

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: P192207

Luminaire Tested: **GLEON-AF-09-LED-E1-T2R-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192207
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-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 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: 44791 lumens
Efficiency: N/A
Efficacy: 119.8 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

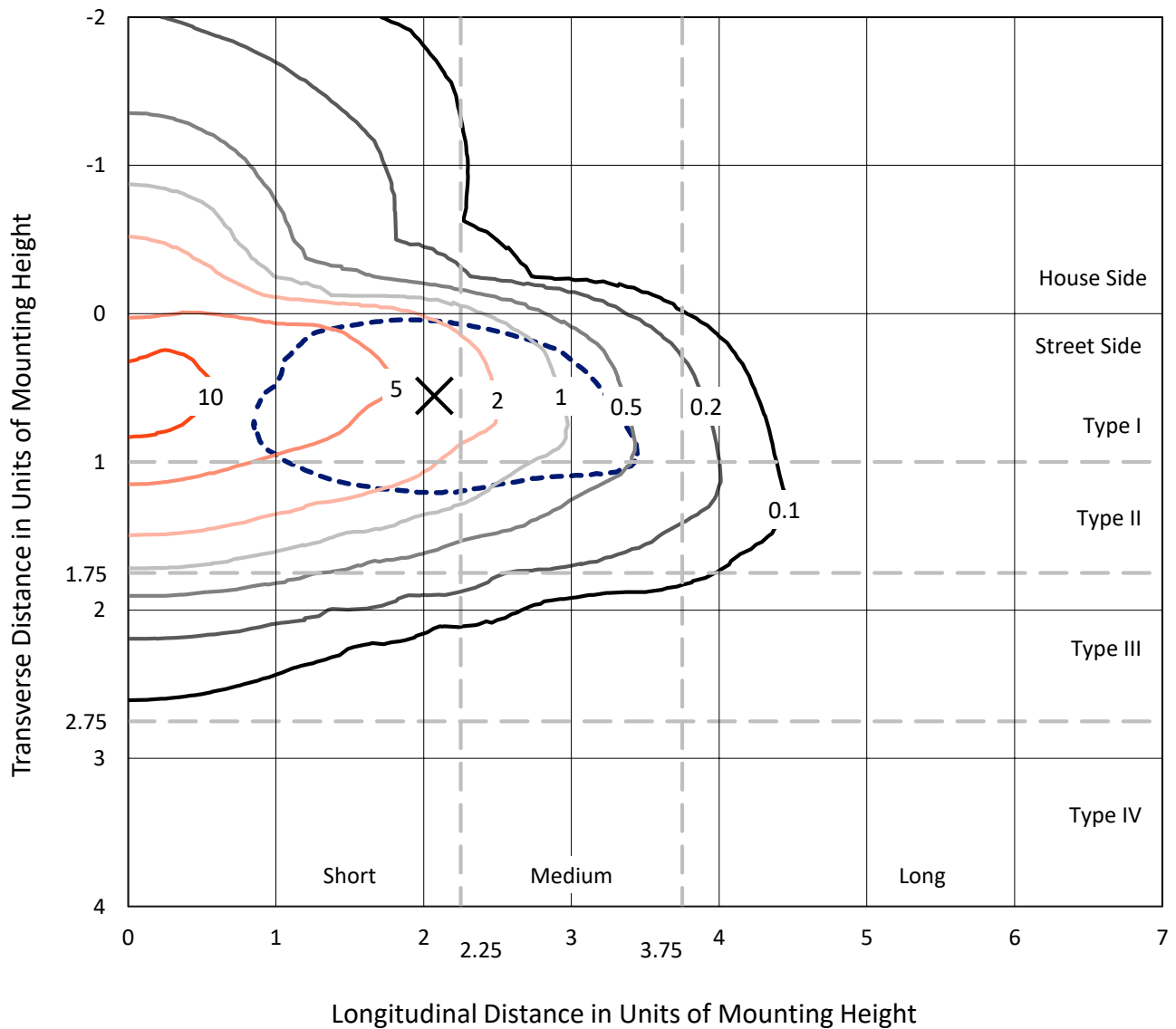


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

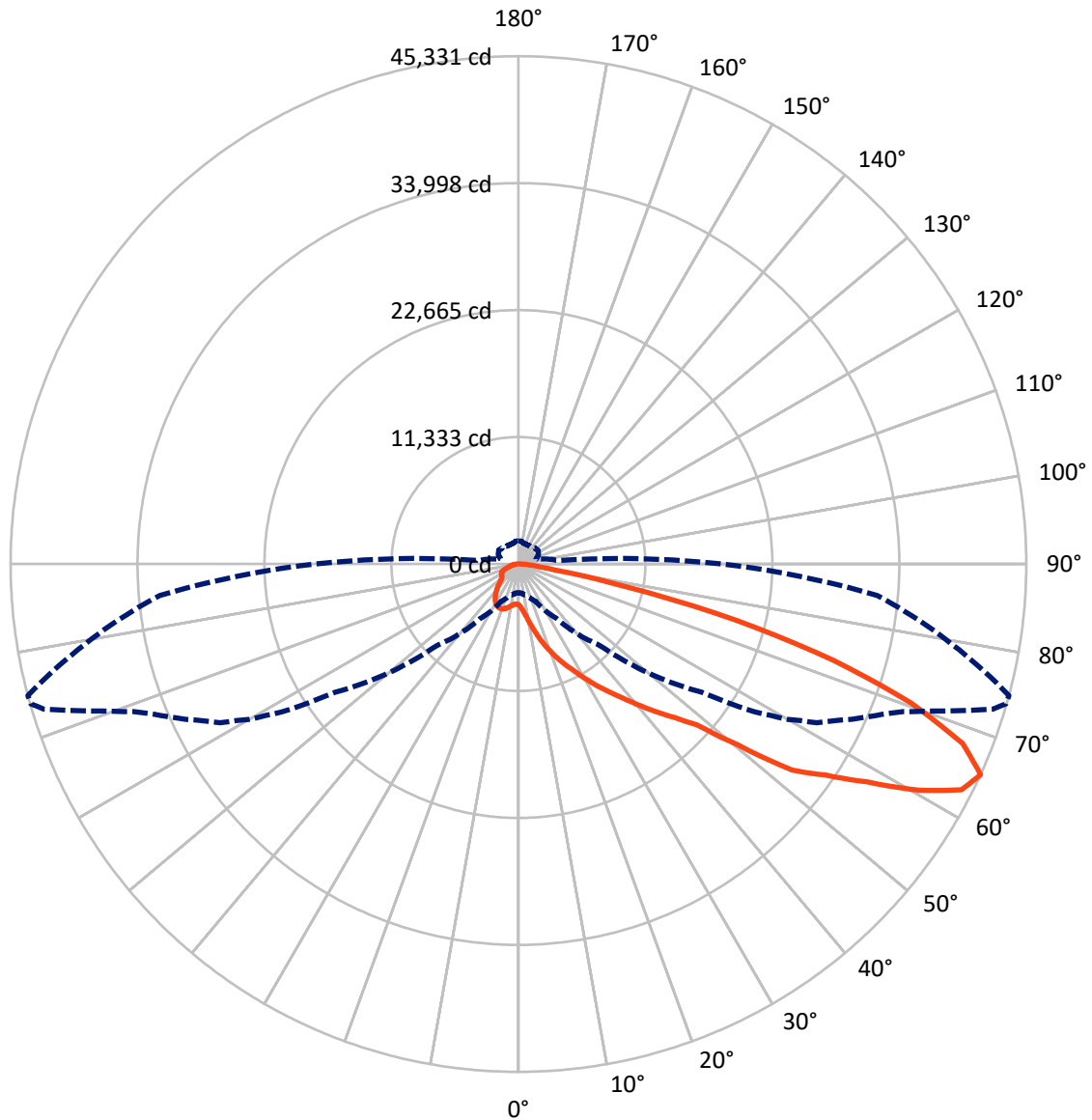


Based on 30 foot mounting height. Maximum calculated value = 12.6 fc
 Type II - Short - Full Cutoff

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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	6905.7	0.0	6905.7
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	37885.3	0.0	37885.3
	% Fixture	84.6	0.0	84.6
Total	Lumens	44791.0	0.0	44791.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	449.9	1.0
10°-20°	1758.0	3.9
20°-30°	3606.8	8.1
30°-40°	6068.3	13.5
40°-50°	8384.7	18.7
50°-60°	10466.5	23.4
60°-70°	9418.8	21.0
70°-80°	3948.3	8.8
80°-90°	689.8	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°	44791.0	100.0
0°-180°	44791.0	100.0



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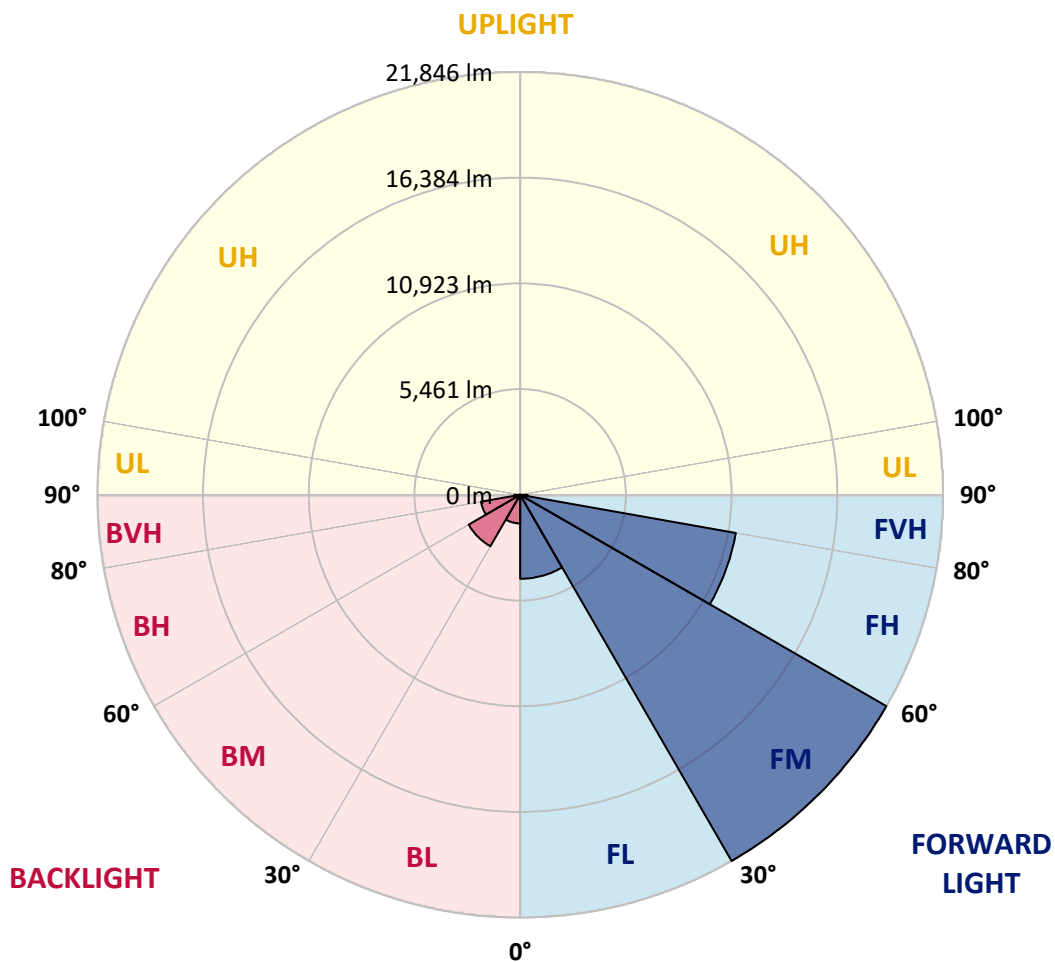
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4337.9	9.7			
FM (30°-60°)	21845.6	48.8			
FH (60°-80°)	11314.0	25.3			G4/12000
FVH (80°-90°)	387.7	0.9			G3/500
BL (0°-30°)	1476.9	3.3	B3/2500		
BM (30°-60°)	3073.8	6.9	B3/5000		
BH (60°-80°)	2053.0	4.6	B3/2500		G3/2500
