

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: P191292

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191292
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
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 21586.3 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 225
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

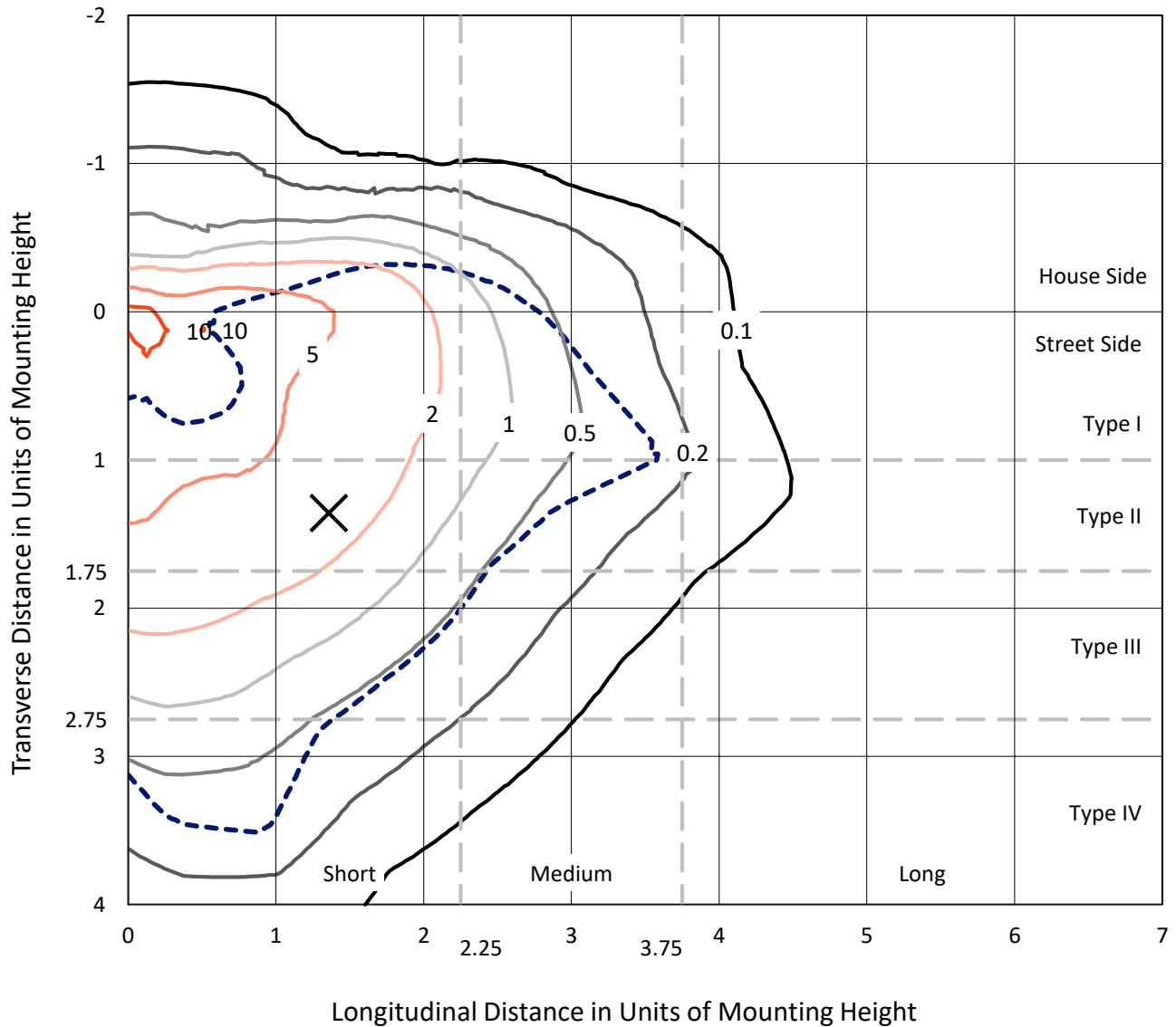


REPORT NUMBER: P191292

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

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

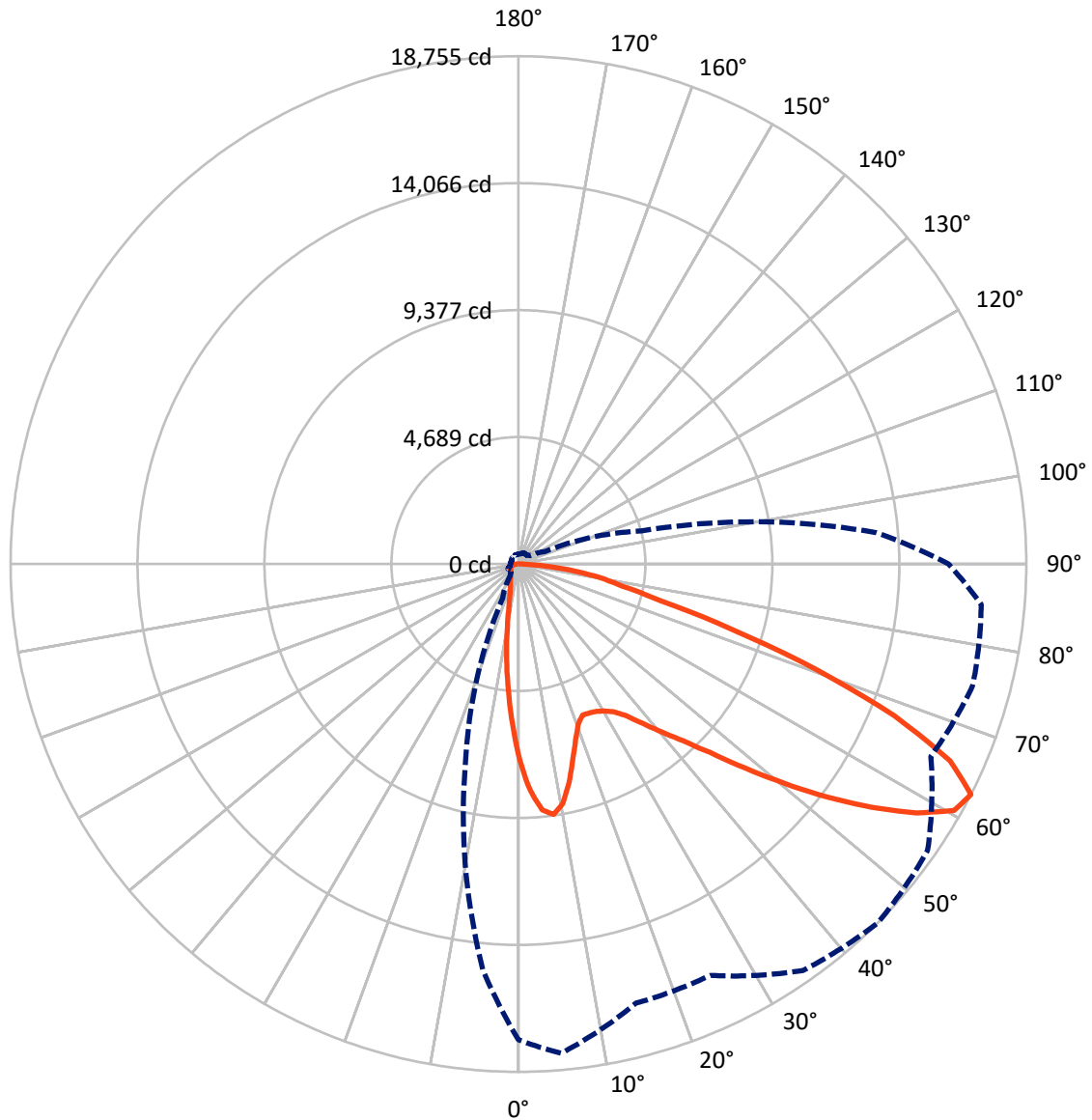


Based on 25 foot mounting height. Maximum calculated value = 13.7 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P191292

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

Luminous Intensity Polar Plot



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

REPORT NUMBER: P191292

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

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3572.2	0.0	3572.2
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	18014.1	0.0	18014.1
	% Fixture	83.5	0.0	83.5
Total	Lumens	21586.3	0.0	21586.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.9	2.5
10°-20°	973.5	4.5
20°-30°	1419.4	6.6
30°-40°	2186.1	10.1
40°-50°	3217.3	14.9
50°-60°	4719.1	21.9
60°-70°	5275.3	24.4
70°-80°	2582.7	12.0
80°-90°	681.9	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°	21586.3	100.0
0°-180°	21586.3	100.0



