

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: P191112

Luminaire Tested: **GLEON-AF-04-LED-E1-SL3-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191112
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-SL3-600-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13826.2 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 129
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

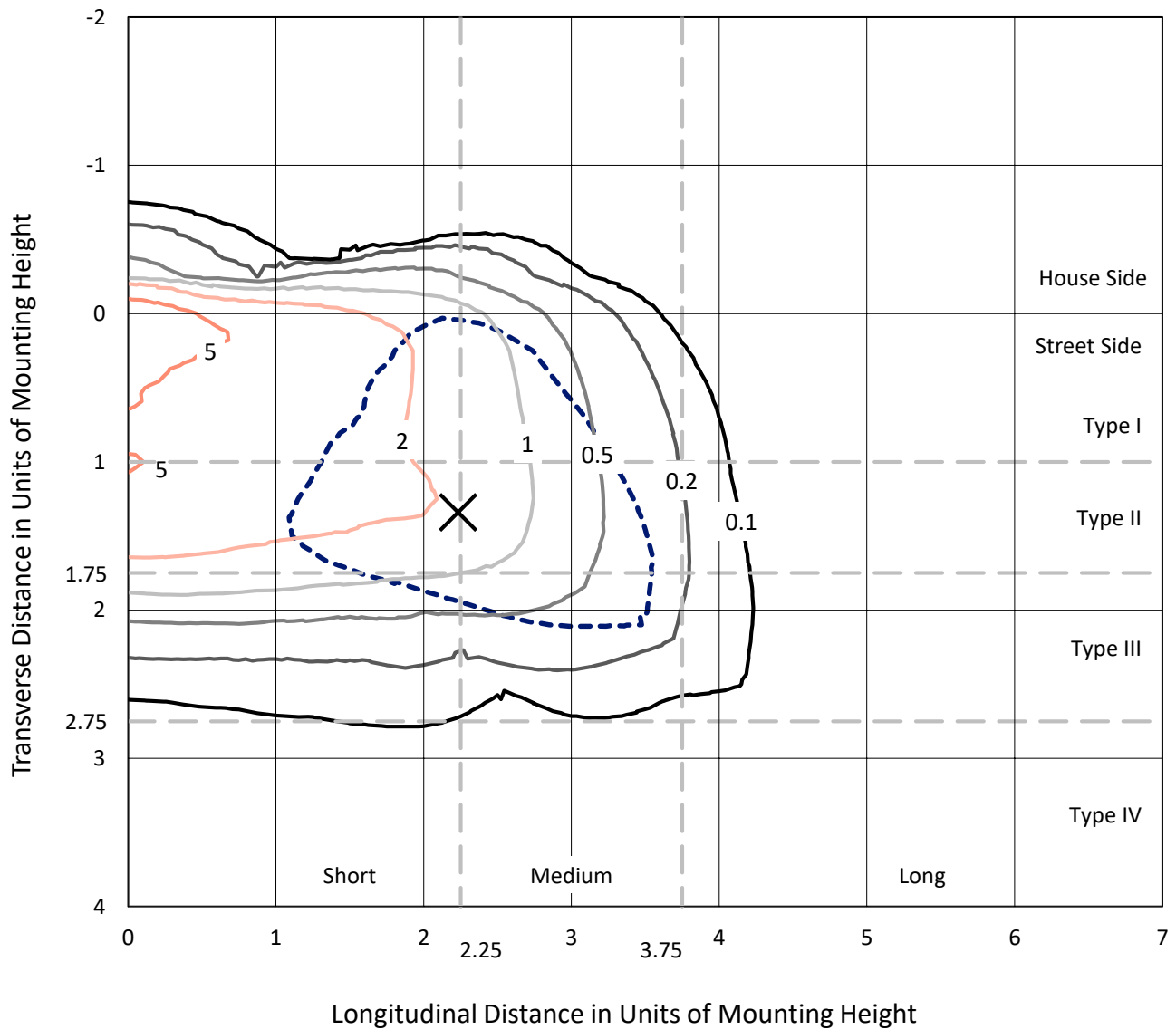


REPORT NUMBER: P191112

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL3-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

