

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: P960353

Luminaire Tested: **NAV-SB1C-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960353
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-SB1C-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7821.8 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 54.4
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

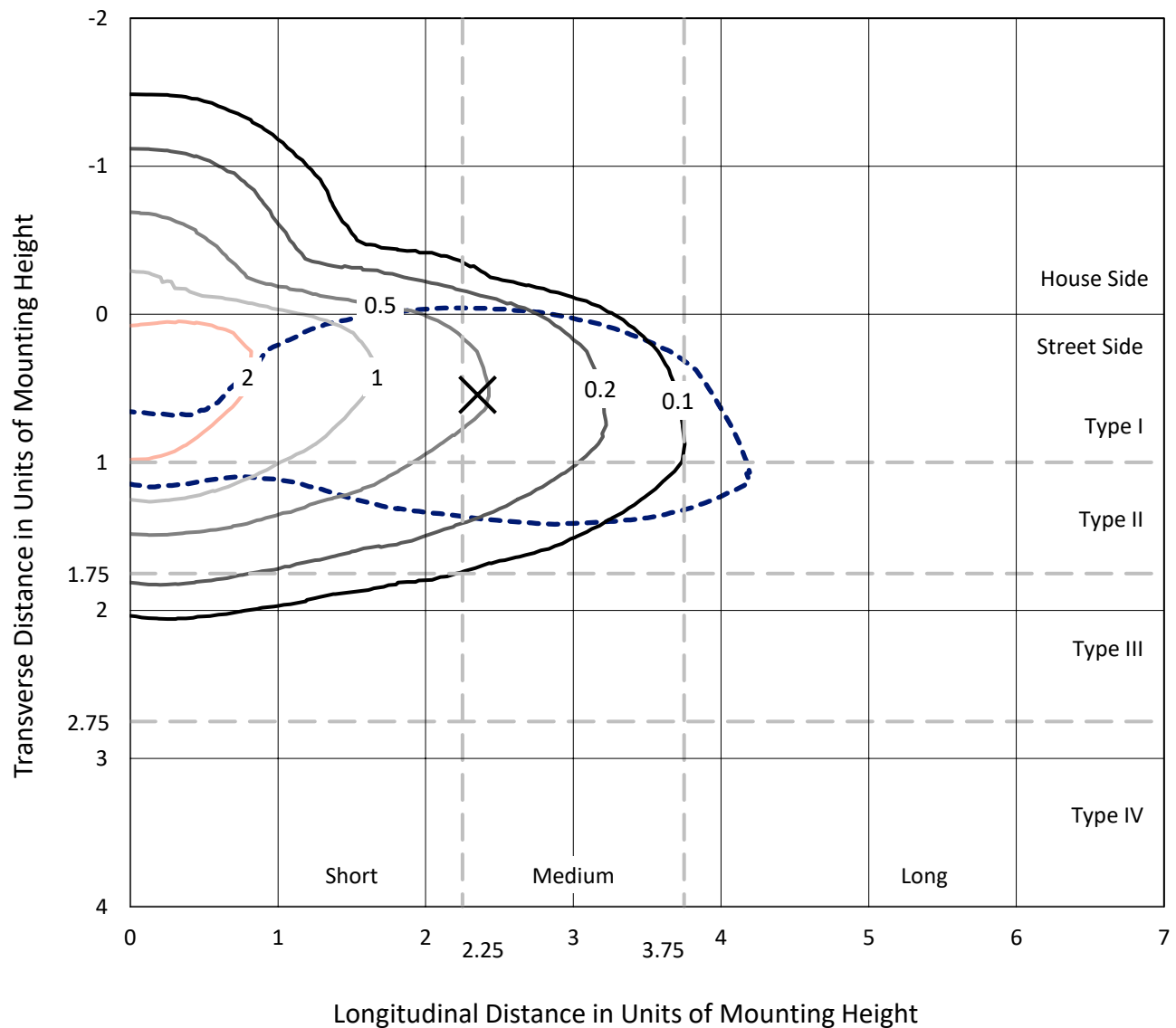


REPORT NUMBER: P960353

CATALOG NUMBER: NAV-SB1C-735-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

