

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: P257956

Luminaire Tested: **ARCH-L-AF72-200-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257956
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-AF72-200-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24903.7 lumens
Efficiency: N/A
Efficacy: 123.9 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): 201
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

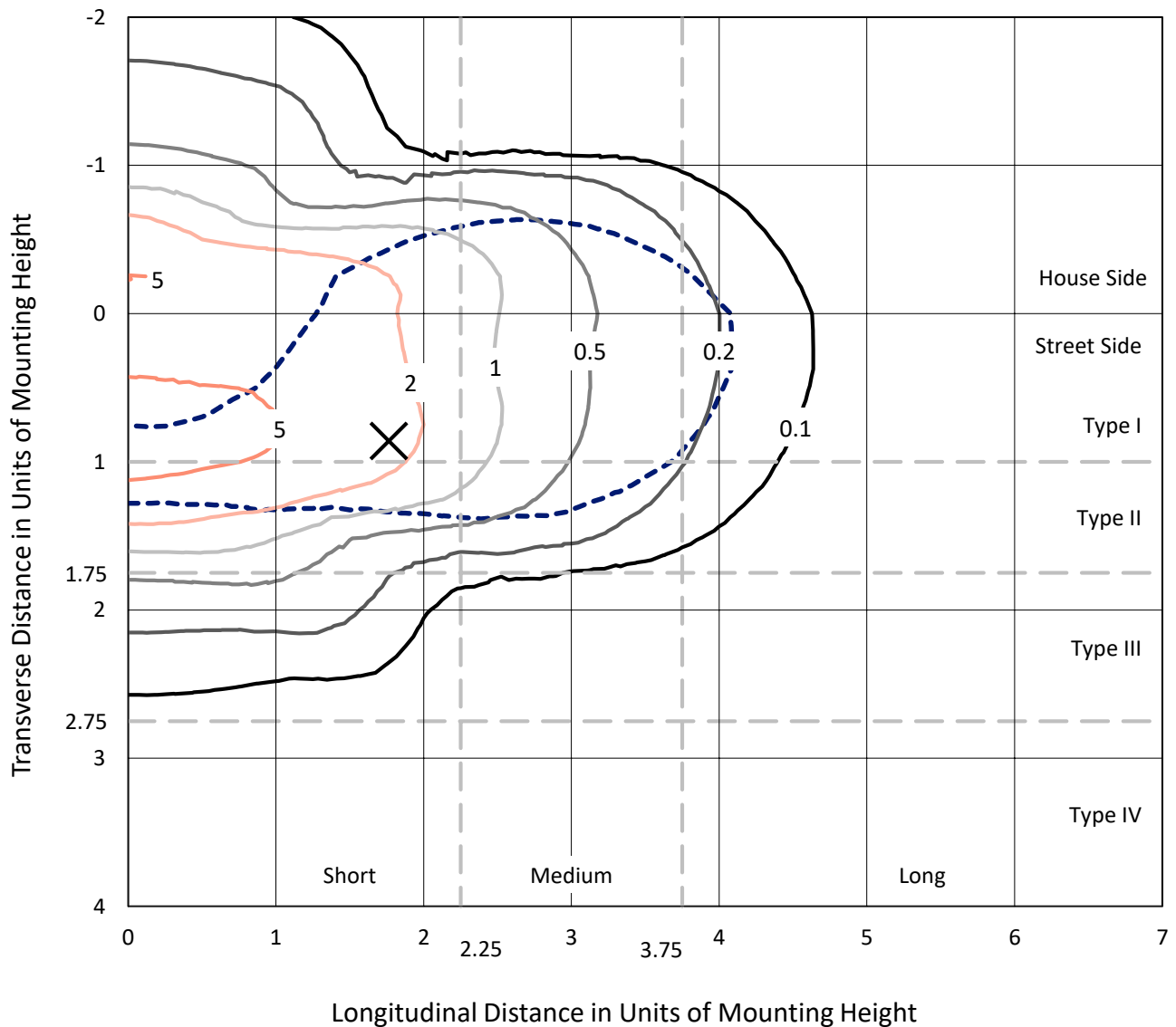


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Iso-Footcandle Lines of Horizontal Illumination

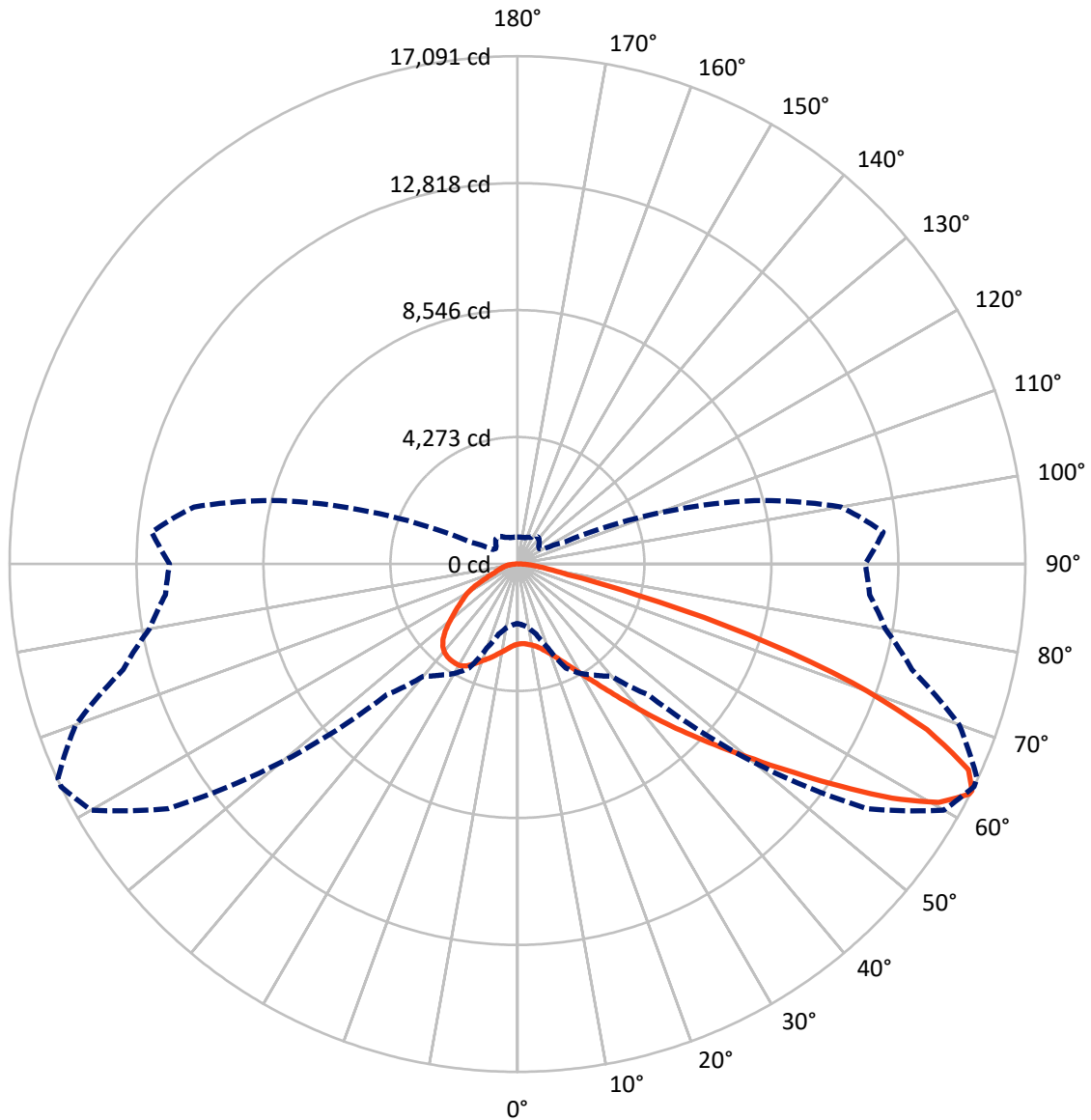
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 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	7320.8	0.0	7320.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	17582.9	0.0	17582.9
	% Fixture	70.6	0.0	70.6
Total	Lumens	24903.7	0.0	24903.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.3	1.1
10°-20°	896.9	3.6
20°-30°	1683.6	6.8
30°-40°	2821.9	11.3
40°-50°	4734.5	19.0
50°-60°	6002.0	24.1
60°-70°	5294.6	21.3
70°-80°	2733.2	11.0
80°-90°	467.7	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°	24903.7	100.0
0°-180°	24903.7	100.0



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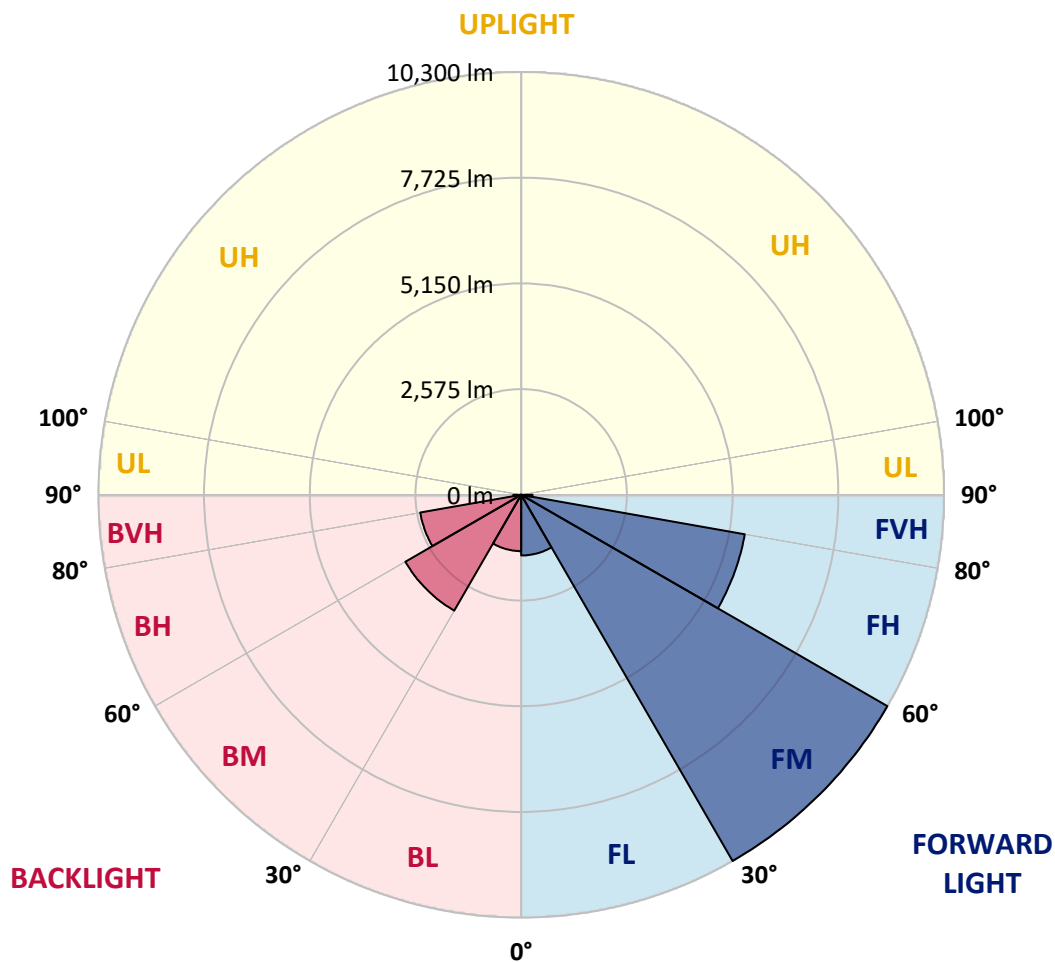
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1478.1	5.9			
FM (30°-60°)	10299.5	41.4			
FH (60°-80°)	5530.0	22.2			G3/7500
FVH (80°-90°)	275.2	1.1			G3/500
BL (0°-30°)	1371.7	5.5	B3/2500		
BM (30°-60°)	3258.9	13.1	B3/5000		
BH (60°-80°)	2497.8	10.0	B3/2500		G3/2500
BVH (80°-90°)	192.5	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°	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1
2.5°	2680.4	2676.2	2676.2	2676.2	2676.2	2672.0	2676.2	2684.5	2680.4	2676.2	2684.5
