

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: P191390

Luminaire Tested: **GLEON-AF-02-LED-E1-T2R-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191390
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-02-LED-E1-T2R-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8551.9 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 66
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

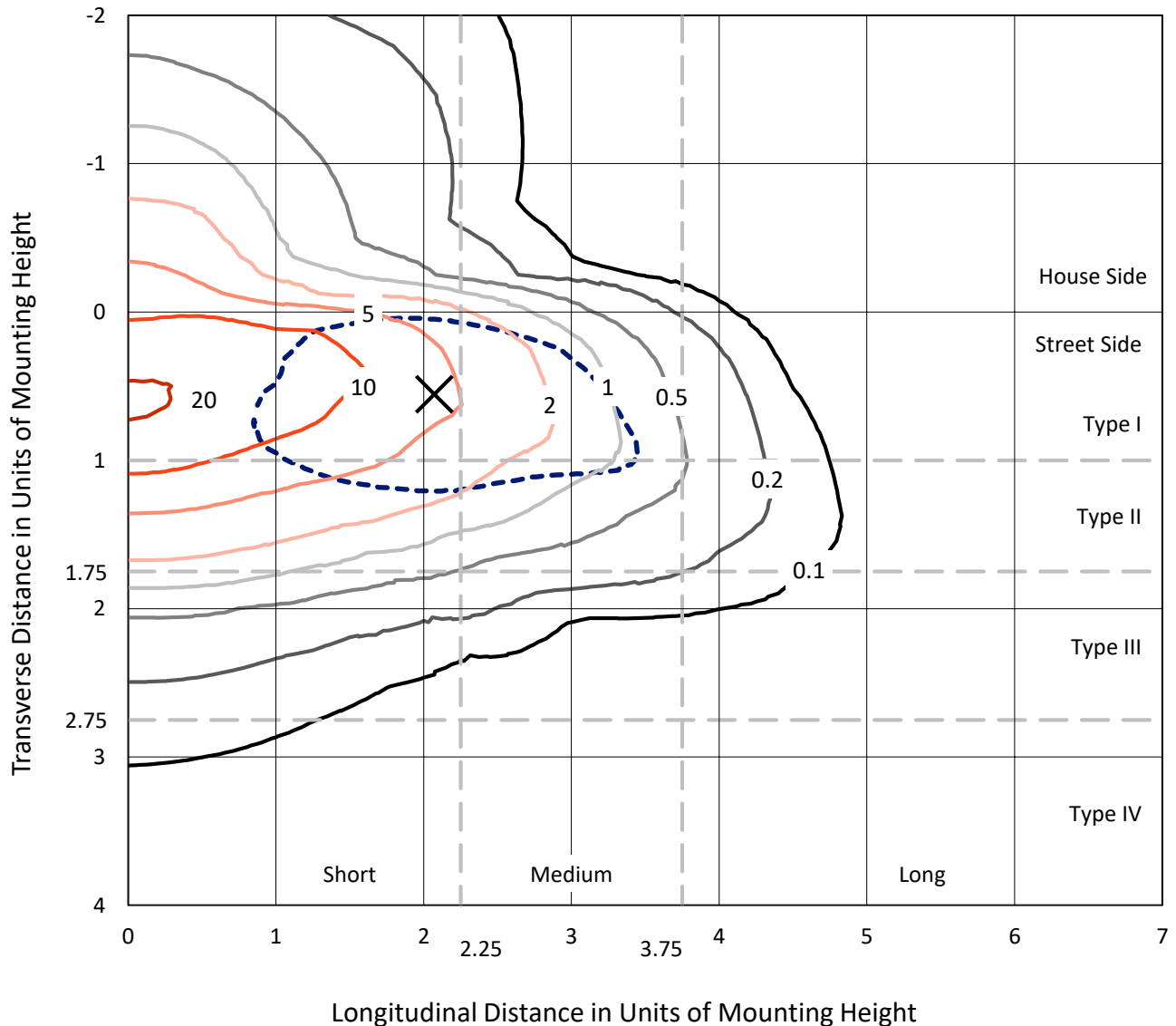


REPORT NUMBER: P191390

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

Iso-Footcandle Lines of Horizontal Illumination

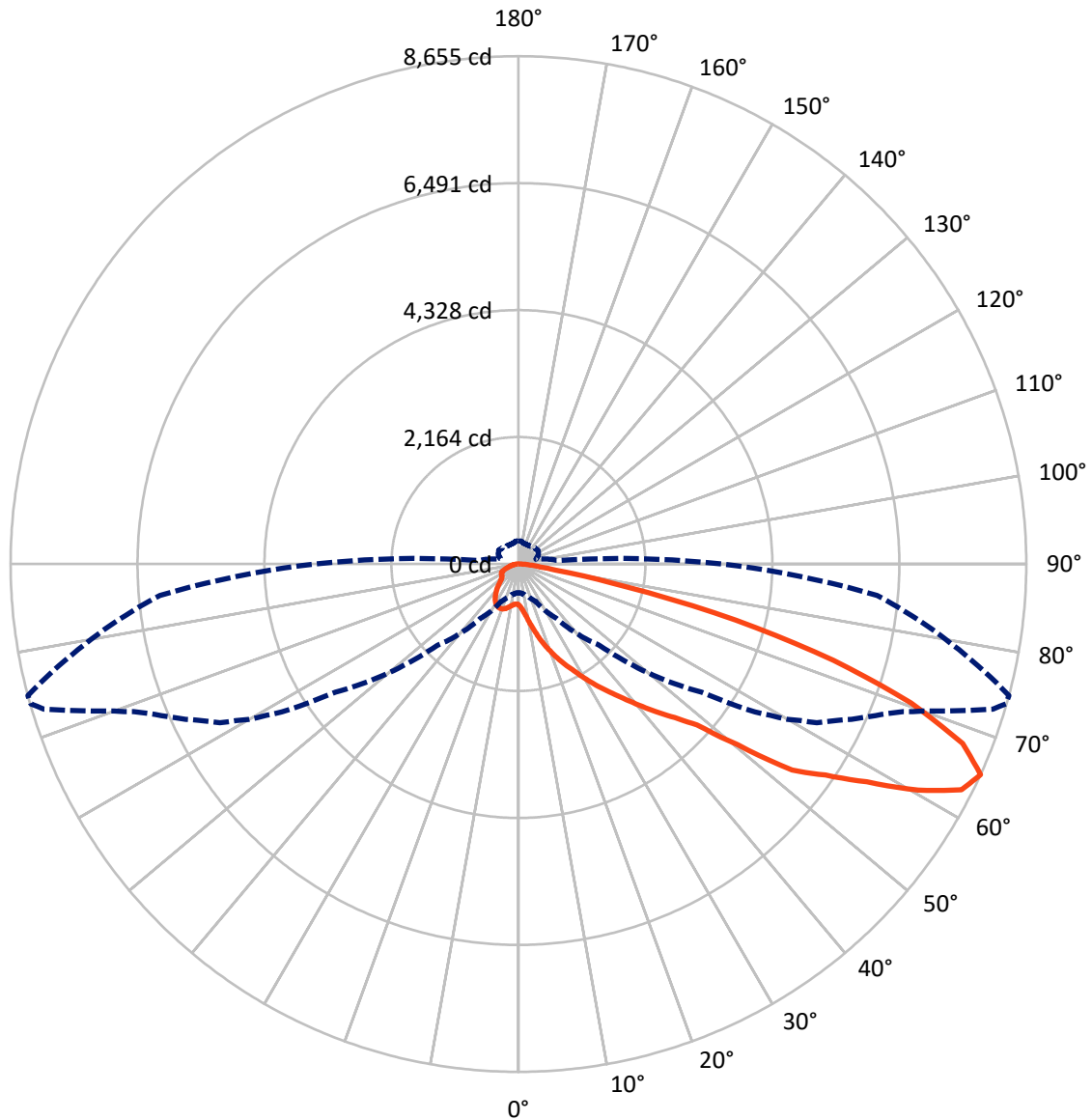
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 21.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P191390
CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P191390

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1318.5	0.0	1318.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	7233.4	0.0	7233.4
	% Fixture	84.6	0.0	84.6
Total	Lumens	8551.9	0.0	8551.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	1.0
10°-20°	335.7	3.9
20°-30°	688.6	8.1
30°-40°	1158.6	13.5
40°-50°	1600.9	18.7
50°-60°	1998.4	23.4
60°-70°	1798.3	21.0
70°-80°	753.8	8.8
80°-90°	131.7	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°	8551.9	100.0
0°-180°	8551.9	100.0

