

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: P967859

Luminaire Tested: **NAV-SB5A-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967859
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15839.3 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 141.7
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

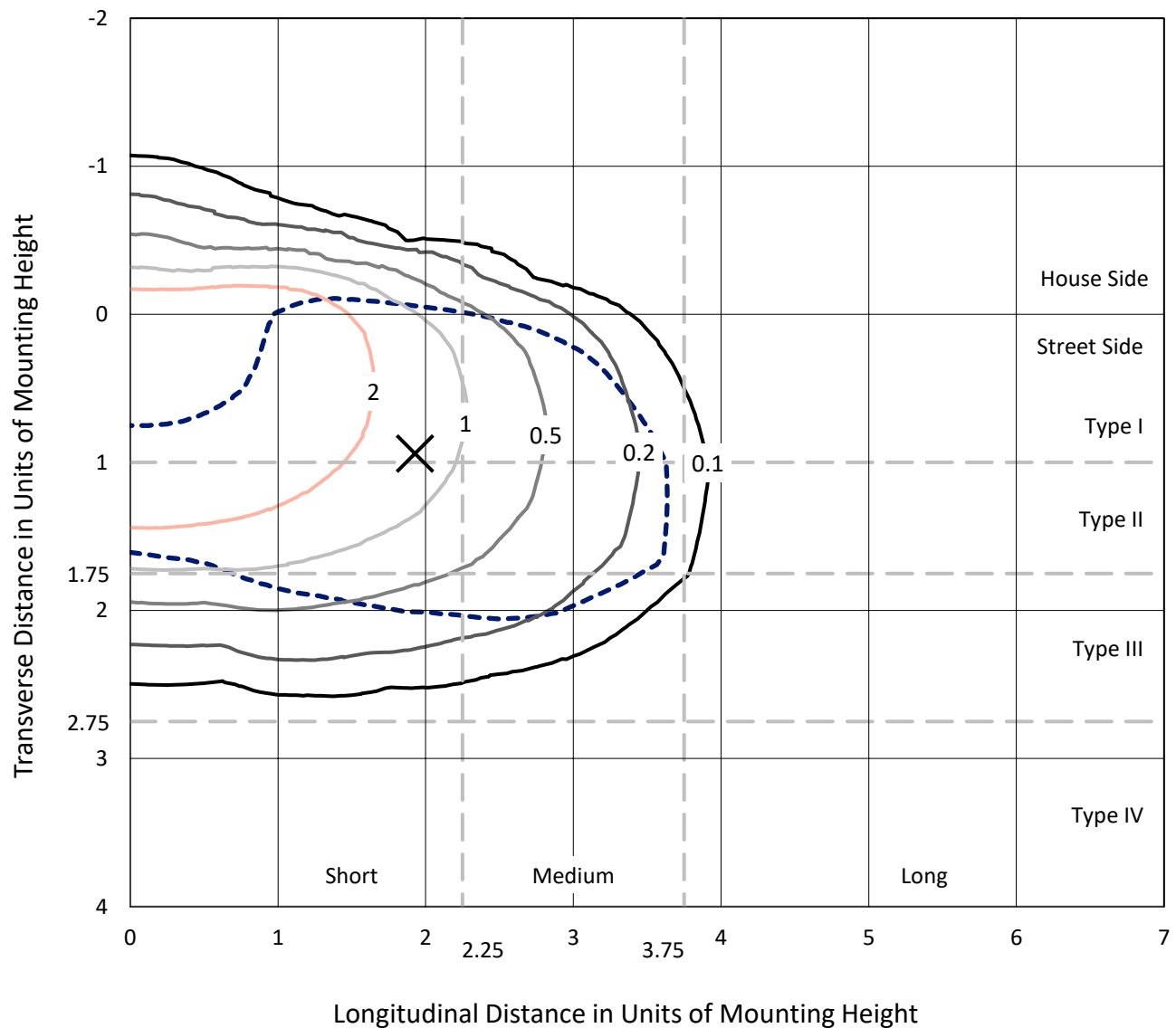


REPORT NUMBER: P967859

CATALOG NUMBER: NAV-SB5A-827-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

