

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: P299335

Luminaire Tested: **GLNA-AF-01-LED-E1-SLR-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299335
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-01-LED-E1-SLR-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K 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: 4743.1 lumens
Efficiency: N/A
Efficacy: 80.4 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

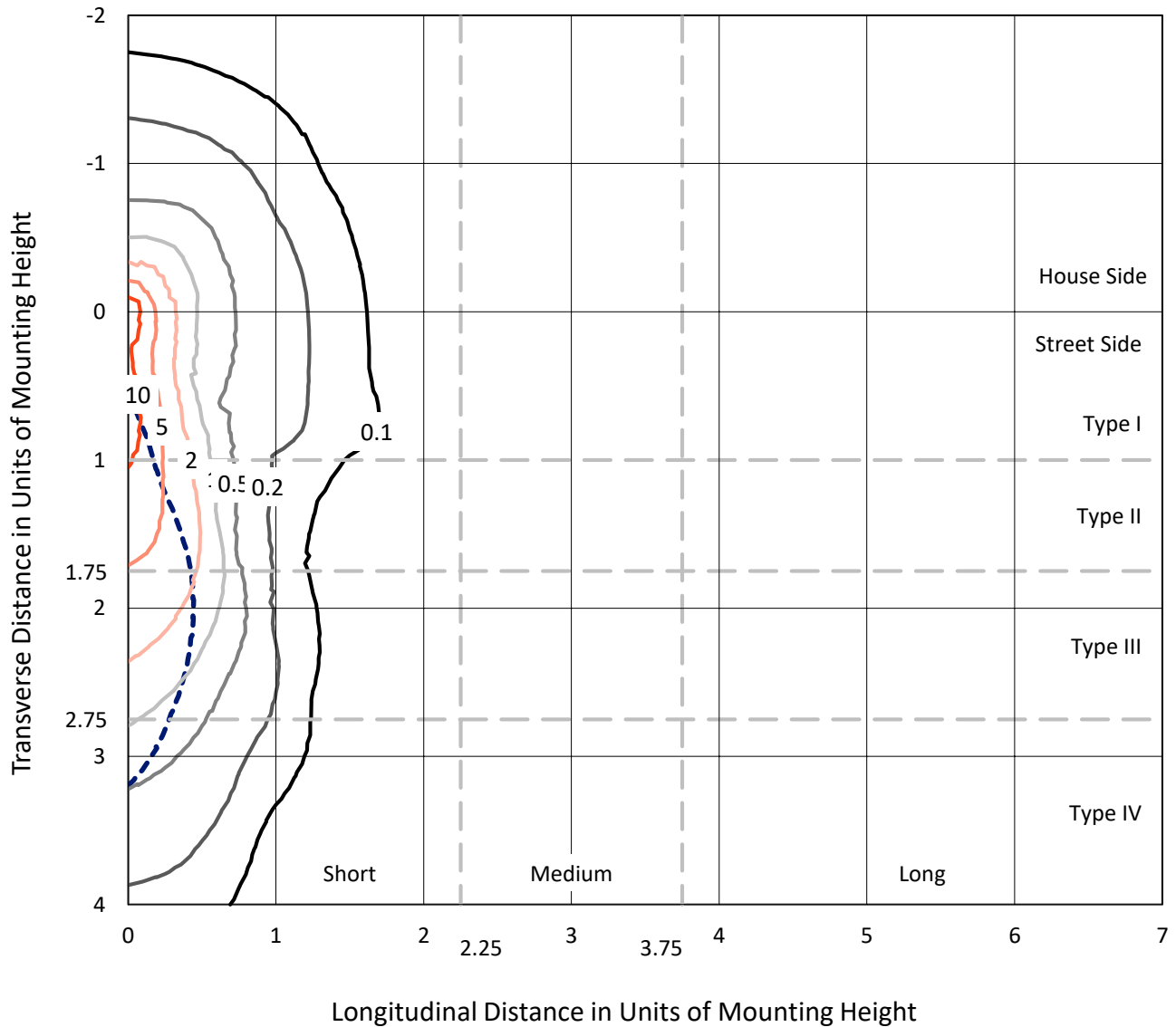
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299335
 CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

