

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: P192092

Luminaire Tested: **GLEON-AF-04-LED-E1-SLL-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192092  
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-04-LED-E1-SLL-7050  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21102 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4

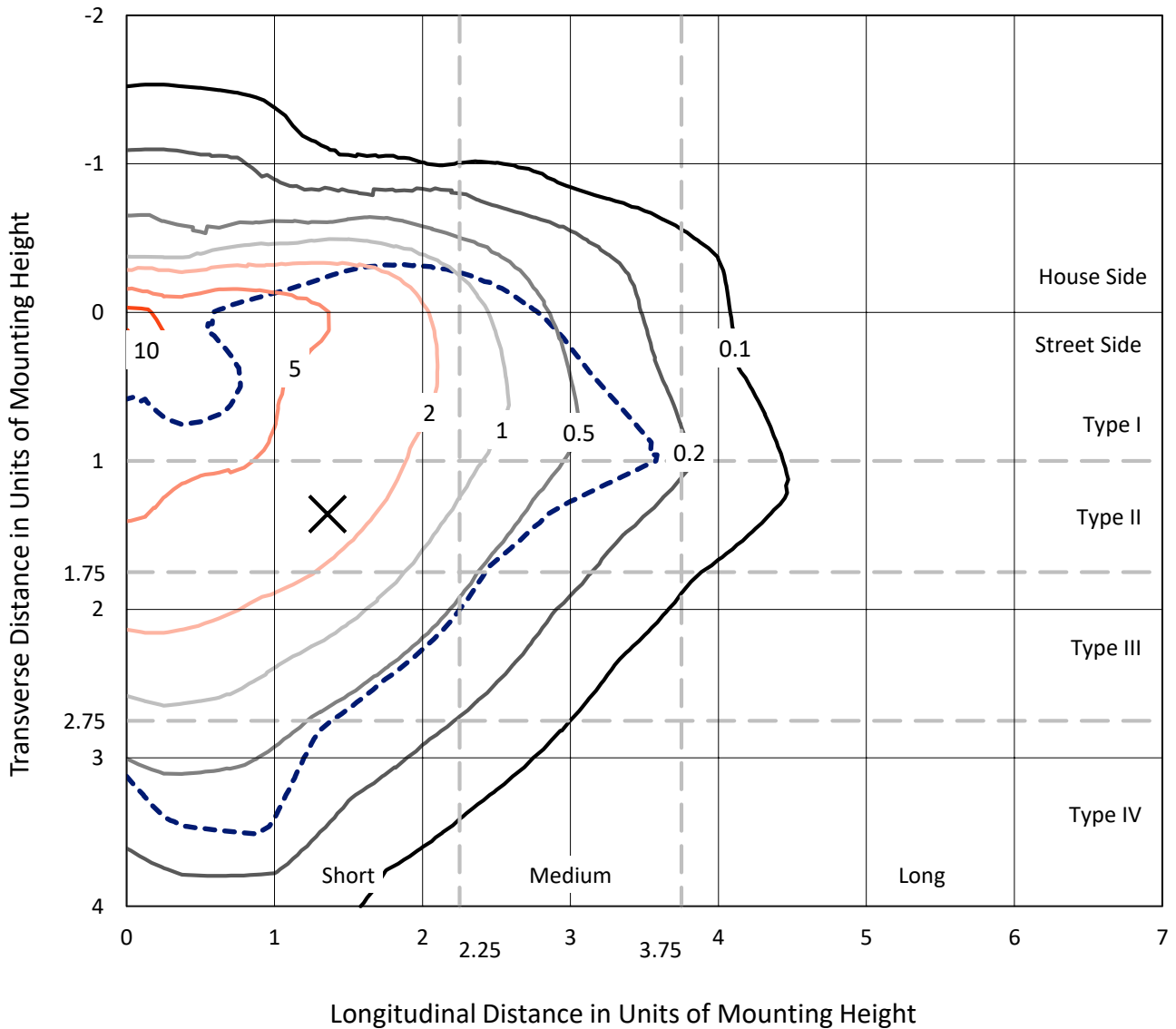
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P192092  
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### Iso-Footcandle Lines of Horizontal Illumination

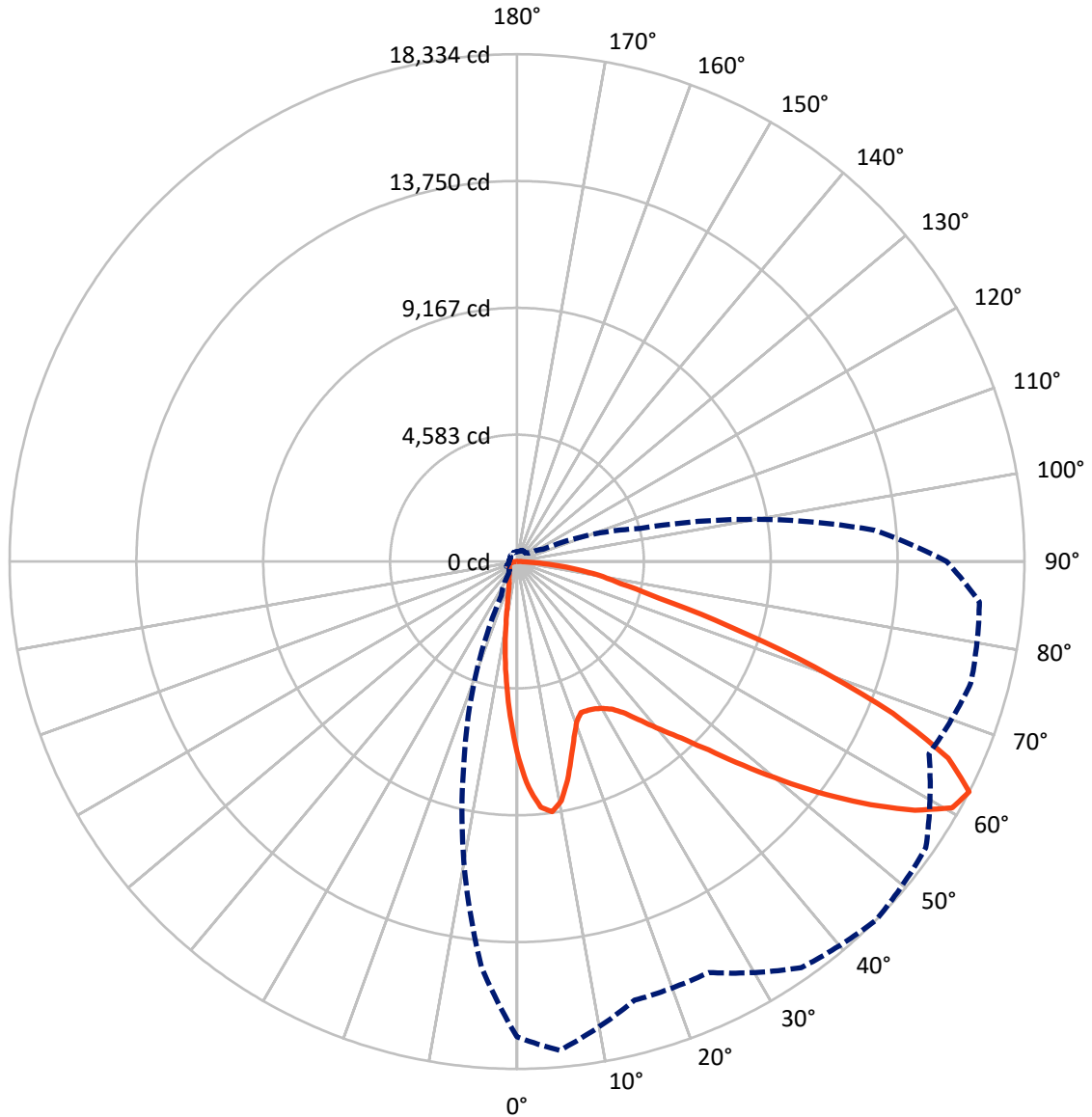
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.4 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P192092  
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P192092

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3492.1	0.0	3492.1
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	17609.9	0.0	17609.9
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	21102.0	0.0	21102.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	519.0	2.5
10°-20°	951.7	4.5
20°-30°	1387.6	6.6
30°-40°	2137.0	10.1
40°-50°	3145.1	14.9
50°-60°	4613.3	21.9
60°-70°	5157.0	24.4
70°-80°	2524.8	12.0
80°-90°	666.6	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°	21102.0	100.0
0°-180°	21102.0	100.0



REPORT NUMBER: P192092

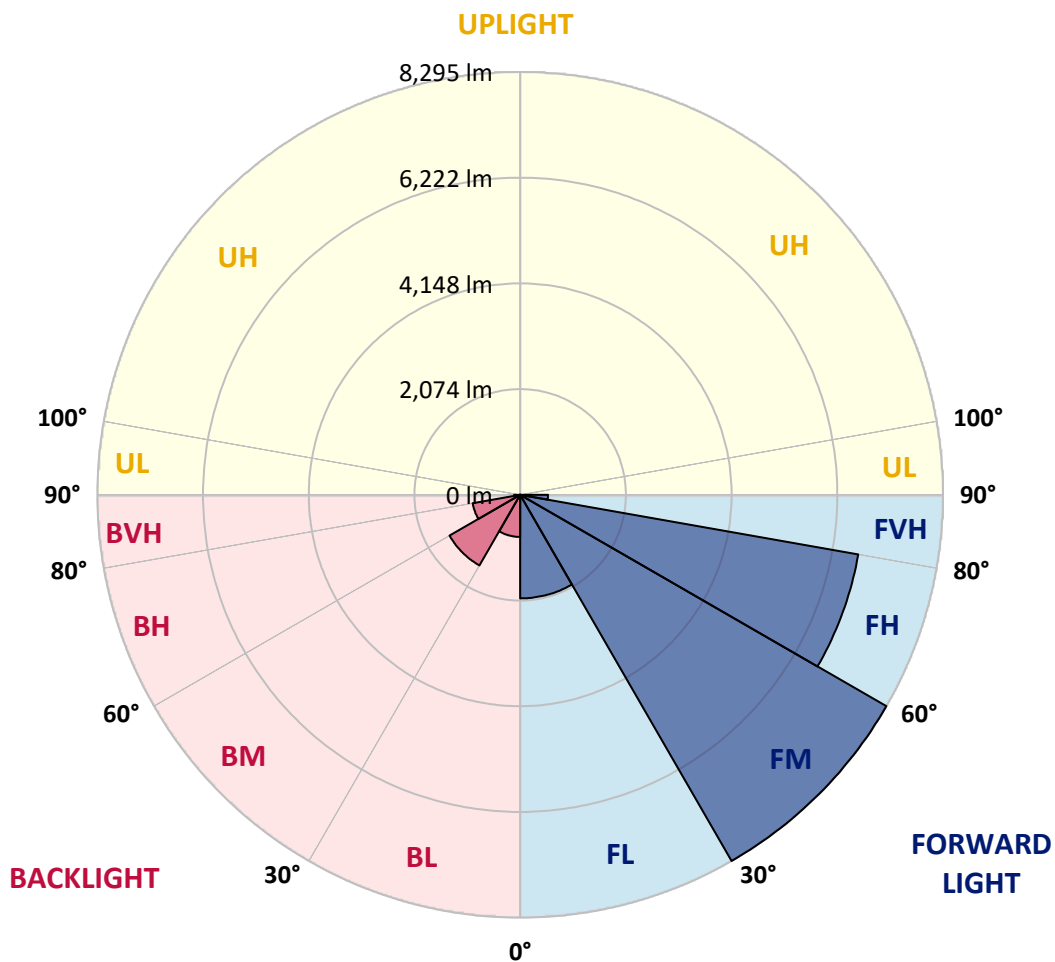
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2032.1	9.6			
FM	(30°-60°)	8295.4	39.3			
FH	(60°-80°)	6735.0	31.9			G3/7500
FVH	(80°-90°)	547.4	2.6			G4/750
BL	(0°-30°)	826.2	3.9	B2/1000		
BM	(30°-60°)	1600.0	7.6	B2/2500		
BH	(60°-80°)	946.7	4.5	B2/1000		G2/1000
BVH	(80°-90°)	119.2	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short





REPORT NUMBER: P192092

