

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: P966785

Luminaire Tested: **NAV-SB4C-827-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966785
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22809.3 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 200.7
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



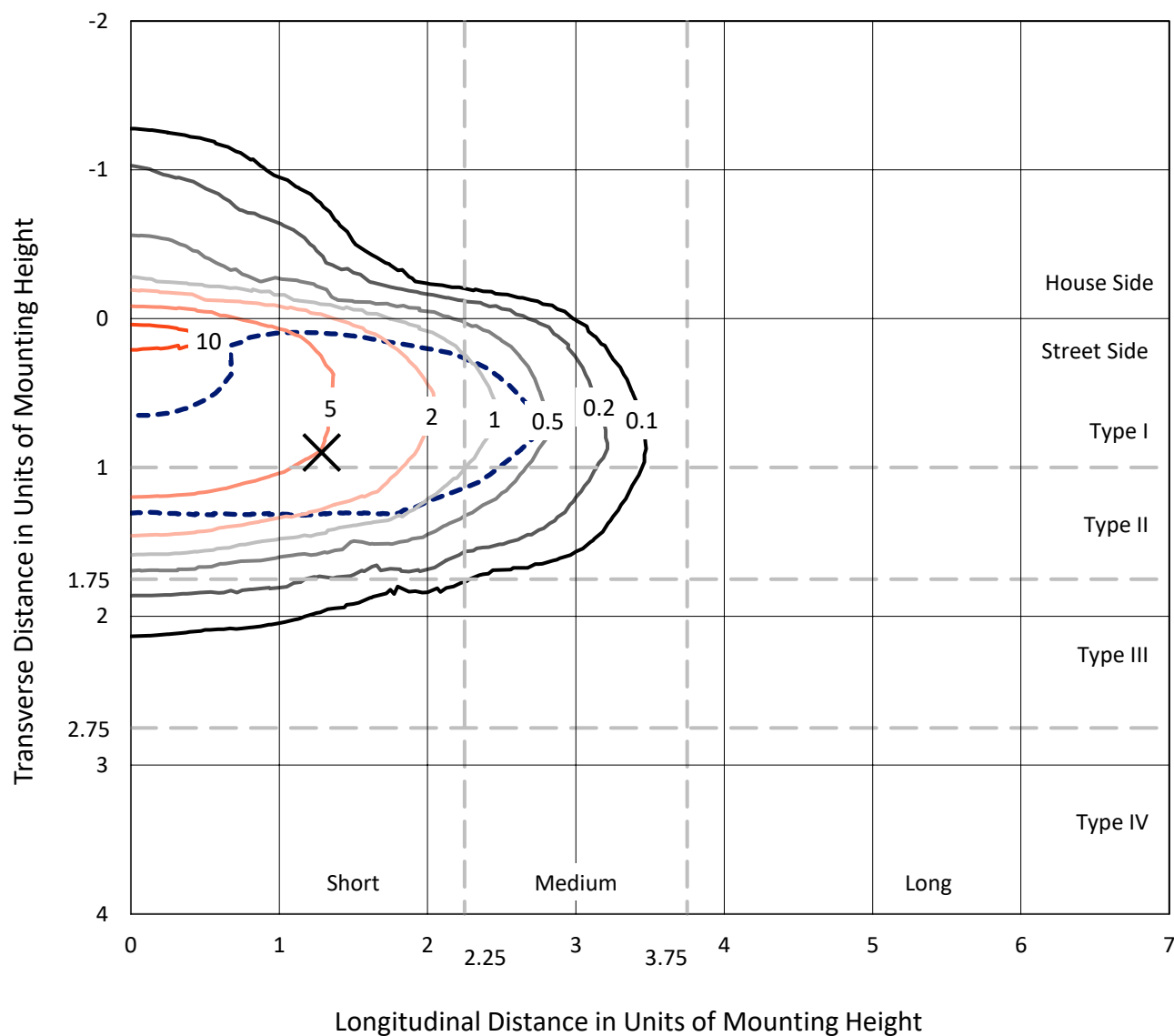
REPORT NUMBER: P966785

CATALOG NUMBER: NAV-SB4C-827-U-AFL-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

