

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: P962595

Luminaire Tested: **NAV-SB2C-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962595
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10282.8 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

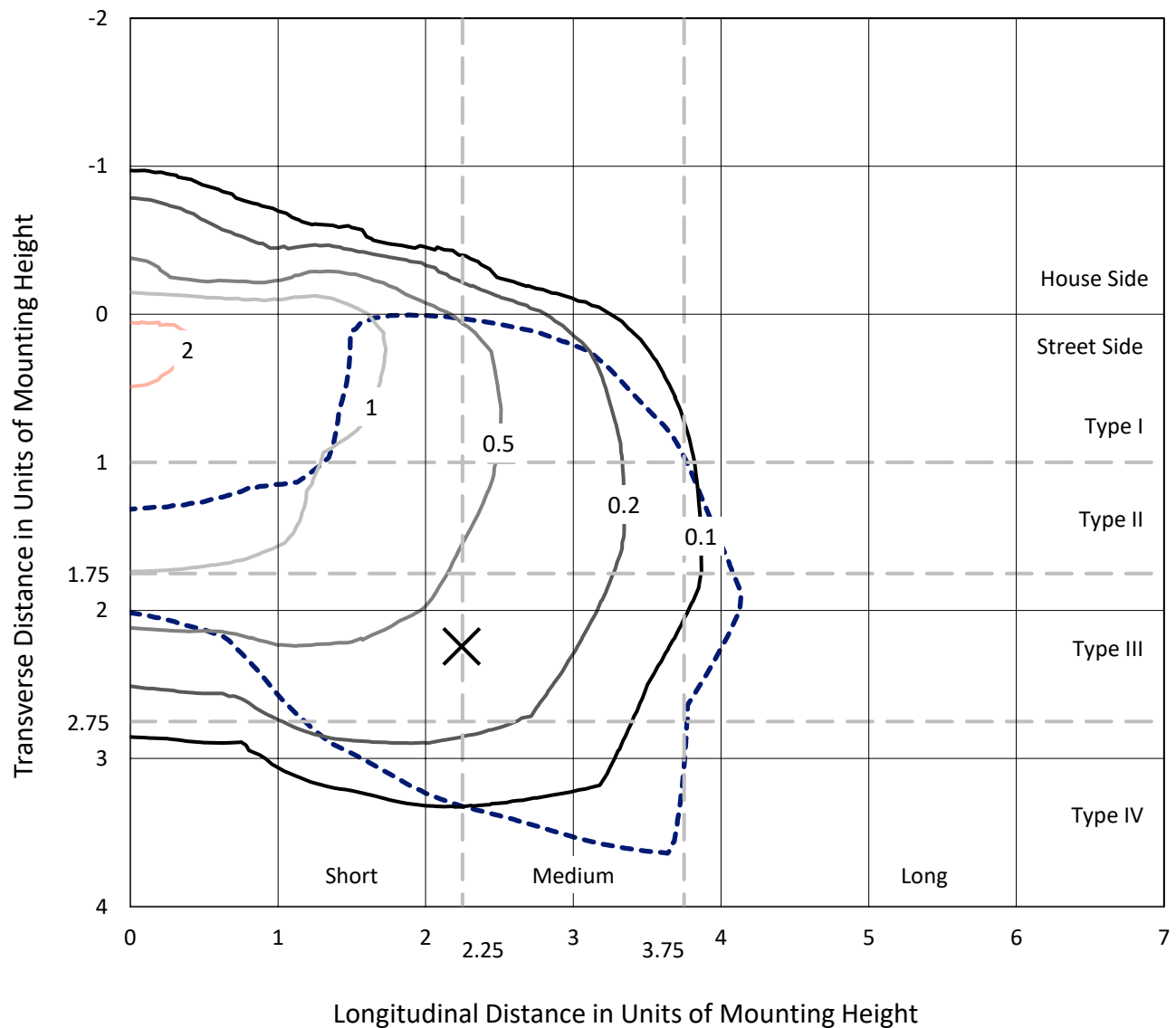
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962595
CATALOG NUMBER: NAV-SB2C-827-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

