

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: P962057

Luminaire Tested: **NAV-SB2B-827-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962057
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-827-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8498.3 lumens
Efficiency: N/A
Efficacy: 115.0 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

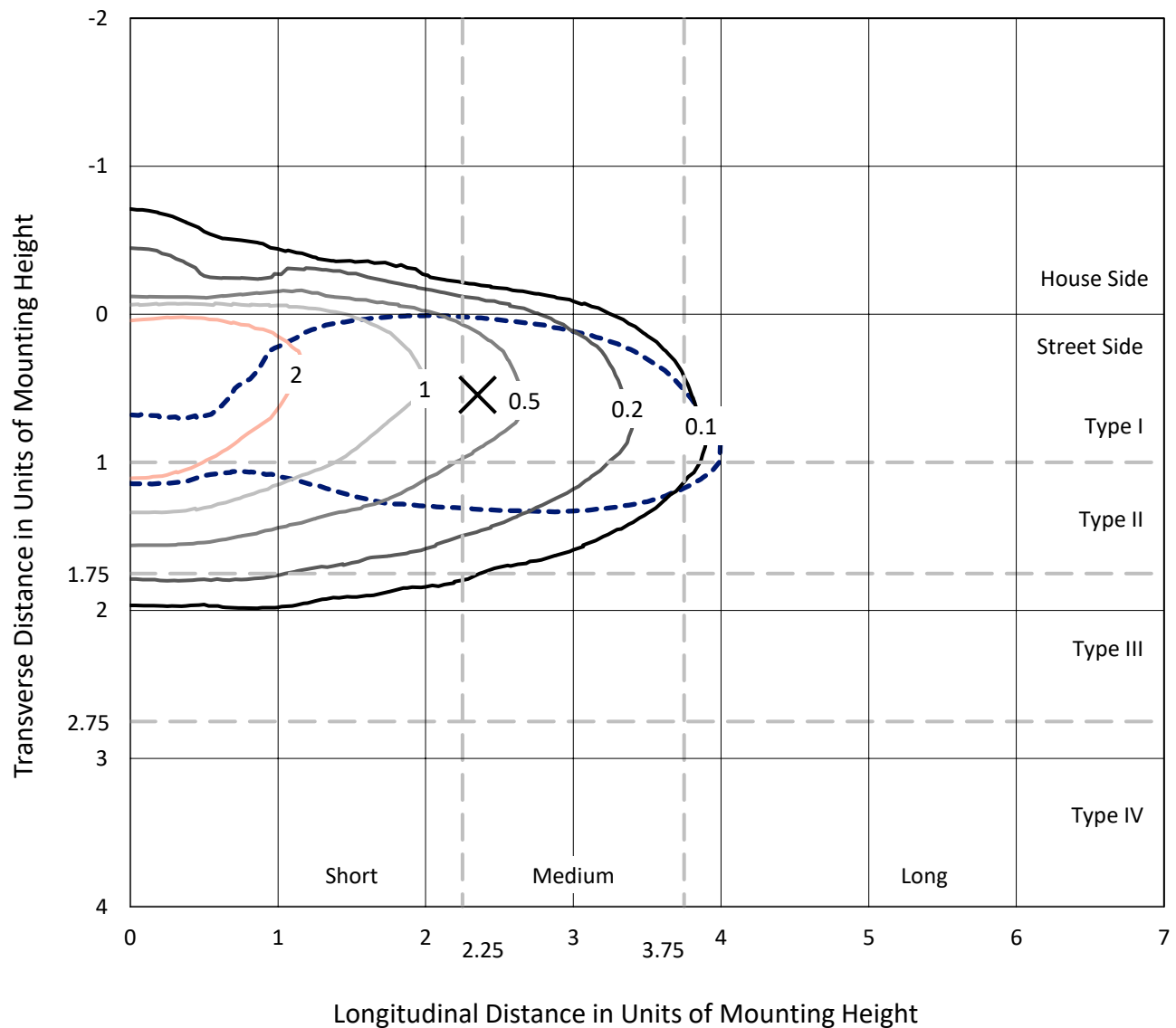


REPORT NUMBER: P962057

CATALOG NUMBER: NAV-SB2B-827-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

