

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: P299440

Luminaire Tested: **GLNA-AF-08-LED-E1-SLR-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299440  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194679)  
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-SLR-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Right 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

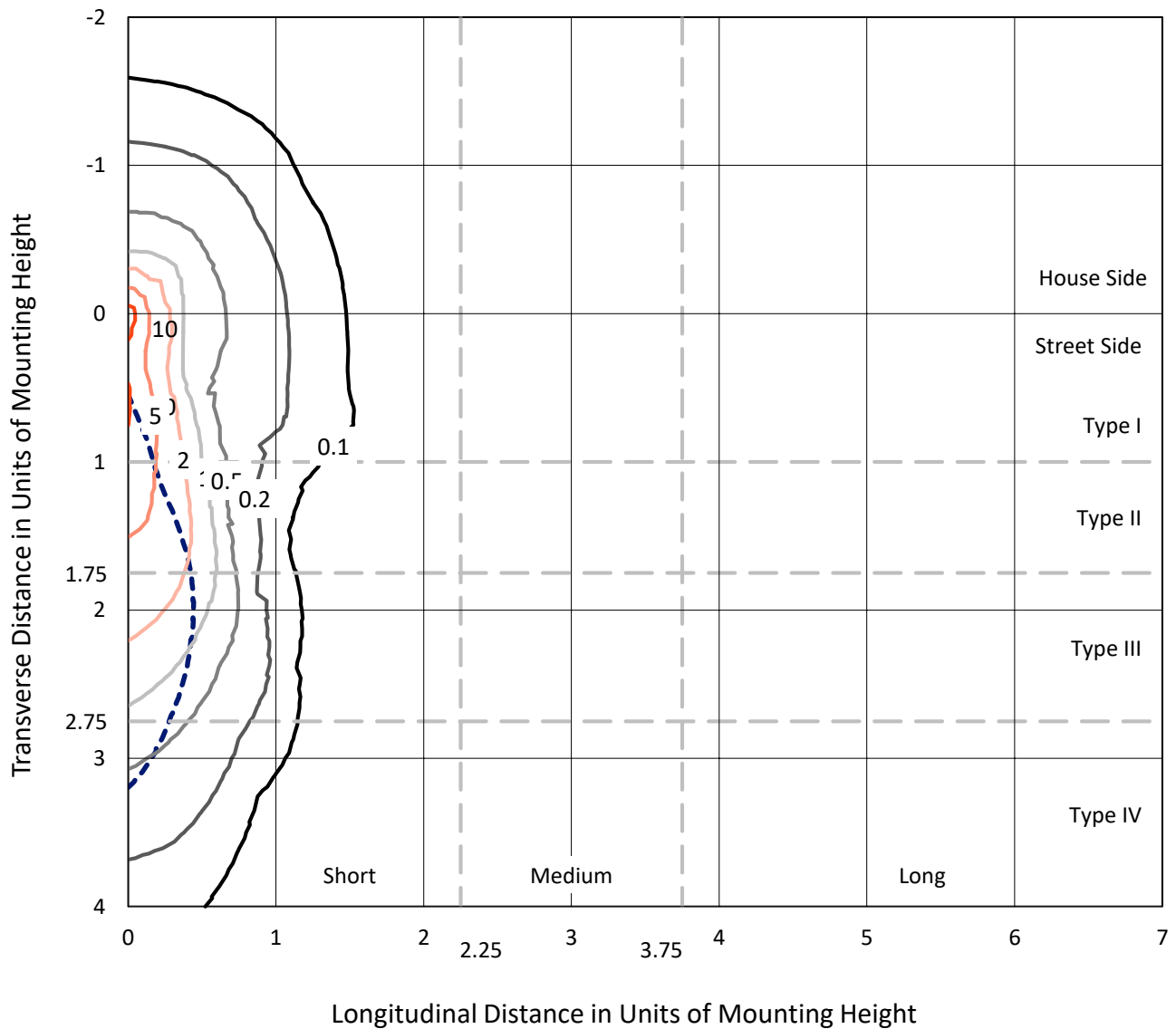
Input Watts (W): 334  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P299440  
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### Iso-Footcandle Lines of Horizontal Illumination

