

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: P191415

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191415
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
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44869.7 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

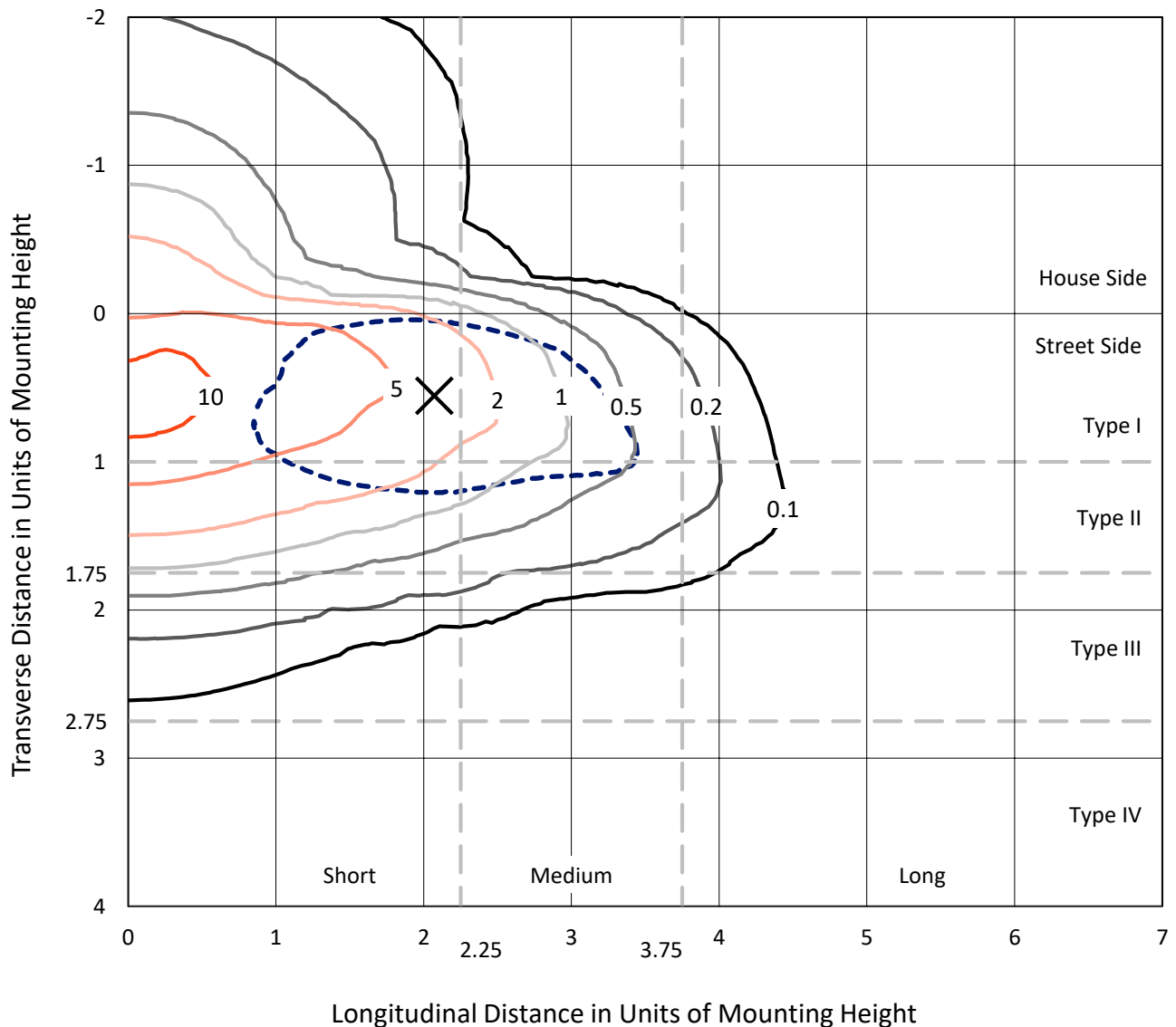
Input Watts (W): 391
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

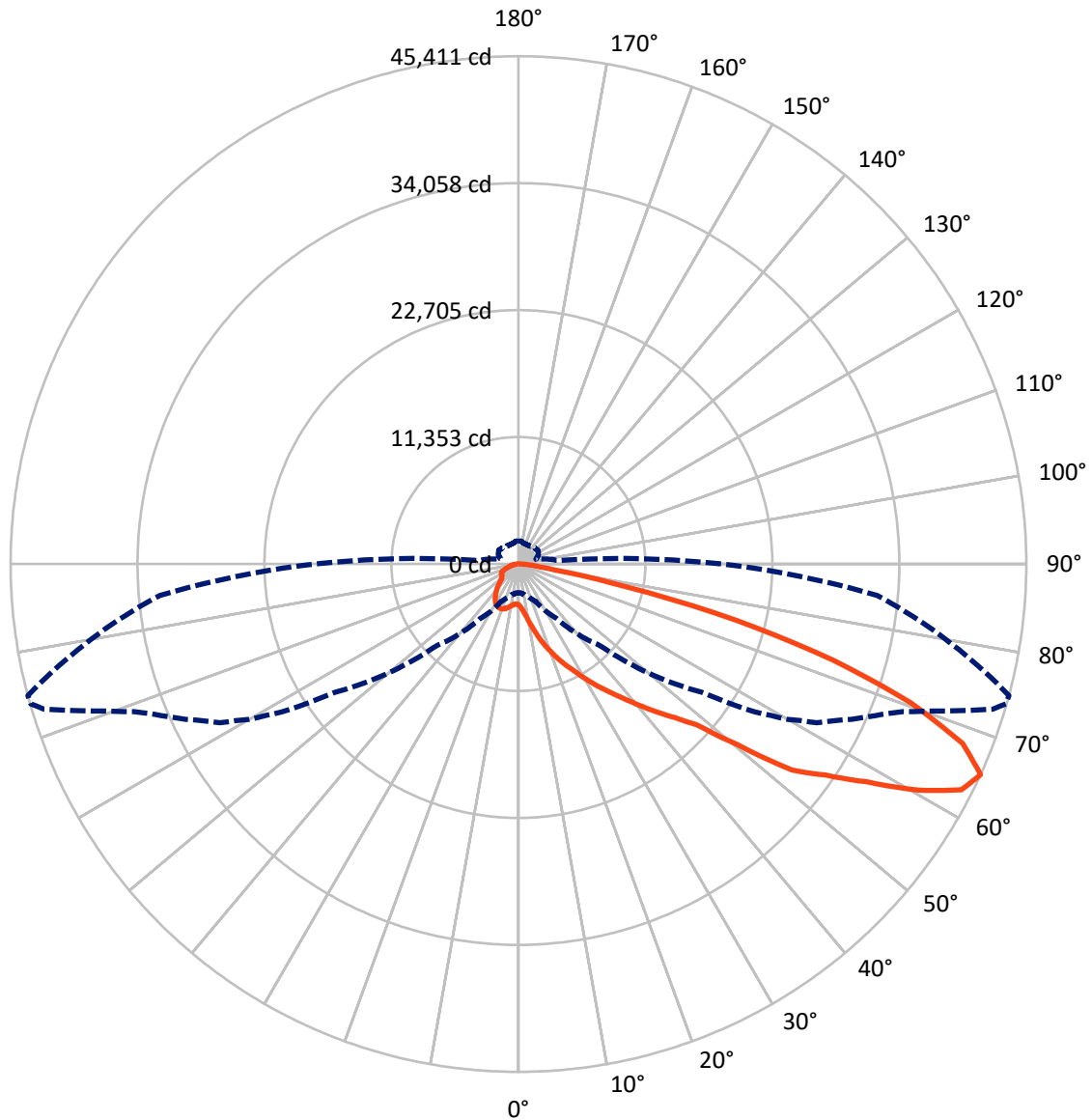
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.6 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	6917.9	0.0	6917.9
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	37951.8	0.0	37951.8
	% Fixture	84.6	0.0	84.6
Total	Lumens	44869.7	0.0	44869.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.7	1.0
10°-20°	1761.1	3.9
20°-30°	3613.2	8.1
30°-40°	6078.9	13.5
40°-50°	8399.4	18.7
50°-60°	10484.9	23.4
60°-70°	9435.3	21.0
70°-80°	3955.2	8.8
80°-90°	691.0	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°	44869.7	100.0
0°-180°	44869.7	100.0

Coefficient of Utilization



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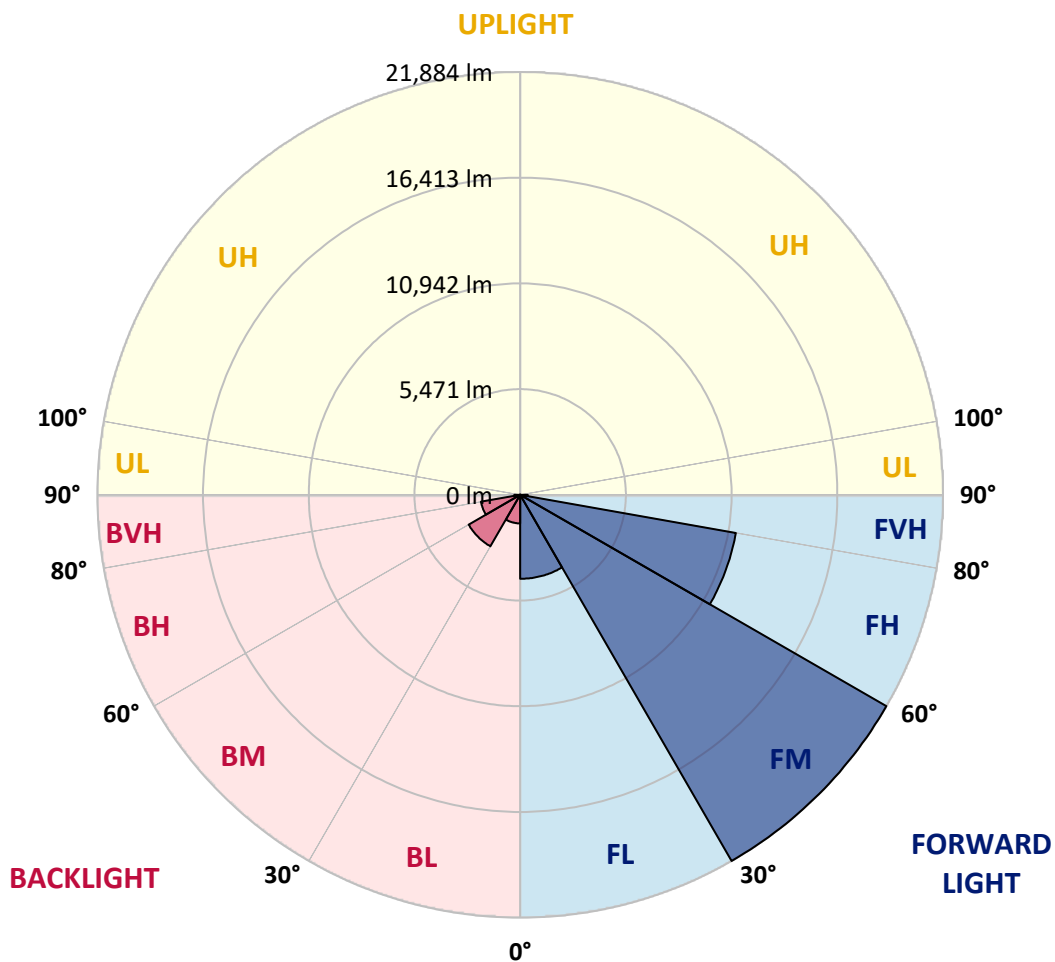
CATALOG NUMBER: GLEON-AF-07-LED-E1-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4345.5	9.7			
FM (30°-60°)	21884.0	48.8			
FH (60°-80°)	11333.9	25.3			G4/12000
FVH (80°-90°)	388.4	0.9			G3/500
BL (0°-30°)	1479.4	3.3	B3/2500		
BM (30°-60°)	3079.2	6.9	B3/5000		
BH (60°-80°)	2056.6	4.6	B3/2500		G3/2500
BVH (80°-90°)	302.6	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5
2.5°	4629.9	4578.8	4591.6	4506.6	4402.6	4266.6	4115.8	4113.8	4115.8	4101.0	4045.8
5°	6420.1	6358.6	6335.2	6144.0	5863.8	5464.5	5031.2	4984.5	4965.4	4916.5	4804.0
7.5°	7726.2	7692.3	7656.2	7511.8	7256.9	6810.9	6229.1	6129.2	6033.7	6010.2	5882.9
10°	8569.5	8561.0	8484.5	8446.3	8286.9	7900.5	7333.4	7237.8	7133.8	7097.6	6963.8
