

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: P840867

Luminaire Tested: **ARCH4-100-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840867
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

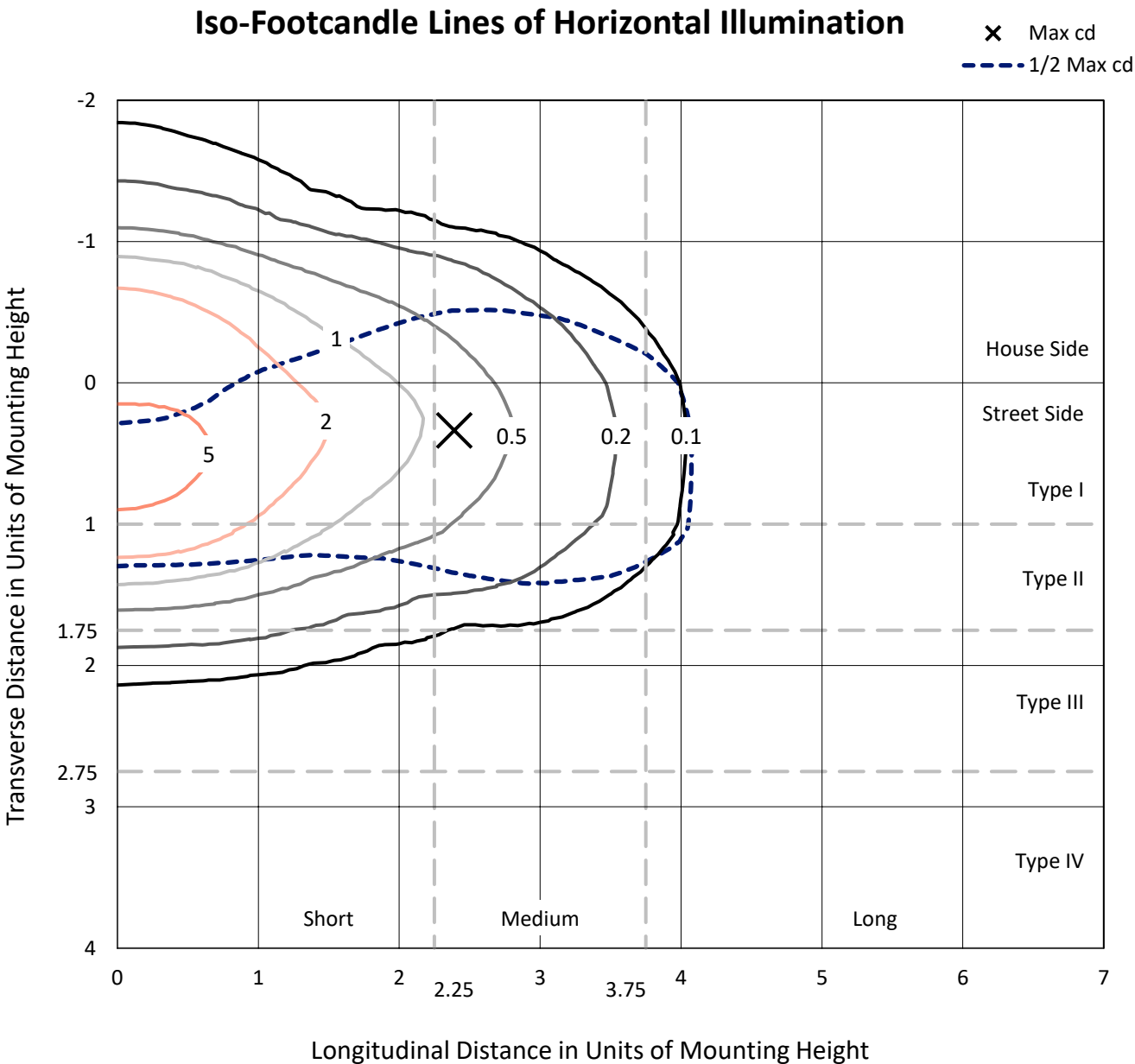
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17005 lumens
Efficiency: N/A
Efficacy: 164.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
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



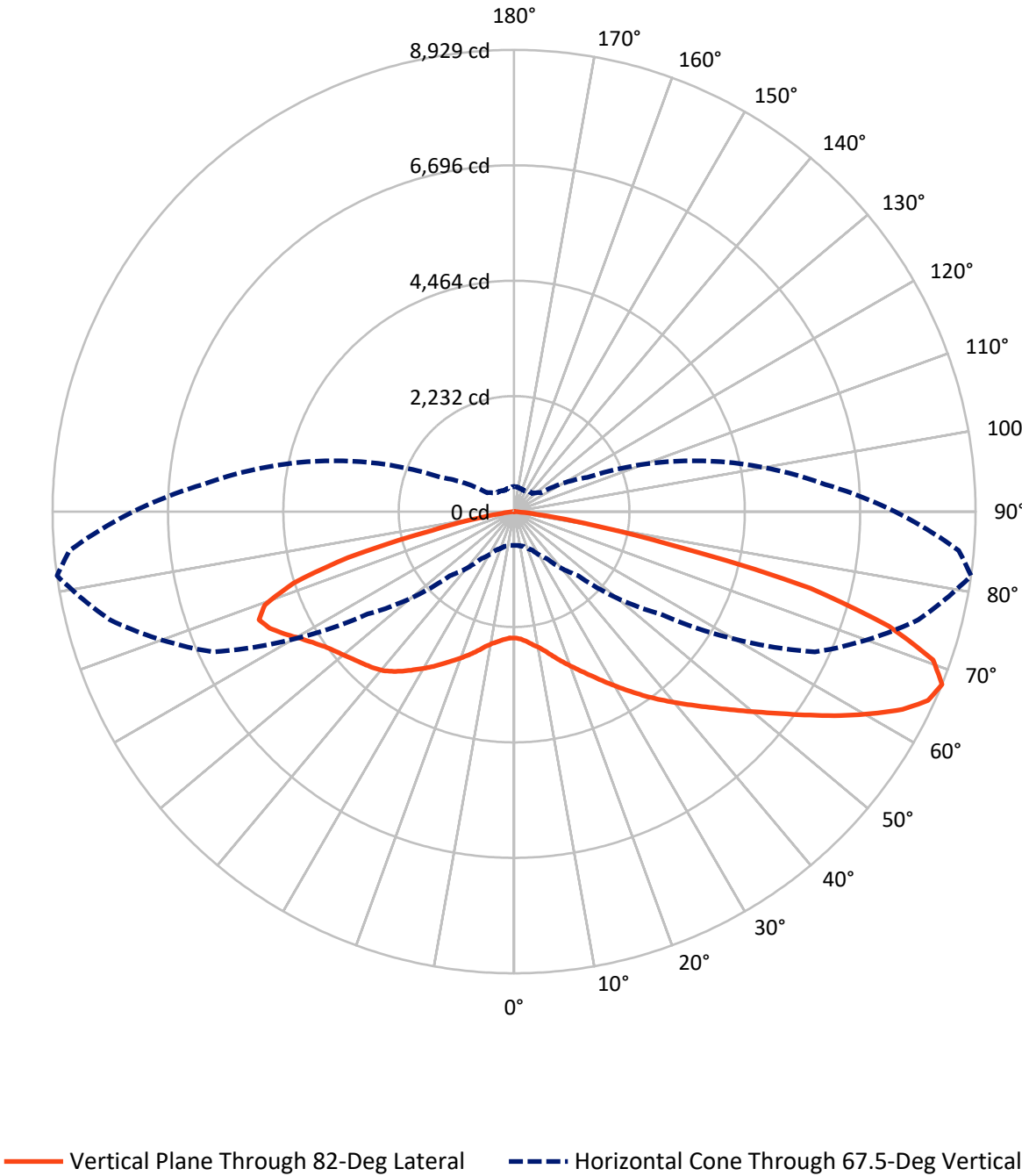
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Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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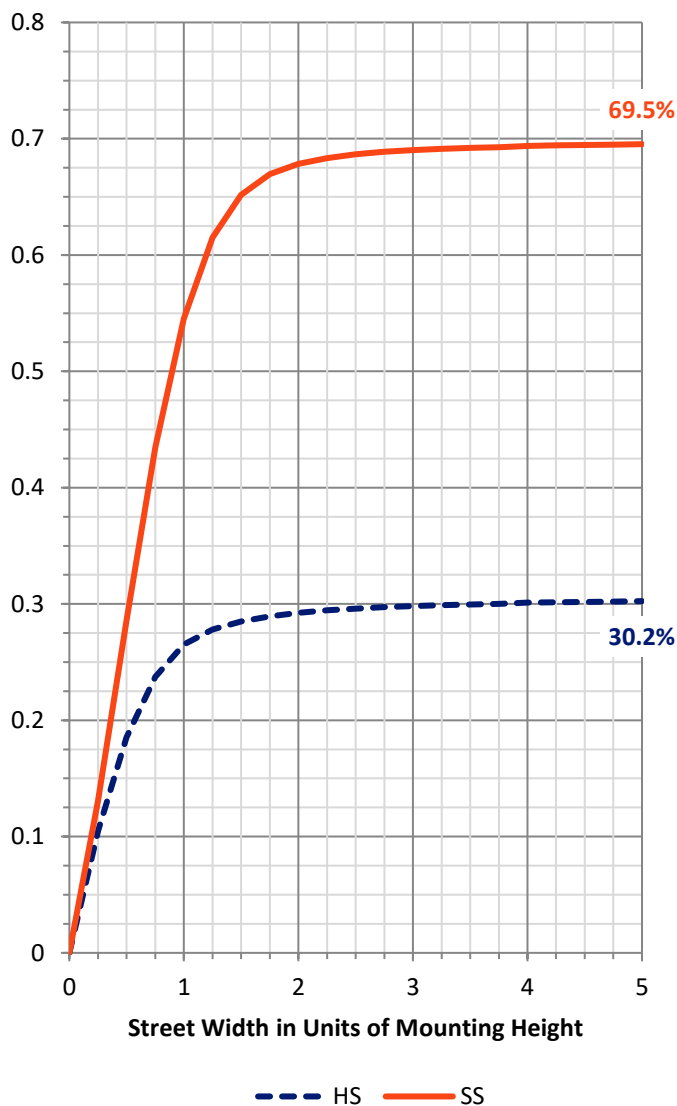
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5178.7	0.0	5178.7
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	11826.3	0.0	11826.3
	% Fixture	69.5	0.0	69.5
Total	Lumens	17005.0	0.0	17005.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.6	1.5
10°-20°	910.0	5.4
20°-30°	1828.8	10.8
30°-40°	2872.8	16.9
40°-50°	3499.6	20.6
50°-60°	3306.7	19.4
60°-70°	2730.6	16.1
70°-80°	1486.9	8.7
80°-90°	116.9	0.7
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°	17005.0	100.0
0°-180°	17005.0	100.0

