

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: P963643

Luminaire Tested: **NAV-SB3A-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963643
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9408.5 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 84.7
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

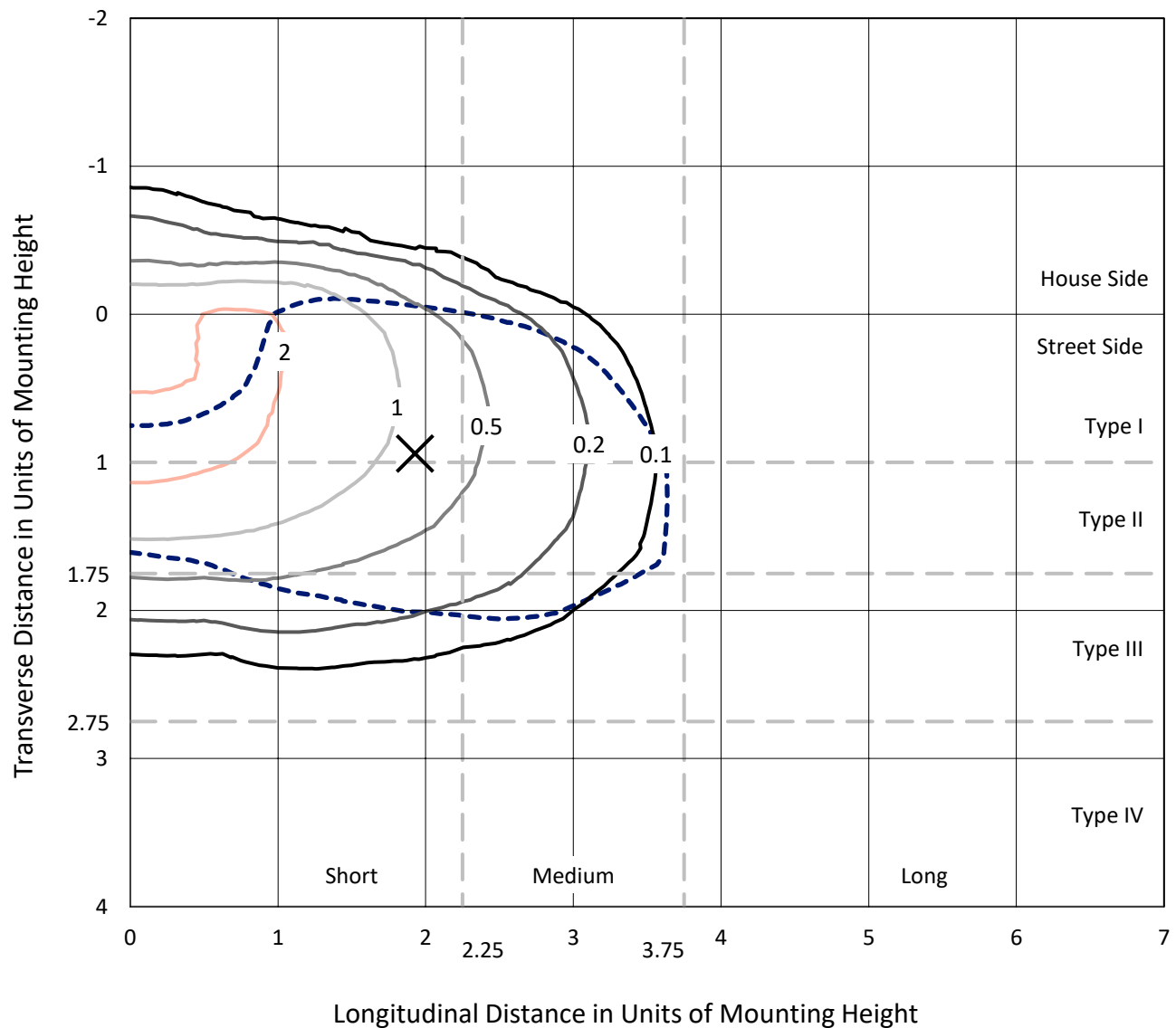


REPORT NUMBER: P963643

CATALOG NUMBER: NAV-SB3A-827-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

