

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: P298921

Luminaire Tested: **GLNA-AF-02-LED-E1-SLL-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298921
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-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K 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: 7487.6 lumens
Efficiency: N/A
Efficacy: 88.1 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

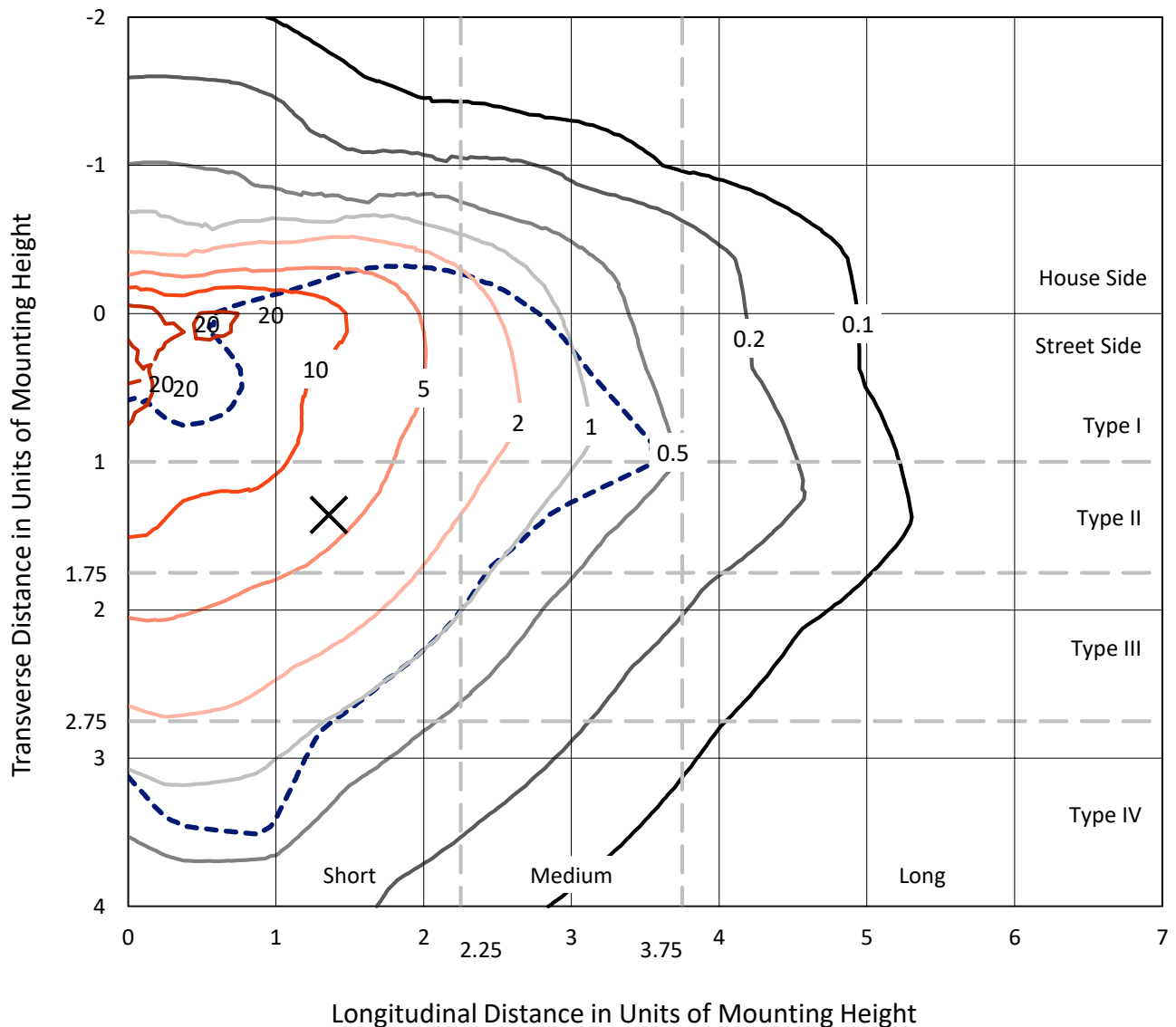


REPORT NUMBER: P298921

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

Iso-Footcandle Lines of Horizontal Illumination

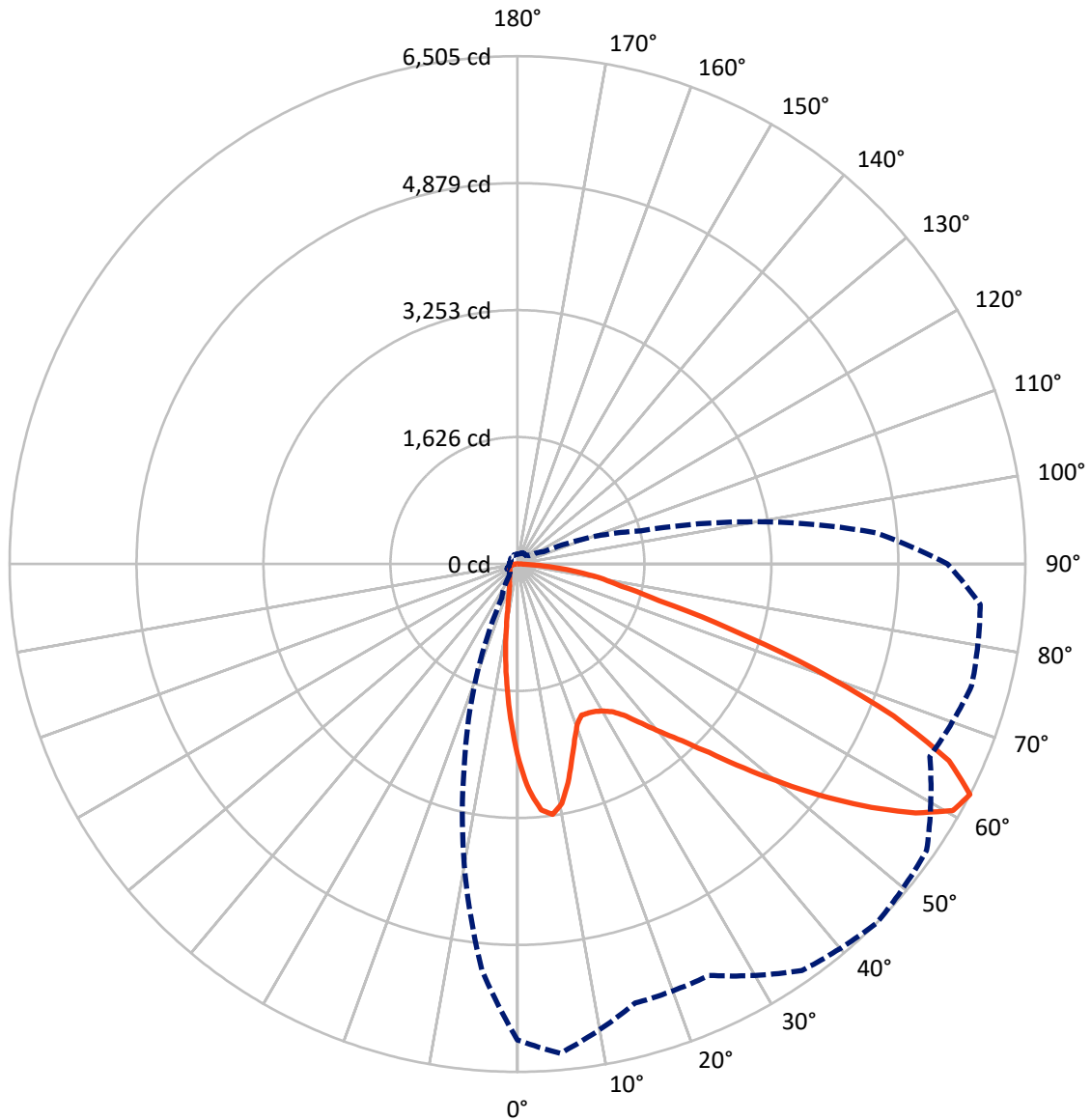
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 29.8 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P298921
CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P298921

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1239.1	0.0	1239.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	6248.5	0.0	6248.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	7487.6	0.0	7487.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.2	2.5
10°-20°	337.7	4.5
20°-30°	492.4	6.6
30°-40°	758.3	10.1
40°-50°	1116.0	14.9
50°-60°	1636.9	21.9
60°-70°	1829.8	24.4
70°-80°	895.9	12.0
80°-90°	236.5	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°	7487.6	100.0
0°-180°	7487.6	100.0

