

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: P192200

Luminaire Tested: **GLEON-AF-02-LED-E1-T2R-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192200
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-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 5000K, 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: 10251 lumens
Efficiency: N/A
Efficacy: 120.6 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): 85
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

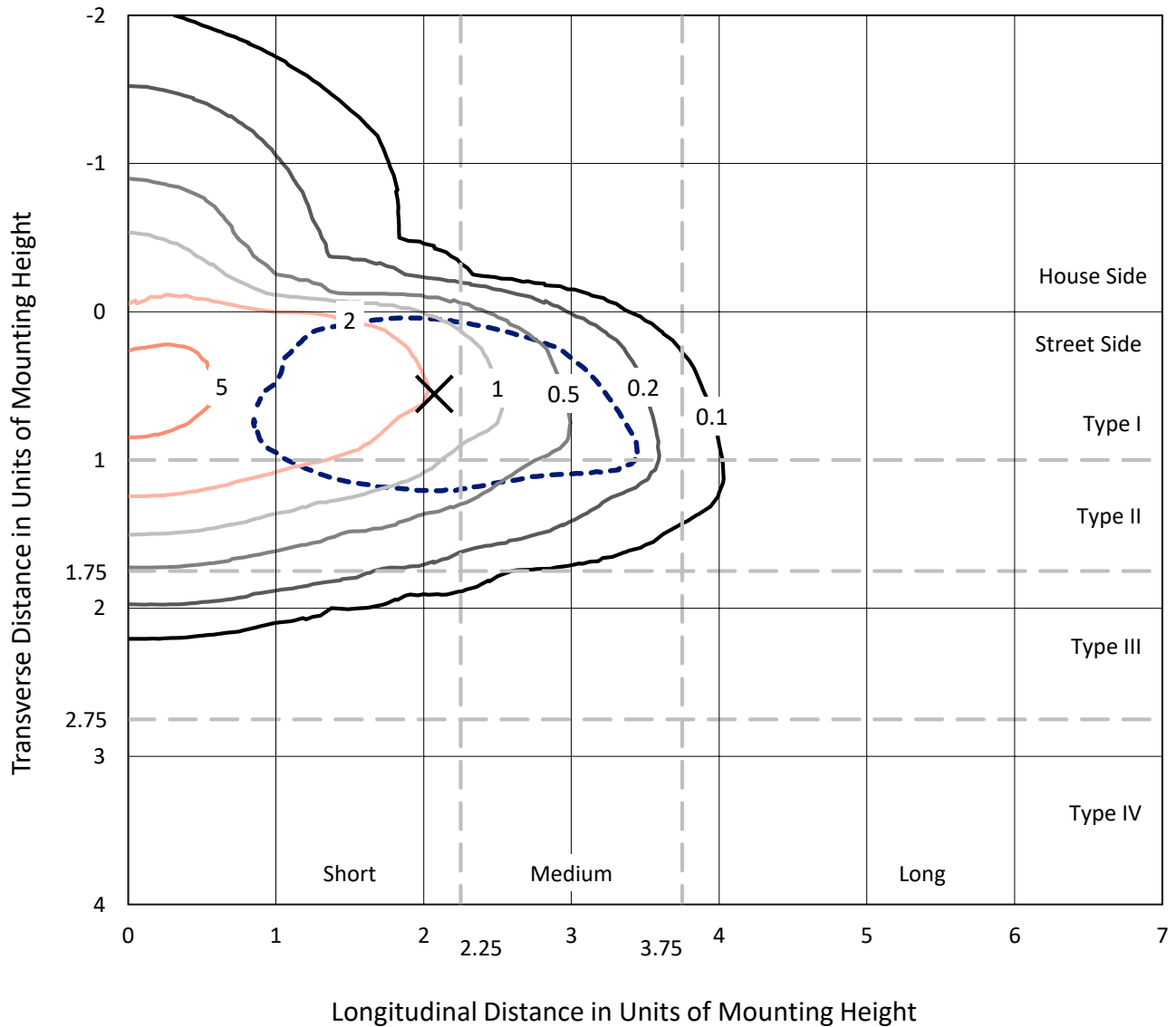


REPORT NUMBER: P192200

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-7050-800

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

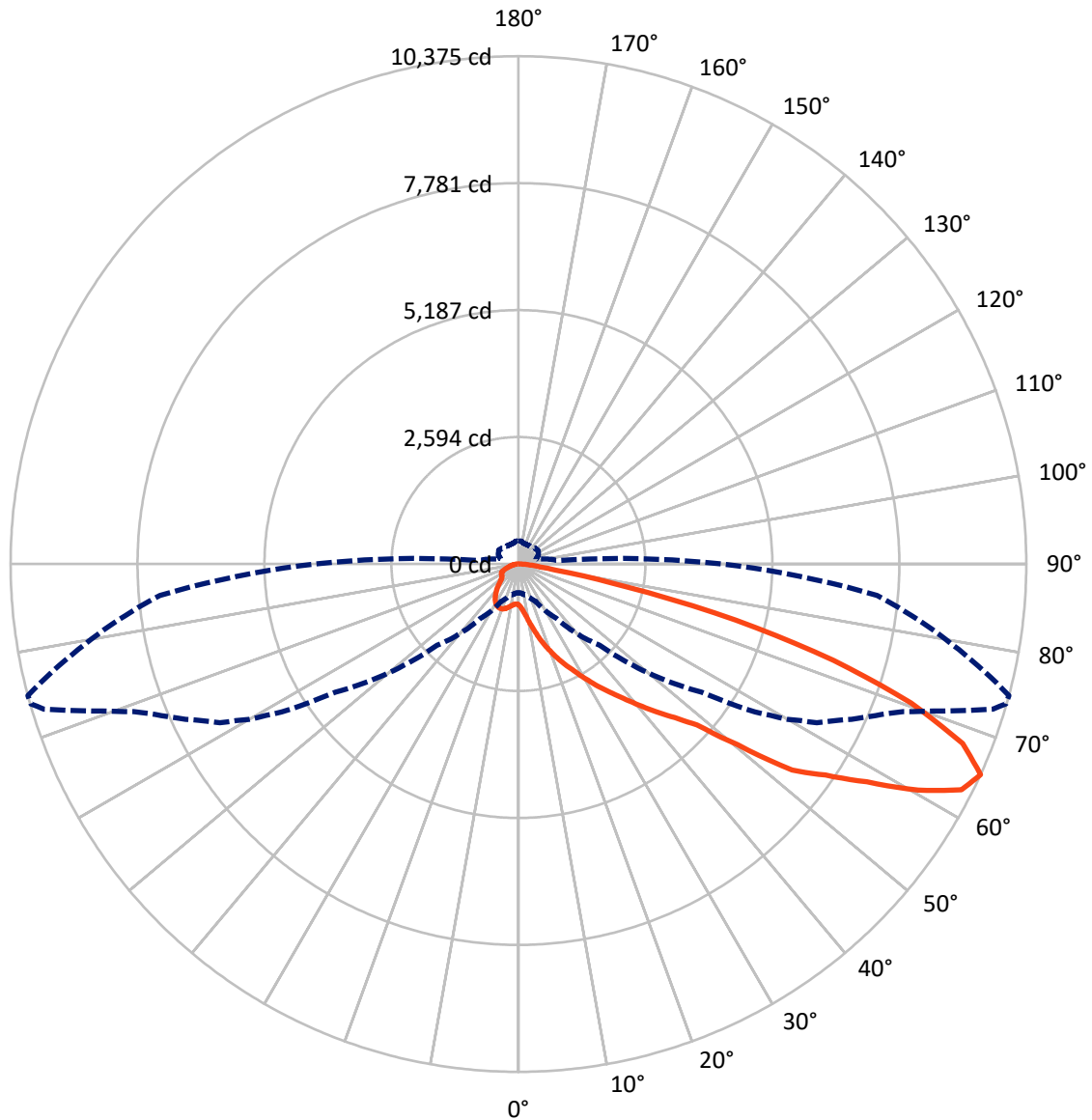


Based on 20 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P192200

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-7050-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P192200

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-7050-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1580.5	0.0	1580.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	8670.5	0.0	8670.5
	% Fixture	84.6	0.0	84.6
Total	Lumens	10251.0	0.0	10251.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	1.0
10°-20°	402.3	3.9
20°-30°	825.5	8.1
30°-40°	1388.8	13.5
40°-50°	1918.9	18.7
50°-60°	2395.4	23.4
60°-70°	2155.6	21.0
70°-80°	903.6	8.8
80°-90°	157.9	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°	10251.0	100.0
0°-180°	10251.0	100.0



