

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: P299625

Luminaire Tested: **GLNA-AF-09-LED-E1-SL2-8030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299625
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-SL2-8030-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32673.5 lumens
Efficiency: N/A
Efficacy: 65.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 501
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



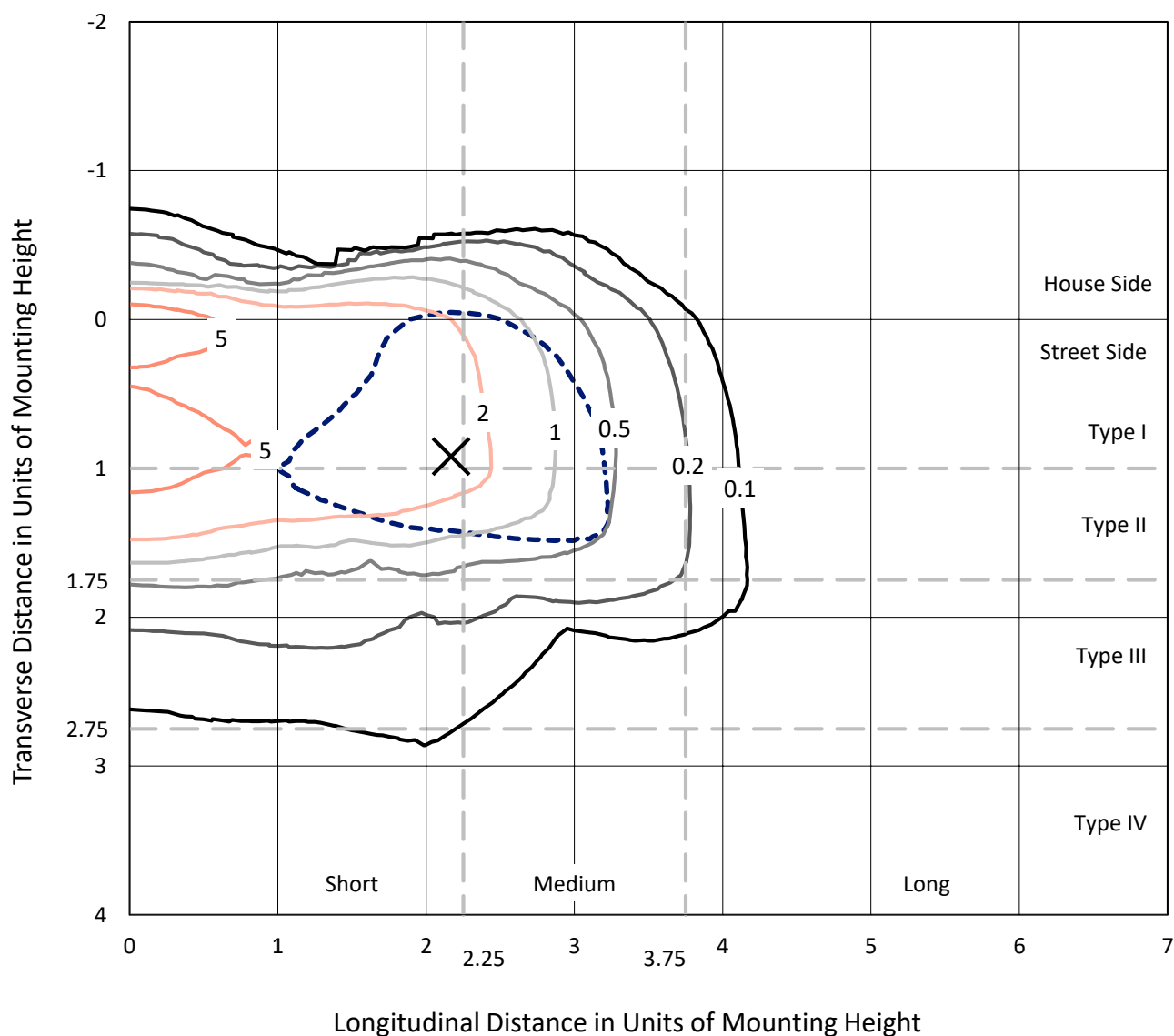
REPORT NUMBER: P299625

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-8030-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

