

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: P191302

Luminaire Tested: **GLEON-AF-04-LED-E1-SLL-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191302
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-04-LED-E1-SLL-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1200mA 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: 23679.3 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

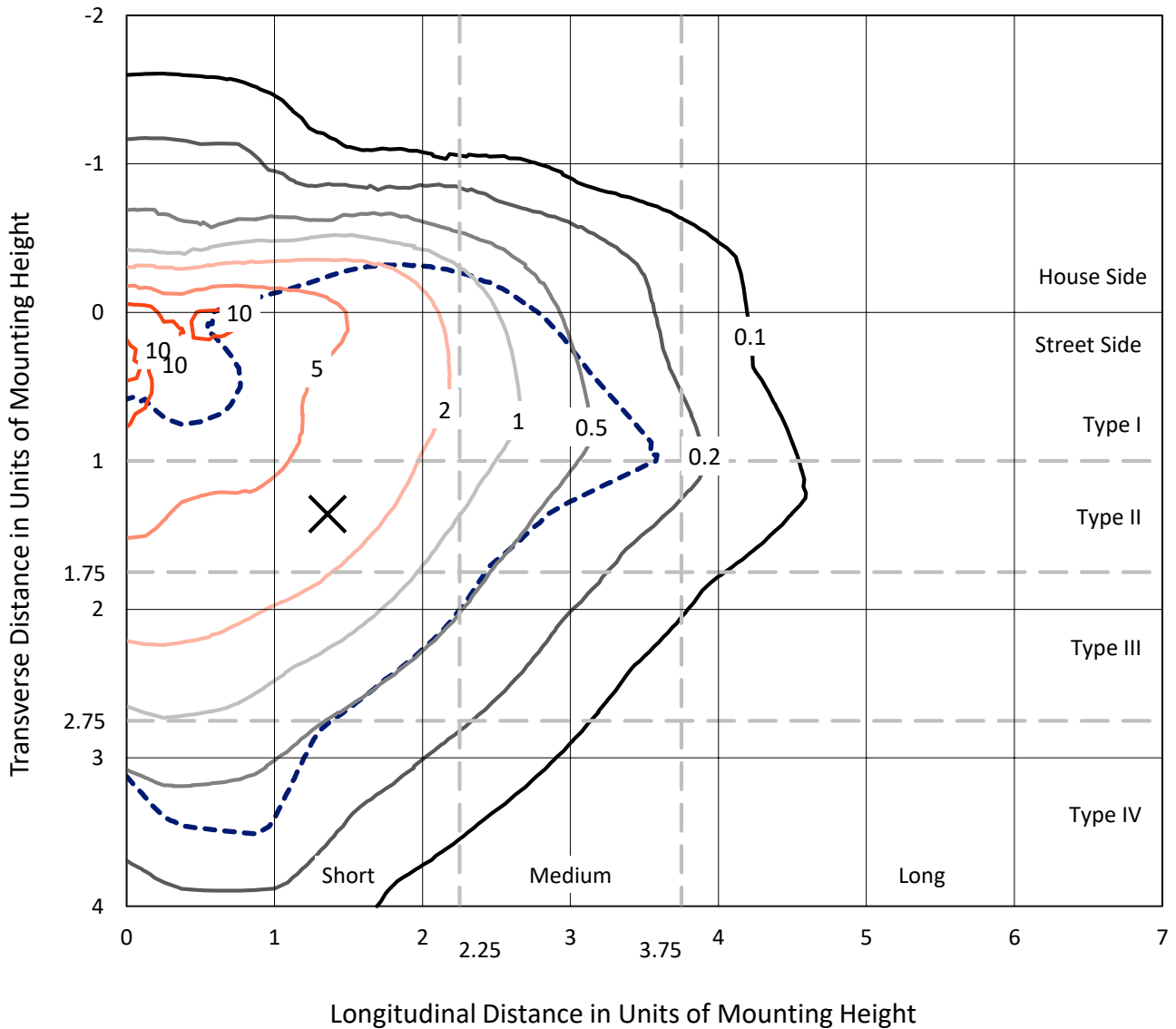
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P191302
 CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

