

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: P964051

Luminaire Tested: **NAV-SB3B-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964051
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17116.5 lumens
Efficiency: N/A
Efficacy: 156.7 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

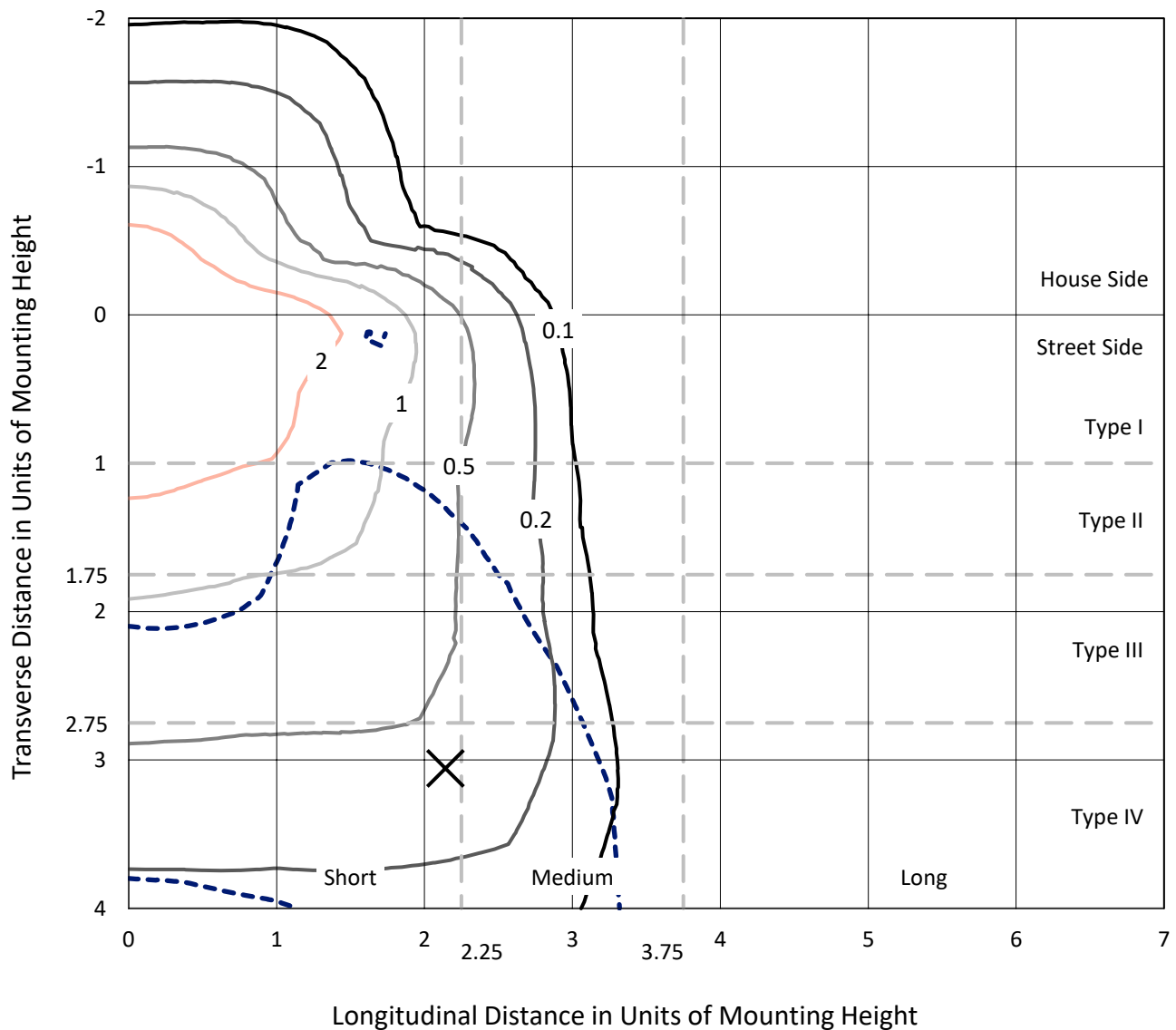


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

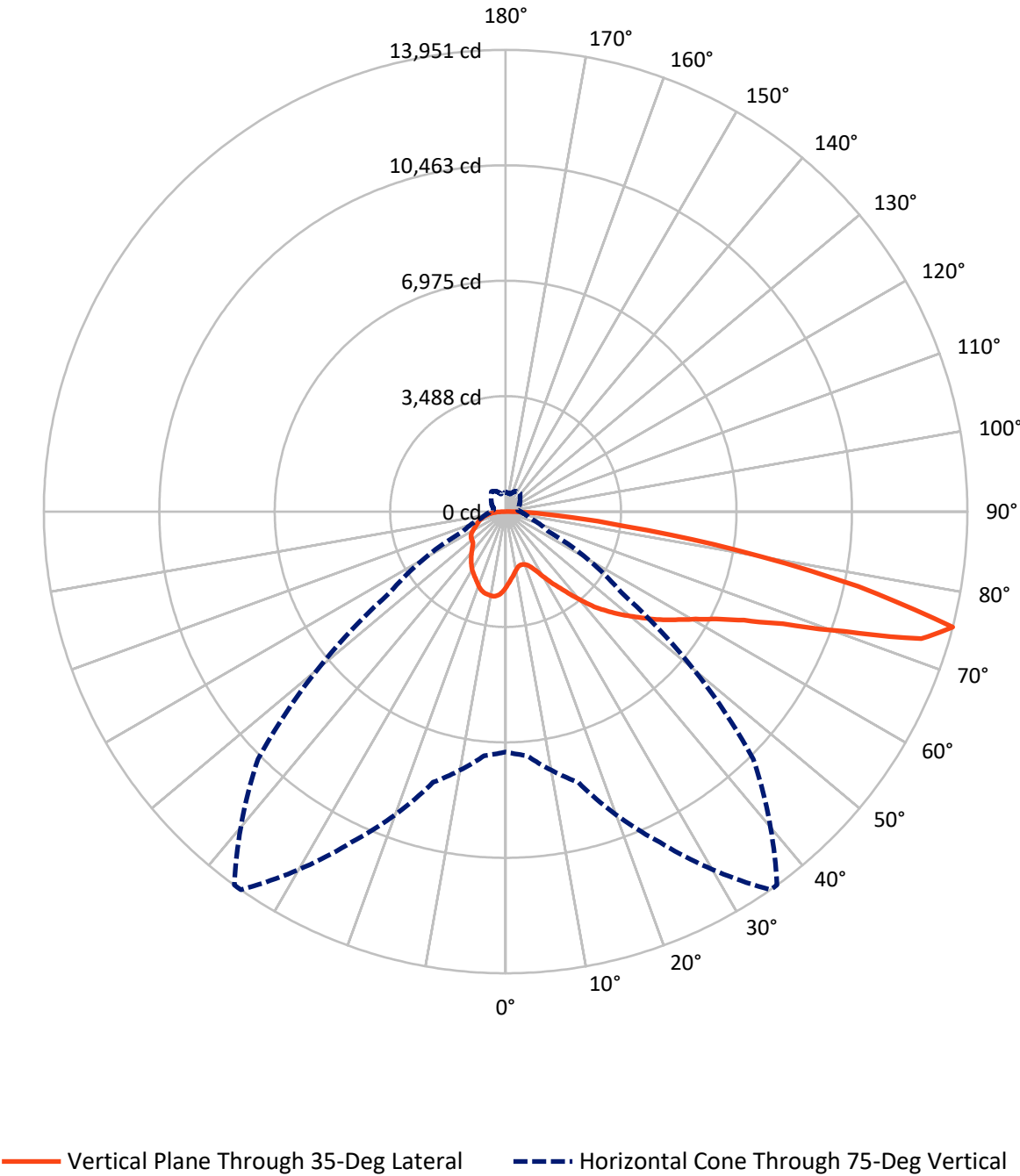


Based on 25 foot mounting height. Maximum calculated value = 4 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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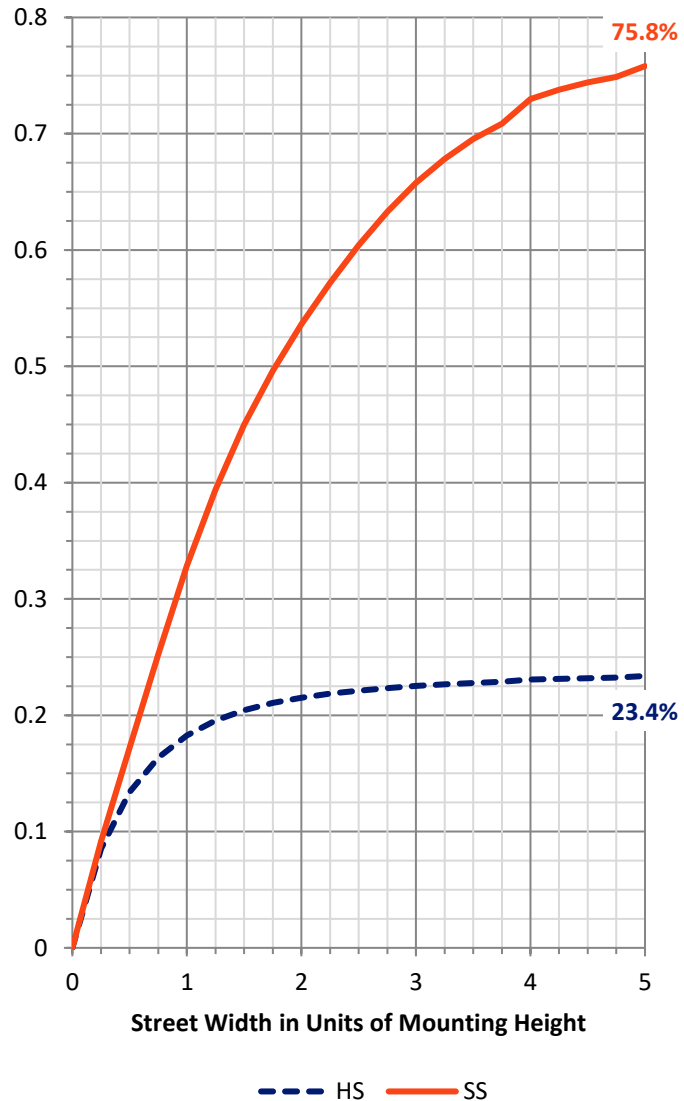
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4073.3	0.0	4073.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	13043.2	0.0	13043.2
	% Fixture	76.2	0.0	76.2
Total	Lumens	17116.5	0.0	17116.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	1.3
10°-20°	622.9	3.6
20°-30°	1046.0	6.1
30°-40°	1625.7	9.5
40°-50°	2412.9	14.1
50°-60°	3331.2	19.5
60°-70°	4041.5	23.6
70°-80°	3340.0	19.5
80°-90°	480.4	2.8
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°	17116.5	100.0
0°-180°	17116.5	100.0

Coefficient of Utilization



