

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: P191291

Luminaire Tested: **GLEON-AF-03-LED-E1-SLL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191291
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-03-LED-E1-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K, 1050mA 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: 16336.5 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 166
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

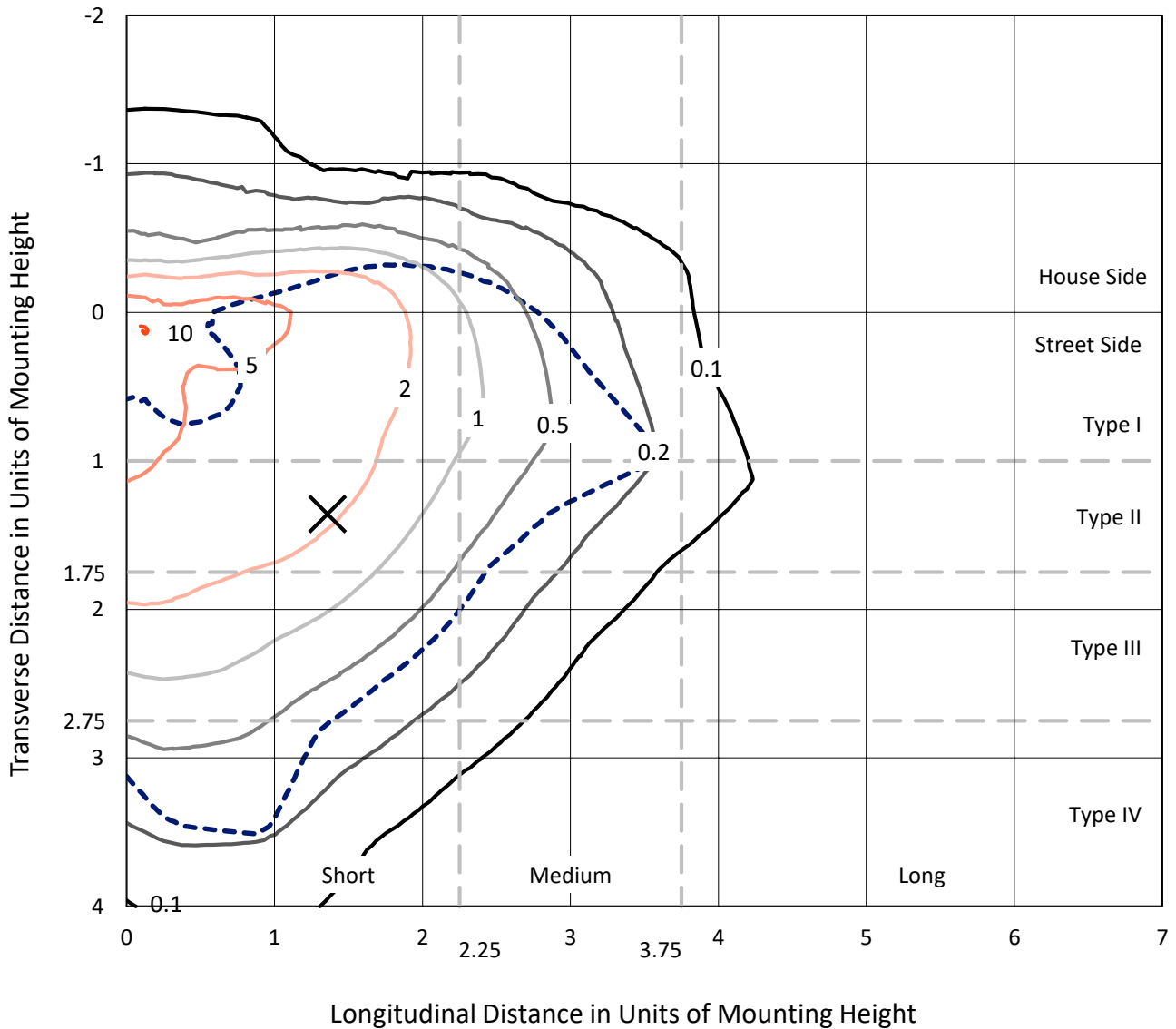


REPORT NUMBER: P191291

CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

Iso-Footcandle Lines of Horizontal Illumination

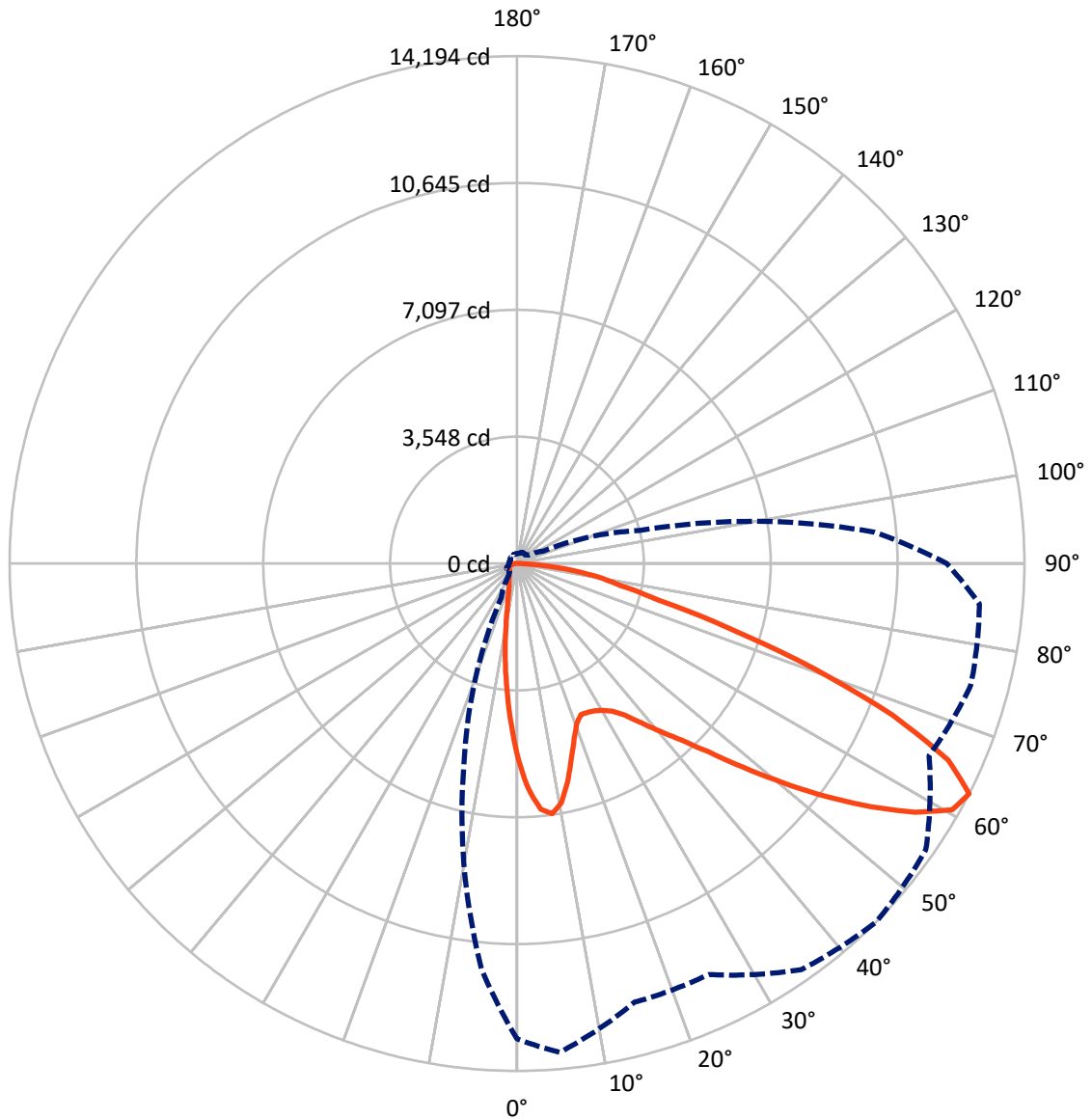
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P191291
CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

Luminous Intensity Polar Plot



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

REPORT NUMBER: P191291

CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2703.5	0.0	2703.5
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	13633.1	0.0	13633.1
	% Fixture	83.5	0.0	83.5
Total	Lumens	16336.5	0.0	16336.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.8	2.5
10°-20°	736.8	4.5
20°-30°	1074.2	6.6
30°-40°	1654.4	10.1
40°-50°	2434.9	14.9
50°-60°	3571.4	21.9
60°-70°	3992.4	24.4
70°-80°	1954.6	12.0
80°-90°	516.1	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°	16336.5	100.0
0°-180°	16336.5	100.0



