

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: P191306

Luminaire Tested: **GLEON-AF-08-LED-E1-SLL-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191306  
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-08-LED-E1-SLL-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K, 1200mA 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: 47045.5 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

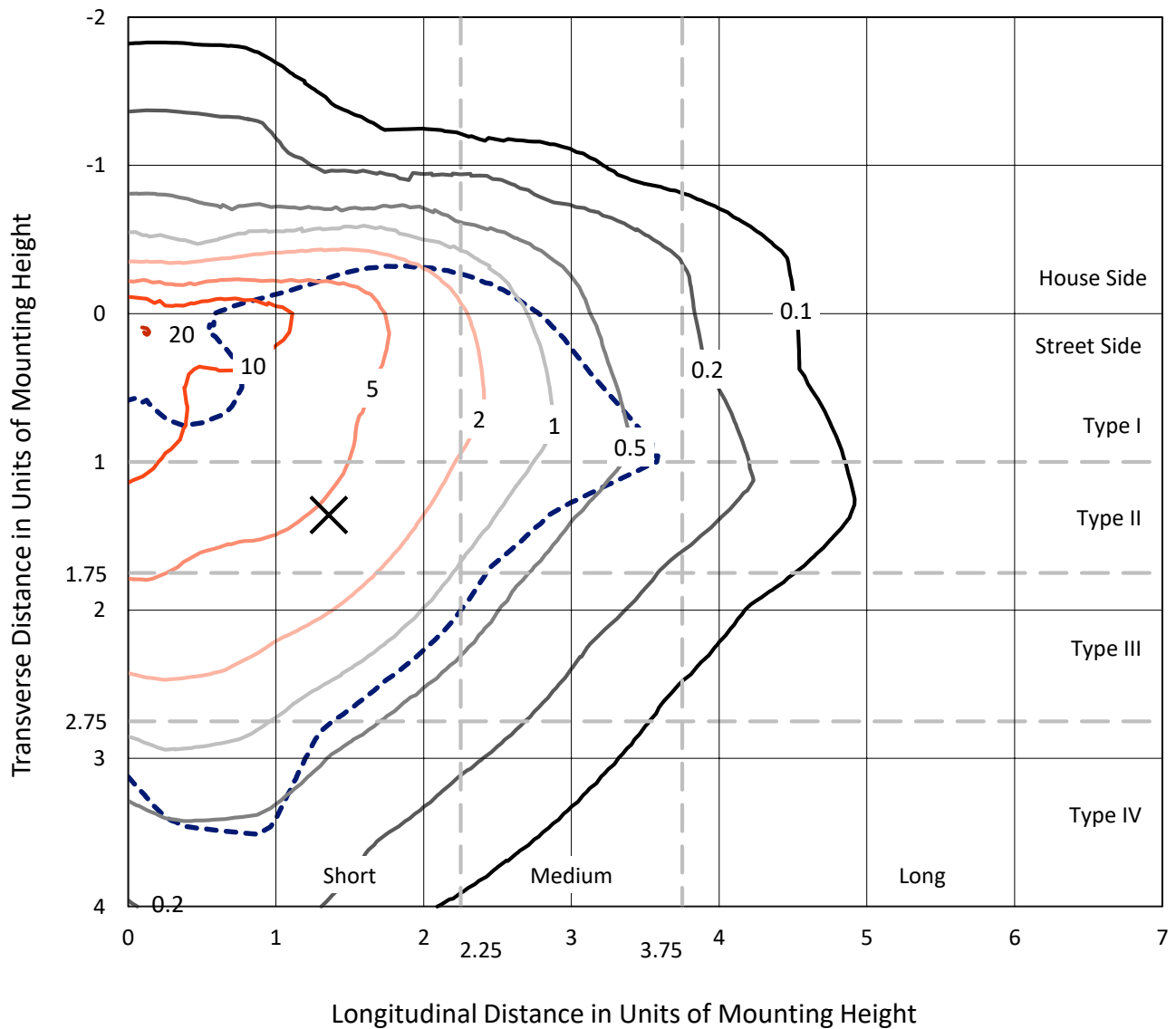
Input Watts (W): 511  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

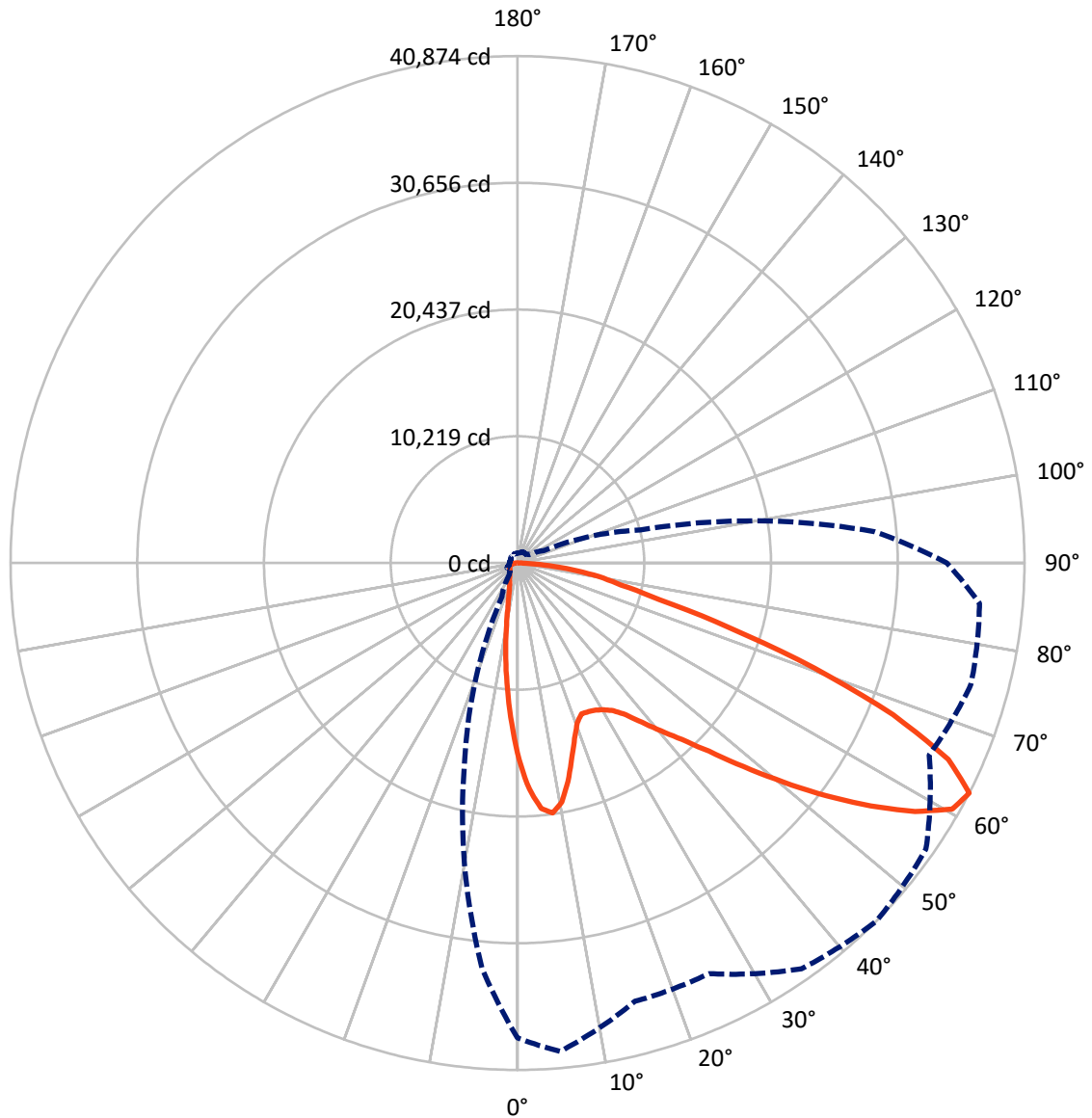
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 20.8 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7785.4	0.0	7785.4
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	39260.1	0.0	39260.1
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	47045.5	0.0	47045.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1157.1	2.5
10°-20°	2121.7	4.5
20°-30°	3093.5	6.6
30°-40°	4764.4	10.1
40°-50°	7011.9	14.9
50°-60°	10285.0	21.9
60°-70°	11497.1	24.4
70°-80°	5628.8	12.0
80°-90°	1486.2	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°	47045.5	100.0
0°-180°	47045.5	100.0



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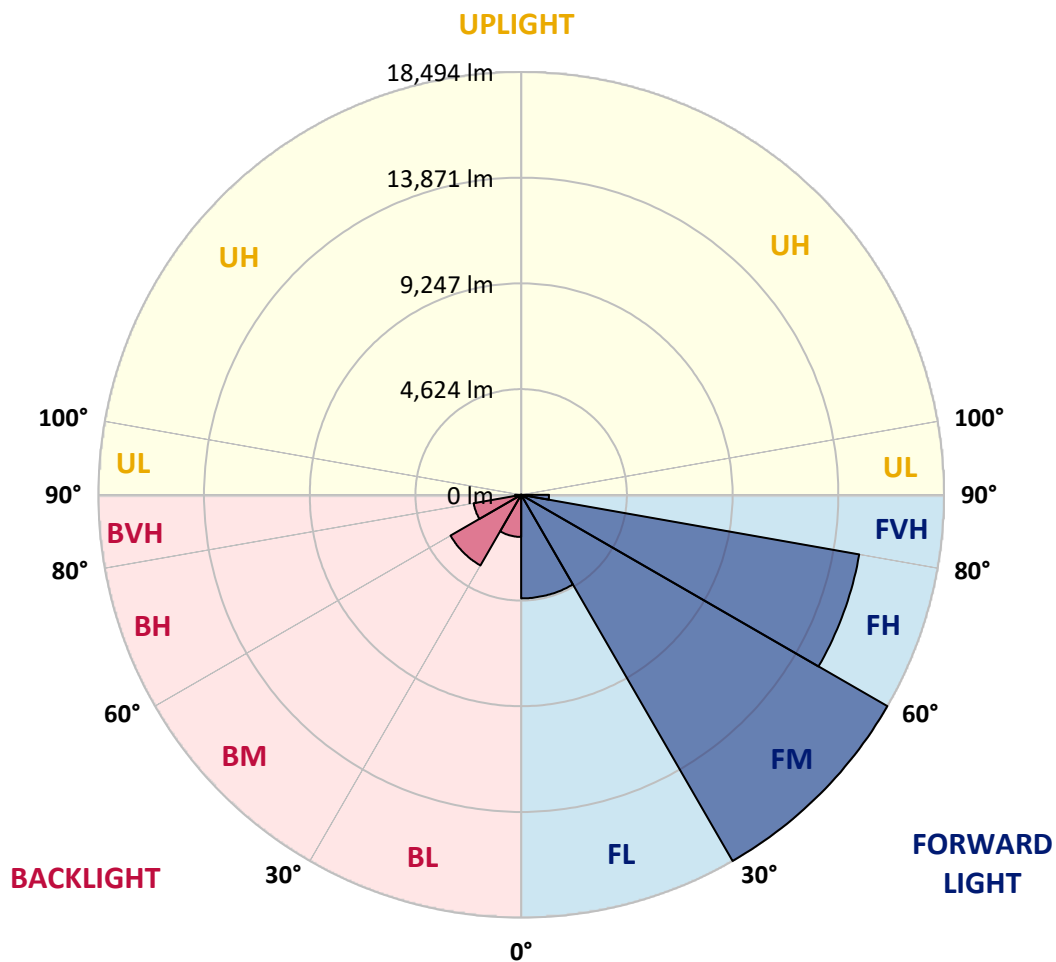
CATALOG NUMBER: GLEON-AF-08-LED-E1-SLL-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4530.3	9.6			
FM	(30°-60°)	18494.0	39.3			
FH	(60°-80°)	15015.3	31.9			G5
FVH	(80°-90°)	1220.5	2.6			G5
BL	(0°-30°)	1841.9	3.9	B3/2500		
BM	(30°-60°)	3567.2	7.6	B3/5000		
BH	(60°-80°)	2110.6	4.5	B3/2500		G3/2500
