

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: STREETWORKS

Report Number: P842754

Luminaire Tested: **ARCH4-90-730-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-90-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15645 lumens
Efficiency: N/A
Efficacy: 168.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 93.1
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

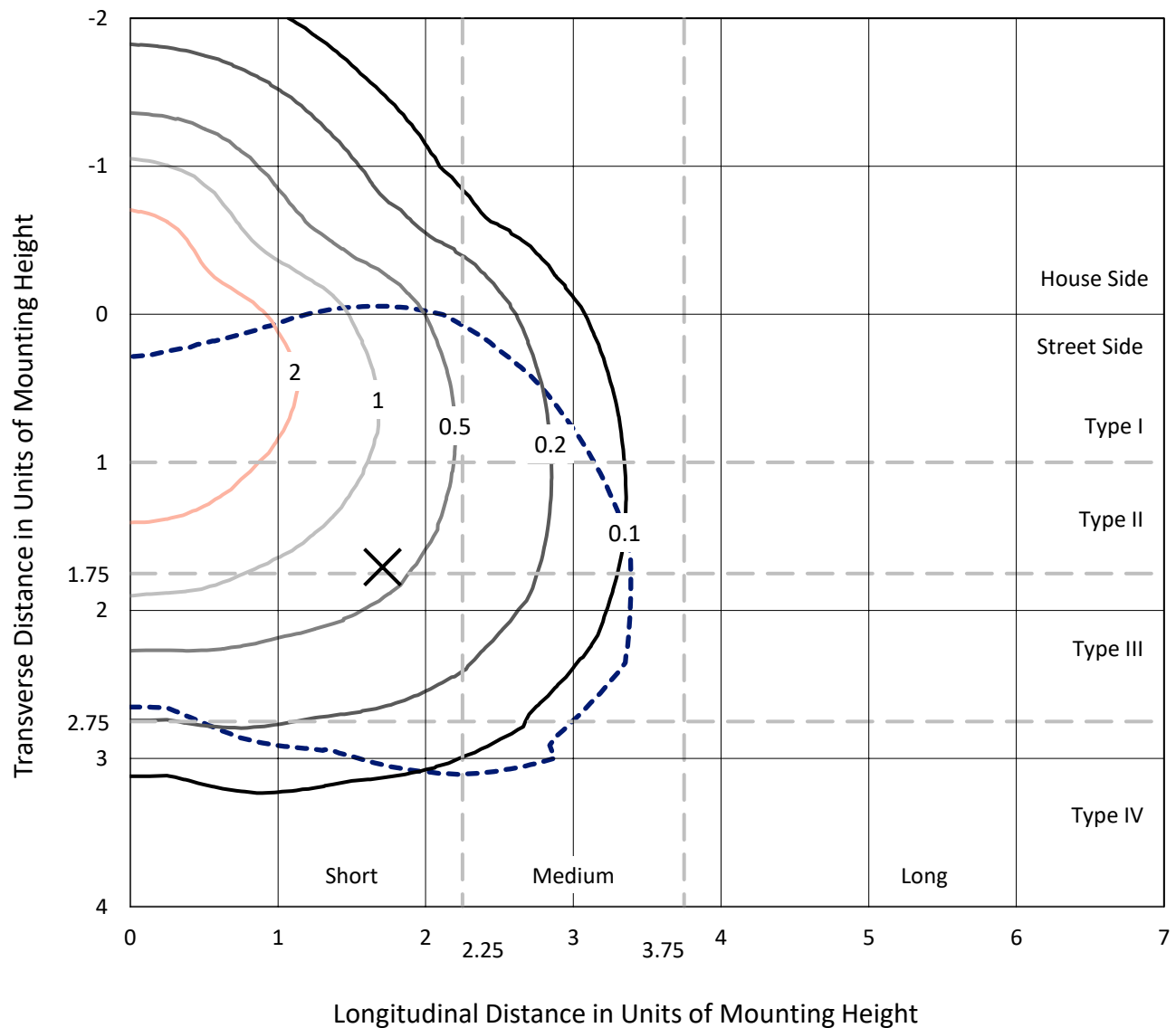


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Iso-Footcandle Lines of Horizontal Illumination

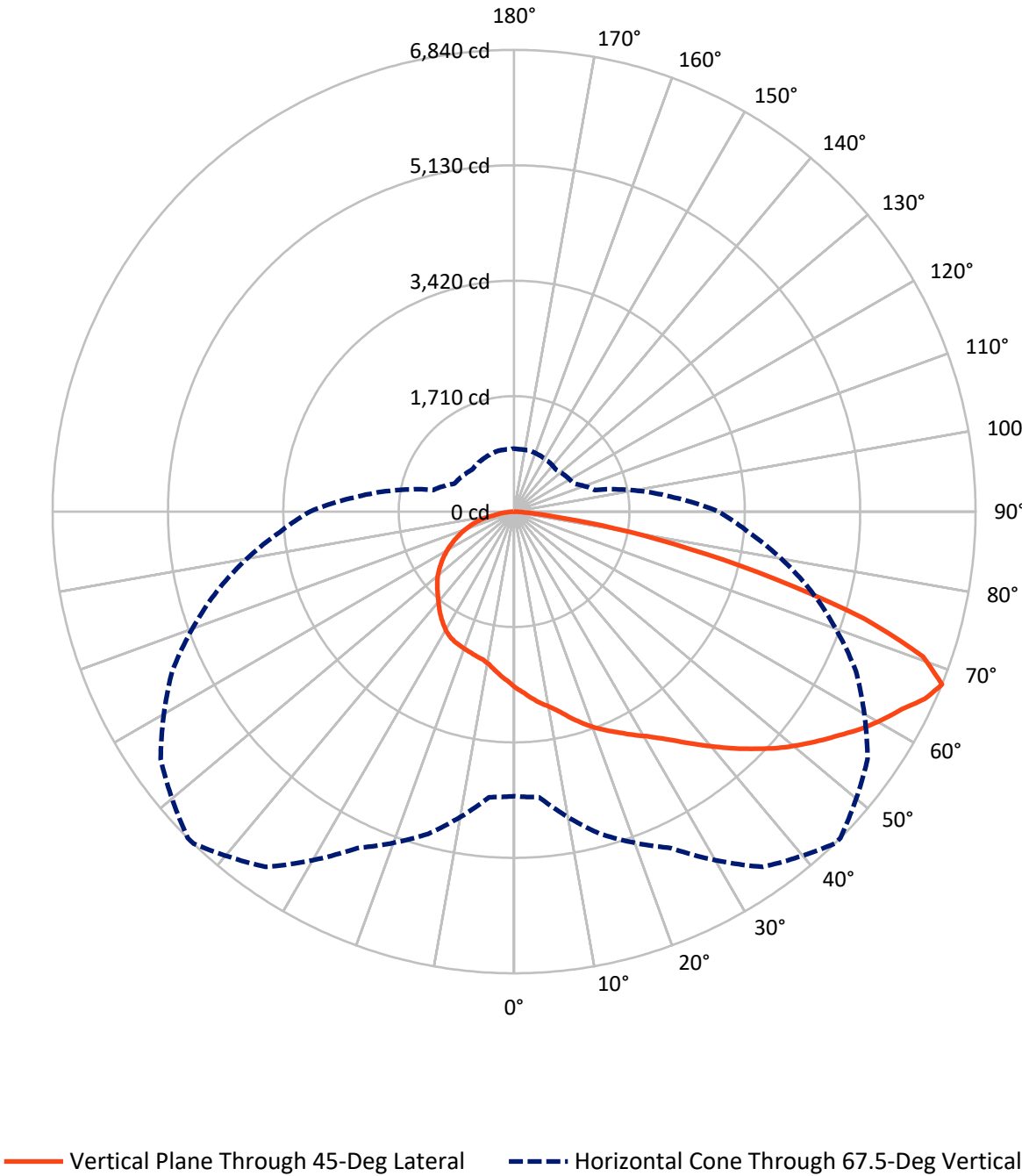
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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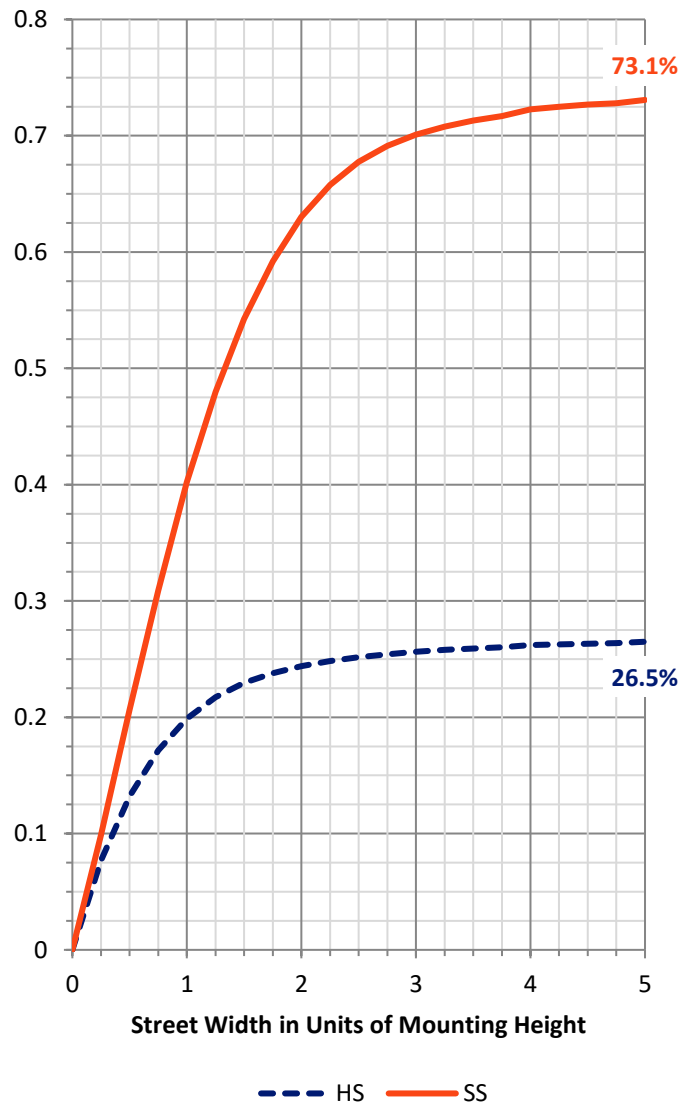
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4179.6	0.0	4179.6
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	11465.4	0.0	11465.4
	% Fixture	73.3	0.0	73.3
Total	Lumens	15645.0	0.0	15645.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.8	1.6
10°-20°	771.7	4.9
20°-30°	1332.1	8.5
30°-40°	1964.4	12.6
40°-50°	2661.4	17.0
50°-60°	3252.8	20.8
60°-70°	3354.9	21.4
70°-80°	1837.6	11.7
80°-90°	220.2	1.4
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°	15645.0	100.0
0°-180°	15645.0	100.0

