

DuPont™ Suva®
refrigerants

**Thermodynamic
Properties
of**

**DuPont™
Suva® 507**
Refrigerant

(R-507)



Thermodynamic Properties of Suva® 507 Refrigerant

English (I/P) Units

Tables of the thermodynamic properties of Suva® 507 are based on values calculated using the NIST REFPROP Database (McLinden, M. O., Klein, S. A., Lemmon, E. W., and Peskin, A. P., NIST Standard Reference Database 23, NIST thermodynamic and transport properties of refrigerants and refrigerant mixtures REFPROP, Version 6.01, Standard Reference Data Program, National Institute of Standards and Technology, 1998).

**Table 1
R-507 Saturation Properties—Temperature Table**

Temp (°F)	Pressure (psia)		Density (lb/ft ³)		Volume (ft ³ /lb)		Enthalpy (Btu/lb)			Entropy (Btu/lb-R)	
	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Latent	Vapor	Liquid	Vapor
-140	0.667	0.666	91.1	0.019	0.0110	51.90	-28.20	96.10	67.9	-0.077	0.224
-139	0.699	0.698	91.0	0.020	0.0110	49.60	-27.90	95.90	68.0	-0.076	0.224
-138	0.732	0.731	90.9	0.021	0.0110	47.50	-27.70	95.90	68.2	-0.075	0.223
-137	0.767	0.766	90.8	0.022	0.0110	45.50	-27.40	95.70	68.3	-0.074	0.223
-136	0.803	0.802	90.7	0.023	0.0110	43.60	-27.10	95.60	68.5	-0.073	0.222
-135	0.840	0.839	90.6	0.024	0.0110	41.80	-26.90	95.50	68.6	-0.072	0.222
-134	0.879	0.878	90.5	0.025	0.0110	40.00	-26.60	95.40	68.8	-0.072	0.221
-133	0.919	0.918	90.4	0.026	0.0111	38.40	-26.30	95.20	68.9	-0.071	0.221
-132	0.961	0.960	90.3	0.027	0.0111	36.80	-26.10	95.20	69.1	-0.070	0.220
-131	1.000	1.000	90.2	0.028	0.0111	35.30	-25.80	95.00	69.2	-0.069	0.220
-130	1.050	1.050	90.1	0.030	0.0111	33.90	-25.50	94.80	69.3	-0.068	0.220
-129	1.100	1.100	90.0	0.031	0.0111	32.50	-25.20	94.70	69.5	-0.067	0.219
-128	1.140	1.140	89.9	0.032	0.0111	31.20	-25.00	94.60	69.6	-0.067	0.219
-127	1.190	1.190	89.8	0.033	0.0111	30.00	-24.70	94.50	69.8	-0.066	0.218
-126	1.250	1.250	89.8	0.035	0.0111	28.80	-24.40	94.30	69.9	-0.065	0.218
-125	1.300	1.300	89.7	0.036	0.0112	27.70	-24.20	94.30	70.1	-0.064	0.217
-124	1.360	1.360	89.6	0.038	0.0112	26.60	-23.90	94.10	70.2	-0.063	0.217
-123	1.410	1.410	89.5	0.039	0.0112	25.60	-23.60	94.00	70.4	-0.063	0.217
-122	1.470	1.470	89.4	0.041	0.0112	24.60	-23.30	93.80	70.5	-0.062	0.216
-121	1.540	1.540	89.3	0.042	0.0112	23.70	-23.10	93.70	70.6	-0.061	0.216
-120	1.600	1.600	89.2	0.044	0.0112	22.80	-22.80	93.60	70.8	-0.060	0.215
-119	1.670	1.670	89.1	0.046	0.0112	22.00	-22.50	93.40	70.9	-0.059	0.215
-118	1.740	1.730	89.0	0.047	0.0112	21.20	-22.20	93.30	71.1	-0.058	0.215
-117	1.810	1.810	88.9	0.049	0.0113	20.40	-22.00	93.20	71.2	-0.058	0.214
-116	1.880	1.880	88.8	0.051	0.0113	19.60	-21.70	93.10	71.4	-0.057	0.214
-115	1.960	1.950	88.7	0.053	0.0113	18.90	-21.40	92.90	71.5	-0.056	0.214
-114	2.030	2.030	88.6	0.055	0.0113	18.20	-21.10	92.80	71.7	-0.055	0.213
-113	2.110	2.110	88.5	0.057	0.0113	17.60	-20.90	92.70	71.8	-0.054	0.213
-112	2.200	2.200	88.4	0.059	0.0113	17.00	-20.60	92.60	72.0	-0.054	0.213
-111	2.280	2.280	88.3	0.061	0.0113	16.40	-20.30	92.40	72.1	-0.053	0.212
-110	2.370	2.370	88.2	0.063	0.0113	15.80	-20.00	92.20	72.2	-0.052	0.212
-109	2.460	2.460	88.1	0.066	0.0114	15.20	-19.80	92.20	72.4	-0.051	0.212
-108	2.560	2.560	88.0	0.068	0.0114	14.70	-19.50	92.00	72.5	-0.051	0.211
-107	2.660	2.660	87.9	0.070	0.0114	14.20	-19.20	91.90	72.7	-0.050	0.211
-106	2.760	2.760	87.8	0.073	0.0114	13.70	-18.90	91.70	72.8	-0.049	0.211
-105	2.860	2.860	87.7	0.075	0.0114	13.30	-18.60	91.60	73.0	-0.048	0.210
-104	2.970	2.970	87.6	0.078	0.0114	12.80	-18.40	91.50	73.1	-0.047	0.210
-103	3.080	3.080	87.5	0.081	0.0114	12.40	-18.10	91.40	73.3	-0.047	0.210
-102	3.190	3.190	87.4	0.084	0.0114	12.00	-17.80	91.20	73.4	-0.046	0.209
-101	3.310	3.310	87.3	0.086	0.0115	11.60	-17.50	91.10	73.6	-0.045	0.209
-100	3.430	3.430	87.2	0.089	0.0115	11.20	-17.30	91.00	73.7	-0.044	0.209
-99	3.550	3.550	87.1	0.092	0.0115	10.80	-17.00	90.90	73.9	-0.044	0.208
-98	3.680	3.680	87.0	0.095	0.0115	10.50	-16.70	90.70	74.0	-0.043	0.208
-97	3.810	3.810	86.9	0.099	0.0115	10.10	-16.40	90.50	74.1	-0.042	0.208
-96	3.950	3.950	86.8	0.102	0.0115	9.82	-16.10	90.40	74.3	-0.041	0.208
-95	4.090	4.080	86.7	0.105	0.0115	9.51	-15.90	90.30	74.4	-0.040	0.207
-94	4.230	4.230	86.6	0.109	0.0115	9.21	-15.60	90.20	74.6	-0.040	0.207
-93	4.370	4.370	86.5	0.112	0.0116	8.92	-15.30	90.00	74.7	-0.039	0.207
-92	4.530	4.530	86.4	0.116	0.0116	8.64	-15.00	89.90	74.9	-0.038	0.206
-91	4.680	4.680	86.3	0.119	0.0116	8.37	-14.70	89.70	75.0	-0.037	0.206

Table 1 (continued)
R-507 Saturation Properties—Temperature Table

Temp (°F)	Pressure (psia)		Density (lb/ft ³)		Volume (ft ³ /lb)		Enthalpy (Btu/lb)			Entropy (Btu/lb-R)	
	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Latent	Vapor	Liquid	Vapor
-90	4.840	4.840	86.2	0.123	0.0116	8.11	-14.40	89.60	75.2	-0.037	0.206
-89	5.000	5.000	86.1	0.127	0.0116	7.87	-14.20	89.50	75.3	-0.036	0.206
-88	5.170	5.170	86.0	0.131	0.0116	7.63	-13.90	89.40	75.5	-0.035	0.205
-87	5.340	5.340	85.9	0.135	0.0116	7.40	-13.60	89.20	75.6	-0.034	0.205
-86	5.520	5.520	85.8	0.139	0.0117	7.17	-13.30	89.10	75.8	-0.034	0.205
-85	5.700	5.700	85.7	0.144	0.0117	6.96	-13.00	88.90	75.9	-0.033	0.205
-84	5.890	5.890	85.6	0.148	0.0117	6.75	-12.80	88.80	76.0	-0.032	0.204
-83	6.080	6.080	85.5	0.153	0.0117	6.55	-12.50	88.70	76.2	-0.031	0.204
-82	6.280	6.280	85.4	0.157	0.0117	6.36	-12.20	88.50	76.3	-0.031	0.204
-81	6.480	6.480	85.3	0.162	0.0117	6.18	-11.90	88.40	76.5	-0.030	0.204
-80	6.690	6.690	85.2	0.167	0.0117	6.00	-11.60	88.20	76.6	-0.029	0.203
-79	6.900	6.900	85.1	0.172	0.0118	5.82	-11.30	88.10	76.8	-0.028	0.203
-78	7.120	7.120	85.0	0.177	0.0118	5.66	-11.00	87.90	76.9	-0.028	0.203
-77	7.340	7.340	84.9	0.182	0.0118	5.50	-10.80	87.90	77.1	-0.027	0.203
-76	7.570	7.570	84.8	0.187	0.0118	5.34	-10.50	87.70	77.2	-0.026	0.203
-75	7.810	7.810	84.7	0.193	0.0118	5.19	-10.20	87.60	77.4	-0.025	0.202
-74	8.050	8.050	84.6	0.198	0.0118	5.05	-9.91	87.41	77.5	-0.025	0.202
-73	8.290	8.290	84.5	0.204	0.0118	4.90	-9.62	87.32	77.7	-0.024	0.202
-72	8.540	8.540	84.4	0.210	0.0119	4.77	-9.33	87.13	77.8	-0.023	0.202
-71	8.800	8.800	84.3	0.216	0.0119	4.64	-9.05	86.95	77.9	-0.022	0.201
-70	9.070	9.070	84.2	0.222	0.0119	4.51	-8.76	86.86	78.1	-0.022	0.201
-69	9.340	9.340	84.0	0.228	0.0119	4.39	-8.47	86.67	78.2	-0.021	0.201
-68	9.610	9.610	83.9	0.234	0.0119	4.27	-8.18	86.58	78.4	-0.020	0.201
-67	9.900	9.900	83.8	0.241	0.0119	4.16	-7.90	86.40	78.5	-0.019	0.201
-66	10.200	10.200	83.7	0.247	0.0119	4.04	-7.61	86.31	78.7	-0.019	0.201
-65	10.500	10.500	83.6	0.254	0.0120	3.94	-7.32	86.12	78.8	-0.018	0.200
-64	10.800	10.800	83.5	0.261	0.0120	3.83	-7.03	86.03	79.0	-0.017	0.200
-63	11.100	11.100	83.4	0.268	0.0120	3.73	-6.74	85.84	79.1	-0.017	0.200
-62	11.400	11.400	83.3	0.275	0.0120	3.63	-6.45	85.65	79.2	-0.016	0.200
-61	11.700	11.700	83.2	0.282	0.0120	3.54	-6.16	85.56	79.4	-0.015	0.200
-60	12.100	12.100	83.1	0.290	0.0120	3.45	-5.87	85.37	79.5	-0.014	0.199
-59	12.400	12.400	83.0	0.298	0.0120	3.36	-5.58	85.28	79.7	-0.014	0.199
-58	12.800	12.800	82.9	0.305	0.0121	3.27	-5.29	85.09	79.8	-0.013	0.199
-57	13.100	13.100	82.8	0.313	0.0121	3.19	-5.00	85.00	80.0	-0.012	0.199
-56	13.500	13.500	82.7	0.321	0.0121	3.11	-4.71	84.81	80.1	-0.011	0.199
-55	13.800	13.800	82.6	0.330	0.0121	3.03	-4.42	84.72	80.3	-0.011	0.199
-54	14.200	14.200	82.5	0.338	0.0121	2.96	-4.12	84.52	80.4	-0.010	0.198
-53	14.600	14.600	82.4	0.347	0.0121	2.88	-3.83	84.33	80.5	-0.009	0.198
-52	15.000	15.000	82.2	0.356	0.0122	2.81	-3.54	84.24	80.7	-0.009	0.198
-51	15.400	15.400	82.1	0.365	0.0122	2.74	-3.25	84.05	80.8	-0.008	0.198
-50	15.800	15.800	82.0	0.374	0.0122	2.68	-2.95	83.95	81.0	-0.007	0.198
-49	16.200	16.200	81.9	0.383	0.0122	2.61	-2.66	83.76	81.1	-0.006	0.198
-48	16.700	16.700	81.8	0.393	0.0122	2.55	-2.36	83.66	81.3	-0.006	0.197
-47	17.100	17.100	81.7	0.402	0.0122	2.49	-2.07	83.47	81.4	-0.005	0.197
-46	17.600	17.600	81.6	0.412	0.0123	2.43	-1.78	83.28	81.5	-0.004	0.197
-45	18.000	18.000	81.5	0.422	0.0123	2.37	-1.48	83.18	81.7	-0.004	0.197
-44	18.500	18.500	81.4	0.433	0.0123	2.31	-1.18	82.98	81.8	-0.003	0.197
-43	18.900	18.900	81.3	0.443	0.0123	2.26	-0.89	82.89	82.0	-0.002	0.197
-42	19.400	19.400	81.2	0.454	0.0123	2.20	-0.59	82.69	82.1	-0.001	0.197
-41	19.900	19.900	81.1	0.465	0.0123	2.15	-0.30	82.60	82.3	-0.001	0.196

