

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: P269662

Luminaire Tested: **GLEON-AF-09-LED-E1-T2R-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P269662
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-7027-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 2700K, 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: 31735.2 lumens
Efficiency: N/A
Efficacy: 109.4 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): 290
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

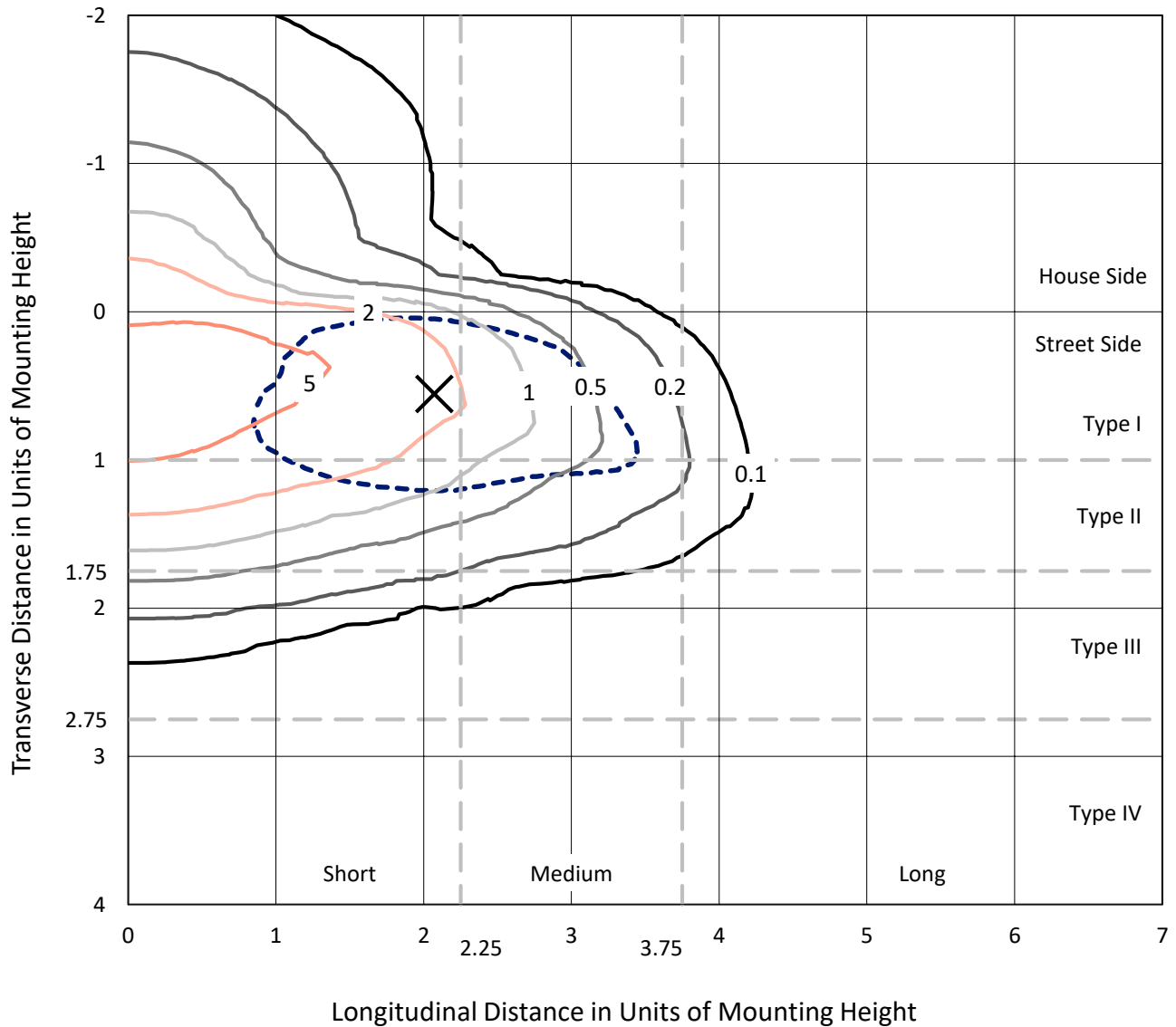


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

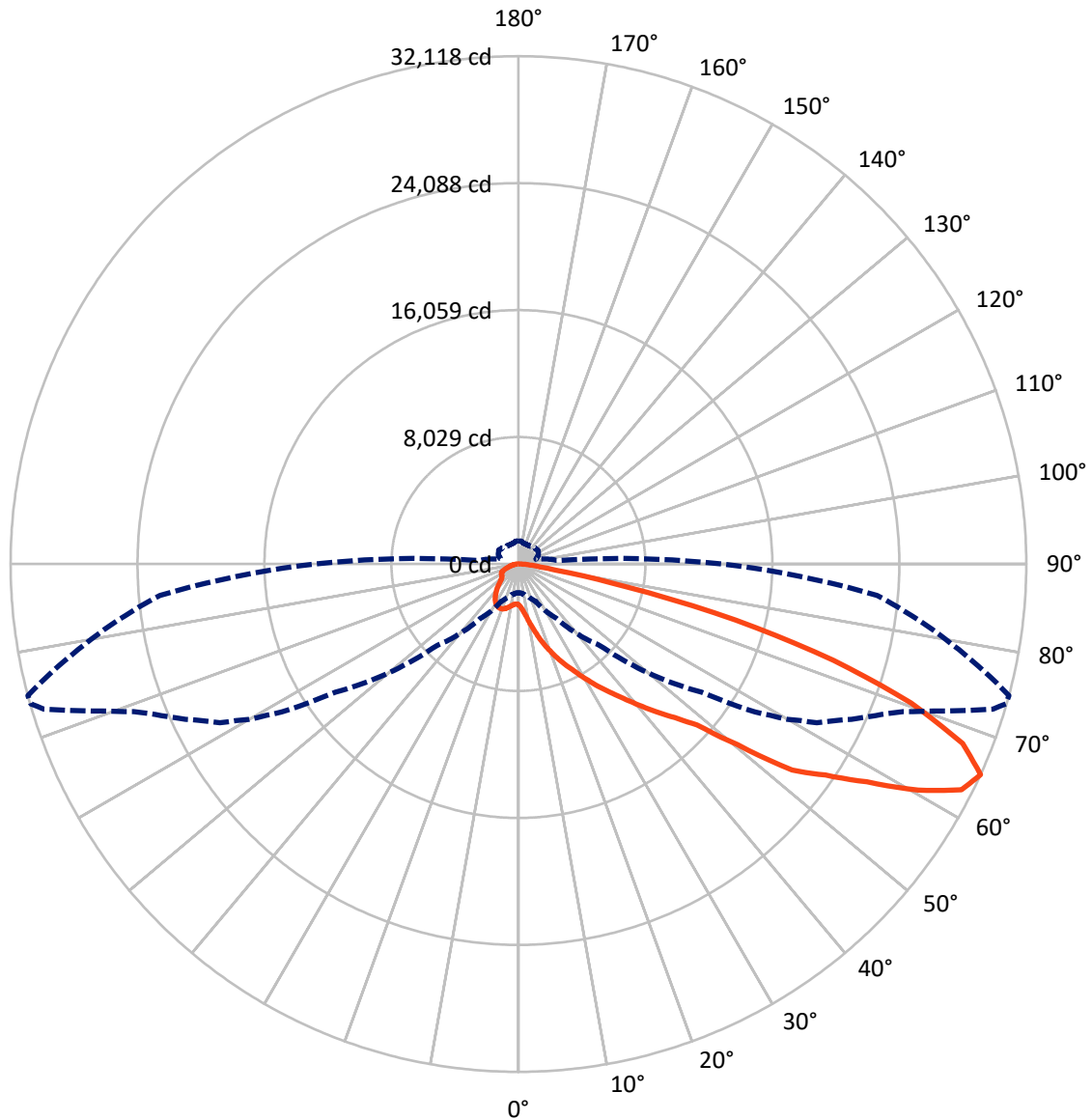


Based on 30 foot mounting height. Maximum calculated value = 8.9 fc
 Type II - Short - Full Cutoff

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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	4892.8	0.0	4892.8
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	26842.4	0.0	26842.4
	% Fixture	84.6	0.0	84.6
Total	Lumens	31735.2	0.0	31735.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.8	1.0
10°-20°	1245.6	3.9
20°-30°	2555.5	8.1
30°-40°	4299.5	13.5
40°-50°	5940.7	18.7
50°-60°	7415.7	23.4
60°-70°	6673.4	21.0
70°-80°	2797.4	8.8
80°-90°	488.7	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°	31735.2	100.0
0°-180°	31735.2	100.0



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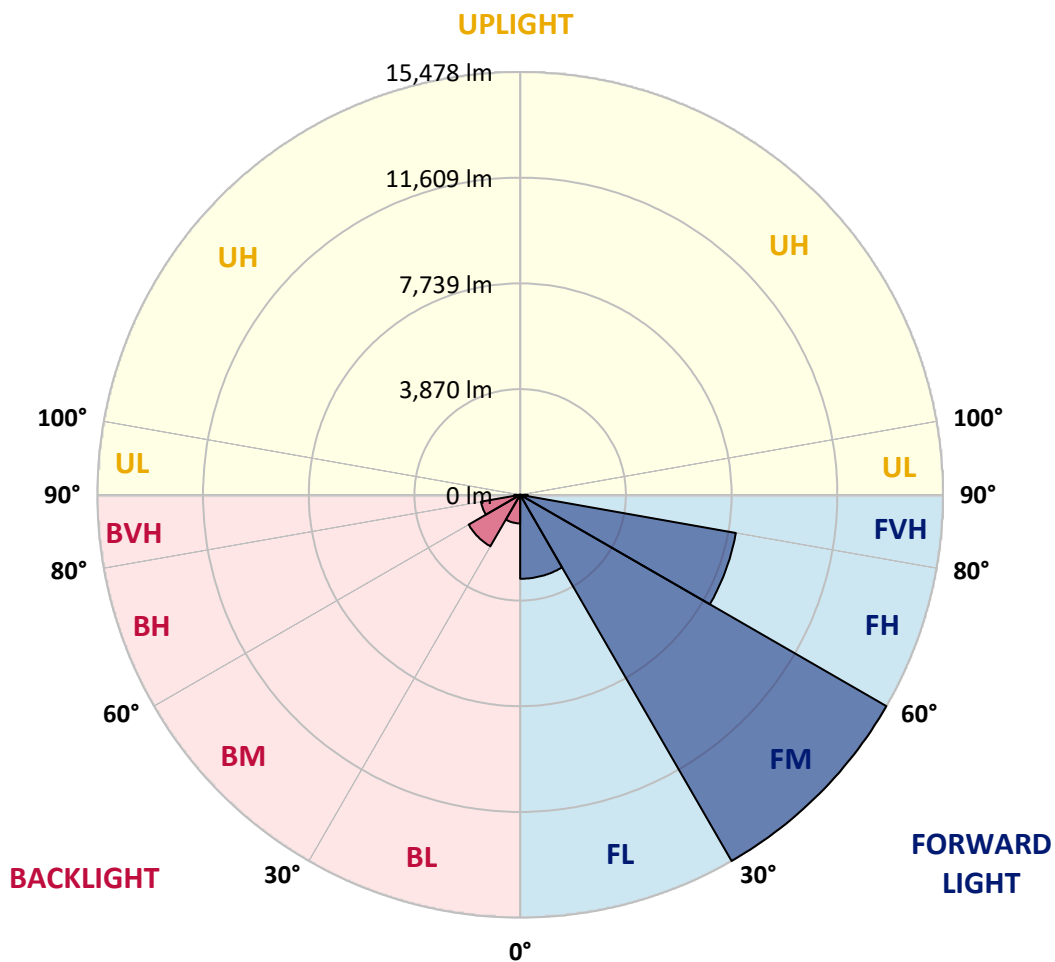
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3073.5	9.7			
FM (30°-60°)	15478.0	48.8			
FH (60°-80°)	8016.2	25.3			G4/12000
FVH (80°-90°)	274.7	0.9			G3/500
BL (0°-30°)	1046.4	3.3	B3/2500		
