

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: P960995

Luminaire Tested: **NAV-SB1D-827-U-SL4-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-827-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6333.5 lumens
Efficiency: N/A
Efficacy: 79.6 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): 79.6
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

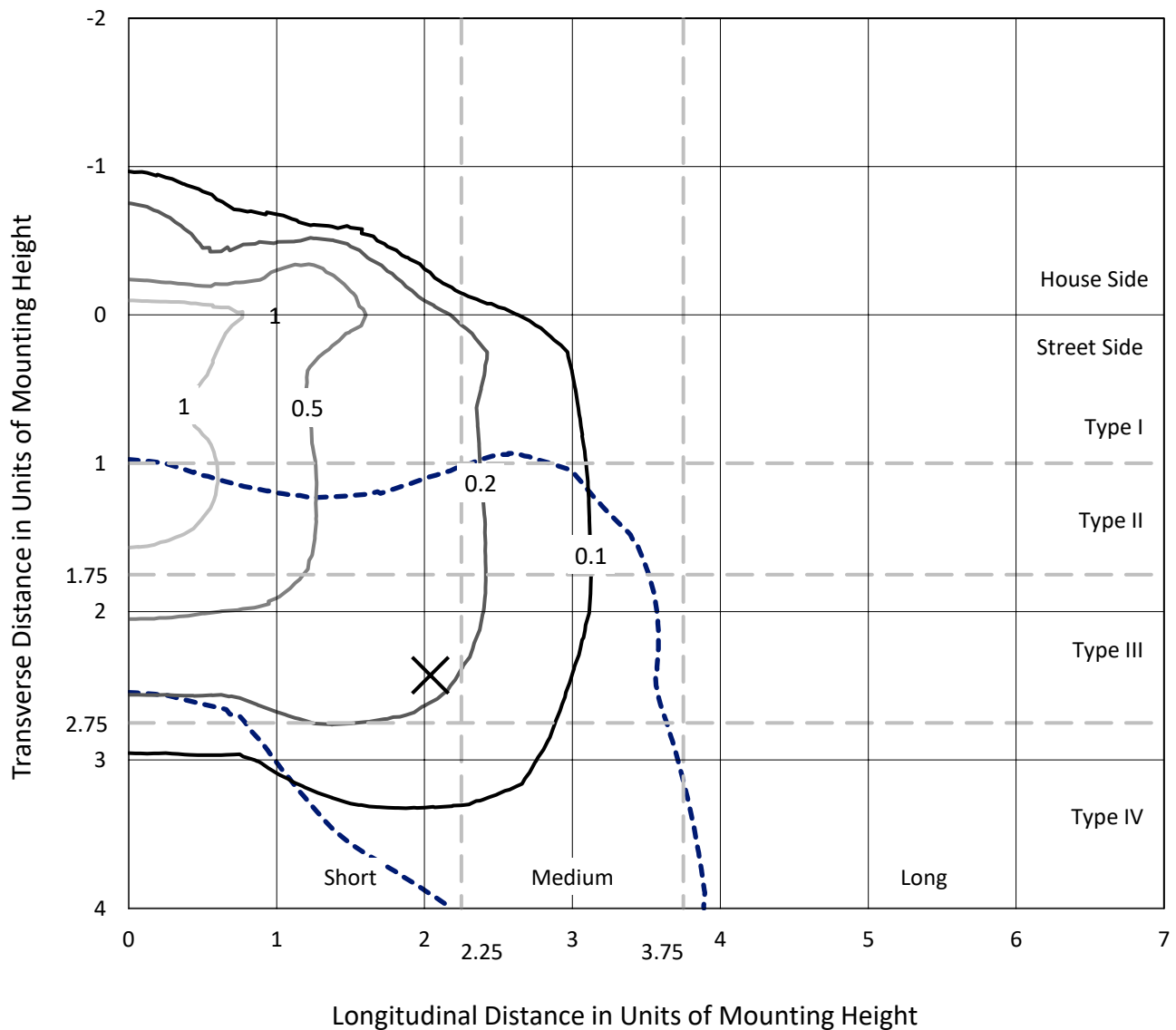


REPORT NUMBER: P960995

CATALOG NUMBER: NAV-SB1D-827-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