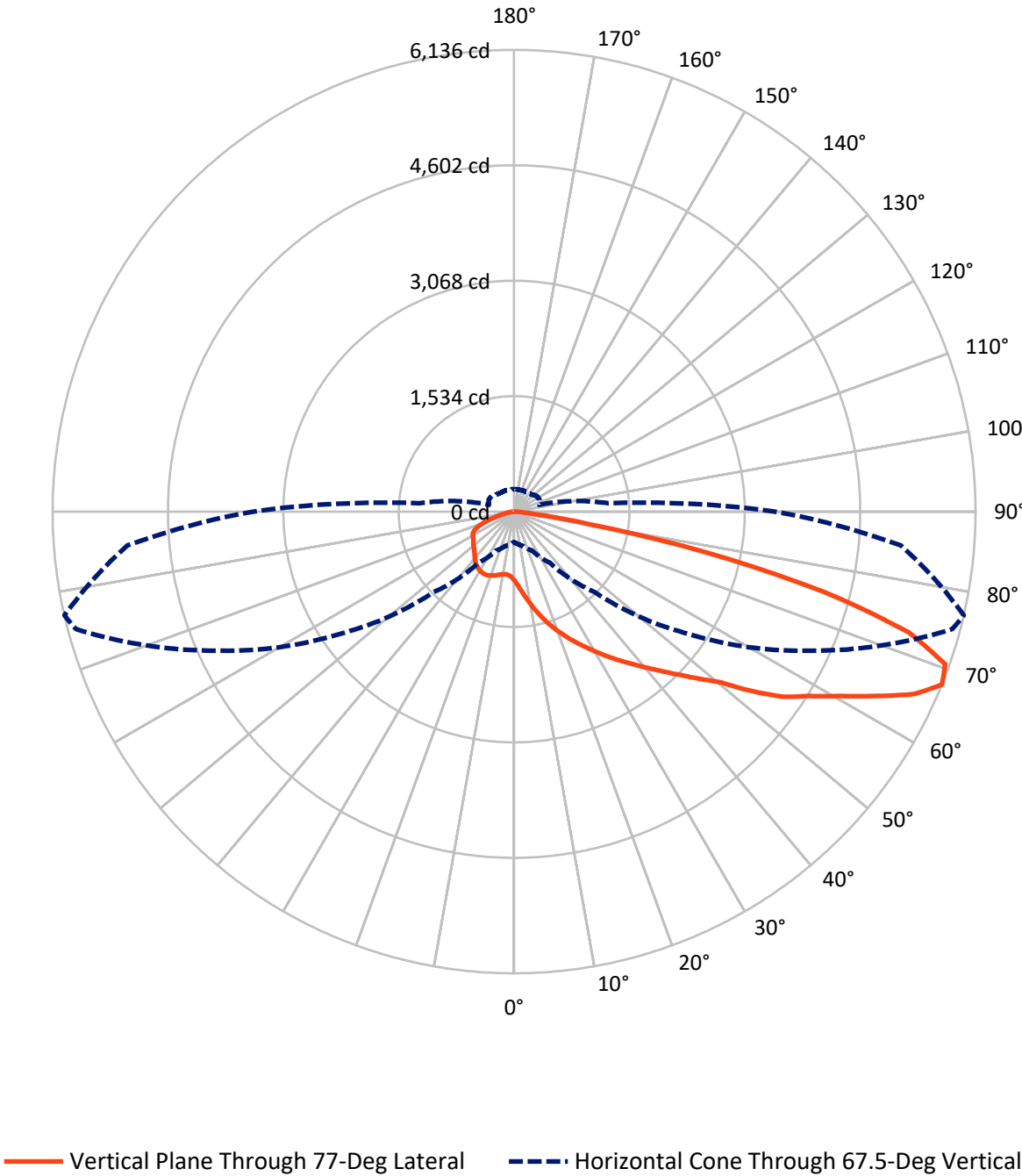
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
Type II - Medium - N/A

REPORT NUMBER: P960353
CATALOG NUMBER: NAV-SB1C-735-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P960353

