

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: P192087

Luminaire Tested: **GLEON-AF-09-LED-E1-SLL-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192087
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-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 800mA 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: 37784 lumens
Efficiency: N/A
Efficacy: 101.0 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

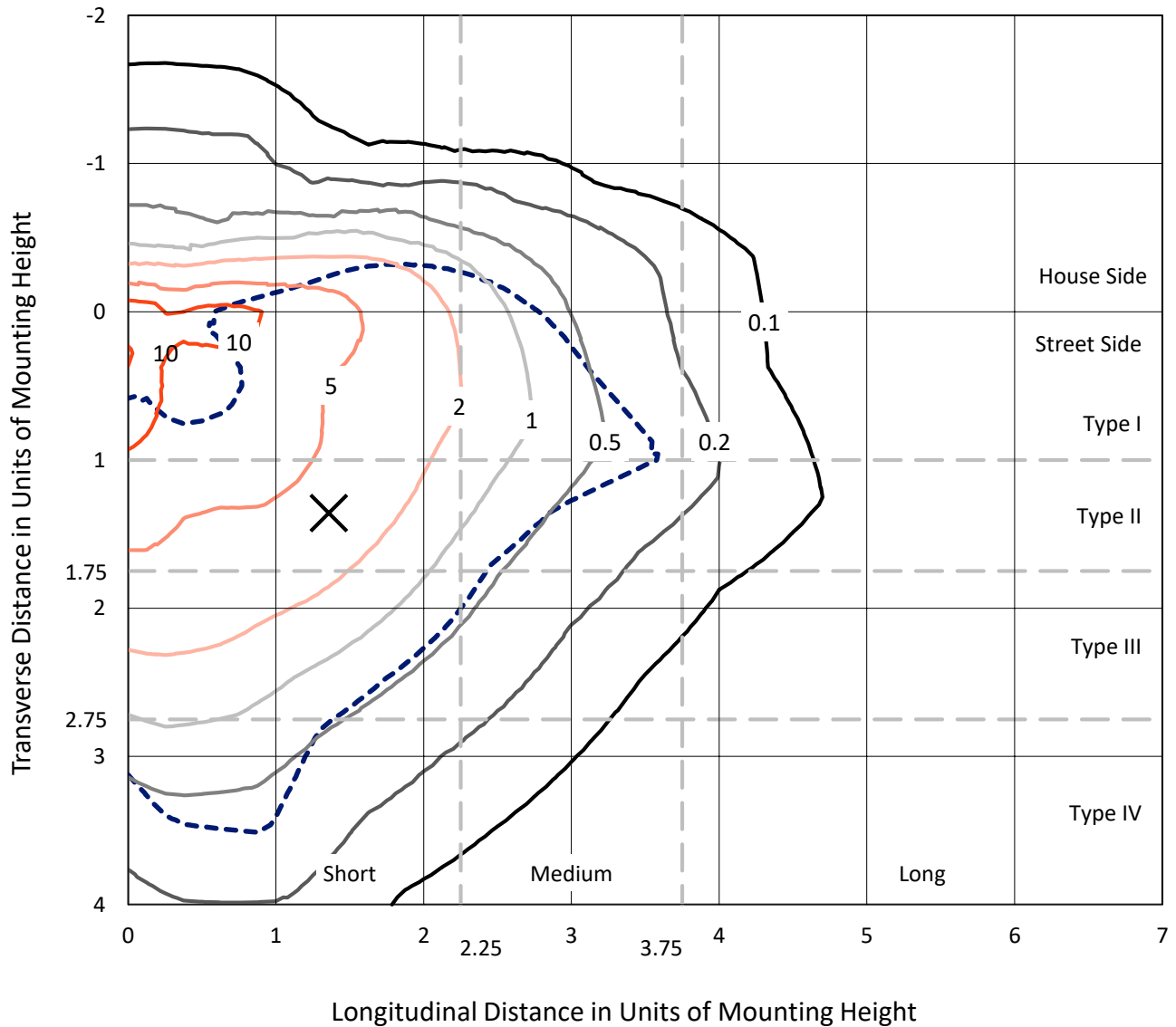
Input Watts (W): 374
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P192087
 CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

