

DuPont™ Suva®
refrigerants

**Thermodynamic
Properties
of**

**DuPont™
Suva® 407C**
Refrigerant

(R-407C)

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Thermodynamic Properties of DuPont™ Suva® 407C Refrigerant

English (I/P) Units

New tables of the thermodynamic properties of DuPont™ Suva® 407C refrigerant [ASHRAE designation: R-407C (23/25/52)], a near azeotropic blend of HFC-32/HFC-125/HFC-134a, have been developed and are presented here. These tables are based on extensive experimental measurements. Equations have been developed, based on the Peng-Robinson-Stryjek-Vera (PRSV) equation of state, which represent the data with accuracy and consistency throughout the entire range of temperature, pressure, and density presented in these tables.

Physical Properties

Chemical Formula	CH ₂ F ₂ /CHF ₂ CF ₃ /CH ₂ FCF ₃ (23/25/52% by weight)	
Molecular Weight	86.20	
Boiling Point at One Atmosphere	-46.40°F	(-43.56°C)
Critical Temperature, T _c	188.13°F	(86.74°C)
	647.80°R	(359.89 K)
Critical Pressure, P _c	669.95 psia	(4619.10 kPa [abs])
Critical Density, D _c	32.92 lb/ft ³	(527.30 kg/m ³)
Critical Volume, V _c	0.0304 ft ³ /lb	(0.00190 m ³ /kg)

Units and Factors

t	= temperature in °F
T	= temperature in °R = °F + 459.67
p _f	= pressure of saturated liquid (bubble point) in psia
p _g	= pressure of saturated vapor (dew point) in psia
v _f	= volume of saturated liquid in ft ³ /lb
v _g	= volume of saturated vapor in ft ³ /lb
V	= volume of superheated vapor in ft ³ /lb
d _f	= 1/v _f = density of saturated liquid in lb/ft ³
d _g	= 1/v _g = density of saturated vapor in lb/ft ³
h _f	= enthalpy of saturated liquid in Btu/lb
h _{fg}	= enthalpy of vaporization in Btu/lb
h _g	= enthalpy of saturated vapor in Btu/lb
H	= enthalpy of superheated vapor in Btu/lb
s _f	= entropy of saturated liquid in Btu/(lb) (°R)
s _g	= entropy of saturated vapor in Btu/(lb) (°R)
S	= entropy of superheated vapor in Btu/(lb) (°R)
C _p	= heat capacity at constant pressure in Btu/(lb) (°F)
C _v	= heat capacity at constant volume in Btu/(lb) (°F)

The gas constant, R = 10.732 (psia) (ft³)/(lb-mole) (°R)
for Suva® 407C, R = 0.1245 (psia) (ft³)/(lb) (°R)

Conversion factor from Work Units to heat Units:

$$J = 0.185053$$

$$\text{Btu/lb} = [(\text{psia}) (\text{ft}^3)/\text{lb}] \infty J$$

One atmosphere = 14.696 psia

Reference point for enthalpy and entropy:

$$h_f = 0.0 \text{ Btu/lb at } -40^\circ\text{F}$$

$$s_f = 0.0 \text{ Btu/(lb) (}^\circ\text{R) at } -40^\circ\text{F}$$

Equations

The Peng-Robinson-Stryjek-Vera (PRSV) equation of state was used to calculate the tables of thermodynamic properties. It was chosen as the preferred equation of state because it provided an accurate fit of the thermodynamic data over the entire range of temperatures and pressures presented in these tables.

The constants for the PRSV equation of state were calculated in SI units. For conversion of thermodynamic properties to English (I/P) units, conversion factors are provided for each property derived from the PRSV equation of state.

1. Equation of State (PRSV)

$$P = RT/(V - b) - a/(V^2 + 2bV - b^2)$$

where P is in kPa, T is in K, V is in m³/mole, and R = 0.008314 kJ/(mole) (K). The constants a and b are calculated as follows:

$$a = \sum_{i=1}^3 \sum_{j=1}^3 x_i x_j a_{ij} \quad b = \sum_{i=1}^3 x_i b_i$$

where

$$a_{ij} = (a_i a_j)^{0.5} (1 - k_{ij}) \quad b_i = 0.077796 RT_{ci}/P_{ci}$$

x_i = mole fraction of component i

x_j = mole fraction of component j

$$a_i = (0.457235 R^2 T_{ci}^2/P_{ci}) \alpha_i$$

$$a_j = (0.457235 R^2 T_{cj}^2/P_{cj}) \alpha_j$$

k_{ij} = binary interaction parameter for components i and j

$$\alpha_i = [1 + \kappa_i (1 - T_{ri}^{0.5})]^2$$

$$\kappa_i = \kappa_{0i} + \kappa_{1i} [(1 + T_{ri}^{0.5}) (0.7 - T_{ri})]$$

(Note: $\kappa_i = \kappa_{0i}$ for $T_r > 0.7$)

$$\kappa_{0i} = 0.378893 + 1.4897153\omega_i - 0.17131848\omega_i^2 + 0.019655\omega_i^3$$

κ_{1i} = adjustable parameter for component i

T_{ri} = T_i/T_{ci} for component i

Values for R, T_{ci}, P_{ci}, ω_i, κ_{1i}, x_i, and k_{ij} are needed to calculate constants a and b. R = 0.008314 kJ/(mole) (K). The remaining constants for Suva® 407C are summarized below:

Component		T _{ci}	P _{ci}	ω _i	κ _{1i}	x _i
HFC-32	(i = 1)	351.60	5830.0	0.2763	-0.0250	0.38110
HFC-125	(i = 2)	339.19	3595.0	0.3023	0.0310	0.17956
HFC-134a	(i = 3)	374.20	4056.0	0.3266	-0.0060	0.43934

The binary interaction parameters, k_{ij} , for Suva[®] 407C are:

$$\begin{array}{lll} k_{11} = 0.00000 & k_{12} = -0.00028 & k_{13} = -0.00815 \\ k_{21} = -0.00028 & k_{22} = 0.00000 & k_{23} = -0.00240 \\ k_{31} = -0.00815 & k_{32} = -0.00240 & k_{33} = 0.00000 \end{array}$$

Ideal Gas Heat Capacity Equation (at constant pressure):

$$C_p^o(\text{mixture}) = \sum_{i=1}^3 x_i C_{pi}^o$$

$$C_{pi}^o = 4.184 (A_i + B_i T + C_i T^2 + D_i T^3 + E_i T^4 + F_i T^5)$$

where C_p^o and C_{pi}^o are in J/(mole) (K) and T is in K.
 x_i is the mole fraction of component i in the mixture (use same values listed in PRSV constants for Suva[®] 407C).
 $A_i, B_i, C_i, D_i, E_i,$ and F_i are constants:

$$\begin{array}{ll} A_1 = 1.226880 \text{ E+01} & B_1 = -0.699113 \text{ E-01} \\ A_2 = 1.170140 \text{ E+01} & B_2 = 0.216411 \text{ E-01} \\ A_3 = 0.463685 \text{ E+01} & B_3 = 0.617904 \text{ E-01} \\ \\ C_1 = 0.394642 \text{ E-03} & D_1 = -0.837462 \text{ E-06} \\ C_2 = 0.868526 \text{ E-04} & D_2 = -0.112776 \text{ E-06} \\ C_3 = -0.309907 \text{ E-04} & D_3 = 0.000000 \text{ E+00} \\ \\ E_1 = 0.859548 \text{ E-09} & F_1 = 0.000000 \text{ E+00} \\ E_2 = 0.000000 \text{ E+00} & F_2 = 0.000000 \text{ E+00} \\ E_3 = 0.000000 \text{ E+00} & F_3 = 0.000000 \text{ E+00} \end{array}$$

Properties calculated in SI units from the equations and constants listed above can be converted to I/P units using the conversion factors shown below. Please note that in converting enthalpy and entropy from SI to I/P units, a change in reference states must be included (from $H = 200$ and $S = 1$ at 0°C for SI units to $H = 0$ and $S = 0$ at -40°F for I/P units). In the conversion equations below, $H(\text{ref})$ and $S(\text{ref})$ are the saturated liquid enthalpy and entropy at -40°C . For Suva[®] 407C, $H(\text{ref}) = 146.6 \text{ kJ/kg}$ and $S(\text{ref}) = 0.7903 \text{ kJ/kg} \cdot \text{K}$.

Conversion Factors (SI units to I/P units):

$$\begin{array}{ll} P(\text{psia}) & = P(\text{kPa}) \cdot 0.14504 \\ T(^{\circ}\text{F}) & = (T[^{\circ}\text{C}] \cdot 1.8) + 32 \\ D(\text{lb/ft}^3) & = D(\text{kg/m}^3) \cdot 0.062428 \\ V(\text{ft}^3/\text{lb}) & = V(\text{m}^3/\text{kg}) \cdot 16.018 \\ H(\text{Btu/lb}) & = [H(\text{kJ/kg}) - H(\text{ref})] \cdot 0.43021 \\ S(\text{Btu/lb} \cdot ^{\circ}\text{R}) & = [S(\text{kJ/kg} \cdot \text{K}) - S(\text{ref})] \cdot 0.23901 \\ C_p(\text{Btu/lb} \cdot ^{\circ}\text{F}) & = C_p(\text{kJ/kg} \cdot \text{K}) \cdot 0.23901 \\ C_v(\text{Btu/lb} \cdot ^{\circ}\text{F}) & = C_v(\text{kJ/kg} \cdot \text{K}) \cdot 0.23901 \end{array}$$

2. Vapor Pressure

$$\log_n P_{\text{sat}} = A + B/T + C \log_n T + D T^2$$

For SI units

T is in K and P is in kPa (abs)

A, B, C, and D are constants.

Constants for vapor pressure of saturated liquid (bubble point), p_f :

$$\begin{array}{ll} A = 4.27103 \text{ E+01} & C = -4.39387 \text{ E+00} \\ B = -3.34460 \text{ E+03} & D = 6.86997 \text{ E-06} \end{array}$$

Constants for vapor pressure of saturated liquid (dew point), p_g :

$$\begin{array}{ll} A = 7.46912 \text{ E+01} & C = -9.51789 \text{ E+00} \\ B = -4.50059 \text{ E+03} & D = 1.73528 \text{ E-05} \end{array}$$

For I/P units

T is in $^{\circ}\text{R}$ and P is in psia

A, B, C, and D are constants.

Constants for vapor pressure of saturated liquid (bubble point), p_f :

$$\begin{array}{ll} A = 4.33622 \text{ E+01} & C = -4.39387 \text{ E+00} \\ B = -6.02028 \text{ E+03} & D = 2.12036 \text{ E-06} \end{array}$$

Constants for vapor pressure of saturated liquid (dew point), p_g :

$$\begin{array}{ll} A = 7.83549 \text{ E+01} & C = -9.51789 \text{ E+00} \\ B = -8.10106 \text{ E+03} & D = 0.53558 \text{ E-05} \end{array}$$

3. Density of the Saturated Liquid

$$d_f/D_c = a_0 + a_1 z + a_2 z^2 + a_3 z^3 + a_4 z^4$$

$$\text{where } z = (1 - T/T_c)^{1/3} - t_0$$

Because both density and temperature appear in the reduced form in the equation, the same constants can be used for either SI or I/P units.

d_f and D_c are in kg/m^3 in SI units and lb/ft^3 in I/P units. T and T_c are in K in SI units and $^{\circ}\text{R}$ in I/P units.

$a_0, a_1, a_2, a_3, a_4,$ and t_0 are constants:

$$\begin{array}{ll} a_0 = 1.000000 \text{ E+00} & a_3 = 2.746460 \text{ E+00} \\ a_1 = 2.350274 \text{ E+00} & a_4 = 0.000000 \text{ E+00} \\ a_2 = -2.029024 \text{ E+00} & t_0 = 0.0000 \end{array}$$

Table 1
Suva® 407C Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia		VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
	LIQUID P _f	VAPOR P _g	LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
-150	0.33	0.15	0.0101	250.0000	99.10	0.0040	-31.0	118.7	87.8	-0.0852	0.3073	-150
-149	0.34	0.16	0.0101	238.0952	98.99	0.0042	-30.7	118.6	87.9	-0.0844	0.3065	-149
-148	0.36	0.17	0.0101	227.2727	98.87	0.0044	-30.4	118.5	88.0	-0.0835	0.3056	-148
-147	0.38	0.18	0.0101	217.3913	98.76	0.0046	-30.2	118.4	88.2	-0.0827	0.3048	-147
-146	0.40	0.19	0.0101	204.0816	98.64	0.0049	-29.9	118.3	88.3	-0.0818	0.3040	-146
-145	0.42	0.20	0.0102	192.3077	98.52	0.0052	-29.6	118.1	88.5	-0.0810	0.3032	-145
-144	0.44	0.21	0.0102	185.1852	98.41	0.0054	-29.4	118.0	88.6	-0.0801	0.3024	-144
-143	0.46	0.22	0.0102	175.4386	98.29	0.0057	-29.1	117.9	88.8	-0.0793	0.3016	-143
-142	0.48	0.24	0.0102	166.6667	98.18	0.0060	-28.8	117.8	88.9	-0.0784	0.3008	-142
-141	0.51	0.25	0.0102	158.7302	98.06	0.0063	-28.6	117.6	89.1	-0.0776	0.3001	-141
-140	0.53	0.26	0.0102	151.5152	97.94	0.0066	-28.3	117.5	89.2	-0.0767	0.2993	-140
-139	0.56	0.28	0.0102	142.8571	97.83	0.0070	-28.0	117.4	89.4	-0.0759	0.2986	-139
-138	0.58	0.29	0.0102	136.9863	97.71	0.0073	-27.8	117.3	89.5	-0.0751	0.2978	-138
-137	0.61	0.31	0.0102	129.8701	97.60	0.0077	-27.5	117.2	89.7	-0.0742	0.2971	-137
-136	0.64	0.33	0.0103	123.4568	97.48	0.0081	-27.2	117.0	89.8	-0.0734	0.2963	-136
-135	0.67	0.34	0.0103	117.6471	97.36	0.0085	-27.0	116.9	90.0	-0.0726	0.2956	-135
-134	0.70	0.36	0.0103	112.3596	97.25	0.0089	-26.7	116.8	90.1	-0.0717	0.2949	-134
-133	0.74	0.38	0.0103	107.5269	97.13	0.0093	-26.4	116.7	90.3	-0.0709	0.2942	-133
-132	0.77	0.40	0.0103	102.0408	97.01	0.0098	-26.2	116.6	90.4	-0.0701	0.2935	-132
-131	0.80	0.42	0.0103	98.0392	96.90	0.0102	-25.9	116.4	90.6	-0.0693	0.2928	-131
-130	0.84	0.44	0.0103	93.4579	96.78	0.0107	-25.6	116.3	90.7	-0.0684	0.2921	-130
-129	0.88	0.46	0.0103	89.2857	96.67	0.0112	-25.3	116.2	90.9	-0.0676	0.2915	-129
-128	0.92	0.48	0.0104	84.7458	96.55	0.0118	-25.1	116.1	91.0	-0.0668	0.2908	-128
-127	0.96	0.51	0.0104	81.3008	96.43	0.0123	-24.8	116.0	91.2	-0.0660	0.2901	-127
-126	1.00	0.53	0.0104	77.5194	96.32	0.0129	-24.5	115.8	91.3	-0.0652	0.2895	-126
-125	1.05	0.56	0.0104	74.0741	96.20	0.0135	-24.3	115.7	91.5	-0.0644	0.2888	-125
-124	1.09	0.59	0.0104	70.9220	96.08	0.0141	-24.0	115.6	91.6	-0.0636	0.2882	-124
-123	1.14	0.62	0.0104	68.0272	95.97	0.0147	-23.7	115.5	91.8	-0.0627	0.2876	-123
-122	1.19	0.64	0.0104	64.9351	95.85	0.0154	-23.4	115.3	91.9	-0.0619	0.2869	-122
-121	1.24	0.68	0.0104	62.1118	95.73	0.0161	-23.2	115.2	92.1	-0.0611	0.2863	-121
-120	1.29	0.71	0.0105	59.5238	95.62	0.0168	-22.9	115.1	92.2	-0.0603	0.2857	-120
-119	1.34	0.74	0.0105	57.1429	95.50	0.0175	-22.6	115.0	92.4	-0.0595	0.2851	-119
-118	1.40	0.77	0.0105	54.6448	95.38	0.0183	-22.3	114.8	92.5	-0.0587	0.2845	-118
-117	1.46	0.81	0.0105	52.6316	95.27	0.0190	-22.1	114.7	92.7	-0.0579	0.2839	-117
-116	1.52	0.85	0.0105	50.2513	95.15	0.0199	-21.8	114.6	92.8	-0.0571	0.2833	-116
-115	1.58	0.89	0.0105	48.3092	95.03	0.0207	-21.5	114.5	93.0	-0.0563	0.2827	-115
-114	1.64	0.93	0.0105	46.2963	94.91	0.0216	-21.2	114.4	93.1	-0.0555	0.2822	-114
-113	1.71	0.97	0.0105	44.4444	94.80	0.0225	-21.0	114.2	93.3	-0.0547	0.2816	-113
-112	1.78	1.01	0.0106	42.7350	94.68	0.0234	-20.7	114.1	93.4	-0.0539	0.2810	-112
-111	1.85	1.05	0.0106	40.9836	94.56	0.0244	-20.4	114.0	93.6	-0.0531	0.2805	-111
-110	1.92	1.10	0.0106	39.3701	94.45	0.0254	-20.1	113.9	93.7	-0.0524	0.2799	-110
-109	2.00	1.15	0.0106	37.8788	94.33	0.0264	-19.9	113.7	93.9	-0.0516	0.2794	-109
-108	2.08	1.20	0.0106	36.3636	94.21	0.0275	-19.6	113.6	94.0	-0.0508	0.2788	-108
-107	2.16	1.25	0.0106	34.9650	94.09	0.0286	-19.3	113.5	94.2	-0.0500	0.2783	-107
-106	2.24	1.30	0.0106	33.6700	93.98	0.0297	-19.0	113.4	94.3	-0.0492	0.2778	-106
-105	2.33	1.36	0.0107	32.3625	93.86	0.0309	-18.8	113.2	94.5	-0.0484	0.2772	-105
-104	2.41	1.42	0.0107	31.1527	93.74	0.0321	-18.5	113.1	94.6	-0.0476	0.2767	-104
-103	2.50	1.47	0.0107	29.9401	93.62	0.0334	-18.2	113.0	94.8	-0.0469	0.2762	-103
-102	2.60	1.54	0.0107	28.8184	93.51	0.0347	-17.9	112.9	94.9	-0.0461	0.2757	-102
-101	2.70	1.60	0.0107	27.7778	93.39	0.0360	-17.6	112.7	95.1	-0.0453	0.2752	-101
-100	2.80	1.66	0.0107	26.7380	93.27	0.0374	-17.4	112.6	95.2	-0.0445	0.2747	-100
-99	2.90	1.73	0.0107	25.7732	93.15	0.0388	-17.1	112.5	95.4	-0.0438	0.2742	-99
-98	3.00	1.80	0.0107	24.8139	93.03	0.0403	-16.8	112.4	95.6	-0.0430	0.2737	-98
-97	3.11	1.87	0.0108	23.9234	92.92	0.0418	-16.5	112.2	95.7	-0.0422	0.2733	-97
-96	3.23	1.95	0.0108	23.0947	92.80	0.0433	-16.2	112.1	95.9	-0.0414	0.2728	-96
-95	3.34	2.03	0.0108	22.2717	92.68	0.0449	-16.0	112.0	96.0	-0.0407	0.2723	-95
-94	3.46	2.11	0.0108	21.4592	92.56	0.0466	-15.7	111.9	96.2	-0.0399	0.2719	-94
-93	3.58	2.19	0.0108	20.7039	92.44	0.0483	-15.4	111.7	96.3	-0.0391	0.2714	-93
-92	3.71	2.27	0.0108	20.0000	92.33	0.0500	-15.1	111.6	96.5	-0.0384	0.2710	-92
-91	3.84	2.36	0.0108	19.3050	92.21	0.0518	-14.8	111.5	96.6	-0.0376	0.2705	-91

