

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: P301904

Luminaire Tested: **GLNA-AF-08-LED-E1-SL4-8030-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301904
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-8030-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23192.6 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - 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



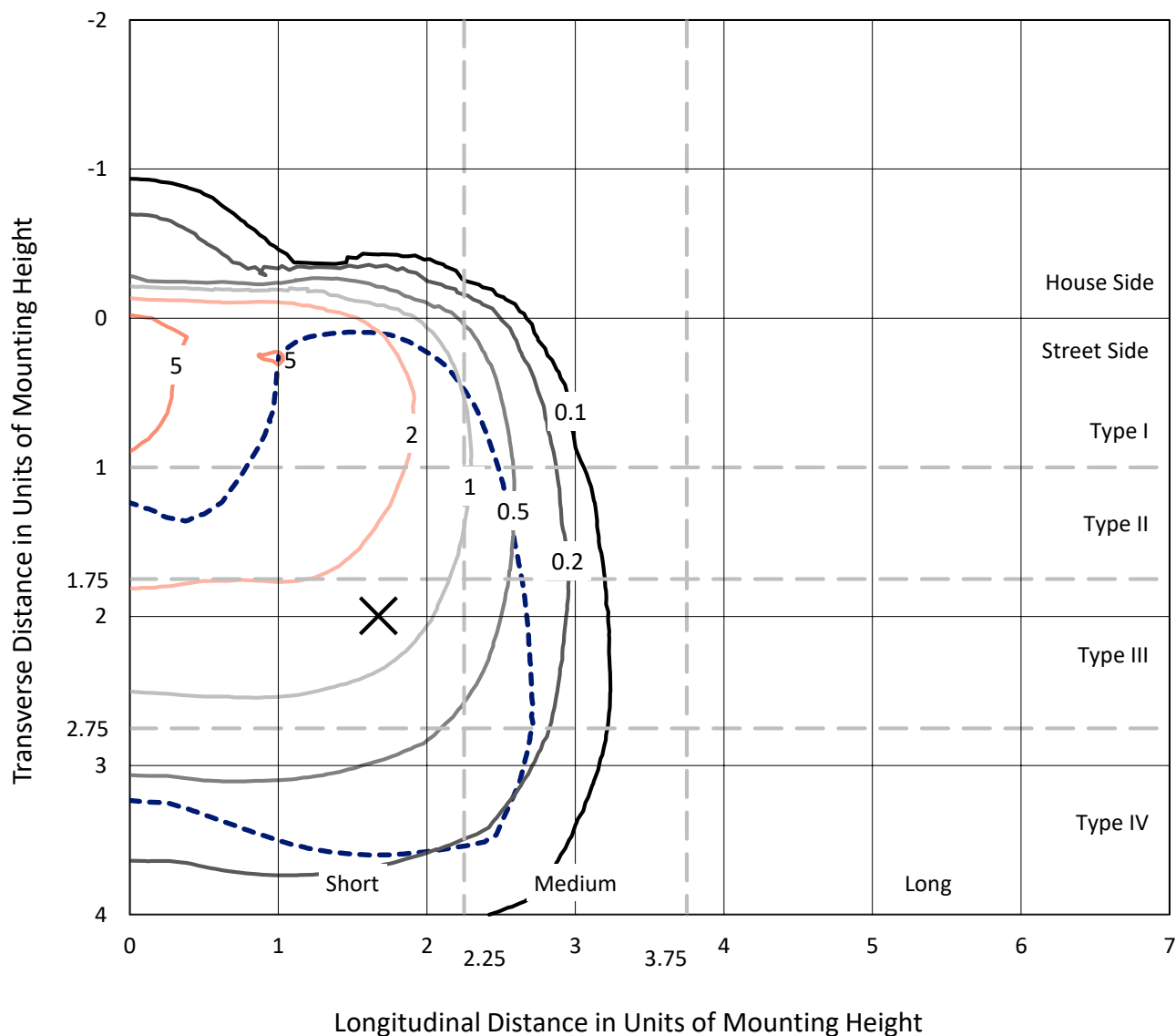
REPORT NUMBER: P301904

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL4-8030-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