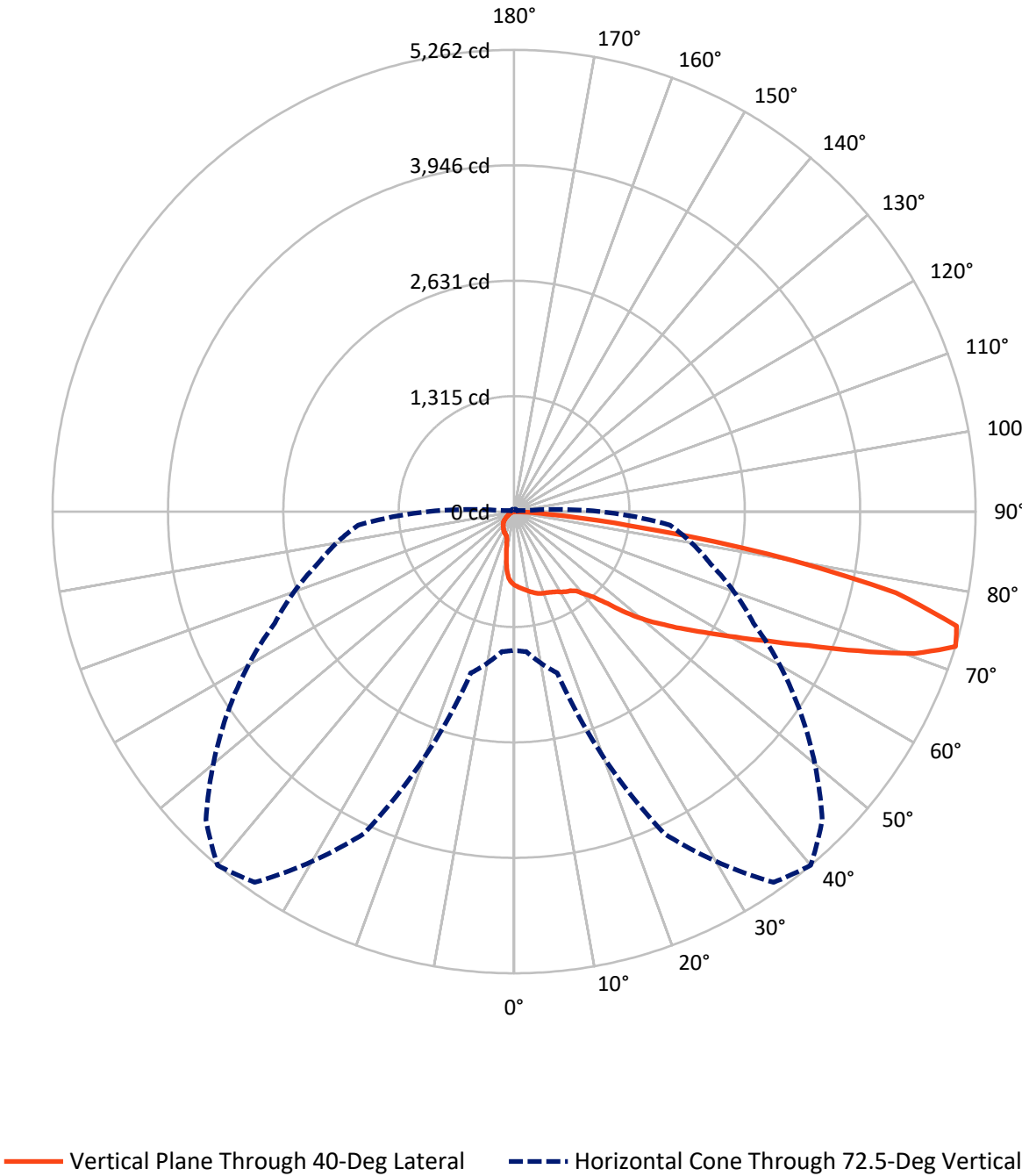


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc

Type IV - Short - N/A

REPORT NUMBER: P960995
CATALOG NUMBER: NAV-SB1D-827-U-SL4-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P960995

CATALOG NUMBER: NAV-SB1D-827-U-SL4-HSS

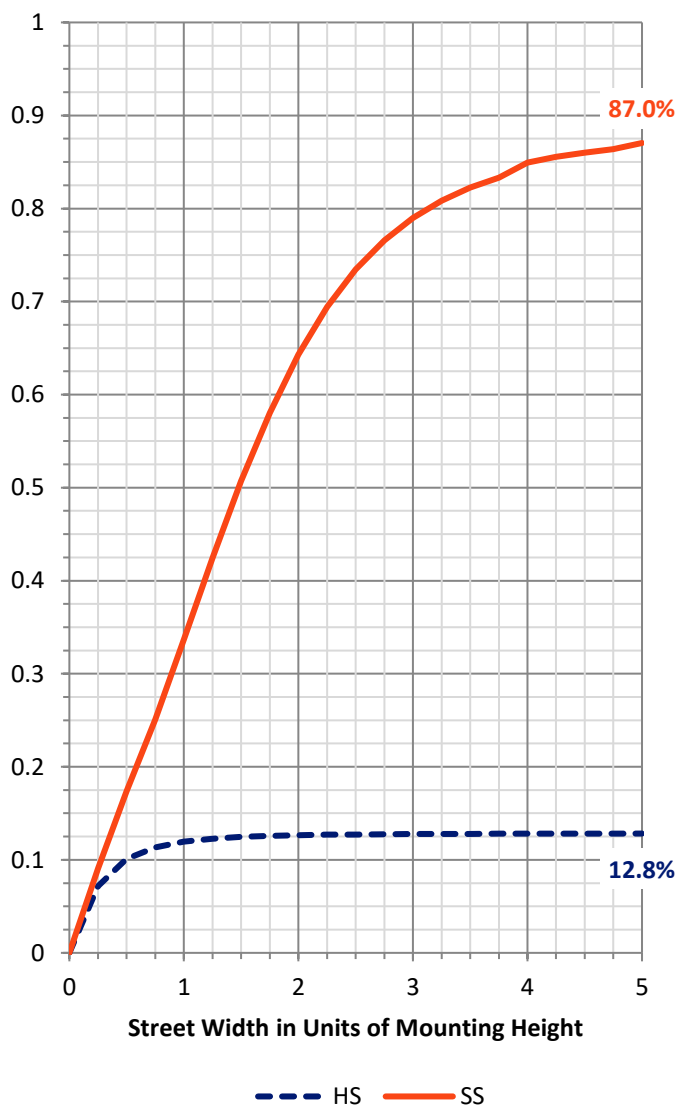
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	817.9	0.0	817.9
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5515.6	0.0	5515.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	6333.5	0.0	6333.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	1.2
10°-20°	208.0	3.3
20°-30°	336.5	5.3
30°-40°	496.8	7.8
40°-50°	836.2	13.2
50°-60°	1298.4	20.5
60°-70°	1624.7	25.7
70°-80°	1330.1	21.0
80°-90°	126.1	2.0
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°	6333.5	100.0
0°-180°	6333.5	100.0

