

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: P960470

Luminaire Tested: **NAV-SB1C-827-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-827-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5096.3 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 54.4
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



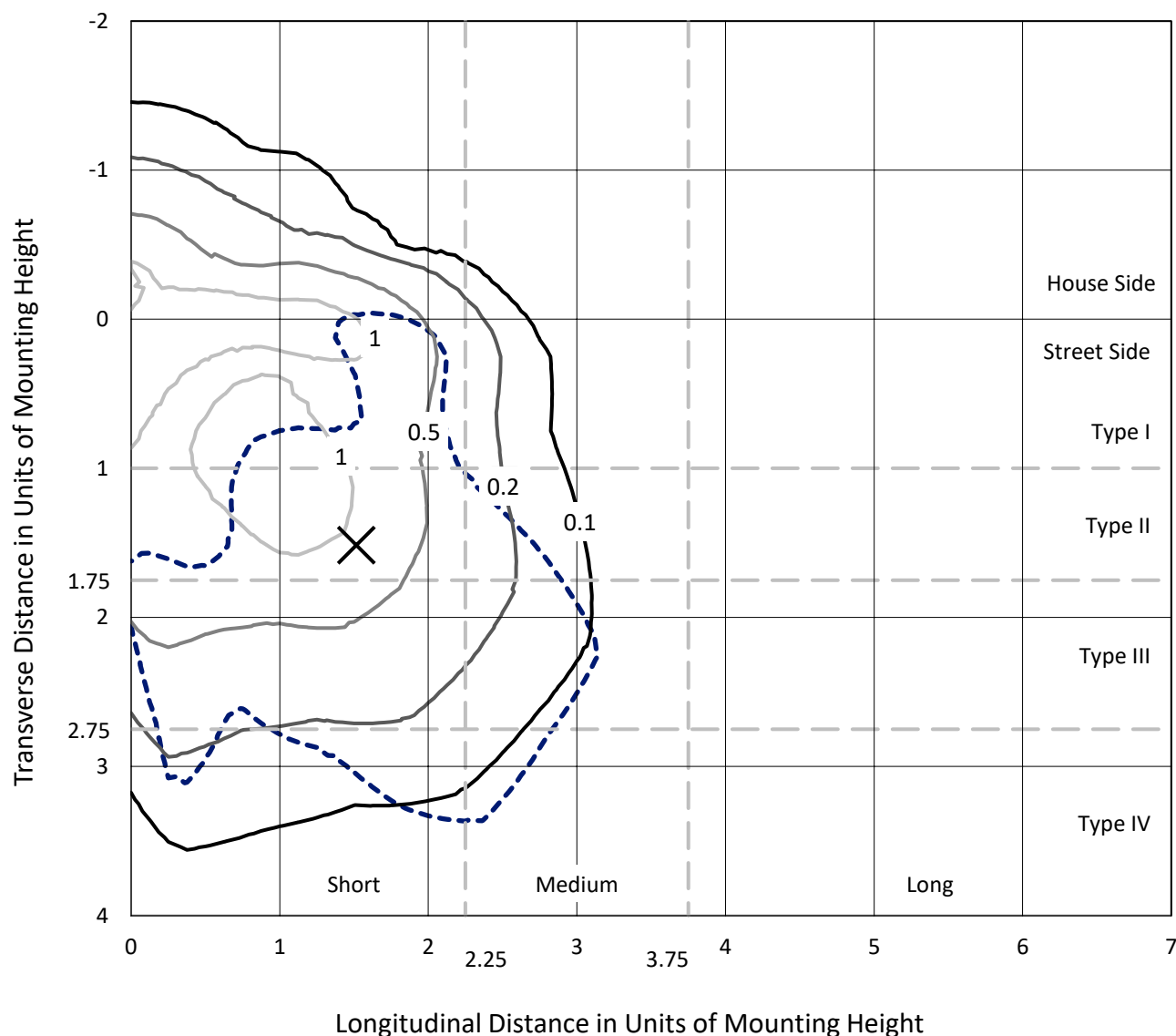
REPORT NUMBER: P960470

CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

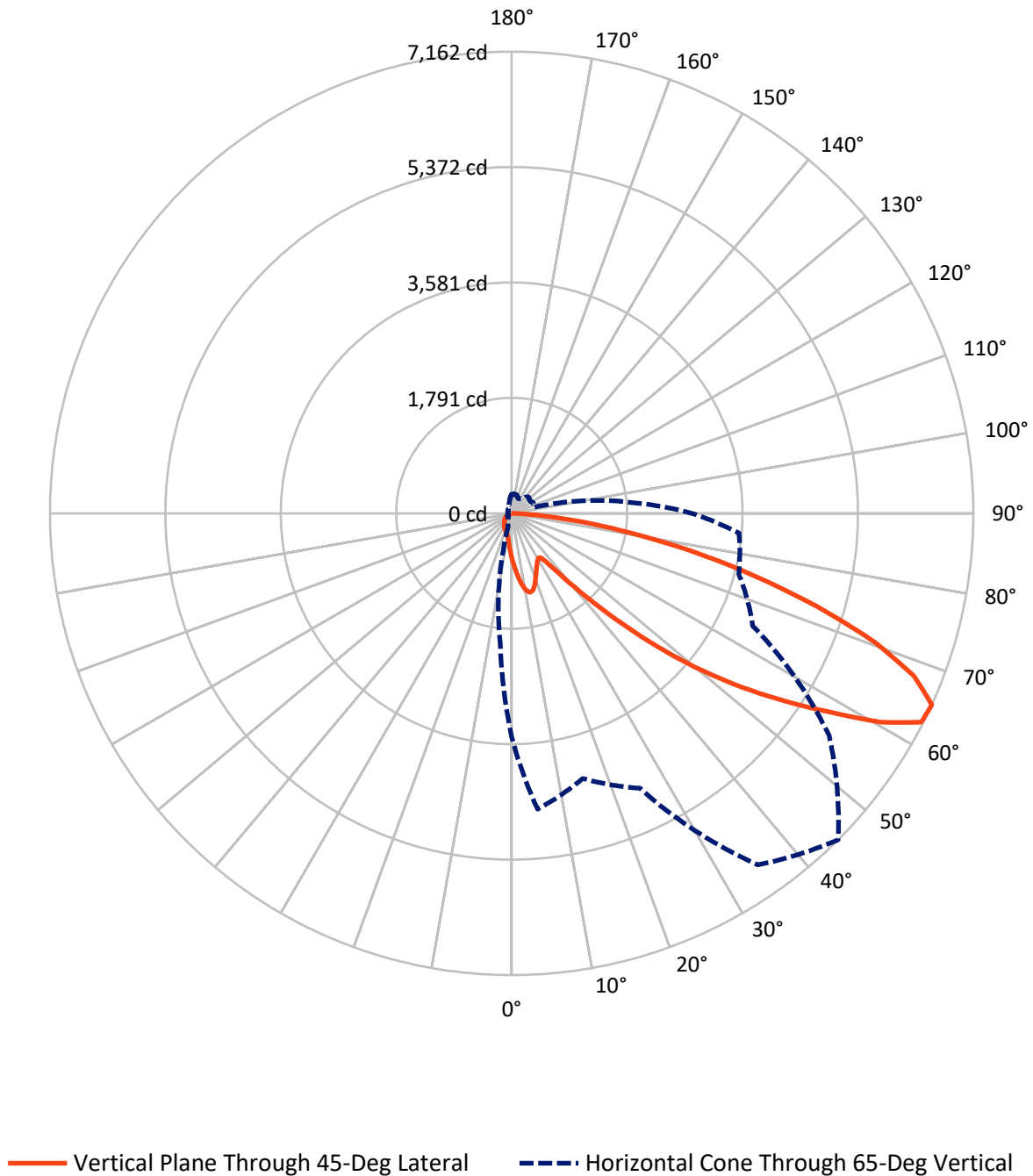


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc

Type IV - Short - N/A

REPORT NUMBER: P960470
CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P960470

CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

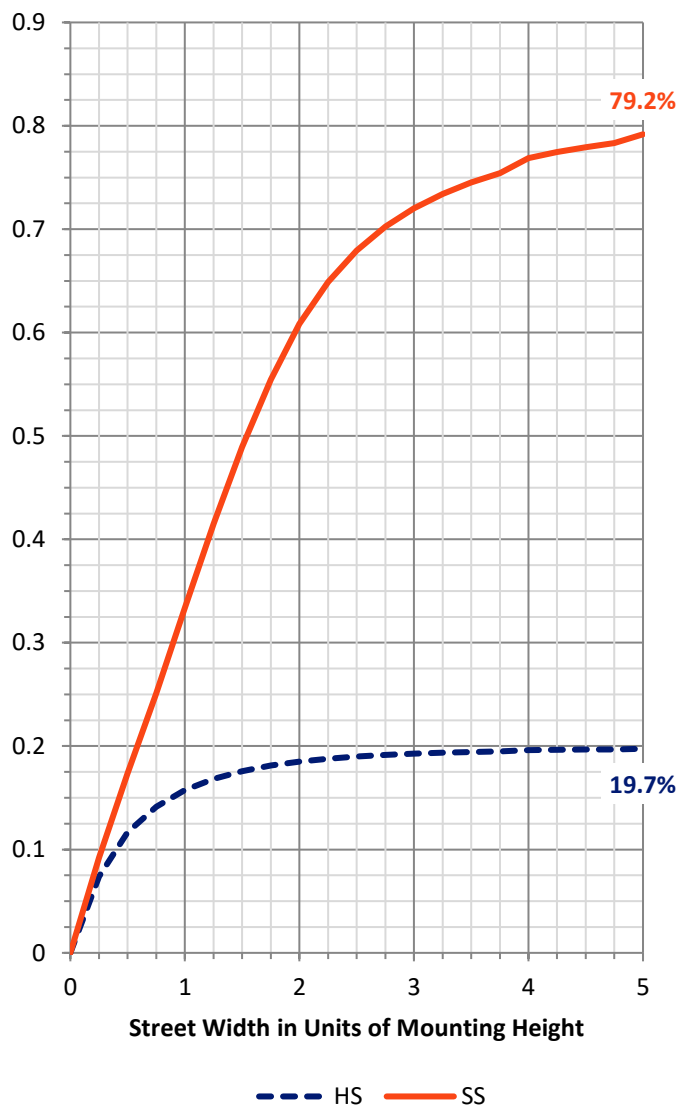
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1013.0	0.0	1013.0
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	4083.3	0.0	4083.3
	% Fixture	80.1	0.0	80.1
Total	Lumens	5096.3	0.0	5096.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	1.4
10°-20°	208.3	4.1
20°-30°	306.8	6.0
30°-40°	394.2	7.7
40°-50°	637.5	12.5
50°-60°	1117.9	21.9
60°-70°	1398.8	27.4
70°-80°	817.4	16.0
80°-90°	145.8	2.9
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°	5096.3	100.0
0°-180°	5096.3	100.0

