

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: P257952

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257952
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-AF72-160-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21390.9 lumens
Efficiency: N/A
Efficacy: 132.0 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

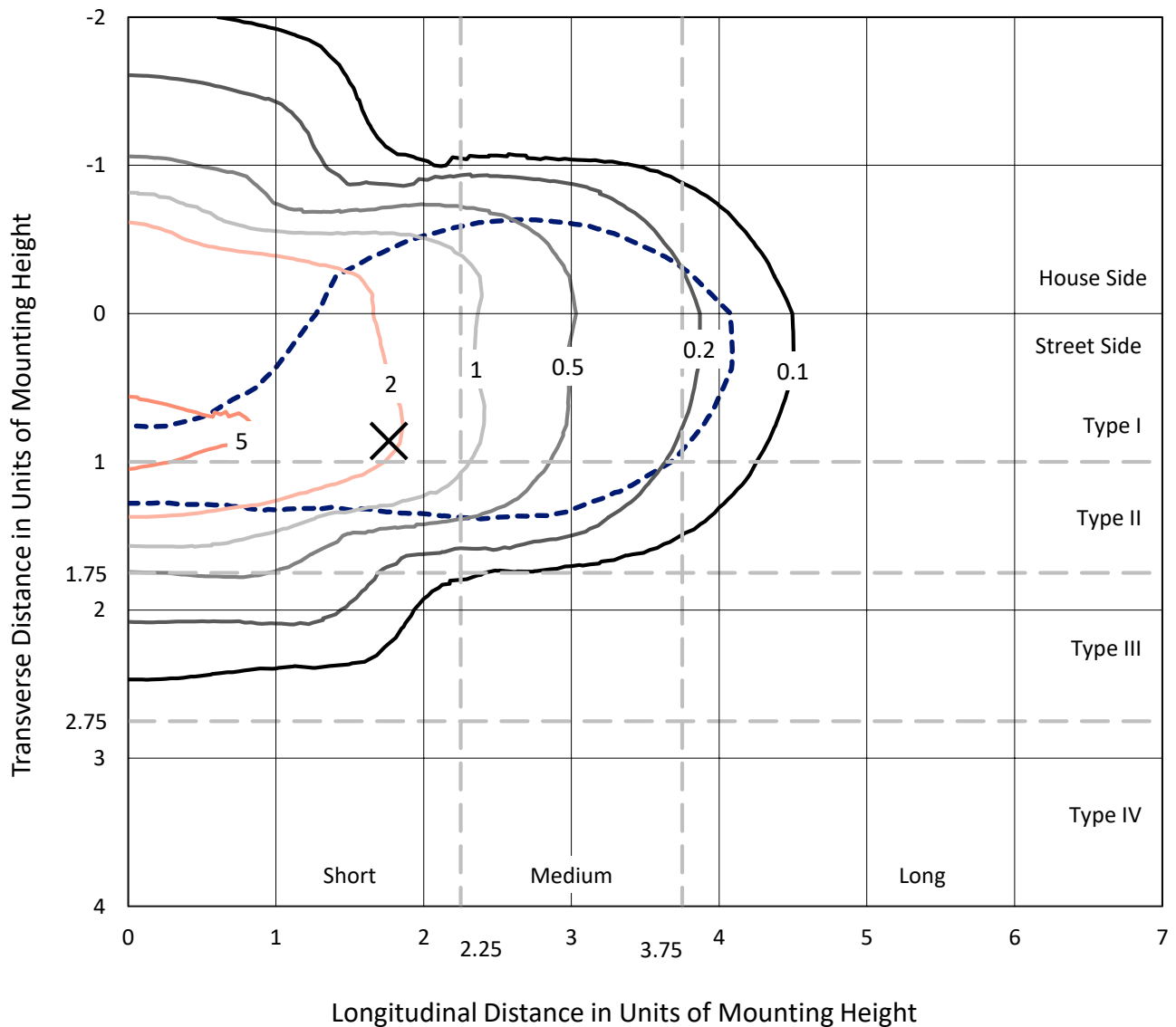
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

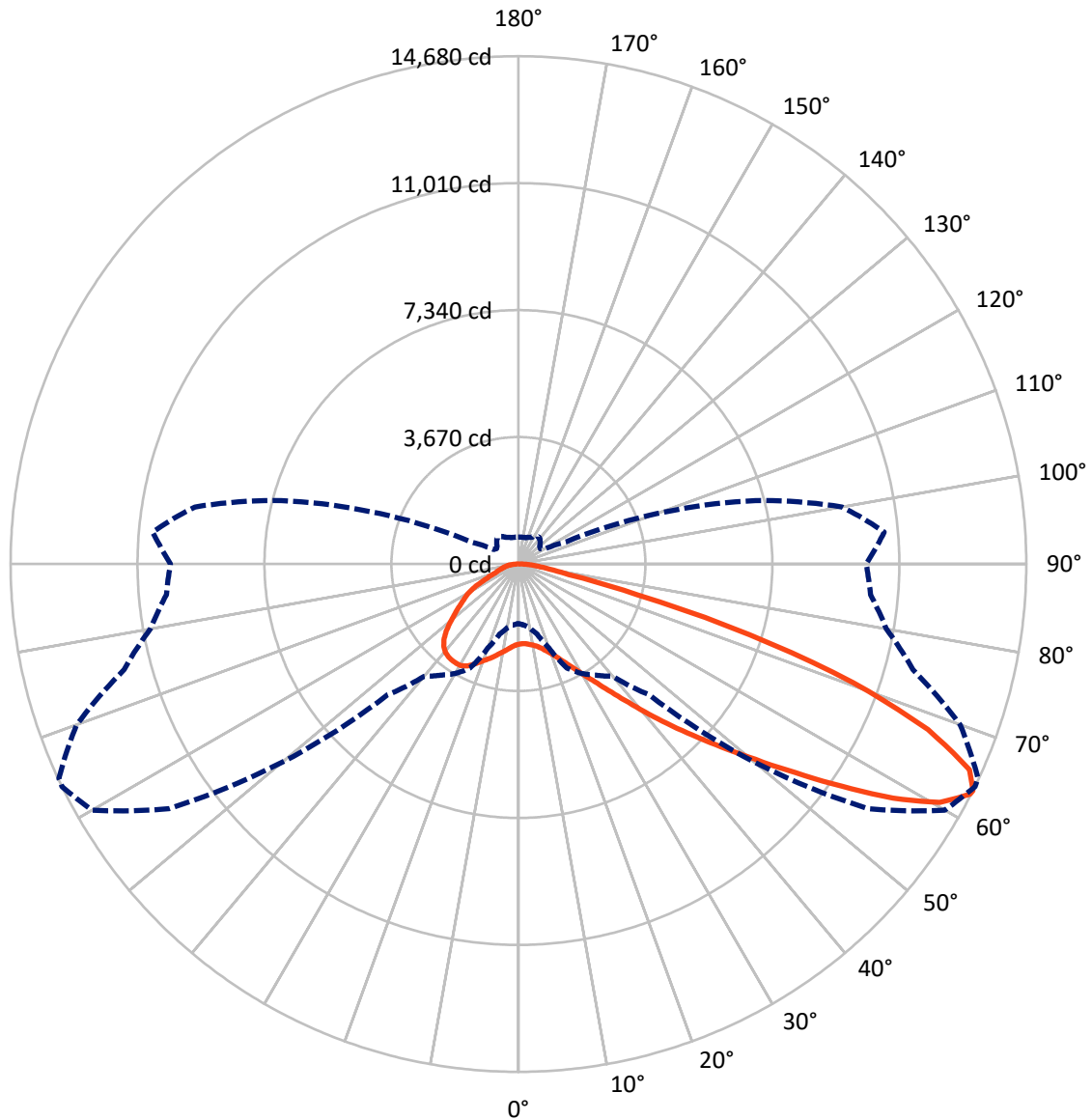


Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type II - Short - Semi-Cutoff

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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	6288.2	0.0	6288.2
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	15102.8	0.0	15102.8
	% Fixture	70.6	0.0	70.6
Total	Lumens	21390.9	0.0	21390.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.3	1.1
10°-20°	770.4	3.6
20°-30°	1446.1	6.8
30°-40°	2423.9	11.3
40°-50°	4066.7	19.0
50°-60°	5155.4	24.1
60°-70°	4547.8	21.3
70°-80°	2347.7	11.0
80°-90°	401.7	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°	21390.9	100.0
0°-180°	21390.9	100.0



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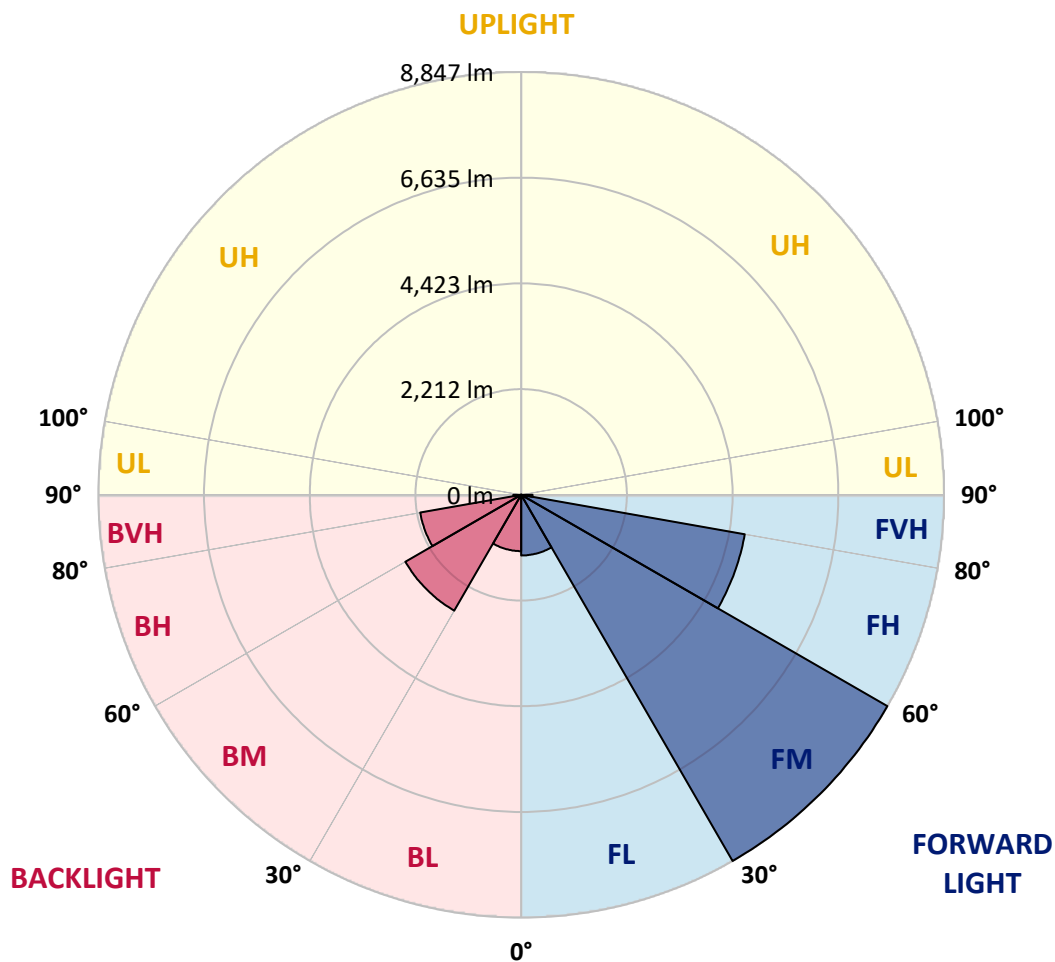
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1269.6	5.9			
FM	(30°-60°)	8846.7	41.4			
FH	(60°-80°)	4750.0	22.2			G2/5000
FVH	(80°-90°)	236.4	1.1			G3/500
BL	(0°-30°)	1178.2	5.5	B3/2500		
BM	(30°-60°)	2799.2	13.1	B3/5000		
BH	(60°-80°)	2145.5	10.0	B3/2500		G3/2500
BVH	(80°-90°)	165.3	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°	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7
2.5°	2302.4	2298.8	2298.8	2298.8	2298.8	2295.2	2298.8	2305.9	2302.4	2298.8	2305.9
