

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: P257950

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257950
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-AF72-140-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19290.8 lumens
Efficiency: N/A
Efficacy: 134.9 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

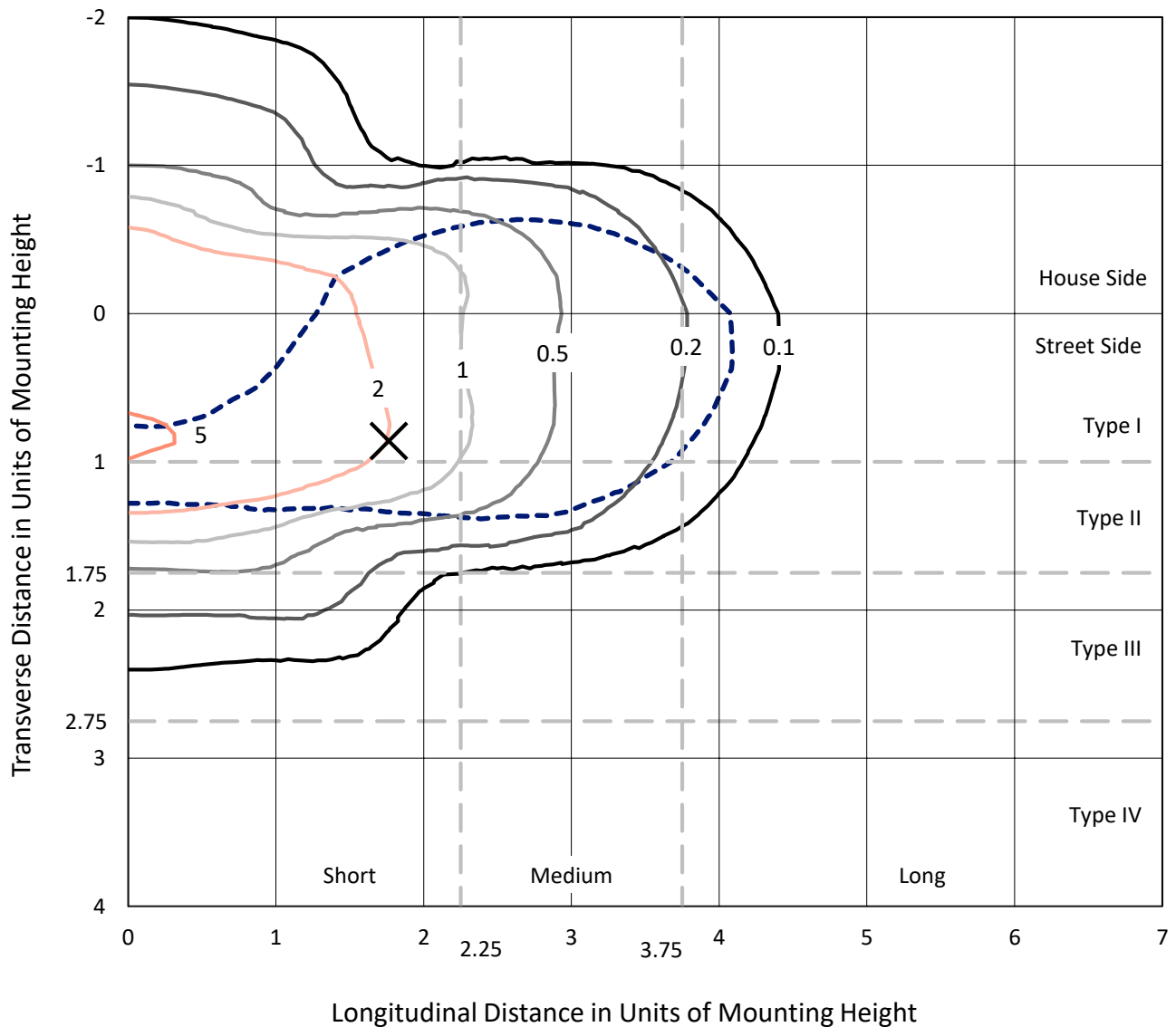
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

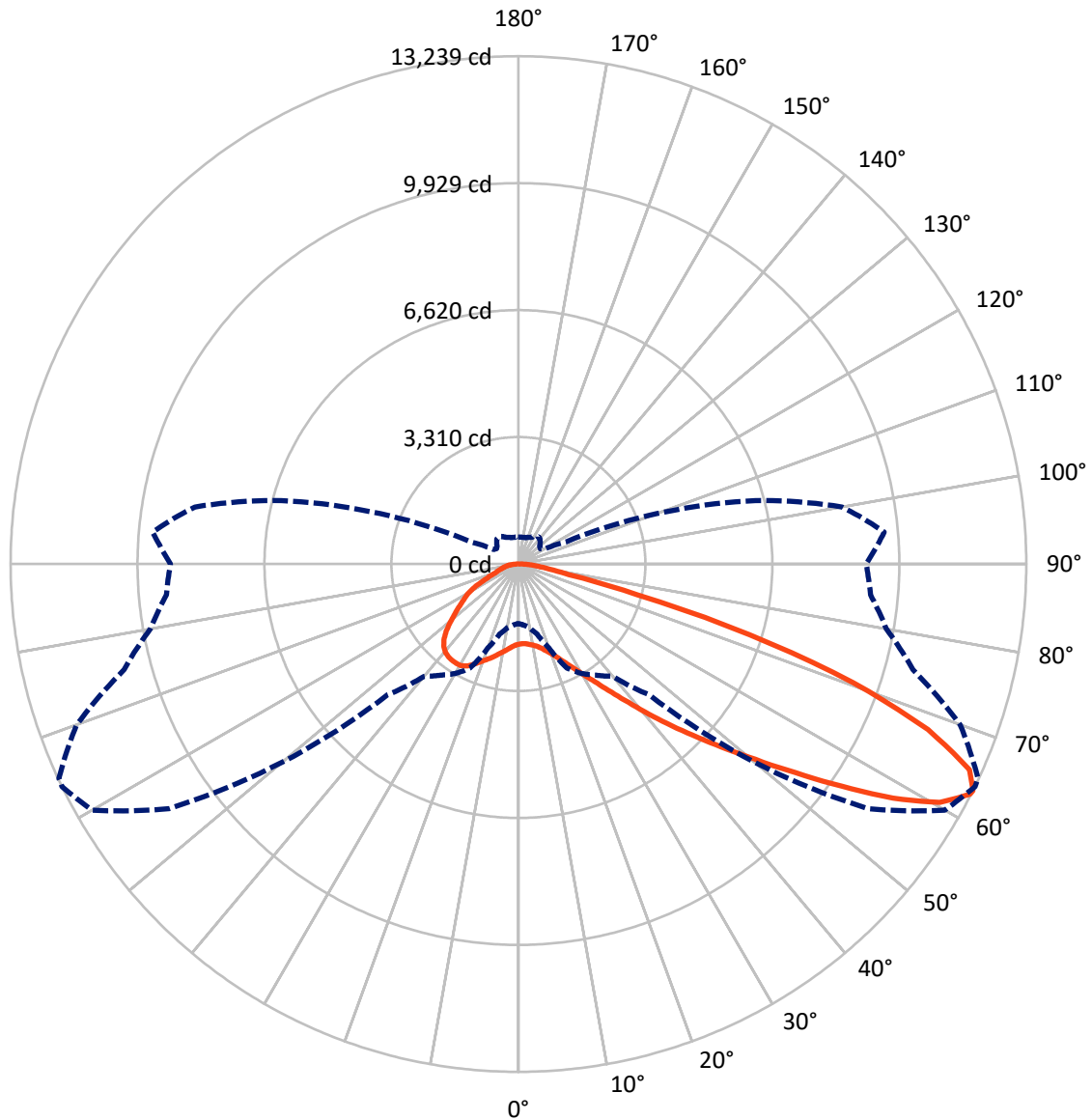
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 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	5670.8	0.0	5670.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	13620.0	0.0	13620.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	19290.8	0.0	19290.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.6	1.1
10°-20°	694.8	3.6
20°-30°	1304.1	6.8
30°-40°	2185.9	11.3
40°-50°	3667.4	19.0
50°-60°	4649.2	24.1
60°-70°	4101.3	21.3
70°-80°	2117.2	11.0
80°-90°	362.3	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°	19290.8	100.0
0°-180°	19290.8	100.0



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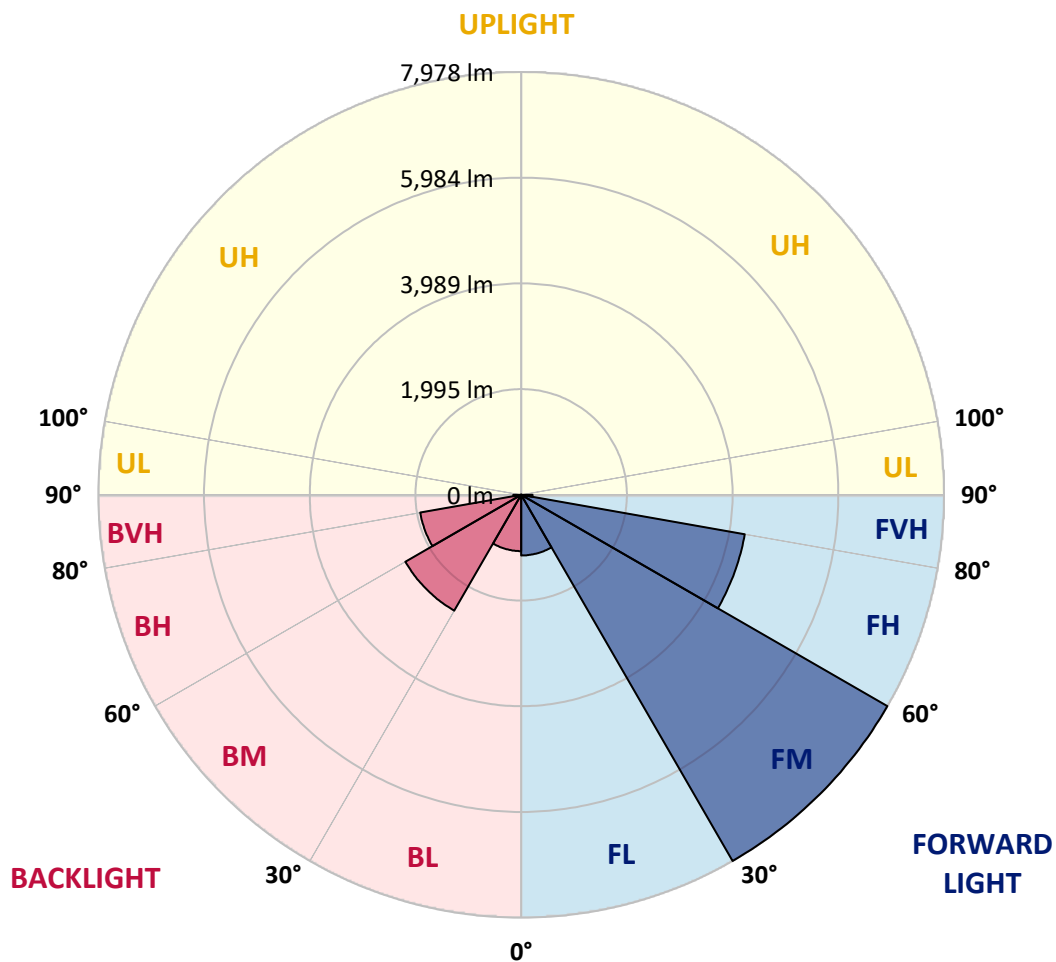
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1145.0	5.9			
FM (30°-60°)	7978.2	41.4			
FH (60°-80°)	4283.7	22.2			G2/5000
FVH (80°-90°)	213.2	1.1			G2/225
BL (0°-30°)	1062.5	5.5	B3/2500		
BM (30°-60°)	2524.4	13.1	B3/5000		
BH (60°-80°)	1934.8	10.0	B3/2500		G3/2500
BVH (80°-90°)	149.1	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°	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2
2.5°	2076.3	2073.0	2073.0	2073.0	2073.0	2069.8	2073.0	2079.5	2076.3	2073.0	2079.5
5°	2082.7	2079.5	2079.5	2079.5	2082.7	2079.5	2082.7	2092.4	2086.0	2086.0	2092.4