Coefficient of Utilization



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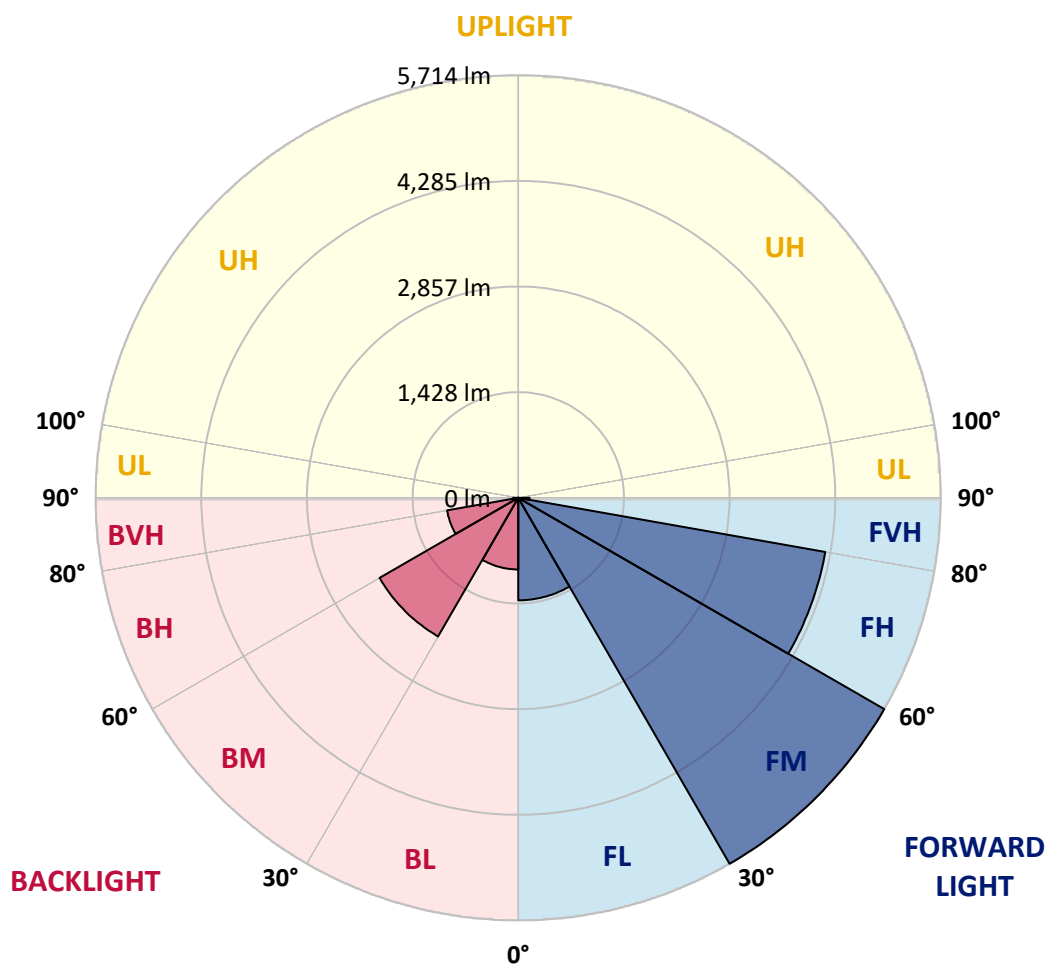
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1385.0	8.9			
FM	(30°-60°)	5713.7	36.5			
FH	(60°-80°)	4215.0	26.9			G2/5000
FVH	(80°-90°)	151.7	1.0			G2/225
BL	(0°-30°)	968.7	6.2	B2/1000		
BM	(30°-60°)	2165.0	13.8	B2/2500		
BH	(60°-80°)	977.4	6.2	B2/1000		G2/1000
BVH	(80°-90°)	68.5	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3
2.5°	2723.6	2721.2	2725.9	2709.3	2687.9	2685.5	2685.5	2671.2	2654.5	2621.2	2595.0
5°	2852.1	2847.4	2849.7	2825.9	2797.4	2783.1	2780.7	2749.8	2711.7	2659.3	2611.7
7.5°	2971.2	2966.4	2964.0	2937.8	2895.0	2871.2	2868.8	2823.6	2778.3	2697.4	2628.3
10°	3083.1	3078.3	3073.5	3037.8	2985.4	2949.7	2945.0	2887.8	2830.7	2730.7	2642.6
12.5°	3225.9	3216.4	3211.6	3168.8	3092.6	3054.5	3047.3	2971.2	2899.7	2778.3	2671.2
15°	3375.9	3368.7	3361.6	3321.1	3235.4	3185.4	3173.5	3078.3	2980.7	2840.2	2714.0
17.5°	3487.8	3480.6	3480.6	3444.9	3366.4	3309.2	3299.7	3185.4	3064.0	2897.4	2747.4
20°	3556.8	3549.7	3556.8	3535.4	3475.9	3428.3	3418.7	3292.6	3147.3	2949.7	2775.9
22.5°	3606.8	3599.7	3611.6	3602.1	3559.2	3530.6	3523.5	3399.7	3233.0	3004.5	2804.5