Coefficient of Utilization



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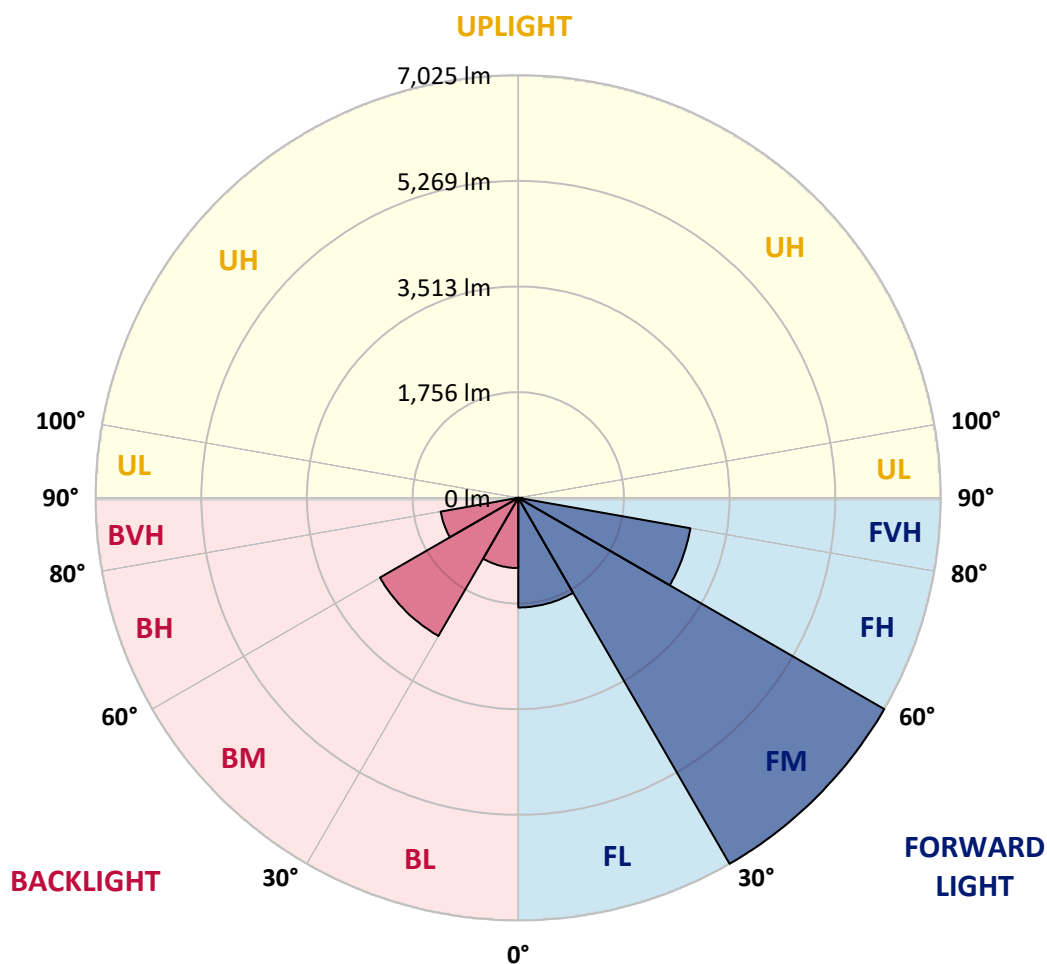
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1823.6	10.7			
FM	(30°-60°)	7025.5	41.3			
FH	(60°-80°)	2906.8	17.1			G2/5000
FVH	(80°-90°)	70.5	0.4			G1/100
BL	(0°-30°)	1167.8	6.9	B3/2500		
BM	(30°-60°)	2653.7	15.6	B3/5000		
BH	(60°-80°)	1310.8	7.7	B3/2500		G3/2500
BVH	(80°-90°)	46.4	0.3			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5
2.5°	2555.6	2555.6	2575.3	2575.3	2558.0	2530.9	2523.5	2493.8	2466.7	2466.7	2469.2
5°	2800.0	2797.5	2812.4	2792.6	2750.6	2696.3	2659.3	2595.1	2540.8	2523.5	2521.0
7.5°	3098.8	3096.3	3103.7	3071.6	2992.6	2903.7	2829.6	2725.9	2637.1	2600.0	2590.1
10°	3432.1	3429.7	3422.2	3367.9	3261.7	3123.5	3012.4	2869.2	2735.8	2676.6	2664.2
12.5°	3814.8	3809.9	3792.6	3713.6	3567.9	3390.1	3229.7	3044.5	2866.7	2785.2	2758.0
15°	4242.0	4234.6	4202.5	4106.2	3911.1	3686.4	3479.0	3242.0	3024.7	2918.5	2881.5
17.5°	4691.4	4691.4	4642.0	4498.8	4281.5	4002.5	3745.7	3444.5	3190.1	3059.3	3014.8
20°	5148.2	5145.7	5084.0	4911.1	4654.4	4333.4	4007.4	3676.6	3360.5	3202.5	3148.2
22.5°	5629.7	5624.7	5548.2	5350.7	5044.5	4681.5	4301.3	3906.2	3548.2	3358.0	3288.9