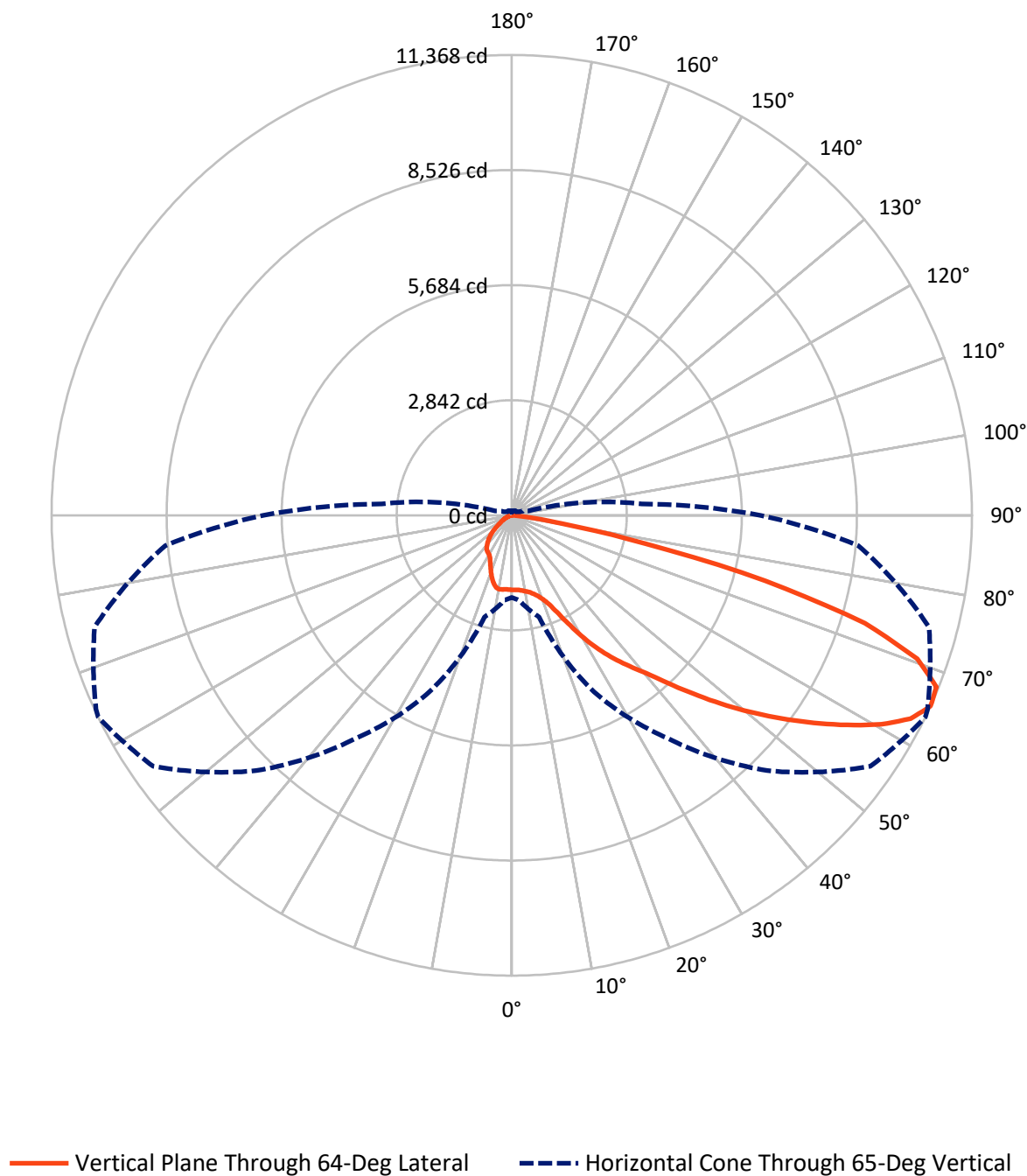


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type III - Short - N/A

REPORT NUMBER: P967859

CATALOG NUMBER: NAV-SB5A-827-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P967859

