DEWGEN

DEW POINT GENERATOR
OPERATORS MANUAL

Rev. A April 2012

Edgetech Instruments DewGen

QUICK STARTUP GUIDE

STARTUP

1. Remove plug from the top elbow fitting on the rear panel.

2. Carefully fill DewGen with distilled water until the water level is half way up the site window on the front panel. Do not over fill.

3. Replace plug snugly.

4. Connect a dry air line to the fitting on the rear panel.

5. Use tables in Section 7 of the manual, set the flow meters for the desired dew point.

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DEW POINT SELECTION TABLES (°C) Page

Note 1: Output Dew/Frost Point Temperature, Saturator Water Temperature

2.0 EDGETECH INSTRUMENTS'S COMMITMENT TO QUALITY

Thank you for purchasing one of our products. At Edgetech Instruments Inc. it is our policy to provide cost-effective products and support services that meet or exceed you requirements, to deliver them on time, and to continuously look for ways to improve both. We all take great pride in the products we manufacture.

We want you to be entirely satisfied with your instrument. The information contained in this manual will get you started. It tells you what you need to get your equipment up and running, and introduces its many features.

We always enjoy hearing from the people who use our products. Your experience with our products is an invaluable source of information that we can use to continuously improve what we manufacture. We encourage you to contact or visit us to discuss any issues whatsoever that relate to our products or your application.

The Employees of Edgetech Instruments Inc.

3.0 INTRODUCTION

3.1 GENERAL DESCRIPTION

The Edgetech Instruments DewGen Dew/Frost Point Generator is a versatile, simple, and portable device that allows the user to generate a wide range of known points with high accuracy. No AC power is needed, so the instrument can be used in the field as a portable calibration device. Only a source of dry gas, such as a tank of nitrogen or a dry air line, is required. With its high accuracy, it can also be used as a stand-alone precision dew point generator in a calibration laboratory setting. If a chilled mirror sensor (such as the Edgetech Instruments S3 with DewMaster Dew Point Hygrometer) is connected in series with the dew point output, a NIST-Traceable calibration system results. See Figure 3-1 below.

In addition to its use as a calibration standard, the DewGen is suited for use in an R&D laboratory in many scientific applications.

Figure 3-1 DewGen with Edgetech Instruments DewMaster/S3 NIST-traceable Dew Point Hygrometer

4.0 THEORY OF OPERATION

4.1 BASIC THEORY

A source of very dry gas is supplied to the input of the DewGen. This gas is regulated and divided into two streams. One will be the “dry” stream. The other is routed through a plane surface saturator that has been filled with distilled water, and, once saturated, becomes the “wet” stream. Adjusting the three precision flow meters on the front panel controls the mixing ratio between the wet gas stream and the dry gas stream, which results in the desired dew or frost point at the front panel output. See Figure 4-1 below.

The flow meters are designed for extremely high resolution and smooth control of the sample gas, by using multi-turn control valves and coarse and fine floats. A panel-mounted range selector switch further enhances the setability.

A separate front panel flow meter allows the user to adjust the output flow rate to be compatible with the sensor being tested or calibrated.

The entire system runs above ambient pressure. This, plus the use of check valves and flow vents, prevents water backup into the flow meters. The design provides a constant output gas flow regardless of the variation of the three dew point selector flow meters. Conversely, the setting of the output flow meter does not affect the dew point being programmed.

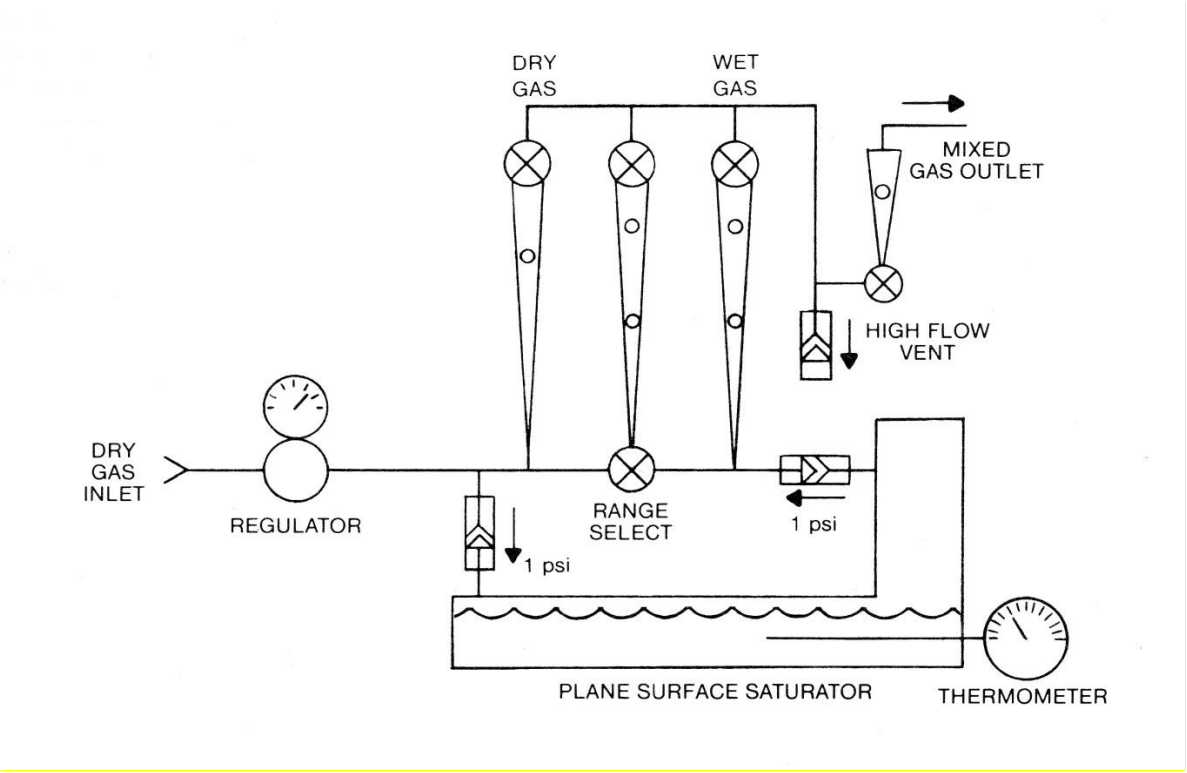

Figure 4-1 DewGen Block Diagram

5.0 INSTALLATION

5.1 FILLING THE SATURATOR

Note: Only distilled water should be used to fill the saturator in the DewGen. The use of tap water will result in eventual mineral buildup which will contaminate the system. Filling should only be done on a level surface.

1. Shut off the dry gas supply.
2. Remove the top plug on the rear panel elbow fitting.
3. Inject water into the top fill opening. Fill until water can be seen half way up the site window on the front panel. Do not over fill.
4. Replace the top fill plug.
5. Turn on the dry gas supply.

5.2 THE DRY GAS SOURCE

To increase the DewGen dew/frost point range at the low end, a source of gas as dry as possible should always be used. The dryness of the gas source determines how low a point you can generate; you cannot generate a point dryer than the incoming gas. It should be less than 115 ppm, a dew point of -40°. The source pressure should be between 30 and 100 psig, with a flow capability of at least 13 scfh (6 liters per minute). It is good practice to use a filter between the gas source and the DewGen.

5.3 PLUMBING CONSIDERATIONS

When generating low dew/frost points, gas connections to both the input connector on the rear panel and the output connector on the front panel should use only tubing that is made for dry gas. Clean stainless steel is best, and some plastics such as Impolene™ may be used at mid range and higher dew points. Never use porous tubing such as Tygon™ for these applications. When generating lower frost points, be sure to wait long enough so that the entire system is dried out completely. Make sure there are no leaks in the plumbing. Also, it may be necessary to connect a few feet of tubing to the downstream side of the sensor you are testing or calibrating, so that moister room air, with its higher vapor pressure, does not work its way upstream into the system.

6.0 OPERATION

6.1 THE FLOW METERS

In the center of the front panel are three large precision flow meters, which are used to set the desired dew point. We will refer to them as Flow Meters No. 1, 2, and 3, from left to right. See Figure 6-1 below.

Flow meter No. 1: This is the “WET” flow meter. It is a dual-ball flow meter, and is used to precisely control the wet gas from the saturator. It contains a black ball and a silver colored ball.

Flow meter No. 2: This is the “MIXING” flow meter. It is a dual-ball flow meter, and is used to precisely control the mixing ratio between the wet and dry gas. It contains a black ball and a silver colored ball. This flow meter is switched between “WET” and “DRY” gas using the WET/DRY switch on the front panel.

Flow Meter No. 3: This is the “DRY” flow meter, which precisely controls the flow from the incoming dry gas source. It has only one floating ball, which is red.

The shorter Output Flow Meter on the right side of the front panel is used for adjusting the desired flow rate for the sensor being tested or calibrated. For use with chilled mirror sensors, 1 SCFH (0.5 liter per minute) is a good rate. Setting this flow meter will not affect the settings of the main three flow meters.

Figure 6-1 DewGen Dew Point Generator

6.2 OPERATING THE FLOW METERS

For best accuracy and repeatability, all meters should be read from the center of the ball. On the dual-ball meters (1 and 2), the black ball will rise first, and it should be used for setting the flow rate until it rises to 140mm on the calibrated flow meter. Above that point, use the silver ball for best resolution.

6.3 GENERATING A KNOWN DEW POINT

To use the dew point setting tables on the following pages, several pieces of information will be needed.

1. Note the saturator water temperature as measured by the front panel thermometer (lower left). Normally it will be at room (ambient) temperature, but the temperature may drop initially because of evaporative cooling of the saturator.
2. If possible, measure the dew/frost point of the incoming dry gas. If you do not have the equipment to do this, then estimate it.
3. Determine the dew point you wish to generate. These are provided in the tables with 1°C resolution.

Note: If the desired dew point is not shown, (for increments of less than 1°C, or when converting to °F), you can linearly interpolate between listed settings. This also applies to saturator temperatures not listed in the tables.

When highest accuracy or NIST traceability are required, a high quality chilled mirror dew point hygrometer should be used in series with the Dew Gen output.

6.4 USING THE DEW POINT TABLES

1. Locate the tables that are closest to your saturator temperate, as measured at the front panel.
2. Select the table from this group that best represents your incoming dry gas dew/frost point.
3. Using the table, set the flow meters for your desired dew point.