BM (30°-60°)	2177.9	6.9	B2/2500		
BH (60°-80°)	1454.6	4.6	B3/2500		G3/2500
BVH (80°-90°)	214.0	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-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2
2.5°	3274.5	3238.5	3247.6	3187.5	3113.9	3017.6	2911.0	2909.6	2911.0	2900.5	2861.6
5°	4540.8	4497.3	4480.7	4345.6	4147.3	3864.9	3558.5	3525.4	3512.0	3477.3	3397.7
7.5°	5464.6	5440.6	5415.1	5312.8	5132.6	4817.3	4405.6	4335.0	4267.5	4250.9	4160.8
10°	6061.0	6054.9	6000.9	5973.8	5861.3	5587.7	5186.8	5119.1	5045.5	5020.0	4925.3
12.5°	6532.7	6531.0	6505.5	6513.2	6415.4	6217.2	5871.7	5810.1	5756.0	5677.8	5610.4
15°	6858.6	6860.0	6897.6	6939.6	6924.7	6790.9	6466.4	6439.5	6392.9	6338.8	6259.2
17.5°	7126.0	7133.4	7172.4	7249.1	7331.7	7321.1	7064.4	7041.9	7001.3	6927.6	6885.6
20°	7729.7	7758.3	7683.3	7683.3	7692.2	7732.8	7609.6	7591.5	7534.5	7495.5	7462.4
22.5°	8749.8	8782.8	8612.9	8440.3	8270.5	8147.4	8024.2	8046.7	8007.6	7980.6	7961.0
25°	10074.5	10100.1	9825.2	9533.8	9188.4	8737.6	8432.7	8419.3	8398.3	8381.6	8372.7
27.5°	11321.2	11331.8	11071.9	10645.4	10244.4	9596.9	8847.3	8830.8	8805.2	8773.7	8746.6
30°	12387.7	12384.8	12117.3	11710.3	11280.7	10564.2	9476.7	9425.6	9350.5	9264.8	9198.9
32.5°	13311.5	13307.0	13014.1	12592.0	12141.4	11522.6	10339.0	10233.9	10116.6	9949.8	9849.2
35°	14038.5	14035.6	13759.2	13319.1	12802.4	12425.4	11327.3	11198.1	11049.4	10825.6	10670.8
37.5°	14313.5	14313.5	14158.7	13858.3	13401.6	13143.3	12425.4	12269.1	12110.0	11856.0	11681.7
40°	14152.7	14155.8	14188.8	14133.3	13911.0	13712.5	13449.8	13356.5	13219.9	12991.6	12809.8