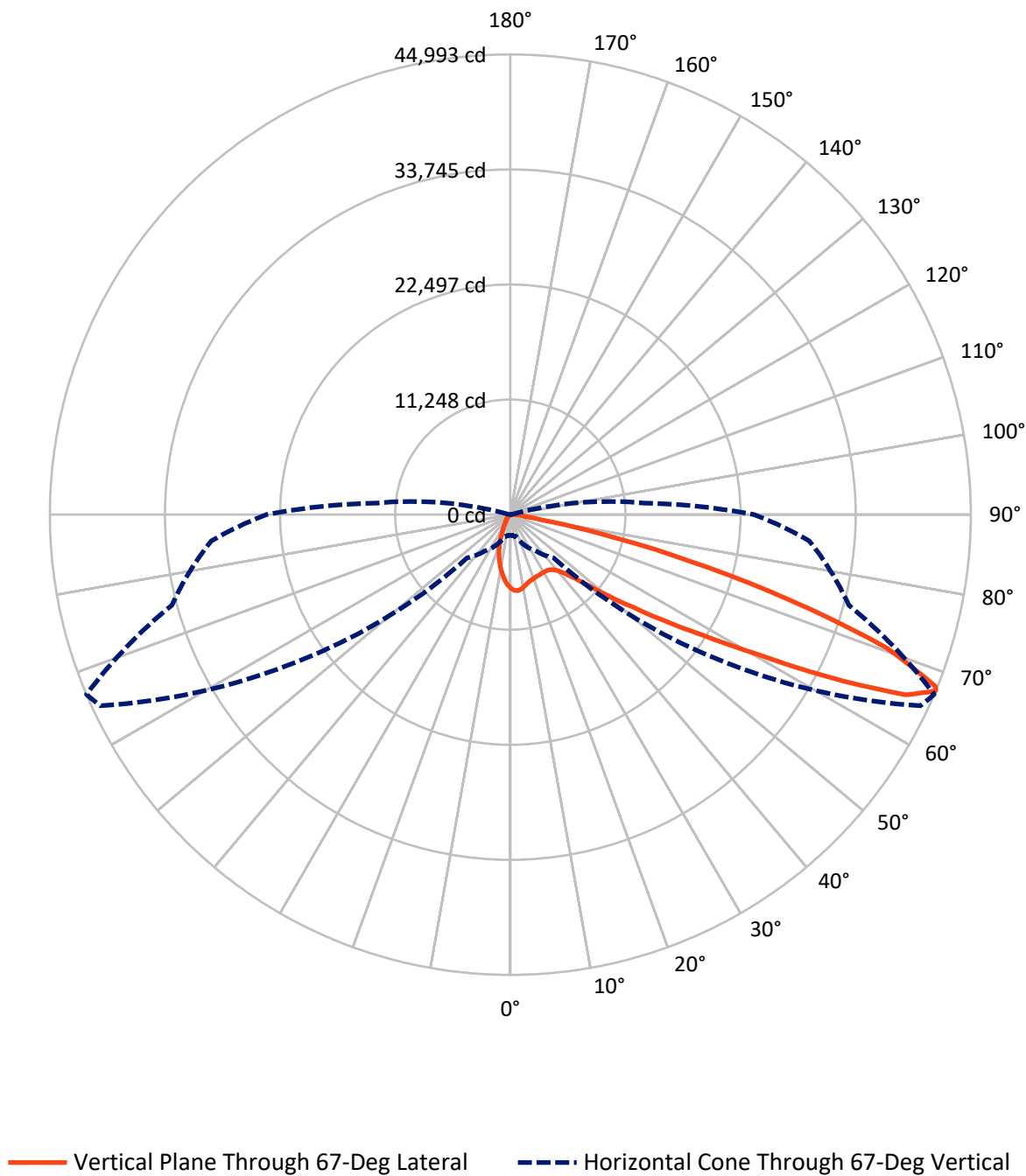


Based on 30 foot mounting height. Maximum calculated value = 8 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299625

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-8030-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P299625