Iso-Footcandle Lines of Horizontal Illumination

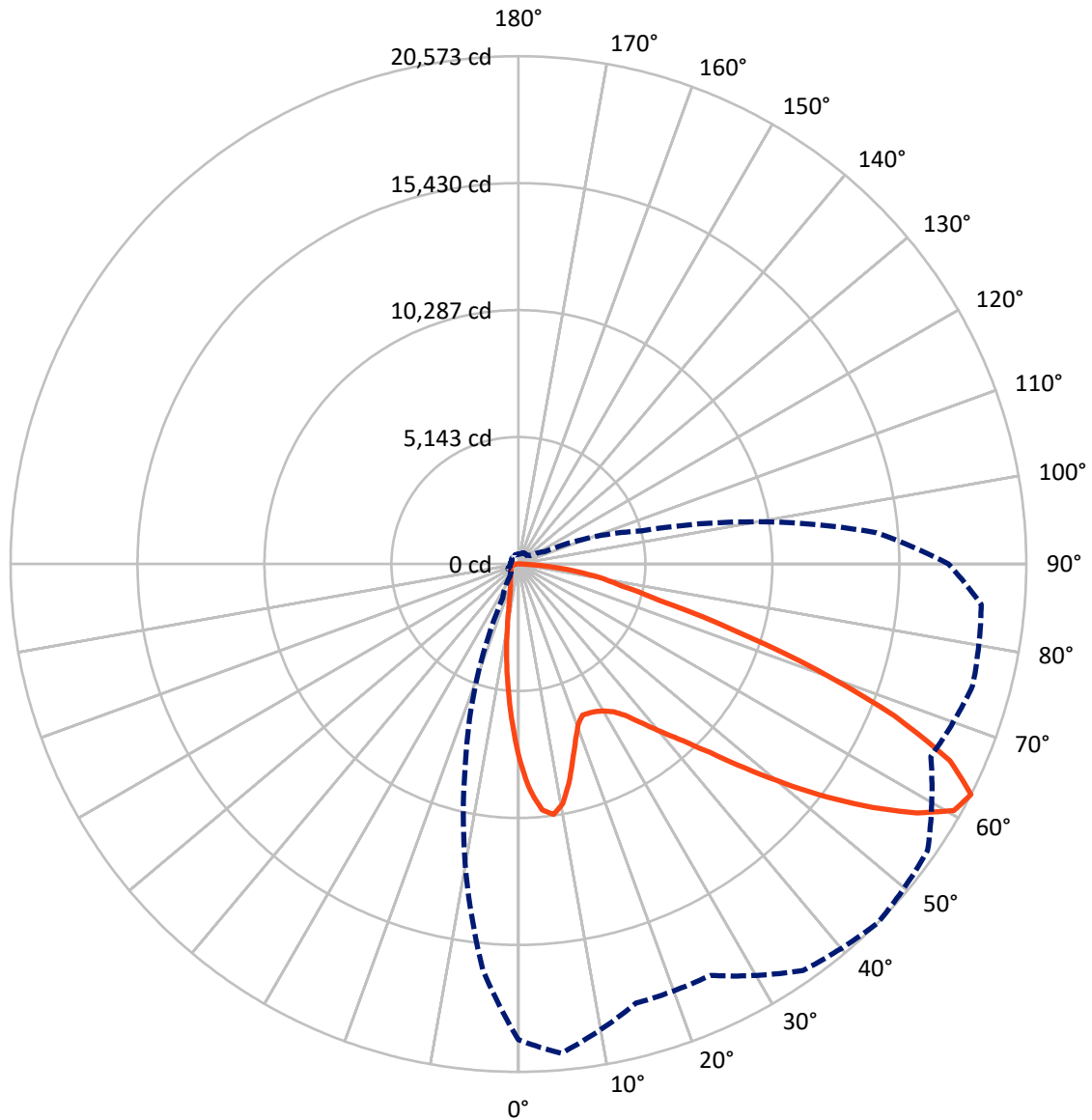
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P191302
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

Luminous Intensity Polar Plot



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

REPORT NUMBER: P191302

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3918.6	0.0	3918.6
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	19760.7	0.0	19760.7
	% Fixture	83.5	0.0	83.5
Total	Lumens	23679.3	0.0	23679.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	582.4	2.5
10°-20°	1067.9	4.5
20°-30°	1557.0	6.6
30°-40°	2398.0	10.1
40°-50°	3529.3	14.9
50°-60°	5176.7	21.9
60°-70°	5786.8	24.4
70°-80°	2833.1	12.0
80°-90°	748.0	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°	23679.3	100.0
0°-180°	23679.3	100.0



