

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: P836858

Luminaire Tested: **ARCH3-80-750-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836858
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-80-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13852 lumens
Efficiency: N/A
Efficacy: 169.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 81.9
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

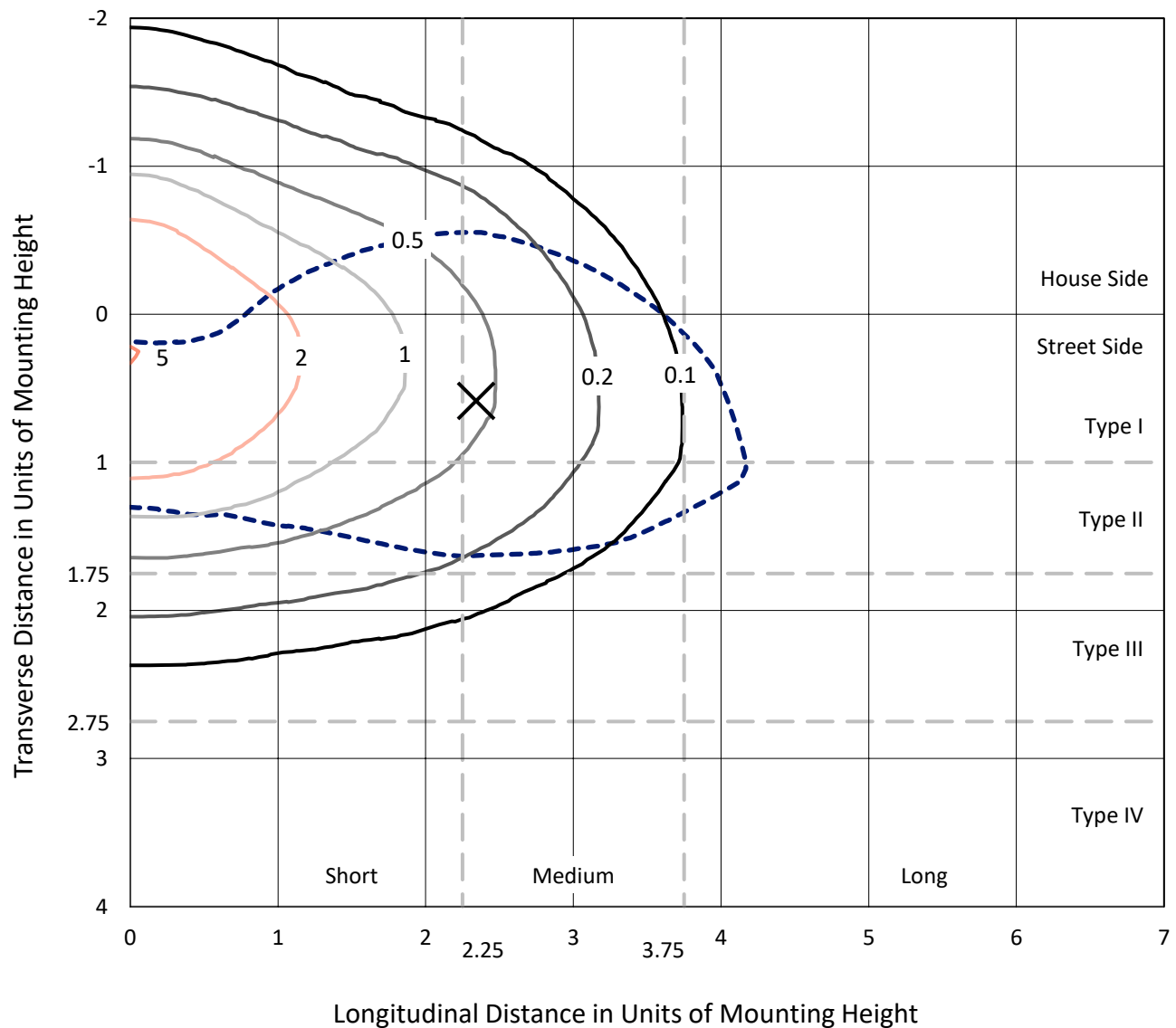


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Iso-Footcandle Lines of Horizontal Illumination

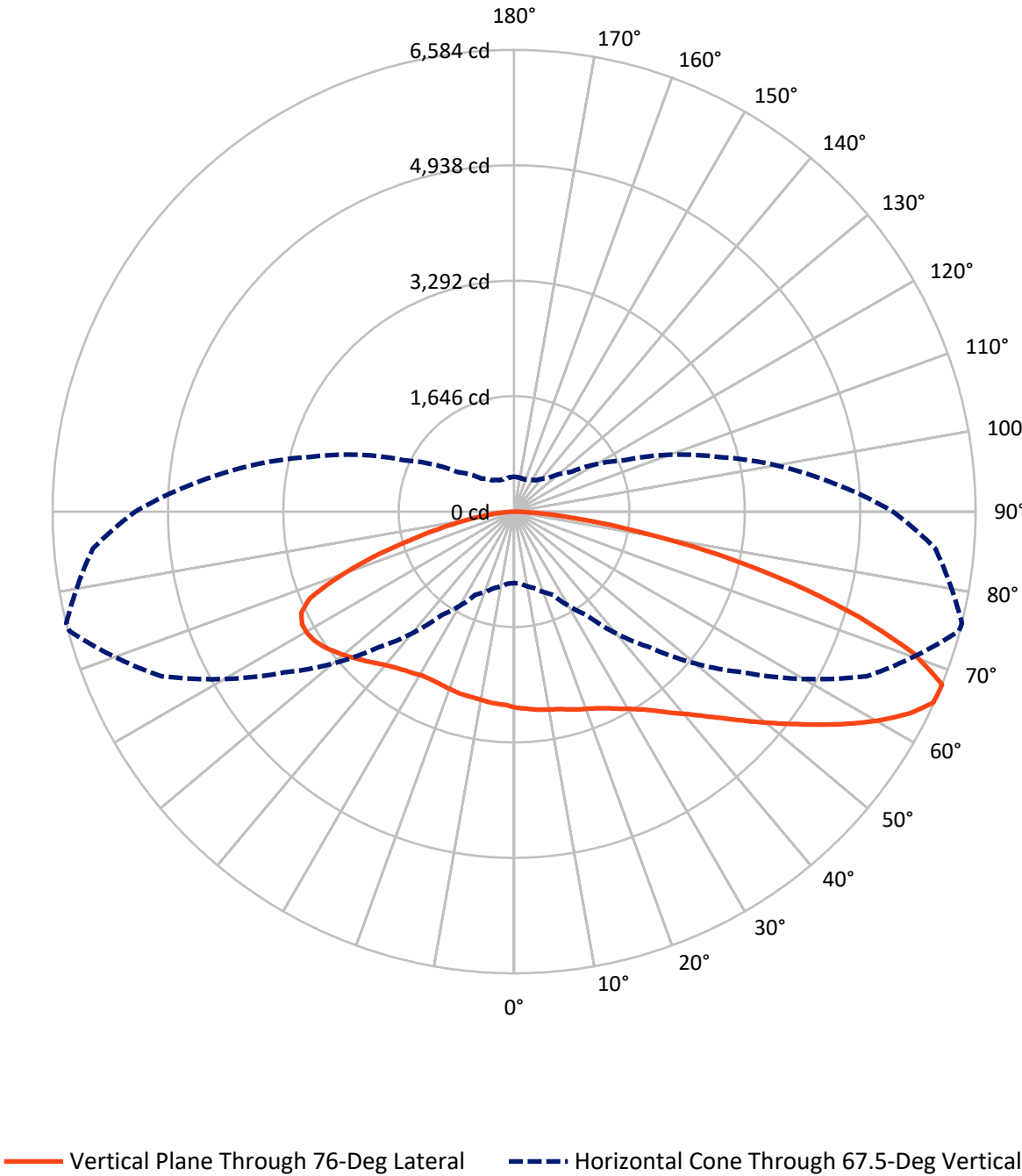
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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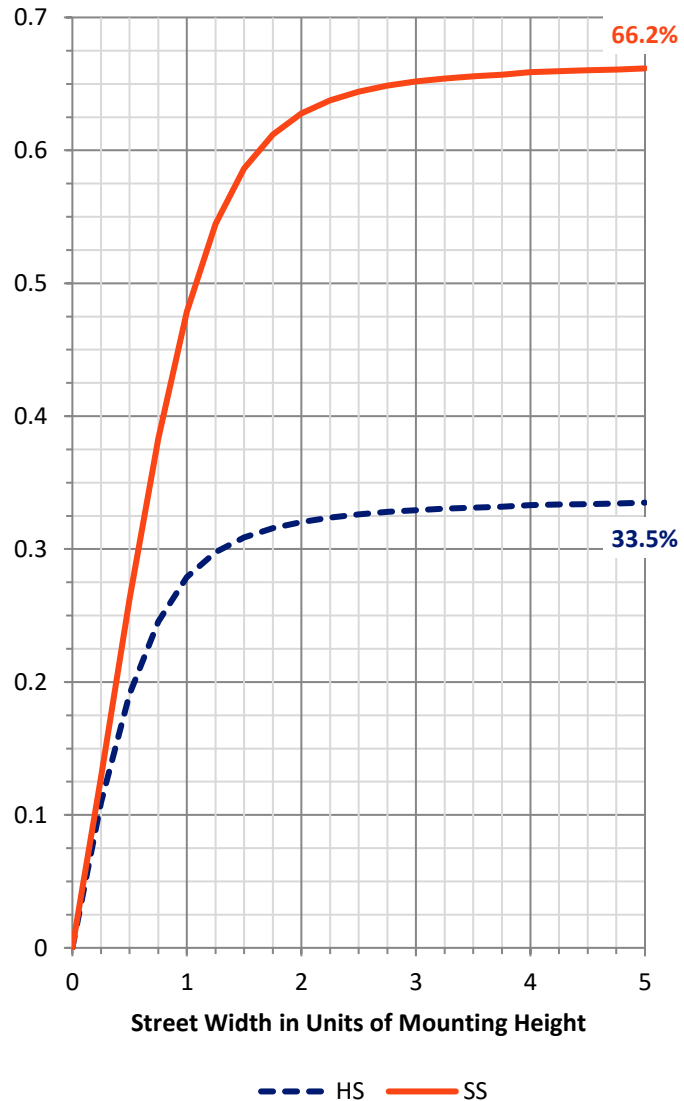
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4680.7	0.0	4680.7
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	9171.3	0.0	9171.3
	% Fixture	66.2	0.0	66.2
Total	Lumens	13852.0	0.0	13852.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.8	1.9
10°-20°	824.9	6.0
20°-30°	1401.5	10.1
30°-40°	1994.1	14.4
40°-50°	2518.5	18.2
50°-60°	2726.7	19.7
60°-70°	2536.2	18.3
70°-80°	1362.1	9.8
80°-90°	218.3	1.6
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°	13852.0	100.0
