

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: P191317

Luminaire Tested: **GLEON-AF-09-LED-E1-SLR-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191317
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-SLR-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31519.2 lumens
Efficiency: N/A
Efficacy: 108.7 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): 290
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

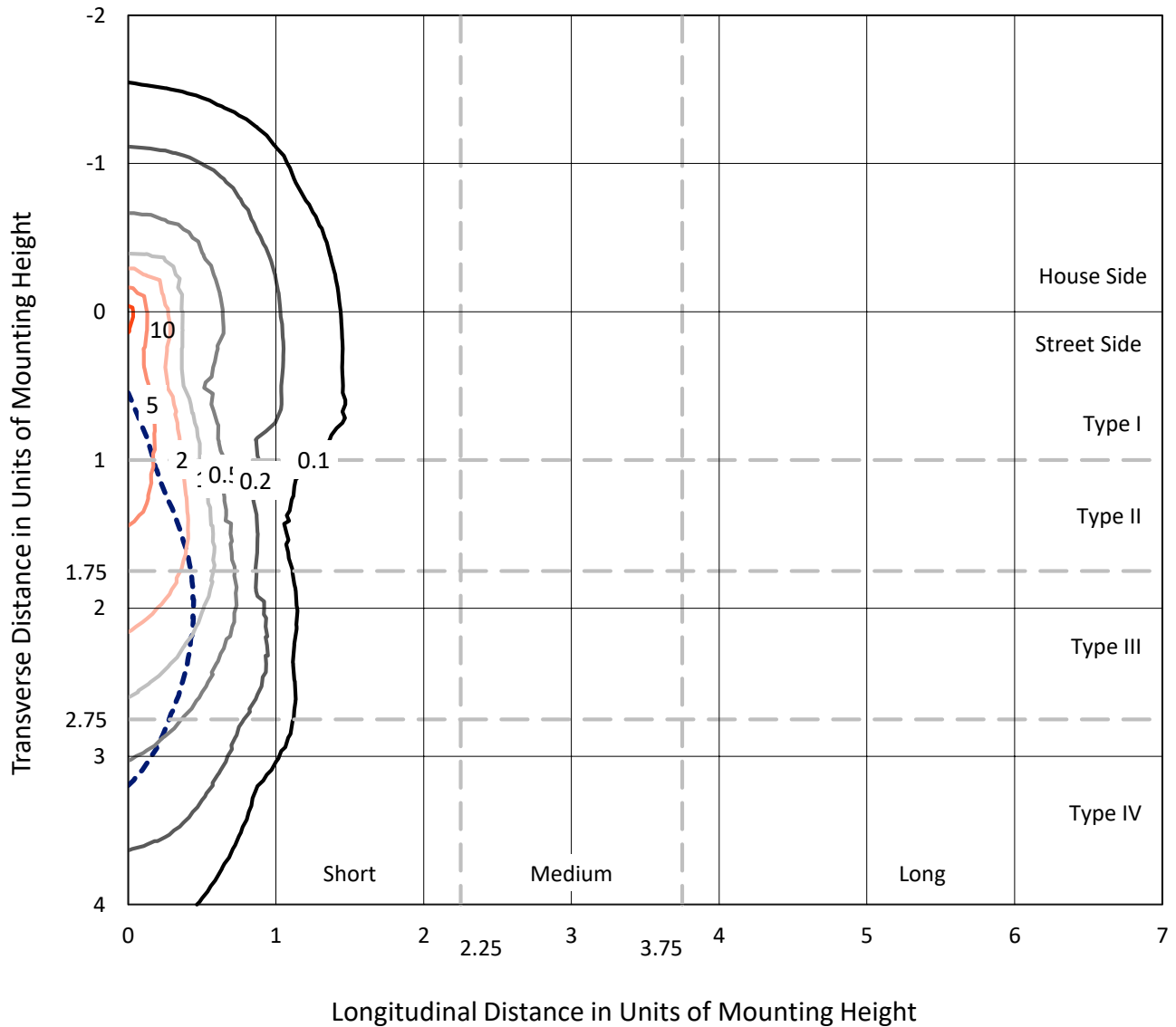


REPORT NUMBER: P191317

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

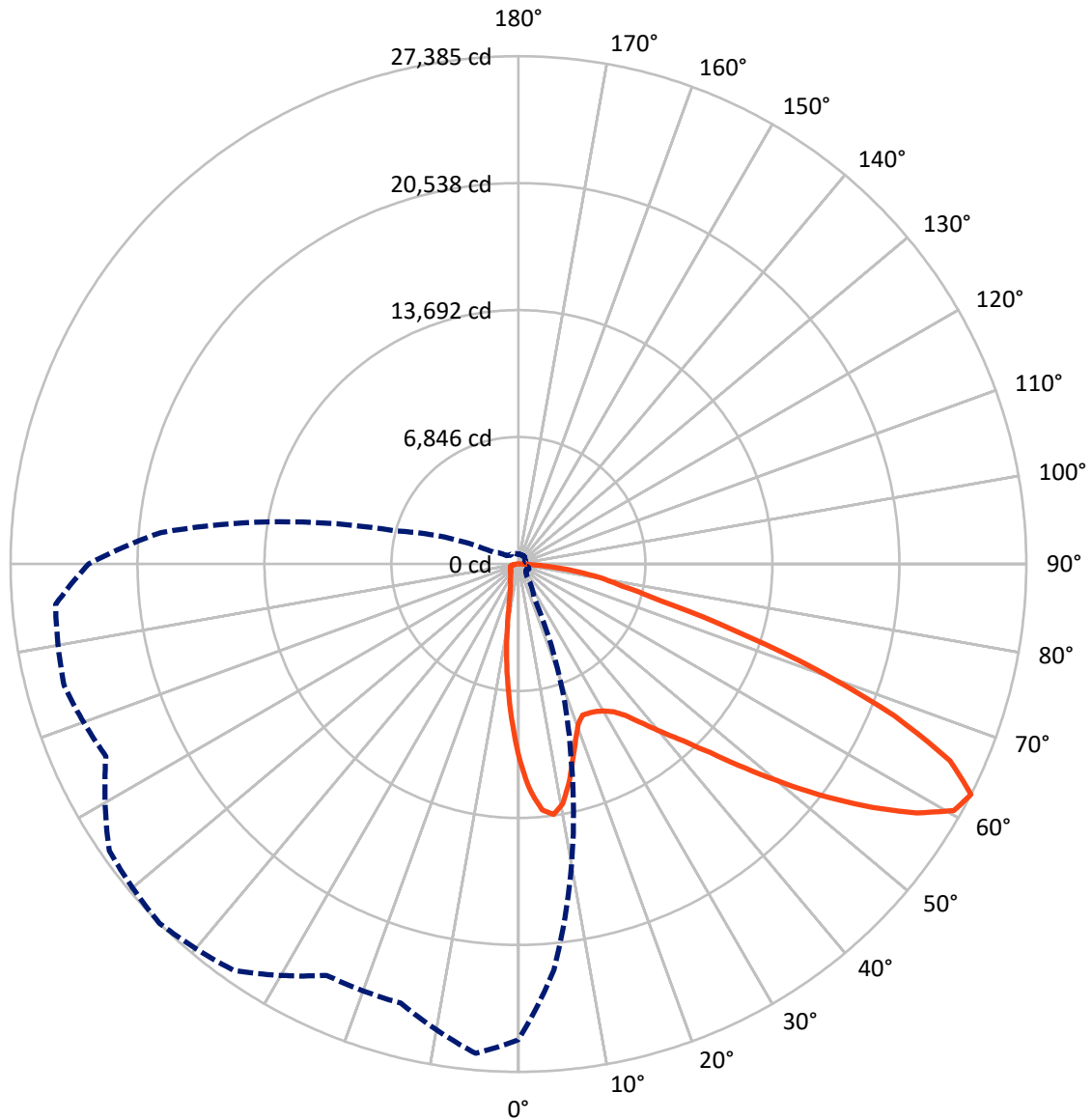


Based on 30 foot mounting height. Maximum calculated value = 11.8 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P191317

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P191317

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5216.0	0.0	5216.0
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	26303.2	0.0	26303.2
	% Fixture	83.5	0.0	83.5
Total	Lumens	31519.2	0.0	31519.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	775.2	2.5
10°-20°	1421.5	4.5
20°-30°	2072.5	6.6
30°-40°	3192.0	10.1
40°-50°	4697.8	14.9
50°-60°	6890.6	21.9
60°-70°	7702.7	24.4
70°-80°	3771.2	12.0
80°-90°	995.7	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°	31519.2	100.0
0°-180°	31519.2	100.0

