

INSTRUCTIONS

PSYCHRO-DYNE

CATALOG NOS.

22010 Fahrenheit Mercury
22012 Celsius Mercury
22014 Fahrenheit Organic
22000 Celsius Organic

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SECTION I

INTRODUCTION

1-1. GENERAL

1-2. The quantity of moisture in the air is one of the most important of environmental properties. It affects food, materials, processes and of course human comfort and health. Consequently, the accurate measurement of moisture in the air has been the subject of scientific investigation and over the years many distinctly different measurement techniques have been developed. However, no accurate technique yet developed is quite so convenient and inexpensive as by observing the difference between wet and dry bulb thermometers. Your PSYCHRO-DYNE Model uses the wet and dry bulb method of measuring moisture in the air.

1.3. PRINCIPLES

1-4. The theory of wet and dry bulb thermometers is based on the evaporative cooling effect of the wet bulb. The drier the surrounding air the more rapidly water will evaporate. This causes the wet bulb to depress in temperature until a balance takes place between the cooling effect and the normal heat gain from the ambient condition. The psychrometric formula relates this observed temperature depression and the temperature of the dry bulb to the quantity of moisture in the air. It can express this quantity as relative humidity, absolute humidity, dew point, or vapor pressure.

1-5. REFERENCE CHARTS

1-6. Based on the psychrometric formula, psychrometric charts, tables, and calculators have been devised as a convenience and can be used to rapidly determine any of the above values once the wet and dry bulb temperatures are known. Such tables are contained in the back of this manual.

1-7. THEORY OF OPERATION

1-8. The accurate measurement of the true wet and dry bulb temperatures requires the right equipment and proper precautions, otherwise severe errors can result. First of all, adequate ventilation across the wet bulb is essential for accuracy. Without it a moisture concentration not representative of the ambient conditions will build up around the wet bulb and one will always tend to measure a higher humidity level than what is actually in the air. Ventilation removes the build up and keeps sampling the actual conditions. It has been found by many years of experimentation that 10 feet-per-second or more of air flow is essential for accurate results. Your PSYCHRO-DYNE is designed to provide 15 feet-per-second air flow over the thermometers throughout a reasonably long battery life.

SECTION II OPERATION INSTRUCTIONS

2-1. PREPARATION (See Figure 1)

2-2. To prepare the PSYCHRO-DYNE for operation, proceed as follows:

1. Remove the PSYCHRO-DYNE from the carrying case.
2. Raise the instrument cover and firmly place three batteries (D Size 1.5V) in the instrument with the center (+) contact of each battery facing the back of the instrument.
CAUTION: Placing the batteries in the wrong direction causes reverse air flow.

2-3. OPERATION

2-4. To take a reading with the PSYCHRO-DYNE, proceed as follows:

1. Open the instrument cover.

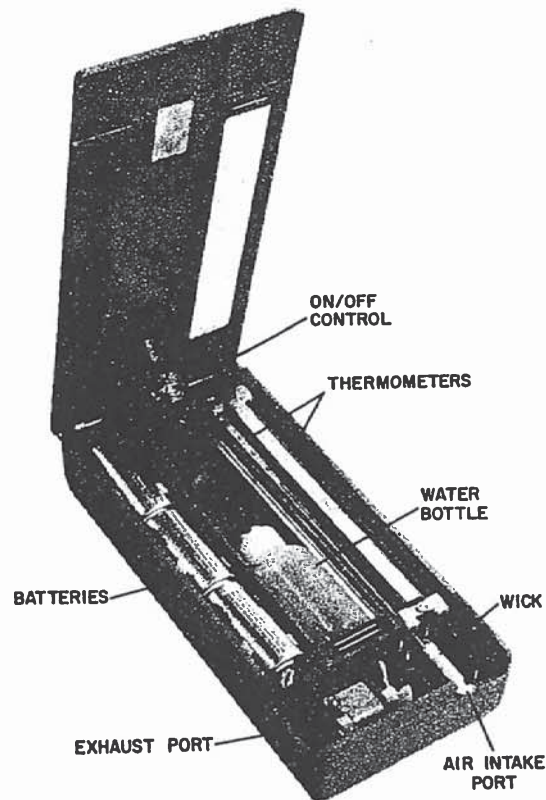


FIGURE 1. PSYCHRO-DYNE

2. Using the distilled water bottle (Figure 1), place the tip of bottle at the wick and saturate with the distilled water.
CAUTION: Avoid using tap water if possible since this reduces the useful life of the wick. Also when applying the water, avoid splashing or dropping water on the dry bulb.
3. Replace the distilled water bottle and close the instrument cover.
4. Hold or set the instrument in a horizontal plane with the graduations of the thermometers facing the operator.
NOTE: The air intake and exhaust ports must be entirely free of obstructions. Also, never allow strong light to shine into the intake port. Radiation upon the wet bulb causes evaporation not accounted for in the psychrometric formula.
- 5.1. Slide the fan switch to the "ON" position which starts the fan motor and aspiration.
- 5.2. Slide the lamp switch to the "ON" position which will illuminate the thermometers. Vary the lamp intensity by means of the associated potentiometer.
6. After the fan operates, the wet bulb temperature will begin to rapidly depress. A reading should not be taken until the depression completely stops. This may take from one to two minutes depending on the dryness of the air. If the wet bulb temperature stabilization does not occur within 2½ minutes, the fan motor is probably running too slow due to weak batteries.
7. With the two readings, one may readily determine the relative humidity from the chart on the cover of the instrument or the calculator in the case. For more accurate evaluations, use the set of Tables at the back of the manual.
CAUTION: Be sure to slide fan switch and lamp switch to "OFF" after each observation.

SECTION III MAINTENANCE

3-1. SPLIT MERCURY (See Figure 3)

A split or separated mercury (or organic) condition may result if the instrument is dropped. This is noticed by a gap in the mercury column inside the thermometer and will cause erroneous readings. To reunite a separated mercury column, proceed as follows:

1. Raise the instrument cover and hold open by placing water bottle between the rheostat and case bottom.
2. Loosen the bolts that secure the thermometer rubber grommets and turn the retaining clips 90 degrees.
3. With needle nose pliers, carefully grasp the rear grommet of the split column thermometer and lift the thermometer up and gently pull out.
4. A slight separation can usually be reunited by heating the bulb slowly in a soft flame (match) until the separated mercury and the main column both run into the safety chamber at the top of the thermometer bore. Remove the

grommet to allow viewing at the top of the scale. A slight jar will then reunite the mercury.

CAUTION: Never completely fill the expansion chamber with fluid as internal pressure will cause breakage. Care should be taken not to heat the thermometer bulb too fast.

If the safety chamber is too small to hold all the separated mercury, it is better to cool the bulb in dry ice until all the mercury runs into the bulb. When using this method apply the dry ice to the bulb but not to the bore. If the mercury freezes solid, it can melt slowly at room temperature without danger of breakage provided it is not frozen in the bore.

5. With the column congealed, replace the grommets so they align with the slots in the frame and set the thermometer gently in position.
6. Insert thermometer by depressing with thumb on grommet until thermometer is fully seated in frame. Failure to do this will cause the cover not to fully close and, create air leaks and provide erroneous readings.
7. Tighten retainers.

3-2. PARTS REPLACEMENT (See Figure 3)

1. **STRIKER PLATE.** To replace striker plate, proceed as follows:
 - a. Clean striker plate and area on cover that the plate is to be adhered to.
 - b. Place instrument upside down with the water bottle wedge sideways between the rheostat and case to hold the cover apart from the magnet.
 - c. With Devcon Corporation's "5 MINUTE EPOXY" (follow directions) apply a thin film of epoxy to one side of the plate only.
 - d. Immediately place plate opposite magnetic on cover and allow to cure.
2. **WICKS.** If the wet bulb wick becomes contaminated and is difficult to wet, proceed as follows:
 - a. Remove the wet bulb thermometer (see Para. 3.1).
 - b. Remove the wick and thoroughly clean the bulb.
 - c. Slip 2 inch length of tubular wicking over the bulb with about $\frac{1}{4}$ inch of material above the top of the bulb onto the stem.
 - d. Secure the wick at the neck of the stem by looping a fine white cotton thread several times around and finally tie a tight square knot.
 - e. Form a loop with a second thread and place it about three-quarters of the way down the bulb and pull toward the bottom. This will stretch the wick tight. When the loop slips over the end tie with a double square knot. Avoid touching the wick as much as possible.
 - f. Replace the thermometer per para. 3-1.
3. **BATTERIES.** The three D cell (1.5 volts) batteries are placed by simply raising the instrument cover and removing the batteries. Only a good grade of leak-proof batteries should be used as replacements. When the instrument is stored for a long period of inactivity, replace the batteries. Always observe proper polarity when replacing.

4. LAMP. To replace the lamp, proceed as follows:
 - a. Raise the instrument cover and completely remove the two bolts, two nuts (located at bottom) and two retainers that secure the thermometer frame.
 - b. Remove the thermometer frame.
 - c. To remove the old lamp, depress and turn counter-clockwise.
 - d. To install a new lamp, reverse the above steps.

SECTION IV PARTS LIST

4-1. GENERAL

4-2. Table 4-1 lists the complete instrument, standard accessories, and optional accessories for the PSYCHRO-DYNE instrument. Table 4-2 lists the detail parts of the PSYCHRO-DYNE instrument.

Table 4-1. Complete Instrument and Accessories (Fig. 2)

INDEX NO.	DESCRIPTION	QTY.	PART NO.
1	PSYCHRO-DYNE	1	
2	Case, Carrying	1	80001
3	Spare Parts Vial, consists of a spare lamp and 2 inches of wick material. (standard)	1	80046
Not Shown	Hanger, Hook (optional)	1	80002
4	Instruction Manual	1	80003
5	Slide Rule, °F or	1	80034
	Slide Rule, °C	1	80033

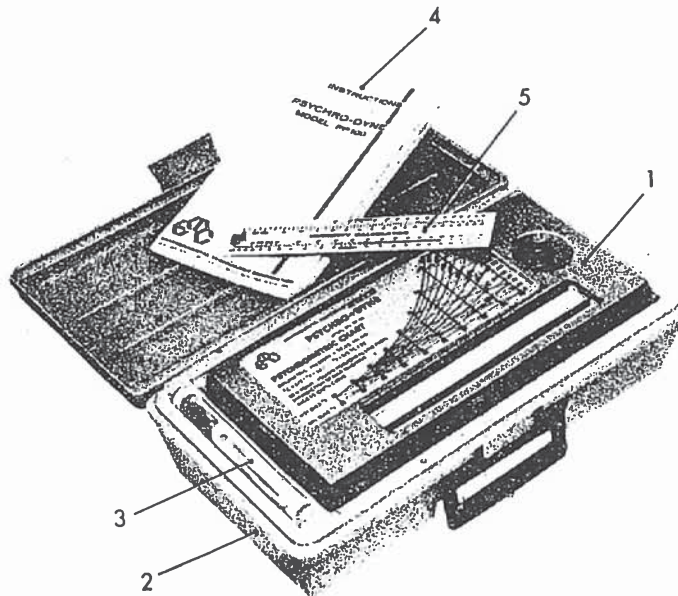


FIGURE 2. COMPLETE INSTRUMENT AND ACCESSORIES

Table 4-2. Instrument Parts List (Figure 3)

INDEX NO.	DESCRIPTION	QTY.	PART NO.
1	Cover, Instrument	1	80004
2	Switch	1	80005
3	Knob	1	80006
4	Chart, Psychrometric	1	80007
5	Not Used		
6	Striker Plate	1	80008
7	Magnetic Catch, Assembly	1	80009
8	Instrument Case	1	80010
9	Motor Fan Assembly	1	80011
10	Socket, Light	1	80012
11	Lamp	1	80013
12	Clips, Battery	2	80015
13	Hinge Pin	1	80019
14	Clip, Hinge Retainer	2	80020
15	Thermometer, matched pair 10-120 °F ± 0.3 °F black OR Thermometer, matched pair, 10-120 °F ± 0.3 ° mercury OR Thermometer, matched pair, -20 to 50 °C ± 0.2 °C mercury	1	80018 80014 80017
16	Retention Frame, Acrylic thermometer	1	80021
17	Foil Mask	1	80022
18	Grommet, Cushion	4	80023
19	Retaining clips, 'Thermometer Stainless Steel	2	80024
20	Screw Mach. 4-40xG1-11/16" slotted	2	80025
21	Bottle, Dispensing, 2 oz.	1	80026

