

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: P959968

Luminaire Tested: **NAV-SB1B-830-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959968
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4204.6 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

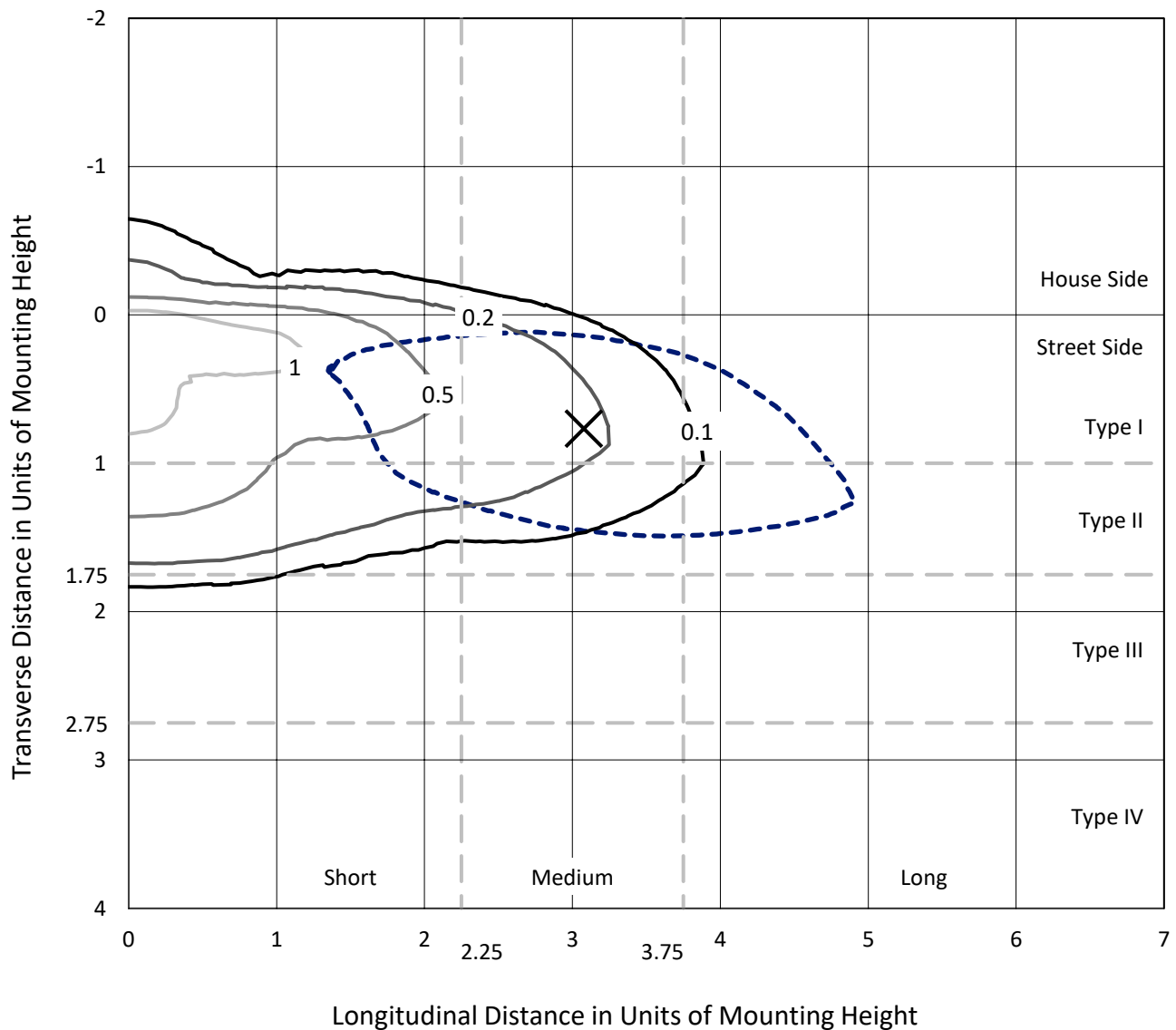
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959968
CATALOG NUMBER: NAV-SB1B-830-U-SL2-HSS