CATALOG NUMBER: NAV-SB5A-827-U-T3-HSS

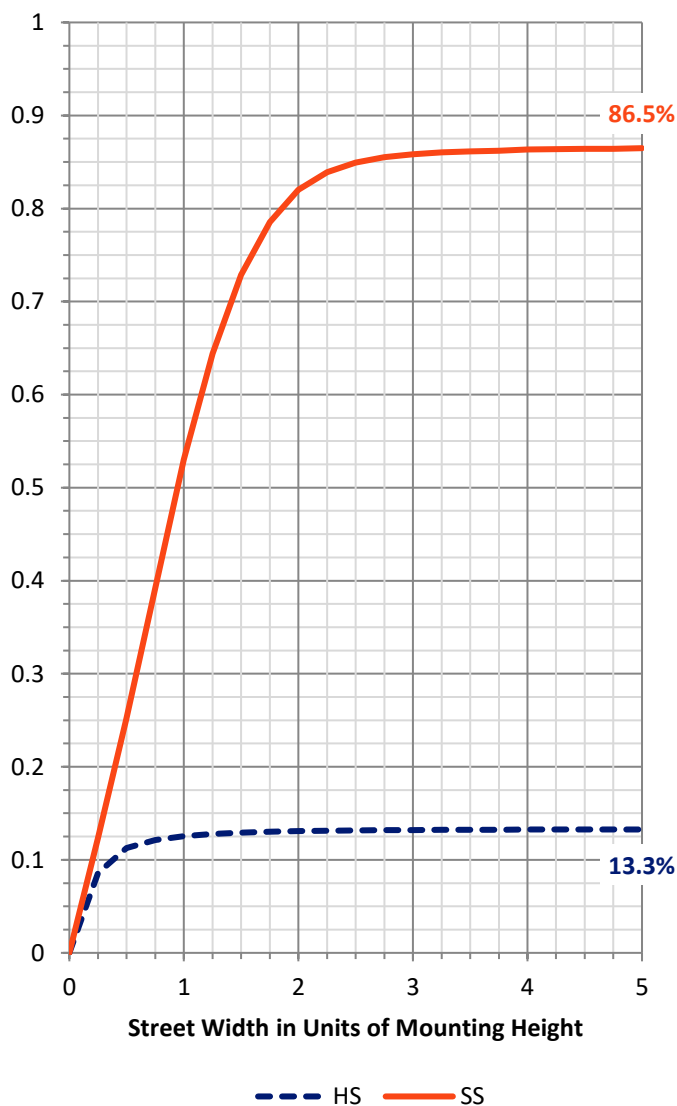
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2118.2	0.0	2118.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	13721.1	0.0	13721.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	15839.3	0.0	15839.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	1.1
10°-20°	461.0	2.9
20°-30°	873.6	5.5
30°-40°	1767.7	11.2
40°-50°	3011.3	19.0
50°-60°	4095.1	25.9
60°-70°	3845.5	24.3
70°-80°	1540.7	9.7
80°-90°	74.6	0.5
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°	15839.3	100.0
0°-180°	15839.3	100.0

