

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: P963691

Luminaire Tested: **NAV-SB3A-835-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963691
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12506 lumens
Efficiency: N/A
Efficacy: 147.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 84.7
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

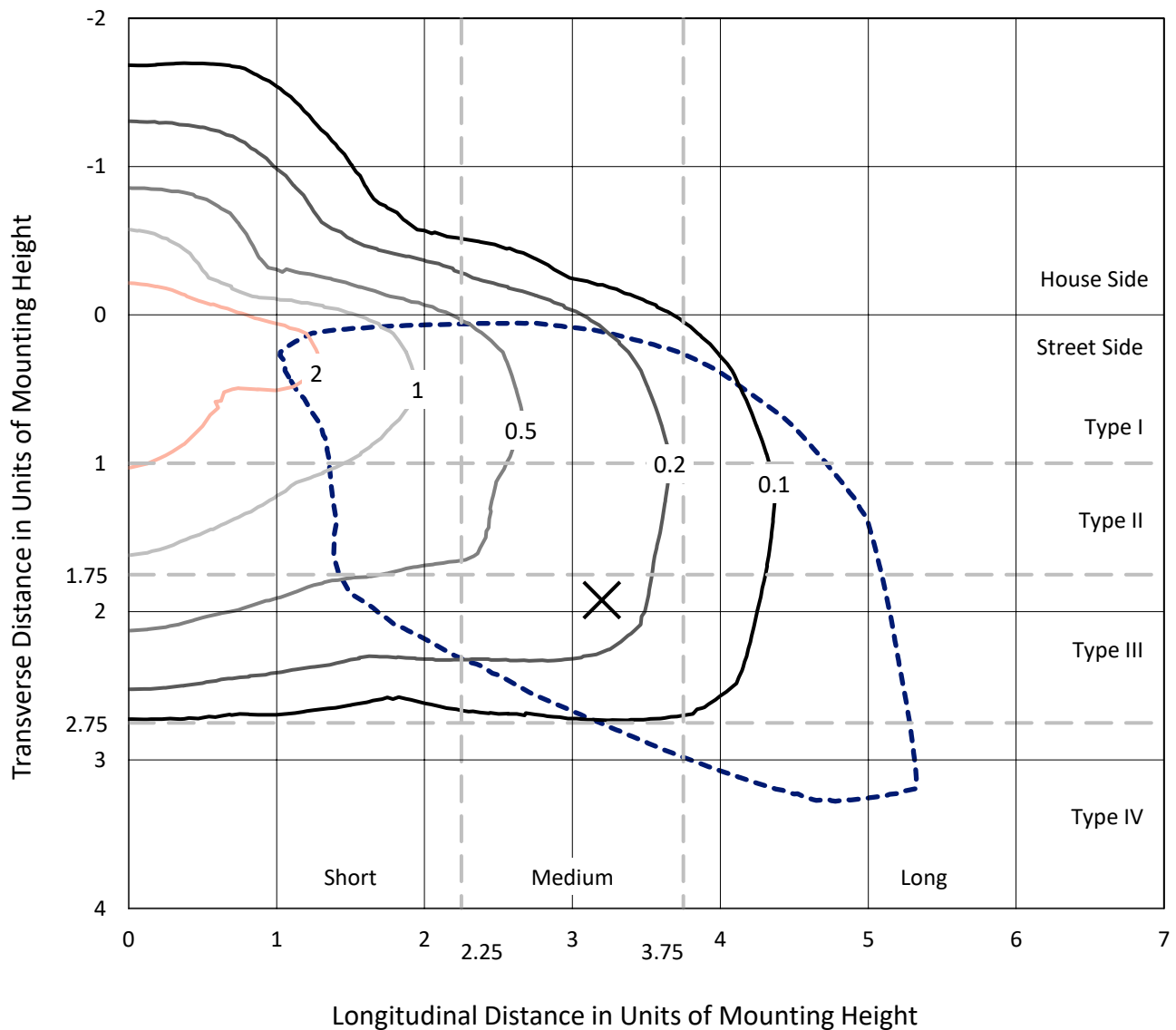


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Iso-Footcandle Lines of Horizontal Illumination

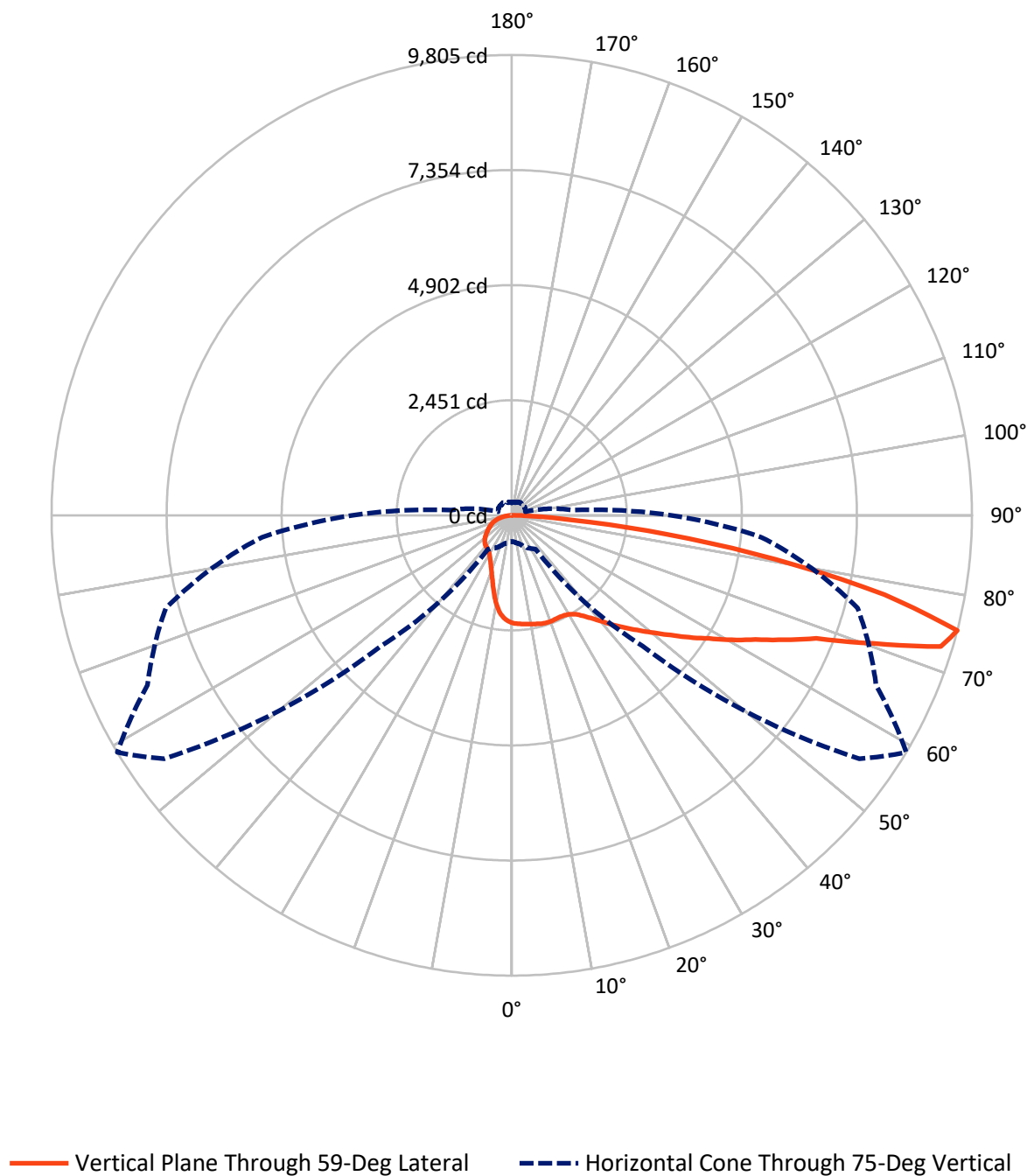
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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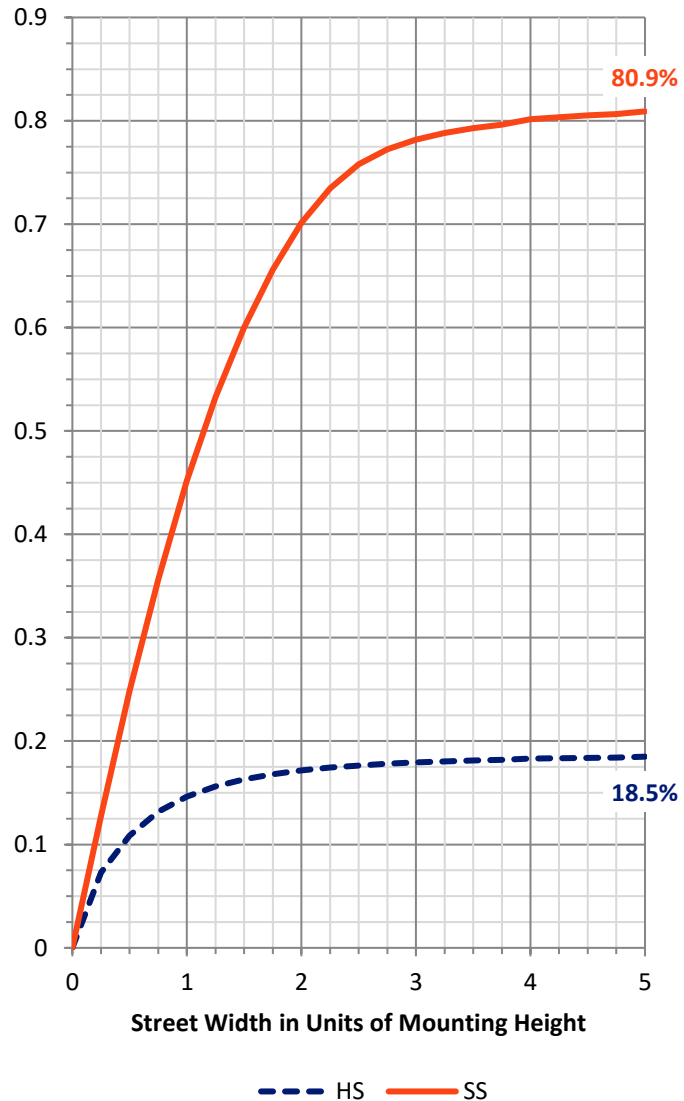
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2345.6	0.0	2345.6
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	10160.4	0.0	10160.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	12506.0	0.0	12506.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.8	1.6
10°-20°	526.1	4.2
20°-30°	799.1	6.4
30°-40°	1187.8	9.5
40°-50°	1766.5	14.1
50°-60°	2397.9	19.2
60°-70°	2927.4	23.4
70°-80°	2297.4	18.4
80°-90°	398.0	3.2
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°	12506.0	100.0
0°-180°	12506.0	100.0

