

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: P840873

Luminaire Tested: **ARCH4-100-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840873
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: ARCH4-100-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16559 lumens
Efficiency: N/A
Efficacy: 160.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 103.1
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

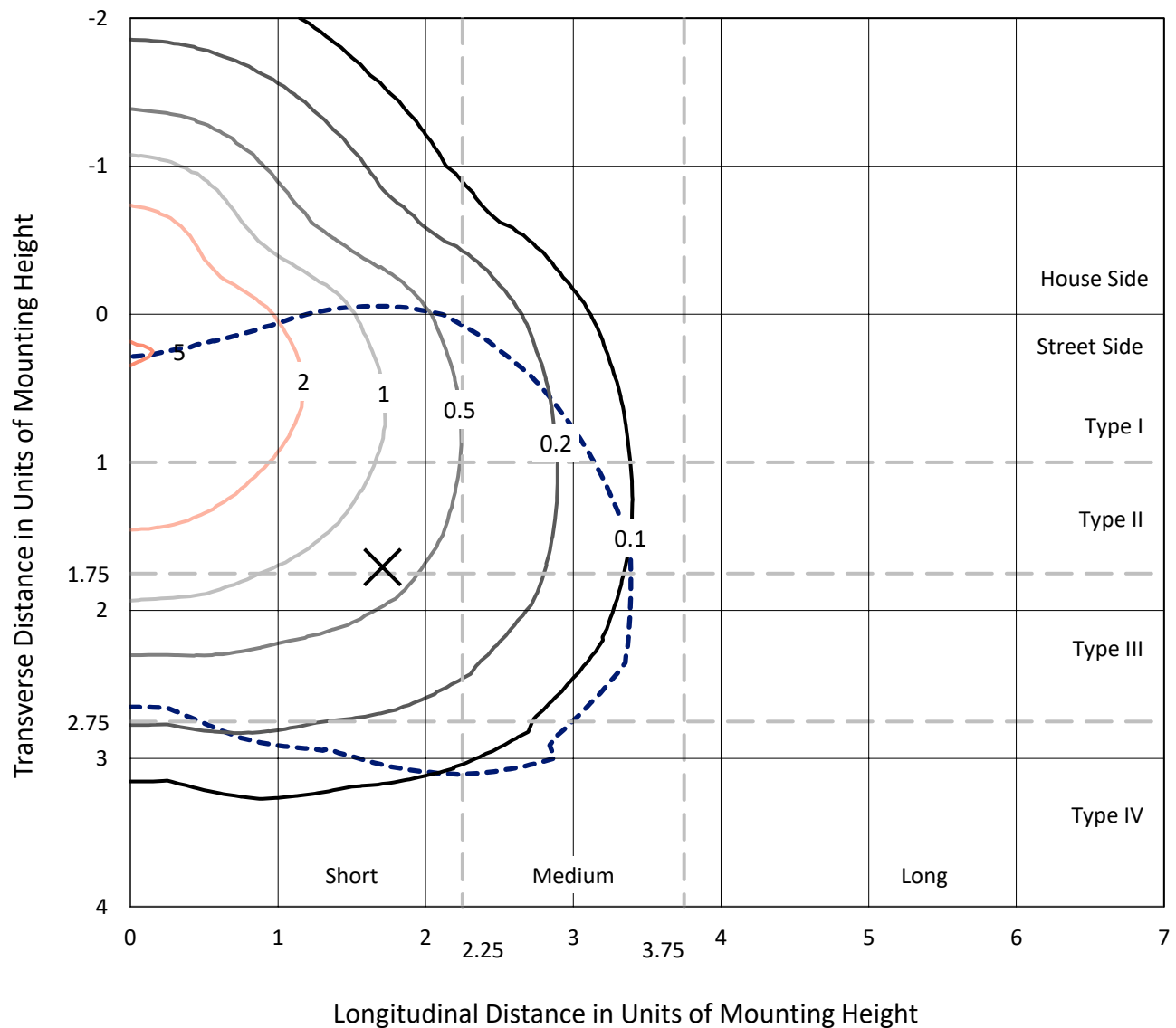


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Iso-Footcandle Lines of Horizontal Illumination

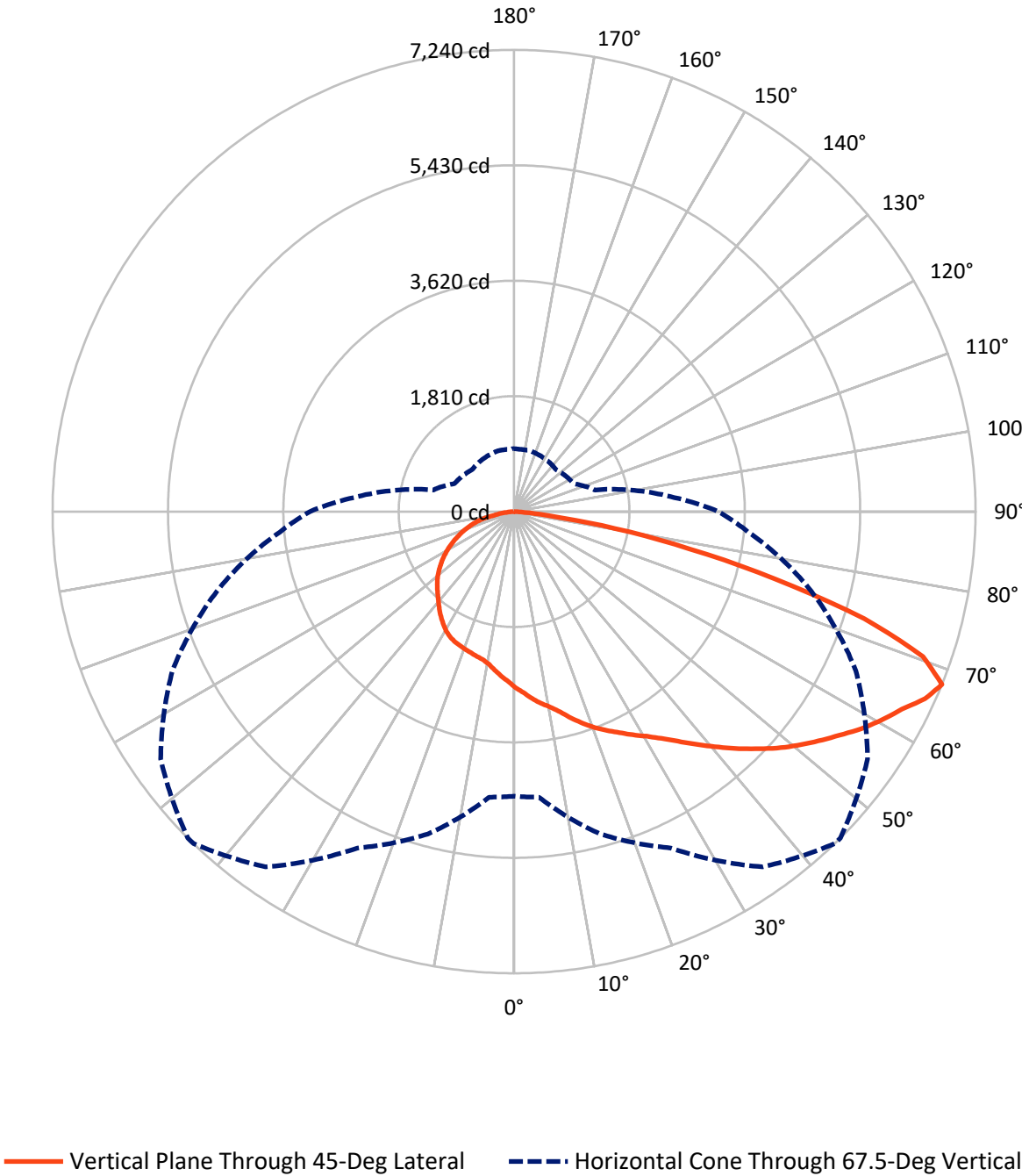
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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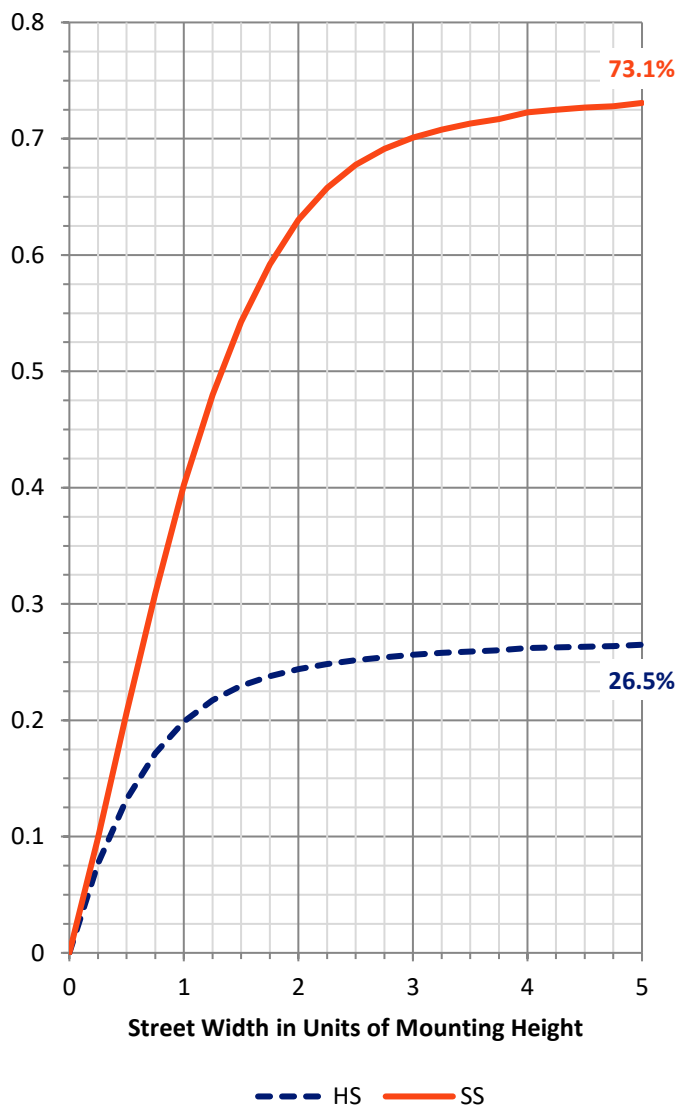
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4423.8	0.0	4423.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	12135.3	0.0	12135.3
	% Fixture	73.3	0.0	73.3
Total	Lumens	16559.0	0.0	16559.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.4	1.6
10°-20°	816.8	4.9
20°-30°	1409.9	8.5
30°-40°	2079.2	12.6
40°-50°	2816.9	17.0
50°-60°	3442.9	20.8
60°-70°	3550.9	21.4
70°-80°	1944.9	11.7
80°-90°	233.1	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°	16559.0	100.0
