

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: P191337

Luminaire Tested: **GLEON-AF-09-LED-E1-SLR**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191337  
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-SLR  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 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: 47838.3 lumens  
Efficiency: N/A  
Efficacy: 95.5 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): 501  
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

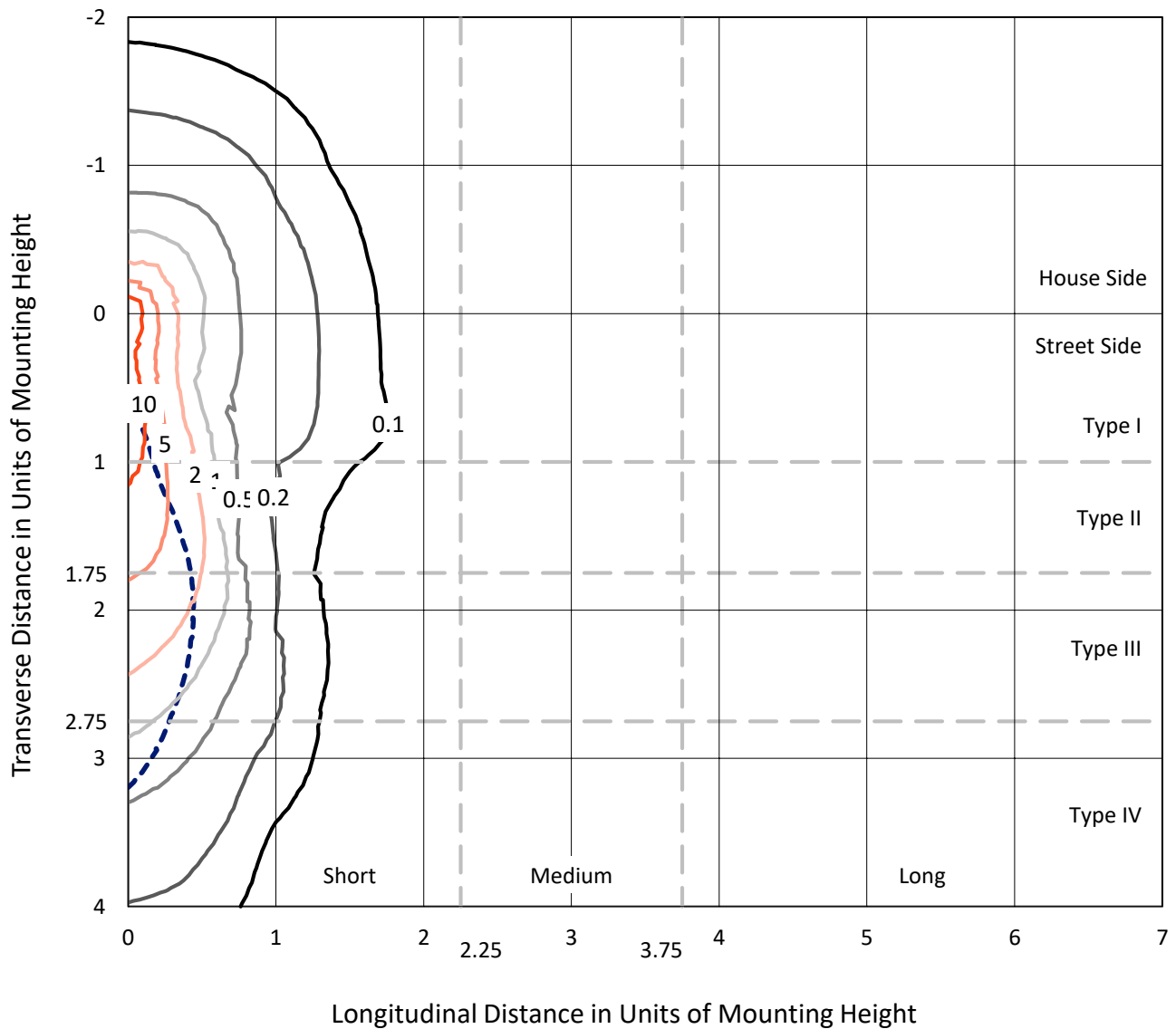


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

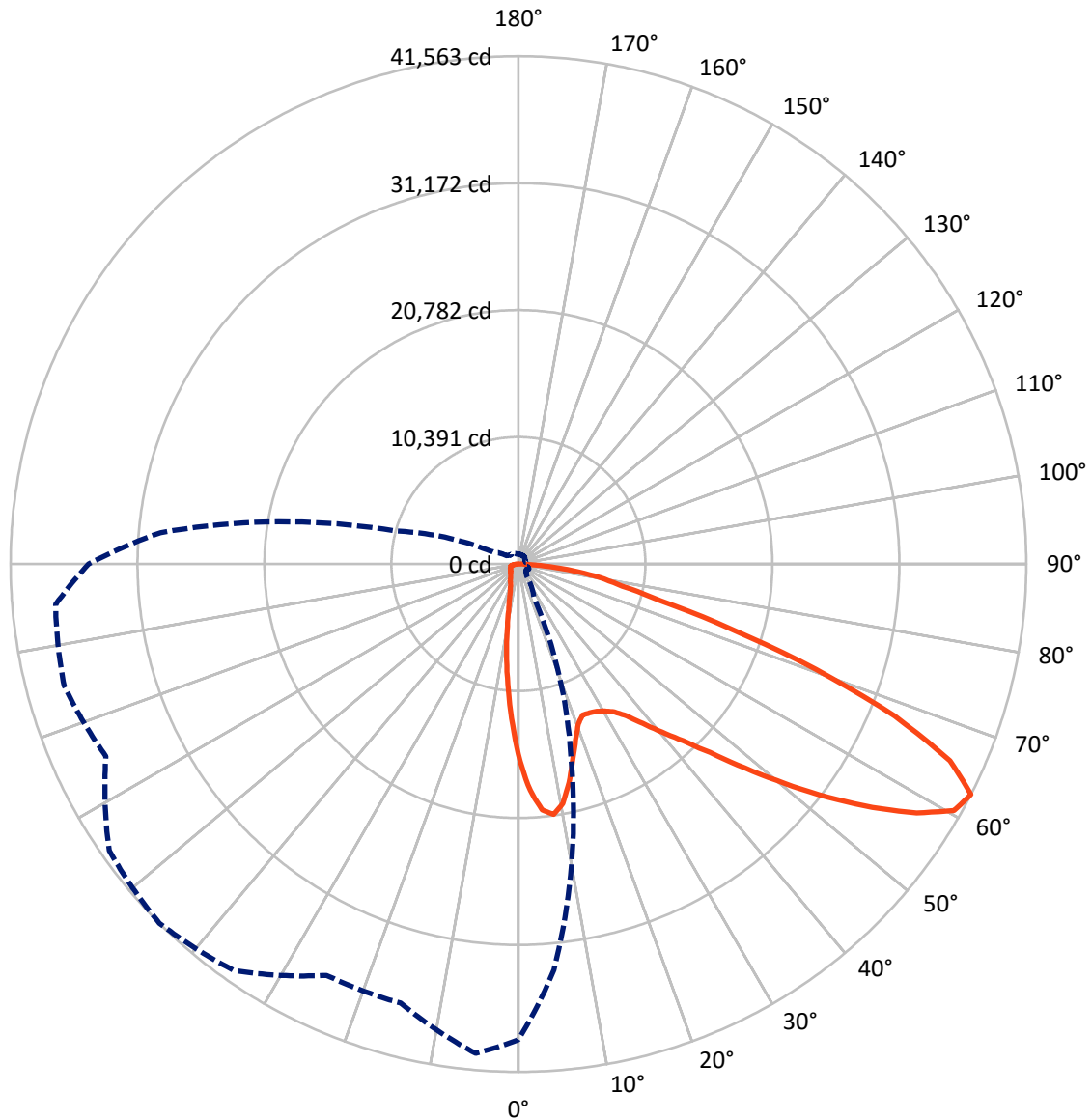


Based on 30 foot mounting height. Maximum calculated value = 18 fc  
 Type IV - Short - Non-Cutoff

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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	7916.6	0.0	7916.6
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	39921.7	0.0	39921.7
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	47838.3	0.0	47838.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1176.5	2.5
10°-20°	2157.5	4.5
20°-30°	3145.6	6.6
30°-40°	4844.7	10.1
40°-50°	7130.1	14.9
50°-60°	10458.3	21.9
60°-70°	11690.8	24.4
70°-80°	5723.7	12.0
80°-90°	1511.2	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°	47838.3	100.0
0°-180°	47838.3	100.0



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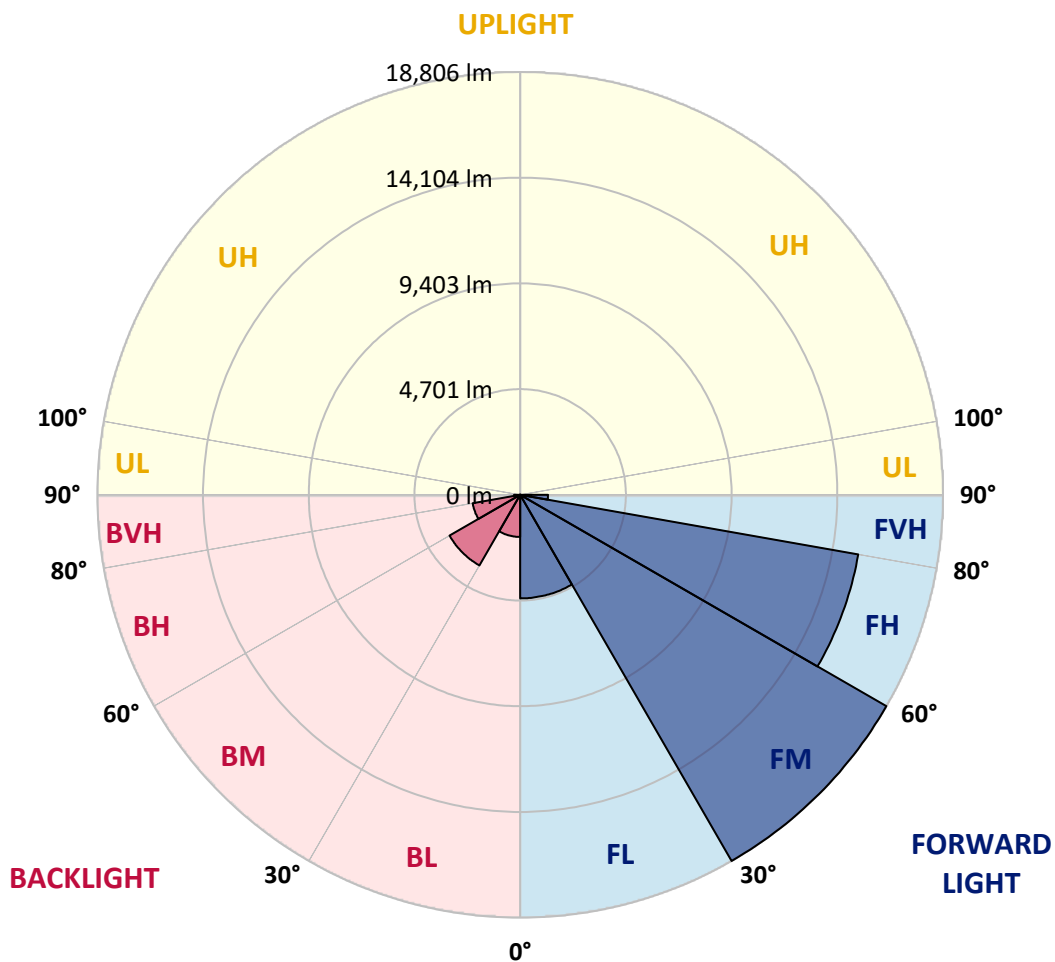
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4606.7	9.6			
FM	(30°-60°)	18805.7	39.3			
FH	(60°-80°)	15268.3	31.9			G5
FVH	(80°-90°)	1241.1	2.6			G5
BL	(0°-30°)	1872.9	3.9	B3/2500		
BM	(30°-60°)	3627.3	7.6	B3/5000		
