

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: P257979

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257979
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-AF72-230-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26621 lumens
Efficiency: N/A
Efficacy: 116.2 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

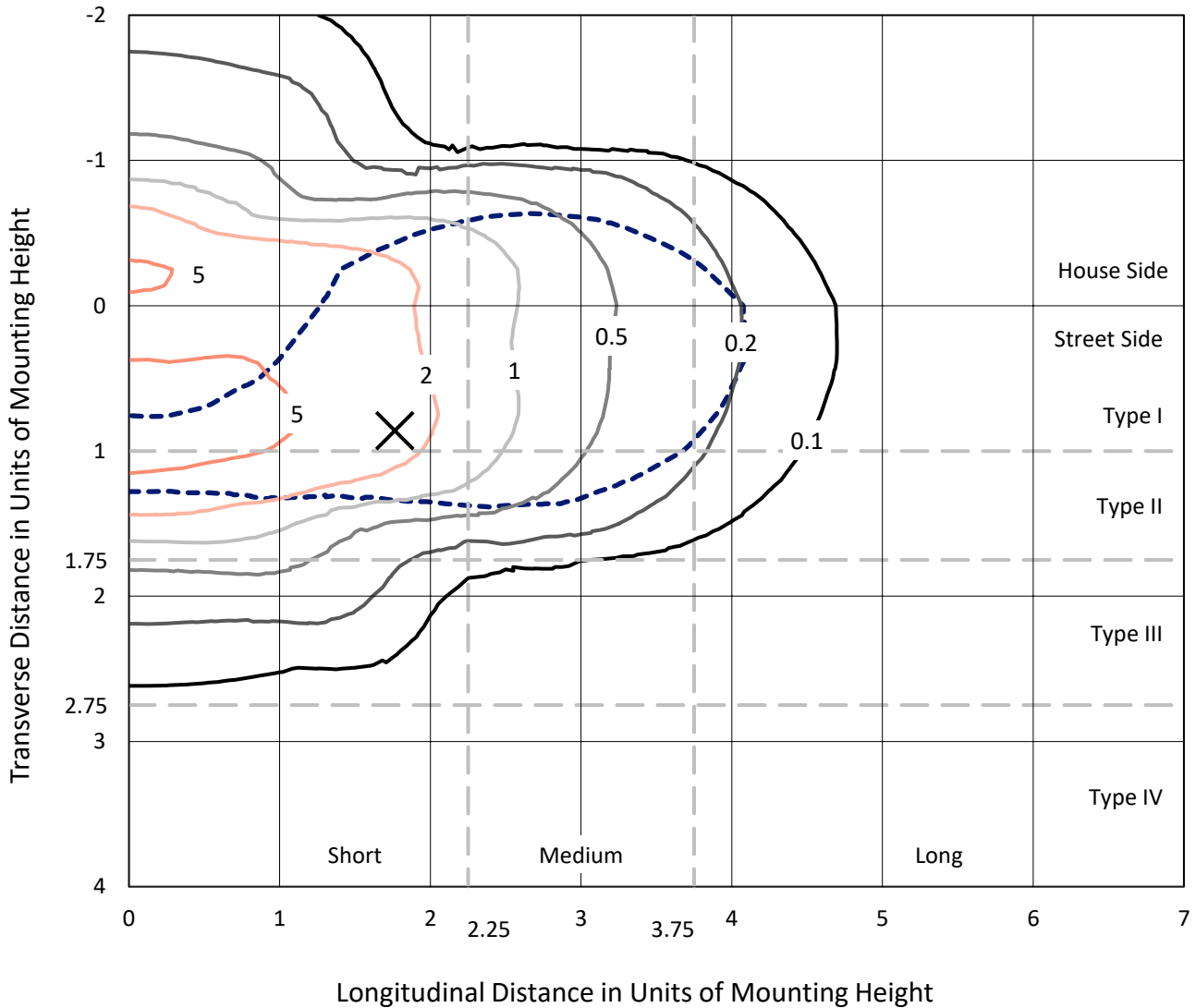
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

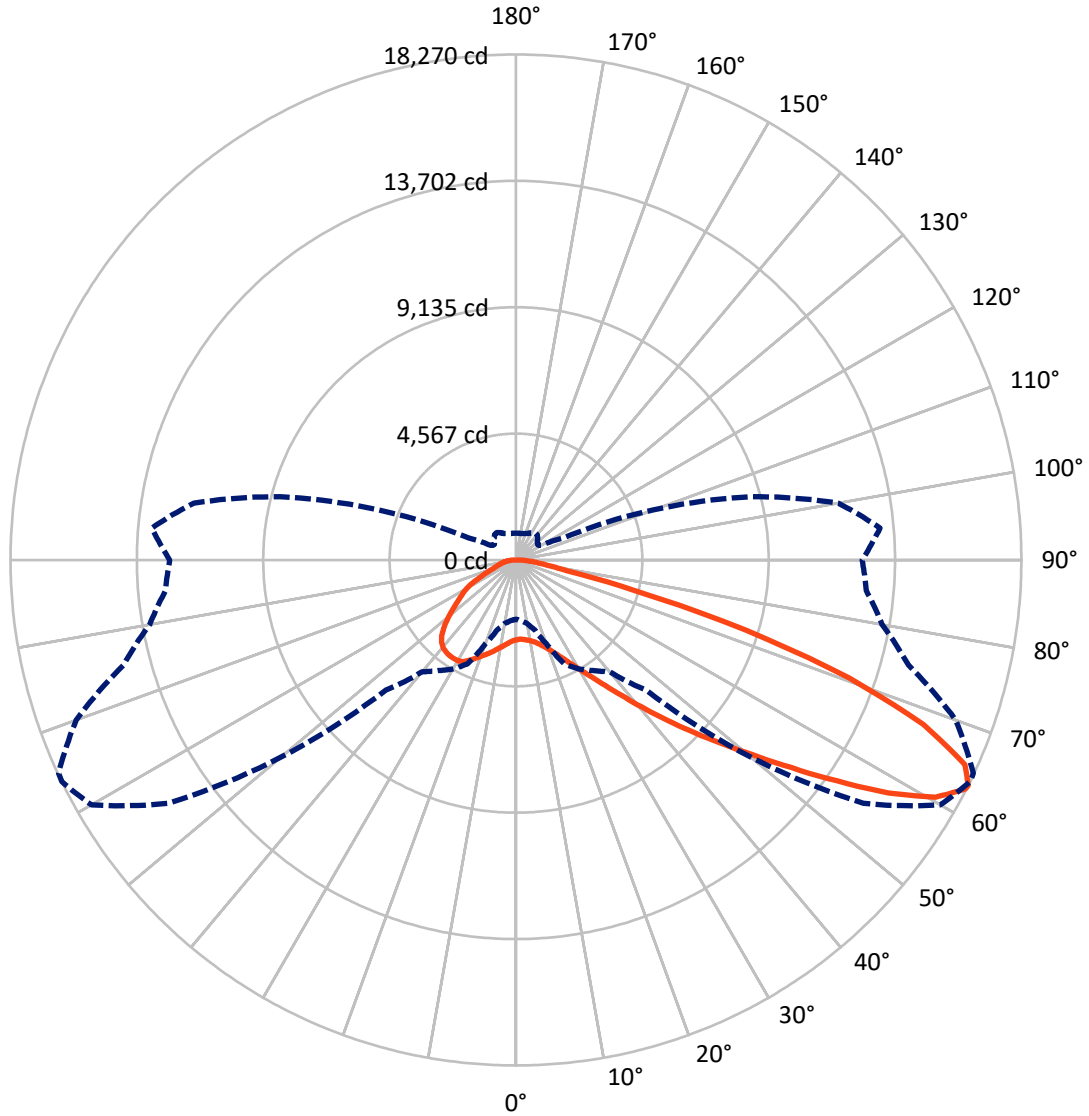
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 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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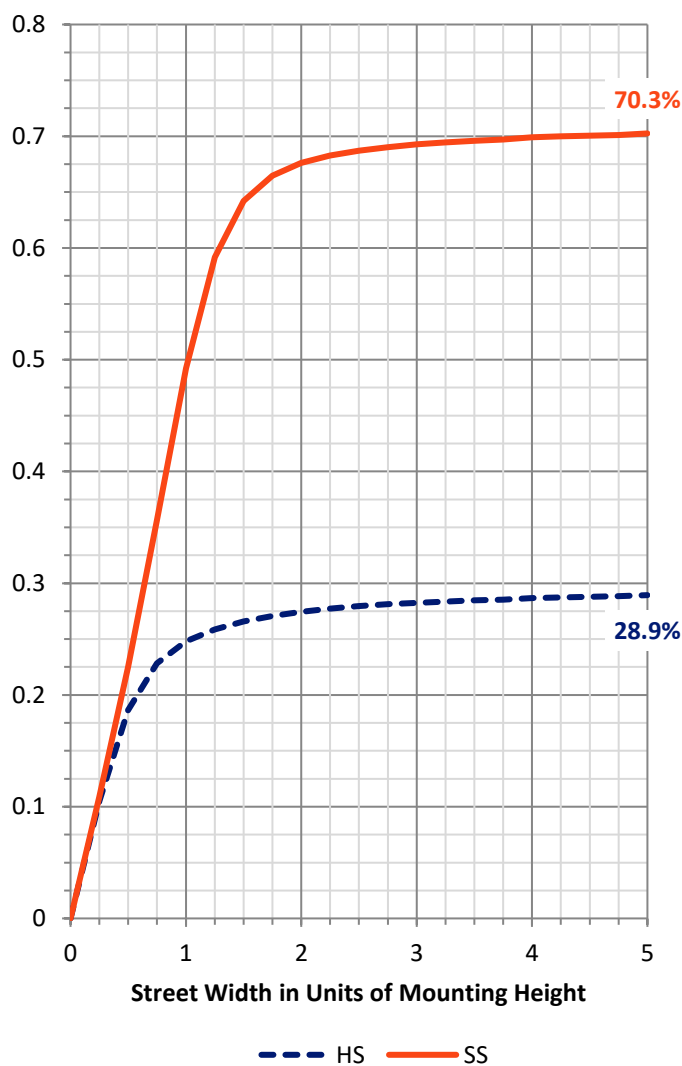
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7825.6	0.0	7825.6
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	18795.4	0.0	18795.4
	% Fixture	70.6	0.0	70.6
Total	Lumens	26621.0	0.0	26621.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.8	1.1
10°-20°	958.8	3.6
20°-30°	1799.7	6.8
30°-40°	3016.5	11.3
40°-50°	5061.0	19.0
50°-60°	6415.8	24.1
60°-70°	5659.7	21.3
70°-80°	2921.7	11.0
80°-90°	499.9	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°	26621.0	100.0
0°-180°	26621.0	100.0

Coefficient of Utilization

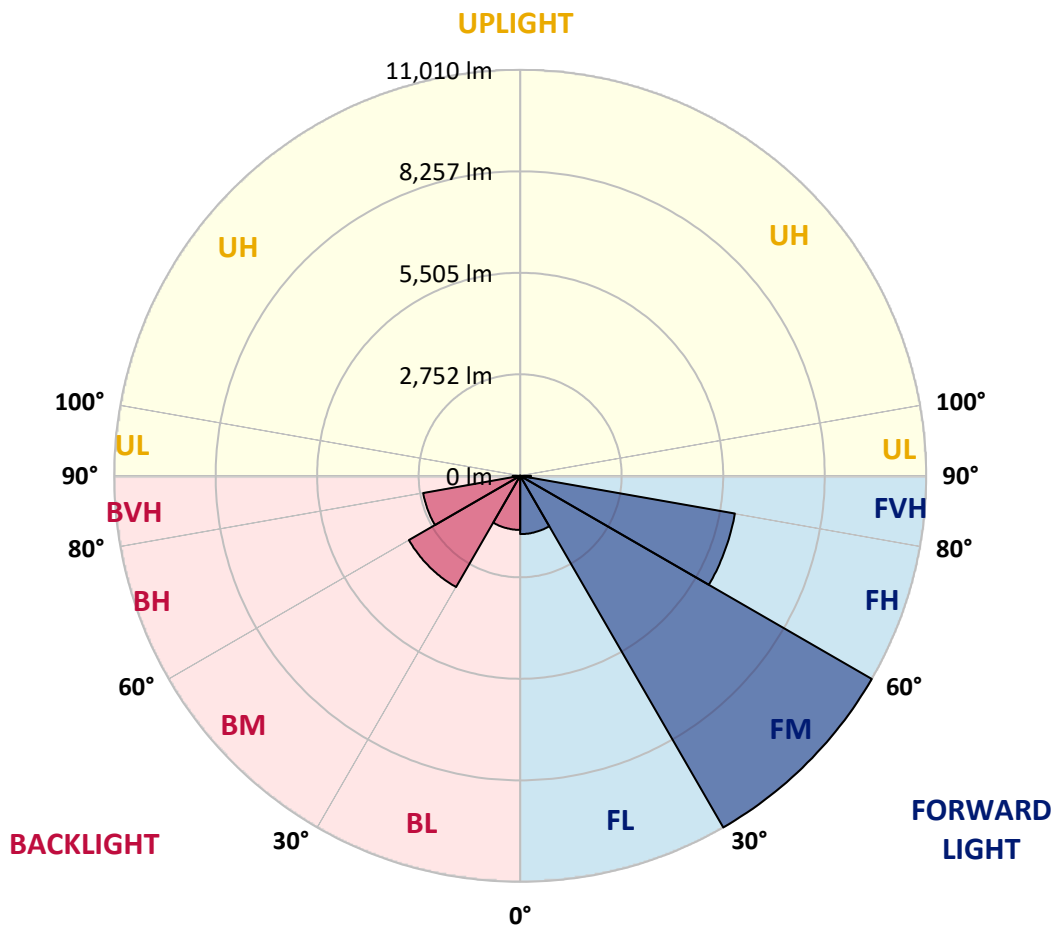


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1580.1	5.9			
FM (30°-60°)	11009.8	41.4			
FH (60°-80°)	5911.4	22.2			G3/7500
FVH (80°-90°)	294.2	1.1			G3/500
BL (0°-30°)	1466.3	5.5	B3/2500		
BM (30°-60°)	3483.6	13.1	B3/5000		
BH (60°-80°)	2670.0	10.0	B4/5000		G4/5000
