

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: P265718

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24460.5 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 251
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: 28.75 FT

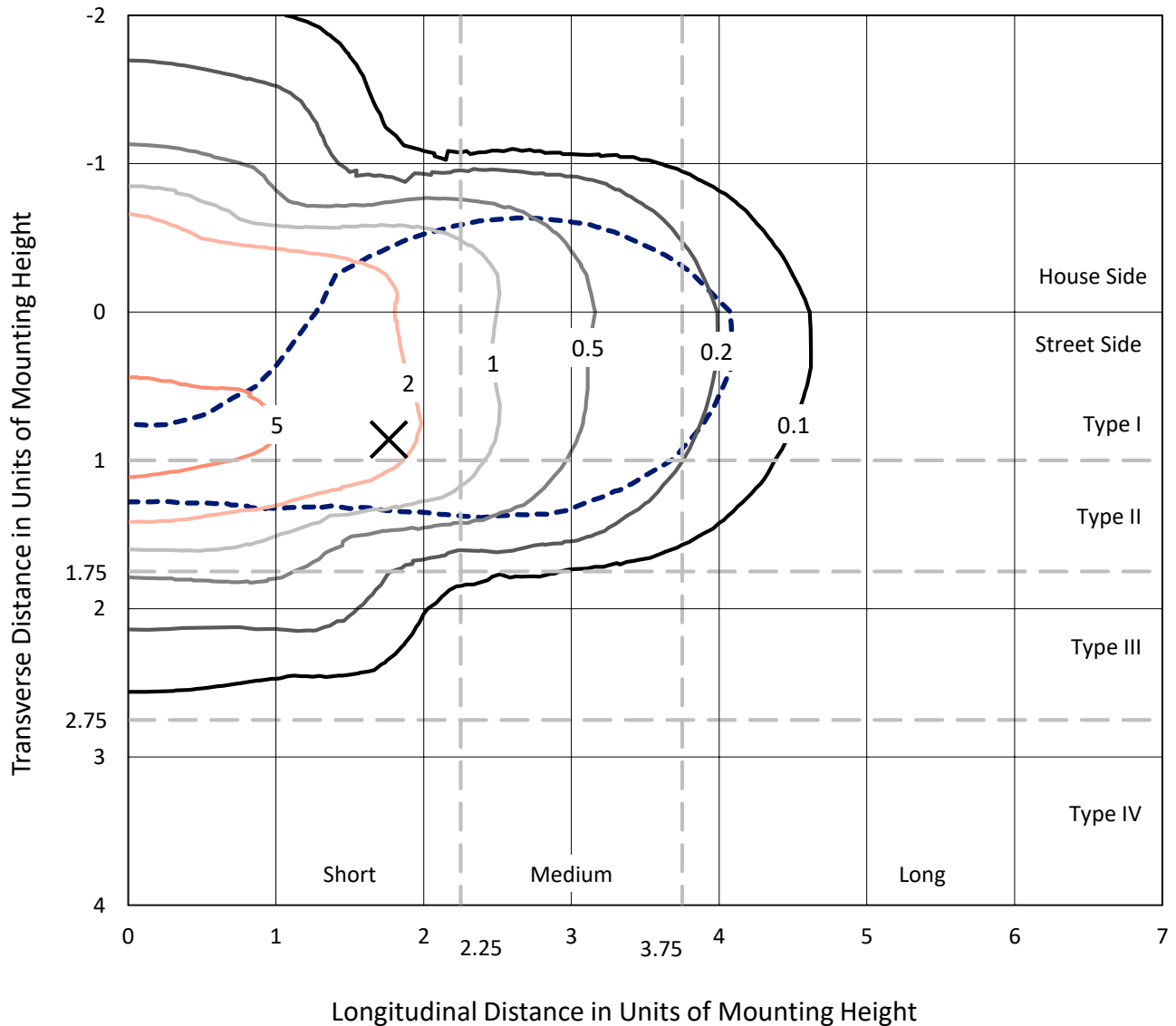


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

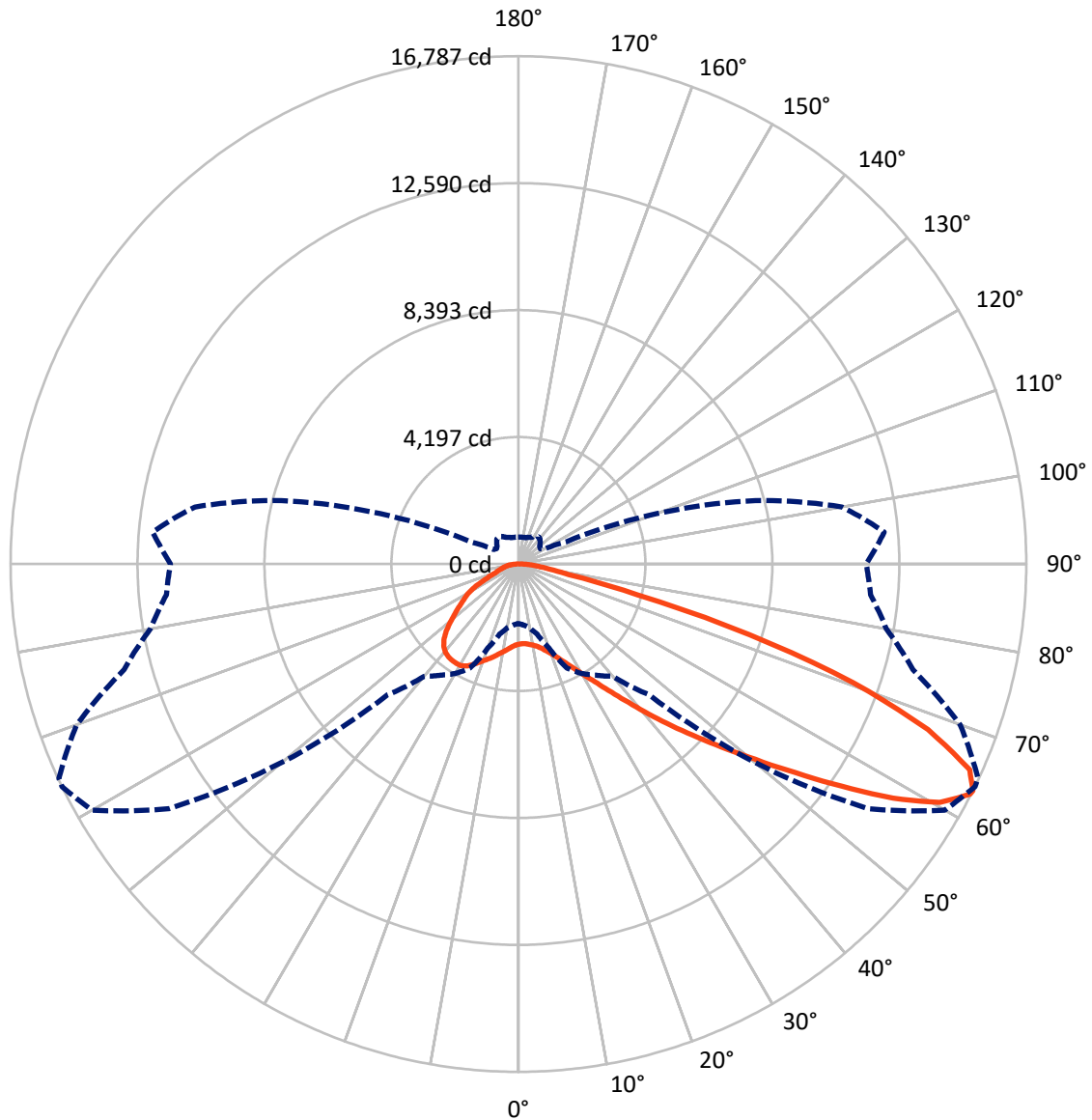


Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7190.5	0.0	7190.5
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	17270.0	0.0	17270.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	24460.5	0.0	24460.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.5	1.1
10°-20°	880.9	3.6
20°-30°	1653.6	6.8
30°-40°	2771.7	11.3
40°-50°	4650.3	19.0
50°-60°	5895.1	24.1
60°-70°	5200.4	21.3
70°-80°	2684.5	11.0
80°-90°	459.4	1.9
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°	24460.5	100.0
0°-180°	24460.5	100.0



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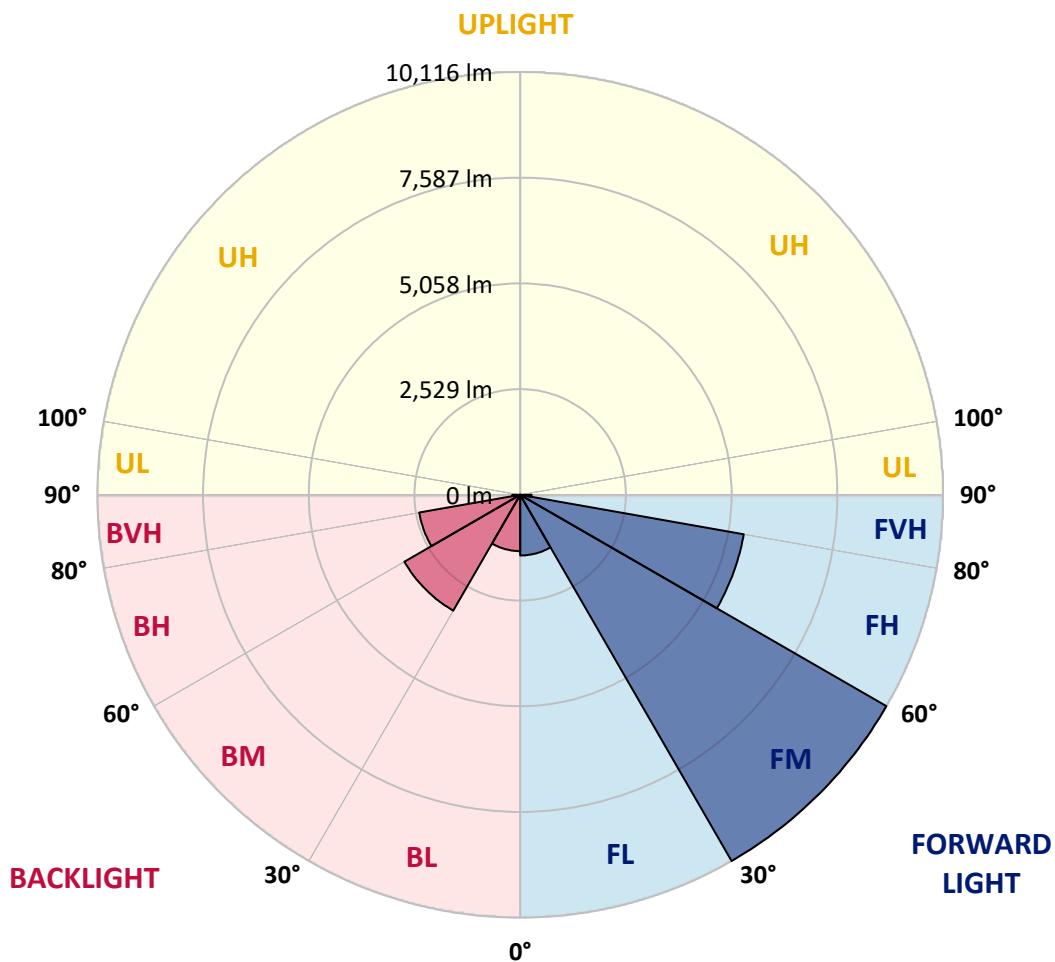
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1451.8	5.9			
FM	(30°-60°)	10116.2	41.4			
FH	(60°-80°)	5431.6	22.2			G3/7500
FVH	(80°-90°)	270.3	1.1			G3/500
BL	(0°-30°)	1347.3	5.5	B3/2500		
BM	(30°-60°)	3200.9	13.1	B3/5000		
BH	(60°-80°)	2453.3	10.0	B3/2500		G3/2500
BVH	(80°-90°)	189.0	0.8			G2/225
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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0
2.5°	2632.8	2628.6	2628.6	2628.6	2628.6	2624.5	2628.6	2636.7	2632.8	2628.6	2636.7
5°	2640.8	2636.7	2636.7	2636.7	2640.8	2636.7	2640.8	2653.1	2645.0	2645.0	2653.1
7.5°	2661.4	2657.2	2661.4	2657.2	2657.2	2657.2	2661.4	2673.6	2669.6	2673.6	2685.9
