

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: P193947

Luminaire Tested: **GLEON-AF-09-LED-E1-T2R-8030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193947
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-09-LED-E1-T2R-8030-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 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: 36549 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 374
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

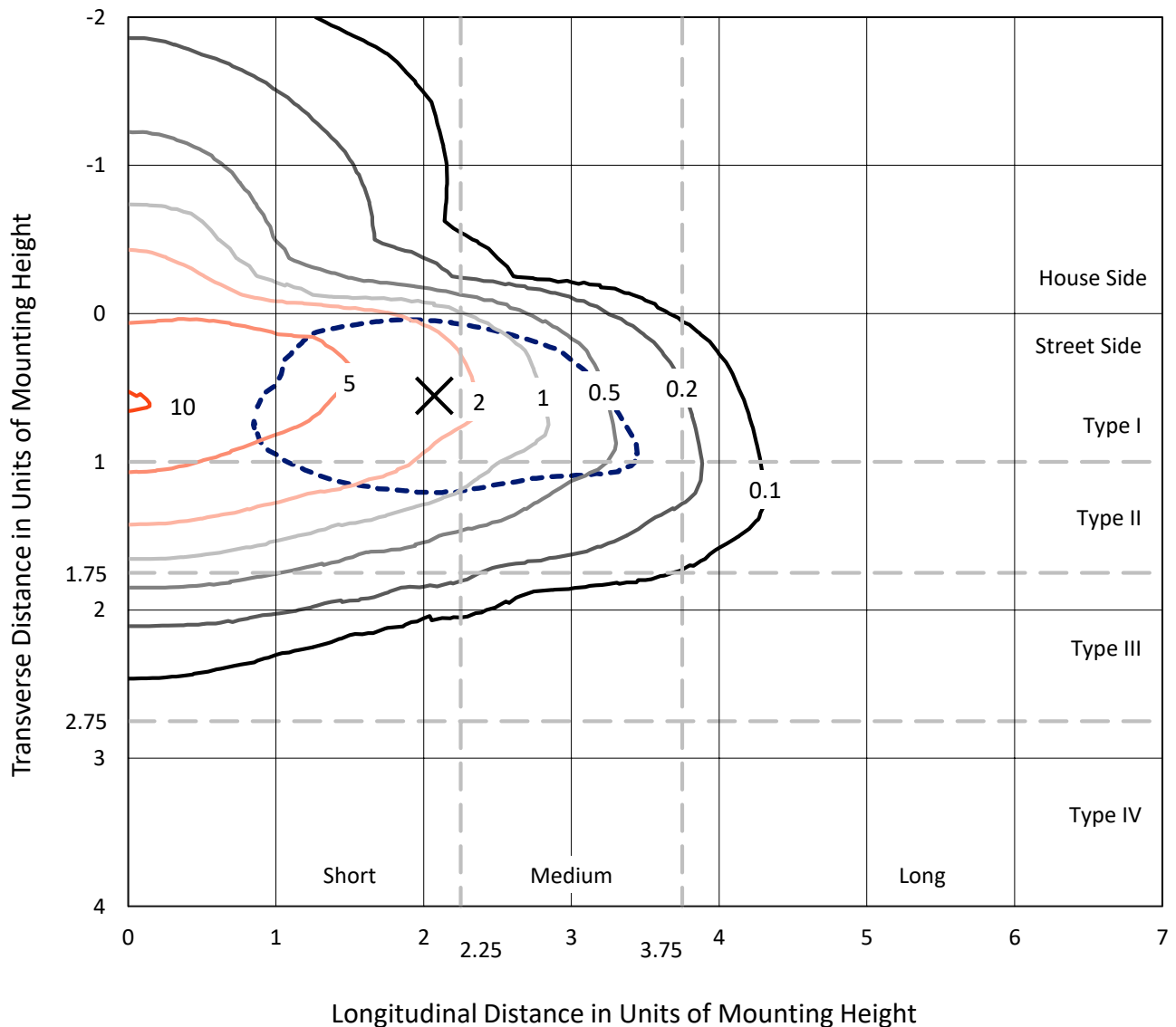


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

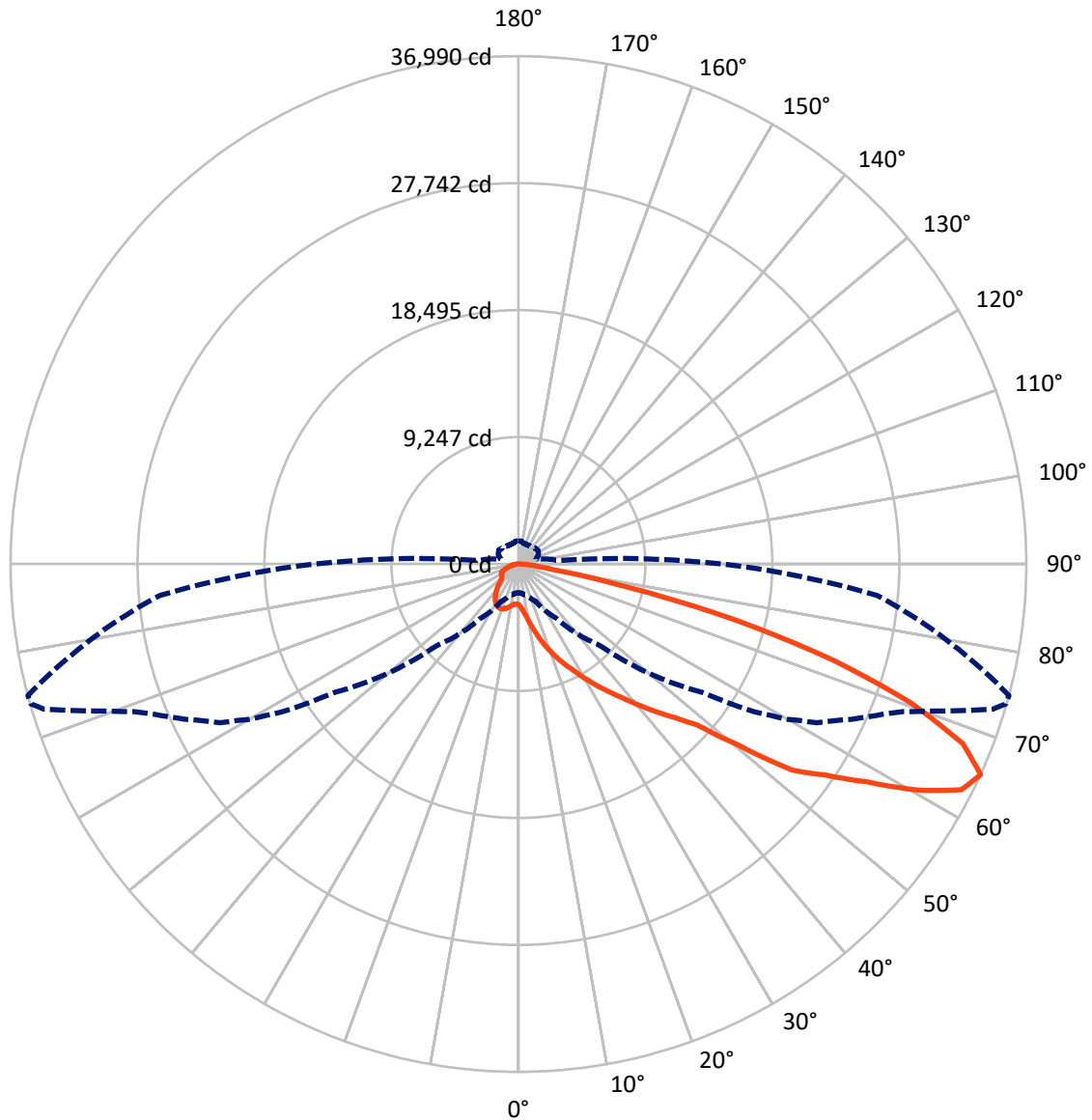


Based on 30 foot mounting height. Maximum calculated value = 10.2 fc
 Type II - Short - Full Cutoff

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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	5635.0	0.0	5635.0
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	30914.0	0.0	30914.0
	% Fixture	84.6	0.0	84.6
Total	Lumens	36549.0	0.0	36549.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.1	1.0
10°-20°	1434.5	3.9
20°-30°	2943.1	8.1
30°-40°	4951.6	13.5
40°-50°	6841.8	18.7
50°-60°	8540.6	23.4
60°-70°	7685.6	21.0
70°-80°	3221.7	8.8
80°-90°	562.8	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°	36549.0	100.0
0°-180°	36549.0	100.0

Coefficient of Utilization



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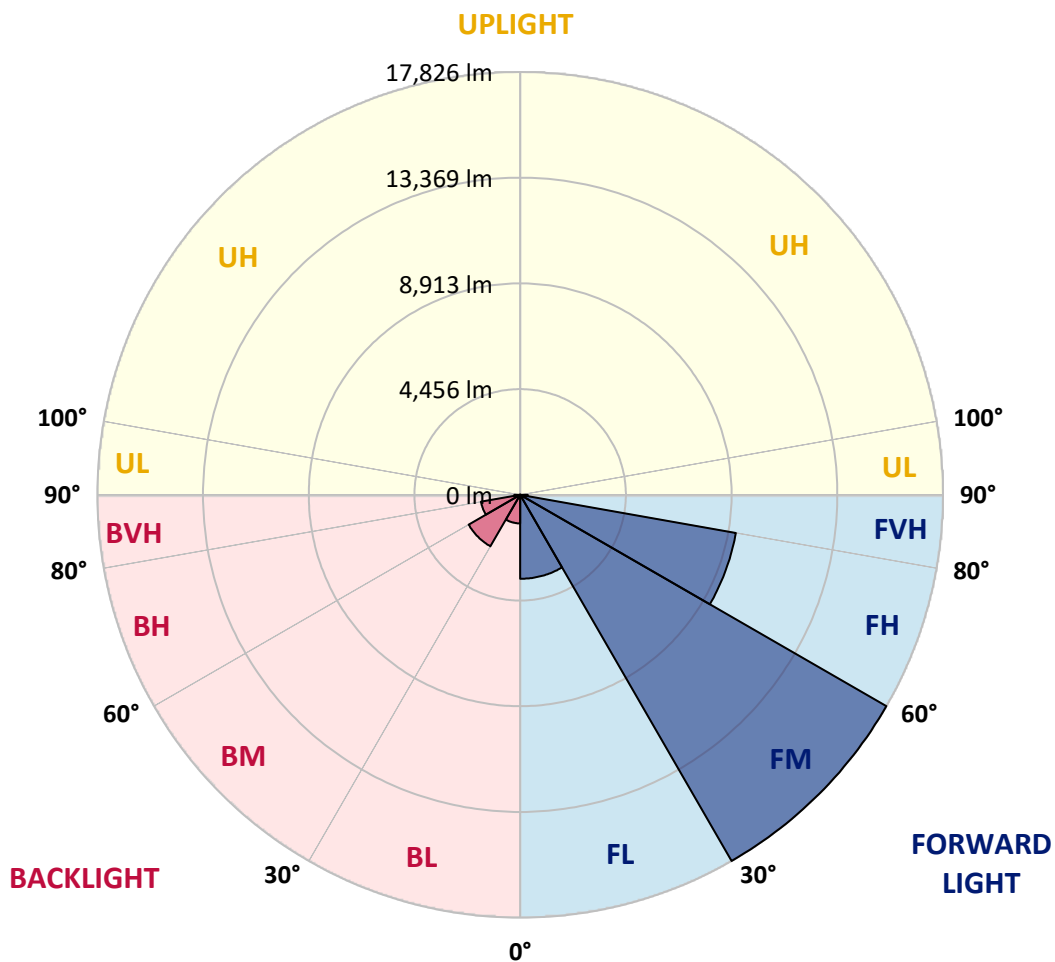
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3539.7	9.7			
FM (30°-60°)	17825.8	48.8			
FH (60°-80°)	9232.1	25.3			G4/12000
FVH (80°-90°)	316.4	0.9			G3/500
BL (0°-30°)	1205.1	3.3	B3/2500		
