

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: P298961

Luminaire Tested: **GLNA-AF-08-LED-E1-SLL-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191289)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-08-LED-E1-SLL-7050-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Left OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33758 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 334
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

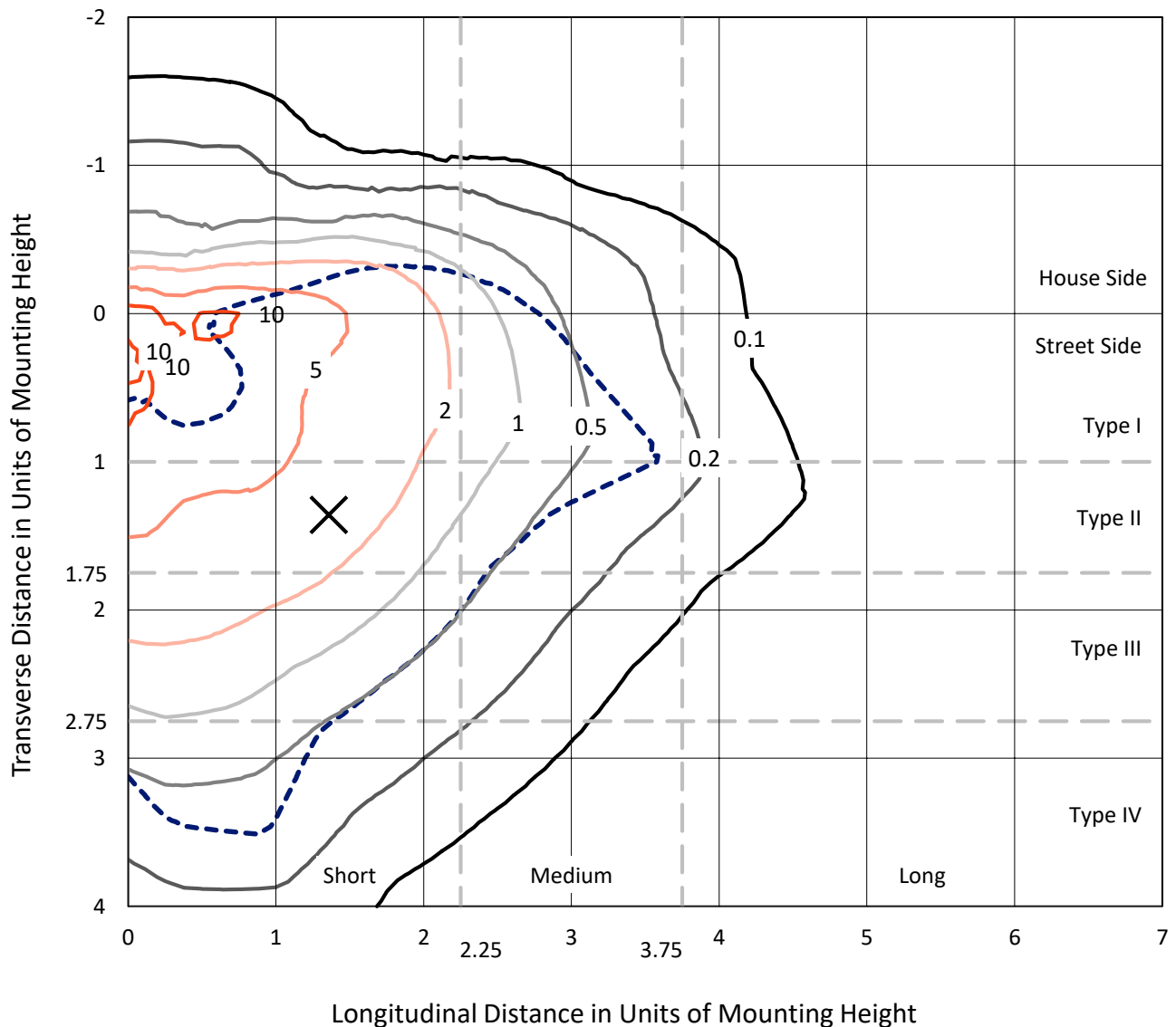


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Iso-Footcandle Lines of Horizontal Illumination

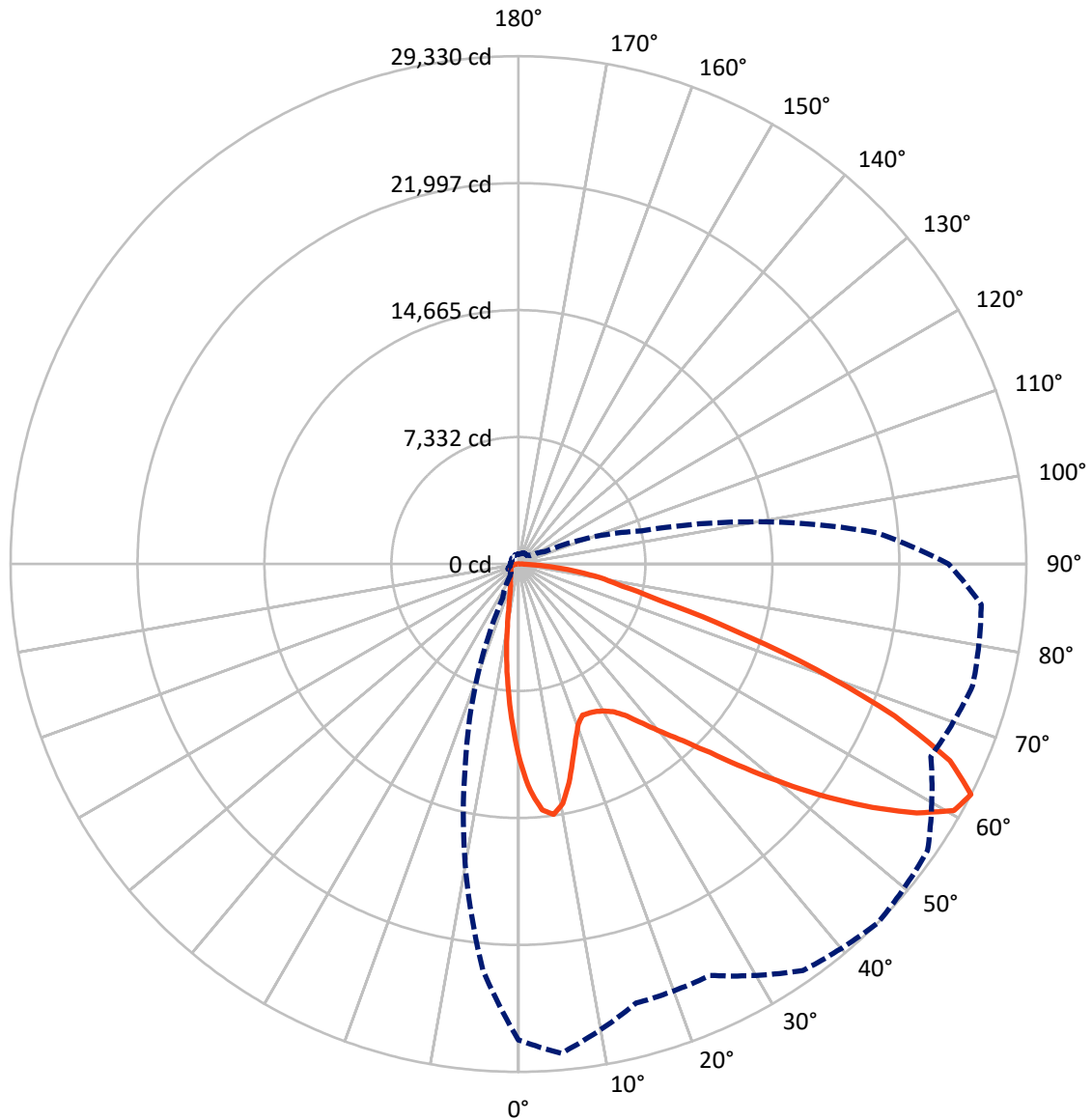
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5586.5	0.0	5586.5
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	28171.5	0.0	28171.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	33758.0	0.0	33758.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	830.3	2.5
10°-20°	1522.5	4.5
20°-30°	2219.8	6.6
30°-40°	3418.7	10.1
40°-50°	5031.4	14.9
50°-60°	7380.1	21.9
60°-70°	8249.9	24.4
70°-80°	4039.0	12.0
80°-90°	1066.4	3.2
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°	33758.0	100.0
0°-180°	33758.0	100.0

Coefficient of Utilization



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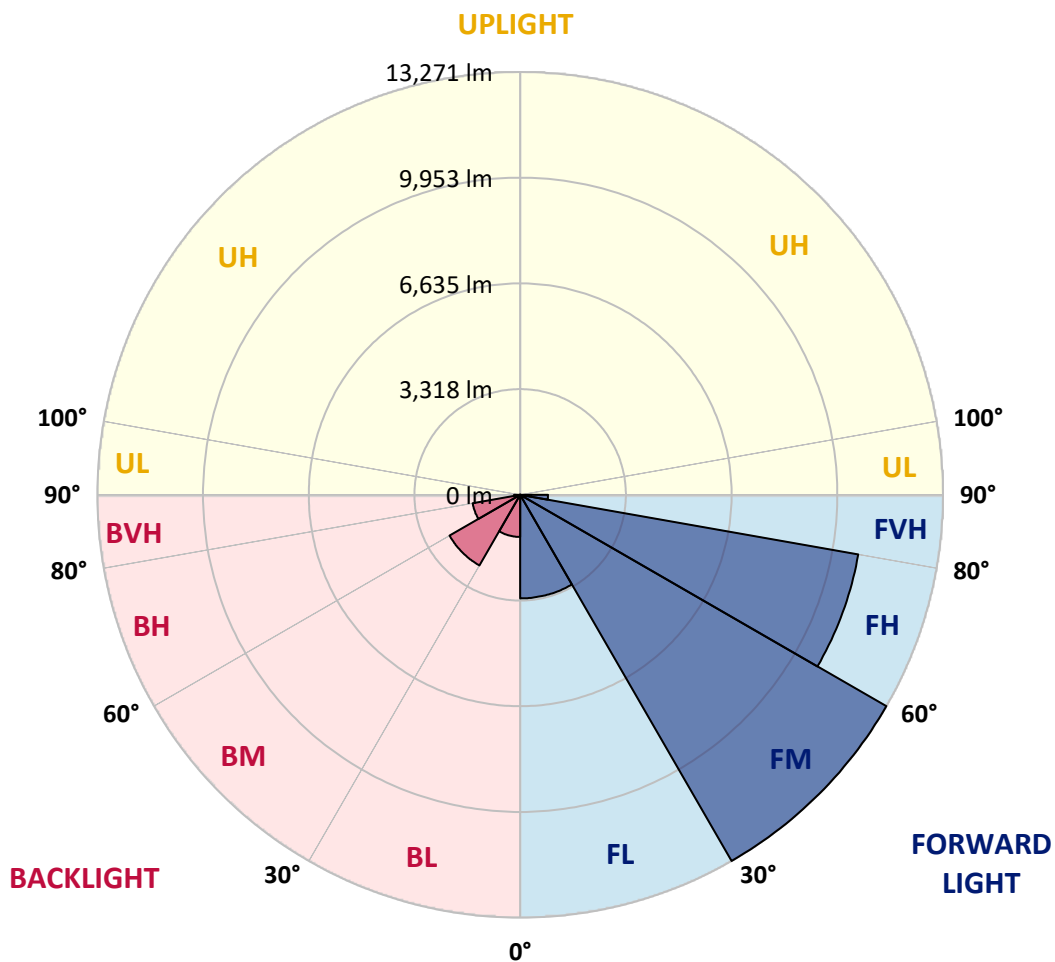
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3250.8	9.6			
FM (30°-60°)	13270.6	39.3			
FH (60°-80°)	10774.4	31.9			G4/12000
FVH (80°-90°)	875.8	2.6			G5
BL (0°-30°)	1321.7	3.9	B3/2500		
BM (30°-60°)	2559.7	7.6	B3/5000		
BH (60°-80°)	1514.5	4.5	B3/2500		G3/2500
BVH (80°-90°)	190.6	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6
2.5°	11850.2	12040.0	12409.3	12685.2	13021.9	13099.7	13207.5	13101.5	12914.1	12665.3	12584.0