5°	2688.7	2684.5	2684.5	2684.5	2688.7	2684.5	2688.7	2701.2	2692.9	2692.9	2701.2
7.5°	2709.6	2705.4	2709.6	2705.4	2705.4	2705.4	2709.6	2722.1	2717.9	2722.1	2734.6
10°	2734.6	2734.6	2734.6	2734.6	2734.6	2734.6	2742.9	2751.2	2755.4	2759.6	2776.3
12.5°	2809.6	2809.6	2809.6	2805.4	2805.4	2793.0	2809.6	2817.9	2826.3	2834.6	2847.2
15°	2968.0	2968.0	2963.9	2947.2	2947.2	2922.2	2926.4	2930.5	2930.5	2938.8	2947.2
17.5°	3176.5	3172.3	3164.0	3151.4	3134.7	3105.6	3097.3	3088.9	3076.4	3072.2	3072.2
20°	3468.2	3464.1	3447.4	3414.1	3393.2	3347.4	3314.1	3280.7	3268.1	3247.4	3243.2
22.5°	3885.1	3885.1	3851.7	3801.7	3785.0	3689.2	3593.3	3522.4	3497.5	3468.2	3468.2
25°	4389.5	4385.3	4339.5	4281.2	4210.3	4110.2	3993.5	3897.6	3835.0	3768.3	3743.4
27.5°	4993.9	4981.5	4919.0	4848.1	4714.7	4589.6	4452.0	4351.9	4243.6	4160.2	4085.2
30°	5702.6	5690.1	5581.7	5448.3	5310.8	5185.7	4985.7	4864.7	4693.8	4593.8	4510.4
32.5°	6523.8	6511.3	6315.4	6186.2	6040.2	5886.1	5648.4	5456.6	5239.9	5098.2	4981.5
35°	7570.1	7520.1	7240.9	7061.5	6832.3	6678.0	6427.9	6169.5	5915.2	5715.1	5544.2
37.5°	8699.8	8641.5	8395.5	8128.7	7903.6	7716.0	7361.7	7036.6	6736.4	6461.3	6248.7
40°	9879.6	9725.3	9462.6	9266.7	9112.4	8933.2	8562.2	8220.4	7749.4	7440.9	7119.9
42.5°	10696.6	10546.5	10363.1	10233.8	10158.8	10021.2	9812.9	9516.8	9095.8	9104.2	8258.0
45°	11234.3	11013.4	10888.3	10896.7	10925.8	10925.8	10888.3	10842.5	10659.0	10784.0	10075.5
47.5°	11042.5	10896.7	10817.4	10984.1	11192.6	11401.0	11642.8	11905.4	12205.5	12559.9	11688.6
50°	9917.0	9971.2	10008.8	10363.1	10809.1	11284.3	11838.7	12555.7	13393.6	13556.1	13135.2
52.5°	8120.4	8237.1	8362.1	8904.1	9491.9	10313.1	11284.3	12468.2	13593.7	14256.5	14214.8
