

Total Cooling = (BTU/hr) = Sensible + Latent
 CFM x 4.5 x (Δ Enthalpy)

Sensible Cooling = (BTU/hr) **Latent Cooling = (BTU/hr)**
 CFM x 1.085 x (Δ Temperature) CFM x 0.68 x (Δ Grains)

Dehumidification Capacity (Grains/hr)
 4.5 x CFM x (Δ Grains)

Sensible Heat Ratio
 (Sensible Load BTU/h)/(Total Load BTU/h)

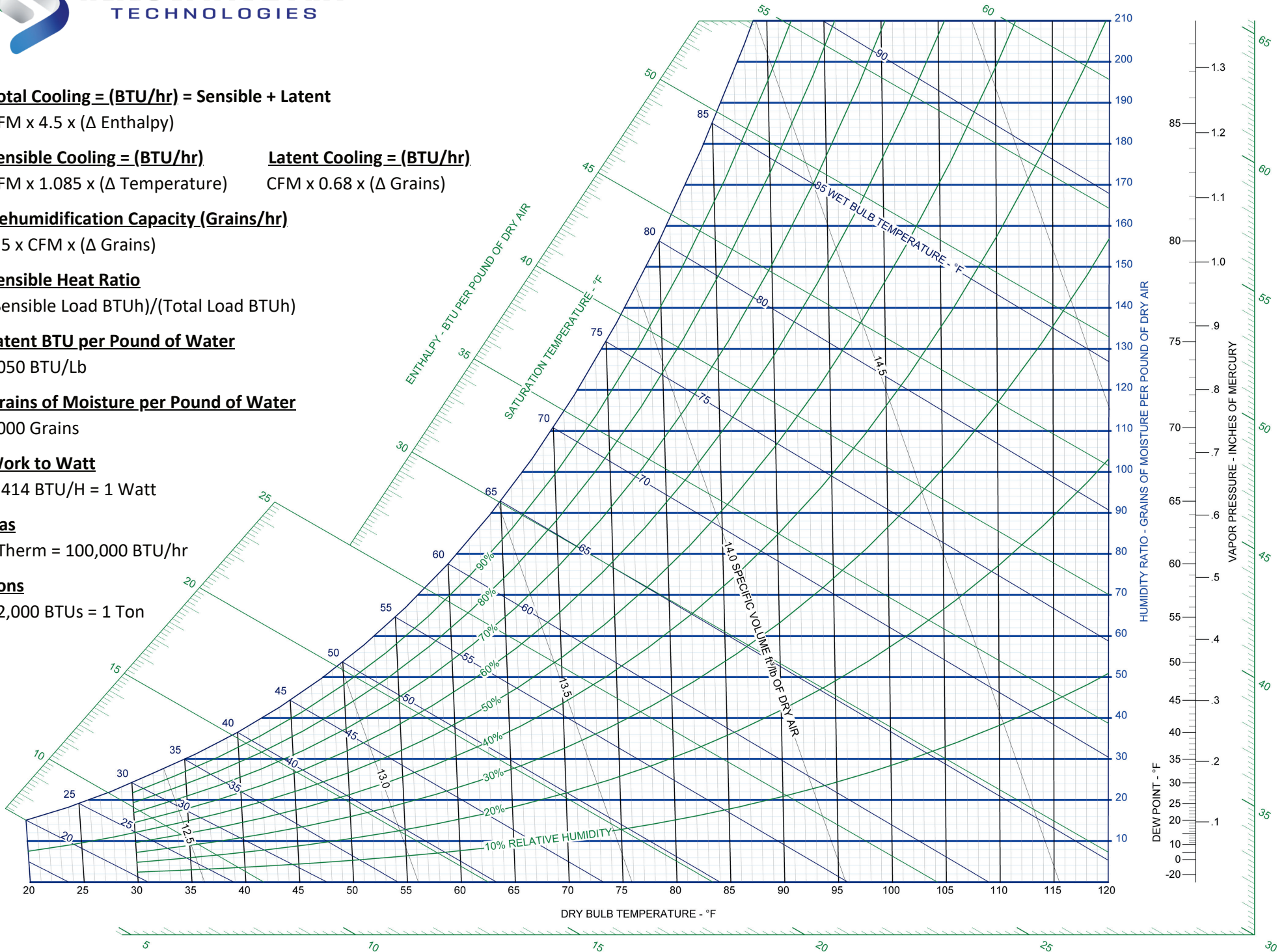
Latent BTU per Pound of Water
 1050 BTU/Lb

