

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: P298862

Luminaire Tested: **GLNA-AF-02-LED-E1-SLL-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298862  
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-7030  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Left OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

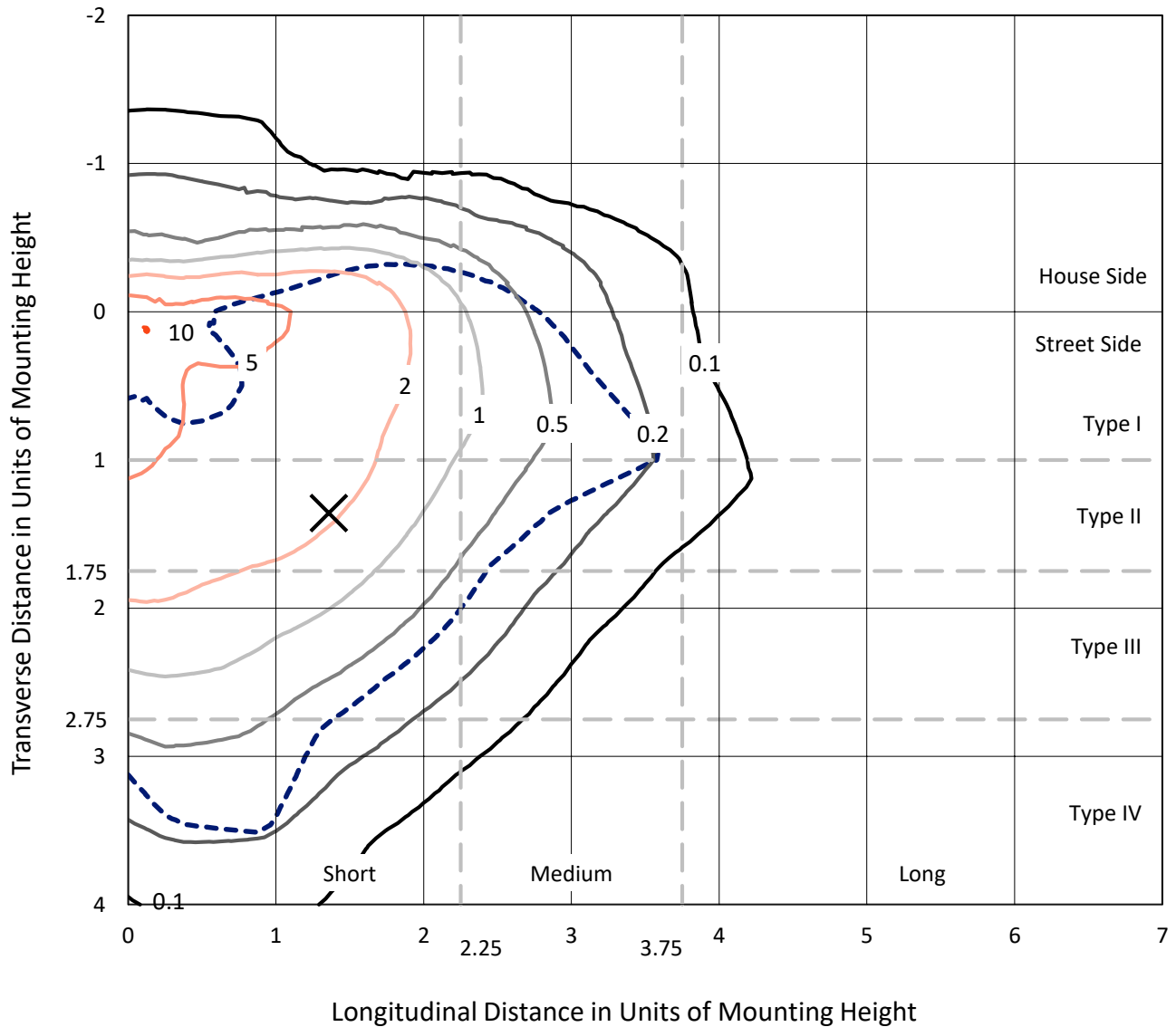
Lumens per Lamp: N/A  
Luminaire Lumens: 10318.3 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (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



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### Iso-Footcandle Lines of Horizontal Illumination

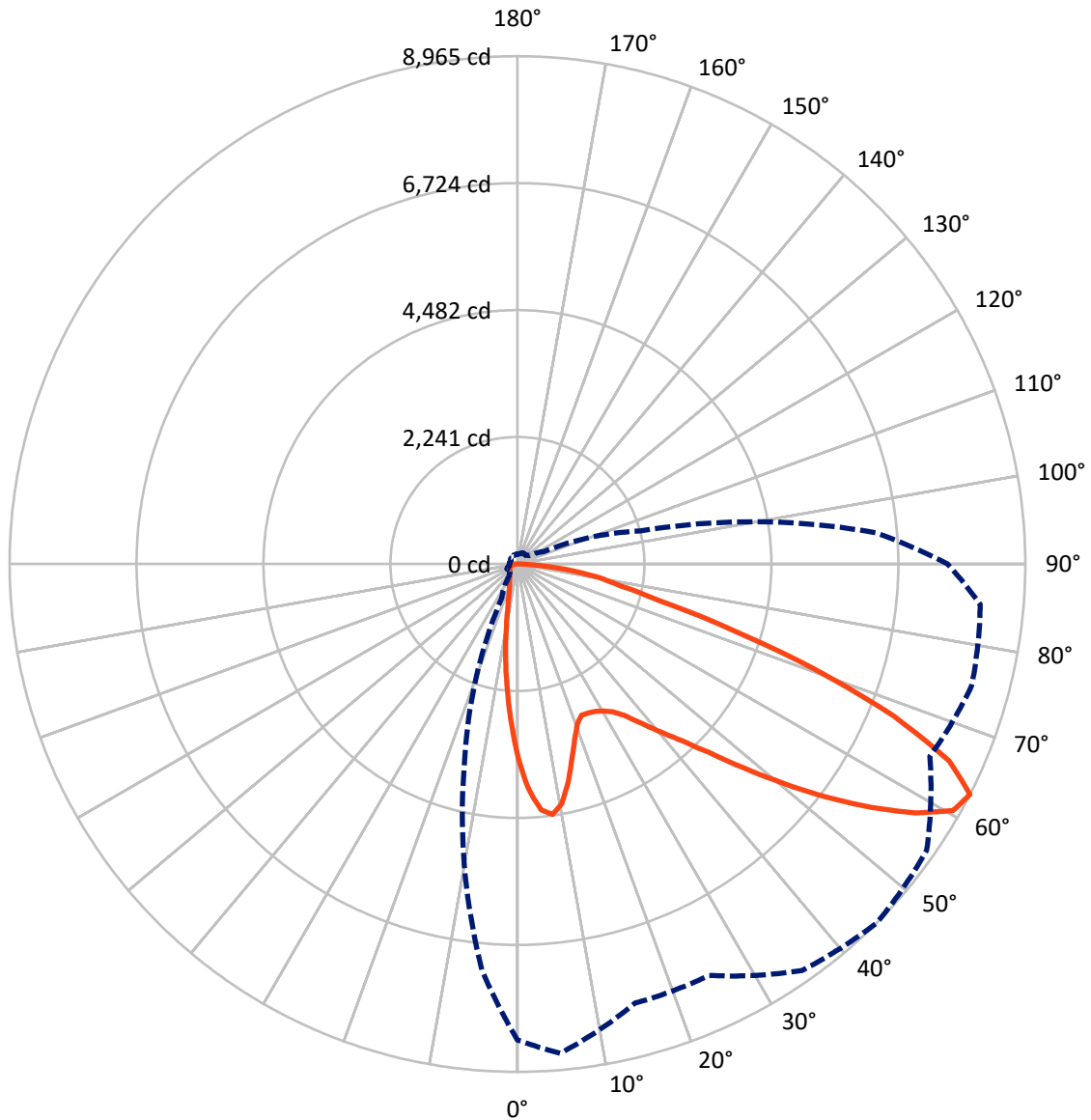
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.3 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1707.5	0.0	1707.5
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	8610.8	0.0	8610.8
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	10318.3	0.0	10318.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.8	2.5
10°-20°	465.3	4.5
20°-30°	678.5	6.6
30°-40°	1045.0	10.1
40°-50°	1537.9	14.9
50°-60°	2255.8	21.9
60°-70°	2521.6	24.4
70°-80°	1234.5	12.0
80°-90°	326.0	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°	10318.3	100.0
0°-180°	10318.3	100.0



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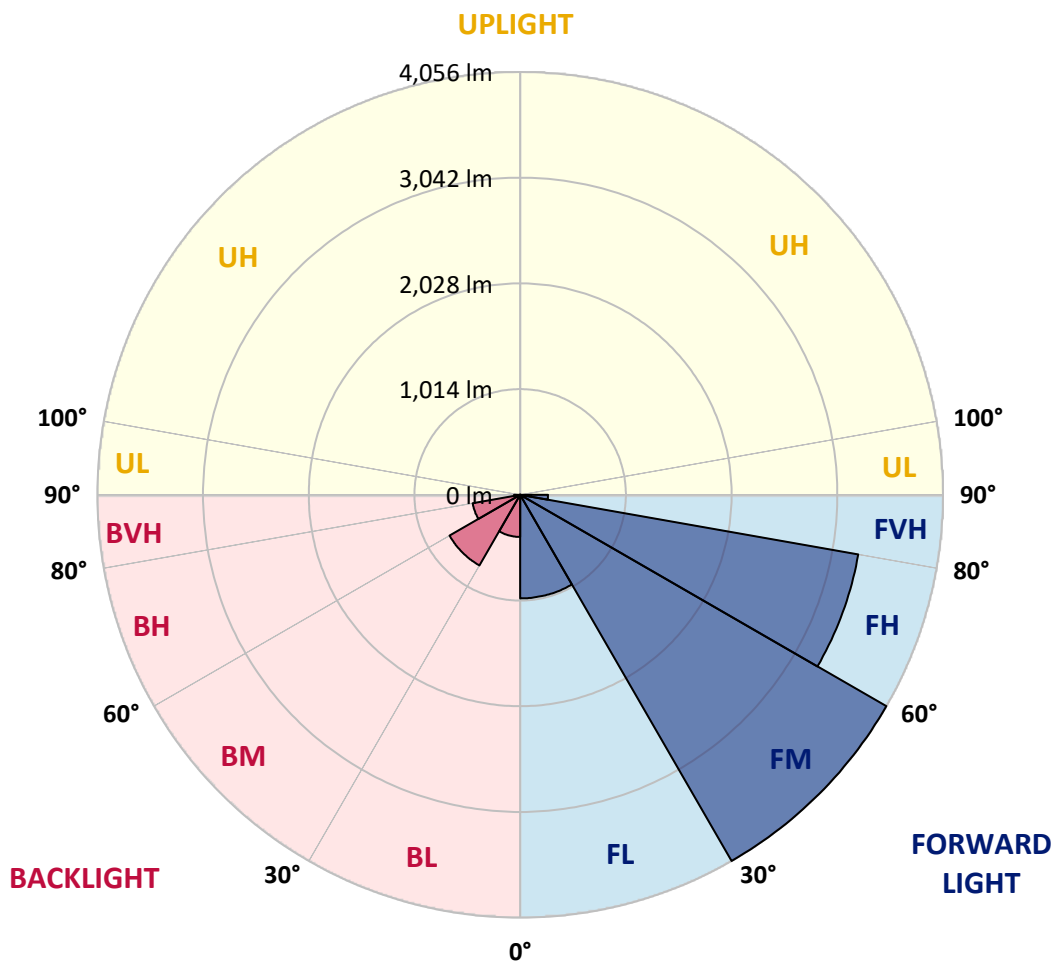
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	993.6	9.6			
FM	(30°-60°)	4056.2	39.3			
FH	(60°-80°)	3293.3	31.9			G2/5000
FVH	(80°-90°)	267.7	2.6			G3/500
BL	(0°-30°)	404.0	3.9	B1/500		
BM	(30°-60°)	782.4	7.6	B1/1000		
BH	(60°-80°)	462.9	4.5	B1/500		G1/500
BVH	(80°-90°)	58.3	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-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2