55°	6307.0	6453.0	6719.8	7124.0	7591.0	8366.3	9566.8	11392.7	13147.7	14202.3	14844.2
57.5°	4489.5	4702.1	5052.4	5615.1	6027.7	6465.5	7353.4	9379.2	11300.9	13264.4	14740.1
60°	2984.7	3084.7	3314.1	4014.4	4710.5	5169.1	5798.5	6532.2	8103.7	10809.1	13664.6
62.5°	2117.6	2184.3	2326.1	2642.9	3272.3	4101.8	4481.2	4818.9	5323.2	6953.2	10971.7
63°	2000.9	2059.3	2176.0	2442.8	3009.7	3868.4	4256.1	4564.6	4931.4	6219.5	10379.8
65°	1659.1	1684.1	1746.6	1875.9	2180.1	2893.0	3526.6	3714.2	3776.7	3997.7	6503.0
67.5°	1400.6	1417.3	1438.2	1475.7	1596.5	1925.9	2630.4	2867.9	2797.2	2647.1	3214.0
70°	1217.2	1229.7	1263.0	1309.0	1350.6	1434.0	1809.2	2163.4	2084.3	1880.0	1967.5
72.5°	971.3	992.2	1029.6	1108.9	1192.2	1300.6	1392.3	1613.2	1563.2	1367.3	1388.1
75°	767.0	779.5	812.8	871.2	950.4	1075.5	1254.8	1329.7	1192.2	1008.8	1008.8
77.5°	608.7	621.1	650.3	696.1	746.1	833.7	958.8	1154.7	1071.3	758.7	754.5
80°	458.6	471.1	500.2	542.0	592.0	654.5	729.5	817.0	983.8	708.7	566.9
82.5°	337.7	341.9	391.9	421.0	437.7	487.7	550.2	600.3	675.4	654.5	504.4
85°	254.3	250.1	283.5	304.3	308.5	321.0	358.5	408.6	441.9	425.2	391.9
87.5°	141.8	125.1	145.9	166.7	166.7	170.9	179.2	208.5	237.6	229.2	208.5
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1
2.5°	2684.5	2684.5	2680.4	2680.4	2684.5	2684.5	2680.4	2692.9	2701.2	2701.2	2705.4
5°	2697.1	2701.2	2697.1	2697.1	2701.2	2701.2	2705.4	2717.9	2730.5	2738.7	2751.2
7.5°	2734.6	2738.7	2734.6	2734.6	2738.7	2742.9	2751.2	2767.9	2776.3	2793.0	2813.8
10°	2776.3	2780.5	2776.3	2780.5	2784.6	2788.8	2801.2	2813.8	2826.3	2843.0	2876.3
12.5°	2851.3	2855.5	2847.2	2851.3	2863.9	2863.9	2872.1	2880.5	2901.3	2922.2	2955.5
15°	2955.5	2955.5	2947.2	2951.3	2963.9	2963.9	2968.0	2976.4	3001.3	3026.4	3059.7
