

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: P191336

Luminaire Tested: **GLEON-AF-08-LED-E1-SLR**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191336  
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-SLR  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42886.2 lumens  
Efficiency: N/A  
Efficacy: 96.4 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): 445  
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

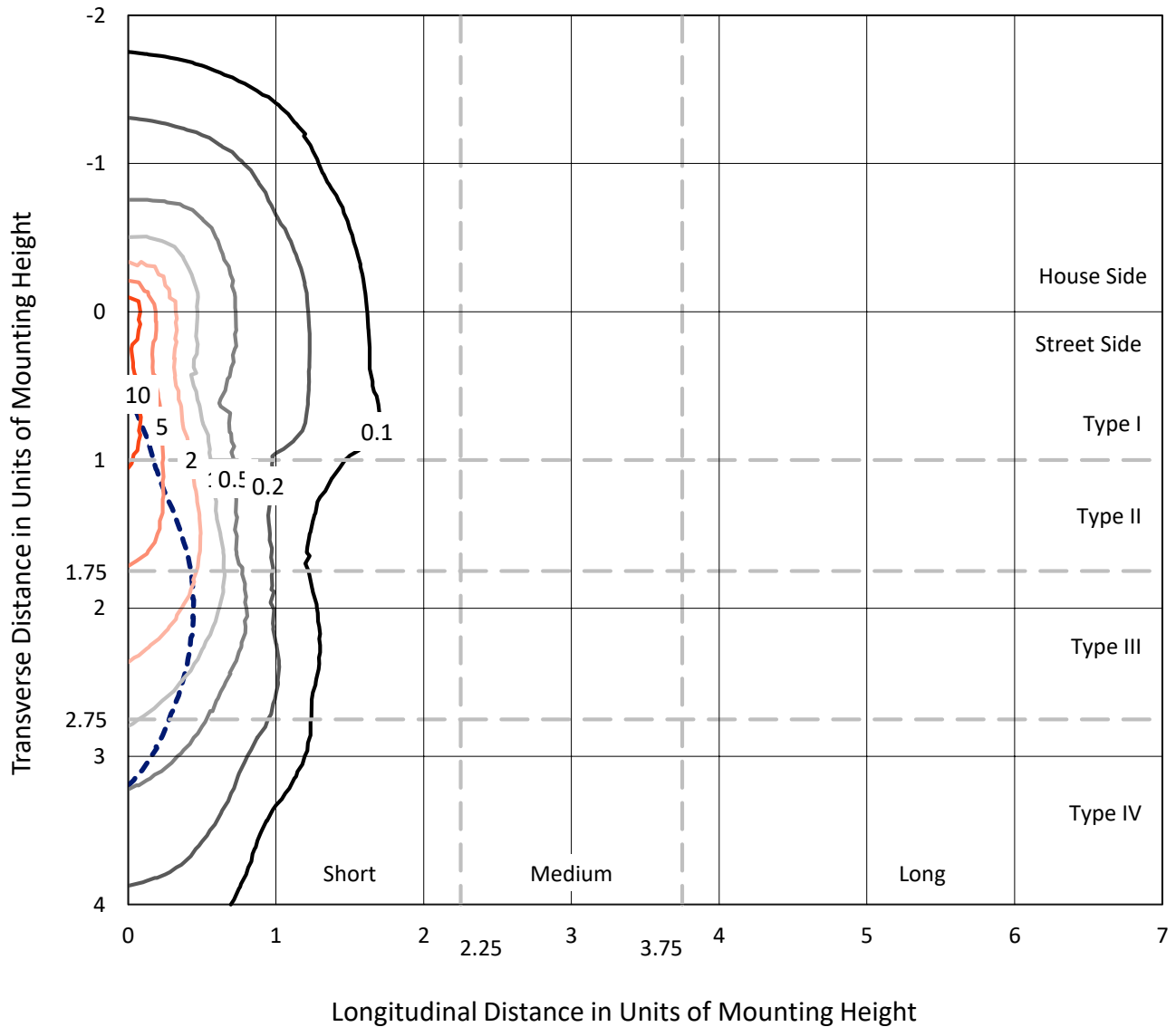


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

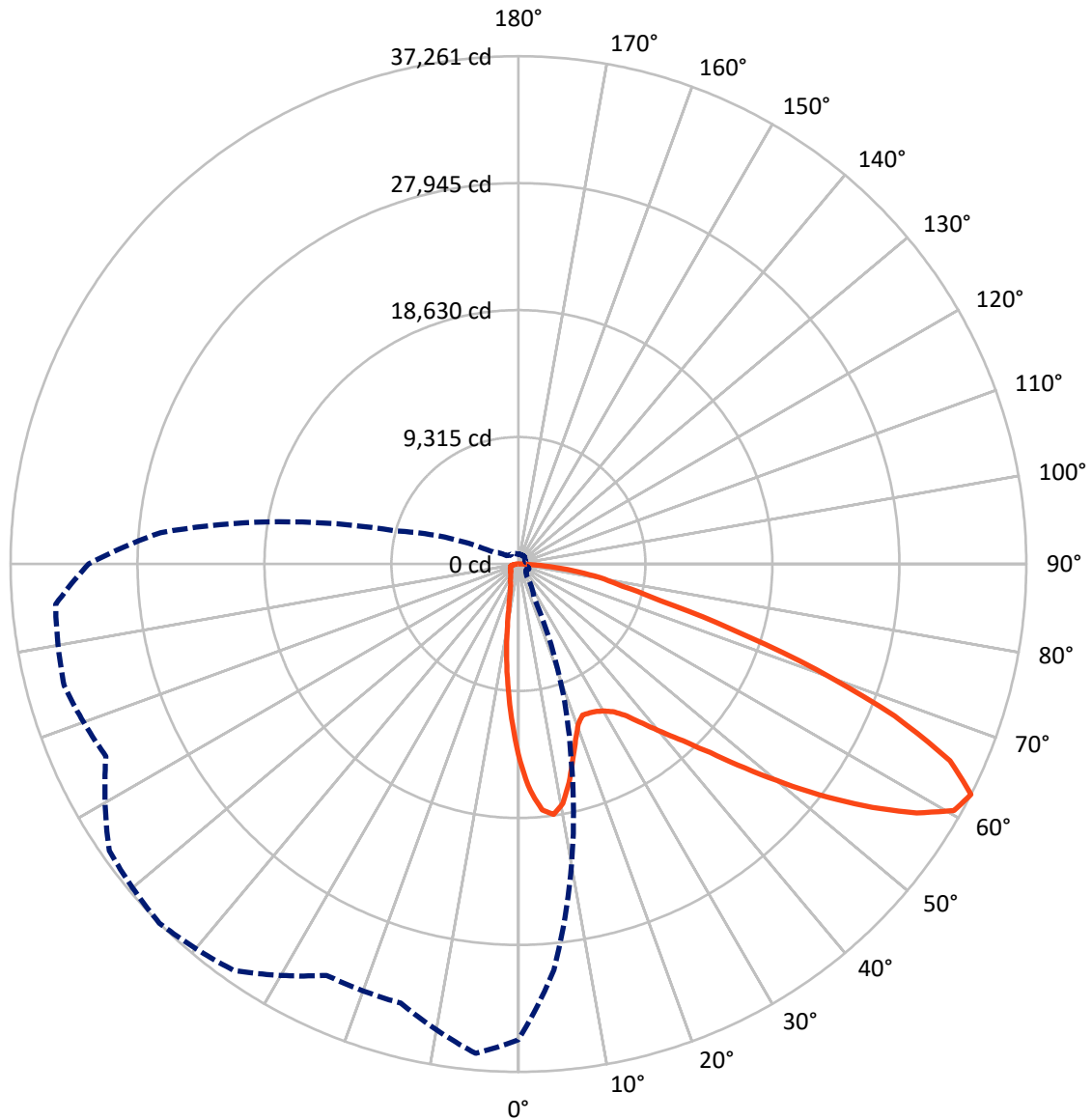


Based on 30 foot mounting height. Maximum calculated value = 16.1 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7097.1	0.0	7097.1
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	35789.1	0.0	35789.1
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	42886.2	0.0	42886.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1054.8	2.5
10°-20°	1934.1	4.5
20°-30°	2820.0	6.6
30°-40°	4343.1	10.1
40°-50°	6392.0	14.9
50°-60°	9375.7	21.9
60°-70°	10480.6	24.4
70°-80°	5131.2	12.0
80°-90°	1354.8	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°	42886.2	100.0
0°-180°	42886.2	100.0



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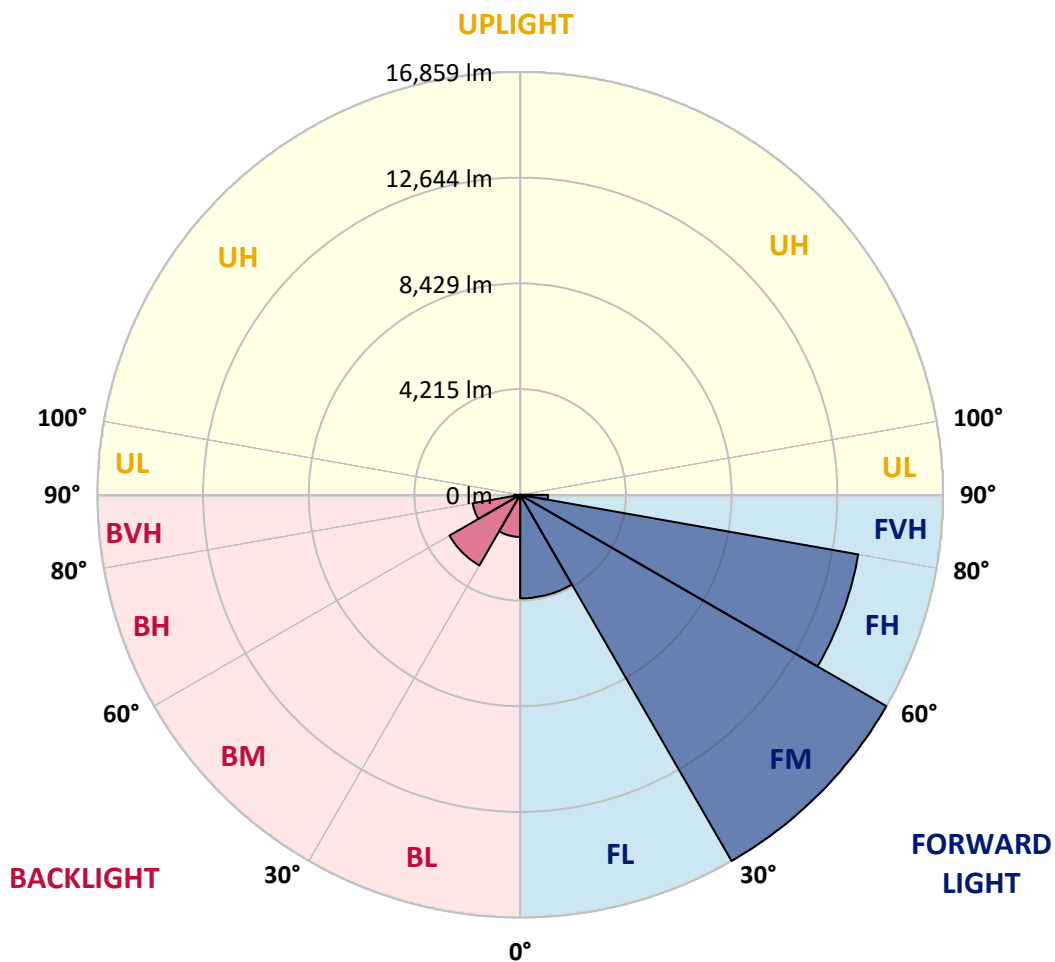
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4129.8	9.6			
FM (30°-60°)	16858.9	39.3			
FH (60°-80°)	13687.8	31.9			G5
FVH (80°-90°)	1112.6	2.6			G5
BL (0°-30°)	1679.1	3.9	B3/2500		
BM (30°-60°)	3251.8	7.6	B3/5000		
BH (60°-80°)	1924.0	4.5	B3/2500		G3/2500
BVH (80°-90°)	242.2	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°	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3
2.5°	15055.1	14748.6	14239.4	13709.0	13385.9	13008.8	12714.1	12454.7	11936.1	11834.7	11926.7
5°	14156.8	13541.5	12582.0	11615.5	10971.9	10281.1	9743.6	9312.1	8654.5	8538.9	8678.0