10°	2685.9	2685.9	2685.9	2685.9	2685.9	2685.9	2694.0	2702.3	2706.4	2710.5	2726.8
12.5°	2759.7	2759.7	2759.7	2755.6	2755.6	2743.2	2759.7	2767.8	2776.0	2784.1	2796.5
15°	2915.2	2915.2	2911.0	2894.7	2894.7	2870.2	2874.2	2878.3	2878.3	2886.6	2894.7
17.5°	3120.0	3115.9	3107.6	3095.3	3079.0	3050.4	3042.1	3033.9	3021.7	3017.5	3017.5
20°	3406.6	3402.4	3386.0	3353.4	3332.8	3287.7	3255.0	3222.3	3210.1	3189.5	3185.4
22.5°	3816.0	3816.0	3783.2	3734.1	3717.6	3623.6	3529.4	3459.7	3435.2	3406.6	3406.6
25°	4311.3	4307.4	4262.3	4205.0	4135.3	4037.1	3922.4	3828.2	3766.9	3701.3	3676.8
27.5°	4905.0	4892.8	4831.4	4761.7	4630.8	4508.0	4372.8	4274.6	4168.0	4086.2	4012.5
30°	5601.1	5588.9	5482.4	5351.4	5216.3	5093.4	4896.9	4778.2	4610.3	4511.9	4430.1
32.5°	6407.7	6395.5	6202.9	6076.0	5932.8	5781.2	5547.9	5359.6	5146.6	5007.4	4892.8
35°	7435.5	7386.3	7111.9	6935.9	6710.7	6559.2	6313.5	6059.6	5809.9	5613.4	5445.5
37.5°	8544.9	8487.6	8246.1	7984.0	7763.0	7578.7	7230.6	6911.3	6616.5	6346.3	6137.5
40°	9703.8	9552.1	9294.3	9101.7	8950.4	8774.3	8409.8	8074.1	7611.5	7308.5	6993.1
42.5°	10506.1	10358.7	10178.6	10051.7	9978.1	9842.9	9638.2	9347.5	8934.0	8942.1	8110.9
45°	11034.3	10817.3	10694.5	10702.6	10731.3	10731.3	10694.5	10649.4	10469.2	10592.2	9896.1
47.5°	10846.0	10702.6	10625.0	10788.6	10993.4	11198.1	11435.7	11693.5	11988.3	12336.3	11480.6
50°	9740.5	9793.7	9830.6	10178.6	10616.7	11083.5	11628.0	12332.2	13155.1	13314.9	12901.4
52.5°	7975.8	8090.5	8213.4	8745.5	9322.9	10129.5	11083.5	12246.2	13351.8	14002.8	13961.7
55°	6194.8	6338.1	6600.1	6997.3	7455.8	8217.4	9396.6	11189.9	12913.7	13949.5	14580.1
57.5°	4409.6	4618.5	4962.3	5515.1	5920.5	6350.4	7222.5	9212.4	11099.8	13028.3	14477.8