Table 1 (continued)
R-507 Saturation Properties—Temperature Table

Temp (°F)	Pressure (psia)		Density (lb/ft ³)		Volume (ft ³ /lb)		Enthalpy (Btu/lb)			Entropy (Btu/lb-R)	
	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Latent	Vapor	Liquid	Vapor
-40	20.400	20.400	80.9	0.476	0.0124	2.10	0.00	82.40	82.4	0.000	0.196
-39	20.900	20.900	80.8	0.487	0.0124	2.05	0.30	82.20	82.5	0.001	0.196
-38	21.500	21.500	80.7	0.498	0.0124	2.01	0.60	82.11	82.7	0.001	0.196
-37	22.000	22.000	80.6	0.510	0.0124	1.96	0.89	81.91	82.8	0.002	0.196
-36	22.500	22.500	80.5	0.522	0.0124	1.92	1.19	81.81	83.0	0.003	0.196
-35	23.100	23.100	80.4	0.534	0.0124	1.87	1.49	81.61	83.1	0.004	0.196
-34	23.700	23.600	80.3	0.546	0.0125	1.83	1.79	81.41	83.2	0.004	0.196
-33	24.200	24.200	80.2	0.559	0.0125	1.79	2.09	81.31	83.4	0.005	0.195
-32	24.800	24.800	80.1	0.572	0.0125	1.75	2.39	81.11	83.5	0.006	0.195
-31	25.400	25.400	79.9	0.585	0.0125	1.71	2.69	81.01	83.7	0.006	0.195
-30	26.000	26.000	79.8	0.598	0.0125	1.67	2.99	80.81	83.8	0.007	0.195
-29	26.600	26.600	79.7	0.611	0.0125	1.64	3.29	80.71	84.0	0.008	0.195
-28	27.300	27.300	79.6	0.625	0.0126	1.60	3.59	80.51	84.1	0.008	0.195
-27	27.900	27.900	79.5	0.639	0.0126	1.56	3.89	80.31	84.2	0.009	0.195
-26	28.600	28.500	79.4	0.653	0.0126	1.53	4.19	80.21	84.4	0.010	0.195
-25	29.200	29.200	79.3	0.668	0.0126	1.50	4.49	80.01	84.5	0.011	0.195
-24	29.900	29.900	79.2	0.683	0.0126	1.47	4.80	79.80	84.6	0.011	0.194
-23	30.600	30.600	79.0	0.697	0.0127	1.43	5.10	79.70	84.8	0.012	0.194
-22	31.300	31.300	78.9	0.713	0.0127	1.40	5.40	79.50	84.9	0.013	0.194
-21	32.000	32.000	78.8	0.728	0.0127	1.37	5.71	79.39	85.1	0.013	0.194
-20	32.700	32.700	78.7	0.744	0.0127	1.34	6.01	79.19	85.2	0.014	0.194
-19	33.500	33.400	78.6	0.760	0.0127	1.32	6.31	78.99	85.3	0.015	0.194
-18	34.200	34.200	78.5	0.776	0.0127	1.29	6.62	78.88	85.5	0.015	0.194
-17	35.000	35.000	78.3	0.793	0.0128	1.26	6.92	78.68	85.6	0.016	0.194
-16	35.700	35.700	78.2	0.810	0.0128	1.24	7.23	78.47	85.7	0.017	0.194
-15	36.500	36.500	78.1	0.827	0.0128	1.21	7.54	78.36	85.9	0.017	0.194
-14	37.300	37.300	78.0	0.844	0.0128	1.18	7.84	78.16	86.0	0.018	0.193
-13	38.200	38.100	77.9	0.862	0.0128	1.16	8.15	78.05	86.2	0.019	0.193
-12	39.000	39.000	77.8	0.880	0.0129	1.14	8.46	77.84	86.3	0.019	0.193
-11	39.800	39.800	77.6	0.898	0.0129	1.11	8.76	77.64	86.4	0.020	0.193
-10	40.700	40.700	77.5	0.917	0.0129	1.09	9.07	77.53	86.6	0.021	0.193
-9	41.600	41.500	77.4	0.936	0.0129	1.07	9.38	77.32	86.7	0.021	0.193
-8	42.400	42.400	77.3	0.955	0.0129	1.05	9.69	77.11	86.8	0.022	0.193
-7	43.300	43.300	77.2	0.974	0.0130	1.03	10.00	77.00	87.0	0.023	0.193
-6	44.300	44.200	77.1	0.994	0.0130	1.01	10.30	76.80	87.1	0.024	0.193
-5	45.200	45.200	76.9	1.010	0.0130	0.99	10.60	76.60	87.2	0.024	0.193
-4	46.100	46.100	76.8	1.030	0.0130	0.97	10.90	76.50	87.4	0.025	0.193
-3	47.100	47.100	76.7	1.060	0.0130	0.95	11.20	76.30	87.5	0.026	0.193
-2	48.100	48.000	76.6	1.080	0.0131	0.93	11.60	76.00	87.6	0.026	0.192
-1	49.000	49.000	76.5	1.100	0.0131	0.91	11.90	75.90	87.8	0.027	0.192
0	50.000	50.000	76.3	1.120	0.0131	0.89	12.20	75.70	87.9	0.028	0.192
1	51.100	51.000	76.2	1.140	0.0131	0.88	12.50	75.50	88.0	0.028	0.192
2	52.100	52.100	76.1	1.160	0.0131	0.86	12.80	75.40	88.2	0.029	0.192
3	53.200	53.100	76.0	1.190	0.0132	0.84	13.10	75.20	88.3	0.030	0.192
4	54.200	54.200	75.8	1.210	0.0132	0.83	13.40	75.00	88.4	0.030	0.192
5	55.300	55.300	75.7	1.230	0.0132	0.81	13.70	74.80	88.5	0.031	0.192
6	56.400	56.400	75.6	1.260	0.0132	0.80	14.10	74.60	88.7	0.032	0.192
7	57.500	57.500	75.5	1.280	0.0132	0.78	14.40	74.40	88.8	0.032	0.192
8	58.700	58.600	75.4	1.310	0.0133	0.77	14.70	74.20	88.9	0.033	0.192
9	59.800	59.800	75.2	1.330	0.0133	0.75	15.00	74.10	89.1	0.034	0.192

Table 1 (continued)
R-507 Saturation Properties—Temperature Table

Temp (°F)	Pressure (psia)		Density (lb/ft ³)		Volume (ft ³ /lb)		Enthalpy (Btu/lb)			Entropy (Btu/lb-R)	
	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Latent	Vapor	Liquid	Vapor
10	61.000	60.900	75.1	1.360	0.0133	0.74	15.30	73.90	89.2	0.034	0.192
11	62.200	62.100	75.0	1.380	0.0133	0.72	15.60	73.70	89.3	0.035	0.191
12	63.400	63.300	74.9	1.410	0.0134	0.71	16.00	73.40	89.4	0.036	0.191
13	64.600	64.500	74.7	1.440	0.0134	0.70	16.30	73.30	89.6	0.036	0.191
14	65.800	65.800	74.6	1.460	0.0134	0.68	16.60	73.10	89.7	0.037	0.191
15	67.100	67.000	74.5	1.490	0.0134	0.67	16.90	72.90	89.8	0.038	0.191
16	68.300	68.300	74.3	1.520	0.0135	0.66	17.20	72.80	90.0	0.038	0.191
17	69.600	69.600	74.2	1.550	0.0135	0.65	17.60	72.50	90.1	0.039	0.191
18	70.900	70.900	74.1	1.580	0.0135	0.64	17.90	72.30	90.2	0.040	0.191
19	72.300	72.200	74.0	1.600	0.0135	0.62	18.20	72.10	90.3	0.040	0.191
20	73.600	73.500	73.8	1.630	0.0135	0.61	18.50	72.00	90.5	0.041	0.191
21	75.000	74.900	73.7	1.660	0.0136	0.60	18.80	71.80	90.6	0.042	0.191
22	76.400	76.300	73.6	1.690	0.0136	0.59	19.20	71.50	90.7	0.042	0.191
23	77.800	77.700	73.4	1.730	0.0136	0.58	19.50	71.30	90.8	0.043	0.191
24	79.200	79.100	73.3	1.760	0.0136	0.57	19.80	71.10	90.9	0.044	0.191
25	80.600	80.600	73.2	1.790	0.0137	0.56	20.10	71.00	91.1	0.044	0.191
26	82.100	82.000	73.1	1.820	0.0137	0.55	20.50	70.70	91.2	0.045	0.191
27	83.600	83.500	72.9	1.850	0.0137	0.54	20.80	70.50	91.3	0.046	0.190
28	85.100	85.000	72.8	1.890	0.0137	0.53	21.10	70.30	91.4	0.046	0.190
29	86.600	86.500	72.7	1.920	0.0138	0.52	21.40	70.20	91.6	0.047	0.190
30	88.100	88.000	72.5	1.960	0.0138	0.51	21.80	69.90	91.7	0.048	0.190
31	89.700	89.600	72.4	1.990	0.0138	0.50	22.10	69.70	91.8	0.048	0.190
32	91.300	91.200	72.3	2.030	0.0138	0.49	22.40	69.50	91.9	0.049	0.190
33	92.900	92.800	72.1	2.060	0.0139	0.49	22.80	69.20	92.0	0.050	0.190
34	94.500	94.400	72.0	2.100	0.0139	0.48	23.10	69.00	92.1	0.050	0.190
35	96.100	96.100	71.8	2.140	0.0139	0.47	23.40	68.90	92.3	0.051	0.190
36	97.800	97.700	71.7	2.170	0.0139	0.46	23.80	68.60	92.4	0.052	0.190
37	99.500	99.400	71.6	2.210	0.0140	0.45	24.10	68.40	92.5	0.052	0.190
38	101.000	101.000	71.4	2.250	0.0140	0.44	24.40	68.20	92.6	0.053	0.190
39	103.000	103.000	71.3	2.290	0.0140	0.44	24.70	68.00	92.7	0.054	0.190
40	105.000	105.000	71.2	2.330	0.0141	0.43	25.10	67.70	92.8	0.054	0.190
41	106.000	106.000	71.0	2.370	0.0141	0.42	25.40	67.50	92.9	0.055	0.190
42	108.000	108.000	70.9	2.410	0.0141	0.42	25.80	67.30	93.1	0.056	0.190
43	110.000	110.000	70.7	2.450	0.0141	0.41	26.10	67.10	93.2	0.056	0.190
44	112.000	112.000	70.6	2.490	0.0142	0.40	26.40	66.90	93.3	0.057	0.190
45	114.000	114.000	70.4	2.540	0.0142	0.39	26.80	66.60	93.4	0.058	0.190
46	116.000	116.000	70.3	2.580	0.0142	0.39	27.10	66.40	93.5	0.058	0.189
47	118.000	117.000	70.2	2.620	0.0143	0.38	27.40	66.20	93.6	0.059	0.189
48	120.000	119.000	70.0	2.670	0.0143	0.38	27.80	65.90	93.7	0.059	0.189
49	121.000	121.000	69.9	2.710	0.0143	0.37	28.10	65.70	93.8	0.060	0.189
50	123.000	123.000	69.7	2.760	0.0143	0.36	28.50	65.40	93.9	0.061	0.189
51	125.000	125.000	69.6	2.810	0.0144	0.36	28.80	65.20	94.0	0.061	0.189
52	128.000	127.000	69.4	2.860	0.0144	0.35	29.10	65.10	94.2	0.062	0.189
53	130.000	129.000	69.3	2.900	0.0144	0.34	29.50	64.80	94.3	0.063	0.189
54	132.000	132.000	69.1	2.950	0.0145	0.34	29.80	64.60	94.4	0.063	0.189
55	134.000	134.000	69.0	3.000	0.0145	0.33	30.20	64.30	94.5	0.064	0.189
56	136.000	136.000	68.8	3.050	0.0145	0.33	30.50	64.10	94.6	0.065	0.189
57	138.000	138.000	68.7	3.100	0.0146	0.32	30.90	63.80	94.7	0.065	0.189
58	140.000	140.000	68.5	3.160	0.0146	0.32	31.20	63.60	94.8	0.066	0.189
59	142.000	142.000	68.4	3.210	0.0146	0.31	31.50	63.40	94.9	0.067	0.189

