

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: P964169

Luminaire Tested: **NAV-SB3B-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964169
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-SB3B-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14920.9 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

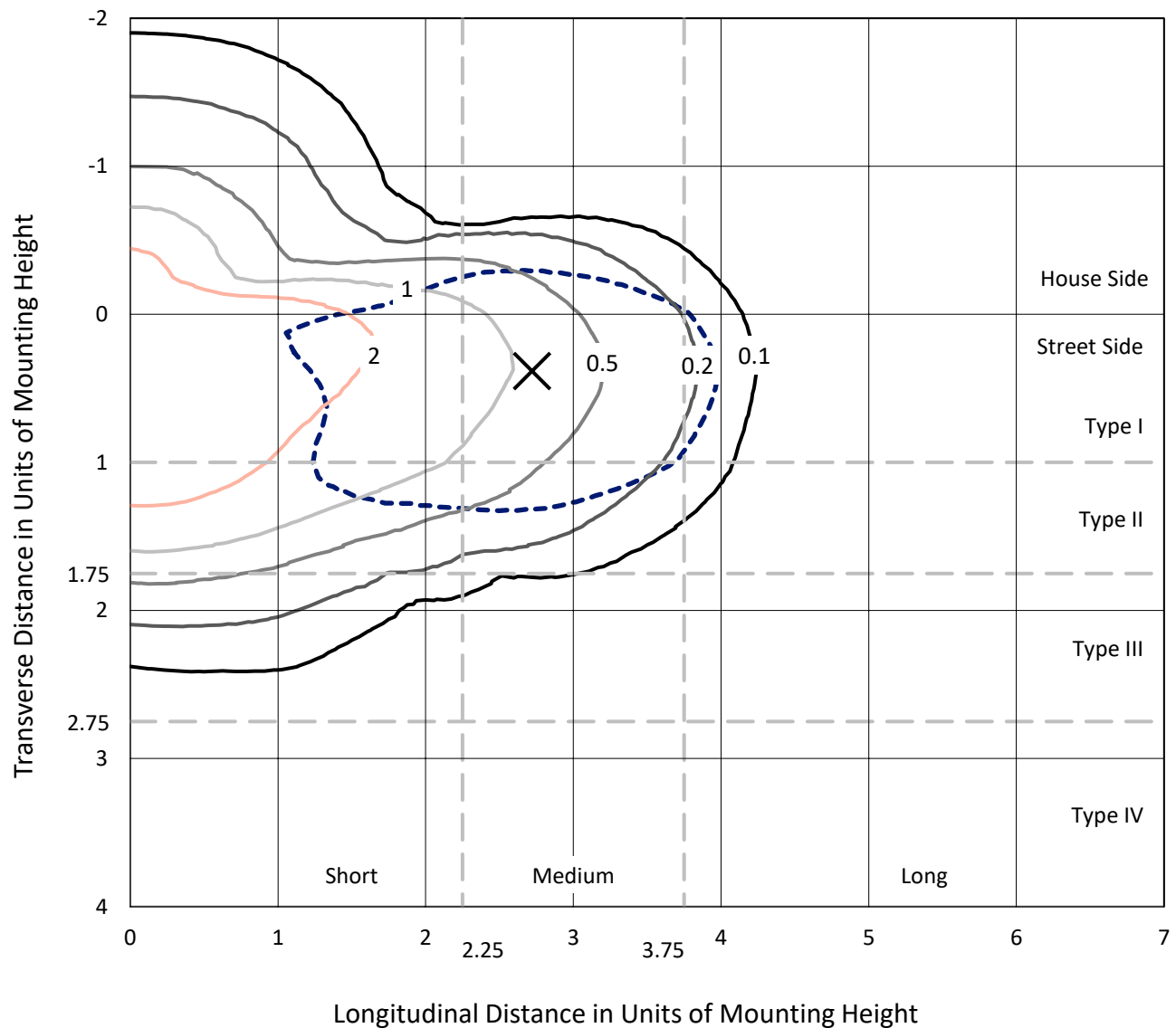
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P964169
CATALOG NUMBER: NAV-SB3B-827-U-T2