Iso-Footcandle Lines of Horizontal Illumination

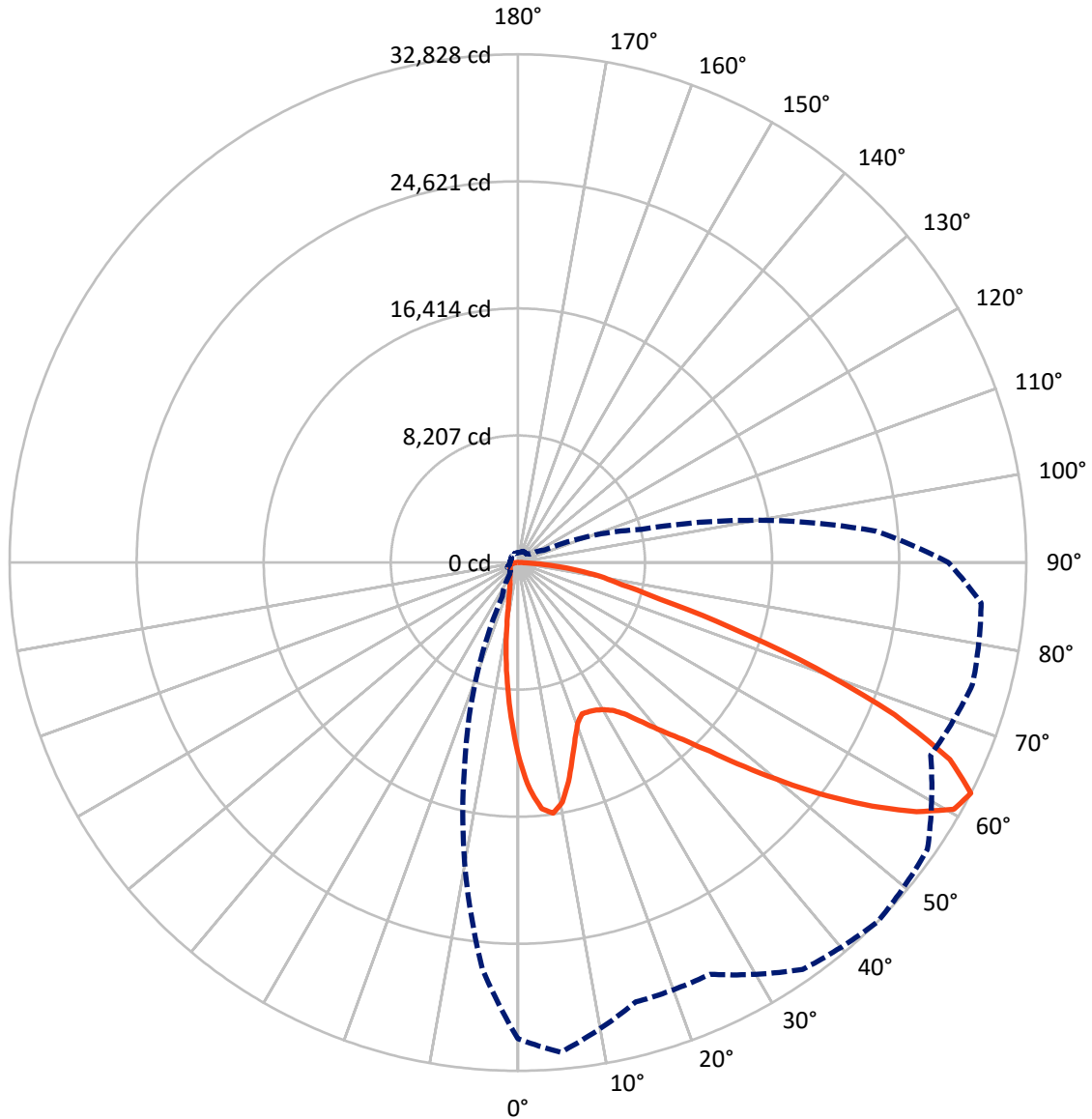
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.7 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P192087
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P192087

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6252.7	0.0	6252.7
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	31531.3	0.0	31531.3
	% Fixture	83.5	0.0	83.5
Total	Lumens	37784.0	0.0	37784.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	929.3	2.5
10°-20°	1704.0	4.5
20°-30°	2484.5	6.6
30°-40°	3826.4	10.1
40°-50°	5631.5	14.9
50°-60°	8260.2	21.9
60°-70°	9233.7	24.4
70°-80°	4520.7	12.0
80°-90°	1193.6	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°	37784.0	100.0
0°-180°	37784.0	100.0

