

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: P191307

Luminaire Tested: **GLEON-AF-09-LED-E1-SLL-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191307
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-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 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: 52478.4 lumens
Efficiency: N/A
Efficacy: 91.3 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

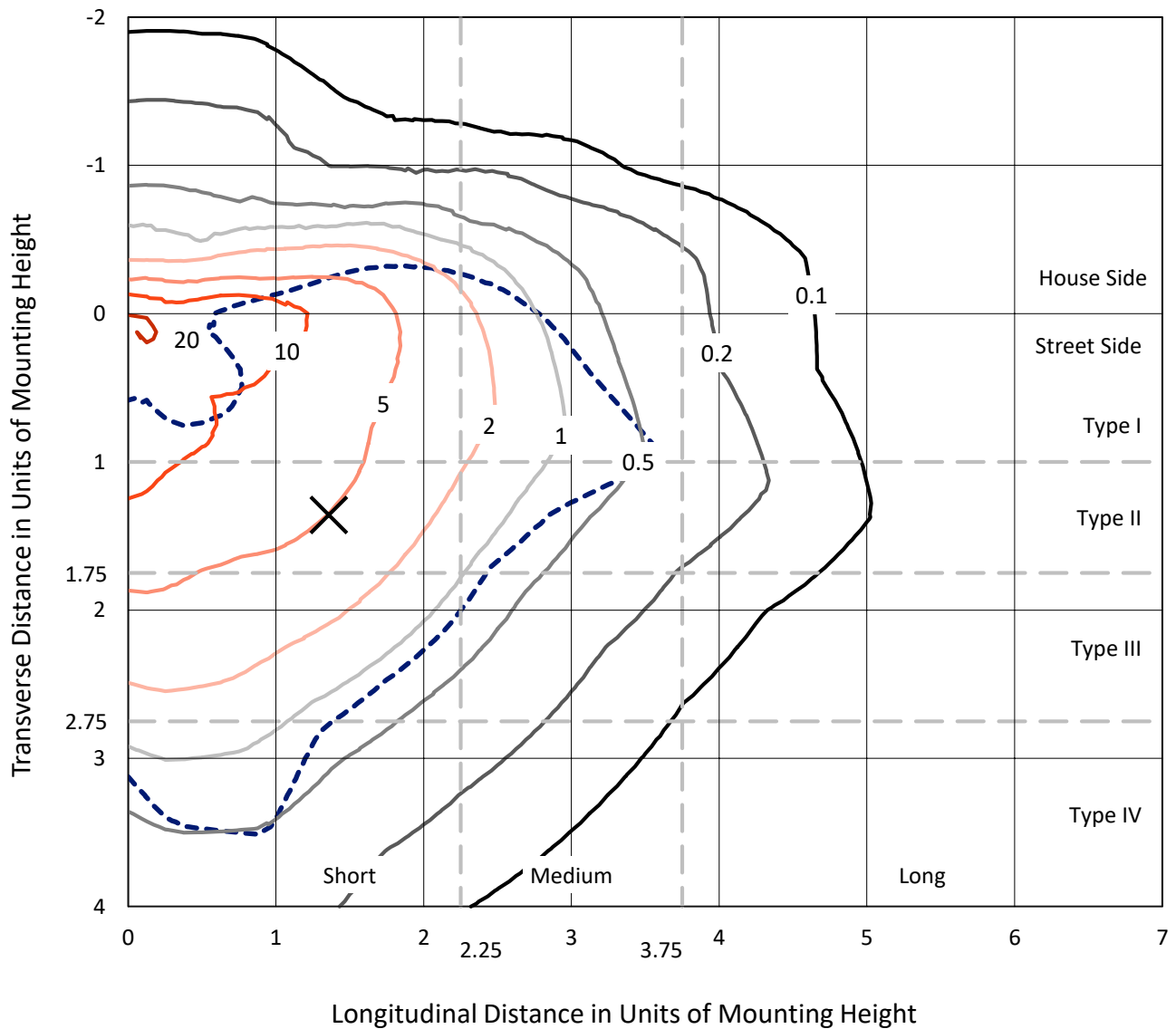
Input Watts (W): 575
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P191307
 CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

