

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: P968925

Luminaire Tested: **NAV-SB5C-830-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35436.3 lumens
Efficiency: N/A
Efficacy: 142.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

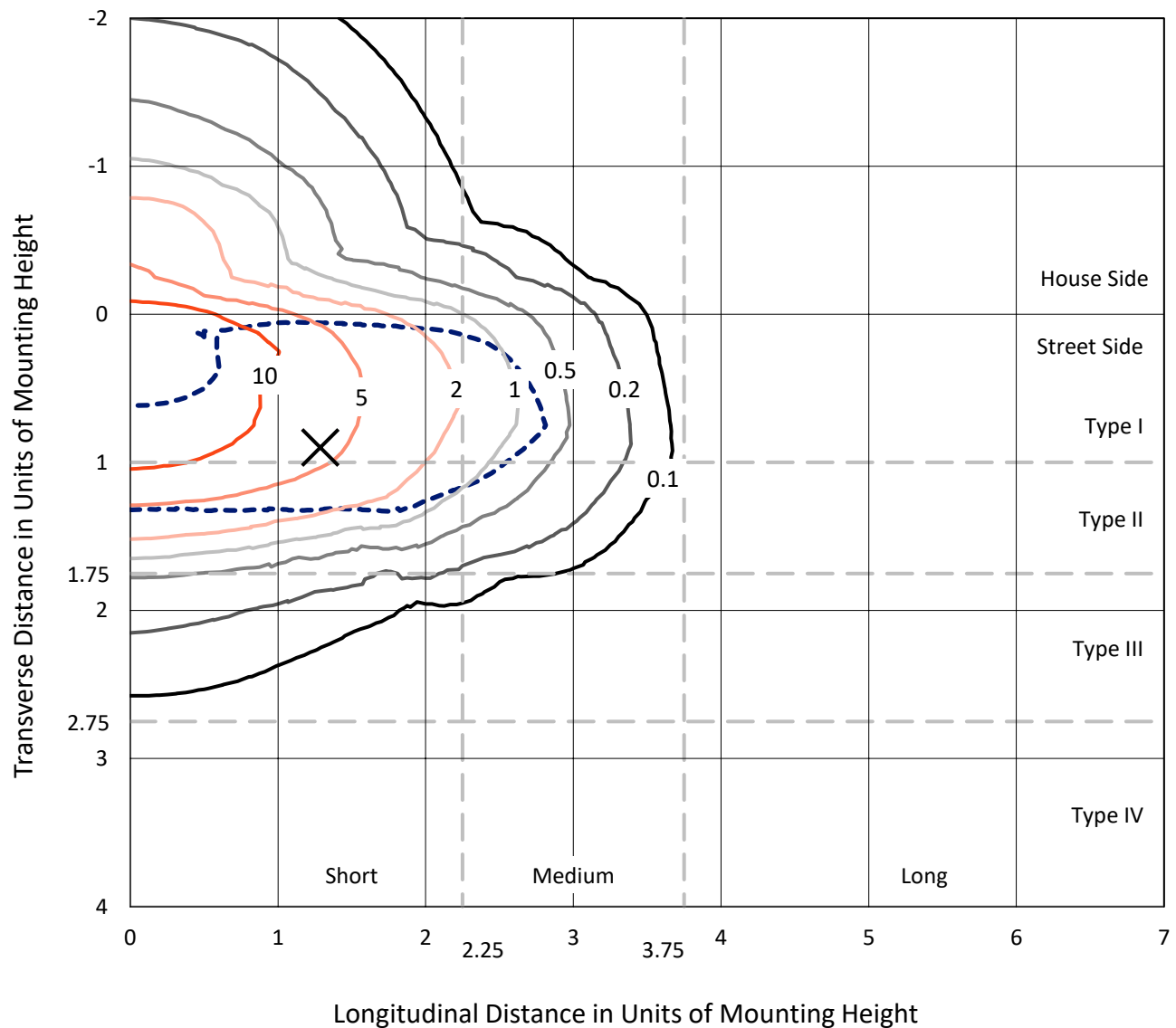
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968925
CATALOG NUMBER: NAV-SB5C-830-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

