

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: P964177

Luminaire Tested: **NAV-SB3B-827-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-827-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15029.6 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - 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

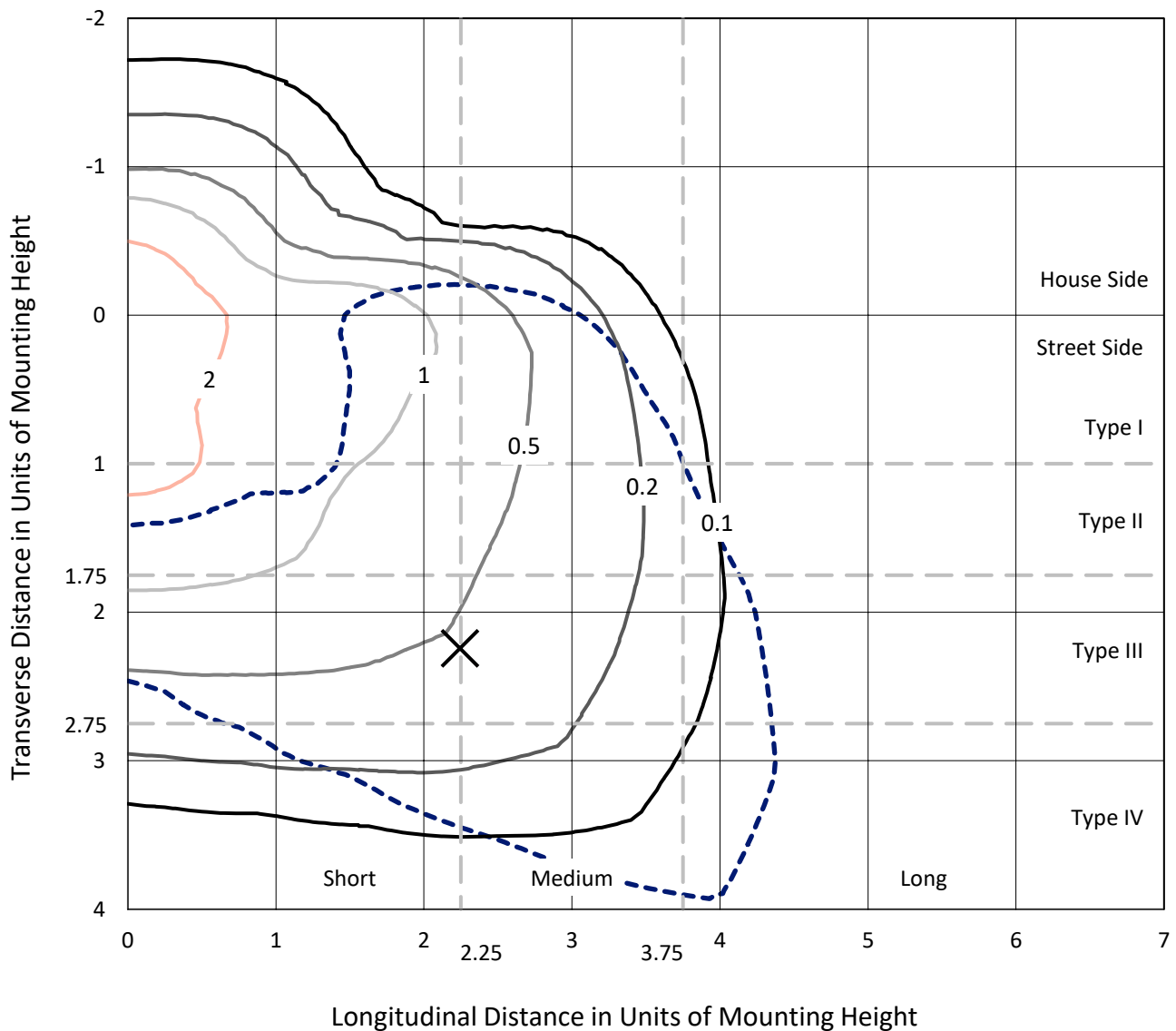