Coefficient of Utilization



REPORT NUMBER: P960995

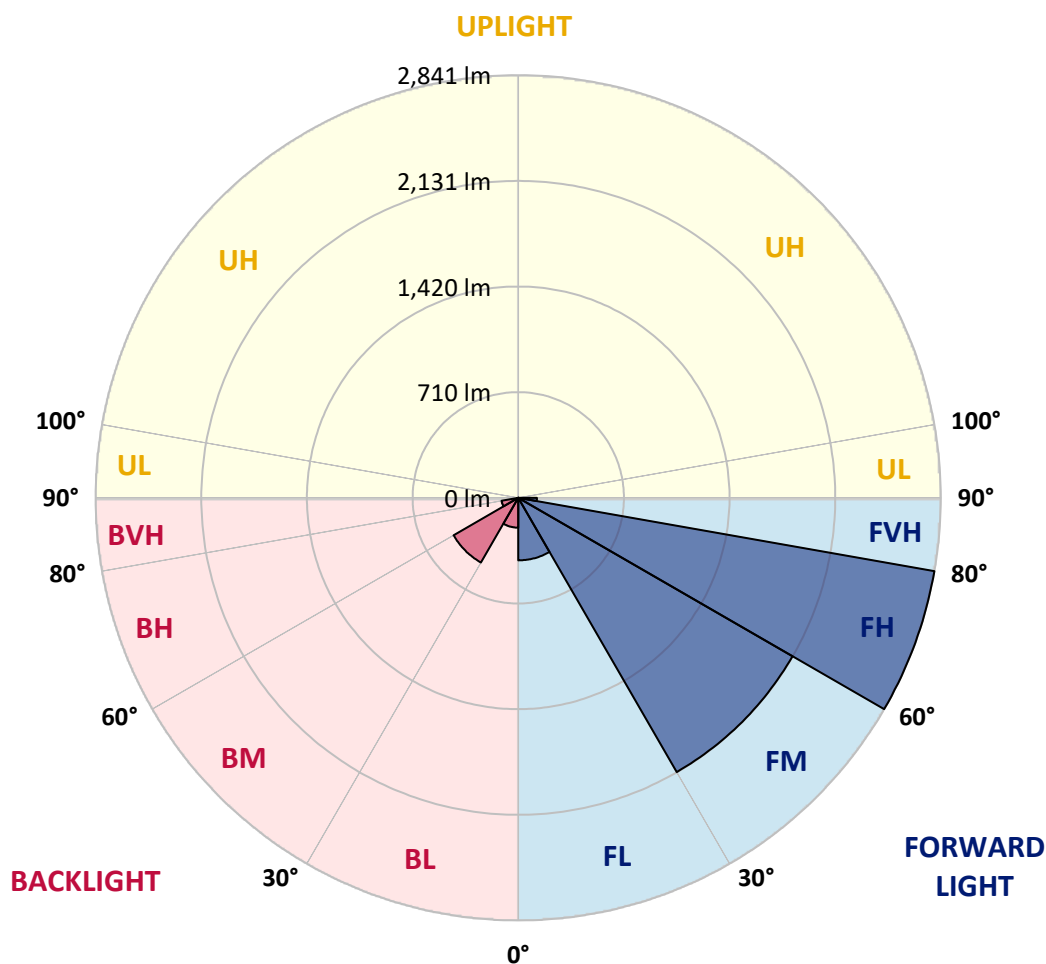
CATALOG NUMBER: NAV-SB1D-827-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	420.4	6.6			
FM	(30°-60°)	2129.2	33.6			
FH	(60°-80°)	2840.8	44.9			G2/5000
FVH	(80°-90°)	125.2	2.0			G2/225
BL	(0°-30°)	200.7	3.2	B1/500		
BM	(30°-60°)	502.2	7.9	B1/1000		
BH	(60°-80°)	113.9	1.8	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 IV Short