Coefficient of Utilization



REPORT NUMBER: P960470

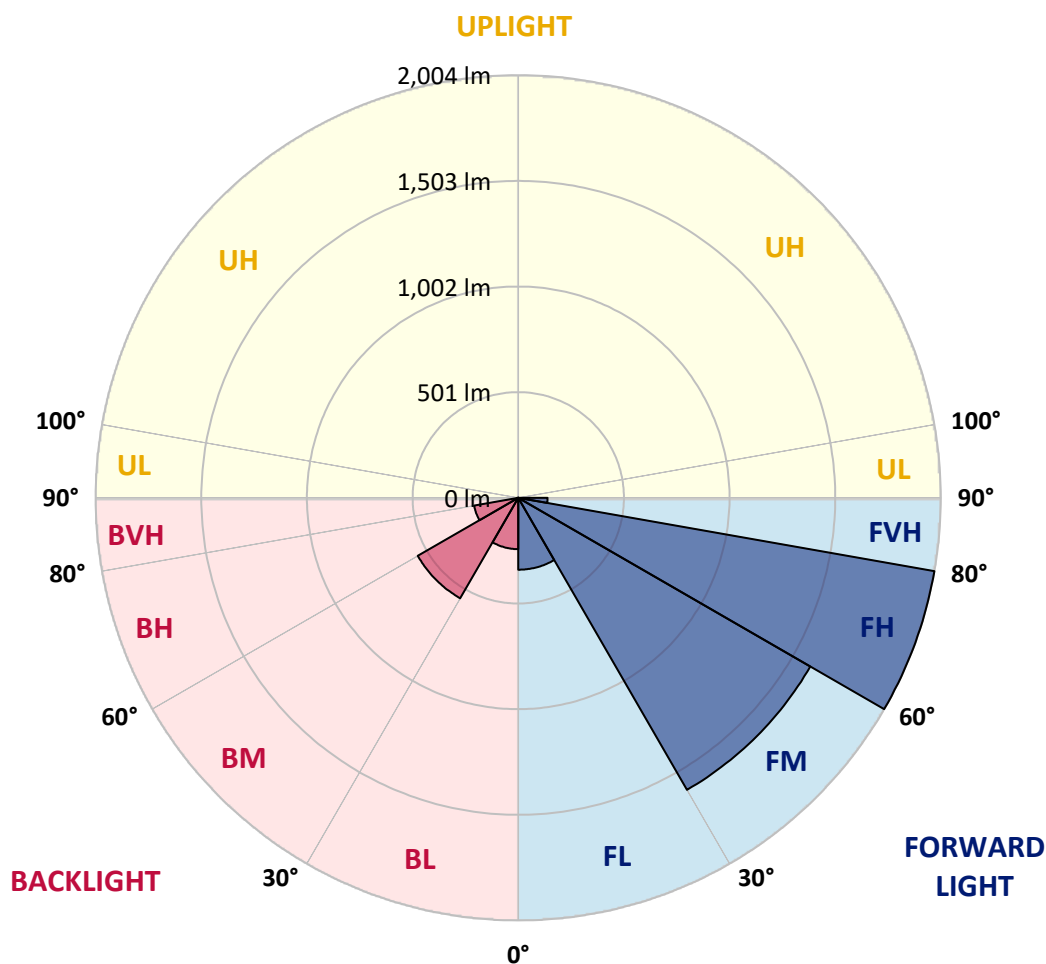
CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	341.0	6.7			
FM	(30°-60°)	1599.3	31.4			
FH	(60°-80°)	2004.0	39.3			G2/5000
FVH	(80°-90°)	139.0	2.7			G2/225
BL	(0°-30°)	243.6	4.8	B1/500		
BM	(30°-60°)	550.4	10.8	B1/1000		
BH	(60°-80°)	212.2	4.2	B1/500		G1/500
BVH	(80°-90°)	6.8	0.1			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 IV Short