7.5°	12716.4	11980.9	10712.5	9479.6	8569.6	7706.7	7126.8	6664.7	6150.7	5929.1	5943.2
10°	11474.0	10644.2	9144.8	7803.4	7058.4	6476.1	5988.0	5514.2	4993.2	4651.4	4557.0
12.5°	10778.5	9823.7	8095.7	6898.1	6207.4	5594.4	5068.6	4561.7	4005.4	3656.5	3557.5
15°	10658.3	9621.0	7702.0	6318.2	5452.9	4677.3	4057.2	3491.4	2918.6	2635.7	2576.7
17.5°	11179.3	9984.1	7574.6	5801.9	4743.3	3786.1	3024.7	2392.9	1926.1	1784.6	1772.9
20°	12178.9	10681.9	7558.2	5316.2	4043.1	2920.9	2107.6	1647.9	1442.8	1402.7	1405.1
22.5°	13581.6	11763.9	7760.9	4950.8	3399.6	2178.4	1584.2	1379.1	1298.9	1261.3	1261.3
25°	15396.9	13254.0	8227.7	4684.4	2840.8	1739.8	1398.0	1275.4	1200.0	1174.0	1178.7
27.5°	17155.6	14703.8	8770.0	4474.6	2475.3	1579.5	1324.9	1214.1	1148.1	1122.2	1133.9
30°	18527.7	15991.0	9222.6	4189.3	2289.2	1534.7	1350.8	1237.7	1143.4	1103.4	1105.7
32.5°	19664.0	17117.9	9602.1	3984.2	2124.2	1315.5	1164.6	1115.1	1103.4	1056.2	1032.6
35°	21116.3	18346.1	9856.7	3988.9	2046.3	1174.0	1037.3	950.1	886.4	832.2	832.2
37.5°	22818.4	19755.9	10127.8	4043.1	2018.1	1091.5	992.5	905.3	846.4	794.5	785.0
40°	24501.6	21137.4	10375.4	4095.0	2001.5	1042.0	957.2	877.0	822.8	770.9	756.8
42.5°	25932.6	22273.7	10597.1	4121.0	1944.9	1037.3	931.2	858.2	806.3	749.7	735.5
45°	26991.2	23226.2	10835.1	4161.1	1888.4	1056.2	931.2	855.8	792.2	737.9	723.7
47.5°	27936.5	24343.7	11233.5	4161.1	1820.0	1020.8	961.9	858.2	789.7	733.1	721.4
50°	29202.5	25876.1	11988.0	4064.4	1723.4	983.1	1013.7	848.7	768.5	723.7	709.6
52.5°	30947.0	27839.8	13185.5	3896.9	1574.8	910.0	1006.7	844.0	747.4	700.2	683.6
55°	33009.9	29942.8	14491.6	3701.3	1353.3	858.2	971.3	832.2	723.7	671.9	655.4
57.5°	34620.0	31390.3	15411.1	3399.6	1159.9	829.8	860.5	820.4	695.5	641.3	627.1
60°	35261.3	31333.7	15663.3	2996.4	1065.6	806.3	752.1	919.4	671.9	617.7	601.2