60°	2931.6	3029.9	3255.0	3942.9	4626.6	5077.0	5695.3	6415.9	7959.4	10616.7	13421.3
62.5°	2079.9	2145.4	2284.7	2595.8	3214.0	4028.9	4401.4	4733.1	5228.6	6829.5	10776.3
63°	1965.3	2022.7	2137.2	2399.4	2956.1	3799.7	4180.4	4483.4	4843.7	6108.8	10195.0
65°	1629.5	1654.0	1715.6	1842.5	2141.4	2841.5	3463.9	3648.0	3709.6	3926.5	6387.2
67.5°	1375.8	1392.2	1412.6	1449.4	1568.1	1891.7	2583.5	2816.9	2747.3	2600.0	3156.7
70°	1195.6	1207.9	1240.6	1285.7	1326.5	1408.5	1776.9	2125.0	2047.1	1846.6	1932.6
72.5°	954.0	974.4	1011.3	1089.1	1171.0	1277.4	1367.5	1584.5	1535.5	1343.0	1363.4
75°	753.4	765.6	798.5	855.7	933.5	1056.3	1232.5	1306.0	1171.0	990.8	990.8
77.5°	597.8	610.0	638.8	683.8	732.8	818.9	941.8	1134.1	1052.3	745.1	741.1
80°	450.4	462.6	491.4	532.2	581.5	642.7	716.5	802.5	966.2	696.0	556.8
82.5°	331.7	335.7	384.8	413.5	429.8	479.1	540.5	589.6	663.3	642.7	495.4
85°	249.8	245.6	278.5	298.9	303.0	315.2	352.1	401.3	434.1	417.6	384.8
87.5°	139.1	122.8	143.3	163.9	163.9	167.9	176.1	204.8	233.4	225.1	204.8
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0
2.5°	2636.7	2636.7	2632.8	2632.8	2636.7	2636.7	2632.8	2645.0	2653.1	2653.1	2657.2
5°	2649.0	2653.1	2649.0	2649.0	2653.1	2653.1	2657.2	2669.6	2681.8	2690.1	2702.3
7.5°	2685.9	2690.1	2685.9	2685.9	2690.1	2694.0	2702.3	2718.7	2726.8	2743.2	2763.6
10°	2726.8	2730.9	2726.8	2730.9	2735.0	2739.1	2751.4	2763.6	2776.0	2792.3	2825.1
12.5°	2800.6	2804.7	2796.5	2800.6	2812.9	2812.9	2821.0	2829.2	2849.8	2870.2	2903.0
15°	2903.0	2903.0	2894.7	2898.8	2911.0	2911.0	2915.2	2923.4	2948.0	2972.5	3005.3
17.5°	3021.7	3029.9	3025.8	3029.9	3038.0	3042.1	3042.1	3050.4	3066.6	3083.1	3115.9
20°	3181.3	3185.4	3177.2	3185.4	3193.7	3185.4	3177.2	3173.2	3181.3	3189.5	3226.4
