

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: P965208

Luminaire Tested: **NAV-SB3D-827-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965208
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-827-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27048.7 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

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



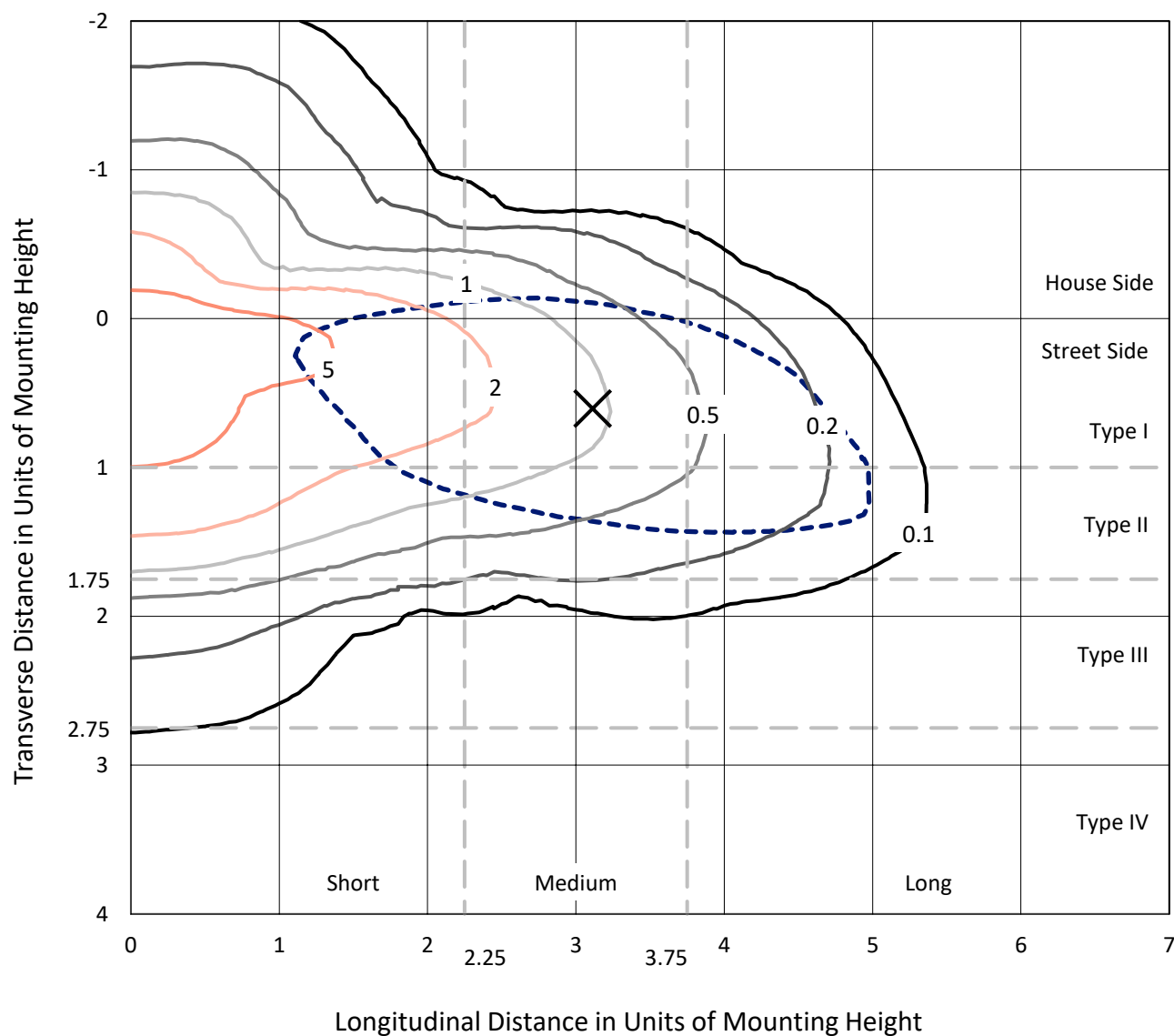
REPORT NUMBER: P965208

CATALOG NUMBER: NAV-SB3D-827-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