12.5°	9236.3	9234.2	9198.1	9208.7	9070.6	8790.3	8301.9	8214.8	8138.3	8027.9	7932.3
15°	9697.2	9699.3	9752.4	9811.8	9790.6	9601.6	9142.8	9104.7	9038.8	8962.4	8849.8
17.5°	10075.1	10085.8	10141.0	10249.4	10366.2	10351.2	9988.1	9956.3	9898.9	9794.9	9735.4
20°	10928.9	10969.3	10863.1	10863.1	10875.8	10933.2	10759.1	10733.5	10652.8	10597.7	10550.9
22.5°	12371.0	12417.7	12177.7	11933.5	11693.5	11519.3	11345.2	11377.1	11321.8	11283.7	11256.0
25°	14244.2	14280.3	13891.6	13479.6	12991.2	12354.0	11922.9	11903.8	11874.0	11850.7	11837.9
27.5°	16006.9	16021.8	15654.3	15051.2	14484.2	13568.8	12509.1	12485.6	12449.5	12405.0	12366.8
30°	17514.8	17510.6	17132.5	16557.0	15949.5	14936.5	13398.9	13326.7	13220.5	13099.4	13006.0
32.5°	18820.9	18814.5	18400.4	17803.6	17166.4	16291.5	14618.0	14469.2	14303.6	14067.9	13925.6
35°	19848.8	19844.5	19453.8	18831.5	18100.9	17567.9	16015.4	15832.7	15622.5	15306.0	15087.3
37.5°	20237.4	20237.4	20018.7	19593.9	18948.3	18583.0	17567.9	17347.0	17121.8	16763.0	16516.6
40°	20010.2	20014.4	20061.2	19982.6	19668.3	19388.0	19016.2	18884.6	18691.4	18368.5	18111.5
42.5°	19247.7	19271.2	19581.2	19961.4	20118.5	20073.9	20301.2	20241.7	20105.8	19857.3	19653.4
45°	18281.5	18353.7	18693.5	19411.3	20243.8	20666.5	21377.9	21384.3	21358.8	21225.0	21067.9
47.5°	16954.1	17056.1	17504.1	18474.7	19950.7	21242.0	22471.7	22529.0	22582.0	22495.0	22422.8
50°	15191.3	15312.4	15983.5	17270.6	19353.9	21838.8	24538.1	24797.1	25039.3	25009.6	25058.4
52.5°	13303.4	13445.7	14267.5	15701.1	18328.2	21976.8	25859.1	26281.8	26704.3	27050.5	27417.9
55°	11600.1	11523.6	12345.5	13855.5	16641.9	21354.5	27046.3	27555.9	28027.4	28452.3	28889.7
57.5°	9291.5	9416.8	10240.9	11733.9	14409.8	19598.2	27864.0	28609.4	29286.9	29989.8	30610.0