7.5°	2098.9	2095.6	2098.9	2095.6	2095.6	2095.6	2098.9	2108.6	2105.3	2108.6	2118.2
10°	2118.2	2118.2	2118.2	2118.2	2118.2	2118.2	2124.7	2131.1	2134.4	2137.7	2150.5
12.5°	2176.3	2176.3	2176.3	2173.2	2173.2	2163.4	2176.3	2182.9	2189.3	2195.8	2205.5
15°	2299.1	2299.1	2295.8	2282.9	2282.9	2263.6	2266.8	2270.0	2270.0	2276.5	2282.9
17.5°	2460.5	2457.3	2450.9	2441.2	2428.3	2405.7	2399.1	2392.7	2383.1	2379.8	2379.8
20°	2686.6	2683.3	2670.4	2644.5	2628.5	2592.9	2567.1	2541.2	2531.6	2515.4	2512.2
22.5°	3009.4	3009.4	2983.6	2944.9	2932.0	2857.7	2783.4	2728.5	2709.2	2686.6	2686.6
25°	3400.2	3396.9	3361.4	3316.2	3261.4	3183.8	3093.4	3019.1	2970.8	2919.1	2899.7
27.5°	3868.4	3858.7	3810.3	3755.4	3652.0	3555.2	3448.6	3371.1	3287.2	3222.6	3164.5
30°	4417.3	4407.6	4323.7	4220.4	4113.8	4016.9	3861.9	3768.2	3635.9	3558.4	3493.8
32.5°	5053.5	5043.8	4892.0	4791.9	4678.9	4559.4	4375.4	4226.8	4058.9	3949.1	3858.7
35°	5864.0	5825.2	5608.8	5470.0	5292.4	5173.0	4979.2	4779.0	4582.0	4427.0	4294.7
37.5°	6739.0	6693.8	6503.3	6296.6	6122.3	5976.9	5702.4	5450.6	5218.1	5005.0	4840.3
40°	7652.8	7533.3	7330.0	7178.1	7058.7	6919.9	6632.4	6367.7	6002.8	5763.8	5515.2
42.5°	8285.7	8169.5	8027.4	7927.3	7869.2	7762.6	7601.1	7371.9	7045.8	7052.2	6396.7
45°	8702.2	8531.1	8434.2	8440.7	8463.3	8463.3	8434.2	8398.7	8256.6	8353.5	7804.6
47.5°	8553.7	8440.7	8379.4	8508.5	8669.9	8831.4	9018.7	9222.1	9454.6	9729.1	9054.2
50°	7681.8	7723.9	7752.9	8027.4	8372.9	8741.0	9170.4	9725.8	10374.9	10500.8	10174.7
52.5°	6290.1	6380.6	6477.4	6897.2	7352.6	7988.6	8741.0	9658.1	10529.8	11043.3	11011.0
55°	4885.5	4998.5	5205.2	5518.4	5880.0	6480.7	7410.7	8825.0	10184.4	11001.3	11498.6
