

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: P265682

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265682
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-AF72-210-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21798.7 lumens
Efficiency: N/A
Efficacy: 103.3 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): 211
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

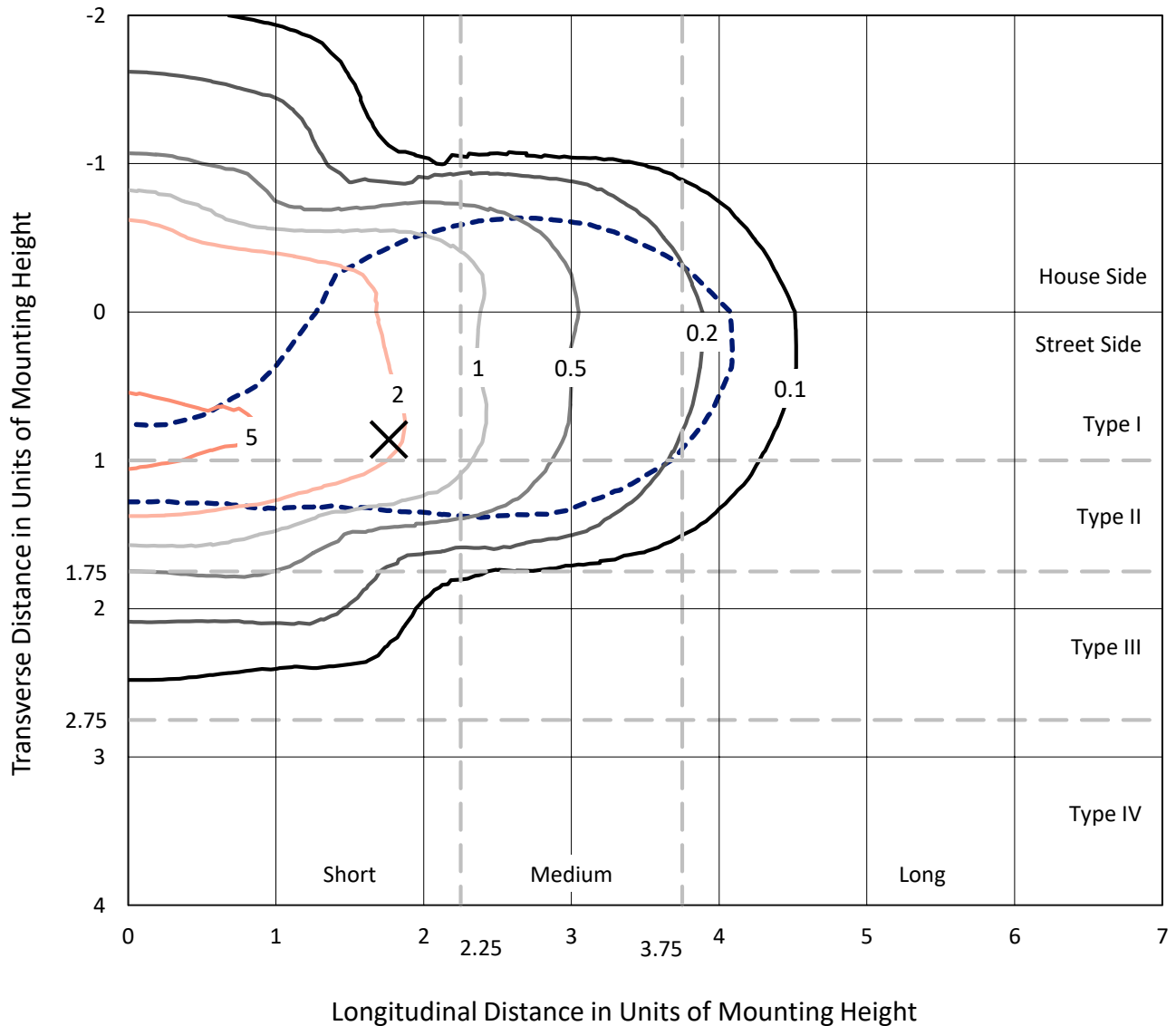


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

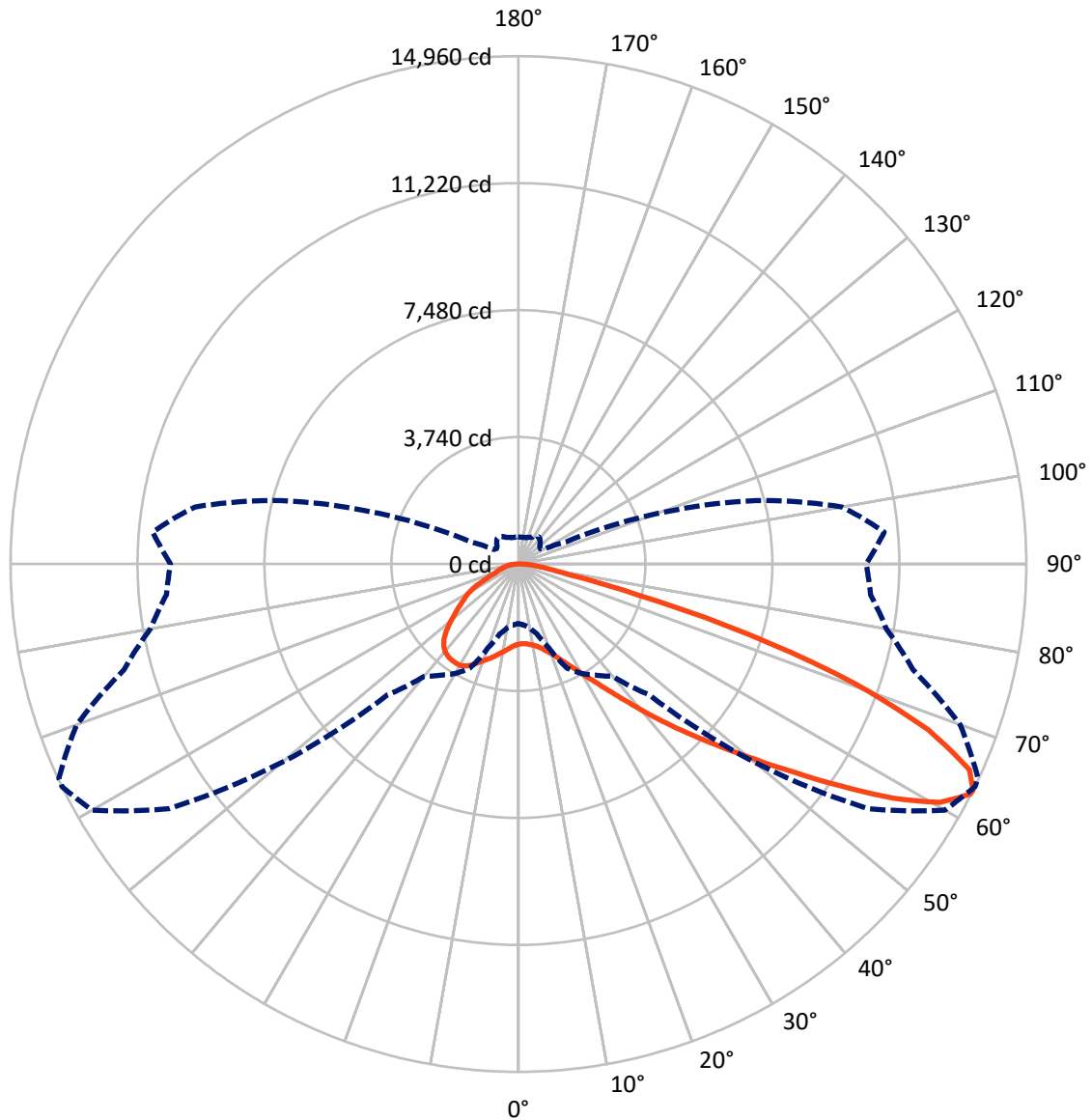


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - Semi-Cutoff

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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	6408.0	0.0	6408.0
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	15390.7	0.0	15390.7
	% Fixture	70.6	0.0	70.6
Total	Lumens	21798.7	0.0	21798.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.7	1.1
10°-20°	785.1	3.6
20°-30°	1473.7	6.8
30°-40°	2470.1	11.3
40°-50°	4144.2	19.0
50°-60°	5253.6	24.1
60°-70°	4634.5	21.3
70°-80°	2392.4	11.0
80°-90°	409.4	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°	21798.7	100.0
0°-180°	21798.7	100.0



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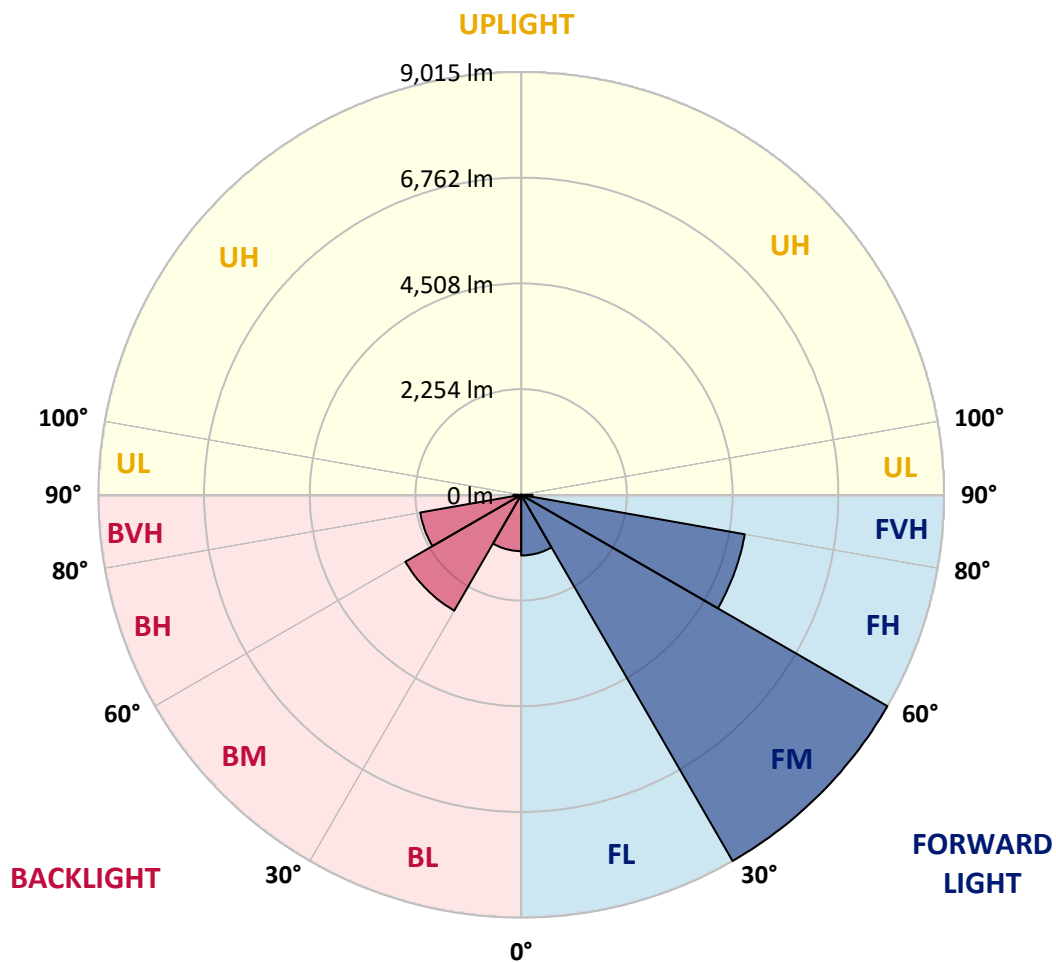
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1293.8	5.9			
FM	(30°-60°)	9015.4	41.4			
FH	(60°-80°)	4840.5	22.2			G2/5000
FVH	(80°-90°)	240.9	1.1			G3/500
BL	(0°-30°)	1200.7	5.5	B3/2500		
BM	(30°-60°)	2852.5	13.1	B3/5000		
BH	(60°-80°)	2186.4	10.0	B3/2500		G3/2500
BVH	(80°-90°)	168.5	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°	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7
2.5°	2346.3	2342.5	2342.5	2342.5	2342.5	2338.8	2342.5	2349.8	2346.3	2342.5	2349.8
