

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: P299410

Luminaire Tested: **GLNA-AF-03-LED-E1-SLR-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299410
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-03-LED-E1-SLR-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Right OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12859.5 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

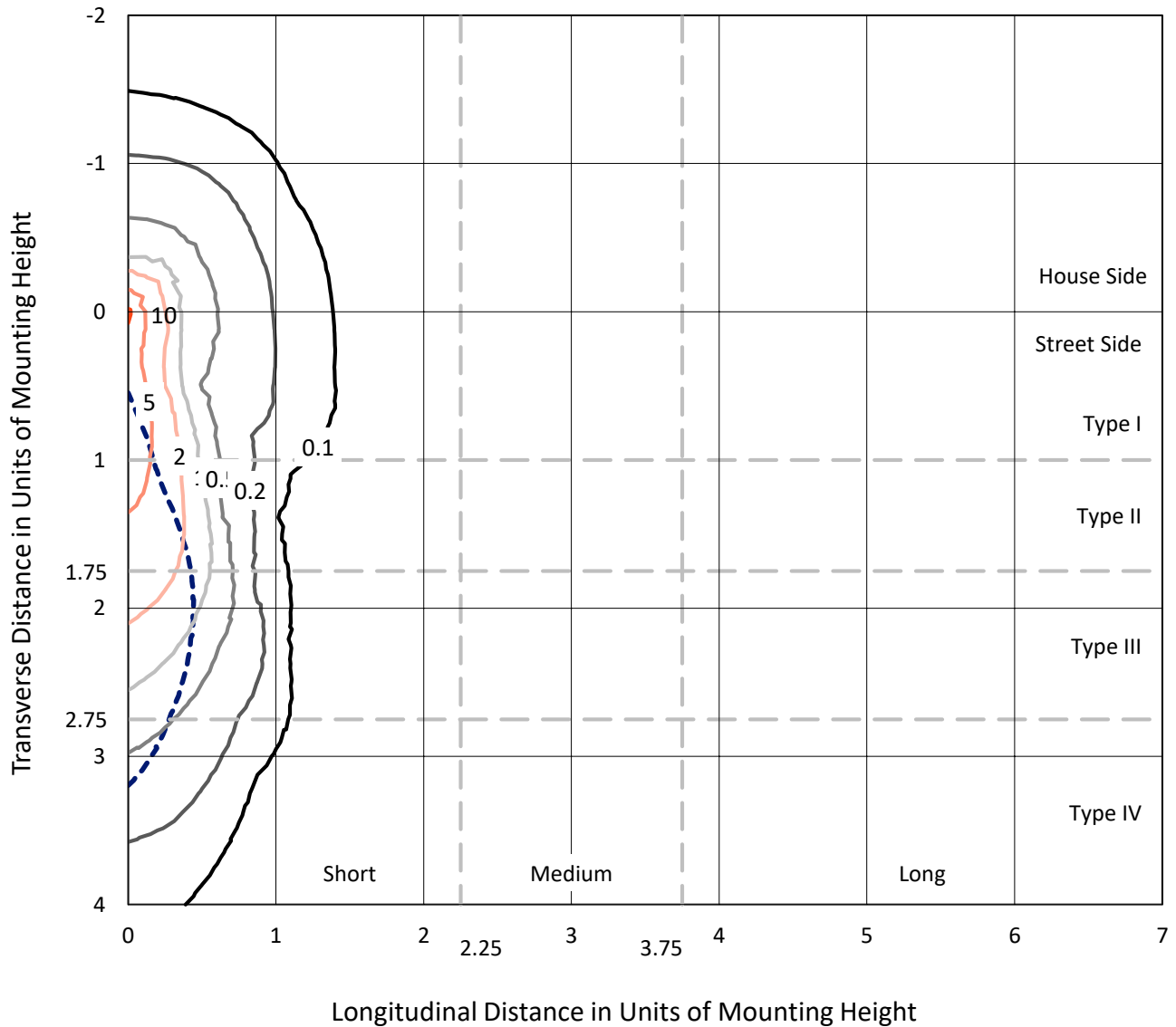
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

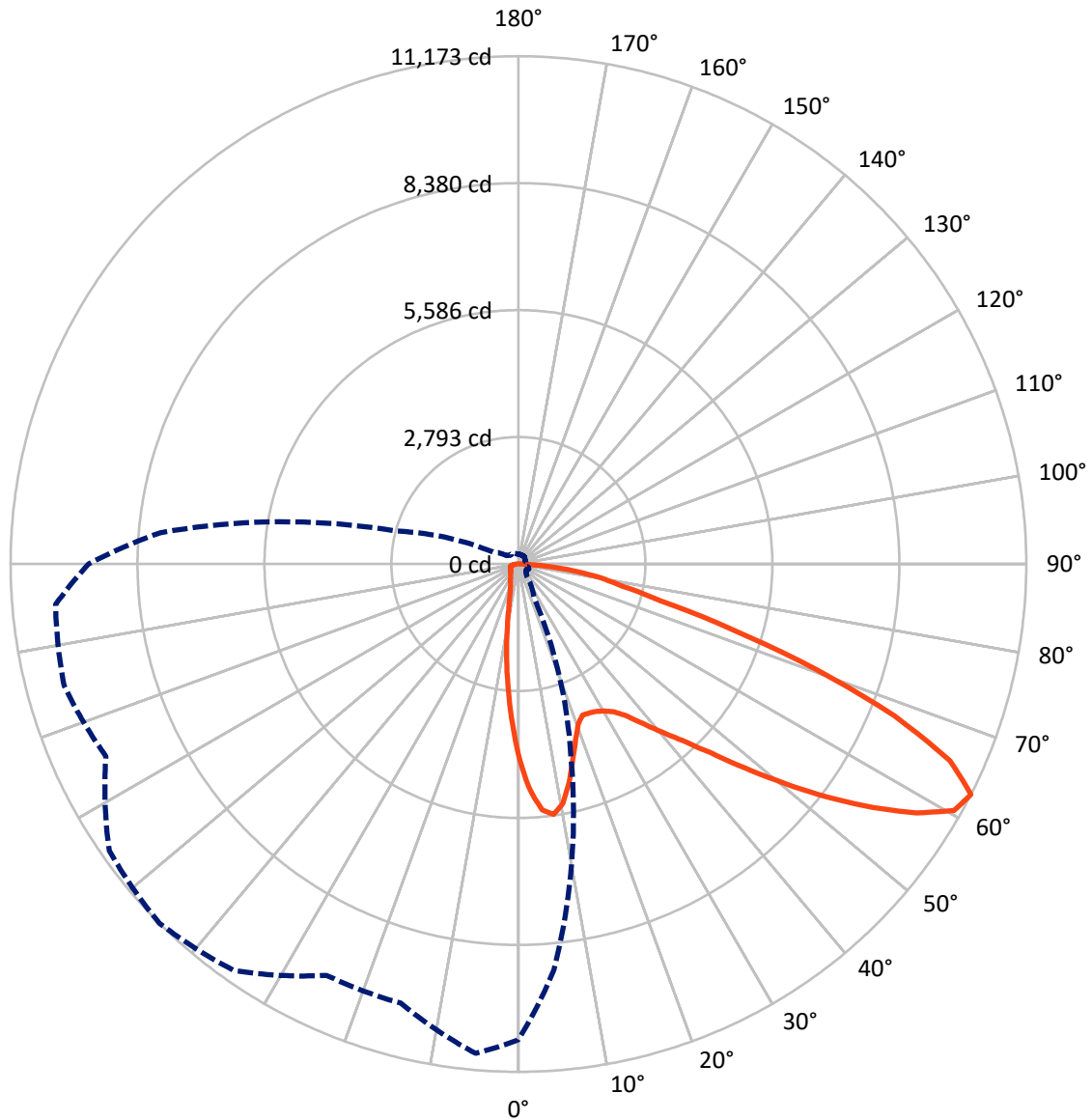
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2128.1	0.0	2128.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	10731.4	0.0	10731.4
	% Fixture	83.5	0.0	83.5
Total	Lumens	12859.5	0.0	12859.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.3	2.5
10°-20°	580.0	4.5
20°-30°	845.6	6.6
30°-40°	1302.3	10.1
40°-50°	1916.6	14.9
50°-60°	2811.3	21.9
60°-70°	3142.6	24.4
70°-80°	1538.6	12.0
80°-90°	406.2	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°	12859.5	100.0
0°-180°	12859.5	100.0



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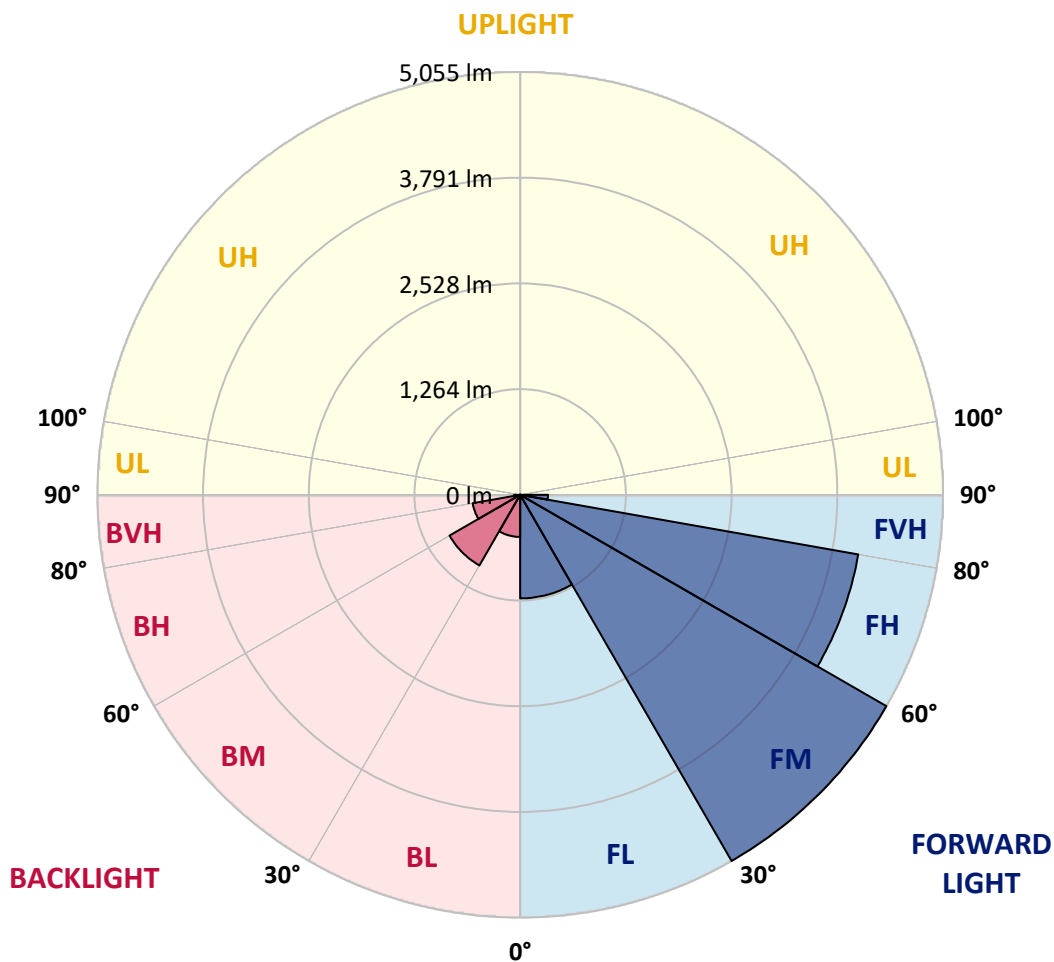
CATALOG NUMBER: GLNA-AF-03-LED-E1-SLR-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1238.3	9.6			
FM	(30°-60°)	5055.2	39.3			
FH	(60°-80°)	4104.3	31.9			G2/5000
FVH	(80°-90°)	333.6	2.6			G3/500
BL	(0°-30°)	503.5	3.9	B2/1000		
BM	(30°-60°)	975.1	7.6	B1/1000		
BH	(60°-80°)	576.9	4.5	B2/1000		G2/1000
BVH	(80°-90°)	72.6	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7
2.5°	4514.2	4422.4	4269.6	4110.6	4013.9	3900.7	3812.3	3734.6	3579.0	3548.6	3576.2
5°	4245.0	4060.5	3772.7	3482.9	3289.9	3082.7	2921.6	2792.3	2595.0	2560.4	2602.1