REPORT NUMBER: P192200

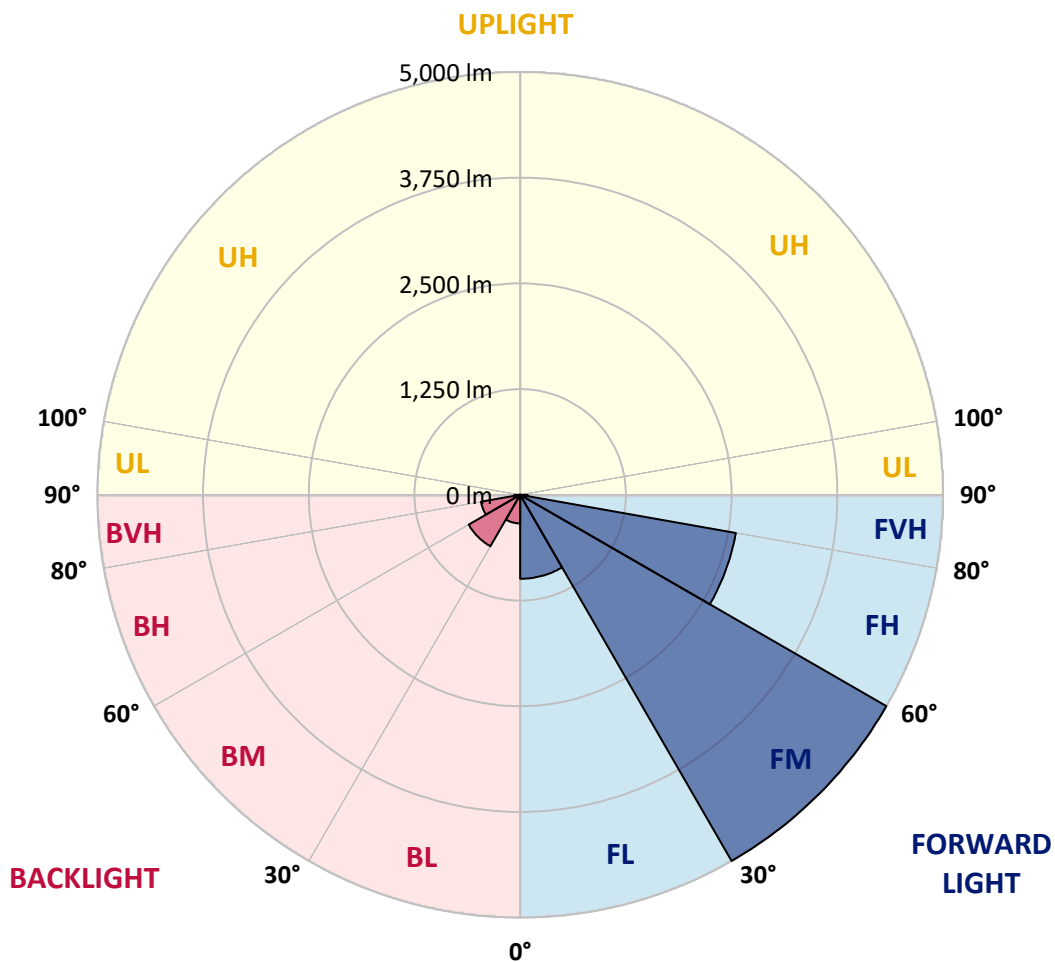
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	992.8	9.7			
FM (30°-60°)	4999.7	48.8			
FH (60°-80°)	2589.4	25.3			G2/5000
FVH (80°-90°)	88.7	0.9			G1/100
BL (0°-30°)	338.0	3.3	B1/500		
BM (30°-60°)	703.5	6.9	B1/1000		
BH (60°-80°)	469.9	4.6	B1/500		G1/500
BVH (80°-90°)	69.1	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: P192200

