

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: P965770

Luminaire Tested: **NAV-SB4A-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965770
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16413.3 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 114
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



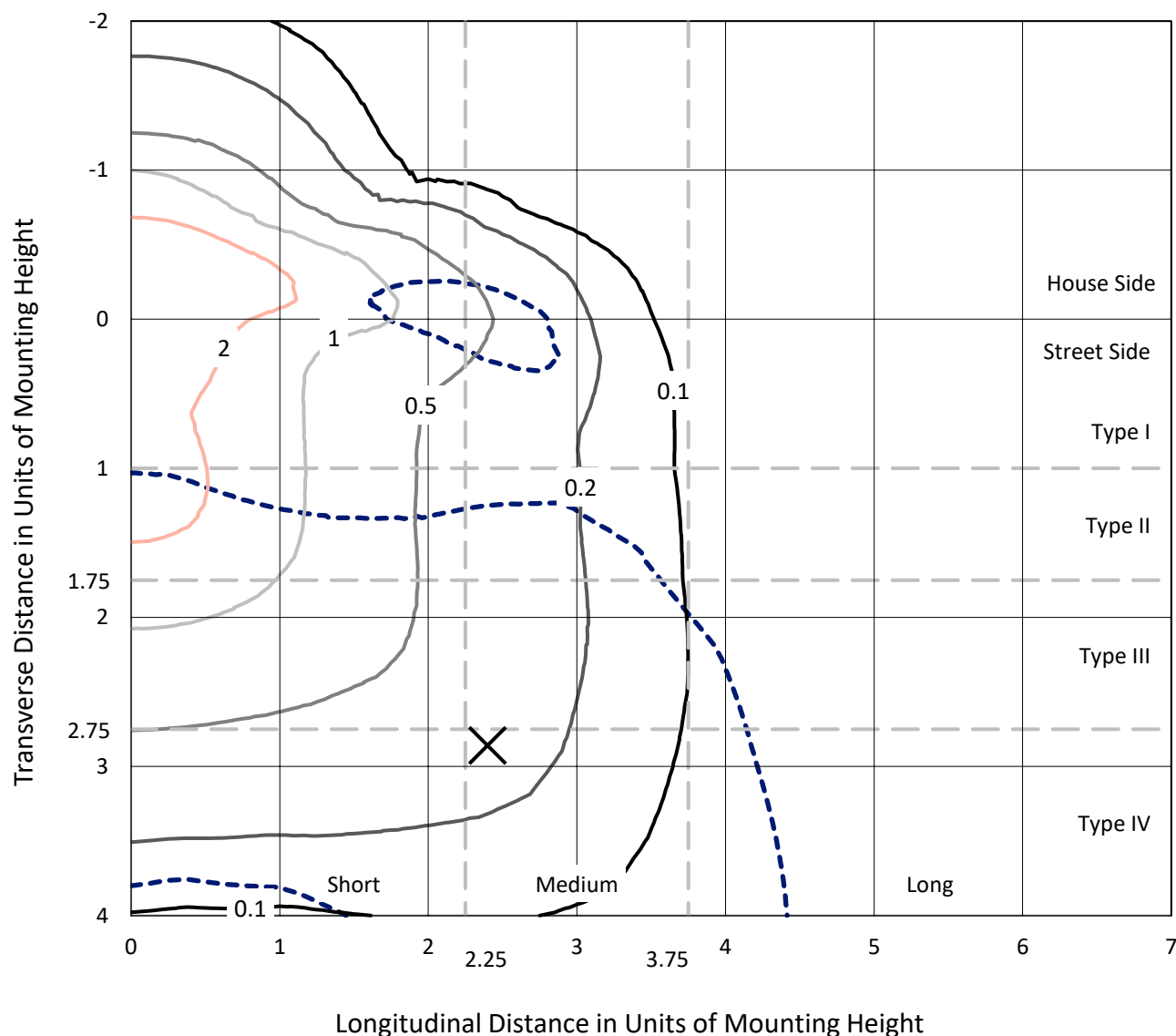
REPORT NUMBER: P965770

CATALOG NUMBER: NAV-SB4A-830-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