FM No. 1 is the left hand flow meter
FM No. 2 in the middle flow meter
FM No. 3 is the right hand flow meter
(R) is the Red colored ball
(S) is the Silver colored ball
(B) is the Black colored ball
RANGE is the setting of the Range selector, WET or DRY

7.0 DEW/FROST POINT SELECTION TABLES

DRY GAS DEW POINT SATURATOR TEMPERATURE

-40°C 25°C

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
14.0	140.0 (S)	140.0 (S)	8.2 (R)	WET
13.0	140.0 (S)	140.0 (S)	16.0 R	WET
12.0	140.0 (S)	140.0 (S)	24.4 (R)	WET
11.0	140.0 (S)	140.0 (S)	33.5 (R)	WET
10.0	140.0 (S)	140.0 (S)	43.2 (R)	WET
9.0	140.0 (S)	140.0 (S)	53.8 (R)	WET
8.0	140.0 (S)	140.0 (S)	65.1 (R)	WET
7.0	140.0 (S)	140.0 (S)	80.8 (R)	WET
6.0	140.0 (S)	140.0 (S)	97.6 (R)	WET
5.0	140.0 (S)	140.0 (S)	115.8 (R)	WET
4.0	140.0 (S)	140.0 (S)	135.6 (R)	WET
3.0	0.0 (B)	133.8 (S)	140.0 (R)	WET
2.0	0.0 (B)	117.7 (S)	140.0 (R)	WET
1.0	0.0 (B)	104.1 (S)	140.0 (R)	WET
0.0	0.0 (B)	92.4 (S)	140.0 (R)	WET
-1.0	0.0 (B)	81.1 (S)	140.0 (R)	WET
-2.0	0.0 (B)	71.4 (S)	140.0 (R)	WET
-3.0	0.0 (B)	63.1 (S)	140.0 (R)	WET
-4.0	0.0 (B)	55.8 (S)	140.0 (R)	WET
-5.0	0.0 (B)	50.9 (S)	140.0 (R)	WET
-6.0	0.0 (B)	138.1 (B)	140.0 (R)	WET
-7.0	0.0 (B)	124.8 (B)	140.0 (R)	WET
-8.0	0.0 (B)	113.1 (B)	140.0 (R)	WET
-9.0	0.0 (B)	102.6 (B)	140.0 (R)	WET
-10.0	0.0 (B)	93.3 (B)	140.0 (R)	WET
-11.0	0.0 (B)	85.0 (B)	140.0 (R)	WET
-12.0	0.0 (B)	77.6 (B)	140.0 (R)	WET
-13.0	0.0 (B)	70.9 (B)	140.0 (R)	WET
-14.0	0.0 (B)	64.9 (B)	140.0 (R)	WET
-15.0	0.0 (B)	59.5 (B)	140.0 (R)	WET
-16.0	0.0 (B)	55.0 (B)	140.0 (R)	WET
-17.0	0.0 (B)	50.3 (B)	140.0 (R)	WET
-18.0	0.0 (B)	46.2 (B)	140.0 (R)	WET
-19.0	0.0 (B)	42.4 (B)	140.0 (R)	WET
-20.0	0.0 (B)	39.0 (B)	140.0 (R)	WET
-21.0	0.0 (B)	35.9 (B)	140.0 (R)	WET
-22.0	140.0 (S)	65.2 (B)	140.0 (R)	DRY
-23.0	140.0 (S)	132.4 (B)	140.0 (R)	DRY

Table 7-1 (continued)

DRY GAS DEW POINT	SATURATOR TEMPERATURE
-40°C	**25°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-24.0	140.0 (S)	70.5 (S)	140.0 (R)	DRY
-25.0	140.0 (S)	103.8 (S)	140.0 (R)	DRY
-26.0	138.8 (S)	140.0 (S)	140.0 (R)	DRY
-27.0	121.2 (S)	140.0 (S)	140.0 (R)	DRY
-28.0	105.2 (S)	140.0 (S)	140.0 (R)	DRY
-29.0	90.8 (S)	140.0 (S)	140.0 (R)	DRY
-30.0	77.8 (S)	140.0 (S)	140.0 (R)	DRY
-31.0	66.0 (S)	140.0 (S)	140.0 (R)	DRY
-32.0	55.3 (S)	140.0 (S)	140.0 (R)	DRY
-33.0	45.7 (S)	140.0 (S)	140.0 (R)	DRY
-34.0	37.0 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	29.1 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	123.4 (B)	140.0 (S)	140.0 (R)	DRY
-37.0	87.6 (B)	140.0 (S)	140.0 (R)	DRY
-38.0	55.3 (B)	140.0 (S)	140.0 (R)	DRY
-39.0	26.2 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-2

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **25°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
14.0	140.0 (S)	140.0 (S)	8.2 (R)	WET
13.0	140.0 (S)	140.0 (S)	15.9 (R)	WET
12.0	140.0 (S)	140.0 (S)	24.2 (R)	WET
11.0	140.0 (S)	140.0 (S)	33.2 (R)	WET
10.0	140.0 (S)	140.0 (S)	42.8 (R)	WET
9.0	140.0 (S)	140.0 (S)	53.2 (R)	WET
8.0	140.0 (S)	140.0 (S)	64.4 (R)	WET
7.0	140.0 (S)	140.0 (S)	79.6 (R)	WET
6.0	140.0 (S)	140.0 (S)	96.2 (R)	WET
5.0	140.0 (S)	140.0 (S)	114.0 (R)	WET
4.0	140.0 (S)	140.0 (S)	133.4 (R)	WET
3.0	0.0 (B)	135.9 (S)	140.0 (R)	WET
2.0	0.0 (B)	119.8 (S)	140.0 (R)	WET
1.0	0.0 (B)	106.0 (S)	140.0 (R)	WET
0.0	0.0 (B)	94.3 (S)	140.0 (R)	WET
-1.0	0.0 (B)	82.9 (S)	140.0 (R)	WET
-2.0	0.0 (B)	73.1 (S)	140.0 (R)	WET
-3.0	0.0 (B)	64.7 (S)	140.0 (R)	WET
-4.0	0.0 (B)	57.4 (S)	140.0 (R)	WET
-5.0	0.0 (B)	52.3 (S)	140.0 (R)	WET
-6.0	0.0 (B)	47.3 (S)	140.0 (R)	WET
-7.0	0.0 (B)	128.9 (B)	140.0 (R)	WET
-8.0	0.0 (B)	117.0 (B)	140.0 (R)	WET
-9.0	0.0 (B)	106.5 (B)	140.0 (R)	WET
-10.0	0.0 (B)	97.1 (B)	140.0 (R)	WET
-11.0	0.0 (B)	88.8 (B)	140.0 (R)	WET
-12.0	0.0 (B)	81.3 (B)	140.0 (R)	WET
-13.0	0.0 (B)	74.6 (B)	140.0 (R)	WET
-14.0	0.0 (B)	68.5 (B)	140.0 (R)	WET
-15.0	0.0 (B)	63.1 (B)	140.0 (R)	WET
-16.0	0.0 (B)	58.2 (B)	140.0 (R)	WET
-17.0	0.0 (B)	54.1 (B)	140.0 (R)	WET
-18.0	0.0 (B)	49.9 (B)	140.0 (R)	WET
-19.0	0.0 (B)	46.1 (B)	140.0 (R)	WET
-20.0	0.0 (B)	42.6 (B)	140.0 (R)	WET
-21.0	0.0 (B)	39.5 (B)	140.0 (R)	WET
-22.0	0.0 (B)	36.7 (B)	140.0 (R)	WET
-23.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY

Table 7-2 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **25°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-24.0	140.0 (S)	96.1 (B)	140.0 (R)	DRY
-25.0	140.0 (S)	52.3 (S)	140.0 (R)	DRY
-26.0	140.0 (S)	76.2 (S)	140.0 (R)	DRY
-27.0	140.0 (S)	104.4 (S)	140.0 (R)	DRY
-28.0	140.0 (S)	136.0 (S)	140.0 (R)	DRY
-29.0	127.3 (S)	140.0 (S)	140.0 (R)	DRY
-30.0	114.2 (S)	140.0 (S)	140.0 (R)	DRY
-31.0	102.3 (S)	140.0 (S)	140.0 (R)	DRY
-32.0	91.5 (S)	140.0 (S)	140.0 (R)	DRY
-33.0	81.8 (S)	140.0 (S)	140.0 (R)	DRY
-34.0	73.1 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	65.1 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	58.0 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	51.6 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	45.8 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	40.5 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	35.8 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	31.6 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	27.8 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	136.8 (B)	140.0 (S)	140.0 (R)	DRY
-44.0	119.6 (B)	140.0 (S)	140.0 (R)	DRY
-45.0	104.3 (B)	140.0 (S)	140.0 (R)	DRY
-46.0	90.5 (B)	140.0 (S)	140.0 (R)	DRY
-47.0	78.2 (B)	140.0 (S)	140.0 (R)	DRY
-48.0	67.2 (B)	140.0 (S)	140.0 (R)	DRY
-49.0	57.3 (B)	140.0 (S)	140.0 (R)	DRY
-50.0	48.6 (B)	140.0 (S)	140.0 (R)	DRY
-51.0	40.7 (B)	140.0 (S)	140.0 (R)	DRY
-52.0	33.8 (B)	140.0 (S)	140.0 (R)	DRY
-53.0	27.6 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	22.1 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	17.2 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	12.9 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	9.0 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	5.6 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	2.6 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-3

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **25°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
14.0	140.0 (S)	140.0 (S)	8.2 (R)	WET
13.0	140.0 (S)	140.0 (S)	15.9 (R)	WET
12.0	140.0 (S)	140.0 (S)	24.2 (R)	WET
11.0	140.0 (S)	140.0 (S)	33.1 (R)	WET
10.0	140.0 (S)	140.0 (S)	42.8 (R)	WET
9.0	140.0 (S)	140.0 (S)	53.2 (R)	WET
8.0	140.0 (S)	140.0 (S)	64.4 (R)	WET
7.0	140.0 (S)	140.0 (S)	79.5 (R)	WET
6.0	140.0 (S)	140.0 (S)	96.0(R)	WET
5.0	140.0 (S)	140.0 (S)	113.9 (R)	WET
4.0	140.0 (S)	140.0 (S)	133.2 (R)	WET
3.0	0.0 (B)	136.1 (S)	140.0 (R)	WET
2.0	0.0 (B)	119.9 (S)	140.0 (R)	WET
1.0	0.0 (B)	106.2 (S)	140.0 (R)	WET
0.0	0.0 (B)	94.4 (S)	140.0 (R)	WET
-1.0	0.0 (B)	83.0 (S)	140.0 (R)	WET
-2.0	0.0 (B)	73.3 (S)	140.0 (R)	WET
-3.0	0.0 (B)	64.9 (S)	140.0 (R)	WET
-4.0	0.0 (B)	57.6 (S)	140.0 (R)	WET
-5.0	0.0 (B)	52.4 (S)	140.0 (R)	WET
-6.0	0.0 (B)	47.5 (S)	140.0 (R)	WET
-7.0	0.0 (B)	129.2 (B)	140.0 (R)	WET
-8.0	0.0 (B)	117.4 (B)	140.0 (R)	WET
-9.0	0.0 (B)	106.8 (B)	140.0 (R)	WET
-10.0	0.0 (B)	97.5 (B)	140.0 (R)	WET
-11.0	0.0 (B)	89.1 (B)	140.0 (R)	WET
-12.0	0.0 (B)	81.6 (B)	140.0 (R)	WET
-13.0	0.0 (B)	74.9 (B)	140.0 (R)	WET
-14.0	0.0 (B)	68.9 (B)	140.0 (R)	WET
-15.0	0.0 (B)	63.4 (B)	140.0 (R)	WET
-16.0	0.0 (B)	58.5 (B)	140.0 (R)	WET
-17.0	0.0 (B)	54.4 (B)	140.0 (R)	WET
-18.0	0.0 (B)	50.2 (B)	140.0 (R)	WET
-19.0	0.0 (B)	46.4 (B)	140.0 (R)	WET
-20.0	0.0 (B)	43.0 (B)	140.0 (R)	WET
-21.0	0.0 (B)	39.8 (B)	140.0 (R)	WET
-22.0	0.0 (B)	37.0 (B)	140.0 (R)	WET
-23.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY

