

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: P265664

Luminaire Tested: **ARCH-L-AF72-190-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265664
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-AF72-190-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20174.4 lumens
Efficiency: N/A
Efficacy: 106.7 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): 189
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

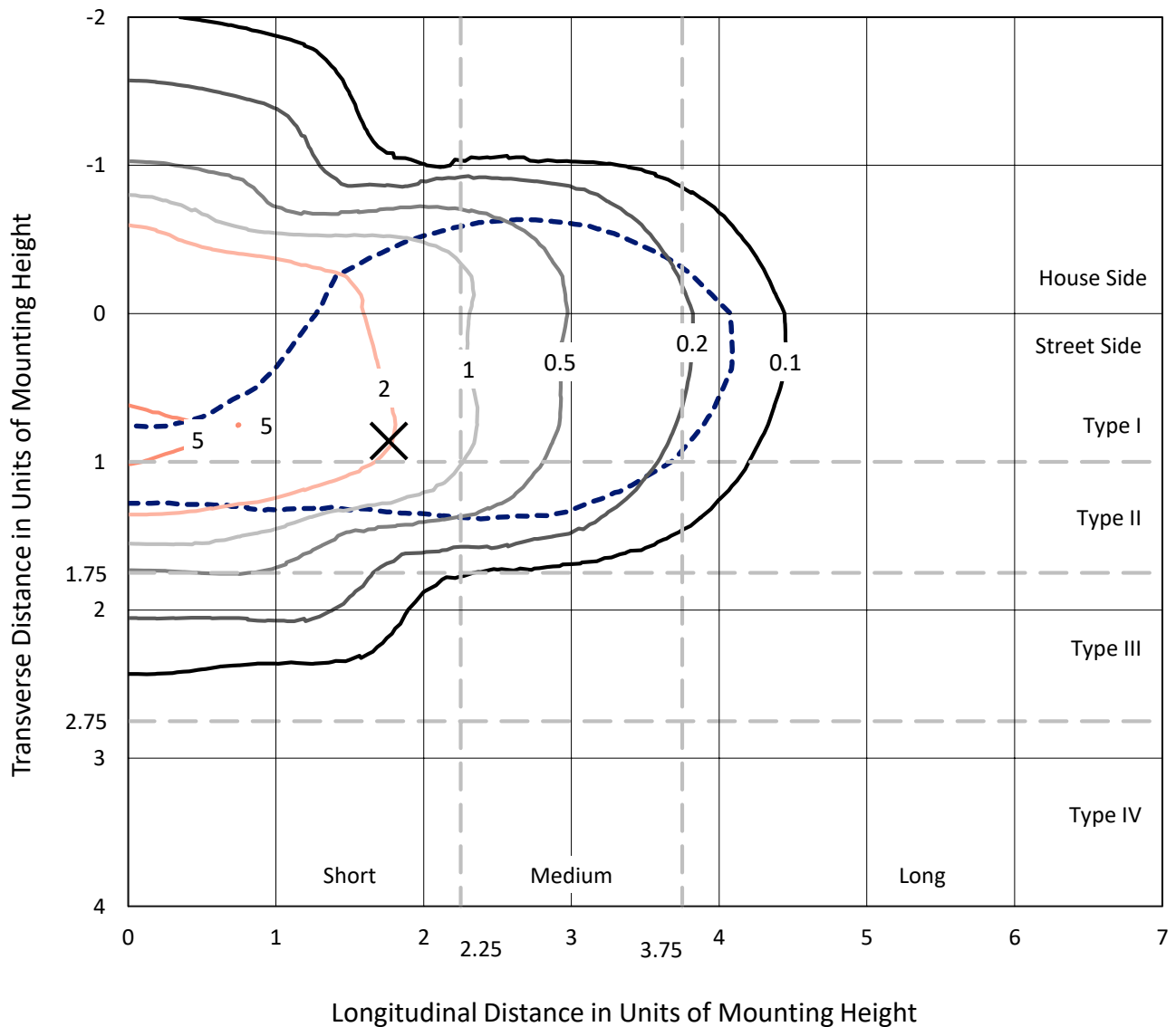


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

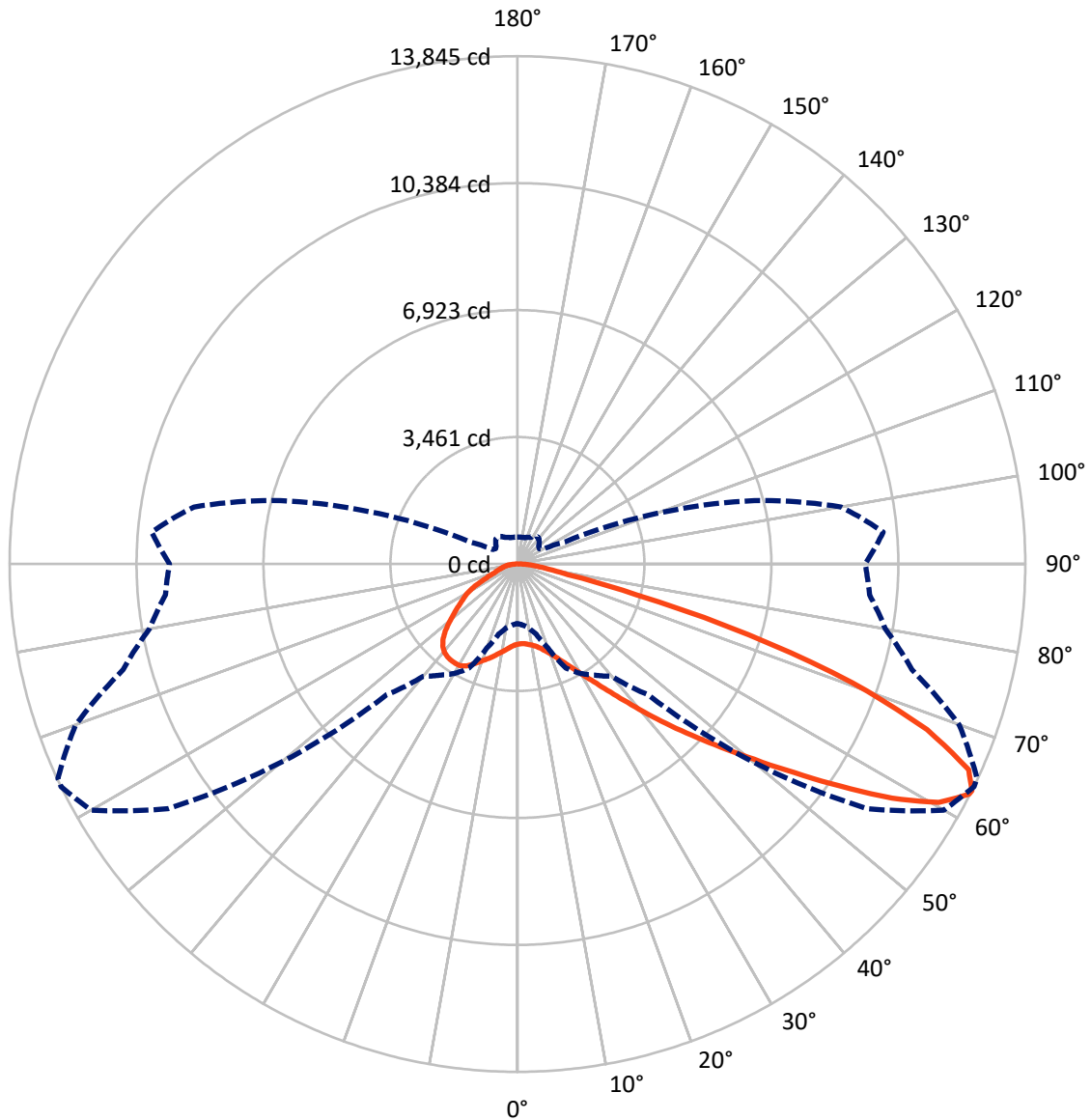


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - Semi-Cutoff

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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	5930.5	0.0	5930.5
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	14243.8	0.0	14243.8
	% Fixture	70.6	0.0	70.6
Total	Lumens	20174.4	0.0	20174.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.1	1.1
10°-20°	726.6	3.6
20°-30°	1363.9	6.8
30°-40°	2286.0	11.3
40°-50°	3835.4	19.0
50°-60°	4862.1	24.1
60°-70°	4289.2	21.3
70°-80°	2214.1	11.0
80°-90°	378.9	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°	20174.4	100.0
0°-180°	20174.4	100.0



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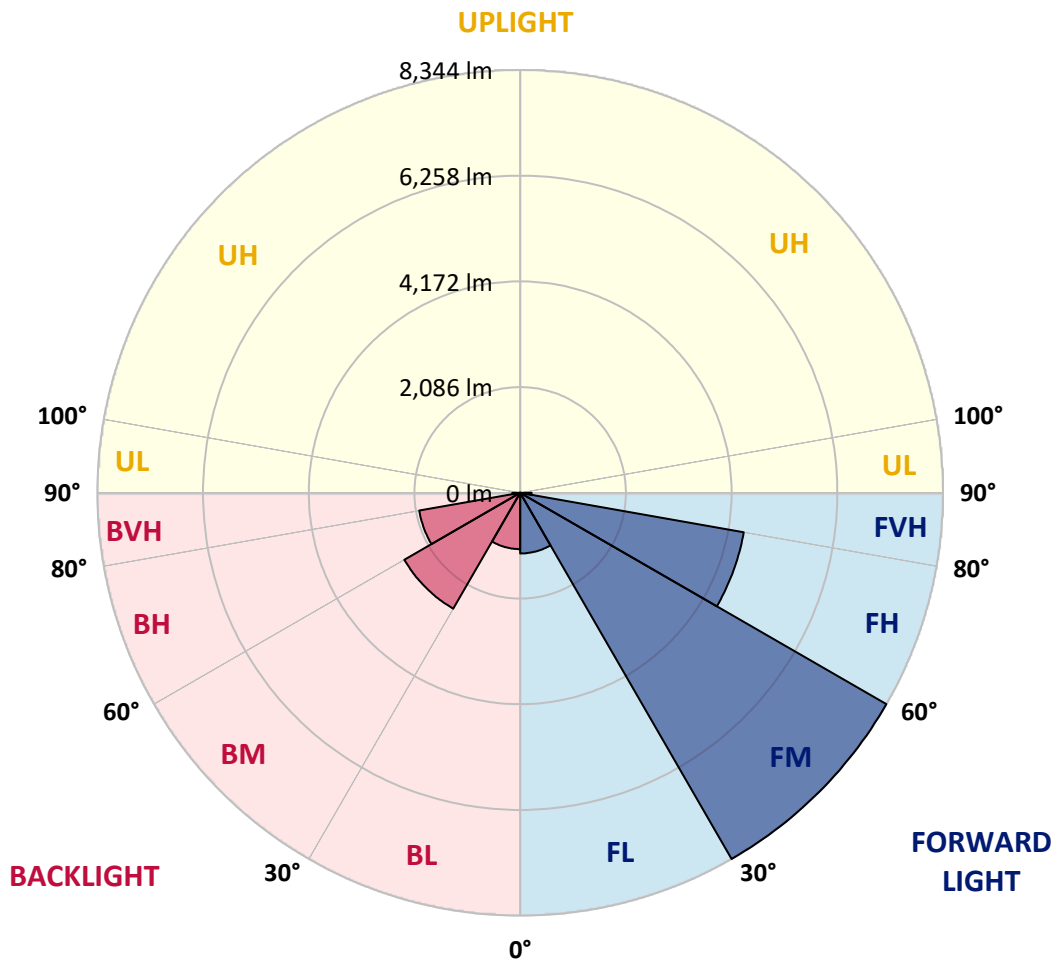
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1197.4	5.9			
FM	(30°-60°)	8343.6	41.4			
FH	(60°-80°)	4479.8	22.2			G2/5000
FVH	(80°-90°)	223.0	1.1			G2/225
BL	(0°-30°)	1111.2	5.5	B3/2500		
BM	(30°-60°)	2640.0	13.1	B3/5000		
BH	(60°-80°)	2023.5	10.0	B3/2500		G3/2500
BVH	(80°-90°)	155.9	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°	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9
