

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: P961594

Luminaire Tested: **NAV-SB2A-835-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-835-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6518 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.3
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

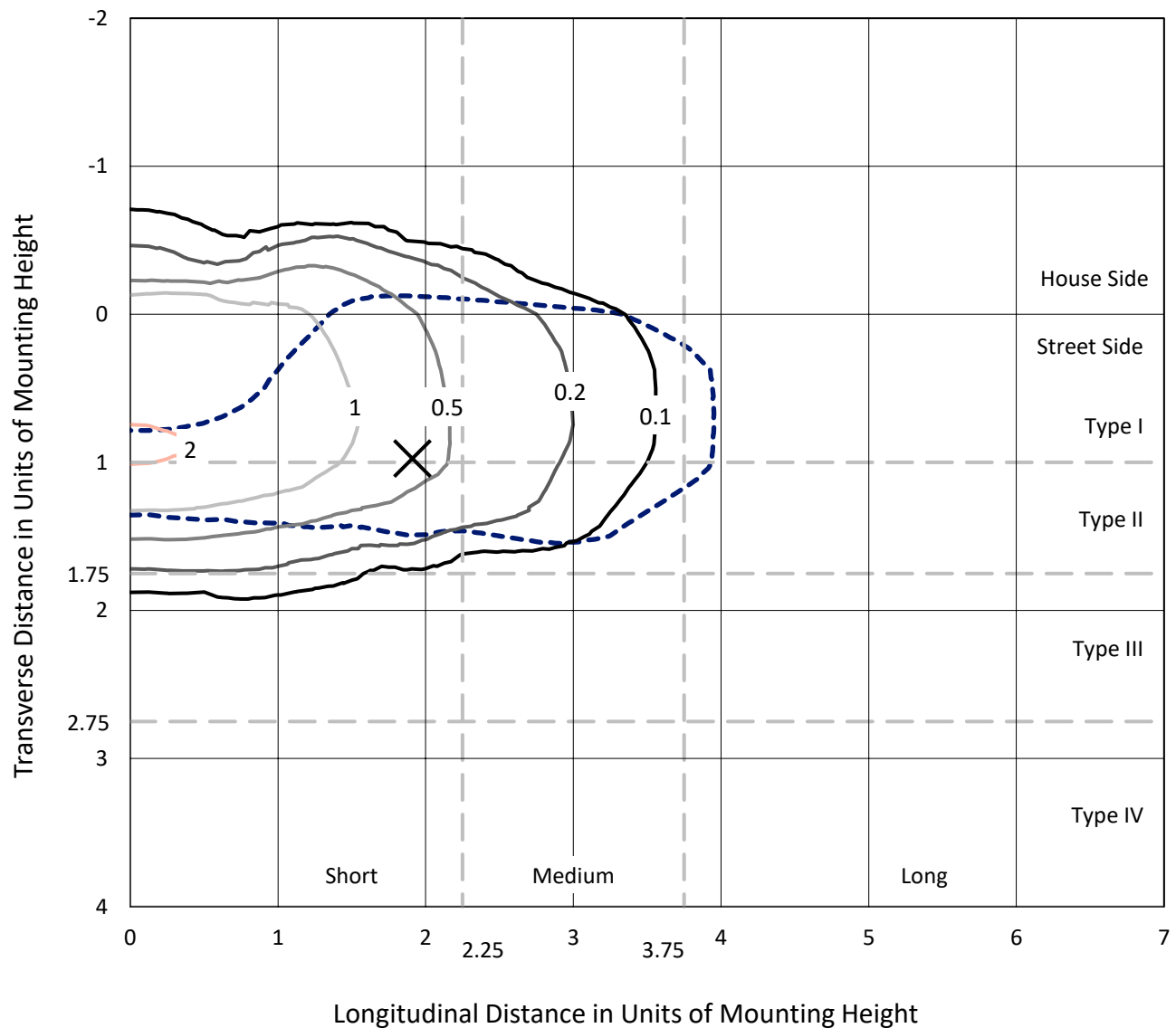


REPORT NUMBER: P961594

CATALOG NUMBER: NAV-SB2A-835-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