7.5°	3813.1	3592.5	3212.2	2842.4	2569.6	2310.8	2137.0	1998.4	1844.3	1777.9	1782.0
10°	3440.6	3191.7	2742.0	2339.9	2116.5	1941.9	1795.5	1653.4	1497.2	1394.7	1366.4
12.5°	3231.9	2945.8	2427.5	2068.4	1861.2	1677.6	1519.9	1367.9	1201.0	1096.3	1066.8
15°	3195.9	2884.8	2309.5	1894.6	1635.0	1402.6	1216.6	1046.9	875.1	790.3	772.6
17.5°	3352.2	2993.7	2271.2	1739.6	1422.3	1135.3	907.0	717.6	577.6	535.2	531.6
20°	3651.8	3203.0	2266.3	1594.1	1212.3	875.9	632.0	494.1	432.7	420.5	421.4
22.5°	4072.5	3527.4	2327.1	1484.5	1019.3	653.1	475.1	413.5	389.5	378.1	378.1
25°	4616.7	3974.3	2467.0	1404.7	851.7	521.7	419.2	382.4	359.7	352.0	353.5
27.5°	5144.2	4408.9	2629.7	1341.8	742.2	473.6	397.2	364.0	344.3	336.4	340.1
30°	5555.6	4795.0	2765.4	1256.2	686.3	460.1	405.1	371.1	342.8	330.9	331.5
32.5°	5896.3	5132.9	2879.2	1194.6	636.9	394.4	349.3	334.3	330.9	316.7	309.7
35°	6331.8	5501.2	2955.6	1196.1	613.6	352.0	310.9	284.8	265.8	249.5	249.5
37.5°	6842.2	5923.9	3036.9	1212.3	605.2	327.2	297.7	271.4	253.8	238.2	235.4
40°	7346.8	6338.2	3111.2	1228.0	600.1	312.4	287.0	263.0	246.7	231.1	226.8
42.5°	7776.1	6678.9	3177.5	1235.7	583.2	310.9	279.3	257.2	241.8	224.7	220.6
45°	8093.4	6964.3	3249.0	1247.6	566.3	316.7	279.3	256.6	237.5	221.3	217.0
47.5°	8376.8	7299.5	3368.4	1247.6	545.7	306.0	288.5	257.2	236.9	219.8	216.4
50°	8756.4	7758.9	3594.6	1218.8	516.8	294.7	303.9	254.5	230.5	217.0	212.7
52.5°	9279.5	8347.9	3953.7	1168.5	472.3	272.9	301.7	253.2	224.1	209.9	205.0
55°	9898.1	8978.3	4345.4	1109.8	405.8	257.2	291.3	249.5	217.0	201.4	196.5
57.5°	10380.9	9412.3	4621.0	1019.3	347.8	248.9	258.1	246.1	208.4	192.2	188.1
60°	10573.1	9395.4	4696.8	898.4	319.5	241.8	225.6	275.6	201.4	185.1	180.2
62.5°	10469.3	8961.4	4484.7	813.6	313.1	232.6	211.4	255.1	195.8	180.2	173.1
