

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: P840939

Luminaire Tested: **ARCH4-110-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840939
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: ARCH4-110-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 920mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18475 lumens
Efficiency: N/A
Efficacy: 164.1 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): 112.6
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

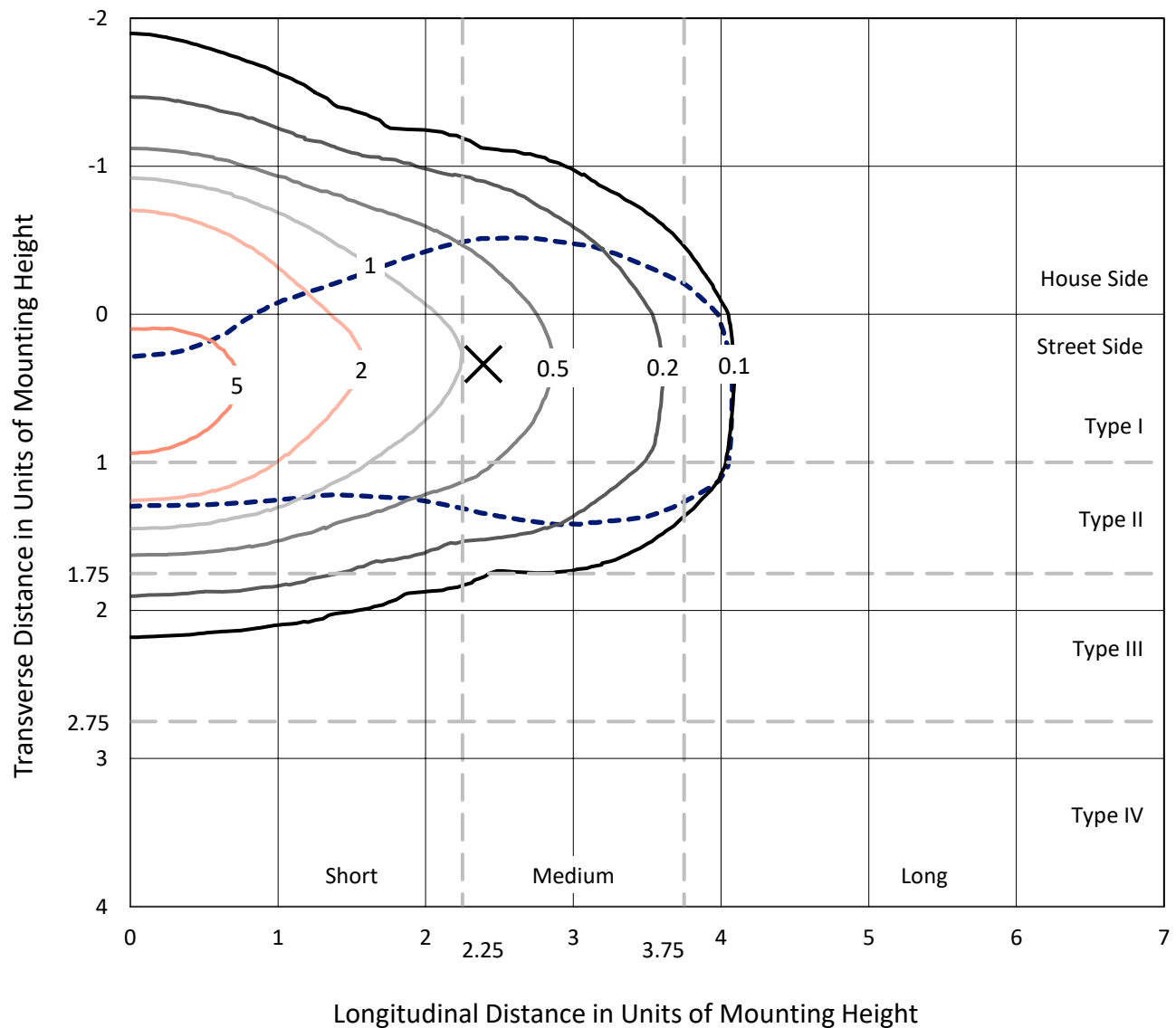


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Iso-Footcandle Lines of Horizontal Illumination

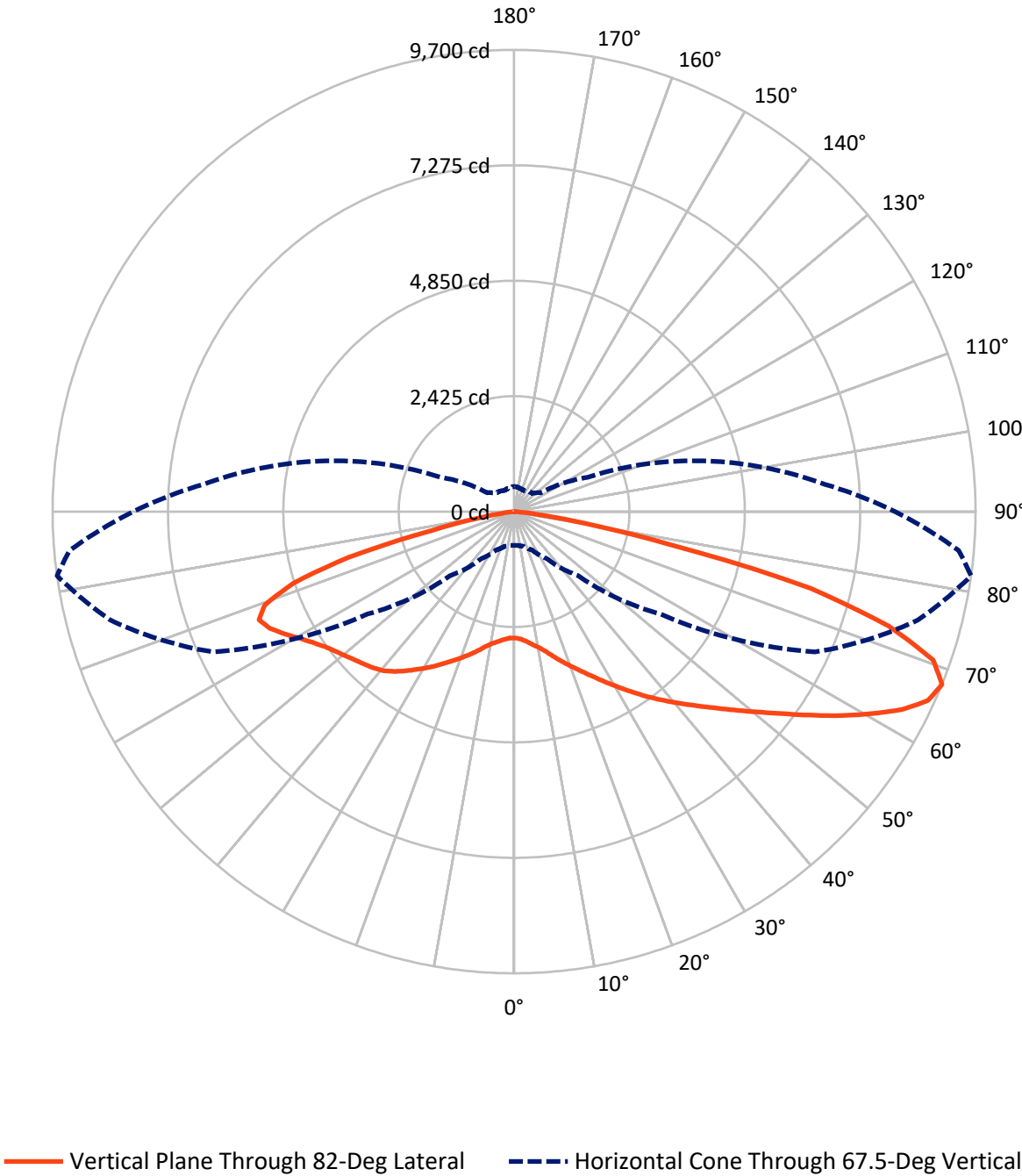
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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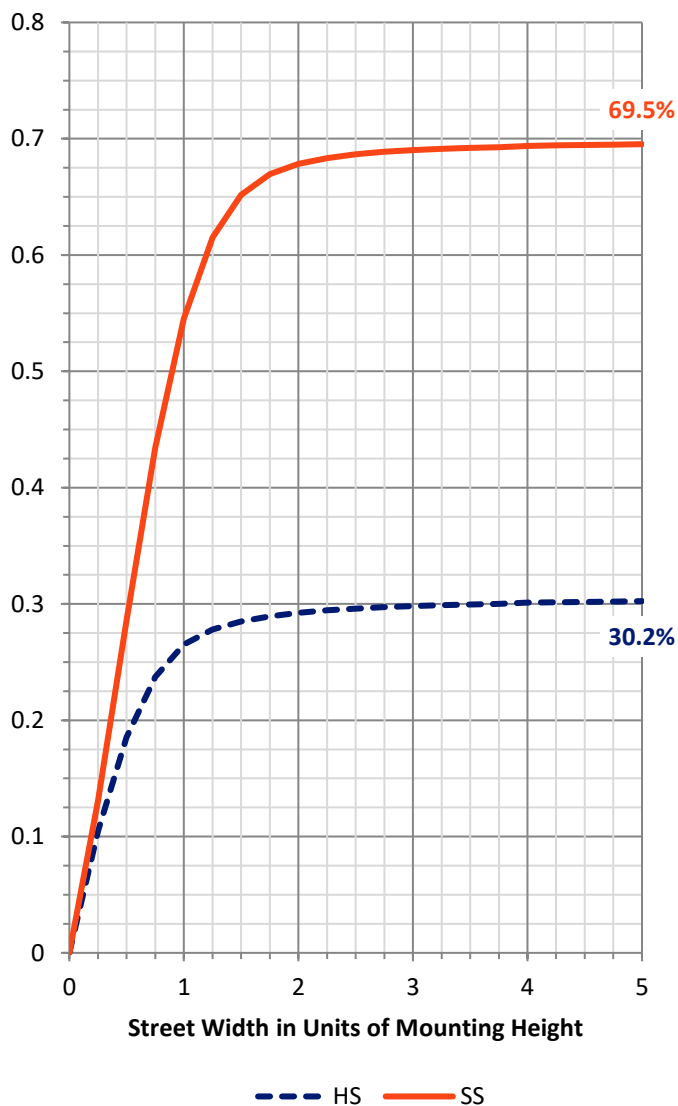
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5626.4	0.0	5626.4
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	12848.6	0.0	12848.6
	% Fixture	69.5	0.0	69.5
Total	Lumens	18475.0	0.0	18475.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.5	1.5
10°-20°	988.6	5.4
20°-30°	1986.9	10.8
30°-40°	3121.1	16.9
40°-50°	3802.2	20.6
50°-60°	3592.6	19.4
60°-70°	2966.6	16.1
70°-80°	1615.5	8.7