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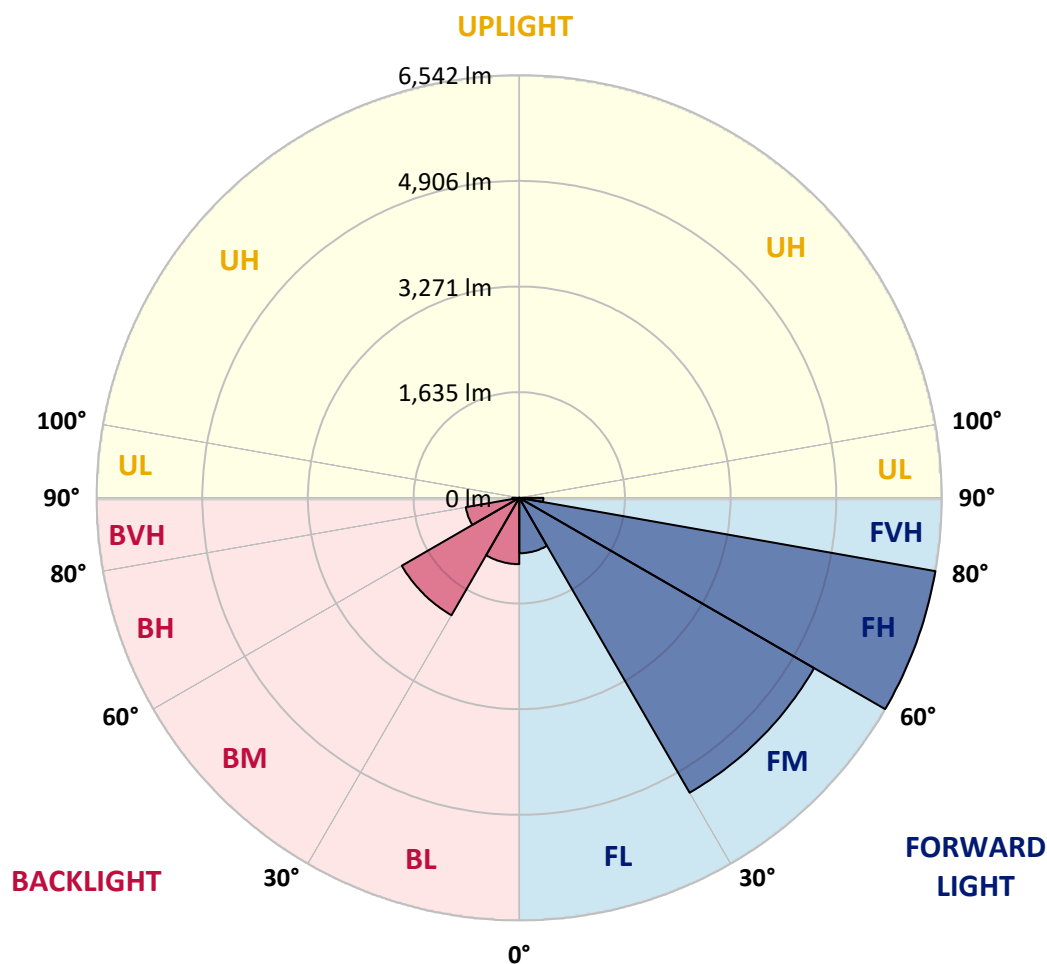
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	858.4	5.0			
FM	(30°-60°)	5270.9	30.8			
FH	(60°-80°)	6541.7	38.2			G3/7500
FVH	(80°-90°)	372.2	2.2			G3/500
BL	(0°-30°)	1026.5	6.0	B3/2500		
BM	(30°-60°)	2098.8	12.3	B2/2500		
BH	(60°-80°)	839.8	4.9	B2/1000		G2/1000
BVH	(80°-90°)	108.2	0.6			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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9
2.5°	2103.2	2116.2	2121.8	2119.0	2132.8	2131.0	2150.4	2174.4	2207.7	2240.1	2287.4
5°	1941.2	1955.2	1967.2	1978.4	2005.1	2013.5	2044.1	2090.3	2151.4	2213.4	2291.1
7.5°	1790.5	1802.5	1821.0	1841.4	1886.7	1895.0	1946.0	2018.1	2103.2	2193.9	2301.2
10°	1667.4	1679.5	1698.8	1722.0	1778.5	1788.6	1853.4	1949.7	2060.7	2175.4	2312.3
12.5°	1614.7	1618.4	1629.4	1652.6	1701.6	1708.2	1779.4	1889.5	2019.0	2161.5	2329.0
15°	1611.9	1619.3	1620.2	1632.2	1673.0	1675.8	1741.5	1850.6	1993.1	2158.8	2354.0
17.5°	1639.7	1645.2	1636.8	1644.3	1678.5	1683.2	1734.9	1832.1	1984.8	2170.7	2396.6
20°	1713.7	1718.3	1693.3	1683.2	1708.2	1711.9	1762.7	1844.2	1993.1	2195.8	2454.9
22.5°	1870.9	1873.7	1812.7	1771.0	1772.9	1774.8	1819.2	1893.2	2025.5	2241.1	2528.9