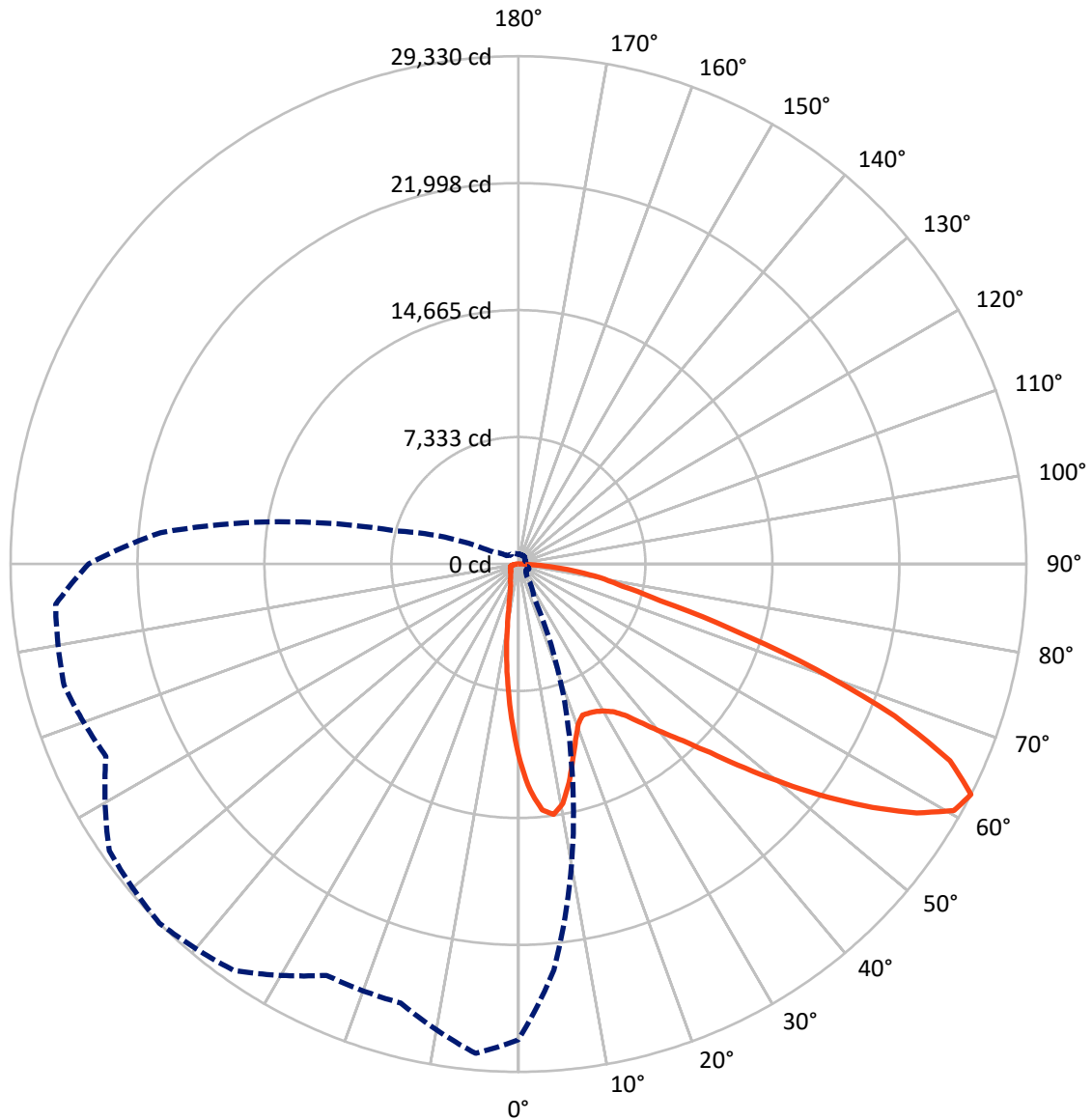
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.7 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P299440  
CATALOG NUMBER: GLNA-AF-08-LED-E1-SLR-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P299440

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLR-800

**FLUX DISTRIBUTION:**

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

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	830.3	2.5
10°-20°	1522.5	4.5
20°-30°	2219.7	6.6
30°-40°	3418.7	10.1
40°-50°	5031.5	14.9
50°-60°	7380.1	21.9
60°-70°	8249.8	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