BH	(60°-80°)	2146.2	4.5	B3/2500		G3/2500
BVH	(80°-90°)	270.1	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°	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3
2.5°	16793.5	16451.6	15883.6	15291.9	14931.6	14510.9	14182.2	13892.9	13314.3	13201.3	13303.8
5°	15791.6	15105.2	14034.9	12956.7	12238.8	11468.3	10868.6	10387.5	9653.8	9524.9	9680.1
7.5°	14184.7	13364.3	11949.5	10574.1	9559.1	8596.6	7949.7	7434.3	6860.9	6613.8	6629.5
10°	12799.0	11873.3	10200.8	8704.4	7873.4	7223.9	6679.6	6150.9	5569.8	5188.5	5083.2
12.5°	12023.2	10958.2	9030.5	7694.6	6924.0	6240.4	5654.0	5088.6	4467.9	4078.7	3968.2
15°	11889.0	10732.0	8591.4	7047.7	6082.6	5217.4	4525.7	3894.7	3255.6	2940.1	2874.3
17.5°	12470.2	11137.0	8449.4	6471.8	5291.0	4223.4	3374.0	2669.2	2148.5	1990.7	1977.6
20°	13585.2	11915.3	8431.0	5930.0	4510.0	3258.2	2350.9	1838.1	1609.4	1564.7	1567.4
22.5°	15149.9	13122.4	8657.1	5522.4	3792.1	2429.9	1767.1	1538.4	1449.0	1406.9	1406.9
25°	17174.8	14784.4	9177.8	5225.3	3168.8	1940.7	1559.4	1422.7	1338.5	1309.6	1314.9
27.5°	19136.5	16401.7	9782.6	4991.3	2761.3	1761.9	1478.0	1354.3	1280.6	1251.8	1264.9
30°	20667.1	17837.5	10287.5	4673.0	2553.5	1711.9	1506.8	1380.6	1275.4	1230.7	1233.4
32.5°	21934.6	19094.5	10710.9	4444.2	2369.4	1467.4	1299.0	1243.9	1230.7	1178.1	1151.8
35°	23554.6	20464.6	10994.9	4449.5	2282.6	1309.6	1157.1	1059.8	988.8	928.3	928.3
37.5°	25453.2	22037.2	11297.4	4510.0	2251.0	1217.6	1107.1	1009.9	944.1	886.2	875.7
40°	27330.8	23578.2	11573.5	4567.9	2232.7	1162.4	1067.7	978.2	917.8	859.9	844.1
42.5°	28927.1	24845.7	11820.7	4596.7	2169.6	1157.1	1038.7	957.2	899.4	836.3	820.5
