

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: P966677

Luminaire Tested: **NAV-SB4C-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31335.3 lumens
Efficiency: N/A
Efficacy: 156.1 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): 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



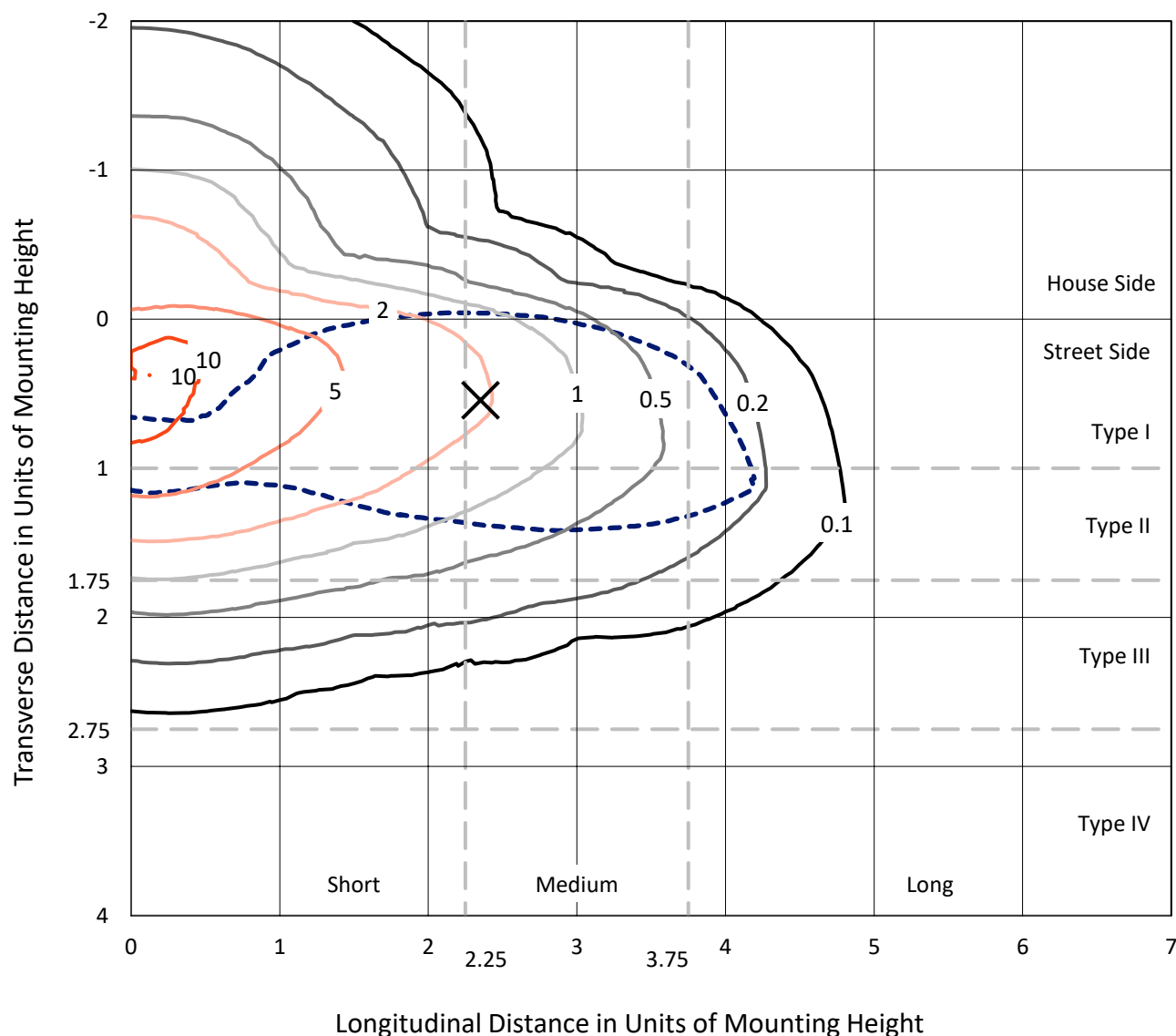
REPORT NUMBER: P966677

CATALOG NUMBER: NAV-SB4C-735-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