57.5°	3477.6	3642.3	3913.6	4349.5	4669.2	5008.3	5696.0	7265.3	8753.9	10274.8	11417.9
60°	2312.0	2389.5	2567.1	3109.6	3648.8	4004.0	4491.6	5059.9	6277.2	8372.9	10584.8
62.5°	1640.3	1692.1	1801.8	2047.2	2534.8	3177.4	3471.2	3732.7	4123.5	5386.0	8498.8
63°	1550.0	1595.2	1685.5	1892.3	2331.4	2996.5	3296.9	3535.8	3819.9	4817.7	8040.3
65°	1285.1	1304.6	1353.0	1453.1	1688.8	2241.0	2731.8	2877.0	2925.5	3096.7	5037.3
67.5°	1084.9	1097.8	1114.0	1143.0	1236.7	1491.8	2037.5	2221.5	2166.7	2050.4	2489.6
70°	942.9	952.6	978.4	1013.9	1046.2	1110.8	1401.4	1675.9	1614.5	1456.3	1524.1
72.5°	752.4	768.5	797.6	859.0	923.5	1007.5	1078.5	1249.6	1210.9	1059.2	1075.2
75°	594.1	603.8	629.6	674.8	736.2	833.1	971.9	1030.1	923.5	781.4	781.4
77.5°	471.5	481.1	503.7	539.3	578.0	645.8	742.7	894.5	829.8	587.7	584.4
80°	355.2	364.9	387.5	419.8	458.5	507.0	565.1	632.9	762.1	548.9	439.2
82.5°	261.6	264.7	303.5	326.1	339.0	377.8	426.3	464.9	523.1	507.0	390.7
85°	197.0	193.7	219.5	235.7	239.0	248.7	277.7	316.4	342.3	329.4	303.5
87.5°	109.8	96.9	113.0	129.2	129.2	132.4	138.8	161.4	184.0	177.6	161.4
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°	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2
2.5°	2079.5	2079.5	2076.3	2076.3	2079.5	2079.5	2076.3	2086.0	2092.4	2092.4	2095.6
5°	2089.2	2092.4	2089.2	2089.2	2092.4	2092.4	2095.6	2105.3	2115.1	2121.5	2131.1
7.5°	2118.2	2121.5	2118.2	2118.2	2121.5	2124.7	2131.1	2144.1	2150.5	2163.4	2179.6
10°	2150.5	2153.7	2150.5	2153.7	2157.0	2160.3	2169.9	2179.6	2189.3	2202.2	2228.0
12.5°	2208.7	2211.9	2205.5	2208.7	2218.4	2218.4	2224.8	2231.3	2247.4	2263.6	2289.4
15°	2289.4	2289.4	2282.9	2286.2	2295.8	2295.8	2299.1	2305.5	2324.9	2344.3	2370.1
17.5°	2383.1	2389.5	2386.2	2389.5	2396.0	2399.1	2399.1	2405.7	2418.6	2431.5	2457.3