65°	9989.3	8192.3	3922.7	791.0	331.5	223.4	202.2	200.1	188.1	173.1	166.1
67.5°	8943.7	7042.9	3140.7	793.1	354.8	214.2	193.0	183.2	177.4	165.4	159.0
70°	7284.7	5568.4	2341.2	798.9	366.8	203.5	183.2	172.5	166.1	154.1	149.8
72.5°	5356.3	4291.6	1700.9	762.1	368.9	191.5	169.7	160.5	154.1	141.5	137.8
75°	3664.6	3282.8	1179.8	631.3	321.6	174.6	154.7	146.4	142.1	126.5	124.3
77.5°	2677.0	2464.3	755.0	468.7	248.0	153.4	136.5	130.1	127.3	110.2	107.4
80°	2148.4	1949.6	472.3	321.0	181.7	128.6	114.5	111.1	108.1	91.2	89.0
82.5°	1490.1	1305.6	303.2	208.4	136.5	99.7	90.5	89.0	84.7	69.3	67.2
85°	786.0	709.0	192.2	142.1	98.9	68.5	62.9	62.9	60.8	46.0	44.5
87.5°	100.4	163.3	97.6	74.3	54.4	30.4	30.4	29.7	31.9	26.1	22.7
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°	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7
2.5°	3511.2	3545.2	3512.7	3514.8	3550.8	3658.2	3707.0	3747.2	3790.4	3818.7	3831.3
5°	2544.9	2624.1	2650.9	2707.4	2790.8	2928.0	2982.4	3022.0	3048.3	3063.7	3070.1
7.5°	1740.5	1788.4	1842.2	1933.3	2115.0	2195.7	2231.6	2222.4	2192.9	2182.2	2171.7
10°	1312.1	1293.0	1283.0	1333.2	1480.3	1561.6	1587.1	1562.2	1546.0	1549.6	1567.2
12.5°	1016.5	983.4	943.1	937.3	1034.3	1107.0	1123.3	1124.6	1154.3	1180.4	1219.4
15°	740.9	737.2	717.6	705.6	760.6	820.1	827.1	839.8	866.7	885.8	919.6
17.5°	522.4	541.4	557.1	564.8	606.5	648.9	641.2	634.7	629.8	629.8	646.1
20°	421.4	434.0	453.9	476.4	519.0	548.5	529.4	504.0	485.6	480.0	482.2
22.5°	379.6	389.5	400.8	420.5	458.8	479.4	458.8	440.4	422.0	415.6	413.5
25°	358.5	371.1	381.8	396.6	424.8	438.9	419.2	405.8	394.4	386.7	380.9
27.5°	346.5	357.6	360.6	367.7	391.6	404.3	394.4	388.8	381.8	374.7	367.7
30°	333.6	331.5	326.6	327.2	346.5	359.1	358.5	359.7	359.1	357.0	355.7