BVH (80°-90°)	205.7	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°	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0
2.5°	2865.2	2860.8	2860.8	2860.8	2860.8	2856.3	2860.8	2869.7	2865.2	2860.8	2869.7
5°	2874.1	2869.7	2869.7	2869.7	2874.1	2869.7	2874.1	2887.5	2878.6	2878.6	2887.5
7.5°	2896.4	2892.0	2896.4	2892.0	2892.0	2892.0	2896.4	2909.8	2905.3	2909.8	2923.1
10°	2923.1	2923.1	2923.1	2923.1	2923.1	2923.1	2932.1	2941.0	2945.4	2949.9	2967.7
12.5°	3003.4	3003.4	3003.4	2998.9	2998.9	2985.5	3003.4	3012.3	3021.2	3030.1	3043.5
15°	3172.7	3172.7	3168.2	3150.4	3150.4	3123.7	3128.1	3132.6	3132.6	3141.5	3150.4
17.5°	3395.5	3391.0	3382.1	3368.7	3350.9	3319.7	3310.8	3301.9	3288.5	3284.1	3284.1
20°	3707.4	3703.0	3685.1	3649.5	3627.2	3578.2	3542.5	3506.9	3493.5	3471.2	3466.8
22.5°	4153.0	4153.0	4117.4	4063.9	4046.1	3943.6	3841.1	3765.3	3738.6	3707.4	3707.4
25°	4692.2	4687.7	4638.7	4576.3	4500.6	4393.6	4268.9	4166.4	4099.5	4028.2	4001.5
27.5°	5338.3	5324.9	5258.1	5182.3	5039.8	4906.1	4759.0	4652.1	4536.2	4447.1	4366.9
30°	6095.8	6082.5	5966.6	5824.0	5677.0	5543.3	5329.4	5200.2	5017.5	4910.5	4821.4
32.5°	6973.7	6960.3	6750.9	6612.7	6456.8	6291.9	6037.9	5832.9	5601.2	5449.7	5324.9
35°	8092.1	8038.7	7740.1	7548.5	7303.4	7138.5	6871.2	6594.9	6323.1	6109.2	5926.5
37.5°	9299.7	9237.3	8974.4	8689.2	8448.6	8248.1	7869.3	7521.8	7200.9	6906.8	6679.6
40°	10560.8	10395.9	10115.2	9905.7	9740.9	9549.2	9152.7	8787.3	8283.7	7954.0	7610.9
42.5°	11434.1	11273.7	11077.7	10939.5	10859.3	10712.3	10489.5	10173.1	9723.0	9731.9	8827.4
