

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: P842741

Luminaire Tested: **ARCH4-90-727-U-T2U**

Issue Date: 5/27/2024

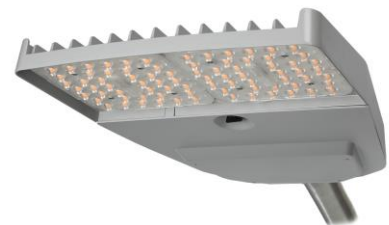
Test Information

Test Method: LM-79-08
Report Number: P842741
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: ARCH4-90-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15509 lumens
Efficiency: N/A
Efficacy: 166.6 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): 93.1
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

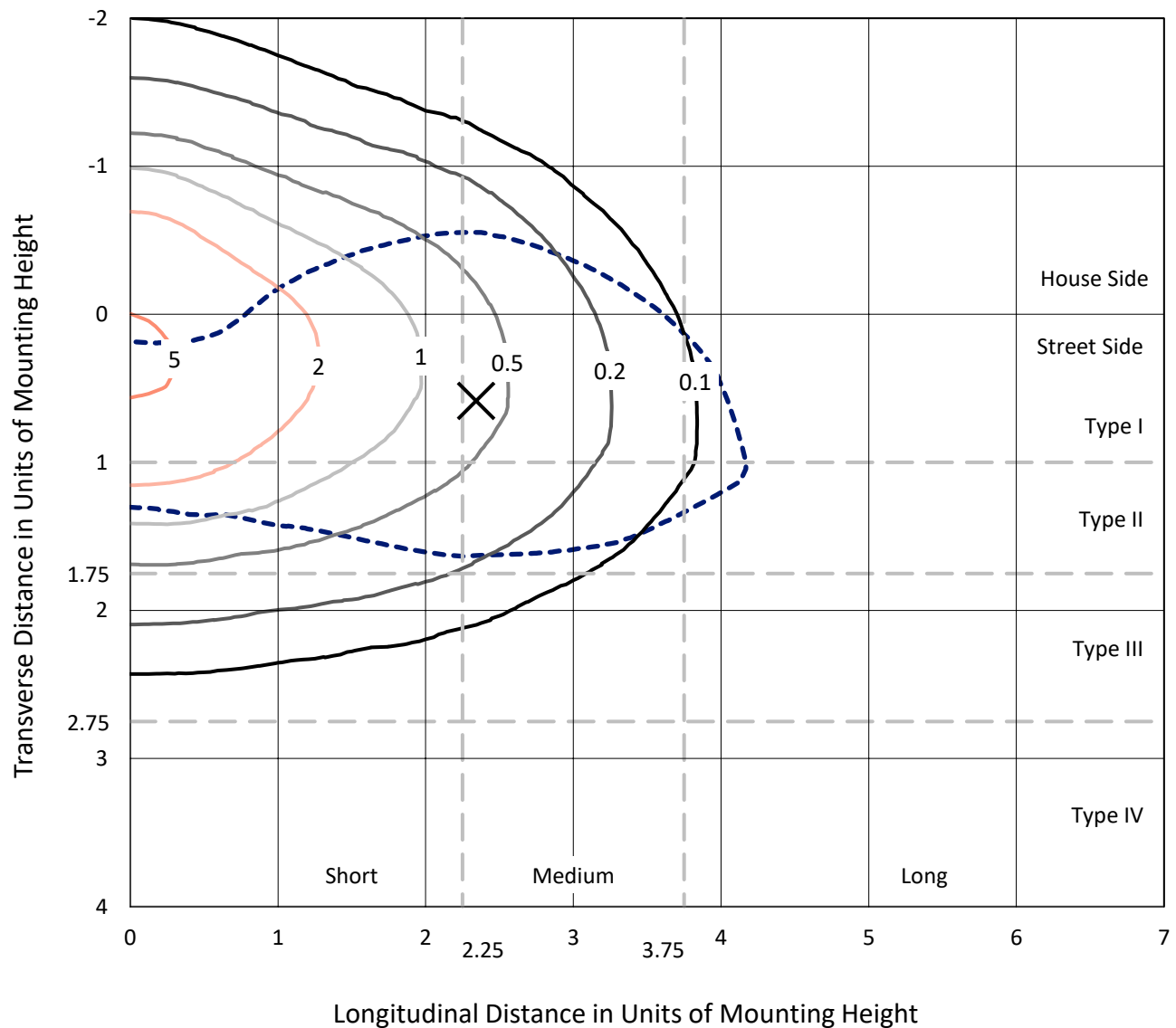


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Iso-Footcandle Lines of Horizontal Illumination

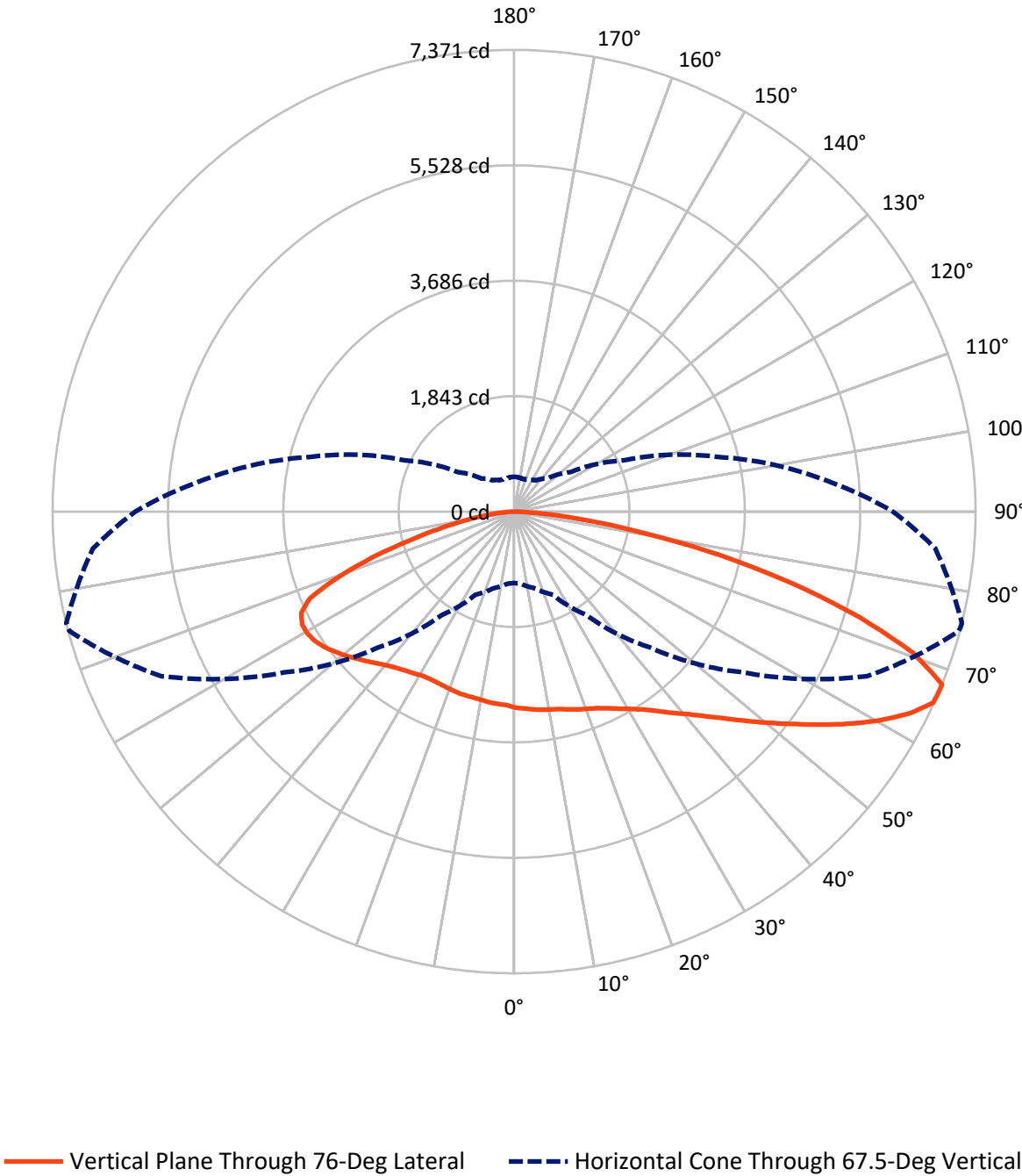
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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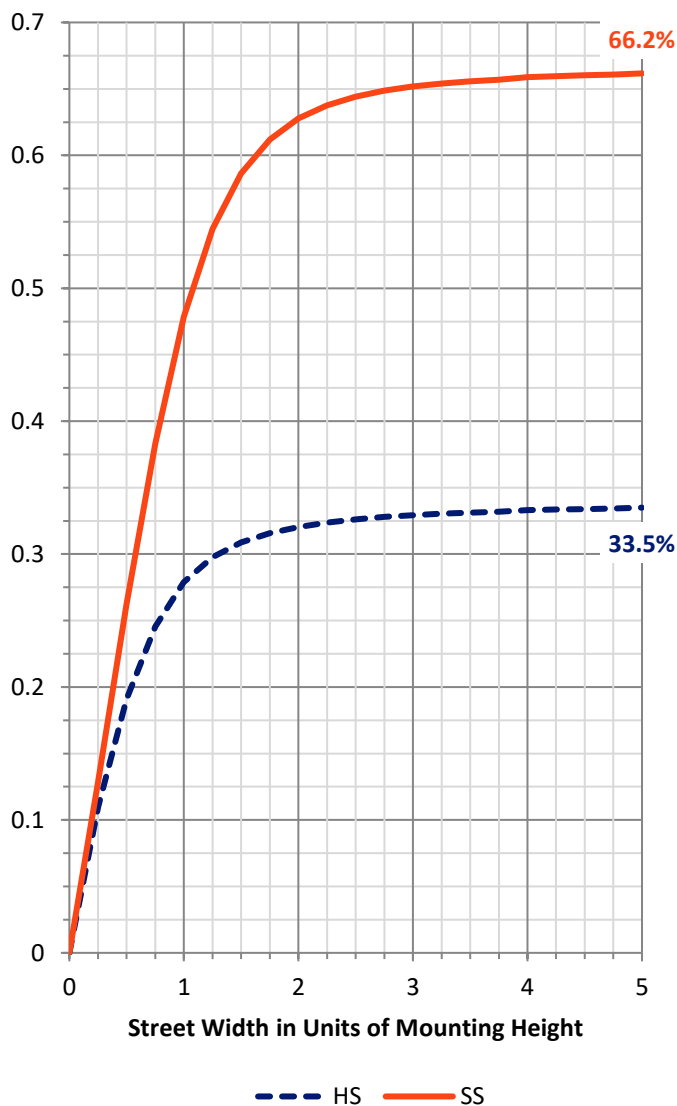
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5240.6	0.0	5240.6
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	10268.4	0.0	10268.4
	% Fixture	66.2	0.0	66.2
Total	Lumens	15509.0	0.0	15509.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.1	1.9
10°-20°	923.5	6.0
20°-30°	1569.1	10.1
30°-40°	2232.6	14.4
40°-50°	2819.7	18.2
50°-60°	3052.9	19.7
60°-70°	2839.5	18.3
70°-80°	1525.1	9.8
