

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: P841017

Luminaire Tested: **ARCH4-120-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841017
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: ARCH4-120-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1000mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19347 lumens
Efficiency: N/A
Efficacy: 158.6 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): 122
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



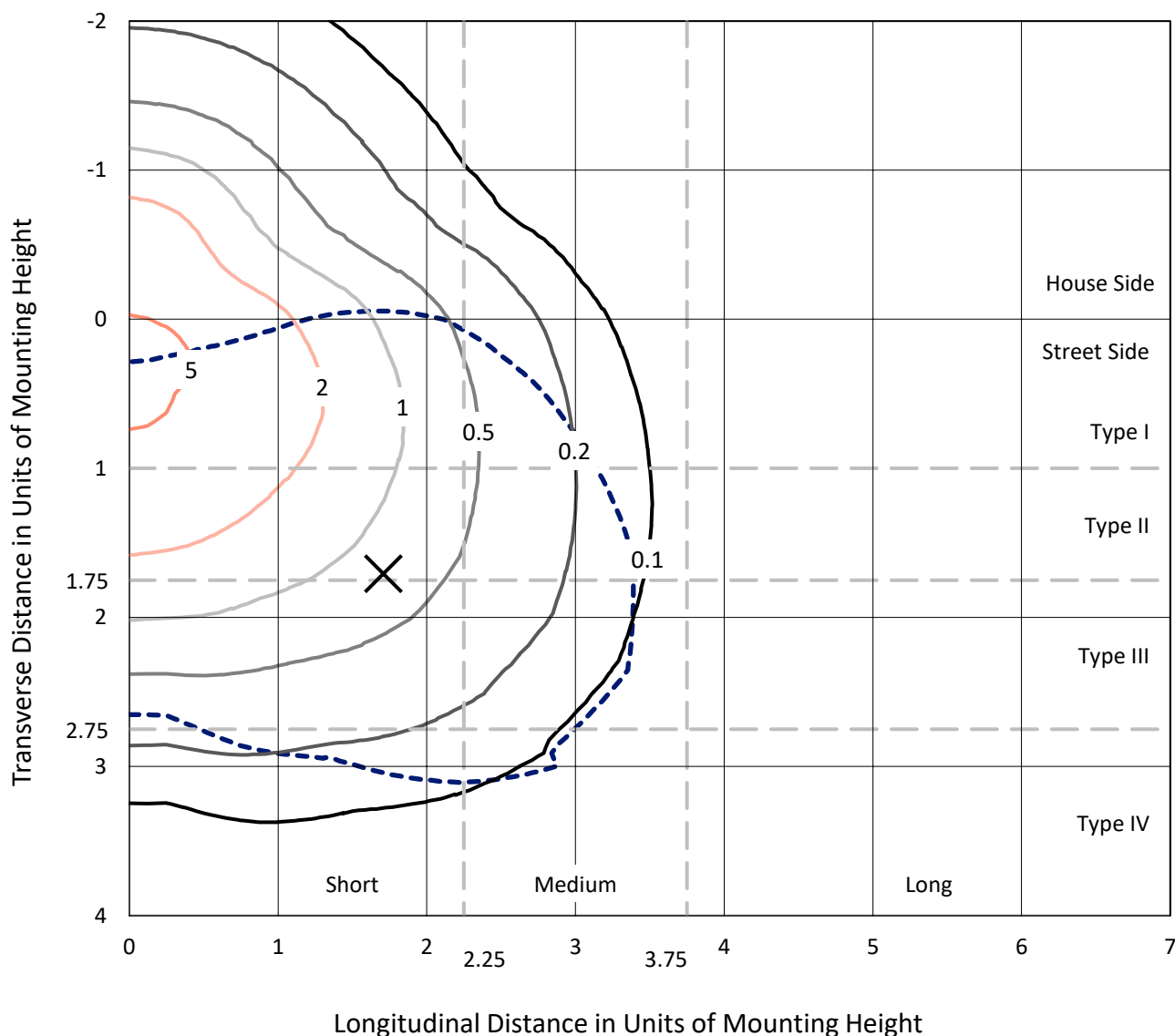
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

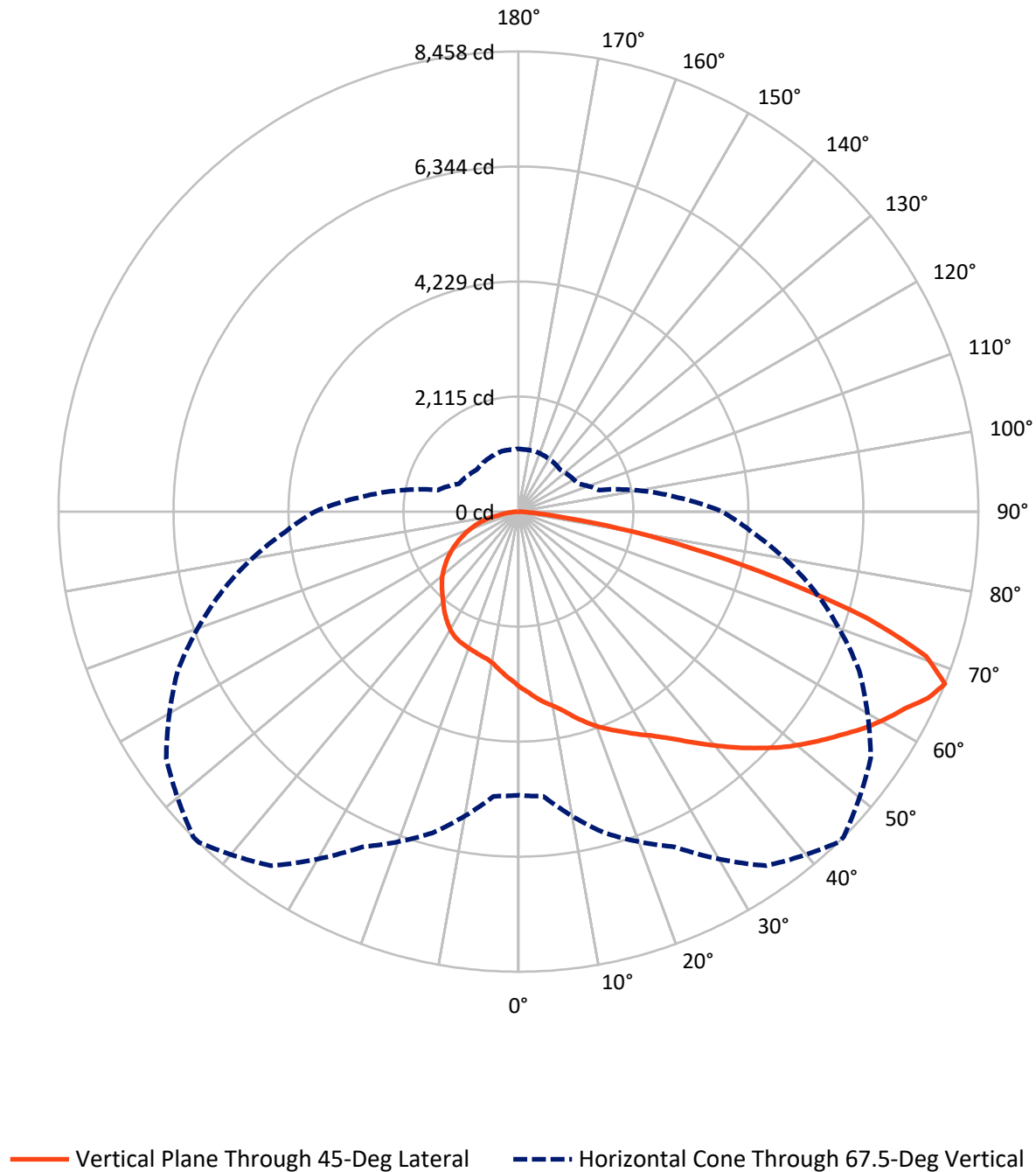


Based on 25 foot mounting height. Maximum calculated value = 6 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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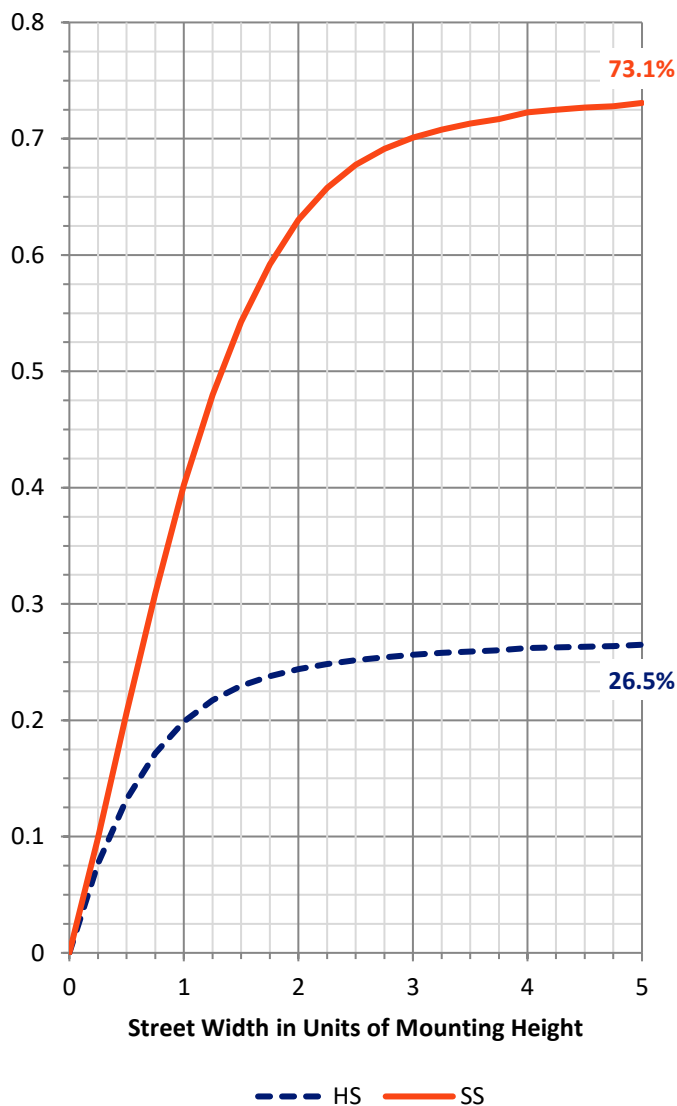
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5168.6	0.0	5168.6
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	14178.4	0.0	14178.4
	% Fixture	73.3	0.0	73.3
Total	Lumens	19347.0	0.0	19347.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.9	1.6
10°-20°	954.4	4.9
20°-30°	1647.3	8.5
30°-40°	2429.2	12.6
40°-50°	3291.1	17.0
50°-60°	4022.6	20.8
60°-70°	4148.7	21.4
70°-80°	2272.4	11.7
