

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: P842705

Luminaire Tested: **ARCH4-80-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842705
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15211 lumens
Efficiency: N/A
Efficacy: 182.4 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): 83.4
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

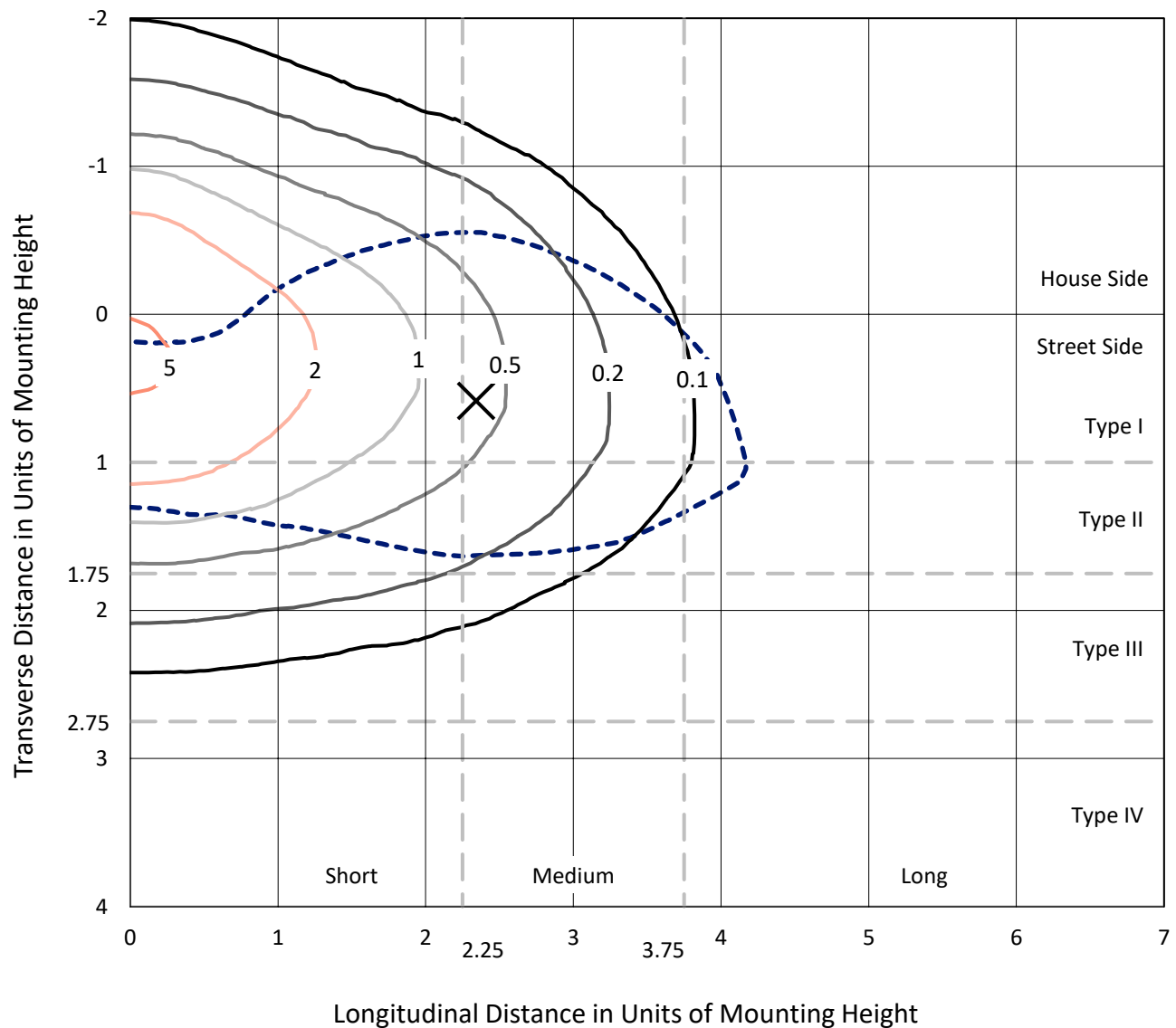


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Iso-Footcandle Lines of Horizontal Illumination

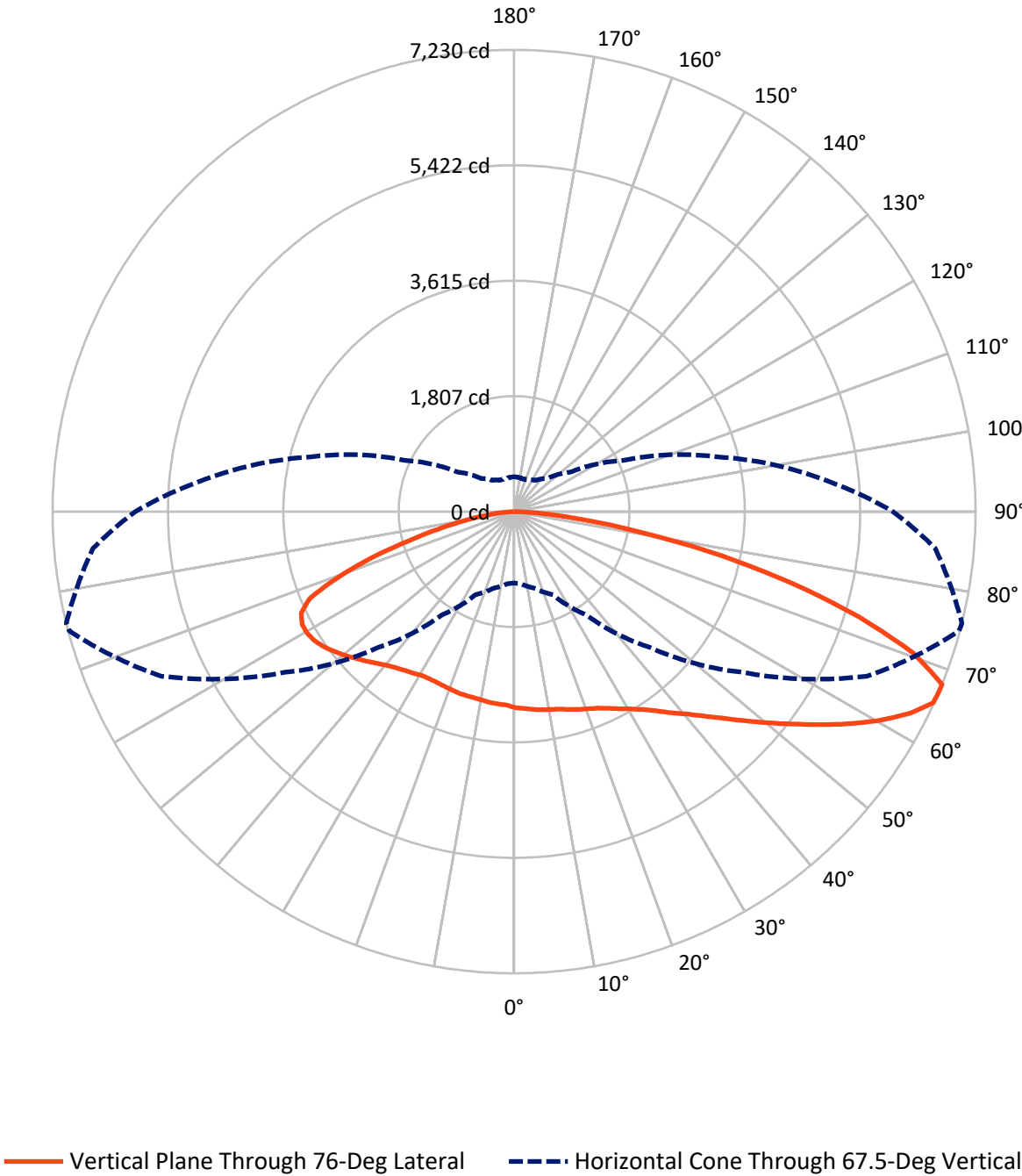
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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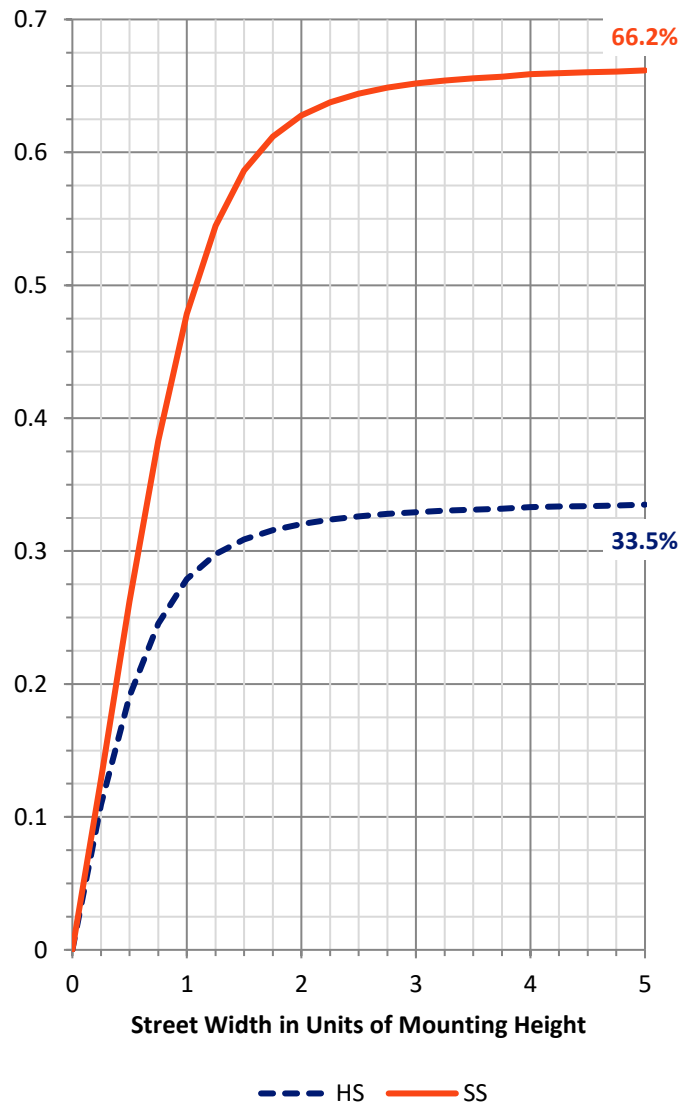
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5139.9	0.0	5139.9
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	10071.1	0.0	10071.1
	% Fixture	66.2	0.0	66.2
Total	Lumens	15211.0	0.0	15211.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.3	1.9
10°-20°	905.8	6.0
20°-30°	1539.0	10.1
30°-40°	2189.7	14.4
40°-50°	2765.6	18.2
50°-60°	2994.2	19.7
60°-70°	2785.0	18.3
70°-80°	1495.8	9.8
80°-90°	239.7	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°	15211.0	100.0
0°-180°	15211.0	100.0

Coefficient of Utilization