Iso-Footcandle Lines of Horizontal Illumination

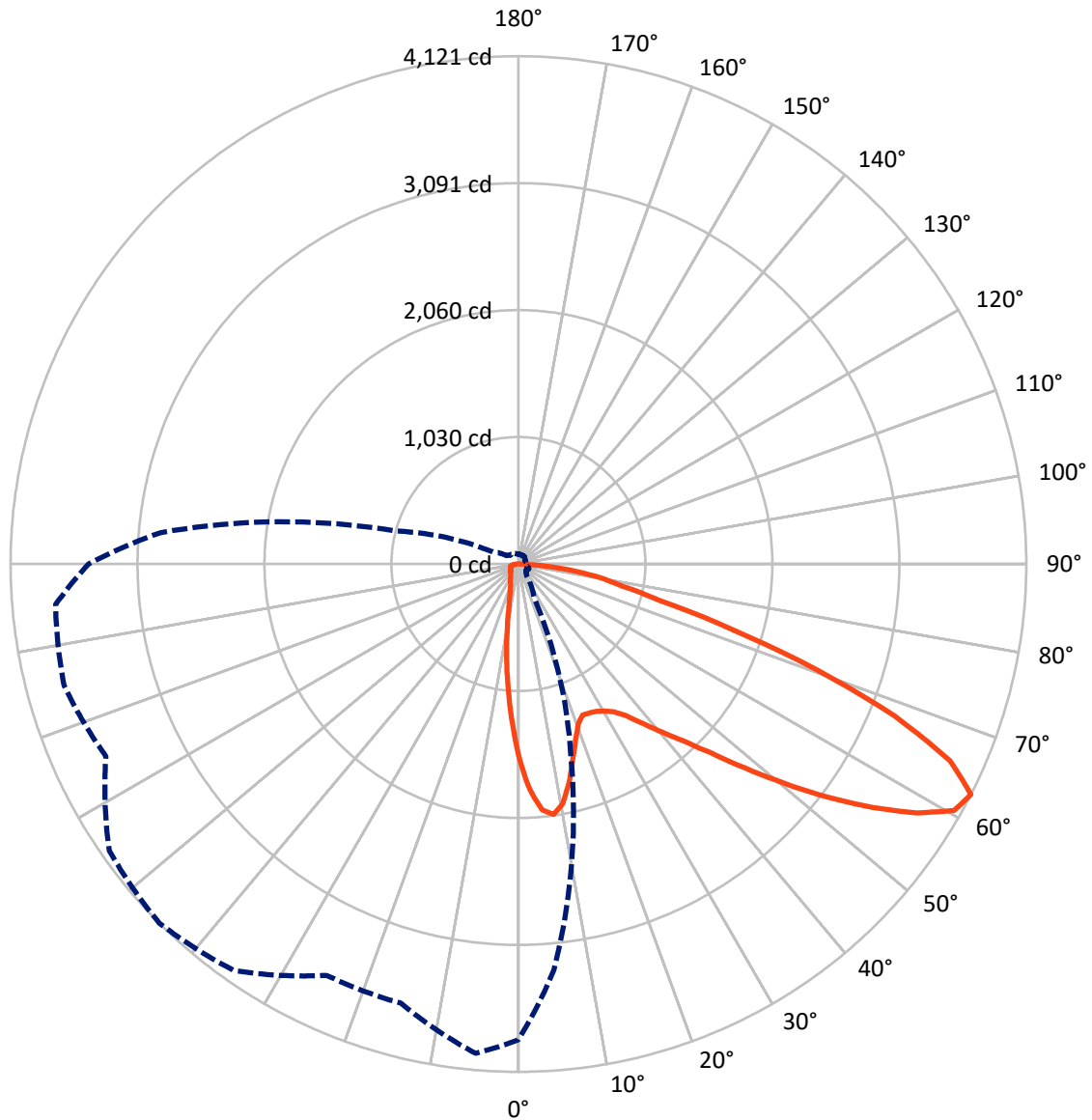
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P299335
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299335

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	784.9	0.0	784.9
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	3958.2	0.0	3958.2
	% Fixture	83.5	0.0	83.5
Total	Lumens	4743.1	0.0	4743.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.7	2.5
10°-20°	213.9	4.5
20°-30°	311.9	6.6
30°-40°	480.3	10.1
40°-50°	706.9	14.9
50°-60°	1036.9	21.9
60°-70°	1159.1	24.4
70°-80°	567.5	12.0
80°-90°	149.8	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°	4743.1	100.0
0°-180°	4743.1	100.0