80°-90°	244.4	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°	15509.0	100.0
0°-180°	15509.0	100.0

Coefficient of Utilization



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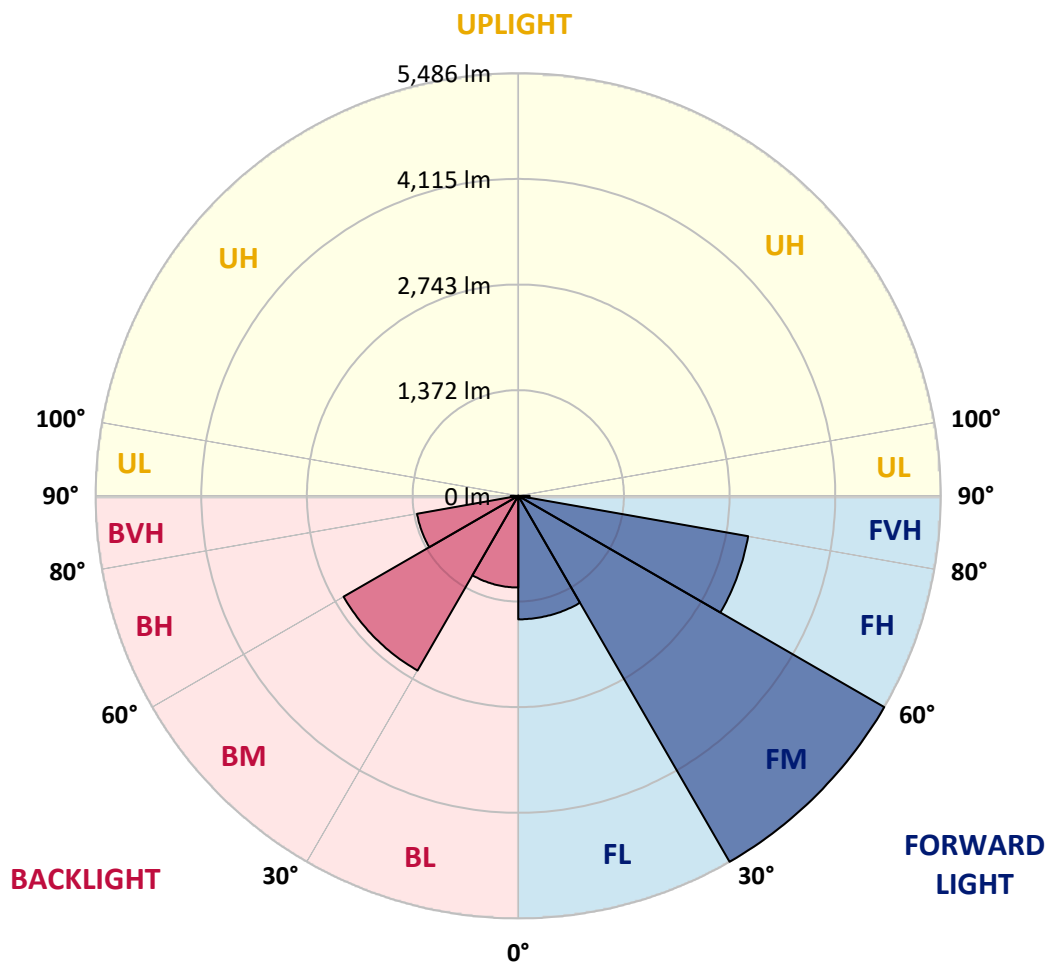
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1603.8	10.3			
FM	(30°-60°)	5486.5	35.4			
FH	(60°-80°)	3030.3	19.5			G2/5000
FVH	(80°-90°)	147.8	1.0			G2/225
BL	(0°-30°)	1190.9	7.7	B3/2500		
BM	(30°-60°)	2618.8	16.9	B3/5000		
BH	(60°-80°)	1334.3	8.6	B3/2500		G3/2500
BVH	(80°-90°)	96.5	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°	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8
2.5°	3227.8	3222.0	3199.0	3201.9	3201.9	3199.0	3164.5	3150.1	3150.1	3147.2	3115.5
5°	3343.0	3334.3	3308.4	3302.7	3291.2	3276.8	3222.0	3190.4	3176.0	3173.1	3129.9
7.5°	3478.3	3466.8	3435.1	3417.8	3389.1	3351.6	3282.5	3233.6	3199.0	3196.1	3135.7
10°	3613.6	3602.1	3564.7	3533.0	3492.7	3432.2	3343.0	3271.0	3216.3	3210.5	3138.5
12.5°	3774.9	3763.4	3717.3	3677.0	3616.5	3535.9	3417.8	3319.9	3245.1	3236.4	3147.2
15°	3944.8	3927.5	3881.4	3835.4	3760.5	3656.8	3515.7	3386.2	3291.2	3276.8	3173.1
17.5°	4085.9	4062.8	4025.4	3979.3	3895.8	3774.9	3613.6	3452.4	3334.3	3322.8	3199.0
20°	4206.8	4189.5	4149.2	4106.0	4016.8	3884.3	3705.8	3518.6	3374.7	3360.3	3219.2
