

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: McGRAW-EDISON

Report Number: P192195

Luminaire Tested: **GLEON-AF-07-LED-E1-T2R-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192195
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-07-LED-E1-T2R-7050-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28900 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 226
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: 25 FT

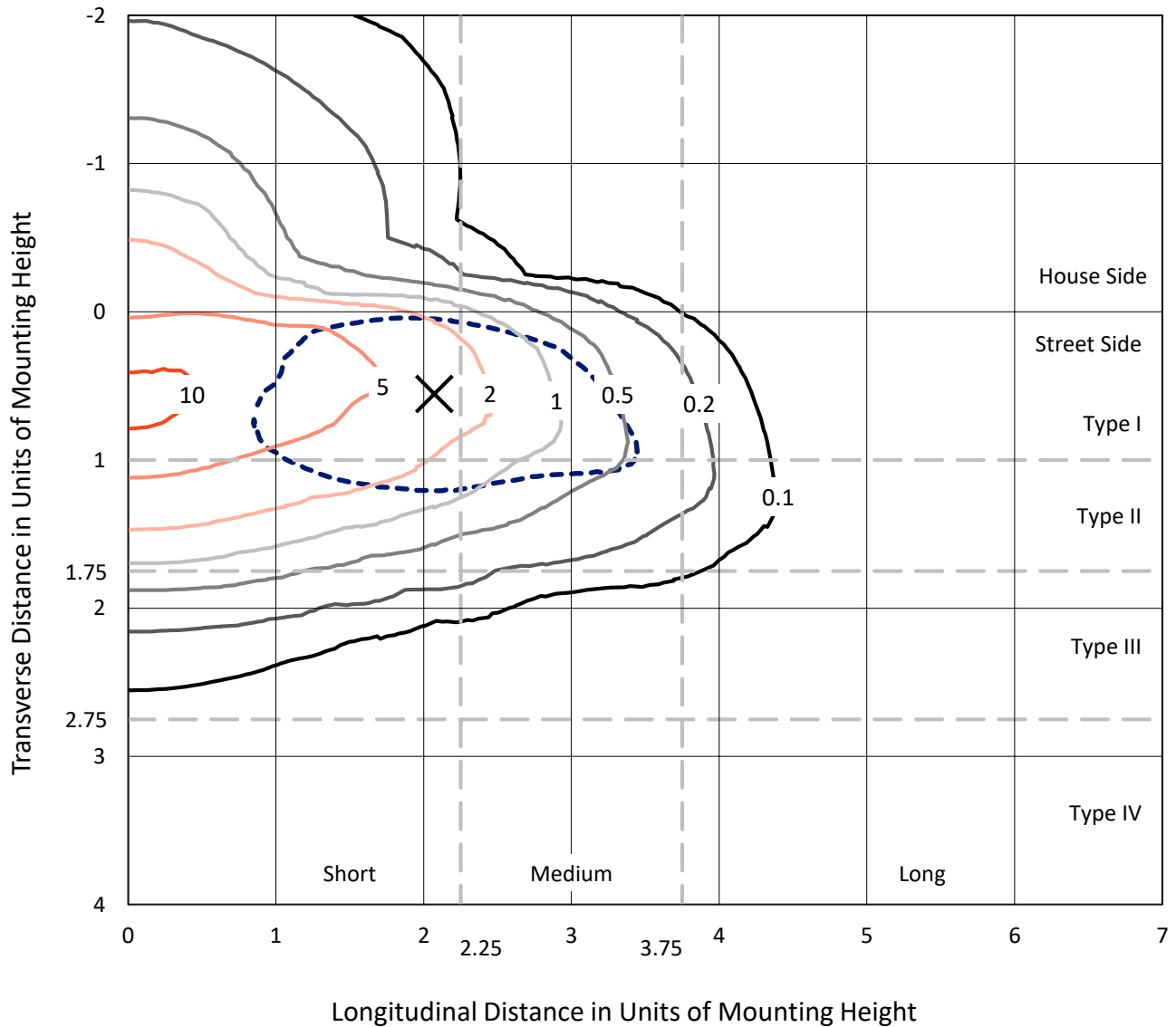


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Iso-Footcandle Lines of Horizontal Illumination

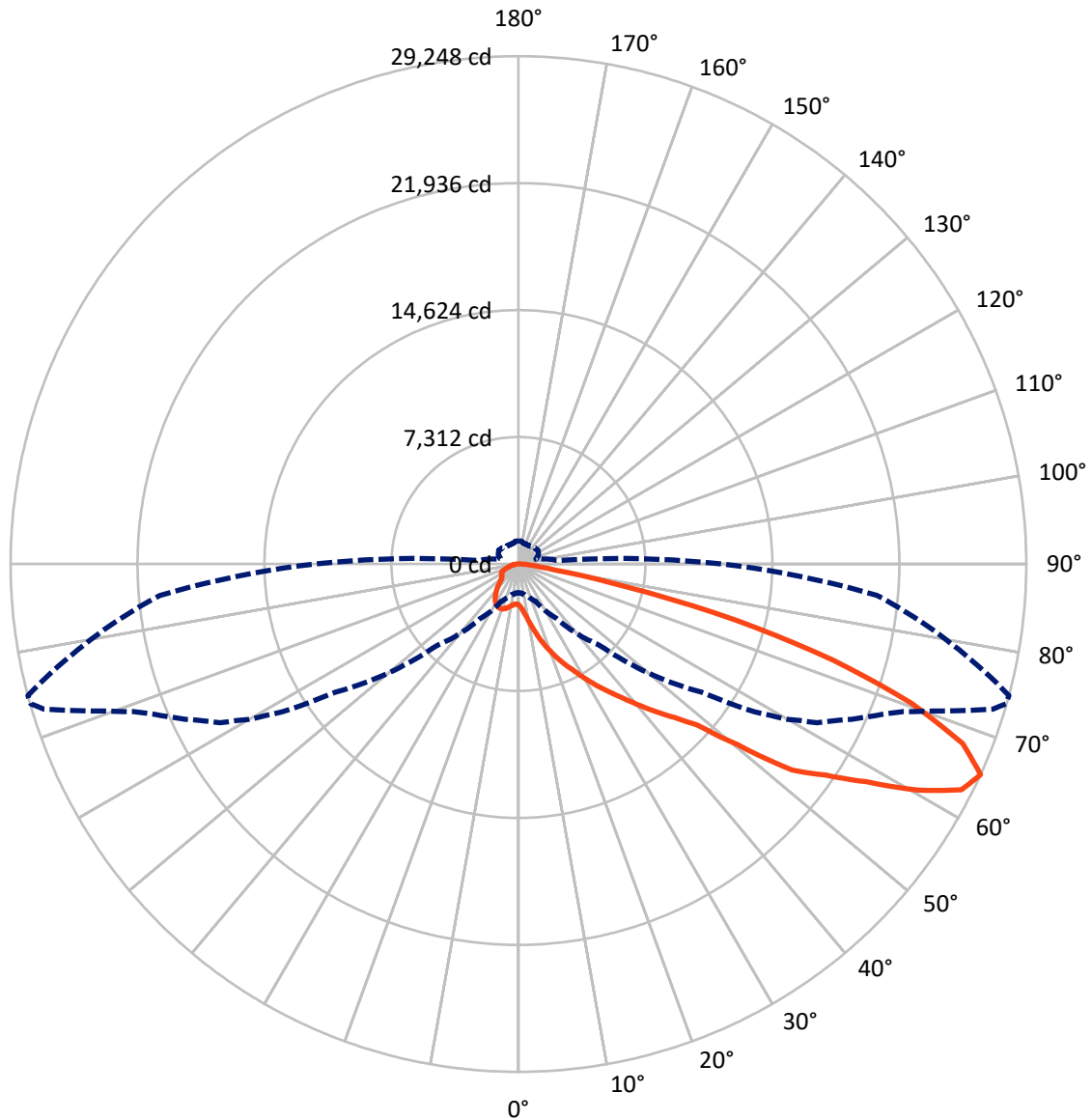
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4455.7	0.0	4455.7
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	24444.3	0.0	24444.3
	% Fixture	84.6	0.0	84.6
Total	Lumens	28900.0	0.0	28900.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.3	1.0
10°-20°	1134.3	3.9
20°-30°	2327.2	8.1
30°-40°	3915.4	13.5
40°-50°	5409.9	18.7
50°-60°	6753.2	23.4
60°-70°	6077.2	21.0
70°-80°	2547.5	8.8
80°-90°	445.1	1.5
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°	28900.0	100.0
0°-180°	28900.0	100.0



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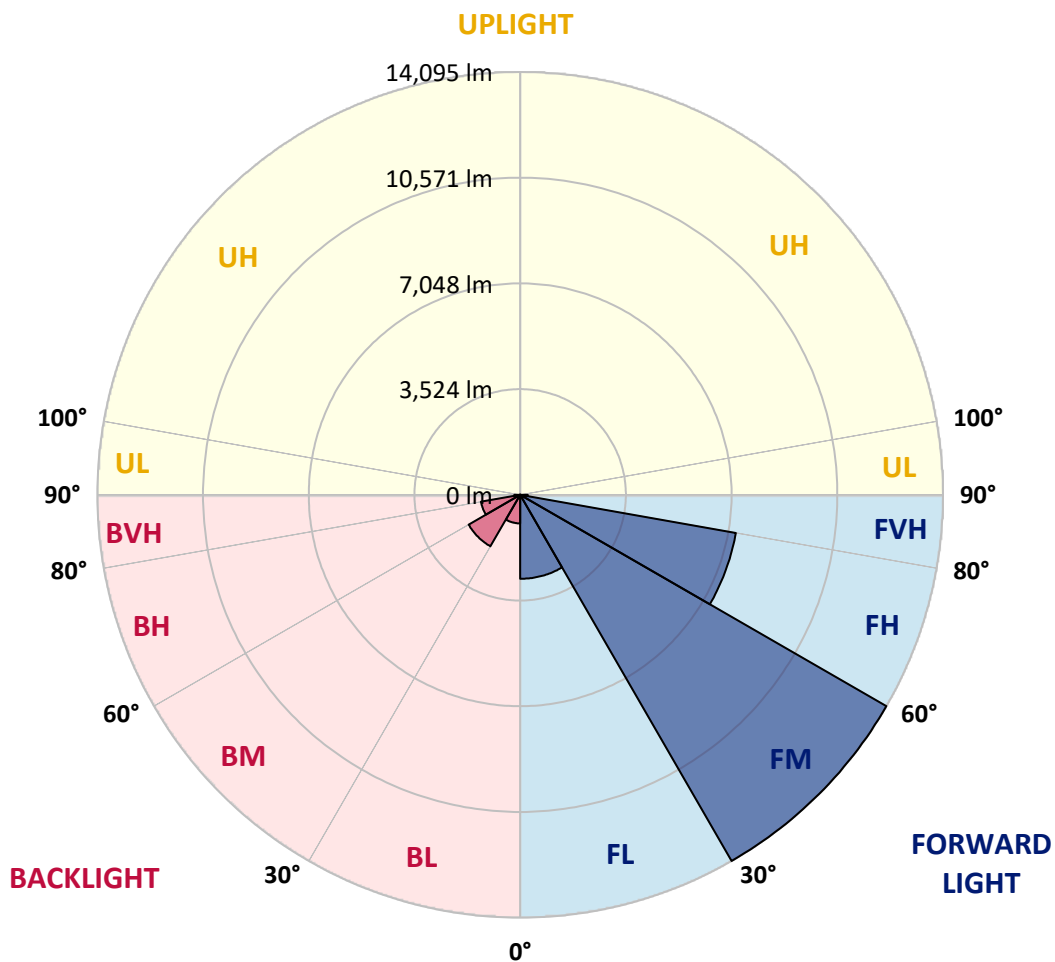
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2798.9	9.7			
FM (30°-60°)	14095.2	48.8			
FH (60°-80°)	7300.0	25.3			G3/7500
FVH (80°-90°)	250.2	0.9			G3/500
BL (0°-30°)	952.9	3.3	B2/1000		
BM (30°-60°)	1983.3	6.9	B2/2500		
BH (60°-80°)	1324.6	4.6	B3/2500		G3/2500
BVH (80°-90°)	194.9	0.7			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°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7
2.5°	2982.0	2949.2	2957.4	2902.7	2835.6	2748.1	2651.0	2649.6	2651.0	2641.4	2605.8
5°	4135.2	4095.5	4080.4	3957.3	3776.8	3519.6	3240.5	3210.5	3198.1	3166.7	3094.2
