

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: P962063

Luminaire Tested: **NAV-SB2B-827-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-827-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8355.8 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - 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



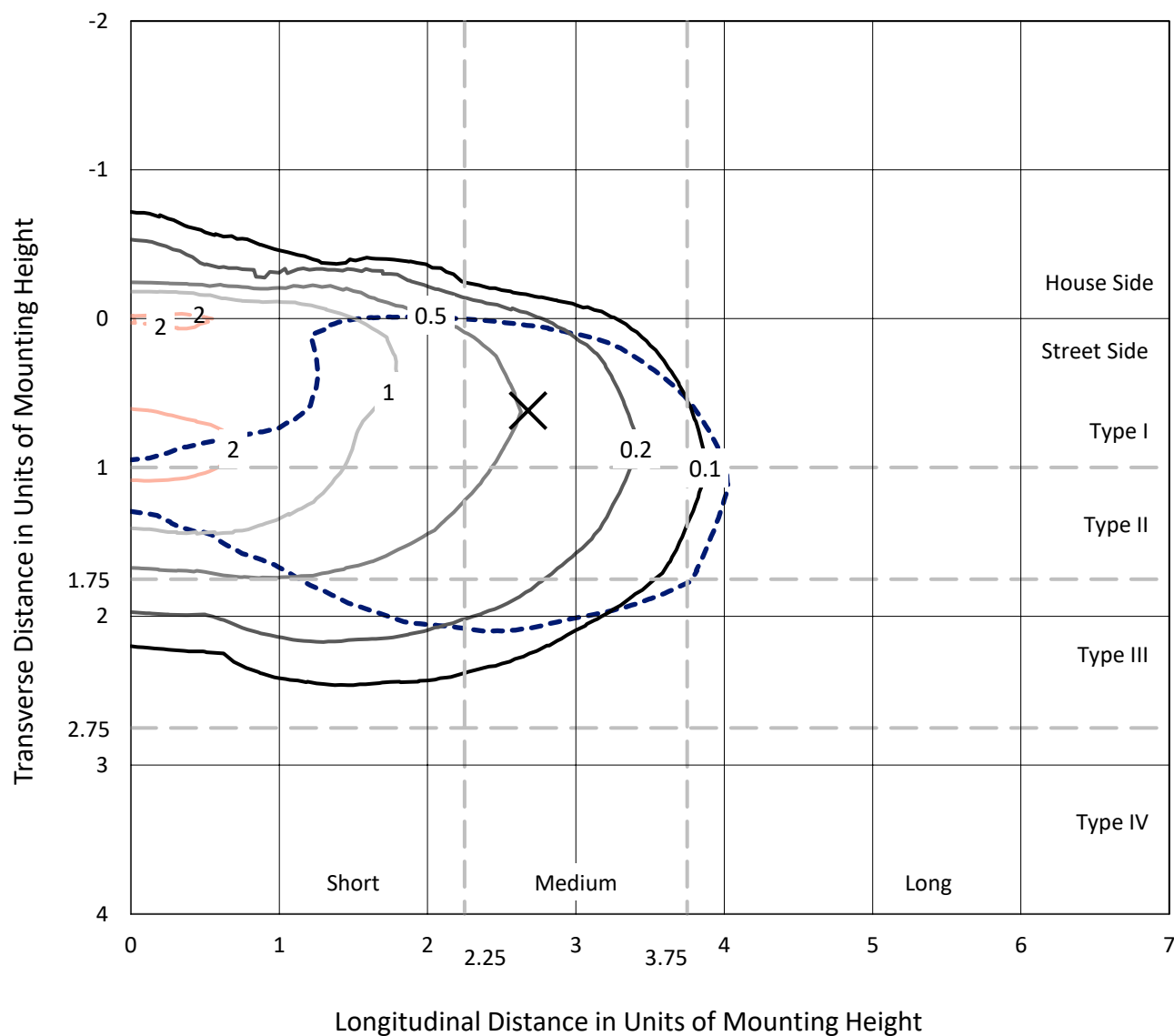
REPORT NUMBER: P962063

CATALOG NUMBER: NAV-SB2B-827-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

