

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: P191400

Luminaire Tested: **GLEON-AF-02-LED-E1-T2R-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191400
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-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10486.3 lumens
Efficiency: N/A
Efficacy: 123.4 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): 85
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

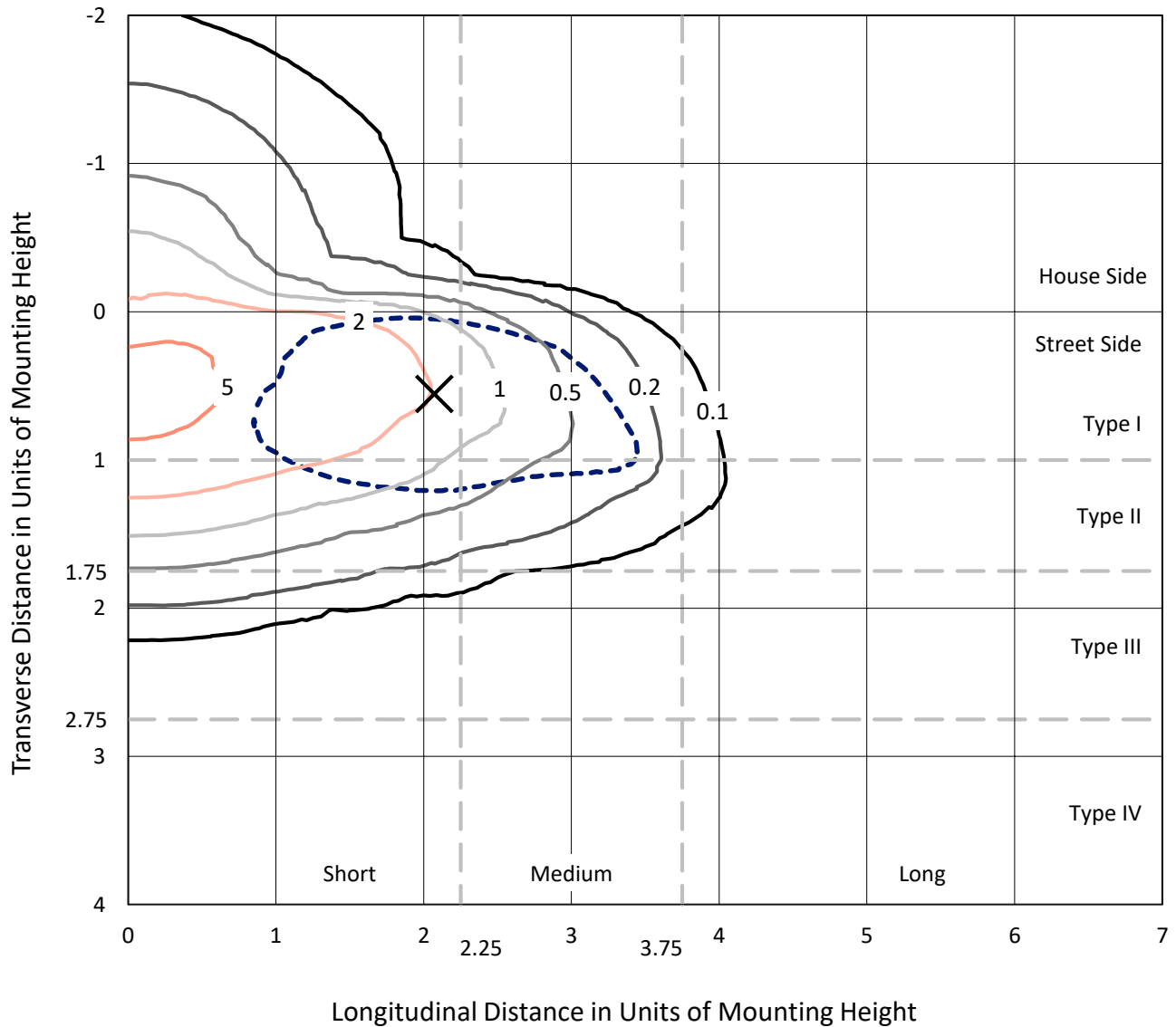


REPORT NUMBER: P191400

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

Iso-Footcandle Lines of Horizontal Illumination

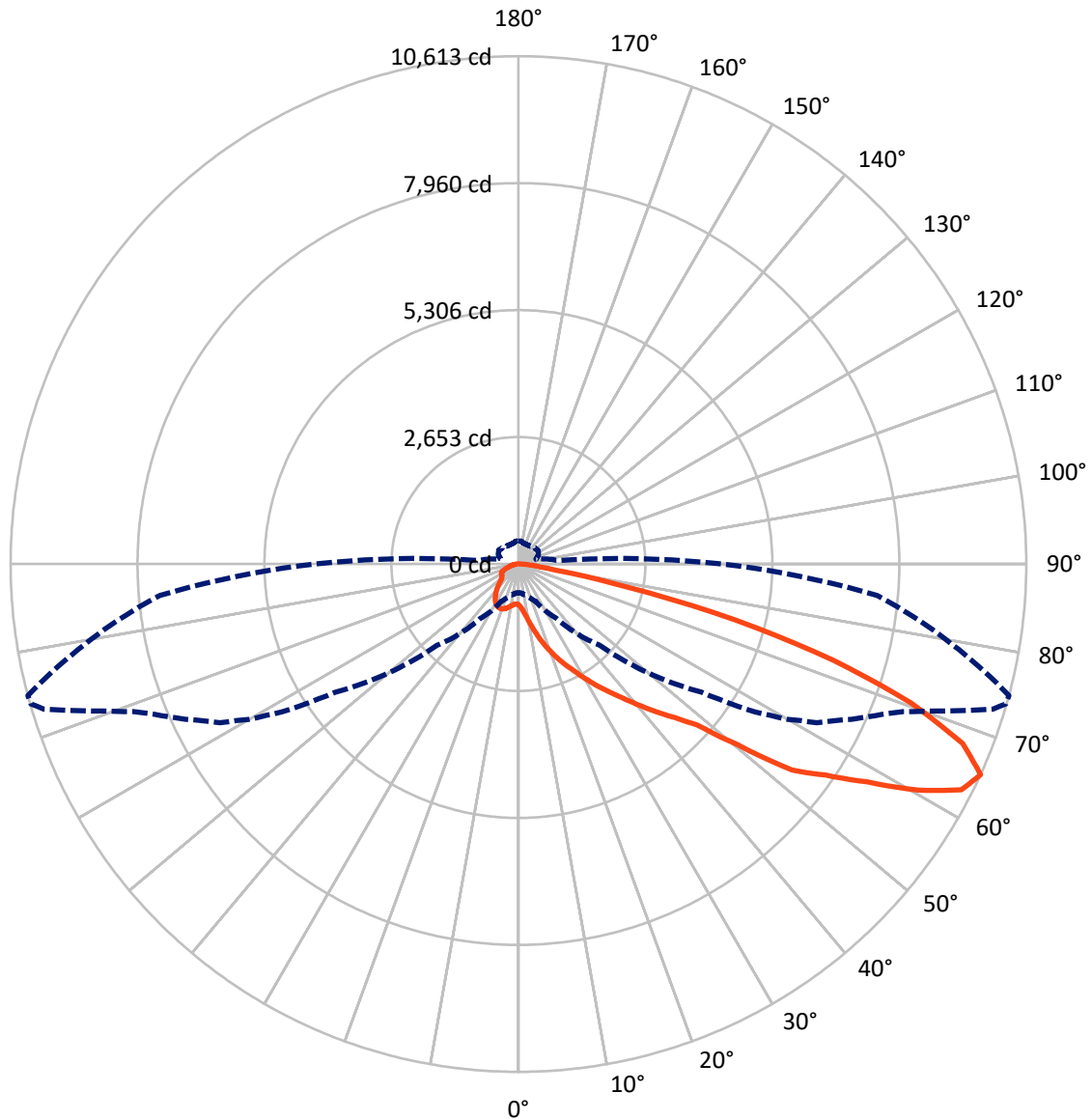
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P191400
CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P191400

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1616.7	0.0	1616.7
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	8869.5	0.0	8869.5
	% Fixture	84.6	0.0	84.6
Total	Lumens	10486.3	0.0	10486.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	1.0
10°-20°	411.6	3.9
20°-30°	844.4	8.1
30°-40°	1420.7	13.5
40°-50°	1963.0	18.7
50°-60°	2450.4	23.4
60°-70°	2205.1	21.0
70°-80°	924.3	8.8
80°-90°	161.5	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°	10486.3	100.0
0°-180°	10486.3	100.0