22.5°	3398.3	3394.2	3373.8	3373.8	3373.8	3357.3	3336.9	3312.3	3312.3	3300.1	3328.7
25°	3656.3	3644.0	3615.3	3619.5	3590.7	3566.2	3529.4	3492.5	3459.7	3447.4	3451.6
27.5°	3959.3	3934.7	3906.0	3897.8	3869.2	3824.2	3762.7	3693.1	3639.9	3599.0	3590.7
30°	4340.0	4286.8	4237.7	4229.5	4184.5	4110.7	4012.5	3918.2	3828.2	3758.7	3734.1
32.5°	4790.4	4708.6	4630.8	4622.6	4548.8	4450.7	4331.8	4200.8	4069.9	3959.3	3906.0
35°	5318.5	5195.7	5122.0	5101.6	4995.1	4872.2	4741.3	4573.5	4389.2	4233.6	4135.3
37.5°	5961.4	5834.5	5707.6	5711.7	5564.2	5420.9	5244.9	5040.2	4806.8	4589.8	4450.7
40°	6755.8	6575.6	6411.8	6374.9	6248.0	6047.4	5855.0	5617.6	5330.9	5044.3	4843.7
42.5°	7717.9	7423.1	7197.8	7165.2	6997.3	6751.7	6518.2	6202.9	5912.3	5564.2	5322.6
45°	8811.0	8340.3	8070.1	8020.8	7750.7	7500.8	7218.4	6882.6	6526.5	6133.4	5846.8
47.5°	10170.4	9498.9	9040.5	8958.4	8585.9	8258.4	7963.6	7590.9	7165.2	6727.0	6411.8
50°	11755.0	10764.1	10145.8	10018.9	9519.3	9134.5	8757.8	8291.0	7836.6	7378.0	7013.6
52.5°	13343.6	12279.0	11456.1	11300.5	10563.4	10047.6	9552.1	9085.4	8549.1	8094.5	7681.0
55°	14621.1	13912.7	12958.7	12741.6	11685.3	10985.3	10334.2	9801.9	9269.7	8909.4	8422.1
57.5°	15390.8	15353.9	14600.5	14301.6	12856.4	11820.4	11095.8	10489.8	9973.9	9822.3	9175.5
60°	15370.3	16324.3	16000.8	15775.7	14039.6	12676.3	11734.5	11079.3	10653.5	10825.6	9933.0
62.5°	14432.7	16365.2	16754.2	16692.8	15300.7	13364.1	12258.5	11582.9	11357.8	11869.6	10719.0
63°	14092.8	16271.0	16786.9	16762.4	15542.3	13495.1	12348.6	11681.2	11497.0	12135.7	10862.3
65°	11910.5	15448.1	16389.8	16500.3	16062.2	13945.5	12557.4	11931.0	11910.5	12729.4	11202.3
67.5°	7259.4	13052.8	14600.5	14813.4	15329.3	14088.7	12438.7	11845.1	12139.9	12815.4	11099.8