BVH (80°-90°)	302.1	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°	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1
2.5°	4621.7	4570.8	4583.5	4498.7	4394.9	4259.2	4108.7	4106.5	4108.7	4093.8	4038.7
5°	6408.9	6347.4	6324.1	6133.3	5853.5	5454.9	5022.4	4975.8	4956.7	4907.9	4795.6
7.5°	7712.7	7678.8	7642.8	7498.6	7244.2	6799.0	6218.1	6118.5	6023.1	5999.7	5872.5
10°	8554.4	8545.9	8469.6	8431.4	8272.4	7886.6	7320.5	7225.1	7121.2	7085.2	6951.6
12.5°	9220.1	9218.0	9181.9	9192.5	9054.7	8774.9	8287.3	8200.4	8124.0	8013.8	7918.4
15°	9680.1	9682.3	9735.3	9794.6	9773.4	9584.7	9126.8	9088.7	9022.9	8946.6	8834.2
17.5°	10057.5	10068.1	10123.2	10231.4	10348.0	10333.1	9970.6	9938.8	9881.6	9777.7	9718.3
20°	10909.8	10950.1	10844.1	10844.1	10856.8	10914.0	10740.2	10714.7	10634.2	10579.0	10532.4
22.5°	12349.3	12395.9	12156.4	11912.6	11673.0	11499.2	11325.3	11357.1	11302.0	11263.8	11236.3
25°	14219.2	14255.2	13867.2	13456.0	12968.3	12332.3	11902.0	11882.9	11853.2	11829.9	11817.2
27.5°	15978.8	15993.7	15626.9	15024.8	14458.7	13545.0	12487.1	12463.8	12427.7	12383.2	12345.1
30°	17484.1	17479.8	17102.4	16527.9	15921.6	14910.3	13375.4	13303.3	13197.3	13076.5	12983.2
32.5°	18787.9	18781.5	18368.1	17772.4	17136.4	16262.9	14592.3	14443.9	14278.5	14043.2	13901.2
35°	19814.0	19809.7	19419.7	18798.5	18069.2	17537.1	15987.3	15805.0	15595.1	15279.2	15060.8
37.5°	20202.0	20202.0	19983.6	19559.6	18915.1	18550.4	17537.1	17316.6	17091.8	16733.6	16487.6
40°	19975.1	19979.3	20026.0	19947.5	19633.8	19353.9	18982.9	18851.5	18658.6	18336.3	18079.8