25°	3694.9	3694.9	3694.9	3678.2	3637.8	3628.2	3628.2	3521.1	3342.6	3075.9	2847.4
27.5°	3871.1	3861.6	3849.7	3802.0	3733.0	3730.6	3744.9	3644.9	3468.7	3168.8	2899.7
30°	4130.6	4125.8	4080.6	3980.6	3863.9	3852.0	3861.6	3778.2	3604.4	3266.4	2959.3
32.5°	4466.3	4449.6	4356.8	4206.8	4040.1	3985.4	4004.4	3916.3	3747.3	3366.4	3016.4
35°	4704.3	4709.1	4642.4	4506.7	4309.1	4163.9	4178.2	4071.1	3902.0	3478.3	3087.8
37.5°	4978.1	4994.8	4894.8	4792.4	4609.1	4361.5	4375.8	4230.6	4056.8	3618.7	3164.0
40°	5356.7	5323.3	5154.3	5032.9	4830.5	4568.6	4580.5	4409.1	4235.3	3752.0	3252.1
42.5°	5673.3	5613.8	5409.0	5254.3	5011.5	4787.7	4799.6	4602.0	4416.3	3899.6	3349.7
45°	6128.0	5963.7	5668.5	5592.4	5197.2	5001.9	5013.8	4806.7	4606.7	4056.8	3454.5
47.5°	6392.3	6130.4	5942.3	5901.9	5401.9	5223.3	5237.6	5023.4	4811.5	4235.3	3564.0
50°	6375.6	6206.6	6151.8	6051.8	5582.8	5430.5	5444.7	5247.1	5018.6	4411.5	3668.7
52.5°	6266.1	6297.1	6268.5	6101.8	5763.8	5630.4	5647.1	5468.6	5230.5	4575.8	3766.3
55°	6435.1	6456.6	6401.8	6182.8	5963.7	5830.4	5849.5	5701.9	5440.0	4721.0	3849.7
57.5°	6637.5	6561.3	6506.6	6325.6	6170.9	6047.1	6068.5	5939.9	5620.9	4837.7	3913.9
60°	6628.0	6468.5	6523.2	6335.1	6311.3	6247.1	6266.1	6135.2	5759.0	4923.4	3940.1
62.5°	6139.9	6054.2	6330.4	6266.1	6425.6	6425.6	6449.4	6254.2	5842.3	4959.1	3925.8