REPORT NUMBER: P299335

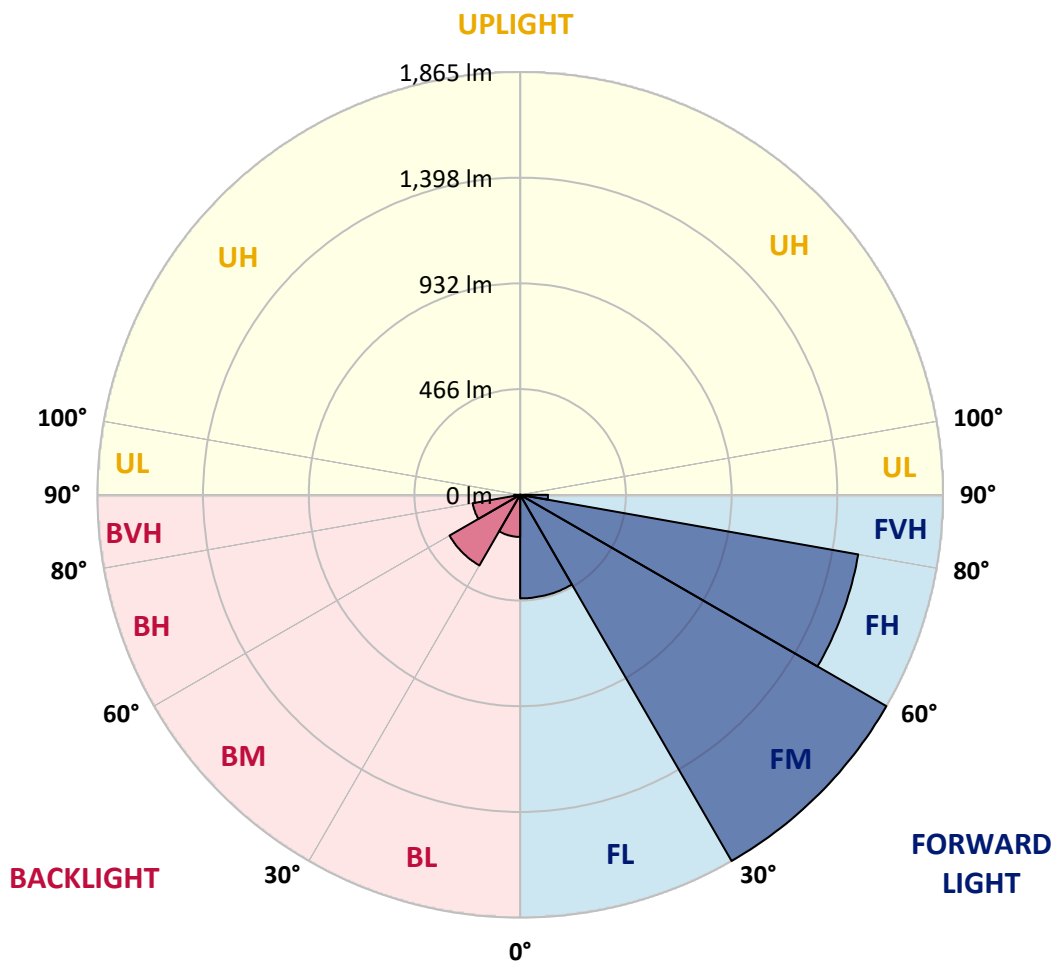
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	456.7	9.6			
FM	(30°-60°)	1864.5	39.3			
FH	(60°-80°)	1513.8	31.9			G1/1800
FVH	(80°-90°)	123.0	2.6			G2/225
BL	(0°-30°)	185.7	3.9	B1/500		
BM	(30°-60°)	359.6	7.6	B1/1000		
BH	(60°-80°)	212.8	4.5	B1/500		G1/500
BVH	(80°-90°)	26.8	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: P299335