Coefficient of Utilization



REPORT NUMBER: P298921

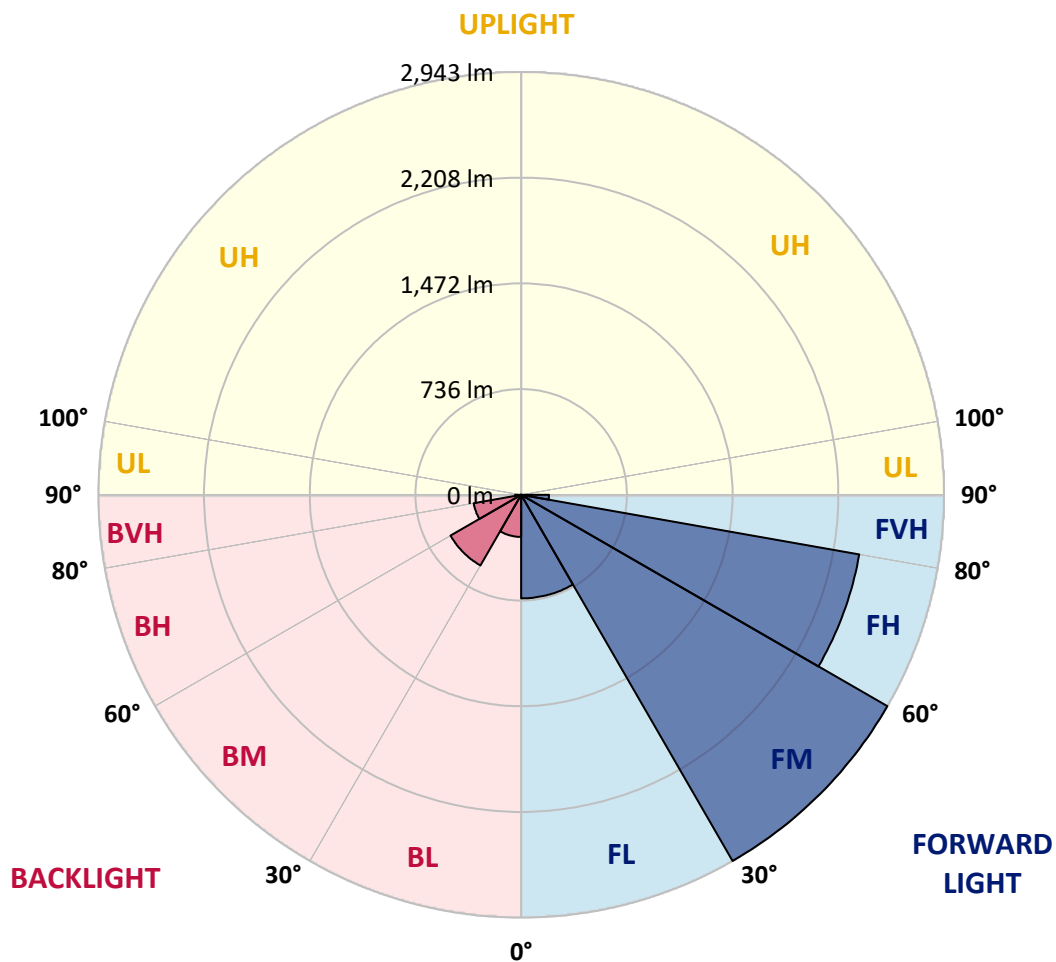
CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	721.0	9.6			
FM	(30°-60°)	2943.5	39.3			
FH	(60°-80°)	2389.8	31.9			G2/5000
FVH	(80°-90°)	194.2	2.6			G2/225
BL	(0°-30°)	293.1	3.9	B1/500		
BM	(30°-60°)	567.7	7.6	B1/1000		
BH	(60°-80°)	335.9	4.5	B1/500		G1/500
BVH	(80°-90°)	42.3	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: P298921

