Measurement and Correlation of the Thermal Conductivity of Pentafluoroethane (R125) from 190 K to 512 K at Pressures to 70 MPa

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SUPPORTING INFORMATION: Tabulated Experimental Data

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Nomenclature

Run Point	-	Unique measurement identification number.
P_{e}	-	Measured pressure of fluid in hot-wire cell. (Uncertainty[b] of 7 kPa)
q	-	Applied heating power per unit length of hot wire. (Relative Uncertainty[b] of 0.01 %)
T_{e}	-	Measured temperature associated with the thermal conductivity. (Uncertainty[b] of 5 mK)
ρ_{e}	-	Density of fluid in hot-wire cell calculated with an equation of state[c] at measured T_{e} and P_{e}. (Uncertainty varies with state point and is largest in the critical region where small changes in T_{e} and P_{e} lead to large changes in ρ_{e})
λ_{e}	-	Measured thermal conductivity of fluid in hot-wire cell. (Uncertainty[b] less than 1 % for measurements away from the critical point and for gas at pressures above 1 MPa, increasing to 3 % in the critical region and for gas at pressure below 1 MPa)
STAT	-	Reproducibility of thermal conductivity from the uncertainty[b] in slope of the line fit to ideal temperature rise versus the logarithm of elapsed time (0.001 corresponds to 0.1%).
T_{i}	-	Measured temperature of hot-wire cell. (Uncertainty[b] of 5 mK)

[b] Coverage factor of k=2 (approximately 95 % confidence interval).

[c] Lemmon, W.W.; Jacobsen, R.T. A New Functional Form and New Fitting Techniques for Equations of State with Application to Pentafluorethane (HFC-125). *J. Phys. Chem. Ref. Data* **2005**, *34*, 69-108.

Table 1. Thermal conductivity of vapor R125 (sample 1, low-temperature apparatus) from 220 K to 300 K.

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
15005	.064	.02788	222.853	.0354	.00860	.002	219.963
15006	.063	.02428	222.483	.0349	.00856	.003	219.966
15007	.062	.02093	222.135	.0345	.00855	.003	219.966
15008	.061	.01783	221.805	.0339	.00854	.004	219.963
15009	.036	.02789	223.121	.0196	.00870	.002	220.053
15010	.034	.02430	222.738	.0187	.00869	.003	220.058
15011	.033	.02094	222.374	.0179	.00870	.003	220.057
15012	.031	.01784	222.023	.0170	.00870	.004	220.051
15016	.068	.01784	221.811	.0378	.00852	.004	220.018
15017	.064	.02790	222.868	.0356	.00859	.002	220.005
15018	.063	.02429	222.499	.0348	.00856	.002	220.001
15019	.060	.02094	222.145	.0333	.00855	.003	219.996
15020	.060	.01784	221.830	.0332	.00856	.004	220.005
15021	.059	.02790	222.956	.0329	.00858	.002	219.995
15022	.060	.02430	222.570	.0332	.00854	.003	219.989
15023	.060	.02094	222.218	.0336	.00854	.003	219.998
15024	.061	.01784	221.883	.0340	.00852	.004	219.997
15025	.041	.02790	222.946	.0224	.00862	.002	219.982
15026	.041	.02430	222.565	.0225	.00860	.003	219.987
15027	.041	.02094	222.201	.0225	.00860	.003	219.982
15028	.041	.01784	221.865	.0226	.00859	.004	219.985
16001	.114	.02923	232.568	.0615	.00922	.002	229.912
16002	.113	.02546	232.214	.0613	.00920	.003	229.909
16003	.112	.02195	231.888	.0608	.00919	.003	229.908
16004	.111	.01871	231.586	.0600	.00917	.004	229.905
16005	.086	.02923	232.637	.0458	.00925	.002	229.901
16006	.084	.02546	232.279	.0451	.00923	.002	229.900
16007	.083	.02195	231.947	.0442	.00922	.003	229.900
16008	.081	.01870	231.639	.0434	.00920	.004	229.901
16009	.060	.02923	232.749	.0318	.00927	.002	229.899
16010	.059	.02546	232.383	.0312	.00925	.003	229.901
16011	.058	.02195	232.035	.0306	.00924	.003	229.902
16012	.057	.01870	231.712	.0300	.00923	.004	229.902
16013	.040	.02923	232.864	.0210	.00930	.002	229.906
16014	.040	.02546	232.479	.0210	.00926	.003	229.904
16015	.040	.02195	232.124	.0211	.00928	.003	229.904
16016	.040	.01870	231.784	.0212	.00928	.004	229.905
17001	.167	.03484	242.903	.0876	.00995	.002	240.040
17002	.165	.03062	242.546	.0865	.00992	.002	240.030
17003	.163	.02667	242.231	.0853	.00992	.003	240.043
17004	.160	.02300	241.916	.0841	.00991	.003	240.036
17005	.139	.03484	242.955	.0719	.00995	.002	240.033
17006	.137	.03062	242.600	.0709	.00993	.002	240.034

Table 1. Thermal conductivity of vapor R125 from 220 K to 300 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
17007	.136	.02667	242.259	.0704	.00991	.002	240.027
17008	.135	.02300	241.941	.0701	.00988	.003	240.025
17009	.123	.03484	242.972	.0634	.00994	.002	240.033
17010	.123	.03062	242.610	.0636	.00991	.002	240.033
17011	.123	.02667	242.268	.0636	.00991	.002	240.031
17012	.123	.02300	241.959	.0636	.00991	.003	240.037
17013	.093	.03484	242.964	.0472	.00999	.002	240.027
17014	.092	.03062	242.598	.0472	.00995	.002	240.023
17015	.092	.02667	242.265	.0473	.00995	.002	240.032
17016	.092	.02300	241.948	.0473	.00994	.003	240.031
17017	.069	.03484	242.951	.0348	.01003	.002	240.019
17018	.069	.03062	242.588	.0350	.01000	.002	240.020
17019	.069	.02667	242.247	.0351	.01000	.002	240.017
17020	.069	.02300	241.939	.0353	.00999	.003	240.026
17021	.041	.03484	242.976	.0204	.00994	.003	240.019
17022	.041	.03062	242.621	.0205	.00993	.003	240.023
17023	.041	.02667	242.275	.0206	.00991	.004	240.021
17024	.041	.02299	241.952	.0206	.00991	.004	240.016
18001	.258	.03635	252.433	.1326	.01064	.002	249.748
18002	.255	.03194	252.113	.1315	.01059	.002	249.753
18003	.253	.02783	251.800	.1303	.01061	.002	249.748
18004	.250	.02400	251.516	.1289	.01058	.003	249.748
18005	.225	.03634	252.492	.1144	.01064	.002	249.751
18006	.225	.03194	252.148	.1145	.01053	.002	249.744
18007	.224	.02782	251.835	.1146	.01059	.002	249.746
18008	.224	.02399	251.536	.1147	.01058	.003	249.742
18009	.187	.03634	252.552	.0938	.01064	.002	249.746
18010	.187	.03194	252.205	.0940	.01060	.002	249.743
18011	.186	.02783	251.888	.0938	.01058	.002	249.748
18012	.185	.02400	251.585	.0934	.01057	.003	249.745
18013	.141	.03635	252.550	.0701	.01065	.002	249.743
18014	.142	.03195	252.215	.0703	.01062	.002	249.750
18015	.142	.02783	251.883	.0705	.01062	.002	249.742
18016	.142	.02400	251.587	.0708	.01060	.003	249.747
18017	.099	.03635	252.546	.0484	.01072	.002	249.744
18018	.107	.03195	252.201	.0527	.01065	.002	249.744
18019	.111	.02783	251.884	.0549	.01065	.002	249.744
18020	.113	.02400	251.587	.0558	.01064	.003	249.742
18021	.186	.03637	252.576	.0936	.01061	.002	249.781
18022	.184	.03196	252.226	.0927	.01057	.002	249.771
18023	.182	.02784	251.875	.0918	.01059	.002	249.753
18024	.181	.02400	251.570	.0913	.01060	.003	249.755
18025	.139	.03635	252.689	.0687	.01064	.002	249.788
18026	.137	.03196	252.329	.0681	.01060	.002	249.783

Table 1. Thermal conductivity of vapor R125 from 220 K to 300 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
18027	.136	.02784	252.009	.0673	.01060	.002	249.792
18028	.134	.02401	251.699	.0664	.01059	.003	249.794
18029	.094	.03636	252.805	.0461	.01066	.002	249.785
18030	.093	.03196	252.441	.0457	.01062	.002	249.790
18031	.092	.02784	252.099	.0453	.01061	.003	249.793
18032	.091	.02400	251.762	.0446	.01059	.003	249.781
18033	.043	.03636	253.033	.0209	.01068	.002	249.788
18034	.043	.03196	252.638	.0207	.01067	.002	249.792
18035	.043	.02784	252.260	.0205	.01068	.003	249.786
18036	.042	.02400	251.905	.0204	.01066	.003	249.783
19001	.395	.03792	262.508	.2011	.01142	.002	260.029
19002	.391	.03335	262.198	.1997	.01142	.002	260.024
19003	.389	.02906	261.916	.1983	.01142	.002	260.025
19004	.385	.02506	261.639	.1968	.01140	.003	260.018
19005	.409	.04279	262.813	.2089	.01146	.001	260.040
19006	.409	.03793	262.521	.2093	.01145	.002	260.042
19007	.409	.03334	262.216	.2097	.01145	.002	260.044
19008	.409	.02904	261.923	.2100	.01144	.003	260.038
19009	.361	.04273	262.894	.1820	.01145	.002	260.039
19010	.361	.03784	262.563	.1822	.01143	.002	260.039
19011	.361	.03325	262.254	.1823	.01142	.002	260.039
19012	.361	.02896	261.948	.1827	.01142	.002	260.028
19013	.312	.04281	262.959	.1544	.01141	.002	260.032
19014	.311	.03793	262.629	.1544	.01140	.002	260.040
19015	.311	.03334	262.304	.1544	.01139	.002	260.033
19016	.310	.02904	262.006	.1544	.01138	.002	260.033
19017	.276	.04281	263.025	.1354	.01141	.002	260.042
19018	.275	.03793	262.680	.1353	.01138	.002	260.043
19019	.275	.03334	262.351	.1354	.01137	.002	260.035
19020	.275	.02904	262.048	.1354	.01135	.002	260.039
19021	.222	.04281	263.112	.1072	.01140	.002	260.041
19022	.221	.03792	262.764	.1068	.01138	.002	260.046
19023	.220	.03333	262.426	.1066	.01133	.002	260.040
19024	.220	.02904	262.111	.1065	.01135	.002	260.039
19025	.176	.04280	263.208	.0840	.01140	.002	260.051
19026	.175	.03792	262.845	.0836	.01139	.002	260.049
19027	.174	.03333	262.501	.0832	.01134	.002	260.043
19028	.173	.02904	262.179	.0827	.01135	.003	260.046
19029	.129	.04280	263.309	.0607	.01142	.002	260.042
19030	.128	.03792	262.926	.0603	.01140	.002	260.031
19031	.127	.03333	262.579	.0600	.01137	.002	260.040
19032	.126	.02903	262.247	.0596	.01137	.002	260.036
19033	.083	.04280	263.466	.0387	.01145	.002	260.047
19034	.083	.03792	263.056	.0388	.01144	.002	260.034

