

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: P965750

Luminaire Tested: **NAV-SB4A-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965750
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

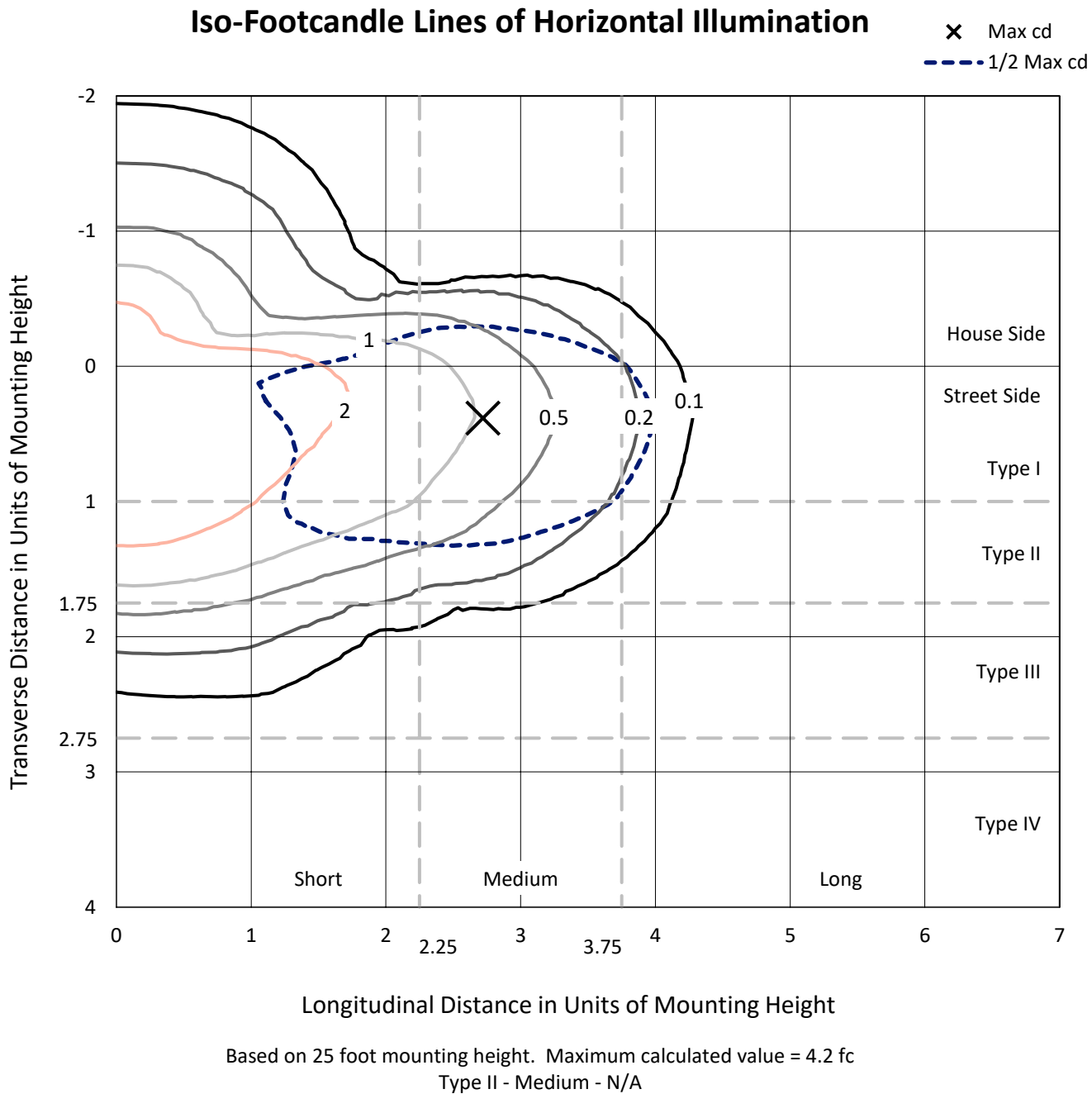
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15877.2 lumens
Efficiency: N/A
Efficacy: 139.3 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): 114
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

