

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: P962585

Luminaire Tested: **NAV-SB2C-827-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962585
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-SB2C-827-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13596.6 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 100.9
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

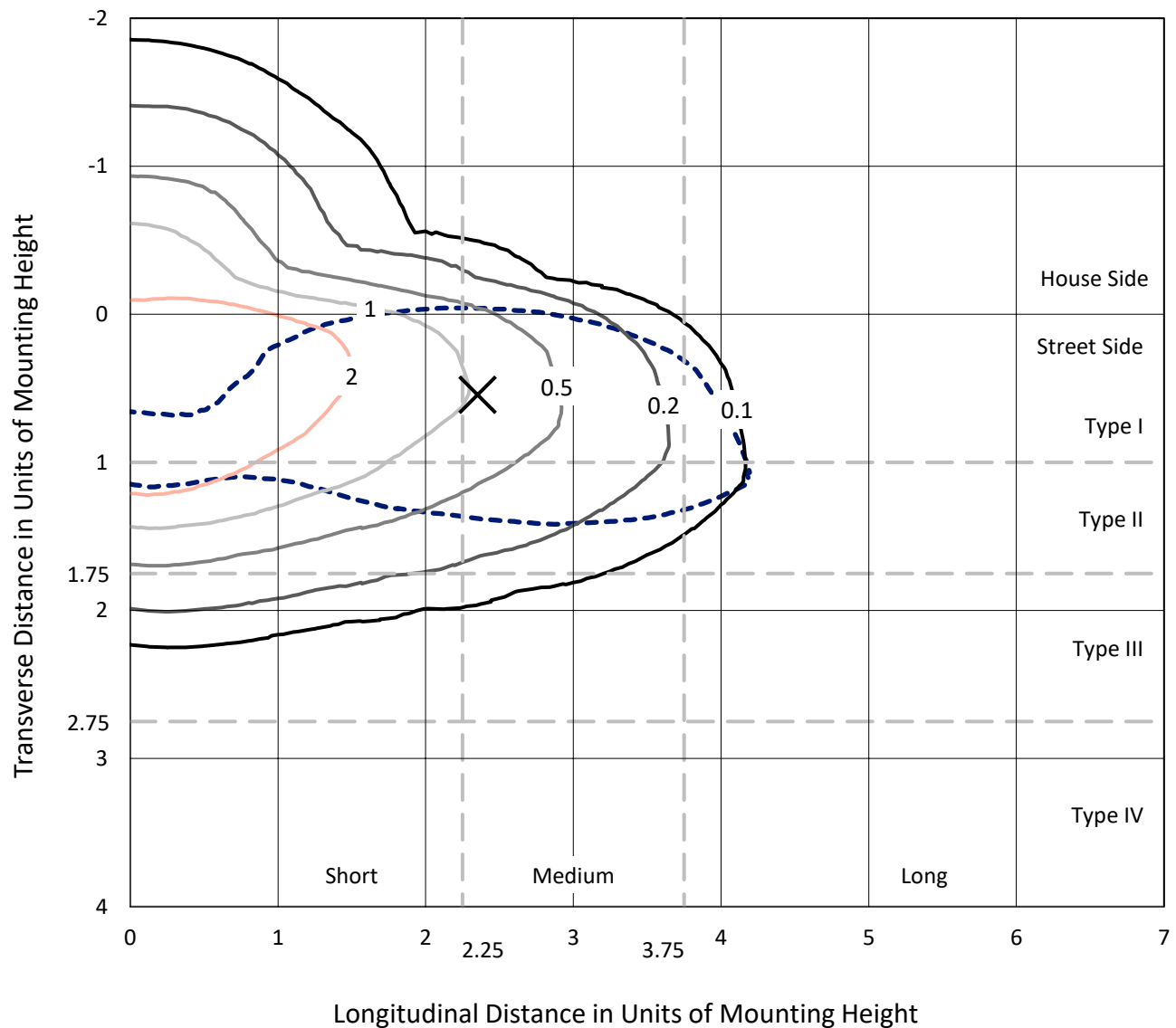


REPORT NUMBER: P962585

CATALOG NUMBER: NAV-SB2C-827-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