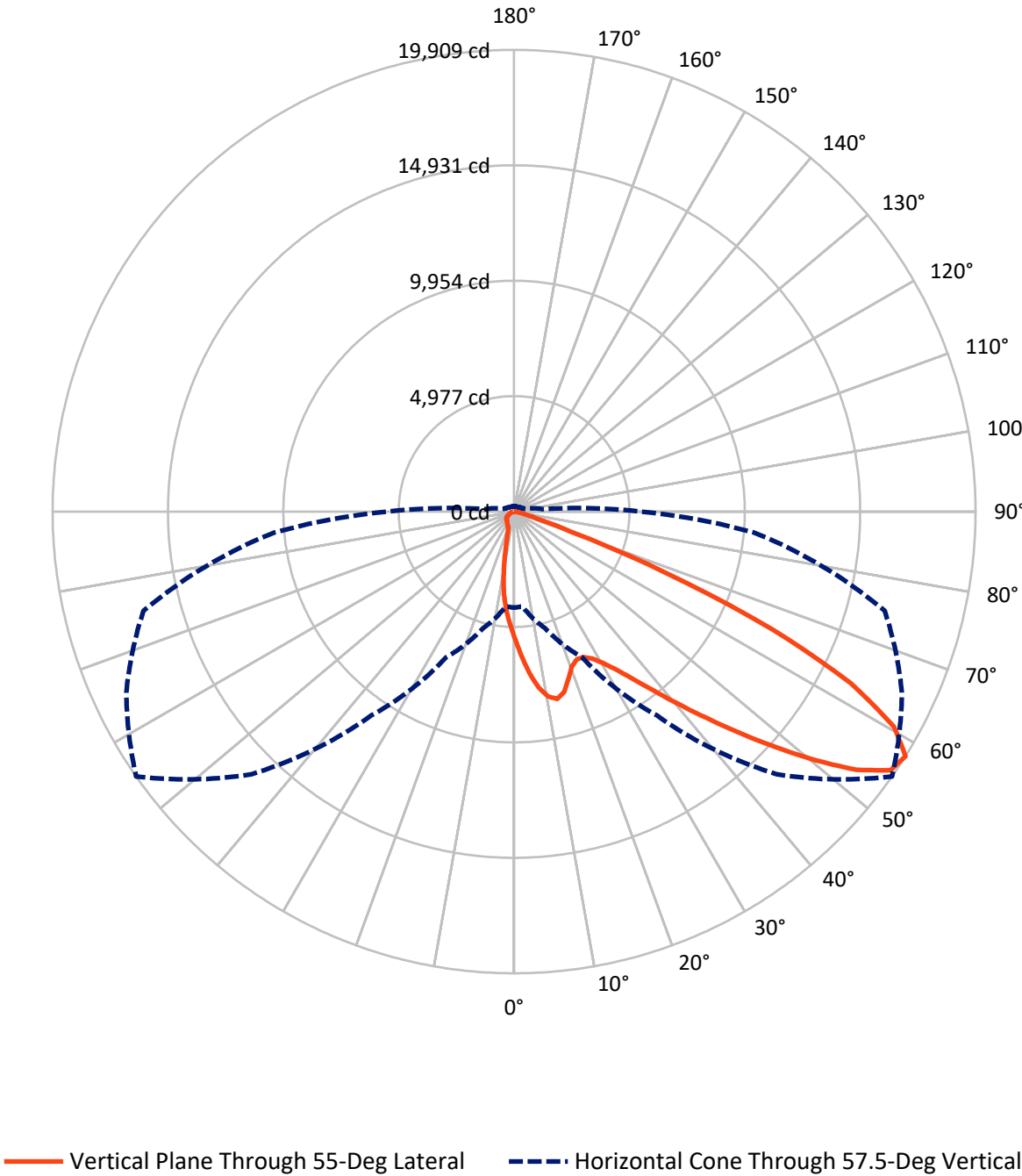


Based on 25 foot mounting height. Maximum calculated value = 12.6 fc

Type II - Short - N/A

REPORT NUMBER: P966785
CATALOG NUMBER: NAV-SB4C-827-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P966785

