

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: P298855

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298855
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-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K 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: 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

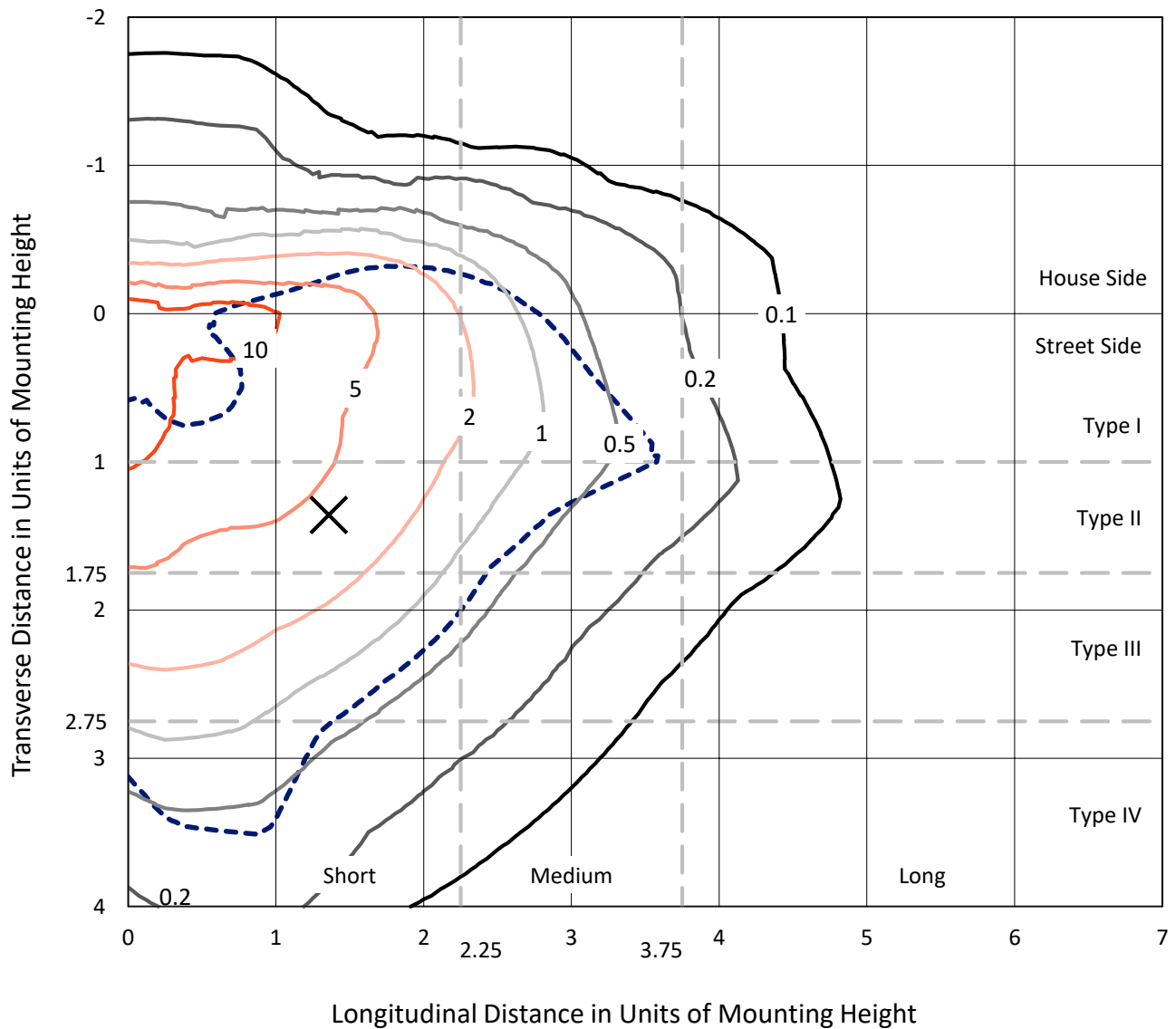
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P298855
 CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-7027

Iso-Footcandle Lines of Horizontal Illumination

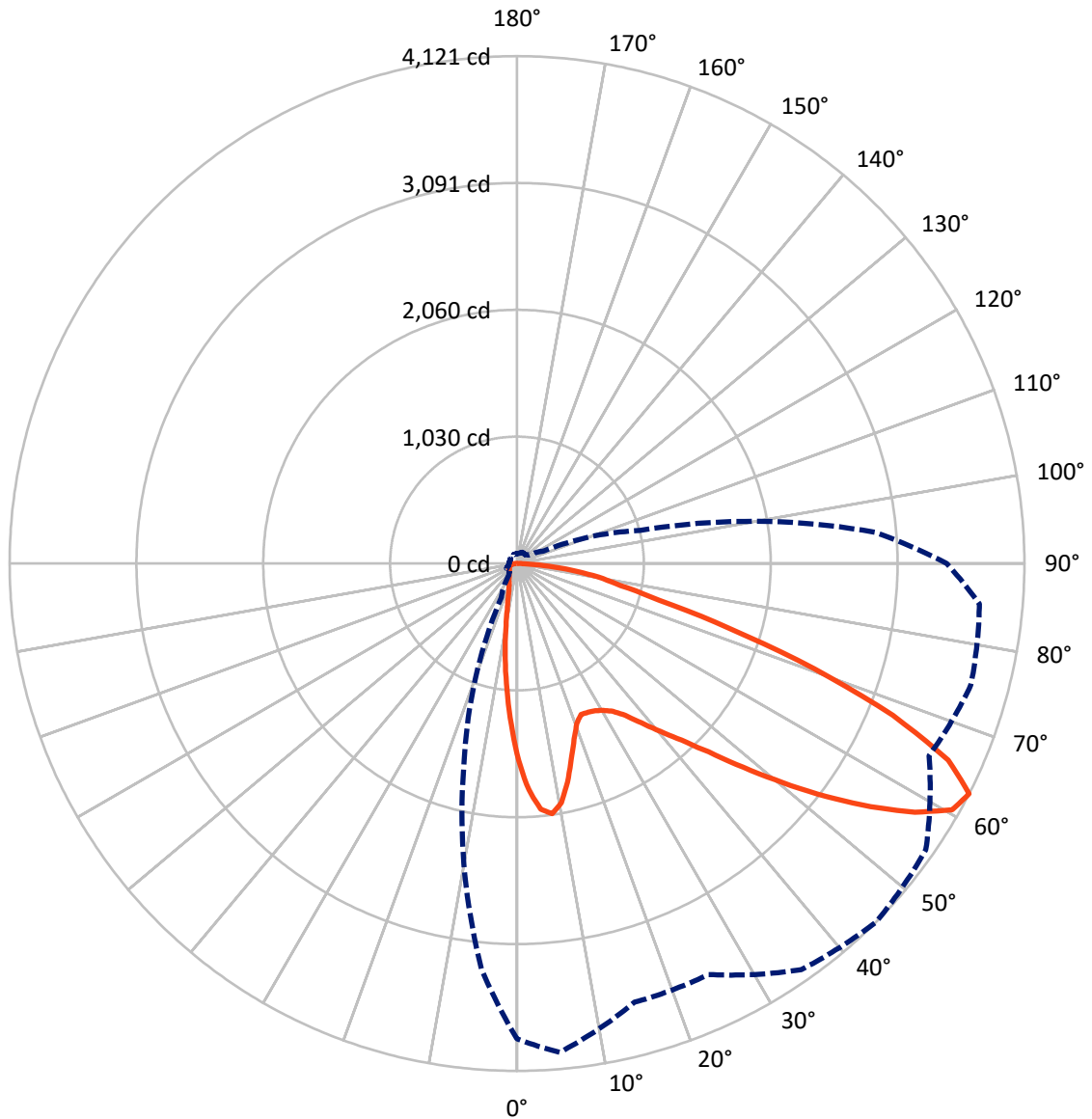
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.9 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P298855
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P298855

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-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: P298855

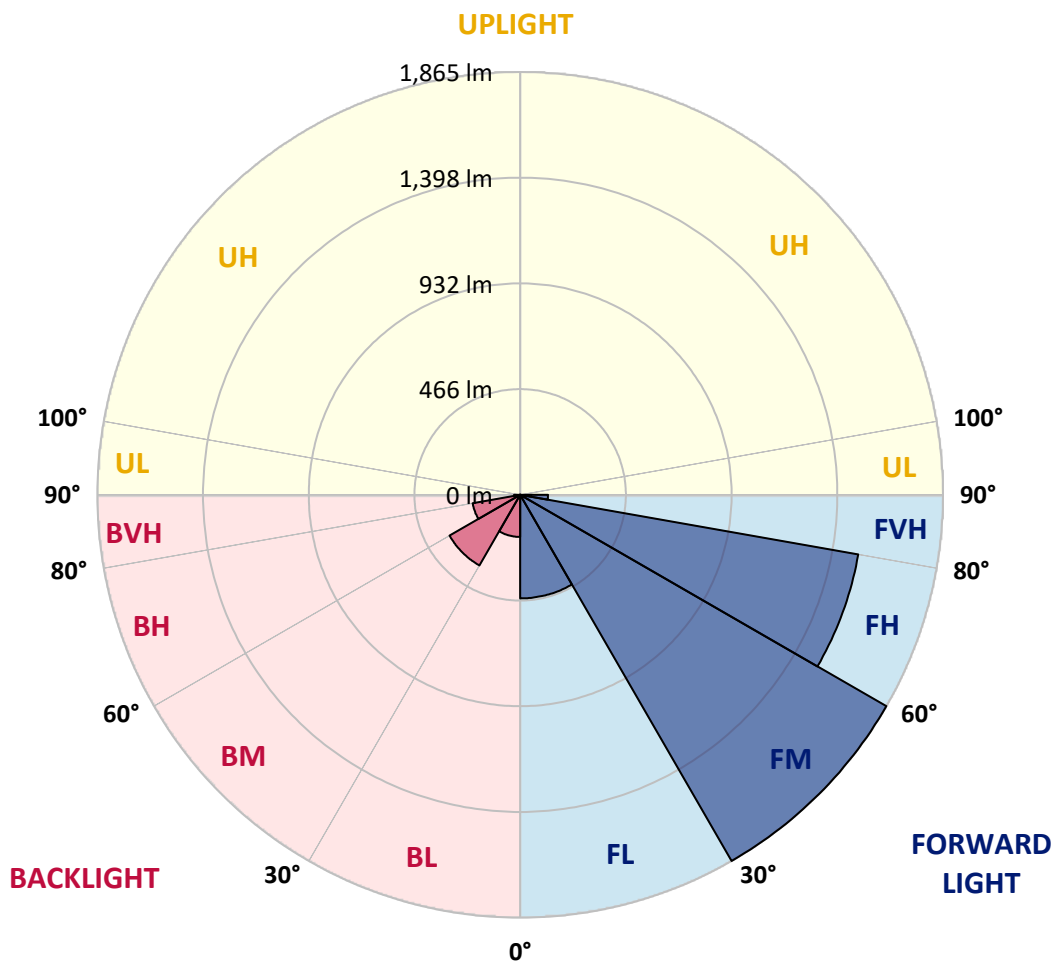
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-7027

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°)	1864.6	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: P298855

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-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	1691.6	1743.5	1782.3	1829.6	1840.5	1855.7	1840.8	1814.5	1779.5	1768.1
5°	1565.7	1622.6	1748.4	1859.3	1957.8	2003.7	2016.6	1978.7	1902.3	1801.9	1740.7
7.5°	1406.4	1487.2	1657.7	1821.0	1966.1	2052.0	2049.9	1962.0	1821.5	1658.0	1559.7
10°	1268.9	1361.3	1556.9	1739.4	1893.4	1976.6	1944.5	1832.2	1664.5	1476.2	1369.7
12.5°	1192.1	1282.6	1481.0	1664.2	1793.0	1821.7	1797.2	1687.2	1529.1	1338.9	1245.5