0°-180°	16559.0	100.0

Coefficient of Utilization



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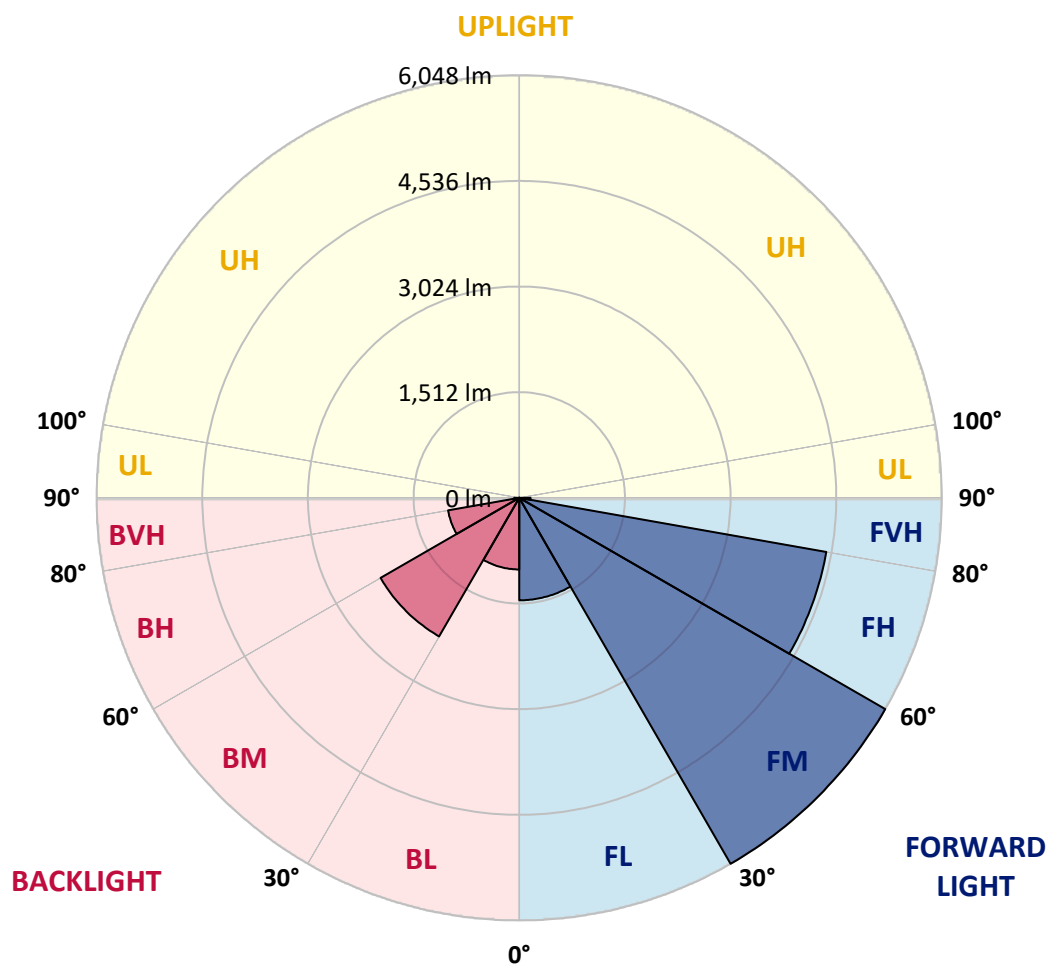
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1465.9	8.9			
FM	(30°-60°)	6047.5	36.5			
FH	(60°-80°)	4461.2	26.9			G2/5000
FVH	(80°-90°)	160.6	1.0			G2/225
BL	(0°-30°)	1025.3	6.2	B3/2500		
BM	(30°-60°)	2291.4	13.8	B2/2500		
BH	(60°-80°)	1034.5	6.2	B3/2500		G3/2500
BVH	(80°-90°)	72.5	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7
2.5°	2882.7	2880.2	2885.2	2867.6	2844.9	2842.4	2842.4	2827.2	2809.6	2774.3	2746.6
5°	3018.7	3013.7	3016.2	2991.0	2960.8	2945.7	2943.2	2910.4	2870.1	2814.6	2764.2
7.5°	3144.7	3139.7	3137.2	3109.5	3064.1	3038.9	3036.4	2988.5	2940.6	2855.0	2781.9
10°	3263.2	3258.1	3253.1	3215.3	3159.9	3122.1	3117.0	3056.5	2996.1	2890.2	2797.0
12.5°	3414.4	3404.3	3399.2	3353.9	3273.3	3232.9	3225.4	3144.7	3069.1	2940.6	2827.2
15°	3573.1	3565.6	3558.0	3515.2	3424.4	3371.5	3358.9	3258.1	3154.8	3006.2	2872.6
17.5°	3691.5	3684.0	3684.0	3646.2	3563.0	3502.6	3492.5	3371.5	3243.0	3066.6	2907.9
20°	3764.6	3757.1	3764.6	3741.9	3678.9	3628.5	3618.5	3484.9	3331.2	3122.1	2938.1
22.5°	3817.5	3810.0	3822.6	3812.5	3767.1	3736.9	3729.3	3598.3	3421.9	3180.0	2968.4
