

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P965249

Luminaire Tested: **NAV-SB3D-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20533.8 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



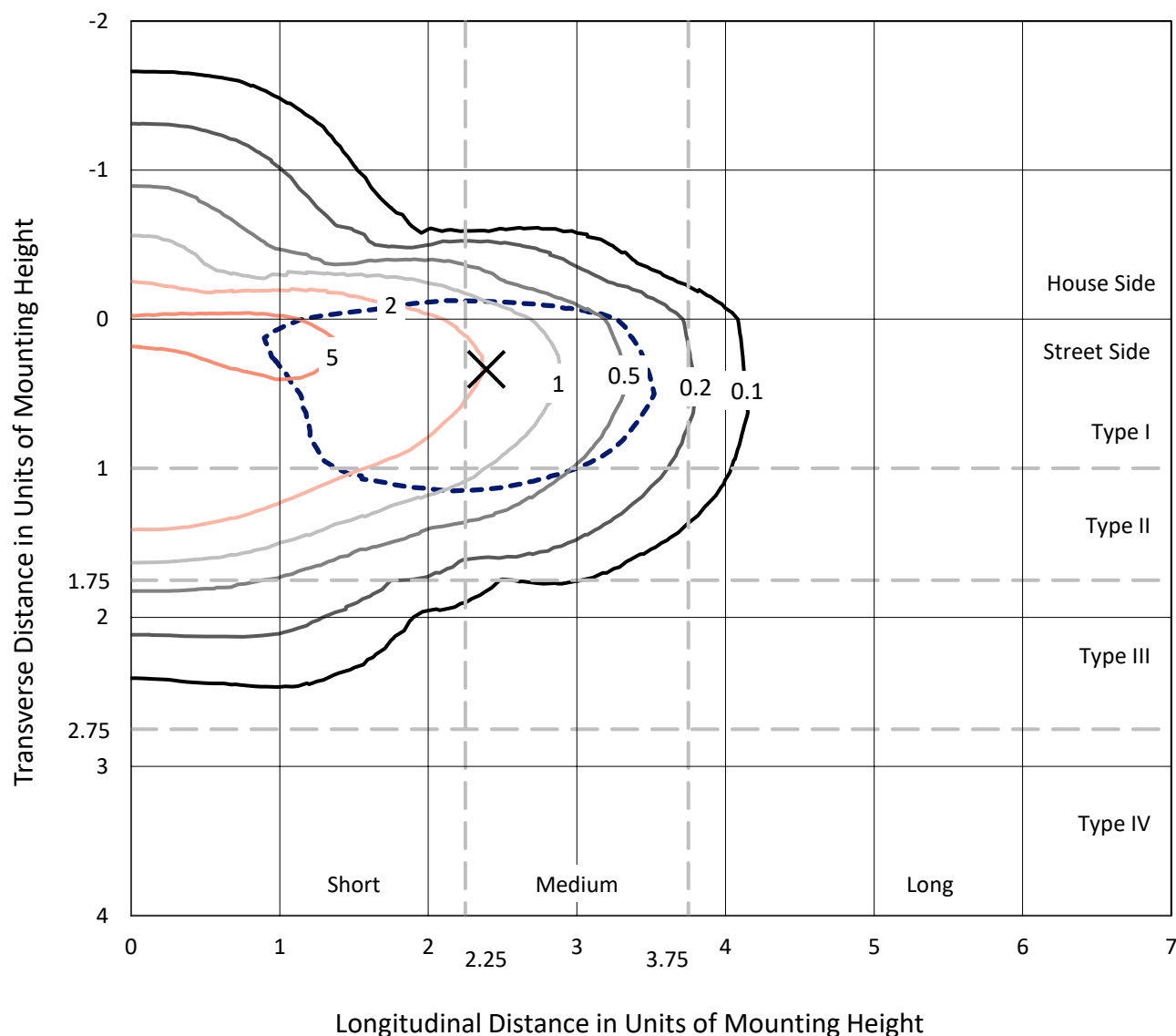
REPORT NUMBER: P965249

CATALOG NUMBER: NAV-SB3D-830-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