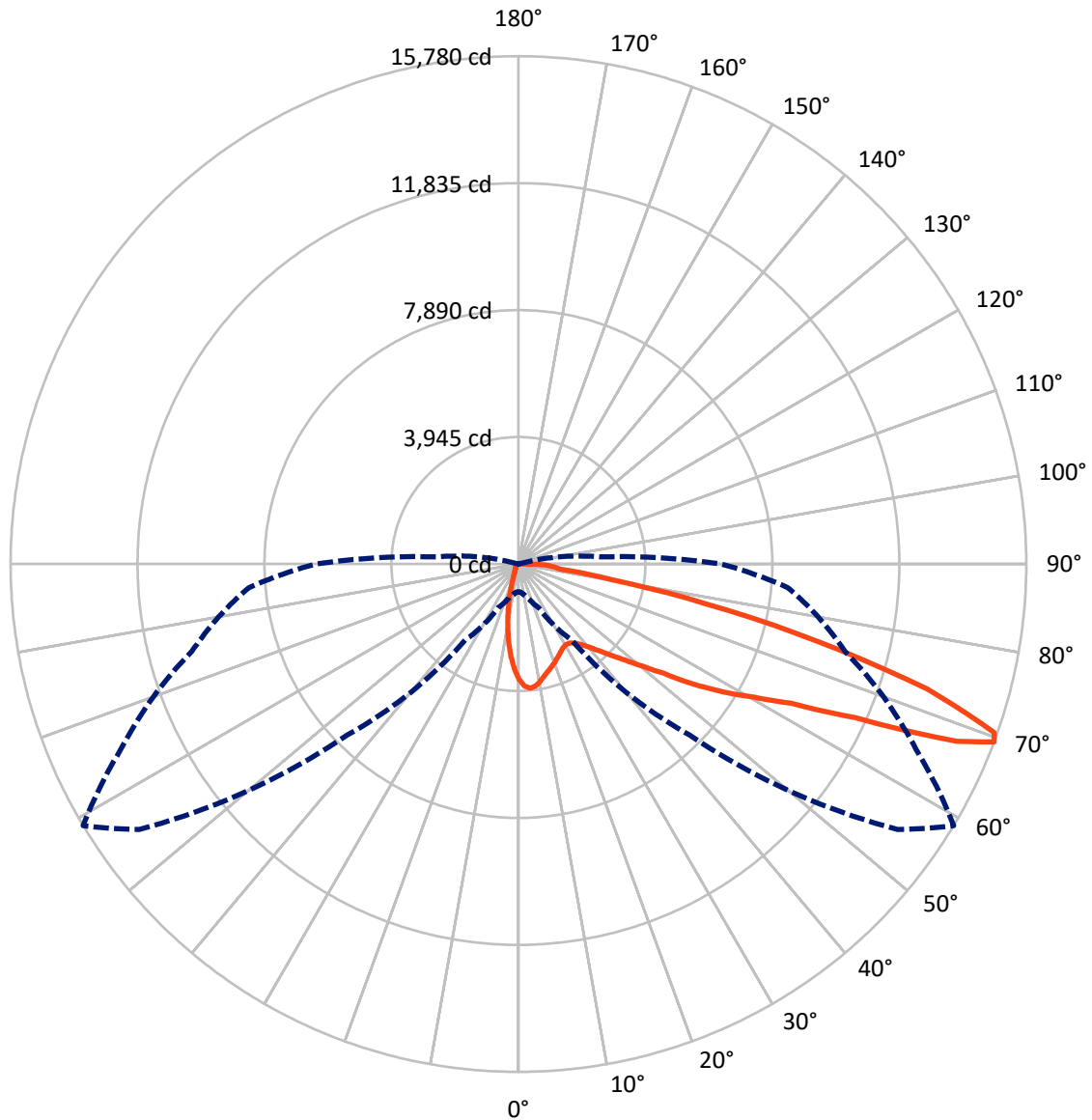
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P191112
CATALOG NUMBER: GLEON-AF-04-LED-E1-SL3-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P191112