REPORT NUMBER: P960470

CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7
2.5°	790.7	796.6	810.0	816.9	827.9	828.5	828.5	819.1	818.8	799.4	797.3
5°	883.7	897.7	929.3	962.0	969.0	970.8	967.2	948.2	934.2	896.7	888.6
7.5°	976.0	1003.1	1051.1	1094.7	1108.7	1108.7	1100.3	1069.4	1040.6	986.2	965.9
10°	1052.6	1086.6	1151.9	1200.7	1216.9	1213.3	1196.2	1157.1	1117.5	1051.4	1024.8
12.5°	1103.1	1141.3	1213.0	1252.3	1268.8	1259.7	1240.0	1202.1	1160.3	1090.8	1060.6
15°	1128.4	1168.4	1230.5	1251.2	1246.7	1237.2	1234.7	1216.5	1184.9	1119.9	1086.9
17.5°	1139.3	1176.5	1219.6	1206.6	1168.1	1160.7	1185.2	1208.4	1200.7	1145.2	1114.4
20°	1149.4	1180.7	1193.7	1136.1	1068.7	1062.0	1109.0	1175.1	1208.8	1168.7	1140.3
22.5°	1163.5	1182.7	1156.1	1061.7	989.0	973.5	1025.5	1124.8	1211.2	1198.6	1170.1
25°	1182.7	1188.1	1114.7	991.1	918.1	902.6	951.1	1069.1	1207.0	1230.9	1206.6
27.5°	1206.0	1195.0	1075.0	932.1	861.5	847.2	895.6	1015.4	1195.0	1263.2	1246.0
30°	1236.1	1204.2	1035.7	886.5	821.2	810.7	857.3	969.0	1180.3	1304.3	1294.8
32.5°	1266.7	1208.1	999.2	859.8	812.0	815.9	854.1	944.0	1164.2	1343.6	1348.2
35°	1299.7	1220.4	981.2	886.1	888.3	922.0	937.8	967.2	1161.7	1397.0	1414.9
37.5°	1344.6	1247.7	1002.7	1017.1	1090.1	1160.0	1147.0	1080.7	1190.1	1476.6	1510.0
40°	1409.3	1295.8	1096.0	1240.0	1389.9	1503.4	1453.9	1286.7	1277.3	1591.4	1641.3
42.5°	1503.4	1372.4	1261.8	1512.5	1766.7	1953.4	1820.7	1552.5	1429.6	1755.4	1819.0
45°	1642.4	1496.3	1462.3	1800.0	2231.1	2525.3	2249.4	1835.8	1643.1	2003.7	2053.5
47.5°	1835.1	1678.5	1650.0	2103.0	2795.7	3176.3	2724.8	2098.4	1886.0	2342.0	2353.6
50°	2091.0	1923.9	1828.1	2434.4	3414.6	3839.8	3199.7	2351.9	2164.4	2755.6	2742.3
52.5°	2428.7	2266.3	2035.5	2750.1	4051.1	4489.3	3676.9	2574.5	2509.9	3235.6	3208.1
55°	2889.4	2781.2	2319.3	3051.2	4687.3	5142.6	4135.4	2784.4	2966.2	3805.7	3640.0
57.5°	3461.0	3538.2	2728.2	3400.5	5259.2	5816.1	4596.0	3078.0	3558.9	4443.3	3890.7
60°	3829.6	4544.7	3511.5	3917.0	5909.0	6577.5	5227.3	3636.2	4181.7	4671.8	3842.9
62.5°	3740.4	4865.0	4449.6	4576.3	6506.6	7131.1	5845.9	4196.9	4299.0	4335.1	3475.1
65°	3467.0	4606.6	4258.3	4704.5	6657.9	7162.4	6011.2	4124.5	3646.6	3539.2	2793.2
67.5°	3090.6	4300.1	3803.6	4364.7	6384.4	6725.6	5703.3	3648.5	2818.1	2656.0	2026.4
70°	2684.4	3960.9	3505.2	3983.4	5863.1	5964.6	5179.8	3208.9	2072.8	1793.6	1300.4
72.5°	2298.9	3607.7	3300.9	3592.6	5167.5	4957.6	4498.4	2820.3	1509.3	1293.8	924.4
75°	1904.7	3086.7	3009.8	3128.5	4253.0	3905.0	3737.7	2335.1	1184.6	936.0	638.0
77.5°	1469.6	2411.9	2588.8	2505.3	2993.7	2900.6	2897.2	1754.7	865.4	624.5	399.9
80°	1005.8	1681.0	2022.6	1767.3	1942.9	1895.5	2182.0	1177.2	627.7	376.0	222.6
82.5°	591.2	1023.4	1407.8	855.6	1074.3	1102.8	1299.4	572.6	369.3	86.7	48.5
85°	239.7	404.1	550.5	335.0	518.2	437.1	493.2	160.8	102.9	2.2	0.0
87.5°	60.4	129.1	90.6	37.5	60.1	55.1	43.6	19.7	4.2	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