REPORT NUMBER: P191292

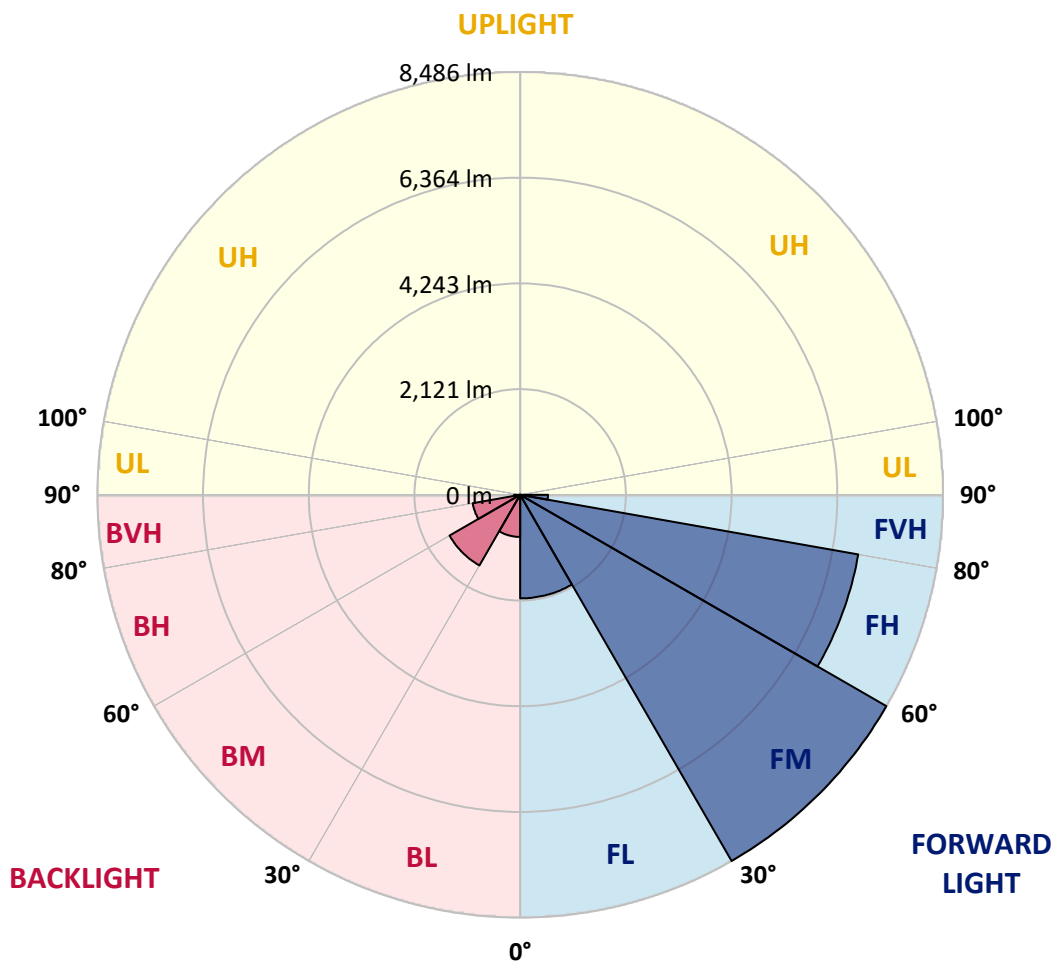
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2078.7	9.6			
FM (30°-60°)	8485.8	39.3			
FH (60°-80°)	6889.6	31.9			G3/7500
FVH (80°-90°)	560.0	2.6			G4/750
BL (0°-30°)	845.1	3.9	B2/1000		
BM (30°-60°)	1636.8	7.6	B2/2500		
BH (60°-80°)	968.4	4.5	B2/1000		G2/1000
BVH (80°-90°)	121.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