42.5°	19214.0	19237.3	19546.9	19926.3	20083.2	20038.7	20265.6	20206.2	20070.5	19822.5	19618.9
45°	18249.4	18321.5	18660.7	19377.3	20208.3	20630.2	21340.4	21346.8	21321.3	21187.8	21030.9
47.5°	16924.4	17026.1	17473.5	18442.3	19915.7	21204.7	22432.2	22489.5	22542.5	22455.6	22383.5
50°	15164.7	15285.6	15955.5	17240.2	19320.0	21800.5	24495.1	24753.7	24995.4	24965.7	25014.5
52.5°	13280.0	13422.0	14242.5	15673.5	18296.0	21938.3	25813.7	26235.6	26657.5	27003.1	27369.8
55°	11579.7	11503.4	12323.8	13831.2	16612.7	21317.1	26998.8	27507.6	27978.3	28402.3	28839.0
57.5°	9275.2	9400.3	10222.9	11713.3	14384.5	19563.8	27815.1	28559.2	29235.5	29937.2	30556.3
60°	6779.9	6905.0	7797.5	9311.3	11965.6	16905.3	27191.8	28319.6	29403.0	30477.8	31317.4
62.5°	4093.8	4187.1	4973.6	6415.3	9226.5	13752.8	24414.5	25894.3	27488.6	28773.3	30060.2
65°	2548.3	2601.3	2891.7	3684.6	5925.5	10267.4	19947.5	21560.9	23278.1	24908.5	26246.2
67.5°	2086.1	2105.2	2158.2	2327.8	3254.3	6695.1	14846.7	16275.6	17825.4	19402.7	20891.0
70°	1876.2	1863.5	1863.5	1874.1	2086.1	3599.8	9720.4	10651.1	11942.2	13313.9	14675.0
72.5°	1693.9	1681.2	1657.9	1626.1	1702.4	2196.4	5024.5	5726.3	6657.0	7876.0	9179.8
75°	1522.2	1505.2	1477.7	1437.4	1490.4	1657.9	2412.6	2707.3	3161.0	3809.7	4536.9
77.5°	1344.1	1322.9	1297.5	1267.8	1335.6	1289.0	1414.1	1520.1	1693.9	1901.7	2175.2
80°	1142.7	1123.6	1115.1	1100.3	1180.9	981.6	998.5	1064.3	1166.0	1278.4	1405.6
82.5°	894.7	894.7	928.6	934.9	1024.0	706.0	746.3	803.5	856.5	915.9	975.2
85°	589.4	593.6	708.1	752.6	807.7	474.9	559.7	578.8	621.2	655.1	680.5
87.5°	184.4	199.3	432.5	479.1	464.3	269.2	343.4	351.9	381.6	404.9	426.1
