

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: P193963

Luminaire Tested: **GLEON-AF-05-LED-E1-T2R-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193963
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-05-LED-E1-T2R-8030-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27744 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 320
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

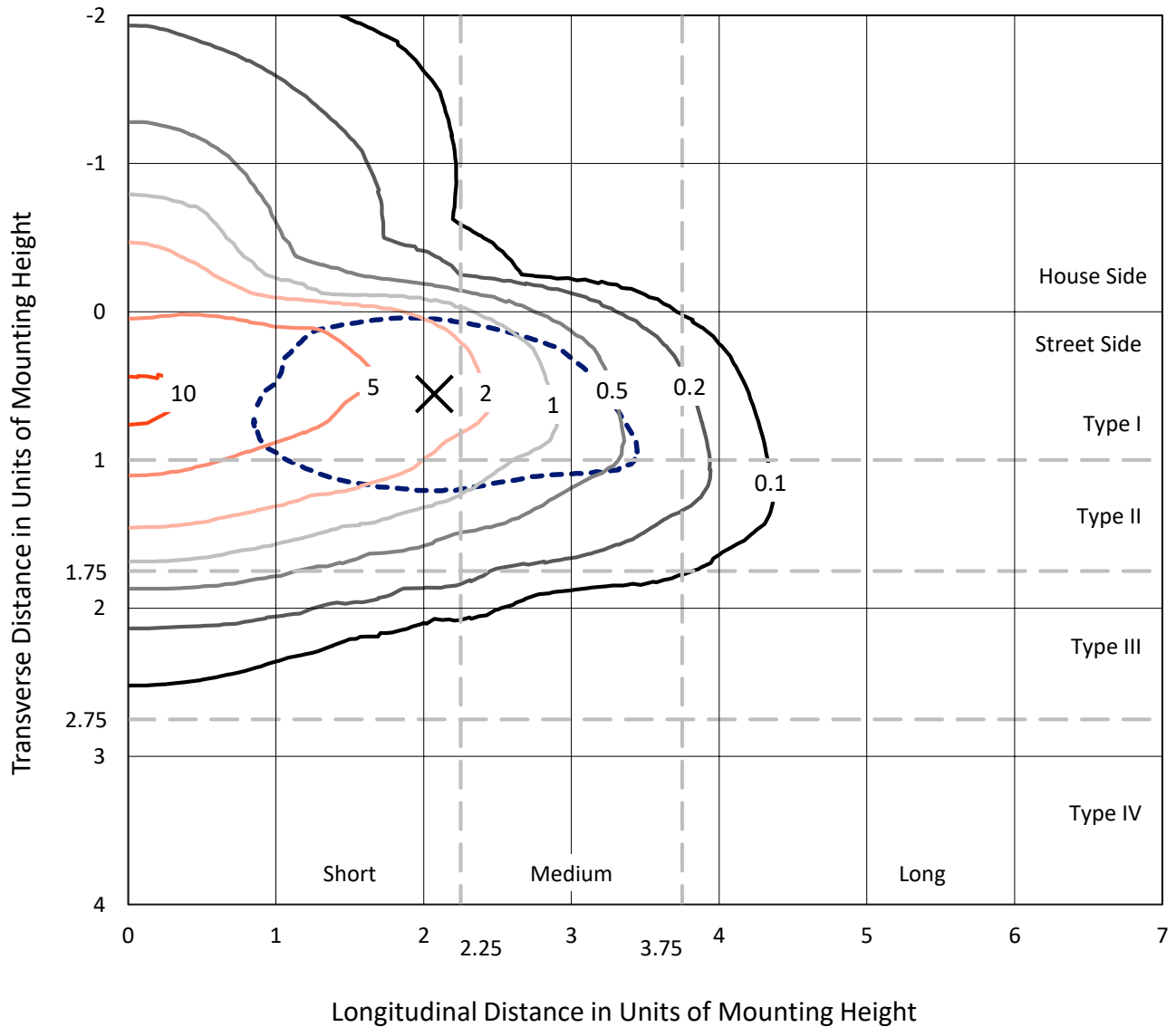


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Iso-Footcandle Lines of Horizontal Illumination

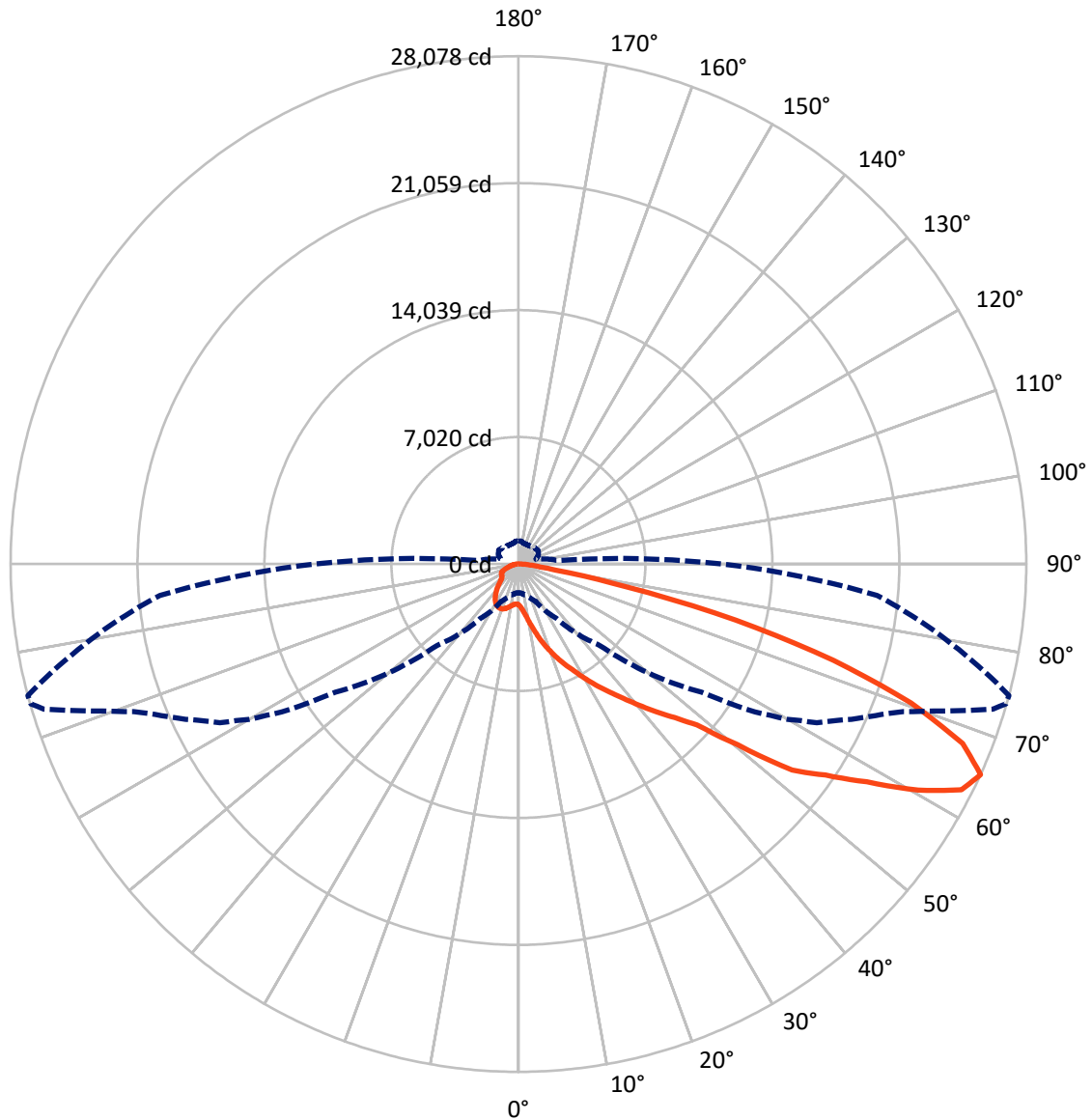
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 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	4277.5	0.0	4277.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	23466.5	0.0	23466.5
	% Fixture	84.6	0.0	84.6
Total	Lumens	27744.0	0.0	27744.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.7	1.0
10°-20°	1088.9	3.9
20°-30°	2234.1	8.1
30°-40°	3758.7	13.5
40°-50°	5193.5	18.7
50°-60°	6483.1	23.4
60°-70°	5834.1	21.0
70°-80°	2445.6	8.8
80°-90°	427.3	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°	27744.0	100.0
0°-180°	27744.0	100.0



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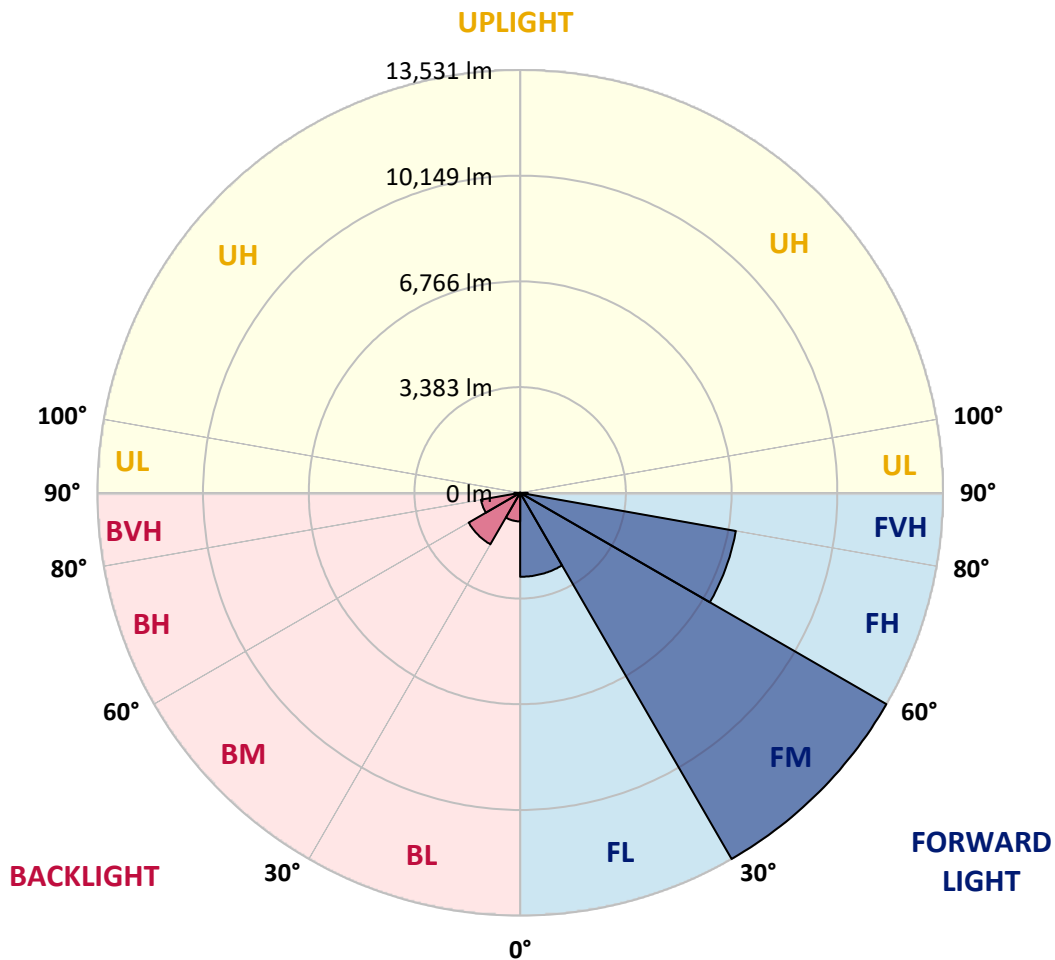
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2686.9	9.7			
FM (30°-60°)	13531.4	48.8			
FH (60°-80°)	7008.0	25.3			G3/7500
FVH (80°-90°)	240.1	0.9			G3/500
BL (0°-30°)	914.8	3.3	B2/1000		
BM (30°-60°)	1904.0	6.9	B2/2500		
BH (60°-80°)	1271.6	4.6	B3/2500		G3/2500
BVH (80°-90°)	187.1	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7
2.5°	2862.7	2831.2	2839.1	2786.6	2722.2	2638.2	2544.9	2543.6	2544.9	2535.8	2501.6
5°	3969.7	3931.7	3917.2	3799.0	3625.7	3378.8	3110.9	3082.0	3070.2	3040.0	2970.4
