

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: P257983

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257983
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-AF72-270-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29611 lumens
Efficiency: N/A
Efficacy: 108.5 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

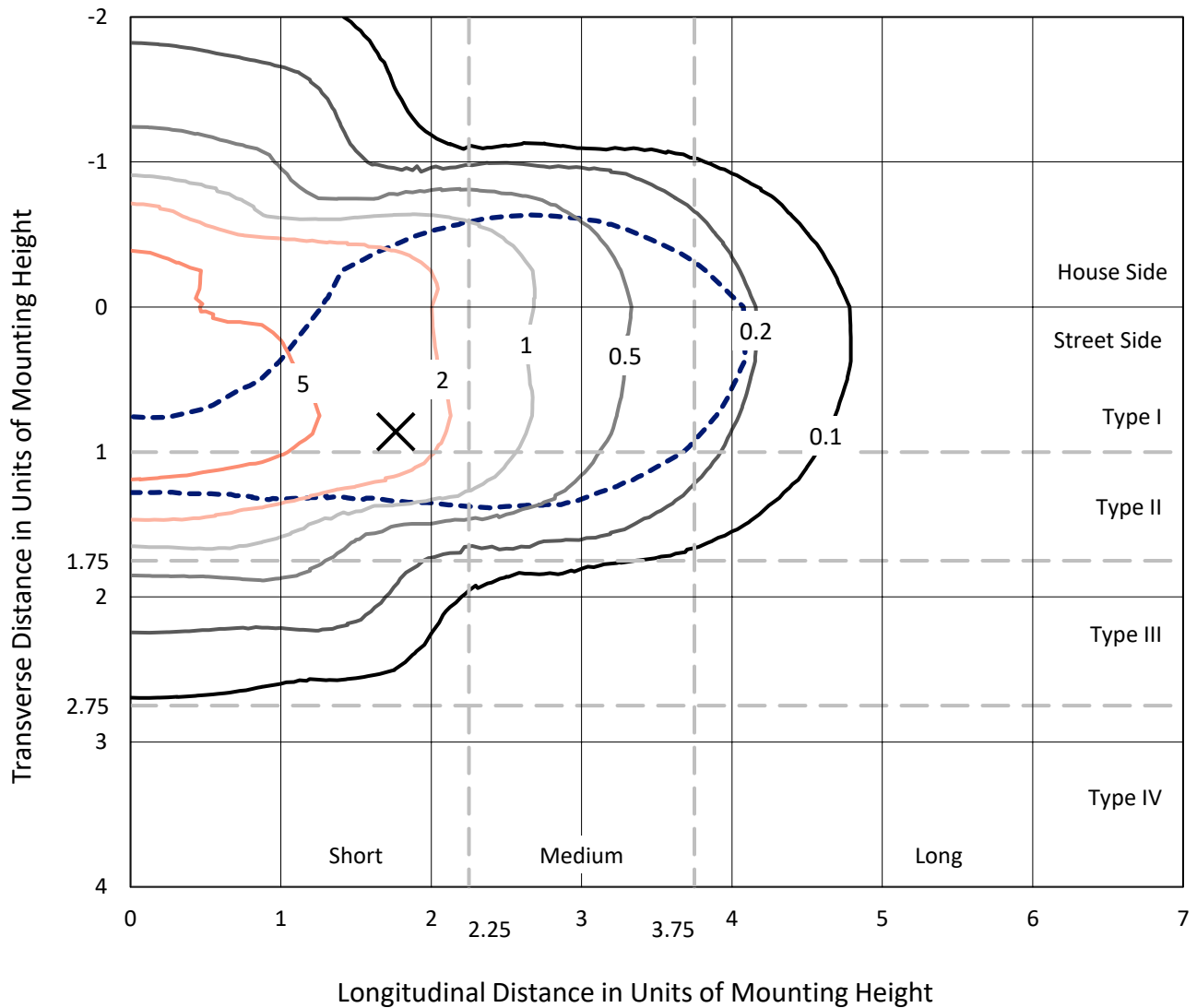
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

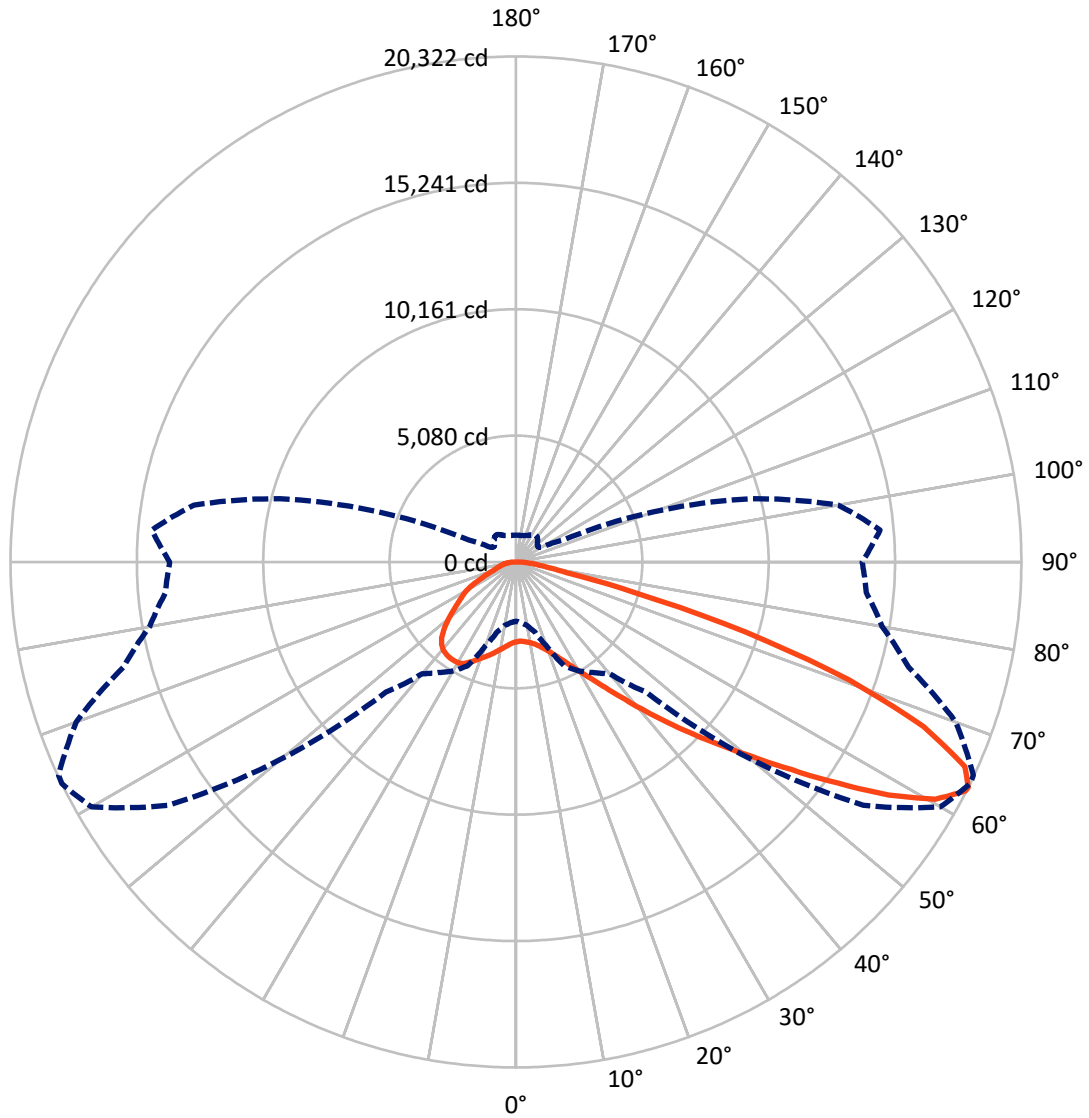
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 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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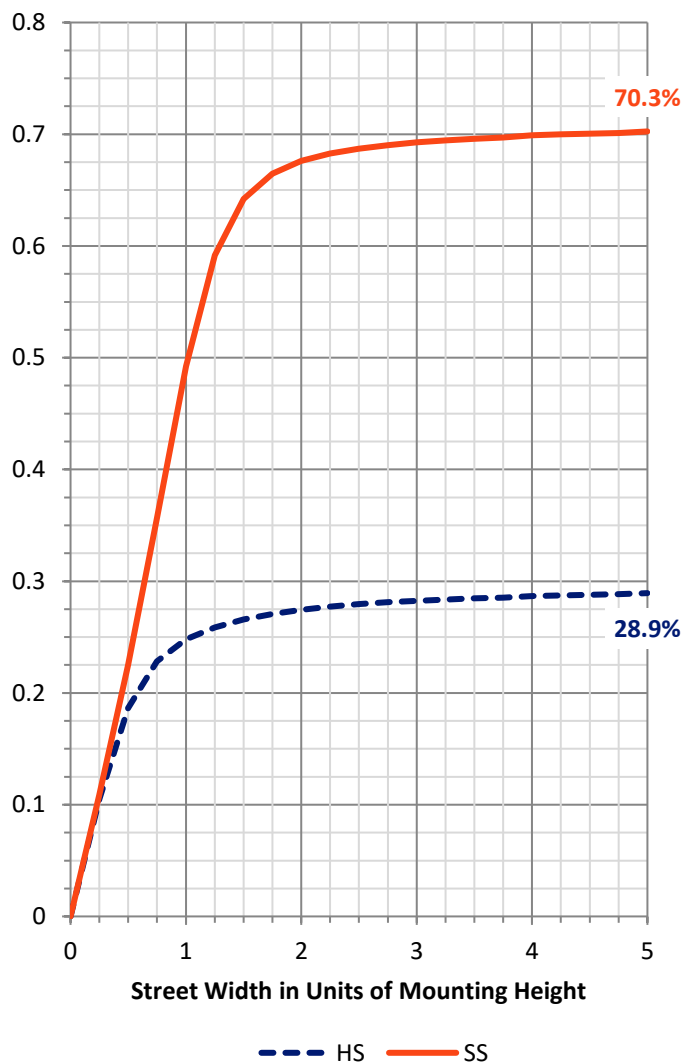
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8704.6	0.0	8704.6
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	20906.4	0.0	20906.4
	% Fixture	70.6	0.0	70.6
Total	Lumens	29611.0	0.0	29611.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.2	1.1
10°-20°	1066.4	3.6
20°-30°	2001.8	6.8
30°-40°	3355.3	11.3
40°-50°	5629.4	19.0
50°-60°	7136.5	24.1
60°-70°	6295.4	21.3
70°-80°	3249.8	11.0
80°-90°	556.1	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°	29611.0	100.0
0°-180°	29611.0	100.0

Coefficient of Utilization

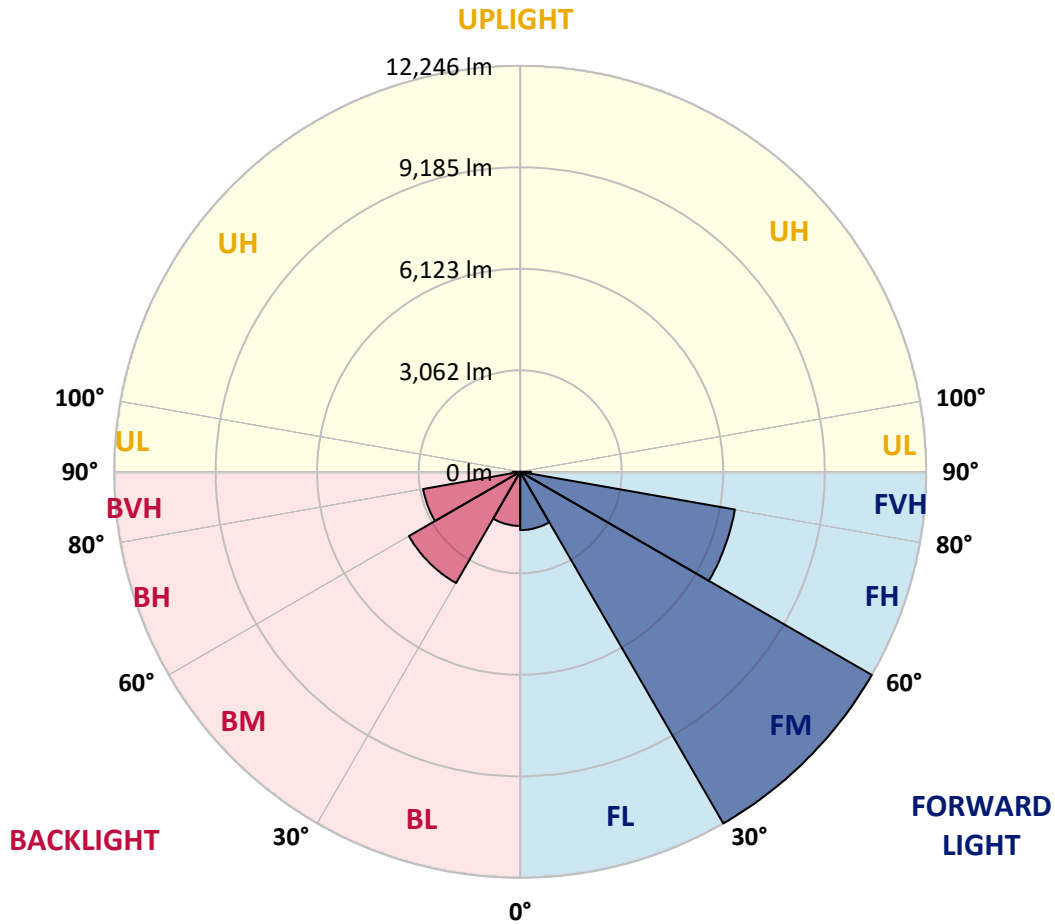


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1757.5	5.9			
FM (30°-60°)	12246.3	41.4			
FH (60°-80°)	6575.3	22.2			G3/7500
FVH (80°-90°)	327.3	1.1			G3/500
BL (0°-30°)	1630.9	5.5	B3/2500		
BM (30°-60°)	3874.9	13.1	B3/5000		
BH (60°-80°)	2969.9	10.0	B4/5000		G4/5000