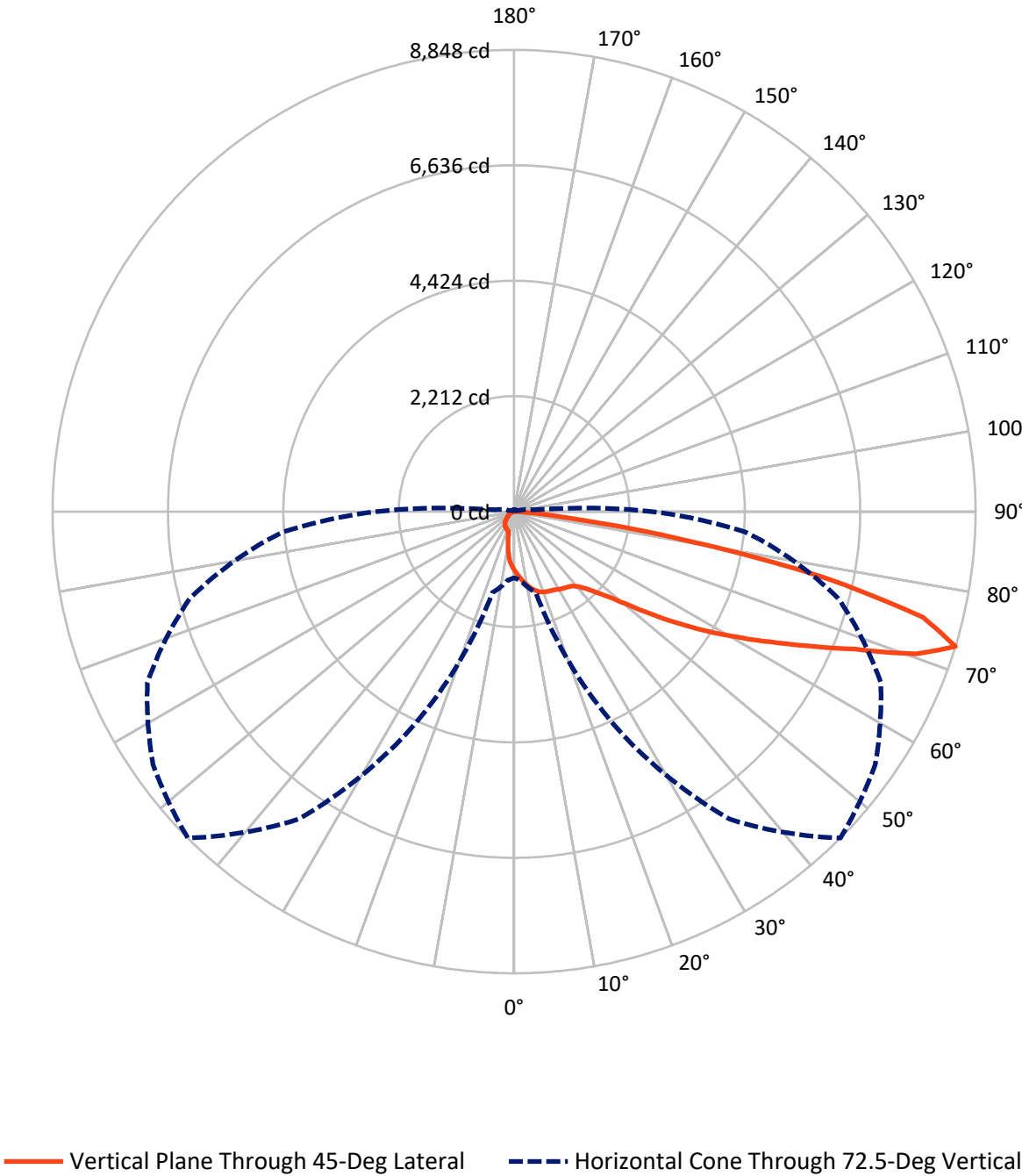
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type IV - Short - N/A

