

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: P298924

Luminaire Tested: **GLNA-AF-02-LED-E1-SLL-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298924  
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-02-LED-E1-SLL-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K 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: 8618 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

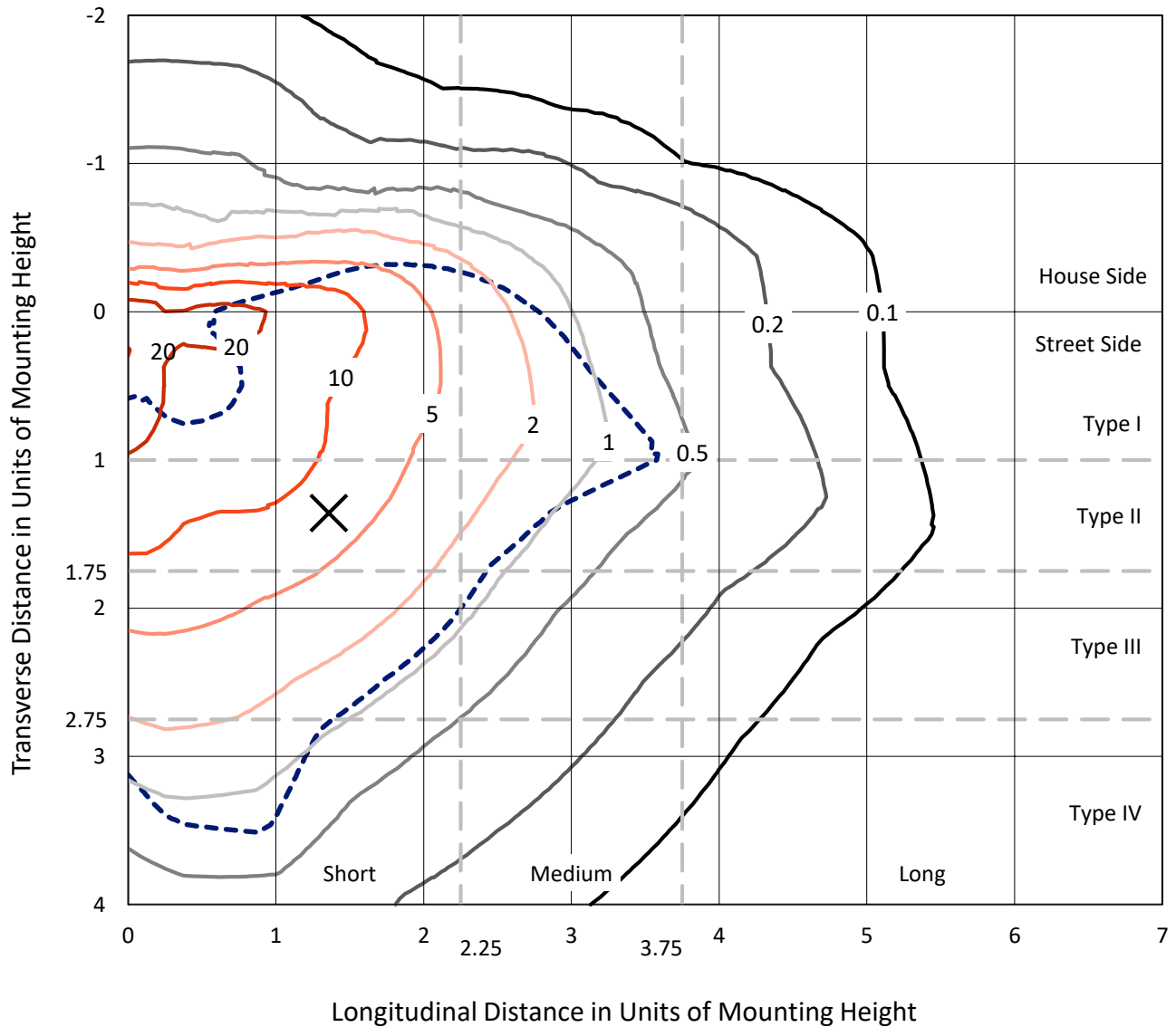
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P298924  
 CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