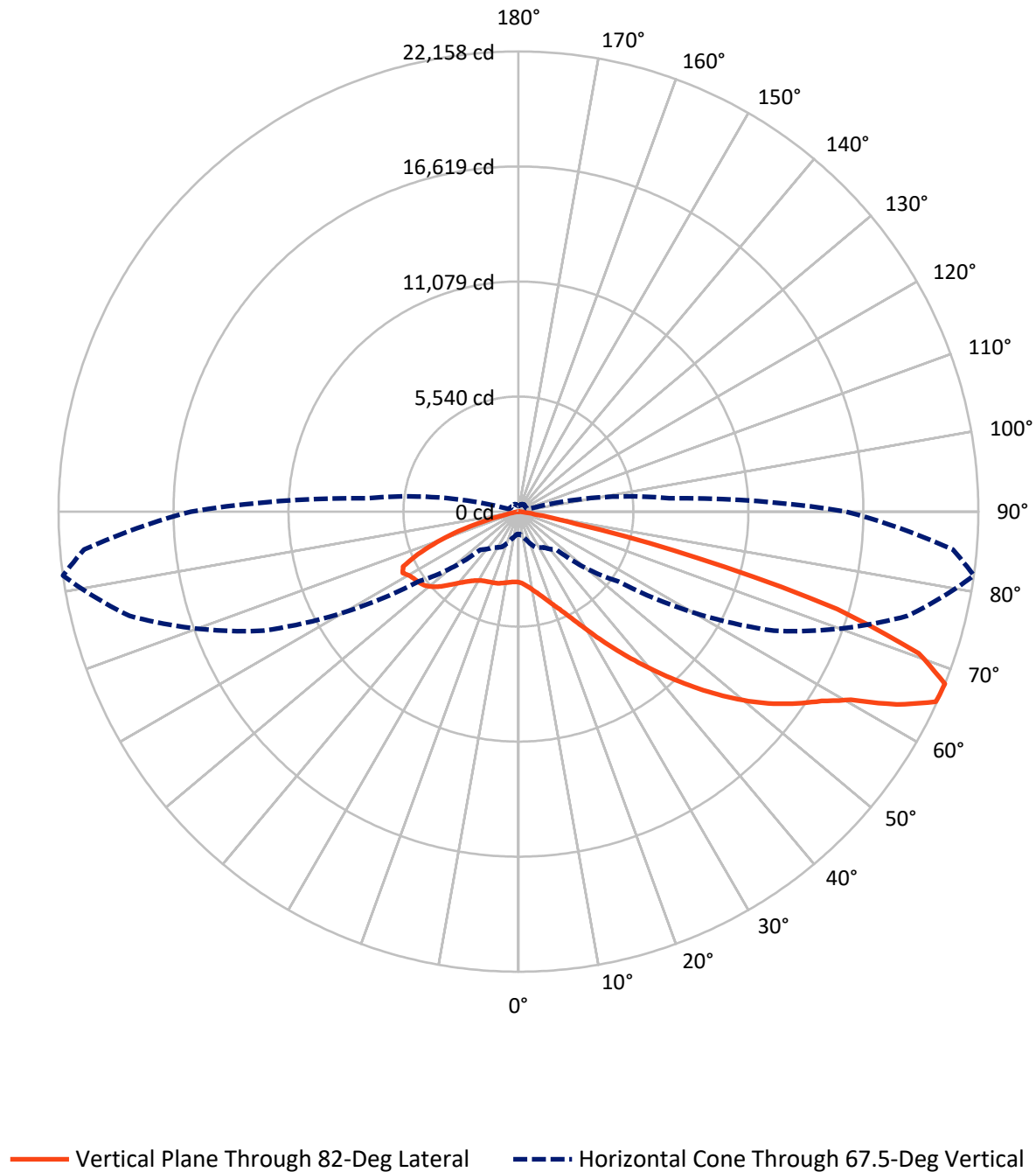
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type II - Medium - N/A

REPORT NUMBER: P965249
CATALOG NUMBER: NAV-SB3D-830-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P965249

