

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: P299017

Luminaire Tested: **GLNA-AF-08-LED-E1-SLL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299017
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-08-LED-E1-SLL-7027-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Left OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23916.5 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 257
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

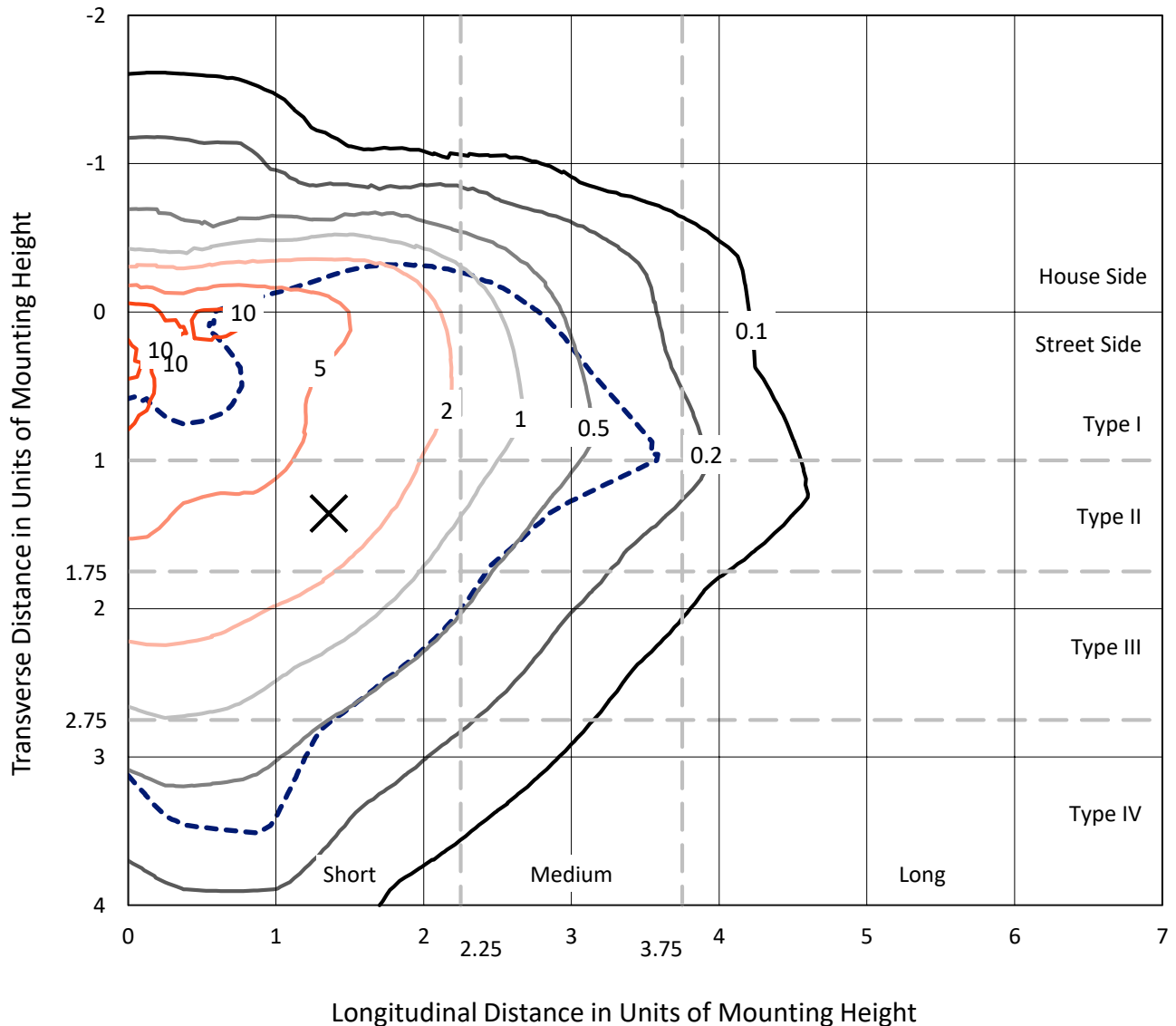


REPORT NUMBER: P299017

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

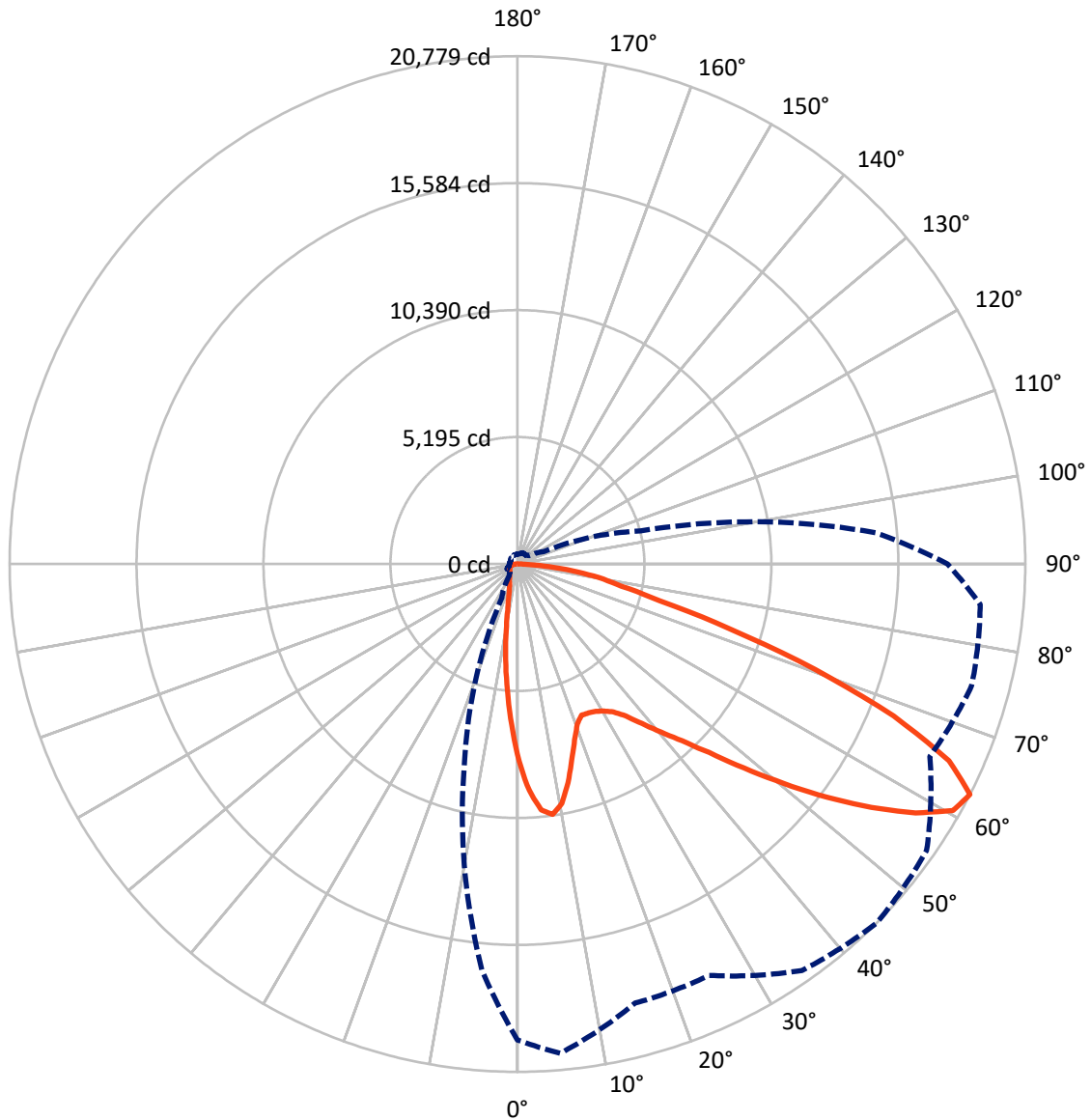


Based on 25 foot mounting height. Maximum calculated value = 15.2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P299017

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299017

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3957.8	0.0	3957.8
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	19958.7	0.0	19958.7
	% Fixture	83.5	0.0	83.5
Total	Lumens	23916.5	0.0	23916.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	588.2	2.5
10°-20°	1078.6	4.5
20°-30°	1572.6	6.6
30°-40°	2422.1	10.1
40°-50°	3564.6	14.9
50°-60°	5228.6	21.9
60°-70°	5844.8	24.4
70°-80°	2861.5	12.0
80°-90°	755.5	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°	23916.5	100.0
0°-180°	23916.5	100.0