15°	1178.7	1278.2	1450.8	1599.9	1672.1	1647.1	1617.8	1568.6	1456.9	1294.5	1197.3
17.5°	1236.4	1345.9	1485.5	1555.0	1542.8	1499.2	1490.9	1496.4	1469.5	1343.8	1231.7
20°	1347.0	1478.4	1568.1	1534.0	1444.5	1384.5	1386.6	1470.3	1549.8	1468.7	1340.6
22.5°	1502.1	1652.0	1687.2	1545.1	1403.0	1331.8	1349.1	1484.7	1677.9	1651.3	1487.7
25°	1702.8	1839.5	1814.2	1585.8	1407.2	1338.4	1352.1	1534.2	1829.0	1833.8	1669.8
27.5°	1897.3	2024.1	1920.8	1639.8	1424.4	1353.8	1372.0	1612.1	1973.5	2031.9	1877.9
30°	2049.1	2137.3	1963.0	1689.0	1458.3	1383.7	1406.4	1686.1	2039.3	2165.6	2037.9
32.5°	2174.8	2238.1	2030.3	1750.0	1520.6	1430.9	1470.8	1776.1	2133.9	2292.9	2194.6
35°	2335.3	2353.4	2114.0	1818.1	1616.8	1513.1	1562.6	1864.2	2224.1	2421.4	2349.0
37.5°	2523.7	2500.5	2193.0	1911.2	1741.2	1641.5	1682.5	1961.0	2298.4	2567.2	2506.7
40°	2709.8	2653.9	2292.2	2055.6	1922.7	1793.0	1841.5	2064.2	2367.8	2713.2	2660.8
42.5°	2868.1	2785.4	2389.9	2214.4	2091.6	1960.2	2018.1	2168.3	2434.0	2837.8	2794.5
45°	2985.1	2882.4	2483.0	2366.9	2324.4	2182.3	2209.7	2287.4	2505.6	2941.9	2904.6
47.5°	3089.7	2979.9	2588.3	2520.8	2528.1	2471.2	2427.1	2426.1	2590.2	3026.9	3008.6
50°	3229.7	3115.2	2701.4	2679.2	2833.6	2795.8	2698.5	2588.0	2697.0	3123.4	3121.2
52.5°	3422.7	3329.6	2839.6	2850.1	3119.0	3143.7	3023.1	2782.6	2864.4	3300.3	3287.9
55°	3650.8	3596.5	3028.0	3046.4	3468.8	3486.6	3366.8	3025.8	3110.6	3556.7	3522.0
57.5°	3828.8	3817.4	3234.4	3282.1	3730.1	3809.9	3699.9	3307.5	3387.9	3772.6	3685.5
60°	3899.8	3955.3	3454.2	3519.9	3971.8	4060.1	3963.7	3554.8	3633.8	3862.0	3674.3