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL3-600-HSS

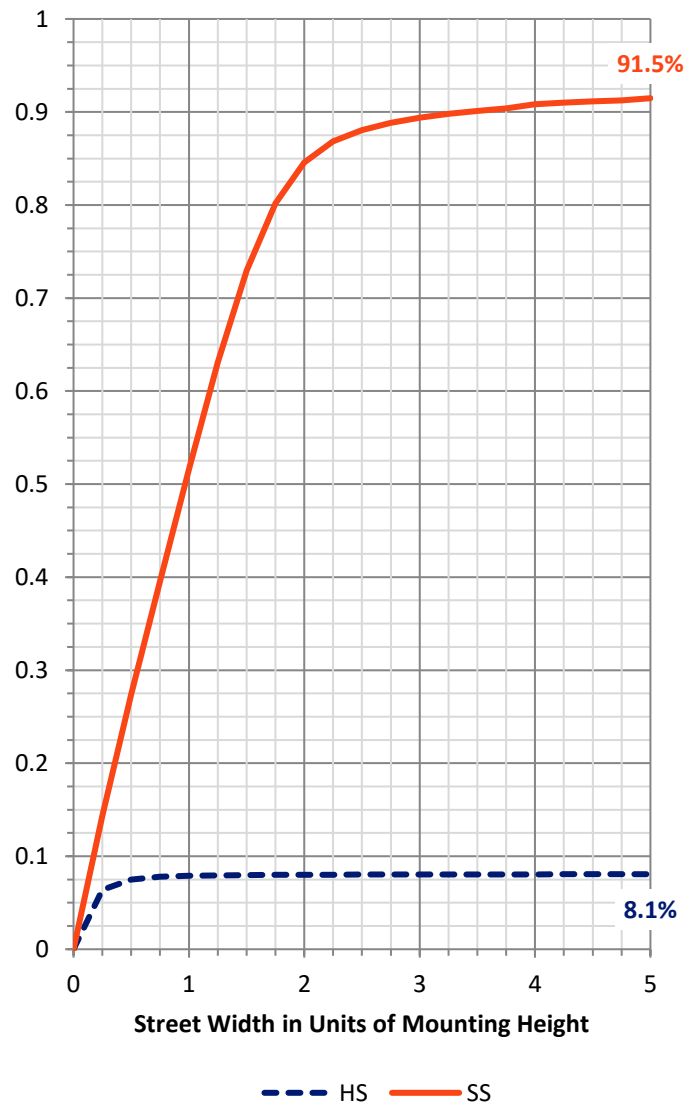
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1126.0	0.0	1126.0
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	12700.2	0.0	12700.2
	% Fixture	91.9	0.0	91.9
Total	Lumens	13826.2	0.0	13826.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.1	2.1
10°-20°	603.6	4.4
20°-30°	812.2	5.9
30°-40°	1179.3	8.5
40°-50°	1963.6	14.2
50°-60°	3063.1	22.2
60°-70°	3790.4	27.4
70°-80°	1920.9	13.9
80°-90°	201.0	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°	13826.2	100.0
0°-180°	13826.2	100.0