REPORT NUMBER: P960470

CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7
2.5°	783.6	775.5	755.5	735.5	719.3	697.6	683.2	666.0	649.5	634.8	631.9
5°	866.4	839.8	803.3	769.9	735.8	702.8	670.2	635.8	604.2	584.9	572.6
7.5°	933.9	886.8	838.3	795.9	754.8	716.2	673.0	631.2	581.8	555.4	531.6
10°	984.1	922.3	858.7	810.0	768.5	730.9	694.4	652.3	592.7	559.6	523.8
12.5°	1017.1	943.7	869.3	813.4	767.1	738.0	721.8	705.3	646.0	607.4	555.4
15°	1039.9	958.8	876.7	805.3	748.6	727.1	743.2	762.2	724.3	679.7	611.9
17.5°	1064.9	978.5	879.9	783.6	712.4	703.3	745.0	788.8	787.1	742.9	676.5
20°	1091.1	995.7	877.7	748.6	668.5	676.5	729.9	780.8	802.3	778.4	719.3
22.5°	1118.2	1012.2	869.6	702.8	627.4	652.6	706.0	750.6	775.9	768.5	723.5
25°	1152.2	1035.4	857.7	653.7	593.4	628.4	678.2	714.4	732.1	731.6	700.8
27.5°	1193.0	1066.2	851.4	614.1	569.1	601.1	645.2	677.6	689.8	689.8	665.3
30°	1240.4	1102.8	844.4	588.0	555.0	572.6	607.0	638.6	650.9	650.9	630.2
32.5°	1293.0	1137.9	827.5	572.3	544.5	544.9	566.6	595.4	610.2	612.3	597.6
35°	1356.3	1175.5	790.7	559.6	532.3	517.8	528.4	552.3	569.8	574.4	565.3
37.5°	1439.1	1221.4	738.0	541.0	513.3	489.4	491.9	510.1	529.4	536.5	530.4
40°	1550.4	1275.5	683.2	514.3	486.6	458.2	457.2	470.5	489.4	497.1	493.9
42.5°	1697.5	1340.4	630.9	488.7	454.3	425.2	423.4	434.0	450.5	458.5	457.2
45°	1885.7	1420.1	586.0	468.7	422.7	393.9	393.2	402.0	416.4	424.8	423.0
47.5°	2147.2	1499.8	555.4	458.2	397.8	368.3	369.7	377.4	390.4	396.4	393.9
50°	2488.1	1524.1	540.0	458.2	384.5	345.4	352.5	358.9	368.6	372.2	369.0
52.5°	2815.4	1444.0	525.9	460.9	386.2	326.2	341.2	345.8	354.2	355.7	351.1
55°	2975.8	1241.4	506.7	461.7	397.1	309.7	332.1	340.5	343.7	343.4	335.6
57.5°	2920.6	1003.8	474.0	458.9	404.5	299.1	320.9	337.0	339.2	336.0	321.5
60°	2727.2	739.0	449.1	438.2	401.6	295.9	303.7	329.3	332.5	328.3	304.7
62.5°	2402.8	512.9	429.7	392.5	389.4	294.9	276.6	312.4	320.2	314.3	279.8
65°	1891.6	362.3	370.0	344.1	362.6	289.3	248.6	292.1	302.7	293.5	245.1
67.5°	1280.0	261.6	299.8	311.8	319.5	276.6	228.2	269.0	283.0	271.0	204.7
70°	691.3	183.6	198.0	262.6	271.4	254.9	209.9	245.4	261.6	248.6	166.8
72.5°	408.3	132.0	138.7	211.0	226.1	224.4	189.6	218.0	237.7	222.2	135.5
75°	225.1	89.2	99.0	153.0	183.6	173.1	162.9	184.7	204.7	189.6	104.7
77.5°	100.8	53.4	68.8	100.4	144.3	118.7	126.1	143.9	162.6	146.8	69.9
80°	38.9	29.8	45.6	54.7	105.0	65.7	81.1	106.0	119.4	106.7	42.4
82.5°	4.9	13.3	19.7	21.4	61.1	34.7	47.0	66.7	65.7	56.9	21.4
85°	0.0	2.5	2.8	1.4	26.3	12.6	15.5	21.7	20.4	15.5	1.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	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

