

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: P193937

Luminaire Tested: **GLEON-AF-09-LED-E1-T2R-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
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-T2R-8030-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29806 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

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

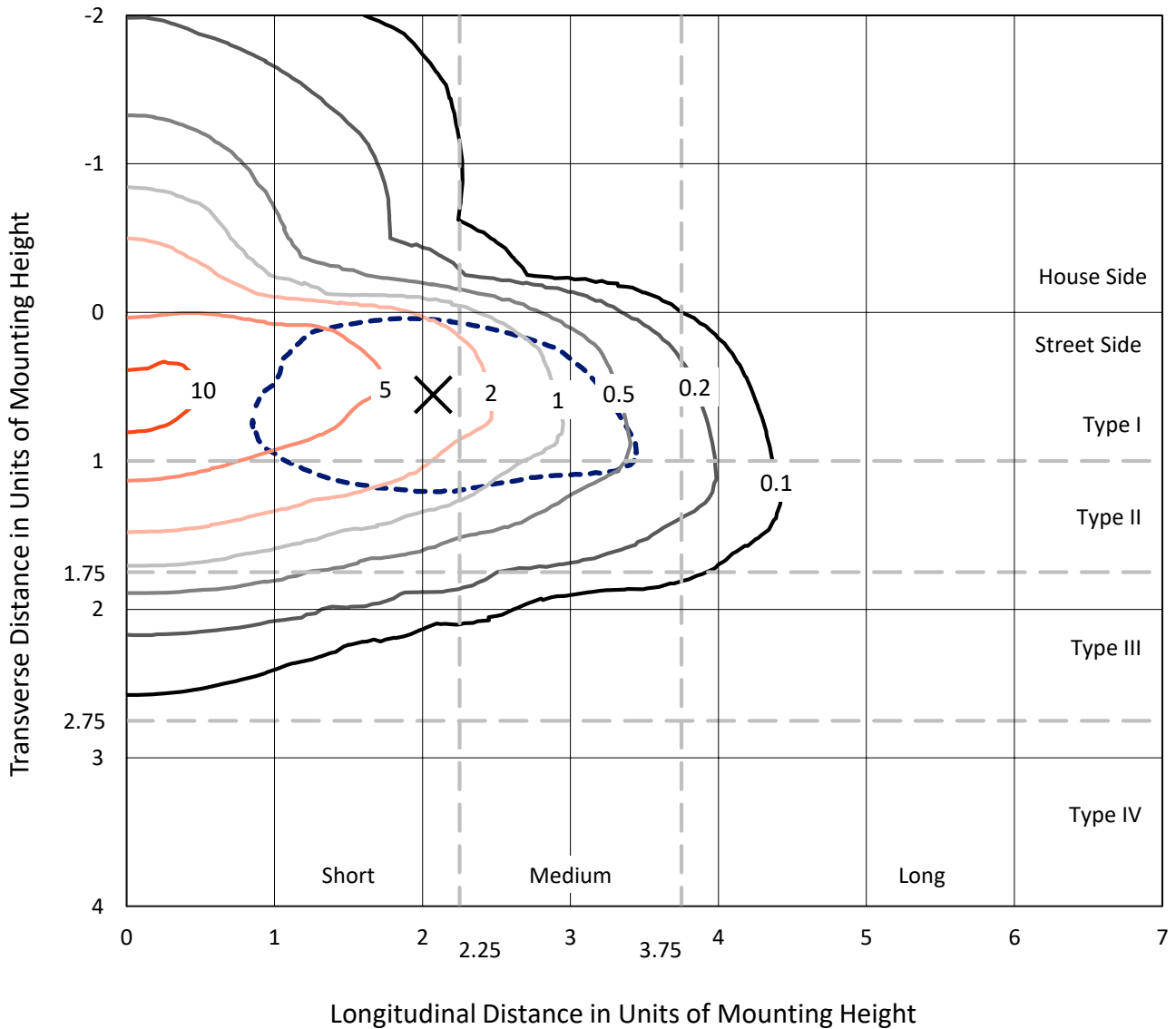


REPORT NUMBER: P193937

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

Iso-Footcandle Lines of Horizontal Illumination

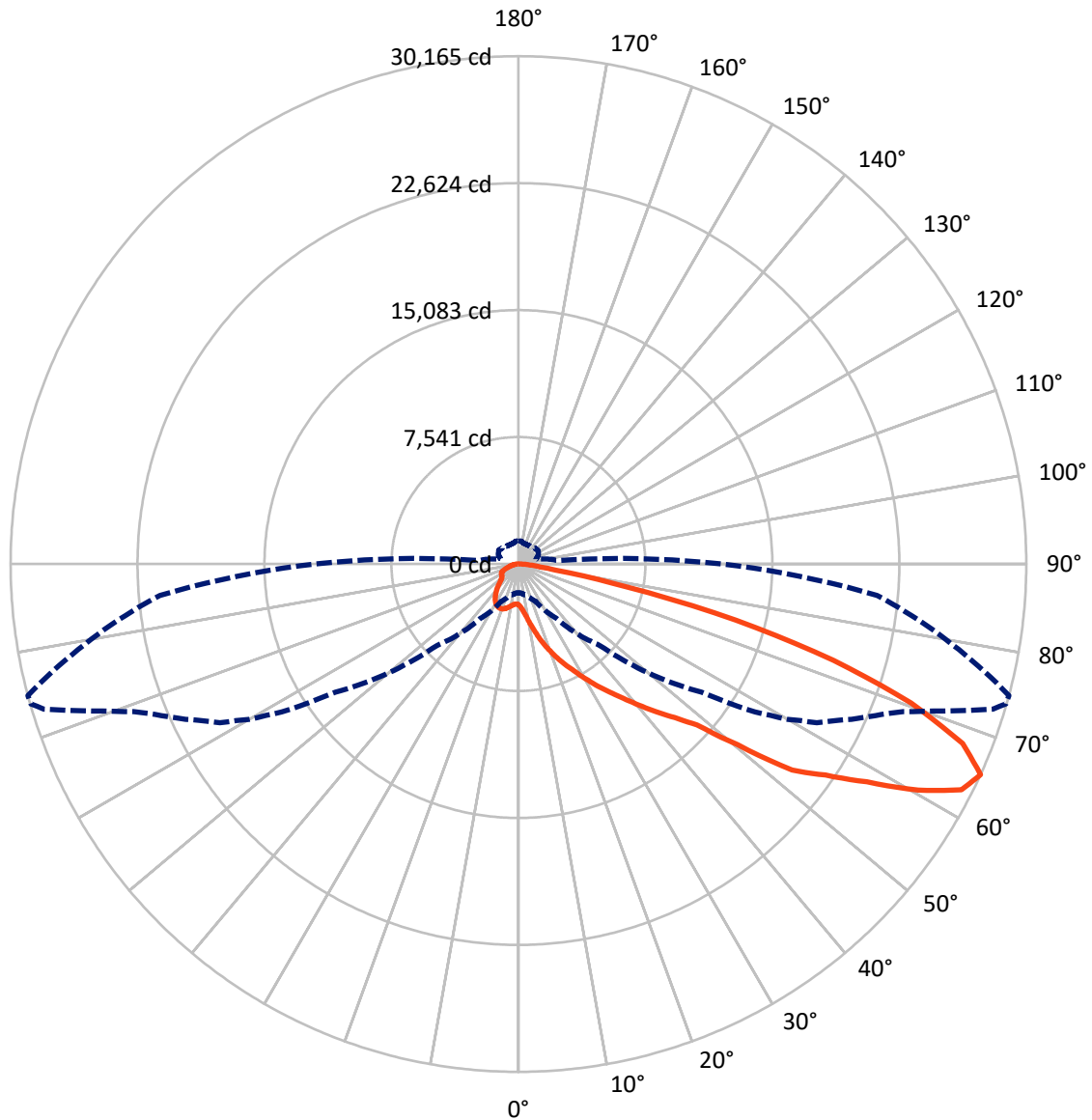
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P193937
CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P193937