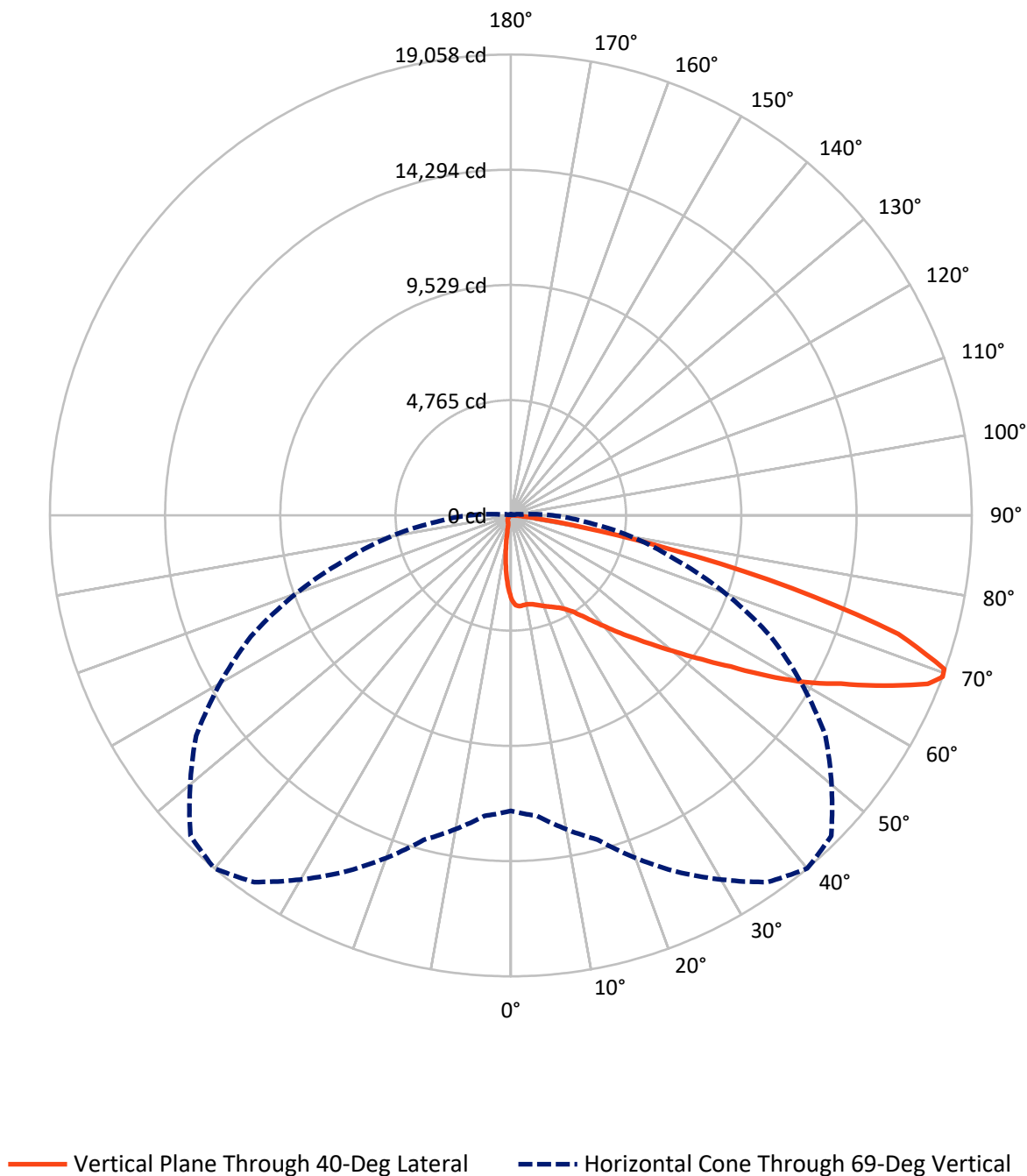


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P301904

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL4-8030-800-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P301904