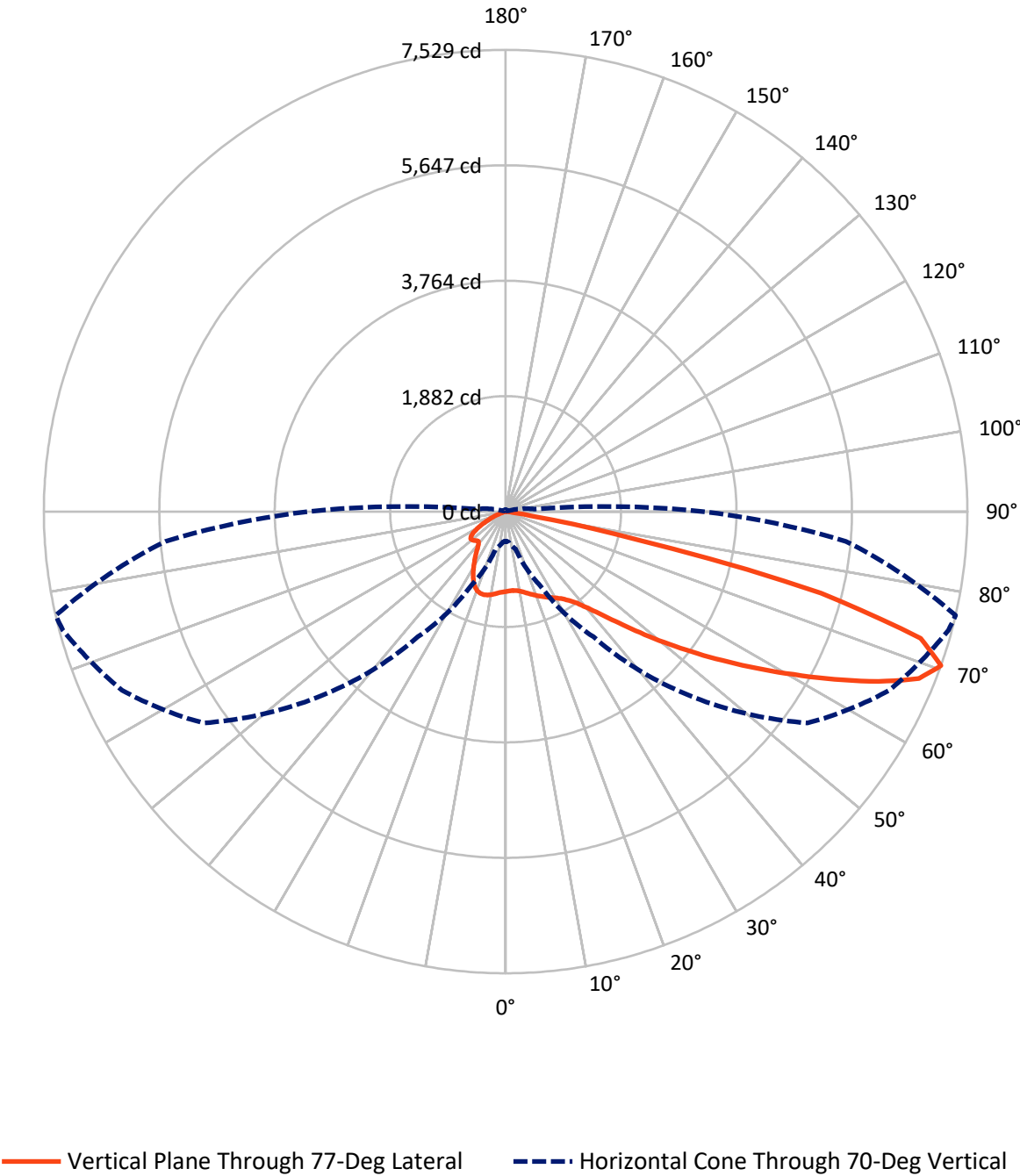


Based on 25 foot mounting height. Maximum calculated value = 2.4 fc

Type III - Medium - N/A

REPORT NUMBER: P962063
CATALOG NUMBER: NAV-SB2B-827-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P962063