Table 7-3 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **25°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-24.0	140.0 (S)	88.0 (B)	140.0 (R)	DRY
-25.0	140.0 (S)	49.0 (S)	140.0 (R)	DRY
-26.0	140.0 (S)	71.7 (S)	140.0 (R)	DRY
-27.0	140.0 (S)	98.9 (S)	140.0 (R)	DRY
-28.0	140.0 (S)	129.1 (S)	140.0 (R)	DRY
-29.0	130.5 (S)	140.0 (S)	140.0 (R)	DRY
-30.0	117.3 (S)	140.0 (S)	140.0 (R)	DRY
-31.0	105.4 (S)	140.0 (S)	140.0 (R)	DRY
-32.0	94.7 (S)	140.0 (S)	140.0 (R)	DRY
-33.0	85.0 (S)	140.0 (S)	140.0 (R)	DRY
-34.0	76.2 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	68.3 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	61.1 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	54.7 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	48.9 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	43.7 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	39.0 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	34.7 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	30.9 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	27.5 (S)	140.0 (S)	140.0 (R)	DRY
-44.0	137.1 (B)	140.0 (S)	140.0 (R)	DRY
-45.0	121.8 (B)	140.0 (S)	140.0 (R)	DRY
-46.0	108.0 (B)	140.0 (S)	140.0 (R)	DRY
-47.0	95.7 (B)	140.0 (S)	140.0 (R)	DRY
-48.0	84.6 (B)	140.0 (S)	140.0 (R)	DRY
-49.0	74.8 (B)	140.0 (S)	140.0 (R)	DRY
-50.0	66.0 (B)	140.0 (S)	140.0 (R)	DRY
-51.0	58.2 (B)	140.0 (S)	140.0 (R)	DRY
-52.0	51.2 (B)	140.0 (S)	140.0 (R)	DRY
-53.0	45.0 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	39.5 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	34.6 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	30.3 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	26.5(B)	140.0 (S)	140.0 (R)	DRY
-58.0	23.1(B)	140.0 (S)	140.0 (R)	DRY
-59.0	20.1(B)	140.0 (S)	140.0 (R)	DRY

Table 7-3 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **25°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-60.0	17.4 (B)	140.0 (S)	140.0 (R)	DRY
-61.0	15.1 (B)	140.0 (S)	140.0 (R)	DRY
-62.0	13.0 (B)	140.0 (S)	140.0 (R)	DRY
-63.0	11.2 (B)	140.0 (S)	140.0 (R)	DRY
-64.0	9.6 (B)	140.0 (S)	140.0 (R)	DRY
-65.0	8.2 (B)	140.0 (S)	140.0 (R)	DRY
-66.0	7.0 (B)	140.0 (S)	140.0 (R)	DRY
-67.0	6.0 (B)	140.0 (S)	140.0 (R)	DRY
-68.0	5.0 (B)	140.0 (S)	140.0 (R)	DRY
-69.0	4.2 (B)	140.0 (S	140.0 (R)	DRY
-70.0	3.5 (B)	140.0 (S)	140.0 (R)	DRY
-71.0	2.9 (B)	140.0 (S)	140.0 (R)	DRY
-72.0	2.4 (B)	140.0 (S)	140.0 (R)	DRY
-73.0	1.9 (B)	140.0 (S)	140.0 (R)	DRY
-74.0	1.5 (B)	140.0 (S)	140.0 (R)	DRY
-75.0	1.1 (B)	140.0 (S)	140.0 (R)	DRY
-76.0	0.8 (B)	140.0 (S)	140.0 (R)	DRY
-77.0	0.6 (B)	140.0 (S)	140.0 (R)	DRY
-78.0	0.4 (B)	140.0 (S)	140.0 (R)	DRY
-79.0	0.2 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-4

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-40°C **20°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
9.0	140.0 (S)	140.0 (S)	8.6 (R)	WET
8.0	140.0 (S)	140.0 (S)	16.7 (R)	WET
7.0	140.0 (S)	140.0 (S)	25.6 (R)	WET
6.0	140.0 (S)	140.0 (S)	35.1 (R)	WET
5.0	140.0 (S)	140.0 (S)	45.4 (R)	WET
4.0	140.0 (S)	140.0 (S)	56.6 (R)	WET
3.0	140.0 (S)	140.0 (S)	68.8 (R)	WET
2.0	140.0 (S)	140.0 (S)	86.5 (R)	WET
1.0	140.0 (S)	140.0 (S)	104.6 (R)	WET
0.0	140.0 (S)	140.0 (S)	124.2 (R)	WET
-1.0	65.4 (B)	140.0 (S)	140.0 (R)	WET
-2.0	0.0 (B)	120.7 (S)	140.0 (R)	WET
-3.0	0.0 (B)	104.4 (S)	140.0 (R)	WET
-4.0	0.0 (B)	90.8 (S)	140.0 (R)	WET
-5.0	0.0 (B)	79.3 (S)	140.0 (R)	WET
-6.0	0.0 (B)	69.5 (S)	140.0 (R)	WET
-7.0	0.0 (B)	61.1 (S)	140.0 (R)	WET
-8.0	0.0 (B)	54.8 (S)	140.0 (R)	WET
-9.0	0.0 (B)	49.2 (S)	140.0 (R)	WET
-10.0	0.0 (B)	132.9 (B)	140.0 (R)	WET
-11.0	0.0 (B)	119.7 (B)	140.0 (R)	WET
-12.0	0.0 (B)	108.1 (B)	140.0 (R)	WET
-13.0	0.0 (B)	97.8 (B)	140.0 (R)	WET
-14.0	0.0 (B)	88.6 (B)	140.0 (R)	WET
-15.0	0.0 (B)	80.4 (B)	140.0 (R)	WET
-16.0	0.0 (B)	73.1 (B)	140.0 (R)	WET
-17.0	0.0 (B)	66.6 (B)	140.0 (R)	WET
-18.0	0.0 (B)	60.8 (B)	140.0 (R)	WET
-19.0	0.0 (B)	55.5 (B)	140.0 (R)	WET
-20.0	0.0 (B)	50.9 (B)	140.0 (R)	WET
-21.0	0.0 (B)	46.4 (B)	140.0 (R)	WET
-22.0	0.0 (B)	42.4 (B)	140.0 (R)	WET
-23.0	0.0 (B)	38.7 (B)	140.0 (R)	WET
-24.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-25.0	140.0 (S)	80.5 (B)	140.0 (R)	DRY
-26.0	140.0 (S)	52.1 (S)	140.0 (R)	DRY
-27.0	140.0 (S)	83.9 (S)	140.0 (R)	DRY
-28.0	140.0 (S)	123.4 (S)	140.0 (R)	DRY

Table 7-4 (continued)

DRY GAS DEW POINT	SATURATOR TEMPERATURE
-40°C	**20°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-29.0	127.4 (S)	140.0 (S)	140.0 (R)	DRY
-30.0	109.0 (S)	140.0 (S)	140.0 (R)	DRY
-31.0	92.4 (S)	140.0 (S)	140.0 (R)	DRY
-32.0	77.4 (S)	140.0 (S)	140.0 (R)	DRY
-33.0	63.8 (S)	140.0 (S)	140.0 (R)	DRY
-34.0	51.6 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	40.6 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	30.7 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	122.1 (B)	140.0 (S)	140.0 (R)	DRY
-38.0	77.0 (B)	140.0 (S)	140.0 (R)	DRY
-39.0	36.5 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-5

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **20°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
9.0	140.0 (S)	140.0 (S)	8.5 (R)	WET
8.0	140.0 (S)	140.0 (S)	16.6 (R)	WET
7.0	140.0 (S)	140.0 (S)	25.3 (R)	WET
6.0	140.0 (S)	140.0 (S)	34.7 (R)	WET
5.0	140.0 (S)	140.0 (S)	44.8 (R)	WET
4.0	140.0 (S)	140.0 (S)	55.8 (R)	WET
3.0	140.0 (S)	140.0 (S)	67.7 (R)	WET
2.0	140.0 (S)	140.0 (S)	84.7 (R)	WET
1.0	140.0 (S)	140.0 (S)	102.4 (R)	WET
0.0	140.0 (S)	140.0 (S)	121.5 (R)	WET
-1.0	61.7 (S)	140.0 (S)	140.0 (R)	WET
-2.0	0.0 (B)	123.6 (S)	140.0 (R)	WET
-3.0	0.0 (B)	107.1 (S)	140.0 (R)	WET
-4.0	0.0 (B)	93.3 (S)	140.0 (R)	WET
-5.0	0.0 (B)	81.7 (S)	140.0 (R)	WET
-6.0	0.0 (B)	71.9 (S)	140.0 (R)	WET
-7.0	0.0 (B)	63.4 (S)	140.0 (R)	WET
-8.0	0.0 (B)	56.1 (S)	140.0 (R)	WET
-9.0	0.0 (B)	51.1 (S)	140.0 (R)	WET
-10.0	0.0 (B)	138.6 (B)	140.0 (R)	WET
-11.0	0.0 (B)	125.3 (B)	140.0 (R)	WET
-12.0	0.0 (B)	113.6 (B)	140.0 (R)	WET
-13.0	0.0 (B)	103.1 (B)	140.0 (R)	WET
-14.0	0.0 (B)	93.9 (B)	140.0 (R)	WET
-15.0	0.0 (B)	85.6 (B)	140.0 (R)	WET
-16.0	0.0 (B)	78.3 (B)	140.0 (R)	WET
-17.0	0.0 (B)	71.7 (B)	140.0 (R)	WET
-18.0	0.0 (B)	65.8 (B)	140.0 (R)	WET
-19.0	0.0 (B)	60.5 (B)	140.0 (R)	WET
-20.0	0.0 (B)	55.7 (B)	140.0 (R)	WET
-21.0	0.0 (B)	51.5 (B)	140.0 (R)	WET
-22.0	0.0 (B)	47.5 (B)	140.0 (R)	WET
-23.0	0.0 (B)	43.8 (B)	140.0 (R)	WET
-24.0	0.0 (B)	40.5 (B)	140.0 (R)	WET
-25.0	0.0 (B)	37.5 (B)	140.0 (R)	WET
-26.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-27.0	140.0 (S)	83.3 (B)	140.0 (R)	DRY

Table 7-5 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **20°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-28.0	140.0 (S)	48.3 (S)	140.0 (R)	DRY
-29.0	140.0 (S)	72.1 (S)	140.0 (R)	DRY
-30.0	140.0 (S)	100.7 (S)	140.0 (R)	DRY
-31.0	140.0 (S)	133.0 (S)	140.0 (R)	DRY
-32.0	128.0 (S)	140.0 (S)	140.0 (R)	DRY
-33.0	114.4 (S)	140.0 (S)	140.0 (R)	DRY
-34.0	102.1 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	90.9 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	80.9 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	71.9 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	63.8 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	56.5 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	49.9 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	44.0 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	38.7 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	34.0 (S)	140.0 (S)	140.0 (R)	DRY
-44.0	29.7 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	25.9 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	125.9 (B)	140.0 (S)	140.0 (R)	DRY
-47.0	108.7 (B)	140.0 (S)	140.0 (R)	DRY
-48.0	93.4 (B)	140.0 (S)	140.0 (R)	DRY
-49.0	79.7 (B)	140.0 (S)	140.0 (R)	DRY
-50.0	67.5 (B)	140.0 (S)	140.0 (R)	DRY
-51.0	56.6 (B)	140.0 (S)	140.0 (R)	DRY
-52.0	47.0 (B)	140.0 (S)	140.0 (R)	DRY
-53.0	38.3 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	30.7 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	23.9 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	17.9 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	12.6 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	7.8 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	3.7 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-6