2.5°	3622.1	3680.1	3793.0	3877.3	3980.2	4004.0	4036.9	4004.5	3947.3	3871.2	3846.4
5°	3406.1	3529.8	3803.7	4044.9	4259.2	4359.0	4387.0	4304.5	4138.4	3920.0	3786.7
7.5°	3059.6	3235.4	3606.3	3961.5	4277.2	4464.0	4459.4	4268.2	3962.6	3606.8	3393.0
10°	2760.5	2961.4	3387.0	3783.9	4119.1	4300.1	4230.1	3985.9	3621.0	3211.5	2979.7
12.5°	2593.3	2790.2	3221.8	3620.4	3900.7	3963.1	3909.7	3670.3	3326.6	2912.6	2709.5
15°	2564.2	2780.6	3156.1	3480.5	3637.6	3583.2	3519.5	3412.4	3169.5	2816.1	2604.6
17.5°	2689.8	2927.9	3231.5	3382.9	3356.2	3261.4	3243.3	3255.3	3196.9	2923.3	2679.5
20°	2930.3	3216.1	3411.3	3337.1	3142.4	3011.9	3016.5	3198.6	3371.5	3195.1	2916.5
22.5°	3267.6	3593.9	3670.3	3361.4	3052.2	2897.3	2934.9	3229.9	3650.1	3592.3	3236.5
25°	3704.4	4001.8	3946.7	3449.7	3061.2	2911.5	2941.5	3337.6	3978.9	3989.3	3632.6
27.5°	4127.5	4403.4	4178.5	3567.2	3098.8	2945.0	2984.8	3507.0	4293.3	4420.3	4085.2
30°	4457.7	4649.6	4270.4	3674.4	3172.4	3010.2	3059.6	3668.1	4436.3	4711.2	4433.4
32.5°	4731.1	4868.9	4416.8	3807.1	3308.0	3112.8	3199.7	3863.9	4642.2	4988.2	4774.2
35°	5080.4	5119.7	4598.9	3955.2	3517.3	3291.6	3399.3	4055.5	4838.5	5267.7	5110.1
37.5°	5490.1	5439.7	4770.7	4157.7	3788.0	3571.1	3660.2	4266.0	5000.0	5584.8	5453.1
40°	5895.0	5773.5	4986.5	4471.9	4182.8	3900.7	4006.2	4490.7	5151.0	5902.4	5788.4
42.5°	6239.4	6059.5	5199.0	4817.3	4550.1	4264.4	4390.3	4717.0	5295.0	6173.5	6079.4
45°	6494.0	6270.5	5401.6	5149.1	5056.7	4747.5	4807.2	4976.0	5450.9	6399.9	6318.7
47.5°	6721.4	6482.6	5630.6	5483.9	5499.7	5376.0	5280.0	5277.8	5634.9	6584.8	6545.0
50°	7026.0	6777.0	5876.8	5828.6	6164.4	6082.1	5870.6	5630.1	5867.2	6794.7	6790.1