Table 1. Thermal conductivity of vapor R125 from 220 K to 300 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
19035	.083	.03333	262.691	.0390	.01144	.002	260.035
19036	.083	.02903	262.344	.0391	.01143	.003	260.038
20001	.553	.04452	272.608	.2794	.01233	.002	269.989
20002	.551	.03944	272.297	.2786	.01229	.002	269.982
20003	.549	.03467	272.010	.2778	.01230	.002	269.981
20004	.546	.03021	271.730	.2768	.01230	.002	269.972
20005	.470	.04453	272.696	.2318	.01225	.001	269.991
20006	.468	.03945	272.381	.2311	.01223	.002	269.991
20007	.465	.03467	272.086	.2299	.01223	.002	269.993
20008	.463	.03020	271.841	.2290	.01222	.002	269.997
20009	.402	.04452	272.794	.1944	.01220	.001	269.994
20010	.401	.03944	272.468	.1941	.01219	.002	269.989
20011	.400	.03467	272.157	.1939	.01219	.002	269.984
20012	.399	.03020	271.869	.1938	.01216	.003	269.980
20013	.333	.04452	272.859	.1581	.01215	.002	269.979
20014	.332	.03944	272.524	.1581	.01214	.002	269.979
20015	.332	.03466	272.216	.1581	.01215	.002	269.981
20016	.331	.03020	271.925	.1581	.01214	.002	269.982
20017	.254	.04452	272.959	.1181	.01214	.002	269.977
20018	.253	.03944	272.611	.1178	.01213	.002	269.975
20019	.251	.03466	272.284	.1173	.01213	.002	269.968
20020	.249	.03020	271.975	.1165	.01213	.002	269.964
20021	.195	.04451	273.045	.0897	.01214	.002	269.968
20022	.195	.03943	272.687	.0895	.01213	.002	269.966
20023	.194	.03466	272.350	.0892	.01209	.002	269.963
20024	.193	.03019	272.028	.0889	.01214	.002	269.955
20025	.136	.04451	273.165	.0615	.01215	.002	269.962
20026	.136	.03943	272.790	.0615	.01215	.002	269.957
20027	.136	.03466	272.446	.0616	.01211	.002	269.960
20028	.136	.03019	272.129	.0617	.01214	.003	269.971
20029	.077	.04450	273.340	.0343	.01222	.003	269.957
20030	.077	.03942	272.959	.0344	.01220	.002	269.965
20031	.077	.03465	272.582	.0344	.01218	.003	269.953
20032	.077	.03019	272.234	.0344	.01220	.003	269.956
20033	.577	.04448	272.592	.2937	.01230	.002	269.952
20034	.577	.03941	272.287	.2942	.01232	.002	269.959
20035	.577	.03465	271.967	.2949	.01230	.002	269.953
20036	.577	.03018	271.694	.2953	.01219	.002	269.950
21001	.786	.04625	282.412	.4013	.01330	.002	279.998
21002	.786	.04097	282.124	.4020	.01328	.002	279.992
21003	.787	.03602	281.857	.4028	.01327	.002	279.994
21004	.787	.03138	281.604	.4036	.01328	.002	279.989
21005	.725	.04624	282.461	.3632	.01322	.001	279.977
21006	.726	.04096	282.176	.3643	.01319	.001	279.979

Table 1. Thermal conductivity of vapor R125 from 220 K to 300 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
21007	.726	.03600	281.902	.3651	.01320	.002	279.978
21008	.726	.03137	281.647	.3657	.01321	.002	279.974
21009	.651	.04623	282.506	.3194	.01313	.001	279.961
21010	.652	.04096	282.196	.3207	.01309	.001	279.951
21011	.653	.03600	281.919	.3218	.01311	.002	279.954
21012	.654	.03137	281.656	.3227	.01312	.002	279.953
21013	.584	.04624	282.542	.2813	.01308	.002	279.948
21014	.584	.04096	282.243	.2820	.01303	.002	279.952
21015	.585	.03600	281.957	.2826	.01310	.006	279.949
21016	.585	.03137	281.688	.2831	.01310	.006	279.946
21017	.517	.04623	282.594	.2451	.01303	.002	279.943
21018	.517	.04096	282.288	.2455	.01298	.002	279.946
21019	.517	.03600	281.992	.2460	.01300	.002	279.939
21020	.518	.03136	281.718	.2463	.01300	.002	279.938
21021	.440	.04623	282.652	.2048	.01301	.001	279.930
21022	.440	.04095	282.348	.2050	.01295	.002	279.943
21023	.440	.03599	282.044	.2053	.01295	.002	279.935
21024	.440	.03135	281.760	.2055	.01294	.002	279.933
21025	.365	.04622	282.722	.1667	.01296	.002	279.927
21026	.365	.04094	282.406	.1669	.01294	.002	279.934
21027	.364	.03599	282.096	.1670	.01293	.002	279.931
21028	.364	.03135	281.809	.1672	.01291	.002	279.932
21029	.290	.04617	282.822	.1306	.01294	.002	279.942
21030	.291	.04089	282.479	.1309	.01294	.002	279.934
21031	.291	.03592	282.171	.1312	.01296	.002	279.942
21032	.291	.03128	281.864	.1316	.01288	.002	279.931
21033	.204	.04607	282.924	.0900	.01296	.002	279.933
21034	.203	.04079	282.581	.0897	.01292	.002	279.933
21035	.202	.03584	282.253	.0896	.01290	.002	279.935
21036	.202	.03123	281.928	.0897	.01291	.002	279.918
21037	.147	.04598	283.056	.0642	.01297	.002	279.934
21038	.146	.04072	282.705	.0639	.01297	.002	279.937
21039	.145	.03578	282.363	.0635	.01293	.002	279.932
21040	.144	.03117	282.041	.0632	.01290	.002	279.927
21041	.083	.04591	283.219	.0356	.01307	.002	279.925
21042	.082	.04065	282.850	.0355	.01303	.002	279.933
21043	.082	.03573	282.478	.0354	.01301	.003	279.920
21044	.082	.03113	282.149	.0354	.01301	.003	279.922
22001	1.058	.04796	292.063	.5478	.01435	.002	289.832
22002	1.058	.04249	291.794	.5489	.01440	.002	289.823
22003	1.058	.03735	291.552	.5499	.01437	.002	289.826
22004	1.058	.03254	291.319	.5510	.01437	.002	289.824
22005	.962	.04796	292.134	.4843	.01423	.002	289.827
22006	.962	.04248	291.863	.4851	.01425	.002	289.828

Table 1. Thermal conductivity of vapor R125 from 220 K to 300 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
22007	.962	.03734	291.616	.4860	.01422	.002	289.830
22008	.962	.03253	291.381	.4868	.01430	.002	289.830
22009	.877	.04796	292.202	.4312	.01409	.001	289.829
22010	.877	.04248	291.927	.4320	.01414	.002	289.831
22011	.877	.03734	291.671	.4327	.01408	.002	289.835
22012	.877	.03253	291.427	.4334	.01409	.002	289.832
22013	.798	.04795	292.261	.3843	.01399	.001	289.827
22014	.798	.04248	291.976	.3849	.01403	.001	289.829
22015	.798	.03733	291.714	.3855	.01405	.002	289.830
22016	.798	.03253	291.475	.3861	.01417	.004	289.838
22017	.715	.04796	292.331	.3374	.01393	.001	289.837
22018	.715	.04248	292.048	.3380	.01389	.002	289.843
22019	.715	.03733	291.771	.3385	.01388	.002	289.836
22020	.715	.03252	291.515	.3390	.01387	.002	289.838
22021	.617	.04795	292.410	.2847	.01385	.001	289.841
22022	.617	.04247	292.106	.2851	.01383	.002	289.838
22023	.617	.03732	291.831	.2855	.01385	.002	289.841
22024	.617	.03252	291.566	.2859	.01382	.002	289.840
22025	.542	.04794	292.460	.2461	.01381	.001	289.836
22026	.542	.04246	292.146	.2465	.01376	.002	289.828
22027	.542	.03732	291.862	.2468	.01382	.002	289.829
22028	.542	.03251	291.598	.2471	.01380	.002	289.834
22029	.450	.04794	292.513	.2002	.01378	.002	289.817
22030	.450	.04246	292.219	.2004	.01371	.002	289.833
22031	.450	.03732	291.913	.2008	.01374	.002	289.821
22032	.450	.03252	291.637	.2010	.01372	.002	289.826
22033	.359	.04793	292.621	.1571	.01374	.002	289.835
22034	.359	.04245	292.290	.1573	.01374	.002	289.828
22035	.359	.03731	291.985	.1575	.01373	.002	289.827
22036	.359	.03251	291.691	.1577	.01373	.002	289.820
22037	.277	.04791	292.698	.1193	.01375	.002	289.823
22038	.277	.04243	292.381	.1195	.01372	.002	289.838
22039	.277	.03729	292.061	.1196	.01372	.002	289.829
22040	.277	.03249	291.767	.1197	.01373	.002	289.828
22041	.177	.04793	292.901	.0749	.01376	.002	289.850
22042	.177	.04248	292.540	.0750	.01376	.002	289.843
22043	.177	.03734	292.214	.0751	.01371	.002	289.846
22044	.177	.03253	291.908	.0752	.01373	.002	289.850
22045	.086	.04795	293.102	.0360	.01387	.002	289.834
22046	.087	.04247	292.735	.0361	.01385	.003	289.841
22047	.086	.03733	292.377	.0360	.01382	.003	289.838
22048	.087	.03252	292.048	.0362	.01383	.003	289.839
23001	1.381	.04969	302.024	.7301	.01560	.001	299.951
23002	1.381	.04405	301.782	.7316	.01566	.002	299.951

