

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: P964053

Luminaire Tested: **NAV-SB3B-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964053
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-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17283.6 lumens
Efficiency: N/A
Efficacy: 158.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - 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



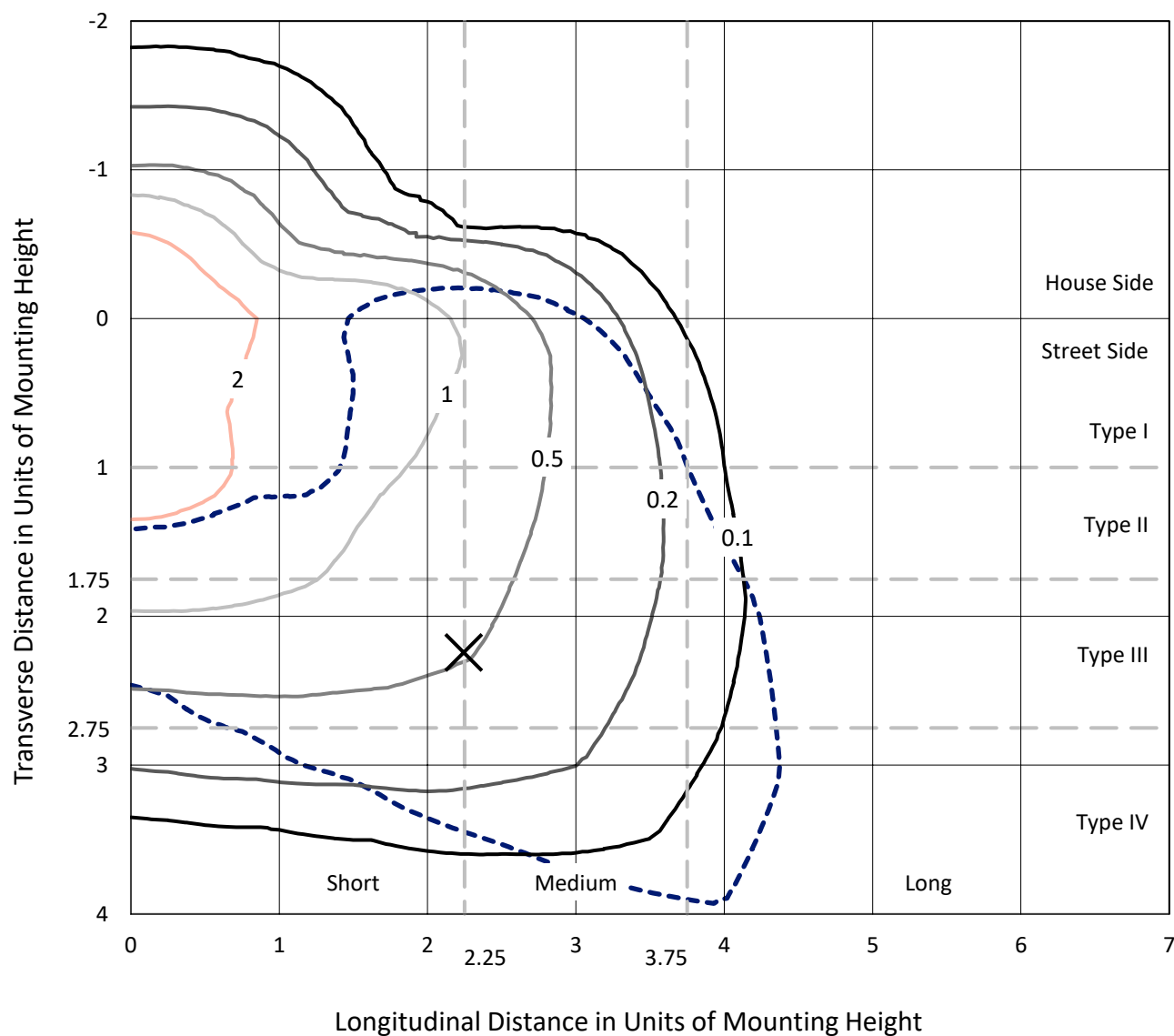
REPORT NUMBER: P964053

CATALOG NUMBER: NAV-SB3B-735-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