Coefficient of Utilization



REPORT NUMBER: P192087

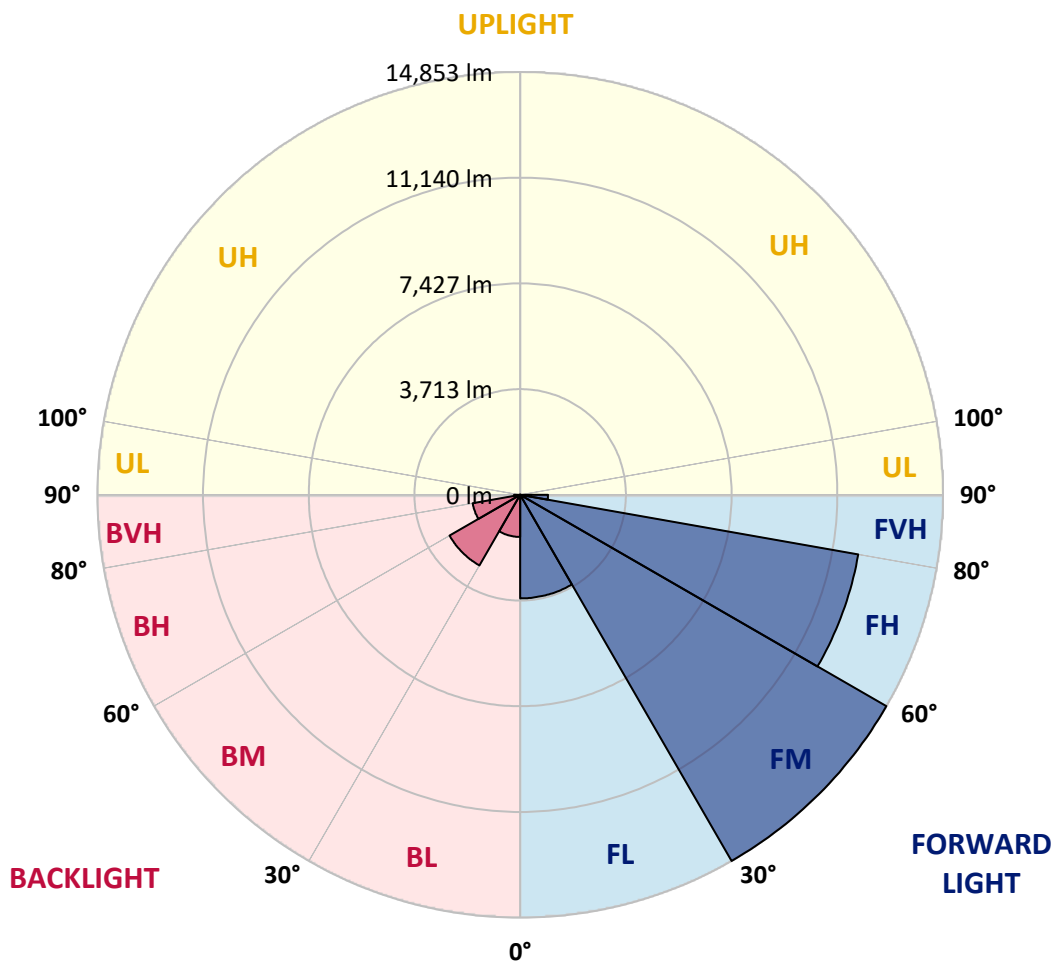
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3638.5	9.6			
FM	(30°-60°)	14853.2	39.3			
FH	(60°-80°)	12059.4	31.9			G5
FVH	(80°-90°)	980.2	2.6			G5
BL	(0°-30°)	1479.3	3.9	B3/2500		
BM	(30°-60°)	2865.0	7.6	B3/5000		
BH	(60°-80°)	1695.1	4.5	B3/2500		G3/2500
BVH	(80°-90°)	213.4	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: P192087

