

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: P301663

Luminaire Tested: **GLNA-AF-08-LED-E1-T2R-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301663
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194759)
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-T2R-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38698.6 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

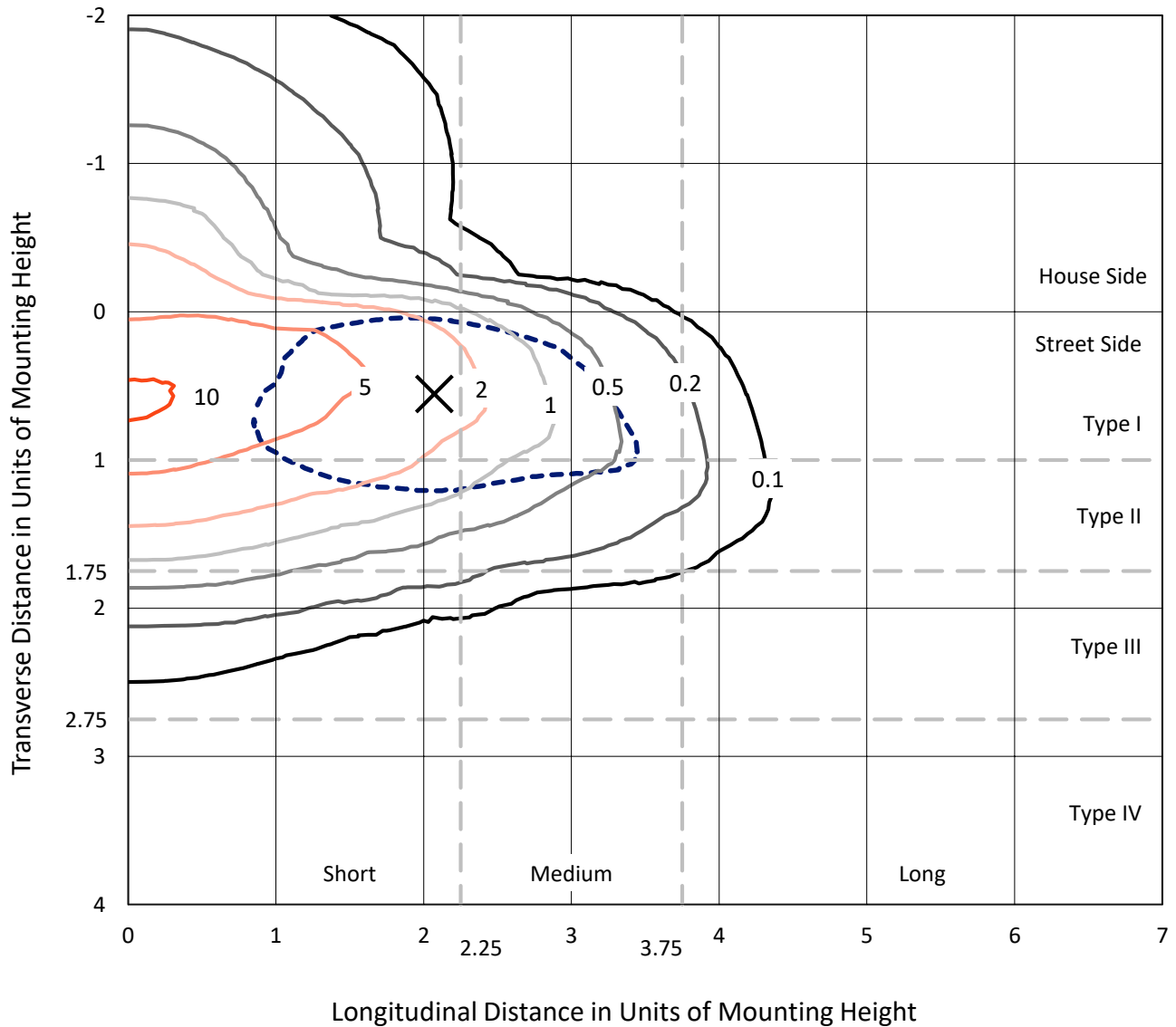
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P301663
 CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