7.5°	4777.4	4756.3	4734.0	4644.7	4487.1	4211.4	3851.6	3789.8	3730.7	3716.3	3637.5
10°	5298.7	5293.4	5246.2	5222.5	5124.0	4885.0	4534.4	4475.3	4411.0	4388.6	4305.9
12.5°	5711.0	5709.7	5687.4	5694.0	5608.6	5435.3	5133.2	5079.4	5032.1	4963.8	4904.7
15°	5996.0	5997.3	6030.1	6066.9	6053.8	5936.9	5653.2	5629.6	5588.9	5541.6	5472.0
17.5°	6229.7	6236.3	6270.4	6337.4	6409.6	6400.4	6175.9	6156.2	6120.7	6056.4	6019.6
20°	6757.6	6782.6	6716.9	6716.9	6724.8	6760.3	6652.6	6636.8	6586.9	6552.8	6523.9
22.5°	7649.3	7678.2	7529.8	7378.8	7230.4	7122.7	7015.0	7034.7	7000.6	6976.9	6959.9
25°	8807.5	8829.8	8589.5	8334.8	8032.7	7638.8	7372.2	7360.4	7342.0	7327.5	7319.7
27.5°	9897.4	9906.6	9679.5	9306.5	8955.9	8389.9	7734.6	7720.2	7697.9	7670.3	7646.6
30°	10829.8	10827.2	10593.4	10237.6	9862.0	9235.6	8284.9	8240.2	8174.5	8099.7	8041.9
32.5°	11637.4	11633.5	11377.4	11008.4	10614.4	10073.4	9038.6	8946.7	8844.3	8698.5	8610.5
35°	12273.0	12270.4	12028.7	11644.0	11192.2	10862.6	9902.7	9789.8	9659.8	9464.1	9328.8
37.5°	12513.3	12513.3	12378.0	12115.4	11716.2	11490.3	10862.6	10726.1	10586.9	10364.9	10212.6
40°	12372.8	12375.4	12404.3	12355.7	12161.4	11988.0	11758.2	11676.8	11557.3	11357.7	11198.8
42.5°	11901.4	11915.8	12107.5	12342.6	12439.8	12412.2	12552.7	12515.9	12431.9	12278.2	12152.2
45°	11303.9	11348.5	11558.6	12002.5	12517.2	12778.6	13218.5	13222.4	13206.7	13123.9	13026.7
47.5°	10483.1	10546.2	10823.2	11423.4	12336.0	13134.4	13894.8	13930.2	13963.0	13909.2	13864.6
50°	9393.2	9468.0	9883.0	10678.8	11967.0	13503.4	15172.5	15332.7	15482.4	15464.0	15494.2
52.5°	8225.8	8313.7	8821.9	9708.3	11332.7	13588.8	15989.3	16250.6	16511.9	16726.0	16953.2
55°	7172.6	7125.3	7633.5	8567.2	10290.1	13204.0	16723.4	17038.5	17330.0	17592.7	17863.2
57.5°	5745.2	5822.6	6332.2	7255.3	8909.9	12118.0	17228.9	17689.9	18108.8	18543.4	18926.9