Coefficient of Utilization



REPORT NUMBER: P191390

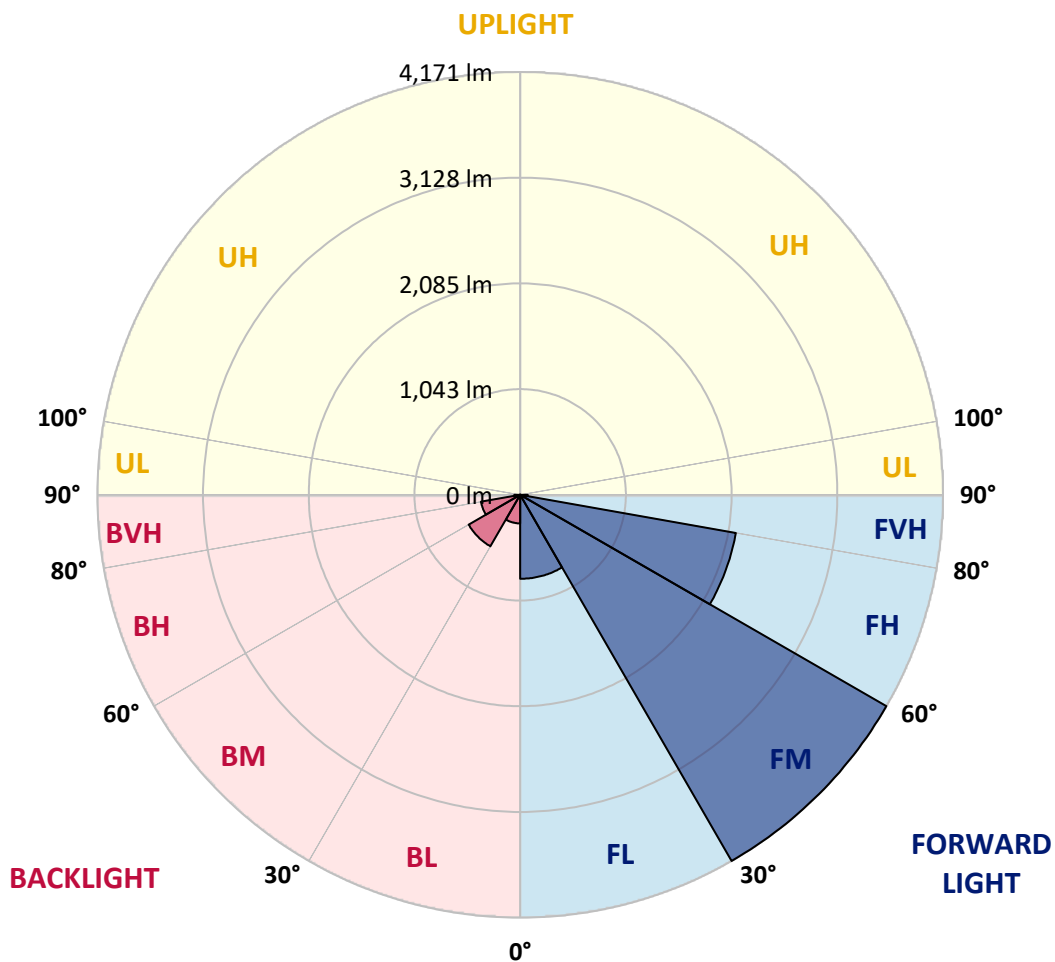
CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	828.2	9.7			
FM	(30°-60°)	4171.0	48.8			
FH	(60°-80°)	2160.2	25.3			G2/5000
FVH	(80°-90°)	74.0	0.9			G1/100
BL	(0°-30°)	282.0	3.3	B1/500		
BM	(30°-60°)	586.9	6.9	B1/1000		
BH	(60°-80°)	392.0	4.6	B1/500		G1/500
BVH	(80°-90°)	57.7	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-G2