62.5°	34914.7	29886.1	14956.1	2713.5	1044.3	775.6	704.9	851.1	653.1	601.2	577.6
65°	33314.0	27321.2	13081.8	2638.1	1105.7	745.0	674.2	667.2	627.1	577.6	554.0
67.5°	29827.2	23487.9	10474.4	2645.1	1183.5	714.3	643.6	610.6	591.8	551.7	530.4
70°	24294.2	18570.1	7808.1	2664.0	1223.6	678.9	610.6	575.2	554.0	513.9	499.8
72.5°	17862.9	14312.4	5672.2	2541.4	1230.6	638.9	565.8	535.1	513.9	471.5	459.7
75°	12221.3	10948.2	3934.7	2105.2	1072.7	582.3	516.3	488.0	473.8	422.0	414.9
77.5°	8927.9	8218.3	2517.8	1563.1	827.5	511.6	455.0	433.7	424.3	367.8	358.3
80°	7164.4	6502.0	1574.8	1070.3	605.9	429.0	381.9	370.1	360.7	304.1	297.1
82.5°	4969.6	4354.3	1011.4	695.5	455.0	332.5	301.8	297.1	282.9	231.1	223.9
85°	2621.5	2364.6	641.3	473.8	330.0	228.6	209.8	209.8	202.7	153.2	148.5
87.5°	334.8	544.6	325.3	247.6	181.6	101.4	101.4	99.0	106.1	87.3	75.4
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°	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3
2.5°	11709.7	11823.0	11714.4	11721.6	11841.8	12200.1	12362.8	12497.2	12641.0	12735.2	12777.7
5°	8487.0	8751.0	8840.6	9029.3	9307.4	9764.8	9946.4	10078.3	10165.6	10217.4	10238.7
7.5°	5804.2	5964.5	6143.6	6447.8	7053.7	7322.4	7442.7	7412.0	7313.0	7277.7	7242.3
10°	4375.6	4311.8	4278.9	4446.3	4936.7	5207.7	5292.6	5210.1	5155.9	5167.6	5226.6
12.5°	3390.1	3279.3	3145.0	3126.0	3449.1	3691.8	3746.0	3750.8	3849.8	3937.0	4066.7
15°	2470.6	2458.9	2392.9	2352.8	2536.7	2734.8	2758.3	2800.7	2890.3	2954.0	3067.1
17.5°	1742.2	1805.8	1857.7	1883.7	2022.8	2164.2	2138.3	2117.0	2100.5	2100.5	2154.7
20°	1405.1	1447.5	1513.6	1588.9	1730.4	1829.4	1765.8	1680.9	1619.6	1600.7	1607.8
22.5°	1266.0	1298.9	1336.7	1402.7	1530.0	1598.4	1530.0	1468.8	1407.5	1386.2	1379.1
25°	1195.2	1237.7	1273.1	1322.6	1416.9	1464.0	1398.0	1353.3	1315.5	1289.5	1270.7
27.5°	1155.2	1192.9	1202.4	1225.9	1306.1	1348.5	1315.5	1296.6	1273.1	1249.4	1225.9