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL4-8030-800-HSS

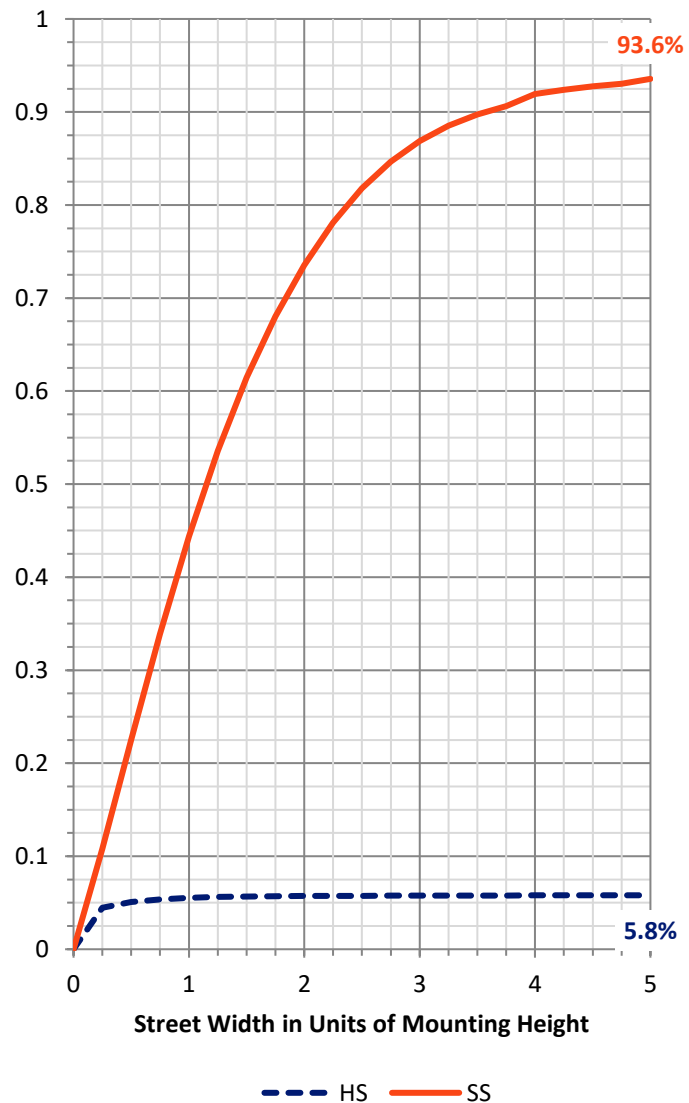
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1356.9	0.0	1356.9
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	21835.7	0.0	21835.7
	% Fixture	94.1	0.0	94.1
Total	Lumens	23192.6	0.0	23192.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.9	1.2
10°-20°	690.9	3.0
20°-30°	1163.7	5.0
30°-40°	1905.1	8.2
40°-50°	3298.6	14.2
50°-60°	5195.6	22.4
60°-70°	6785.2	29.3
70°-80°	3494.7	15.1
80°-90°	378.0	1.6
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°	23192.6	100.0
0°-180°	23192.6	100.0



