347	286.876	0.0954	0.01452	0.440	5.300	4.96	40.00	8007.
1300	0.220	0.07669	287.421	0.0955	0.01451	0.740	6.390	3.36	40.00	9595.
1303	0.101	0.09117	288.075	0.0430	0.01449	0.650	7.712	1.76	40.00	2153.
1318	0.557	0.03072	296.048	0.2489	0.01588	1.580	2.269	4.96	40.00	26335.
1321	0.557	0.04009	296.371	0.2485	0.01587	1.480	2.927	3.36	40.00	33662.
1324	0.558	0.05068	296.745	0.2484	0.01582	1.160	3.658	3.36	40.00	41794.

Table 30. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1333	0.439	0.03072	296.062	0.1917	0.01584	1.170	2.322	6.56	40.00	14565.
1336	0.439	0.04009	296.399	0.1913	0.01586	1.110	3.005	4.96	40.00	18658.
1339	0.438	0.05070	296.780	0.1907	0.01590	1.130	3.762	3.36	40.00	23071.
1342	0.439	0.06251	297.185	0.1907	0.01592	1.010	4.593	3.36	40.00	27995.
1345	0.439	0.07556	297.626	0.1905	0.01594	1.190	5.495	3.36	40.00	33236.
1348	0.314	0.03073	296.079	0.1343	0.01561	1.030	2.392	6.56	40.00	6749.
1351	0.314	0.04008	296.451	0.1340	0.01551	0.850	3.129	4.96	40.00	8734.
1354	0.316	0.05067	296.852	0.1345	0.01548	0.680	3.946	4.96	40.00	11047.
1357	0.317	0.06250	297.299	0.1347	0.01550	0.460	4.839	4.96	40.00	13520.
1360	0.315	0.07556	297.786	0.1338	0.01556	0.770	5.804	3.36	40.00	15878.
1363	0.213	0.03072	296.074	0.0893	0.01550	1.280	2.424	3.36	40.00	2833.
1366	0.213	0.04009	296.447	0.0893	0.01542	0.730	3.176	4.96	40.00	3698.
1369	0.212	0.05068	296.868	0.0887	0.01540	0.820	4.015	3.36	40.00	4583.
1372	0.211	0.06250	297.350	0.0880	0.01534	0.670	4.962	3.36	40.00	5534.
1375	0.210	0.07554	297.854	0.0876	0.01536	0.640	5.979	3.36	40.00	6560.
1378	0.103	0.03072	296.098	0.0424	0.01527	1.150	2.471	1.76	40.00	612.
1381	0.104	0.04007	296.466	0.0427	0.01520	0.770	3.238	1.76	40.00	807.
1384	0.105	0.05067	296.894	0.0432	0.01520	0.670	4.092	1.76	40.00	1042.
1387	0.106	0.06249	297.364	0.0436	0.01521	0.850	5.042	1.76	40.00	1297.
1390	0.106	0.07553	297.893	0.0435	0.01523	0.540	6.084	1.76	40.00	1550.
1393	0.554	0.02968	305.977	0.2366	0.01675	1.550	2.108	4.96	40.00	18702.
1396	0.552	0.03874	306.282	0.2352	0.01676	1.210	2.724	4.96	40.00	23756.
1399	0.552	0.04900	306.626	0.2351	0.01679	1.220	3.404	3.36	40.00	29519.
1402	0.555	0.06044	307.021	0.2358	0.01679	1.290	4.153	3.36	40.00	36063.
1405	0.555	0.07308	307.411	0.2358	0.01679	1.940	4.964	1.76	40.00	42846.
1408	0.445	0.02970	305.965	0.1866	0.01690	1.300	2.119	8.16	40.00	10935.
1411	0.446	0.03875	306.294	0.1867	0.01682	1.080	2.762	6.56	40.00	14215.
1414	0.447	0.04900	306.646	0.1872	0.01667	0.880	3.499	4.96	40.00	18020.
1417	0.447	0.06044	307.047	0.1869	0.01670	1.020	4.279	3.36	40.00	21843.
1420	0.446	0.07307	307.472	0.1859	0.01674	0.950	5.127	3.36	40.00	25724.
1423	0.312	0.02970	305.963	0.1284	0.01706	1.200	2.122	4.96	40.00	4805.
1426	0.311	0.03875	306.297	0.1276	0.01686	1.070	2.796	4.96	40.00	6217.
1429	0.309	0.04901	306.672	0.1265	0.01673	0.830	3.553	4.96	40.00	7729.
1432	0.309	0.06046	307.114	0.1263	0.01641	0.590	4.452	4.96	40.00	9600.
1435	0.311	0.07308	307.571	0.1269	0.01640	0.410	5.365	4.96	40.00	11621.
1438	0.215	0.02971	305.978	0.0872	0.01662	1.320	2.190	3.36	40.00	2171.
1441	0.216	0.03877	306.318	0.0875	0.01648	1.280	2.878	3.36	40.00	2864.
1444	0.220	0.04901	306.716	0.0888	0.01640	0.710	3.650	3.36	40.00	3729.
1447	0.219	0.06044	307.133	0.0884	0.01637	0.770	4.504	3.36	40.00	4537.
1450	0.216	0.07304	307.606	0.0870	0.01635	0.600	5.441	3.36	40.00	5264.
1453	0.107	0.02963	305.431	0.0426	0.01603	1.210	2.272	1.76	40.00	511.
1456	0.104	0.03867	305.761	0.0415	0.01600	0.960	2.969	1.76	40.00	633.
1459	0.103	0.04889	306.158	0.0412	0.01602	0.770	3.750	1.76	40.00	782.