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4
2.5°	7407.8	7526.1	7757.0	7929.8	8139.8	8188.5	8255.8	8189.6	8072.5	7917.0	7866.0
5°	6965.8	7218.7	7779.0	8272.0	8710.5	8914.6	8971.5	8803.3	8463.4	8016.8	7744.2
7.5°	6257.1	6616.7	7375.3	8101.5	8747.6	9129.2	9120.0	8729.0	8103.8	7376.5	6939.2
10°	5645.7	6056.4	6926.4	7738.4	8424.0	8794.0	8651.3	8151.4	7405.5	6567.9	6093.5
12.5°	5303.5	5706.1	6588.8	7404.3	7977.4	8105.0	7995.9	7506.4	6803.4	5956.6	5541.3
15°	5244.4	5686.3	6454.3	7117.8	7439.1	7327.8	7197.8	6978.6	6482.1	5759.4	5326.7
17.5°	5500.7	5987.9	6608.5	6918.3	6863.8	6670.0	6632.9	6657.3	6537.8	5978.7	5479.9
20°	5992.6	6577.2	6976.3	6824.3	6426.4	6159.6	6168.9	6541.3	6895.1	6534.3	5964.7
22.5°	6682.8	7349.8	7506.4	6874.2	6242.0	5925.3	6001.9	6605.1	7464.6	7346.3	6619.0
25°	7576.0	8183.8	8071.3	7055.2	6260.5	5954.3	6015.8	6825.5	8137.4	8158.3	7428.7
27.5°	8441.4	9005.1	8545.8	7295.3	6337.1	6022.7	6103.9	7172.3	8780.1	9039.9	8354.4
30°	9116.5	9508.6	8733.7	7514.5	6487.9	6156.1	6257.1	7501.8	9072.4	9635.0	9066.6
32.5°	9675.6	9957.5	9033.0	7786.0	6765.2	6366.1	6543.6	7902.0	9493.5	10201.1	9763.8
35°	10390.2	10470.2	9405.3	8088.7	7193.2	6731.5	6951.9	8294.0	9894.8	10773.0	10450.5
37.5°	11227.7	11124.5	9756.8	8502.8	7746.5	7303.4	7485.5	8724.4	10225.4	11421.4	11152.3
40°	12055.9	11807.7	10197.6	9145.5	8553.9	7977.4	8193.1	9183.8	10534.0	12071.0	11837.9
42.5°	12760.1	12392.3	10632.6	9851.9	9305.6	8720.9	8978.4	9646.6	10828.6	12625.5	12432.9
45°	13280.9	12823.9	11046.7	10530.5	10341.4	9709.2	9831.0	10176.7	11147.7	13088.3	12922.5
47.5°	13746.1	13257.7	11515.4	11214.9	11247.4	10994.5	10798.5	10793.8	11523.5	13466.5	13385.3
50°	14369.0	13859.7	12018.8	11920.2	12606.9	12438.7	12006.1	11514.2	11999.1	13895.7	13886.4
52.5°	15227.4	14813.3	12633.6	12680.0	13876.0	13986.2	13450.3	12379.6	12743.8	14683.3	14627.7
