

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: P265745

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265745
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-AF72-280-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26108.4 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 279
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

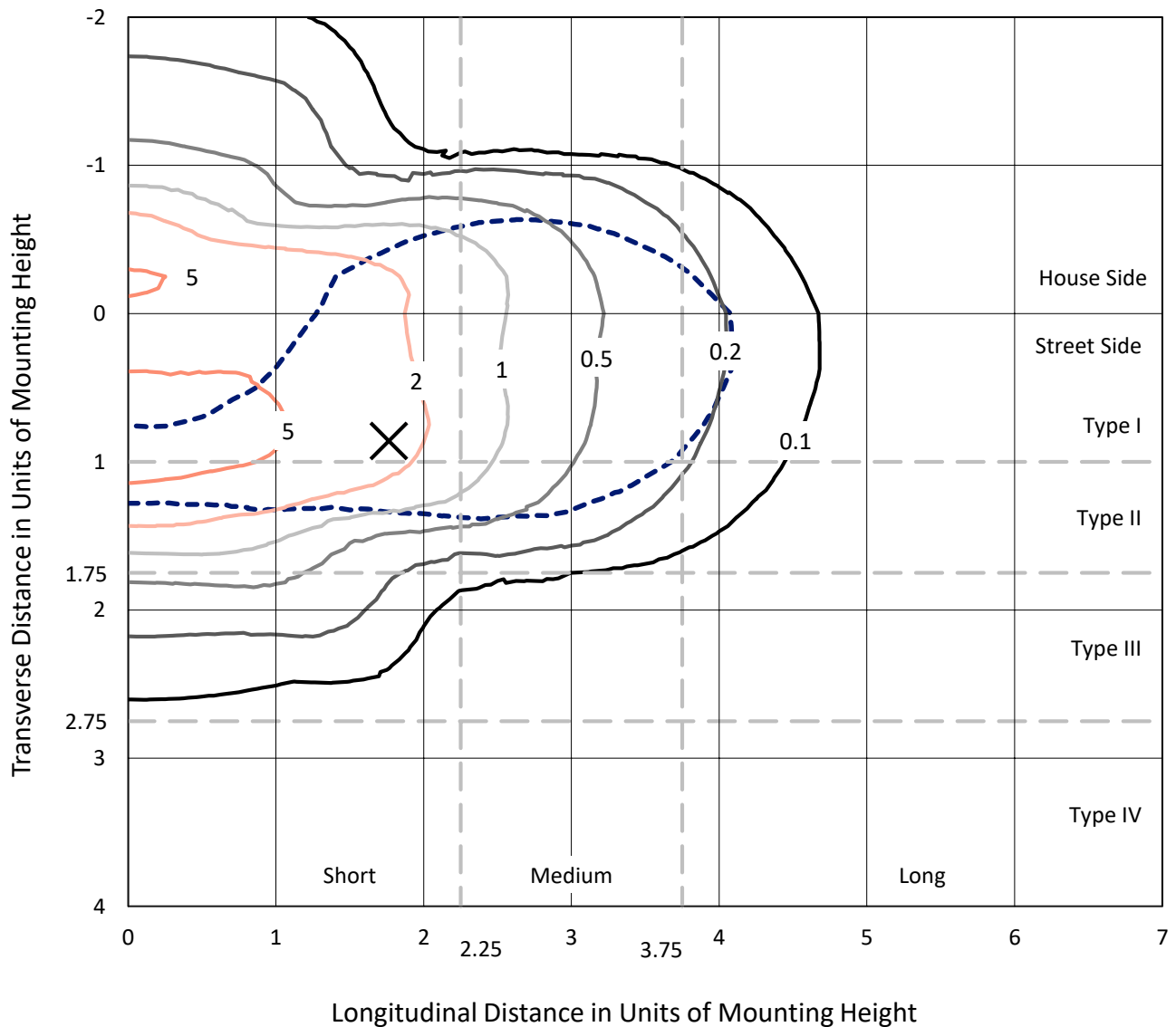


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Iso-Footcandle Lines of Horizontal Illumination

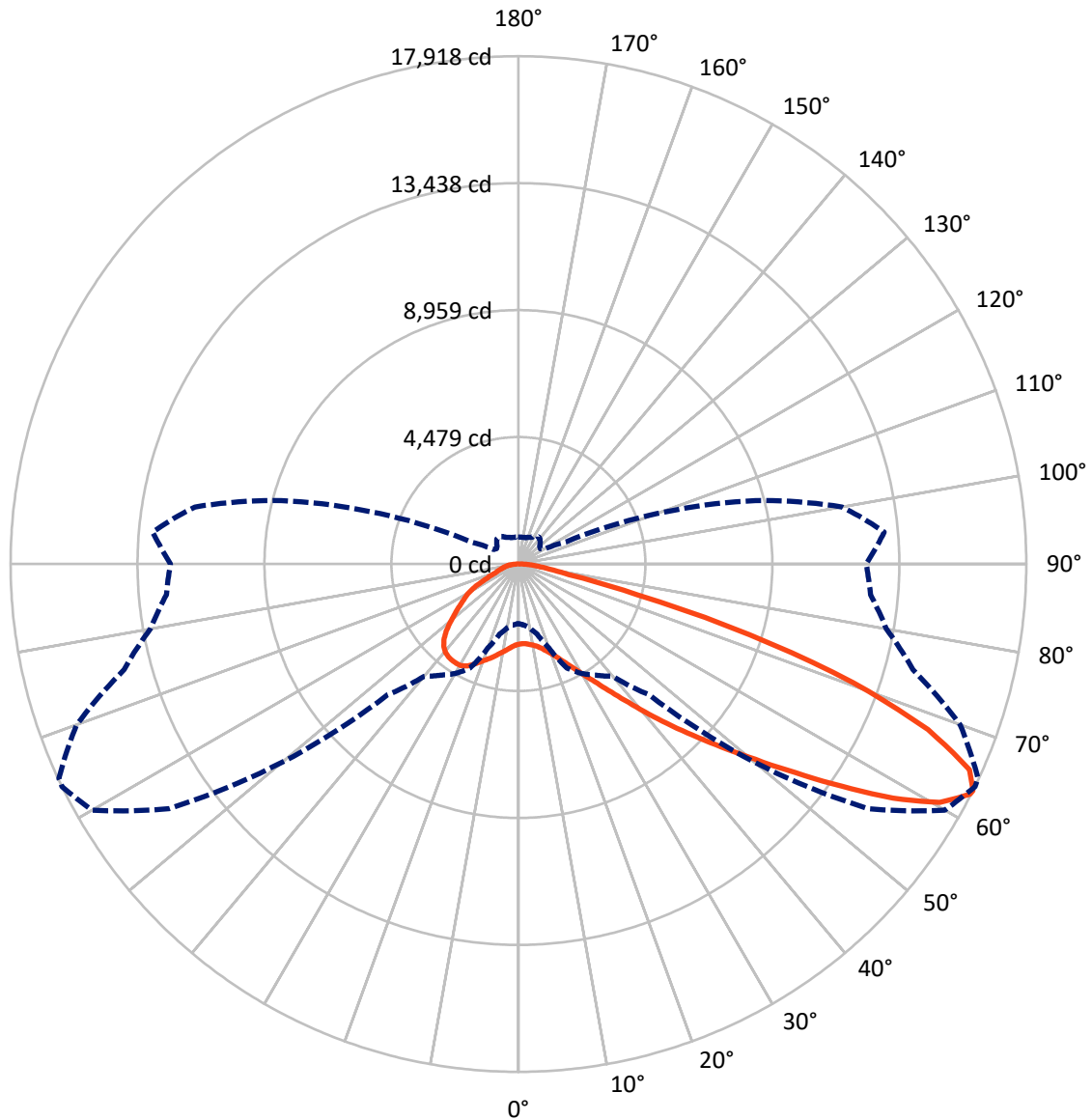
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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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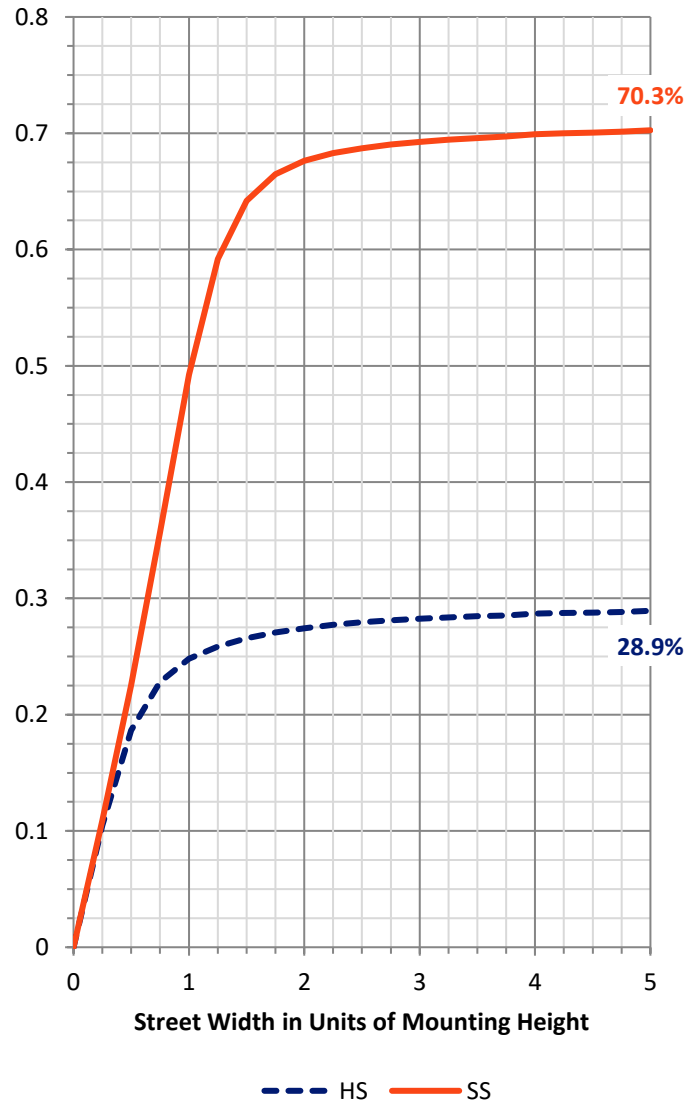
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7674.9	0.0	7674.9
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	18433.5	0.0	18433.5
	% Fixture	70.6	0.0	70.6
Total	Lumens	26108.4	0.0	26108.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.3	1.1
10°-20°	940.3	3.6
20°-30°	1765.0	6.8
30°-40°	2958.4	11.3
40°-50°	4963.5	19.0
50°-60°	6292.3	24.1
60°-70°	5550.8	21.3
70°-80°	2865.4	11.0
80°-90°	490.3	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°	26108.4	100.0
0°-180°	26108.4	100.0



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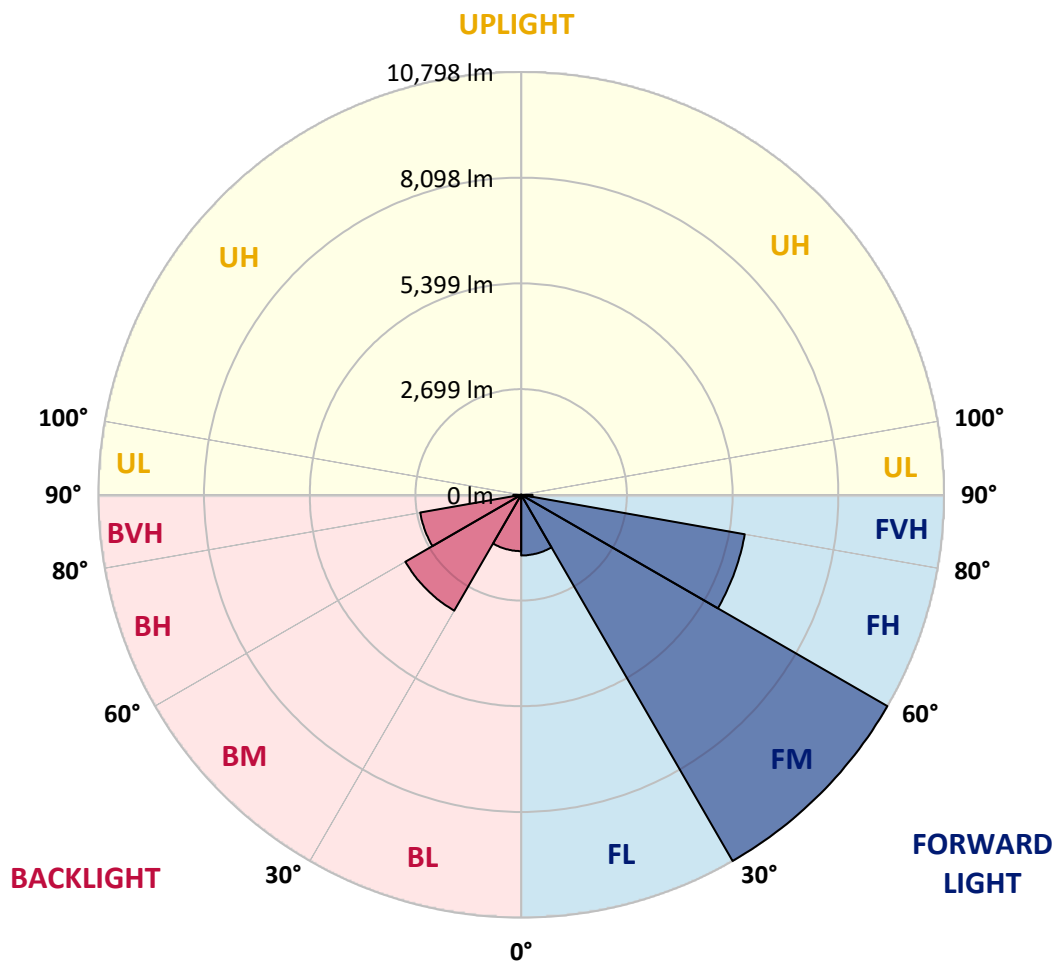
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1549.6	5.9			
FM (30°-60°)	10797.7	41.4			
FH (60°-80°)	5797.5	22.2			G3/7500
FVH (80°-90°)	288.5	1.1			G3/500
BL (0°-30°)	1438.0	5.5	B3/2500		