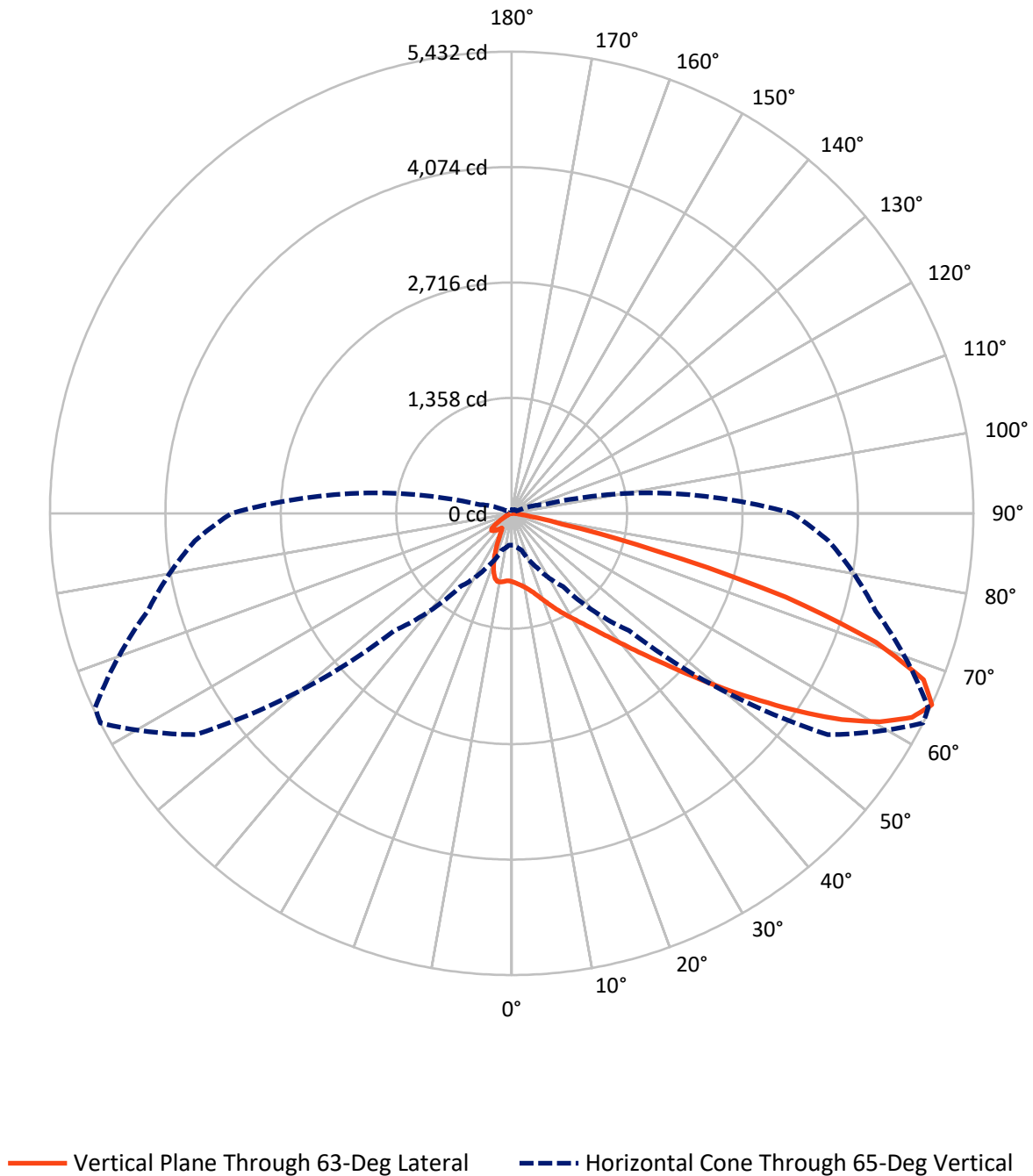
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
Type II - Short - N/A

REPORT NUMBER: P961594
CATALOG NUMBER: NAV-SB2A-835-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961594