Iso-Footcandle Lines of Horizontal Illumination

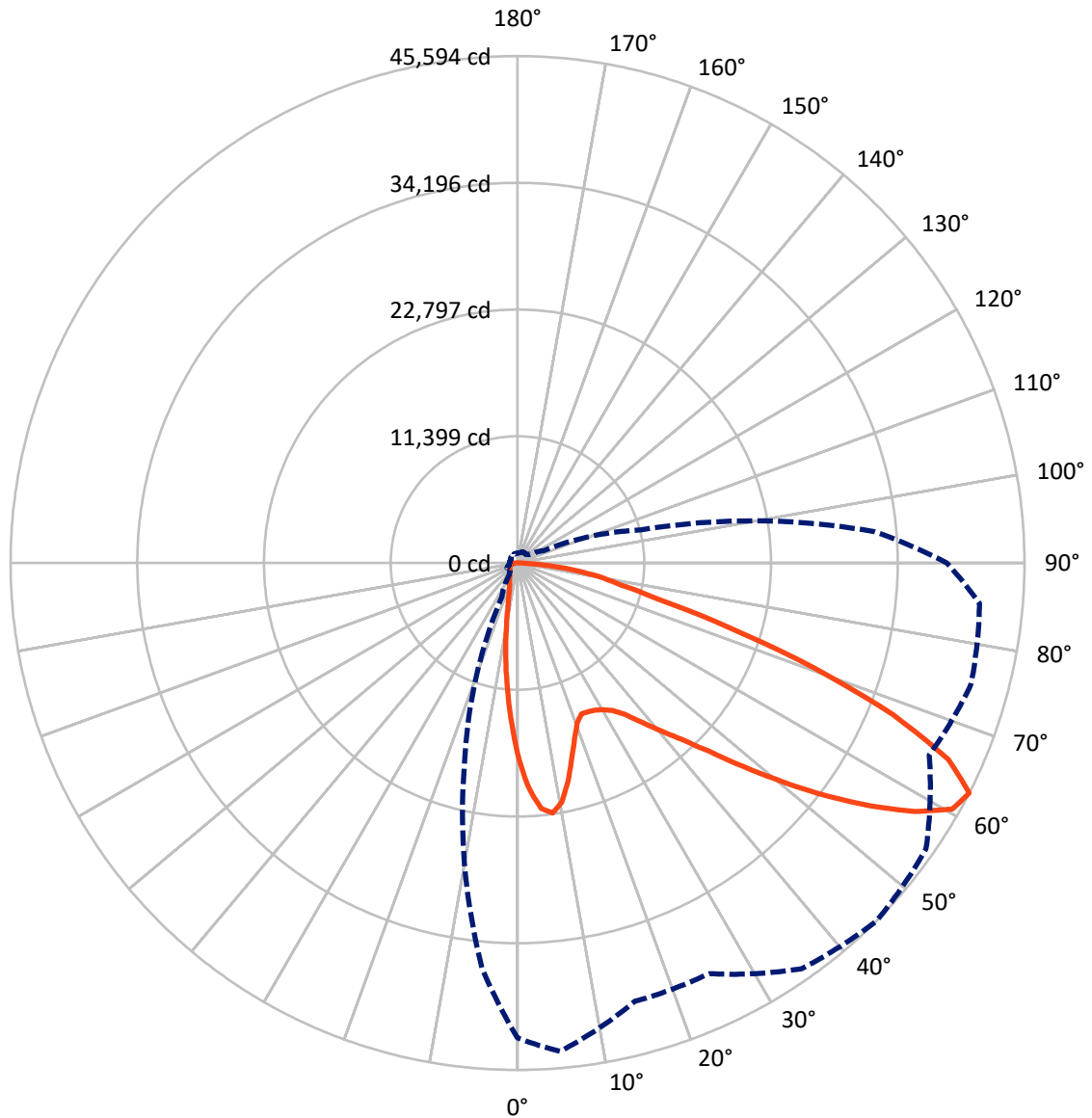
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 23.2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P191307
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