REPORT NUMBER: P960470

CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7
2.5°	614.8	602.1	595.8	590.5	595.4	598.3	598.3	610.2	617.2	620.0	639.7
5°	541.7	518.2	502.4	492.9	496.1	499.6	503.5	518.5	528.7	535.4	565.9
7.5°	484.1	448.3	426.2	414.6	416.4	418.8	422.0	436.8	446.9	455.7	489.7
10°	455.7	405.2	376.0	361.9	359.5	358.1	357.0	365.8	373.5	380.6	414.3
12.5°	457.2	386.5	351.1	333.8	326.5	318.1	311.4	312.8	317.8	326.5	347.9
15°	475.0	380.6	338.0	316.7	304.4	294.6	286.5	284.7	286.5	287.9	301.2
17.5°	499.3	379.9	326.9	300.2	287.5	279.4	272.1	269.7	270.0	271.7	275.2
20°	518.5	377.8	314.3	284.3	273.2	266.1	258.7	256.2	257.0	257.4	261.2
22.5°	528.7	374.6	300.2	268.5	259.1	252.0	245.4	245.1	245.1	247.1	250.0
25°	528.7	368.0	287.5	253.5	245.1	238.7	230.6	232.1	232.8	235.5	239.7
27.5°	516.1	355.3	277.4	240.5	231.8	225.4	218.0	219.8	220.8	224.0	229.3
30°	499.9	340.2	265.8	228.2	218.0	213.5	207.2	207.9	209.2	212.8	218.7
32.5°	482.8	322.3	256.2	215.9	205.7	202.2	195.2	196.3	197.6	201.5	208.2
35°	463.8	301.2	245.1	204.7	194.5	191.7	183.6	184.3	186.4	190.6	197.3
37.5°	443.7	284.0	233.8	193.8	183.3	180.5	172.0	172.7	175.2	180.1	186.4
40°	424.1	267.2	221.9	182.2	171.7	169.2	160.1	160.8	163.6	168.9	175.6
42.5°	402.7	254.2	206.4	170.3	159.1	156.6	148.1	149.2	152.4	157.6	164.3
45°	377.1	245.8	189.2	159.1	146.4	143.9	136.2	138.4	141.9	147.1	154.2
47.5°	350.8	242.2	174.9	147.1	133.5	131.3	124.9	128.5	132.3	136.5	144.3
50°	325.4	237.7	160.1	135.9	122.2	120.0	115.8	120.4	124.3	128.1	135.5
52.5°	296.6	227.9	146.8	126.1	112.6	112.0	109.9	114.1	117.6	121.2	127.4
55°	266.8	212.1	135.2	117.3	104.7	105.4	104.2	107.8	110.6	113.8	119.4
57.5°	240.9	192.1	126.1	107.8	97.6	99.7	98.3	100.0	101.8	105.7	110.3
60°	214.5	168.2	115.8	96.6	90.6	93.1	89.2	88.9	89.5	90.6	99.0
62.5°	179.1	143.2	103.2	86.7	82.8	83.9	76.6	70.9	70.9	72.0	84.6
65°	143.9	120.0	89.2	75.4	72.4	71.6	61.1	53.4	52.7	55.9	66.7
67.5°	118.3	99.7	75.1	62.8	60.8	61.4	53.7	46.0	45.3	48.8	56.9
70°	98.0	80.4	60.1	48.5	50.5	53.7	46.0	38.6	37.5	40.7	48.5
72.5°	77.9	62.8	46.0	35.8	41.8	45.6	37.5	30.5	29.8	32.7	40.0
75°	57.2	44.9	31.3	25.9	32.3	35.8	27.4	21.7	20.7	23.2	30.5
77.5°	35.5	25.3	19.7	15.5	22.1	23.9	14.3	12.6	12.3	14.0	19.3
80°	16.5	10.9	9.4	5.2	8.1	9.4	5.9	6.7	7.1	8.4	11.9
82.5°	4.6	1.7	0.3	0.0	0.0	2.8	1.4	2.8	3.5	5.2	7.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.7	3.2	5.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.8
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: P960470