80°-90°	127.0	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°	18475.0	100.0
0°-180°	18475.0	100.0

Coefficient of Utilization



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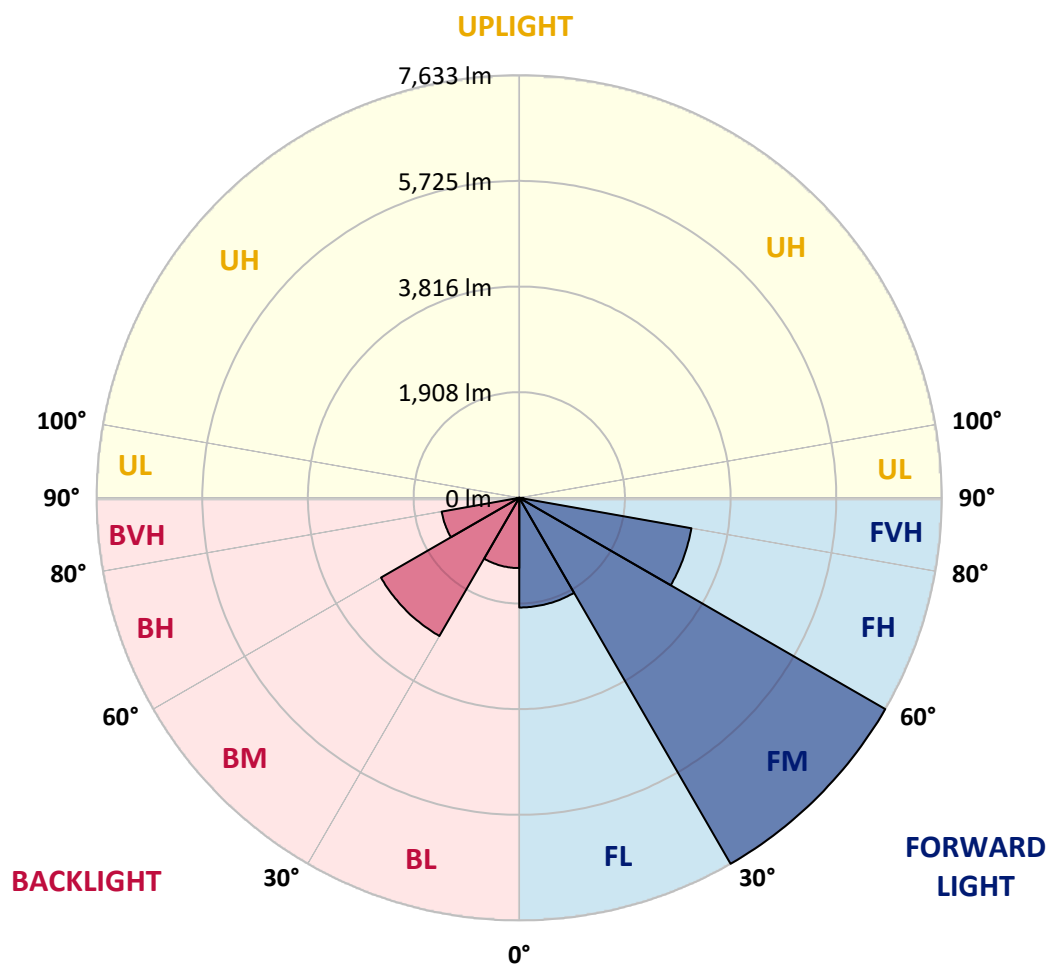
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1981.2	10.7			
FM	(30°-60°)	7632.8	41.3			
FH	(60°-80°)	3158.0	17.1			G2/5000
FVH	(80°-90°)	76.6	0.4			G1/100
BL	(0°-30°)	1268.8	6.9	B3/2500		
BM	(30°-60°)	2883.1	15.6	B3/5000		
BH	(60°-80°)	1424.1	7.7	B3/2500		G3/2500
BVH	(80°-90°)	50.4	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°	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8
2.5°	2776.5	2776.5	2797.9	2797.9	2779.2	2749.7	2741.6	2709.4	2679.9	2679.9	2682.6
5°	3042.1	3039.4	3055.5	3034.0	2988.4	2929.4	2889.2	2819.4	2760.4	2741.6	2738.9
7.5°	3366.7	3364.0	3372.0	3337.2	3251.3	3154.7	3074.3	2961.6	2865.0	2824.8	2814.0
10°	3728.8	3726.1	3718.1	3659.1	3543.7	3393.5	3272.8	3117.2	2972.3	2907.9	2894.5
12.5°	4144.6	4139.2	4120.5	4034.6	3876.4	3683.2	3508.8	3307.6	3114.5	3026.0	2996.5
15°	4608.7	4600.7	4565.8	4461.2	4249.2	4005.1	3779.8	3522.3	3286.2	3170.8	3130.6
17.5°	5096.9	5096.9	5043.3	4887.7	4651.6	4348.5	4069.5	3742.2	3465.9	3323.7	3275.5
20°	5593.2	5590.5	5523.5	5335.7	5056.7	4708.0	4353.9	3994.4	3651.0	3479.3	3420.3