32.5°	304.7	300.5	296.2	300.5	318.0	329.4	330.2	333.0	333.0	332.3	337.9
35°	253.8	261.5	266.4	279.3	300.5	310.3	306.0	299.0	286.3	278.4	277.8
37.5°	234.8	236.0	244.6	262.2	285.7	294.7	288.5	272.2	263.7	262.2	264.3
40°	225.6	226.8	231.8	248.0	271.4	280.6	275.0	263.0	255.1	254.5	258.1
42.5°	219.1	220.6	223.4	234.8	253.8	265.2	265.8	257.2	248.0	248.9	252.3
45°	215.5	216.4	215.5	221.3	238.8	252.3	258.1	252.3	244.6	246.1	250.2
47.5°	214.9	212.7	209.9	211.4	229.8	243.1	250.2	248.0	244.6	246.1	249.5
50°	212.1	207.2	203.5	202.9	221.3	235.4	241.8	241.8	243.1	246.1	249.5
52.5°	203.5	198.0	198.0	195.8	215.5	229.0	233.3	233.9	236.0	241.0	246.1
55°	193.0	190.9	193.0	189.4	211.4	224.1	226.2	227.7	229.0	233.3	240.3
57.5°	183.8	181.0	186.0	184.5	207.8	219.1	219.1	221.9	221.9	227.7	233.3
60°	178.9	173.1	175.3	176.8	202.9	214.9	213.6	216.4	217.6	222.8	226.8
62.5°	172.5	167.6	167.6	171.0	197.3	208.4	207.8	209.9	215.5	217.0	221.3
65°	164.8	162.6	160.5	164.8	191.5	201.4	202.2	205.0	209.9	211.4	214.9
67.5°	156.9	157.7	153.4	157.7	186.6	194.3	194.3	200.1	202.2	205.0	208.4
70°	148.5	149.2	145.5	150.7	183.2	186.6	186.0	193.7	195.2	197.3	200.7
72.5°	137.8	137.8	136.5	143.6	177.4	178.9	177.4	183.8	184.5	186.6	188.1
75°	126.5	126.5	125.2	135.0	174.0	170.3	166.1	171.0	172.5	174.0	174.0
77.5°	111.7	113.2	113.2	125.2	161.8	166.9	152.6	155.6	157.7	158.4	156.2
80°	93.3	96.9	98.2	113.9	135.7	154.1	136.5	138.5	139.3	139.3	136.5
82.5°	71.5	77.7	81.3	98.2	104.0	129.3	118.8	120.9	118.8	114.5	113.2
85°	49.4	58.0	62.3	74.9	78.5	99.7	98.9	98.9	94.8	89.0	88.4
87.5°	27.0	31.9	34.7	44.5	53.7	67.2	72.8	70.6	67.2	63.6	64.4
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°	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7
