

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: P192077

Luminaire Tested: **GLEON-AF-09-LED-E1-SLL-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24296)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-SLL-7050-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30812 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 290
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

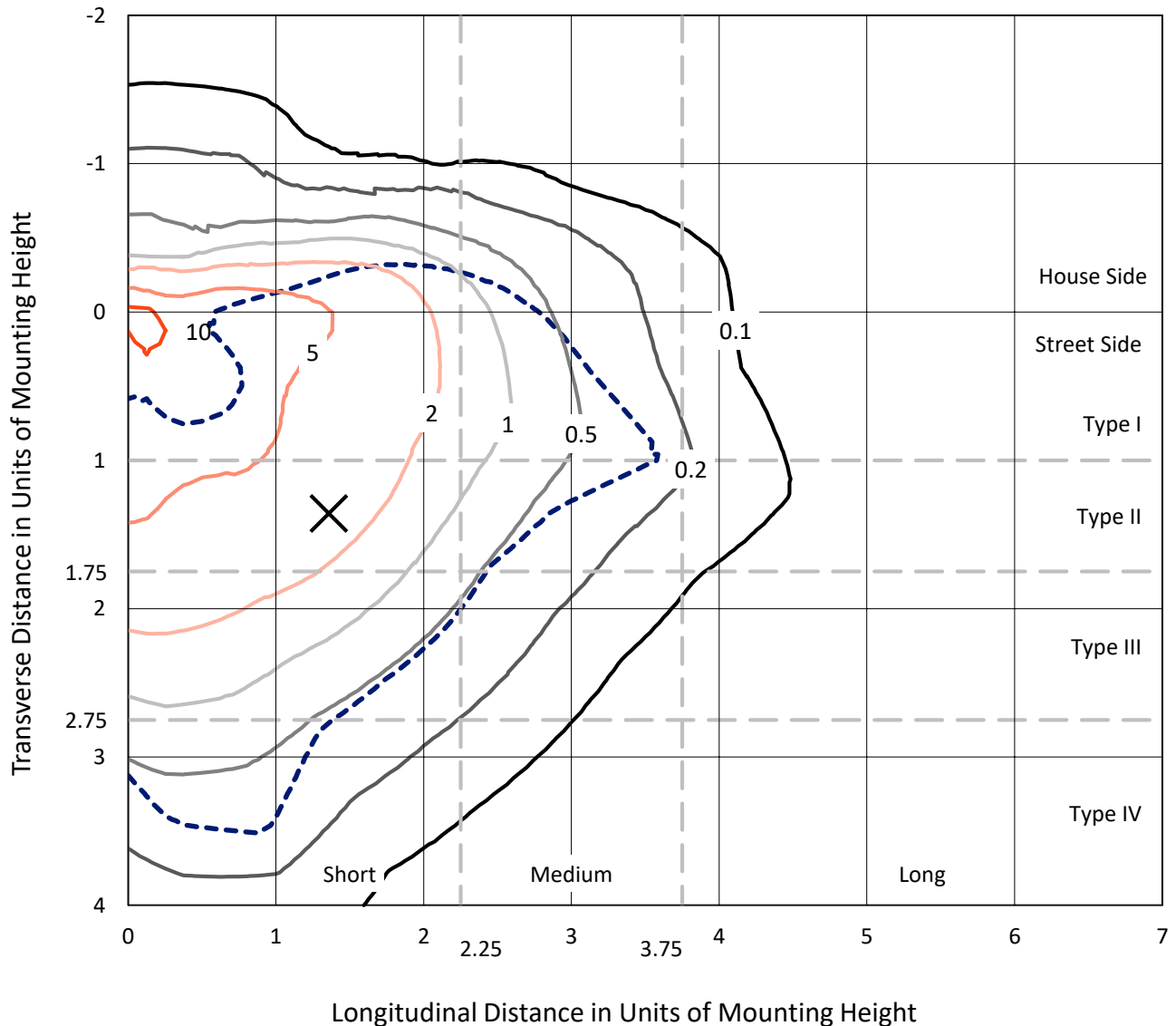


REPORT NUMBER: P192077

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

Iso-Footcandle Lines of Horizontal Illumination

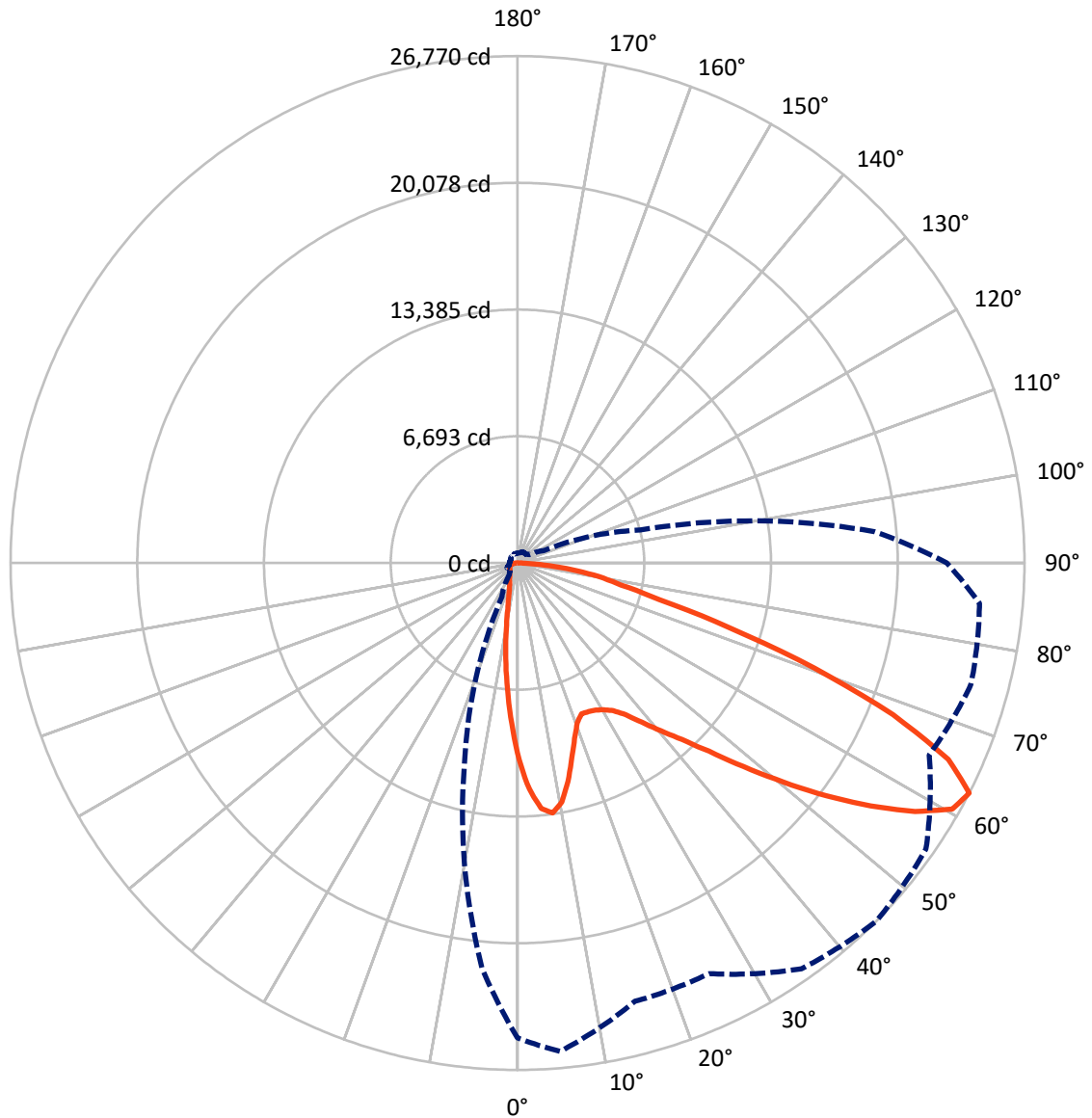
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P192077
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P192077

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5099.0	0.0	5099.0
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	25713.0	0.0	25713.0
	% Fixture	83.5	0.0	83.5
Total	Lumens	30812.0	0.0	30812.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	757.8	2.5
10°-20°	1389.6	4.5
20°-30°	2026.0	6.6
30°-40°	3120.4	10.1
40°-50°	4592.4	14.9
50°-60°	6736.0	21.9
60°-70°	7529.9	24.4
70°-80°	3686.5	12.0
80°-90°	973.3	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°	30812.0	100.0
0°-180°	30812.0	100.0