22.5°	6116.3	6111.0	6027.8	5813.2	5480.5	5086.2	4673.1	4243.9	3854.9	3648.3	3573.2
25°	6717.2	6709.2	6607.2	6344.3	5950.0	5504.7	5032.6	4536.3	4088.3	3836.1	3747.6
27.5°	7355.7	7345.0	7224.2	6918.4	6486.5	5950.0	5429.6	4874.3	4345.8	4045.4	3946.1
30°	7924.4	7916.3	7784.9	7471.0	6974.8	6392.6	5807.8	5212.3	4616.8	4268.0	4144.6
32.5°	8353.6	8353.6	8235.6	7927.1	7412.0	6816.5	6188.8	5531.5	4898.4	4506.8	4361.9
35°	8613.8	8621.9	8519.9	8273.1	7787.6	7216.2	6583.1	5907.1	5198.9	4761.6	4606.0
37.5°	8651.4	8678.2	8619.2	8452.9	8047.8	7548.8	6969.4	6269.2	5510.1	5019.1	4844.8
40°	8477.0	8495.8	8498.5	8434.1	8155.1	7787.6	7310.1	6652.8	5840.0	5290.1	5088.9
42.5°	8128.3	8141.7	8165.8	8184.6	8077.3	7892.2	7570.3	7009.6	6191.4	5566.4	5330.3
45°	7677.6	7674.9	7715.2	7795.6	7790.3	7833.2	7715.2	7334.2	6556.3	5880.3	5598.6
47.5°	7004.3	6990.8	7133.0	7315.4	7406.7	7607.8	7717.8	7589.1	6953.3	6226.3	5904.4
50°	5950.0	5936.6	6247.8	6677.0	6945.2	7251.1	7570.3	7742.0	7369.1	6615.3	6237.0
52.5°	4667.7	4654.3	5048.6	5799.8	6384.6	6829.9	7272.5	7776.9	7763.4	7049.9	6612.6
55°	3471.3	3460.6	3844.2	4657.0	5603.9	6341.7	6907.7	7685.6	8133.6	7548.8	7068.6
57.5°	2446.5	2441.2	2773.8	3447.1	4600.7	5746.1	6556.3	7508.6	8474.3	8090.7	7583.7