CATALOG NUMBER: NAV-SB4C-827-U-AFL-HSS

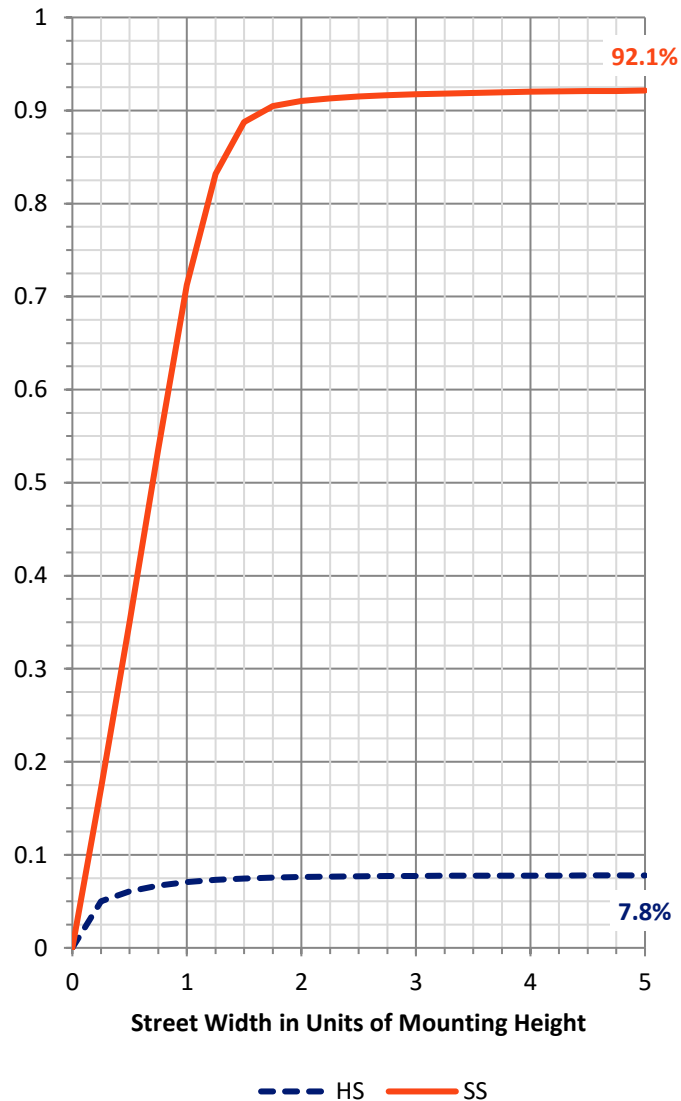
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1781.3	0.0	1781.3
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	21028.0	0.0	21028.0
	% Fixture	92.2	0.0	92.2
Total	Lumens	22809.3	0.0	22809.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	511.4	2.2
10°-20°	1235.3	5.4
20°-30°	1976.5	8.7
30°-40°	3345.4	14.7
40°-50°	5492.4	24.1
50°-60°	6036.5	26.5
60°-70°	3462.5	15.2
70°-80°	707.5	3.1
80°-90°	41.7	0.2
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°	22809.3	100.0
0°-180°	22809.3	100.0