20°	2509.0	2512.2	2505.7	2512.2	2518.6	2512.2	2505.7	2502.5	2509.0	2515.4	2544.5
22.5°	2680.1	2676.9	2660.7	2660.7	2660.7	2647.8	2631.6	2612.3	2612.3	2602.6	2625.2
25°	2883.5	2873.9	2851.3	2854.4	2831.8	2812.5	2783.4	2754.4	2728.5	2718.8	2722.1
27.5°	3122.5	3103.1	3080.5	3074.1	3051.5	3016.0	2967.5	2912.5	2870.6	2838.3	2831.8
30°	3422.8	3380.8	3342.1	3335.6	3300.0	3241.9	3164.5	3090.2	3019.1	2964.2	2944.9
32.5°	3778.0	3713.4	3652.0	3645.6	3587.5	3509.9	3416.3	3313.0	3209.7	3122.5	3080.5
35°	4194.5	4097.6	4039.5	4023.4	3939.4	3842.5	3739.2	3606.8	3461.6	3338.8	3261.4
37.5°	4701.5	4601.3	4501.3	4504.5	4388.3	4275.2	4136.4	3975.0	3790.9	3619.7	3509.9
40°	5327.9	5185.8	5056.7	5027.6	4927.6	4769.3	4617.5	4430.2	4204.2	3978.2	3819.9
42.5°	6086.8	5854.2	5676.7	5650.8	5518.4	5324.7	5140.6	4892.0	4662.7	4388.3	4197.8
45°	6948.9	6577.6	6364.4	6325.7	6112.5	5915.6	5692.8	5428.0	5147.1	4837.1	4611.1
47.5°	8021.0	7491.4	7129.7	7065.1	6771.3	6512.9	6280.5	5986.6	5650.8	5305.3	5056.7
50°	9270.6	8489.2	8001.5	7901.5	7507.5	7204.0	6906.9	6538.8	6180.4	5818.7	5531.3
52.5°	10523.4	9683.9	9034.8	8912.2	8330.9	7924.1	7533.3	7165.3	6742.3	6383.8	6057.7
55°	11530.9	10972.3	10219.9	10048.8	9215.7	8663.5	8150.1	7730.3	7310.5	7026.3	6642.1
57.5°	12137.9	12108.9	11514.7	11279.1	10139.2	9322.3	8750.7	8272.8	7866.0	7746.5	7236.3
60°	12121.8	12874.1	12619.1	12441.4	11072.3	9997.1	9254.4	8737.7	8401.9	8537.5	7833.7
62.5°	11382.4	12906.5	13213.3	13164.8	12066.9	10539.6	9667.7	9135.0	8957.4	9361.0	8453.7
63°	11114.4	12832.2	13239.0	13219.7	12257.4	10642.9	9738.8	9212.5	9067.1	9570.8	8566.6
65°	9393.2	12183.1	12925.8	13013.1	12667.5	10998.1	9903.5	9409.4	9393.2	10039.0	8834.6