REPORT NUMBER: P299440

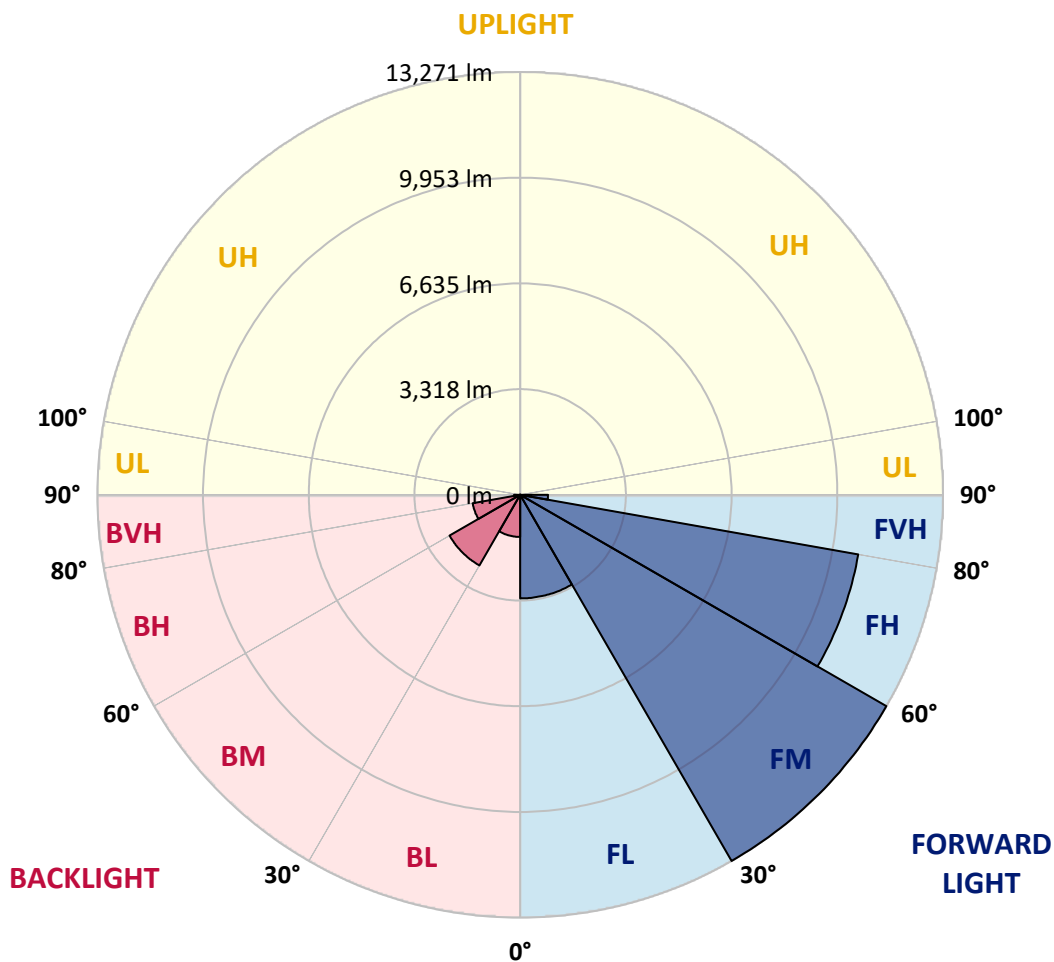
CATALOG NUMBER: GLNA-AF-08-LED-E1-SLR-800