REPORT NUMBER: P192077

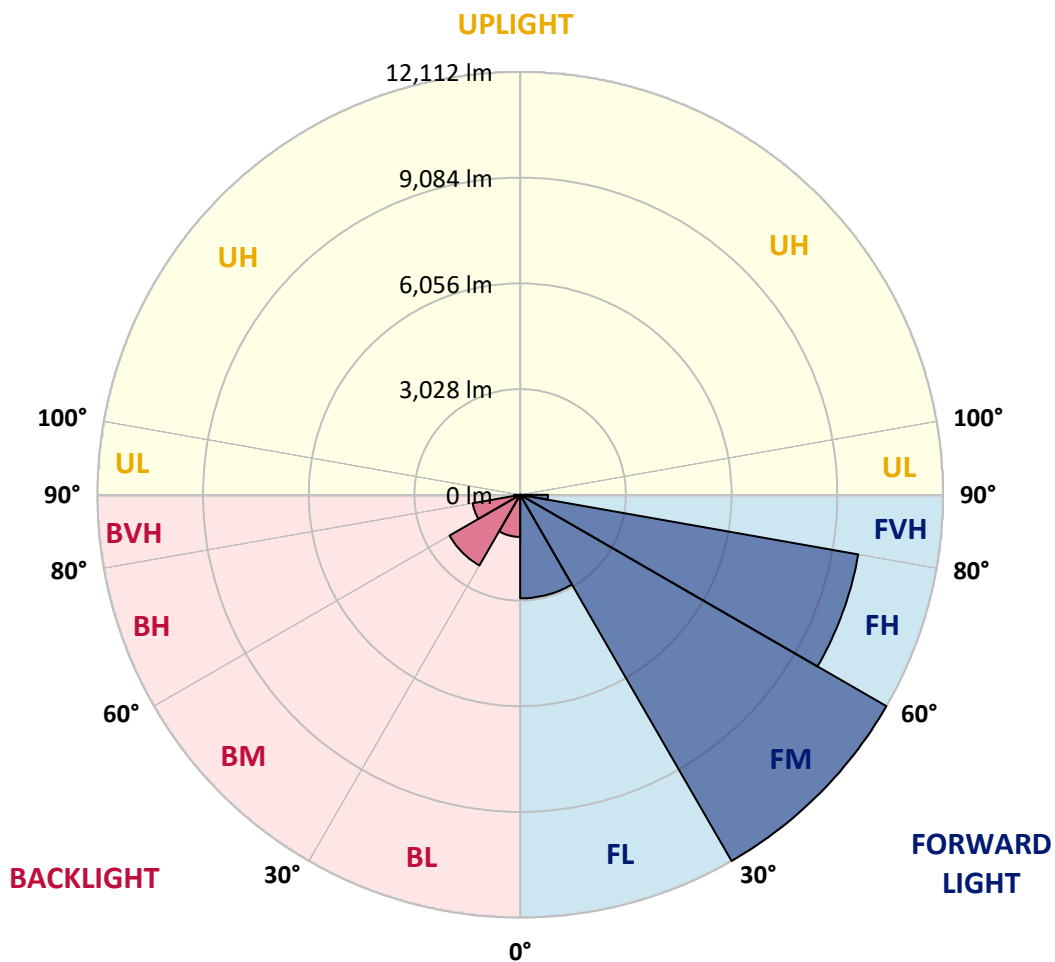
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2967.1	9.6			
FM (30°-60°)	12112.5	39.3			
FH (60°-80°)	9834.1	31.9			G4/12000
FVH (80°-90°)	799.3	2.6			G5
BL (0°-30°)	1206.3	3.9	B3/2500		
BM (30°-60°)	2336.3	7.6	B2/2500		
BH (60°-80°)	1382.3	4.5	B3/2500		G3/2500
BVH (80°-90°)	174.0	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-G5