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5
2.5°	13264.0	13475.8	13889.1	14198.6	14574.6	14661.8	14782.3	14663.9	14454.1	14175.8	14084.4
5°	12472.6	12925.4	13928.6	14811.4	15596.5	15962.0	16063.8	15762.6	15154.1	14354.4	13866.3
7.5°	11203.5	11847.4	13205.8	14506.0	15662.9	16346.3	16329.7	15629.7	14510.2	13207.9	12424.8
10°	10108.9	10844.2	12402.0	13855.9	15083.4	15746.0	15490.5	14595.3	13259.8	11760.2	10910.7
12.5°	9496.2	10216.9	11797.6	13257.7	14283.8	14512.3	14317.0	13440.5	12181.8	10665.6	9922.0
15°	9390.3	10181.6	11556.6	12744.7	13320.0	13120.6	12888.0	12495.5	11606.5	10312.5	9537.8
17.5°	9849.3	10721.7	11832.9	12387.4	12289.8	11943.0	11876.5	11920.1	11706.2	10705.0	9811.9
20°	10730.0	11776.8	12491.3	12219.2	11506.8	11029.1	11045.7	11712.4	12345.9	11700.0	10680.1
22.5°	11965.8	13160.1	13440.5	12308.5	11176.5	10609.5	10746.6	11826.6	13365.7	13153.9	11851.6
25°	13565.1	14653.5	14452.0	12632.5	11209.8	10661.4	10771.5	12221.3	14570.4	14607.8	13301.3
27.5°	15114.6	16124.0	15301.5	13062.5	11346.9	10784.0	10929.4	12842.3	15721.1	16186.4	14958.8
30°	16323.4	17025.5	15638.0	13455.0	11616.9	11022.8	11203.5	13432.2	16244.5	17251.9	16234.1
32.5°	17324.6	17829.3	16173.9	13941.1	12113.3	11398.8	11716.6	14148.8	16998.5	18265.5	17482.4
35°	18604.0	18747.3	16840.6	14483.2	12879.7	12053.0	12447.7	14850.8	17717.1	19289.4	18712.0
37.5°	20103.6	19918.8	17470.0	15224.7	13870.5	13077.0	13403.1	15621.4	18309.1	20450.5	19968.6
40°	21586.6	21142.2	18259.2	16375.4	15316.1	14283.8	14670.1	16443.9	18861.6	21613.6	21196.2
42.5°	22847.4	22189.0	19038.1	17640.3	16662.0	15615.2	16076.3	17272.6	19389.1	22606.5	22261.7
45°	23780.0	22961.6	19779.6	18855.3	18516.8	17384.8	17602.9	18221.8	19960.3	23435.2	23138.2
47.5°	24612.9	23738.5	20618.7	20080.8	20139.0	19686.2	19335.1	19326.8	20633.3	24112.3	23966.9
50°	25728.3	24816.4	21520.2	21343.6	22573.2	22272.1	21497.3	20616.7	21484.9	24880.8	24864.2
52.5°	27265.3	26523.8	22621.0	22704.1	24845.5	25042.8	24083.2	22166.1	22818.3	26291.1	26191.4
55°	29082.7	28650.7	24120.6	24268.1	27632.9	27774.1	26820.8	24104.0	24779.1	28332.9	28056.6
57.5°	30501.3	30409.9	25765.6	26145.7	29714.1	30349.7	29473.2	26347.2	26989.0	30052.7	29358.9
60°	31066.2	31508.7	27516.6	28040.0	31639.5	32343.6	31575.1	28318.3	28947.7	30765.1	29269.6
62.5°	30760.9	31749.6	29381.8	29338.2	32069.5	32827.6	32287.5	29415.0	30399.5	30029.8	27788.7
65°	29350.6	30883.5	30463.9	29003.7	30598.9	30661.2	30486.8	28924.8	30742.2	27705.6	24926.5
67.5°	26278.7	28484.5	29039.1	26137.4	26631.8	26226.7	25933.9	26241.3	28956.0	24222.4	20949.0
70°	21403.9	24723.0	24988.8	20905.4	20681.1	20409.0	19825.3	21514.0	25431.2	19852.3	16622.5
72.5°	15737.7	19227.1	20043.4	15332.7	14294.2	14350.2	13889.1	16213.4	20676.9	14747.0	12410.3
75°	10767.4	13922.4	15681.6	10698.8	9452.6	9475.4	9417.3	11488.1	16468.8	10258.5	9286.4
77.5°	7865.7	9946.9	11826.6	7192.8	6983.0	6854.2	6823.1	8038.1	12626.3	7448.3	7211.5
80°	6312.1	7348.6	7944.7	4984.9	5360.8	5350.4	5178.1	5527.0	8245.8	5448.1	5394.1
82.5°	4378.4	5647.5	6436.7	3906.9	3618.2	3558.0	3599.5	4116.7	5828.2	3724.1	3541.3
85°	2309.7	3751.1	6374.4	3462.4	2147.7	1713.6	2131.0	3371.0	5049.3	1973.2	1728.1
87.5°	294.9	1084.2	4220.5	1381.2	847.4	456.9	1011.5	1898.4	3242.3	402.9	351.0
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: P192087