0°-180°	13852.0	100.0

Coefficient of Utilization



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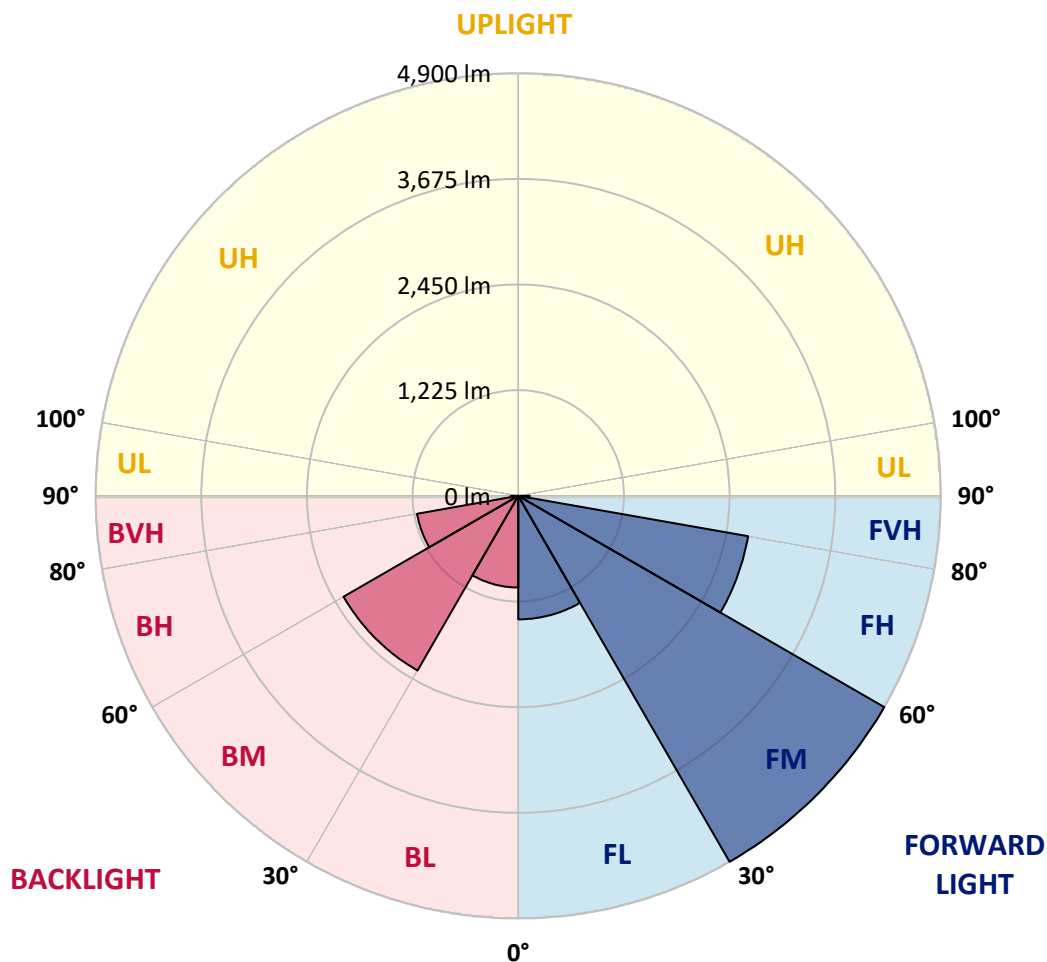
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1432.4	10.3			
FM	(30°-60°)	4900.3	35.4			
FH	(60°-80°)	2706.6	19.5			G2/5000
FVH	(80°-90°)	132.0	1.0			G2/225
BL	(0°-30°)	1063.7	7.7	B3/2500		
BM	(30°-60°)	2339.0	16.9	B2/2500		
BH	(60°-80°)	1191.7	8.6	B3/2500		G3/2500
BVH	(80°-90°)	86.2	0.6			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°	76°	85°
0°	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1
2.5°	2882.9	2877.8	2857.2	2859.8	2859.8	2857.2	2826.4	2813.5	2813.5	2810.9	2782.6
5°	2985.8	2978.1	2955.0	2949.8	2939.5	2926.7	2877.8	2849.5	2836.6	2834.1	2795.5
7.5°	3106.7	3096.4	3068.1	3052.7	3027.0	2993.5	2931.8	2888.1	2857.2	2854.7	2800.6
10°	3227.6	3217.3	3183.8	3155.5	3119.5	3065.5	2985.8	2921.5	2872.7	2867.5	2803.2
12.5°	3371.6	3361.3	3320.1	3284.1	3230.1	3158.1	3052.7	2965.2	2898.4	2890.7	2810.9
15°	3523.3	3507.9	3466.7	3425.6	3358.7	3266.1	3140.1	3024.4	2939.5	2926.7	2834.1
17.5°	3649.3	3628.8	3595.3	3554.2	3479.6	3371.6	3227.6	3083.5	2978.1	2967.8	2857.2
20°	3757.3	3741.9	3705.9	3667.3	3587.6	3469.3	3309.9	3142.7	3014.1	3001.2	2875.2
22.5°	3860.2	3839.6	3819.1	3790.8	3703.3	3572.2	3405.0	3214.7	3060.4	3045.0	2898.4