BM (30°-60°)	3416.5	13.1	B3/5000		
BH (60°-80°)	2618.6	10.0	B4/5000		G4/5000
BVH (80°-90°)	201.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5
2.5°	2810.1	2805.6	2805.6	2805.6	2805.6	2801.4	2805.6	2814.4	2810.1	2805.6	2814.4
5°	2818.8	2814.4	2814.4	2814.4	2818.8	2814.4	2818.8	2831.8	2823.2	2823.2	2831.8
7.5°	2840.6	2836.3	2840.6	2836.3	2836.3	2836.3	2840.6	2853.7	2849.3	2853.7	2866.9
10°	2866.9	2866.9	2866.9	2866.9	2866.9	2866.9	2875.7	2884.4	2888.7	2893.1	2910.6
12.5°	2945.5	2945.5	2945.5	2941.1	2941.1	2928.0	2945.5	2954.3	2963.0	2971.8	2984.9
15°	3111.5	3111.5	3107.1	3089.7	3089.7	3063.5	3067.9	3072.3	3072.3	3080.9	3089.7
17.5°	3330.0	3325.7	3317.0	3303.8	3286.4	3255.7	3247.1	3238.3	3225.3	3220.9	3220.9
20°	3636.0	3631.7	3614.2	3579.1	3557.4	3509.3	3474.4	3439.4	3426.2	3404.3	3400.1
22.5°	4073.1	4073.1	4038.2	3985.6	3968.2	3867.7	3767.1	3692.8	3666.6	3636.0	3636.0
25°	4601.8	4597.4	4549.3	4488.2	4413.9	4309.0	4186.7	4086.1	4020.6	3950.7	3924.4
27.5°	5235.5	5222.3	5156.8	5082.6	4942.7	4811.6	4667.5	4562.5	4448.9	4361.5	4282.8
30°	5978.5	5965.4	5851.6	5711.9	5567.6	5436.5	5226.8	5100.0	4920.8	4816.0	4728.6
32.5°	6839.3	6826.3	6620.9	6485.5	6332.4	6170.7	5921.6	5720.5	5493.3	5344.7	5222.3
35°	7936.3	7883.9	7591.0	7403.1	7162.7	7001.1	6738.8	6467.9	6201.3	5991.5	5812.5
37.5°	9120.6	9059.4	8801.7	8522.0	8286.0	8089.2	7717.8	7376.9	7062.2	6773.8	6551.0
40°	10357.4	10195.8	9920.4	9715.0	9553.3	9365.4	8976.5	8618.1	8124.2	7800.8	7464.3
42.5°	11213.9	11056.7	10864.3	10728.8	10650.2	10505.9	10287.5	9977.1	9535.8	9544.5	8657.3