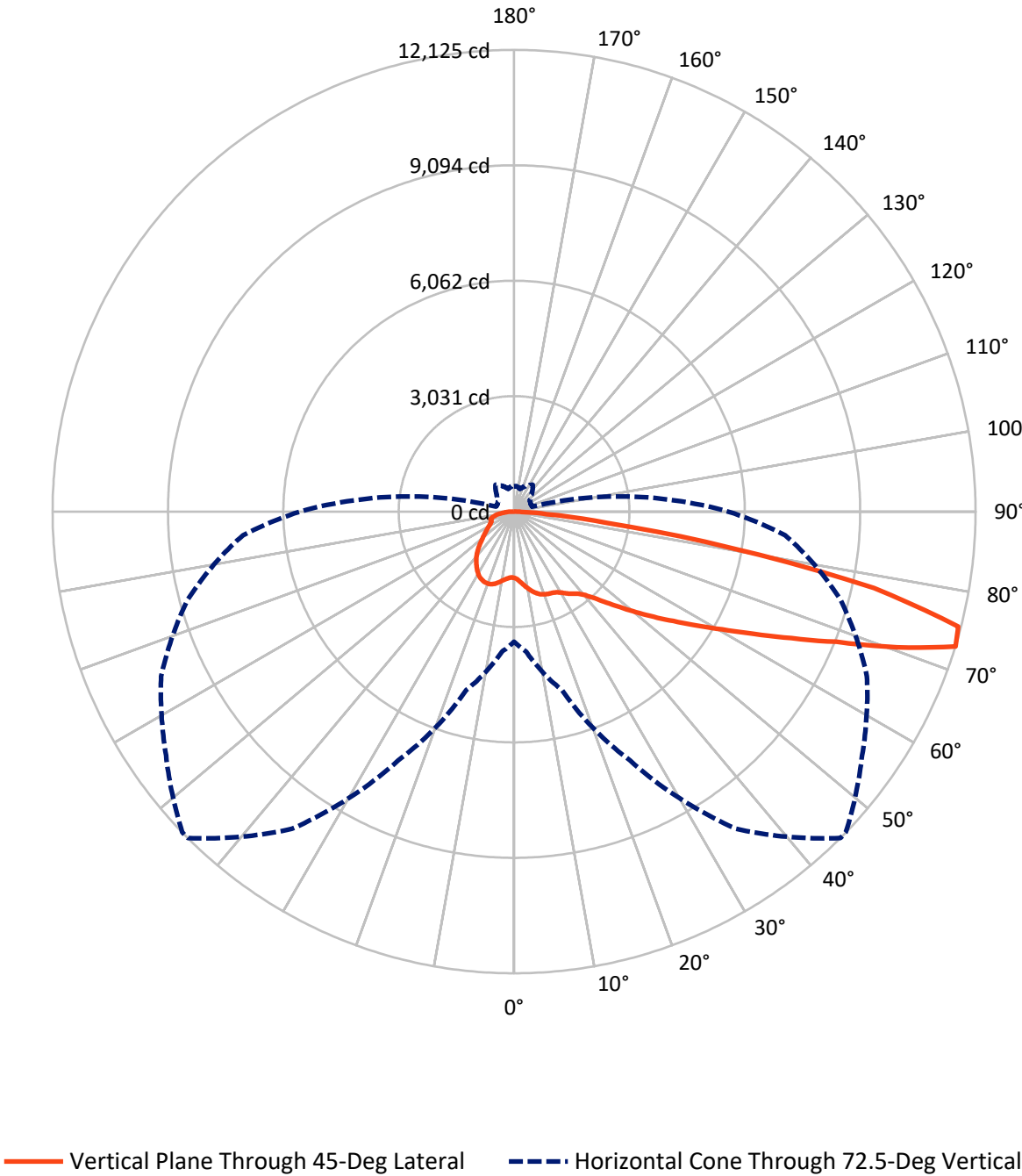


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc

Type IV - Short - N/A

REPORT NUMBER: P964053
CATALOG NUMBER: NAV-SB3B-735-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P964053