7.5°	4976.4	4954.5	4931.3	4838.2	4674.1	4386.8	4012.0	3947.7	3886.2	3871.1	3789.1
10°	5519.5	5514.0	5464.7	5440.1	5337.5	5088.6	4723.3	4661.8	4594.8	4571.5	4485.3
12.5°	5949.0	5947.6	5924.4	5931.2	5842.3	5661.7	5347.1	5291.0	5241.8	5170.6	5109.1
15°	6245.8	6247.2	6281.4	6319.7	6306.0	6184.3	5888.8	5864.2	5821.8	5772.5	5700.0
17.5°	6489.3	6496.1	6531.7	6601.5	6676.7	6667.1	6433.2	6412.7	6375.8	6308.7	6270.4
20°	7039.2	7065.2	6996.8	6996.8	7005.0	7041.9	6929.8	6913.3	6861.4	6825.8	6795.7
22.5°	7968.0	7998.1	7843.5	7686.2	7531.6	7419.5	7307.3	7327.8	7292.3	7267.6	7249.8
25°	9174.5	9197.7	8947.4	8682.0	8367.4	7957.1	7679.4	7667.1	7647.9	7632.9	7624.7
27.5°	10309.8	10319.4	10082.8	9694.3	9329.1	8739.5	8056.9	8041.9	8018.6	7989.9	7965.3
30°	11281.0	11278.3	11034.8	10664.1	10272.9	9620.4	8630.1	8583.5	8515.2	8437.2	8377.0
32.5°	12122.3	12118.2	11851.5	11467.1	11056.7	10493.1	9415.2	9319.5	9212.8	9060.9	8969.3
35°	12784.4	12781.6	12529.9	12129.1	11658.6	11315.2	10315.3	10197.7	10062.2	9858.4	9717.5
37.5°	13034.7	13034.7	12893.8	12620.2	12204.4	11969.1	11315.2	11173.0	11028.0	10796.8	10638.1
40°	12888.3	12891.1	12921.1	12870.5	12668.1	12487.5	12248.1	12163.3	12038.9	11830.9	11665.4
42.5°	12397.2	12412.3	12612.0	12856.9	12958.1	12929.4	13075.7	13037.4	12949.9	12789.8	12658.5
45°	11774.9	11821.4	12040.2	12502.6	13038.8	13311.0	13769.2	13773.3	13756.9	13670.8	13569.5
47.5°	10919.9	10985.6	11274.2	11899.3	12850.0	13681.7	14473.7	14510.6	14544.8	14488.8	14442.2
50°	9784.6	9862.5	10294.8	11123.7	12465.6	14066.1	15804.7	15971.6	16127.5	16108.3	16139.8
52.5°	8568.5	8660.2	9189.5	10112.9	11804.9	14155.0	16655.5	16927.7	17199.9	17422.9	17659.5
55°	7471.4	7422.2	7951.6	8924.2	10718.8	13754.2	17420.2	17748.5	18052.1	18325.7	18607.5
