

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: P257984

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2U-7050**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P257984  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-280-D-U-T2U-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 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: 30051 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

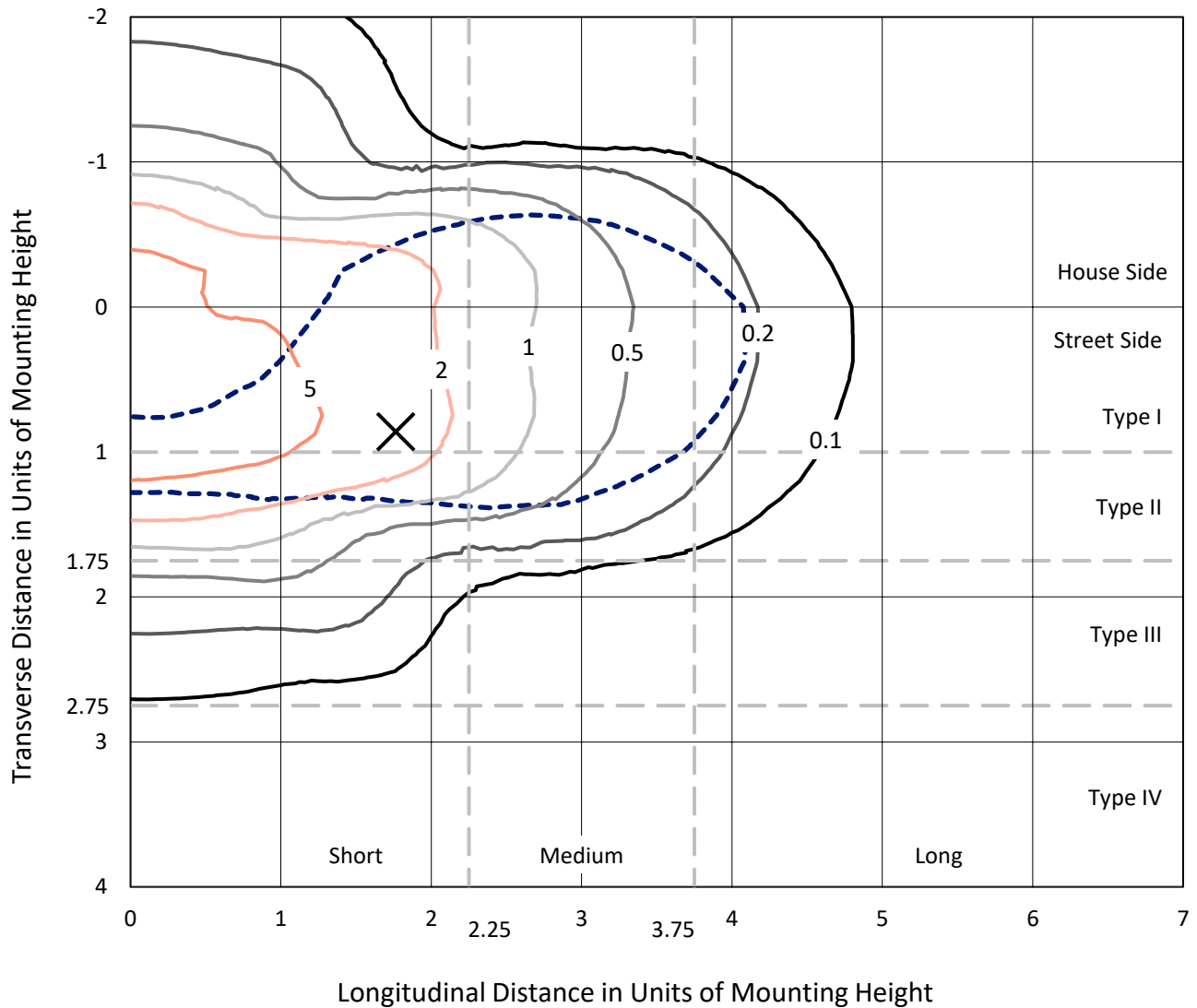
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

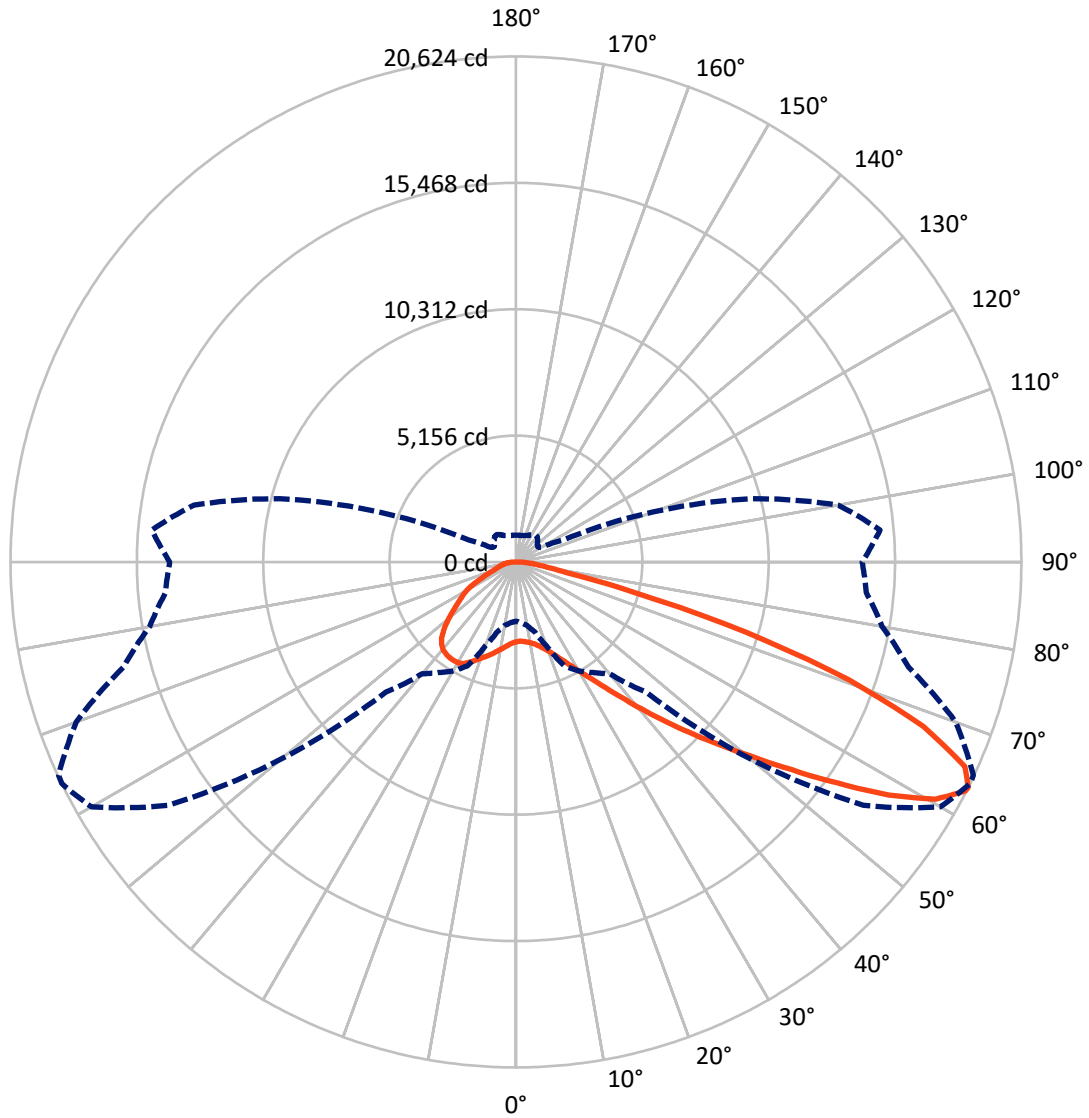
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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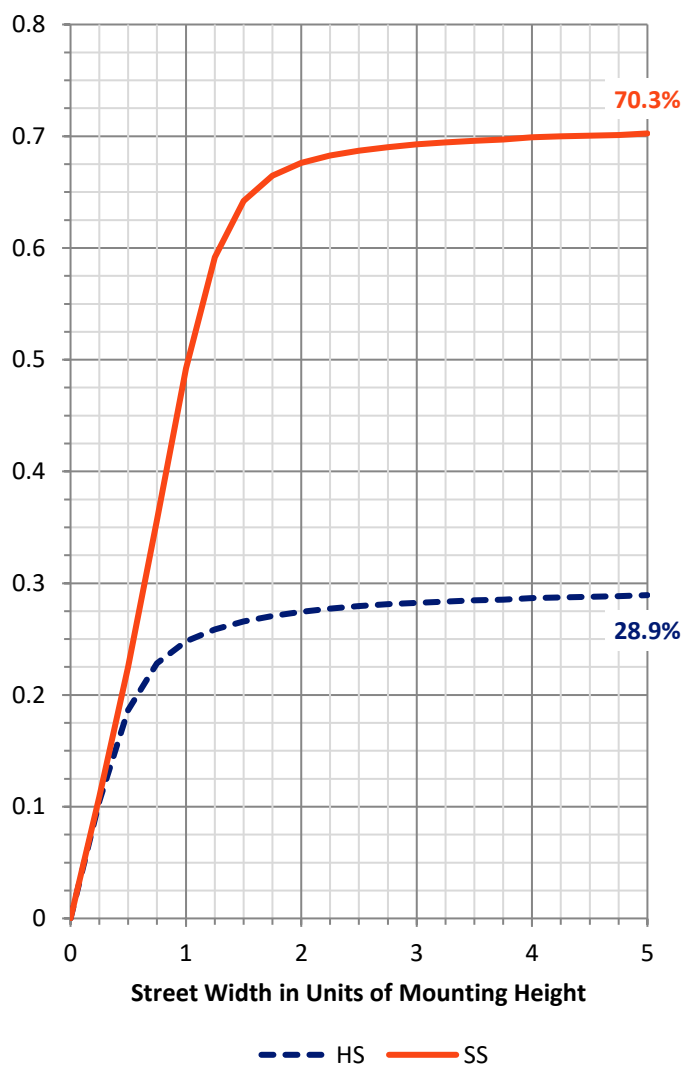
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8833.9	0.0	8833.9
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	21217.1	0.0	21217.1
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	30051.0	0.0	30051.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	324.9	1.1
10°-20°	1082.3	3.6
20°-30°	2031.6	6.8
30°-40°	3405.2	11.3
40°-50°	5713.1	19.0
50°-60°	7242.5	24.1
60°-70°	6389.0	21.3
70°-80°	3298.1	11.0
80°-90°	564.3	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°	30051.0	100.0
0°-180°	30051.0	100.0

**Coefficient of Utilization**



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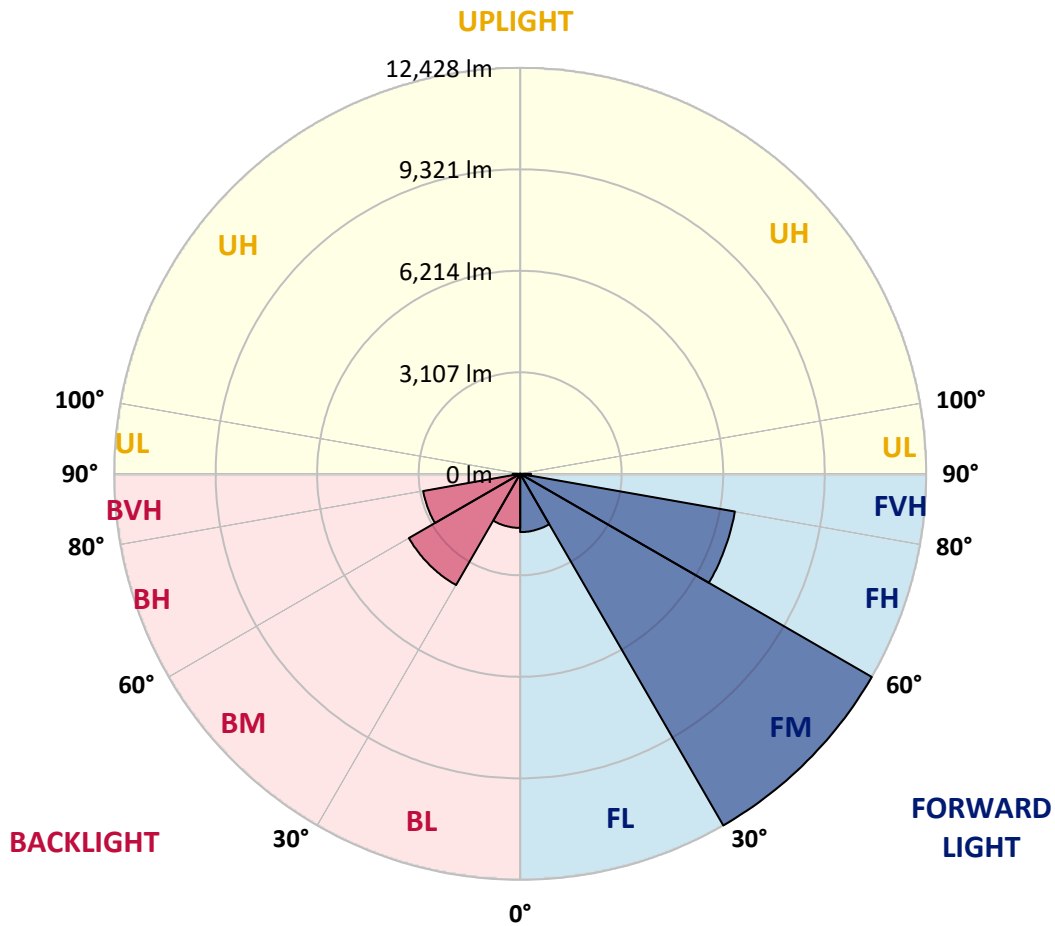
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U-7050

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1783.6	5.9			
FM (30°-60°)	12428.3	41.4			
FH (60°-80°)	6673.0	22.2			G3/7500
