

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: P964174

Luminaire Tested: **NAV-SB3B-827-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11402.1 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

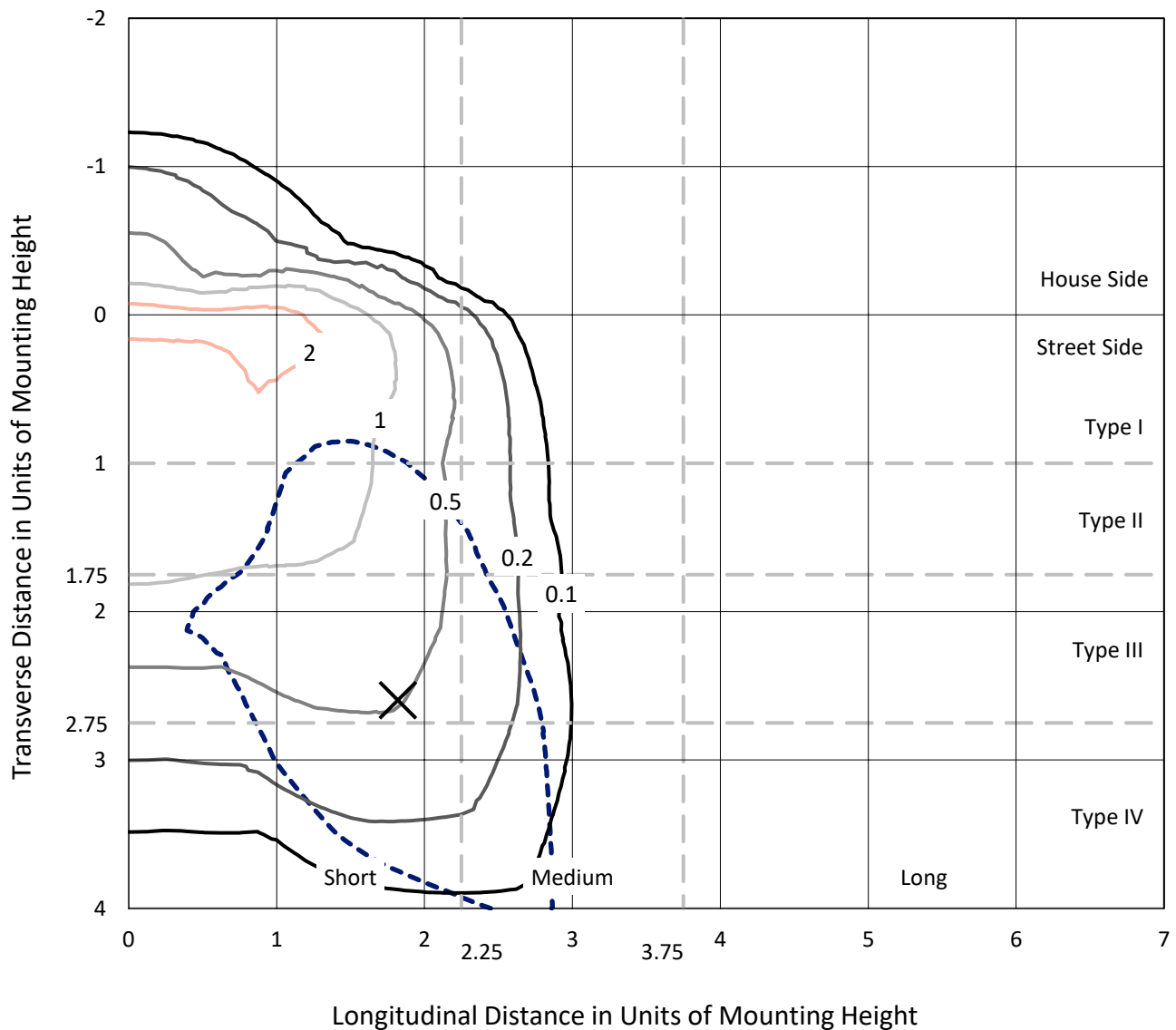
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P964174
CATALOG NUMBER: NAV-SB3B-827-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