5°	11143.6	11548.4	12444.2	13233.4	13934.6	14261.1	14352.7	14082.8	13539.4	12824.9	12388.8
7.5°	10009.8	10585.1	11798.4	12960.5	13993.6	14604.5	14589.4	13964.1	12964.1	11800.2	11100.8
10°	9031.5	9688.7	11080.9	12379.8	13476.2	14068.3	13839.4	13040.6	11846.6	10506.8	9748.4
12.5°	8484.5	9128.5	10540.6	11844.8	12761.7	12965.9	12791.2	12008.1	10883.3	9529.1	8864.6
15°	8389.3	9097.2	10325.5	11387.0	11900.8	11723.1	11514.7	11164.1	10369.5	9213.4	8521.3
17.5°	8800.2	9579.1	10572.5	11067.7	10980.3	10670.1	10611.1	10650.2	10459.2	9564.0	8766.4
20°	9586.9	10521.9	11160.5	10917.7	10280.9	9853.8	9868.9	10464.7	11030.3	10453.2	9541.8
22.5°	10690.6	11758.1	12008.1	10997.2	9985.7	9479.1	9602.0	10567.1	11941.8	11752.6	10588.8
25°	12119.5	13092.4	12912.3	11286.4	10015.3	9525.5	9623.7	10919.5	13017.7	13051.5	11884.6
27.5°	13503.9	14406.3	13670.7	11670.7	10138.1	9635.1	9765.3	11473.7	14046.1	14461.7	13365.3
30°	14584.0	15211.7	13971.4	12021.3	10379.1	9848.4	10009.8	12000.8	14514.1	15413.6	14504.5
32.5°	15478.6	15929.2	14450.3	12455.7	10822.5	10183.9	10468.3	12641.2	15187.6	16319.6	15619.6
35°	16621.4	16749.7	15046.1	12940.0	11507.5	10768.9	11121.3	13268.3	15829.8	17234.1	16718.4
37.5°	17961.8	17796.7	15608.1	13602.7	12393.0	11683.4	11974.9	13956.9	16358.2	18271.4	17840.7
40°	19286.5	18888.9	16314.2	14630.4	13684.6	12761.7	13106.9	14691.9	16852.1	19310.6	18937.7
42.5°	20413.0	19824.5	17009.4	15760.5	14886.4	13951.5	14363.5	15432.2	17323.2	20197.4	19889.5
45°	21246.2	20514.9	17672.0	16846.1	16543.7	15532.2	15727.4	16279.8	17833.5	20938.4	20672.7
47.5°	21990.2	21208.8	18421.4	17941.3	17993.1	17588.3	17274.4	17267.2	18435.3	21543.2	21413.1
50°	22986.6	22172.1	19226.9	19069.0	20167.9	19898.6	19206.4	18419.6	19195.6	22230.0	22214.9
52.5°	24360.1	23698.1	20210.6	20284.7	22198.6	22374.5	21516.7	19804.6	20386.5	23489.6	23401.1