67.5°	5725.0	10294.2	11514.7	11682.6	12089.5	11111.1	9809.8	9341.6	9574.1	10106.9	8753.9
70°	2447.6	6793.9	9254.4	9525.6	10520.2	10549.3	9541.8	9063.9	9532.2	9577.3	8179.1
72.5°	1449.8	3203.2	6299.8	6890.8	8324.5	9076.8	8928.3	8579.6	8980.0	8411.6	6965.1
75°	1026.8	1498.3	3200.0	3829.6	5796.1	6929.5	7501.1	7662.5	7646.4	6671.2	5227.8
77.5°	736.2	962.3	1349.8	1591.9	3235.5	4449.6	5147.1	5618.6	5466.8	4465.8	3222.6
80°	513.4	665.2	826.6	878.3	1501.5	2286.2	2712.4	2919.1	2828.7	2231.3	1443.4
82.5°	371.3	435.9	532.8	565.1	755.6	1055.9	1256.1	1107.5	1062.3	823.4	623.2
85°	287.3	280.9	332.6	345.6	442.4	552.2	565.1	439.2	384.2	342.3	348.7
87.5°	203.5	174.4	177.6	184.0	229.2	293.8	287.3	180.9	155.0	164.7	187.3
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°	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2	2089.2
2.5°	2102.1	2105.3	2111.8	2115.1	2121.5	2121.5	2127.9	2131.1	2137.7	2144.1	2147.3
5°	2140.8	2150.5	2163.4	2169.9	2182.9	2192.5	2205.5	2211.9	2224.8	2234.5	2247.4
7.5°	2198.9	2215.1	2231.3	2250.6	2270.0	2286.2	2299.1	2315.2	2337.9	2354.0	2363.6
10°	2253.9	2276.5	2305.5	2328.1	2357.2	2379.8	2399.1	2428.3	2454.1	2476.7	2489.6
12.5°	2324.9	2354.0	2383.1	2418.6	2457.3	2486.4	2515.4	2554.2	2589.7	2615.5	2628.5
15°	2408.8	2444.3	2476.7	2518.6	2563.8	2602.6	2644.5	2686.6	2712.4	2712.4	2705.9
17.5°	2496.0	2525.2	2563.8	2612.3	2673.7	2722.1	2744.7	2751.1	2741.4	2718.8	2702.7
20°	2583.3	2609.0	2651.1	2709.2	2773.7	2783.4	2760.8	2731.8	2702.7	2664.0	2638.1
22.5°	2654.3	2689.7	2754.4	2822.2	2825.4	2770.6	2709.2	2660.7	2615.5	2570.3	2521.9
25°	2738.2	2786.6	2873.9	2899.7	2815.7	2712.4	2625.2	2554.2	2479.9	2405.7	2350.7
27.5°	2841.6	2912.5	2999.8	2925.5	2760.8	2615.5	2496.0	2389.5	2292.6	2189.3	2127.9
