

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: P962056

Luminaire Tested: **NAV-SB2B-827-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962056
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7329.8 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
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



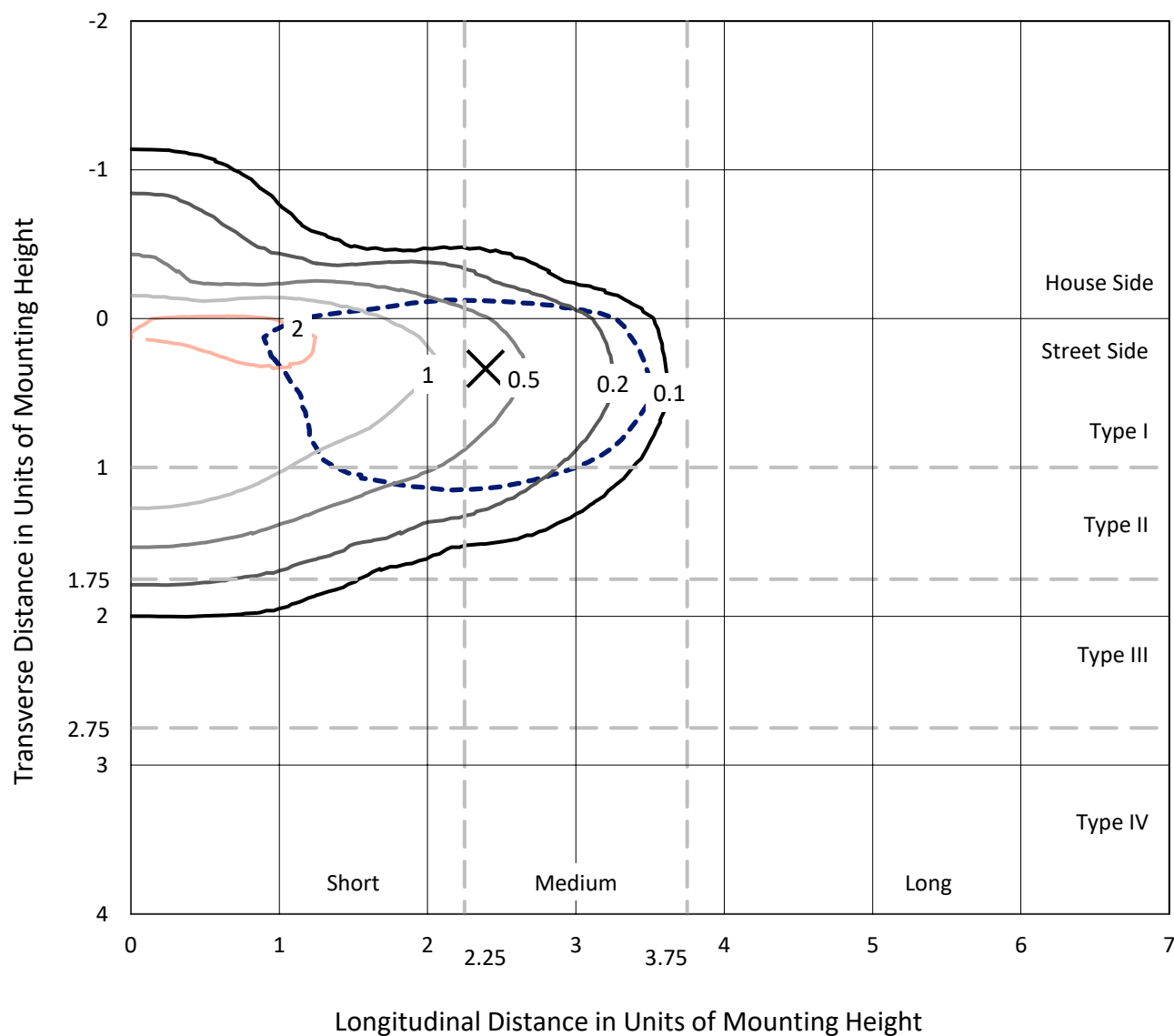
REPORT NUMBER: P962056

CATALOG NUMBER: NAV-SB2B-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

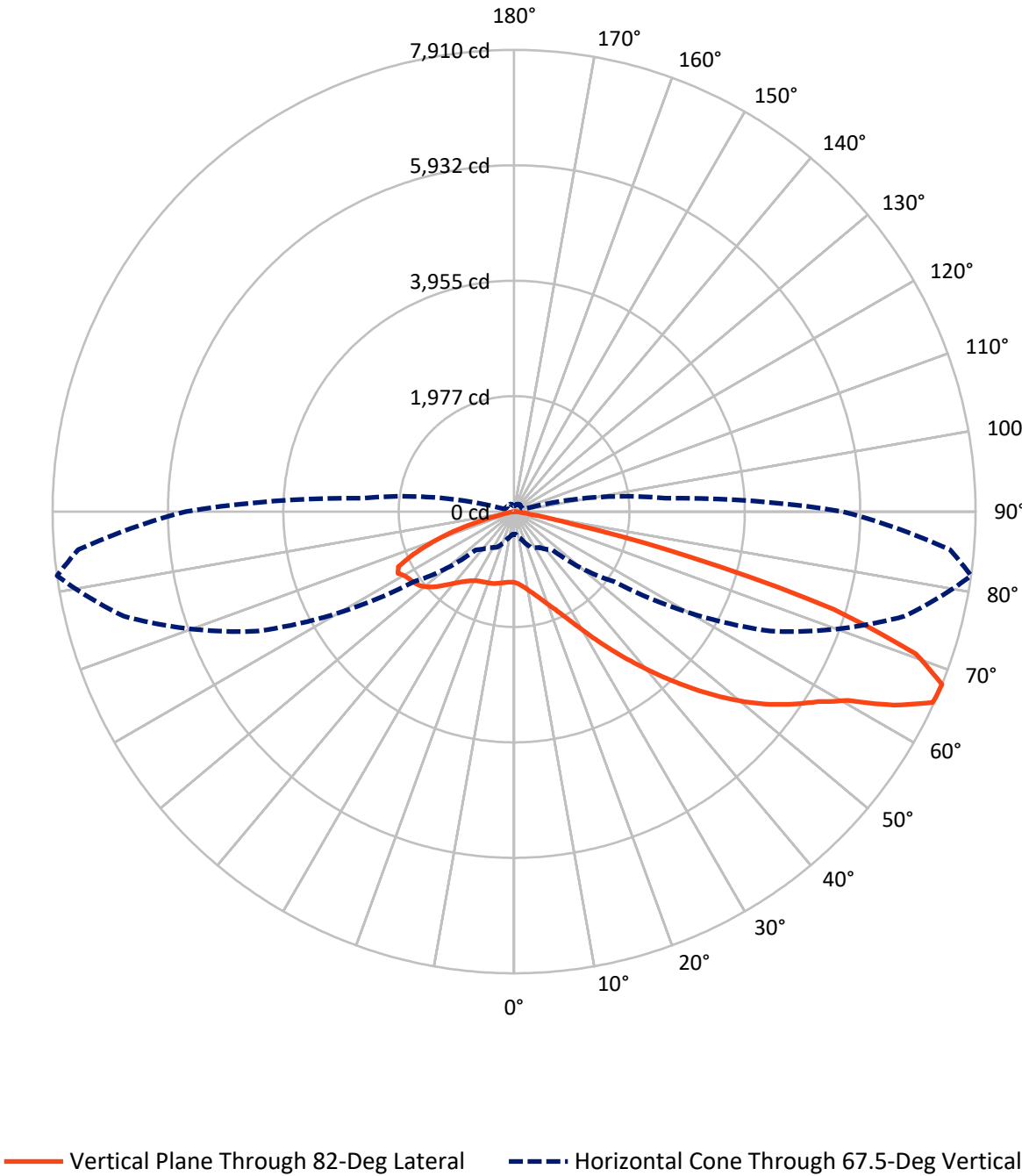
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P962056
CATALOG NUMBER: NAV-SB2B-827-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P962056