Table 1 (continued)
Suva® 407C Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia		VOLUME ft³/lb		DENSITY lb/ft³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
	LIQUID P _l	VAPOR P _g	LIQUID v _l	VAPOR v _c	LIQUID 1/v _l	VAPOR 1/v _g	LIQUID h _l	LATENT h _{fg}	VAPOR h _g	LIQUID s _l	VAPOR s _g	
-90	3.97	2.45	0.0109	18.6220	92.09	0.0537	-14.6	111.3	96.8	-0.0368	0.2701	-90
-89	4.11	2.55	0.0109	17.9856	91.97	0.0556	-14.3	111.2	96.9	-0.0361	0.2696	-89
-88	4.25	2.64	0.0109	17.3913	91.85	0.0575	-14.0	111.1	97.1	-0.0353	0.2692	-88
-87	4.40	2.74	0.0109	16.7785	91.73	0.0596	-13.7	111.0	97.2	-0.0346	0.2688	-87
-86	4.54	2.84	0.0109	16.2338	91.61	0.0616	-13.4	110.8	97.4	-0.0338	0.2683	-86
-85	4.70	2.95	0.0109	15.6740	91.50	0.0638	-13.1	110.7	97.5	-0.0331	0.2679	-85
-84	4.85	3.06	0.0109	15.1745	91.38	0.0659	-12.9	110.6	97.7	-0.0323	0.2675	-84
-83	5.02	3.17	0.0110	14.6628	91.26	0.0682	-12.6	110.4	97.9	-0.0315	0.2671	-83
-82	5.18	3.29	0.0110	14.1844	91.14	0.0705	-12.3	110.3	98.0	-0.0308	0.2667	-82
-81	5.35	3.40	0.0110	13.7174	91.02	0.0729	-12.0	110.2	98.2	-0.0300	0.2663	-81
-80	5.53	3.53	0.0110	13.2802	90.90	0.0753	-11.7	110.0	98.3	-0.0293	0.2659	-80
-79	5.71	3.65	0.0110	12.8535	90.78	0.0778	-11.4	109.9	98.5	-0.0285	0.2655	-79
-78	5.89	3.78	0.0110	12.4378	90.66	0.0804	-11.2	109.8	98.6	-0.0278	0.2651	-78
-77	6.08	3.92	0.0110	12.0337	90.54	0.0831	-10.9	109.7	98.8	-0.0270	0.2647	-77
-76	6.27	4.05	0.0111	11.6550	90.42	0.0858	-10.6	109.5	98.9	-0.0263	0.2643	-76
-75	6.47	4.19	0.0111	11.2994	90.31	0.0885	-10.3	109.4	99.1	-0.0255	0.2639	-75
-74	6.68	4.34	0.0111	10.9409	90.19	0.0914	-10.0	109.3	99.2	-0.0248	0.2636	-74
-73	6.89	4.49	0.0111	10.6045	90.07	0.0943	-9.7	109.1	99.4	-0.0240	0.2632	-73
-72	7.10	4.64	0.0111	10.2775	89.95	0.0973	-9.4	109.0	99.6	-0.0233	0.2628	-72
-71	7.32	4.80	0.0111	9.9602	89.83	0.1004	-9.1	108.9	99.7	-0.0226	0.2625	-71
-70	7.54	4.96	0.0111	9.6525	89.71	0.1036	-8.9	108.7	99.9	-0.0218	0.2621	-70
-69	7.78	5.13	0.0112	9.3633	89.59	0.1068	-8.6	108.6	100.0	-0.0211	0.2618	-69
-68	8.01	5.30	0.0112	9.0827	89.47	0.1101	-8.3	108.5	100.2	-0.0203	0.2614	-68
-67	8.25	5.47	0.0112	8.8106	89.35	0.1135	-8.0	108.3	100.3	-0.0196	0.2611	-67
-66	8.50	5.65	0.0112	8.5470	89.23	0.1170	-7.7	108.2	100.5	-0.0189	0.2607	-66
-65	8.76	5.84	0.0112	8.2919	89.11	0.1206	-7.4	108.0	100.6	-0.0181	0.2604	-65
-64	9.02	6.03	0.0112	8.0515	88.99	0.1242	-7.1	107.9	100.8	-0.0174	0.2600	-64
-63	9.28	6.22	0.0113	7.8125	88.87	0.1280	-6.8	107.8	101.0	-0.0167	0.2597	-63
-62	9.55	6.42	0.0113	7.5873	88.75	0.1318	-6.5	107.6	101.1	-0.0159	0.2594	-62
-61	9.83	6.63	0.0113	7.3692	88.63	0.1357	-6.2	107.5	101.3	-0.0152	0.2591	-61
-60	10.12	6.84	0.0113	7.1531	88.51	0.1398	-5.9	107.4	101.4	-0.0145	0.2587	-60
-59	10.41	7.06	0.0113	6.9493	88.39	0.1439	-5.6	107.2	101.6	-0.0137	0.2584	-59
-58	10.71	7.28	0.0113	6.7522	88.27	0.1481	-5.4	107.1	101.7	-0.0130	0.2581	-58
-57	11.01	7.51	0.0113	6.5617	88.15	0.1524	-5.1	106.9	101.9	-0.0123	0.2578	-57
-56	11.33	7.74	0.0114	6.3776	88.03	0.1568	-4.8	106.8	102.0	-0.0115	0.2575	-56
-55	11.65	7.98	0.0114	6.1996	87.90	0.1613	-4.5	106.7	102.2	-0.0108	0.2572	-55
-54	11.97	8.22	0.0114	6.0277	87.78	0.1659	-4.2	106.5	102.3	-0.0101	0.2569	-54
-53	12.31	8.47	0.0114	5.8617	87.66	0.1706	-3.9	106.4	102.5	-0.0094	0.2566	-53
-52	12.65	8.73	0.0114	5.6980	87.54	0.1755	-3.6	106.2	102.7	-0.0086	0.2563	-52
-51	12.99	8.99	0.0114	5.5432	87.42	0.1804	-3.3	106.1	102.8	-0.0079	0.2560	-51
-50	13.35	9.26	0.0115	5.3937	87.30	0.1854	-3.0	106.0	103.0	-0.0072	0.2557	-50
-49	13.71	9.54	0.0115	5.2466	87.18	0.1906	-2.7	105.8	103.1	-0.0065	0.2554	-49
-48	14.09	9.82	0.0115	5.1073	87.06	0.1958	-2.4	105.7	103.3	-0.0057	0.2551	-48
-47	14.47	10.11	0.0115	4.9702	86.94	0.2012	-2.1	105.5	103.4	-0.0050	0.2549	-47
-46	14.85	10.40	0.0115	4.8379	86.81	0.2067	-1.8	105.4	103.6	-0.0043	0.2546	-46
-45	15.25	10.71	0.0115	4.7103	86.69	0.2123	-1.5	105.2	103.7	-0.0036	0.2543	-45
-44	15.65	11.02	0.0116	4.5872	86.57	0.2180	-1.2	105.1	103.9	-0.0029	0.2540	-44
-43	16.07	11.33	0.0116	4.4663	86.45	0.2239	-0.9	104.9	104.0	-0.0022	0.2538	-43
-42	16.49	11.66	0.0116	4.3497	86.33	0.2299	-0.6	104.8	104.2	-0.0014	0.2535	-42
-41	16.92	11.99	0.0116	4.2373	86.21	0.2360	-0.3	104.7	104.4	-0.0007	0.2532	-41
-40	17.36	12.33	0.0116	4.1288	86.08	0.2422	0.0	104.5	104.5	0.0000	0.2530	-40
-39	17.80	12.67	0.0116	4.0225	85.96	0.2486	0.3	104.4	104.7	0.0007	0.2527	-39
-38	18.26	13.03	0.0117	3.9200	85.84	0.2551	0.6	104.2	104.8	0.0014	0.2525	-38
-37	18.73	13.39	0.0117	3.8212	85.72	0.2617	0.9	104.1	105.0	0.0022	0.2522	-37
-36	19.20	13.76	0.0117	3.7244	85.59	0.2685	1.2	103.9	105.1	0.0029	0.2520	-36
-35	19.69	14.14	0.0117	3.6311	85.47	0.2754	1.5	103.8	105.3	0.0036	0.2517	-35
-34	20.18	14.53	0.0117	3.5411	85.35	0.2824	1.8	103.6	105.4	0.0043	0.2515	-34
-33	20.69	14.92	0.0117	3.4530	85.23	0.2896	2.1	103.5	105.6	0.0050	0.2512	-33
-32	21.20	15.32	0.0118	3.3681	85.10	0.2969	2.6	103.2	105.7	0.0060	0.2510	-32
-31	21.72	15.74	0.0118	3.2852	84.98	0.3044	2.9	103.0	105.9	0.0067	0.2508	-31

Table 1 (continued)
Suva® 407C Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia		VOLUME ft³/lb		DENSITY lb/ft³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
	LIQUID P _f	VAPOR P _g	LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
-30	22.26	16.16	0.0118	3.2051	84.86	0.3120	3.2	102.9	106.0	0.0074	0.2505	-30
-29	22.80	16.59	0.0118	3.1270	84.74	0.3198	3.5	102.7	106.2	0.0081	0.2503	-29
-28	23.35	17.02	0.0118	3.0516	84.61	0.3277	3.8	102.6	106.3	0.0088	0.2501	-28
-27	23.92	17.47	0.0118	2.9780	84.49	0.3358	4.1	102.4	106.5	0.0095	0.2498	-27
-26	24.49	17.93	0.0119	2.9070	84.37	0.3440	4.4	102.3	106.6	0.0102	0.2496	-26
-25	25.08	18.40	0.0119	2.8377	84.24	0.3524	4.7	102.1	106.8	0.0109	0.2494	-25
-24	25.67	18.87	0.0119	2.7701	84.12	0.3610	5.0	102.0	106.9	0.0116	0.2492	-24
-23	26.28	19.36	0.0119	2.7049	84.00	0.3697	5.3	101.8	107.1	0.0123	0.2490	-23
-22	26.90	19.85	0.0119	2.6413	83.87	0.3786	5.6	101.6	107.2	0.0130	0.2487	-22
-21	27.53	20.36	0.0119	2.5800	83.75	0.3876	5.9	101.5	107.4	0.0137	0.2485	-21
-20	28.17	20.87	0.0120	2.5195	83.62	0.3969	6.2	101.3	107.6	0.0144	0.2483	-20
-19	28.83	21.40	0.0120	2.4612	83.50	0.4063	6.5	101.2	107.7	0.0151	0.2481	-19
-18	29.49	21.94	0.0120	2.4050	83.37	0.4158	6.8	101.0	107.9	0.0158	0.2479	-18
-17	30.17	22.48	0.0120	2.3496	83.25	0.4256	7.2	100.8	108.0	0.0165	0.2477	-17
-16	30.86	23.04	0.0120	2.2962	83.13	0.4355	7.3	100.9	108.2	0.0168	0.2475	-16
-15	31.56	23.61	0.0120	2.2442	83.00	0.4456	7.6	100.7	108.3	0.0175	0.2473	-15
-14	32.28	24.19	0.0121	2.1935	82.88	0.4559	7.9	100.5	108.4	0.0183	0.2471	-14
-13	33.00	24.78	0.0121	2.1441	82.75	0.4664	8.2	100.4	108.6	0.0190	0.2469	-13
-12	33.74	25.38	0.0121	2.0960	82.63	0.4771	8.6	100.2	108.7	0.0197	0.2467	-12
-11	34.50	26.00	0.0121	2.0492	82.50	0.4880	8.9	100.0	108.9	0.0204	0.2465	-11
-10	35.26	26.62	0.0121	2.0036	82.38	0.4991	9.2	99.9	109.0	0.0211	0.2463	-10
-9	36.04	27.26	0.0122	1.9596	82.25	0.5103	9.5	99.7	109.2	0.0218	0.2461	-9
-8	36.84	27.91	0.0122	1.9164	82.13	0.5218	9.8	99.5	109.3	0.0225	0.2459	-8
-7	37.64	28.57	0.0122	1.8744	82.00	0.5335	10.1	99.4	109.5	0.0232	0.2457	-7
-6	38.46	29.24	0.0122	1.8335	81.87	0.5454	10.5	99.2	109.6	0.0239	0.2456	-6
-5	39.30	29.93	0.0122	1.7937	81.75	0.5575	10.8	99.0	109.8	0.0246	0.2454	-5
-4	40.14	30.63	0.0123	1.7550	81.62	0.5698	11.1	98.8	109.9	0.0253	0.2452	-4
-3	41.00	31.34	0.0123	1.7173	81.50	0.5823	11.4	98.7	110.1	0.0259	0.2450	-3
-2	41.88	32.06	0.0123	1.6804	81.37	0.5951	11.7	98.5	110.2	0.0266	0.2448	-2
-1	42.77	32.80	0.0123	1.6447	81.24	0.6080	12.1	98.3	110.4	0.0273	0.2447	-1
0	43.67	33.55	0.0123	1.6098	81.12	0.6212	12.4	98.1	110.5	0.0280	0.2445	0
1	44.59	34.31	0.0123	1.5758	80.99	0.6346	12.7	98.0	110.7	0.0287	0.2443	1
2	45.53	35.09	0.0124	1.5425	80.86	0.6483	13.0	97.8	110.8	0.0294	0.2441	2
3	46.48	35.88	0.0124	1.5103	80.74	0.6621	13.3	97.6	111.0	0.0301	0.2440	3
4	47.44	36.69	0.0124	1.4786	80.61	0.6763	13.7	97.4	111.1	0.0308	0.2438	4
5	48.42	37.51	0.0124	1.4480	80.48	0.6906	14.0	97.2	111.2	0.0315	0.2436	5
6	49.42	38.34	0.0124	1.4180	80.36	0.7052	14.3	97.1	111.4	0.0322	0.2435	6
7	50.43	39.19	0.0125	1.3889	80.23	0.7200	14.6	96.9	111.5	0.0329	0.2433	7
8	51.45	40.05	0.0125	1.3604	80.10	0.7351	15.0	96.7	111.7	0.0336	0.2432	8
9	52.49	40.92	0.0125	1.3324	79.97	0.7505	15.3	96.5	111.8	0.0343	0.2430	9
10	53.55	41.82	0.0125	1.3053	79.85	0.7661	15.6	96.3	112.0	0.0350	0.2428	10
11	54.63	42.72	0.0125	1.2789	79.72	0.7819	16.0	96.1	112.1	0.0357	0.2427	11
12	55.72	43.64	0.0126	1.2531	79.59	0.7980	16.2	96.0	112.2	0.0363	0.2425	12
13	56.83	44.58	0.0126	1.2279	79.46	0.8144	16.6	95.8	112.4	0.0369	0.2424	13
14	57.95	45.53	0.0126	1.2032	79.33	0.8311	16.9	95.6	112.5	0.0376	0.2422	14
15	59.09	46.50	0.0126	1.1792	79.20	0.8480	17.2	95.4	112.7	0.0383	0.2421	15
16	60.25	47.49	0.0126	1.1558	79.07	0.8652	17.6	95.3	112.8	0.0390	0.2419	16
17	61.43	48.49	0.0127	1.1329	78.95	0.8827	17.9	95.1	112.9	0.0397	0.2417	17
18	62.62	49.51	0.0127	1.1105	78.82	0.9005	18.2	94.9	113.1	0.0404	0.2416	18
19	63.83	50.54	0.0127	1.0886	78.69	0.9186	18.6	94.7	113.2	0.0411	0.2415	19
20	65.06	51.59	0.0127	1.0674	78.56	0.9369	18.9	94.5	113.4	0.0418	0.2413	20
21	66.31	52.66	0.0128	1.0465	78.43	0.9556	19.2	94.3	113.5	0.0425	0.2412	21
22	67.58	53.74	0.0128	1.0261	78.30	0.9746	19.6	94.1	113.6	0.0432	0.2410	22
23	68.86	54.84	0.0128	1.0062	78.17	0.9938	19.9	93.9	113.8	0.0439	0.2409	23
24	70.16	55.96	0.0128	0.9868	78.04	1.0134	20.2	93.7	113.9	0.0446	0.2407	24
25	71.48	57.10	0.0128	0.9679	77.91	1.0332	20.6	93.5	114.1	0.0453	0.2406	25
26	72.82	58.25	0.0129	0.9493	77.78	1.0534	20.9	93.3	114.2	0.0460	0.2404	26
27	74.18	59.42	0.0129	0.9312	77.65	1.0739	21.3	93.1	114.3	0.0467	0.2403	27
28	75.56	60.61	0.0129	0.9134	77.51	1.0948	21.6	92.9	114.5	0.0474	0.2402	28
29	76.95	61.82	0.0129	0.8961	77.38	1.1159	21.9	92.7	114.6	0.0480	0.2400	29

Table 1 (continued)
Suva® 407C Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia		VOLUME ft³/lb		DENSITY lb/ft³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
	LIQUID P _f	VAPOR P _g	LIQUID v _f	VAPOR v _c	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
30	78.37	63.05	0.0129	0.8792	77.25	1.1374	22.3	92.4	114.7	0.0487	0.2399	30
31	79.81	64.29	0.0130	0.8627	77.12	1.1592	22.6	92.2	114.9	0.0494	0.2398	31
32	81.26	65.56	0.0130	0.8465	76.99	1.1814	23.0	92.0	115.0	0.0501	0.2396	32
33	82.74	66.84	0.0130	0.8306	76.86	1.2039	23.3	91.8	115.1	0.0508	0.2395	33
34	84.23	68.15	0.0130	0.8151	76.72	1.2268	23.7	91.6	115.3	0.0515	0.2393	34
35	85.75	69.47	0.0131	0.8000	76.59	1.2500	24.0	91.4	115.4	0.0522	0.2392	35
36	87.29	70.81	0.0131	0.7852	76.46	1.2736	24.4	91.2	115.5	0.0529	0.2391	36
37	88.85	72.17	0.0131	0.7707	76.33	1.2975	24.7	91.0	115.7	0.0536	0.2389	37
38	90.43	73.55	0.0131	0.7565	76.19	1.3218	25.1	90.7	115.8	0.0543	0.2388	38
39	92.03	74.96	0.0131	0.7427	76.06	1.3465	25.4	90.5	115.9	0.0550	0.2387	39
40	93.65	76.38	0.0132	0.7291	75.93	1.3716	25.8	90.3	116.1	0.0557	0.2386	40
41	95.29	77.82	0.0132	0.7158	75.79	1.3970	26.1	90.1	116.2	0.0564	0.2384	41
42	96.95	79.29	0.0132	0.7028	75.66	1.4228	26.5	89.9	116.3	0.0571	0.2383	42
43	98.64	80.77	0.0132	0.6901	75.52	1.4491	26.8	89.6	116.4	0.0577	0.2382	43
44	100.35	82.28	0.0133	0.6776	75.39	1.4757	27.2	89.4	116.6	0.0584	0.2380	44
45	102.08	83.81	0.0133	0.6655	75.26	1.5027	27.5	89.2	116.7	0.0591	0.2379	45
46	103.83	85.36	0.0133	0.6535	75.12	1.5302	27.9	88.9	116.8	0.0598	0.2378	46
47	105.61	86.93	0.0133	0.6418	74.99	1.5581	28.2	88.7	116.9	0.0605	0.2377	47
48	107.40	88.52	0.0134	0.6304	74.85	1.5863	28.6	88.5	117.1	0.0612	0.2375	48
49	109.23	90.14	0.0134	0.6192	74.71	1.6151	28.9	88.2	117.2	0.0619	0.2374	49
50	111.07	91.78	0.0134	0.6082	74.58	1.6442	29.3	88.0	117.3	0.0626	0.2373	50
51	112.94	93.44	0.0134	0.5974	74.44	1.6738	29.7	87.8	117.4	0.0633	0.2372	51
52	114.83	95.12	0.0135	0.5869	74.31	1.7038	30.0	87.5	117.6	0.0640	0.2371	52
53	116.74	96.83	0.0135	0.5766	74.17	1.7343	30.4	87.3	117.7	0.0647	0.2369	53
54	118.68	98.56	0.0135	0.5665	74.03	1.7653	30.7	87.1	117.8	0.0654	0.2368	54
55	120.64	100.31	0.0135	0.5566	73.89	1.7967	31.1	86.8	117.9	0.0661	0.2367	55
56	122.63	102.09	0.0136	0.5469	73.76	1.8286	31.5	86.6	118.0	0.0668	0.2366	56
57	124.64	103.89	0.0136	0.5374	73.62	1.8609	31.8	86.3	118.2	0.0675	0.2364	57
58	126.68	105.72	0.0136	0.5280	73.48	1.8938	32.2	86.1	118.3	0.0682	0.2363	58
59	128.74	107.57	0.0136	0.5189	73.34	1.9271	32.6	85.8	118.4	0.0689	0.2362	59
60	130.82	109.45	0.0137	0.5099	73.20	1.9610	32.9	85.6	118.5	0.0696	0.2361	60
61	132.94	111.35	0.0137	0.5012	73.07	1.9953	33.3	85.3	118.6	0.0703	0.2360	61
62	135.07	113.27	0.0137	0.4926	72.93	2.0302	33.7	85.1	118.7	0.0710	0.2358	62
63	137.23	115.23	0.0137	0.4841	72.79	2.0656	34.0	84.8	118.8	0.0717	0.2357	63
64	139.42	117.20	0.0138	0.4759	72.65	2.1015	34.4	84.5	119.0	0.0724	0.2356	64
65	141.63	119.21	0.0138	0.4677	72.51	2.1380	34.8	84.3	119.1	0.0731	0.2355	65
66	143.87	121.23	0.0138	0.4598	72.37	2.1750	35.2	84.0	119.2	0.0738	0.2354	66
67	146.14	123.29	0.0138	0.4520	72.22	2.2126	35.5	83.8	119.3	0.0745	0.2352	67
68	148.43	125.37	0.0139	0.4443	72.08	2.2507	35.9	83.5	119.4	0.0752	0.2351	68
69	150.75	127.48	0.0139	0.4368	71.94	2.2894	36.3	83.2	119.5	0.0759	0.2350	69
70	153.10	129.61	0.0139	0.4294	71.80	2.3286	36.7	83.0	119.6	0.0766	0.2349	70
71	155.47	131.78	0.0140	0.4222	71.66	2.3685	37.0	82.7	119.7	0.0773	0.2348	71
72	157.87	133.97	0.0140	0.4151	71.51	2.4090	37.4	82.4	119.8	0.0780	0.2346	72
73	160.30	136.18	0.0140	0.4082	71.37	2.4500	37.8	82.1	119.9	0.0787	0.2345	73
74	162.75	138.43	0.0140	0.4013	71.23	2.4917	38.2	81.9	120.0	0.0794	0.2344	74
75	165.24	140.70	0.0141	0.3946	71.08	2.5340	38.6	81.6	120.1	0.0801	0.2343	75
76	167.75	143.01	0.0141	0.3880	70.94	2.5770	39.0	81.3	120.3	0.0808	0.2342	76
77	170.29	145.34	0.0141	0.3816	70.80	2.6206	39.3	81.0	120.4	0.0815	0.2340	77
78	172.86	147.70	0.0142	0.3753	70.65	2.6648	39.7	80.7	120.5	0.0822	0.2339	78
79	175.45	150.09	0.0142	0.3690	70.51	2.7097	40.1	80.4	120.6	0.0829	0.2338	79
80	178.08	152.50	0.0142	0.3629	70.36	2.7553	40.5	80.1	120.7	0.0836	0.2337	80
81	180.73	154.95	0.0142	0.3569	70.21	2.8016	40.9	79.9	120.7	0.0843	0.2336	81
82	183.42	157.43	0.0143	0.3511	70.07	2.8486	41.3	79.6	120.8	0.0850	0.2334	82
83	186.13	159.94	0.0143	0.3453	69.92	2.8962	41.7	79.3	120.9	0.0857	0.2333	83
84	188.87	162.48	0.0143	0.3396	69.77	2.9447	42.1	79.0	121.0	0.0865	0.2332	84
85	191.65	165.04	0.0144	0.3340	69.62	2.9938	42.5	78.7	121.1	0.0872	0.2331	85
86	194.45	167.64	0.0144	0.3285	69.48	3.0437	42.9	78.4	121.2	0.0879	0.2329	86
87	197.28	170.28	0.0144	0.3232	69.33	3.0944	43.3	78.0	121.3	0.0886	0.2328	87
88	200.15	172.94	0.0145	0.3179	69.18	3.1458	43.7	77.7	121.4	0.0893	0.2327	88
89	203.04	175.63	0.0145	0.3127	69.03	3.1980	44.1	77.4	121.5	0.0900	0.2326	89