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **20°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
9.0	140.0 (S)	140.0 (S)	8.5 (R)	WET
8.0	140.0 (S)	140.0 (S)	16.5 (R)	WET
7.0	140.0 (S)	140.0 (S)	25.2 (R)	WET
6.0	140.0 (S)	140.0 (S)	34.6 (R)	WET
5.0	140.0 (S)	140.0 (S)	44.8 (R)	WET
4.0	140.0 (S)	140.0 (S)	55.8 (R)	WET
3.0	140.0 (S)	140.0 (S)	67.6 (R)	WET
2.0	140.0 (S)	140.0 (S)	84.6 (R)	WET
1.0	140.0 (S)	140.0 (S)	102.2 (R)	WET
0.0	140.0 (S)	140.0 (S)	121.3 (R)	WET
-1.0	66.1 (S)	140.0 (S)	140.0 (R)	WET
-2.0	0.0 (B)	123.9 (S)	140.0 (R)	WET
-3.0	0.0 (B)	107.3 (S)	140.0 (R)	WET
-4.0	0.0 (B)	93.6 (S)	140.0 (R)	WET
-5.0	0.0 (B)	82.0 (S)	140.0 (R)	WET
-6.0	0.0 (B)	72.1 (S)	140.0 (R)	WET
-7.0	0.0 (B)	63.6 (S)	140.0 (R)	WET
-8.0	0.0 (B)	56.3 (S)	140.0 (R)	WET
-9.0	0.0 (B)	51.3 (S)	140.0 (R)	WET
-10.0	0.0 (B)	139.1 (B)	140.0 (R)	WET
-11.0	0.0 (B)	125.8 (B)	140.0 (R)	WET
-12.0	0.0 (B)	114.0 (B)	140.0 (R)	WET
-13.0	0.0 (B)	103.6 (B)	140.0 (R)	WET
-14.0	0.0 (B)	94.3 (B)	140.0 (R)	WET
-15.0	0.0 (B)	86.1 (B)	140.0 (R)	WET
-16.0	0.0 (B)	78.7 (B)	140.0 (R)	WET
-17.0	0.0 (B)	72.1 (B)	140.0 (R)	WET
-18.0	0.0 (B)	66.2 (B)	140.0 (R)	WET
-19.0	0.0 (B)	60.9 (B)	140.0 (R)	WET
-20.0	0.0 (B)	56.1 (B)	140.0 (R)	WET
-21.0	0.0 (B)	52.0 (B)	140.0 (R)	WET
-22.0	0.0 (B)	47.9 (B)	140.0 (R)	WET
-23.0	0.0 (B)	44.2 (B)	140.0 (R)	WET
-24.0	0.0 (B)	40.9 (B)	140.0 (R)	WET
-25.0	0.0 (B)	37.9 (B)	140.0 (R)	WET
-26.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-27.0	140.0 (S)	72.6 (B)	140.0 (R)	DRY
-28.0	140.0 (S)	131.9 (B)	140.0 (R)	DRY

Table 7-6 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **20°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-29.0	140.0 (S)	66.1 (S)	140.0 (R)	DRY
-30.0	140.0 (S)	93.3 (S)	140.0 (R)	DRY
-31.0	140.0 (S)	123.8 (S)	140.0 (R)	DRY
-32.0	132.5 (S)	140.0 (S)	140.0 (R)	DRY
-33.0	118.8 (S)	140.0 (S)	140.0 (R)	DRY
-34.0	106.5 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	95.3 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	85.3 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	76.3 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	68.2 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	60.9 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	54.3 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	48.4 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	43.1 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	38.3 (S)	140.0 (S)	140.0 (R)	DRY
-44.0	34.0 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	30.2 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	26.8 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	133.0 (B)	140.0 (S)	140.0 (R)	DRY
-48.0	117.7 (B)	140.0 (S)	140.0 (R)	DRY
-49.0	104.0 (B)	140.0 (S)	140.0 (R)	DRY
-50.0	98.1 (B)	140.0 (S)	140.0 (R)	DRY
-51.0	80.9 (B)	140.0 (S)	140.0 (R)	DRY
-52.0	71.2 (B)	140.0 (S)	140.0 (R)	DRY
-53.0	62.6 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	54.9 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	48.1 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	42.1 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	36.8 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	32.0 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	27.9 (B)	140.0 (S)	140.0 (R)	DRY
-60.0	24.2 (B)	140.0 (S)	140.0 (R)	DRY
-61.0	21.0 (B)	140.0 (S)	140.0 (R)	DRY
-62.0	18.1 (B)	140.0 (S)	140.0 (R)	DRY
-63.0	15.6 (B)	140.0 (S)	140.0 (R)	DRY
-64.0	13.4 (B)	140.0 (S)	140.0 (R)	DRY
-65.0	11.5 (B)	140.0 (S)	140.0 (R)	DRY
-66.0	9.8 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-6 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **20°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-67.0	8.3 (B)	140.0 (S)	140.0 (R)	DRY
-68.0	7.0 (B)	140.0 (S)	140.0 (R)	DRY
-69.0	5.9 (B)	140.0 (S	140.0 (R)	DRY
-70.0	4.9 (B)	140.0 (S)	140.0 (R)	DRY
-71.0	4.0 (B)	140.0 (S)	140.0 (R)	DRY
-72.0	3.3 (B)	140.0 (S)	140.0 (R)	DRY
-73.0	2.6 (B)	140.0 (S)	140.0 (R)	DRY
-74.0	2.1 (B)	140.0 (S)	140.0 (R)	DRY
-75.0	1.6 (B)	140.0 (S)	140.0 (R)	DRY
-76.0	1.2 (B)	140.0 (S)	140.0 (R)	DRY
-77.0	0.8 (B)	140.0 (S)	140.0 (R)	DRY
-78.0	0.5 (B)	140.0 (S)	140.0 (R)	DRY
-79.0	0.2 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-7

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-40°C **15°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
4.0	140.0 (S)	140.0 (S)	8.9 (R)	WET
3.0	140.0 (S)	140.0 (S)	17.5 (R)	WET
2.0	140.0 (S)	140.0 (S)	26.8 (R)	WET
1.0	140.0 (S)	140.0 (S)	36.9 (R)	WET
0.0	140.0 (S)	140.0 (S)	47.9 (R)	WET
-1.0	140.0 (S)	140.0 (S)	61.5 (R)	WET
-2.0	140.0 (S)	140.0 (S)	79.6 (R)	WET
-3.0	140.0 (S)	140.0 (S)	100.4 (R)	WET
-4.0	140.0 (S)	140.0 (S)	123.3 (R)	WET
-5.0	60.5 (B)	140.0 (S)	140.0 (R)	WET
-6.0	0.0 (B)	120.0 (S)	140.0 (R)	WET
-7.0	0.0 (B)	103.1 (S)	140.0 (R)	WET
-8.0	0.0 (B)	89.2 (S)	140.0 (R)	WET
-9.0	0.0 (B)	77.5 (S)	140.0 (R)	WET
-10.0	0.0 (B)	67.6 (S)	140.0 (R)	WET
-11.0	0.0 (B)	59.2 (S)	140.0 (R)	WET
-12.0	0.0 (B)	53.0 (S)	140.0 (R)	WET
-13.0	0.0 (B)	47.4 (S)	140.0 (R)	WET
-14.0	0.0 (B)	127.5 (B)	140.0 (R)	WET
-15.0	0.0 (B)	114.3 (B)	140.0 (R)	WET
-16.0	0.0 (B)	102.7 (B)	140.0 (R)	WET
-17.0	0.0 (B)	92.5 (B)	140.0 (R)	WET
-18.0	0.0 (B)	83.5 (B)	140.0 (R)	WET
-19.0	0.0 (B)	75.4 (B)	140.0 (R)	WET
-20.0	0.0 (B)	68.2 (B)	140.0 (R)	WET
-21.0	0.0 (B)	61.9 (B)	140.0 (R)	WET
-22.0	0.0 (B)	56.1 (B)	140.0 (R)	WET
-23.0	0.0 (B)	51.1 (B)	140.0 (R)	WET
-24.0	0.0 (B)	46.3 (B)	140.0 (R)	WET
-25.0	0.0 (B)	41.9 (B)	140.0 (R)	WET
-26.0	0.0 (B)	38.0 (B)	140.0 (R)	WET
-27.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-28.0	140.0 (S)	110.2 (B)	140.0 (R)	DRY
-29.0	140.0 (S)	67.5 (S)	140.0 (R)	DRY
-30.0	140.0 (S)	108.8 (S)	140.0 (R)	DRY
-31.0	131.5 (S)	140.0 (S)	140.0 (R)	DRY
-32.0	110.0 (S)	140.0 (S)	140.0 (R)	DRY
-33.0	90.7 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-7 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-40°C **15°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-34.0	73.3 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	57.6 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	43.5 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	30.8 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	109.0 (B)	140.0 (S)	140.0 (R)	DRY
-39.0	51.6 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-8

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **15°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
4.0	140.0 (S)	140.0 (S)	8.8 (R)	WET
3.0	140.0 (S)	140.0 (S)	17.2 (R)	WET
2.0	140.0 (S)	140.0 (S)	26.4 (R)	WET
1.0	140.0 (S)	140.0 (S)	36.3 (R)	WET
0.0	140.0 (S)	140.0 (S)	47.0 (R)	WET
-1.0	140.0 (S)	140.0 (S)	60.2 (R)	WET
-2.0	140.0 (S)	140.0 (S)	77.7 (R)	WET
-3.0	140.0 (S)	140.0 (S)	97.5 (R)	WET
-4.0	140.0 (S)	140.0 (S)	119.6 (R)	WET
-5.0	81.5 (S)	140.0 (S)	140.0 (R)	WET
-6.0	0.0 (B)	124.0 (S)	140.0 (R)	WET
-7.0	0.0 (B)	107.0 (S)	140.0 (R)	WET
-8.0	0.0 (B)	92.8 (S)	140.0 (R)	WET
-9.0	0.0 (B)	81.0 (S)	140.0 (R)	WET
-10.0	0.0 (B)	71.0 (S)	140.0 (R)	WET
-11.0	0.0 (B)	62.4 (S)	140.0 (R)	WET
-12.0	0.0 (B)	55.0 (S)	140.0 (R)	WET
-13.0	0.0 (B)	50.1 (S)	140.0 (R)	WET
-14.0	0.0 (B)	135.5 (B)	140.0 (R)	WET
-15.0	0.0 (B)	122.1 (B)	140.0 (R)	WET
-16.0	0.0 (B)	110.4 (B)	140.0 (R)	WET
-17.0	0.0 (B)	100.1 (B)	140.0 (R)	WET
-18.0	0.0 (B)	90.9 (B)	140.0 (R)	WET
-19.0	0.0 (B)	82.7 (B)	140.0 (R)	WET
-20.0	0.0 (B)	75.4 (B)	140.0 (R)	WET
-21.0	0.0 (B)	69.0 (B)	140.0 (R)	WET
-22.0	0.0 (B)	63.2 (B)	140.0 (R)	WET
-23.0	0.0 (B)	58.0 (B)	140.0 (R)	WET
-24.0	0.0 (B)	53.6 (B)	140.0 (R)	WET
-25.0	0.0 (B)	49.1 (B)	140.0 (R)	WET
-26.0	0.0 (B)	45.2 (B)	140.0 (R)	WET
-27.0	0.0 (B)	41.6 (B)	140.0 (R)	WET
-28.0	0.0 (B)	38.4 (B)	140.0 (R)	WET
-29.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-30.0	140.0 (S)	68.7 (B)	140.0 (R)	DRY
-31.0	140.0 (S)	131.1 (B)	140.0 (R)	DRY
-32.0	140.0 (S)	67.2 (S)	140.0 (R)	DRY
-33.0	140.0 (S)	96.4 (S)	140.0 (R)	DRY