55°	25984.2	25597.5	21551.0	21682.4	24688.4	24814.9	23962.5	21535.4	22139.0	25314.3	25067.4
57.5°	27251.1	27169.8	23020.3	23360.1	26548.1	27116.2	26333.0	23540.2	24113.1	26850.5	26230.6
60°	27756.0	28151.2	24584.8	25052.3	28268.6	28896.9	28210.8	25300.5	25863.2	27487.3	26151.1
62.5°	27483.7	28366.2	26251.1	26212.0	28652.4	29329.5	28846.9	26280.6	27160.8	26830.0	24828.2
65°	26223.4	27592.7	27218.0	25913.2	27338.5	27393.9	27237.9	25842.7	27466.8	24753.5	22270.3
67.5°	23478.2	25449.3	25944.5	23352.9	23793.8	23432.4	23170.3	23445.0	25870.4	21641.4	18716.6
70°	19123.3	22089.0	22325.7	18678.1	18477.5	18234.1	17713.0	19221.5	22721.5	17737.1	14851.5
72.5°	14061.1	17178.6	17907.6	13699.1	12771.3	12820.7	12409.3	14485.2	18473.9	13175.6	11088.2
75°	9620.1	12438.8	14011.1	9558.6	8445.9	8465.8	8413.4	10264.1	14714.1	9165.2	8297.1
77.5°	7027.8	8886.9	10567.1	6426.0	6238.7	6123.6	6095.9	7181.5	11280.9	6654.9	6442.9
80°	5639.3	6565.8	7097.7	4453.7	4789.3	4780.2	4626.0	4938.0	7367.0	4867.6	4818.8
82.5°	3912.1	5045.9	5750.7	3490.4	3232.6	3178.4	3216.3	3677.8	5207.3	3327.2	3163.9
85°	2063.9	3351.3	5695.3	3093.4	1918.7	1530.8	1904.3	3011.5	4511.5	1763.3	1543.4
87.5°	263.9	968.7	3770.6	1234.4	757.2	407.8	904.2	1695.8	2897.0	359.6	313.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6
2.5°	12374.3	12127.3	11804.4	11505.0	11195.4	10887.0	10484.5	10232.1	10058.0	10024.3	9950.8
5°	12073.7	11253.2	10633.3	10097.2	9611.0	8923.7	8543.5	8227.9	8059.2	8042.9	8002.0
7.5°	10687.0	9555.0	8718.2	7959.2	7270.6	6715.8	6103.1	5818.2	5700.7	5728.4	5756.1
10°	9244.8	7979.7	7018.2	6242.3	5635.7	5168.2	4676.6	4344.7	4113.9	4067.5	4058.5
12.5°	8191.1	6803.1	5870.0	5321.8	4853.1	4412.7	3891.6	3499.5	3201.3	3098.9	3030.8