Iso-Footcandle Lines of Horizontal Illumination

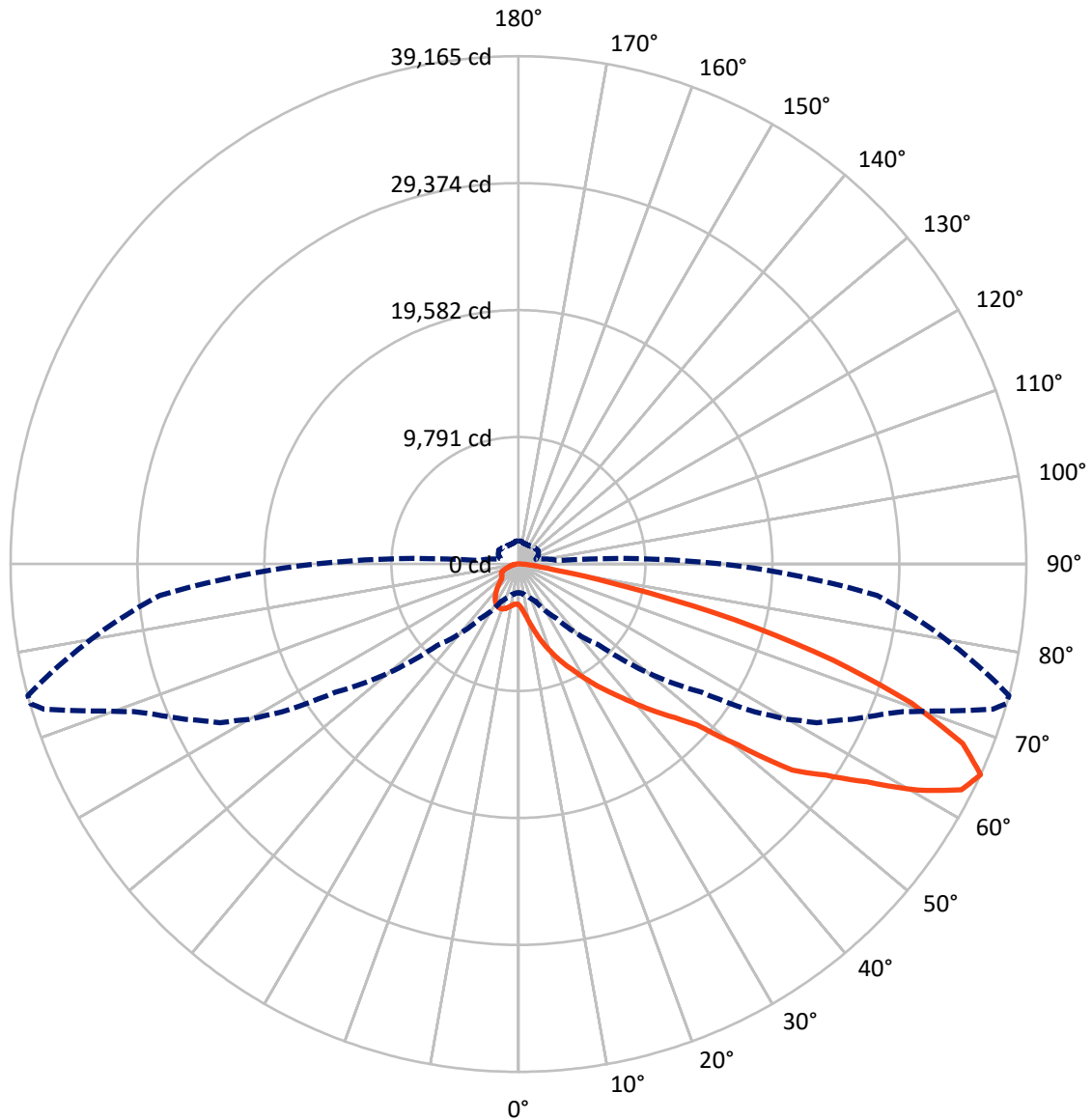
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.8 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P301663
CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P301663

CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

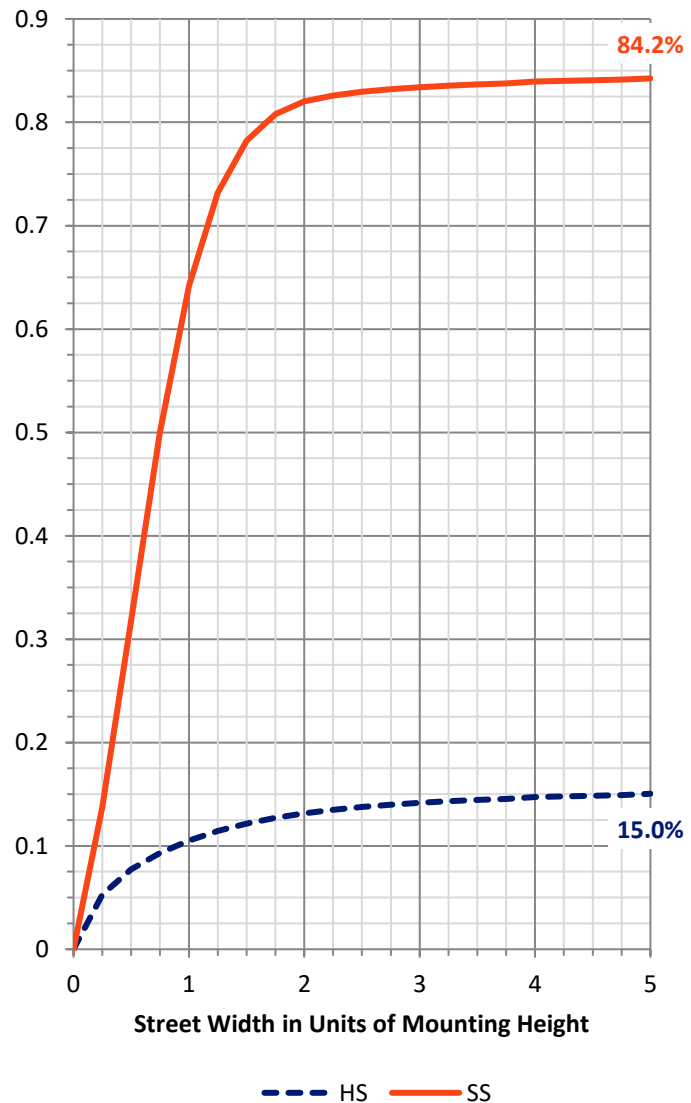
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5966.4	0.0	5966.4
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	32732.2	0.0	32732.2
	% Fixture	84.6	0.0	84.6
Total	Lumens	38698.6	0.0	38698.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.7	1.0
10°-20°	1518.9	3.9
20°-30°	3116.2	8.1
30°-40°	5242.9	13.5
40°-50°	7244.2	18.7
50°-60°	9042.9	23.4
60°-70°	8137.6	21.0
70°-80°	3411.2	8.8
80°-90°	596.0	1.5
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°	38698.6	100.0
0°-180°	38698.6	100.0