BVH	(80°-90°)	265.7	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5
2.5°	16515.2	16779.0	17293.6	17678.9	18147.0	18255.7	18405.6	18258.2	17997.1	17650.5	17536.8
5°	15529.8	16093.7	17342.8	18441.9	19419.4	19874.6	20001.3	19626.3	18868.6	17872.9	17265.2
7.5°	13949.7	14751.5	16442.8	18061.7	19502.1	20353.0	20332.4	19460.8	18066.8	16445.4	15470.4
10°	12586.8	13502.3	15442.0	17252.3	18780.7	19605.7	19287.5	18172.9	16510.0	14642.8	13585.1
12.5°	11823.9	12721.3	14689.4	16507.5	17785.0	18069.5	17826.4	16735.0	15167.8	13279.9	12354.1
15°	11692.0	12677.3	14389.3	15868.6	16585.0	16336.7	16047.1	15558.3	14451.4	12840.3	11875.6
17.5°	12263.5	13349.7	14733.4	15423.8	15302.3	14870.4	14787.7	14841.9	14575.6	13329.0	12217.0
20°	13360.0	14663.5	15553.1	15214.3	14327.3	13732.5	13753.2	14583.3	15372.1	14567.8	13298.1
22.5°	14898.9	16385.8	16735.0	15325.5	13916.1	13210.1	13380.8	14725.6	16641.9	16378.2	14756.6
25°	16890.1	18245.4	17994.4	15729.0	13957.4	13274.7	13411.8	15216.9	18141.8	18188.5	16561.8
27.5°	18819.4	20076.3	19052.2	16264.3	14128.2	13427.4	13608.3	15990.2	19574.6	20153.9	18625.5
30°	20324.6	21198.7	19471.2	16753.1	14464.3	13724.7	13949.7	16724.6	20226.3	21480.6	20213.4
32.5°	21571.1	22199.6	20138.4	17358.2	15082.5	14192.8	14588.5	17616.8	21165.1	22742.7	21767.7
35°	23164.2	23342.6	20968.5	18033.3	16036.7	15007.5	15498.8	18491.0	22059.9	24017.7	23298.6
37.5°	25031.4	24801.2	21752.1	18956.5	17270.4	16282.4	16688.4	19450.5	22797.0	25463.3	24863.3
40°	26877.9	26324.5	22734.9	20389.3	19070.3	17785.0	18266.0	20474.6	23484.9	26911.5	26391.7
42.5°	28447.8	27627.9	23704.7	21964.2	20746.2	19442.7	20016.8	21506.4	24141.7	28147.7	27718.4