45°	30107.8	25908.2	12086.3	4641.4	2106.5	1178.1	1038.7	954.6	883.6	823.1	807.3
47.5°	31162.4	27154.6	12530.7	4641.4	2030.1	1138.6	1073.0	957.2	881.0	817.8	804.7
50°	32574.5	28864.0	13372.2	4533.6	1922.3	1096.6	1130.8	946.7	857.3	807.3	791.6
52.5°	34520.5	31054.5	14708.1	4346.9	1756.7	1015.1	1122.9	941.4	833.6	781.0	762.6
55°	36821.5	33400.3	16165.0	4128.7	1509.5	957.2	1083.4	928.3	807.3	749.5	731.1
57.5°	38617.6	35014.9	17190.6	3792.1	1293.8	925.7	959.8	915.1	775.8	715.2	699.5
60°	39333.0	34951.8	17472.0	3342.4	1188.7	899.4	838.9	1025.6	749.5	689.0	670.5
62.5°	38946.4	33337.1	16683.0	3026.8	1164.9	865.2	786.2	949.3	728.4	670.5	644.3
65°	37160.8	30476.0	14592.4	2942.7	1233.4	831.0	752.1	744.2	699.5	644.3	618.0
67.5°	33271.4	26200.0	11683.9	2950.6	1320.1	796.8	717.9	681.1	660.1	615.4	591.7
70°	27099.4	20714.4	8709.7	2971.6	1364.8	757.4	681.1	641.7	618.0	573.3	557.5
72.5°	19925.5	15965.1	6327.2	2834.9	1372.7	712.7	631.2	597.0	573.3	525.9	512.8
75°	13632.6	12212.5	4389.1	2348.4	1196.5	649.6	575.9	544.3	528.6	470.8	462.8
77.5°	9958.8	9167.3	2808.5	1743.5	923.0	570.6	507.6	483.9	473.3	410.2	399.8
80°	7991.8	7252.8	1756.7	1193.9	675.9	478.6	426.1	412.9	402.3	339.2	331.3
82.5°	5543.5	4857.1	1128.1	775.8	507.6	370.8	336.7	331.3	315.6	257.7	249.8
85°	2924.3	2637.6	715.2	528.6	368.2	255.1	234.1	234.1	226.2	170.9	165.7
87.5°	373.4	607.4	362.9	276.1	202.4	113.0	113.0	110.5	118.4	97.3	84.2
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°	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3
2.5°	13061.9	13188.1	13067.2	13075.1	13209.2	13608.9	13790.3	13940.3	14100.7	14205.8	14253.2
5°	9467.0	9761.6	9861.6	10071.9	10382.2	10892.4	11094.8	11242.1	11339.4	11397.3	11420.9
