

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: P298918

Luminaire Tested: **GLNA-AF-01-LED-E1-SLL-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298918
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-01-LED-E1-SLL-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Left OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4410.3 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

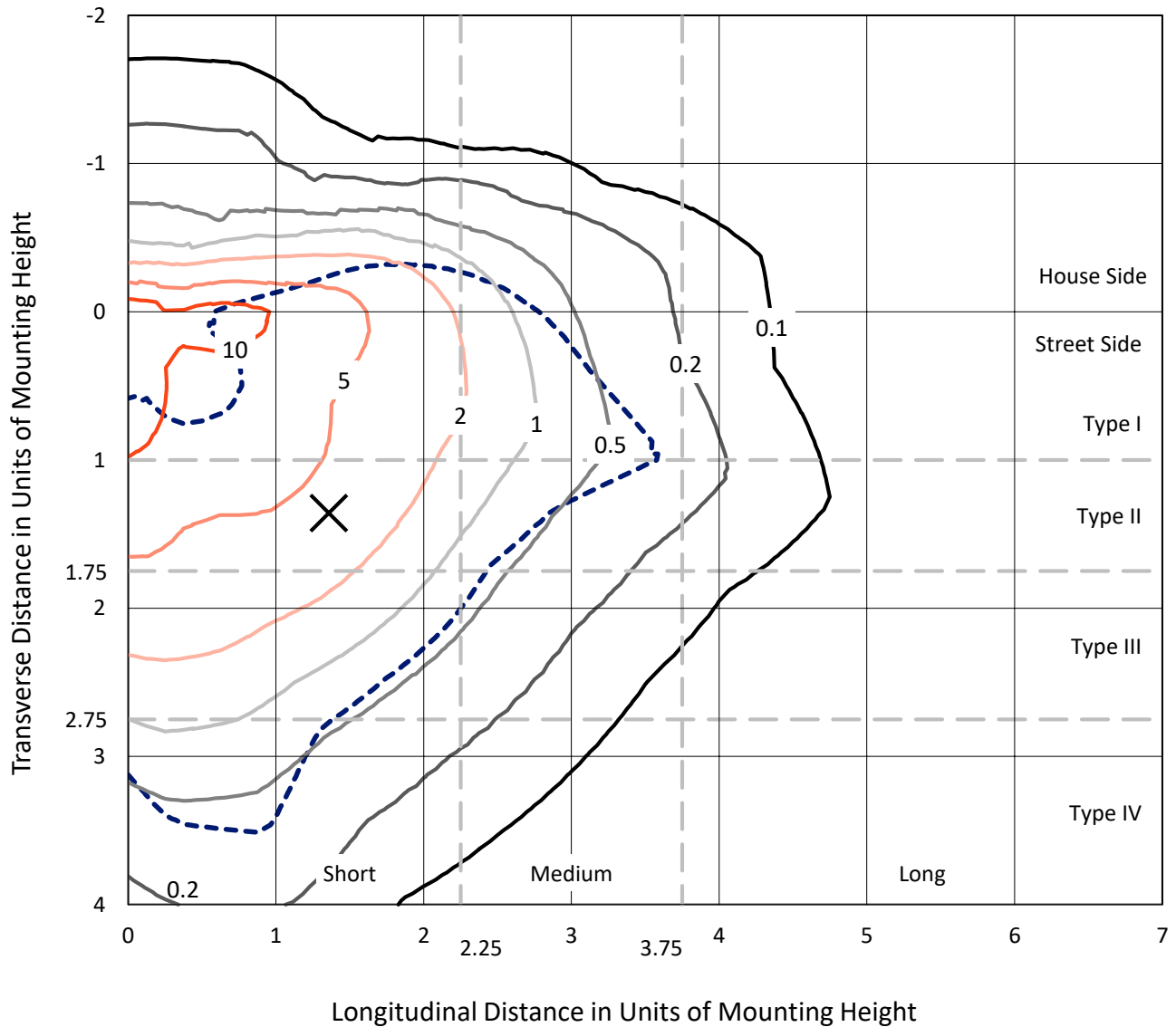
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P298918
 CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