CATALOG NUMBER: NAV-SB2A-835-U-T2U-HSS

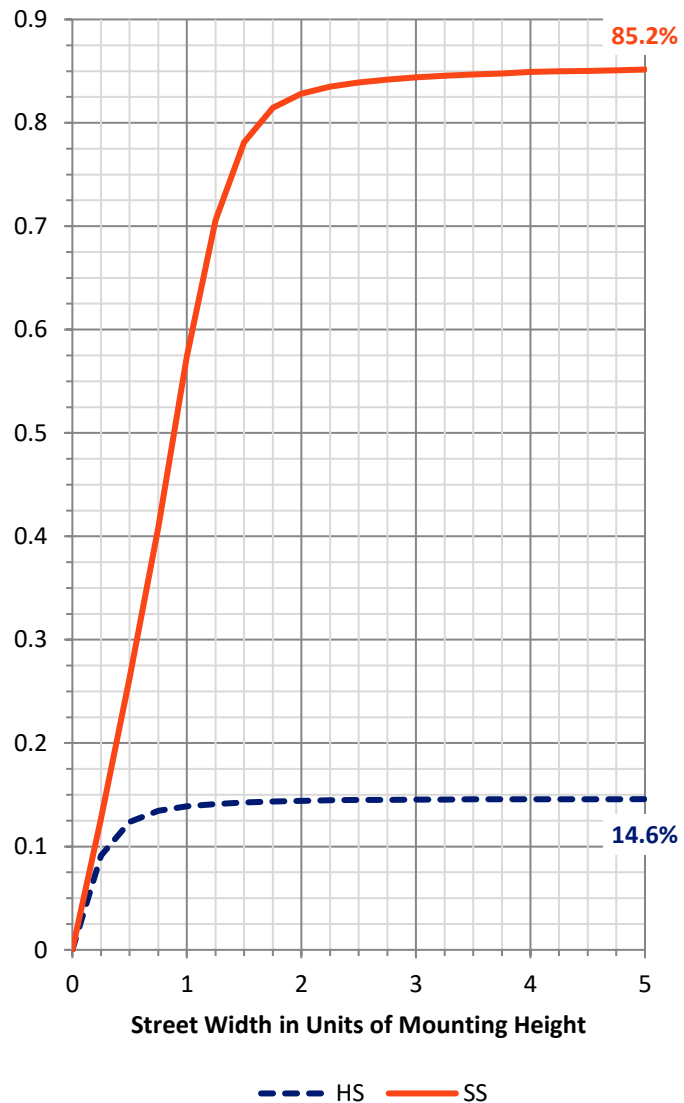
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	958.1	0.0	958.1
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	5559.9	0.0	5559.9
	% Fixture	85.3	0.0	85.3
Total	Lumens	6518.0	0.0	6518.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	1.2
10°-20°	210.3	3.2
20°-30°	366.2	5.6
30°-40°	660.0	10.1
40°-50°	1309.0	20.1
50°-60°	1783.1	27.4
60°-70°	1423.2	21.8
70°-80°	644.1	9.9
80°-90°	46.3	0.7
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°	6518.0	100.0
0°-180°	6518.0	100.0