REPORT NUMBER: P964177

CATALOG NUMBER: NAV-SB3B-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

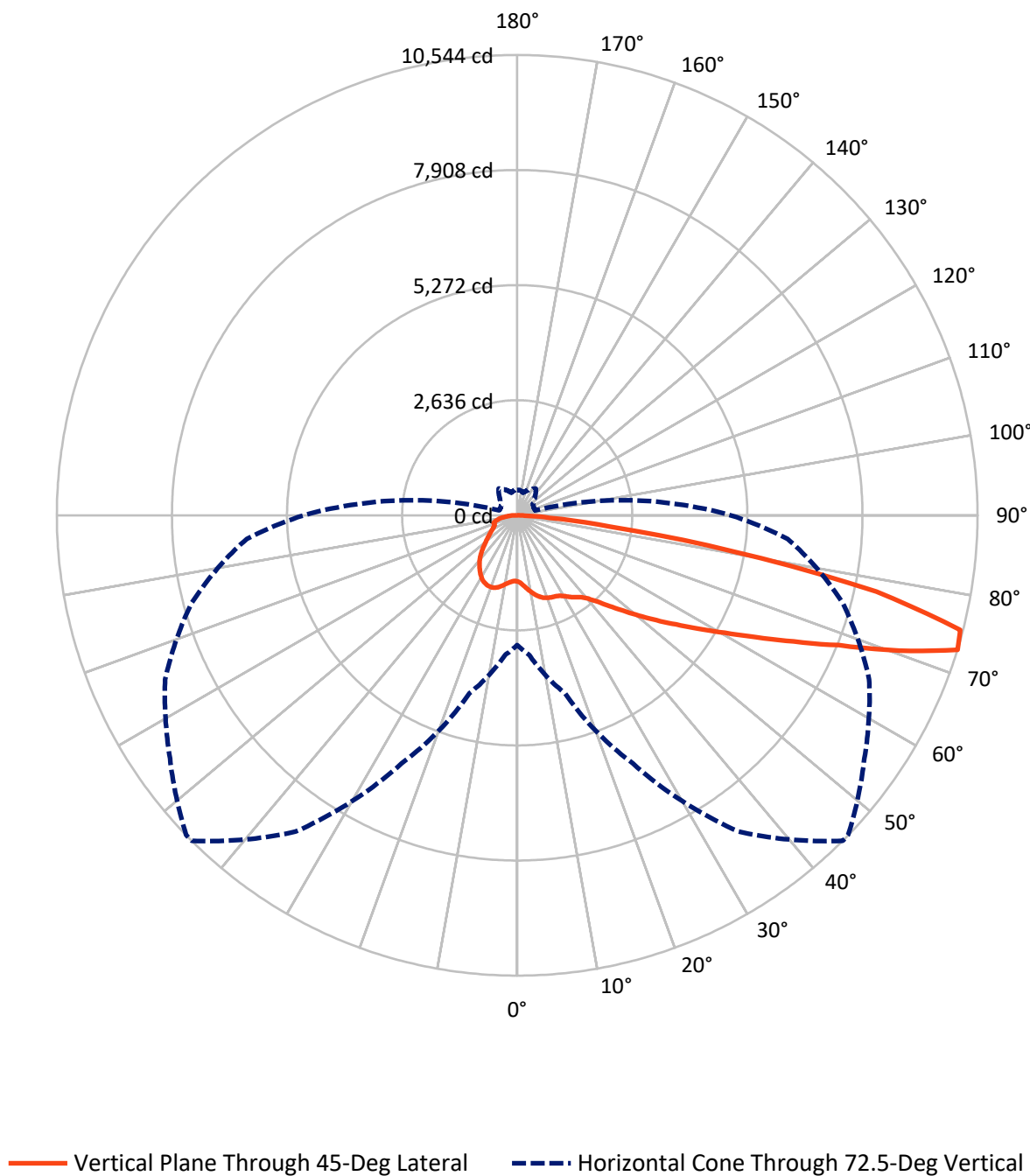
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
Type IV - Short - N/A

REPORT NUMBER: P964177
CATALOG NUMBER: NAV-SB3B-827-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P964177