Luminous Intensity Polar Plot



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

REPORT NUMBER: P191307

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8684.4	0.0	8684.4
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	43794.0	0.0	43794.0
	% Fixture	83.5	0.0	83.5
Total	Lumens	52478.4	0.0	52478.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1290.7	2.5
10°-20°	2366.7	4.5
20°-30°	3450.7	6.6
30°-40°	5314.6	10.1
40°-50°	7821.6	14.9
50°-60°	11472.7	21.9
60°-70°	12824.8	24.4
70°-80°	6278.8	12.0
80°-90°	1657.8	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°	52478.4	100.0
0°-180°	52478.4	100.0



REPORT NUMBER: P191307

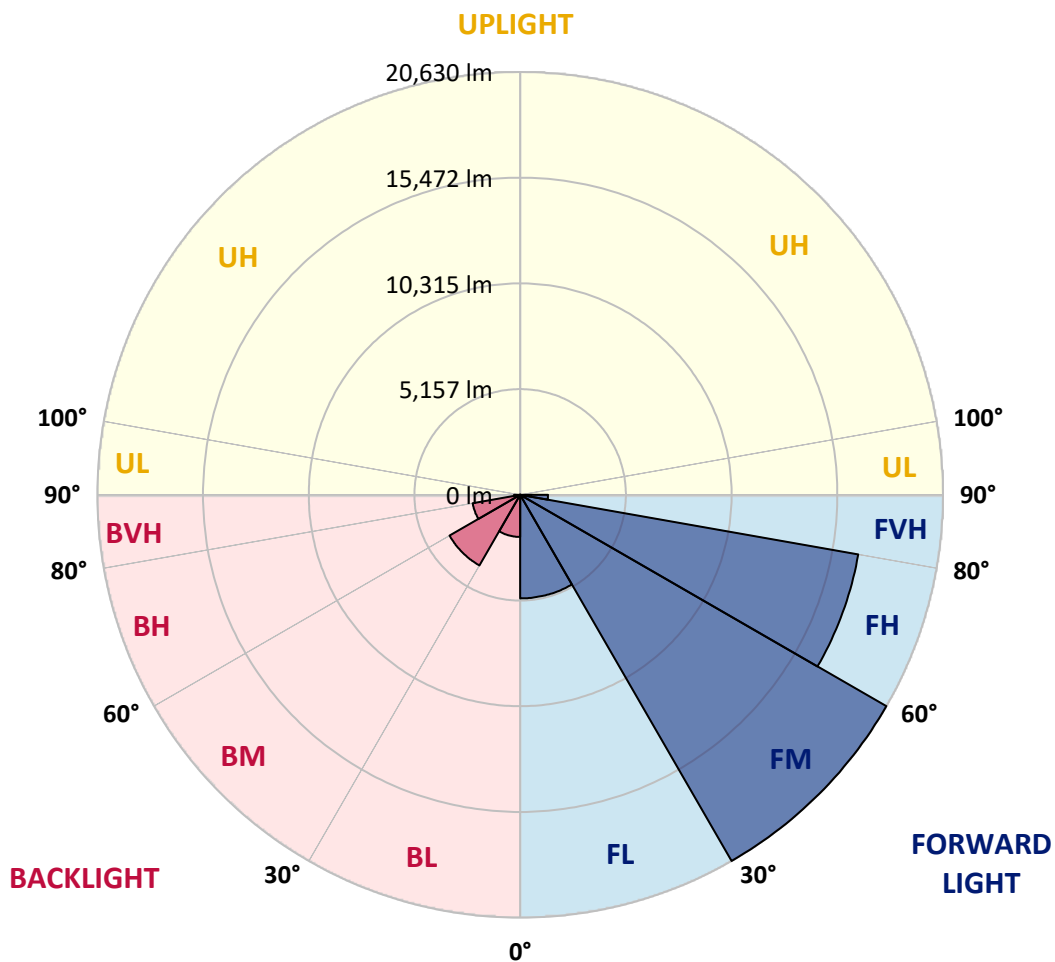
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5053.5	9.6			
FM	(30°-60°)	20629.7	39.3			
FH	(60°-80°)	16749.3	31.9			G5
FVH	(80°-90°)	1361.4	2.6			G5
BL	(0°-30°)	2054.6	3.9	B3/2500		
BM	(30°-60°)	3979.2	7.6	B3/5000		
BH	(60°-80°)	2354.4	4.5	B3/2500		G3/2500
BVH	(80°-90°)	296.3	0.6			G3/500
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: P191307