80°-90°	272.4	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°	19347.0	100.0
0°-180°	19347.0	100.0

Coefficient of Utilization



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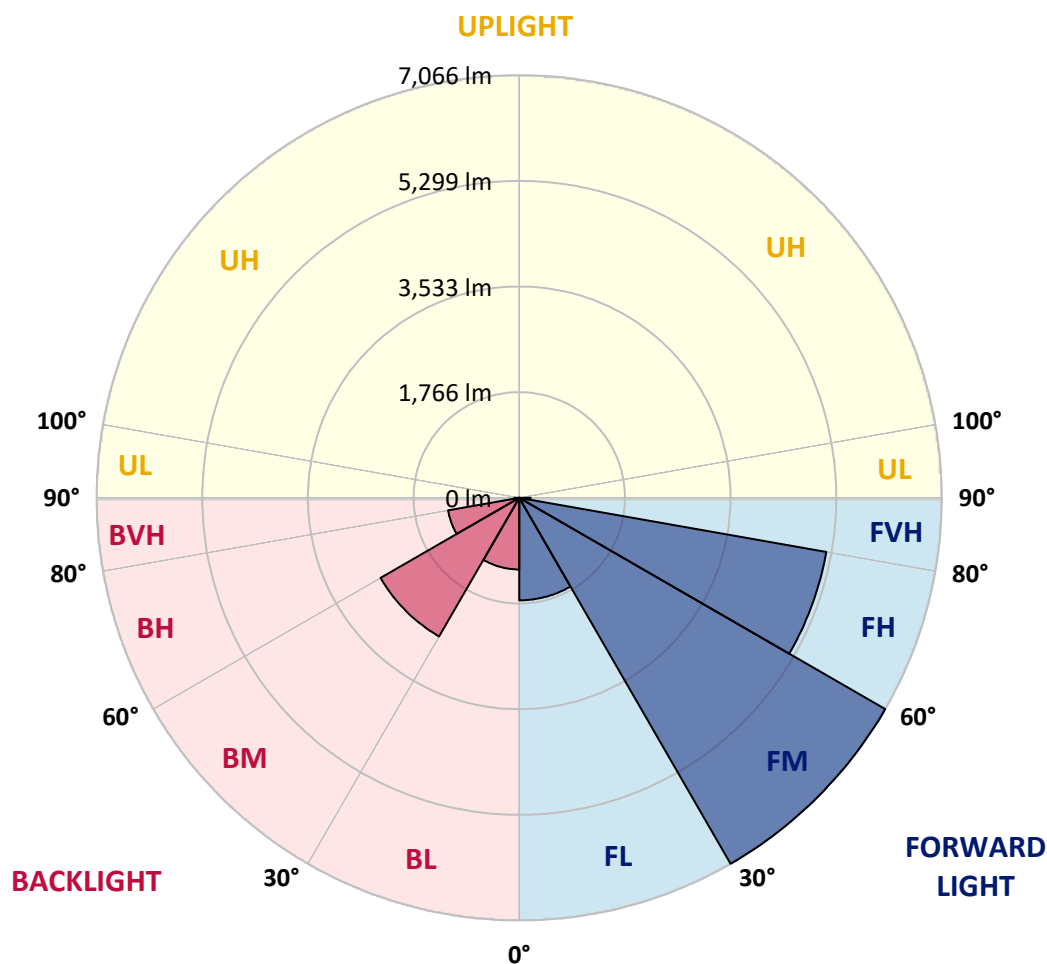
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1712.7	8.9			
FM	(30°-60°)	7065.7	36.5			
FH	(60°-80°)	5212.4	26.9			G3/7500
FVH	(80°-90°)	187.6	1.0			G2/225
BL	(0°-30°)	1197.9	6.2	B3/2500		
BM	(30°-60°)	2677.2	13.8	B3/5000		
BH	(60°-80°)	1208.7	6.2	B3/2500		G3/2500
BVH	(80°-90°)	84.7	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°	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7
2.5°	3368.0	3365.1	3371.0	3350.4	3323.9	3320.9	3320.9	3303.3	3282.7	3241.4	3209.0
5°	3527.0	3521.1	3524.1	3494.6	3459.3	3441.6	3438.7	3400.4	3353.3	3288.5	3229.7
7.5°	3674.2	3668.3	3665.4	3633.0	3580.0	3550.6	3547.6	3491.7	3435.7	3335.6	3250.3
10°	3812.6	3806.7	3800.8	3756.6	3691.9	3647.7	3641.8	3571.2	3500.5	3376.9	3267.9
12.5°	3989.2	3977.5	3971.6	3918.6	3824.4	3777.3	3768.4	3674.2	3585.9	3435.7	3303.3
15°	4174.7	4165.9	4157.0	4107.0	4001.0	3939.2	3924.5	3806.7	3686.0	3512.3	3356.3
17.5°	4313.1	4304.2	4304.2	4260.1	4162.9	4092.3	4080.5	3939.2	3789.0	3582.9	3397.5
20°	4398.5	4389.6	4398.5	4372.0	4298.4	4239.5	4227.7	4071.7	3892.1	3647.7	3432.8
