

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: P191287

Luminaire Tested: **GLEON-AF-09-LED-E1-SLL-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191287
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-09-LED-E1-SLL-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 800mA 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: 38651.2 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

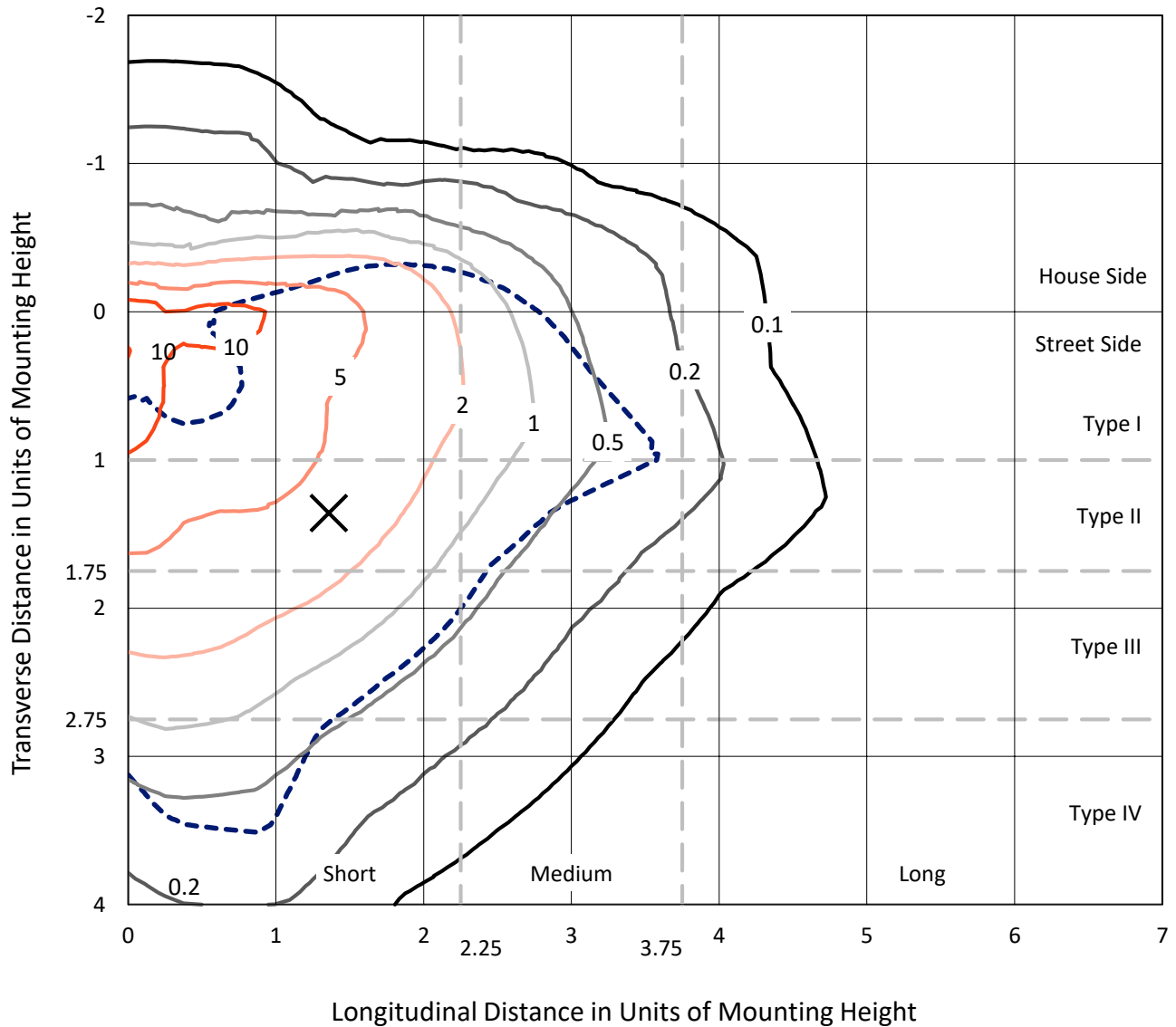
Input Watts (W): 374
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

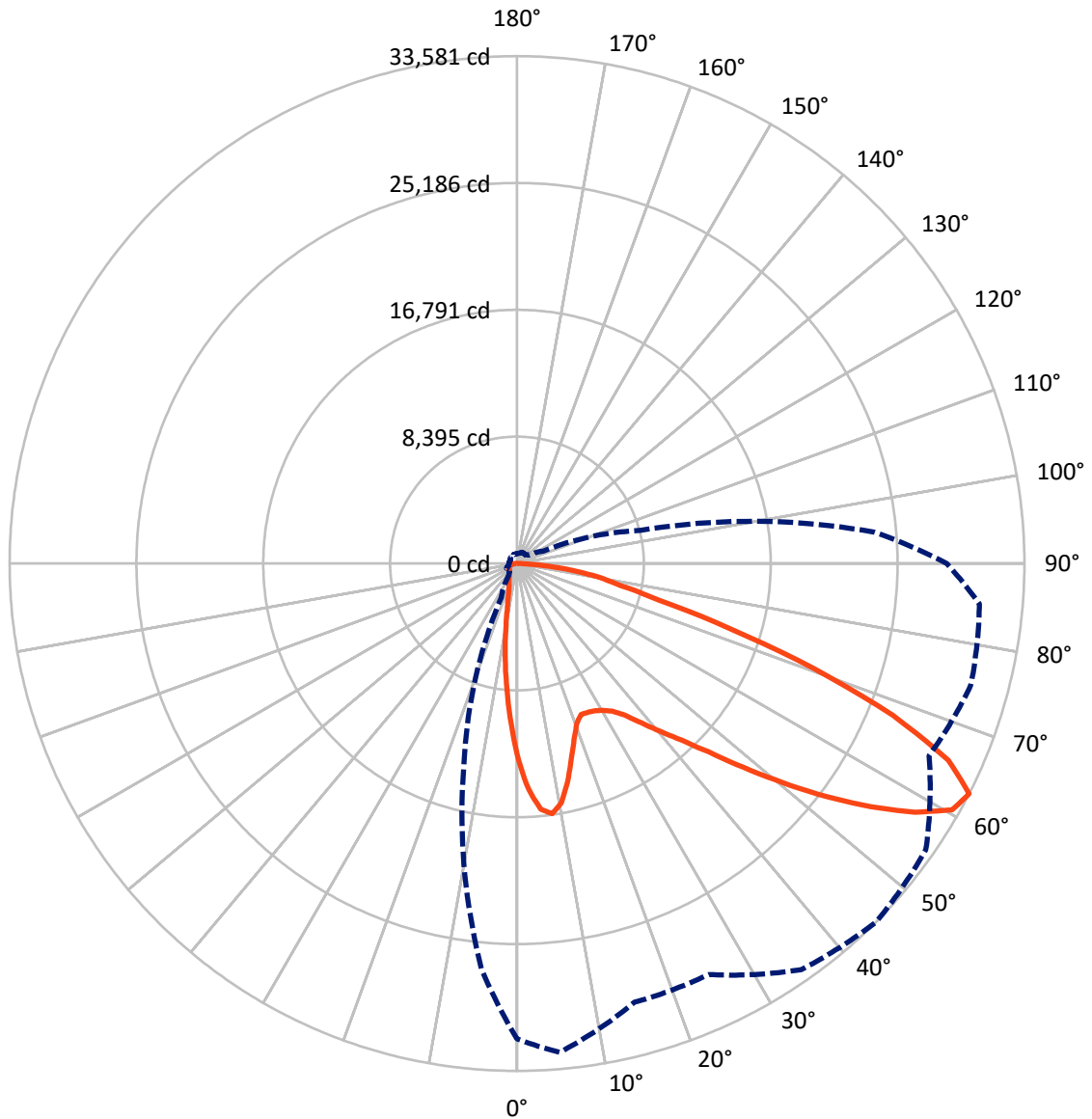
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.1 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
House Side	Lumens	6396.2	0.0	6396.2
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	32254.9	0.0	32254.9
	% Fixture	83.5	0.0	83.5
Total	Lumens	38651.2	0.0	38651.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	950.6	2.5
10°-20°	1743.1	4.5
20°-30°	2541.5	6.6
30°-40°	3914.3	10.1
40°-50°	5760.8	14.9
50°-60°	8449.8	21.9
60°-70°	9445.7	24.4
70°-80°	4624.5	12.0
80°-90°	1221.0	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°	38651.2	100.0
0°-180°	38651.2	100.0



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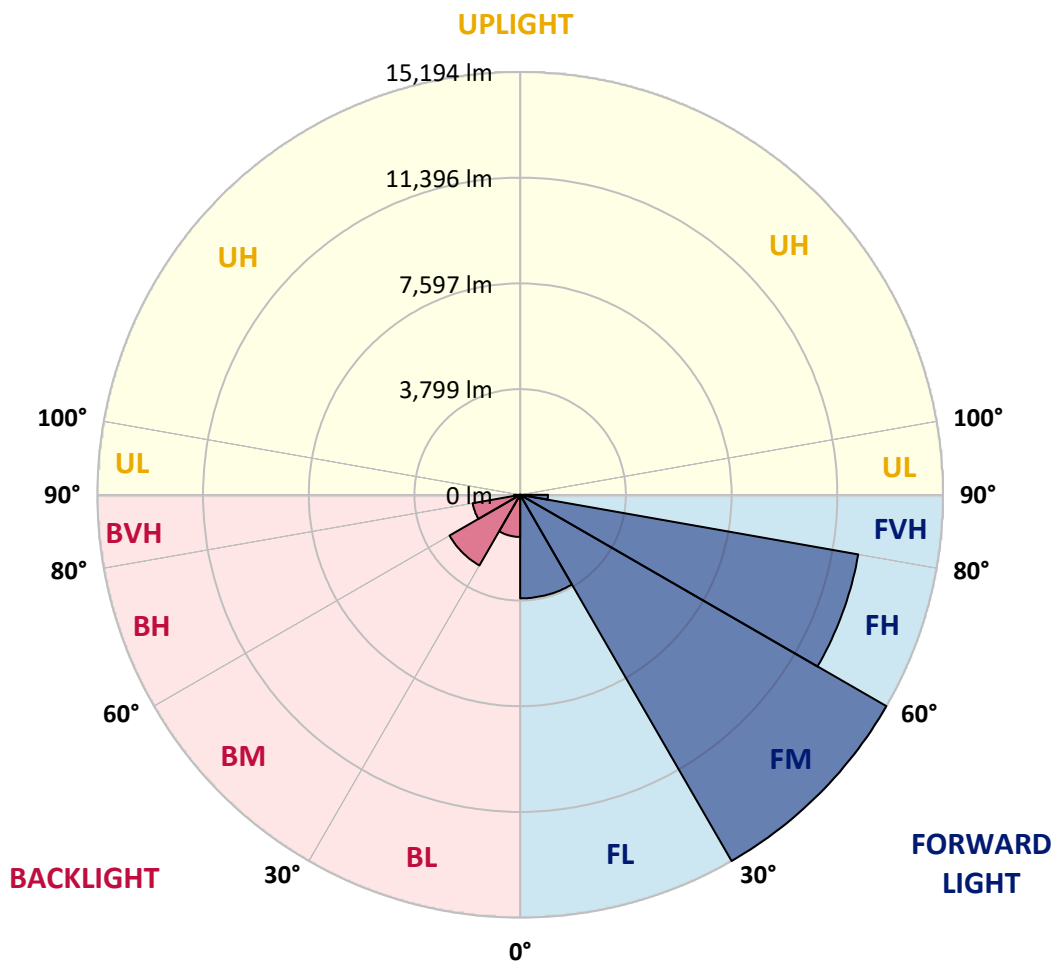
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3722.0	9.6			
FM	(30°-60°)	15194.1	39.3			
FH	(60°-80°)	12336.1	31.9			G5
FVH	(80°-90°)	1002.7	2.6			G5
BL	(0°-30°)	1513.2	3.9	B3/2500		
BM	(30°-60°)	2930.7	7.6	B3/5000		
BH	(60°-80°)	1734.0	4.5	B3/2500		G3/2500
BVH	(80°-90°)	218.3	0.6			G2/225
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°	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5
2.5°	13568.4	13785.1	14207.9	14524.5	14909.1	14998.3	15121.6	15000.4	14785.8	14501.1	14407.6
5°	12758.9	13222.0	14248.3	15151.3	15954.5	16328.3	16432.5	16124.4	15501.9	14683.8	14184.5