2.5°	2171.4	2168.0	2168.0	2168.0	2168.0	2164.6	2168.0	2174.7	2171.4	2168.0	2174.7
5°	2178.1	2174.7	2174.7	2174.7	2178.1	2174.7	2178.1	2188.2	2181.5	2181.5	2188.2
7.5°	2195.0	2191.7	2195.0	2191.7	2191.7	2191.7	2195.0	2205.1	2201.7	2205.1	2215.3
10°	2215.3	2215.3	2215.3	2215.3	2215.3	2215.3	2222.0	2228.8	2232.2	2235.5	2249.0
12.5°	2276.0	2276.0	2276.0	2272.7	2272.7	2262.6	2276.0	2282.9	2289.6	2296.2	2306.5
15°	2404.4	2404.4	2401.0	2387.4	2387.4	2367.3	2370.5	2374.0	2374.0	2380.8	2387.4
17.5°	2573.3	2569.8	2563.1	2553.0	2539.5	2515.9	2509.1	2502.3	2492.2	2488.8	2488.8
20°	2809.5	2806.2	2792.7	2765.7	2748.9	2711.7	2684.7	2657.6	2647.6	2630.6	2627.3
22.5°	3147.3	3147.3	3120.4	3079.7	3066.3	2988.7	2910.9	2853.5	2833.3	2809.5	2809.5
25°	3555.9	3552.5	3515.3	3468.0	3410.8	3329.7	3235.1	3157.5	3106.8	3052.7	3032.5
27.5°	4045.5	4035.5	3984.8	3927.4	3819.4	3718.1	3606.5	3525.5	3437.8	3370.3	3309.4
30°	4619.7	4609.6	4521.7	4413.6	4302.3	4201.0	4038.8	3940.9	3802.4	3721.4	3653.9
32.5°	5284.9	5274.8	5116.0	5011.4	4893.2	4768.3	4575.7	4420.4	4244.9	4130.0	4035.5
35°	6132.5	6091.9	5865.8	5720.5	5534.7	5409.9	5207.3	4997.9	4791.9	4629.8	4491.3
37.5°	7047.7	7000.4	6801.2	6585.0	6402.7	6250.6	5963.7	5700.3	5457.2	5234.2	5061.9
40°	8003.3	7878.3	7665.6	7507.0	7382.0	7236.7	6936.3	6659.3	6277.7	6027.8	5767.7
42.5°	8665.2	8543.6	8395.0	8290.4	8229.6	8118.2	7949.3	7709.6	7368.4	7375.3	6689.7
45°	9100.8	8921.8	8820.5	8827.3	8850.9	8850.9	8820.5	8783.4	8634.8	8736.1	8162.0
47.5°	8945.5	8827.3	8763.1	8898.3	9067.0	9236.0	9431.8	9644.6	9887.6	10174.7	9468.9
50°	8033.7	8077.6	8108.0	8395.0	8756.4	9141.3	9590.5	10171.2	10850.1	10981.8	10640.8
52.5°	6578.3	6672.8	6774.1	7213.1	7689.3	8354.5	9141.3	10100.5	11012.1	11549.1	11515.4