2.5°	3897.9	3994.0	4147.4	4264.7	4382.8	4496.7	4619.7	4713.7	4793.5	4824.7	4919.3
5°	3134.5	3254.6	3399.5	3661.0	3846.3	4050.5	4286.7	4599.2	4719.2	4885.5	5157.5
7.5°	2216.2	2324.9	2558.2	2769.6	3032.0	3321.1	3639.8	4071.0	4228.7	4495.2	4938.4
10°	1654.9	1781.4	1968.6	2146.9	2378.0	2673.6	3039.7	3521.9	3713.4	4002.5	4512.9
12.5°	1333.2	1482.4	1681.0	1848.6	2027.5	2235.9	2591.6	3120.2	3377.0	3629.9	4145.9
15°	1024.2	1180.4	1365.1	1577.9	1775.0	1999.9	2372.5	2950.7	3246.0	3509.9	3950.1
17.5°	709.0	842.5	1075.2	1297.1	1549.6	1837.2	2311.7	2986.6	3339.3	3643.4	3984.1
20°	502.7	578.9	769.8	1027.2	1341.8	1702.8	2300.3	3176.0	3634.9	3982.0	4201.8
22.5°	422.7	450.9	562.0	798.0	1161.4	1602.5	2339.9	3441.8	4033.6	4476.8	4548.9
25°	385.2	402.3	460.1	626.4	1000.9	1529.7	2473.5	3837.7	4527.1	4971.8	4958.9
27.5°	364.7	382.4	420.5	528.8	880.2	1484.5	2607.0	4307.3	5091.2	5508.9	5350.5
30°	358.5	382.4	422.7	498.4	794.0	1413.1	2716.6	4719.2	5525.2	5871.6	5528.8
32.5°	353.5	357.0	375.4	429.7	711.8	1329.6	2790.8	5089.0	5950.0	6216.6	5785.4
35°	285.7	303.2	333.0	385.2	663.8	1279.5	2790.8	5407.9	6368.6	6565.0	6030.0
37.5°	275.0	290.6	316.7	361.2	636.9	1254.7	2735.0	5715.4	6796.1	6960.3	6231.4
40°	269.4	282.1	306.9	342.8	625.5	1226.5	2653.7	5986.8	7213.9	7356.0	6419.5
42.5°	265.2	276.5	299.8	331.5	610.8	1195.4	2588.0	6204.4	7576.6	7693.9	6599.0
45°	263.0	275.0	300.5	337.3	581.0	1154.3	2566.1	6439.8	7874.9	7975.9	6793.4
47.5°	263.0	277.1	303.9	349.3	545.7	1112.0	2634.6	6750.3	8157.0	8206.4	7022.3
50°	260.9	276.5	313.9	337.3	494.1	1058.3	2795.8	7141.1	8462.4	8467.9	7312.3
52.5°	256.6	275.0	337.9	330.2	434.6	987.6	3013.6	7643.2	8914.1	8948.0	7766.0