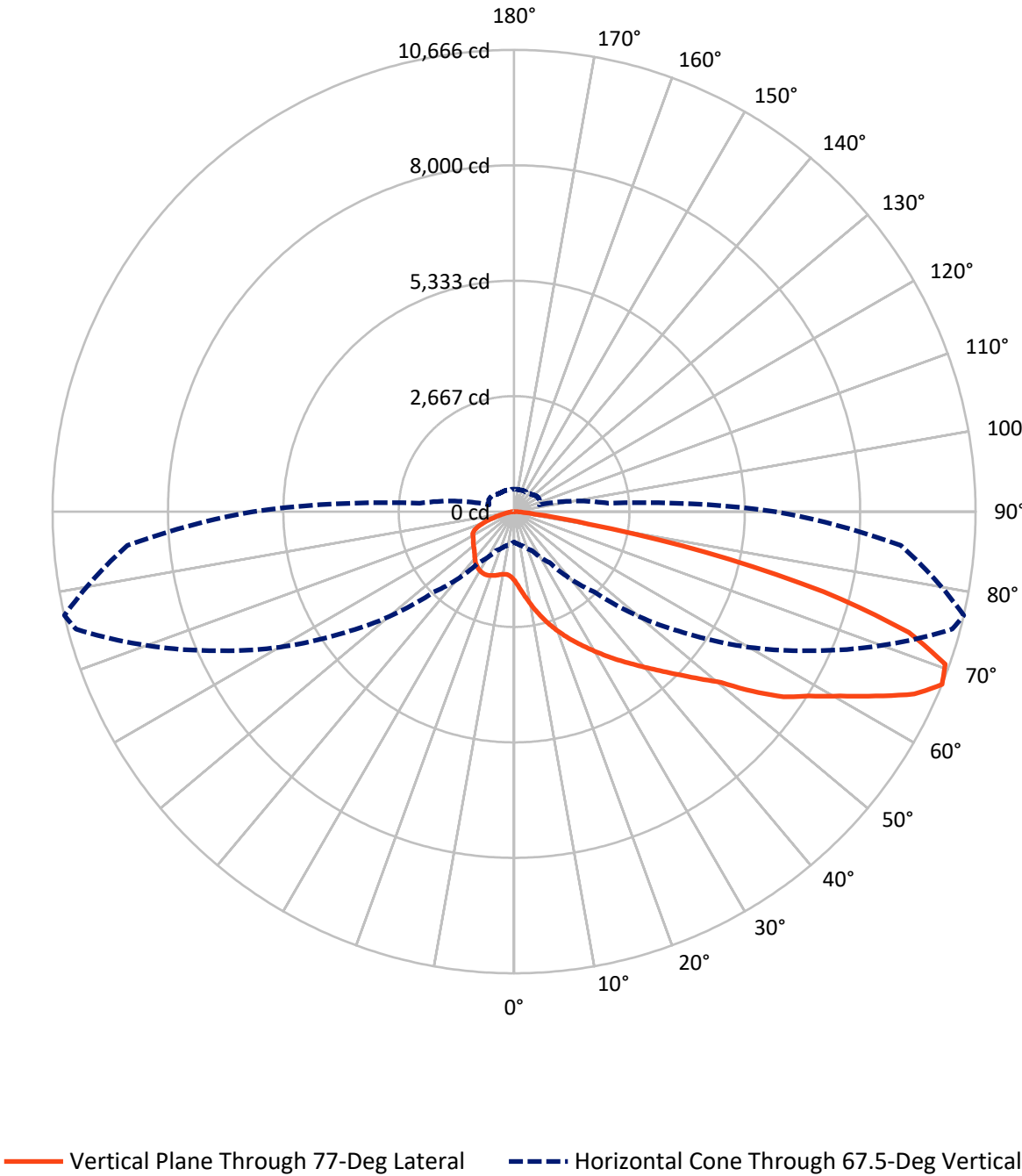
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
Type II - Medium - N/A

REPORT NUMBER: P962585
CATALOG NUMBER: NAV-SB2C-827-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P962585