55°	5109.3	5227.4	5443.5	5771.3	6149.3	6777.5	7750.0	9229.1	10650.8	11505.2	12025.3
57.5°	3637.0	3809.2	4092.9	4548.7	4883.0	5237.6	5956.9	7598.1	9154.8	10745.3	11940.8
60°	2417.9	2498.9	2684.7	3252.0	3815.9	4187.4	4697.2	5291.6	6564.8	8756.4	11069.5
62.5°	1715.5	1769.5	1884.4	2141.0	2650.9	3322.9	3630.2	3903.8	4312.4	5632.7	8888.1
63°	1620.9	1668.2	1762.7	1978.8	2438.1	3133.7	3447.9	3697.8	3994.9	5038.4	8408.6
65°	1344.0	1364.3	1414.9	1519.7	1766.2	2343.6	2856.9	3008.9	3059.4	3238.5	5268.0
67.5°	1134.6	1148.2	1165.0	1195.5	1293.4	1560.1	2130.8	2323.3	2266.0	2144.3	2603.6
70°	986.1	996.2	1023.2	1060.4	1094.1	1161.7	1465.6	1752.7	1688.5	1522.9	1594.0
72.5°	786.8	803.8	834.0	898.2	965.8	1053.6	1127.9	1306.9	1266.3	1107.6	1124.5
75°	621.4	631.5	658.5	705.8	769.9	871.3	1016.4	1077.2	965.8	817.2	817.2
77.5°	493.0	503.2	526.8	564.0	604.5	675.3	776.7	935.5	867.9	614.6	611.2
80°	371.4	381.6	405.2	439.0	479.5	530.2	590.9	662.0	796.9	574.0	459.3
82.5°	273.5	276.9	317.5	341.0	354.7	395.2	445.7	486.3	547.1	530.2	408.5
85°	206.0	202.6	229.6	246.6	249.9	260.0	290.4	330.9	358.0	344.4	317.5
87.5°	114.9	101.2	118.1	135.0	135.0	138.5	145.2	168.8	192.4	185.7	168.8
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°	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9
2.5°	2174.7	2174.7	2171.4	2171.4	2174.7	2174.7	2171.4	2181.5	2188.2	2188.2	2191.7
5°	2184.9	2188.2	2184.9	2184.9	2188.2	2188.2	2191.7	2201.7	2211.8	2218.6	2228.8
7.5°	2215.3	2218.6	2215.3	2215.3	2218.6	2222.0	2228.8	2242.3	2249.0	2262.6	2279.4
10°	2249.0	2252.4	2249.0	2252.4	2255.9	2259.1	2269.3	2279.4	2289.6	2303.1	2330.1
12.5°	2309.8	2313.1	2306.5	2309.8	2320.0	2320.0	2326.7	2333.4	2350.3	2367.3	2394.3
15°	2394.3	2394.3	2387.4	2390.8	2401.0	2401.0	2404.4	2411.1	2431.4	2451.7	2478.7