60°	4199.6	4277.0	4829.9	5767.5	7411.6	10471.3	16842.9	17541.5	18212.5	18878.3	19398.3
62.5°	2535.8	2593.5	3080.7	3973.7	5715.0	8518.6	15122.6	16039.2	17026.7	17822.5	18619.6
65°	1578.4	1611.3	1791.2	2282.3	3670.3	6359.7	12355.7	13355.0	14418.7	15428.6	16257.2
67.5°	1292.2	1304.0	1336.8	1441.9	2015.7	4147.0	9196.2	10081.3	11041.2	12018.2	12940.1
70°	1162.2	1154.3	1154.3	1160.9	1292.2	2229.8	6020.9	6597.4	7397.1	8246.8	9089.8
72.5°	1049.2	1041.4	1026.9	1007.2	1054.5	1360.5	3112.2	3546.9	4123.4	4878.5	5686.1
75°	942.9	932.4	915.3	890.3	923.2	1026.9	1494.4	1676.9	1958.0	2359.8	2810.2
77.5°	832.6	819.4	803.7	785.3	827.3	798.4	875.9	941.6	1049.2	1177.9	1347.3
80°	707.8	696.0	690.7	681.5	731.4	608.0	618.5	659.2	722.2	791.8	870.6
82.5°	554.2	554.2	575.2	579.1	634.3	437.3	462.2	497.7	530.5	567.3	604.1
85°	365.1	367.7	438.6	466.2	500.3	294.2	346.7	358.5	384.8	405.8	421.5
87.5°	114.2	123.4	267.9	296.8	287.6	166.8	212.7	218.0	236.4	250.8	263.9
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°	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7
2.5°	2501.6	2485.9	2471.4	2470.1	2459.6	2445.1	2450.4	2428.1	2429.4	2417.6	2404.4
5°	2941.5	2931.0	2878.5	2864.0	2824.7	2799.7	2795.8	2743.2	2736.7	2706.5	2673.6
7.5°	3574.5	3540.3	3466.8	3431.3	3364.4	3314.5	3290.8	3221.2	3187.1	3108.3	3072.8
10°	4237.6	4194.3	4103.7	4053.8	3989.4	3909.3	3866.0	3764.9	3725.5	3653.3	3566.6
12.5°	4852.2	4808.9	4715.6	4677.5	4592.2	4506.8	4459.6	4345.3	4294.1	4178.5	4110.3
15°	5420.8	5377.5	5296.1	5256.7	5171.3	5101.7	5038.7	4925.7	4865.3	4757.7	4668.4
17.5°	5972.3	5926.4	5855.5	5820.0	5737.3	5666.4	5598.1	5491.7	5430.0	5322.3	5242.2
20°	6484.5	6450.3	6399.1	6351.9	6269.1	6204.8	6123.4	6031.4	5942.1	5863.4	5787.2