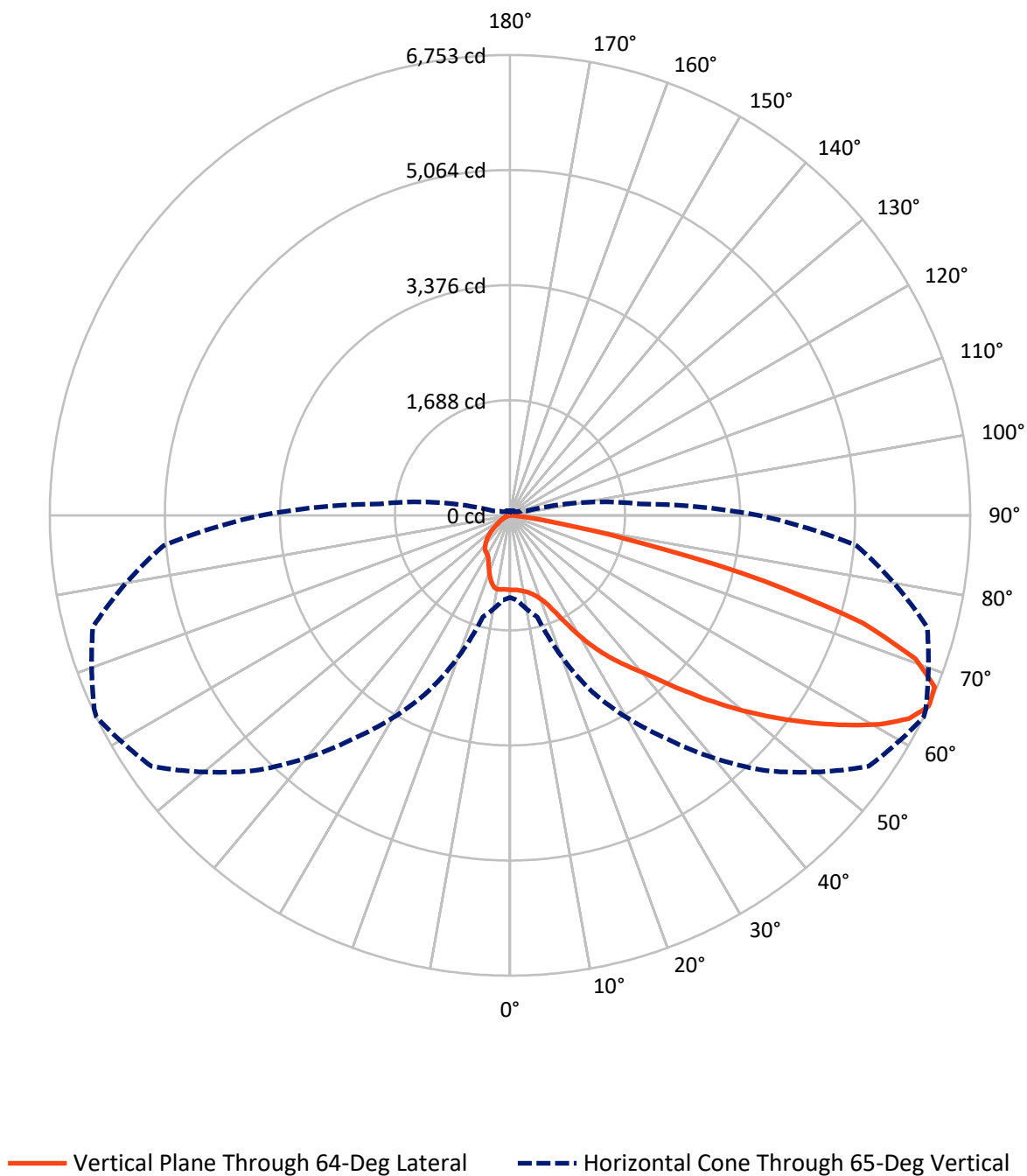


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
Type III - Short - N/A

REPORT NUMBER: P963643

CATALOG NUMBER: NAV-SB3A-827-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963643