52.5°	7445.8	7243.5	6177.5	6200.2	6785.1	6838.9	6576.7	6053.4	6231.3	7179.7	7152.7
55°	7942.2	7824.0	6587.2	6627.3	7546.2	7584.8	7324.3	6582.4	6766.9	7737.5	7662.0
57.5°	8329.5	8304.6	7036.3	7140.2	8114.6	8288.2	8048.9	7195.2	7370.3	8207.0	8017.6
60°	8483.8	8604.6	7514.5	7657.4	8640.5	8832.5	8622.8	7733.2	7905.2	8401.7	7993.2
62.5°	8400.5	8670.3	8023.8	8011.8	8757.8	8964.7	8817.2	8032.8	8301.9	8200.8	7588.9
65°	8015.3	8433.9	8319.3	7920.5	8356.2	8373.1	8325.4	7899.0	8395.4	7566.1	6807.1
67.5°	7176.2	7778.7	7930.1	7137.9	7272.7	7162.3	7082.2	7166.1	7907.4	6614.8	5720.9
70°	5845.1	6751.6	6824.0	5709.1	5647.8	5573.4	5414.1	5875.2	6945.0	5421.4	4539.4
72.5°	4297.9	5250.8	5473.6	4187.2	3903.6	3918.7	3793.0	4427.5	5646.6	4027.2	3389.2
75°	2940.4	3802.0	4282.6	2921.7	2581.6	2587.6	2571.6	3137.3	4497.5	2801.4	2536.1
77.5°	2148.1	2716.3	3229.9	1964.2	1906.9	1871.7	1863.2	2195.1	3448.1	2034.1	1969.3
80°	1723.7	2006.9	2169.5	1361.3	1463.9	1461.1	1414.0	1509.3	2251.8	1487.8	1472.9
82.5°	1195.8	1542.3	1757.7	1066.9	988.1	971.5	983.1	1124.1	1591.7	1017.0	967.1
85°	630.8	1024.3	1740.8	945.5	586.5	467.9	582.0	920.5	1379.0	539.0	471.8
87.5°	80.7	296.1	1152.5	377.3	231.5	124.7	276.4	518.3	885.5	109.9	95.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2
2.5°	3782.3	3706.8	3608.1	3516.6	3421.9	3327.7	3204.7	3127.5	3074.3	3064.0	3041.5
5°	3690.4	3439.6	3250.1	3086.3	2937.7	2727.6	2611.4	2514.9	2463.3	2458.4	2445.8
7.5°	3266.5	2920.5	2664.8	2432.8	2222.3	2052.7	1865.5	1778.4	1742.5	1750.9	1759.4
10°	2825.7	2439.0	2145.2	1908.0	1722.6	1579.7	1429.4	1328.0	1257.4	1243.3	1240.5
12.5°	2503.7	2079.4	1794.2	1626.6	1483.4	1348.8	1189.5	1069.6	978.5	947.2	926.4
15°	2367.4	1903.6	1604.7	1424.3	1265.9	1095.2	947.2	821.8	738.0	710.8	695.5