REPORT NUMBER: P962595
CATALOG NUMBER: NAV-SB2C-827-U-T4W-HSS

Luminous Intensity Polar Plot



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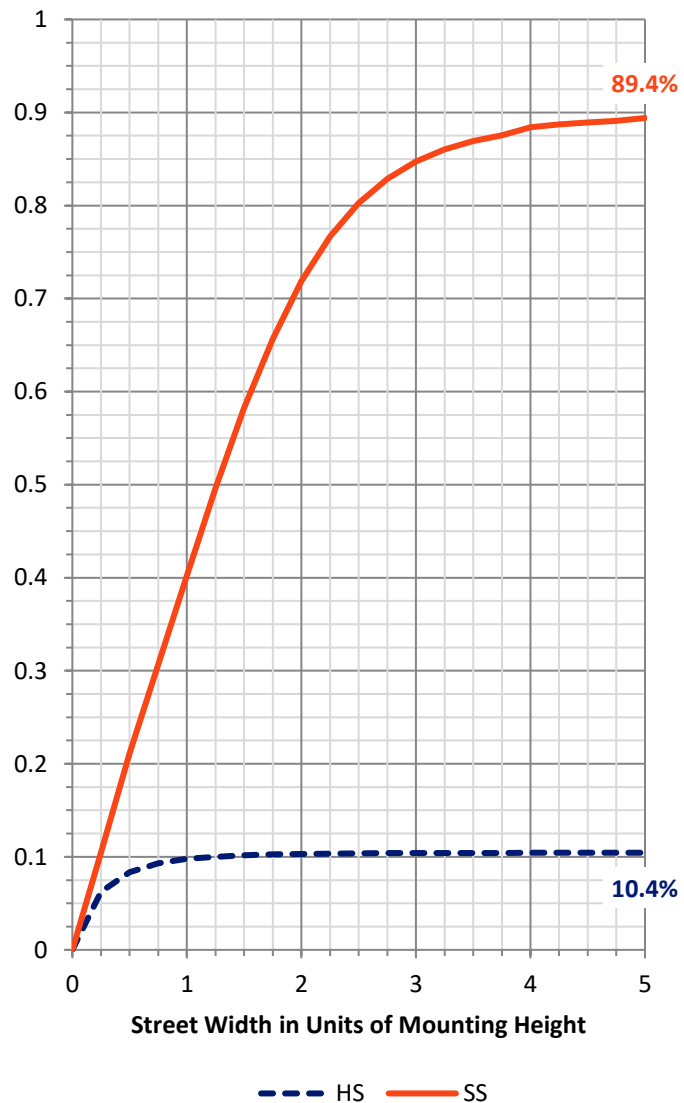
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1080.4	0.0	1080.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	9202.4	0.0	9202.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	10282.8	0.0	10282.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	1.0
10°-20°	310.2	3.0
20°-30°	509.4	5.0
30°-40°	722.4	7.0
40°-50°	1194.1	11.6
50°-60°	2145.1	20.9
60°-70°	2978.6	29.0
70°-80°	2160.6	21.0
80°-90°	156.2	1.5
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°	10282.8	100.0
0°-180°	10282.8	100.0