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5
2.5°	13849.7	13573.4	13212.0	12877.6	12530.8	12186.0	11735.3	11452.8	11257.5	11220.2	11137.1
5°	13513.2	12595.2	11901.4	11301.2	10757.0	9988.5	9562.7	9209.6	9020.6	9001.9	8956.2
7.5°	11961.7	10694.7	9757.9	8908.4	8137.8	7516.8	6831.4	6511.5	6380.7	6411.8	6443.0
10°	10347.8	8931.3	7855.4	6987.2	6308.0	5784.5	5234.1	4862.3	4604.8	4552.9	4542.5
12.5°	9168.0	7614.4	6569.7	5956.9	5431.5	4939.2	4355.5	3917.3	3582.9	3468.7	3391.8
15°	8669.6	6970.5	5875.9	5215.4	4635.9	4010.8	3468.7	3009.6	2702.2	2602.5	2546.4
17.5°	8775.5	6791.9	5398.2	4552.9	3811.4	3159.2	2475.8	2083.3	1898.4	1850.6	1850.6
20°	9332.1	6758.7	5003.6	3942.2	3017.9	2261.9	1701.1	1476.8	1416.5	1410.3	1426.9
22.5°	10113.1	6875.0	4708.6	3412.6	2345.0	1651.2	1325.1	1242.1	1215.1	1221.3	1240.0
25°	11276.2	7267.6	4494.7	2941.1	1840.3	1352.2	1181.8	1132.0	1119.5	1136.1	1159.0
27.5°	12655.4	7660.1	4361.8	2585.9	1553.6	1235.8	1123.7	1071.8	1080.1	1100.8	1121.6
30°	13866.3	7982.1	4152.0	2332.5	1464.3	1242.1	1123.7	1053.1	1044.7	1048.9	1055.1
32.5°	14952.6	8200.1	3906.9	2091.6	1262.8	1102.9	1048.9	1038.5	992.8	976.2	978.3
35°	15889.3	8200.1	3759.4	1950.3	1132.0	978.3	891.0	839.1	816.3	818.4	841.2
37.5°	16792.8	8036.1	3686.7	1871.4	1061.4	930.5	853.7	808.0	776.8	770.6	774.7
40°	17590.4	7797.2	3603.7	1838.2	1007.4	901.4	828.7	791.4	758.1	747.7	749.8
42.5°	18230.2	7604.0	3512.3	1794.6	974.1	880.7	812.1	778.9	741.5	731.1	729.0
45°	18921.8	7539.6	3391.8	1707.3	990.7	882.7	808.0	772.7	735.3	722.8	718.7
47.5°	19833.6	7741.1	3267.2	1603.5	1026.1	893.1	814.2	772.7	733.2	722.8	718.7
50°	20982.2	8214.7	3109.3	1451.8	990.7	922.2	812.1	766.4	733.2	722.8	714.5
52.5°	22456.9	8854.4	2901.6	1277.4	970.0	992.8	808.0	754.0	722.8	708.3	693.7
55°	24249.4	9377.8	2654.5	1134.1	922.2	974.1	801.7	739.4	706.2	685.4	673.0
57.5°	25562.1	9566.8	2336.7	1040.6	855.7	943.0	793.4	720.7	685.4	668.8	652.2
60°	25302.5	9201.3	2068.7	982.4	816.3	851.6	787.2	704.1	666.7	654.3	639.7
62.5°	23223.4	8245.8	1896.3	955.4	791.4	776.8	793.4	687.5	650.1	637.7	633.5
65°	20105.7	6835.5	1827.8	949.2	770.6	733.2	737.3	668.8	631.4	621.0	616.9
67.5°	16585.1	5516.6	1767.6	970.0	743.6	702.0	681.3	643.9	612.7	602.3	594.0
70°	13079.1	4588.2	1740.6	957.5	710.3	670.9	648.0	616.9	589.9	579.5	573.3
72.5°	10532.7	3875.8	1726.0	945.1	666.7	629.3	608.6	581.6	552.5	548.3	542.1
75°	8912.6	3047.0	1580.6	905.6	616.9	579.5	565.0	540.0	511.0	511.0	506.8
77.5°	6875.0	2203.7	1314.8	801.7	565.0	523.4	511.0	492.3	459.0	465.3	463.2
80°	5078.4	1437.3	1028.1	664.7	500.6	461.1	454.9	436.2	400.9	409.2	409.2
82.5°	3479.0	943.0	739.4	544.2	427.9	390.5	390.5	371.8	332.3	336.5	348.9
85°	1746.8	648.0	552.5	421.6	332.3	313.6	313.6	299.1	259.6	261.7	278.3
87.5°	531.7	390.5	365.6	301.2	238.9	234.7	224.3	213.9	189.0	186.9	197.3
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: P192087