7.5°	11460.6	12119.3	13508.9	14838.9	16022.4	16721.5	16704.5	15988.4	14843.2	13511.0	12710.0
10°	10340.9	11093.1	12686.6	14173.9	15429.6	16107.4	15846.0	14930.3	13564.1	12030.1	11161.1
12.5°	9714.1	10451.4	12068.4	13562.0	14611.6	14845.4	14645.6	13749.0	12461.4	10910.4	10149.7
15°	9605.8	10415.3	11821.8	13037.2	13625.7	13421.7	13183.8	12782.3	11872.9	10549.2	9756.7
17.5°	10075.3	10967.8	12104.5	12671.7	12571.9	12217.1	12149.1	12193.7	11974.9	10950.7	10037.1
20°	10976.3	12047.1	12778.0	12499.6	11770.9	11282.2	11299.2	11981.2	12629.2	11968.5	10925.2
22.5°	12240.4	13462.1	13749.0	12591.0	11433.0	10853.0	10993.2	12098.0	13672.5	13455.8	12123.6
25°	13876.4	14989.8	14783.7	12922.4	11467.1	10906.1	11018.7	12501.8	14904.8	14943.1	13606.6
27.5°	15461.5	16494.1	15652.7	13362.3	11607.3	11031.5	11180.2	13137.0	16081.9	16557.9	15302.1
30°	16698.0	17416.2	15996.9	13763.8	11883.5	11275.8	11460.6	13740.5	16617.3	17647.8	16606.7
32.5°	17722.2	18238.5	16545.1	14261.1	12391.3	11660.4	11985.5	14473.5	17388.6	18684.7	17883.6
35°	19031.0	19177.6	17227.1	14815.6	13175.3	12329.6	12733.4	15191.6	18123.7	19732.1	19141.5
37.5°	20565.0	20376.0	17871.0	15574.1	14188.8	13377.1	13710.7	15979.9	18729.3	20919.9	20426.9
40°	22082.0	21627.4	18678.3	16751.2	15667.6	14611.6	15006.8	16821.3	19294.5	22109.6	21682.7
42.5°	23371.8	22698.3	19475.0	18045.2	17044.4	15973.6	16445.3	17669.0	19834.1	23125.3	22772.6
45°	24325.8	23488.6	20233.6	19288.0	18941.8	17783.8	18006.9	18640.0	20418.4	23973.1	23669.2
47.5°	25177.8	24283.3	21091.9	20541.7	20601.2	20138.0	19778.9	19770.4	21106.9	24665.7	24517.0
50°	26318.8	25386.0	22014.1	21833.5	23091.3	22783.3	21990.7	21089.9	21978.0	25451.8	25434.9
52.5°	27891.1	27132.5	23140.2	23225.2	25415.7	25617.6	24635.9	22674.8	23342.0	26894.5	26792.5