Table 1 (continued)
Suva® 407C Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia		VOLUME ft³/lb		DENSITY lb/ft³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
	LIQUID p _f	VAPOR p _g	LIQUID v _f	VAPOR v _c	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
90	205.97	178.36	0.0145	0.3076	68.88	3.2510	44.5	77.1	121.6	0.0907	0.2324	90
91	208.92	181.12	0.0146	0.3026	68.73	3.3048	44.9	76.8	121.7	0.0915	0.2323	91
92	211.91	183.91	0.0146	0.2977	68.57	3.3595	45.3	76.5	121.8	0.0922	0.2322	92
93	214.93	186.73	0.0146	0.2928	68.42	3.4150	45.7	76.2	121.8	0.0929	0.2321	93
94	217.98	189.59	0.0146	0.2881	68.27	3.4714	46.1	75.8	121.9	0.0936	0.2319	94
95	221.06	192.48	0.0147	0.2834	68.12	3.5286	46.5	75.5	122.0	0.0943	0.2318	95
96	224.18	195.40	0.0147	0.2788	67.96	3.5867	46.9	75.2	122.1	0.0951	0.2317	96
97	227.32	198.36	0.0147	0.2743	67.81	3.6457	47.3	74.8	122.2	0.0958	0.2316	97
98	230.50	201.35	0.0148	0.2699	67.65	3.7057	47.7	74.5	122.2	0.0965	0.2314	98
99	233.71	204.37	0.0148	0.2655	67.50	3.7666	48.2	74.2	122.3	0.0972	0.2313	99
100	236.96	207.44	0.0149	0.2612	67.34	3.8284	48.6	73.8	122.4	0.0980	0.2312	100
101	240.24	210.53	0.0149	0.2570	67.19	3.8913	49.0	73.5	122.5	0.0987	0.2310	101
102	243.55	213.66	0.0149	0.2528	67.03	3.9551	49.4	73.1	122.5	0.0994	0.2309	102
103	246.89	216.83	0.0150	0.2488	66.87	4.0199	49.8	72.8	122.6	0.1002	0.2307	103
104	250.27	220.03	0.0150	0.2448	66.71	4.0858	50.3	72.4	122.7	0.1009	0.2306	104
105	253.68	223.27	0.0150	0.2408	66.55	4.1527	50.7	72.1	122.7	0.1016	0.2305	105
106	257.12	226.54	0.0151	0.2369	66.39	4.2207	51.1	71.7	122.8	0.1024	0.2303	106
107	260.60	229.85	0.0151	0.2331	66.23	4.2898	51.5	71.3	122.9	0.1031	0.2302	107
108	264.12	233.20	0.0151	0.2294	66.07	4.3600	52.0	71.0	122.9	0.1039	0.2300	108
109	267.67	236.59	0.0152	0.2257	65.91	4.4314	52.4	70.6	123.0	0.1046	0.2299	109
110	271.25	240.01	0.0152	0.2220	65.74	4.5039	52.8	70.2	123.0	0.1053	0.2298	110
111	274.87	243.47	0.0152	0.2185	65.58	4.5776	53.3	69.8	123.1	0.1061	0.2296	111
112	278.52	246.97	0.0153	0.2149	65.41	4.6525	53.7	69.5	123.2	0.1068	0.2295	112
113	282.21	250.51	0.0153	0.2115	65.25	4.7287	54.1	69.1	123.2	0.1076	0.2293	113
114	285.94	254.08	0.0154	0.2081	65.08	4.8061	54.6	68.7	123.3	0.1083	0.2292	114
115	289.70	257.70	0.0154	0.2047	64.92	4.8849	55.0	68.3	123.3	0.1091	0.2290	115
116	293.49	261.35	0.0154	0.2014	64.75	4.9649	55.5	67.9	123.4	0.1098	0.2288	116
117	297.33	265.05	0.0155	0.1982	64.58	5.0464	55.9	67.5	123.4	0.1106	0.2287	117
118	301.20	268.78	0.0155	0.1950	64.41	5.1292	56.4	67.1	123.5	0.1114	0.2285	118
119	305.10	272.56	0.0156	0.1918	64.24	5.2134	56.8	66.7	123.5	0.1121	0.2284	119
120	309.04	276.37	0.0156	0.1887	64.06	5.2991	57.3	66.3	123.5	0.1129	0.2282	120
121	313.02	280.23	0.0157	0.1857	63.89	5.3863	57.7	65.8	123.6	0.1136	0.2280	121
122	317.04	284.13	0.0157	0.1826	63.72	5.4750	58.2	65.4	123.6	0.1144	0.2279	122
123	321.09	288.07	0.0157	0.1797	63.54	5.5652	58.7	65.0	123.6	0.1152	0.2277	123
124	325.18	292.05	0.0158	0.1768	63.37	5.6571	59.1	64.5	123.7	0.1160	0.2275	124
125	329.31	296.07	0.0158	0.1739	63.19	5.7506	59.6	64.1	123.7	0.1167	0.2274	125
126	333.48	300.14	0.0159	0.1711	63.01	5.8457	60.1	63.7	123.7	0.1175	0.2272	126
127	337.68	304.25	0.0159	0.1683	62.83	5.9426	60.5	63.2	123.8	0.1183	0.2270	127
128	341.93	308.40	0.0160	0.1655	62.65	6.0413	61.0	62.8	123.8	0.1191	0.2268	128
129	346.21	312.60	0.0160	0.1628	62.47	6.1418	61.5	62.3	123.8	0.1199	0.2266	129
130	350.53	316.84	0.0161	0.1602	62.28	6.2441	62.0	61.8	123.8	0.1207	0.2264	130
131	354.89	321.13	0.0161	0.1575	62.10	6.3484	62.4	61.4	123.8	0.1214	0.2263	131
132	359.28	325.46	0.0162	0.1549	61.91	6.4546	62.9	60.9	123.8	0.1222	0.2261	132
133	363.72	329.84	0.0162	0.1524	61.72	6.5628	63.4	60.4	123.8	0.1230	0.2259	133
134	368.20	334.26	0.0163	0.1499	61.53	6.6731	63.9	59.9	123.8	0.1238	0.2257	134
135	372.71	338.73	0.0163	0.1474	61.34	6.7856	64.4	59.4	123.8	0.1247	0.2255	135
136	377.27	343.24	0.0164	0.1449	61.15	6.9003	64.9	58.9	123.8	0.1255	0.2253	136
137	381.86	347.81	0.0164	0.1425	60.95	7.0172	65.4	58.4	123.8	0.1263	0.2250	137
138	386.49	352.42	0.0165	0.1401	60.76	7.1365	65.9	57.9	123.8	0.1271	0.2248	138
139	391.17	357.07	0.0165	0.1378	60.56	7.2582	66.4	57.4	123.8	0.1279	0.2246	139
140	395.88	361.78	0.0166	0.1355	60.36	7.3824	66.9	56.9	123.8	0.1287	0.2244	140
141	400.64	366.53	0.0166	0.1332	60.15	7.5092	67.4	56.4	123.8	0.1296	0.2242	141
142	405.43	371.34	0.0167	0.1309	59.95	7.6386	68.0	55.8	123.8	0.1304	0.2239	142
143	410.27	376.19	0.0167	0.1287	59.74	7.7708	68.5	55.3	123.8	0.1312	0.2237	143
144	415.15	381.09	0.0168	0.1265	59.53	7.9058	69.0	54.7	123.7	0.1321	0.2235	144
145	420.07	386.04	0.0169	0.1243	59.32	8.0437	69.5	54.2	123.7	0.1329	0.2232	145
146	425.02	391.05	0.0169	0.1222	59.11	8.1847	70.1	53.6	123.7	0.1338	0.2230	146
147	430.02	396.10	0.0170	0.1201	58.89	8.3289	70.6	53.0	123.6	0.1346	0.2227	147
148	435.06	401.21	0.0170	0.1180	58.68	8.4763	71.2	52.4	123.6	0.1355	0.2225	148
149	440.15	406.37	0.0171	0.1159	58.45	8.6272	71.7	51.8	123.5	0.1364	0.2222	149

Table 1 (continued)
Suva® 407C Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia		VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
	LIQUID P _f	VAPOR P _g	LIQUID v _f	VAPOR v _c	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
150	445.27	411.58	0.0172	0.1139	58.23	8.7815	72.3	51.2	123.5	0.1373	0.2219	150
151	450.43	416.85	0.0172	0.1119	58.00	8.9396	72.8	50.6	123.4	0.1381	0.2216	151
152	455.64	422.17	0.0173	0.1099	57.77	9.1015	73.4	50.0	123.3	0.1390	0.2214	152
153	460.89	427.54	0.0174	0.1079	57.54	9.2674	73.9	49.3	123.3	0.1399	0.2211	153
154	466.18	432.97	0.0175	0.1060	57.30	9.4374	74.5	48.7	123.2	0.1408	0.2208	154
155	471.51	438.46	0.0175	0.1040	57.06	9.6118	75.1	48.0	123.1	0.1418	0.2205	155
156	476.88	444.00	0.0176	0.1021	56.81	9.7908	75.7	47.3	123.0	0.1427	0.2201	156
157	482.29	449.60	0.0177	0.1003	56.56	9.9745	76.3	46.6	122.9	0.1436	0.2198	157
158	487.74	455.25	0.0178	0.0984	56.31	10.1633	76.9	45.9	122.8	0.1445	0.2195	158
159	493.24	460.97	0.0178	0.0966	56.05	10.3573	77.5	45.2	122.7	0.1455	0.2191	159
160	498.78	466.74	0.0179	0.0947	55.79	10.5568	78.1	44.5	122.6	0.1464	0.2188	160
161	504.36	472.57	0.0180	0.0929	55.52	10.7622	78.7	43.8	122.5	0.1474	0.2184	161
162	509.97	478.47	0.0181	0.0911	55.24	10.9737	79.4	43.0	122.4	0.1484	0.2181	162
163	515.63	484.43	0.0182	0.0894	54.96	11.1918	80.0	42.2	122.2	0.1494	0.2177	163
164	521.33	490.44	0.0183	0.0876	54.68	11.4167	80.6	41.4	122.1	0.1504	0.2173	164
165	527.07	496.53	0.0184	0.0858	54.38	11.6490	81.3	40.6	121.9	0.1514	0.2169	165
166	532.85	502.67	0.0185	0.0841	54.08	11.8891	82.0	39.8	121.7	0.1524	0.2165	166
167	538.67	508.88	0.0186	0.0824	53.77	12.1376	82.7	38.9	121.6	0.1535	0.2160	167
168	544.53	515.16	0.0187	0.0807	53.45	12.3950	83.3	38.0	121.4	0.1545	0.2156	168
169	550.43	521.51	0.0188	0.0790	53.12	12.6620	84.0	37.1	121.2	0.1556	0.2151	169
170	556.36	527.92	0.0189	0.0773	52.78	12.9394	84.8	36.2	121.0	0.1567	0.2146	170
171	562.33	534.41	0.0191	0.0756	52.43	13.2280	85.5	35.2	120.7	0.1578	0.2141	171
172	568.34	540.97	0.0192	0.0739	52.07	13.5289	86.2	34.2	120.5	0.1590	0.2136	172
173	574.38	547.60	0.0193	0.0722	51.69	13.8431	87.0	33.2	120.2	0.1601	0.2130	173
174	580.45	554.31	0.0195	0.0706	51.29	14.1719	87.8	32.1	119.9	0.1613	0.2124	174
175	586.56	561.10	0.0197	0.0689	50.88	14.5170	88.6	31.0	119.6	0.1625	0.2118	175

**Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables**

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	1.00			2.00			3.00			4.00			TEMP. °F
	(-112.23°F)			(-95.34°F)			(-84.53°F)			(-76.38°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(43.1061)	(93.4)	(0.2812)	(22.5408)	(96.0)	(0.2725)	(15.4366)	(97.6)	(0.2677)	(11.8027)	(98.9)	(0.2645)	
-100	44.6361	95.3	0.2865	—	—	—	—	—	—	—	—	—	-100
-90	45.8870	96.9	0.2909	22.8767	96.8	0.2748	—	—	—	—	—	—	-90
-80	47.1376	98.5	0.2952	23.5049	98.4	0.2791	15.6271	98.4	0.2697	—	—	—	-80
-70	48.3879	100.1	0.2994	24.1327	100.0	0.2833	16.0475	100.0	0.2739	12.0047	99.9	0.2672	-70
-60	49.6378	101.8	0.3036	24.7602	101.7	0.2875	16.4676	101.6	0.2781	12.3211	101.6	0.2714	-60
-50	50.8875	103.4	0.3077	25.3875	103.4	0.2917	16.8873	103.3	0.2822	12.6372	103.3	0.2755	-50
-40	52.1369	105.1	0.3118	26.0145	105.1	0.2958	17.3069	105.0	0.2863	12.9530	105.0	0.2796	-40
-30	53.3860	106.8	0.3159	26.6412	106.8	0.2998	17.7261	106.7	0.2904	13.2685	106.7	0.2837	-30
-20	54.6350	108.6	0.3199	27.2677	108.5	0.3038	18.1452	108.5	0.2944	13.5839	108.4	0.2877	-20
-10	55.8837	110.3	0.3238	27.8940	110.3	0.3078	18.5640	110.3	0.2984	13.8990	110.2	0.2917	-10
0	57.1323	112.1	0.3278	28.5201	112.1	0.3117	18.9827	112.0	0.3023	14.2139	112.0	0.2956	0
10	58.3806	113.9	0.3317	29.1461	113.9	0.3156	19.4011	113.8	0.3062	14.5286	113.8	0.2995	10
20	59.6288	115.8	0.3355	29.7718	115.7	0.3195	19.8194	115.7	0.3101	14.8432	115.6	0.3034	20
30	60.8769	117.6	0.3393	30.3974	117.6	0.3233	20.2376	117.5	0.3139	15.1576	117.5	0.3072	30
40	62.1248	119.5	0.3431	31.0229	119.5	0.3271	20.6555	119.4	0.3177	15.4718	119.4	0.3110	40
50	63.3725	121.4	0.3469	31.6482	121.4	0.3308	21.0734	121.3	0.3214	15.7860	121.3	0.3148	50
60	64.6202	123.3	0.3506	32.2734	123.3	0.3346	21.4911	123.2	0.3252	16.0999	123.2	0.3185	60
70	65.8677	125.3	0.3543	32.8985	125.2	0.3383	21.9087	125.2	0.3289	16.4138	125.1	0.3222	70
80	67.1151	127.2	0.3580	33.5234	127.2	0.3419	22.3262	127.1	0.3326	16.7275	127.1	0.3259	80
90	68.3624	129.2	0.3616	34.1483	129.2	0.3456	22.7436	129.1	0.3362	17.0412	129.1	0.3295	90
100	69.6096	131.2	0.3652	34.7730	131.2	0.3492	23.1608	131.1	0.3398	17.3547	131.1	0.3331	100
110	70.8567	133.2	0.3688	35.3977	133.2	0.3528	23.5780	133.2	0.3434	17.6681	133.1	0.3367	110
120	72.1037	135.3	0.3724	36.0222	135.2	0.3564	23.9951	135.2	0.3470	17.9815	135.2	0.3403	120
130	73.3506	137.4	0.3759	36.6467	137.3	0.3599	24.4121	137.3	0.3505	18.2948	137.3	0.3439	130
140	74.5974	139.4	0.3795	37.2711	139.4	0.3634	24.8290	139.4	0.3541	18.6079	139.4	0.3474	140
150	75.8442	141.6	0.3829	37.8954	141.5	0.3669	25.2458	141.5	0.3576	18.9210	141.5	0.3509	150
160	77.0909	143.7	0.3864	38.5197	143.7	0.3704	25.6626	143.6	0.3610	19.2341	143.6	0.3544	160
170	78.3375	145.9	0.3899	39.1439	145.8	0.3739	26.0793	145.8	0.3645	19.5470	145.8	0.3578	170
180	79.5841	148.0	0.3933	39.7680	148.0	0.3773	26.4959	148.0	0.3679	19.8599	147.9	0.3613	180
190	80.8306	150.2	0.3967	40.3920	150.2	0.3807	26.9125	150.2	0.3713	20.1727	150.1	0.3647	190
200	82.0770	152.4	0.4001	41.0160	152.4	0.3841	27.3290	152.4	0.3747	20.4855	152.4	0.3681	200
210	41.6400	154.7	0.3875	27.7455	154.6	0.3781	20.7982	154.6	0.3714	—	—	—	210
220	28.1619	156.9	0.3814	21.1109	156.9	0.3748	—	—	—	—	—	—	220
230	21.4235	159.2	0.3781	—	—	—	—	—	—	—	—	—	230