62.5°	3861.5	3985.5	3688.3	3682.8	4025.7	4120.9	4053.1	3692.5	3816.2	3769.7	3488.4
65°	3684.4	3876.8	3824.2	3640.9	3841.1	3848.9	3827.0	3631.0	3859.1	3477.9	3129.0
67.5°	3298.7	3575.7	3645.3	3281.1	3343.1	3292.3	3255.5	3294.1	3634.8	3040.7	2629.7
70°	2686.9	3103.6	3136.8	2624.3	2596.1	2561.9	2488.7	2700.7	3192.4	2492.1	2086.7
72.5°	1975.6	2413.6	2516.1	1924.8	1794.4	1801.3	1743.5	2035.2	2595.6	1851.2	1557.9
75°	1351.6	1747.7	1968.6	1343.0	1186.7	1189.5	1182.1	1442.1	2067.4	1287.7	1165.8
77.5°	987.4	1248.6	1484.7	902.9	876.5	860.4	856.5	1009.0	1585.0	935.0	905.2
80°	792.3	922.5	997.2	625.8	672.9	671.6	650.0	693.8	1035.1	683.9	677.0
82.5°	549.7	709.0	808.0	490.4	454.2	446.6	451.9	516.7	731.6	467.5	444.5
85°	290.0	470.9	800.2	434.6	269.6	215.1	267.6	423.1	633.9	247.7	216.9
87.5°	37.1	136.1	529.8	173.4	106.4	57.3	127.0	238.3	407.0	50.5	44.1
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: P298855

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-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°	1738.6	1703.9	1658.6	1616.5	1573.0	1529.6	1473.1	1437.6	1413.2	1408.4	1398.1
5°	1696.4	1581.1	1494.0	1418.7	1350.4	1253.8	1200.4	1156.0	1132.3	1130.1	1124.3
7.5°	1501.5	1342.5	1224.9	1118.3	1021.5	943.6	857.5	817.5	801.0	804.9	808.8
10°	1298.9	1121.2	986.1	877.1	791.8	726.1	657.1	610.4	578.0	571.5	570.2
12.5°	1150.9	955.9	824.7	747.7	681.9	620.0	546.8	491.7	449.8	435.4	425.8
15°	1088.2	875.0	737.7	654.7	581.9	503.4	435.4	377.8	339.2	326.7	319.7
17.5°	1101.6	852.6	677.6	571.5	478.5	396.5	310.8	261.5	238.3	232.3	232.3
20°	1171.5	848.4	628.0	494.9	378.8	283.9	213.6	185.4	177.8	177.1	179.1