25°	3978.5	3955.4	3947.6	3932.2	3829.3	3695.6	3520.7	3304.7	3124.7	3106.7	2939.5
27.5°	4125.1	4099.4	4084.0	4084.0	3960.5	3821.6	3644.2	3410.2	3199.3	3183.8	2991.0
30°	4279.4	4248.5	4225.4	4225.4	4086.5	3947.6	3765.1	3515.6	3284.1	3266.1	3057.8
32.5°	4415.7	4384.8	4359.1	4356.6	4212.5	4073.7	3891.1	3631.3	3387.0	3363.9	3140.1
35°	4521.2	4492.9	4469.7	4474.9	4338.6	4202.3	4032.5	3785.6	3515.6	3489.9	3248.1
37.5°	4585.4	4575.2	4562.3	4580.3	4454.3	4325.7	4179.1	3934.8	3662.2	3639.0	3381.9
40°	4618.9	4611.2	4662.6	4685.7	4552.0	4436.3	4325.7	4089.1	3821.6	3795.9	3536.2
42.5°	4667.7	4732.0	4752.6	4747.5	4624.0	4521.2	4459.4	4256.3	4009.4	3986.2	3721.3
45°	4492.9	4477.4	4590.6	4652.3	4629.2	4575.2	4585.4	4456.9	4228.0	4204.8	3934.8
47.5°	4258.8	4238.3	4302.6	4454.3	4544.3	4595.7	4698.6	4665.2	4480.0	4459.4	4184.3
50°	3765.1	3793.3	4032.5	4235.7	4413.1	4590.6	4793.8	4888.9	4757.8	4737.2	4451.7
52.5°	3217.3	3245.6	3495.0	3963.1	4253.7	4552.0	4863.2	5112.7	5058.6	5035.5	4737.2
55°	2818.6	2880.4	3163.3	3502.7	4027.4	4431.1	4904.3	5341.5	5382.7	5362.1	5048.4
57.5°	2422.6	2468.9	2682.3	2983.2	3718.8	4220.3	4901.8	5555.0	5722.2	5701.6	5364.7
60°	1957.1	2016.3	2186.0	2510.0	3307.3	3968.2	4829.8	5722.2	6048.8	6033.3	5670.7