5°	2353.5	2349.8	2349.8	2349.8	2353.5	2349.8	2353.5	2364.5	2357.2	2357.2	2364.5
7.5°	2371.7	2368.1	2371.7	2368.1	2368.1	2368.1	2371.7	2382.7	2379.0	2382.7	2393.7
10°	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2400.9	2408.3	2411.9	2415.5	2430.2
12.5°	2459.3	2459.3	2459.3	2455.6	2455.6	2444.6	2459.3	2466.6	2473.9	2481.2	2492.2
15°	2598.0	2598.0	2594.3	2579.8	2579.8	2557.8	2561.4	2565.1	2565.1	2572.4	2579.8
17.5°	2780.4	2776.8	2769.5	2758.5	2744.0	2718.5	2711.1	2703.8	2692.8	2689.2	2689.2
20°	3035.8	3032.1	3017.5	2988.4	2970.2	2930.0	2900.7	2871.6	2860.7	2842.4	2838.7
22.5°	3400.8	3400.8	3371.5	3327.7	3313.0	3229.1	3145.2	3083.3	3061.3	3035.8	3035.8
25°	3842.2	3838.5	3798.5	3747.3	3685.2	3597.7	3495.6	3411.7	3357.0	3298.5	3276.7
27.5°	4371.3	4360.4	4305.7	4243.7	4126.9	4017.4	3896.9	3809.4	3714.5	3641.5	3575.9
30°	4991.6	4980.7	4885.8	4769.0	4648.5	4539.1	4364.0	4258.1	4108.6	4021.1	3948.1
32.5°	5710.4	5699.4	5528.0	5414.9	5287.2	5152.1	4944.1	4776.3	4586.6	4462.5	4360.4
35°	6626.3	6582.5	6338.0	6181.1	5980.5	5845.5	5626.5	5400.3	5177.7	5002.5	4853.0
37.5°	7615.1	7564.0	7348.8	7115.2	6918.1	6753.9	6443.8	6159.1	5896.6	5655.6	5469.6
40°	8647.8	8512.7	8282.8	8111.3	7976.3	7819.4	7494.6	7195.5	6783.2	6513.2	6232.3
42.5°	9362.9	9231.5	9070.9	8957.9	8892.2	8771.8	8589.4	8330.3	7961.8	7969.0	7228.3
45°	9833.6	9640.3	9530.7	9538.1	9563.5	9563.5	9530.7	9490.7	9330.1	9439.5	8819.2
47.5°	9665.8	9538.1	9468.8	9614.6	9797.0	9979.5	10191.2	10421.1	10683.7	10993.8	10231.3
50°	8680.5	8728.0	8760.8	9070.9	9461.4	9877.4	10362.7	10990.3	11723.7	11866.0	11497.4
52.5°	7107.8	7210.1	7319.5	7793.9	8308.3	9027.2	9877.4	10913.7	11898.8	12479.0	12442.6