45°	11777.7	11546.2	11415.0	11423.7	11454.3	11454.3	11415.0	11367.0	11174.6	11305.8	10562.8
47.5°	11576.6	11423.7	11340.7	11515.6	11734.0	11952.6	12206.0	12481.3	12795.9	13167.4	12254.0
50°	10396.8	10453.5	10492.9	10864.3	11331.9	11830.1	12411.4	13163.0	14041.4	14211.9	13770.6
52.5°	8513.1	8635.5	8766.6	9334.7	9951.0	10811.9	11830.1	13071.2	14251.3	14946.1	14902.4
55°	6612.2	6765.0	7044.8	7468.7	7958.2	8771.1	10029.7	11943.8	13783.7	14889.2	15562.3
57.5°	4706.7	4929.5	5296.6	5886.7	6319.3	6778.3	7709.1	9832.9	11847.7	13906.0	15453.1
60°	3129.1	3234.0	3474.4	4208.5	4938.3	5419.0	6079.0	6848.0	8495.7	11331.9	14325.6
62.5°	2220.2	2290.0	2438.5	2770.7	3430.5	4300.2	4698.0	5052.0	5580.8	7289.6	11502.3
63°	2097.7	2158.8	2281.2	2561.0	3155.2	4055.6	4462.1	4785.5	5169.9	6520.3	10881.8
65°	1739.4	1765.6	1831.1	1966.6	2285.6	3032.9	3697.2	3893.9	3959.4	4191.0	6817.5
67.5°	1468.4	1485.8	1507.7	1547.1	1673.8	2019.0	2757.5	3006.6	2932.3	2775.0	3369.5
70°	1276.1	1289.2	1324.2	1372.3	1416.0	1503.4	1896.7	2268.1	2185.0	1971.1	2062.8
72.5°	1018.3	1040.1	1079.5	1162.4	1249.9	1363.4	1459.7	1691.2	1638.9	1433.4	1455.3
75°	804.2	817.2	852.2	913.3	996.4	1127.6	1315.5	1394.1	1249.9	1057.6	1057.6
77.5°	638.1	651.1	681.8	729.9	782.2	874.1	1005.2	1210.6	1123.2	795.4	791.0
80°	480.8	493.9	524.4	568.1	620.5	686.1	764.7	856.5	1031.3	743.0	594.4
82.5°	354.0	358.3	410.9	441.3	458.9	511.3	576.9	629.4	708.0	686.1	528.8
85°	266.5	262.2	297.2	319.0	323.4	336.5	375.9	428.3	463.3	445.7	410.9