Type IV Short





REPORT NUMBER: P192077

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	10816.5	10989.2	11326.3	11578.7	11885.2	11956.4	12054.6	11958.1	11787.0	11560.0	11485.5
5°	10171.1	10540.4	11358.5	12078.3	12718.6	13016.7	13099.7	12854.1	12357.8	11705.7	11307.7
7.5°	9136.2	9661.3	10769.0	11829.3	12772.8	13330.0	13316.5	12745.7	11832.7	10770.7	10132.2
10°	8243.6	8843.2	10113.5	11299.2	12300.2	12840.5	12632.2	11902.2	10813.1	9590.2	8897.4
12.5°	7743.9	8331.7	9620.7	10811.4	11648.1	11834.4	11675.2	10960.4	9934.0	8697.5	8091.2
15°	7657.6	8302.9	9424.2	10393.0	10862.2	10699.6	10509.9	10189.8	9464.8	8409.6	7777.8
17.5°	8031.9	8743.3	9649.4	10101.7	10022.1	9739.2	9685.0	9720.6	9546.1	8729.7	8001.4
20°	8750.1	9603.7	10186.4	9964.5	9383.5	8994.0	9007.5	9551.2	10067.8	9541.0	8709.4
22.5°	9757.8	10731.8	10960.4	10037.3	9114.2	8651.8	8763.6	9644.4	10899.5	10726.7	9664.7
25°	11062.1	11949.6	11785.3	10301.6	9141.3	8694.2	8783.9	9966.2	11881.8	11912.3	10846.9
27.5°	12325.6	13148.8	12478.1	10652.2	9253.1	8794.1	8912.7	10472.6	12820.2	13199.6	12198.6
30°	13311.4	13883.9	12752.4	10972.3	9473.3	8988.9	9136.2	10953.7	13247.0	14068.5	13238.6
32.5°	14127.8	14539.4	13189.4	11368.6	9878.1	9295.4	9554.6	11538.0	13861.9	14895.1	14256.5
35°	15171.2	15288.0	13733.1	11810.7	10503.1	9829.0	10150.8	12110.5	14447.9	15730.1	15259.2
37.5°	16394.1	16243.3	14246.4	12415.4	11311.0	10664.0	10929.9	12738.9	14930.6	16676.9	16284.0
40°	17603.4	17241.0	14890.0	13353.7	12489.9	11648.1	11963.1	13409.6	15381.2	17625.4	17285.0
42.5°	18631.5	18094.6	15525.2	14385.2	13587.5	12733.8	13109.8	14085.4	15811.4	18435.1	18153.9
45°	19392.1	18724.7	16129.8	15376.1	15100.0	14176.9	14354.8	14859.5	16277.2	19110.9	18868.7
47.5°	20071.3	19358.2	16814.1	16375.4	16422.9	16053.6	15767.4	15760.6	16826.0	19663.1	19544.5
50°	20980.8	20237.2	17549.2	17405.3	18408.0	18162.4	17530.6	16812.4	17520.4	20289.8	20276.2
52.5°	22234.2	21629.5	18446.9	18514.7	20261.0	20421.9	19639.3	18076.0	18607.8	21439.8	21358.5
55°	23716.3	23364.0	19669.8	19790.1	22534.0	22649.2	21871.7	19656.3	20206.8	23104.8	22879.5
57.5°	24873.1	24798.6	21011.3	21321.3	24231.2	24749.5	24034.7	21485.6	22008.9	24507.3	23941.5
60°	25333.8	25694.6	22439.2	22866.0	25801.3	26375.5	25748.8	23093.0	23606.2	25088.2	23868.7
62.5°	25084.8	25891.1	23960.2	23924.6	26151.9	26770.1	26329.8	23987.3	24790.1	24488.6	22661.0
65°	23934.8	25184.8	24842.6	23651.9	24952.7	25003.5	24861.3	23587.5	25069.6	22593.3	20327.0
67.5°	21429.7	23228.5	23680.7	21314.5	21717.6	21387.3	21148.5	21399.2	23612.9	19752.8	17083.4
70°	17454.4	20161.0	20377.8	17047.9	16864.9	16643.1	16167.1	17544.1	20738.6	16189.1	13555.3
72.5°	12833.7	15679.3	16344.9	12503.5	11656.6	11702.3	11326.3	13221.6	16861.5	12025.8	10120.3
75°	8780.5	11353.4	12788.0	8724.6	7708.4	7727.0	7679.6	9368.3	13430.0	8365.6	7572.9
77.5°	6414.3	8111.5	9644.4	5865.5	5694.5	5589.5	5564.1	6554.9	10296.5	6073.9	5880.8
80°	5147.4	5992.6	6478.7	4065.1	4371.6	4363.2	4222.6	4507.1	6724.3	4442.8	4398.7
82.5°	3570.5	4605.4	5249.0	3186.0	2950.6	2901.4	2935.3	3357.1	4752.7	3036.9	2887.9
85°	1883.5	3059.0	5198.2	2823.5	1751.4	1397.4	1737.8	2749.0	4117.6	1609.1	1409.2
87.5°	240.5	884.2	3441.8	1126.4	691.1	372.6	824.9	1548.1	2644.0	328.6	286.2
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: P192077