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-8030-HSS

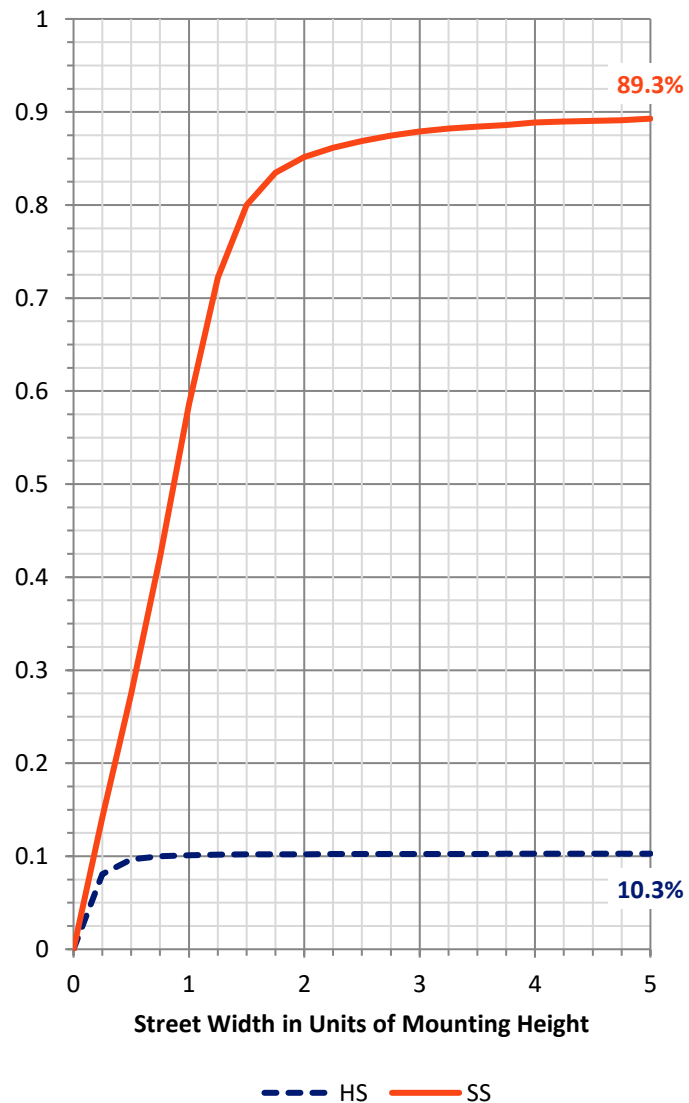
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3392.5	0.0	3392.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	29281.0	0.0	29281.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	32673.5	0.0	32673.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	586.3	1.8
10°-20°	1247.9	3.8
20°-30°	1814.4	5.6
30°-40°	2830.4	8.7
40°-50°	5014.0	15.3
50°-60°	7934.2	24.3
60°-70°	9087.5	27.8
70°-80°	3769.4	11.5
80°-90°	389.4	1.2
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°	32673.5	100.0
0°-180°	32673.5	100.0