Table 30. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1462	0.106	0.06028	306.595	0.0420	0.01604	0.740	4.615	1.76	40.00	998.
1465	0.109	0.07286	307.061	0.0431	0.01606	0.540	5.568	1.76	40.00	1265.
1468	0.552	0.03068	316.018	0.2259	0.01766	1.250	2.081	6.56	40.00	14570.
1471	0.551	0.04002	316.338	0.2253	0.01763	1.100	2.699	4.96	40.00	18711.
1474	0.551	0.05060	316.680	0.2250	0.01765	1.010	3.381	4.96	40.00	23265.
1477	0.553	0.06240	317.042	0.2255	0.01768	1.180	4.125	3.36	40.00	28388.
1480	0.555	0.07543	317.452	0.2261	0.01769	1.120	4.935	3.36	40.00	34025.
1483	0.427	0.03067	316.017	0.1717	0.01784	1.800	2.084	6.56	40.00	7914.
1486	0.426	0.04002	316.342	0.1712	0.01768	1.000	2.732	6.56	40.00	10268.
1489	0.427	0.05060	316.685	0.1715	0.01764	1.080	3.446	4.96	40.00	12933.
1492	0.429	0.06241	317.083	0.1719	0.01764	0.650	4.229	4.96	40.00	15890.
1495	0.430	0.07545	317.500	0.1722	0.01768	1.070	5.072	3.36	40.00	19031.
1498	0.315	0.03066	315.927	0.1249	0.01756	1.240	2.132	4.96	40.00	4057.
1501	0.318	0.04001	316.268	0.1260	0.01746	1.050	2.791	4.96	40.00	5392.
1504	0.319	0.05058	316.653	0.1264	0.01739	0.660	3.533	4.96	40.00	6846.
1507	0.317	0.06239	317.046	0.1254	0.01735	0.550	4.358	4.96	40.00	8260.
1510	0.315	0.07541	317.494	0.1243	0.01734	0.410	5.255	4.96	40.00	9740.
1513	0.207	0.03066	315.934	0.0809	0.01740	1.460	2.161	3.36	40.00	1641.
1516	0.210	0.04000	316.260	0.0818	0.01731	0.930	2.831	3.36	40.00	2194.
1519	0.208	0.05057	316.639	0.0810	0.01726	0.740	3.587	3.36	40.00	2713.
1522	0.205	0.06236	317.070	0.0796	0.01724	0.620	4.423	3.36	40.00	3212.
1525	0.204	0.07539	317.510	0.0792	0.01724	0.530	5.341	3.36	40.00	3816.
1528	0.103	0.03065	315.907	0.0399	0.01724	1.130	2.186	1.76	40.00	385.
1531	0.108	0.03999	316.232	0.0417	0.01717	0.970	2.862	1.76	40.00	551.
1534	0.108	0.05057	316.623	0.0415	0.01713	0.720	3.626	1.76	40.00	688.
1537	0.105	0.06236	317.035	0.0403	0.01712	0.570	4.475	1.76	40.00	798.
1540	0.104	0.07538	317.489	0.0399	0.01713	0.460	5.404	1.76	40.00	940.
1543	0.557	0.03059	325.689	0.2200	0.01863	1.240	1.977	9.76	40.00	11622.
1546	0.558	0.03991	325.993	0.2200	0.01859	0.990	2.570	6.56	40.00	15058.
1549	0.554	0.05047	326.301	0.2183	0.01858	0.800	3.231	4.96	40.00	18538.
1552	0.554	0.06226	326.670	0.2176	0.01864	1.350	3.947	3.36	40.00	22398.
1555	0.556	0.07527	327.063	0.2184	0.01872	0.920	4.714	3.36	40.00	26845.
1558	0.429	0.03060	325.666	0.1664	0.01908	1.290	1.951	6.56	40.00	6205.
1561	0.427	0.03992	325.977	0.1655	0.01883	0.980	2.569	6.56	40.00	8042.
1564	0.425	0.05048	326.328	0.1646	0.01869	0.670	3.262	6.56	40.00	10053.
1567	0.426	0.06227	326.692	0.1648	0.01863	0.710	4.019	4.96	40.00	12366.
1570	0.427	0.07526	327.116	0.1651	0.01861	0.520	4.842	4.96	40.00	14905.
1573	0.304	0.03059	325.703	0.1163	0.01836	1.230	2.038	4.96	40.00	3001.
1576	0.305	0.03992	326.020	0.1167	0.01830	0.880	2.665	4.96	40.00	3940.
1579	0.306	0.05049	326.367	0.1167	0.01825	0.750	3.371	4.96	40.00	4971.
1582	0.304	0.06228	326.750	0.1157	0.01824	0.480	4.154	4.96	40.00	5988.
1585	0.302	0.07528	327.187	0.1148	0.01824	0.420	5.011	4.96	40.00	7072.
1588	0.207	0.03059	325.646	0.0782	0.01854	1.300	2.025	3.36	40.00	1296.

Table 30. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1591	0.209	0.03992	325.961	0.0788	0.01841	0.900	2.659	3.36	40.00	1726.
1594	0.208	0.05048	326.325	0.0786	0.01832	0.680	3.376	3.36	40.00	2174.
1597	0.207	0.06224	326.734	0.0778	0.01828	0.680	4.169	3.36	40.00	2615.
1600	0.206	0.07522	327.165	0.0776	0.01826	0.470	5.039	3.36	40.00	3128.
1603	0.108	0.03059	325.641	0.0403	0.01834	1.150	2.050	1.76	40.00	335.
1606	0.107	0.03991	325.971	0.0401	0.01822	0.900	2.692	1.76	40.00	436.
1609	0.106	0.05047	326.335	0.0394	0.01814	0.640	3.418	1.76	40.00	532.
1612	0.107	0.06226	326.717	0.0397	0.01812	0.530	4.221	1.76	40.00	663.
1615	0.108	0.07525	327.167	0.0401	0.01811	0.460	5.104	1.76	40.00	817.
1618	0.566	0.02960	335.785	0.2152	0.01972	1.480	1.816	8.16	40.00	9095.
1621	0.565	0.03862	336.049	0.2147	0.01960	1.230	2.372	6.56	40.00	11784.
1624	0.565	0.04885	336.364	0.2145	0.01956	1.020	2.991	4.96	40.00	14776.
1627	0.565	0.06025	336.695	0.2145	0.01958	0.800	3.664	4.96	40.00	18033.
1630	0.565	0.07284	337.059	0.2140	0.01961	1.030	4.395	3.36	40.00	21443.
1633	0.439	0.02959	335.743	0.1647	0.02010	1.530	1.794	6.56	40.00	5019.
1636	0.440	0.03862	336.019	0.1648	0.01986	1.090	2.363	6.56	40.00	6600.
1639	0.440	0.04884	336.339	0.1648	0.01970	0.830	3.002	6.56	40.00	8356.
1642	0.439	0.06024	336.692	0.1643	0.01961	0.760	3.709	4.96	40.00	10211.
1645	0.439	0.07283	337.072	0.1639	0.01957	0.630	4.477	4.96	40.00	12220.
1648	0.311	0.02960	335.720	0.1150	0.02011	1.470	1.803	4.96	40.00	2343.
1651	0.312	0.03862	335.996	0.1155	0.01986	1.090	2.379	4.96	40.00	3110.
1654	0.314	0.04884	336.324	0.1161	0.01969	0.820	3.028	4.96	40.00	3997.
1657	0.314	0.06025	336.674	0.1160	0.01961	0.590	3.746	4.96	40.00	4915.
1660	0.313	0.07283	337.070	0.1154	0.01953	0.420	4.537	4.96	40.00	5869.
1663	0.213	0.02960	335.671	0.0779	0.02008	1.580	1.810	3.36	40.00	1042.
1666	0.213	0.03862	335.967	0.0778	0.01982	1.190	2.391	3.36	40.00	1370.
1669	0.214	0.04886	336.309	0.0781	0.01965	0.860	3.049	3.36	40.00	1757.
1672	0.214	0.06027	336.645	0.0781	0.01956	0.620	3.776	3.36	40.00	2167.
1675	0.213	0.07285	337.054	0.0776	0.01949	0.490	4.575	3.36	40.00	2582.
1678	0.106	0.02961	335.690	0.0385	0.01931	1.350	1.885	1.76	40.00	256.
1681	0.107	0.03864	335.977	0.0387	0.01921	1.060	2.473	1.76	40.00	338.
1684	0.106	0.04885	336.309	0.0382	0.01911	0.770	3.141	1.76	40.00	416.
1687	0.105	0.06025	336.687	0.0380	0.01909	0.530	3.879	1.76	40.00	509.
1690	0.107	0.07286	337.071	0.0385	0.01908	0.480	4.692	1.76	40.00	628.
1693	0.554	0.03739	345.343	0.2037	0.02078	1.250	2.178	6.56	40.00	8755.
1696	0.554	0.04728	345.615	0.2035	0.02065	0.870	2.759	6.56	40.00	11034.
1699	0.554	0.05832	345.938	0.2032	0.02065	0.890	3.391	4.96	40.00	13482.
1702	0.554	0.07052	346.252	0.2031	0.02070	0.670	4.070	4.96	40.00	16105.
1705	0.554	0.08385	346.607	0.2029	0.02077	1.080	4.798	3.36	40.00	18884.
1708	0.447	0.03740	345.267	0.1627	0.02088	1.200	2.181	6.56	40.00	5399.
1711	0.447	0.04728	345.546	0.1625	0.02075	1.140	2.768	4.96	40.00	6813.
1714	0.447	0.05832	345.882	0.1623	0.02065	1.040	3.421	4.96	40.00	8378.
1717	0.448	0.07051	346.204	0.1623	0.02060	0.730	4.134	4.96	40.00	10083.