87.5°	148.6	131.2	152.9	174.8	174.8	179.2	187.9	218.5	249.1	240.3	218.5
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°	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5
2.5°	2814.4	2814.4	2810.1	2810.1	2814.4	2814.4	2810.1	2823.2	2831.8	2831.8	2836.3
5°	2827.5	2831.8	2827.5	2827.5	2831.8	2831.8	2836.3	2849.3	2862.4	2871.3	2884.4
7.5°	2866.9	2871.3	2866.9	2866.9	2871.3	2875.7	2884.4	2901.9	2910.6	2928.0	2949.9
10°	2910.6	2914.9	2910.6	2914.9	2919.3	2923.7	2936.7	2949.9	2963.0	2980.4	3015.4
12.5°	2989.2	2993.6	2984.9	2989.2	3002.3	3002.3	3011.1	3019.8	3041.8	3063.5	3098.4
15°	3098.4	3098.4	3089.7	3094.1	3107.1	3107.1	3111.5	3120.4	3146.6	3172.8	3207.8
17.5°	3225.3	3234.0	3229.5	3234.0	3242.7	3247.1	3247.1	3255.7	3273.2	3290.9	3325.7
20°	3395.7	3400.1	3391.3	3400.1	3408.8	3400.1	3391.3	3386.9	3395.7	3404.3	3443.7
22.5°	3627.3	3623.0	3601.0	3601.0	3601.0	3583.6	3561.7	3535.5	3535.5	3522.4	3552.9
25°	3902.5	3889.5	3858.8	3863.3	3832.7	3806.5	3767.1	3727.7	3692.8	3679.6	3684.0
27.5°	4225.9	4199.8	4169.2	4160.4	4129.9	4081.8	4016.2	3941.9	3885.1	3841.4	3832.7
30°	4632.4	4575.5	4523.1	4514.4	4466.4	4387.7	4282.8	4182.2	4086.1	4011.9	3985.6
32.5°	5113.2	5025.7	4942.7	4934.0	4855.2	4750.4	4623.7	4483.8	4344.1	4225.9	4169.2
35°	5676.8	5545.7	5467.2	5445.3	5331.7	5200.6	5060.7	4881.5	4684.9	4518.8	4413.9
37.5°	6363.1	6227.6	6092.0	6096.4	5939.1	5786.2	5598.2	5379.7	5130.6	4898.9	4750.4
40°	7210.9	7018.5	6843.7	6804.4	6668.9	6454.9	6249.4	5995.9	5690.0	5384.1	5169.9
42.5°	8237.8	7923.2	7682.8	7647.9	7468.7	7206.6	6957.4	6620.9	6310.7	5939.1	5681.3