Coefficient of Utilization



REPORT NUMBER: P962595

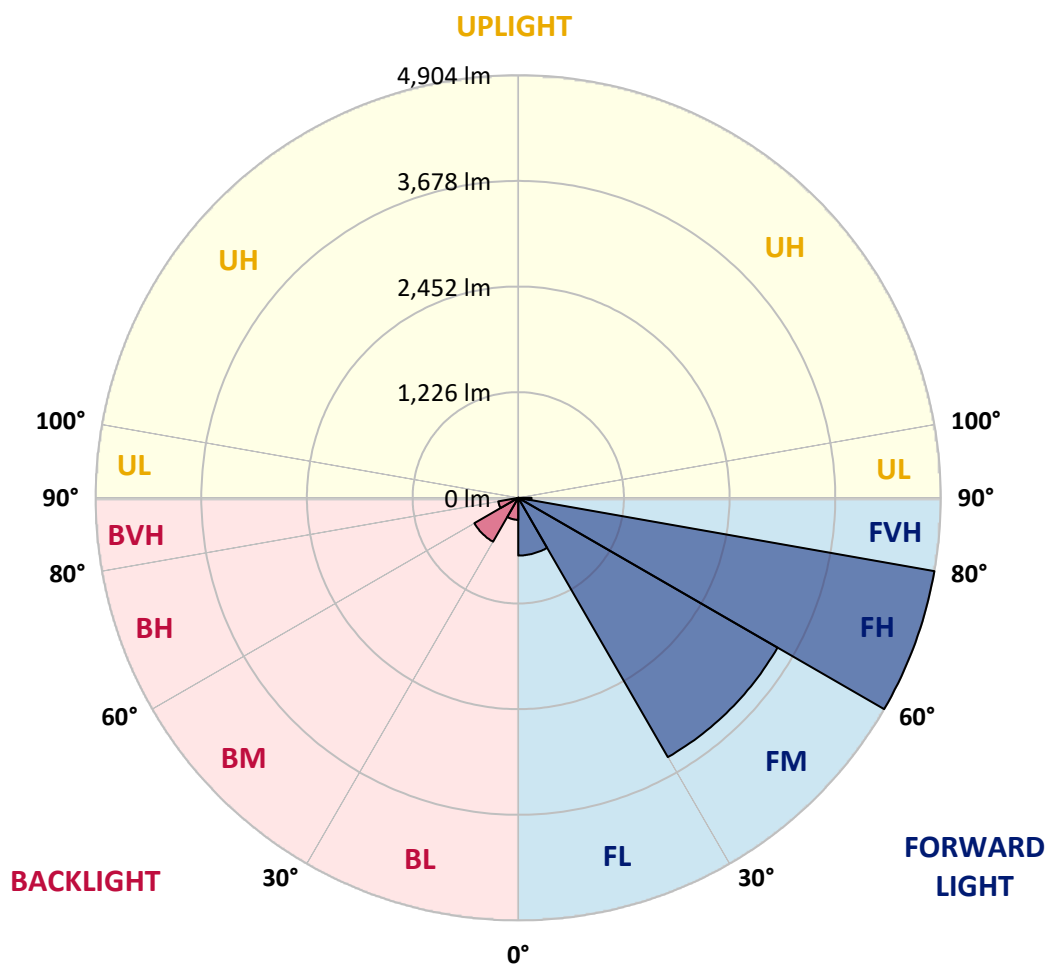
CATALOG NUMBER: NAV-SB2C-827-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	669.8	6.5			
FM	(30°-60°)	3474.1	33.8			
FH	(60°-80°)	4903.6	47.7			G2/5000
FVH	(80°-90°)	154.9	1.5			G2/225
BL	(0°-30°)	255.9	2.5	B1/500		
BM	(30°-60°)	587.6	5.7	B1/1000		
BH	(60°-80°)	235.6	2.3	B1/500		G1/500
BVH	(80°-90°)	1.3	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: P962595