FVH (80°-90°)	332.1	1.1			G3/500
BL (0°-30°)	1655.2	5.5	B3/2500		
BM (30°-60°)	3932.4	13.1	B3/5000		
BH (60°-80°)	3014.1	10.0	B4/5000		G4/5000
BVH (80°-90°)	232.2	0.8			G3/500
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°	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5
2.5°	3234.4	3229.4	3229.4	3229.4	3229.4	3224.3	3229.4	3239.4	3234.4	3229.4	3239.4
5°	3244.5	3239.4	3239.4	3239.4	3244.5	3239.4	3244.5	3259.5	3249.5	3249.5	3259.5
7.5°	3269.6	3264.6	3269.6	3264.6	3264.6	3264.6	3269.6	3284.7	3279.7	3284.7	3299.8
10°	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3309.8	3319.9	3324.9	3330.0	3350.1
12.5°	3390.3	3390.3	3390.3	3385.3	3385.3	3370.2	3390.3	3400.4	3410.4	3420.5	3435.6
15°	3581.5	3581.5	3576.4	3556.3	3556.3	3526.1	3531.2	3536.2	3536.2	3546.3	3556.3
17.5°	3833.0	3827.9	3817.9	3802.8	3782.7	3747.5	3737.4	3727.3	3712.3	3707.2	3707.2
20°	4185.1	4180.1	4159.9	4119.7	4094.5	4039.2	3999.0	3958.7	3943.6	3918.5	3913.5
22.5°	4688.1	4688.1	4647.9	4587.5	4567.4	4451.7	4336.0	4250.5	4220.3	4185.1	4185.1
25°	5296.8	5291.7	5236.4	5166.0	5080.5	4959.7	4818.9	4703.2	4627.7	4547.3	4517.1
27.5°	6026.1	6011.0	5935.6	5850.1	5689.1	5538.2	5372.2	5251.5	5120.7	5020.1	4929.6
30°	6881.3	6866.2	6735.4	6574.4	6408.4	6257.5	6016.1	5870.2	5664.0	5543.2	5442.6
32.5°	7872.2	7857.1	7620.7	7464.8	7288.7	7102.6	6815.9	6584.5	6322.9	6151.9	6011.0
35°	9134.8	9074.4	8737.4	8521.1	8244.4	8058.3	7756.5	7444.6	7137.8	6896.3	6690.1
37.5°	10497.9	10427.5	10130.7	9808.8	9537.2	9310.8	8883.3	8490.9	8128.7	7796.7	7540.2