Coefficient of Utilization



REPORT NUMBER: P961594

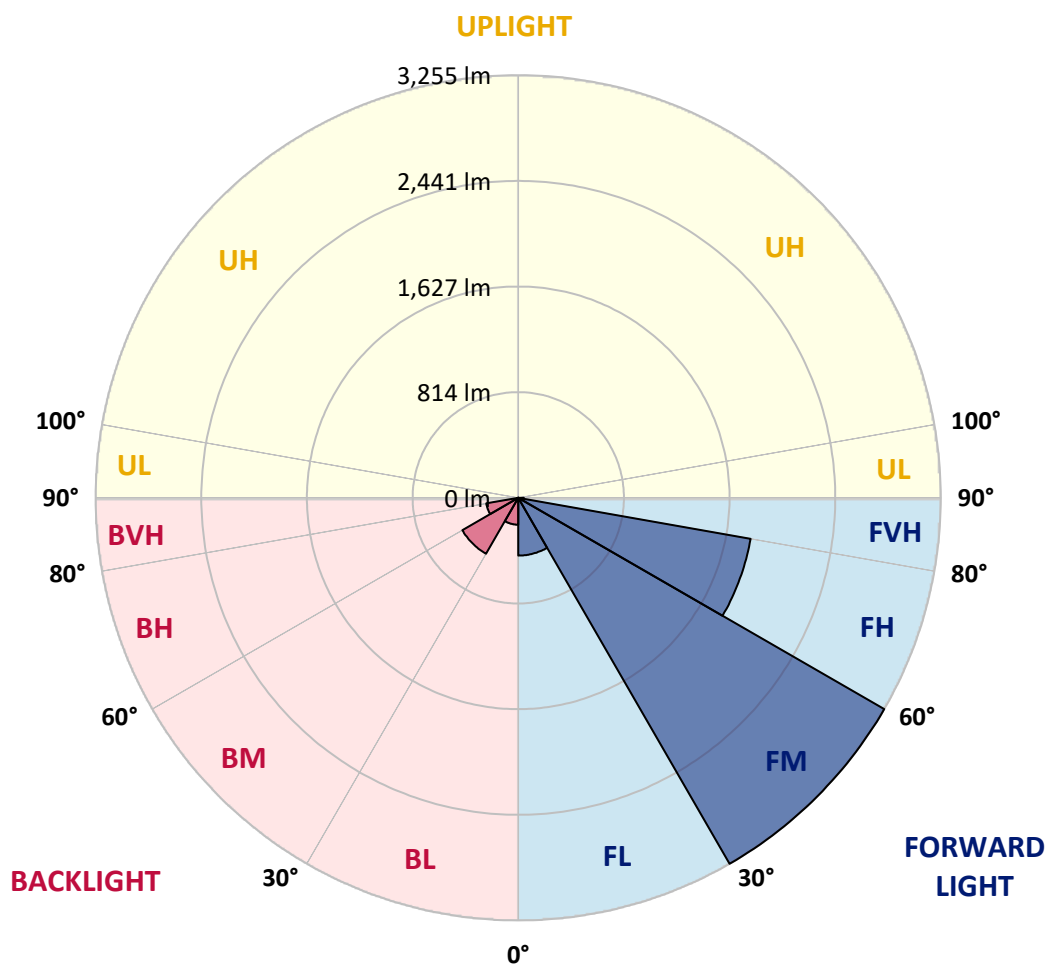
CATALOG NUMBER: NAV-SB2A-835-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	444.9	6.8			
FM	(30°-60°)	3254.9	49.9			
FH	(60°-80°)	1817.2	27.9			G2/5000
FVH	(80°-90°)	42.9	0.7			G1/100
BL	(0°-30°)	207.3	3.2	B1/500		
BM	(30°-60°)	497.2	7.6	B1/1000		
BH	(60°-80°)	250.1	3.8	B1/500		G1/500
BVH	(80°-90°)	3.4	0.1			G0/10
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 Short