REPORT NUMBER: P191292

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	7577.8	7698.8	7935.0	8111.8	8326.6	8376.4	8445.3	8377.6	8257.8	8098.7	8046.5
5°	7125.7	7384.4	7957.5	8461.8	8910.4	9119.2	9177.4	9005.3	8657.6	8200.8	7921.9
7.5°	6400.7	6768.6	7544.6	8287.4	8948.4	9338.7	9329.3	8929.3	8289.8	7545.8	7098.5
10°	5775.3	6195.4	7085.4	7916.0	8617.3	8995.8	8849.9	8338.5	7575.5	6718.6	6233.4
12.5°	5425.2	5837.1	6740.0	7574.2	8160.5	8291.0	8179.4	7678.7	6959.5	6093.3	5668.5
15°	5364.8	5816.8	6602.4	7281.2	7609.8	7496.0	7363.0	7138.8	6630.9	5891.6	5449.0
17.5°	5626.9	6125.3	6760.2	7077.1	7021.3	6823.1	6785.1	6810.1	6687.8	6115.9	5605.7
20°	6130.1	6728.2	7136.4	6980.9	6573.9	6301.0	6310.5	6691.4	7053.3	6684.3	6101.6
22.5°	6836.2	7518.5	7678.7	7032.0	6385.3	6061.3	6139.6	6756.7	7635.9	7514.9	6770.9
25°	7749.9	8371.6	8256.5	7217.1	6404.2	6091.0	6153.9	6982.2	8324.2	8345.5	7599.2
27.5°	8635.1	9211.8	8741.9	7462.7	6482.5	6160.9	6244.0	7336.9	8981.6	9247.4	8546.1
30°	9325.7	9726.8	8934.1	7687.0	6636.8	6297.4	6400.7	7674.0	9280.6	9856.1	9274.7
32.5°	9897.7	10186.0	9240.3	7964.7	6920.5	6512.2	6693.8	8083.4	9711.4	10435.2	9987.9
35°	10628.7	10710.5	9621.2	8274.3	7358.3	6886.0	7111.5	8484.4	10121.9	11020.2	10690.3
37.5°	11485.4	11379.8	9980.7	8697.9	7924.3	7471.0	7657.3	8924.6	10460.1	11683.5	11408.3
40°	12332.6	12078.7	10431.6	9355.4	8750.2	8160.5	8381.1	9394.6	10775.8	12348.0	12109.6
42.5°	13053.0	12676.7	10876.6	10078.0	9519.2	8921.1	9184.5	9868.0	11077.1	12915.3	12718.2
45°	13585.7	13118.2	11300.2	10772.2	10578.7	9932.0	10056.6	10410.3	11403.5	13388.7	13219.1
47.5°	14061.6	13562.0	11779.7	11472.3	11505.5	11246.8	11046.3	11041.5	11788.0	13775.6	13692.5
50°	14698.8	14177.8	12294.6	12193.8	12896.2	12724.2	12281.6	11778.5	12274.5	14214.6	14205.1
52.5°	15576.9	15153.3	12923.6	12971.0	14194.5	14307.2	13759.0	12663.7	13036.3	15020.3	14963.4
55°	16615.2	16368.3	13780.3	13864.6	15786.9	15867.6	15322.9	13770.9	14156.5	16186.8	16029.0
57.5°	17425.7	17373.4	14720.2	14937.2	16975.9	17339.0	16838.3	15052.4	15419.0	17169.3	16773.0
60°	17748.4	18001.2	15720.4	16019.5	18076.0	18478.2	18039.1	16178.5	16538.0	17576.3	16722.0
62.5°	17574.0	18138.8	16786.0	16761.2	18321.6	18754.7	18446.2	16805.0	17367.5	17156.3	15875.9
65°	16768.2	17644.0	17404.3	16570.1	17481.4	17517.0	17417.4	16525.0	17563.2	15828.4	14240.7
67.5°	15013.2	16273.4	16590.2	14932.5	15215.0	14983.6	14816.2	14991.9	16542.8	13838.5	11968.3
70°	12228.3	14124.4	14276.3	11943.5	11815.3	11659.8	11326.4	12291.1	14529.1	11341.8	9496.6
72.5°	8991.1	10984.7	11451.0	8759.7	8166.4	8198.4	7935.0	9262.8	11812.9	8425.0	7090.1
75°	6151.5	7954.0	8959.0	6112.3	5400.4	5413.4	5380.2	6563.3	9408.8	5860.8	5305.4
77.5°	4493.7	5682.8	6756.7	4109.3	3989.4	3915.9	3898.1	4592.2	7213.5	4255.3	4119.9
80°	3606.2	4198.3	4538.8	2847.9	3062.7	3056.8	2958.3	3157.6	4710.9	3112.5	3081.6
82.5°	2501.4	3226.5	3677.4	2232.1	2067.1	2032.7	2056.4	2351.9	3329.7	2127.6	2023.2
85°	1319.5	2143.1	3641.8	1978.1	1226.9	979.0	1217.5	1925.9	2884.7	1127.3	987.2
87.5°	168.5	619.4	2411.2	789.1	484.2	261.1	577.9	1084.5	1852.4	230.2	200.5
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: P191292