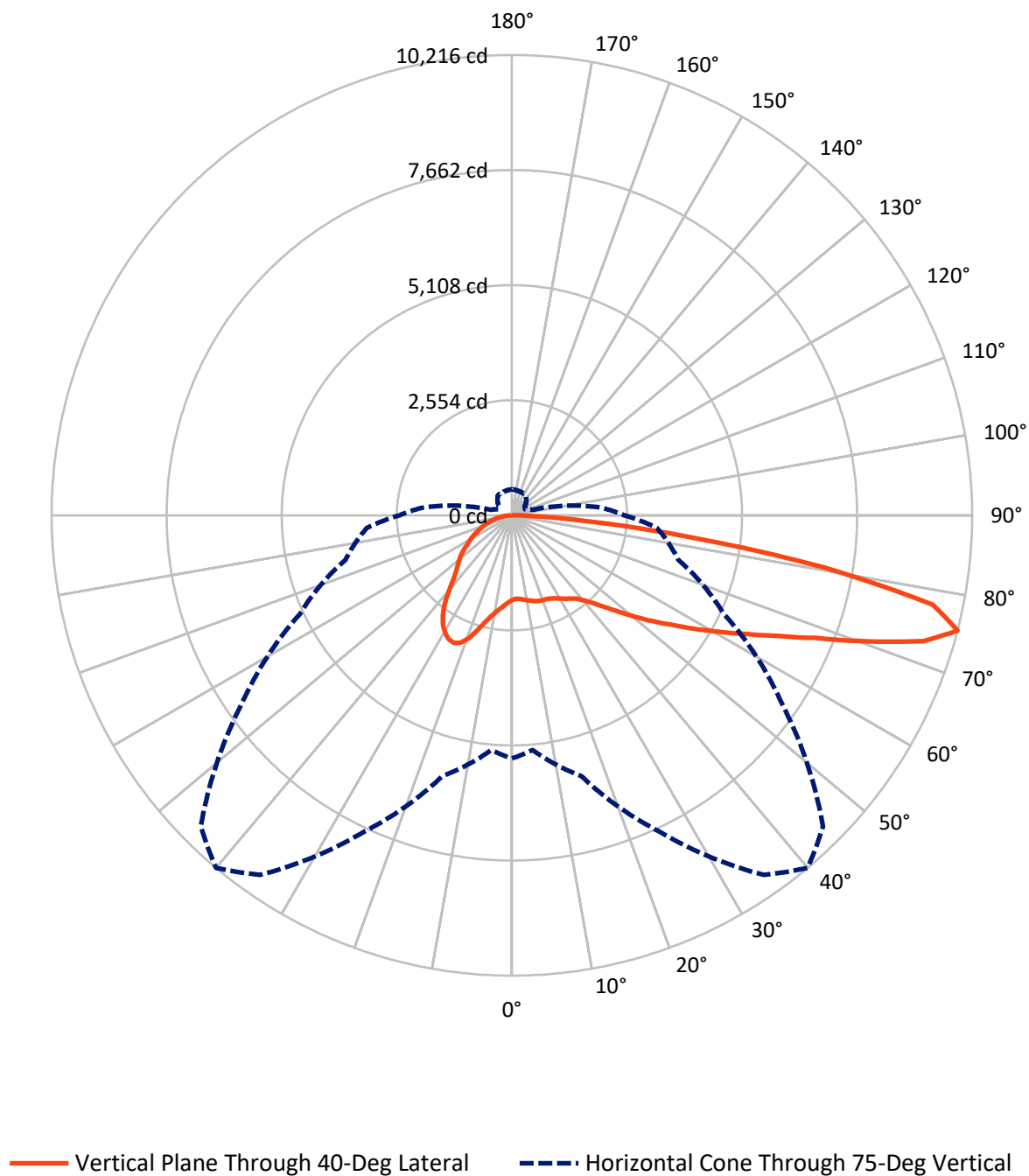
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type IV - Medium - N/A

REPORT NUMBER: P965770
CATALOG NUMBER: NAV-SB4A-830-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P965770