25°	2116.2	2114.4	2017.2	1936.6	1890.4	1880.3	1909.9	1972.7	2080.1	2301.2	2624.2
27.5°	2403.0	2389.2	2292.0	2171.7	2070.8	2056.0	2049.6	2076.3	2157.8	2380.9	2740.7
30°	2726.9	2713.9	2609.3	2452.1	2312.3	2288.3	2227.2	2213.4	2273.4	2489.1	2902.7
32.5°	3082.2	3073.9	2948.9	2758.4	2571.4	2543.6	2440.9	2403.9	2451.2	2652.9	3128.5
35°	3380.1	3372.8	3269.1	3073.0	2844.4	2810.1	2705.6	2664.0	2688.1	2862.9	3423.6
37.5°	3649.4	3645.7	3556.9	3402.4	3166.4	3124.8	3007.2	2993.4	2988.8	3139.6	3781.7
40°	3899.2	3890.0	3797.4	3716.0	3541.2	3503.2	3399.6	3387.5	3352.4	3480.1	4187.0
42.5°	4176.0	4151.9	4017.7	3979.8	3932.5	3901.2	3839.1	3841.0	3763.2	3864.0	4616.4
45°	4401.7	4387.8	4250.0	4227.7	4278.7	4265.6	4319.3	4333.2	4182.4	4266.6	5062.4
47.5°	4644.2	4631.2	4514.6	4498.8	4636.7	4640.4	4830.1	4834.7	4591.4	4684.9	5509.3
50°	4943.0	4924.5	4808.8	4828.3	4982.8	4996.7	5343.6	5312.2	4968.0	5109.5	5952.5
52.5°	5140.1	5151.2	5126.2	5157.7	5368.6	5381.6	5848.9	5768.4	5340.9	5528.7	6387.4
55°	5285.4	5307.6	5385.2	5457.5	5775.8	5788.7	6325.4	6202.4	5649.9	5917.3	6796.4
57.5°	5472.3	5440.8	5586.0	5726.8	6162.6	6196.8	6789.0	6620.6	5923.8	6252.3	7076.8
60°	5740.6	5718.4	5831.3	6039.5	6595.6	6650.2	7279.4	6997.2	6124.6	6517.9	7131.3