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	18422.4	18716.6	19290.7	19720.5	20242.7	20363.9	20531.1	20366.7	20075.4	19688.8	19561.9
5°	17323.3	17952.2	19345.5	20571.5	21662.0	22169.8	22311.1	21892.8	21047.5	19936.9	19259.0
7.5°	15560.6	16455.0	18341.6	20147.5	21754.4	22703.5	22680.4	21708.1	20153.3	18344.5	17256.9
10°	14040.4	15061.6	17225.2	19244.6	20949.5	21869.8	21514.9	20271.5	18416.6	16333.8	15153.9
12.5°	13189.3	14190.4	16385.7	18413.7	19838.8	20156.1	19884.9	18667.6	16919.4	14813.5	13780.7
15°	13042.2	14141.4	16051.1	17701.1	18500.3	18223.4	17900.2	17355.0	16120.3	14323.1	13247.0
17.5°	13679.7	14891.4	16434.7	17205.0	17069.4	16587.7	16495.3	16555.9	16258.8	14868.3	13627.9
20°	14903.0	16356.9	17349.2	16971.4	15981.9	15318.4	15341.4	16267.5	17147.3	16250.1	14833.7
22.5°	16619.4	18278.2	18667.6	17095.3	15523.2	14735.6	14926.0	16426.1	18563.7	18269.5	16460.7
25°	18840.7	20352.3	20072.5	17545.4	15569.3	14807.7	14960.7	16974.2	20236.9	20288.9	18474.3
27.5°	20992.8	22394.7	21252.4	18142.5	15759.7	14977.9	15179.9	17836.8	21835.1	22481.3	20776.4
30°	22671.7	23646.7	21719.7	18687.8	16134.7	15309.7	15560.6	18656.1	22562.1	23961.2	22547.7
32.5°	24062.2	24763.2	22464.0	19362.8	16824.2	15831.8	16273.2	19651.3	23609.3	25369.0	24281.5
35°	25839.2	26038.3	23390.0	20115.8	17888.6	16740.6	17288.7	20626.4	24607.4	26791.2	25989.2
37.5°	27922.1	27665.3	24264.1	21145.6	19264.7	18162.8	18615.7	21696.7	25429.5	28403.9	27734.5
40°	29981.8	29364.4	25360.4	22743.8	21272.6	19838.8	20375.4	22839.0	26197.0	30019.3	29439.5
42.5°	31732.9	30818.4	26442.2	24500.7	23141.9	21688.0	22328.5	23990.0	26929.7	31398.2	30919.4