22.5°	4322.0	4298.9	4275.9	4244.2	4146.3	3999.5	3812.3	3599.2	3426.5	3409.2	3245.1
25°	4454.4	4428.5	4419.9	4402.6	4287.4	4137.7	3941.9	3700.0	3498.5	3478.3	3291.2
27.5°	4618.6	4589.8	4572.5	4572.5	4434.3	4278.8	4080.1	3818.1	3582.0	3564.7	3348.7
30°	4791.3	4756.8	4730.8	4730.8	4575.4	4419.9	4215.4	3936.1	3677.0	3656.8	3423.6
32.5°	4943.9	4909.4	4880.6	4877.7	4716.5	4561.0	4356.5	4065.7	3792.2	3766.3	3515.7
35°	5062.0	5030.3	5004.4	5010.2	4857.5	4704.9	4514.9	4238.5	3936.1	3907.3	3636.7
37.5°	5134.0	5122.4	5108.0	5128.2	4987.1	4843.1	4679.0	4405.5	4100.3	4074.3	3786.4
40°	5171.4	5162.8	5220.3	5246.3	5096.5	4967.0	4843.1	4578.2	4278.8	4250.0	3959.2
42.5°	5226.1	5298.1	5321.1	5315.4	5177.2	5062.0	4992.9	4765.4	4489.0	4463.1	4166.5
45°	5030.3	5013.0	5139.7	5208.8	5182.9	5122.4	5134.0	4990.0	4733.7	4707.8	4405.5
47.5°	4768.3	4745.2	4817.2	4987.1	5087.9	5145.5	5260.7	5223.2	5015.9	4992.9	4684.8
50°	4215.4	4247.1	4514.9	4742.4	4941.0	5139.7	5367.2	5473.7	5326.9	5303.8	4984.2
52.5°	3602.1	3633.8	3913.1	4437.2	4762.5	5096.5	5444.9	5724.2	5663.8	5637.9	5303.8
55°	3155.8	3224.9	3541.7	3921.7	4509.1	4961.2	5491.0	5980.5	6026.6	6003.5	5652.3
57.5°	2712.4	2764.2	3003.2	3340.1	4163.6	4725.1	5488.1	6219.5	6406.7	6383.6	6006.4