40°	11921.5	11735.4	11418.5	11182.0	10995.9	10779.6	10331.9	9919.5	9351.1	8978.8	8591.5
42.5°	12907.4	12726.3	12505.0	12349.0	12258.5	12092.5	11841.0	11483.8	10975.8	10985.9	9964.7
45°	13556.3	13289.7	13138.8	13148.8	13184.0	13184.0	13138.8	13083.4	12862.1	13013.0	12157.9
47.5°	13324.9	13148.8	13053.3	13254.5	13506.0	13757.5	14049.2	14366.1	14728.3	15155.9	14104.6
50°	11966.7	12032.1	12077.4	12505.0	13043.2	13616.6	14285.6	15150.8	16161.9	16358.1	15850.0
52.5°	9798.7	9939.6	10090.5	10744.4	11453.7	12444.6	13616.6	15045.2	16403.3	17203.1	17152.8
55°	7610.6	7786.7	8108.6	8596.5	9159.9	10095.5	11544.2	13747.4	15865.1	17137.7	17912.4
57.5°	5417.5	5674.0	6096.5	6775.6	7273.6	7801.8	8873.2	11317.9	13636.8	16006.0	17786.6
60°	3601.6	3722.3	3999.0	4844.0	5684.1	6237.4	6996.9	7882.3	9778.6	13043.2	16488.9
62.5°	2555.3	2635.8	2806.8	3189.1	3948.7	4949.7	5407.4	5814.9	6423.5	8390.3	13239.4
63°	2414.5	2484.9	2625.7	2947.7	3631.8	4668.0	5135.8	5508.0	5950.7	7505.0	12525.1
65°	2002.0	2032.2	2107.6	2263.6	2630.8	3490.9	4255.5	4481.9	4557.3	4823.9	7847.0
67.5°	1690.1	1710.3	1735.4	1780.7	1926.5	2323.9	3174.0	3460.7	3375.2	3194.1	3878.3
70°	1468.8	1483.9	1524.1	1579.5	1629.8	1730.4	2183.1	2610.7	2515.1	2268.6	2374.2
72.5°	1172.0	1197.2	1242.4	1338.0	1438.6	1569.4	1680.1	1946.7	1886.3	1649.9	1675.0
75°	925.5	940.6	980.9	1051.3	1146.9	1297.8	1514.1	1604.6	1438.6	1217.3	1217.3
77.5°	734.4	749.5	784.7	840.0	900.4	1006.0	1156.9	1393.4	1292.8	915.5	910.5
80°	553.3	568.4	603.6	653.9	714.3	789.7	880.3	985.9	1187.1	855.1	684.1
82.5°	407.4	412.5	472.8	508.0	528.2	588.5	664.0	724.3	814.9	789.7	608.6