22.5°	6931.0	6917.8	6862.7	6841.7	6770.8	6715.6	6644.7	6554.1	6489.7	6389.9	6319.0
25°	7315.7	7311.8	7285.5	7279.0	7229.1	7176.5	7160.8	7085.9	7026.8	6938.8	6865.3
27.5°	7646.6	7650.6	7644.0	7662.4	7649.3	7625.6	7627.0	7602.0	7567.9	7494.3	7430.0
30°	8014.3	7993.3	8005.1	8031.4	8039.3	8041.9	8085.3	8099.7	8097.1	8048.5	8017.0
32.5°	8534.4	8484.5	8438.5	8434.6	8460.8	8471.3	8544.9	8582.9	8615.8	8627.6	8632.8
35°	9197.5	9097.7	9001.9	8950.6	8906.0	8917.8	8970.3	9032.1	9104.3	9154.2	9213.3
37.5°	10032.7	9910.6	9741.2	9620.4	9590.2	9524.5	9558.6	9607.2	9678.1	9755.6	9858.0
40°	11045.2	10860.0	10669.6	10509.4	10422.7	10301.9	10300.6	10291.4	10334.7	10407.0	10551.4
42.5°	12019.5	11855.4	11653.2	11485.1	11372.1	11210.6	11177.8	11092.4	11112.1	11175.2	11315.7
45°	12932.2	12796.9	12673.5	12479.2	12383.3	12208.6	12153.5	12052.4	11995.9	12024.8	12165.3
47.5°	13816.0	13729.3	13600.6	13474.5	13401.0	13244.7	13173.8	13101.6	13029.4	13026.7	13173.8
50°	15538.9	15492.9	15340.6	15209.3	15244.7	15053.0	15064.8	14870.5	14958.4	14968.9	15277.5
52.5°	17158.0	17318.2	17431.2	17569.0	17658.3	17675.4	17734.5	17822.5	17928.9	18139.0	18425.2
55°	18085.1	18286.0	18402.9	18508.0	18681.3	18718.1	18816.6	18933.4	19026.7	19263.0	19506.0
57.5°	19186.9	19559.8	19741.0	19907.8	20141.6	20230.9	20395.0	20522.4	20643.2	20922.9	21217.1
60°	19865.8	20320.2	20689.2	20953.1	21245.9	21456.1	21704.2	21903.8	22187.5	22522.4	22961.0
62.5°	19326.1	19993.2	20483.0	20936.0	21333.9	21735.8	22091.6	22464.6	22895.3	23402.2	24082.4
65°	17176.4	17855.3	18694.4	19164.6	19691.1	20311.0	20852.0	21456.1	22043.0	22781.1	23786.9
67.5°	13827.8	14617.0	15559.9	16033.9	16639.3	17331.4	17938.0	18676.1	19361.5	20255.8	21499.4
70°	9967.0	10987.4	11780.5	12275.6	12982.1	13695.2	14280.8	15139.7	15707.0	16623.6	17909.2