42.5°	13613.5	13630.1	13849.3	14118.2	14229.3	14197.8	14358.5	14316.5	14220.3	14044.6	13900.4
45°	12930.1	12981.0	13221.4	13729.2	14317.9	14617.0	15120.1	15124.6	15106.5	15011.9	14900.7
47.5°	11991.2	12063.2	12380.3	13066.7	14110.7	15024.0	15893.6	15934.1	15971.8	15910.2	15859.0
50°	10744.4	10830.1	11304.7	12215.1	13688.6	15446.0	17355.2	17538.5	17709.6	17688.6	17723.2
52.5°	9409.0	9509.7	10091.1	11104.9	12963.0	15543.6	18289.5	18588.4	18887.4	19132.1	19392.0
55°	8204.4	8150.3	8731.6	9799.7	11770.4	15103.6	19129.1	19489.6	19823.1	20123.6	20432.9
57.5°	6571.7	6660.3	7243.2	8299.1	10191.7	13861.2	19707.5	20234.7	20713.8	21211.0	21649.7
60°	4803.6	4892.3	5524.7	6597.2	8477.8	11977.7	19265.9	20064.9	20832.6	21594.0	22188.9
62.5°	2900.5	2966.7	3524.0	4545.3	6537.1	9744.0	17298.1	18346.5	19476.2	20386.5	21298.2
65°	1805.6	1843.1	2048.9	2610.7	4198.4	7274.7	14133.3	15276.2	16493.1	17648.1	18596.0
67.5°	1478.0	1491.5	1529.2	1649.3	2305.7	4743.6	10519.2	11531.5	12629.6	13747.1	14801.6
70°	1329.3	1320.4	1320.4	1327.9	1478.0	2550.6	6887.0	7546.5	8461.2	9433.1	10397.5
72.5°	1200.1	1191.2	1174.7	1152.0	1206.2	1556.1	3560.0	4057.1	4716.6	5580.4	6504.1
75°	1078.5	1066.5	1047.0	1018.4	1056.0	1174.7	1709.4	1918.2	2239.7	2699.2	3214.4
77.5°	952.4	937.3	919.2	898.2	946.4	913.2	1001.9	1077.0	1200.1	1347.4	1541.1
80°	809.6	796.1	790.1	779.5	836.7	695.5	707.4	754.0	826.1	905.9	996.0
82.5°	633.8	633.8	657.9	662.4	725.6	500.1	528.7	569.3	606.9	648.8	690.9
85°	417.6	420.5	501.8	533.2	572.3	336.4	396.5	410.0	440.1	464.2	482.2
87.5°	130.7	141.3	306.4	339.5	329.0	190.8	243.4	249.4	270.4	286.9	301.9