Table 1. Thermal conductivity of vapor R125 from 220 K to 300 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
23003	1.381	.03872	301.555	.7331	.01568	.002	299.952
23004	1.381	.03374	301.349	.7343	.01566	.002	299.954
23005	1.280	.04971	302.090	.6561	.01547	.002	299.959
23006	1.288	.04404	301.831	.6631	.01550	.002	299.959
23007	1.295	.03870	301.595	.6691	.01549	.002	299.961
23008	1.301	.03372	301.373	.6745	.01549	.002	299.959
23009	1.171	.04970	302.130	.5819	.01518	.001	299.943
23010	1.171	.04403	301.869	.5829	.01520	.002	299.941
23011	1.171	.03869	301.641	.5840	.01521	.002	299.952
23012	1.171	.03371	301.412	.5849	.01518	.002	299.952
23013	1.063	.04968	302.239	.5135	.01498	.001	299.952
23014	1.063	.04400	301.968	.5144	.01503	.002	299.944
23015	1.063	.03866	301.721	.5153	.01501	.002	299.945
23016	1.063	.03369	301.487	.5161	.01501	.002	299.945
23017	.952	.04968	302.294	.4481	.01494	.001	299.940
23018	.952	.04400	302.034	.4488	.01496	.002	299.950
23019	.952	.03867	301.780	.4495	.01493	.002	299.955
23020	.952	.03369	301.530	.4502	.01493	.002	299.942
23021	.857	.04967	302.350	.3949	.01484	.001	299.938
23022	.857	.04399	302.072	.3955	.01483	.002	299.938
23023	.857	.03866	301.807	.3960	.01482	.002	299.937
23024	.857	.03369	301.561	.3966	.01482	.002	299.931
23025	.762	.04966	302.411	.3441	.01476	.002	299.939
23026	.762	.04399	302.128	.3446	.01475	.001	299.940
23027	.762	.03866	301.866	.3451	.01475	.002	299.944
23028	.762	.03367	301.617	.3455	.01472	.002	299.946
23029	.664	.04966	302.485	.2940	.01468	.002	299.943
23030	.664	.04398	302.193	.2944	.01464	.002	299.944
23031	.664	.03865	301.911	.2948	.01467	.002	299.939
23032	.664	.03367	301.658	.2952	.01469	.002	299.946
23033	.556	.04965	302.555	.2412	.01463	.002	299.942
23034	.556	.04398	302.254	.2416	.01457	.002	299.944
23035	.556	.03864	301.971	.2419	.01462	.002	299.944
23036	.556	.03367	301.709	.2422	.01464	.002	299.948
23037	.428	.04964	302.654	.1815	.01459	.002	299.942
23038	.428	.04397	302.337	.1817	.01456	.002	299.941
23039	.428	.03863	302.043	.1820	.01457	.002	299.936
23040	.428	.03366	301.777	.1822	.01457	.002	299.942
23041	.317	.04963	302.755	.1321	.01463	.002	299.940
23042	.317	.04394	302.433	.1323	.01460	.002	299.943
23043	.317	.03861	302.125	.1325	.01460	.002	299.939
23044	.317	.03364	301.833	.1327	.01460	.002	299.935
23045	.215	.04960	302.875	.0882	.01461	.002	299.934
23046	.215	.04394	302.532	.0883	.01463	.002	299.933

Table 1. Thermal conductivity of vapor R125 from 220 K to 300 K. (continued)

Run	P_e	q	T_e	ρ_e	λ_e	STAT	T_i
Point	$\overline{\mathrm{MPa}}$	$\overline{\mathrm{W \cdot m^{-1}}}$	$\overline{\mathrm{K}}$	$\overline{\mathrm{mol \cdot L^{-1}}}$	$\overline{\mathrm{W \cdot m^{-1} \cdot K^{-1}}}$		$\overline{\mathrm{K}}$
23047	.215	.03860	302.230	.0884	.01459	.002	299.947
23048	.215	.03363	301.926	.0885	.01460	.003	299.942
23049	.095	.04959	303.127	.0382	.01477	.002	299.943
23050	.095	.04393	302.768	.0383	.01473	.002	299.947
23051	.095	.03861	302.409	.0383	.01468	.003	299.935
23052	.095	.03364	302.097	.0383	.01472	.003	299.943

Table 2. Thermal conductivity of liquid R125 (sample 1, low-temperature apparatus) from 190 K to 330 K.

Run	P_e	q	T_e	ρ_e	λ_e	STAT	T_i
Point	$\overline{\mathrm{MPa}}$	$\overline{\mathrm{W \cdot m^{-1}}}$	$\overline{\mathrm{K}}$	$\overline{\mathrm{mol \cdot L^{-1}}}$	$\overline{\mathrm{W \cdot m^{-1} \cdot K^{-1}}}$		$\overline{\mathrm{K}}$
7001	45.674	.60712	193.166	14.1893	.12265	.001	190.168
7002	45.642	.52944	192.774	14.1973	.12303	.001	190.168
7003	45.607	.45650	192.423	14.2044	.12324	.001	190.170
7004	45.588	.38942	192.085	14.2115	.12357	.001	190.167
7005	45.457	.60746	193.152	14.1870	.12275	.000	190.163
7006	45.470	.52925	192.759	14.1956	.12286	.000	190.160
7007	45.466	.45665	192.394	14.2034	.12305	.001	190.156
7008	45.469	.38959	192.068	14.2105	.12332	.001	190.164
7009	35.036	.60687	193.280	14.0555	.11950	.000	190.196
7010	35.043	.52884	192.878	14.0647	.11964	.001	190.195
7011	35.049	.45645	192.518	14.0728	.11992	.001	190.199
7012	35.054	.38937	192.164	14.0809	.12023	.001	190.195
7013	20.297	.60786	193.433	13.8504	.11455	.000	190.249
7014	20.301	.52958	193.021	13.8604	.11475	.001	190.251
7015	20.306	.45694	192.627	13.8700	.11502	.001	190.248
7016	20.302	.38975	192.287	13.8782	.11542	.001	190.252
7017	8.727	.60642	193.460	13.6699	.10995	.000	190.183
7018	8.733	.52940	193.026	13.6813	.11047	.000	190.178
7019	8.738	.45686	192.621	13.6919	.11080	.001	190.177
7020	8.738	.38957	192.267	13.7011	.11113	.001	190.184
7021	1.365	.60790	193.570	13.5391	.10739	.000	190.216
7022	1.366	.52924	193.126	13.5513	.10750	.000	190.217
7023	1.363	.45665	192.726	13.5622	.10776	.000	190.217
7024	1.364	.38957	192.355	13.5723	.10812	.001	190.219
8001	55.889	.67753	213.712	13.8848	.11866	.000	210.281
8002	55.886	.59055	213.265	13.8939	.11889	.000	210.283
8003	55.894	.50958	212.857	13.9023	.11918	.000	210.282
8004	55.897	.43457	212.470	13.9102	.11939	.001	210.286
8005	54.490	.67754	213.765	13.8658	.11892	.000	210.325
8006	54.493	.59017	213.332	13.8748	.11887	.000	210.326
8007	54.502	.50936	212.913	13.8834	.11912	.000	210.324
8008	54.506	.43450	212.532	13.8913	.11936	.001	210.326
8013	41.304	.67723	213.880	13.6848	.11460	.000	210.336
8014	41.310	.59029	213.427	13.6948	.11412	.000	210.330
8015	41.307	.50953	212.990	13.7042	.11443	.001	210.328
8016	41.310	.43478	212.605	13.7126	.11471	.001	210.333
8017	41.314	.67727	213.878	13.6850	.11394	.000	210.322
8018	41.317	.59058	213.413	13.6952	.11413	.000	210.322
8019	41.317	.50986	212.986	13.7045	.11452	.002	210.323
8020	41.314	.43507	212.592	13.7130	.11468	.001	210.324
8021	26.812	.67681	214.054	13.4595	.10858	.000	210.353
8022	26.814	.59033	213.567	13.4710	.10876	.000	210.349
8023	26.817	.50957	213.129	13.4814	.10909	.001	210.355