25°	3910.8	3910.8	3910.8	3893.1	3850.3	3840.2	3840.2	3726.8	3537.8	3255.6	3013.7
27.5°	4097.2	4087.2	4074.6	4024.2	3951.1	3948.6	3963.7	3857.9	3671.4	3353.9	3069.1
30°	4371.9	4366.9	4319.0	4213.1	4089.7	4077.1	4087.2	3999.0	3815.0	3457.2	3132.1
32.5°	4727.2	4709.6	4611.3	4452.5	4276.1	4218.2	4238.3	4145.1	3966.2	3563.0	3192.6
35°	4979.2	4984.2	4913.7	4770.0	4560.9	4407.2	4422.3	4308.9	4130.0	3681.5	3268.2
37.5°	5269.0	5286.6	5180.8	5072.4	4878.4	4616.3	4631.4	4477.7	4293.8	3830.1	3348.8
40°	5669.6	5634.3	5455.4	5326.9	5112.7	4835.5	4848.1	4666.7	4482.8	3971.2	3442.1
42.5°	6004.7	5941.7	5725.0	5561.3	5304.2	5067.4	5080.0	4870.8	4674.3	4127.5	3545.4
45°	6486.0	6312.2	5999.7	5919.1	5500.8	5294.2	5306.7	5087.5	4875.9	4293.8	3656.3
47.5°	6765.7	6488.5	6289.5	6246.6	5717.5	5528.5	5543.6	5316.8	5092.6	4482.8	3772.2
50°	6748.1	6569.2	6511.2	6405.4	5909.0	5747.7	5762.8	5553.7	5311.8	4669.2	3883.0
52.5°	6632.2	6664.9	6634.7	6458.3	6100.5	5959.4	5977.0	5788.0	5536.1	4843.1	3986.4
55°	6811.1	6833.8	6775.8	6544.0	6312.2	6171.0	6191.2	6035.0	5757.8	4996.8	4074.6
57.5°	7025.3	6944.6	6886.7	6695.2	6531.4	6400.4	6423.0	6287.0	5949.3	5120.3	4142.6
60°	7015.2	6846.4	6904.3	6705.3	6680.1	6612.0	6632.2	6493.6	6095.5	5211.0	4170.3