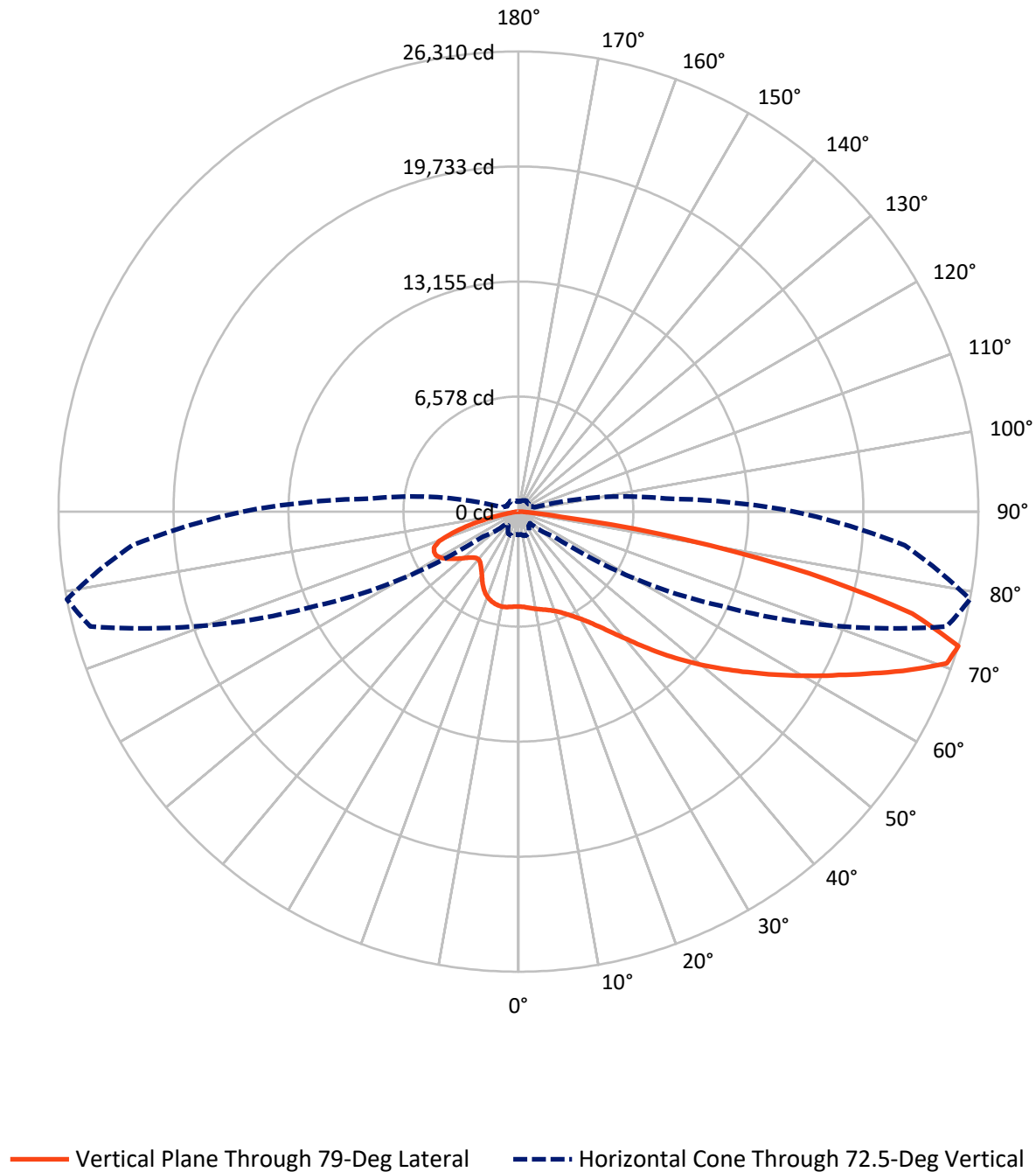
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
 Type II - Medium - N/A

REPORT NUMBER: P965208
CATALOG NUMBER: NAV-SB3D-827-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P965208