85°	306.8	301.8	342.1	367.2	372.2	387.3	432.6	493.0	533.2	513.1	472.8
87.5°	171.0	150.9	176.1	201.2	201.2	206.2	216.3	251.5	286.7	276.7	251.5
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°	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5
2.5°	3239.4	3239.4	3234.4	3234.4	3239.4	3239.4	3234.4	3249.5	3259.5	3259.5	3264.6
5°	3254.5	3259.5	3254.5	3254.5	3259.5	3259.5	3264.6	3279.7	3294.8	3304.8	3319.9
7.5°	3299.8	3304.8	3299.8	3299.8	3304.8	3309.8	3319.9	3340.0	3350.1	3370.2	3395.4
10°	3350.1	3355.1	3350.1	3355.1	3360.1	3365.2	3380.3	3395.4	3410.4	3430.6	3470.8
12.5°	3440.6	3445.7	3435.6	3440.6	3455.7	3455.7	3465.8	3475.8	3501.0	3526.1	3566.4
15°	3566.4	3566.4	3556.3	3561.4	3576.4	3576.4	3581.5	3591.5	3621.7	3651.9	3692.1
17.5°	3712.3	3722.3	3717.3	3722.3	3732.4	3737.4	3737.4	3747.5	3767.6	3787.7	3827.9
20°	3908.4	3913.5	3903.4	3913.5	3923.5	3913.5	3903.4	3898.4	3908.4	3918.5	3963.8
22.5°	4175.0	4170.0	4144.8	4144.8	4144.8	4124.7	4099.6	4069.4	4069.4	4054.3	4089.5
25°	4491.9	4476.8	4441.6	4446.7	4411.4	4381.3	4336.0	4290.7	4250.5	4235.4	4240.4
27.5°	4864.2	4834.0	4798.8	4788.7	4753.5	4698.2	4622.7	4537.2	4471.8	4421.5	4411.4
30°	5332.0	5266.6	5206.2	5196.2	5140.8	5050.3	4929.6	4813.9	4703.2	4617.7	4587.5
32.5°	5885.3	5784.7	5689.1	5679.0	5588.5	5467.8	5321.9	5160.9	5000.0	4864.2	4798.8
35°	6534.2	6383.3	6292.7	6267.6	6136.8	5985.9	5824.9	5618.7	5392.3	5201.2	5080.5
37.5°	7323.9	7168.0	7012.0	7017.1	6836.0	6659.9	6443.6	6192.1	5905.4	5638.8	5467.8
40°	8299.8	8078.4	7877.2	7832.0	7676.0	7429.5	7193.1	6901.4	6549.3	6197.2	5950.7