CATALOG NUMBER: NAV-SB2B-827-U-T3R-HSS

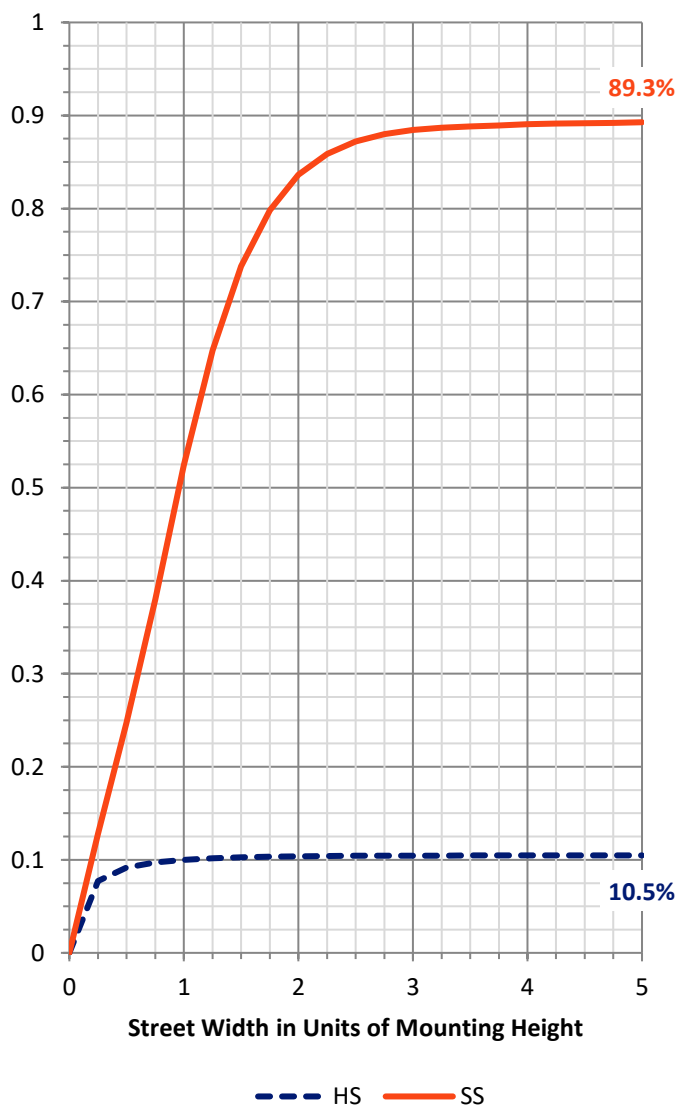
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	880.8	0.0	880.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	7475.0	0.0	7475.0
	% Fixture	89.5	0.0	89.5
Total	Lumens	8355.8	0.0	8355.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	1.3
10°-20°	266.7	3.2
20°-30°	412.4	4.9
30°-40°	748.4	9.0
40°-50°	1412.7	16.9
50°-60°	2041.2	24.4
60°-70°	2172.8	26.0
70°-80°	1151.4	13.8
80°-90°	37.8	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°	8355.8	100.0
0°-180°	8355.8	100.0