TEMP. °F	5.00			6.00			7.00			8.00			TEMP. °F
	(-69.76°F)			(-64.15°F)			(-59.26°F)			(-54.90°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(9.5850)	(99.9)	(0.2620)	(8.0861)	(100.8)	(0.2601)	(7.0031)	(101.5)	(0.2585)	(6.1827)	(102.2)	(0.2571)	
-60	9.8331	101.5	0.2661	8.1744	101.5	0.2618	—	—	—	—	—	—	-60
-50	10.0870	103.2	0.2703	8.3868	103.2	0.2660	7.1723	103.1	0.2624	6.2614	103.0	0.2592	-50
-40	10.3406	104.9	0.2744	8.5989	104.9	0.2701	7.3548	104.8	0.2665	6.4217	104.7	0.2633	-40
-30	10.5939	106.6	0.2785	8.8108	106.6	0.2742	7.5370	106.5	0.2705	6.5817	106.5	0.2674	-30
-20	10.8470	108.4	0.2825	9.0224	108.3	0.2782	7.7190	108.3	0.2746	6.7415	108.2	0.2714	-20
-10	11.0999	110.2	0.2865	9.2338	110.1	0.2822	7.9008	110.1	0.2786	6.9011	110.0	0.2754	-10
0	11.3526	111.9	0.2904	9.4450	111.9	0.2861	8.0824	111.8	0.2825	7.0604	111.8	0.2794	0
10	11.6051	113.8	0.2943	9.6560	113.7	0.2900	8.2638	113.7	0.2864	7.2196	113.6	0.2833	10
20	11.8574	115.6	0.2982	9.8668	115.5	0.2939	8.4450	115.5	0.2903	7.3786	115.5	0.2871	20
30	12.1096	117.4	0.3020	10.0775	117.4	0.2977	8.6260	117.4	0.2941	7.5374	117.3	0.2910	30
40	12.3616	119.3	0.3058	10.2881	119.3	0.3015	8.8069	119.2	0.2979	7.6961	119.2	0.2948	40
50	12.6135	121.2	0.3096	10.4984	121.2	0.3053	8.9877	121.1	0.3017	7.8546	121.1	0.2986	50
60	12.8652	123.2	0.3133	10.7087	123.1	0.3090	9.1683	123.1	0.3054	8.0130	123.0	0.3023	60
70	13.1168	125.1	0.3170	10.9188	125.1	0.3128	9.3488	125.0	0.3092	8.1713	125.0	0.3060	70
80	13.3683	127.1	0.3207	11.1288	127.0	0.3164	9.5292	127.0	0.3128	8.3295	127.0	0.3097	80
90	13.6197	129.1	0.3243	11.3388	129.0	0.3201	9.7095	129.0	0.3165	8.4875	128.9	0.3134	90
100	13.8710	131.1	0.3280	11.5486	131.0	0.3237	9.8896	131.0	0.3201	8.6454	131.0	0.3170	100
110	14.1222	133.1	0.3316	11.7583	133.1	0.3273	10.0697	133.0	0.3237	8.8033	133.0	0.3206	110
120	14.3733	135.1	0.3351	11.9679	135.1	0.3309	10.2497	135.1	0.3273	8.9610	135.0	0.3242	120
130	14.6243	137.2	0.3387	12.1774	137.2	0.3344	10.4296	137.2	0.3309	9.1187	137.1	0.3277	130
140	14.8753	139.3	0.3422	12.3868	139.3	0.3380	10.6094	139.3	0.3344	9.2763	139.2	0.3313	140
150	15.1261	141.4	0.3457	12.5962	141.4	0.3415	10.7891	141.4	0.3379	9.4338	141.3	0.3348	150
160	15.3769	143.6	0.3492	12.8055	143.5	0.3450	10.9688	143.5	0.3414	9.5912	143.5	0.3383	160
170	15.6276	145.7	0.3526	13.0147	145.7	0.3484	11.1483	145.7	0.3448	9.7486	145.6	0.3417	170
180	15.8783	147.9	0.3561	13.2239	147.9	0.3518	11.3279	147.9	0.3483	9.9058	147.8	0.3452	180
190	16.1289	150.1	0.3595	13.4330	150.1	0.3553	11.5073	150.1	0.3517	10.0631	150.0	0.3486	190
200	16.3794	152.3	0.3629	13.6420	152.3	0.3587	11.6867	152.3	0.3551	10.2202	152.3	0.3520	200
210	16.6299	154.6	0.3663	13.8510	154.6	0.3620	11.8661	154.5	0.3585	10.3773	154.5	0.3553	210
220	16.8803	156.8	0.3696	14.0599	156.8	0.3654	12.0453	156.8	0.3618	10.5344	156.8	0.3587	220
230	17.1307	159.1	0.3729	14.2688	159.1	0.3687	12.2246	159.1	0.3651	10.6914	159.1	0.3620	230
240	17.3810	161.4	0.3763	14.4776	161.4	0.3720	12.4038	161.4	0.3685	10.8484	161.4	0.3654	240
250	—	—	—	—	—	—	12.5829	163.7	0.3718	11.0053	163.7	0.3687	250

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	9.00			10.00			11.00			12.00			TEMP. °F
	(-50.97°F)			(-47.37°F)			(-44.05°F)			(-40.96°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(5.5390)	(102.8)	(0.2560)	(5.0200)	(103.4)	(0.2550)	(4.5923)	(103.9)	(0.2540)	(4.2336)	(104.4)	(0.2532)	
-50	5.5529	103.0	0.2564	—	—	—	—	—	—	—	—	—	-50
-40	5.6959	104.7	0.2605	5.1152	104.6	0.2580	4.6401	104.6	0.2557	4.2441	104.5	0.2536	-40
-30	5.8386	106.4	0.2646	5.2441	106.4	0.2621	4.7577	106.3	0.2598	4.3523	106.3	0.2577	-30
-20	5.9811	108.2	0.2686	5.3728	108.1	0.2661	4.8751	108.1	0.2639	4.4603	108.0	0.2618	-20
-10	6.1234	110.0	0.2726	5.5013	109.9	0.2701	4.9923	109.9	0.2679	4.5681	109.8	0.2658	-10
0	6.2655	111.8	0.2766	5.6296	111.7	0.2741	5.1092	111.7	0.2718	4.6756	111.6	0.2697	0
10	6.4074	113.6	0.2805	5.7577	113.5	0.2780	5.2260	113.5	0.2757	4.7830	113.4	0.2737	10
20	6.5491	115.4	0.2844	5.8856	115.4	0.2819	5.3426	115.3	0.2796	4.8901	115.3	0.2776	20
30	6.6907	117.3	0.2882	6.0133	117.2	0.2857	5.4590	117.2	0.2835	4.9971	117.1	0.2814	30
40	6.8321	119.2	0.2920	6.1409	119.1	0.2895	5.5753	119.1	0.2873	5.1040	119.0	0.2852	40
50	6.9733	121.1	0.2958	6.2683	121.0	0.2933	5.6914	121.0	0.2911	5.2107	120.9	0.2890	50
60	7.1144	123.0	0.2995	6.3956	123.0	0.2971	5.8074	122.9	0.2948	5.3172	122.9	0.2928	60
70	7.2554	124.9	0.3033	6.5227	124.9	0.3008	5.9232	124.9	0.2985	5.4237	124.8	0.2965	70
80	7.3963	126.9	0.3070	6.6498	126.9	0.3045	6.0390	126.8	0.3022	5.5300	126.8	0.3002	80
90	7.5371	128.9	0.3106	6.7767	128.9	0.3081	6.1546	128.8	0.3059	5.6362	128.8	0.3038	90
100	7.6777	130.9	0.3142	6.9035	130.9	0.3118	6.2701	130.9	0.3095	5.7422	130.8	0.3075	100
110	7.8183	133.0	0.3178	7.0303	132.9	0.3154	6.3855	132.9	0.3131	5.8482	132.9	0.3111	110
120	7.9587	135.0	0.3214	7.1569	135.0	0.3190	6.5008	134.9	0.3167	5.9541	134.9	0.3147	120
130	8.0991	137.1	0.3250	7.2834	137.1	0.3225	6.6161	137.0	0.3203	6.0599	137.0	0.3182	130
140	8.2394	139.2	0.3285	7.4099	139.2	0.3261	6.7312	139.1	0.3238	6.1657	139.1	0.3218	140
150	8.3796	141.3	0.3320	7.5363	141.3	0.3296	6.8463	141.3	0.3273	6.2713	141.2	0.3253	150
160	8.5198	143.5	0.3355	7.6626	143.4	0.3330	6.9613	143.4	0.3308	6.3769	143.4	0.3288	160
170	8.6598	145.6	0.3390	7.7888	145.6	0.3365	7.0762	145.6	0.3343	6.4824	145.5	0.3322	170
180	8.7998	147.8	0.3424	7.9150	147.8	0.3400	7.1911	147.7	0.3377	6.5878	147.7	0.3357	180
190	8.9398	150.0	0.3458	8.0411	150.0	0.3434	7.3059	150.0	0.3411	6.6931	149.9	0.3391	190
200	9.0796	152.2	0.3492	8.1672	152.2	0.3468	7.4206	152.2	0.3445	6.7984	152.2	0.3425	200
210	9.2195	154.5	0.3526	8.2932	154.5	0.3501	7.5353	154.4	0.3479	6.9037	154.4	0.3459	210
220	9.3592	156.7	0.3560	8.4191	156.7	0.3535	7.6499	156.7	0.3513	7.0089	156.7	0.3492	220
230	9.4990	159.0	0.3593	8.5450	159.0	0.3568	7.7645	159.0	0.3546	7.1140	159.0	0.3526	230
240	9.6386	161.3	0.3626	8.6708	161.3	0.3602	7.8790	161.3	0.3579	7.2191	161.3	0.3559	240
250	9.7782	163.7	0.3659	8.7966	163.6	0.3635	7.9935	163.6	0.3612	7.3242	163.6	0.3592	250
260	8.9224	166.0	0.3667	8.1079	166.0	0.3645	7.4292	165.9	0.3625	—	—	—	260

TEMP. °F	13.00			14.00			14.696			15.00			TEMP. °F
	(-38.08°F)			(-35.37°F)			(-33.57°F)			(-32.80°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(3.9283)	(104.8)	(0.2525)	(3.6651)	(105.2)	(0.2518)	(3.5023)	(105.5)	(0.2514)	(3.4358)	(105.6)	(0.2512)	
-30	4.0093	106.2	0.2558	3.7152	106.2	0.2540	3.5341	106.1	0.2528	3.4603	106.1	0.2523	-30
-20	4.1093	108.0	0.2598	3.8084	107.9	0.2581	3.6231	107.9	0.2569	3.5476	107.9	0.2564	-20
-10	4.2091	109.8	0.2639	3.9014	109.7	0.2621	3.7119	109.7	0.2609	3.6347	109.7	0.2604	-10
0	4.3087	111.6	0.2678	3.9941	111.5	0.2660	3.8005	111.5	0.2649	3.7215	111.5	0.2644	0
10	4.4081	113.4	0.2718	4.0867	113.3	0.2700	3.8888	113.3	0.2688	3.8082	113.3	0.2683	10
20	4.5073	115.2	0.2756	4.1791	115.2	0.2739	3.9770	115.2	0.2727	3.8946	115.1	0.2722	20
30	4.6063	117.1	0.2795	4.2713	117.1	0.2777	4.0650	117.0	0.2766	3.9809	117.0	0.2761	30
40	4.7052	119.0	0.2833	4.3633	118.9	0.2816	4.1528	118.9	0.2804	4.0670	118.9	0.2799	40
50	4.8039	120.9	0.2871	4.4552	120.9	0.2853	4.2405	120.8	0.2842	4.1530	120.8	0.2837	50
60	4.9025	122.8	0.2909	4.5470	122.8	0.2891	4.3281	122.8	0.2880	4.2388	122.8	0.2875	60
70	5.0009	124.8	0.2946	4.6386	124.7	0.2928	4.4155	124.7	0.2917	4.3245	124.7	0.2912	70
80	5.0993	126.8	0.2983	4.7301	126.7	0.2965	4.5028	126.7	0.2954	4.4101	126.7	0.2949	80
90	5.1975	128.8	0.3020	4.8215	128.7	0.3002	4.5899	128.7	0.2991	4.4956	128.7	0.2986	90
100	5.2956	130.8	0.3056	4.9127	130.7	0.3038	4.6770	130.7	0.3027	4.5809	130.7	0.3022	100
110	5.3936	132.8	0.3092	5.0039	132.8	0.3075	4.7640	132.8	0.3063	4.6662	132.8	0.3058	110
120	5.4915	134.9	0.3128	5.0950	134.8	0.3110	4.8509	134.8	0.3099	4.7513	134.8	0.3094	120
130	5.5893	137.0	0.3164	5.1860	136.9	0.3146	4.9376	136.9	0.3135	4.8364	136.9	0.3130	130
140	5.6871	139.1	0.3199	5.2769	139.0	0.3182	5.0243	139.0	0.3170	4.9214	139.0	0.3165	140
150	5.7847	141.2	0.3234	5.3677	141.2	0.3217	5.1109	141.1	0.3205	5.0063	141.1	0.3200	150
160	5.8823	143.3	0.3269	5.4585	143.3	0.3252	5.1975	143.3	0.3240	5.0911	143.3	0.3235	160
170	5.9799	145.5	0.3304	5.5491	145.5	0.3286	5.2840	145.5	0.3275	5.1758	145.4	0.3270	170
180	6.0773	147.7	0.3338	5.6397	147.7	0.3321	5.3704	147.6	0.3309	5.2605	147.6	0.3305	180
190	6.1747	149.9	0.3372	5.7303	149.9	0.3355	5.4567	149.8	0.3344	5.3452	149.8	0.3339	190
200	6.2720	152.1	0.3406	5.8208	152.1	0.3389	5.5430	152.1	0.3378	5.4297	152.1	0.3373	200
210	6.3693	154.4	0.3440	5.9112	154.3	0.3423	5.6292	154.3	0.3411	5.5142	154.3	0.3407	210
220	6.4665	156.6	0.3474	6.0016	156.6	0.3456	5.7154	156.6	0.3445	5.5987	156.6	0.3440	220
230	6.5637	158.9	0.3507	6.0919	158.9	0.3490	5.8015	158.9	0.3478	5.6831	158.9	0.3474	230
240	6.6608	161.2	0.3540	6.1822	161.2	0.3523	5.8875	161.2	0.3512	5.7674	161.2	0.3507	240
250	6.7578	163.6	0.3573	6.2724	163.5	0.3556	5.9735	163.5	0.3545	5.8517	163.5	0.3540	250
260	6.8549	165.9	0.3606	6.3626	165.9	0.3589	6.0595	165.9	0.3578	5.9360	165.9	0.3573	260
270	6.9518	168.3	0.3639	6.4527	168.2	0.3622	6.1454	168.2	0.3610	6.0202	168.2	0.3605	270

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	16.00			17.00			18.00			19.00			TEMP. °F
	(-30.37°F)			(-28.06°F)			(-25.85°F)			(-23.73°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(3.2342)	(106.0)	(0.2506)	(3.0555)	(106.3)	(0.2501)	(2.8960)	(106.7)	(0.2496)	(2.7527)	(107.0)	(0.2491)	
-30	3.2373	106.0	0.2508	—	—	—	—	—	—	—	—	—	-30
-20	3.3194	107.8	0.2548	3.1180	107.8	0.2534	2.9390	107.7	0.2520	2.7788	107.7	0.2506	-20
-10	3.4013	109.6	0.2589	3.1953	109.5	0.2574	3.0123	109.5	0.2560	2.8484	109.4	0.2547	-10
0	3.4830	111.4	0.2628	3.2725	111.4	0.2614	3.0853	111.3	0.2600	2.9179	111.3	0.2587	0
10	3.5644	113.2	0.2668	3.3494	113.2	0.2653	3.1582	113.1	0.2639	2.9871	113.1	0.2626	10
20	3.6457	115.1	0.2707	3.4261	115.0	0.2692	3.2308	115.0	0.2678	3.0561	115.0	0.2665	20
30	3.7268	117.0	0.2745	3.5026	116.9	0.2731	3.3033	116.9	0.2717	3.1250	116.8	0.2704	30
40	3.8078	118.9	0.2784	3.5790	118.8	0.2769	3.3756	118.8	0.2755	3.1937	118.7	0.2742	40
50	3.8886	120.8	0.2822	3.6552	120.7	0.2807	3.4478	120.7	0.2793	3.2622	120.6	0.2780	50
60	3.9692	122.7	0.2859	3.7313	122.7	0.2845	3.5198	122.6	0.2831	3.3306	122.6	0.2818	60
70	4.0497	124.7	0.2897	3.8073	124.6	0.2882	3.5917	124.6	0.2868	3.3989	124.6	0.2856	70
80	4.1301	126.7	0.2934	3.8831	126.6	0.2919	3.6635	126.6	0.2906	3.4670	126.5	0.2893	80
90	4.2104	128.7	0.2970	3.9588	128.6	0.2956	3.7351	128.6	0.2942	3.5350	128.5	0.2929	90
100	4.2906	130.7	0.3007	4.0344	130.6	0.2992	3.8067	130.6	0.2979	3.6029	130.6	0.2966	100
110	4.3706	132.7	0.3043	4.1099	132.7	0.3029	3.8781	132.6	0.3015	3.6707	132.6	0.3002	110
120	4.4506	134.8	0.3079	4.1853	134.7	0.3065	3.9494	134.7	0.3051	3.7384	134.7	0.3038	120
130	4.5305	136.9	0.3115	4.2606	136.8	0.3100	4.0207	136.8	0.3087	3.8060	136.8	0.3074	130
140	4.6103	139.0	0.3150	4.3358	138.9	0.3136	4.0918	138.9	0.3122	3.8735	138.9	0.3109	140
150	4.6900	141.1	0.3185	4.4110	141.1	0.3171	4.1629	141.0	0.3157	3.9410	141.0	0.3145	150
160	4.7697	143.2	0.3220	4.4860	143.2	0.3206	4.2339	143.2	0.3192	4.0083	143.2	0.3180	160
170	4.8492	145.4	0.3255	4.5610	145.4	0.3241	4.3048	145.4	0.3227	4.0756	145.3	0.3214	170
180	4.9287	147.6	0.3289	4.6359	147.6	0.3275	4.3757	147.5	0.3262	4.1428	147.5	0.3249	180
190	5.0082	149.8	0.3324	4.7108	149.8	0.3309	4.4465	149.8	0.3296	4.2100	149.7	0.3283	190
200	5.0875	152.0	0.3358	4.7856	152.0	0.3343	4.5172	152.0	0.3330	4.2771	152.0	0.3317	200
210	5.1668	154.3	0.3391	4.8603	154.3	0.3377	4.5879	154.2	0.3364	4.3441	154.2	0.3351	210
220	5.2461	156.6	0.3425	4.9350	156.5	0.3411	4.6585	156.5	0.3397	4.4111	156.5	0.3385	220
230	5.3253	158.9	0.3459	5.0097	158.8	0.3444	4.7291	158.8	0.3431	4.4780	158.8	0.3418	230
240	5.4045	161.2	0.3492	5.0842	161.1	0.3478	4.7996	161.1	0.3464	4.5449	161.1	0.3451	240
250	5.4836	163.5	0.3525	5.1588	163.5	0.3511	4.8701	163.4	0.3497	4.6117	163.4	0.3485	250
260	5.5627	165.8	0.3558	5.2333	165.8	0.3543	4.9405	165.8	0.3530	4.6785	165.8	0.3517	260
270	5.6417	168.2	0.3590	5.3077	168.2	0.3576	5.0109	168.2	0.3563	4.7453	168.1	0.3550	270
280	5.821	170.6	0.3609	5.0812	170.5	0.3595	4.8120	170.5	0.3583	—	—	—	280