60°	2191.2	2257.4	2447.5	2810.3	3702.9	4442.9	5407.5	6406.7	6772.3	6755.1	6349.1
62.5°	1834.2	1854.3	1989.7	2303.5	3109.7	4085.9	5226.1	6507.4	7103.5	7092.0	6657.2
65°	1477.1	1480.0	1603.8	1865.8	2536.7	3642.4	4918.0	6470.0	7354.0	7359.7	6878.9
67.5°	1140.2	1154.6	1266.9	1465.6	2015.6	3066.6	4477.5	6216.6	7356.9	7371.3	6752.2
70°	789.0	800.5	970.4	1163.3	1557.8	2444.6	3881.4	5545.7	6752.2	6763.7	6052.5
72.5°	555.7	561.5	742.9	930.0	1218.0	1842.8	2928.3	4586.9	5755.9	5764.6	5090.8
75°	414.6	420.4	524.1	705.5	932.9	1275.6	2001.2	3512.9	4598.4	4598.4	4019.6
77.5°	293.7	296.6	339.8	486.6	621.9	860.9	1203.6	2300.6	3374.7	3380.4	2928.3
80°	198.7	201.6	221.7	328.3	388.7	466.5	653.6	1206.5	2127.9	2136.5	1860.1
82.5°	103.7	109.4	123.8	167.0	195.8	259.1	336.9	613.3	1177.7	1200.7	1117.2
85°	40.3	40.3	46.1	54.7	72.0	100.8	155.5	233.2	532.7	550.0	492.4
87.5°	14.4	14.4	17.3	17.3	20.2	23.0	25.9	34.6	60.5	60.5	57.6
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°	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8	3132.8
2.5°	3104.0	3104.0	3089.6	3095.4	3092.5	3086.7	3081.0	3089.6	3081.0	3060.8	3057.9
5°	3109.7	3104.0	3081.0	3078.1	3069.4	3057.9	3043.5	3049.3	3034.9	3017.6	3014.7
7.5°	3112.6	3101.1	3069.4	3057.9	3040.6	3017.6	2994.6	2994.6	2974.4	2957.1	2954.3