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4595.4	0.0	4595.4
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	25210.6	0.0	25210.6
	% Fixture	84.6	0.0	84.6
Total	Lumens	29806.0	0.0	29806.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.4	1.0
10°-20°	1169.8	3.9
20°-30°	2400.1	8.1
30°-40°	4038.1	13.5
40°-50°	5579.5	18.7
50°-60°	6964.9	23.4
60°-70°	6267.7	21.0
70°-80°	2627.4	8.8
80°-90°	459.0	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°	29806.0	100.0
0°-180°	29806.0	100.0



REPORT NUMBER: P193937

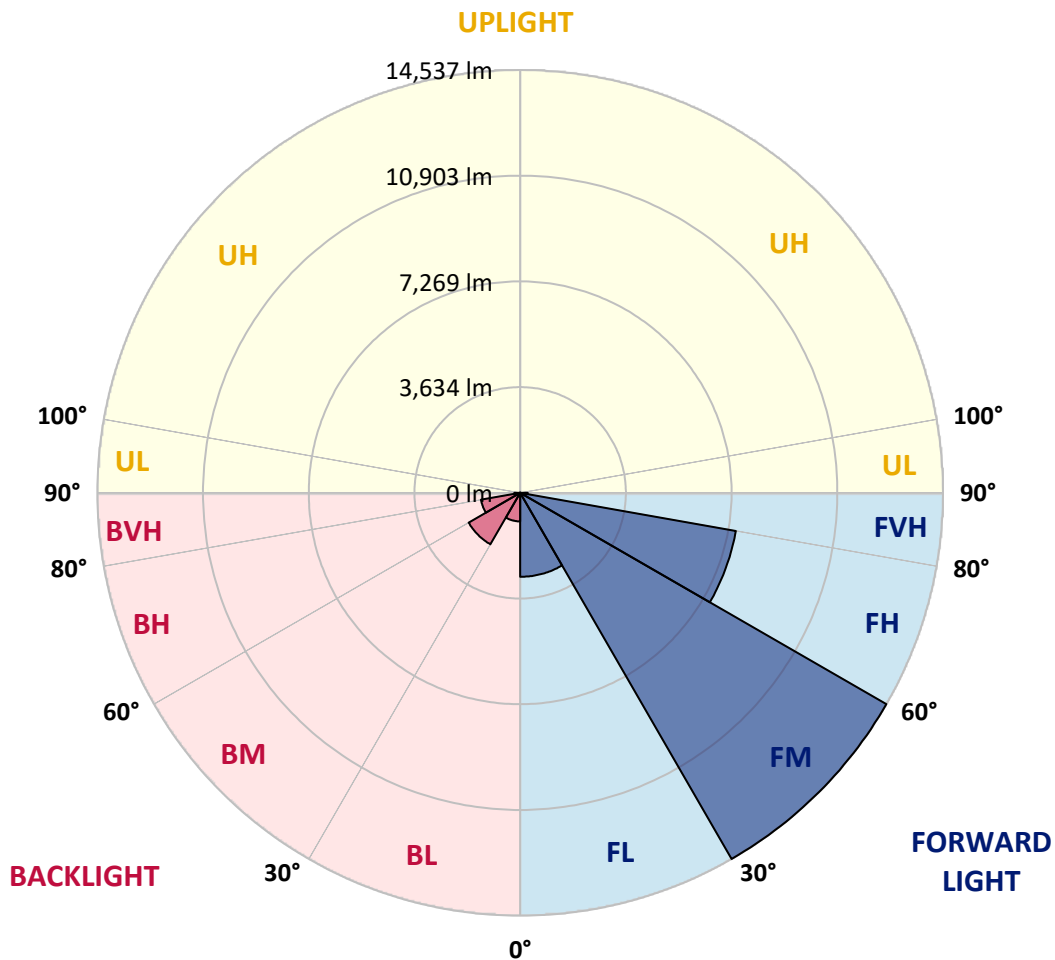
CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2886.6	9.7			
FM	(30°-60°)	14537.1	48.8			
FH	(60°-80°)	7528.9	25.3			G4/12000
FVH	(80°-90°)	258.0	0.9			G3/500
BL	(0°-30°)	982.8	3.3	B2/1000		
BM	(30°-60°)	2045.5	6.9	B2/2500		
BH	(60°-80°)	1366.2	4.6	B3/2500		G3/2500
BVH	(80°-90°)	201.0	0.7			G2/225
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: P193937