17.5°	2396.5	1854.8	1474.2	1243.3	1040.9	862.7	676.1	568.8	518.3	505.4	505.4
20°	2548.6	1845.8	1366.3	1076.6	824.0	617.6	464.6	403.3	386.9	385.2	389.6
22.5°	2761.8	1877.6	1286.0	932.1	640.4	450.9	361.8	339.2	331.8	333.7	338.6
25°	3079.5	1984.8	1227.6	803.2	502.5	369.2	322.6	309.2	305.7	310.3	316.5
27.5°	3456.0	2091.9	1191.2	706.2	424.2	337.5	306.8	292.8	295.0	300.7	306.2
30°	3786.7	2180.0	1133.9	637.1	399.9	339.2	306.8	287.6	285.4	286.5	288.2
32.5°	4083.5	2239.4	1066.9	571.2	344.9	301.2	286.5	283.8	271.0	266.4	267.2
35°	4339.3	2239.4	1026.7	532.7	309.2	267.2	243.4	229.2	222.8	223.4	229.8
37.5°	4586.0	2194.5	1006.8	511.0	289.8	254.1	233.1	220.6	212.1	210.5	211.6
40°	4803.7	2129.3	984.2	501.9	275.1	246.2	226.5	216.0	207.0	204.2	204.8
42.5°	4978.4	2076.5	959.2	490.2	265.9	240.5	221.7	212.7	202.5	199.6	199.0
45°	5167.3	2059.0	926.4	466.2	270.5	241.0	220.6	211.0	200.7	197.4	196.3
47.5°	5416.3	2114.0	892.3	437.9	280.3	244.0	222.2	211.0	200.2	197.4	196.3
50°	5729.9	2243.3	849.0	396.4	270.5	251.9	221.7	209.2	200.2	197.4	195.2
52.5°	6132.8	2418.0	792.5	348.9	264.8	271.0	220.6	205.9	197.4	193.5	189.5
55°	6622.2	2560.9	724.8	309.7	251.9	265.9	218.9	202.0	193.0	187.3	183.8
57.5°	6980.7	2612.5	638.2	284.3	233.7	257.4	216.5	196.8	187.3	182.7	178.2
60°	6909.8	2512.7	564.9	268.3	222.8	232.6	214.9	192.2	182.1	178.8	174.6
62.5°	6342.1	2251.8	517.8	260.9	216.0	212.1	216.5	187.8	177.7	174.0	172.9
65°	5490.7	1866.6	499.2	259.3	210.5	200.2	201.4	182.7	172.3	169.6	168.5
67.5°	4529.1	1506.6	482.8	264.8	203.1	191.7	186.2	175.8	167.2	164.4	162.2
70°	3571.6	1253.0	475.2	261.5	194.1	183.2	177.1	168.5	161.1	158.2	156.5
72.5°	2876.2	1058.4	471.2	258.0	182.1	171.8	166.1	158.7	150.8	149.7	148.0