### Iso-Footcandle Lines of Horizontal Illumination

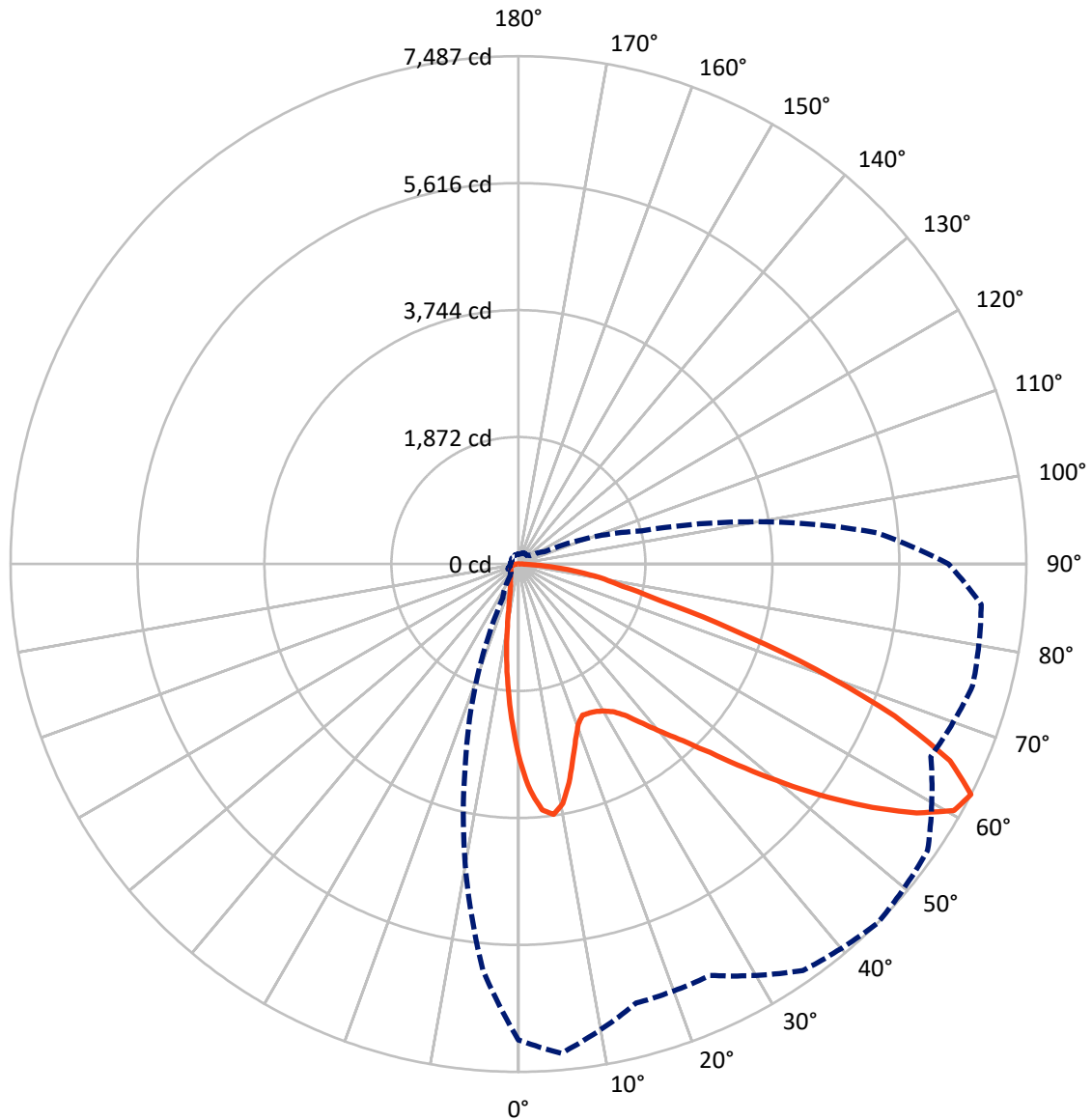
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 34.3 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P298924  
CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P298924

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1426.2	0.0	1426.2
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	7191.8	0.0	7191.8
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	8618.0	0.0	8618.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.0	2.5
10°-20°	388.7	4.5
20°-30°	566.7	6.6
30°-40°	872.8	10.1
40°-50°	1284.5	14.9
50°-60°	1884.0	21.9
60°-70°	2106.1	24.4
70°-80°	1031.1	12.0
80°-90°	272.2	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°	8618.0	100.0
0°-180°	8618.0	100.0