72.5°	6311.1	7116.1	8087.9	8711.6	9339.3	10061.6	10660.4	11401.0	11930.2	12765.4	13930.2
75°	3393.3	3986.8	4840.4	5432.6	6105.0	6722.2	7423.4	7919.8	8311.1	8971.6	9917.1
77.5°	1590.3	1951.4	2383.4	2839.1	3294.8	3770.1	4232.4	4634.2	4802.3	5180.5	5738.6
80°	965.2	1082.1	1208.1	1348.6	1539.0	1692.7	1896.2	2043.3	2053.8	2173.3	2344.0
82.5°	644.8	688.1	726.2	761.6	810.2	848.3	891.6	942.9	963.9	991.5	1046.6
85°	439.9	460.9	468.8	491.1	485.9	499.0	516.1	533.2	542.3	541.0	566.0
87.5°	270.5	281.0	286.3	291.5	287.6	282.3	290.2	299.4	302.0	294.2	296.8
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°	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7
2.5°	2407.1	2395.2	2383.4	2375.5	2372.9	2303.3	2273.1	2253.4	2211.4	2177.3	2149.7
5°	2655.3	2630.3	2610.6	2587.0	2573.8	2397.9	2333.5	2288.9	2215.3	2172.0	2132.6
7.5°	3054.5	2984.9	2944.2	2898.2	2858.8	2541.0	2434.6	2365.0	2262.6	2204.8	2160.2
10°	3507.5	3435.3	3370.9	3300.0	3238.3	2731.4	2576.5	2468.8	2333.5	2258.7	2199.6
12.5°	4013.1	3942.2	3860.8	3770.1	3691.4	2973.0	2757.7	2604.0	2418.9	2319.1	2236.3
15°	4610.6	4485.8	4387.3	4282.3	4190.4	3261.9	2969.1	2756.4	2509.5	2374.2	2263.9
17.5°	5166.1	5034.7	4900.8	4808.9	4702.5	3586.3	3181.8	2911.3	2584.3	2409.7	2269.2
20°	5708.4	5565.3	5449.7	5326.3	5214.6	3922.5	3409.0	3047.9	2632.9	2411.0	2236.3
22.5°	6186.4	6097.1	5968.4	5834.5	5721.5	4258.6	3621.8	3163.5	2651.3	2380.8	2178.6
25°	6730.0	6635.5	6477.9	6365.0	6238.9	4601.4	3830.5	3252.7	2640.8	2324.3	2089.3
27.5°	7310.5	7205.4	7043.9	6925.7	6773.4	4957.3	4022.3	3317.1	2601.4	2232.4	1969.8
30°	7915.9	7820.0	7661.1	7541.6	7388.0	5334.1	4236.3	3360.4	2522.6	2105.0	1830.6
32.5°	8565.9	8485.8	8328.2	8203.4	8039.3	5742.5	4435.9	3373.6	2403.1	1954.0	1683.5
35°	9183.1	9127.9	8995.3	8878.4	8707.7	6128.6	4647.3	3367.0	2261.3	1788.6	1549.6
