

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: P191405

Luminaire Tested: **GLEON-AF-07-LED-E1-T2R-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191405
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-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36252.4 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 295
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

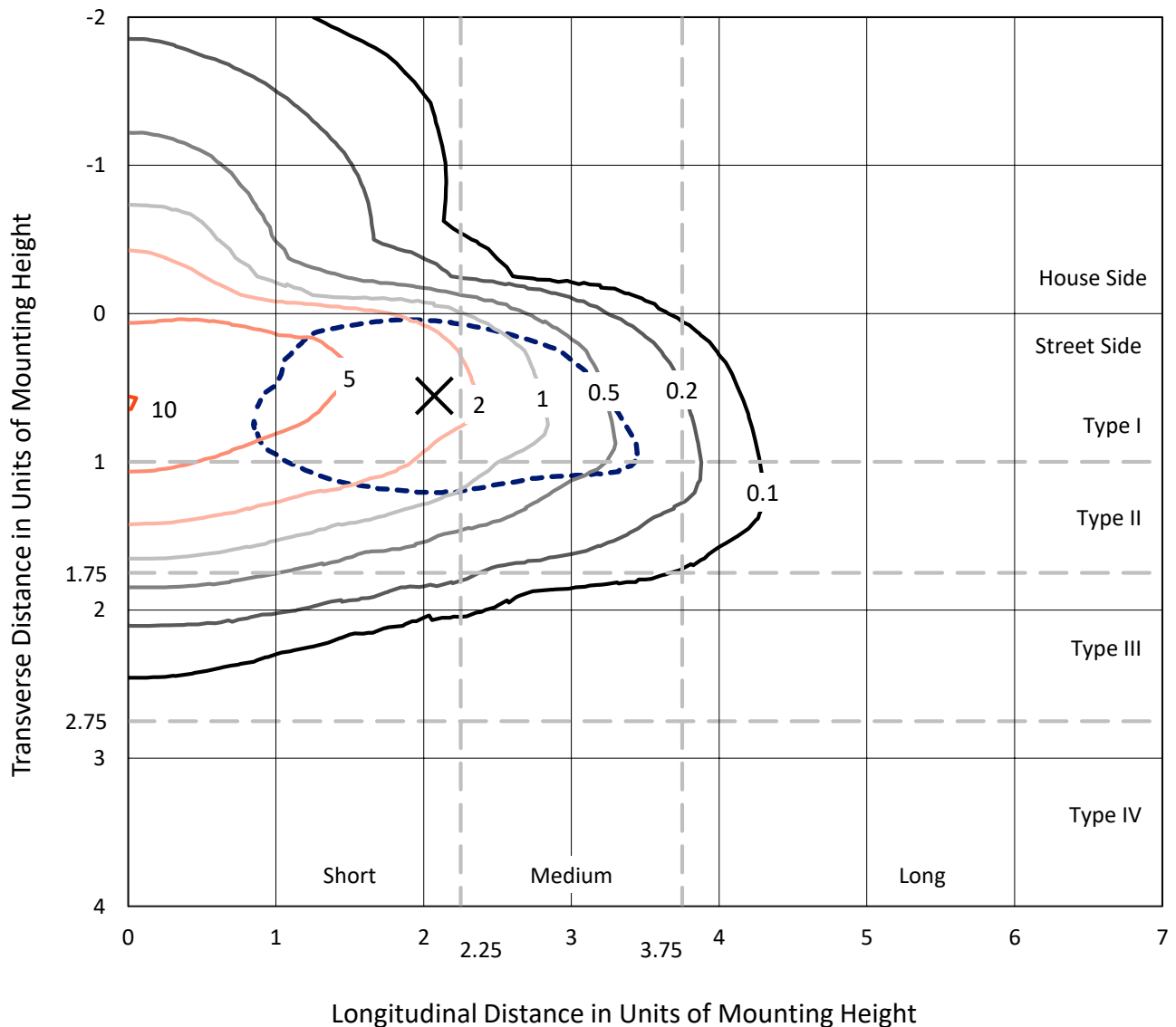


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Iso-Footcandle Lines of Horizontal Illumination

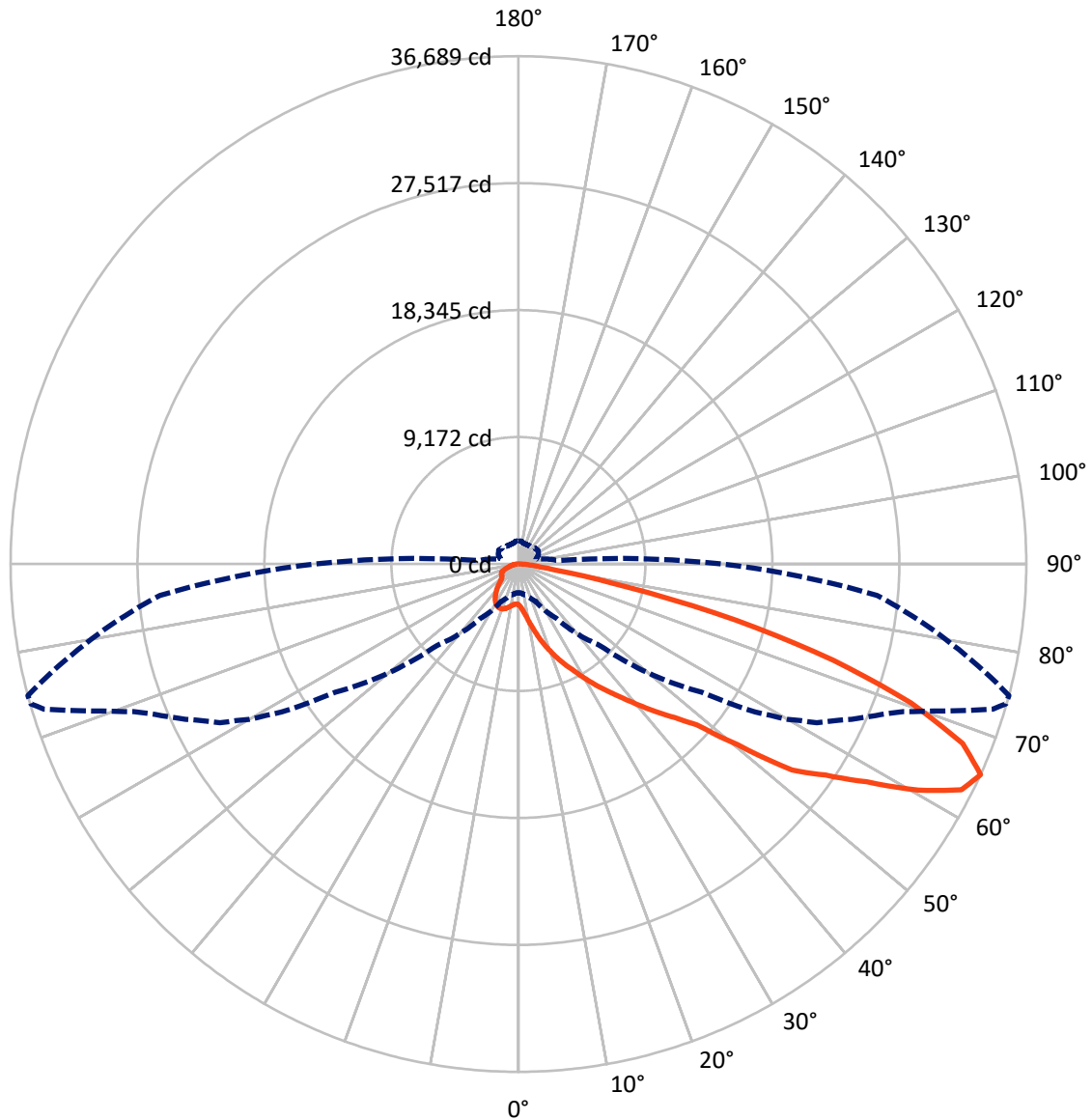
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.2 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	5589.3	0.0	5589.3
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	30663.1	0.0	30663.1
	% Fixture	84.6	0.0	84.6
Total	Lumens	36252.4	0.0	36252.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.2	1.0
10°-20°	1422.9	3.9
20°-30°	2919.2	8.1
30°-40°	4911.5	13.5
40°-50°	6786.3	18.7
50°-60°	8471.3	23.4
60°-70°	7623.2	21.0
70°-80°	3195.6	8.8
80°-90°	558.3	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°	36252.4	100.0
0°-180°	36252.4	100.0



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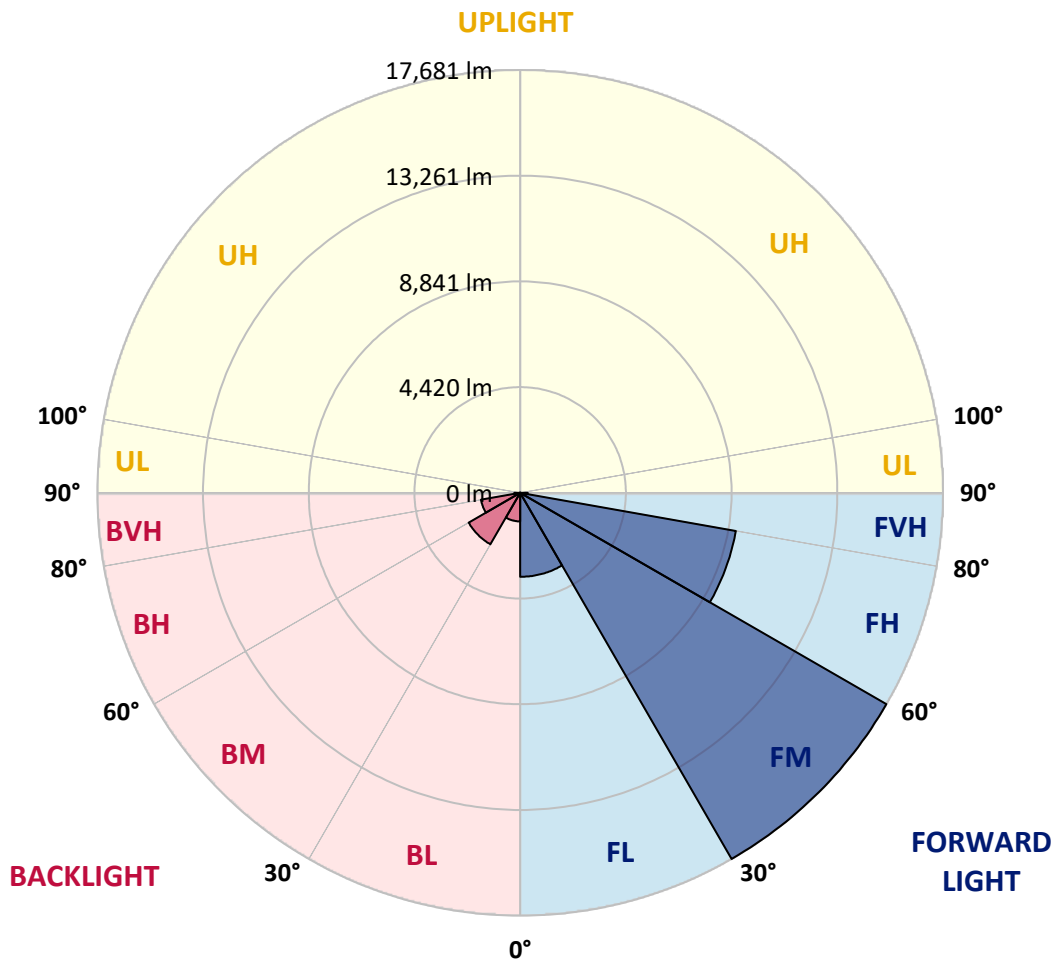
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3510.9	9.7			
FM	(30°-60°)	17681.1	48.8			
FH	(60°-80°)	9157.2	25.3			G4/12000
FVH	(80°-90°)	313.8	0.9			G3/500
BL	(0°-30°)	1195.3	3.3	B3/2500		
BM	(30°-60°)	2487.8	6.9	B2/2500		
BH	(60°-80°)	1661.6	4.6	B3/2500		G3/2500
BVH	(80°-90°)	244.5	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°	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2
2.5°	3740.6	3699.5	3709.7	3641.1	3557.1	3447.2	3325.4	3323.7	3325.4	3313.4	3268.7
5°	5187.2	5137.4	5118.5	4964.1	4737.6	4415.1	4065.0	4027.3	4011.8	3972.3	3881.4