Iso-Footcandle Lines of Horizontal Illumination

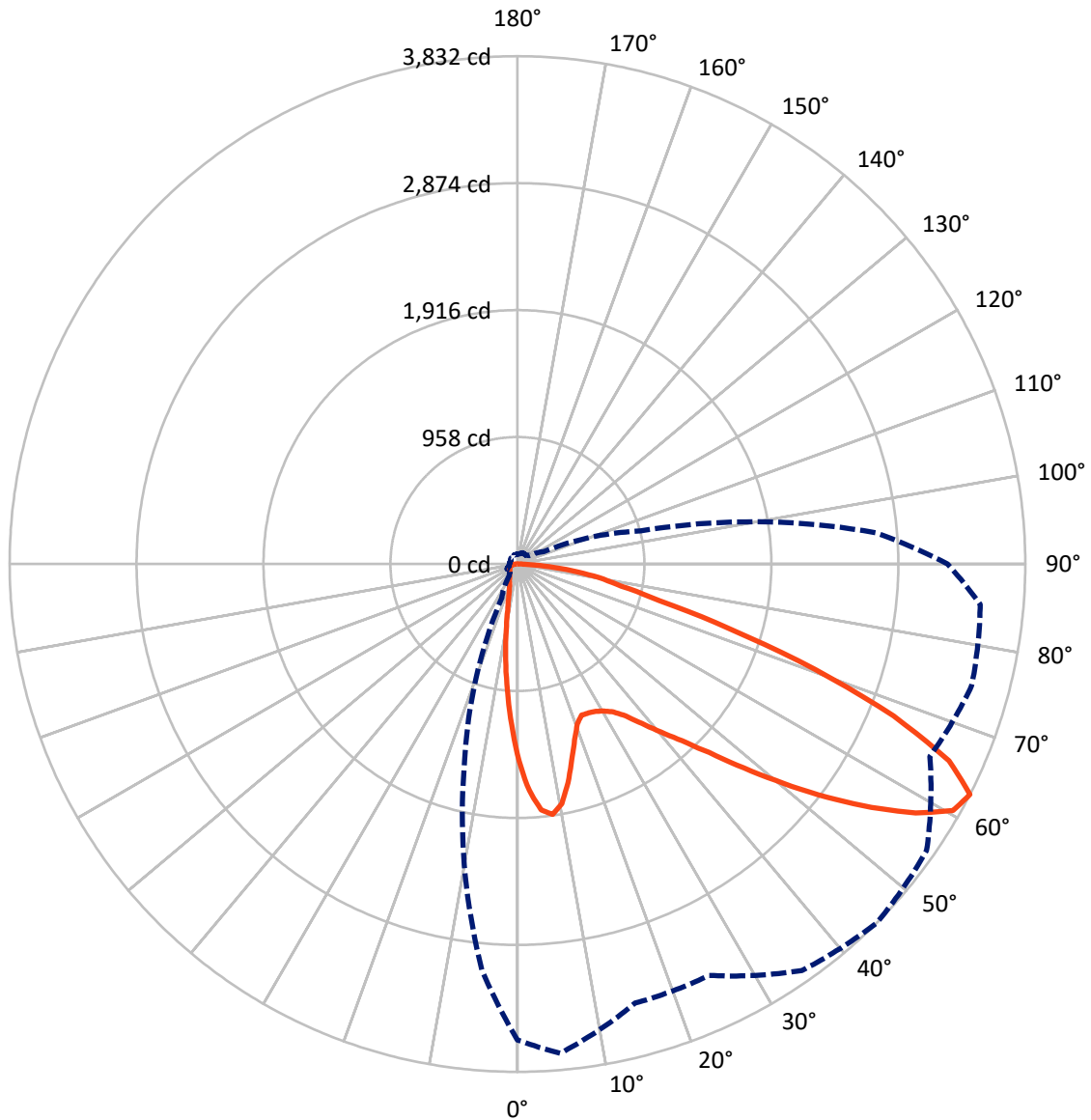
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.5 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P298918
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P298918

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	729.8	0.0	729.8
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	3680.5	0.0	3680.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	4410.3	0.0	4410.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	2.5
10°-20°	198.9	4.5
20°-30°	290.0	6.6
30°-40°	446.6	10.1
40°-50°	657.3	14.9
50°-60°	964.2	21.9
60°-70°	1077.8	24.4
70°-80°	527.7	12.0
80°-90°	139.3	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°	4410.3	100.0
0°-180°	4410.3	100.0