65°	5292.4	5297.1	5782.8	6049.5	6561.3	6670.8	6689.9	6328.0	5794.7	4854.3	3792.5
67.5°	4216.3	4247.2	4944.8	5499.5	6425.6	6837.5	6839.9	6394.7	5590.0	4559.1	3483.0
70°	3085.4	3109.2	3933.0	4606.7	5785.2	6468.5	6430.4	6206.6	5144.8	4044.9	2999.7
72.5°	2085.5	2107.0	2954.5	3537.8	4747.2	5509.0	5425.7	5485.2	4385.3	3323.5	2411.7
75°	1402.3	1428.4	2102.2	2530.7	3492.5	4183.0	3997.3	4154.4	3392.6	2516.4	1759.4
77.5°	883.3	899.9	1335.6	1659.4	2385.5	2847.4	2661.7	2664.0	1954.6	1354.6	945.2
80°	561.9	566.6	809.5	957.1	1380.8	1711.8	1514.1	1230.8	880.9	719.0	564.2
82.5°	326.2	319.0	483.3	540.4	657.1	649.9	538.0	509.5	385.7	359.5	288.1
85°	130.9	121.4	211.9	197.6	200.0	211.9	157.1	157.1	126.2	97.6	71.4
87.5°	26.2	26.2	28.6	26.2	26.2	28.6	21.4	21.4	19.0	19.0	19.0
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°	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3	2609.3
2.5°	2590.2	2585.5	2573.6	2542.6	2526.0	2516.4	2502.2	2497.4	2495.0	2497.4	2504.5
5°	2597.4	2580.7	2547.4	2497.4	2464.1	2442.6	2418.8	2409.3	2402.2	2402.2	2409.3
7.5°	2602.1	2576.0	2518.8	2445.0	2397.4	2364.1	2335.5	2323.6	2321.2	2328.4	2330.7
10°	2604.5	2566.4	2485.5	2392.6	2330.7	2287.9	2259.3	2252.2	2259.3	2273.6	2276.0