REPORT NUMBER: P299017

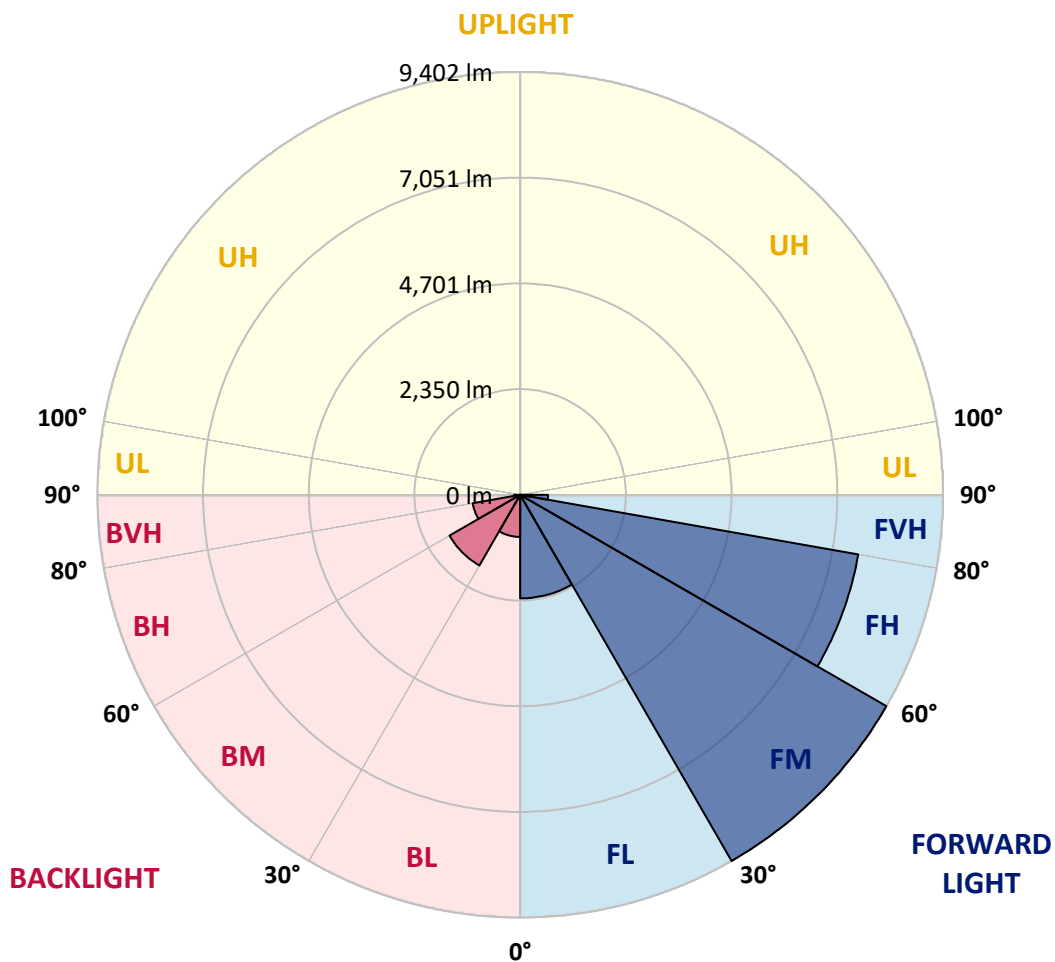
CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2303.1	9.6			
FM	(30°-60°)	9401.8	39.3			
FH	(60°-80°)	7633.3	31.9			G4/12000
FVH	(80°-90°)	620.5	2.6			G4/750
BL	(0°-30°)	936.4	3.9	B2/1000		
BM	(30°-60°)	1813.5	7.6	B2/2500		
BH	(60°-80°)	1073.0	4.5	B3/2500		G3/2500
BVH	(80°-90°)	135.1	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short