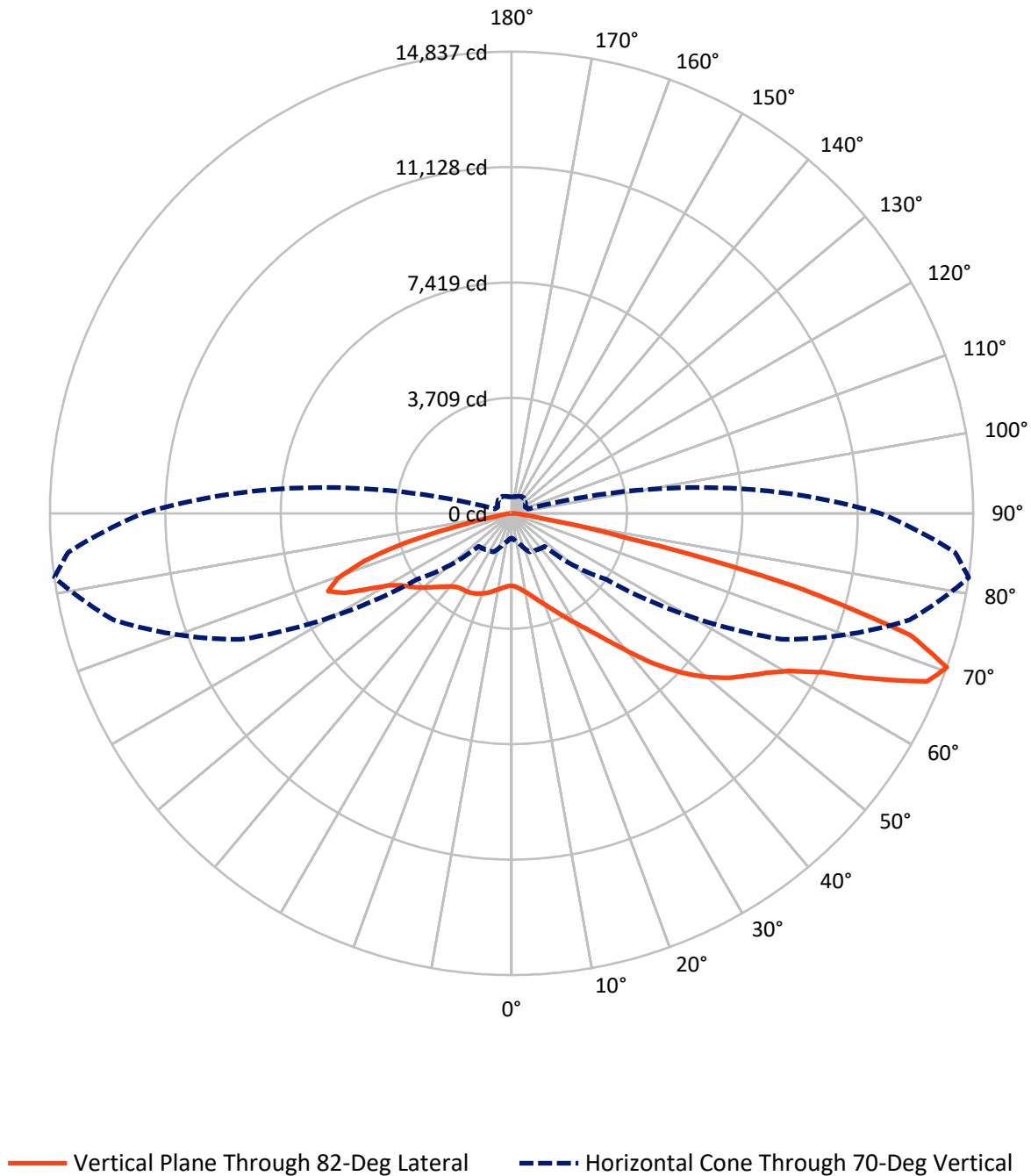


REPORT NUMBER: P965750
CATALOG NUMBER: NAV-SB4A-827-U-T2



REPORT NUMBER: P965750
CATALOG NUMBER: NAV-SB4A-827-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P965750