CATALOG NUMBER: NAV-SB3D-827-U-SL2

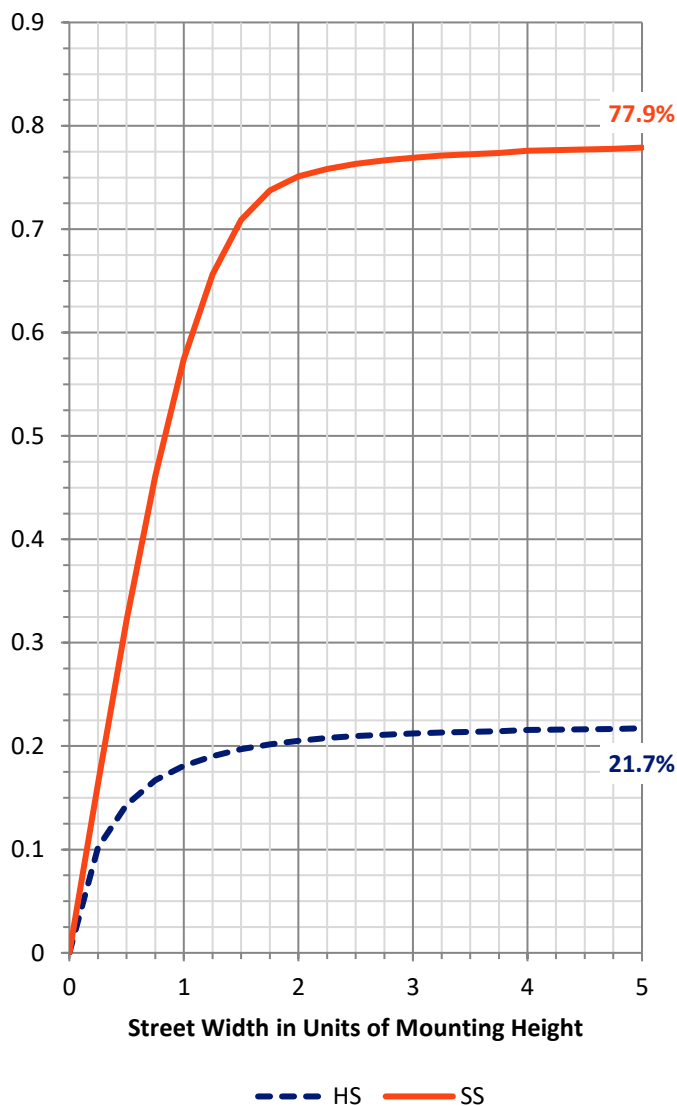
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5952.2	0.0	5952.2
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	21096.5	0.0	21096.5
	% Fixture	78.0	0.0	78.0
Total	Lumens	27048.7	0.0	27048.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.9	1.8
10°-20°	1288.6	4.8
20°-30°	2079.3	7.7
30°-40°	3120.7	11.5
40°-50°	4426.9	16.4
50°-60°	5590.6	20.7
60°-70°	5678.0	21.0
70°-80°	3869.8	14.3
80°-90°	502.1	1.9
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°	27048.7	100.0
0°-180°	27048.7	100.0