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	11294.1	11068.8	10774.1	10501.4	10218.6	9937.4	9569.8	9339.5	9180.3	9149.8	9082.0
5°	11019.7	10271.1	9705.3	9215.8	8772.1	8145.4	7798.1	7510.2	7356.1	7340.8	7303.6
7.5°	9754.5	8721.3	7957.4	7264.6	6636.2	6129.8	5570.8	5310.0	5203.3	5228.7	5254.1
10°	8438.4	7283.2	6405.9	5697.9	5144.0	4717.2	4268.3	3965.1	3755.1	3712.8	3704.3
12.5°	7476.3	6209.4	5357.4	4857.8	4429.2	4027.8	3551.9	3194.5	2921.8	2828.6	2765.9
15°	7069.8	5684.3	4791.7	4253.1	3780.5	3270.7	2828.6	2454.3	2203.6	2122.3	2076.6
17.5°	7156.2	5538.7	4402.1	3712.8	3108.1	2576.2	2019.0	1698.9	1548.1	1509.2	1509.2
20°	7610.1	5511.6	4080.3	3214.8	2461.1	1844.5	1387.2	1204.3	1155.2	1150.1	1163.6
22.5°	8247.0	5606.4	3839.8	2782.9	1912.3	1346.6	1080.6	1012.9	990.9	995.9	1011.2
25°	9195.5	5926.5	3665.3	2398.4	1500.7	1102.6	963.8	923.1	912.9	926.5	945.1
27.5°	10320.2	6246.6	3556.9	2108.8	1266.9	1007.8	916.3	874.0	880.8	897.7	914.6
30°	11307.7	6509.2	3385.9	1902.1	1194.1	1012.9	916.3	858.7	852.0	855.4	860.4
32.5°	12193.5	6687.0	3186.0	1705.6	1029.8	899.4	855.4	846.9	809.6	796.1	797.8
35°	12957.4	6687.0	3065.7	1590.5	923.1	797.8	726.6	684.3	665.7	667.3	686.0
37.5°	13694.2	6553.2	3006.5	1526.1	865.5	758.8	696.1	658.9	633.5	628.4	631.8
40°	14344.6	6358.4	2938.7	1499.0	821.5	735.1	675.8	645.3	618.2	609.8	611.5
42.5°	14866.3	6200.9	2864.2	1463.4	794.4	718.2	662.3	635.2	604.7	596.2	594.5
45°	15430.3	6148.4	2765.9	1392.3	807.9	719.9	658.9	630.1	599.6	589.4	586.0
47.5°	16173.9	6312.7	2664.3	1307.6	836.7	728.3	664.0	630.1	597.9	589.4	586.0
50°	17110.5	6698.9	2535.6	1184.0	807.9	752.0	662.3	625.0	597.9	589.4	582.7
52.5°	18313.1	7220.6	2366.2	1041.7	791.0	809.6	658.9	614.8	589.4	577.6	565.7
55°	19774.8	7647.4	2164.6	924.8	752.0	794.4	653.8	603.0	575.9	558.9	548.8
57.5°	20845.3	7801.5	1905.5	848.6	697.8	769.0	647.0	587.7	558.9	545.4	531.8
60°	20633.6	7503.4	1687.0	801.2	665.7	694.4	641.9	574.2	543.7	533.5	521.7
62.5°	18938.1	6724.3	1546.4	779.1	645.3	633.5	647.0	560.6	530.2	520.0	516.6
65°	16395.8	5574.2	1490.5	774.1	628.4	597.9	601.3	545.4	514.9	506.4	503.1
67.5°	13524.8	4498.7	1441.4	791.0	606.4	572.5	555.6	525.1	499.7	491.2	484.4
70°	10665.7	3741.6	1419.4	780.8	579.3	547.1	528.5	503.1	481.0	472.6	467.5
72.5°	8589.1	3160.6	1407.5	770.7	543.7	513.2	496.3	474.3	450.5	447.2	442.1
75°	7268.0	2484.8	1289.0	738.5	503.1	472.6	460.7	440.4	416.7	416.7	413.3
77.5°	5606.4	1797.1	1072.2	653.8	460.7	426.8	416.7	401.4	374.3	379.4	377.7
80°	4141.3	1172.1	838.4	542.0	408.2	376.0	370.9	355.7	326.9	333.7	333.7
82.5°	2837.1	769.0	603.0	443.8	348.9	318.4	318.4	303.2	271.0	274.4	284.6
85°	1424.5	528.5	450.5	343.8	271.0	255.8	255.8	243.9	211.7	213.4	227.0
87.5°	433.6	318.4	298.1	245.6	194.8	191.4	182.9	174.5	154.1	152.4	160.9
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: P192077