Table 2. Thermal conductivity of liquid R125 from 190 K to 330 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
8024	26.816	.43483	212.722	13.4909	.10939	.001	210.354
8025	14.711	.59232	213.741	13.2546	.10386	.002	210.389
8026	14.721	.51091	213.267	13.2668	.10427	.000	210.392
8027	14.727	.43557	212.832	13.2780	.10461	.001	210.386
8028	14.739	.36629	212.439	13.2882	.10485	.001	210.391
8029	1.324	.59177	213.951	12.9685	.09744	.000	210.393
8030	1.324	.51041	213.450	12.9829	.09791	.000	210.386
8031	1.324	.43524	212.995	12.9959	.09819	.001	210.388
8032	1.324	.36636	212.580	13.0077	.09876	.001	210.388
9001	63.751	.65150	234.027	13.5843	.11404	.000	230.624
9002	63.739	.56292	233.549	13.5935	.11463	.000	230.623
9003	63.733	.48030	233.118	13.6018	.11522	.001	230.625
9004	63.722	.40411	232.728	13.6092	.11541	.001	230.628
9005	63.634	.65140	234.006	13.5831	.11416	.000	230.611
9006	63.626	.56230	233.531	13.5923	.11445	.000	230.609
9007	63.618	.48013	233.095	13.6006	.11504	.001	230.610
9008	63.611	.40401	232.691	13.6084	.11532	.001	230.604
9009	55.516	.65126	234.133	13.4660	.11144	.000	230.662
9010	55.520	.56175	233.654	13.4757	.11139	.000	230.665
9011	55.519	.47949	233.217	13.4845	.11207	.001	230.667
9012	55.515	.40340	232.798	13.4929	.11253	.001	230.662
9013	44.006	.65174	234.283	13.2864	.10745	.000	230.676
9014	44.006	.56216	233.789	13.2969	.10691	.000	230.690
9015	44.004	.47937	233.329	13.3067	.10770	.001	230.682
9016	43.999	.40340	232.898	13.3158	.10835	.001	230.686
9017	31.010	.65059	234.435	13.0583	.10183	.000	230.685
9018	31.013	.56131	233.918	13.0703	.10198	.001	230.683
9019	31.009	.47917	233.434	13.0814	.10270	.000	230.684
9020	31.008	.40348	232.993	13.0915	.10318	.001	230.678
9021	20.512	.56507	234.086	12.8584	.09730	.001	230.699
9022	20.509	.48207	233.579	12.8710	.09824	.000	230.698
9023	20.509	.40569	233.107	12.8827	.09864	.001	230.690
9024	20.502	.33589	232.680	12.8932	.09921	.001	230.687
9025	11.786	.56491	234.250	12.6549	.09342	.000	230.744
9026	11.786	.48190	233.728	12.6690	.09355	.000	230.747
9027	11.787	.40543	233.240	12.6822	.09427	.001	230.747
9028	11.792	.33563	232.799	12.6942	.09488	.001	230.747
9029	3.598	.56498	234.314	12.4339	.08873	.000	230.671
9030	3.599	.48184	233.768	12.4502	.08919	.001	230.669
9031	3.600	.40540	233.264	12.4652	.08991	.001	230.671
9032	3.601	.33560	232.816	12.4785	.09041	.001	230.671
9033	1.307	.48179	233.787	12.3811	.08808	.000	230.637
9034	1.308	.40524	233.278	12.3967	.08868	.002	230.631
9035	1.308	.33545	232.827	12.4105	.08909	.001	230.637

Table 2. Thermal conductivity of liquid R125 from 190 K to 330 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
9036	1.308	.27232	232.405	12.4234	.08957	.001	230.637
10001	67.804	.61673	253.954	13.2613	.10984	.000	250.611
10002	67.781	.52626	253.464	13.2702	.11013	.000	250.618
10003	67.766	.44288	253.014	13.2784	.11046	.001	250.620
10004	67.750	.36668	252.590	13.2862	.11096	.001	250.620
10005	57.486	.61658	254.078	13.0985	.10595	.000	250.620
10006	57.502	.52625	253.563	13.1090	.10636	.000	250.618
10007	57.504	.44280	253.096	13.1182	.10674	.001	250.618
10008	57.511	.36662	252.662	13.1269	.10707	.001	250.620
10009	45.377	.61591	254.202	12.8874	.10134	.000	250.637
10010	45.381	.52556	253.664	12.8988	.10170	.000	250.632
10011	45.383	.44229	253.176	12.9091	.10202	.001	250.636
10012	45.386	.36615	252.733	12.9185	.10243	.001	250.637
10013	34.982	.52523	253.801	12.6942	.09724	.000	250.632
10014	34.980	.44202	253.290	12.7057	.09765	.000	250.628
10015	34.979	.36596	252.828	12.7161	.09791	.001	250.634
10016	34.985	.29710	252.405	12.7257	.09841	.001	250.628
10017	25.267	.52549	253.865	12.4776	.09272	.000	250.544
10018	25.270	.44213	253.331	12.4907	.09312	.001	250.547
10019	25.270	.36608	252.840	12.5027	.09344	.001	250.542
10020	25.272	.29714	252.408	12.5133	.09385	.001	250.541
10021	16.722	.52559	254.121	12.2516	.08809	.000	250.659
10022	16.721	.44211	253.519	12.2676	.08865	.001	250.653
10023	16.722	.36595	253.014	12.2810	.08909	.001	250.651
10024	16.724	.29702	252.569	12.2929	.08942	.001	250.654
10025	9.843	.52694	254.284	12.0397	.08426	.001	250.714
10026	9.848	.44345	253.702	12.0568	.08468	.000	250.712
10027	9.858	.36717	253.177	12.0724	.08511	.001	250.709
10028	9.860	.29808	252.697	12.0863	.08551	.001	250.708
10029	4.285	.44338	253.749	11.8598	.08123	.000	250.644
10030	4.295	.36710	253.201	11.8775	.08165	.001	250.636
10031	4.290	.29802	252.709	11.8930	.08205	.001	250.634
10032	4.290	.23612	252.277	11.9067	.08251	.001	250.640
10033	1.261	.44316	253.825	11.7352	.07912	.000	250.645
10034	1.263	.36698	253.263	11.7543	.07956	.001	250.646
10035	1.262	.29794	252.759	11.7712	.08004	.001	250.637
10036	1.261	.23613	252.306	11.7864	.08048	.001	250.633
11001	68.487	.56955	273.780	12.9032	.10440	.000	270.548
11002	68.494	.47934	273.271	12.9127	.10477	.000	270.556
11003	68.477	.39698	272.787	12.9214	.10501	.001	270.548
11004	68.453	.32234	272.353	12.9290	.10544	.001	270.547
11005	58.371	.57025	273.589	12.7321	.10056	.000	270.261
11006	58.360	.47989	273.043	12.7425	.10111	.000	270.257
11007	58.367	.39744	272.549	12.7522	.10143	.001	270.248

Table 2. Thermal conductivity of liquid R125 from 190 K to 330 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
11008	58.362	.32262	272.104	12.7607	.10182	.001	270.253
11009	58.362	.56969	273.560	12.7325	.10062	.000	270.248
11010	58.359	.47946	273.031	12.7427	.10114	.000	270.247
11011	58.357	.39701	272.561	12.7517	.10139	.001	270.233
11012	58.358	.32232	272.128	12.7602	.10172	.001	270.236
11013	48.044	.56955	273.671	12.5328	.09604	.000	270.214
11014	48.038	.47936	273.111	12.5442	.09672	.000	270.215
11015	48.046	.39693	272.607	12.5548	.09721	.002	270.209
11016	48.038	.32232	272.135	12.5643	.09753	.001	270.202
11017	38.144	.56898	273.779	12.3167	.09213	.000	270.179
11018	38.152	.47903	273.196	12.3298	.09135	.001	270.177
11019	38.152	.39671	272.672	12.3414	.09280	.000	270.176
11020	38.155	.32224	272.189	12.3521	.09317	.001	270.174
11021	29.344	.56900	273.946	12.0953	.08760	.000	270.188
11022	29.345	.47911	273.340	12.1098	.08726	.000	270.196
11023	29.348	.39691	272.779	12.1233	.08843	.001	270.187
11024	29.349	.32238	272.282	12.1352	.08898	.001	270.184
11025	22.748	.47927	273.417	11.9223	.08412	.000	270.164
11026	22.748	.39685	272.842	11.9370	.08491	.001	270.160
11027	22.748	.32226	272.326	11.9502	.08550	.001	270.158
11028	22.749	.25539	271.875	11.9618	.08588	.001	270.164
11029	16.537	.25534	271.976	11.7618	.08232	.001	270.215
11030	16.538	.32219	272.460	11.7485	.08189	.002	270.227
11031	16.541	.39677	272.986	11.7340	.08113	.001	270.214
11032	16.541	.47902	273.598	11.7170	.08068	.000	270.206
11033	10.618	.47832	273.732	11.4880	.07706	.000	270.223
11034	10.618	.39605	273.113	11.5069	.07684	.001	270.220
11035	10.618	.32168	272.559	11.5239	.07807	.001	270.217
11036	10.616	.25499	272.059	11.5390	.07851	.001	270.220
11037	6.012	.47763	273.871	11.2738	.07365	.000	270.224
11038	6.005	.39532	273.217	11.2957	.07341	.001	270.223
11039	6.008	.32116	272.656	11.3148	.07471	.001	270.228
11040	6.004	.25425	272.131	11.3323	.07520	.001	270.218
11041	1.522	.39412	273.291	11.0454	.06937	.001	270.183
11042	1.524	.31989	272.686	11.0689	.07100	.002	270.179
11043	1.525	.25387	272.175	11.0886	.07160	.001	270.192
11044	1.525	.19502	271.689	11.1072	.07208	.001	270.180
12001	68.227	.61290	294.211	12.5259	.09914	.002	290.561
12002	68.223	.51600	293.628	12.5364	.09884	.000	290.557
12003	68.221	.42760	293.092	12.5461	.09952	.001	290.563
12004	68.216	.34742	292.597	12.5549	.10036	.001	290.549
12005	60.430	.61285	294.303	12.3748	.09581	.000	290.559
12006	60.428	.51607	293.695	12.3863	.09590	.000	290.552
12007	60.423	.42762	293.136	12.3967	.09636	.001	290.541

Table 2. Thermal conductivity of liquid R125 from 190 K to 330 K. (continued)