45°	33028.2	31891.5	27472.1	26188.3	25718.1	24145.8	24448.7	25308.4	27723.0	32549.3	32136.7
47.5°	34185.0	32970.4	28637.5	27890.3	27971.1	27342.2	26854.7	26843.2	28657.7	33489.8	33287.8
50°	35734.1	34467.7	29889.5	29644.3	31352.1	30933.8	29857.8	28634.6	29840.5	34557.1	34534.0
52.5°	37868.9	36839.0	31418.4	31533.8	34508.1	34782.2	33449.4	30786.6	31692.6	36515.9	36377.5
55°	40393.1	39793.0	33501.2	33706.1	38379.5	38575.7	37251.6	33478.2	34415.7	39351.7	38968.0
57.5°	42363.4	42236.5	35786.1	36313.9	41270.0	42152.8	40935.4	36593.8	37485.2	41740.3	40776.8
60°	43148.1	43762.6	38218.0	38944.9	43944.3	44922.3	43854.8	39331.4	40205.5	42729.8	40652.7
62.5°	42724.1	44097.2	40808.5	40747.9	44541.4	45594.4	44844.3	40854.6	42222.1	41708.6	38595.8
65°	40765.2	42894.2	42311.5	40283.5	42499.0	42585.5	42343.2	40173.8	42698.1	38480.4	34620.5
67.5°	36498.6	39562.2	40332.5	36302.4	36989.0	36426.5	36019.7	36446.7	40217.1	33642.6	29096.2
70°	29728.0	34337.9	34707.1	29035.6	28724.0	28346.2	27535.5	29880.8	35321.6	27573.0	23087.1
72.5°	21858.2	26704.6	27838.4	21295.7	19853.2	19931.2	19290.7	22518.8	28718.2	20482.1	17236.7
75°	14954.8	19336.8	21780.3	14859.7	13128.8	13160.5	13079.8	15955.9	22873.7	14248.1	12898.0
77.5°	10924.8	13815.4	16426.1	9990.1	9698.7	9519.9	9476.6	11164.2	17536.8	10344.9	10016.0
80°	8766.9	10206.5	11034.4	6923.5	7445.6	7431.2	7191.9	7676.4	11452.7	7566.9	7491.9
82.5°	6081.1	7843.8	8940.0	5426.3	5025.3	4941.7	4999.4	5717.7	8094.8	5172.4	4918.6
85°	3207.9	5210.0	8853.4	4809.0	2982.9	2380.0	2959.8	4682.0	7012.9	2740.6	2400.1
87.5°	409.7	1505.9	5861.9	1918.4	1177.0	634.6	1404.9	2636.8	4503.2	559.7	487.5
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: P191307