Coefficient of Utilization



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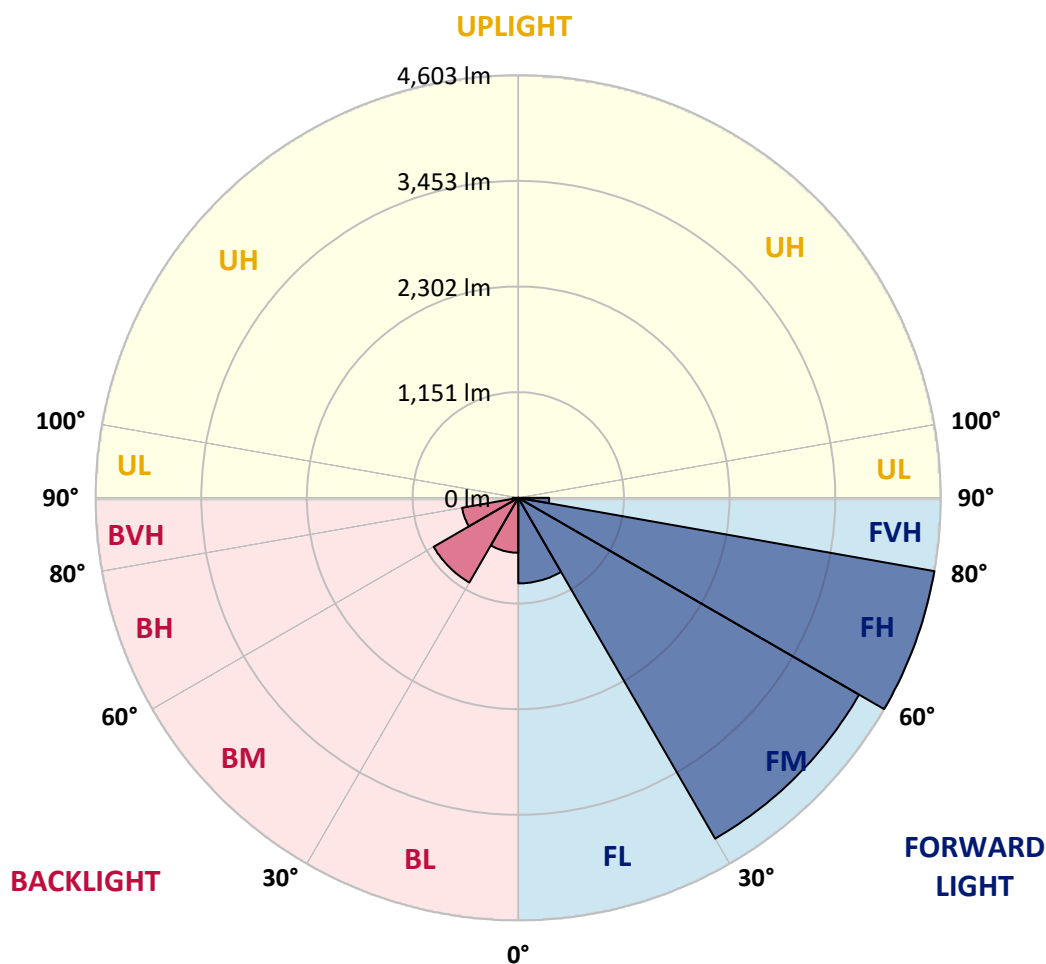
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	932.5	7.5			
FM	(30°-60°)	4287.6	34.3			
FH	(60°-80°)	4603.3	36.8			G2/5000
FVH	(80°-90°)	337.0	2.7			G3/500
BL	(0°-30°)	598.6	4.8	B2/1000		
BM	(30°-60°)	1064.7	8.5	B2/2500		
BH	(60°-80°)	621.4	5.0	B2/1000		G2/1000
BVH	(80°-90°)	60.9	0.5			G1/100
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5
2.5°	2315.0	2306.9	2315.0	2311.6	2310.2	2307.6	2308.2	2312.9	2310.2	2313.6	2302.1
5°	2299.5	2294.8	2302.9	2300.8	2309.5	2311.0	2319.7	2325.0	2328.4	2329.1	2320.4
7.5°	2274.0	2269.2	2280.6	2290.1	2308.9	2314.2	2332.5	2341.2	2345.9	2354.0	2341.2
10°	2180.4	2178.4	2206.6	2242.3	2286.7	2314.2	2341.9	2356.7	2364.1	2385.6	2370.8
12.5°	2014.9	2017.6	2054.6	2123.2	2212.1	2300.8	2352.7	2374.2	2385.6	2412.5	2405.8
15°	1856.8	1856.2	1896.6	1969.8	2094.3	2241.7	2358.0	2395.0	2414.5	2454.3	2448.8
17.5°	1765.4	1762.6	1790.9	1846.7	1962.5	2150.9	2344.6	2406.5	2448.2	2497.9	2493.2
20°	1748.5	1743.1	1757.9	1785.6	1867.5	2051.2	2309.5	2406.5	2475.1	2539.6	2537.0
22.5°	1809.7	1800.9	1794.9	1791.6	1827.9	1969.1	2269.9	2398.4	2514.7	2599.5	2594.8