60°	1716.9	1708.8	1950.2	2470.7	3479.3	4847.5	6207.5	7272.5	8729.2	8624.6	8131.0
62.5°	1156.2	1150.8	1322.5	1757.1	2470.7	3731.5	5679.1	7114.2	8874.0	9161.1	8683.6
65°	877.2	874.5	952.3	1191.1	1749.1	2679.9	4839.4	7095.5	8892.8	9563.5	9153.0
67.5°	708.2	710.9	753.8	890.6	1209.9	1904.6	3753.0	6977.4	8793.6	9700.3	9381.0
70°	579.4	579.4	598.2	689.4	893.3	1285.0	2620.9	6440.9	8517.2	9343.5	9110.1
72.5°	442.6	445.3	504.3	558.0	673.3	901.4	1679.3	5330.3	7865.4	8238.3	8061.2
75°	351.4	348.7	383.6	458.7	523.1	643.8	1030.1	3822.7	6693.1	6438.2	6325.6
77.5°	252.2	249.5	276.3	340.7	397.0	456.0	614.3	1928.8	3640.3	3345.2	3262.0
80°	171.7	166.3	190.5	236.1	262.9	268.3	300.5	740.4	1588.1	1496.9	1478.1
82.5°	88.5	88.5	101.9	134.1	136.8	139.5	134.1	238.8	525.8	490.9	469.5
85°	34.9	34.9	37.6	45.6	45.6	48.3	48.3	61.7	56.3	53.7	51.0
87.5°	2.7	2.7	5.4	5.4	8.0	8.0	8.0	10.7	13.4	13.4	13.4
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°	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8
2.5°	2677.2	2666.5	2631.6	2623.6	2618.2	2610.2	2612.9	2594.1	2586.0	2588.7	2578.0
5°	2725.5	2706.7	2663.8	2645.0	2639.7	2631.6	2639.7	2626.3	2612.9	2618.2	2612.9
7.5°	2792.6	2765.8	2712.1	2693.3	2690.6	2682.6	2693.3	2682.6	2671.9	2677.2	2666.5