CATALOG NUMBER: NAV-SB4A-827-U-T2

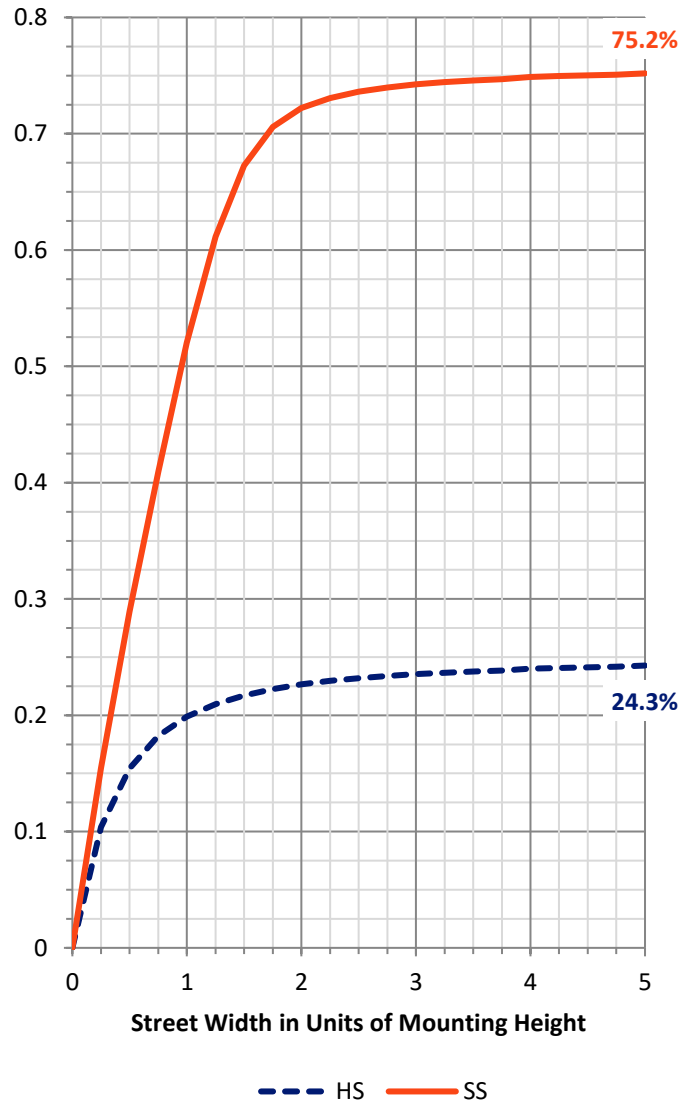
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3914.1	0.0	3914.1
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	11963.1	0.0	11963.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	15877.2	0.0	15877.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.8	1.4
10°-20°	631.5	4.0
20°-30°	1056.4	6.7
30°-40°	1650.3	10.4
40°-50°	2628.3	16.6
50°-60°	3657.6	23.0
60°-70°	3826.0	24.1
70°-80°	1999.7	12.6
80°-90°	207.6	1.3
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°	15877.2	100.0
0°-180°	15877.2	100.0