TEMP. °F	20.00			21.00			22.00			23.00			TEMP. °F
	(-21.71°F)			(-19.76°F)			(-17.88°F)			(-16.07°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	2.6232	107.3	0.2487	2.5056	107.6	0.2483	2.3984	107.9	0.2479	2.3001	108.1	0.2475	
-20	2.6346	107.6	0.2494	—	—	—	—	—	—	—	—	—	-20
-10	2.7010	109.4	0.2534	2.5676	109.3	0.2522	2.4463	109.3	0.2511	2.3355	109.2	0.2500	-10
0	2.7672	111.2	0.2574	2.6308	111.2	0.2562	2.5068	111.1	0.2551	2.3936	111.1	0.2540	0
10	2.8331	113.0	0.2614	2.6938	113.0	0.2602	2.5671	113.0	0.2590	2.4515	112.9	0.2579	10
20	2.8989	114.9	0.2653	2.7566	114.9	0.2641	2.6273	114.8	0.2630	2.5092	114.8	0.2619	20
30	2.9645	116.8	0.2692	2.8193	116.7	0.2680	2.6872	116.7	0.2668	2.5667	116.7	0.2658	30
40	3.0299	118.7	0.2730	2.8817	118.6	0.2718	2.7470	118.6	0.2707	2.6240	118.6	0.2696	40
50	3.0952	120.6	0.2768	2.9440	120.6	0.2756	2.8066	120.5	0.2745	2.6812	120.5	0.2734	50
60	3.1603	122.5	0.2806	3.0062	122.5	0.2794	2.8661	122.5	0.2783	2.7382	122.4	0.2772	60
70	3.2253	124.5	0.2843	3.0682	124.5	0.2831	2.9255	124.4	0.2820	2.7951	124.4	0.2809	70
80	3.2901	126.5	0.2880	3.1301	126.5	0.2869	2.9847	126.4	0.2857	2.8518	126.4	0.2847	80
90	3.3549	128.5	0.2917	3.1919	128.5	0.2905	3.0438	128.4	0.2894	2.9085	128.4	0.2884	90
100	3.4195	130.5	0.2954	3.2536	130.5	0.2942	3.1027	130.5	0.2931	2.9650	130.4	0.2920	100
110	3.4840	132.6	0.2990	3.3151	132.5	0.2978	3.1616	132.5	0.2967	3.0214	132.5	0.2956	110
120	3.5485	134.6	0.3026	3.3766	134.6	0.3014	3.2204	134.6	0.3003	3.0777	134.5	0.2993	120
130	3.6128	136.7	0.3062	3.4380	136.7	0.3050	3.2791	136.7	0.3039	3.1340	136.6	0.3028	130
140	3.6770	138.8	0.3097	3.4993	138.8	0.3086	3.3377	138.8	0.3074	3.1901	138.7	0.3064	140
150	3.7412	141.0	0.3132	3.5605	140.9	0.3121	3.3962	140.9	0.3110	3.2462	140.9	0.3099	150
160	3.8053	143.1	0.3167	3.6216	143.1	0.3156	3.4546	143.1	0.3145	3.3021	143.0	0.3134	160
170	3.8693	145.3	0.3202	3.6827	145.3	0.3191	3.5130	145.2	0.3179	3.3580	145.2	0.3169	170
180	3.9333	147.5	0.3237	3.7436	147.5	0.3225	3.5713	147.4	0.3214	3.4139	147.4	0.3203	180
190	3.9971	149.7	0.3271	3.8046	149.7	0.3259	3.6295	149.6	0.3248	3.4696	149.6	0.3238	190
200	4.0610	151.9	0.3305	3.8654	151.9	0.3294	3.6877	151.9	0.3283	3.5254	151.9	0.3272	200
210	4.1247	154.2	0.3339	3.9262	154.2	0.3327	3.7458	154.1	0.3316	3.5810	154.1	0.3306	210
220	4.1884	156.5	0.3373	3.9870	156.4	0.3361	3.8038	156.4	0.3350	3.6366	156.4	0.3340	220
230	4.2521	158.7	0.3406	4.0477	158.7	0.3395	3.8618	158.7	0.3384	3.6921	158.7	0.3373	230
240	4.3157	161.1	0.3439	4.1083	161.0	0.3428	3.9198	161.0	0.3417	3.7476	161.0	0.3406	240
250	4.3792	163.4	0.3472	4.1689	163.4	0.3461	3.9777	163.3	0.3450	3.8031	163.3	0.3440	250
260	4.4428	165.7	0.3505	4.2294	165.7	0.3494	4.0355	165.7	0.3483	3.8584	165.7	0.3472	260
270	4.5062	168.1	0.3538	4.2899	168.1	0.3527	4.0933	168.1	0.3516	3.9138	168.0	0.3505	270
280	4.5696	170.5	0.3571	4.3504	170.5	0.3559	4.1511	170.5	0.3548	3.9691	170.4	0.3538	280
290	4.6108	172.9	0.3591	4.2088	172.9	0.3580	4.0244	172.8	0.3570	—	—	—	290

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	24.00			25.00			26.00			27.00			TEMP. °F
	(-14.33°F)			(-12.64°F)			(-11.00°F)			(-9.41°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(2.2097)	(108.4)	(0.2472)	(2.1263)	(108.7)	(0.2468)	(2.0490)	(108.9)	(0.2465)	(1.9773)	(109.1)	(0.2462)	
-10	2.2339	109.2	0.2489	2.1405	109.1	0.2479	2.0542	109.1	0.2469	—	—	—	-10
0	2.2898	111.0	0.2529	2.1943	111.0	0.2519	2.1061	110.9	0.2509	2.0245	110.9	0.2500	0
10	2.3454	112.9	0.2569	2.2479	112.8	0.2559	2.1578	112.8	0.2549	2.0744	112.7	0.2540	10
20	2.4009	114.7	0.2608	2.3013	114.7	0.2598	2.2093	114.6	0.2588	2.1241	114.6	0.2579	20
30	2.4562	116.6	0.2647	2.3545	116.6	0.2637	2.2606	116.5	0.2627	2.1737	116.5	0.2618	30
40	2.5112	118.5	0.2686	2.4075	118.5	0.2676	2.3117	118.4	0.2666	2.2230	118.4	0.2657	40
50	2.5662	120.4	0.2724	2.4604	120.4	0.2714	2.3627	120.4	0.2704	2.2722	120.3	0.2695	50
60	2.6209	122.4	0.2762	2.5131	122.3	0.2752	2.4135	122.3	0.2742	2.3213	122.3	0.2733	60
70	2.6756	124.4	0.2799	2.5656	124.3	0.2789	2.4641	124.3	0.2780	2.3701	124.2	0.2771	70
80	2.7301	126.3	0.2836	2.6181	126.3	0.2826	2.5147	126.3	0.2817	2.4189	126.2	0.2808	80
90	2.7845	128.4	0.2873	2.6704	128.3	0.2863	2.5651	128.3	0.2854	2.4675	128.2	0.2845	90
100	2.8387	130.4	0.2910	2.7226	130.3	0.2900	2.6154	130.3	0.2891	2.5161	130.3	0.2881	100
110	2.8929	132.4	0.2946	2.7747	132.4	0.2936	2.6655	132.4	0.2927	2.5645	132.3	0.2918	110
120	2.9470	134.5	0.2982	2.8267	134.5	0.2972	2.7156	134.4	0.2963	2.6128	134.4	0.2954	120
130	3.0010	136.6	0.3018	2.8786	136.6	0.3008	2.7656	136.5	0.2999	2.6610	136.5	0.2990	130
140	3.0548	138.7	0.3054	2.9304	138.7	0.3044	2.8155	138.7	0.3034	2.7092	138.6	0.3025	140
150	3.1086	140.8	0.3089	2.9821	140.8	0.3079	2.8653	140.8	0.3070	2.7572	140.8	0.3061	150
160	3.1624	143.0	0.3124	3.0338	143.0	0.3114	2.9151	142.9	0.3105	2.8052	142.9	0.3096	160
170	3.2160	145.2	0.3159	3.0854	145.1	0.3149	2.9647	145.1	0.3140	2.8531	145.1	0.3131	170
180	3.2696	147.4	0.3193	3.1369	147.3	0.3184	3.0143	147.3	0.3174	2.9009	147.3	0.3165	180
190	3.3231	149.6	0.3228	3.1883	149.6	0.3218	3.0639	149.5	0.3209	2.9486	149.5	0.3200	190
200	3.3766	151.8	0.3262	3.2397	151.8	0.3252	3.1133	151.8	0.3243	2.9963	151.7	0.3234	200
210	3.4300	154.1	0.3296	3.2910	154.1	0.3286	3.1627	154.0	0.3277	3.0440	154.0	0.3268	210
220	3.4833	156.4	0.3330	3.3423	156.3	0.3320	3.2121	156.3	0.3311	3.0916	156.3	0.3302	220
230	3.5366	158.6	0.3363	3.3935	158.6	0.3353	3.2614	158.6	0.3344	3.1391	158.6	0.3335	230
240	3.5898	161.0	0.3396	3.4446	160.9	0.3387	3.3106	160.9	0.3377	3.1866	160.9	0.3368	240
250	3.6430	163.3	0.3429	3.4958	163.3	0.3420	3.3598	163.2	0.3411	3.2340	163.2	0.3402	250
260	3.6961	165.6	0.3462	3.5468	165.6	0.3453	3.4090	165.6	0.3443	3.2814	165.6	0.3435	260
270	3.7492	168.0	0.3495	3.5978	168.0	0.3485	3.4581	168.0	0.3476	3.3287	168.0	0.3467	270
280	3.8023	170.4	0.3528	3.6488	170.4	0.3518	3.5072	170.4	0.3509	3.3760	170.3	0.3500	280
290	3.8553	172.8	0.3560	3.6998	172.8	0.3550	3.5562	172.8	0.3541	3.4232	172.8	0.3532	290
300	—	—	—	—	—	—	—	—	—	3.4704	175.2	0.3564	300

TEMP. °F	28.00			29.00			30.00			31.00			TEMP. °F
	(-7.86°F)			(-6.36°F)			(-4.90°F)			(-3.48°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(1.9105)	(109.4)	(0.2459)	(1.8482)	(109.6)	(0.2456)	(1.7898)	(109.8)	(0.2454)	(1.7351)	(110.0)	(0.2451)	
0	1.9487	110.8	0.2491	1.8781	110.8	0.2482	1.8121	110.7	0.2473	1.7505	110.7	0.2465	0
10	1.9970	112.7	0.2531	1.9248	112.6	0.2522	1.8575	112.6	0.2513	1.7945	112.5	0.2505	10
20	2.0450	114.5	0.2570	1.9714	114.5	0.2561	1.9027	114.4	0.2553	1.8384	114.4	0.2545	20
30	2.0929	116.4	0.2609	2.0178	116.4	0.2600	1.9476	116.3	0.2592	1.8820	116.3	0.2584	30
40	2.1407	118.3	0.2648	2.0640	118.3	0.2639	1.9924	118.2	0.2631	1.9254	118.2	0.2623	40
50	2.1882	120.3	0.2686	2.1100	120.2	0.2677	2.0370	120.2	0.2669	1.9687	120.1	0.2661	50
60	2.2356	122.2	0.2724	2.1559	122.2	0.2715	2.0815	122.1	0.2707	2.0118	122.1	0.2699	60
70	2.2829	124.2	0.2762	2.2016	124.2	0.2753	2.1258	124.1	0.2745	2.0548	124.1	0.2737	70
80	2.3300	126.2	0.2799	2.2472	126.2	0.2790	2.1699	126.1	0.2782	2.0976	126.1	0.2774	80
90	2.3770	128.2	0.2836	2.2927	128.2	0.2827	2.2140	128.1	0.2819	2.1404	128.1	0.2811	90
100	2.4239	130.2	0.2873	2.3380	130.2	0.2864	2.2579	130.2	0.2856	2.1829	130.1	0.2848	100
110	2.4706	132.3	0.2909	2.3833	132.3	0.2901	2.3017	132.2	0.2892	2.2254	132.2	0.2884	110
120	2.5173	134.4	0.2945	2.4284	134.3	0.2937	2.3454	134.3	0.2928	2.2678	134.3	0.2920	120
130	2.5639	136.5	0.2981	2.4735	136.4	0.2973	2.3891	136.4	0.2964	2.3101	136.4	0.2956	130
140	2.6104	138.6	0.3017	2.5184	138.6	0.3008	2.4326	138.5	0.3000	2.3523	138.5	0.2992	140
150	2.6568	140.7	0.3052	2.5633	140.7	0.3044	2.4760	140.7	0.3035	2.3944	140.6	0.3027	150
160	2.7031	142.9	0.3087	2.6081	142.9	0.3079	2.5194	142.8	0.3071	2.4364	142.8	0.3063	160
170	2.7494	145.1	0.3122	2.6528	145.0	0.3114	2.5627	145.0	0.3105	2.4784	145.0	0.3098	170
180	2.7955	147.3	0.3157	2.6975	147.2	0.3148	2.6059	147.2	0.3140	2.5203	147.2	0.3132	180
190	2.8417	149.5	0.3191	2.7420	149.4	0.3183	2.6491	149.4	0.3175	2.5621	149.4	0.3167	190
200	2.8877	151.7	0.3225	2.7866	151.7	0.3217	2.6922	151.7	0.3209	2.6038	151.6	0.3201	200
210	2.9337	154.0	0.3259	2.8310	153.9	0.3251	2.7352	153.9	0.3243	2.6455	153.9	0.3235	210
220	2.9796	156.3	0.3293	2.8754	156.2	0.3285	2.7782	156.2	0.3276	2.6872	156.2	0.3269	220
230	3.0255	158.5	0.3326	2.9198	158.5	0.3318	2.8211	158.5	0.3310	2.7287	158.5	0.3302	230
240	3.0713	160.9	0.3360	2.9641	160.8	0.3351	2.8639	160.8	0.3343	2.7703	160.8	0.3336	240
250	3.1171	163.2	0.3393	3.0083	163.2	0.3385	2.9068	163.2	0.3377	2.8118	163.1	0.3369	250
260	3.1628	165.6	0.3426	3.0525	165.5	0.3418	2.9495	165.5	0.3410	2.8532	165.5	0.3402	260
270	3.2085	167.9	0.3459	3.0967	167.9	0.3450	2.9922	167.9	0.3442	2.8946	167.9	0.3435	270
280	3.2542	170.3	0.3491	3.1408	170.3	0.3483	3.0349	170.3	0.3475	2.9359	170.3	0.3467	280
290	3.2998	172.7	0.3524	3.1848	172.7	0.3515	3.0776	172.7	0.3507	2.9772	172.7	0.3500	290
300	3.3454	175.2	0.3556	3.2289	175.1	0.3548	3.1202	175.1	0.3539	3.0185	175.1	0.3532	300

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	32.00			33.00			34.00			35.00			TEMP. °F
	(−2.09°F)			(−0.73°F)			(0.59°F)			(1.88°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(1.6837)	(110.2)	(0.2449)	(1.6353)	(110.4)	(0.2446)	(1.5896)	(110.6)	(0.2444)	(1.5464)	(110.8)	(0.2442)	
0	1.6927	110.6	0.2457	1.6383	110.5	0.2449	—	—	—	—	—	—	0
10	1.7355	112.5	0.2497	1.6800	112.4	0.2489	1.6277	112.4	0.2482	1.5785	112.3	0.2474	10
20	1.7781	114.3	0.2537	1.7214	114.3	0.2529	1.6681	114.2	0.2521	1.6178	114.2	0.2514	20
30	1.8204	116.2	0.2576	1.7626	116.2	0.2568	1.7082	116.1	0.2561	1.6569	116.1	0.2553	30
40	1.8626	118.2	0.2615	1.8037	118.1	0.2607	1.7481	118.1	0.2599	1.6958	118.0	0.2592	40
50	1.9047	120.1	0.2653	1.8445	120.1	0.2645	1.7879	120.0	0.2638	1.7345	120.0	0.2631	50
60	1.9465	122.1	0.2691	1.8852	122.0	0.2683	1.8275	122.0	0.2676	1.7731	121.9	0.2669	60
70	1.9883	124.0	0.2729	1.9258	124.0	0.2721	1.8670	124.0	0.2714	1.8115	123.9	0.2707	70
80	2.0299	126.0	0.2766	1.9662	126.0	0.2759	1.9063	126.0	0.2751	1.8498	125.9	0.2744	80
90	2.0713	128.1	0.2803	2.0065	128.0	0.2796	1.9455	128.0	0.2788	1.8879	127.9	0.2781	90
100	2.1127	130.1	0.2840	2.0467	130.1	0.2833	1.9845	130.0	0.2825	1.9259	130.0	0.2818	100
110	2.1539	132.2	0.2877	2.0867	132.1	0.2869	2.0235	132.1	0.2862	1.9638	132.0	0.2855	110
120	2.1950	134.2	0.2913	2.1267	134.2	0.2905	2.0623	134.2	0.2898	2.0017	134.1	0.2891	120
130	2.2361	136.3	0.2949	2.1665	136.3	0.2941	2.1011	136.3	0.2934	2.0394	136.2	0.2927	130
140	2.2770	138.5	0.2984	2.2063	138.4	0.2977	2.1397	138.4	0.2970	2.0770	138.4	0.2963	140
150	2.3179	140.6	0.3020	2.2460	140.6	0.3012	2.1783	140.5	0.3005	2.1145	140.5	0.2998	150
160	2.3587	142.8	0.3055	2.2856	142.7	0.3048	2.2168	142.7	0.3040	2.1520	142.7	0.3033	160
170	2.3994	144.9	0.3090	2.3251	144.9	0.3082	2.2552	144.9	0.3075	2.1893	144.9	0.3068	170
180	2.4400	147.1	0.3125	2.3646	147.1	0.3117	2.2936	147.1	0.3110	2.2266	147.1	0.3103	180
190	2.4805	149.4	0.3159	2.4039	149.3	0.3152	2.3319	149.3	0.3144	2.2639	149.3	0.3137	190
200	2.5210	151.6	0.3193	2.4433	151.6	0.3186	2.3701	151.6	0.3179	2.3010	151.5	0.3172	200
210	2.5615	153.9	0.3227	2.4825	153.8	0.3220	2.4082	153.8	0.3213	2.3382	153.8	0.3206	210
220	2.6019	156.1	0.3261	2.5217	156.1	0.3254	2.4463	156.1	0.3247	2.3752	156.1	0.3240	220
230	2.6422	158.4	0.3295	2.5609	158.4	0.3287	2.4843	158.4	0.3280	2.4122	158.4	0.3273	230
240	2.6825	160.8	0.3328	2.6000	160.7	0.3321	2.5223	160.7	0.3314	2.4491	160.7	0.3307	240
250	2.7227	163.1	0.3361	2.6390	163.1	0.3354	2.5603	163.1	0.3347	2.4860	163.0	0.3340	250
260	2.7629	165.5	0.3394	2.6780	165.4	0.3387	2.5982	165.4	0.3380	2.5229	165.4	0.3373	260
270	2.8030	167.8	0.3427	2.7170	167.8	0.3420	2.6360	167.8	0.3413	2.5597	167.8	0.3406	270
280	2.8431	170.2	0.3460	2.7559	170.2	0.3452	2.6738	170.2	0.3445	2.5964	170.2	0.3438	280
290	2.8831	172.6	0.3492	2.7948	172.6	0.3485	2.7116	172.6	0.3478	2.6332	172.6	0.3471	290
300	2.9232	175.1	0.3524	2.8336	175.1	0.3517	2.7493	175.0	0.3510	2.6698	175.0	0.3503	300
310	—	—	—	—	—	—	2.7870	177.5	0.3542	2.7065	177.5	0.3535	310