42.5°	9481.8	9119.7	8843.0	8802.8	8596.5	8294.7	8008.0	7620.7	7263.5	6836.0	6539.2
45°	10824.9	10246.4	9914.4	9854.1	9522.1	9215.2	8868.2	8455.7	8018.1	7535.2	7183.1
47.5°	12494.9	11670.0	11106.6	11006.0	10548.2	10145.8	9783.7	9325.9	8802.8	8264.5	7877.2
50°	14441.6	13224.3	12464.7	12308.8	11695.1	11222.3	10759.5	10186.1	9627.7	9064.3	8616.7
52.5°	16393.3	15085.4	14074.4	13883.2	12977.8	12344.0	11735.4	11161.9	10503.0	9944.6	9436.6
55°	17962.7	17092.5	15920.4	15653.8	14356.1	13495.9	12696.1	12042.2	11388.3	10945.6	10347.0
57.5°	18908.4	18863.1	17937.5	17570.3	15794.7	14522.1	13631.7	12887.3	12253.5	12067.3	11272.6
60°	18883.2	20055.2	19657.8	19381.2	17248.4	15573.4	14416.4	13611.6	13088.5	13299.7	12203.2
62.5°	17731.3	20105.5	20583.4	20507.9	18797.7	16418.4	15060.3	14230.3	13953.7	14582.4	13168.9
63°	17313.8	19989.8	20623.6	20593.5	19094.5	16579.4	15170.9	14351.0	14124.7	14909.4	13345.0
65°	14632.7	18978.8	20135.7	20271.5	19733.3	17132.7	15427.5	14657.9	14632.7	15638.8	13762.5
67.5°	8918.5	16036.1	17937.5	18199.1	18832.9	17308.8	15281.6	14552.2	14914.4	15744.4	13636.8
70°	3812.9	10583.4	14416.4	14839.0	16388.2	16433.5	14864.1	14119.6	14849.0	14919.4	12741.4
72.5°	2258.5	4989.9	9813.8	10734.4	12967.7	14139.8	13908.4	13365.1	13988.9	13103.6	10850.0
75°	1599.6	2334.0	4984.9	5965.8	9029.1	10794.7	11685.1	11936.6	11911.4	10392.3	8143.8
77.5°	1146.9	1499.0	2102.6	2479.9	5040.2	6931.6	8018.1	8752.5	8516.1	6956.7	5020.1
80°	799.8	1036.2	1287.7	1368.2	2339.0	3561.4	4225.3	4547.3	4406.4	3475.8	2248.5
82.5°	578.5	679.1	830.0	880.3	1177.1	1644.9	1956.7	1725.3	1654.9	1282.7	970.8