Iso-Footcandle Lines of Horizontal Illumination

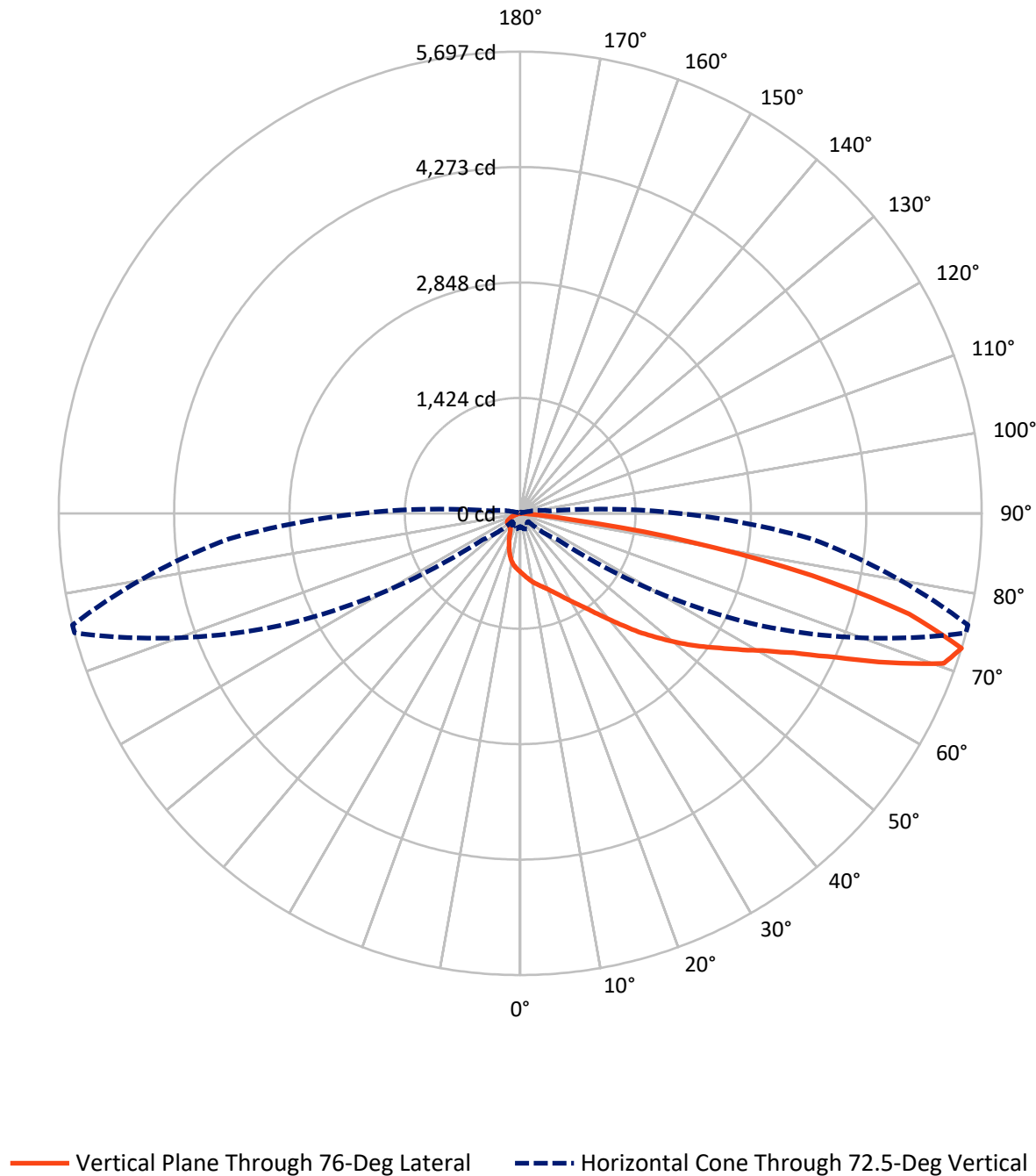
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
Type II - Medium - N/A

