

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: P192117

Luminaire Tested: **GLEON-AF-09-LED-E1-SLR-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192117
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-7050-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 615mA 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: 30812 lumens
Efficiency: N/A
Efficacy: 106.2 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): 290
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

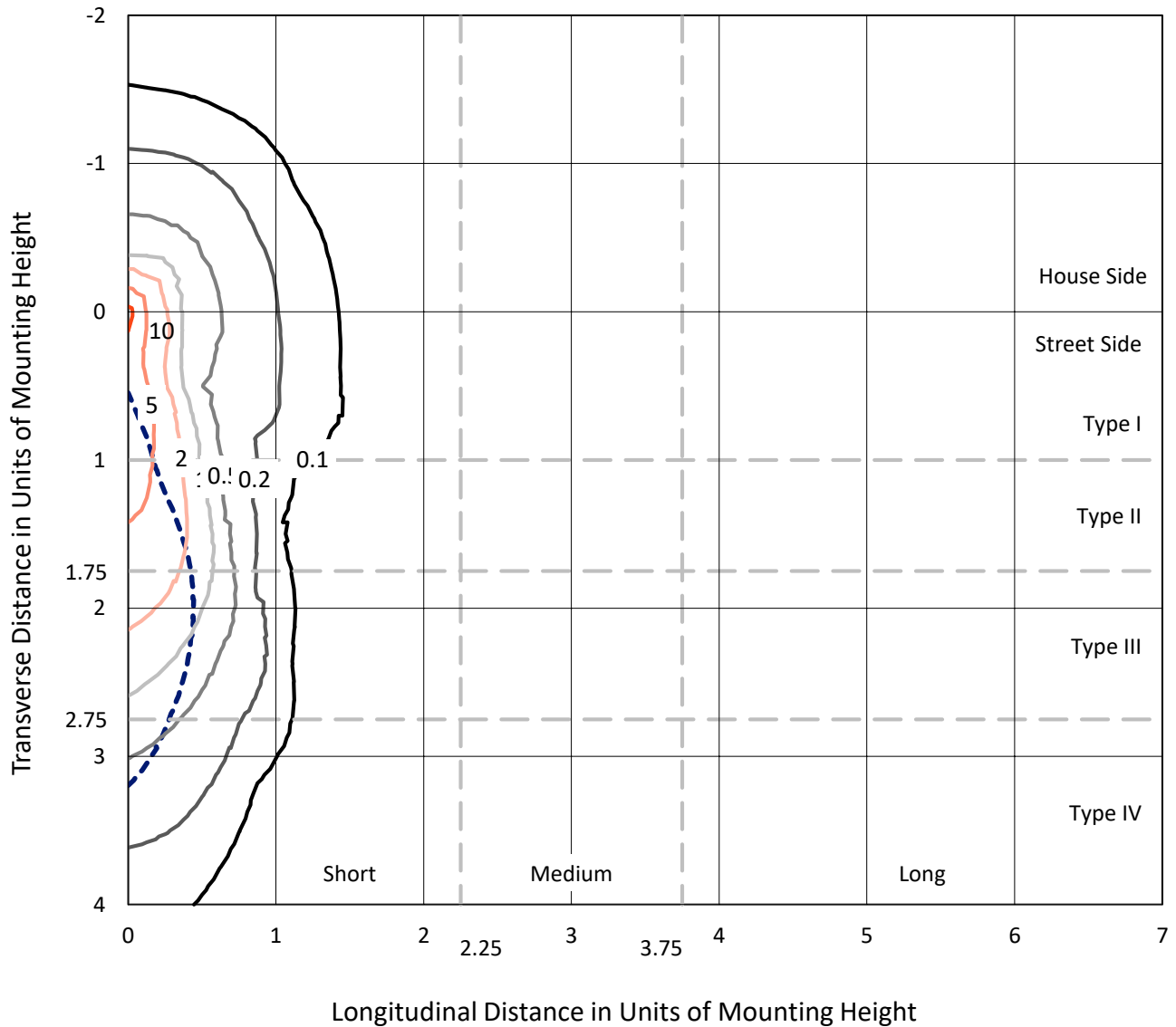


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Iso-Footcandle Lines of Horizontal Illumination

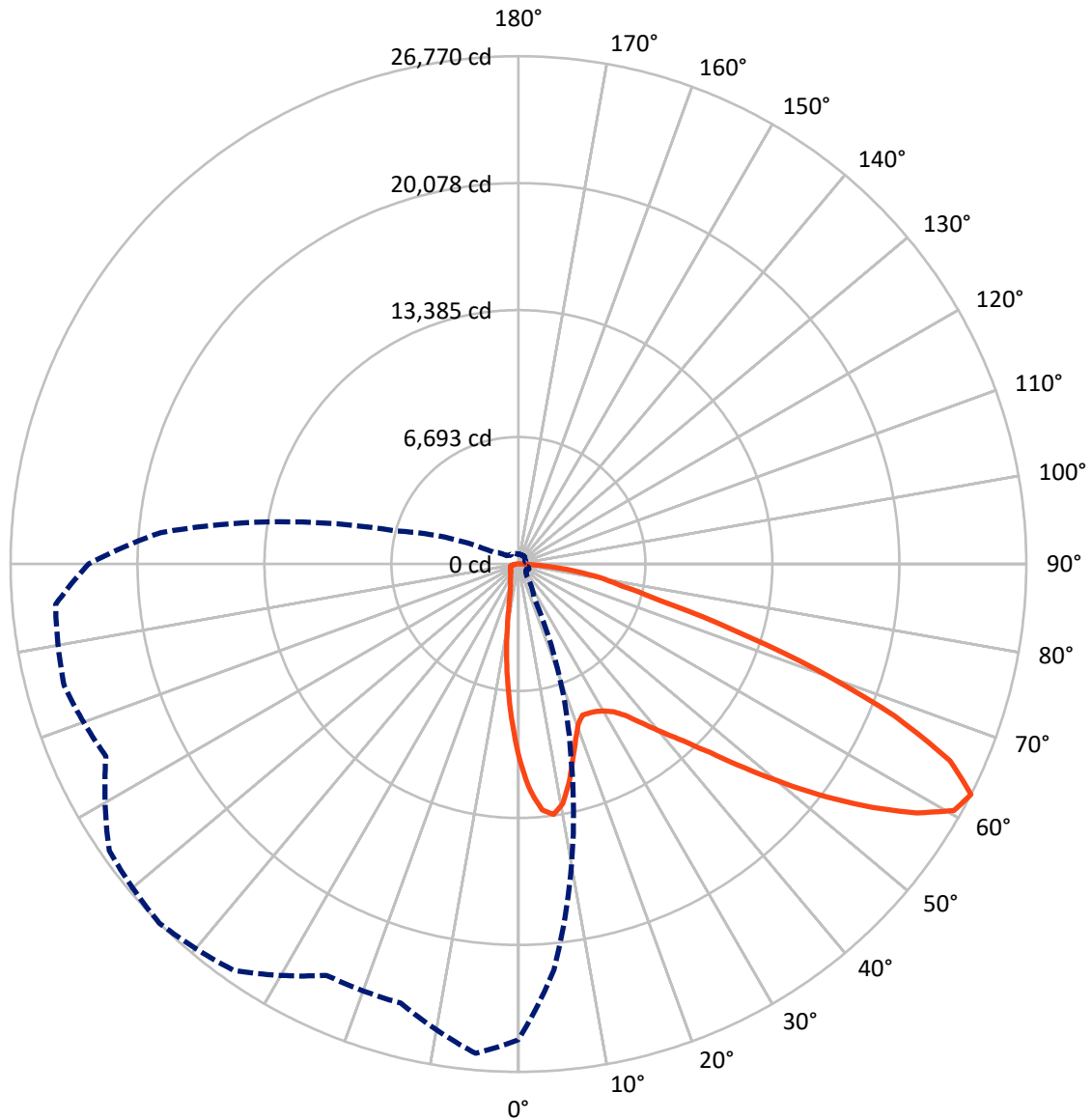
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.6 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
House Side	Lumens	5099.0	0.0	5099.0
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	25713.0	0.0	25713.0
	% Fixture	83.5	0.0	83.5
Total	Lumens	30812.0	0.0	30812.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	757.8	2.5
10°-20°	1389.6	4.5
20°-30°	2026.0	6.6
30°-40°	3120.4	10.1
40°-50°	4592.4	14.9
50°-60°	6736.0	21.9
60°-70°	7529.9	24.4
70°-80°	3686.5	12.0
80°-90°	973.3	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°	30812.0	100.0
0°-180°	30812.0	100.0



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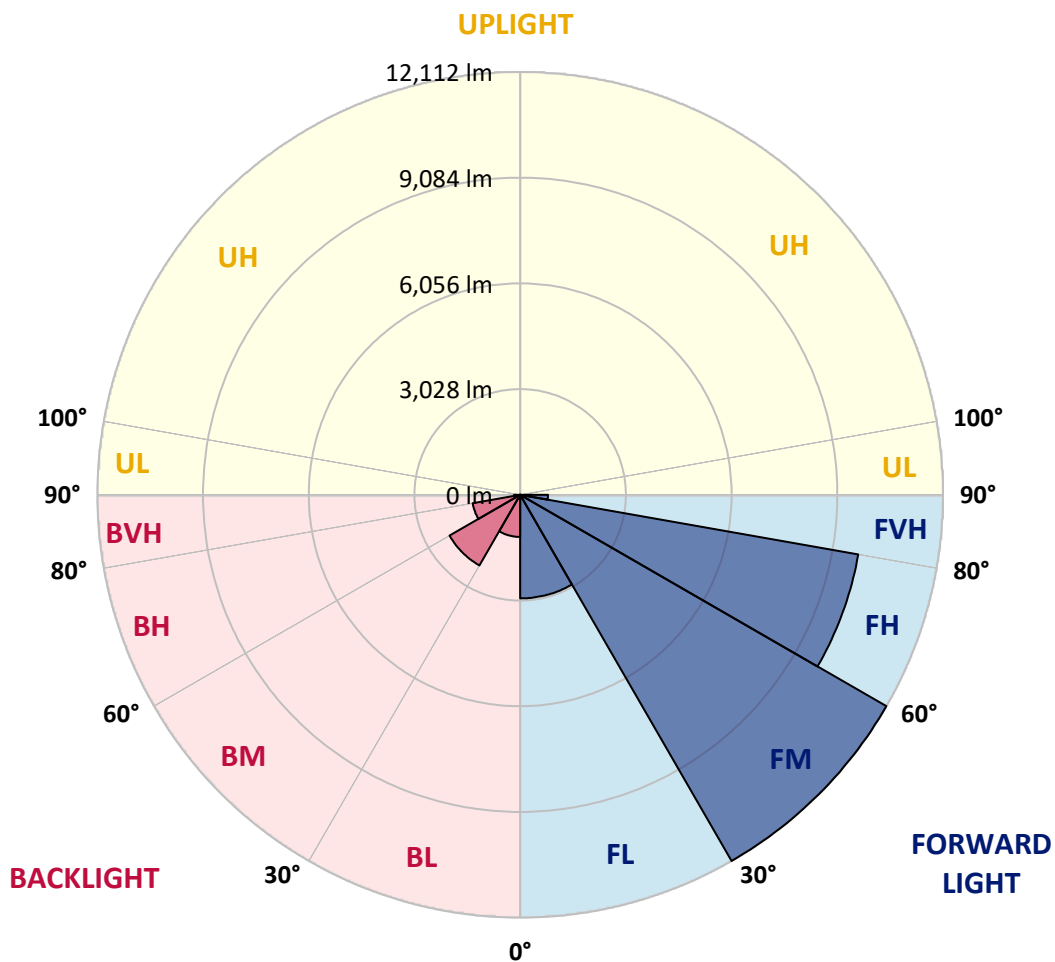
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2967.1	9.6			
FM	(30°-60°)	12112.5	39.3			
FH	(60°-80°)	9834.1	31.9			G4/12000
FVH	(80°-90°)	799.3	2.6			G5
BL	(0°-30°)	1206.3	3.9	B3/2500		
BM	(30°-60°)	2336.3	7.6	B2/2500		
BH	(60°-80°)	1382.3	4.5	B3/2500		G3/2500
BVH	(80°-90°)	174.0	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°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	10816.5	10596.3	10230.4	9849.3	9617.3	9346.3	9134.5	8948.2	8575.6	8502.8	8568.8