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5
2.5°	1665.0	1631.1	1574.8	1516.1	1480.5	1438.7	1406.1	1377.5	1320.1	1308.9	1319.0
5°	1565.7	1497.7	1391.5	1284.6	1213.4	1137.0	1077.6	1029.9	957.1	944.4	959.7
7.5°	1406.4	1325.0	1184.8	1048.4	947.7	852.3	788.2	737.1	680.2	655.8	657.3
10°	1269.0	1177.2	1011.4	863.1	780.6	716.2	662.2	609.8	552.2	514.4	504.0
12.5°	1192.0	1086.5	895.3	762.9	686.5	618.8	560.6	504.5	443.0	404.4	393.5
15°	1178.8	1064.0	851.8	698.8	603.0	517.3	448.7	386.1	322.8	291.5	284.9
17.5°	1236.4	1104.2	837.7	641.6	524.6	418.7	334.5	264.7	213.0	197.4	196.1
20°	1346.9	1181.4	835.9	588.0	447.2	323.1	233.1	182.3	159.6	155.1	155.4
22.5°	1502.1	1301.1	858.3	547.6	376.0	240.9	175.2	152.5	143.7	139.5	139.5
25°	1702.8	1465.9	909.9	518.1	314.2	192.4	154.6	141.1	132.7	129.8	130.4
27.5°	1897.4	1626.2	969.9	494.9	273.7	174.7	146.5	134.3	127.0	124.1	125.4
30°	2049.1	1768.6	1020.0	463.3	253.1	169.7	149.4	136.9	126.5	122.0	122.3
32.5°	2174.8	1893.2	1062.0	440.6	234.9	145.5	128.8	123.3	122.0	116.8	114.2
35°	2335.4	2029.0	1090.1	441.2	226.3	129.8	114.7	105.1	98.0	92.0	92.0
37.5°	2523.6	2184.9	1120.1	447.2	223.2	120.7	109.8	100.1	93.6	87.9	86.8
40°	2709.8	2337.8	1147.5	452.9	221.3	115.2	105.8	97.0	91.0	85.2	83.7
42.5°	2868.1	2463.4	1172.0	455.8	215.1	114.7	103.0	94.9	89.2	82.9	81.4
45°	2985.2	2568.7	1198.4	460.2	208.9	116.8	103.0	94.6	87.6	81.6	80.0
47.5°	3089.7	2692.3	1242.4	460.2	201.3	112.9	106.4	94.9	87.4	81.1	79.8
50°	3229.7	2861.8	1325.8	449.5	190.6	108.7	112.1	93.9	85.0	80.0	78.5
52.5°	3422.6	3079.0	1458.3	431.0	174.2	100.6	111.3	93.4	82.6	77.4	75.6
55°	3650.8	3311.5	1602.7	409.3	149.7	94.9	107.4	92.0	80.0	74.3	72.5
57.5°	3828.9	3471.6	1704.4	376.0	128.3	91.8	95.2	90.8	76.9	70.9	69.4
60°	3899.8	3465.4	1732.3	331.4	117.8	89.2	83.2	101.7	74.3	68.3	66.5
62.5°	3861.5	3305.3	1654.1	300.1	115.5	85.8	78.0	94.1	72.2	66.5	63.9
65°	3684.4	3021.6	1446.8	291.7	122.3	82.4	74.6	73.8	69.4	63.9	61.3
67.5°	3298.8	2597.7	1158.4	292.5	130.9	79.0	71.2	67.6	65.4	61.0	58.6
70°	2686.9	2053.8	863.5	294.7	135.3	75.1	67.6	63.6	61.3	56.8	55.3
72.5°	1975.6	1582.9	627.4	281.1	136.1	70.6	62.6	59.2	56.8	52.2	50.8
75°	1351.6	1210.8	435.2	232.9	118.6	64.4	57.1	54.0	52.4	46.6	45.9
77.5°	987.4	908.9	278.5	172.9	91.5	56.6	50.4	48.0	47.0	40.7	39.6
80°	792.4	719.1	174.2	118.4	67.0	47.4	42.2	41.0	39.9	33.6	32.8
82.5°	549.6	481.6	111.8	76.9	50.4	36.8	33.4	32.8	31.3	25.6	24.8
85°	289.9	261.5	70.9	52.4	36.5	25.3	23.2	23.2	22.4	17.0	16.4
87.5°	37.0	60.2	36.0	27.4	20.0	11.2	11.2	11.0	11.8	9.6	8.4
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: P299335