CATALOG NUMBER: NAV-SB3B-735-U-T4W

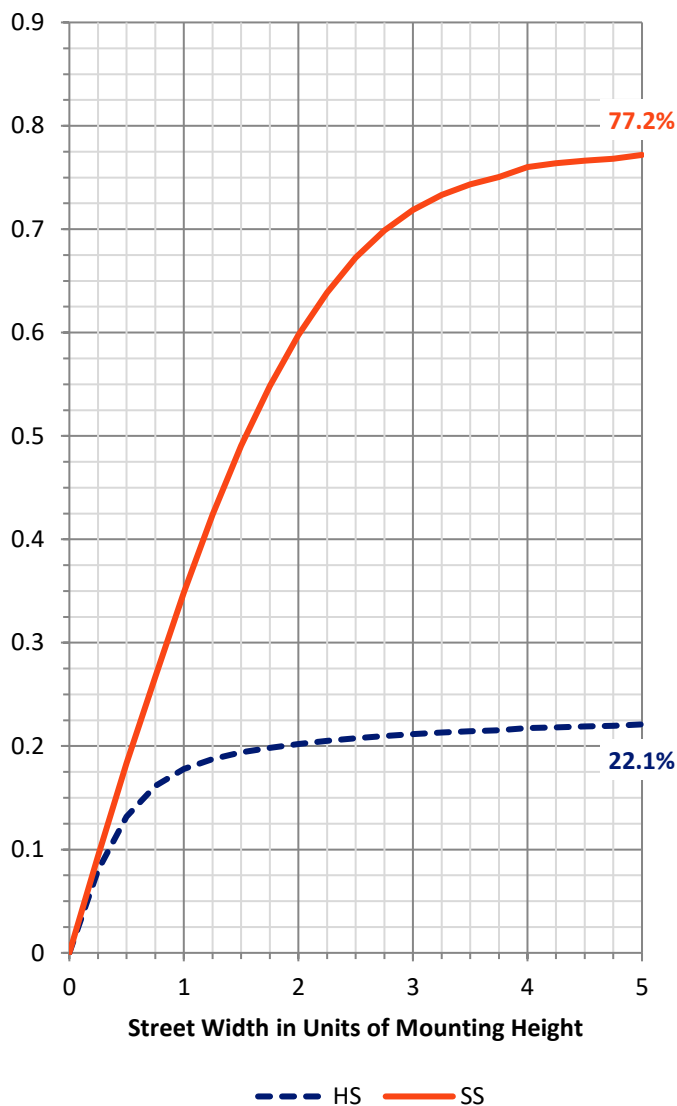
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3907.2	0.0	3907.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	13376.3	0.0	13376.3
	% Fixture	77.4	0.0	77.4
Total	Lumens	17283.6	0.0	17283.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.5	1.0
10°-20°	591.7	3.4
20°-30°	1029.3	6.0
30°-40°	1475.5	8.5
40°-50°	2077.6	12.0
50°-60°	3182.3	18.4
60°-70°	4610.0	26.7
70°-80°	3681.3	21.3
80°-90°	458.5	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°	17283.6	100.0
0°-180°	17283.6	100.0