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1
2.5°	4038.7	4013.3	3989.9	3987.8	3970.9	3947.5	3956.0	3920.0	3922.1	3903.0	3881.8
5°	4748.9	4732.0	4647.1	4623.8	4560.2	4519.9	4513.6	4428.8	4418.2	4369.4	4316.4
7.5°	5770.8	5715.7	5596.9	5539.7	5431.6	5351.0	5312.8	5200.5	5145.4	5018.2	4960.9
10°	6841.4	6771.4	6625.2	6544.6	6440.7	6311.4	6241.4	6078.2	6014.6	5898.0	5758.1
12.5°	7833.6	7763.6	7613.1	7551.6	7413.8	7276.0	7199.7	7015.2	6932.6	6746.0	6635.8
15°	8751.6	8681.6	8550.2	8486.6	8348.8	8236.4	8134.6	7952.3	7854.8	7680.9	7536.8
17.5°	9642.0	9567.8	9453.3	9396.1	9262.5	9148.0	9037.8	8866.0	8766.4	8592.6	8463.2
20°	10468.8	10413.7	10331.0	10254.7	10121.1	10017.2	9885.8	9737.4	9593.2	9466.0	9343.1
22.5°	11189.6	11168.4	11079.4	11045.5	10931.0	10841.9	10727.5	10581.2	10477.3	10316.2	10201.7
25°	11810.8	11804.4	11762.0	11751.4	11670.9	11586.1	11560.6	11439.8	11344.4	11202.3	11083.6
27.5°	12345.1	12351.4	12340.8	12370.5	12349.3	12311.1	12313.2	12273.0	12217.8	12099.1	11995.2
30°	12938.7	12904.7	12923.8	12966.2	12978.9	12983.2	13053.1	13076.5	13072.2	12993.8	12942.9
32.5°	13778.2	13697.6	13623.4	13617.1	13659.5	13676.4	13795.2	13856.6	13909.6	13928.7	13937.2
35°	14848.8	14687.7	14532.9	14450.3	14378.2	14397.3	14482.1	14581.7	14698.3	14778.9	14874.3
37.5°	16197.2	16000.0	15726.5	15531.5	15482.7	15376.7	15431.8	15510.3	15624.8	15749.9	15915.2
40°	17831.7	17532.8	17225.4	16966.8	16826.8	16631.8	16629.7	16614.8	16684.8	16801.4	17034.6
42.5°	19404.8	19139.8	18813.3	18542.0	18359.6	18098.9	18045.9	17908.1	17939.9	18041.6	18268.5
45°	20878.3	20659.9	20460.6	20146.8	19992.1	19710.1	19621.1	19457.8	19366.7	19413.3	19640.1