CATALOG NUMBER: NAV-SB3D-830-U-T2-HSS

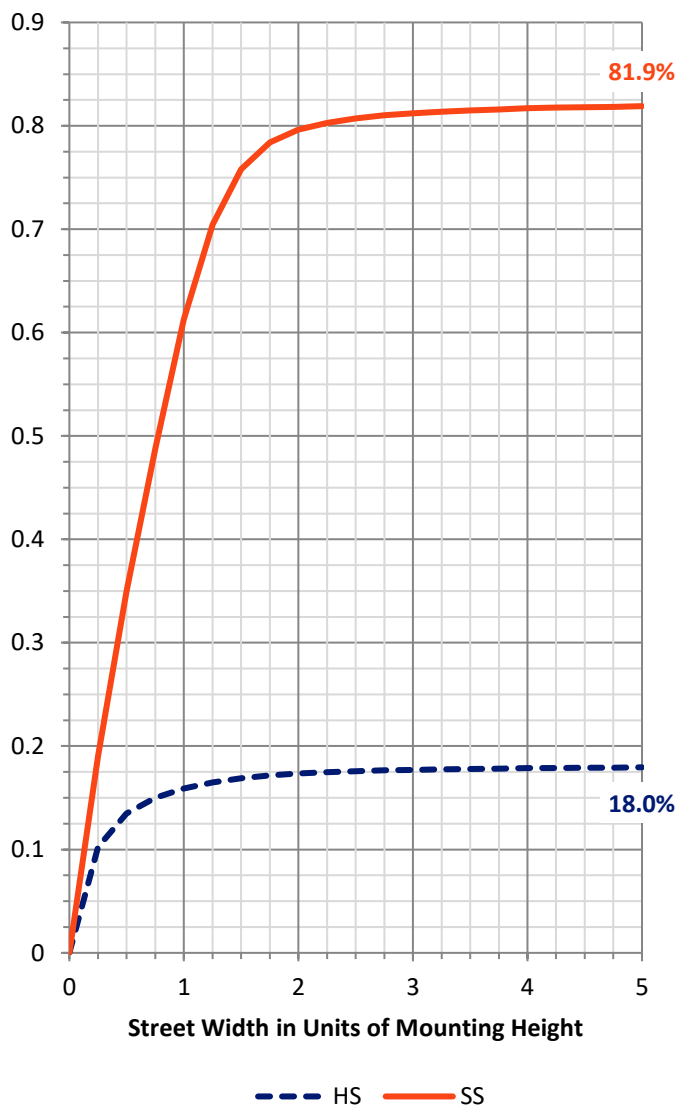
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3719.5	0.0	3719.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	16814.3	0.0	16814.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	20533.8	0.0	20533.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.1	1.5
10°-20°	787.6	3.8
20°-30°	1261.4	6.1
30°-40°	2230.6	10.9
40°-50°	3908.2	19.0
50°-60°	5212.4	25.4
60°-70°	4852.5	23.6
70°-80°	1862.4	9.1
80°-90°	115.7	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	20533.8	100.0
0°-180°	20533.8	100.0