Coefficient of Utilization



REPORT NUMBER: P191317

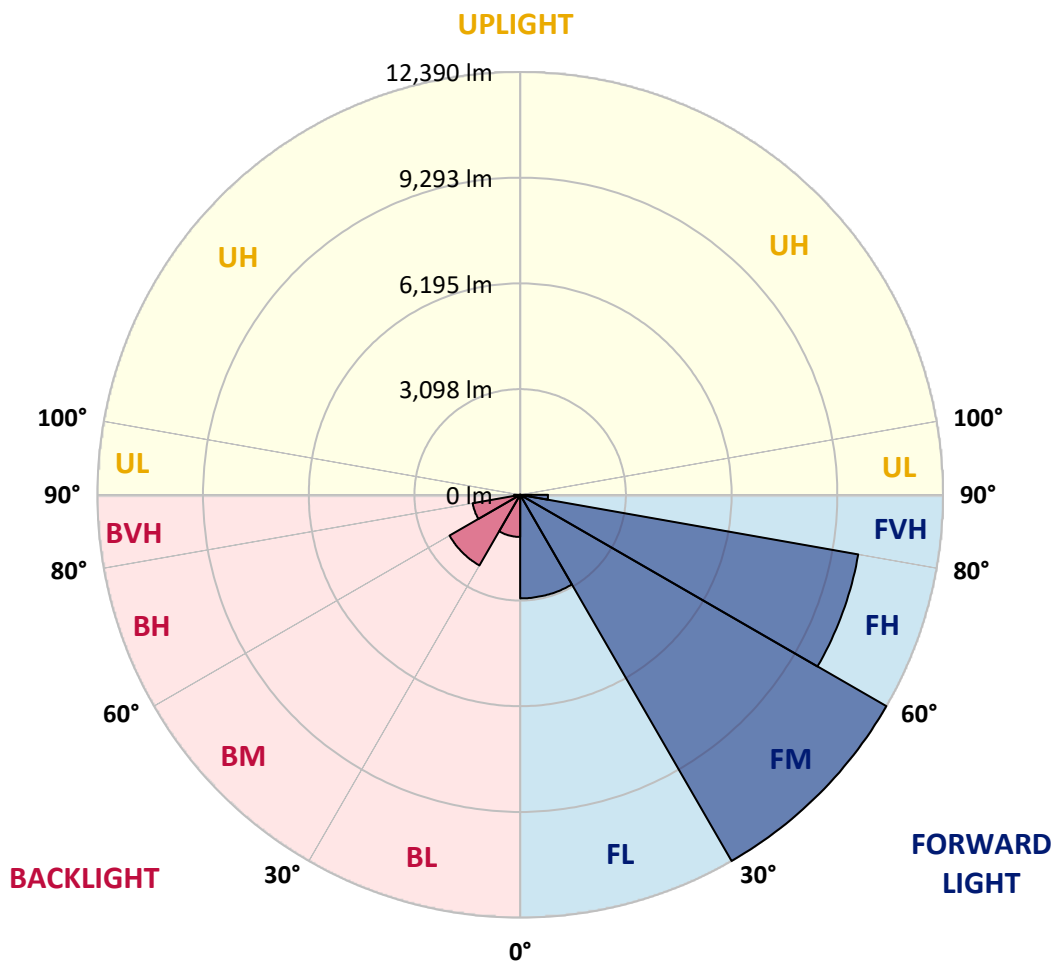
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3035.2	9.6			
FM	(30°-60°)	12390.5	39.3			
FH	(60°-80°)	10059.8	31.9			G4/12000
FVH	(80°-90°)	817.7	2.6			G5
BL	(0°-30°)	1234.0	3.9	B3/2500		
BM	(30°-60°)	2389.9	7.6	B2/2500		
BH	(60°-80°)	1414.1	4.5	B3/2500		G3/2500
BVH	(80°-90°)	178.0	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: P191317