**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





REPORT NUMBER: P299440  
 CATALOG NUMBER: GLNA-AF-08-LED-E1-SLR-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5
2.5°	11850.4	11609.4	11208.3	10790.9	10536.9	10239.8	10007.7	9803.8	9395.4	9315.6	9388.1
5°	11143.7	10659.4	9903.8	9143.1	8636.4	8092.6	7669.6	7330.2	6812.3	6721.3	6830.8
7.5°	10010.0	9430.8	8432.5	7461.7	6745.4	6066.2	5610.0	5246.0	4841.5	4667.4	4678.0
10°	9031.9	8378.5	7198.2	6142.6	5556.1	5097.7	4713.4	4340.4	3930.3	3661.2	3587.0
12.5°	8484.2	7733.0	6372.4	5429.7	4885.9	4403.9	3989.8	3591.0	3152.8	2878.1	2800.5
15°	8389.8	7572.9	6062.8	4973.5	4292.1	3682.0	3193.8	2748.3	2297.2	2074.7	2028.1
17.5°	8799.9	7858.9	5962.3	4566.8	3733.7	2980.3	2380.9	1883.7	1516.3	1405.0	1395.5
20°	9586.4	8408.3	5949.4	4184.8	3182.5	2299.4	1659.0	1297.2	1135.9	1103.9	1106.2
22.5°	10690.9	9260.0	6108.9	3897.1	2675.8	1714.6	1247.2	1085.4	1022.5	992.7	992.7
25°	12119.5	10433.0	6476.3	3687.6	2235.9	1369.6	1100.5	1003.9	944.4	924.1	928.1
27.5°	13504.3	11574.0	6903.3	3522.4	1948.3	1243.2	1042.7	955.6	903.9	883.1	892.7
30°	14584.1	12587.5	7259.5	3297.7	1801.7	1207.8	1063.5	974.1	900.0	868.5	870.2
32.5°	15478.4	13474.5	7558.3	3135.9	1671.9	1035.4	916.8	877.5	868.5	831.4	812.9
35°	16621.7	14441.4	7758.9	3139.8	1610.7	924.1	816.3	747.7	697.7	655.0	655.0
37.5°	17961.6	15550.9	7972.4	3182.5	1588.7	859.0	781.5	712.4	666.3	625.3	618.0
40°	19286.3	16638.5	8167.3	3223.6	1575.3	820.2	753.4	690.4	647.7	606.7	595.5
42.5°	20413.2	17532.9	8341.5	3243.8	1530.9	816.3	733.1	675.3	634.8	589.9	579.2
45°	21246.4	18282.3	8529.1	3275.2	1486.5	831.4	733.1	673.6	623.6	580.9	569.7
47.5°	21990.2	19162.1	8842.6	3275.2	1432.6	803.4	757.3	675.3	621.9	577.0	568.0
50°	22986.8	20368.3	9436.4	3199.4	1356.7	773.6	797.7	668.0	605.0	569.7	558.4
52.5°	24359.8	21914.3	10379.1	3067.4	1239.9	716.3	792.1	664.6	588.2	551.1	538.2
55°	25983.9	23569.4	11407.2	2913.4	1065.2	675.3	764.6	655.0	569.7	528.6	515.7
57.5°	27251.3	24708.7	12130.7	2675.8	912.9	653.4	677.5	646.1	547.2	504.5	493.8
60°	27755.8	24664.3	12329.6	2358.4	838.8	634.8	592.1	723.6	528.6	485.9	473.0
62.5°	27483.3	23525.0	11772.9	2135.9	821.9	610.7	555.0	669.7	514.0	473.0	454.5
65°	26223.3	21505.9	10297.6	2076.4	870.2	586.5	530.9	525.3	493.8	454.5	435.9
67.5°	23478.3	18488.5	8244.8	2082.0	931.4	562.4	506.7	480.9	465.7	434.3	417.4
70°	19123.3	14617.8	6146.0	2097.2	962.9	534.3	480.9	452.8	435.9	404.5	393.3
72.5°	14061.1	11266.1	4465.1	2000.5	968.5	502.8	445.5	421.3	404.5	371.3	361.8
75°	9620.1	8617.9	3097.2	1657.3	844.4	458.4	406.2	384.3	373.0	332.0	326.4
77.5°	7027.4	6469.0	1982.0	1230.3	651.1	402.8	358.4	341.6	334.3	289.3	282.0
80°	5639.8	5117.9	1239.9	842.7	477.0	337.6	300.6	291.6	283.7	239.3	233.7
82.5°	3911.7	3427.5	796.1	547.2	358.4	261.8	237.6	233.7	222.5	182.0	176.4
85°	2063.5	1861.2	504.5	373.0	259.5	179.8	165.2	165.2	159.5	120.8	116.9
87.5°	263.5	428.6	256.2	194.9	142.7	79.8	79.8	78.1	83.7	68.5	59.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299440