7.5°	6242.5	6214.9	6185.8	6069.2	5863.2	5502.9	5032.7	4952.1	4874.9	4855.9	4753.0
10°	6923.6	6916.8	6855.0	6824.1	6695.4	6383.1	5925.0	5847.8	5763.7	5734.6	5626.4
12.5°	7462.4	7460.7	7431.5	7440.1	7328.6	7102.1	6707.5	6637.1	6575.3	6486.1	6408.9
15°	7834.8	7836.5	7879.4	7927.5	7910.3	7757.5	7386.9	7356.0	7302.8	7241.1	7150.1
17.5°	8140.2	8148.8	8193.4	8280.9	8375.3	8363.2	8069.9	8044.2	7997.8	7913.8	7865.7
20°	8830.0	8862.6	8776.8	8776.8	8787.1	8833.5	8692.7	8672.2	8606.9	8562.3	8524.6
22.5°	9995.2	10032.9	9838.9	9641.6	9447.8	9307.0	9166.4	9192.0	9147.4	9116.5	9094.2
25°	11508.5	11537.7	11223.7	10890.8	10496.2	9981.3	9633.0	9617.6	9593.5	9574.7	9564.4
27.5°	12932.8	12944.7	12647.9	12160.5	11702.5	10962.9	10106.7	10087.7	10058.6	10022.6	9991.7
30°	14151.0	14147.6	13842.2	13377.1	12886.4	12068.0	10825.6	10767.3	10681.4	10583.7	10508.2
32.5°	15206.3	15201.2	14866.5	14384.3	13869.6	13162.6	11810.5	11690.4	11556.6	11366.1	11251.1
35°	16036.8	16033.3	15717.6	15214.9	14624.6	14194.0	12939.6	12792.0	12622.2	12366.5	12189.8
37.5°	16350.7	16350.7	16174.1	15830.9	15309.3	15014.2	14194.0	14015.4	13833.6	13543.6	13344.5
40°	16167.2	16170.6	16208.3	16144.9	15890.9	15664.4	15364.1	15257.7	15101.6	14840.8	14633.2
42.5°	15551.2	15570.0	15820.5	16127.7	16254.7	16218.7	16402.3	16354.2	16244.5	16043.7	15879.0
45°	14770.5	14828.8	15103.4	15683.3	16356.0	16697.4	17272.2	17277.3	17256.8	17148.6	17021.7
47.5°	13698.0	13780.4	14142.4	14926.6	16119.1	17162.5	18155.9	18202.3	18245.1	18174.8	18116.5
50°	12273.8	12371.7	12913.8	13953.7	15637.0	17644.6	19825.5	20034.8	20230.5	20206.4	20245.8
52.5°	10748.3	10863.3	11527.4	12685.6	14808.2	17756.1	20892.7	21234.2	21575.7	21855.4	22152.2
55°	9372.3	9310.5	9974.5	11194.6	13445.8	17253.4	21852.0	22263.8	22644.8	22987.9	23341.4