45°	9404.6	8902.2	8613.7	8561.2	8272.9	8006.2	7704.8	7346.2	6966.1	6546.6	6240.6
47.5°	10855.6	10138.9	9649.5	9562.0	9164.2	8814.7	8500.0	8102.4	7647.9	7180.2	6843.7
50°	12546.8	11489.3	10829.3	10694.0	10160.8	9749.9	9347.9	8849.7	8364.6	7875.1	7486.1
52.5°	14242.4	13106.4	12227.9	12061.8	11275.2	10724.5	10195.8	9697.6	9125.1	8639.9	8198.6
55°	15606.1	14850.1	13831.7	13600.1	12472.5	11725.2	11030.4	10462.3	9894.1	9509.5	8989.5
57.5°	16427.7	16388.3	15584.2	15265.2	13722.5	12616.9	11843.3	11196.5	10645.9	10484.2	9793.6
60°	16405.7	17424.1	17078.8	16838.4	14985.4	13530.2	12525.1	11825.7	11371.3	11554.9	10602.2
62.5°	15405.0	17467.7	17882.9	17817.3	16331.5	14264.4	13084.4	12363.4	12122.9	12669.2	11441.3
63°	15042.3	17367.2	17917.9	17891.6	16589.3	14404.2	13180.7	12468.2	12271.6	12953.3	11594.2
65°	12713.0	16488.7	17494.0	17612.0	17144.3	14884.9	13403.4	12734.8	12713.0	13587.0	11956.9
67.5°	7748.4	13932.3	15584.2	15811.4	16362.1	15037.8	13276.7	12643.0	12957.7	13678.9	11847.7
70°	3312.6	9195.0	12525.1	12892.1	14238.1	14277.5	12913.9	12267.2	12900.9	12962.1	11069.8
72.5°	1962.2	4335.2	8526.4	9326.1	11266.5	12284.7	12083.6	11611.6	12153.6	11384.4	9426.5
75°	1389.7	2027.7	4330.9	5183.1	7844.4	9378.5	10152.0	10370.6	10348.7	9028.9	7075.4
77.5°	996.4	1302.4	1826.8	2154.6	4379.0	6022.1	6966.1	7604.2	7398.8	6043.9	4361.5
80°	694.8	900.2	1118.7	1188.6	2032.1	3094.1	3671.0	3950.7	3828.2	3019.8	1953.5
82.5°	502.6	589.9	721.1	764.7	1022.6	1429.1	1700.0	1499.0	1437.7	1114.3	843.5