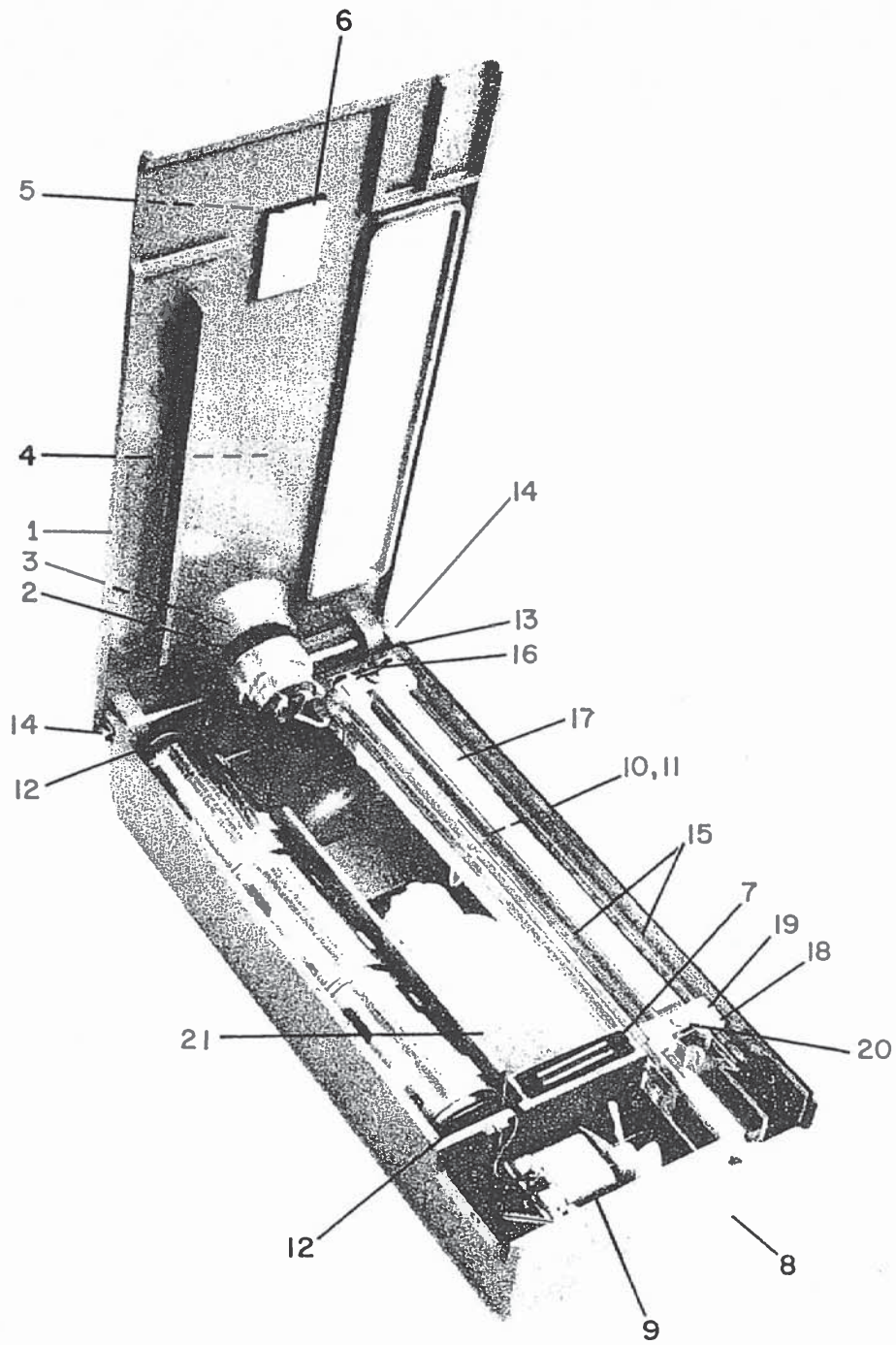


FIGURE 3. INSTRUMENT PARTS LOCATION

SECTION V
RELATIVE HUMIDITY AND DEW POINT
TABLES AND CONVERSION FORMULAS

5-1. INTRODUCTION

5-2. Relative Humidity and Dew Point Tables for Fahrenheit temperatures and Relative Humidity Tables for Centigrade temperatures are contained in this section. For computation of Dew Point temperatures for Centigrade . . . observations, use the conversion formula as shown below

CONVERSION FORMULAS

Convert °C to °F according to the following formula:

$$9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$$

Convert °F to °C according to the following formula:

$$5/9 (^{\circ}\text{F} - 32) = ^{\circ}\text{C}$$

TABLE 5-1

Temperature of dew point in degrees Fahrenheit

[Pressure=30.0 inches]

Air temperature <i>t</i>	Vapor pressure <i>e</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
		0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
10	0.0631	9	8	7	6	5	4	3	+1	±0	-2	-3	-5	-6	-8	-10
11	0.665	10	9	8	7	6	5	4	3	+1	±0	-1	-3	-4	-6	-8
12	0.699	11	10	9	8	7	6	5	4	3	+2	±0	-1	-3	-4	-6
13	0.735	12	11	11	10	9	8	7	6	4	3	+2	±0	-1	-2	-4
14	0.772	13	12	12	11	10	9	8	7	6	5	3	+2	+1	-1	-2
15	0.0810	14	13	13	12	11	10	9	8	7	6	5	4	2	+1	±0
16	0.850	15	14	14	13	12	11	10	9	8	7	6	5	4	3	+1
17	0.891	16	15	15	14	13	12	11	10	9	8	7	6	4	3	3
18	0.933	17	17	16	15	14	13	13	12	11	10	9	8	7	6	5
19	0.979	18	18	17	16	15	15	14	13	12	11	10	9	8	7	6
20	0.1020	19	19	18	17	16	16	15	14	13	12	12	11	10	9	8

Air temperature <i>t</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0
10	-13	-16	-19	-23	-27	-34	-45								
11	-10	-13	-16	-19	-22	-27	-34	-46							
12	-8	-10	-13	-15	-19	-22	-27	-34	-47						
13	-6	-8	-10	-12	-15	-18	-22	-27	-34	-46					
14	-4	-6	-8	-10	-12	-15	-18	-22	-27	-33	-45				
15	-2	-4	-5	-7	-9	-12	-15	-18	-21	-26	-32	-44			
16	±0	-2	-3	-5	-7	-9	-11	-14	-17	-20	-25	-31	-42		
17	+2	±0	-1	-3	-4	-6	-8	-11	-13	-16	-20	-24	-30	-39	-57
18	+3	+2	+1	-1	-2	-4	-6	-8	-10	-13	-16	-19	-23	-29	-37
19	+5	+4	+3	+1	±0	-2	-4	-5	-7	-10	-12	-15	-18	-22	-27
20	+7	+6	+4	+3	+2	±0	-1	-3	-5	-7	-9	-11	-14	-17	-21

TABLE 5-1

Temperature of dew point in degrees Fahrenheit—Continued

[Pressure=30.0 inches]

Air temperature t	Vapor pressure e	Depression of wet-bulb thermometer ($t-t'$)														
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
20	0.103	18	16	14	12	10	8	5	2	-2	-7	-13	-21	-37		
21	.108	19	18	16	14	12	9	7	3	± 0	-4	-9	-16	-27	-60	
22	.113	20	19	17	15	13	11	8	5	+2	-2	-6	-12	-20	-36	
23	.118	21	20	18	16	14	12	10	7	4	± 0	-4	-9	-16	-26	-57
24	.124	23	21	19	17	15	13	11	9	6	+2	-1	-6	-12	-20	-35
25	0.130	24	22	20	19	17	15	13	10	8	5	+1	-3	-8	-15	-25
26	.136	25	23	22	20	18	16	14	12	9	7	3	-1	-5	-11	-18
27	.143	26	24	23	21	19	18	16	13	11	8	5	+2	-2	-7	-14
28	.150	27	25	24	22	21	19	17	15	13	10	7	4	± 0	-4	-9
29	.157	28	26	25	23	22	20	18	16	14	12	9	6	+3	-1	-5
30	0.164	29	27	26	25	23	21	20	18	16	14	11	8	5	+2	-2
31	.172	30	28	27	26	24	23	21	19	17	15	13	10	8	4	± 0
32	.180	31	30	28	27	25	24	22	21	19	17	15	12	10	7	+3
33	.187	32	31	29	28	27	25	24	22	20	18	16	14	12	9	6
34	.195	33	32	30	29	28	26	25	23	22	20	18	16	13	11	8
35	0.203	34	33	31	30	29	28	26	25	23	21	19	17	15	13	10
36	.211	35	34	32	31	30	29	27	26	24	23	21	19	17	15	12
37	.219	36	35	33	32	31	30	28	27	26	24	22	21	19	17	14
38	.228	37	36	34	33	32	31	29	28	27	25	24	22	20	18	16
39	.237	38	37	35	34	33	32	31	29	28	27	25	23	22	20	18
40	0.247	39	38	37	35	34	33	32	30	29	28	26	25	23	21	20
41	.256	40	39	38	36	35	34	33	31	30	29	27	26	24	23	21
42	.266	41	40	39	38	36	35	34	33	31	30	29	27	26	24	23
43	.277	42	41	40	39	37	36	35	34	32	31	30	28	27	25	24
44	.287	43	42	41	40	38	37	36	35	34	32	31	30	28	27	25
45	0.298	44	43	42	41	40	38	37	36	35	34	32	31	30	28	27
46	.310	45	44	43	42	41	40	38	37	36	35	33	32	31	29	28
47	.322	46	45	44	43	42	41	40	38	37	36	35	33	32	31	29
48	.334	47	46	45	44	43	42	41	40	38	37	36	35	33	32	31
49	.347	48	47	46	45	44	43	42	41	40	38	37	36	34	33	32
50	0.360	49	48	47	46	45	44	43	42	41	40	38	37	36	34	33
51	.373	50	49	48	47	46	45	44	43	42	41	40	38	37	36	34
52	.387	51	50	49	48	47	46	45	44	43	42	41	40	38	37	36
53	.402	52	51	50	49	48	47	46	45	44	43	42	41	40	38	37
54	.417	53	52	51	50	49	48	47	46	45	44	43	42	41	40	38
55	0.432	54	53	52	51	50	50	49	48	47	45	44	43	42	41	40
56	.448	55	54	53	53	52	51	50	49	48	47	46	44	43	42	41
57	.465	56	55	54	54	53	52	51	50	49	48	47	46	45	43	42
58	.482	57	56	55	55	54	53	52	51	50	49	48	47	46	45	44
59	.499	58	57	56	56	55	54	53	52	51	50	49	48	47	46	45
60	0.517	59	58	57	57	56	55	54	53	52	51	50	49	48	47	46
61	.536	60	59	59	58	57	56	55	54	53	52	51	50	49	48	47
62	.555	61	60	60	59	58	57	56	55	54	53	52	51	50	48	48
63	.575	62	61	61	60	59	58	57	56	55	54	53	52	51	50	50
64	.595	63	62	62	61	60	59	58	57	56	55	54	53	52	51	51
65	0.616	64	63	63	62	61	60	59	59	58	57	56	55	54	53	52
66	.638	65	64	64	63	62	61	60	60	59	58	57	56	55	54	53
67	.661	66	65	65	64	63	62	62	61	60	59	58	57	56	55	54
68	.684	67	67	66	65	64	63	63	62	61	60	59	58	57	57	56
69	.707	68	68	67	66	65	64	64	63	62	61	60	59	59	58	57
70	0.732	69	69	68	67	66	65	65	64	63	62	61	61	60	59	58
71	.757	70	70	69	68	67	67	66	65	64	63	62	62	61	60	59
72	.783	71	71	70	69	68	68	67	66	65	64	64	63	62	61	60
73	.810	72	72	71	70	69	69	68	67	66	66	65	64	63	62	61
74	.838	73	73	72	71	70	70	69	68	67	67	66	65	64	63	62
75	0.866	74	74	73	72	71	71	70	69	68	68	67	66	65	64	64
76	.896	75	75	74	73	72	72	71	70	69	69	68	67	66	66	65
77	.926	76	76	75	74	73	73	72	71	71	70	69	68	67	67	66
78	.957	77	77	76	75	75	74	73	72	72	71	70	69	69	68	67
79	0.989	78	78	77	76	76	75	74	73	73	72	71	70	70	69	68
80	1.022	79	79	78	77	77	76	75	74	74	73	72	72	71	70	69

TABLE 5-1

Temperature of dew point in degrees Fahrenheit—Continued

[Pressure=30.0 inches]

Air temperature <i>t</i>	Vapor pressure <i>e</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
25	0.130	-51														
26	.136	-32														
27	.143	-23	-45													
28	.150	-17	-29													
29	.157	-12	-20	-39												
30	0.164	-7	-14	-25	-57											
31	.172	-4	-10	-18	-31											
32	.180	-1	-6	-12	-21	-42										
33	.187	+2	-2	-7	-14	-26										
34	.195	5	+1	-3	-9	-17	-32									
35	0.203	7	4	±0	-5	-11	-20	-41								
36	.211	10	7	+3	-1	-6	-14	-25	-58							
37	.219	12	9	6	+2	-3	-8	-16	-29							
38	.228	14	11	8	5	+1	-4	-10	-19	-36						
39	.237	16	13	11	8	4	±0	-5	-12	-22	-47					
40	0.247	18	15	13	10	7	+3	-1	-6	-14	-26					
41	.256	19	17	15	12	10	6	+2	-2	-8	-16	-30				
42	.266	21	19	17	14	12	9	6	+2	-3	-9	-18	-36			
43	.277	22	20	19	16	14	11	9	5	+1	-4	-11	-21	-45		
44	.287	24	22	20	18	16	13	11	8	4	±0	-5	-12	-24	-60	
45	0.298	25	23	22	20	18	15	13	10	7	+5	-1	-6	-14	-27	
46	.310	27	25	23	21	20	17	15	13	10	7	+3	-2	-7	-16	-30
47	.322	28	26	25	23	21	19	17	15	12	9	6	+2	-3	-9	-17
48	.334	29	28	26	25	23	21	19	17	14	12	9	5	+1	-4	-10
49	.347	30	29	28	26	24	23	21	19	16	14	11	8	±0	-5	-5
50	0.360	32	30	29	27	26	24	22	21	18	16	13	11	8	+4	±0
51	.373	33	32	30	29	27	26	24	22	20	18	16	13	10	7	+3
52	.387	34	33	32	30	29	27	25	24	22	20	18	16	13	10	7
53	.402	36	34	33	32	30	29	27	26	24	22	20	18	15	13	10
54	.417	37	36	34	33	32	30	29	27	25	24	22	20	18	15	12
55	0.432	38	37	36	34	33	32	30	29	27	25	24	22	20	17	15
56	.448	40	39	37	36	34	33	32	30	29	27	26	24	22	19	17
57	.465	41	40	39	37	36	34	33	32	30	29	27	25	24	21	19
58	.482	42	41	40	39	37	36	35	33	32	30	29	27	25	23	21
59	.499	44	43	41	40	39	37	36	35	33	32	30	29	27	25	23
60	0.517	45	44	43	41	40	39	38	36	35	33	32	30	29	27	25
61	.536	46	45	44	43	42	40	39	38	36	35	33	32	30	29	27
62	.556	47	46	45	44	43	42	40	39	38	36	35	33	32	30	29
63	.575	49	48	47	45	44	43	42	41	39	38	36	35	34	32	30
64	.595	50	49	48	47	46	44	43	42	41	39	38	37	35	34	32
65	0.616	51	50	49	48	47	46	45	43	42	41	40	38	37	35	34
66	.638	52	51	50	49	48	47	46	45	44	42	41	40	38	37	35
67	.661	53	53	52	50	49	48	47	46	45	44	43	41	40	38	37
68	.684	55	54	53	52	51	50	49	48	46	46	44	43	42	40	39
69	.707	56	55	54	53	52	51	50	49	48	46	45	44	43	42	40
70	0.732	57	56	55	54	53	52	51	50	49	48	47	46	44	43	42
71	.757	58	57	56	55	54	53	52	51	50	49	48	47	46	45	43
72	.783	59	58	58	57	56	55	54	53	52	51	50	49	47	46	45
73	.810	60	60	59	58	57	56	55	54	53	52	51	50	49	48	46
74	.838	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48
75	0.866	63	62	61	60	59	58	57	56	55	55	54	52	51	50	49
76	.896	64	63	62	61	60	60	59	58	57	56	55	54	53	52	51
77	.926	65	64	63	62	62	61	60	59	58	57	56	55	54	53	52
78	.957	66	65	64	64	63	62	61	60	59	58	57	56	55	54	53
79	0.989	67	66	66	65	64	63	62	61	60	59	59	58	57	56	55
80	1.022	68	68	67	66	65	64	63	63	62	61	60	59	58	57	56