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2628.4	2670.5	2752.4	2813.6	2888.3	2905.5	2929.5	2905.9	2864.4	2809.2	2791.2
5°	2471.7	2561.5	2760.2	2935.2	3090.7	3163.2	3183.5	3123.6	3003.1	2844.6	2747.9
7.5°	2220.2	2347.8	2616.9	2874.7	3103.8	3239.3	3236.0	3097.3	2875.5	2617.3	2462.2
10°	2003.2	2149.0	2457.8	2745.9	2989.1	3120.4	3069.6	2892.4	2627.6	2330.4	2162.2
12.5°	1881.9	2024.7	2337.9	2627.2	2830.6	2875.9	2837.1	2663.4	2414.0	2113.6	1966.2
15°	1860.8	2017.8	2290.2	2525.7	2639.6	2600.2	2554.0	2476.2	2300.0	2043.6	1890.0
17.5°	1951.9	2124.7	2345.0	2454.8	2435.5	2366.7	2353.6	2362.2	2319.9	2121.3	1944.4
20°	2126.4	2333.8	2475.4	2421.6	2280.3	2185.6	2188.9	2321.1	2446.6	2318.6	2116.4
22.5°	2371.2	2608.0	2663.4	2439.2	2214.9	2102.5	2129.8	2343.8	2648.7	2606.8	2348.6
25°	2688.1	2903.9	2864.0	2503.4	2221.4	2112.8	2134.6	2422.0	2887.4	2894.9	2636.0
27.5°	2995.2	3195.4	3032.2	2588.6	2248.7	2137.1	2166.0	2544.9	3115.5	3207.7	2964.5
30°	3234.8	3374.0	3098.9	2666.4	2302.1	2184.4	2220.2	2661.8	3219.3	3418.8	3217.1
32.5°	3433.2	3533.2	3205.1	2762.7	2400.5	2258.8	2321.9	2803.9	3368.7	3619.7	3464.5
35°	3686.7	3715.1	3337.3	2870.1	2552.4	2388.6	2466.7	2943.0	3511.1	3822.6	3708.2
37.5°	3984.0	3947.4	3461.9	3017.1	2748.8	2591.4	2656.1	3095.7	3628.3	4052.7	3957.1
40°	4277.8	4189.6	3618.5	3245.1	3035.3	2830.6	2907.1	3258.7	3737.9	4283.2	4200.4
42.5°	4527.7	4397.1	3772.7	3495.7	3301.9	3094.5	3185.9	3422.9	3842.3	4479.8	4411.6
45°	4712.5	4550.3	3919.7	3736.5	3669.4	3445.1	3488.4	3610.9	3955.5	4644.2	4585.3
47.5°	4877.5	4704.2	4085.9	3979.4	3990.9	3901.1	3831.5	3829.9	4089.0	4778.3	4749.5
50°	5098.5	4917.8	4264.6	4229.6	4473.3	4413.6	4260.0	4085.5	4257.6	4930.7	4927.3
52.5°	5403.1	5256.3	4482.8	4499.2	4923.7	4962.7	4772.5	4392.7	4521.8	5210.1	5190.4
55°	5763.4	5677.6	4780.1	4809.2	5476.0	5504.0	5315.0	4776.6	4910.5	5614.8	5560.0
57.5°	6044.4	6026.3	5106.0	5181.3	5888.5	6014.5	5840.8	5221.3	5348.4	5955.5	5818.0
60°	6156.4	6244.0	5453.0	5556.7	6270.1	6409.4	6257.2	5611.7	5736.5	6096.8	5800.4
62.5°	6096.0	6291.7	5822.6	5813.9	6355.2	6505.4	6398.3	5829.1	6024.3	5951.0	5507.0
65°	5816.4	6120.1	6037.0	5747.6	6063.8	6076.1	6041.4	5732.0	6092.2	5490.4	4939.6
67.5°	5207.5	5644.7	5754.6	5179.7	5277.5	5197.4	5139.3	5200.2	5738.1	4800.1	4151.4
70°	4241.6	4899.4	4951.9	4142.9	4098.4	4044.4	3928.8	4263.4	5039.7	3934.1	3294.1
72.5°	3118.8	3810.3	3972.0	3038.5	2832.7	2843.7	2752.4	3212.9	4097.6	2922.4	2459.4
75°	2133.8	2759.0	3107.7	2120.1	1873.3	1877.7	1866.1	2276.6	3263.6	2032.9	1840.3
77.5°	1558.8	1971.1	2343.8	1425.3	1383.8	1358.2	1352.1	1592.9	2502.1	1476.1	1429.1
80°	1250.8	1456.3	1574.3	987.8	1062.3	1060.3	1026.1	1095.3	1634.0	1079.6	1068.8
82.5°	867.7	1119.2	1275.5	774.2	717.0	705.0	713.4	815.7	1155.0	738.0	701.8
85°	457.8	743.3	1263.2	686.1	425.6	339.5	422.4	668.0	1000.7	391.1	342.3
87.5°	58.5	214.9	836.3	273.8	168.0	90.5	200.6	376.1	642.6	79.8	69.6
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: P298921