BVH (80°-90°)	228.8	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°	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9
2.5°	3187.0	3182.1	3182.1	3182.1	3182.1	3177.1	3182.1	3192.0	3187.0	3182.1	3192.0
5°	3196.9	3192.0	3192.0	3192.0	3196.9	3192.0	3196.9	3211.8	3201.9	3201.9	3211.8
7.5°	3221.7	3216.8	3221.7	3216.8	3216.8	3216.8	3221.7	3236.6	3231.6	3236.6	3251.5
10°	3251.5	3251.5	3251.5	3251.5	3251.5	3251.5	3261.4	3271.3	3276.2	3281.2	3301.0
12.5°	3340.7	3340.7	3340.7	3335.7	3335.7	3320.9	3340.7	3350.6	3360.5	3370.4	3385.3
15°	3529.0	3529.0	3524.1	3504.2	3504.2	3474.5	3479.5	3484.4	3484.4	3494.3	3504.2
17.5°	3776.9	3771.9	3762.0	3747.1	3727.3	3692.6	3682.7	3672.8	3657.9	3652.9	3652.9
20°	4123.8	4118.9	4099.0	4059.4	4034.6	3980.1	3940.4	3900.8	3885.9	3861.1	3856.2
22.5°	4619.5	4619.5	4579.8	4520.3	4500.5	4386.5	4272.5	4188.2	4158.5	4123.8	4123.8
25°	5219.2	5214.2	5159.7	5090.3	5006.1	4887.1	4748.3	4634.3	4560.0	4480.7	4450.9
27.5°	5937.9	5923.0	5848.7	5764.4	5605.8	5457.1	5293.5	5174.6	5045.7	4946.6	4857.4
30°	6780.5	6765.6	6636.8	6478.2	6314.6	6165.9	5928.0	5784.2	5581.0	5462.1	5362.9
32.5°	7756.9	7742.1	7509.1	7355.5	7182.0	6998.6	6716.1	6488.1	6230.3	6061.8	5923.0
35°	9001.0	8941.5	8609.4	8396.3	8123.7	7940.3	7642.9	7335.6	7033.3	6795.4	6592.2
37.5°	10344.2	10274.8	9982.4	9665.2	9397.5	9174.5	8753.2	8366.6	8009.7	7682.6	7429.8
40°	11746.9	11563.5	11251.3	11018.3	10834.9	10621.8	10180.7	9774.2	9214.1	8847.4	8465.7
42.5°	12718.4	12540.0	12321.9	12168.2	12079.0	11915.4	11667.6	11315.7	10815.1	10825.0	9818.8