37.5°	9877.7	9844.9	9779.3	9630.9	9422.1	6652.6	4900.8	3339.4	2088.0	1624.4	1447.1
40°	10618.4	10621.0	10550.1	10449.0	10254.6	7288.2	5202.8	3285.6	1898.9	1480.0	1353.9
42.5°	11402.3	11443.1	11408.9	11336.7	11150.2	7929.0	5563.9	3219.9	1715.0	1339.4	1262.0
45°	12300.6	12350.5	12403.0	12296.6	12115.4	8774.7	6039.3	3134.6	1516.7	1222.6	1198.9
47.5°	13336.7	13415.5	13462.7	13464.0	13282.8	9822.6	6811.5	3083.3	1340.8	1143.8	1168.7
50°	15523.1	15548.1	15659.7	15854.0	15714.8	12248.0	8160.1	3051.8	1221.3	1095.2	1146.4
52.5°	18673.4	18947.9	19140.9	19127.8	18938.7	13788.4	8903.4	2889.0	1150.3	1076.8	1135.9
55°	19956.4	20299.1	20656.3	20750.9	20603.8	15102.9	9605.9	2726.2	1116.2	1089.9	1139.8
57.5°	21666.2	22244.0	22733.8	22939.9	22727.2	16785.1	10530.4	2640.8	1105.7	1125.4	1164.8
60°	23663.5	24377.9	25021.3	25391.7	25391.7	18718.1	11489.0	2605.3	1091.3	1177.9	1206.8
62.5°	24946.5	25995.7	26967.5	27509.8	27494.1	20064.1	11914.5	2484.5	1058.4	1214.7	1264.6
65°	24951.7	26199.3	27437.6	28046.9	28078.4	19898.6	11211.9	2194.3	998.0	1219.9	1322.4
67.5°	22871.7	24201.9	25645.1	26326.6	26484.2	18317.6	9705.7	1804.3	899.5	1167.4	1343.4
70°	19316.9	20615.6	22089.0	22758.7	23038.4	15615.0	7817.4	1390.7	773.5	1051.9	1300.0
72.5°	15218.4	16492.2	17517.8	18007.6	18225.6	11935.5	5692.6	1050.5	634.3	886.4	1183.2
75°	10774.6	11730.6	12275.6	12384.6	12418.7	7194.9	3458.9	781.3	522.6	689.4	999.3
77.5°	6081.3	6491.1	6446.4	6495.0	6090.5	2777.4	1506.2	559.4	430.7	524.0	774.8
80°	2374.2	2447.8	2299.4	2253.4	2066.9	1033.5	664.5	390.0	344.1	396.6	542.3
82.5°	1046.6	1080.7	1049.2	1057.1	1011.1	533.2	397.9	282.3	262.6	290.2	359.8
85°	576.5	587.0	584.4	601.4	576.5	212.7	189.1	173.3	183.8	197.0	231.1
87.5°	281.0	283.6	274.5	288.9	279.7	107.7	93.2	98.5	107.7	110.3	110.3