CATALOG NUMBER: NAV-SB3A-827-U-T3-HSS

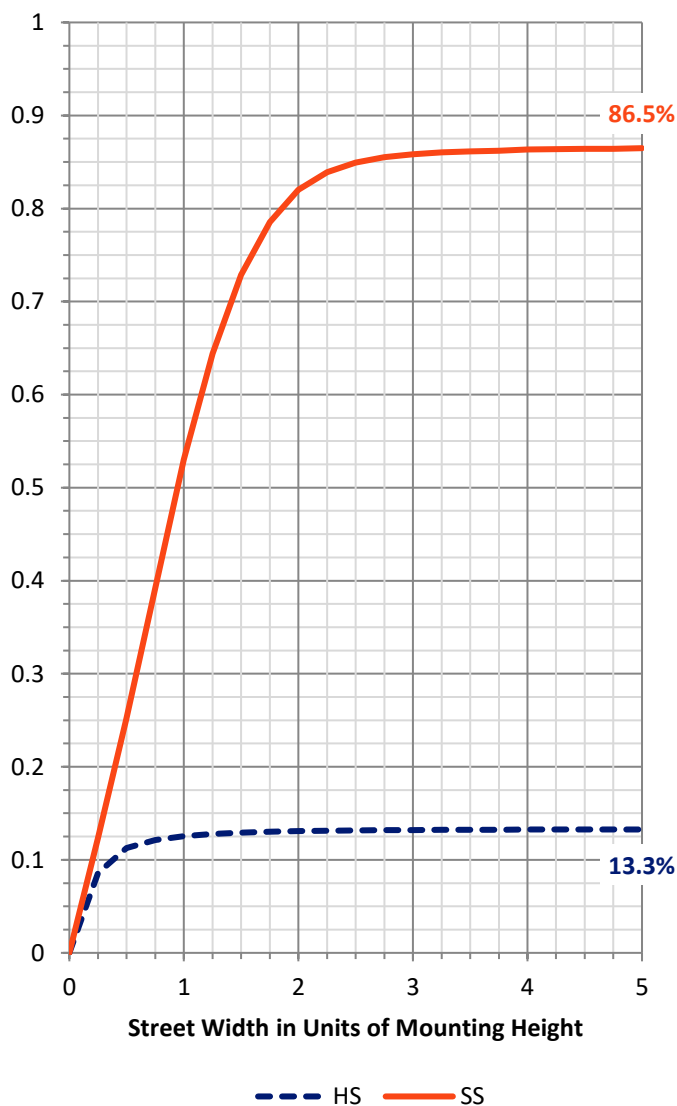
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1258.2	0.0	1258.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	8150.3	0.0	8150.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	9408.5	0.0	9408.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	1.1
10°-20°	273.8	2.9
20°-30°	518.9	5.5
30°-40°	1050.0	11.2
40°-50°	1788.7	19.0
50°-60°	2432.5	25.9
60°-70°	2284.2	24.3
70°-80°	915.2	9.7
80°-90°	44.3	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°	9408.5	100.0
0°-180°	9408.5	100.0

