

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: P299494

Luminaire Tested: **GLNA-AF-07-LED-E1-SLR-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299494
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-07-LED-E1-SLR-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Right OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24294.7 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

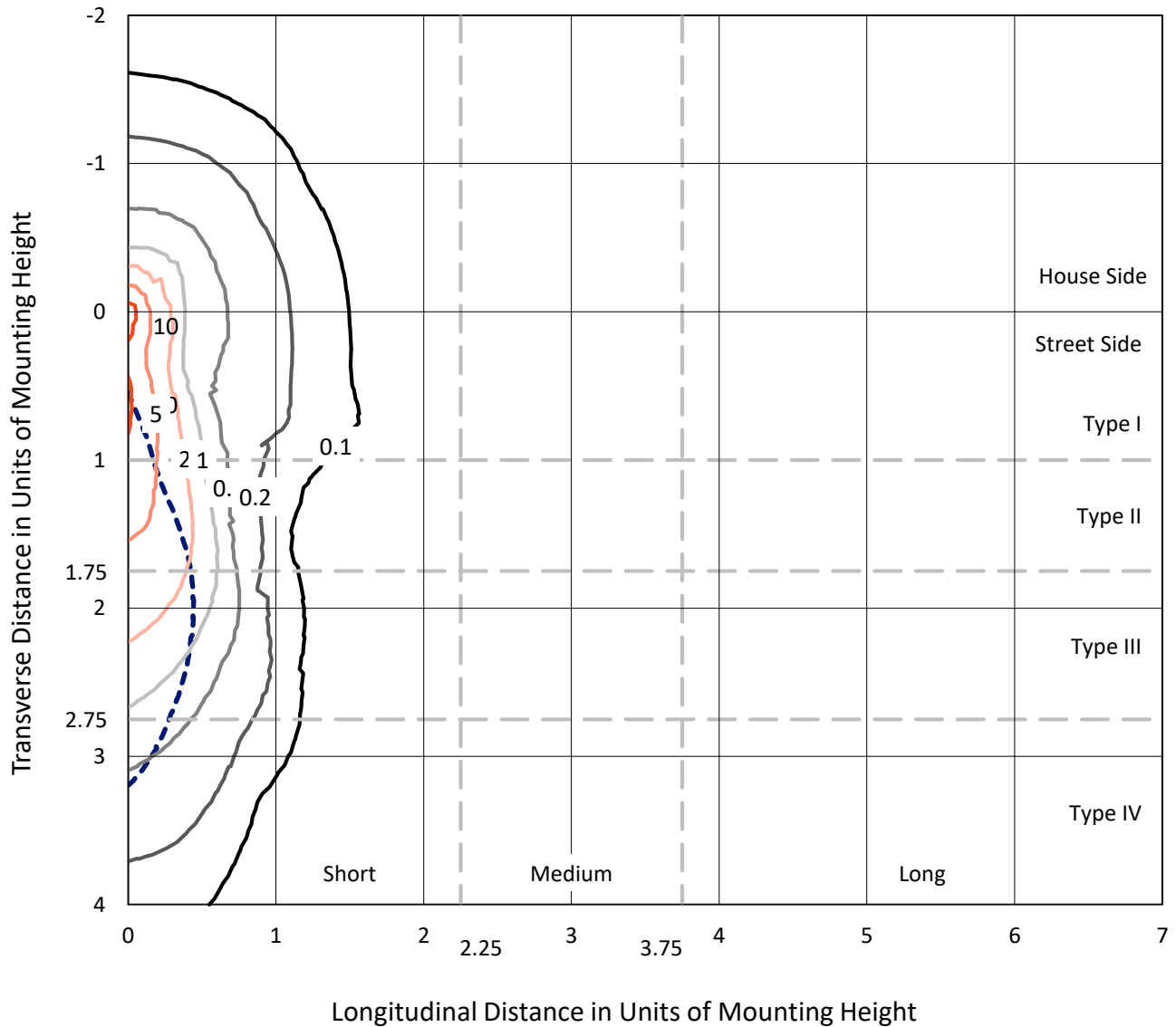
Input Watts (W): 226
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299494
 CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