REPORT NUMBER: P191302

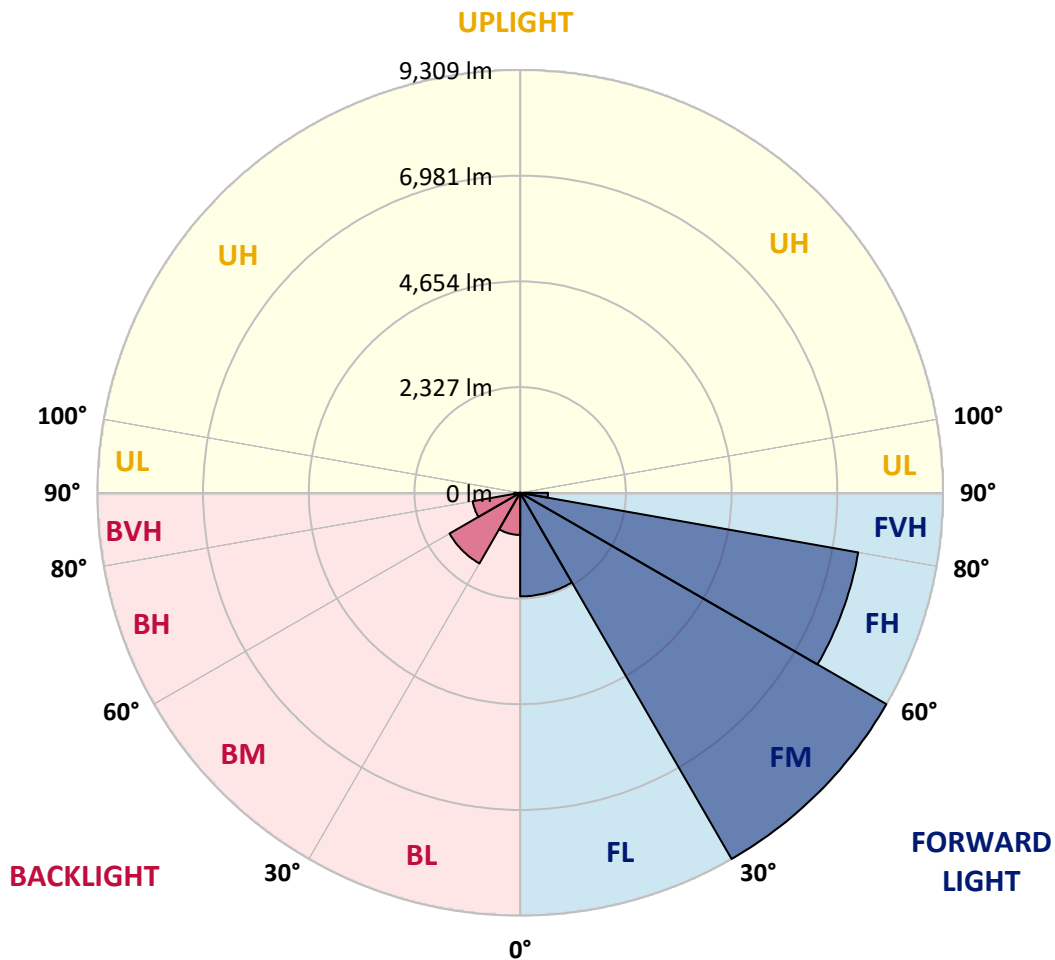
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2280.2	9.6			
FM	(30°-60°)	9308.5	39.3			
FH	(60°-80°)	7557.6	31.9			G4/12000
FVH	(80°-90°)	614.3	2.6			G4/750
BL	(0°-30°)	927.1	3.9	B2/1000		
BM	(30°-60°)	1795.5	7.6	B2/2500		
BH	(60°-80°)	1062.3	4.5	B3/2500		G3/2500
BVH	(80°-90°)	133.7	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-G4