30°	1112.8	1105.7	1089.1	1091.5	1155.2	1197.6	1195.2	1200.0	1197.6	1190.5	1185.8
32.5°	1016.1	1002.0	987.8	1002.0	1060.9	1098.6	1101.0	1110.4	1110.4	1108.1	1126.9
35°	846.4	872.3	888.7	931.2	1002.0	1034.9	1020.8	997.3	954.8	928.8	926.5
37.5°	782.7	787.4	815.7	874.6	952.5	983.1	961.9	907.7	879.3	874.6	881.7
40°	752.1	756.8	773.2	827.5	905.3	935.9	917.1	877.0	851.1	848.7	860.5
42.5°	730.8	735.5	745.0	782.7	846.4	884.0	886.4	858.2	827.5	829.8	841.6
45°	719.0	721.4	719.0	737.9	796.9	841.6	860.5	841.6	815.7	820.4	834.5
47.5°	716.7	709.6	700.2	704.9	766.2	811.0	834.5	827.5	815.7	820.4	832.2
50°	707.3	690.8	678.9	676.6	737.9	785.0	806.3	806.3	811.0	820.4	832.2
52.5°	678.9	660.1	660.1	653.1	719.0	763.8	778.0	780.3	787.4	803.9	820.4
55°	643.6	636.5	643.6	631.8	704.9	747.4	754.4	759.1	763.8	778.0	801.6
57.5°	613.0	603.5	620.0	615.3	693.2	730.8	730.8	740.3	740.3	759.1	778.0
60°	596.5	577.6	584.6	589.4	676.6	716.7	712.0	721.4	726.1	742.7	756.8
62.5°	575.2	558.7	558.7	570.5	657.8	695.5	693.2	700.2	719.0	723.7	737.9
65°	549.3	542.3	535.1	549.3	638.9	671.9	674.2	683.6	700.2	704.9	716.7
67.5°	523.3	525.7	511.6	525.7	622.4	648.3	648.3	667.2	674.2	683.6	695.5
70°	495.1	497.5	485.7	502.2	610.6	622.4	620.0	646.0	650.7	657.8	669.5
72.5°	459.7	459.7	455.0	478.5	591.8	596.5	591.8	613.0	615.3	622.4	627.1
75°	422.0	422.0	417.3	450.3	579.9	568.1	554.0	570.5	575.2	579.9	579.9
77.5°	372.5	377.2	377.2	417.3	539.9	556.4	509.2	518.6	525.7	528.0	521.0
80°	311.2	322.9	327.7	379.5	452.7	513.9	455.0	462.1	464.4	464.4	455.0
82.5°	238.1	259.3	271.1	327.7	346.6	431.4	396.1	403.1	396.1	381.9	377.2
85°	165.0	193.3	207.5	249.9	261.7	332.5	330.0	330.0	315.9	297.1	294.7
87.5°	89.6	106.1	115.5	148.5	179.2	223.9	242.8	235.8	223.9	212.2	214.5
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°	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3