CATALOG NUMBER: NAV-SB2C-827-U-T2R

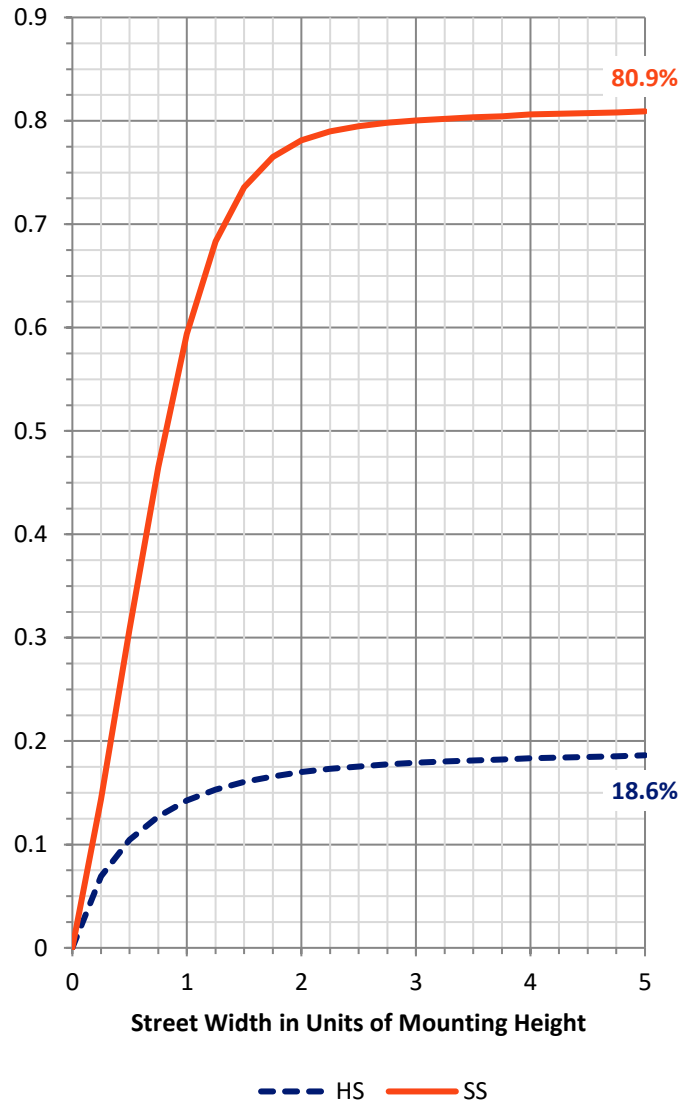
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2571.9	0.0	2571.9
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	11024.7	0.0	11024.7
	% Fixture	81.1	0.0	81.1
Total	Lumens	13596.6	0.0	13596.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.0	1.3
10°-20°	614.3	4.5
20°-30°	1159.9	8.5
30°-40°	1868.6	13.7
40°-50°	2555.9	18.8
50°-60°	2883.0	21.2
60°-70°	2690.9	19.8
70°-80°	1475.1	10.8
80°-90°	177.9	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°	13596.6	100.0
0°-180°	13596.6	100.0