TABLE 5-1

Temperature of dew point in degrees Fahrenheit—Continued

[Pressure = 30.0 inches]

Air temperature t	Depression of wet-bulb thermometer ($t-t'$)														
	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5
47	-35														
48	-20	-41													
49	-12	-22	-53												
50	-6	-13	-26												
51	-1	-7	-15	-29											
52	+3	-2	-8	-17	-33										
53	7	+2	-3	-9	-18	-39									
54	10	6	+2	-4	-10	-20	-47								
55	12	9	6	+1	-4	-12	-23	-59							
56	15	12	9	5	+1	-5	-13	-25							
57	17	14	12	9	5	± 0	-6	-14	-27						
58	19	17	14	11	8	+4	-1	-6	-15	-30					
59	21	19	17	14	11	8	+4	-1	-7	-16	-33				
60	23	21	19	17	14	11	8	+4	-2	-8	-17	-36			
61	25	23	21	19	17	14	11	8	+3	-2	-8	-18	-40		
62	27	25	23	21	19	16	14	11	7	-3	-2	-9	-19	-45	
63	29	27	25	23	21	19	17	14	7	7	+3	-2	-9	-20	-49
64	31	29	27	25	23	21	19	17	14	11	7	+3	-3	-10	-21
65	32	31	29	27	25	24	21	19	17	14	11	7	+3	-3	-10
66	34	32	31	29	27	26	24	22	19	17	14	11	7	+2	-3
67	36	34	32	31	29	28	26	24	22	19	17	14	11	7	+2
68	37	36	34	33	31	29	28	26	24	22	19	17	14	11	7
69	39	37	36	34	33	31	30	28	26	24	22	19	17	14	11
70	40	39	38	36	34	33	31	30	28	26	24	22	20	17	14
71	42	41	39	38	36	35	33	31	30	28	26	24	22	20	17
72	44	42	41	40	38	37	35	33	32	30	28	26	24	22	20
73	45	44	43	41	40	38	37	35	34	32	30	28	27	25	22
74	47	45	44	43	41	40	39	37	35	34	32	30	29	27	25
75	48	47	46	44	43	42	40	39	37	36	34	32	31	29	27
76	49	48	47	46	45	43	42	41	39	38	36	34	33	31	29
77	51	50	49	48	46	45	44	42	41	39	38	36	35	33	31
78	52	51	50	49	48	46	45	44	43	41	40	38	37	35	33
79	54	53	52	50	49	48	47	46	44	43	42	40	38	37	35
80	55	54	53	52	51	50	48	47	46	44	43	42	40	39	37

t	Depression of wet-bulb thermometer ($t-t'$)														
	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0
64	-54														
65	-22														
66	-11	-22													
67	-3	-11	-23												
68	+2	-3	-11	-24											
69	7	+2	-3	-11	-24										
70	11	7	+2	-3	-11	-24									
71	14	11	7	+3	-3	-11	-24								
72	17	14	11	7	+3	-3	-11	-24							
73	20	17	15	11	8	+3	-3	-11	-24						
74	23	20	18	15	12	8	+3	-3	-10	-24					
75	25	23	21	18	15	12	8	+4	-2	-10	-23				
76	27	25	23	21	18	15	12	8	+4	-2	-10	-22			
77	29	28	26	23	21	18	16	13	9	+4	-2	-9	-21		
78	31	30	28	26	24	21	19	16	13	9	+5	-1	-9	-20	
79	34	32	30	28	26	24	22	19	16	13	10	+5	-1	-8	-20
80	36	34	32	30	28	26	24	22	20	17	13	10	+6	± 0	-7

TABLE 5-1

Temperature of dew point in degrees Fahrenheit—Continued

[Pressure=30.0 inches]

Air temperature <i>t</i>	Vapor pressure <i>e</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
80	1.022	79	77	76	74	73	72	70	68	67	65	63	62	60	58	56
81	.056	80	78	77	75	74	73	71	70	68	66	65	63	61	59	57
82	.091	81	79	78	77	75	74	72	71	69	67	66	64	62	60	59
83	.127	82	80	79	78	76	75	73	72	70	69	67	65	64	62	60
84	.163	83	81	80	79	77	76	74	73	71	70	68	66	65	63	61
85	1.201	84	82	81	80	78	77	75	74	72	71	69	68	66	64	62
86	.241	85	83	82	81	79	78	76	75	73	72	70	69	67	65	64
87	.281	86	84	83	82	80	79	78	76	75	73	72	70	68	67	65
88	.322	87	85	84	83	81	80	79	77	76	74	73	71	69	68	66
89	.364	88	86	85	84	82	81	80	78	77	75	74	72	71	69	67
90	1.408	89	87	86	85	83	82	81	79	78	76	75	73	72	70	69
91	.453	90	88	87	86	85	83	82	80	79	78	76	75	73	71	70
92	.499	91	89	88	87	86	84	83	81	80	79	77	76	74	73	71
93	.546	92	90	89	88	87	85	84	83	81	80	78	77	75	74	72
94	.595	93	92	90	89	88	86	85	84	82	81	79	78	76	75	73
95	1.645	94	93	91	90	89	87	86	85	83	82	80	79	78	76	74
96	.696	95	94	92	91	90	88	87	86	84	83	82	80	79	77	76
97	.749	96	95	93	92	91	89	88	87	85	84	83	81	80	78	77
98	.803	97	96	94	93	92	90	89	88	87	85	84	82	81	79	78
99	.859	98	97	95	94	93	92	90	89	88	86	85	83	82	81	79
100	1.916	99	98	96	95	94	93	91	90	89	87	86	85	83	82	80
101	1.975	100	99	97	96	95	94	92	91	90	88	87	86	84	83	81
102	2.035	101	100	98	97	96	95	93	92	91	89	88	87	85	84	83
103	.097	102	101	99	98	97	96	94	93	92	91	89	88	86	85	84
104	.160	103	102	100	99	98	97	95	94	93	92	90	89	88	86	85
105	2.225	104	103	101	100	99	98	96	95	94	93	91	90	89	87	86
106	.292	105	104	102	101	100	99	98	96	95	94	92	91	90	88	87
107	.360	106	105	103	102	101	100	99	97	96	95	93	92	91	90	88
108	.431	107	106	104	103	102	101	100	98	97	96	95	93	92	91	89
109	.503	108	107	105	104	103	102	101	99	98	97	96	94	93	92	90
110	2.576	109	108	106	105	104	103	102	100	99	98	97	95	94	93	91
111	.652	110	109	108	106	105	104	103	102	100	99	98	96	95	94	93
112	.730	111	110	109	107	106	105	104	103	101	100	99	98	96	95	94
113	.810	112	111	110	108	107	106	105	104	102	101	100	99	97	96	95
114	.891	113	112	111	109	108	107	106	105	103	102	101	100	98	97	96
115	2.975	114	113	112	110	109	108	107	106	104	103	102	101	99	98	97
116	3.061	115	114	113	111	110	109	108	107	105	104	103	102	101	99	98
117	.148	116	115	114	112	111	110	109	108	107	105	104	103	102	100	99
118	.239	117	116	115	113	112	111	110	109	108	106	105	104	103	101	100
119	.331	118	117	116	114	113	112	111	110	109	107	106	105	104	102	101
120	3.425	119	118	117	115	114	113	112	111	110	108	107	106	105	104	102
121	.522	120	119	118	116	115	114	113	112	111	109	108	107	106	105	103
122	.621	121	120	119	118	116	115	114	113	112	110	109	108	107	106	104
123	.723	122	121	120	119	117	116	115	114	113	112	110	109	108	107	106
124	.827	123	122	121	120	118	117	116	115	114	113	111	110	109	108	107
125	3.933	124	123	122	121	119	118	117	116	115	114	112	111	110	109	108
126	4.042	125	124	123	122	120	119	118	117	116	115	113	112	111	110	109
127	.154	126	125	124	123	121	120	119	118	117	116	114	113	112	111	110
128	.268	127	126	125	124	122	121	120	119	118	117	116	114	113	112	111
129	.385	128	127	126	125	123	122	121	120	119	118	117	115	114	113	112
130	4.504	129	128	127	126	124	123	122	121	120	119	118	116	115	114	113
131	.627	130	129	128	127	125	124	123	122	121	120	119	117	116	115	114
132	.752	131	130	129	128	126	125	124	123	122	121	120	119	117	116	115
133	4.890	132	131	130	129	127	126	125	124	123	122	121	120	118	117	116
134	5.011	133	132	131	130	129	128	127	126	125	124	123	122	121	119	118
135	5.145	134	133	132	131	130	128	127	126	125	124	123	122	120	119	118
136	.282	135	134	133	132	131	129	128	127	126	125	124	123	122	120	119
137	.422	136	135	134	133	132	130	129	128	127	126	125	124	123	121	120
138	.565	137	136	135	134	133	131	130	129	128	127	126	125	124	122	121
139	.712	138	137	136	135	134	132	131	130	129	128	127	126	125	123	122
140	5.862	139	138	137	136	135	133	132	131	130	129	128	127	126	124	123

TABLE 5-1

Temperature of dew point in degrees Fahrenheit—Continued

[Pressure=30.0 inches]

Air temperature t	Vapor pressure e	Depression of wet-bulb thermometer ($t-t'$)														
		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
80	1.022	54	52	50	47	44	42	39	36	32	28	24	20	13	6	-7
81	.956	55	53	51	49	46	43	41	38	34	31	27	22	17	10	± 0
82	.901	57	55	52	50	48	45	42	39	36	33	29	25	20	14	+7
83	.847	58	56	54	52	49	47	44	41	38	35	31	27	23	18	11
84	.793	59	57	55	53	51	48	46	43	40	37	34	30	26	21	15
85	1.201	61	59	57	54	52	50	48	45	42	39	36	32	28	24	19
86	.241	62	60	58	56	54	52	49	47	44	41	38	34	31	27	22
87	.281	63	61	59	57	55	53	51	48	46	43	40	36	33	29	25
88	.322	64	62	61	59	57	55	52	50	47	45	42	38	35	31	27
89	.364	66	64	62	60	58	56	54	51	49	46	44	41	37	34	30
90	1.408	67	65	63	61	59	57	55	53	51	48	45	43	39	36	32
91	.453	68	66	65	63	61	59	57	55	52	50	47	44	41	38	35
92	.499	69	67	66	64	62	60	58	56	54	51	49	46	43	40	37
93	.546	71	69	67	65	63	62	60	58	55	53	51	48	45	42	39
94	.595	72	70	68	67	65	63	61	59	57	55	52	50	47	44	41
95	1.645	73	71	70	68	66	64	62	60	58	56	54	52	49	46	43
96	.696	74	72	71	69	67	66	64	62	60	58	55	53	51	48	45
97	.740	75	74	72	70	68	67	65	63	61	59	57	55	52	50	47
98	.803	76	75	73	72	70	68	66	64	63	61	58	56	54	52	49
99	.859	78	76	74	73	71	69	68	66	64	62	60	58	56	53	51
100	1.916	79	77	76	74	72	71	69	67	65	63	61	59	57	55	52
101	1.973	80	78	77	75	74	72	70	69	67	65	63	61	59	56	54
102	2.035	81	80	78	76	75	73	72	70	68	66	64	62	60	58	56
103	.097	83	81	79	78	76	74	73	71	69	68	66	64	62	60	57
104	.160	83	82	80	79	77	76	74	72	71	69	67	65	63	61	59
105	2.225	84	83	82	80	78	77	75	74	72	70	68	67	65	63	61
106	.292	86	84	83	81	80	78	77	75	73	72	70	68	66	64	62
107	.360	87	85	84	82	81	79	78	76	75	73	71	69	67	66	64
108	.431	89	86	85	84	82	81	79	77	76	74	72	71	69	67	65
109	.503	89	88	86	85	83	82	80	79	77	75	74	72	70	68	66
110	2.576	90	89	87	86	84	83	81	80	78	77	75	73	72	70	68
111	.652	91	90	88	87	86	84	83	81	80	78	76	75	73	71	69
112	.730	92	91	90	88	87	85	84	82	81	79	78	76	74	72	71
113	.810	93	92	91	89	88	86	85	84	82	80	79	77	76	74	72
114	.891	94	93	92	90	89	88	86	85	83	82	80	79	77	75	73
115	2.975	96	94	93	92	90	89	87	86	84	83	81	80	78	76	75
116	3.061	97	95	94	93	91	90	88	87	86	84	83	81	79	78	76
117	.143	98	96	95	94	92	91	90	88	87	85	84	82	81	79	77
118	.239	99	98	96	95	94	92	91	89	88	86	85	84	82	80	79
119	.331	100	99	97	96	95	93	92	91	89	88	86	85	83	82	80
120	3.425	101	100	98	97	96	94	93	92	90	89	87	86	84	83	81
121	.522	102	101	100	98	97	96	94	93	91	90	89	87	86	84	83
122	.621	103	102	101	99	98	97	95	94	93	91	90	88	87	85	84
123	.723	104	103	102	100	99	98	96	95	94	92	91	90	88	87	85
124	.827	105	104	103	102	100	99	98	96	95	94	92	91	89	88	86
125	3.933	106	105	104	103	101	100	99	97	96	95	93	92	90	89	88
126	4.042	107	106	105	104	102	101	100	99	97	96	94	93	92	90	89
127	.154	109	107	106	105	104	102	101	100	98	97	96	94	93	91	89
128	.268	110	108	107	106	105	103	102	101	99	98	97	95	94	93	91
129	.383	111	109	108	107	106	104	103	102	101	99	98	97	95	94	92
130	4.504	112	110	109	108	107	106	104	103	102	100	99	98	96	95	94
131	.627	113	112	110	109	108	107	105	104	103	101	100	99	97	96	95
132	.752	114	113	111	110	109	108	106	105	104	103	101	100	99	97	96
133	.880	115	114	112	111	110	109	108	106	105	104	102	101	100	98	97
134	5.011	116	115	114	112	111	110	109	107	106	105	104	102	101	100	98
135	5.145	117	116	115	113	112	111	110	108	107	106	105	103	102	101	99
136	.282	118	117	116	114	113	112	111	110	108	107	106	104	103	102	101
137	.422	119	118	117	116	114	113	112	111	109	108	107	106	104	103	102
138	.565	120	119	118	117	115	114	113	112	110	109	108	107	105	104	103
139	.712	121	120	119	118	116	115	114	113	112	110	109	108	107	105	104
140	5.862	122	121	120	119	117	116	115	114	113	111	110	109	108	106	105