5°	10171.1	9729.1	9039.7	8345.2	7882.8	7386.6	7000.4	6690.4	6217.9	6134.9	6234.8
7.5°	9136.2	8607.8	7696.5	6810.7	6156.9	5537.0	5120.3	4788.3	4419.1	4259.8	4270.0
10°	8243.6	7647.4	6570.2	5606.4	5071.2	4652.8	4302.2	3961.7	3587.4	3341.8	3274.1
12.5°	7743.9	7058.0	5816.4	4956.0	4459.7	4019.3	3641.6	3277.5	2877.7	2627.0	2555.9
15°	7657.6	6912.3	5533.6	4539.3	3917.7	3360.5	2915.0	2508.5	2096.9	1893.6	1851.3
17.5°	8031.9	7173.1	5442.1	4168.4	3407.9	2720.2	2173.1	1719.2	1383.8	1282.2	1273.7
20°	8750.1	7674.5	5430.2	3819.5	2904.8	2098.6	1514.2	1184.0	1036.6	1007.8	1009.5
22.5°	9757.8	8451.9	5575.9	3556.9	2442.4	1565.0	1138.2	990.9	933.3	906.2	906.2
25°	11062.1	9522.4	5911.3	3365.5	2041.0	1250.0	1004.4	916.3	862.1	843.5	846.9
27.5°	12325.6	10564.1	6300.9	3214.8	1778.5	1134.8	951.9	872.3	824.9	806.2	814.7
30°	13311.4	11488.9	6626.1	3009.8	1644.7	1102.6	970.5	889.2	821.5	792.7	794.4
32.5°	14127.8	12298.5	6898.8	2862.5	1526.1	945.1	836.7	801.2	792.7	758.8	741.9
35°	15171.2	13181.0	7081.7	2865.9	1470.2	843.5	745.3	682.6	636.9	597.9	597.9
37.5°	16394.1	14193.9	7276.5	2904.8	1449.9	784.2	713.1	650.4	608.1	570.8	564.0
40°	17603.4	15186.4	7454.3	2942.1	1438.0	748.6	687.7	630.1	591.1	553.9	543.7
42.5°	18631.5	16002.8	7613.5	2960.7	1397.4	745.3	669.0	616.5	579.3	538.6	528.5
45°	19392.1	16687.1	7784.6	2989.5	1356.7	758.8	669.0	614.8	569.1	530.2	520.0
47.5°	20071.3	17489.9	8070.8	2989.5	1307.6	733.4	691.1	616.5	567.4	526.8	518.3
50°	20980.8	18590.9	8612.9	2920.1	1238.2	706.3	728.3	609.8	552.2	520.0	509.8
52.5°	22234.2	20001.8	9473.3	2799.8	1131.4	653.8	723.2	606.4	536.9	503.1	491.2
55°	23716.3	21512.7	10411.6	2659.2	972.2	616.5	697.8	597.9	520.0	482.7	470.9
57.5°	24873.1	22552.6	11072.2	2442.4	833.3	596.2	618.2	589.4	499.7	460.7	450.5