30°	2951.3	3061.1	3080.5	2886.8	2667.1	2479.9	2318.4	2157.0	2034.3	1940.6	1905.1
32.5°	3083.7	3225.8	3109.6	2818.9	2541.2	2295.8	2079.5	1885.7	1782.4	1724.3	1708.1
35°	3284.0	3400.2	3125.7	2748.0	2396.0	2076.3	1805.0	1650.0	1585.5	1546.7	1527.4
37.5°	3571.3	3568.1	3122.5	2660.7	2228.0	1837.3	1585.5	1475.7	1424.0	1391.7	1356.2
40°	3907.2	3697.3	3103.1	2534.8	2002.0	1608.1	1433.7	1330.3	1282.0	1243.2	1201.3
42.5°	4239.7	3784.4	3048.2	2347.5	1721.1	1443.4	1323.9	1230.3	1178.6	1136.6	1078.5
45°	4527.1	3819.9	2941.7	2089.2	1469.2	1314.2	1252.9	1172.1	1110.8	1046.2	1001.0
47.5°	4753.1	3813.5	2770.6	1785.7	1301.3	1223.8	1194.7	1139.9	1065.6	984.9	926.7
50°	4943.6	3765.1	2538.0	1517.6	1188.3	1143.0	1133.4	1117.3	997.8	930.0	894.5
52.5°	5118.0	3694.0	2289.4	1336.8	1091.4	1052.6	1072.1	1055.9	971.9	913.8	878.3
55°	5357.0	3645.6	2044.0	1198.0	978.4	968.7	984.9	1007.5	955.8	900.9	862.1
57.5°	5637.9	3671.4	1856.7	1043.0	871.9	878.3	933.2	965.5	939.7	881.5	842.8
60°	5960.8	3748.9	1692.1	894.5	784.7	800.8	881.5	926.7	923.5	855.7	810.5
62.5°	6322.4	3829.6	1430.5	781.4	710.3	736.2	820.2	878.3	888.0	829.8	775.0
63°	6393.4	3836.1	1362.7	758.8	697.4	726.5	804.0	865.4	878.3	823.4	768.5
65°	6567.9	3778.0	1097.8	697.4	645.8	678.1	755.6	810.5	836.4	787.9	742.7
67.5°	6422.6	3303.3	826.6	623.2	603.8	626.5	694.3	745.9	768.5	745.9	700.7
70°	5873.6	2402.4	645.8	555.4	558.6	574.8	626.5	674.8	700.7	694.3	652.2
72.5°	4730.5	1362.7	539.3	497.3	507.0	526.3	561.8	607.0	629.6	626.5	597.4
75°	3116.0	697.4	455.3	445.6	452.0	468.2	494.1	529.6	555.4	552.2	539.3
77.5°	1543.4	484.4	390.7	393.9	397.2	410.1	429.4	461.8	477.9	481.1	477.9
80°	636.1	377.8	335.8	339.0	342.3	352.0	364.9	393.9	403.7	410.1	413.3
