

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: P192102

Luminaire Tested: **GLEON-AF-04-LED-E1-SLL-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192102
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-04-LED-E1-SLL-7050-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5000K, 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: 23148 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 258
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

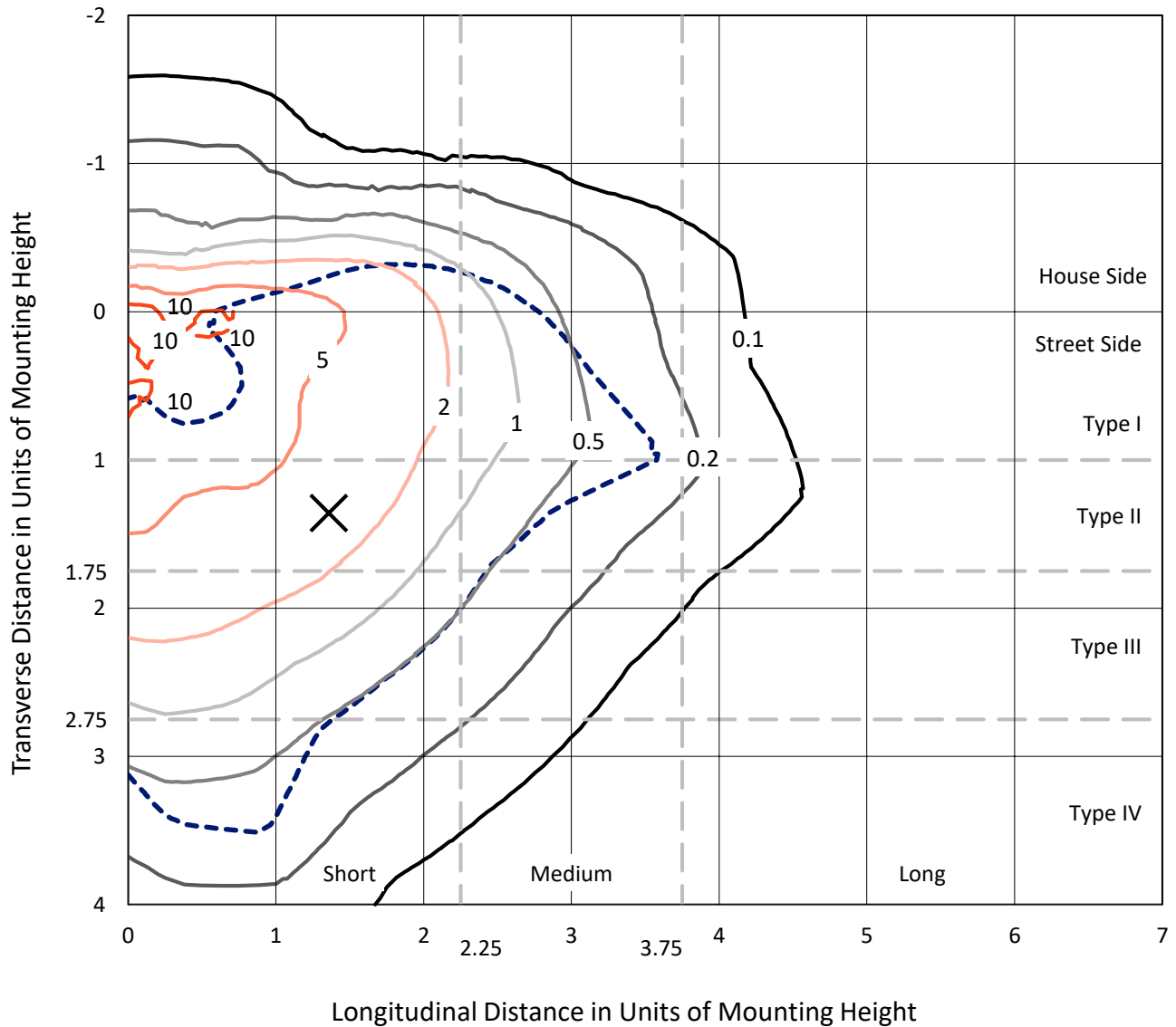


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