2.5°	12999.4	13319.9	13831.5	14222.9	14616.5	14996.2	15406.4	15719.9	15986.3	16090.0	16405.9
5°	10453.2	10854.0	11337.3	12209.5	12827.2	13508.6	14295.9	15337.9	15738.7	16292.7	17200.4
7.5°	7390.8	7753.9	8531.8	9236.7	10111.4	11075.6	12138.8	13576.9	14102.6	14991.4	16469.6
10°	5518.9	5940.9	6565.7	7159.7	7930.6	8916.1	10137.3	11745.1	12384.0	13348.3	15050.4
12.5°	4446.3	4943.7	5606.2	6164.9	6761.3	7456.8	8642.6	10406.1	11261.9	12105.8	13826.8
15°	3416.0	3937.0	4552.3	5262.0	5919.7	6669.4	7911.8	9840.3	10825.7	11705.0	13173.8
17.5°	2364.6	2810.1	3585.7	4326.1	5167.6	6127.2	7709.1	9960.5	11136.9	12150.6	13286.9
20°	1676.2	1930.8	2567.3	3425.5	4474.6	5679.2	7671.3	10592.3	12122.3	13279.8	14013.1
22.5°	1409.8	1504.0	1874.3	2661.6	3873.4	5344.5	7803.4	11478.7	13452.0	14930.1	15170.6
25°	1284.8	1341.4	1534.7	2088.8	3338.2	5101.7	8249.0	12799.0	15097.5	16580.4	16537.9
27.5°	1216.5	1275.4	1402.7	1763.5	2935.2	4950.8	8694.5	14364.3	16978.8	18372.1	17844.0
30°	1195.2	1275.4	1409.8	1662.1	2647.5	4712.6	9059.9	15738.7	18426.3	19581.5	18438.1
32.5°	1178.7	1190.5	1251.9	1433.4	2374.1	4434.5	9307.4	16971.7	19843.2	20731.9	19293.9
35°	952.5	1011.4	1110.4	1284.8	2213.7	4267.1	9307.4	18034.9	21238.8	21894.2	20109.6
37.5°	917.1	968.9	1056.2	1204.7	2124.2	4184.6	9121.2	19060.4	22665.1	23212.1	20781.5
40°	898.3	940.6	1023.2	1143.4	2086.4	4090.3	8850.1	19965.7	24058.4	24532.3	21408.5
42.5°	884.0	921.8	999.6	1105.7	2036.9	3986.5	8630.8	20691.8	25267.8	25659.2	22007.4
45°	877.0	917.1	1002.0	1124.5	1937.9	3849.8	8557.8	21477.0	26262.7	26599.8	22655.7
47.5°	877.0	924.1	1013.7	1164.6	1820.0	3708.4	8786.4	22511.9	27203.3	27368.3	23419.5
50°	869.9	921.8	1046.8	1124.5	1647.9	3529.2	9324.0	23815.6	28221.8	28240.6	24386.1
52.5°	855.8	917.1	1126.9	1101.0	1449.8	3293.5	10050.1	25489.4	29728.2	29841.4	25899.6
