

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: P299365

Luminaire Tested: **GLNA-AF-06-LED-E1-SLR-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299365  
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-06-LED-E1-SLR-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Right OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27094.3 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

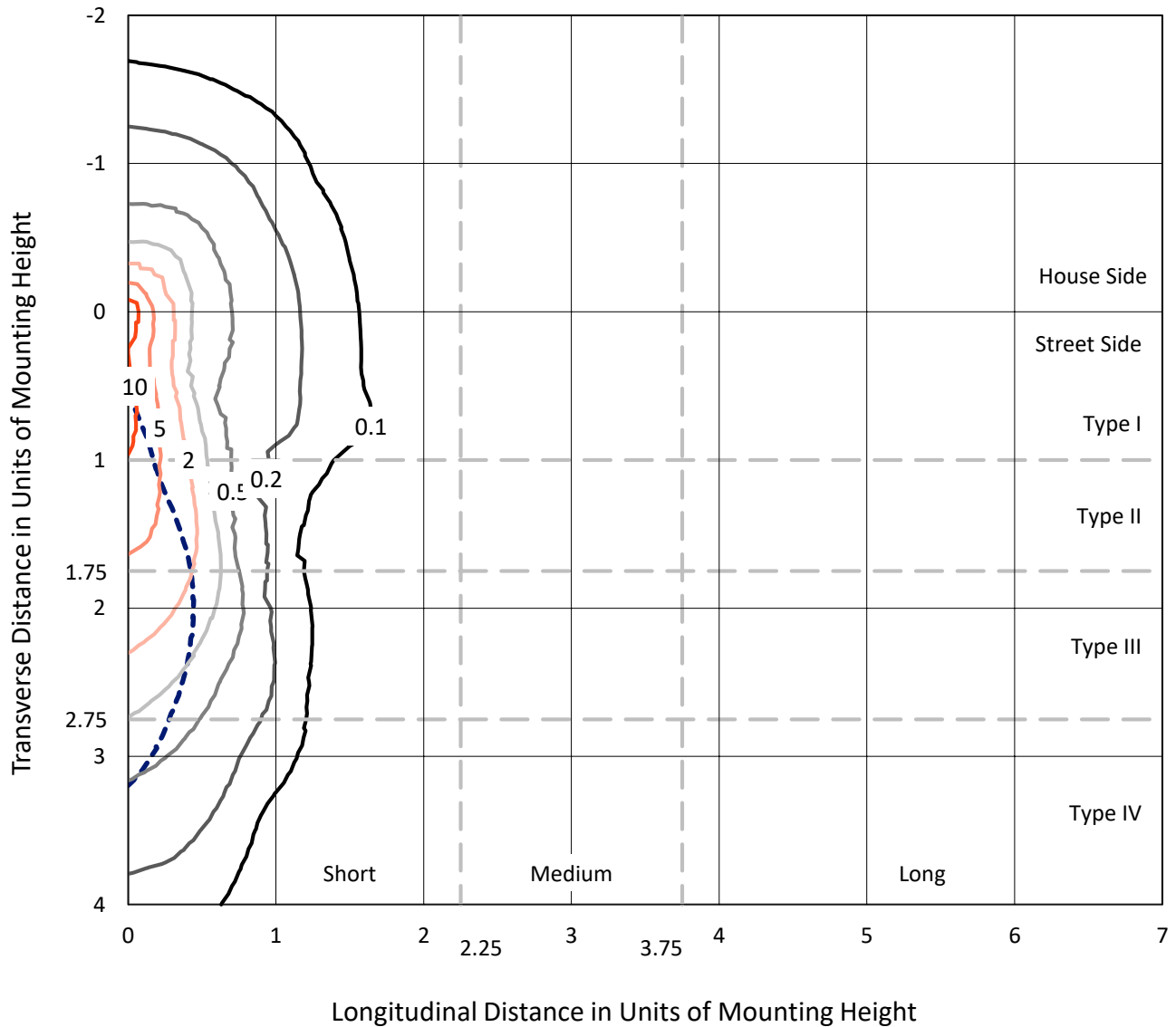
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P299365  
 CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