47.5°	22305.0	22165.1	21957.4	21753.8	21635.1	21382.8	21268.3	21151.7	21035.1	21030.9	21268.3
50°	25086.5	25012.3	24766.4	24554.4	24611.7	24302.1	24321.2	24007.4	24149.5	24166.4	24664.7
52.5°	27700.6	27959.2	28141.5	28364.1	28508.3	28535.9	28631.3	28773.3	28945.0	29284.2	29746.4
55°	29197.3	29521.7	29710.4	29880.0	30159.8	30219.2	30378.2	30566.9	30717.4	31099.0	31491.2
57.5°	30976.0	31578.1	31870.7	32140.0	32517.3	32661.5	32926.5	33132.1	33327.2	33778.8	34253.6
60°	32072.1	32805.7	33401.4	33827.5	34300.3	34639.5	35040.2	35362.4	35820.4	36361.0	37069.1
62.5°	31200.8	32277.8	33068.5	33800.0	34442.3	35091.1	35665.6	36267.7	36963.1	37781.4	38879.6
65°	27730.3	28826.3	30181.0	30940.0	31790.1	32790.8	33664.3	34639.5	35587.2	36778.6	38402.6
67.5°	22324.1	23598.3	25120.5	25885.8	26863.2	27980.4	28959.9	30151.3	31258.0	32701.8	34709.5
70°	16091.2	17738.5	19019.0	19818.2	20958.8	22110.0	23055.5	24442.1	25357.9	26837.7	28913.2
72.5°	10189.0	11488.5	13057.4	14064.4	15077.8	16243.8	17210.6	18406.3	19260.7	20609.0	22489.5
75°	5478.2	6436.5	7814.5	8770.6	9856.1	10852.5	11984.6	12786.0	13417.8	14484.2	16010.6
77.5°	2567.4	3150.4	3847.9	4583.5	5319.2	6086.7	6832.9	7481.7	7753.0	8363.6	9264.6
80°	1558.2	1746.9	1950.4	2177.3	2484.7	2732.7	3061.4	3298.8	3315.8	3508.7	3784.3
82.5°	1040.9	1110.9	1172.4	1229.6	1308.1	1369.6	1439.5	1522.2	1556.1	1600.6	1689.7
85°	710.2	744.1	756.9	792.9	784.4	805.6	833.2	860.7	875.6	873.5	913.7
87.5°	436.7	453.7	462.2	470.7	464.3	455.8	468.5	483.4	487.6	474.9	479.1
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°	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1