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9
2.5°	11064.7	10839.5	10465.2	10075.3	9838.0	9560.8	9344.1	9153.6	8772.4	8697.9	8765.5
5°	10404.5	9952.4	9247.2	8536.7	8063.7	7556.1	7161.1	6844.0	6360.6	6275.7	6377.9
7.5°	9345.9	8805.4	7873.1	6967.0	6298.2	5664.1	5237.8	4898.2	4520.5	4357.6	4368.0
10°	8432.8	7822.9	6721.0	5735.1	5187.6	4759.6	4400.9	4052.6	3669.7	3418.5	3349.2
12.5°	7921.6	7220.0	5949.9	5069.7	4562.1	4111.5	3725.2	3352.7	2943.7	2687.3	2614.6
15°	7833.3	7070.9	5660.6	4643.5	4007.6	3437.6	2981.9	2566.1	2145.0	1937.1	1893.8
17.5°	8216.2	7337.7	5567.0	4264.1	3486.1	2782.6	2223.0	1758.7	1415.6	1311.6	1302.9
20°	8950.9	7850.6	5554.8	3907.2	2971.5	2146.8	1549.0	1211.2	1060.4	1030.9	1032.7
22.5°	9981.7	8645.9	5703.9	3638.5	2498.5	1600.9	1164.3	1013.6	954.7	927.0	927.0
25°	11316.0	9740.9	6047.0	3442.7	2087.8	1278.7	1027.5	937.3	881.9	862.9	866.3
27.5°	12608.5	10806.6	6445.5	3288.6	1819.3	1160.8	973.7	892.3	843.8	824.7	833.4
30°	13616.9	11752.6	6778.2	3078.9	1682.4	1127.9	992.8	909.6	840.4	810.9	812.6
32.5°	14452.0	12580.8	7057.1	2928.2	1561.1	966.8	855.9	819.6	810.9	776.2	758.9
35°	15519.4	13483.5	7244.2	2931.7	1503.9	862.9	762.4	698.3	651.5	611.6	611.6
37.5°	16770.4	14519.7	7443.5	2971.5	1483.2	802.2	729.5	665.3	622.1	583.9	576.9
40°	18007.4	15534.9	7625.4	3009.6	1471.0	765.8	703.5	644.6	604.7	566.6	556.2
42.5°	19059.1	16370.1	7788.2	3028.7	1429.5	762.4	684.4	630.6	592.6	551.0	540.6
45°	19837.2	17070.1	7963.3	3058.1	1387.8	776.2	684.4	628.9	582.2	542.4	531.9
47.5°	20532.0	17891.3	8256.0	3058.1	1337.6	750.2	707.0	630.6	580.4	538.9	530.2
50°	21462.3	19017.6	8810.6	2987.1	1266.6	722.5	745.0	623.8	564.9	531.9	521.5
52.5°	22744.5	20460.9	9690.7	2864.1	1157.4	668.8	739.8	620.3	549.2	514.6	502.5
55°	24260.6	22006.4	10650.6	2720.2	994.5	630.6	713.8	611.6	531.9	493.8	481.7
57.5°	25444.0	23070.2	11326.3	2498.5	852.4	609.9	632.4	602.9	511.2	471.3	460.8
60°	25915.2	23028.7	11511.8	2202.2	783.2	592.6	552.7	675.8	493.8	454.0	441.8
62.5°	25660.5	21964.8	10991.9	1994.2	767.5	570.1	518.0	625.5	480.0	441.8	424.5
65°	24484.1	20079.7	9614.5	1938.8	812.6	547.5	495.5	490.3	460.8	424.5	407.1
67.5°	21921.5	17262.4	7698.2	1944.0	869.8	525.0	473.0	448.8	434.9	405.4	389.8
70°	17855.0	13648.1	5738.5	1957.9	899.3	499.0	448.8	422.8	407.1	377.7	367.3
72.5°	13128.2	10518.9	4168.7	1867.8	904.5	469.5	415.8	393.3	377.7	346.6	337.9
75°	8982.0	8046.4	2891.8	1547.2	788.4	428.0	379.4	358.6	348.2	310.2	304.9
77.5°	6561.5	6040.0	1850.5	1148.8	608.1	375.9	334.4	318.9	311.9	270.3	263.4
80°	5265.5	4778.6	1157.4	786.6	445.3	315.4	280.7	272.0	265.0	223.5	218.3
82.5°	3652.4	3200.2	743.3	511.2	334.4	244.3	221.8	218.3	208.0	169.8	164.6
85°	1926.7	1737.9	471.3	348.2	242.5	168.1	154.2	154.2	149.0	112.6	109.1
87.5°	246.0	400.3	239.1	181.9	133.4	74.5	74.5	72.7	77.9	64.1	55.4
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: P191317