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3
2.5°	3075.5	3041.6	3050.1	2993.7	2924.5	2834.3	2734.1	2732.7	2734.1	2724.2	2687.5
5°	4264.8	4223.9	4208.4	4081.4	3895.2	3629.9	3342.1	3311.1	3298.4	3266.0	3191.2
7.5°	5132.4	5109.8	5085.9	4989.9	4820.6	4524.4	4137.8	4071.5	4008.0	3992.5	3907.9
10°	5692.5	5686.9	5636.1	5610.7	5504.9	5248.1	4871.4	4807.9	4738.8	4714.8	4625.9
12.5°	6135.5	6134.1	6110.1	6117.1	6025.4	5839.2	5514.7	5456.9	5406.1	5332.7	5269.3
15°	6441.6	6443.0	6478.3	6517.8	6503.7	6378.1	6073.4	6048.0	6004.3	5953.5	5878.7
17.5°	6692.7	6699.8	6736.5	6808.4	6886.0	6876.1	6634.9	6613.7	6575.6	6506.5	6467.0
20°	7259.9	7286.7	7216.1	7216.1	7224.6	7262.7	7147.0	7130.1	7076.5	7039.8	7008.8
22.5°	8217.8	8248.8	8089.4	7927.2	7767.7	7652.1	7536.4	7557.5	7520.9	7495.5	7477.1
25°	9462.1	9486.1	9227.9	8954.2	8629.7	8206.5	7920.1	7907.4	7887.7	7872.1	7863.7
27.5°	10633.0	10642.9	10398.9	9998.2	9621.5	9013.5	8309.5	8294.0	8270.0	8240.4	8215.0
30°	11634.7	11631.9	11380.8	10998.4	10595.0	9922.0	8900.6	8852.6	8782.1	8701.7	8639.6
32.5°	12502.3	12498.1	12223.0	11826.6	11403.3	10822.1	9710.4	9611.6	9501.6	9345.0	9250.5
35°	13185.1	13182.3	12922.7	12509.4	12024.1	11670.0	10638.7	10517.4	10377.7	10167.5	10022.2
37.5°	13443.3	13443.3	13298.0	13015.8	12587.0	12344.3	11670.0	11523.2	11373.7	11135.3	10971.6
40°	13292.4	13295.2	13326.2	13274.0	13065.2	12879.0	12632.1	12544.6	12416.3	12201.8	12031.1
42.5°	12785.9	12801.4	13007.4	13259.9	13364.3	13334.7	13485.6	13446.1	13355.8	13190.8	13055.3
45°	12144.0	12192.0	12417.7	12894.5	13447.5	13728.3	14200.9	14205.1	14188.2	14099.3	13994.9
47.5°	11262.2	11330.0	11627.6	12272.4	13252.9	14110.6	14927.5	14965.5	15000.8	14943.0	14895.0
50°	10091.3	10171.7	10617.5	11472.5	12856.4	14507.0	16300.1	16472.3	16633.1	16613.3	16645.8
52.5°	8837.1	8931.6	9477.6	10429.9	12175.0	14598.7	17177.6	17458.4	17739.1	17969.1	18213.2
55°	7705.7	7654.9	8200.9	9203.9	11054.9	14185.4	17966.3	18304.9	18618.1	18900.2	19190.8
57.5°	6172.2	6255.4	6802.8	7794.6	9572.1	13018.7	18509.4	19004.6	19454.6	19921.6	20333.6
60°	4511.7	4594.9	5188.8	6196.1	7962.4	11249.6	18094.7	18845.2	19566.1	20281.4	20840.0
62.5°	2724.2	2786.3	3309.7	4269.0	6139.7	9151.7	16246.5	17231.3	18292.2	19147.1	20003.4
65°	1695.8	1731.0	1924.3	2451.9	3943.1	6832.4	13274.0	14347.6	15490.4	16575.2	17465.4
67.5°	1388.2	1400.9	1436.2	1549.0	2165.5	4455.2	9879.7	10830.6	11861.8	12911.4	13901.8
70°	1248.5	1240.1	1240.1	1247.1	1388.2	2395.5	6468.4	7087.8	7946.9	8859.7	9765.4
72.5°	1127.2	1118.7	1103.2	1082.1	1132.9	1461.6	3343.5	3810.5	4429.8	5241.0	6108.7
75°	1012.9	1001.7	983.3	956.5	991.8	1103.2	1605.5	1801.6	2103.5	2535.2	3019.1
77.5°	894.4	880.3	863.4	843.6	888.8	857.8	941.0	1011.5	1127.2	1265.5	1447.5
80°	760.4	747.7	742.1	732.2	785.8	653.2	664.5	708.2	775.9	850.7	935.3
82.5°	595.3	595.3	617.9	622.2	681.4	469.8	496.6	534.7	570.0	609.5	649.0
85°	392.2	395.0	471.2	500.8	537.5	316.0	372.4	385.1	413.4	435.9	452.9
87.5°	122.7	132.6	287.8	318.8	309.0	179.2	228.5	234.2	253.9	269.5	283.6
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: P193937