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°	2254.7	2254.7	2254.7	2254.7	2254.7	2254.7
2.5°	2130.0	2119.5	2120.8	2118.2	2112.9	2112.9
5°	2111.6	2101.1	2101.1	2098.5	2091.9	2093.2
7.5°	2130.0	2112.9	2106.3	2097.1	2088.0	2088.0
10°	2151.0	2120.8	2102.4	2086.6	2074.8	2074.8
12.5°	2166.7	2119.5	2089.3	2068.3	2056.4	2056.4
15°	2172.0	2110.3	2068.3	2043.3	2032.8	2031.5
17.5°	2154.9	2074.8	2023.6	1994.7	1981.6	1977.6
20°	2102.4	2010.5	1948.8	1915.9	1897.5	1891.0
22.5°	2023.6	1918.6	1846.3	1812.2	1788.6	1784.6
25°	1913.3	1800.4	1729.5	1696.6	1683.5	1679.6
27.5°	1784.6	1679.6	1619.2	1598.1	1586.3	1585.0
30°	1662.5	1573.2	1528.5	1512.8	1498.3	1495.7
32.5°	1548.2	1491.8	1474.7	1452.4	1418.2	1414.3
35°	1466.8	1461.6	1449.8	1399.9	1357.8	1346.0
37.5°	1416.9	1465.5	1405.1	1306.6	1276.4	1273.8
40°	1388.0	1424.8	1321.1	1286.9	1289.5	1286.9
42.5°	1322.4	1360.5	1323.7	1307.9	1318.4	1321.1
45°	1256.7	1298.7	1343.4	1332.9	1357.8	1357.8
47.5°	1219.9	1283.0	1342.1	1342.1	1378.8	1392.0
50°	1177.9	1269.8	1321.1	1339.4	1368.3	1357.8
52.5°	1175.3	1247.5	1290.9	1323.7	1336.8	1325.0
55°	1179.2	1229.1	1260.7	1297.4	1313.2	1314.5
57.5°	1184.5	1218.6	1239.6	1256.7	1304.0	1304.0
60°	1197.6	1209.4	1221.3	1230.5	1292.2	1293.5
62.5°	1218.6	1200.2	1197.6	1206.8	1285.6	1280.4
65°	1251.5	1187.1	1167.4	1176.6	1279.0	1263.3
67.5°	1296.1	1167.4	1129.3	1135.9	1273.8	1239.6
70°	1336.8	1135.9	1082.1	1075.5	1223.9	1163.5
72.5°	1340.8	1099.1	1016.4	996.7	1063.7	1005.9
75°	1275.1	1074.2	944.2	886.4	878.5	870.6
77.5°	1149.0	1059.7	860.1	769.5	753.8	759.0
80°	961.2	1005.9	759.0	651.3	736.7	727.5
82.5°	718.3	887.7	644.8	576.5	575.2	508.2
85°	399.2	692.0	525.3	432.0	300.7	291.5
87.5°	111.6	384.8	367.7	244.3	166.8	173.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)