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°	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2
2.5°	2861.6	2843.4	2827.0	2825.3	2813.4	2797.0	2802.9	2777.4	2778.8	2765.3	2750.3
5°	3364.7	3352.7	3292.6	3276.1	3231.1	3202.5	3198.0	3137.9	3130.4	3095.7	3058.3
7.5°	4088.6	4049.6	3965.5	3925.0	3848.3	3791.2	3764.3	3684.7	3645.6	3555.4	3514.9
10°	4847.3	4797.7	4694.1	4637.1	4563.4	4471.8	4422.1	4306.6	4261.4	4178.8	4079.7
12.5°	5550.3	5500.7	5394.1	5350.5	5252.7	5155.3	5101.1	4970.4	4911.8	4779.6	4701.5
15°	6200.6	6151.1	6057.9	6012.9	5915.2	5835.6	5763.5	5634.3	5565.3	5442.1	5340.0
17.5°	6831.5	6779.0	6697.9	6657.2	6562.7	6481.5	6403.4	6281.8	6211.2	6088.1	5996.4
20°	7417.3	7378.3	7319.7	7265.6	7171.0	7097.4	7004.3	6899.2	6796.9	6706.8	6619.7
22.5°	7928.0	7913.0	7850.0	7825.9	7744.7	7681.6	7600.6	7497.0	7423.4	7309.1	7228.1
25°	8368.3	8363.7	8333.7	8326.1	8269.0	8208.9	8190.9	8105.2	8037.8	7937.1	7853.0
27.5°	8746.6	8751.2	8743.7	8764.8	8749.8	8722.6	8724.2	8695.7	8656.5	8572.4	8498.9
30°	9167.3	9143.3	9156.8	9186.7	9195.8	9198.9	9248.4	9264.8	9262.0	9206.3	9170.3
32.5°	9762.2	9705.0	9652.5	9647.9	9678.0	9689.9	9774.1	9817.7	9855.2	9868.8	9874.8
35°	10520.7	10406.5	10296.8	10238.3	10187.1	10200.8	10260.8	10331.3	10414.1	10471.2	10538.6
37.5°	11475.9	11336.3	11142.5	11004.3	10969.8	10894.6	10933.7	10989.3	11070.4	11159.0	11276.2
40°	12634.1	12422.3	12204.6	12021.3	11922.1	11784.0	11782.3	11771.8	11821.4	11904.1	12069.3
42.5°	13748.6	13561.0	13329.6	13137.4	13008.1	12823.3	12785.8	12688.2	12710.7	12782.8	12943.6