Coefficient of Utilization



REPORT NUMBER: P965249

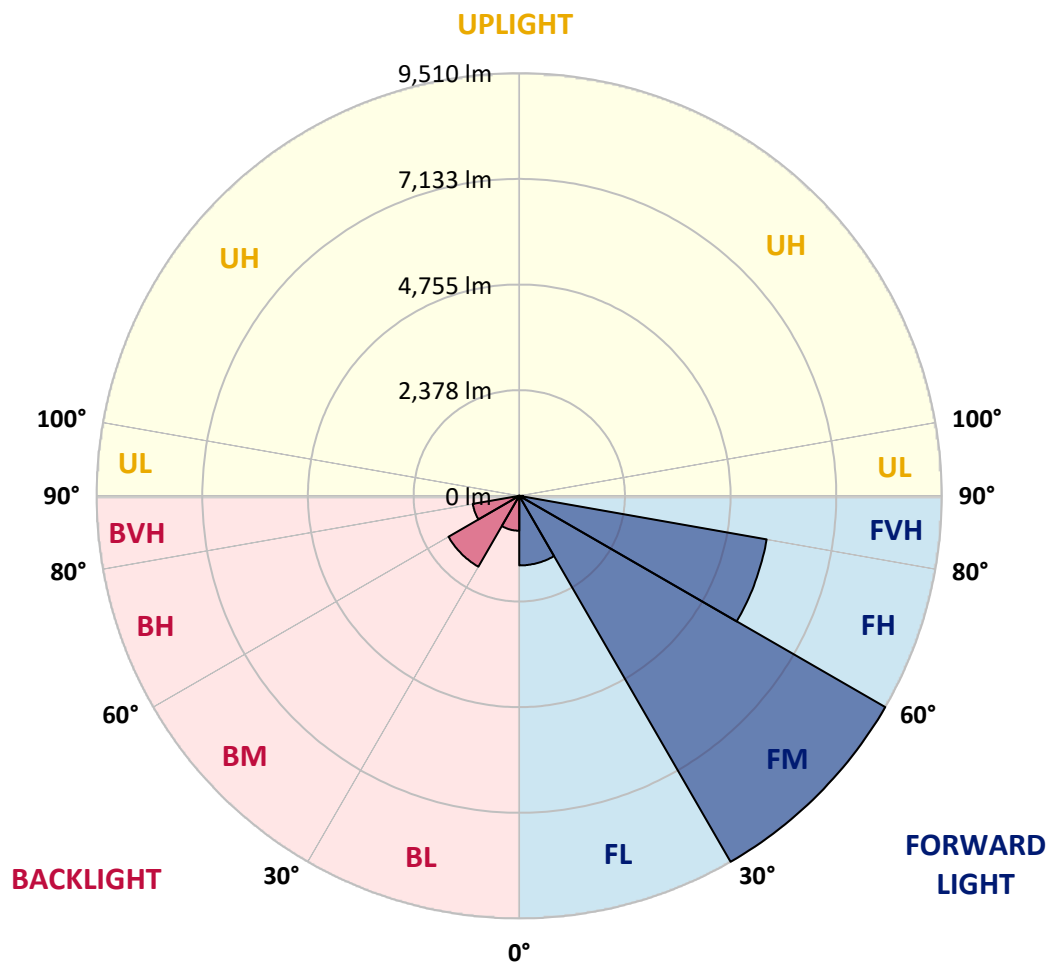
CATALOG NUMBER: NAV-SB3D-830-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1566.5	7.6			
FM	(30°-60°)	9510.4	46.3			
FH	(60°-80°)	5653.3	27.5			G3/7500
FVH	(80°-90°)	84.1	0.4			G1/100
BL	(0°-30°)	785.6	3.8	B2/1000		
BM	(30°-60°)	1840.8	9.0	B2/2500		
BH	(60°-80°)	1061.6	5.2	B3/2500		G3/2500
BVH	(80°-90°)	31.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