Coefficient of Utilization



REPORT NUMBER: P301663

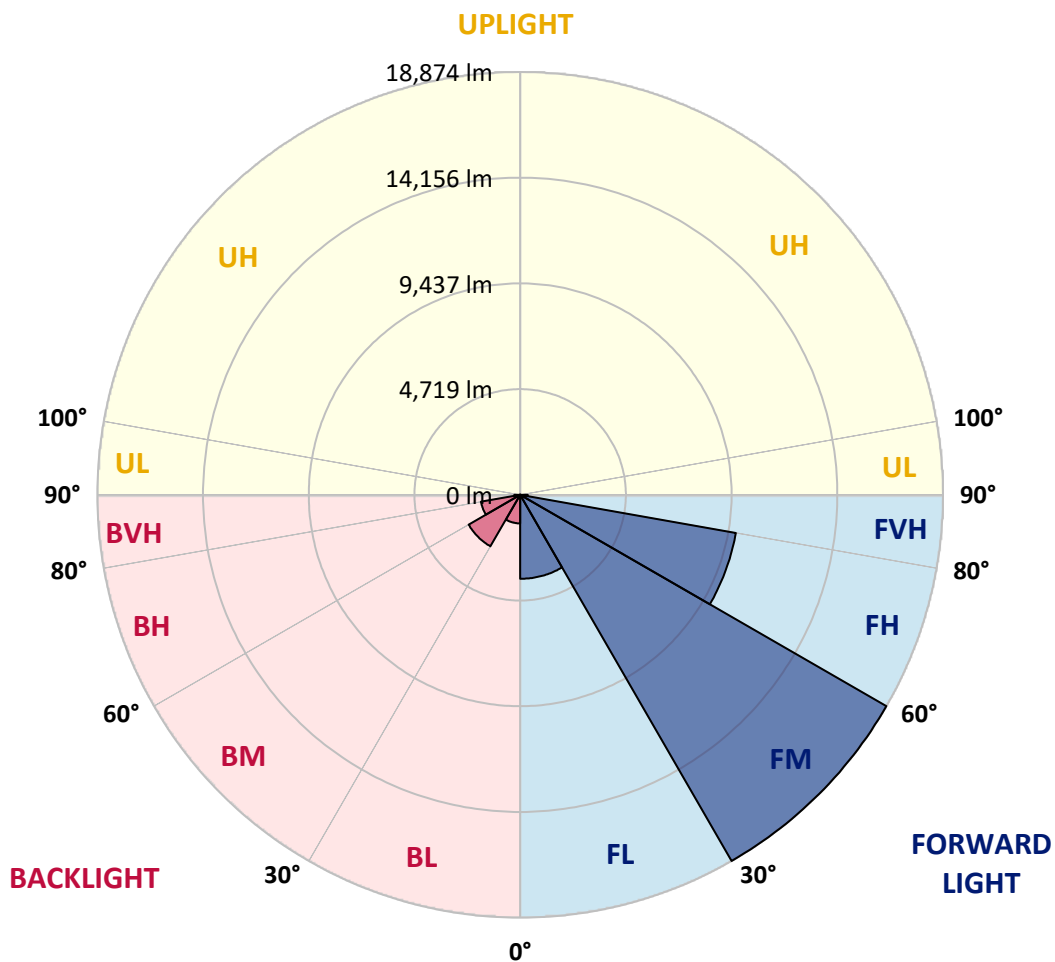
CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3747.8	9.7			
FM	(30°-60°)	18874.2	48.8			
FH	(60°-80°)	9775.1	25.3			G4/12000
FVH	(80°-90°)	335.0	0.9			G3/500
BL	(0°-30°)	1276.0	3.3	B3/2500		
BM	(30°-60°)	2655.7	6.9	B3/5000		
BH	(60°-80°)	1773.7	4.6	B3/2500		G3/2500
BVH	(80°-90°)	261.0	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short