Table 7-8 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **15°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-34.0	140.0 (S)	129.4 (S)	140.0 (R)	DRY
-35.0	129.0 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	114.7 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	101.8 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	90.3 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	79.9 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	70.6 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	62.2 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	54.7 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	47.9 (S)	140.0 (S)	140.0 (R)	DRY
-44.0	41.9 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	36.5 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	31.7 (B)	140.0 (S)	140.0 (R)	DRY
-47.0	27.3 (B)	140.0 (S)	140.0 (R)	DRY
-48.0	131.7 (B)	140.0 (S)	140.0 (R)	DRY
-49.0	112.4 (B)	140.0 (S)	140.0 (R)	DRY
-50.0	95.1 (B)	140.0 (S)	140.0 (R)	DRY
-51.0	79.8 (B)	140.0 (S)	140.0 (R)	DRY
-52.0	66.2 (B)	140.0 (S)	140.0 (R)	DRY
-53.0	54.0 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	43.2 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	33.7 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	25.2 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	17.7 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	11.0 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	5.2 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-9

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **15°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
4.0	140.0 (S)	140.0 (S)	8.8 (R)	WET
3.0	140.0 (S)	140.0 (S)	17.2 (R)	WET
2.0	140.0 (S)	140.0 (S)	26.3 (R)	WET
1.0	140.0 (S)	140.0 (S)	36.2 (R)	WET
0.0	140.0 (S)	140.0 (S)	46.9 (R)	WET
-1.0	140.0 (S)	140.0 (S)	60.1 (R)	WET
-2.0	140.0 (S)	140.0 (S)	77.2 (R)	WET
-3.0	140.0 (S)	140.0 (S)	97.3 (R)	WET
-4.0	140.0 (S)	140.0 (S)	119.3 (R)	WET
-5.0	87.7 (S)	140.0 (S)	140.0 (R)	WET
-6.0	0.0 (B)	124.4 (S)	140.0 (R)	WET
-7.0	0.0 (B)	107.3 (S)	140.0 (R)	WET
-8.0	0.0 (B)	93.1 (S)	140.0 (R)	WET
-9.0	0.0 (B)	81.3 (S)	140.0 (R)	WET
-10.0	0.0 (B)	71.3 (S)	140.0 (R)	WET
-11.0	0.0 (B)	62.7 (S)	140.0 (R)	WET
-12.0	0.0 (B)	55.3 (S)	140.0 (R)	WET
-13.0	0.0 (B)	50.3 (S)	140.0 (R)	WET
-14.0	0.0 (B)	136.2 (B)	140.0 (R)	WET
-15.0	0.0 (B)	122.8 (B)	140.0 (R)	WET
-16.0	0.0 (B)	111.1 (B)	140.0 (R)	WET
-17.0	0.0 (B)	100.7 (B)	140.0 (R)	WET
-18.0	0.0 (B)	91.5 (B)	140.0 (R)	WET
-19.0	0.0 (B)	83.4 (B)	140.0 (R)	WET
-20.0	0.0 (B)	76.1 (B)	140.0 (R)	WET
-21.0	0.0 (B)	69.6 (B)	140.0 (R)	WET
-22.0	0.0 (B)	63.8 (B)	140.0 (R)	WET
-23.0	0.0 (B)	58.6 (B)	140.0 (R)	WET
-24.0	0.0 (B)	54.2 (B)	140.0 (R)	WET
-25.0	0.0 (B)	49.8 (B)	140.0 (R)	WET
-26.0	0.0 (B)	45.8 (B)	140.0 (R)	WET
-27.0	0.0 (B)	42.3 (B)	140.0 (R)	WET
-28.0	0.0 (B)	39.1 (B)	140.0 (R)	WET
-29.0	0.0 (B)	36.2 (B)	140.0 (R)	WET
-30.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-31.0	140.0 (S)	113.4 (B)	140.0 (R)	DRY
-32.0	140.0 (S)	59.1 (S)	140.0 (R)	DRY
-33.0	140.0 (S)	86.3 (S)	140.0 (R)	DRY

Table 7-9 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **15°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-34.0	140.0 (S)	116.9 (S)	140.0 (R)	DRY
-35.0	135.2 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	120.9 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	108.0 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	96.5 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	86.1 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	76.7 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	68.3 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	60.8 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	54.1 (S)	140.0 (S)	140.0 (R)	DRY
-44.0	48.0 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	42.6 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	37.8 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	33.5 (S)	140.0 (S)	140.0 (R)	DRY
-48.0	29.6 (S)	140.0 (S)	140.0 (R)	DRY
-49.0	26.1 (S)	140.0 (S)	140.0 (R)	DRY
-50.0	129.3 (B)	140.0 (S)	140.0 (R)	DRY
-51.0	114.0 (B)	140.0 (S)	140.0 (R)	DRY
-52.0	100.3 (B)	140.0 (S)	140.0 (R)	DRY
-53.0	88.1 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	77.4 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	67.8 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	59.3 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	51.8 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	45.1 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	39.2 (B)	140.0 (S)	140.0 (R)	DRY
-60.0	34.1 (B)	140.0 (S)	140.0 (R)	DRY
-61.0	29.5 (B)	140.0 (S)	140.0 (R)	DRY
-62.0	25.5 (B)	140.0 (S)	140.0 (R)	DRY
-63.0	21.9 (B)	140.0 (S)	140.0 (R)	DRY
-64.0	18.8 (B)	140.0 (S)	140.0 (R)	DRY
-65.0	16.1 (B)	140.0 (S)	140.0 (R)	DRY
-66.0	13.7 (B)	140.0 (S)	140.0 (R)	DRY
-67.0	11.7 (B)	140.0 (S)	140.0 (R)	DRY
-68.0	9.8 (B)	140.0 (S)	140.0 (R)	DRY
-69.0	8.2 (B)	140.0 (S	140.0 (R)	DRY
-70.0	6.9 (B)	140.0 (S)	140.0 (R)	DRY
-71.0	5.6 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-9 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **15°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-72.0	4.6 (B)	140.0 (S)	140.0 (R)	DRY
-73.0	3.7 (B)	140.0 (S)	140.0 (R)	DRY
-74.0	2.9 (B)	140.0 (S)	140.0 (R)	DRY
-75.0	2.2 (B)	140.0 (S)	140.0 (R)	DRY
-76.0	1.6 (B)	140.0 (S)	140.0 (R)	DRY
-77.0	1.1 (B)	140.0 (S)	140.0 (R)	DRY
-78.0	0.7 (B)	140.0 (S)	140.0 (R)	DRY
-79.0	0.3 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-10

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-40°C **10°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-1.0	140.0 (S)	140.0 (S)	10.5 (R)	WET
-2.0	140.0 (S)	140.0 (S)	20.9 (R)	WET
-3.0	140.0 (S)	140.0 (S)	32.3 (R)	WET
-4.0	140.0 (S)	140.0 (S)	45.0 (R)	WET
-5.0	140.0 (S)	140.0 (S)	58.9 (R)	WET
-6.0	140.0 (S)	140.0 (S)	76.7 (R)	WET
-7.0	140.0 (S)	140.0 (S)	98.2 (R)	WET
-8.0	140.0 (S)	140.0 (S)	121.9 (R)	WET
-9.0	93.3 (B)	140.0 (S)	140.0 (R)	WET
-10.0	0.0 (B)	119.4 (S)	140.0 (R)	WET
-11.0	0.0 (B)	102.0 (S)	140.0 (R)	WET
-12.0	0.0 (B)	87.6 (S)	140.0 (R)	WET
-13.0	0.0 (B)	75.7 (S)	140.0 (R)	WET
-14.0	0.0 (B)	65.6 (S)	140.0 (R)	WET
-15.0	0.0 (B)	57.0 (S)	140.0 (R)	WET
-16.0	0.0 (B)	51.1 (S)	140.0 (R)	WET
-17.0	0.0 (B)	136.4 (B)	140.0 (R)	WET
-18.0	0.0 (B)	121.3 (B)	140.0 (R)	WET
-19.0	0.0 (B)	108.2 (B)	140.0 (R)	WET
-20.0	0.0 (B)	96.7 (B)	140.0 (R)	WET
-21.0	0.0 (B)	86.5 (B)	140.0 (R)	WET
-22.0	0.0 (B)	77.6 (B)	140.0 (R)	WET
-23.0	0.0 (B)	69.6 (B)	140.0 (R)	WET
-24.0	0.0 (B)	62.6 (B)	140.0 (R)	WET
-25.0	0.0 (B)	56.3 (B)	140.0 (R)	WET
-26.0	0.0 (B)	50.8 (B)	140.0 (R)	WET
-27.0	0.0 (B)	45.5 (B)	140.0 (R)	WET
-28.0	0.0 (B)	40.8 (B)	140.0 (R)	WET
-29.0	0.0 (B)	36.6 (B)	140.0 (R)	WET
-30.0	140.0 (S)	73.0 (B)	140.0 (R)	DRY
-31.0	140.0 (S)	55.9 (S)	140.0 (R)	DRY
-32.0	140.0 (S)	101.4 (S)	140.0 (R)	DRY
-33.0	131.3 (S)	140.0 (S)	140.0 (R)	DRY
-34.0	106.0 (S)	140.0 (S)	140.0 (R)	DRY
-35.0	83.2 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	62.8 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	44.4 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-10 (continued)

DRY GAS DEW POINT		SATURATOR TEMPERATURE		
-40°C		**10°C**		
-38.0	28.0 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	74.2 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-11