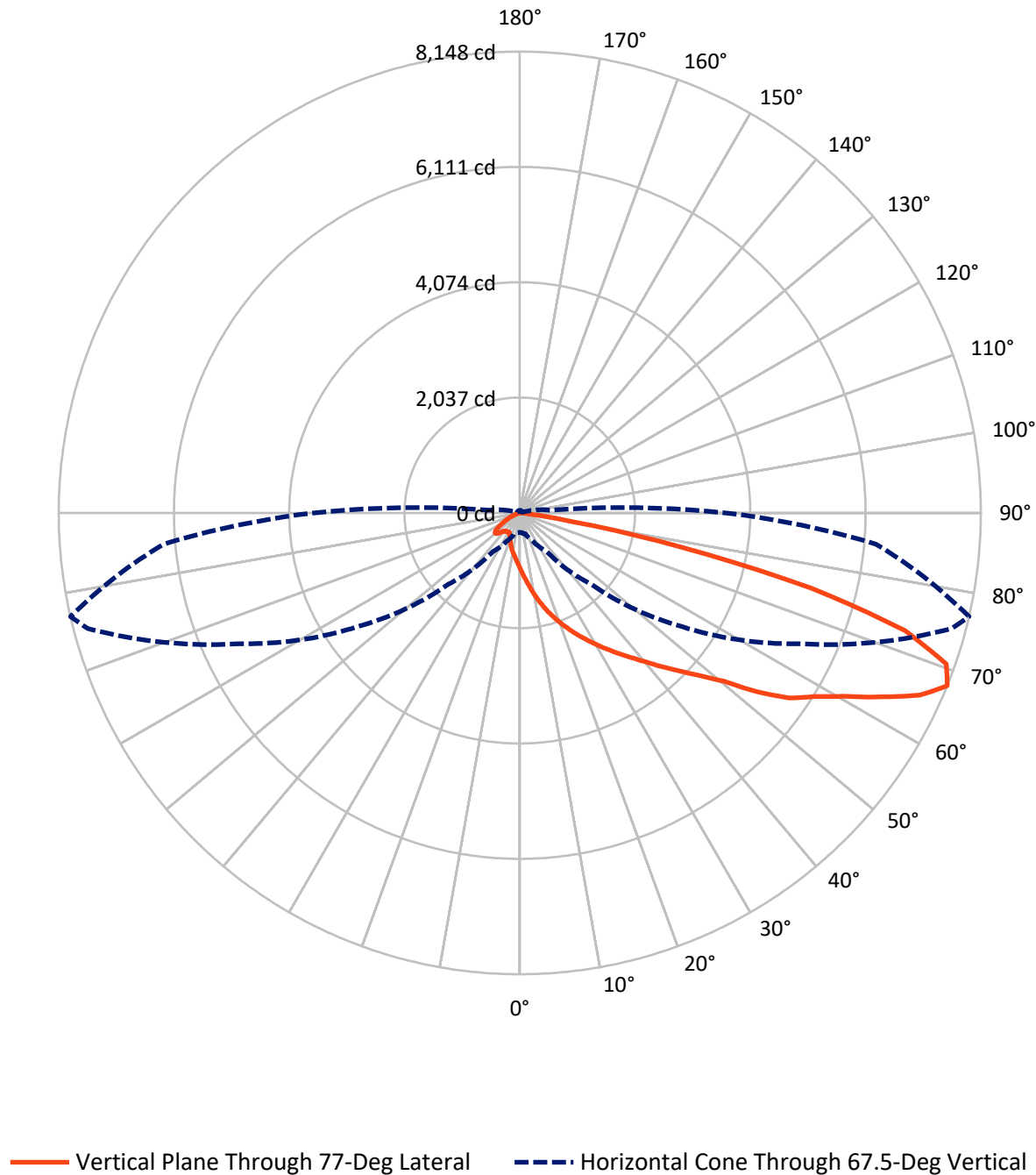
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type II - Medium - N/A