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9
2.5°	8606.1	8689.3	8609.6	8614.8	8703.1	8966.5	9086.1	9184.8	9290.4	9359.8	9391.0
5°	6237.5	6431.6	6497.5	6636.1	6840.5	7176.6	7310.0	7407.1	7471.2	7509.3	7524.9
7.5°	4265.8	4383.7	4515.3	4738.8	5184.1	5381.6	5470.0	5447.4	5374.7	5348.7	5322.7
10°	3215.9	3169.0	3144.8	3267.8	3628.2	3827.5	3889.8	3829.1	3789.3	3798.0	3841.3
12.5°	2491.6	2410.1	2311.4	2297.4	2534.9	2713.4	2753.2	2756.6	2829.4	2893.5	2988.9
15°	1815.8	1807.1	1758.7	1729.2	1864.3	2009.9	2027.2	2058.4	2124.3	2171.0	2254.2
17.5°	1280.4	1327.2	1365.3	1384.4	1486.7	1590.6	1571.6	1555.9	1543.8	1543.8	1583.6
20°	1032.7	1063.9	1112.4	1167.8	1271.7	1344.6	1297.7	1235.4	1190.3	1176.5	1181.7
22.5°	930.5	954.7	982.4	1030.9	1124.5	1174.8	1124.5	1079.4	1034.4	1018.8	1013.6
25°	878.4	909.6	935.6	972.0	1041.4	1075.9	1027.5	994.5	966.8	947.8	933.9
27.5°	849.0	876.8	883.6	901.0	959.9	991.0	966.8	953.0	935.6	918.3	901.0
30°	817.8	812.6	800.5	802.2	849.0	880.1	878.4	881.9	880.1	875.0	871.6
32.5°	746.8	736.4	726.0	736.4	779.7	807.4	809.2	816.1	816.1	814.4	828.2
35°	622.1	641.1	653.3	684.4	736.4	760.7	750.2	732.9	701.7	682.6	681.0
37.5°	575.2	578.7	599.4	642.8	700.0	722.5	707.0	667.1	646.3	642.8	648.0
40°	552.7	556.2	568.4	608.1	665.3	687.8	674.0	644.6	625.5	623.8	632.4
42.5°	537.2	540.6	547.5	575.2	622.1	649.8	651.5	630.6	608.1	609.9	618.6
45°	528.5	530.2	528.5	542.4	585.6	618.6	632.4	618.6	599.4	602.9	613.4
47.5°	526.7	521.5	514.6	518.0	563.1	596.1	613.4	608.1	599.4	602.9	611.6
50°	519.8	507.7	499.0	497.3	542.4	576.9	592.6	592.6	596.1	602.9	611.6
52.5°	499.0	485.2	485.2	480.0	528.5	561.4	571.7	573.5	578.7	590.9	602.9
55°	473.0	467.8	473.0	464.3	518.0	549.2	554.4	557.9	561.4	571.7	589.1
57.5°	450.5	443.6	455.7	452.2	509.4	537.2	537.2	544.0	544.0	557.9	571.7
60°	438.3	424.5	429.7	433.1	497.3	526.7	523.2	530.2	533.7	545.7	556.2
62.5°	422.8	410.6	410.6	419.3	483.4	511.2	509.4	514.6	528.5	531.9	542.4
65°	403.8	398.5	393.3	403.8	469.5	493.8	495.5	502.5	514.6	518.0	526.7
67.5°	384.6	386.4	375.9	386.4	457.5	476.5	476.5	490.3	495.5	502.5	511.2
70°	363.9	365.6	356.9	369.1	448.8	457.5	455.7	474.8	478.2	483.4	492.0
72.5°	337.9	337.9	334.4	351.7	434.9	438.3	434.9	450.5	452.2	457.5	460.8
75°	310.2	310.2	306.7	330.9	426.3	417.6	407.1	419.3	422.8	426.3	426.3
77.5°	273.7	277.2	277.2	306.7	396.8	408.9	374.3	381.2	386.4	388.1	382.9
80°	228.7	237.3	240.8	279.0	332.7	377.7	334.4	339.6	341.4	341.4	334.4
82.5°	175.0	190.6	199.3	240.8	254.7	317.1	291.1	296.2	291.1	280.7	277.2
85°	121.3	142.1	152.5	183.6	192.3	244.3	242.5	242.5	232.2	218.3	216.6
87.5°	65.9	77.9	84.9	109.1	131.7	164.6	178.5	173.3	164.6	155.9	157.6
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: P191317