55°	839.2	910.0	1105.7	1046.8	1287.2	3012.9	10644.2	27523.9	31845.3	32158.8	28125.1
57.5°	818.1	900.6	1070.3	971.3	1181.1	2652.2	10858.7	29013.9	33323.4	34110.8	30633.5
60°	799.2	893.5	966.6	926.5	1115.1	2348.1	10443.8	28719.2	33222.1	34919.4	32856.7
62.5°	780.3	900.6	881.7	898.3	1084.4	2152.4	9359.3	26359.3	31541.2	34084.9	34504.5
65°	759.1	836.9	832.2	874.6	1077.4	2074.6	7758.6	22820.7	28292.5	31446.8	34893.6
67.5°	730.8	773.2	796.9	844.0	1101.0	2006.2	6261.6	18824.8	23777.9	27493.3	32866.1
70°	700.2	735.5	761.5	806.3	1086.8	1975.6	5207.7	14845.3	18867.2	22533.0	28865.3
72.5°	660.1	690.8	714.3	756.8	1072.7	1959.1	4399.1	11954.9	14086.1	16738.3	23469.0
75°	613.0	641.3	657.8	700.2	1027.9	1794.1	3458.5	10116.1	10540.4	11643.7	18692.7
77.5°	558.7	579.9	594.1	641.3	910.0	1492.3	2501.3	7803.4	8185.2	8454.1	14331.3
80°	495.1	516.3	523.3	568.1	754.4	1167.0	1631.4	5764.1	6122.5	6183.7	9359.3
82.5°	422.0	443.2	443.2	485.7	617.7	839.2	1070.3	3948.8	4019.6	4227.0	6615.2
85°	339.5	356.0	356.0	377.2	478.5	627.1	735.5	1982.7	1961.4	2239.6	5731.1
87.5°	242.8	254.6	266.4	271.1	341.9	414.9	443.2	603.5	398.4	457.4	3680.1
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: P191336

CATALOG NUMBER: GLEON-AF-08-LED-E1-SLR

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3	14489.3
2.5°	16644.0	16778.4	16641.7	16542.6	16116.0	15764.7	15295.6	15055.1
5°	17891.2	18233.0	18117.5	17702.6	16811.4	15809.5	14670.8	14156.8
7.5°	17740.3	18534.7	18553.6	17778.0	16464.9	14989.1	13447.2	12716.4
10°	16566.3	17582.3	17872.3	17120.2	15726.9	14076.7	12308.6	11474.0
12.5°	15255.5	16250.3	16472.0	16212.6	15048.0	13390.6	11596.6	10778.5
15°	14182.8	14628.4	14892.4	15118.7	14465.6	13117.2	11556.5	10658.3
17.5°	13529.8	13480.2	13555.7	13949.4	14060.2	13430.7	12169.4	11179.3
20°	13294.0	12537.3	12518.4	13060.6	13869.3	14178.1	13367.1	12178.9
22.5°	13423.7	12197.8	12042.2	12685.8	13970.6	15255.5	14937.2	13581.6