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **10°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-1.0	140.0 (S)	140.0 (S)	10.3 (R)	WET
-2.0	140.0 (S)	140.0 (S)	20.4 (R)	WET
-3.0	140.0 (S)	140.0 (S)	31.6 (R)	WET
-4.0	140.0 (S)	140.0 (S)	43.8 (R)	WET
-5.0	140.0 (S)	140.0 (S)	57.2 (R)	WET
-6.0	140.0 (S)	140.0 (S)	73.7 (R)	WET
-7.0	140.0 (S)	140.0 (S)	94.2 (R)	WET
-8.0	140.0 (S)	140.0 (S)	116.6 (R)	WET
-9.0	118.4 (S)	140.0 (S)	140.0 (R)	WET
-10.0	0.0 (B)	125.2 (S)	140.0 (R)	WET
-11.0	0.0 (B)	107.4 (S)	140.0 (R)	WET
-12.0	0.0 (B)	92.8 (S)	140.0 (R)	WET
-13.0	0.0 (B)	80.6 (S)	140.0 (R)	WET
-14.0	0.0 (B)	70.3 (S)	140.0 (R)	WET
-15.0	0.0 (B)	61.6 (S)	140.0 (R)	WET
-16.0	0.0 (B)	54.1 (S)	140.0 (R)	WET
-17.0	0.0 (B)	49.2 (S)	140.0 (R)	WET
-18.0	0.0 (B)	132.7 (B)	140.0 (R)	WET
-19.0	0.0 (B)	119.3 (B)	140.0 (R)	WET
-20.0	0.0 (B)	107.6 (B)	140.0 (R)	WET
-21.0	0.0 (B)	97.2 (B)	140.0 (R)	WET
-22.0	0.0 (B)	88.1 (B)	140.0 (R)	WET
-23.0	0.0 (B)	80.1 (B)	140.0 (R)	WET
-24.0	0.0 (B)	72.8 (B)	140.0 (R)	WET
-25.0	0.0 (B)	66.4 (B)	140.0 (R)	WET
-26.0	0.0 (B)	60.7 (B)	140.0 (R)	WET
-27.0	0.0 (B)	55.6 (B)	140.0 (R)	WET
-28.0	0.0 (B)	51.1 (B)	140.0 (R)	WET
-29.0	0.0 (B)	46.8 (B)	140.0 (R)	WET
-30.0	0.0 (B)	43.0 (B)	140.0 (R)	WET
-31.0	0.0 (B)	39.5 (B)	140.0 (R)	WET
-32.0	0.0 (B)	36.4 (B)	140.0 (R)	WET
-33.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-34.0	140.0 (S)	115.6 (B)	140.0 (R)	DRY
-35.0	140.0 (S)	61.9 (S)	140.0 (R)	DRY
-36.0	140.0 (S)	91.7 (S)	140.0 (R)	DRY
-37.0	140.0 (S)	125.7 (S)	140.0 (R)	DRY
-38.0	129.9 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-11 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **10°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-39.0	114.9 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	101.4 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	89.3 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	78.5 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	68.7 (S)	140.0 (S)	140.0 (R)	DRY
-44.0	60.1 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	52.3 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	45.4 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	39.1 (S)	140.0 (S)	140.0 (R)	DRY
-48.0	33.6 (S)	140.0 (S)	140.0 (R)	DRY
-49.0	28.7 (S)	140.0 (S)	140.0 (R)	DRY
-50.0	136.1 (B)	140.0 (S)	140.0 (R)	DRY
-51.0	114.1 (B)	140.0 (S)	140.0 (R)	DRY
-52.0	94.6 (B)	140.0 (S)	140.0 (R)	DRY
-53.0	77.2 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	61.8 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	48.1 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	36.0 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	25.3 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	15.8 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	7.4 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-12

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **10°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-1.0	140.0 (S)	140.0 (S)	10.3 (R)	WET
-2.0	140.0 (S)	140.0 (S)	20.4 (R)	WET
-3.0	140.0 (S)	140.0 (S)	31.5 (R)	WET
-4.0	140.0 (S)	140.0 (S)	43.7 (R)	WET
-5.0	140.0 (S)	140.0 (S)	57.0 (R)	WET
-6.0	140.0 (S)	140.0 (S)	73.5 (R)	WET
-7.0	140.0 (S)	140.0 (S)	93.8 (R)	WET
-8.0	140.0 (S)	140.0 (S)	116.2 (R)	WET
-9.0	127.2 (S)	140.0 (S)	140.0 (R)	WET
-10.0	0.0 (B)	125.7 (S)	140.0 (R)	WET
-11.0	0.0 (B)	107.9 (S)	140.0 (R)	WET
-12.0	0.0 (B)	93.3 (S)	140.0 (R)	WET
-13.0	0.0 (B)	81.0 (S)	140.0 (R)	WET
-14.0	0.0 (B)	70.8 (S)	140.0 (R)	WET
-15.0	0.0 (B)	62.0 (S)	140.0 (R)	WET
-16.0	0.0 (B)	54.5 (S)	140.0 (R)	WET
-17.0	0.0 (B)	49.6 (S)	140.0 (R)	WET
-18.0	0.0 (B)	133.7 (B)	140.0 (R)	WET
-19.0	0.0 (B)	120.3 (B)	140.0 (R)	WET
-20.0	0.0 (B)	108.5 (B)	140.0 (R)	WET
-21.0	0.0 (B)	98.2 (B)	140.0 (R)	WET
-22.0	0.0 (B)	89.0 (B)	140.0 (R)	WET
-23.0	0.0 (B)	80.9 (B)	140.0 (R)	WET
-24.0	0.0 (B)	73.7 (B)	140.0 (R)	WET
-25.0	0.0 (B)	67.3 (B)	140.0 (R)	WET
-26.0	0.0 (B)	61.6 (B)	140.0 (R)	WET
-27.0	0.0 (B)	56.5 (B)	140.0 (R)	WET
-28.0	0.0 (B)	52.0 (B)	140.0 (R)	WET
-29.0	0.0 (B)	47.7 (B)	140.0 (R)	WET
-30.0	0.0 (B)	43.9 (B)	140.0 (R)	WET
-31.0	0.0 (B)	40.4 (B)	140.0 (R)	WET
-32.0	0.0 (B)	37.3 (B)	140.0 (R)	WET
-33.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-34.0	140.0 (S)	91.9 (B)	140.0 (R)	DRY
-35.0	140.0 (S)	52.3 (S)	140.0 (R)	DRY
-36.0	140.0 (S)	78.0 (S)	140.0 (R)	DRY
-37.0	140.0 (S)	108.4 (S)	140.0 (R)	DRY
-38.0	138.8 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-12 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **10°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-39.0	123.7 (S)	140.0 (S)	140.0 (R)	DRY
-40.0	110.2 (S)	140.0 (S)	140.0 (R)	DRY
-41.0	98.1 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	87.3 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	77.5 (S)	140.0 (S)	140.0 (R)	DRY
-44.0	68.8 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	61.1 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	54.1 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	47.9 (S)	140.0 (S)	140.0 (R)	DRY
-48.0	42.3 (S)	140.0 (S)	140.0 (R)	DRY
-49.0	37.4 (S)	140.0 (S)	140.0 (R)	DRY
-50.0	33.0 (S)	140.0 (S)	140.0 (R)	DRY
-51.0	29.1 (S)	140.0 (S)	140.0 (R)	DRY
-52.0	25.6 (S)	140.0 (S)	140.0 (R)	DRY
-53.0	126.0 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	110.5 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	96.8 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	84.7 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	74.0 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	64.5 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	56.1 (B)	140.0 (S)	140.0 (R)	DRY
-60.0	48.7 (B)	140.0 (S)	140.0 (R)	DRY
-61.0	42.1 (B)	140.0 (S)	140.0 (R)	DRY
-62.0	36.4 (B)	140.0 (S)	140.0 (R)	DRY
-63.0	31.3 (B)	140.0 (S)	140.0 (R)	DRY
-64.0	26.9 (B)	140.0 (S)	140.0 (R)	DRY
-65.0	23.0 (B)	140.0 (S)	140.0 (R)	DRY
-66.0	19.6 (B)	140.0 (S)	140.0 (R)	DRY
-67.0	16.6 (B)	140.0 (S)	140.0 (R)	DRY
-68.0	14.0 (B)	140.0 (S)	140.0 (R)	DRY
-69.0	11.8 (B)	140.0 (S	140.0 (R)	DRY
-70.0	9.8 (B)	140.0 (S)	140.0 (R)	DRY
-71.0	8.1 (B)	140.0 (S)	140.0 (R)	DRY
-72.0	6.6 (B)	140.0 (S)	140.0 (R)	DRY
-73.0	5.3 (B)	140.0 (S)	140.0 (R)	DRY
-74.0	5.2 (B)	140.0 (S)	140.0 (R)	DRY
-75.0	3.2 (B)	140.0 (S)	140.0 (R)	DRY
-76.0	2.3 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-12 (continued)

DRY GAS DEW POINT	SATURATOR TEMPERATURE
-80°C	**10°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-77.0	1.6 (B)	140.0 (S)	140.0 (R)	DRY
-78.0	1.0 (B)	140.0 (S)	140.0 (R)	DRY
-79.0	0.5 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-13

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-40°C **5°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-6.0	140.0 (S)	140.0 (S)	11.0 (R)	WET
-7.0	140.0 (S)	140.0 (S)	22.0 (R)	WET
-8.0	140.0 (S)	140.0 (S)	34.2 (R)	WET
-9.0	140.0 (S)	140.0 (S)	47.7 (R)	WET
-10.0	140.0 (S)	140.0 (S)	62.7 (R)	WET
-11.0	140.0 (S)	140.0 (S)	83.2 (R)	WET
-12.0	140.0 (S)	140.0 (S)	106.7 (R)	WET
-13.0	140.0 (S)	140.0 (S)	132.9 (R)	WET
-14.0	0.0 (B)	129.8 (S)	140.0 (R)	WET
-15.0	0.0 (B)	109.3 (S)	140.0 (R)	WET
-16.0	0.0 (B)	92.8 (S)	140.0 (R)	WET
-17.0	0.0 (B)	79.2 (S)	140.0 (R)	WET
-18.0	0.0 (B)	67.9 (S)	140.0 (R)	WET
-19.0	0.0 (B)	58.4 (S)	140.0 (R)	WET
-20.0	0.0 (B)	51.6 (S)	140.0 (R)	WET
-21.0	0.0 (B)	136.5 (B)	140.0 (R)	WET
-22.0	0.0 (B)	120.3 (B)	140.0 (R)	WET
-23.0	0.0 (B)	106.1 (B)	140.0 (R)	WET
-24.0	0.0 (B)	93.8 (B)	140.0 (R)	WET
-25.0	0.0 (B)	83.1 (B)	140.0 (R)	WET
-26.0	0.0 (B)	73.6 (B)	140.0 (R)	WET
-27.0	0.0 (B)	65.3 (B)	140.0 (R)	WET
-28.0	0.0 (B)	57.9 (B)	140.0 (R)	WET
-29.0	0.0 (B)	51.5 (B)	140.0 (R)	WET
-30.0	0.0 (B)	45.3 (B)	140.0 (R)	WET
-31.0	0.0 (B)	39.9 (B)	140.0 (R)	WET
-32.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-33.0	140.0 (S)	128.4 (B)	140.0 (R)	DRY
-34.0	140.0 (S)	92.6 (S)	140.0 (R)	DRY
-35.0	129.1 (S)	140.0 (S)	140.0 (R)	DRY
-36.0	97.2 (S)	140.0 (S)	140.0 (R)	DRY
-37.0	68.7 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	43.2 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	114.3 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-14