25°	1932.8	1919.4	1888.5	1858.1	1847.4	1932.1	2234.9	2396.3	2574.0	2680.3	2662.7
27.5°	2132.0	2115.2	2052.6	1979.9	1914.7	1951.0	2219.4	2408.4	2639.3	2765.8	2730.7
30°	2378.9	2360.7	2282.0	2170.3	2053.3	2021.0	2238.9	2444.1	2722.6	2879.4	2810.8
32.5°	2600.2	2580.0	2512.8	2399.0	2241.0	2142.0	2300.8	2512.1	2853.8	3037.5	2931.2
35°	2796.6	2773.1	2712.6	2607.6	2471.1	2312.3	2412.5	2632.5	3040.1	3294.5	3094.7
37.5°	2989.1	2961.5	2895.5	2784.5	2689.0	2539.0	2566.6	2787.3	3287.8	3606.7	3311.4
40°	3204.4	3164.7	3084.6	2975.0	2882.1	2804.7	2769.0	2976.9	3539.4	3955.2	3581.8
42.5°	3412.9	3375.2	3279.7	3186.2	3069.8	3047.6	3003.9	3198.9	3814.5	4337.9	3856.3
45°	3637.6	3592.5	3476.8	3358.4	3285.1	3209.1	3231.2	3420.9	4084.3	4728.1	4144.2
47.5°	3848.2	3797.7	3661.2	3529.3	3488.9	3345.0	3439.8	3665.2	4364.9	5123.8	4429.4
50°	3961.8	3912.1	3798.4	3679.3	3647.7	3512.5	3665.9	3933.6	4658.8	5518.0	4703.2
52.5°	4056.7	4002.9	3854.2	3788.3	3778.9	3694.8	3944.4	4240.4	4952.8	5866.5	4967.7
55°	4157.6	4097.7	3908.0	3848.9	3891.9	3899.3	4274.7	4588.2	5263.7	6206.2	5217.2
57.5°	4274.0	4198.0	3959.9	3900.0	4002.2	4138.8	4654.1	4948.8	5569.1	6521.0	5439.3
60°	4383.7	4307.0	4059.4	3981.4	4121.3	4416.6	5089.4	5385.5	5914.9	6801.6	5649.2
