

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: P298874

Luminaire Tested: **GLNA-AF-04-LED-E1-SLL-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298874  
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-04-LED-E1-SLL-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Left OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20344 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4

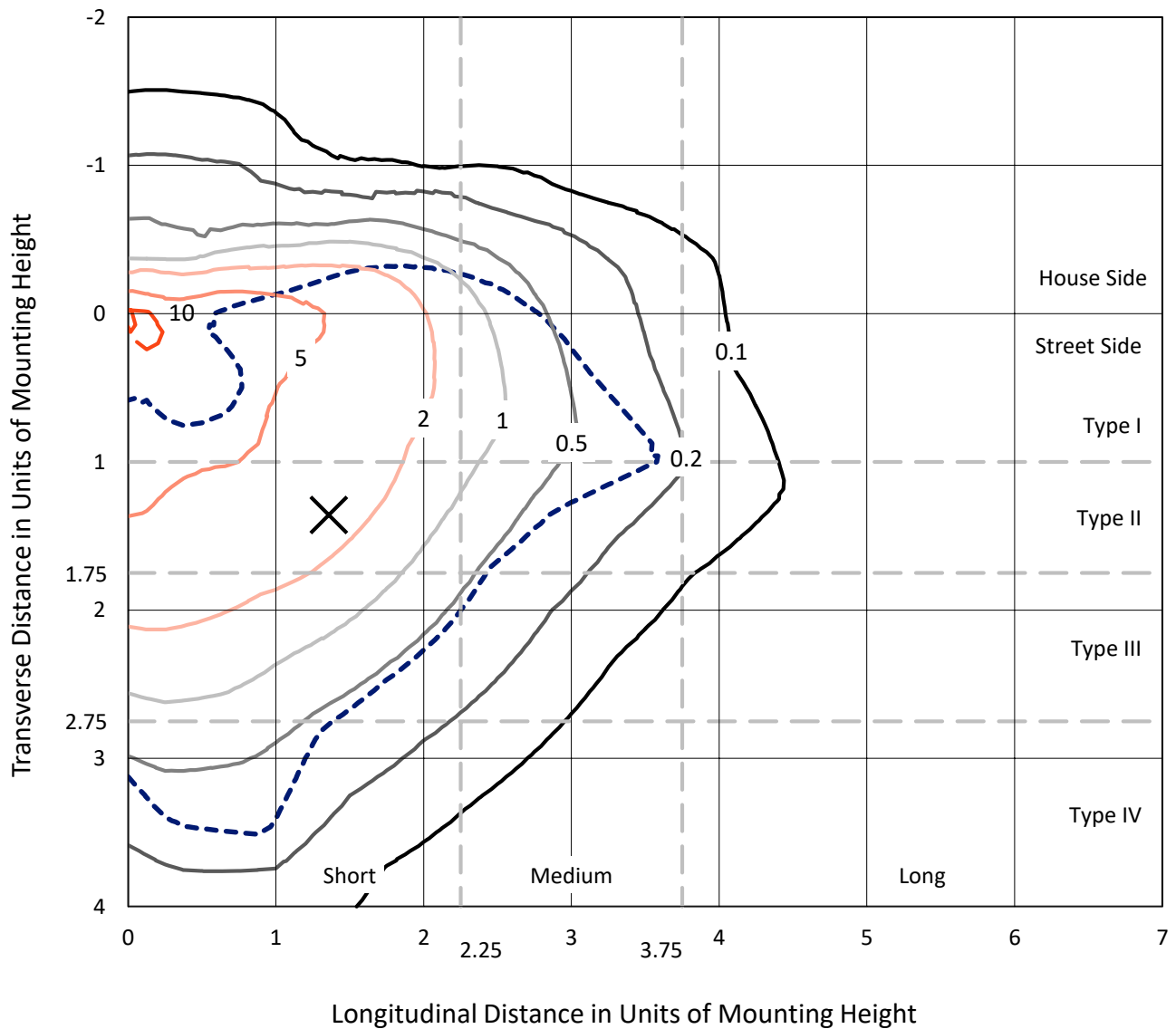
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P298874  
 CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