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLR-800

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5
2.5°	9217.3	9306.6	9221.2	9226.8	9321.2	9603.2	9731.3	9837.0	9950.4	10024.6	10057.7
5°	6680.8	6888.7	6958.9	7107.2	7326.3	7686.4	7829.1	7933.0	8002.1	8042.6	8059.4
7.5°	4569.0	4694.9	4835.9	5075.2	5552.2	5764.0	5858.4	5834.2	5756.7	5728.6	5701.0
10°	3444.3	3394.3	3367.9	3500.0	3885.9	4099.4	4166.2	4101.1	4058.4	4067.9	4114.0
12.5°	2668.5	2581.4	2475.8	2460.6	2715.1	2906.1	2948.8	2952.2	3030.3	3098.8	3201.1
15°	1944.9	1935.4	1883.7	1852.2	1996.6	2152.8	2171.3	2204.5	2275.3	2325.3	2414.0
17.5°	1371.3	1421.3	1462.3	1482.6	1592.1	1703.3	1683.1	1666.3	1653.3	1653.3	1696.0
20°	1106.2	1139.3	1191.6	1250.5	1362.3	1439.9	1389.9	1323.0	1274.7	1260.1	1265.7
22.5°	996.6	1022.5	1052.2	1103.9	1204.5	1258.4	1204.5	1156.2	1107.9	1091.0	1085.4
25°	941.0	974.1	1002.2	1041.0	1115.2	1152.2	1100.5	1065.2	1035.4	1015.2	1000.0
27.5°	909.5	938.8	946.6	965.2	1028.1	1061.2	1035.4	1020.8	1002.2	983.7	965.2
30°	875.8	870.2	857.3	859.0	909.5	942.7	941.0	944.4	942.7	937.1	933.7
32.5°	800.0	788.8	777.5	788.8	834.8	864.6	866.8	874.1	874.1	872.5	887.1
35°	666.3	686.5	699.4	733.1	788.8	814.6	803.4	784.8	751.7	730.9	729.2
37.5°	616.3	619.7	642.1	688.2	750.0	773.6	757.3	714.6	692.1	688.2	693.8
40°	592.1	595.5	608.4	651.1	712.4	736.5	721.9	690.4	669.7	668.0	677.5
42.5°	575.3	579.2	586.5	616.3	666.3	696.1	697.7	675.3	651.1	653.4	662.4
45°	565.7	568.0	565.7	580.9	627.0	662.4	677.5	662.4	642.1	646.1	656.7
47.5°	564.0	558.4	551.1	555.0	603.4	638.2	656.7	651.1	642.1	646.1	655.0
50°	556.7	543.8	534.3	532.6	580.9	618.0	634.8	634.8	638.2	646.1	655.0
52.5°	534.3	519.7	519.7	514.0	565.7	601.1	612.4	614.0	619.7	632.6	646.1
55°	506.7	501.1	506.7	497.2	555.0	588.2	593.8	597.7	601.1	612.4	630.9
57.5°	482.6	475.3	488.2	484.3	545.5	575.3	575.3	582.6	582.6	597.7	612.4
60°	469.7	454.5	460.1	464.0	532.6	564.0	560.7	568.0	571.3	584.8	595.5
62.5°	452.8	439.9	439.9	448.9	518.0	547.2	545.5	551.1	565.7	569.7	580.9
65°	432.6	427.0	421.3	432.6	502.8	528.6	530.9	538.2	551.1	555.0	564.0
67.5°	411.8	414.0	402.8	414.0	489.9	510.1	510.1	525.3	530.9	538.2	547.2
70°	389.9	391.6	382.0	395.5	480.9	489.9	488.2	508.4	512.4	518.0	527.0
72.5°	361.8	361.8	358.4	377.0	465.7	469.7	465.7	482.6	484.3	489.9	493.8
75°	332.0	332.0	328.6	354.5	456.7	447.2	435.9	448.9	452.8	456.7	456.7
77.5°	293.3	297.2	297.2	328.6	424.7	438.2	400.6	408.4	414.0	415.7	410.1
80°	244.9	254.5	257.9	298.9	356.2	404.5	358.4	363.5	365.7	365.7	358.4
82.5°	187.6	203.9	213.5	257.9	273.0	339.3	311.8	317.4	311.8	300.6	297.2
85°	129.8	152.2	163.5	196.6	206.2	261.8	259.5	259.5	248.9	233.7	232.0
87.5°	70.8	83.7	91.0	116.9	141.0	176.4	191.0	185.4	176.4	166.9	169.1
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):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5
2.5°	10232.5	10484.7	10887.5	11195.4	11505.5	11804.3	12127.4	12374.0	12583.5	12665.6	12913.9