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	8978.7	8882.2	8765.3	8507.8	8421.5	8416.4	8494.3	8413.0	8568.8	8502.8	8575.6
5°	7240.9	7146.0	7015.6	6687.0	6487.2	6351.7	6287.3	6097.6	6234.8	6134.9	6217.9
7.5°	5325.2	5347.3	5260.9	5067.8	4632.5	4414.0	4285.3	4170.1	4270.0	4259.8	4419.1
10°	3743.2	3802.5	3741.6	3546.8	3194.5	3074.2	3097.9	3143.7	3274.1	3341.8	3587.4
12.5°	2694.8	2691.4	2652.5	2478.0	2245.9	2259.5	2356.0	2435.7	2555.9	2627.0	2877.7
15°	2012.2	1981.7	1964.8	1822.5	1690.4	1719.2	1766.6	1775.1	1851.3	1893.6	2096.9
17.5°	1521.0	1536.3	1554.9	1453.3	1353.3	1334.7	1297.4	1251.7	1273.7	1282.2	1383.8
20°	1207.7	1268.6	1314.4	1243.2	1141.6	1087.4	1040.0	1009.5	1009.5	1007.8	1036.6
22.5°	1055.2	1099.3	1148.4	1099.3	1007.8	960.4	933.3	909.6	906.2	906.2	933.3
25°	972.2	1004.4	1051.8	1018.0	950.2	914.6	889.2	858.7	846.9	843.5	862.1
27.5°	931.6	945.1	968.8	938.4	880.8	863.8	857.1	830.0	814.7	806.2	824.9
30°	862.1	858.7	860.4	830.0	784.2	782.5	794.4	799.5	794.4	792.7	821.5
32.5°	797.8	791.0	789.3	762.2	719.9	709.7	719.9	730.0	741.9	758.8	792.7
35°	716.5	733.4	743.6	719.9	669.0	638.6	626.7	608.1	597.9	597.9	636.9
37.5°	652.1	691.1	706.3	684.3	628.4	586.0	565.7	562.3	564.0	570.8	608.1
40°	630.1	658.9	672.4	650.4	594.5	555.6	543.7	540.3	543.7	553.9	591.1
42.5°	616.5	636.9	635.2	608.1	562.3	535.2	528.5	525.1	528.5	538.6	579.3
45°	604.7	618.2	604.7	572.5	530.2	516.6	518.3	516.6	520.0	530.2	569.1
47.5°	594.5	599.6	582.7	550.5	506.4	503.1	509.8	514.9	518.3	526.8	567.4
50°	579.3	579.3	564.0	530.2	486.1	487.8	496.3	508.1	509.8	520.0	552.2
52.5°	560.6	558.9	548.8	516.6	469.2	474.3	474.3	487.8	491.2	503.1	536.9
55°	545.4	542.0	536.9	506.4	453.9	462.4	457.3	462.4	470.9	482.7	520.0
57.5°	531.8	525.1	525.1	498.0	442.1	445.5	433.6	440.4	450.5	460.7	499.7
60°	518.3	511.5	514.9	486.1	423.4	420.1	415.0	428.5	431.9	443.8	482.7
62.5°	503.1	498.0	499.7	472.6	409.9	401.4	401.4	413.3	415.0	431.9	469.2
65°	491.2	484.4	482.7	459.0	394.7	384.5	389.6	394.7	398.0	415.0	450.5
67.5°	479.3	465.8	465.8	447.2	377.7	367.5	377.7	376.0	381.1	396.3	425.1
70°	464.1	445.5	447.2	438.7	360.8	348.9	357.4	355.7	359.1	369.2	398.0
72.5°	440.4	425.1	428.5	425.1	343.8	326.9	330.3	330.3	330.3	338.8	369.2
75°	409.9	398.0	408.2	416.7	323.5	299.8	303.2	303.2	298.1	303.2	340.4
77.5°	372.6	365.9	399.7	387.9	299.8	271.0	271.0	267.6	257.5	264.2	304.9
80°	332.0	326.9	369.2	325.2	272.7	235.4	232.0	223.6	213.4	218.5	259.1
82.5°	289.6	284.6	310.0	249.0	235.4	194.8	186.3	171.1	160.9	166.0	203.3
85°	237.1	237.1	238.8	188.0	179.5	149.1	138.9	118.6	106.7	110.1	145.7
87.5°	169.4	174.5	160.9	128.7	106.7	83.0	76.2	64.4	54.2	62.7	76.2
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: P192077