### Iso-Footcandle Lines of Horizontal Illumination

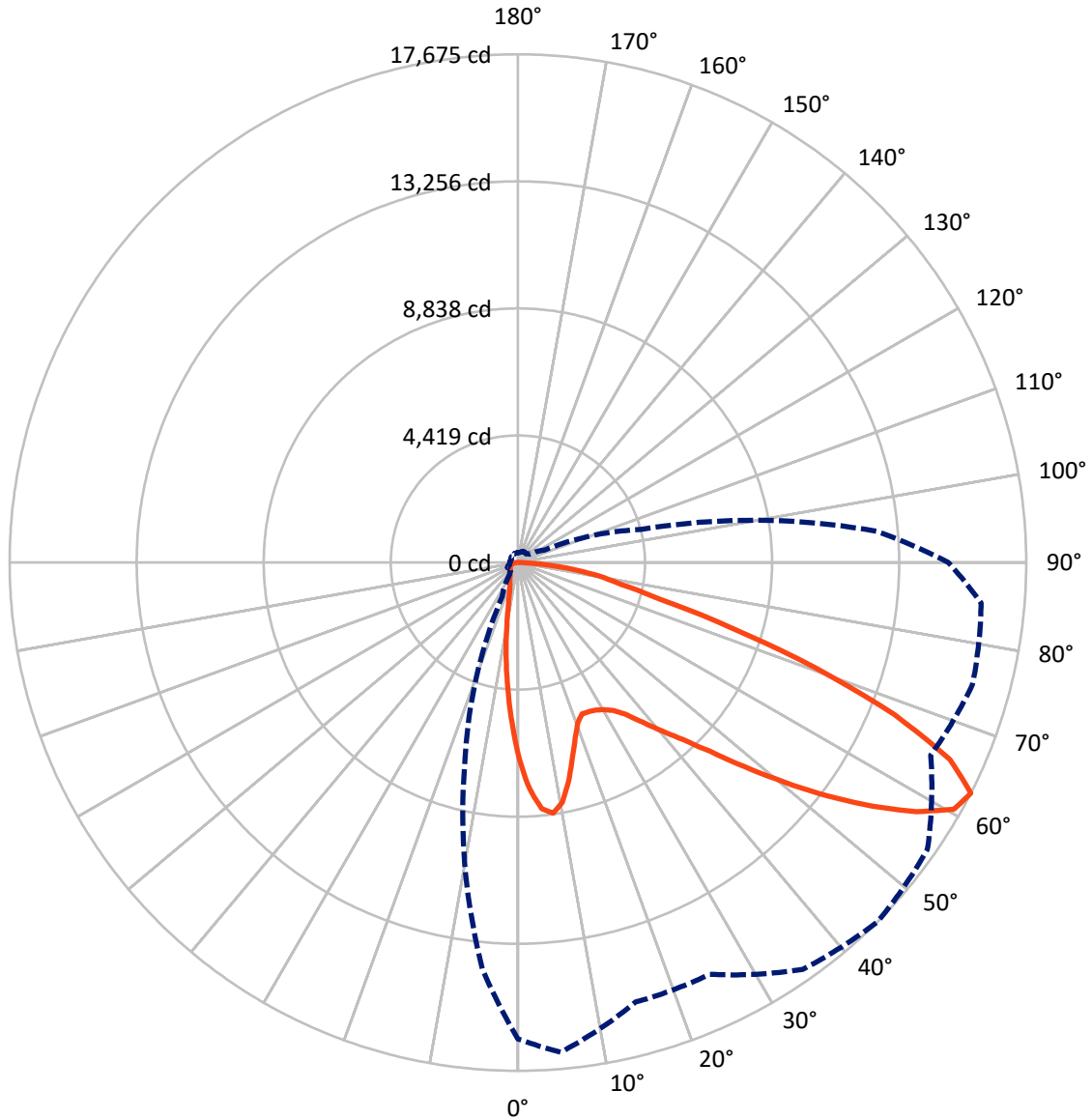
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P298874  
CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P298874

CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3366.6	0.0	3366.6
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	16977.3	0.0	16977.3
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	20344.0	0.0	20344.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	500.3	2.5
10°-20°	917.5	4.5
20°-30°	1337.7	6.6
30°-40°	2060.3	10.1
40°-50°	3032.2	14.9
50°-60°	4447.6	21.9
60°-70°	4971.7	24.4
70°-80°	2434.1	12.0
80°-90°	642.7	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°	20344.0	100.0
0°-180°	20344.0	100.0