45°	29608.9	28589.9	24628.0	23477.1	23055.6	21646.2	21917.6	22688.3	24852.9	29179.6	28809.8
47.5°	30646.0	29557.1	25672.8	25003.0	25075.4	24511.5	24074.5	24064.2	25690.9	30022.7	29841.6
50°	32034.7	30899.4	26795.2	26575.3	28106.3	27731.4	26766.7	25670.1	26751.2	30979.6	30958.9
52.5°	33948.5	33025.1	28165.8	28269.2	30935.6	31181.3	29986.5	27599.4	28411.5	32735.6	32611.4
55°	36211.3	35673.5	30033.0	30216.6	34406.2	34582.1	33395.0	30012.4	30852.8	35277.7	34933.8
57.5°	37977.7	37863.9	32081.3	32554.5	36997.6	37788.9	36697.5	32805.4	33604.4	37419.0	36555.2
60°	38681.1	39232.0	34261.4	34913.1	39394.9	40271.6	39314.8	35259.7	36043.3	38306.1	36444.1
62.5°	38300.9	39531.9	36583.8	36529.5	39930.3	40874.1	40201.8	36625.1	37850.9	37390.6	34600.2
65°	36544.9	38453.5	37931.1	36113.0	38099.2	38176.8	37959.6	36014.8	38277.7	34496.8	31036.4
67.5°	32720.0	35466.5	36157.0	32544.2	33159.7	32655.4	32290.8	32673.5	36053.6	30159.8	26083.9
70°	26650.3	30783.0	31114.1	26029.6	25750.3	25411.5	24684.8	26787.4	31664.8	24718.5	20697.0
72.5°	19595.3	23940.0	24956.4	19091.0	17797.9	17867.8	17293.6	20187.5	25745.2	18361.7	15452.3
75°	13406.6	17335.0	19525.5	13321.3	11769.6	11798.0	11725.7	14304.0	20505.7	12773.0	11562.7
77.5°	9793.7	12385.1	14725.6	8955.8	8694.7	8534.3	8495.5	10008.4	15721.2	9274.0	8979.2
80°	7859.3	9149.8	9892.0	6206.8	6674.9	6662.0	6447.2	6881.8	10267.1	6783.5	6716.3
82.5°	5451.6	7031.8	8014.5	4864.5	4505.1	4430.1	4481.9	5125.8	7256.7	4636.9	4409.4
85°	2875.8	4670.6	7936.9	4311.1	2674.1	2133.6	2653.4	4197.4	6287.0	2456.8	2151.7