15°	7745.3	6227.8	5250.1	4659.7	4141.6	3583.2	3098.9	2688.6	2414.5	2325.3	2275.3
17.5°	7840.5	6068.2	4823.0	4067.5	3405.5	2822.3	2212.1	1860.9	1695.8	1653.6	1653.6
20°	8338.1	6038.7	4470.0	3522.4	2695.8	2020.5	1519.9	1319.3	1265.7	1260.3	1274.7
22.5°	9035.7	6142.9	4207.3	3049.5	2095.2	1475.3	1183.8	1109.7	1085.6	1091.6	1107.9
25°	10074.9	6493.5	4016.3	2627.8	1644.0	1207.9	1055.4	1011.5	1000.0	1015.1	1035.6
27.5°	11306.8	6844.1	3897.1	2310.3	1388.0	1104.2	1003.6	957.9	965.1	983.8	1001.8
30°	12388.8	7132.1	3709.7	2084.4	1308.5	1109.7	1003.6	941.0	933.8	937.4	942.8
32.5°	13359.9	7326.6	3490.4	1868.7	1128.3	985.6	937.4	928.3	886.8	871.7	874.1
35°	14196.7	7326.6	3359.1	1742.8	1011.5	874.1	796.4	750.0	728.9	730.7	751.8
37.5°	15003.9	7179.7	3294.0	1671.7	948.2	831.3	762.7	721.7	694.0	688.6	692.2
40°	15716.0	6966.4	3219.9	1642.2	900.0	805.4	741.0	706.6	677.1	668.1	669.9
42.5°	16287.7	6793.5	3138.0	1603.6	869.9	786.8	725.3	695.8	662.7	653.0	651.2
45°	16905.8	6736.3	3030.8	1525.3	885.0	788.6	721.7	690.4	656.6	645.8	642.2
47.5°	17720.2	6916.4	2919.3	1432.6	916.9	798.2	727.1	690.4	654.8	645.8	642.2
50°	18746.1	7339.3	2777.8	1297.0	885.0	824.1	725.3	684.4	654.8	645.8	638.6
52.5°	20064.2	7911.0	2592.8	1141.6	866.3	886.8	721.7	673.5	645.8	633.1	619.9
55°	21665.5	8378.5	2371.1	1013.3	824.1	869.9	716.3	660.9	631.3	612.7	601.2
57.5°	22838.4	8547.2	2088.0	930.1	764.5	842.2	708.4	644.0	612.7	597.6	583.1
60°	22606.5	8220.6	1848.2	877.7	728.9	760.9	703.0	628.9	595.8	585.0	571.1
62.5°	20749.2	7367.0	1694.0	853.6	706.6	694.0	708.4	614.5	581.3	569.3	565.7
65°	17963.6	6106.7	1633.2	848.2	688.6	654.8	659.0	597.6	563.9	554.8	551.2
67.5°	14817.8	4929.0	1579.5	866.3	664.5	627.1	609.0	575.3	547.0	538.0	530.7
70°	11685.2	4099.5	1554.8	855.4	635.0	599.4	579.5	551.2	527.1	517.5	512.1