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5
2.5°	1295.1	1307.6	1295.6	1296.4	1309.7	1349.3	1367.3	1382.1	1398.1	1408.5	1413.1
5°	938.7	967.9	977.7	998.6	1029.4	1080.0	1100.0	1114.6	1124.3	1130.0	1132.4
7.5°	642.0	659.6	679.5	713.1	780.1	809.9	823.1	819.7	808.8	804.9	801.0
10°	483.9	476.9	473.2	491.8	546.0	576.0	585.4	576.2	570.2	571.6	578.0
12.5°	374.9	362.7	347.9	345.7	381.5	408.3	414.3	414.8	425.8	435.4	449.8
15°	273.3	271.9	264.7	260.2	280.5	302.5	305.1	309.7	319.7	326.7	339.2
17.5°	192.7	199.7	205.5	208.3	223.7	239.3	236.5	234.1	232.3	232.3	238.3
20°	155.4	160.1	167.4	175.7	191.4	202.3	195.3	185.9	179.1	177.0	177.8
22.5°	140.0	143.7	147.8	155.1	169.2	176.8	169.2	162.4	155.7	153.3	152.5
25°	132.2	136.9	140.8	146.3	156.7	161.9	154.6	149.7	145.5	142.6	140.5
27.5°	127.8	131.9	133.0	135.6	144.4	149.1	145.5	143.4	140.8	138.2	135.6
30°	123.1	122.3	120.5	120.7	127.8	132.4	132.2	132.7	132.4	131.7	131.2
32.5°	112.4	110.8	109.2	110.8	117.3	121.5	121.8	122.8	122.8	122.6	124.6
35°	93.6	96.5	98.3	103.0	110.8	114.5	112.9	110.3	105.6	102.7	102.5
37.5°	86.6	87.1	90.2	96.7	105.4	108.7	106.4	100.4	97.2	96.7	97.5
40°	83.2	83.7	85.5	91.5	100.1	103.5	101.4	97.0	94.1	93.9	95.2
42.5°	80.8	81.4	82.4	86.6	93.6	97.8	98.0	94.9	91.5	91.8	93.1
45°	79.5	79.8	79.5	81.6	88.1	93.1	95.2	93.1	90.2	90.8	92.3
47.5°	79.2	78.5	77.4	78.0	84.8	89.7	92.3	91.5	90.2	90.8	92.0
50°	78.2	76.4	75.1	74.8	81.6	86.8	89.2	89.2	89.7	90.8	92.0
52.5°	75.1	73.0	73.0	72.2	79.5	84.5	86.0	86.3	87.1	88.9	90.8
55°	71.2	70.4	71.2	69.9	78.0	82.6	83.4	84.0	84.5	86.0	88.6
57.5°	67.8	66.8	68.6	68.0	76.6	80.8	80.8	81.9	81.9	84.0	86.0
60°	66.0	63.9	64.6	65.2	74.8	79.2	78.8	79.8	80.3	82.2	83.7
62.5°	63.6	61.8	61.8	63.1	72.8	76.9	76.6	77.4	79.5	80.0	81.6
65°	60.8	60.0	59.2	60.8	70.6	74.3	74.6	75.6	77.4	78.0	79.2
67.5°	57.9	58.2	56.6	58.2	68.8	71.7	71.7	73.8	74.6	75.6	76.9
70°	54.8	55.0	53.7	55.6	67.6	68.8	68.6	71.4	72.0	72.8	74.0
72.5°	50.8	50.8	50.4	53.0	65.4	66.0	65.4	67.8	68.0	68.8	69.4
75°	46.6	46.6	46.2	49.8	64.2	62.8	61.3	63.1	63.6	64.2	64.2
77.5°	41.2	41.8	41.8	46.2	59.7	61.6	56.3	57.4	58.2	58.4	57.6
80°	34.4	35.8	36.2	42.0	50.0	56.8	50.4	51.1	51.4	51.4	50.4
82.5°	26.4	28.7	30.0	36.2	38.4	47.7	43.8	44.6	43.8	42.2	41.8
85°	18.2	21.4	23.0	27.6	29.0	36.8	36.5	36.5	35.0	32.8	32.6
87.5°	9.9	11.8	12.8	16.4	19.8	24.8	26.8	26.0	24.8	23.4	23.8
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: P299335