5°	2309.5	2305.9	2305.9	2305.9	2309.5	2305.9	2309.5	2320.3	2313.1	2313.1	2320.3
7.5°	2327.4	2323.8	2327.4	2323.8	2323.8	2323.8	2327.4	2338.2	2334.6	2338.2	2348.9
10°	2348.9	2348.9	2348.9	2348.9	2348.9	2348.9	2356.1	2363.2	2366.8	2370.4	2384.7
12.5°	2413.3	2413.3	2413.3	2409.8	2409.8	2399.0	2413.3	2420.5	2427.7	2434.8	2445.6
15°	2549.4	2549.4	2545.8	2531.5	2531.5	2510.0	2513.6	2517.2	2517.2	2524.3	2531.5
17.5°	2728.4	2724.8	2717.7	2706.9	2692.6	2667.5	2660.4	2653.2	2642.5	2638.9	2638.9
20°	2979.0	2975.5	2961.1	2932.5	2914.6	2875.2	2846.6	2817.9	2807.2	2789.3	2785.7
22.5°	3337.1	3337.1	3308.4	3265.5	3251.1	3168.8	3086.4	3025.6	3004.1	2979.0	2979.0
25°	3770.3	3766.7	3727.3	3677.2	3616.3	3530.4	3430.2	3347.8	3294.1	3236.8	3215.3
27.5°	4289.5	4278.8	4225.1	4164.2	4049.7	3942.2	3824.1	3738.1	3645.0	3573.4	3508.9
30°	4898.2	4887.5	4794.4	4679.8	4561.6	4454.2	4282.4	4178.5	4031.8	3945.8	3874.2
32.5°	5603.6	5592.9	5424.6	5313.5	5188.2	5055.7	4851.7	4687.0	4500.8	4379.0	4278.8
35°	6502.3	6459.3	6219.4	6065.5	5868.6	5736.1	5521.3	5299.2	5080.8	4908.9	4762.1
37.5°	7472.7	7422.5	7211.3	6982.2	6788.7	6627.6	6323.3	6044.0	5786.2	5549.9	5367.3
40°	8486.0	8353.5	8127.9	7959.6	7827.1	7673.2	7354.5	7060.9	6656.2	6391.3	6115.6
42.5°	9187.7	9058.8	8901.3	8790.3	8725.9	8607.7	8428.7	8174.4	7812.8	7819.9	7093.1
45°	9649.6	9459.8	9352.4	9359.6	9384.7	9384.7	9352.4	9313.0	9155.5	9262.9	8654.3
47.5°	9484.9	9359.6	9291.6	9434.8	9613.8	9792.8	10000.6	10226.1	10483.9	10788.2	10040.0
50°	8518.2	8564.8	8597.0	8901.3	9284.4	9692.6	10168.8	10784.7	11504.4	11644.0	11282.3
52.5°	6975.0	7075.2	7182.6	7648.1	8152.9	8858.3	9692.6	10709.5	11676.3	12245.5	12209.7
55°	5417.4	5542.8	5771.9	6119.2	6520.2	7186.2	8217.4	9785.6	11293.1	12199.0	12750.4