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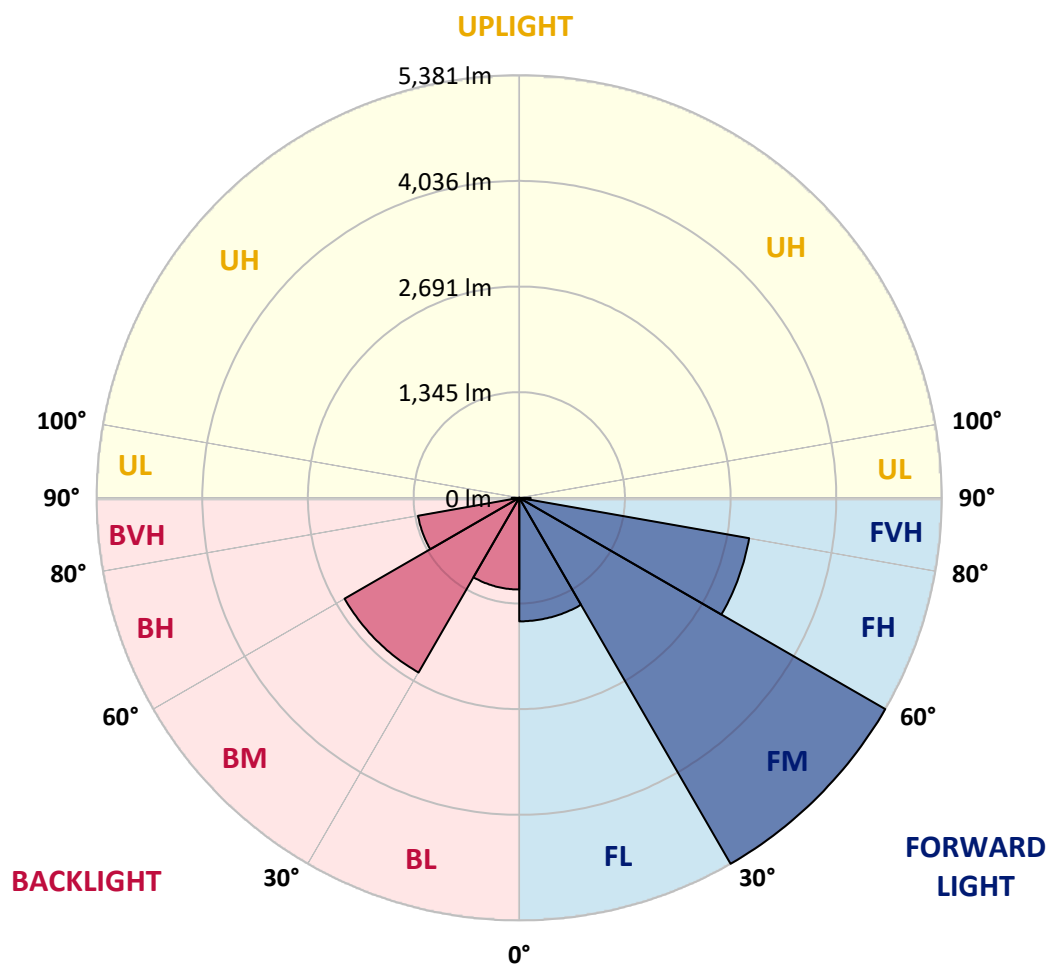
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1573.0	10.3			
FM	(30°-60°)	5381.1	35.4			
FH	(60°-80°)	2972.1	19.5			G2/5000
FVH	(80°-90°)	145.0	1.0			G2/225
BL	(0°-30°)	1168.1	7.7	B3/2500		
BM	(30°-60°)	2568.5	16.9	B3/5000		
BH	(60°-80°)	1308.7	8.6	B3/2500		G3/2500
BVH	(80°-90°)	94.7	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°	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6
2.5°	3165.8	3160.1	3137.5	3140.4	3140.4	3137.5	3103.7	3089.5	3089.5	3086.7	3055.6
5°	3278.7	3270.3	3244.9	3239.2	3227.9	3213.8	3160.1	3129.1	3114.9	3112.1	3069.8
7.5°	3411.5	3400.2	3369.1	3352.2	3323.9	3287.2	3219.4	3171.4	3137.5	3134.7	3075.4
10°	3544.2	3532.9	3496.2	3465.1	3425.6	3366.3	3278.7	3208.1	3154.5	3148.8	3078.2
12.5°	3702.4	3691.1	3645.9	3606.3	3547.0	3468.0	3352.2	3256.2	3182.7	3174.3	3086.7
15°	3869.0	3852.0	3806.8	3761.7	3688.2	3586.6	3448.2	3321.1	3227.9	3213.8	3112.1
17.5°	4007.4	3984.8	3948.1	3902.9	3821.0	3702.4	3544.2	3386.1	3270.3	3259.0	3137.5
20°	4126.0	4109.0	4069.5	4027.1	3939.6	3809.7	3634.6	3451.0	3309.8	3295.7	3157.3
22.5°	4238.9	4216.3	4193.7	4162.7	4066.7	3922.6	3739.1	3530.1	3360.6	3343.7	3182.7