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9
2.5°	9553.8	9789.4	10165.5	10453.1	10742.4	11021.4	11322.8	11553.3	11749.1	11825.3	12057.5
5°	7682.6	7977.1	8332.3	8973.4	9427.3	9928.0	10506.8	11272.6	11567.2	11974.4	12641.4
7.5°	5431.9	5698.7	6270.5	6788.5	7431.3	8140.0	8921.5	9978.4	10364.7	11017.9	12104.3
10°	4056.1	4366.3	4825.5	5262.1	5828.7	6552.9	7450.4	8632.1	9101.6	9810.3	11061.3
12.5°	3267.8	3633.4	4120.2	4530.9	4969.3	5480.4	6351.9	7647.9	8276.9	8897.1	10162.0
15°	2510.6	2893.5	3345.8	3867.3	4350.7	4901.7	5814.8	7232.1	7956.3	8602.6	9682.0
17.5°	1737.9	2065.3	2635.3	3179.4	3798.0	4503.1	5665.8	7320.4	8185.0	8930.1	9765.2
20°	1231.9	1419.0	1886.8	2517.6	3288.6	4173.9	5638.1	7784.8	8909.3	9760.0	10298.9
22.5°	1036.1	1105.4	1377.5	1956.2	2846.8	3927.9	5735.1	8436.3	9886.5	10972.9	11149.7
25°	944.3	985.9	1127.9	1535.1	2453.4	3749.4	6062.5	9406.5	11095.8	12185.7	12154.5
27.5°	894.1	937.3	1030.9	1296.0	2157.2	3638.5	6390.0	10557.1	12478.6	13502.5	13114.4
30°	878.4	937.3	1036.1	1221.5	1945.8	3463.6	6658.6	11567.2	13542.4	14391.4	13551.0
32.5°	866.3	875.0	920.0	1053.4	1744.7	3259.1	6840.5	12473.4	14583.7	15237.0	14180.0
35°	700.0	743.3	816.1	944.3	1627.0	3136.1	6840.5	13254.8	15609.4	16091.1	14779.5
37.5°	674.0	712.1	776.2	885.4	1561.1	3075.5	6703.6	14008.5	16657.7	17059.6	15273.3
40°	660.1	691.3	752.0	840.4	1533.4	3006.1	6504.3	14673.8	17681.7	18029.9	15734.2
42.5°	649.8	677.5	734.7	812.6	1497.0	2929.9	6343.2	15207.5	18570.5	18858.2	16174.3
45°	644.6	674.0	736.4	826.4	1424.3	2829.4	6289.5	15784.4	19301.8	19549.5	16650.8
47.5°	644.6	679.2	745.0	855.9	1337.6	2725.4	6457.6	16545.1	19993.1	20114.4	17212.2
50°	639.3	677.5	769.3	826.4	1211.2	2593.8	6852.6	17503.2	20741.6	20755.5	17922.5
52.5°	628.9	674.0	828.2	809.2	1065.6	2420.5	7386.3	18733.4	21848.7	21931.9	19034.9
55°	616.8	668.8	812.6	769.3	946.0	2214.3	7822.9	20228.6	23404.6	23635.1	20670.6
57.5°	601.2	661.8	786.6	713.8	868.1	1949.2	7980.6	21323.7	24491.0	25069.8	22514.0
60°	587.4	656.6	710.3	681.0	819.6	1725.7	7675.6	21107.2	24416.5	25664.0	24148.0
62.5°	573.5	661.8	648.0	660.1	797.0	1581.9	6878.6	19372.7	23181.1	25050.6	25359.1
65°	557.9	615.1	611.6	642.8	791.9	1524.7	5702.1	16772.1	20793.5	23111.8	25645.0
67.5°	537.2	568.4	585.6	620.3	809.2	1474.5	4601.9	13835.2	17475.5	20206.1	24154.8
70°	514.6	540.6	559.7	592.6	798.7	1452.0	3827.5	10910.5	13866.4	16560.7	21214.6
72.5°	485.2	507.7	525.0	556.2	788.4	1439.8	3233.1	8786.2	10352.6	12301.8	17248.5
75°	450.5	471.3	483.4	514.6	755.4	1318.6	2541.8	7434.8	7746.7	8557.6	13738.2
77.5°	410.6	426.3	436.6	471.3	668.8	1096.8	1838.3	5735.1	6015.8	6213.3	10532.8
80°	363.9	379.4	384.6	417.6	554.4	857.6	1199.0	4236.3	4499.7	4544.8	6878.6
82.5°	310.2	325.7	325.7	356.9	454.0	616.8	786.6	2902.2	2954.2	3106.6	4861.8
85°	249.5	261.7	261.7	277.2	351.7	460.8	540.6	1457.2	1441.5	1646.0	4212.1
87.5°	178.5	187.1	195.8	199.3	251.2	304.9	325.7	443.6	292.8	336.1	2704.7
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: P191317