Type IV Short





REPORT NUMBER: P191302

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	8312.5	8445.3	8704.4	8898.3	9133.9	9188.6	9264.0	9189.9	9058.4	8884.0	8826.7
5°	7816.6	8100.3	8729.0	9282.3	9774.3	10003.4	10067.2	9878.4	9497.1	8995.9	8690.1
7.5°	7021.2	7424.8	8276.1	9091.0	9815.9	10244.2	10233.8	9795.2	9093.5	8277.4	7786.7
10°	6335.2	6796.1	7772.4	8683.5	9452.8	9868.0	9707.9	9146.9	8309.9	7370.2	6837.7
12.5°	5951.3	6403.0	7393.6	8308.6	8951.6	9094.9	8972.5	8423.2	7634.4	6684.2	6218.1
15°	5884.9	6380.9	7242.6	7987.1	8347.7	8222.7	8076.9	7830.9	7273.8	6462.8	5977.3
17.5°	6172.6	6719.3	7415.7	7763.3	7702.0	7484.6	7443.0	7470.3	7336.3	6708.8	6149.2
20°	6724.5	7380.5	7828.3	7657.8	7211.3	6912.0	6922.3	7340.2	7737.2	7332.4	6693.3
22.5°	7498.9	8247.4	8423.2	7713.8	7004.3	6649.0	6734.9	7411.8	8376.3	8243.6	7427.4
25°	8501.2	9183.3	9057.1	7916.8	7025.2	6681.5	6750.6	7659.1	9131.3	9154.7	8335.9
27.5°	9472.3	10104.9	9589.4	8186.3	7111.0	6758.3	6849.5	8048.3	9852.4	10144.0	9374.7
30°	10229.9	10669.9	9800.4	8432.3	7280.3	6908.0	7021.2	8418.0	10180.4	10811.8	10174.0
32.5°	10857.3	11173.6	10136.2	8736.9	7591.4	7143.7	7342.7	8867.0	10652.9	11447.0	10956.2
35°	11659.2	11749.0	10554.0	9076.6	8071.7	7553.7	7801.0	9307.0	11103.3	12088.7	11726.8
37.5°	12599.0	12483.2	10948.4	9541.4	8692.6	8195.4	8399.8	9789.9	11474.3	12816.3	12514.4
40°	13528.3	13249.8	11443.0	10262.4	9598.6	8951.6	9193.8	10305.4	11820.6	13545.3	13283.6
42.5°	14318.4	13905.9	11931.2	11055.1	10442.1	9786.1	10075.0	10824.8	12151.2	14167.5	13951.4
45°	14903.0	14390.1	12395.9	11816.6	11604.5	10895.0	11031.7	11419.6	12509.2	14686.9	14500.7
47.5°	15424.9	14876.9	12921.8	12584.6	12621.1	12337.3	12117.4	12112.1	12930.9	15111.2	15020.1
50°	16124.0	15552.5	13486.7	13376.1	14146.7	13958.0	13472.4	12920.5	13464.6	15592.8	15582.4
52.5°	17087.2	16622.4	14176.6	14228.6	15570.7	15694.4	15093.0	13891.6	14300.2	16476.7	16414.2
55°	18226.1	17955.3	15116.5	15208.8	17317.5	17406.1	16808.6	15106.0	15529.0	17756.3	17583.1
57.5°	19115.2	19057.9	16147.4	16385.5	18621.9	19020.1	18470.8	16511.9	16914.1	18834.1	18399.3
60°	19469.2	19746.5	17244.7	17572.7	19828.5	20269.8	19788.2	17747.1	18141.5	19280.5	18343.2
62.5°	19277.9	19897.5	18413.6	18386.2	20097.9	20573.1	20234.6	18434.4	19051.4	18819.7	17415.2
65°	18394.1	19354.7	19091.7	18176.7	19176.3	19215.4	19106.1	18127.2	19266.2	17363.2	15621.5
67.5°	16468.9	17851.2	18198.8	16380.3	16690.2	16436.4	16252.7	16445.5	18146.7	15180.2	13128.8
70°	13413.9	15493.9	15660.6	13101.4	12960.8	12790.4	12424.6	13482.8	15937.8	12441.4	10417.3
72.5°	9862.9	12049.6	12561.2	9609.0	8958.2	8993.3	8704.4	10161.0	12958.2	9242.0	7777.5
75°	6747.9	8725.2	9827.7	6704.9	5923.9	5938.2	5901.8	7199.6	10321.1	6429.0	5819.8
77.5°	4929.5	6233.8	7411.8	4507.7	4376.3	4295.6	4276.0	5037.5	7912.9	4667.8	4519.4
80°	3955.9	4605.3	4978.9	3124.0	3359.7	3353.1	3245.1	3463.8	5167.6	3414.3	3380.4
82.5°	2744.0	3539.3	4033.9	2448.4	2267.6	2229.8	2255.8	2579.9	3652.5	2334.0	2219.4
85°	1447.5	2350.8	3994.8	2169.9	1345.9	1073.9	1335.6	2112.6	3164.4	1236.6	1083.0
87.5°	184.8	679.4	2645.0	865.6	531.1	286.3	633.9	1189.7	2031.9	252.6	219.9
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: P191302