REPORT NUMBER: P299017

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6
2.5°	8395.5	8530.0	8791.6	8987.1	9225.7	9280.7	9357.1	9282.0	9149.3	8973.0	8915.4
5°	7894.9	8181.7	8816.4	9375.5	9872.3	10103.6	10168.5	9977.2	9592.3	9086.1	8777.1
7.5°	7091.7	7499.3	8358.8	9182.1	9914.1	10346.9	10336.2	9893.2	9184.7	8360.1	7864.6
10°	6398.5	6864.2	7850.5	8770.7	9547.5	9967.0	9804.8	9238.9	8393.0	7443.8	6906.4
12.5°	6011.0	6467.3	7467.7	8391.7	9041.3	9186.0	9062.2	8507.4	7710.5	6751.1	6280.3
15°	5943.6	6445.1	7315.3	8067.3	8431.4	8305.5	8157.8	7909.4	7346.5	6527.4	6037.1
17.5°	6234.7	6786.5	7490.3	7841.1	7779.2	7559.4	7517.6	7545.4	7410.1	6775.8	6210.8
20°	6792.1	7454.4	7906.9	7734.9	7283.7	6981.1	6991.8	7413.9	7814.7	7405.8	6760.0
22.5°	7574.0	8330.2	8507.4	7791.2	7074.6	6715.7	6802.7	7486.5	8460.4	8326.4	7501.8
25°	8586.3	9275.6	9148.0	7996.1	7095.5	6748.5	6818.1	7736.1	9222.7	9246.6	8419.9
27.5°	9567.1	10206.4	9685.3	8268.4	7182.6	6826.2	6918.4	8128.8	9951.2	10245.7	9468.9
30°	10332.3	10777.1	9898.3	8516.7	7353.3	6977.3	7091.7	8502.2	10282.8	10920.0	10276.0
32.5°	10966.1	11285.4	10237.6	8824.5	7667.4	7215.0	7416.5	8955.9	10760.0	11561.9	11066.0
35°	11775.8	11866.7	10659.7	9167.6	8152.7	7629.4	7879.1	9400.2	11215.0	12209.8	11844.5
37.5°	12725.4	12608.5	11057.9	9637.1	8780.1	8277.3	8483.9	9888.0	11589.3	12944.8	12639.6
40°	13663.9	13382.2	11558.1	10365.2	9695.1	9041.3	9285.8	10408.7	11939.2	13681.0	13416.8
42.5°	14462.0	14045.1	12050.6	11165.9	10546.6	9884.2	10176.1	10933.3	12273.0	14309.2	14091.2
45°	15052.3	14534.2	12520.1	11935.0	11720.7	11004.1	11142.4	11533.8	12634.5	14834.2	14646.0
47.5°	15579.4	15025.8	13051.0	12710.9	12747.6	12460.8	12238.4	12233.3	13060.9	15262.7	15170.5
50°	16285.3	15708.3	13621.7	13509.9	14288.3	14097.6	13607.2	13049.8	13599.5	15749.3	15738.6
52.5°	17258.4	16789.4	14318.6	14371.1	15727.1	15851.7	15243.9	14031.0	14443.3	16641.7	16579.0
55°	18409.1	18135.1	15268.3	15361.3	17491.0	17580.6	16976.7	15257.2	15684.8	17934.5	17759.5
57.5°	19306.6	19249.0	16309.2	16549.9	18808.5	19211.0	18656.2	16677.5	17083.4	19022.8	18583.6
60°	19664.3	19944.3	17417.6	17748.8	20027.5	20472.6	19986.5	17924.6	18323.3	19473.9	18527.3
62.5°	19471.4	20096.6	18598.1	18570.4	20299.3	20779.1	20437.2	18619.0	19242.6	19008.3	17590.0
65°	18578.5	19548.6	19283.1	18358.7	19368.5	19407.8	19297.2	18308.8	19459.4	17537.1	15777.9
67.5°	16633.6	18030.1	18380.9	16544.8	16857.2	16601.1	16415.5	16610.1	18328.4	15332.3	13260.2
70°	13548.3	15649.4	15817.1	13232.9	13090.7	12918.3	12549.1	13617.8	16097.5	12566.2	10521.8
72.5°	9961.9	12170.6	12687.0	9705.4	9048.1	9083.1	8791.6	10262.3	13088.2	9334.5	7855.6
75°	6815.5	8812.5	9926.5	6772.0	5983.7	5997.8	5960.7	7271.8	10424.5	6493.3	5878.3
77.5°	4979.0	6296.1	7486.5	4552.7	4419.9	4338.4	4318.8	5087.9	7992.2	4714.8	4564.6
80°	3995.3	4651.7	5028.5	3155.3	3393.0	3386.6	3277.4	3498.5	5219.3	3448.5	3414.0
82.5°	2771.6	3574.9	4074.2	2472.9	2290.2	2251.8	2278.7	2605.6	3689.2	2357.2	2241.5
85°	1462.2	2374.3	4034.9	2191.6	1359.4	1084.5	1349.1	2133.6	3196.3	1249.2	1093.5
87.5°	186.9	686.3	2671.3	874.5	536.5	288.9	640.6	1201.4	2052.5	254.8	222.4
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: P299017