22.5°	4460.3	4451.5	4466.2	4454.4	4401.4	4366.1	4357.2	4204.1	3998.1	3715.4	3468.1
25°	4569.2	4569.2	4569.2	4548.6	4498.6	4486.8	4486.8	4354.3	4133.5	3803.8	3521.1
27.5°	4787.1	4775.3	4760.6	4701.7	4616.3	4613.4	4631.0	4507.4	4289.5	3918.6	3585.9
30°	5108.0	5102.1	5046.2	4922.5	4778.2	4763.5	4775.3	4672.3	4457.3	4039.3	3659.5
32.5°	5523.1	5502.5	5387.7	5202.2	4996.1	4928.4	4951.9	4843.0	4634.0	4162.9	3730.2
35°	5817.5	5823.4	5741.0	5573.1	5328.8	5149.2	5166.9	5034.4	4825.3	4301.3	3818.5
37.5°	6156.1	6176.7	6053.0	5926.4	5699.7	5393.6	5411.2	5231.6	5016.7	4475.0	3912.7
40°	6624.2	6583.0	6373.9	6223.8	5973.5	5649.7	5664.4	5452.4	5237.5	4639.9	4021.6
42.5°	7015.7	6942.1	6689.0	6497.6	6197.3	5920.5	5935.3	5690.9	5461.3	4822.4	4142.3
45°	7578.1	7374.9	7009.9	6915.6	6426.9	6185.5	6200.2	5944.1	5696.8	5016.7	4271.9
47.5°	7904.9	7581.0	7348.4	7298.4	6680.1	6459.3	6477.0	6212.0	5950.0	5237.5	4407.3
50°	7884.2	7675.2	7607.5	7483.9	6903.9	6715.4	6733.1	6488.8	6206.1	5455.4	4536.8
52.5°	7748.8	7787.1	7751.8	7545.7	7127.6	6962.8	6983.4	6762.6	6468.1	5658.5	4657.5
55°	7957.9	7984.3	7916.6	7645.8	7374.9	7210.1	7233.6	7051.1	6727.2	5838.1	4760.6
57.5°	8208.1	8113.9	8046.2	7822.4	7631.1	7478.0	7504.5	7345.5	6951.0	5982.4	4840.1
60°	8196.3	7999.1	8066.8	7834.2	7804.8	7725.3	7748.8	7586.9	7121.7	6088.4	4872.5
