

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: P299360

Luminaire Tested: **GLNA-AF-05-LED-E1-SLR-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299360
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-05-LED-E1-SLR-7030
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K 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: 25206.6 lumens
Efficiency: N/A
Efficacy: 90.3 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

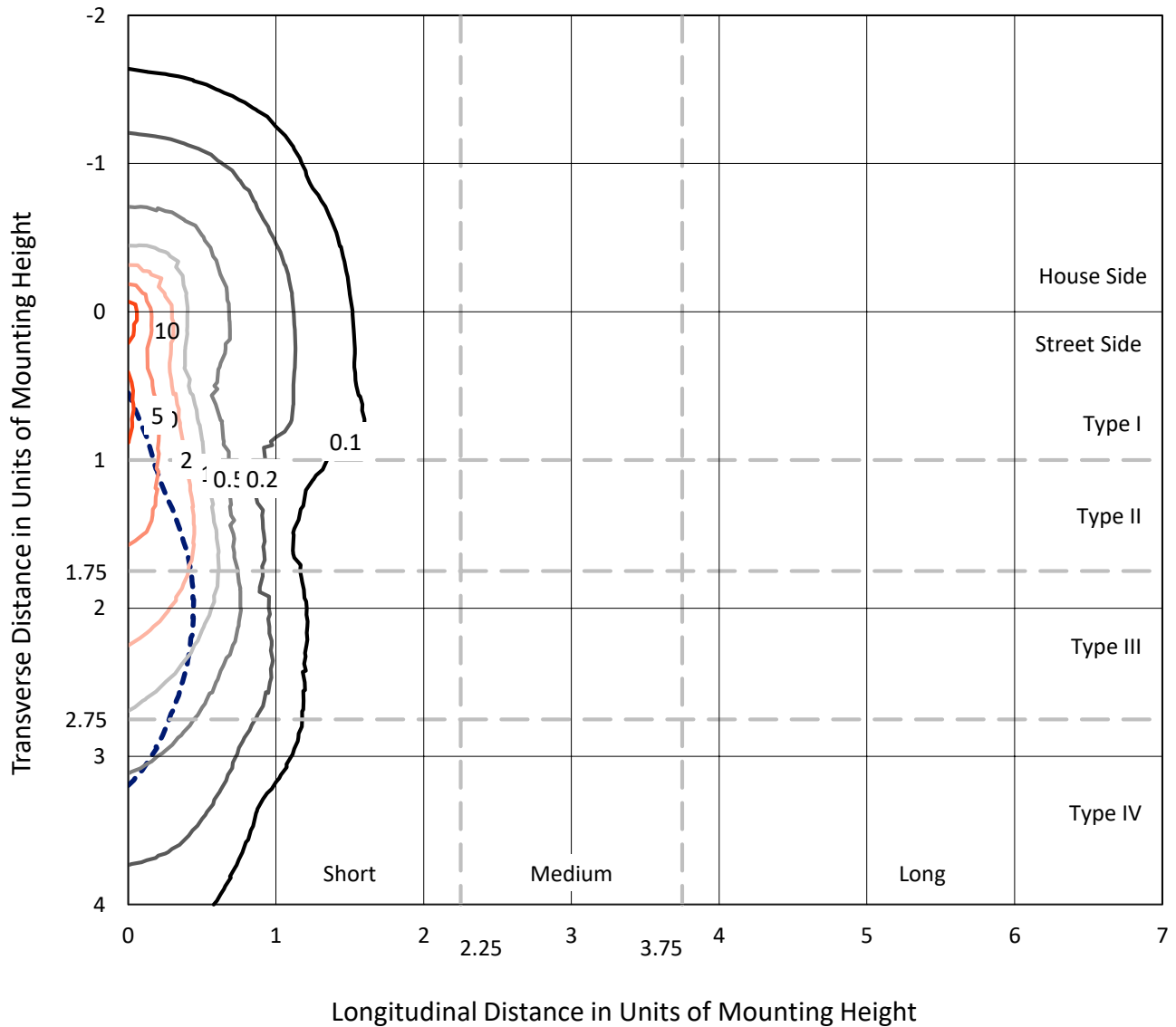
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299360
 CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