Grains of Moisture per Pound of Water
 7000 Grains

Work to Watt
 3.414 BTU/H = 1 Watt

Gas
 1Therm = 100,000 BTU/hr

Tons
 12,000 BTUs = 1 Ton



DEWPOINT F°	DEWPOINT C°	GRAINS/ POUND	DEWPOINT F°	DEWPOINT C°	GRAINS/ POUND	DEWPOINT F°	DEWPOINT C°	GRAINS/ POUND	DEWPOINT F°	DEWPOINT C°	GRAINS/ POUND	DEWPOINT F°	DEWPOINT C°	GRAINS/ POUND	DEWPOINT F°	DEWPOINT C°	GRAINS/ POUND
100	37.8	302.3	66	18.9	96.2	32	0	26.5	-2	-18.9	4.96	-36	-37.8	0.711	-70	-56.7	0.073
99	37.2	292.7	65	18.3	92.8	31	-0.6	25.3	-3	-19.4	4.7	-37	-38.3	0.67	-71	-57.2	0.068
98	36.7	283.4	64	17.8	89.6	30	-1.1	24.2	-4	-20	4.46	-38	-38.9	0.629	-72	-57.8	0.064
97	36.1	274.4	63	17.2	86.5	29	-1.7	23.1	-5	-20.6	4.23	-39	-39.4	0.592	-73	-58.3	0.059
96	35.6	265.6	62	16.7	83.4	28	-2.2	22	-6	-21.1	4.01	-40	-40	0.555	-74	-58.9	0.055
95	35	257.1	61	16.1	80.4	27	-2.8	21	-7	-21.7	3.8	-41	-40.6	0.522	-75	-59.4	0.05
94	34.4	248.9	60	15.6	77.6	26	-3.3	20.1	-8	-22.2	3.6	-42	-41.1	0.489	-76	-60	0.047
93	33.9	240.9	59	15	74.8	25	-3.9	19.1	-9	-22.8	3.41	-43	-41.7	0.46	-77	-60.6	0.044
92	33.3	233.1	58	14.4	72.1	24	-4.4	18.2	-10	-23.3	3.22	-44	-42.2	0.43	-78	-61.1	0.041
91	32.8	225.6	57	13.9	69.5	23	-5	17.4	-11	-23.9	3.05	-45	-42.8	0.404	-79	-61.7	0.038
90	32.2	218.3	56	13.3	67	22	-5.6	16.6	-12	-24.4	2.89	-46	-43.3	0.378	-80	-62.2	0.035
89	31.7	211.2	55	12.8	64.6	21	-6.1	15.8	-13	-25	2.73	-47	-43.9	0.355	-81	-62.8	0.032
88	31.1	204.3	54	12.2	62.3	20	-6.7	15.1	-14	-25.6	2.58	-48	-44.4	0.332	-82	-63.3	0.03
87	30.6	197.7	53	11.7	60	19	-7.2	14.4	-15	-26.2	2.44	-49	-45	0.312	-83	-63.9	0.028
86	30	191.2	52	11.1	57.8	18	-7.8	13.7	-16	-26.7	2.31	-50	-45.6	0.291	-84	-64.4	0.026
85	29.4	184.9	51	10.6	55.7	17	-8.3	13	-17	-27.2	2.18	-51	-46.1	0.275	-85	-65	0.023
84	28.9	178.8	50	10	53.6	16	-8.9	12.4	-18	-27.8	2.06	-52	-46.7	0.258	-86	-65.6	0.022
83	28.3	173	49	9.4	51.6	15	-9.4	11.8	-19	-28.3	1.95	-53	-47.2	0.242	-87	-66.1	0.02
82	27.8	167.2	48	8.9	49.7	14	-10	11.2	-20	-28.9	1.84	-54	-47.8	0.225	-88	-66.7	0.019
81	27.2	161.7	47	8.3	47.8	13	-10.6	10.7	-21	-29.4	1.74	-55	-48.3	0.209	-89	-67.2	0.017
80	26.7	156.3	46	7.8	46.1	12	-11.1	10.2	-22	-30	1.64	-56	-48.9	0.197	-90	-67.8	0.016
79	26.1	151.1	45	7.2	44.3	11	-11.7	9.68	-23	-30.6	1.55	-57	-49.4	0.185	-91	-68.3	0.015
78	25.6	146	44	6.7	42.6	10	-12.2	9.21	-24	-31.1	1.46	-58	-50	0.173	-92	-68.9	0.014
77	25	141.1	43	6.1	41	9	-12.8	8.75	-25	-31.7	1.38	-59	-50.6	0.160	-93	-69.4	0.013
76	24.4	136.4	42	5.6	39.5	8	-13.3	8.32	-26	-32.2	1.29	-60	-51.1	0.148	-94	-70	0.012
75	23.9	131.7	41	5	38	7	-13.9	7.91	-27	-32.8	1.22	-61	-51.7	0.14	-95	-70.6	0.01
74	23.3	127.3	40	4.4	36.5	6	-14.4	7.52	-28	-33.3	1.15	-62	-52.2	0.131			
73	22.8	123	39	3.9	35.1	5	-15	7.14	-29	-33.9	1.09	-63	-52.8	0.122			
72	22.2	118.8	38	3.3	33.7	4	-15.6	6.78	-30	-34.4	1.03	-64	-53.3	0.113			
71	21.7	114.7	37	2.8	32.4	3	-16.1	6.44	-31	-35	0.967	-65	-53.9	0.104			
70	21.1	110.7	36	2.2	31.2	2	-16.7	6.12	-32	-35.6	0.909	-66	-54.4	0.098			
69	20.6	107	35	1.7	29.9	1	-17.2	5.81	-33	-36.1	0.856	-67	-55	0.092			
68	20	103.2	34	1.1	28.7	0	-17.8	5.51	-34	-36.7	0.804	-68	-55.6	0.085			
67	19.4	99.7	33	0.6	27.6	-1	-18.3	5.23	-35	-37.2	0.758	-69	-56.1	0.079			

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