57.5°	7507.0	7608.3	8274.0	9480.3	11642.4	15834.4	22512.6	23114.9	23662.3	24230.2	24731.3
60°	5487.4	5588.7	6311.1	7536.2	9684.5	13682.6	22008.1	22921.0	23797.8	24667.7	25347.3
62.5°	3313.4	3388.9	4025.5	5192.3	7467.5	11131.0	19760.2	20958.0	22248.4	23288.2	24329.8
65°	2062.5	2105.4	2340.5	2982.2	4795.9	8310.1	16144.9	17450.7	18840.6	20160.1	21242.8
67.5°	1688.5	1703.9	1746.8	1884.1	2633.9	5418.8	12016.4	13172.9	14427.3	15703.9	16908.5
70°	1518.6	1508.2	1508.2	1516.8	1688.5	2913.6	7867.4	8620.7	9665.7	10775.9	11877.5
72.5°	1371.0	1360.7	1341.8	1316.1	1377.9	1777.7	4066.6	4634.7	5387.9	6374.5	7429.8
75°	1232.0	1218.3	1195.9	1163.4	1206.3	1341.8	1952.7	2191.2	2558.4	3083.5	3672.0
77.5°	1087.9	1070.7	1050.2	1026.1	1081.1	1043.3	1144.5	1230.3	1371.0	1539.1	1760.5
80°	924.8	909.4	902.5	890.6	955.7	794.4	808.2	861.4	943.8	1034.7	1137.6
82.5°	724.1	724.1	751.6	756.7	828.8	571.4	604.0	650.3	693.3	741.2	789.3
85°	477.0	480.5	573.2	609.2	653.8	384.3	453.0	468.4	502.8	530.2	550.8
87.5°	149.2	161.3	350.1	387.8	375.8	217.9	277.9	284.8	308.8	327.8	344.9
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°	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2
2.5°	3268.7	3248.2	3229.4	3227.6	3213.9	3195.0	3201.8	3172.7	3174.4	3159.0	3141.8
5°	3843.6	3829.9	3761.3	3742.4	3690.9	3658.3	3653.2	3584.5	3575.9	3536.4	3493.6
7.5°	4670.7	4626.1	4529.9	4483.6	4396.1	4331.0	4300.1	4209.1	4164.5	4061.5	4015.2
10°	5537.2	5480.6	5362.2	5296.9	5212.9	5108.2	5051.6	4919.5	4868.0	4773.6	4660.4
12.5°	6340.2	6283.6	6161.7	6112.0	6000.5	5888.9	5827.2	5677.9	5611.0	5460.0	5370.8
15°	7083.2	7026.6	6920.3	6868.7	6757.2	6666.3	6583.9	6436.3	6357.4	6216.7	6100.1
17.5°	7803.9	7743.8	7651.2	7604.8	7496.8	7404.1	7314.9	7175.9	7095.3	6954.5	6849.9
20°	8473.1	8428.5	8361.6	8299.8	8191.7	8107.6	8001.2	7881.1	7764.4	7661.5	7562.0