25°	6182.8	6175.3	6081.5	5839.5	5476.6	5066.7	4632.1	4175.3	3763.0	3530.9	3449.4
27.5°	6770.4	6760.5	6649.4	6367.9	5970.4	5476.6	4997.6	4486.4	4000.0	3723.5	3632.1
30°	7293.9	7286.5	7165.5	6876.6	6419.8	5884.0	5345.7	4797.6	4249.4	3928.4	3814.8
32.5°	7688.9	7688.9	7580.3	7296.3	6822.3	6274.1	5696.3	5091.4	4508.7	4148.2	4014.8
35°	7928.4	7935.9	7842.0	7614.9	7167.9	6642.0	6059.3	5437.1	4785.2	4382.7	4239.5
37.5°	7963.0	7987.7	7933.4	7780.3	7407.5	6948.2	6414.9	5770.4	5071.6	4619.8	4459.3
40°	7802.5	7819.8	7822.3	7763.0	7506.2	7167.9	6728.4	6123.5	5375.3	4869.2	4684.0
42.5°	7481.5	7493.9	7516.1	7533.4	7434.6	7264.2	6967.9	6451.9	5698.8	5123.5	4906.2
45°	7066.7	7064.2	7101.3	7175.4	7170.4	7209.9	7101.3	6750.7	6034.6	5412.4	5153.1
47.5°	6447.0	6434.6	6565.5	6733.4	6817.3	7002.5	7103.7	6985.2	6400.0	5730.9	5434.6
50°	5476.6	5464.2	5750.7	6145.7	6392.6	6674.1	6967.9	7126.0	6782.8	6088.9	5740.8
52.5°	4296.3	4284.0	4646.9	5338.3	5876.6	6286.5	6693.9	7158.1	7145.7	6488.9	6086.5
55°	3195.1	3185.2	3538.3	4286.4	5158.1	5837.1	6358.1	7074.1	7486.5	6948.2	6506.2
57.5°	2251.9	2246.9	2553.1	3172.9	4234.6	5288.9	6034.6	6911.2	7800.0	7447.0	6980.3
60°	1580.3	1572.8	1795.1	2274.1	3202.5	4461.8	5713.6	6693.9	8034.6	7938.3	7484.0