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	19235.9	18852.3	18350.3	17885.8	17404.1	16925.1	16299.2	15906.8	15635.7	15583.7	15468.3
5°	18768.6	17493.5	16530.0	15696.3	14940.4	13873.1	13281.7	12791.3	12528.7	12502.7	12439.3
7.5°	16613.6	14853.9	13552.9	12372.9	11302.7	10440.1	9488.2	9043.9	8862.1	8905.4	8948.7
10°	14372.2	12404.7	10910.4	9704.5	8761.2	8034.2	7269.7	6753.3	6395.6	6323.5	6309.0
12.5°	12733.6	10575.7	9124.6	8273.6	7543.8	6860.1	6049.4	5440.8	4976.2	4817.6	4710.9
15°	12041.2	9681.4	8161.1	7243.7	6438.9	5570.6	4817.6	4180.1	3753.1	3614.7	3536.8
17.5°	12188.4	9433.3	7497.6	6323.5	5293.7	4387.7	3438.6	2893.4	2636.8	2570.4	2570.4
20°	12961.4	9387.2	6949.5	5475.3	4191.6	3141.6	2362.6	2051.1	1967.4	1958.7	1981.9
22.5°	14046.1	9548.7	6539.8	4739.7	3257.0	2293.5	1840.5	1725.1	1687.6	1696.3	1722.2
25°	15661.6	10094.0	6242.8	4084.8	2555.9	1878.0	1641.4	1572.2	1554.9	1578.0	1609.7
27.5°	17577.2	10639.2	6058.1	3591.6	2157.8	1716.5	1560.7	1488.6	1500.1	1528.9	1557.7
30°	19259.0	11086.3	5766.7	3239.7	2033.8	1725.1	1560.7	1462.6	1451.1	1456.8	1465.5
32.5°	20767.7	11389.2	5426.3	2905.0	1754.0	1531.9	1456.8	1442.4	1378.9	1355.8	1358.8
35°	22068.7	11389.2	5221.6	2708.9	1572.2	1358.8	1237.6	1165.4	1133.7	1136.6	1168.3
37.5°	23323.7	11161.3	5120.6	2599.2	1474.2	1292.4	1185.7	1122.2	1078.9	1070.3	1076.0
40°	24431.4	10829.6	5005.1	2553.1	1399.1	1252.0	1151.0	1099.2	1052.9	1038.5	1041.5
42.5°	25320.0	10561.3	4878.2	2492.5	1353.0	1223.1	1128.0	1081.8	1029.9	1015.5	1012.5
45°	26280.6	10471.8	4710.9	2371.3	1376.1	1226.0	1122.2	1073.2	1021.2	1003.9	998.1
47.5°	27547.0	10751.7	4537.8	2227.1	1425.1	1240.4	1130.9	1073.2	1018.3	1003.9	998.1
50°	29142.3	11409.4	4318.6	2016.4	1376.1	1280.8	1128.0	1064.5	1018.3	1003.9	992.4
52.5°	31190.6	12297.9	4030.1	1774.2	1347.2	1378.9	1122.2	1047.2	1003.9	983.7	963.5
55°	33680.1	13024.9	3686.8	1575.1	1280.8	1353.0	1113.6	1027.0	980.8	952.0	934.7
57.5°	35503.3	13287.4	3245.4	1445.3	1188.6	1309.7	1102.0	1001.1	952.0	928.9	905.8
60°	35142.8	12779.7	2873.3	1364.5	1133.7	1182.7	1093.3	977.9	926.0	908.7	888.5
62.5°	32255.1	11452.7	2633.8	1327.0	1099.2	1078.9	1102.0	954.8	903.0	885.7	879.8
65°	27924.9	9493.9	2538.7	1318.4	1070.3	1018.3	1024.1	928.9	877.0	862.6	856.8
67.5°	23035.2	7662.0	2455.0	1347.2	1032.8	975.1	946.2	894.3	851.0	836.6	825.0
70°	18165.7	6372.6	2417.4	1329.9	986.6	931.8	900.1	856.8	819.3	804.9	796.2
72.5°	14628.9	5383.1	2397.3	1312.5	926.0	874.1	845.3	807.7	767.3	761.6	752.9
75°	12378.7	4232.0	2195.4	1257.8	856.8	804.9	784.7	750.0	709.6	709.6	703.9
77.5°	9548.7	3060.8	1826.1	1113.6	784.7	727.0	709.6	683.7	637.5	646.2	643.3
80°	7053.3	1996.3	1427.9	923.1	695.2	640.5	631.8	605.8	556.8	568.4	568.4
82.5°	4832.0	1309.7	1027.0	755.9	594.2	542.4	542.4	516.4	461.6	467.4	484.7
85°	2426.1	900.1	767.3	585.6	461.6	435.6	435.6	415.4	360.6	363.5	386.6
87.5°	738.5	542.4	507.7	418.3	331.7	326.0	311.6	297.2	262.5	259.6	274.0
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: P191307