Coefficient of Utilization



REPORT NUMBER: P299625

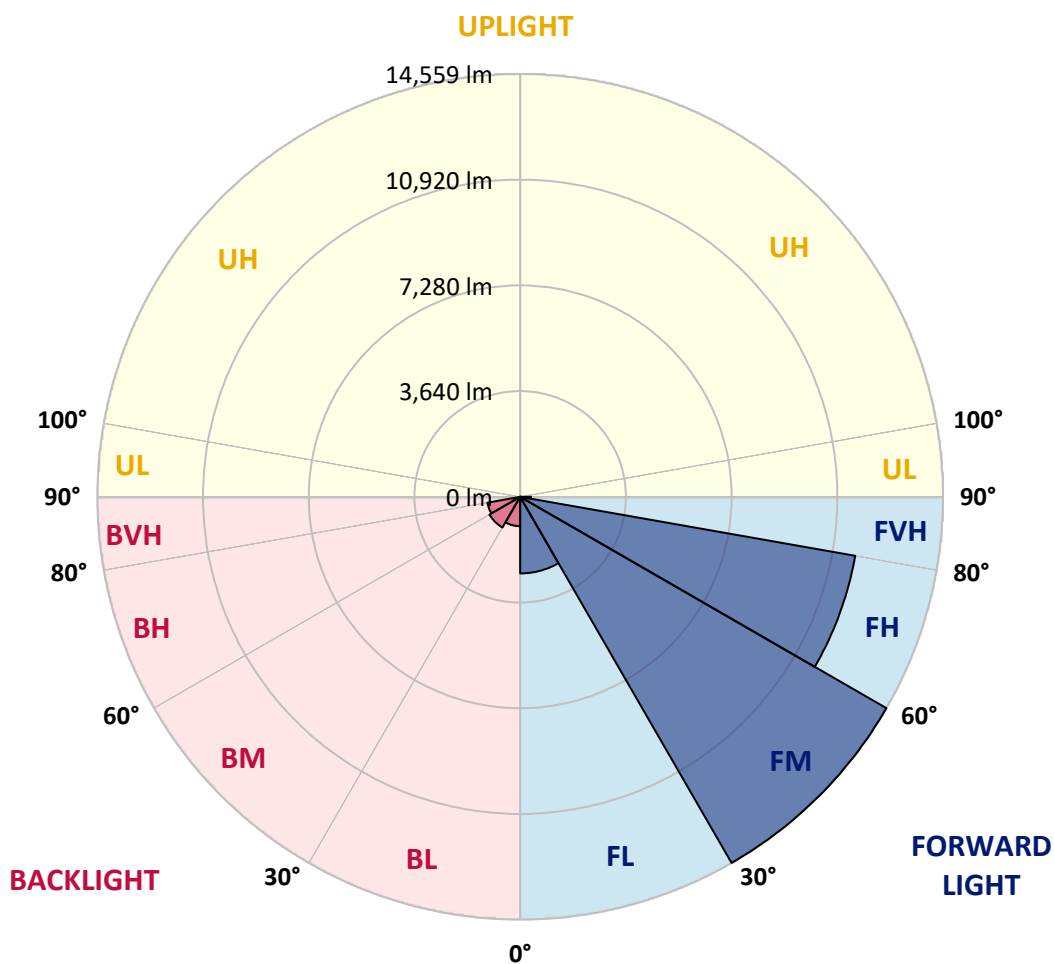
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-8030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2636.3	8.1			
FM	(30°-60°)	14559.4	44.6			
FH	(60°-80°)	11713.5	35.9			G4/12000
FVH	(80°-90°)	371.8	1.1			G3/500
BL	(0°-30°)	1012.3	3.1	B3/2500		
BM	(30°-60°)	1219.2	3.7	B2/2500		
BH	(60°-80°)	1143.4	3.5	B3/2500		G3/2500
BVH	(80°-90°)	17.5	0.1			G1/100
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: P299625