REPORT NUMBER: P298924

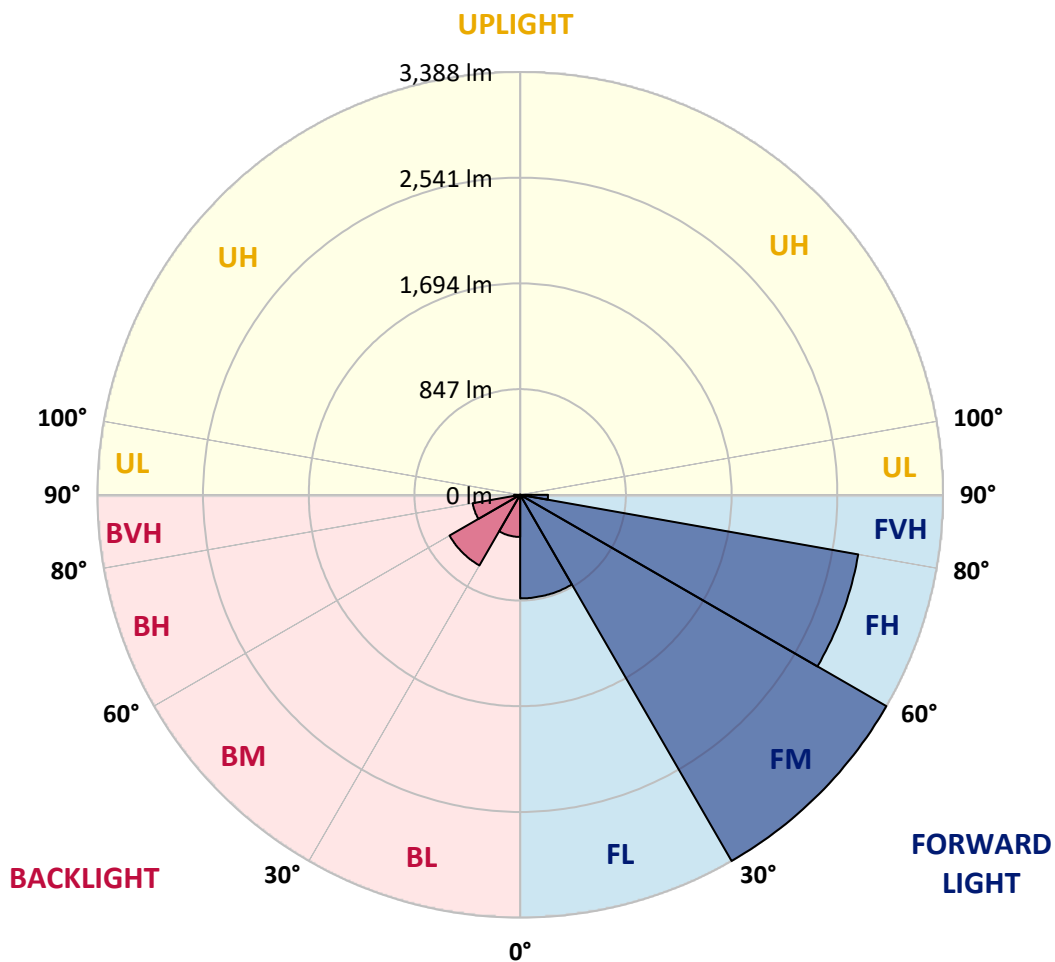
CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	829.9	9.6			
FM (30°-60°)	3387.8	39.3			
FH (60°-80°)	2750.6	31.9			G2/5000
FVH (80°-90°)	223.6	2.6			G2/225
BL (0°-30°)	337.4	3.9	B1/500		
BM (30°-60°)	653.5	7.6	B1/1000		
BH (60°-80°)	386.6	4.5	B1/500		G1/500
BVH (80°-90°)	48.7	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P298924