85°	447.7	437.6	518.1	538.2	689.1	860.2	880.3	684.1	598.6	533.2	543.3
87.5°	316.9	271.6	276.7	286.7	357.1	457.7	447.7	281.7	241.4	256.5	291.7
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°	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5	3254.5
2.5°	3274.6	3279.7	3289.7	3294.8	3304.8	3304.8	3314.9	3319.9	3330.0	3340.0	3345.1
5°	3335.0	3350.1	3370.2	3380.3	3400.4	3415.5	3435.6	3445.7	3465.8	3480.9	3501.0
7.5°	3425.5	3450.7	3475.8	3506.0	3536.2	3561.4	3581.5	3606.6	3641.8	3667.0	3682.1
10°	3511.0	3546.3	3591.5	3626.7	3672.0	3707.2	3737.4	3782.7	3822.9	3858.1	3878.3
12.5°	3621.7	3667.0	3712.3	3767.6	3827.9	3873.2	3918.5	3978.9	4034.2	4074.4	4094.5
15°	3752.5	3807.8	3858.1	3923.5	3993.9	4054.3	4119.7	4185.1	4225.3	4225.3	4215.3
17.5°	3888.3	3933.6	3993.9	4069.4	4165.0	4240.4	4275.6	4285.7	4270.6	4235.4	4210.2
20°	4024.1	4064.4	4129.8	4220.3	4320.9	4336.0	4300.8	4255.5	4210.2	4149.9	4109.6
22.5°	4134.8	4190.1	4290.7	4396.4	4401.4	4315.9	4220.3	4144.8	4074.4	4004.0	3928.6
25°	4265.6	4341.0	4476.8	4517.1	4386.3	4225.3	4089.5	3978.9	3863.2	3747.5	3662.0
27.5°	4426.5	4537.2	4673.0	4557.3	4300.8	4074.4	3888.3	3722.3	3571.4	3410.4	3314.9
30°	4597.6	4768.6	4798.8	4497.0	4154.9	3863.2	3611.7	3360.1	3169.0	3023.1	2967.8
32.5°	4803.8	5025.1	4844.0	4391.3	3958.7	3576.4	3239.4	2937.6	2776.6	2686.1	2661.0
35°	5115.7	5296.8	4869.2	4280.7	3732.4	3234.4	2811.9	2570.4	2469.8	2409.4	2379.3
37.5°	5563.4	5558.3	4864.2	4144.8	3470.8	2862.2	2469.8	2298.8	2218.3	2168.0	2112.7
40°	6086.5	5759.5	4834.0	3948.7	3118.7	2505.0	2233.4	2072.4	1997.0	1936.6	1871.2