55°	16242.4	16001.1	13471.1	13553.5	15432.7	15511.6	14979.1	13461.9	13838.9	15823.6	15669.4
57.5°	17034.7	16983.6	14389.9	14602.1	16595.0	16950.0	16460.5	14714.7	15073.1	16784.1	16396.7
60°	17350.2	17597.3	15367.7	15660.1	17670.4	18063.6	17634.4	15815.5	16167.0	17182.0	16346.8
62.5°	17179.7	17731.8	16409.4	16385.1	17910.5	18333.9	18032.3	16428.0	16977.8	16771.4	15519.7
65°	16392.0	17248.1	17013.8	16198.3	17089.2	17124.0	17026.6	16154.2	17169.2	15473.3	13921.2
67.5°	14676.4	15908.3	16218.0	14597.5	14873.6	14647.4	14483.8	14655.5	16171.6	13528.0	11699.8
70°	11953.9	13807.5	13956.0	11675.5	11550.2	11398.2	11072.3	12015.3	14203.1	11087.3	9283.5
72.5°	8789.4	10738.2	11194.1	8563.2	7983.2	8014.5	7757.0	9055.0	11547.9	8236.0	6931.0
75°	6013.5	7775.5	8758.0	5975.2	5279.2	5291.9	5259.5	6416.0	9197.7	5729.3	5186.4
77.5°	4392.9	5555.3	6605.1	4017.1	3899.9	3828.0	3810.6	4489.2	7051.7	4159.8	4027.5
80°	3525.3	4104.1	4437.0	2784.0	2994.0	2988.2	2891.9	3086.8	4605.2	3042.7	3012.5
82.5°	2445.3	3154.1	3594.9	2182.0	2020.7	1987.1	2010.3	2299.1	3255.0	2079.9	1977.8
85°	1289.9	2095.0	3560.1	1933.7	1199.4	957.0	1190.2	1882.7	2820.0	1102.0	965.1
87.5°	164.7	605.5	2357.1	771.4	473.3	255.2	564.9	1060.2	1810.8	225.0	196.0
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: P192092

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4
2.5°	7734.9	7580.6	7378.8	7192.0	6998.3	6805.8	6554.0	6396.3	6287.2	6266.3	6219.9
5°	7547.0	7034.3	6646.8	6311.6	6007.7	5578.5	5340.7	5143.5	5037.9	5027.5	5001.9
7.5°	6680.5	5972.9	5449.7	4975.3	4544.9	4198.1	3815.3	3636.6	3563.5	3580.9	3598.3
10°	5779.1	4988.0	4387.1	3902.3	3522.9	3230.6	2923.2	2715.6	2571.7	2542.7	2536.9
12.5°	5120.3	4252.6	3669.1	3326.9	3033.4	2758.5	2432.5	2187.8	2001.0	1937.2	1894.3