Coefficient of Utilization



REPORT NUMBER: P966785

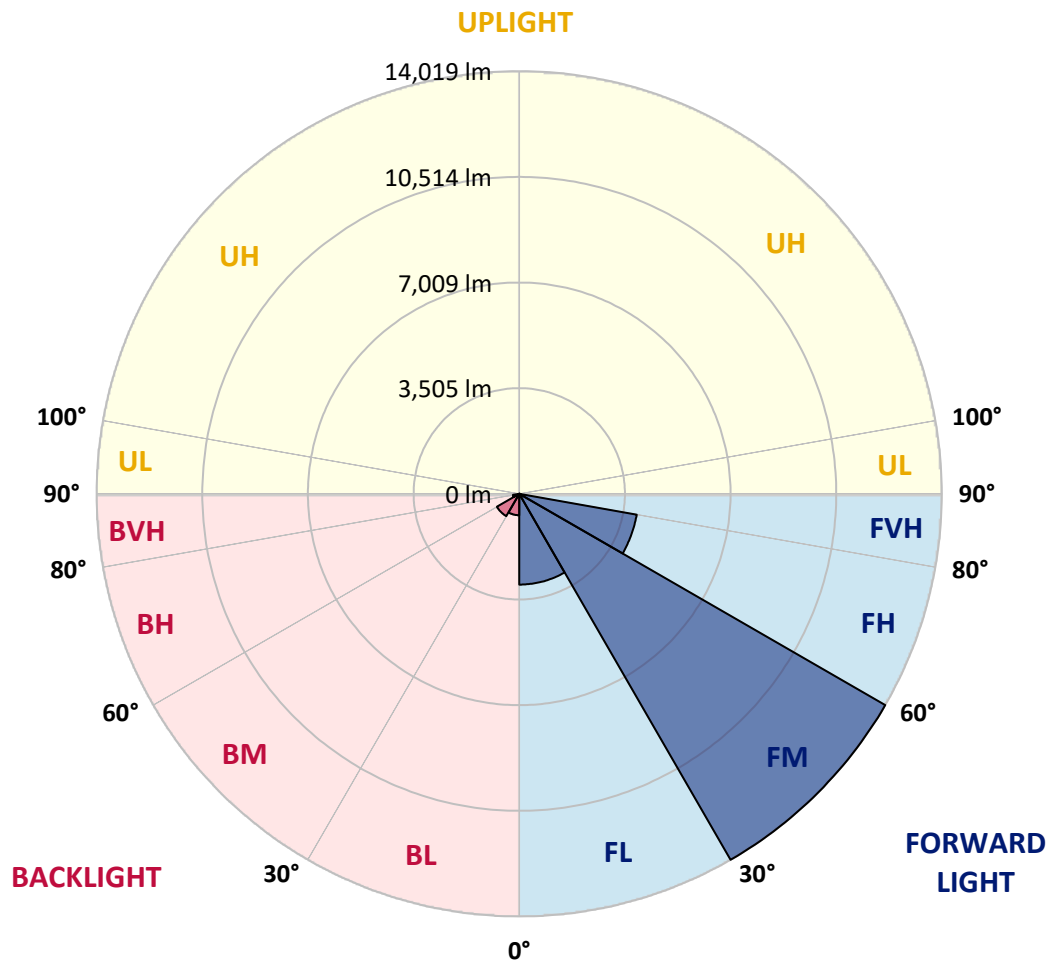
CATALOG NUMBER: NAV-SB4C-827-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3012.1	13.2			
FM	(30°-60°)	14018.8	61.5			
FH	(60°-80°)	3958.2	17.4			G2/5000
FVH	(80°-90°)	38.9	0.2			G1/100
BL	(0°-30°)	711.1	3.1	B2/1000		
BM	(30°-60°)	855.5	3.8	B1/1000		
BH	(60°-80°)	211.9	0.9	B1/500		G1/500
BVH	(80°-90°)	2.8	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-G2