62.5°	6498.6	6407.9	6700.2	6632.2	6801.0	6801.0	6826.2	6619.6	6183.6	5248.8	4155.2
65°	5601.6	5606.6	6120.7	6402.9	6944.6	7060.5	7080.7	6697.7	6133.3	5137.9	4014.1
67.5°	4462.6	4495.4	5233.7	5820.8	6801.0	7236.9	7239.5	6768.2	5916.5	4825.5	3686.5
70°	3265.7	3290.9	4162.7	4875.9	6123.2	6846.4	6806.0	6569.2	5445.3	4281.2	3175.0
72.5°	2207.4	2230.0	3127.1	3744.5	5024.5	5830.9	5742.7	5805.7	4641.5	3517.7	2552.6
75°	1484.2	1511.9	2225.0	2678.6	3696.6	4427.3	4230.8	4397.1	3590.7	2663.5	1862.1
77.5°	934.9	952.5	1413.6	1756.3	2524.9	3013.7	2817.2	2819.7	2068.8	1433.8	1000.4
80°	594.7	599.7	856.7	1013.0	1461.5	1811.8	1602.6	1302.7	932.3	761.0	597.2
82.5°	345.2	337.7	511.5	572.0	695.5	687.9	569.5	539.2	408.2	380.5	304.9
85°	138.6	128.5	224.3	209.1	211.7	224.3	166.3	166.3	133.6	103.3	75.6
87.5°	27.7	27.7	30.2	27.7	27.7	30.2	22.7	22.7	20.2	20.2	20.2
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°	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7
2.5°	2741.6	2736.5	2723.9	2691.2	2673.5	2663.5	2648.3	2643.3	2640.8	2643.3	2650.9
5°	2749.1	2731.5	2696.2	2643.3	2608.0	2585.3	2560.1	2550.1	2542.5	2542.5	2550.1
7.5°	2754.2	2726.4	2666.0	2587.9	2537.5	2502.2	2471.9	2459.3	2456.8	2464.4	2466.9
10°	2756.7	2716.4	2630.7	2532.4	2466.9	2421.6	2391.3	2383.8	2391.3	2406.4	2409.0