BM (30°-60°)	2508.2	6.9	B3/5000		
BH (60°-80°)	1675.2	4.6	B3/2500		G3/2500
BVH (80°-90°)	246.5	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°	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3
2.5°	3771.3	3729.7	3740.1	3670.9	3586.2	3475.4	3352.6	3350.9	3352.6	3340.5	3295.5
5°	5229.6	5179.4	5160.4	5004.7	4776.4	4451.1	4098.2	4060.2	4044.6	4004.8	3913.1
7.5°	6293.5	6265.8	6236.4	6118.8	5911.2	5547.9	5073.9	4992.6	4914.8	4895.7	4791.9
10°	6980.3	6973.4	6911.1	6880.0	6750.2	6435.4	5973.5	5895.6	5810.9	5781.5	5672.5
12.5°	7523.5	7521.8	7492.4	7501.0	7388.6	7160.2	6762.3	6691.4	6629.1	6539.2	6461.3
15°	7898.9	7900.6	7943.9	7992.3	7975.0	7821.1	7447.4	7416.2	7362.6	7300.3	7208.7
17.5°	8206.8	8215.5	8260.5	8348.7	8443.8	8431.7	8135.9	8110.0	8063.2	7978.5	7930.0
20°	8902.3	8935.1	8848.6	8848.6	8859.0	8905.7	8763.9	8743.1	8677.4	8632.4	8594.3
22.5°	10076.9	10115.0	9919.5	9720.5	9525.0	9383.2	9241.3	9267.3	9222.3	9191.2	9168.7
25°	11602.7	11632.1	11315.5	10979.9	10582.0	10063.1	9711.9	9696.3	9672.1	9653.1	9642.7
27.5°	13038.6	13050.7	12751.4	12260.1	11798.2	11052.6	10189.3	10170.3	10140.9	10104.6	10073.4
30°	14266.8	14263.3	13955.4	13486.6	12991.8	12166.7	10914.2	10855.4	10768.9	10670.3	10594.1
32.5°	15330.7	15325.5	14988.2	14502.1	13983.1	13270.4	11907.2	11786.1	11651.1	11459.1	11343.2
35°	16168.0	16164.6	15846.2	15339.4	14744.3	14310.1	13045.5	12896.7	12725.4	12467.7	12289.5
37.5°	16484.6	16484.6	16306.4	15960.4	15434.5	15137.0	14310.1	14130.1	13946.8	13654.4	13453.7
40°	16299.5	16302.9	16341.0	16277.0	16021.0	15792.6	15489.9	15382.6	15225.2	14962.2	14752.9