60°	6791.8	6917.1	7811.3	9327.6	11986.6	16935.0	27239.5	28369.4	29454.6	30531.4	31372.4
62.5°	4101.0	4194.4	4982.4	6426.6	9242.7	13776.9	24457.4	25939.8	27536.8	28823.9	30113.0
65°	2552.8	2605.9	2896.8	3691.1	5936.0	10285.5	19982.6	21598.8	23319.1	24952.2	26292.3
67.5°	2089.8	2108.9	2162.0	2331.9	3260.0	6706.9	14872.8	16304.2	17856.7	19436.8	20927.6
70°	1879.6	1866.8	1866.8	1877.4	2089.8	3606.2	9737.5	10669.9	11963.2	13337.3	14700.7
72.5°	1696.9	1684.2	1660.8	1628.9	1705.4	2200.3	5033.3	5736.3	6668.6	7889.8	9195.9
75°	1524.9	1507.8	1480.3	1439.9	1493.0	1660.8	2416.8	2712.0	3166.5	3816.4	4544.9
77.5°	1346.5	1325.2	1299.8	1270.0	1338.0	1291.3	1416.6	1522.8	1696.9	1905.0	2179.0
80°	1144.7	1125.6	1117.1	1102.2	1182.9	983.3	1000.3	1066.1	1168.1	1280.6	1408.1
82.5°	896.2	896.2	930.2	936.6	1025.8	707.2	747.6	805.0	858.1	917.5	976.9
85°	590.4	594.6	709.3	753.9	809.2	475.8	560.7	579.8	622.3	656.2	681.7
87.5°	184.7	199.7	433.2	480.0	465.1	269.8	344.0	352.5	382.3	405.6	426.9
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°	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5
2.5°	4045.8	4020.3	3997.0	3994.8	3977.8	3954.4	3963.0	3926.9	3928.9	3909.8	3888.6
5°	4757.2	4740.3	4655.3	4631.9	4568.2	4527.9	4521.5	4436.5	4425.9	4377.1	4324.0
7.5°	5780.9	5725.7	5606.8	5549.4	5441.1	5360.4	5322.2	5209.6	5154.4	5027.0	4969.6
10°	6853.5	6783.3	6636.8	6556.1	6452.1	6322.4	6252.4	6088.9	6025.2	5908.4	5768.2
12.5°	7847.4	7777.3	7626.5	7564.9	7426.8	7288.8	7212.3	7027.6	6944.7	6757.8	6647.4
15°	8766.9	8696.8	8565.2	8501.4	8363.4	8250.8	8148.9	7966.2	7868.5	7694.4	7550.0
17.5°	9658.9	9584.6	9469.9	9412.6	9278.8	9164.1	9053.6	8881.7	8781.8	8607.6	8478.1
20°	10487.2	10432.0	10349.2	10272.7	10138.9	10034.8	9903.2	9754.4	9610.1	9482.7	9359.5
22.5°	11209.3	11188.0	11098.8	11064.8	10950.2	10861.0	10746.3	10599.7	10495.7	10334.3	10219.6