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7
2.5°	3025.2	3073.7	3167.9	3238.4	3324.3	3344.2	3371.7	3344.6	3296.8	3233.3	3212.5
5°	2844.8	2948.2	3176.8	3378.3	3557.3	3640.7	3664.1	3595.2	3456.4	3274.0	3162.7
7.5°	2555.4	2702.2	3012.0	3308.6	3572.4	3728.3	3724.5	3564.9	3309.6	3012.4	2833.9
10°	2305.6	2473.4	2828.8	3160.4	3440.3	3591.5	3533.0	3329.1	3024.3	2682.3	2488.6
12.5°	2166.0	2330.4	2690.9	3023.8	3257.9	3310.0	3265.4	3065.5	2778.4	2432.7	2263.0
15°	2141.7	2322.4	2636.0	2906.9	3038.1	2992.8	2939.5	2850.0	2647.2	2352.1	2175.4
17.5°	2246.6	2445.4	2699.0	2825.4	2803.1	2723.9	2708.9	2718.9	2670.1	2441.6	2238.0
20°	2447.4	2686.1	2849.1	2787.1	2624.6	2515.5	2519.4	2671.5	2815.9	2668.6	2435.9
22.5°	2729.2	3001.7	3065.5	2807.4	2549.2	2419.9	2451.3	2697.6	3048.6	3000.3	2703.2
25°	3094.0	3342.3	3296.3	2881.3	2556.8	2431.7	2456.8	2787.6	3323.3	3331.9	3034.0
27.5°	3447.4	3677.7	3490.0	2979.4	2588.1	2459.7	2492.9	2929.1	3585.8	3691.9	3412.0
30°	3723.1	3883.4	3566.7	3068.9	2649.7	2514.2	2555.4	3063.7	3705.3	3934.9	3702.8
32.5°	3951.5	4066.5	3689.0	3179.8	2762.8	2599.8	2672.4	3227.1	3877.2	4166.2	3987.5
35°	4243.2	4276.0	3841.1	3303.4	2937.7	2749.2	2839.1	3387.2	4041.1	4399.6	4268.0
37.5°	4585.4	4543.3	3984.6	3472.6	3163.8	2982.6	3057.0	3563.0	4176.0	4664.5	4554.5
40°	4923.6	4822.1	4164.8	3735.0	3493.5	3257.9	3346.0	3750.6	4302.1	4929.7	4834.6
42.5°	5211.2	5060.9	4342.3	4023.5	3800.3	3561.6	3666.8	3939.6	4422.4	5156.1	5077.5
45°	5423.9	5237.2	4511.4	4300.6	4223.4	3965.2	4015.0	4156.0	4552.7	5345.3	5277.5
47.5°	5613.8	5414.3	4702.8	4580.2	4593.4	4490.1	4409.9	4408.1	4706.3	5499.7	5466.5
50°	5868.2	5660.3	4908.4	4868.1	5148.6	5079.8	4903.1	4702.3	4900.4	5675.0	5671.2
52.5°	6218.8	6049.8	5159.5	5178.4	5667.0	5711.9	5492.9	5055.9	5204.4	5996.6	5974.0
55°	6633.4	6534.7	5501.7	5535.2	6302.6	6334.9	6117.3	5497.7	5651.8	6462.4	6399.4
57.5°	6956.9	6936.1	5876.8	5963.5	6777.4	6922.4	6722.5	6009.5	6155.8	6854.6	6696.3
60°	7085.7	7186.6	6276.2	6395.5	7216.6	7377.0	7201.8	6458.9	6602.5	7017.1	6676.0
62.5°	7016.2	7241.5	6701.6	6691.6	7314.6	7487.4	7364.2	6709.1	6933.8	6849.4	6338.3
65°	6694.5	7044.1	6948.4	6615.3	6979.2	6993.3	6953.5	6597.3	7011.9	6319.2	5685.3
67.5°	5993.7	6496.9	6623.3	5961.7	6074.3	5982.0	5915.1	5985.2	6604.4	5524.8	4778.1
70°	4881.9	5639.0	5699.5	4768.3	4717.1	4654.9	4521.9	4907.0	5800.5	4528.0	3791.4
72.5°	3589.6	4385.5	4571.6	3497.2	3260.4	3273.0	3167.9	3697.9	4716.1	3363.5	2830.7
75°	2455.9	3175.5	3576.9	2440.2	2156.1	2161.2	2147.8	2620.3	3756.3	2339.8	2118.2
77.5°	1794.1	2268.7	2697.6	1640.5	1592.7	1563.3	1556.2	1833.3	2879.9	1698.9	1644.8
80°	1439.6	1676.2	1812.0	1137.0	1222.6	1220.3	1181.0	1260.6	1880.7	1242.6	1230.2
82.5°	998.7	1288.1	1468.1	891.1	825.2	811.4	821.1	938.9	1329.4	849.4	807.7
85°	526.9	855.5	1453.9	789.7	489.8	390.8	486.1	768.8	1151.7	450.1	394.0
87.5°	67.4	247.3	962.6	315.1	193.3	104.1	230.8	432.9	739.6	91.8	80.1
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: P298924