CATALOG NUMBER: NAV-SB4A-830-U-SL4

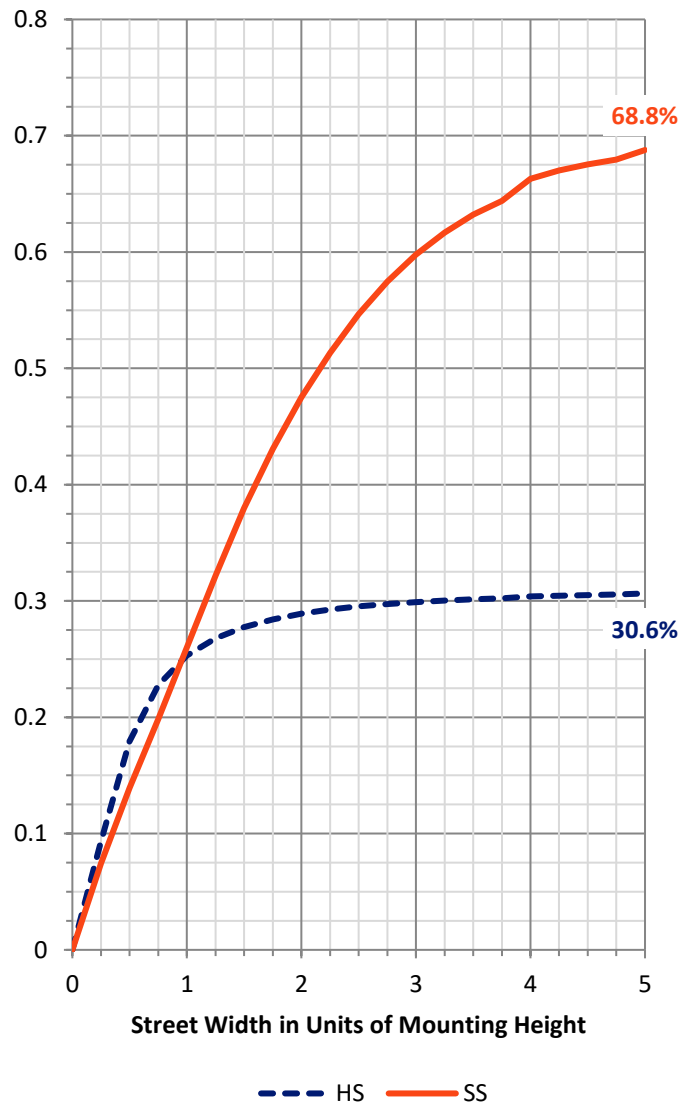
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5085.4	0.0	5085.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	11327.9	0.0	11327.9
	% Fixture	69.0	0.0	69.0
Total	Lumens	16413.3	0.0	16413.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.4	1.1
10°-20°	629.0	3.8
20°-30°	1148.5	7.0
30°-40°	1628.9	9.9
40°-50°	2199.6	13.4
50°-60°	2959.0	18.0
60°-70°	3755.6	22.9
70°-80°	3408.5	20.8
80°-90°	496.8	3.0
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°	16413.3	100.0
0°-180°	16413.3	100.0