55°	29750.2	29308.3	24674.2	24825.1	28267.1	28411.5	27436.4	24657.2	25347.8	28983.2	28700.5
57.5°	31201.3	31107.8	26356.9	26745.8	30396.1	31046.3	30149.6	26951.9	27608.4	30742.4	30032.7
60°	31779.2	32231.9	28148.1	28683.5	32365.7	33085.9	32299.8	28968.2	29612.1	31471.2	29941.4
62.5°	31466.9	32478.3	30056.1	30011.5	32805.5	33581.0	33028.5	30090.1	31097.2	30719.0	28426.5
65°	30024.2	31592.3	31163.1	29669.4	31301.2	31364.9	31186.5	29588.6	31447.8	28341.5	25498.6
67.5°	26881.8	29138.2	29705.6	26737.3	27243.0	26828.6	26529.1	26843.6	29620.6	24778.3	21429.8
70°	21895.1	25290.4	25562.3	21385.2	21155.7	20877.4	20280.3	22007.8	26014.9	20307.9	17004.0
72.5°	16098.9	19668.4	20503.4	15684.6	14622.3	14679.5	14207.9	16585.5	21151.5	15085.5	12695.1
75°	11014.5	14241.9	16041.5	10944.3	9669.5	9692.9	9633.4	11751.8	16846.8	10493.9	9499.5
77.5°	8046.2	10175.2	12098.0	7357.9	7143.3	7011.5	6979.7	8222.6	12916.1	7619.2	7377.0
80°	6457.0	7517.3	8127.0	5099.3	5483.8	5473.2	5296.9	5653.8	8435.0	5573.1	5517.9
82.5°	4478.9	5777.1	6584.4	3996.6	3701.2	3639.7	3682.1	4211.2	5962.0	3809.6	3622.6
85°	2362.7	3837.2	6520.7	3541.9	2197.0	1752.9	2179.9	3448.4	5165.2	2018.5	1767.8
87.5°	301.7	1109.1	4317.4	1412.9	866.8	467.4	1034.7	1942.0	3316.7	412.1	359.1
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°	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5
2.5°	14167.6	13884.9	13515.2	13173.2	12818.4	12465.7	12004.6	11715.7	11515.9	11477.7	11392.7
5°	13823.3	12884.3	12174.5	11560.6	11003.9	10217.7	9782.2	9421.0	9227.6	9208.5	9161.8
7.5°	12236.2	10940.2	9981.9	9112.9	8324.6	7689.3	6988.2	6660.9	6527.1	6559.0	6590.9
10°	10585.3	9136.3	8035.7	7147.6	6452.8	5917.3	5354.2	4973.9	4710.5	4657.4	4646.8
12.5°	9378.4	7789.2	6720.5	6093.6	5556.2	5052.6	4455.5	4007.2	3665.1	3548.3	3469.6
15°	8868.6	7130.5	6010.8	5335.1	4742.3	4102.9	3548.3	3078.7	2764.2	2662.2	2604.8