Iso-Footcandle Lines of Horizontal Illumination

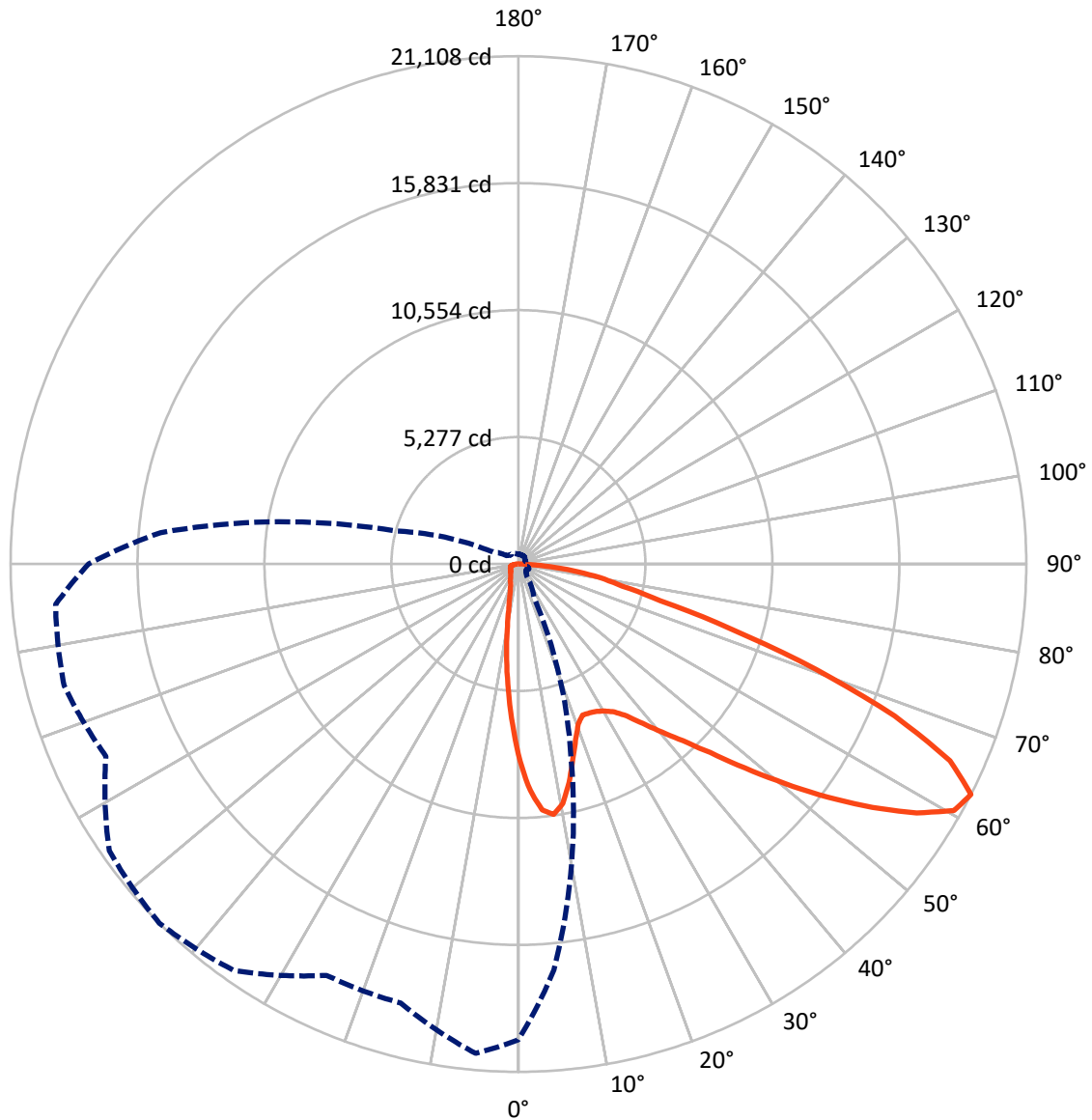
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P299494
CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299494

CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4020.5	0.0	4020.5
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	20274.3	0.0	20274.3
	% Fixture	83.5	0.0	83.5
Total	Lumens	24294.7	0.0	24294.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	597.5	2.5
10°-20°	1095.7	4.5
20°-30°	1597.5	6.6
30°-40°	2460.4	10.1
40°-50°	3621.0	14.9
50°-60°	5311.2	21.9
60°-70°	5937.2	24.4
70°-80°	2906.8	12.0
80°-90°	767.5	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°	24294.7	100.0
0°-180°	24294.7	100.0