60°	25333.8	22512.0	11253.5	2152.8	765.6	579.3	540.3	660.6	482.7	443.8	431.9
62.5°	25084.8	21472.0	10745.3	1949.5	750.3	557.3	506.4	611.5	469.2	431.9	415.0
65°	23934.8	19629.2	9398.8	1895.3	794.4	535.2	484.4	479.3	450.5	415.0	398.0
67.5°	21429.7	16875.1	7525.5	1900.4	850.3	513.2	462.4	438.7	425.1	396.3	381.1
70°	17454.4	13341.9	5609.8	1914.0	879.1	487.8	438.7	413.3	398.0	369.2	359.1
72.5°	12833.7	10282.9	4075.2	1825.9	884.2	459.0	406.5	384.5	369.2	338.8	330.3
75°	8780.5	7865.9	2826.9	1512.5	770.7	418.4	370.9	350.6	340.4	303.2	298.1
77.5°	6414.3	5904.5	1809.0	1123.0	594.5	367.5	326.9	311.7	304.9	264.2	257.5
80°	5147.4	4671.4	1131.4	769.0	435.3	308.3	274.4	265.9	259.1	218.5	213.4
82.5°	3570.5	3128.4	726.6	499.7	326.9	238.8	216.8	213.4	203.3	166.0	160.9
85°	1883.5	1698.9	460.7	340.4	237.1	164.3	150.7	150.7	145.7	110.1	106.7
87.5°	240.5	391.3	233.7	177.8	130.4	72.8	72.8	71.1	76.2	62.7	54.2
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°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	8413.0	8494.3	8416.4	8421.5	8507.8	8765.3	8882.2	8978.7	9082.0	9149.8	9180.3
5°	6097.6	6287.3	6351.7	6487.2	6687.0	7015.6	7146.0	7240.9	7303.6	7340.8	7356.1
7.5°	4170.1	4285.3	4414.0	4632.5	5067.8	5260.9	5347.3	5325.2	5254.1	5228.7	5203.3
10°	3143.7	3097.9	3074.2	3194.5	3546.8	3741.6	3802.5	3743.2	3704.3	3712.8	3755.1
12.5°	2435.7	2356.0	2259.5	2245.9	2478.0	2652.5	2691.4	2694.8	2765.9	2828.6	2921.8
15°	1775.1	1766.6	1719.2	1690.4	1822.5	1964.8	1981.7	2012.2	2076.6	2122.3	2203.6
17.5°	1251.7	1297.4	1334.7	1353.3	1453.3	1554.9	1536.3	1521.0	1509.2	1509.2	1548.1
20°	1009.5	1040.0	1087.4	1141.6	1243.2	1314.4	1268.6	1207.7	1163.6	1150.1	1155.2
22.5°	909.6	933.3	960.4	1007.8	1099.3	1148.4	1099.3	1055.2	1011.2	995.9	990.9
25°	858.7	889.2	914.6	950.2	1018.0	1051.8	1004.4	972.2	945.1	926.5	912.9