REPORT NUMBER: P301904

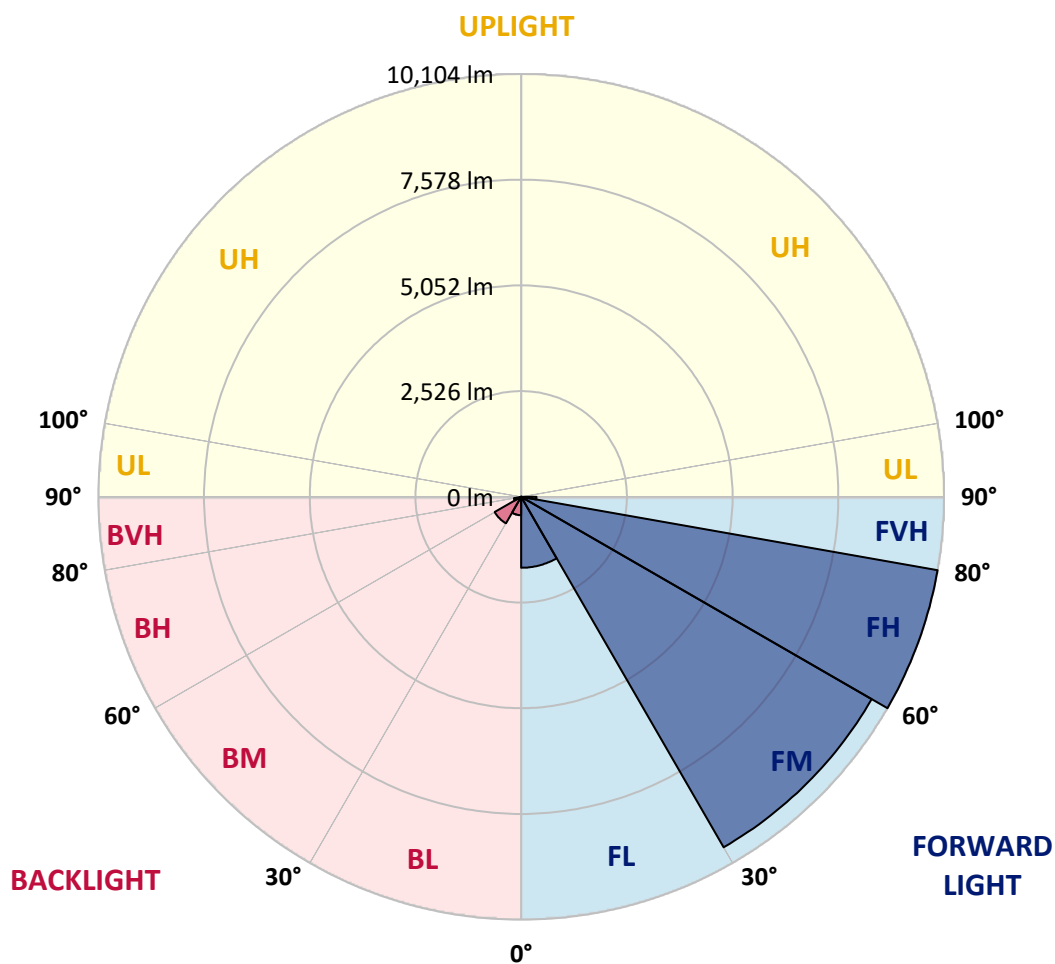
CATALOG NUMBER: GLNA-AF-08-LED-E1-SL4-8030-800-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1696.0	7.3			
FM	(30°-60°)	9669.9	41.7			
FH	(60°-80°)	10103.7	43.6			G4/12000
FVH	(80°-90°)	366.1	1.6			G3/500
BL	(0°-30°)	439.5	1.9	B1/500		
BM	(30°-60°)	729.3	3.1	B1/1000		
BH	(60°-80°)	176.2	0.8	B1/500		G1/500
BVH	(80°-90°)	11.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Short