Coefficient of Utilization



REPORT NUMBER: P965770

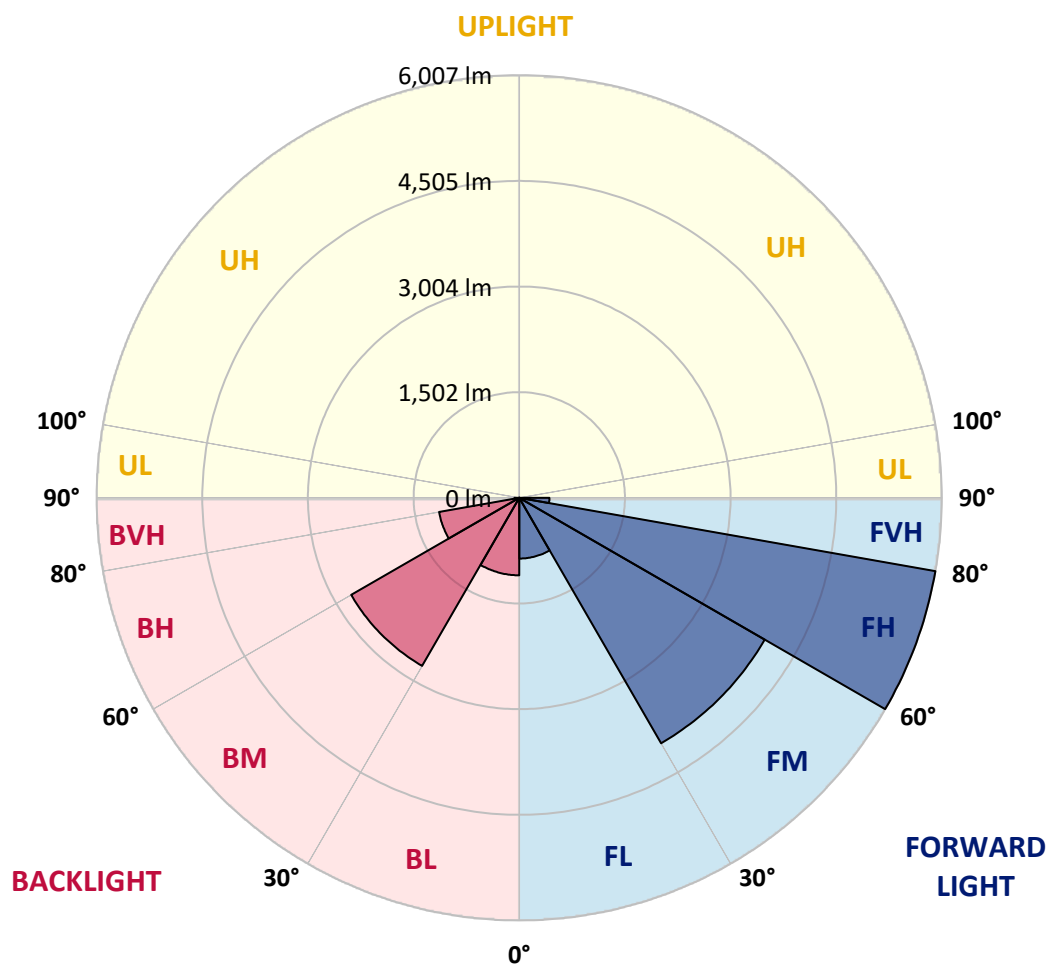
CATALOG NUMBER: NAV-SB4A-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	863.4	5.3			
FM	(30°-60°)	4029.1	24.5			
FH	(60°-80°)	6007.0	36.6			G3/7500
FVH	(80°-90°)	428.4	2.6			G3/500
BL	(0°-30°)	1101.5	6.7	B3/2500		
BM	(30°-60°)	2758.4	16.8	B3/5000		
BH	(60°-80°)	1157.1	7.0	B3/2500		G3/2500
BVH	(80°-90°)	68.4	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Medium