CATALOG NUMBER: NAV-SB1C-735-U-T2R

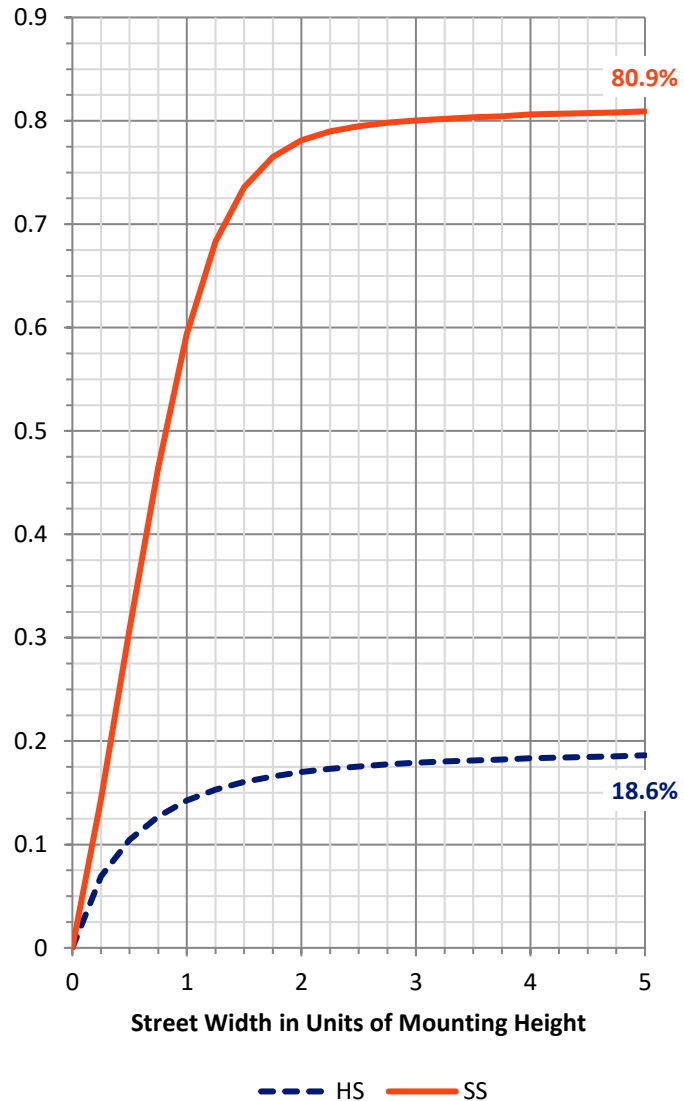
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1479.6	0.0	1479.6
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	6342.2	0.0	6342.2
	% Fixture	81.1	0.0	81.1
Total	Lumens	7821.8	0.0	7821.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	1.3
10°-20°	353.4	4.5
20°-30°	667.3	8.5
30°-40°	1074.9	13.7
40°-50°	1470.3	18.8
50°-60°	1658.5	21.2
60°-70°	1548.0	19.8
70°-80°	848.6	10.8
80°-90°	102.4	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°	7821.8	100.0
0°-180°	7821.8	100.0