42.5°	15678.4	15697.5	15950.0	16259.7	16387.7	16351.4	16536.5	16488.0	16377.3	16174.9	16008.9
45°	14891.3	14950.1	15226.9	15811.6	16489.8	16834.0	17413.6	17418.8	17398.0	17289.0	17161.0
47.5°	13810.1	13893.1	14258.2	15048.7	16251.0	17302.9	18304.5	18351.2	18394.4	18323.5	18264.7
50°	12374.3	12472.9	13019.5	14067.9	15764.9	17789.0	19987.7	20198.8	20396.0	20371.8	20411.6
52.5°	10836.3	10952.2	11621.7	12789.4	14929.4	17901.4	21063.7	21408.0	21752.3	22034.2	22333.5
55°	9448.9	9386.6	10056.1	11286.1	13555.8	17394.5	22030.8	22446.0	22830.0	23176.0	23532.4
57.5°	7568.5	7670.5	8341.8	9557.9	11737.6	15963.9	22696.8	23304.0	23855.9	24428.5	24933.6
60°	5532.3	5634.4	6362.7	7597.9	9763.8	13794.5	22188.2	23108.5	23992.5	24869.6	25554.7
62.5°	3340.5	3416.6	4058.4	5234.8	7528.7	11222.1	19922.0	21129.5	22430.4	23478.7	24528.8
65°	2079.4	2122.6	2359.6	3006.6	4835.2	8378.1	16277.0	17593.5	18994.7	20325.1	21416.6
67.5°	1702.3	1717.8	1761.1	1899.5	2655.5	5463.1	12114.8	13280.7	14545.3	15832.4	17046.8
70°	1531.0	1520.6	1520.6	1529.3	1702.3	2937.4	7931.8	8691.2	9744.7	10864.0	11974.6
72.5°	1382.2	1371.8	1352.8	1326.9	1389.1	1792.2	4100.0	4672.6	5432.0	6426.7	7490.6
75°	1242.1	1228.3	1205.8	1172.9	1216.1	1352.8	1968.7	2209.1	2579.3	3108.7	3702.1
77.5°	1096.8	1079.5	1058.7	1034.5	1089.9	1051.8	1153.9	1240.4	1382.2	1551.8	1774.9
80°	932.4	916.9	909.9	897.8	963.6	801.0	814.8	868.4	951.5	1043.2	1146.9
82.5°	730.0	730.0	757.7	762.9	835.6	576.1	608.9	655.6	698.9	747.3	795.8
85°	480.9	484.4	577.8	614.1	659.1	387.5	456.7	472.3	506.9	534.6	555.3
87.5°	150.5	162.6	352.9	391.0	378.9	219.7	280.3	287.2	311.4	330.4	347.7