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-8030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7
2.5°	7449.7	7464.9	7463.0	7474.4	7501.1	7503.0	7476.3	7424.9	7413.4	7346.7	7230.5
5°	6870.3	6914.1	6940.8	7049.4	7171.4	7318.2	7428.7	7468.7	7463.0	7415.3	7240.0
7.5°	6209.0	6252.8	6283.3	6411.0	6573.0	6824.6	7112.3	7348.6	7369.6	7421.1	7232.4
10°	5768.8	5776.4	5818.3	5940.3	6109.9	6367.2	6710.2	7123.8	7186.7	7375.3	7213.3
12.5°	5406.7	5412.4	5467.7	5599.2	5780.2	6039.4	6399.6	6877.9	6975.1	7318.2	7209.5
15°	5149.4	5170.4	5219.9	5357.1	5549.6	5806.9	6176.6	6696.9	6813.1	7297.2	7243.8
17.5°	5063.6	5086.5	5101.7	5200.8	5376.2	5627.7	6007.0	6578.7	6710.2	7308.6	7310.5
20°	5153.2	5170.4	5136.0	5160.8	5269.5	5494.3	5864.1	6477.7	6634.0	7322.0	7396.3
22.5°	5486.7	5494.3	5401.0	5292.3	5273.3	5397.1	5751.6	6397.7	6565.4	7358.2	7497.3
25°	6058.4	6045.1	5892.6	5658.2	5437.2	5380.0	5684.9	6348.1	6531.1	7396.3	7602.1
27.5°	6748.3	6767.4	6557.8	6216.6	5795.4	5494.3	5675.4	6327.2	6515.8	7423.0	7693.6
30°	7586.9	7613.5	7373.4	6944.6	6340.5	5776.4	5763.0	6323.3	6506.3	7405.8	7701.2
32.5°	8442.6	8475.0	8286.3	7844.1	7068.5	6249.0	5961.2	6365.3	6525.4	7346.7	7657.4
35°	9338.3	9384.0	9258.2	8879.0	8055.7	6931.3	6310.0	6493.0	6614.9	7341.0	7613.5
37.5°	10575.1	10617.0	10380.7	9978.6	9250.6	7846.1	6870.3	6733.1	6826.5	7432.5	7625.0
40°	12421.8	12416.1	11806.2	11190.7	10563.7	9008.6	7657.4	7167.6	7215.2	7708.8	7766.0
42.5°	14434.3	14424.8	13523.3	12587.6	12021.6	10439.8	8692.2	7918.5	7886.1	8217.7	8131.9
45°	15985.6	15983.7	15248.1	14194.2	13776.8	12082.6	10030.1	8962.8	8913.3	9044.8	8806.6
47.5°	16646.9	16658.3	16288.6	15547.3	15722.6	14304.7	11716.7	10476.0	10401.7	10348.3	9986.2
50°	16132.3	16155.2	16185.7	16040.9	17150.0	17291.0	13978.8	12608.6	12572.4	12334.1	11768.1
52.5°	14451.5	14567.7	14926.0	15385.3	17645.5	20157.3	17525.5	15257.6	15063.2	14809.7	14186.5
55°	11619.5	11747.2	12427.5	13542.4	16908.0	22040.2	22495.7	18672.7	18348.8	17592.2	16692.6
57.5°	7689.8	7888.0	8875.2	10293.1	14765.9	22343.2	27454.5	23412.4	22284.2	20212.6	19198.7
60°	4236.5	4427.1	5498.1	6782.6	10664.7	20845.3	30789.6	29583.3	27589.8	23141.8	22242.2
62.5°	2609.0	2711.9	3502.8	4697.7	6395.8	16452.5	31479.5	37337.8	35030.0	26913.3	25918.5
65°	2077.3	2121.1	2508.0	3840.1	4585.3	9786.1	29251.7	43249.5	42479.6	31479.5	29209.7
67°	2016.3	2033.5	2216.4	3297.0	4322.3	5999.4	24506.3	44212.0	44993.3	34242.9	29312.6
67.5°	2029.6	2048.7	2222.1	3146.4	4314.7	5513.4	22871.1	43832.7	44819.9	34462.0	28857.2
70°	1957.2	2016.3	2544.2	3144.5	4103.1	4581.5	13696.8	37978.2	39005.4	32020.7	24485.3
72.5°	693.7	697.5	1099.6	2544.2	4461.4	4631.0	6877.9	27841.4	28601.8	24494.9	17653.1
75°	411.6	350.7	365.9	724.2	4263.2	4497.6	3967.8	17790.4	18074.3	14036.0	8940.0
77.5°	284.0	247.8	255.4	320.2	1623.7	4434.7	3152.1	9277.3	8974.3	4922.6	1903.9
80°	162.0	142.9	152.5	280.1	590.8	4137.4	2973.0	3762.0	3207.4	834.7	526.0
82.5°	85.8	72.4	87.7	230.6	411.6	2578.5	2978.7	1818.1	1440.8	282.1	358.3
85°	30.5	24.8	41.9	158.2	274.4	790.9	2761.5	1528.4	1200.6	137.2	272.5
87.5°	5.7	5.7	17.2	64.8	110.5	242.0	1633.2	907.1	607.9	81.9	186.8
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: P299625