22.5°	9056.5	9039.3	8967.3	8939.9	8847.2	8775.1	8682.4	8564.0	8480.0	8349.5	8257.0
25°	9559.3	9554.2	9519.8	9511.2	9446.0	9377.4	9356.8	9259.0	9181.8	9066.8	8970.7
27.5°	9991.7	9996.8	9988.2	10012.2	9995.2	9964.3	9965.9	9933.4	9888.8	9792.6	9708.5
30°	10472.2	10444.6	10460.1	10494.5	10504.7	10508.2	10564.8	10583.7	10580.3	10516.8	10475.5
32.5°	11151.6	11086.4	11026.4	11021.2	11055.5	11069.2	11165.3	11215.1	11258.0	11273.4	11280.3
35°	12018.1	11887.7	11762.5	11695.6	11637.2	11652.6	11721.3	11802.0	11896.3	11961.6	12038.7
37.5°	13109.4	12949.8	12728.6	12570.6	12531.2	12445.4	12490.0	12553.6	12646.1	12747.4	12881.2
40°	14432.4	14190.5	13941.7	13732.3	13619.1	13461.2	13459.5	13447.5	13504.1	13598.5	13787.2
42.5°	15705.6	15491.2	15226.9	15007.2	14859.7	14648.7	14605.7	14494.2	14520.0	14602.3	14785.9
45°	16898.1	16721.5	16560.1	16306.1	16180.9	15952.7	15880.6	15748.5	15674.8	15712.5	15896.0
47.5°	18052.9	17939.7	17771.5	17606.8	17510.8	17306.6	17213.9	17119.5	17025.2	17021.7	17213.9
50°	20304.2	20244.2	20045.1	19873.6	19919.8	19669.3	19684.7	19430.8	19545.8	19559.5	19962.8
52.5°	22419.9	22629.3	22776.8	22957.0	23073.7	23096.0	23173.2	23288.2	23427.1	23701.7	24075.8
55°	23631.4	23893.9	24046.6	24183.9	24410.4	24458.4	24587.1	24739.9	24861.7	25170.5	25487.9
57.5°	25071.0	25558.3	25795.1	26013.0	26318.5	26435.1	26649.6	26816.0	26973.9	27339.4	27723.8
60°	25958.1	26551.8	27033.9	27378.9	27761.6	28036.0	28360.4	28621.1	28991.9	29429.4	30002.4
62.5°	25252.9	26124.5	26764.6	27356.6	27876.4	28401.5	28866.5	29353.9	29916.7	30579.1	31467.8
65°	22444.0	23331.1	24427.6	25041.8	25729.9	26539.8	27246.7	28036.0	28803.0	29767.4	31081.7
67.5°	18068.4	19099.6	20331.7	20951.2	21742.1	22646.4	23439.2	24403.5	25299.2	26467.7	28092.7
70°	13023.7	14356.9	15393.4	16040.2	16963.4	17895.1	18660.4	19782.6	20523.9	21721.5	23401.4