REPORT NUMBER: P299494

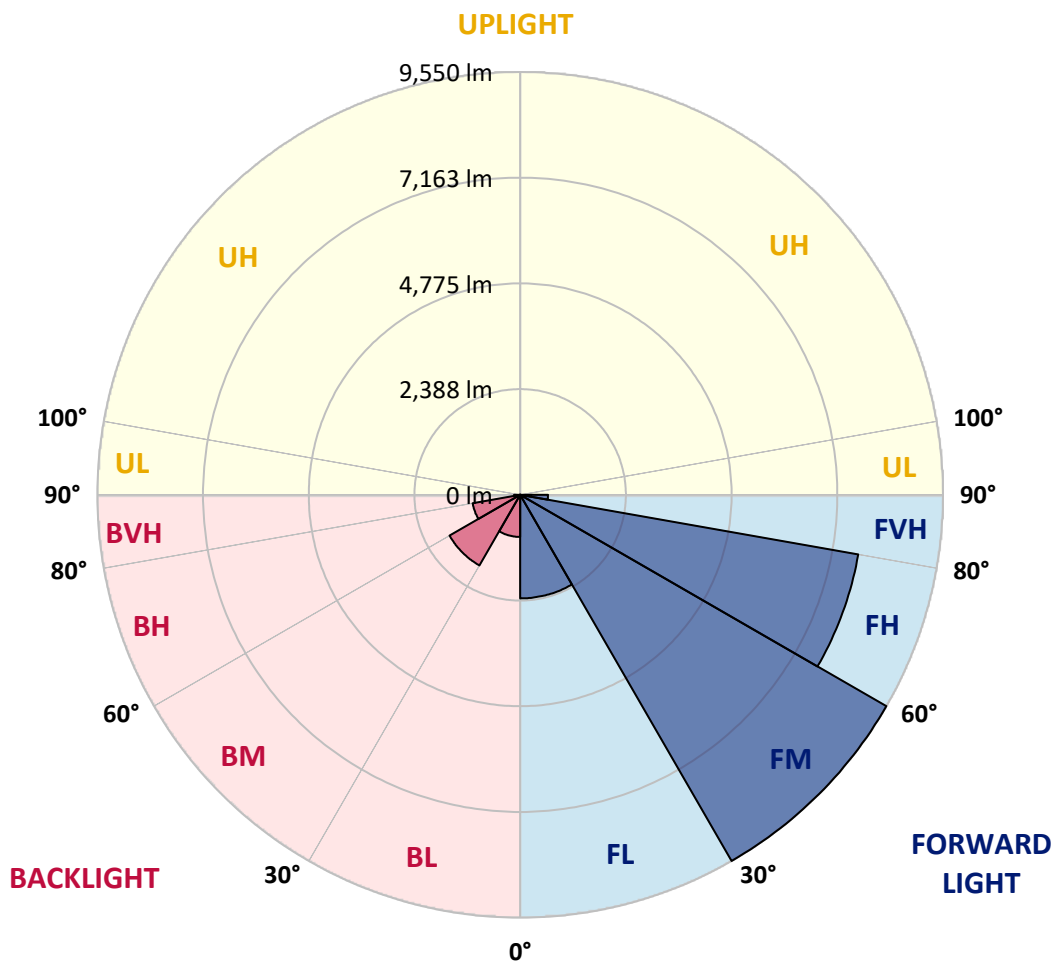
CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2339.5	9.6			
FM	(30°-60°)	9550.5	39.3			
FH	(60°-80°)	7754.0	31.9			G4/12000
FVH	(80°-90°)	630.3	2.6			G4/750
BL	(0°-30°)	951.2	3.9	B2/1000		
BM	(30°-60°)	1842.1	7.6	B2/2500		
BH	(60°-80°)	1090.0	4.5	B3/2500		G3/2500
BVH	(80°-90°)	137.2	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-G4