62.5°	4405.2	4342.0	4138.8	4138.1	4282.8	4740.9	5604.8	5826.1	6216.9	7078.8	5837.5
65°	4032.6	3992.8	3872.4	4132.1	4514.2	5207.8	6178.6	6389.8	6601.1	7321.0	6003.0
67.5°	3069.2	3074.5	3065.8	3567.0	4327.1	5878.6	7009.5	6993.4	7075.4	7592.8	6193.5
70°	1403.3	1435.0	1640.8	2462.3	3466.8	5956.0	8383.3	8174.1	7670.8	7944.6	6358.3
72.5°	758.2	782.4	866.5	1192.8	2084.2	5295.3	9409.9	9558.5	8462.6	8181.4	6177.3
75°	556.4	569.8	628.3	758.2	875.2	3935.6	9041.8	9804.7	8561.5	7629.1	5334.3
77.5°	416.5	422.5	470.3	600.8	448.0	2074.8	7224.7	8120.2	7329.1	6268.1	3940.3
80°	302.1	308.8	344.5	450.8	314.2	758.9	4960.9	5699.6	5019.4	3995.6	1963.8
82.5°	208.6	211.3	226.7	306.8	219.4	294.7	2814.9	3342.2	2802.0	1402.0	530.1
85°	125.8	129.1	135.9	179.0	124.4	139.9	1215.0	1256.8	837.6	335.1	164.8
87.5°	51.8	55.1	60.6	75.3	49.1	39.1	200.5	251.6	156.7	98.2	51.1
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°	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5
2.5°	2298.8	2294.2	2281.3	2263.8	2247.7	2227.5	2218.7	2211.3	2204.7	2191.9	2185.8
5°	2312.9	2300.2	2265.9	2221.5	2171.0	2115.8	2062.0	2025.0	1993.4	1969.8	1950.4
7.5°	2334.4	2310.2	2247.7	2156.9	2041.2	1922.7	1815.8	1739.7	1682.5	1661.7	1625.3