REPORT NUMBER: P965770

CATALOG NUMBER: NAV-SB4A-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9
2.5°	1848.2	1858.6	1856.0	1852.5	1852.5	1853.4	1852.5	1858.6	1864.7	1870.8	1880.4
5°	1867.3	1877.8	1872.6	1868.2	1864.7	1863.9	1861.2	1860.4	1863.9	1871.6	1884.8
7.5°	1904.8	1915.2	1907.3	1899.5	1892.6	1889.1	1885.6	1880.4	1877.8	1882.1	1900.4
10°	1946.6	1956.9	1947.4	1933.5	1922.2	1917.8	1914.3	1909.1	1905.6	1908.2	1928.2
12.5°	1988.3	1998.7	1985.7	1966.6	1951.7	1949.1	1944.8	1943.1	1942.2	1941.4	1961.3
15°	2027.4	2036.2	2019.7	1997.0	1981.3	1977.0	1972.6	1975.3	1979.6	1984.8	2007.5
17.5°	2058.0	2066.7	2042.3	2012.7	1997.9	1996.2	1993.5	2002.2	2014.4	2027.4	2055.3
20°	2085.8	2094.5	2063.2	2023.1	2005.7	2005.7	2006.6	2024.9	2042.3	2061.5	2099.7
22.5°	2125.0	2132.0	2093.7	2038.8	2013.5	2015.3	2022.2	2040.6	2062.3	2088.4	2141.5
25°	2183.4	2188.6	2141.5	2068.4	2039.6	2044.9	2051.0	2059.7	2080.5	2111.1	2182.4
27.5°	2277.3	2281.6	2219.8	2120.6	2077.1	2085.8	2094.5	2088.4	2098.0	2124.1	2215.5
30°	2409.7	2412.2	2333.9	2202.4	2140.6	2145.0	2146.8	2121.5	2103.2	2124.1	2239.0
32.5°	2566.4	2565.5	2472.3	2301.7	2212.9	2208.6	2193.8	2144.1	2101.5	2119.8	2259.9
35°	2809.2	2799.7	2679.6	2441.0	2294.8	2267.7	2233.0	2169.4	2110.2	2115.4	2278.2
37.5°	3211.4	3181.8	3015.5	2669.1	2416.6	2347.9	2296.5	2210.3	2129.3	2113.7	2300.0
40°	3665.0	3627.6	3444.7	2981.6	2599.4	2488.9	2406.2	2268.6	2160.7	2121.5	2332.2
42.5°	4203.0	4149.9	3953.1	3349.8	2830.9	2670.8	2546.3	2342.6	2206.8	2146.8	2375.7
45°	4863.7	4793.2	4514.6	3765.1	3122.7	2909.4	2743.1	2454.9	2277.3	2195.5	2441.0
47.5°	5531.4	5548.8	5152.8	4240.4	3472.6	3203.6	2989.4	2623.8	2380.0	2273.9	2546.3
50°	6240.9	6253.1	5787.4	4767.1	3869.6	3536.1	3266.3	2812.7	2522.8	2385.3	2704.0
52.5°	6794.5	6796.3	6363.6	5318.1	4283.1	3901.8	3564.8	3028.6	2688.3	2533.3	2913.7
55°	7141.1	7136.7	6767.6	5839.6	4758.4	4285.6	3895.7	3274.1	2890.2	2707.3	3177.5
57.5°	7392.6	7379.6	7046.2	6288.0	5265.0	4739.2	4270.0	3552.6	3128.7	2914.6	3524.8
60°	7488.3	7480.6	7235.1	6675.3	5797.8	5240.6	4701.8	3864.4	3399.4	3159.2	3971.4
62.5°	7524.9	7539.8	7420.5	7050.5	6368.0	5796.1	5176.2	4236.9	3704.1	3436.0	4442.3
65°	7653.8	7680.7	7656.4	7541.5	7012.2	6446.3	5805.6	4680.0	4036.7	3732.8	4934.2
67.5°	7908.9	7935.9	7946.3	8129.1	7799.1	7256.8	6590.9	5231.9	4425.8	4041.1	5304.2
70°	7902.7	7895.0	8079.5	8596.6	8784.7	8379.0	7649.5	5911.0	4889.9	4297.0	5351.2
72.5°	7193.2	7130.6	7566.8	8591.3	9604.7	9550.7	8942.2	6786.7	5290.2	4328.4	4643.5
75°	5396.5	5229.3	5999.7	7742.5	9741.4	10215.8	9763.9	7330.0	5195.4	3824.3	3231.4
77.5°	2307.8	2139.8	3047.7	5731.6	8718.4	9549.8	9010.1	6395.0	4147.3	2528.9	1587.0
80°	604.1	603.3	921.1	2598.6	5929.2	7052.2	6186.9	4129.8	2369.6	903.6	437.9
82.5°	249.9	243.7	338.7	1010.6	2897.2	3957.5	3229.7	1842.0	855.8	244.7	145.3
85°	93.2	92.2	164.5	349.1	1022.0	1632.3	1181.3	471.0	213.3	119.3	65.3
87.5°	26.1	25.2	35.7	121.1	249.0	377.8	201.9	77.5	60.1	47.0	19.2
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: P965770