REPORT NUMBER: P962057
CATALOG NUMBER: NAV-SB2B-827-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P962057

CATALOG NUMBER: NAV-SB2B-827-U-T2R-HSS

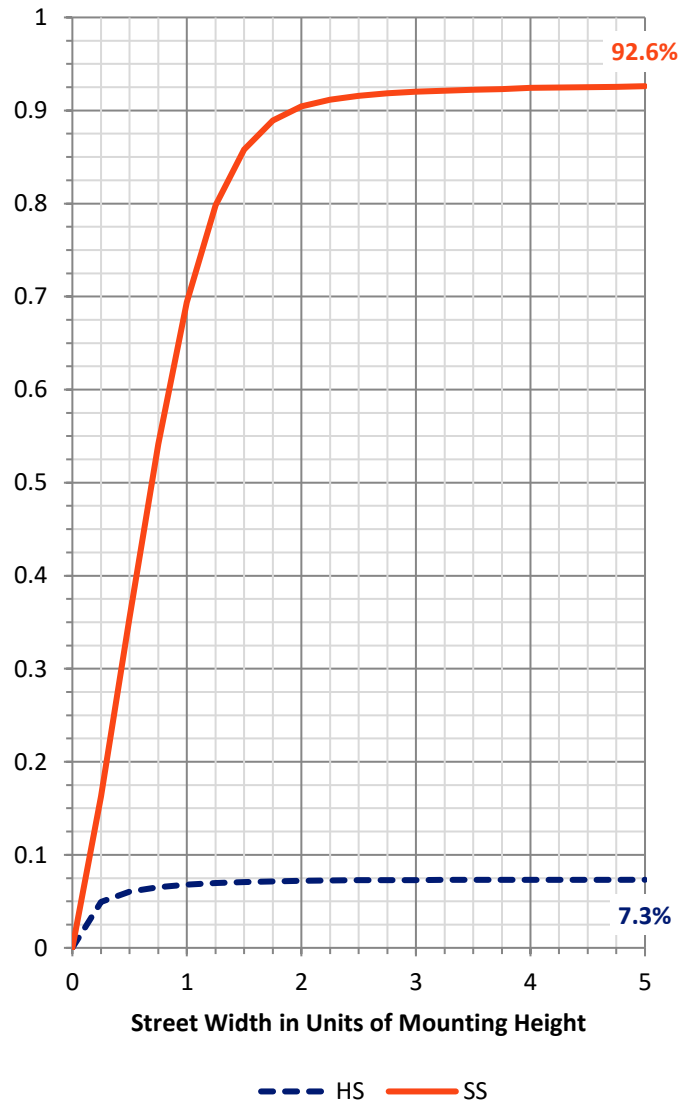
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	625.2	0.0	625.2
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	7873.0	0.0	7873.0
	% Fixture	92.6	0.0	92.6
Total	Lumens	8498.3	0.0	8498.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.0	1.2
10°-20°	350.3	4.1
20°-30°	675.9	8.0
30°-40°	1173.4	13.8
40°-50°	1703.8	20.0
50°-60°	1956.6	23.0
60°-70°	1698.7	20.0
70°-80°	800.1	9.4
80°-90°	39.6	0.5
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°	8498.3	100.0
0°-180°	8498.3	100.0