62.5°	1638.2	1656.2	1777.1	2057.4	2777.5	3649.3	4667.7	5812.2	6344.5	6334.2	5945.9
65°	1319.3	1321.9	1432.5	1666.5	2265.7	3253.3	4392.6	5778.7	6568.3	6573.4	6143.9
67.5°	1018.4	1031.3	1131.6	1309.0	1800.2	2738.9	3999.1	5552.4	6570.8	6583.7	6030.8
70°	704.7	714.9	866.7	1039.0	1391.3	2183.4	3466.7	4953.2	6030.8	6041.1	5405.8
72.5°	496.3	501.5	663.5	830.7	1087.9	1645.9	2615.5	4096.8	5140.9	5148.7	4546.9
75°	370.3	375.5	468.1	630.1	833.2	1139.3	1787.4	3137.5	4107.1	4107.1	3590.2
77.5°	262.3	264.9	303.5	434.6	555.5	769.0	1075.0	2054.8	3014.1	3019.2	2615.5
80°	177.5	180.0	198.0	293.2	347.2	416.6	583.8	1077.6	1900.5	1908.2	1661.4
82.5°	92.6	97.7	110.6	149.2	174.9	231.5	300.9	547.8	1051.8	1072.4	997.8
85°	36.0	36.0	41.1	48.9	64.3	90.0	138.9	208.3	475.8	491.2	439.8
87.5°	12.9	12.9	15.4	15.4	18.0	20.6	23.1	30.9	54.0	54.0	51.4
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°	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1	2798.1
2.5°	2772.4	2772.4	2759.5	2764.6	2762.1	2756.9	2751.8	2759.5	2751.8	2733.8	2731.2
5°	2777.5	2772.4	2751.8	2749.2	2741.5	2731.2	2718.3	2723.5	2710.6	2695.2	2692.6
7.5°	2780.1	2769.8	2741.5	2731.2	2715.8	2695.2	2674.6	2674.6	2656.6	2641.2	2638.6
10°	2774.9	2762.1	2723.5	2702.9	2674.6	2643.8	2615.5	2607.8	2587.2	2569.2	2569.2