75°	2434.1	832.1	431.8	247.3	168.5	158.2	154.3	147.5	139.6	139.6	138.5
77.5°	1877.6	601.7	359.1	218.9	154.3	142.9	139.6	134.4	125.4	127.1	126.5
80°	1386.9	392.6	280.8	181.6	136.8	125.9	124.1	119.1	109.4	111.8	111.8
82.5°	950.1	257.4	202.0	148.6	116.7	106.6	106.6	101.5	90.8	91.9	95.4
85°	477.1	177.1	150.8	115.1	90.8	85.6	85.6	81.8	70.9	71.4	76.0
87.5°	145.3	106.6	99.8	82.3	65.2	64.1	61.1	58.4	51.6	51.0	54.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2
2.5°	3006.7	2974.3	2935.5	2849.1	2820.2	2818.4	2844.7	2817.2	2869.5	2847.4	2871.7
5°	2424.7	2393.2	2349.4	2239.4	2172.4	2126.9	2105.6	2042.0	2087.9	2054.4	2082.4
7.5°	1783.3	1790.7	1761.8	1697.2	1551.3	1478.2	1435.1	1396.5	1430.0	1426.5	1479.9
10°	1253.6	1273.3	1253.0	1187.8	1069.6	1029.5	1037.4	1052.7	1096.5	1119.0	1201.3
12.5°	902.4	901.3	888.3	829.9	752.2	756.6	789.0	815.5	855.9	879.8	963.6
15°	673.7	663.6	657.9	610.2	566.0	575.8	591.6	594.4	620.0	634.2	702.3
17.5°	509.3	514.5	520.5	486.7	453.2	446.9	434.6	419.1	426.6	429.4	463.3
20°	404.4	424.8	440.3	416.3	382.4	364.0	348.2	338.1	338.1	337.5	347.1
22.5°	353.4	368.1	384.7	368.1	337.5	321.5	312.5	304.6	303.5	303.5	312.5
25°	325.7	336.4	352.2	341.0	318.2	306.2	297.7	287.6	283.8	282.5	288.7
27.5°	311.9	316.5	324.4	314.1	295.0	289.3	287.1	278.0	272.7	269.9	276.4
30°	288.7	287.6	288.2	278.0	262.6	262.0	265.9	267.7	265.9	265.3	275.1
32.5°	267.2	264.8	264.2	255.2	241.0	237.7	241.0	244.5	248.4	254.1	265.3
35°	239.9	245.6	248.9	241.0	223.9	213.8	209.9	203.7	200.2	200.2	213.2
37.5°	218.4	231.5	236.6	229.2	210.5	196.3	189.5	188.4	188.9	191.1	203.7
40°	211.0	220.6	225.0	217.8	199.0	186.2	182.1	181.0	182.1	185.6	197.9
42.5°	206.4	213.2	212.7	203.7	188.4	179.3	177.1	175.8	177.1	180.5	194.1