7.5°	6474.4	6653.3	6853.1	7192.4	7868.1	8168.0	8302.1	8267.9	8157.4	8118.0	8078.5
10°	4880.8	4809.8	4773.0	4959.7	5506.6	5809.1	5903.8	5811.7	5751.2	5764.4	5830.1
12.5°	3781.5	3658.0	3508.1	3487.0	3847.3	4118.2	4178.7	4183.9	4294.3	4391.6	4536.3
15°	2755.9	2742.8	2669.2	2624.5	2829.6	3050.5	3076.8	3124.1	3224.0	3295.0	3421.3
17.5°	1943.4	2014.4	2072.2	2101.1	2256.3	2414.1	2385.2	2361.5	2343.1	2343.1	2403.6
20°	1567.4	1614.6	1688.3	1772.5	1930.2	2040.7	1969.7	1875.0	1806.6	1785.6	1793.4
22.5°	1412.2	1449.0	1491.1	1564.7	1706.7	1783.0	1706.7	1638.4	1569.9	1546.3	1538.4
25°	1333.3	1380.6	1420.1	1475.3	1580.5	1633.0	1559.4	1509.5	1467.4	1438.5	1417.4
27.5°	1288.6	1330.7	1341.2	1367.5	1456.9	1504.2	1467.4	1446.4	1420.1	1393.8	1367.5
30°	1241.2	1233.4	1215.0	1217.6	1288.6	1335.9	1333.3	1338.5	1335.9	1328.0	1322.8
32.5°	1133.4	1117.7	1101.8	1117.7	1183.3	1225.5	1228.1	1238.6	1238.6	1235.9	1257.0
35°	944.1	973.0	991.4	1038.7	1117.7	1154.5	1138.6	1112.4	1065.0	1036.1	1033.5
37.5°	873.1	878.3	909.9	975.6	1062.4	1096.6	1073.0	1012.4	980.9	975.6	983.6
40°	838.9	844.1	862.6	923.0	1009.9	1044.0	1023.0	978.2	949.3	946.7	959.8
42.5°	815.2	820.5	831.0	873.1	944.1	986.1	988.8	957.2	923.0	925.7	938.9
45°	802.1	804.7	802.1	823.1	888.8	938.9	959.8	938.9	909.9	915.1	930.9
47.5°	799.4	791.6	781.0	786.2	854.7	904.6	930.9	923.0	909.9	915.1	928.3
50°	788.9	770.5	757.4	754.7	823.1	875.7	899.4	899.4	904.6	915.1	928.3
52.5°	757.4	736.3	736.3	728.4	802.1	852.0	867.8	870.4	878.3	896.7	915.1
55°	717.9	710.0	717.9	704.8	786.2	833.6	841.5	846.8	852.0	867.8	894.1
57.5°	683.7	673.2	691.6	686.4	773.1	815.2	815.2	825.7	825.7	846.8	867.8