Coefficient of Utilization



REPORT NUMBER: P960353

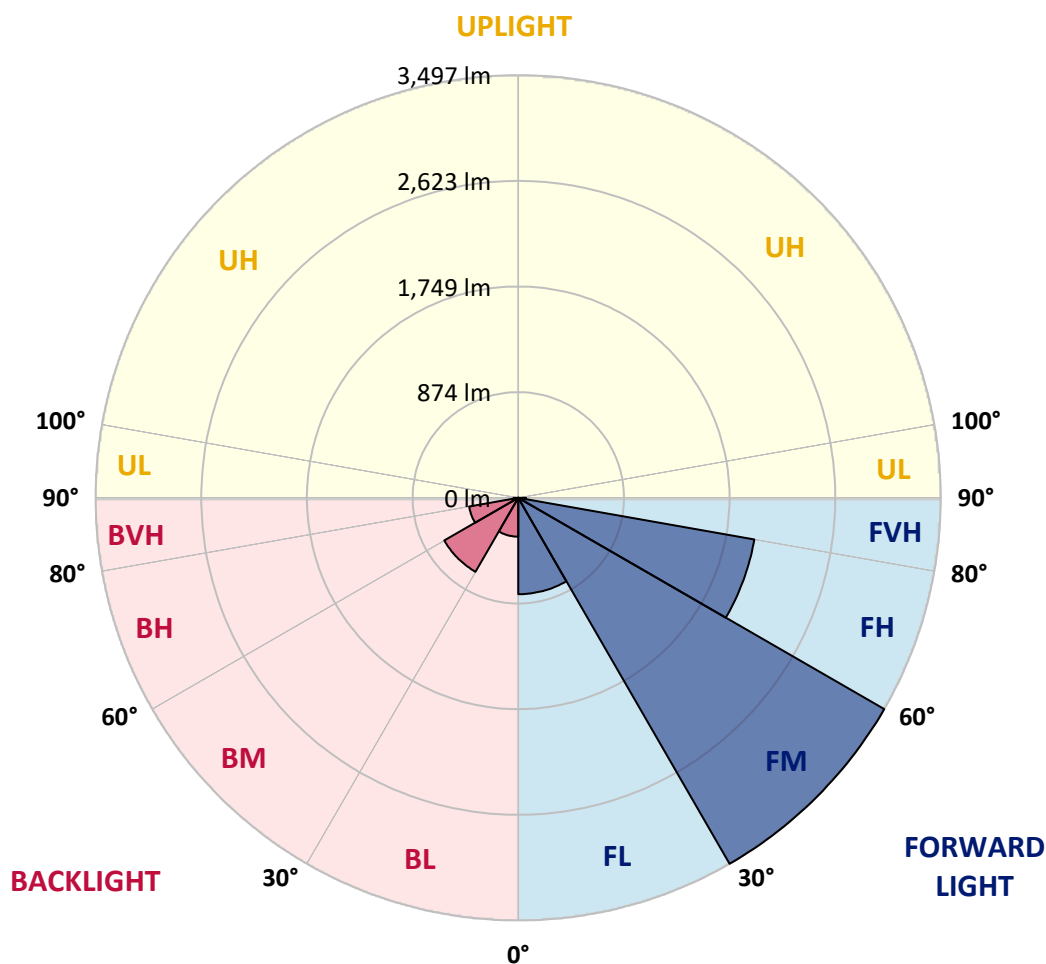
CATALOG NUMBER: NAV-SB1C-735-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	797.3	10.2			
FM	(30°-60°)	3497.0	44.7			
FH	(60°-80°)	1983.8	25.4			G2/5000
FVH	(80°-90°)	64.0	0.8			G1/100
BL	(0°-30°)	321.7	4.1	B1/500		
BM	(30°-60°)	706.8	9.0	B1/1000		
BH	(60°-80°)	412.8	5.3	B1/500		G1/500
BVH	(80°-90°)	38.3	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