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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	7912.4	7754.6	7548.1	7357.1	7158.9	6962.0	6704.4	6543.1	6431.5	6410.1	6362.7
5°	7720.2	7195.7	6799.3	6456.5	6145.6	5706.5	5463.3	5261.5	5153.5	5142.9	5116.7
7.5°	6833.8	6110.0	5574.8	5089.5	4649.2	4294.4	3902.9	3720.1	3645.3	3663.1	3680.9
10°	5911.7	5102.5	4487.8	3991.9	3603.8	3304.7	2990.3	2777.9	2630.7	2601.1	2595.1
12.5°	5237.8	4350.2	3753.3	3403.3	3103.0	2821.8	2488.3	2238.0	2046.9	1981.7	1937.8
15°	4953.0	3982.3	3357.0	2979.7	2648.5	2291.4	1981.7	1719.4	1543.8	1486.9	1454.8
17.5°	5013.5	3880.3	3084.1	2601.1	2177.5	1804.9	1414.4	1190.2	1084.5	1057.3	1057.3
20°	5331.5	3861.3	2858.6	2252.2	1724.2	1292.2	971.8	843.7	809.3	805.7	815.2
22.5°	5777.7	3927.7	2690.1	1949.6	1339.7	943.4	757.1	709.6	694.2	697.8	708.4
25°	6442.2	4152.1	2567.9	1680.3	1051.4	772.5	675.1	646.7	639.5	649.1	662.2
27.5°	7230.1	4376.3	2491.9	1477.3	887.6	706.0	642.0	612.3	617.0	628.9	640.8
30°	7921.9	4560.2	2372.1	1332.6	836.6	709.6	642.0	601.6	596.9	599.2	602.8
32.5°	8542.6	4684.8	2232.1	1194.9	721.5	630.1	599.2	593.3	567.2	557.7	558.9
35°	9077.7	4684.8	2147.8	1114.2	646.7	558.9	509.0	479.4	466.4	467.5	480.6
37.5°	9593.8	4591.1	2106.3	1069.2	606.4	531.6	487.7	461.6	443.8	440.3	442.6
40°	10049.6	4454.6	2058.8	1050.2	575.5	515.0	473.4	452.1	433.1	427.2	428.4
42.5°	10415.1	4344.3	2006.6	1025.2	556.5	503.1	464.0	445.0	423.6	417.7	416.5
45°	10810.1	4307.4	1937.8	975.4	566.0	504.3	461.6	441.4	420.0	413.0	410.6
47.5°	11331.1	4422.5	1866.6	916.1	586.2	510.2	465.1	441.4	418.9	413.0	410.6
50°	11987.3	4693.1	1776.4	829.4	566.0	526.8	464.0	437.8	418.9	413.0	408.2
52.5°	12829.8	5058.6	1657.7	729.8	554.1	567.2	461.6	430.8	413.0	404.7	396.3
55°	13853.9	5357.6	1516.5	647.9	526.8	556.5	458.1	422.5	403.5	391.6	384.4
57.5°	14603.9	5465.6	1335.0	594.5	488.9	538.7	453.3	411.7	391.6	382.1	372.6
60°	14455.5	5256.7	1181.9	561.3	466.4	486.5	449.7	402.2	380.9	373.8	365.5
62.5°	13267.7	4710.9	1083.4	545.8	452.1	443.8	453.3	392.8	371.4	364.3	361.9
65°	11486.6	3905.2	1044.2	542.3	440.3	418.9	421.3	382.1	360.7	354.8	352.4
67.5°	9475.2	3151.7	1009.9	554.1	424.8	401.1	389.2	367.9	350.1	344.1	339.4
70°	7472.2	2621.3	994.4	547.1	405.8	383.3	370.2	352.4	337.0	331.0	327.5
72.5°	6017.4	2214.3	986.1	539.9	380.9	359.6	347.7	332.3	315.7	313.2	309.7
75°	5091.8	1740.8	903.1	517.4	352.4	331.0	322.7	308.5	292.0	292.0	289.5
77.5°	3927.7	1259.0	751.2	458.1	322.7	299.0	292.0	281.2	262.3	265.8	264.6
80°	2901.3	821.1	587.4	379.7	286.0	263.4	259.8	249.2	229.0	233.7	233.7
82.5°	1987.6	538.7	422.5	310.9	244.5	223.1	223.1	212.4	189.9	192.2	199.4
85°	998.0	370.2	315.7	240.9	189.9	179.2	179.2	170.8	148.3	149.6	159.0
87.5°	303.8	223.1	208.9	172.1	136.5	134.1	128.2	122.2	108.0	106.8	112.7
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: P191292

