

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: P968897

Luminaire Tested: **NAV-SB5C-827-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33514.4 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

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

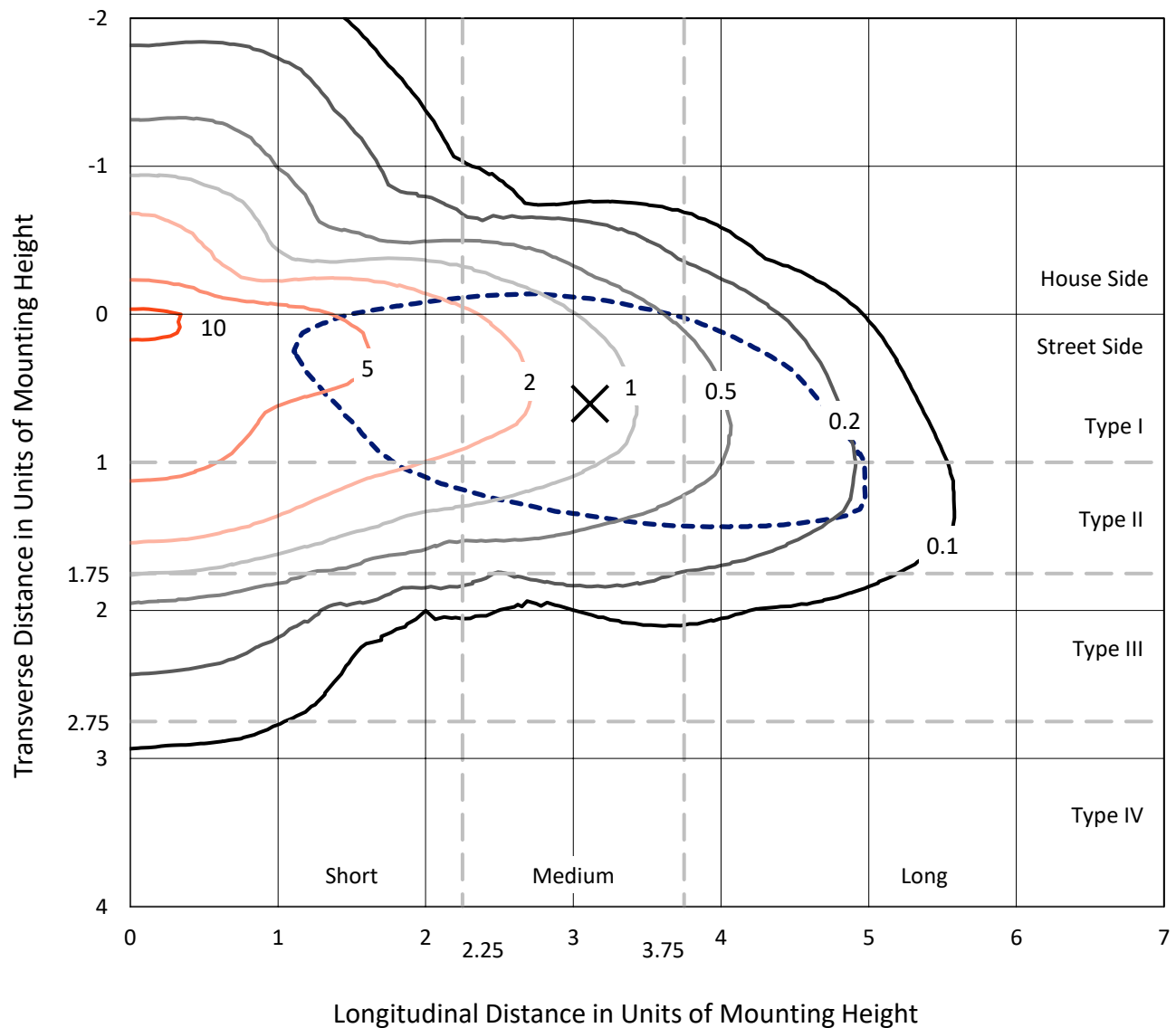


REPORT NUMBER: P968897

CATALOG NUMBER: NAV-SB5C-827-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