Coefficient of Utilization



REPORT NUMBER: P963643

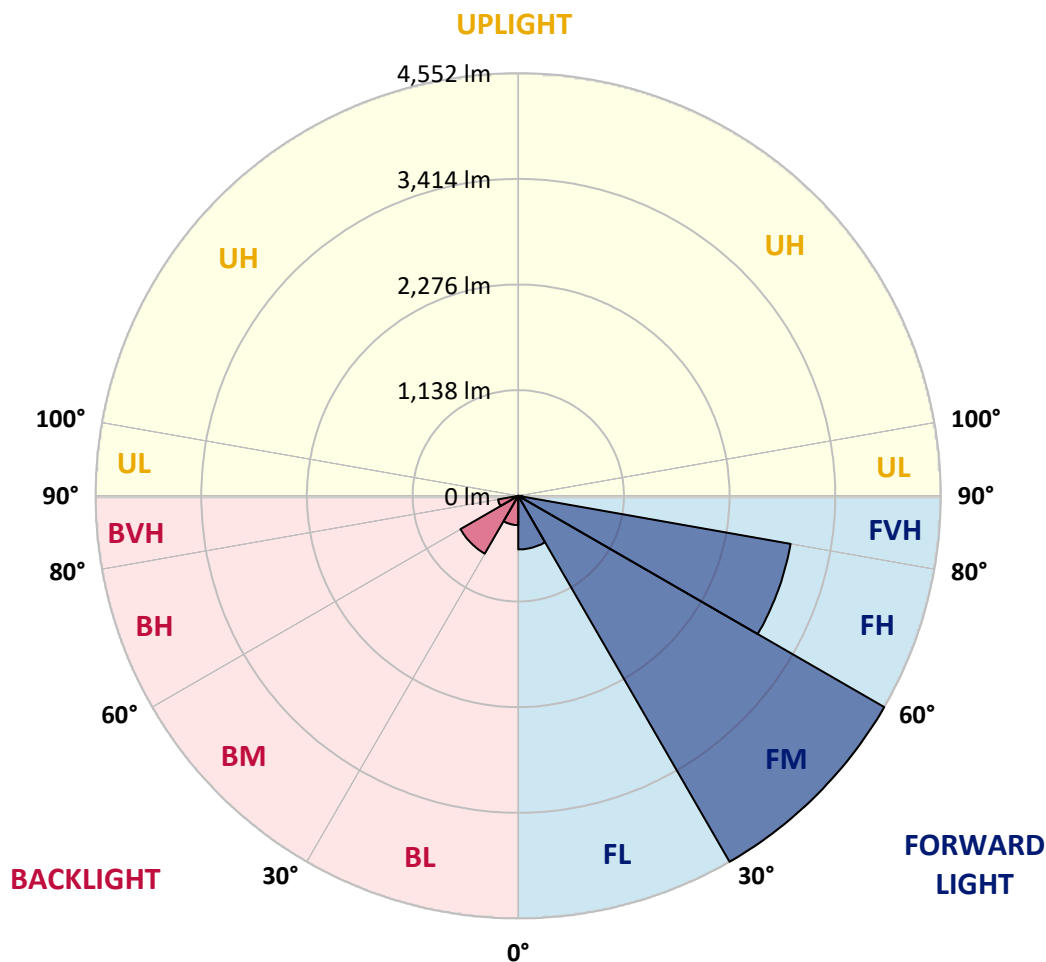
CATALOG NUMBER: NAV-SB3A-827-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	577.8	6.1			
FM	(30°-60°)	4551.8	48.4			
FH	(60°-80°)	2978.5	31.7			G2/5000
FVH	(80°-90°)	42.2	0.4			G1/100
BL	(0°-30°)	315.9	3.4	B1/500		
BM	(30°-60°)	719.3	7.6	B1/1000		
BH	(60°-80°)	220.8	2.3	B1/500		G1/500
BVH	(80°-90°)	2.2	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 III Short