REPORT NUMBER: P298918

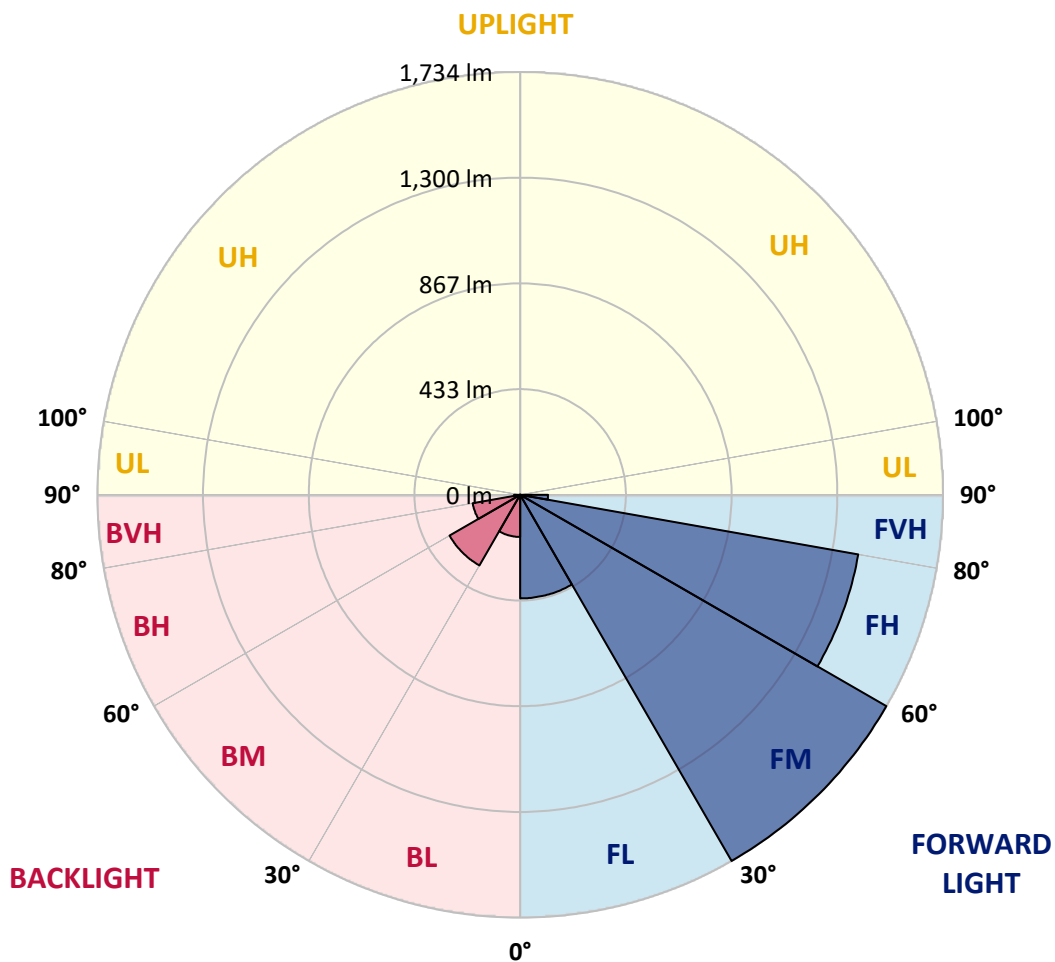
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	424.7	9.6			
FM (30°-60°)	1733.7	39.3			
FH (60°-80°)	1407.6	31.9			G1/1800
FVH (80°-90°)	114.4	2.6			G2/225
BL (0°-30°)	172.7	3.9	B1/500		
BM (30°-60°)	334.4	7.6	B1/1000		
BH (60°-80°)	197.9	4.5	B1/500		G1/500
BVH (80°-90°)	24.9	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-G2