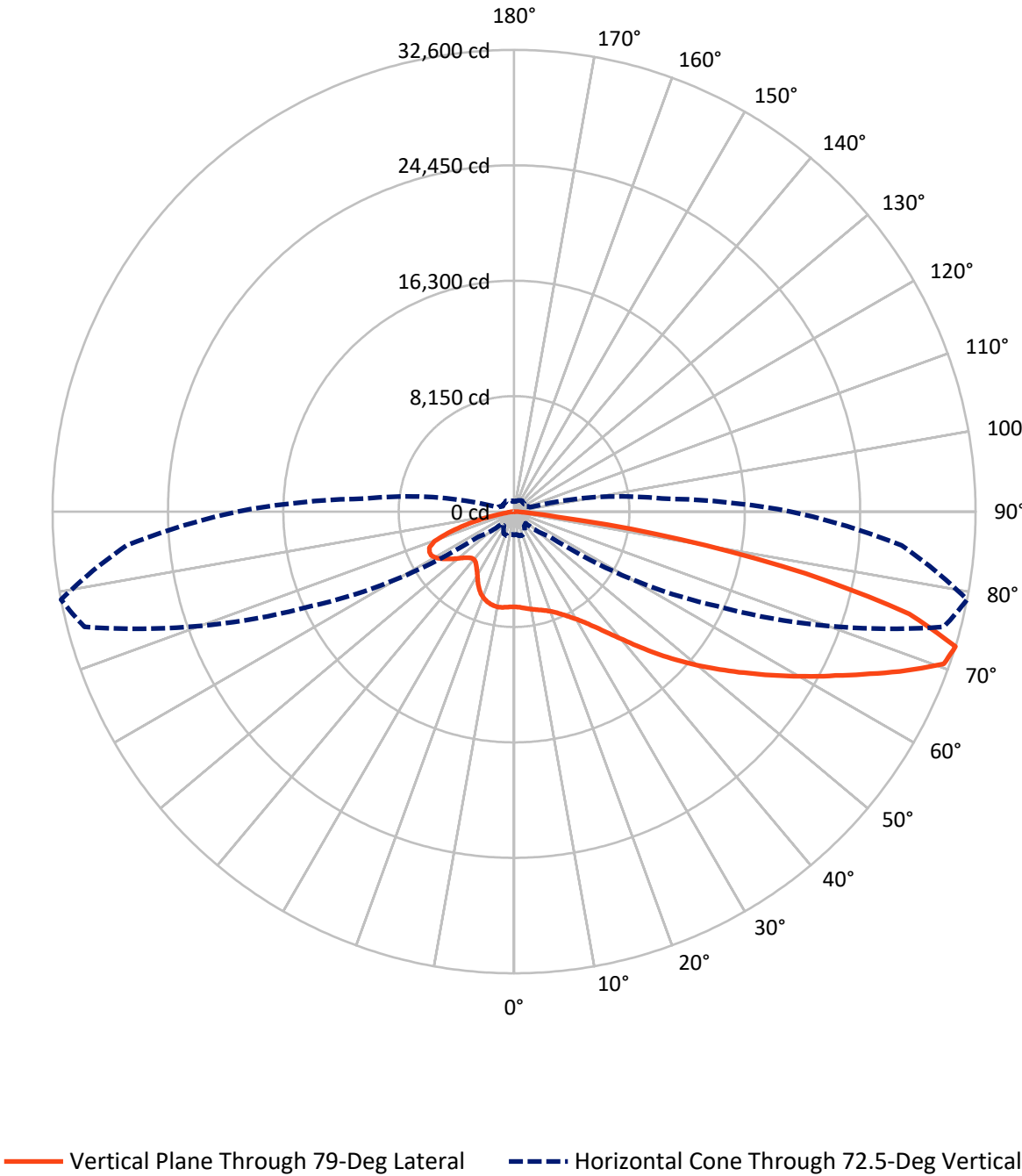
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 fc
Type II - Medium - N/A

REPORT NUMBER: P968897
CATALOG NUMBER: NAV-SB5C-827-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P968897