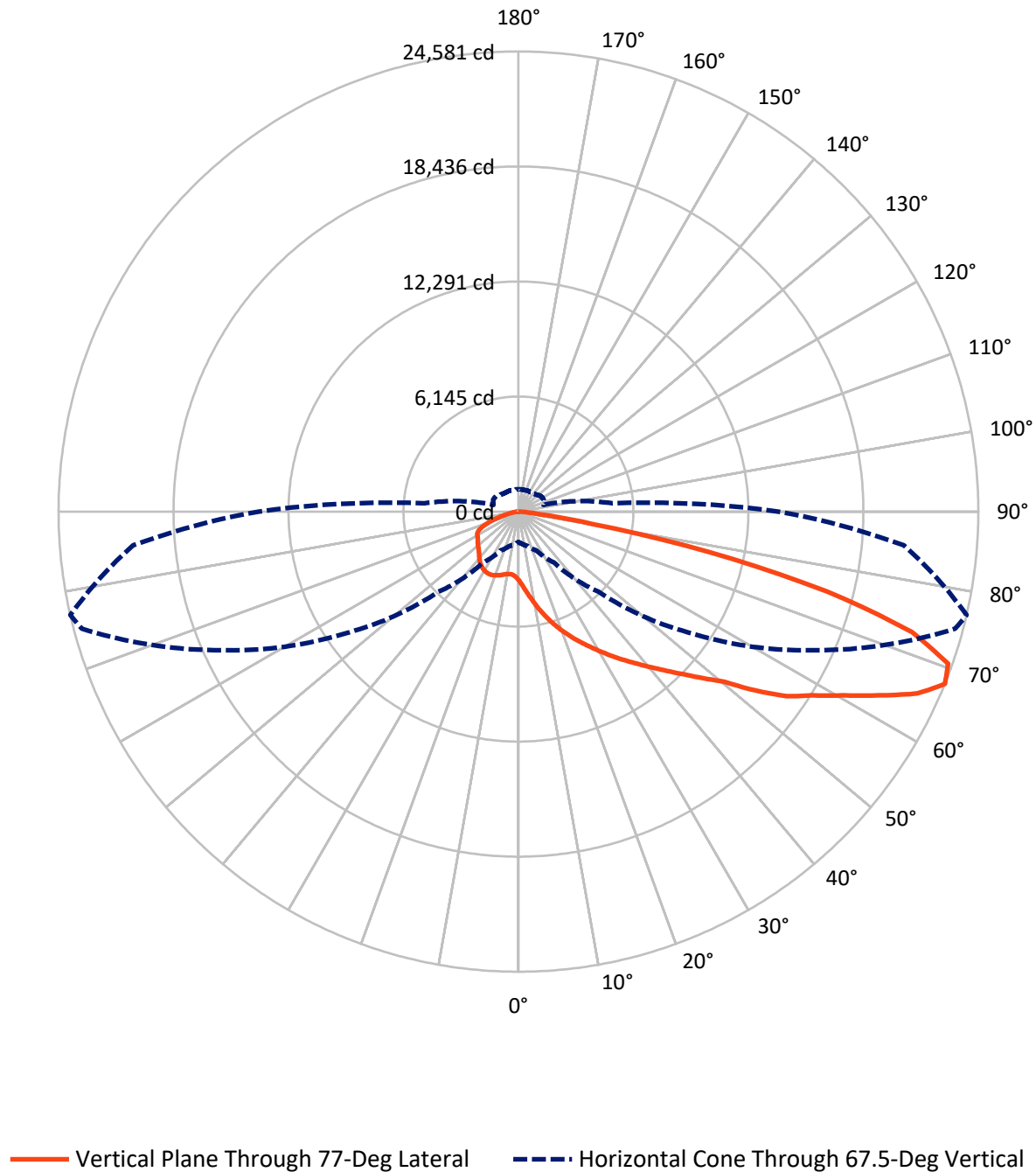
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P966677
CATALOG NUMBER: NAV-SB4C-735-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P966677