15°	4841.9	3893.0	3281.7	2912.8	2589.1	2240.0	1937.2	1680.8	1509.2	1453.5	1422.2
17.5°	4901.0	3793.2	3014.9	2542.7	2128.6	1764.4	1382.7	1163.5	1060.2	1033.6	1033.6
20°	5211.9	3774.7	2794.5	2201.7	1685.5	1263.2	950.0	824.8	791.1	787.6	796.9
22.5°	5648.1	3839.6	2629.7	1905.9	1309.6	922.2	740.1	693.7	678.6	682.1	692.5
25°	6297.7	4058.9	2510.3	1642.6	1027.8	755.2	660.0	632.2	625.2	634.5	647.3
27.5°	7067.9	4278.1	2436.0	1444.2	867.7	690.2	627.6	598.6	603.2	614.8	626.4
30°	7744.2	4457.9	2318.9	1302.7	817.8	693.7	627.6	588.1	583.5	585.8	589.3
32.5°	8350.9	4579.7	2182.0	1168.1	705.3	616.0	585.8	580.0	554.5	545.2	546.4
35°	8874.0	4579.7	2099.6	1089.2	632.2	546.4	497.6	468.6	455.9	457.0	469.8
37.5°	9378.6	4488.1	2059.0	1045.2	592.8	519.7	476.8	451.2	433.8	430.4	432.7
40°	9824.1	4354.7	2012.6	1026.6	562.6	503.4	462.8	442.0	423.4	417.6	418.8
42.5°	10181.4	4246.8	1961.6	1002.2	544.0	491.8	453.6	435.0	414.1	408.3	407.2
45°	10567.6	4210.8	1894.3	953.5	553.3	493.0	451.2	431.5	410.6	403.7	401.4
47.5°	11076.9	4323.3	1824.7	895.5	573.0	498.8	454.7	431.5	409.5	403.7	401.4
50°	11718.4	4587.8	1736.5	810.8	553.3	515.0	453.6	428.0	409.5	403.7	399.0
52.5°	12542.0	4945.1	1620.5	713.4	541.7	554.5	451.2	421.1	403.7	395.6	387.4
55°	13543.1	5237.4	1482.5	633.4	515.0	544.0	447.8	413.0	394.4	382.8	375.8
57.5°	14276.2	5343.0	1305.0	581.2	477.9	526.6	443.1	402.5	382.8	373.5	364.2
60°	14131.2	5138.8	1155.4	548.7	455.9	475.6	439.6	393.2	372.4	365.4	357.3
62.5°	12970.0	4605.2	1059.1	533.6	442.0	433.8	443.1	384.0	363.1	356.1	353.8
65°	11228.9	3817.6	1020.8	530.1	430.4	409.5	411.8	373.5	352.6	346.8	344.5
67.5°	9262.6	3081.0	987.2	541.7	415.3	392.1	380.5	359.6	342.2	336.4	331.8
70°	7304.6	2562.5	972.1	534.8	396.7	374.7	361.9	344.5	329.4	323.6	320.2
72.5°	5882.4	2164.6	964.0	527.8	372.4	351.5	339.9	324.8	308.6	306.2	302.8