22.5°	1269.5	863.1	591.1	428.5	294.4	207.3	166.3	155.9	152.5	153.4	155.7
25°	1415.5	912.4	564.3	369.2	231.0	169.7	148.3	142.1	140.5	142.6	145.5
27.5°	1588.6	961.6	547.5	324.6	195.0	155.1	141.0	134.6	135.6	138.2	140.8
30°	1740.7	1002.1	521.2	292.9	183.8	155.9	141.0	132.2	131.2	131.7	132.5
32.5°	1877.1	1029.4	490.4	262.6	158.5	138.5	131.7	130.4	124.6	122.5	122.8
35°	1994.7	1029.4	472.0	244.9	142.1	122.8	111.9	105.4	102.4	102.7	105.6
37.5°	2108.1	1008.8	462.8	234.9	133.2	116.8	107.2	101.4	97.5	96.7	97.3
40°	2208.1	978.8	452.4	230.7	126.5	113.2	104.1	99.3	95.1	93.9	94.1
42.5°	2288.5	954.5	440.9	225.3	122.2	110.5	101.9	97.8	93.1	91.8	91.5
45°	2375.3	946.5	425.8	214.3	124.3	110.8	101.4	97.0	92.3	90.7	90.2
47.5°	2489.7	971.8	410.2	201.3	128.8	112.2	102.2	97.0	92.0	90.7	90.2
50°	2633.9	1031.2	390.3	182.2	124.3	115.8	101.9	96.2	92.0	90.7	89.7
52.5°	2819.1	1111.5	364.3	160.4	121.7	124.6	101.4	94.6	90.7	89.0	87.1
55°	3044.1	1177.2	333.1	142.4	115.8	122.2	100.6	92.9	88.7	86.1	84.5
57.5°	3208.8	1200.9	293.4	130.7	107.4	118.3	99.5	90.5	86.1	84.0	81.9
60°	3176.3	1155.0	259.7	123.3	102.4	106.9	98.8	88.4	83.7	82.2	80.2
62.5°	2915.3	1035.1	238.0	119.9	99.3	97.5	99.5	86.3	81.7	80.0	79.5
65°	2523.9	858.0	229.5	119.2	96.7	92.0	92.6	84.0	79.2	78.0	77.4
67.5°	2081.9	692.5	221.9	121.7	93.4	88.1	85.6	80.8	76.9	75.6	74.6
70°	1641.8	576.0	218.5	120.2	89.2	84.2	81.4	77.4	74.1	72.7	71.9
72.5°	1322.1	486.5	216.6	118.6	83.7	79.0	76.3	73.0	69.3	68.8	68.1
75°	1118.9	382.5	198.5	113.7	77.4	72.7	70.9	67.8	64.2	64.2	63.7
77.5°	863.1	276.6	165.1	100.6	70.9	65.7	64.2	61.8	57.6	58.4	58.1