45°	202.5	207.0	202.5	191.7	177.7	172.9	173.5	172.9	174.0	177.7	190.6
47.5°	199.0	200.7	195.2	184.3	169.6	168.5	170.7	172.3	173.5	176.6	190.0
50°	194.1	194.1	188.9	177.7	162.8	163.3	166.1	170.1	170.7	174.0	185.1
52.5°	187.8	187.3	183.8	172.9	157.1	158.7	158.7	163.3	164.4	168.5	179.9
55°	182.7	181.6	179.9	169.6	152.1	154.9	153.2	154.9	157.6	161.7	174.0
57.5°	178.2	175.8	175.8	166.6	148.0	149.1	145.3	147.5	150.8	154.3	167.2
60°	173.5	171.2	172.3	162.8	141.8	140.7	139.0	143.4	144.7	148.6	161.7
62.5°	168.5	166.6	167.2	158.2	137.4	134.4	134.4	138.5	139.0	144.7	157.1
65°	164.4	162.2	161.7	153.8	132.2	128.9	130.6	132.2	133.3	139.0	150.8
67.5°	160.6	156.0	156.0	149.7	126.5	123.0	126.5	125.9	127.8	132.8	142.3
70°	155.4	149.1	149.7	146.9	120.8	116.7	119.7	119.1	120.2	123.6	133.3
72.5°	147.5	142.3	143.4	142.3	115.1	109.4	110.5	110.5	110.5	113.4	123.6
75°	137.4	133.3	136.8	139.6	108.3	100.4	101.5	101.5	99.8	101.5	114.0
77.5°	124.7	122.4	133.9	130.0	100.4	90.8	90.8	89.7	86.4	88.6	102.0
80°	111.2	109.4	123.6	108.8	91.3	79.0	77.7	74.8	71.4	73.1	86.9
82.5°	97.0	95.4	103.9	83.4	79.0	65.2	62.4	57.3	54.0	55.6	67.9
85°	79.5	79.5	80.1	63.0	60.0	49.9	46.6	39.8	35.7	36.8	48.8
87.5°	56.7	58.4	54.0	43.1	35.7	27.8	25.6	21.5	18.0	21.0	25.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-7030

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2	3486.2
2.5°	2996.6	3059.0	3129.9	3220.5	3298.4	3425.8	3548.4	3622.1
5°	2240.5	2344.4	2473.5	2639.9	2794.8	3027.2	3258.1	3406.1
7.5°	1603.4	1714.7	1854.2	2061.7	2280.9	2577.3	2882.6	3059.6
10°	1326.9	1440.8	1558.1	1698.3	1877.6	2200.2	2560.9	2760.5
12.5°	1097.6	1219.5	1346.0	1493.5	1659.6	1947.8	2363.5	2593.3