Table 30. Thermal conductivity of the binary 70 % R134a / 30 % propane mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1720	0.448	0.08383	346.599	0.1621	0.02057	0.600	4.905	4.96	40.00	11897.
1723	0.313	0.03738	345.133	0.1122	0.02104	1.140	2.176	4.96	40.00	2454.
1726	0.312	0.04727	345.425	0.1119	0.02087	0.820	2.770	4.96	40.00	3100.
1729	0.312	0.05832	345.741	0.1119	0.02074	0.620	3.434	4.96	40.00	3830.
1732	0.312	0.07052	346.102	0.1117	0.02067	0.510	4.161	4.96	40.00	4605.
1735	0.312	0.08386	346.483	0.1113	0.02062	0.350	4.954	4.96	40.00	5429.
1738	0.210	0.03738	345.047	0.0745	0.02070	1.130	2.217	3.36	40.00	1067.
1741	0.209	0.04726	345.339	0.0743	0.02058	0.850	2.818	3.36	40.00	1344.
1744	0.209	0.05830	345.660	0.0742	0.02050	0.570	3.488	3.36	40.00	1658.
1747	0.209	0.07050	346.019	0.0742	0.02044	0.490	4.226	3.36	40.00	1998.
1750	0.209	0.08382	346.424	0.0741	0.02041	0.430	5.029	3.36	40.00	2362.
1753	0.111	0.03735	345.035	0.0392	0.01996	1.130	2.300	1.76	40.00	298.
1756	0.110	0.04725	345.334	0.0387	0.01995	0.680	2.911	1.76	40.00	366.
1759	0.108	0.05829	345.669	0.0379	0.01996	0.520	3.589	1.76	40.00	430.
1762	0.109	0.07047	346.014	0.0384	0.01999	0.430	4.333	1.76	40.00	533.
1765	0.111	0.08379	346.433	0.0388	0.02001	0.420	5.144	1.76	40.00	644.

Table 31. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the dilute gas measured using the steady-state technique.

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1003	0.219	0.03483	262.493	0.1064	0.01117	0.980	3.763	4.96	40.00	10600.
1006	0.220	0.04267	262.954	0.1066	0.01112	0.610	4.608	4.96	40.00	12932.
1009	0.222	0.05124	263.458	0.1075	0.01111	0.450	5.516	4.96	40.00	15634.
1012	0.220	0.06061	263.968	0.1064	0.01114	0.640	6.481	3.36	40.00	17783.
1015	0.219	0.07077	264.514	0.1055	0.01120	0.600	7.494	3.36	40.00	20011.
1018	0.214	0.03534	258.277	0.1062	0.01100	0.860	3.869	4.96	40.00	11652.
1021	0.214	0.04326	258.694	0.1058	0.01102	0.600	4.708	4.96	40.00	13962.
1024	0.214	0.05197	259.131	0.1056	0.01110	0.680	5.591	3.36	40.00	16397.
1027	0.214	0.06149	259.605	0.1052	0.01117	0.540	6.545	3.36	40.00	18843.
1030	0.213	0.07179	260.118	0.1047	0.01124	0.940	7.557	3.36	40.00	21320.
1033	0.093	0.03543	257.835	0.0443	0.01080	0.630	4.022	3.36	40.00	1748.
1036	0.092	0.04338	258.275	0.0440	0.01082	0.490	4.913	3.36	40.00	2093.
1039	0.092	0.05211	258.770	0.0439	0.01084	0.410	5.886	3.36	40.00	2475.
1042	0.092	0.06163	259.295	0.0437	0.01086	0.320	6.943	3.36	40.00	2880.
1045	0.091	0.07192	259.858	0.0434	0.01089	0.260	8.073	3.36	40.00	3262.
1048	0.096	0.03407	269.424	0.0437	0.01168	0.980	3.580	1.76	40.00	1296.
1051	0.096	0.04172	269.814	0.0439	0.01169	0.890	4.376	1.76	40.00	1586.
1054	0.096	0.03407	269.375	0.0439	0.01177	1.200	3.552	1.76	40.00	1296.
1057	0.096	0.04173	269.773	0.0439	0.01177	0.980	4.349	1.76	40.00	1582.
1060	0.096	0.05014	270.214	0.0439	0.01177	0.800	5.222	1.76	40.00	1885.
1063	0.095	0.05930	270.683	0.0431	0.01178	0.790	6.167	1.76	40.00	2127.
1066	0.095	0.06921	271.194	0.0429	0.01180	0.760	7.183	1.76	40.00	2435.
1069	0.279	0.03410	269.163	0.1334	0.01185	0.830	3.445	4.96	40.00	14686.
1072	0.279	0.04175	269.537	0.1331	0.01188	0.670	4.186	4.96	40.00	17636.
1075	0.279	0.05017	269.933	0.1330	0.01194	0.850	4.979	3.36	40.00	20811.
1078	0.279	0.05935	270.354	0.1325	0.01201	1.000	5.823	3.36	40.00	23979.
1081	0.279	0.06928	270.806	0.1325	0.01206	2.000	6.723	1.76	40.00	27441.
1084	0.286	0.03390	275.589	0.1329	0.01231	0.880	3.310	4.96	40.00	12589.
1087	0.286	0.04151	275.943	0.1327	0.01234	0.690	4.026	4.96	40.00	15199.
1090	0.286	0.04988	276.328	0.1327	0.01238	0.620	4.798	4.96	40.00	18007.
1093	0.287	0.05904	276.721	0.1330	0.01244	0.970	5.617	3.36	40.00	21039.
1096	0.287	0.06893	277.172	0.1328	0.01251	1.030	6.490	3.36	40.00	24041.
1099	0.098	0.03391	275.602	0.0435	0.01211	1.060	3.437	3.36	40.00	1135.
1102	0.098	0.04151	275.971	0.0434	0.01213	1.180	4.200	1.76	40.00	1376.
1105	0.099	0.04990	276.387	0.0440	0.01215	0.910	5.035	1.76	40.00	1688.
1108	0.100	0.05904	276.838	0.0442	0.01218	0.780	5.940	1.76	40.00	2003.
1111	0.100	0.06891	277.324	0.0444	0.01220	1.140	6.916	1.76	40.00	2337.
1114	0.103	0.03300	286.232	0.0443	0.01294	1.340	3.132	1.76	40.00	947.
1117	0.104	0.04042	286.577	0.0445	0.01295	1.040	3.831	1.76	40.00	1164.
1120	0.104	0.04857	286.956	0.0444	0.01297	0.810	4.596	1.76	40.00	1382.
1123	0.103	0.05746	287.359	0.0441	0.01299	0.780	5.426	1.76	40.00	1603.
1126	0.103	0.06707	287.803	0.0440	0.01302	0.740	6.317	1.76	40.00	1847.
1129	0.280	0.03299	286.125	0.1242	0.01319	0.980	3.030	6.56	40.00	8459.