CATALOG NUMBER: NAV-SB2C-827-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5
2.5°	1230.4	1232.5	1231.1	1222.6	1208.6	1200.9	1196.7	1182.6	1173.5	1157.4	1140.5
5°	1343.4	1351.8	1346.8	1330.0	1303.4	1284.4	1278.8	1250.0	1224.1	1193.9	1158.8
7.5°	1463.4	1467.6	1458.5	1436.7	1401.0	1368.7	1363.8	1323.7	1282.3	1235.9	1188.3
10°	1567.3	1572.1	1558.1	1526.5	1485.8	1445.9	1438.8	1394.6	1345.5	1288.6	1227.5
12.5°	1654.4	1659.3	1641.0	1603.1	1558.1	1516.7	1509.7	1463.4	1409.4	1346.2	1270.4
15°	1720.3	1729.4	1704.9	1664.1	1615.7	1574.3	1570.8	1525.2	1472.5	1402.3	1321.6
17.5°	1758.9	1768.0	1744.9	1695.8	1654.4	1619.2	1615.0	1577.1	1528.0	1460.6	1371.4
20°	1765.3	1773.7	1749.1	1706.2	1671.9	1643.8	1641.6	1614.3	1578.5	1513.9	1425.5
22.5°	1746.3	1756.7	1734.3	1700.0	1676.1	1661.3	1658.6	1643.1	1622.7	1567.9	1476.0
25°	1726.6	1735.0	1718.2	1688.0	1675.4	1673.9	1676.1	1673.2	1669.0	1622.7	1535.0
27.5°	1725.2	1734.3	1715.3	1686.6	1679.6	1694.3	1696.4	1709.8	1713.3	1672.6	1591.8
30°	1737.2	1743.4	1725.2	1695.0	1691.6	1725.2	1725.9	1749.8	1755.4	1714.6	1648.0
32.5°	1763.1	1770.1	1751.8	1707.6	1702.7	1749.8	1751.8	1783.5	1792.6	1759.6	1706.9
35°	1824.2	1832.6	1811.5	1742.7	1725.2	1772.9	1779.2	1816.4	1834.6	1807.3	1768.0
37.5°	1976.5	1951.9	1923.1	1813.6	1776.4	1809.4	1820.0	1863.4	1895.7	1864.2	1841.0
40°	2354.7	2277.5	2187.8	1934.4	1866.3	1887.3	1895.7	1939.3	1983.5	1952.6	1941.4
42.5°	2922.6	2831.4	2686.7	2212.3	2001.7	2012.3	2018.5	2056.5	2119.0	2094.4	2097.1
45°	3428.6	3395.6	3248.2	2686.7	2255.1	2203.1	2210.9	2230.5	2322.4	2313.3	2331.6
47.5°	3817.5	3798.5	3684.8	3231.4	2683.2	2436.9	2458.7	2467.8	2600.4	2632.7	2681.8
50°	4116.5	4109.4	4007.6	3715.7	3242.7	2781.5	2789.2	2769.5	2968.2	3048.2	3141.5
52.5°	4398.6	4422.5	4347.4	4165.6	3840.0	3232.8	3231.4	3138.8	3406.9	3527.6	3686.9
55°	4653.4	4661.8	4669.6	4624.6	4440.7	3746.6	3733.3	3581.7	3915.7	4040.7	4213.4
57.5°	4892.7	4896.2	4965.0	5056.9	5066.1	4298.2	4273.7	4091.9	4471.7	4560.7	4666.7
60°	5053.5	5069.6	5214.9	5470.4	5581.9	4867.5	4854.1	4668.9	5037.4	5078.8	5059.1
62.5°	4821.8	4920.1	5286.5	5793.2	6069.1	5498.4	5492.2	5318.1	5632.5	5598.9	5430.3
65°	3903.1	4069.5	4713.8	6011.5	6547.1	6203.1	6212.2	6027.0	6243.9	6134.3	5732.2
67.5°	2730.3	2905.8	3668.0	6029.0	7081.2	7030.7	7083.3	6792.7	6893.0	6647.4	5803.8
70°	1888.0	1978.6	2474.8	5651.4	7497.4	8170.5	8169.0	7733.2	7538.8	6881.1	5438.8
72.5°	1269.7	1316.7	1607.3	4483.6	7191.4	8847.8	8807.1	8451.9	7756.4	6435.5	4443.6
75°	535.6	569.9	743.9	2519.8	5689.4	8094.6	7984.4	7469.3	6891.7	5067.5	2772.4
77.5°	169.8	184.6	293.4	901.9	3133.8	6084.5	5968.0	4664.7	4619.1	2542.2	1013.5
80°	80.7	94.1	164.9	362.1	1233.2	3309.3	3293.2	2116.1	1987.0	686.4	203.6
82.5°	35.1	41.4	91.2	193.7	551.7	1180.6	1204.4	720.2	595.9	260.3	62.4
85°	11.3	14.8	42.1	89.2	233.0	293.4	289.9	171.3	240.1	141.8	21.7
87.5°	0.0	0.0	14.0	20.4	23.9	16.8	19.0	14.8	66.7	39.3	7.7
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: P962595