Coefficient of Utilization



REPORT NUMBER: P962063

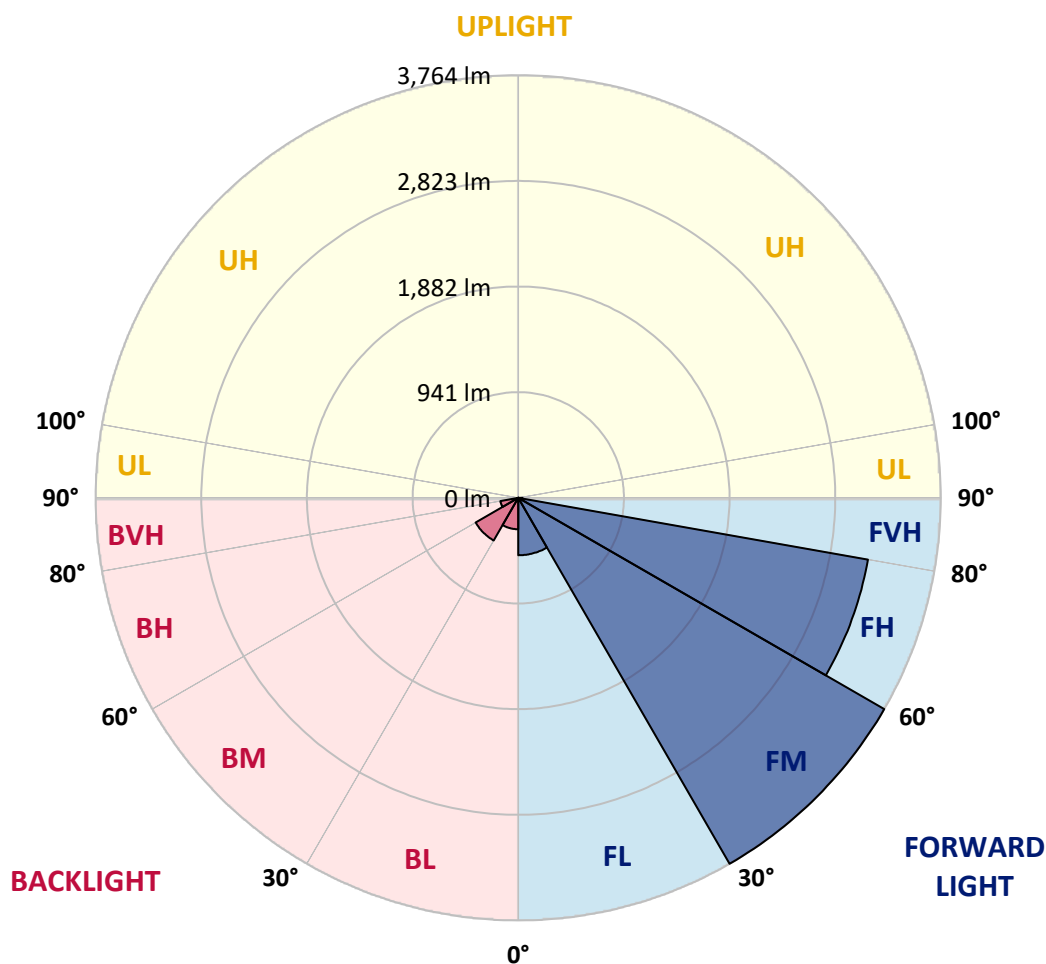
CATALOG NUMBER: NAV-SB2B-827-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	511.6	6.1			
FM	(30°-60°)	3763.8	45.0			
FH	(60°-80°)	3162.8	37.9			G2/5000
FVH	(80°-90°)	36.8	0.4			G1/100
BL	(0°-30°)	279.8	3.3	B1/500		
BM	(30°-60°)	438.5	5.2	B1/1000		
BH	(60°-80°)	161.5	1.9	B1/500		G1/500
BVH	(80°-90°)	1.0	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 Medium