10°	3106.9	3092.5	3049.3	3026.2	2994.6	2960.0	2928.3	2919.7	2896.7	2876.5	2876.5
12.5°	3109.7	3089.6	3034.9	2997.5	2954.3	2911.1	2870.8	2859.2	2839.1	2818.9	2816.1
15°	3127.0	3098.2	3029.1	2980.2	2916.8	2867.9	2824.7	2816.1	2798.8	2784.4	2784.4
17.5°	3144.3	3106.9	3020.5	2951.4	2873.6	2818.9	2778.6	2778.6	2767.1	2758.5	2758.5
20°	3152.9	3109.7	3003.2	2911.1	2821.8	2764.2	2726.8	2732.5	2729.7	2726.8	2726.8
22.5°	3173.1	3115.5	2988.8	2873.6	2767.1	2706.6	2672.1	2680.7	2677.8	2677.8	2680.7
25°	3204.8	3129.9	2977.3	2839.1	2715.3	2649.0	2611.6	2617.4	2617.4	2617.4	2617.4
27.5°	3248.0	3158.7	2974.4	2807.4	2663.4	2588.6	2542.5	2542.5	2531.0	2533.9	2536.7
30°	3314.2	3213.4	2980.2	2778.6	2608.7	2513.7	2459.0	2450.4	2447.5	2453.2	2456.1
32.5°	3394.8	3288.3	3014.7	2758.5	2551.1	2430.2	2361.1	2358.2	2349.6	2349.6	2349.6
35°	3495.6	3360.3	3046.4	2755.6	2493.6	2340.9	2266.1	2257.4	2237.3	2228.7	2228.7
37.5°	3625.2	3472.6	3083.8	2735.4	2444.6	2254.6	2165.3	2136.5	2113.5	2110.6	2110.6
40°	3783.5	3599.2	3138.5	2712.4	2392.8	2165.3	2047.3	1998.3	2001.2	2012.7	2012.7
42.5°	3970.7	3754.7	3207.6	2700.9	2317.9	2073.2	1909.0	1851.5	1871.6	1883.1	1886.0
45°	4189.5	3939.0	3285.4	2686.5	2248.8	1969.5	1762.2	1690.2	1698.8	1701.7	1704.6
47.5°	4442.9	4143.5	3366.0	2675.0	2171.1	1839.9	1600.9	1505.9	1503.0	1485.8	1491.5