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	15292.4	15127.9	14928.8	14490.4	14343.3	14334.6	14467.3	14328.9	14594.2	14481.7	14605.8
5°	12332.6	12171.0	11948.9	11389.2	11048.8	10818.0	10708.5	10385.3	10618.9	10448.7	10590.1
7.5°	9069.8	9107.3	8960.2	8631.4	7889.9	7517.8	7298.5	7102.3	7272.6	7255.3	7526.5
10°	6375.4	6476.4	6372.6	6040.8	5440.8	5236.0	5276.3	5354.2	5576.3	5691.7	6110.0
12.5°	4589.8	4583.9	4517.7	4220.5	3825.2	3848.3	4012.7	4148.4	4353.2	4474.4	4901.3
15°	3427.2	3375.2	3346.4	3104.0	2879.0	2928.1	3008.8	3023.2	3153.1	3225.3	3571.4
17.5°	2590.5	2616.5	2648.2	2475.1	2304.9	2273.2	2209.8	2131.8	2169.4	2183.8	2356.9
20°	2056.8	2160.7	2238.6	2117.4	1944.3	1852.1	1771.2	1719.4	1719.4	1716.5	1765.5
22.5°	1797.2	1872.2	1955.9	1872.2	1716.5	1635.7	1589.6	1549.2	1543.3	1543.3	1589.6
25°	1655.9	1710.7	1791.5	1733.8	1618.4	1557.7	1514.5	1462.6	1442.4	1436.6	1468.3
27.5°	1586.6	1609.7	1650.1	1598.2	1500.1	1471.2	1459.8	1413.5	1387.6	1373.2	1404.9
30°	1468.3	1462.6	1465.5	1413.5	1335.7	1332.8	1353.0	1361.6	1353.0	1350.1	1399.1
32.5°	1358.8	1347.2	1344.4	1298.1	1226.0	1208.7	1226.0	1243.4	1263.5	1292.4	1350.1
35°	1220.3	1249.1	1266.4	1226.0	1139.5	1087.6	1067.3	1035.6	1018.3	1018.3	1084.7
37.5°	1110.6	1177.0	1203.0	1165.4	1070.3	998.1	963.5	957.8	960.7	972.2	1035.6
40°	1073.2	1122.2	1145.3	1107.8	1012.5	946.2	926.0	920.2	926.0	943.4	1006.8
42.5°	1050.1	1084.7	1081.8	1035.6	957.8	911.6	900.1	894.3	900.1	917.4	986.6
45°	1029.9	1052.9	1029.9	975.1	903.0	879.8	882.7	879.8	885.7	903.0	969.2
47.5°	1012.5	1021.2	992.4	937.5	862.6	856.8	868.3	877.0	882.7	897.1	966.4
50°	986.6	986.6	960.7	903.0	828.0	830.8	845.3	865.4	868.3	885.7	940.4
52.5°	954.8	952.0	934.7	879.8	799.1	807.7	807.7	830.8	836.6	856.8	914.5
55°	928.9	923.1	914.5	862.6	773.1	787.6	778.9	787.6	802.0	822.1	885.7
57.5°	905.8	894.3	894.3	848.1	752.9	758.7	738.5	750.0	767.3	784.7	851.0
60°	882.7	871.2	877.0	828.0	721.2	715.5	706.8	729.9	735.6	755.9	822.1
62.5°	856.8	848.1	851.0	804.9	698.2	683.7	683.7	703.9	706.8	735.6	799.1
65°	836.6	825.0	822.1	781.7	672.2	654.9	663.5	672.2	677.9	706.8	767.3
67.5°	816.4	793.3	793.3	761.6	643.3	626.0	643.3	640.5	649.1	675.0	724.0
70°	790.4	758.7	761.6	747.2	614.5	594.2	608.7	605.8	611.6	628.9	677.9
72.5°	750.0	724.0	729.9	724.0	585.6	556.8	562.5	562.5	562.5	576.9	628.9
75°	698.2	677.9	695.2	709.6	551.0	510.7	516.4	516.4	507.7	516.4	579.8
77.5°	634.6	623.1	680.8	660.6	510.7	461.6	461.6	455.8	438.5	450.0	519.2
80°	565.4	556.8	628.9	553.9	464.4	401.0	395.3	380.8	363.5	372.1	441.4
82.5°	493.3	484.7	527.9	424.1	401.0	331.7	317.3	291.3	274.0	282.7	346.2
85°	403.9	403.9	406.7	320.2	305.8	253.9	236.5	201.9	181.8	187.5	248.1
87.5°	288.5	297.2	274.0	219.2	181.8	141.4	129.8	109.7	92.3	106.7	129.8
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: P191307

