

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: P191389

Luminaire Tested: **GLEON-AF-01-LED-E1-T2R-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191389  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-01-LED-E1-T2R-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4376.2 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 34  
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

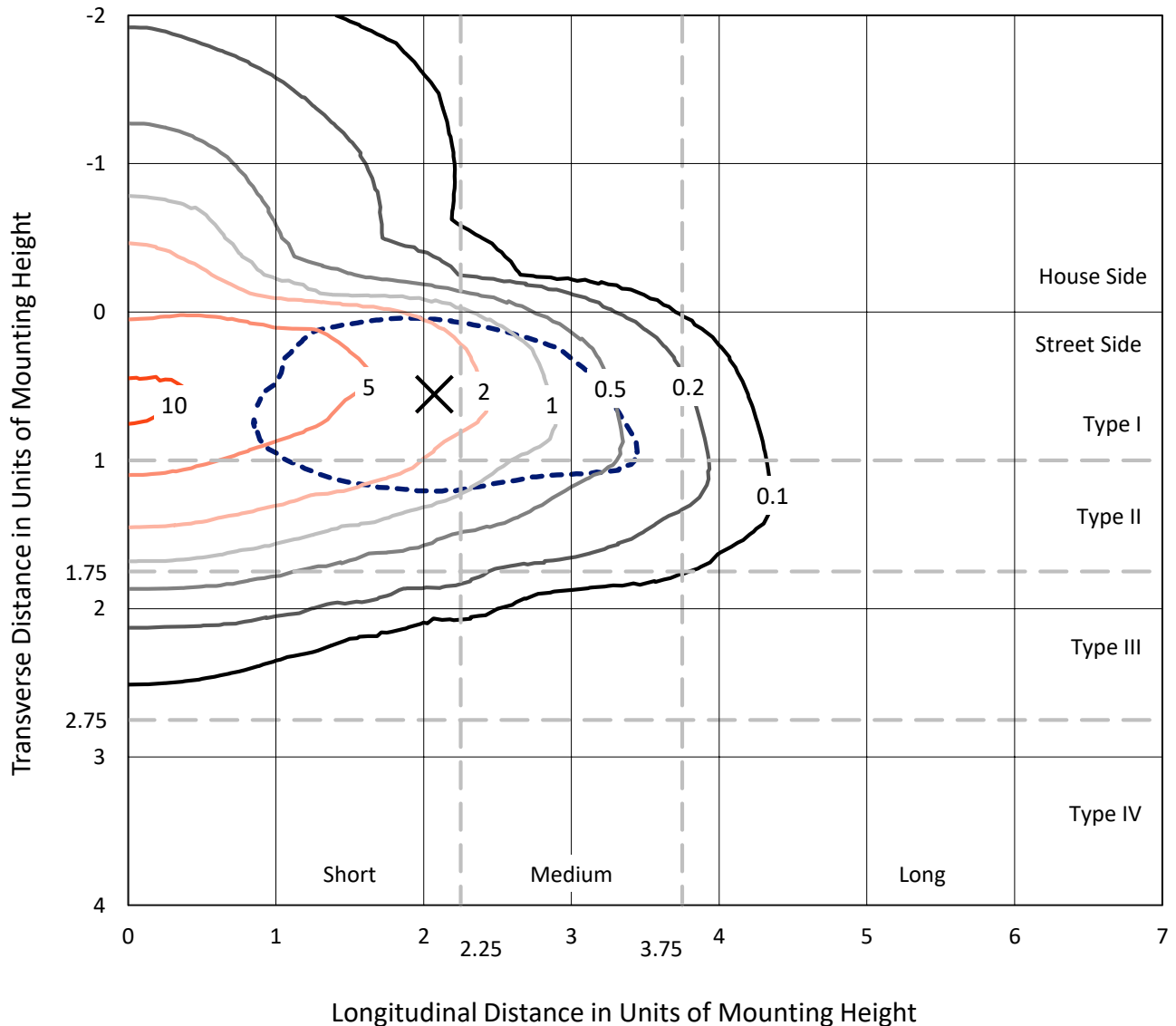


REPORT NUMBER: P191389

CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

### Iso-Footcandle Lines of Horizontal Illumination

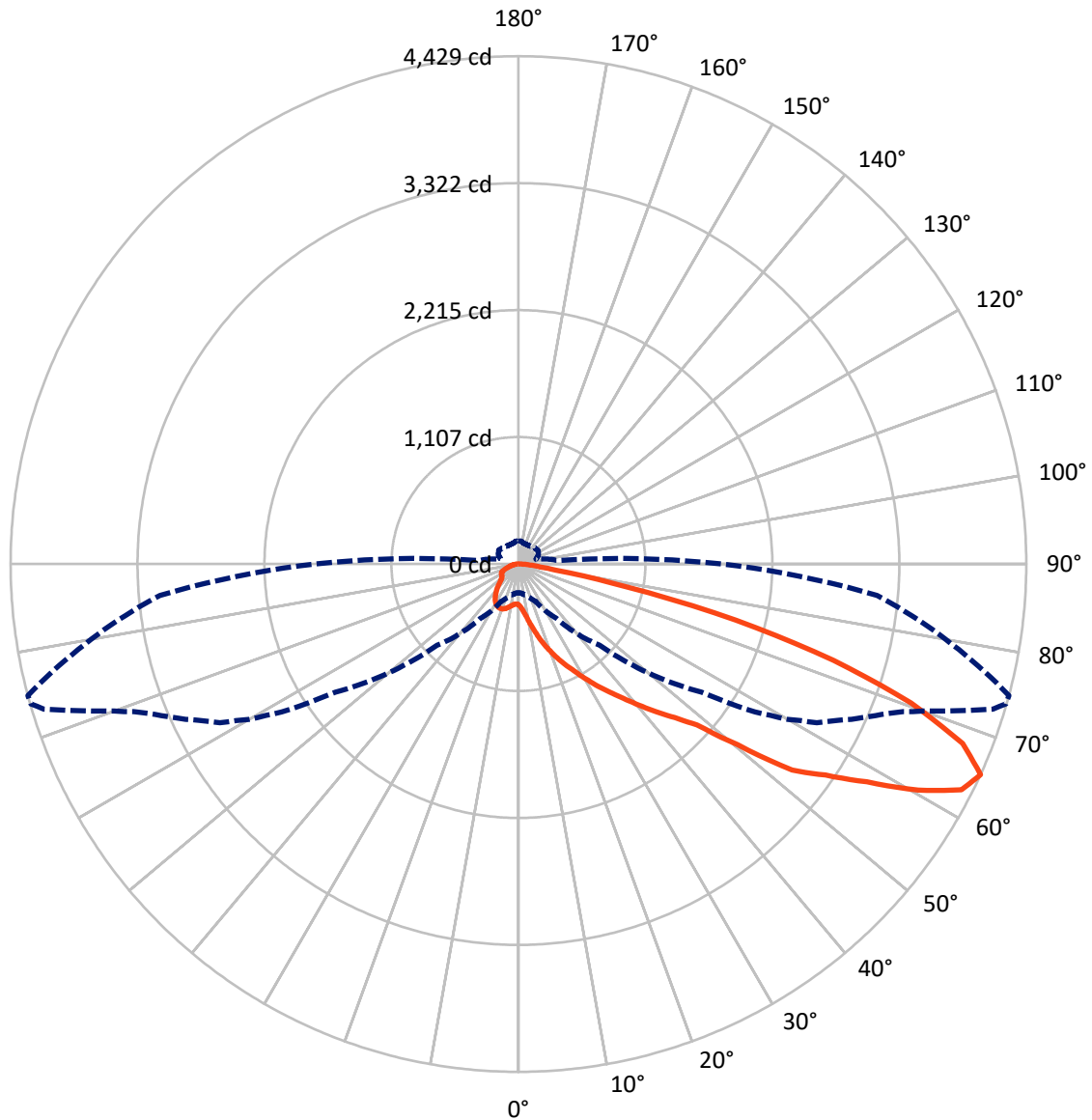
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P191389  
CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P191389

CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	674.7	0.0	674.7
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	3701.5	0.0	3701.5
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	4376.2	0.0	4376.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.0	1.0
10°-20°	171.8	3.9
20°-30°	352.4	8.1
30°-40°	592.9	13.5
40°-50°	819.2	18.7
50°-60°	1022.6	23.4
60°-70°	920.2	21.0
70°-80°	385.7	8.8
80°-90°	67.4	1.5
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°	4376.2	100.0
0°-180°	4376.2	100.0



REPORT NUMBER: P191389

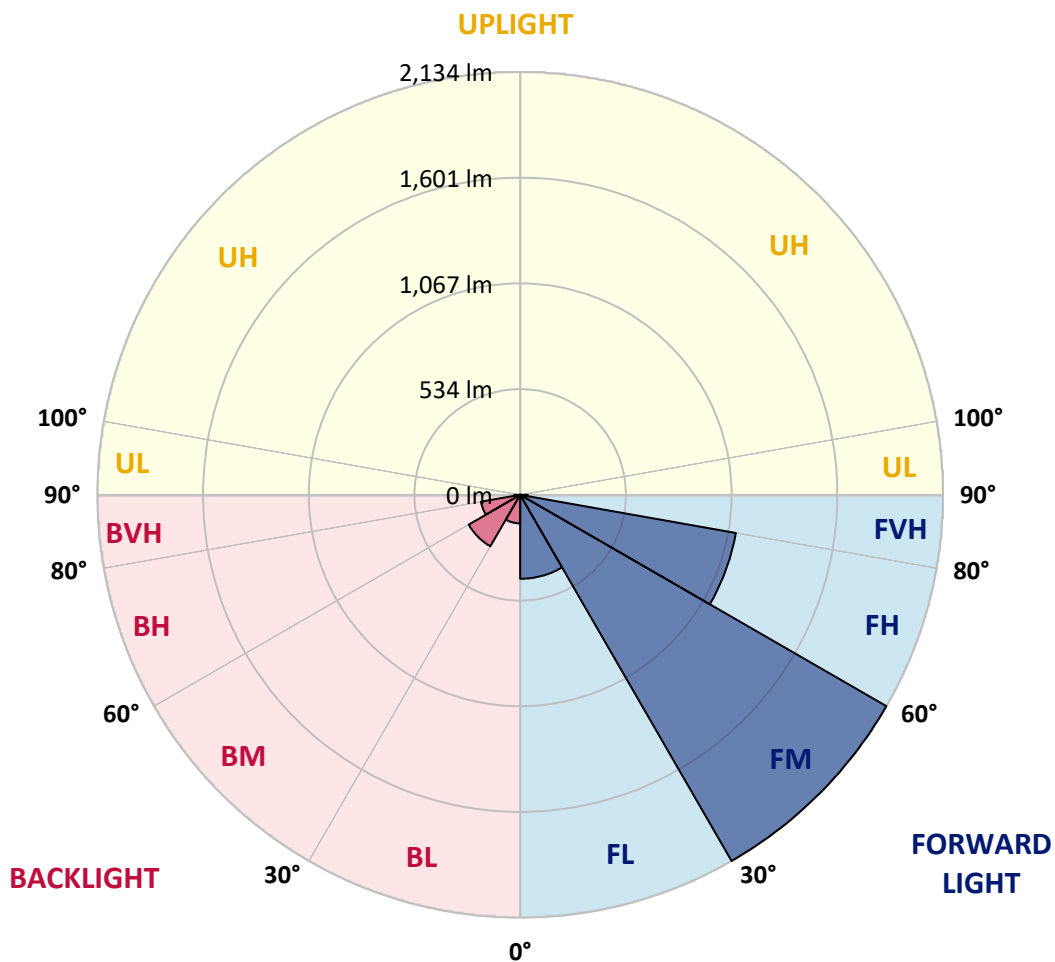
CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	423.8	9.7			
FM	(30°-60°)	2134.4	48.8			
FH	(60°-80°)	1105.4	25.3			G1/1800
FVH	(80°-90°)	37.9	0.9			G1/100
BL	(0°-30°)	144.3	3.3	B1/500		
BM	(30°-60°)	300.3	6.9	B1/1000		
BH	(60°-80°)	200.6	4.6	B1/500		G1/500
BVH	(80°-90°)	29.5	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P191389

CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7
2.5°	451.5	446.6	447.8	439.6	429.4	416.1	401.4	401.2	401.4	400.0	394.6
5°	626.1	620.1	617.9	599.2	571.9	533.0	490.7	486.1	484.3	479.6	468.5
7.5°	753.5	750.2	746.8	732.6	707.8	664.3	607.5	597.8	588.5	586.2	573.8
10°	835.8	834.9	827.5	823.8	808.2	770.5	715.2	705.9	695.8	692.2	679.2
12.5°	900.8	900.6	897.1	898.2	884.6	857.3	809.7	801.2	793.7	783.0	773.7
15°	945.8	946.0	951.1	957.0	954.9	936.4	891.7	888.0	881.6	874.1	863.2
17.5°	982.6	983.7	989.1	999.6	1011.0	1009.6	974.2	971.1	965.5	955.3	949.5
20°	1065.9	1069.8	1059.5	1059.5	1060.7	1066.3	1049.3	1046.9	1039.0	1033.6	1029.1
22.5°	1206.6	1211.1	1187.7	1163.9	1140.5	1123.5	1106.5	1109.6	1104.3	1100.5	1097.8
25°	1389.3	1392.7	1354.9	1314.7	1267.0	1204.9	1162.9	1160.9	1158.1	1155.8	1154.6
27.5°	1561.1	1562.7	1526.8	1467.9	1412.7	1323.4	1220.0	1217.7	1214.2	1209.8	1206.2
30°	1708.2	1707.8	1671.0	1614.8	1555.6	1456.8	1306.8	1299.8	1289.4	1277.6	1268.5
32.5°	1835.6	1835.0	1794.6	1736.4	1674.3	1588.9	1425.7	1411.2	1395.0	1372.1	1358.2
35°	1935.8	1935.4	1897.4	1836.6	1765.4	1713.4	1562.0	1544.1	1523.7	1492.8	1471.5
37.5°	1973.8	1973.8	1952.4	1911.0	1848.1	1812.5	1713.4	1691.9	1669.9	1634.9	1610.8
40°	1951.6	1952.0	1956.6	1948.9	1918.2	1890.9	1854.7	1841.8	1823.0	1791.5	1766.4
42.5°	1877.2	1879.6	1909.7	1946.9	1962.2	1957.8	1980.0	1974.2	1960.9	1936.7	1916.8
45°	1783.0	1790.1	1823.2	1893.2	1974.4	2015.6	2085.0	2085.6	2083.1	2070.1	2054.8
47.5°	1653.5	1663.5	1707.2	1801.8	1945.9	2071.8	2191.7	2197.3	2202.4	2193.9	2187.0
50°	1481.6	1493.4	1558.9	1684.4	1887.7	2130.0	2393.2	2418.5	2442.1	2439.2	2443.9
52.5°	1297.5	1311.3	1391.5	1531.4	1787.6	2143.4	2522.1	2563.3	2604.5	2638.3	2674.1
55°	1131.4	1123.9	1204.1	1351.3	1623.1	2082.7	2637.9	2687.6	2733.5	2775.0	2817.6
57.5°	906.2	918.4	998.8	1144.4	1405.4	1911.4	2717.6	2790.3	2856.4	2924.9	2985.4
60°	662.5	674.6	761.8	909.7	1169.0	1651.7	2656.7	2766.9	2872.8	2977.7	3059.7
62.5°	400.0	409.1	485.9	626.8	901.4	1343.6	2385.3	2530.0	2685.7	2811.2	2937.0
65°	249.0	254.2	282.5	360.0	578.9	1003.1	1948.9	2106.6	2274.3	2433.6	2564.3
67.5°	203.8	205.7	210.8	227.4	317.9	654.2	1450.5	1590.2	1741.6	1895.7	2041.1
70°	183.3	182.1	182.1	183.1	203.8	351.7	949.7	1040.6	1166.8	1300.8	1433.8
72.5°	165.5	164.3	161.9	158.9	166.3	214.6	490.9	559.5	650.4	769.5	896.9
75°	148.7	147.1	144.3	140.5	145.6	161.9	235.7	264.5	308.8	372.3	443.2
77.5°	131.3	129.3	126.7	123.9	130.5	125.9	138.2	148.5	165.5	185.8	212.6
80°	111.6	109.8	108.9	107.5	115.4	96.0	97.6	103.9	114.0	124.9	137.3
82.5°	87.4	87.4	90.7	91.3	100.0	68.9	72.9	78.5	83.7	89.5	95.2
85°	57.6	58.0	69.2	73.6	78.9	46.4	54.7	56.6	60.7	64.0	66.5
87.5°	18.0	19.4	42.2	46.9	45.3	26.3	33.6	34.4	37.2	39.6	41.6
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: P191389

CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7
2.5°	394.6	392.1	389.8	389.6	388.0	385.7	386.5	383.0	383.2	381.4	379.3
5°	464.0	462.3	454.1	451.7	445.5	441.6	441.0	432.7	431.7	426.9	421.8
7.5°	563.9	558.4	546.9	541.2	530.7	522.8	519.0	508.1	502.7	490.3	484.7
10°	668.4	661.5	647.3	639.4	629.3	616.6	609.8	593.8	587.7	576.2	562.6
12.5°	765.4	758.5	743.8	737.9	724.4	710.8	703.4	685.4	677.3	659.1	648.3
15°	855.1	848.2	835.3	829.2	815.7	804.8	794.7	776.9	767.4	750.4	736.3
17.5°	942.0	934.8	923.6	918.0	905.0	893.8	883.0	866.2	856.5	839.5	826.9
20°	1022.8	1017.4	1009.3	1001.9	988.9	978.7	965.9	951.3	937.3	924.8	912.9
22.5°	1093.2	1091.2	1082.5	1079.2	1068.0	1059.3	1048.1	1033.8	1023.7	1007.9	996.8
25°	1154.0	1153.3	1149.2	1148.2	1140.3	1132.0	1129.5	1117.7	1108.4	1094.5	1082.9
27.5°	1206.2	1206.8	1205.8	1208.6	1206.6	1202.8	1203.0	1199.1	1193.7	1182.1	1172.0
30°	1264.2	1260.8	1262.7	1266.8	1268.0	1268.5	1275.3	1277.6	1277.2	1269.5	1264.6
32.5°	1346.2	1338.3	1331.1	1330.4	1334.5	1336.2	1347.8	1353.9	1359.0	1360.8	1361.6
35°	1450.7	1435.0	1419.9	1411.8	1404.8	1406.7	1414.9	1424.7	1436.0	1443.9	1453.2
37.5°	1582.5	1563.3	1536.5	1517.4	1512.7	1502.3	1507.7	1515.4	1526.5	1538.8	1555.0
40°	1742.2	1713.0	1683.0	1657.7	1644.0	1625.0	1624.8	1623.3	1630.2	1641.5	1664.3
42.5°	1895.9	1870.0	1838.1	1811.5	1793.7	1768.3	1763.2	1749.7	1752.7	1762.7	1784.8
45°	2039.9	2018.5	1999.1	1968.4	1953.2	1925.7	1917.0	1901.1	1892.2	1896.8	1918.9
47.5°	2179.3	2165.6	2145.3	2125.4	2113.8	2089.2	2077.9	2066.6	2055.2	2054.8	2077.9
50°	2451.0	2443.7	2419.7	2399.0	2404.7	2374.4	2376.2	2345.6	2359.4	2361.1	2409.8
52.5°	2706.4	2731.7	2749.5	2771.3	2785.3	2788.1	2797.4	2811.2	2827.9	2861.1	2906.3
55°	2852.6	2884.3	2902.7	2919.3	2946.7	2952.4	2968.0	2986.5	3001.1	3038.5	3076.7
57.5°	3026.4	3085.2	3113.9	3140.2	3177.0	3191.1	3217.0	3237.1	3256.2	3300.2	3346.7
60°	3133.5	3205.2	3263.4	3305.1	3351.2	3384.3	3423.5	3455.0	3499.7	3552.5	3621.8
62.5°	3048.4	3153.7	3230.9	3302.3	3365.1	3428.5	3484.6	3543.4	3611.4	3691.3	3798.6
65°	2709.3	2816.4	2948.8	3022.9	3106.0	3203.8	3289.1	3384.3	3476.9	3593.3	3752.0
67.5°	2181.1	2305.6	2454.4	2529.1	2624.6	2733.7	2829.5	2945.9	3054.0	3195.1	3391.2
70°	1572.2	1733.1	1858.2	1936.2	2047.7	2160.2	2252.5	2388.1	2477.5	2622.1	2824.9
72.5°	995.5	1122.5	1275.7	1374.1	1473.2	1587.1	1681.5	1798.3	1881.8	2013.6	2197.3
75°	535.2	628.8	763.5	856.9	963.0	1060.3	1171.0	1249.2	1310.9	1415.2	1564.3
77.5°	250.8	307.8	375.9	447.8	519.7	594.6	667.6	731.0	757.5	817.1	905.2
80°	152.2	170.6	190.6	212.8	242.7	267.0	299.1	322.3	324.0	342.8	369.7
82.5°	101.7	108.5	114.6	120.1	127.8	133.8	140.7	148.7	152.0	156.4	165.1
85°	69.4	72.7	74.0	77.4	76.6	78.7	81.4	84.1	85.5	85.3	89.3
87.5°	42.7	44.3	45.1	46.0	45.3	44.5	45.7	47.3	47.7	46.4	46.9
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: P191389

CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

**CANDELA DISTRIBUTION (continued):**

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7
2.5°	379.7	377.8	375.9	374.7	374.3	363.4	358.5	355.5	348.8	343.4	339.1
5°	418.8	414.9	411.7	408.1	406.0	378.2	368.1	361.0	349.4	342.6	336.3
7.5°	481.8	470.9	464.4	457.2	450.9	400.8	384.0	373.1	356.9	347.8	340.7
10°	553.2	541.9	531.7	520.5	510.8	430.9	406.4	389.4	368.1	356.3	347.0
12.5°	633.0	621.9	609.0	594.6	582.3	468.9	435.0	410.7	381.6	365.8	352.7
15°	727.2	707.6	692.0	675.5	660.9	514.5	468.3	434.8	395.9	374.5	357.1
17.5°	814.9	794.1	773.0	758.5	741.7	565.7	501.9	459.2	407.6	380.1	357.9
20°	900.4	877.8	859.6	840.1	822.6	618.7	537.8	480.8	415.3	380.3	352.7
22.5°	975.8	961.7	941.4	920.2	902.4	671.8	571.3	499.0	418.2	375.5	343.6
25°	1061.5	1046.7	1021.8	1004.0	984.1	725.8	604.3	513.1	416.5	366.6	329.6
27.5°	1153.1	1136.5	1111.0	1092.4	1068.4	781.9	634.4	523.2	410.3	352.1	310.7
30°	1248.6	1233.5	1208.4	1189.6	1165.3	841.4	668.2	530.1	397.9	332.0	288.8
32.5°	1351.1	1338.5	1313.7	1293.9	1268.0	905.8	699.7	532.1	379.1	308.2	265.6
35°	1448.5	1439.8	1418.8	1400.4	1373.5	966.7	733.0	531.1	356.7	282.1	244.4
37.5°	1558.1	1552.8	1542.5	1519.1	1486.1	1049.3	773.0	526.7	329.4	256.2	228.2
40°	1674.9	1675.3	1664.1	1648.2	1617.5	1149.6	820.7	518.2	299.5	233.4	213.6
42.5°	1798.6	1805.0	1799.6	1788.2	1758.8	1250.7	877.6	507.9	270.5	211.2	199.1
45°	1940.2	1948.1	1956.4	1939.6	1911.0	1384.1	952.6	494.4	239.3	192.8	189.1
47.5°	2103.7	2116.1	2123.5	2123.7	2095.2	1549.4	1074.4	486.3	211.4	180.4	184.3
50°	2448.5	2452.4	2470.1	2500.7	2478.8	1931.9	1287.2	481.4	192.6	172.8	180.9
52.5°	2945.5	2988.8	3019.1	3017.1	2987.3	2174.9	1404.4	455.7	181.5	169.8	179.2
55°	3147.8	3201.8	3258.2	3273.1	3249.9	2382.2	1515.2	430.0	176.0	172.0	179.8
57.5°	3417.5	3508.6	3585.9	3618.4	3584.8	2647.6	1661.0	416.5	174.4	177.5	183.7
60°	3732.5	3845.3	3946.7	4005.2	4005.2	2952.4	1812.3	410.9	172.2	185.8	190.4
62.5°	3934.9	4100.4	4253.7	4339.3	4336.8	3164.8	1879.4	391.9	166.9	191.6	199.5
65°	3935.7	4132.5	4327.9	4424.0	4429.0	3138.7	1768.5	346.2	157.4	192.4	208.6
67.5°	3607.6	3817.4	4045.2	4152.6	4177.4	2889.3	1530.9	284.6	141.9	184.1	211.9
70°	3047.0	3251.8	3484.2	3589.8	3633.9	2463.1	1233.1	219.3	122.0	165.9	205.1
72.5°	2400.5	2601.4	2763.2	2840.4	2874.8	1882.6	897.9	165.7	100.0	139.8	186.6
75°	1699.5	1850.3	1936.2	1953.5	1958.8	1134.9	545.5	123.3	82.4	108.7	157.6
77.5°	959.2	1023.9	1016.8	1024.5	960.7	438.1	237.6	88.3	67.9	82.7	122.2
80°	374.5	386.1	362.7	355.5	326.0	163.1	104.9	61.5	54.3	62.6	85.5
82.5°	165.1	170.4	165.5	166.7	159.5	84.1	62.8	44.5	41.4	45.7	56.8
85°	90.9	92.6	92.2	94.8	90.9	33.6	29.9	27.3	28.9	31.1	36.4
87.5°	44.3	44.7	43.3	45.5	44.1	17.0	14.7	15.5	17.0	17.4	17.4
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: P191389