45°	12009.0	11772.8	11639.1	11648.0	11679.2	11679.2	11639.1	11590.1	11394.0	11527.7	10770.2
47.5°	11804.0	11648.0	11563.4	11741.6	11964.4	12187.2	12445.7	12726.4	13047.2	13426.0	12494.7
50°	10600.9	10658.8	10698.9	11077.7	11554.5	12062.4	12655.1	13421.5	14317.2	14491.0	14040.9
52.5°	8680.3	8805.1	8938.8	9518.1	10146.4	11024.2	12062.4	13327.9	14531.1	15239.6	15195.0
55°	6742.0	6897.9	7183.1	7615.3	8114.4	8943.2	10226.6	12178.3	14054.3	15181.7	15867.9
57.5°	4799.1	5026.4	5400.7	6002.3	6443.4	6911.3	7860.4	10026.0	12080.3	14179.0	15756.5
60°	3190.5	3297.5	3542.5	4291.1	5035.3	5525.5	6198.3	6982.6	8662.5	11554.5	14606.8
62.5°	2263.7	2335.0	2486.5	2825.1	3498.0	4384.7	4790.2	5151.2	5690.3	7432.6	11728.2
63°	2138.9	2201.3	2326.0	2611.2	3217.2	4135.2	4549.6	4879.3	5271.5	6648.4	11095.5
65°	1773.5	1800.2	1867.1	2005.2	2330.5	3092.5	3769.8	3970.3	4037.2	4273.3	6951.4
67.5°	1497.2	1515.0	1537.3	1577.4	1706.7	2058.7	2811.7	3065.7	2990.0	2829.6	3435.6
70°	1301.2	1314.5	1350.2	1399.2	1443.7	1532.9	1933.9	2312.7	2228.0	2009.7	2103.2
72.5°	1038.3	1060.5	1100.6	1185.3	1274.4	1390.3	1488.3	1724.5	1671.0	1461.6	1483.9
75°	819.9	833.3	868.9	931.3	1016.0	1149.7	1341.3	1421.5	1274.4	1078.4	1078.4
77.5°	650.6	663.9	695.1	744.2	797.6	891.2	1024.9	1234.3	1145.2	811.0	806.5
80°	490.2	503.5	534.7	579.3	632.8	699.6	779.8	873.4	1051.6	757.5	606.0
82.5°	360.9	365.4	418.9	450.1	467.9	521.4	588.2	641.7	721.9	699.6	539.2
85°	271.8	267.4	303.0	325.3	329.7	343.1	383.2	436.7	472.3	454.5	418.9
87.5°	151.5	133.7	156.0	178.2	178.2	182.7	191.6	222.8	254.0	245.1	222.8