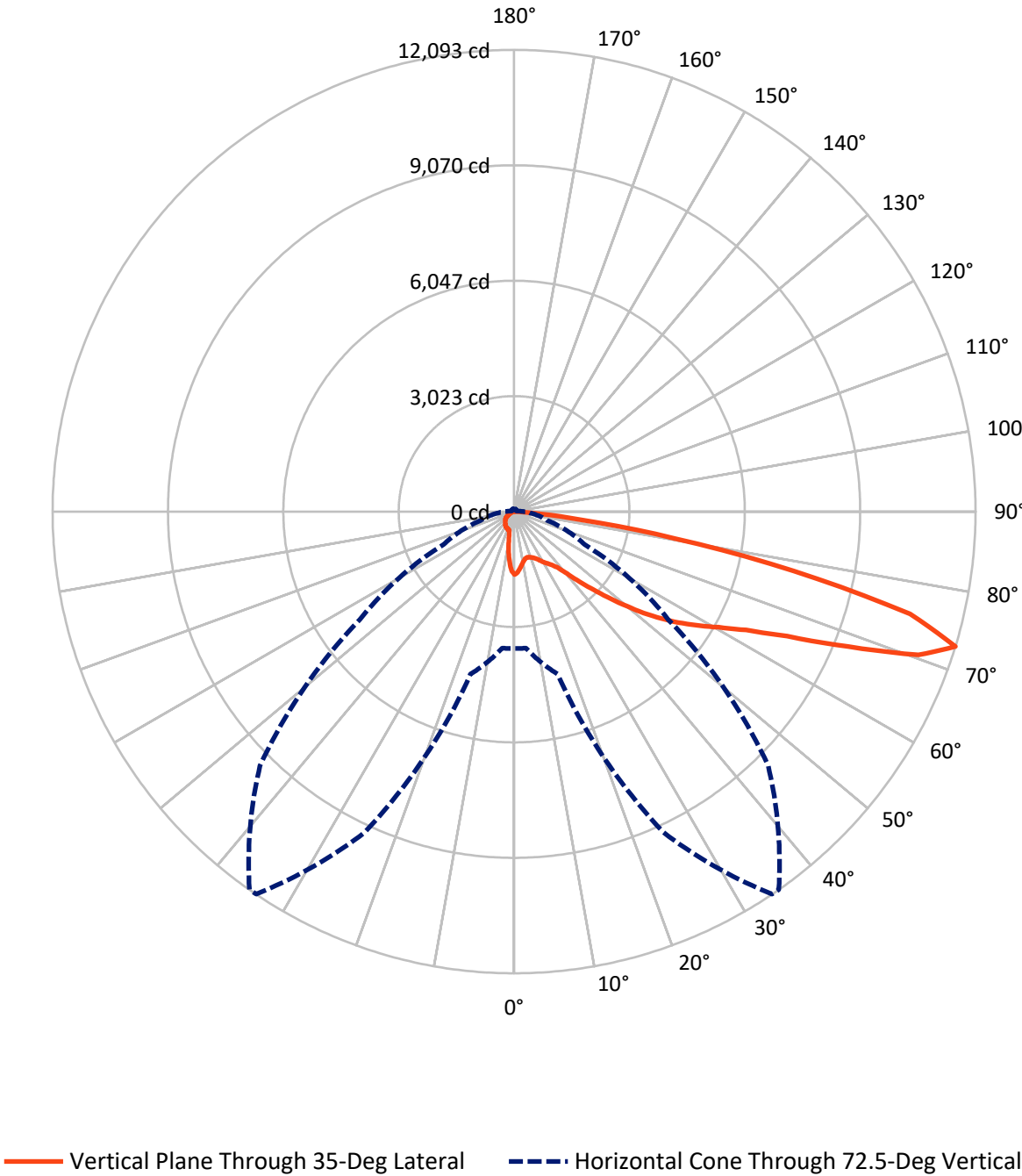
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
Type IV - Short - N/A

REPORT NUMBER: P964174
CATALOG NUMBER: NAV-SB3B-827-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P964174