Table 1 (continued)
R-507 Saturation Properties—Temperature Table

Temp (°F)	Pressure (psia)		Density (lb/ft ³)		Volume (ft ³ /lb)		Enthalpy (Btu/lb)			Entropy (Btu/lb-R)	
	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Latent	Vapor	Liquid	Vapor
60	145.000	145.000	68.2	3.260	0.0147	0.31	31.90	63.10	95.0	0.067	0.189
61	147.000	147.000	68.1	3.320	0.0147	0.30	32.20	62.90	95.1	0.068	0.189
62	149.000	149.000	67.9	3.370	0.0147	0.30	32.60	62.60	95.2	0.069	0.189
63	152.000	151.000	67.8	3.430	0.0148	0.29	32.90	62.40	95.3	0.069	0.189
64	154.000	154.000	67.6	3.480	0.0148	0.29	33.30	62.10	95.4	0.070	0.188
65	156.000	156.000	67.4	3.540	0.0148	0.28	33.60	61.90	95.5	0.071	0.188
66	159.000	159.000	67.3	3.600	0.0149	0.28	34.00	61.60	95.6	0.071	0.188
67	161.000	161.000	67.1	3.660	0.0149	0.27	34.40	61.20	95.6	0.072	0.188
68	164.000	163.000	67.0	3.720	0.0149	0.27	34.70	61.00	95.7	0.073	0.188
69	166.000	166.000	66.8	3.780	0.0150	0.26	35.10	60.70	95.8	0.073	0.188
70	169.000	168.000	66.6	3.840	0.0150	0.26	35.40	60.50	95.9	0.074	0.188
71	171.000	171.000	66.5	3.910	0.0150	0.26	35.80	60.20	96.0	0.075	0.188
72	174.000	173.000	66.3	3.970	0.0151	0.25	36.10	60.00	96.1	0.075	0.188
73	176.000	176.000	66.2	4.040	0.0151	0.25	36.50	59.70	96.2	0.076	0.188
74	179.000	179.000	66.0	4.100	0.0152	0.24	36.90	59.40	96.3	0.077	0.188
75	181.000	181.000	65.8	4.170	0.0152	0.24	37.20	59.20	96.4	0.077	0.188
76	184.000	184.000	65.7	4.240	0.0152	0.24	37.60	58.80	96.4	0.078	0.188
77	187.000	187.000	65.5	4.310	0.0153	0.23	37.90	58.60	96.5	0.079	0.188
78	190.000	189.000	65.3	4.380	0.0153	0.23	38.30	58.30	96.6	0.079	0.188
79	192.000	192.000	65.1	4.450	0.0154	0.23	38.70	58.00	96.7	0.080	0.188
80	195.000	195.000	65.0	4.520	0.0154	0.22	39.00	57.80	96.8	0.081	0.188
81	198.000	198.000	64.8	4.590	0.0154	0.22	39.40	57.50	96.9	0.081	0.187
82	201.000	201.000	64.6	4.670	0.0155	0.21	39.80	57.10	96.9	0.082	0.187
83	204.000	204.000	64.4	4.750	0.0155	0.21	40.10	56.90	97.0	0.083	0.187
84	207.000	206.000	64.3	4.820	0.0156	0.21	40.50	56.60	97.1	0.083	0.187
85	210.000	209.000	64.1	4.900	0.0156	0.20	40.90	56.30	97.2	0.084	0.187
86	213.000	212.000	63.9	4.980	0.0156	0.20	41.20	56.00	97.2	0.085	0.187
87	216.000	215.000	63.7	5.060	0.0157	0.20	41.60	55.70	97.3	0.085	0.187
88	219.000	218.000	63.5	5.150	0.0157	0.19	42.00	55.40	97.4	0.086	0.187
89	222.000	221.000	63.4	5.230	0.0158	0.19	42.40	55.00	97.4	0.087	0.187
90	225.000	225.000	63.2	5.310	0.0158	0.19	42.70	54.80	97.5	0.087	0.187
91	228.000	228.000	63.0	5.400	0.0159	0.19	43.10	54.50	97.6	0.088	0.187
92	231.000	231.000	62.8	5.490	0.0159	0.18	43.50	54.10	97.6	0.089	0.187
93	234.000	234.000	62.6	5.580	0.0160	0.18	43.90	53.80	97.7	0.089	0.187
94	238.000	237.000	62.4	5.670	0.0160	0.18	44.30	53.40	97.7	0.090	0.186
95	241.000	241.000	62.2	5.760	0.0161	0.17	44.70	53.10	97.8	0.091	0.186
96	244.000	244.000	62.0	5.860	0.0161	0.17	45.00	52.90	97.9	0.091	0.186
97	247.000	247.000	61.8	5.960	0.0162	0.17	45.40	52.50	97.9	0.092	0.186
98	251.000	251.000	61.6	6.050	0.0162	0.17	45.80	52.20	98.0	0.093	0.186
99	254.000	254.000	61.4	6.150	0.0163	0.16	46.20	51.80	98.0	0.093	0.186
100	258.000	257.000	61.2	6.250	0.0163	0.16	46.60	51.50	98.1	0.094	0.186
101	261.000	261.000	61.0	6.360	0.0164	0.16	47.00	51.10	98.1	0.095	0.186
102	265.000	264.000	60.8	6.460	0.0164	0.16	47.40	50.80	98.2	0.095	0.186
103	268.000	268.000	60.6	6.570	0.0165	0.15	47.80	50.40	98.2	0.096	0.186
104	272.000	272.000	60.4	6.680	0.0166	0.15	48.20	50.00	98.2	0.097	0.186
105	275.000	275.000	60.2	6.790	0.0166	0.15	48.60	49.70	98.3	0.097	0.185
106	279.000	279.000	60.0	6.910	0.0167	0.15	49.00	49.30	98.3	0.098	0.185
107	283.000	283.000	59.7	7.020	0.0167	0.14	49.40	48.90	98.3	0.099	0.185
108	287.000	286.000	59.5	7.140	0.0168	0.14	49.80	48.60	98.4	0.099	0.185
109	290.000	290.000	59.3	7.260	0.0169	0.14	50.20	48.20	98.4	0.100	0.185

Table 1 (continued)
R-507 Saturation Properties—Temperature Table

Temp (°F)	Pressure (psia)		Density (lb/ft ³)		Volume (ft ³ /lb)		Enthalpy (Btu/lb)			Entropy (Btu/lb-R)	
	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Latent	Vapor	Liquid	Vapor
110	294.000	294.000	59.1	7.380	0.0169	0.14	50.60	47.80	98.4	0.101	0.185
111	298.000	298.000	58.8	7.510	0.0170	0.13	51.00	47.50	98.5	0.102	0.185
112	302.000	302.000	58.6	7.640	0.0171	0.13	51.40	47.10	98.5	0.102	0.185
113	306.000	306.000	58.4	7.770	0.0171	0.13	51.80	46.70	98.5	0.103	0.184
114	310.000	310.000	58.1	7.900	0.0172	0.13	52.20	46.30	98.5	0.104	0.184
115	314.000	314.000	57.9	8.040	0.0173	0.12	52.70	45.80	98.5	0.104	0.184
116	318.000	318.000	57.7	8.170	0.0173	0.12	53.10	45.40	98.5	0.105	0.184
117	322.000	322.000	57.4	8.320	0.0174	0.12	53.50	45.00	98.5	0.106	0.184
118	326.000	326.000	57.2	8.460	0.0175	0.12	53.90	44.60	98.5	0.106	0.184
119	330.000	330.000	56.9	8.610	0.0176	0.12	54.40	44.10	98.5	0.107	0.184
120	334.000	334.000	56.7	8.760	0.0176	0.11	54.80	43.70	98.5	0.108	0.183
121	339.000	338.000	56.4	8.920	0.0177	0.11	55.20	43.30	98.5	0.109	0.183
122	343.000	343.000	56.1	9.080	0.0178	0.11	55.70	42.80	98.5	0.109	0.183
123	347.000	347.000	55.9	9.240	0.0179	0.11	56.10	42.40	98.5	0.110	0.183
124	352.000	351.000	55.6	9.410	0.0180	0.11	56.50	42.00	98.5	0.111	0.183
125	356.000	356.000	55.3	9.580	0.0181	0.10	57.00	41.40	98.4	0.112	0.182
126	361.000	360.000	55.1	9.760	0.0182	0.10	57.40	41.00	98.4	0.112	0.182
127	365.000	365.000	54.8	9.940	0.0183	0.10	57.90	40.50	98.4	0.113	0.182
128	370.000	369.000	54.5	10.100	0.0184	0.10	58.30	40.00	98.3	0.114	0.182
129	374.000	374.000	54.2	10.300	0.0185	0.10	58.80	39.50	98.3	0.115	0.182
130	379.000	379.000	53.9	10.500	0.0186	0.10	59.30	38.90	98.2	0.115	0.181
131	384.000	383.000	53.6	10.700	0.0187	0.09	59.70	38.50	98.2	0.116	0.181
132	388.000	388.000	53.3	10.900	0.0188	0.09	60.20	37.90	98.1	0.117	0.181
133	393.000	393.000	53.0	11.100	0.0189	0.09	60.70	37.30	98.0	0.118	0.181
134	398.000	398.000	52.6	11.400	0.0190	0.09	61.20	36.80	98.0	0.118	0.180
135	403.000	402.000	52.3	11.600	0.0191	0.09	61.60	36.30	97.9	0.119	0.180
136	408.000	407.000	52.0	11.800	0.0192	0.08	62.10	35.70	97.8	0.120	0.180
137	413.000	412.000	51.6	12.100	0.0194	0.08	62.60	35.10	97.7	0.121	0.180
138	418.000	417.000	51.2	12.300	0.0195	0.08	63.10	34.50	97.6	0.122	0.179
139	423.000	422.000	50.9	12.600	0.0197	0.08	63.60	33.80	97.4	0.122	0.179
140	428.000	428.000	50.5	12.900	0.0198	0.08	64.20	33.10	97.3	0.123	0.179
141	433.000	433.000	50.1	13.100	0.0200	0.08	64.70	32.50	97.2	0.124	0.178
142	438.000	438.000	49.7	13.400	0.0201	0.07	65.20	31.80	97.0	0.125	0.178
143	444.000	443.000	49.3	13.800	0.0203	0.07	65.80	31.00	96.8	0.126	0.177
144	449.000	449.000	48.9	14.100	0.0205	0.07	66.30	30.30	96.6	0.127	0.177
145	454.000	454.000	48.4	14.400	0.0207	0.07	66.90	29.50	96.4	0.128	0.176
146	460.000	459.000	47.9	14.800	0.0209	0.07	67.50	28.70	96.2	0.129	0.176
147	465.000	465.000	47.4	15.200	0.0211	0.07	68.10	27.90	96.0	0.130	0.175
148	471.000	471.000	46.9	15.600	0.0213	0.06	68.70	27.00	95.7	0.130	0.175
149	476.000	476.000	46.4	16.000	0.0216	0.06	69.30	26.10	95.4	0.131	0.174
150	482.000	482.000	45.8	16.500	0.0218	0.06	70.00	25.00	95.0	0.133	0.174
151	488.000	488.000	45.2	17.000	0.0221	0.06	70.70	24.00	94.7	0.134	0.173

Table 2
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)											
	1 (-131°F)			2 (-114°F)			3 (-104°F)			4 (-95.6°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-100	38.855	74.059	0.2342	0.843	321.600	1.6950	-	-	-	-	-	-
-90	39.955	75.673	0.2386	0.865	325.100	1.7110	0.573	324.700	1.6760	-	-	-
-80	41.054	77.313	0.2430	0.887	328.600	1.7280	0.588	328.200	1.6930	0.438	327.800	1.6670
-70	42.151	78.979	0.2473	0.908	332.100	1.7440	0.602	331.800	1.7090	0.449	331.400	1.6840
-60	43.246	80.671	0.2516	0.930	335.700	1.7610	0.617	335.400	1.7250	0.461	335.100	1.7000
-50	44.341	82.389	0.2558	0.951	339.400	1.7770	0.632	339.100	1.7420	0.472	338.700	1.7160
-40	45.435	84.133	0.2600	0.973	343.000	1.7930	0.646	342.800	1.7580	0.483	342.500	1.7330
-30	46.528	85.902	0.2642	0.994	346.800	1.8090	0.660	346.500	1.7740	0.494	346.200	1.7490
-20	47.621	87.698	0.2683	1.016	350.500	1.8240	0.675	350.300	1.7890	0.504	350.000	1.7640
-10	48.712	89.519	0.2724	1.037	354.400	1.8400	0.689	354.100	1.8050	0.515	353.900	1.7800
0	49.804	91.366	0.2765	1.058	358.200	1.8550	0.704	358.000	1.8200	0.526	357.800	1.7960
10	50.894	93.238	0.2805	1.080	362.100	1.8700	0.718	361.900	1.8360	0.537	361.700	1.8110
20	51.985	95.136	0.2845	1.101	366.100	1.8860	0.732	365.900	1.8510	0.548	365.700	1.8260
30	53.075	97.059	0.2885	1.122	370.100	1.9010	0.747	369.900	1.8660	0.559	369.700	1.8410
40	54.164	99.006	0.2924	1.144	374.100	1.9160	0.761	374.000	1.8810	0.569	373.800	1.8560
50	55.254	100.980	0.2963	1.165	378.200	1.9310	0.775	378.100	1.8960	0.580	377.900	1.8710
60	56.343	102.980	0.3002	1.186	382.400	1.9450	0.789	382.200	1.9110	0.591	382.100	1.8860
70	57.431	105.000	0.3041	1.207	386.600	1.9600	0.803	386.400	1.9250	0.602	386.300	1.9010
80	58.520	107.040	0.3079	1.229	390.800	1.9740	0.818	390.700	1.9400	0.612	390.500	1.9150
90	59.608	109.110	0.3117	1.250	395.100	1.9890	0.832	394.900	1.9550	0.623	394.800	1.9300
100	60.696	111.210	0.3155	1.271	399.400	2.0030	0.846	399.300	1.9690	0.634	399.100	1.9440
110	61.784	113.330	0.3192	1.292	403.800	2.0180	0.860	403.600	1.9830	0.644	403.500	1.9590
120	62.872	115.470	0.3230	1.313	408.200	2.0320	0.874	408.000	1.9970	0.655	407.900	1.9730
130	63.960	117.630	0.3267	1.334	412.600	2.0460	0.889	412.500	2.0120	0.666	412.400	1.9870
140	65.047	119.820	0.3303	1.356	417.100	2.0600	0.903	417.000	2.0260	0.676	416.900	2.0010
150	66.135	122.030	0.3340	1.377	421.600	2.0740	0.917	421.500	2.0400	0.687	421.400	2.0150
160	67.222	124.270	0.3376	1.398	426.200	2.0880	0.931	426.100	2.0530	0.697	426.000	2.0290
170	68.309	126.520	0.3412	1.419	430.900	2.1010	0.945	430.800	2.0670	0.708	430.700	2.0430
180	69.397	128.800	0.3448	1.440	435.550	2.1150	0.959	435.450	2.0810	0.719	435.350	2.0565
190	70.484	131.100	0.3484	1.461	440.200	2.1290	0.973	440.100	2.0950	0.729	440.000	2.0700
200	71.571	133.420	0.3520	1.482	445.000	2.1420	0.987	444.900	2.1080	0.740	444.800	2.0840
210	72.657	135.770	0.3555	-	-	-	-	-	-	-	-	-