Coefficient of Utilization



REPORT NUMBER: P964053

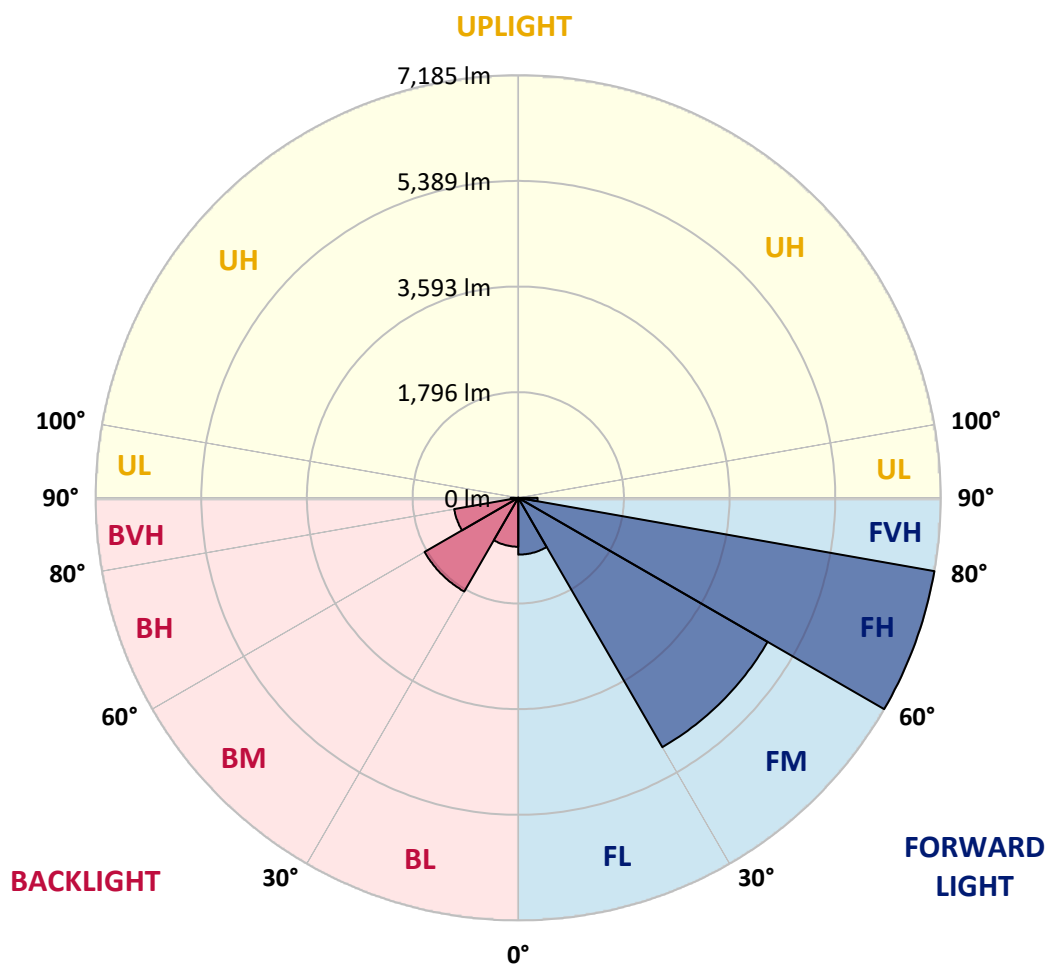
CATALOG NUMBER: NAV-SB3B-735-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	966.5	5.6			
FM	(30°-60°)	4895.6	28.3			
FH	(60°-80°)	7185.3	41.6			G3/7500
FVH	(80°-90°)	328.9	1.9			G3/500
BL	(0°-30°)	831.9	4.8	B2/1000		
BM	(30°-60°)	1839.7	10.6	B2/2500		
BH	(60°-80°)	1106.0	6.4	B3/2500		G3/2500
BVH	(80°-90°)	129.6	0.7			G2/225
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 Short