REPORT NUMBER: P962063

CATALOG NUMBER: NAV-SB2B-827-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4
2.5°	1223.6	1234.7	1233.2	1240.6	1243.2	1253.8	1264.3	1278.6	1294.4	1293.9	1304.4
5°	1154.6	1165.6	1168.3	1178.3	1190.9	1207.3	1229.0	1257.5	1287.0	1291.7	1312.8
7.5°	1072.8	1084.3	1091.2	1111.3	1134.5	1168.3	1203.7	1245.3	1294.4	1301.2	1341.8
10°	991.0	1001.5	1010.4	1038.9	1075.9	1126.1	1183.6	1243.7	1309.6	1319.7	1377.2
12.5°	940.3	950.4	960.3	985.1	1031.0	1092.2	1170.3	1251.1	1335.1	1349.3	1425.3
15°	922.4	931.3	939.3	961.4	1004.2	1073.8	1167.8	1266.4	1367.2	1386.2	1483.3
17.5°	925.1	929.8	935.0	951.9	993.6	1065.4	1172.5	1292.8	1405.2	1422.1	1541.3
20°	940.3	943.0	943.5	955.1	992.0	1064.4	1182.0	1318.1	1441.0	1463.8	1598.9
22.5°	959.8	960.9	959.8	967.7	1002.0	1072.3	1194.6	1348.7	1481.2	1502.2	1656.9
25°	1051.1	1031.0	1005.7	990.5	1019.0	1087.5	1213.6	1389.9	1525.0	1545.6	1713.4
27.5°	1334.4	1276.9	1186.2	1084.3	1053.8	1109.7	1240.0	1431.6	1569.3	1587.7	1774.1
30°	1794.6	1719.1	1565.1	1335.6	1165.6	1156.1	1274.4	1473.2	1616.2	1636.3	1839.0
32.5°	2255.8	2237.4	2059.5	1741.9	1417.4	1259.5	1331.3	1529.7	1678.5	1694.3	1926.5
35°	2722.3	2684.8	2539.1	2225.2	1805.1	1470.1	1426.3	1603.6	1760.3	1778.3	2054.2
37.5°	3079.5	3056.9	2966.6	2708.0	2265.4	1795.2	1588.9	1718.1	1879.0	1899.1	2217.8
40°	3395.0	3384.4	3353.9	3183.4	2779.8	2220.5	1841.6	1895.4	2043.6	2067.4	2418.3
42.5°	3643.1	3667.9	3685.3	3637.8	3310.1	2705.9	2181.4	2144.5	2273.2	2297.5	2673.7
45°	3896.8	3905.4	3975.5	4044.1	3836.7	3213.6	2564.4	2436.2	2558.7	2588.7	2979.8
47.5°	4059.9	4093.6	4217.2	4338.0	4279.5	3717.0	2976.1	2780.8	2889.6	2946.0	3322.7
50°	4072.0	4135.9	4305.8	4516.4	4601.8	4196.0	3423.5	3173.4	3289.0	3351.2	3689.0
52.5°	3870.0	3969.2	4232.4	4540.6	4776.0	4601.8	3886.3	3566.0	3714.3	3795.6	4068.9
55°	2967.1	3096.9	3956.5	4408.7	4782.9	4909.4	4337.0	3975.0	4188.2	4280.0	4479.5
57.5°	2585.0	2650.5	3110.7	4179.7	4655.7	5033.5	4744.3	4364.3	4703.7	4817.7	4867.2
60°	2150.8	2236.9	2608.8	3805.0	4483.1	5045.7	5104.2	4866.7	5262.5	5390.7	5222.9
62.5°	1461.6	1555.0	1925.0	3161.3	4247.3	5039.8	5399.2	5383.8	5883.6	6021.3	5524.2
65°	905.5	964.0	1207.9	2581.4	3917.4	5046.2	5707.8	6011.8	6538.9	6678.8	5757.4
67.5°	715.6	742.4	869.6	1981.9	3349.2	4903.7	6016.0	6602.2	7155.8	7266.6	5828.7
70°	480.7	497.0	632.6	1328.7	2491.7	4246.2	6010.2	6898.8	7473.5	7528.8	5569.0
72.5°	253.3	266.0	369.9	615.3	1504.9	3018.3	5066.2	6544.2	7157.4	7074.0	4760.1
75°	126.7	147.7	249.1	312.4	642.7	1683.3	3146.0	5159.5	5633.4	5310.5	3054.2
77.5°	96.0	116.1	205.8	205.8	223.8	566.7	1332.4	2814.0	2595.6	2161.3	896.6
80°	61.2	79.1	179.9	155.7	93.4	144.0	347.2	788.3	551.4	419.5	163.1
82.5°	35.9	51.8	149.9	102.9	52.3	53.3	98.2	167.8	143.0	111.3	50.1
85°	14.2	33.7	102.9	40.6	20.6	13.2	29.5	35.9	29.5	22.1	12.7
87.5°	0.0	7.9	17.9	0.0	1.5	1.0	2.2	2.7	2.7	2.2	4.2
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: P962063