REPORT NUMBER: P191291

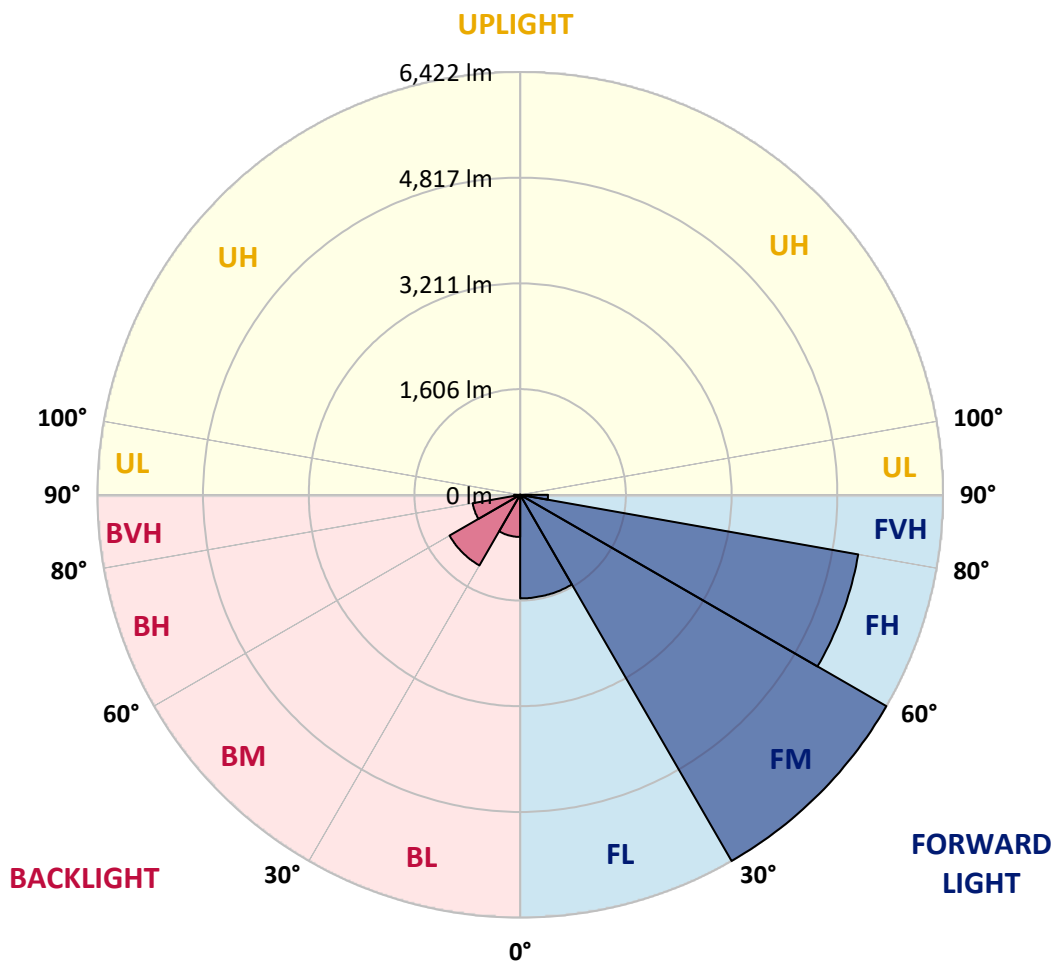
CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1573.2	9.6			
FM	(30°-60°)	6422.0	39.3			
FH	(60°-80°)	5214.1	31.9			G3/7500
FVH	(80°-90°)	423.8	2.6			G3/500
BL	(0°-30°)	639.6	3.9	B2/1000		
BM	(30°-60°)	1238.7	7.6	B2/2500		
BH	(60°-80°)	732.9	4.5	B2/1000		G2/1000
BVH	(80°-90°)	92.2	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