CATALOG NUMBER: NAV-SB3B-827-U-T4W

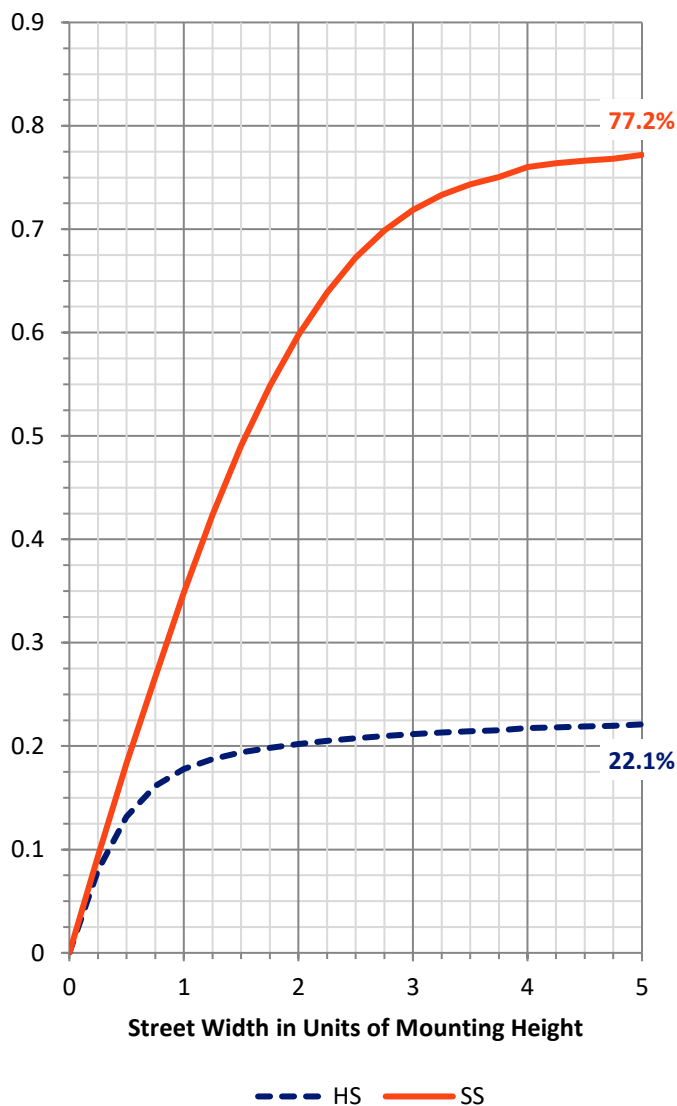
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3397.7	0.0	3397.7
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	11631.9	0.0	11631.9
	% Fixture	77.4	0.0	77.4
Total	Lumens	15029.6	0.0	15029.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.3	1.0
10°-20°	514.5	3.4
20°-30°	895.0	6.0
30°-40°	1283.1	8.5
40°-50°	1806.6	12.0
50°-60°	2767.3	18.4
60°-70°	4008.8	26.7
70°-80°	3201.3	21.3
80°-90°	398.7	2.7
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°	15029.6	100.0
0°-180°	15029.6	100.0