TABLE 5-1

Temperature of dew point in degrees Fahrenheit—Continued

[Pressure=30.0 inches]

Air temperature <i>t</i>	Vapor pressure <i>e</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
		31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
80	1.022	-53														
81	.056	-18														
82	.091	-6	-43													
83	.127	+2	-15													
84	.163	8	-4	-33												
85	1.201	12	+3	-12												
86	.241	16	9	-2	-27											
87	.281	20	13	+5	-10											
88	.322	23	17	10	±0	-22										
89	.364	26	21	15	+6	-7										
90	1.408	28	24	19	11	+1	-17									
91	.453	31	27	22	16	8	-4	-40								
92	.499	33	29	25	20	13	+4	-13								
93	.546	36	32	28	23	17	10	-2	-28							
94	.595	38	34	30	26	21	14	+6	-9							
95	1.645	40	37	33	29	24	19	11	+1	-20						
96	.696	42	39	35	31	27	22	16	8	-5						
97	.749	44	41	38	34	30	25	20	13	+3	-15					
98	.803	46	43	40	36	32	28	23	17	10	-2	-33				
99	.859	48	45	42	39	35	31	26	21	15	+6	-10				
100	1.916	50	47	44	41	37	33	29	25	19	12	+1	-22			
101	1.975	52	49	46	43	40	36	32	28	23	17	8	-5			
102	2.035	53	51	48	45	42	38	35	31	26	21	14	+4	-14		
103	.097	55	53	50	47	44	41	37	33	29	24	18	11	-2	-32	
104	.160	57	54	52	49	46	43	40	36	32	27	22	16	+7	-9	
105	2.225	58	56	54	51	48	45	42	38	34	30	26	20	13	+2	-20
106	.292	60	58	55	53	50	47	44	41	37	33	29	24	18	9	-4
107	.360	62	59	57	55	52	49	46	43	40	36	32	27	22	15	+5
108	.431	63	61	59	56	54	51	48	45	42	39	35	30	25	20	12
109	.503	64	62	60	58	56	53	50	47	44	41	37	33	29	23	17
110	2.576	66	64	62	60	57	55	52	50	47	43	40	36	32	27	21
111	.652	67	65	63	61	59	57	54	52	49	46	42	39	35	30	25
112	.730	69	67	65	63	61	58	56	54	51	48	45	41	37	33	29
113	.810	70	68	66	64	62	60	58	55	53	50	47	44	40	36	32
114	.891	72	70	68	66	64	62	59	57	55	52	49	46	43	39	35
115	2.975	73	71	69	67	65	63	61	59	56	54	51	48	45	42	38
116	3.061	74	73	71	69	67	65	63	60	58	56	53	50	47	44	40
117	.148	76	74	72	70	68	66	64	62	60	58	55	52	49	46	43
118	.239	77	75	74	72	70	68	66	64	62	59	57	54	51	49	45
119	.331	78	77	75	73	71	69	67	65	63	61	59	56	53	51	48
120	3.425	80	78	76	75	73	71	69	67	65	63	60	58	55	53	50
121	.522	81	79	78	76	74	72	70	68	66	64	62	60	57	55	52
122	.621	82	81	79	77	76	74	72	70	68	66	64	62	59	57	54
123	.723	84	82	80	79	77	75	73	71	69	67	65	63	61	58	56
124	.827	85	83	82	80	78	77	75	73	71	69	67	65	63	60	58
125	3.933	86	84	83	81	80	78	76	74	72	71	69	66	64	62	60
126	4.042	87	86	84	83	81	79	78	76	74	72	70	68	66	64	62
127	.154	88	87	85	84	82	81	79	77	75	74	72	70	68	65	63
128	.263	90	88	87	85	84	82	80	79	77	75	73	71	69	67	65
129	.385	91	89	88	86	85	83	82	80	78	76	75	73	71	69	67
130	4.504	92	91	89	88	86	85	83	81	80	78	76	74	72	70	68
131	.627	93	92	90	89	87	86	84	83	81	79	77	76	74	72	70
132	.752	94	93	92	90	89	87	86	84	82	81	79	77	75	73	71
133	.880	96	94	93	91	90	88	87	85	84	82	80	78	77	75	73
134	5.011	97	95	94	93	91	90	88	87	85	83	82	80	78	76	74
135	5.145	98	97	95	94	92	91	89	88	86	85	83	81	80	78	76
136	.232	99	98	96	95	94	92	91	89	88	86	84	83	81	79	77
137	.422	100	99	98	96	95	93	92	90	89	87	86	84	82	81	79
138	.565	101	100	99	97	96	95	93	92	90	89	87	85	84	82	80
139	.712	103	101	100	99	97	96	94	93	91	90	88	87	85	83	82
140	5.862	104	102	101	100	98	97	96	94	93	91	90	88	86	85	83

TABLE 5-1

Temperature of dew point in degrees Fahrenheit—Continued

[Pressure=30.0 inches]

Air temperature <i>t</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
106	-56														
107	-12														
108	±0	-26													
109	+8	-6													
110	14	+4	-16												
111	19	11	-1	-35											
112	23	17	+8	-8											
113	27	21	14	+3	-19										
114	30	25	19	11	-2	-50									
115	33	29	23	16	+7	-10									
116	36	32	27	21	14	+2	-22								
117	39	35	30	25	19	10	-3								
118	42	38	34	29	23	16	+7	-11							
119	44	41	37	32	27	21	14	+2	-25						
120	47	43	39	35	30	25	19	10	-4						
121	49	46	42	38	34	29	23	16	+6	-12					
122	51	48	45	41	37	32	27	21	14	+1	-27				
123	53	50	47	44	40	36	31	25	19	10	-4				
124	55	52	49	46	43	39	34	29	24	17	+7	-13			
125	57	54	52	49	45	42	37	33	28	22	14	+2	-29		
126	59	56	54	51	48	44	40	36	31	26	19	11	-4		
127	61	58	56	53	50	47	43	39	35	30	24	17	+7	-13	
128	63	60	58	55	52	49	46	42	38	33	28	22	14	+2	-27
129	64	62	60	57	54	51	48	45	41	37	32	26	20	11	-4
130	66	64	62	59	56	54	51	47	44	40	35	30	25	17	+7
131	68	66	63	61	58	56	53	50	46	43	39	34	29	23	15
132	69	67	65	63	60	58	55	52	49	45	42	37	32	27	21
133	71	69	67	64	62	60	57	54	51	48	44	40	36	31	25
134	73	71	68	66	64	62	59	56	53	50	47	43	39	34	29
135	74	72	70	68	66	63	61	58	56	53	50	46	42	38	33
136	76	74	72	70	67	65	63	60	58	55	52	49	45	41	37
137	77	75	73	71	69	67	65	62	60	57	54	51	48	44	40
138	78	77	75	73	71	69	66	64	62	59	56	53	50	47	43
139	80	78	76	74	72	70	68	66	64	61	58	56	53	50	46
140	81	80	78	76	74	72	70	68	65	63	60	58	55	52	49

TABLE 5-2

Relative humidity, percent—Fahrenheit temperatures

[Pressure=30.0 inches]

Air temperature t	Depression of wet-bulb thermometer (t-t')																			
	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
10	96	91	87	82	78	73	69	65	60	56	52	47	43	39	34	30	26	22	17	13
11	96	91	87	83	79	74	70	66	62	58	53	49	45	41	37	33	28	25	20	16
12	96	92	88	84	80	75	71	67	63	59	55	51	47	43	39	35	31	27	23	19
13	96	92	88	84	80	76	73	69	65	61	57	53	49	45	41	38	34	30	26	23
14	96	92	89	85	81	77	74	70	66	62	59	55	51	48	44	40	37	33	29	26
15	96	93	89	86	82	78	75	71	67	64	60	57	53	50	46	42	39	35	32	29
16	96	93	90	86	82	79	76	72	69	65	62	58	55	51	48	45	41	38	34	31
17	97	93	90	86	83	80	77	73	70	66	63	60	57	53	50	47	43	40	37	34
18	97	93	90	87	84	80	77	74	71	68	65	61	58	55	52	49	45	42	39	36
19	97	94	90	87	84	81	78	75	72	69	66	63	60	56	53	50	47	44	41	38
20	97	94	91	88	85	82	79	76	73	70	67	64	61	58	55	52	49	46	43	40

Air temperature t	Depression of wet-bulb thermometer (t-t')									
	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0
10	9	5	0							
11	12	8	4	0						
12	16	12	8	4	0					
13	19	15	11	7	4	0				
14	23	18	15	11	8	4	0			
15	25	21	18	14	11	7	4	0		
16	28	24	21	18	14	11	8	4	1	
17	30	27	24	21	17	14	11	8	5	1
18	33	30	27	24	20	17	14	11	8	5
19	35	32	29	26	23	20	17	14	11	8
20	37	34	32	29	26	23	20	17	14	12

TABLE 5-2

Relative humidity, percent—Fahrenheit temperatures—Continued

[Pressure=30.0 inches]

Air temperature t	Depression of wet-bulb thermometer (t-t')																						
	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5		
20	92	85	77	70	62	56	48	40	33	26	19	12	5										
21	92	85	78	71	63	56	49	42	35	28	21	15	8	1									
22	93	86	78	71	65	58	51	44	37	31	24	17	11	4									
23	93	86	79	72	66	59	52	46	39	33	26	20	14	7	1								
24	93	87	80	73	67	60	54	47	41	35	29	22	16	10	4								
25	94	87	81	74	68	62	55	49	43	37	31	25	19	13	7	1							
26	94	87	81	75	69	63	57	51	45	39	33	27	21	16	10	4							
27	94	88	82	76	70	64	58	52	47	41	35	29	24	18	13	7	2						
28	94	88	82	76	71	65	59	54	48	43	37	32	26	21	15	10	5						
29	94	88	83	77	72	66	60	55	50	44	39	34	28	23	18	13	8	3					
30	94	89	83	78	73	67	62	56	51	46	41	36	31	26	21	16	11	6	1				
31	94	89	84	78	73	68	63	58	52	47	42	37	33	28	23	18	13	8	4				
32	95	89	84	79	74	69	64	59	54	49	44	39	35	30	25	20	16	11	7	2			
33	95	90	85	80	75	70	65	60	56	51	46	41	37	32	27	23	18	14	9	5			
34	95	90	86	81	76	71	66	62	57	52	48	43	38	34	29	25	21	16	12	8			0
35	95	91	86	81	77	72	67	63	58	54	49	45	40	36	32	27	23	19	14	10			6
36	95	91	86	82	77	73	68	64	60	55	51	46	42	38	34	29	25	21	17	13			9
37	95	91	87	83	78	74	69	65	61	57	53	48	44	40	36	31	27	23	19	15			11
38	96	91	87	83	79	75	70	66	62	58	54	50	46	42	37	33	29	25	21	17			14
39	96	92	87	83	79	75	71	67	63	59	55	51	47	43	39	35	31	27	24	20			16
40	96	92	87	83	79	75	71	68	64	60	56	52	48	44	41	37	33	29	26	22			18
41	96	92	88	84	80	76	72	69	65	61	57	54	50	46	42	39	35	31	29	24			20
42	96	92	88	85	81	77	73	69	65	62	58	55	51	47	44	40	36	33	30	26			23
43	96	92	88	85	81	77	73	70	66	63	59	55	52	48	45	42	38	35	31	28			25
44	96	93	89	85	81	78	74	71	67	63	60	56	53	49	46	43	39	36	33	30			26
45	96	93	89	86	82	78	74	71	67	64	61	57	54	51	47	44	41	38	34	31			28
46	96	93	89	86	82	79	75	72	68	65	61	58	55	52	48	45	42	39	36	32			29
47	96	93	89	86	82	79	75	72	69	66	62	59	56	53	49	46	43	40	37	34			31
48	96	93	90	86	83	79	76	73	69	66	63	60	57	54	50	47	44	41	38	35			32
49	96	93	90	86	83	80	76	73	70	67	64	61	57	54	51	48	45	42	39	36			34
50	96	93	90	87	83	80	77	74	71	67	64	61	58	55	52	49	46	43	41	38			35
51	97	94	90	87	84	81	78	75	71	68	65	62	59	56	53	50	47	45	42	39			36
52	97	94	90	87	84	81	78	75	72	69	66	63	60	57	54	51	49	46	43	40			37
53	97	94	90	87	84	81	78	75	72	69	66	63	61	58	55	52	50	47	44	41			39
54	97	94	91	88	85	82	79	76	73	70	67	64	61	58	56	53	50	48	45	42			40
55	97	94	91	88	85	82	79	76	73	70	68	65	62	59	57	54	51	49	46	43			41
56	97	94	91	88	85	82	79	76	73	71	68	65	63	60	57	55	52	50	47	44			42
57	97	94	91	88	85	82	80	77	74	71	69	66	63	61	58	55	53	50	48	45			43
58	97	94	91	88	85	83	80	77	74	72	69	66	64	61	59	56	54	51	49	46			44
59	97	94	91	89	86	83	80	78	75	72	70	67	65	62	59	57	55	52	49	47			45
60	97	94	91	89	86	83	81	78	75	73	70	68	65	63	60	58	55	53	50	48			46
61	97	94	92	89	86	84	81	78	76	73	71	68	65	63	61	58	56	54	51	49			47
62	97	94	92	89	86	84	81	79	76	74	71	69	66	64	61	59	57	54	52	50			47
63	97	95	92	89	87	84	82	79	77	74	71	69	67	64	62	60	57	55	53	50			48
64	97	95	92	90	87	84	82	79	77	74	72	70	67	65	63	60	58	56	53	51			49
65	97	95	92	90	87	85	82	80	77	75	72	70	68	66	63	61	59	56	54	52			50
66	97	95	92	90	87	85	82	80	78	75	73	71	68	66	64	61	59	57	55	53			51
67	97	95	92	90	87	85	83	80	78	75	73	71	69	66	64	62	60	58	56	53			51
68	97	95	92	90	88	85	83	80	78	76	74	71	69	67	65	62	60	58	56	54			52
69	97	95	93	90	88	85	83	81	79	76	74	72	70	67	65	63	61	59	57	55			53
70	98	95	93	90	88	86	83	81	79	77	74	72	70	68	66	64	61	59	57	55			53
71	98	95	93	90	88	86	84	81	79	77	75	72	70	68	66	64	62	60	58	56			54
72	98	95	93	91	88	86	84	82	79	77	75	73	71	69	67	65	63	61	59	57			55
73	98	95	93	91	88	86	84	82	80	78	75	73	71	69	67	65	63	61	59	57			55
74	98	95	93	91	89	86	84	82	80	78	76	74	71	69	67	65	63	61	60	58			56
75	98	96	93	91	89	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58			56
76	98	96	93	91	89	87	84	82	80	78	76	74	72	70	68	66	64	62	61	59			57
77	98	96	93	91	89	87	85	83	81	79	77	74	72	71	69	67	65	63	61	59			57
78	98	96	93	91	89	87	85	83	81	79	77	75	73	71	69	67	65	63	62	60			58
79	98	96	93	91	89	87	85	83	81	79	77	75	73	71	69	68	66	64	62	60			58
80	98	96	94	91	89	87	85	83	81	79	77	75	74	72	70	69	66	64	62	61			59