27.5°	830.0	857.1	863.8	880.8	938.4	968.8	945.1	931.6	914.6	897.7	880.8
30°	799.5	794.4	782.5	784.2	830.0	860.4	858.7	862.1	860.4	855.4	852.0
32.5°	730.0	719.9	709.7	719.9	762.2	789.3	791.0	797.8	797.8	796.1	809.6
35°	608.1	626.7	638.6	669.0	719.9	743.6	733.4	716.5	686.0	667.3	665.7
37.5°	562.3	565.7	586.0	628.4	684.3	706.3	691.1	652.1	631.8	628.4	633.5
40°	540.3	543.7	555.6	594.5	650.4	672.4	658.9	630.1	611.5	609.8	618.2
42.5°	525.1	528.5	535.2	562.3	608.1	635.2	636.9	616.5	594.5	596.2	604.7
45°	516.6	518.3	516.6	530.2	572.5	604.7	618.2	604.7	586.0	589.4	599.6
47.5°	514.9	509.8	503.1	506.4	550.5	582.7	599.6	594.5	586.0	589.4	597.9
50°	508.1	496.3	487.8	486.1	530.2	564.0	579.3	579.3	582.7	589.4	597.9
52.5°	487.8	474.3	474.3	469.2	516.6	548.8	558.9	560.6	565.7	577.6	589.4
55°	462.4	457.3	462.4	453.9	506.4	536.9	542.0	545.4	548.8	558.9	575.9
57.5°	440.4	433.6	445.5	442.1	498.0	525.1	525.1	531.8	531.8	545.4	558.9
60°	428.5	415.0	420.1	423.4	486.1	514.9	511.5	518.3	521.7	533.5	543.7
62.5°	413.3	401.4	401.4	409.9	472.6	499.7	498.0	503.1	516.6	520.0	530.2
65°	394.7	389.6	384.5	394.7	459.0	482.7	484.4	491.2	503.1	506.4	514.9
67.5°	376.0	377.7	367.5	377.7	447.2	465.8	465.8	479.3	484.4	491.2	499.7
70°	355.7	357.4	348.9	360.8	438.7	447.2	445.5	464.1	467.5	472.6	481.0
72.5°	330.3	330.3	326.9	343.8	425.1	428.5	425.1	440.4	442.1	447.2	450.5
75°	303.2	303.2	299.8	323.5	416.7	408.2	398.0	409.9	413.3	416.7	416.7
77.5°	267.6	271.0	271.0	299.8	387.9	399.7	365.9	372.6	377.7	379.4	374.3
80°	223.6	232.0	235.4	272.7	325.2	369.2	326.9	332.0	333.7	333.7	326.9
82.5°	171.1	186.3	194.8	235.4	249.0	310.0	284.6	289.6	284.6	274.4	271.0
85°	118.6	138.9	149.1	179.5	188.0	238.8	237.1	237.1	227.0	213.4	211.7
87.5°	64.4	76.2	83.0	106.7	128.7	160.9	174.5	169.4	160.9	152.4	154.1