55°	251.7	272.9	331.5	313.9	386.1	903.5	3191.7	8253.1	9548.9	9642.8	8433.5
57.5°	245.2	270.1	321.0	291.3	354.2	795.2	3256.1	8699.9	9992.1	10228.1	9185.5
60°	239.7	267.9	289.8	277.8	334.3	704.1	3131.5	8611.5	9961.7	10470.6	9852.1
62.5°	233.9	270.1	264.3	269.4	325.1	645.4	2806.5	7903.8	9457.7	10220.4	10346.3
65°	227.7	251.0	249.5	262.2	323.1	622.1	2326.4	6842.8	8483.6	9429.5	10462.9
67.5°	219.1	231.8	238.8	253.2	330.2	601.6	1877.5	5644.6	7129.8	8243.9	9854.9
70°	209.9	220.6	228.3	241.8	325.9	592.4	1561.6	4451.3	5657.4	6756.6	8655.4
72.5°	198.0	207.2	214.2	226.8	321.6	587.4	1319.1	3584.8	4223.8	5019.0	7037.3
75°	183.8	192.2	197.3	209.9	308.2	538.0	1037.1	3033.3	3160.6	3491.5	5605.0
77.5°	167.6	174.0	178.1	192.2	272.9	447.5	750.1	2339.9	2454.4	2534.9	4297.2
80°	148.5	154.7	156.9	170.3	226.2	349.9	489.2	1728.3	1835.7	1854.1	2806.5
82.5°	126.5	132.9	132.9	145.5	185.1	251.7	321.0	1184.1	1205.3	1267.5	1983.6
85°	101.9	106.8	106.8	113.2	143.6	188.1	220.6	594.5	588.1	671.5	1718.5
87.5°	72.8	76.4	79.8	81.3	102.5	124.3	132.9	181.0	119.4	137.2	1103.4
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-03-LED-E1-SLR-800

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7	4344.7
2.5°	4990.8	5031.0	4989.9	4960.4	4832.4	4727.1	4586.3	4514.2
5°	5364.7	5467.2	5432.5	5308.2	5040.9	4740.4	4399.1	4245.0
7.5°	5319.5	5557.7	5563.3	5330.9	4937.1	4494.5	4032.3	3813.1
10°	4967.5	5272.0	5359.1	5133.5	4715.8	4221.0	3690.7	3440.6
12.5°	4574.3	4872.7	4939.2	4861.3	4512.3	4015.2	3477.4	3231.9
15°	4252.7	4386.5	4465.4	4533.5	4337.7	3933.2	3465.2	3195.9
17.5°	4056.9	4042.1	4064.8	4182.7	4215.9	4027.1	3649.0	3352.2
20°	3986.3	3759.4	3753.6	3916.3	4158.8	4251.4	4008.1	3651.8
22.5°	4025.2	3657.6	3610.9	3803.9	4189.1	4574.3	4478.9	4072.5