TABLE 5-2

Relative humidity, percent—Fahrenheit temperatures—Continued

[Pressure = 30.0 inches]

Air temperature <i>t</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)																				
	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0
	35	2																			
36	5	1																			
37	7	3																			
38	10	6	2																		
39	12	8	5	1																	
40	15	11	7	4	0																
41	17	13	10	6	3																
42	19	16	12	9	5	2															
43	21	18	14	11	8	4	1														
44	23	20	16	13	10	7	4	0													
45	25	22	18	15	12	9	6	3													
46	26	23	20	17	14	11	8	5	2												
47	28	25	22	19	16	13	10	7	5	2											
48	29	26	23	21	18	15	12	9	7	4	1										
49	31	28	25	22	19	17	14	11	9	6	3	1									
50	32	29	27	24	21	18	16	13	10	8	5	3	0								
51	34	31	28	26	23	20	17	15	12	9	7	4	2								
52	35	32	29	27	24	22	19	17	14	11	9	6	4	1							
53	36	33	31	28	26	23	20	18	16	13	10	8	6	3	1						
54	37	35	32	29	27	24	22	20	17	15	12	10	8	5	3	1					
55	38	36	33	31	28	26	23	21	19	16	14	12	9	7	5	2	0				
56	39	37	34	32	30	27	25	22	20	18	16	13	11	9	7	4	2				
57	40	38	35	33	31	28	26	24	22	19	17	15	13	10	8	6	4	2			
58	41	39	37	34	32	30	27	25	23	21	18	16	14	12	10	8	6	4	2		
59	42	40	38	35	33	31	29	26	24	22	20	18	16	13	11	9	7	5	3	1	
60	43	41	39	37	34	32	30	28	26	23	21	19	17	15	13	11	9	7	5	3	1
61	44	42	40	38	35	33	31	29	27	25	22	20	18	16	14	12	10	8	7	5	3
62	45	43	41	39	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4
63	46	44	42	40	37	35	33	31	29	27	25	23	21	19	17	15	13	11	10	8	6
64	47	45	43	41	38	36	34	32	30	28	26	24	22	20	18	17	15	13	11	9	7
65	48	46	44	41	39	37	35	33	31	29	27	25	24	22	20	18	16	14	12	11	9
66	48	46	44	42	40	38	36	34	32	30	29	27	25	23	21	19	17	16	14	12	10
67	49	47	45	43	41	39	37	35	33	31	30	28	26	24	22	20	19	17	15	13	12
68	50	48	46	44	42	40	38	36	34	32	31	29	27	25	23	21	20	18	16	15	13
69	51	49	47	45	43	41	39	37	35	33	32	30	28	26	24	23	21	19	18	16	14
70	51	49	48	46	44	42	40	38	36	34	33	31	29	27	25	24	22	20	19	17	15
71	52	50	48	46	45	43	41	39	37	35	33	32	30	28	27	25	23	22	20	18	17
72	53	51	49	47	45	43	42	40	38	36	34	33	31	29	28	26	24	23	21	19	18
73	53	51	50	48	46	44	42	40	39	37	35	34	32	30	29	27	25	24	22	20	19
74	54	52	50	48	47	45	43	41	39	38	36	34	33	31	29	28	26	25	23	21	20
75	54	53	51	49	47	45	44	42	40	39	37	35	34	32	30	29	27	26	24	23	21
76	55	53	51	50	48	46	44	43	41	39	38	36	34	33	31	30	28	27	25	24	22
77	56	54	52	50	48	47	45	43	42	40	39	37	35	34	32	31	29	28	26	25	23
78	56	54	53	51	49	47	46	44	43	41	39	38	36	34	33	31	30	28	27	25	24
79	57	55	53	51	50	48	46	45	43	42	40	38	37	35	34	32	31	29	28	26	25
80	57	55	54	52	50	49	47	45	44	42	41	39	38	36	35	33	32	30	29	27	26

<i>t</i>	(t-t')														
	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5
	61	1													
62	2	1													
63	4	2	0												
64	6	4	2	0											
65	7	5	4	2	0										
66	9	7	5	3	2	0									
67	10	8	7	5	3	2	0								
68	11	10	8	6	5	3	1								
69	13	11	9	8	6	5	3	1							
70	14	12	11	9	8	6	4	3	1						
71	15	13	12	10	9	7	6	4	3	1					
72	16	15	13	12	10	9	7	6	4	3	1				
73	17	16	14	13	11	10	8	7	5	4	3	1			
74	18	17	15	14	13	11	10	8	7	5	4	3	1		
75	20	18	17	15	14	12	11	9	8	7	5	4	3	1	
76	21	19	18	16	15	13	12	11	9	8	6	5	4	3	1
77	22	20	19	17	16	14	13	12	10	9	8	6	5	4	3
78	23	21	20	18	17	16	14	13	11	10	9	8	6	5	4
79	23	22	21	19	18	17	15	14	13	11	10	9	7	6	5
80	24	23	22	20	19	18	16	15	14	12	11	10	9	7	6

TABLE 5-2

Relative humidity, percent—Fahrenheit temperatures—Continued

[Pressure=30.0 inches]

Air temperature <i>t</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
80	96	91	87	83	79	75	72	68	64	61	57	54	50	47	44
82	96	92	88	84	80	76	72	69	65	61	58	55	51	48	45
84	96	92	88	84	80	76	73	69	66	62	59	56	52	49	46
86	96	92	88	84	81	77	73	70	66	63	60	57	53	50	47
88	96	92	88	85	81	77	74	70	67	64	61	57	54	51	48
90	96	92	89	85	81	78	74	71	68	65	61	58	55	52	49
92	96	92	89	85	82	78	75	72	68	65	62	59	56	53	50
94	96	93	89	85	82	79	75	72	69	66	63	60	57	54	51
96	96	93	89	86	82	79	76	73	69	66	63	61	58	55	52
98	96	93	89	86	83	79	76	73	70	67	64	61	58	56	53
100	96	93	89	86	83	80	77	73	70	68	65	62	59	56	54
102	96	93	90	86	83	80	77	74	71	68	65	62	60	57	55
104	97	93	90	87	83	80	77	74	71	69	66	63	60	58	55
106	97	93	90	87	84	81	78	75	72	69	66	64	61	58	56
108	97	93	90	87	84	81	78	75	72	70	67	64	62	59	57
110	97	93	90	87	84	81	78	75	73	70	67	65	62	60	57
112	97	94	90	87	84	81	79	76	73	70	68	65	63	60	58
114	97	94	91	88	85	82	79	76	74	71	68	66	63	61	58
116	97	94	91	88	85	82	79	76	74	71	69	66	64	61	59
118	97	94	91	88	85	82	79	77	74	72	69	67	64	62	59
120	97	94	91	88	85	82	80	77	74	72	69	67	65	62	60
122	97	94	91	88	85	83	80	77	75	72	70	67	65	63	60
124	97	94	91	88	85	83	80	78	75	73	70	68	65	63	61
126	97	94	91	88	86	83	80	78	75	73	70	68	66	64	61
128	97	94	91	89	86	83	81	78	76	73	71	68	66	64	62
130	97	94	91	89	86	83	81	78	76	73	71	69	67	64	62
132	97	94	92	89	86	84	81	79	76	74	71	69	67	65	63
134	97	94	92	89	86	84	81	79	76	74	72	69	67	65	63
136	97	94	92	89	86	84	81	79	77	74	72	70	68	65	63
138	97	94	92	89	87	84	82	79	77	75	72	70	68	66	64
140	97	95	92	89	87	84	82	79	77	75	73	70	68	66	64

<i>t</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
80	41	38	35	32	29	26	23	20	18	15	12	10	7	5	3
82	42	39	36	33	30	28	25	22	20	17	14	12	10	7	5
84	43	40	37	35	32	29	26	24	21	19	16	14	12	9	7
86	44	42	39	36	33	31	28	26	23	21	18	16	14	11	9
88	46	43	40	37	35	32	30	27	25	22	20	18	15	13	11
90	47	44	41	39	36	34	31	29	26	24	22	19	17	15	13
92	48	45	42	40	37	35	32	30	28	25	23	21	19	17	15
94	49	46	43	41	38	36	33	31	29	27	24	22	20	18	16
96	50	47	44	42	39	37	35	32	30	28	26	24	22	20	18
98	50	48	45	43	40	38	36	34	32	29	27	25	23	21	19
100	51	49	46	44	41	39	37	35	33	30	28	26	24	22	21
102	52	49	47	45	42	40	38	36	34	32	30	28	26	24	22
104	53	50	48	46	43	41	39	37	35	33	31	29	27	25	23
106	53	51	49	46	44	42	40	38	36	34	32	30	28	26	24
108	54	52	49	47	45	43	41	39	37	35	33	31	29	27	25
110	55	52	50	48	46	44	42	40	38	36	34	32	30	28	26
112	55	53	51	49	47	44	42	40	38	36	35	33	31	29	27
114	56	54	52	49	47	45	43	41	39	37	35	34	32	30	28
116	57	54	52	50	48	46	44	42	40	38	36	34	33	31	29
118	57	55	53	51	49	47	45	43	41	39	37	35	34	32	30
120	58	55	53	51	49	47	45	43	41	40	38	36	34	33	31
122	58	56	54	52	50	48	46	44	42	40	39	37	35	34	32
124	59	57	54	52	50	48	47	45	43	41	39	38	36	34	33
126	59	57	55	53	51	49	47	45	44	42	40	38	37	35	33
128	60	58	56	54	52	50	48	46	44	42	41	39	37	36	34
130	60	58	56	54	52	50	48	47	45	43	41	40	38	37	35
132	61	58	56	55	53	51	49	47	45	44	42	40	39	37	36
134	61	59	57	55	53	51	49	48	46	44	43	41	39	38	36
136	61	59	57	55	54	52	50	48	46	45	43	41	40	38	37
138	62	60	58	56	54	52	50	49	47	45	44	42	40	39	37
140	62	60	58	56	54	53	51	49	47	46	44	43	41	40	38

TABLE 5-2

Relative humidity, percent—Fahrenheit temperatures—Continued

[Pressure=30.0 inches]

Air temperature <i>t</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
80	0														
82	2	0													
84	5	3	0												
86	7	5	3	1											
88	9	7	5	3	1										
90	11	9	7	5	3	1									
92	13	11	9	7	5	3	1								
94	14	12	10	9	7	5	3	1							
96	16	14	12	10	8	7	5	3	2	0					
98	17	15	14	12	10	8	7	5	3	2	0				
100	19	17	15	13	12	10	8	7	5	4	2	1			
102	20	18	16	15	13	11	10	8	7	5	4	2	1		
104	21	20	18	16	14	13	11	10	8	7	5	4	2	1	
106	23	21	19	17	16	14	13	11	10	8	7	5	4	3	1
108	24	22	20	19	17	16	14	12	11	10	8	7	5	4	3
110	25	23	21	20	18	17	15	14	12	11	10	8	7	6	4
112	26	24	23	21	19	18	16	15	14	12	11	9	8	7	6
114	27	25	24	22	20	19	18	16	15	13	12	11	9	8	7
116	28	26	25	23	22	20	19	17	16	14	13	12	11	9	8
118	29	27	25	24	22	21	20	18	17	16	14	13	12	11	9
120	29	28	26	25	23	22	21	19	18	17	15	14	13	12	10
122	30	29	27	26	24	23	22	20	19	18	16	15	14	13	11
124	31	30	28	27	25	24	22	21	20	18	17	16	15	14	12
126	32	30	29	27	26	25	23	22	21	19	18	17	16	15	13
128	33	31	30	28	27	25	24	22	22	20	19	18	17	16	14
130	33	32	30	29	28	26	25	24	23	21	20	19	18	16	15
132	34	33	31	30	28	27	26	24	23	22	21	20	19	17	15
134	35	33	32	30	29	28	26	25	24	23	21	20	19	18	17
136	35	34	33	31	30	28	27	26	25	23	22	21	20	19	18
138	36	35	33	32	30	29	28	27	26	24	23	22	21	20	19
140	37	35	34	32	31	30	29	27	26	25	24	23	21	20	19

<i>t</i>	Depression of wet-bulb thermometer (<i>t-t'</i>)														
	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
106	0														
108	2	0													
110	3	2	1												
112	4	2	2	1											
114	6	5	3	2	1										
116	7	6	5	4	2	1									
118	8	7	6	5	4	3	0	2	1						
120	9	8	7	6	5	4	3	2	1						
122	10	9	8	7	6	5	4	3	2	1	0				
124	11	10	9	8	7	6	5	4	3	2	1	0			
126	12	11	10	9	8	7	6	5	4	3	2	1			
128	13	12	11	10	9	8	7	6	5	4	3	2	1		0
130	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
132	16	14	13	12	11	10	9	8	7	6	5	4	3	2	1
134	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
136	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3
138	17	16	15	14	14	13	12	11	10	9	8	7	6	5	4
140	18	17	16	15	14	13	12	12	11	10	9	8	7	7	6

TABLE 5-3

Relative humidity, percent—centigrade temperatures

[Pressure = 29.24 in.]