Iso-Footcandle Lines of Horizontal Illumination

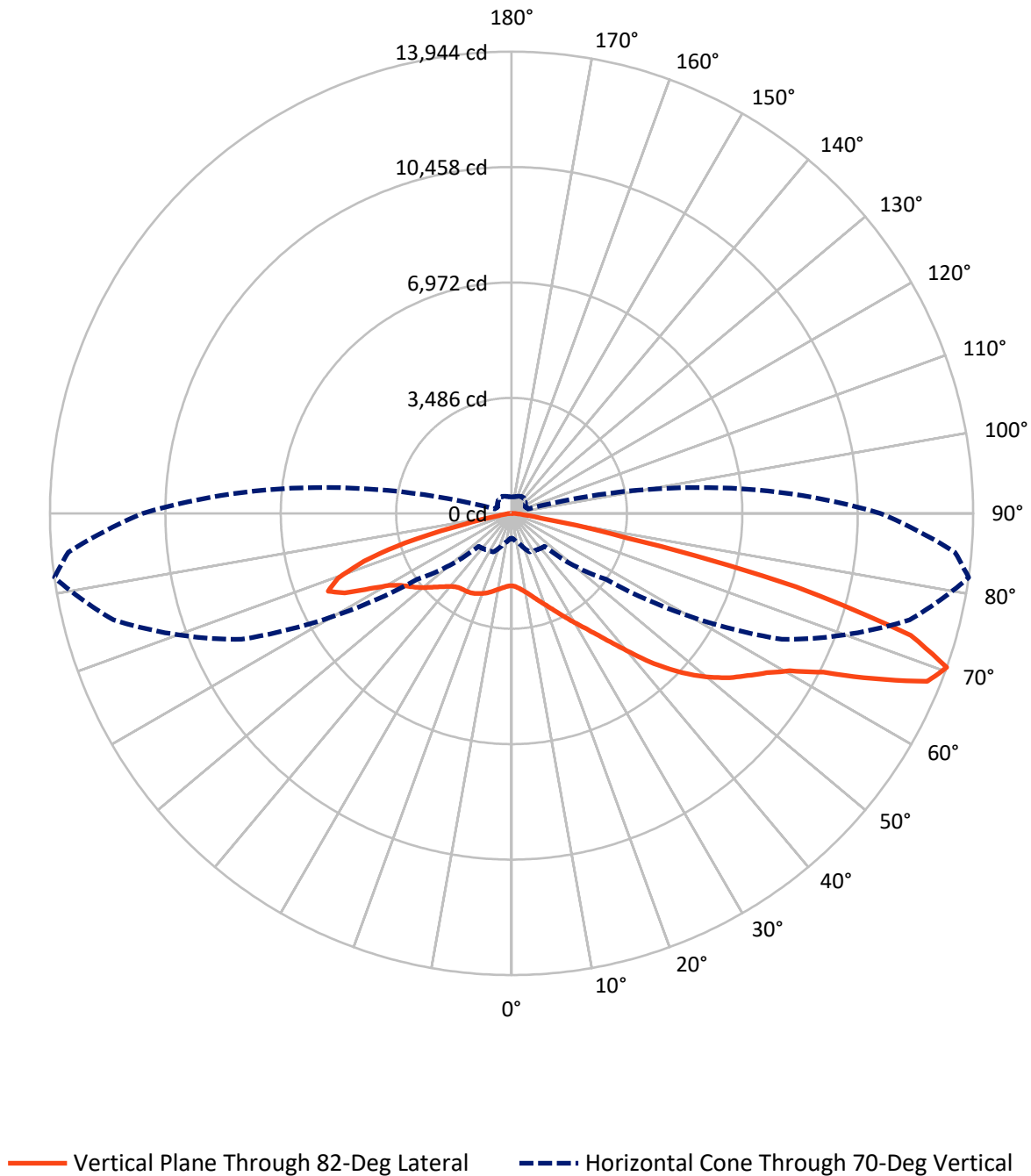
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type II - Medium - N/A

REPORT NUMBER: P964169
CATALOG NUMBER: NAV-SB3B-827-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P964169