Type II Short





REPORT NUMBER: P191390

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0
2.5°	882.4	872.7	875.1	859.0	839.1	813.2	784.5	784.1	784.5	781.6	771.1
5°	1223.7	1211.9	1207.5	1171.0	1117.6	1041.5	958.9	950.0	946.3	937.0	915.6
7.5°	1472.5	1466.1	1459.2	1431.7	1383.1	1298.1	1187.2	1168.2	1150.0	1145.5	1121.3
10°	1633.2	1631.7	1617.1	1609.8	1579.4	1505.8	1397.7	1379.4	1359.6	1352.8	1327.3
12.5°	1760.4	1760.0	1753.1	1755.1	1728.8	1675.4	1582.3	1565.7	1551.1	1530.0	1511.8
15°	1848.2	1848.6	1858.7	1870.1	1866.1	1830.0	1742.6	1735.2	1722.8	1708.1	1686.7
17.5°	1920.3	1922.3	1932.8	1953.4	1975.7	1972.9	1903.7	1897.6	1886.6	1866.8	1855.5
20°	2083.0	2090.7	2070.5	2070.5	2072.9	2083.8	2050.6	2045.7	2030.4	2019.8	2010.9
22.5°	2357.8	2366.7	2321.0	2274.4	2228.7	2195.6	2162.3	2168.3	2157.9	2150.5	2145.3
25°	2714.8	2721.8	2647.6	2569.1	2476.1	2354.6	2272.4	2268.8	2263.1	2258.7	2256.2
27.5°	3050.8	3053.6	2983.6	2868.7	2760.5	2586.1	2384.1	2379.7	2372.8	2364.3	2357.0
30°	3338.2	3337.4	3265.4	3155.6	3039.9	2846.8	2553.7	2540.0	2519.7	2496.7	2478.8
32.5°	3587.2	3586.0	3507.0	3393.2	3271.8	3105.1	2786.1	2757.8	2726.2	2681.3	2654.1
35°	3783.1	3782.3	3707.8	3589.1	3449.9	3348.3	3052.4	3017.6	2977.5	2917.3	2875.5
37.5°	3857.1	3857.1	3815.4	3734.5	3611.4	3541.8	3348.3	3306.2	3263.3	3194.9	3147.9
40°	3813.8	3814.6	3823.5	3808.5	3748.6	3695.2	3624.4	3599.3	3562.4	3500.9	3451.9
42.5°	3668.5	3672.9	3732.0	3804.5	3834.4	3825.9	3869.3	3858.0	3832.1	3784.7	3745.8
45°	3484.4	3498.1	3562.8	3699.7	3858.4	3938.9	4074.5	4075.7	4070.8	4045.4	4015.4
47.5°	3231.3	3250.7	3336.1	3521.2	3802.5	4048.6	4283.0	4293.8	4304.0	4287.4	4273.7
50°	2895.4	2918.5	3046.3	3291.7	3688.8	4162.3	4676.8	4726.1	4772.4	4766.6	4776.0
52.5°	2535.5	2562.7	2719.3	2992.5	3493.3	4188.7	4928.6	5009.1	5089.7	5155.7	5225.6
55°	2210.9	2196.3	2353.0	2640.7	3171.9	4070.0	5154.9	5252.0	5341.8	5422.8	5506.2
57.5°	1770.9	1794.8	1951.8	2236.4	2746.4	3735.3	5310.6	5452.7	5581.8	5715.8	5834.1
60°	1294.4	1318.4	1488.8	1777.8	2284.6	3227.7	5191.7	5407.0	5613.9	5819.1	5979.4
62.5°	781.6	799.4	949.6	1224.9	1761.6	2625.8	4661.4	4943.9	5248.4	5493.7	5739.4
65°	486.5	496.6	552.1	703.5	1131.4	1960.4	3808.5	4116.6	4444.4	4755.7	5011.1
67.5°	398.3	401.9	412.0	444.5	621.3	1278.3	2834.7	3107.5	3403.4	3704.5	3988.7
70°	358.2	355.8	355.8	357.8	398.3	687.3	1855.9	2033.6	2280.2	2542.0	2801.9
72.5°	323.5	321.0	316.5	310.5	325.0	419.3	959.3	1093.3	1271.0	1503.7	1752.7
75°	290.6	287.3	282.1	274.5	284.6	316.5	460.6	516.9	603.5	727.4	866.2
77.5°	256.7	252.6	247.8	242.0	255.0	246.1	270.0	290.2	323.5	363.0	415.3
80°	218.2	214.5	212.9	210.1	225.5	187.4	190.7	203.2	222.6	244.1	268.3
82.5°	170.8	170.8	177.3	178.5	195.5	134.8	142.5	153.4	163.6	174.8	186.2
85°	112.5	113.3	135.2	143.7	154.3	90.6	106.9	110.5	118.6	125.1	129.9
87.5°	35.2	38.1	82.6	91.5	88.7	51.5	65.6	67.2	72.8	77.3	81.3
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: P191390