CATALOG NUMBER: NAV-SB3B-827-U-T4FT-HSS

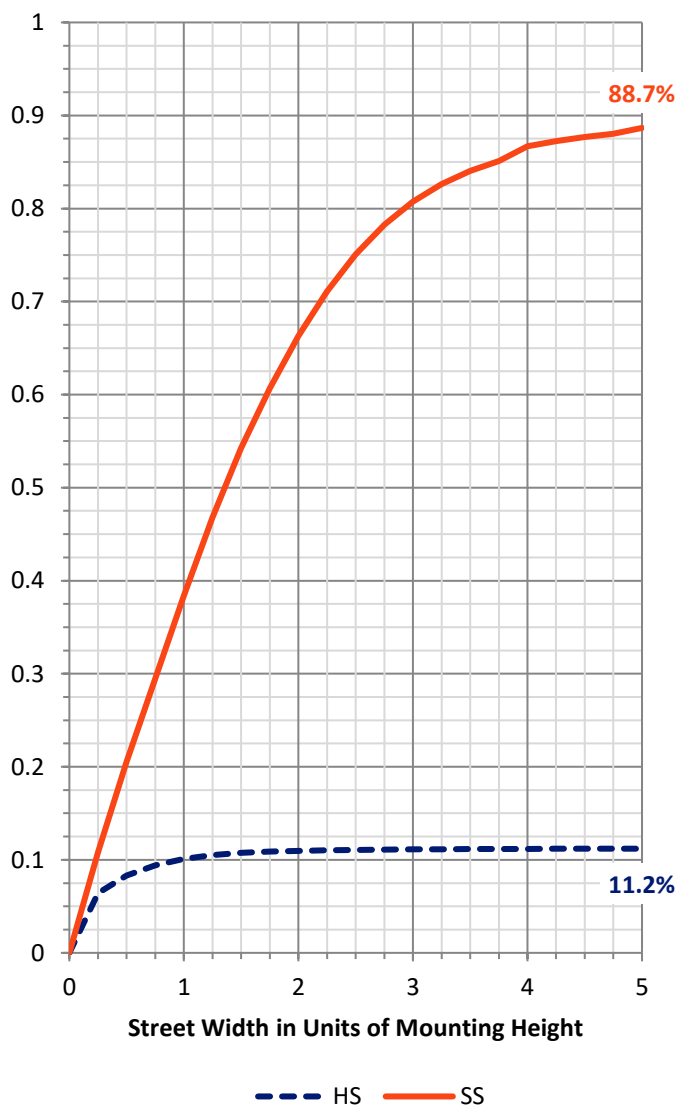
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1283.2	0.0	1283.2
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	10118.8	0.0	10118.8
	% Fixture	88.7	0.0	88.7
Total	Lumens	11402.1	0.0	11402.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	1.2
10°-20°	317.7	2.8
20°-30°	516.1	4.5
30°-40°	861.0	7.6
40°-50°	1629.1	14.3
50°-60°	2588.6	22.7
60°-70°	3202.3	28.1
70°-80°	1990.6	17.5
80°-90°	160.9	1.4
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°	11402.1	100.0
0°-180°	11402.1	100.0