75°	4977.6	1701.7	882.8	505.8	344.5	323.6	315.5	301.6	285.4	285.4	283.0
77.5°	3839.6	1230.8	734.3	447.8	315.5	292.3	285.4	274.9	256.4	259.8	258.7
80°	2836.2	802.7	574.2	371.2	279.6	257.5	254.0	243.6	223.9	228.5	228.5
82.5°	1943.0	526.6	413.0	303.9	239.0	218.1	218.1	207.6	185.6	187.9	194.9
85°	975.6	361.9	308.6	235.5	185.6	175.2	175.2	167.0	145.0	146.2	155.4
87.5°	297.0	218.1	204.2	168.2	133.4	131.1	125.3	119.5	105.6	104.4	110.2
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: P192092

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4
2.5°	6149.2	6083.1	6003.0	5826.7	5767.5	5764.1	5817.4	5761.7	5868.5	5823.2	5873.1
5°	4959.0	4894.1	4804.7	4579.7	4442.8	4350.0	4305.9	4176.0	4270.0	4201.5	4258.4
7.5°	3647.1	3662.1	3603.0	3470.7	3172.6	3023.0	2934.8	2855.9	2924.4	2917.4	3026.5
10°	2563.6	2604.2	2562.5	2429.1	2187.8	2105.4	2121.6	2153.0	2242.3	2288.7	2456.9
12.5°	1845.6	1843.2	1816.6	1697.1	1538.2	1547.4	1613.6	1668.1	1750.4	1799.2	1970.8
15°	1378.1	1357.2	1345.6	1248.2	1157.7	1177.4	1209.9	1215.7	1267.9	1296.9	1436.1
17.5°	1041.7	1052.1	1064.9	995.3	926.8	914.1	888.6	857.2	872.3	878.1	947.7
20°	827.1	868.8	900.2	851.4	781.8	744.7	712.2	691.4	691.4	690.2	709.9
22.5°	722.7	752.8	786.5	752.8	690.2	657.7	639.2	622.9	620.6	620.6	639.2
25°	665.8	687.9	720.4	697.2	650.8	626.4	609.0	588.1	580.0	577.7	590.4
27.5°	638.0	647.3	663.5	642.6	603.2	591.6	587.0	568.4	558.0	552.2	564.9
30°	590.4	588.1	589.3	568.4	537.1	535.9	544.0	547.5	544.0	542.9	562.6
32.5°	546.4	541.7	540.6	522.0	493.0	486.0	493.0	500.0	508.1	519.7	542.9
35°	490.7	502.3	509.2	493.0	458.2	437.3	429.2	416.4	409.5	409.5	436.2
37.5°	446.6	473.3	483.7	468.6	430.4	401.4	387.4	385.1	386.3	390.9	416.4
40°	431.5	451.2	460.5	445.4	407.2	380.5	372.4	370.0	372.4	379.3	404.8