REPORT NUMBER: P965249

CATALOG NUMBER: NAV-SB3D-830-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8
2.5°	3595.4	3616.1	3604.3	3598.4	3588.0	3573.3	3561.5	3524.5	3486.0	3460.9	3452.0
5°	3667.9	3688.6	3687.1	3693.0	3700.4	3704.9	3701.9	3660.5	3605.7	3562.9	3537.8
7.5°	3605.7	3629.4	3648.7	3678.2	3730.0	3784.7	3811.3	3802.4	3746.3	3687.1	3656.1
10°	3429.9	3455.0	3500.8	3570.3	3679.6	3797.9	3897.0	3942.9	3907.4	3842.3	3799.5
12.5°	3107.6	3132.7	3222.9	3373.7	3557.0	3762.5	3951.7	4074.4	4083.3	4018.2	3968.0
15°	2745.4	2770.5	2866.6	3055.8	3335.2	3664.9	3981.3	4213.4	4291.8	4235.6	4174.9
17.5°	2520.7	2542.8	2615.3	2767.5	3058.8	3469.7	3971.0	4361.3	4540.1	4495.8	4423.3
20°	2452.6	2471.9	2505.8	2612.3	2854.7	3267.2	3902.9	4500.2	4807.7	4782.5	4701.3
22.5°	2525.1	2542.8	2553.2	2600.4	2752.7	3134.1	3817.2	4642.1	5118.1	5121.1	5022.1
25°	2692.2	2709.9	2698.0	2727.6	2794.1	3092.7	3784.7	4809.2	5508.5	5540.9	5428.6
27.5°	2967.1	2968.6	2940.5	2939.0	2949.3	3154.8	3818.6	4988.1	6000.8	6061.3	5922.4
30°	3518.5	3496.4	3388.4	3271.7	3218.4	3341.2	3913.2	5199.5	6581.7	6689.7	6515.2
32.5°	4368.7	4336.1	4138.0	3858.6	3577.7	3641.2	4083.3	5440.5	7214.5	7409.6	7196.7
35°	5291.2	5282.2	5075.3	4659.9	4169.1	4068.5	4359.7	5756.8	7904.9	8215.4	7962.6
37.5°	6148.6	6144.2	6025.9	5536.5	4939.3	4664.3	4803.3	6170.8	8644.1	9093.5	8794.9
40°	6932.2	6945.4	6827.2	6389.5	5787.9	5428.6	5406.5	6682.3	9466.1	10050.0	9695.3
42.5°	7609.2	7624.1	7504.2	7180.5	6626.1	6274.2	6147.1	7309.2	10268.9	11077.5	10657.6
45°	8069.0	8160.6	8142.9	7884.2	7486.5	7121.4	7037.1	8095.7	11184.0	12167.1	11674.7
47.5°	8199.1	8283.3	8416.5	8451.9	8209.4	7850.2	7950.7	9043.3	12109.5	13258.2	12697.8
50°	7878.4	7956.7	8233.1	8601.2	8769.8	8658.9	8839.3	10058.9	13057.1	14346.2	13701.7
52.5°	7245.5	7325.4	7674.3	8256.8	8944.3	9293.2	9730.7	11059.7	13975.2	15376.6	14652.3
55°	6330.4	6414.7	6862.7	7522.1	8611.5	9554.7	10474.4	12059.1	14816.4	16303.6	15509.7
57.5°	5085.6	5147.8	5613.4	6535.9	7774.8	9294.6	11022.8	13150.2	15608.8	17214.3	16359.8
60°	3314.5	3369.3	3910.4	4939.3	6388.1	8425.3	11132.2	14366.9	16661.4	18398.4	17505.6
62.5°	2204.3	2241.3	2562.0	3317.5	4498.7	6756.2	10492.1	15338.2	18204.8	20459.3	19470.3
65°	1512.4	1549.4	1870.1	2396.4	2906.5	4469.1	8651.5	15209.6	19603.3	22095.9	20926.5
67.5°	1079.2	1110.3	1382.3	1879.0	2103.7	2596.0	5864.7	13565.7	19402.3	22158.0	21004.9
70°	773.2	790.9	1015.7	1463.6	1672.1	1559.7	3261.3	10375.3	16988.1	20460.8	19405.3
72.5°	541.1	547.0	705.2	1114.7	1346.8	1138.4	1552.3	6917.3	12848.6	16059.7	15044.0
75°	366.6	374.0	474.6	817.5	1080.7	869.3	821.9	3709.3	7542.7	8889.5	7968.5
77.5°	224.7	227.7	306.1	558.8	808.7	662.4	529.3	1571.5	2918.3	2865.1	2442.3
80°	127.1	127.1	195.2	347.4	551.4	427.2	371.0	668.2	924.0	811.6	715.6
82.5°	70.9	72.5	142.0	215.9	365.2	252.8	204.0	308.9	399.1	353.3	307.5
85°	29.5	32.5	87.2	102.0	174.5	125.7	82.8	130.1	147.8	131.6	96.1
87.5°	3.0	4.4	26.6	19.3	20.7	25.1	11.8	25.1	20.7	20.7	14.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P965249