Coefficient of Utilization



REPORT NUMBER: P962585

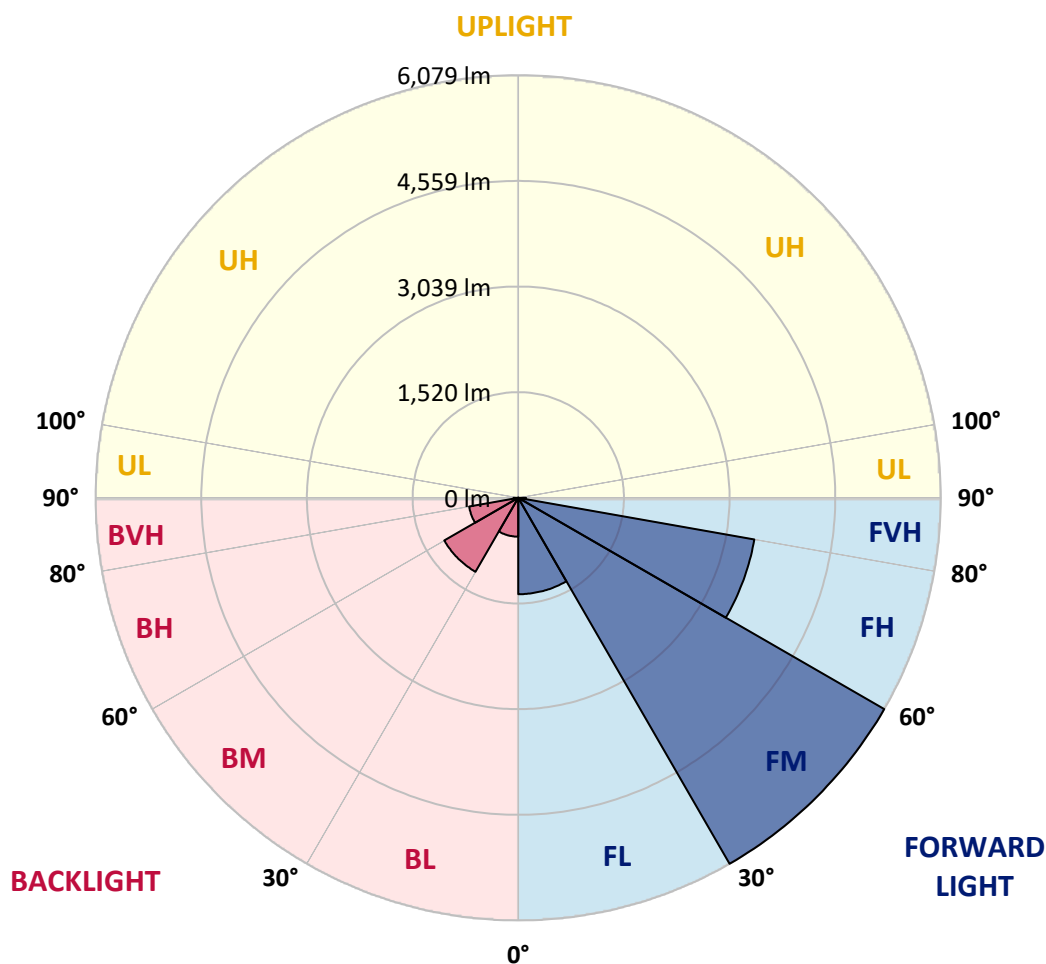
CATALOG NUMBER: NAV-SB2C-827-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1386.0	10.2			
FM	(30°-60°)	6078.9	44.7			
FH	(60°-80°)	3448.5	25.4			G2/5000
FVH	(80°-90°)	111.3	0.8			G2/225
BL	(0°-30°)	559.2	4.1	B2/1000		
BM	(30°-60°)	1228.5	9.0	B2/2500		
BH	(60°-80°)	717.5	5.3	B2/1000		G2/1000
BVH	(80°-90°)	66.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