12.5°	2777.5	2759.5	2710.6	2677.2	2638.6	2600.0	2564.0	2553.8	2535.8	2517.8	2515.2
15°	2792.9	2767.2	2705.5	2661.8	2605.2	2561.5	2522.9	2515.2	2499.7	2486.9	2486.9
17.5°	2808.4	2774.9	2697.8	2636.1	2566.6	2517.8	2481.7	2481.7	2471.5	2463.7	2463.7
20°	2816.1	2777.5	2682.3	2600.0	2520.3	2468.9	2435.5	2440.6	2438.0	2435.5	2435.5
22.5°	2834.1	2782.6	2669.5	2566.6	2471.5	2417.5	2386.6	2394.3	2391.7	2391.7	2394.3
25°	2862.4	2795.5	2659.2	2535.8	2425.2	2366.0	2332.6	2337.7	2337.7	2337.7	2337.7
27.5°	2900.9	2821.2	2656.6	2507.5	2378.9	2312.0	2270.9	2270.9	2260.6	2263.1	2265.7
30°	2960.1	2870.1	2661.8	2481.7	2330.0	2245.1	2196.3	2188.6	2186.0	2191.1	2193.7
32.5°	3032.1	2936.9	2692.6	2463.7	2278.6	2170.6	2108.8	2106.3	2098.6	2098.6	2098.6
35°	3122.1	3001.2	2720.9	2461.2	2227.1	2090.8	2024.0	2016.3	1998.3	1990.5	1990.5
37.5°	3237.8	3101.5	2754.4	2443.2	2183.4	2013.7	1934.0	1908.2	1887.7	1885.1	1885.1
40°	3379.3	3214.7	2803.2	2422.6	2137.1	1934.0	1828.5	1784.8	1787.4	1797.7	1797.7
42.5°	3546.5	3353.6	2864.9	2412.3	2070.3	1851.7	1705.1	1653.6	1671.6	1681.9	1684.5
45°	3741.9	3518.2	2934.4	2399.5	2008.5	1759.1	1573.9	1509.6	1517.3	1519.9	1522.5
47.5°	3968.2	3700.8	3006.4	2389.2	1939.1	1643.4	1429.9	1345.0	1342.5	1327.0	1332.2