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5
2.5°	1437.7	1473.1	1529.7	1573.0	1616.5	1658.5	1703.9	1738.6	1768.0	1779.5	1814.4
5°	1156.1	1200.4	1253.8	1350.3	1418.7	1494.0	1581.1	1696.3	1740.6	1802.0	1902.3
7.5°	817.4	857.5	943.6	1021.5	1118.3	1225.0	1342.5	1501.5	1559.7	1658.0	1821.5
10°	610.4	657.0	726.1	791.9	877.1	986.1	1121.2	1299.0	1369.6	1476.3	1664.5
12.5°	491.8	546.8	620.0	681.8	747.8	824.7	955.9	1150.8	1245.6	1338.9	1529.2
15°	377.8	435.4	503.5	582.0	654.7	737.6	875.0	1088.3	1197.3	1294.6	1456.9
17.5°	261.5	310.8	396.6	478.4	571.6	677.6	852.6	1101.6	1231.7	1343.8	1469.5
20°	185.4	213.5	283.9	378.9	494.9	628.1	848.4	1171.4	1340.7	1468.7	1549.8
22.5°	155.9	166.3	207.3	294.3	428.4	591.0	863.1	1269.5	1487.7	1651.2	1677.8
25°	142.1	148.4	169.7	231.0	369.2	564.2	912.3	1415.5	1669.7	1833.8	1829.0
27.5°	134.5	141.1	155.1	195.0	324.7	547.6	961.6	1588.7	1877.8	2031.9	1973.5
30°	132.2	141.1	155.9	183.8	292.8	521.2	1002.0	1740.6	2037.9	2165.7	2039.2
32.5°	130.4	131.7	138.4	158.5	262.5	490.4	1029.4	1877.0	2194.6	2292.9	2133.9
35°	105.4	111.8	122.8	142.1	244.8	471.9	1029.4	1994.6	2349.0	2421.4	2224.1
37.5°	101.4	107.2	116.8	133.2	234.9	462.8	1008.8	2108.1	2506.7	2567.2	2298.4
40°	99.4	104.0	113.2	126.5	230.7	452.4	978.8	2208.1	2660.7	2713.2	2367.7
42.5°	97.8	102.0	110.6	122.3	225.3	440.9	954.5	2288.4	2794.5	2837.8	2434.0
45°	97.0	101.4	110.8	124.4	214.3	425.8	946.5	2375.2	2904.6	2941.8	2505.6
47.5°	97.0	102.2	112.1	128.8	201.3	410.1	971.7	2489.8	3008.6	3026.8	2590.1
50°	96.2	102.0	115.8	124.4	182.3	390.3	1031.2	2633.9	3121.2	3123.3	2697.1
52.5°	94.6	101.4	124.6	121.8	160.3	364.3	1111.5	2819.1	3287.9	3300.3	2864.4
55°	92.8	100.6	122.3	115.8	142.4	333.3	1177.2	3044.0	3522.0	3556.6	3110.6
57.5°	90.5	99.6	118.4	107.4	130.6	293.3	1201.0	3208.9	3685.5	3772.5	3388.0
60°	88.4	98.8	106.9	102.5	123.3	259.7	1155.0	3176.3	3674.2	3861.9	3633.8
62.5°	86.3	99.6	97.5	99.4	119.9	238.1	1035.1	2915.2	3488.4	3769.7	3816.1
65°	84.0	92.6	92.0	96.7	119.2	229.5	858.1	2523.9	3129.1	3477.9	3859.1
67.5°	80.8	85.5	88.1	93.4	121.8	221.9	692.5	2081.9	2629.7	3040.7	3634.9
70°	77.4	81.4	84.2	89.2	120.2	218.5	576.0	1641.8	2086.7	2492.1	3192.4
72.5°	73.0	76.4	79.0	83.7	118.6	216.7	486.5	1322.2	1557.9	1851.2	2595.6
75°	67.8	70.9	72.8	77.4	113.7	198.4	382.5	1118.8	1165.8	1287.8	2067.3
77.5°	61.8	64.2	65.7	70.9	100.6	165.0	276.7	863.1	905.3	935.0	1585.0
80°	54.8	57.1	57.9	62.8	83.4	129.1	180.4	637.5	677.1	683.9	1035.1
82.5°	46.6	49.0	49.0	53.7	68.3	92.8	118.4	436.7	444.5	467.5	731.6
85°	37.6	39.4	39.4	41.8	53.0	69.4	81.4	219.3	216.9	247.7	633.8
87.5°	26.8	28.2	29.4	30.0	37.8	45.9	49.0	66.8	44.0	50.6	407.0
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: P299335