45°	14792.6	14637.9	14496.7	14274.3	14164.7	13965.0	13901.9	13786.2	13721.6	13754.7	13915.4
47.5°	15803.5	15704.3	15557.1	15412.9	15328.9	15150.2	15069.0	14986.3	14903.8	14900.7	15069.0
50°	17774.3	17721.8	17547.4	17397.3	17437.8	17218.5	17231.9	17009.6	17110.3	17122.4	17475.4
52.5°	19626.3	19809.7	19938.8	20096.5	20198.7	20218.2	20285.7	20386.5	20508.0	20748.4	21075.9
55°	20686.8	20916.7	21050.3	21170.4	21368.8	21410.8	21523.5	21657.1	21763.9	22034.2	22312.1
57.5°	21947.1	22373.6	22581.0	22771.8	23039.1	23141.2	23329.1	23474.7	23612.8	23932.9	24269.2
60°	22723.6	23243.4	23665.5	23967.4	24302.3	24542.8	24826.5	25054.8	25379.4	25762.4	26264.0
62.5°	22106.3	22869.4	23429.7	23947.8	24402.9	24862.7	25269.7	25696.2	26188.9	26768.9	27546.9
65°	19647.4	20424.0	21383.9	21921.6	22523.9	23232.9	23851.7	24542.8	25214.2	26058.4	27208.9
67.5°	15817.0	16719.9	17798.3	18340.5	19033.0	19824.7	20518.5	21362.8	22146.9	23169.9	24592.3
70°	11400.8	12567.9	13475.2	14041.5	14849.7	15665.4	16335.3	17317.6	17966.6	19015.1	20485.6
72.5°	7219.0	8139.8	9251.4	9964.9	10683.0	11509.1	12194.0	13041.1	13646.5	14601.9	15934.1
75°	3881.3	4560.3	5536.8	6214.1	6983.2	7689.2	8491.3	9059.1	9506.8	10262.2	11343.7
77.5°	1819.1	2232.1	2726.3	3247.6	3768.7	4312.6	4841.2	5300.9	5493.1	5925.8	6564.2
80°	1104.0	1237.8	1382.0	1542.7	1760.5	1936.1	2169.0	2337.3	2349.2	2486.0	2681.3
82.5°	737.5	787.0	830.7	871.3	926.8	970.3	1019.9	1078.5	1102.5	1134.1	1197.3
85°	503.2	527.2	536.3	561.8	555.8	570.9	590.4	609.9	620.4	618.8	647.4
87.5°	309.5	321.5	327.4	333.5	329.0	322.9	332.0	342.4	345.5	336.4	339.5