		Depression of wet-bulb thermometer (t-t')*														
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
-15	-----	82	78	74	70	66	62	57	53	49	45	41	37	33	29	25
-14	-----	83	79	76	72	68	64	60	56	52	49	45	41	37	33	30
-13	-----	84	81	77	74	70	66	63	59	55	52	48	45	41	38	34
-12	-----	86	82	79	75	72	68	65	62	58	55	52	48	45	41	38
-11	-----	87	83	80	77	74	70	67	64	61	58	55	51	48	45	42
-10	-----	88	85	82	79	75	72	69	66	63	60	57	54	52	49	46
-9	-----	89	86	83	80	77	74	72	69	66	63	60	57	55	52	49
-8	-----	90	87	84	82	79	76	73	71	68	65	63	60	57	55	52
-7	-----	91	88	86	83	80	78	75	73	70	68	65	63	60	58	55
-6	-----	92	89	87	84	82	80	77	75	72	70	68	65	63	60	58
-5	-----	93	91	88	86	84	81	79	77	74	72	70	68	65	63	61
-4	-----	94	92	89	87	85	83	81	78	76	74	72	70	68	65	63
-3	-----	95	93	91	89	86	84	82	80	78	76	74	72	70	68	66
-2	-----	96	94	92	90	88	86	84	82	80	78	76	74	72	70	68
-1	-----	97	95	93	91	89	87	85	83	82	80	78	76	74	72	70
0	-----	98	96	94	92	91	89	87	85	83	81	80	78	76	74	72

		Depression of wet-bulb thermometer (t-t')*														
Air temperature (t)		1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
-15	-----	21	17	13	9	5	1									
-14	-----	26	22	18	15	11	7	3								
-13	-----	30	27	23	20	16	13	9	6	2						
-12	-----	35	31	28	25	22	18	15	12	8	5	2				
-11	-----	39	36	33	29	26	23	20	17	14	11	8	5	2		
-10	-----	43	40	37	34	31	28	25	22	19	16	13	10	8	5	2
-9	-----	46	43	41	38	35	32	30	27	24	21	19	16	13	10	8
-8	-----	49	47	44	42	39	36	34	31	29	26	23	21	18	16	13
-7	-----	53	50	48	45	43	40	38	35	33	30	28	26	23	21	18
-6	-----	56	53	51	48	46	44	41	39	37	34	32	30	28	25	23
-5	-----	58	56	54	52	49	47	45	43	41	38	36	34	32	30	27
-4	-----	61	59	57	55	53	50	48	46	44	42	40	38	36	34	32
-3	-----	64	62	59	57	55	53	51	49	47	45	43	41	39	37	35
-2	-----	66	64	62	60	58	56	54	52	51	49	47	45	43	41	39
-1	-----	68	66	65	63	61	59	57	55	53	52	50	48	46	44	43
0	-----	70	69	67	65	63	62	60	58	56	55	53	51	49	48	46

		Depression of wet-bulb thermometer (t-t')*														
Air temperature (t)		3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5
-9	-----	5	2													
-8	-----	11	8	6	3	0										
-7	-----	16	13	11	9	6	4	1								
-6	-----	21	18	16	14	12	9	7	5	3	0					
-5	-----	25	23	21	19	17	14	12	10	8	6	4	2			
-4	-----	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1
-3	-----	34	32	30	28	26	24	22	20	18	16	14	12	10	8	7
-2	-----	37	35	34	32	30	28	26	24	22	21	19	17	15	13	12
-1	-----	41	39	37	35	34	32	30	28	27	25	23	21	20	18	16
0	-----	44	42	41	39	37	36	34	32	31	29	27	26	24	22	21

		Depression of wet-bulb thermometer (t-t')*											
Air temperature (t)		4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7
-3	-----	5	3	1									
-2	-----	10	8	6	4	3	1						
-1	-----	15	13	11	9	8	6	4	3	1			
0	-----	19	17	16	14	13	11	9	8	6	4	3	1

*Wick assumed to be ice covered.

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure = 29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0	1.1	1.2	1.3	1.4	1.5
0.....	98	96	94	93	91	89	87	85	83	81	80	78	76	74	73
1.....	98	97	95	93	92	90	88	86	85	83	81	80	78	76	75
2.....	98	97	95	93	92	90	89	87	85	84	82	81	79	78	76
3.....	98	97	95	94	92	91	89	88	86	84	83	82	80	78	77
4.....	99	97	96	94	93	91	90	88	87	85	84	82	81	79	78
5.....	99	97	96	94	93	91	90	88	87	86	84	83	82	80	79
6.....	99	97	96	94	93	92	90	89	88	86	85	84	82	81	80
7.....	99	97	96	95	93	92	91	89	88	87	86	84	83	82	80
8.....	99	97	96	95	94	92	91	90	88	87	86	85	84	82	81
9.....	99	98	96	95	94	93	91	90	89	88	87	85	84	83	82
10.....	99	98	96	95	94	93	91	90	89	88	87	86	84	83	82
11.....	99	98	97	95	94	93	92	91	90	89	87	86	85	84	83
12.....	99	98	97	96	94	93	92	91	90	89	88	87	86	85	84
13.....	99	98	97	96	95	93	92	91	90	89	88	87	86	85	84
14.....	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
15.....	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
16.....	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
17.....	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
18.....	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
19.....	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
20.....	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
21.....	99	98	97	97	96	95	94	93	92	91	90	89	88	87	86
22.....	99	98	97	97	96	95	94	93	92	91	90	89	88	87	86
23.....	99	98	97	97	96	95	94	93	92	91	90	89	88	87	86
24.....	99	98	98	97	96	95	94	94	93	92	91	90	89	88	87
25.....	99	98	98	97	96	95	94	94	93	92	91	91	90	89	88
26.....	99	98	98	97	96	95	95	94	93	92	91	91	90	89	88
27.....	99	98	98	97	96	95	95	94	93	92	91	91	90	89	88
28.....	99	99	98	97	96	95	95	94	93	92	91	91	90	89	88
29.....	99	99	98	97	96	95	95	94	93	93	92	91	90	89	88
30.....	99	99	98	97	96	95	95	94	94	93	92	91	91	90	89
31.....	99	99	98	97	96	95	95	94	94	93	92	92	91	90	89
32.....	99	99	98	97	96	95	95	94	94	93	92	92	91	90	89
33.....	99	99	98	97	97	96	95	94	94	93	92	92	91	90	89
34.....	99	99	98	97	97	96	95	95	94	93	93	92	91	91	90
35.....	99	99	98	97	97	96	95	95	94	94	93	92	91	91	90
36.....	99	99	98	97	97	96	95	95	94	94	93	92	92	91	90
37.....	99	99	98	97	97	96	95	95	94	94	93	92	92	91	91
38.....	99	99	98	97	97	96	95	95	94	94	93	92	92	91	91
39.....	99	99	98	98	97	96	95	95	94	94	93	93	92	91	91
40.....	99	99	98	98	97	96	95	95	94	94	93	93	92	91	91
41.....	99	99	98	98	97	96	95	95	94	93	93	93	92	92	91
42.....	99	99	98	98	97	96	95	95	94	93	93	93	92	92	91
43.....	99	99	98	98	97	96	95	95	94	94	93	93	92	92	91
44.....	99	99	98	98	97	97	96	95	95	94	94	93	93	92	91

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure=29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0.....	71	69	67	66	64	62	60	59	57	55	53	52	50	48	46
1.....	73	71	70	68	66	64	63	61	59	58	56	54	53	51	49
2.....	74	73	71	70	68	67	65	63	62	60	59	57	55	54	52
3.....	76	74	72	71	70	68	67	65	64	62	61	59	58	56	55
4.....	77	75	74	72	71	69	68	67	65	64	62	61	60	58	57
5.....	77	76	75	73	72	71	69	68	67	65	64	62	61	60	58
6.....	78	77	76	74	73	72	70	69	68	67	65	64	63	61	60
7.....	79	78	77	75	74	73	72	70	69	68	67	65	64	63	62
8.....	80	79	77	76	75	74	73	71	70	69	68	67	65	64	63
9.....	81	79	78	77	76	75	74	72	71	70	69	68	67	66	64
10.....	81	80	79	78	77	76	74	73	72	71	70	69	68	67	66
11.....	82	81	80	79	78	76	75	74	73	72	71	70	69	68	67
12.....	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68
13.....	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69
14.....	84	83	82	81	79	78	77	76	75	74	73	72	71	70	70
15.....	84	83	82	81	80	79	78	77	76	75	74	74	73	72	71
16.....	84	83	82	82	81	80	79	78	77	76	75	74	73	72	71
17.....	85	84	83	82	81	80	79	78	78	76	75	74	73	72	72
18.....	85	84	83	83	82	81	80	79	78	77	76	75	74	73	73
19.....	86	85	84	83	82	81	80	80	79	78	77	76	75	75	74
20.....	86	85	84	83	83	82	81	80	79	78	78	77	76	75	74
21.....	86	86	85	84	83	82	81	81	80	79	78	77	77	76	75
22.....	87	86	85	84	83	83	82	81	80	80	79	78	77	76	76
23.....	87	86	85	85	84	83	82	81	81	80	79	78	78	77	76
24.....	87	87	86	85	84	83	83	82	81	80	80	79	78	77	77
25.....	88	87	86	85	84	84	83	82	82	81	80	79	79	78	77
26.....	88	87	86	86	85	84	83	83	82	81	80	80	79	78	78
27.....	88	87	87	86	85	84	84	83	82	82	81	80	79	79	78
28.....	88	88	87	86	85	85	84	83	83	82	81	81	80	79	78
29.....	88	88	87	86	85	85	84	84	83	82	82	81	80	80	79
30.....	89	88	87	87	86	85	85	84	83	83	82	81	81	80	79
31.....	89	88	87	87	86	86	85	84	84	83	82	82	81	80	80
32.....	89	88	88	87	86	86	85	84	84	83	83	82	81	81	80
33.....	89	89	88	87	87	86	85	85	84	83	83	82	82	81	80
34.....	89	89	88	87	87	86	86	85	84	84	83	82	82	81	81
35.....	90	89	88	88	87	86	86	85	85	84	83	83	82	82	81
36.....	90	89	88	88	87	87	86	85	85	84	84	83	82	82	81
37.....	90	89	89	88	87	87	86	86	85	84	84	83	83	82	82
38.....	90	89	89	88	88	87	86	86	85	84	84	83	83	82	82
39.....	90	90	89	88	88	87	87	86	86	85	84	84	83	83	82
40.....	90	90	89	89	88	87	87	86	86	85	85	84	84	83	82
41.....	91	90	89	89	88	88	87	87	86	85	85	84	84	83	83
42.....	91	90	89	89	88	88	87	87	86	86	85	84	84	83	83
43.....	91	90	89	89	88	88	87	87	86	86	85	85	84	84	83
44.....	91	90	90	89	89	88	88	87	86	86	85	85	84	84	83

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure = 29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5
0	45	43	41	40	38	36	34	33	31	29	28	26	24	23	21
1	48	46	45	43	41	40	38	36	35	33	32	30	28	27	25
2	51	49	48	46	44	43	41	40	38	37	35	34	32	31	29
3	53	52	50	49	47	46	44	43	41	40	39	37	36	34	33
4	55	54	53	51	50	48	47	46	44	43	42	40	39	37	36
5	57	56	54	53	52	51	49	48	47	45	44	43	42	40	39
6	59	58	56	55	54	53	51	50	49	48	46	45	44	43	41
7	60	59	58	57	56	54	53	52	51	50	48	47	46	45	44
8	62	61	59	58	57	56	55	54	52	51	50	49	48	47	46
9	63	62	61	60	59	58	56	55	54	53	52	51	50	49	48
10	65	63	62	61	60	59	58	57	56	55	54	53	52	51	50
11	66	65	64	62	61	60	59	58	57	56	55	54	53	52	51
12	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53
13	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54
14	69	68	67	66	65	64	63	62	61	60	59	58	58	57	56
15	70	69	68	67	66	65	64	63	62	61	61	60	59	58	57
16	71	70	69	68	67	66	65	64	63	62	61	61	60	59	58
17	71	70	70	69	68	67	66	65	64	64	63	62	61	60	60
18	72	71	70	70	69	68	67	66	65	65	64	63	62	61	61
19	73	72	71	70	70	69	68	67	66	65	65	64	63	62	62
20	74	73	72	71	70	70	69	68	67	66	66	65	64	63	63
21	74	73	73	72	71	70	69	68	67	66	66	65	64	63	64
22	75	74	73	73	72	71	70	70	69	68	67	67	66	65	64
23	75	75	74	73	72	72	71	70	69	68	67	67	66	65	64
24	76	75	74	74	73	72	71	70	69	69	68	67	67	66	66
25	76	76	75	74	74	73	72	72	71	70	69	69	68	67	67
26	77	76	76	75	74	74	73	72	71	71	70	69	69	68	67
27	77	77	76	75	75	74	73	73	72	71	71	70	69	69	68
28	78	77	77	76	75	75	74	73	73	72	71	71	70	69	69
29	78	78	77	76	76	75	74	74	73	72	72	71	71	70	69
30	79	78	77	77	76	75	75	74	74	73	72	72	71	70	70
31	79	78	78	77	77	76	75	74	74	73	73	72	72	71	70
32	79	79	78	78	77	76	76	75	75	74	73	73	72	72	71
33	80	79	78	78	77	77	76	76	75	74	74	73	73	72	71
34	80	79	79	78	78	77	76	76	75	75	74	74	73	72	72
35	80	80	79	79	78	77	77	76	76	75	75	74	73	73	72
36	81	80	79	79	78	78	77	76	76	75	75	74	74	73	73
37	81	80	80	79	79	78	78	77	76	76	75	75	74	74	73
38	81	81	80	80	79	78	78	77	77	76	76	75	75	74	74
39	82	81	80	80	79	79	78	77	77	77	76	76	75	74	74
40	82	81	81	80	80	79	79	78	77	77	76	76	75	75	74
41	82	82	81	80	80	79	79	78	78	77	77	76	76	75	75
42	82	82	81	81	80	80	79	79	78	78	77	76	76	75	75
43	82	82	81	81	80	80	79	79	78	78	77	77	76	76	75
44	83	82	82	81	81	80	80	79	79	78	78	77	77	76	76