### Iso-Footcandle Lines of Horizontal Illumination

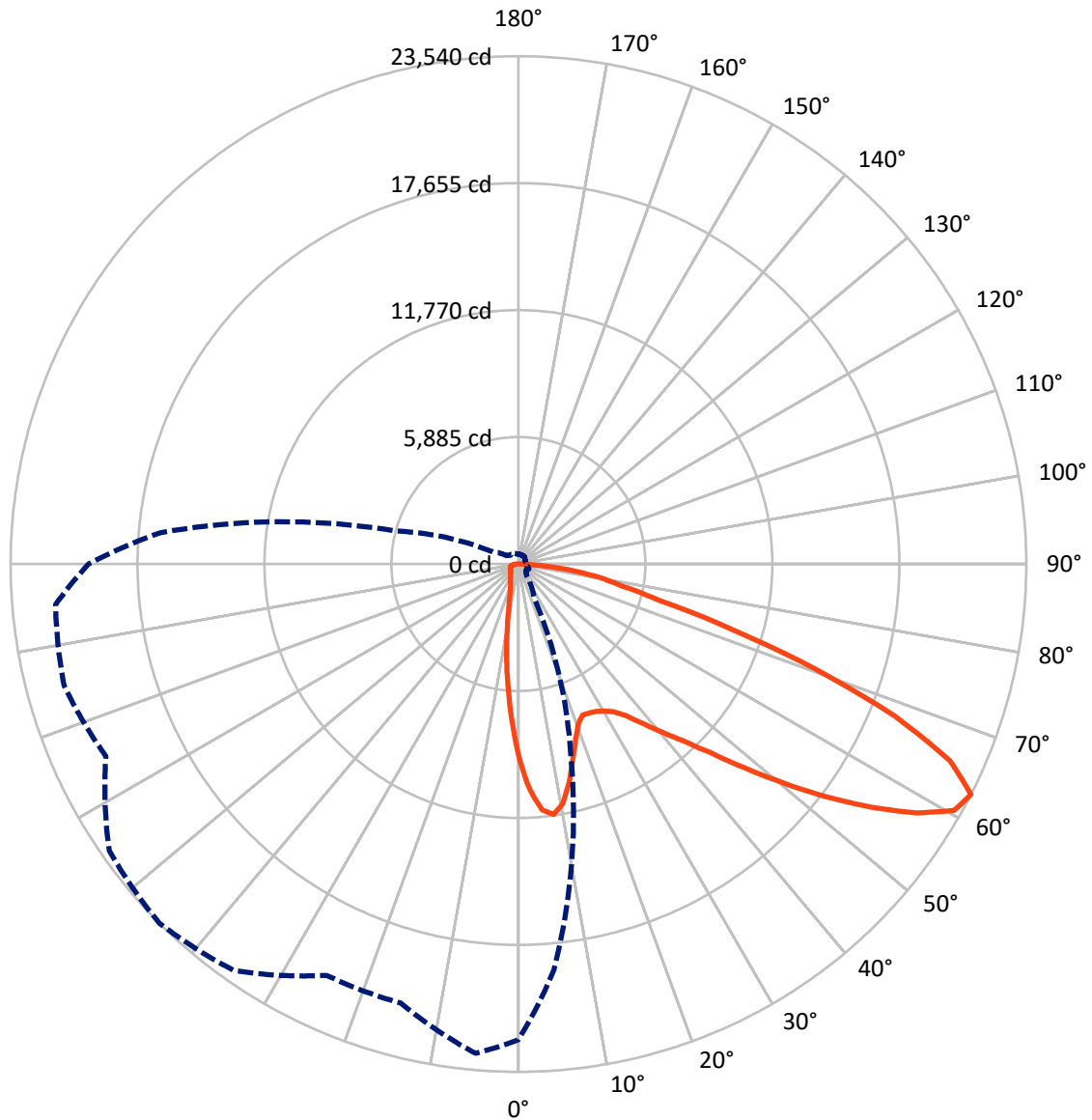
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.6 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P299365  
CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P299365

CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4483.8	0.0	4483.8
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	22610.6	0.0	22610.6
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	27094.3	0.0	27094.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	666.4	2.5
10°-20°	1221.9	4.5
20°-30°	1781.6	6.6
30°-40°	2743.9	10.1
40°-50°	4038.3	14.9
50°-60°	5923.3	21.9
60°-70°	6621.4	24.4
70°-80°	3241.8	12.0
80°-90°	855.9	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°	27094.3	100.0
0°-180°	27094.3	100.0