72.5°	8246.6	9298.4	10568.2	11383.3	12203.5	13147.2	13929.6	14897.4	15589.0	16680.2	18202.3
75°	4433.9	5209.5	6324.8	7098.7	7977.2	8783.7	9699.9	10348.6	10860.0	11723.0	12958.4
77.5°	2077.9	2549.8	3114.4	3709.7	4305.2	4926.3	5530.4	6055.4	6275.1	6769.2	7498.4
80°	1261.2	1413.9	1578.6	1762.2	2011.0	2211.8	2477.8	2669.9	2683.7	2839.8	3062.9
82.5°	842.5	899.2	948.9	995.2	1058.8	1108.5	1165.1	1232.0	1259.5	1295.5	1367.6
85°	574.8	602.3	612.5	641.7	634.8	652.0	674.3	696.6	708.7	707.0	739.6
87.5°	353.4	367.2	374.1	380.9	375.8	368.9	379.2	391.2	394.7	384.3	387.8
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2
2.5°	3145.3	3129.8	3114.4	3104.0	3100.7	3009.7	2970.2	2944.5	2889.5	2844.9	2808.9
5°	3469.5	3436.9	3411.2	3380.3	3363.2	3133.2	3049.1	2990.8	2894.7	2838.1	2786.6
7.5°	3991.1	3900.2	3847.0	3787.0	3735.5	3320.3	3181.3	3090.3	2956.5	2881.0	2822.6
10°	4583.1	4488.8	4404.7	4312.0	4231.4	3569.1	3366.6	3225.9	3049.1	2951.3	2874.1
12.5°	5243.7	5151.2	5044.8	4926.3	4823.4	3884.8	3603.3	3402.6	3160.7	3030.3	2922.2
15°	6024.6	5861.5	5732.8	5595.5	5475.4	4262.3	3879.6	3601.7	3279.1	3102.3	2958.2
17.5°	6750.4	6578.8	6403.8	6283.6	6144.7	4686.1	4157.6	3804.1	3376.9	3148.6	2965.0
20°	7459.1	7272.0	7121.0	6959.6	6813.9	5125.4	4454.4	3982.6	3440.4	3150.4	2922.2
22.5°	8083.6	7966.9	7798.8	7623.7	7476.1	5564.6	4732.5	4133.6	3464.4	3110.9	2846.7
25°	8794.0	8670.4	8464.5	8317.0	8152.2	6012.5	5005.3	4250.3	3450.7	3037.1	2729.9
27.5°	9552.4	9415.1	9204.1	9049.6	8850.6	6477.5	5255.8	4334.3	3399.2	2917.0	2573.8
30°	10343.5	10218.2	10010.6	9854.4	9653.7	6970.0	5535.5	4391.0	3296.3	2750.6	2392.0
32.5°	11192.8	11088.2	10882.3	10719.2	10504.7	7503.7	5796.3	4408.1	3140.0	2553.3	2199.8
35°	11999.3	11927.2	11753.9	11601.2	11378.1	8008.1	6072.5	4399.6	2954.8	2337.0	2024.7