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7
2.5°	3159.0	3096.0	3013.5	2937.1	2858.0	2779.3	2676.6	2612.1	2567.7	2559.1	2540.3
5°	3082.3	2872.8	2714.6	2577.7	2453.6	2278.1	2181.1	2100.5	2057.4	2053.3	2042.8
7.5°	2728.2	2439.3	2225.7	2031.9	1856.1	1714.5	1558.0	1485.3	1455.3	1462.4	1469.5
10°	2360.1	2037.1	1791.7	1593.6	1438.7	1319.4	1193.9	1109.1	1050.2	1038.4	1036.1
12.5°	2091.1	1736.8	1498.5	1358.6	1238.9	1126.5	993.5	893.4	817.2	791.1	773.7
15°	1977.3	1589.9	1340.3	1189.6	1057.3	914.7	791.1	686.4	616.4	593.6	580.9
17.5°	2001.6	1549.1	1231.2	1038.4	869.4	720.5	564.7	475.1	432.9	422.2	422.2
20°	2128.6	1541.6	1141.1	899.2	688.2	515.8	388.0	336.8	323.1	321.7	325.4
22.5°	2306.7	1568.2	1074.1	778.5	534.9	376.6	302.2	283.3	277.1	278.7	282.8
25°	2572.0	1657.7	1025.3	670.8	419.7	308.3	269.4	258.2	255.3	259.1	264.4
27.5°	2886.5	1747.2	994.9	589.8	354.3	281.9	256.2	244.5	246.4	251.1	255.8
30°	3162.7	1820.7	947.0	532.1	334.0	283.3	256.2	240.2	238.4	239.3	240.7
32.5°	3410.6	1870.4	891.1	477.1	288.0	251.6	239.3	237.0	226.4	222.5	223.1
35°	3624.2	1870.4	857.5	444.9	258.2	223.1	203.3	191.5	186.1	186.5	191.9
37.5°	3830.3	1832.9	840.9	426.8	242.1	212.2	194.7	184.2	177.2	175.8	176.7
40°	4012.1	1778.4	822.0	419.2	229.8	205.6	189.2	180.4	172.9	170.6	171.0
42.5°	4158.0	1734.3	801.1	409.4	222.1	200.9	185.2	177.6	169.2	166.7	166.2
45°	4315.8	1719.7	773.7	389.4	225.9	201.3	184.2	176.2	167.6	164.9	163.9
47.5°	4523.7	1765.7	745.3	365.7	234.1	203.8	185.6	176.2	167.2	164.9	163.9
50°	4785.6	1873.6	709.1	331.1	225.9	210.4	185.2	174.7	167.2	164.9	163.0
52.5°	5122.1	2019.6	661.9	291.4	221.2	226.4	184.2	171.9	164.9	161.6	158.3
55°	5530.9	2138.9	605.3	258.7	210.4	222.1	182.9	168.7	161.2	156.4	153.5
57.5°	5830.3	2182.0	533.0	237.5	195.2	215.0	180.9	164.4	156.4	152.6	148.9
60°	5771.1	2098.6	471.8	224.1	186.1	194.2	179.5	160.6	152.1	149.3	145.8
62.5°	5297.0	1880.7	432.5	217.9	180.4	177.2	180.9	156.9	148.4	145.3	144.4
65°	4585.9	1559.0	416.9	216.5	175.8	167.2	168.2	152.6	143.9	141.6	140.7
67.5°	3782.8	1258.3	403.2	221.2	169.6	160.1	155.5	146.9	139.6	137.3	135.5
70°	2983.1	1046.5	396.9	218.4	162.1	153.0	147.9	140.7	134.6	132.1	130.7
72.5°	2402.2	884.0	393.5	215.5	152.1	143.5	138.7	132.6	126.0	125.0	123.6
75°	2033.0	695.0	360.6	206.5	140.7	132.1	128.9	123.2	116.6	116.6	115.7
77.5°	1568.2	502.6	299.9	182.9	128.9	119.3	116.6	112.3	104.7	106.1	105.7
80°	1158.3	327.9	234.5	151.6	114.3	105.2	103.7	99.5	91.4	93.4	93.4
82.5°	793.6	215.0	168.7	124.1	97.5	89.0	89.0	84.7	75.8	76.7	79.7
85°	398.5	147.9	126.0	96.1	75.8	71.5	71.5	68.3	59.2	59.7	63.5
87.5°	121.3	89.0	83.4	68.7	54.4	53.5	51.1	48.8	43.1	42.6	45.1
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: P298924