10°	2356.7	2327.8	2218.7	2058.6	1858.8	1676.5	1534.5	1456.5	1410.8	1395.9	1373.1
12.5°	2382.9	2340.5	2173.7	1922.1	1655.0	1455.2	1331.4	1285.7	1262.1	1254.0	1256.0
15°	2421.3	2351.2	2105.8	1751.2	1460.5	1293.8	1213.7	1182.0	1169.9	1169.2	1172.0
17.5°	2450.2	2353.3	2000.1	1568.2	1311.2	1196.2	1130.3	1118.2	1126.2	1138.3	1143.0
20°	2482.4	2335.2	1861.5	1401.4	1206.2	1110.7	1083.1	1091.2	1110.7	1128.2	1134.3
22.5°	2505.3	2302.1	1694.0	1271.5	1115.4	1061.6	1060.3	1077.1	1087.8	1096.6	1101.3
25°	2525.5	2246.4	1516.4	1162.6	1040.8	1032.0	1046.8	1041.4	1034.0	1041.4	1046.1
27.5°	2540.4	2158.2	1357.6	1067.0	988.3	1011.9	1003.1	991.0	990.3	994.4	1001.0
30°	2535.6	2040.5	1227.1	976.2	951.3	974.2	953.2	951.3	949.3	951.3	958.7
32.5°	2535.6	1906.6	1126.9	913.6	927.7	919.0	917.0	912.2	904.2	903.5	912.2
35°	2549.8	1772.7	1040.8	880.0	908.3	887.3	888.7	877.3	860.5	852.4	860.5
37.5°	2578.7	1665.1	955.3	863.9	873.9	873.2	867.9	848.4	818.8	793.1	802.0
40°	2648.7	1633.4	896.8	856.4	857.7	865.8	851.7	814.1	746.7	705.1	710.4
42.5°	2758.3	1686.6	884.0	838.2	847.0	855.1	827.5	740.0	692.3	667.4	667.4
45°	2897.6	1779.4	911.6	812.0	821.4	835.6	753.5	711.8	690.2	691.0	694.3
47.5°	3073.9	1877.0	962.7	789.1	784.4	792.5	704.4	678.9	649.2	656.6	675.5