25°	4368.8	4343.4	4334.9	4318.0	4205.0	4058.2	3866.2	3628.9	3431.2	3411.5	3227.9
27.5°	4529.8	4501.6	4484.6	4484.6	4349.1	4196.6	4001.7	3744.7	3513.1	3496.2	3284.4
30°	4699.3	4665.4	4639.9	4639.9	4487.4	4334.9	4134.4	3860.5	3606.3	3586.6	3357.8
32.5°	4848.9	4815.0	4786.8	4784.0	4625.8	4473.3	4272.8	3987.6	3719.3	3693.9	3448.2
35°	4964.7	4933.7	4908.2	4913.9	4764.2	4614.5	4428.1	4157.0	3860.5	3832.3	3566.8
37.5°	5035.3	5024.0	5009.9	5029.7	4891.3	4750.1	4589.1	4320.8	4021.5	3996.1	3713.7
40°	5072.0	5063.6	5120.0	5145.5	4998.6	4871.5	4750.1	4490.3	4196.6	4168.3	3883.1
42.5°	5125.7	5196.3	5218.9	5213.2	5077.7	4964.7	4896.9	4673.8	4402.7	4377.3	4086.4
45°	4933.7	4916.7	5041.0	5108.7	5083.3	5024.0	5035.3	4894.1	4642.8	4617.4	4320.8
47.5°	4676.7	4654.1	4724.7	4891.3	4990.1	5046.6	5159.6	5122.9	4919.5	4896.9	4594.8
50°	4134.4	4165.5	4428.1	4651.2	4846.1	5041.0	5264.1	5368.6	5224.5	5201.9	4888.5
52.5°	3532.9	3564.0	3837.9	4351.9	4671.0	4998.6	5340.3	5614.3	5554.9	5529.5	5201.9
55°	3095.2	3163.0	3473.6	3846.4	4422.5	4865.9	5385.5	5865.6	5910.8	5888.2	5543.6
57.5°	2660.3	2711.1	2945.5	3275.9	4083.6	4634.3	5382.7	6100.0	6283.6	6261.0	5891.0
60°	2149.1	2214.1	2400.5	2756.3	3631.8	4357.5	5303.6	6283.6	6642.2	6625.3	6227.1