72.5°	9409.8	3462.7	1541.6	844.0	595.8	562.1	543.4	519.3	493.4	489.8	484.3
75°	7963.4	2722.3	1412.7	809.1	551.2	517.5	504.8	482.5	456.6	456.6	453.0
77.5°	6142.9	1968.7	1174.7	716.3	504.8	467.5	456.6	439.8	410.2	415.7	413.9
80°	4537.4	1284.4	918.7	594.0	447.6	412.1	406.0	389.8	357.8	365.7	365.7
82.5°	3108.5	842.2	660.9	486.2	381.9	348.8	348.8	331.9	297.0	300.6	312.1
85°	1560.9	579.5	493.4	376.5	297.0	280.1	280.1	267.5	231.9	233.7	248.8
87.5°	475.3	348.8	326.5	269.3	213.3	209.6	200.0	191.0	168.7	166.9	176.5
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6
2.5°	9836.9	9730.9	9603.8	9321.3	9226.7	9220.7	9306.8	9217.0	9388.1	9315.8	9395.4
5°	7932.7	7829.7	7686.3	7326.6	7107.4	6958.6	6888.7	6680.9	6830.9	6721.2	6812.8
7.5°	5834.5	5858.5	5764.0	5552.5	5075.4	4836.2	4695.3	4568.8	4678.4	4667.0	4841.7
10°	4101.3	4165.7	4099.5	3886.2	3499.5	3368.1	3394.0	3444.0	3587.4	3660.9	3930.2
12.5°	2952.5	2948.9	2906.1	2715.1	2460.9	2475.3	2581.4	2668.1	2800.1	2878.4	3152.5
15°	2204.3	2171.1	2152.5	1996.4	1851.8	1883.8	1935.6	1944.6	2028.4	2074.7	2297.6
17.5°	1666.3	1683.2	1703.0	1592.2	1482.6	1462.1	1421.7	1371.1	1395.8	1404.8	1515.7
20°	1322.9	1389.8	1440.4	1362.1	1251.2	1191.0	1139.2	1106.0	1106.0	1104.2	1135.6
22.5°	1156.0	1204.2	1258.5	1204.2	1104.2	1051.8	1022.3	996.4	992.8	992.8	1022.3
25°	1065.7	1100.6	1152.4	1115.7	1041.0	1001.8	974.1	941.0	928.3	924.1	944.6
27.5°	1020.5	1035.6	1061.5	1027.7	965.1	946.4	939.2	909.7	892.2	883.1	904.2
30°	944.6	941.0	942.8	909.7	859.1	857.2	869.9	875.9	869.9	868.1	900.0
32.5°	874.1	866.3	864.5	835.0	788.6	777.7	788.6	800.0	812.7	831.3	868.1
35°	785.0	803.6	814.5	788.6	732.5	699.4	686.8	666.3	654.8	654.8	697.6
37.5°	714.5	757.2	774.1	750.0	688.6	642.2	619.9	616.3	618.1	625.3	666.3
40°	690.4	721.7	736.2	712.7	651.2	609.0	595.8	592.2	595.8	607.2	647.6