62.5°	7592.8	7486.8	7828.3	7748.8	7946.1	7946.1	7975.5	7734.1	7224.8	6132.5	4854.8
65°	6544.7	6550.6	7151.2	7480.9	8113.9	8249.3	8272.9	7825.4	7165.9	6003.0	4689.9
67.5°	5214.0	5252.2	6114.9	6800.8	7946.1	8455.4	8458.3	7907.8	6912.7	5637.9	4307.2
70°	3815.5	3845.0	4863.6	5696.8	7154.1	7999.1	7952.0	7675.2	6362.2	5002.0	3709.5
72.5°	2579.0	2605.5	3653.6	4374.9	5870.5	6812.6	6709.6	6783.2	5423.0	4109.9	2982.4
75°	1734.1	1766.4	2599.6	3129.6	4319.0	5172.8	4943.1	5137.4	4195.3	3111.9	2175.7
77.5°	1092.3	1112.9	1651.6	2052.0	2950.0	3521.1	3291.5	3294.4	2417.1	1675.2	1168.8
80°	694.8	700.7	1001.0	1183.5	1707.6	2116.8	1872.4	1522.1	1089.3	889.1	697.7
82.5°	403.3	394.5	597.6	668.3	812.6	803.7	665.4	630.0	476.9	444.6	356.2
85°	161.9	150.1	262.0	244.4	247.3	262.0	194.3	194.3	156.0	120.7	88.3
87.5°	32.4	32.4	35.3	32.4	32.4	35.3	26.5	26.5	23.6	23.6	23.6
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°	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7	3226.7
2.5°	3203.2	3197.3	3182.6	3144.3	3123.7	3111.9	3094.2	3088.3	3085.4	3088.3	3097.2
5°	3212.0	3191.4	3150.2	3088.3	3047.1	3020.6	2991.2	2979.4	2970.6	2970.6	2979.4
7.5°	3217.9	3185.5	3114.8	3023.6	2964.7	2923.5	2888.1	2873.4	2870.5	2879.3	2882.3