5°	8228.5	8543.7	8924.0	9610.5	10097.1	10633.0	11253.2	12073.4	12388.6	12825.1	13539.1
7.5°	5817.9	6103.3	6715.6	7270.7	7959.4	8718.4	9554.9	10686.9	11101.0	11800.4	12963.9
10°	4344.3	4676.3	5167.9	5635.9	6242.6	7018.4	7979.7	9245.4	9748.2	10507.2	11847.0
12.5°	3500.0	3891.5	4412.9	4852.7	5322.4	5869.6	6803.3	8190.9	8865.1	9529.1	10883.6
15°	2688.7	3098.8	3583.7	4142.1	4659.5	5249.9	6228.0	7746.0	8521.2	9213.9	10369.5
17.5°	1861.2	2211.8	2822.4	3405.0	4067.9	4823.0	6068.5	7840.3	8766.2	9564.5	10458.9
20°	1319.6	1519.6	2020.8	2696.6	3522.4	4470.2	6038.7	8337.5	9542.0	10453.2	11030.2
22.5°	1109.5	1183.7	1475.3	2094.9	3048.8	4206.7	6142.6	9035.3	10588.6	11752.1	11941.4
25°	1011.2	1056.2	1207.8	1644.4	2627.5	4015.7	6493.2	10074.6	11884.1	13051.5	13017.8
27.5°	957.3	1003.9	1103.9	1388.2	2310.6	3897.1	6843.7	11307.2	13365.0	14461.6	14045.9
30°	941.0	1003.9	1109.5	1308.4	2084.2	3709.5	7131.4	12388.6	14504.3	15413.8	14513.9
32.5°	928.1	937.1	985.4	1128.1	1868.5	3490.4	7326.3	13359.4	15619.5	16319.4	15187.4
35°	750.0	796.1	874.1	1011.2	1742.7	3358.9	7326.3	14196.4	16718.3	17234.0	15829.6
37.5°	721.9	762.9	831.4	948.3	1671.9	3293.8	7179.7	15003.7	17840.8	18271.7	16358.2
40°	707.3	740.4	805.6	900.0	1642.1	3219.6	6966.2	15716.1	18937.4	19310.4	16852.0
42.5°	696.1	725.8	787.1	870.2	1603.3	3138.2	6793.7	16287.4	19889.6	20197.5	17323.4
45°	690.4	721.9	788.8	885.4	1525.3	3030.3	6736.4	16905.4	20672.8	20937.9	17833.5
47.5°	690.4	727.5	797.7	916.8	1432.6	2919.1	6916.2	17720.6	21413.2	21543.0	18434.6
50°	684.8	725.8	824.1	885.4	1297.2	2778.1	7339.2	18746.4	22214.9	22229.5	19195.8
52.5°	673.6	721.9	887.1	866.8	1141.0	2592.7	7911.1	20064.3	23400.8	23489.6	20386.8
55°	660.7	716.3	870.2	824.1	1013.5	2371.9	8378.5	21665.4	25067.1	25313.7	22139.0
57.5°	643.8	709.0	842.7	764.6	929.8	2087.6	8547.6	22838.5	26230.6	26850.2	24113.2
60°	629.2	703.4	760.7	729.2	877.5	1848.3	8220.7	22606.4	26150.8	27486.7	25863.1
62.5°	614.0	709.0	693.8	707.3	853.4	1694.4	7367.3	20748.6	24827.8	26830.0	27160.3
65°	597.7	659.0	655.0	688.2	848.3	1633.1	6107.2	17963.2	22270.5	24753.6	27466.5
67.5°	575.3	608.4	627.0	664.6	866.8	1579.2	4928.6	14817.8	18716.6	21641.3	25870.4
70°	551.1	579.2	599.4	634.8	855.6	1555.0	4099.4	11685.2	14851.5	17736.8	22721.6
72.5°	519.7	543.8	562.4	595.5	844.4	1542.1	3462.9	9410.6	11088.1	13175.7	18473.9
75°	482.6	504.5	518.0	551.1	809.0	1412.3	2722.4	7962.8	8297.1	9165.6	14713.9
77.5°	439.9	456.7	467.4	504.5	716.3	1174.7	1969.1	6142.6	6443.2	6654.4	11280.8
80°	389.9	406.2	411.8	447.2	593.8	918.5	1284.3	4537.0	4819.0	4867.4	7367.3
82.5°	332.0	348.9	348.9	382.0	485.9	660.7	842.7	3108.4	3164.0	3327.5	5207.2
85°	267.4	280.3	280.3	297.2	377.0	493.8	579.2	1560.7	1543.8	1762.9	4511.2
87.5°	191.0	200.6	209.5	213.5	269.1	326.4	348.9	475.3	313.5	360.1	2896.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299440