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure=29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')															
	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	
0.....	20	18	16	15	13	11	10	8	7	5						
1.....	24	22	21	19	17	16	14	13	11	10	8	7	6			
2.....	28	26	25	23	22	20	19	17	16	14	13	11	10	8	7	
3.....	31	30	28	27	26	24	23	21	20	19	17	16	14	13	12	
4.....	35	33	32	31	29	28	26	25	24	22	21	20	18	17	16	
5.....																
6.....	38	37	35	34	33	31	30	29	28	26	25	24	22	21	20	
7.....	40	39	38	37	35	34	33	32	31	29	28	27	26	25	24	
8.....	43	41	40	39	38	37	36	34	33	32	31	30	29	28	26	
9.....	45	44	42	41	40	39	38	37	36	35	34	32	31	30	29	
10.....	47	46	45	43	42	41	40	39	38	37	36	35	34	33	32	
11.....																
12.....	49	47	46	45	44	43	42	41	40	39	38	37	36	35	34	
13.....	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	
14.....	52	51	50	49	48	47	46	45	44	43	42	41	40	40	39	
15.....	53	52	51	51	50	49	48	47	46	45	44	43	42	42	41	
16.....	55	54	53	52	51	50	50	49	48	47	46	45	44	43	42	
17.....																
18.....	56	55	54	54	53	52	51	50	49	48	48	47	46	45	44	
19.....	58	57	56	55	54	53	52	51	50	49	48	48	47	47	46	
20.....	59	58	57	56	55	54	53	52	51	50	49	48	48	48	47	
21.....	60	59	58	57	56	55	54	53	52	51	50	49	49	49	49	
22.....	61	60	59	58	58	57	56	55	54	53	52	51	50	50	50	
23.....																
24.....	62	61	60	59	59	58	57	56	55	54	54	53	52	51	51	
25.....	63	62	61	61	60	59	58	58	57	56	55	54	53	53	53	
26.....	64	63	62	61	61	60	59	58	57	56	56	55	54	54	54	
27.....	64	64	63	62	62	61	60	60	59	58	58	57	56	55	55	
28.....	65	65	64	63	62	62	61	60	60	59	58	58	57	56	56	
29.....																
30.....	66	65	65	64	63	63	62	61	61	60	59	59	58	57	57	
31.....	67	66	65	65	64	63	63	62	62	61	60	60	59	58	58	
32.....	67	67	66	65	65	64	64	63	62	62	61	60	60	59	58	
33.....	68	67	67	66	65	65	64	64	63	62	62	61	61	60	59	
34.....	69	68	67	67	66	66	65	64	64	63	62	62	61	61	60	
35.....																
36.....	69	69	68	67	67	66	66	65	64	64	63	63	62	61	61	
37.....	70	69	69	68	67	67	66	66	65	64	64	63	63	62	61	
38.....	70	70	69	68	67	67	66	66	65	64	64	63	63	62	62	
39.....	71	70	70	69	68	68	67	67	66	66	65	65	64	63	63	
40.....	71	71	70	70	69	68	68	67	67	66	66	65	65	64	63	
41.....																
42.....	72	71	71	70	69	69	68	68	67	67	66	66	65	65	64	
43.....	72	72	71	70	70	69	69	68	68	67	66	66	65	65	64	
44.....	73	72	72	71	70	70	69	69	68	68	67	67	66	66	65	
45.....	73	73	72	72	71	71	70	70	69	69	68	68	67	67	66	
46.....																
47.....	74	73	73	72	72	71	71	70	70	69	69	68	68	67	67	
48.....	74	74	73	73	72	72	71	71	70	70	69	69	68	68	67	
49.....	74	74	73	73	72	72	71	71	70	70	69	69	68	68	67	
50.....	75	74	74	73	73	72	72	71	71	70	70	69	69	68	68	
51.....	75	75	74	74	73	73	72	72	71	71	70	70	69	69	68	

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure=29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5
2	6														
3	10	9													
4	14	13	12	11	9	8	7	5							
5	18	17	16	15	13	12	11	10	8	7	6	5			
6	22	21	20	19	17	16	15	14	13	11	10	9	8	6	5
7	25	24	23	22	21	20	19	18	17	15	14	13	12	11	10
8	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14
9	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
10	33	32	31	30	29	28	27	26	25	24	23	22	22	21	20
11	35	35	34	33	32	31	30	29	28	27	26	25	24	23	22
12	38	37	36	35	34	33	32	31	30	29	29	28	27	26	25
13	40	39	38	37	36	35	34	34	33	32	31	30	29	28	28
14	42	41	40	39	38	37	36	36	35	34	33	32	31	31	30
15	43	43	42	41	40	39	38	38	37	36	35	34	33	32	32
16	45	44	43	43	42	41	40	39	39	38	37	36	35	35	34
17	47	46	45	44	43	43	42	41	40	40	39	38	37	37	36
18	48	47	46	46	45	44	43	43	42	41	40	40	39	38	38
19	49	49	48	47	46	46	45	44	44	43	42	41	40	40	39
20	51	50	49	48	48	47	46	46	45	44	44	43	42	41	41
21	52	51	50	50	49	48	48	47	46	46	45	44	44	43	42
22	53	52	52	51	50	50	49	48	48	47	46	46	45	44	44
23	54	53	53	52	52	51	50	50	49	48	48	47	46	46	45
24	55	54	54	53	53	52	51	51	50	49	49	48	47	47	46
25	56	55	55	54	54	53	52	52	51	50	50	49	49	48	47
26	57	56	56	55	54	54	53	53	52	51	51	50	50	49	49
27	58	57	57	56	56	55	54	54	53	52	52	51	51	50	50
28	59	58	58	57	56	56	55	55	54	53	53	52	52	51	51
29	60	59	58	58	57	57	56	55	55	54	54	53	53	52	52
30	60	60	59	59	58	57	57	56	56	55	55	54	53	53	52
31	61	60	60	59	59	58	58	57	57	56	55	55	54	54	53
32	62	61	61	60	60	59	58	58	57	57	56	56	55	55	54
33	62	62	61	61	60	60	59	59	58	57	57	56	56	55	55
34	63	62	62	61	61	60	60	59	59	58	58	57	57	56	56
35	64	63	63	62	61	61	60	60	59	59	58	58	57	57	56
36	64	63	63	62	62	61	61	60	60	59	59	58	58	57	57
37	65	64	64	63	63	62	62	61	61	60	60	59	59	58	58
38	65	65	64	64	63	63	62	62	61	61	60	60	59	59	58
39	66	65	65	64	64	63	63	62	62	61	61	60	60	59	59
40	66	66	65	65	64	64	63	63	62	62	61	61	60	60	59
41	67	66	66	65	65	64	64	63	63	62	62	61	61	60	60
42	67	67	66	66	65	65	64	64	63	63	62	62	61	61	61
43	67	67	66	66	66	65	65	64	64	63	63	62	62	61	61
44	68	67	67	66	66	66	65	65	64	64	63	63	62	62	62

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure=29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0
7.....	9	8	7	5											
8.....	12	11	10	9	8	7	6	6							
9.....	16	15	14	13	12	11	10	9	8	7	6	5			
10.....	19	18	17	16	15	14	13	12	11	10	9	8	7	7	6
11.....	22	21	20	19	18	17	16	15	14	13	13	12	11	10	9
12.....	24	23	22	22	21	20	19	18	17	16	16	15	14	13	12
13.....	27	26	25	24	23	22	22	21	20	19	18	17	17	16	15
14.....	29	28	27	27	26	25	24	23	22	22	21	20	19	18	18
15.....	31	30	29	28	27	27	26	25	24	24	23	22	22	21	20
16.....	33	32	32	31	30	29	29	28	27	26	26	25	24	23	23
17.....	35	34	34	33	32	31	31	30	29	28	28	27	26	26	25
18.....	37	36	35	35	34	33	33	32	31	30	30	29	28	28	27
19.....	39	38	37	36	36	35	34	34	33	32	32	31	30	30	29
20.....	40	39	39	38	37	37	36	35	35	34	33	33	32	31	31
21.....	42	41	40	40	39	38	38	37	36	36	35	34	34	33	32
22.....	43	42	42	41	40	40	39	39	38	37	37	36	35	35	34
23.....	44	44	43	42	41	41	40	39	39	38	38	37	36	36	35
24.....	46	45	44	44	43	43	42	41	41	40	40	39	38	38	37
25.....	47	46	46	45	44	44	43	43	42	41	41	40	40	39	39
26.....	48	47	47	46	46	45	44	44	43	43	42	42	41	40	40
27.....	49	48	48	47	47	46	46	45	44	44	43	43	42	42	41
28.....	50	49	49	48	48	47	47	46	46	45	44	44	43	43	42
29.....	51	50	50	49	49	48	48	47	47	46	46	45	44	44	43
30.....	52	51	51	50	50	49	49	48	48	47	47	46	45	45	44
31.....	53	52	52	51	51	50	50	49	49	48	48	47	47	46	45
32.....	54	53	52	52	51	51	50	50	49	49	48	48	47	47	46
33.....	54	54	53	53	52	52	51	51	50	50	49	49	48	48	47
34.....	55	55	54	54	53	53	52	52	51	51	50	50	49	49	48
35.....	56	55	54	54	54	53	53	52	52	51	51	50	50	49	49
36.....	56	56	55	55	54	54	53	53	53	52	52	51	51	50	50
37.....	57	57	56	56	55	55	54	54	53	53	52	52	51	51	51
38.....	58	57	57	56	56	55	55	55	54	54	53	53	52	52	51
39.....	58	58	57	57	57	56	56	55	55	54	54	53	53	52	52
40.....	59	59	58	58	57	57	56	56	55	54	54	54	54	53	53
41.....	60	59	59	58	58	57	57	56	56	55	55	55	54	54	53
42.....	60	60	59	59	58	58	57	57	56	56	55	55	54	54	54
43.....	61	60	60	59	59	58	58	58	57	57	56	56	55	55	55
44.....	61	61	60	60	59	59	58	58	58	57	57	56	55	55	55

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure = 29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	10.0	10.1	10.2	10.3	10.4	10.5
10.....	5														
11.....	8	7	6	6	5										
12.....	11	10	10	9	8	7	6	5	5						
13.....	14	13	13	12	11	10	9	9	8	7	6	6	5		
14.....	17	16	15	15	14	13	12	11	11	10	9	8	8	7	6
15.....	20	19	18	17	16	16	15	14	13	13	12	11	11	10	9
16.....	22	21	20	20	19	18	17	17	16	15	15	14	13	13	12
17.....	24	23	23	22	21	21	20	19	18	18	17	16	16	15	14
18.....	26	26	25	24	23	23	22	21	21	20	19	19	18	17	17
19.....	28	28	27	26	26	25	24	24	23	22	22	21	20	20	19
20.....	30	29	29	28	28	27	26	26	25	24	24	23	22	22	21
21.....	32	31	31	30	29	29	28	28	27	26	26	25	24	24	23
22.....	34	33	32	32	31	30	30	29	28	28	28	27	26	26	25
23.....	35	34	34	33	33	32	32	31	30	30	29	29	28	27	27
24.....	37	36	35	35	34	34	33	33	32	31	31	30	30	29	29
25.....	38	37	37	36	36	35	35	34	33	33	32	32	31	31	30
26.....	39	39	38	38	37	37	36	35	35	34	34	33	33	32	32
27.....	41	40	39	39	38	38	37	37	36	36	35	35	34	34	33
28.....	42	41	41	40	40	39	39	38	38	37	36	36	35	35	34
29.....	43	42	42	41	41	40	40	39	39	38	38	37	37	36	36
30.....	44	43	43	42	42	41	41	40	40	39	39	38	38	37	37
31.....	45	44	44	43	43	42	42	41	41	40	40	39	39	39	38
32.....	46	45	45	44	44	43	43	42	42	41	41	40	40	40	39
33.....	47	46	46	45	45	44	44	43	43	42	42	41	41	41	40
34.....	48	47	47	46	46	45	45	44	44	43	43	42	42	42	41
35.....	49	48	48	47	47	46	46	45	45	44	44	44	43	43	42
36.....	49	49	48	48	48	47	47	46	46	45	45	44	44	44	43
37.....	50	50	49	49	48	48	47	47	47	46	46	45	45	44	44
38.....	51	50	50	50	49	49	48	48	47	47	46	46	46	45	45
39.....	52	51	51	50	50	49	49	48	48	48	47	47	46	46	46
40.....	52	52	51	51	51	50	50	49	49	48	48	48	47	47	46
41.....	53	52	52	52	51	51	50	50	50	49	49	48	48	47	47
42.....	53	53	53	52	52	51	51	51	50	50	49	49	48	48	48
43.....	54	54	53	53	52	52	52	51	51	50	50	49	49	49	48
44.....	55	54	54	53	53	53	52	52	51	51	51	50	50	49	49