50°	4707.8	4359.4	3449.5	2654.8	2076.0	1687.3	1431.1	1318.8	1295.7	1269.8	1272.7
52.5°	4990.0	4581.1	3527.3	2623.1	1958.0	1531.8	1269.8	1148.9	1102.8	1074.0	1079.8
55°	5301.0	4808.6	3602.1	2574.2	1834.2	1376.4	1125.8	1002.0	944.4	921.4	924.3
57.5°	5586.0	5027.4	3656.8	2513.7	1698.8	1235.3	999.2	878.2	840.8	837.9	840.8
60°	5862.5	5211.7	3679.9	2430.2	1560.6	1105.7	881.1	789.0	763.0	777.4	780.3
62.5°	6095.7	5329.8	3668.4	2317.9	1419.5	981.9	786.1	719.8	702.6	731.4	734.2
65°	6231.0	5367.2	3587.7	2156.7	1266.9	860.9	696.8	624.8	616.2	633.5	642.1
67.5°	6052.5	5134.0	3368.9	1935.0	1097.1	748.6	610.4	552.8	538.4	552.8	552.8
70°	5364.3	4448.7	2850.6	1583.7	909.9	639.2	529.8	489.5	478.0	489.5	486.6
72.5°	4468.8	3700.0	2245.9	1235.3	717.0	538.4	460.7	423.3	411.8	400.2	394.5
75°	3466.8	2810.3	1629.7	907.0	541.3	431.9	385.8	351.3	322.5	334.0	328.3
77.5°	2539.6	1972.4	1154.6	627.7	388.7	334.0	302.3	276.4	256.3	279.3	276.4
80°	1635.5	1275.6	771.7	420.4	267.8	233.2	221.7	207.3	227.5	296.6	302.3
82.5°	999.2	809.1	460.7	273.5	175.6	155.5	144.0	144.0	233.2	256.3	259.1
85°	446.3	429.0	250.5	141.1	97.9	89.3	80.6	103.7	95.0	69.1	72.0
87.5°	72.0	74.9	54.7	48.9	37.4	37.4	28.8	20.2	14.4	8.6	8.6
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)