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7
2.5°	2511.2	2484.2	2451.7	2379.6	2355.5	2353.9	2375.9	2353.0	2396.7	2378.2	2398.5
5°	2025.1	1998.8	1962.2	1870.4	1814.4	1776.4	1758.6	1705.5	1743.8	1715.8	1739.2
7.5°	1489.5	1495.6	1471.5	1417.5	1295.7	1234.6	1198.6	1166.3	1194.3	1191.4	1236.0
10°	1047.0	1063.5	1046.5	992.1	893.4	859.8	866.5	879.2	915.8	934.6	1003.3
12.5°	753.7	752.8	741.9	693.1	628.2	631.9	659.0	681.1	714.8	734.8	804.8
15°	562.7	554.3	549.5	509.7	472.8	480.9	494.1	496.4	517.8	529.7	586.6
17.5°	425.4	429.7	434.8	406.5	378.5	373.2	362.9	350.0	356.3	358.6	386.9
20°	337.7	354.8	367.7	347.7	319.4	304.0	290.8	282.4	282.4	281.9	289.9
22.5°	295.1	307.4	321.3	307.4	281.9	268.5	261.0	254.4	253.4	253.4	261.0
25°	272.1	281.0	294.2	284.8	265.7	255.8	248.7	240.2	237.0	235.9	241.1
27.5°	260.5	264.4	271.0	262.4	246.4	241.6	239.8	232.2	227.8	225.5	230.8
30°	241.1	240.2	240.7	232.2	219.3	218.8	222.1	223.6	222.1	221.6	229.8
32.5°	223.1	221.2	220.7	213.2	201.3	198.5	201.3	204.2	207.5	212.2	221.6
35°	200.4	205.2	207.9	201.3	187.0	178.6	175.3	170.1	167.2	167.2	178.1
37.5°	182.4	193.3	197.6	191.5	175.8	163.9	158.3	157.3	157.8	159.6	170.1
40°	176.2	184.2	187.9	181.9	166.2	155.5	152.1	151.2	152.1	155.0	165.3
42.5°	172.4	178.1	177.6	170.1	157.3	149.8	147.9	146.9	147.9	150.7	162.1
45°	169.2	172.9	169.2	160.1	148.4	144.4	144.9	144.4	145.3	148.4	159.2
47.5°	166.2	167.6	163.0	153.9	141.6	140.7	142.6	143.9	144.9	147.5	158.7
50°	162.1	162.1	157.8	148.4	136.0	136.4	138.7	142.1	142.6	145.3	154.6
52.5°	156.9	156.4	153.5	144.4	131.2	132.6	132.6	136.4	137.3	140.7	150.3
55°	152.6	151.6	150.3	141.6	127.0	129.3	128.0	129.3	131.6	135.0	145.3
57.5°	148.9	146.9	146.9	139.2	123.6	124.6	121.3	123.2	126.0	128.9	139.6
60°	144.9	143.0	143.9	136.0	118.4	117.5	116.1	119.8	120.9	124.1	135.0
62.5°	140.7	139.2	139.6	132.1	114.7	112.3	112.3	115.7	116.1	120.9	131.2
65°	137.3	135.5	135.0	128.4	110.4	107.7	109.0	110.4	111.3	116.1	126.0
67.5°	134.1	130.3	130.3	125.0	105.7	102.7	105.7	105.2	106.7	110.9	118.9
70°	129.8	124.6	125.0	122.7	100.9	97.5	100.0	99.5	100.4	103.2	111.3
72.5°	123.2	118.9	119.8	118.9	96.1	91.4	92.3	92.3	92.3	94.7	103.2
75°	114.7	111.3	114.3	116.6	90.4	83.8	84.7	84.7	83.4	84.7	95.2
77.5°	104.1	102.3	111.8	108.6	83.8	75.8	75.8	74.9	72.1	74.0	85.2
80°	92.9	91.4	103.2	90.9	76.3	66.0	64.9	62.4	59.7	61.1	72.6
82.5°	81.0	79.7	86.7	69.7	66.0	54.4	52.1	47.8	45.1	46.4	56.7
85°	66.4	66.4	66.9	52.6	50.1	41.7	38.9	33.2	29.8	30.8	40.8
87.5°	47.4	48.8	45.1	36.0	29.8	23.2	21.4	18.0	15.1	17.5	21.4
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: P298924