42.5°	422.2	436.2	435.0	416.4	385.1	366.6	361.9	359.6	361.9	368.9	396.7
45°	414.1	423.4	414.1	392.1	363.1	353.8	355.0	353.8	356.1	363.1	389.8
47.5°	407.2	410.6	399.0	377.0	346.8	344.5	349.2	352.6	355.0	360.8	388.6
50°	396.7	396.7	386.3	363.1	332.9	334.1	339.9	348.0	349.2	356.1	378.2
52.5°	384.0	382.8	375.8	353.8	321.3	324.8	324.8	334.1	336.4	344.5	367.7
55°	373.5	371.2	367.7	346.8	310.9	316.7	313.2	316.7	322.5	330.6	356.1
57.5°	364.2	359.6	359.6	341.0	302.8	305.1	297.0	301.6	308.6	315.5	342.2
60°	355.0	350.3	352.6	332.9	290.0	287.7	284.2	293.5	295.8	303.9	330.6
62.5°	344.5	341.0	342.2	323.6	280.7	274.9	274.9	283.0	284.2	295.8	321.3
65°	336.4	331.8	330.6	314.4	270.3	263.3	266.8	270.3	272.6	284.2	308.6
67.5°	328.3	319.0	319.0	306.2	258.7	251.7	258.7	257.5	261.0	271.4	291.2
70°	317.8	305.1	306.2	300.4	247.1	239.0	244.8	243.6	245.9	252.9	272.6
72.5°	301.6	291.2	293.5	291.2	235.5	223.9	226.2	226.2	226.2	232.0	252.9
75°	280.7	272.6	279.6	285.4	221.6	205.3	207.6	207.6	204.2	207.6	233.2
77.5°	255.2	250.6	273.8	265.6	205.3	185.6	185.6	183.3	176.3	181.0	208.8
80°	227.4	223.9	252.9	222.7	186.8	161.2	158.9	153.1	146.2	149.6	177.5
82.5°	198.4	194.9	212.3	170.5	161.2	133.4	127.6	117.2	110.2	113.7	139.2
85°	162.4	162.4	163.6	128.8	123.0	102.1	95.1	81.2	73.1	75.4	99.8
87.5°	116.0	119.5	110.2	88.2	73.1	56.8	52.2	44.1	37.1	42.9	52.2
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: P192092

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4	7129.4
2.5°	6128.3	6255.9	6400.9	6586.5	6745.4	7006.4	7257.0	7407.8
5°	4582.0	4794.3	5058.8	5398.7	5715.3	6190.9	6663.1	6965.8
7.5°	3279.3	3506.7	3792.1	4216.6	4664.4	5271.1	5895.1	6257.1
10°	2713.3	2946.4	3186.5	3473.1	3839.6	4499.7	5237.4	5645.7
12.5°	2244.6	2494.0	2752.7	3054.3	3394.2	3983.5	4833.7	5303.5