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2744.7	2689.9	2618.3	2551.9	2483.2	2414.8	2325.5	2269.5	2230.9	2223.4	2207.1
5°	2678.0	2496.0	2358.5	2239.6	2131.8	1979.3	1895.0	1825.0	1787.6	1783.9	1774.9
7.5°	2370.4	2119.3	1933.7	1765.4	1612.6	1489.6	1353.7	1290.5	1264.4	1270.6	1276.7
10°	2050.5	1769.9	1556.7	1384.6	1250.0	1146.3	1037.3	963.7	912.5	902.2	900.2
12.5°	1816.8	1509.0	1302.0	1180.4	1076.4	978.8	863.2	776.2	710.1	687.3	672.2
15°	1717.9	1381.4	1164.5	1033.5	918.6	794.8	687.3	596.3	535.5	515.8	504.7
17.5°	1739.1	1345.9	1069.8	902.2	755.3	626.0	490.6	412.7	376.1	366.8	366.8
20°	1849.4	1339.4	991.5	781.3	597.9	448.2	337.1	292.6	280.7	279.5	282.7
22.5°	2004.2	1362.5	933.2	676.4	464.7	327.2	262.6	246.1	240.8	242.1	245.7
25°	2234.6	1440.3	890.8	582.8	364.6	267.9	234.1	224.3	221.8	225.1	229.7
27.5°	2507.9	1518.0	864.4	512.4	307.9	244.9	222.6	212.5	214.1	218.2	222.2
30°	2747.9	1581.9	822.8	462.3	290.2	246.1	222.6	208.7	207.1	207.9	209.1
32.5°	2963.3	1625.1	774.2	414.5	250.3	218.6	207.9	205.9	196.7	193.3	193.9
35°	3148.9	1625.1	745.1	386.6	224.3	193.9	176.6	166.4	161.7	162.1	166.8
37.5°	3327.9	1592.5	730.6	370.8	210.3	184.4	169.2	160.1	153.9	152.7	153.5
40°	3485.9	1545.2	714.2	364.2	199.6	178.6	164.4	156.7	150.2	148.2	148.6
42.5°	3612.7	1506.8	696.0	355.7	192.9	174.5	160.9	154.3	147.0	144.8	144.4
45°	3749.7	1494.1	672.2	338.3	196.3	174.9	160.1	153.1	145.6	143.2	142.4
47.5°	3930.4	1534.1	647.5	317.7	203.4	177.0	161.3	153.1	145.2	143.2	142.4
50°	4158.0	1627.9	616.1	287.7	196.3	182.8	160.9	151.8	145.2	143.2	141.6
52.5°	4450.3	1754.7	575.1	253.2	192.1	196.7	160.1	149.4	143.2	140.4	137.5
55°	4805.5	1858.4	525.9	224.7	182.8	192.9	158.9	146.6	140.0	135.9	133.4
57.5°	5065.6	1895.8	463.1	206.3	169.6	186.8	157.1	142.8	135.9	132.6	129.3
60°	5014.2	1823.4	409.9	194.7	161.7	168.8	155.9	139.5	132.1	129.7	126.7
62.5°	4602.2	1634.0	375.7	189.3	156.7	153.9	157.1	136.3	128.9	126.3	125.5
65°	3984.4	1354.5	362.2	188.1	152.7	145.2	146.2	132.6	125.1	123.1	122.3
67.5°	3286.6	1093.3	350.3	192.1	147.4	139.1	135.1	127.6	121.3	119.3	117.7
70°	2591.8	909.3	344.9	189.7	140.8	133.0	128.5	122.3	116.9	114.8	113.6
72.5°	2087.1	768.0	341.9	187.2	132.1	124.7	120.5	115.2	109.4	108.6	107.4
75°	1766.3	603.8	313.3	179.5	122.3	114.8	112.0	107.0	101.3	101.3	100.5
77.5°	1362.5	436.7	260.6	158.9	112.0	103.7	101.3	97.5	91.0	92.2	91.8
80°	1006.4	284.9	203.8	131.7	99.3	91.4	90.1	86.5	79.4	81.1	81.1
82.5°	689.5	186.8	146.6	107.8	84.7	77.4	77.4	73.6	65.9	66.7	69.2
85°	346.2	128.5	109.4	83.5	65.9	62.1	62.1	59.3	51.4	51.8	55.2
87.5°	105.4	77.4	72.4	59.7	47.3	46.5	44.4	42.4	37.4	37.0	39.2
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: P298921