25°	11831.6	11825.2	11782.7	11772.1	11691.4	11606.4	11580.9	11459.9	11364.3	11222.0	11103.1
27.5°	12366.8	12373.1	12362.5	12392.2	12371.0	12332.8	12334.8	12294.5	12239.3	12120.3	12016.3
30°	12961.4	12927.4	12946.6	12989.0	13001.7	13006.0	13076.1	13099.4	13095.2	13016.6	12965.6
32.5°	13802.4	13721.7	13647.4	13641.0	13683.5	13700.5	13819.3	13881.0	13934.1	13953.2	13961.7
35°	14874.9	14713.5	14558.4	14475.7	14403.5	14422.6	14507.5	14607.3	14724.1	14804.9	14900.4
37.5°	16225.6	16028.1	15754.2	15558.8	15509.9	15403.7	15458.9	15537.5	15652.2	15777.5	15943.2
40°	17863.1	17563.7	17255.6	16996.5	16856.4	16661.0	16658.9	16644.0	16714.1	16830.9	17064.6
42.5°	19438.9	19173.5	18846.3	18574.5	18391.8	18130.7	18077.6	17939.5	17971.4	18073.3	18300.6
45°	20914.9	20696.1	20496.6	20182.2	20027.2	19744.7	19655.5	19492.0	19400.7	19447.4	19674.6
47.5°	22344.2	22204.1	21995.9	21792.0	21673.2	21420.4	21305.7	21188.9	21072.1	21067.9	21305.7
50°	25130.6	25056.3	24809.9	24597.6	24654.9	24344.8	24363.9	24049.6	24191.9	24208.9	24707.9
52.5°	27749.3	28008.3	28191.0	28414.0	28558.4	28586.1	28681.6	28823.9	28995.8	29335.7	29798.7
55°	29248.6	29573.6	29762.5	29932.5	30212.9	30272.3	30431.6	30620.6	30771.4	31153.7	31546.6
57.5°	31030.5	31633.6	31926.7	32196.5	32574.4	32718.9	32984.3	33190.4	33385.7	33838.1	34313.9
60°	32128.4	32863.3	33460.1	33887.0	34360.5	34700.3	35101.7	35424.6	35883.3	36424.8	37134.2
62.5°	31255.5	32334.5	33126.6	33859.4	34502.8	35152.7	35728.3	36331.4	37028.1	37847.7	38947.9
65°	27778.9	28877.0	30234.0	30994.4	31846.0	32848.4	33723.4	34700.3	35649.6	36843.2	38470.0
67.5°	22363.3	23639.8	25164.6	25931.3	26910.4	28029.6	29010.8	30204.4	31312.9	32759.2	34770.4
70°	16119.5	17769.6	19052.4	19853.0	20995.7	22148.8	23096.1	24485.0	25402.4	26884.9	28964.0