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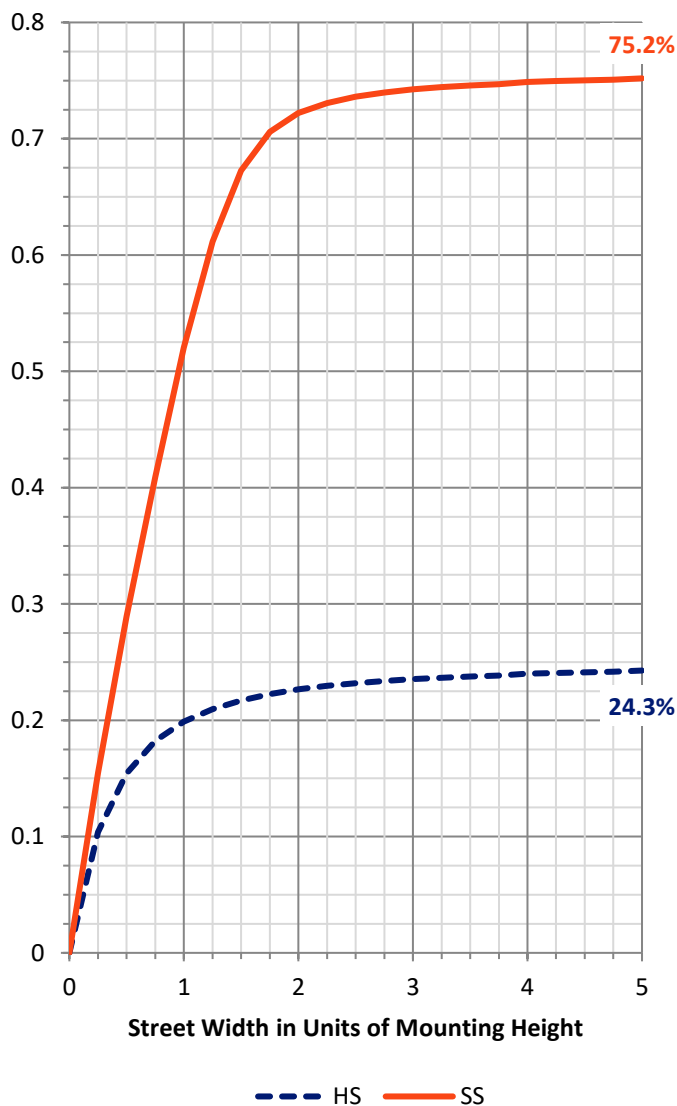
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3678.4	0.0	3678.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	11242.5	0.0	11242.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	14920.9	0.0	14920.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.5	1.4
10°-20°	593.4	4.0
20°-30°	992.7	6.7
30°-40°	1550.9	10.4
40°-50°	2470.0	16.6
50°-60°	3437.3	23.0
60°-70°	3595.6	24.1
70°-80°	1879.3	12.6
80°-90°	195.1	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°	14920.9	100.0
0°-180°	14920.9	100.0