Temp (°F)	Absolute Pressure (psia)											
	5 (-89°F)			6 (-83.4°F)			7 (-78.5°F)			8 (-74.2°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-80	8.079	76.843	0.2097	6.705	76.723	0.2058	-	-	-	-	-	-
-70	8.308	78.547	0.2141	6.898	78.438	0.2103	5.890	78.327	0.2070	5.134	78.215	0.2041
-60	8.536	80.273	0.2185	7.090	80.172	0.2147	6.056	80.070	0.2114	5.281	79.968	0.2085
-50	8.763	82.021	0.2228	7.280	81.928	0.2190	6.221	81.834	0.2157	5.426	81.740	0.2129
-40	8.989	83.792	0.2271	7.470	83.706	0.2233	6.385	83.619	0.2200	5.571	83.532	0.2172
-30	9.213	85.586	0.2313	7.658	85.506	0.2275	6.548	85.425	0.2243	5.714	85.344	0.2215
-20	9.437	87.403	0.2355	7.846	87.329	0.2317	6.710	87.254	0.2285	5.857	87.178	0.2257
-10	9.661	89.244	0.2396	8.034	89.174	0.2359	6.871	89.104	0.2327	5.999	89.034	0.2299
0	9.884	91.108	0.2437	8.220	91.043	0.2400	7.032	90.978	0.2368	6.141	90.912	0.2340
10	10.106	92.997	0.2478	8.407	92.936	0.2441	7.193	92.874	0.2409	6.282	92.813	0.2381
20	10.328	94.909	0.2518	8.592	94.851	0.2481	7.353	94.794	0.2449	6.423	94.736	0.2421
30	10.550	96.845	0.2558	8.778	96.791	0.2521	7.512	96.737	0.2489	6.563	96.682	0.2461
40	10.771	98.804	0.2598	8.963	98.754	0.2561	7.671	98.703	0.2529	6.703	98.651	0.2501
50	10.992	100.790	0.2637	9.148	100.740	0.2600	7.830	100.690	0.2568	6.842	100.640	0.2541
60	11.212	102.800	0.2676	9.332	102.750	0.2639	7.989	102.700	0.2607	6.981	102.660	0.2580
70	11.433	104.830	0.2715	9.516	104.780	0.2678	8.147	104.740	0.2646	7.120	104.700	0.2619
80	11.653	106.880	0.2753	9.700	106.840	0.2716	8.305	106.800	0.2685	7.259	106.760	0.2657
90	11.873	108.960	0.2792	9.884	108.920	0.2754	8.463	108.880	0.2723	7.398	108.840	0.2696
100	12.093	111.060	0.2829	10.067	111.020	0.2792	8.621	110.990	0.2761	7.536	110.950	0.2734
110	12.312	113.190	0.2867	10.251	113.150	0.2830	8.778	113.110	0.2799	7.674	113.080	0.2771
120	12.532	115.330	0.2904	10.434	115.300	0.2867	8.936	115.270	0.2836	7.812	115.230	0.2809
130	12.751	117.500	0.2942	10.617	117.470	0.2905	9.093	117.440	0.2873	7.950	117.410	0.2846
140	12.970	119.700	0.2978	10.800	119.670	0.2941	9.250	119.640	0.2910	8.088	119.600	0.2883
150	13.189	121.910	0.3015	10.983	121.880	0.2978	9.407	121.850	0.2947	8.225	121.820	0.2920
160	13.408	124.150	0.3052	11.166	124.120	0.3015	9.564	124.090	0.2983	8.363	124.070	0.2956
170	13.627	126.410	0.3088	11.348	126.380	0.3051	9.721	126.360	0.3019	8.500	126.330	0.2992
180	13.845	128.690	0.3124	11.531	128.670	0.3087	9.878	128.640	0.3055	8.638	128.620	0.3028
190	14.064	131.000	0.3159	11.713	130.970	0.3122	10.034	130.950	0.3091	8.775	130.920	0.3064
200	14.283	133.330	0.3195	11.896	133.300	0.3158	10.191	133.280	0.3127	8.912	133.250	0.3100
210	14.501	135.670	0.3230	12.078	135.650	0.3193	10.347	135.630	0.3162	9.049	135.600	0.3135
220	14.720	138.040	0.3265	12.260	138.020	0.3228	10.503	138.000	0.3197	9.186	137.970	0.3170
230	14.938	140.430	0.3300	12.422	140.410	0.3263	10.660	140.390	0.3232	9.323	140.360	0.3205

Table 2 (continued)
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)											
	9 (-70.3°F)			10 (-66.6°F)			11 (-63.3°F)			12 (-60.2°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-60	4.678	79.865	0.2059	4.195	79.761	0.2036	3.800	79.656	0.2015	3.471	79.550	0.1996
-50	4.808	81.645	0.2103	4.314	81.549	0.2080	3.909	81.453	0.2060	3.572	81.356	0.2040
-40	4.938	83.444	0.2147	4.431	83.356	0.2124	4.017	83.267	0.2103	3.671	83.177	0.2084
-30	5.066	85.263	0.2190	4.548	85.181	0.2167	4.124	85.099	0.2146	3.770	85.016	0.2128
-20	5.194	87.103	0.2232	4.664	87.027	0.2209	4.229	86.951	0.2189	3.868	86.874	0.2170
-10	5.321	88.964	0.2274	4.779	88.893	0.2251	4.335	88.822	0.2231	3.965	88.751	0.2212
0	5.448	90.847	0.2315	4.893	90.781	0.2293	4.439	90.714	0.2273	4.061	90.648	0.2254
10	5.574	92.751	0.2356	5.007	92.690	0.2334	4.543	92.628	0.2314	4.157	92.565	0.2295
20	5.699	94.678	0.2397	5.121	94.620	0.2375	4.647	94.562	0.2355	4.253	94.504	0.2336
30	5.824	96.628	0.2437	5.234	96.573	0.2415	4.750	96.519	0.2395	4.348	96.464	0.2377
40	5.949	98.600	0.2477	5.346	98.549	0.2455	4.853	98.497	0.2435	4.442	98.446	0.2417
50	6.074	100.600	0.2516	5.459	100.550	0.2495	4.956	100.500	0.2475	4.537	100.450	0.2457
60	6.198	102.610	0.2556	5.571	102.570	0.2534	5.058	102.520	0.2514	4.631	102.470	0.2496
70	6.322	104.650	0.2594	5.682	104.610	0.2573	5.160	104.570	0.2553	4.724	104.520	0.2535
80	6.445	106.720	0.2633	5.794	106.680	0.2611	5.262	106.630	0.2592	4.818	106.590	0.2574
90	6.569	108.800	0.2671	5.906	108.760	0.2650	5.363	108.720	0.2630	4.911	108.680	0.2612
100	6.692	110.910	0.2709	6.017	110.870	0.2688	5.465	110.840	0.2668	5.004	110.800	0.2650
110	6.815	113.040	0.2747	6.128	113.010	0.2726	5.566	112.970	0.2706	5.097	112.940	0.2688
120	6.938	115.200	0.2785	6.239	115.160	0.2763	5.667	115.130	0.2743	5.190	115.100	0.2726
130	7.061	117.370	0.2822	6.350	117.340	0.2800	5.768	117.310	0.2781	5.283	117.280	0.2763
140	7.184	119.570	0.2859	6.460	119.540	0.2837	5.868	119.510	0.2818	5.375	119.480	0.2800
150	7.306	121.790	0.2896	6.571	121.760	0.2874	5.969	121.730	0.2855	5.468	121.700	0.2837
160	7.429	124.040	0.2932	6.681	124.010	0.2911	6.070	123.980	0.2891	5.560	123.950	0.2873
170	7.551	126.300	0.2968	6.791	126.270	0.2947	6.170	126.250	0.2927	5.652	126.220	0.2910
180	7.673	128.590	0.3004	6.902	128.560	0.2983	6.270	128.540	0.2963	5.744	128.510	0.2946
190	7.795	130.900	0.3040	7.012	130.870	0.3019	6.371	130.850	0.2999	5.836	130.820	0.2982
200	7.917	133.230	0.3076	7.122	133.200	0.3054	6.471	133.180	0.3035	5.928	133.150	0.3017
210	8.039	135.580	0.3111	7.232	135.550	0.3090	6.571	135.530	0.3070	6.020	135.510	0.3053
220	8.161	137.950	0.3146	7.341	137.930	0.3125	6.671	137.900	0.3105	6.112	137.880	0.3088
230	8.283	140.340	0.3181	7.451	140.320	0.3160	6.771	140.300	0.3140	6.203	140.280	0.3123
240	8.405	142.760	0.3216	7.561	142.730	0.3195	6.871	142.710	0.3175	6.295	142.690	0.3157
250	8.527	145.190	0.3250	7.671	145.170	0.3229	6.970	145.150	0.3210	6.387	145.130	0.3192

Temp (°F)	Absolute Pressure (psia)											
	13 (-57.3°F)			14 (-54.6°F)			14.7 (-52.8°F)			15 (-52°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-50	3.286	81.258	0.2022	3.042	81.160	0.2006	2.891	81.091	0.1995	2.829	81.061	0.1990
-40	3.379	83.088	0.2067	3.128	82.997	0.2050	2.974	82.934	0.2039	2.911	82.906	0.2035
-30	3.471	84.933	0.2110	3.214	84.850	0.2094	3.056	84.791	0.2083	2.992	84.766	0.2078
-20	3.561	86.797	0.2153	3.299	86.719	0.2137	3.137	86.665	0.2126	3.071	86.642	0.2122
-10	3.652	88.679	0.2195	3.383	88.607	0.2179	3.218	88.557	0.2169	3.151	88.535	0.2164
0	3.741	90.581	0.2237	3.467	90.514	0.2221	3.298	90.467	0.2211	3.229	90.447	0.2206
10	3.830	92.503	0.2278	3.550	92.440	0.2263	3.377	92.396	0.2252	3.307	92.377	0.2248
20	3.917	94.445	0.2319	3.632	94.387	0.2304	3.456	94.346	0.2293	3.384	94.328	0.2289
30	4.007	96.409	0.2360	3.715	96.354	0.2344	3.535	96.315	0.2334	3.461	96.298	0.2329
40	4.094	98.394	0.2400	3.796	98.342	0.2384	3.613	98.306	0.2374	3.538	98.290	0.2370
50	4.182	100.400	0.2440	3.878	100.350	0.2424	3.691	100.320	0.2414	3.614	100.300	0.2410
60	4.269	102.430	0.2479	3.959	102.380	0.2464	3.768	102.350	0.2453	3.690	102.340	0.2449
70	4.356	104.480	0.2518	4.040	104.440	0.2503	3.845	104.400	0.2493	3.766	104.390	0.2488
80	4.442	106.550	0.2557	4.120	106.510	0.2542	3.922	106.480	0.2531	3.841	106.470	0.2527
90	4.529	108.650	0.2595	4.201	108.610	0.2580	3.999	108.580	0.2570	3.917	108.570	0.2566
100	4.615	110.760	0.2634	4.281	110.720	0.2618	4.075	110.700	0.2608	3.992	110.690	0.2604
110	4.701	112.900	0.2671	4.361	112.860	0.2656	4.152	112.840	0.2646	4.067	112.830	0.2642
120	4.787	115.060	0.2709	4.441	115.030	0.2694	4.228	115.000	0.2684	4.141	114.990	0.2679
130	4.872	117.240	0.2746	4.521	117.210	0.2731	4.304	117.190	0.2721	4.216	117.180	0.2717
140	4.958	119.450	0.2783	4.600	119.420	0.2768	4.380	119.390	0.2758	4.290	119.390	0.2754
150	5.043	121.670	0.2820	4.680	121.640	0.2805	4.456	121.620	0.2795	4.365	121.610	0.2791
160	5.129	123.920	0.2857	4.759	123.890	0.2842	4.532	123.870	0.2832	4.439	123.860	0.2827
170	5.214	126.190	0.2893	4.838	126.160	0.2878	4.607	126.150	0.2868	4.513	126.140	0.2864
180	5.299	128.480	0.2929	4.918	128.460	0.2914	4.683	128.440	0.2904	4.587	128.430	0.2900
190	5.384	130.800	0.2965	4.997	130.770	0.2950	4.758	130.750	0.2940	4.661	130.740	0.2936
200	5.469	133.130	0.3001	5.076	133.100	0.2986	4.833	133.090	0.2976	4.735	133.080	0.2971
210	5.554	135.480	0.3036	5.155	135.460	0.3021	4.909	135.440	0.3011	4.808	135.440	0.3007
220	5.639	137.860	0.3071	5.233	137.840	0.3056	4.984	137.820	0.3046	4.882	137.810	0.3042
230	5.724	140.250	0.3106	5.312	140.230	0.3091	5.059	140.220	0.3081	4.956	140.210	0.3077
240	5.808	142.670	0.3141	5.391	142.650	0.3126	5.134	142.630	0.3116	5.029	142.630	0.3112
250	5.893	145.110	0.3176	5.470	145.090	0.3161	5.209	145.070	0.3151	5.103	145.060	0.3147
260	5.977	147.560	0.3210	5.548	147.540	0.3195	5.284	147.530	0.3185	5.176	147.520	0.3181