Coefficient of Utilization



REPORT NUMBER: P965750

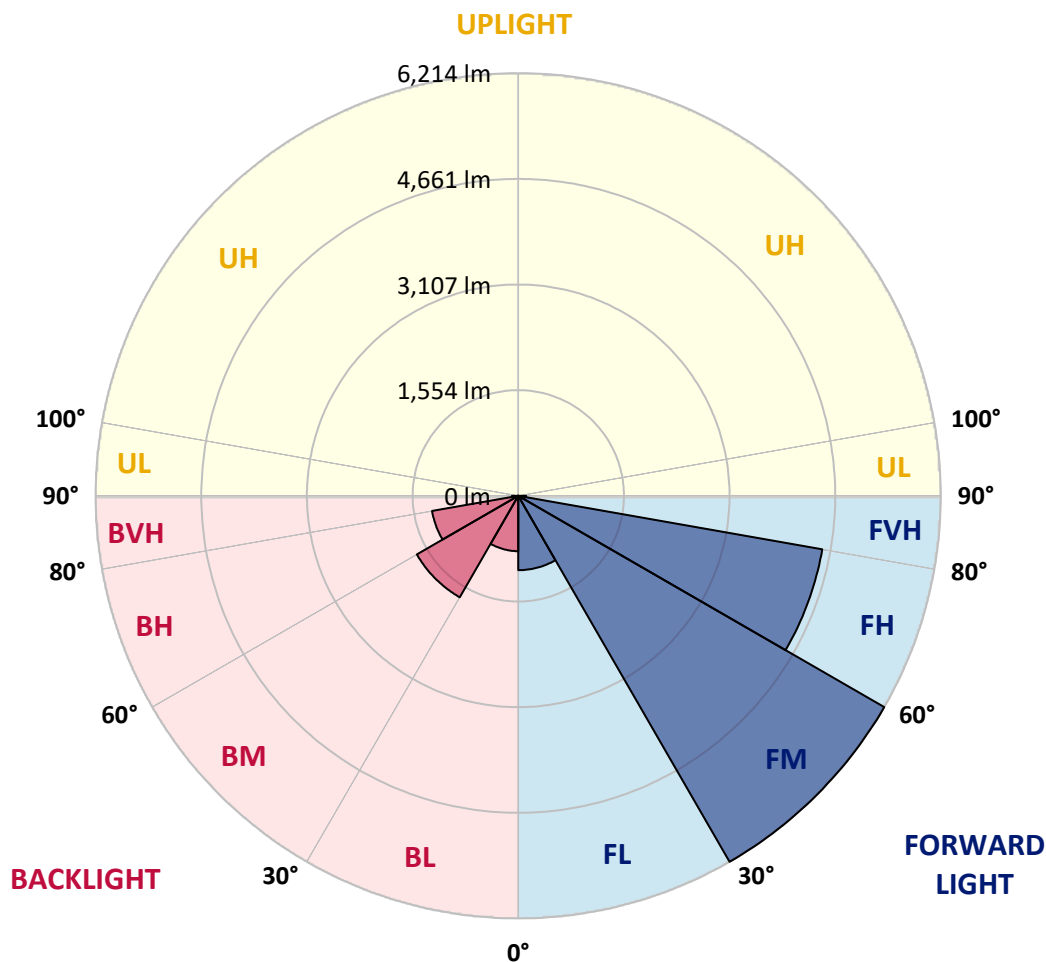
CATALOG NUMBER: NAV-SB4A-827-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1093.3	6.9			
FM	(30°-60°)	6214.2	39.1			
FH	(60°-80°)	4539.4	28.6			G2/5000
FVH	(80°-90°)	116.2	0.7			G2/225
BL	(0°-30°)	814.3	5.1	B2/1000		
BM	(30°-60°)	1722.1	10.8	B2/2500		
BH	(60°-80°)	1286.4	8.1	B3/2500		G3/2500
BVH	(80°-90°)	91.4	0.6			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: P965750