55°	5520.7	5648.5	5881.9	6235.9	6644.6	7323.3	8374.1	9972.3	11508.4	12431.6	12993.4
57.5°	3929.7	4115.9	4422.4	4914.9	5276.3	5659.3	6436.5	8209.9	9892.0	11610.6	12902.3
60°	2612.6	2700.1	2900.7	3513.8	4123.2	4524.6	5075.6	5717.7	7093.3	9461.4	11960.8
62.5°	1853.7	1912.0	2036.1	2313.3	2864.3	3590.4	3922.4	4218.0	4659.6	6086.2	9603.7
63°	1751.4	1802.4	1904.6	2138.2	2634.5	3386.2	3725.5	3995.5	4316.5	5444.1	9085.5
65°	1452.2	1474.1	1528.8	1642.0	1908.3	2532.3	3086.9	3251.1	3305.9	3499.2	5692.2
67.5°	1225.9	1240.6	1258.9	1291.8	1397.6	1685.8	2302.4	2510.5	2448.4	2317.0	2813.2
70°	1065.5	1076.3	1105.6	1145.7	1182.2	1255.2	1583.6	1893.7	1824.4	1645.7	1722.2
72.5°	850.2	868.4	901.3	970.6	1043.7	1138.4	1218.7	1412.0	1368.3	1196.8	1215.0
75°	671.5	682.4	711.5	762.7	831.9	941.5	1098.3	1163.9	1043.7	883.0	883.0
77.5°	532.8	543.7	569.3	609.4	653.2	729.8	839.2	1010.8	937.7	664.0	660.4
80°	401.4	412.3	437.8	474.3	518.1	572.8	638.5	715.2	861.1	620.3	496.3
82.5°	295.5	299.1	343.1	368.6	383.1	427.0	481.6	525.4	591.2	572.8	441.4
85°	222.6	218.9	248.1	266.3	270.0	281.0	313.8	357.5	386.8	372.2	343.1
87.5°	124.1	109.5	127.6	146.0	146.0	149.6	156.9	182.4	208.0	200.7	182.4
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7
2.5°	2349.8	2349.8	2346.3	2346.3	2349.8	2349.8	2346.3	2357.2	2364.5	2364.5	2368.1
5°	2360.7	2364.5	2360.7	2360.7	2364.5	2364.5	2368.1	2379.0	2390.0	2397.2	2408.3
7.5°	2393.7	2397.2	2393.7	2393.7	2397.2	2400.9	2408.3	2422.8	2430.2	2444.6	2463.0
10°	2430.2	2433.8	2430.2	2433.8	2437.5	2441.1	2452.1	2463.0	2473.9	2488.6	2517.7
12.5°	2495.9	2499.4	2492.2	2495.9	2506.7	2506.7	2514.0	2521.4	2539.6	2557.8	2586.9
15°	2586.9	2586.9	2579.8	2583.3	2594.3	2594.3	2598.0	2605.3	2627.2	2649.0	2678.2