2.5°	3886.1	3867.0	3847.9	3835.2	3830.9	3718.6	3669.8	3638.0	3570.2	3515.0	3470.5
5°	4286.7	4246.5	4214.7	4176.5	4155.3	3871.2	3767.3	3695.2	3576.5	3506.6	3443.0
7.5°	4931.2	4818.9	4753.2	4678.9	4615.3	4102.3	3930.6	3818.2	3652.8	3559.6	3487.5
10°	5662.7	5546.1	5442.2	5327.7	5228.0	4409.7	4159.5	3985.7	3767.3	3646.5	3551.1
12.5°	6478.9	6364.4	6232.9	6086.7	5959.5	4799.8	4452.1	4204.1	3905.1	3744.0	3610.4
15°	7443.5	7242.1	7083.1	6913.5	6765.1	5266.2	4793.4	4450.0	4051.4	3833.1	3655.0
17.5°	8340.3	8128.3	7912.0	7763.6	7591.9	5789.9	5136.9	4700.2	4172.3	3890.3	3663.4
20°	9215.9	8984.8	8798.2	8598.9	8418.7	6332.6	5503.6	4920.6	4250.7	3892.4	3610.4
22.5°	9987.6	9843.4	9635.6	9419.4	9237.1	6875.3	5847.1	5107.2	4280.4	3843.7	3517.2
25°	10865.3	10712.6	10458.2	10275.9	10072.4	7428.7	6184.2	5251.4	4263.4	3752.5	3373.0
27.5°	11802.3	11632.7	11371.9	11181.1	10935.2	8003.2	6493.7	5355.2	4199.8	3604.1	3180.1
30°	12779.7	12624.9	12368.4	12175.4	11927.4	8611.6	6839.3	5425.2	4072.6	3398.4	2955.3
32.5°	13829.1	13699.8	13445.4	13244.0	12978.9	9271.0	7161.5	5446.4	3879.7	3154.6	2717.9
35°	14825.5	14736.5	14522.3	14333.7	14058.1	9894.3	7502.9	5435.8	3650.7	2887.5	2501.7
37.5°	15947.0	15894.0	15788.0	15548.4	15211.4	10740.2	7912.0	5391.3	3370.9	2622.5	2336.3
40°	17142.7	17147.0	17032.5	16869.2	16555.5	11766.3	8399.6	5304.4	3065.6	2389.3	2185.8
42.5°	18408.4	18474.1	18419.0	18302.4	18001.3	12800.9	8982.7	5198.4	2768.8	2162.5	2037.4
45°	19858.5	19939.1	20023.9	19852.1	19559.6	14166.2	9750.1	5060.6	2448.7	1973.8	1935.6