50°	4204.8	3893.6	3081.0	2371.2	1854.2	1507.1	1278.2	1177.9	1157.3	1134.1	1136.7
52.5°	4456.9	4091.7	3150.4	2342.9	1748.8	1368.2	1134.1	1026.1	985.0	959.3	964.4
55°	4734.6	4294.8	3217.3	2299.2	1638.2	1229.3	1005.6	895.0	843.5	823.0	825.5
57.5°	4989.2	4490.3	3266.1	2245.1	1517.3	1103.3	892.4	784.4	751.0	748.4	751.0
60°	5236.1	4654.9	3286.7	2170.6	1393.9	987.6	787.0	704.7	681.5	694.4	696.9
62.5°	5444.4	4760.3	3276.4	2070.3	1267.9	877.0	702.1	642.9	627.5	653.2	655.8
65°	5565.3	4793.8	3204.4	1926.2	1131.6	769.0	622.4	558.1	550.4	565.8	573.5
67.5°	5405.8	4585.4	3009.0	1728.2	979.8	668.7	545.2	493.8	480.9	493.8	493.8
70°	4791.2	3973.4	2546.0	1414.5	812.7	570.9	473.2	437.2	426.9	437.2	434.6
72.5°	3991.4	3304.7	2006.0	1103.3	640.4	480.9	411.5	378.0	367.8	357.5	352.3
75°	3096.4	2510.0	1455.6	810.1	483.5	385.8	344.6	313.8	288.0	298.3	293.2
77.5°	2268.3	1761.7	1031.3	560.6	347.2	298.3	270.0	246.9	228.9	249.5	246.9
80°	1460.8	1139.3	689.2	375.5	239.2	208.3	198.0	185.2	203.2	264.9	270.0
82.5°	892.4	722.7	411.5	244.3	156.9	138.9	128.6	128.6	208.3	228.9	231.5
85°	398.6	383.2	223.7	126.0	87.4	79.7	72.0	92.6	84.9	61.7	64.3
87.5°	64.3	66.9	48.9	43.7	33.4	33.4	25.7	18.0	12.9	7.7	7.7
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)