REPORT NUMBER: P964053

CATALOG NUMBER: NAV-SB3B-735-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1811.9	1823.7	1812.8	1802.8	1798.2	1786.4	1785.4	1778.2	1773.7	1760.8	1757.3
5°	1938.4	1953.9	1935.7	1915.6	1897.5	1868.3	1864.7	1843.8	1820.1	1792.7	1777.2
7.5°	2081.4	2095.0	2074.1	2044.1	2012.2	1963.9	1963.0	1924.7	1887.4	1841.0	1814.6
10°	2206.1	2224.4	2196.1	2155.1	2115.1	2060.5	2054.0	2010.3	1963.0	1902.9	1862.8
12.5°	2316.3	2329.0	2301.7	2251.6	2205.2	2150.6	2142.4	2094.1	2041.3	1973.0	1922.0
15°	2403.6	2420.0	2383.6	2329.9	2280.7	2227.0	2219.7	2176.1	2123.3	2051.3	1985.7
17.5°	2461.0	2474.7	2437.3	2377.3	2329.9	2285.3	2279.8	2243.4	2197.0	2124.1	2054.0
20°	2482.9	2497.4	2458.3	2397.3	2353.6	2319.0	2316.3	2289.8	2258.0	2191.6	2120.5
22.5°	2504.7	2518.4	2467.4	2403.6	2365.4	2343.6	2342.6	2325.4	2312.6	2258.0	2188.8
25°	2593.0	2596.7	2528.4	2436.4	2381.8	2362.7	2361.8	2360.9	2366.3	2323.6	2262.6
27.5°	2669.5	2668.6	2610.4	2523.9	2439.2	2399.1	2398.2	2407.3	2424.6	2389.1	2339.0
30°	2781.5	2771.5	2702.3	2612.2	2534.8	2472.9	2467.4	2459.2	2472.9	2444.6	2415.5
32.5°	3019.1	2987.3	2875.3	2715.0	2614.0	2566.6	2559.3	2508.4	2513.8	2496.6	2481.9
35°	3359.6	3317.8	3168.5	2909.9	2712.4	2644.9	2641.3	2576.6	2565.8	2550.3	2555.7
37.5°	3764.8	3713.0	3539.0	3192.2	2881.7	2736.0	2730.5	2672.3	2627.7	2611.3	2642.2
40°	4171.9	4106.3	3962.4	3536.4	3131.2	2888.0	2870.7	2782.5	2731.4	2704.2	2769.7
42.5°	4567.0	4512.4	4389.5	3922.4	3438.9	3110.2	3071.9	2920.8	2882.6	2857.1	2975.5
45°	4916.6	4867.4	4777.3	4334.8	3799.5	3412.5	3375.1	3128.4	3116.6	3116.6	3287.8
47.5°	5200.6	5189.8	5094.1	4755.5	4224.6	3756.6	3692.0	3417.0	3448.9	3498.1	3731.2
50°	5515.7	5485.7	5383.7	5169.7	4724.5	4150.8	4098.1	3771.2	3890.5	4025.3	4372.1
52.5°	5805.2	5821.6	5707.8	5601.3	5289.0	4590.7	4497.8	4189.2	4446.8	4669.9	5123.3
55°	6103.0	6103.9	6072.0	6057.4	5880.8	5076.8	4974.8	4691.7	5101.4	5378.2	5999.1
57.5°	6382.5	6384.3	6431.7	6560.0	6567.3	5637.7	5522.1	5309.0	5828.9	6111.2	6902.4
60°	6632.0	6644.7	6774.0	7074.4	7171.0	6280.5	6171.2	6038.3	6581.0	6865.0	7852.0
62.5°	6715.7	6762.1	7049.8	7476.9	7767.3	7069.0	6961.6	6882.4	7371.3	7635.3	8646.0
65°	6573.6	6680.2	7236.5	7809.2	8381.0	8005.9	7899.4	7812.9	8192.5	8441.1	9297.9
67.5°	6224.9	6362.5	7225.6	8157.9	9125.8	9133.1	9033.8	8830.8	9073.0	9168.5	9509.9
70°	5306.3	5512.0	6589.1	8288.2	9980.7	10674.5	10578.9	10056.3	9951.6	9489.0	8912.7
72.5°	3418.9	3695.6	4851.9	7216.5	10171.0	12124.9	12119.4	11162.6	10229.3	8866.2	7148.2
75°	1247.3	1416.8	2254.4	4529.7	8537.6	12051.1	12086.7	10973.1	9338.0	6848.6	4453.2
77.5°	454.3	497.1	735.6	1740.9	5250.8	9669.3	9743.0	8772.5	6646.5	3437.0	1764.5
80°	238.5	262.2	376.9	675.6	2249.8	5742.5	5858.1	5213.5	3123.9	1035.2	529.0
82.5°	132.0	143.0	211.3	367.0	1013.4	2455.6	2524.8	2059.5	1098.9	438.8	218.5
85°	71.0	75.5	99.2	200.3	495.3	851.3	870.4	615.5	438.0	257.7	105.6
87.5°	20.9	25.5	32.8	63.8	193.9	191.2	195.8	122.0	173.0	130.2	34.6
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: P964053