45°	13357.8	13095.1	12946.4	12956.3	12991.0	12991.0	12946.4	12891.9	12673.8	12822.5	11979.9
47.5°	13129.8	12956.3	12862.1	13060.4	13308.2	13556.0	13843.5	14155.8	14512.6	14934.0	13898.0
50°	11791.5	11856.0	11900.6	12321.9	12852.2	13417.3	14076.5	14929.0	15925.3	16118.6	15617.9
52.5°	9655.3	9794.1	9942.7	10587.1	11286.0	12262.4	13417.3	14824.9	16163.2	16951.2	16901.7
55°	7499.2	7672.7	7989.9	8470.7	9025.8	9947.7	11375.2	13546.1	15632.8	16886.8	17650.1
57.5°	5338.2	5590.9	6007.3	6676.4	7167.1	7687.5	8743.3	11152.1	13437.1	15771.6	17526.2
60°	3548.9	3667.8	3940.4	4773.1	5600.9	6146.1	6894.5	7766.8	9635.4	12852.2	16247.4
62.5°	2517.9	2597.2	2765.7	3142.4	3890.9	4877.2	5328.2	5729.7	6329.5	8267.5	13045.5
63°	2379.1	2448.5	2587.3	2904.5	3578.6	4599.6	5060.6	5427.4	5863.5	7395.1	12341.7
65°	1972.7	2002.4	2076.8	2230.4	2592.3	3439.8	4193.2	4416.2	4490.6	4753.3	7732.1
67.5°	1665.4	1685.2	1710.0	1754.6	1898.3	2289.9	3127.6	3410.1	3325.8	3147.4	3821.5
70°	1447.3	1462.2	1501.8	1556.3	1605.9	1705.0	2151.1	2572.4	2478.3	2235.4	2339.5
72.5°	1154.9	1179.6	1224.3	1318.4	1417.6	1546.4	1655.5	1918.2	1858.7	1625.7	1650.5
75°	912.0	926.9	966.5	1035.9	1130.1	1278.8	1491.9	1581.1	1417.6	1199.5	1199.5
77.5°	723.6	738.5	773.2	827.7	887.2	991.3	1140.0	1373.0	1273.8	902.1	897.1
80°	545.2	560.1	594.8	644.3	703.8	778.2	867.4	971.5	1169.7	842.6	674.1
82.5°	401.5	406.4	465.9	500.6	520.4	579.9	654.3	713.7	803.0	778.2	599.7
85°	302.3	297.4	337.0	361.8	366.8	381.7	426.3	485.7	525.4	505.6	465.9
87.5°	168.5	148.7	173.5	198.3	198.3	203.2	213.1	247.8	282.5	272.6	247.8