REPORT NUMBER: P298874

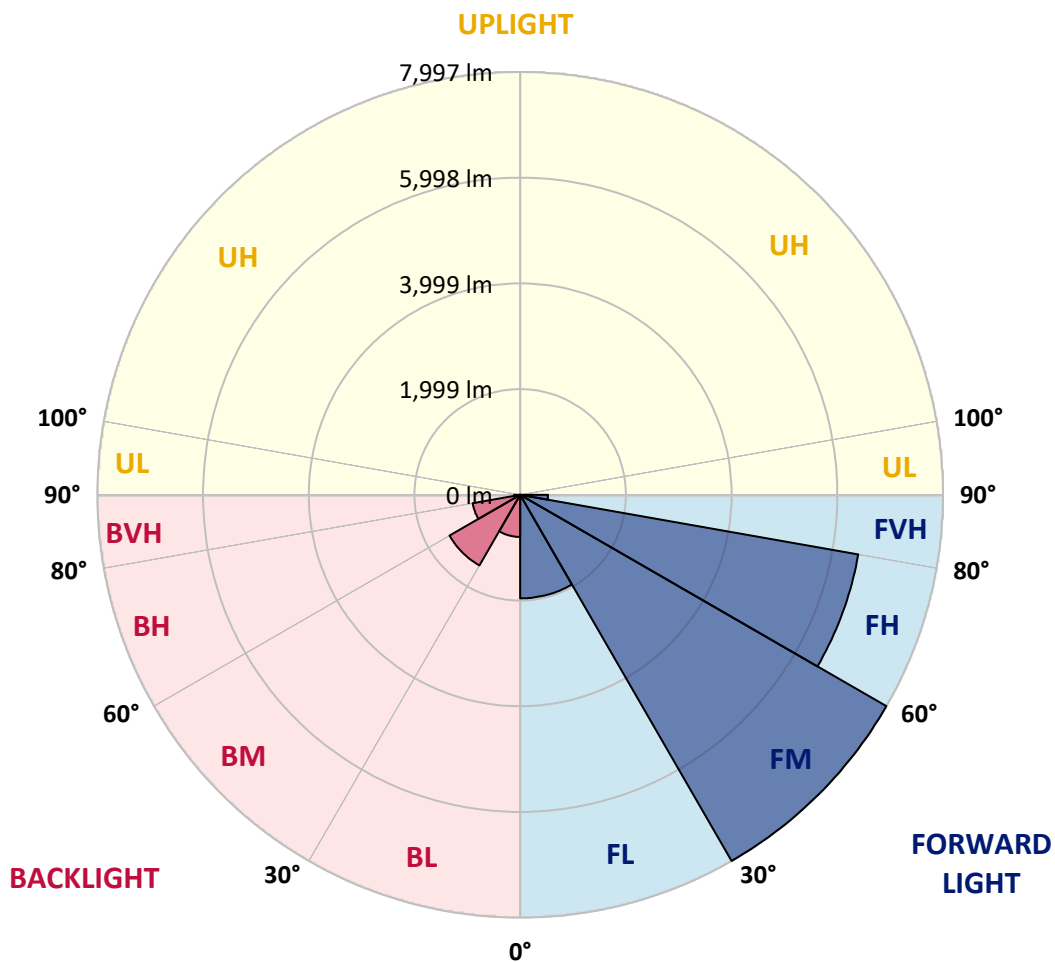
CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1959.1	9.6			
FM	(30°-60°)	7997.4	39.3			
FH	(60°-80°)	6493.1	31.9			G3/7500
FVH	(80°-90°)	527.8	2.6			G4/750
BL	(0°-30°)	796.5	3.9	B2/1000		
BM	(30°-60°)	1542.6	7.6	B2/2500		
BH	(60°-80°)	912.7	4.5	B2/1000		G2/1000
BVH	(80°-90°)	114.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short