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

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	6290.3	6222.7	6140.8	5960.4	5899.9	5896.4	5950.9	5893.9	6003.2	5956.8	6007.9
5°	5072.8	5006.4	4915.0	4684.8	4544.8	4449.8	4404.7	4271.8	4368.0	4297.9	4356.1
7.5°	3730.8	3746.1	3685.7	3550.4	3245.4	3092.4	3002.2	2921.4	2991.5	2984.4	3096.0
10°	2622.4	2664.0	2621.3	2484.8	2238.0	2153.7	2170.3	2202.4	2293.8	2341.2	2513.3
12.5°	1888.0	1885.5	1858.3	1736.0	1573.5	1582.9	1650.6	1706.4	1790.6	1840.5	2016.0
15°	1409.7	1388.3	1376.5	1276.8	1184.3	1204.4	1237.7	1243.6	1297.0	1326.7	1469.1
17.5°	1065.6	1076.2	1089.3	1018.1	948.1	935.1	909.0	876.9	892.3	898.3	969.5
20°	846.1	888.7	920.9	870.9	799.7	761.8	728.5	707.3	707.3	706.0	726.2
22.5°	739.3	770.1	804.6	770.1	706.0	672.8	653.9	637.2	634.8	634.8	653.9
25°	681.1	703.7	736.9	713.2	665.7	640.8	623.0	601.6	593.3	591.0	604.0
27.5°	652.6	662.2	678.7	657.3	617.0	605.2	600.5	581.4	570.8	564.9	577.9
30°	604.0	601.6	602.8	581.4	549.4	548.2	556.5	560.1	556.5	555.4	575.5
32.5°	558.9	554.1	553.0	534.0	504.3	497.2	504.3	511.5	519.8	531.6	555.4
35°	502.0	513.8	520.9	504.3	468.7	447.3	439.1	426.0	418.9	418.9	446.2
37.5°	456.8	484.2	494.8	479.4	440.3	410.6	396.3	393.9	395.2	399.9	426.0
40°	441.4	461.6	471.1	455.6	416.5	389.2	380.9	378.5	380.9	388.0	414.1
42.5°	431.9	446.2	445.0	426.0	393.9	375.0	370.2	367.9	370.2	377.4	405.8
45°	423.6	433.1	423.6	401.1	371.4	361.9	363.1	361.9	364.3	371.4	398.7
47.5°	416.5	420.0	408.2	385.7	354.8	352.4	357.2	360.7	363.1	369.1	397.5
50°	405.8	405.8	395.2	371.4	340.5	341.8	347.7	356.0	357.2	364.3	386.9
52.5°	392.8	391.6	384.4	361.9	328.7	332.3	332.3	341.8	344.1	352.4	376.1
55°	382.1	379.7	376.1	354.8	318.0	324.0	320.4	324.0	329.9	338.2	364.3
57.5°	372.6	367.9	367.9	348.8	309.7	312.1	303.8	308.5	315.7	322.7	350.1
60°	363.1	358.3	360.7	340.5	296.7	294.3	290.7	300.2	302.6	310.9	338.2
62.5°	352.4	348.8	350.1	331.0	287.1	281.2	281.2	289.5	290.7	302.6	328.7
65°	344.1	339.4	338.2	321.6	276.5	269.3	272.9	276.5	278.9	290.7	315.7
67.5°	335.8	326.3	326.3	313.2	264.6	257.5	264.6	263.4	267.0	277.6	297.9
70°	325.1	312.1	313.2	307.3	252.8	244.5	250.4	249.2	251.5	258.7	278.9
72.5°	308.5	297.9	300.2	297.9	240.9	229.0	231.4	231.4	231.4	237.3	258.7
75°	287.1	278.9	286.0	292.0	226.7	210.0	212.4	212.4	208.9	212.4	238.6
77.5°	261.1	256.4	280.1	271.7	210.0	189.9	189.9	187.5	180.3	185.2	213.6
80°	232.6	229.0	258.7	227.8	191.1	164.9	162.5	156.6	149.6	153.0	181.6
82.5°	203.0	199.4	217.2	174.4	164.9	136.5	130.5	119.9	112.7	116.3	142.4
85°	166.1	166.1	167.4	131.8	125.8	104.4	97.3	83.1	74.8	77.1	102.1
87.5°	118.7	122.2	112.7	90.2	74.8	58.1	53.4	45.1	38.0	43.9	53.4
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: P191292