CATALOG NUMBER: NAV-SB5C-827-U-SL2

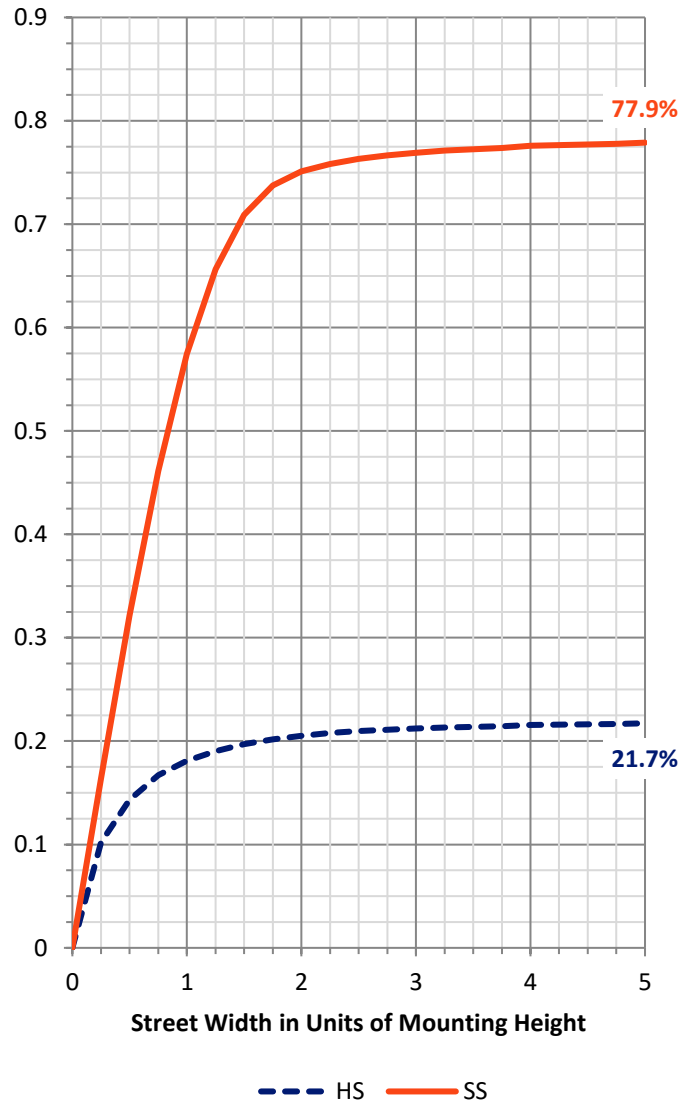
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7375.0	0.0	7375.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	26139.4	0.0	26139.4
	% Fixture	78.0	0.0	78.0
Total	Lumens	33514.4	0.0	33514.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.7	1.8
10°-20°	1596.6	4.8
20°-30°	2576.3	7.7
30°-40°	3866.7	11.5
40°-50°	5485.1	16.4
50°-60°	6926.9	20.7
60°-70°	7035.2	21.0
70°-80°	4794.8	14.3
80°-90°	622.1	1.9
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°	33514.4	100.0
0°-180°	33514.4	100.0