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	8948.2	9134.5	9346.3	9617.3	9849.3	10230.4	10596.3	10816.5
5°	6690.4	7000.4	7386.6	7882.8	8345.2	9039.7	9729.1	10171.1
7.5°	4788.3	5120.3	5537.0	6156.9	6810.7	7696.5	8607.8	9136.2
10°	3961.7	4302.2	4652.8	5071.2	5606.4	6570.2	7647.4	8243.6
12.5°	3277.5	3641.6	4019.3	4459.7	4956.0	5816.4	7058.0	7743.9
15°	2508.5	2915.0	3360.5	3917.7	4539.3	5533.6	6912.3	7657.6
17.5°	1719.2	2173.1	2720.2	3407.9	4168.4	5442.1	7173.1	8031.9
20°	1184.0	1514.2	2098.6	2904.8	3819.5	5430.2	7674.5	8750.1
22.5°	990.9	1138.2	1565.0	2442.4	3556.9	5575.9	8451.9	9757.8
25°	916.3	1004.4	1250.0	2041.0	3365.5	5911.3	9522.4	11062.1
27.5°	872.3	951.9	1134.8	1778.5	3214.8	6300.9	10564.1	12325.6
30°	889.2	970.5	1102.6	1644.7	3009.8	6626.1	11488.9	13311.4
32.5°	801.2	836.7	945.1	1526.1	2862.5	6898.8	12298.5	14127.8
35°	682.6	745.3	843.5	1470.2	2865.9	7081.7	13181.0	15171.2
37.5°	650.4	713.1	784.2	1449.9	2904.8	7276.5	14193.9	16394.1
40°	630.1	687.7	748.6	1438.0	2942.1	7454.3	15186.4	17603.4
42.5°	616.5	669.0	745.3	1397.4	2960.7	7613.5	16002.8	18631.5
45°	614.8	669.0	758.8	1356.7	2989.5	7784.6	16687.1	19392.1
47.5°	616.5	691.1	733.4	1307.6	2989.5	8070.8	17489.9	20071.3
50°	609.8	728.3	706.3	1238.2	2920.1	8612.9	18590.9	20980.8
52.5°	606.4	723.2	653.8	1131.4	2799.8	9473.3	20001.8	22234.2
55°	597.9	697.8	616.5	972.2	2659.2	10411.6	21512.7	23716.3
57.5°	589.4	618.2	596.2	833.3	2442.4	11072.2	22552.6	24873.1
60°	660.6	540.3	579.3	765.6	2152.8	11253.5	22512.0	25333.8
62.5°	611.5	506.4	557.3	750.3	1949.5	10745.3	21472.0	25084.8
65°	479.3	484.4	535.2	794.4	1895.3	9398.8	19629.2	23934.8
67.5°	438.7	462.4	513.2	850.3	1900.4	7525.5	16875.1	21429.7
70°	413.3	438.7	487.8	879.1	1914.0	5609.8	13341.9	17454.4
72.5°	384.5	406.5	459.0	884.2	1825.9	4075.2	10282.9	12833.7
75°	350.6	370.9	418.4	770.7	1512.5	2826.9	7865.9	8780.5
77.5°	311.7	326.9	367.5	594.5	1123.0	1809.0	5904.5	6414.3
80°	265.9	274.4	308.3	435.3	769.0	1131.4	4671.4	5147.4
82.5°	213.4	216.8	238.8	326.9	499.7	726.6	3128.4	3570.5
85°	150.7	150.7	164.3	237.1	340.4	460.7	1698.9	1883.5
87.5°	71.1	72.8	72.8	130.4	177.8	233.7	391.3	240.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)