CATALOG NUMBER: NAV-SB4A-827-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8
2.5°	2383.4	2396.9	2392.7	2388.5	2388.5	2382.6	2381.7	2373.3	2366.5	2355.7	2353.1
5°	2413.8	2428.0	2426.4	2429.8	2440.7	2443.2	2445.8	2440.7	2427.2	2413.8	2407.8
7.5°	2386.8	2402.8	2407.8	2428.0	2461.7	2492.1	2514.8	2524.1	2511.5	2492.1	2482.9
10°	2295.8	2313.5	2331.2	2379.2	2439.0	2510.6	2571.3	2607.5	2604.9	2586.5	2570.4
12.5°	2111.3	2129.8	2167.8	2261.3	2370.7	2497.1	2610.1	2685.9	2711.9	2698.5	2670.7
15°	1963.8	1979.9	2008.5	2104.5	2246.9	2439.0	2624.4	2771.8	2838.3	2830.7	2797.0
17.5°	1959.6	1966.4	1984.1	2029.6	2139.1	2348.1	2609.2	2856.1	2983.3	2982.4	2940.3
20°	2033.8	2036.3	2046.4	2055.6	2118.1	2279.0	2570.4	2926.0	3145.8	3145.8	3100.3
22.5°	2136.5	2134.9	2145.0	2136.5	2166.8	2273.0	2546.0	2987.5	3327.0	3340.5	3283.2
25°	2290.8	2282.3	2279.8	2260.4	2266.3	2327.8	2573.0	3057.4	3541.8	3569.7	3498.0
27.5°	2496.3	2482.9	2473.5	2428.9	2413.8	2440.7	2655.6	3141.6	3781.1	3829.1	3738.2
30°	2764.2	2739.8	2726.3	2648.8	2594.1	2598.3	2780.2	3253.7	4031.3	4108.8	3993.4
32.5°	3129.8	3091.9	3055.7	2928.5	2828.3	2795.4	2941.1	3408.7	4302.6	4426.5	4278.1
35°	3539.3	3509.0	3470.2	3274.0	3119.8	3043.9	3158.5	3625.2	4620.2	4816.5	4623.6
37.5°	3933.6	3907.5	3926.1	3661.5	3462.7	3352.3	3443.3	3915.9	5011.9	5301.8	5056.6
40°	4341.4	4321.1	4323.7	4070.9	3839.2	3715.4	3788.7	4280.7	5461.0	5878.9	5577.3
42.5°	4784.5	4769.3	4718.8	4494.7	4234.4	4119.0	4186.3	4702.0	5943.0	6536.0	6148.5
45°	5280.7	5271.5	5224.3	4967.4	4669.1	4539.3	4630.3	5167.0	6427.4	7154.4	6722.3
47.5°	5709.6	5717.1	5711.2	5494.7	5185.6	4995.1	5103.8	5652.3	6878.1	7735.8	7272.4
50°	5916.0	5955.6	6013.7	5946.3	5754.2	5560.4	5581.5	6120.7	7307.7	8280.9	7799.7
52.5°	5808.2	5883.1	6041.6	6149.4	6223.5	6183.0	6126.6	6585.7	7712.2	8772.9	8298.5
55°	5406.3	5511.5	5774.4	6034.8	6413.0	6707.1	6781.2	7101.4	8106.4	9205.9	8770.3
57.5°	4674.1	4845.2	5081.0	5607.7	6244.5	6960.7	7544.5	7816.6	8524.3	9668.4	9264.1
60°	3418.8	3648.0	3941.1	4724.7	5654.8	6825.1	8194.1	8915.2	9118.3	10267.4	9906.8
62.5°	2188.0	2329.5	2599.1	3337.1	4406.3	6130.0	8392.9	10288.5	10125.1	11249.8	10870.6
65°	1497.9	1589.0	1835.8	2250.3	2848.5	4562.9	7860.4	11318.0	11724.2	12806.8	12518.5
67.5°	1088.4	1157.5	1368.2	1731.3	1856.0	2700.2	6099.7	11270.8	13278.5	14410.8	13962.7
70°	793.7	842.4	1019.5	1368.2	1428.0	1502.1	3695.1	9580.8	13244.8	14837.1	14300.5
72.5°	588.0	621.8	740.6	1061.5	1155.9	1014.3	1829.0	6963.2	11381.2	13420.0	12989.5
75°	425.5	450.7	538.3	812.2	925.1	772.5	912.5	4069.2	7938.8	9440.1	9515.9
77.5°	325.2	344.6	401.9	594.8	740.6	579.6	566.1	1872.1	3764.2	3782.8	3995.1
80°	261.2	273.8	304.9	418.7	567.8	433.9	369.0	755.7	1189.6	1006.8	1056.5
82.5°	192.1	213.2	257.8	294.1	406.1	299.1	225.0	381.6	452.4	389.2	392.6
85°	109.6	123.8	155.9	210.6	259.5	182.9	128.9	169.3	210.6	172.7	154.2
87.5°	38.7	50.5	54.7	82.6	112.9	75.8	49.7	48.9	69.1	51.4	42.9
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: P965750