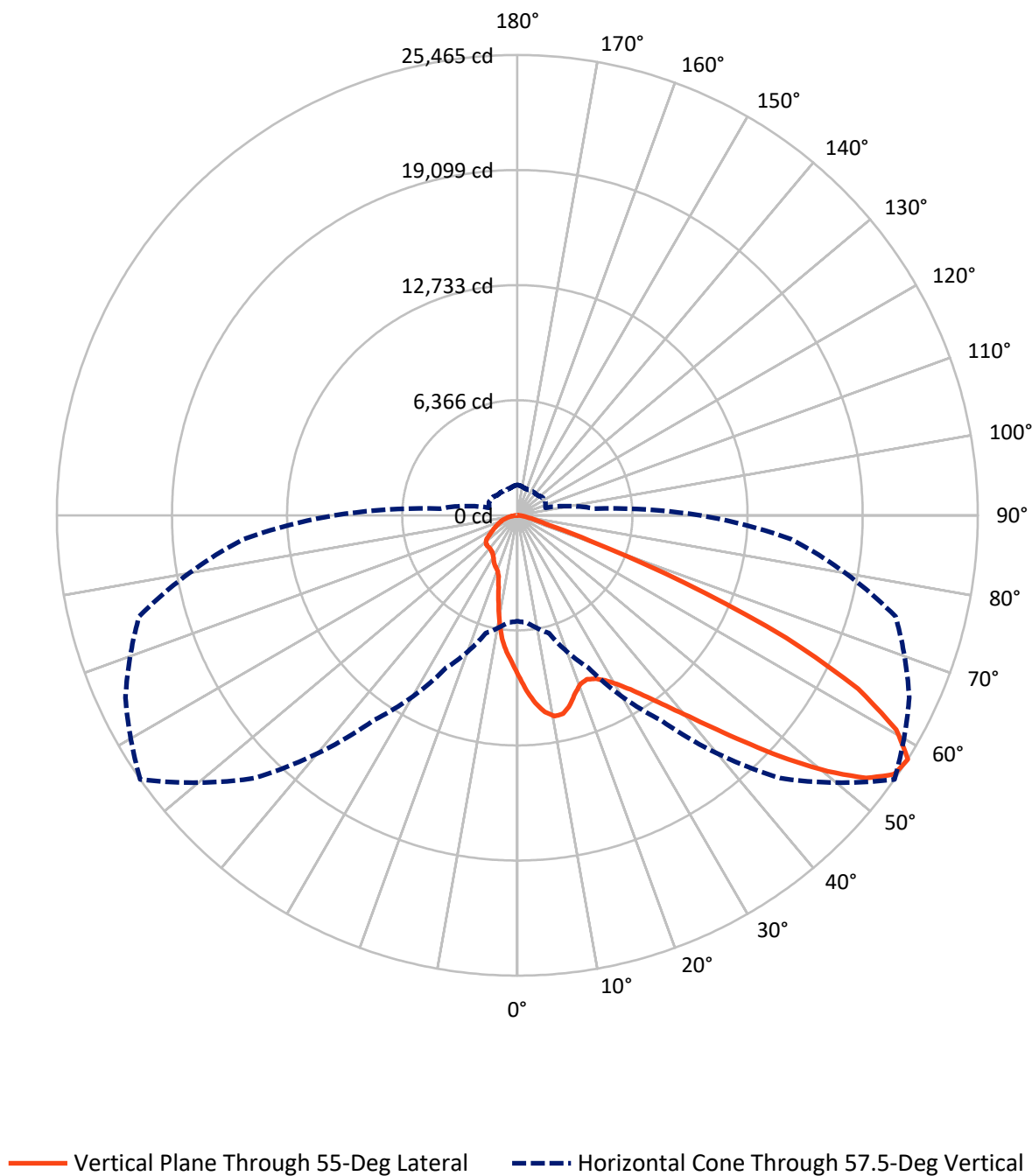
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.2 fc
Type II - Short - N/A