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°	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0
2.5°	2869.7	2869.7	2865.2	2865.2	2869.7	2869.7	2865.2	2878.6	2887.5	2887.5	2892.0
5°	2883.0	2887.5	2883.0	2883.0	2887.5	2887.5	2892.0	2905.3	2918.7	2927.6	2941.0
7.5°	2923.1	2927.6	2923.1	2923.1	2927.6	2932.1	2941.0	2958.8	2967.7	2985.5	3007.8
10°	2967.7	2972.2	2967.7	2972.2	2976.6	2981.1	2994.4	3007.8	3021.2	3039.0	3074.7
12.5°	3047.9	3052.4	3043.5	3047.9	3061.3	3061.3	3070.2	3079.1	3101.4	3123.7	3159.3
15°	3159.3	3159.3	3150.4	3154.9	3168.2	3168.2	3172.7	3181.6	3208.3	3235.1	3270.7
17.5°	3288.5	3297.5	3293.0	3297.5	3306.4	3310.8	3310.8	3319.7	3337.6	3355.4	3391.0
20°	3462.3	3466.8	3457.9	3466.8	3475.7	3466.8	3457.9	3453.4	3462.3	3471.2	3511.3
22.5°	3698.5	3694.0	3671.8	3671.8	3671.8	3653.9	3631.7	3604.9	3604.9	3591.5	3622.7
25°	3979.2	3965.9	3934.7	3939.1	3907.9	3881.2	3841.1	3801.0	3765.3	3752.0	3756.4
27.5°	4309.0	4282.2	4251.0	4242.1	4210.9	4161.9	4095.1	4019.3	3961.4	3916.8	3907.9
30°	4723.4	4665.5	4612.0	4603.1	4554.0	4473.8	4366.9	4264.4	4166.4	4090.6	4063.9
32.5°	5213.5	5124.4	5039.8	5030.8	4950.6	4843.7	4714.5	4571.9	4429.3	4309.0	4251.0
35°	5788.4	5654.7	5574.5	5552.2	5436.3	5302.7	5160.1	4977.4	4776.9	4607.5	4500.6
37.5°	6488.0	6349.8	6211.7	6216.1	6055.7	5899.8	5708.2	5485.4	5231.4	4995.2	4843.7
40°	7352.4	7156.4	6978.1	6938.0	6799.9	6581.5	6372.1	6113.7	5801.7	5489.8	5271.5
42.5°	8399.6	8078.8	7833.7	7798.0	7615.3	7348.0	7094.0	6750.9	6434.5	6055.7	5792.8