17.5°	8976.9	6947.8	5522.1	4657.4	3898.9	3231.7	2532.6	2131.1	1942.0	1893.1	1893.1
20°	9546.3	6913.8	5118.4	4032.7	3087.2	2313.8	1740.1	1510.7	1449.0	1442.7	1459.6
22.5°	10345.2	7032.8	4816.7	3490.9	2398.8	1689.1	1355.5	1270.6	1243.0	1249.3	1268.5
25°	11535.0	7434.4	4597.9	3008.6	1882.5	1383.2	1208.9	1158.0	1145.2	1162.2	1185.6
27.5°	12945.9	7835.9	4461.9	2645.2	1589.3	1264.2	1149.5	1096.4	1104.9	1126.1	1147.3
30°	14184.5	8165.3	4247.3	2386.0	1497.9	1270.6	1149.5	1077.3	1068.7	1073.0	1079.3
32.5°	15295.8	8388.3	3996.6	2139.6	1291.8	1128.2	1073.0	1062.3	1015.6	998.6	1000.8
35°	16254.0	8388.3	3845.7	1995.1	1158.0	1000.8	911.4	858.4	835.0	837.2	860.5
37.5°	17178.2	8220.5	3771.3	1914.4	1085.8	951.9	873.3	826.5	794.6	788.3	792.5
40°	17994.1	7976.2	3686.4	1880.4	1030.5	922.1	847.7	809.6	775.5	764.9	767.0
42.5°	18648.6	7778.5	3592.9	1835.8	996.5	900.9	830.7	796.8	758.5	747.9	745.7
45°	19356.1	7712.6	3469.6	1746.5	1013.4	903.0	826.5	790.4	752.2	739.4	735.2
47.5°	20288.8	7918.8	3342.2	1640.3	1049.6	913.6	832.9	790.4	750.0	739.4	735.2
50°	21463.8	8403.2	3180.7	1485.1	1013.4	943.4	830.7	784.0	750.0	739.4	730.9
52.5°	22972.3	9057.6	2968.2	1306.7	992.3	1015.6	826.5	771.3	739.4	724.6	709.6
55°	24805.9	9593.0	2715.4	1160.1	943.4	996.5	820.1	756.4	722.4	701.1	688.4
57.5°	26148.8	9786.4	2390.3	1064.5	875.3	964.6	811.6	737.2	701.1	684.1	667.2
60°	25883.2	9412.5	2116.2	1004.9	835.0	871.1	805.3	720.3	682.0	669.3	654.4
62.5°	23756.4	8435.0	1939.8	977.3	809.6	794.6	811.6	703.3	665.0	652.3	648.0
65°	20567.1	6992.4	1869.7	971.0	788.3	750.0	754.2	684.1	645.9	635.3	631.1
67.5°	16965.7	5643.2	1808.2	992.3	760.7	718.1	696.9	658.7	626.8	616.1	607.6
70°	13379.3	4693.5	1780.5	979.5	726.6	686.3	662.9	631.1	603.4	592.8	586.5
72.5°	10774.4	3964.8	1765.6	966.8	682.0	643.7	622.6	594.9	565.2	560.9	554.5