CATALOG NUMBER: NAV-SB4C-735-U-T2R

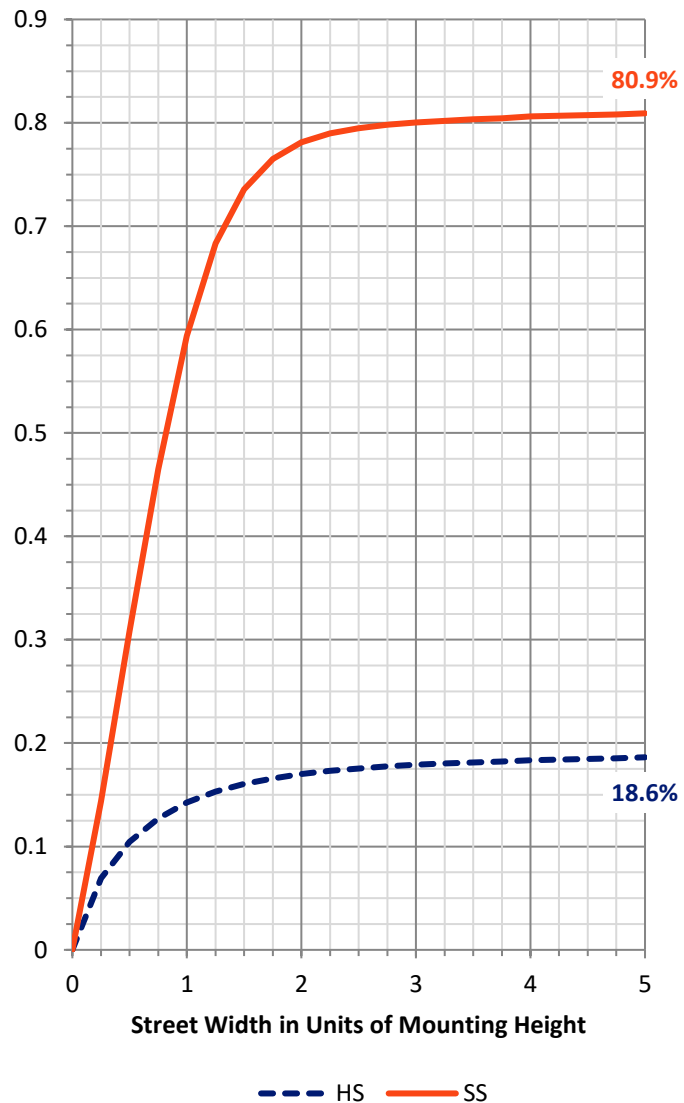
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5927.4	0.0	5927.4
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	25407.9	0.0	25407.9
	% Fixture	81.1	0.0	81.1
Total	Lumens	31335.3	0.0	31335.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.1	1.3
10°-20°	1415.8	4.5
20°-30°	2673.1	8.5
30°-40°	4306.4	13.7
40°-50°	5890.3	18.8
50°-60°	6644.3	21.2
60°-70°	6201.7	19.8
70°-80°	3399.6	10.8
80°-90°	410.1	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°	31335.3	100.0
0°-180°	31335.3	100.0