60°	665.3	644.3	652.1	657.5	754.7	799.4	794.2	804.7	810.0	828.4	844.1
62.5°	641.7	623.3	623.3	636.4	733.7	775.8	773.1	781.0	802.1	807.3	823.1
65°	612.7	604.9	597.0	612.7	712.7	749.5	752.1	762.6	781.0	786.2	799.4
67.5°	583.8	586.5	570.6	586.5	694.3	723.2	723.2	744.2	752.1	762.6	775.8
70°	552.3	554.8	541.8	560.2	681.1	694.3	691.6	720.6	725.8	733.7	746.9
72.5°	512.8	512.8	507.6	533.9	660.1	665.3	660.1	683.7	686.4	694.3	699.5
75°	470.8	470.8	465.4	502.3	646.9	633.7	618.0	636.4	641.7	646.9	646.9
77.5°	415.5	420.7	420.7	465.4	602.2	620.6	568.0	578.6	586.5	589.0	581.1
80°	347.1	360.3	365.5	423.4	504.9	573.3	507.6	515.5	518.0	518.0	507.6
82.5°	265.6	289.3	302.4	365.5	386.6	481.2	441.8	449.7	441.8	426.1	420.7
85°	184.1	215.6	231.4	278.8	292.0	370.8	368.2	368.2	352.4	331.3	328.7
87.5°	99.9	118.4	128.9	165.7	199.9	249.8	270.9	263.0	249.8	236.7	239.3
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°	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3
2.5°	14500.3	14858.1	15428.7	15865.1	16304.4	16727.7	17185.4	17535.1	17832.3	17948.0	18300.3
5°	11660.2	12107.3	12646.4	13619.4	14308.4	15068.4	15946.7	17109.1	17556.1	18174.1	19186.6
7.5°	8244.3	8649.2	9517.0	10303.3	11279.0	12354.5	13540.5	15144.7	15731.0	16722.5	18371.4
10°	6156.2	6627.0	7323.8	7986.5	8846.5	9945.6	11307.9	13101.3	13814.0	14889.6	16788.3
12.5°	4959.7	5514.5	6253.5	6876.8	7542.1	8317.8	9640.6	11607.6	12562.2	13503.7	15423.4
15°	3810.5	4391.6	5078.0	5869.6	6603.2	7439.5	8825.4	10976.5	12075.7	13056.6	14695.0
17.5°	2637.6	3134.6	3999.8	4825.6	5764.4	6834.6	8599.2	11110.7	12422.9	13553.7	14821.2