Type IV Short





REPORT NUMBER: P298918
 CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1
2.5°	1548.2	1573.0	1621.2	1657.3	1701.2	1711.4	1725.5	1711.6	1687.2	1654.7	1644.0
5°	1455.9	1508.7	1625.8	1728.9	1820.5	1863.1	1875.1	1839.8	1768.9	1675.5	1618.5
7.5°	1307.7	1382.9	1541.4	1693.2	1828.2	1908.0	1906.0	1824.3	1693.7	1541.6	1450.3
10°	1179.9	1265.8	1447.7	1617.3	1760.6	1838.0	1808.0	1703.7	1547.7	1372.7	1273.6
12.5°	1108.5	1192.6	1377.1	1547.5	1667.2	1693.9	1671.1	1568.8	1421.9	1244.9	1158.1
15°	1096.0	1188.5	1349.0	1487.6	1554.8	1531.6	1504.3	1458.5	1354.7	1203.7	1113.3
17.5°	1149.7	1251.5	1381.2	1445.9	1434.5	1394.0	1386.3	1391.4	1366.4	1249.5	1145.3
20°	1252.5	1374.6	1458.1	1426.3	1343.1	1287.3	1289.3	1367.2	1441.1	1365.7	1246.6
22.5°	1396.7	1536.1	1568.8	1436.7	1304.6	1238.4	1254.4	1380.5	1560.1	1535.4	1383.4
25°	1583.3	1710.5	1686.9	1474.5	1308.4	1244.5	1257.3	1426.6	1700.7	1705.1	1552.7
27.5°	1764.2	1882.1	1786.0	1524.7	1324.5	1258.8	1275.8	1499.0	1835.0	1889.3	1746.1
30°	1905.3	1987.3	1825.3	1570.5	1356.0	1286.6	1307.7	1567.8	1896.2	2013.7	1894.9
32.5°	2022.2	2081.1	1887.9	1627.3	1413.9	1330.5	1367.6	1651.5	1984.2	2132.1	2040.6
35°	2171.5	2188.3	1965.7	1690.5	1503.4	1406.9	1452.9	1733.4	2068.1	2251.5	2184.2
37.5°	2346.6	2325.0	2039.1	1777.1	1619.1	1526.4	1564.5	1823.4	2137.1	2387.1	2330.8
40°	2519.7	2467.7	2131.4	1911.4	1787.8	1667.2	1712.3	1919.4	2201.6	2522.8	2474.1
42.5°	2666.9	2590.0	2222.2	2059.0	1944.8	1822.7	1876.5	2016.1	2263.2	2638.7	2598.5
45°	2775.7	2680.2	2308.8	2200.9	2161.3	2029.2	2054.7	2126.9	2329.8	2735.5	2700.8
47.5°	2872.9	2770.8	2406.7	2343.9	2350.7	2297.8	2256.8	2255.9	2408.5	2814.5	2797.5
50°	3003.1	2896.7	2511.9	2491.3	2634.8	2599.6	2509.2	2406.4	2507.8	2904.2	2902.3
52.5°	3182.5	3096.0	2640.4	2650.1	2900.1	2923.1	2811.0	2587.4	2663.4	3068.8	3057.2
55°	3394.7	3344.2	2815.5	2832.7	3225.4	3241.9	3130.6	2813.5	2892.3	3307.2	3274.9
57.5°	3560.2	3549.6	3007.5	3051.9	3468.4	3542.6	3440.3	3075.4	3150.3	3507.9	3426.9
60°	3626.2	3677.8	3211.9	3272.9	3693.1	3775.2	3685.6	3305.4	3378.9	3591.1	3416.5
62.5°	3590.6	3705.9	3429.6	3424.5	3743.3	3831.7	3768.7	3433.4	3548.4	3505.2	3243.7
65°	3425.9	3604.8	3555.9	3385.4	3571.6	3578.9	3558.5	3376.2	3588.4	3233.9	2909.5
67.5°	3067.3	3324.8	3389.5	3050.9	3108.5	3061.3	3027.1	3063.0	3379.8	2827.3	2445.2
70°	2498.4	2885.8	2916.7	2440.2	2414.0	2382.2	2314.1	2511.2	2968.4	2317.3	1940.3
72.5°	1837.0	2244.3	2339.5	1789.7	1668.5	1675.0	1621.2	1892.4	2413.5	1721.3	1448.6
75°	1256.8	1625.1	1830.5	1248.8	1103.4	1106.0	1099.2	1340.9	1922.3	1197.4	1084.0
77.5°	918.2	1161.0	1380.5	839.5	815.0	800.0	796.4	938.2	1473.8	869.4	841.7
80°	736.7	857.8	927.3	581.9	625.7	624.5	604.4	645.1	962.5	635.9	629.5
82.5°	511.1	659.2	751.3	456.0	422.3	415.2	420.2	480.5	680.3	434.7	413.3
85°	269.6	437.8	744.1	404.1	250.7	200.0	248.8	393.4	589.4	230.4	201.6
87.5°	34.5	126.6	492.6	161.3	98.9	53.3	118.1	221.5	378.5	47.0	41.0
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: P298918