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0
2.5°	771.1	766.3	761.8	761.4	758.1	753.7	755.3	748.4	748.8	745.2	741.1
5°	906.7	903.5	887.3	882.8	870.6	863.0	861.7	845.6	843.5	834.2	824.1
7.5°	1101.8	1091.3	1068.6	1057.7	1037.1	1021.6	1014.4	992.9	982.4	958.1	947.2
10°	1306.2	1292.9	1264.9	1249.5	1229.7	1205.0	1191.6	1160.5	1148.4	1126.1	1099.4
12.5°	1495.7	1482.3	1453.5	1441.8	1415.5	1389.2	1374.6	1339.5	1323.6	1288.0	1266.9
15°	1670.9	1657.6	1632.4	1620.4	1594.1	1572.6	1553.1	1518.4	1499.7	1466.5	1439.0
17.5°	1840.9	1826.8	1804.9	1793.9	1768.5	1746.6	1725.6	1692.8	1673.8	1640.6	1615.9
20°	1998.7	1988.3	1972.5	1957.9	1932.5	1912.6	1887.4	1859.1	1831.6	1807.3	1783.8
22.5°	2136.4	2132.3	2115.4	2108.9	2087.0	2070.0	2048.2	2020.2	2000.4	1969.7	1947.8
25°	2255.0	2253.8	2245.7	2243.6	2228.3	2212.1	2207.2	2184.2	2166.0	2138.9	2116.2
27.5°	2357.0	2358.2	2356.2	2361.9	2357.8	2350.5	2350.9	2343.3	2332.7	2310.0	2290.2
30°	2470.3	2463.9	2467.6	2475.6	2478.1	2478.8	2492.2	2496.7	2495.9	2480.9	2471.1
32.5°	2630.6	2615.3	2601.1	2599.9	2608.0	2611.2	2633.9	2645.7	2655.8	2659.4	2661.0
35°	2835.1	2804.3	2774.8	2759.0	2745.2	2748.9	2765.0	2784.1	2806.4	2821.7	2839.9
37.5°	3092.5	3054.8	3002.7	2965.4	2956.1	2935.9	2946.4	2961.3	2983.2	3007.1	3038.7
40°	3404.6	3347.5	3288.8	3239.5	3212.7	3175.4	3175.0	3172.3	3185.6	3207.9	3252.4
42.5°	3704.9	3654.3	3592.0	3540.2	3505.3	3455.6	3445.5	3419.1	3425.2	3444.7	3488.0
45°	3986.2	3944.6	3906.5	3846.6	3817.0	3763.2	3746.3	3715.1	3697.7	3706.6	3749.8
47.5°	4258.6	4231.9	4192.3	4153.4	4130.8	4082.6	4060.7	4038.5	4016.2	4015.4	4060.7
50°	4789.8	4775.5	4728.6	4688.2	4699.0	4640.0	4643.6	4583.7	4610.8	4614.0	4709.2
52.5°	5288.9	5338.2	5373.0	5415.5	5443.0	5448.3	5466.5	5493.7	5526.4	5591.1	5679.4
55°	5574.6	5636.6	5672.6	5704.9	5758.4	5769.6	5800.0	5836.0	5864.8	5937.7	6012.6
57.5°	5914.2	6029.2	6085.0	6136.5	6208.5	6236.0	6286.6	6325.8	6363.1	6449.3	6540.0
60°	6123.5	6263.5	6377.3	6458.6	6548.9	6613.7	6690.2	6751.7	6839.1	6942.4	7077.5
62.5°	5957.2	6162.8	6313.8	6453.4	6576.0	6699.9	6809.6	6924.6	7057.3	7213.5	7423.2
65°	5294.5	5503.8	5762.4	5907.3	6069.7	6260.7	6427.5	6613.7	6794.6	7022.0	7332.1
67.5°	4262.3	4505.6	4796.2	4942.3	5129.0	5342.3	5529.3	5756.8	5968.0	6243.7	6627.0
70°	3072.2	3386.8	3631.3	3783.9	4001.6	4221.4	4402.0	4666.7	4841.5	5124.1	5520.4
72.5°	1945.3	2193.5	2493.0	2685.2	2878.8	3101.4	3286.0	3514.2	3677.4	3934.9	4293.8
75°	1046.0	1228.9	1492.0	1674.6	1881.8	2072.1	2288.2	2441.2	2561.9	2765.4	3056.9
77.5°	490.2	601.5	734.7	875.1	1015.6	1162.1	1304.6	1428.4	1480.3	1596.8	1768.9
80°	297.5	333.6	372.4	415.7	474.4	521.8	584.5	629.8	633.1	669.9	722.5
82.5°	198.8	212.1	223.8	234.8	249.7	261.5	274.9	290.6	297.1	305.7	322.6
85°	135.6	142.1	144.5	151.4	149.8	153.9	159.1	164.4	167.2	166.7	174.4
87.5°	83.4	86.6	88.3	89.8	88.7	87.1	89.4	92.3	93.1	90.6	91.5
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: P191390