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-800

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7	2911.7
2.5°	2502.8	2554.9	2614.1	2689.8	2754.8	2861.3	2963.7	3025.2
5°	1871.3	1958.1	2065.9	2204.9	2334.2	2528.3	2721.2	2844.8
7.5°	1339.2	1432.1	1548.7	1722.0	1905.0	2152.6	2407.6	2555.4
10°	1108.2	1203.4	1301.4	1418.4	1568.2	1837.6	2138.9	2305.6
12.5°	916.7	1018.6	1124.2	1247.4	1386.1	1626.8	1974.1	2166.0
15°	701.6	815.2	939.8	1095.8	1269.5	1547.7	1933.3	2141.7
17.5°	480.9	607.9	760.8	953.2	1165.9	1522.1	2006.3	2246.6
20°	331.1	423.5	587.0	812.5	1068.4	1518.8	2146.5	2447.4
22.5°	277.1	318.3	437.7	683.1	994.9	1559.6	2364.1	2729.2
25°	256.2	281.0	349.6	570.9	941.4	1653.4	2663.5	3094.0
27.5°	244.1	266.2	317.4	497.5	899.2	1762.3	2954.8	3447.4
30°	248.7	271.4	308.3	460.0	841.8	1853.2	3213.4	3723.1
32.5°	224.1	234.1	264.4	426.8	800.6	1929.5	3439.8	3951.5
35°	191.0	208.4	235.9	411.2	801.6	1980.7	3686.7	4243.2
37.5°	181.9	199.5	219.3	405.5	812.5	2035.3	3969.9	4585.4
40°	176.2	192.4	209.5	402.3	822.9	2084.9	4247.7	4923.6
42.5°	172.4	187.0	208.4	390.8	828.2	2129.5	4475.9	5211.2
45°	171.9	187.0	212.2	379.4	836.2	2177.4	4667.4	5423.9
47.5°	172.4	193.3	205.2	365.7	836.2	2257.3	4891.9	5613.8
50°	170.6	203.8	197.6	346.3	816.8	2409.0	5199.8	5868.2
52.5°	169.6	202.4	182.9	316.5	783.1	2649.7	5594.4	6218.8
55°	167.2	195.2	172.4	272.1	743.9	2912.2	6017.0	6633.4
57.5°	164.9	172.9	166.7	233.1	683.1	3096.9	6307.9	6956.9
60°	184.7	151.2	162.1	214.1	602.1	3147.5	6296.6	7085.7
62.5°	171.0	141.6	155.9	209.9	545.3	3005.4	6005.7	7016.2
65°	134.1	135.5	149.8	222.1	530.1	2628.9	5490.2	6694.5
67.5°	122.7	129.3	143.5	237.9	531.7	2104.8	4720.0	5993.7
70°	115.7	122.7	136.4	245.9	535.3	1569.1	3731.6	4881.9
72.5°	107.7	113.8	128.4	247.3	510.6	1139.7	2876.2	3589.6
75°	98.0	103.7	117.0	215.5	423.1	790.6	2200.1	2455.9
77.5°	87.2	91.4	102.7	166.2	314.2	506.0	1651.4	1794.1
80°	74.4	76.7	86.3	121.8	215.0	316.5	1306.6	1439.6
82.5°	59.7	60.6	66.9	91.4	139.6	203.3	875.1	998.7
85°	42.1	42.1	46.0	66.4	95.2	128.9	475.1	526.9
87.5°	19.8	20.3	20.3	36.4	49.7	65.5	109.5	67.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)