REPORT NUMBER: P301904

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1
2.5°	3804.7	3784.0	3771.6	3755.0	3734.3	3716.4	3709.5	3658.4	3610.1	3543.8	3467.9
5°	3875.1	3868.2	3846.1	3824.0	3799.2	3771.6	3756.4	3695.6	3626.6	3530.0	3397.5
7.5°	3882.0	3873.7	3846.1	3815.8	3781.2	3748.1	3721.9	3661.1	3597.6	3499.6	3338.1
10°	3871.0	3861.3	3840.6	3807.5	3764.7	3732.9	3706.7	3648.7	3594.9	3506.5	3327.0
12.5°	3858.5	3848.9	3839.2	3822.7	3785.4	3763.3	3741.2	3686.0	3637.7	3563.1	3367.1
15°	3871.0	3865.4	3876.5	3869.6	3848.9	3829.6	3807.5	3757.8	3713.6	3651.5	3440.2
17.5°	3923.4	3923.4	3957.9	3962.1	3942.8	3915.1	3883.4	3833.7	3796.4	3744.0	3527.2
20°	4046.3	4042.2	4086.3	4094.6	4047.7	4004.9	3957.9	3897.2	3868.2	3835.1	3612.8
22.5°	4257.5	4238.2	4264.4	4256.1	4163.6	4097.4	4039.4	3964.8	3949.7	3934.5	3708.1
25°	4532.2	4521.2	4539.1	4457.7	4294.8	4205.1	4136.0	4051.8	4051.8	4067.0	3815.8
27.5°	4931.2	4889.8	4829.1	4685.5	4441.1	4326.5	4252.0	4162.3	4185.7	4242.3	3957.9
30°	5339.8	5294.3	5154.9	4934.0	4619.2	4499.1	4412.1	4318.3	4373.5	4477.0	4148.5
32.5°	5743.0	5691.9	5494.5	5215.6	4874.6	4754.5	4670.3	4566.8	4659.2	4833.2	4427.3
35°	6133.6	6088.1	5860.3	5531.7	5214.2	5114.8	5037.5	4947.8	5066.5	5309.5	4820.8
37.5°	6572.6	6522.9	6245.5	5889.3	5627.0	5555.2	5498.6	5408.9	5615.9	5972.1	5368.8
40°	7112.4	7028.2	6654.1	6299.3	6104.6	6070.1	6031.5	6019.1	6340.7	6833.6	6099.1
42.5°	7730.9	7592.8	7082.1	6731.4	6629.2	6654.1	6644.4	6699.7	7247.7	7904.8	6988.2
45°	8349.4	8171.3	7558.3	7192.5	7206.3	7293.3	7347.1	7568.0	8383.9	9133.5	7944.9
47.5°	8874.0	8698.6	8015.3	7690.9	7856.5	8027.7	8174.0	8592.3	9551.8	10342.8	8689.0
50°	9322.6	9157.0	8499.8	8238.9	8611.7	8887.8	9125.2	9745.1	10808.1	11263.6	9210.8
52.5°	9689.9	9579.4	9002.4	8867.1	9474.5	9879.0	10226.9	10969.6	11920.8	12011.9	9616.7
55°	10047.4	9968.7	9542.1	9613.9	10487.8	11038.6	11479.0	12268.7	12878.8	12635.9	10006.0
57.5°	10458.8	10387.0	10157.8	10561.0	11820.0	12513.0	12993.4	13420.0	13722.3	13273.7	10373.2
60°	10878.5	10837.1	10842.6	11612.9	13349.6	14015.0	14280.1	14390.5	14550.7	13874.2	10393.9
62.5°	11278.8	11357.5	11625.3	12783.6	14814.3	15325.1	15459.0	15568.1	15380.3	13969.5	9602.9
65°	11956.7	12085.1	12724.2	14350.5	16425.4	16972.1	17110.1	16736.0	15511.5	12738.0	7811.0
67.5°	12288.0	12522.7	13663.0	15811.1	17988.1	18595.6	18544.5	16811.9	13919.8	9713.3	5012.7
69°	12219.0	12468.8	13879.7	16258.4	18507.2	19058.0	18733.6	15882.9	11858.6	7036.5	3077.2
70°	11945.6	12198.3	13767.9	16241.8	18573.5	19009.7	18383.0	14735.6	10026.7	5145.2	1924.4
72.5°	9975.6	10193.7	12223.1	14680.4	17110.1	16755.3	15379.0	10208.9	4885.7	1401.2	433.5
75°	6140.5	6262.0	8770.4	11059.3	12923.0	12011.9	10246.2	5078.9	1456.4	396.2	240.2
77.5°	3244.2	3299.4	4801.4	6518.8	8192.0	6778.3	5251.5	1981.0	670.9	248.5	173.9
80°	1917.5	1959.0	2585.7	2980.5	3545.2	2961.2	2099.8	1216.2	480.4	156.0	154.6
82.5°	1097.5	1123.7	1874.7	1656.6	1397.1	1192.8	1045.1	1152.7	288.5	104.9	160.1
85°	403.1	408.6	1054.7	1260.4	831.1	494.2	519.1	955.3	77.3	66.3	125.6
87.5°	187.8	183.6	542.5	771.7	485.9	313.4	404.5	209.8	30.4	42.8	34.5
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: P301904