Coefficient of Utilization



REPORT NUMBER: P964177

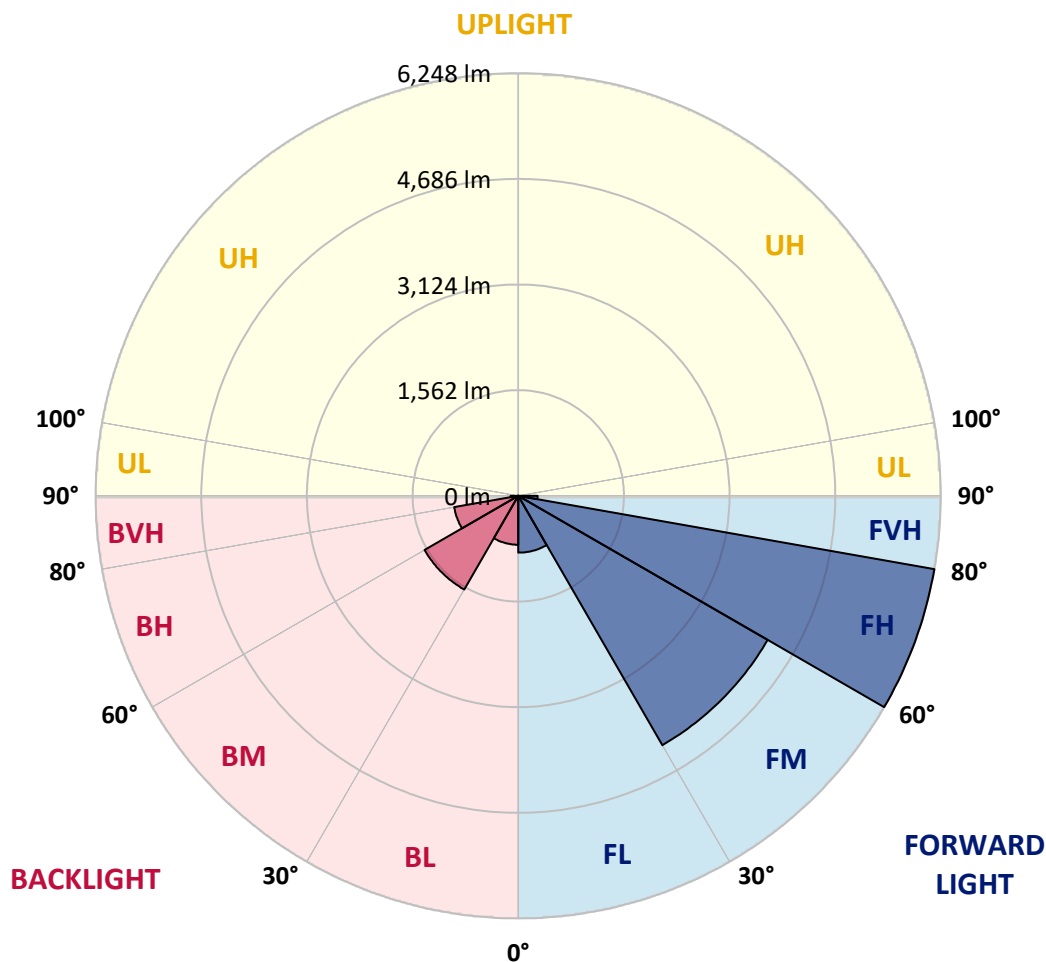
CATALOG NUMBER: NAV-SB3B-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	840.5	5.6			
FM	(30°-60°)	4257.2	28.3			
FH	(60°-80°)	6248.2	41.6			G3/7500
FVH	(80°-90°)	286.0	1.9			G3/500
BL	(0°-30°)	723.4	4.8	B2/1000		
BM	(30°-60°)	1599.8	10.6	B2/2500		
BH	(60°-80°)	961.8	6.4	B2/1000		G2/1000
BVH	(80°-90°)	112.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