70°	3103.6	8614.6	11734.5	12078.4	13339.6	13376.3	12098.9	11492.9	12086.5	12143.8	10371.0
72.5°	1838.4	4061.6	7988.1	8737.5	10555.4	11509.3	11320.9	10878.7	11386.5	10665.8	8831.5
75°	1302.1	1899.7	4057.6	4855.9	7349.5	8786.5	9511.3	9716.0	9695.4	8459.0	6628.9
77.5°	933.5	1220.1	1711.5	2018.5	4102.6	5642.1	6526.5	7124.2	6931.9	5662.6	4086.2
80°	651.0	843.5	1048.1	1113.7	1903.9	2898.8	3439.3	3701.3	3586.7	2829.2	1830.1
82.5°	470.8	552.7	675.5	716.5	958.1	1338.8	1592.8	1404.4	1347.1	1044.1	790.1
85°	364.4	356.2	421.8	438.2	560.9	700.0	716.5	556.8	487.2	434.1	442.1
87.5°	258.0	221.2	225.1	233.4	290.7	372.5	364.4	229.2	196.5	208.9	237.5
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0	2649.0
2.5°	2665.5	2669.6	2677.7	2681.8	2690.1	2690.1	2698.1	2702.3	2710.5	2718.7	2722.8
5°	2714.6	2726.8	2743.2	2751.4	2767.8	2780.1	2796.5	2804.7	2821.0	2833.3	2849.8
7.5°	2788.2	2808.7	2829.2	2853.7	2878.3	2898.8	2915.2	2935.8	2964.3	2984.8	2997.0
10°	2857.9	2886.6	2923.4	2952.0	2988.9	3017.5	3042.1	3079.0	3111.6	3140.4	3156.7
12.5°	2948.0	2984.8	3021.7	3066.6	3115.9	3152.7	3189.5	3238.7	3283.7	3316.5	3332.8
15°	3054.3	3099.4	3140.4	3193.7	3251.0	3300.1	3353.4	3406.6	3439.3	3439.3	3431.0
17.5°	3165.0	3201.7	3251.0	3312.3	3390.2	3451.6	3480.3	3488.4	3476.1	3447.4	3427.0
20°	3275.5	3308.3	3361.5	3435.2	3517.0	3529.4	3500.7	3463.9	3427.0	3377.8	3345.1
22.5°	3365.6	3410.7	3492.5	3578.5	3582.6	3513.0	3435.2	3373.8	3316.5	3259.1	3197.6
25°	3471.9	3533.5	3644.0	3676.8	3570.4	3439.3	3328.7	3238.7	3144.4	3050.4	2980.7
27.5°	3603.0	3693.1	3803.7	3709.6	3500.7	3316.5	3165.0	3029.9	2907.1	2776.0	2698.1
30°	3742.2	3881.4	3906.0	3660.4	3381.9	3144.4	2939.8	2735.0	2579.5	2460.6	2415.7