Run	P_e	q	T_e	ρ_e	λ_e	STAT	T_i
Point	$\overline{\mathrm{MPa}}$	$\overline{\mathrm{W \cdot m^{-1}}}$	$\overline{\mathrm{K}}$	$\overline{\mathrm{mol \cdot L^{-1}}}$	$\overline{\mathrm{W \cdot m^{-1} \cdot K^{-1}}}$		$\overline{\mathrm{K}}$
12008	60.420	.34741	292.632	12.4062	.09715	.001	290.540
12009	50.347	.51577	293.836	12.1709	.09138	.000	290.541
12010	50.343	.42751	293.258	12.1825	.09199	.001	290.540
12011	50.338	.34741	292.742	12.1928	.09273	.001	290.538
12012	50.335	.27549	292.271	12.2022	.09310	.001	290.533
12013	41.920	.51592	293.934	11.9687	.08767	.000	290.531
12014	41.918	.42741	293.342	11.9813	.08803	.001	290.530
12015	41.913	.34713	292.807	11.9927	.08885	.001	290.529
12016	41.908	.27499	292.310	12.0032	.08929	.001	290.519
12017	34.036	.51529	294.076	11.7530	.08335	.000	290.542
12018	34.034	.42720	293.454	11.7673	.08421	.001	290.539
12019	34.029	.34727	292.906	11.7797	.08495	.001	290.541
12020	34.025	.27534	292.397	11.7914	.08538	.001	290.536
12021	27.284	.51575	294.228	11.5407	.08013	.000	290.548
12022	27.282	.42723	293.588	11.5565	.08061	.000	290.543
12023	27.279	.34703	293.001	11.5710	.08114	.001	290.533
12024	27.278	.27512	292.477	11.5839	.08165	.001	290.528
12025	21.195	.46148	293.956	11.3302	.07669	.000	290.548
12026	21.191	.39388	293.463	11.3433	.07743	.000	290.549
12027	21.191	.33177	292.992	11.3560	.07770	.001	290.543
12028	21.186	.27511	292.560	11.3675	.07810	.001	290.542
12029	16.134	.46121	294.063	11.1160	.07371	.000	290.556
12030	16.131	.39390	293.527	11.1317	.07400	.001	290.546
12031	16.130	.33190	293.055	11.1455	.07442	.001	290.545
12032	16.126	.27513	292.644	11.1574	.07476	.001	290.547
12033	11.698	.46120	294.227	10.8920	.07021	.000	290.549
12034	11.693	.39371	293.675	10.9097	.07056	.000	290.543
12035	11.687	.33156	293.170	10.9257	.07112	.001	290.539
12036	11.689	.27487	292.718	10.9405	.07149	.001	290.543
12037	7.878	.39355	293.773	10.6813	.06731	.001	290.550
12038	7.878	.33148	293.228	10.7011	.06823	.001	290.535
12039	7.873	.27455	292.739	10.7184	.06893	.001	290.536
12040	7.873	.22295	292.308	10.7339	.06892	.001	290.520
12041	5.128	.39312	293.879	10.4811	.06480	.001	290.558
12042	5.129	.33138	293.340	10.5030	.06545	.001	290.544
12043	5.128	.27496	292.851	10.5225	.06585	.001	290.546
12044	5.126	.22361	292.409	10.5400	.06635	.001	290.545
12045	1.328	.39331	294.055	10.1187	.06062	.001	290.549
12046	1.326	.33144	293.491	10.1470	.06134	.001	290.546
12047	1.325	.27498	292.985	10.1722	.06182	.001	290.550
12048	1.324	.22362	292.499	10.1963	.06229	.001	290.534
6001	69.851	.65636	314.359	12.1980	.09588	.000	310.314
6002	69.857	.55266	313.719	12.2094	.09646	.000	310.311
6003	69.863	.45798	313.117	12.2201	.09658	.000	310.304

Table 2. Thermal conductivity of liquid R125 from 190 K to 330 K. (continued)

Run	P_e	q	T_e	ρ_e	λ_e	STAT	T_i
Point	$\overline{\mathrm{MPa}}$	$\overline{\mathrm{W \cdot m^{-1}}}$	$\overline{\mathrm{K}}$	$\overline{\mathrm{mol \cdot L^{-1}}}$	$\overline{\mathrm{W \cdot m^{-1} \cdot K^{-1}}}$		$\overline{\mathrm{K}}$
6004	69.817	.37187	312.573	12.2287	.09715	.001	310.298
6005	57.297	.55249	313.855	11.9379	.09111	.000	310.303
6006	57.307	.45796	313.242	11.9497	.09146	.000	310.305
6007	57.307	.37196	312.658	11.9608	.09184	.001	310.283
6008	57.313	.29489	312.176	11.9701	.09224	.001	310.300
6009	46.098	.55233	314.003	11.6559	.08634	.000	310.264
6010	46.099	.45771	313.363	11.6691	.08673	.000	310.285
6011	46.103	.37173	312.770	11.6814	.08683	.001	310.269
6012	46.103	.29473	312.257	11.6920	.08723	.001	310.293
6013	33.659	.55226	314.220	11.2746	.07928	.000	310.230
6014	33.664	.45734	313.562	11.2900	.07964	.000	310.264
6015	33.664	.37209	312.918	11.3050	.07998	.001	310.241
6016	33.669	.29488	312.350	11.3184	.08047	.001	310.245
6017	26.595	.45779	313.702	11.0250	.07529	.000	310.233
6018	26.598	.37183	313.041	11.0420	.07573	.000	310.235
6019	26.598	.29476	312.456	11.0570	.07596	.001	310.229
6020	26.598	.22663	311.915	11.0707	.07657	.001	310.219
6021	19.682	.45720	313.885	10.7080	.07060	.000	310.242
6022	19.676	.37150	313.203	10.7273	.07101	.001	310.247
6023	19.679	.29458	312.581	10.7454	.07134	.001	310.242
6024	19.679	.22658	311.998	10.7622	.07183	.001	310.212
6025	13.862	.45728	314.094	10.3665	.06613	.000	310.229
6026	13.862	.37146	313.356	10.3911	.06647	.000	310.224
6027	13.860	.29452	312.715	10.4122	.06714	.001	310.239
6028	13.856	.22637	312.142	10.4310	.06737	.001	310.238
6029	9.855	.37136	313.536	10.0895	.06258	.000	310.263
6030	9.857	.29461	312.854	10.1158	.06296	.001	310.272
6031	9.855	.22653	312.206	10.1403	.06364	.001	310.264
6032	9.856	.16737	311.693	10.1599	.06427	.001	310.269
6033	6.451	.37122	313.677	9.7525	.05896	.000	310.259
6034	6.451	.29454	312.963	9.7853	.05957	.001	310.269
6035	6.449	.22647	312.327	9.8140	.06009	.001	310.280
6036	6.449	.16727	311.762	9.8396	.06063	.001	310.267
6037	4.871	.37195	313.706	9.5523	.05726	.001	310.213
6038	4.871	.29476	312.972	9.5903	.05742	.001	310.213
6039	4.876	.22666	312.330	9.6239	.05795	.002	310.220
6040	4.874	.16740	311.764	9.6523	.05888	.001	310.227
6041	3.510	.37168	313.778	9.3359	.05527	.000	310.191
6042	3.508	.29458	313.003	9.3819	.05559	.001	310.184
6043	3.508	.22647	312.312	9.4227	.05630	.001	310.171
6044	3.510	.16722	311.748	9.4557	.05698	.001	310.169
13001	53.403	.55323	333.689	11.4624	.08464	.000	329.909
13002	53.407	.47481	333.137	11.4731	.08506	.000	329.905
13003	53.408	.40219	332.638	11.4827	.08518	.000	329.908

Table 2. Thermal conductivity of liquid R125 from 190 K to 330 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
13004	53.401	.33545	332.176	11.4914	.08554	.000	329.910
13005	42.354	.47466	333.385	11.1400	.07953	.000	329.944
13006	42.361	.40206	332.851	11.1515	.07972	.000	329.947
13007	42.362	.33533	332.360	11.1619	.07995	.000	329.951
13008	42.354	.27462	331.906	11.1713	.08045	.001	329.939
13009	33.294	.47463	333.571	10.8083	.07449	.000	329.945
13010	33.291	.40185	333.007	10.8214	.07487	.000	329.943
13011	33.293	.33518	332.476	10.8340	.07491	.000	329.931
13012	33.292	.27449	332.004	10.8451	.07535	.001	329.934
13013	26.651	.43730	333.464	10.5180	.07078	.000	329.951
13014	26.648	.36765	332.893	10.5327	.07070	.000	329.951
13015	26.651	.30399	332.385	10.5461	.07076	.000	329.958
13016	26.648	.24636	331.904	10.5584	.07120	.001	329.946
13017	20.662	.40162	333.314	10.1967	.06646	.000	329.918
13018	20.657	.33499	332.738	10.2133	.06663	.000	329.921
13019	20.661	.27438	332.223	10.2286	.06660	.001	329.918
13020	20.655	.24632	331.977	10.2355	.06705	.001	329.920
13021	16.172	.40158	333.482	9.8844	.06291	.000	329.935
13022	16.170	.33491	332.868	9.9046	.06301	.000	329.923
13023	16.171	.27430	332.314	9.9231	.06315	.000	329.915
13024	16.169	.21976	331.818	9.9394	.06366	.001	329.914
13025	12.414	.36717	333.295	9.5625	.05946	.000	329.899
13026	12.415	.31919	332.821	9.5809	.05955	.000	329.891
13027	12.414	.27430	332.409	9.5966	.05978	.001	329.903
13028	12.414	.23278	332.011	9.6120	.06008	.001	329.892
13029	9.686	.36731	333.417	9.2470	.05673	.000	329.892
13030	9.685	.31905	332.939	9.2684	.05672	.001	329.888
13031	9.687	.27421	332.495	9.2886	.05668	.001	329.881
13032	9.682	.23272	332.076	9.3066	.05703	.001	329.873
13033	7.302	.33470	333.250	8.8900	.05371	.001	329.898
13034	7.302	.28872	332.779	8.9159	.05360	.001	329.891
13035	7.298	.24612	332.342	8.9392	.05381	.001	329.893
13036	7.299	.20690	331.941	8.9610	.05411	.001	329.895
13037	5.828	.33461	333.376	8.5699	.05121	.001	329.907
13038	5.828	.28868	332.900	8.6017	.05138	.001	329.917
13039	5.829	.24608	332.433	8.6330	.05157	.001	329.903
13040	5.829	.20691	332.029	8.6594	.05187	.001	329.903
13041	4.592	.33340	333.456	8.1861	.04892	.001	329.919
13042	4.593	.28764	332.961	8.2299	.04906	.001	329.923
13043	4.592	.24523	332.498	8.2698	.04921	.001	329.921
13044	4.593	.20616	332.061	8.3071	.04924	.001	329.911
13045	3.926	.27319	332.831	7.9509	.04778	.001	329.883
13046	3.925	.23186	332.375	8.0007	.04784	.001	329.883
13047	3.924	.19390	331.959	8.0450	.04796	.001	329.886

Table 2. Thermal conductivity of liquid R125 from 190 K to 330 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
13048	3.923	.15930	331.573	8.0850	.04862	.001	329.887
13049	3.522	.23194	332.341	7.7675	.04691	.001	329.854
13050	3.522	.19397	331.925	7.8237	.04700	.001	329.859
13051	3.521	.15935	331.534	7.8741	.04750	.001	329.852
13052	3.521	.12814	331.183	7.9179	.04810	.001	329.850
13053	3.238	.23219	332.401	7.5169	.04624	.001	329.884
13054	3.238	.19420	331.977	7.5930	.04633	.001	329.888
13055	3.237	.15957	331.585	7.6586	.04672	.001	329.885
13056	3.237	.12834	331.236	7.7141	.04718	.001	329.878

Table 3. Thermal conductivity of vapor R125 (sample 2, high-temperature apparatus) from 300 K to 330 K.