Table 2 (continued)
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)											
	16 (-49.6°F)			17 (-47.2°F)			18 (-45°F)			19 (-42.9°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-40	2.721	82.815	0.2020	2.553	82.722	0.2006	2.404	82.630	0.1993	2.270	82.536	0.1980
-30	2.797	84.681	0.2064	2.625	84.596	0.2050	2.473	84.513	0.2037	2.336	84.427	0.2025
-20	2.872	86.564	0.2107	2.697	86.485	0.2094	2.540	86.409	0.2081	2.401	86.330	0.2069
-10	2.947	88.462	0.2150	2.767	88.389	0.2137	2.608	88.320	0.2124	2.465	88.247	0.2112
0	3.021	90.379	0.2192	2.837	90.311	0.2179	2.674	90.248	0.2166	2.528	90.180	0.2154
10	3.094	92.314	0.2234	2.907	92.251	0.2221	2.740	92.193	0.2208	2.591	92.129	0.2196
20	3.167	94.269	0.2275	2.976	94.209	0.2262	2.805	94.156	0.2250	2.653	94.096	0.2238
30	3.240	96.243	0.2316	3.044	96.187	0.2303	2.870	96.138	0.2290	2.715	96.082	0.2279
40	3.312	98.238	0.2356	3.112	98.185	0.2343	2.935	98.139	0.2331	2.776	98.087	0.2319
50	3.384	100.250	0.2396	3.180	100.200	0.2383	2.999	100.160	0.2371	2.837	100.110	0.2359
60	3.455	102.290	0.2435	3.248	102.240	0.2423	3.063	102.200	0.2411	2.898	102.160	0.2399
70	3.526	104.350	0.2475	3.315	104.300	0.2462	3.127	104.260	0.2450	2.959	104.220	0.2438
80	3.597	106.430	0.2514	3.382	106.380	0.2501	3.190	106.350	0.2489	3.019	106.300	0.2477
90	3.668	108.530	0.2552	3.449	108.490	0.2539	3.254	108.450	0.2528	3.079	108.410	0.2516
100	3.739	110.650	0.2590	3.515	110.610	0.2578	3.317	110.580	0.2566	3.139	110.540	0.2554
110	3.809	112.790	0.2628	3.581	112.760	0.2616	3.379	112.720	0.2604	3.199	112.680	0.2593
120	3.879	114.960	0.2666	3.648	114.920	0.2653	3.442	114.890	0.2642	3.258	114.850	0.2630
130	3.949	117.150	0.2703	3.714	117.110	0.2691	3.505	117.080	0.2679	3.317	117.040	0.2668
140	4.019	119.350	0.2741	3.780	119.320	0.2728	3.567	119.290	0.2716	3.377	119.260	0.2705
150	4.089	121.580	0.2777	3.845	121.550	0.2765	3.629	121.520	0.2753	3.436	121.490	0.2742
160	4.158	123.840	0.2814	3.911	123.810	0.2802	3.691	123.770	0.2790	3.495	123.740	0.2778
170	4.228	126.110	0.2851	3.977	126.080	0.2838	3.753	126.040	0.2826	3.553	126.020	0.2815
180	4.298	128.400	0.2887	4.042	128.380	0.2874	3.815	128.340	0.2862	3.612	128.310	0.2851
190	4.367	130.720	0.2923	4.108	130.690	0.2910	3.877	130.660	0.2898	3.671	130.630	0.2887
200	4.436	133.050	0.2958	4.173	133.030	0.2946	3.939	132.990	0.2934	3.730	132.970	0.2923
210	4.505	135.410	0.2994	4.238	135.390	0.2981	4.001	135.350	0.2969	3.788	135.330	0.2958
220	4.575	137.790	0.3029	4.303	137.770	0.3017	4.062	137.730	0.3005	3.847	137.710	0.2994
230	4.644	140.190	0.3064	4.368	140.160	0.3052	4.124	140.130	0.3040	3.905	140.110	0.3029
240	4.713	142.610	0.3099	4.434	142.580	0.3086	4.185	142.550	0.3075	3.963	142.530	0.3063
250	4.782	145.040	0.3133	4.499	145.020	0.3121	4.247	144.990	0.3109	4.022	144.970	0.3098
260	4.851	147.500	0.3168	4.563	147.480	0.3155	4.308	147.450	0.3144	4.080	147.430	0.3133

Temp (°F)	Absolute Pressure (psia)											
	20 (-40.8°F)			21 (-38.9°F)			22 (-37°F)			23 (-35.2°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-30	2.213	84.340	0.2013	2.101	84.253	0.2002	—	—	—	—	—	—
-20	2.275	86.250	0.2057	2.161	86.170	0.2046	2.057	86.089	0.2035	—	—	—
-10	2.336	88.173	0.2100	2.220	88.099	0.2089	2.114	88.024	0.2079	2.017	87.949	0.2069
0	2.396	90.111	0.2143	2.278	90.042	0.2132	2.169	89.973	0.2122	2.071	89.903	0.2112
10	2.456	92.065	0.2185	2.335	92.001	0.2174	2.224	91.936	0.2164	2.123	91.871	0.2154
20	2.516	94.037	0.2227	2.392	93.976	0.2216	2.279	93.916	0.2206	2.176	93.855	0.2196
30	2.575	96.026	0.2268	2.448	95.970	0.2257	2.333	95.913	0.2247	2.228	95.856	0.2237
40	2.633	98.034	0.2308	2.504	97.981	0.2298	2.387	97.928	0.2288	2.279	97.875	0.2278
50	2.692	100.060	0.2348	2.560	100.010	0.2338	2.440	99.961	0.2328	2.331	99.911	0.2318
60	2.750	102.110	0.2388	2.615	102.060	0.2378	2.493	102.010	0.2368	2.382	101.970	0.2358
70	2.807	104.180	0.2428	2.670	104.130	0.2417	2.546	104.090	0.2407	2.432	104.040	0.2398
80	2.865	106.260	0.2467	2.725	106.220	0.2456	2.598	106.180	0.2446	2.483	106.140	0.2437
90	2.922	108.370	0.2505	2.780	108.330	0.2495	2.651	108.290	0.2485	2.533	108.250	0.2476
100	2.979	110.500	0.2544	2.834	110.460	0.2533	2.703	110.420	0.2524	2.583	110.380	0.2514
110	3.036	112.650	0.2582	2.888	112.610	0.2571	2.755	112.580	0.2562	2.632	112.540	0.2552
120	3.092	114.820	0.2620	2.943	114.780	0.2609	2.806	114.750	0.2600	2.682	114.720	0.2590
130	3.149	117.010	0.2657	2.996	116.980	0.2647	2.858	116.940	0.2637	2.731	116.910	0.2628
140	3.205	119.220	0.2694	3.050	119.190	0.2684	2.909	119.160	0.2674	2.781	119.130	0.2665
150	3.261	121.460	0.2731	3.104	121.430	0.2721	2.961	121.400	0.2711	2.830	121.370	0.2702
160	3.318	123.710	0.2768	3.157	123.680	0.2758	3.012	123.650	0.2748	2.879	123.630	0.2739
170	3.374	125.990	0.2804	3.211	125.960	0.2794	3.063	125.930	0.2784	2.928	125.910	0.2775
180	3.429	128.290	0.2840	3.264	128.260	0.2830	3.114	128.230	0.2821	2.977	128.210	0.2811
190	3.485	130.600	0.2876	3.317	130.580	0.2866	3.165	130.550	0.2857	3.025	130.530	0.2848
200	3.541	132.940	0.2912	3.371	132.920	0.2902	3.216	132.890	0.2892	3.074	132.870	0.2883
210	3.597	135.300	0.2948	3.424	135.280	0.2938	3.266	135.260	0.2928	3.123	135.230	0.2919
220	3.652	137.680	0.2983	3.477	137.660	0.2973	3.317	137.640	0.2963	3.171	137.620	0.2954
230	3.708	140.090	0.3018	3.530	140.060	0.3008	3.368	140.040	0.2998	3.220	140.020	0.2989
240	3.763	142.510	0.3053	3.583	142.490	0.3043	3.418	142.470	0.3033	3.268	142.440	0.3024
250	3.819	144.950	0.3088	3.635	144.930	0.3078	3.469	144.910	0.3068	3.316	144.890	0.3059
260	3.874	147.410	0.3122	3.688	147.390	0.3112	3.519	147.370	0.3102	3.365	147.350	0.3093
270	3.929	149.900	0.3156	3.741	149.880	0.3146	3.569	149.860	0.3137	3.413	149.840	0.3128

Table 2 (continued)
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)											
	24 (-33.4°F)			25 (-31.7°F)			26 (-30°F)			27 (-28.4°F)		
	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-30	1.823	83.990	0.1970	—	—	—	—	—	—	—	—	—
-20	1.876	85.927	0.2015	1.796	85.845	0.2005	—	—	—	—	—	—
-10	1.928	87.874	0.2059	1.847	87.798	0.2049	1.771	87.722	0.2040	1.702	87.645	0.2031
0	1.980	89.833	0.2102	1.897	89.763	0.2093	1.820	89.692	0.2084	1.748	89.621	0.2075
10	2.031	91.806	0.2144	1.946	91.741	0.2135	1.867	91.675	0.2126	1.794	91.609	0.2118
20	2.081	93.795	0.2186	1.995	93.734	0.2177	1.914	93.672	0.2168	1.840	93.611	0.2160
30	2.131	95.799	0.2228	2.043	95.742	0.2219	1.961	95.685	0.2210	1.885	95.627	0.2201
40	2.181	97.821	0.2268	2.091	97.768	0.2259	2.007	97.714	0.2251	1.930	97.660	0.2242
50	2.230	99.861	0.2309	2.138	99.811	0.2300	2.053	99.760	0.2291	1.974	99.709	0.2283
60	2.279	101.920	0.2349	2.185	101.870	0.2340	2.098	101.820	0.2331	2.018	101.780	0.2323
70	2.328	104.000	0.2388	2.232	103.950	0.2380	2.144	103.910	0.2371	2.062	103.860	0.2363
80	2.376	106.090	0.2428	2.279	106.050	0.2419	2.188	106.010	0.2410	2.105	105.970	0.2402
90	2.425	108.210	0.2467	2.325	108.170	0.2458	2.233	108.130	0.2449	2.148	108.090	0.2441
100	2.472	110.350	0.2505	2.371	110.310	0.2496	2.278	110.270	0.2488	2.191	110.230	0.2480
110	2.520	112.500	0.2543	2.417	112.470	0.2535	2.322	112.430	0.2526	2.234	112.390	0.2518
120	2.568	114.680	0.2581	2.463	114.650	0.2573	2.366	114.610	0.2564	2.276	114.580	0.2556
130	2.615	116.880	0.2619	2.509	116.850	0.2610	2.410	116.810	0.2602	2.319	116.780	0.2594
140	2.663	119.100	0.2656	2.554	119.070	0.2647	2.454	119.030	0.2639	2.361	119.000	0.2631
150	2.710	121.340	0.2693	2.600	121.310	0.2685	2.498	121.280	0.2676	2.403	121.250	0.2668
160	2.757	123.600	0.2730	2.645	123.570	0.2721	2.541	123.540	0.2713	2.445	123.510	0.2705
170	2.804	125.880	0.2766	2.690	125.850	0.2758	2.585	125.820	0.2750	2.487	125.790	0.2742
180	2.851	128.180	0.2803	2.735	128.150	0.2794	2.628	128.130	0.2786	2.529	128.100	0.2778
190	2.898	130.500	0.2839	2.780	130.480	0.2830	2.672	130.450	0.2822	2.571	130.420	0.2814
200	2.944	132.840	0.2874	2.825	132.820	0.2866	2.715	132.790	0.2858	2.613	132.770	0.2850
210	2.991	135.210	0.2910	2.870	135.180	0.2902	2.758	135.160	0.2893	2.654	135.140	0.2886
220	3.037	137.590	0.2945	2.914	137.570	0.2937	2.801	137.550	0.2929	2.696	137.520	0.2921
230	3.084	140.000	0.2980	2.959	139.970	0.2972	2.844	139.950	0.2964	2.737	139.930	0.2956
240	3.130	142.420	0.3015	3.004	142.400	0.3007	2.887	142.380	0.2999	2.779	142.360	0.2991
250	3.177	144.870	0.3050	3.048	144.850	0.3042	2.930	144.830	0.3034	2.820	144.800	0.3026
260	3.223	147.330	0.3085	3.093	147.310	0.3076	2.973	147.290	0.3068	2.861	147.270	0.3060
270	3.269	149.820	0.3119	3.137	149.800	0.3111	3.015	149.780	0.3102	2.903	149.760	0.3095
280	3.316	152.330	0.3153	3.182	152.310	0.3145	3.058	152.290	0.3137	2.944	152.270	0.3129