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°	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2
2.5°	2753.3	2739.8	2726.3	2717.4	2714.3	2634.6	2600.1	2577.5	2529.5	2490.6	2458.9
5°	3037.2	3008.8	2986.1	2959.1	2944.1	2742.9	2669.3	2618.1	2533.9	2484.4	2439.3
7.5°	3493.9	3414.3	3367.7	3315.1	3270.1	2906.6	2784.8	2705.2	2588.0	2522.0	2471.0
10°	4012.1	3929.5	3855.9	3774.8	3704.3	3124.3	2947.1	2823.9	2669.3	2583.5	2516.1
12.5°	4590.3	4509.3	4416.2	4312.6	4222.5	3400.8	3154.4	2978.7	2766.9	2652.7	2558.1
15°	5273.9	5131.2	5018.6	4898.3	4793.1	3731.2	3396.2	3153.0	2870.5	2715.8	2589.6
17.5°	5909.2	5759.0	5605.9	5500.7	5379.1	4102.2	3639.6	3330.1	2956.1	2756.3	2595.7
20°	6529.6	6365.8	6233.7	6092.5	5964.8	4486.8	3899.5	3486.3	3011.7	2757.8	2558.1
22.5°	7076.4	6974.3	6826.9	6673.8	6544.6	4871.2	4142.8	3618.6	3032.7	2723.3	2492.0
25°	7698.3	7590.0	7409.8	7280.7	7136.5	5263.3	4381.7	3720.7	3020.7	2658.8	2389.9
27.5°	8362.1	8241.9	8057.3	7922.1	7747.8	5670.5	4600.8	3794.4	2975.6	2553.5	2253.2
30°	9054.6	8945.0	8763.2	8626.6	8450.7	6101.5	4845.7	3843.8	2885.5	2407.8	2093.9
32.5°	9798.2	9706.5	9526.3	9383.5	9195.8	6568.6	5074.0	3858.8	2748.9	2235.2	1925.6
35°	10504.2	10441.1	10289.4	10155.7	9960.3	7010.3	5315.9	3851.4	2586.6	2045.9	1772.4
37.5°	11298.7	11261.2	11186.1	11016.4	10777.5	7609.6	5605.9	3819.9	2388.4	1858.1	1655.2
40°	12146.0	12148.9	12067.8	11952.2	11729.9	8336.6	5951.4	3758.1	2172.0	1692.9	1548.7
42.5°	13042.8	13089.3	13050.1	12967.6	12754.2	9069.6	6364.4	3683.1	1961.7	1532.1	1443.4
45°	14070.2	14127.1	14187.3	14065.7	13858.3	10037.0	6908.1	3585.4	1734.9	1398.4	1371.4