17.5°	2492.2	2498.9	2495.5	2498.9	2505.7	2509.1	2509.1	2515.9	2529.3	2542.8	2569.8
20°	2623.9	2627.3	2620.4	2627.3	2634.0	2627.3	2620.4	2617.1	2623.9	2630.6	2661.0
22.5°	2802.8	2799.5	2782.6	2782.6	2782.6	2769.0	2752.1	2731.9	2731.9	2721.9	2745.4
25°	3015.6	3005.5	2981.8	2985.2	2961.5	2941.3	2910.9	2880.5	2853.5	2843.3	2846.8
27.5°	3265.5	3245.2	3221.6	3214.9	3191.1	3154.0	3103.5	3046.1	3002.0	2968.3	2961.5
30°	3579.6	3535.6	3495.1	3488.4	3451.2	3390.5	3309.4	3231.7	3157.5	3100.1	3079.7
32.5°	3951.0	3883.5	3819.4	3812.5	3751.9	3670.7	3572.7	3464.8	3356.6	3265.5	3221.6
35°	4386.7	4285.4	4224.5	4207.7	4119.8	4018.6	3910.5	3772.1	3620.1	3491.7	3410.8
37.5°	4916.9	4812.1	4707.5	4710.8	4589.3	4471.0	4325.9	4156.9	3964.5	3785.5	3670.7
40°	5571.9	5423.3	5288.3	5257.9	5153.1	4987.7	4829.0	4633.2	4396.8	4160.4	3994.9
42.5°	6365.5	6122.4	5936.7	5909.6	5771.3	5568.6	5376.0	5116.0	4876.3	4589.3	4389.9
45°	7267.2	6878.9	6655.9	6615.4	6392.5	6186.5	5953.5	5676.6	5382.9	5058.6	4822.2
47.5°	8388.4	7834.5	7456.2	7388.6	7081.3	6811.3	6568.1	6260.8	5909.6	5548.3	5288.3
50°	9695.1	8877.9	8368.0	8263.4	7851.4	7533.9	7223.2	6838.3	6463.5	6085.2	5784.6
52.5°	11005.5	10127.4	9448.6	9320.4	8712.5	8287.0	7878.3	7493.4	7051.1	6676.3	6335.1
55°	12058.9	11474.8	10687.9	10509.0	9637.7	9060.3	8523.4	8084.3	7645.4	7348.1	6946.4
57.5°	12693.9	12663.4	12042.0	11795.6	10603.6	9749.1	9151.6	8651.7	8226.1	8101.3	7567.7
60°	12677.1	13463.8	13197.0	13011.3	11579.5	10455.0	9678.2	9138.0	8786.9	8928.7	8192.5
62.5°	11903.7	13497.7	13818.4	13767.8	12619.6	11022.4	10110.6	9553.4	9367.6	9789.6	8840.8
63°	11623.3	13419.9	13845.3	13825.2	12818.9	11130.4	10184.9	9634.4	9482.4	10009.3	8958.9