Run	P_e	q	T_e	ρ_e	λ_e	STAT	T_i
Point	$\overline{\mathrm{MPa}}$	$\overline{\mathrm{W \cdot m^{-1}}}$	$\overline{\mathrm{K}}$	$\overline{\mathrm{mol \cdot L^{-1}}}$	$\overline{\mathrm{W \cdot m^{-1} \cdot K^{-1}}}$		$\overline{\mathrm{K}}$
1001	1.284	.11321	304.535	.6462	.01537	.003	299.839
1002	1.284	.09207	303.665	.6505	.01530	.004	299.842
1003	1.284	.07313	302.861	.6546	.01524	.005	299.835
1004	1.284	.05637	302.167	.6582	.01524	.007	299.847
1005	1.117	.11320	304.766	.5381	.01501	.003	299.817
1006	1.118	.09208	303.851	.5417	.01496	.003	299.825
1007	1.118	.07313	303.018	.5447	.01485	.004	299.819
1008	1.118	.05638	302.264	.5475	.01483	.006	299.813
1009	.968	.11322	304.992	.4498	.01477	.003	299.808
1010	.968	.09208	304.019	.4523	.01469	.003	299.812
1011	.968	.07313	303.145	.4547	.01467	.005	299.808
1012	.968	.05637	302.381	.4571	.01465	.007	299.811
1013	.842	.11321	305.161	.3809	.01463	.003	299.803
1014	.843	.09208	304.166	.3833	.01457	.003	299.807
1015	.843	.07314	303.267	.3851	.01455	.004	299.811
1016	.843	.05637	302.465	.3868	.01447	.007	299.809
1017	.672	.11323	305.400	.2941	.01447	.003	299.793
1018	.673	.09209	304.372	.2958	.01443	.003	299.804
1019	.673	.07315	303.427	.2972	.01435	.004	299.802
1020	.673	.05637	302.586	.2984	.01429	.006	299.796
1021	.543	.10029	304.954	.2325	.01438	.003	299.799
1022	.543	.08424	304.140	.2333	.01434	.004	299.801
1023	.543	.06961	303.378	.2341	.01428	.005	299.801
1024	.543	.05638	302.704	.2348	.01424	.007	299.799
1025	.497	.10033	305.046	.2114	.01434	.003	299.821
1026	.497	.08428	304.222	.2121	.01430	.004	299.828
1027	.497	.06963	303.460	.2128	.01427	.004	299.825
1028	.497	.05639	302.744	.2135	.01419	.006	299.812
1029	.351	.10032	305.308	.1457	.01428	.003	299.818
1031	.351	.06960	303.628	.1467	.01420	.005	299.816
1032	.352	.05638	302.908	.1474	.01421	.007	299.829
1033	.220	.10030	305.606	.0893	.01437	.003	299.806
1034	.220	.08424	304.686	.0896	.01431	.004	299.807
1035	.221	.06961	303.843	.0901	.01429	.005	299.809
1036	.221	.05636	303.078	.0904	.01419	.007	299.819
1037	.111	.10030	306.053	.0443	.01446	.004	299.813
1038	.111	.08424	305.055	.0445	.01443	.004	299.806
1039	.111	.06961	304.139	.0446	.01428	.005	299.810
1040	.111	.05637	303.321	.0447	.01427	.007	299.818
2001	1.778	.11729	314.516	.9482	.01742	.004	310.437
2002	1.779	.09961	313.896	.9548	.01733	.004	310.436
2003	1.779	.08336	313.320	.9605	.01726	.004	310.436
2004	1.779	.06857	312.818	.9657	.01724	.006	310.446

Table 3. Thermal conductivity of vapor R125 from 300 K to 330 K. (continued)

Run	P_e	q	T_e	ρ_e	λ_e	STAT	T_i
Point	$\overline{\mathrm{MPa}}$	$\overline{\mathrm{W \cdot m^{-1}}}$	$\overline{\mathrm{K}}$	$\overline{\mathrm{mol \cdot L^{-1}}}$	$\overline{\mathrm{W \cdot m^{-1} \cdot K^{-1}}}$		$\overline{\mathrm{K}}$
2005	1.474	.11729	314.972	.7200	.01636	.003	310.414
2006	1.474	.09959	314.286	.7237	.01628	.003	310.414
2007	1.474	.08336	313.640	.7273	.01626	.004	310.410
2008	1.473	.06856	313.053	.7301	.01622	.005	310.405
2009	1.297	.11731	315.187	.6079	.01599	.003	310.396
2010	1.297	.09961	314.469	.6107	.01595	.003	310.406
2011	1.298	.08337	313.814	.6141	.01589	.004	310.410
2012	1.299	.06857	313.194	.6170	.01583	.005	310.408
2013	1.134	.11730	315.378	.5134	.01576	.003	310.386
2014	1.134	.09961	314.635	.5156	.01567	.003	310.394
2015	1.134	.08336	313.935	.5177	.01566	.004	310.391
2016	1.134	.06857	313.316	.5196	.01559	.005	310.399
2017	.920	.11731	315.633	.4004	.01548	.003	310.384
2018	.920	.09960	314.840	.4020	.01542	.003	310.383
2019	.921	.08336	314.117	.4038	.01543	.004	310.392
2020	.921	.06857	313.454	.4052	.01540	.006	310.386
2021	.694	.11731	315.931	.2903	.01531	.003	310.376
2022	.694	.09960	315.102	.2914	.01530	.003	310.390
2023	.694	.08335	314.324	.2924	.01522	.004	310.382
2024	.694	.06857	313.622	.2936	.01517	.005	310.379
2025	.515	.09960	315.315	.2106	.01519	.003	310.372
2026	.515	.08337	314.513	.2112	.01520	.004	310.387
2027	.515	.06857	313.788	.2119	.01512	.005	310.390
2028	.516	.05522	313.124	.2127	.01511	.007	310.389
2029	.328	.09961	315.631	.1304	.01522	.003	310.377
2030	.329	.08337	314.773	.1311	.01518	.004	310.381
2031	.329	.06856	314.002	.1315	.01517	.005	310.387
2032	.329	.05520	313.296	.1318	.01513	.006	310.394
2033	.248	.09959	315.812	.0976	.01526	.003	310.389
2034	.249	.08335	314.917	.0982	.01520	.004	310.386
2035	.249	.06855	314.118	.0985	.01515	.006	310.385
2036	.249	.05520	313.392	.0987	.01504	.006	310.382
2037	.143	.09964	316.122	.0553	.01532	.003	310.370
2038	.143	.08338	315.182	.0555	.01527	.004	310.363
2039	.143	.06856	314.321	.0556	.01519	.005	310.367
2040	.143	.05521	313.567	.0558	.01520	.007	310.379
3002	2.234	.09000	322.463	1.2691	.01963	.005	319.814
3003	2.235	.07437	321.980	1.2790	.01950	.007	319.808
3004	2.235	.06023	321.560	1.2866	.01924	.007	319.812
3005	2.072	.10711	323.201	1.1047	.01870	.004	319.772
3006	2.072	.09000	322.656	1.1113	.01855	.004	319.787
3007	2.071	.07436	322.150	1.1170	.01853	.006	319.783
3008	2.071	.06022	321.687	1.1228	.01849	.007	319.784
3009	1.860	.10711	323.471	.9332	.01781	.004	319.773

Table 3. Thermal conductivity of vapor R125 from 300 K to 330 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
3010	1.860	.08999	322.885	.9380	.01771	.004	319.776
3011	1.860	.07436	322.340	.9425	.01772	.005	319.777
3012	1.859	.06022	321.841	.9462	.01781	.030	319.779
3013	1.621	.10710	323.732	.7681	.01712	.003	319.769
3014	1.620	.08999	323.092	.7712	.01708	.004	319.766
3015	1.620	.07437	322.508	.7740	.01704	.005	319.765
3016	1.618	.06024	321.983	.7762	.01707	.007	319.777
3017	1.415	.10709	323.916	.6426	.01680	.003	319.756
3018	1.415	.08999	323.255	.6453	.01668	.004	319.756
3019	1.414	.07437	322.634	.6474	.01670	.005	319.761
3020	1.414	.06023	322.093	.6496	.01659	.006	319.764
3021	1.175	.10711	324.152	.5109	.01642	.003	319.753
3022	1.179	.09001	323.456	.5148	.01636	.004	319.770
3023	1.182	.07437	322.817	.5183	.01637	.005	319.772
3024	1.186	.06024	322.221	.5220	.01628	.007	319.769
3025	.946	.10711	324.389	.3960	.01642	.034	319.761
3026	.946	.09000	323.641	.3973	.01617	.004	319.759
3027	.946	.07437	322.966	.3986	.01608	.005	319.768
3028	.946	.06024	322.365	.3998	.01619	.049	319.768
3029	.680	.09001	323.881	.2746	.01601	.004	319.761
3030	.680	.07438	323.166	.2754	.01594	.005	319.763
3031	.680	.06024	322.512	.2762	.01594	.006	319.768
3032	.680	.04760	321.940	.2768	.01602	.008	319.775
3033	.475	.09000	324.120	.1863	.01596	.004	319.770
3034	.475	.07437	323.352	.1871	.01590	.005	319.770
3035	.475	.06024	322.660	.1876	.01588	.006	319.766
3036	.475	.04759	322.055	.1880	.01585	.009	319.775
3037	.281	.09001	324.392	.1075	.01603	.004	319.763
3038	.281	.07437	323.579	.1078	.01595	.005	319.766
3039	.281	.06024	322.868	.1081	.01592	.007	319.770
3040	.281	.04760	322.215	.1083	.01594	.009	319.772
4001	2.713	.09278	331.516	1.6206	.02259	.006	329.195
4002	2.714	.07669	331.091	1.6338	.02227	.007	329.188
4003	2.714	.06211	330.712	1.6452	.02227	.008	329.188
4004	2.714	.04907	330.377	1.6557	.02213	.012	329.187
4005	2.535	.09278	331.748	1.4127	.02066	.005	329.158
4006	2.535	.07666	331.280	1.4217	.02063	.006	329.160
4007	2.535	.06209	330.878	1.4297	.02055	.008	329.168
4008	2.535	.04906	330.513	1.4364	.02040	.011	329.170
4009	2.277	.09277	332.026	1.1726	.01931	.005	329.161
4010	2.278	.07668	331.517	1.1798	.01932	.006	329.162
4011	2.280	.06209	331.066	1.1870	.01920	.007	329.169
4012	2.281	.04906	330.654	1.1932	.01925	.010	329.165
4013	1.978	.09274	332.291	.9481	.01837	.004	329.164