CATALOG NUMBER: NAV-SB1C-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	705.7	705.7	705.7	705.7	705.7	705.7	705.7	705.7
2.5°	654.5	668.5	691.0	714.1	736.9	760.1	782.6	790.7
5°	593.7	626.0	670.6	718.3	767.4	817.3	862.9	883.7
7.5°	525.9	572.3	639.3	714.1	792.4	870.6	942.7	976.0
10°	453.6	512.2	588.8	689.8	802.3	910.4	1009.3	1052.6
12.5°	384.8	446.2	530.8	652.0	794.5	933.2	1052.2	1103.1
15°	327.2	381.6	472.9	607.0	769.6	934.6	1072.6	1128.4
17.5°	284.0	319.5	413.9	557.2	736.9	921.6	1079.5	1139.3
20°	262.6	272.4	337.4	493.2	706.3	909.3	1086.6	1149.4
22.5°	250.0	252.5	275.9	410.7	669.8	905.5	1098.9	1163.5
25°	239.7	240.5	246.8	325.4	614.1	903.0	1117.9	1182.7
27.5°	229.6	229.6	233.1	262.3	538.2	892.5	1142.5	1206.0
30°	219.5	219.5	221.9	232.1	449.4	871.8	1171.9	1236.1
32.5°	208.9	208.9	211.0	218.3	358.9	845.7	1198.9	1266.7
35°	198.3	197.6	200.5	208.2	285.5	812.7	1226.0	1299.7
37.5°	187.2	186.8	189.6	198.3	246.4	774.5	1246.3	1344.6
40°	175.2	175.2	178.4	187.8	235.2	726.4	1278.7	1409.3
42.5°	164.3	163.6	167.1	178.7	226.8	680.4	1336.6	1503.4
45°	153.8	152.4	155.5	169.9	212.1	664.2	1444.7	1642.4
47.5°	143.9	140.4	143.2	159.4	198.7	724.7	1621.7	1835.1
50°	135.9	129.1	131.6	148.8	188.5	855.6	1851.3	2091.0
52.5°	127.4	118.7	120.0	135.9	179.4	980.2	2100.1	2428.7
55°	118.7	108.9	109.6	122.9	166.5	998.9	2343.1	2889.4
57.5°	108.9	99.7	99.7	110.9	156.9	865.8	2529.9	3461.0
60°	98.0	91.9	90.2	101.5	165.3	610.9	2551.6	3829.6
62.5°	86.0	82.8	80.4	92.4	171.7	361.9	2376.5	3740.4
65°	72.4	71.6	69.9	101.5	144.6	213.8	2040.2	3467.0
67.5°	60.8	59.7	59.7	106.4	109.9	134.5	1593.9	3090.6
70°	52.3	48.5	48.5	80.4	66.7	93.1	1112.9	2684.4
72.5°	43.9	39.7	36.9	64.3	49.8	68.1	695.5	2298.9
75°	35.2	32.0	28.4	42.4	37.2	51.7	404.1	1904.7
77.5°	25.3	23.9	20.0	31.3	27.1	37.2	240.5	1469.6
80°	13.0	13.3	12.6	17.9	18.2	25.3	136.9	1005.8
82.5°	7.7	5.9	6.7	8.8	10.6	14.3	51.7	591.2
85°	4.9	3.2	3.2	4.2	5.2	5.6	15.8	239.7
87.5°	2.5	1.0	1.4	2.2	1.7	1.4	0.7	60.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)