57.5°	3856.3	4038.9	4339.7	4823.0	5177.5	5553.5	6316.1	8056.2	9706.9	11393.4	12660.9
60°	2563.7	2649.6	2846.6	3448.1	4046.1	4439.9	4980.5	5610.8	6960.7	9284.4	11737.1
62.5°	1818.9	1876.2	1997.9	2270.0	2810.8	3523.2	3849.2	4139.2	4572.4	5972.4	9424.0
63°	1718.7	1768.8	1869.0	2098.2	2585.2	3322.7	3655.7	3920.8	4235.8	5342.3	8915.6
65°	1425.1	1446.6	1500.3	1611.2	1872.6	2485.0	3029.2	3190.3	3244.0	3433.7	5585.7
67.5°	1203.1	1217.4	1235.3	1267.5	1371.4	1654.2	2259.3	2463.5	2402.6	2273.6	2760.6
70°	1045.6	1056.3	1084.9	1124.3	1160.1	1231.7	1554.0	1858.3	1790.3	1614.8	1690.0
72.5°	834.3	852.2	884.4	952.5	1024.1	1117.2	1195.9	1385.7	1342.7	1174.4	1192.4
75°	658.8	669.5	698.2	748.3	816.4	923.8	1077.8	1142.2	1024.1	866.5	866.5
77.5°	522.7	533.5	558.5	597.9	640.9	716.1	823.6	991.9	920.2	651.6	648.0
80°	393.8	404.6	429.6	465.4	508.4	562.1	626.6	701.7	845.1	608.7	486.9
82.5°	290.0	293.6	336.6	361.6	375.9	418.9	472.6	515.6	580.0	562.1	433.2
85°	218.4	214.8	243.5	261.4	264.9	275.7	307.9	350.9	379.5	365.2	336.6
87.5°	121.7	107.4	125.3	143.2	143.2	146.8	154.0	179.0	204.1	196.9	179.0
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°	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7
2.5°	2305.9	2305.9	2302.4	2302.4	2305.9	2305.9	2302.4	2313.1	2320.3	2320.3	2323.8
5°	2316.7	2320.3	2316.7	2316.7	2320.3	2320.3	2323.8	2334.6	2345.3	2352.5	2363.2
7.5°	2348.9	2352.5	2348.9	2348.9	2352.5	2356.1	2363.2	2377.5	2384.7	2399.0	2416.9
10°	2384.7	2388.3	2384.7	2388.3	2391.9	2395.4	2406.2	2416.9	2427.7	2442.0	2470.6
12.5°	2449.1	2452.7	2445.6	2449.1	2459.9	2459.9	2467.1	2474.2	2492.1	2510.0	2538.7
15°	2538.7	2538.7	2531.5	2535.1	2545.8	2545.8	2549.4	2556.6	2578.0	2599.5	2628.2