Table 3. Thermal conductivity of vapor R125 from 300 K to 330 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
4014	1.978	.07664	331.730	.9524	.01823	.005	329.167
4015	1.977	.06209	331.251	.9556	.01830	.007	329.173
4016	1.977	.04905	330.789	.9591	.01831	.010	329.166
4017	1.633	.09273	332.555	.7316	.01767	.004	329.177
4018	1.634	.07664	331.952	.7348	.01756	.005	329.170
4019	1.635	.06208	331.431	.7376	.01761	.007	329.179
4020	1.635	.04904	330.943	.7403	.01768	.009	329.180
4021	1.418	.09272	332.708	.6124	.01733	.003	329.178
4022	1.419	.07662	332.102	.6148	.01732	.004	329.180
4023	1.420	.06207	331.534	.6171	.01730	.007	329.181
4024	1.421	.04905	331.032	.6199	.01729	.010	329.181
4025	1.091	.09270	332.947	.4482	.01704	.004	329.170
4026	1.091	.07661	332.289	.4496	.01699	.005	329.179
4027	1.092	.06205	331.691	.4512	.01695	.006	329.176
4028	1.092	.04904	331.157	.4523	.01691	.009	329.181
4029	.893	.09275	333.075	.3572	.01687	.004	329.159
4030	.893	.07664	332.389	.3582	.01689	.005	329.158
4031	.893	.06208	331.785	.3592	.01677	.007	329.165
4032	.893	.04905	331.235	.3600	.01682	.010	329.168
4033	.748	.09274	333.195	.2935	.01682	.004	329.152
4034	.748	.07666	332.480	.2944	.01683	.005	329.152
4035	.748	.06208	331.852	.2951	.01672	.006	329.159
4036	.748	.04905	331.286	.2958	.01672	.009	329.154
4037	.572	.08450	332.983	.2198	.01674	.004	329.146
4038	.572	.06917	332.291	.2206	.01677	.006	329.149
4039	.572	.05537	331.647	.2212	.01671	.007	329.146
4040	.572	.04310	331.091	.2216	.01662	.011	329.153
4041	.316	.08451	333.263	.1181	.01673	.005	329.133
4042	.317	.06918	332.513	.1186	.01677	.006	329.135
4043	.317	.05537	331.824	.1189	.01673	.008	329.137
4044	.317	.04311	331.221	.1191	.01673	.012	329.133

Table 4. Thermal conductivity of supercritical R125 (sample 2, high-temperature apparatus) from 350 K to 390 K.

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
24001	64.976	.24615	353.081	11.4128	.08546	.004	351.390
24002	64.975	.21057	352.856	11.4166	.08407	.005	351.383
24003	64.973	.17742	352.592	11.4211	.08657	.006	351.379
24004	64.970	.14717	352.373	11.4249	.08457	.009	351.365
24006	41.127	.21036	352.787	10.6852	.07469	.005	351.163
24007	41.128	.17723	352.542	10.6905	.07526	.006	351.163
24008	41.128	.14679	352.283	10.6960	.07470	.007	351.161
24009	25.279	.24608	353.216	9.9180	.06510	.003	351.069
24010	25.282	.21019	352.902	9.9267	.06511	.004	351.072
24011	25.283	.17715	352.609	9.9347	.06494	.005	351.076
24012	25.287	.14693	352.352	9.9419	.06491	.007	351.072
24013	14.939	.24602	353.419	9.0636	.05658	.003	351.006
24014	14.940	.21017	353.081	9.0765	.05649	.003	351.017
24015	14.942	.17712	352.757	9.0888	.05676	.005	351.022
24016	14.943	.14679	352.457	9.1002	.05671	.006	351.030
24017	9.321	.24587	353.655	8.1602	.05014	.003	350.985
24019	9.322	.17704	352.946	8.2007	.04927	.004	351.000
24018	9.323	.21010	353.275	8.1823	.05042	.003	351.012
24020	9.324	.14687	352.623	8.2194	.04958	.005	351.025
24021	6.408	.21004	353.459	7.1334	.04583	.004	351.005
24022	6.409	.17704	353.124	7.1680	.04502	.004	351.024
24023	6.410	.14685	352.736	7.2072	.04477	.004	351.012
24024	6.411	.11951	352.425	7.2381	.04475	.006	351.023
24025	5.319	.09512	352.444	6.3033	.04215	.008	351.306
24026	5.319	.08608	352.327	6.3245	.04241	.010	351.308
24027	5.321	.07746	352.211	6.3479	.04214	.010	351.308
24028	5.321	.06933	352.115	6.3650	.04238	.012	351.308
24029	4.948	.08172	352.240	5.6443	.04250	.011	351.277
24030	4.948	.07334	352.105	5.6814	.04218	.012	351.265
24031	4.948	.06541	352.023	5.7033	.04161	.014	351.279
24032	4.949	.05794	351.928	5.7303	.04150	.017	351.280
24033	4.948	.08169	352.235	5.6471	.04235	.012	351.279
24034	4.949	.07331	352.133	5.6752	.04201	.013	351.278
24035	4.948	.06538	352.013	5.7068	.04219	.015	351.275
24036	4.949	.05792	351.930	5.7296	.04145	.017	351.283
24037	4.715	.06540	352.005	4.9623	.04264	.015	351.251
24038	4.715	.05794	351.902	4.9972	.04160	.017	351.251
24039	4.715	.05091	351.828	5.0239	.04119	.021	351.252
24040	4.715	.04435	351.733	5.0565	.04090	.023	351.254
24042	4.563	.05793	351.921	4.3548	.04081	.019	351.233
24043	4.562	.05092	351.839	4.3798	.04056	.021	351.241
24044	4.563	.04435	351.731	4.4154	.03943	.024	351.236
24046	4.376	.05792	352.043	3.5984	.03590	.016	351.216

Table 4. Thermal conductivity of supercritical R125 from 350 K to 390 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
24047	4.376	.05091	351.929	3.6218	.03552	.020	351.224
24048	4.376	.04435	351.824	3.6434	.03529	.020	351.227
24049	4.051	.05792	352.312	2.7387	.02871	.012	351.204
24050	4.051	.05090	352.184	2.7494	.02865	.014	351.221
24051	4.051	.04433	352.059	2.7594	.02852	.017	351.222
24053	3.729	.05791	352.552	2.2163	.02515	.010	351.208
24054	3.729	.05090	352.372	2.2235	.02514	.012	351.210
24055	3.728	.04433	352.240	2.2285	.02518	.015	351.218
24057	3.163	.05791	352.836	1.6134	.02208	.009	351.208
24058	3.163	.05090	352.630	1.6168	.02206	.011	351.209
24059	3.163	.04433	352.454	1.6197	.02217	.014	351.217
24060	3.162	.03822	352.263	1.6230	.02198	.017	351.219
24061	2.393	.05789	353.122	1.0594	.02011	.009	351.202
24062	2.393	.05089	352.866	1.0614	.02067	.010	351.208
24063	2.392	.04433	352.657	1.0624	.02087	.013	351.208
24064	2.392	.03822	352.457	1.0639	.02055	.017	351.214
24065	1.331	.05793	353.577	.5130	.01879	.007	351.304
24066	1.331	.05092	353.310	.5137	.01886	.009	351.319
24067	1.331	.04435	353.043	.5146	.01881	.010	351.316
24068	1.332	.03825	352.785	.5153	.01889	.014	351.314
24069	.831	.05793	353.811	.3042	.01867	.008	351.363
24070	.831	.05092	353.526	.3045	.01868	.010	351.370
24071	.831	.04436	353.241	.3049	.01867	.011	351.372
24072	.831	.03825	352.971	.3052	.01854	.013	351.375
24073	.453	.05793	354.012	.1598	.01872	.008	351.363
24074	.453	.05092	353.693	.1601	.01875	.010	351.365
24075	.454	.04436	353.371	.1605	.01882	.012	351.358
24076	.454	.03824	353.093	.1607	.01870	.014	351.364
25001	67.503	.20275	372.025	11.1571	.08177	.004	370.552
25002	67.503	.17085	371.776	11.1612	.08202	.005	370.537
25003	67.504	.14171	371.556	11.1649	.08190	.006	370.534
25004	67.504	.11531	371.360	11.1682	.08207	.009	370.535
25005	43.768	.20252	372.065	10.3877	.07153	.003	370.396
25006	43.768	.17069	371.797	10.3932	.07171	.004	370.395
25007	43.771	.14160	371.563	10.3981	.07155	.006	370.405
25009	27.643	.17061	371.933	9.5713	.06216	.004	370.348
25010	27.650	.14152	371.689	9.5781	.06249	.005	370.379
25011	27.654	.11513	371.450	9.5846	.06244	.006	370.390
25012	27.654	.09147	371.212	9.5908	.06235	.009	370.382
25013	19.225	.17056	372.080	8.8750	.05615	.003	370.350
25014	19.227	.14146	371.791	8.8847	.05614	.004	370.354
25015	19.227	.11509	371.515	8.8939	.05609	.007	370.352
25016	19.229	.09144	371.277	8.9019	.05611	.009	370.365
25017	13.010	.17052	372.244	8.0005	.04992	.003	370.321