75°	9117.2	3116.9	1616.9	926.4	631.1	592.8	578.0	552.4	522.7	522.7	518.4
77.5°	7032.8	2254.3	1345.0	820.1	578.0	535.4	522.7	503.6	469.5	476.0	473.8
80°	5195.0	1470.3	1051.7	680.0	512.1	471.7	465.3	446.2	410.1	418.6	418.6
82.5°	3558.8	964.6	756.4	556.7	437.7	399.5	399.5	380.3	339.9	344.2	356.9
85°	1786.9	662.9	565.2	431.3	339.9	320.8	320.8	306.0	265.6	267.7	284.7
87.5°	543.9	399.5	374.0	308.1	244.4	240.1	229.4	218.8	193.3	191.2	201.8
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°	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5
2.5°	11263.1	11142.0	10995.4	10672.4	10564.0	10557.7	10655.4	10553.4	10748.9	10666.0	10757.4
5°	9083.1	8964.1	8800.5	8388.3	8137.7	7967.7	7887.0	7648.9	7821.1	7695.7	7799.8
7.5°	6680.1	6707.7	6599.4	6357.1	5811.1	5537.0	5375.5	5231.1	5356.4	5343.6	5543.4
10°	4695.7	4769.9	4693.5	4449.1	4007.2	3856.3	3886.1	3943.5	4107.0	4192.1	4500.2
12.5°	3380.4	3376.1	3327.2	3108.4	2817.4	2834.4	2955.5	3055.3	3206.1	3295.4	3609.9
15°	2524.1	2485.9	2464.7	2286.2	2120.5	2156.6	2216.0	2226.7	2322.3	2375.4	2630.4
17.5°	1908.0	1927.1	1950.5	1823.0	1697.7	1674.3	1627.5	1570.1	1597.7	1608.4	1735.8
20°	1514.9	1591.4	1648.8	1559.5	1432.0	1364.1	1304.6	1266.3	1266.3	1264.2	1300.3
22.5°	1323.7	1378.9	1440.5	1378.9	1264.2	1204.7	1170.7	1141.0	1136.7	1136.7	1170.7
25°	1219.6	1260.0	1319.4	1276.9	1191.9	1147.3	1115.4	1077.3	1062.3	1058.1	1081.5
27.5°	1168.6	1185.6	1215.4	1177.1	1104.9	1083.6	1075.1	1041.1	1022.0	1011.4	1034.7
30°	1081.5	1077.3	1079.3	1041.1	983.8	981.6	996.5	1002.9	996.5	994.4	1030.5
32.5°	1000.8	992.3	990.1	956.2	903.0	890.3	903.0	915.7	930.6	951.9	994.4
35°	898.8	920.0	932.7	903.0	839.2	801.0	786.1	762.8	750.0	750.0	798.9
37.5°	818.1	866.8	886.0	858.4	788.3	735.2	709.6	705.4	707.6	716.1	762.8
40°	790.4	826.5	843.5	815.9	745.7	696.9	682.0	677.8	682.0	694.8	741.5