Table 31. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1132	0.281	0.04043	286.453	0.1245	0.01317	0.860	3.706	4.96	40.00	10351.
1135	0.281	0.04858	286.824	0.1242	0.01315	0.710	4.442	4.96	40.00	12285.
1138	0.281	0.05746	287.209	0.1239	0.01316	0.590	5.231	4.96	40.00	14311.
1141	0.280	0.06708	287.620	0.1232	0.01321	0.930	6.066	3.36	40.00	16274.
1144	0.292	0.03178	297.658	0.1239	0.01404	1.200	2.752	6.56	40.00	6541.
1147	0.292	0.03894	297.955	0.1239	0.01403	1.000	3.365	4.96	40.00	7969.
1150	0.293	0.04681	298.294	0.1239	0.01402	0.700	4.035	4.96	40.00	9522.
1153	0.293	0.05537	298.650	0.1237	0.01403	0.600	4.758	4.96	40.00	11131.
1156	0.293	0.06464	299.033	0.1235	0.01404	0.380	5.532	4.96	40.00	12829.
1159	0.101	0.03179	297.657	0.0414	0.01379	1.150	2.831	1.76	40.00	651.
1162	0.102	0.03895	297.960	0.0417	0.01382	0.900	3.462	1.76	40.00	806.
1165	0.102	0.04682	298.321	0.0420	0.01384	1.000	4.154	1.76	40.00	978.
1168	0.102	0.05538	298.682	0.0419	0.01386	0.590	4.904	1.76	40.00	1147.
1171	0.102	0.06466	299.079	0.0415	0.01389	0.630	5.713	1.76	40.00	1302.
1174	0.103	0.03126	303.279	0.0414	0.01427	1.050	2.691	1.76	40.00	582.
1177	0.102	0.03828	303.569	0.0411	0.01428	0.850	3.294	1.76	40.00	701.
1180	0.102	0.04600	303.891	0.0410	0.01430	0.720	3.951	1.76	40.00	832.
1183	0.103	0.05444	304.255	0.0411	0.01433	0.750	4.665	1.76	40.00	987.
1186	0.104	0.06359	304.622	0.0416	0.01436	0.690	5.434	1.76	40.00	1174.
1189	0.284	0.03131	302.629	0.1181	0.01436	1.080	2.655	4.96	40.00	5338.
1192	0.284	0.03836	302.922	0.1176	0.01436	0.820	3.248	4.96	40.00	6453.
1195	0.283	0.04612	303.239	0.1171	0.01436	0.730	3.896	4.96	40.00	7631.
1198	0.282	0.05455	303.579	0.1167	0.01436	0.640	4.598	4.96	40.00	8904.
1201	0.283	0.06369	303.956	0.1168	0.01437	0.510	5.350	4.96	40.00	10339.
1204	0.293	0.03041	312.023	0.1177	0.01540	1.080	2.410	4.96	40.00	4304.
1207	0.293	0.03725	312.285	0.1175	0.01538	0.970	2.952	4.96	40.00	5236.
1210	0.293	0.04478	312.569	0.1175	0.01536	0.690	3.545	4.96	40.00	6260.
1213	0.293	0.05300	312.879	0.1172	0.01537	0.550	4.185	4.96	40.00	7336.
1216	0.293	0.06190	313.212	0.1171	0.01537	0.540	4.877	4.96	40.00	8488.
1219	0.101	0.03040	311.869	0.0395	0.01521	1.110	2.456	1.76	40.00	440.
1222	0.101	0.03724	312.151	0.0394	0.01522	1.010	3.007	1.76	40.00	536.
1225	0.101	0.04477	312.433	0.0394	0.01522	0.680	3.613	1.76	40.00	642.
1228	0.101	0.05298	312.758	0.0393	0.01524	0.620	4.271	1.76	40.00	753.
1231	0.101	0.06187	313.104	0.0392	0.01524	0.480	4.986	1.76	40.00	870.
1234	0.103	0.02961	321.478	0.0392	0.01601	1.240	2.273	1.76	40.00	365.
1237	0.104	0.03628	321.717	0.0394	0.01604	0.940	2.781	1.76	40.00	450.
1240	0.104	0.04362	321.990	0.0395	0.01606	0.830	3.338	1.76	40.00	542.
1243	0.105	0.05162	322.271	0.0395	0.01608	0.580	3.945	1.76	40.00	640.
1246	0.104	0.06028	322.588	0.0394	0.01608	0.570	4.604	1.76	40.00	739.
1249	0.298	0.02961	321.231	0.1156	0.01624	1.280	2.229	4.96	40.00	3453.
1252	0.297	0.03628	321.465	0.1154	0.01625	0.970	2.725	4.96	40.00	4192.
1255	0.297	0.04362	321.724	0.1151	0.01625	0.870	3.271	4.96	40.00	4993.
1258	0.296	0.05162	322.002	0.1147	0.01625	0.790	3.865	4.96	40.00	5839.

Table 31. Thermal conductivity of the ternary 33 % R32 / 33 % R125 / 33 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q $W \cdot m^{-1}$	T_{exp} K	ρ_{calc} $mol \cdot L^{-1}$	λ_{exp} $W \cdot m^{-1} \cdot K^{-1}$	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1261	0.296	0.06029	322.321	0.1145	0.01626	0.570	4.506	4.96	40.00	6761.
1264	0.305	0.02981	329.992	0.1151	0.01711	1.340	2.131	4.96	40.00	2980.
1267	0.305	0.03652	330.220	0.1149	0.01713	0.950	2.605	4.96	40.00	3620.
1270	0.306	0.04390	330.469	0.1150	0.01713	0.930	3.127	4.96	40.00	4344.
1273	0.305	0.05196	330.728	0.1148	0.01713	0.770	3.695	4.96	40.00	5095.
1276	0.304	0.06068	331.030	0.1143	0.01713	0.500	4.310	4.96	40.00	5867.
1279	0.092	0.02986	329.418	0.0341	0.01679	1.170	2.186	1.76	40.00	245.
1282	0.091	0.03658	329.632	0.0336	0.01682	0.870	2.673	1.76	40.00	289.
1285	0.091	0.04398	329.904	0.0334	0.01683	0.680	3.212	1.76	40.00	342.
1288	0.091	0.05204	330.164	0.0335	0.01685	0.510	3.797	1.76	40.00	408.
1291	0.091	0.06077	330.463	0.0336	0.01686	0.460	4.431	1.76	40.00	476.
1294	0.094	0.02983	338.811	0.0338	0.01757	1.650	2.087	1.76	40.00	211.
1297	0.095	0.03654	339.029	0.0339	0.01762	1.050	2.550	1.76	40.00	258.
1300	0.095	0.04393	339.243	0.0339	0.01765	0.860	3.060	1.76	40.00	309.
1303	0.095	0.05199	339.513	0.0339	0.01768	0.670	3.614	1.76	40.00	365.
1306	0.095	0.06073	339.770	0.0338	0.01771	0.590	4.215	1.76	40.00	420.
1309	0.284	0.02991	338.359	0.1037	0.01791	1.430	2.046	4.96	40.00	2107.
1312	0.283	0.03665	338.570	0.1036	0.01787	1.260	2.511	3.36	40.00	2571.
1315	0.284	0.04406	338.788	0.1037	0.01786	1.040	3.017	3.36	40.00	3092.
1318	0.284	0.05215	339.036	0.1037	0.01790	0.940	3.560	3.36	40.00	3641.
1321	0.284	0.06092	339.301	0.1036	0.01791	0.750	4.153	3.36	40.00	4228.

Table 32. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the dilute gas measured using the steady-state technique.