Coefficient of Utilization



REPORT NUMBER: P965208

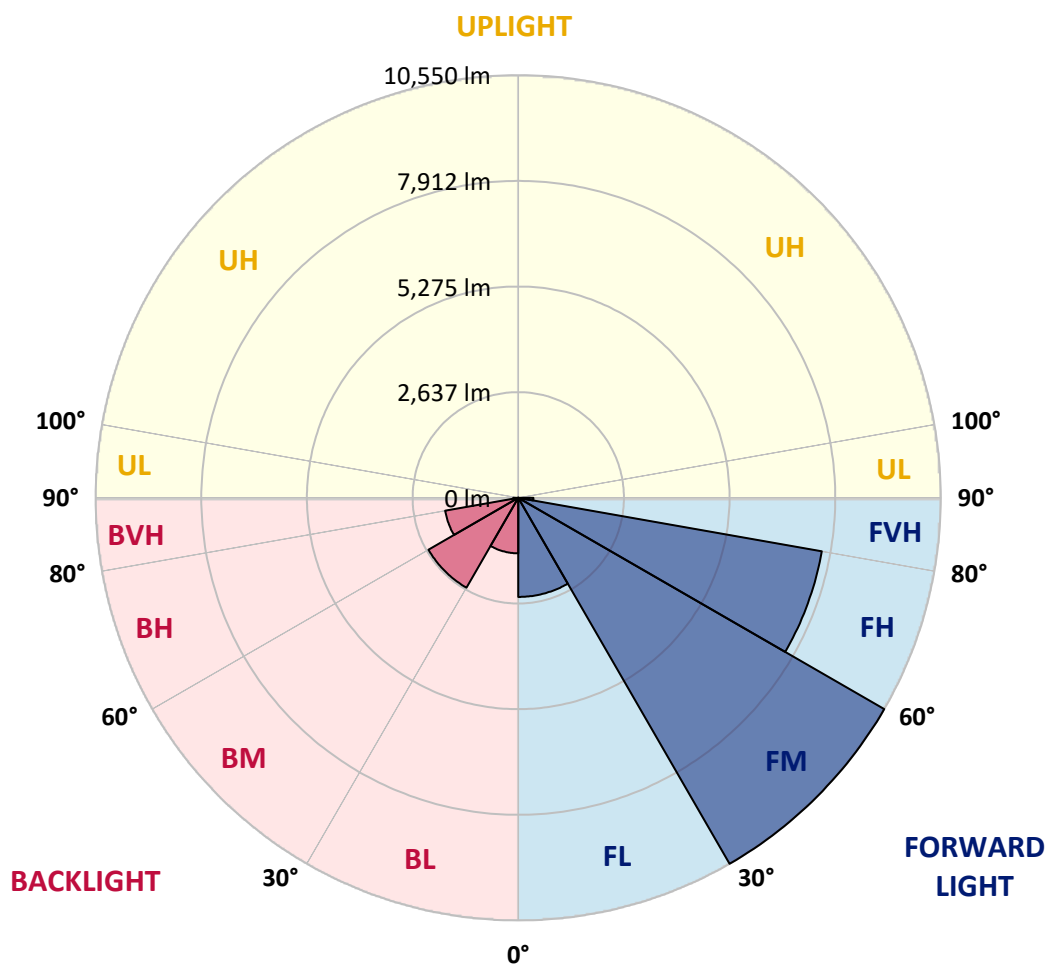
CATALOG NUMBER: NAV-SB3D-827-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2474.3	9.1			
FM	(30°-60°)	10549.6	39.0			
FH	(60°-80°)	7694.5	28.4			G4/12000
FVH	(80°-90°)	378.2	1.4			G3/500
BL	(0°-30°)	1386.4	5.1	B3/2500		
BM	(30°-60°)	2588.6	9.6	B3/5000		
BH	(60°-80°)	1853.3	6.9	B3/2500		G3/2500
BVH	(80°-90°)	123.9	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