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

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	6268.9	6399.5	6547.8	6737.7	6900.2	7167.2	7423.6	7577.8
5°	4687.2	4904.3	5174.9	5522.6	5846.5	6333.0	6816.0	7125.7
7.5°	3354.6	3587.2	3879.1	4313.4	4771.5	5392.1	6030.4	6400.7
10°	2775.6	3014.0	3259.6	3552.8	3927.7	4603.0	5357.6	5775.3
12.5°	2296.1	2551.2	2815.9	3124.4	3472.1	4074.9	4944.6	5425.2
15°	1757.4	2042.2	2354.3	2744.7	3180.1	3876.7	4842.6	5364.8
17.5°	1204.4	1522.5	1905.8	2387.5	2920.3	3812.6	5025.3	5626.9
20°	829.4	1060.8	1470.2	2035.1	2675.8	3804.4	5376.6	6130.1
22.5°	694.2	797.4	1096.4	1711.1	2491.9	3906.3	5921.2	6836.2
25°	642.0	703.7	875.7	1429.9	2357.8	4141.3	6671.2	7749.9
27.5°	611.1	666.9	795.0	1246.0	2252.2	4414.2	7401.0	8635.1
30°	623.0	680.0	772.5	1152.3	2108.6	4642.0	8048.9	9325.7
32.5°	561.3	586.2	662.2	1069.2	2005.4	4833.1	8616.1	9897.7
35°	478.2	522.1	591.0	1030.0	2007.7	4961.3	9234.4	10628.7
37.5°	455.6	499.6	549.4	1015.8	2035.1	5097.8	9943.9	11485.4
40°	441.4	481.8	524.5	1007.4	2061.1	5222.4	10639.3	12332.6
42.5°	431.9	468.7	522.1	979.0	2074.2	5333.9	11211.2	13053.0
45°	430.8	468.7	531.6	950.5	2094.4	5453.8	11690.7	13585.7
47.5°	431.9	484.2	513.8	916.1	2094.4	5654.3	12253.1	14061.6
50°	427.2	510.2	494.8	867.5	2045.7	6034.0	13024.4	14698.8
52.5°	424.8	506.7	458.1	792.7	1961.5	6636.8	14012.9	15576.9
55°	418.9	488.9	431.9	681.1	1863.0	7294.3	15071.3	16615.2
57.5°	413.0	433.1	417.7	583.8	1711.1	7757.0	15800.0	17425.7
60°	462.8	378.5	405.8	536.3	1508.2	7884.0	15771.4	17748.4
62.5°	428.4	354.8	390.4	525.7	1365.8	7528.0	15042.9	17574.0
65°	335.8	339.4	375.0	556.5	1327.8	6584.6	13751.8	16768.2
67.5°	307.3	324.0	359.6	595.7	1331.4	5272.2	11822.3	15013.2
70°	289.5	307.3	341.8	615.8	1340.9	3930.1	9347.1	12228.3
72.5°	269.3	284.8	321.6	619.4	1279.2	2855.1	7204.0	8991.1
75°	245.6	259.8	293.1	539.9	1059.7	1980.4	5510.7	6151.5
77.5°	218.3	229.0	257.5	416.5	786.8	1267.3	4136.6	4493.7
80°	186.3	192.2	215.9	304.9	538.7	792.7	3272.7	3606.2
82.5°	149.6	151.9	167.4	229.0	350.1	509.0	2191.7	2501.4
85°	105.6	105.6	115.1	166.1	238.6	322.7	1190.2	1319.5
87.5°	49.8	51.0	51.0	91.3	124.6	163.8	274.2	168.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)