REPORT NUMBER: P961594

CATALOG NUMBER: NAV-SB2A-835-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4
2.5°	823.3	821.0	824.2	822.9	821.9	820.1	819.3	818.4	816.5	815.2	809.9
5°	825.5	824.2	827.3	830.0	832.7	835.4	836.7	838.6	836.7	833.1	827.8
7.5°	806.7	805.8	812.5	820.6	832.7	843.0	854.2	860.5	860.9	859.6	853.7
10°	805.3	803.1	809.9	819.7	835.4	853.7	873.5	886.9	888.8	894.6	888.3
12.5°	826.5	824.2	833.6	844.4	860.5	879.8	903.9	922.8	925.5	933.6	929.1
15°	861.8	858.7	869.5	883.3	903.9	926.0	951.5	968.5	970.8	980.6	972.6
17.5°	903.1	900.0	912.6	927.3	949.8	979.8	1009.3	1028.2	1030.8	1037.2	1022.3
20°	956.0	951.9	961.9	975.3	999.1	1034.9	1070.3	1097.3	1096.9	1096.9	1072.6
22.5°	1017.4	1011.2	1019.7	1030.4	1052.9	1096.3	1143.4	1175.3	1175.3	1162.8	1122.8
25°	1083.3	1077.1	1086.5	1096.3	1116.1	1165.4	1220.6	1260.0	1261.8	1240.2	1176.6
27.5°	1165.8	1157.7	1164.9	1176.6	1188.3	1238.5	1304.0	1349.7	1350.6	1317.4	1227.7
30°	1324.6	1301.8	1279.3	1266.8	1272.1	1321.9	1391.8	1442.5	1447.0	1401.3	1283.3
32.5°	1615.2	1610.7	1531.8	1428.6	1374.8	1411.6	1490.0	1551.0	1553.7	1495.0	1355.6
35°	2066.7	2061.3	1934.4	1738.0	1562.7	1531.8	1609.4	1681.5	1679.8	1613.4	1449.2
37.5°	2605.7	2600.7	2433.5	2170.7	1886.9	1713.4	1763.1	1839.0	1850.1	1763.1	1570.3
40°	3066.2	3047.8	2942.0	2688.7	2317.3	2014.7	1981.9	2032.2	2043.8	1940.7	1724.2
42.5°	3415.1	3399.4	3345.6	3187.2	2838.4	2460.4	2239.8	2259.1	2272.1	2148.3	1900.8
45°	3595.8	3592.2	3613.7	3598.9	3369.3	3007.5	2608.4	2528.2	2533.1	2378.3	2101.2
47.5°	3621.3	3619.6	3717.8	3856.8	3825.8	3624.5	3081.5	2863.5	2846.0	2637.9	2319.2
50°	3470.6	3467.1	3655.5	3915.9	4130.8	4142.8	3618.7	3241.6	3202.9	2906.6	2546.5
52.5°	2989.5	2988.6	3298.0	3731.6	4237.9	4596.6	4149.5	3656.8	3592.2	3190.8	2786.9
55°	2300.3	2316.9	2671.6	3184.2	4042.4	4815.0	4626.2	4117.7	4018.6	3476.9	3008.4
57.5°	1629.5	1653.7	2004.4	2460.8	3436.1	4685.9	4948.6	4579.6	4472.9	3762.2	3233.1
60°	875.2	896.8	1247.9	1792.7	2556.4	4204.2	5118.5	4980.5	4879.5	4033.0	3435.7
62.5°	521.5	528.7	673.9	1157.3	1729.1	3211.9	5046.4	5285.8	5202.9	4260.3	3611.9
65°	374.4	375.8	448.8	706.7	1049.7	1951.5	4540.1	5432.0	5406.5	4431.6	3742.4
67.5°	315.2	314.4	344.8	469.4	715.2	977.5	3479.7	5225.2	5333.8	4540.1	3816.4
70°	270.4	271.7	307.6	343.9	537.6	553.3	1730.0	4549.6	4780.9	4568.8	3811.9
72.5°	201.3	205.8	239.0	313.4	405.8	380.7	597.3	3373.4	3791.7	4304.7	3614.2
75°	142.2	144.4	168.2	263.6	302.7	277.2	304.9	1743.8	2280.1	3300.3	2958.1
77.5°	109.4	113.5	127.3	184.3	298.2	194.6	186.5	603.5	927.3	1993.6	2028.2
80°	59.1	66.3	91.9	133.1	209.4	137.7	92.4	240.4	314.4	932.2	782.0
82.5°	30.4	34.0	64.2	95.9	119.3	120.1	45.7	100.0	129.6	287.9	107.2
85°	12.1	14.8	43.0	52.9	61.4	59.1	20.6	40.4	46.6	79.8	32.7
87.5°	2.7	4.5	15.7	12.1	11.7	12.5	4.9	9.4	8.9	9.4	5.8
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: P961594