Coefficient of Utilization



REPORT NUMBER: P964174

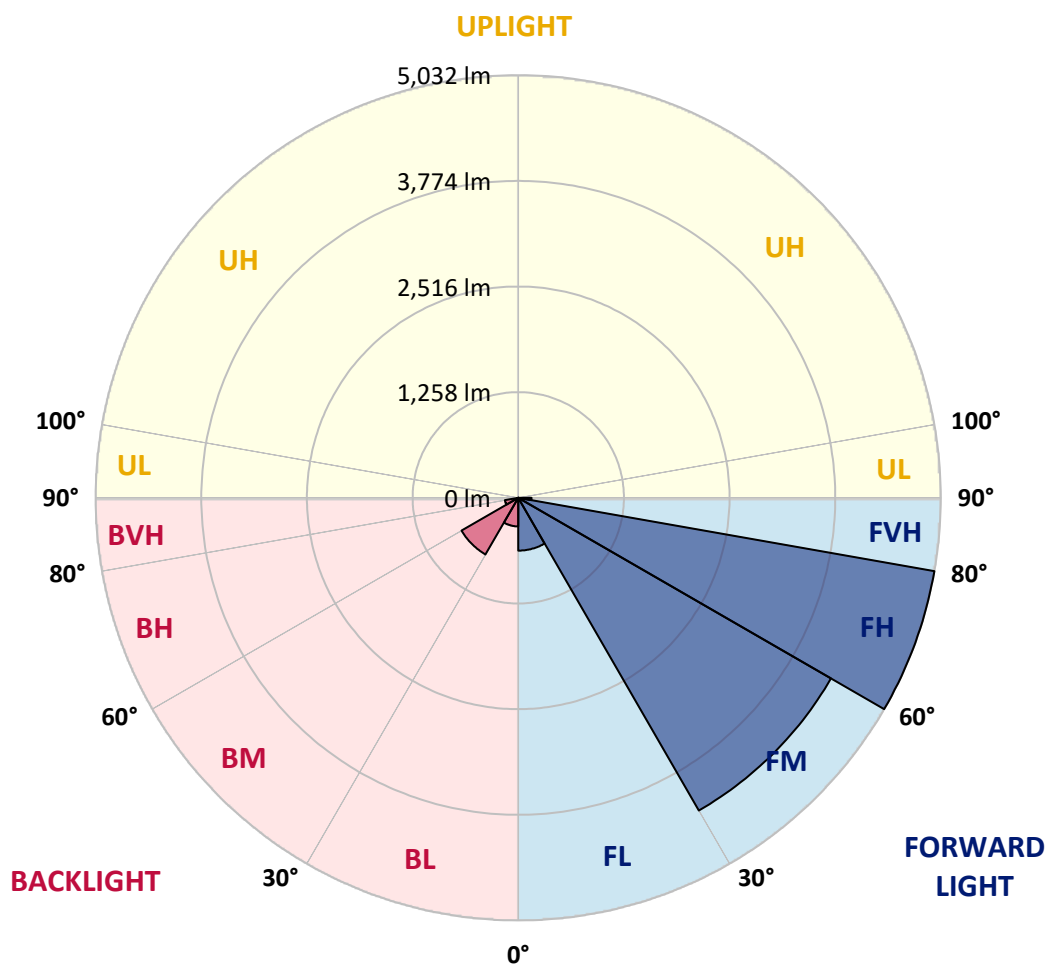
CATALOG NUMBER: NAV-SB3B-827-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	628.5	5.5			
FM	(30°-60°)	4299.7	37.7			
FH	(60°-80°)	5031.9	44.1			G3/7500
FVH	(80°-90°)	158.7	1.4			G2/225
BL	(0°-30°)	341.0	3.0	B1/500		
BM	(30°-60°)	779.1	6.8	B1/1000		
BH	(60°-80°)	161.0	1.4	B1/500		G1/500
BVH	(80°-90°)	2.2	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-G3