REPORT NUMBER: P964177

CATALOG NUMBER: NAV-SB3B-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2
2.5°	1575.5	1585.9	1576.3	1567.6	1563.7	1553.4	1552.6	1546.3	1542.3	1531.2	1528.1
5°	1685.6	1699.0	1683.3	1665.8	1650.0	1624.6	1621.4	1603.3	1582.7	1558.9	1545.5
7.5°	1809.9	1821.8	1803.6	1777.5	1749.8	1707.8	1707.0	1673.7	1641.3	1600.9	1578.0
10°	1918.4	1934.3	1909.7	1874.1	1839.3	1791.7	1786.2	1748.1	1707.0	1654.8	1619.9
12.5°	2014.2	2025.3	2001.5	1958.0	1917.6	1870.1	1862.9	1821.0	1775.1	1715.7	1671.4
15°	2090.2	2104.4	2072.8	2026.1	1983.3	1936.6	1930.3	1892.3	1846.3	1783.8	1726.8
17.5°	2140.1	2152.0	2119.5	2067.2	2026.1	1987.3	1982.6	1950.9	1910.5	1847.2	1786.2
20°	2159.1	2171.8	2137.7	2084.6	2046.6	2016.6	2014.2	1991.3	1963.5	1905.7	1844.0
22.5°	2178.1	2190.0	2145.6	2090.2	2057.0	2037.9	2037.2	2022.1	2011.0	1963.5	1903.3
25°	2254.9	2258.1	2198.6	2118.7	2071.2	2054.6	2053.8	2053.0	2057.8	2020.6	1967.5
27.5°	2321.4	2320.6	2270.0	2194.7	2121.1	2086.3	2085.5	2093.4	2108.4	2077.6	2034.0
30°	2418.8	2410.1	2349.9	2271.5	2204.3	2150.3	2145.6	2138.5	2150.3	2125.8	2100.5
32.5°	2625.4	2597.8	2500.3	2361.0	2273.1	2231.9	2225.6	2181.3	2186.0	2171.0	2158.3
35°	2921.6	2885.1	2755.3	2530.4	2358.6	2300.0	2296.8	2240.6	2231.1	2217.7	2222.4
37.5°	3273.8	3228.7	3077.6	2775.9	2505.9	2379.2	2374.4	2323.8	2284.9	2270.7	2297.6
40°	3627.8	3570.8	3445.6	3075.1	2722.8	2511.5	2496.4	2419.6	2375.2	2351.5	2408.4
42.5°	3971.4	3923.9	3817.0	3410.8	2990.4	2704.6	2671.4	2540.0	2506.6	2484.5	2587.4
45°	4275.4	4232.6	4154.3	3769.5	3304.0	2967.5	2935.0	2720.5	2710.1	2710.1	2859.0
47.5°	4522.4	4513.0	4429.8	4135.3	3673.7	3266.8	3210.5	2971.4	2999.1	3041.9	3244.5
50°	4796.4	4770.2	4681.6	4495.5	4108.4	3609.5	3563.6	3279.4	3383.1	3500.3	3801.9
52.5°	5048.1	5062.4	4963.5	4870.8	4599.3	3992.0	3911.2	3642.8	3866.9	4060.8	4455.2
55°	5307.0	5307.9	5280.2	5267.5	5113.9	4414.8	4326.1	4079.9	4436.1	4676.9	5216.8
57.5°	5550.2	5551.7	5592.9	5704.5	5710.9	4902.5	4801.9	4616.7	5068.7	5314.2	6002.2
60°	5767.1	5778.1	5890.6	6151.8	6235.8	5461.5	5366.5	5250.9	5722.8	5969.8	6828.0
62.5°	5839.9	5880.3	6130.5	6501.8	6754.3	6147.1	6053.6	5984.8	6409.9	6639.5	7518.4
65°	5716.4	5809.0	6292.8	6790.8	7288.1	6961.8	6869.1	6794.0	7124.2	7340.2	8085.3
67.5°	5413.1	5532.7	6283.2	7094.0	7935.7	7942.0	7855.7	7679.1	7889.7	7972.9	8269.8
70°	4614.2	4793.2	5729.9	7207.3	8679.1	9282.4	9199.3	8744.8	8653.8	8251.6	7750.4
72.5°	2973.0	3213.7	4219.2	6275.4	8844.6	10543.7	10538.9	9706.8	8895.3	7710.0	6216.0
75°	1084.7	1231.9	1960.3	3939.0	7424.2	10479.5	10510.5	9542.1	8120.2	5955.5	3872.4
77.5°	395.0	432.2	639.7	1513.8	4566.0	8408.4	8472.4	7628.5	5779.8	2988.8	1534.4
80°	207.5	228.1	327.8	587.4	1956.4	4993.5	5094.0	4533.6	2716.5	900.3	460.0
82.5°	114.8	124.3	183.7	319.1	881.2	2135.4	2195.5	1790.9	955.6	381.6	190.0
85°	61.7	65.7	86.3	174.1	430.7	740.3	756.9	535.3	380.8	224.1	91.8
87.5°	18.2	22.1	28.5	55.5	168.6	166.3	170.3	106.1	150.5	113.3	30.1
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: P964177