TEMP. °F	36.00			37.00			38.00			39.00			TEMP. °F
	(3.15°F)			(4.38°F)			(5.60°F)			(6.78°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(1.5056)	(111.0)	(0.2440)	(1.4668)	(111.2)	(0.2437)	(1.4301)	(111.3)	(0.2435)	(1.3951)	(111.5)	(0.2434)	
10	1.5320	112.3	0.2467	1.4879	112.2	0.2460	1.4462	112.2	0.2453	1.4067	112.1	0.2446	10
20	1.5703	114.1	0.2507	1.5254	114.1	0.2500	1.4828	114.0	0.2493	1.4424	114.0	0.2486	20
30	1.6084	116.1	0.2546	1.5625	116.0	0.2539	1.5191	116.0	0.2532	1.4779	115.9	0.2526	30
40	1.6463	118.0	0.2585	1.5995	117.9	0.2578	1.5552	117.9	0.2571	1.5132	117.8	0.2565	40
50	1.6841	119.9	0.2624	1.6364	119.9	0.2617	1.5912	119.8	0.2610	1.5483	119.8	0.2603	50
60	1.7217	121.9	0.2662	1.6730	121.8	0.2655	1.6269	121.8	0.2648	1.5832	121.8	0.2642	60
70	1.7591	123.9	0.2700	1.7095	123.8	0.2693	1.6626	123.8	0.2686	1.6180	123.7	0.2680	70
80	1.7964	125.9	0.2737	1.7459	125.8	0.2730	1.6981	125.8	0.2724	1.6527	125.8	0.2717	80
90	1.8336	127.9	0.2774	1.7821	127.9	0.2767	1.7334	127.8	0.2761	1.6872	127.8	0.2754	90
100	1.8706	129.9	0.2811	1.8182	129.9	0.2804	1.7687	129.9	0.2798	1.7216	129.8	0.2791	100
110	1.9075	132.0	0.2848	1.8542	132.0	0.2841	1.8038	131.9	0.2834	1.7559	131.9	0.2828	110
120	1.9444	134.1	0.2884	1.8901	134.1	0.2877	1.8388	134.0	0.2871	1.7901	134.0	0.2864	120
130	1.9811	136.2	0.2920	1.9259	136.2	0.2913	1.8737	136.1	0.2907	1.8241	136.1	0.2900	130
140	2.0177	138.3	0.2956	1.9616	138.3	0.2949	1.9085	138.3	0.2943	1.8581	138.2	0.2936	140
150	2.0543	140.5	0.2991	1.9973	140.4	0.2985	1.9433	140.4	0.2978	1.8920	140.4	0.2972	150
160	2.0907	142.6	0.3026	2.0328	142.6	0.3020	1.9779	142.6	0.3013	1.9258	142.5	0.3007	160
170	2.1271	144.8	0.3061	2.0682	144.8	0.3055	2.0125	144.8	0.3048	1.9596	144.7	0.3042	170
180	2.1634	147.0	0.3096	2.1036	147.0	0.3090	2.0470	147.0	0.3083	1.9932	146.9	0.3077	180
190	2.1997	149.3	0.3131	2.1389	149.2	0.3124	2.0814	149.2	0.3118	2.0268	149.2	0.3111	190
200	2.2359	151.5	0.3165	2.1742	151.5	0.3158	2.1158	151.4	0.3152	2.0603	151.4	0.3146	200
210	2.2720	153.8	0.3199	2.2094	153.7	0.3192	2.1501	153.7	0.3186	2.0938	153.7	0.3180	210
220	2.3080	156.0	0.3233	2.2445	156.0	0.3226	2.1843	156.0	0.3220	2.1272	156.0	0.3214	220
230	2.3440	158.3	0.3266	2.2796	158.3	0.3260	2.2185	158.3	0.3253	2.1606	158.3	0.3247	230
240	2.3800	160.7	0.3300	2.3146	160.6	0.3293	2.2526	160.6	0.3287	2.1939	160.6	0.3281	240
250	2.4159	163.0	0.3333	2.3496	163.0	0.3327	2.2867	163.0	0.3320	2.2271	162.9	0.3314	250
260	2.4518	165.4	0.3366	2.3845	165.3	0.3360	2.3208	165.3	0.3353	2.2603	165.3	0.3347	260
270	2.4876	167.7	0.3399	2.4194	167.7	0.3392	2.3548	167.7	0.3386	2.2935	167.7	0.3380	270
280	2.5234	170.1	0.3432	2.4542	170.1	0.3425	2.3887	170.1	0.3419	2.3266	170.1	0.3412	280
290	2.5591	172.6	0.3464	2.4890	172.5	0.3457	2.4226	172.5	0.3451	2.3597	172.5	0.3445	290
300	2.5948	175.0	0.3496	2.5238	175.0	0.3490	2.4565	174.9	0.3483	2.3927	174.9	0.3477	300
310	2.6304	177.4	0.3528	2.5585	177.4	0.3522	2.4903	177.4	0.3515	2.4257	177.4	0.3509	310

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	40.00			41.00			42.00			43.00			TEMP. °F
	(7.95°F)			(9.09°F)			(10.21°F)			(11.30°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(1.3619)	(111.7)	(0.2432)	(1.3301)	(111.8)	(0.2430)	(1.2999)	(112.0)	(0.2428)	(1.2710)	(112.1)	(0.2426)	
10	1.3691	112.1	0.2440	1.3333	112.0	0.2433	—	—	—	—	—	—	10
20	1.4040	113.9	0.2480	1.3675	113.9	0.2473	1.3327	113.9	0.2467	1.2995	113.8	0.2461	20
30	1.4387	115.9	0.2519	1.4014	115.8	0.2513	1.3659	115.8	0.2507	1.3321	115.7	0.2501	30
40	1.4732	117.8	0.2558	1.4352	117.7	0.2552	1.3990	117.7	0.2546	1.3644	117.7	0.2540	40
50	1.5075	119.7	0.2597	1.4688	119.7	0.2591	1.4318	119.7	0.2585	1.3966	119.6	0.2579	50
60	1.5417	121.7	0.2635	1.5022	121.7	0.2629	1.4645	121.6	0.2623	1.4287	121.6	0.2617	60
70	1.5757	123.7	0.2673	1.5354	123.7	0.2667	1.4971	123.6	0.2661	1.4605	123.6	0.2655	70
80	1.6096	125.7	0.2711	1.5685	125.7	0.2705	1.5295	125.6	0.2699	1.4922	125.6	0.2693	80
90	1.6433	127.7	0.2748	1.6015	127.7	0.2742	1.5617	127.7	0.2736	1.5238	127.6	0.2730	90
100	1.6769	129.8	0.2785	1.6344	129.8	0.2779	1.5939	129.7	0.2773	1.5553	129.7	0.2767	100
110	1.7104	131.9	0.2822	1.6671	131.8	0.2816	1.6259	131.8	0.2810	1.5866	131.8	0.2804	110
120	1.7438	134.0	0.2858	1.6997	133.9	0.2852	1.6578	133.9	0.2846	1.6178	133.9	0.2840	120
130	1.7771	136.1	0.2894	1.7323	136.0	0.2888	1.6896	136.0	0.2882	1.6489	136.0	0.2876	130
140	1.8102	138.2	0.2930	1.7647	138.2	0.2924	1.7213	138.1	0.2918	1.6800	138.1	0.2912	140
150	1.8433	140.3	0.2965	1.7970	140.3	0.2959	1.7529	140.3	0.2954	1.7109	140.2	0.2948	150
160	1.8764	142.5	0.3001	1.8293	142.5	0.2995	1.7845	142.5	0.2989	1.7418	142.4	0.2983	160
170	1.9093	144.7	0.3036	1.8615	144.7	0.3030	1.8159	144.6	0.3024	1.7725	144.6	0.3018	170
180	1.9422	146.9	0.3071	1.8936	146.9	0.3065	1.8473	146.9	0.3059	1.8032	146.8	0.3053	180
190	1.9750	149.1	0.3105	1.9256	149.1	0.3099	1.8787	149.1	0.3093	1.8339	149.1	0.3088	190
200	2.0077	151.4	0.3139	1.9576	151.4	0.3134	1.9099	151.3	0.3128	1.8644	151.3	0.3122	200
210	2.0404	153.7	0.3174	1.9895	153.6	0.3168	1.9411	153.6	0.3162	1.8949	153.6	0.3156	210
220	2.0730	155.9	0.3207	2.0214	155.9	0.3202	1.9722	155.9	0.3196	1.9254	155.9	0.3190	220
230	2.1055	158.2	0.3241	2.0532	158.2	0.3235	2.0033	158.2	0.3229	1.9558	158.2	0.3224	230
240	2.1380	160.6	0.3275	2.0849	160.5	0.3269	2.0343	160.5	0.3263	1.9861	160.5	0.3257	240
250	2.1705	162.9	0.3308	2.1166	162.9	0.3302	2.0653	162.9	0.3296	2.0164	162.8	0.3290	250
260	2.2029	165.3	0.3341	2.1483	165.2	0.3335	2.0962	165.2	0.3329	2.0466	165.2	0.3324	260
270	2.2352	167.7	0.3374	2.1799	167.6	0.3368	2.1271	167.6	0.3362	2.0768	167.6	0.3356	270
280	2.2676	170.1	0.3406	2.2114	170.0	0.3401	2.1579	170.0	0.3395	2.1069	170.0	0.3389	280
290	2.2998	172.5	0.3439	2.2429	172.4	0.3433	2.1887	172.4	0.3427	2.1371	172.4	0.3422	290
300	2.3321	174.9	0.3471	2.2744	174.9	0.3465	2.2195	174.9	0.3459	2.1671	174.8	0.3454	300
310	2.3643	177.4	0.3503	2.3058	177.3	0.3497	2.2502	177.3	0.3492	2.1972	177.3	0.3486	310
320	—	—	—	—	—	—	2.2809	179.8	0.3524	2.2271	179.8	0.3518	320

TEMP. °F	44.00			45.00			46.00			47.00			TEMP. °F
	(12.38°F)			(13.44°F)			(14.48°F)			(15.51°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(1.2434)	(112.3)	(0.2425)	(1.2169)	(112.4)	(0.2423)	(1.1915)	(112.6)	(0.2421)	(1.1672)	(112.7)	(0.2420)	
20	1.2678	113.8	0.2455	1.2376	113.7	0.2449	1.2086	113.7	0.2443	1.1809	113.6	0.2438	20
30	1.2998	115.7	0.2495	1.2689	115.6	0.2489	1.2393	115.6	0.2483	1.2110	115.5	0.2478	30
40	1.3315	117.6	0.2534	1.3000	117.6	0.2528	1.2698	117.5	0.2522	1.2410	117.5	0.2517	40
50	1.3630	119.6	0.2573	1.3309	119.5	0.2567	1.3002	119.5	0.2561	1.2708	119.4	0.2556	50
60	1.3944	121.5	0.2611	1.3617	121.5	0.2605	1.3303	121.5	0.2600	1.3003	121.4	0.2594	60
70	1.4256	123.5	0.2649	1.3922	123.5	0.2643	1.3603	123.5	0.2638	1.3298	123.4	0.2632	70
80	1.4567	125.6	0.2687	1.4227	125.5	0.2681	1.3902	125.5	0.2676	1.3590	125.4	0.2670	80
90	1.4876	127.6	0.2724	1.4530	127.6	0.2719	1.4199	127.5	0.2713	1.3882	127.5	0.2708	90
100	1.5184	129.6	0.2761	1.4832	129.6	0.2756	1.4495	129.6	0.2750	1.4172	129.5	0.2745	100
110	1.5491	131.7	0.2798	1.5132	131.7	0.2792	1.4789	131.7	0.2787	1.4461	131.6	0.2782	110
120	1.5796	133.8	0.2834	1.5432	133.8	0.2829	1.5083	133.7	0.2823	1.4749	133.7	0.2818	120
130	1.6101	135.9	0.2871	1.5730	135.9	0.2865	1.5375	135.9	0.2860	1.5035	135.8	0.2854	130
140	1.6405	138.1	0.2906	1.6028	138.0	0.2901	1.5667	138.0	0.2895	1.5321	138.0	0.2890	140
150	1.6708	140.2	0.2942	1.6324	140.2	0.2937	1.5957	140.2	0.2931	1.5606	140.1	0.2926	150
160	1.7010	142.4	0.2977	1.6620	142.4	0.2972	1.6247	142.3	0.2966	1.5890	142.3	0.2961	160
170	1.7311	144.6	0.3013	1.6915	144.6	0.3007	1.6536	144.5	0.3002	1.6173	144.5	0.2996	170
180	1.7611	146.8	0.3047	1.7209	146.8	0.3042	1.6824	146.7	0.3036	1.6456	146.7	0.3031	180
190	1.7911	149.0	0.3082	1.7502	149.0	0.3076	1.7112	149.0	0.3071	1.6737	148.9	0.3066	190
200	1.8210	151.3	0.3116	1.7795	151.2	0.3111	1.7398	151.2	0.3106	1.7018	151.2	0.3100	200
210	1.8509	153.5	0.3150	1.8087	153.5	0.3145	1.7685	153.5	0.3140	1.7299	153.5	0.3134	210
220	1.8806	155.8	0.3184	1.8379	155.8	0.3179	1.7970	155.8	0.3174	1.7579	155.8	0.3168	220
230	1.9104	158.1	0.3218	1.8670	158.1	0.3213	1.8255	158.1	0.3207	1.7858	158.1	0.3202	230
240	1.9400	160.5	0.3252	1.8961	160.4	0.3246	1.8540	160.4	0.3241	1.8137	160.4	0.3236	240
250	1.9697	162.8	0.3285	1.9251	162.8	0.3279	1.8824	162.8	0.3274	1.8415	162.7	0.3269	250
260	1.9993	165.2	0.3318	1.9540	165.2	0.3313	1.9107	165.1	0.3307	1.8693	165.1	0.3302	260
270	2.0288	167.6	0.3351	1.9829	167.5	0.3345	1.9390	167.5	0.3340	1.8970	167.5	0.3335	270
280	2.0583	170.0	0.3384	2.0118	169.9	0.3378	1.9673	169.9	0.3373	1.9247	169.9	0.3368	280
290	2.0877	172.4	0.3416	2.0406	172.4	0.3411	1.9955	172.3	0.3405	1.9523	172.3	0.3400	290
300	2.1171	174.8	0.3448	2.0694	174.8	0.3443	2.0237	174.8	0.3438	1.9799	174.8	0.3433	300
310	2.1465	177.3	0.3480	2.0981	177.3	0.3475	2.0518	177.2	0.3470	2.0075	177.2	0.3465	310
320	2.1758	179.7	0.3512	2.1268	179.7	0.3507	2.0799	179.7	0.3502	2.0350	179.7	0.3497	320

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	48.00			49.00			50.00			55.00			TEMP. °F
	(16.51°F)			(17.51°F)			(18.48°F)			(23.14°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(1.1439)	(112.9)	(0.2418)	(1.1215)	(113.0)	(0.2417)	(1.0999)	(113.2)	(0.2415)	(1.0034)	(113.8)	(0.2408)	
20	1.1543	113.6	0.2432	1.1288	113.5	0.2427	1.1043	113.4	0.2421	—	—	—	20
30	1.1839	115.5	0.2472	1.1579	115.4	0.2467	1.1329	115.4	0.2461	1.0215	115.1	0.2436	30
40	1.2133	117.4	0.2511	1.1868	117.4	0.2506	1.1613	117.3	0.2501	1.0478	117.1	0.2476	40
50	1.2425	119.4	0.2550	1.2155	119.3	0.2545	1.1895	119.3	0.2540	1.0738	119.1	0.2515	50
60	1.2716	121.4	0.2589	1.2440	121.3	0.2584	1.2175	121.3	0.2578	1.0996	121.1	0.2554	60
70	1.3005	123.4	0.2627	1.2724	123.3	0.2622	1.2454	123.3	0.2617	1.1252	123.1	0.2592	70
80	1.3292	125.4	0.2665	1.3006	125.4	0.2660	1.2731	125.3	0.2654	1.1507	125.1	0.2630	80
90	1.3578	127.4	0.2702	1.3287	127.4	0.2697	1.3007	127.4	0.2692	1.1760	127.2	0.2668	90
100	1.3863	129.5	0.2739	1.3566	129.5	0.2734	1.3281	129.4	0.2729	1.2012	129.2	0.2705	100
110	1.4146	131.6	0.2776	1.3844	131.5	0.2771	1.3554	131.5	0.2766	1.2263	131.3	0.2742	110
120	1.4428	133.7	0.2813	1.4121	133.6	0.2808	1.3826	133.6	0.2803	1.2513	133.4	0.2778	120
130	1.4710	135.8	0.2849	1.4397	135.8	0.2844	1.4097	135.7	0.2839	1.2761	135.6	0.2815	130
140	1.4990	137.9	0.2885	1.4672	137.9	0.2880	1.4367	137.9	0.2875	1.3009	137.7	0.2851	140
150	1.5269	140.1	0.2921	1.4946	140.1	0.2915	1.4636	140.0	0.2910	1.3255	139.9	0.2887	150
160	1.5548	142.3	0.2956	1.5220	142.2	0.2951	1.4905	142.2	0.2946	1.3501	142.0	0.2922	160
170	1.5826	144.5	0.2991	1.5492	144.4	0.2986	1.5172	144.4	0.2981	1.3746	144.2	0.2957	170
180	1.6102	146.7	0.3026	1.5764	146.6	0.3021	1.5439	146.6	0.3016	1.3990	146.5	0.2992	180
190	1.6379	148.9	0.3061	1.6035	148.9	0.3056	1.5704	148.9	0.3051	1.4233	148.7	0.3027	190
200	1.6654	151.2	0.3095	1.6305	151.1	0.3090	1.5970	151.1	0.3085	1.4476	151.0	0.3062	200
210	1.6929	153.4	0.3129	1.6575	153.4	0.3124	1.6234	153.4	0.3119	1.4718	153.2	0.3096	210
220	1.7204	155.7	0.3163	1.6844	155.7	0.3158	1.6498	155.7	0.3153	1.4959	155.5	0.3130	220
230	1.7477	158.0	0.3197	1.7112	158.0	0.3192	1.6762	158.0	0.3187	1.5200	157.9	0.3164	230
240	1.7751	160.4	0.3231	1.7380	160.3	0.3226	1.7025	160.3	0.3221	1.5441	160.2	0.3197	240
250	1.8023	162.7	0.3264	1.7648	162.7	0.3259	1.7287	162.7	0.3254	1.5680	162.5	0.3231	250
260	1.8296	165.1	0.3297	1.7915	165.1	0.3292	1.7549	165.0	0.3287	1.5920	164.9	0.3264	260
270	1.8567	167.5	0.3330	1.8181	167.4	0.3325	1.7810	167.4	0.3320	1.6159	167.3	0.3297	270
280	1.8839	169.9	0.3363	1.8447	169.8	0.3358	1.8071	169.8	0.3353	1.6397	169.7	0.3330	280
290	1.9110	172.3	0.3395	1.8713	172.3	0.3390	1.8332	172.2	0.3385	1.6635	172.1	0.3362	290
300	1.9380	174.7	0.3427	1.8978	174.7	0.3423	1.8592	174.7	0.3418	1.6873	174.6	0.3395	300
310	1.9650	177.2	0.3460	1.9243	177.2	0.3455	1.8852	177.1	0.3450	1.7110	177.0	0.3427	310
320	1.9920	179.7	0.3492	1.9507	179.6	0.3487	1.9111	179.6	0.3482	1.7347	179.5	0.3459	320
330	—	—	—	—	—	—	—	—	—	1.7583	182.0	0.3491	330

TEMP. °F	60.00			65.00			70.00			75.00			TEMP. °F
	(27.49°F)			(31.56°F)			(35.40°F)			(39.03°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.9225)	(114.4)	(0.2402)	(0.8535)	(114.9)	(0.2397)	(0.7941)	(115.5)	(0.2392)	(0.7422)	(115.9)	(0.2387)	
30	0.9287	114.9	0.2412	—	—	—	—	—	—	—	—	—	30
40	0.9530	116.9	0.2452	0.8728	116.6	0.2431	0.8040	116.4	0.2410	0.7442	116.1	0.2391	40
50	0.9772	118.8	0.2492	0.8954	118.6	0.2470	0.8253	118.4	0.2450	0.7644	118.1	0.2431	50
60	1.0012	120.8	0.2531	0.9179	120.6	0.2509	0.8464	120.4	0.2489	0.7844	120.2	0.2470	60
70	1.0250	122.9	0.2569	0.9401	122.7	0.2548	0.8673	122.4	0.2528	0.8042	122.2	0.2509	70
80	1.0486	124.9	0.2607	0.9622	124.7	0.2586	0.8881	124.5	0.2566	0.8238	124.3	0.2548	80
90	1.0721	127.0	0.2645	0.9841	126.8	0.2624	0.9087	126.6	0.2604	0.8432	126.4	0.2586	90
100	1.0954	129.0	0.2682	1.0059	128.8	0.2662	0.9291	128.7	0.2642	0.8625	128.5	0.2624	100
110	1.1187	131.1	0.2720	1.0275	131.0	0.2699	0.9494	130.8	0.2679	0.8817	130.6	0.2661	110
120	1.1418	133.2	0.2756	1.0491	133.1	0.2736	0.9696	132.9	0.2716	0.9007	132.7	0.2698	120
130	1.1647	135.4	0.2793	1.0705	135.2	0.2772	0.9897	135.0	0.2753	0.9196	134.9	0.2735	130
140	1.1876	137.5	0.2829	1.0918	137.4	0.2808	1.0096	137.2	0.2789	0.9384	137.0	0.2772	140
150	1.2104	139.7	0.2865	1.1130	139.5	0.2844	1.0295	139.4	0.2826	0.9571	139.2	0.2808	150
160	1.2331	141.9	0.2900	1.1341	141.7	0.2880	1.0492	141.6	0.2861	0.9757	141.4	0.2844	160
170	1.2557	144.1	0.2936	1.1551	143.9	0.2916	1.0689	143.8	0.2897	0.9942	143.6	0.2879	170
180	1.2783	146.3	0.2971	1.1761	146.2	0.2951	1.0885	146.0	0.2932	1.0126	145.9	0.2914	180
190	1.3007	148.6	0.3006	1.1970	148.4	0.2986	1.1080	148.3	0.2967	1.0309	148.1	0.2949	190
200	1.3231	150.8	0.3040	1.2178	150.7	0.3020	1.1275	150.5	0.3002	1.0492	150.4	0.2984	200
210	1.3454	153.1	0.3074	1.2385	153.0	0.3055	1.1469	152.8	0.3036	1.0674	152.7	0.3019	210
220	1.3677	155.4	0.3109	1.2592	155.3	0.3089	1.1662	155.1	0.3070	1.0855	155.0	0.3053	220
230	1.3899	157.7	0.3142	1.2798	157.6	0.3123	1.1854	157.5	0.3104	1.1036	157.3	0.3087	230
240	1.4121	160.1	0.3176	1.3004	159.9	0.3156	1.2046	159.8	0.3138	1.1216	159.7	0.3121	240
250	1.4342	162.4	0.3210	1.3209	162.3	0.3190	1.2238	162.2	0.3172	1.1396	162.1	0.3154	250
260	1.4562	164.8	0.3243	1.3413	164.7	0.3223	1.2429	164.6	0.3205	1.1575	164.4	0.3188	260
270	1.4782	167.2	0.3276	1.3617	167.1	0.3256	1.2619	167.0	0.3238	1.1754	166.8	0.3221	270
280	1.5002	169.6	0.3309	1.3821	169.5	0.3289	1.2809	169.4	0.3271	1.1932	169.3	0.3254	280
290	1.5221	172.0	0.3341	1.4024	171.9	0.3322	1.2999	171.8	0.3304	1.2110	171.7	0.3287	290
300	1.5440	174.5	0.3374	1.4227	174.4	0.3354	1.3188	174.3	0.3336	1.2287	174.2	0.3319	300
310	1.5658	176.9	0.3406	1.4429	176.8	0.3386	1.3377	176.7	0.3368	1.2464	176.6	0.3351	310
320	1.5876	179.4	0.3438	1.4632	179.3	0.3418	1.3565	179.2	0.3400	1.2640	179.1	0.3384	320
330	1.6094	181.9	0.3470	1.4833	181.8	0.3450	1.3753	181.7	0.3432	1.2817	181.6	0.3415	330
340	1.5035	184.3	0.3482	1.3941	184.2	0.3464	1.2993	184.1	0.3447	—	—	—	340