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6
2.5°	8766.8	8591.9	8363.1	8151.0	7931.6	7713.1	7428.0	7249.2	7125.8	7101.9	7049.8
5°	8553.9	7972.6	7533.4	7153.6	6809.1	6322.2	6052.8	5829.2	5709.7	5698.2	5669.2
7.5°	7571.4	6769.4	6176.6	5638.9	5151.0	4757.9	4323.9	4122.0	4038.8	4058.4	4078.1
10°	6549.6	5653.4	4972.2	4422.5	3992.7	3661.5	3313.2	3078.1	2914.6	2881.7	2875.3
12.5°	5803.2	4819.8	4158.7	3770.3	3438.3	3126.3	2757.1	2479.3	2268.0	2195.4	2147.2
15°	5487.3	4412.2	3719.5	3301.3	2934.2	2538.6	2195.4	1904.8	1710.6	1647.4	1612.0
17.5°	5554.8	4299.1	3416.9	2881.7	2412.7	1999.5	1567.2	1318.4	1201.4	1171.6	1171.6
20°	5907.3	4278.2	3166.8	2495.5	1909.9	1431.5	1076.8	934.7	896.7	892.9	903.1
22.5°	6401.5	4352.1	2980.8	2160.4	1484.4	1045.2	838.7	786.2	769.1	773.4	784.9
25°	7137.8	4600.5	2845.5	1861.7	1164.7	855.7	747.7	716.6	708.5	719.2	733.7
27.5°	8010.6	4848.8	2761.0	1636.8	983.3	782.3	711.0	678.6	683.7	697.0	709.8
30°	8777.1	5052.9	2628.2	1476.7	927.0	786.2	711.0	666.7	661.5	664.1	667.9
32.5°	9465.1	5190.7	2472.9	1323.9	799.4	698.2	664.1	657.7	628.2	617.6	619.3
35°	10057.9	5190.7	2379.8	1234.7	716.6	619.3	564.2	531.4	516.4	517.7	532.6
37.5°	10629.8	5086.6	2333.7	1184.4	671.8	589.0	540.3	511.3	491.7	487.8	490.4
40°	11134.3	4935.5	2281.2	1163.5	637.6	570.6	525.0	500.6	479.7	473.3	474.6
42.5°	11539.3	4813.0	2223.2	1136.1	616.3	557.4	513.9	493.0	469.5	462.6	461.4
45°	11977.2	4772.5	2147.2	1080.7	627.0	558.7	511.3	489.1	465.2	457.5	455.0
47.5°	12554.3	4900.1	2068.3	1014.9	649.6	565.5	515.1	489.1	463.9	457.5	455.0
50°	13281.1	5199.7	1968.0	918.9	627.0	583.9	513.9	484.8	463.9	457.5	452.4
52.5°	14214.9	5604.7	1836.9	808.8	613.7	628.2	511.3	477.2	457.5	448.6	439.2
55°	15349.3	5935.9	1679.9	717.9	583.9	616.3	507.5	468.2	447.3	434.1	425.9
57.5°	16180.3	6055.4	1479.3	659.0	541.6	596.7	501.9	456.2	434.1	423.4	413.1
60°	16016.0	5824.1	1309.4	621.8	516.4	539.0	498.1	445.6	422.1	414.4	404.6
62.5°	14700.2	5219.3	1200.2	604.8	500.6	491.7	501.9	435.3	411.9	403.3	400.8
65°	12726.7	4326.4	1157.0	600.9	487.8	463.9	466.9	423.4	399.5	393.1	390.5
67.5°	10497.9	3492.1	1119.1	613.7	470.8	444.3	431.5	407.6	387.5	381.1	376.0
70°	8278.6	2904.4	1101.6	606.1	449.8	424.7	410.6	390.5	373.4	366.6	362.8
72.5°	6666.6	2453.2	1092.2	597.9	422.1	398.2	385.0	367.9	349.5	347.0	343.1
75°	5641.8	1928.7	1000.8	573.2	390.5	366.6	357.7	341.9	323.5	323.5	321.0
77.5°	4352.1	1394.8	832.3	507.5	357.7	331.2	323.5	311.6	290.6	294.5	293.2
80°	3214.6	909.9	650.9	420.8	317.1	291.9	287.7	276.1	253.5	259.1	259.1
82.5°	2202.3	596.7	468.2	344.4	270.6	247.1	247.1	235.2	210.4	213.0	221.1
85°	1105.8	410.6	349.5	266.7	210.4	198.5	198.5	189.5	164.3	165.6	176.3
87.5°	336.7	247.1	231.3	190.8	151.1	148.5	141.7	135.3	119.5	118.2	125.1
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: P299017