REPORT NUMBER: P963643

CATALOG NUMBER: NAV-SB3A-827-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3
2.5°	1090.5	1098.1	1096.2	1094.3	1093.7	1094.9	1095.5	1094.9	1094.9	1094.9	1095.5
5°	1069.7	1076.0	1076.0	1080.5	1086.7	1094.3	1100.0	1101.3	1102.5	1104.4	1103.7
7.5°	1029.9	1035.0	1038.8	1053.3	1069.1	1089.3	1106.3	1115.1	1116.3	1123.3	1125.9
10°	1002.9	1009.1	1015.5	1030.6	1053.3	1083.6	1112.6	1134.1	1137.2	1153.6	1161.1
12.5°	1001.6	1007.9	1016.1	1032.5	1059.0	1091.1	1126.5	1157.3	1163.1	1187.1	1202.8
15°	1014.9	1022.4	1029.9	1050.1	1078.5	1117.7	1155.5	1193.9	1199.7	1233.7	1250.7
17.5°	1041.9	1052.1	1057.7	1077.9	1108.2	1151.7	1201.5	1245.7	1250.7	1290.5	1311.9
20°	1095.5	1107.5	1109.5	1125.9	1155.5	1202.1	1261.5	1316.3	1322.7	1368.1	1392.1
22.5°	1206.5	1223.6	1208.5	1216.7	1243.1	1289.9	1354.1	1423.5	1432.3	1484.1	1505.5
25°	1402.1	1426.1	1386.9	1373.1	1384.5	1433.1	1513.7	1601.4	1611.5	1653.1	1663.9
27.5°	1786.2	1755.3	1696.0	1637.9	1603.9	1631.7	1722.5	1831.0	1843.6	1884.0	1871.3
30°	2208.2	2181.0	2100.9	1972.3	1891.5	1887.1	1971.0	2092.1	2106.6	2145.1	2106.6
32.5°	2630.8	2604.8	2517.8	2359.5	2219.5	2150.1	2208.2	2342.5	2350.1	2374.7	2317.9
35°	3046.4	3019.9	2932.8	2770.8	2598.6	2440.9	2429.6	2581.0	2583.4	2609.3	2524.8
37.5°	3464.6	3442.5	3349.8	3190.8	3021.2	2803.6	2698.2	2806.8	2809.8	2835.0	2747.4
40°	3762.9	3772.3	3708.7	3585.7	3440.0	3202.2	2999.8	3047.0	3028.1	3070.4	3018.0
42.5°	4018.9	4037.9	3982.3	3920.5	3836.1	3626.7	3373.1	3364.9	3334.6	3357.3	3303.1
45°	4240.3	4256.1	4206.3	4191.7	4189.9	4042.9	3781.2	3732.0	3689.7	3685.3	3620.3
47.5°	4321.7	4351.9	4373.5	4422.0	4516.6	4454.8	4203.1	4126.9	4079.5	4044.9	3942.0
50°	4352.7	4384.7	4457.9	4599.3	4823.1	4849.6	4623.2	4537.4	4479.4	4416.3	4264.9
52.5°	4310.9	4368.3	4466.7	4704.5	5029.4	5166.2	5026.2	4951.2	4884.9	4782.1	4557.6
55°	4065.7	4123.1	4324.3	4703.3	5132.2	5388.2	5407.2	5373.8	5299.4	5137.2	4794.1
57.5°	3548.4	3633.6	3952.1	4543.1	5130.3	5579.4	5780.6	5804.6	5721.2	5489.2	4980.2
60°	2832.0	2947.4	3335.9	4188.0	4972.0	5682.8	6107.9	6227.8	6139.4	5836.0	5130.9
62.5°	1976.1	2109.8	2477.5	3631.7	4609.9	5608.4	6347.0	6568.3	6501.5	6146.4	5189.0
65°	1205.3	1248.2	1544.7	2857.8	3994.3	5296.8	6420.8	6752.5	6730.5	6336.2	5103.2
67.5°	802.9	838.9	924.0	1959.7	3100.6	4674.3	6244.2	6720.3	6726.7	6305.3	4789.1
70°	483.8	514.7	570.2	1139.7	2009.5	3699.8	5697.4	6310.4	6347.0	5892.2	4193.7
72.5°	199.3	220.2	270.6	516.6	1040.7	2348.2	4536.8	5417.9	5503.0	4954.3	3218.6
75°	112.9	123.6	159.0	259.2	451.6	1094.3	2748.0	3846.1	3971.7	3414.7	1936.3
77.5°	75.0	80.1	102.8	167.8	254.2	373.4	1174.4	2003.8	2243.5	1865.1	838.2
80°	50.4	54.8	70.6	112.2	165.2	160.2	374.0	742.4	913.3	640.8	204.4
82.5°	34.0	34.6	50.4	73.8	104.7	77.6	110.4	230.8	290.2	185.4	77.6
85°	19.6	19.0	37.2	42.8	46.6	32.2	33.4	69.4	90.8	78.2	44.2
87.5°	2.6	3.8	14.6	11.4	6.4	7.0	7.0	12.0	17.6	19.0	9.4
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: P963643