20°	1869.7	2153.7	2863.8	3821.0	4991.3	6335.0	8557.2	11815.4	13522.1	14813.2	15631.1
22.5°	1572.6	1677.7	2090.6	2969.0	4320.6	5961.7	8704.4	12804.2	15005.3	16654.2	16922.4
25°	1433.3	1496.3	1711.9	2330.0	3723.7	5690.8	9201.4	14276.8	16840.8	18495.0	18447.6
27.5°	1356.9	1422.7	1564.7	1967.0	3274.1	5522.4	9698.5	16023.0	18939.3	20493.5	19904.5
30°	1333.3	1422.7	1572.6	1854.0	2953.2	5256.8	10106.0	17556.1	20554.0	21842.6	20567.1
32.5°	1314.9	1328.0	1396.4	1598.9	2648.1	4946.6	10382.2	18931.4	22134.5	23125.8	21521.8
35°	1062.4	1128.1	1238.6	1433.3	2469.3	4759.8	10382.2	20117.5	23691.2	24422.3	22431.7
37.5°	1023.0	1080.8	1178.1	1343.7	2369.4	4667.8	10174.5	21261.4	25282.2	25892.4	23181.1
40°	1001.9	1049.2	1141.3	1275.4	2327.3	4562.6	9872.0	22271.3	26836.4	27365.1	23880.6
42.5°	986.1	1028.3	1115.0	1233.4	2272.1	4446.9	9627.5	23081.1	28185.5	28622.1	24548.6
45°	978.2	1023.0	1117.7	1254.3	2161.6	4294.3	9546.0	23956.9	29295.3	29671.3	25271.8
47.5°	978.2	1030.8	1130.8	1299.0	2030.1	4136.6	9801.0	25111.3	30344.5	30528.6	26123.8
50°	970.4	1028.3	1167.6	1254.3	1838.1	3936.7	10400.6	26565.6	31480.6	31501.6	27202.0
52.5°	954.6	1023.0	1257.0	1228.1	1617.3	3673.7	11210.5	28432.7	33161.0	33287.2	28890.3
55°	936.2	1015.1	1233.4	1167.6	1435.8	3360.8	11873.3	30702.1	35522.5	35872.2	31372.8
57.5°	912.5	1004.5	1193.9	1083.4	1317.5	2958.5	12112.6	32364.1	37171.3	38049.7	34170.8
60°	891.5	996.7	1078.2	1033.5	1243.9	2619.3	11649.8	32035.4	37058.2	38951.6	36650.6
62.5°	870.4	1004.5	983.6	1001.9	1209.6	2401.0	10440.0	29403.1	35183.3	38020.7	38488.8
65°	846.8	933.5	928.3	975.6	1201.8	2314.1	8654.5	25455.8	31559.5	35078.0	38922.7