REPORT NUMBER: P959968
CATALOG NUMBER: NAV-SB1B-830-U-SL2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P959968

CATALOG NUMBER: NAV-SB1B-830-U-SL2-HSS

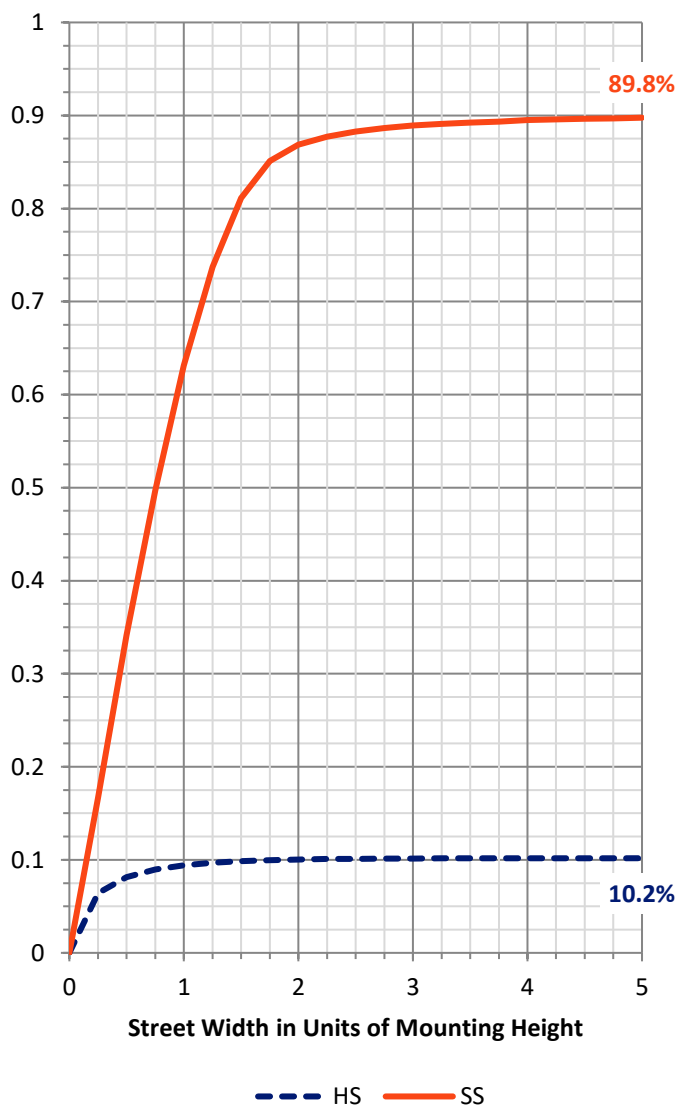
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	430.3	0.0	430.3
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	3774.2	0.0	3774.2
	% Fixture	89.8	0.0	89.8
Total	Lumens	4204.6	0.0	4204.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	1.6
10°-20°	177.2	4.2
20°-30°	280.4	6.7
30°-40°	433.9	10.3
40°-50°	659.0	15.7
50°-60°	908.5	21.6
60°-70°	959.8	22.8
70°-80°	658.4	15.7
80°-90°	61.3	1.5
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°	4204.6	100.0
0°-180°	4204.6	100.0