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1003	0.087	0.02318	256.536	0.0419	0.01047	1.490	2.719	3.36	40.00	1108.
1006	0.087	0.03151	257.022	0.0420	0.01047	0.660	3.692	3.36	40.00	1500.
1009	0.086	0.04111	257.576	0.0413	0.01050	0.680	4.800	3.36	40.00	1872.
1012	0.086	0.05196	258.194	0.0411	0.01053	0.340	6.043	3.36	40.00	2305.
1015	0.087	0.06407	258.878	0.0415	0.01057	0.310	7.419	3.36	40.00	2864.
1018	0.138	0.02318	256.516	0.0673	0.01065	1.620	2.662	4.96	40.00	3077.
1021	0.138	0.03152	256.979	0.0676	0.01063	1.010	3.618	3.36	40.00	4179.
1024	0.139	0.04112	257.525	0.0680	0.01064	0.700	4.708	3.36	40.00	5472.
1027	0.140	0.05199	258.135	0.0679	0.01065	0.770	5.931	3.36	40.00	6797.
1030	0.139	0.06409	258.810	0.0671	0.01067	0.470	7.278	3.36	40.00	8040.
1033	0.143	0.02248	266.478	0.0669	0.01143	1.250	2.408	3.36	40.00	2341.
1036	0.144	0.03058	266.891	0.0672	0.01142	1.180	3.276	3.36	40.00	3197.
1039	0.145	0.03991	267.369	0.0676	0.01141	0.680	4.268	3.36	40.00	4190.
1042	0.145	0.05045	267.927	0.0676	0.01141	0.600	5.384	3.36	40.00	5232.
1045	0.144	0.06220	268.537	0.0670	0.01143	0.610	6.619	3.36	40.00	6247.
1048	0.088	0.02241	268.925	0.0403	0.01142	1.560	2.410	1.76	40.00	758.
1051	0.087	0.03047	269.370	0.0398	0.01139	0.870	3.285	1.76	40.00	1003.
1054	0.087	0.03977	269.851	0.0397	0.01141	1.080	4.278	1.76	40.00	1286.
1057	0.088	0.05027	270.421	0.0399	0.01143	0.810	5.396	1.76	40.00	1630.
1060	0.088	0.06198	271.041	0.0398	0.01146	0.750	6.631	1.76	40.00	1979.
1063	0.212	0.02242	268.897	0.1002	0.01164	1.410	2.346	4.96	40.00	5458.
1066	0.210	0.03048	269.316	0.0991	0.01161	0.810	3.187	4.96	40.00	7167.
1069	0.210	0.03978	269.792	0.0992	0.01161	0.770	4.145	4.96	40.00	9271.
1072	0.212	0.05029	270.330	0.0995	0.01161	0.560	5.218	4.96	40.00	11649.
1075	0.211	0.06202	270.907	0.0989	0.01165	0.770	6.385	3.36	40.00	13949.
1081	0.272	0.03049	269.248	0.1308	0.01174	1.690	3.116	4.96	40.00	13534.
1084	0.271	0.03979	269.712	0.1302	0.01176	0.690	4.035	4.96	40.00	17163.
1087	0.272	0.05030	270.205	0.1304	0.01182	0.950	5.036	3.36	40.00	21318.
1090	0.273	0.06203	270.755	0.1305	0.01188	1.070	6.131	3.36	40.00	25762.
1093	0.283	0.02182	278.123	0.1311	0.01241	1.290	2.132	6.56	40.00	7963.
1096	0.285	0.02968	278.489	0.1315	0.01238	1.180	2.890	4.96	40.00	10814.
1099	0.285	0.03872	278.937	0.1315	0.01237	0.850	3.754	4.96	40.00	13933.
1102	0.284	0.04897	279.406	0.1309	0.01240	0.630	4.707	4.96	40.00	17147.
1105	0.284	0.06039	279.928	0.1302	0.01247	0.750	5.738	3.36	40.00	20496.
1108	0.087	0.02182	278.115	0.0383	0.01213	1.500	2.211	1.76	40.00	556.
1111	0.086	0.02967	278.510	0.0378	0.01212	1.040	3.007	1.76	40.00	728.
1114	0.085	0.03872	278.960	0.0375	0.01212	0.720	3.922	1.76	40.00	931.
1117	0.086	0.04896	279.471	0.0378	0.01214	0.760	4.949	1.76	40.00	1187.
1120	0.086	0.06038	280.058	0.0377	0.01212	0.690	6.113	1.76	40.00	1449.
1123	0.184	0.02182	278.078	0.0831	0.01217	1.280	2.194	4.96	40.00	2906.
1126	0.183	0.02968	278.465	0.0826	0.01217	1.040	2.979	3.36	40.00	3863.
1129	0.183	0.03873	278.925	0.0822	0.01217	0.610	3.879	4.96	40.00	4955.
1132	0.184	0.04897	279.418	0.0827	0.01218	0.430	4.888	4.96	40.00	6286.

Table 32. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1135	0.185	0.06038	279.977	0.0827	0.01221	0.760	5.999	3.36	40.00	7655.
1138	0.351	0.02182	277.285	0.1662	0.01240	1.320	2.109	6.56	40.00	14179.
1141	0.350	0.02968	277.649	0.1655	0.01238	1.250	2.850	4.96	40.00	18839.
1144	0.349	0.03873	278.075	0.1645	0.01242	1.260	3.674	3.36	40.00	23741.
1147	0.349	0.04898	278.520	0.1638	0.01246	1.150	4.589	3.36	40.00	29095.
1150	0.349	0.06039	279.032	0.1636	0.01247	1.030	5.596	3.36	40.00	35028.
1153	0.408	0.02182	277.218	0.1962	0.01254	1.940	2.061	4.96	40.00	21123.
1156	0.409	0.02967	277.549	0.1966	0.01256	1.300	2.761	4.96	40.00	28276.
1159	0.409	0.03873	277.955	0.1959	0.01258	1.350	3.554	3.36	40.00	35744.
1162	0.407	0.04899	278.397	0.1945	0.01259	2.170	4.432	1.76	40.00	43359.
1165	0.406	0.06042	278.874	0.1938	0.01257	1.640	5.398	1.76	40.00	51822.
1168	0.425	0.02195	286.936	0.1956	0.01324	1.650	1.979	6.56	40.00	16720.
1171	0.425	0.02986	287.281	0.1950	0.01326	1.190	2.662	4.96	40.00	22193.
1174	0.426	0.03897	287.660	0.1952	0.01329	1.340	3.428	3.36	40.00	28478.
1177	0.427	0.04928	288.077	0.1956	0.01329	1.210	4.281	3.36	40.00	35455.
1180	0.427	0.06079	288.541	0.1952	0.01331	2.080	5.210	1.76	40.00	42606.
1183	0.332	0.02196	286.938	0.1492	0.01303	1.540	2.040	6.56	40.00	8972.
1186	0.333	0.02986	287.301	0.1497	0.01298	0.980	2.767	6.56	40.00	12194.
1189	0.333	0.03897	287.706	0.1493	0.01306	0.840	3.567	4.96	40.00	15515.
1192	0.332	0.04928	288.150	0.1484	0.01310	0.720	4.470	4.96	40.00	19049.
1195	0.331	0.06079	288.631	0.1477	0.01318	0.920	5.445	3.36	40.00	22798.
1198	0.250	0.02196	286.894	0.1103	0.01305	1.520	2.053	4.96	40.00	4508.
1201	0.250	0.02986	287.283	0.1100	0.01297	1.040	2.801	4.96	40.00	6081.
1204	0.249	0.03896	287.712	0.1095	0.01294	0.650	3.652	4.96	40.00	7802.
1207	0.247	0.04927	288.175	0.1085	0.01294	0.600	4.602	4.96	40.00	9561.
1210	0.246	0.06077	288.687	0.1076	0.01296	0.450	5.649	4.96	40.00	11452.
1213	0.183	0.02197	286.688	0.0798	0.01290	1.820	2.087	3.36	40.00	2248.
1216	0.183	0.02987	287.052	0.0795	0.01286	1.080	2.841	3.36	40.00	3018.
1219	0.183	0.03898	287.492	0.0795	0.01285	0.900	3.704	3.36	40.00	3914.
1222	0.183	0.04929	287.973	0.0793	0.01286	0.800	4.671	3.36	40.00	4880.
1225	0.184	0.06079	288.512	0.0795	0.01287	0.680	5.745	3.36	40.00	5982.
1228	0.090	0.02197	286.680	0.0383	0.01280	1.270	2.109	1.76	40.00	475.
1231	0.090	0.02988	287.065	0.0383	0.01276	0.960	2.876	1.76	40.00	647.
1234	0.089	0.03899	287.504	0.0378	0.01272	0.830	3.764	1.76	40.00	819.
1237	0.087	0.04930	287.989	0.0370	0.01274	0.570	4.751	1.76	40.00	984.
1240	0.087	0.06080	288.546	0.0370	0.01277	0.520	5.844	1.76	40.00	1199.
1243	0.491	0.02197	286.575	0.2301	0.01349	1.990	1.917	4.96	40.00	24628.
1246	0.492	0.02989	286.909	0.2304	0.01345	1.630	2.577	3.36	40.00	32999.
1249	0.492	0.03900	287.280	0.2302	0.01337	1.600	3.328	3.36	40.00	42197.
1252	0.491	0.04932	287.688	0.2289	0.01336	2.080	4.149	1.76	40.00	51461.
1258	0.524	0.02130	297.132	0.2351	0.01414	1.740	1.787	6.56	40.00	20019.
1261	0.524	0.02898	297.458	0.2345	0.01405	1.380	2.418	4.96	40.00	26754.
1264	0.524	0.03783	297.806	0.2342	0.01407	1.390	3.112	3.36	40.00	34134.