REPORT NUMBER: P191400

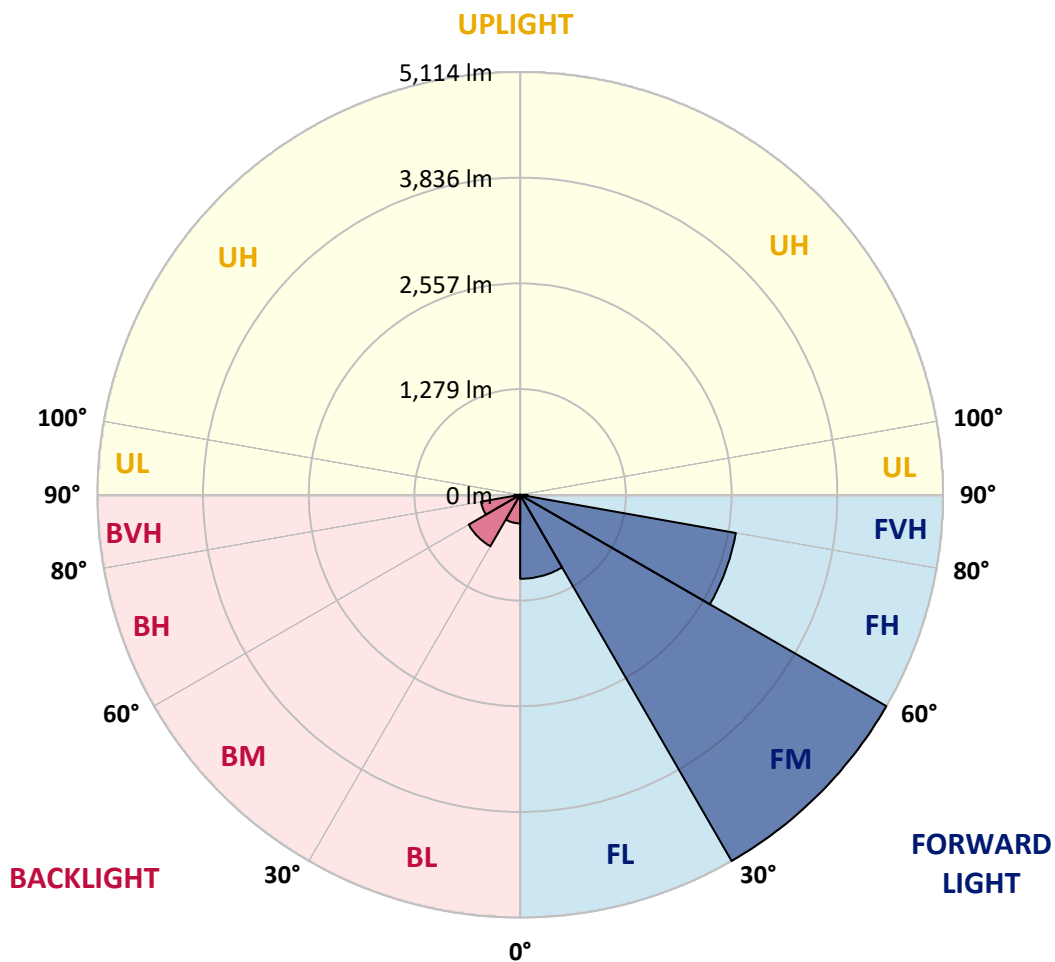
CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1015.6	9.7			
FM	(30°-60°)	5114.4	48.8			
FH	(60°-80°)	2648.8	25.3			G2/5000
FVH	(80°-90°)	90.8	0.9			G1/100
BL	(0°-30°)	345.8	3.3	B1/500		
BM	(30°-60°)	719.6	6.9	B1/1000		
BH	(60°-80°)	480.6	4.6	B1/500		G1/500
BVH	(80°-90°)	70.7	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: P191400