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	8679.6	8506.4	8280.0	8070.5	7853.1	7636.9	7354.5	7177.4	7055.1	7031.7	6979.6
5°	8468.7	7893.4	7458.6	7082.4	6741.5	6259.7	5993.0	5771.7	5653.2	5641.5	5612.8
7.5°	7496.4	6702.4	6115.3	5583.0	5100.0	4710.8	4281.3	4080.8	3998.7	4018.3	4037.8
10°	6485.0	5597.2	4923.0	4378.8	3953.2	3625.1	3280.2	3047.3	2885.8	2853.3	2846.8
12.5°	5745.6	4772.0	4117.2	3733.3	3403.9	3095.3	2729.6	2455.0	2245.4	2173.8	2125.7
15°	5433.2	4368.4	3682.4	3268.5	2905.4	2513.6	2173.8	1886.1	1693.5	1631.0	1595.9
17.5°	5499.6	4256.5	3383.1	2853.3	2388.6	1979.8	1551.6	1305.6	1189.7	1159.8	1159.8
20°	5848.4	4235.6	3135.8	2470.6	1891.3	1417.5	1066.1	925.5	887.7	883.8	894.3
22.5°	6337.9	4308.6	2950.9	2138.7	1469.6	1034.8	830.4	778.4	761.5	765.4	777.1
25°	7066.9	4554.6	2816.8	1843.2	1153.3	847.4	740.6	709.4	701.6	712.0	726.3
27.5°	7931.1	4800.6	2733.5	1620.6	973.6	774.5	704.2	671.7	676.9	689.9	702.9
30°	8690.1	5002.3	2602.1	1461.8	917.7	778.4	704.2	659.9	654.8	657.3	661.2
32.5°	9370.8	5139.0	2448.4	1310.8	791.5	691.2	657.3	650.8	622.2	611.8	613.1
35°	9957.8	5139.0	2356.1	1222.3	709.4	613.1	558.4	525.9	511.6	512.9	527.2
37.5°	10524.1	5036.2	2310.4	1172.8	665.1	583.2	535.0	506.4	486.8	482.9	485.5
40°	11023.9	4886.5	2258.4	1151.9	631.4	565.0	519.4	495.9	475.2	468.6	469.9
42.5°	11424.8	4765.4	2201.2	1124.6	610.5	551.9	508.9	488.2	464.7	458.2	456.8
45°	11858.4	4725.1	2125.7	1070.0	620.9	553.2	506.4	484.3	460.8	453.0	450.4
47.5°	12429.8	4851.3	2047.5	1004.9	643.0	559.8	510.2	484.3	459.5	453.0	450.4
50°	13149.6	5148.1	1948.6	909.9	620.9	578.0	508.9	480.3	459.5	453.0	447.7
52.5°	14073.8	5549.1	1818.4	800.6	607.8	622.2	506.4	472.5	453.0	443.9	434.8
55°	15197.2	5877.1	1663.5	710.7	578.0	610.5	502.5	463.4	442.5	429.5	421.8
57.5°	16019.8	5995.5	1464.4	652.1	536.3	591.0	497.3	451.6	429.5	419.1	408.8
60°	15857.1	5766.5	1296.5	615.7	511.6	533.7	493.4	441.3	417.9	410.0	400.9
62.5°	14554.1	5167.6	1188.5	598.7	495.9	486.8	497.3	430.9	407.4	399.7	397.0
65°	12600.3	4283.8	1145.5	594.8	482.9	459.5	462.1	419.1	395.7	389.2	386.6
67.5°	10393.9	3457.3	1107.8	607.8	466.0	440.0	427.0	403.6	384.0	377.5	372.3
70°	8196.7	2875.4	1090.8	600.1	445.2	420.4	406.1	386.6	369.7	363.1	359.3
72.5°	6600.8	2428.9	1081.7	592.3	417.9	394.4	381.4	364.5	346.3	343.6	339.7
75°	5585.5	1909.5	990.6	567.5	386.6	363.1	354.0	338.4	320.2	320.2	317.6
77.5°	4308.6	1381.1	824.0	502.5	354.0	328.1	320.2	308.5	287.7	291.5	290.3
80°	3182.6	900.8	644.4	416.5	313.7	289.0	285.1	273.3	251.2	256.5	256.5
82.5°	2180.3	591.0	463.4	341.1	268.1	244.7	244.7	233.0	208.3	210.8	218.7
85°	1094.8	406.1	346.3	264.2	208.3	196.5	196.5	187.4	162.8	164.0	174.4
87.5°	333.3	244.7	229.1	188.7	149.7	147.1	140.6	134.1	118.5	117.1	123.7
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: P191302