15°	1718.0	1996.4	2301.5	2683.1	3108.8	3789.7	4734.0	5244.4
17.5°	1177.4	1488.3	1863.0	2333.9	2854.8	3727.1	4912.6	5500.7
20°	810.8	1037.0	1437.2	1989.4	2615.8	3719.0	5256.0	5992.6
22.5°	678.6	779.5	1071.8	1672.7	2436.0	3818.7	5788.4	6682.8
25°	627.6	687.9	856.1	1397.8	2304.9	4048.4	6521.5	7576.0
27.5°	597.4	651.9	777.2	1218.0	2201.7	4315.2	7235.0	8441.4
30°	609.0	664.7	755.2	1126.4	2061.3	4537.9	7868.3	9116.5
32.5°	548.7	573.0	647.3	1045.2	1960.4	4724.7	8422.8	9675.6
35°	467.5	510.4	577.7	1006.9	1962.7	4850.0	9027.2	10390.2
37.5°	445.4	488.4	537.1	993.0	1989.4	4983.4	9720.8	11227.7
40°	431.5	471.0	512.7	984.8	2014.9	5105.2	10400.6	12055.9
42.5°	422.2	458.2	510.4	957.0	2027.7	5214.2	10959.7	12760.1
45°	421.1	458.2	519.7	929.2	2047.4	5331.4	11428.4	13280.9
47.5°	422.2	473.3	502.3	895.5	2047.4	5527.4	11978.2	13746.1
50°	417.6	498.8	483.7	848.0	1999.8	5898.6	12732.2	14369.0
52.5°	415.3	495.3	447.8	774.9	1917.5	6487.9	13698.5	15227.4
55°	409.5	477.9	422.2	665.8	1821.2	7130.6	14733.2	16242.4
57.5°	403.7	423.4	408.3	570.7	1672.7	7583.0	15445.5	17034.7
60°	452.4	370.0	396.7	524.3	1474.4	7707.1	15417.6	17350.2
62.5°	418.8	346.8	381.6	513.9	1335.2	7359.1	14705.4	17179.7
65°	328.3	331.8	366.6	544.0	1298.0	6436.9	13443.3	16392.0
67.5°	300.4	316.7	351.5	582.3	1301.5	5153.9	11557.1	14676.4
70°	283.0	300.4	334.1	602.0	1310.8	3841.9	9137.4	11953.9
72.5°	263.3	278.4	314.4	605.5	1250.5	2791.0	7042.4	8789.4
75°	240.1	254.0	286.5	527.8	1035.9	1936.0	5387.1	6013.5
77.5°	213.4	223.9	251.7	407.2	769.1	1238.9	4043.8	4392.9
80°	182.1	187.9	211.1	298.1	526.6	774.9	3199.3	3525.3
82.5°	146.2	148.5	163.6	223.9	342.2	497.6	2142.5	2445.3
85°	103.2	103.2	112.5	162.4	233.2	315.5	1163.5	1289.9
87.5°	48.7	49.9	49.9	89.3	121.8	160.1	268.0	164.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)