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2
2.5°	1082.0	1070.1	1073.1	1053.2	1028.9	997.2	961.9	961.4	961.9	958.4	945.5
5°	1500.5	1486.0	1480.6	1435.9	1370.3	1277.1	1175.8	1164.9	1160.4	1149.0	1122.7
7.5°	1805.7	1797.7	1789.2	1755.6	1696.0	1591.7	1455.8	1432.4	1410.1	1404.6	1374.8
10°	2002.7	2000.7	1982.9	1973.9	1936.8	1846.3	1713.9	1691.6	1667.2	1658.7	1627.5
12.5°	2158.5	2158.1	2149.6	2152.1	2119.9	2054.3	1940.2	1919.9	1902.0	1876.2	1853.8
15°	2266.2	2266.8	2279.1	2293.0	2288.1	2243.9	2136.7	2127.8	2112.4	2094.5	2068.2
17.5°	2354.6	2357.1	2370.0	2395.3	2422.7	2419.2	2334.3	2326.8	2313.4	2289.1	2275.2
20°	2554.1	2563.6	2538.8	2538.8	2541.7	2555.1	2514.4	2508.5	2489.7	2476.8	2465.8
22.5°	2891.2	2902.1	2846.0	2788.9	2732.8	2692.1	2651.4	2658.9	2646.0	2637.1	2630.6
25°	3328.9	3337.4	3246.5	3150.3	3036.1	2887.2	2786.4	2782.0	2775.1	2769.5	2766.6
27.5°	3740.9	3744.4	3658.5	3517.5	3385.0	3171.0	2923.4	2918.0	2909.5	2899.1	2890.1
30°	4093.3	4092.3	4003.9	3869.4	3727.5	3490.7	3131.4	3114.5	3089.7	3061.4	3039.6
32.5°	4398.5	4397.1	4300.3	4160.8	4011.9	3807.4	3416.2	3381.6	3342.8	3287.8	3254.5
35°	4638.8	4637.8	4546.4	4401.0	4230.3	4105.7	3742.9	3700.2	3651.0	3577.1	3526.0
37.5°	4729.6	4729.6	4678.5	4579.2	4428.4	4342.9	4105.7	4054.1	4001.5	3917.6	3860.0
40°	4676.5	4677.4	4688.4	4670.1	4596.5	4531.1	4444.2	4413.4	4368.3	4292.8	4232.8
42.5°	4498.3	4503.7	4576.3	4665.1	4701.8	4691.4	4744.4	4730.5	4698.8	4640.7	4593.0
45°	4272.5	4289.3	4368.7	4536.5	4731.0	4829.9	4996.1	4997.6	4991.7	4960.4	4923.7
47.5°	3962.3	3986.0	4090.8	4317.7	4662.6	4964.4	5251.7	5265.1	5277.5	5257.1	5240.4
50°	3550.3	3578.6	3735.4	4036.3	4523.1	5103.8	5734.7	5795.2	5851.8	5844.8	5856.3
52.5°	3109.1	3142.3	3334.4	3669.4	4283.4	5136.1	6043.4	6142.2	6240.9	6321.8	6407.7
55°	2711.0	2693.1	2885.2	3238.2	3889.3	4990.7	6320.8	6440.0	6550.2	6649.4	6751.7
57.5°	2171.5	2200.8	2393.3	2742.2	3367.7	4580.2	6511.9	6686.1	6844.5	7008.7	7153.7
60°	1587.3	1616.6	1825.6	2179.9	2801.4	3957.8	6366.0	6630.1	6883.7	7135.3	7331.9
62.5°	958.4	980.3	1164.4	1501.9	2160.1	3219.7	5715.8	6062.2	6435.5	6736.2	7037.6
65°	596.6	609.0	677.0	862.7	1387.2	2403.7	4670.1	5047.8	5449.8	5831.4	6144.7
67.5°	488.4	492.9	505.2	545.0	761.9	1567.5	3475.9	3810.4	4173.2	4542.5	4890.9
70°	439.3	436.3	436.3	438.7	488.4	842.8	2275.7	2493.5	2795.8	3117.0	3435.7
72.5°	396.6	393.6	388.1	380.6	398.5	514.2	1176.3	1340.6	1558.5	1843.9	2149.1
75°	356.4	352.4	346.0	336.6	348.9	388.1	564.9	633.8	740.0	891.9	1062.1
77.5°	314.7	309.7	303.7	296.9	312.7	301.8	331.0	355.9	396.6	445.2	509.2
80°	267.5	263.1	261.1	257.6	276.5	229.8	233.7	249.2	273.0	299.3	329.1
82.5°	209.5	209.5	217.4	218.9	239.8	165.3	174.7	188.1	200.5	214.4	228.3
85°	138.0	139.0	165.8	176.2	189.1	111.2	131.0	135.5	145.5	153.3	159.3
87.5°	43.2	46.6	101.3	112.2	108.7	63.0	80.4	82.3	89.3	94.8	99.7
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: P191400