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0	695.0
2.5°	741.9	738.3	734.7	732.2	731.4	710.0	700.6	694.6	681.7	671.2	662.7
5°	818.5	810.8	804.7	797.4	793.4	739.1	719.3	705.5	682.8	669.5	657.3
7.5°	941.5	920.0	907.6	893.3	881.2	783.3	750.4	729.0	697.4	679.6	665.8
10°	1081.2	1058.9	1039.1	1017.2	998.2	841.9	794.2	761.0	719.3	696.2	678.0
12.5°	1237.0	1215.2	1190.0	1162.1	1137.8	916.5	850.1	802.7	745.6	714.8	689.4
15°	1421.2	1382.7	1352.3	1320.0	1291.7	1005.5	915.2	849.7	773.6	731.8	697.9
17.5°	1592.4	1551.9	1510.6	1482.3	1449.5	1105.4	980.8	897.4	796.6	742.8	699.5
20°	1759.6	1715.5	1679.8	1641.7	1607.4	1209.0	1050.8	939.5	811.6	743.2	689.4
22.5°	1906.9	1879.4	1839.7	1798.4	1763.6	1312.7	1116.3	975.1	817.2	733.9	671.6
25°	2074.4	2045.4	1996.8	1961.9	1923.1	1418.3	1180.7	1002.6	814.0	716.5	644.0
27.5°	2253.4	2221.0	2171.2	2134.8	2087.8	1528.1	1239.8	1022.4	801.9	688.1	607.1
30°	2440.0	2410.5	2361.5	2324.7	2277.3	1644.2	1305.8	1035.8	777.5	648.9	564.3
32.5°	2640.3	2615.7	2567.1	2528.6	2478.1	1770.1	1367.4	1039.8	740.7	602.3	518.9
35°	2830.6	2813.6	2772.7	2736.7	2684.1	1889.1	1432.5	1037.9	697.0	551.3	477.6
37.5°	3044.7	3034.6	3014.3	2968.6	2904.3	2050.6	1510.6	1029.4	643.6	500.7	446.1
40°	3273.0	3273.9	3252.0	3220.9	3160.9	2246.5	1603.7	1012.7	585.3	456.1	417.4
42.5°	3514.7	3527.2	3516.7	3494.4	3437.0	2444.0	1715.1	992.5	528.7	412.9	389.0
45°	3791.6	3806.9	3823.1	3790.3	3734.5	2704.7	1861.6	966.2	467.5	376.9	369.6
47.5°	4110.9	4135.2	4149.8	4150.2	4094.4	3027.7	2099.6	950.4	413.3	352.6	360.3
50°	4784.9	4792.5	4827.0	4886.8	4844.0	3775.4	2515.3	940.7	376.4	337.6	353.3
52.5°	5755.9	5840.5	5900.1	5896.0	5837.7	4250.2	2744.4	890.5	354.6	331.9	350.2
55°	6151.4	6257.1	6367.2	6396.3	6351.0	4655.3	2960.9	840.4	344.0	335.9	351.4
57.5°	6678.4	6856.5	7007.5	7071.0	7005.5	5173.9	3245.9	814.0	340.8	346.9	359.1
60°	7294.0	7514.3	7712.6	7826.8	7826.8	5769.6	3541.4	803.1	336.3	363.0	371.9
62.5°	7689.5	8013.0	8312.5	8479.6	8474.8	6184.6	3672.5	765.9	326.2	374.4	389.8
65°	7691.2	8075.7	8457.5	8645.3	8655.0	6133.6	3456.0	676.4	307.6	376.0	407.6
67.5°	7050.0	7460.1	7904.9	8115.0	8163.6	5646.3	2991.7	556.2	277.3	359.9	414.1
70°	5954.3	6354.6	6808.8	7015.2	7101.4	4813.2	2409.7	428.6	238.4	324.3	400.7
72.5°	4690.9	5083.6	5399.7	5550.7	5617.9	3679.0	1754.7	323.9	195.5	273.2	364.7
75°	3321.2	3615.9	3783.9	3817.4	3828.0	2217.8	1066.2	240.8	161.1	212.5	308.0
77.5°	1874.6	2000.8	1987.1	2002.0	1877.3	856.1	464.3	172.5	132.8	161.5	238.9
80°	731.8	754.5	708.8	694.6	637.1	318.5	204.8	120.2	106.1	122.2	167.2
82.5°	322.6	333.2	323.5	325.8	311.7	164.4	122.7	87.1	80.9	89.4	110.9
85°	177.7	181.0	180.1	185.4	177.7	65.6	58.3	53.4	56.7	60.8	71.2
87.5°	86.6	87.5	84.6	89.1	86.2	33.1	28.7	30.4	33.1	34.0	34.0
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: P191390