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-7050-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1
2.5°	1057.7	1046.1	1049.0	1029.6	1005.8	974.8	940.3	939.8	940.3	936.9	924.3
5°	1466.8	1452.7	1447.4	1403.7	1339.6	1248.4	1149.4	1138.8	1134.4	1123.2	1097.5
7.5°	1765.2	1757.4	1749.1	1716.2	1657.9	1556.0	1423.1	1400.3	1378.5	1373.1	1344.0
10°	1957.8	1955.8	1938.4	1929.6	1893.3	1804.9	1675.4	1653.6	1629.8	1621.5	1591.0
12.5°	2110.1	2109.7	2101.4	2103.8	2072.3	2008.2	1896.7	1876.8	1859.3	1834.1	1812.2
15°	2215.4	2215.9	2228.0	2241.6	2236.8	2193.6	2088.8	2080.1	2065.0	2047.5	2021.8
17.5°	2301.8	2304.2	2316.8	2341.6	2368.3	2364.9	2281.9	2274.6	2261.5	2237.7	2224.2
20°	2496.8	2506.1	2481.8	2481.8	2484.7	2497.8	2458.0	2452.2	2433.8	2421.2	2410.5
22.5°	2826.3	2837.0	2782.1	2726.3	2671.5	2631.7	2591.9	2599.2	2586.6	2577.9	2571.6
25°	3254.2	3262.5	3173.7	3079.6	2968.0	2822.4	2723.9	2719.6	2712.8	2707.4	2704.5
27.5°	3657.0	3660.4	3576.4	3438.6	3309.1	3099.9	2857.8	2852.5	2844.2	2834.1	2825.3
30°	4001.5	4000.5	3914.1	3782.6	3643.9	3412.4	3061.1	3044.6	3020.4	2992.7	2971.4
32.5°	4299.8	4298.4	4203.8	4067.4	3921.9	3722.0	3339.6	3305.7	3267.8	3214.0	3181.5
35°	4534.7	4533.7	4444.4	4302.3	4135.4	4013.6	3658.9	3617.2	3569.1	3496.8	3446.9
37.5°	4623.5	4623.5	4573.5	4476.5	4329.0	4245.5	4013.6	3963.1	3911.7	3829.7	3773.4
40°	4571.6	4572.5	4583.2	4565.3	4493.4	4429.4	4344.5	4314.4	4270.3	4196.5	4137.8
42.5°	4397.4	4402.7	4473.6	4560.4	4596.3	4586.1	4638.0	4624.4	4593.4	4536.6	4490.0
45°	4176.6	4193.1	4270.7	4434.7	4624.9	4721.5	4884.0	4885.5	4879.7	4849.1	4813.2
47.5°	3873.4	3896.6	3999.0	4220.8	4558.0	4853.0	5133.9	5147.0	5159.1	5139.2	5122.8
50°	3470.6	3498.3	3651.6	3945.7	4421.6	4989.3	5606.0	5665.2	5720.5	5713.7	5724.9
52.5°	3039.3	3071.8	3259.6	3587.1	4187.3	5020.9	5907.8	6004.4	6100.9	6180.0	6263.9
55°	2650.2	2632.7	2820.5	3165.5	3802.0	4878.7	6179.0	6295.5	6403.2	6500.2	6600.2
57.5°	2122.8	2151.4	2339.6	2680.7	3292.1	4477.4	6365.8	6536.1	6690.9	6851.5	6993.2
60°	1551.7	1580.3	1784.6	2131.0	2738.5	3869.0	6223.2	6481.3	6729.3	6975.2	7167.4
62.5°	936.9	958.3	1138.3	1468.2	2111.6	3147.5	5587.6	5926.2	6291.1	6585.1	6879.7
65°	583.2	595.3	661.8	843.3	1356.1	2349.8	4565.3	4934.5	5327.5	5700.6	6006.8
67.5°	477.4	481.8	493.9	532.8	744.8	1532.3	3397.9	3724.9	4079.6	4440.6	4781.2
70°	429.4	426.5	426.5	428.9	477.4	823.9	2224.6	2437.6	2733.1	3047.1	3358.6
72.5°	387.7	384.8	379.4	372.1	389.6	502.7	1149.9	1310.5	1523.5	1802.5	2100.9
75°	348.4	344.5	338.2	329.0	341.1	379.4	552.2	619.6	723.4	871.9	1038.3
77.5°	307.6	302.8	296.9	290.2	305.7	295.0	323.6	347.9	387.7	435.2	497.8
80°	261.5	257.2	255.2	251.8	270.3	224.6	228.5	243.6	266.9	292.6	321.7
82.5°	204.8	204.8	212.5	214.0	234.4	161.6	170.8	183.9	196.0	209.6	223.2
85°	134.9	135.9	162.1	172.2	184.9	108.7	128.1	132.5	142.2	149.9	155.7
87.5°	42.2	45.6	99.0	109.7	106.3	61.6	78.6	80.5	87.3	92.7	97.5
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: P192200