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3
2.5°	2687.5	2670.6	2655.1	2653.7	2642.4	2626.9	2632.5	2608.5	2609.9	2597.2	2583.1
5°	3160.1	3148.9	3092.4	3076.9	3034.6	3007.8	3003.5	2947.1	2940.1	2907.6	2872.3
7.5°	3840.1	3803.5	3724.5	3686.4	3614.4	3560.8	3535.4	3460.6	3424.0	3339.3	3301.2
10°	4552.6	4506.0	4408.7	4355.1	4285.9	4199.9	4153.3	4044.7	4002.4	3924.8	3831.7
12.5°	5212.8	5166.3	5066.1	5025.2	4933.5	4841.8	4791.0	4668.3	4613.2	4489.1	4415.7
15°	5823.7	5777.1	5689.7	5647.3	5555.6	5480.9	5413.2	5291.8	5226.9	5111.3	5015.3
17.5°	6416.2	6366.8	6290.7	6252.6	6163.7	6087.5	6014.2	5899.9	5833.6	5717.9	5631.8
20°	6966.4	6929.7	6874.7	6823.9	6735.1	6665.9	6578.5	6479.7	6383.8	6299.1	6217.3
22.5°	7446.1	7432.0	7372.7	7350.2	7274.0	7214.7	7138.5	7041.2	6972.1	6864.9	6788.7
25°	7859.5	7855.2	7827.0	7819.9	7766.3	7709.9	7693.0	7612.6	7549.1	7454.6	7375.6
27.5°	8215.0	8219.2	8212.1	8231.9	8217.8	8192.4	8193.8	8167.0	8130.3	8051.3	7982.2
30°	8610.0	8587.4	8600.1	8628.3	8636.8	8639.6	8686.2	8701.7	8698.9	8646.7	8612.8
32.5°	9168.7	9115.0	9065.7	9061.4	9089.6	9100.9	9179.9	9220.9	9256.1	9268.8	9274.5
35°	9881.1	9773.9	9670.9	9615.9	9567.9	9580.6	9637.0	9703.3	9780.9	9834.5	9898.0
37.5°	10778.4	10647.1	10465.2	10335.4	10302.9	10232.4	10269.1	10321.3	10397.4	10480.7	10590.7
40°	11866.1	11667.1	11462.6	11290.5	11197.4	11067.6	11066.2	11056.3	11102.8	11180.4	11335.6
42.5°	12912.9	12736.5	12519.3	12338.7	12217.3	12043.8	12008.6	11916.9	11938.0	12005.7	12156.7
45°	13893.4	13748.0	13615.4	13406.6	13303.6	13116.0	13056.8	12948.1	12887.5	12918.5	13069.5