57.5°	5984.5	6065.3	6596.0	7557.6	9281.2	12622.9	17946.8	18426.9	18863.3	19316.1	19715.5
60°	4374.5	4455.2	5031.1	6007.8	7720.4	10907.6	17544.6	18272.4	18971.4	19664.9	20206.6
62.5°	2641.4	2701.6	3209.1	4139.3	5953.1	8873.5	15752.7	16707.5	17736.1	18565.1	19395.4
65°	1644.2	1678.4	1865.8	2377.4	3823.3	6624.7	12870.5	13911.5	15019.5	16071.4	16934.6
67.5°	1346.0	1358.3	1392.5	1502.0	2099.7	4319.8	9579.4	10501.3	11501.3	12519.0	13479.2
70°	1210.6	1202.4	1202.4	1209.2	1346.0	2322.7	6271.8	6872.3	7705.4	8590.4	9468.6
72.5°	1092.9	1084.7	1069.7	1049.2	1098.4	1417.1	3241.9	3694.7	4295.2	5081.7	5923.0
75°	982.1	971.2	953.4	927.4	961.6	1069.7	1556.7	1746.8	2039.5	2458.1	2927.3
77.5°	867.2	853.6	837.2	818.0	861.8	831.7	912.4	980.8	1092.9	1227.0	1403.5
80°	737.3	725.0	719.5	709.9	761.9	633.3	644.3	686.7	752.3	824.8	906.9
82.5°	577.3	577.3	599.1	603.2	660.7	455.5	481.5	518.4	552.6	590.9	629.2
85°	380.3	383.0	456.9	485.6	521.2	306.4	361.1	373.4	400.8	422.7	439.1
87.5°	119.0	128.6	279.1	309.1	299.6	173.7	221.6	227.1	246.2	261.3	274.9
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7
2.5°	2605.8	2589.4	2574.4	2573.0	2562.1	2547.0	2552.5	2529.2	2530.6	2518.3	2504.6
5°	3064.1	3053.1	2998.4	2983.4	2942.3	2916.4	2912.3	2857.5	2850.7	2819.2	2785.0
7.5°	3723.4	3687.8	3611.2	3574.3	3504.6	3452.6	3427.9	3355.4	3319.9	3237.8	3200.9
10°	4414.2	4369.1	4274.7	4222.7	4155.7	4072.2	4027.1	3921.8	3880.7	3805.5	3715.2
12.5°	5054.4	5009.2	4912.1	4872.4	4783.5	4694.6	4645.4	4526.4	4473.0	4352.6	4281.5
15°	5646.7	5601.5	5516.7	5475.7	5386.8	5314.3	5248.6	5131.0	5068.1	4955.9	4862.9
17.5°	6221.2	6173.3	6099.4	6062.5	5976.3	5902.5	5831.3	5720.5	5656.3	5544.1	5460.6
20°	6754.7	6719.1	6665.8	6616.5	6530.3	6463.3	6378.5	6282.7	6189.7	6107.7	6028.3