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLR-800

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5	11405.5
2.5°	13101.5	13207.1	13099.3	13021.7	12685.8	12409.4	12039.7	11850.4
5°	14083.0	14352.1	14261.0	13934.6	13233.0	12444.2	11548.2	11143.7
7.5°	13964.4	14589.7	14604.3	13994.2	12960.5	11798.7	10585.3	10010.0
10°	13040.3	13839.7	14068.4	13476.2	12379.6	11080.8	9688.6	9031.9
12.5°	12008.3	12791.4	12966.1	12761.6	11845.4	10540.3	9128.5	8484.2
15°	11163.9	11515.0	11722.3	11901.0	11386.9	10325.1	9096.5	8389.8
17.5°	10649.9	10611.1	10670.6	10980.2	11067.3	10571.8	9579.1	8799.9
20°	10464.5	9869.0	9853.8	10280.8	10917.3	11160.5	10521.8	9586.4
22.5°	10566.7	9601.6	9479.1	9985.8	10997.0	12008.3	11757.7	10690.9
25°	10919.0	9624.0	9525.2	10015.6	11286.4	12912.2	13092.0	12119.5
27.5°	11474.0	9765.0	9634.7	10138.1	11670.6	13671.2	14406.0	13504.3
30°	12001.0	10010.0	9848.2	10379.1	12021.2	13971.7	15211.6	14584.1
32.5°	12641.4	10468.4	10184.1	10822.3	12455.5	14450.4	15929.6	15478.4
35°	13268.4	11121.2	10769.0	11507.2	12939.7	15046.4	16749.8	16621.7
37.5°	13957.1	11975.1	11683.6	12392.5	13602.6	15608.2	17796.4	17961.6
40°	14691.9	13107.1	12761.6	13684.1	14630.7	16313.8	18889.6	19286.3
42.5°	15432.4	14363.3	13951.5	14886.3	15760.5	17009.3	19824.5	20413.2
45°	16280.1	15727.3	15532.4	16543.6	16846.4	17672.2	20514.9	21246.4
47.5°	17267.8	17275.1	17588.5	17993.0	17941.3	18421.7	21209.3	21990.2
50°	18420.0	19206.5	19899.2	20167.7	19069.4	19227.3	22172.2	22986.8
52.5°	19804.2	21517.1	22374.4	22198.0	20285.1	20210.4	23697.4	24359.8
55°	21535.7	23963.2	24814.8	24688.4	21682.3	21550.3	25598.0	25983.9
57.5°	23539.6	26332.8	27115.9	26548.0	23359.8	23020.5	27169.9	27251.3
60°	25300.8	28210.9	28897.4	28268.2	25052.5	24584.5	28151.3	27755.8
62.5°	26280.6	28847.4	29330.0	28652.4	26212.0	26250.8	28366.5	27483.3
65°	25842.9	27238.4	27394.0	27338.4	25913.1	27217.6	27592.9	26223.3
67.5°	23445.2	23170.5	23432.3	23794.1	23352.5	25944.6	25449.1	23478.3
70°	19221.7	17712.7	18234.6	18477.3	18677.8	22326.1	22088.5	19123.3
72.5°	14485.8	12409.4	12821.2	12771.2	13698.7	17907.6	17178.4	14061.1
75°	10263.9	8413.9	8465.6	8445.4	9558.9	14010.5	12439.2	9620.1
77.5°	7181.4	6096.0	6124.1	6238.7	6426.3	10566.7	8887.0	7027.4
80°	4938.1	4626.3	4780.3	4789.8	4453.9	7098.2	6565.6	5639.8
82.5°	3678.0	3215.7	3178.6	3232.5	3490.4	5751.0	5045.4	3911.7
85°	3011.8	1903.9	1530.9	1919.1	3093.2	5695.4	3351.6	2063.5
87.5°	1696.0	903.9	408.4	757.3	1234.3	3770.7	968.5	263.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)