REPORT NUMBER: P965208

CATALOG NUMBER: NAV-SB3D-827-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7
2.5°	5432.6	5406.9	5422.7	5416.9	5424.1	5432.6	5435.5	5439.8	5454.1	5452.7	5451.3
5°	5421.2	5395.4	5416.9	5409.7	5428.3	5448.4	5465.5	5481.3	5504.1	5514.2	5499.8
7.5°	5396.8	5379.7	5401.1	5422.7	5457.0	5487.0	5511.3	5547.1	5580.0	5585.7	5595.8
10°	5255.2	5242.4	5292.4	5348.2	5442.6	5524.2	5577.1	5618.6	5654.4	5660.2	5674.4
12.5°	5107.9	5092.1	5148.0	5223.7	5376.8	5524.2	5635.8	5690.2	5721.7	5740.2	5761.7
15°	5083.5	5070.7	5102.1	5167.9	5295.3	5485.6	5675.8	5776.0	5803.2	5824.7	5833.3
17.5°	5200.8	5176.6	5189.4	5212.3	5286.7	5449.8	5707.3	5873.4	5914.8	5937.7	5937.7
20°	5472.7	5438.3	5418.4	5372.5	5359.6	5455.6	5704.4	5990.6	6045.0	6073.6	6080.8
22.5°	5834.7	5811.7	5768.9	5653.0	5527.1	5525.7	5758.9	6140.9	6242.5	6269.6	6252.5
25°	6272.5	6238.2	6183.8	6026.4	5784.6	5664.5	5850.4	6332.6	6502.8	6510.0	6460.0
27.5°	6776.2	6724.6	6650.2	6442.7	6116.6	5881.9	5990.6	6552.9	6801.9	6799.0	6696.0
30°	7306.9	7255.5	7176.7	6924.9	6514.3	6175.2	6185.3	6790.4	7156.8	7141.0	6965.0
32.5°	7694.7	7656.0	7640.4	7445.7	6972.2	6521.5	6408.4	7053.7	7594.5	7580.2	7334.1
35°	7992.3	7942.2	7960.8	7862.1	7471.5	6909.2	6681.7	7367.1	8126.8	8125.4	7819.1
37.5°	8287.0	8242.6	8258.4	8192.6	7933.6	7401.4	7015.1	7750.4	8786.4	8817.9	8405.8
40°	8556.0	8508.8	8571.8	8510.3	8292.8	7925.0	7394.2	8184.0	9550.4	9610.5	9115.4
42.5°	8717.7	8680.5	8785.0	8786.4	8604.7	8367.2	7810.6	8661.9	10434.6	10569.1	9988.2
45°	8773.5	8760.6	8918.0	8950.9	8880.8	8623.2	8185.4	9182.7	11387.5	11627.9	10982.6
47.5°	8713.4	8689.0	8906.5	9028.2	9084.0	8743.5	8495.9	9746.4	12360.5	12712.4	12067.1
50°	8410.0	8362.9	8686.2	8942.3	9141.2	8822.2	8809.3	10397.4	13466.4	13851.3	13157.4
52.5°	7864.9	7829.2	8196.9	8641.9	9015.3	8860.7	9161.2	11108.5	14516.6	15014.5	14274.8
55°	7168.1	7121.0	7525.9	8106.7	8701.9	8847.9	9513.2	11904.0	15755.7	16260.7	15429.4
57.5°	6063.6	5969.2	6481.4	7168.1	8191.2	8832.1	9879.5	12695.2	17014.7	17620.0	16661.3
60°	4452.6	4312.4	4940.5	5754.6	7192.5	8679.1	10333.0	13582.3	18525.6	19070.7	18006.3
62.5°	2592.5	2511.0	2921.7	3681.4	5421.2	7777.7	10587.7	14613.9	20010.8	20583.0	19328.3
65°	2013.1	1990.2	2026.0	2084.6	3017.5	5823.2	9802.2	15619.8	21899.3	22300.0	20706.1
67.5°	1841.4	1824.2	1840.0	1729.8	1530.9	3243.5	7754.7	15874.4	23922.5	24165.7	21912.2
70°	1636.8	1616.7	1668.3	1573.9	1204.7	1475.1	5010.5	14950.1	25532.1	25988.6	22829.4
72.5°	1333.5	1310.6	1430.8	1387.8	1014.4	947.2	2516.7	12753.9	25363.3	26310.4	22172.7
75°	1024.4	1011.6	1154.7	1190.4	827.0	745.5	1207.6	9480.3	22320.0	23274.4	19109.4
77.5°	795.5	785.5	858.4	988.6	666.8	578.0	742.6	6013.6	16820.1	16987.5	13168.8
80°	596.7	568.1	635.3	765.5	519.4	422.1	503.6	3506.8	10632.0	9637.7	5731.7
82.5°	373.4	359.2	414.9	510.8	366.2	290.5	327.7	1937.2	4260.8	2509.6	1106.0
85°	213.2	207.5	226.0	291.9	198.8	167.4	187.5	855.6	778.4	535.2	333.3
87.5°	85.9	83.0	103.0	130.2	73.0	61.5	65.8	206.0	171.7	158.8	110.2
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: P965208