12.5°	2774.3	2718.9	2610.5	2494.6	2416.5	2371.2	2348.5	2348.5	2368.6	2396.4	2398.9
15°	2804.6	2736.5	2600.5	2464.4	2383.8	2343.4	2335.9	2348.5	2378.7	2421.6	2426.6
17.5°	2827.2	2746.6	2577.8	2424.1	2340.9	2315.7	2328.3	2358.6	2401.4	2459.3	2464.4
20°	2842.4	2746.6	2545.0	2376.2	2298.1	2293.0	2328.3	2376.2	2421.6	2489.6	2497.1
22.5°	2857.5	2741.6	2507.2	2318.2	2250.2	2265.3	2330.8	2391.3	2436.7	2509.7	2522.3
25°	2885.2	2749.1	2469.4	2260.3	2199.8	2242.6	2328.3	2401.4	2449.3	2524.9	2545.0
27.5°	2923.0	2766.8	2441.7	2207.4	2149.4	2207.4	2310.7	2398.9	2449.3	2522.3	2545.0
30°	2963.3	2786.9	2409.0	2149.4	2091.5	2157.0	2272.9	2371.2	2429.1	2497.1	2524.9
32.5°	3006.2	2809.6	2381.2	2086.4	2020.9	2088.9	2217.4	2328.3	2391.3	2454.3	2484.5
35°	3064.1	2849.9	2366.1	2036.0	1957.9	2018.4	2146.9	2272.9	2340.9	2398.9	2434.2
37.5°	3134.7	2900.3	2358.6	1985.6	1889.9	1940.3	2071.3	2204.8	2277.9	2325.8	2358.6
40°	3215.3	2963.3	2356.0	1937.7	1821.8	1859.6	1993.2	2126.7	2197.3	2235.1	2262.8
42.5°	3306.0	3033.9	2351.0	1889.9	1753.8	1784.0	1917.6	2048.6	2109.1	2141.9	2167.0
45°	3401.8	3104.4	2340.9	1831.9	1680.7	1716.0	1839.5	1955.4	2018.4	2046.1	2073.8
47.5°	3497.5	3175.0	2320.8	1766.4	1615.2	1648.0	1756.3	1857.1	1907.5	1932.7	1960.4