62.5°	1798.9	1818.7	1951.4	2259.3	3050.0	4007.4	5125.7	6382.4	6967.0	6955.7	6529.3
65°	1448.7	1451.6	1573.0	1830.0	2488.0	3572.4	4823.5	6345.7	7212.7	7218.3	6746.7
67.5°	1118.3	1132.5	1242.6	1437.5	1976.8	3007.6	4391.4	6097.2	7215.5	7229.6	6622.4
70°	773.8	785.1	951.7	1140.9	1527.8	2397.6	3806.8	5439.2	6622.4	6633.7	5936.2
72.5°	545.0	550.7	728.6	912.2	1194.6	1807.4	2872.1	4498.7	5645.3	5653.8	4993.0
75°	406.7	412.3	514.0	691.9	915.0	1251.1	1962.7	3445.4	4510.0	4510.0	3942.4
77.5°	288.1	290.9	333.2	477.3	610.0	844.4	1180.5	2256.4	3309.8	3315.5	2872.1
80°	194.9	197.7	217.5	321.9	381.2	457.5	641.1	1183.3	2087.0	2095.5	1824.3
82.5°	101.7	107.3	121.4	163.8	192.0	254.2	330.4	601.5	1155.0	1177.6	1095.7
85°	39.5	39.5	45.2	53.7	70.6	98.8	152.5	228.7	522.5	539.4	482.9
87.5°	14.1	14.1	16.9	16.9	19.8	22.6	25.4	33.9	59.3	59.3	56.5
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°	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6	3072.6
2.5°	3044.3	3044.3	3030.2	3035.9	3033.1	3027.4	3021.8	3030.2	3021.8	3002.0	2999.2
5°	3050.0	3044.3	3021.8	3018.9	3010.5	2999.2	2985.0	2990.7	2976.6	2959.6	2956.8
7.5°	3052.8	3041.5	3010.5	2999.2	2982.2	2959.6	2937.0	2937.0	2917.3	2900.3	2897.5
10°	3047.2	3033.1	2990.7	2968.1	2937.0	2903.1	2872.1	2863.6	2841.0	2821.2	2821.2