Iso-Footcandle Lines of Horizontal Illumination

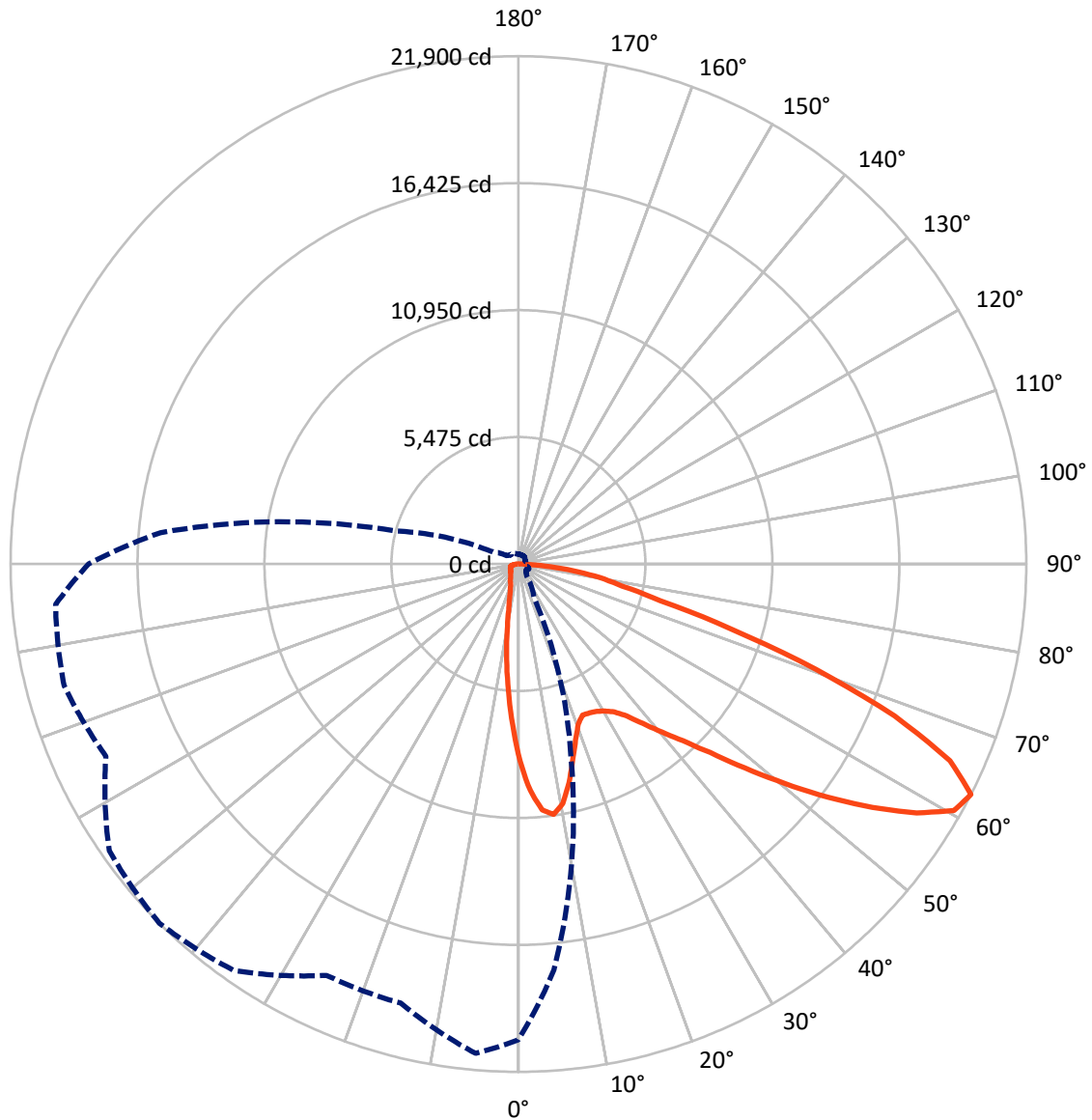
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P299360
CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299360

CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4171.4	0.0	4171.4
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	21035.2	0.0	21035.2
	% Fixture	83.5	0.0	83.5
Total	Lumens	25206.6	0.0	25206.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	619.9	2.5
10°-20°	1136.8	4.5
20°-30°	1657.4	6.6
30°-40°	2552.7	10.1
40°-50°	3756.9	14.9
50°-60°	5510.6	21.9
60°-70°	6160.0	24.4
70°-80°	3015.9	12.0
80°-90°	796.3	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°	25206.6	100.0
0°-180°	25206.6	100.0