17.5°	3076.4	3084.7	3080.6	3084.7	3093.1	3097.3	3097.3	3105.6	3122.3	3138.9	3172.3
20°	3239.0	3243.2	3234.8	3243.2	3251.4	3243.2	3234.8	3230.7	3239.0	3247.4	3284.8
22.5°	3459.9	3455.7	3434.9	3434.9	3434.9	3418.2	3397.4	3372.4	3372.4	3359.9	3389.0
25°	3722.5	3710.0	3680.9	3685.0	3655.8	3630.9	3593.3	3555.8	3522.4	3509.9	3514.1
27.5°	4031.0	4006.0	3976.8	3968.4	3939.3	3893.5	3831.0	3760.1	3705.8	3664.2	3655.8
30°	4418.6	4364.5	4314.5	4306.1	4260.3	4185.2	4085.2	3989.3	3897.6	3826.8	3801.7
32.5°	4877.2	4793.9	4714.7	4706.3	4631.3	4531.3	4410.4	4277.0	4143.6	4031.0	3976.8
35°	5415.0	5289.9	5214.9	5194.0	5085.7	4960.6	4827.2	4656.3	4468.7	4310.3	4210.3
37.5°	6069.5	5940.2	5811.0	5815.2	5665.1	5519.2	5339.9	5131.5	4893.9	4672.9	4531.3
40°	6878.1	6694.7	6528.0	6490.4	6361.2	6156.9	5961.0	5719.3	5427.5	5135.7	4931.4
42.5°	7857.8	7557.7	7328.3	7295.0	7124.0	6873.9	6636.4	6315.4	6019.5	5665.1	5419.2
45°	8970.8	8491.4	8216.2	8166.2	7891.1	7636.8	7349.2	7007.3	6644.7	6244.5	5952.8
47.5°	10354.7	9671.1	9204.2	9120.8	8741.5	8408.0	8107.9	7728.5	7295.0	6849.0	6528.0
50°	11968.0	10959.2	10329.8	10200.5	9691.9	9300.1	8916.6	8441.4	7978.6	7511.7	7140.7
52.5°	13585.4	12501.6	11663.7	11505.2	10754.9	10229.7	9725.3	9250.0	8704.0	8241.3	7820.3
55°	14886.0	14164.8	13193.5	12972.6	11897.1	11184.2	10521.5	9979.6	9437.6	9070.8	8574.8
57.5°	15669.7	15632.1	14865.1	14560.8	13089.3	12034.7	11296.9	10679.9	10154.6	10000.4	9341.8
60°	15648.8	16620.1	16290.8	16061.5	14294.0	12905.9	11947.1	11280.2	10846.7	11021.7	10113.0
62.5°	14694.2	16661.7	17057.8	16995.3	15577.9	13606.2	12480.7	11792.9	11563.6	12084.7	10913.4
63°	14348.2	16565.9	17091.2	17066.1	15823.9	13739.6	12572.4	11892.9	11705.3	12355.6	11059.2
65°	12126.4	15728.0	16686.8	16799.3	16353.3	14198.1	12785.0	12147.2	12126.4	12960.1	11405.2