Coefficient of Utilization



REPORT NUMBER: P964169

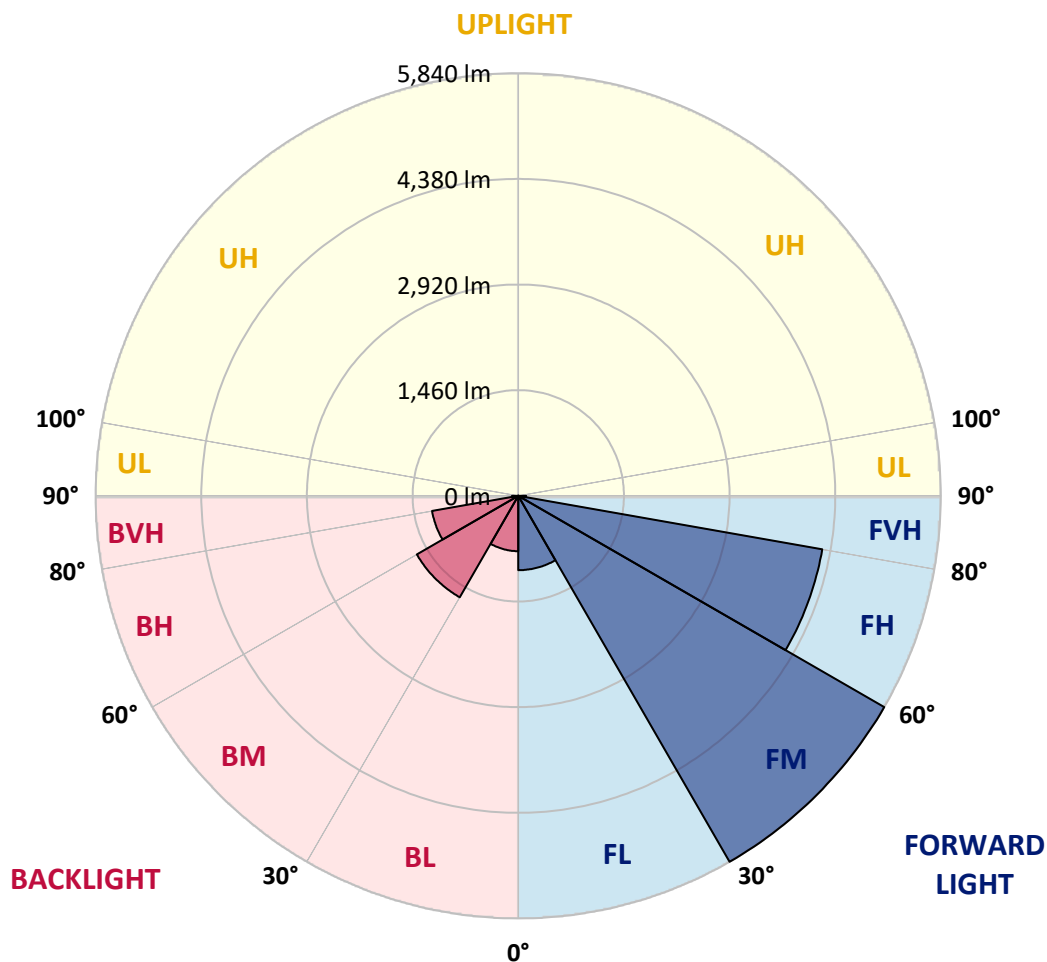
CATALOG NUMBER: NAV-SB3B-827-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1027.5	6.9			
FM	(30°-60°)	5839.9	39.1			
FH	(60°-80°)	4265.9	28.6			G2/5000
FVH	(80°-90°)	109.2	0.7			G2/225
BL	(0°-30°)	765.2	5.1	B2/1000		
BM	(30°-60°)	1618.3	10.8	B2/2500		
BH	(60°-80°)	1208.9	8.1	B3/2500		G3/2500
BVH	(80°-90°)	85.9	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: P964169