47.5°	14842.8	14749.7	14611.4	14476.0	14397.0	14229.1	14152.9	14075.3	13997.7	13994.9	14152.9
50°	16693.7	16644.4	16480.7	16339.6	16377.7	16171.8	16184.5	15975.7	16070.2	16081.5	16413.0
52.5°	18433.2	18605.4	18726.7	18874.8	18970.7	18989.1	19052.6	19147.1	19261.4	19487.1	19794.6
55°	19429.2	19645.1	19770.7	19883.5	20069.7	20109.2	20215.1	20340.6	20440.8	20694.7	20955.7
57.5°	20612.9	21013.6	21208.2	21387.4	21638.5	21734.5	21910.8	22047.7	22177.4	22477.9	22794.0
60°	21342.3	21830.4	22226.8	22510.4	22825.0	23050.7	23317.4	23531.8	23836.5	24196.3	24667.5
62.5°	20762.4	21479.1	22005.3	22492.1	22919.5	23351.2	23733.5	24134.2	24596.9	25141.5	25872.3
65°	18453.0	19182.4	20083.9	20588.9	21154.6	21820.5	22401.8	23050.7	23681.3	24474.2	25554.9
67.5°	14855.5	15703.4	16716.3	17225.6	17876.0	18619.5	19271.2	20064.1	20800.5	21761.3	23097.3
70°	10707.8	11804.0	12656.1	13188.0	13947.0	14713.0	15342.2	16264.9	16874.3	17859.1	19240.2
72.5°	6780.2	7645.0	8689.0	9359.1	10033.5	10809.4	11452.7	12248.4	12816.9	13714.2	14965.5
75°	3645.5	4283.1	5200.1	5836.4	6558.7	7221.8	7975.1	8508.4	8928.8	9638.4	10654.2
77.5°	1708.5	2096.4	2560.6	3050.1	3539.6	4050.3	4546.9	4978.6	5159.2	5565.5	6165.1
80°	1036.9	1162.5	1297.9	1448.9	1653.4	1818.5	2037.2	2195.2	2206.5	2334.8	2518.2
82.5°	692.7	739.2	780.2	818.3	870.5	911.4	957.9	1012.9	1035.5	1065.1	1124.4
85°	472.6	495.2	503.6	527.6	522.0	536.1	554.4	572.8	582.7	581.2	608.0
87.5°	290.6	301.9	307.5	313.2	309.0	303.3	311.8	321.7	324.5	316.0	318.8
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: P193937