REPORT NUMBER: P960353

CATALOG NUMBER: NAV-SB1C-735-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8
2.5°	1149.1	1157.1	1147.1	1147.1	1113.1	1095.4	1061.5	1035.7	989.2	981.1	950.5
5°	1358.2	1368.4	1354.2	1348.2	1308.2	1271.4	1214.5	1158.4	1075.6	1067.1	994.9
7.5°	1520.2	1533.1	1520.6	1514.1	1478.6	1437.4	1370.7	1292.4	1175.8	1159.2	1054.6
10°	1652.2	1654.1	1650.1	1652.6	1624.7	1590.8	1522.5	1431.3	1285.6	1262.9	1126.9
12.5°	1726.8	1736.1	1744.2	1758.8	1753.9	1733.0	1671.6	1562.5	1401.8	1372.8	1205.6
15°	1762.0	1778.2	1796.3	1829.8	1856.9	1862.1	1815.3	1703.4	1520.2	1485.0	1285.1
17.5°	1774.5	1789.9	1818.6	1866.9	1925.2	1964.3	1943.3	1840.3	1637.2	1596.8	1368.7
20°	1837.9	1842.3	1859.7	1905.7	1968.7	2033.7	2049.5	1971.9	1753.1	1707.4	1455.1
22.5°	1973.5	1964.7	1969.5	1990.5	2035.8	2098.7	2134.7	2088.2	1872.3	1819.7	1542.3
25°	2197.6	2171.8	2145.9	2121.8	2144.7	2180.3	2221.1	2204.5	1997.0	1930.4	1630.4
27.5°	2480.7	2449.1	2392.2	2312.7	2284.8	2297.3	2315.6	2312.3	2112.4	2045.0	1721.2
30°	2759.3	2722.5	2654.6	2539.6	2466.1	2433.0	2419.3	2410.0	2238.0	2166.1	1812.8
32.5°	2981.7	2952.7	2886.1	2757.2	2650.6	2594.2	2548.5	2515.4	2369.3	2297.3	1909.8
35°	3176.4	3149.3	3073.0	2932.5	2816.6	2756.4	2696.7	2626.0	2505.7	2433.0	2013.9
37.5°	3354.0	3326.9	3222.4	3076.2	2959.5	2918.0	2864.7	2744.7	2642.6	2574.0	2124.2
40°	3466.2	3460.2	3362.5	3197.0	3075.8	3055.2	3037.5	2882.4	2794.4	2730.6	2245.3
42.5°	3494.9	3508.3	3430.7	3294.7	3179.1	3162.6	3204.3	3038.3	2964.8	2903.8	2382.6
45°	3425.9	3464.2	3413.4	3320.9	3252.6	3243.8	3352.0	3208.7	3153.3	3097.7	2548.1
47.5°	3251.0	3316.1	3295.1	3282.2	3272.4	3310.7	3482.0	3389.6	3366.9	3318.4	2737.1
50°	2898.2	3021.3	3058.1	3139.6	3233.3	3362.9	3600.3	3587.0	3616.4	3567.6	2967.2
52.5°	2288.1	2457.6	2670.8	2875.1	3112.9	3345.5	3730.3	3870.4	3994.7	3968.1	3333.0
55°	1888.8	1965.1	2129.0	2503.7	2879.6	3272.4	3788.8	4099.4	4370.3	4346.4	3610.4
57.5°	1581.9	1650.1	1751.1	2064.0	2526.7	3106.5	3825.2	4239.0	4627.5	4625.0	3884.1
60°	1252.9	1325.1	1428.4	1650.1	2114.5	2819.9	3817.1	4398.1	4955.7	4975.9	4218.1
62.5°	881.4	960.9	1075.6	1282.4	1693.4	2448.4	3652.4	4513.2	5342.1	5397.0	4619.8
65°	579.4	631.9	718.3	896.8	1261.8	1970.8	3337.8	4528.1	5755.6	5848.4	4996.9
67.5°	406.2	426.4	477.2	574.1	831.8	1511.3	2836.8	4373.5	6031.3	6135.9	5160.4
70°	316.9	327.1	352.9	391.7	522.4	1016.3	2173.8	3971.4	5972.4	6081.3	4989.6
72.5°	273.8	283.4	293.2	298.0	350.4	627.4	1472.5	3320.5	5417.2	5491.1	4338.3
75°	248.4	250.7	258.8	257.2	267.3	407.0	849.9	2419.3	4274.1	4248.7	3202.6
77.5°	208.8	212.0	225.3	223.2	237.4	278.2	441.3	1561.3	2771.0	2598.2	1782.6
80°	176.8	178.5	193.0	190.5	206.3	201.5	225.3	795.8	1175.4	995.7	513.9
82.5°	61.4	76.0	147.4	151.8	157.4	122.0	130.0	324.6	359.0	275.0	107.8
85°	29.8	31.9	75.1	106.6	106.2	61.4	63.3	115.9	113.1	88.9	36.0
87.5°	4.8	6.0	8.9	41.6	33.1	16.2	21.8	22.7	23.4	20.2	8.1
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: P960353