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1
2.5°	1616.6	1584.4	1542.2	1503.1	1462.6	1422.3	1369.7	1336.8	1314.0	1309.6	1300.0
5°	1577.4	1470.2	1389.2	1319.1	1255.6	1165.8	1116.2	1074.9	1052.9	1050.8	1045.4
7.5°	1396.2	1248.3	1139.0	1039.8	949.9	877.4	797.3	760.1	744.8	748.4	752.0
10°	1207.8	1042.5	916.9	815.5	736.3	675.2	611.0	567.6	537.5	531.4	530.2
12.5°	1070.1	888.8	766.9	695.3	634.0	576.5	508.4	457.2	418.2	404.8	396.0
15°	1011.9	813.6	685.9	608.8	541.1	468.1	404.8	351.3	315.4	303.8	297.3
17.5°	1024.3	792.8	630.1	531.4	444.9	368.7	289.0	243.1	221.5	216.0	216.0
20°	1089.3	788.9	584.0	460.2	352.2	264.0	198.6	172.4	165.4	164.6	166.5
22.5°	1180.5	802.5	549.7	398.4	273.7	192.7	154.7	145.0	141.8	142.6	144.7
25°	1316.2	848.3	524.7	343.3	214.8	157.8	137.9	132.1	130.6	132.6	135.3
27.5°	1477.2	894.1	509.1	301.8	181.3	144.3	131.1	125.1	126.1	128.5	130.9
30°	1618.5	931.8	484.7	272.3	170.9	145.0	131.1	122.9	122.0	122.5	123.2
32.5°	1745.4	957.2	456.0	244.1	147.4	128.8	122.5	121.3	115.9	113.9	114.2
35°	1854.7	957.2	438.8	227.7	132.1	114.2	104.0	98.0	95.2	95.5	98.2
37.5°	1960.2	938.0	430.3	218.4	123.9	108.6	99.6	94.3	90.7	90.0	90.4
40°	2053.2	910.1	420.7	214.5	117.6	105.2	96.8	92.3	88.5	87.3	87.5
42.5°	2127.9	887.5	410.0	209.5	113.6	102.8	94.8	90.9	86.6	85.3	85.1
45°	2208.6	880.1	396.0	199.3	115.6	103.0	94.3	90.2	85.8	84.4	83.9
47.5°	2315.1	903.6	381.4	187.2	119.8	104.3	95.0	90.2	85.6	84.4	83.9
50°	2449.1	958.8	362.9	169.4	115.6	107.7	94.8	89.4	85.6	84.4	83.4
52.5°	2621.3	1033.5	338.7	149.1	113.2	115.9	94.3	88.0	84.4	82.7	81.0
55°	2830.5	1094.6	309.8	132.4	107.7	113.6	93.6	86.3	82.5	80.0	78.5
57.5°	2983.7	1116.6	272.8	121.5	99.9	110.0	92.6	84.1	80.0	78.1	76.2
60°	2953.4	1074.0	241.5	114.7	95.2	99.4	91.8	82.2	77.8	76.4	74.6
62.5°	2710.8	962.5	221.3	111.5	92.3	90.7	92.6	80.3	75.9	74.4	73.9
65°	2346.8	797.8	213.4	110.8	90.0	85.6	86.1	78.1	73.7	72.5	72.0
67.5°	1935.9	643.9	206.4	113.2	86.8	81.9	79.6	75.2	71.5	70.3	69.3
70°	1526.6	535.6	203.1	111.8	83.0	78.3	75.7	72.0	68.9	67.6	66.9
72.5°	1229.3	452.4	201.4	110.3	77.8	73.4	71.0	67.8	64.5	64.0	63.3
75°	1040.4	355.7	184.6	105.7	72.0	67.6	66.0	63.0	59.7	59.7	59.2
77.5°	802.5	257.2	153.5	93.6	66.0	61.1	59.7	57.5	53.6	54.3	54.1
80°	592.8	167.8	120.0	77.6	58.5	53.8	53.0	50.9	46.7	47.8	47.8
82.5°	406.1	110.0	86.3	63.5	49.9	45.6	45.6	43.4	38.8	39.3	40.8
85°	203.9	75.7	64.5	49.2	38.8	36.6	36.6	34.9	30.3	30.5	32.5
87.5°	62.1	45.6	42.7	35.2	27.9	27.4	26.1	24.9	22.0	21.8	23.1
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: P298918