50°	3277.6	1975.9	1011.2	758.2	743.4	717.2	672.8	648.5	610.9	593.4	598.1
52.5°	3498.3	2071.4	1030.6	720.6	698.9	668.7	651.2	621.7	575.8	546.9	546.3
55°	3707.5	2158.2	1009.1	675.5	654.6	631.1	628.3	610.2	561.1	520.7	520.7
57.5°	3905.4	2230.9	955.3	629.7	609.6	595.4	613.6	604.9	542.9	491.1	488.4
60°	4072.8	2280.6	877.3	583.3	569.2	561.8	589.4	586.6	517.3	459.5	457.5
62.5°	4206.1	2300.2	791.2	538.8	535.6	522.0	555.7	555.7	485.0	428.6	426.5
65°	4310.3	2281.3	703.7	495.2	501.8	481.6	514.7	510.7	450.8	401.0	398.3
67.5°	4402.6	2219.4	606.8	452.1	467.6	442.0	471.6	462.2	413.1	373.4	370.6
70°	4443.6	2075.4	496.5	409.1	427.8	403.0	428.6	411.0	370.6	343.8	338.4
72.5°	4113.9	1725.0	390.8	364.0	380.1	359.9	382.1	361.9	324.9	312.8	302.8
75°	3403.5	1294.4	300.7	314.9	327.0	311.5	326.3	311.5	277.9	286.6	261.7
77.5°	2471.7	873.9	230.1	263.0	268.4	260.3	273.2	256.4	226.0	224.1	213.9
80°	1229.2	512.0	180.3	207.9	205.8	200.5	215.2	207.3	181.6	192.4	190.3
82.5°	355.9	219.4	131.2	146.0	142.0	143.3	154.1	158.1	236.8	234.8	240.2
85°	111.7	86.1	78.7	81.4	77.4	79.3	90.8	180.3	166.9	97.6	105.6
87.5°	28.9	29.6	19.5	20.8	21.5	25.5	28.9	109.7	52.5	34.3	36.3
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)