REPORT NUMBER: P191112

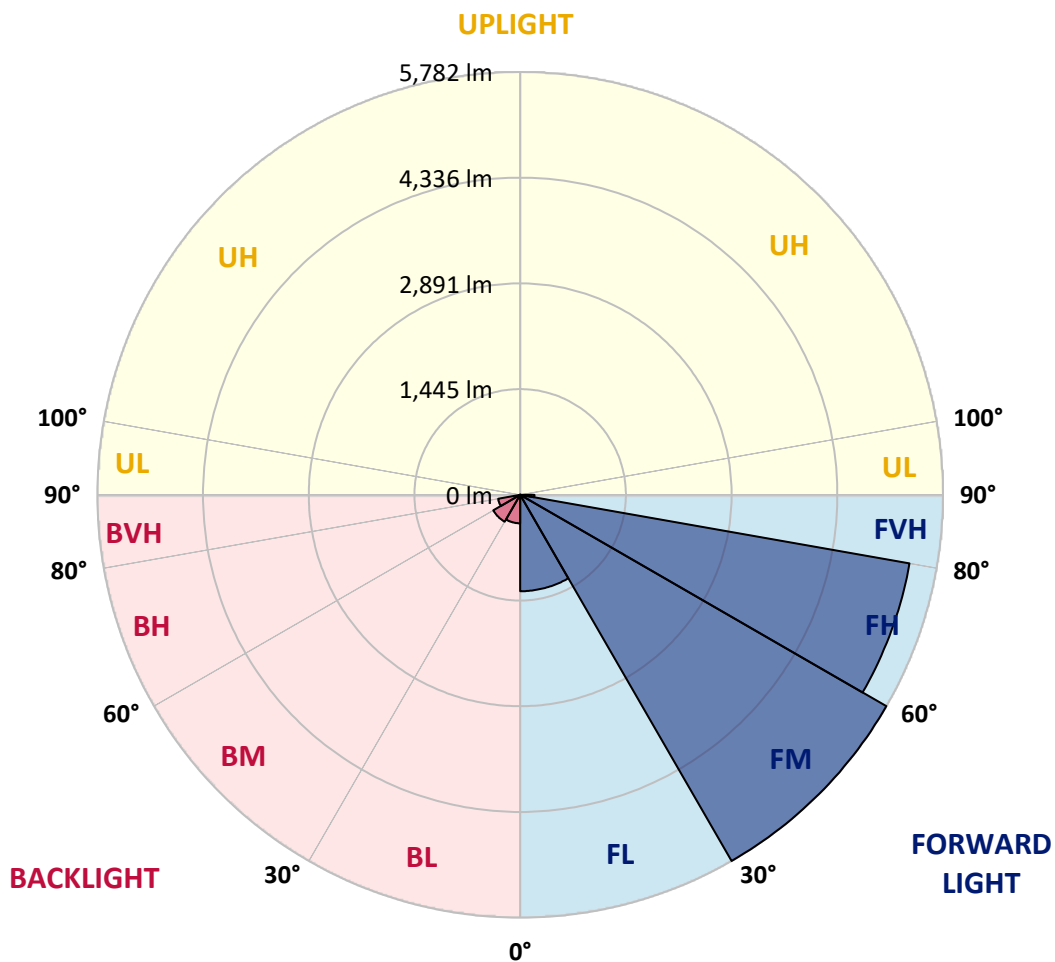
CATALOG NUMBER: GLEON-AF-04-LED-E1-SL3-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1318.2	9.5			
FM	(30°-60°)	5781.7	41.8			
FH	(60°-80°)	5405.5	39.1			G3/7500
FVH	(80°-90°)	194.8	1.4			G2/225
BL	(0°-30°)	389.7	2.8	B1/500		
BM	(30°-60°)	424.3	3.1	B1/1000		
BH	(60°-80°)	305.8	2.2	B1/500		G1/500
BVH	(80°-90°)	6.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short