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°	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3
2.5°	3295.5	3274.8	3255.7	3254.0	3240.2	3221.1	3228.1	3198.7	3200.4	3184.8	3167.5
5°	3875.1	3861.2	3792.0	3773.0	3721.1	3688.2	3683.0	3613.8	3605.2	3565.4	3522.2
7.5°	4708.9	4663.9	4567.0	4520.3	4432.1	4366.4	4335.2	4243.5	4198.6	4094.8	4048.1
10°	5582.5	5525.4	5406.1	5340.3	5255.6	5150.0	5092.9	4959.7	4907.8	4812.7	4698.5
12.5°	6392.1	6335.0	6212.2	6162.0	6049.6	5937.2	5874.9	5724.4	5656.9	5504.7	5414.7
15°	7141.2	7084.1	6976.8	6924.9	6812.5	6720.8	6637.8	6489.0	6409.4	6267.6	6149.9
17.5°	7867.8	7807.2	7713.8	7667.1	7558.1	7464.7	7374.7	7234.6	7153.3	7011.4	6905.9
20°	8542.4	8497.5	8430.0	8367.7	8258.7	8174.0	8066.7	7945.6	7828.0	7724.2	7623.8
22.5°	9130.6	9113.3	9040.7	9013.0	8919.6	8846.9	8753.5	8634.1	8549.4	8417.9	8324.5
25°	9637.5	9632.3	9597.7	9589.1	9523.3	9454.1	9433.4	9334.8	9256.9	9141.0	9044.1
27.5°	10073.4	10078.6	10070.0	10094.2	10076.9	10045.8	10047.5	10014.6	9969.6	9872.8	9788.0
30°	10557.8	10530.1	10545.7	10580.3	10590.7	10594.1	10651.2	10670.3	10666.8	10602.8	10561.3
32.5°	11242.9	11177.1	11116.6	11111.4	11146.0	11159.8	11256.7	11306.9	11350.1	11365.7	11372.6
35°	12116.5	11985.0	11858.7	11791.3	11732.4	11748.0	11817.2	11898.5	11993.7	12059.4	12137.3
37.5°	13216.7	13055.9	12832.7	12673.5	12633.7	12547.2	12592.2	12656.2	12749.7	12851.7	12986.7
40°	14550.5	14306.6	14055.8	13844.7	13730.5	13571.4	13569.6	13557.5	13614.6	13709.8	13900.1
42.5°	15834.1	15617.9	15351.5	15130.0	14981.3	14768.5	14725.2	14612.8	14638.7	14721.8	14906.9