CATALOG NUMBER: NAV-SB1C-735-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8	917.8
2.5°	927.8	907.6	865.2	826.0	795.4	765.9	749.4	735.2	727.1	725.6	725.6
5°	952.8	911.3	834.1	769.2	726.7	695.3	678.8	668.2	663.0	659.7	659.4
7.5°	988.8	927.8	818.1	744.2	699.7	677.1	668.6	667.0	666.6	667.0	668.2
10°	1038.4	954.9	816.4	738.1	700.9	688.4	688.0	688.4	690.0	690.4	690.8
12.5°	1092.1	982.8	822.9	743.3	716.3	709.4	708.2	707.8	709.0	709.8	710.2
15°	1150.7	1019.5	833.7	754.6	733.2	725.9	724.8	722.3	721.9	721.5	721.1
17.5°	1210.8	1055.9	845.8	766.7	744.2	734.0	729.6	724.0	719.4	718.3	719.4
20°	1271.8	1091.7	854.3	772.7	745.0	730.8	721.9	712.3	704.6	700.1	701.7
22.5°	1336.8	1129.3	859.6	771.2	737.7	718.3	702.1	690.8	679.2	671.5	671.9
25°	1400.3	1162.0	859.2	762.7	723.5	698.9	678.3	663.8	647.6	639.6	639.6
27.5°	1461.2	1191.5	849.1	747.7	703.4	675.9	651.3	633.9	618.2	610.5	610.1
30°	1524.2	1216.2	833.3	725.9	679.5	649.2	622.2	607.2	593.2	585.9	585.5
32.5°	1586.8	1238.7	811.2	698.9	652.1	623.0	596.3	582.6	574.1	574.1	574.5
35°	1653.0	1254.5	781.7	667.4	623.0	595.1	574.1	566.1	565.3	560.4	559.2
37.5°	1722.8	1264.5	745.7	635.1	594.3	568.1	561.6	552.0	543.9	533.4	531.8
40°	1796.3	1274.7	702.5	601.6	564.1	549.5	546.7	533.7	510.8	484.9	481.2
42.5°	1885.6	1281.6	657.7	568.1	532.2	527.3	531.4	509.1	472.4	453.0	453.5
45°	1988.9	1292.8	616.5	534.9	499.5	499.5	516.4	487.3	457.0	445.0	447.0
47.5°	2123.0	1319.1	578.2	498.7	469.1	477.2	483.3	461.0	444.1	429.2	428.8
50°	2316.7	1382.0	538.6	461.9	446.2	462.3	453.9	440.9	421.1	409.0	407.7
52.5°	2557.4	1419.2	503.5	428.8	426.4	442.5	430.4	418.3	403.3	387.2	384.0
55°	2721.3	1426.1	474.0	404.6	413.1	411.4	407.0	396.1	388.0	366.6	367.1
57.5°	2904.6	1439.8	449.8	390.0	404.6	386.8	385.2	375.9	365.4	350.9	346.0
60°	3123.9	1461.2	428.8	384.4	397.3	370.6	362.5	359.0	348.4	341.2	343.2
62.5°	3362.9	1480.6	407.4	385.2	388.8	354.9	342.8	341.5	335.1	332.7	332.7
65°	3526.0	1427.7	380.8	384.4	375.5	338.8	323.4	323.0	317.8	316.9	316.5
67.5°	3469.1	1260.1	344.8	373.1	361.7	322.6	305.7	304.0	297.1	297.6	297.6
70°	3184.1	1021.1	295.1	345.2	344.8	308.1	287.1	281.8	272.5	274.2	275.7
72.5°	2649.4	756.7	228.6	298.8	317.8	294.8	265.7	257.2	245.5	247.1	246.7
75°	1913.4	514.3	166.4	227.3	276.5	279.0	244.7	230.1	216.0	218.4	219.2
77.5°	979.1	291.5	122.4	156.6	217.2	253.6	225.7	206.3	203.1	225.7	222.4
80°	319.4	146.2	84.8	109.8	142.5	207.6	197.8	175.7	174.9	180.1	154.7
82.5°	95.3	61.8	54.5	72.3	78.7	159.1	170.8	132.8	114.3	120.3	124.3
85°	32.7	29.8	31.1	36.0	37.5	93.3	119.5	88.0	83.1	91.6	90.4
87.5°	7.7	10.5	8.9	8.1	8.1	22.7	46.4	36.7	50.8	33.9	32.7
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)