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5
2.5°	11010.4	10892.0	10748.7	10433.0	10327.0	10320.8	10416.3	10316.6	10507.7	10426.7	10516.0
5°	8879.3	8763.0	8603.1	8200.1	7955.1	7788.9	7710.0	7477.3	7645.6	7523.0	7624.8
7.5°	6530.2	6557.2	6451.3	6214.5	5680.7	5412.8	5254.9	5113.7	5236.2	5223.7	5419.0
10°	4590.3	4662.9	4588.2	4349.3	3917.3	3769.8	3798.9	3855.0	4014.9	4098.0	4399.2
12.5°	3304.6	3300.4	3252.6	3038.7	2754.2	2770.8	2889.2	2986.8	3134.2	3221.5	3528.9
15°	2467.5	2430.1	2409.4	2234.9	2072.9	2108.2	2166.3	2176.7	2270.2	2322.1	2571.4
17.5°	1865.2	1883.9	1906.7	1782.1	1659.6	1636.7	1591.0	1534.9	1561.9	1572.3	1696.9
20°	1480.9	1555.7	1611.8	1524.5	1399.9	1333.5	1275.3	1237.9	1237.9	1235.8	1271.1
22.5°	1294.0	1348.0	1408.2	1348.0	1235.8	1177.7	1144.4	1115.4	1111.2	1111.2	1144.4
25°	1192.2	1231.7	1289.8	1248.3	1165.2	1121.6	1090.4	1053.1	1038.5	1034.4	1057.2
27.5°	1142.4	1159.0	1188.1	1150.7	1080.1	1059.3	1051.0	1017.7	999.1	988.7	1011.5
30°	1057.2	1053.1	1055.1	1017.7	961.7	959.6	974.1	980.4	974.1	972.1	1007.4
32.5°	978.3	970.0	967.9	934.7	882.7	870.3	882.7	895.2	909.7	930.5	972.1
35°	878.6	899.4	911.8	882.7	820.4	783.0	768.5	745.7	733.2	733.2	781.0
37.5°	799.7	847.4	866.1	839.1	770.6	718.7	693.7	689.6	691.7	700.0	745.7
40°	772.7	808.0	824.6	797.6	729.0	681.3	666.7	662.6	666.7	679.2	724.9
42.5°	756.0	781.0	778.9	745.7	689.6	656.3	648.0	643.9	648.0	660.5	710.3
45°	741.5	758.1	741.5	702.0	650.1	633.5	635.6	633.5	637.7	650.1	697.9
47.5°	729.0	735.3	714.5	675.0	621.0	616.9	625.2	631.4	635.6	646.0	695.8
50°	710.3	710.3	691.7	650.1	596.1	598.2	608.6	623.1	625.2	637.7	677.1
52.5°	687.5	685.4	673.0	633.5	575.3	581.6	581.6	598.2	602.3	616.9	658.4
55°	668.8	664.7	658.4	621.0	556.6	567.0	560.8	567.0	577.4	592.0	637.7
57.5°	652.2	643.9	643.9	610.6	542.1	546.3	531.7	540.0	552.5	565.0	612.7
60°	635.6	627.3	631.4	596.1	519.3	515.1	508.9	525.5	529.6	544.2	592.0
62.5°	616.9	610.6	612.7	579.5	502.6	492.3	492.3	506.8	508.9	529.6	575.3
65°	602.3	594.0	592.0	562.9	483.9	471.5	477.7	483.9	488.1	508.9	552.5
67.5°	587.8	571.2	571.2	548.3	463.2	450.7	463.2	461.1	467.3	486.0	521.3
70°	569.1	546.3	548.3	538.0	442.4	427.9	438.3	436.2	440.3	452.8	488.1
72.5°	540.0	521.3	525.5	521.3	421.6	400.9	405.0	405.0	405.0	415.4	452.8
75°	502.6	488.1	500.6	511.0	396.7	367.6	371.8	371.8	365.6	371.8	417.5
77.5°	456.9	448.6	490.2	475.6	367.6	332.3	332.3	328.2	315.7	324.0	373.9
80°	407.1	400.9	452.8	398.8	334.4	288.7	284.6	274.2	261.7	267.9	317.8
82.5°	355.2	348.9	380.1	305.3	288.7	238.9	228.5	209.8	197.3	203.5	249.2
85°	290.8	290.8	292.9	230.6	220.2	182.8	170.3	145.4	130.9	135.0	178.6
87.5°	207.7	213.9	197.3	157.9	130.9	101.8	93.5	78.9	66.5	76.9	93.5
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: P192087