62.5°	6284.7	6229.1	6246.8	6430.8	7141.5	7213.7	7832.7	7325.7	6224.5	6621.5	6839.0
65°	7098.0	7002.7	6913.9	7041.6	7910.4	7981.7	8457.3	7583.9	6187.5	6420.7	6062.7
67.5°	8122.4	8028.0	7918.8	8039.1	9043.1	9099.4	9228.1	7729.1	5896.1	5647.1	4690.4
70°	8967.2	8932.1	9062.4	9557.5	10852.0	10853.8	10216.4	7608.8	5097.5	4003.9	2713.9
72.5°	8855.2	8834.0	9521.4	11051.9	13132.0	13082.9	11151.8	6698.3	3433.9	1806.2	1016.9
75°	7264.6	7402.4	8467.5	11025.1	13950.9	13944.4	10579.0	4258.3	1420.3	748.6	525.6
77.5°	3895.5	4113.9	5497.3	8139.9	10890.9	11054.6	7437.6	1489.7	609.8	479.3	363.7
80°	1270.5	1461.0	2191.1	4144.5	7076.8	7046.3	3187.6	584.8	417.3	339.6	251.6
82.5°	539.5	561.7	979.0	1957.0	3631.9	3575.4	1015.1	335.9	293.4	232.3	155.5
85°	210.9	236.0	432.1	905.0	1573.1	1538.8	366.4	166.6	187.9	151.7	92.6
87.5°	69.4	84.2	154.6	310.0	489.4	471.9	89.8	57.4	81.4	69.4	33.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9	2280.9
2.5°	2300.3	2315.2	2332.7	2358.6	2380.9	2399.3	2418.8	2430.8	2435.4	2449.3	2448.4
5°	2317.0	2349.4	2392.9	2435.4	2477.0	2502.0	2524.3	2535.3	2545.5	2553.0	2554.8
7.5°	2344.7	2386.4	2454.9	2510.3	2545.5	2565.9	2580.6	2577.0	2580.6	2582.5	2585.4
10°	2368.8	2427.1	2508.5	2561.3	2588.1	2589.0	2585.4	2572.3	2565.9	2566.8	2568.6