CATALOG NUMBER: NAV-SB3B-735-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1751.7	1749.1	1739.0	1734.5	1729.0	1728.0	1732.7	1733.6	1734.5	1735.4	1739.0
5°	1768.1	1759.0	1750.0	1744.4	1746.3	1747.2	1756.3	1762.7	1767.2	1770.9	1772.7
7.5°	1800.0	1792.7	1777.2	1776.3	1779.1	1787.3	1799.1	1813.6	1821.8	1828.3	1830.0
10°	1847.4	1833.7	1815.5	1818.2	1823.7	1835.6	1860.1	1872.0	1885.6	1897.5	1894.7
12.5°	1895.6	1883.7	1862.8	1864.7	1873.8	1894.7	1918.4	1932.9	1942.1	1951.2	1954.8
15°	1958.5	1937.6	1914.7	1914.7	1931.1	1953.9	1964.8	1976.6	1982.1	1992.1	1995.8
17.5°	2023.0	1995.8	1965.7	1963.9	1984.0	1994.9	2001.2	2003.1	2004.9	2015.8	2019.5
20°	2087.7	2057.7	2014.9	2011.3	2015.8	2014.0	2013.1	2011.3	2014.0	2027.7	2033.1
22.5°	2151.5	2116.8	2057.7	2041.3	2028.6	2011.3	2010.3	2009.4	2011.3	2024.9	2034.0
25°	2226.1	2184.3	2105.0	2055.8	2013.1	1989.4	1992.1	1993.0	1994.9	2005.8	2020.4
27.5°	2307.2	2260.7	2148.7	2051.3	1973.9	1957.5	1953.0	1955.7	1962.1	1979.4	1996.7
30°	2388.1	2333.6	2188.8	2033.1	1924.7	1902.0	1887.4	1893.8	1913.9	1931.1	1950.3
32.5°	2461.9	2407.3	2220.7	1993.0	1861.9	1826.4	1807.3	1815.5	1835.6	1841.9	1864.7
35°	2548.5	2486.5	2234.3	1929.4	1793.6	1739.0	1713.5	1701.7	1711.7	1705.3	1725.4
37.5°	2644.9	2580.3	2232.6	1845.5	1713.5	1650.7	1615.2	1570.6	1549.6	1527.8	1541.5
40°	2787.9	2695.0	2210.6	1744.4	1614.3	1557.0	1493.2	1417.6	1370.3	1327.5	1330.2
42.5°	2982.7	2854.3	2170.5	1633.4	1502.3	1448.5	1362.1	1273.8	1199.1	1128.1	1121.8
45°	3273.2	3062.9	2120.5	1515.1	1381.2	1328.4	1234.6	1135.4	1050.7	959.6	948.7
47.5°	3692.0	3343.2	2073.2	1380.3	1253.8	1205.5	1120.8	1028.9	928.6	840.4	830.4
50°	4267.4	3745.8	2029.5	1249.2	1128.1	1091.6	1024.3	930.5	829.4	758.4	753.9
52.5°	4999.4	4292.9	2011.3	1122.6	1010.6	997.0	943.3	855.9	760.2	700.2	695.6
55°	5839.8	4947.6	2011.3	1001.5	907.7	912.4	874.9	794.0	711.0	657.3	651.9
57.5°	6697.6	5610.4	1974.9	889.5	820.3	839.5	815.8	744.8	670.1	614.6	605.5
60°	7487.8	6165.8	1827.4	787.6	742.9	773.0	757.5	696.5	605.5	559.0	551.8
62.5°	8095.1	6479.0	1543.2	706.5	679.3	713.8	705.6	632.8	593.7	574.5	568.2
65°	8399.2	6428.0	1180.0	634.6	625.5	679.3	661.9	659.2	628.2	606.4	599.1
67.5°	8212.5	5989.2	855.9	581.8	594.5	647.4	713.8	724.8	667.4	624.6	617.4
70°	7394.0	5195.2	637.3	531.8	555.3	648.3	814.0	758.4	654.7	604.5	596.3
72.5°	5625.0	3874.1	494.4	478.9	504.4	652.8	858.5	742.9	618.2	668.3	662.9
75°	3216.8	2126.9	397.0	414.3	440.6	610.0	835.8	702.8	590.0	613.7	613.7
77.5°	1226.4	817.6	327.8	350.5	354.1	532.6	799.4	700.2	561.8	548.1	499.9
80°	425.2	319.6	271.3	278.6	274.1	473.4	766.6	609.2	459.8	411.5	397.9
82.5°	173.9	159.3	214.8	205.8	194.9	367.9	619.1	498.0	376.1	332.3	328.7
85°	75.5	101.1	142.1	124.7	112.9	254.9	496.2	421.6	317.8	274.1	273.2
87.5°	15.5	38.2	60.1	56.5	58.2	170.3	352.4	299.5	224.9	168.4	132.0
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)