72.5°	10206.9	11508.7	13080.4	14089.1	15104.3	16272.4	17240.8	18438.6	19294.5	20645.2	22529.0
75°	5487.8	6447.8	7828.2	8786.0	9873.4	10871.6	12005.7	12808.5	13441.4	14509.6	16038.7
77.5°	2571.9	3155.9	3854.7	4591.6	5328.6	6097.4	6845.0	7494.8	7766.7	8378.3	9280.9
80°	1561.0	1750.0	1953.8	2181.1	2489.0	2737.5	3066.7	3304.6	3321.6	3514.9	3791.0
82.5°	1042.8	1112.9	1174.4	1231.8	1310.4	1372.0	1442.1	1524.9	1558.9	1603.5	1692.7
85°	711.5	745.4	758.2	794.3	785.8	807.0	834.6	862.2	877.1	875.0	915.3
87.5°	437.5	454.5	463.0	471.5	465.1	456.6	469.3	484.3	488.5	475.8	480.0
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°	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5
2.5°	3892.8	3873.8	3854.7	3841.9	3837.7	3725.1	3676.3	3644.4	3576.4	3521.2	3476.6
5°	4294.2	4253.9	4222.0	4183.9	4162.6	3878.0	3774.0	3701.8	3582.8	3512.7	3449.0
7.5°	4939.9	4827.3	4761.5	4687.2	4623.4	4109.5	3937.4	3824.9	3659.3	3565.8	3493.6
10°	5672.6	5555.7	5451.7	5337.0	5237.2	4417.4	4166.9	3992.7	3774.0	3652.9	3557.3
12.5°	6490.2	6375.5	6243.9	6097.4	5969.9	4808.2	4460.0	4211.5	3912.0	3750.5	3616.7
15°	7456.6	7254.8	7095.5	6925.6	6776.9	5275.5	4801.8	4457.8	4058.6	3839.7	3661.3
17.5°	8355.0	8142.6	7925.9	7777.3	7605.2	5800.0	5146.0	4708.4	4179.6	3897.1	3669.8
20°	9232.0	9000.5	8813.6	8614.1	8433.5	6343.7	5513.3	4929.3	4258.1	3899.3	3616.7
22.5°	10005.1	9860.7	9652.6	9435.9	9253.3	6887.4	5857.4	5116.2	4287.9	3850.4	3523.3
25°	10884.3	10731.5	10476.6	10294.0	10090.1	7441.7	6195.1	5260.6	4270.9	3759.0	3378.9
27.5°	11823.1	11653.1	11391.9	11200.8	10954.5	8017.3	6505.1	5364.7	4207.2	3610.4	3185.7
30°	12802.1	12647.0	12390.1	12196.8	11948.4	8626.7	6851.3	5434.7	4079.7	3404.4	2960.5
32.5°	13853.4	13723.8	13469.0	13267.3	13001.7	9287.3	7174.2	5456.0	3886.5	3160.2	2722.7
35°	14851.5	14762.3	14547.9	14358.9	14082.8	9911.7	7516.0	5445.4	3657.2	2892.6	2506.0