42.5°	773.4	798.9	796.8	762.8	705.4	671.4	662.9	658.7	662.9	675.7	726.6
45°	758.5	775.5	758.5	718.1	665.0	648.0	650.2	648.0	652.3	665.0	713.9
47.5°	745.7	752.2	730.9	690.5	635.3	631.1	639.5	645.9	650.2	660.8	711.8
50°	726.6	726.6	707.6	665.0	609.8	611.9	622.6	637.4	639.5	652.3	692.6
52.5°	703.3	701.1	688.4	648.0	588.5	594.9	594.9	611.9	616.1	631.1	673.5
55°	684.1	680.0	673.5	635.3	569.4	580.0	573.7	580.0	590.7	605.6	652.3
57.5°	667.2	658.7	658.7	624.6	554.5	558.8	543.9	552.4	565.2	578.0	626.8
60°	650.2	641.7	645.9	609.8	531.2	526.9	520.6	537.6	541.8	556.7	605.6
62.5°	631.1	624.6	626.8	592.8	514.1	503.6	503.6	518.4	520.6	541.8	588.5
65°	616.1	607.6	605.6	575.8	495.0	482.3	488.7	495.0	499.3	520.6	565.2
67.5°	601.3	584.3	584.3	560.9	473.8	461.0	473.8	471.7	478.0	497.2	533.3
70°	582.2	558.8	560.9	550.3	452.6	437.7	448.4	446.2	450.4	463.2	499.3
72.5°	552.4	533.3	537.6	533.3	431.3	410.1	414.3	414.3	414.3	424.9	463.2
75°	514.1	499.3	512.1	522.7	405.8	376.0	380.3	380.3	374.0	380.3	427.1
77.5°	467.4	458.9	501.5	486.5	376.0	339.9	339.9	335.7	322.9	331.4	382.5
80°	416.4	410.1	463.2	408.0	342.1	295.3	291.1	280.5	267.7	274.0	325.1
82.5°	363.4	356.9	388.8	312.3	295.3	244.4	233.7	214.6	201.8	208.2	254.9
85°	297.5	297.5	299.6	235.9	225.3	187.0	174.2	148.7	133.9	138.1	182.7
87.5°	212.5	218.8	201.8	161.5	133.9	104.1	95.6	80.7	68.0	78.7	95.6
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: P191287

CATALOG NUMBER: GLEON-AF-09-LED-E1-SLL-800

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5	13058.5
2.5°	11224.8	11458.6	11724.1	12064.1	12355.2	12833.2	13292.1	13568.4
5°	8392.6	8781.4	9265.9	9888.4	10468.5	11339.5	12204.3	12758.9
7.5°	6006.6	6423.0	6945.6	7723.3	8543.5	9654.7	10797.8	11460.6
10°	4969.7	5396.8	5836.5	6361.3	7032.8	8241.7	9593.0	10340.9
12.5°	4111.3	4568.1	5041.9	5594.3	6216.9	7296.2	8853.6	9714.1