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **5°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-6.0	140.0 (S)	140.0 (S)	10.7 (R)	WET
-7.0	140.0 (S)	140.0 (S)	21.3 (R)	WET
-8.0	140.0 (S)	140.0 (S)	32.9 (R)	WET
-9.0	140.0 (S)	140.0 (S)	45.8 (R)	WET
-10.0	140.0 (S)	140.0 (S)	59.9 (R)	WET
-11.0	140.0 (S)	140.0 (S)	78.3 (R)	WET
-12.0	140.0 (S)	140.0 (S)	100.0 (R)	WET
-13.0	140.0 (S)	140.0 (S)	124.0 (R)	WET
-14.0	0.0 (B)	139.0 (S)	140.0 (R)	WET
-15.0	0.0 (B)	117.9 (S)	140.0 (R)	WET
-16.0	0.0 (B)	100.9 (S)	140.0 (R)	WET
-17.0	0.0 (B)	86.9 (S)	140.0 (R)	WET
-18.0	0.0 (B)	75.3 (S)	140.0 (R)	WET
-19.0	0.0 (B)	65.5 (S)	140.0 (R)	WET
-20.0	0.0 (B)	57.1 (S)	140.0 (R)	WET
-21.0	0.0 (B)	51.4 (S)	140.0 (R)	WET
-22.0	0.0 (B)	137.7 (B)	140.0 (R)	WET
-23.0	0.0 (B)	123.2 (B)	140.0 (R)	WET
-24.0	0.0 (B)	110.5 (B)	140.0 (R)	WET
-25.0	0.0 (B)	99.4 (B)	140.0 (R)	WET
-26.0	0.0 (B)	89.7 (B)	140.0 (R)	WET
-27.0	0.0 (B)	81.1 (B)	140.0 (R)	WET
-28.0	0.0 (B)	73.5 (B)	140.0 (R)	WET
-29.0	0.0 (B)	66.7 (B)	140.0 (R)	WET
-30.0	0.0 (B)	60.8 (B)	140.0 (R)	WET
-31.0	0.0 (B)	55.4 (B)	140.0 (R)	WET
-32.0	0.0 (B)	50.8 (B)	140.0 (R)	WET
-33.0	0.0 (B)	46.3 (B)	140.0 (R)	WET
-34.0	0.0 (B)	42.4 (B)	140.0 (R)	WET
-35.0	0.0 (B)	38.8 (B)	140.0 (R)	WET
-36.0	0.0 (B)	35.7 (B)	140.0 (R)	WET
-37.0	140.0 (S)	71.9 (B)	140.0 (R)	DRY
-38.0	140.0 (S)	47.0 (S)	140.0 (R)	DRY
-39.0	140.0 (S)	74.3 (S)	140.0 (R)	DRY
-40.0	140.0 (S)	107.8 (S)	140.0 (R)	DRY
-41.0	137.2 (S)	140.0 (S)	140.0 (R)	DRY
-42.0	120.4 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	105.4 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-14 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **5°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-44.0	92.0 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	80.1 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	69.4 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	59.8 (S)	140.0 (S)	140.0 (R)	DRY
-48.0	51.4 (S)	140.0 (S)	140.0 (R)	DRY
-49.0	43.8 (S)	140.0 (S)	140.0 (R)	DRY
-50.0	37.1 (S)	140.0 (S)	140.0 (R)	DRY
-51.0	31.1 (S)	140.0 (S)	140.0 (R)	DRY
-52.0	25.7 (S)	140.0 (S)	140.0 (R)	DRY
-53.0	117.7 (B)	140.0 (S)	140.0 (R)	DRY
-54.0	94.2 (B)	140.0 (S)	140.0 (R)	DRY
-55.0	73.3 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	54.8 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	38.5 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	24.0 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	11.3 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-15

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **5°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-6.0	140.0 (S)	140.0 (S)	10.6 (R)	WET
-7.0	140.0 (S)	140.0 (S)	21.2 (R)	WET
-8.0	140.0 (S)	140.0 (S)	32.8 (R)	WET
-9.0	140.0 (S)	140.0 (S)	45.6 (R)	WET
-10.0	140.0 (S)	140.0 (S)	59.7 (R)	WET
-11.0	140.0 (S)	140.0 (S)	77.9 (R)	WET
-12.0	140.0 (S)	140.0 (S)	99.5 (R)	WET
-13.0	140.0 (S)	140.0 (S)	123.3 (R)	WET
-14.0	0.0 (B)	139.9 (S)	140.0 (R)	WET
-15.0	0.0 (B)	118.7 (S)	140.0 (R)	WET
-16.0	0.0 (B)	101.6 (S)	140.0 (R)	WET
-17.0	0.0 (B)	87.6 (S)	140.0 (R)	WET
-18.0	0.0 (B)	75.9 (S)	140.0 (R)	WET
-19.0	0.0 (B)	66.1 (S)	140.0 (R)	WET
-20.0	0.0 (B)	57.7 (S)	140.0 (R)	WET
-21.0	0.0 (B)	51.9 (S)	140.0 (R)	WET
-22.0	0.0 (B)	139.3 (B)	140.0 (R)	WET
-23.0	0.0 (B)	124.7 (B)	140.0 (R)	WET
-24.0	0.0 (B)	112.0 (B)	140.0 (R)	WET
-25.0	0.0 (B)	100.9 (B)	140.0 (R)	WET
-26.0	0.0 (B)	91.1 (B)	140.0 (R)	WET
-27.0	0.0 (B)	82.5 (B)	140.0 (R)	WET
-28.0	0.0 (B)	74.8 (B)	140.0 (R)	WET
-29.0	0.0 (B)	68.1 (B)	140.0 (R)	WET
-30.0	0.0 (B)	62.1 (B)	140.0 (R)	WET
-31.0	0.0 (B)	56.8 (B)	140.0 (R)	WET
-32.0	0.0 (B)	52.2 (B)	140.0 (R)	WET
-33.0	0.0 (B)	47.7 (B)	140.0 (R)	WET
-34.0	0.0 (B)	43.7 (B)	140.0 (R)	WET
-35.0	0.0 (B)	40.2 (B)	140.0 (R)	WET
-36.0	0.0 (B)	37.0 (B)	140.0 (R)	WET
-37.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-38.0	140.0 (S)	102.9 (B)	140.0 (R)	DRY
-39.0	140.0 (S)	56.4 (S)	140.0 (R)	DRY
-40.0	140.0 (S)	85.1 (S)	140.0 (R)	DRY
-41.0	140.0 (S)	117.5 (S)	140.0 (R)	DRY
-42.0	133.9 (S)	140.0 (S)	140.0 (R)	DRY
-43.0	118.9 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-15 (continued)

DRY GAS DEW POINT	SATURATOR TEMPERATURE			
-80°C			**5°C**	
-44.0	105.5 (S)	140.0 (S)	140.0 (R)	DRY
-45.0	93.5 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	82.8 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	73.2 (S)	140.0 (S)	140.0 (R)	DRY
-48.0	64.7 (S)	140.0 (S)	140.0 (R)	DRY
-49.0	57.1 (S)	140.0 (S)	140.0 (R)	DRY
-50.0	50.4 (S)	140.0 (S)	140.0 (R)	DRY
-51.0	44.4 (S)	140.0 (S)	140.0 (R)	DRY
-52.0	39.0 (S)	140.0 (S)	140.0 (R)	DRY
-53.0	34.3 (S)	140.0 (S)	140.0 (R)	DRY
-54.0	30.1 (S)	140.0 (S)	140.0 (R)	DRY
-55.0	26.3 (S)	140.0 (S)	140.0 (R)	DRY
-56.0	129.1 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	112.7 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	98.2 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	85.4 (B)	140.0 (S)	140.0 (R)	DRY
-60.0	74.1 (B)	140.0 (S)	140.0 (R)	DRY
-61.0	64.1 (B)	140.0 (S)	140.0 (R)	DRY
-62.0	55.4 (B)	140.0 (S)	140.0 (R)	DRY
-63.0	47.7 (B)	140.0 (S)	140.0 (R)	DRY
-64.0	40.9 (B)	140.0 (S)	140.0 (R)	DRY
-65.0	35.0 (B)	140.0 (S)	140.0 (R)	DRY
-66.0	29.8 (B)	140.0 (S)	140.0 (R)	DRY
-67.0	25.3 (B)	140.0 (S)	140.0 (R)	DRY
-68.0	21.4 (B)	140.0 (S)	140.0 (R)	DRY
-69.0	17.9 (B)	140.0 (S	140.0 (R)	DRY
-70.0	14.9 (B)	140.0 (S)	140.0 (R)	DRY
-71.0	12.3 (B)	140.0 (S)	140.0 (R)	DRY
-72.0	10.0 (B)	140.0 (S)	140.0 (R)	DRY
-73.0	8.0 (B)	140.0 (S)	140.0 (R)	DRY
-74.0	6.3 (B)	140.0 (S)	140.0 (R)	DRY
-75.0	4.8 (B)	140.0 (S)	140.0 (R)	DRY
-76.0	3.6 (B)	140.0 (S)	140.0 (R)	DRY
-77.0	2.5 (B)	140.0 (S)	140.0 (R)	DRY
-78.0	1.5 (B)	140.0 (S)	140.0 (R)	DRY
-79.0	0.7 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-16

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-40°C **0°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-11.0	140.0 (S)	140.0 (S)	11.6 (R)	WET
-12.0	140.0 (S)	140.0 (S)	23.4 (R)	WET
-13.0	140.0 (S)	140.0 (S)	36.5 (R)	WET
-14.0	140.0 (S)	140.0 (S)	51.2 (R)	WET
-15.0	140.0 (S)	140.0 (S)	67.7 (R)	WET
-16.0	140.0 (S)	140.0 (S)	91.8 (R)	WET
-17.0	140.0 (S)	140.0 (S)	118.1 (R)	WET
-18.0	128.4 (B)	140.0 (S)	140.0 (R)	WET
-19.0	0.0 (B)	117.0 (S)	140.0 (R)	WET
-20.0	0.0 (B)	97.7 (S)	140.0 (R)	WET
-21.0	0.0 (B)	82.1 (S)	140.0 (R)	WET
-22.0	0.0 (B)	69.4 (S)	140.0 (R)	WET
-23.0	0.0 (B)	58.8 (S)	140.0 (R)	WET
-24.0	0.0 (B)	51.3 (S)	140.0 (R)	WET
-25.0	0.0 (B)	133.6 (B)	140.0 (R)	WET
-26.0	0.0 (B)	116.0 (B)	140.0 (R)	WET
-27.0	0.0 (B)	100.9 (B)	140.0 (R)	WET
-28.0	0.0 (B)	87.7 (B)	140.0 (R)	WET
-29.0	0.0 (B)	76.3 (B)	140.0 (R)	WET
-30.0	0.0 (B)	66.3 (B)	140.0 (R)	WET
-31.0	0.0 (B)	57.6 (B)	140.0 (R)	WET
-32.0	0.0 (B)	49.9 (B)	140.0 (R)	WET
-33.0	0.0 (B)	42.8 (B)	140.0 (R)	WET
-34.0	0.0 (B)	36.5 (B)	140.0 (R)	WET
-35.0	140.0 (S)	124.5 (B)	140.0 (R)	DRY
-36.0	140.0 (S)	110.1 (S)	140.0 (R)	DRY
-37.0	108.9 (S)	140.0 (S)	140.0 (R)	DRY
-38.0	68.3 (S)	140.0 (S)	140.0 (R)	DRY
-39.0	32.2 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-17