45°	9589.3	9076.9	8782.8	8729.3	8435.2	8163.4	7856.0	7490.6	7102.9	6675.1	6363.2
47.5°	11068.7	10338.0	9838.9	9749.8	9344.3	8987.8	8667.0	8261.5	7798.0	7321.2	6978.1
50°	12793.2	11714.9	11042.0	10903.9	10360.2	9941.4	9531.4	9023.4	8528.8	8029.7	7633.2
52.5°	14522.2	13363.6	12467.9	12298.6	11496.5	10935.1	10395.9	9887.9	9304.2	8809.5	8359.5
55°	15912.4	15141.5	14103.3	13867.1	12717.5	11955.5	11247.0	10667.7	10088.4	9696.3	9166.0
57.5°	16750.2	16710.1	15890.2	15564.9	13991.9	12864.5	12075.8	11416.3	10854.9	10690.0	9985.9
60°	16727.9	17766.1	17414.1	17169.0	15279.7	13795.8	12770.9	12058.0	11594.6	11781.7	10810.3
62.5°	15707.5	17810.7	18234.0	18167.2	16652.1	14544.4	13341.3	12606.1	12361.0	12918.0	11665.9
63°	15337.6	17708.2	18269.7	18242.9	16915.0	14687.0	13439.3	12713.0	12512.5	13207.6	11821.8
65°	12962.6	16812.6	17837.4	17957.7	17481.0	15177.2	13666.6	12984.8	12962.6	13853.8	12191.7
67.5°	7900.5	14205.8	15890.2	16121.9	16683.3	15333.2	13537.4	12891.3	13212.1	13947.3	12080.3
70°	3377.7	9375.5	12770.9	13145.3	14517.7	14557.8	13167.5	12508.0	13154.2	13216.5	11287.1
72.5°	2000.8	4420.4	8693.7	9509.1	11487.6	12525.9	12320.9	11839.6	12392.2	11607.9	9611.6
75°	1417.0	2067.6	4415.9	5284.8	7998.6	9562.6	10351.3	10574.1	10551.8	9206.1	7214.3
77.5°	1016.0	1327.9	1862.6	2196.8	4464.9	6140.4	7102.9	7753.5	7544.0	6162.7	4447.1
80°	708.5	917.9	1140.7	1212.0	2072.0	3154.9	3743.1	4028.2	3903.5	3079.1	1991.8
82.5°	512.4	601.6	735.2	779.8	1042.7	1457.1	1733.4	1528.4	1466.0	1136.3	860.0
85°	396.6	387.7	459.0	476.8	610.5	762.0	779.8	606.0	530.3	472.3	481.2