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL2-8030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7	7205.7
2.5°	7182.8	7100.9	6990.4	6855.1	6695.0	6553.9	6449.1	6340.5	6317.6	6279.5	6273.8
5°	7135.2	6994.2	6719.7	6405.3	6069.9	5766.9	5521.0	5301.9	5204.7	5120.8	5111.3
7.5°	7064.7	6853.1	6386.2	5879.3	5355.2	4878.8	4474.7	4188.9	3925.9	3800.1	3781.0
10°	6982.7	6679.7	6010.8	5307.6	4583.4	3910.6	3310.3	2807.2	2502.3	2321.2	2298.4
12.5°	6906.5	6510.1	5627.7	4714.9	3752.5	2852.9	2081.1	1600.8	1280.7	1151.1	1135.8
15°	6870.3	6372.9	5269.5	4108.8	2883.4	1816.2	1137.7	880.5	775.6	745.2	743.3
17.5°	6866.5	6256.6	4918.8	3481.8	2020.1	1055.8	741.3	676.5	655.6	648.0	648.0
20°	6864.6	6146.1	4568.1	2832.0	1282.6	703.2	617.5	602.2	587.0	577.4	577.4
22.5°	6885.5	6047.0	4202.2	2168.8	808.0	569.8	543.1	527.9	508.8	495.5	493.6
25°	6906.5	5970.8	3828.7	1543.7	585.1	495.5	468.8	447.9	421.2	404.0	402.1
27.5°	6910.3	5875.5	3428.5	1032.9	489.8	432.6	398.3	365.9	335.4	318.3	316.4
30°	6853.1	5715.4	2984.4	697.5	432.6	375.4	329.7	295.4	266.8	253.5	253.5
32.5°	6740.7	5517.2	2496.6	526.0	385.0	322.1	272.5	240.1	221.1	215.4	213.4
35°	6639.7	5303.8	1995.3	446.0	344.9	272.5	223.0	202.0	190.6	188.7	186.8
37.5°	6580.6	5132.2	1524.6	404.0	306.8	228.7	188.7	173.4	167.7	163.9	165.8
40°	6626.4	4989.3	1126.3	369.7	268.7	190.6	160.1	152.5	146.7	144.8	144.8
42.5°	6826.5	4964.5	836.6	339.2	232.5	158.2	139.1	133.4	129.6	127.7	129.6
45°	7352.5	5117.0	649.9	310.6	196.3	133.4	118.2	116.3	114.3	114.3	114.3
47.5°	8143.4	5431.4	541.2	278.2	163.9	114.3	102.9	101.0	99.1	101.0	101.0
50°	9483.1	6007.0	484.1	245.8	135.3	97.2	87.7	87.7	87.7	87.7	89.6
52.5°	11520.4	7139.0	446.0	213.4	110.5	81.9	74.3	74.3	76.2	76.2	78.1
55°	13790.1	8640.8	411.6	181.0	93.4	68.6	61.0	62.9	64.8	66.7	66.7
57.5°	16252.4	10304.5	383.1	148.7	80.0	55.3	51.5	53.4	55.3	59.1	59.1
60°	19223.5	12105.4	341.1	116.3	66.7	43.8	40.0	43.8	49.6	53.4	55.3
62.5°	22486.2	13847.3	287.8	91.5	55.3	34.3	32.4	40.0	47.6	51.5	53.4
65°	24715.9	14394.3	221.1	74.3	41.9	24.8	26.7	36.2	45.7	51.5	51.5
67°	23812.6	13050.7	181.0	62.9	34.3	19.1	24.8	36.2	45.7	49.6	51.5
67.5°	23185.6	12524.7	173.4	61.0	32.4	19.1	24.8	36.2	45.7	51.5	51.5
70°	18865.2	9408.8	144.8	45.7	26.7	17.2	21.0	34.3	43.8	49.6	49.6
72.5°	13107.9	5801.2	129.6	32.4	22.9	15.2	19.1	32.4	41.9	47.6	49.6
75°	6231.9	2100.2	110.5	24.8	21.0	13.3	17.2	32.4	41.9	47.6	47.6
77.5°	1271.1	487.9	89.6	21.0	17.2	13.3	15.2	30.5	40.0	45.7	45.7
80°	417.4	188.7	66.7	19.1	17.2	13.3	15.2	28.6	40.0	43.8	45.7
82.5°	301.1	95.3	43.8	19.1	17.2	13.3	13.3	28.6	38.1	43.8	43.8
85°	230.6	66.7	28.6	19.1	17.2	13.3	13.3	26.7	36.2	41.9	41.9
87.5°	152.5	26.7	22.9	19.1	17.2	13.3	13.3	26.7	34.3	40.0	41.9
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)