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2
2.5°	945.5	939.6	934.1	933.6	929.7	924.1	926.2	917.7	918.2	913.8	908.8
5°	1111.7	1107.9	1088.0	1082.5	1067.7	1058.1	1056.7	1036.9	1034.4	1023.0	1010.6
7.5°	1351.0	1338.1	1310.3	1296.9	1271.6	1252.7	1243.8	1217.5	1204.6	1174.9	1161.5
10°	1601.6	1585.3	1551.1	1532.2	1507.8	1477.6	1461.2	1423.0	1408.1	1380.8	1348.0
12.5°	1833.9	1817.6	1782.4	1768.0	1735.6	1703.4	1685.5	1642.3	1623.0	1579.3	1553.6
15°	2048.9	2032.5	2001.7	1986.9	1954.6	1928.3	1904.4	1861.8	1839.0	1798.2	1764.5
17.5°	2257.3	2240.0	2213.2	2199.8	2168.5	2141.6	2115.9	2075.7	2052.3	2011.6	1981.4
20°	2450.9	2438.0	2418.7	2400.8	2369.5	2345.2	2314.4	2279.6	2245.9	2216.1	2187.4
22.5°	2619.7	2614.7	2593.9	2585.9	2559.1	2538.2	2511.4	2477.2	2452.9	2415.2	2388.4
25°	2765.1	2763.6	2753.7	2751.2	2732.3	2712.5	2706.5	2678.2	2655.9	2622.6	2594.8
27.5°	2890.1	2891.7	2889.2	2896.1	2891.2	2882.3	2882.7	2873.3	2860.4	2832.6	2808.3
30°	3029.2	3021.2	3025.7	3035.6	3038.6	3039.6	3056.0	3061.4	3060.4	3042.1	3030.2
32.5°	3225.7	3206.8	3189.5	3187.9	3197.8	3201.8	3229.7	3244.1	3256.5	3261.0	3262.9
35°	3476.3	3438.6	3402.4	3383.0	3366.1	3370.6	3390.5	3413.8	3441.1	3459.9	3482.3
37.5°	3792.0	3745.8	3681.8	3636.2	3624.7	3600.0	3612.9	3631.2	3658.0	3687.3	3726.0
40°	4174.7	4104.7	4032.8	3972.2	3939.4	3893.8	3893.2	3889.8	3906.1	3933.5	3988.1
42.5°	4542.9	4480.9	4404.5	4341.0	4298.2	4237.3	4224.8	4192.6	4200.0	4223.9	4277.0
45°	4888.0	4836.8	4790.2	4716.7	4680.4	4614.4	4593.6	4555.4	4534.0	4545.0	4598.1
47.5°	5222.0	5189.2	5140.5	5092.9	5065.1	5006.0	4979.2	4951.9	4924.7	4923.7	4979.2
50°	5873.2	5855.8	5798.2	5748.6	5762.0	5689.6	5693.9	5620.5	5653.7	5657.7	5774.4
52.5°	6485.1	6545.7	6588.4	6640.5	6674.2	6680.7	6703.0	6736.2	6776.4	6855.9	6964.1
55°	6835.6	6911.5	6955.7	6995.3	7060.9	7074.8	7112.0	7156.2	7191.4	7280.8	7372.6
57.5°	7252.0	7393.0	7461.4	7524.4	7612.8	7646.6	7708.7	7756.7	7802.5	7908.1	8019.3
60°	7508.6	7680.3	7819.7	7919.6	8030.3	8109.6	8203.5	8278.8	8386.2	8512.7	8678.4
62.5°	7304.6	7556.7	7741.9	7913.1	8063.5	8215.3	8349.8	8490.8	8653.7	8845.3	9102.3
65°	6492.1	6748.7	7065.8	7243.5	7442.6	7676.8	7881.3	8109.6	8331.5	8610.5	8990.6
67.5°	5226.5	5524.8	5881.0	6060.3	6289.1	6550.7	6779.9	7058.9	7318.0	7656.0	8126.0
70°	3767.2	4152.9	4452.6	4639.8	4906.8	5176.3	5397.7	5722.3	5936.7	6283.2	6769.1
72.5°	2385.4	2689.6	3057.0	3292.7	3529.9	3802.9	4029.3	4309.2	4509.2	4824.8	5265.1
75°	1282.6	1506.9	1829.5	2053.4	2307.5	2540.7	2805.7	2993.4	3141.3	3391.0	3748.3
77.5°	601.1	737.5	900.8	1073.1	1245.3	1425.0	1599.7	1751.6	1815.1	1958.0	2169.0
80°	364.8	409.0	456.6	509.7	581.8	639.8	716.7	772.3	776.3	821.4	886.0
82.5°	243.7	260.0	274.5	287.9	306.3	320.6	337.1	356.4	364.3	374.7	395.6
85°	166.2	174.2	177.2	185.7	183.6	188.6	195.1	201.5	205.0	204.5	213.9
87.5°	102.3	106.2	108.2	110.2	108.7	106.7	109.7	113.1	114.2	111.2	112.2
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: P191400