17.5°	2642.5	2649.6	2646.1	2649.6	2656.8	2660.4	2660.4	2667.5	2681.9	2696.2	2724.8
20°	2782.1	2785.7	2778.5	2785.7	2792.9	2785.7	2778.5	2775.0	2782.1	2789.3	2821.5
22.5°	2971.9	2968.3	2950.4	2950.4	2950.4	2936.1	2918.2	2896.7	2896.7	2885.9	2911.0
25°	3197.4	3186.7	3161.6	3165.2	3140.2	3118.7	3086.4	3054.2	3025.6	3014.8	3018.4
27.5°	3462.4	3440.9	3415.8	3408.7	3383.6	3344.2	3290.5	3229.7	3183.1	3147.3	3140.2
30°	3795.4	3748.8	3705.8	3698.7	3659.3	3594.9	3508.9	3426.6	3347.8	3286.9	3265.5
32.5°	4189.3	4117.7	4049.7	4042.5	3978.1	3892.1	3788.2	3673.6	3559.1	3462.4	3415.8
35°	4651.2	4543.7	4479.3	4461.4	4368.3	4260.9	4146.3	3999.5	3838.4	3702.3	3616.3
37.5°	5213.3	5102.3	4991.3	4994.9	4866.0	4740.7	4586.7	4407.7	4203.6	4013.9	3892.1
40°	5908.0	5750.4	5607.2	5575.0	5464.0	5288.5	5120.2	4912.5	4661.9	4411.3	4235.8
42.5°	6749.3	6491.5	6294.6	6266.0	6119.2	5904.4	5700.3	5424.6	5170.3	4866.0	4654.7
45°	7705.4	7293.6	7057.3	7014.4	6778.0	6559.6	6312.5	6018.9	5707.5	5363.7	5113.0
47.5°	8894.1	8306.9	7905.9	7834.3	7508.5	7222.0	6964.2	6638.3	6266.0	5882.9	5607.2
50°	10279.8	9413.3	8872.7	8761.7	8324.8	7988.2	7658.8	7250.7	6853.3	6452.2	6133.5
52.5°	11669.1	10738.1	10018.5	9882.4	9237.9	8786.7	8353.5	7945.3	7476.2	7078.8	6717.1
55°	12786.2	12166.8	11332.5	11142.7	10219.0	9606.6	9037.4	8571.9	8106.4	7791.3	7365.2
57.5°	13459.4	13427.2	12768.3	12506.9	11242.9	10337.1	9703.3	9173.4	8722.3	8589.8	8024.0
60°	13441.5	14275.7	13992.8	13795.9	12277.8	11085.4	10261.9	9689.0	9316.6	9467.0	8686.5
62.5°	12621.5	14311.5	14651.7	14598.0	13380.6	11687.0	10720.2	10129.5	9932.5	10380.1	9373.9
63°	12324.3	14229.1	14680.4	14658.9	13591.8	11801.6	10799.0	10215.4	10054.3	10612.8	9499.2
65°	10415.9	13509.5	14333.0	14429.7	14046.5	12195.4	10981.6	10433.8	10415.9	11132.0	9796.4