REPORT NUMBER: P299365

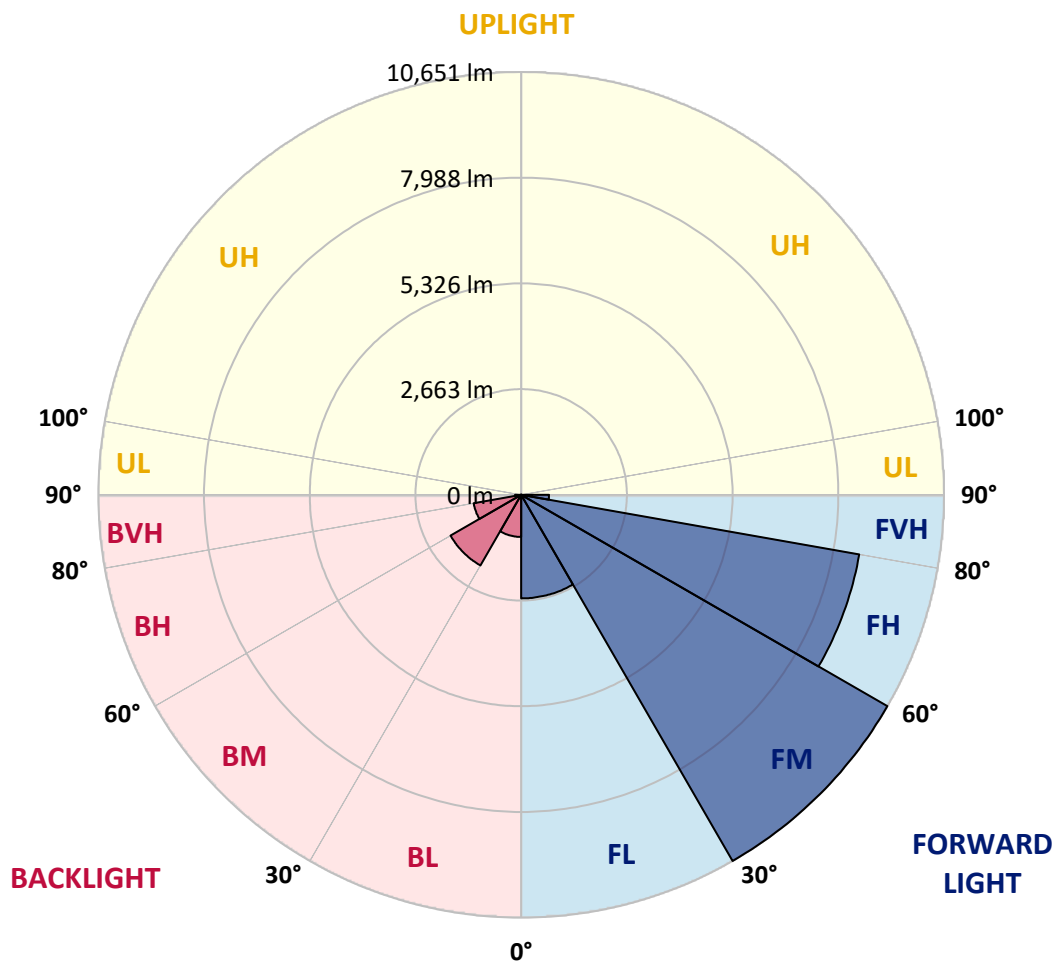
CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2609.1	9.6			
FM	(30°-60°)	10651.0	39.3			
FH	(60°-80°)	8647.6	31.9			G4/12000
FVH	(80°-90°)	702.9	2.6			G4/750
BL	(0°-30°)	1060.8	3.9	B3/2500		
BM	(30°-60°)	2054.4	7.6	B2/2500		
BH	(60°-80°)	1215.6	4.5	B3/2500		G3/2500
BVH	(80°-90°)	153.0	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: P299365

CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1
2.5°	9511.2	9317.8	8995.8	8660.8	8457.0	8218.5	8032.3	7868.6	7540.8	7476.8	7534.9
5°	8944.0	8555.3	7948.8	7338.3	6931.6	6495.2	6155.6	5883.3	5467.6	5394.5	5482.4
7.5°	8034.1	7569.2	6767.9	5988.8	5413.9	4868.8	4502.6	4210.5	3885.8	3746.0	3754.6
10°	7249.0	6724.7	5777.3	4930.1	4459.4	4091.4	3783.0	3483.6	3154.5	2938.5	2879.0
12.5°	6809.4	6206.6	5114.5	4357.9	3921.4	3534.6	3202.3	2882.1	2530.4	2309.9	2247.7
15°	6733.7	6078.1	4866.1	3991.8	3444.8	2955.2	2563.3	2205.8	1843.7	1665.2	1627.7
17.5°	7062.8	6307.6	4785.4	3665.3	2996.7	2392.0	1910.9	1511.9	1217.0	1127.7	1120.0
20°	7694.1	6748.6	4775.0	3358.7	2554.3	1845.5	1331.5	1041.1	911.7	886.0	887.8
22.5°	8580.5	7432.1	4903.0	3127.9	2147.6	1376.1	1001.0	871.1	820.6	796.7	796.7
25°	9727.2	8373.6	5197.9	2959.7	1794.6	1099.3	883.3	805.8	758.0	741.7	744.9
27.5°	10838.6	9289.4	5540.6	2827.1	1563.7	997.8	836.9	767.0	725.5	708.8	716.5
30°	11705.2	10102.8	5826.5	2646.8	1446.0	969.4	853.5	781.9	722.3	697.1	698.4
32.5°	12423.1	10814.7	6066.3	2516.9	1341.9	831.0	735.9	704.3	697.1	667.3	652.4
35°	13340.6	11590.7	6227.3	2520.1	1292.7	741.7	655.2	600.1	560.0	525.7	525.7
37.5°	14416.0	12481.2	6398.7	2554.3	1275.1	689.4	627.2	571.7	534.8	501.8	496.0
40°	15479.2	13354.2	6555.1	2587.2	1264.3	658.3	604.7	554.2	519.9	487.0	477.9
42.5°	16383.7	14072.0	6694.9	2603.5	1228.7	655.2	588.4	542.0	509.5	473.4	464.9
45°	17052.4	14673.5	6845.5	2628.7	1193.1	667.3	588.4	540.6	500.5	466.2	457.2
47.5°	17649.4	15379.6	7097.1	2628.7	1149.8	644.8	607.8	542.0	499.1	463.1	455.9
50°	18449.3	16347.7	7573.7	2567.9	1088.9	620.9	640.3	536.1	485.6	457.2	448.2
52.5°	19551.3	17588.5	8330.3	2461.9	995.1	574.9	635.8	533.4	472.1	442.3	432.0
55°	20854.8	18916.9	9155.4	2338.3	854.9	542.0	613.7	525.7	457.2	424.3	413.9
57.5°	21872.0	19831.3	9736.2	2147.6	732.7	524.4	543.8	518.5	439.2	404.9	396.3
60°	22276.9	19795.7	9895.8	1892.9	673.2	509.5	475.2	580.8	424.3	390.0	379.7
62.5°	22058.3	18881.3	9449.0	1714.3	659.7	490.1	445.5	537.5	412.6	379.7	364.8
65°	21046.9	17260.7	8264.9	1666.5	698.4	470.7	426.1	421.6	396.3	364.8	349.9
67.5°	18843.8	14839.0	6617.3	1671.0	747.6	451.3	406.7	386.0	373.8	348.5	335.0
70°	15348.5	11732.3	4932.8	1683.2	772.8	428.8	386.0	363.4	349.9	324.6	315.6
72.5°	11285.5	9042.3	3583.7	1605.6	777.3	403.6	357.6	338.2	324.6	298.0	290.4
75°	7721.1	6916.7	2485.8	1330.1	677.7	367.9	326.0	308.4	299.4	266.5	262.0
77.5°	5640.3	5192.1	1590.8	987.5	522.6	323.3	287.7	274.1	268.3	232.2	226.3
80°	4526.5	4107.7	995.1	676.3	382.8	271.0	241.2	234.0	227.7	192.1	187.6
82.5°	3139.6	2750.9	638.9	439.2	287.7	210.1	190.7	187.6	178.6	146.1	141.6
85°	1656.1	1493.8	404.9	299.4	208.3	144.3	132.6	132.6	128.1	96.9	93.8
87.5°	211.5	344.0	205.6	156.5	114.5	64.0	64.0	62.7	67.2	55.0	47.8
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: P299365

CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1
2.5°	7397.8	7469.5	7401.0	7405.5	7481.3	7707.6	7810.4	7895.2	7986.3	8045.8	8072.4
5°	5362.1	5528.9	5585.2	5704.3	5880.1	6169.2	6283.7	6367.1	6422.6	6455.0	6468.5
7.5°	3667.1	3768.1	3881.3	4073.4	4456.2	4626.2	4701.9	4682.6	4620.3	4597.8	4575.7
10°	2764.4	2724.3	2703.1	2809.1	3118.8	3290.2	3343.8	3291.5	3257.3	3264.9	3301.9
12.5°	2141.8	2071.9	1987.1	1974.9	2179.2	2332.5	2366.8	2369.5	2432.1	2487.1	2569.2
15°	1561.0	1553.3	1511.9	1486.6	1602.5	1727.8	1742.7	1769.3	1826.1	1866.3	1937.5
17.5°	1100.6	1140.8	1173.7	1189.9	1277.8	1367.1	1350.9	1337.4	1327.0	1327.0	1361.3
20°	887.8	914.4	956.3	1003.7	1093.4	1155.6	1115.5	1061.9	1023.1	1011.4	1015.9
22.5°	799.9	820.6	844.5	886.0	966.7	1010.0	966.7	927.9	889.2	875.6	871.1
25°	755.3	781.9	804.4	835.5	895.0	924.8	883.3	854.9	831.0	814.8	802.6
27.5°	730.0	753.4	759.8	774.6	825.1	851.7	831.0	819.3	804.4	789.5	774.6
30°	702.9	698.4	688.1	689.4	730.0	756.6	755.3	758.0	756.6	752.1	749.4
32.5°	642.1	633.1	624.0	633.1	670.0	693.9	695.7	701.6	701.6	700.2	712.0
35°	534.8	551.0	561.4	588.4	633.1	653.8	644.8	629.9	603.3	586.6	585.3
37.5°	494.6	497.3	515.4	552.3	601.9	620.9	607.8	573.5	555.5	552.3	556.9
40°	475.2	477.9	488.3	522.6	571.7	591.1	579.4	554.2	537.5	536.1	543.8
42.5°	461.7	464.9	470.7	494.6	534.8	558.7	560.0	542.0	522.6	524.4	531.6
45°	454.1	455.9	454.1	466.2	503.2	531.6	543.8	531.6	515.4	518.5	527.1
47.5°	452.7	448.2	442.3	445.5	484.3	512.2	527.1	522.6	515.4	518.5	525.7
50°	446.8	436.5	428.8	427.4	466.2	496.0	509.5	509.5	512.2	518.5	525.7
52.5°	428.8	417.1	417.1	412.6	454.1	482.5	491.5	492.8	497.3	507.7	518.5
55°	406.7	402.2	406.7	399.0	445.5	472.1	476.6	479.8	482.5	491.5	506.4
57.5°	387.3	381.5	391.8	388.7	437.8	461.7	461.7	467.6	467.6	479.8	491.5
60°	376.9	364.8	369.3	372.4	427.4	452.7	450.0	455.9	458.6	469.4	477.9
62.5°	363.4	353.1	353.1	360.3	415.7	439.2	437.8	442.3	454.1	457.2	466.2
65°	347.2	342.7	338.2	347.2	403.6	424.3	426.1	432.0	442.3	445.5	452.7
67.5°	330.5	332.3	323.3	332.3	393.2	409.4	409.4	421.6	426.1	432.0	439.2
70°	312.9	314.3	306.6	317.4	386.0	393.2	391.8	408.1	411.2	415.7	422.9
72.5°	290.4	290.4	287.7	302.6	373.8	376.9	373.8	387.3	388.7	393.2	396.3
75°	266.5	266.5	263.8	284.5	366.6	358.9	349.9	360.3	363.4	366.6	366.6
77.5°	235.4	238.5	238.5	263.8	340.9	351.7	321.5	327.8	332.3	333.7	329.2
80°	196.6	204.3	207.0	239.9	285.9	324.6	287.7	291.7	293.5	293.5	287.7
82.5°	150.6	163.7	171.3	207.0	219.1	272.3	250.2	254.8	250.2	241.2	238.5
85°	104.2	122.2	131.2	157.8	165.5	210.1	208.3	208.3	199.7	187.6	186.2
87.5°	56.8	67.2	73.0	93.8	113.2	141.6	153.3	148.8	141.6	133.9	135.7
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: P299365

CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1
2.5°	8212.6	8415.1	8738.4	8985.4	9234.3	9474.2	9733.5	9931.4	10099.6	10165.4	10364.7
5°	6604.3	6857.2	7162.5	7713.5	8103.9	8534.1	9031.9	9690.2	9943.1	10293.5	10866.6
7.5°	4669.5	4898.5	5390.0	5835.5	6388.3	6997.4	7668.8	8577.4	8909.7	9471.1	10404.9
10°	3486.8	3753.3	4147.8	4523.4	5010.4	5633.0	6404.5	7420.4	7823.9	8433.1	9508.5
12.5°	2809.1	3123.4	3541.8	3894.8	4271.8	4711.0	5460.3	6574.1	7115.1	7648.1	8735.2
15°	2158.0	2487.1	2876.3	3324.5	3739.7	4213.6	4998.6	6216.9	6839.2	7395.1	8322.6
17.5°	1493.8	1775.2	2265.3	2732.9	3264.9	3870.9	4870.6	6292.7	7035.8	7676.5	8394.3
20°	1059.2	1219.7	1621.9	2164.3	2827.1	3587.8	4846.7	6691.7	7658.5	8389.8	8852.9
22.5°	890.5	950.0	1184.1	1681.4	2447.0	3376.3	4930.1	7251.8	8498.5	9432.3	9584.2
25°	811.6	847.7	969.4	1319.8	2108.8	3223.0	5211.5	8085.9	9538.2	10475.2	10448.2
27.5°	768.3	805.8	886.0	1114.2	1854.5	3127.9	5492.8	9075.2	10726.8	11607.0	11273.3
30°	755.3	805.8	890.5	1050.1	1672.8	2977.3	5723.7	9943.1	11641.2	12371.2	11648.9
32.5°	744.9	752.1	790.9	905.4	1499.7	2801.4	5880.1	10722.3	12536.3	13098.1	12189.5
35°	601.9	638.9	701.6	811.6	1398.7	2695.9	5880.1	11394.1	13418.2	13832.1	12704.9
37.5°	579.4	612.3	667.3	761.1	1341.9	2643.6	5762.4	12042.1	14319.1	14664.9	13129.2
40°	567.7	594.3	646.6	722.3	1318.0	2584.1	5591.1	12613.8	15199.2	15498.6	13525.5
42.5°	558.7	582.6	631.7	698.4	1286.9	2518.7	5452.7	13072.4	15963.5	16210.6	13903.8
45°	554.2	579.4	633.1	710.6	1224.2	2432.1	5406.7	13568.4	16592.1	16804.9	14313.2
47.5°	554.2	583.9	640.3	735.9	1149.8	2342.9	5551.0	14222.6	17186.3	17290.5	14795.7
50°	549.6	582.6	661.5	710.6	1041.1	2229.7	5890.5	15045.9	17829.8	17841.5	15406.7
52.5°	540.6	579.4	712.0	695.7	915.8	2080.9	6349.5	16103.7	18781.6	18852.8	16362.6
55°	530.3	574.9	698.4	661.5	813.4	1903.7	6724.7	17388.8	20119.0	20316.9	17768.9
57.5°	516.7	569.0	676.3	613.7	746.2	1675.5	6860.4	18330.3	21052.8	21550.1	19353.3
60°	505.0	564.5	610.5	585.3	704.3	1483.4	6598.0	18144.0	20988.7	22061.0	20757.9
62.5°	492.8	569.0	556.9	567.7	684.9	1359.9	5913.0	16652.9	19926.9	21533.9	21799.0
65°	479.8	528.9	525.7	552.3	680.9	1310.8	4901.7	14417.4	17874.4	19867.4	22044.7
67.5°	461.7	488.3	503.2	533.4	695.7	1267.5	3955.7	11892.8	15022.0	17369.4	20763.7
70°	442.3	464.9	481.1	509.5	686.7	1248.1	3290.2	9378.6	11919.9	14235.7	18236.5
72.5°	417.1	436.5	451.3	477.9	677.7	1237.7	2779.3	7553.0	8899.3	10574.9	14827.3
75°	387.3	404.9	415.7	442.3	649.3	1133.6	2185.0	6391.0	6659.3	7356.4	11809.4
77.5°	353.1	366.6	375.1	404.9	574.9	942.8	1580.4	4930.1	5171.3	5340.9	9054.0
80°	312.9	326.0	330.5	358.9	476.6	737.2	1030.7	3641.4	3867.8	3906.6	5913.0
82.5°	266.5	280.0	280.0	306.6	390.0	530.3	676.3	2494.8	2539.4	2670.7	4179.4
85°	214.6	225.0	225.0	238.5	302.6	396.3	464.9	1252.6	1239.1	1414.9	3620.7
87.5°	153.3	161.0	168.2	171.3	216.0	262.0	280.0	381.5	251.6	289.0	2324.8
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: P299365