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-7050-800

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1
2.5°	924.3	918.5	913.1	912.7	908.8	903.4	905.4	897.1	897.6	893.3	888.4
5°	1086.8	1083.0	1063.6	1058.2	1043.7	1034.4	1033.0	1013.6	1011.2	1000.0	987.9
7.5°	1320.7	1308.1	1280.9	1267.8	1243.1	1224.6	1215.9	1190.2	1177.6	1148.5	1135.4
10°	1565.7	1549.7	1516.3	1497.8	1474.0	1444.4	1428.4	1391.1	1376.5	1349.8	1317.8
12.5°	1792.8	1776.8	1742.4	1728.3	1696.7	1665.2	1647.7	1605.5	1586.6	1543.9	1518.7
15°	2002.9	1986.9	1956.8	1942.3	1910.7	1885.0	1861.7	1820.0	1797.7	1757.9	1724.9
17.5°	2206.7	2189.7	2163.5	2150.4	2119.8	2093.6	2068.4	2029.1	2006.3	1966.5	1936.9
20°	2395.9	2383.3	2364.4	2346.9	2316.3	2292.6	2262.5	2228.5	2195.5	2166.4	2138.3
22.5°	2560.9	2556.0	2535.7	2527.9	2501.7	2481.3	2455.1	2421.6	2397.9	2361.0	2334.8
25°	2703.1	2701.6	2691.9	2689.5	2671.0	2651.6	2645.8	2618.1	2596.3	2563.8	2536.6
27.5°	2825.3	2826.8	2824.4	2831.1	2826.3	2817.6	2818.0	2808.8	2796.2	2769.0	2745.3
30°	2961.2	2953.4	2957.8	2967.5	2970.4	2971.4	2987.4	2992.7	2991.7	2973.8	2962.2
32.5°	3153.3	3134.9	3117.9	3116.4	3126.1	3130.0	3157.2	3171.3	3183.4	3187.8	3189.7
35°	3398.3	3361.5	3326.1	3307.1	3290.6	3295.0	3314.4	3337.2	3363.9	3382.3	3404.2
37.5°	3706.9	3661.8	3599.2	3554.6	3543.4	3519.2	3531.8	3549.7	3575.9	3604.6	3642.4
40°	4081.0	4012.6	3942.3	3883.1	3851.0	3806.4	3805.9	3802.5	3818.5	3845.2	3898.6
42.5°	4441.0	4380.4	4305.7	4243.6	4201.8	4142.2	4130.0	4098.5	4105.8	4129.1	4181.0
45°	4778.3	4728.3	4682.7	4610.9	4575.4	4510.9	4490.5	4453.2	4432.3	4443.0	4494.9
47.5°	5104.8	5072.8	5025.2	4978.6	4951.5	4893.7	4867.5	4840.8	4814.2	4813.2	4867.5
50°	5741.4	5724.4	5668.1	5619.6	5632.7	5561.9	5566.2	5494.4	5526.9	5530.8	5644.8
52.5°	6339.6	6398.8	6440.6	6491.5	6524.5	6530.8	6552.6	6585.1	6624.4	6702.1	6807.9
55°	6682.2	6756.4	6799.6	6838.4	6902.5	6916.1	6952.4	6995.6	7030.1	7117.4	7207.2
57.5°	7089.3	7227.1	7294.0	7355.6	7442.0	7475.0	7535.7	7582.7	7627.4	7730.7	7839.4
60°	7340.1	7508.0	7644.3	7741.9	7850.1	7927.7	8019.4	8093.1	8198.0	8321.7	8483.7
62.5°	7140.7	7387.2	7568.2	7735.6	7882.6	8031.0	8162.5	8300.3	8459.5	8646.8	8898.1
65°	6346.4	6597.3	6907.3	7081.0	7275.6	7504.6	7704.5	7927.7	8144.6	8417.3	8788.9
67.5°	5109.2	5400.8	5749.1	5924.3	6148.0	6403.7	6627.8	6900.5	7153.8	7484.2	7943.7
70°	3682.7	4059.7	4352.7	4535.7	4796.7	5060.2	5276.6	5593.9	5803.5	6142.2	6617.2
72.5°	2331.9	2629.3	2988.4	3218.8	3450.7	3717.6	3938.9	4212.5	4408.0	4716.6	5147.0
75°	1253.8	1473.1	1788.5	2007.3	2255.7	2483.7	2742.8	2926.2	3070.8	3314.9	3664.2
77.5°	587.6	721.0	880.6	1049.0	1217.4	1393.0	1563.8	1712.3	1774.4	1914.1	2120.3
80°	356.6	399.8	446.4	498.3	568.7	625.4	700.6	755.0	758.9	803.0	866.1
82.5°	238.2	254.2	268.3	281.4	299.4	313.4	329.5	348.4	356.1	366.3	386.7
85°	162.5	170.3	173.2	181.5	179.5	184.4	190.7	197.0	200.4	199.9	209.1
87.5°	100.0	103.8	105.8	107.7	106.3	104.3	107.2	110.6	111.6	108.7	109.7
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: P192200