CATALOG NUMBER: NAV-SB4A-827-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8
2.5°	2344.7	2340.5	2323.6	2300.8	2277.2	2254.5	2246.9	2230.9	2219.9	2214.1	2220.8
5°	2391.8	2378.3	2338.7	2288.2	2235.1	2177.8	2137.4	2100.3	2073.4	2048.1	2058.2
7.5°	2459.3	2435.6	2367.4	2279.0	2184.6	2089.4	2018.6	1964.7	1928.4	1904.9	1909.9
10°	2537.6	2501.3	2396.9	2264.6	2118.9	1982.4	1899.0	1852.7	1829.9	1817.2	1820.6
12.5°	2627.7	2576.3	2427.2	2231.7	2018.6	1862.7	1805.4	1792.0	1792.8	1793.6	1795.4
15°	2738.9	2667.4	2451.7	2160.2	1888.0	1770.9	1760.8	1782.7	1805.4	1816.4	1815.6
17.5°	2864.5	2763.4	2455.9	2042.2	1759.9	1712.0	1743.9	1791.2	1825.6	1840.8	1844.2
20°	2999.3	2861.1	2425.6	1875.3	1654.7	1663.9	1721.2	1781.9	1819.8	1839.2	1844.2
22.5°	3153.4	2965.5	2353.1	1700.2	1568.8	1611.7	1679.1	1738.1	1777.7	1797.0	1802.1
25°	3329.5	3082.7	2239.3	1552.7	1494.6	1552.7	1620.1	1669.0	1701.0	1718.7	1723.7
27.5°	3525.0	3204.9	2087.7	1435.6	1429.7	1492.1	1547.6	1585.6	1602.4	1615.9	1620.9
30°	3721.3	3316.1	1904.0	1347.2	1373.3	1432.2	1471.8	1488.7	1493.7	1496.3	1502.1
32.5°	3933.6	3412.1	1711.1	1273.9	1319.4	1374.1	1397.7	1405.3	1381.7	1365.7	1370.7
35°	4190.5	3514.8	1522.4	1215.8	1266.3	1313.4	1321.0	1314.3	1286.5	1253.7	1255.3
37.5°	4508.2	3643.0	1371.6	1174.4	1216.6	1247.7	1238.5	1236.8	1239.3	1200.6	1203.0
40°	4897.4	3809.7	1261.2	1142.5	1176.1	1182.8	1156.7	1171.1	1183.7	1124.7	1126.4
42.5°	5329.6	4011.1	1191.3	1120.5	1142.5	1126.4	1086.0	1102.0	1100.3	1022.7	1021.9
45°	5770.2	4230.2	1166.9	1104.5	1111.2	1079.2	1034.5	1038.8	1003.4	933.5	936.0
47.5°	6208.3	4465.2	1182.0	1091.0	1072.5	1036.3	1001.7	983.2	930.9	878.7	878.7
50°	6638.0	4712.0	1237.6	1064.1	1019.5	998.4	973.0	940.2	884.6	840.0	836.6
52.5°	7036.5	4960.6	1300.0	1019.5	952.8	965.4	949.5	911.5	856.8	811.3	812.2
55°	7413.9	5209.2	1324.4	957.9	890.5	936.8	927.6	857.6	791.9	754.9	751.5
57.5°	7825.1	5508.2	1297.4	879.6	840.0	903.9	868.6	791.1	753.2	725.4	722.8
60°	8394.5	5977.5	1239.3	782.7	791.9	855.2	794.5	762.5	721.2	690.0	688.3
62.5°	9340.7	6852.8	1145.7	686.6	735.5	782.7	759.1	727.0	684.9	654.6	654.6
65°	10739.2	8069.4	969.8	611.6	672.3	711.9	721.2	689.1	645.3	613.4	615.0
67.5°	11918.7	8832.6	733.8	549.3	607.4	654.6	680.7	649.5	603.2	572.1	572.9
70°	11853.8	8278.3	560.3	487.8	550.1	598.2	631.9	607.4	557.7	528.3	530.7
72.5°	10528.6	6925.3	453.3	425.5	492.0	539.2	579.6	561.1	510.6	482.0	482.0
75°	7735.0	4915.9	362.2	362.2	419.5	477.6	522.3	510.6	464.2	444.0	438.1
77.5°	3260.4	2062.4	283.9	300.7	348.8	410.3	465.9	470.1	429.7	454.9	412.9
80°	866.9	568.7	216.5	236.8	273.8	338.7	405.3	403.5	359.8	336.2	312.5
82.5°	330.3	224.1	154.2	166.8	198.0	259.5	321.0	331.1	287.3	248.6	248.6
85°	127.2	96.0	95.2	100.2	115.4	171.9	242.6	251.0	216.5	183.7	189.5
87.5°	32.9	28.6	35.4	33.7	53.1	91.8	139.0	144.1	132.2	76.7	109.6
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)