Coefficient of Utilization



REPORT NUMBER: P962057

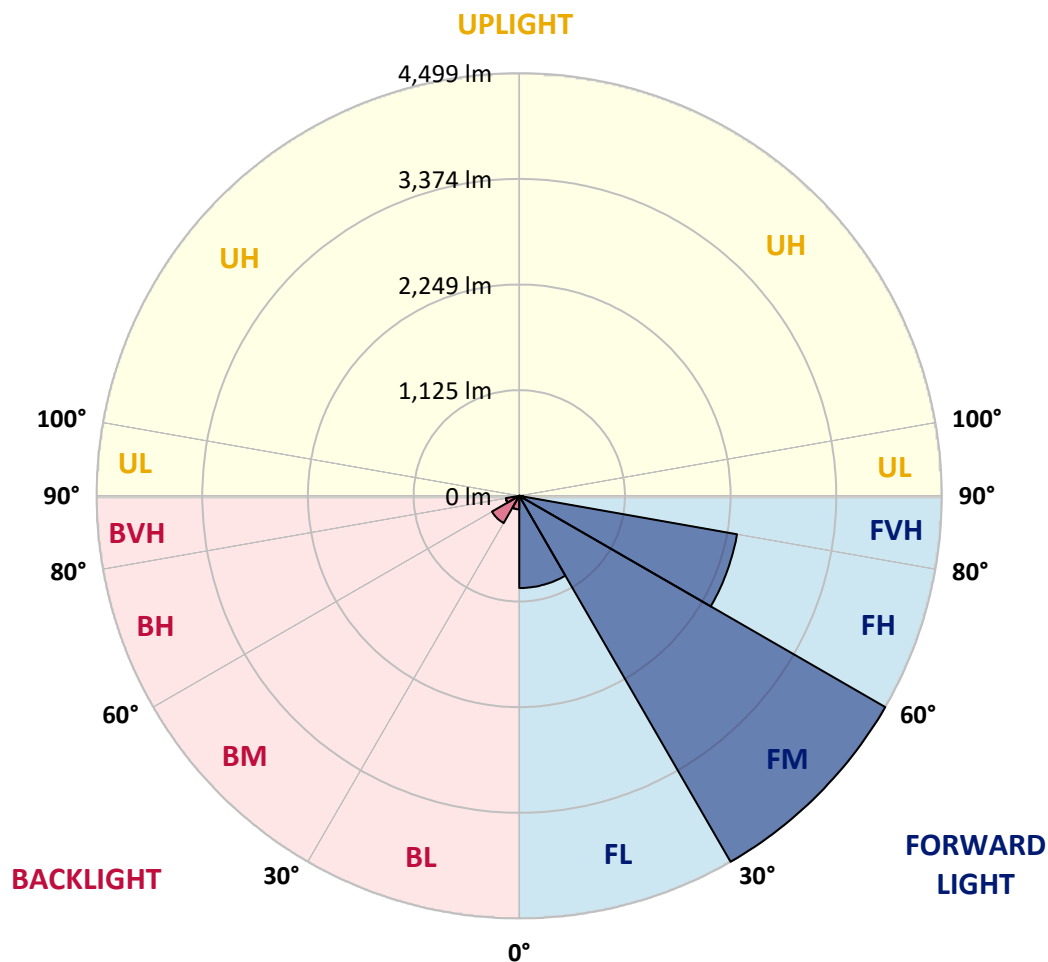
CATALOG NUMBER: NAV-SB2B-827-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	981.5	11.5			
FM	(30°-60°)	4498.8	52.9			
FH	(60°-80°)	2354.0	27.7			G2/5000
FVH	(80°-90°)	38.8	0.5			G1/100
BL	(0°-30°)	144.8	1.7	B1/500		
BM	(30°-60°)	335.0	3.9	B1/1000		
BH	(60°-80°)	144.7	1.7	B1/500		G1/500
BVH	(80°-90°)	0.7	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-G2