37.5°	15975.0	15921.9	15815.7	15575.8	15238.1	10759.1	7925.9	5400.8	3376.8	2627.1	2340.4
40°	17172.9	17177.1	17062.4	16898.8	16584.6	11787.0	8414.4	5313.7	3071.0	2393.5	2189.6
42.5°	18440.7	18506.6	18451.4	18334.6	18033.0	12823.3	8998.4	5207.5	2773.6	2166.2	2041.0
45°	19893.4	19974.1	20059.0	19887.0	19593.9	14191.1	9767.2	5069.4	2452.9	1977.3	1939.0
47.5°	21569.0	21696.5	21772.9	21775.0	21482.0	15885.8	11016.1	4986.6	2168.3	1849.8	1890.2
50°	25105.2	25145.5	25326.0	25640.4	25415.2	19808.4	13197.1	4935.6	1975.1	1771.2	1854.1
52.5°	30200.1	30643.9	30956.1	30934.9	30629.1	22299.6	14399.2	4672.3	1860.4	1741.5	1837.0
55°	32275.0	32829.4	33407.0	33559.8	33322.0	24425.5	15535.5	4408.9	1805.2	1762.7	1843.5
57.5°	35040.2	35974.6	36766.8	37100.2	36756.2	27146.0	17030.6	4270.9	1788.2	1820.0	1883.8
60°	38270.4	39425.8	40466.4	41065.3	41065.3	30272.3	18580.9	4213.5	1764.9	1905.0	1951.8
62.5°	40345.4	42042.3	43613.8	44491.0	44465.4	32449.1	19269.0	4018.2	1711.8	1964.5	2045.2
65°	40353.9	42371.4	44374.2	45359.6	45410.5	32181.5	18132.8	3548.8	1614.1	1973.0	2138.7
67.5°	36989.8	39141.2	41475.2	42577.5	42832.3	29624.6	15696.8	2918.1	1454.7	1888.1	2172.6
70°	31240.7	33341.1	35724.0	36807.1	37259.4	25253.8	12642.9	2249.1	1250.9	1701.2	2102.6
72.5°	24612.4	26672.5	28331.1	29123.3	29475.8	19303.0	9206.6	1699.0	1025.8	1433.6	1913.5
75°	17425.6	18971.6	19853.0	20029.3	20084.5	11636.2	5594.0	1263.7	845.3	1115.0	1616.2
77.5°	9835.2	10497.8	10425.6	10504.2	9850.1	4491.8	2436.0	904.7	696.6	847.4	1253.0
80°	3839.7	3958.7	3718.7	3644.4	3342.8	1671.4	1074.6	630.8	556.4	641.4	877.1
82.5°	1692.7	1747.9	1696.9	1709.7	1635.3	862.2	643.5	456.6	424.7	469.3	582.0
85°	932.3	949.3	945.1	972.7	932.3	344.0	305.9	280.3	297.4	318.5	373.8
87.5°	454.5	458.7	443.9	467.2	452.3	174.1	150.8	159.3	174.1	178.4	178.4