85°	389.0	380.3	450.1	467.6	598.7	747.3	764.7	594.4	520.1	463.3	472.0
87.5°	275.3	236.0	240.3	249.1	310.3	397.7	389.0	244.7	209.8	222.9	253.5
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5	2827.5
2.5°	2845.0	2849.3	2858.0	2862.4	2871.3	2871.3	2880.0	2884.4	2893.1	2901.9	2906.1
5°	2897.5	2910.6	2928.0	2936.7	2954.3	2967.5	2984.9	2993.6	3011.1	3024.1	3041.8
7.5°	2976.2	2998.0	3019.8	3046.1	3072.3	3094.1	3111.5	3133.5	3164.0	3185.8	3199.0
10°	3050.5	3080.9	3120.4	3151.0	3190.2	3220.9	3247.1	3286.4	3321.4	3351.9	3369.5
12.5°	3146.6	3185.8	3225.3	3273.2	3325.7	3365.1	3404.3	3456.9	3504.8	3540.0	3557.4
15°	3260.2	3308.3	3351.9	3408.8	3470.0	3522.4	3579.1	3636.0	3671.0	3671.0	3662.2
17.5°	3378.2	3417.5	3470.0	3535.5	3618.6	3684.0	3714.8	3723.5	3710.3	3679.6	3657.9
20°	3496.2	3531.1	3587.9	3666.6	3753.9	3767.1	3736.5	3697.2	3657.9	3605.4	3570.5
22.5°	3592.3	3640.4	3727.7	3819.6	3823.9	3749.6	3666.6	3601.0	3540.0	3478.6	3413.1
25°	3706.0	3771.5	3889.5	3924.4	3810.8	3671.0	3552.9	3456.9	3356.3	3255.7	3181.4
27.5°	3845.7	3941.9	4059.9	3959.4	3736.5	3540.0	3378.2	3234.0	3102.8	2963.0	2880.0
30°	3994.4	4143.0	4169.2	3907.0	3609.7	3356.3	3137.8	2919.3	2753.2	2626.6	2578.4
32.5°	4173.5	4365.9	4208.5	3815.2	3439.4	3107.1	2814.4	2552.3	2412.4	2333.6	2311.9
35°	4444.5	4601.8	4230.4	3719.1	3242.7	2810.1	2442.9	2233.1	2145.8	2093.3	2067.1
37.5°	4833.5	4829.1	4225.9	3601.0	3015.4	2486.7	2145.8	1997.2	1927.3	1883.6	1835.4
40°	5288.0	5003.9	4199.8	3430.5	2709.6	2176.4	1940.3	1800.6	1734.9	1682.5	1625.8