87.5°	367.2	1350.0	5255.1	1719.8	1055.2	569.0	1259.5	2363.7	4037.0	501.8	437.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5
2.5°	17244.5	16900.5	16450.5	16034.1	15602.3	15173.0	14611.7	14260.0	14017.0	13970.4	13866.9
5°	16825.5	15682.4	14818.7	14071.3	13393.7	12436.8	11906.6	11467.0	11231.7	11208.4	11151.5
7.5°	14893.7	13316.2	12149.8	11092.1	10132.5	9359.3	8505.8	8107.6	7944.6	7983.4	8022.3
10°	12884.3	11120.5	9780.8	8699.8	7854.1	7202.4	6517.1	6054.2	5733.5	5668.9	5655.9
12.5°	11415.3	9480.8	8180.0	7417.1	6762.8	6149.9	5423.2	4877.5	4461.1	4318.9	4223.2
15°	10794.6	8679.1	7316.2	6493.8	5772.3	4993.8	4318.9	3747.4	3364.6	3240.4	3170.6
17.5°	10926.5	8456.7	6721.4	5668.9	4745.6	3933.6	3082.7	2593.9	2363.7	2304.3	2304.3
20°	11619.6	8415.3	6230.1	4908.5	3757.7	2816.3	2118.0	1838.8	1763.8	1756.0	1776.7
22.5°	12592.0	8560.2	5862.8	4249.0	2919.8	2056.0	1649.9	1546.5	1512.9	1520.6	1543.9
25°	14040.2	9048.9	5596.5	3662.0	2291.3	1683.6	1471.5	1409.4	1394.0	1414.6	1443.1
27.5°	15757.4	9537.8	5430.9	3219.7	1934.4	1538.7	1399.1	1334.4	1344.8	1370.7	1396.5
30°	17265.2	9938.6	5169.7	2904.3	1823.2	1546.5	1399.1	1311.2	1300.9	1306.0	1313.8
32.5°	18617.7	10210.2	4864.5	2604.2	1572.4	1373.2	1306.0	1293.1	1236.1	1215.5	1218.1
35°	19784.1	10210.2	4680.9	2428.4	1409.4	1218.1	1109.5	1044.8	1016.4	1019.0	1047.4
37.5°	20909.0	10005.8	4590.4	2330.1	1321.6	1158.6	1062.9	1006.0	967.2	959.4	964.6
40°	21902.2	9708.4	4487.0	2288.8	1254.2	1122.4	1031.9	985.3	944.0	931.0	933.6
42.5°	22698.7	9467.9	4373.2	2234.4	1212.9	1096.5	1011.2	969.8	923.2	910.3	907.8
45°	23559.9	9387.7	4223.2	2125.8	1233.6	1099.2	1006.0	962.1	915.5	900.0	894.8