CATALOG NUMBER: NAV-SB3B-827-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6
2.5°	2239.8	2252.5	2248.5	2244.6	2244.6	2239.0	2238.3	2230.3	2224.0	2213.7	2211.3
5°	2268.3	2281.9	2280.2	2283.4	2293.6	2296.1	2298.5	2293.6	2281.0	2268.3	2262.8
7.5°	2243.0	2258.1	2262.8	2281.9	2313.5	2342.0	2363.3	2372.1	2360.2	2342.0	2333.3
10°	2157.5	2174.1	2190.7	2235.9	2292.1	2359.4	2416.4	2450.5	2448.1	2430.7	2415.6
12.5°	1984.1	2001.5	2037.2	2125.0	2227.9	2346.7	2452.8	2524.1	2548.7	2536.0	2509.8
15°	1845.5	1860.6	1887.5	1977.7	2111.6	2292.1	2466.3	2604.8	2667.4	2660.3	2628.6
17.5°	1841.6	1848.0	1864.6	1907.3	2010.2	2206.6	2452.0	2684.1	2803.6	2802.8	2763.2
20°	1911.3	1913.7	1923.1	1931.8	1990.4	2141.6	2415.6	2749.8	2956.4	2956.4	2913.7
22.5°	2007.9	2006.3	2015.8	2007.9	2036.4	2136.1	2392.7	2807.6	3126.6	3139.3	3085.5
25°	2152.8	2144.8	2142.5	2124.2	2129.8	2187.6	2418.0	2873.3	3328.5	3354.6	3287.4
27.5°	2345.9	2333.3	2324.6	2282.6	2268.3	2293.6	2495.6	2952.4	3553.4	3598.5	3513.0
30°	2597.8	2574.8	2562.1	2489.2	2437.8	2441.8	2612.7	3057.7	3788.5	3861.4	3752.8
32.5°	2941.3	2905.7	2871.6	2752.1	2657.9	2627.0	2764.0	3203.4	4043.4	4159.9	4020.5
35°	3326.1	3297.6	3261.2	3076.7	2931.8	2860.6	2968.3	3406.9	4341.9	4526.4	4345.1
37.5°	3696.7	3672.2	3689.5	3440.9	3254.1	3150.3	3235.8	3680.1	4710.1	4982.4	4752.1
40°	4079.9	4060.8	4063.2	3825.7	3608.0	3491.6	3560.4	4022.8	5132.1	5524.9	5241.3
42.5°	4496.4	4482.1	4434.6	4223.9	3979.4	3870.8	3934.2	4418.8	5585.0	6142.4	5778.1
45°	4962.6	4953.9	4909.6	4668.2	4387.8	4265.9	4351.4	4855.7	6040.2	6723.5	6317.4
47.5°	5365.7	5372.7	5367.2	5163.7	4873.2	4694.3	4796.4	5311.9	6463.9	7269.8	6834.4
50°	5559.6	5596.8	5651.4	5588.1	5407.6	5225.6	5245.3	5752.0	6867.6	7782.1	7330.0
52.5°	5458.3	5528.7	5677.6	5779.0	5848.6	5810.6	5757.5	6189.1	7247.7	8244.5	7798.7
55°	5080.6	5179.6	5426.7	5671.3	6026.8	6303.1	6372.7	6673.7	7618.2	8651.4	8242.0
57.5°	4392.6	4553.4	4775.1	5269.8	5868.4	6541.4	7090.1	7345.9	8010.9	9086.1	8706.0
60°	3212.9	3428.2	3703.8	4440.1	5314.2	6413.9	7700.5	8378.2	8569.1	9649.0	9310.2
62.5°	2056.1	2189.2	2442.6	3136.1	4140.8	5760.7	7887.4	9668.8	9515.2	10572.2	10215.9
65°	1407.7	1493.2	1725.2	2114.8	2676.9	4288.1	7387.0	10636.3	11017.9	12035.3	11764.5
67.5°	1023.0	1087.8	1285.8	1627.1	1744.2	2537.6	5732.2	10591.9	12478.7	13542.8	13121.6
70°	745.8	791.7	958.0	1285.8	1342.0	1411.7	3472.6	9003.7	12447.1	13943.5	13439.1
72.5°	552.7	584.4	696.0	997.6	1086.3	953.2	1718.9	6543.8	10695.7	12611.7	12207.1
75°	399.9	423.6	505.9	763.2	869.3	726.0	857.4	3824.2	7460.7	8871.5	8942.8
77.5°	305.7	323.8	377.7	558.9	696.0	544.7	532.1	1759.3	3537.5	3554.9	3754.5
80°	245.5	257.3	286.6	393.5	533.6	407.7	346.8	710.2	1118.0	946.2	992.8
82.5°	180.5	200.3	242.3	276.3	381.6	281.1	211.4	358.6	425.2	365.8	369.0
85°	102.9	116.3	146.5	197.9	243.8	171.8	121.2	159.2	197.9	162.3	144.9
87.5°	36.4	47.5	51.5	77.6	106.1	71.2	46.7	45.9	64.9	48.3	40.4
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: P964169