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure = 29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0
14.....	6	5													
15.....	8	8	7	6	6	5									
16.....	11	10	10	9	8	8									
17.....	14	13	12	12	11	10	7								
18.....	16	15	15	14	14	13	12	12	11	10	10	7	6	5	7
19.....	18	18	17	17	16	15	15	14	13	13	12	12	11	10	10
20.....	21	20	19	19	18	18	17	16	16	15	15	14	13	13	12
21.....	23	22	22	21	20	20	19	19	18	17	17	16	16	15	14
22.....	25	24	23	23	22	22	21	20	20	19	19	18	18	17	17
23.....	26	26	25	25	24	24	23	22	22	21	21	20	20	19	19
24.....	28	27	27	26	26	25	25	24	24	23	23	22	21	21	20
25.....	30	29	29	28	28	27	26	26	25	25	24	24	23	23	22
26.....	31	31	30	30	29	28	28	27	27	26	26	25	25	24	24
27.....	33	32	32	31	31	30	30	29	29	28	28	27	27	26	26
28.....	34	33	33	32	32	31	31	30	30	29	29	28	28	27	27
29.....	35	35	34	34	33	33	32	32	31	31	30	30	29	29	28
30.....	36	36	35	35	35	34	34	33	33	32	32	31	31	30	30
31.....	38	37	37	36	36	35	35	34	34	33	33	32	32	32	31
32.....	39	38	38	37	37	36	36	36	35	35	34	34	33	33	32
33.....	40	39	39	38	38	37	37	36	36	36	35	35	34	34	33
34.....	41	40	40	39	39	39	38	38	37	37	36	36	35	35	34
35.....	42	41	41	40	40	40	39	39	38	38	37	37	37	36	36
36.....	43	42	42	41	41	40	40	40	39	39	38	38	38	37	37
37.....	44	43	43	42	42	41	41	41	40	40	39	39	38	38	38
38.....	44	44	44	43	43	42	42	41	41	41	40	40	39	39	39
39.....	45	45	44	44	43	43	43	42	42	42	41	41	40	40	39
40.....	46	46	45	45	44	44	44	43	43	42	42	42	41	40	40
41.....	47	46	46	45	45	45	44	44	43	43	43	42	42	41	41
42.....	47	47	46	46	46	45	45	45	44	44	43	43	43	42	42
43.....	48	48	47	47	46	46	46	45	45	44	44	44	43	43	43
44.....	49	48	48	47	47	47	46	46	46	45	45	44	44	44	43

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5
18.....	7	6	5	5											
19.....	9	9	8	7	7	6	6	5							
20.....	12	11	10	10	9	9	8	7	7	6	6	5	5		
21.....	14	13	13	12	12	11	10	10	9	9	8	8	7	7	6
22.....	16	15	15	14	14	13	13	12	12	11	10	10	9	9	8
23.....	18	17	17	16	16	15	15	14	14	13	13	12	12	11	11
24.....	20	19	19	18	18	17	17	16	16	15	15	14	14	13	13
25.....	22	21	21	20	20	19	19	18	18	17	17	16	16	15	15
26.....	23	23	22	22	21	21	20	20	19	19	19	18	18	17	17
27.....	25	25	24	24	23	23	22	22	21	21	20	20	19	19	18
28.....	27	26	26	25	25	24	24	23	23	22	22	21	21	20	20
29.....	28	28	27	27	26	26	25	25	24	24	23	23	22	22	22
30.....	29	29	28	28	28	27	27	26	26	25	25	24	24	24	23
31.....	31	30	30	29	29	28	28	28	27	27	26	26	25	25	25
32.....	32	31	31	31	30	30	29	29	28	28	28	27	27	26	26
33.....	33	32	32	32	31	31	30	30	30	29	29	28	28	28	27
34.....	34	34	33	33	32	32	32	31	31	30	30	30	29	29	28
35.....	35	35	34	34	34	33	33	32	32	31	31	30	30	30	30
36.....	36	36	35	35	35	34	34	33	33	32	32	31	31	31	31
37.....	37	37	36	36	36	35	35	34	34	33	33	33	33	32	32
38.....	38	38	37	37	37	36	36	35	35	34	34	34	33	33	33
39.....	39	39	38	38	38	37	37	36	36	36	35	35	34	34	34
40.....	40	40	39	39	38	38	38	37	37	36	36	36	35	35	35
41.....	41	40	40	40	39	39	39	38	38	37	37	37	36	36	36
42.....	42	41	41	40	40	40	39	39	39	38	37	37	37	37	36
43.....	42	42	42	41	41	40	40	40	39	39	39	39	38	38	37
44.....	43	43	42	42	42	41	41	40	40	40	39	39	39	38	38

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure=29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
21	5	5													
22	8	7													
23	10	10	7	6	6	5	5								
24	12	12	11	11	10	10	9	7	8	6	5	5	6	6	5
25	14	14	13	13	12	12	11	11	10	10	9	9	9	8	8
26	16	16	15	15	14	14	13	13	12	12	11	11	11	10	10
27	18	17	17	17	16	16	15	15	14	14	13	13	12	12	12
28	20	19	19	18	18	17	17	16	16	16	15	15	14	14	13
29	21	21	20	20	19	19	19	18	18	17	17	16	16	16	16
30	23	22	22	21	21	21	20	20	19	19	18	18	18	17	17
31	24	24	23	23	22	22	22	21	21	20	20	20	19	19	18
32	25	25	25	24	24	23	23	23	22	22	21	21	21	20	20
33	27	26	26	26	25	25	24	24	24	23	23	22	22	22	21
34	28	28	27	27	26	26	26	25	25	24	24	24	23	23	23
35	29	29	28	28	28	27	27	26	26	26	25	25	25	24	24
36	30	30	29	29	29	28	28	28	27	27	26	26	26	25	25
37	31	31	31	30	30	30	29	29	28	28	28	27	27	27	26
38	32	32	32	31	31	31	30	30	29	29	29	28	28	28	27
39	33	33	33	32	32	32	31	31	30	30	30	29	29	29	28
40	34	34	34	33	33	32	32	32	31	31	31	30	30	30	29
41	35	35	35	34	34	33	33	33	32	32	32	31	31	31	30
42	36	36	35	35	35	34	34	34	33	33	33	32	32	32	31
43	37	37	36	36	35	35	34	34	34	33	33	33	33	33	32
44	38	37	37	37	36	36	36	35	35	35	34	34	34	33	33

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5
24	5														
25	7	7	6	6	5	5									
26	9	9	8	8	7	7	7	6	6	5	5				
27	11	11	10	10	9	9	9	8	8	7	7	6	6	6	5
28	13	13	12	12	11	11	10	10	10	9	9	8	8	8	7
29	15	14	14	13	13	13	12	12	11	11	11	10	10	9	9
30	16	16	16	15	15	14	14	14	13	13	12	12	12	11	11
31	18	18	17	17	16	16	16	15	15	14	14	14	13	13	12
32	19	19	19	18	18	17	17	17	16	16	15	15	15	14	14
33	21	20	20	20	19	19	19	18	18	17	17	17	16	16	16
34	22	22	21	21	21	20	20	20	19	19	18	18	18	17	17
35	23	23	23	22	22	22	21	21	21	20	20	19	19	19	18
36	25	24	24	23	23	23	22	22	22	21	21	21	20	20	20
37	26	25	25	25	24	24	24	23	23	23	22	22	22	21	21
38	27	27	26	26	26	25	25	24	24	24	23	23	23	22	22
39	28	28	27	27	27	26	26	25	25	25	24	24	24	23	23
40	29	29	28	28	28	27	27	27	26	26	25	25	25	25	24
41	30	30	29	29	29	28	28	28	27	27	27	26	26	26	25
42	31	31	30	30	30	29	29	29	28	28	28	27	27	27	26
43	32	31	31	31	30	30	30	29	29	29	28	28	28	28	27
44	33	32	32	32	31	31	31	30	30	30	29	29	29	28	28

TABLE 5-3

Relative humidity, percent—centigrade temperatures—Continued

[Pressure=29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	18.0
27	5														
28	7	6	6	6	5	5									
29	9	8	8	7	7	7	6	6	5	5	5				
30	10	10	10	9	9	9	8	8	7	7	7	6	6	5	5
31	12	12	11	11	11	10	10	9	9	9	8	8	8	7	7
32	14	13	13	13	12	12	11	11	11	10	10	10	9	9	9
33	15	15	15	14	14	13	13	13	13	12	12	12	11	11	10
34	17	16	16	16	15	15	14	14	14	13	13	13	12	12	12
35	18	18	17	17	17	16	16	16	15	15	15	14	14	14	13
36	19	19	19	18	18	18	17	17	17	16	16	16	15	15	15
37	21	20	20	20	19	19	19	18	18	18	17	17	17	16	16
38	22	21	21	21	20	20	20	19	19	19	18	18	18	18	17
39	23	23	22	22	22	21	21	21	20	20	20	19	19	19	18
40	24	24	23	23	23	22	22	22	21	21	21	20	20	20	20
41	25	25	24	24	24	23	23	23	23	22	22	22	21	21	21
41	26	26	25	25	25	24	24	24	24	23	23	23	22	22	22
43	27	27	26	26	26	25	25	25	24	24	24	24	23	23	23
44	28	28	27	27	27	26	26	26	25	25	25	24	24	24	24

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.3	19.4	19.5
30	5														
31	7	6	6	5	5	5									
32	8	8	8	7	7	7	6	6	6	5	5	5			
33	10	10	9	9	9	8	8	7	7	7	6	6	6	5	5
34	11	11	11	10	10	10	9	9	9	8	8	8	7	7	7
35	13	13	12	12	12	11	11	11	10	10	10	9	9	9	8
36	14	14	14	13	13	13	12	12	12	11	11	11	10	10	10
37	16	15	15	15	14	14	14	13	13	13	12	12	12	12	11
38	17	17	16	16	16	15	15	15	14	14	14	14	13	13	13
39	18	18	17	17	17	17	16	16	16	15	15	15	14	14	14
40	19	19	19	18	18	18	17	17	17	16	16	16	16	15	15
41	20	20	20	19	19	19	18	18	18	17	17	17	17	16	16
42	21	21	21	21	20	20	20	19	19	19	19	18	18	18	17
43	22	22	22	22	21	21	21	20	20	20	20	19	19	19	18
44	23	23	23	22	22	22	22	21	21	21	21	20	20	20	19

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	19.6	19.7	19.8	19.9	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	21.0
33	5														
34	6	6	6	6	5	5	5								
35	8	8	7	7	7	6	6	6	6	5	5	5			
36	10	9	9	9	8	8	8	7	7	7	6	6	6	6	5
37	11	11	10	10	10	9	9	9	9	8	8	8	7	7	7
38	12	12	12	11	11	11	11	10	10	10	9	9	9	9	8
39	14	13	13	13	12	12	12	12	11	11	11	10	10	10	10
40	15	14	14	14	14	13	13	13	12	12	12	12	11	11	11
41	16	16	15	15	15	15	14	14	14	13	13	13	13	12	12
42	17	17	17	16	16	16	15	15	15	15	14	14	14	14	13
43	18	18	18	17	17	17	16	16	16	16	15	15	15	15	14
44	19	19	19	18	18	18	18	17	17	17	17	16	16	16	16

TABLE 5-3

Relative humidity, percent—Centigrade temperatures—Continued

[Pressure=29.24 in.]

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4	22.5
36.....	5	5													
37.....	7	6	6	6	5	5	5	5							
38.....	8	8	8	7	7	7	6	6	6	5	5	5	5		
39.....	9	9	9	8	8	8	8	7	7	7	6	6	6	6	6
40.....	11	10	10	10	10	9	9	9	8	8	8	8	7	7	7
41.....	12	12	11	11	11	10	10	10	10	9	9	9	9	8	8
42.....	13	13	13	12	12	12	11	11	11	11	10	10	10	10	9
43.....	14	14	14	13	13	13	13	13	12	12	12	11	11	11	11
44.....	15	15	15	15	14	14	14	14	13	13	13	13	12	12	12

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0
39.....	5	5	5												
40.....	7	6	6	6	6	5	5	5	5						
41.....	8	8	7	7	7	7	6	6	6	6	5	5	5	5	
42.....	9	9	9	8	8	8	8	7	7	7	7	6	6	6	6
43.....	10	10	10	10	9	9	9	9	8	8	8	8	7	7	7
44.....	11	11	11	11	10	10	10	10	10	9	9	9	9	8	8

Air temperature (t)	Depression of wet-bulb thermometer (t-t')														
	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3	25.4	25.5
42.....	5	5	5	5	5										
43.....	7	7	6	6	6	6	5	5	5	5					
44.....	8	8	7	7	7	7	7	6	6	6	6	6	5	5	5

RECOMMENDED HUMIDITIES AND TEMPERATURES FOR VARIOUS INDUSTRIES

Industry	Degrees Fahrenheit	Relative Humidity	Hospitals:	As required	50-65% 55% 40-50%
Baking:			Nurses:	75	50-65%
Cake mixing	70-75	65%	Operating room	75	55%
Crackers & biscuits	60-65	50%	Patient's rooms	75	40-50%
Fermenting	75-80	70-75%	Leather:		
Flour storage	65-80	50-65%	Chromic tanned	120	45%
Loaf cooling	70	60-70%	Vegetable tanned	70	75%
Make-up room	75-80	65-70%	Storage	50-60	40-60%
Mixer-bread dough	75-80	40-50%	Libraries & Museums	70-80	40-50%
Proof box	90-95	80-90%	Paint Application:		
Yeast storage	32-45	60-75%	Air drying lacquers	70-90	60%
Bowling alleys	70	35-45%	Air drying oil paint	60-90	60%
Cereal: packaging	75-80	45-50%	Paper Products:		
Confectionary:			Binding	70	50-65%
Chocolate covering	62-65	50-65%	Folding	75	50-65%
Centers for coating	80-85	40-50%	Printing	75-80	45-55%
Hard candy	70-80	30-50%	Storage	75-80	40-60%
Storage	60-68	50-65%	Schools	72	35-50%
Data Processing	75	45-55%	Textiles:		
Electrical:			Cotton-carding	75-80	50-55%
Mfg. cotton covered wire	60-80	60-70%	Cotton-spinning	60-80	50-70%
Storage-general	60-80	35-50%	Cotton-weaving	68-75	85%
Food:			Rayon-spinning	80	50-60%
Apple storage	30-32	75-85%	Rayon-throwing	70	85%
Banana-ripening	68	90-95%	Rayon	70	60%
Banana-storage	60	85-90%	Silk Processing	75-80	65-70%
Citrus fruit-storage	60	85%	Woolens-carding	80-85	65-70%
Egg storage	35-55	75-80%	Woolens-spinning	80-85	50-60%
Grain storage	60	30-45%	Woolens-weaving	80-85	60%
Meat-beef aging	40	80%	Tobacco		
Mushroom storage	32-35	80-85%	Cigar & cigarette	70-75	55-65%
Mushroom-growing stages	Various	60-85%	Other processing & storage	70-75%	70-75%
Produce	Various	70-95%	Casing room	90	88-95%
Sugar	80	30%	Woodworking:		
Tomato-storage	34	85%	Finished products	65-70	35-40%
Tomato-ripening	70	85%	Gluing	70-75	40-50%
			Manufacture	65-75	35-40%
			Painting-lacquers (static control)	70-90	60% min.