15°	840.0	976.1	1125.2	1312.0	1520.0	1853.1	2314.7	2564.2
17.5°	575.8	727.9	910.9	1141.3	1395.9	1822.4	2402.2	2689.8
20°	396.4	507.1	702.8	972.8	1279.2	1818.5	2570.0	2930.3
22.5°	331.8	381.2	524.0	817.9	1191.2	1867.3	2830.5	3267.6
25°	306.8	336.4	418.5	683.5	1127.1	1979.6	3189.0	3704.4
27.5°	292.2	318.7	380.1	595.7	1076.6	2110.0	3537.8	4127.5
30°	297.7	325.0	369.2	550.7	1007.9	2218.8	3847.5	4457.7
32.5°	268.3	280.3	316.5	511.0	958.6	2310.1	4118.5	4731.1
35°	228.7	249.5	282.5	492.4	959.7	2371.5	4414.1	5080.4
37.5°	217.8	238.8	262.6	485.6	972.8	2436.8	4753.2	5490.1
40°	211.0	230.4	250.8	481.7	985.3	2496.3	5085.8	5895.0
42.5°	206.4	223.9	249.5	467.9	991.6	2549.7	5359.0	6239.4
45°	205.9	223.9	254.1	454.3	1001.1	2607.0	5588.3	6494.0
47.5°	206.4	231.5	245.6	437.9	1001.1	2702.7	5857.1	6721.4
50°	204.2	244.0	236.6	414.7	977.9	2884.3	6225.7	7026.0
52.5°	203.1	242.3	218.9	378.9	937.6	3172.4	6698.2	7445.8
55°	200.2	233.7	206.4	325.7	890.7	3486.8	7204.2	7942.2
57.5°	197.4	207.0	199.6	279.1	817.9	3707.9	7552.4	8329.5
60°	221.1	181.0	194.1	256.3	720.9	3768.5	7539.0	8483.8
62.5°	204.8	169.6	186.7	251.3	652.9	3598.3	7190.6	8400.5
65°	160.6	162.2	179.3	265.9	634.7	3147.6	6573.4	8015.3
67.5°	146.9	154.9	171.8	284.9	636.6	2520.1	5651.2	7176.2
70°	138.5	146.9	163.3	294.4	641.0	1878.7	4467.8	5845.1
72.5°	128.9	136.3	153.8	296.1	611.3	1364.6	3443.7	4297.9
75°	117.3	124.1	140.1	258.0	506.6	946.6	2634.2	2940.4
77.5°	104.4	109.4	123.0	199.0	376.2	605.8	1977.2	2148.1
80°	89.1	91.9	103.3	145.8	257.4	378.9	1564.4	1723.7
82.5°	71.4	72.5	80.1	109.4	167.2	243.4	1047.7	1195.8
85°	50.5	50.5	55.1	79.5	114.0	154.3	568.8	630.8
87.5°	23.8	24.3	24.3	43.6	59.5	78.4	131.1	80.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)