Type IV Short





REPORT NUMBER: P299494

CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2
2.5°	8528.4	8355.0	8066.3	7765.9	7583.2	7369.3	7202.3	7055.5	6761.6	6704.2	6756.4
5°	8019.8	7671.3	7127.5	6580.1	6215.4	5824.0	5519.6	5275.4	4902.6	4837.1	4916.0
7.5°	7203.9	6787.1	6068.6	5370.0	4854.5	4365.7	4037.4	3775.4	3484.3	3359.0	3366.7
10°	6500.0	6029.8	5180.4	4420.7	3998.6	3668.7	3392.1	3123.7	2828.5	2634.9	2581.5
12.5°	6105.8	5565.3	4586.0	3907.6	3516.2	3169.4	2871.4	2584.3	2269.0	2071.3	2015.5
15°	6037.9	5450.0	4363.3	3579.3	3088.9	2649.8	2298.5	1977.9	1653.2	1493.1	1459.5
17.5°	6333.0	5655.8	4290.9	3286.6	2687.0	2144.8	1713.4	1355.6	1091.2	1011.2	1004.3
20°	6899.1	6051.2	4281.6	3011.7	2290.4	1654.8	1193.9	933.5	817.5	794.5	796.1
22.5°	7693.9	6664.2	4396.4	2804.7	1925.7	1233.9	897.6	781.1	735.8	714.4	714.4
25°	8722.1	7508.4	4660.8	2653.9	1609.1	985.7	792.0	722.5	679.6	665.1	667.9
27.5°	9718.7	8329.5	4968.1	2535.0	1402.1	894.7	750.4	687.7	650.5	635.6	642.4
30°	10495.8	9058.9	5224.4	2373.3	1296.6	869.3	765.4	701.1	647.7	625.1	626.3
32.5°	11139.4	9697.3	5439.5	2256.8	1203.2	745.1	659.8	631.5	625.1	598.4	585.0
35°	11962.2	10393.1	5583.9	2259.7	1159.1	665.1	587.5	538.1	502.1	471.4	471.4
37.5°	12926.5	11191.6	5737.5	2290.4	1143.4	618.2	562.4	512.7	479.5	450.0	444.7
40°	13879.8	11974.3	5877.8	2319.9	1133.7	590.3	542.2	496.9	466.2	436.7	428.6
42.5°	14690.8	12618.0	6003.1	2334.5	1101.7	587.5	527.6	486.0	456.9	424.5	416.8
45°	15290.4	13157.3	6138.2	2357.1	1069.8	598.4	527.6	484.8	448.8	418.1	410.0
47.5°	15825.7	13790.5	6363.8	2357.1	1031.0	578.2	545.0	486.0	447.6	415.2	408.8
50°	16543.0	14658.5	6791.1	2302.5	976.4	556.7	574.1	480.7	435.4	410.0	401.9
52.5°	17531.1	15771.2	7469.5	2207.5	892.3	515.5	570.1	478.3	423.3	396.6	387.3
55°	18699.9	16962.2	8209.4	2096.7	766.6	486.0	550.3	471.4	410.0	380.5	371.2
57.5°	19612.1	17782.2	8730.2	1925.7	657.0	470.2	487.6	465.0	393.8	363.1	355.4
60°	19975.1	17750.2	8873.3	1697.3	603.6	456.9	426.1	520.7	380.5	349.7	340.4
62.5°	19779.0	16930.3	8472.6	1537.2	591.5	439.5	399.5	481.9	369.9	340.4	327.1
65°	18872.2	15477.2	7410.9	1494.3	626.3	422.1	382.1	378.0	355.4	327.1	313.7
67.5°	16896.7	13305.7	5933.6	1498.4	670.3	404.7	364.7	346.1	335.2	312.5	300.4
70°	13762.6	10520.0	4423.1	1509.3	693.0	384.5	346.1	325.9	313.7	291.1	283.0
72.5°	10119.4	8107.9	3213.4	1439.7	697.0	361.9	320.6	303.2	291.1	267.2	260.4
75°	6923.3	6202.0	2228.9	1192.7	607.7	329.9	292.3	276.5	268.5	238.9	234.9
77.5°	5057.5	4655.6	1426.4	885.4	468.6	289.9	257.9	245.8	240.6	208.2	203.0
80°	4058.8	3683.2	892.3	606.5	343.3	243.0	216.3	209.8	204.2	172.2	168.2
82.5°	2815.2	2466.7	572.9	393.8	257.9	188.4	171.0	168.2	160.1	131.0	127.0
85°	1485.0	1339.5	363.1	268.5	186.8	129.4	118.9	118.9	114.8	86.9	84.1
87.5°	189.6	308.5	184.4	140.3	102.7	57.4	57.4	56.2	60.2	49.3	42.9
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: P299494

CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2
2.5°	6633.4	6697.7	6636.3	6640.3	6708.2	6911.2	7003.4	7079.4	7161.1	7214.4	7238.3
5°	4808.0	4957.6	5008.1	5114.9	5272.5	5531.7	5634.4	5709.2	5758.9	5788.0	5800.2
7.5°	3288.2	3378.8	3480.3	3652.5	3995.8	4148.2	4216.1	4198.7	4142.9	4122.7	4102.9
10°	2478.8	2442.8	2423.8	2518.8	2796.6	2950.2	2998.3	2951.4	2920.7	2927.6	2960.7
12.5°	1920.5	1857.8	1781.8	1770.9	1954.0	2091.5	2122.2	2124.6	2180.8	2230.1	2303.7
15°	1399.7	1392.8	1355.6	1333.0	1436.9	1549.3	1562.6	1586.5	1637.4	1673.4	1737.3
17.5°	986.9	1022.9	1052.4	1067.0	1145.8	1225.9	1211.3	1199.2	1189.9	1189.9	1220.6
20°	796.1	819.9	857.5	900.0	980.4	1036.2	1000.3	952.1	917.4	906.9	910.9
22.5°	717.2	735.8	757.3	794.5	866.8	905.6	866.8	832.1	797.3	785.2	781.1
25°	677.2	701.1	721.3	749.2	802.5	829.2	792.0	766.6	745.1	730.6	719.7
27.5°	654.6	675.6	681.3	694.6	739.9	763.7	745.1	734.6	721.3	707.9	694.6
30°	630.3	626.3	617.0	618.2	654.6	678.4	677.2	679.6	678.4	674.4	672.0
32.5°	575.7	567.6	559.6	567.6	600.8	622.2	623.8	629.1	629.1	627.9	638.4
35°	479.5	494.1	503.4	527.6	567.6	586.2	578.2	564.8	541.0	526.0	524.8
37.5°	443.5	445.9	462.1	495.3	539.7	556.7	545.0	514.3	498.1	495.3	499.3
40°	426.1	428.6	437.9	468.6	512.7	530.0	519.5	496.9	481.9	480.7	487.6
42.5°	414.0	416.8	422.1	443.5	479.5	500.9	502.1	486.0	468.6	470.2	476.7
45°	407.1	408.8	407.1	418.1	451.2	476.7	487.6	476.7	462.1	465.0	472.6
47.5°	405.9	401.9	396.6	399.5	434.2	459.3	472.6	468.6	462.1	465.0	471.4
50°	400.7	391.4	384.5	383.3	418.1	444.7	456.9	456.9	459.3	465.0	471.4
52.5°	384.5	374.0	374.0	369.9	407.1	432.6	440.7	441.9	445.9	455.2	465.0
55°	364.7	360.6	364.7	357.8	399.5	423.3	427.4	430.2	432.6	440.7	454.0
57.5°	347.3	342.0	351.3	348.5	392.6	414.0	414.0	419.3	419.3	430.2	440.7
60°	338.0	327.1	331.1	334.0	383.3	405.9	403.5	408.8	411.2	420.9	428.6
62.5°	325.9	316.6	316.6	323.0	372.8	393.8	392.6	396.6	407.1	410.0	418.1
65°	311.3	307.3	303.2	311.3	361.9	380.5	382.1	387.3	396.6	399.5	405.9
67.5°	296.4	298.0	289.9	298.0	352.6	367.1	367.1	378.0	382.1	387.3	393.8
70°	280.6	281.8	274.9	284.6	346.1	352.6	351.3	365.9	368.7	372.8	379.2
72.5°	260.4	260.4	257.9	271.3	335.2	338.0	335.2	347.3	348.5	352.6	355.4
75°	238.9	238.9	236.5	255.1	328.7	321.8	313.7	323.0	325.9	328.7	328.7
77.5°	211.0	213.9	213.9	236.5	305.7	315.4	288.3	293.9	298.0	299.2	295.1
80°	176.3	183.2	185.6	215.1	256.3	291.1	257.9	261.6	263.2	263.2	257.9
82.5°	135.0	146.8	153.6	185.6	196.5	244.2	224.4	228.4	224.4	216.3	213.9
85°	93.4	109.6	117.7	141.5	148.4	188.4	186.8	186.8	179.1	168.2	167.0
87.5°	50.9	60.2	65.5	84.1	101.5	127.0	137.5	133.4	127.0	120.1	121.7
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: P299494

CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2
2.5°	7364.0	7545.6	7835.4	8057.0	8280.2	8495.3	8727.7	8905.2	9056.0	9115.1	9293.8
5°	5921.9	6148.7	6422.4	6916.5	7266.6	7652.3	8098.6	8688.9	8915.7	9229.9	9743.8
7.5°	4187.0	4392.4	4833.1	5232.5	5728.2	6274.4	6876.4	7691.1	7989.1	8492.4	9329.8
10°	3126.5	3365.4	3719.2	4056.0	4492.6	5051.0	5742.8	6653.7	7015.5	7561.7	8526.0
12.5°	2518.8	2800.6	3175.8	3492.4	3830.4	4224.2	4896.1	5894.8	6379.9	6857.8	7832.6
15°	1935.0	2230.1	2579.1	2980.9	3353.3	3778.2	4482.1	5574.6	6132.5	6631.0	7462.7
17.5°	1339.5	1591.8	2031.2	2450.5	2927.6	3471.0	4367.3	5642.5	6308.8	6883.3	7527.0
20°	949.7	1093.6	1454.3	1940.7	2535.0	3217.1	4345.9	6000.3	6867.1	7522.9	7938.1
22.5°	798.5	851.9	1061.7	1507.7	2194.2	3027.4	4420.7	6502.4	7620.4	8457.7	8593.9
25°	727.8	760.1	869.3	1183.4	1890.9	2890.0	4673.0	7250.4	8552.7	9392.8	9368.6
27.5°	688.9	722.5	794.5	999.0	1662.9	2804.7	4925.3	8137.5	9618.4	10407.6	10108.4
30°	677.2	722.5	798.5	941.6	1500.0	2669.6	5132.3	8915.7	10438.4	11092.9	10445.2
32.5°	667.9	674.4	709.2	811.8	1344.7	2512.0	5272.5	9614.4	11240.9	11744.7	10930.0
35°	539.7	572.9	629.1	727.8	1254.2	2417.3	5272.5	10216.8	12031.7	12402.9	11392.1
37.5°	519.5	549.0	598.4	682.5	1203.2	2370.4	5167.0	10797.8	12839.5	13149.6	11772.6
40°	509.0	532.9	579.8	647.7	1181.8	2317.1	5013.4	11310.4	13628.7	13897.2	12128.0
42.5°	500.9	522.4	566.4	626.3	1153.9	2258.5	4889.3	11721.6	14314.0	14535.6	12467.2
45°	496.9	519.5	567.6	637.2	1097.7	2180.8	4848.0	12166.4	14877.6	15068.5	12834.3
47.5°	496.9	523.6	574.1	659.8	1031.0	2100.8	4977.4	12753.0	15410.5	15503.9	13266.9
50°	492.8	522.4	593.1	637.2	933.5	1999.3	5281.8	13491.3	15987.5	15998.0	13814.7
52.5°	484.8	519.5	638.4	623.8	821.1	1865.9	5693.4	14439.8	16840.9	16904.8	14671.8
55°	475.5	515.5	626.3	593.1	729.4	1707.0	6029.8	15592.0	18040.1	18217.6	15932.9
57.5°	463.3	510.2	606.5	550.3	669.1	1502.4	6151.5	16436.2	18877.4	19323.4	17353.6
60°	452.8	506.2	547.4	524.8	631.5	1330.2	5916.2	16269.3	18820.0	19781.5	18613.0
62.5°	441.9	510.2	499.3	509.0	614.1	1219.4	5302.1	14932.2	17867.9	19308.8	19546.6
65°	430.2	474.3	471.4	495.3	610.5	1175.3	4395.2	12927.7	16027.5	17814.5	19766.9
67.5°	414.0	437.9	451.2	478.3	623.8	1136.5	3547.0	10664.0	13469.8	15574.7	18618.3
70°	396.6	416.8	431.4	456.9	615.8	1119.1	2950.2	8409.6	10688.2	12764.7	16352.1
72.5°	374.0	391.4	404.7	428.6	607.7	1109.8	2492.1	6772.5	7979.8	9482.2	13295.2
75°	347.3	363.1	372.8	396.6	582.2	1016.4	1959.3	5730.6	5971.2	6596.2	10589.2
77.5°	316.6	328.7	336.4	363.1	515.5	845.4	1417.1	4420.7	4637.0	4789.0	8118.5
80°	280.6	292.3	296.4	321.8	427.4	661.0	924.2	3265.2	3468.1	3502.9	5302.1
82.5°	238.9	251.1	251.1	274.9	349.7	475.5	606.5	2237.0	2277.0	2394.7	3747.5
85°	192.4	201.7	201.7	213.9	271.3	355.4	416.8	1123.2	1111.0	1268.7	3246.6
87.5°	137.5	144.3	150.8	153.6	193.7	234.9	251.1	342.0	225.6	259.2	2084.6
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: P299494