22.5°	7219.8	7206.1	7148.6	7126.7	7052.9	6995.4	6921.6	6827.2	6760.1	6656.2	6582.3
25°	7620.5	7616.4	7589.1	7582.2	7530.3	7475.6	7459.1	7381.2	7319.6	7228.0	7151.4
27.5°	7965.3	7969.4	7962.5	7981.7	7968.0	7943.4	7944.7	7918.8	7883.2	7806.6	7739.6
30°	8348.3	8326.4	8338.7	8366.1	8374.3	8377.0	8422.1	8437.2	8434.4	8383.8	8351.0
32.5°	8890.0	8838.0	8790.1	8786.0	8813.4	8824.3	8900.9	8940.6	8974.8	8987.1	8992.5
35°	9580.7	9476.8	9376.9	9323.6	9277.1	9289.4	9344.1	9408.4	9483.6	9535.6	9597.2
37.5°	10450.7	10323.5	10147.1	10021.2	9989.7	9921.4	9956.9	10007.5	10081.4	10162.1	10268.8
40°	11505.4	11312.5	11114.2	10947.3	10857.0	10731.1	10729.8	10720.2	10765.3	10840.6	10991.0
42.5°	12520.4	12349.4	12138.7	11963.6	11846.0	11677.7	11643.5	11554.6	11575.1	11640.8	11787.2
45°	13471.0	13330.1	13201.6	12999.1	12899.3	12717.3	12659.9	12554.6	12495.7	12525.8	12672.2
47.5°	14391.6	14301.4	14167.3	14036.0	13959.4	13796.6	13722.7	13647.5	13572.3	13569.5	13722.7
50°	16186.3	16138.4	15979.8	15843.0	15879.9	15680.2	15692.5	15490.1	15581.7	15592.6	15914.1
52.5°	17872.9	18039.8	18157.5	18301.1	18394.1	18411.9	18473.4	18565.1	18675.9	18894.8	19193.0
55°	18838.7	19048.0	19169.7	19279.1	19459.7	19498.0	19600.6	19722.3	19819.4	20065.7	20318.7
57.5°	19986.3	20374.8	20563.6	20737.3	20980.8	21073.8	21244.8	21377.5	21503.3	21794.7	22101.1
60°	20693.5	21166.8	21551.2	21826.2	22131.2	22350.1	22608.6	22816.5	23112.0	23460.8	23917.7
62.5°	20131.3	20826.2	21336.4	21808.4	22222.8	22641.4	23012.1	23400.6	23849.3	24377.3	25085.8
65°	17892.1	18599.3	19473.4	19963.1	20511.6	21157.3	21720.8	22350.1	22961.5	23730.3	24778.1
67.5°	14403.9	15226.1	16208.2	16702.0	17332.6	18053.5	18685.5	19454.2	20168.3	21099.8	22395.2
70°	10382.3	11445.2	12271.4	12787.1	13523.0	14265.8	14875.9	15770.5	16361.4	17316.2	18655.4