REPORT NUMBER: P299360

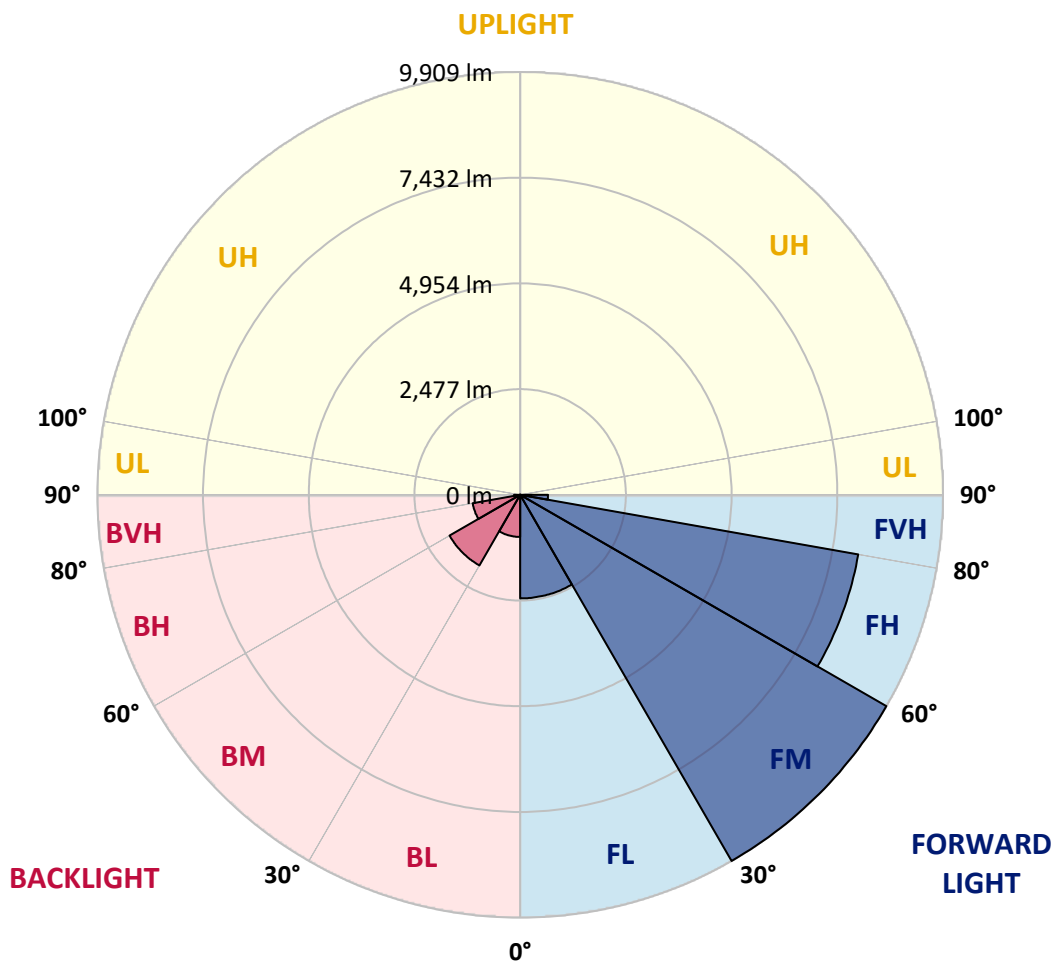
CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2427.3	9.6			
FM	(30°-60°)	9908.9	39.3			
FH	(60°-80°)	8045.1	31.9			G4/12000
FVH	(80°-90°)	653.9	2.6			G4/750
BL	(0°-30°)	986.9	3.9	B2/1000		
BM	(30°-60°)	1911.3	7.6	B2/2500		
BH	(60°-80°)	1130.9	4.5	B3/2500		G3/2500
BVH	(80°-90°)	142.3	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: P299360

CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3
2.5°	8848.5	8668.6	8369.1	8057.4	7867.8	7645.9	7472.6	7320.4	7015.4	6955.8	7009.9
5°	8320.8	7959.2	7395.0	6827.0	6448.7	6042.6	5726.7	5473.4	5086.6	5018.7	5100.5
7.5°	7474.3	7041.8	6296.4	5571.5	5036.7	4529.5	4188.9	3917.1	3615.1	3485.0	3493.0
10°	6744.0	6256.1	5374.8	4586.6	4148.7	3806.4	3519.4	3240.9	2934.7	2733.8	2678.4
12.5°	6335.0	5774.1	4758.2	4054.3	3648.2	3288.3	2979.1	2681.3	2354.1	2149.0	2091.1
15°	6264.5	5654.6	4527.0	3713.7	3204.8	2749.3	2384.7	2052.1	1715.3	1549.1	1514.3
17.5°	6570.7	5868.1	4451.9	3410.0	2787.9	2225.3	1777.8	1406.5	1132.2	1049.1	1042.0
20°	7158.0	6278.4	4442.3	3124.7	2376.4	1716.9	1238.7	968.6	848.2	824.3	826.0
22.5°	7982.7	6914.3	4561.4	2909.9	1998.0	1280.3	931.2	810.4	763.5	741.2	741.2
25°	9049.4	7790.2	4835.8	2753.5	1669.5	1022.7	821.8	749.6	705.1	690.0	693.0
27.5°	10083.5	8642.1	5154.6	2630.1	1454.8	928.3	778.6	713.5	674.9	659.4	666.6
30°	10889.7	9398.9	5420.5	2462.3	1345.3	901.9	794.1	727.4	672.0	648.5	649.8
32.5°	11557.5	10061.2	5643.7	2341.5	1248.4	773.1	684.6	655.2	648.5	620.8	607.0
35°	12411.2	10783.2	5793.4	2344.5	1202.7	690.0	609.5	558.3	521.0	489.1	489.1
37.5°	13411.6	11611.6	5952.8	2376.4	1186.3	641.4	583.5	531.9	497.5	466.9	461.4
40°	14400.8	12423.7	6098.4	2407.0	1176.2	612.4	562.5	515.5	483.7	453.0	444.6
42.5°	15242.2	13091.6	6228.4	2422.1	1143.1	609.5	547.4	504.2	474.0	440.5	432.5
45°	15864.3	13651.1	6368.6	2445.6	1109.9	620.8	547.4	503.0	465.6	433.7	425.4
47.5°	16419.7	14308.1	6602.6	2445.6	1069.7	599.9	565.5	504.2	464.4	430.8	424.1
50°	17163.9	15208.7	7046.0	2388.9	1013.0	577.6	595.7	498.8	451.8	425.4	417.0
52.5°	18189.1	16363.1	7749.9	2290.4	925.8	534.8	591.5	496.2	439.2	411.5	401.9
55°	19401.8	17598.9	8517.5	2175.4	795.3	504.2	570.9	489.1	425.4	394.7	385.1
57.5°	20348.2	18449.6	9057.8	1998.0	681.7	487.9	505.9	482.4	408.6	376.7	368.7
60°	20724.8	18416.4	9206.3	1761.0	626.3	474.0	442.1	540.3	394.7	362.9	353.2
62.5°	20521.4	17565.7	8790.6	1594.9	613.7	456.0	414.4	500.0	383.8	353.2	339.4
65°	19580.5	16058.1	7689.1	1550.4	649.8	437.9	396.4	392.2	368.7	339.4	325.5
67.5°	17530.9	13805.1	6156.3	1554.6	695.5	419.9	378.4	359.1	347.7	324.3	311.7
70°	14279.1	10914.9	4589.1	1565.9	719.0	398.9	359.1	338.1	325.5	302.0	293.6
72.5°	10499.2	8412.3	3334.0	1493.8	723.2	375.4	332.6	314.6	302.0	277.3	270.1
75°	7183.2	6434.8	2312.6	1237.5	630.5	342.3	303.3	286.9	278.5	247.9	243.7
77.5°	5247.3	4830.3	1479.9	918.7	486.2	300.8	267.6	255.0	249.6	216.0	210.6
80°	4211.2	3821.5	925.8	629.2	356.1	252.1	224.4	217.7	211.8	178.7	174.5
82.5°	2920.8	2559.2	594.4	408.6	267.6	195.5	177.4	174.5	166.1	135.9	131.7
85°	1540.8	1389.7	376.7	278.5	193.8	134.2	123.3	123.3	119.1	90.2	87.3
87.5°	196.7	320.1	191.3	145.6	106.5	59.6	59.6	58.3	62.5	51.2	44.5
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: P299360

CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3
2.5°	6882.4	6949.1	6885.3	6889.5	6960.0	7170.6	7266.2	7345.1	7429.8	7485.2	7510.0
5°	4988.5	5143.7	5196.1	5306.8	5470.4	5739.3	5845.9	5923.5	5975.1	6005.3	6017.9
7.5°	3411.6	3505.6	3610.9	3789.6	4145.7	4303.9	4374.3	4356.3	4298.4	4277.4	4256.9
10°	2571.8	2534.5	2514.8	2613.4	2901.5	3060.9	3110.9	3062.2	3030.3	3037.5	3071.9
12.5°	1992.5	1927.5	1848.6	1837.3	2027.3	2170.0	2201.9	2204.4	2262.7	2313.9	2390.2
15°	1452.2	1445.1	1406.5	1383.0	1490.8	1607.4	1621.3	1646.0	1698.9	1736.2	1802.5
17.5°	1024.0	1061.3	1091.9	1107.0	1188.8	1271.9	1256.8	1244.2	1234.5	1234.5	1266.4
20°	826.0	850.7	889.7	933.8	1017.2	1075.1	1037.8	987.9	951.8	940.9	945.1
22.5°	744.2	763.5	785.7	824.3	899.4	939.6	899.4	863.3	827.2	814.6	810.4
25°	702.6	727.4	748.4	777.3	832.7	860.4	821.8	795.3	773.1	758.0	746.7
27.5°	679.1	701.0	706.8	720.7	767.6	792.4	773.1	762.2	748.4	734.5	720.7
30°	654.0	649.8	640.1	641.4	679.1	703.9	702.6	705.1	703.9	699.7	697.2
32.5°	597.3	589.0	580.6	589.0	623.3	645.6	647.3	652.7	652.7	651.5	662.4
35°	497.5	512.6	522.3	547.4	589.0	608.2	599.9	586.0	561.3	545.7	544.5
37.5°	460.2	462.7	479.5	513.9	560.0	577.6	565.5	533.6	516.8	513.9	518.1
40°	442.1	444.6	454.3	486.2	531.9	549.9	539.0	515.5	500.0	498.8	505.9
42.5°	429.5	432.5	437.9	460.2	497.5	519.7	521.0	504.2	486.2	487.9	494.6
45°	422.4	424.1	422.4	433.7	468.1	494.6	505.9	494.6	479.5	482.4	490.4
47.5°	421.2	417.0	411.5	414.4	450.5	476.5	490.4	486.2	479.5	482.4	489.1
50°	415.7	406.1	398.9	397.7	433.7	461.4	474.0	474.0	476.5	482.4	489.1
52.5°	398.9	388.0	388.0	383.8	422.4	448.8	457.2	458.5	462.7	472.3	482.4
55°	378.4	374.2	378.4	371.2	414.4	439.2	443.4	446.3	448.8	457.2	471.1
57.5°	360.3	354.9	364.5	361.6	407.3	429.5	429.5	435.0	435.0	446.3	457.2
60°	350.7	339.4	343.6	346.5	397.7	421.2	418.6	424.1	426.6	436.7	444.6
62.5°	338.1	328.5	328.5	335.2	386.8	408.6	407.3	411.5	422.4	425.4	433.7
65°	323.0	318.8	314.6	323.0	375.4	394.7	396.4	401.9	411.5	414.4	421.2
67.5°	307.5	309.2	300.8	309.2	365.8	380.9	380.9	392.2	396.4	401.9	408.6
70°	291.1	292.4	285.2	295.3	359.1	365.8	364.5	379.6	382.6	386.8	393.5
72.5°	270.1	270.1	267.6	281.5	347.7	350.7	347.7	360.3	361.6	365.8	368.7
75°	247.9	247.9	245.4	264.7	341.0	333.9	325.5	335.2	338.1	341.0	341.0
77.5°	219.0	221.9	221.9	245.4	317.1	327.2	299.1	305.0	309.2	310.4	306.2
80°	182.9	190.0	192.5	223.2	266.0	302.0	267.6	271.4	273.1	273.1	267.6
82.5°	140.1	152.3	159.4	192.5	203.9	253.4	232.8	237.0	232.8	224.4	221.9
85°	96.9	113.7	122.1	146.8	153.9	195.5	193.8	193.8	185.8	174.5	173.2
87.5°	52.9	62.5	68.0	87.3	105.3	131.7	142.6	138.4	131.7	124.6	126.3
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: P299360

CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3
2.5°	7640.4	7828.8	8129.5	8359.4	8591.0	8814.1	9055.3	9239.5	9395.9	9457.2	9642.6
5°	6144.1	6379.5	6663.4	7176.0	7539.3	7939.5	8402.6	9015.1	9250.4	9576.3	10109.5
7.5°	4344.1	4557.2	5014.5	5428.9	5943.2	6509.9	7134.5	7979.8	8288.9	8811.2	9679.9
10°	3243.8	3491.8	3858.8	4208.2	4661.3	5240.6	5958.3	6903.4	7278.8	7845.5	8846.0
12.5°	2613.4	2905.7	3295.0	3623.5	3974.2	4382.7	5079.9	6116.0	6619.4	7115.2	8126.6
15°	2007.6	2313.9	2675.9	3092.8	3479.2	3920.0	4650.4	5783.8	6362.7	6879.9	7742.8
17.5°	1389.7	1651.5	2107.5	2542.5	3037.5	3601.2	4531.2	5854.3	6545.6	7141.7	7809.5
20°	985.4	1134.7	1508.9	2013.5	2630.1	3337.8	4509.0	6225.5	7124.9	7805.3	8236.1
22.5°	828.5	883.8	1101.6	1564.2	2276.5	3141.1	4586.6	6746.5	7906.4	8775.1	8916.5
25°	755.1	788.6	901.9	1227.8	1961.9	2998.4	4848.4	7522.5	8873.7	9745.4	9720.2
27.5°	714.8	749.6	824.3	1036.5	1725.3	2909.9	5110.1	8442.9	9979.4	10798.3	10487.8
30°	702.6	749.6	828.5	977.0	1556.3	2769.8	5324.9	9250.4	10830.1	11509.3	10837.3
32.5°	693.0	699.7	735.8	842.3	1395.2	2606.2	5470.4	9975.2	11662.8	12185.5	11340.2
35°	560.0	594.4	652.7	755.1	1301.2	2508.1	5470.4	10600.3	12483.3	12868.4	11819.7
37.5°	539.0	569.7	620.8	708.1	1248.4	2459.4	5361.0	11203.1	13321.4	13643.2	12214.4
40°	528.1	552.9	601.5	672.0	1226.1	2404.0	5201.6	11735.0	14140.3	14418.8	12583.2
42.5°	519.7	542.0	587.7	649.8	1197.2	2343.2	5072.8	12161.6	14851.3	15081.2	12935.1
45°	515.5	539.0	589.0	661.1	1138.9	2262.7	5030.0	12623.0	15436.0	15634.0	13316.0
47.5°	515.5	543.2	595.7	684.6	1069.7	2179.6	5164.2	13231.7	15988.9	16085.8	13764.8
50°	511.3	542.0	615.4	661.1	968.6	2074.3	5480.1	13997.6	16587.5	16598.4	14333.2
52.5°	503.0	539.0	662.4	647.3	852.0	1935.9	5907.1	14981.7	17473.0	17539.3	15222.5
55°	493.3	534.8	649.8	615.4	756.7	1771.0	6256.1	16177.3	18717.2	18901.4	16530.9
57.5°	480.7	529.4	629.2	570.9	694.2	1558.8	6382.4	17053.1	19586.0	20048.6	18004.9
60°	469.8	525.2	568.0	544.5	655.2	1380.1	6138.3	16879.9	19526.4	20523.9	19311.6
62.5°	458.5	529.4	518.1	528.1	637.2	1265.2	5501.1	15492.7	18538.5	20033.5	20280.2
65°	446.3	492.1	489.1	513.9	633.4	1219.4	4560.2	13412.9	16629.0	18483.1	20508.8
67.5°	429.5	454.3	468.1	496.2	647.3	1179.2	3680.1	11064.2	13975.4	16159.2	19317.1
70°	411.5	432.5	447.6	474.0	638.9	1161.1	3060.9	8725.2	11089.4	13243.8	16965.9
72.5°	388.0	406.1	419.9	444.6	630.5	1151.5	2585.7	7026.7	8279.3	9838.1	13794.2
75°	360.3	376.7	386.8	411.5	604.1	1054.6	2032.8	5945.7	6195.3	6843.8	10986.6
77.5°	328.5	341.0	349.0	376.7	534.8	877.1	1470.3	4586.6	4811.0	4968.7	8423.2
80°	291.1	303.3	307.5	333.9	443.4	685.9	958.9	3387.7	3598.3	3634.4	5501.1
82.5°	247.9	260.5	260.5	285.2	362.9	493.3	629.2	2321.0	2362.5	2484.6	3888.2
85°	199.7	209.3	209.3	221.9	281.5	368.7	432.5	1165.3	1152.7	1316.3	3368.4
87.5°	142.6	149.8	156.5	159.4	200.9	243.7	260.5	354.9	234.1	268.9	2162.8
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: P299360