Type IV Short



REPORT NUMBER: P964174

CATALOG NUMBER: NAV-SB3B-827-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5
2.5°	1579.0	1592.4	1594.9	1599.1	1599.1	1604.1	1612.4	1624.1	1643.4	1653.4	1660.1
5°	1455.4	1465.4	1477.9	1488.0	1507.2	1509.7	1542.2	1574.0	1618.3	1651.7	1675.1
7.5°	1330.9	1342.5	1359.3	1383.5	1408.6	1416.1	1465.4	1518.8	1589.1	1651.7	1690.9
10°	1243.1	1244.0	1259.0	1283.3	1323.4	1332.6	1392.7	1468.7	1556.5	1641.6	1706.0
12.5°	1193.9	1199.8	1206.4	1224.8	1263.2	1269.1	1333.4	1422.8	1523.9	1635.8	1723.5
15°	1193.9	1198.0	1202.2	1211.4	1242.3	1247.3	1304.1	1393.6	1507.2	1638.4	1751.9
17.5°	1206.4	1213.1	1209.7	1220.6	1253.2	1256.5	1306.7	1385.2	1506.3	1654.2	1795.4
20°	1236.5	1241.5	1234.8	1241.5	1274.1	1280.7	1332.6	1401.1	1520.6	1681.8	1849.7
22.5°	1284.1	1286.6	1270.7	1275.7	1309.1	1317.5	1377.7	1446.2	1554.8	1726.1	1922.4
25°	1344.3	1349.3	1325.0	1330.9	1362.6	1372.7	1442.0	1513.8	1609.1	1787.1	2015.2
27.5°	1413.6	1416.1	1395.2	1394.4	1435.3	1449.6	1519.7	1597.4	1681.8	1864.0	2132.1
30°	1493.0	1500.5	1480.4	1477.1	1528.9	1540.6	1610.0	1700.2	1788.7	1979.2	2298.4
32.5°	1555.6	1561.5	1549.8	1558.1	1610.8	1620.0	1719.3	1845.5	1956.6	2143.0	2524.8
35°	1645.8	1649.2	1622.5	1637.5	1697.7	1721.1	1868.9	2049.4	2168.0	2348.5	2820.5
37.5°	1972.5	1972.5	1858.9	1784.5	1842.2	1863.0	2073.6	2305.8	2428.7	2624.2	3193.2
40°	2424.5	2417.0	2250.7	2098.7	2091.2	2132.1	2365.2	2629.2	2765.3	2955.1	3612.5
42.5°	2906.6	2894.9	2668.5	2518.1	2493.0	2507.3	2701.9	3027.7	3166.4	3358.5	4063.7
45°	3334.3	3330.9	3123.8	2921.7	2876.5	2921.7	3122.1	3493.9	3593.3	3795.5	4514.0
47.5°	3692.8	3692.8	3541.6	3409.6	3386.1	3412.8	3691.1	4011.0	4001.9	4260.8	4952.6
50°	4105.4	4102.2	3958.4	3901.7	3925.9	3963.5	4346.1	4555.8	4424.6	4717.9	5344.5
52.5°	4394.6	4414.6	4365.3	4356.1	4479.8	4545.0	5011.1	5088.8	4803.0	5151.4	5637.7
55°	4623.5	4646.8	4703.6	4768.0	5006.1	5091.3	5655.2	5594.2	5119.7	5527.4	5806.4
57.5°	4947.6	4914.2	5001.9	5128.9	5514.1	5616.8	6279.4	6071.3	5374.5	5832.4	5824.9
60°	5341.1	5346.1	5361.2	5521.6	6021.2	6153.2	6894.3	6522.5	5538.3	6019.5	5621.0
62.5°	5814.0	5821.5	5852.4	6098.9	6702.1	6826.6	7549.2	6891.7	5613.5	5966.8	5094.7
65°	5781.4	5813.2	6158.2	7001.2	7737.2	7860.0	8313.7	7150.7	5499.8	5485.7	4148.1
67.5°	5266.8	5318.5	5895.9	8078.9	9297.9	9434.9	9237.7	7201.6	5009.5	4265.8	2706.1
70°	4591.7	4610.0	5304.4	9048.1	11105.0	11243.6	10064.8	6641.1	3801.3	2379.4	1212.3
72.5°	3585.9	3590.0	4404.5	9272.8	12085.8	12093.4	9415.6	4930.0	2044.4	914.0	421.1
75°	2561.6	2536.5	2950.1	7520.0	10632.9	10718.1	7058.9	2312.6	781.2	431.9	209.7
77.5°	1373.5	1401.1	1669.2	4459.7	7345.4	7490.8	3851.4	666.7	397.7	294.1	138.7
80°	424.5	447.8	684.3	2041.9	4160.6	4248.3	1427.8	296.6	277.4	209.7	91.0
82.5°	133.7	138.7	319.2	858.0	1726.9	1767.0	413.6	167.9	189.6	138.7	53.5
85°	38.4	39.3	142.1	320.0	426.9	435.3	116.1	65.2	108.6	86.1	27.6
87.5°	4.2	13.3	53.5	53.5	37.6	36.8	12.5	14.2	31.0	10.9	5.0
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: P964174