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9	10648.9
2.5°	12232.5	12331.3	12230.8	12158.0	11844.4	11586.2	11241.4	11064.7
5°	13149.1	13400.3	13315.4	13010.5	12355.5	11619.2	10782.3	10404.5
7.5°	13038.2	13622.1	13635.9	13065.9	12100.8	11016.2	9883.0	9345.9
10°	12175.4	12922.1	13135.2	12582.5	11558.5	10345.6	9046.2	8432.8
12.5°	11212.0	11943.2	12106.0	11915.4	11059.5	9841.5	8522.9	7921.6
15°	10423.7	10751.1	10945.2	11111.5	10631.5	9640.5	8493.5	7833.3
17.5°	9943.7	9907.3	9962.7	10252.1	10333.5	9870.9	8944.0	8216.2
20°	9770.4	9214.2	9200.4	9598.9	10193.2	10420.2	9824.1	8950.9
22.5°	9865.7	8964.7	8850.4	9323.4	10267.7	11212.0	10978.1	9981.7
25°	10194.9	8985.5	8893.7	9351.1	10538.0	12055.8	12223.9	11316.0
27.5°	10713.0	9117.3	8995.9	9465.5	10896.7	12764.5	13450.6	12608.5
30°	11205.1	9345.9	9195.2	9690.7	11224.1	13045.1	14202.5	13616.9
32.5°	11802.8	9773.9	9508.7	10104.8	11629.5	13492.1	14873.1	14452.0
35°	12388.4	10383.8	10054.6	10744.2	12081.8	14048.3	15638.9	15519.4
37.5°	13031.3	11180.8	10908.7	11570.6	12700.3	14573.4	16616.1	16770.4
40°	13717.4	12237.7	11915.4	12776.6	13660.2	15231.7	17636.7	18007.4
42.5°	14408.7	13410.7	13026.1	13899.3	14715.4	15881.5	18509.9	19059.1
45°	15200.5	14684.3	14502.3	15446.6	15729.0	16500.0	19154.4	19837.2
47.5°	16122.3	16129.3	16422.0	16799.8	16751.2	17200.0	19802.5	20532.0
50°	17198.3	17932.9	18579.2	18830.5	17804.8	17952.0	20701.7	21462.3
52.5°	18490.9	20090.0	20890.6	20726.0	18939.6	18870.3	22125.9	22744.5
55°	20107.4	22373.7	23169.0	23051.2	20244.3	20121.2	23900.2	24260.6
57.5°	21978.7	24586.3	25317.5	24787.3	21810.6	21493.5	25367.7	25444.0
60°	23623.0	26339.8	26980.8	26393.5	23390.8	22954.2	26284.3	25915.2
62.5°	24537.8	26934.1	27384.5	26752.1	24473.7	24510.1	26485.3	25660.5
65°	24128.9	25431.9	25577.4	25525.4	24194.7	25412.8	25762.8	24484.1
67.5°	21890.3	21633.9	21878.2	22216.0	21803.7	24224.2	23761.6	21921.5
70°	17946.8	16538.1	17025.1	17252.0	17439.2	20845.5	20623.7	17855.0
72.5°	13525.0	11586.2	11970.9	11924.1	12790.5	16720.0	16039.2	13128.2
75°	9583.3	7855.9	7904.3	7885.3	8924.8	13081.5	11614.0	8982.0
77.5°	6705.3	5691.8	5717.8	5825.2	6000.1	9865.7	8297.7	6561.5
80°	4610.5	4319.5	4463.3	4471.9	4158.4	6627.4	6130.1	5265.5
82.5°	3434.1	3002.7	2968.0	3018.3	3259.1	5369.5	4711.1	3652.4
85°	2812.1	1777.7	1429.5	1791.6	2888.3	5317.5	3129.2	1926.7
87.5°	1583.6	843.8	381.2	707.0	1152.3	3520.8	904.5	246.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)