CATALOG NUMBER: NAV-SB2B-827-U-T2-HSS

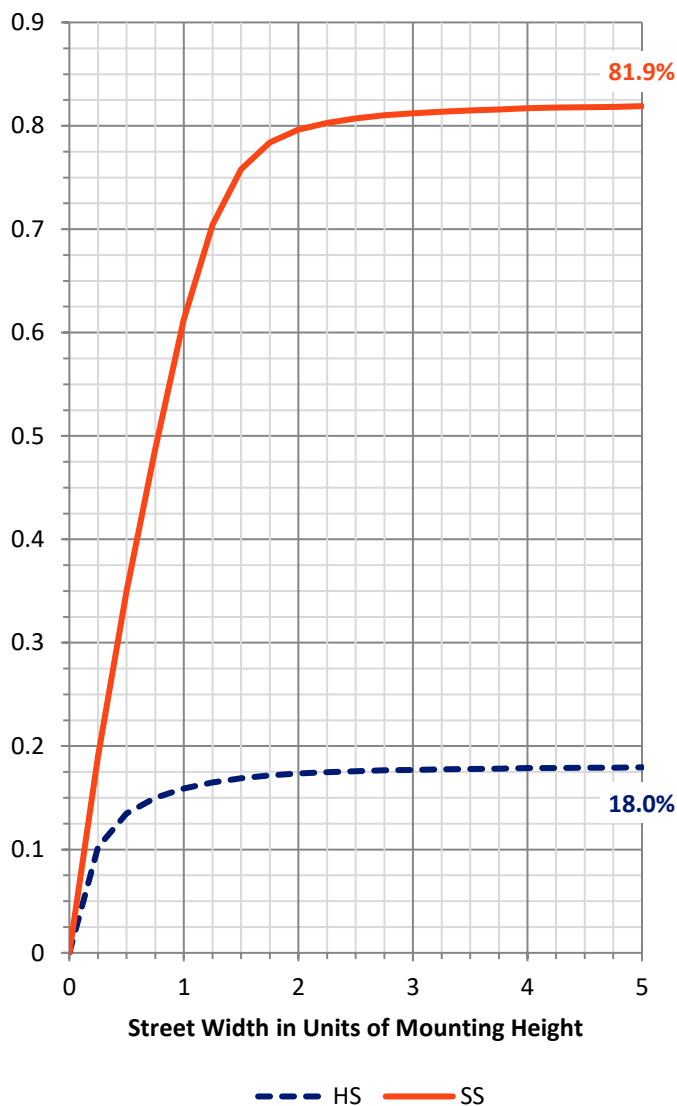
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1327.7	0.0	1327.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	6002.1	0.0	6002.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	7329.8	0.0	7329.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.2	1.5
10°-20°	281.1	3.8
20°-30°	450.3	6.1
30°-40°	796.2	10.9
40°-50°	1395.1	19.0
50°-60°	1860.6	25.4
60°-70°	1732.2	23.6
70°-80°	664.8	9.1
80°-90°	41.3	0.6
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°	7329.8	100.0
0°-180°	7329.8	100.0