10°	2862.3	2827.5	2768.4	2749.7	2749.7	2747.0	2757.7	2741.6	2730.9	2733.6	2728.2
12.5°	2964.3	2918.7	2854.3	2838.2	2830.1	2838.2	2840.9	2819.4	2800.6	2803.3	2795.3
15°	3087.7	3036.7	2967.0	2942.8	2937.4	2934.8	2924.0	2897.2	2873.1	2870.4	2862.3
17.5°	3221.8	3157.4	3074.3	3050.1	3026.0	3017.9	2991.1	2956.2	2918.7	2918.7	2907.9
20°	3350.6	3278.1	3178.9	3144.0	3109.1	3076.9	3031.3	2975.0	2926.7	2918.7	2907.9
22.5°	3490.1	3404.2	3288.9	3237.9	3176.2	3111.8	3034.0	2958.9	2897.2	2883.8	2875.7
25°	3645.7	3538.3	3401.5	3326.4	3227.2	3127.9	3012.6	2916.0	2843.6	2822.1	2816.7
27.5°	3817.3	3688.6	3522.3	3412.3	3267.4	3111.8	2964.3	2848.9	2760.4	2733.6	2725.5
30°	3991.7	3838.8	3632.2	3471.3	3267.4	3060.8	2875.7	2741.6	2639.7	2602.1	2596.8
32.5°	4166.1	3994.4	3731.5	3503.5	3235.2	2975.0	2760.4	2602.1	2486.8	2441.2	2451.9
35°	4375.3	4166.1	3822.7	3516.9	3181.6	2870.4	2628.9	2443.8	2325.8	2285.6	2293.6
37.5°	4592.6	4337.8	3895.1	3506.2	3106.4	2752.3	2481.4	2301.7	2154.1	2084.4	2092.4
40°	4780.4	4493.4	3946.1	3468.6	3009.9	2618.2	2336.5	2100.5	1896.6	1829.5	1821.5
42.5°	4957.4	4608.7	3972.9	3412.3	2899.9	2462.6	2130.0	1826.8	1623.0	1539.8	1542.5
45°	5142.5	4721.4	3962.2	3337.2	2763.1	2280.2	1864.4	1558.6	1378.9	1303.7	1306.4
47.5°	5354.5	4842.1	3951.5	3256.7	2596.8	2044.1	1609.6	1322.5	1166.9	1113.3	1107.9