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1
2.5°	1285.1	1271.3	1254.7	1217.8	1205.4	1204.6	1215.9	1204.2	1226.5	1217.1	1227.5
5°	1036.4	1022.9	1004.2	957.2	928.5	909.1	900.0	872.8	892.4	878.1	890.1
7.5°	762.2	765.4	753.0	725.4	663.1	631.8	613.4	596.9	611.2	609.7	632.5
10°	535.8	544.2	535.6	507.7	457.2	440.0	443.4	449.9	468.7	478.3	513.5
12.5°	385.7	385.3	379.7	354.7	321.5	323.4	337.2	348.6	365.8	376.0	411.9
15°	288.0	283.6	281.2	260.8	241.9	246.1	252.9	254.1	265.0	271.1	300.2
17.5°	217.7	219.9	222.5	208.0	193.7	191.0	185.7	179.1	182.4	183.5	198.0
20°	172.8	181.6	188.2	177.9	163.5	155.6	148.8	144.5	144.5	144.3	148.4
22.5°	151.0	157.3	164.4	157.3	144.3	137.4	133.6	130.2	129.7	129.7	133.6
25°	139.2	143.8	150.6	145.8	136.0	130.9	127.3	122.9	121.3	120.7	123.4
27.5°	133.3	135.3	138.7	134.3	126.1	123.6	122.7	118.8	116.6	115.4	118.1
30°	123.4	122.9	123.2	118.8	112.2	112.0	113.6	114.4	113.6	113.4	117.6
32.5°	114.2	113.2	112.9	109.1	103.0	101.6	103.0	104.5	106.2	108.6	113.4
35°	102.6	105.0	106.4	103.0	95.7	91.4	89.7	87.0	85.6	85.6	91.1
37.5°	93.3	98.9	101.1	98.0	90.0	83.9	81.0	80.5	80.7	81.7	87.0
40°	90.2	94.3	96.2	93.1	85.1	79.6	77.8	77.4	77.8	79.3	84.6
42.5°	88.2	91.1	90.9	87.0	80.5	76.7	75.7	75.2	75.7	77.1	83.0
45°	86.6	88.5	86.6	81.9	75.9	73.9	74.1	73.9	74.4	75.9	81.5
47.5°	85.1	85.8	83.4	78.8	72.5	72.0	73.0	73.7	74.1	75.5	81.2
50°	83.0	83.0	80.7	75.9	69.6	69.8	71.0	72.7	73.0	74.4	79.1
52.5°	80.3	80.0	78.5	73.9	67.1	67.8	67.8	69.8	70.3	72.0	76.9
55°	78.1	77.6	76.9	72.5	65.0	66.2	65.5	66.2	67.4	69.1	74.4
57.5°	76.2	75.2	75.2	71.2	63.3	63.7	62.1	63.0	64.5	66.0	71.5
60°	74.1	73.2	73.7	69.6	60.6	60.1	59.4	61.3	61.9	63.5	69.1
62.5°	72.0	71.2	71.5	67.6	58.7	57.5	57.5	59.2	59.4	61.9	67.1
65°	70.3	69.3	69.1	65.7	56.5	55.1	55.8	56.5	57.0	59.4	64.5
67.5°	68.6	66.7	66.7	64.0	54.1	52.6	54.1	53.8	54.6	56.7	60.8
70°	66.4	63.7	64.0	62.8	51.6	49.9	51.2	50.9	51.4	52.8	57.0
72.5°	63.0	60.8	61.3	60.8	49.2	46.7	47.2	47.2	47.2	48.5	52.8
75°	58.7	57.0	58.5	59.7	46.3	42.9	43.4	43.4	42.7	43.4	48.7
77.5°	53.3	52.3	57.2	55.6	42.9	38.8	38.8	38.3	36.9	37.9	43.6
80°	47.5	46.7	52.8	46.5	39.0	33.8	33.2	32.0	30.5	31.2	37.1
82.5°	41.5	40.8	44.4	35.7	33.8	27.9	26.7	24.5	23.1	23.8	29.0
85°	34.0	34.0	34.2	26.9	25.7	21.3	19.9	17.0	15.3	15.7	20.9
87.5°	24.2	24.9	23.1	18.4	15.3	11.9	10.9	9.2	7.7	9.0	10.9
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: P298918