67.5°	7390.9	13289.4	14865.1	15081.9	15607.2	14344.0	12664.1	12059.7	12359.8	13047.6	11300.9
70°	3159.8	8770.7	11947.1	12297.3	13581.2	13618.7	12318.2	11701.1	12305.6	12364.0	10559.0
72.5°	1871.7	4135.2	8132.9	8895.7	10746.6	11717.8	11526.1	11075.9	11592.8	10859.1	8991.6
75°	1325.6	1934.2	4131.1	4943.9	7482.6	8945.7	9683.6	9892.0	9871.2	8612.2	6748.9
77.5°	950.4	1242.3	1742.5	2055.1	4176.9	5744.3	6644.7	7253.3	7057.3	5765.1	4160.2
80°	662.8	858.8	1067.1	1133.8	1938.4	2951.3	3501.6	3768.3	3651.6	2880.5	1863.3
82.5°	479.4	562.7	687.8	729.5	975.5	1363.1	1621.6	1429.8	1371.5	1062.9	804.6
85°	371.0	362.6	429.3	446.0	571.1	712.8	729.5	566.9	496.0	441.9	450.2
87.5°	262.6	225.2	229.2	237.6	295.9	379.3	371.0	233.4	200.1	212.6	241.8
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1	2697.1
2.5°	2713.8	2717.9	2726.3	2730.5	2738.7	2738.7	2747.1	2751.2	2759.6	2767.9	2772.1
5°	2763.8	2776.3	2793.0	2801.2	2817.9	2830.5	2847.2	2855.5	2872.1	2884.6	2901.3
7.5°	2838.8	2859.7	2880.5	2905.5	2930.5	2951.3	2968.0	2988.9	3018.0	3038.9	3051.4
10°	2909.7	2938.8	2976.4	3005.5	3043.1	3072.2	3097.3	3134.7	3168.1	3197.3	3214.0
12.5°	3001.3	3038.9	3076.4	3122.3	3172.3	3209.8	3247.4	3297.4	3343.2	3376.6	3393.2
15°	3109.8	3155.6	3197.3	3251.4	3309.9	3359.9	3414.1	3468.2	3501.6	3501.6	3493.3
17.5°	3222.3	3259.8	3309.9	3372.4	3451.5	3514.1	3543.3	3551.6	3539.1	3509.9	3489.1
20°	3334.8	3368.2	3422.4	3497.5	3580.8	3593.3	3564.2	3526.6	3489.1	3439.1	3405.7
22.5°	3426.6	3472.4	3555.8	3643.3	3647.5	3576.6	3497.5	3434.9	3376.6	3318.1	3255.6
25°	3534.9	3597.5	3710.0	3743.4	3635.0	3501.6	3389.0	3297.4	3201.4	3105.6	3034.7
27.5°	3668.3	3760.1	3872.6	3776.7	3564.2	3376.6	3222.3	3084.7	2959.7	2826.3	2747.1