Type II Medium



REPORT NUMBER: P962057

CATALOG NUMBER: NAV-SB2B-827-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0
2.5°	1356.8	1365.2	1353.1	1329.8	1295.0	1272.3	1216.9	1164.7	1106.6	1088.1	1030.1
5°	1653.8	1661.2	1647.6	1622.2	1575.7	1531.5	1458.6	1349.4	1235.9	1199.6	1096.6
7.5°	1873.9	1878.1	1872.9	1849.6	1805.3	1755.2	1673.9	1544.7	1376.3	1336.2	1178.4
10°	2032.3	2046.0	2044.4	2035.4	2005.8	1965.2	1878.7	1731.4	1533.6	1481.8	1270.8
12.5°	2137.2	2152.6	2161.5	2181.6	2180.0	2154.1	2078.2	1922.5	1690.3	1629.6	1374.7
15°	2167.9	2184.3	2218.5	2264.9	2306.1	2319.4	2266.1	2109.9	1862.8	1785.2	1481.3
17.5°	2150.4	2175.8	2217.0	2290.3	2380.6	2440.2	2434.4	2290.9	2019.6	1930.9	1585.8
20°	2189.0	2213.3	2245.5	2307.2	2412.2	2520.4	2563.6	2463.9	2175.3	2082.4	1695.6
22.5°	2402.2	2398.0	2401.2	2411.1	2473.9	2581.1	2670.2	2621.2	2329.3	2234.4	1811.7
25°	2739.9	2721.0	2688.8	2634.4	2618.6	2670.2	2763.1	2760.5	2491.9	2390.1	1930.4
27.5°	3127.3	3124.1	3048.7	2917.8	2843.9	2823.9	2868.2	2896.1	2652.8	2544.2	2049.7
30°	3498.2	3506.7	3404.8	3259.2	3123.6	3045.0	3004.8	3024.9	2816.4	2710.4	2172.6
32.5°	3821.2	3830.2	3719.4	3549.0	3381.1	3286.2	3201.7	3152.1	2994.8	2879.2	2307.7
35°	4094.1	4103.0	3975.9	3787.5	3608.5	3522.5	3427.0	3291.4	3174.2	3066.6	2458.2
37.5°	4337.9	4335.2	4164.8	3974.7	3799.1	3731.0	3680.9	3462.9	3358.9	3255.0	2624.9
40°	4481.9	4493.0	4347.3	4137.8	3967.4	3917.8	3914.6	3675.5	3572.1	3471.4	2807.5
42.5°	4524.1	4543.6	4438.1	4266.0	4111.5	4057.7	4140.5	3905.7	3820.2	3722.0	3013.8
45°	4448.2	4467.2	4419.1	4299.9	4209.6	4174.8	4334.7	4144.2	4085.0	3988.0	3246.5
47.5°	4226.5	4250.3	4261.8	4236.5	4235.5	4270.9	4508.9	4395.4	4399.6	4300.4	3516.2
50°	3797.5	3837.6	3944.2	4033.9	4172.7	4346.8	4678.2	4667.6	4754.3	4668.8	3867.6
52.5°	3017.5	3074.5	3441.7	3687.1	3999.0	4332.6	4864.5	5104.6	5376.4	5251.4	4363.2
55°	2424.8	2424.8	2723.5	3182.7	3660.3	4238.7	4945.8	5388.5	5800.2	5770.6	4712.0
57.5°	1976.8	2000.6	2191.1	2596.9	3170.0	4014.9	4996.0	5566.9	6141.6	6120.0	5052.9
60°	1220.1	1271.3	1631.2	2031.8	2612.2	3616.5	4964.3	5747.4	6555.9	6573.3	5463.5
62.5°	687.1	706.1	866.5	1461.8	2031.2	3080.8	4722.1	5848.2	7085.7	7159.6	5886.7
65°	474.4	483.9	545.7	909.8	1407.9	2452.8	4248.6	5785.4	7616.6	7765.9	6245.5
67.5°	344.6	349.3	387.9	555.7	835.4	1778.4	3506.7	5468.8	7897.8	8147.5	6314.2
70°	265.0	268.0	296.0	365.2	493.4	1097.7	2546.8	4839.2	7694.2	7992.3	5962.7
72.5°	215.4	218.4	240.2	270.2	327.2	649.1	1543.5	3930.0	6794.9	7116.9	5076.1
75°	181.5	185.7	205.3	224.8	256.5	416.9	724.1	2736.7	5109.9	5321.0	3529.9
77.5°	100.8	92.9	166.8	186.2	216.4	263.8	338.8	1610.6	2861.8	2920.4	1566.3
80°	62.8	64.9	132.4	149.9	166.3	132.9	155.2	620.0	992.1	942.5	303.4
82.5°	3.7	8.4	101.9	108.1	114.0	57.0	58.5	210.5	239.0	219.6	53.8
85°	0.0	0.0	46.4	37.5	39.6	16.4	16.9	49.1	32.2	34.8	10.6
87.5°	0.0	0.0	0.0	1.0	0.0	1.5	3.2	4.2	1.5	2.2	3.7
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: P962057