Coefficient of Utilization



REPORT NUMBER: P959968

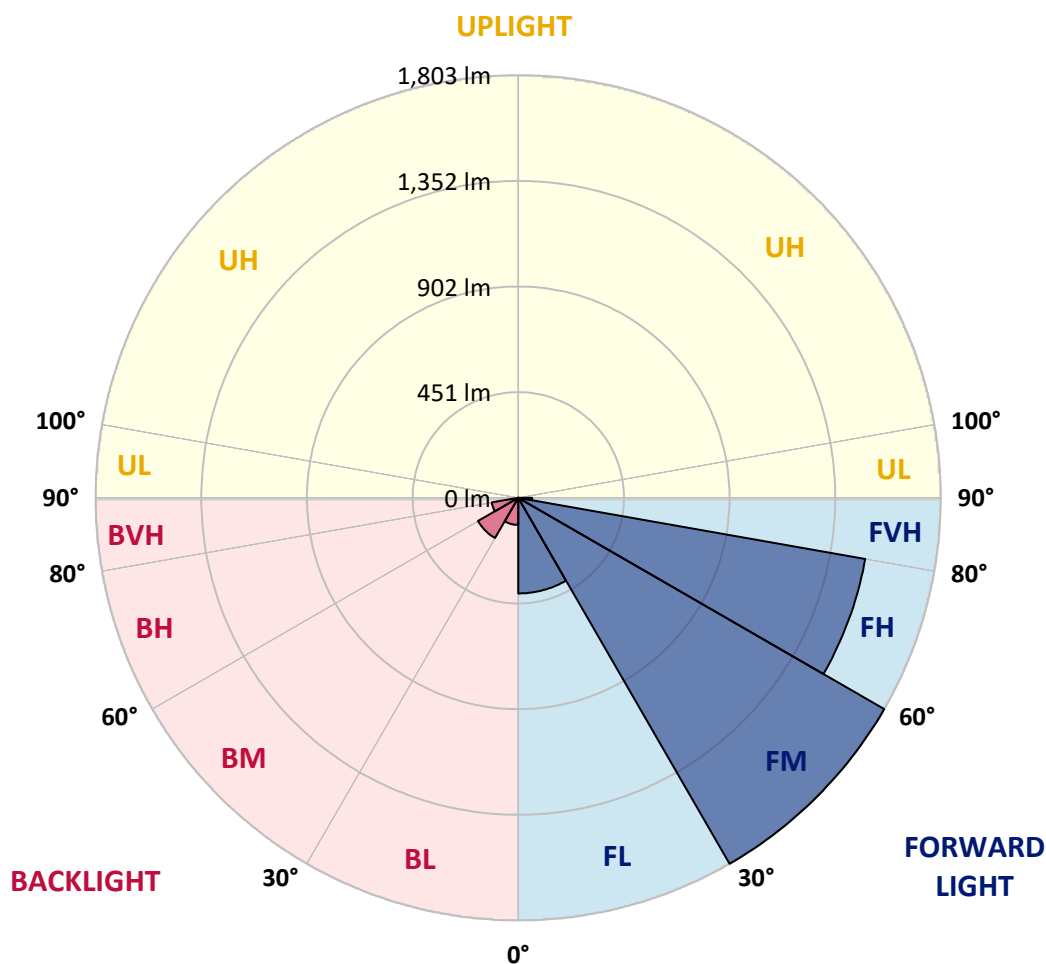
CATALOG NUMBER: NAV-SB1B-830-U-SL2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	408.0	9.7			
FM	(30°-60°)	1803.2	42.9			
FH	(60°-80°)	1503.3	35.8			G1/1800
FVH	(80°-90°)	59.6	1.4			G1/100
BL	(0°-30°)	115.7	2.8	B1/500		
BM	(30°-60°)	198.1	4.7	B0/220		
BH	(60°-80°)	114.9	2.7	B1/500		G1/500
BVH	(80°-90°)	1.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