50°	5579.8	4976.2	3938.1	3157.4	2411.7	1781.2	1357.4	1102.5	971.1	936.2	928.2
52.5°	5834.6	5121.1	3930.0	3039.4	2189.0	1502.3	1132.1	909.4	820.9	796.7	794.0
55°	6140.5	5290.1	3940.7	2897.2	1920.7	1239.4	941.6	783.3	724.3	710.9	708.2
57.5°	6513.3	5507.4	3972.9	2730.9	1639.1	1011.3	802.1	705.5	668.0	657.2	657.2
60°	6918.4	5754.2	4031.9	2543.1	1357.4	834.3	710.9	643.8	627.7	641.1	641.1
62.5°	7355.7	6043.9	4136.6	2315.1	1094.5	705.5	638.5	592.9	582.1	608.9	611.6
65°	7760.8	6325.6	4203.6	2041.5	869.2	611.6	582.1	541.9	547.2	574.1	571.4
67.5°	8010.2	6559.0	4109.7	1698.1	689.4	541.9	523.1	488.2	501.6	523.1	525.8
70°	7857.3	6427.5	3645.7	1282.3	539.2	472.1	458.7	437.3	448.0	474.8	485.6
72.5°	7108.9	5756.9	2835.5	866.5	434.6	397.0	402.4	391.7	405.1	429.2	453.4
75°	5770.3	4351.2	1902.0	555.3	343.4	338.0	346.1	338.0	343.4	367.5	380.9
77.5°	3012.6	2121.9	947.0	346.1	254.8	262.9	276.3	279.0	295.1	300.5	305.8
80°	1405.7	955.0	394.3	193.1	169.0	185.1	211.9	214.6	220.0	228.0	230.7
82.5°	458.7	287.0	182.4	104.6	96.6	104.6	136.8	163.6	166.3	182.4	182.4
85°	48.3	29.5	40.2	42.9	37.6	45.6	61.7	59.0	26.8	16.1	16.1
87.5°	13.4	10.7	13.4	13.4	10.7	10.7	8.0	2.7	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)