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	6900.2	6826.0	6736.2	6538.4	6472.0	6468.0	6528.0	6465.5	6585.2	6534.4	6590.4
5°	5564.6	5491.8	5391.6	5139.0	4985.5	4881.3	4831.8	4686.0	4791.5	4714.7	4778.5
7.5°	4092.5	4109.4	4043.0	3894.7	3560.1	3392.2	3293.3	3204.7	3281.5	3273.7	3396.1
10°	2876.7	2922.3	2875.4	2725.8	2455.0	2362.5	2380.8	2415.9	2516.2	2568.2	2757.0
12.5°	2071.0	2068.4	2038.4	1904.3	1726.0	1736.5	1810.6	1871.8	1964.3	2018.9	2211.5
15°	1546.4	1523.0	1510.0	1400.6	1299.0	1321.2	1357.7	1364.2	1422.7	1455.2	1611.5
17.5°	1168.9	1180.6	1194.9	1116.9	1040.0	1025.7	997.1	962.0	978.9	985.4	1063.5
20°	928.1	975.0	1010.1	955.4	877.3	835.6	799.2	775.8	775.8	774.5	796.7
22.5°	811.0	844.8	882.5	844.8	774.5	738.1	717.2	699.0	696.4	696.4	717.2
25°	747.2	771.9	808.3	782.4	730.3	702.9	683.4	659.9	650.8	648.2	662.6
27.5°	716.0	726.3	744.6	721.2	676.9	663.9	658.7	637.8	626.1	619.6	633.9
30°	662.6	659.9	661.2	637.8	602.7	601.4	610.5	614.4	610.5	609.2	631.4
32.5°	613.1	607.8	606.6	585.7	553.2	545.4	553.2	561.0	570.1	583.2	609.2
35°	550.7	563.6	571.4	553.2	514.1	490.7	481.6	467.3	459.5	459.5	489.5
37.5°	501.1	531.1	542.8	525.9	482.9	450.4	434.8	432.2	433.4	438.6	467.3
40°	484.3	506.4	516.8	499.8	456.8	427.0	417.9	415.2	417.9	425.6	454.3
42.5°	473.8	489.5	488.2	467.3	432.2	411.3	406.1	403.6	406.1	413.9	445.2
45°	464.7	475.2	464.7	440.0	407.4	397.0	398.3	397.0	399.7	407.4	437.4
47.5°	456.8	460.8	447.7	423.1	389.2	386.6	391.8	395.7	398.3	404.8	436.1
50°	445.2	445.2	433.4	407.4	373.6	374.9	381.4	390.5	391.8	399.7	424.3
52.5°	430.9	429.5	421.8	397.0	360.6	364.5	364.5	374.9	377.5	386.6	412.7
55°	419.1	416.5	412.7	389.2	348.8	355.4	351.5	355.4	361.8	371.0	399.7
57.5°	408.8	403.6	403.6	382.7	339.7	342.4	333.3	338.4	346.3	354.0	384.0
60°	398.3	393.1	395.7	373.6	325.4	322.8	319.0	329.3	331.9	341.1	371.0
62.5°	386.6	382.7	384.0	363.1	315.0	308.5	308.5	317.6	319.0	331.9	360.6
65°	377.5	372.3	371.0	352.7	303.3	295.5	299.4	303.3	305.9	319.0	346.3
67.5°	368.4	357.9	357.9	343.6	290.3	282.4	290.3	289.0	292.9	304.6	326.7
70°	356.7	342.4	343.6	337.2	277.2	268.1	274.7	273.3	276.0	283.8	305.9
72.5°	338.4	326.7	329.3	326.7	264.2	251.2	253.8	253.8	253.8	260.3	283.8
75°	315.0	305.9	313.7	320.2	248.6	230.4	233.0	233.0	229.1	233.0	261.7
77.5°	286.3	281.2	307.2	298.1	230.4	208.3	208.3	205.7	197.8	203.1	234.3
80°	255.1	251.2	283.8	249.9	209.6	181.0	178.3	171.9	164.0	167.9	199.2
82.5°	222.6	218.7	238.2	191.4	181.0	149.7	143.2	131.4	123.7	127.6	156.2
85°	182.2	182.2	183.5	144.4	138.0	114.6	106.7	91.1	82.0	84.6	111.9
87.5°	130.1	134.1	123.7	98.9	82.0	63.8	58.6	49.5	41.6	48.2	58.6
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: P191302