65°	9823.4	12741.2	13517.9	13609.1	13247.8	11501.8	10357.1	9840.4	9823.4	10498.9	9239.2
67.5°	5987.4	10765.6	12042.0	12217.8	12643.3	11620.0	10259.2	9769.4	10012.6	10569.7	9154.8
70°	2559.7	7105.1	9678.2	9961.9	11002.0	11032.4	9978.8	9479.0	9968.8	10016.0	8553.8
72.5°	1516.2	3349.9	6588.3	7206.4	8705.7	9492.6	9337.3	8972.5	9391.2	8796.9	7284.0
75°	1073.8	1567.0	3346.5	4005.1	6061.7	7246.8	7844.5	8013.5	7996.5	6976.7	5467.3
77.5°	769.9	1006.3	1411.5	1664.7	3383.6	4653.4	5382.9	5875.9	5717.2	4670.3	3370.3
80°	536.9	695.6	864.4	918.5	1570.2	2390.8	2836.6	3052.7	2958.2	2333.4	1509.5
82.5°	388.3	455.9	557.2	590.9	790.1	1104.2	1313.6	1158.3	1111.1	861.1	651.7
85°	300.6	293.7	347.9	361.3	462.6	577.5	590.9	459.3	401.8	358.0	364.7
87.5°	212.8	182.4	185.7	192.4	239.8	307.3	300.6	189.2	162.1	172.2	195.9
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°	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9	2184.9
2.5°	2198.4	2201.7	2208.6	2211.8	2218.6	2218.6	2225.5	2228.8	2235.5	2242.3	2245.7
5°	2238.8	2249.0	2262.6	2269.3	2282.9	2293.0	2306.5	2313.1	2326.7	2336.9	2350.3
7.5°	2299.8	2316.5	2333.4	2353.6	2374.0	2390.8	2404.4	2421.2	2444.8	2461.7	2472.0
10°	2357.2	2380.8	2411.1	2434.8	2465.2	2488.8	2509.1	2539.5	2566.5	2590.2	2603.6
12.5°	2431.4	2461.7	2492.2	2529.3	2569.8	2600.2	2630.6	2671.2	2708.3	2735.2	2748.9
15°	2519.1	2556.3	2590.2	2634.0	2681.4	2721.9	2765.7	2809.5	2836.6	2836.6	2829.9
17.5°	2610.4	2640.7	2681.4	2731.9	2796.2	2846.8	2870.4	2877.1	2867.0	2843.3	2826.4
20°	2701.6	2728.5	2772.4	2833.3	2900.7	2910.9	2887.3	2856.9	2826.4	2786.0	2759.0
22.5°	2775.9	2813.0	2880.5	2951.4	2954.9	2897.5	2833.3	2782.6	2735.2	2688.1	2637.3
25°	2863.6	2914.3	3005.5	3032.5	2944.6	2836.6	2745.4	2671.2	2593.4	2515.9	2458.4