67.5°	6348.3	11414.9	12768.3	12954.5	13405.7	12320.7	10877.8	10358.6	10616.4	11207.1	9706.9
70°	2714.1	7533.5	10261.9	10562.7	11665.5	11697.7	10580.6	10050.7	10569.8	10620.0	9069.6
72.5°	1607.7	3551.9	6985.7	7640.9	9230.7	10065.0	9900.3	9513.5	9957.6	9327.4	7723.3
75°	1138.6	1661.4	3548.3	4246.6	6427.1	7683.9	8317.6	8496.7	8478.8	7397.5	5797.0
77.5°	816.4	1067.0	1496.7	1765.2	3587.7	4934.0	5707.5	6230.2	6061.9	4951.9	3573.4
80°	569.3	737.5	916.7	974.0	1665.0	2535.1	3007.7	3236.8	3136.6	2474.2	1600.5
82.5°	411.7	483.3	590.8	626.6	837.9	1170.9	1392.8	1228.2	1178.0	913.1	691.0
85°	318.6	311.5	368.8	383.1	490.5	612.2	626.6	486.9	426.1	379.5	386.7
87.5°	225.6	193.3	196.9	204.1	254.2	325.8	318.6	200.5	171.9	182.6	207.7
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°	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7	2316.7
2.5°	2331.0	2334.6	2341.7	2345.3	2352.5	2352.5	2359.6	2363.2	2370.4	2377.5	2381.1
5°	2374.0	2384.7	2399.0	2406.2	2420.5	2431.2	2445.6	2452.7	2467.1	2477.8	2492.1
7.5°	2438.4	2456.3	2474.2	2495.7	2517.2	2535.1	2549.4	2567.3	2592.4	2610.3	2621.0
10°	2499.3	2524.3	2556.6	2581.6	2613.8	2638.9	2660.4	2692.6	2721.3	2746.3	2760.6
12.5°	2578.0	2610.3	2642.5	2681.9	2724.8	2757.1	2789.3	2832.2	2871.6	2900.3	2914.6
15°	2671.1	2710.5	2746.3	2792.9	2843.0	2885.9	2932.5	2979.0	3007.7	3007.7	3000.5
17.5°	2767.8	2800.0	2843.0	2896.7	2964.7	3018.4	3043.5	3050.6	3039.9	3014.8	2996.9
20°	2864.5	2893.1	2939.7	3004.1	3075.7	3086.4	3061.4	3029.2	2996.9	2954.0	2925.3
22.5°	2943.2	2982.6	3054.2	3129.4	3133.0	3072.1	3004.1	2950.4	2900.3	2850.1	2796.4
25°	3036.3	3090.0	3186.7	3215.3	3122.3	3007.7	2911.0	2832.2	2749.9	2667.5	2606.7
27.5°	3150.9	3229.7	3326.3	3244.0	3061.4	2900.3	2767.8	2649.6	2542.2	2427.7	2359.6