Coefficient of Utilization



REPORT NUMBER: P967859

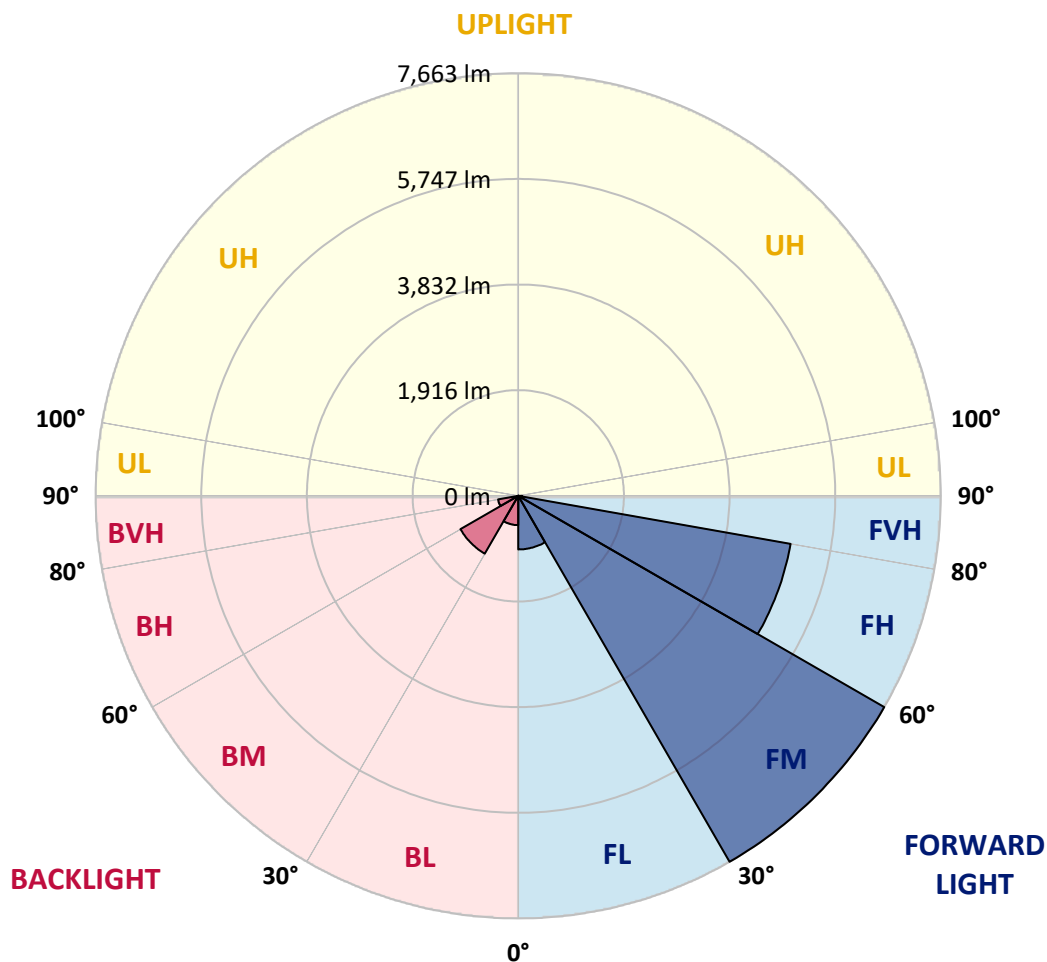
CATALOG NUMBER: NAV-SB5A-827-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	972.7	6.1			
FM	(30°-60°)	7663.0	48.4			
FH	(60°-80°)	5014.4	31.7			G3/7500
FVH	(80°-90°)	71.0	0.4			G1/100
BL	(0°-30°)	531.8	3.4	B2/1000		
BM	(30°-60°)	1211.0	7.6	B2/2500		
BH	(60°-80°)	371.8	2.3	B1/500		G1/500
BVH	(80°-90°)	3.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