REPORT NUMBER: P301663

CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0
2.5°	3993.2	3949.2	3960.1	3886.7	3797.0	3679.7	3549.8	3548.2	3549.8	3536.8	3489.5
5°	5536.9	5484.2	5464.1	5298.9	5057.1	4713.2	4339.3	4299.1	4282.3	4240.4	4143.2
7.5°	6663.8	6634.5	6603.0	6478.6	6259.0	5874.3	5372.3	5286.4	5203.8	5183.7	5074.0
10°	7390.9	7383.3	7317.5	7284.4	7147.4	6813.8	6324.8	6242.2	6152.5	6121.6	6005.8
12.5°	7965.7	7964.1	7933.1	7942.4	7822.8	7581.6	7159.9	7085.0	7019.2	6923.6	6841.5
15°	8363.5	8365.1	8411.3	8462.4	8443.9	8280.9	7885.3	7852.2	7795.7	7729.9	7632.7
17.5°	8689.5	8698.7	8746.0	8839.5	8940.5	8927.5	8614.5	8586.8	8537.4	8447.7	8396.6
20°	9425.8	9460.5	9369.3	9369.3	9380.1	9429.6	9279.1	9257.3	9187.8	9140.0	9099.8
22.5°	10669.5	10709.7	10502.7	10292.4	10085.4	9934.9	9784.9	9812.1	9764.8	9731.7	9707.8
25°	12285.0	12316.5	11981.2	11625.9	11204.2	10654.9	10283.2	10266.4	10240.8	10220.7	10209.8
27.5°	13805.3	13818.3	13501.6	12981.0	12492.0	11702.5	10788.5	10768.4	10737.5	10698.9	10665.7
30°	15106.1	15102.3	14776.3	14279.7	13755.9	12882.1	11556.3	11493.8	11402.0	11297.7	11217.3
32.5°	16232.5	16227.1	15869.6	15355.0	14805.6	14050.9	12607.7	12479.5	12336.6	12132.8	12010.6
35°	17118.7	17115.5	16778.1	16241.8	15611.5	15151.8	13812.9	13655.3	13473.8	13201.1	13012.5
37.5°	17454.0	17454.0	17265.5	16899.2	16342.3	16027.1	15151.8	14961.0	14767.1	14457.3	14244.9
40°	17257.9	17261.7	17301.9	17234.5	16963.3	16721.5	16401.0	16287.4	16120.6	15842.4	15620.7
42.5°	16600.4	16620.5	16888.4	17216.0	17351.3	17313.3	17508.9	17457.8	17340.4	17126.4	16950.3
45°	15766.9	15829.3	16122.2	16741.7	17459.4	17824.0	18437.5	18442.9	18421.2	18306.0	18170.2
47.5°	14622.5	14710.0	15096.9	15933.7	17206.8	18320.7	19380.8	19430.2	19476.4	19401.4	19338.9
50°	13102.2	13206.5	13785.2	14895.3	16692.2	18835.2	21163.0	21386.9	21595.5	21570.0	21611.8
52.5°	11473.7	11596.5	12305.1	13541.8	15807.6	18954.2	22302.5	22667.1	23031.7	23330.0	23646.8
55°	10004.5	9938.7	10647.8	11949.7	14353.0	18417.4	23326.7	23766.3	24172.7	24539.0	24916.6
57.5°	8013.6	8121.7	8832.4	10120.2	12427.9	16902.5	24031.5	24674.8	25258.9	25865.3	26400.0
60°	5857.5	5965.6	6736.7	8044.5	10338.1	14605.7	23493.0	24467.8	25403.5	26332.1	27057.5
62.5°	3536.8	3617.7	4296.9	5542.9	7971.7	11882.3	21093.5	22372.0	23749.4	24859.5	25971.3
65°	2201.7	2247.4	2498.4	3183.6	5119.6	8871.0	17234.5	18628.2	20111.6	21520.6	22676.3
67.5°	1802.3	1818.6	1864.8	2011.0	2811.4	5784.7	12827.2	14061.8	15400.6	16763.4	18049.5
70°	1620.9	1610.0	1610.0	1619.2	1802.3	3110.2	8398.3	9202.4	10318.0	11503.1	12678.9
72.5°	1463.3	1452.4	1432.3	1405.1	1470.9	1897.4	4341.0	4947.3	5751.5	6804.6	7931.0
75°	1314.9	1300.3	1276.9	1242.1	1287.8	1432.3	2084.4	2339.2	2731.0	3291.7	3919.8
77.5°	1161.2	1142.7	1121.0	1095.4	1154.1	1113.9	1221.5	1313.3	1463.3	1643.1	1879.5
80°	987.3	971.0	963.4	950.9	1020.4	848.2	862.9	919.4	1007.4	1104.7	1214.4
82.5°	773.2	773.2	802.0	808.0	884.6	610.2	645.0	694.4	740.1	791.1	842.8
85°	509.1	512.9	611.8	650.4	697.7	410.2	483.6	499.9	536.8	566.2	587.9
87.5°	159.2	172.2	373.8	414.0	401.0	232.6	296.7	304.3	329.8	349.9	368.4
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: P301663

CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0
2.5°	3489.5	3467.2	3447.1	3445.5	3430.8	3410.7	3417.8	3386.8	3388.4	3372.1	3353.7
5°	4103.0	4088.3	4014.9	3994.8	3939.9	3905.2	3899.7	3826.4	3817.1	3775.3	3729.1
7.5°	4985.9	4938.1	4835.4	4786.0	4692.5	4623.0	4590.4	4493.1	4445.3	4335.5	4286.1
10°	5910.7	5850.4	5723.8	5654.3	5564.6	5452.7	5392.4	5251.6	5196.2	5095.7	4975.1
12.5°	6768.2	6707.9	6577.4	6524.2	6405.2	6286.2	6220.5	6061.2	5989.5	5828.1	5733.1
15°	7560.9	7500.6	7387.1	7332.2	7213.2	7115.9	7027.9	6870.9	6786.6	6636.1	6511.7
17.5°	8330.3	8266.2	8167.3	8117.9	8002.7	7903.8	7808.7	7659.8	7574.0	7424.0	7312.1
20°	9044.9	8997.1	8925.9	8859.6	8744.4	8654.7	8541.2	8412.9	8288.5	8178.2	8072.2
22.5°	9667.6	9649.1	9572.5	9543.1	9444.2	9367.1	9268.2	9142.1	9051.9	8912.8	8813.9
25°	10204.4	10199.0	10162.0	10152.8	10083.2	10009.9	9988.2	9883.8	9801.2	9678.4	9576.3
27.5°	10665.7	10671.2	10662.5	10688.0	10669.5	10636.4	10638.6	10603.8	10556.0	10453.3	10363.6
30°	11178.7	11149.3	11166.2	11202.6	11213.4	11217.3	11277.6	11297.7	11294.4	11226.5	11182.5
32.5°	11904.1	11834.5	11770.4	11765.0	11801.4	11816.0	11918.7	11972.0	12017.6	12033.9	12041.5
35°	12828.9	12689.8	12556.1	12484.9	12422.4	12438.7	12512.1	12598.5	12699.0	12768.6	12851.2
37.5°	13993.9	13823.8	13587.4	13419.0	13376.6	13285.3	13332.6	13400.5	13499.4	13607.5	13750.4
40°	15406.1	15148.0	14882.3	14658.9	14538.3	14369.3	14367.7	14354.6	14415.5	14516.0	14717.6
42.5°	16765.6	16536.3	16254.3	16020.1	15862.5	15637.0	15591.3	15472.4	15499.5	15587.5	15783.7
45°	18038.1	17849.6	17677.3	17406.7	17272.5	17029.1	16951.9	16811.2	16732.4	16772.6	16968.8
47.5°	19271.0	19150.4	18970.5	18795.0	18692.3	18474.4	18375.6	18274.5	18174.0	18170.2	18375.6
50°	21674.3	21610.2	21397.8	21214.6	21264.1	20996.8	21013.1	20741.9	20864.7	20879.4	21309.7
52.5°	23932.6	24156.4	24314.0	24505.8	24630.8	24654.7	24736.7	24859.5	25007.9	25300.8	25700.1
55°	25225.8	25506.1	25669.2	25815.9	26057.7	26108.7	26246.2	26409.2	26539.1	26868.9	27208.0
57.5°	26763.0	27283.0	27535.6	27768.2	28094.2	28218.6	28447.9	28625.6	28794.1	29184.2	29594.4
60°	27709.5	28343.6	28858.2	29226.0	29634.6	29928.1	30274.2	30552.4	30948.0	31415.3	32027.1
62.5°	26956.9	27887.2	28570.7	29202.7	29757.4	30318.2	30814.3	31334.8	31935.3	32642.2	33591.4
65°	23958.6	24905.2	26075.6	26731.4	27466.1	28330.6	29085.3	29928.1	30746.4	31776.1	33179.0
67.5°	19287.9	20388.2	21703.7	22364.9	23209.3	24174.4	25020.9	26050.1	27006.4	28253.4	29988.4
70°	13902.6	15325.6	16431.9	17122.6	18108.2	19102.6	19919.8	21117.4	21908.5	23187.1	24980.7
72.5°	8803.1	9925.7	11281.4	12151.3	13026.7	14034.6	14869.8	15902.7	16640.6	17805.6	19430.2
75°	4733.3	5560.8	6751.3	7577.8	8515.6	9376.3	10354.4	11046.6	11592.7	12514.3	13833.0
77.5°	2218.0	2721.7	3324.3	3960.1	4595.8	5258.7	5903.7	6463.9	6698.6	7226.2	8004.3
80°	1346.5	1509.5	1685.0	1881.1	2146.8	2360.9	2645.1	2850.0	2864.6	3031.4	3269.4
82.5°	899.3	959.6	1012.8	1062.3	1130.2	1183.5	1243.8	1314.9	1344.3	1382.9	1460.0
85°	613.5	642.8	653.7	685.2	677.6	696.1	720.0	743.9	756.4	754.7	789.5
87.5°	377.1	391.8	399.4	406.4	401.0	393.9	404.8	417.8	421.1	410.2	414.0
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: P301663

CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0
2.5°	3357.5	3341.2	3324.3	3313.4	3309.6	3212.9	3170.5	3143.4	3084.7	3036.9	2998.3
5°	3703.6	3668.8	3641.6	3608.5	3590.0	3344.4	3254.8	3192.8	3090.1	3029.8	2974.4
7.5°	4260.5	4163.3	4106.8	4042.6	3987.8	3544.4	3396.0	3298.8	3155.9	3075.5	3013.0
10°	4892.5	4791.9	4701.7	4602.9	4517.0	3810.1	3593.8	3443.3	3254.8	3150.4	3067.8
12.5°	5597.8	5498.9	5385.3	5258.7	5148.9	4147.0	3846.5	3632.4	3373.8	3234.7	3119.5
15°	6431.3	6256.9	6119.4	5973.2	5845.0	4550.1	4141.5	3844.9	3500.4	3311.8	3158.0
17.5°	7205.6	7022.5	6836.1	6707.9	6559.5	5002.2	4438.2	4060.6	3604.7	3361.3	3165.1
20°	7962.5	7762.5	7601.7	7429.4	7273.5	5471.2	4755.0	4251.3	3672.6	3362.9	3119.5
22.5°	8629.2	8504.2	8324.9	8138.0	7980.4	5940.1	5051.7	4412.7	3698.1	3321.1	3038.5
25°	9387.2	9255.7	9035.6	8878.1	8702.6	6418.2	5342.9	4537.1	3683.5	3242.3	2914.1
27.5°	10196.8	10050.6	9825.1	9660.5	9448.1	6914.3	5610.3	4626.8	3628.6	3114.0	2747.3
30°	11041.2	10907.5	10685.8	10519.6	10304.9	7440.3	5909.1	4687.1	3518.8	2936.4	2553.3
32.5°	11948.1	11836.1	11616.6	11442.7	11213.4	8009.8	6187.3	4705.6	3352.0	2725.5	2348.4
35°	12808.8	12732.2	12546.9	12383.9	12145.9	8548.2	6482.4	4696.3	3154.2	2494.6	2161.5
37.5°	13778.1	13731.9	13640.7	13433.6	13142.4	9279.1	6836.1	4657.7	2912.4	2265.8	2018.6
40°	14811.1	14814.9	14716.0	14574.7	14303.6	10165.8	7257.2	4582.7	2648.4	2064.2	1888.2
42.5°	15904.3	15961.4	15913.6	15813.0	15552.8	11059.7	7760.9	4491.5	2392.4	1868.1	1760.5
45°	17157.3	17226.9	17300.2	17151.9	16899.2	12239.3	8423.8	4372.5	2115.3	1705.1	1672.5
47.5°	18602.7	18712.4	18778.2	18780.4	18527.7	13701.0	9500.8	4300.7	1870.3	1595.3	1630.1
50°	21652.1	21687.4	21842.8	22113.9	21919.9	17084.0	11381.9	4256.7	1703.5	1527.4	1599.1
52.5°	26046.3	26429.3	26698.8	26680.4	26416.3	19232.4	12418.6	4029.6	1604.6	1501.9	1584.5
55°	27836.1	28314.3	28812.5	28944.0	28739.2	21066.3	13398.9	3802.5	1556.7	1520.3	1589.9
57.5°	30220.9	31026.7	31710.3	31997.7	31701.1	23412.6	14688.3	3683.5	1542.1	1569.8	1624.7
60°	33006.8	34003.3	34900.9	35417.1	35417.1	26108.7	16025.5	3634.0	1522.0	1643.1	1683.3
62.5°	34796.6	36259.9	37615.6	38372.0	38349.7	27986.1	16618.9	3465.6	1476.3	1694.2	1763.8
65°	34803.7	36544.1	38270.9	39121.3	39164.7	27755.7	15639.2	3060.8	1392.1	1701.8	1844.7
67.5°	31902.7	33757.7	35770.9	36721.8	36941.3	25550.2	13538.0	2516.9	1254.6	1628.5	1874.1
70°	26943.9	28755.5	30810.5	31745.1	32135.2	21780.3	10903.7	1939.8	1079.1	1467.1	1813.2
72.5°	21227.1	23003.9	24434.6	25117.6	25421.9	16648.2	7940.2	1465.5	884.6	1236.2	1650.2
75°	15029.0	16362.4	17122.6	17274.7	17322.0	10036.0	4824.5	1090.0	729.2	961.8	1393.7
77.5°	8482.5	9054.1	8991.6	9059.5	8495.5	3874.2	2101.2	780.3	601.0	730.8	1080.8
80°	3311.8	3414.5	3207.5	3143.4	2883.1	1441.6	927.0	543.9	479.8	553.1	756.4
82.5°	1460.0	1507.3	1463.3	1474.7	1410.6	743.9	554.8	393.9	366.2	404.8	502.1
85°	804.2	818.9	815.0	839.0	804.2	296.7	263.5	241.8	256.5	274.9	322.2
87.5°	391.8	395.6	383.1	403.2	390.1	150.0	129.9	137.5	150.0	153.8	153.8
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: P301663