Table 32. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1267	0.527	0.04784	298.182	0.2350	0.01406	1.420	3.882	3.36	40.00	42677.
1270	0.526	0.05902	298.609	0.2343	0.01405	2.160	4.723	1.76	40.00	51187.
1273	0.439	0.02136	296.439	0.1940	0.01404	1.930	1.828	6.56	40.00	12932.
1276	0.438	0.02905	296.759	0.1930	0.01400	1.270	2.475	6.56	40.00	17211.
1279	0.439	0.03792	297.124	0.1932	0.01397	1.120	3.206	4.96	40.00	22239.
1282	0.441	0.04796	297.515	0.1937	0.01402	1.260	4.003	3.36	40.00	27752.
1285	0.440	0.05915	297.963	0.1929	0.01404	1.070	4.884	3.36	40.00	33317.
1288	0.347	0.02137	296.428	0.1502	0.01386	1.540	1.871	6.56	40.00	7258.
1291	0.346	0.02906	296.771	0.1497	0.01383	1.060	2.539	6.56	40.00	9723.
1294	0.347	0.03792	297.149	0.1497	0.01380	0.730	3.304	6.56	40.00	12586.
1297	0.348	0.04795	297.580	0.1501	0.01379	0.850	4.155	4.96	40.00	15817.
1300	0.350	0.05914	298.038	0.1506	0.01385	0.970	5.071	3.36	40.00	19348.
1303	0.258	0.02136	296.418	0.1096	0.01380	1.680	1.891	4.96	40.00	3599.
1306	0.259	0.02906	296.768	0.1099	0.01375	1.090	2.576	4.96	40.00	4909.
1309	0.258	0.03792	297.174	0.1093	0.01372	0.840	3.360	4.96	40.00	6293.
1312	0.256	0.04795	297.596	0.1085	0.01370	0.560	4.243	4.96	40.00	7767.
1315	0.256	0.05913	298.086	0.1082	0.01370	0.490	5.220	4.96	40.00	9447.
1318	0.177	0.02136	296.369	0.0743	0.01376	1.670	1.904	3.36	40.00	1554.
1321	0.178	0.02905	296.725	0.0745	0.01370	1.030	2.599	3.36	40.00	2121.
1324	0.180	0.03791	297.109	0.0752	0.01367	0.830	3.394	3.36	40.00	2815.
1327	0.179	0.04794	297.564	0.0747	0.01364	0.860	4.296	3.36	40.00	3495.
1330	0.178	0.05914	298.065	0.0739	0.01365	0.570	5.289	3.36	40.00	4176.
1333	0.092	0.02137	296.367	0.0379	0.01349	1.740	1.948	1.76	40.00	384.
1336	0.093	0.02907	296.726	0.0384	0.01346	1.100	2.655	1.76	40.00	536.
1339	0.094	0.03793	297.142	0.0385	0.01344	0.790	3.468	1.76	40.00	703.
1342	0.092	0.04795	297.582	0.0376	0.01346	0.710	4.376	1.76	40.00	840.
1345	0.092	0.05914	298.093	0.0376	0.01348	0.640	5.388	1.76	40.00	1025.
1348	0.097	0.02144	306.844	0.0385	0.01429	1.790	1.844	1.76	40.00	335.
1351	0.097	0.02916	307.168	0.0385	0.01428	1.250	2.510	1.76	40.00	455.
1354	0.096	0.03806	307.545	0.0383	0.01430	0.780	3.270	1.76	40.00	582.
1357	0.096	0.04814	307.954	0.0379	0.01432	0.660	4.129	1.76	40.00	719.
1360	0.095	0.05937	308.432	0.0374	0.01435	0.450	5.082	1.76	40.00	855.
1363	0.182	0.02145	306.774	0.0733	0.01437	1.620	1.831	3.36	40.00	1284.
1366	0.181	0.02916	307.087	0.0727	0.01436	1.320	2.491	3.36	40.00	1710.
1369	0.183	0.03806	307.472	0.0736	0.01435	0.810	3.248	3.36	40.00	2275.
1372	0.184	0.04812	307.888	0.0738	0.01437	0.660	4.097	3.36	40.00	2878.
1375	0.182	0.05936	308.349	0.0732	0.01440	0.450	5.039	3.36	40.00	3454.
1378	0.268	0.02145	306.616	0.1097	0.01450	1.880	1.809	4.96	40.00	3031.
1381	0.267	0.02917	306.934	0.1091	0.01448	1.180	2.459	4.96	40.00	4060.
1384	0.269	0.03807	307.304	0.1100	0.01446	0.810	3.206	4.96	40.00	5356.
1387	0.270	0.04815	307.716	0.1103	0.01446	0.750	4.044	4.96	40.00	6771.
1390	0.269	0.05939	308.172	0.1097	0.01445	0.490	4.980	4.96	40.00	8184.
1393	0.347	0.02146	306.434	0.1440	0.01453	1.720	1.798	6.56	40.00	5529.