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°	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9
2.5°	3192.0	3192.0	3187.0	3187.0	3192.0	3192.0	3187.0	3201.9	3211.8	3211.8	3216.8
5°	3206.9	3211.8	3206.9	3206.9	3211.8	3211.8	3216.8	3231.6	3246.5	3256.4	3271.3
7.5°	3251.5	3256.4	3251.5	3251.5	3256.4	3261.4	3271.3	3291.1	3301.0	3320.9	3345.6
10°	3301.0	3306.0	3301.0	3306.0	3310.9	3315.9	3330.8	3345.6	3360.5	3380.3	3420.0
12.5°	3390.2	3395.2	3385.3	3390.2	3405.1	3405.1	3415.0	3424.9	3449.7	3474.5	3514.2
15°	3514.2	3514.2	3504.2	3509.2	3524.1	3524.1	3529.0	3538.9	3568.7	3598.4	3638.1
17.5°	3657.9	3667.8	3662.9	3667.8	3677.7	3682.7	3682.7	3692.6	3712.4	3732.2	3771.9
20°	3851.2	3856.2	3846.2	3856.2	3866.1	3856.2	3846.2	3841.3	3851.2	3861.1	3905.7
22.5°	4113.9	4108.9	4084.2	4084.2	4084.2	4064.3	4039.6	4009.8	4009.8	3994.9	4029.6
25°	4426.2	4411.3	4376.6	4381.6	4346.9	4317.1	4272.5	4227.9	4188.2	4173.4	4178.3
27.5°	4792.9	4763.2	4728.5	4718.6	4683.9	4629.4	4555.0	4470.8	4406.3	4356.8	4346.9
30°	5253.9	5189.5	5130.0	5120.1	5065.5	4976.3	4857.4	4743.4	4634.3	4550.1	4520.3
32.5°	5799.1	5700.0	5605.8	5595.9	5506.7	5387.7	5244.0	5085.4	4926.8	4792.9	4728.5
35°	6438.5	6289.8	6200.6	6175.8	6046.9	5898.2	5739.6	5536.4	5313.4	5125.0	5006.1
37.5°	7216.7	7063.0	6909.4	6914.3	6735.9	6562.4	6349.3	6101.5	5818.9	5556.2	5387.7
40°	8178.2	7960.1	7761.9	7717.3	7563.6	7320.8	7087.8	6800.3	6453.4	6106.4	5863.5
42.5°	9343.0	8986.1	8713.5	8673.9	8470.7	8173.3	7890.8	7509.1	7157.2	6735.9	6443.5