REPORT NUMBER: P967859

CATALOG NUMBER: NAV-SB5A-827-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2
2.5°	1835.9	1848.7	1845.5	1842.2	1841.2	1843.4	1844.4	1843.4	1843.4	1843.4	1844.4
5°	1800.8	1811.5	1811.5	1819.0	1829.5	1842.2	1851.9	1853.9	1856.1	1859.2	1858.2
7.5°	1734.0	1742.5	1748.9	1773.2	1799.8	1833.8	1862.4	1877.3	1879.4	1891.1	1895.3
10°	1688.3	1698.9	1709.6	1735.0	1773.2	1824.2	1873.1	1909.2	1914.5	1942.1	1954.9
12.5°	1686.2	1696.8	1710.6	1738.2	1782.8	1837.0	1896.5	1948.4	1958.1	1998.3	2024.9
15°	1708.5	1721.2	1734.0	1767.9	1815.7	1881.6	1945.2	2010.0	2019.6	2077.0	2105.7
17.5°	1754.2	1771.1	1780.7	1814.7	1865.6	1938.9	2022.8	2097.1	2105.7	2172.5	2208.6
20°	1844.4	1864.6	1867.8	1895.3	1945.2	2023.9	2123.7	2216.0	2226.7	2303.1	2343.5
22.5°	2031.2	2059.9	2034.4	2048.3	2092.8	2171.5	2279.7	2396.6	2411.4	2498.5	2534.6
25°	2360.5	2400.8	2335.0	2311.6	2330.7	2412.4	2548.4	2696.0	2713.0	2783.1	2801.1
27.5°	3007.1	2955.1	2855.2	2757.6	2700.3	2747.0	2899.8	3082.5	3103.7	3171.7	3150.4
30°	3717.5	3671.9	3537.0	3320.4	3184.5	3177.0	3318.2	3522.1	3546.5	3611.3	3546.5
32.5°	4428.9	4385.4	4238.8	3972.3	3736.5	3619.8	3717.5	3943.7	3956.4	3997.8	3902.3
35°	5128.7	5084.0	4937.5	4664.7	4374.7	4109.3	4090.2	4345.0	4349.3	4392.8	4250.5
37.5°	5832.7	5795.5	5639.3	5371.8	5086.2	4719.8	4542.5	4725.1	4730.5	4772.9	4625.3
40°	6334.9	6350.8	6243.6	6036.5	5791.2	5390.9	5050.1	5129.7	5097.8	5169.0	5080.8
42.5°	6766.0	6797.8	6704.4	6600.4	6458.0	6105.5	5678.7	5664.9	5613.9	5652.2	5560.8
45°	7138.7	7165.3	7081.3	7056.9	7053.7	6806.3	6365.7	6282.8	6211.7	6204.3	6095.0
47.5°	7275.7	7326.6	7362.8	7444.5	7603.8	7499.7	7076.1	6947.6	6867.9	6809.5	6636.5
50°	7327.7	7381.8	7505.0	7742.8	8119.8	8164.4	7783.2	7638.8	7541.1	7434.9	7180.1
52.5°	7257.6	7354.3	7519.9	7920.2	8467.0	8697.4	8461.8	8335.4	8223.9	8050.8	7672.8
55°	6844.5	6941.2	7280.0	7918.1	8640.1	9071.2	9103.1	9046.9	8921.5	8648.6	8071.0
57.5°	5973.9	6117.2	6653.5	7648.3	8637.0	9393.0	9731.7	9772.0	9631.9	9241.1	8384.2
60°	4767.6	4961.9	5616.1	7050.6	8370.5	9567.1	10282.8	10484.5	10335.9	9825.1	8638.0
62.5°	3326.7	3551.8	4170.8	6114.0	7760.9	9441.8	10685.2	11057.9	10945.4	10347.6	8735.7
65°	2029.2	2101.4	2600.4	4811.1	6724.6	8917.3	10809.4	11368.0	11330.8	10667.2	8591.2
67.5°	1351.7	1412.2	1555.5	3299.1	5219.9	7869.2	10512.1	11313.8	11324.4	10615.1	8062.4
70°	814.5	866.4	959.9	1918.7	3383.0	6228.7	9591.5	10623.6	10685.2	9919.6	7060.1
72.5°	335.6	370.5	455.5	869.6	1752.0	3953.2	7637.8	9121.2	9264.5	8340.7	5418.6
75°	190.0	208.1	267.6	436.4	760.2	1842.2	4626.4	6475.0	6686.4	5748.7	3259.8
77.5°	126.4	134.9	173.1	282.5	427.9	628.6	1977.1	3373.5	3776.9	3139.9	1411.2
80°	85.0	92.4	118.9	189.0	278.2	269.7	629.7	1249.8	1537.5	1078.8	344.0
82.5°	57.3	58.4	85.0	124.2	176.3	130.6	185.8	388.7	488.4	312.2	130.6
85°	32.9	31.9	62.6	72.2	78.6	54.1	56.3	116.8	152.9	131.7	74.3
87.5°	4.2	6.4	24.4	19.1	10.7	11.7	11.7	20.2	29.7	31.9	15.9
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: P967859