27.5°	2971.8	3046.1	3137.2	3059.4	2887.3	2735.2	2610.4	2498.9	2397.7	2289.6	2225.5
30°	3086.5	3201.3	3221.6	3018.9	2789.3	2593.4	2424.6	2255.9	2127.5	2029.5	1992.4
32.5°	3224.9	3373.6	3252.0	2948.1	2657.6	2401.0	2174.7	1972.0	1864.1	1803.3	1786.4
35°	3434.3	3555.9	3268.8	2873.8	2505.7	2171.4	1887.7	1725.6	1658.1	1617.6	1597.2
37.5°	3735.0	3731.5	3265.5	2782.6	2330.1	1921.5	1658.1	1543.3	1489.2	1455.4	1418.3
40°	4086.1	3866.6	3245.2	2650.9	2093.7	1681.6	1499.4	1391.2	1340.6	1300.0	1256.2
42.5°	4433.9	3957.8	3187.8	2455.0	1799.9	1509.5	1384.6	1286.6	1232.6	1188.6	1127.9
45°	4734.4	3994.9	3076.3	2184.9	1536.6	1374.3	1310.3	1225.8	1161.7	1094.1	1046.9
47.5°	4970.9	3988.1	2897.5	1867.4	1360.9	1279.8	1249.5	1192.1	1114.3	1029.9	969.2
50°	5170.0	3937.5	2654.2	1587.1	1242.7	1195.5	1185.4	1168.4	1043.6	972.5	935.5
52.5°	5352.5	3863.3	2394.3	1398.0	1141.3	1101.0	1121.2	1104.2	1016.4	955.6	918.5
55°	5602.3	3812.5	2137.5	1252.9	1023.2	1013.1	1029.9	1053.6	999.5	942.1	901.7
57.5°	5896.1	3839.5	1941.7	1090.7	911.8	918.5	975.9	1009.8	982.7	921.9	881.3
60°	6233.8	3920.7	1769.5	935.5	820.6	837.5	921.9	969.2	965.8	894.9	847.6
62.5°	6612.1	4005.1	1495.9	817.2	742.9	769.9	857.7	918.5	928.7	867.9	810.5
63°	6686.4	4011.8	1425.2	793.7	729.5	759.7	840.9	905.0	918.5	861.1	803.8
65°	6868.7	3951.0	1148.2	729.5	675.3	709.1	790.1	847.6	874.6	823.9	776.7
67.5°	6716.6	3454.6	864.4	651.7	631.5	655.1	726.0	780.1	803.8	780.1	732.7
70°	6142.6	2512.4	675.3	580.8	584.2	601.1	655.1	705.8	732.7	726.0	682.2
72.5°	4947.1	1425.2	564.0	520.1	530.2	550.4	587.6	634.8	658.5	655.1	624.7
75°	3258.7	729.5	476.1	466.0	472.8	489.7	516.6	553.9	580.8	577.5	564.0
77.5°	1614.2	506.6	408.5	412.1	415.3	428.9	449.2	482.8	499.7	503.2	499.7
80°	665.3	395.2	351.1	354.7	358.0	368.0	381.6	412.1	422.2	428.9	432.3