CATALOG NUMBER: NAV-SB3D-830-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8	3401.8
2.5°	3423.9	3401.8	3345.6	3280.5	3194.8	3153.4	3097.2	3058.8	3026.2	3029.2	2999.7
5°	3490.4	3434.3	3308.6	3151.9	2956.8	2817.8	2669.9	2567.9	2485.1	2467.4	2427.5
7.5°	3582.2	3493.4	3273.1	2990.7	2661.1	2411.2	2188.0	2044.6	1942.6	1910.1	1877.6
10°	3700.4	3571.8	3227.3	2788.2	2313.6	1995.8	1756.3	1644.0	1574.5	1550.8	1533.1
12.5°	3837.9	3661.9	3166.7	2541.4	1955.9	1649.8	1497.6	1441.5	1419.2	1411.8	1407.4
15°	4010.8	3774.4	3075.0	2248.6	1652.8	1438.5	1373.4	1366.0	1369.0	1366.0	1364.6
17.5°	4216.3	3897.0	2925.8	1947.0	1448.8	1330.6	1306.9	1312.8	1320.2	1318.8	1315.8
20°	4441.0	4018.2	2735.0	1679.5	1309.8	1253.7	1240.4	1246.3	1252.1	1249.3	1247.7
22.5°	4696.9	4148.4	2523.5	1471.0	1216.7	1182.7	1167.9	1169.4	1169.4	1163.5	1160.5
25°	5002.8	4291.8	2301.8	1323.2	1145.7	1119.1	1101.4	1095.5	1086.6	1068.9	1065.9
27.5°	5368.0	4444.0	2089.0	1219.6	1089.6	1064.5	1043.8	1029.0	1006.8	977.2	974.3
30°	5779.0	4628.8	1908.5	1154.7	1045.2	1020.1	996.4	974.3	941.8	904.8	901.8
32.5°	6262.4	4826.9	1777.0	1111.7	1005.3	978.7	950.6	924.0	888.5	851.6	853.0
35°	6839.0	5066.4	1700.2	1082.2	974.3	938.8	907.7	878.1	851.6	819.0	816.1
37.5°	7464.4	5320.7	1676.5	1067.4	953.6	898.8	863.4	842.7	839.7	820.5	819.0
40°	8148.9	5622.3	1694.2	1058.5	931.4	860.4	821.9	817.5	824.9	790.9	792.4
42.5°	8873.2	5980.1	1723.8	1048.2	900.4	821.9	785.0	785.0	779.1	731.8	731.8
45°	9656.8	6392.5	1753.4	1023.1	863.4	783.5	755.4	745.1	720.0	674.1	672.7
47.5°	10446.3	6812.4	1775.5	977.2	819.0	751.0	725.9	702.2	665.2	623.9	622.4
50°	11195.8	7189.4	1751.9	909.2	768.7	720.0	693.4	660.8	620.9	592.9	588.3
52.5°	11865.5	7516.1	1651.4	829.3	715.6	687.5	663.8	629.8	597.3	567.7	564.8
55°	12448.0	7780.8	1473.9	754.0	668.2	659.4	635.7	592.9	548.5	523.4	520.4
57.5°	13006.8	7981.8	1252.1	691.9	625.4	628.3	592.9	554.4	513.0	486.4	483.4
60°	13750.5	8250.8	1027.5	634.3	579.5	588.3	549.9	521.8	470.2	436.1	431.7
62.5°	14939.1	8669.2	816.1	563.2	526.3	529.3	513.0	479.0	416.9	377.0	374.0
65°	15882.3	8515.5	643.1	486.4	465.7	470.2	470.2	433.2	366.6	320.8	316.4
67.5°	15775.9	7291.3	513.0	411.0	408.1	411.0	421.4	390.3	325.2	288.3	282.4
70°	14532.6	5799.7	411.0	341.5	354.9	347.4	377.0	356.3	292.7	255.7	251.3
72.5°	11858.1	4177.9	313.4	282.4	272.0	283.8	340.0	320.8	244.0	202.5	198.1
75°	6929.2	2229.4	233.6	223.2	196.6	236.6	301.6	273.5	186.2	149.3	144.8
77.5°	2256.0	777.7	171.5	164.1	146.4	190.8	257.3	230.6	152.3	118.3	113.9
80°	604.6	235.0	116.7	107.9	94.6	142.0	204.0	183.3	109.4	76.9	75.4
82.5°	242.4	99.0	68.0	60.6	51.8	97.6	161.1	147.8	81.3	48.8	48.8
85°	78.3	32.5	25.1	19.3	23.7	60.6	96.1	100.6	57.7	25.1	19.3
87.5°	10.4	4.4	4.4	5.9	4.4	10.4	29.5	28.1	16.3	3.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)