10°	3220.8	3173.7	3073.6	2958.8	2882.3	2829.3	2793.9	2785.1	2793.9	2811.6	2814.5
12.5°	3241.4	3176.7	3050.1	2914.6	2823.4	2770.4	2743.9	2743.9	2767.4	2799.8	2802.8
15°	3276.8	3197.3	3038.3	2879.3	2785.1	2738.0	2729.2	2743.9	2779.2	2829.3	2835.1
17.5°	3303.3	3209.0	3011.8	2832.2	2735.1	2705.6	2720.3	2755.7	2805.7	2873.4	2879.3
20°	3320.9	3209.0	2973.5	2776.3	2685.0	2679.1	2720.3	2776.3	2829.3	2908.8	2917.6
22.5°	3338.6	3203.2	2929.4	2708.6	2629.1	2646.7	2723.3	2793.9	2846.9	2932.3	2947.0
25°	3371.0	3212.0	2885.2	2640.8	2570.2	2620.2	2720.3	2805.7	2861.6	2950.0	2973.5
27.5°	3415.1	3232.6	2852.8	2579.0	2511.3	2579.0	2699.7	2802.8	2861.6	2947.0	2973.5
30°	3462.2	3256.2	2814.5	2511.3	2443.6	2520.1	2655.6	2770.4	2838.1	2917.6	2950.0
32.5°	3512.3	3282.7	2782.2	2437.7	2361.2	2440.6	2590.8	2720.3	2793.9	2867.5	2902.9
35°	3580.0	3329.8	2764.5	2378.8	2287.6	2358.2	2508.4	2655.6	2735.1	2802.8	2844.0
37.5°	3662.4	3388.6	2755.7	2319.9	2208.1	2266.9	2420.0	2576.1	2661.4	2717.4	2755.7
40°	3756.6	3462.2	2752.7	2264.0	2128.6	2172.7	2328.8	2484.8	2567.2	2611.4	2643.8
42.5°	3862.6	3544.7	2746.8	2208.1	2049.1	2084.4	2240.4	2393.5	2464.2	2502.5	2531.9
45°	3974.5	3627.1	2735.1	2140.3	1963.7	2004.9	2149.2	2284.6	2358.2	2390.6	2423.0
47.5°	4086.4	3709.5	2711.5	2063.8	1887.2	1925.4	2052.0	2169.8	2228.7	2258.1	2290.5