42.5°	6604.6	5895.3	4748.5	3656.9	2681.1	2248.5	2062.4	1916.5	1836.0	1770.6	1680.1
45°	7052.3	5950.7	4582.5	3254.5	2288.7	2047.3	1951.7	1825.9	1730.4	1629.8	1559.3
47.5°	7404.4	5940.6	4315.9	2781.7	2027.2	1906.4	1861.2	1775.6	1660.0	1534.2	1443.7
50°	7701.2	5865.2	3953.7	2364.2	1851.1	1780.7	1765.6	1740.4	1554.3	1448.7	1393.4
52.5°	7972.8	5754.5	3566.4	2082.5	1700.2	1639.8	1670.0	1644.9	1514.1	1423.5	1368.2
55°	8345.0	5679.0	3184.1	1866.2	1524.1	1509.0	1534.2	1569.4	1488.9	1403.4	1343.1
57.5°	8782.7	5719.3	2892.3	1624.7	1358.1	1368.2	1453.7	1504.0	1463.8	1373.2	1312.9
60°	9285.7	5840.0	2635.8	1393.4	1222.3	1247.5	1373.2	1443.7	1438.6	1333.0	1262.6
62.5°	9849.0	5965.8	2228.4	1217.3	1106.6	1146.9	1277.7	1368.2	1383.3	1292.8	1207.2
63°	9959.7	5975.8	2122.7	1182.1	1086.5	1131.8	1252.5	1348.1	1368.2	1282.7	1197.2
65°	10231.3	5885.3	1710.3	1086.5	1006.0	1056.3	1177.1	1262.6	1302.8	1227.4	1156.9
67.5°	10005.0	5145.8	1287.7	970.8	940.6	975.9	1081.5	1162.0	1197.2	1162.0	1091.5
70°	9149.9	3742.4	1006.0	865.2	870.2	895.4	975.9	1051.3	1091.5	1081.5	1016.1
72.5°	7369.2	2122.7	840.0	774.6	789.7	819.9	875.2	945.7	980.9	975.9	930.6
75°	4854.1	1086.5	709.3	694.2	704.2	729.4	769.6	824.9	865.2	860.2	840.0
77.5°	2404.4	754.5	608.6	613.7	618.7	638.8	669.0	719.3	744.5	749.5	744.5
80°	990.9	588.5	523.1	528.2	533.2	548.3	568.4	613.7	628.8	638.8	643.9
82.5°	593.6	447.7	417.5	427.6	432.6	447.7	462.8	503.0	518.1	533.2	533.2
85°	392.4	311.9	301.8	311.9	321.9	332.0	337.0	362.2	387.3	407.4	417.5
87.5°	211.3	186.1	181.1	186.1	186.1	196.2	206.2	231.4	261.6	281.7	291.7