12.5°	2621.2	2568.8	2466.4	2356.9	2283.1	2240.3	2218.8	2218.8	2237.9	2264.1	2266.5
15°	2649.8	2585.5	2456.9	2328.4	2252.2	2214.1	2206.9	2218.8	2247.4	2287.9	2292.7
17.5°	2671.2	2595.0	2435.5	2290.3	2211.7	2187.9	2199.8	2228.4	2268.8	2323.6	2328.4
20°	2685.5	2595.0	2404.5	2245.0	2171.2	2166.5	2199.8	2245.0	2287.9	2352.2	2359.3
22.5°	2699.8	2590.2	2368.8	2190.3	2126.0	2140.3	2202.2	2259.3	2302.2	2371.2	2383.1
25°	2725.9	2597.4	2333.1	2135.5	2078.4	2118.9	2199.8	2268.8	2314.1	2385.5	2404.5
27.5°	2761.7	2614.1	2306.9	2085.5	2030.8	2085.5	2183.1	2266.5	2314.1	2383.1	2404.5
30°	2799.7	2633.1	2276.0	2030.8	1976.0	2037.9	2147.4	2240.3	2295.0	2359.3	2385.5
32.5°	2840.2	2654.5	2249.8	1971.3	1909.4	1973.6	2095.0	2199.8	2259.3	2318.8	2347.4
35°	2895.0	2692.6	2235.5	1923.6	1849.8	1907.0	2028.4	2147.4	2211.7	2266.5	2299.8
37.5°	2961.6	2740.2	2228.4	1876.0	1785.6	1833.2	1957.0	2083.1	2152.2	2197.4	2228.4
40°	3037.8	2799.7	2226.0	1830.8	1721.3	1757.0	1883.2	2009.3	2076.0	2111.7	2137.9
42.5°	3123.5	2866.4	2221.2	1785.6	1657.0	1685.6	1811.7	1935.5	1992.7	2023.6	2047.4
45°	3214.0	2933.1	2211.7	1730.8	1588.0	1621.3	1737.9	1847.5	1907.0	1933.2	1959.3
47.5°	3304.5	2999.7	2192.7	1668.9	1526.1	1557.0	1659.4	1754.6	1802.2	1826.0	1852.2