CATALOG NUMBER: NAV-SB4A-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9
2.5°	1883.0	1887.3	1895.1	1901.3	1909.1	1917.8	1930.0	1937.9	1945.7	1950.9	1947.4
5°	1890.8	1900.4	1920.4	1940.4	1963.9	1985.7	2010.9	2029.2	2044.1	2048.4	2050.1
7.5°	1908.2	1923.9	1957.9	1991.8	2029.2	2065.0	2101.5	2132.8	2158.0	2167.7	2168.5
10°	1938.7	1959.6	2007.5	2055.3	2104.9	2159.8	2206.8	2252.1	2287.8	2302.6	2303.5
12.5°	1977.0	2003.2	2065.8	2132.0	2200.8	2276.4	2337.4	2393.1	2437.6	2457.5	2457.5
15°	2026.6	2060.6	2140.6	2229.5	2330.4	2435.8	2513.3	2575.1	2624.7	2649.0	2647.3
17.5°	2080.5	2125.8	2226.8	2360.9	2505.4	2643.8	2734.4	2779.6	2830.9	2854.5	2853.6
20°	2132.8	2188.6	2333.0	2528.1	2720.5	2867.5	2940.7	2952.9	2956.3	2959.0	2965.9
22.5°	2186.8	2261.7	2466.3	2738.7	2945.0	3046.9	3057.4	3005.1	2932.0	2898.0	2907.6
25°	2246.0	2345.2	2640.4	2971.2	3138.3	3150.4	3070.4	2943.3	2804.9	2741.4	2750.9
27.5°	2303.5	2441.9	2849.3	3193.2	3277.5	3170.5	2998.1	2817.9	2650.8	2583.7	2591.6
30°	2360.9	2552.5	3080.0	3387.3	3341.1	3120.9	2884.1	2683.0	2515.0	2444.5	2452.3
32.5°	2419.2	2681.3	3345.5	3527.4	3329.8	3015.5	2742.2	2531.5	2383.5	2309.5	2319.2
35°	2485.4	2839.7	3597.0	3604.0	3254.1	2860.6	2555.0	2350.4	2221.6	2162.4	2175.5
37.5°	2571.6	3040.8	3819.0	3623.2	3121.7	2633.4	2322.6	2136.3	2030.1	2003.2	2022.2
40°	2678.6	3282.8	3988.8	3592.7	2925.9	2357.4	2068.4	1919.5	1859.5	1865.6	1886.5
42.5°	2817.9	3553.6	4108.1	3514.4	2653.4	2072.8	1845.5	1779.4	1808.1	1832.5	1855.1
45°	2999.0	3834.7	4182.1	3381.2	2345.2	1831.6	1714.1	1729.8	1751.5	1754.2	1771.5
47.5°	3230.6	4119.4	4230.8	3180.1	2030.9	1661.8	1630.6	1634.1	1629.6	1611.4	1625.3
50°	3519.6	4396.2	4274.4	2913.7	1763.7	1555.6	1513.8	1501.7	1441.7	1382.4	1390.2
52.5°	3848.7	4650.4	4292.6	2582.9	1555.6	1466.9	1398.9	1322.4	1210.0	1191.8	1197.8
55°	4214.3	4885.5	4245.7	2176.4	1380.7	1352.8	1250.1	1157.8	1145.6	1130.0	1132.5
57.5°	4651.3	5138.8	4149.9	1722.8	1201.3	1219.6	1119.5	1130.0	1108.2	1083.8	1079.4
60°	5129.2	5400.8	3981.8	1309.3	1015.9	1053.4	1085.6	1084.7	1078.6	1058.6	1051.6
62.5°	5559.3	5573.2	3651.0	1002.9	853.1	924.6	1012.4	1011.6	1006.3	995.1	990.7
65°	5815.2	5547.1	3099.1	789.6	719.0	818.3	913.2	920.1	921.1	920.1	920.1
67.5°	5769.9	5241.5	2341.7	628.5	608.5	710.3	814.9	824.4	831.4	833.1	834.9
70°	5258.0	4570.4	1526.9	501.4	510.1	615.5	721.7	731.2	737.4	744.4	747.8
72.5°	4098.5	3360.3	874.0	405.7	423.9	533.6	629.3	640.7	644.2	657.2	662.5
75°	2497.6	1976.1	471.8	319.5	348.2	456.1	538.0	551.0	557.2	572.8	574.5
77.5°	1187.5	855.8	269.0	249.0	280.3	372.6	454.4	469.2	452.6	461.4	454.4
80°	401.3	317.8	169.7	189.7	214.1	290.8	363.9	378.6	343.9	342.1	338.7
82.5°	140.1	128.8	107.9	126.2	138.4	208.1	275.1	294.3	255.9	255.0	242.9
85°	54.8	52.3	60.1	68.8	82.7	127.9	181.1	190.6	157.5	127.1	125.4
87.5°	11.3	12.2	14.8	15.7	25.2	44.4	65.3	80.1	63.6	54.0	49.6
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)