50°	3590.7	3238.0	2272.9	1690.8	1547.2	1577.4	1660.6	1728.6	1766.4	1786.6	1814.3
52.5°	3673.9	3280.8	2204.8	1602.6	1479.1	1494.3	1549.7	1607.6	1637.9	1640.4	1665.6
55°	3744.5	3303.5	2106.6	1511.9	1406.1	1408.6	1438.8	1484.2	1496.8	1486.7	1504.3
57.5°	3784.8	3290.9	1998.2	1418.7	1330.5	1320.4	1343.1	1365.7	1368.3	1343.1	1360.7
60°	3794.9	3232.9	1857.1	1325.4	1254.9	1227.2	1234.7	1229.7	1224.6	1214.6	1229.7
62.5°	3744.5	3109.5	1700.9	1234.7	1174.2	1131.4	1128.9	1126.4	1133.9	1136.4	1139.0
65°	3560.5	2877.6	1514.4	1141.5	1088.6	1030.6	1028.1	1058.3	1068.4	1053.3	1058.3
67.5°	3205.2	2522.3	1310.3	1033.1	980.2	929.8	950.0	967.6	985.3	980.2	985.3
70°	2701.3	2071.3	1123.8	912.2	861.8	834.1	856.7	871.9	874.4	869.3	874.4
72.5°	2124.2	1617.7	950.0	788.7	743.3	730.7	758.5	771.1	793.7	803.8	806.3
75°	1534.6	1194.4	778.6	655.2	617.4	617.4	642.6	665.2	685.4	672.8	665.2
77.5°	856.7	713.1	559.4	451.0	458.6	493.9	504.0	529.2	549.3	546.8	541.8
80°	519.1	446.0	378.0	292.3	289.8	317.5	383.0	425.9	435.9	413.3	410.7
82.5°	269.6	234.3	201.6	163.8	181.4	211.7	221.7	267.1	294.8	284.7	297.3
85°	68.0	65.5	73.1	75.6	93.2	103.3	113.4	133.6	88.2	42.8	42.8
87.5°	20.2	20.2	25.2	25.2	32.8	40.3	37.8	37.8	20.2	2.5	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)