80°	637.5	180.5	129.1	83.5	62.9	57.9	57.0	54.8	50.3	51.4	51.4
82.5°	436.8	118.3	92.9	68.3	53.7	49.0	49.0	46.6	41.7	42.2	43.8
85°	219.3	81.4	69.3	52.9	41.7	39.4	39.4	37.6	32.6	32.8	35.0
87.5°	66.8	49.0	45.9	37.8	30.0	29.5	28.1	26.8	23.7	23.4	24.8
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: P298855

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-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°	1382.1	1367.2	1349.4	1309.7	1296.4	1295.5	1307.6	1295.0	1319.1	1308.9	1320.1
5°	1114.6	1100.1	1079.9	1029.4	998.6	977.7	967.9	938.7	959.8	944.3	957.2
7.5°	819.8	823.1	809.9	780.1	713.1	679.5	659.7	641.9	657.3	655.7	680.3
10°	576.2	585.3	576.0	546.0	491.7	473.2	476.9	483.9	504.0	514.4	552.2
12.5°	414.8	414.3	408.3	381.5	345.8	347.8	362.7	374.9	393.4	404.4	442.9
15°	309.7	305.0	302.4	280.5	260.2	264.7	272.0	273.2	285.0	291.5	322.8
17.5°	234.1	236.5	239.3	223.7	208.3	205.4	199.8	192.6	196.1	197.4	213.0
20°	185.9	195.3	202.4	191.4	175.8	167.3	160.1	155.4	155.4	155.1	159.5
22.5°	162.4	169.2	176.8	169.2	155.1	147.8	143.6	140.0	139.5	139.5	143.6
25°	149.7	154.6	161.9	156.8	146.3	140.8	136.9	132.2	130.4	129.8	132.7
27.5°	143.4	145.5	149.1	144.4	135.6	133.0	132.0	127.8	125.4	124.1	127.0
30°	132.7	132.2	132.5	127.8	120.7	120.4	122.2	123.1	122.2	122.0	126.5
32.5°	122.8	121.7	121.5	117.3	110.8	109.3	110.8	112.4	114.2	116.8	122.0
35°	110.3	112.9	114.4	110.8	102.9	98.3	96.5	93.6	92.0	92.0	98.0
37.5°	100.4	106.4	108.8	105.4	96.7	90.2	87.1	86.6	86.8	87.9	93.6
40°	97.0	101.4	103.4	100.1	91.5	85.6	83.7	83.2	83.7	85.3	91.0
42.5°	94.9	98.0	97.8	93.6	86.6	82.4	81.4	80.8	81.4	82.9	89.2