25°	13871.6	12226.1	12101.1	12723.5	14338.4	16403.5	16632.3	15396.9
27.5°	14576.5	12405.2	12240.2	12879.1	14826.3	17367.8	18301.4	17155.6
30°	15246.1	12716.4	12511.3	13185.5	15271.9	17749.7	19324.6	18527.7
32.5°	16059.4	13298.8	12938.0	13749.0	15823.6	18358.0	20236.8	19664.0
35°	16856.2	14128.6	13680.6	14618.9	16438.9	19114.7	21278.9	21116.3
37.5°	17730.8	15213.0	14842.9	15743.4	17280.6	19829.0	22608.5	22818.4
40°	18664.5	16651.1	16212.6	17384.3	18586.6	20724.9	23997.1	24501.6
42.5°	19605.1	18247.1	17723.7	18911.9	20022.3	21608.9	25185.3	25932.6
45°	20682.4	19979.9	19732.4	21017.2	21401.5	22450.6	26062.3	26991.2
47.5°	21936.7	21946.1	22344.5	22858.4	22792.5	23403.0	26944.0	27936.5
50°	23400.6	24400.2	25279.6	25621.4	24225.8	24426.2	28167.6	29202.5
52.5°	25159.4	27335.4	28424.5	28200.5	25770.0	25675.7	30105.4	30947.0
55°	27358.9	30442.5	31524.7	31364.3	27545.2	27377.7	32519.5	33009.9
57.5°	29905.0	33453.0	34448.0	33726.6	29676.3	29244.9	34516.3	34620.0
60°	32142.3	35838.9	36711.1	35912.0	31826.5	31232.3	35763.5	35261.3
62.5°	33387.1	36647.5	37260.5	36400.0	33299.8	33349.3	36036.9	34914.7
65°	32830.7	34603.6	34801.6	34730.8	32920.3	34577.6	35053.9	33314.0
67.5°	29784.8	29435.9	29768.3	30228.0	29666.9	32960.4	32330.9	29827.2
70°	24419.1	22502.5	23164.9	23473.8	23728.4	28363.3	28061.5	24294.2
72.5°	18402.8	15764.7	16288.0	16224.4	17403.2	22750.0	21823.5	17862.9
75°	13039.3	10688.9	10755.0	10729.0	12143.6	17799.2	15802.4	12221.3
77.5°	9123.6	7744.5	7779.7	7925.9	8164.1	13423.7	11290.1	8927.9
80°	6273.3	5877.3	6073.0	6084.7	5658.0	9017.5	8340.8	7164.4
82.5°	4672.6	4085.6	4038.4	4106.7	4434.5	7305.9	6410.1	4969.6
85°	3826.2	2418.8	1944.9	2437.7	3930.0	7235.2	4257.6	2621.5
87.5°	2154.7	1148.1	518.6	961.9	1567.8	4790.5	1230.6	334.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)