32.5°	3910.1	4090.3	3942.9	3574.4	3222.3	2911.0	2636.7	2391.1	2260.0	2186.4	2166.0
35°	4164.0	4311.3	3963.3	3484.3	3038.0	2632.8	2288.7	2092.2	2010.3	1961.2	1936.7
37.5°	4528.4	4524.3	3959.3	3373.8	2825.1	2329.8	2010.3	1871.1	1805.7	1764.7	1719.6
40°	4954.2	4688.1	3934.7	3214.0	2538.5	2039.1	1817.9	1686.8	1625.5	1576.3	1523.0
42.5°	5375.8	4798.6	3865.0	2976.7	2182.3	1830.1	1678.8	1559.9	1494.4	1441.2	1367.5
45°	5740.3	4843.7	3730.0	2649.0	1862.9	1666.4	1588.7	1486.2	1408.5	1326.5	1269.2
47.5°	6026.9	4835.4	3513.0	2264.2	1650.0	1551.7	1514.9	1445.4	1351.1	1248.7	1175.2
50°	6268.6	4774.0	3218.2	1924.3	1506.7	1449.4	1437.1	1416.6	1265.2	1179.1	1134.1
52.5°	6489.5	4683.9	2903.0	1695.1	1383.8	1334.8	1359.3	1338.8	1232.5	1158.8	1113.7
55°	6792.5	4622.6	2591.7	1519.0	1240.6	1228.3	1248.7	1277.4	1212.0	1142.4	1093.1
57.5°	7148.8	4655.2	2354.3	1322.5	1105.5	1113.7	1183.2	1224.2	1191.4	1117.9	1068.7
60°	7558.2	4753.7	2145.4	1134.1	995.0	1015.4	1117.9	1175.2	1171.0	1085.1	1027.8
62.5°	8016.7	4855.9	1813.8	990.8	900.8	933.5	1040.0	1113.7	1125.9	1052.3	982.7
63°	8106.8	4864.1	1727.8	962.2	884.4	921.2	1019.4	1097.3	1113.7	1044.1	974.4
65°	8327.9	4790.4	1392.2	884.4	818.9	859.8	958.1	1027.8	1060.4	999.0	941.8
67.5°	8143.8	4188.5	1048.1	790.1	765.6	794.3	880.2	945.7	974.4	945.7	888.5
70°	7447.7	3046.2	818.9	704.2	708.4	728.7	794.3	855.7	888.5	880.2	827.1
72.5°	5998.3	1727.8	683.8	630.5	642.7	667.4	712.4	769.8	798.5	794.3	757.5
75°	3951.0	884.4	577.3	565.0	573.2	593.7	626.5	671.5	704.2	700.0	683.8
77.5°	1957.0	614.1	495.4	499.5	503.6	519.9	544.6	585.4	605.9	610.0	605.9
80°	806.6	479.1	425.7	429.8	434.1	446.3	462.6	499.5	511.9	519.9	524.2
82.5°	483.2	364.4	339.7	348.1	352.1	364.4	376.7	409.4	421.8	434.1	434.1