15°	3146.7	3656.6	4215.4	4914.5	5694.3	6941.4	8670.9	9605.8
17.5°	2156.6	2726.0	3412.3	4274.9	5228.9	6826.7	8998.2	10075.3
20°	1485.1	1899.5	2632.5	3643.9	4791.2	6811.8	9627.1	10976.3
22.5°	1243.0	1427.8	1963.2	3063.8	4461.9	6994.5	10602.3	12240.4
25°	1149.5	1260.0	1568.1	2560.2	4221.8	7415.3	11945.1	13876.4
27.5°	1094.3	1194.1	1423.5	2231.0	4032.7	7903.9	13251.8	15461.5
30°	1115.4	1217.4	1383.2	2063.1	3775.6	8311.9	14411.8	16698.0
32.5°	1004.9	1049.6	1185.6	1914.4	3590.8	8654.0	15427.5	17722.2
35°	856.2	934.9	1058.1	1844.3	3595.0	8883.4	16534.5	19031.0
37.5°	815.9	894.5	983.8	1818.7	3643.9	9127.8	17805.1	20565.0
40°	790.4	862.7	939.2	1803.9	3690.6	9350.8	19050.1	22082.0
42.5°	773.4	839.2	934.9	1752.9	3714.0	9550.6	20074.2	23371.8
45°	771.3	839.2	951.9	1701.9	3750.1	9765.2	20932.6	24325.8
47.5°	773.4	866.8	920.0	1640.3	3750.1	10124.2	21939.7	25177.8
50°	764.9	913.6	886.0	1553.1	3663.0	10804.1	23320.8	26318.8
52.5°	760.7	907.3	820.1	1419.3	3512.1	11883.5	25090.6	27891.1
55°	750.0	875.3	773.4	1219.6	3335.7	13060.5	26985.9	29750.2
57.5°	739.4	775.5	747.9	1045.4	3063.8	13889.2	28290.5	31201.3
60°	828.6	677.8	726.6	960.3	2700.5	14116.5	28239.5	31779.2
62.5°	767.0	635.3	699.0	941.2	2445.6	13479.1	26934.9	31466.9
65°	601.3	607.6	671.4	996.5	2377.5	11790.0	24623.2	30024.2
67.5°	550.3	580.0	643.7	1066.6	2383.9	9440.1	21168.4	26881.8
70°	518.4	550.3	611.9	1102.7	2401.0	7037.0	16736.3	21895.1
72.5°	482.3	509.9	575.8	1109.1	2290.4	5112.1	12899.1	16098.9
75°	439.8	465.3	524.8	966.8	1897.4	3546.2	9867.2	11014.5
77.5°	391.0	410.1	461.0	745.7	1408.7	2269.2	7406.8	8046.2
80°	333.6	344.2	386.7	546.1	964.6	1419.3	5860.0	6457.0
82.5°	267.7	272.0	299.6	410.1	626.8	911.4	3924.3	4478.9
85°	189.1	189.1	206.1	297.5	427.1	578.0	2131.1	2362.7
87.5°	89.2	91.3	91.3	163.6	223.1	293.2	490.8	301.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)