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **0°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-11.0	140.0 (S)	140.0 (S)	11.1 (R)	WET
-12.0	140.0 (S)	140.0 (S)	22.2 (R)	WET
-13.0	140.0 (S)	140.0 (S)	34.4 (R)	WET
-14.0	140.0 (S)	140.0 (S)	47.9 (R)	WET
-15.0	140.0 (S)	140.0 (S)	62.9 (R)	WET
-16.0	140.0 (S)	140.0 (S)	83.3 (R)	WET
-17.0	140.0 (S)	140.0 (S)	106.5 (R)	WET
-18.0	140.0 (S)	140.0 (S)	132.2 (R)	WET
-19.0	0.0 (B)	130.9 (S)	140.0 (R)	WET
-20.0	0.0 (B)	110.7 (S)	140.0 (R)	WET
-21.0	0.0 (B)	94.4 (S)	140.0 (R)	WET
-22.0	0.0 (B)	81.0 (S)	140.0 (R)	WET
-23.0	0.0 (B)	69.9 (S)	140.0 (R)	WET
-24.0	0.0 (B)	60.6 (S)	140.0 (R)	WET
-25.0	0.0 (B)	53.7 (S)	140.0 (R)	WET
-26.0	0.0 (B)	47.7 (S)	140.0 (R)	WET
-27.0	0.0 (B)	127.5 (B)	140.0 (R)	WET
-28.0	0.0 (B)	113.7 (B)	140.0 (R)	WET
-29.0	0.0 (B)	101.8 (B)	140.0 (R)	WET
-30.0	0.0 (B)	91.3 (B)	140.0 (R)	WET
-31.0	0.0 (B)	82.1 (B)	140.0 (R)	WET
-32.0	0.0 (B)	74.1 (B)	140.0 (R)	WET
-33.0	0.0 (B)	67.0 (B)	140.0 (R)	WET
-34.0	0.0 (B)	60.7 (B)	140.0 (R)	WET
-35.0	0.0 (B)	55.1 (B)	140.0 (R)	WET
-36.0	0.0 (B)	50.3 (B)	140.0 (R)	WET
-37.0	0.0 (B)	45.6 (B)	140.0 (R)	WET
-38.0	0.0 (B)	41.5 (B)	140.0 (R)	WET
-39.0	0.0 (B)	37.9 (B)	140.0 (R)	WET
-40.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-41.0	140.0 (S)	99.4 (B)	140.0 (R)	DRY
-42.0	140.0 (S)	58.6 (S)	140.0 (R)	DRY
-43.0	140.0 (S)	92.3 (S)	140.0 (R)	DRY
-44.0	140.0 (S)	131.6 (S)	140.0 (R)	DRY
-45.0	125.0 (S)	140.0 (S)	140.0 (R)	DRY
-46.0	1.8.2 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	93.2 (S)	140.0 (S)	140.0 (R)	DRY
-48.0	79.9 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-17 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-60°C **0°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-49.0	68.1 (S)	140.0 (S)	140.0 (R)	DRY
-50.0	57.6 (S)	140.0 (S)	140.0 (R)	DRY
-51.0	48.2 (S)	140.0 (S)	140.0 (R)	DRY
-52.0	39.9 (S)	140.0 (S)	140.0 (R)	DRY
-53.0	32.6 (S)	140.0 (S)	140.0 (R)	DRY
-54.0	26.1 (S)	140.0 (S)	140.0 (R)	DRY
-55.0	113.6 (B)	140.0 (S)	140.0 (R)	DRY
-56.0	85.0 (B)	140.0 (S)	140.0 (R)	DRY
-57.0	59.6 (B)	140.0 (S)	140.0 (R)	DRY
-58.0	37.2 (B)	140.0 (S)	140.0 (R)	DRY
-59.0	17.4 (B)	140.0 (S)	140.0 (R)	DRY

Table 7-18

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **0°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-11.0	140.0 (S)	140.0 (S)	11.0 (R)	WET
-12.0	140.0 (S)	140.0 (S)	22.1 (R)	WET
-13.0	140.0 (S)	140.0 (S)	34.2 (R)	WET
-14.0	140.0 (S)	140.0 (S)	47.1 (R)	WET
-15.0	140.0 (S)	140.0 (S)	62.5 (R)	WET
-16.0	140.0 (S)	140.0 (S)	82.6 (R)	WET
-17.0	140.0 (S)	140.0 (S)	105.6 (R)	WET
-18.0	140.0 (S)	140.0 (S)	131.0 (R)	WET
-19.0	0.0 (B)	132.1 (S)	140.0 (R)	WET
-20.0	0.0 (B)	111.8 (S)	140.0 (R)	WET
-21.0	0.0 (B)	95.5 (S)	140.0 (R)	WET
-22.0	0.0 (B)	82.1 (S)	140.0 (R)	WET
-23.0	0.0 (B)	70.9 (S)	140.0 (R)	WET
-24.0	0.0 (B)	61.5 (S)	140.0 (R)	WET
-25.0	0.0 (B)	54.5 (S)	140.0 (R)	WET
-26.0	0.0 (B)	48.5 (S)	140.0 (R)	WET
-27.0	0.0 (B)	129.8 (B)	140.0 (R)	WET
-28.0	0.0 (B)	116.0 (B)	140.0 (R)	WET
-29.0	0.0 (B)	104.0 (B)	140.0 (R)	WET
-30.0	0.0 (B)	93.5 (B)	140.0 (R)	WET
-31.0	0.0 (B)	84.3 (B)	140.0 (R)	WET
-32.0	0.0 (B)	76.2 (B)	140.0 (R)	WET
-33.0	0.0 (B)	69.0 (B)	140.0 (R)	WET
-34.0	0.0 (B)	62.7 (B)	140.0 (R)	WET
-35.0	0.0 (B)	57.2 (B)	140.0 (R)	WET
-36.0	0.0 (B)	52.4 (B)	140.0 (R)	WET
-37.0	0.0 (B)	47.7 (B)	140.0 (R)	WET
-38.0	0.0 (B)	43.6 (B)	140.0 (R)	WET
-39.0	0.0 (B)	40.0 (B)	140.0 (R)	WET
-40.0	0.0 (B)	36.7 (B)	140.0 (R)	WET
-41.0	140.0 (S)	0.0 (B)	140.0 (R)	DRY
-42.0	140.0 (S)	113.9 (B)	140.0 (R)	DRY
-43.0	140.0 (S)	62.0 (S)	140.0 (R)	DRY
-44.0	140.0 (S)	92.5 (S)	140.0 (R)	DRY
-45.0	140.0 (S)	127.2 (S)	140.0 (R)	DRY
-46.0	129.1 (S)	140.0 (S)	140.0 (R)	DRY
-47.0	114.1 (S)	140.0 (S)	140.0 (R)	DRY
-48.0	100.7 (S)	140.0 (S)	140.0 (R)	DRY

Table 7-18 (continued)

DRY GAS DEW POINT **SATURATOR TEMPERATURE**

-80°C **0°C**

DEW PT. °C	FM 1	FM 2	FM 3	RANGE
-49.0	88.8 (S)	140.0 (S)	140.0 (R)	DRY
-50.0	78.3 (S)	140.0 (S)	140.0 (R)	DRY
-51.0	68.9 (S)	140.0 (S)	140.0 (R)	DRY
-52.0	60.6 (S)	140.0 (S)	140.0 (R)	DRY
-53.0	53.2 (S)	140.0 (S)	140.0 (R)	DRY
-54.0	46.6 (S)	140.0 (S)	140.0 (R)	DRY
-55.0	40.8 (S)	140.0 (S)	140.0 (R)	DRY
-56.0	35.7 (S)	140.0 (S)	140.0 (R)	DRY
-57.0	31.1 (S)	140.0 (S)	140.0 (R)	DRY
-58.0	27.1 (S)	140.0 (S)	140.0 (R)	DRY
-59.0	132.2 (B)	140.0 (S)	140.0 (R)	DRY
-60.0	114.7 (B)	140.0 (S)	140.0 (R)	DRY
-61.0	99.3 (B)	140.0 (S)	140.0 (R)	DRY
-62.0	85.7 (B)	140.0 (S)	140.0 (R)	DRY
-63.0	78.3 (B)	140.0 (S)	140.0 (R)	DRY
-64.0	63.4 (B)	140.0 (S)	140.0 (R)	DRY
-65.0	54.2 (B)	140.0 (S)	140.0 (R)	DRY
-66.0	46.2 (B)	140.0 (S)	140.0 (R)	DRY
-67.0	39.1 (B)	140.0 (S)	140.0 (R)	DRY
-68.0	33.0 (B)	140.0 (S)	140.0 (R)	DRY
-69.0	27.7 (B)	140.0 (S	140.0 (R)	DRY
-70.0	23.0 (B)	140.0 (S)	140.0 (R)	DRY
-71.0	19.0 (B)	140.0 (S)	140.0 (R)	DRY
-72.0	15.5 (B)	140.0 (S)	140.0 (R)	DRY
-73.0	12.4 (B)	140.0 (S)	140.0 (R)	DRY
-74.0	9.8 (B)	140.0 (S)	140.0 (R)	DRY
-75.0	7.5 (B)	140.0 (S)	140.0 (R)	DRY
-76.0	5.5 (B)	140.0 (S)	140.0 (R)	DRY
-77.0	3.8 (B)	140.0 (S)	140.0 (R)	DRY
-78.0	2.3 (B)	140.0 (S)	140.0 (R)	DRY
-79.0	1.1 (B)	140.0 (S)	140.0 (R)	DRY

8.0 SPECIFICATIONS

Dew/Frost Point Generation Range:	-80°C to +15°C at 25°C ambient
Dew/Frost Point Adjustment:	Infinite Resolution
Accuracy:	±0.5°C typical
Repeatability:	±0.25°C
Stability:	±0.25°C
Hysteresis:	None
Response Time:	Less than 3 minutes
Output Flow Rate:	0 to 5 SCFH (0 to 2.5 liters/min) Adjustable
Dimensions (HWD):	11-1/4 X 11-1/4 X 25-3/4 in. (28.6 X 28.6 X 65.4 cm)
Weight (with water):	15 lbs. (6.8 kg)
Storage Temperature:	-40 to +50°C
Power Requirements:	None
Input/Output Gas Connections:	¼ in. (0.6cm) compression fittings
Input Gas Requirement:	Dry gas less than 115ppm (-40°C dew point), 13 SCFH (6 liters/min), 30 to 100 psig **Note:** Input gas should be as dry as possible, since it determines the lowest dew/frost point that can be generated.

9.0 APPENDIX

9.1 WARRANTY INFORMATION

All equipment manufactured by Edgetech Instruments Inc. is warranted against defective components and workmanship for repair at their plant in Massachusetts, USA, free of charge, for a period of twelve months. Malfunction due to improper use is not covered in this warranty and Edgetech Instruments disclaims any liability for consequential damage resulting from defects in the performance of the equipment. No product is warranted as being fit for a particular purpose and there is no warranty of merchantability. This warranty applies only if (i) the items are used solely under the operating conditions and in the manner recommended in the instruction manual, specifications, or other literature; (ii) the items have not been misused or abused in any manner or repairs attempted thereon; (iii) written notice of the failure within the warranty period is forwarded to Edgetech Instruments and the directions received for properly identifying items returned under warranty are followed; and (iv) the return notice authorizes Edgetech Instruments to examine and disassemble returned products to the extent Edgetech Instruments deems necessary to ascertain the cause for failure. The warranties expressed herein are exclusive. There are no other warranties, either expressed or implied, beyond those set forth herein, and Edgetech Instruments does not assume any other obligation or liability in connection with the sale or use of said products.

Equipment not manufactured by Edgetech Instruments Inc.is supported only to the extent of the original manufacturer’s warranties.

NOTES