45°	17036.4	16858.3	16695.6	16439.6	16313.3	16083.2	16010.6	15877.4	15803.0	15841.1	16026.2
47.5°	18200.7	18086.5	17917.0	17750.9	17654.0	17448.2	17354.7	17259.6	17164.5	17161.0	17354.7
50°	20470.4	20409.8	20209.1	20036.2	20082.9	19830.3	19845.9	19589.8	19705.7	19719.6	20126.1
52.5°	22603.4	22814.4	22963.2	23144.9	23262.5	23285.0	23362.8	23478.7	23618.9	23895.6	24272.8
55°	23824.7	24089.4	24243.4	24381.8	24610.1	24658.6	24788.3	24942.3	25065.1	25376.5	25696.5
57.5°	25276.1	25767.4	26006.2	26225.9	26533.8	26651.4	26867.7	27035.5	27194.6	27563.1	27950.6
60°	26170.5	26769.1	27255.2	27602.9	27988.7	28265.5	28592.4	28855.4	29229.1	29670.2	30248.0
62.5°	25459.5	26338.3	26983.6	27580.4	28104.6	28634.0	29102.8	29594.1	30161.5	30829.2	31725.4
65°	22627.6	23522.0	24627.4	25246.7	25940.4	26757.0	27469.7	28265.5	29038.8	30011.0	31336.1
67.5°	18216.3	19256.0	20498.0	21122.6	21920.1	22831.7	23631.0	24603.2	25506.2	26684.3	28322.6
70°	13130.2	14474.4	15519.3	16171.5	17102.2	18041.5	18813.1	19944.5	20691.8	21899.3	23592.9
72.5°	8314.1	9374.5	10654.7	11476.4	12303.3	13254.8	14043.6	15019.3	15716.5	16816.7	18351.2
75°	4470.2	5252.1	6376.6	7156.8	8042.5	8855.6	9779.3	10433.3	10948.8	11818.9	13064.5
77.5°	2095.0	2570.7	3139.8	3740.1	4340.4	4966.7	5575.6	6105.0	6326.4	6824.6	7559.8
80°	1271.5	1425.5	1591.5	1776.6	2027.5	2229.9	2498.0	2691.8	2705.6	2863.0	3087.9
82.5°	849.4	906.5	956.7	1003.4	1067.4	1117.5	1174.6	1242.1	1269.8	1306.1	1378.8
85°	579.5	607.2	617.6	647.0	640.1	657.4	679.9	702.4	714.5	712.7	745.6
87.5°	356.4	370.2	377.1	384.0	378.9	371.9	382.3	394.4	397.9	387.5	391.0