REPORT NUMBER: P962585

CATALOG NUMBER: NAV-SB2C-827-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3
2.5°	1997.4	2011.5	1993.9	1993.9	1935.0	1904.1	1845.2	1800.2	1719.5	1705.5	1652.2
5°	2361.0	2378.6	2354.0	2343.5	2274.0	2210.1	2111.2	2013.6	1869.7	1854.9	1729.4
7.5°	2642.4	2664.9	2643.2	2631.9	2570.2	2498.5	2382.8	2246.6	2043.7	2015.0	1833.2
10°	2871.9	2875.4	2868.5	2872.7	2824.3	2765.2	2646.7	2488.1	2234.7	2195.3	1958.9
12.5°	3001.8	3017.9	3032.0	3057.3	3048.9	3012.4	2905.7	2716.1	2436.8	2386.3	2095.7
15°	3062.9	3091.0	3122.6	3180.8	3227.8	3237.0	3155.6	2961.1	2642.4	2581.4	2234.0
17.5°	3084.6	3111.3	3161.1	3245.4	3346.4	3414.5	3378.0	3199.0	2846.0	2775.8	2379.2
20°	3194.8	3202.5	3232.7	3312.7	3422.3	3535.2	3562.6	3427.8	3047.4	2968.1	2529.5
22.5°	3430.7	3415.2	3423.6	3460.1	3538.7	3648.2	3710.7	3629.9	3254.5	3163.3	2681.1
25°	3820.2	3775.3	3730.4	3688.3	3728.2	3790.0	3860.9	3832.1	3471.4	3355.5	2834.0
27.5°	4312.2	4257.4	4158.4	4020.2	3971.8	3993.5	4025.1	4019.5	3672.1	3554.9	2992.0
30°	4796.5	4732.6	4614.7	4414.7	4286.9	4229.4	4205.5	4189.4	3890.4	3765.4	3151.3
32.5°	5183.1	5132.6	5016.9	4792.9	4607.7	4509.4	4430.0	4372.5	4118.4	3993.5	3319.8
35°	5521.5	5474.4	5341.8	5097.5	4896.1	4791.6	4687.6	4564.8	4355.6	4229.4	3500.8
37.5°	5830.3	5783.3	5601.4	5347.4	5144.6	5072.3	4979.7	4771.2	4593.6	4474.3	3692.5
40°	6025.4	6014.9	5845.1	5557.2	5346.7	5310.9	5280.0	5010.5	4857.5	4746.6	3903.0
42.5°	6075.2	6098.3	5963.7	5727.1	5526.4	5497.6	5569.8	5281.4	5153.7	5047.7	4141.6
45°	5955.2	6021.9	5933.4	5772.7	5654.1	5638.6	5826.7	5577.6	5481.5	5384.6	4429.3
47.5°	5651.3	5764.3	5727.8	5705.4	5688.5	5755.2	6052.7	5892.0	5852.7	5768.5	4757.8
50°	5037.9	5252.0	5315.9	5457.6	5620.4	5845.7	6258.4	6235.3	6286.4	6201.6	5157.9
52.5°	3977.4	4272.2	4642.7	4997.9	5411.3	5815.5	6484.4	6727.9	6944.1	6897.7	5793.8
55°	3283.3	3415.9	3700.9	4352.2	5005.6	5688.5	6586.1	7125.9	7596.8	7555.4	6276.0
57.5°	2749.9	2868.5	3043.9	3587.9	4392.2	5400.0	6649.4	7368.7	8043.9	8039.7	6751.8
60°	2177.8	2303.5	2483.2	2868.5	3675.5	4901.8	6635.3	7645.3	8614.5	8649.6	7332.2
62.5°	1532.2	1670.4	1869.7	2229.1	2943.6	4256.0	6349.0	7845.2	9286.2	9381.6	8030.6
65°	1007.2	1098.4	1248.6	1558.8	2193.3	3425.8	5802.2	7871.3	10004.9	10166.3	8686.1
67.5°	706.0	741.2	829.6	998.0	1445.8	2627.1	4931.2	7602.4	10484.2	10666.0	8970.4
70°	550.9	568.5	613.5	680.8	908.2	1766.6	3778.8	6903.4	10381.8	10571.2	8673.4
72.5°	475.8	492.7	509.5	517.9	609.2	1090.7	2559.6	5772.0	9416.8	9545.2	7541.3
75°	431.6	435.8	449.9	447.1	464.6	707.5	1477.4	4205.5	7429.8	7385.5	5567.1
77.5°	362.8	368.5	391.7	388.2	412.7	483.6	767.1	2714.1	4816.8	4516.5	3098.7
80°	307.4	310.3	335.5	331.3	358.6	350.2	391.7	1383.3	2043.1	1730.7	893.5
82.5°	106.7	131.9	256.1	263.9	273.7	212.0	226.0	564.3	623.9	478.0	187.4
85°	52.0	55.5	130.6	185.3	184.6	106.7	110.2	201.4	196.5	154.4	62.4
87.5°	8.4	10.6	15.5	72.3	57.5	28.1	37.9	39.3	40.7	35.1	14.0
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: P962585