12.5°	2397.5	2462.3	2550.2	2594.6	2602.0	2581.6	2565.9	2543.6	2535.3	2531.6	2529.8
15°	2436.3	2510.3	2595.5	2612.1	2593.7	2567.7	2540.9	2504.8	2486.3	2471.5	2476.1
17.5°	2483.6	2565.0	2630.7	2618.7	2578.8	2536.3	2492.8	2438.2	2400.2	2384.6	2385.5
20°	2549.2	2622.4	2657.5	2604.7	2544.6	2479.8	2405.8	2339.2	2304.0	2288.3	2286.5
22.5°	2628.8	2699.1	2683.3	2580.6	2495.6	2391.9	2299.4	2250.4	2232.8	2221.7	2223.5
25°	2724.1	2784.2	2701.9	2545.5	2415.1	2275.3	2204.1	2188.4	2180.1	2171.7	2171.7
27.5°	2848.1	2880.5	2715.7	2493.7	2289.2	2151.4	2125.4	2128.2	2125.4	2111.6	2114.4
30°	3011.9	3005.4	2728.8	2409.5	2144.9	2039.3	2041.2	2053.3	2055.1	2045.9	2050.5
32.5°	3227.5	3161.8	2735.2	2300.3	2007.0	1941.2	1943.2	1956.1	1965.3	1949.7	1957.0
35°	3488.4	3344.1	2725.1	2163.4	1900.6	1847.9	1833.9	1837.6	1840.5	1825.6	1835.8
37.5°	3792.8	3548.6	2679.7	2011.7	1812.7	1756.2	1726.6	1701.6	1686.8	1673.0	1682.2
40°	4126.9	3771.6	2596.4	1863.6	1714.6	1659.1	1614.7	1567.4	1517.5	1499.0	1507.4
42.5°	4476.7	4001.0	2495.6	1722.0	1601.7	1556.4	1509.2	1440.7	1365.7	1327.8	1332.4
45°	4839.3	4236.0	2396.6	1582.3	1486.0	1466.6	1412.0	1329.6	1248.2	1200.2	1196.4
47.5°	5194.7	4458.1	2251.3	1441.7	1377.8	1399.0	1356.5	1280.6	1189.9	1114.1	1105.8