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-1200

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	6876.8	7020.0	7182.6	7390.9	7569.3	7862.2	8143.3	8312.5
5°	5141.7	5379.8	5676.7	6058.0	6413.4	6947.1	7476.8	7816.6
7.5°	3679.9	3935.0	4255.2	4731.7	5234.0	5914.8	6615.1	7021.2
10°	3044.6	3306.3	3575.7	3897.2	4308.6	5049.2	5877.1	6335.2
12.5°	2518.7	2798.6	3088.9	3427.3	3808.8	4470.0	5424.1	5951.3
15°	1927.8	2240.2	2582.5	3010.7	3488.5	4252.6	5312.2	5884.9
17.5°	1321.2	1670.1	2090.5	2619.0	3203.5	4182.3	5512.6	6172.6
20°	909.9	1163.7	1612.8	2232.4	2935.3	4173.2	5897.9	6724.5
22.5°	761.5	874.7	1202.8	1877.0	2733.5	4285.1	6495.4	7498.9
25°	704.2	771.9	960.7	1568.5	2586.4	4542.8	7318.1	8501.2
27.5°	670.3	731.5	872.2	1366.8	2470.6	4842.2	8118.5	9472.3
30°	683.4	745.8	847.4	1264.0	2313.1	5092.1	8829.3	10229.9
32.5°	615.7	643.0	726.3	1172.8	2199.9	5301.7	9451.6	10857.3
35°	524.6	572.8	648.2	1129.8	2202.4	5442.3	10129.7	11659.2
37.5°	499.8	548.0	602.7	1114.2	2232.4	5592.1	10908.1	12599.0
40°	484.3	528.5	575.3	1105.1	2261.0	5728.7	11670.8	13528.3
42.5°	473.8	514.1	572.8	1073.9	2275.3	5851.1	12298.3	14318.4
45°	472.5	514.1	583.2	1042.7	2297.4	5982.5	12824.1	14903.0
47.5°	473.8	531.1	563.6	1004.9	2297.4	6202.6	13441.2	15424.9
50°	468.6	559.8	542.8	951.5	2244.0	6619.0	14287.2	16124.0
52.5°	466.0	555.8	502.5	869.5	2151.7	7280.3	15371.6	17087.2
55°	459.5	536.3	473.8	747.2	2043.7	8001.4	16532.6	18226.1
57.5°	453.0	475.2	458.2	640.5	1877.0	8509.1	17331.9	19115.2
60°	507.7	415.2	445.2	588.4	1654.4	8648.3	17300.7	19469.2
62.5°	469.9	389.2	428.2	576.6	1498.2	8257.9	16501.4	19277.9
65°	368.4	372.3	411.3	610.5	1456.6	7223.1	15085.1	18394.1
67.5°	337.2	355.4	394.4	653.5	1460.5	5783.4	12968.7	16468.9
70°	317.6	337.2	374.9	675.6	1470.9	4311.1	10253.3	13413.9
72.5°	295.5	312.4	352.7	679.4	1403.2	3131.9	7902.5	9862.9
75°	269.4	285.1	321.5	592.3	1162.4	2172.5	6045.0	6747.9
77.5°	239.5	251.2	282.4	456.8	863.1	1390.2	4537.7	4929.5
80°	204.4	210.8	236.9	334.5	591.0	869.5	3590.0	3955.9
82.5°	164.0	166.6	183.5	251.2	384.0	558.4	2404.2	2744.0
85°	115.9	115.9	126.2	182.2	261.7	354.0	1305.6	1447.5
87.5°	54.6	56.0	56.0	100.2	136.7	179.6	300.6	184.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)