45°	93.1	95.1	93.1	88.1	81.7	79.5	79.7	79.5	80.0	81.7	87.6
47.5°	91.5	92.3	89.7	84.7	78.0	77.4	78.5	79.2	79.7	81.2	87.4
50°	89.2	89.2	86.8	81.7	74.8	75.1	76.3	78.2	78.5	80.0	85.1
52.5°	86.3	86.1	84.5	79.5	72.2	73.0	73.0	75.1	75.6	77.4	82.7
55°	84.0	83.5	82.7	78.0	69.9	71.2	70.4	71.2	72.5	74.3	80.0
57.5°	81.9	80.8	80.8	76.6	68.1	68.6	66.8	67.8	69.3	70.9	76.9
60°	79.7	78.7	79.2	74.8	65.2	64.7	63.9	65.9	66.5	68.3	74.3
62.5°	77.4	76.6	76.9	72.7	63.1	61.8	61.8	63.7	63.9	66.5	72.2
65°	75.6	74.6	74.3	70.7	60.8	59.2	60.0	60.8	61.3	63.9	69.3
67.5°	73.8	71.7	71.7	68.8	58.1	56.5	58.1	57.9	58.7	61.0	65.4
70°	71.4	68.6	68.8	67.5	55.5	53.7	55.0	54.8	55.3	56.8	61.3
72.5°	67.8	65.4	65.9	65.4	52.9	50.3	50.8	50.8	50.8	52.1	56.8
75°	63.1	61.3	62.9	64.2	49.8	46.1	46.6	46.6	45.9	46.6	52.4
77.5°	57.3	56.3	61.5	59.8	46.1	41.7	41.7	41.2	39.7	40.7	46.9
80°	51.1	50.3	56.8	50.0	42.0	36.3	35.7	34.4	32.8	33.6	40.0
82.5°	44.6	43.8	47.7	38.3	36.3	30.0	28.7	26.3	24.8	25.6	31.2
85°	36.6	36.6	36.8	28.9	27.6	22.9	21.4	18.3	16.4	16.9	22.4
87.5°	26.1	26.8	24.8	19.8	16.4	12.8	11.8	9.9	8.3	9.6	11.8
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: P298855

CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-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°	1377.5	1406.2	1438.7	1480.4	1516.2	1574.8	1631.1	1665.0
5°	1029.9	1077.7	1137.0	1213.5	1284.7	1391.5	1497.6	1565.7
7.5°	737.1	788.2	852.3	947.7	1048.5	1184.7	1325.1	1406.4
10°	609.9	662.3	716.2	780.6	863.1	1011.4	1177.2	1268.9
12.5°	504.5	560.6	618.7	686.5	762.9	895.3	1086.5	1192.1
15°	386.1	448.7	517.2	603.1	698.7	851.8	1064.0	1178.7