42.5°	675.3	697.6	695.8	666.3	616.3	586.8	579.5	575.3	579.5	590.4	635.0
45°	662.7	677.1	662.7	627.1	581.3	565.7	567.5	565.7	569.3	581.3	623.5
47.5°	651.2	656.6	638.6	603.0	554.8	551.2	558.4	563.9	567.5	577.7	621.7
50°	635.0	635.0	618.1	581.3	532.5	534.3	543.4	556.6	558.4	569.3	605.4
52.5°	614.5	612.7	601.2	565.7	513.9	519.3	519.3	534.3	538.0	551.2	588.6
55°	597.6	594.0	588.6	554.8	497.6	506.6	501.2	506.6	515.7	528.9	569.3
57.5°	583.1	575.3	575.3	545.2	484.3	488.0	475.3	482.5	493.4	504.8	547.0
60°	567.5	560.3	563.9	532.5	463.9	460.2	454.8	469.3	473.5	486.2	528.9
62.5°	551.2	545.2	547.0	517.5	449.4	439.8	439.8	453.0	454.8	473.5	513.9
65°	538.0	530.7	528.9	503.0	432.5	421.7	427.1	432.5	436.2	454.8	493.4
67.5°	525.3	510.3	510.3	489.8	413.9	402.4	413.9	412.1	418.1	434.3	465.7
70°	508.4	488.0	489.8	480.7	395.2	381.9	391.6	389.8	393.4	404.2	436.2
72.5°	482.5	465.7	469.3	465.7	376.5	357.8	361.5	361.5	361.5	371.1	404.2
75°	449.4	436.2	447.6	456.6	354.2	328.3	331.9	331.9	326.5	331.9	372.9
77.5°	407.8	400.6	438.0	425.3	328.3	297.0	297.0	293.4	282.5	289.8	333.7
80°	363.9	357.8	404.2	356.0	298.8	258.4	254.2	244.6	233.7	239.2	284.3
82.5°	317.5	312.1	339.8	272.9	258.4	213.3	204.2	187.4	176.5	181.9	222.3
85°	260.2	260.2	262.1	206.0	196.4	163.3	152.4	130.1	116.9	120.5	159.6
87.5°	185.5	191.0	176.5	141.0	116.9	91.0	83.7	70.5	59.0	68.7	83.7
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6	11405.6
2.5°	9803.8	10008.0	10240.0	10536.4	10791.2	11208.0	11609.3	11850.2
5°	7330.3	7670.0	8092.3	8636.9	9143.6	9903.8	10659.2	11143.6
7.5°	5245.9	5609.7	6066.4	6745.3	7462.2	8432.1	9430.9	10009.8
10°	4341.0	4713.9	5097.7	5556.1	6142.9	7198.3	8378.5	9031.5
12.5°	3591.0	3989.8	4403.7	4886.2	5429.6	6372.4	7732.7	8484.5
15°	2748.2	3193.4	3681.4	4292.3	4973.0	6062.8	7573.0	8389.3