37.5°	12907.0	12864.1	12778.3	12584.4	12311.5	8692.7	6403.8	4363.5	2728.3	2122.5	1890.9
40°	13874.8	13878.2	13785.5	13653.4	13399.4	9523.3	6798.4	4293.2	2481.2	1933.8	1769.1
42.5°	14899.2	14952.4	14907.8	14813.4	14569.7	10360.5	7270.2	4207.4	2241.0	1750.2	1649.0
45°	16072.8	16138.1	16206.6	16067.7	15830.9	11465.6	7891.5	4095.9	1981.9	1597.5	1566.6
47.5°	17426.7	17529.6	17591.4	17593.1	17356.3	12835.0	8900.4	4028.9	1751.9	1494.5	1527.2
50°	20283.7	20316.2	20462.1	20716.1	20534.2	16004.2	10662.6	3987.8	1595.8	1431.1	1498.0
52.5°	24400.0	24758.7	25010.9	24993.8	24746.7	18016.9	11633.8	3775.0	1503.1	1407.1	1484.3
55°	26076.6	26524.4	26991.1	27114.6	26922.4	19734.6	12551.8	3562.2	1458.5	1424.2	1489.4
57.5°	28310.6	29065.6	29705.7	29975.0	29697.1	21932.6	13759.8	3450.7	1444.8	1470.5	1522.0
60°	30920.5	31854.0	32694.7	33178.6	33178.6	24458.4	15012.4	3404.4	1425.9	1539.1	1576.9
62.5°	32596.9	33967.9	35237.7	35946.4	35925.7	26217.2	15568.4	3246.4	1383.0	1587.2	1652.4
65°	32603.8	34233.9	35852.0	36648.1	36689.4	26001.0	14650.3	2867.2	1304.1	1594.1	1727.9
67.5°	29885.8	31624.0	33509.8	34400.3	34606.2	23935.1	12682.2	2357.6	1175.4	1525.4	1755.4
70°	25240.9	26937.9	28863.2	29738.2	30103.7	20403.8	10214.8	1817.2	1010.7	1374.4	1698.7
72.5°	19885.6	21550.0	22890.1	23530.1	23814.9	15595.8	7438.4	1372.7	828.8	1158.2	1546.0
75°	14079.0	15328.1	16040.2	16182.7	16227.3	9401.4	4519.7	1021.0	682.9	900.8	1305.8
77.5°	7946.3	8481.7	8423.4	8486.8	7958.4	3629.1	1968.2	731.0	562.8	684.7	1012.4
80°	3102.3	3198.5	3004.5	2944.5	2700.8	1350.4	868.3	509.6	449.6	518.2	708.7
82.5°	1367.6	1412.2	1371.0	1381.3	1321.2	696.6	520.0	368.9	343.2	379.2	470.1
85°	753.3	767.0	763.5	785.8	753.3	277.9	247.0	226.5	240.2	257.4	302.0
87.5°	367.2	370.6	358.6	377.5	365.5	140.7	121.8	128.7	140.7	144.1	144.1