47.5°	24695.2	9638.5	4068.1	1996.5	1277.6	1112.0	1013.7	962.1	912.9	900.0	894.8
50°	26125.3	10228.3	3871.5	1807.8	1233.6	1148.3	1011.2	954.3	912.9	900.0	889.7
52.5°	27961.5	11024.8	3612.9	1590.5	1207.7	1236.1	1006.0	938.8	900.0	881.9	863.8
55°	30193.3	11676.5	3305.2	1412.1	1148.3	1212.9	998.3	920.7	879.3	853.4	837.9
57.5°	31827.8	11911.9	2909.4	1295.7	1065.5	1174.1	987.9	897.4	853.4	832.8	812.0
60°	31504.5	11456.6	2575.8	1223.2	1016.4	1060.3	980.2	876.7	830.1	814.7	796.6
62.5°	28915.8	10267.1	2361.2	1189.6	985.3	967.2	987.9	856.0	809.5	793.9	788.8
65°	25034.0	8511.1	2275.9	1181.9	959.4	912.9	918.1	832.8	786.2	773.2	768.1
67.5°	20650.4	6868.8	2200.8	1207.7	925.9	874.1	848.2	801.7	762.9	750.0	739.6
70°	16285.0	5712.8	2167.2	1192.2	884.4	835.3	806.9	768.1	734.5	721.5	713.8
72.5°	13114.4	4825.8	2149.1	1176.7	830.1	783.6	757.7	724.1	687.9	682.7	674.9
75°	11097.2	3793.9	1968.1	1127.6	768.1	721.5	703.5	672.4	636.2	636.2	631.1
77.5°	8560.2	2743.9	1637.0	998.3	703.5	651.7	636.2	613.0	571.5	579.3	576.7
80°	6323.2	1789.7	1280.1	827.6	623.3	574.1	566.4	543.1	499.1	509.4	509.4
82.5°	4331.8	1174.1	920.7	677.6	532.8	486.2	486.2	462.9	413.8	419.0	434.4
85°	2175.0	806.9	687.9	525.0	413.8	390.5	390.5	372.5	323.3	325.8	346.6
87.5°	662.1	486.2	455.2	375.0	297.4	292.3	279.3	266.4	235.4	232.7	245.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5
2.5°	13709.2	13561.8	13383.4	12990.2	12858.4	12850.6	12969.6	12845.4	13083.3	12982.5	13093.7
5°	11055.8	10911.0	10711.8	10210.2	9904.9	9698.1	9599.8	9310.2	9519.7	9367.1	9493.8
7.5°	8130.8	8164.5	8032.6	7737.8	7073.1	6739.5	6543.0	6367.2	6519.7	6504.2	6747.3