CATALOG NUMBER: NAV-SB3B-827-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6	2187.6
2.5°	2203.4	2199.4	2183.7	2162.2	2140.1	2118.7	2111.6	2096.5	2086.3	2080.8	2087.0
5°	2247.7	2235.1	2197.9	2150.3	2100.5	2046.6	2008.7	1973.8	1948.5	1924.7	1934.3
7.5°	2311.1	2288.9	2224.8	2141.6	2053.0	1963.5	1897.1	1846.3	1812.3	1790.2	1794.9
10°	2384.8	2350.7	2252.5	2128.2	1991.3	1862.9	1784.6	1741.1	1719.6	1707.8	1710.9
12.5°	2469.4	2421.2	2281.0	2097.4	1897.1	1750.6	1696.7	1684.1	1684.8	1685.6	1687.3
15°	2574.0	2506.6	2304.0	2030.0	1774.3	1664.3	1654.8	1675.4	1696.7	1707.0	1706.2
17.5°	2692.0	2596.9	2307.9	1919.2	1653.9	1608.8	1638.9	1683.3	1715.7	1730.0	1733.2
20°	2818.6	2688.8	2279.4	1762.4	1555.0	1563.7	1617.6	1674.5	1710.2	1728.4	1733.2
22.5°	2963.5	2787.0	2211.3	1597.8	1474.3	1514.6	1578.0	1633.3	1670.5	1688.8	1693.5
25°	3129.0	2897.0	2104.4	1459.2	1404.6	1459.2	1522.5	1568.5	1598.5	1615.2	1619.9
27.5°	3312.7	3011.8	1962.0	1349.1	1343.6	1402.2	1454.5	1490.0	1505.9	1518.5	1523.4
30°	3497.1	3116.3	1789.3	1266.0	1290.6	1345.9	1383.1	1399.0	1403.7	1406.1	1411.7
32.5°	3696.7	3206.6	1608.0	1197.1	1239.8	1291.3	1313.5	1320.6	1298.5	1283.4	1288.2
35°	3938.2	3303.2	1430.7	1142.5	1190.0	1234.3	1241.5	1235.1	1209.0	1178.1	1179.7
37.5°	4236.6	3423.5	1288.9	1103.7	1143.3	1172.6	1163.9	1162.2	1164.7	1128.2	1130.6
40°	4602.5	3580.3	1185.2	1073.6	1105.3	1111.6	1087.1	1100.5	1112.4	1057.0	1058.5
42.5°	5008.6	3769.5	1119.5	1053.0	1073.6	1058.5	1020.6	1035.6	1034.0	961.1	960.4
45°	5422.7	3975.4	1096.5	1038.0	1044.3	1014.2	972.3	976.2	943.0	877.3	879.7
47.5°	5834.4	4196.2	1110.8	1025.3	1007.9	973.9	941.4	923.9	874.8	825.7	825.7
50°	6238.2	4428.2	1163.1	1000.0	958.0	938.2	914.5	883.6	831.4	789.4	786.2
52.5°	6612.7	4661.8	1221.7	958.0	895.4	907.3	892.3	856.7	805.2	762.5	763.2
55°	6967.3	4895.4	1244.7	900.3	836.9	880.4	871.8	806.0	744.3	709.4	706.2
57.5°	7353.8	5176.5	1219.3	826.6	789.4	849.5	816.3	743.4	707.9	681.7	679.3
60°	7888.9	5617.4	1164.7	735.5	744.3	803.6	746.6	716.6	677.7	648.4	646.9
62.5°	8778.1	6440.1	1076.8	645.2	691.2	735.5	713.4	683.3	643.7	615.2	615.2
65°	10092.4	7583.4	911.3	574.8	631.8	669.0	677.7	647.7	606.5	576.4	578.0
67.5°	11200.8	8300.7	689.6	516.2	570.8	615.2	639.7	610.4	566.9	537.6	538.4
70°	11139.9	7779.6	526.5	458.4	517.0	562.1	593.8	570.8	524.2	496.4	498.8
72.5°	9894.4	6508.1	426.0	399.9	462.4	506.8	544.7	527.3	479.8	452.8	452.8
75°	7269.0	4619.9	340.4	340.4	394.3	449.0	490.9	479.8	436.2	417.3	411.7
77.5°	3064.0	1938.2	266.8	282.7	327.8	385.6	437.9	441.8	403.7	427.5	388.0
80°	814.7	534.4	203.5	222.5	257.3	318.3	380.8	379.2	338.0	315.9	293.8
82.5°	310.4	210.6	144.9	156.7	186.0	243.8	301.7	311.2	270.0	233.6	233.6
85°	119.5	90.3	89.5	94.2	108.4	161.5	228.1	236.0	203.5	172.6	178.1
87.5°	30.9	27.0	33.2	31.7	49.9	86.3	130.7	135.4	124.3	72.1	102.9
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)