50°	5534.3	4666.3	2013.5	1299.1	1289.9	1378.7	1338.0	1228.8	1125.1	1028.0	1019.7
52.5°	5871.1	4834.7	1709.1	1169.6	1242.7	1373.2	1313.9	1193.6	1066.9	965.1	954.0
55°	6157.0	4921.7	1415.7	1058.5	1174.2	1325.9	1285.2	1152.0	984.5	876.3	867.0
57.5°	6319.8	4851.4	1171.5	949.4	1079.8	1248.2	1236.3	1063.1	886.4	803.2	792.0
60°	6249.5	4566.4	971.6	854.0	990.0	1164.0	1151.1	975.3	811.5	732.9	721.7
62.5°	5861.9	4023.2	813.3	770.8	908.7	1078.0	1066.0	907.7	754.1	678.2	666.2
65°	5080.8	3272.8	690.2	701.4	826.3	974.4	991.9	851.3	708.8	634.8	622.7
67.5°	3875.2	2370.6	594.1	641.2	745.8	872.6	923.4	810.6	670.9	600.5	589.4
70°	2208.7	1346.3	512.6	582.9	674.6	778.2	870.7	778.2	630.2	571.8	564.5
72.5°	837.4	618.1	443.2	524.7	606.1	698.6	812.4	727.3	582.9	539.5	532.1
75°	446.9	376.6	372.9	456.2	527.5	620.8	739.3	677.3	547.8	570.0	588.5
77.5°	304.4	266.5	311.8	390.5	441.4	534.8	661.6	601.5	474.7	472.8	435.8
80°	210.9	188.8	253.6	314.6	341.4	449.7	577.4	516.3	386.7	360.9	345.1
82.5°	126.8	123.1	189.7	235.0	241.5	347.0	478.4	433.1	316.4	275.7	277.6
85°	69.4	73.1	121.3	137.9	140.6	242.4	374.7	335.0	243.3	204.5	206.3
87.5°	19.5	25.0	44.4	54.6	67.5	125.9	223.0	199.0	122.2	85.2	85.2
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)