45°	10666.4	10096.4	9769.3	9709.8	9382.7	9080.3	8738.3	8331.9	7900.7	7424.8	7077.9
47.5°	12312.0	11499.1	10944.0	10844.8	10393.8	9997.3	9640.4	9189.4	8673.9	8143.5	7761.9
50°	14230.1	13030.7	12282.2	12128.6	11523.9	11058.0	10602.0	10036.9	9486.8	8931.6	8490.5
52.5°	16153.3	14864.6	13868.3	13680.0	12787.8	12163.3	11563.5	10998.5	10349.2	9799.0	9298.4
55°	17699.7	16842.2	15687.3	15424.6	14145.9	13298.3	12510.2	11865.9	11221.5	10785.4	10195.5
57.5°	18631.5	18586.9	17674.9	17313.1	15563.4	14309.4	13432.1	12698.6	12074.0	11890.7	11107.5
60°	18606.7	19761.6	19370.0	19097.4	16995.9	15345.3	14205.3	13412.3	12896.8	13105.0	12024.5
62.5°	17471.7	19811.2	20282.0	20207.7	18522.5	16178.0	14839.8	14022.0	13749.3	14368.9	12976.1
63°	17060.3	19697.2	20321.7	20291.9	18814.9	16336.6	14948.8	14140.9	13917.9	14691.1	13149.6
65°	14418.5	18700.9	19840.9	19974.7	19444.4	16881.9	15201.6	14443.3	14418.5	15409.8	13561.0
67.5°	8787.9	15801.3	17674.9	17932.6	18557.2	17055.3	15057.9	14339.2	14696.0	15513.9	13437.1
70°	3757.0	10428.5	14205.3	14621.7	16148.3	16192.9	14646.5	13912.9	14631.6	14701.0	12554.8
72.5°	2225.5	4916.9	9670.1	10577.2	12777.9	13932.7	13704.7	13169.4	13784.0	12911.7	10691.2
75°	1576.2	2299.8	4911.9	5878.4	8896.9	10636.7	11514.0	11761.8	11737.0	10240.1	8024.6
77.5°	1130.1	1477.0	2071.8	2443.6	4966.4	6830.1	7900.7	8624.3	8391.4	6854.8	4946.6
80°	788.1	1021.0	1268.9	1348.2	2304.8	3509.2	4163.5	4480.7	4341.9	3424.9	2215.6
82.5°	570.0	669.1	817.8	867.4	1159.8	1620.8	1928.1	1700.1	1630.7	1263.9	956.6
85°	441.1	431.2	510.5	530.3	679.0	847.6	867.4	674.1	589.8	525.4	535.3