62.5°	1064.2	1059.3	1217.3	1617.3	2274.1	3434.6	5227.2	6548.2	8168.0	8432.2	7992.6
65°	807.4	804.9	876.5	1096.3	1609.9	2466.7	4454.3	6530.9	8185.2	8802.5	8424.7
67.5°	651.9	654.3	693.8	819.8	1113.6	1753.1	3454.3	6422.3	8093.9	8928.5	8634.6
70°	533.3	533.3	550.6	634.6	822.2	1182.7	2412.4	5928.4	7839.6	8600.1	8385.2
72.5°	407.4	409.9	464.2	513.6	619.8	829.6	1545.7	4906.2	7239.6	7582.8	7419.8
75°	323.5	321.0	353.1	422.2	481.5	592.6	948.2	3518.5	6160.5	5926.0	5822.3
77.5°	232.1	229.6	254.3	313.6	365.4	419.8	565.4	1775.3	3350.6	3079.0	3002.5
80°	158.0	153.1	175.3	217.3	242.0	246.9	276.5	681.5	1461.7	1377.8	1360.5
82.5°	81.5	81.5	93.8	123.5	125.9	128.4	123.5	219.8	484.0	451.9	432.1
85°	32.1	32.1	34.6	42.0	42.0	44.4	44.4	56.8	51.9	49.4	46.9
87.5°	2.5	2.5	4.9	4.9	7.4	7.4	7.4	9.9	12.3	12.3	12.3
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°	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5	2444.5
2.5°	2464.2	2454.3	2422.2	2414.8	2409.9	2402.5	2405.0	2387.7	2380.3	2382.7	2372.9
5°	2508.7	2491.4	2451.9	2434.6	2429.6	2422.2	2429.6	2417.3	2405.0	2409.9	2405.0
7.5°	2570.4	2545.7	2496.3	2479.0	2476.6	2469.2	2479.0	2469.2	2459.3	2464.2	2454.3
10°	2634.6	2602.5	2548.2	2530.9	2530.9	2528.4	2538.3	2523.5	2513.6	2516.1	2511.1