REPORT NUMBER: P960995

CATALOG NUMBER: NAV-SB1D-827-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6
2.5°	863.9	867.3	865.3	861.5	860.6	858.6	856.3	855.3	852.0	849.1	845.7
5°	888.2	891.5	889.2	884.0	881.5	879.1	875.8	873.0	866.2	860.1	852.4
7.5°	914.9	917.8	914.9	907.3	903.4	900.6	895.8	891.5	884.0	874.8	865.3
10°	944.5	946.9	942.6	932.5	926.4	922.1	917.8	913.1	905.9	895.8	884.4
12.5°	972.2	975.1	968.3	956.4	949.3	944.9	940.2	936.4	929.3	919.7	907.7
15°	997.4	1001.7	990.3	977.4	969.3	966.0	961.2	958.8	954.1	947.4	936.4
17.5°	1016.5	1019.4	1007.5	992.2	983.2	980.7	977.4	978.9	977.8	974.6	967.4
20°	1032.8	1034.6	1019.0	1000.3	990.3	990.8	989.8	994.6	996.5	996.5	996.0
22.5°	1052.8	1053.3	1033.2	1009.8	997.9	1001.2	1002.7	1008.0	1011.8	1015.6	1024.2
25°	1079.0	1078.1	1054.2	1022.2	1011.8	1016.5	1019.9	1021.8	1026.0	1032.3	1051.9
27.5°	1118.2	1115.3	1084.8	1042.3	1029.9	1034.2	1040.4	1039.5	1037.5	1042.3	1075.2
30°	1167.8	1163.9	1123.4	1070.4	1059.0	1062.8	1064.7	1056.2	1042.3	1046.6	1095.7
32.5°	1246.5	1239.7	1183.5	1101.9	1084.2	1088.6	1086.2	1068.6	1048.1	1052.3	1116.2
35°	1383.3	1367.1	1287.5	1167.8	1112.8	1108.1	1102.4	1085.3	1060.0	1055.6	1133.4
37.5°	1674.3	1645.7	1509.7	1296.1	1177.7	1146.8	1129.1	1111.9	1072.9	1055.6	1152.9
40°	2002.5	1973.4	1816.5	1510.7	1285.6	1233.1	1191.2	1143.4	1086.2	1061.9	1183.5
42.5°	2345.0	2313.1	2151.9	1776.9	1439.6	1331.9	1253.6	1168.7	1108.1	1081.0	1224.1
45°	2727.6	2687.5	2476.7	2054.5	1663.4	1496.0	1354.2	1220.7	1146.3	1114.8	1279.4
47.5°	3131.2	3079.2	2800.6	2324.1	1904.2	1723.0	1538.4	1313.7	1202.5	1165.3	1354.2
50°	3488.9	3437.4	3135.0	2606.0	2129.4	1939.1	1748.2	1442.5	1287.0	1236.9	1454.9
52.5°	3746.1	3706.9	3439.3	2897.0	2363.6	2141.8	1938.6	1592.3	1393.9	1328.5	1573.7
55°	3918.3	3882.5	3654.9	3172.7	2636.0	2365.1	2126.1	1755.0	1522.6	1438.2	1704.9
57.5°	4022.7	4002.2	3811.0	3418.8	2906.0	2609.3	2340.8	1933.9	1674.3	1567.5	1851.4
60°	4059.9	4043.2	3907.7	3653.5	3232.3	2902.7	2593.0	2135.6	1858.4	1714.4	2001.6
62.5°	3960.7	3964.1	3977.4	3931.6	3576.2	3246.2	2895.5	2378.0	2062.6	1880.9	2142.8
65°	3493.7	3521.4	3775.2	4239.8	4031.7	3676.4	3280.5	2673.7	2296.4	2070.3	2254.9
67.5°	2892.7	2932.7	3248.5	4420.1	4517.4	4235.0	3816.7	3050.5	2575.0	2263.0	2297.3
70°	2214.3	2257.3	2639.8	4382.4	4972.0	4845.6	4479.7	3530.0	2863.5	2396.6	2189.1
72.5°	1580.3	1602.3	1903.8	4047.0	5158.5	5261.5	4968.2	3984.1	3010.9	2322.6	1785.4
75°	1110.5	1106.7	1306.6	3259.0	4868.0	5211.0	4796.9	3738.4	2724.8	1845.1	1101.0
77.5°	483.7	484.6	652.5	1979.2	3885.4	4450.7	3987.5	2341.7	1899.5	977.8	464.6
80°	125.5	129.3	239.4	788.0	2339.4	2937.5	2431.8	1029.4	877.7	238.5	88.8
82.5°	44.4	47.3	110.2	247.5	862.9	1347.2	1082.8	329.1	229.0	68.3	23.9
85°	12.9	15.3	59.1	75.8	178.5	380.7	262.8	64.0	56.3	35.3	6.3
87.5°	0.0	1.9	11.9	10.5	10.5	7.2	13.3	7.2	9.0	4.3	1.9
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: P960995