87.5°	312.3	267.7	272.6	282.5	351.9	451.0	441.1	277.6	237.9	252.8	287.5
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°	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9	3206.9
2.5°	3226.7	3231.6	3241.6	3246.5	3256.4	3256.4	3266.3	3271.3	3281.2	3291.1	3296.1
5°	3286.2	3301.0	3320.9	3330.8	3350.6	3365.5	3385.3	3395.2	3415.0	3429.9	3449.7
7.5°	3375.4	3400.2	3424.9	3454.7	3484.4	3509.2	3529.0	3553.8	3588.5	3613.3	3628.2
10°	3459.6	3494.3	3538.9	3573.6	3618.2	3652.9	3682.7	3727.3	3766.9	3801.6	3821.5
12.5°	3568.7	3613.3	3657.9	3712.4	3771.9	3816.5	3861.1	3920.6	3975.1	4014.8	4034.6
15°	3697.6	3752.1	3801.6	3866.1	3935.5	3994.9	4059.4	4123.8	4163.5	4163.5	4153.6
17.5°	3831.4	3876.0	3935.5	4009.8	4104.0	4178.3	4213.0	4222.9	4208.1	4173.4	4148.6
20°	3965.2	4004.9	4069.3	4158.5	4257.6	4272.5	4237.8	4193.2	4148.6	4089.1	4049.5
22.5°	4074.2	4128.8	4227.9	4332.0	4336.9	4252.7	4158.5	4084.2	4014.8	3945.4	3871.0
25°	4203.1	4277.5	4411.3	4450.9	4322.1	4163.5	4029.6	3920.6	3806.6	3692.6	3608.3
27.5°	4361.7	4470.8	4604.6	4490.6	4237.8	4014.8	3831.4	3667.8	3519.1	3360.5	3266.3
30°	4530.2	4698.8	4728.5	4431.1	4094.1	3806.6	3558.8	3310.9	3122.6	2978.9	2924.3
32.5°	4733.5	4951.5	4773.1	4327.0	3900.8	3524.1	3192.0	2894.6	2736.0	2646.8	2622.0
35°	5040.8	5219.2	4797.9	4218.0	3677.7	3187.0	2770.7	2532.8	2433.6	2374.2	2344.4
37.5°	5481.9	5476.9	4792.9	4084.2	3420.0	2820.3	2433.6	2265.1	2185.8	2136.3	2081.7
40°	5997.4	5675.2	4763.2	3890.9	3073.0	2468.3	2200.7	2042.1	1967.7	1908.3	1843.8