72.5°	6574.1	7412.6	8424.9	9074.6	9728.5	10480.8	11104.6	11876.1	12427.3	13297.3	14510.6
75°	3534.6	4152.9	5042.1	5659.0	6359.3	7002.3	7732.7	8249.8	8657.4	9345.5	10330.4
77.5°	1656.5	2032.7	2482.7	2957.4	3432.1	3927.2	4408.7	4827.3	5002.4	5396.4	5977.7
80°	1005.4	1127.1	1258.5	1404.8	1603.2	1763.2	1975.2	2128.4	2139.4	2263.9	2441.7
82.5°	671.6	716.8	756.4	793.4	844.0	883.7	928.8	982.1	1004.0	1032.8	1090.2
85°	458.2	480.1	488.3	511.6	506.1	519.8	537.6	555.4	564.9	563.6	589.6
87.5°	281.8	292.7	298.2	303.7	299.6	294.1	302.3	311.9	314.6	306.4	309.1
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7
2.5°	2507.4	2495.0	2482.7	2474.5	2471.8	2399.3	2367.8	2347.3	2303.5	2268.0	2239.2
5°	2765.9	2739.9	2719.4	2694.8	2681.1	2497.8	2430.8	2384.2	2307.6	2262.5	2221.5
7.5°	3181.7	3109.2	3066.8	3018.9	2977.9	2646.9	2536.1	2463.6	2356.9	2296.7	2250.2
10°	3653.7	3578.4	3511.4	3437.5	3373.2	2845.2	2683.8	2571.6	2430.8	2352.8	2291.2
12.5°	4180.3	4106.4	4021.6	3927.2	3845.2	3096.9	2872.6	2712.5	2519.7	2415.7	2329.5
15°	4802.7	4672.7	4570.1	4460.7	4365.0	3397.9	3092.8	2871.2	2614.0	2473.2	2358.3
17.5°	5381.3	5244.5	5105.0	5009.2	4898.4	3735.7	3314.4	3032.6	2692.0	2510.1	2363.7
20°	5946.2	5797.1	5676.8	5548.2	5431.9	4085.9	3551.1	3174.9	2742.6	2511.5	2329.5
22.5°	6444.2	6351.1	6217.1	6077.6	5959.9	4436.1	3772.7	3295.3	2761.8	2480.0	2269.3
25°	7010.5	6912.0	6747.8	6630.2	6498.9	4793.1	3990.2	3388.3	2750.8	2421.2	2176.3
27.5°	7615.1	7505.6	7337.4	7214.3	7055.6	5163.8	4189.9	3455.3	2709.8	2325.4	2051.8
30°	8245.7	8145.8	7980.3	7855.8	7695.8	5556.4	4412.8	3500.4	2627.7	2192.7	1906.8
32.5°	8922.8	8839.3	8675.2	8545.2	8374.3	5981.8	4620.8	3514.1	2503.3	2035.4	1753.6
35°	9565.7	9508.2	9370.1	9248.3	9070.5	6384.0	4841.0	3507.3	2355.5	1863.1	1614.1