REPORT NUMBER: P191291

CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3
2.5°	5734.9	5826.5	6005.2	6139.0	6301.6	6339.2	6391.4	6340.1	6249.5	6129.1	6089.6
5°	5392.7	5588.5	6022.2	6404.0	6743.4	6901.4	6945.4	6815.2	6552.1	6206.3	5995.3
7.5°	4844.1	5122.4	5709.7	6271.9	6772.1	7067.6	7060.4	6757.7	6273.8	5710.6	5372.1
10°	4370.8	4688.7	5362.2	5990.8	6521.6	6808.0	6697.6	6310.5	5733.1	5084.7	4717.4
12.5°	4105.8	4417.5	5100.8	5732.2	6175.9	6274.6	6190.2	5811.2	5267.0	4611.5	4289.9
15°	4060.1	4402.2	4996.7	5510.3	5759.1	5672.9	5572.3	5402.6	5018.3	4458.7	4123.8
17.5°	4258.5	4635.7	5116.2	5355.9	5313.7	5163.8	5135.0	5153.8	5061.4	4628.5	4242.4
20°	4639.3	5091.8	5400.8	5283.1	4975.1	4768.6	4775.7	5064.0	5338.0	5058.7	4617.7
22.5°	5173.6	5690.0	5811.2	5321.8	4832.3	4587.2	4646.4	5113.4	5778.9	5687.3	5124.3
25°	5865.1	6335.6	6248.6	5461.8	4846.7	4609.6	4657.2	5284.1	6299.7	6315.9	5751.0
27.5°	6535.0	6971.5	6615.8	5647.8	4906.0	4662.6	4725.5	5552.6	6797.3	6998.4	6467.7
30°	7057.7	7361.3	6761.4	5817.5	5022.8	4765.9	4844.1	5807.6	7023.6	7459.2	7019.1
32.5°	7490.6	7708.8	6993.0	6027.6	5237.4	4928.5	5065.9	6117.5	7349.6	7897.4	7558.8
35°	8043.8	8105.8	7281.4	6262.0	5568.7	5211.3	5381.9	6421.0	7660.3	8340.1	8090.4
37.5°	8692.1	8612.2	7553.5	6582.7	5997.2	5654.1	5795.0	6754.1	7916.2	8842.1	8633.8
40°	9333.3	9141.2	7894.7	7080.1	6622.2	6175.9	6342.9	7109.8	8155.1	9345.0	9164.5
42.5°	9878.4	9593.7	8231.5	7627.0	7204.1	6751.5	6950.8	7468.2	8383.2	9774.3	9625.1
45°	10281.7	9927.8	8552.1	8152.4	8006.0	7516.6	7610.9	7878.5	8630.1	10132.6	10004.2
47.5°	10641.8	10263.7	8914.8	8682.3	8707.4	8511.7	8359.9	8356.3	8921.2	10425.4	10362.5
50°	11124.1	10729.8	9304.6	9228.2	9759.9	9629.6	9294.7	8914.0	9289.3	10757.7	10750.4
52.5°	11788.6	11468.0	9780.5	9816.4	10742.3	10827.6	10412.8	9583.9	9865.8	11367.4	11324.3
55°	12574.3	12387.5	10429.0	10492.7	11947.6	12008.6	11596.4	10421.7	10713.7	12250.1	12130.8
57.5°	13187.7	13148.2	11140.2	11304.5	12847.3	13122.2	12743.2	11391.7	11669.1	12993.7	12693.8
60°	13432.0	13623.2	11897.2	12123.5	13679.8	13984.2	13652.0	12243.9	12516.0	13301.7	12655.2
62.5°	13300.0	13727.5	12703.7	12684.8	13865.8	14193.5	13960.0	12718.0	13143.7	12983.9	12014.9
65°	12690.2	13353.0	13171.5	12540.3	13229.9	13256.8	13181.4	12506.1	13291.9	11979.0	10777.4
67.5°	11362.0	12315.7	12555.5	11300.9	11514.6	11339.5	11213.0	11345.9	12519.6	10473.0	9057.6
70°	9254.3	10689.4	10804.3	9038.8	8941.8	8824.2	8571.8	9301.9	10995.6	8583.5	7187.0
72.5°	6804.5	8313.1	8666.1	6629.3	6180.4	6204.6	6005.2	7010.1	8940.0	6376.1	5365.8
75°	4655.4	6019.6	6780.2	4625.8	4087.0	4096.8	4071.8	4967.0	7120.6	4435.4	4015.2
77.5°	3400.9	4300.7	5113.4	3109.9	3019.2	2963.5	2950.1	3475.4	5459.2	3220.4	3118.0
80°	2729.1	3177.3	3435.0	2155.3	2317.8	2313.4	2238.8	2389.7	3565.2	2355.5	2332.2
82.5°	1893.1	2441.8	2783.0	1689.2	1564.4	1538.3	1556.3	1779.9	2519.9	1610.2	1531.2
85°	998.6	1621.9	2756.1	1497.0	928.5	740.9	921.4	1457.5	2183.2	853.1	747.2
87.5°	127.6	468.8	1824.8	597.2	366.4	197.5	437.3	820.8	1401.9	174.2	151.8
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: P191291

CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3
2.5°	5988.1	5868.7	5712.5	5567.8	5417.9	5268.8	5073.9	4951.8	4867.4	4851.2	4815.3
5°	5842.7	5445.7	5145.7	4886.2	4650.9	4318.7	4134.6	3981.9	3900.2	3892.1	3872.4
7.5°	5171.8	4624.0	4219.0	3851.7	3518.5	3250.0	2953.7	2815.4	2758.8	2772.3	2785.7
10°	4474.1	3861.5	3396.4	3021.0	2727.4	2501.0	2263.1	2102.3	1991.0	1968.5	1964.1
12.5°	3963.9	3292.3	2840.5	2575.6	2348.4	2135.5	1883.2	1693.7	1549.2	1499.7	1466.5
15°	3748.4	3013.8	2540.6	2255.0	2004.5	1734.1	1499.7	1301.3	1168.3	1125.2	1101.0
17.5°	3794.2	2936.6	2334.0	1968.5	1647.9	1365.9	1070.4	900.7	820.8	800.2	800.2
20°	4034.9	2922.3	2163.3	1704.4	1304.9	977.9	735.5	638.5	612.4	609.8	616.9
22.5°	4372.6	2972.5	2035.9	1475.5	1013.8	713.9	573.0	537.0	525.4	528.0	536.1
25°	4875.5	3142.2	1943.4	1271.6	795.7	584.6	511.0	489.5	484.1	491.2	501.1
27.5°	5471.8	3312.0	1885.9	1118.1	671.8	534.3	485.8	463.4	467.0	476.0	485.0
30°	5995.3	3451.1	1795.2	1008.5	633.1	537.0	485.8	455.3	451.7	453.5	456.2
32.5°	6464.9	3545.4	1689.2	904.3	546.1	476.9	453.5	449.0	429.2	422.1	423.0
35°	6870.0	3545.4	1625.5	843.2	489.5	423.0	385.2	362.8	352.9	353.8	363.7
37.5°	7260.7	3474.6	1594.1	809.2	458.9	402.3	369.1	349.3	335.8	333.2	335.0
40°	7605.5	3371.2	1558.1	794.7	435.6	389.7	358.3	342.2	327.8	323.3	324.2
42.5°	7882.1	3287.8	1518.6	775.9	421.1	380.7	351.2	336.8	320.6	316.1	315.2
45°	8181.2	3259.8	1466.5	738.2	428.4	381.7	349.3	334.1	317.9	312.5	310.8
47.5°	8575.4	3347.0	1412.6	693.3	443.7	386.2	352.0	334.1	317.0	312.5	310.8
50°	9072.0	3551.8	1344.4	627.7	428.4	398.7	351.2	331.3	317.0	312.5	308.9
52.5°	9709.6	3828.4	1254.5	552.3	419.4	429.2	349.3	326.0	312.5	306.3	299.9
55°	10484.6	4054.7	1147.6	490.3	398.7	421.1	346.7	319.7	305.4	296.3	290.9
57.5°	11052.2	4136.4	1010.3	449.9	370.0	407.7	343.1	311.6	296.3	289.2	282.0
60°	10939.9	3978.4	894.5	424.7	352.9	368.2	340.3	304.4	288.3	282.8	276.6
62.5°	10041.0	3565.2	819.9	413.1	342.2	335.8	343.1	297.3	281.1	275.7	273.9
65°	8693.0	2955.4	790.2	410.4	333.2	317.0	318.9	289.2	273.0	268.5	266.7
67.5°	7170.9	2385.2	764.2	419.4	321.5	303.5	294.5	278.3	264.9	260.4	256.9
70°	5655.0	1983.8	752.6	414.0	307.1	290.1	280.2	266.7	255.0	250.5	247.9
72.5°	4554.0	1675.7	746.2	408.6	288.3	272.1	263.1	251.4	238.9	237.1	234.4
75°	3853.5	1317.5	683.4	391.6	266.7	250.5	244.3	233.5	221.0	221.0	219.1
77.5°	2972.5	952.8	568.5	346.7	244.3	226.3	221.0	212.9	198.5	201.1	200.3
80°	2195.7	621.4	444.6	287.3	216.5	199.4	196.7	188.6	173.3	176.9	176.9
82.5°	1504.2	407.7	319.7	235.3	184.9	168.8	168.8	160.7	143.7	145.5	150.9
85°	755.2	280.2	238.9	182.3	143.7	135.6	135.6	129.3	112.2	113.1	120.3
87.5°	229.9	168.8	158.0	130.2	103.3	101.5	97.0	92.5	81.7	80.8	85.3
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: P191291

CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3
2.5°	4760.5	4709.4	4647.4	4510.9	4465.1	4462.3	4503.6	4460.6	4543.2	4508.1	4546.8
5°	3839.1	3788.8	3719.7	3545.4	3439.5	3367.7	3333.5	3232.9	3305.7	3252.7	3296.7
7.5°	2823.4	2835.1	2789.3	2687.0	2456.1	2340.3	2272.1	2211.0	2264.0	2258.6	2343.0
10°	1984.6	2016.1	1983.8	1880.5	1693.7	1630.0	1642.6	1666.8	1735.9	1771.9	1902.1
12.5°	1428.8	1427.0	1406.4	1313.9	1190.8	1198.0	1249.1	1291.4	1355.1	1392.8	1525.7
15°	1066.8	1050.7	1041.8	966.3	896.2	911.6	936.6	941.1	981.5	1004.0	1111.7
17.5°	806.4	814.5	824.4	770.5	717.5	707.7	687.9	663.7	675.4	679.9	733.7
20°	640.3	672.6	696.8	659.2	605.3	576.5	551.4	535.2	535.2	534.3	549.6
22.5°	559.5	582.9	608.9	582.9	534.3	509.2	494.8	482.2	480.5	480.5	494.8
25°	515.5	532.5	557.7	539.7	503.8	485.0	471.5	455.3	449.0	447.2	457.1
27.5°	493.9	501.1	513.7	497.6	467.0	458.0	454.4	440.1	432.0	427.5	437.3
30°	457.1	455.3	456.2	440.1	415.8	414.9	421.1	423.9	421.1	420.3	435.6
32.5°	423.0	419.4	418.5	404.2	381.7	376.2	381.7	387.1	393.3	402.3	420.3
35°	379.8	388.8	394.2	381.7	354.8	338.6	332.3	322.4	317.0	317.0	337.7
37.5°	345.8	366.4	374.5	362.8	333.2	310.8	299.9	298.2	299.0	302.6	322.4
40°	334.1	349.3	356.5	344.8	315.2	294.5	288.3	286.4	288.3	293.7	313.4
42.5°	326.9	337.7	336.8	322.4	298.2	283.8	280.2	278.3	280.2	285.6	307.1
45°	320.6	327.8	320.6	303.5	281.1	273.9	274.8	273.9	275.7	281.1	301.8
47.5°	315.2	317.9	308.9	291.8	268.5	266.7	270.3	273.0	274.8	279.3	300.8
50°	307.1	307.1	299.0	281.1	257.8	258.6	263.1	269.4	270.3	275.7	292.8
52.5°	297.3	296.3	290.9	273.9	248.8	251.4	251.4	258.6	260.4	266.7	284.7
55°	289.2	287.3	284.7	268.5	240.7	245.2	242.4	245.2	249.7	255.9	275.7
57.5°	282.0	278.3	278.3	264.0	234.4	236.2	229.9	233.5	238.9	244.3	264.9
60°	274.8	271.2	273.0	257.8	224.5	222.7	220.0	227.2	229.0	235.3	255.9
62.5°	266.7	264.0	264.9	250.5	217.3	212.9	212.9	219.1	220.0	229.0	248.8
65°	260.4	256.9	255.9	243.4	209.2	203.9	206.5	209.2	211.0	220.0	238.9
67.5°	254.1	246.9	246.9	237.1	200.3	194.9	200.3	199.4	202.0	210.1	225.5
70°	246.0	236.2	237.1	232.6	191.3	184.9	189.5	188.6	190.4	195.8	211.0
72.5°	233.5	225.5	227.2	225.5	182.3	173.3	175.1	175.1	175.1	179.6	195.8
75°	217.3	211.0	216.5	221.0	171.5	159.0	160.7	160.7	158.0	160.7	180.6
77.5°	197.5	194.0	212.0	205.6	159.0	143.7	143.7	141.9	136.5	140.1	161.6
80°	176.0	173.3	195.8	172.5	144.5	124.8	123.1	118.6	113.1	115.8	137.4
82.5°	153.5	150.9	164.4	132.1	124.8	103.3	98.8	90.7	85.3	88.0	107.7
85°	125.7	125.7	126.6	99.6	95.2	79.1	73.7	62.9	56.6	58.4	77.2
87.5°	89.8	92.5	85.3	68.2	56.6	44.0	40.4	34.2	28.7	33.2	40.4
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: P191291