12.5°	2728.4	2686.4	2627.2	2612.4	2605.0	2612.4	2614.8	2595.1	2577.8	2580.3	2572.9
15°	2842.0	2795.1	2730.9	2708.7	2703.7	2701.3	2691.4	2666.7	2644.5	2642.0	2634.6
17.5°	2965.5	2906.2	2829.6	2807.4	2785.2	2777.8	2753.1	2721.0	2686.4	2686.4	2676.6
20°	3084.0	3017.3	2925.9	2893.8	2861.7	2832.1	2790.1	2738.3	2693.8	2686.4	2676.6
22.5°	3212.4	3133.4	3027.2	2980.3	2923.5	2864.2	2792.6	2723.5	2666.7	2654.3	2646.9
25°	3355.6	3256.8	3130.9	3061.7	2970.4	2879.0	2772.9	2684.0	2617.3	2597.5	2592.6
27.5°	3513.6	3395.1	3242.0	3140.8	3007.4	2864.2	2728.4	2622.2	2540.8	2516.1	2508.7
30°	3674.1	3533.4	3343.2	3195.1	3007.4	2817.3	2646.9	2523.5	2429.6	2395.1	2390.1
32.5°	3834.6	3676.6	3434.6	3224.7	2977.8	2738.3	2540.8	2395.1	2288.9	2246.9	2256.8
35°	4027.2	3834.6	3518.5	3237.1	2928.4	2642.0	2419.8	2249.4	2140.8	2103.7	2111.1
37.5°	4227.2	3992.6	3585.2	3227.2	2859.3	2533.3	2284.0	2118.5	1982.7	1918.5	1925.9
40°	4400.0	4135.8	3632.1	3192.6	2770.4	2409.9	2150.6	1933.3	1745.7	1684.0	1676.6
42.5°	4563.0	4242.0	3656.8	3140.8	2669.2	2266.7	1960.5	1681.5	1493.8	1417.3	1419.8
45°	4733.4	4345.7	3646.9	3071.6	2543.2	2098.8	1716.1	1434.6	1269.1	1200.0	1202.5
47.5°	4928.4	4456.8	3637.1	2997.5	2390.1	1881.5	1481.5	1217.3	1074.1	1024.7	1019.8