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2181.9	2158.3	2130.2	2067.5	2046.5	2045.2	2064.3	2044.4	2082.3	2066.3	2083.9
5°	1759.5	1736.6	1704.8	1625.1	1576.4	1543.4	1527.9	1481.8	1515.1	1490.8	1511.1
7.5°	1294.1	1299.4	1278.5	1231.6	1125.7	1072.7	1041.4	1013.4	1037.7	1035.1	1073.9
10°	909.7	924.0	909.3	862.0	776.2	747.1	752.8	763.9	795.7	812.0	871.7
12.5°	654.9	654.1	644.6	602.2	545.8	549.0	572.6	591.8	621.1	638.4	699.2
15°	488.9	481.6	477.4	442.8	410.7	417.8	429.3	431.3	449.9	460.2	509.6
17.5°	369.6	373.3	377.7	353.2	328.8	324.3	315.3	304.1	309.6	311.6	336.2
20°	293.4	308.3	319.5	302.1	277.5	264.2	252.7	245.3	245.3	244.9	251.9
22.5°	256.4	267.1	279.1	267.1	244.9	233.3	226.8	221.0	220.2	220.2	226.8
25°	236.4	244.1	255.6	247.5	230.9	222.2	216.1	208.7	205.9	205.0	209.5
27.5°	226.4	229.7	235.4	228.0	214.1	209.9	208.3	201.8	197.9	195.9	200.6
30°	209.5	208.7	209.1	201.8	190.5	190.1	192.9	194.3	192.9	192.5	199.6
32.5°	193.9	192.1	191.7	185.2	174.9	172.5	174.9	177.4	180.3	184.4	192.5
35°	174.1	178.2	180.7	174.9	162.5	155.1	152.3	147.8	145.2	145.2	154.7
37.5°	158.5	168.0	171.7	166.4	152.7	142.4	137.5	136.7	137.1	138.7	147.8
40°	153.1	160.1	163.3	158.1	144.4	135.1	132.1	131.3	132.1	134.7	143.6
42.5°	149.8	154.7	154.3	147.8	136.7	130.1	128.5	127.6	128.5	130.9	140.8
45°	147.0	150.2	147.0	139.1	128.9	125.5	125.9	125.5	126.3	128.9	138.3
47.5°	144.4	145.6	141.6	133.8	123.1	122.3	123.9	125.1	125.9	128.1	137.9
50°	140.8	140.8	137.1	128.9	118.1	118.5	120.5	123.5	123.9	126.3	134.3
52.5°	136.3	135.9	133.4	125.5	114.0	115.2	115.2	118.5	119.3	122.3	130.5
55°	132.6	131.7	130.5	123.1	110.4	112.4	111.2	112.4	114.4	117.3	126.3
57.5°	129.3	127.6	127.6	120.9	107.4	108.2	105.4	107.0	109.4	112.0	121.3
60°	125.9	124.3	125.1	118.1	102.9	102.1	100.9	104.1	105.0	107.8	117.3
62.5°	122.3	120.9	121.3	114.8	99.7	97.5	97.5	100.5	100.9	105.0	114.0
65°	119.3	117.7	117.3	111.6	95.9	93.5	94.7	95.9	96.7	100.9	109.4
67.5°	116.5	113.2	113.2	108.6	91.8	89.3	91.8	91.4	92.7	96.3	103.3
70°	112.8	108.2	108.6	106.6	87.7	84.7	86.9	86.5	87.3	89.7	96.7
72.5°	107.0	103.3	104.1	103.3	83.5	79.4	80.2	80.2	80.2	82.3	89.7
75°	99.7	96.7	99.3	101.3	78.6	72.8	73.6	73.6	72.4	73.6	82.7
77.5°	90.5	88.9	97.1	94.3	72.8	65.9	65.9	65.1	62.7	64.3	74.0
80°	80.7	79.4	89.7	79.0	66.3	57.3	56.4	54.2	51.8	53.0	63.1
82.5°	70.4	69.2	75.4	60.5	57.3	47.3	45.3	41.6	39.2	40.4	49.3
85°	57.7	57.7	58.1	45.7	43.6	36.2	33.8	28.9	25.9	26.7	35.4
87.5°	41.2	42.4	39.2	31.3	25.9	20.2	18.6	15.6	13.1	15.2	18.6
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: P298921

CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7027-800

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2174.5	2219.8	2271.3	2337.0	2393.5	2486.0	2575.0	2628.4
5°	1625.9	1701.2	1794.9	1915.7	2028.1	2196.7	2364.3	2471.7
7.5°	1163.6	1244.3	1345.5	1496.1	1655.1	1870.3	2091.8	2220.2
10°	962.9	1045.6	1130.7	1232.4	1362.5	1596.6	1858.4	2003.2
12.5°	796.5	885.0	976.8	1083.8	1204.3	1413.4	1715.1	1881.9
15°	609.6	708.3	816.5	952.0	1103.0	1344.7	1679.7	1860.8
17.5°	417.8	528.2	661.0	828.2	1013.0	1322.4	1743.2	1951.9
20°	287.7	368.0	510.0	705.9	928.3	1319.6	1864.9	2126.4
22.5°	240.8	276.6	380.3	593.5	864.4	1355.0	2054.0	2371.2
25°	222.6	244.1	303.7	496.0	817.9	1436.5	2314.1	2688.1
27.5°	212.1	231.3	275.8	432.3	781.3	1531.1	2567.2	2995.2
30°	216.1	235.8	267.9	399.7	731.4	1610.1	2792.0	3234.8
32.5°	194.7	203.4	229.7	370.8	695.6	1676.4	2988.7	3433.2
35°	166.0	181.1	205.0	357.3	696.4	1720.9	3203.1	3686.7
37.5°	158.1	173.3	190.5	352.4	705.9	1768.3	3449.2	3984.0
40°	153.1	167.2	182.0	349.5	715.0	1811.5	3690.6	4277.8
42.5°	149.8	162.5	181.1	339.5	719.5	1850.2	3888.8	4527.7
45°	149.4	162.5	184.4	329.6	726.5	1891.8	4055.2	4712.5
47.5°	149.8	168.0	178.2	317.7	726.5	1961.3	4250.3	4877.5
50°	148.2	177.0	171.7	300.9	709.7	2093.0	4517.8	5098.5
52.5°	147.4	175.8	158.9	275.0	680.4	2302.1	4860.7	5403.1
55°	145.2	169.6	149.8	236.4	646.3	2530.2	5227.8	5763.4
57.5°	143.2	150.2	144.8	202.6	593.5	2690.7	5480.5	6044.4
60°	160.5	131.3	140.8	186.0	523.1	2734.6	5470.8	6156.4
62.5°	148.6	123.1	135.5	182.4	473.8	2611.2	5218.0	6096.0
65°	116.5	117.7	130.1	192.9	460.6	2284.1	4770.1	5816.4
67.5°	106.6	112.4	124.7	206.7	461.9	1828.7	4100.9	5207.5
70°	100.5	106.6	118.5	213.7	465.1	1363.3	3242.1	4241.6
72.5°	93.5	98.9	111.6	214.9	443.6	990.3	2498.9	3118.8
75°	85.1	90.1	101.7	187.2	367.6	686.9	1911.6	2133.8
77.5°	75.8	79.4	89.3	144.4	273.0	439.6	1434.8	1558.8
80°	64.7	66.7	75.0	105.8	186.8	275.0	1135.2	1250.8
82.5°	51.8	52.6	58.1	79.4	121.3	176.6	760.3	867.7
85°	36.6	36.6	40.0	57.7	82.7	112.0	412.7	457.8
87.5°	17.2	17.6	17.6	31.7	43.2	56.9	95.1	58.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)