REPORT NUMBER: P968925
CATALOG NUMBER: NAV-SB5C-830-U-AFL

Luminous Intensity Polar Plot



REPORT NUMBER: P968925

CATALOG NUMBER: NAV-SB5C-830-U-AFL

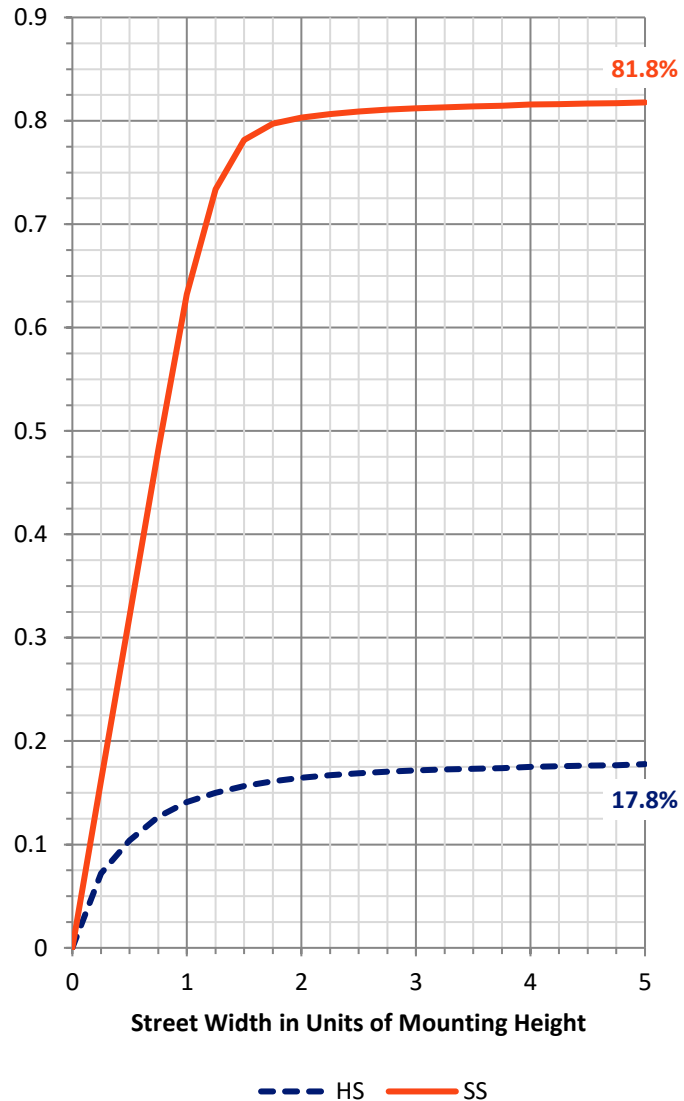
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6412.0	0.0	6412.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	29024.3	0.0	29024.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	35436.3	0.0	35436.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	823.9	2.3
10°-20°	2079.7	5.9
20°-30°	3318.5	9.4
30°-40°	5254.1	14.8
40°-50°	8041.9	22.7
50°-60°	8613.6	24.3
60°-70°	5418.9	15.3
70°-80°	1602.5	4.5
80°-90°	283.3	0.8
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°	35436.3	100.0
0°-180°	35436.3	100.0