Coefficient of Utilization



REPORT NUMBER: P966677

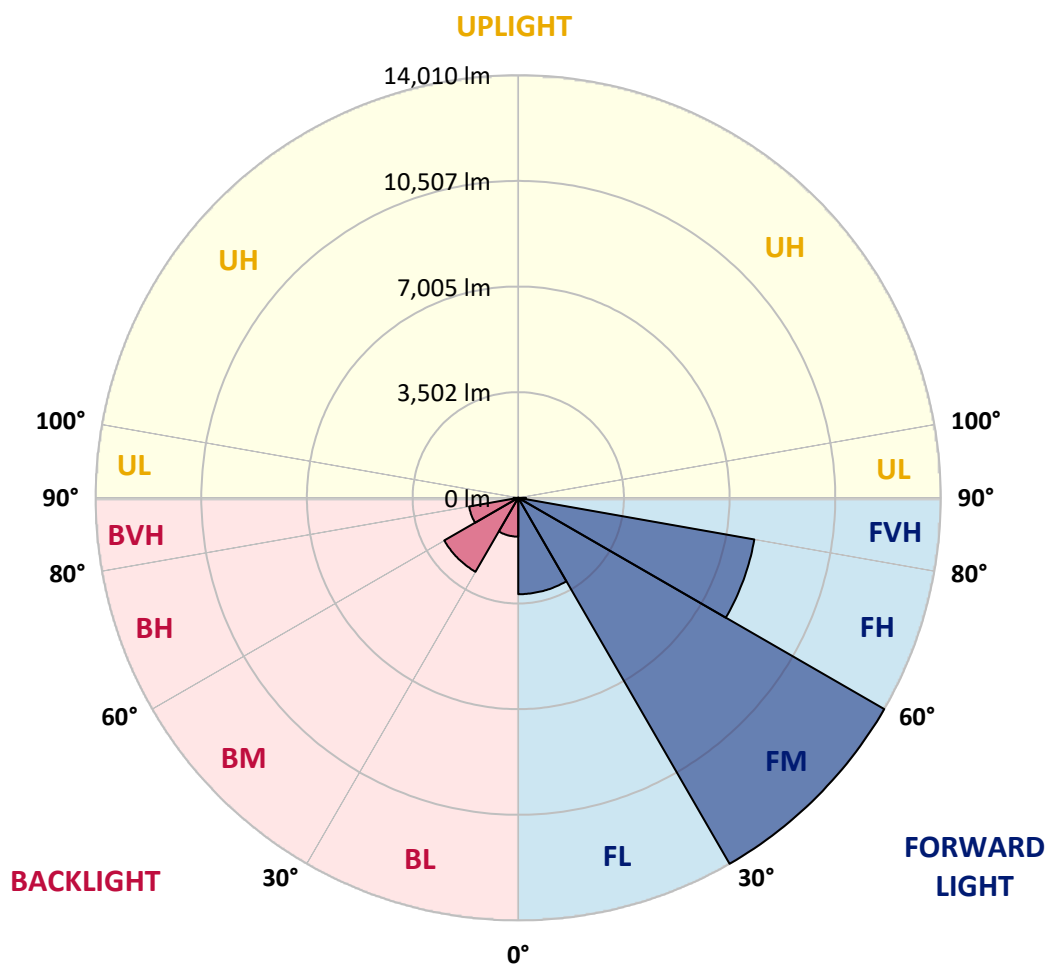
CATALOG NUMBER: NAV-SB4C-735-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3194.2	10.2			
FM	(30°-60°)	14009.7	44.7			
FH	(60°-80°)	7947.6	25.4			G4/12000
FVH	(80°-90°)	256.4	0.8			G3/500
BL	(0°-30°)	1288.8	4.1	B3/2500		
BM	(30°-60°)	2831.4	9.0	B3/5000		
BH	(60°-80°)	1653.7	5.3	B3/2500		G3/2500
BVH	(80°-90°)	153.6	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: P966677