42.5°	5738.2	5121.9	4125.5	3177.1	2329.3	1953.5	1791.8	1665.1	1595.1	1538.3	1459.7
45°	6127.0	5169.9	3981.3	2827.5	1988.5	1778.6	1695.6	1586.3	1503.4	1416.0	1354.7
47.5°	6432.9	5161.2	3749.6	2416.7	1761.1	1656.4	1616.9	1542.7	1442.1	1332.9	1254.3
50°	6690.8	5095.6	3434.9	2054.1	1608.2	1547.1	1533.9	1512.0	1350.4	1258.6	1210.6
52.5°	6926.8	4999.5	3098.4	1809.2	1477.2	1424.7	1450.9	1429.1	1315.5	1236.7	1188.6
55°	7250.2	4934.0	2766.3	1621.4	1324.2	1311.0	1332.9	1363.4	1293.6	1219.3	1166.9
57.5°	7630.5	4969.0	2512.9	1411.5	1180.0	1188.6	1262.9	1306.7	1271.7	1193.0	1140.6
60°	8067.4	5073.7	2290.0	1210.6	1061.9	1083.8	1193.0	1254.3	1249.9	1158.2	1096.9
62.5°	8556.9	5183.1	1935.9	1057.6	961.5	996.4	1110.0	1188.6	1201.8	1123.2	1048.9
63°	8653.1	5191.8	1844.2	1027.0	943.9	983.4	1088.1	1171.2	1188.6	1114.3	1040.1
65°	8889.0	5113.2	1485.8	943.9	874.1	917.8	1022.6	1096.9	1131.9	1066.4	1005.2
67.5°	8692.4	4470.8	1118.7	843.5	817.2	847.8	939.5	1009.5	1040.1	1009.5	948.3
70°	7949.5	3251.4	874.1	751.7	756.1	777.9	847.8	913.3	948.3	939.5	882.8
72.5°	6402.4	1844.2	729.9	673.0	686.1	712.4	760.4	821.6	852.2	847.8	808.5
75°	4217.3	943.9	616.1	603.1	611.8	633.7	668.7	716.7	751.7	747.3	729.9
77.5°	2089.0	655.6	528.8	533.1	537.5	555.1	581.3	625.0	646.8	651.1	646.8
80°	860.9	511.3	454.5	458.9	463.3	476.3	493.9	533.1	546.3	555.1	559.4
82.5°	515.6	389.0	362.7	371.4	375.9	389.0	402.0	437.0	450.1	463.3	463.3
85°	340.8	271.0	262.2	271.0	279.7	288.4	292.8	314.6	336.5	354.0	362.7
87.5°	183.6	161.7	157.4	161.7	161.7	170.5	179.2	201.0	227.2	244.7	253.5