12.5°	3050.0	3030.2	2976.6	2939.9	2897.5	2855.1	2815.6	2804.3	2784.5	2764.8	2761.9
15°	3066.9	3038.7	2970.9	2922.9	2860.8	2812.8	2770.4	2761.9	2745.0	2730.9	2730.9
17.5°	3083.9	3047.2	2962.4	2894.7	2818.4	2764.8	2725.2	2725.2	2713.9	2705.5	2705.5
20°	3092.4	3050.0	2945.5	2855.1	2767.6	2711.1	2674.4	2680.0	2677.2	2674.4	2674.4
22.5°	3112.1	3055.6	2931.4	2818.4	2713.9	2654.6	2620.7	2629.2	2626.4	2626.4	2629.2
25°	3143.2	3069.8	2920.1	2784.5	2663.1	2598.1	2561.4	2567.1	2567.1	2567.1	2567.1
27.5°	3185.6	3098.0	2917.3	2753.5	2612.3	2538.8	2493.7	2493.7	2482.4	2485.2	2488.0
30°	3250.5	3151.7	2922.9	2725.2	2558.6	2465.4	2411.8	2403.3	2400.5	2406.1	2408.9
32.5°	3329.6	3225.1	2956.8	2705.5	2502.1	2383.5	2315.7	2312.9	2304.4	2304.4	2304.4
35°	3428.4	3295.7	2987.9	2702.6	2445.6	2296.0	2222.5	2214.1	2194.3	2185.8	2185.8
37.5°	3555.5	3405.8	3024.6	2682.9	2397.6	2211.2	2123.7	2095.5	2072.9	2070.0	2070.0
40°	3710.8	3530.1	3078.2	2660.3	2346.8	2123.7	2007.9	1959.9	1962.7	1974.0	1974.0
42.5°	3894.4	3682.6	3146.0	2649.0	2273.4	2033.3	1872.4	1815.9	1835.6	1846.9	1849.8
45°	4109.0	3863.3	3222.3	2634.9	2205.6	1931.7	1728.3	1657.7	1666.2	1669.0	1671.8
47.5°	4357.5	4063.8	3301.3	2623.6	2129.3	1804.6	1570.2	1477.0	1474.2	1457.2	1462.9