25°	4159.4	3666.1	3628.4	3815.3	4299.4	4918.7	4987.2	4616.7
27.5°	4370.8	3719.8	3670.2	3861.9	4445.7	5207.8	5487.7	5144.2
30°	4571.6	3813.1	3751.5	3953.7	4579.3	5322.3	5794.6	5555.6
32.5°	4815.5	3987.8	3879.5	4122.6	4744.7	5504.6	6068.1	5896.3
35°	5054.4	4236.4	4102.3	4383.5	4929.2	5731.7	6380.5	6331.8
37.5°	5316.7	4561.7	4450.7	4720.7	5181.7	5945.7	6779.2	6842.2
40°	5596.6	4992.9	4861.3	5212.7	5573.3	6214.5	7195.7	7346.8
42.5°	5878.7	5471.5	5314.6	5670.7	6003.7	6479.4	7551.8	7776.1
45°	6201.6	5991.1	5916.8	6302.0	6417.4	6731.9	7814.8	8093.4
47.5°	6577.9	6580.6	6700.1	6854.1	6834.4	7017.4	8079.3	8376.8
50°	7016.8	7316.4	7580.3	7682.5	7264.2	7324.3	8446.1	8756.4
52.5°	7544.1	8196.6	8523.2	8456.0	7727.3	7698.8	9027.1	9279.5
55°	8203.7	9128.4	9452.8	9404.6	8259.5	8209.2	9751.1	9898.1
57.5°	8967.0	10031.0	10329.4	10113.0	8898.5	8769.3	10349.9	10380.9
60°	9637.9	10746.5	11008.0	10768.3	9543.3	9365.1	10723.8	10573.1
62.5°	10011.1	10988.9	11172.7	10914.7	9985.0	9999.8	10805.7	10469.3
65°	9844.4	10376.0	10435.3	10414.1	9871.2	10368.1	10511.0	9989.3
67.5°	8931.1	8826.4	8926.1	9063.9	8895.7	9883.2	9694.4	8943.7
70°	7322.2	6747.3	6946.2	7038.6	7115.0	8504.8	8414.2	7284.7
72.5°	5518.1	4727.1	4884.0	4865.0	5218.3	6821.6	6543.8	5356.3
75°	3909.9	3205.1	3224.8	3217.1	3641.3	5337.1	4738.5	3664.6
77.5°	2735.6	2322.2	2332.9	2376.5	2448.0	4025.2	3385.3	2677.0
80°	1881.1	1762.3	1821.0	1824.6	1696.6	2703.9	2501.1	2148.4
82.5°	1401.1	1225.0	1210.8	1231.4	1329.6	2190.8	1922.0	1490.1
85°	1147.3	725.3	583.2	731.0	1178.3	2169.6	1276.8	786.0
87.5°	646.1	344.3	155.6	288.5	470.2	1436.4	368.9	100.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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