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-600

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	695.0	695.0	695.0	695.0	695.0	695.0
2.5°	656.5	653.4	653.7	652.9	651.3	651.3
5°	650.9	647.6	647.6	646.8	644.8	645.2
7.5°	656.5	651.3	649.3	646.4	643.6	643.6
10°	663.0	653.7	648.0	643.2	639.5	639.5
12.5°	667.9	653.4	644.0	637.5	633.9	633.9
15°	669.5	650.5	637.5	629.8	626.6	626.1
17.5°	664.2	639.5	623.8	614.9	610.8	609.6
20°	648.0	619.7	600.7	590.5	584.9	582.9
22.5°	623.8	591.4	569.1	558.6	551.3	550.1
25°	589.7	555.0	533.1	522.9	518.9	517.7
27.5°	550.1	517.7	499.1	492.7	489.0	488.6
30°	512.5	484.9	471.2	466.3	461.9	461.0
32.5°	477.2	459.8	454.6	447.6	437.2	436.0
35°	452.1	450.5	446.8	431.5	418.5	414.9
37.5°	436.8	451.7	433.1	402.7	393.4	392.6
40°	427.9	439.2	407.2	396.7	397.5	396.7
42.5°	407.6	419.3	408.1	403.1	406.4	407.2
45°	387.4	400.3	414.1	410.8	418.5	418.5
47.5°	376.0	395.5	413.7	413.7	425.0	429.0
50°	363.0	391.4	407.2	412.9	421.8	418.5
52.5°	362.2	384.5	397.9	408.1	412.0	408.5
55°	363.5	378.9	388.6	399.9	404.8	405.2
57.5°	365.1	375.6	382.1	387.4	401.9	401.9
60°	369.2	372.8	376.4	379.3	398.3	398.7
62.5°	375.6	370.0	369.2	371.9	396.3	394.7
65°	385.8	365.9	359.9	362.6	394.2	389.4
67.5°	399.6	359.9	348.1	350.2	392.6	382.1
70°	412.0	350.2	333.6	331.5	377.3	358.6
72.5°	413.3	338.8	313.3	307.2	327.9	310.1
75°	393.0	331.1	291.0	273.2	270.8	268.3
77.5°	354.1	326.6	265.1	237.2	232.3	233.9
80°	296.2	310.1	233.9	200.8	227.1	224.2
82.5°	221.4	273.6	198.8	177.7	177.3	156.6
85°	123.1	213.3	161.9	133.2	92.7	89.8
87.5°	34.4	118.6	113.3	75.3	51.5	53.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)