87.5°	280.7	240.6	245.1	254.0	316.4	405.5	396.6	249.5	213.9	227.3	258.4
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°	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0
2.5°	2900.9	2905.3	2914.2	2918.7	2927.6	2927.6	2936.5	2941.0	2949.9	2958.8	2963.3
5°	2954.3	2967.7	2985.5	2994.4	3012.3	3025.6	3043.5	3052.4	3070.2	3083.6	3101.4
7.5°	3034.5	3056.8	3079.1	3105.8	3132.6	3154.9	3172.7	3195.0	3226.2	3248.4	3261.8
10°	3110.3	3141.5	3181.6	3212.8	3252.9	3284.1	3310.8	3350.9	3386.6	3417.8	3435.6
12.5°	3208.3	3248.4	3288.5	3337.6	3391.0	3431.1	3471.2	3524.7	3573.7	3609.4	3627.2
15°	3324.2	3373.2	3417.8	3475.7	3538.1	3591.5	3649.5	3707.4	3743.1	3743.1	3734.1
17.5°	3444.5	3484.6	3538.1	3604.9	3689.6	3756.4	3787.6	3796.5	3783.2	3752.0	3729.7
20°	3564.8	3600.5	3658.4	3738.6	3827.7	3841.1	3809.9	3769.8	3729.7	3676.2	3640.6
22.5°	3662.8	3711.9	3801.0	3894.6	3899.0	3823.3	3738.6	3671.8	3609.4	3547.0	3480.1
25°	3778.7	3845.5	3965.9	4001.5	3885.6	3743.1	3622.7	3524.7	3422.2	3319.7	3244.0
27.5°	3921.3	4019.3	4139.6	4037.2	3809.9	3609.4	3444.5	3297.5	3163.8	3021.2	2936.5
30°	4072.8	4224.3	4251.0	3983.7	3680.7	3422.2	3199.4	2976.6	2807.3	2678.1	2629.1
32.5°	4255.5	4451.6	4291.1	3890.1	3506.9	3168.2	2869.7	2602.3	2459.7	2379.5	2357.2
35°	4531.8	4692.2	4313.4	3792.1	3306.4	2865.2	2490.9	2277.0	2187.9	2134.4	2107.7
37.5°	4928.4	4923.9	4309.0	3671.8	3074.7	2535.5	2187.9	2036.4	1965.1	1920.5	1871.5
40°	5391.8	5102.1	4282.2	3498.0	2762.7	2219.1	1978.5	1835.9	1769.0	1715.6	1657.6