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):

	135°	145°	155°	165°	175°	180°
0°	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5
2.5°	3444.8	3427.8	3429.9	3425.7	3417.2	3417.2
5°	3415.0	3398.0	3398.0	3393.7	3383.2	3385.3
7.5°	3444.8	3417.2	3406.5	3391.7	3376.8	3376.8
10°	3478.7	3429.9	3400.2	3374.7	3355.6	3355.6
12.5°	3504.2	3427.8	3378.9	3344.9	3325.8	3325.8
15°	3512.7	3412.9	3344.9	3304.6	3287.6	3285.5
17.5°	3485.1	3355.6	3272.7	3226.0	3204.8	3198.4
20°	3400.2	3251.4	3151.7	3098.6	3068.9	3058.2
22.5°	3272.7	3102.8	2986.0	2930.9	2892.6	2886.3
25°	3094.3	2911.7	2797.1	2744.0	2722.7	2716.3
27.5°	2886.3	2716.3	2618.7	2584.6	2565.6	2563.4
30°	2688.7	2544.3	2472.1	2446.6	2423.3	2419.0
32.5°	2504.0	2412.6	2385.0	2348.9	2293.7	2287.3
35°	2372.2	2363.7	2344.6	2263.9	2196.0	2176.8
37.5°	2291.5	2370.2	2272.5	2113.1	2064.3	2060.0
40°	2244.9	2304.3	2136.5	2081.3	2085.6	2081.3
42.5°	2138.7	2200.3	2140.7	2115.3	2132.2	2136.5
45°	2032.5	2100.4	2172.6	2155.7	2196.0	2196.0
47.5°	1973.0	2075.0	2170.5	2170.5	2229.9	2251.2
50°	1905.0	2053.7	2136.5	2166.2	2212.9	2196.0
52.5°	1900.7	2017.6	2087.6	2140.7	2162.0	2142.9
55°	1907.2	1987.9	2038.8	2098.3	2123.7	2125.9
57.5°	1915.7	1970.8	2004.9	2032.5	2108.9	2108.9
60°	1936.9	1956.0	1975.1	1989.9	2089.8	2091.9
62.5°	1970.8	1941.2	1936.9	1951.8	2079.1	2070.7
65°	2023.9	1919.9	1888.1	1902.9	2068.5	2043.0
67.5°	2096.1	1888.1	1826.5	1837.0	2060.0	2004.9
70°	2162.0	1837.0	1750.0	1739.3	1979.3	1881.6
72.5°	2168.3	1777.6	1643.8	1612.0	1720.3	1626.8
75°	2062.2	1737.3	1527.0	1433.6	1420.8	1408.1
77.5°	1858.3	1713.9	1391.1	1244.5	1219.1	1227.5
80°	1554.6	1626.8	1227.5	1053.4	1191.4	1176.6
82.5°	1161.7	1435.7	1042.8	932.3	930.2	821.9
85°	645.6	1119.2	849.6	698.7	486.3	471.5
87.5°	180.6	622.3	594.6	395.1	269.8	280.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)