CATALOG NUMBER: NAV-SB3A-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3	1094.3
2.5°	1095.5	1094.9	1093.1	1091.1	1086.7	1084.2	1085.5	1084.2	1083.6	1084.2	1086.7
5°	1103.7	1101.9	1096.9	1090.5	1081.7	1070.9	1064.1	1053.9	1044.5	1038.8	1040.1
7.5°	1125.9	1123.9	1117.0	1099.3	1070.9	1026.2	985.2	949.3	922.1	906.3	907.0
10°	1161.1	1158.0	1147.3	1108.2	1033.7	936.0	854.6	787.1	743.0	722.2	720.3
12.5°	1202.8	1199.0	1180.1	1100.0	963.1	810.5	698.2	623.2	582.2	563.9	562.0
15°	1251.9	1246.9	1209.7	1060.9	860.3	671.7	568.9	512.8	486.3	469.9	470.5
17.5°	1313.1	1304.3	1231.8	1002.2	748.7	565.8	489.4	447.2	423.8	408.1	406.8
20°	1392.7	1378.1	1249.5	932.2	645.9	498.9	435.8	400.5	382.8	369.0	366.4
22.5°	1503.7	1482.9	1270.9	856.5	573.3	452.8	396.1	370.2	355.8	340.0	337.4
25°	1641.1	1616.5	1297.4	786.5	523.5	413.1	367.1	345.6	328.6	310.3	308.4
27.5°	1833.5	1789.3	1328.9	729.1	480.6	379.0	340.6	316.6	297.0	282.0	278.8
30°	2048.0	1975.4	1356.7	694.4	441.5	347.6	305.9	282.0	263.6	253.0	251.0
32.5°	2251.0	2152.7	1374.9	679.3	406.2	311.6	268.0	242.2	228.4	225.2	227.0
35°	2442.8	2312.8	1373.1	664.8	374.6	275.6	230.8	204.4	193.6	195.6	195.6
37.5°	2663.6	2483.8	1359.9	642.1	348.8	242.8	198.6	175.4	165.8	166.5	169.0
40°	2920.2	2681.2	1351.7	599.2	320.4	212.6	172.2	153.2	146.4	143.8	143.2
42.5°	3194.0	2872.4	1352.9	550.6	285.1	185.4	153.9	138.2	131.8	130.0	129.3
45°	3469.0	3054.6	1354.7	500.2	247.8	164.6	140.6	127.4	123.6	121.1	121.1
47.5°	3727.6	3209.8	1319.5	445.9	211.3	148.8	130.0	121.1	118.0	114.8	114.8
50°	3968.5	3313.2	1234.3	382.8	182.2	136.2	121.8	115.4	112.2	109.2	109.2
52.5°	4155.9	3329.6	1093.7	317.9	162.1	126.8	116.6	111.0	107.2	104.0	103.4
55°	4239.1	3226.8	893.7	257.4	146.4	118.6	111.6	106.0	101.6	98.4	97.8
57.5°	4217.7	3010.4	696.9	206.8	131.2	110.4	105.4	101.6	96.5	91.4	90.8
60°	4112.3	2721.0	525.4	172.2	117.4	101.6	98.4	95.2	88.3	80.8	79.4
62.5°	3930.1	2357.0	374.6	142.6	102.2	91.4	90.2	87.6	77.6	63.7	62.4
65°	3651.3	1914.9	252.3	118.6	87.6	80.1	80.8	76.4	63.0	47.4	46.0
67.5°	3243.8	1400.3	161.4	97.2	73.2	66.8	67.4	65.0	53.6	40.4	38.4
70°	2724.8	927.1	105.4	73.8	58.6	51.8	55.5	56.2	45.4	32.8	31.6
72.5°	1997.5	547.5	73.8	54.8	42.8	36.0	45.4	46.6	36.6	24.6	23.4
75°	1138.5	259.8	55.5	39.8	26.4	25.2	35.4	35.4	25.2	16.4	15.2
77.5°	478.1	108.4	39.2	25.8	15.2	14.6	24.0	22.0	12.6	7.6	7.6
80°	138.2	48.6	20.8	12.6	6.4	5.6	9.4	7.0	3.2	1.2	1.2
82.5°	54.2	21.4	8.2	5.0	2.6	2.6	1.2	0.0	0.0	0.0	0.0
85°	32.2	8.8	3.8	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.2	1.8	1.2	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)