CATALOG NUMBER: NAV-SB2A-835-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4
2.5°	809.3	807.6	802.7	797.2	791.0	787.4	785.2	784.7	781.6	779.3	781.6
5°	822.9	821.0	811.6	800.4	788.3	778.9	769.9	761.9	750.2	747.9	747.0
7.5°	849.7	844.8	829.5	814.3	791.4	764.0	730.9	692.8	658.7	648.4	643.5
10°	882.9	876.2	856.9	830.0	779.3	704.9	624.6	550.2	491.0	474.4	468.1
12.5°	920.6	914.7	889.2	839.4	728.7	593.7	470.8	378.4	321.0	306.7	302.7
15°	965.4	956.9	921.5	825.0	638.1	451.1	323.3	268.5	247.9	245.3	242.6
17.5°	1012.9	999.1	950.2	773.5	516.1	320.6	249.8	234.1	225.1	222.4	221.1
20°	1056.5	1038.5	967.2	695.5	385.6	249.8	223.8	213.4	205.4	202.2	200.4
22.5°	1099.9	1074.4	967.2	589.2	289.3	221.5	205.4	196.0	186.5	182.6	180.3
25°	1145.2	1111.2	950.2	470.8	232.7	203.2	187.9	177.5	169.5	164.6	162.8
27.5°	1189.2	1142.1	911.1	358.7	207.2	187.0	171.8	161.8	154.3	150.7	150.7
30°	1230.9	1172.6	856.5	272.1	190.5	171.3	156.9	148.4	140.8	137.2	137.7
32.5°	1287.4	1211.1	798.2	223.3	176.2	156.5	143.5	135.4	128.7	126.0	126.0
35°	1365.8	1268.1	747.9	219.2	164.1	144.4	131.4	123.7	117.1	114.8	114.8
37.5°	1477.0	1360.0	721.5	246.2	154.3	133.7	121.6	113.5	107.2	105.4	105.0
40°	1614.3	1484.7	735.8	273.1	147.5	124.2	112.5	104.4	99.1	96.9	96.5
42.5°	1777.0	1638.5	815.2	293.7	143.1	116.1	104.0	95.0	91.4	90.6	90.6
45°	1964.0	1807.5	936.7	315.7	135.9	108.5	95.5	88.8	86.1	85.7	85.2
47.5°	2176.6	1993.2	1077.5	343.1	128.7	101.4	88.8	84.3	82.1	81.2	81.2
50°	2387.3	2180.2	1222.3	358.2	122.9	94.6	83.4	79.8	78.0	77.6	77.6
52.5°	2607.9	2372.6	1339.4	343.9	118.0	89.3	78.9	76.3	74.4	74.0	74.0
55°	2818.2	2528.2	1359.6	291.9	108.0	83.8	74.0	72.7	70.4	70.4	69.9
57.5°	2999.4	2606.2	1217.0	214.3	98.2	75.7	69.1	67.8	65.9	65.5	65.0
60°	3165.7	2583.7	939.4	144.4	87.4	67.8	62.7	61.9	60.1	57.8	57.4
62.5°	3259.5	2485.1	642.6	94.2	76.7	59.1	55.6	55.1	51.1	46.6	45.7
65°	3294.9	2282.4	400.9	68.6	64.2	50.6	48.0	47.0	41.2	36.3	35.9
67.5°	3263.9	1948.7	202.2	54.2	50.6	42.1	39.5	39.5	35.5	31.0	30.4
70°	3140.2	1460.9	85.2	43.5	39.1	32.3	32.3	34.0	30.0	25.1	24.7
72.5°	2871.6	982.9	45.3	33.2	29.1	22.9	26.4	27.8	23.8	18.9	18.9
75°	2282.9	599.5	31.4	24.7	18.3	16.1	20.2	21.1	16.1	12.5	12.1
77.5°	1561.4	344.4	21.1	15.7	11.7	9.4	13.9	13.0	8.5	5.8	6.3
80°	685.6	143.5	12.1	7.2	4.5	3.6	4.9	3.6	2.7	1.7	1.7
82.5°	80.3	33.6	4.5	2.7	1.7	0.9	0.4	0.0	0.0	0.0	0.0
85°	16.6	4.0	2.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	0.9	0.4	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)