10°	5715.4	5806.0	5712.8	5415.4	4877.5	4693.9	4730.1	4799.9	4999.1	5102.5	5477.5
12.5°	4114.6	4109.4	4050.0	3783.6	3429.2	3449.9	3597.3	3718.9	3902.6	4011.1	4393.9
15°	3072.3	3025.8	2999.9	2782.7	2581.0	2625.0	2697.3	2710.3	2826.6	2891.4	3201.6
17.5°	2322.4	2345.6	2374.1	2218.9	2066.4	2037.9	1980.9	1911.2	1944.8	1957.7	2112.9
20°	1844.0	1937.1	2006.8	1898.2	1743.1	1660.4	1587.9	1541.4	1541.4	1538.7	1582.7
22.5°	1611.1	1678.5	1753.4	1678.5	1538.7	1466.4	1425.0	1388.8	1383.6	1383.6	1425.0
25°	1484.4	1533.6	1606.0	1554.3	1450.9	1396.5	1357.8	1311.2	1293.1	1287.9	1316.3
27.5°	1422.4	1443.1	1479.3	1432.7	1344.8	1318.9	1308.6	1267.2	1243.9	1231.0	1259.5
30°	1316.3	1311.2	1313.8	1267.2	1197.4	1194.8	1212.9	1220.7	1212.9	1210.4	1254.2
32.5°	1218.1	1207.7	1205.1	1163.8	1099.2	1083.6	1099.2	1114.6	1132.7	1158.6	1210.4
35°	1093.9	1119.8	1135.3	1099.2	1021.5	975.0	956.9	928.4	912.9	912.9	972.4
37.5°	995.6	1055.2	1078.4	1044.8	959.4	894.8	863.8	858.6	861.2	871.6	928.4
40°	962.1	1006.0	1026.7	993.1	907.8	848.2	830.1	825.0	830.1	845.7	902.5
42.5°	941.3	972.4	969.8	928.4	858.6	817.2	806.9	801.7	806.9	822.4	884.4
45°	923.2	944.0	923.2	874.1	809.5	788.8	791.4	788.8	793.9	809.5	869.0
47.5°	907.8	915.5	889.7	840.5	773.2	768.1	778.5	786.2	791.4	804.2	866.3
50°	884.4	884.4	861.2	809.5	742.3	744.8	757.7	775.8	778.5	793.9	843.1
52.5°	856.0	853.4	837.9	788.8	716.4	724.1	724.1	744.8	750.0	768.1	819.8
55°	832.8	827.6	819.8	773.2	693.0	706.0	698.3	706.0	718.9	737.0	793.9
57.5°	812.0	801.7	801.7	760.4	674.9	680.2	662.1	672.4	687.9	703.5	762.9
60°	791.4	781.0	786.2	742.3	646.5	641.4	633.6	654.3	659.5	677.6	737.0