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2
2.5°	909.8	905.3	900.8	897.8	896.9	870.5	859.2	851.7	835.9	823.0	812.5
5°	1003.6	994.2	986.7	977.7	972.8	906.3	882.0	865.1	837.3	820.9	806.1
7.5°	1154.5	1128.2	1112.8	1095.4	1080.5	960.4	920.2	893.9	855.2	833.4	816.5
10°	1325.7	1298.4	1274.1	1247.3	1224.0	1032.4	973.8	933.1	882.0	853.7	831.4
12.5°	1516.8	1490.0	1459.2	1425.0	1395.2	1123.7	1042.3	984.3	914.2	876.6	845.3
15°	1742.6	1695.4	1658.3	1618.5	1583.8	1232.9	1122.2	1041.8	948.5	897.3	855.7
17.5°	1952.6	1903.0	1852.4	1817.6	1777.4	1355.5	1202.6	1100.4	976.8	910.7	857.6
20°	2157.6	2103.5	2059.8	2013.2	1970.9	1482.6	1288.5	1152.0	995.1	911.2	845.3
22.5°	2338.3	2304.5	2255.8	2205.2	2162.5	1609.6	1368.9	1195.6	1002.1	899.9	823.4
25°	2543.8	2508.0	2448.4	2405.8	2358.1	1739.1	1447.8	1229.4	998.1	878.5	789.7
27.5°	2763.1	2723.4	2662.3	2617.6	2560.1	1873.6	1520.3	1253.7	983.3	843.7	744.5
30°	2991.9	2955.7	2895.7	2850.5	2792.3	2016.1	1601.2	1270.1	953.5	795.7	691.9
32.5°	3237.6	3207.4	3147.7	3100.6	3038.6	2170.5	1676.6	1275.1	908.3	738.6	636.3
35°	3470.9	3450.0	3399.9	3355.7	3291.2	2316.4	1756.5	1272.7	854.7	676.0	585.6
37.5°	3733.5	3721.1	3696.2	3640.2	3561.2	2514.4	1852.4	1262.2	789.2	614.0	547.0
40°	4013.3	4014.4	3987.6	3949.3	3875.9	2754.7	1966.5	1241.9	717.7	559.3	511.7
42.5°	4309.7	4325.0	4312.1	4284.8	4214.4	2996.8	2103.0	1217.0	648.2	506.3	477.0
45°	4649.2	4668.0	4687.9	4647.7	4579.2	3316.5	2282.6	1184.8	573.3	462.1	453.2
47.5°	5040.8	5070.6	5088.5	5089.0	5020.4	3712.6	2574.5	1165.4	506.8	432.3	441.7
50°	5867.2	5876.6	5918.8	5992.2	5939.7	4629.4	3084.2	1153.5	461.6	414.0	433.3
52.5°	7058.0	7161.7	7234.6	7229.6	7158.2	5211.5	3365.2	1091.9	434.8	407.0	429.3
55°	7542.8	7672.3	7807.4	7843.1	7787.5	5708.4	3630.7	1030.4	421.9	411.9	430.9
57.5°	8189.0	8407.4	8592.6	8670.5	8590.1	6344.1	3980.1	998.1	417.9	425.3	440.3
60°	8944.0	9214.0	9457.2	9597.1	9597.1	7074.8	4342.4	984.7	412.5	445.2	456.1
62.5°	9428.9	9825.4	10192.8	10397.8	10391.7	7583.5	4503.2	939.1	400.1	459.1	477.9
65°	9430.9	9902.4	10370.5	10600.7	10612.7	7520.9	4237.7	829.4	377.3	461.1	499.8
67.5°	8644.7	9147.5	9693.0	9950.5	10010.1	6923.4	3668.4	682.0	340.0	441.2	507.8
70°	7301.1	7792.0	8348.9	8602.0	8707.8	5901.9	2954.7	525.6	292.4	397.5	491.3
72.5°	5752.1	6233.5	6621.2	6806.3	6888.7	4511.2	2151.6	397.1	239.8	335.0	447.2
75°	4072.5	4433.8	4639.8	4680.9	4693.8	2719.4	1307.3	295.3	197.5	260.5	377.7
77.5°	2298.6	2453.3	2436.6	2454.9	2302.0	1049.8	569.3	211.4	162.8	198.0	292.9
80°	897.3	925.2	869.1	851.7	781.2	390.7	251.1	147.4	130.0	149.9	205.0
82.5°	395.6	408.5	396.6	399.6	382.2	201.5	150.4	106.7	99.2	109.7	136.0
85°	217.9	221.9	220.9	227.3	217.9	80.4	71.5	65.5	69.5	74.5	87.4
87.5°	106.2	107.2	103.7	109.1	105.7	40.7	35.2	37.2	40.7	41.7	41.7
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: P191400