50°	4195.3	3783.1	2655.6	1975.5	1807.7	1843.0	1940.1	2019.6	2063.8	2087.4	2119.7
52.5°	4292.5	3833.2	2576.1	1872.4	1728.2	1745.8	1810.6	1878.3	1913.7	1916.6	1946.0
55°	4374.9	3859.7	2461.3	1766.4	1642.8	1645.7	1681.1	1734.1	1748.8	1737.0	1757.6
57.5°	4422.0	3845.0	2334.7	1657.5	1554.5	1542.7	1569.2	1595.7	1598.6	1569.2	1589.8
60°	4433.8	3777.3	2169.8	1548.6	1466.2	1433.8	1442.6	1436.7	1430.8	1419.0	1436.7
62.5°	4374.9	3633.0	1987.3	1442.6	1371.9	1321.9	1318.9	1316.0	1324.8	1327.8	1330.7
65°	4160.0	3362.1	1769.4	1333.7	1271.8	1204.1	1201.2	1236.5	1248.3	1230.6	1236.5
67.5°	3744.9	2947.0	1530.9	1207.1	1145.2	1086.4	1109.9	1130.5	1151.1	1145.2	1151.1
70°	3156.1	2420.0	1313.1	1065.8	1006.9	974.5	1001.0	1018.7	1021.6	1015.7	1021.6
72.5°	2481.9	1890.1	1109.9	921.5	868.5	853.8	886.2	900.9	927.4	939.2	942.1
75°	1792.9	1395.5	909.7	765.5	721.3	721.3	750.7	777.2	800.8	786.1	777.2
77.5°	1001.0	833.2	653.6	527.0	535.8	577.0	588.8	618.3	641.8	638.9	633.0
80°	606.5	521.1	441.6	341.5	338.6	371.0	447.5	497.5	509.3	482.8	479.9
82.5°	315.0	273.8	235.5	191.4	212.0	247.3	259.1	312.1	344.5	332.7	347.4
85°	79.5	76.5	85.4	88.3	108.9	120.7	132.5	156.0	103.0	50.0	50.0
87.5°	23.6	23.6	29.4	29.4	38.3	47.1	44.2	44.2	23.6	2.9	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)