REPORT NUMBER: P191112

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL3-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7
2.5°	3944.3	3942.8	3925.6	3917.8	3903.7	3874.0	3827.9	3803.6	3764.6	3696.5	3605.0
5°	3908.4	3927.1	3937.3	3938.1	3948.3	3937.3	3895.9	3875.6	3821.6	3712.2	3547.9
7.5°	3664.4	3671.5	3700.4	3725.4	3773.9	3820.0	3834.8	3826.2	3794.2	3677.0	3458.8
10°	3403.4	3410.3	3444.8	3477.6	3543.3	3614.4	3689.5	3705.1	3718.4	3626.9	3372.8
12.5°	3178.1	3185.2	3220.4	3263.3	3339.9	3427.5	3544.0	3569.8	3628.5	3579.2	3304.0
15°	2984.3	2987.4	3021.8	3075.0	3166.4	3279.0	3411.1	3452.6	3542.5	3545.6	3243.8
17.5°	2819.3	2827.1	2848.2	2899.0	2999.1	3138.3	3292.3	3351.7	3457.3	3517.4	3185.2
20°	2718.4	2726.3	2725.4	2753.6	2843.5	2992.0	3173.5	3244.6	3372.8	3488.6	3132.8
22.5°	2698.9	2698.9	2678.6	2674.6	2727.8	2852.1	3049.9	3136.7	3297.0	3476.0	3096.1
25°	2768.5	2765.3	2714.5	2673.1	2675.4	2749.7	2930.3	3033.5	3232.8	3484.6	3076.5
27.5°	2915.4	2911.5	2847.4	2768.5	2705.1	2704.4	2839.6	2950.6	3182.1	3525.3	3084.3
30°	3118.8	3117.1	3047.6	2948.2	2833.4	2727.8	2808.3	2909.2	3149.3	3598.7	3102.3
32.5°	3340.8	3338.4	3286.0	3181.3	3035.8	2833.4	2841.1	2925.6	3158.6	3696.5	3146.1
35°	3576.1	3572.1	3549.5	3458.1	3297.8	3028.0	2949.1	3014.7	3218.0	3842.7	3232.1
37.5°	3831.0	3834.8	3851.3	3763.7	3595.7	3300.9	3129.7	3174.2	3337.7	4041.3	3372.1
40°	4207.0	4206.3	4211.7	4096.8	3935.0	3634.7	3382.2	3396.3	3537.8	4304.8	3584.7
42.5°	4889.6	4841.8	4697.3	4462.7	4300.1	4016.3	3700.4	3685.6	3782.5	4630.8	3882.6
45°	5806.7	5705.0	5329.8	4880.2	4672.2	4446.3	4092.1	4044.4	4106.2	5022.5	4250.1
47.5°	6595.6	6490.0	5959.1	5314.8	5067.1	4854.4	4551.0	4465.1	4485.3	5461.1	4716.0
50°	6863.7	6812.1	6348.4	5693.3	5449.4	5368.0	5083.5	4978.7	4949.8	5968.5	5256.2
52.5°	6770.7	6766.7	6457.9	5938.7	5799.6	5899.7	5753.5	5632.3	5526.0	6503.3	5805.9
55°	6621.4	6640.9	6502.5	6153.8	6149.1	6385.3	6669.8	6569.0	6260.9	7084.1	6279.7
57.5°	6209.3	6293.0	6477.4	6560.4	6752.7	6994.2	7432.9	7492.3	7127.9	7529.0	6672.9
60°	5038.1	5221.9	5825.4	6619.0	7530.6	8132.6	8353.8	8404.7	7839.4	7898.8	7203.8
62.5°	3576.1	3763.7	4529.1	5871.5	7542.3	9628.2	9726.0	9526.6	8622.9	8446.9	8119.4
65°	1898.3	2042.9	2668.4	4238.3	6539.2	9975.4	12125.4	11531.2	10005.1	9525.0	9302.2
67.5°	971.0	1014.8	1263.4	2074.2	4495.6	8860.5	14276.2	14694.5	12387.3	10594.6	9245.1
69°	859.3	885.1	1050.0	1499.5	2878.7	7504.8	14381.1	15780.4	13634.4	10505.5	8401.6
70°	831.9	854.6	1004.6	1357.3	2250.1	6293.7	13980.0	15685.1	13953.4	10166.2	7771.4
72.5°	706.0	725.6	894.4	1199.3	1828.7	3124.2	11356.1	13291.1	12521.0	8468.8	5625.3
75°	472.2	536.3	858.5	1124.2	1701.3	1774.7	7486.8	9604.8	8922.3	5712.1	2930.3
77.5°	113.3	121.9	242.3	894.4	1555.8	1562.1	3850.5	5970.9	4870.1	2035.9	692.7
80°	61.0	58.6	68.0	177.5	1448.7	1465.9	1733.3	2898.2	1738.8	337.8	228.3
82.5°	43.0	40.6	43.8	74.3	455.8	1335.4	1254.0	1311.9	720.9	129.8	102.4
85°	15.7	14.8	24.2	67.2	143.1	767.7	1288.5	1082.1	584.0	59.4	75.1
87.5°	5.5	4.7	9.4	36.7	43.8	326.8	795.1	817.7	229.9	36.0	35.2
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: P191112