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):

	135°	145°	155°	165°	175°	180°
0°	2946.2	2946.2	2946.2	2946.2	2946.2	2946.2
2.5°	2783.1	2769.4	2771.2	2767.7	2760.8	2760.8
5°	2759.2	2745.4	2745.4	2742.0	2733.4	2735.2
7.5°	2783.1	2760.8	2752.4	2740.3	2728.3	2728.3
10°	2810.7	2771.2	2747.1	2726.6	2711.1	2711.1
12.5°	2831.2	2769.4	2729.9	2702.5	2687.1	2687.1
15°	2838.1	2757.5	2702.5	2669.9	2656.2	2654.5
17.5°	2815.8	2711.1	2644.2	2606.5	2589.3	2584.2
20°	2747.1	2627.0	2546.4	2503.5	2479.4	2470.9
22.5°	2644.2	2506.9	2412.5	2367.9	2337.0	2331.9
25°	2500.1	2352.5	2259.8	2216.9	2199.8	2194.6
27.5°	2331.9	2194.6	2115.7	2088.3	2072.8	2071.1
30°	2172.3	2055.6	1997.3	1976.8	1957.8	1954.4
32.5°	2023.1	1949.2	1926.9	1897.8	1853.2	1848.1
35°	1916.7	1909.7	1894.4	1829.1	1774.2	1758.8
37.5°	1851.4	1915.0	1836.0	1707.3	1667.8	1664.4
40°	1813.7	1861.8	1726.2	1681.6	1685.0	1681.6
42.5°	1727.9	1777.7	1729.6	1709.0	1722.8	1726.2
45°	1642.1	1697.0	1755.4	1741.7	1774.2	1774.2
47.5°	1594.1	1676.4	1753.6	1753.6	1801.7	1818.8
50°	1539.1	1659.2	1726.2	1750.2	1788.0	1774.2
52.5°	1535.8	1630.1	1686.7	1729.6	1746.8	1731.3
55°	1540.9	1606.0	1647.3	1695.3	1715.9	1717.6
57.5°	1547.7	1592.3	1619.8	1642.1	1703.9	1703.9
60°	1564.9	1580.4	1595.8	1607.8	1688.5	1690.1
62.5°	1592.3	1568.3	1564.9	1576.9	1679.9	1673.0
65°	1635.3	1551.2	1525.4	1537.5	1671.3	1650.7
67.5°	1693.6	1525.4	1475.7	1484.3	1664.4	1619.8
70°	1746.8	1484.3	1413.9	1405.3	1599.2	1520.3
72.5°	1751.9	1436.2	1328.1	1302.3	1389.9	1314.4
75°	1666.2	1403.6	1233.8	1158.2	1148.0	1137.6
77.5°	1501.4	1384.8	1123.9	1005.6	984.9	991.8
80°	1256.1	1314.4	991.8	851.1	962.6	950.6
82.5°	938.6	1159.9	842.5	753.3	751.6	664.1
85°	521.6	904.3	686.4	564.6	392.9	380.9
87.5°	145.9	502.8	480.5	319.2	217.9	226.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)