CATALOG NUMBER: NAV-SB2B-827-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0	980.0
2.5°	993.1	956.2	881.3	807.9	748.4	692.9	653.3	615.8	596.9	595.8	594.7
5°	1023.3	945.7	795.8	663.4	556.8	471.3	415.8	376.3	356.2	349.3	348.3
7.5°	1065.5	948.8	720.9	536.7	411.1	337.7	306.1	293.5	289.2	284.4	283.4
10°	1118.8	956.2	653.8	432.2	324.0	287.1	274.4	269.2	266.0	262.8	261.8
12.5°	1178.4	963.1	587.3	358.9	285.0	266.0	257.0	250.7	246.4	242.7	241.7
15°	1236.5	967.3	518.2	307.7	265.0	249.6	240.2	233.3	227.4	223.2	222.7
17.5°	1294.0	973.1	453.4	277.1	248.6	233.3	223.8	215.4	210.5	205.8	205.3
20°	1357.8	972.1	392.1	255.4	232.2	216.9	206.8	199.0	194.2	188.9	188.4
22.5°	1417.0	966.8	338.2	237.0	215.4	200.5	189.4	181.5	176.8	172.6	172.0
25°	1485.0	962.6	293.5	220.1	199.5	184.7	172.6	165.1	159.9	156.2	155.7
27.5°	1550.4	956.2	260.7	204.8	184.2	169.9	158.4	149.9	145.1	142.5	142.5
30°	1614.8	954.7	248.6	189.9	170.5	156.2	144.6	136.6	132.9	131.9	131.4
32.5°	1692.4	958.9	253.8	184.7	157.7	143.5	132.4	126.7	123.0	123.0	123.0
35°	1775.3	957.9	261.8	189.4	149.3	130.9	122.4	118.7	115.0	115.0	115.0
37.5°	1879.2	959.4	268.0	197.4	146.2	120.3	115.6	110.8	108.8	108.8	108.8
40°	2034.3	1011.7	265.0	204.2	145.1	113.0	103.4	101.9	100.2	100.2	100.2
42.5°	2224.4	1125.1	269.2	204.8	144.6	107.6	95.0	98.2	94.5	93.9	93.4
45°	2432.2	1249.1	296.0	193.6	144.1	105.1	90.8	94.5	88.7	88.7	88.7
47.5°	2638.6	1372.1	323.5	177.8	142.5	104.4	87.1	85.0	83.3	83.9	83.9
50°	2923.0	1472.3	334.0	156.2	138.8	103.4	80.3	80.8	79.6	80.8	80.8
52.5°	3232.8	1493.4	321.3	131.9	128.2	100.2	75.4	77.6	77.1	78.1	78.1
55°	3426.0	1470.8	265.5	109.8	111.8	87.6	70.7	74.9	74.9	74.9	74.9
57.5°	3625.4	1374.2	188.4	89.2	92.9	71.8	66.5	72.3	71.8	71.2	71.2
60°	3768.9	1218.0	124.0	73.4	73.9	59.1	61.7	68.1	67.5	64.9	64.9
62.5°	3876.1	1045.4	79.6	62.3	56.5	53.3	56.5	61.7	59.7	53.8	52.8
65°	3863.9	806.4	61.2	53.3	46.4	46.4	49.1	53.8	47.5	38.0	36.9
67.5°	3638.6	545.7	50.6	44.9	39.1	38.5	40.6	44.9	40.6	32.2	31.2
70°	3236.0	356.7	40.6	34.8	31.2	28.5	32.7	38.5	34.3	25.8	24.8
72.5°	2626.5	217.4	30.6	25.3	22.7	18.4	25.8	31.7	27.5	19.0	17.9
75°	1699.2	110.8	21.1	16.4	12.1	11.1	19.0	23.8	19.0	11.6	10.0
77.5°	650.2	46.4	11.6	7.4	6.4	5.2	10.6	14.2	7.9	2.7	2.2
80°	125.0	19.5	5.8	3.7	3.2	2.2	1.5	1.0	0.0	0.0	0.0
82.5°	21.6	6.4	2.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	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)