30°	3810.1	3951.8	3976.8	3726.7	3443.3	3201.4	2993.1	2784.6	2626.2	2505.3	2459.5
32.5°	3981.0	4164.4	4014.4	3639.1	3280.7	2963.9	2684.5	2434.4	2301.0	2226.0	2205.2
35°	4239.4	4389.5	4035.1	3547.5	3093.1	2680.4	2330.2	2130.1	2046.7	1996.7	1971.7
37.5°	4610.4	4606.2	4031.0	3434.9	2876.3	2371.9	2046.7	1905.0	1838.3	1796.6	1750.8
40°	5044.0	4773.0	4006.0	3272.3	2584.5	2076.0	1850.8	1717.4	1654.9	1604.9	1550.7
42.5°	5473.3	4885.6	3935.1	3030.6	2221.8	1863.3	1709.1	1588.2	1521.5	1467.3	1392.3
45°	5844.3	4931.4	3797.6	2697.1	1896.7	1696.6	1617.4	1513.1	1434.0	1350.6	1292.3
47.5°	6136.2	4923.1	3576.6	2305.2	1679.9	1579.8	1542.4	1471.5	1375.7	1271.4	1196.3
50°	6382.1	4860.6	3276.5	1959.3	1534.0	1475.7	1463.1	1442.4	1288.1	1200.5	1154.7
52.5°	6607.1	4768.9	2955.5	1725.8	1409.0	1359.0	1384.0	1363.1	1254.8	1179.7	1133.8
55°	6915.7	4706.3	2638.7	1546.5	1263.0	1250.6	1271.4	1300.6	1233.9	1163.0	1113.0
57.5°	7278.3	4739.6	2397.0	1346.4	1125.6	1133.8	1204.7	1246.4	1213.0	1138.0	1088.0
60°	7695.1	4839.7	2184.3	1154.7	1012.9	1033.8	1138.0	1196.3	1192.2	1104.7	1046.3
62.5°	8162.0	4943.9	1846.6	1008.8	917.1	950.4	1058.9	1133.8	1146.3	1071.3	1000.4
63°	8253.8	4952.3	1759.2	979.6	900.4	937.9	1038.0	1117.2	1133.8	1062.9	992.2
65°	8478.8	4877.2	1417.3	900.4	833.7	875.4	975.5	1046.3	1079.6	1017.1	958.8
67.5°	8291.3	4264.5	1067.1	804.6	779.5	808.7	896.2	962.9	992.2	962.9	904.6
70°	7582.6	3101.4	833.7	717.0	721.2	742.0	808.7	871.2	904.6	896.2	842.1
72.5°	6106.9	1759.2	696.1	642.0	654.5	679.4	725.4	783.7	812.8	808.7	771.2
75°	4022.7	900.4	587.8	575.3	583.6	604.5	637.8	683.6	717.0	712.8	696.1
77.5°	1992.6	625.3	504.4	508.6	512.7	529.4	554.4	596.1	616.9	621.1	616.9
80°	821.2	487.7	433.5	437.7	441.9	454.4	471.1	508.6	521.1	529.4	533.6