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL3-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7	3598.7
2.5°	3566.7	3518.2	3429.1	3337.7	3253.2	3151.6	3100.8	3050.7	3029.6	3021.8	2985.1
5°	3463.5	3381.5	3192.2	3002.3	2827.1	2641.1	2518.3	2419.8	2361.9	2333.8	2289.2
7.5°	3331.3	3196.9	2910.0	2616.8	2343.9	2075.0	1875.6	1722.3	1616.9	1566.0	1519.9
10°	3203.2	3024.1	2616.0	2216.5	1845.9	1489.4	1214.1	1014.8	887.4	828.7	791.3
12.5°	3088.2	2856.1	2332.2	1826.4	1361.1	943.7	663.8	505.0	426.1	398.7	385.4
15°	2985.8	2701.2	2064.0	1455.8	921.8	539.5	362.7	308.8	296.3	296.3	294.7
17.5°	2888.9	2549.6	1805.2	1107.9	578.6	329.9	276.0	268.9	268.9	272.1	272.1
20°	2795.8	2405.0	1555.1	795.1	364.4	261.9	249.4	247.9	249.4	253.3	253.3
22.5°	2716.0	2273.6	1321.3	545.7	270.5	236.1	229.9	227.5	228.3	230.7	232.2
25°	2656.7	2162.5	1100.8	369.8	233.0	215.0	208.0	204.1	200.9	200.9	202.5
27.5°	2619.2	2068.7	887.4	268.9	209.5	195.5	184.5	178.3	171.2	167.4	168.9
30°	2591.7	1979.6	687.2	219.7	187.6	173.6	159.5	149.4	139.1	134.5	136.1
32.5°	2581.6	1907.7	513.6	193.8	168.1	152.4	135.2	121.9	111.0	107.1	107.9
35°	2608.9	1850.6	376.0	175.1	152.4	132.9	113.3	98.5	89.9	87.6	88.4
37.5°	2680.9	1820.1	281.4	159.5	138.4	116.5	94.6	80.5	75.1	75.1	75.8
40°	2816.9	1819.3	226.0	148.5	125.9	100.9	78.2	68.0	64.9	66.5	67.2
42.5°	3015.6	1860.7	197.0	138.4	115.0	86.0	64.9	57.9	57.1	58.6	59.4
45°	3286.8	1936.5	181.4	129.8	103.2	71.9	54.7	50.0	50.0	52.4	53.2
47.5°	3619.1	2047.6	168.1	121.2	91.5	60.3	47.0	43.8	44.6	47.0	47.7
50°	4019.4	2187.6	154.8	111.8	82.9	50.0	40.6	38.4	39.1	42.2	43.0
52.5°	4475.2	2376.0	143.8	103.2	71.9	41.4	34.4	32.8	34.4	37.5	38.4
55°	4866.1	2544.9	130.5	96.2	57.9	34.4	28.1	28.1	29.7	33.7	34.4
57.5°	5242.2	2721.6	118.9	82.9	45.3	27.4	23.4	24.2	26.6	30.5	31.3
60°	5794.2	3021.0	104.8	69.6	34.4	21.9	19.5	20.4	23.4	27.4	28.1
62.5°	6731.5	3476.8	90.7	57.9	26.6	17.2	15.7	17.2	21.1	25.8	26.6
65°	7577.5	3662.1	74.3	48.5	20.4	13.3	13.3	15.7	20.4	25.1	25.8
67.5°	7106.0	3082.8	57.9	38.4	15.7	10.1	10.9	14.8	19.5	25.1	25.8
69°	6284.4	2520.7	49.3	30.5	13.3	9.4	10.1	14.8	19.5	24.2	25.1
70°	5644.0	2128.1	43.8	25.8	11.8	9.4	10.1	14.1	19.5	24.2	25.1
72.5°	3780.1	1149.3	35.2	18.7	10.9	8.6	8.6	14.1	18.7	23.4	24.2
75°	1624.7	317.4	28.1	13.3	9.4	7.8	7.8	13.3	18.0	22.7	24.2
77.5°	297.1	80.5	22.7	11.8	9.4	7.8	7.1	12.5	17.2	21.9	22.7
80°	118.0	39.9	18.0	10.1	8.6	7.1	6.2	11.8	16.5	21.1	21.9
82.5°	71.2	22.7	14.8	9.4	8.6	6.2	5.5	10.1	15.7	20.4	21.1
85°	57.9	15.7	11.8	9.4	7.8	6.2	4.7	9.4	14.1	19.5	20.4
87.5°	28.1	10.9	10.9	8.6	7.8	6.2	4.7	8.6	13.3	18.7	19.5
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)