Table 4. Thermal conductivity of supercritical R125 from 350 K to 390 K. (continued)

Run	P_e	q	T_e	ρ_e	λ_e	STAT	T_i
Point	$\overline{\mathrm{MPa}}$	$\overline{\mathrm{W \cdot m^{-1}}}$	$\overline{\mathrm{K}}$	$\overline{\mathrm{mol \cdot L^{-1}}}$	$\overline{\mathrm{W \cdot m^{-1} \cdot K^{-1}}}$		$\overline{\mathrm{K}}$
25018	13.010	.14146	371.917	8.0155	.04999	.004	370.330
25019	13.011	.11507	371.621	8.0291	.05012	.005	370.343
25020	13.012	.09144	371.360	8.0411	.04981	.008	370.352
25021	9.860	.14163	372.168	7.2029	.04568	.004	370.446
25022	9.860	.12028	371.899	7.2197	.04574	.005	370.449
25023	9.862	.10068	371.670	7.2344	.04580	.006	370.450
25024	9.862	.08283	371.443	7.2487	.04581	.009	370.460
25025	7.834	.11519	371.926	6.2602	.04238	.005	370.424
25026	7.834	.10066	371.719	6.2790	.04222	.006	370.415
25027	7.834	.08711	371.544	6.2947	.04211	.007	370.422
25026	7.835	.07453	371.406	6.3074	.04219	.054	370.444
25029	6.944	.08710	371.593	5.5532	.04004	.007	370.410
25030	6.944	.07452	371.417	5.5732	.03981	.008	370.416
25031	6.944	.06292	371.256	5.5910	.04003	.011	370.415
25032	6.944	.05231	371.112	5.6070	.03946	.014	370.421
25033	6.381	.07862	371.672	4.8716	.03819	.008	370.545
25034	6.380	.07057	371.557	4.8851	.03810	.009	370.547
25035	6.380	.06295	371.441	4.8987	.03766	.010	370.551
25036	6.381	.05578	371.329	4.9127	.03764	.012	370.548
25037	5.847	.07055	371.616	4.1038	.03536	.009	370.508
25038	5.847	.06295	371.491	4.1168	.03539	.009	370.512
25039	5.847	.05577	371.374	4.1286	.03504	.012	370.519
25040	5.846	.04901	371.257	4.1405	.03462	.014	370.505
25041	5.494	.07056	371.715	3.5777	.03320	.009	370.503
25042	5.494	.06293	371.588	3.5879	.03295	.009	370.503
25043	5.494	.05573	371.455	3.5989	.03289	.011	370.504
25044	5.494	.04899	371.326	3.6091	.03249	.013	370.503
25045	4.989	.07055	371.896	2.9064	.02962	.009	370.483
25046	4.989	.06292	371.733	2.9148	.02945	.008	370.483
25047	4.989	.05574	371.590	2.9219	.02925	.010	370.488
25048	4.989	.04901	371.458	2.9288	.02938	.012	370.494
25049	4.221	.07055	372.165	2.1197	.02557	.006	370.458
25050	4.220	.06292	371.987	2.1238	.02567	.007	370.463
25051	4.220	.05574	371.816	2.1280	.02542	.009	370.474
25052	4.221	.04900	371.646	2.1324	.02553	.011	370.468
25053	3.471	.07052	372.439	1.5535	.02333	.006	370.461
25054	3.471	.06291	372.223	1.5558	.02314	.006	370.462
25055	3.469	.05572	372.019	1.5575	.02318	.007	370.465
25056	3.470	.04898	371.824	1.5601	.02317	.010	370.472
25057	2.342	.06290	372.519	.9178	.02135	.006	370.454
25058	2.341	.05573	372.293	.9188	.02138	.008	370.458
25059	2.342	.04897	372.067	.9201	.02125	.009	370.464
25060	2.342	.04265	371.861	.9210	.02119	.011	370.471
25061	1.407	.06289	372.791	.5049	.02063	.006	370.471

Table 4. Thermal conductivity of supercritical R125 from 350 K to 390 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
25062	1.405	.05572	372.537	.5048	.02063	.006	370.473
25063	1.403	.04896	372.269	.5045	.02063	.008	370.472
25064	1.401	.04265	372.043	.5042	.02052	.010	370.477
25065	.720	.06288	373.037	.2443	.02051	.006	370.466
25066	.720	.05570	372.738	.2447	.02064	.007	370.468
25067	.720	.04897	372.462	.2450	.02049	.008	370.470
25068	.721	.04264	372.211	.2454	.02055	.010	370.478
26001	67.405	.21387	392.049	10.8259	.07985	.003	390.469
26002	67.400	.18020	391.763	10.8304	.08020	.005	390.429
26003	67.400	.14946	391.510	10.8345	.08000	.006	390.412
26004	67.401	.12161	391.278	10.8383	.07997	.008	390.397
26005	46.614	.21354	391.944	10.1106	.07024	.003	390.158
26006	46.616	.18004	391.670	10.1160	.07077	.004	390.169
26007	46.617	.14933	391.404	10.1212	.07027	.006	390.169
26008	46.623	.12148	391.172	10.1259	.07067	.007	390.168
26009	31.941	.17977	391.783	9.3589	.06232	.004	390.105
26010	31.943	.14911	391.503	9.3657	.06247	.005	390.117
26011	31.945	.12131	391.253	9.3717	.06249	.006	390.122
26012	31.949	.09643	391.011	9.3777	.06220	.009	390.126
26013	22.043	.16728	391.846	8.5498	.05552	.003	390.108
26014	22.045	.14342	391.592	8.5575	.05561	.004	390.104
26015	22.045	.12140	391.356	8.5647	.05565	.006	390.112
26016	22.046	.10122	391.152	8.5709	.05539	.008	390.121
26017	15.966	.15510	391.920	7.7233	.04971	.004	390.155
26018	15.967	.13215	391.663	7.7334	.04980	.004	390.161
26019	15.970	.11105	391.422	7.7433	.04981	.006	390.163
26020	15.972	.09180	391.206	7.7519	.04987	.008	390.177
26021	12.500	.13767	391.875	6.9480	.04573	.005	390.172
26022	12.500	.12135	391.679	6.9577	.04569	.004	390.179
26023	12.500	.10604	391.502	6.9664	.04572	.006	390.194
26024	12.501	.09177	391.311	6.9760	.04578	.007	390.194
26025	10.051	.12133	391.814	6.0494	.04205	.005	390.184
26026	10.050	.10605	391.608	6.0619	.04187	.005	390.193
26027	10.051	.09175	391.416	6.0738	.04184	.007	390.205
26028	10.051	.07850	391.248	6.0842	.04182	.008	390.214
26029	8.786	.10116	391.673	5.3476	.03955	.006	390.231
26030	8.786	.09175	391.539	5.3567	.03933	.006	390.234
26031	8.787	.08280	391.411	5.3657	.03927	.008	390.244
26032	8.787	.07432	391.300	5.3732	.03923	.008	390.253
26033	7.890	.08280	391.508	4.6997	.03717	.007	390.247
26034	7.890	.07432	391.383	4.7079	.03688	.008	390.262
26035	7.890	.06627	391.259	4.7166	.03714	.010	390.258
26036	7.891	.05872	391.144	4.7248	.03655	.011	390.261
26037	7.122	.07432	391.498	4.0428	.03461	.007	390.265

Table 4. Thermal conductivity of supercritical R125 from 350 K to 390 K. (continued)

Run Point	P_e / MPa	q / W · m^{-1}	T_e / K	ρ_e / mol · L^{-1}	λ_e / W · m^{-1} · K^{-1}	STAT	T_i / K
26038	7.122	.06629	391.355	4.0513	.03458	.009	390.265
26039	7.122	.05872	391.237	4.0585	.03464	.011	390.279
26040	7.122	.05161	391.127	4.0649	.03424	.012	390.283
26041	6.319	.06626	391.492	3.3296	.03153	.009	390.262
26042	6.318	.05870	391.343	3.3356	.03146	.010	390.258
26043	6.317	.05160	391.205	3.3412	.03153	.011	390.269
26044	6.317	.04495	391.094	3.3462	.03117	.015	390.273
26045	5.502	.05874	391.646	2.6495	.02891	.008	390.423
26046	5.502	.05163	391.507	2.6537	.02879	.010	390.432
26047	5.503	.04497	391.359	2.6581	.02885	.013	390.431
26048	5.503	.03878	391.225	2.6621	.02849	.016	390.438
26049	4.761	.05163	391.503	2.1191	.02706	.011	390.311
26050	4.761	.04497	391.333	2.1219	.02699	.013	390.302
26051	4.761	.03877	391.181	2.1247	.02672	.015	390.305
26052	4.760	.03303	391.037	2.1271	.02672	.019	390.305
26053	3.641	.05161	391.661	1.4504	.02441	.009	390.273
26054	3.640	.04497	391.485	1.4517	.02446	.012	390.276
26055	3.640	.03877	391.311	1.4531	.02446	.014	390.281
26056	3.640	.03303	391.159	1.4544	.02428	.017	390.288
26057	2.361	.04495	391.682	.8462	.02288	.011	390.288
26058	2.361	.03877	391.485	.8469	.02290	.013	390.297
26059	2.363	.03303	391.302	.8482	.02272	.017	390.294
26060	2.363	.02776	391.129	.8490	.02302	.021	390.301
26061	1.496	.04494	391.888	.5036	.02246	.010	390.358
26062	1.497	.03875	391.668	.5043	.02243	.013	390.354
26063	1.498	.03302	391.467	.5052	.02244	.016	390.357
26064	1.499	.02776	391.276	.5058	.02251	.021	390.367