47.5°	15255.2	15345.3	15399.5	15400.9	15193.7	11235.6	7791.4	3526.9	1533.6	1308.3	1336.9
50°	17756.3	17784.7	17912.5	18134.8	17975.5	14010.1	9334.0	3490.9	1397.0	1252.7	1311.3
52.5°	21359.8	21673.6	21894.5	21879.5	21663.2	15772.0	10184.2	3304.7	1315.8	1231.8	1299.3
55°	22827.3	23219.4	23627.8	23736.1	23567.8	17275.6	10987.8	3118.3	1276.9	1246.8	1303.8
57.5°	24783.0	25444.0	26004.2	26240.1	25996.7	19199.7	12045.4	3020.7	1264.8	1287.4	1332.4
60°	27067.6	27884.8	28620.9	29044.4	29044.4	21410.8	13141.8	2980.1	1248.3	1347.4	1380.4
62.5°	28535.3	29735.4	30847.0	31467.4	31449.3	22950.4	13628.5	2842.0	1210.6	1389.5	1446.5
65°	28541.3	29968.3	31384.8	32081.7	32117.8	22761.3	12824.8	2510.0	1141.6	1395.4	1512.6
67.5°	26162.0	27683.5	29334.4	30114.1	30294.3	20952.6	11102.0	2063.9	1028.9	1335.4	1536.6
70°	22095.8	23581.3	25266.6	26032.8	26352.7	17861.4	8942.0	1590.7	884.7	1203.2	1487.1
72.5°	17407.7	18864.8	20038.0	20598.1	20847.5	13652.5	6511.5	1201.7	725.6	1013.8	1353.3
75°	12324.7	13418.3	14041.5	14166.2	14205.3	8230.0	3956.6	893.8	597.8	788.6	1143.2
77.5°	6956.1	7424.9	7373.7	7429.3	6966.7	3176.9	1722.9	640.0	492.7	599.3	886.3
80°	2715.8	2799.8	2630.1	2577.5	2364.2	1182.2	760.1	446.1	393.5	453.6	620.4
82.5°	1197.3	1236.2	1200.1	1209.2	1156.6	609.9	455.1	322.9	300.5	332.0	411.6
85°	659.4	671.5	668.3	687.9	659.4	243.4	216.3	198.3	210.4	225.4	264.5
87.5°	321.5	324.5	314.0	330.4	319.9	123.2	106.7	112.6	123.2	126.2	126.2
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°	2579.2	2579.2	2579.2	2579.2	2579.2	2579.2
2.5°	2436.5	2424.3	2426.0	2422.9	2416.9	2416.9
5°	2415.4	2403.3	2403.3	2400.4	2392.8	2394.3