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°	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3
2.5°	3171.0	3155.4	3139.8	3129.5	3126.0	3034.3	2994.5	2968.6	2913.2	2868.2	2831.9
5°	3497.9	3465.1	3439.1	3408.0	3390.7	3158.9	3074.1	3015.3	2918.4	2861.3	2809.4
7.5°	4023.8	3932.2	3878.5	3818.0	3766.1	3347.4	3207.3	3115.6	2980.7	2904.6	2845.7
10°	4620.7	4525.5	4440.8	4347.3	4266.0	3598.3	3394.1	3252.3	3074.1	2975.5	2897.6
12.5°	5286.7	5193.3	5086.0	4966.7	4862.9	3916.6	3632.9	3430.5	3186.5	3055.1	2946.1
15°	6073.8	5909.5	5779.7	5641.3	5520.2	4297.2	3911.4	3631.1	3305.9	3127.7	2982.4
17.5°	6805.6	6632.6	6456.1	6335.0	6194.9	4724.5	4191.6	3835.3	3404.5	3174.4	2989.3
20°	7520.0	7331.5	7179.2	7016.6	6869.6	5167.3	4490.9	4015.2	3468.5	3176.2	2946.1
22.5°	8149.7	8032.1	7862.6	7686.1	7537.3	5610.2	4771.2	4167.4	3492.7	3136.4	2870.0
25°	8865.9	8741.4	8533.8	8385.0	8218.9	6061.7	5046.2	4285.1	3478.9	3062.0	2752.3
27.5°	9630.6	9492.2	9279.4	9123.7	8923.0	6530.5	5298.8	4369.8	3427.0	2940.9	2594.9
30°	10428.1	10301.8	10092.5	9935.0	9732.6	7027.0	5580.8	4426.9	3323.2	2773.1	2411.5
32.5°	11284.4	11178.9	10971.3	10806.9	10590.7	7565.0	5843.7	4444.2	3165.8	2574.1	2217.8
35°	12097.5	12024.8	11850.1	11696.1	11471.2	8073.6	6122.3	4435.6	2979.0	2356.2	2041.3
37.5°	13012.6	12969.4	12882.9	12687.4	12412.3	8763.9	6456.1	4399.2	2750.6	2139.9	1906.4
40°	13988.3	13991.7	13898.3	13765.1	13509.1	9601.2	6854.0	4328.3	2501.5	1949.6	1783.6
42.5°	15021.1	15074.7	15029.7	14934.6	14688.9	10445.4	7329.8	4241.8	2259.3	1764.5	1662.5
45°	16204.3	16270.1	16339.3	16199.1	15960.4	11559.5	7956.0	4129.4	1998.1	1610.6	1579.4