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6
2.5°	6969.2	6894.1	6804.0	6603.8	6536.8	6532.6	6593.6	6530.0	6651.2	6600.0	6656.3
5°	5620.1	5547.1	5445.5	5190.7	5035.4	4929.9	4880.4	4733.2	4839.5	4761.8	4826.7
7.5°	4133.5	4150.6	4083.6	3933.8	3595.8	3426.3	3326.5	3236.8	3314.5	3306.4	3430.2
10°	2905.6	2951.3	2904.4	2753.3	2479.3	2386.2	2404.6	2440.0	2541.6	2593.6	2784.4
12.5°	2091.7	2089.2	2058.9	1923.6	1743.5	1753.7	1828.8	1890.3	1983.8	2039.2	2233.4
15°	1561.7	1538.2	1524.9	1414.4	1312.0	1334.6	1371.3	1377.7	1437.0	1469.9	1627.8
17.5°	1180.5	1192.5	1206.6	1128.0	1050.3	1035.8	1007.2	971.4	988.9	995.3	1073.8
20°	937.2	984.6	1020.5	965.0	886.5	843.8	807.1	783.6	783.6	782.3	804.5
22.5°	819.0	853.2	891.6	853.2	782.3	745.2	724.3	705.9	703.4	703.4	724.3
25°	755.0	779.8	816.5	790.4	737.5	709.8	690.1	666.7	657.7	654.7	669.2
27.5°	723.0	733.7	752.0	728.1	683.7	670.5	665.4	644.5	632.1	625.7	640.6
30°	669.2	666.7	667.9	644.5	608.6	607.3	616.3	620.6	616.3	615.0	637.6
32.5°	619.3	613.7	612.5	591.5	558.7	551.0	558.7	566.8	575.7	589.0	615.0
35°	556.1	569.3	577.0	558.7	519.0	495.5	486.5	472.0	463.9	463.9	494.2
37.5°	506.2	536.5	548.4	531.4	487.8	455.0	439.2	436.6	437.9	443.0	472.0
40°	489.1	511.3	521.5	504.9	461.4	431.5	422.1	419.5	422.1	430.2	458.8
42.5°	478.4	494.2	493.0	472.0	436.6	415.7	410.6	407.6	410.6	418.3	449.8
45°	469.5	479.7	469.5	444.3	411.9	400.8	402.0	400.8	403.3	411.9	441.7
47.5°	461.4	465.2	452.4	427.2	393.1	390.5	395.6	399.5	402.0	409.3	440.5
50°	449.8	449.8	437.9	411.9	377.3	378.6	385.0	394.4	395.6	403.3	428.9
52.5°	435.3	434.1	425.9	400.8	364.1	367.9	367.9	378.6	381.1	390.5	417.0
55°	423.4	420.8	417.0	393.1	352.5	358.9	355.1	358.9	365.3	374.7	403.3
57.5°	413.1	407.6	407.6	386.3	343.1	345.7	336.7	341.9	349.5	357.7	387.5
60°	402.0	396.9	399.5	377.3	328.6	326.1	322.2	332.5	335.5	344.4	374.7
62.5°	390.5	386.3	387.5	366.6	318.4	311.6	311.6	321.0	322.2	335.5	364.1
65°	381.1	376.0	374.7	356.4	306.4	298.8	302.6	306.4	309.0	322.2	349.5
67.5°	372.2	361.5	361.5	347.0	293.2	285.1	293.2	291.9	296.2	307.7	329.9
70°	360.2	345.7	347.0	340.6	280.0	270.6	277.4	276.1	278.7	286.4	309.0
72.5°	341.9	329.9	332.5	329.9	266.7	253.5	256.1	256.1	256.1	262.9	286.4
75°	318.4	309.0	317.1	323.5	251.0	232.6	235.2	235.2	231.3	235.2	264.2
77.5°	288.9	283.8	310.3	301.3	232.6	210.4	210.4	207.9	200.2	205.3	236.4
80°	257.8	253.5	286.4	252.2	211.7	183.1	180.1	173.3	165.6	169.4	201.4
82.5°	224.9	221.1	240.7	193.3	183.1	151.1	144.7	132.7	125.1	128.9	157.5
85°	184.4	184.4	185.7	146.0	139.1	115.7	108.0	92.2	82.8	85.4	113.1
87.5°	131.5	135.3	125.1	99.9	82.8	64.4	59.3	49.9	41.8	48.7	59.3
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: P299017