CATALOG NUMBER: GLNA-AF-05-LED-E1-SLR-7030

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3	8516.3
2.5°	9782.7	9861.6	9781.0	9723.1	9472.3	9265.9	8989.9	8848.5
5°	10515.5	10716.5	10648.5	10404.8	9880.9	9291.9	8622.8	8320.8
7.5°	10427.0	10893.9	10904.8	10449.3	9677.4	8809.9	7903.8	7474.3
10°	9737.0	10333.9	10504.6	10062.5	9243.7	8273.8	7234.4	6744.0
12.5°	8966.4	9551.1	9681.6	9528.9	8844.7	7870.3	6816.1	6335.0
15°	8335.9	8598.1	8752.9	8886.3	8502.4	7709.6	6792.2	6264.5
17.5°	7952.1	7923.1	7967.6	8198.7	8263.8	7893.8	7152.6	6570.7
20°	7813.7	7369.0	7357.7	7676.5	8151.8	8333.4	7856.4	7158.0
22.5°	7890.0	7169.3	7077.9	7456.3	8211.3	8966.4	8779.3	7982.7
25°	8153.0	7186.1	7112.3	7478.5	8427.4	9641.3	9775.6	9049.4
27.5°	8567.5	7291.4	7194.1	7569.9	8714.3	10208.1	10756.7	10083.5
30°	8960.9	7474.3	7353.5	7749.9	8976.0	10432.5	11358.3	10889.7
32.5°	9439.1	7816.6	7604.3	8080.9	9300.3	10789.9	11894.4	11557.5
35°	9907.3	8304.0	8041.0	8592.2	9661.9	11234.9	12506.8	12411.2
37.5°	10421.6	8941.6	8723.9	9253.3	10156.9	11654.4	13288.3	13411.6
40°	10970.2	9786.9	9528.9	10217.7	10924.5	12181.3	14104.6	14400.8
42.5°	11523.1	10724.9	10417.4	11115.4	11768.1	12700.6	14802.6	15242.2
45°	12156.1	11743.4	11597.8	12352.9	12579.0	13195.6	15318.2	15864.3
47.5°	12893.6	12899.0	13133.1	13435.1	13396.5	13755.2	15836.6	16419.7
50°	13753.9	14341.2	14858.4	15058.9	14238.8	14356.7	16555.6	17163.9
52.5°	14787.5	16066.5	16706.6	16574.9	15146.6	15090.8	17694.5	18189.1
55°	16080.4	17892.9	18528.9	18434.5	16189.8	16091.3	19113.6	19401.8
57.5°	17576.6	19662.3	20247.1	19823.0	17442.4	17189.0	20287.3	20348.2
60°	18891.7	21064.6	21577.2	21107.4	18706.3	18356.9	21020.2	20724.8
62.5°	19623.3	21539.9	21900.2	21394.3	19572.1	19601.1	21180.8	20521.4
65°	19296.5	20338.5	20454.7	20413.2	19348.9	20323.0	20603.2	19580.5
67.5°	17506.2	17301.0	17496.5	17766.7	17437.0	19372.4	19002.5	17530.9
70°	14352.5	13225.8	13615.5	13796.7	13946.5	16670.6	16493.1	14279.1
72.5°	10816.3	9265.9	9573.4	9536.0	10228.6	13371.4	12826.9	10499.2
75°	7663.9	6282.6	6321.1	6306.0	7137.5	10461.4	9288.1	7183.2
77.5°	5362.2	4551.8	4572.8	4658.3	4798.4	7890.0	6635.8	5247.3
80°	3687.2	3454.4	3569.4	3576.5	3325.6	5300.1	4902.5	4211.2
82.5°	2746.3	2401.1	2373.4	2413.7	2606.2	4294.2	3767.4	2920.8
85°	2248.8	1421.6	1143.1	1432.9	2309.7	4252.7	2502.6	1540.8
87.5°	1266.4	674.9	305.0	565.5	921.6	2815.6	723.2	196.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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