47.5°	17569.3	17673.1	17735.3	17737.1	17498.3	12939.9	8973.2	4061.9	1766.3	1506.8	1539.6
50°	20449.6	20482.5	20629.5	20885.6	20702.2	16135.1	10749.8	4020.4	1608.8	1442.8	1510.2
52.5°	24599.7	24961.3	25215.6	25198.3	24949.2	18164.4	11729.0	3805.9	1515.4	1418.6	1496.4
55°	26289.9	26741.4	27211.9	27336.5	27142.7	19896.0	12654.5	3591.4	1470.4	1435.8	1501.6
57.5°	28542.3	29303.4	29948.7	30220.3	29940.1	22112.1	13872.4	3478.9	1456.6	1482.6	1534.5
60°	31173.5	32114.6	32962.3	33450.1	33450.1	24658.6	15135.2	3432.2	1437.6	1551.8	1589.8
62.5°	32863.7	34245.9	35526.0	36240.5	36219.7	26431.7	15695.7	3273.0	1394.3	1600.2	1665.9
65°	32870.6	34514.0	36145.3	36948.0	36989.6	26213.8	14770.2	2890.7	1314.8	1607.1	1742.0
67.5°	30130.3	31882.8	33784.0	34681.8	34889.4	24130.9	12786.0	2376.9	1185.0	1537.9	1769.7
70°	25447.4	27158.3	29099.3	29981.6	30350.1	20570.7	10298.3	1832.0	1018.9	1385.7	1712.6
72.5°	20048.3	21726.3	23077.4	23722.7	24009.8	15723.4	7499.3	1384.0	835.6	1167.7	1558.7
75°	14194.2	15453.5	16171.5	16315.1	16360.0	9478.3	4556.7	1029.3	688.5	908.2	1316.5
77.5°	8011.3	8551.1	8492.3	8556.3	8023.5	3658.8	1984.2	737.0	567.4	690.2	1020.7
80°	3127.7	3224.6	3029.1	2968.6	2722.9	1361.5	875.3	513.8	453.2	522.4	714.5
82.5°	1378.8	1423.7	1382.2	1392.6	1332.1	702.4	524.2	371.9	346.0	382.3	474.0
85°	759.4	773.3	769.8	792.3	759.4	280.3	249.1	228.4	242.2	259.5	304.5
87.5°	370.2	373.7	361.6	380.6	368.5	141.9	122.8	129.7	141.9	145.3	145.3
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°	2970.3	2970.3	2970.3	2970.3	2970.3	2970.3
2.5°	2806.0	2792.1	2793.9	2790.4	2783.5	2783.5
5°	2781.7	2767.9	2767.9	2764.4	2755.8	2757.5