42.5°	6507.9	5809.0	4678.9	3603.4	2641.8	2215.6	2032.2	1888.4	1809.1	1744.7	1655.5
45°	6949.0	5863.5	4515.4	3206.9	2255.2	2017.3	1923.1	1799.2	1705.0	1605.9	1536.5
47.5°	7296.0	5853.6	4252.7	2740.9	1997.5	1878.5	1833.9	1749.6	1635.6	1511.7	1422.5
50°	7588.4	5779.3	3895.8	2329.6	1824.0	1754.6	1739.7	1715.0	1531.6	1427.5	1373.0
52.5°	7856.1	5670.2	3514.2	2052.0	1675.3	1615.8	1645.6	1620.8	1491.9	1402.7	1348.2
55°	8222.8	5595.9	3137.5	1838.9	1501.8	1487.0	1511.7	1546.4	1467.1	1382.9	1323.4
57.5°	8654.1	5635.5	2850.0	1601.0	1338.3	1348.2	1432.4	1482.0	1442.3	1353.1	1293.6
60°	9149.7	5754.5	2597.2	1373.0	1204.4	1229.2	1353.1	1422.5	1417.6	1313.5	1244.1
62.5°	9704.8	5878.4	2195.7	1199.5	1090.4	1130.1	1259.0	1348.2	1363.0	1273.8	1189.6
63°	9813.9	5888.3	2091.6	1164.8	1070.6	1115.2	1234.2	1328.3	1348.2	1263.9	1179.6
65°	10081.5	5799.1	1685.2	1070.6	991.3	1040.9	1159.8	1244.1	1283.7	1209.4	1140.0
67.5°	9858.5	5070.5	1268.9	956.6	926.9	961.6	1065.6	1145.0	1179.6	1145.0	1075.6
70°	9015.9	3687.6	991.3	852.5	857.5	882.3	961.6	1035.9	1075.6	1065.6	1001.2
72.5°	7261.3	2091.6	827.7	763.3	778.2	807.9	862.4	931.8	966.5	961.6	917.0
75°	4783.0	1070.6	698.9	684.0	693.9	718.7	758.3	812.9	852.5	847.6	827.7
77.5°	2369.2	743.5	599.7	604.7	609.7	629.5	659.2	708.8	733.6	738.5	733.6
80°	976.4	579.9	515.5	520.4	525.4	540.3	560.1	604.7	619.6	629.5	634.4
82.5°	584.9	441.1	411.4	421.3	426.3	441.1	456.0	495.7	510.5	525.4	525.4
85°	386.6	307.3	297.4	307.3	317.2	327.1	332.1	356.9	381.7	401.5	411.4
87.5°	208.2	183.4	178.4	183.4	183.4	193.3	203.2	228.0	257.7	277.6	287.5