42.5°	5850.8	5222.5	4206.5	3239.5	2375.1	1991.8	1827.0	1697.7	1626.4	1568.5	1488.3
45°	6247.3	5271.5	4059.4	2883.0	2027.5	1813.6	1728.9	1617.5	1532.9	1443.7	1381.4
47.5°	6559.3	5262.6	3823.3	2464.2	1795.8	1688.8	1648.7	1573.0	1470.5	1359.1	1278.9
50°	6822.2	5195.7	3502.4	2094.3	1639.8	1577.4	1564.1	1541.8	1376.9	1283.3	1234.3
52.5°	7062.8	5097.7	3159.3	1844.8	1506.1	1452.7	1479.4	1457.1	1341.3	1261.1	1212.0
55°	7392.5	5030.8	2820.7	1653.2	1350.2	1336.8	1359.1	1390.3	1319.0	1243.2	1189.8
57.5°	7780.2	5066.5	2562.2	1439.3	1203.1	1212.0	1287.8	1332.3	1296.7	1216.5	1163.0
60°	8225.8	5173.4	2335.0	1234.3	1082.8	1105.1	1216.5	1278.9	1274.4	1180.8	1118.5
62.5°	8724.9	5284.8	1974.0	1078.4	980.3	1016.0	1131.8	1212.0	1225.4	1145.2	1069.4
63°	8822.9	5293.7	1880.4	1047.2	962.5	1002.6	1109.5	1194.2	1212.0	1136.3	1060.5
65°	9063.5	5213.5	1515.0	962.5	891.2	935.8	1042.7	1118.5	1154.1	1087.3	1024.9
67.5°	8863.0	4558.5	1140.7	860.0	833.3	864.5	958.0	1029.3	1060.5	1029.3	967.0
70°	8105.5	3315.3	891.2	766.4	770.9	793.2	864.5	931.3	967.0	958.0	900.1
72.5°	6528.1	1880.4	744.2	686.2	699.6	726.3	775.3	837.7	868.9	864.5	824.4
75°	4300.1	962.5	628.3	614.9	623.8	646.1	681.8	730.8	766.4	762.0	744.2
77.5°	2130.0	668.4	539.2	543.6	548.1	565.9	592.7	637.2	659.5	663.9	659.5
80°	877.8	521.4	463.4	467.9	472.3	485.7	503.5	543.6	557.0	565.9	570.4
82.5°	525.8	396.6	369.8	378.8	383.2	396.6	410.0	445.6	459.0	472.3	472.3
85°	347.6	276.3	267.4	276.3	285.2	294.1	298.6	320.8	343.1	360.9	369.8
87.5°	187.2	164.9	160.4	164.9	164.9	173.8	182.7	205.0	231.7	249.5	258.4