82.5°	491.9	371.0	346.0	354.4	358.5	371.0	383.5	416.9	429.3	441.9	441.9
85°	325.2	258.5	250.1	258.5	266.8	275.2	279.3	300.1	321.0	337.7	346.0
87.5°	175.1	154.3	150.1	154.3	154.3	162.5	170.9	191.8	216.8	233.4	241.8
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):

	160°	165°	170°	175°	180°
0°	2697.1	2697.1	2697.1	2697.1	2697.1
2.5°	2763.8	2767.9	2763.8	2767.9	2772.1
5°	2901.3	2909.7	2905.5	2905.5	2922.2
7.5°	3059.7	3076.4	3076.4	3084.7	3093.1
10°	3230.7	3247.4	3259.8	3259.8	3272.3
12.5°	3401.5	3409.9	3422.4	3422.4	3422.4
15°	3489.1	3484.9	3480.8	3476.6	3476.6
17.5°	3476.6	3459.9	3451.5	3443.3	3447.4
20°	3384.8	3355.7	3347.4	3334.8	3343.2
22.5°	3226.5	3184.8	3168.1	3147.3	3155.6
25°	2988.9	2938.8	2930.5	2905.5	2918.0
27.5°	2713.8	2688.7	2684.5	2680.4	2701.2
30°	2455.3	2463.7	2467.8	2476.2	2497.0
32.5°	2217.7	2234.3	2238.5	2242.7	2271.9
35°	1984.2	1963.3	1984.2	1975.9	2000.9
37.5°	1729.9	1713.2	1696.6	1675.8	1692.5
40°	1517.3	1488.2	1438.2	1413.1	1417.3
42.5°	1350.6	1313.1	1271.4	1246.4	1246.4
45°	1242.3	1196.3	1158.9	1142.2	1142.2
47.5°	1158.9	1138.0	1117.2	1104.7	1104.7
50°	1125.6	1100.5	1088.0	1079.6	1079.6
52.5°	1100.5	1075.5	1062.9	1054.7	1046.3
55°	1079.6	1042.2	1029.6	1025.5	1025.5
57.5°	1050.5	1017.1	1000.4	996.3	996.3
60°	1004.6	979.6	962.9	958.8	958.8
62.5°	958.8	933.7	917.1	917.1	917.1
63°	950.4	921.3	908.8	908.8	908.8
65°	912.9	883.7	871.2	871.2	867.1
67.5°	862.9	833.7	825.4	825.4	817.0
70°	804.6	779.5	771.2	775.4	758.7
72.5°	746.1	721.2	708.7	708.7	692.0
75°	679.4	654.5	637.8	633.6	616.9
77.5°	604.5	583.6	566.9	550.2	542.0
80°	525.3	508.6	487.7	475.3	462.7
82.5°	441.9	425.2	412.7	429.3	366.8
85°	346.0	329.3	312.6	337.7	262.6
87.5°	254.3	245.9	229.2	200.1	175.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)