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):

	160°	165°	170°	175°	180°
0°	2827.5	2827.5	2827.5	2827.5	2827.5
2.5°	2897.5	2901.9	2897.5	2901.9	2906.1
5°	3041.8	3050.5	3046.1	3046.1	3063.5
7.5°	3207.8	3225.3	3225.3	3234.0	3242.7
10°	3386.9	3404.3	3417.5	3417.5	3430.5
12.5°	3566.1	3574.9	3587.9	3587.9	3587.9
15°	3657.9	3653.4	3649.2	3644.8	3644.8
17.5°	3644.8	3627.3	3618.6	3609.7	3614.2
20°	3548.7	3518.0	3509.3	3496.2	3504.8
22.5°	3382.6	3338.8	3321.4	3299.6	3308.3
25°	3133.5	3080.9	3072.3	3046.1	3059.2
27.5°	2845.0	2818.8	2814.4	2810.1	2831.8
30°	2574.1	2582.7	2587.2	2595.9	2617.8
32.5°	2325.0	2342.4	2346.8	2351.1	2381.8
35°	2080.3	2058.3	2080.3	2071.5	2097.7
37.5°	1813.7	1796.2	1778.6	1756.8	1774.3
40°	1590.8	1560.1	1507.7	1481.6	1485.8
42.5°	1416.0	1376.7	1332.9	1306.7	1306.7
45°	1302.4	1254.3	1214.9	1197.4	1197.4
47.5°	1214.9	1193.0	1171.2	1158.2	1158.2
50°	1180.0	1153.8	1140.6	1131.9	1131.9
52.5°	1153.8	1127.6	1114.3	1105.6	1096.9
55°	1131.9	1092.6	1079.5	1075.1	1075.1
57.5°	1101.3	1066.4	1048.9	1044.5	1044.5
60°	1053.3	1027.0	1009.5	1005.2	1005.2
62.5°	1005.2	979.0	961.5	961.5	961.5
63°	996.4	965.8	952.7	952.7	952.7
65°	957.1	926.5	913.3	913.3	909.1
67.5°	904.7	874.1	865.2	865.2	856.5
70°	843.5	817.2	808.5	812.8	795.4
72.5°	782.2	756.1	743.0	743.0	725.4
75°	712.4	686.1	668.7	664.2	646.8
77.5°	633.7	611.8	594.4	576.9	568.1
80°	550.7	533.1	511.3	498.2	485.1
82.5°	463.3	445.7	432.7	450.1	384.6
85°	362.7	345.3	327.8	354.0	275.3
87.5°	266.5	257.9	240.3	209.8	183.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)