67.5°	815.2	862.6	888.8	941.4	1228.1	2237.9	6984.6	20998.4	26523.5	30668.0	36661.1
70°	781.0	820.5	849.4	899.4	1212.3	2203.7	5809.1	16559.4	21045.8	25135.0	32198.5
72.5°	736.3	770.5	796.8	844.1	1196.5	2185.3	4907.1	13335.4	15712.6	18671.1	26179.1
75°	683.7	715.2	733.7	781.0	1146.5	2001.2	3857.9	11284.2	11757.6	12988.3	20851.2
77.5°	623.3	646.9	662.7	715.2	1015.1	1664.6	2790.1	8704.4	9130.4	9430.3	15986.2
80°	552.3	575.9	583.8	633.7	841.5	1301.7	1819.7	6429.7	6829.4	6897.8	10440.0
82.5°	470.8	494.4	494.4	541.8	689.0	936.2	1193.9	4404.8	4483.7	4715.1	7379.1
85°	378.7	397.1	397.1	420.7	533.9	699.5	820.5	2211.6	2188.0	2498.3	6392.9
87.5°	270.9	284.0	297.2	302.4	381.4	462.8	494.4	673.2	444.5	510.1	4105.0
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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CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3	16162.3
2.5°	18565.9	18715.8	18563.3	18452.8	17976.8	17585.0	17061.7	16793.5
5°	19957.1	20338.4	20209.5	19746.6	18752.6	17635.0	16364.9	15791.6
7.5°	19788.8	20675.0	20696.0	19830.8	18366.1	16719.8	15000.0	14184.7
10°	18479.2	19612.5	19936.0	19097.2	17543.0	15702.2	13729.8	12799.0
12.5°	17017.0	18126.8	18373.9	18084.6	16785.6	14936.9	12935.6	12023.2
15°	15820.4	16317.5	16612.0	16864.5	16136.0	14631.9	12890.9	11889.0
17.5°	15092.0	15036.9	15121.0	15560.1	15683.8	14981.6	13574.7	12470.2
20°	14829.1	13985.0	13963.9	14568.8	15470.7	15815.2	14910.6	13585.2
22.5°	14973.7	13606.3	13432.7	14150.6	15583.8	17017.0	16662.0	15149.9
25°	15473.4	13637.8	13498.4	14192.7	15994.0	18297.7	18552.7	17174.8
27.5°	16259.7	13837.7	13653.6	14366.2	16538.5	19373.3	20414.6	19136.5