50°	4617.4	4275.6	3383.2	2603.8	2036.2	1654.9	1403.6	1293.4	1270.8	1245.4	1248.2
52.5°	4894.1	4493.1	3459.5	2572.7	1920.4	1502.4	1245.4	1126.8	1081.6	1053.4	1059.0
55°	5199.1	4716.2	3532.9	2524.7	1798.9	1349.9	1104.2	982.8	926.3	903.7	906.5
57.5°	5478.7	4930.8	3586.6	2465.4	1666.2	1211.5	980.0	861.3	824.6	821.8	824.6
60°	5749.8	5111.6	3609.2	2383.5	1530.6	1084.4	864.2	773.8	748.4	762.5	765.3
62.5°	5978.6	5227.4	3597.9	2273.4	1392.3	963.0	771.0	706.0	689.1	717.3	720.1
65°	6111.3	5264.1	3518.8	2115.2	1242.6	844.4	683.4	612.8	604.4	621.3	629.8
67.5°	5936.2	5035.3	3304.2	1897.8	1076.0	734.3	598.7	542.2	528.1	542.2	542.2
70°	5261.2	4363.2	2795.8	1553.2	892.4	626.9	519.6	480.1	468.8	480.1	477.3
72.5°	4383.0	3628.9	2202.8	1211.5	703.2	528.1	451.9	415.1	403.8	392.5	386.9
75°	3400.2	2756.3	1598.4	889.6	530.9	423.6	378.4	344.5	316.3	327.6	321.9
77.5°	2490.8	1934.5	1132.5	615.6	381.2	327.6	296.5	271.1	251.3	273.9	271.1
80°	1604.1	1251.1	756.9	412.3	262.6	228.7	217.5	203.3	223.1	290.9	296.5
82.5°	980.0	793.6	451.9	268.3	172.3	152.5	141.2	141.2	228.7	251.3	254.2
85°	437.7	420.8	245.7	138.4	96.0	87.5	79.1	101.7	93.2	67.8	70.6
87.5°	70.6	73.4	53.7	48.0	36.7	36.7	28.2	19.8	14.1	8.5	8.5
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)