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3
2.5°	2586.0	2573.3	2560.6	2552.1	2549.3	2474.5	2442.1	2420.9	2375.8	2339.1	2309.4
5°	2852.6	2825.8	2804.6	2779.2	2765.1	2576.1	2507.0	2459.0	2380.0	2333.4	2291.1
7.5°	3281.5	3206.7	3163.0	3113.6	3071.3	2729.9	2615.6	2540.8	2430.8	2368.7	2320.7
10°	3768.2	3690.6	3621.5	3545.3	3479.0	2934.4	2767.9	2652.3	2507.0	2426.5	2363.1
12.5°	4311.3	4235.2	4147.7	4050.3	3965.7	3194.0	2962.6	2797.6	2598.7	2491.4	2402.6
15°	4953.2	4819.2	4713.4	4600.6	4501.8	3504.4	3189.8	2961.2	2696.0	2550.7	2432.2
17.5°	5550.0	5408.9	5265.0	5166.3	5052.0	3852.8	3418.3	3127.7	2776.4	2588.8	2437.8
20°	6132.7	5978.9	5854.7	5722.1	5602.2	4214.0	3662.4	3274.4	2828.6	2590.2	2402.6
22.5°	6646.2	6550.2	6412.0	6268.1	6146.8	4575.2	3890.9	3398.6	2848.4	2557.7	2340.5
25°	7230.2	7128.7	6959.4	6838.0	6702.6	4943.4	4115.2	3494.5	2837.1	2497.1	2244.5
27.5°	7853.8	7740.9	7567.4	7440.4	7276.8	5325.7	4321.2	3563.6	2794.8	2398.3	2116.2
30°	8504.2	8401.2	8230.5	8102.1	7937.0	5730.6	4551.2	3610.2	2710.1	2261.5	1966.6
32.5°	9202.5	9116.5	8947.2	8813.1	8636.8	6169.3	4765.6	3624.3	2581.7	2099.2	1808.6
35°	9865.6	9806.3	9663.8	9538.3	9354.9	6584.1	4992.7	3617.2	2429.4	1921.5	1664.7
37.5°	10611.9	10576.6	10506.1	10346.7	10122.3	7147.0	5265.0	3587.6	2243.1	1745.1	1554.7
40°	11407.6	11410.4	11334.2	11225.6	11016.8	7829.8	5589.5	3529.8	2040.0	1589.9	1454.5
42.5°	12249.8	12293.5	12256.8	12179.3	11978.9	8518.3	5977.5	3459.2	1842.5	1439.0	1355.8
45°	13214.8	13268.4	13324.8	13210.5	13015.8	9426.8	6488.2	3367.5	1629.4	1313.4	1288.0
47.5°	14327.9	14412.5	14463.3	14464.7	14270.0	10552.6	7317.7	3312.5	1440.4	1228.8	1255.6
50°	16676.8	16703.6	16823.5	17032.3	16882.8	13158.3	8766.6	3278.7	1312.0	1176.6	1231.6
52.5°	20061.3	20356.1	20563.5	20549.4	20346.3	14813.2	9565.1	3103.7	1235.8	1156.8	1220.3
55°	21439.6	21807.8	22191.6	22293.1	22135.1	16225.4	10319.8	2928.8	1199.2	1170.9	1224.6
57.5°	23276.4	23897.2	24423.4	24644.9	24416.4	18032.6	11313.0	2837.1	1187.9	1209.0	1251.4
60°	25422.2	26189.7	26881.0	27278.8	27278.8	20109.2	12342.9	2799.0	1172.4	1265.5	1296.5
62.5°	26800.6	27927.8	28971.8	29554.4	29537.5	21555.3	12800.0	2669.2	1137.1	1305.0	1358.6
65°	26806.2	28146.5	29476.8	30131.4	30165.3	21377.5	12045.2	2357.4	1072.2	1310.6	1420.7
67.5°	24571.5	26000.7	27551.1	28283.3	28452.6	19679.0	10427.1	1938.4	966.4	1254.2	1443.2
70°	20752.6	22147.8	23730.7	24450.2	24750.7	16775.6	8398.4	1494.0	830.9	1130.0	1396.7
72.5°	16349.5	17718.0	18819.8	19346.0	19580.2	12822.6	6115.7	1128.6	681.4	952.3	1271.1
75°	11575.4	12602.5	13188.0	13305.1	13341.7	7729.7	3716.0	839.4	561.5	740.7	1073.6
77.5°	6533.3	6973.5	6925.5	6977.7	6543.2	2983.8	1618.2	601.0	462.7	562.9	832.4
80°	2550.7	2629.7	2470.3	2420.9	2220.6	1110.3	713.9	419.0	369.6	426.1	582.7
82.5°	1124.4	1161.1	1127.2	1135.7	1086.3	572.8	427.5	303.3	282.2	311.8	386.6
85°	619.3	630.6	627.8	646.1	619.3	228.5	203.2	186.2	197.5	211.6	248.3
87.5°	301.9	304.7	294.9	310.4	300.5	115.7	100.2	105.8	115.7	118.5	118.5
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: P193937