CATALOG NUMBER: GLEON-AF-01-LED-E1-T2R-600

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	355.7	355.7	355.7	355.7	355.7	355.7
2.5°	335.9	334.3	334.5	334.1	333.3	333.3
5°	333.1	331.4	331.4	331.0	330.0	330.2
7.5°	335.9	333.3	332.3	330.8	329.4	329.4
10°	339.3	334.5	331.6	329.2	327.2	327.2
12.5°	341.8	334.3	329.6	326.2	324.4	324.4
15°	342.6	332.9	326.2	322.3	320.6	320.4
17.5°	339.9	327.2	319.2	314.7	312.6	311.9
20°	331.6	317.1	307.4	302.2	299.3	298.3
22.5°	319.2	302.6	291.2	285.8	282.1	281.5
25°	301.8	284.0	272.8	267.6	265.6	264.9
27.5°	281.5	264.9	255.4	252.1	250.2	250.0
30°	262.2	248.2	241.1	238.7	236.3	235.9
32.5°	244.2	235.3	232.6	229.1	223.7	223.1
35°	231.4	230.6	228.6	220.9	214.2	212.3
37.5°	223.5	231.2	221.7	206.1	201.3	200.9
40°	218.9	224.7	208.4	203.0	203.4	203.0
42.5°	208.6	214.6	208.8	206.3	208.0	208.4
45°	198.2	204.9	211.9	210.2	214.2	214.2
47.5°	192.4	202.3	211.6	211.6	217.5	219.5
50°	185.8	200.3	208.4	211.2	215.8	214.2
52.5°	185.4	196.8	203.6	208.8	210.8	209.0
55°	186.0	193.8	198.9	204.7	207.1	207.4
57.5°	186.8	192.2	195.5	198.2	205.7	205.7
60°	188.9	190.8	192.6	194.1	203.8	204.0
62.5°	192.2	189.3	188.9	190.4	202.7	201.9
65°	197.4	187.2	184.1	185.6	201.7	199.3
67.5°	204.5	184.1	178.1	179.2	200.9	195.5
70°	210.8	179.2	170.6	169.6	193.0	183.5
72.5°	211.4	173.4	160.3	157.2	167.8	158.7
75°	201.1	169.4	148.9	139.8	138.6	137.3
77.5°	181.3	167.2	135.6	121.4	118.9	119.7
80°	151.6	158.7	119.7	102.7	116.2	114.8
82.5°	113.3	140.0	101.7	90.9	90.7	80.2
85°	63.0	109.1	82.9	68.1	47.5	46.0
87.5°	17.6	60.7	58.0	38.6	26.3	27.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)