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-800

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1
2.5°	1280.8	1307.5	1337.8	1376.5	1409.8	1464.3	1516.7	1548.2
5°	957.7	1002.0	1057.2	1128.4	1194.6	1293.9	1392.6	1455.9
7.5°	685.3	732.9	792.5	881.2	974.9	1101.6	1232.1	1307.7
10°	567.1	615.9	666.0	725.9	802.5	940.4	1094.6	1179.9
12.5°	469.1	521.3	575.3	638.4	709.4	832.5	1010.2	1108.5
15°	359.0	417.2	481.0	560.8	649.7	792.1	989.4	1096.0
17.5°	246.1	311.1	389.3	487.8	596.6	778.9	1026.8	1149.7
20°	169.4	216.7	300.4	415.8	546.8	777.3	1098.5	1252.5
22.5°	141.8	162.9	224.0	349.6	509.1	798.1	1209.8	1396.7
25°	131.1	143.8	178.9	292.1	481.7	846.1	1363.1	1583.3
27.5°	124.9	136.2	162.4	254.6	460.2	901.9	1512.1	1764.2
30°	127.3	138.9	157.8	235.4	430.8	948.4	1644.5	1905.3
32.5°	114.7	119.8	135.3	218.4	409.7	987.4	1760.4	2022.2
35°	97.7	106.6	120.7	210.5	410.2	1013.6	1886.7	2171.5
37.5°	93.1	102.1	112.2	207.5	415.8	1041.6	2031.6	2346.6
40°	90.2	98.5	107.2	205.9	421.1	1067.0	2173.8	2519.7
42.5°	88.2	95.7	106.6	200.0	423.8	1089.8	2290.6	2666.9
45°	88.0	95.7	108.6	194.2	427.9	1114.3	2388.6	2775.7
47.5°	88.2	98.9	105.0	187.2	427.9	1155.2	2503.5	2872.9
50°	87.3	104.3	101.1	177.2	418.0	1232.8	2661.0	3003.1
52.5°	86.8	103.6	93.6	162.0	400.8	1356.0	2863.0	3182.5
55°	85.6	99.9	88.2	139.2	380.7	1490.3	3079.3	3394.7
57.5°	84.4	88.5	85.3	119.3	349.6	1584.8	3228.1	3560.2
60°	94.5	77.4	83.0	109.6	308.1	1610.7	3222.3	3626.2
62.5°	87.5	72.5	79.8	107.4	279.1	1538.0	3073.4	3590.6
65°	68.6	69.3	76.7	113.6	271.3	1345.4	2809.6	3425.9
67.5°	62.8	66.2	73.4	121.8	272.1	1077.1	2415.5	3067.3
70°	59.2	62.8	69.8	125.8	274.0	803.0	1909.7	2498.4
72.5°	55.1	58.2	65.7	126.6	261.3	583.3	1471.9	1837.0
75°	50.1	53.0	59.9	110.3	216.5	404.6	1125.9	1256.8
77.5°	44.6	46.7	52.6	85.1	160.8	258.9	845.1	918.2
80°	38.1	39.3	44.2	62.3	110.0	162.0	668.7	736.7
82.5°	30.5	31.0	34.2	46.7	71.5	104.0	447.8	511.1
85°	21.6	21.6	23.5	34.0	48.7	66.0	243.1	269.6
87.5°	10.2	10.4	10.4	18.7	25.4	33.5	56.0	34.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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