CATALOG NUMBER: NAV-SB1D-827-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6
2.5°	842.9	839.6	832.4	824.8	817.6	811.0	809.0	801.9	798.6	799.0	798.6
5°	847.2	841.0	827.2	810.5	793.2	773.8	757.5	734.6	715.0	712.7	711.2
7.5°	858.6	848.6	826.2	793.8	750.8	696.9	646.9	597.3	569.1	553.8	552.9
10°	876.3	862.9	828.6	766.6	675.5	579.1	503.3	440.7	408.8	394.0	391.1
12.5°	897.3	882.5	832.4	720.3	578.1	451.7	369.7	331.5	324.8	323.9	323.4
15°	926.8	910.6	836.7	657.8	472.7	343.9	306.3	306.7	312.0	314.9	314.4
17.5°	959.8	943.5	830.5	581.5	368.7	293.9	292.8	297.1	304.8	307.7	307.2
20°	993.1	977.8	808.5	491.8	298.2	280.0	283.8	288.6	296.2	300.0	300.0
22.5°	1027.5	1014.1	773.8	396.4	269.1	270.0	274.8	279.5	288.1	292.4	292.4
25°	1064.3	1052.8	727.4	317.6	256.7	259.5	265.7	271.4	280.4	285.8	285.8
27.5°	1101.5	1092.9	675.0	265.3	245.2	248.6	255.6	263.3	272.3	278.6	279.1
30°	1142.0	1137.2	633.0	245.7	234.2	237.1	245.2	253.8	263.8	271.4	272.3
32.5°	1183.5	1182.5	612.5	259.9	224.2	226.1	233.3	241.9	254.3	263.8	264.8
35°	1224.5	1226.4	600.5	300.5	220.9	215.7	220.4	228.1	242.8	254.7	256.7
37.5°	1276.9	1281.8	600.1	344.4	229.0	205.1	208.5	213.7	226.6	240.5	242.8
40°	1355.3	1380.5	630.6	382.1	243.2	195.6	196.5	197.5	204.2	215.7	219.5
42.5°	1459.2	1533.2	740.8	407.8	249.0	187.0	183.7	178.5	177.4	183.7	187.0
45°	1588.4	1717.8	934.5	422.2	243.2	177.4	168.4	154.6	149.3	153.6	153.6
47.5°	1740.7	1920.0	1163.9	425.5	233.7	165.5	149.3	131.2	126.9	128.3	127.8
50°	1889.0	2071.7	1365.7	397.8	218.0	150.3	128.3	113.1	110.2	110.7	110.7
52.5°	2020.2	2123.7	1422.9	332.5	197.0	131.6	110.2	99.7	97.8	97.8	97.3
55°	2107.0	2067.4	1268.8	254.3	170.8	112.5	94.4	89.2	88.3	87.7	86.8
57.5°	2125.1	1884.3	958.4	183.7	133.6	94.9	83.9	81.1	79.2	77.3	76.4
60°	2060.2	1578.9	610.1	128.3	100.1	81.1	74.4	72.5	68.7	64.9	63.4
62.5°	1920.0	1192.6	337.7	89.2	80.7	69.2	65.8	63.4	56.3	50.1	48.2
65°	1731.6	792.8	149.3	69.6	65.8	58.2	56.3	53.0	44.4	37.2	35.8
67.5°	1542.2	456.5	67.2	55.9	53.0	47.7	46.2	43.9	37.7	31.1	30.0
70°	1326.1	231.3	46.2	44.4	41.0	36.3	37.7	37.2	31.1	25.3	24.3
72.5°	987.5	115.0	34.8	33.4	29.6	25.7	31.1	30.5	24.3	19.1	18.1
75°	559.0	56.8	25.3	23.4	17.6	19.1	24.8	23.4	16.7	12.4	11.5
77.5°	221.8	29.1	16.7	14.3	10.5	12.9	18.1	15.8	8.6	5.2	4.8
80°	51.0	14.3	8.6	6.3	4.8	7.6	9.5	5.7	2.4	0.5	0.0
82.5°	14.3	6.3	2.9	2.4	2.4	2.9	2.4	0.9	0.0	0.0	0.0
85°	4.8	2.9	0.9	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
87.5°	1.9	0.9	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)