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	9339.5	9569.8	9937.4	10218.6	10501.4	10774.1	11068.8	11294.1	11485.5	11560.0	11787.0
5°	7510.2	7798.1	8145.4	8772.1	9215.8	9705.3	10271.1	11019.7	11307.7	11705.7	12357.8
7.5°	5310.0	5570.8	6129.8	6636.2	7264.6	7957.4	8721.3	9754.5	10132.2	10770.7	11832.7
10°	3965.1	4268.3	4717.2	5144.0	5697.9	6405.9	7283.2	8438.4	8897.4	9590.2	10813.1
12.5°	3194.5	3551.9	4027.8	4429.2	4857.8	5357.4	6209.4	7476.3	8091.2	8697.5	9934.0
15°	2454.3	2828.6	3270.7	3780.5	4253.1	4791.7	5684.3	7069.8	7777.8	8409.6	9464.8
17.5°	1698.9	2019.0	2576.2	3108.1	3712.8	4402.1	5538.7	7156.2	8001.4	8729.7	9546.1
20°	1204.3	1387.2	1844.5	2461.1	3214.8	4080.3	5511.6	7610.1	8709.4	9541.0	10067.8
22.5°	1012.9	1080.6	1346.6	1912.3	2782.9	3839.8	5606.4	8247.0	9664.7	10726.7	10899.5
25°	923.1	963.8	1102.6	1500.7	2398.4	3665.3	5926.5	9195.5	10846.9	11912.3	11881.8
27.5°	874.0	916.3	1007.8	1266.9	2108.8	3556.9	6246.6	10320.2	12198.6	13199.6	12820.2
30°	858.7	916.3	1012.9	1194.1	1902.1	3385.9	6509.2	11307.7	13238.6	14068.5	13247.0
32.5°	846.9	855.4	899.4	1029.8	1705.6	3186.0	6687.0	12193.5	14256.5	14895.1	13861.9
35°	684.3	726.6	797.8	923.1	1590.5	3065.7	6687.0	12957.4	15259.2	15730.1	14447.9
37.5°	658.9	696.1	758.8	865.5	1526.1	3006.5	6553.2	13694.2	16284.0	16676.9	14930.6
40°	645.3	675.8	735.1	821.5	1499.0	2938.7	6358.4	14344.6	17285.0	17625.4	15381.2
42.5°	635.2	662.3	718.2	794.4	1463.4	2864.2	6200.9	14866.3	18153.9	18435.1	15811.4
45°	630.1	658.9	719.9	807.9	1392.3	2765.9	6148.4	15430.3	18868.7	19110.9	16277.2
47.5°	630.1	664.0	728.3	836.7	1307.6	2664.3	6312.7	16173.9	19544.5	19663.1	16826.0
50°	625.0	662.3	752.0	807.9	1184.0	2535.6	6698.9	17110.5	20276.2	20289.8	17520.4
52.5°	614.8	658.9	809.6	791.0	1041.7	2366.2	7220.6	18313.1	21358.5	21439.8	18607.8