REPORT NUMBER: P959968

CATALOG NUMBER: NAV-SB1B-830-U-SL2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6
2.5°	844.7	833.5	835.7	824.5	819.3	806.8	793.7	776.5	757.4	757.4	738.8
5°	933.6	926.5	926.5	913.4	903.3	883.7	860.2	829.9	794.0	790.4	755.2
7.5°	988.1	983.8	986.5	978.9	970.7	950.3	922.4	882.8	831.9	827.5	774.6
10°	998.8	998.6	1006.1	1008.3	1013.8	1003.4	978.6	933.1	869.2	862.9	791.2
12.5°	957.6	952.4	971.2	993.3	1024.4	1038.3	1025.5	978.9	903.3	894.6	806.8
15°	889.9	891.0	909.1	943.1	995.0	1044.6	1061.3	1023.6	938.0	927.6	821.5
17.5°	851.3	847.2	862.6	893.2	950.5	1020.6	1077.9	1065.3	974.8	963.1	836.5
20°	846.5	846.3	849.8	863.8	907.4	986.3	1075.9	1106.0	1018.1	1004.5	858.0
22.5°	878.7	878.2	875.2	872.5	884.5	952.6	1067.7	1144.7	1070.0	1055.2	888.6
25°	928.1	927.3	922.7	906.0	894.3	934.7	1060.2	1180.7	1131.3	1115.0	925.7
27.5°	988.4	987.9	979.4	954.3	924.0	936.3	1056.4	1217.8	1202.2	1186.1	968.5
30°	1062.3	1061.3	1043.8	1008.3	968.7	962.3	1061.5	1259.5	1276.1	1263.9	1017.8
32.5°	1155.1	1152.1	1129.1	1075.7	1020.3	996.9	1071.3	1302.4	1363.7	1352.3	1083.8
35°	1226.8	1222.1	1208.8	1161.6	1080.0	1039.5	1094.2	1353.1	1469.0	1458.9	1168.2
37.5°	1288.4	1283.8	1272.8	1234.2	1165.7	1093.7	1131.1	1420.8	1593.4	1588.4	1271.0
40°	1354.9	1347.4	1342.1	1300.7	1238.8	1172.0	1183.7	1499.8	1736.6	1737.1	1394.5
42.5°	1406.3	1403.2	1403.8	1371.9	1309.4	1264.7	1253.5	1589.0	1908.1	1913.3	1543.1
45°	1450.2	1447.7	1457.8	1435.4	1380.6	1325.5	1335.4	1689.9	2095.7	2106.4	1709.5
47.5°	1484.0	1486.8	1501.2	1486.8	1454.6	1368.4	1407.9	1798.8	2292.9	2294.3	1881.4
50°	1517.8	1518.9	1542.9	1535.8	1522.7	1422.6	1474.7	1920.3	2500.8	2503.3	2042.0
52.5°	1528.5	1526.8	1565.0	1582.4	1583.0	1489.7	1561.2	2053.0	2704.5	2712.5	2207.3
55°	1473.8	1478.6	1540.2	1611.1	1639.2	1582.4	1677.9	2220.7	2921.6	2924.8	2370.9
57.5°	1207.1	1232.8	1369.2	1533.6	1675.5	1715.2	1845.6	2416.7	3172.3	3169.3	2536.8
60°	732.6	763.1	926.2	1286.3	1557.1	1848.7	2092.7	2720.6	3446.0	3437.6	2704.5
62.5°	409.7	418.9	471.0	770.0	1184.3	1763.8	2334.1	3110.9	3813.7	3785.1	2869.5
65°	302.0	304.9	317.2	377.2	582.0	1356.6	2281.2	3577.6	4330.3	4279.3	3067.2
67.5°	262.4	265.4	277.4	285.6	259.9	712.7	1879.4	3836.4	4986.2	4919.4	3334.8
70°	220.9	222.5	241.9	247.3	186.0	271.1	1207.4	3756.4	5593.4	5545.7	3622.0
72.5°	164.7	171.3	199.4	212.5	149.2	144.0	568.4	3284.3	5696.2	5696.7	3602.7
75°	111.8	117.9	150.0	174.9	115.1	101.0	229.4	2452.5	4960.1	4960.1	3158.0
77.5°	76.4	81.3	104.4	137.1	87.2	69.3	118.9	1556.6	3558.5	3683.6	2250.9
80°	33.8	36.8	67.3	99.5	66.3	44.7	67.3	852.3	2151.9	2125.4	882.3
82.5°	16.6	19.1	43.0	62.2	42.8	27.6	35.5	405.3	697.4	662.8	137.8
85°	3.3	4.4	23.2	26.4	19.9	12.3	13.3	124.6	84.0	96.0	29.2
87.5°	0.0	0.0	7.1	4.9	2.2	2.8	2.8	11.2	6.6	7.7	7.7
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: P959968