Type II Short



REPORT NUMBER: P966785

CATALOG NUMBER: NAV-SB4C-827-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5
2.5°	6819.9	6734.1	6721.5	6704.6	6541.4	6419.2	6241.9	6047.8	5829.8	5607.6	5509.2
5°	7879.1	7811.5	7798.9	7720.1	7534.5	7326.3	7011.2	6613.2	6206.8	5728.5	5523.2
7.5°	8084.4	8071.8	8129.4	8126.6	8101.3	7936.7	7670.9	7196.9	6586.5	5877.7	5559.8
10°	7168.7	7201.1	7372.7	7523.2	7929.7	8166.0	8108.3	7717.3	6977.5	6047.8	5600.6
12.5°	6334.7	6296.8	6419.2	6589.3	7061.8	7765.1	8289.7	8151.9	7424.8	6240.5	5661.1
15°	5811.5	5796.1	5864.9	5943.8	6303.7	7012.6	8078.7	8504.9	7855.1	6468.4	5752.5
17.5°	5644.2	5631.6	5652.6	5672.2	5905.7	6454.3	7576.7	8721.5	8267.2	6728.5	5853.8
20°	5780.6	5763.7	5760.9	5745.4	5842.5	6216.6	7122.3	8737.0	8637.2	6964.9	5940.9
22.5°	6178.6	6158.9	6090.0	6028.1	6036.5	6248.9	6919.9	8582.3	8915.7	7185.7	5995.7
25°	6900.1	6867.8	6724.3	6516.1	6384.0	6474.0	6950.7	8378.3	9181.4	7358.7	5969.1
27.5°	7803.1	7760.9	7576.7	7267.2	6964.9	6855.1	7174.4	8237.7	9402.2	7490.9	5911.4
30°	8687.8	8633.0	8451.4	8211.0	7769.3	7423.4	7578.0	8299.6	9665.2	7628.7	5835.4
32.5°	9642.8	9590.7	9350.3	9052.1	8686.4	8220.8	8130.8	8602.0	9987.4	7821.4	5782.0
35°	10851.0	10769.4	10427.5	10021.1	9632.9	9161.8	8879.1	9123.7	10416.4	8115.3	5811.5
37.5°	12226.4	12116.7	11748.2	11187.1	10680.7	10153.3	9790.4	9841.0	11045.0	8509.1	5903.0
40°	13523.2	13423.4	13083.0	12554.2	11918.4	11278.5	10891.8	10779.2	11912.8	8988.7	6063.3
42.5°	14301.0	14211.0	14067.5	13843.9	13308.0	12655.4	12167.4	11924.0	12939.5	9562.6	6258.8
45°	14344.6	14265.8	14458.5	14718.7	14613.2	14178.6	13583.7	13137.8	13970.4	10101.3	6461.3
47.5°	13647.0	13593.6	14178.6	15087.2	15540.1	15722.9	15174.4	14250.4	14821.4	10488.0	6544.3
50°	11745.5	11725.7	12929.7	14597.7	15893.1	17076.0	16852.3	15285.5	15481.0	10687.8	6465.5
52.5°	10184.3	10112.5	10814.4	13030.9	15379.7	17787.6	18492.2	16301.0	15942.3	10725.7	6281.3
55°	7724.3	7661.1	8541.5	10409.3	13724.3	17534.5	19692.0	17348.8	16272.9	10628.7	5950.7
57.5°	4143.5	4104.1	5216.6	6928.3	10728.6	16015.5	19908.6	18457.1	16551.3	10371.4	5488.1
60°	1613.2	1606.2	2022.5	3361.5	6520.4	13029.5	18815.7	19122.4	16725.7	10054.8	5101.2
62.5°	976.1	997.2	1064.7	1509.1	2880.5	8094.2	16296.8	18365.6	16842.5	9765.1	4782.0
65°	807.3	808.7	817.1	1036.6	1379.8	3386.8	12268.6	15876.2	16554.2	9249.0	4329.1
67.5°	692.0	704.7	737.0	822.8	973.2	1485.2	7063.3	12298.2	14800.3	8047.8	3623.1
70°	545.7	562.6	603.4	676.5	751.0	929.7	2610.4	8182.9	11306.6	6066.2	2739.8
72.5°	459.9	458.5	479.6	549.9	596.3	654.1	1004.2	4585.1	6571.1	2895.9	1355.9
75°	355.9	369.9	396.7	459.9	488.0	474.0	544.3	1675.1	2354.4	877.6	461.4
77.5°	278.5	289.8	313.6	375.6	403.6	336.1	313.6	599.1	756.7	315.1	208.2
80°	125.2	135.0	213.8	277.1	329.1	232.1	170.1	306.6	336.1	143.5	105.5
82.5°	22.5	37.9	125.2	146.3	168.8	150.5	88.6	159.0	164.5	57.7	36.6
85°	1.4	2.8	43.6	53.4	67.5	49.2	26.8	63.2	54.8	19.7	14.0
87.5°	0.0	0.0	0.0	1.4	1.4	7.1	8.4	11.3	8.4	7.1	5.6
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: P966785