82.5°	398.5	300.6	280.4	287.1	290.4	300.6	310.6	337.8	347.9	358.0	358.0
85°	263.5	209.3	202.6	209.3	216.1	222.9	226.3	243.1	260.0	273.5	280.4
87.5°	141.8	125.0	121.6	125.0	125.0	131.7	138.5	155.3	175.6	189.2	195.9
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°	2184.9	2184.9	2184.9	2184.9	2184.9
2.5°	2238.8	2242.3	2238.8	2242.3	2245.7
5°	2350.3	2357.2	2353.6	2353.6	2367.3
7.5°	2478.7	2492.2	2492.2	2498.9	2505.7
10°	2617.1	2630.6	2640.7	2640.7	2650.9
12.5°	2755.6	2762.3	2772.4	2772.4	2772.4
15°	2826.4	2823.2	2819.7	2816.4	2816.4
17.5°	2816.4	2802.8	2796.2	2789.3	2792.7
20°	2742.0	2718.5	2711.7	2701.6	2708.3
22.5°	2613.8	2580.0	2566.5	2549.6	2556.3
25°	2421.2	2380.8	2374.0	2353.6	2363.9
27.5°	2198.4	2178.1	2174.7	2171.4	2188.2
30°	1988.9	1995.8	1999.2	2005.8	2022.8
32.5°	1796.5	1810.1	1813.4	1816.8	1840.4
35°	1607.3	1590.4	1607.3	1600.7	1620.9
37.5°	1401.4	1387.9	1374.3	1357.5	1371.1
40°	1229.2	1205.5	1165.0	1144.8	1148.2
42.5°	1094.1	1063.8	1029.9	1009.8	1009.8
45°	1006.3	969.2	938.8	925.3	925.3
47.5°	938.8	921.9	905.0	894.9	894.9
50°	911.8	891.5	881.3	874.6	874.6
52.5°	891.5	871.3	861.1	854.4	847.6
55°	874.6	844.2	834.0	830.8	830.8
57.5°	851.0	823.9	810.5	807.0	807.0
60°	813.9	793.7	780.1	776.7	776.7
62.5°	776.7	756.5	742.9	742.9	742.9
63°	769.9	746.3	736.3	736.3	736.3
65°	739.6	715.9	705.8	705.8	702.5
67.5°	699.1	675.3	668.6	668.6	662.0
70°	651.7	631.5	624.7	628.2	614.6
72.5°	604.5	584.2	574.0	574.0	560.5
75°	550.4	530.2	516.6	513.3	499.7
77.5°	489.7	472.8	459.3	445.7	439.0
80°	425.4	412.1	395.2	385.0	374.9
82.5°	358.0	344.4	334.3	347.9	297.2
85°	280.4	266.7	253.2	273.5	212.8
87.5°	206.0	199.2	185.7	162.1	141.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)