Temp (°F)	Absolute Pressure (psia)											
	28 (-26.9°F)			29 (-25.3°F)			30 (-23.8°F)			31 (-22.4°F)		
	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft³/lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
-10	1.637	87.568	0.2023	1.577	87.491	0.2014	1.520	87.414	0.2006	—	—	—
0	1.682	89.550	0.2066	1.621	89.479	0.2058	1.563	89.407	0.2050	1.509	89.335	0.2042
10	1.727	91.543	0.2109	1.664	91.477	0.2101	1.605	91.410	0.2093	1.550	91.343	0.2086
20	1.771	93.549	0.2152	1.707	93.487	0.2144	1.647	93.425	0.2136	1.591	93.363	0.2128
30	1.815	95.570	0.2193	1.749	95.512	0.2185	1.688	95.454	0.2178	1.631	95.396	0.2170
40	1.858	97.606	0.2234	1.791	97.552	0.2227	1.729	97.497	0.2219	1.670	97.443	0.2212
50	1.901	99.659	0.2275	1.832	99.608	0.2267	1.769	99.557	0.2260	1.709	99.505	0.2252
60	1.943	101.730	0.2315	1.874	101.680	0.2308	1.809	101.630	0.2300	1.748	101.580	0.2293
70	1.985	103.820	0.2355	1.915	103.770	0.2347	1.848	103.730	0.2340	1.787	103.680	0.2333
80	2.027	105.920	0.2394	1.955	105.880	0.2387	1.888	105.840	0.2379	1.825	105.790	0.2372
90	2.069	108.050	0.2433	1.996	108.010	0.2426	1.927	107.970	0.2419	1.863	107.930	0.2411
100	2.111	110.190	0.2472	2.036	110.150	0.2465	1.966	110.120	0.2457	1.901	110.080	0.2450
110	2.152	112.360	0.2510	2.076	112.320	0.2503	2.005	112.280	0.2496	1.938	112.250	0.2489
120	2.193	114.540	0.2548	2.116	114.510	0.2541	2.043	114.470	0.2534	1.976	114.440	0.2527
130	2.234	116.750	0.2586	2.155	116.710	0.2579	2.082	116.680	0.2571	2.013	116.650	0.2565
140	2.275	118.970	0.2624	2.195	118.940	0.2616	2.120	118.910	0.2609	2.050	118.870	0.2602
150	2.316	121.210	0.2661	2.234	121.180	0.2653	2.158	121.150	0.2646	2.087	121.120	0.2639
160	2.356	123.480	0.2698	2.274	123.450	0.2690	2.196	123.420	0.2683	2.124	123.390	0.2676
170	2.397	125.770	0.2734	2.313	125.740	0.2727	2.234	125.710	0.2720	2.161	125.680	0.2713
180	2.437	128.070	0.2770	2.352	128.040	0.2763	2.272	128.020	0.2756	2.197	127.990	0.2749
190	2.478	130.400	0.2807	2.391	130.370	0.2799	2.310	130.350	0.2792	2.234	130.320	0.2785
200	2.518	132.740	0.2842	2.430	132.720	0.2835	2.347	132.690	0.2828	2.270	132.670	0.2821
210	2.558	135.110	0.2878	2.469	135.090	0.2871	2.385	135.060	0.2864	2.307	135.040	0.2857
220	2.598	137.500	0.2913	2.507	137.480	0.2906	2.423	137.450	0.2899	2.343	137.430	0.2892
230	2.638	139.910	0.2949	2.546	139.890	0.2941	2.460	139.860	0.2934	2.380	139.840	0.2927
240	2.678	142.340	0.2984	2.585	142.310	0.2976	2.497	142.290	0.2969	2.416	142.270	0.2962
250	2.718	144.780	0.3018	2.623	144.760	0.3011	2.535	144.740	0.3004	2.452	144.720	0.2997
260	2.758	147.250	0.3053	2.662	147.230	0.3046	2.572	147.210	0.3039	2.488	147.190	0.3032
270	2.798	149.740	0.3087	2.700	149.720	0.3080	2.609	149.700	0.3073	2.524	149.680	0.3066
280	2.838	152.250	0.3121	2.739	152.230	0.3114	2.646	152.210	0.3107	2.560	152.190	0.3100
290	2.877	154.780	0.3155	2.777	154.760	0.3148	2.684	154.740	0.3141	2.596	154.720	0.3134

Table 2 (continued) R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)											
	32 (-21°F)			33 (-19.6°F)			34 (-18.3°F)			35 (-17°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
0	1.459	89.262	0.2035	1.411	89.189	0.2027	1.367	89.116	0.2020	—	—	—
10	1.499	91.276	0.2078	1.450	91.208	0.2071	1.405	91.141	0.2064	1.362	91.073	0.2057
20	1.538	93.300	0.2121	1.489	93.238	0.2114	1.442	93.175	0.2107	1.398	93.111	0.2100
30	1.577	95.337	0.2163	1.526	95.279	0.2156	1.479	95.220	0.2149	1.434	95.161	0.2142
40	1.615	97.388	0.2204	1.564	97.333	0.2197	1.515	97.278	0.2191	1.470	97.223	0.2184
50	1.653	99.454	0.2245	1.601	99.403	0.2238	1.551	99.351	0.2232	1.505	99.299	0.2225
60	1.691	101.540	0.2286	1.638	101.490	0.2279	1.587	101.440	0.2272	1.540	101.390	0.2266
70	1.729	103.630	0.2326	1.674	103.590	0.2319	1.623	103.540	0.2312	1.574	103.500	0.2306
80	1.766	105.750	0.2365	1.710	105.710	0.2359	1.658	105.660	0.2352	1.609	105.620	0.2346
90	1.803	107.890	0.2404	1.746	107.840	0.2398	1.693	107.800	0.2391	1.643	107.760	0.2385
100	1.839	110.040	0.2443	1.782	110.000	0.2437	1.728	109.960	0.2430	1.676	109.920	0.2424
110	1.876	112.210	0.2482	1.817	112.170	0.2475	1.762	112.140	0.2469	1.710	112.100	0.2462
120	1.912	114.400	0.2520	1.853	114.370	0.2513	1.796	114.330	0.2507	1.744	114.300	0.2501
130	1.948	116.610	0.2558	1.888	116.580	0.2551	1.831	116.550	0.2545	1.777	116.510	0.2538
140	1.984	118.840	0.2595	1.923	118.810	0.2589	1.865	118.780	0.2582	1.810	118.750	0.2576
150	2.020	121.090	0.2632	1.958	121.060	0.2626	1.899	121.030	0.2620	1.843	121.000	0.2613
160	2.056	123.360	0.2669	1.992	123.330	0.2663	1.932	123.300	0.2657	1.876	123.270	0.2650
170	2.092	125.650	0.2706	2.027	125.630	0.2700	1.966	125.600	0.2693	1.909	125.570	0.2687
180	2.127	127.960	0.2742	2.062	127.940	0.2736	2.000	127.910	0.2730	1.941	127.880	0.2724
190	2.163	130.290	0.2779	2.096	130.270	0.2772	2.033	130.240	0.2766	1.974	130.220	0.2760
200	2.198	132.640	0.2814	2.130	132.620	0.2808	2.067	132.590	0.2802	2.006	132.570	0.2796
210	2.234	135.020	0.2850	2.165	134.990	0.2844	2.100	134.970	0.2837	2.039	134.940	0.2831
220	2.269	137.410	0.2886	2.199	137.380	0.2879	2.133	137.360	0.2873	2.071	137.340	0.2867
230	2.304	139.820	0.2921	2.233	139.800	0.2914	2.166	139.770	0.2908	2.104	139.750	0.2902
240	2.339	142.250	0.2956	2.267	142.230	0.2949	2.200	142.210	0.2943	2.136	142.180	0.2937
250	2.374	144.700	0.2991	2.301	144.680	0.2984	2.233	144.660	0.2978	2.168	144.640	0.2972
260	2.409	147.170	0.3025	2.335	147.150	0.3019	2.266	147.130	0.3013	2.200	147.110	0.3007
270	2.444	149.660	0.3060	2.369	149.640	0.3053	2.299	149.620	0.3047	2.232	149.600	0.3041
280	2.479	152.170	0.3094	2.403	152.150	0.3087	2.332	152.140	0.3081	2.264	152.120	0.3075
290	2.514	154.700	0.3128	2.437	154.690	0.3121	2.364	154.670	0.3115	2.296	154.650	0.3109
300	2.549	157.250	0.3162	2.471	157.240	0.3155	2.397	157.220	0.3149	2.328	157.200	0.3143

Temp (°F)	Absolute Pressure (psia)											
	36 (-15.7°F)			37 (-14.4°F)			38 (-13.2°F)			39 (-12.0°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
0	1.285	88.969	0.2006	1.247	88.895	0.2000	—	—	—	—	—	—
10	1.321	91.004	0.2050	1.282	90.936	0.2044	1.246	90.867	0.2037	1.211	90.797	0.2031
20	1.357	93.048	0.2093	1.317	92.984	0.2087	1.280	92.920	0.2080	1.245	92.856	0.2074
30	1.392	95.102	0.2136	1.352	95.042	0.2129	1.314	94.983	0.2123	1.278	94.923	0.2117
40	1.427	97.168	0.2177	1.386	97.112	0.2171	1.347	97.056	0.2165	1.310	97.000	0.2159
50	1.461	99.247	0.2219	1.419	99.195	0.2212	1.380	99.143	0.2206	1.342	99.090	0.2200
60	1.495	101.340	0.2259	1.453	101.290	0.2253	1.412	101.240	0.2247	1.374	101.190	0.2241
70	1.529	103.450	0.2300	1.485	103.410	0.2293	1.444	103.360	0.2287	1.406	103.310	0.2282
80	1.562	105.580	0.2339	1.518	105.530	0.2333	1.476	105.490	0.2327	1.437	105.450	0.2321
90	1.595	107.720	0.2379	1.550	107.680	0.2373	1.508	107.640	0.2367	1.468	107.600	0.2361
100	1.628	109.880	0.2418	1.583	109.840	0.2412	1.539	109.800	0.2406	1.498	109.770	0.2400
110	1.661	112.060	0.2456	1.615	112.030	0.2450	1.570	111.990	0.2444	1.529	111.950	0.2439
120	1.694	114.260	0.2494	1.646	114.230	0.2489	1.601	114.190	0.2483	1.559	114.150	0.2477
130	1.726	116.480	0.2532	1.678	116.440	0.2526	1.632	116.410	0.2521	1.589	116.380	0.2515
140	1.758	118.710	0.2570	1.709	118.680	0.2564	1.663	118.650	0.2558	1.619	118.620	0.2553
150	1.790	120.970	0.2607	1.741	120.940	0.2601	1.694	120.910	0.2596	1.649	120.880	0.2590
160	1.822	123.250	0.2644	1.772	123.220	0.2639	1.724	123.190	0.2633	1.679	123.160	0.2627
170	1.854	125.540	0.2681	1.803	125.510	0.2675	1.754	125.480	0.2670	1.708	125.460	0.2664
180	1.886	127.860	0.2718	1.834	127.830	0.2712	1.785	127.800	0.2706	1.738	127.770	0.2701
190	1.918	130.190	0.2754	1.865	130.160	0.2748	1.815	130.140	0.2742	1.767	130.110	0.2737
200	1.950	132.540	0.2790	1.896	132.520	0.2784	1.845	132.490	0.2778	1.797	132.470	0.2773
210	1.981	134.920	0.2825	1.927	134.900	0.2820	1.875	134.870	0.2814	1.826	134.850	0.2809
220	2.013	137.310	0.2861	1.957	137.290	0.2855	1.905	137.270	0.2850	1.855	137.240	0.2844
230	2.044	139.730	0.2896	1.988	139.710	0.2890	1.935	139.680	0.2885	1.884	139.660	0.2879
240	2.075	142.160	0.2931	2.018	142.140	0.2926	1.964	142.120	0.2920	1.913	142.100	0.2915
250	2.107	144.620	0.2966	2.049	144.600	0.2960	1.994	144.570	0.2955	1.942	144.550	0.2949
260	2.138	147.090	0.3001	2.079	147.070	0.2995	2.024	147.050	0.2989	1.971	147.030	0.2984
270	2.169	149.580	0.3035	2.110	149.560	0.3029	2.053	149.540	0.3024	2.000	149.520	0.3018
280	2.200	152.100	0.3069	2.140	152.080	0.3064	2.083	152.060	0.3058	2.029	152.040	0.3053
290	2.232	154.630	0.3103	2.170	154.610	0.3098	2.113	154.590	0.3092	2.058	154.570	0.3087
300	2.263	157.180	0.3137	2.201	157.160	0.3131	2.142	157.150	0.3126	2.086	157.130	0.3121

Table 2 (continued)
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)											
	40 (-10.8°F)			41 (-9.63°F)			42 (-8.49°F)			43 (-7.37°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
10	1.179	90.728	0.2025	1.147	90.658	0.2019	1.118	90.588	0.2013	1.089	90.517	0.2007
20	1.211	92.791	0.2068	1.179	92.726	0.2062	1.149	92.661	0.2056	1.120	92.596	0.2051
30	1.244	94.863	0.2111	1.211	94.802	0.2105	1.180	94.742	0.2099	1.151	94.681	0.2094
40	1.275	96.944	0.2153	1.242	96.888	0.2147	1.211	96.832	0.2142	1.181	96.775	0.2136
50	1.307	99.038	0.2194	1.273	98.985	0.2189	1.241	98.932	0.2183	1.210	98.879	0.2178
60	1.338	101.140	0.2235	1.303	101.100	0.2230	1.271	101.050	0.2224	1.239	101.000	0.2219
70	1.369	103.270	0.2276	1.334	103.220	0.2270	1.300	103.170	0.2265	1.268	103.130	0.2259
80	1.399	105.400	0.2316	1.363	105.360	0.2310	1.329	105.310	0.2305	1.297	105.270	0.2299
90	1.429	107.560	0.2355	1.393	107.510	0.2350	1.358	107.470	0.2344	1.325	107.430	0.2339
100	1.459	109.730	0.2394	1.422	109.690	0.2389	1.387	109.650	0.2384	1.353	109.610	0.2378
110	1.489	111.910	0.2433	1.451	111.880	0.2428	1.415	111.840	0.2422	1.381	111.800	0.2417
120	1.519	114.120	0.2472	1.480	114.080	0.2466	1.444	114.050	0.2461	1.409	114.010	0.2456
130	1.548	116.340	0.2510	1.509	116.310	0.2504	1.472	116.270	0.2499	1.436	116.240	0.2494
140	1.577	118.590	0.2547	1.538	118.550	0.2542	1.500	118.520	0.2537	1.464	118.490	0.2532
150	1.607	120.850	0.2585	1.566	120.820	0.2579	1.528	120.780	0.2574	1.491	120.750	0.2569
160	1.636	123.130	0.2622	1.594	123.100	0.2617	1.555	123.070	0.2611	1.518	123.040	0.2606
170	1.664	125.430	0.2659	1.623	125.400	0.2653	1.583	125.370	0.2648	1.545	125.340	0.2643
180	1.693	127.750	0.2695	1.651	127.720	0.2690	1.611	127.690	0.2685	1.572	127.660	0.2680
190	1.722	130.090	0.2731	1.679	130.060	0.2726	1.638	130.030	0.2721	1.599	130.010	0.2716
200	1.751	132.440	0.2767	1.707	132.420	0.2762	1.665	132.390	0.2757	1.626	132.370	0.2752
210	1.779	134.820	0.2803	1.735	134.800	0.2798	1.693	134.770	0.2793	1.652	134.750	0.2788
220	1.808	137.220	0.2839	1.763	137.200	0.2834	1.720	137.170	0.2829	1.679	137.150	0.2824
230	1.836	139.640	0.2874	1.790	139.620	0.2869	1.747	139.590	0.2864	1.705	139.570	0.2859
240	1.864	142.080	0.2909	1.818	142.050	0.2904	1.774	142.030	0.2899	1.732	142.010	0.2894
250	1.893	144.530	0.2944	1.846	144.510	0.2939	1.801	144.490	0.2934	1.758	144.470	0.2929
260	1.921	147.010	0.2979	1.873	146.990	0.2974	1.828	146.970	0.2969	1.785	146.950	0.2964
270	1.949	149.510	0.3013	1.901	149.490	0.3008	1.855	149.470	0.3003	1.811	149.450	0.2998
280	1.977	152.020	0.3047	1.928	152.000	0.3042	1.882	151.980	0.3037	1.837	151.960	0.3032
290	2.005	154.560	0.3081	1.956	154.540	0.3076	1.909	154.520	0.3071	1.863	154.500	0.3066
300	2.034	157.110	0.3115	1.983	157.090	0.3110	1.935	157.070	0.3105	1.890	157.060	0.3100