CATALOG NUMBER: NAV-SB4C-735-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6
2.5°	4603.5	4635.8	4595.4	4595.4	4459.5	4388.3	4252.4	4148.9	3962.9	3930.6	3807.7
5°	5441.3	5481.7	5425.1	5400.8	5240.7	5093.5	4865.5	4640.7	4309.0	4275.1	3985.5
7.5°	6089.9	6141.7	6091.6	6065.6	5923.4	5758.3	5491.4	5177.7	4710.2	4643.9	4224.9
10°	6618.8	6626.9	6610.7	6620.5	6508.9	6373.0	6099.7	5734.1	5150.1	5059.6	4514.5
12.5°	6918.1	6955.3	6987.6	7045.8	7026.5	6942.3	6696.5	6259.8	5616.0	5499.5	4829.9
15°	7058.8	7123.5	7196.3	7330.6	7438.9	7459.9	7272.4	6824.2	6089.9	5949.2	5148.6
17.5°	7109.0	7170.4	7285.3	7479.3	7712.3	7869.2	7785.1	7372.6	6559.0	6397.2	5483.3
20°	7362.9	7380.7	7450.2	7634.6	7887.0	8147.4	8210.5	7899.9	7023.2	6840.4	5829.5
22.5°	7906.4	7870.8	7890.2	7974.3	8155.5	8407.9	8551.8	8365.7	7500.4	7290.1	6178.9
25°	8804.1	8700.6	8597.1	8500.0	8592.2	8734.5	8897.9	8831.6	8000.2	7733.3	6531.5
27.5°	9938.0	9811.8	9583.8	9265.1	9153.5	9203.7	9276.5	9263.4	8462.8	8192.7	6895.5
30°	11054.1	10906.9	10635.1	10174.2	9879.8	9747.1	9692.1	9654.9	8965.9	8678.0	7262.6
32.5°	11945.3	11828.8	11562.0	11046.0	10619.0	10392.5	10209.7	10077.1	9491.6	9203.7	7650.8
35°	12725.0	12616.6	12310.9	11747.9	11283.7	11042.7	10803.4	10520.3	10038.2	9747.1	8068.2
37.5°	13436.6	13328.3	12909.4	12323.8	11856.4	11689.7	11476.2	10995.8	10586.6	10311.6	8509.8
40°	13886.3	13862.1	13470.7	12807.5	12322.2	12239.7	12168.5	11547.4	11194.7	10939.2	8995.0
42.5°	14001.2	14054.6	13744.0	13198.9	12736.2	12669.9	12836.6	12171.8	11877.4	11633.1	9544.9
45°	13724.5	13878.2	13674.4	13304.0	13030.6	12995.1	13428.5	12854.3	12632.7	12409.6	10208.1
47.5°	13024.2	13284.6	13200.5	13148.7	13110.0	13263.6	13949.4	13579.0	13488.4	13294.4	10965.1
50°	11610.5	12103.8	12251.0	12577.8	12953.0	13472.3	14423.4	14370.0	14488.1	14292.3	11887.1
52.5°	9166.5	9845.7	10699.9	11518.3	12471.0	13402.7	14944.2	15505.5	16003.6	15896.9	13352.6
55°	7566.8	7872.4	8529.1	10030.1	11536.1	13110.0	15178.7	16422.6	17507.9	17412.5	14463.8
57.5°	6337.4	6610.7	7015.1	8268.7	10122.4	12445.1	15324.3	16982.2	18538.3	18528.6	15560.4
60°	5019.1	5308.7	5722.8	6610.7	8470.9	11296.7	15292.0	17619.5	19853.3	19934.2	16898.1
62.5°	3531.0	3849.7	4309.0	5137.2	6783.9	9808.5	14632.0	18080.5	21401.3	21621.2	18507.6
65°	2321.1	2531.4	2877.6	3592.5	5054.7	7895.1	13371.9	18140.3	23057.6	23429.7	20018.4
67.5°	1627.2	1708.1	1911.9	2300.1	3332.1	6054.4	11364.6	17520.8	24162.3	24581.3	20673.4
70°	1269.8	1310.2	1413.7	1569.0	2093.0	4071.3	8708.7	15909.8	23926.2	24362.9	19989.2
72.5°	1096.6	1135.5	1174.3	1193.7	1404.0	2513.6	5899.1	13302.4	21702.1	21998.1	17380.1
75°	994.8	1004.5	1036.8	1030.3	1070.8	1630.5	3404.8	9692.1	17122.9	17021.0	12830.1
77.5°	836.3	849.2	902.6	894.5	951.1	1114.5	1767.9	6255.0	11101.0	10408.7	7141.3
80°	708.5	714.9	773.2	763.4	826.6	807.2	902.6	3188.2	4708.5	3988.8	2059.1
82.5°	245.9	304.1	590.4	608.2	630.8	488.5	520.8	1300.5	1438.0	1101.6	431.8
85°	119.7	127.8	300.8	427.0	425.4	245.9	254.0	464.2	452.9	355.9	143.9
87.5°	19.4	24.3	35.6	166.6	132.6	64.7	87.3	90.6	93.8	80.9	32.4
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: P966677