55°	603.0	653.8	794.4	752.0	924.8	2164.6	7647.4	19774.8	22879.5	23104.8	20206.8
57.5°	587.7	647.0	769.0	697.8	848.6	1905.5	7801.5	20845.3	23941.5	24507.3	22008.9
60°	574.2	641.9	694.4	665.7	801.2	1687.0	7503.4	20633.6	23868.7	25088.2	23606.2
62.5°	560.6	647.0	633.5	645.3	779.1	1546.4	6724.3	18938.1	22661.0	24488.6	24790.1
65°	545.4	601.3	597.9	628.4	774.1	1490.5	5574.2	16395.8	20327.0	22593.3	25069.6
67.5°	525.1	555.6	572.5	606.4	791.0	1441.4	4498.7	13524.8	17083.4	19752.8	23612.9
70°	503.1	528.5	547.1	579.3	780.8	1419.4	3741.6	10665.7	13555.3	16189.1	20738.6
72.5°	474.3	496.3	513.2	543.7	770.7	1407.5	3160.6	8589.1	10120.3	12025.8	16861.5
75°	440.4	460.7	472.6	503.1	738.5	1289.0	2484.8	7268.0	7572.9	8365.6	13430.0
77.5°	401.4	416.7	426.8	460.7	653.8	1072.2	1797.1	5606.4	5880.8	6073.9	10296.5
80°	355.7	370.9	376.0	408.2	542.0	838.4	1172.1	4141.3	4398.7	4442.8	6724.3
82.5°	303.2	318.4	318.4	348.9	443.8	603.0	769.0	2837.1	2887.9	3036.9	4752.7
85°	243.9	255.8	255.8	271.0	343.8	450.5	528.5	1424.5	1409.2	1609.1	4117.6
87.5°	174.5	182.9	191.4	194.8	245.6	298.1	318.4	433.6	286.2	328.6	2644.0
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-7050-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0	10410.0
2.5°	11958.1	12054.6	11956.4	11885.2	11578.7	11326.3	10989.2	10816.5
5°	12854.1	13099.7	13016.7	12718.6	12078.3	11358.5	10540.4	10171.1
7.5°	12745.7	13316.5	13330.0	12772.8	11829.3	10769.0	9661.3	9136.2
10°	11902.2	12632.2	12840.5	12300.2	11299.2	10113.5	8843.2	8243.6
12.5°	10960.4	11675.2	11834.4	11648.1	10811.4	9620.7	8331.7	7743.9
15°	10189.8	10509.9	10699.6	10862.2	10393.0	9424.2	8302.9	7657.6
17.5°	9720.6	9685.0	9739.2	10022.1	10101.7	9649.4	8743.3	8031.9
20°	9551.2	9007.5	8994.0	9383.5	9964.5	10186.4	9603.7	8750.1
22.5°	9644.4	8763.6	8651.8	9114.2	10037.3	10960.4	10731.8	9757.8