REPORT NUMBER: P298874

CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5
2.5°	7141.4	7255.8	7478.4	7644.6	7847.6	7894.4	7959.4	7895.5	7782.6	7632.6	7583.6
5°	6715.6	6959.6	7499.4	7975.0	8397.6	8594.3	8649.5	8486.9	8159.4	7728.9	7466.0
7.5°	6032.3	6379.1	7110.2	7810.5	8433.2	8801.3	8792.2	8415.4	7812.7	7111.3	6689.8
10°	5442.8	5838.8	6677.8	7460.6	8121.3	8478.2	8340.2	7858.8	7139.3	6331.9	5874.8
12.5°	5113.1	5501.2	6352.2	7138.2	7690.7	7813.8	7708.5	7236.6	6558.8	5742.6	5342.2
15°	5055.8	5482.3	6222.6	6862.3	7171.9	7064.8	6939.2	6727.9	6249.1	5552.4	5135.3
17.5°	5303.4	5772.8	6371.4	6669.9	6617.2	6430.2	6394.7	6418.3	6303.2	5763.7	5283.0
20°	5777.5	6340.9	6725.8	6579.5	6195.7	5938.3	5947.4	6306.4	6647.3	6299.5	5750.3
22.5°	6442.6	7085.9	7236.6	6627.4	6017.8	5712.5	5786.6	6368.2	7196.6	7082.6	6381.2
25°	7303.7	7890.0	7781.5	6801.6	6035.6	5740.5	5799.6	6580.5	7845.0	7865.4	7162.1
27.5°	8138.0	8681.8	8238.6	7033.3	6109.7	5806.5	5884.9	6914.5	8464.7	8715.2	8054.5
30°	8788.9	9167.2	8419.7	7244.6	6254.9	5935.0	6032.3	7232.2	8746.8	9288.9	8741.0
32.5°	9328.1	9599.6	8708.3	7506.3	6522.1	6137.3	6308.6	7618.1	9152.7	9834.9	9413.0
35°	10016.8	10094.1	9067.4	7798.2	6934.9	6489.8	6702.2	7996.1	9539.7	10386.0	10075.2
37.5°	10824.5	10725.1	9406.1	8197.5	7468.5	7040.9	7216.6	8411.0	9858.1	11011.1	10751.6
40°	11622.9	11383.3	9831.6	8816.9	8246.9	7690.7	7898.8	8853.9	10155.8	11637.4	11412.7
42.5°	12301.8	11947.1	10250.6	9498.0	8971.2	8407.7	8656.1	9300.1	10439.7	12171.8	11986.3
45°	12803.8	12363.1	10649.9	10152.2	9969.9	9360.4	9478.0	9810.9	10747.2	12618.3	12458.2
47.5°	13252.2	12781.3	11101.5	10812.2	10843.4	10599.4	10410.3	10405.9	11109.9	12982.8	12904.4
50°	13852.7	13361.8	11586.9	11491.8	12154.0	11991.7	11574.6	11100.4	11568.0	13396.7	13387.6
52.5°	14680.4	14281.4	12179.8	12224.4	13377.8	13483.8	12966.9	11935.1	12285.8	14155.8	14102.5
55°	15659.2	15426.1	12987.6	13066.7	14878.3	14954.5	14440.8	12978.1	13341.9	15255.5	15106.6
57.5°	16422.7	16373.7	13873.0	14077.8	15999.0	16341.4	15869.4	14186.3	14531.6	16181.3	15807.7
60°	16726.9	16965.1	14815.8	15097.6	17035.9	17414.5	17001.0	15247.1	15586.2	16565.0	15759.8
62.5°	16562.8	17094.7	15820.0	15796.4	17267.1	17675.2	17384.4	15837.8	16368.2	16168.9	14962.5
65°	15803.3	16628.5	16402.7	15616.4	16475.3	16508.7	16414.7	15573.9	16552.6	14917.5	13421.0
67.5°	14148.9	15336.8	15635.2	14073.4	14339.2	14121.3	13963.4	14129.0	15590.6	13042.0	11279.4
70°	11524.5	13311.7	13454.4	11256.2	11135.3	10988.6	10674.6	11583.7	13692.9	10689.1	8950.1
72.5°	8473.8	10352.6	10791.9	8255.6	7696.5	7726.3	7478.4	8729.4	11133.1	7940.1	6682.2
75°	5797.5	7496.1	8443.7	5760.4	5089.9	5101.9	5070.3	6185.6	8867.4	5523.4	5000.2
77.5°	4235.3	5355.6	6368.2	3872.6	3759.7	3690.3	3673.6	4327.9	6798.4	4010.6	3882.8
80°	3398.5	3956.8	4277.4	2684.0	2886.2	2880.8	2787.8	2975.9	4439.7	2933.4	2904.0
82.5°	2357.6	3040.9	3465.6	2103.5	1948.1	1915.4	1938.3	2216.4	3138.2	2005.1	1906.7
85°	1243.8	2019.6	3432.2	1864.2	1156.3	922.5	1147.6	1814.9	2718.8	1062.6	930.1
87.5°	159.0	583.8	2272.3	743.9	456.3	245.8	544.9	1022.0	1745.9	216.7	189.1
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: P298874

CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5
2.5°	7457.3	7308.4	7113.9	6933.4	6746.8	6560.9	6318.4	6166.3	6061.4	6041.1	5996.8
5°	7276.1	6781.7	6408.1	6085.0	5792.0	5377.8	5148.7	4958.5	4856.8	4847.0	4822.3
7.5°	6440.4	5758.2	5254.0	4796.5	4381.6	4047.2	3678.0	3506.3	3435.5	3452.2	3468.9
10°	5571.3	4808.9	4229.5	3761.9	3396.3	3114.6	2818.3	2618.3	2479.2	2451.3	2445.8
12.5°	4936.3	4099.9	3537.5	3207.1	2924.7	2659.3	2345.3	2108.9	1929.2	1867.5	1826.5
15°	4667.7	3753.2	3163.9	2808.1	2495.9	2159.4	1867.5	1620.3	1455.1	1401.4	1371.2
17.5°	4725.0	3656.9	2906.5	2451.3	2052.3	1700.9	1333.1	1121.4	1022.0	996.6	996.6
20°	5024.9	3639.2	2693.8	2122.7	1624.6	1217.7	916.0	795.1	762.8	759.5	768.2
22.5°	5445.3	3702.0	2535.5	1837.7	1262.7	889.1	713.4	668.7	654.2	657.8	667.6
25°	6071.6	3913.3	2420.4	1583.6	990.7	727.9	636.1	609.6	602.7	611.7	624.1
27.5°	6814.0	4124.5	2348.5	1392.3	836.5	665.5	604.8	577.2	581.6	592.9	603.7
30°	7466.0	4298.1	2235.6	1256.1	788.5	668.7	604.8	567.1	562.7	564.9	568.2
32.5°	8051.2	4415.3	2103.5	1126.2	680.0	593.9	564.9	559.5	534.4	525.3	526.8
35°	8555.5	4415.3	2024.3	1050.3	609.6	526.8	479.9	452.0	439.3	440.4	453.1
37.5°	9042.0	4326.8	1985.1	1007.4	571.4	501.0	459.6	434.9	418.2	415.0	417.1
40°	9471.1	4198.2	1940.5	989.7	542.4	485.4	446.5	425.9	408.1	402.6	403.7
42.5°	9815.6	4094.1	1891.1	966.4	524.2	474.1	437.1	419.3	399.3	393.5	392.5
45°	10188.1	4059.6	1826.5	919.2	533.3	475.2	434.9	416.0	395.7	389.2	387.0
47.5°	10679.0	4168.1	1759.3	863.3	552.6	481.0	438.2	416.0	394.6	389.2	387.0
50°	11297.2	4423.0	1674.0	781.6	533.3	496.6	437.1	412.4	394.6	389.2	384.8
52.5°	12091.6	4767.5	1562.5	688.0	522.1	534.4	434.9	405.9	389.2	381.6	373.6
55°	13056.5	5049.2	1428.9	610.6	496.6	524.2	431.7	398.3	380.5	369.2	362.3
57.5°	13763.4	5150.9	1258.3	560.5	460.7	507.5	426.9	388.1	369.2	360.1	351.4
60°	13623.6	4954.1	1113.8	529.0	439.3	458.5	423.7	379.0	359.1	352.5	344.2
62.5°	12504.3	4439.7	1020.9	514.4	425.9	418.2	426.9	370.3	350.3	343.1	340.9
65°	10825.6	3680.2	984.2	511.2	415.0	394.6	397.2	360.1	339.8	334.4	332.2
67.5°	8929.8	2970.4	951.9	522.1	400.4	377.9	367.0	346.7	329.6	324.2	319.8
70°	7042.0	2470.5	937.0	515.5	382.6	361.2	349.2	332.2	317.7	311.9	308.6
72.5°	5670.8	2086.8	929.0	508.6	359.1	338.7	327.5	312.9	297.3	295.2	291.9
75°	4799.1	1640.6	851.3	487.6	332.2	311.9	304.2	290.8	275.2	275.2	273.0
77.5°	3702.0	1186.4	707.9	431.7	304.2	281.7	275.2	265.0	247.2	250.5	249.4
80°	2734.5	774.0	553.6	358.0	269.7	248.3	244.7	234.9	215.6	220.4	220.4
82.5°	1873.3	507.5	398.3	293.0	230.2	210.2	210.2	200.0	179.0	181.2	188.1
85°	940.6	349.2	297.3	226.9	179.0	168.8	168.8	161.2	139.8	140.9	149.9
87.5°	286.4	210.2	196.8	162.3	128.5	126.3	120.5	115.1	101.7	100.6	106.4
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: P298874

CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5
2.5°	5928.2	5864.3	5787.7	5617.4	5560.4	5556.8	5608.7	5554.6	5657.7	5614.1	5662.0
5°	4780.6	4718.5	4632.1	4415.3	4283.2	4193.5	4151.4	4026.2	4116.6	4050.5	4105.7
7.5°	3516.1	3530.6	3473.6	3346.2	3058.6	2914.5	2829.6	2753.3	2819.4	2812.5	2917.8
10°	2471.6	2510.5	2470.5	2342.0	2108.9	2029.8	2045.4	2075.5	2161.9	2206.2	2368.5
12.5°	1779.3	1777.1	1751.3	1636.2	1483.0	1491.7	1555.6	1607.9	1687.4	1734.6	1899.8
15°	1328.4	1308.4	1297.2	1203.1	1116.0	1135.2	1166.5	1171.9	1222.4	1250.3	1384.7
17.5°	1004.2	1014.3	1026.3	959.5	893.5	881.1	856.8	826.3	841.2	846.6	913.4
20°	797.2	837.5	868.0	820.8	754.0	717.7	686.5	666.5	666.5	665.5	684.3
22.5°	696.7	725.7	758.4	725.7	665.5	633.9	616.1	600.5	598.3	598.3	616.1
25°	642.2	663.3	694.5	672.4	627.3	603.7	587.0	567.1	559.5	556.9	569.3
27.5°	615.0	624.1	639.7	619.4	581.6	570.3	566.0	548.2	537.7	532.2	544.9
30°	569.3	567.1	568.2	548.2	517.7	516.6	524.2	527.9	524.2	523.1	542.4
32.5°	526.8	522.1	521.0	503.2	475.2	468.7	475.2	482.1	489.7	501.0	523.1
35°	473.0	484.3	490.8	475.2	441.5	421.5	413.9	401.5	394.6	394.6	420.4
37.5°	430.6	456.3	466.5	452.0	415.0	387.0	373.6	371.4	372.5	376.8	401.5
40°	416.0	434.9	443.6	429.5	392.5	367.0	359.1	356.9	359.1	365.9	390.3
42.5°	407.0	420.4	419.3	401.5	371.4	353.6	349.2	346.7	349.2	355.8	382.6
45°	399.3	408.1	399.3	377.9	350.3	340.9	342.0	340.9	343.1	350.3	375.8
47.5°	392.5	395.7	384.8	363.4	334.4	332.2	336.5	339.8	342.0	348.2	374.7
50°	382.6	382.6	372.5	350.3	320.9	322.0	327.5	335.5	336.5	343.1	364.9
52.5°	370.3	369.2	362.3	340.9	309.7	312.9	312.9	322.0	324.2	332.2	354.7
55°	360.1	358.0	354.7	334.4	299.9	305.3	302.1	305.3	310.8	318.8	343.1
57.5°	351.4	346.7	346.7	328.6	291.9	294.1	286.4	290.8	297.3	304.2	329.6
60°	342.0	337.6	339.8	320.9	279.5	277.4	274.1	282.8	285.4	293.0	318.8
62.5°	332.2	328.6	329.6	311.9	270.8	265.0	265.0	273.0	274.1	285.4	309.7
65°	324.2	319.8	318.8	303.1	260.7	254.1	257.4	260.7	262.8	274.1	297.3
67.5°	316.6	307.5	307.5	295.2	249.4	242.5	249.4	248.3	252.0	261.8	280.6
70°	306.4	294.1	295.2	289.7	238.2	230.2	236.0	234.9	237.1	243.6	262.8
72.5°	290.8	280.6	282.8	280.6	226.9	215.6	217.8	217.8	217.8	223.6	243.6
75°	270.8	262.8	269.7	275.2	213.5	197.9	200.0	200.0	196.8	200.0	224.7
77.5°	245.8	241.4	263.9	256.3	197.9	179.0	179.0	176.8	170.3	174.6	201.1
80°	219.3	215.6	243.6	214.6	180.1	155.7	153.2	147.4	140.9	144.1	171.4
82.5°	191.3	188.1	204.8	164.5	155.7	128.5	123.1	112.9	106.4	109.6	134.0
85°	156.8	156.8	157.9	124.2	118.4	98.4	91.9	78.4	70.4	72.6	96.2
87.5°	111.8	115.1	106.4	85.0	70.4	54.8	50.5	42.5	35.6	41.4	50.5
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: P298874