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°	3206.9	3206.9	3206.9	3206.9	3206.9
2.5°	3286.2	3291.1	3286.2	3291.1	3296.1
5°	3449.7	3459.6	3454.7	3454.7	3474.5
7.5°	3638.1	3657.9	3657.9	3667.8	3677.7
10°	3841.3	3861.1	3876.0	3876.0	3890.9
12.5°	4044.5	4054.4	4069.3	4069.3	4069.3
15°	4148.6	4143.6	4138.7	4133.7	4133.7
17.5°	4133.7	4113.9	4104.0	4094.1	4099.0
20°	4024.7	3990.0	3980.1	3965.2	3975.1
22.5°	3836.3	3786.8	3766.9	3742.2	3752.1
25°	3553.8	3494.3	3484.4	3454.7	3469.6
27.5°	3226.7	3196.9	3192.0	3187.0	3211.8
30°	2919.4	2929.3	2934.3	2944.2	2968.9
32.5°	2636.9	2656.7	2661.6	2666.6	2701.3
35°	2359.3	2334.5	2359.3	2349.4	2379.1
37.5°	2056.9	2037.1	2017.3	1992.5	2012.3
40°	1804.2	1769.5	1710.0	1680.3	1685.2
42.5°	1605.9	1561.3	1511.7	1482.0	1482.0
45°	1477.0	1422.5	1377.9	1358.1	1358.1
47.5°	1377.9	1353.1	1328.3	1313.5	1313.5
50°	1338.3	1308.5	1293.6	1283.7	1283.7
52.5°	1308.5	1278.8	1263.9	1254.0	1244.1
55°	1283.7	1239.1	1224.3	1219.3	1219.3
57.5°	1249.0	1209.4	1189.6	1184.6	1184.6
60°	1194.5	1164.8	1145.0	1140.0	1140.0
62.5°	1140.0	1110.3	1090.4	1090.4	1090.4
63°	1130.1	1095.4	1080.5	1080.5	1080.5
65°	1085.5	1050.8	1035.9	1035.9	1031.0
67.5°	1026.0	991.3	981.4	981.4	971.5
70°	956.6	926.9	917.0	921.9	902.1
72.5°	887.2	857.5	842.6	842.6	822.8
75°	807.9	778.2	758.3	753.4	733.6
77.5°	718.7	693.9	674.1	654.3	644.3
80°	624.5	604.7	579.9	565.0	550.2
82.5°	525.4	505.6	490.7	510.5	436.2
85°	411.4	391.6	371.7	401.5	312.3
87.5°	302.3	292.4	272.6	237.9	208.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)