30°	17006.5	14184.7	13956.0	14708.1	17035.4	19799.3	21555.9	20667.1
32.5°	17913.7	14834.3	14432.0	15336.6	17650.8	20477.7	22573.7	21934.6
35°	18802.7	15760.0	15260.4	16307.0	18337.1	21321.9	23736.0	23554.6
37.5°	19778.2	16969.7	16556.8	17561.4	19276.0	22118.8	25219.1	25453.2
40°	20819.6	18573.8	18084.6	19391.7	20732.9	23118.0	26768.1	27330.8
42.5°	21868.8	20354.2	19770.4	21095.7	22334.4	24104.2	28093.5	28927.1
45°	23070.7	22287.0	22010.9	23444.1	23872.7	25043.0	29071.8	30107.8
47.5°	24469.7	24480.2	24924.6	25497.9	25424.3	26105.4	30055.2	31162.4
50°	26102.7	27217.8	28198.7	28579.9	27023.2	27246.7	31420.0	32574.5
52.5°	28064.6	30491.8	31706.7	31456.9	28745.6	28640.5	33581.7	34520.5
55°	30518.1	33957.8	35164.9	34986.0	30725.9	30539.1	36274.6	36821.5
57.5°	33358.2	37315.9	38425.7	37621.0	33103.1	32621.9	38501.9	38617.6
60°	35853.8	39977.2	40950.3	40058.8	35501.4	34838.7	39893.0	39333.0
62.5°	37242.3	40879.3	41563.0	40603.1	37145.0	37200.2	40198.2	38946.4
65°	36621.7	38599.2	38820.2	38741.3	36721.6	38570.4	39101.6	37160.8
67.5°	33224.1	32834.9	33205.7	33718.5	33092.6	36766.3	36064.2	33271.4
70°	27238.8	25100.9	25839.7	26184.3	26468.2	31638.3	31301.8	27099.4
72.5°	20527.8	17585.0	18168.8	18097.8	19412.7	25377.0	24343.5	19925.5
75°	14545.0	11923.2	11996.9	11967.9	13545.8	19854.5	17627.1	13632.6
77.5°	10177.0	8638.7	8678.1	8841.2	9106.8	14973.7	12593.8	9958.8
80°	6997.7	6555.9	6774.2	6787.4	6311.4	10058.8	9304.0	7991.8
82.5°	5212.1	4557.3	4504.8	4581.0	4946.6	8149.5	7150.2	5543.5
85°	4268.1	2698.1	2169.6	2719.1	4383.8	8070.7	4749.3	2924.3
87.5°	2403.6	1280.6	578.6	1073.0	1748.7	5343.6	1372.7	373.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)