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°	2883.0	2883.0	2883.0	2883.0	2883.0
2.5°	2954.3	2958.8	2954.3	2958.8	2963.3
5°	3101.4	3110.3	3105.8	3105.8	3123.7
7.5°	3270.7	3288.5	3288.5	3297.5	3306.4
10°	3453.4	3471.2	3484.6	3484.6	3498.0
12.5°	3636.1	3645.0	3658.4	3658.4	3658.4
15°	3729.7	3725.2	3720.8	3716.3	3716.3
17.5°	3716.3	3698.5	3689.6	3680.7	3685.1
20°	3618.3	3587.1	3578.2	3564.8	3573.7
22.5°	3449.0	3404.4	3386.6	3364.3	3373.2
25°	3195.0	3141.5	3132.6	3105.8	3119.2
27.5°	2900.9	2874.1	2869.7	2865.2	2887.5
30°	2624.6	2633.5	2638.0	2646.9	2669.2
32.5°	2370.6	2388.4	2392.9	2397.3	2428.5
35°	2121.1	2098.8	2121.1	2112.2	2138.9
37.5°	1849.2	1831.4	1813.6	1791.3	1809.1
40°	1622.0	1590.8	1537.3	1510.6	1515.0
42.5°	1443.7	1403.6	1359.1	1332.3	1332.3
45°	1327.9	1278.9	1238.8	1220.9	1220.9
47.5°	1238.8	1216.5	1194.2	1180.8	1180.8
50°	1203.1	1176.4	1163.0	1154.1	1154.1
52.5°	1176.4	1149.7	1136.3	1127.4	1118.5
55°	1154.1	1114.0	1100.6	1096.2	1096.2
57.5°	1122.9	1087.3	1069.4	1065.0	1065.0
60°	1073.9	1047.2	1029.3	1024.9	1024.9
62.5°	1024.9	998.1	980.3	980.3	980.3
63°	1016.0	984.8	971.4	971.4	971.4
65°	975.9	944.7	931.3	931.3	926.9
67.5°	922.4	891.2	882.3	882.3	873.4
70°	860.0	833.3	824.4	828.8	811.0
72.5°	797.6	770.9	757.5	757.5	739.7
75°	726.3	699.6	681.8	677.3	659.5
77.5°	646.1	623.8	606.0	588.2	579.3
80°	561.5	543.6	521.4	508.0	494.6
82.5°	472.3	454.5	441.1	459.0	392.1
85°	369.8	352.0	334.2	360.9	280.7
87.5°	271.8	262.9	245.1	213.9	187.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)