50°	3392.6	3059.2	2147.4	1597.5	1461.8	1490.3	1568.9	1633.2	1668.9	1687.9	1714.1
52.5°	3471.1	3099.7	2083.1	1514.1	1397.5	1411.8	1464.2	1518.9	1547.5	1549.9	1573.7
55°	3537.8	3121.1	1990.3	1428.4	1328.5	1330.8	1359.4	1402.3	1414.2	1404.6	1421.3
57.5°	3575.9	3109.2	1887.9	1340.4	1257.0	1247.5	1268.9	1290.4	1292.7	1268.9	1285.6
60°	3585.4	3054.5	1754.6	1252.3	1185.6	1159.4	1166.6	1161.8	1157.0	1147.5	1161.8
62.5°	3537.8	2937.8	1607.0	1166.6	1109.4	1069.0	1066.6	1064.2	1071.3	1073.7	1076.1
65°	3364.0	2718.8	1430.8	1078.5	1028.5	973.7	971.3	999.9	1009.4	995.1	999.9
67.5°	3028.3	2383.1	1238.0	976.1	926.1	878.5	897.5	914.2	930.9	926.1	930.9
70°	2552.2	1957.0	1061.8	861.8	814.2	788.0	809.5	823.7	826.1	821.4	826.1
72.5°	2007.0	1528.4	897.5	745.2	702.3	690.4	716.6	728.5	749.9	759.5	761.8
75°	1449.9	1128.5	735.6	619.0	583.3	583.3	607.1	628.5	647.6	635.7	628.5
77.5°	809.5	673.7	528.5	426.2	433.3	466.6	476.1	500.0	519.0	516.6	511.9
80°	490.4	421.4	357.1	276.2	273.8	300.0	361.9	402.3	411.9	390.4	388.1
82.5°	254.7	221.4	190.5	154.7	171.4	200.0	209.5	252.4	278.5	269.0	280.9
85°	64.3	61.9	69.0	71.4	88.1	97.6	107.1	126.2	83.3	40.5	40.5
87.5°	19.0	19.0	23.8	23.8	30.9	38.1	35.7	35.7	19.0	2.4	0.0
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)