Coefficient of Utilization



REPORT NUMBER: P968897

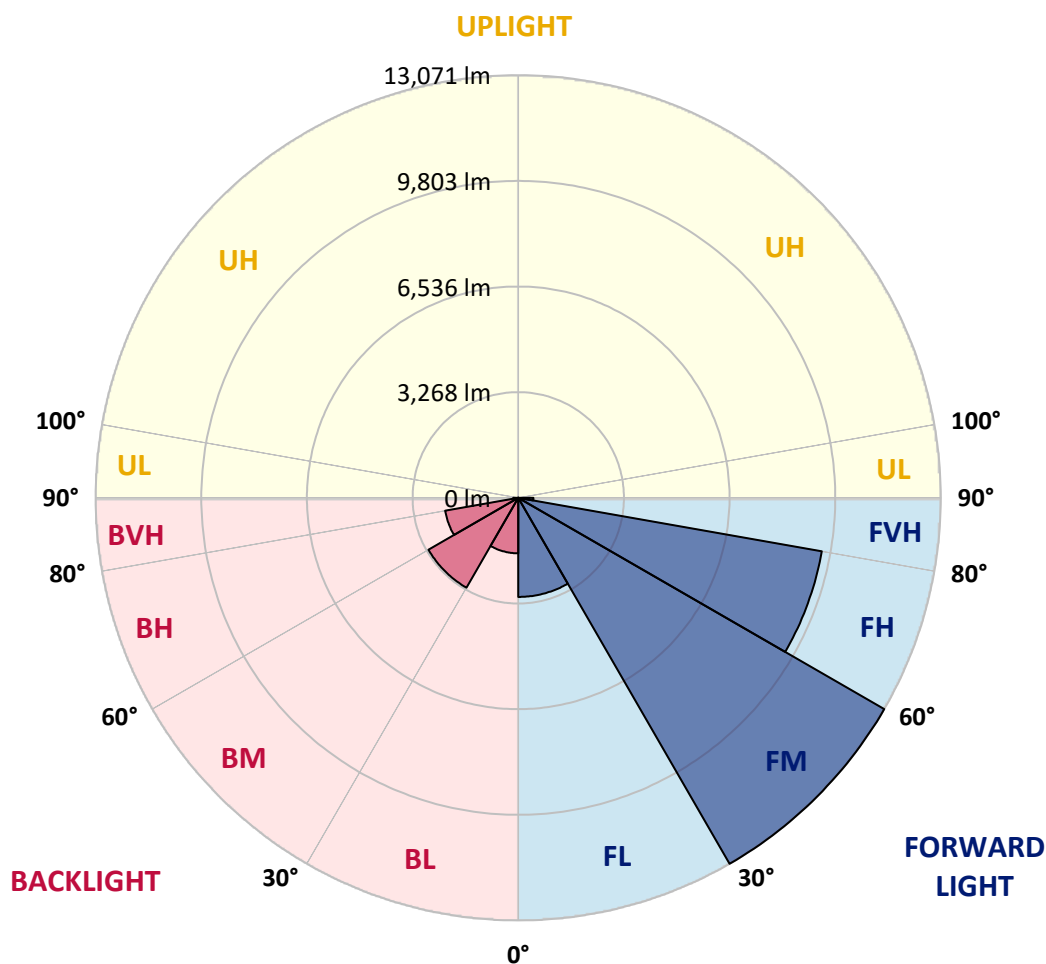
CATALOG NUMBER: NAV-SB5C-827-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3065.8	9.1			
FM	(30°-60°)	13071.3	39.0			
FH	(60°-80°)	9533.7	28.4			G4/12000
FVH	(80°-90°)	468.6	1.4			G3/500
BL	(0°-30°)	1717.9	5.1	B3/2500		
BM	(30°-60°)	3207.3	9.6	B3/5000		
BH	(60°-80°)	2296.3	6.9	B3/2500		G3/2500
BVH	(80°-90°)	153.5	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: P968897