CATALOG NUMBER: NAV-SB3D-827-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7	5429.7
2.5°	5445.5	5445.5	5425.5	5394.0	5358.2	5335.3	5298.1	5288.1	5249.5	5238.1	5256.6
5°	5511.3	5499.8	5438.3	5349.7	5228.0	5116.4	4993.4	4916.1	4807.4	4768.7	4797.4
7.5°	5594.3	5562.9	5457.0	5262.3	5007.7	4757.3	4496.9	4299.5	4110.6	4043.3	4051.9
10°	5670.1	5625.8	5445.5	5105.0	4664.3	4230.8	3815.9	3525.4	3305.1	3214.9	3235.0
12.5°	5745.9	5664.5	5369.7	4843.1	4176.5	3588.4	3146.2	2920.2	2784.3	2675.6	2711.3
15°	5817.5	5703.1	5252.4	4492.6	3641.3	3044.7	2718.5	2538.2	2429.5	2357.9	2370.8
17.5°	5900.5	5736.0	5076.4	4047.6	3132.0	2668.4	2402.3	2293.5	2272.0	2263.5	2269.2
20°	6016.3	5766.0	4844.6	3549.8	2757.0	2368.0	2230.6	2220.6	2219.1	2214.8	2229.2
22.5°	6140.9	5801.8	4538.4	3097.7	2438.1	2180.5	2156.2	2136.1	2123.3	2121.9	2137.5
25°	6288.3	5813.2	4154.9	2727.0	2166.2	2091.8	2063.1	2033.1	2024.6	2024.6	2033.1
27.5°	6431.4	5774.5	3708.6	2405.2	2013.1	2010.2	1973.0	1963.0	1961.5	1965.8	1977.3
30°	6574.4	5701.7	3265.0	2107.5	1924.4	1924.4	1911.5	1918.7	1924.4	1938.7	1948.7
32.5°	6767.6	5624.4	2894.5	1887.2	1847.2	1832.8	1845.7	1860.0	1865.7	1884.4	1900.0
35°	7050.9	5570.0	2599.7	1767.0	1767.0	1748.4	1755.5	1752.6	1739.8	1731.2	1751.2
37.5°	7425.7	5567.1	2356.5	1711.2	1699.8	1696.9	1698.3	1679.8	1629.6	1569.6	1571.0
40°	7876.4	5644.4	2169.0	1672.6	1664.0	1681.2	1672.6	1622.5	1485.1	1380.7	1377.8
42.5°	8481.6	5864.7	2048.9	1625.3	1651.1	1672.6	1638.3	1465.1	1372.1	1302.0	1299.2
45°	9194.1	6222.5	1987.4	1575.3	1626.8	1652.5	1486.6	1410.7	1336.3	1251.9	1246.2
47.5°	10001.1	6673.2	1973.0	1528.1	1572.5	1588.1	1422.2	1387.8	1303.4	1211.9	1204.7
50°	10879.6	7206.8	2011.7	1472.3	1493.7	1439.3	1400.8	1369.3	1282.0	1191.9	1181.8
52.5°	11788.1	7794.8	2089.0	1396.5	1415.0	1354.9	1392.2	1365.0	1269.1	1147.5	1138.9
55°	12680.9	8387.2	2163.4	1307.7	1335.0	1279.1	1367.9	1347.8	1210.4	1073.1	1065.9
57.5°	13588.0	8976.6	2236.3	1229.1	1257.7	1206.1	1329.2	1302.0	1144.6	1004.4	1001.5
60°	14530.9	9549.0	2270.7	1153.2	1173.2	1138.9	1270.5	1223.3	1070.2	934.3	930.0
62.5°	15413.6	10025.4	2214.8	1077.4	1090.3	1075.9	1193.3	1130.3	995.8	855.6	854.1
65°	16299.3	10308.7	2043.1	1003.0	1005.8	998.7	1084.6	1030.1	908.6	786.9	778.4
67.5°	17102.0	10467.5	1769.9	922.8	915.7	912.9	983.0	921.4	824.1	718.2	709.7
70°	17272.3	10064.1	1352.1	828.4	828.4	821.2	871.4	808.4	731.1	645.2	642.4
72.5°	15775.7	8465.9	960.0	721.1	732.6	718.2	759.7	706.8	636.7	579.4	562.3
75°	12721.0	6208.1	698.2	610.9	631.0	606.7	645.2	608.0	548.0	546.5	492.2
77.5°	8740.6	3838.7	506.5	503.6	517.9	486.5	530.8	510.8	456.4	432.1	404.9
80°	3730.0	1530.9	369.1	389.2	389.2	360.6	412.0	417.8	370.5	359.2	359.2
82.5°	742.6	434.9	259.0	267.5	251.8	243.2	291.9	323.4	446.4	496.5	497.9
85°	223.2	160.2	156.0	146.0	128.7	130.2	171.7	324.8	400.6	228.9	197.4
87.5°	61.5	40.1	41.5	32.9	27.2	35.8	58.6	246.1	134.5	57.2	48.7
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)