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-7050-800

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5	12765.5
2.5°	10973.0	11201.5	11461.1	11793.4	12078.0	12545.3	12993.9	13264.0
5°	8204.3	8584.4	9058.0	9666.5	10233.6	11085.1	11930.5	12472.6
7.5°	5871.8	6278.9	6789.8	7550.0	8351.8	9438.1	10555.5	11203.5
10°	4858.2	5275.7	5705.6	6218.6	6875.0	8056.8	9377.8	10108.9
12.5°	4019.1	4465.6	4928.8	5468.8	6077.4	7132.5	8655.0	9496.2
15°	3076.1	3574.6	4120.8	4804.2	5566.5	6785.7	8476.4	9390.3
17.5°	2108.2	2664.8	3335.7	4179.0	5111.6	6673.5	8796.3	9849.3
20°	1451.8	1856.9	2573.4	3562.1	4683.7	6659.0	9411.1	10730.0
22.5°	1215.1	1395.8	1919.2	2995.1	4361.8	6837.6	10364.4	11965.8
25°	1123.7	1231.7	1532.9	2502.8	4127.1	7248.9	11677.1	13565.1
27.5°	1069.7	1167.3	1391.6	2180.9	3942.2	7726.6	12954.5	15114.6
30°	1090.4	1190.1	1352.2	2016.8	3690.9	8125.4	14088.5	16323.4
32.5°	982.4	1026.1	1159.0	1871.4	3510.2	8459.8	15081.4	17324.6
35°	837.0	913.9	1034.4	1802.9	3514.3	8684.1	16163.5	18604.0
37.5°	797.6	874.4	961.7	1777.9	3562.1	8923.0	17405.6	20103.6
40°	772.7	843.3	918.1	1763.4	3607.8	9141.0	18622.7	21586.6
42.5°	756.0	820.4	913.9	1713.6	3630.7	9336.3	19623.8	22847.4
45°	754.0	820.4	930.5	1663.7	3666.0	9546.1	20463.0	23780.0
47.5°	756.0	847.4	899.4	1603.5	3666.0	9897.1	21447.5	24612.9
50°	747.7	893.1	866.1	1518.3	3580.8	10561.7	22797.6	25728.3
52.5°	743.6	886.9	801.7	1387.5	3433.3	11616.9	24527.7	27265.3
55°	733.2	855.7	756.0	1192.2	3260.9	12767.5	26380.4	29082.7
57.5°	722.8	758.1	731.1	1021.9	2995.1	13577.6	27655.8	30501.3
60°	810.0	662.6	710.3	938.8	2639.9	13799.8	27605.9	31066.2
62.5°	749.8	621.0	683.3	920.1	2390.7	13176.7	26330.6	30760.9
65°	587.8	594.0	656.3	974.1	2324.2	11525.5	24070.8	29350.6
67.5°	538.0	567.0	629.3	1042.7	2330.4	9228.3	20693.5	26278.7
70°	506.8	538.0	598.2	1078.0	2347.1	6879.1	16360.8	21403.9
72.5°	471.5	498.5	562.9	1084.2	2239.0	4997.4	12609.7	15737.7
75°	429.9	454.9	513.0	945.1	1854.8	3466.6	9645.8	10767.4
77.5°	382.2	400.9	450.7	729.0	1377.1	2218.3	7240.6	7865.7
80°	326.1	336.5	378.0	533.8	943.0	1387.5	5728.5	6312.1
82.5°	261.7	265.9	292.9	400.9	612.7	891.0	3836.3	4378.4
85°	184.9	184.9	201.5	290.8	417.5	565.0	2083.3	2309.7
87.5°	87.2	89.3	89.3	159.9	218.1	286.6	479.8	294.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)