47.5°	21531.2	21658.4	21734.8	21736.9	21444.3	15858.0	10996.7	4977.9	2164.6	1846.6	1886.8
50°	25061.1	25101.4	25281.6	25595.4	25370.6	19773.7	13174.0	4927.0	1971.6	1768.1	1850.8
52.5°	30147.1	30590.2	30901.8	30880.6	30575.4	22260.5	14373.9	4664.1	1857.2	1738.4	1833.8
55°	32218.4	32771.7	33348.4	33501.0	33263.6	24382.7	15508.2	4401.2	1802.0	1759.6	1840.2
57.5°	34978.7	35911.5	36702.3	37035.2	36691.7	27098.5	17000.7	4263.4	1785.1	1816.9	1880.5
60°	38203.3	39356.6	40395.4	40993.3	40993.3	30219.2	18548.3	4206.2	1761.8	1901.7	1948.3
62.5°	40274.6	41968.5	43537.3	44412.9	44387.5	32392.2	19235.2	4011.1	1708.8	1961.0	2041.6
65°	40283.1	42297.1	44296.3	45280.0	45330.9	32125.1	18101.0	3542.6	1611.2	1969.5	2134.9
67.5°	36924.9	39072.5	41402.5	42502.8	42757.2	29572.6	15669.3	2912.9	1452.2	1884.7	2168.8
70°	31185.9	33282.7	35661.4	36742.6	37194.2	25209.5	12620.7	2245.1	1248.7	1698.2	2098.8
72.5°	24569.3	26625.7	28281.5	29072.2	29424.2	19269.1	9190.4	1696.0	1024.0	1431.0	1910.2
75°	17395.0	18938.4	19818.2	19994.2	20049.3	11615.8	5584.2	1261.4	843.8	1113.0	1613.4
77.5°	9818.0	10479.4	10407.3	10485.8	9832.8	4483.9	2431.7	903.1	695.4	845.9	1250.8
80°	3833.1	3951.8	3712.2	3638.0	3337.0	1668.5	1072.7	629.7	555.5	640.3	875.6
82.5°	1689.7	1744.8	1693.9	1706.6	1632.4	860.7	642.4	455.8	424.0	468.5	580.9
85°	930.7	947.7	943.4	971.0	930.7	343.4	305.3	279.8	296.8	318.0	373.1
87.5°	453.7	457.9	443.1	466.4	451.6	173.8	150.5	159.0	173.8	178.1	178.1
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°	3640.1	3640.1	3640.1	3640.1	3640.1	3640.1
2.5°	3438.7	3421.8	3423.9	3419.6	3411.2	3411.2
5°	3409.0	3392.1	3392.1	3387.8	3377.2	3379.4