25°	9966.2	8783.9	8694.2	9141.3	10301.6	11785.3	11949.6	11062.1
27.5°	10472.6	8912.7	8794.1	9253.1	10652.2	12478.1	13148.8	12325.6
30°	10953.7	9136.2	8988.9	9473.3	10972.3	12752.4	13883.9	13311.4
32.5°	11538.0	9554.6	9295.4	9878.1	11368.6	13189.4	14539.4	14127.8
35°	12110.5	10150.8	9829.0	10503.1	11810.7	13733.1	15288.0	15171.2
37.5°	12738.9	10929.9	10664.0	11311.0	12415.4	14246.4	16243.3	16394.1
40°	13409.6	11963.1	11648.1	12489.9	13353.7	14890.0	17241.0	17603.4
42.5°	14085.4	13109.8	12733.8	13587.5	14385.2	15525.2	18094.6	18631.5
45°	14859.5	14354.8	14176.9	15100.0	15376.1	16129.8	18724.7	19392.1
47.5°	15760.6	15767.4	16053.6	16422.9	16375.4	16814.1	19358.2	20071.3
50°	16812.4	17530.6	18162.4	18408.0	17405.3	17549.2	20237.2	20980.8
52.5°	18076.0	19639.3	20421.9	20261.0	18514.7	18446.9	21629.5	22234.2
55°	19656.3	21871.7	22649.2	22534.0	19790.1	19669.8	23364.0	23716.3
57.5°	21485.6	24034.7	24749.5	24231.2	21321.3	21011.3	24798.6	24873.1
60°	23093.0	25748.8	26375.5	25801.3	22866.0	22439.2	25694.6	25333.8
62.5°	23987.3	26329.8	26770.1	26151.9	23924.6	23960.2	25891.1	25084.8
65°	23587.5	24861.3	25003.5	24952.7	23651.9	24842.6	25184.8	23934.8
67.5°	21399.2	21148.5	21387.3	21717.6	21314.5	23680.7	23228.5	21429.7
70°	17544.1	16167.1	16643.1	16864.9	17047.9	20377.8	20161.0	17454.4
72.5°	13221.6	11326.3	11702.3	11656.6	12503.5	16344.9	15679.3	12833.7
75°	9368.3	7679.6	7727.0	7708.4	8724.6	12788.0	11353.4	8780.5
77.5°	6554.9	5564.1	5589.5	5694.5	5865.5	9644.4	8111.5	6414.3
80°	4507.1	4222.6	4363.2	4371.6	4065.1	6478.7	5992.6	5147.4
82.5°	3357.1	2935.3	2901.4	2950.6	3186.0	5249.0	4605.4	3570.5
85°	2749.0	1737.8	1397.4	1751.4	2823.5	5198.2	3059.0	1883.5
87.5°	1548.1	824.9	372.6	691.1	1126.4	3441.8	884.2	240.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)