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-8030-600

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	2422.3	2422.3	2422.3	2422.3	2422.3	2422.3
2.5°	2288.3	2277.0	2278.4	2275.6	2269.9	2269.9
5°	2268.5	2257.2	2257.2	2254.4	2247.4	2248.8
7.5°	2288.3	2269.9	2262.9	2253.0	2243.1	2243.1
10°	2310.9	2278.4	2258.7	2241.7	2229.0	2229.0
12.5°	2327.8	2277.0	2244.5	2222.0	2209.3	2209.3
15°	2333.4	2267.1	2222.0	2195.2	2183.9	2182.5
17.5°	2315.1	2229.0	2174.0	2143.0	2128.9	2124.6
20°	2258.7	2159.9	2093.6	2058.3	2038.6	2031.5
22.5°	2174.0	2061.1	1983.6	1946.9	1921.5	1917.2
25°	2055.5	1934.2	1858.0	1822.7	1808.6	1804.4
27.5°	1917.2	1804.4	1739.5	1716.9	1704.2	1702.8
30°	1786.0	1690.1	1642.1	1625.2	1609.7	1606.9
32.5°	1663.3	1602.6	1584.3	1560.3	1523.6	1519.4
35°	1575.8	1570.2	1557.5	1503.9	1458.7	1446.0
37.5°	1522.2	1574.4	1509.5	1403.7	1371.3	1368.5
40°	1491.2	1530.7	1419.2	1382.6	1385.4	1382.6
42.5°	1420.7	1461.6	1422.1	1405.1	1416.4	1419.2
45°	1350.1	1395.3	1443.2	1431.9	1458.7	1458.7
47.5°	1310.6	1378.3	1441.8	1441.8	1481.3	1495.4
50°	1265.5	1364.2	1419.2	1439.0	1470.0	1458.7
52.5°	1262.6	1340.2	1386.8	1422.1	1436.2	1423.5
55°	1266.9	1320.5	1354.3	1393.8	1410.8	1412.2
57.5°	1272.5	1309.2	1331.8	1350.1	1400.9	1400.9
60°	1286.6	1299.3	1312.0	1321.9	1388.2	1389.6
62.5°	1309.2	1289.5	1286.6	1296.5	1381.2	1375.5
65°	1344.5	1275.3	1254.2	1264.1	1374.1	1357.2
67.5°	1392.4	1254.2	1213.3	1220.3	1368.5	1331.8
70°	1436.2	1220.3	1162.5	1155.4	1314.8	1250.0
72.5°	1440.4	1180.8	1091.9	1070.8	1142.7	1080.7
75°	1369.9	1154.0	1014.4	952.3	943.8	935.3
77.5°	1234.4	1138.5	924.1	826.7	809.8	815.4
80°	1032.7	1080.7	815.4	699.7	791.4	781.6
82.5°	771.7	953.7	692.7	619.3	617.9	546.0
85°	428.9	743.5	564.3	464.1	323.1	313.2
87.5°	119.9	413.4	395.0	262.4	179.2	186.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)