CATALOG NUMBER: GLNA-AF-08-LED-E1-SLL-7027-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6	8080.6
2.5°	6945.7	7090.4	7254.7	7464.7	7645.2	7940.6	8224.8	8395.5
5°	5193.3	5434.0	5733.2	6119.0	6477.9	7016.6	7551.8	7894.9
7.5°	3716.6	3974.3	4297.9	4778.9	5286.7	5973.9	6681.5	7091.7
10°	3075.5	3339.7	3611.6	3936.4	4352.1	5099.8	5935.9	6398.5
12.5°	2544.1	2826.7	3119.9	3461.8	3846.7	4514.7	5478.4	6011.0
15°	1947.1	2262.5	2608.2	3040.9	3523.2	4295.3	5365.3	5943.6
17.5°	1334.6	1687.1	2111.4	2645.3	3235.6	4224.0	5568.0	6234.7
20°	918.9	1175.4	1629.1	2254.8	2965.0	4215.1	5956.8	6792.1
22.5°	769.1	883.5	1214.7	1895.8	2761.0	4328.2	6560.7	7574.0
25°	711.0	779.8	970.1	1584.3	2612.4	4588.5	7391.7	8586.3
27.5°	677.3	738.8	880.9	1380.7	2495.5	4890.7	8200.1	9567.1
30°	690.1	753.3	855.7	1276.6	2336.3	5142.9	8917.9	10332.3
32.5°	621.8	649.6	733.7	1184.4	2221.9	5354.6	9546.2	10966.1
35°	530.1	578.3	654.7	1141.3	2224.5	5496.7	10231.2	11775.8
37.5°	504.9	553.6	608.6	1125.5	2254.8	5648.2	11017.4	12725.4
40°	489.1	533.9	581.3	1116.5	2283.8	5786.1	11788.2	13663.9
42.5°	478.4	519.0	578.3	1084.5	2298.3	5909.9	12421.5	14462.0
45°	477.2	519.0	589.0	1052.9	2320.5	6042.6	12952.9	15052.3
47.5°	478.4	536.5	569.3	1014.9	2320.5	6264.5	13576.0	15579.4
50°	473.3	565.5	548.4	961.1	2266.7	6685.4	14430.5	16285.3
52.5°	470.8	561.7	507.5	878.3	2173.3	7353.3	15525.6	17258.4
55°	463.9	541.6	478.4	755.0	2064.4	8081.8	16698.5	18409.1
57.5°	457.5	479.7	462.6	647.0	1895.8	8594.4	17505.5	19306.6
60°	512.6	419.5	449.8	594.1	1670.9	8734.8	17474.4	19664.3
62.5°	474.6	393.1	432.8	582.6	1513.4	8340.5	16666.9	19471.4
65°	372.2	376.0	415.7	616.3	1471.2	7295.7	15236.2	18578.5
67.5°	340.6	358.9	398.2	660.3	1475.4	5841.2	13098.8	16633.6
70°	321.0	340.6	378.6	682.4	1485.7	4354.6	10355.8	13548.3
72.5°	298.8	315.8	356.4	686.3	1417.0	3163.0	7982.0	9961.9
75°	271.9	287.7	324.8	597.9	1174.1	2194.2	6105.8	6815.5
77.5°	242.0	253.5	285.1	461.4	871.9	1404.2	4583.0	4979.0
80°	206.6	213.0	239.4	338.0	596.7	878.3	3626.1	3995.3
82.5°	165.6	168.2	185.7	253.5	387.5	564.2	2428.5	2771.6
85°	116.9	116.9	127.6	184.4	264.2	357.7	1318.4	1462.2
87.5°	55.1	56.3	56.3	101.2	137.9	181.8	303.9	186.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)