30°	3272.6	3394.4	3415.8	3201.0	2957.6	2749.9	2570.9	2391.9	2255.7	2151.9	2112.5
32.5°	3419.4	3577.0	3448.1	3125.8	2817.9	2545.8	2305.9	2091.0	1976.4	1912.0	1894.1
35°	3641.4	3770.3	3466.0	3047.1	2656.8	2302.4	2001.5	1829.6	1758.0	1715.1	1693.6
37.5°	3960.1	3956.6	3462.4	2950.4	2470.6	2037.3	1758.0	1636.3	1579.0	1543.2	1503.8
40°	4332.5	4099.8	3440.9	2810.8	2219.9	1783.1	1589.8	1475.2	1421.5	1378.5	1332.0
42.5°	4701.3	4196.5	3380.0	2603.1	1908.4	1600.5	1468.0	1364.2	1306.9	1260.4	1195.9
45°	5019.9	4235.8	3261.9	2316.7	1629.2	1457.3	1389.3	1299.8	1231.7	1160.1	1110.0
47.5°	5270.5	4228.7	3072.1	1980.0	1443.0	1357.0	1324.8	1264.0	1181.6	1092.1	1027.7
50°	5481.9	4175.0	2814.3	1682.9	1317.7	1267.5	1256.8	1238.9	1106.4	1031.2	991.9
52.5°	5675.2	4096.2	2538.7	1482.4	1210.3	1167.3	1188.8	1170.9	1077.8	1013.3	974.0
55°	5940.2	4042.5	2266.4	1328.4	1084.9	1074.2	1092.1	1117.2	1059.9	999.0	956.0
57.5°	6251.7	4071.1	2058.8	1156.5	966.8	974.0	1034.8	1070.6	1042.0	977.5	934.6
60°	6609.7	4157.1	1876.2	991.9	870.1	888.0	977.5	1027.7	1024.1	948.9	898.8
62.5°	7010.8	4246.6	1586.2	866.5	787.8	816.4	909.5	974.0	984.7	920.2	859.4
63°	7089.6	4253.7	1511.0	841.5	773.5	805.7	891.6	959.6	974.0	913.1	852.2
65°	7282.9	4189.3	1217.4	773.5	716.1	751.9	837.9	898.8	927.4	873.7	823.6
67.5°	7121.8	3662.9	916.7	691.0	669.5	694.6	769.9	827.2	852.2	827.2	777.0
70°	6513.0	2664.0	716.1	615.8	619.4	637.3	694.6	748.3	777.0	769.9	723.2
72.5°	5245.5	1511.0	597.9	551.4	562.1	583.6	623.0	673.1	698.2	694.6	662.4
75°	3455.2	773.5	504.8	494.1	501.2	519.1	547.8	587.2	615.8	612.2	597.9
77.5°	1711.5	537.0	433.2	436.8	440.4	454.7	476.2	512.0	529.9	533.5	529.9
80°	705.3	418.9	372.4	375.9	379.5	390.3	404.6	436.8	447.5	454.7	458.3