Coefficient of Utilization



REPORT NUMBER: P968925

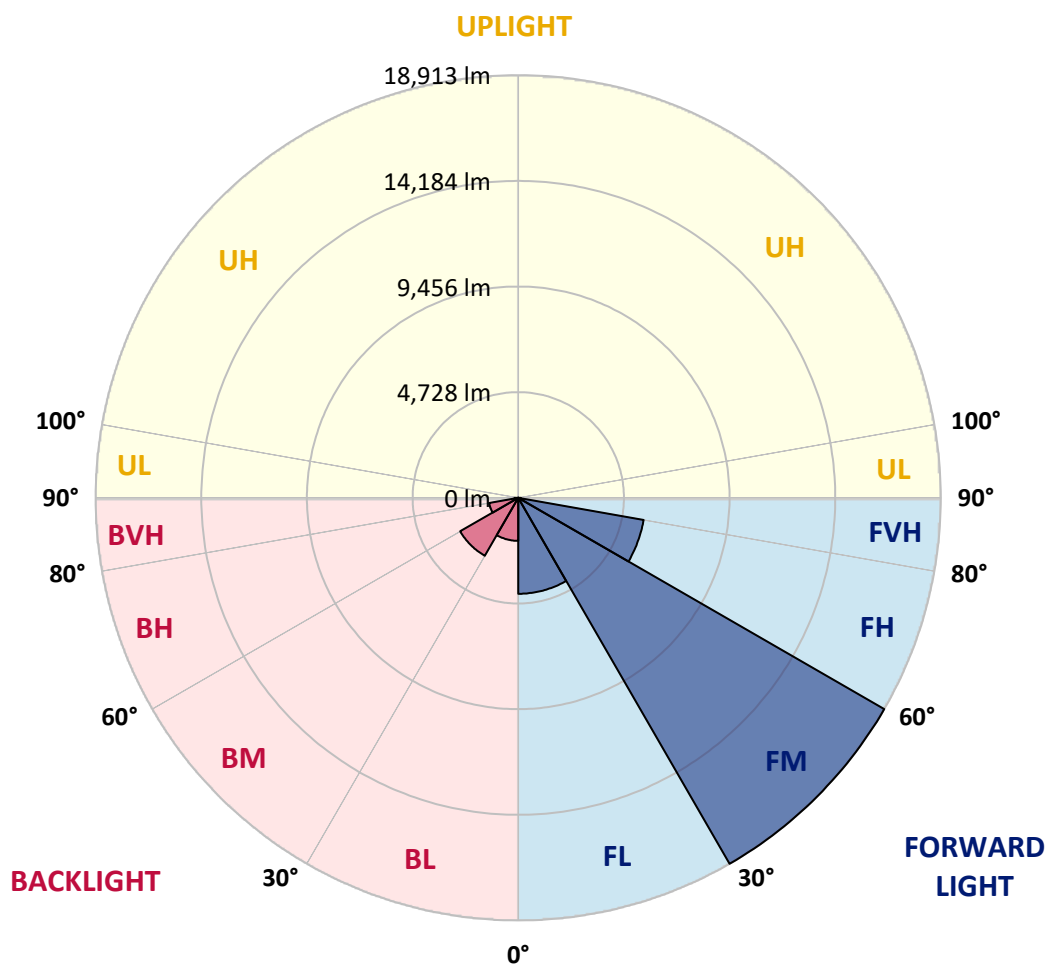
CATALOG NUMBER: NAV-SB5C-830-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4294.9	12.1			
FM	(30°-60°)	18912.6	53.4			
FH	(60°-80°)	5697.1	16.1			G3/7500
FVH	(80°-90°)	119.7	0.3			G2/225
BL	(0°-30°)	1927.2	5.4	B3/2500		
BM	(30°-60°)	2996.9	8.5	B3/5000		
BH	(60°-80°)	1324.2	3.7	B3/2500		G3/2500
BVH	(80°-90°)	163.6	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-G3