Coefficient of Utilization



REPORT NUMBER: P962056

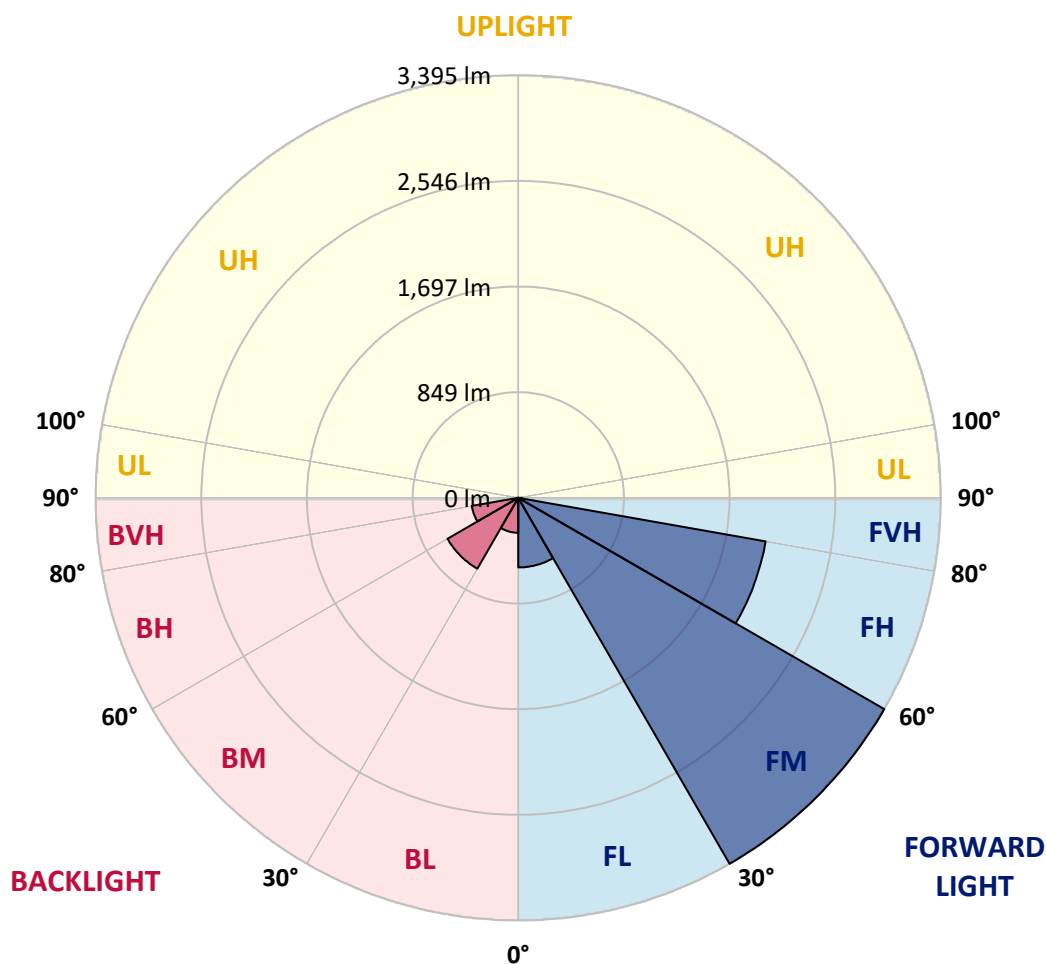
CATALOG NUMBER: NAV-SB2B-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	559.2	7.6			
FM	(30°-60°)	3394.9	46.3			
FH	(60°-80°)	2018.0	27.5			G2/5000
FVH	(80°-90°)	30.0	0.4			G1/100
BL	(0°-30°)	280.4	3.8	B1/500		
BM	(30°-60°)	657.1	9.0	B1/1000		
BH	(60°-80°)	379.0	5.2	B1/500		G1/500
BVH	(80°-90°)	11.3	0.2			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: P962056