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	80.00			85.00			90.00			95.00			TEMP. °F
	(42.48°F)			(45.77°F)			(48.92°F)			(51.93°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.6966)	(116.4)	(0.2382)	(0.6562)	(116.8)	(0.2378)	(0.6201)	(117.2)	(0.2374)	(0.5877)	(117.5)	(0.2371)	
50	0.7111	117.9	0.2413	0.6640	117.6	0.2395	0.6220	117.4	0.2379	—	—	—	50
60	0.7301	119.9	0.2452	0.6821	119.7	0.2435	0.6394	119.5	0.2419	0.6012	119.2	0.2403	60
70	0.7489	122.0	0.2491	0.7001	121.8	0.2475	0.6566	121.5	0.2458	0.6177	121.3	0.2443	70
80	0.7675	124.1	0.2530	0.7178	123.9	0.2514	0.6736	123.6	0.2498	0.6340	123.4	0.2482	80
90	0.7860	126.2	0.2569	0.7354	125.9	0.2552	0.6904	125.7	0.2536	0.6501	125.5	0.2521	90
100	0.8042	128.3	0.2607	0.7528	128.1	0.2590	0.7070	127.9	0.2574	0.6660	127.7	0.2559	100
110	0.8224	130.4	0.2644	0.7700	130.2	0.2628	0.7235	130.0	0.2612	0.6818	129.8	0.2597	110
120	0.8404	132.5	0.2681	0.7871	132.3	0.2665	0.7398	132.1	0.2650	0.6974	132.0	0.2635	120
130	0.8583	134.7	0.2718	0.8041	134.5	0.2702	0.7560	134.3	0.2687	0.7129	134.1	0.2672	130
140	0.8760	136.8	0.2755	0.8210	136.7	0.2739	0.7721	136.5	0.2724	0.7283	136.3	0.2709	140
150	0.8937	139.0	0.2791	0.8378	138.9	0.2775	0.7880	138.7	0.2760	0.7435	138.5	0.2746	150
160	0.9113	141.2	0.2827	0.8544	141.1	0.2811	0.8039	140.9	0.2796	0.7587	140.8	0.2782	160
170	0.9288	143.5	0.2863	0.8710	143.3	0.2847	0.8197	143.2	0.2832	0.7738	143.0	0.2818	170
180	0.9462	145.7	0.2898	0.8875	145.6	0.2882	0.8354	145.4	0.2867	0.7887	145.3	0.2853	180
190	0.9635	148.0	0.2933	0.9039	147.8	0.2917	0.8510	147.7	0.2903	0.8036	147.5	0.2889	190
200	0.9807	150.3	0.2968	0.9203	150.1	0.2952	0.8665	150.0	0.2938	0.8184	149.8	0.2924	200
210	0.9979	152.6	0.3002	0.9365	152.4	0.2987	0.8820	152.3	0.2972	0.8332	152.1	0.2958	210
220	1.0150	154.9	0.3037	0.9527	154.7	0.3021	0.8974	154.6	0.3007	0.8479	154.5	0.2993	220
230	1.0320	157.2	0.3071	0.9689	157.1	0.3055	0.9127	156.9	0.3041	0.8625	156.8	0.3027	230
240	1.0490	159.6	0.3105	0.9849	159.4	0.3089	0.9280	159.3	0.3075	0.8770	159.2	0.3061	240
250	1.0659	161.9	0.3138	1.0010	161.8	0.3123	0.9432	161.7	0.3109	0.8915	161.6	0.3095	250
260	1.0828	164.3	0.3172	1.0169	164.2	0.3156	0.9584	164.1	0.3142	0.9059	164.0	0.3128	260
270	1.0997	166.7	0.3205	1.0329	166.6	0.3190	0.9735	166.5	0.3175	0.9203	166.4	0.3162	270
280	1.1164	169.1	0.3238	1.0487	169.0	0.3223	0.9885	168.9	0.3208	0.9347	168.8	0.3195	280
290	1.1332	171.6	0.3271	1.0646	171.5	0.3256	1.0035	171.4	0.3241	0.9490	171.3	0.3228	290
300	1.1499	174.0	0.3303	1.0803	173.9	0.3288	1.0185	173.8	0.3274	0.9632	173.7	0.3260	300
310	1.1665	176.5	0.3336	1.0961	176.4	0.3321	1.0335	176.3	0.3306	0.9774	176.2	0.3293	310
320	1.1832	179.0	0.3368	1.1118	178.9	0.3353	1.0484	178.8	0.3339	0.9916	178.7	0.3325	320
330	1.1997	181.5	0.3400	1.1275	181.4	0.3385	1.0632	181.3	0.3371	1.0057	181.2	0.3357	330
340	1.2163	184.0	0.3431	1.1431	183.9	0.3417	1.0780	183.8	0.3403	1.0198	183.8	0.3389	340
350	1.2328	186.6	0.3463	1.1587	186.5	0.3448	1.0928	186.4	0.3434	1.0339	186.3	0.3421	350
360	—	—	—	—	—	—	—	—	—	1.0479	188.9	0.3452	360

TEMP. °F	100.00			110.00			120.00			130.00			TEMP. °F
	(54.82°F)			(60.29°F)			(65.39°F)			(70.18°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.5583)	(117.9)	(0.2367)	(0.5074)	(118.5)	(0.2360)	(0.4646)	(119.1)	(0.2354)	(0.4281)	(119.6)	(0.2349)	
60	0.5667	119.0	0.2388	—	—	—	—	—	—	—	—	—	60
70	0.5826	121.1	0.2428	0.5218	120.6	0.2400	0.4710	120.1	0.2373	—	—	—	70
80	0.5983	123.2	0.2468	0.5365	122.7	0.2440	0.4849	122.3	0.2413	0.4411	121.8	0.2389	80
90	0.6138	125.3	0.2507	0.5510	124.9	0.2479	0.4985	124.4	0.2453	0.4540	124.0	0.2429	90
100	0.6291	127.4	0.2545	0.5652	127.0	0.2518	0.5119	126.6	0.2492	0.4667	126.2	0.2468	100
110	0.6442	129.6	0.2583	0.5793	129.2	0.2556	0.5251	128.8	0.2531	0.4792	128.4	0.2508	110
120	0.6592	131.8	0.2621	0.5932	131.4	0.2594	0.5382	131.0	0.2569	0.4915	130.6	0.2546	120
130	0.6741	134.0	0.2658	0.6070	133.6	0.2632	0.5511	133.2	0.2607	0.5036	132.8	0.2584	130
140	0.6888	136.1	0.2695	0.6207	135.8	0.2669	0.5638	135.4	0.2645	0.5157	135.1	0.2622	140
150	0.7035	138.4	0.2732	0.6342	138.0	0.2706	0.5765	137.7	0.2682	0.5275	137.3	0.2659	150
160	0.7180	140.6	0.2768	0.6476	140.3	0.2742	0.5890	139.9	0.2718	0.5393	139.6	0.2696	160
170	0.7324	142.8	0.2804	0.6610	142.5	0.2778	0.6014	142.2	0.2755	0.5509	141.9	0.2733	170
180	0.7467	145.1	0.2840	0.6742	144.8	0.2814	0.6137	144.5	0.2791	0.5625	144.2	0.2769	180
190	0.7610	147.4	0.2875	0.6873	147.1	0.2850	0.6259	146.8	0.2826	0.5739	146.5	0.2805	190
200	0.7752	149.7	0.2910	0.7004	149.4	0.2885	0.6380	149.1	0.2862	0.5853	148.8	0.2840	200
210	0.7893	152.0	0.2945	0.7134	151.7	0.2920	0.6501	151.4	0.2897	0.5965	151.1	0.2875	210
220	0.8033	154.3	0.2980	0.7263	154.1	0.2955	0.6621	153.8	0.2932	0.6077	153.5	0.2910	220
230	0.8172	156.7	0.3014	0.7391	156.4	0.2989	0.6740	156.1	0.2966	0.6189	155.9	0.2945	230
240	0.8311	159.0	0.3048	0.7519	158.8	0.3023	0.6858	158.5	0.3001	0.6299	158.3	0.2980	240
250	0.8450	161.4	0.3082	0.7646	161.2	0.3057	0.6976	160.9	0.3035	0.6409	160.7	0.3014	250
260	0.8588	163.8	0.3115	0.7773	163.6	0.3091	0.7094	163.3	0.3068	0.6519	163.1	0.3048	260
270	0.8725	166.3	0.3149	0.7899	166.0	0.3124	0.7210	165.8	0.3102	0.6628	165.5	0.3081	270
280	0.8862	168.7	0.3182	0.8025	168.5	0.3158	0.7327	168.2	0.3135	0.6736	168.0	0.3115	280
290	0.8998	171.1	0.3215	0.8150	170.9	0.3191	0.7442	170.7	0.3168	0.6844	170.5	0.3148	290
300	0.9134	173.6	0.3248	0.8274	173.4	0.3224	0.7558	173.2	0.3201	0.6952	172.9	0.3181	300
310	0.9270	176.1	0.3280	0.8399	175.9	0.3256	0.7673	175.7	0.3234	0.7059	175.5	0.3214	310
320	0.9405	178.6	0.3312	0.8523	178.4	0.3288	0.7787	178.2	0.3266	0.7165	178.0	0.3246	320
330	0.9540	181.1	0.3345	0.8646	180.9	0.3321	0.7901	180.7	0.3299	0.7271	180.5	0.3278	330
340	0.9674	183.7	0.3376	0.8769	183.5	0.3353	0.8015	183.3	0.3331	0.7377	183.1	0.3310	340
350	0.9808	186.2	0.3408	0.8892	186.0	0.3384	0.8129	185.8	0.3363	0.7483	185.6	0.3342	350
360	0.9942	188.8	0.3440	0.9015	188.6	0.3416	0.8242	188.4	0.3394	0.7588	188.2	0.3374	360
370	—	—	—	0.9137	191.2	0.3447	0.8355	191.0	0.3426	0.7693	190.8	0.3406	370
380	—	—	—	—	—	—	—	—	—	0.7797	193.4	0.3437	380

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	140.00			150.00			160.00			170.00			TEMP. °F
	(74.69°F)			(78.96°F)			(83.02°F)			(86.90°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.3967)	(120.1)	(0.2343)	(0.3693)	(120.6)	(0.2338)	(0.3451)	(120.9)	(0.2333)	(0.3237)	(121.3)	(0.2328)	
80	0.4034	121.3	0.2365	0.3705	120.8	0.2342	—	—	—	—	—	—	80
90	0.4157	123.5	0.2406	0.3824	123.0	0.2384	0.3531	122.5	0.2362	0.3272	122.0	0.2341	90
100	0.4278	125.7	0.2446	0.3940	125.3	0.2424	0.3644	124.8	0.2403	0.3381	124.3	0.2383	100
110	0.4397	128.0	0.2485	0.4054	127.5	0.2464	0.3753	127.1	0.2443	0.3487	126.6	0.2424	110
120	0.4514	130.2	0.2524	0.4166	129.8	0.2503	0.3861	129.3	0.2483	0.3590	128.9	0.2464	120
130	0.4629	132.4	0.2562	0.4276	132.0	0.2542	0.3966	131.6	0.2522	0.3692	131.2	0.2503	130
140	0.4743	134.7	0.2600	0.4384	134.3	0.2580	0.4070	133.9	0.2561	0.3792	133.5	0.2542	140
150	0.4856	137.0	0.2638	0.4491	136.6	0.2618	0.4172	136.2	0.2599	0.3890	135.8	0.2580	150
160	0.4967	139.2	0.2675	0.4597	138.9	0.2655	0.4273	138.5	0.2636	0.3987	138.2	0.2618	160
170	0.5077	141.5	0.2712	0.4701	141.2	0.2692	0.4372	140.9	0.2673	0.4082	140.5	0.2655	170
180	0.5185	143.8	0.2748	0.4804	143.5	0.2729	0.4471	143.2	0.2710	0.4176	142.9	0.2692	180
190	0.5293	146.2	0.2784	0.4907	145.8	0.2765	0.4568	145.5	0.2746	0.4269	145.2	0.2729	190
200	0.5400	148.5	0.2820	0.5008	148.2	0.2801	0.4664	147.9	0.2782	0.4361	147.6	0.2765	200
210	0.5506	150.9	0.2855	0.5108	150.6	0.2836	0.4760	150.3	0.2818	0.4452	150.0	0.2801	210
220	0.5612	153.2	0.2890	0.5208	152.9	0.2871	0.4854	152.7	0.2854	0.4542	152.4	0.2837	220
230	0.5716	155.6	0.2925	0.5307	155.3	0.2906	0.4948	155.1	0.2889	0.4632	154.8	0.2872	230
240	0.5820	158.0	0.2960	0.5405	157.7	0.2941	0.5041	157.5	0.2923	0.4720	157.2	0.2907	240
250	0.5923	160.4	0.2994	0.5502	160.2	0.2975	0.5134	159.9	0.2958	0.4808	159.6	0.2941	250
260	0.6026	162.8	0.3028	0.5599	162.6	0.3010	0.5225	162.3	0.2992	0.4896	162.1	0.2976	260
270	0.6128	165.3	0.3062	0.5695	165.1	0.3043	0.5317	164.8	0.3026	0.4982	164.6	0.3010	270
280	0.6230	167.8	0.3095	0.5791	167.5	0.3077	0.5407	167.3	0.3060	0.5068	167.0	0.3044	280
290	0.6331	170.2	0.3129	0.5886	170.0	0.3110	0.5497	169.8	0.3093	0.5154	169.5	0.3077	290
300	0.6432	172.7	0.3162	0.5981	172.5	0.3144	0.5587	172.3	0.3126	0.5239	172.1	0.3110	300
310	0.6532	175.2	0.3194	0.6076	175.0	0.3176	0.5676	174.8	0.3159	0.5324	174.6	0.3143	310
320	0.6632	177.8	0.3227	0.6170	177.6	0.3209	0.5765	177.3	0.3192	0.5408	177.1	0.3176	320
330	0.6731	180.3	0.3259	0.6263	180.1	0.3242	0.5854	179.9	0.3225	0.5492	179.7	0.3209	330
340	0.6830	182.9	0.3292	0.6356	182.7	0.3274	0.5942	182.5	0.3257	0.5576	182.3	0.3241	340
350	0.6929	185.4	0.3324	0.6449	185.2	0.3306	0.6029	185.0	0.3289	0.5659	184.8	0.3273	350
360	0.7027	188.0	0.3355	0.6542	187.8	0.3338	0.6117	187.6	0.3321	0.5741	187.5	0.3305	360
370	0.7125	190.6	0.3387	0.6634	190.4	0.3369	0.6203	190.3	0.3353	0.5824	190.1	0.3337	370
380	0.7223	193.2	0.3418	0.6726	193.1	0.3401	0.6290	192.9	0.3384	0.5906	192.7	0.3369	380
390	—	—	—	—	—	—	0.6377	195.5	0.3415	0.5988	195.3	0.3400	390

TEMP. °F	180.00			190.00			200.00			220.00			TEMP. °F
	(90.60°F)			(94.14°F)			(97.55°F)			(103.99°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.3046)	(121.6)	(0.2324)	(0.2874)	(121.9)	(0.2319)	(0.2718)	(122.2)	(0.2315)	(0.2448)	(122.7)	(0.2306)	
100	0.3146	123.8	0.2363	0.2935	123.3	0.2344	0.2743	122.8	0.2325	—	—	—	100
110	0.3249	126.1	0.2404	0.3035	125.7	0.2386	0.2842	125.2	0.2368	0.2505	124.1	0.2332	110
120	0.3350	128.5	0.2445	0.3133	128.0	0.2427	0.2938	127.6	0.2409	0.2598	126.6	0.2375	120
130	0.3448	130.8	0.2485	0.3229	130.4	0.2467	0.3031	129.9	0.2450	0.2687	129.0	0.2416	130
140	0.3544	133.1	0.2524	0.3322	132.7	0.2506	0.3122	132.3	0.2490	0.2774	131.5	0.2457	140
150	0.3639	135.5	0.2562	0.3414	135.1	0.2545	0.3211	134.7	0.2529	0.2859	133.9	0.2497	150
160	0.3732	137.8	0.2601	0.3504	137.4	0.2584	0.3298	137.1	0.2568	0.2941	136.3	0.2536	160
170	0.3823	140.2	0.2638	0.3592	139.8	0.2622	0.3383	139.4	0.2606	0.3022	138.7	0.2575	170
180	0.3914	142.5	0.2675	0.3679	142.2	0.2659	0.3467	141.8	0.2643	0.3101	141.1	0.2613	180
190	0.4003	144.9	0.2712	0.3765	144.6	0.2696	0.3550	144.2	0.2681	0.3179	143.6	0.2651	190
200	0.4091	147.3	0.2749	0.3850	147.0	0.2733	0.3632	146.6	0.2717	0.3256	146.0	0.2688	200
210	0.4178	149.7	0.2785	0.3933	149.4	0.2769	0.3713	149.1	0.2754	0.3331	148.4	0.2725	210
220	0.4265	152.1	0.2820	0.4016	151.8	0.2805	0.3793	151.5	0.2790	0.3406	150.9	0.2761	220
230	0.4350	154.5	0.2856	0.4098	154.2	0.2840	0.3871	153.9	0.2825	0.3480	153.4	0.2797	230
240	0.4435	156.9	0.2891	0.4180	156.7	0.2875	0.3950	156.4	0.2861	0.3552	155.8	0.2833	240
250	0.4519	159.4	0.2925	0.4260	159.1	0.2910	0.4027	158.8	0.2896	0.3624	158.3	0.2868	250
260	0.4602	161.8	0.2960	0.4340	161.6	0.2945	0.4104	161.3	0.2930	0.3696	160.8	0.2903	260
270	0.4685	164.3	0.2994	0.4419	164.1	0.2979	0.4180	163.8	0.2965	0.3766	163.3	0.2938	270
280	0.4767	166.8	0.3028	0.4498	166.6	0.3013	0.4255	166.3	0.2999	0.3836	165.8	0.2972	280
290	0.4849	169.3	0.3062	0.4576	169.1	0.3047	0.4330	168.8	0.3033	0.3906	168.4	0.3006	290
300	0.4930	171.8	0.3095	0.4653	171.6	0.3080	0.4404	171.4	0.3066	0.3974	170.9	0.3040	300
310	0.5011	174.4	0.3128	0.4731	174.1	0.3114	0.4478	173.9	0.3100	0.4043	173.5	0.3073	310
320	0.5091	176.9	0.3161	0.4807	176.7	0.3147	0.4552	176.5	0.3133	0.4111	176.1	0.3107	320
330	0.5171	179.5	0.3194	0.4884	179.3	0.3179	0.4625	179.1	0.3166	0.4178	178.6	0.3140	330
340	0.5250	182.1	0.3226	0.4959	181.9	0.3212	0.4697	181.7	0.3198	0.4245	181.2	0.3172	340
350	0.5329	184.7	0.3258	0.5035	184.5	0.3244	0.4770	184.3	0.3231	0.4312	183.9	0.3205	350
360	0.5408	187.3	0.3290	0.5110	187.1	0.3276	0.4842	186.9	0.3263	0.4378	186.5	0.3237	360
370	0.5487	189.9	0.3322	0.5185	189.7	0.3308	0.4913	189.5	0.3295	0.4444	189.1	0.3269	370
380	0.5565	192.5	0.3354	0.5259	192.3	0.3340	0.4984	192.2	0.3326	0.4510	191.8	0.3301	380
390	0.5642	195.2	0.3385	0.5333	195.0	0.3371	0.5055	194.8	0.3358	0.4575	194.5	0.3333	390
400	0.5720	197.8	0.3416	0.5407	197.7	0.3402	0.5126	197.5	0.3389	0.4640	197.1	0.3364	400
410	—	—	—	—	—	—	—	—	—	0.4704	199.8	0.3395	410