CATALOG NUMBER: NAV-SB3B-827-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5	1652.5
2.5°	1655.9	1656.7	1645.8	1627.5	1607.4	1590.7	1569.8	1553.1	1541.4	1538.1	1544.0
5°	1667.6	1661.7	1630.8	1574.8	1508.0	1450.4	1386.0	1335.1	1301.6	1287.4	1292.4
7.5°	1685.1	1668.4	1600.7	1490.5	1362.6	1249.1	1133.8	1044.4	987.5	959.1	963.3
10°	1700.2	1666.8	1550.6	1368.5	1173.0	1000.9	845.5	737.7	677.5	649.1	650.0
12.5°	1714.4	1665.9	1485.4	1224.0	959.1	748.6	604.0	550.5	533.8	528.0	526.3
15°	1741.1	1668.4	1403.5	1058.5	746.1	565.6	513.0	512.1	515.5	513.8	513.0
17.5°	1777.9	1671.0	1310.9	883.0	575.6	498.8	496.3	503.8	508.8	506.2	505.4
20°	1825.5	1681.0	1212.3	709.3	494.6	482.1	487.9	494.6	498.8	494.6	493.7
22.5°	1892.4	1698.5	1104.4	569.8	468.7	472.0	477.0	484.6	488.7	482.9	482.1
25°	1974.2	1726.1	998.4	495.4	456.1	460.3	467.8	476.2	481.2	475.4	474.6
27.5°	2080.3	1770.4	900.7	478.7	443.6	446.2	457.0	469.6	476.2	468.7	468.7
30°	2234.0	1843.1	816.2	486.3	436.1	430.3	445.3	462.9	470.4	463.7	462.9
32.5°	2437.9	1945.8	764.4	497.9	432.8	411.8	426.1	448.6	461.1	457.0	457.0
35°	2705.2	2102.1	744.4	511.3	430.3	392.7	402.7	426.9	448.6	452.8	452.8
37.5°	3029.4	2319.3	750.2	517.1	422.7	376.8	381.8	402.7	431.1	444.4	447.8
40°	3397.9	2572.4	783.7	511.3	414.4	363.5	364.3	380.2	405.2	425.3	431.9
42.5°	3777.9	2868.2	845.5	489.5	406.8	351.8	349.2	360.1	376.8	391.0	396.9
45°	4139.8	3172.3	906.5	459.5	397.7	340.0	334.2	338.4	341.7	347.6	350.9
47.5°	4455.6	3386.1	889.0	431.9	385.2	326.7	316.6	315.0	304.9	304.1	303.3
50°	4673.6	3432.9	789.6	404.4	366.7	311.6	295.7	285.8	268.1	259.8	260.7
52.5°	4742.9	3248.3	644.9	376.8	336.7	291.6	269.1	253.2	231.4	223.9	223.0
55°	4651.0	2886.5	515.5	343.4	294.9	264.9	239.7	218.9	201.3	192.2	192.2
57.5°	4426.3	2426.2	407.7	304.1	250.6	234.7	209.7	188.8	173.7	164.6	162.9
60°	4053.7	1926.6	322.5	257.3	213.9	202.2	176.3	162.9	149.5	138.7	136.2
62.5°	3488.1	1375.1	253.2	203.9	178.8	165.4	150.4	140.3	124.4	109.5	106.9
65°	2722.0	841.3	195.5	149.5	143.7	137.0	127.8	118.6	99.4	84.4	81.9
67.5°	1716.9	398.5	139.5	112.7	113.7	110.3	106.1	98.6	84.4	71.0	69.4
70°	756.1	193.0	91.9	86.1	84.4	84.4	87.7	85.2	71.9	59.3	56.8
72.5°	257.3	103.6	68.5	65.2	61.0	60.2	73.5	71.0	57.6	45.9	43.5
75°	134.5	69.4	50.1	46.7	36.8	44.3	58.5	55.1	40.9	30.0	27.6
77.5°	87.7	49.3	34.2	30.0	20.9	29.2	43.5	38.4	24.2	15.1	13.3
80°	55.1	32.6	20.1	14.2	10.0	15.9	23.4	16.7	9.2	3.4	2.5
82.5°	29.2	16.7	7.5	5.0	4.2	5.0	5.8	4.2	1.6	0.0	0.0
85°	11.7	5.8	2.5	1.6	0.8	0.0	1.6	0.8	0.0	0.0	0.0
87.5°	4.2	0.8	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)