82.5°	381.0	287.3	268.0	274.5	277.7	287.3	297.1	322.9	332.6	342.3	342.3
85°	251.9	200.2	193.7	200.2	206.6	213.1	216.4	232.5	248.7	261.6	268.0
87.5°	135.6	119.5	116.2	119.5	119.5	125.9	132.4	148.5	167.9	180.9	187.3
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°	2089.2	2089.2	2089.2	2089.2	2089.2
2.5°	2140.8	2144.1	2140.8	2144.1	2147.3
5°	2247.4	2253.9	2250.6	2250.6	2263.6
7.5°	2370.1	2383.1	2383.1	2389.5	2396.0
10°	2502.5	2515.4	2525.2	2525.2	2534.8
12.5°	2634.9	2641.4	2651.1	2651.1	2651.1
15°	2702.7	2699.5	2696.3	2693.0	2693.0
17.5°	2693.0	2680.1	2673.7	2667.1	2670.4
20°	2622.0	2599.4	2592.9	2583.3	2589.7
22.5°	2499.3	2466.9	2454.1	2437.9	2444.3
25°	2315.2	2276.5	2270.0	2250.6	2260.3
27.5°	2102.1	2082.7	2079.5	2076.3	2092.4
30°	1901.9	1908.3	1911.6	1918.0	1934.2
32.5°	1717.8	1730.7	1734.0	1737.2	1759.8
35°	1537.0	1520.9	1537.0	1530.5	1550.0
37.5°	1340.1	1327.2	1314.2	1298.0	1311.0
40°	1175.4	1152.8	1114.0	1094.7	1097.8
42.5°	1046.2	1017.1	984.9	965.5	965.5
45°	962.3	926.7	897.6	884.8	884.8
47.5°	897.6	881.5	865.4	855.7	855.7
50°	871.9	852.4	842.8	836.4	836.4
52.5°	852.4	833.1	823.4	816.9	810.5
55°	836.4	807.2	797.6	794.3	794.3
57.5°	813.8	787.9	775.0	771.7	771.7
60°	778.2	758.8	745.9	742.7	742.7
62.5°	742.7	723.3	710.3	710.3	710.3
63°	736.2	713.6	703.9	703.9	703.9
65°	707.2	684.6	674.8	674.8	671.7
67.5°	668.4	645.8	639.3	639.3	632.9
70°	623.2	603.8	597.4	600.6	587.7
72.5°	578.0	558.6	548.9	548.9	536.0
75°	526.3	507.0	494.1	490.8	477.9
77.5°	468.2	452.0	439.2	426.3	419.8
80°	406.8	393.9	377.8	368.2	358.4
82.5°	342.3	329.4	319.7	332.6	284.2
85°	268.0	255.1	242.1	261.6	203.5
87.5°	197.0	190.5	177.6	155.0	135.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)