Type II Short



REPORT NUMBER: P968925

CATALOG NUMBER: NAV-SB5C-830-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2
2.5°	10187.2	10179.8	10220.2	10082.7	9989.3	9863.0	9696.2	9483.7	9254.7	9012.9	8908.5
5°	11105.0	11040.8	11082.9	10980.4	10877.8	10687.3	10439.9	10093.7	9670.6	9188.8	8932.4
7.5°	10960.2	10916.2	11024.3	11115.9	11192.9	11169.0	10987.7	10624.9	10079.0	9379.3	9007.4
10°	9793.3	9743.9	9895.9	10212.8	10678.1	11082.9	11302.8	11077.5	10496.7	9588.2	9080.7
12.5°	8763.8	8740.0	8840.7	9097.2	9613.8	10390.5	11262.5	11473.1	10930.9	9835.4	9179.6
15°	8324.1	8294.8	8359.0	8488.9	8818.7	9542.3	10896.1	11744.2	11357.7	10121.3	9337.1
17.5°	8227.1	8194.1	8221.5	8289.3	8501.9	9053.2	10342.9	11878.0	11802.9	10439.9	9469.1
20°	8406.5	8379.1	8382.8	8379.1	8527.5	8965.3	9958.2	11826.7	12191.2	10733.1	9597.3
22.5°	8840.7	8794.9	8796.8	8699.7	8780.3	9119.1	9857.4	11689.3	12537.5	10989.5	9694.3
25°	9547.9	9465.4	9481.9	9234.5	9212.6	9463.5	10015.0	11583.0	12881.9	11194.7	9712.7
27.5°	10515.1	10421.7	10372.2	10004.0	9828.1	9952.6	10335.6	11619.7	13207.9	11372.4	9666.9
30°	11724.2	11610.6	11509.8	10987.7	10668.9	10623.1	10833.8	11861.5	13592.6	11559.2	9588.2
32.5°	13206.1	13074.2	12891.0	12198.6	11749.8	11509.8	11478.7	12292.0	14043.3	11797.4	9547.9
35°	14970.2	14798.0	14537.9	13642.1	13074.2	12583.3	12328.6	12913.1	14660.7	12156.4	9593.6
37.5°	16787.4	16593.3	16355.1	15289.0	14591.1	13867.4	13365.5	13755.7	15483.1	12643.7	9714.5
40°	18463.6	18245.6	18024.0	17075.1	16325.8	15453.8	14635.0	14821.8	16488.9	13226.3	9919.7
42.5°	19452.9	19291.6	19207.4	18694.5	18115.5	17230.8	16214.1	16085.8	17619.1	13896.7	10154.2
45°	19408.9	19343.0	19603.1	19815.6	19678.2	19187.3	18064.3	17483.6	18753.1	14477.4	10370.3
47.5°	18372.1	18416.1	18996.7	20191.2	20716.9	20973.3	20171.0	18855.7	19738.6	14911.6	10467.4
50°	15551.0	15587.6	16932.2	19507.8	20984.3	22429.7	22261.2	20194.8	20502.6	15177.3	10445.5
52.5°	13317.8	13341.7	13918.7	17481.8	20101.4	23162.4	24144.4	21456.9	21061.3	15250.5	10322.7
55°	10031.5	10113.9	10760.6	13715.4	17804.1	22581.8	25291.2	22757.6	21414.8	15257.8	10194.4
57.5°	5860.2	5950.0	6748.7	9309.7	13838.1	20557.5	25465.1	23911.7	21654.8	15199.2	10117.6
60°	2870.6	2909.1	3257.1	4892.9	8532.9	16657.4	24065.6	24470.4	21788.5	15168.1	10113.9
62.5°	1934.5	1928.9	1943.6	2414.4	4204.2	10701.9	21149.2	23492.2	21717.1	15049.0	10077.3
65°	1663.4	1643.2	1588.2	1694.5	2178.1	4894.8	16340.4	20572.2	21173.0	14750.4	9826.3
67.5°	1438.1	1439.8	1441.7	1408.8	1555.2	2258.7	9985.7	16204.9	19220.2	13336.2	8859.1
70°	1190.7	1207.2	1214.5	1214.5	1267.7	1482.0	4262.8	11106.8	15160.8	10456.4	7135.2
72.5°	1084.4	1049.7	1053.3	1035.0	1035.0	1128.4	1716.5	6296.3	9551.5	5882.2	4354.4
75°	884.8	906.8	910.4	897.6	855.5	861.0	1018.5	2641.6	4087.0	2440.1	2152.5
77.5°	763.9	763.9	771.2	762.1	729.1	644.8	679.7	1024.1	1390.4	1000.2	1075.3
80°	613.7	611.8	643.0	661.3	610.0	476.3	434.2	566.0	617.4	439.6	558.7
82.5°	298.6	316.9	441.5	503.8	463.5	344.4	265.6	351.7	329.7	194.1	250.9
85°	174.0	164.8	197.8	280.2	265.6	190.5	128.2	183.2	172.2	98.9	100.8
87.5°	54.9	51.2	40.3	95.2	77.0	53.1	34.8	53.1	47.7	21.9	21.9
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: P968925