17.5°	2692.8	2700.1	2696.5	2700.1	2707.4	2711.1	2711.1	2718.5	2733.0	2747.6	2776.8
20°	2835.1	2838.7	2831.5	2838.7	2846.1	2838.7	2831.5	2827.9	2835.1	2842.4	2875.2
22.5°	3028.5	3024.9	3006.6	3006.6	3006.6	2992.1	2973.7	2951.9	2951.9	2941.0	2966.6
25°	3258.4	3247.5	3222.0	3225.5	3200.0	3178.2	3145.2	3112.4	3083.3	3072.4	3075.9
27.5°	3528.5	3506.5	3481.0	3473.7	3448.1	3408.0	3353.3	3291.2	3243.8	3207.3	3200.0
30°	3867.7	3820.3	3776.6	3769.3	3729.1	3663.4	3575.9	3491.9	3411.7	3349.6	3327.7
32.5°	4269.1	4196.2	4126.9	4119.5	4053.8	3966.2	3860.5	3743.6	3626.9	3528.5	3481.0
35°	4739.8	4630.4	4564.6	4546.4	4451.6	4342.0	4225.4	4075.7	3911.5	3772.9	3685.2
37.5°	5312.7	5199.6	5086.5	5090.2	4958.7	4831.1	4674.2	4491.7	4283.7	4090.3	3966.2
40°	6020.6	5860.1	5714.1	5681.2	5568.1	5389.3	5217.9	5006.2	4750.7	4495.4	4316.5
42.5°	6878.1	6615.3	6414.6	6385.4	6235.9	6016.8	5808.9	5528.0	5268.9	4958.7	4743.5
45°	7852.3	7432.7	7191.8	7148.1	6907.2	6684.6	6432.9	6133.6	5816.3	5465.9	5210.4
47.5°	9063.7	8465.3	8056.5	7983.6	7651.7	7359.6	7097.0	6765.0	6385.4	5995.0	5714.1
50°	10475.8	9592.8	9041.8	8928.7	8483.6	8140.5	7804.8	7388.9	6983.9	6575.1	6250.4
52.5°	11891.6	10942.9	10209.3	10070.8	9414.0	8954.2	8512.7	8096.8	7618.7	7213.7	6845.3
55°	13029.9	12398.6	11548.5	11355.1	10413.7	9789.8	9209.7	8735.3	8261.0	7939.8	7505.7
57.5°	13716.0	13683.2	13011.7	12745.3	11457.3	10534.2	9888.4	9348.3	8888.5	8753.5	8177.0
60°	13697.6	14548.0	14259.7	14059.0	12511.9	11296.7	10457.4	9873.7	9494.2	9647.4	8852.1
62.5°	12862.1	14584.3	14931.0	14876.2	13635.6	11909.8	10924.6	10322.6	10121.8	10577.9	9552.7
63°	12559.3	14500.4	14960.3	14938.3	13851.0	12026.5	11004.9	10410.1	10245.9	10815.1	9680.3
65°	10614.5	13767.1	14606.3	14704.7	14314.3	12428.0	11190.9	10632.7	10614.5	11344.2	9983.3