CATALOG NUMBER: NAV-SB2B-827-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4	1303.4
2.5°	1309.1	1310.3	1313.3	1313.9	1306.6	1297.0	1293.3	1291.7	1285.5	1284.8	1286.0
5°	1325.0	1329.7	1325.0	1311.3	1278.6	1232.7	1197.8	1169.3	1143.5	1135.6	1130.8
7.5°	1356.7	1361.4	1347.2	1293.3	1211.0	1119.7	1037.4	979.4	927.1	907.6	899.6
10°	1402.0	1408.4	1363.6	1254.8	1109.2	962.5	823.2	725.0	648.5	617.4	604.2
12.5°	1459.0	1461.6	1372.5	1196.3	976.7	767.2	569.9	464.8	396.8	371.5	363.6
15°	1521.8	1518.1	1373.5	1116.5	796.2	542.4	372.0	305.6	278.1	269.7	269.7
17.5°	1587.7	1572.5	1352.4	1001.5	598.4	370.9	275.9	260.1	255.4	253.3	252.8
20°	1652.7	1618.4	1313.9	851.2	429.6	277.1	250.6	245.9	243.2	242.2	241.2
22.5°	1711.7	1653.2	1247.9	676.5	311.8	244.9	236.9	232.7	228.0	225.8	225.3
25°	1769.3	1673.2	1155.1	513.4	249.6	229.0	222.6	214.7	208.4	205.8	204.7
27.5°	1825.2	1685.9	1038.9	380.0	222.6	214.2	202.6	191.6	186.8	185.7	184.7
30°	1884.9	1690.1	907.0	283.3	206.3	195.8	178.9	166.3	163.6	164.1	164.1
32.5°	1957.6	1696.5	774.1	232.2	192.6	173.6	153.5	140.3	138.3	140.3	139.8
35°	2044.8	1709.1	645.9	213.7	180.5	150.9	129.3	118.2	116.1	117.7	117.2
37.5°	2163.0	1729.7	526.1	210.0	170.5	131.9	108.6	99.7	99.7	100.2	99.7
40°	2320.2	1784.6	419.0	207.4	165.1	117.7	91.8	88.1	89.7	90.7	90.7
42.5°	2511.8	1901.2	346.7	204.2	159.4	111.3	83.3	81.8	84.5	85.5	85.5
45°	2726.5	2049.0	321.3	199.0	154.1	115.5	79.6	77.6	80.8	81.3	81.8
47.5°	2948.6	2193.5	318.2	193.1	148.8	121.9	78.6	73.9	77.6	78.1	78.6
50°	3173.4	2288.0	321.3	184.2	140.3	121.9	79.1	70.2	73.4	74.9	75.4
52.5°	3399.8	2331.3	319.3	164.6	125.6	114.5	79.1	67.0	70.2	71.2	71.2
55°	3619.3	2322.9	287.1	135.6	106.6	101.3	77.1	64.4	66.5	67.0	67.0
57.5°	3792.9	2205.2	227.4	105.6	86.5	84.5	70.2	61.2	62.8	62.2	62.2
60°	3883.7	1946.6	162.6	81.3	68.1	66.5	61.7	57.0	58.0	55.5	54.8
62.5°	3884.7	1604.6	108.6	64.4	54.3	52.8	52.8	51.1	50.1	44.9	43.3
65°	3801.9	1225.3	72.3	51.1	43.8	41.2	44.3	43.8	40.1	32.7	31.7
67.5°	3614.0	803.1	54.8	40.1	33.7	32.2	35.4	36.9	34.3	27.5	27.0
70°	3227.8	467.5	45.4	31.2	25.3	23.8	28.5	31.7	28.5	22.1	21.1
72.5°	2681.1	252.3	36.9	23.3	17.4	15.8	22.7	25.8	22.7	16.4	15.8
75°	1739.7	135.1	28.5	15.3	9.0	10.0	16.9	19.0	15.8	10.6	9.5
77.5°	584.1	59.7	17.9	7.4	4.2	4.2	10.0	11.6	7.4	3.7	3.2
80°	130.4	24.8	7.4	3.2	1.5	1.5	2.2	2.2	1.0	0.0	0.0
82.5°	42.7	10.0	3.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.4	3.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.4	0.5	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)