Temp (°F)	Absolute Pressure (psia)											
	44 (-6.27°F)			45 (-5.19°F)			46 (-4.13°F)			47 (-3.08°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
10	1.062	90.446	0.2001	–	–	–	–	–	–	–	–	–
20	1.092	92.530	0.2045	1.066	92.465	0.2039	1.041	92.399	0.2034	1.016	92.332	0.2029
30	1.122	94.620	0.2088	1.095	94.559	0.2083	1.070	94.498	0.2077	1.045	94.436	0.2072
40	1.152	96.718	0.2130	1.124	96.661	0.2125	1.098	96.604	0.2120	1.073	96.547	0.2115
50	1.181	98.826	0.2172	1.153	98.773	0.2167	1.126	98.720	0.2162	1.100	98.666	0.2157
60	1.209	100.950	0.2213	1.181	100.900	0.2208	1.154	100.850	0.2203	1.127	100.800	0.2198
70	1.238	103.080	0.2254	1.209	103.030	0.2249	1.181	102.990	0.2244	1.154	102.940	0.2239
80	1.266	105.230	0.2294	1.236	105.180	0.2289	1.208	105.140	0.2284	1.181	105.090	0.2279
90	1.293	107.390	0.2334	1.263	107.350	0.2329	1.234	107.310	0.2324	1.207	107.260	0.2319
100	1.321	109.570	0.2373	1.290	109.530	0.2368	1.261	109.490	0.2363	1.233	109.450	0.2358
110	1.348	111.760	0.2412	1.317	111.730	0.2407	1.287	111.690	0.2402	1.259	111.650	0.2397
120	1.376	113.980	0.2451	1.344	113.940	0.2446	1.313	113.900	0.2441	1.284	113.870	0.2436
130	1.402	116.210	0.2489	1.370	116.170	0.2484	1.339	116.140	0.2479	1.310	116.100	0.2474
140	1.429	118.460	0.2527	1.396	118.420	0.2522	1.365	118.390	0.2517	1.335	118.360	0.2512
150	1.456	120.720	0.2564	1.423	120.690	0.2559	1.391	120.660	0.2554	1.360	120.630	0.2550
160	1.483	123.010	0.2601	1.449	122.980	0.2596	1.416	122.950	0.2592	1.385	122.920	0.2587
170	1.509	125.310	0.2638	1.475	125.280	0.2633	1.441	125.260	0.2629	1.410	125.230	0.2624
180	1.535	127.640	0.2675	1.500	127.610	0.2670	1.467	127.580	0.2665	1.435	127.560	0.2661
190	1.562	129.980	0.2711	1.526	129.950	0.2706	1.492	129.930	0.2702	1.459	129.900	0.2697
200	1.588	132.340	0.2747	1.552	132.320	0.2742	1.517	132.290	0.2738	1.484	132.270	0.2733
210	1.614	134.730	0.2783	1.577	134.700	0.2778	1.542	134.680	0.2774	1.508	134.650	0.2769
220	1.640	137.130	0.2819	1.603	137.100	0.2814	1.567	137.080	0.2809	1.533	137.060	0.2805
230	1.666	139.550	0.2854	1.628	139.530	0.2849	1.592	139.500	0.2845	1.557	139.480	0.2840
240	1.692	141.990	0.2889	1.653	141.970	0.2884	1.617	141.940	0.2880	1.582	141.920	0.2875
250	1.718	144.450	0.2924	1.679	144.430	0.2919	1.642	144.410	0.2915	1.606	144.380	0.2910
260	1.743	146.930	0.2959	1.704	146.910	0.2954	1.666	146.890	0.2949	1.630	146.870	0.2945
270	1.769	149.430	0.2993	1.729	149.410	0.2989	1.691	149.390	0.2984	1.654	149.370	0.2979
280	1.795	151.940	0.3028	1.754	151.930	0.3023	1.715	151.910	0.3018	1.678	151.890	0.3014
290	1.820	154.480	0.3062	1.779	154.460	0.3057	1.740	154.440	0.3052	1.702	154.430	0.3048
300	1.846	157.040	0.3095	1.804	157.020	0.3091	1.765	157.000	0.3086	1.726	156.980	0.3082

Table 2 (continued)
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)								
	48 (-2.06°F)			49 (-1.04°F)			50 (-.05°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
20	0.993	92.265	0.2023	0.971	92.198	0.2018	0.949	92.131	0.2013
30	1.021	94.374	0.2067	0.998	94.312	0.2062	0.977	94.250	0.2057
40	1.049	96.489	0.2110	1.025	96.431	0.2105	1.003	96.373	0.2100
50	1.076	98.612	0.2152	1.052	98.558	0.2147	1.029	98.504	0.2142
60	1.102	100.750	0.2193	1.078	100.690	0.2188	1.055	100.640	0.2184
70	1.129	102.890	0.2234	1.104	102.840	0.2229	1.080	102.800	0.2225
80	1.155	105.050	0.2274	1.130	105.000	0.2270	1.106	104.960	0.2265
90	1.180	107.220	0.2314	1.155	107.180	0.2310	1.130	107.140	0.2305
100	1.206	109.410	0.2354	1.180	109.370	0.2349	1.155	109.330	0.2344
110	1.231	111.610	0.2393	1.205	111.570	0.2388	1.179	111.540	0.2384
120	1.256	113.830	0.2431	1.229	113.800	0.2427	1.204	113.760	0.2422
130	1.281	116.070	0.2470	1.254	116.040	0.2465	1.228	116.000	0.2461
140	1.306	118.330	0.2508	1.278	118.290	0.2503	1.252	118.260	0.2499
150	1.331	120.600	0.2545	1.302	120.570	0.2541	1.275	120.540	0.2536
160	1.355	122.890	0.2582	1.326	122.860	0.2578	1.299	122.830	0.2574
170	1.380	125.200	0.2619	1.350	125.170	0.2615	1.323	125.140	0.2611
180	1.404	127.530	0.2656	1.374	127.500	0.2652	1.346	127.470	0.2647
190	1.428	129.880	0.2693	1.398	129.850	0.2688	1.369	129.820	0.2684
200	1.452	132.240	0.2729	1.422	132.220	0.2724	1.392	132.190	0.2720
210	1.476	134.630	0.2765	1.445	134.600	0.2760	1.416	134.580	0.2756
220	1.500	137.030	0.2800	1.469	137.010	0.2796	1.439	136.990	0.2792
230	1.524	139.460	0.2836	1.492	139.430	0.2831	1.462	139.410	0.2827
240	1.548	141.900	0.2871	1.516	141.880	0.2866	1.485	141.860	0.2862
250	1.572	144.360	0.2906	1.539	144.340	0.2901	1.508	144.320	0.2897
260	1.595	146.850	0.2940	1.562	146.830	0.2936	1.530	146.800	0.2932
270	1.619	149.350	0.2975	1.585	149.330	0.2971	1.553	149.310	0.2966
280	1.643	151.870	0.3009	1.609	151.850	0.3005	1.576	151.830	0.3001
290	1.666	154.410	0.3043	1.632	154.390	0.3039	1.599	154.370	0.3035
300	1.690	156.970	0.3077	1.655	156.950	0.3073	1.621	156.930	0.3069
310	1.713	159.540	0.3111	1.678	159.530	0.3107	1.644	159.510	0.3102

Temp (°F)	Absolute Pressure (psia)											
	55 (4.72°F)			60 (9.17°F)			65 (13.3°F)			70 (17.3°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
30	0.879	93.935	0.2033	0.798	93.613	0.2010	—	—	—	—	—	—
40	0.904	96.081	0.2076	0.821	95.783	0.2054	0.751	95.479	0.2034	0.691	95.170	0.2014
50	0.928	98.231	0.2119	0.844	97.954	0.2097	0.772	97.672	0.2077	0.711	97.385	0.2058
60	0.952	100.390	0.2161	0.866	100.130	0.2140	0.793	99.867	0.2120	0.731	99.600	0.2101
70	0.976	102.560	0.2202	0.888	102.310	0.2181	0.814	102.070	0.2162	0.750	101.820	0.2143
80	0.999	104.730	0.2243	0.910	104.510	0.2222	0.834	104.270	0.2203	0.770	104.040	0.2185
90	1.022	106.920	0.2283	0.931	106.710	0.2263	0.854	106.490	0.2244	0.788	106.270	0.2226
100	1.044	109.130	0.2323	0.952	108.920	0.2303	0.874	108.720	0.2284	0.807	108.510	0.2266
110	1.067	111.350	0.2362	0.973	111.150	0.2342	0.893	110.960	0.2324	0.825	110.760	0.2306
120	1.089	113.580	0.2401	0.994	113.400	0.2381	0.913	113.210	0.2363	0.843	113.030	0.2346
130	1.111	115.830	0.2439	1.014	115.660	0.2420	0.932	115.480	0.2402	0.861	115.300	0.2384
140	1.133	118.100	0.2477	1.034	117.930	0.2458	0.951	117.760	0.2440	0.879	117.600	0.2423
150	1.155	120.380	0.2515	1.055	120.220	0.2496	0.970	120.060	0.2478	0.897	119.900	0.2461
160	1.177	122.680	0.2553	1.075	122.530	0.2533	0.988	122.380	0.2516	0.914	122.220	0.2499
170	1.198	125.000	0.2590	1.095	124.850	0.2571	1.007	124.710	0.2553	0.932	124.560	0.2536
180	1.220	127.340	0.2627	1.114	127.200	0.2608	1.025	127.060	0.2590	0.949	126.920	0.2573
190	1.241	129.690	0.2663	1.134	129.560	0.2644	1.044	129.420	0.2627	0.966	129.290	0.2610
200	1.262	132.060	0.2699	1.154	131.940	0.2681	1.062	131.810	0.2663	0.983	131.680	0.2647
210	1.283	134.460	0.2735	1.173	134.330	0.2717	1.080	134.210	0.2699	1.000	134.090	0.2683
220	1.305	136.870	0.2771	1.193	136.750	0.2752	1.098	136.630	0.2735	1.017	136.510	0.2719
230	1.326	139.300	0.2807	1.212	139.180	0.2788	1.116	139.070	0.2771	1.034	138.960	0.2755
240	1.347	141.750	0.2842	1.231	141.640	0.2823	1.134	141.530	0.2806	1.051	141.420	0.2790
250	1.367	144.220	0.2877	1.251	144.110	0.2858	1.152	144.000	0.2841	1.067	143.900	0.2825
260	1.388	146.700	0.2912	1.270	146.600	0.2893	1.170	146.500	0.2876	1.084	146.390	0.2860
270	1.409	149.210	0.2946	1.289	149.110	0.2928	1.187	149.010	0.2911	1.100	148.910	0.2895
280	1.430	151.730	0.2981	1.308	151.640	0.2962	1.205	151.540	0.2945	1.117	151.440	0.2929
290	1.451	154.280	0.3015	1.327	154.180	0.2996	1.223	154.090	0.2979	1.133	154.000	0.2964
300	1.471	156.840	0.3049	1.346	156.750	0.3030	1.241	156.660	0.3013	1.150	156.570	0.2998
310	1.492	159.420	0.3083	1.365	159.330	0.3064	1.258	159.250	0.3047	1.166	159.160	0.3032
320	1.512	162.020	0.3116	1.384	161.940	0.3098	1.276	161.850	0.3081	1.183	161.770	0.3065
330	1.533	164.640	0.3149	1.403	164.560	0.3131	1.293	164.480	0.3114	1.199	164.390	0.3099