Table 32. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1396	0.349	0.02919	306.741	0.1448	0.01450	1.120	2.442	6.56	40.00	7571.
1399	0.351	0.03809	307.108	0.1454	0.01448	1.180	3.178	4.96	40.00	9902.
1402	0.350	0.04816	307.521	0.1447	0.01449	0.710	3.999	4.96	40.00	12268.
1405	0.348	0.05940	307.976	0.1438	0.01453	0.540	4.896	4.96	40.00	14711.
1408	0.437	0.02145	306.010	0.1846	0.01460	1.760	1.775	6.56	40.00	9705.
1411	0.435	0.02917	306.311	0.1837	0.01458	1.100	2.404	6.56	40.00	12928.
1414	0.436	0.03807	306.667	0.1837	0.01461	0.970	3.111	4.96	40.00	16661.
1417	0.437	0.04815	307.050	0.1842	0.01468	0.920	3.886	4.96	40.00	20831.
1420	0.436	0.05939	307.463	0.1834	0.01476	1.010	4.730	3.36	40.00	24943.
1423	0.493	0.02145	305.950	0.2107	0.01478	1.980	1.744	8.16	40.00	13022.
1426	0.496	0.02918	306.243	0.2119	0.01474	1.260	2.358	6.56	40.00	17775.
1429	0.496	0.03808	306.605	0.2116	0.01474	1.340	3.049	4.96	40.00	22789.
1432	0.494	0.04816	306.973	0.2101	0.01480	1.280	3.807	3.36	40.00	27837.
1435	0.492	0.05942	307.377	0.2088	0.01483	1.040	4.644	3.36	40.00	33278.
1438	0.515	0.02148	317.980	0.2102	0.01565	1.710	1.656	8.16	40.00	10422.
1441	0.518	0.02921	318.273	0.2111	0.01562	1.390	2.242	6.56	40.00	14184.
1444	0.517	0.03813	318.602	0.2102	0.01564	0.910	2.902	6.56	40.00	18101.
1447	0.514	0.04822	318.943	0.2089	0.01570	0.870	3.628	4.96	40.00	22212.
1450	0.513	0.05947	319.329	0.2081	0.01576	1.210	4.425	3.36	40.00	26720.
1453	0.437	0.02149	317.843	0.1760	0.01571	2.110	1.661	6.56	40.00	6957.
1456	0.435	0.02922	318.142	0.1751	0.01566	1.310	2.256	6.56	40.00	9313.
1459	0.433	0.03813	318.460	0.1741	0.01565	0.910	2.933	6.56	40.00	11906.
1462	0.434	0.04822	318.833	0.1741	0.01565	0.850	3.690	4.96	40.00	14900.
1465	0.436	0.05949	319.224	0.1749	0.01568	0.550	4.515	4.96	40.00	18340.
1468	0.346	0.02150	317.684	0.1376	0.01544	1.710	1.700	8.16	40.00	4112.
1471	0.346	0.02924	317.977	0.1373	0.01545	1.120	2.304	4.96	40.00	5529.
1474	0.343	0.03815	318.322	0.1360	0.01547	0.920	2.994	4.96	40.00	7000.
1477	0.343	0.04824	318.700	0.1359	0.01548	0.750	3.773	4.96	40.00	8772.
1480	0.346	0.05950	319.112	0.1369	0.01548	0.630	4.636	4.96	40.00	10905.
1483	0.261	0.02157	316.556	0.1029	0.01557	1.740	1.697	4.96	40.00	2201.
1486	0.259	0.02933	316.855	0.1019	0.01543	1.130	2.325	4.96	40.00	2943.
1489	0.257	0.03827	317.209	0.1010	0.01541	0.770	3.033	4.96	40.00	3753.
1492	0.261	0.04839	317.596	0.1023	0.01540	0.550	3.830	4.96	40.00	4854.
1495	0.262	0.05968	318.024	0.1030	0.01535	0.560	4.729	4.96	40.00	6045.
1498	0.177	0.02157	316.482	0.0691	0.01542	1.910	1.718	3.36	40.00	954.
1501	0.179	0.02934	316.791	0.0695	0.01537	1.260	2.342	3.36	40.00	1314.
1504	0.180	0.03829	317.143	0.0701	0.01534	0.950	3.061	3.36	40.00	1741.
1507	0.180	0.04843	317.519	0.0697	0.01548	0.720	3.832	3.36	40.00	2147.
1510	0.178	0.05973	317.991	0.0689	0.01529	0.460	4.783	3.36	40.00	2595.
1513	0.090	0.02159	316.401	0.0347	0.01525	2.050	1.740	1.76	40.00	231.
1516	0.087	0.02936	316.758	0.0335	0.01504	1.320	2.399	1.76	40.00	296.
1519	0.090	0.03832	317.108	0.0344	0.01505	0.870	3.129	1.76	40.00	405.
1522	0.092	0.04845	317.519	0.0352	0.01507	0.630	3.949	1.76	40.00	534.

Table 32. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1525	0.089	0.05975	317.955	0.0341	0.01510	0.450	4.861	1.76	40.00	612.
1528	0.095	0.02154	327.975	0.0352	0.01589	2.040	1.667	1.76	40.00	204.
1531	0.093	0.02929	328.275	0.0344	0.01594	1.200	2.259	1.76	40.00	262.
1534	0.090	0.03824	328.584	0.0333	0.01600	0.800	2.938	1.76	40.00	319.
1537	0.093	0.04835	328.958	0.0344	0.01604	0.580	3.704	1.76	40.00	428.
1540	0.095	0.05964	329.381	0.0349	0.01608	0.430	4.556	1.76	40.00	539.
1543	0.178	0.02155	327.732	0.0666	0.01613	1.630	1.641	3.36	40.00	750.
1546	0.177	0.02931	328.007	0.0663	0.01616	1.060	2.227	3.36	40.00	1007.
1549	0.178	0.03826	328.317	0.0668	0.01619	0.780	2.900	3.36	40.00	1326.
1552	0.181	0.04837	328.702	0.0679	0.01620	0.580	3.660	3.36	40.00	1725.
1555	0.183	0.05965	329.098	0.0683	0.01624	0.410	4.501	3.36	40.00	2139.
1558	0.262	0.02153	325.711	0.1002	0.01649	2.220	1.601	3.36	40.00	1775.
1561	0.260	0.02928	326.001	0.0992	0.01615	1.260	2.221	4.96	40.00	2403.
1564	0.262	0.03822	326.327	0.1000	0.01616	1.120	2.892	3.36	40.00	3169.
1567	0.265	0.04832	326.694	0.1009	0.01616	0.590	3.651	4.96	40.00	4061.
1570	0.262	0.05960	327.120	0.0994	0.01606	0.460	4.525	4.96	40.00	4853.
1573	0.355	0.02143	325.553	0.1373	0.01611	1.920	1.626	4.96	40.00	3575.
1576	0.351	0.02915	325.828	0.1357	0.01613	1.310	2.203	4.96	40.00	4703.
1579	0.351	0.03804	326.156	0.1355	0.01615	1.080	2.866	4.96	40.00	6078.
1582	0.355	0.04811	326.517	0.1370	0.01616	0.770	3.610	4.96	40.00	7812.
1585	0.358	0.05934	326.926	0.1378	0.01616	0.600	4.437	4.96	40.00	9677.
1588	0.429	0.02145	325.196	0.1677	0.01624	2.080	1.608	6.56	40.00	5530.
1591	0.431	0.02917	325.492	0.1685	0.01622	1.470	2.182	6.56	40.00	7550.
1594	0.434	0.03807	325.802	0.1694	0.01620	0.990	2.838	6.56	40.00	9913.
1597	0.433	0.04814	326.162	0.1689	0.01621	0.780	3.571	6.56	40.00	12328.
1600	0.429	0.05938	326.553	0.1671	0.01626	0.750	4.374	4.96	40.00	14688.
1603	0.507	0.02145	325.060	0.2009	0.01636	1.700	1.589	8.16	40.00	8230.
1606	0.512	0.02918	325.345	0.2027	0.01622	1.930	2.167	6.56	40.00	11421.
1609	0.515	0.03807	325.654	0.2037	0.01627	0.820	2.801	6.56	40.00	14866.
1612	0.515	0.04815	325.994	0.2032	0.01634	0.900	3.506	4.96	40.00	18437.
1615	0.511	0.05939	326.372	0.2016	0.01641	1.420	4.278	3.36	40.00	21978.
1618	0.532	0.02137	337.264	0.2017	0.01760	2.150	1.475	6.56	40.00	6680.
1621	0.533	0.02907	337.498	0.2020	0.01744	1.410	2.017	8.16	40.00	9136.
1624	0.534	0.03794	337.796	0.2022	0.01742	0.980	2.622	6.56	40.00	11873.
1627	0.535	0.04799	338.093	0.2022	0.01742	0.670	3.299	6.56	40.00	14884.
1630	0.534	0.05920	338.466	0.2016	0.01731	0.780	4.070	4.96	40.00	18157.
1633	0.441	0.02139	337.043	0.1656	0.01756	2.050	1.486	6.56	40.00	4349.
1636	0.441	0.02909	337.299	0.1653	0.01750	1.520	2.023	6.56	40.00	5877.
1639	0.442	0.03796	337.597	0.1656	0.01720	1.020	2.676	6.56	40.00	7781.
1642	0.443	0.04801	337.915	0.1658	0.01722	0.770	3.368	6.56	40.00	9787.
1645	0.443	0.05921	338.301	0.1655	0.01723	0.560	4.136	6.56	40.00	11912.
1648	0.353	0.02141	336.516	0.1315	0.01737	2.090	1.509	4.96	40.00	2678.
1651	0.355	0.02912	336.785	0.1319	0.01718	1.280	2.071	4.96	40.00	3695.