CATALOG NUMBER: NAV-SB2C-827-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3	1595.3
2.5°	1612.8	1577.8	1504.1	1436.0	1382.6	1331.4	1302.7	1278.1	1264.0	1261.3	1261.3
5°	1656.4	1584.0	1450.1	1337.0	1263.3	1208.6	1179.8	1161.5	1152.4	1146.9	1146.2
7.5°	1718.8	1612.8	1422.0	1293.6	1216.3	1177.0	1162.2	1159.5	1158.8	1159.5	1161.5
10°	1805.1	1659.9	1419.1	1283.0	1218.4	1196.7	1196.0	1196.7	1199.5	1200.2	1200.9
12.5°	1898.5	1708.3	1430.4	1292.1	1245.1	1233.2	1231.0	1230.3	1232.5	1233.9	1234.5
15°	2000.3	1772.1	1449.4	1311.8	1274.6	1261.9	1259.8	1255.6	1254.9	1254.2	1253.5
17.5°	2104.8	1835.4	1470.4	1332.8	1293.6	1275.9	1268.2	1258.4	1250.7	1248.6	1250.7
20°	2210.8	1897.8	1485.1	1343.4	1294.9	1270.4	1254.9	1238.1	1224.8	1217.0	1219.9
22.5°	2323.8	1963.1	1494.2	1340.5	1282.3	1248.6	1220.5	1200.9	1180.5	1167.2	1167.9
25°	2434.1	2020.0	1493.5	1325.8	1257.7	1214.9	1179.2	1153.8	1125.8	1111.7	1111.7
27.5°	2540.0	2071.1	1476.0	1299.8	1222.6	1174.9	1132.1	1101.9	1074.5	1061.2	1060.5
30°	2649.5	2114.0	1448.6	1261.9	1181.2	1128.5	1081.6	1055.5	1031.0	1018.3	1017.7
32.5°	2758.3	2153.3	1410.0	1214.9	1133.4	1082.9	1036.6	1012.8	998.0	998.0	998.8
35°	2873.4	2180.7	1358.7	1160.2	1082.9	1034.5	998.0	984.0	982.6	974.2	972.1
37.5°	2994.8	2198.2	1296.3	1104.0	1033.1	987.5	976.3	959.4	945.4	927.1	924.3
40°	3122.6	2215.7	1221.2	1045.8	980.5	955.2	950.3	927.8	887.9	843.0	836.6
42.5°	3277.6	2227.6	1143.3	987.5	925.1	916.7	923.6	885.0	821.1	787.5	788.2
45°	3457.3	2247.3	1071.7	930.0	868.2	868.2	897.7	847.2	794.5	773.5	776.9
47.5°	3690.3	2292.9	1005.0	866.7	815.6	829.6	840.1	801.6	772.0	746.1	745.4
50°	4027.2	2402.4	936.2	802.9	775.5	803.6	788.8	766.4	732.1	710.9	708.9
52.5°	4445.5	2467.0	875.2	745.4	741.2	769.3	748.1	727.1	701.1	673.1	667.5
55°	4730.5	2479.0	824.0	703.3	718.0	715.1	707.5	688.5	674.4	637.2	638.0
57.5°	5049.2	2502.8	781.9	678.0	703.3	672.4	669.5	653.4	635.2	609.9	601.5
60°	5430.2	2540.0	745.4	668.2	690.6	644.3	630.3	623.9	605.7	593.1	596.6
62.5°	5845.7	2573.7	708.2	669.5	675.9	616.9	595.8	593.8	582.5	578.3	578.3
65°	6129.3	2481.7	661.8	668.2	652.7	588.9	562.2	561.5	552.4	550.9	550.2
67.5°	6030.3	2190.4	599.4	648.5	628.8	560.8	531.3	528.5	516.6	517.2	517.2
70°	5534.8	1775.0	513.0	600.0	599.4	535.6	499.0	489.8	473.8	476.5	479.4
72.5°	4605.5	1315.3	397.3	519.4	552.4	512.4	461.9	447.1	426.7	429.6	428.9
75°	3326.0	894.1	289.2	395.1	480.7	485.0	425.3	400.1	375.5	379.7	381.1
77.5°	1702.0	506.8	212.7	272.3	377.6	440.7	392.4	358.6	353.0	392.4	386.7
80°	555.1	254.1	147.4	190.9	247.7	360.8	343.9	305.3	303.9	313.0	268.9
82.5°	165.6	107.4	94.7	125.7	136.8	276.5	296.8	230.9	198.6	209.2	216.2
85°	56.9	52.0	54.0	62.4	65.3	162.2	207.8	153.0	144.6	159.3	157.2
87.5°	13.3	18.2	15.5	14.0	14.0	39.3	80.7	63.9	88.5	58.9	56.9
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)