CATALOG NUMBER: GLNA-AF-07-LED-E1-SLR-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2	8208.2
2.5°	9428.8	9504.8	9427.2	9371.4	9129.6	8930.7	8664.7	8528.4
5°	10135.1	10328.8	10263.3	10028.4	9523.4	8955.8	8310.9	8019.8
7.5°	10049.8	10499.8	10510.3	10071.3	9327.3	8491.2	7617.9	7203.9
10°	9384.7	9960.1	10124.6	9698.5	8909.3	7974.5	6972.7	6500.0
12.5°	8642.0	9205.6	9331.4	9184.2	8524.8	7585.6	6569.6	6105.8
15°	8034.4	8287.1	8436.2	8564.8	8194.9	7430.7	6546.5	6037.9
17.5°	7664.4	7636.5	7679.4	7902.2	7964.8	7608.2	6893.8	6333.0
20°	7531.0	7102.4	7091.5	7398.8	7856.9	8031.9	7572.2	6899.1
22.5°	7604.6	6910.0	6821.8	7186.5	7914.3	8642.0	8461.7	7693.9
25°	7858.1	6926.2	6855.0	7208.0	8122.5	9292.6	9421.9	8722.1
27.5°	8257.5	7027.6	6933.8	7296.1	8399.0	9838.8	10367.6	9718.7
30°	8636.8	7203.9	7087.5	7469.5	8651.3	10055.1	10947.4	10495.8
32.5°	9097.7	7533.8	7329.3	7788.5	8963.9	10399.5	11464.1	11139.4
35°	9548.9	8003.6	7750.1	8281.4	9312.4	10828.5	12054.4	11962.2
37.5°	10044.6	8618.2	8408.3	8918.6	9789.5	11232.8	12807.6	12926.5
40°	10573.4	9432.9	9184.2	9848.1	10529.3	11740.6	13594.4	13879.8
42.5°	11106.3	10336.9	10040.5	10713.3	11342.4	12241.2	14267.1	14690.8
45°	11716.4	11318.5	11178.2	11906.0	12123.9	12718.2	14764.0	15290.4
47.5°	12427.1	12432.4	12658.0	12949.1	12911.9	13257.6	15263.7	15825.7
50°	13256.4	13822.4	14320.9	14514.2	13723.7	13837.4	15956.7	16543.0
52.5°	14252.6	15485.3	16102.3	15975.3	14598.7	14544.9	17054.4	17531.1
55°	15498.7	17245.7	17858.6	17767.6	15604.2	15509.2	18422.2	18699.9
57.5°	16940.8	18951.0	19514.6	19105.9	16811.4	16567.2	19553.4	19612.1
60°	18208.3	20302.6	20796.7	20343.8	18029.6	17692.8	20259.8	19975.1
62.5°	18913.4	20760.7	21108.0	20620.4	18864.1	18892.0	20414.6	19779.0
65°	18598.5	19602.8	19714.8	19674.7	18649.0	19587.8	19857.9	18872.2
67.5°	16872.9	16675.2	16863.6	17124.0	16806.2	18671.6	18315.0	16896.7
70°	13833.3	12747.4	13123.0	13297.6	13441.9	16067.5	15896.5	13762.6
72.5°	10425.0	8930.7	9227.1	9191.1	9858.6	12887.6	12362.9	10119.4
75°	7386.7	6055.3	6092.5	6077.9	6879.3	10083.0	8952.1	6923.3
77.5°	5168.2	4387.1	4407.3	4489.8	4624.9	7604.6	6395.7	5057.5
80°	3553.8	3329.5	3440.2	3447.1	3205.3	5108.4	4725.1	4058.8
82.5°	2647.0	2314.2	2287.6	2326.4	2512.0	4138.9	3631.1	2815.2
85°	2167.5	1370.2	1101.7	1381.1	2226.1	4098.9	2412.1	1485.0
87.5°	1220.6	650.5	293.9	545.0	888.3	2713.7	697.0	189.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)