CATALOG NUMBER: GLNA-AF-06-LED-E1-SLR-7027

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1	9154.1
2.5°	10515.3	10600.1	10513.5	10451.3	10181.7	9959.8	9663.1	9511.2
5°	11303.1	11519.0	11446.0	11184.0	10620.8	9987.8	9268.6	8944.0
7.5°	11207.9	11709.8	11721.5	11231.8	10402.2	9469.7	8495.8	8034.1
10°	10466.2	11107.8	11291.3	10816.1	9935.9	8893.5	7776.1	7249.0
12.5°	9637.9	10266.4	10406.7	10242.5	9507.1	8459.7	7326.6	6809.4
15°	8960.2	9242.0	9408.4	9551.8	9139.2	8287.0	7300.9	6733.7
17.5°	8547.6	8516.5	8564.3	8812.8	8882.6	8485.0	7688.2	7062.8
20°	8398.8	7920.9	7908.7	8251.4	8762.3	8957.5	8444.8	7694.1
22.5°	8480.9	7706.3	7608.0	8014.7	8826.3	9637.9	9436.8	8580.5
25°	8763.6	7724.3	7644.9	8038.6	9058.5	10363.4	10507.7	9727.2
27.5°	9209.1	7837.5	7732.9	8136.9	9366.9	10972.5	11562.3	10838.6
30°	9632.0	8034.1	7904.2	8330.3	9648.3	11213.8	12208.9	11705.2
32.5°	10146.1	8402.0	8173.8	8686.1	9996.8	11597.9	12785.1	12423.1
35°	10649.3	8925.9	8643.2	9235.7	10385.5	12076.3	13443.5	13340.6
37.5°	11202.1	9611.3	9377.3	9946.3	10917.5	12527.2	14283.5	14416.0
40°	11791.8	10519.8	10242.5	10982.9	11742.7	13093.6	15160.9	15479.2
42.5°	12386.1	11528.0	11197.5	11947.8	12649.4	13651.8	15911.2	16383.7
45°	13066.5	12622.8	12466.4	13278.0	13521.0	14183.8	16465.4	17052.4
47.5°	13859.2	13865.0	14116.6	14441.3	14399.8	14785.3	17022.7	17649.4
50°	14784.0	15415.2	15971.2	16186.7	15305.2	15431.9	17795.5	18449.3
52.5°	15895.0	17269.8	17957.8	17816.2	16280.9	16221.0	19019.7	19551.3
55°	17284.6	19233.0	19916.5	19815.1	17402.3	17296.4	20545.1	20854.8
57.5°	18893.0	21134.8	21763.4	21307.5	18748.7	18476.3	21806.7	21872.0
60°	20306.5	22642.2	23193.2	22688.2	20107.2	19731.6	22594.4	22276.9
62.5°	21092.9	23153.0	23540.4	22996.6	21037.9	21069.0	22767.1	22058.3
65°	20741.6	21861.7	21986.6	21941.9	20798.0	21845.0	22146.2	21046.9
67.5°	18817.2	18596.7	18806.9	19097.2	18742.8	20823.3	20425.6	18843.8
70°	15427.4	14216.3	14635.2	14830.0	14990.9	17919.0	17728.3	15348.5
72.5°	11626.3	9959.8	10290.3	10250.2	10994.6	14372.7	13787.5	11285.5
75°	8237.9	6753.1	6794.5	6778.3	7672.0	11244.9	9983.7	7721.1
77.5°	5763.8	4892.7	4915.2	5007.2	5157.8	8480.9	7132.7	5640.3
80°	3963.4	3713.1	3836.7	3844.3	3574.7	5697.1	5269.6	4526.5
82.5°	2952.0	2580.9	2551.2	2594.5	2801.4	4615.8	4049.5	3139.6
85°	2417.3	1528.1	1228.7	1540.3	2482.6	4571.2	2690.0	1656.1
87.5°	1361.3	725.5	327.8	607.8	990.6	3026.4	777.3	211.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)