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-7027

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5
2.5°	1840.8	1855.6	1840.5	1829.6	1782.4	1743.5	1691.6	1665.0
5°	1978.7	2016.5	2003.7	1957.9	1859.3	1748.4	1622.5	1565.7
7.5°	1962.0	2049.9	2051.9	1966.2	1821.0	1657.7	1487.3	1406.4
10°	1832.2	1944.5	1976.6	1893.4	1739.4	1556.9	1361.3	1269.0
12.5°	1687.2	1797.2	1821.8	1793.0	1664.3	1480.9	1282.6	1192.0
15°	1568.6	1617.9	1647.0	1672.1	1599.9	1450.7	1278.1	1178.8
17.5°	1496.3	1490.9	1499.3	1542.7	1555.0	1485.4	1345.9	1236.4
20°	1470.3	1386.6	1384.5	1444.5	1533.9	1568.1	1478.3	1346.9
22.5°	1484.6	1349.0	1331.8	1403.0	1545.1	1687.2	1652.0	1502.1
25°	1534.1	1352.2	1338.3	1407.2	1585.8	1814.2	1839.5	1702.8
27.5°	1612.1	1372.0	1353.7	1424.4	1639.8	1920.8	2024.1	1897.4
30°	1686.2	1406.4	1383.7	1458.3	1689.0	1963.1	2137.3	2049.1
32.5°	1776.1	1470.8	1430.9	1520.6	1750.0	2030.3	2238.1	2174.8
35°	1864.2	1562.6	1513.1	1616.8	1818.1	2114.1	2353.4	2335.4
37.5°	1961.0	1682.5	1641.6	1741.2	1911.2	2193.0	2500.4	2523.6
40°	2064.3	1841.6	1793.0	1922.6	2055.6	2292.1	2654.0	2709.8
42.5°	2168.3	2018.1	1960.2	2091.6	2214.4	2389.9	2785.4	2868.1
45°	2287.4	2209.7	2182.3	2324.4	2367.0	2483.0	2882.4	2985.2
47.5°	2426.2	2427.2	2471.2	2528.1	2520.8	2588.3	2980.0	3089.7
50°	2588.1	2698.6	2795.9	2833.6	2679.3	2701.5	3115.2	3229.7
52.5°	2782.5	3023.2	3143.7	3118.9	2850.1	2839.6	3329.5	3422.6
55°	3025.8	3366.9	3486.5	3468.8	3046.4	3027.9	3596.6	3650.8
57.5°	3307.4	3699.8	3809.9	3730.1	3282.1	3234.4	3817.4	3828.9
60°	3554.8	3963.7	4060.1	3971.7	3519.9	3454.2	3955.3	3899.8
62.5°	3692.5	4053.1	4120.9	4025.7	3682.8	3688.3	3985.6	3861.5
65°	3631.0	3827.1	3848.9	3841.1	3640.9	3824.1	3876.9	3684.4
67.5°	3294.1	3255.5	3292.3	3343.1	3281.1	3645.3	3575.7	3298.8
70°	2700.7	2488.7	2562.0	2596.1	2624.3	3136.9	3103.5	2686.9
72.5°	2035.3	1743.5	1801.4	1794.4	1924.7	2516.1	2413.6	1975.6
75°	1442.1	1182.2	1189.4	1186.6	1343.0	1968.5	1747.7	1351.6
77.5°	1009.0	856.5	860.4	876.5	902.9	1484.6	1248.6	987.4
80°	693.8	650.0	671.6	673.0	625.8	997.3	922.5	792.4
82.5°	516.8	451.8	446.6	454.2	490.4	808.0	708.9	549.6
85°	423.2	267.5	215.1	269.6	434.6	800.2	470.9	289.9
87.5°	238.3	127.0	57.4	106.4	173.4	529.8	136.1	37.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)