17.5°	264.7	334.6	418.7	524.6	641.7	837.7	1104.2	1236.4
20°	182.2	233.1	323.1	447.2	588.0	835.9	1181.3	1347.0
22.5°	152.5	175.2	240.9	376.0	547.5	858.4	1301.1	1502.1
25°	141.0	154.6	192.4	314.2	518.1	910.0	1465.9	1702.8
27.5°	134.3	146.5	174.7	273.8	494.9	969.9	1626.2	1897.3
30°	136.9	149.4	169.7	253.2	463.3	1019.9	1768.6	2049.1
32.5°	123.3	128.8	145.5	234.9	440.6	1061.9	1893.2	2174.8
35°	105.1	114.7	129.8	226.3	441.2	1090.1	2029.0	2335.3
37.5°	100.1	109.8	120.7	223.2	447.2	1120.1	2184.9	2523.7
40°	97.0	105.9	115.3	221.4	452.9	1147.5	2337.8	2709.8
42.5°	94.9	102.9	114.7	215.1	455.8	1172.0	2463.4	2868.1
45°	94.6	102.9	116.8	208.8	460.2	1198.4	2568.8	2985.1
47.5°	94.9	106.4	112.9	201.3	460.2	1242.4	2692.4	3089.7
50°	93.9	112.2	108.8	190.6	449.5	1325.8	2861.8	3229.7
52.5°	93.4	111.4	100.6	174.2	431.0	1458.3	3079.0	3422.7
55°	92.0	107.4	94.9	149.7	409.4	1602.8	3311.6	3650.8
57.5°	90.7	95.1	91.8	128.3	376.0	1704.4	3471.7	3828.8
60°	101.7	83.2	89.2	117.8	331.4	1732.3	3465.5	3899.8
62.5°	94.1	78.0	85.8	115.5	300.1	1654.1	3305.3	3861.5
65°	73.8	74.6	82.4	122.2	291.8	1446.9	3021.6	3684.4
67.5°	67.5	71.2	79.0	130.9	292.6	1158.4	2597.7	3298.7
70°	63.7	67.5	75.1	135.3	294.6	863.6	2053.7	2686.9
72.5°	59.2	62.6	70.7	136.1	281.0	627.3	1583.0	1975.6
75°	53.9	57.0	64.4	118.6	232.8	435.1	1210.9	1351.6
77.5°	48.0	50.3	56.5	91.5	172.9	278.5	908.9	987.4
80°	41.0	42.2	47.5	67.0	118.3	174.2	719.1	792.3
82.5°	32.8	33.3	36.8	50.3	76.9	111.9	481.6	549.7
85°	23.2	23.2	25.3	36.6	52.4	70.9	261.5	290.0
87.5°	10.9	11.2	11.2	20.1	27.3	36.1	60.3	37.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)