37.5°	10289.3	10255.1	10186.7	10032.2	9814.7	6929.8	5105.0	3478.6	2175.0	1692.1	1507.4
40°	11060.8	11063.5	10989.7	10884.4	10681.9	7591.8	5419.6	3422.5	1978.0	1541.6	1410.3
42.5°	11877.4	11919.8	11884.3	11809.0	11614.8	8259.4	5795.8	3354.1	1786.5	1395.3	1314.5
45°	12813.1	12865.1	12919.8	12809.0	12620.2	9140.3	6291.0	3265.2	1579.9	1273.5	1248.9
47.5°	13892.4	13974.4	14023.7	14025.0	13836.3	10231.9	7095.3	3211.8	1396.6	1191.4	1217.4
50°	16169.9	16195.9	16312.2	16514.6	16369.6	12758.4	8500.1	3179.0	1272.1	1140.8	1194.2
52.5°	19451.5	19737.4	19938.5	19924.8	19727.8	14362.9	9274.3	3009.4	1198.3	1121.7	1183.2
55°	20787.9	21144.9	21517.0	21615.5	21462.3	15732.2	10006.2	2839.8	1162.7	1135.4	1187.3
57.5°	22568.9	23170.8	23681.0	23895.8	23674.2	17484.4	10969.2	2750.8	1151.8	1172.3	1213.3
60°	24649.5	25393.6	26063.9	26449.6	26449.6	19498.0	11967.7	2713.9	1136.7	1227.0	1257.1
62.5°	25985.9	27078.9	28091.1	28656.1	28639.6	20900.1	12410.9	2588.1	1102.5	1265.3	1317.3
65°	25991.4	27290.9	28580.8	29215.5	29248.4	20727.7	11679.1	2285.8	1039.6	1270.8	1377.5
67.5°	23824.6	25210.3	26713.6	27423.6	27587.7	19080.8	10110.1	1879.5	937.0	1216.1	1399.4
70°	20121.8	21474.6	23009.4	23707.0	23998.4	16265.7	8143.1	1448.6	805.7	1095.7	1354.2
72.5°	15852.5	17179.4	18247.7	18758.0	18985.0	12432.8	5929.8	1094.3	660.7	923.3	1232.5
75°	11223.6	12219.4	12787.1	12900.6	12936.2	7494.7	3603.0	813.9	544.4	718.1	1041.0
77.5°	6334.7	6761.5	6715.0	6765.6	6344.3	2893.1	1569.0	582.7	448.7	545.8	807.1
80°	2473.2	2549.8	2395.2	2347.3	2153.1	1076.5	692.2	406.3	358.4	413.1	564.9
82.5°	1090.2	1125.8	1092.9	1101.2	1053.3	555.4	414.5	294.1	273.6	302.3	374.8
85°	600.5	611.4	608.7	626.5	600.5	221.6	197.0	180.6	191.5	205.2	240.7
87.5°	292.7	295.5	285.9	300.9	291.4	112.2	97.1	102.6	112.2	114.9	114.9