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

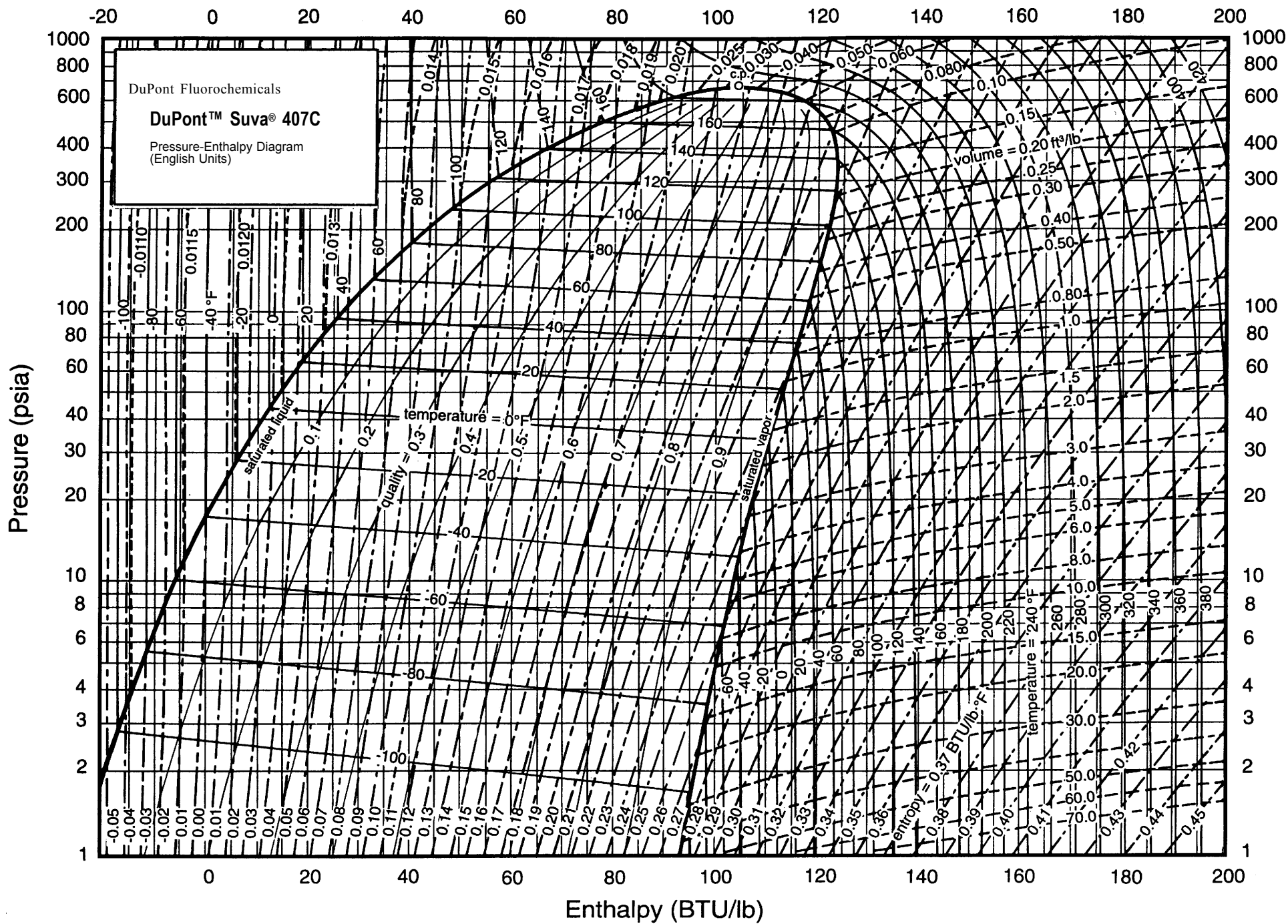
ABSOLUTE PRESSURE, psia													
TEMP. °F	240.00			260.00			280.00			300.00			TEMP. °F
	(110.00°F)			(115.63°F)			(120.94°F)			(125.97°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.2220)	(123.0)	(0.2298)	(0.2026)	(123.3)	(0.2289)	(0.1858)	(123.6)	(0.2280)	(0.1712)	(123.7)	(0.2272)	
110	0.2220	123.0	0.2298	—	—	—	—	—	—	—	—	—	110
120	0.2311	125.6	0.2342	0.2065	124.5	0.2309	—	—	—	—	—	—	120
130	0.2398	128.1	0.2384	0.2151	127.1	0.2353	0.1936	126.0	0.2322	0.1746	124.9	0.2291	130
140	0.2482	130.6	0.2426	0.2233	129.6	0.2396	0.2017	128.6	0.2366	0.1828	127.6	0.2337	140
150	0.2564	133.0	0.2467	0.2312	132.1	0.2438	0.2095	131.2	0.2409	0.1905	130.3	0.2381	150
160	0.2643	135.5	0.2507	0.2389	134.7	0.2479	0.2170	133.8	0.2451	0.1978	132.9	0.2424	160
170	0.2720	137.9	0.2546	0.2463	137.2	0.2519	0.2242	136.4	0.2492	0.2049	135.5	0.2466	170
180	0.2795	140.4	0.2585	0.2535	139.7	0.2558	0.2312	138.9	0.2532	0.2117	138.1	0.2507	180
190	0.2869	142.9	0.2623	0.2606	142.2	0.2597	0.2380	141.4	0.2571	0.2183	140.7	0.2547	190
200	0.2942	145.3	0.2661	0.2675	144.7	0.2635	0.2446	144.0	0.2610	0.2247	143.3	0.2586	200
210	0.3013	147.8	0.2698	0.2743	147.2	0.2673	0.2511	146.5	0.2648	0.2310	145.8	0.2625	210
220	0.3083	150.3	0.2735	0.2810	149.7	0.2710	0.2575	149.0	0.2686	0.2371	148.4	0.2663	220
230	0.3153	152.8	0.2771	0.2876	152.2	0.2746	0.2638	151.6	0.2723	0.2431	151.0	0.2700	230
240	0.3221	155.3	0.2807	0.2940	154.7	0.2783	0.2699	154.1	0.2759	0.2490	153.5	0.2737	240
250	0.3288	157.8	0.2843	0.3004	157.2	0.2818	0.2760	156.7	0.2796	0.2549	156.1	0.2774	250
260	0.3355	160.3	0.2878	0.3067	159.8	0.2854	0.2820	159.2	0.2831	0.2606	158.7	0.2810	260
270	0.3421	162.8	0.2913	0.3129	162.3	0.2889	0.2879	161.8	0.2867	0.2662	161.3	0.2845	270
280	0.3487	165.3	0.2947	0.3191	164.9	0.2924	0.2938	164.4	0.2902	0.2718	163.8	0.2881	280
290	0.3552	167.9	0.2981	0.3252	167.4	0.2958	0.2995	166.9	0.2936	0.2773	166.4	0.2916	290
300	0.3616	170.5	0.3015	0.3313	170.0	0.2992	0.3053	169.5	0.2971	0.2827	169.1	0.2950	300
310	0.3680	173.0	0.3049	0.3372	172.6	0.3026	0.3109	172.1	0.3005	0.2881	171.7	0.2985	310
320	0.3743	175.6	0.3082	0.3432	175.2	0.3060	0.3165	174.8	0.3039	0.2934	174.3	0.3018	320
330	0.3806	178.2	0.3116	0.3491	177.8	0.3093	0.3221	177.4	0.3072	0.2987	177.0	0.3052	330
340	0.3868	180.8	0.3149	0.3549	180.4	0.3126	0.3276	180.0	0.3105	0.3039	179.6	0.3085	340
350	0.3930	183.5	0.3181	0.3607	183.1	0.3159	0.3331	182.7	0.3138	0.3091	182.3	0.3119	350
360	0.3992	186.1	0.3214	0.3665	185.7	0.3192	0.3385	185.3	0.3171	0.3142	184.9	0.3151	360
370	0.4053	188.8	0.3246	0.3722	188.4	0.3224	0.3439	188.0	0.3203	0.3193	187.6	0.3184	370
380	0.4114	191.4	0.3278	0.3779	191.1	0.3256	0.3493	190.7	0.3236	0.3244	190.3	0.3216	380
390	0.4175	194.1	0.3309	0.3836	193.8	0.3288	0.3546	193.4	0.3268	0.3294	193.0	0.3248	390
400	0.4235	196.8	0.3341	0.3892	196.5	0.3319	0.3599	196.1	0.3299	0.3345	195.8	0.3280	400
410	0.4295	199.5	0.3372	0.3948	199.2	0.3351	0.3651	198.8	0.3331	0.3394	198.5	0.3312	410
420	—	—	—	0.4004	201.9	0.3382	0.3704	201.6	0.3362	0.3444	201.2	0.3343	420
430	—	—	—	—	—	—	0.3756	204.3	0.3393	0.3493	204.0	0.3374	430

TEMP. °F	320.00			340.00			360.00			380.00			TEMP. °F
	(130.74°F)			(135.28°F)			(139.62°F)			(143.78°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.1582)	(123.8)	(0.2263)	(0.1467)	(123.9)	(0.2254)	(0.1363)	(123.8)	(0.2245)	(0.1270)	(123.7)	(0.2235)	
140	0.1659	126.5	0.2308	0.1506	125.3	0.2278	0.1366	123.9	0.2247	—	—	—	140
150	0.1736	129.2	0.2354	0.1585	128.2	0.2326	0.1448	127.0	0.2297	0.1322	125.7	0.2268	150
160	0.1809	132.0	0.2398	0.1658	131.0	0.2371	0.1522	129.9	0.2345	0.1398	128.8	0.2318	160
170	0.1879	134.6	0.2441	0.1727	133.7	0.2416	0.1591	132.8	0.2391	0.1468	131.8	0.2366	170
180	0.1945	137.3	0.2482	0.1793	136.4	0.2458	0.1657	135.6	0.2434	0.1534	134.6	0.2411	180
190	0.2010	139.9	0.2523	0.1856	139.1	0.2500	0.1719	138.3	0.2477	0.1596	137.4	0.2454	190
200	0.2072	142.5	0.2563	0.1918	141.8	0.2540	0.1779	141.0	0.2518	0.1655	140.2	0.2497	200
210	0.2133	145.1	0.2602	0.1977	144.4	0.2580	0.1837	143.7	0.2559	0.1712	143.0	0.2538	210
220	0.2193	147.7	0.2641	0.2034	147.1	0.2619	0.1894	146.4	0.2598	0.1767	145.7	0.2578	220
230	0.2251	150.3	0.2679	0.2091	149.7	0.2658	0.1948	149.0	0.2637	0.1821	148.4	0.2618	230
240	0.2307	152.9	0.2716	0.2146	152.3	0.2695	0.2002	151.7	0.2676	0.1873	151.1	0.2656	240
250	0.2363	155.5	0.2753	0.2200	154.9	0.2733	0.2054	154.3	0.2713	0.1923	153.7	0.2694	250
260	0.2418	158.1	0.2789	0.2252	157.6	0.2769	0.2105	157.0	0.2750	0.1973	156.4	0.2732	260
270	0.2472	160.7	0.2825	0.2304	160.2	0.2806	0.2155	159.6	0.2787	0.2022	159.1	0.2769	270
280	0.2525	163.3	0.2861	0.2356	162.8	0.2841	0.2205	162.3	0.2823	0.2070	161.8	0.2805	280
290	0.2578	166.0	0.2896	0.2406	165.5	0.2877	0.2253	165.0	0.2859	0.2116	164.4	0.2841	290
300	0.2630	168.6	0.2931	0.2456	168.1	0.2912	0.2301	167.6	0.2894	0.2163	167.1	0.2877	300
310	0.2681	171.2	0.2965	0.2505	170.8	0.2947	0.2348	170.3	0.2929	0.2208	169.8	0.2912	310
320	0.2732	173.9	0.2999	0.2554	173.4	0.2981	0.2395	173.0	0.2963	0.2253	172.5	0.2947	320
330	0.2782	176.5	0.3033	0.2602	176.1	0.3015	0.2441	175.7	0.2998	0.2298	175.2	0.2981	330
340	0.2832	179.2	0.3067	0.2649	178.8	0.3049	0.2487	178.3	0.3032	0.2342	177.9	0.3015	340
350	0.2881	181.9	0.3100	0.2696	181.5	0.3082	0.2532	181.0	0.3065	0.2385	180.6	0.3049	350
360	0.2930	184.5	0.3133	0.2743	184.2	0.3115	0.2577	183.8	0.3098	0.2428	183.4	0.3082	360
370	0.2979	187.2	0.3166	0.2789	186.9	0.3148	0.2621	186.5	0.3131	0.2470	186.1	0.3115	370
380	0.3027	190.0	0.3198	0.2835	189.6	0.3181	0.2665	189.2	0.3164	0.2512	188.8	0.3148	380
390	0.3075	192.7	0.3230	0.2881	192.3	0.3213	0.2708	192.0	0.3197	0.2554	191.6	0.3181	390
400	0.3122	195.4	0.3262	0.2926	195.1	0.3245	0.2752	194.7	0.3229	0.2596	194.4	0.3213	400
410	0.3169	198.2	0.3294	0.2971	197.8	0.3277	0.2794	197.5	0.3261	0.2637	197.1	0.3245	410
420	0.3216	200.9	0.3326	0.3015	200.6	0.3309	0.2837	200.2	0.3293	0.2677	199.9	0.3277	420
430	0.3263	203.7	0.3357	0.3060	203.4	0.3340	0.2879	203.0	0.3324	0.2718	202.7	0.3309	430
440	0.3309	206.5	0.3388	0.3104	206.1	0.3371	0.2921	205.8	0.3355	0.2758	205.5	0.3340	440
450	—	—	—	—	—	—	—	—	—	0.2798	208.3	0.3371	450

Table 2 (continued)
Suva® 407C Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) (Saturation Properties in parentheses)

ABSOLUTE PRESSURE, psia													
TEMP. °F	400.00			450.00			500.00			550.00			TEMP. °F
	(147.76°F)			(157.07°F)			(165.57°F)			(173.24°F)			
	V	H	S	V	H	S	V	H	S	V	H	S	
	(0.1185)	(123.6)	(0.2225)	(0.1001)	(122.9)	(0.2198)	(0.0849)	(121.8)	(0.2166)	(0.0262)	(89.2)	(0.1638)	
150	0.1204	124.3	0.2238	—	—	—	—	—	—	—	—	—	150
160	0.1284	127.6	0.2291	0.1028	124.1	0.2217	—	—	—	—	—	—	160
170	0.1355	130.7	0.2340	0.1108	127.7	0.2275	0.0892	123.9	0.2199	0.0789	123.8	0.2186	180
180	0.1421	133.7	0.2387	0.1179	131.0	0.2327	0.0974	127.9	0.2262	0.0871	128.2	0.2254	190
190	0.1484	136.6	0.2432	0.1243	134.2	0.2376	0.1043	131.5	0.2318	0.0938	132.0	0.2313	200
200	0.1542	139.4	0.2475	0.1302	137.2	0.2422	0.1105	134.8	0.2369	0.0997	135.5	0.2365	210
210	0.1599	142.2	0.2517	0.1358	140.2	0.2467	0.1161	138.0	0.2417	0.1051	138.9	0.2415	220
220	0.1653	144.9	0.2558	0.1410	143.1	0.2510	0.1214	141.0	0.2462	0.1101	142.1	0.2461	230
230	0.1705	147.7	0.2598	0.1461	145.9	0.2552	0.1264	144.1	0.2506	0.1148	145.2	0.2506	240
240	0.1756	150.4	0.2638	0.1510	148.7	0.2592	0.1311	147.0	0.2549	0.1193	148.2	0.2549	250
250	0.1806	153.1	0.2676	0.1557	151.6	0.2632	0.1357	149.9	0.2590	0.1235	151.2	0.2591	260
260	0.1854	155.8	0.2714	0.1603	154.3	0.2671	0.1401	152.8	0.2630	0.1277	154.1	0.2631	270
270	0.1901	158.5	0.2751	0.1647	157.1	0.2709	0.1444	155.6	0.2669	0.1316	157.0	0.2671	280
280	0.1948	161.2	0.2788	0.1691	159.9	0.2747	0.1485	158.5	0.2708	0.1355	159.9	0.2710	290
290	0.1993	163.9	0.2824	0.1733	162.6	0.2784	0.1525	161.3	0.2746	0.1393	162.8	0.2748	300
300	0.2038	166.6	0.2860	0.1775	165.4	0.2820	0.1565	164.1	0.2783	0.1429	165.7	0.2786	310
310	0.2082	169.3	0.2895	0.1816	168.1	0.2856	0.1603	166.9	0.2820	0.1465	168.5	0.2822	320
320	0.2126	172.1	0.2930	0.1856	170.9	0.2892	0.1641	169.7	0.2856	0.1500	171.4	0.2859	330
330	0.2168	174.8	0.2965	0.1896	173.7	0.2927	0.1678	172.5	0.2892	0.1535	174.2	0.2895	340
340	0.2211	177.5	0.2999	0.1935	176.4	0.2962	0.1715	175.3	0.2927	0.1568	177.1	0.2930	350
350	0.2253	180.2	0.3033	0.1974	179.2	0.2996	0.1751	178.1	0.2962	0.1602	179.9	0.2965	360
360	0.2294	183.0	0.3067	0.2012	182.0	0.3030	0.1786	180.9	0.2997	0.1635	182.8	0.3000	370
370	0.2335	185.7	0.3100	0.2049	184.7	0.3064	0.1821	183.8	0.3031	0.1667	185.6	0.3034	380
380	0.2375	188.5	0.3133	0.2086	187.5	0.3097	0.1855	186.6	0.3064	0.1699	188.5	0.3068	390
390	0.2416	191.2	0.3166	0.2123	190.3	0.3130	0.1890	189.4	0.3098	0.1730	191.3	0.3101	400
400	0.2455	194.0	0.3198	0.2160	193.1	0.3163	0.1923	192.2	0.3131	0.1761	194.2	0.3134	410
410	0.2495	196.8	0.3231	0.2196	195.9	0.3196	0.1957	195.1	0.3164	0.1792	197.1	0.3167	420
420	0.2534	199.6	0.3262	0.2231	198.7	0.3228	0.1990	197.9	0.3196	0.1823	200.0	0.3199	430
430	0.2573	202.4	0.3294	0.2267	201.6	0.3260	0.2022	200.8	0.3229	0.1853	202.8	0.3232	440
440	0.2611	205.2	0.3326	0.2302	204.4	0.3292	0.2055	203.6	0.3261	0.1883	205.7	0.3264	450
450	0.2650	208.0	0.3357	0.2337	207.3	0.3323	0.2087	206.5	0.3292	0.1912	208.6	0.3295	460
460	—	—	—	0.2372	210.1	0.3354	0.2119	209.4	0.3324	0.1942	211.5	0.3327	470
470	—	—	—	—	—	—	0.2150	212.3	0.3355	0.1971	214.4	0.3358	480
480	—	—	—	—	—	—	—	—	—	—	—	—	—



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