50°	5135.8	4580.3	3624.7	2906.2	2219.8	1639.5	1249.4	1014.8	893.8	861.7	854.3
52.5°	5370.4	4713.6	3617.3	2797.5	2014.8	1382.7	1042.0	837.0	755.6	733.3	730.9
55°	5651.9	4869.2	3627.2	2666.7	1767.9	1140.7	866.7	721.0	666.7	654.3	651.9
57.5°	5995.1	5069.2	3656.8	2513.6	1508.7	930.9	738.3	649.4	614.8	604.9	604.9
60°	6367.9	5296.3	3711.1	2340.8	1249.4	767.9	654.3	592.6	577.8	590.1	590.1
62.5°	6770.4	5563.0	3807.4	2130.9	1007.4	649.4	587.7	545.7	535.8	560.5	563.0
65°	7143.3	5822.3	3869.2	1879.0	800.0	563.0	535.8	498.8	503.7	528.4	525.9
67.5°	7372.9	6037.1	3782.7	1563.0	634.6	498.8	481.5	449.4	461.7	481.5	484.0
70°	7232.1	5916.1	3355.6	1180.3	496.3	434.6	422.2	402.5	412.3	437.0	446.9
72.5°	6543.3	5298.8	2609.9	797.5	400.0	365.4	370.4	360.5	372.8	395.1	417.3
75°	5311.1	4005.0	1750.6	511.1	316.1	311.1	318.5	311.1	316.1	338.3	350.6
77.5°	2772.9	1953.1	871.6	318.5	234.6	242.0	254.3	256.8	271.6	276.5	281.5
80°	1293.8	879.0	363.0	177.8	155.6	170.4	195.1	197.5	202.5	209.9	212.3
82.5°	422.2	264.2	167.9	96.3	88.9	96.3	125.9	150.6	153.1	167.9	167.9
85°	44.4	27.2	37.0	39.5	34.6	42.0	56.8	54.3	24.7	14.8	14.8
87.5°	12.3	9.9	12.3	12.3	9.9	9.9	7.4	2.5	0.0	0.0	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)