Table 32. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1654	0.355	0.03801	337.090	0.1320	0.01700	0.930	2.727	4.96	40.00	4858.
1657	0.354	0.04808	337.412	0.1314	0.01705	0.820	3.430	4.96	40.00	6029.
1660	0.353	0.05931	337.784	0.1308	0.01707	0.550	4.216	4.96	40.00	7300.
1663	0.255	0.02143	336.309	0.0937	0.01703	1.700	1.544	3.36	40.00	1331.
1666	0.253	0.02915	336.577	0.0931	0.01708	1.210	2.093	3.36	40.00	1774.
1669	0.253	0.03805	336.858	0.0929	0.01711	0.960	2.724	3.36	40.00	2290.
1672	0.254	0.04811	337.190	0.0933	0.01712	0.860	3.438	3.36	40.00	2909.
1675	0.255	0.05934	337.561	0.0933	0.01715	0.730	4.229	3.36	40.00	3569.
1678	0.176	0.02145	334.949	0.0645	0.01681	1.840	1.568	3.36	40.00	624.
1681	0.177	0.02917	335.209	0.0649	0.01685	1.170	2.126	3.36	40.00	856.
1684	0.179	0.03808	335.514	0.0654	0.01688	0.920	2.769	3.36	40.00	1130.
1687	0.178	0.04816	335.870	0.0651	0.01677	0.700	3.524	3.36	40.00	1417.
1690	0.177	0.05940	336.267	0.0644	0.01682	0.410	4.330	3.36	40.00	1699.
1693	0.089	0.02147	334.745	0.0324	0.01659	2.140	1.591	1.76	40.00	154.
1696	0.090	0.02919	335.004	0.0327	0.01652	1.140	2.173	1.76	40.00	213.
1699	0.092	0.03810	335.316	0.0332	0.01658	0.870	2.826	1.76	40.00	285.
1702	0.091	0.04819	335.658	0.0328	0.01662	0.570	3.563	1.76	40.00	350.
1705	0.090	0.05943	336.056	0.0324	0.01668	0.440	4.380	1.76	40.00	419.
1708	0.093	0.02119	344.361	0.0327	0.01756	2.020	1.484	1.76	40.00	134.
1711	0.092	0.02884	344.603	0.0323	0.01762	1.340	2.012	1.76	40.00	177.
1714	0.093	0.03764	344.892	0.0327	0.01745	0.890	2.653	1.76	40.00	238.
1717	0.094	0.04761	345.219	0.0331	0.01739	0.580	3.365	1.76	40.00	308.
1720	0.093	0.05873	345.578	0.0327	0.01747	0.460	4.131	1.76	40.00	368.
1723	0.186	0.02122	344.036	0.0663	0.01805	2.470	1.445	1.76	40.00	559.
1726	0.188	0.02886	344.281	0.0669	0.01777	1.340	1.995	3.36	40.00	786.
1729	0.188	0.03767	344.556	0.0667	0.01775	0.880	2.606	3.36	40.00	1017.
1732	0.186	0.04764	344.879	0.0662	0.01779	0.660	3.286	3.36	40.00	1257.
1735	0.186	0.05877	345.249	0.0660	0.01765	0.460	4.084	3.36	40.00	1546.
1738	0.268	0.02124	343.702	0.0964	0.01794	2.370	1.453	3.36	40.00	1237.
1741	0.269	0.02889	343.927	0.0969	0.01798	1.520	1.971	3.36	40.00	1691.
1744	0.269	0.03771	344.220	0.0968	0.01779	1.060	2.597	3.36	40.00	2216.
1747	0.268	0.04769	344.562	0.0962	0.01759	0.710	3.318	3.36	40.00	2789.
1750	0.268	0.05883	344.915	0.0961	0.01767	0.820	4.070	3.36	40.00	3399.
1753	0.353	0.02128	343.082	0.1286	0.01775	2.190	1.469	4.96	40.00	2326.
1756	0.353	0.02894	343.299	0.1282	0.01781	1.370	1.987	4.96	40.00	3116.
1759	0.351	0.03776	343.587	0.1276	0.01779	0.990	2.592	4.96	40.00	4012.
1762	0.352	0.04776	343.901	0.1277	0.01767	0.800	3.294	4.96	40.00	5096.
1765	0.353	0.05892	344.279	0.1281	0.01761	0.660	4.069	4.96	40.00	6313.
1768	0.434	0.02129	342.741	0.1595	0.01789	2.130	1.454	6.56	40.00	3684.
1771	0.432	0.02897	342.956	0.1588	0.01795	1.630	1.967	4.96	40.00	4923.
1774	0.433	0.03781	343.244	0.1587	0.01782	1.050	2.579	6.56	40.00	6432.
1777	0.434	0.04782	343.559	0.1592	0.01766	0.990	3.282	4.96	40.00	8217.
1780	0.433	0.05899	343.928	0.1587	0.01767	0.770	4.032	4.96	40.00	9986.

Table 32. Thermal conductivity of the ternary 30 % R32 / 10 % R125 / 60 % R134a mixture in the dilute gas measured using the steady-state technique (continued).

Run point	P_{exp} MPa	Q W·m^{-1}	T_{exp} K	ρ_{calc} mol·L^{-1}	λ_{exp} W·m^{-1}·K^{-1}	TBAND %	ΔT_{avg} K	t_{start} s	t_{end} s	N_{Ra}
1783	0.522	0.02132	342.452	0.1940	0.01796	1.930	1.445	8.16	40.00	5661.
1786	0.521	0.02899	342.671	0.1935	0.01795	1.490	1.959	6.56	40.00	7610.
1789	0.519	0.03784	342.977	0.1927	0.01756	1.070	2.603	6.56	40.00	9989.
1792	0.519	0.04786	343.280	0.1925	0.01766	0.940	3.259	4.96	40.00	12437.
1795	0.521	0.05904	343.610	0.1930	0.01775	0.760	3.980	4.96	40.00	15220.