7.5°	2436.5	2416.9	2409.3	2398.8	2388.4	2388.4
10°	2460.5	2426.0	2404.9	2386.8	2373.3	2373.3
12.5°	2478.5	2424.3	2389.9	2365.7	2352.3	2352.3
15°	2484.4	2413.8	2365.7	2337.3	2325.3	2323.7
17.5°	2464.9	2373.3	2314.8	2281.7	2266.7	2262.1
20°	2404.9	2299.8	2229.1	2191.5	2170.6	2162.9
22.5°	2314.8	2194.6	2111.9	2072.8	2045.9	2041.4
25°	2188.5	2059.4	1978.2	1940.7	1925.6	1921.1
27.5°	2041.4	1921.1	1852.0	1828.1	1814.5	1813.0
30°	1901.6	1799.6	1748.5	1730.5	1713.8	1710.9
32.5°	1771.0	1706.4	1686.8	1661.3	1622.2	1617.8
35°	1677.9	1671.8	1658.4	1601.1	1553.2	1539.7
37.5°	1620.7	1676.3	1607.2	1494.6	1460.0	1457.1
40°	1587.8	1629.7	1511.0	1472.1	1475.0	1472.1
42.5°	1512.6	1556.1	1514.2	1496.0	1508.2	1511.0
45°	1437.5	1485.5	1536.6	1524.7	1553.2	1553.2
47.5°	1395.4	1467.6	1535.2	1535.2	1577.2	1592.2
50°	1347.4	1452.5	1511.0	1532.1	1565.1	1553.2
52.5°	1344.4	1427.0	1476.5	1514.2	1529.2	1515.6
55°	1348.8	1405.9	1442.0	1484.1	1502.1	1503.7
57.5°	1355.0	1393.9	1418.0	1437.5	1491.5	1491.5
60°	1369.9	1383.4	1397.0	1407.5	1478.0	1479.6
62.5°	1393.9	1372.9	1369.9	1380.4	1470.5	1464.5
65°	1431.4	1357.9	1335.4	1345.9	1463.0	1445.1
67.5°	1482.6	1335.4	1291.9	1299.3	1457.1	1418.0
70°	1529.2	1299.3	1237.8	1230.1	1400.0	1330.8
72.5°	1533.6	1257.3	1162.6	1140.0	1216.8	1150.5
75°	1458.6	1228.7	1080.0	1013.8	1004.9	996.0
77.5°	1314.3	1212.3	983.9	880.2	862.3	868.2
80°	1099.5	1150.5	868.2	745.1	842.7	832.2
82.5°	821.6	1015.4	737.5	659.4	657.9	581.4
85°	456.7	791.5	600.8	494.2	344.1	333.5
87.5°	127.6	440.1	420.5	279.5	190.8	198.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)