17.5°	1883.8	2381.4	2980.2	3733.8	4567.0	5962.2	7859.2	8800.2
20°	1297.0	1659.1	2299.4	3182.6	4185.0	5949.5	8408.0	9586.9
22.5°	1085.6	1247.0	1714.5	2676.0	3897.1	6109.2	9260.4	10690.6
25°	1003.6	1100.6	1369.3	2236.2	3687.4	6476.6	10433.3	12119.5
27.5°	956.0	1042.8	1243.4	1948.8	3522.4	6903.1	11574.3	13503.9
30°	974.1	1063.3	1207.9	1801.8	3297.7	7259.2	12587.6	14584.0
32.5°	877.7	916.9	1035.6	1671.7	3136.2	7558.0	13474.4	15478.6
35°	748.2	816.3	924.1	1610.9	3139.8	7758.6	14441.2	16621.4
37.5°	712.7	781.3	859.1	1588.6	3182.6	7972.4	15550.9	17961.8
40°	690.4	753.6	820.5	1575.9	3223.6	8167.0	16638.9	19286.5
42.5°	675.3	732.5	816.3	1530.8	3244.0	8341.7	17532.9	20413.0
45°	673.5	732.5	831.3	1486.2	3275.4	8529.1	18282.9	21246.2
47.5°	675.3	757.2	803.6	1432.6	3275.4	8842.3	19162.4	21990.2
50°	668.1	798.2	774.1	1356.7	3199.5	9436.3	20368.5	22986.6
52.5°	664.5	792.8	716.3	1239.8	3067.5	10379.1	21914.3	24360.1
55°	654.8	764.5	675.3	1065.7	2913.9	11407.5	23569.7	25984.2
57.5°	645.8	677.1	653.0	913.3	2676.0	12131.0	24708.9	27251.1
60°	723.5	592.2	635.0	838.6	2358.5	12329.2	24664.9	27756.0
62.5°	669.9	554.8	610.9	822.3	2136.2	11772.5	23525.2	27483.7
65°	525.3	530.7	586.8	869.9	2076.5	10297.8	21505.8	26223.4
67.5°	480.7	506.6	562.1	931.9	2082.6	8244.7	18488.9	23478.2
70°	453.0	480.7	534.3	963.3	2097.0	6146.5	14617.2	19123.3
72.5°	421.7	445.8	503.0	968.7	2000.0	4464.5	11266.5	14061.1
75°	383.7	406.0	458.4	844.0	1657.3	3097.0	8618.2	9620.1
77.5°	341.6	357.8	402.4	651.2	1230.7	1982.0	6468.8	7027.8
80°	291.6	300.6	338.0	477.1	842.2	1239.8	5118.2	5639.3
82.5°	233.7	237.4	262.1	357.8	547.0	796.4	3427.8	3912.1
85°	165.1	165.1	180.1	260.2	372.9	504.8	1860.9	2063.9
87.5°	77.7	79.5	79.5	142.8	194.6	256.6	428.9	263.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)