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL4-8030-800-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1	3465.1
2.5°	3423.7	3372.6	3280.1	3184.9	3088.2	3013.7	2940.5	2882.5	2863.2	2827.3	2830.1
5°	3318.8	3224.9	3031.6	2835.6	2631.3	2462.8	2304.1	2175.7	2113.6	2050.1	2050.1
7.5°	3227.7	3091.0	2788.6	2469.7	2139.8	1862.3	1612.4	1424.7	1321.2	1238.3	1236.9
10°	3193.1	3008.1	2585.7	2128.8	1669.0	1290.8	994.0	803.5	705.4	641.9	639.2
12.5°	3208.3	2979.2	2429.7	1814.0	1236.9	829.7	575.7	452.8	411.4	392.1	392.1
15°	3252.5	2970.9	2273.7	1506.1	873.9	519.1	382.4	349.3	346.5	346.5	346.5
17.5°	3306.3	2973.6	2113.6	1206.6	595.0	371.4	329.9	325.8	328.6	328.6	328.6
20°	3361.6	2975.0	1941.0	929.1	419.7	323.0	310.6	309.2	312.0	312.0	313.4
22.5°	3429.2	2981.9	1768.4	694.4	346.5	305.1	295.4	295.4	296.8	296.8	295.4
25°	3506.5	2995.7	1589.0	514.9	316.1	292.7	284.4	283.0	284.4	283.0	281.6
27.5°	3603.2	3015.1	1388.8	403.1	302.3	280.2	273.3	273.3	272.0	270.6	269.2
30°	3724.6	3037.1	1163.8	342.4	288.5	269.2	262.3	260.9	259.5	256.8	256.8
32.5°	3909.6	3085.5	941.5	310.6	273.3	254.0	248.5	248.5	245.7	243.0	241.6
35°	4194.0	3180.7	742.7	291.3	256.8	237.4	230.5	230.5	227.8	226.4	225.0
37.5°	4587.5	3325.7	577.1	273.3	240.2	219.5	212.6	211.2	208.5	205.7	204.3
40°	5110.7	3505.1	454.2	256.8	223.6	201.6	196.0	193.3	187.8	183.6	183.6
42.5°	5767.8	3709.5	368.6	238.8	204.3	185.0	180.8	176.7	167.0	162.9	161.5
45°	6455.3	3893.1	312.0	218.1	185.0	168.4	165.7	158.8	146.3	142.2	142.2
47.5°	6950.9	3935.9	274.7	198.8	167.0	150.5	149.1	136.7	125.6	122.9	121.5
50°	7260.1	3851.6	244.4	179.5	150.5	133.9	129.8	114.6	107.7	104.9	103.5
52.5°	7468.6	3701.2	219.5	162.9	135.3	118.7	109.1	98.0	92.5	89.7	89.7
55°	7635.6	3488.6	194.7	147.7	122.9	106.3	92.5	84.2	78.7	75.9	75.9
57.5°	7682.6	3200.0	169.8	135.3	110.4	93.9	78.7	73.2	66.3	64.9	64.9
60°	7341.6	2679.6	150.5	120.1	99.4	81.5	69.0	62.1	55.2	53.8	52.5
62.5°	6442.9	2073.5	132.5	106.3	87.0	70.4	59.4	51.1	45.6	45.6	45.6
65°	4914.6	1390.2	116.0	92.5	75.9	59.4	51.1	41.4	38.7	38.7	40.0
67.5°	2941.9	756.5	99.4	78.7	64.9	49.7	42.8	35.9	34.5	35.9	35.9
69°	1724.3	444.5	89.7	70.4	56.6	44.2	37.3	31.8	34.5	35.9	35.9
70°	1064.4	299.6	82.8	63.5	51.1	40.0	34.5	30.4	33.1	34.5	34.5
72.5°	296.8	154.6	66.3	49.7	41.4	33.1	27.6	27.6	31.8	33.1	33.1
75°	193.3	114.6	51.1	37.3	31.8	26.2	23.5	26.2	30.4	31.8	31.8
77.5°	160.1	93.9	41.4	30.4	26.2	24.8	22.1	23.5	27.6	29.0	29.0
80°	146.3	66.3	33.1	27.6	23.5	22.1	20.7	19.3	24.8	26.2	26.2
82.5°	139.4	52.5	29.0	24.8	22.1	19.3	17.9	19.3	22.1	23.5	24.8
85°	87.0	34.5	26.2	23.5	19.3	17.9	17.9	17.9	20.7	22.1	22.1
87.5°	31.8	27.6	23.5	19.3	16.6	16.6	16.6	16.6	17.9	20.7	20.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)