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-7050-800

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1
2.5°	889.4	885.0	880.6	877.7	876.8	851.0	839.9	832.6	817.1	804.5	794.3
5°	981.1	971.9	964.6	955.8	951.0	886.0	862.2	845.7	818.5	802.5	788.0
7.5°	1128.6	1102.9	1087.8	1070.8	1056.3	938.9	899.6	873.8	836.0	814.7	798.2
10°	1296.0	1269.3	1245.5	1219.3	1196.5	1009.2	952.0	912.2	862.2	834.5	812.7
12.5°	1482.8	1456.6	1426.5	1393.0	1363.9	1098.5	1018.9	962.2	893.7	856.9	826.3
15°	1703.5	1657.4	1621.1	1582.2	1548.3	1205.2	1097.0	1018.4	927.2	877.2	836.5
17.5°	1908.8	1860.3	1810.8	1776.8	1737.5	1325.1	1175.6	1075.7	954.9	890.3	838.4
20°	2109.2	2056.3	2013.6	1968.0	1926.7	1449.3	1259.6	1126.2	972.8	890.8	826.3
22.5°	2285.8	2252.8	2205.2	2155.7	2114.0	1573.5	1338.2	1168.8	979.6	879.7	804.9
25°	2486.7	2451.7	2393.5	2351.8	2305.2	1700.1	1415.3	1201.8	975.7	858.8	772.0
27.5°	2701.1	2662.3	2602.6	2558.9	2502.7	1831.6	1486.2	1225.6	961.2	824.8	727.8
30°	2924.8	2889.4	2830.7	2786.5	2729.7	1970.9	1565.3	1241.6	932.1	777.8	676.4
32.5°	3165.0	3135.4	3077.1	3031.0	2970.4	2121.8	1639.0	1246.5	887.9	722.0	622.0
35°	3393.0	3372.6	3323.6	3280.4	3217.4	2264.4	1717.1	1244.1	835.5	660.8	572.5
37.5°	3649.7	3637.6	3613.3	3558.5	3481.3	2458.0	1810.8	1233.9	771.5	600.2	534.7
40°	3923.3	3924.3	3898.1	3860.7	3788.9	2692.9	1922.4	1214.0	701.6	546.8	500.2
42.5°	4213.0	4228.0	4215.4	4188.7	4119.8	2929.6	2055.8	1189.7	633.7	494.9	466.3
45°	4544.9	4563.3	4582.7	4543.4	4476.5	3242.1	2231.4	1158.2	560.4	451.7	443.0
47.5°	4927.7	4956.8	4974.3	4974.8	4907.8	3629.3	2516.7	1139.3	495.4	422.6	431.8
50°	5735.6	5744.8	5786.0	5857.8	5806.4	4525.5	3015.0	1127.6	451.2	404.7	423.6
52.5°	6899.6	7001.0	7072.3	7067.4	6997.6	5094.6	3289.7	1067.4	425.0	397.9	419.7
55°	7373.6	7500.2	7632.2	7667.1	7612.8	5580.3	3549.2	1007.3	412.4	402.7	421.2
57.5°	8005.3	8218.8	8399.8	8476.0	8397.4	6201.8	3890.8	975.7	408.5	415.8	430.4
60°	8743.3	9007.3	9245.0	9381.8	9381.8	6916.1	4245.0	962.6	403.2	435.2	445.9
62.5°	9217.4	9605.0	9964.1	10164.5	10158.6	7413.4	4402.2	918.0	391.1	448.8	467.2
65°	9219.3	9680.2	10137.8	10362.9	10374.6	7352.2	4142.6	810.8	368.8	450.8	488.6
67.5°	8450.7	8942.3	9475.5	9727.3	9785.5	6768.1	3586.1	666.7	332.4	431.3	496.4
70°	7137.3	7617.2	8161.6	8409.0	8512.4	5769.5	2888.4	513.8	285.8	388.6	480.3
72.5°	5623.0	6093.6	6472.6	6653.6	6734.1	4410.0	2103.3	388.2	234.4	327.5	437.2
75°	3981.1	4334.3	4535.7	4575.9	4588.5	2658.4	1278.0	288.7	193.1	254.7	369.2
77.5°	2247.0	2398.3	2381.9	2399.8	2250.4	1026.2	556.5	206.7	159.1	193.6	286.3
80°	877.2	904.4	849.6	832.6	763.7	381.9	245.5	144.1	127.1	146.5	200.4
82.5°	386.7	399.3	387.7	390.6	373.6	197.0	147.0	104.3	97.0	107.2	132.9
85°	213.0	216.9	215.9	222.2	213.0	78.6	69.9	64.0	67.9	72.8	85.4
87.5°	103.8	104.8	101.4	106.7	103.3	39.8	34.4	36.4	39.8	40.8	40.8
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: P192200

CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-7050-800

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	833.1	833.1	833.1	833.1	833.1	833.1
2.5°	787.0	783.1	783.6	782.6	780.7	780.7
5°	780.2	776.3	776.3	775.4	772.9	773.4
7.5°	787.0	780.7	778.3	774.9	771.5	771.5
10°	794.8	783.6	776.8	771.0	766.6	766.6
12.5°	800.6	783.1	772.0	764.2	759.8	759.8
15°	802.5	779.7	764.2	755.0	751.1	750.6
17.5°	796.2	766.6	747.7	737.0	732.2	730.7
20°	776.8	742.8	720.0	707.9	701.1	698.7
22.5°	747.7	708.9	682.2	669.6	660.8	659.4
25°	706.9	665.2	639.0	626.9	622.0	620.6
27.5°	659.4	620.6	598.3	590.5	586.1	585.6
30°	614.3	581.3	564.8	559.0	553.6	552.6
32.5°	572.1	551.2	544.9	536.6	524.0	522.6
35°	542.0	540.0	535.7	517.2	501.7	497.3
37.5°	523.5	541.5	519.2	482.8	471.6	470.6
40°	512.9	526.4	488.1	475.5	476.5	475.5
42.5°	488.6	502.7	489.1	483.3	487.1	488.1
45°	464.3	479.9	496.4	492.5	501.7	501.7
47.5°	450.8	474.0	495.9	495.9	509.5	514.3
50°	435.2	469.2	488.1	494.9	505.6	501.7
52.5°	434.3	460.9	477.0	489.1	493.9	489.6
55°	435.7	454.1	465.8	479.4	485.2	485.7
57.5°	437.7	450.3	458.0	464.3	481.8	481.8
60°	442.5	446.9	451.2	454.6	477.4	477.9
62.5°	450.3	443.5	442.5	445.9	475.0	473.1
65°	462.4	438.6	431.3	434.7	472.6	466.8
67.5°	478.9	431.3	417.3	419.7	470.6	458.0
70°	493.9	419.7	399.8	397.4	452.2	429.9
72.5°	495.4	406.1	375.5	368.3	393.0	371.7
75°	471.1	396.9	348.9	327.5	324.6	321.7
77.5°	424.6	391.6	317.8	284.3	278.5	280.4
80°	355.2	371.7	280.4	240.7	272.2	268.8
82.5°	265.4	328.0	238.2	213.0	212.5	187.8
85°	147.5	255.7	194.1	159.6	111.1	107.7
87.5°	41.2	142.2	135.9	90.2	61.6	64.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)