CATALOG NUMBER: NAV-SB5C-830-U-AFL

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2	8879.2
2.5°	8778.4	8562.2	8347.9	8151.9	8032.8	7955.9	7879.0	7792.9	7759.9	7710.5
5°	8690.5	8272.9	7900.9	7580.4	7289.1	7060.1	6829.3	6642.4	6558.2	6614.9
7.5°	8639.2	8034.7	7461.3	6873.2	6307.2	5854.7	5460.9	5184.2	5059.7	5090.9
10°	8593.4	7765.4	6891.6	5962.8	5149.5	4588.9	4185.9	3975.3	3896.4	3912.9
12.5°	8551.3	7463.1	6204.6	4982.7	4118.1	3748.0	3632.6	3634.4	3649.1	3660.2
15°	8544.0	7098.6	5437.0	4125.4	3561.2	3537.4	3661.9	3740.7	3782.9	3795.7
17.5°	8532.9	6662.6	4654.8	3541.1	3425.7	3586.9	3702.3	3753.6	3786.6	3788.4
20°	8488.9	6109.4	3933.0	3262.6	3396.3	3535.5	3607.0	3647.3	3674.7	3684.0
22.5°	8353.4	5493.9	3370.7	3138.0	3279.1	3390.8	3475.1	3520.9	3537.4	3548.3
25°	8109.8	4805.1	2982.3	3018.9	3116.0	3257.1	3324.9	3334.0	3328.6	3345.1
27.5°	7791.0	4066.8	2740.5	2857.8	2982.3	3103.2	3139.9	3134.3	3123.4	3141.7
30°	7406.3	3403.6	2586.6	2676.4	2846.7	2956.7	2989.6	2976.8	2954.9	2975.0
32.5°	6999.6	2861.4	2460.2	2550.0	2735.0	2843.1	2876.0	2863.2	2846.7	2863.2
35°	6620.5	2482.2	2342.9	2465.7	2647.1	2753.4	2795.5	2797.3	2797.3	2817.4
37.5°	6272.4	2260.5	2245.9	2412.6	2586.6	2681.9	2742.4	2746.0	2667.3	2672.7
40°	5950.0	2167.2	2201.9	2377.8	2528.1	2619.6	2623.3	2418.1	2273.3	2269.8
42.5°	5686.2	2148.8	2214.7	2374.1	2485.8	2489.5	2231.2	2071.8	2031.5	2033.4
45°	5438.9	2143.3	2244.0	2374.1	2423.6	2150.7	1976.6	1934.5	1938.2	1952.8
47.5°	5162.3	2121.3	2249.6	2341.2	2244.0	1912.5	1861.2	1842.8	1835.6	1839.3
50°	4860.0	2042.5	2180.0	2275.2	1936.3	1809.9	1745.8	1740.3	1749.5	1754.9
52.5°	4541.3	1914.3	2060.9	2156.1	1795.3	1720.2	1648.7	1661.5	1701.8	1714.6
55°	4332.5	1764.1	1903.3	1918.0	1696.4	1635.9	1575.4	1604.7	1679.9	1703.7
57.5°	4277.4	1604.7	1723.8	1707.3	1569.9	1562.6	1525.9	1551.6	1646.9	1681.7
60°	4261.0	1461.9	1548.0	1535.1	1447.2	1482.0	1472.8	1485.6	1518.6	1529.6
62.5°	4132.8	1348.3	1390.4	1372.1	1337.3	1397.7	1419.7	1392.3	1417.9	1430.7
65°	3806.6	1256.6	1236.6	1223.7	1238.4	1293.3	1337.3	1282.3	1306.2	1342.7
67.5°	3268.1	1132.1	1077.2	1091.8	1137.6	1167.0	1223.7	1161.4	1181.6	1243.8
70°	2643.4	974.6	925.1	967.2	1011.2	1071.6	1080.9	1038.6	1086.3	1155.9
72.5°	1870.3	815.2	780.4	866.5	881.1	959.9	939.7	919.6	985.5	1009.4
75°	1296.9	657.6	637.6	703.5	756.6	824.3	809.6	833.5	972.7	983.7
77.5°	820.7	511.1	498.3	540.4	613.7	688.8	712.6	983.7	1661.5	1727.4
80°	476.3	381.0	366.3	399.3	463.5	533.1	687.0	1207.2	1095.5	1082.6
82.5°	265.6	262.0	243.6	252.8	309.5	384.7	970.9	850.0	690.6	712.6
85°	124.5	153.9	131.9	126.4	174.0	450.7	648.5	485.4	322.4	315.1
87.5°	33.0	29.3	29.3	33.0	73.3	388.4	258.3	207.0	122.7	119.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)