82.5°	422.5	318.6	297.2	304.3	307.9	318.6	329.4	358.0	368.8	379.5	379.5
85°	279.3	222.0	214.8	222.0	229.1	236.3	239.9	257.8	275.7	290.0	297.2
87.5°	150.4	132.5	128.9	132.5	132.5	139.6	146.8	164.7	186.2	200.5	207.7
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°	2316.7	2316.7	2316.7	2316.7	2316.7
2.5°	2374.0	2377.5	2374.0	2377.5	2381.1
5°	2492.1	2499.3	2495.7	2495.7	2510.0
7.5°	2628.2	2642.5	2642.5	2649.6	2656.8
10°	2775.0	2789.3	2800.0	2800.0	2810.8
12.5°	2921.8	2928.9	2939.7	2939.7	2939.7
15°	2996.9	2993.4	2989.8	2986.2	2986.2
17.5°	2986.2	2971.9	2964.7	2957.6	2961.1
20°	2907.4	2882.4	2875.2	2864.5	2871.6
22.5°	2771.4	2735.6	2721.3	2703.4	2710.5
25°	2567.3	2524.3	2517.2	2495.7	2506.4
27.5°	2331.0	2309.5	2305.9	2302.4	2320.3
30°	2108.9	2116.1	2119.7	2126.8	2144.7
32.5°	1904.8	1919.2	1922.7	1926.3	1951.4
35°	1704.3	1686.4	1704.3	1697.2	1718.7
37.5°	1485.9	1471.6	1457.3	1439.4	1453.7
40°	1303.3	1278.3	1235.3	1213.8	1217.4
42.5°	1160.1	1127.9	1092.1	1070.6	1070.6
45°	1067.0	1027.7	995.4	981.1	981.1
47.5°	995.4	977.5	959.6	948.9	948.9
50°	966.8	945.3	934.6	927.4	927.4
52.5°	945.3	923.8	913.1	905.9	898.8
55°	927.4	895.2	884.4	880.9	880.9
57.5°	902.3	873.7	859.4	855.8	855.8
60°	863.0	841.5	827.2	823.6	823.6
62.5°	823.6	802.1	787.8	787.8	787.8
63°	816.4	791.4	780.6	780.6	780.6
65°	784.2	759.0	748.3	748.3	744.7
67.5°	741.1	716.1	708.9	708.9	701.7
70°	691.0	669.5	662.4	665.9	651.6
72.5°	640.9	619.4	608.7	608.7	594.3
75°	583.6	562.1	547.8	544.2	529.9
77.5°	519.1	501.2	486.9	472.6	465.4
80°	451.1	436.8	418.9	408.2	397.4
82.5°	379.5	365.2	354.5	368.8	315.1
85°	297.2	282.8	268.5	290.0	225.6
87.5°	218.4	211.2	196.9	171.9	150.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)