CATALOG NUMBER: NAV-SB3B-827-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2	1516.2
2.5°	1523.4	1520.9	1512.2	1508.3	1503.6	1502.8	1506.6	1507.5	1508.3	1509.1	1512.2
5°	1537.6	1529.6	1521.7	1517.0	1518.5	1519.4	1527.2	1532.8	1536.8	1540.0	1541.5
7.5°	1565.3	1558.9	1545.5	1544.7	1547.0	1554.2	1564.5	1577.2	1584.2	1589.8	1591.4
10°	1606.5	1594.6	1578.7	1581.2	1585.9	1596.1	1617.6	1627.8	1639.7	1650.0	1647.6
12.5°	1648.4	1638.2	1619.9	1621.4	1629.4	1647.6	1668.2	1680.9	1688.8	1696.7	1699.9
15°	1703.0	1684.8	1665.0	1665.0	1679.3	1699.0	1708.6	1718.9	1723.6	1732.4	1735.5
17.5°	1759.2	1735.5	1709.4	1707.8	1725.2	1734.7	1740.2	1741.9	1743.4	1753.0	1756.1
20°	1815.5	1789.3	1752.1	1749.0	1753.0	1751.3	1750.6	1749.0	1751.3	1763.2	1767.9
22.5°	1870.9	1840.8	1789.3	1775.1	1764.0	1749.0	1748.1	1747.4	1749.0	1760.8	1768.7
25°	1935.8	1899.4	1830.5	1787.8	1750.6	1730.0	1732.4	1733.2	1734.7	1744.2	1756.8
27.5°	2006.2	1966.0	1868.5	1783.8	1716.5	1702.2	1698.3	1700.7	1706.2	1721.3	1736.2
30°	2076.8	2029.2	1903.3	1767.9	1673.7	1653.9	1641.3	1646.9	1664.3	1679.3	1696.0
32.5°	2140.9	2093.4	1931.1	1733.2	1619.1	1588.2	1571.6	1578.7	1596.1	1601.7	1621.4
35°	2216.0	2162.2	1943.0	1677.7	1559.7	1512.2	1490.0	1479.8	1488.5	1483.0	1500.4
37.5°	2300.0	2243.8	1941.4	1604.8	1490.0	1435.4	1404.6	1365.7	1347.6	1328.5	1340.4
40°	2424.3	2343.6	1922.4	1517.0	1403.7	1353.9	1298.5	1232.8	1191.6	1154.4	1156.7
42.5°	2593.8	2482.1	1887.5	1420.3	1306.4	1259.6	1184.5	1107.6	1042.7	980.9	975.4
45°	2846.3	2663.5	1844.0	1317.4	1201.1	1155.2	1073.6	987.3	913.7	834.5	825.0
47.5°	3210.5	2907.3	1802.8	1200.3	1090.2	1048.3	974.7	894.7	807.6	730.8	722.1
50°	3710.9	3257.2	1764.8	1086.3	980.9	949.3	890.7	809.1	721.3	659.5	655.6
52.5°	4347.4	3733.0	1749.0	976.2	878.8	866.9	820.2	744.3	661.1	608.8	604.9
55°	5078.3	4302.3	1749.0	870.9	789.4	793.3	760.9	690.4	618.4	571.6	566.9
57.5°	5824.0	4878.7	1717.3	773.6	713.4	730.0	709.4	647.7	582.7	534.4	526.5
60°	6511.3	5361.7	1589.1	684.9	646.1	672.2	658.8	605.7	526.5	486.2	479.8
62.5°	7039.4	5634.0	1342.0	614.4	590.6	620.7	613.6	550.2	516.2	499.6	494.0
65°	7303.8	5589.7	1026.1	551.9	544.0	590.6	575.6	573.2	546.3	527.3	521.0
67.5°	7141.6	5208.1	744.3	505.9	517.0	562.9	620.7	630.3	580.4	543.1	536.8
70°	6429.7	4517.7	554.2	462.4	483.0	563.8	707.9	659.5	569.3	525.7	518.5
72.5°	4891.4	3368.9	429.9	416.5	438.6	567.6	746.6	646.1	537.6	581.2	576.4
75°	2797.2	1849.5	345.2	360.3	383.2	530.4	726.8	611.2	513.0	533.6	533.6
77.5°	1066.5	710.9	285.1	304.8	308.0	463.2	695.2	608.8	488.5	476.6	434.7
80°	369.7	277.9	236.0	242.3	238.3	411.7	666.7	529.7	399.9	357.8	346.0
82.5°	151.2	138.6	186.9	179.0	169.4	319.9	538.4	433.1	327.0	288.9	285.8
85°	65.7	87.8	123.5	108.4	98.2	221.7	431.5	366.5	276.3	238.3	237.5
87.5°	13.4	33.2	52.3	49.1	50.6	148.0	306.4	260.5	195.6	146.5	114.8
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)