CATALOG NUMBER: NAV-SB5C-827-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7
2.5°	6731.3	6699.3	6718.9	6711.7	6720.6	6731.3	6734.8	6740.1	6757.8	6756.1	6754.3
5°	6717.0	6685.2	6711.7	6702.9	6725.9	6750.8	6772.1	6791.5	6819.8	6832.3	6814.6
7.5°	6686.9	6665.7	6692.2	6718.9	6761.4	6798.6	6828.8	6873.0	6913.8	6920.9	6933.3
10°	6511.4	6495.4	6557.5	6626.6	6743.7	6844.7	6910.3	6961.7	7006.0	7013.2	7030.9
12.5°	6328.9	6309.3	6378.5	6472.5	6662.1	6844.7	6983.0	7050.4	7089.3	7112.4	7139.0
15°	6298.7	6282.7	6321.7	6403.3	6561.0	6796.9	7032.6	7156.8	7190.4	7217.0	7227.6
17.5°	6444.1	6413.9	6429.8	6458.2	6550.5	6752.5	7071.6	7277.3	7328.6	7357.0	7357.0
20°	6780.9	6738.4	6713.5	6656.8	6640.9	6759.6	7068.1	7422.6	7490.0	7525.4	7534.4
22.5°	7229.4	7201.0	7147.8	7004.2	6848.2	6846.5	7135.4	7608.8	7734.6	7768.4	7747.1
25°	7771.9	7729.3	7662.0	7466.9	7167.3	7018.5	7248.9	7846.4	8057.3	8066.1	8004.1
27.5°	8395.9	8332.0	8239.9	7982.8	7578.6	7287.9	7422.6	8119.3	8427.8	8424.3	8296.7
30°	9053.6	8989.8	8892.3	8580.3	8071.5	7651.3	7663.7	8413.6	8867.5	8847.9	8629.9
32.5°	9534.0	9486.2	9466.7	9225.5	8638.8	8080.4	7940.3	8739.8	9409.9	9392.2	9087.2
35°	9902.7	9840.7	9863.8	9741.4	9257.5	8560.8	8278.9	9128.0	10069.4	10067.7	9688.2
37.5°	10267.9	10213.0	10232.5	10151.0	9830.1	9170.6	8691.9	9603.1	10886.6	10925.7	10415.1
40°	10601.3	10542.7	10620.7	10544.5	10275.0	9819.4	9161.8	10140.3	11833.3	11907.7	11294.4
42.5°	10801.6	10755.4	10884.9	10886.6	10661.5	10367.3	9677.6	10732.4	12928.8	13095.5	12375.7
45°	10870.7	10854.7	11049.7	11090.5	11003.7	10684.5	10142.1	11377.7	14109.5	14407.4	13607.9
47.5°	10796.2	10766.1	11035.6	11186.2	11255.4	10833.4	10526.7	12076.1	15315.0	15751.2	14951.7
50°	10420.4	10361.9	10762.5	11079.8	11326.2	10931.0	10915.0	12882.8	16685.4	17162.3	16302.5
52.5°	9745.0	9700.7	10156.2	10707.6	11170.2	10978.9	11351.2	13763.9	17986.6	18603.5	17687.0
55°	8881.6	8823.1	9324.8	10044.6	10782.1	10962.9	11787.2	14749.5	19521.8	20147.6	19117.7
57.5°	7513.0	7396.0	8030.7	8881.6	10149.1	10943.4	12241.1	15729.9	21081.9	21831.8	20644.0
60°	5516.9	5343.1	6121.4	7130.1	8911.8	10753.7	12803.1	16829.0	22954.0	23629.4	22310.5
62.5°	3212.2	3111.2	3620.0	4561.4	6717.0	9636.8	13118.6	18107.1	24794.1	25503.2	23948.5
65°	2494.3	2465.9	2510.2	2582.9	3738.8	7215.2	12145.3	19353.4	27134.2	27630.5	25655.6
67.5°	2281.5	2260.3	2279.8	2143.3	1896.9	4018.9	9608.5	19669.0	29640.8	29942.3	27150.1
70°	2028.1	2003.3	2067.0	1950.1	1492.7	1827.8	6208.3	18523.8	31635.3	32200.8	28286.5
72.5°	1652.2	1623.9	1772.7	1719.6	1256.9	1173.6	3118.4	15802.5	31426.1	32599.6	27472.8
75°	1269.4	1253.4	1430.6	1475.0	1024.7	923.6	1496.2	11746.4	27655.4	28837.9	23677.3
77.5°	985.6	973.2	1063.6	1225.0	826.2	716.2	920.0	7451.0	20840.8	21048.3	16316.7
80°	739.2	703.8	787.1	948.4	643.5	523.0	624.0	4345.1	13173.5	11941.5	7101.7
82.5°	462.7	445.0	514.1	632.8	453.9	359.9	406.0	2400.3	5279.4	3109.4	1370.3
85°	264.1	257.1	280.1	361.6	246.4	207.5	232.3	1060.2	964.4	663.0	413.1
87.5°	106.4	102.8	127.6	161.3	90.4	76.3	81.6	255.3	212.7	196.8	136.5
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: P968897