CATALOG NUMBER: NAV-SB5A-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2	1842.2
2.5°	1844.4	1843.4	1840.2	1837.0	1829.5	1825.3	1827.4	1825.3	1824.2	1825.3	1829.5
5°	1858.2	1855.0	1846.5	1835.9	1821.0	1803.0	1791.3	1774.3	1758.4	1748.9	1751.0
7.5°	1895.3	1892.2	1880.5	1850.7	1803.0	1727.6	1658.6	1598.1	1552.4	1525.8	1526.9
10°	1954.9	1949.5	1931.5	1865.6	1740.3	1575.7	1438.8	1325.1	1250.8	1215.8	1212.6
12.5°	2024.9	2018.5	1986.7	1851.9	1621.4	1364.5	1175.5	1049.1	980.1	949.3	946.1
15°	2107.7	2099.2	2036.6	1786.0	1448.3	1130.9	957.8	863.3	818.7	791.1	792.1
17.5°	2210.7	2195.9	2073.8	1687.3	1260.4	952.4	824.0	752.9	713.5	687.0	684.9
20°	2344.5	2320.1	2103.5	1569.4	1087.3	839.9	733.7	674.2	644.5	621.2	616.9
22.5°	2531.4	2496.4	2139.6	1442.0	965.2	762.4	666.9	623.3	598.9	572.4	568.1
25°	2762.9	2721.5	2184.2	1324.1	881.3	695.5	618.0	581.9	553.2	522.4	519.3
27.5°	3086.8	3012.4	2237.3	1227.4	809.1	638.2	573.4	533.0	500.1	474.7	469.3
30°	3447.8	3325.6	2284.0	1169.1	743.3	585.1	515.0	474.7	443.8	425.8	422.6
32.5°	3789.6	3624.0	2314.8	1143.6	683.8	524.6	451.3	407.7	384.4	379.0	382.2
35°	4112.5	3893.8	2311.6	1119.2	630.7	464.0	388.7	344.0	326.0	329.1	329.1
37.5°	4484.1	4181.5	2289.3	1081.0	587.2	408.8	334.5	295.2	279.3	280.3	284.5
40°	4916.3	4513.9	2275.5	1008.7	539.5	357.8	289.9	258.0	246.3	242.1	241.1
42.5°	5377.2	4835.5	2277.7	927.0	479.9	312.2	259.1	232.6	221.9	218.7	217.7
45°	5840.0	5142.4	2280.8	842.0	417.3	277.2	236.8	214.5	208.1	203.9	203.9
47.5°	6275.5	5403.7	2221.4	750.7	355.7	250.6	218.7	203.9	198.5	193.2	193.2
50°	6681.1	5577.8	2078.0	644.5	306.9	229.4	204.9	194.3	189.0	183.7	183.7
52.5°	6996.4	5605.4	1841.2	535.2	272.9	213.4	196.4	186.9	180.5	175.2	174.1
55°	7136.6	5432.3	1504.6	433.3	246.3	199.7	188.0	178.4	171.0	165.6	164.6
57.5°	7100.5	5068.1	1173.3	348.3	220.9	185.8	177.3	171.0	162.5	154.0	152.9
60°	6923.2	4580.7	884.5	289.9	197.5	171.0	165.6	160.3	148.6	135.9	133.8
62.5°	6616.3	3968.1	630.7	240.0	172.0	154.0	151.8	147.6	130.6	107.2	105.2
65°	6146.9	3223.7	424.8	199.7	147.6	134.9	135.9	128.4	106.2	79.6	77.5
67.5°	5461.0	2357.3	271.8	163.5	123.2	112.5	113.6	109.4	90.3	68.0	64.8
70°	4587.1	1560.9	177.3	124.2	98.7	87.0	93.5	94.5	76.5	55.2	53.1
72.5°	3362.8	921.7	124.2	92.4	72.2	60.5	76.5	78.6	61.6	41.4	39.3
75°	1916.6	437.5	93.5	66.9	44.6	42.4	59.4	59.4	42.4	27.6	25.5
77.5°	804.8	182.7	65.8	43.6	25.5	24.4	40.4	37.2	21.2	12.7	12.7
80°	232.6	81.8	35.1	21.2	10.7	9.5	15.9	11.7	5.3	2.2	2.2
82.5°	91.3	36.1	13.8	8.5	4.2	4.2	2.2	0.0	0.0	0.0	0.0
85°	54.1	14.9	6.4	3.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.8	3.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)