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-800

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	852.2	852.2	852.2	852.2	852.2	852.2
2.5°	805.1	801.1	801.6	800.6	798.6	798.6
5°	798.1	794.1	794.1	793.2	790.6	791.2
7.5°	805.1	798.6	796.2	792.7	789.2	789.2
10°	813.0	801.6	794.6	788.7	784.2	784.2
12.5°	819.0	801.1	789.7	781.7	777.2	777.2
15°	820.9	797.6	781.7	772.3	768.3	767.8
17.5°	814.5	784.2	764.9	753.9	749.0	747.5
20°	794.6	759.8	736.5	724.1	717.2	714.7
22.5°	764.9	725.2	697.9	685.0	676.0	674.5
25°	723.1	680.5	653.7	641.3	636.3	634.8
27.5°	674.5	634.8	612.0	604.1	599.6	599.0
30°	628.4	594.6	577.8	571.8	566.3	565.3
32.5°	585.2	563.9	557.4	548.9	536.0	534.6
35°	554.4	552.4	548.0	529.1	513.2	508.7
37.5°	535.5	553.9	531.1	493.9	482.4	481.4
40°	524.7	538.5	499.3	486.4	487.4	486.4
42.5°	499.8	514.2	500.3	494.4	498.3	499.3
45°	475.0	490.9	507.8	503.8	513.2	513.2
47.5°	461.1	484.9	507.3	507.3	521.2	526.1
50°	445.2	480.0	499.3	506.3	517.2	513.2
52.5°	444.3	471.5	487.9	500.3	505.2	500.8
55°	445.7	464.5	476.5	490.4	496.3	496.8
57.5°	447.7	460.6	468.5	475.0	492.9	492.9
60°	452.7	457.2	461.6	465.0	488.4	488.9
62.5°	460.6	453.7	452.7	456.1	485.9	484.0
65°	473.0	448.7	441.2	444.7	483.4	477.5
67.5°	489.9	441.2	426.9	429.3	481.4	468.5
70°	505.2	429.3	409.0	406.5	462.6	439.8
72.5°	506.8	415.4	384.1	376.8	402.0	380.2
75°	481.9	406.0	356.9	335.0	332.0	329.1
77.5°	434.3	400.6	325.1	290.8	284.9	286.8
80°	363.4	380.2	286.8	246.2	278.4	275.0
82.5°	271.5	335.5	243.7	217.9	217.4	192.1
85°	150.9	261.6	198.6	163.3	113.6	110.2
87.5°	42.1	145.5	139.0	92.3	63.0	65.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)