CATALOG NUMBER: NAV-SB2B-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3
2.5°	1283.4	1290.8	1286.6	1284.5	1280.8	1275.5	1271.3	1258.1	1244.4	1235.4	1232.3
5°	1309.3	1316.7	1316.1	1318.3	1320.9	1322.5	1321.4	1306.7	1287.1	1271.8	1262.8
7.5°	1287.1	1295.6	1302.5	1313.0	1331.5	1350.9	1360.5	1357.3	1337.2	1316.1	1305.0
10°	1224.4	1233.3	1249.7	1274.5	1313.5	1355.8	1391.1	1407.4	1394.8	1371.6	1356.3
12.5°	1109.3	1118.3	1150.5	1204.3	1269.7	1343.1	1410.6	1454.4	1457.6	1434.4	1416.4
15°	980.0	988.9	1023.3	1090.8	1190.5	1308.2	1421.2	1504.0	1532.0	1512.0	1490.2
17.5°	899.7	907.6	933.6	987.9	1091.8	1238.6	1417.5	1556.8	1620.6	1604.8	1578.9
20°	875.5	882.3	894.5	932.4	1019.1	1166.2	1393.2	1606.4	1716.2	1707.2	1678.1
22.5°	901.4	907.6	911.4	928.2	982.7	1118.8	1362.6	1657.0	1827.0	1828.1	1792.7
25°	960.9	967.3	963.1	973.6	997.4	1104.0	1350.9	1716.7	1966.3	1977.9	1937.8
27.5°	1059.1	1059.6	1049.6	1049.1	1052.8	1126.2	1363.1	1780.5	2142.0	2163.7	2114.1
30°	1256.0	1248.0	1209.5	1167.9	1148.8	1192.7	1396.9	1856.0	2349.4	2387.9	2325.7
32.5°	1559.4	1547.9	1477.1	1377.4	1277.0	1299.8	1457.6	1942.1	2575.3	2644.9	2569.0
35°	1888.8	1885.6	1811.7	1663.4	1488.2	1452.3	1556.3	2054.9	2821.7	2932.5	2842.3
37.5°	2194.8	2193.2	2151.0	1976.3	1763.1	1665.0	1714.6	2202.7	3085.7	3246.1	3139.5
40°	2474.5	2479.3	2437.0	2280.8	2066.1	1937.8	1929.9	2385.3	3379.0	3587.5	3460.8
42.5°	2716.2	2721.5	2678.7	2563.1	2365.3	2239.6	2194.3	2609.0	3665.6	3954.2	3804.4
45°	2880.4	2913.0	2906.7	2814.3	2672.4	2542.1	2512.0	2889.8	3992.3	4343.1	4167.4
47.5°	2926.8	2956.8	3004.4	3017.0	2930.5	2802.2	2838.1	3228.1	4322.6	4732.6	4532.7
50°	2812.3	2840.2	2938.9	3070.3	3130.5	3090.9	3155.3	3590.7	4660.9	5121.0	4891.0
52.5°	2586.4	2614.9	2739.4	2947.4	3192.8	3317.3	3473.5	3947.9	4988.6	5488.9	5230.3
55°	2259.7	2289.8	2449.8	2685.1	3074.0	3410.7	3738.9	4304.7	5288.9	5819.7	5536.3
57.5°	1815.4	1837.5	2003.8	2333.1	2775.3	3317.8	3934.8	4694.1	5571.7	6144.9	5839.8
60°	1183.2	1202.7	1395.8	1763.1	2280.3	3007.6	3973.7	5128.4	5947.5	6567.6	6248.8
62.5°	786.8	800.0	914.5	1184.2	1605.9	2411.7	3745.2	5475.1	6498.4	7303.2	6950.1
65°	539.9	553.1	667.6	855.5	1037.5	1595.3	3088.2	5429.2	6997.7	7887.4	7470.0
67.5°	385.2	396.4	493.4	670.8	750.9	926.7	2093.5	4842.4	6925.8	7909.5	7497.9
70°	276.0	282.3	362.5	522.4	596.9	556.8	1164.2	3703.5	6064.1	7303.7	6927.0
72.5°	193.1	195.3	251.7	397.9	480.7	406.3	554.1	2469.2	4586.5	5732.7	5370.2
75°	130.9	133.6	169.4	291.8	385.8	310.3	293.5	1324.1	2692.5	3173.2	2844.5
77.5°	80.3	81.3	109.3	199.5	288.6	236.5	188.9	561.0	1041.7	1022.7	871.8
80°	45.4	45.4	69.7	124.0	196.8	152.5	132.4	238.5	329.8	289.8	255.4
82.5°	25.3	25.8	50.6	77.1	130.4	90.2	72.8	110.3	142.5	126.2	109.8
85°	10.6	11.6	31.2	36.4	62.3	44.9	29.5	46.4	52.8	46.9	34.3
87.5°	1.0	1.5	9.5	6.9	7.4	9.0	4.2	9.0	7.4	7.4	5.2
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: P962056