67.5°	6469.4	11632.4	13011.7	13201.4	13661.2	12555.6	11085.2	10556.1	10818.7	11420.8	9892.0
70°	2765.8	7677.2	10457.4	10764.0	11887.9	11920.7	10782.3	10242.3	10771.3	10822.4	9242.5
72.5°	1638.2	3619.6	7118.9	7786.6	9406.7	10256.8	10089.0	9695.0	10147.3	9505.1	7870.5
75°	1160.3	1693.0	3615.9	4327.6	6549.6	7830.3	8476.2	8658.7	8640.3	7538.4	5907.4
77.5°	831.9	1087.4	1525.2	1798.9	3656.1	5028.2	5816.3	6349.0	6177.5	5046.3	3641.5
80°	580.1	751.6	934.1	992.4	1696.7	2583.3	3064.9	3298.5	3196.3	2521.4	1631.1
82.5°	419.6	492.6	602.0	638.5	853.7	1193.2	1419.4	1251.6	1200.5	930.5	704.2
85°	324.7	317.5	375.9	390.5	499.8	624.0	638.5	496.3	434.2	386.8	394.0
87.5°	229.8	197.1	200.7	208.0	259.2	332.1	324.7	204.4	175.1	186.0	211.6
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7	2360.7
2.5°	2375.4	2379.0	2386.3	2390.0	2397.2	2397.2	2404.6	2408.3	2415.5	2422.8	2426.5
5°	2419.1	2430.2	2444.6	2452.1	2466.6	2477.5	2492.2	2499.4	2514.0	2525.0	2539.6
7.5°	2484.8	2503.0	2521.4	2543.2	2565.1	2583.3	2598.0	2616.3	2641.7	2660.1	2670.9
10°	2546.9	2572.4	2605.3	2630.7	2663.7	2689.2	2711.1	2744.0	2773.1	2798.7	2813.2
12.5°	2627.2	2660.1	2692.8	2733.0	2776.8	2809.5	2842.4	2886.3	2926.4	2955.6	2970.2
15°	2722.0	2762.2	2798.7	2846.1	2897.2	2941.0	2988.4	3035.8	3064.9	3064.9	3057.7
17.5°	2820.6	2853.3	2897.2	2951.9	3021.2	3075.9	3101.5	3108.9	3097.9	3072.4	3054.1
20°	2919.0	2948.2	2995.7	3061.3	3134.4	3145.2	3119.8	3086.9	3054.1	3010.3	2981.0
22.5°	2999.4	3039.4	3112.4	3189.1	3192.8	3130.8	3061.3	3006.6	2955.6	2904.5	2849.8
25°	3094.2	3149.0	3247.5	3276.7	3181.7	3064.9	2966.6	2886.3	2802.4	2718.5	2656.4
27.5°	3211.0	3291.2	3389.8	3305.9	3119.8	2955.6	2820.6	2700.1	2590.6	2473.9	2404.6