62.5°	768.1	760.4	762.9	721.5	625.8	613.0	613.0	631.1	633.6	659.5	716.4
65°	750.0	739.6	737.0	700.8	602.6	587.1	594.8	602.6	607.7	633.6	687.9
67.5°	731.9	711.2	711.2	682.7	576.7	561.2	576.7	574.1	581.9	605.2	649.2
70°	708.6	680.2	682.7	669.8	550.9	532.8	545.6	543.1	548.3	563.7	607.7
72.5°	672.4	649.2	654.3	649.2	525.0	499.1	504.3	504.3	504.3	517.2	563.7
75°	625.8	607.7	623.3	636.2	494.0	457.8	462.9	462.9	455.2	462.9	519.9
77.5°	569.0	558.6	610.3	592.2	457.8	413.8	413.8	408.6	393.1	403.5	465.5
80°	506.9	499.1	563.7	496.5	416.3	359.5	354.4	341.4	325.8	333.6	395.7
82.5°	442.2	434.4	473.2	380.1	359.5	297.4	284.5	261.2	245.7	253.5	310.4
85°	362.0	362.0	364.7	287.0	274.2	227.6	212.1	181.1	163.0	168.1	222.4
87.5°	258.6	266.4	245.7	196.5	163.0	126.7	116.4	98.3	82.8	95.6	116.4
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: P191306

CATALOG NUMBER: GLEON-AF-08-LED-E1-SLL-1200

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5	15894.5
2.5°	13662.6	13947.1	14270.4	14684.2	15038.5	15620.4	16179.0	16515.2
5°	10215.3	10688.6	11278.2	12035.9	12742.0	13802.3	14854.9	15529.8
7.5°	7311.0	7817.9	8454.2	9400.7	10398.9	11751.5	13142.9	13949.7
10°	6049.0	6568.9	7104.2	7742.9	8560.2	10031.7	11676.5	12586.8
12.5°	5004.2	5560.2	6137.0	6809.4	7567.1	8880.8	10776.5	11823.9
15°	3830.1	4450.8	5130.9	5981.8	6930.9	8449.0	10554.1	11692.0
17.5°	2625.0	3318.0	4153.4	5203.3	6364.5	8309.3	10952.3	12263.5
20°	1807.8	2312.1	3204.3	4435.2	5831.7	8291.2	11717.9	13360.0
22.5°	1512.9	1737.9	2389.6	3729.3	5430.9	8513.6	12904.9	14898.9
25°	1399.1	1533.6	1908.6	3116.3	5138.7	9025.7	14539.4	16890.1