CATALOG NUMBER: GLNA-AF-04-LED-E1-SLL-7030

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5	6873.5
2.5°	5908.2	6031.3	6171.0	6349.6	6503.2	6754.4	6996.2	7141.4
5°	4417.5	4622.3	4876.8	5205.0	5510.3	5968.4	6423.7	6715.6
7.5°	3161.4	3380.7	3655.9	4065.0	4497.0	5081.5	5683.5	6032.3
10°	2616.1	2840.8	3072.1	3348.4	3702.0	4338.0	5049.2	5442.8
12.5°	2164.1	2404.4	2653.9	2944.7	3272.1	3840.3	4660.0	5113.1
15°	1656.2	1924.5	2218.6	2586.7	2996.9	3653.7	4563.8	5055.8
17.5°	1135.2	1435.1	1796.0	2250.1	2752.2	3593.1	4736.3	5303.4
20°	781.6	999.8	1385.7	1918.0	2522.1	3585.4	5067.0	5777.5
22.5°	654.2	751.5	1033.2	1612.6	2348.5	3681.6	5580.7	6442.6
25°	604.8	663.3	825.2	1347.6	2222.2	3903.1	6287.6	7303.7
27.5°	576.2	628.4	749.3	1174.4	2122.7	4160.1	6975.2	8138.0
30°	587.0	640.8	727.9	1085.9	1987.3	4374.7	7585.8	8788.9
32.5°	529.0	552.6	624.1	1007.4	1890.0	4554.8	8120.2	9328.1
35°	450.9	491.9	556.9	970.8	1892.2	4675.6	8702.9	10016.8
37.5°	429.5	470.9	517.7	957.3	1918.0	4804.5	9371.6	10824.5
40°	416.0	454.2	494.5	949.7	1942.7	4921.8	10027.3	11622.9
42.5°	407.0	441.5	491.9	922.5	1955.0	5027.1	10566.0	12301.8
45°	405.9	441.5	501.0	895.6	1973.9	5140.0	11018.0	12803.8
47.5°	407.0	456.3	484.3	863.3	1973.9	5328.8	11548.1	13252.2
50°	402.6	481.0	466.5	817.6	1928.1	5686.7	12274.9	13852.7
52.5°	400.4	477.8	431.7	747.1	1848.6	6254.9	13206.5	14680.4
55°	394.6	460.7	407.0	642.2	1756.0	6874.6	14204.1	15659.2
57.5°	389.2	408.1	393.5	550.4	1612.6	7310.6	14890.6	16422.7
60°	436.0	356.9	382.6	505.4	1421.3	7430.1	14864.1	16726.9
62.5°	403.7	334.4	368.1	495.6	1287.4	7094.6	14177.2	16562.8
65°	316.6	319.8	353.6	524.2	1251.4	6205.9	12960.3	15803.3
67.5°	289.7	305.3	338.7	561.6	1255.0	4968.6	11142.2	14148.9
70°	273.0	289.7	322.0	580.5	1263.8	3704.1	8808.9	11524.5
72.5°	254.1	268.7	303.1	583.8	1205.3	2690.5	6789.7	8473.8
75°	231.3	244.7	276.3	508.6	998.7	1866.4	5193.7	5797.5
77.5°	205.8	215.6	242.5	392.5	741.7	1194.4	3898.4	4235.3
80°	175.7	181.2	203.7	287.5	507.5	747.1	3084.4	3398.5
82.5°	140.9	143.0	157.9	215.6	329.6	479.9	2065.7	2357.6
85°	99.5	99.5	108.6	156.8	224.7	304.2	1121.4	1243.8
87.5°	46.8	47.9	47.9	86.0	117.3	154.7	258.5	159.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)