30°	3335.0	3459.2	3481.0	3262.0	3014.0	2802.4	2619.8	2437.5	2298.8	2192.9	2152.8
32.5°	3484.6	3645.2	3513.8	3185.4	2871.6	2594.3	2349.8	2130.9	2014.2	1948.5	1930.2
35°	3710.9	3842.2	3532.0	3105.1	2707.4	2346.3	2039.7	1864.5	1791.6	1747.8	1726.0
37.5°	4035.5	4032.0	3528.5	3006.6	2517.7	2076.3	1791.6	1667.6	1609.1	1572.7	1532.5
40°	4415.1	4177.8	3506.5	2864.3	2262.3	1817.1	1620.1	1503.4	1448.5	1404.8	1357.3
42.5°	4790.9	4276.4	3444.6	2652.7	1944.8	1631.1	1495.9	1390.1	1331.8	1284.3	1218.7
45°	5115.7	4316.5	3324.1	2360.7	1660.2	1485.1	1415.8	1324.6	1255.2	1182.2	1131.1
47.5°	5371.1	4309.3	3130.8	2017.9	1470.4	1382.9	1350.1	1288.0	1204.1	1112.9	1047.2
50°	5586.4	4254.6	2868.0	1715.0	1342.7	1291.8	1280.8	1262.5	1127.6	1050.8	1010.8
52.5°	5783.4	4174.2	2586.9	1510.6	1233.4	1189.5	1211.5	1193.2	1098.3	1032.6	992.4
55°	6053.4	4119.5	2309.7	1353.7	1105.6	1094.7	1112.9	1138.4	1080.0	1018.0	974.2
57.5°	6370.9	4148.7	2098.1	1178.5	985.3	992.4	1054.5	1091.0	1061.7	996.1	952.4
60°	6735.8	4236.2	1912.0	1010.8	886.6	905.0	996.1	1047.2	1043.7	966.9	915.8
62.5°	7144.4	4327.6	1616.4	883.0	802.7	831.9	926.8	992.4	1003.4	937.7	875.7
63°	7224.7	4334.9	1539.9	857.5	788.2	821.1	908.5	977.8	992.4	930.5	868.4
65°	7421.6	4269.1	1240.6	788.2	729.8	766.3	853.7	915.8	945.0	890.3	839.2
67.5°	7257.4	3732.7	934.1	704.2	682.4	707.9	784.5	842.9	868.4	842.9	791.8
70°	6637.1	2714.7	729.8	627.6	631.2	649.5	707.9	762.7	791.8	784.5	737.1
72.5°	5345.5	1539.9	609.4	561.9	572.8	594.8	634.9	685.9	711.5	707.9	675.0
75°	3521.1	788.2	514.5	503.5	510.9	529.1	558.2	598.5	627.6	624.0	609.4
77.5°	1744.1	547.3	441.4	445.2	448.9	463.3	485.4	521.7	540.1	543.7	540.1
80°	718.9	427.0	379.4	383.1	386.8	397.7	412.3	445.2	456.1	463.3	467.1