CATALOG NUMBER: NAV-SB1B-830-U-SL2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6
2.5°	729.1	718.9	696.9	675.1	652.7	632.2	618.1	603.8	595.1	591.3	591.8
5°	734.7	714.3	668.0	619.4	571.4	524.5	489.3	456.3	446.0	428.8	429.9
7.5°	743.7	710.5	637.4	555.6	477.5	408.9	359.2	319.7	303.8	288.5	288.3
10°	749.8	703.4	597.1	487.7	382.1	304.9	257.5	228.8	218.4	209.2	208.9
12.5°	752.2	690.3	550.6	411.5	297.2	232.4	204.0	190.6	187.1	183.8	183.8
15°	754.4	677.5	498.9	338.2	234.8	194.4	183.3	179.0	176.5	174.2	174.2
17.5°	756.3	661.1	439.6	274.9	198.2	179.2	173.7	169.1	167.2	164.7	164.7
20°	762.9	645.3	386.7	226.9	178.4	168.3	162.3	157.3	155.7	154.1	154.4
22.5°	775.1	632.5	335.5	194.4	166.4	157.1	149.4	144.0	142.9	141.9	141.0
25°	789.9	616.6	287.2	173.4	154.7	144.3	135.8	131.2	130.1	130.4	129.9
27.5°	808.7	599.2	245.7	160.1	144.3	132.3	122.7	119.2	119.7	120.8	120.2
30°	829.4	583.1	213.3	150.8	135.0	121.7	112.1	109.7	111.5	113.2	112.6
32.5°	860.2	569.0	190.6	143.5	126.8	113.0	105.3	102.3	104.4	106.6	106.1
35°	902.2	561.8	177.8	137.1	119.7	106.1	98.5	96.2	98.5	99.0	98.7
37.5°	953.8	561.3	172.4	132.0	113.2	100.3	91.9	91.1	92.8	93.0	92.5
40°	1020.3	564.9	168.3	128.2	106.4	93.8	85.9	85.1	85.7	87.5	87.2
42.5°	1104.6	579.5	162.6	123.3	99.0	87.2	81.0	79.1	78.8	81.0	80.8
45°	1210.4	612.0	154.9	115.4	92.5	81.8	75.5	73.4	72.6	73.1	73.9
47.5°	1325.8	651.9	147.3	108.0	87.8	77.5	71.1	68.5	67.1	67.1	67.1
50°	1437.7	696.9	142.1	100.3	84.6	73.4	66.5	63.9	61.6	61.1	60.8
52.5°	1548.4	741.1	138.0	92.8	80.8	68.2	62.2	59.1	56.7	55.7	55.0
55°	1649.2	783.0	130.9	85.4	75.8	62.7	57.8	54.8	51.9	49.9	49.1
57.5°	1746.1	817.9	117.9	77.7	68.2	57.5	53.2	49.9	46.3	43.9	42.8
60°	1834.1	836.0	101.5	69.6	60.6	52.1	48.0	45.0	40.4	36.3	35.2
62.5°	1901.3	828.8	83.7	60.3	52.7	47.2	42.0	39.1	33.5	28.6	26.8
65°	1970.0	790.2	66.8	50.4	46.1	40.6	35.2	32.2	25.9	20.7	19.4
67.5°	2059.2	707.5	52.7	42.0	39.8	32.2	27.6	25.6	21.3	16.4	15.3
70°	2116.5	549.6	40.9	34.1	32.7	23.5	21.3	21.0	16.9	12.5	11.2
72.5°	1959.4	360.3	31.4	25.9	23.5	15.3	16.4	16.4	12.3	8.4	7.4
75°	1635.6	210.8	22.7	18.6	13.3	9.8	11.2	11.2	7.7	4.1	3.3
77.5°	1168.2	112.3	15.0	11.5	6.9	4.4	6.0	5.7	2.5	0.3	0.0
80°	446.8	38.7	7.1	4.6	1.9	0.8	0.5	0.3	0.3	0.0	0.0
82.5°	68.2	10.0	1.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	0.0	0.0	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)