Table 2 (continued)
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)											
	75 (21°F)			80 (24.6°F)			85 (28°F)			90 (31.2°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
50	0.658	97.093	0.2040	0.611	96.796	0.2023	0.570	96.493	0.2006	—	—	—
60	0.677	99.329	0.2083	0.629	99.053	0.2066	0.587	98.773	0.2050	0.550	98.488	0.2035
70	0.695	101.560	0.2126	0.647	101.310	0.2109	0.604	101.050	0.2094	0.566	100.780	0.2078
80	0.713	103.800	0.2168	0.664	103.560	0.2152	0.621	103.320	0.2136	0.582	103.070	0.2121
90	0.731	106.050	0.2209	0.681	105.820	0.2193	0.637	105.600	0.2178	0.598	105.370	0.2163
100	0.749	108.300	0.2250	0.698	108.090	0.2234	0.653	107.880	0.2219	0.613	107.660	0.2205
110	0.766	110.570	0.2290	0.714	110.370	0.2274	0.669	110.160	0.2259	0.628	109.960	0.2245
120	0.783	112.840	0.2329	0.731	112.650	0.2314	0.684	112.460	0.2299	0.643	112.270	0.2285
130	0.800	115.130	0.2368	0.747	114.950	0.2353	0.700	114.770	0.2339	0.658	114.590	0.2325
140	0.817	117.430	0.2407	0.763	117.260	0.2392	0.715	117.090	0.2378	0.672	116.910	0.2364
150	0.834	119.740	0.2445	0.778	119.580	0.2430	0.730	119.420	0.2416	0.686	119.250	0.2403
160	0.850	122.070	0.2483	0.794	121.920	0.2469	0.744	121.760	0.2455	0.700	121.610	0.2441
170	0.866	124.420	0.2521	0.809	124.270	0.2506	0.759	124.120	0.2492	0.714	123.970	0.2479
180	0.883	126.780	0.2558	0.825	126.640	0.2543	0.774	126.490	0.2530	0.728	126.350	0.2517
190	0.899	129.160	0.2595	0.840	129.020	0.2580	0.788	128.880	0.2567	0.742	128.750	0.2554
200	0.915	131.550	0.2632	0.855	131.420	0.2617	0.802	131.290	0.2604	0.755	131.160	0.2591
210	0.931	133.960	0.2668	0.870	133.840	0.2653	0.817	133.710	0.2640	0.769	133.590	0.2627
220	0.947	136.390	0.2704	0.885	136.270	0.2690	0.831	136.150	0.2676	0.783	136.030	0.2663
230	0.962	138.840	0.2740	0.900	138.720	0.2725	0.845	138.610	0.2712	0.796	138.490	0.2699
240	0.978	141.310	0.2775	0.915	141.190	0.2761	0.859	141.080	0.2748	0.809	140.970	0.2735
250	0.994	143.790	0.2810	0.930	143.680	0.2796	0.873	143.570	0.2783	0.823	143.470	0.2770
260	1.009	146.290	0.2845	0.944	146.190	0.2831	0.887	146.080	0.2818	0.836	145.980	0.2806
270	1.025	148.810	0.2880	0.959	148.710	0.2866	0.901	148.610	0.2853	0.849	148.510	0.2840
280	1.040	151.350	0.2915	0.974	151.250	0.2901	0.914	151.150	0.2888	0.862	151.060	0.2875
290	1.056	153.900	0.2949	0.988	153.810	0.2935	0.928	153.710	0.2922	0.875	153.620	0.2910
300	1.071	156.480	0.2983	1.003	156.390	0.2969	0.942	156.290	0.2956	0.888	156.200	0.2944
310	1.087	159.070	0.3017	1.017	158.980	0.3003	0.956	158.890	0.2990	0.901	158.800	0.2978
320	1.102	161.680	0.3051	1.032	161.590	0.3037	0.969	161.510	0.3024	0.914	161.420	0.3012
330	1.117	164.310	0.3084	1.046	164.230	0.3070	0.983	164.140	0.3057	0.927	164.060	0.3045
340	1.133	166.960	0.3117	1.060	166.870	0.3104	0.996	166.790	0.3091	0.940	166.710	0.3079
350	1.148	169.620	0.3151	1.075	169.540	0.3137	1.010	169.460	0.3124	0.953	169.380	0.3112
360	1.163	172.300	0.3183	1.089	172.230	0.3170	1.024	172.150	0.3157	0.965	172.070	0.3145

Temp (°F)	Absolute Pressure (psia)											
	95 (34.3°F)			100 (37.3°F)			110 (43°F)			120 (48.2°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
60	0.516	98.198	0.2019	0.486	97.903	0.2005	—	—	—	—	—	—
70	0.532	100.510	0.2064	0.502	100.240	0.2049	0.448	99.683	0.2022	—	—	—
80	0.548	102.830	0.2107	0.516	102.570	0.2093	0.462	102.050	0.2067	0.417	101.520	0.2042
90	0.563	105.130	0.2149	0.531	104.900	0.2136	0.476	104.420	0.2110	0.430	103.920	0.2086
100	0.577	107.440	0.2191	0.545	107.220	0.2178	0.489	106.770	0.2152	0.443	106.310	0.2129
110	0.592	109.760	0.2232	0.559	109.550	0.2219	0.502	109.130	0.2194	0.455	108.690	0.2171
120	0.606	112.070	0.2272	0.573	111.880	0.2259	0.515	111.480	0.2235	0.467	111.080	0.2213
130	0.620	114.400	0.2312	0.586	114.220	0.2299	0.528	113.840	0.2276	0.479	113.460	0.2253
140	0.634	116.740	0.2351	0.599	116.560	0.2339	0.540	116.210	0.2315	0.490	115.850	0.2293
150	0.647	119.090	0.2390	0.612	118.920	0.2378	0.552	118.590	0.2355	0.502	118.240	0.2333
160	0.661	121.450	0.2429	0.625	121.290	0.2416	0.564	120.970	0.2393	0.513	120.650	0.2372
170	0.674	123.820	0.2467	0.638	123.670	0.2454	0.576	123.370	0.2432	0.524	123.060	0.2411
180	0.687	126.210	0.2504	0.651	126.070	0.2492	0.588	125.780	0.2470	0.535	125.480	0.2449
190	0.701	128.610	0.2541	0.663	128.470	0.2530	0.599	128.200	0.2507	0.546	127.920	0.2487
200	0.714	131.030	0.2578	0.676	130.900	0.2567	0.611	130.630	0.2545	0.556	130.360	0.2524
210	0.726	133.460	0.2615	0.688	133.340	0.2603	0.622	133.080	0.2581	0.567	132.820	0.2561
220	0.739	135.910	0.2651	0.700	135.790	0.2640	0.633	135.540	0.2618	0.577	135.300	0.2598
230	0.752	138.380	0.2687	0.713	138.260	0.2676	0.645	138.020	0.2654	0.588	137.790	0.2634
240	0.765	140.860	0.2723	0.725	140.750	0.2712	0.656	140.520	0.2690	0.598	140.290	0.2670
250	0.777	143.360	0.2758	0.737	143.250	0.2747	0.667	143.030	0.2726	0.608	142.810	0.2706
260	0.790	145.870	0.2794	0.749	145.770	0.2782	0.678	145.560	0.2761	0.619	145.350	0.2741
270	0.803	148.410	0.2829	0.761	148.310	0.2817	0.689	148.100	0.2796	0.629	147.900	0.2777
280	0.815	150.960	0.2863	0.773	150.860	0.2852	0.700	150.660	0.2831	0.639	150.470	0.2812
290	0.827	153.530	0.2898	0.785	153.430	0.2887	0.711	153.240	0.2866	0.649	153.050	0.2846
300	0.840	156.110	0.2932	0.796	156.020	0.2921	0.721	155.840	0.2900	0.659	155.650	0.2881
310	0.852	158.720	0.2966	0.808	158.630	0.2955	0.732	158.450	0.2934	0.669	158.270	0.2915
320	0.864	161.340	0.3000	0.820	161.250	0.2989	0.743	161.080	0.2968	0.679	160.900	0.2949
330	0.877	163.980	0.3034	0.832	163.890	0.3023	0.754	163.720	0.3002	0.689	163.560	0.2983
340	0.889	166.630	0.3067	0.843	166.550	0.3056	0.764	166.390	0.3035	0.699	166.220	0.3016
350	0.901	169.310	0.3100	0.855	169.230	0.3089	0.775	169.070	0.3069	0.708	168.910	0.3050
360	0.913	172.000	0.3133	0.866	171.920	0.3122	0.786	171.770	0.3102	0.718	171.610	0.3083
370	—	—	—	—	—	—	0.796	174.480	0.3135	0.728	174.330	0.3116

Table 2 (continued)
R-507 Superheated Vapor—Constant Pressure Tables

Temp (°F)	Absolute Pressure (psia)					
	380 (130°F)			400 (134°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
160	0.121	109.850	0.2006	—	—	—
170	0.127	113.130	0.2059	0.118	112.110	0.2035
180	0.133	116.270	0.2108	0.124	115.360	0.2086
190	0.139	119.310	0.2155	0.129	118.490	0.2135
200	0.144	122.280	0.2201	0.135	121.540	0.2182
210	0.149	125.200	0.2245	0.140	124.520	0.2226
220	0.154	128.080	0.2287	0.144	127.450	0.2270
230	0.159	130.940	0.2329	0.149	130.340	0.2312
240	0.164	133.770	0.2370	0.153	133.210	0.2353
250	0.168	136.590	0.2410	0.158	136.060	0.2394
260	0.172	139.400	0.2449	0.162	138.900	0.2434
270	0.176	142.200	0.2488	0.166	141.720	0.2473
280	0.181	145.000	0.2526	0.170	144.540	0.2511
290	0.185	147.790	0.2563	0.174	147.360	0.2549
300	0.189	150.590	0.2600	0.178	150.180	0.2586
310	0.193	153.390	0.2637	0.182	153.000	0.2623
320	0.196	156.200	0.2673	0.185	155.820	0.2659
330	0.200	159.010	0.2709	0.189	158.640	0.2695
340	0.204	161.820	0.2745	0.193	161.470	0.2731
350	0.208	164.650	0.2780	0.196	164.310	0.2766
360	0.211	167.490	0.2814	0.200	167.160	0.2801
370	0.215	170.330	0.2849	0.203	170.020	0.2836
380	0.219	173.190	0.2883	0.207	172.880	0.2870
390	0.222	176.050	0.2917	0.210	175.760	0.2904
400	0.226	178.930	0.2951	0.213	178.640	0.2938
410	0.229	181.820	0.2984	0.217	181.540	0.2971
420	0.233	184.720	0.3017	0.220	184.450	0.3005
430	0.236	187.630	0.3050	0.223	187.370	0.3038
440	0.240	190.560	0.3083	0.227	190.300	0.3071

Temp (°F)	Absolute Pressure (psia)											
	425 (139°F)			450 (144°F)			475 (149°F)			500 (153°F)		
	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)	Volume (ft ³ /lb)	Enthalpy (Btu/lb)	Entropy (Btu/lb-R)
170	0.106	110.740	0.2005	—	—	—	—	—	—	—	—	—
180	0.113	114.160	0.2059	0.103	112.880	0.2031	0.093	111.490	0.2003	—	—	—
190	0.118	117.420	0.2110	0.108	116.300	0.2084	0.099	115.100	0.2059	0.091	113.820	0.2032
200	0.124	120.570	0.2158	0.114	119.560	0.2134	0.105	118.500	0.2110	0.097	117.380	0.2086
210	0.129	123.630	0.2204	0.119	122.710	0.2182	0.110	121.750	0.2159	0.102	120.760	0.2137
220	0.133	126.630	0.2248	0.123	125.780	0.2227	0.114	124.910	0.2206	0.106	124.010	0.2185
230	0.138	129.580	0.2291	0.128	128.800	0.2271	0.119	128.000	0.2251	0.111	127.170	0.2232
240	0.142	132.500	0.2333	0.132	131.770	0.2314	0.123	131.020	0.2295	0.115	130.260	0.2276
250	0.146	135.390	0.2374	0.136	134.710	0.2356	0.127	134.010	0.2337	0.119	133.300	0.2319
260	0.150	138.270	0.2415	0.140	137.620	0.2396	0.131	136.970	0.2379	0.123	136.300	0.2361
270	0.154	141.120	0.2454	0.144	140.520	0.2436	0.135	139.900	0.2419	0.126	139.270	0.2402
280	0.158	143.970	0.2493	0.148	143.400	0.2476	0.138	142.810	0.2459	0.130	142.220	0.2442
290	0.162	146.820	0.2531	0.151	146.270	0.2514	0.142	145.710	0.2498	0.133	145.150	0.2482
300	0.166	149.660	0.2569	0.155	149.130	0.2552	0.145	148.600	0.2536	0.137	148.070	0.2520
310	0.169	152.500	0.2606	0.158	152.000	0.2590	0.149	151.490	0.2574	0.140	150.980	0.2558
320	0.173	155.340	0.2643	0.162	154.860	0.2627	0.152	154.380	0.2611	0.143	153.890	0.2596
330	0.176	158.180	0.2679	0.165	157.720	0.2663	0.155	157.260	0.2648	0.146	156.790	0.2633
340	0.180	161.030	0.2715	0.169	160.590	0.2699	0.158	160.140	0.2684	0.149	159.700	0.2670
350	0.183	163.890	0.2750	0.172	163.460	0.2735	0.162	163.030	0.2720	0.152	162.600	0.2706
360	0.187	166.750	0.2785	0.175	166.340	0.2770	0.165	165.930	0.2755	0.155	165.510	0.2741
370	0.190	169.620	0.2820	0.178	169.220	0.2805	0.168	168.820	0.2791	0.158	168.430	0.2777
380	0.193	172.500	0.2855	0.181	172.120	0.2840	0.171	171.730	0.2825	0.161	171.340	0.2812
390	0.197	175.390	0.2889	0.185	175.020	0.2874	0.174	174.640	0.2860	0.164	174.270	0.2846
400	0.200	178.280	0.2923	0.188	177.930	0.2908	0.177	177.570	0.2894	0.167	177.200	0.2881
410	0.203	181.190	0.2956	0.191	180.850	0.2942	0.180	180.500	0.2928	0.170	180.150	0.2915
420	0.206	184.110	0.2990	0.194	183.780	0.2975	0.183	183.440	0.2962	0.173	183.100	0.2948
430	0.209	187.040	0.3023	0.197	186.720	0.3009	0.186	186.390	0.2995	0.175	186.060	0.2982
440	0.212	189.990	0.3056	0.200	189.670	0.3042	0.188	189.350	0.3028	0.178	189.030	0.3015

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(11/04) RWJ4 Printed in U.S.A.
[Replaces: H-85071]
Reorder No.: H-85071-1

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