82.5°	430.6	324.7	302.9	310.2	313.8	324.7	335.6	364.9	375.9	386.8	386.8
85°	284.7	226.3	218.9	226.3	233.5	240.8	244.5	262.8	281.0	295.5	302.9
87.5°	153.3	135.0	131.3	135.0	135.0	142.3	149.6	167.9	189.7	204.4	211.6
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):

	160°	165°	170°	175°	180°
0°	2360.7	2360.7	2360.7	2360.7	2360.7
2.5°	2419.1	2422.8	2419.1	2422.8	2426.5
5°	2539.6	2546.9	2543.2	2543.2	2557.8
7.5°	2678.2	2692.8	2692.8	2700.1	2707.4
10°	2827.9	2842.4	2853.3	2853.3	2864.3
12.5°	2977.4	2984.8	2995.7	2995.7	2995.7
15°	3054.1	3050.5	3046.8	3043.1	3043.1
17.5°	3043.1	3028.5	3021.2	3014.0	3017.5
20°	2962.8	2937.3	2930.0	2919.0	2926.4
22.5°	2824.2	2787.7	2773.1	2754.8	2762.2
25°	2616.3	2572.4	2565.1	2543.2	2554.2
27.5°	2375.4	2353.5	2349.8	2346.3	2364.5
30°	2149.1	2156.4	2160.2	2167.4	2185.7
32.5°	1941.1	1955.8	1959.5	1963.1	1988.6
35°	1736.9	1718.5	1736.9	1729.5	1751.4
37.5°	1514.3	1499.7	1485.1	1466.8	1481.5
40°	1328.1	1302.6	1258.9	1237.0	1240.6
42.5°	1182.2	1149.4	1112.9	1091.0	1091.0
45°	1087.4	1047.2	1014.4	999.8	999.8
47.5°	1014.4	996.1	977.8	966.9	966.9
50°	985.3	963.3	952.4	945.0	945.0
52.5°	963.3	941.5	930.5	923.2	915.8
55°	945.0	912.1	901.3	897.5	897.5
57.5°	919.5	890.3	875.7	872.1	872.1
60°	879.4	857.5	842.9	839.2	839.2
62.5°	839.2	817.4	802.7	802.7	802.7
63°	831.9	806.4	795.4	795.4	795.4
65°	799.1	773.5	762.7	762.7	759.0
67.5°	755.4	729.8	722.4	722.4	715.2
70°	704.2	682.4	675.0	678.7	664.0
72.5°	653.2	631.2	620.3	620.3	605.6
75°	594.8	572.8	558.2	554.7	540.1
77.5°	529.1	510.9	496.3	481.6	474.3
80°	459.8	445.2	427.0	415.9	405.0
82.5°	386.8	372.2	361.2	375.9	321.1
85°	302.9	288.3	273.7	295.5	229.8
87.5°	222.6	215.2	200.7	175.1	153.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)