CATALOG NUMBER: NAV-SB4C-827-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5	5496.5
2.5°	5407.9	5208.1	5014.1	4855.1	4762.4	4604.8	4500.7	4483.9	4440.2	4478.2
5°	5303.8	4946.5	4585.1	4261.6	3995.8	3652.6	3396.6	3288.3	3194.1	3226.4
7.5°	5254.6	4690.6	4128.0	3575.2	3007.0	2458.5	2050.6	1880.5	1751.0	1769.4
10°	5188.4	4424.7	3542.9	2699.0	1938.1	1396.7	1115.3	1011.3	953.6	955.0
12.5°	5137.8	4106.9	2863.5	1829.8	1180.0	891.7	804.5	779.2	762.3	763.7
15°	5112.5	3732.7	2192.7	1219.4	843.9	755.3	734.2	722.9	711.7	710.2
17.5°	5070.4	3316.5	1604.7	890.3	738.4	707.5	689.2	676.5	662.5	659.6
20°	5007.0	2843.9	1173.0	752.5	692.0	668.1	642.8	625.9	609.0	606.2
22.5°	4890.3	2344.6	901.6	696.2	658.3	631.5	600.5	580.9	564.0	561.2
25°	4673.7	1876.3	759.5	661.0	628.7	596.3	562.6	535.9	520.4	517.6
27.5°	4399.4	1473.9	689.2	628.7	590.7	561.2	523.2	497.8	483.8	481.0
30°	4075.9	1135.0	648.4	592.1	545.7	520.4	486.7	465.6	457.2	457.2
32.5°	3727.1	907.1	631.5	555.6	506.4	478.2	451.5	443.0	440.2	438.8
35°	3399.4	787.6	623.1	526.0	471.2	444.4	433.2	434.6	440.2	440.2
37.5°	3108.3	749.7	618.9	504.9	440.2	416.4	423.3	436.0	430.4	430.4
40°	2845.3	753.9	616.0	489.4	414.9	400.9	414.9	405.1	391.0	389.6
42.5°	2644.2	789.0	610.4	476.8	399.4	389.6	384.0	368.5	367.1	369.9
45°	2497.9	820.0	609.0	471.2	382.5	364.3	357.2	341.7	369.9	376.9
47.5°	2324.9	820.0	609.0	451.5	354.4	347.4	336.1	319.3	347.4	354.4
50°	2101.2	767.9	585.1	429.0	331.9	327.7	308.0	286.9	281.3	285.5
52.5°	1818.6	673.7	524.6	398.0	309.4	300.9	277.1	261.6	257.4	257.4
55°	1496.5	564.0	443.0	353.0	285.5	270.1	253.2	246.1	241.9	239.1
57.5°	1216.6	462.7	355.9	313.6	263.0	243.3	237.7	229.3	222.2	218.0
60°	998.6	364.3	294.0	278.5	240.5	222.2	220.8	209.6	191.3	188.5
62.5°	770.7	267.2	247.5	241.9	218.0	202.5	199.7	177.2	149.0	143.5
65°	544.3	208.2	199.7	212.4	194.1	180.0	173.0	139.2	109.7	105.5
67.5°	382.5	174.4	157.5	185.6	168.8	150.5	146.3	118.2	91.4	88.6
70°	272.9	142.1	129.4	159.0	135.0	132.2	123.8	98.5	74.5	71.8
72.5°	192.7	108.3	99.8	137.9	92.9	113.9	101.3	76.0	56.3	53.4
75°	142.1	77.4	70.3	80.2	67.5	85.8	71.8	50.6	35.2	33.7
77.5°	104.0	49.2	42.2	39.4	39.4	53.4	39.4	21.1	15.5	14.0
80°	73.2	22.5	19.7	16.9	15.5	12.6	5.6	2.8	1.4	1.4
82.5°	43.6	9.8	9.8	7.1	4.2	0.0	0.0	0.0	0.0	0.0
85°	9.8	4.2	4.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	1.4	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

(END OF REPORT)