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°	3254.5	3254.5	3254.5	3254.5	3254.5
2.5°	3335.0	3340.0	3335.0	3340.0	3345.1
5°	3501.0	3511.0	3506.0	3506.0	3526.1
7.5°	3692.1	3712.3	3712.3	3722.3	3732.4
10°	3898.4	3918.5	3933.6	3933.6	3948.7
12.5°	4104.6	4114.7	4129.8	4129.8	4129.8
15°	4210.2	4205.2	4200.2	4195.1	4195.1
17.5°	4195.1	4175.0	4165.0	4154.9	4159.9
20°	4084.5	4049.3	4039.2	4024.1	4034.2
22.5°	3893.3	3843.0	3822.9	3797.8	3807.8
25°	3606.6	3546.3	3536.2	3506.0	3521.1
27.5°	3274.6	3244.5	3239.4	3234.4	3259.5
30°	2962.8	2972.8	2977.9	2987.9	3013.1
32.5°	2676.0	2696.2	2701.2	2706.2	2741.4
35°	2394.4	2369.2	2394.4	2384.3	2414.5
37.5°	2087.5	2067.4	2047.3	2022.1	2042.2
40°	1831.0	1795.8	1735.4	1705.2	1710.3
42.5°	1629.8	1584.5	1534.2	1504.0	1504.0
45°	1499.0	1443.7	1398.4	1378.3	1378.3
47.5°	1398.4	1373.2	1348.1	1333.0	1333.0
50°	1358.1	1328.0	1312.9	1302.8	1302.8
52.5°	1328.0	1297.8	1282.7	1272.6	1262.6
55°	1302.8	1257.5	1242.4	1237.4	1237.4
57.5°	1267.6	1227.4	1207.2	1202.2	1202.2
60°	1212.3	1182.1	1162.0	1156.9	1156.9
62.5°	1156.9	1126.8	1106.6	1106.6	1106.6
63°	1146.9	1111.7	1096.6	1096.6	1096.6
65°	1101.6	1066.4	1051.3	1051.3	1046.3
67.5°	1041.2	1006.0	996.0	996.0	985.9
70°	970.8	940.6	930.6	935.6	915.5
72.5°	900.4	870.2	855.1	855.1	835.0
75°	819.9	789.7	769.6	764.6	744.5
77.5°	729.4	704.2	684.1	664.0	653.9
80°	633.8	613.7	588.5	573.4	558.3
82.5°	533.2	513.1	498.0	518.1	442.7
85°	417.5	397.4	377.3	407.4	316.9
87.5°	306.8	296.8	276.7	241.4	211.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)