CATALOG NUMBER: GLEON-AF-03-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3	5519.3
2.5°	4744.3	4843.2	4955.4	5099.1	5222.1	5424.2	5618.1	5734.9
5°	3547.3	3711.6	3916.4	4179.5	4424.7	4792.8	5158.3	5392.7
7.5°	2538.8	2714.8	2935.7	3264.3	3611.0	4080.7	4563.8	4844.1
10°	2100.5	2281.0	2466.9	2688.7	2972.5	3483.5	4054.7	4370.8
12.5°	1737.7	1930.8	2131.0	2364.6	2627.7	3083.9	3742.2	4105.8
15°	1330.0	1545.6	1781.7	2077.2	2406.8	2933.9	3664.9	4060.1
17.5°	911.6	1152.1	1442.3	1806.8	2210.1	2885.4	3803.2	4258.5
20°	627.7	802.8	1112.7	1540.2	2025.0	2879.1	4069.0	4639.3
22.5°	525.4	603.4	829.8	1295.0	1885.9	2956.3	4481.2	5173.6
25°	485.8	532.5	662.8	1082.2	1784.4	3134.1	5048.8	5865.1
27.5°	462.5	504.7	601.7	943.0	1704.4	3340.8	5601.1	6535.0
30°	471.5	514.5	584.6	872.0	1595.8	3513.1	6091.4	7057.7
32.5°	424.7	443.7	501.1	809.2	1517.6	3657.8	6520.7	7490.6
35°	361.9	395.2	447.2	779.5	1519.5	3754.7	6988.6	8043.8
37.5°	344.8	378.1	415.8	768.7	1540.2	3858.0	7525.5	8692.1
40°	334.1	364.6	396.9	762.4	1559.9	3952.3	8051.9	9333.3
42.5°	326.9	354.8	395.2	740.9	1569.8	4036.7	8484.7	9878.4
45°	326.0	354.8	402.3	719.3	1585.1	4127.4	8847.5	10281.7
47.5°	326.9	366.4	388.8	693.3	1585.1	4279.2	9273.2	10641.8
50°	323.3	386.2	374.5	656.4	1548.2	4566.6	9856.8	11124.1
52.5°	321.5	383.5	346.7	599.9	1484.5	5022.8	10604.9	11788.6
55°	317.0	370.0	326.9	515.5	1409.9	5520.3	11406.0	12574.3
57.5°	312.5	327.8	316.1	441.8	1295.0	5870.5	11957.4	13187.7
60°	350.3	286.4	307.1	405.9	1141.4	5966.6	11935.9	13432.0
62.5°	324.2	268.5	295.4	397.8	1033.7	5697.1	11384.4	13300.0
65°	254.1	256.9	283.8	421.1	1004.9	4983.2	10407.4	12690.2
67.5°	232.6	245.2	272.1	450.8	1007.6	3990.0	8947.1	11362.0
70°	219.1	232.6	258.6	466.1	1014.8	2974.3	7073.9	9254.3
72.5°	203.9	215.5	243.4	468.8	968.1	2160.7	5452.0	6804.5
75°	185.9	196.7	221.8	408.6	802.0	1498.8	4170.5	4655.4
77.5°	165.2	173.3	194.9	315.2	595.4	959.1	3130.5	3400.9
80°	141.0	145.5	163.5	230.8	407.7	599.9	2476.8	2729.1
82.5°	113.1	115.0	126.6	173.3	264.9	385.2	1658.7	1893.1
85°	79.9	79.9	87.2	125.7	180.6	244.3	900.7	998.6
87.5°	37.7	38.6	38.6	69.2	94.3	123.9	207.5	127.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)