85°	319.3	253.9	245.6	253.9	262.0	270.2	274.3	294.9	315.2	331.7	339.7
87.5°	171.9	151.5	147.4	151.5	151.5	159.7	167.9	188.4	212.9	229.2	237.5
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):

	160°	165°	170°	175°	180°
0°	2649.0	2649.0	2649.0	2649.0	2649.0
2.5°	2714.6	2718.7	2714.6	2718.7	2722.8
5°	2849.8	2857.9	2853.7	2853.7	2870.2
7.5°	3005.3	3021.7	3021.7	3029.9	3038.0
10°	3173.2	3189.5	3201.7	3201.7	3214.0
12.5°	3340.9	3349.2	3361.5	3361.5	3361.5
15°	3427.0	3422.9	3418.8	3414.6	3414.6
17.5°	3414.6	3398.3	3390.2	3381.9	3386.0
20°	3324.6	3296.1	3287.7	3275.5	3283.7
22.5°	3169.0	3128.1	3111.6	3091.2	3099.4
25°	2935.8	2886.6	2878.3	2853.7	2866.0
27.5°	2665.5	2640.8	2636.7	2632.8	2653.1
30°	2411.6	2419.8	2423.8	2432.0	2452.6
32.5°	2178.2	2194.6	2198.7	2202.7	2231.4
35°	1949.0	1928.4	1949.0	1940.8	1965.3
37.5°	1699.1	1682.7	1666.4	1646.0	1662.4
40°	1490.4	1461.7	1412.6	1388.1	1392.2
42.5°	1326.5	1289.7	1248.7	1224.2	1224.2
45°	1220.1	1175.2	1138.2	1121.9	1121.9
47.5°	1138.2	1117.9	1097.3	1085.1	1085.1
50°	1105.5	1080.9	1068.7	1060.4	1060.4
52.5°	1080.9	1056.3	1044.1	1035.8	1027.8
55°	1060.4	1023.6	1011.3	1007.2	1007.2
57.5°	1031.8	999.0	982.7	978.6	978.6
60°	986.8	962.2	945.7	941.8	941.8
62.5°	941.8	917.1	900.8	900.8	900.8
63°	933.5	904.9	892.6	892.6	892.6
65°	896.7	868.0	855.7	855.7	851.7
67.5°	847.6	818.9	810.7	810.7	802.5
70°	790.1	765.6	757.5	761.6	745.1
72.5°	732.8	708.4	696.0	696.0	679.7
75°	667.4	642.7	626.5	622.3	605.9
77.5°	593.7	573.2	556.8	540.5	532.2
80°	515.8	499.5	479.1	466.8	454.5
82.5°	434.1	417.6	405.3	421.8	360.3
85°	339.7	323.5	307.1	331.7	258.0
87.5°	249.8	241.6	225.1	196.5	171.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)