CATALOG NUMBER: NAV-SB4C-735-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6	3676.6
2.5°	3717.1	3636.2	3466.3	3309.4	3186.5	3068.4	3002.1	2945.4	2913.2	2906.7	2906.7
5°	3817.3	3650.7	3341.8	3081.4	2911.5	2785.3	2719.0	2677.0	2656.0	2643.0	2641.4
7.5°	3961.3	3717.1	3277.0	2981.1	2803.2	2712.6	2678.6	2672.2	2670.5	2672.2	2677.0
10°	4160.3	3825.4	3270.6	2956.8	2808.0	2757.9	2756.2	2757.9	2764.3	2766.0	2767.6
12.5°	4375.3	3937.0	3296.5	2977.8	2869.5	2841.9	2837.1	2835.5	2840.4	2843.6	2845.2
15°	4609.9	4084.2	3340.2	3023.1	2937.4	2908.3	2903.4	2893.7	2892.1	2890.5	2888.9
17.5°	4850.9	4229.8	3388.6	3071.6	2981.1	2940.6	2922.9	2900.2	2882.4	2877.6	2882.4
20°	5095.2	4373.8	3422.7	3095.9	2984.3	2927.7	2892.1	2853.3	2822.5	2804.8	2811.3
22.5°	5355.6	4524.1	3443.7	3089.5	2955.2	2877.6	2812.8	2767.6	2720.7	2689.9	2691.5
25°	5609.5	4655.2	3442.1	3055.5	2898.6	2799.9	2717.4	2659.2	2594.5	2562.1	2562.1
27.5°	5853.8	4773.3	3401.7	2995.7	2817.7	2707.7	2609.0	2539.5	2476.4	2445.6	2444.0
30°	6106.1	4871.9	3338.5	2908.3	2722.3	2600.9	2492.6	2432.7	2376.2	2347.0	2345.4
32.5°	6356.8	4962.5	3249.6	2799.9	2612.3	2495.8	2389.1	2334.0	2300.1	2300.1	2301.7
35°	6622.1	5025.6	3131.5	2673.7	2495.8	2384.3	2300.1	2267.7	2264.5	2245.1	2240.2
37.5°	6901.9	5066.1	2987.6	2544.4	2381.0	2275.8	2250.0	2211.1	2178.7	2136.7	2130.3
40°	7196.3	5106.4	2814.4	2410.1	2259.6	2201.4	2190.1	2138.4	2046.1	1942.6	1928.0
42.5°	7553.7	5134.0	2635.0	2275.8	2131.9	2112.4	2128.6	2039.6	1892.5	1814.9	1816.5
45°	7967.8	5179.2	2469.9	2143.2	2000.9	2000.9	2068.8	1952.3	1831.1	1782.5	1790.6
47.5°	8504.8	5284.4	2316.3	1997.6	1879.5	1911.9	1936.1	1847.2	1779.3	1719.4	1717.8
50°	9281.3	5536.7	2157.7	1850.4	1787.4	1852.1	1818.0	1766.3	1687.0	1638.6	1633.6
52.5°	10245.3	5685.6	2017.0	1717.8	1708.1	1772.8	1724.3	1675.8	1615.9	1551.2	1538.2
55°	10902.0	5713.0	1898.9	1620.7	1654.8	1648.2	1630.5	1586.8	1554.4	1468.7	1470.4
57.5°	11636.4	5768.1	1802.0	1562.5	1620.7	1549.6	1543.1	1505.9	1463.8	1405.6	1386.2
60°	12514.6	5853.8	1717.8	1539.9	1591.6	1484.9	1452.5	1438.0	1395.9	1366.8	1374.9
62.5°	13472.3	5931.4	1632.1	1543.1	1557.7	1421.8	1373.3	1368.4	1342.5	1332.8	1332.8
65°	14125.7	5719.5	1525.3	1539.9	1504.3	1357.1	1295.6	1294.0	1272.9	1269.8	1268.1
67.5°	13897.7	5048.2	1381.4	1494.6	1449.2	1292.4	1224.5	1218.0	1190.5	1192.1	1192.1
70°	12755.7	4090.7	1182.4	1382.9	1381.4	1234.2	1150.0	1129.0	1091.8	1098.3	1104.7
72.5°	10614.1	3031.2	915.5	1197.0	1272.9	1180.8	1064.4	1030.3	983.5	989.9	988.3
75°	7665.4	2060.7	666.5	910.6	1108.0	1117.7	980.2	922.0	865.4	875.0	878.3
77.5°	3922.5	1167.9	490.2	627.6	870.2	1015.8	904.2	826.6	813.6	904.2	891.2
80°	1279.4	585.6	339.7	439.9	571.0	831.4	792.5	703.7	700.4	721.4	619.5
82.5°	381.7	247.4	218.3	289.6	315.4	637.3	684.2	532.2	457.8	482.1	498.2
85°	131.0	119.7	124.5	143.9	150.5	373.6	478.8	352.6	333.2	367.2	362.3
87.5°	30.7	42.0	35.6	32.4	32.4	90.6	186.0	147.2	203.8	135.9	131.0
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)