CATALOG NUMBER: NAV-SB2B-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3
2.5°	1222.2	1214.3	1194.2	1171.1	1140.4	1125.7	1105.6	1091.8	1080.2	1081.3	1070.7
5°	1246.0	1225.9	1181.0	1125.1	1055.4	1005.8	953.0	916.7	887.1	880.8	866.5
7.5°	1278.7	1247.0	1168.4	1067.5	949.9	860.7	781.0	729.8	693.4	681.8	670.2
10°	1320.9	1275.0	1152.0	995.3	825.8	712.5	626.9	586.8	562.0	553.6	547.2
12.5°	1370.0	1307.2	1130.4	907.1	698.2	589.0	534.5	514.6	506.7	504.0	502.4
15°	1431.7	1347.3	1097.7	802.7	590.0	513.5	490.3	487.6	488.7	487.6	487.1
17.5°	1505.1	1391.1	1044.4	695.1	517.2	475.0	466.5	468.6	471.3	470.7	469.7
20°	1585.3	1434.4	976.3	599.5	467.6	447.5	442.8	444.8	447.0	446.0	445.4
22.5°	1676.6	1480.8	900.9	525.1	434.3	422.2	416.9	417.4	417.4	415.3	414.3
25°	1785.9	1532.0	821.6	472.3	409.0	399.4	393.2	391.0	387.9	381.5	380.5
27.5°	1916.1	1586.4	745.7	435.4	388.9	380.0	372.6	367.3	359.4	348.8	347.8
30°	2062.9	1652.3	681.3	412.2	373.1	364.1	355.7	347.8	336.2	323.0	322.0
32.5°	2235.4	1723.0	634.4	396.9	358.9	349.3	339.4	329.8	317.1	304.0	304.5
35°	2441.2	1808.5	606.9	386.3	347.8	335.1	324.0	313.4	304.0	292.3	291.3
37.5°	2664.5	1899.3	598.4	381.0	340.4	320.8	308.2	300.8	299.7	292.8	292.3
40°	2908.8	2007.0	604.8	377.8	332.5	307.1	293.5	291.8	294.5	282.3	282.9
42.5°	3167.5	2134.7	615.3	374.1	321.3	293.5	280.2	280.2	278.1	261.3	261.3
45°	3447.1	2281.9	625.9	365.2	308.2	279.7	269.7	266.0	257.0	240.7	240.2
47.5°	3729.0	2431.7	633.8	348.8	292.3	268.0	259.1	250.7	237.5	222.7	222.2
50°	3996.5	2566.3	625.4	324.5	274.4	257.0	247.5	235.9	221.6	211.7	210.0
52.5°	4235.5	2682.9	589.5	296.0	255.4	245.4	237.0	224.8	213.2	202.6	201.6
55°	4443.5	2777.4	526.1	269.2	238.5	235.3	226.9	211.7	195.8	186.9	185.7
57.5°	4642.9	2849.2	447.0	247.0	223.2	224.3	211.7	197.9	183.2	173.6	172.6
60°	4908.4	2945.2	366.7	226.4	206.8	210.0	196.3	186.2	167.8	155.7	154.1
62.5°	5332.7	3094.6	291.3	201.1	187.9	188.9	183.2	171.0	148.8	134.6	133.6
65°	5669.4	3039.7	229.6	173.6	166.3	167.8	167.8	154.7	130.9	114.5	113.0
67.5°	5631.3	2602.8	183.2	146.7	145.7	146.7	150.4	139.3	116.1	102.9	100.8
70°	5187.5	2070.3	146.7	121.9	126.7	124.0	134.6	127.2	104.4	91.3	89.7
72.5°	4232.8	1491.4	111.8	100.8	97.1	101.4	121.4	114.5	87.1	72.3	70.7
75°	2473.4	795.8	83.3	79.6	70.2	84.5	107.6	97.6	66.5	53.3	51.8
77.5°	805.3	277.6	61.2	58.5	52.3	68.1	91.8	82.3	54.3	42.2	40.6
80°	215.9	83.9	41.7	38.5	33.8	50.6	72.8	65.4	39.1	27.5	27.0
82.5°	86.5	35.4	24.3	21.6	18.4	34.8	57.5	52.8	29.0	17.4	17.4
85°	28.0	11.6	9.0	6.9	8.4	21.6	34.3	35.9	20.6	9.0	6.9
87.5°	3.7	1.5	1.5	2.2	1.5	3.7	10.6	10.0	5.8	1.0	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)