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-1200

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	15240.4	15557.8	15918.3	16379.9	16775.2	17424.2	18047.4	18422.4
5°	11395.0	11922.9	12580.7	13425.9	14213.5	15396.2	16570.4	17323.3
7.5°	8155.4	8720.8	9430.5	10486.3	11599.9	13108.6	14660.6	15560.6
10°	6747.6	7327.4	7924.6	8637.1	9548.7	11190.2	13024.9	14040.4
12.5°	5582.1	6202.4	6845.7	7595.7	8441.0	9906.5	12021.0	13189.3
15°	4272.4	4964.8	5723.4	6672.6	7731.3	9424.7	11772.9	13042.2
17.5°	2928.1	3701.2	4633.0	5804.2	7099.5	9268.9	12217.2	13679.7
20°	2016.4	2579.1	3574.3	4947.4	6505.3	9248.7	13071.1	14903.0
22.5°	1687.6	1938.6	2665.6	4159.9	6058.1	9496.8	14395.2	16619.4
25°	1560.7	1710.7	2129.0	3476.2	5732.1	10068.0	16218.4	18840.7
27.5°	1485.6	1621.3	1932.9	3029.1	5475.3	10731.5	17992.6	20992.8
30°	1514.5	1653.0	1878.0	2801.1	5126.3	11285.4	19567.6	22671.7
32.5°	1364.5	1425.1	1609.7	2599.2	4875.3	11749.8	20946.6	24062.2
35°	1162.6	1269.3	1436.6	2504.0	4881.1	12061.4	22449.6	25839.2
37.5°	1107.8	1214.5	1335.7	2469.4	4947.4	12393.2	24174.7	27922.1
40°	1073.2	1171.3	1275.1	2449.3	5010.9	12696.0	25865.2	29981.8
42.5°	1050.1	1139.5	1269.3	2380.0	5042.6	12967.2	27255.7	31732.9
45°	1047.2	1139.5	1292.4	2310.7	5091.6	13258.6	28421.2	33028.2
47.5°	1050.1	1177.0	1249.1	2227.1	5091.6	13746.1	29788.5	34185.0
50°	1038.5	1240.4	1203.0	2108.8	4973.4	14669.2	31663.7	35734.1
52.5°	1032.8	1231.8	1113.6	1927.0	4768.6	16134.7	34066.7	37868.9
55°	1018.3	1188.6	1050.1	1655.9	4529.1	17733.0	36640.0	40393.1
57.5°	1003.9	1052.9	1015.5	1419.3	4159.9	18858.0	38411.2	42363.4
60°	1125.0	920.2	986.6	1304.0	3666.6	19166.6	38341.9	43148.1
62.5°	1041.5	862.6	949.1	1278.0	3320.4	18301.2	36570.7	42724.1
65°	816.4	825.0	911.6	1353.0	3228.1	16007.9	33432.1	40765.2
67.5°	747.2	787.6	874.1	1448.2	3236.7	12817.2	28741.3	36498.6
70°	703.9	747.2	830.8	1497.2	3259.8	9554.5	22723.6	29728.0
72.5°	654.9	692.3	781.7	1505.9	3109.9	6940.8	17513.6	21858.2
75°	597.2	631.8	712.6	1312.5	2576.1	4814.7	13397.1	14954.8
77.5°	530.8	556.8	626.0	1012.5	1912.6	3081.0	10056.4	10924.8
80°	453.0	467.4	525.1	741.4	1309.7	1927.0	7956.3	8766.9
82.5°	363.5	369.3	406.7	556.8	851.0	1237.6	5328.2	6081.1
85°	256.8	256.8	279.8	403.9	579.8	784.7	2893.4	3207.9
87.5°	121.1	124.1	124.1	222.1	302.9	398.1	666.4	409.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)