7.5°	2806.0	2783.5	2774.8	2762.7	2750.6	2750.6
10°	2833.6	2793.9	2769.6	2748.9	2733.3	2733.3
12.5°	2854.4	2792.1	2752.3	2724.7	2709.1	2709.1
15°	2861.3	2780.0	2724.7	2691.8	2677.9	2676.2
17.5°	2838.8	2733.3	2665.8	2627.8	2610.5	2605.3
20°	2769.6	2648.5	2567.2	2524.0	2499.8	2491.1
22.5°	2665.8	2527.4	2432.3	2387.3	2356.2	2351.0
25°	2520.5	2371.7	2278.3	2235.1	2217.8	2212.6
27.5°	2351.0	2212.6	2133.0	2105.3	2089.8	2088.0
30°	2190.1	2072.5	2013.6	1992.9	1973.9	1970.4
32.5°	2039.6	1965.2	1942.7	1913.3	1868.3	1863.1
35°	1932.3	1925.4	1909.9	1844.1	1788.8	1773.2
37.5°	1866.6	1930.6	1851.0	1721.3	1681.5	1678.0
40°	1828.5	1877.0	1740.3	1695.3	1698.8	1695.3
42.5°	1742.0	1792.2	1743.8	1723.0	1736.9	1740.3
45°	1655.6	1710.9	1769.7	1755.9	1788.8	1788.8
47.5°	1607.1	1690.2	1768.0	1768.0	1816.4	1833.7
50°	1551.8	1672.9	1740.3	1764.5	1802.6	1788.8
52.5°	1548.3	1643.4	1700.5	1743.8	1761.1	1745.5
55°	1553.5	1619.2	1660.7	1709.2	1729.9	1731.7
57.5°	1560.4	1605.4	1633.1	1655.6	1717.8	1717.8
60°	1577.7	1593.3	1608.8	1621.0	1702.3	1704.0
62.5°	1605.4	1581.2	1577.7	1589.8	1693.6	1686.7
65°	1648.6	1563.9	1537.9	1550.0	1685.0	1664.2
67.5°	1707.4	1537.9	1487.7	1496.4	1678.0	1633.1
70°	1761.1	1496.4	1425.5	1416.8	1612.3	1532.7
72.5°	1766.3	1448.0	1339.0	1313.0	1401.3	1325.1
75°	1679.8	1415.1	1243.8	1167.7	1157.3	1146.9
77.5°	1513.7	1396.1	1133.1	1013.7	993.0	999.9
80°	1266.3	1325.1	999.9	858.0	970.5	958.4
82.5°	946.3	1169.4	849.4	759.4	757.7	669.5
85°	525.9	911.7	692.0	569.1	396.2	384.0
87.5°	147.0	506.9	484.4	321.8	219.7	228.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)