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):

	135°	145°	155°	165°	175°	180°
0°	2348.7	2348.7	2348.7	2348.7	2348.7	2348.7
2.5°	2218.7	2207.8	2209.2	2206.4	2200.9	2200.9
5°	2199.6	2188.6	2188.6	2185.9	2179.1	2180.4
7.5°	2218.7	2200.9	2194.1	2184.5	2175.0	2175.0
10°	2240.6	2209.2	2190.0	2173.6	2161.3	2161.3
12.5°	2257.0	2207.8	2176.3	2154.4	2142.1	2142.1
15°	2262.5	2198.2	2154.4	2128.4	2117.5	2116.1
17.5°	2244.7	2161.3	2107.9	2077.8	2064.2	2060.1
20°	2190.0	2094.2	2030.0	1995.8	1976.6	1969.8
22.5°	2107.9	1998.5	1923.3	1887.7	1863.1	1859.0
25°	1993.0	1875.4	1801.5	1767.3	1753.6	1749.5
27.5°	1859.0	1749.5	1686.6	1664.7	1652.4	1651.1
30°	1731.8	1638.7	1592.2	1575.8	1560.8	1558.0
32.5°	1612.7	1553.9	1536.1	1512.9	1477.3	1473.2
35°	1527.9	1522.5	1510.2	1458.2	1414.4	1402.1
37.5°	1476.0	1526.6	1463.6	1361.1	1329.6	1326.9
40°	1445.9	1484.2	1376.1	1340.5	1343.3	1340.5
42.5°	1377.5	1417.1	1378.8	1362.4	1373.4	1376.1
45°	1309.1	1352.8	1399.4	1388.4	1414.4	1414.4
47.5°	1270.8	1336.4	1398.0	1398.0	1436.3	1450.0
50°	1227.0	1322.8	1376.1	1395.3	1425.3	1414.4
52.5°	1224.3	1299.5	1344.6	1378.8	1392.5	1380.2
55°	1228.4	1280.4	1313.2	1351.5	1367.9	1369.3
57.5°	1233.8	1269.4	1291.3	1309.1	1358.3	1358.3
60°	1247.5	1259.8	1272.1	1281.7	1346.0	1347.4
62.5°	1269.4	1250.3	1247.5	1257.1	1339.2	1333.7
65°	1303.6	1236.6	1216.1	1225.6	1332.3	1315.9
67.5°	1350.1	1216.1	1176.4	1183.2	1326.9	1291.3
70°	1392.5	1183.2	1127.1	1120.3	1274.9	1212.0
72.5°	1396.6	1144.9	1058.8	1038.2	1108.0	1047.8
75°	1328.2	1118.9	983.5	923.3	915.1	906.9
77.5°	1196.9	1103.9	896.0	801.6	785.2	790.6
80°	1001.3	1047.8	790.6	678.5	767.4	757.8
82.5°	748.2	924.7	671.6	600.5	599.1	529.4
85°	415.8	720.9	547.2	450.0	313.2	303.7
87.5°	116.3	400.8	383.0	254.4	173.7	180.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)