27.5°	1331.9	1453.4	1732.7	2715.4	4908.5	9620.5	16129.9	18819.4
30°	1357.8	1481.8	1683.6	2511.1	4595.6	10117.1	17541.9	20324.6
32.5°	1223.2	1277.6	1443.1	2330.1	4370.6	10533.4	18778.1	21571.1
35°	1042.2	1137.9	1287.9	2244.8	4375.8	10812.7	20125.4	23164.2
37.5°	993.1	1088.7	1197.4	2213.8	4435.2	11110.2	21671.9	25031.4
40°	962.1	1050.0	1143.0	2195.7	4492.2	11381.7	23187.4	26877.9
42.5°	941.3	1021.5	1137.9	2133.6	4520.6	11624.8	24434.0	28447.8
45°	938.8	1021.5	1158.6	2071.5	4564.6	11886.0	25478.8	29608.9
47.5°	941.3	1055.2	1119.8	1996.5	4564.6	12323.0	26704.6	30646.0
50°	931.0	1112.0	1078.4	1890.5	4458.5	13150.6	28385.7	32034.7
52.5°	925.9	1104.3	998.3	1727.6	4274.9	14464.3	30539.9	33948.5
55°	912.9	1065.5	941.3	1484.4	4060.3	15897.1	32846.7	36211.3
57.5°	900.0	944.0	910.3	1272.3	3729.3	16905.7	34434.7	37977.7
60°	1008.6	825.0	884.4	1168.9	3287.0	17182.4	34372.6	38681.1
62.5°	933.6	773.2	850.9	1145.7	2976.7	16406.6	32784.7	38300.9
65°	731.9	739.6	817.2	1212.9	2893.9	14350.6	29970.9	36544.9
67.5°	669.8	706.0	783.6	1298.2	2901.7	11490.3	25765.9	32720.0
70°	631.1	669.8	744.8	1342.2	2922.4	8565.4	20371.1	26650.3
72.5°	587.1	620.7	700.8	1350.0	2787.8	6222.3	15700.6	19595.3
75°	535.3	566.4	638.7	1176.7	2309.4	4316.3	12010.1	13406.6
77.5°	475.9	499.1	561.2	907.8	1714.7	2762.0	9015.4	9793.7
80°	406.0	419.0	470.7	664.6	1174.1	1727.6	7132.6	7859.3
82.5°	325.8	331.0	364.7	499.1	762.9	1109.5	4776.7	5451.6
85°	230.2	230.2	250.8	362.0	519.9	703.5	2593.9	2875.8
87.5°	108.6	111.2	111.2	199.2	271.6	356.9	597.4	367.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)