7.5°	3438.7	3411.2	3400.6	3385.7	3370.9	3370.9
10°	3472.6	3423.9	3394.2	3368.8	3349.7	3349.7
12.5°	3498.1	3421.8	3373.0	3339.1	3320.0	3320.0
15°	3506.6	3406.9	3339.1	3298.8	3281.8	3279.7
17.5°	3479.0	3349.7	3267.0	3220.4	3199.2	3192.8
20°	3394.2	3245.8	3146.2	3093.2	3063.5	3052.9
22.5°	3267.0	3097.4	2980.8	2925.7	2887.5	2881.1
25°	3088.9	2906.6	2792.1	2739.1	2717.9	2711.5
27.5°	2881.1	2711.5	2614.0	2580.1	2561.0	2558.9
30°	2684.0	2539.8	2467.7	2442.3	2419.0	2414.7
32.5°	2499.5	2408.4	2380.8	2344.8	2289.7	2283.3
35°	2368.1	2359.6	2340.5	2260.0	2192.1	2173.1
37.5°	2287.5	2366.0	2268.5	2109.4	2060.7	2056.4
40°	2240.9	2300.3	2132.8	2077.6	2081.9	2077.6
42.5°	2134.9	2196.4	2137.0	2111.6	2128.5	2132.8
45°	2028.9	2096.7	2168.8	2151.9	2192.1	2192.1
47.5°	1969.5	2071.3	2166.7	2166.7	2226.1	2247.3
50°	1901.7	2050.1	2132.8	2162.5	2209.1	2192.1
52.5°	1897.4	2014.0	2084.0	2137.0	2158.2	2139.1
55°	1903.8	1984.4	2035.2	2094.6	2120.0	2122.2
57.5°	1912.3	1967.4	2001.3	2028.9	2105.2	2105.2
60°	1933.5	1952.6	1971.6	1986.5	2086.1	2088.2
62.5°	1967.4	1937.7	1933.5	1948.3	2075.5	2067.0
65°	2020.4	1916.5	1884.7	1899.6	2064.9	2039.5
67.5°	2092.5	1884.7	1823.2	1833.8	2056.4	2001.3
70°	2158.2	1833.8	1746.9	1736.3	1975.9	1878.4
72.5°	2164.6	1774.5	1640.9	1609.1	1717.2	1624.0
75°	2058.6	1734.2	1524.3	1431.0	1418.3	1405.6
77.5°	1855.0	1710.9	1388.6	1242.3	1216.9	1225.4
80°	1551.9	1624.0	1225.4	1051.5	1189.3	1174.5
82.5°	1159.7	1433.2	1040.9	930.7	928.6	820.5
85°	644.5	1117.3	848.0	697.5	485.5	470.7
87.5°	180.2	621.2	593.6	394.3	269.2	279.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)