CATALOG NUMBER: GLNA-AF-08-LED-E1-T2R-7030-800

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	3145.0	3145.0	3145.0	3145.0	3145.0	3145.0
2.5°	2971.1	2956.5	2958.1	2954.3	2947.2	2947.2
5°	2945.6	2930.9	2930.9	2927.1	2917.9	2919.5
7.5°	2971.1	2947.2	2938.0	2924.9	2912.4	2912.4
10°	3000.5	2958.1	2932.5	2910.8	2894.0	2894.0
12.5°	3022.2	2956.5	2914.1	2884.7	2868.4	2868.4
15°	3029.8	2943.4	2884.7	2850.0	2835.3	2833.7
17.5°	3005.9	2894.0	2822.8	2782.6	2764.1	2758.7
20°	2932.5	2804.3	2718.5	2672.3	2646.7	2637.5
22.5°	2822.8	2676.1	2575.6	2527.7	2494.6	2489.2
25°	2669.0	2511.4	2412.5	2366.4	2348.4	2342.5
27.5°	2489.2	2342.5	2258.2	2228.9	2212.6	2211.0
30°	2319.1	2194.1	2132.2	2109.9	2089.8	2086.5
32.5°	2159.3	2080.5	2057.2	2025.7	1978.4	1973.0
35°	2045.8	2038.7	2022.4	1952.3	1894.2	1877.3
37.5°	1976.2	2044.1	1959.9	1822.4	1780.6	1776.8
40°	1936.0	1987.6	1842.6	1795.3	1798.5	1795.3
42.5°	1844.7	1897.4	1846.4	1824.6	1838.8	1842.6
45°	1752.9	1811.6	1874.1	1859.4	1894.2	1894.2
47.5°	1701.8	1789.3	1871.9	1871.9	1923.5	1941.4
50°	1643.1	1771.4	1842.6	1868.1	1908.8	1894.2
52.5°	1639.3	1739.9	1800.7	1846.4	1864.8	1848.0
55°	1644.8	1714.3	1758.3	1810.0	1831.7	1833.3
57.5°	1652.4	1699.6	1729.0	1752.9	1818.6	1818.6
60°	1670.3	1687.2	1703.5	1716.5	1802.3	1804.0
62.5°	1699.6	1674.1	1670.3	1683.3	1793.1	1786.0
65°	1745.8	1655.6	1628.5	1641.0	1783.9	1762.1
67.5°	1807.8	1628.5	1575.2	1584.5	1776.8	1729.0
70°	1864.8	1584.5	1509.5	1500.2	1707.3	1623.0
72.5°	1870.3	1533.4	1417.6	1390.5	1483.9	1403.0
75°	1778.4	1498.1	1317.1	1236.2	1225.3	1214.4
77.5°	1602.9	1478.0	1199.8	1073.1	1051.4	1058.5
80°	1341.0	1403.0	1058.5	908.5	1027.5	1015.0
82.5°	1002.0	1238.3	899.3	804.2	802.0	709.1
85°	557.0	965.6	732.5	602.6	419.5	406.4
87.5°	155.9	536.8	512.9	340.7	232.6	241.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)