CATALOG NUMBER: NAV-SB2C-827-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5
2.5°	1132.1	1120.8	1101.3	1083.0	1066.8	1050.7	1040.9	1026.8	1025.4	1025.4	1028.9
5°	1139.8	1121.6	1086.5	1049.3	1006.4	965.8	925.1	885.8	873.1	864.0	868.2
7.5°	1162.2	1133.5	1078.1	1007.2	925.8	836.6	774.2	706.7	680.8	666.8	668.9
10°	1194.5	1155.3	1071.0	946.8	814.9	693.4	604.3	531.4	503.3	491.3	491.3
12.5°	1230.4	1181.9	1058.4	871.8	693.4	548.2	461.1	427.4	423.2	423.2	423.2
15°	1273.2	1214.2	1036.7	783.3	566.4	433.8	402.8	404.3	408.5	411.3	411.3
17.5°	1317.4	1248.7	1002.2	684.3	454.1	390.2	390.9	393.1	396.6	399.3	399.3
20°	1365.1	1283.0	956.6	579.0	389.5	377.6	379.8	381.8	384.6	386.0	386.7
22.5°	1416.3	1315.3	902.6	475.9	367.8	367.1	367.8	369.9	373.4	373.4	374.8
25°	1471.1	1351.1	840.8	400.8	356.6	356.6	357.9	359.4	362.1	362.1	362.8
27.5°	1527.2	1384.1	775.6	361.4	346.8	346.0	346.0	348.1	349.5	350.2	351.0
30°	1589.1	1422.7	710.3	353.0	339.0	335.5	333.4	334.8	336.2	336.9	338.4
32.5°	1652.2	1459.9	652.0	356.6	331.3	324.9	318.0	316.5	316.5	319.4	321.4
35°	1722.4	1500.6	607.1	368.5	327.1	309.5	298.3	292.0	292.6	296.9	299.0
37.5°	1806.7	1549.7	574.1	379.0	324.3	292.0	273.8	266.0	261.1	266.0	264.7
40°	1916.9	1622.1	550.2	387.4	320.7	271.6	247.0	234.4	225.3	228.1	226.7
42.5°	2078.9	1735.7	541.1	388.2	313.0	247.7	219.7	202.8	189.5	190.2	187.4
45°	2306.4	1915.4	588.1	379.0	296.2	221.8	191.0	168.4	160.0	158.0	155.1
47.5°	2618.0	2177.2	697.0	360.1	271.6	196.5	162.9	143.9	137.6	134.1	131.9
50°	3035.6	2513.4	817.6	339.0	247.0	172.6	139.7	127.7	123.5	120.0	119.3
52.5°	3519.8	2854.5	916.7	318.0	222.5	151.6	124.9	117.9	114.4	111.6	110.9
55°	3964.2	3089.7	911.0	295.5	198.6	134.8	114.4	110.2	106.0	103.2	101.8
57.5°	4240.7	3122.7	751.0	270.9	171.3	121.5	104.6	101.8	96.9	93.4	92.7
60°	4367.7	2934.5	526.4	238.6	143.9	108.8	94.1	92.7	86.3	81.4	80.1
62.5°	4390.9	2584.9	351.0	198.6	120.0	96.9	83.5	81.4	73.0	64.6	60.4
65°	4296.9	2085.3	242.8	155.1	102.5	84.3	71.5	67.3	58.2	49.8	47.0
67.5°	3999.2	1464.1	169.1	111.6	87.0	66.7	56.9	55.5	48.4	41.4	39.3
70°	3453.9	834.6	113.0	83.5	68.8	45.6	44.9	46.3	39.3	33.7	30.9
72.5°	2648.2	381.8	70.2	61.1	47.0	30.9	35.8	36.5	30.1	25.3	22.4
75°	1558.8	163.5	44.2	39.3	23.9	20.4	25.9	26.6	20.4	16.1	14.0
77.5°	530.6	61.8	28.1	23.2	11.9	11.3	16.8	16.8	11.3	6.4	4.9
80°	120.7	23.2	14.0	9.1	5.6	4.9	5.6	4.9	2.8	0.7	0.0
82.5°	34.4	9.1	5.6	3.5	2.2	2.2	0.7	0.0	0.0	0.0	0.0
85°	9.8	4.2	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	0.7	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)