CATALOG NUMBER: NAV-SB5C-827-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7	6727.7
2.5°	6747.2	6747.2	6722.4	6683.4	6639.0	6610.7	6564.6	6552.2	6504.3	6490.2	6513.2
5°	6828.8	6814.6	6738.4	6628.5	6477.7	6339.4	6187.0	6091.3	5956.6	5908.7	5944.2
7.5°	6931.6	6892.6	6761.4	6520.3	6204.7	5894.5	5571.9	5327.2	5093.2	5009.9	5020.6
10°	7025.6	6970.6	6747.2	6325.3	5779.3	5242.2	4728.0	4368.1	4095.1	3983.5	4008.3
12.5°	7119.4	7018.5	6653.3	6000.9	5174.7	4446.1	3898.4	3618.2	3449.8	3315.1	3359.4
15°	7208.1	7066.4	6507.8	5566.6	4511.7	3772.5	3368.3	3144.9	3010.2	2921.6	2937.5
17.5°	7310.9	7107.0	6289.8	5015.2	3880.6	3306.2	2976.5	2841.8	2815.2	2804.5	2811.7
20°	7454.5	7144.4	6002.6	4398.3	3416.1	2934.0	2763.8	2751.3	2749.6	2744.2	2762.0
22.5°	7608.8	7188.6	5623.3	3838.1	3020.8	2701.7	2671.6	2646.8	2630.8	2629.0	2648.5
25°	7791.3	7202.8	5148.2	3378.9	2684.0	2591.8	2556.4	2519.1	2508.5	2508.5	2519.1
27.5°	7968.7	7154.9	4595.1	2980.1	2494.3	2490.8	2444.6	2432.2	2430.5	2435.8	2450.0
30°	8145.9	7064.5	4045.5	2611.3	2384.4	2384.4	2368.5	2377.3	2384.4	2402.1	2414.5
32.5°	8385.2	6968.8	3586.4	2338.3	2288.6	2270.9	2286.9	2304.6	2311.7	2334.7	2354.2
35°	8736.3	6901.4	3221.2	2189.4	2189.4	2166.3	2175.2	2171.7	2155.7	2145.0	2169.9
37.5°	9200.7	6897.8	2919.8	2120.2	2106.1	2102.5	2104.3	2081.3	2019.1	1944.7	1946.5
40°	9759.1	6993.6	2687.5	2072.3	2061.8	2083.0	2072.3	2010.3	1840.2	1710.7	1707.1
42.5°	10509.0	7266.6	2538.6	2013.9	2045.8	2072.3	2029.8	1815.4	1700.1	1613.2	1609.7
45°	11391.8	7709.8	2462.4	1951.8	2015.7	2047.5	1841.9	1747.9	1655.8	1551.1	1544.1
47.5°	12391.7	8268.3	2444.6	1893.4	1948.3	1967.8	1762.2	1719.6	1615.0	1501.5	1492.7
50°	13480.2	8929.5	2492.5	1824.2	1850.7	1783.4	1735.5	1696.6	1588.4	1476.7	1464.3
52.5°	14605.9	9658.1	2588.2	1730.2	1753.3	1678.8	1724.9	1691.2	1572.5	1421.8	1411.1
55°	15712.1	10392.1	2680.5	1620.3	1654.0	1584.9	1694.7	1669.9	1499.8	1329.6	1320.7
57.5°	16836.1	11122.4	2770.9	1522.8	1558.3	1494.4	1646.9	1613.2	1418.2	1244.5	1241.0
60°	18004.3	11831.6	2813.4	1428.8	1453.7	1411.1	1574.2	1515.8	1326.0	1157.6	1152.3
62.5°	19098.2	12421.9	2744.2	1334.9	1350.8	1333.1	1478.5	1400.5	1233.9	1060.2	1058.3
65°	20195.5	12772.9	2531.5	1242.7	1246.3	1237.4	1343.8	1276.4	1125.8	975.0	964.4
67.5°	21190.0	12969.6	2192.9	1143.5	1134.6	1131.0	1217.9	1141.6	1021.1	889.9	879.3
70°	21401.0	12469.7	1675.3	1026.4	1026.4	1017.6	1079.6	1001.6	905.9	799.5	796.0
72.5°	19546.6	10489.5	1189.5	893.5	907.6	889.9	941.4	875.8	788.8	718.0	696.7
75°	15761.8	7692.1	865.1	757.0	781.8	751.6	799.5	753.5	679.0	677.2	609.9
77.5°	10829.9	4756.4	627.6	624.0	641.8	602.7	657.7	632.8	565.5	535.4	501.7
80°	4621.6	1896.9	457.4	482.2	482.2	446.7	510.6	517.6	459.2	445.0	445.0
82.5°	920.0	538.9	320.8	331.5	312.0	301.3	361.6	400.7	553.1	615.2	616.9
85°	276.5	198.5	193.2	180.8	159.6	161.3	212.7	402.4	496.4	283.6	244.7
87.5°	76.3	49.6	51.5	40.8	33.7	44.3	72.7	304.9	166.7	70.9	60.3
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)