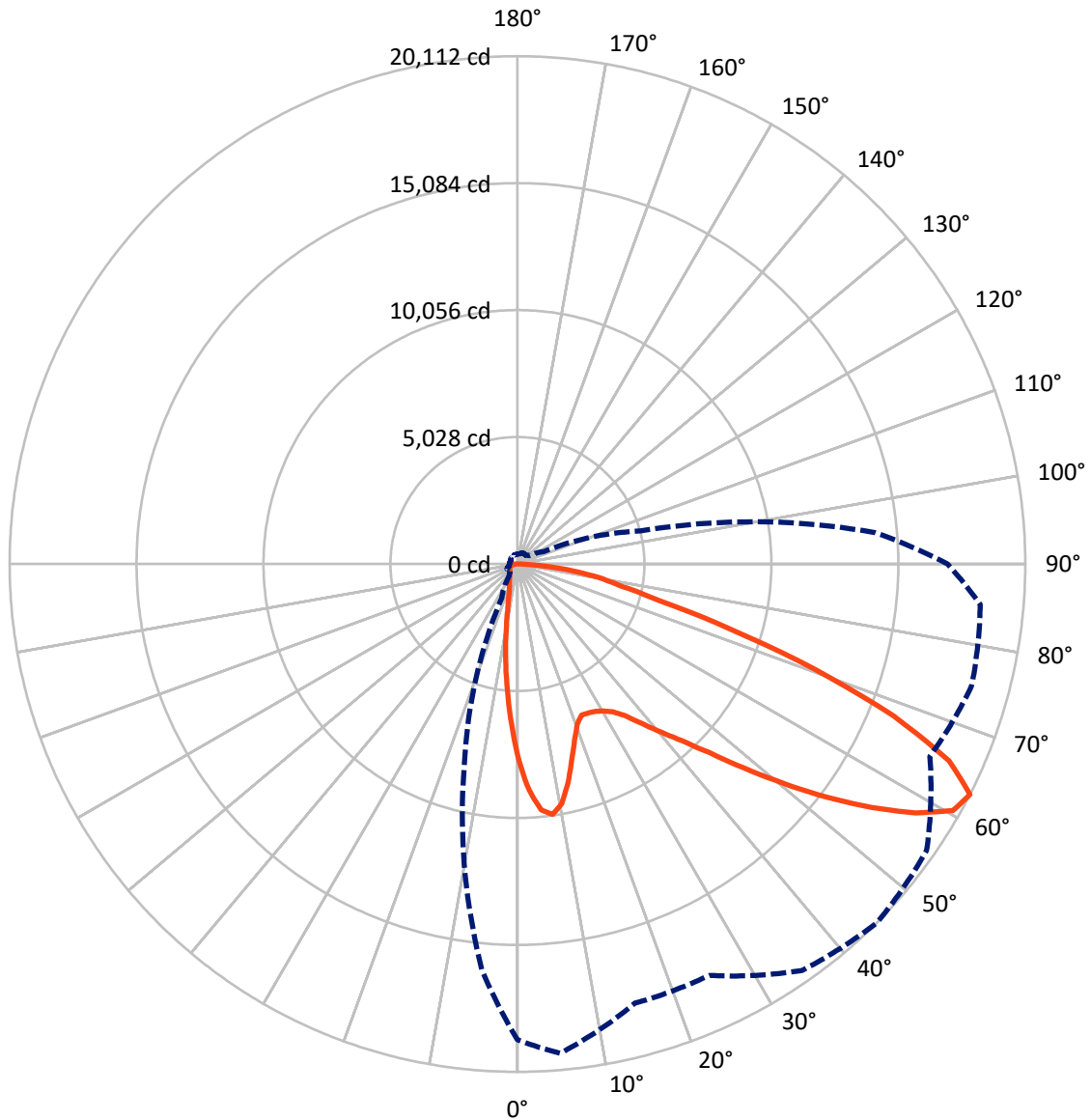


Based on 25 foot mounting height. Maximum calculated value = 14.7 fc
 Type IV - Short - Non-Cutoff

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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	3830.7	0.0	3830.7
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	19317.3	0.0	19317.3
	% Fixture	83.5	0.0	83.5
Total	Lumens	23148.0	0.0	23148.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	569.3	2.5
10°-20°	1044.0	4.5
20°-30°	1522.1	6.6
30°-40°	2344.2	10.1
40°-50°	3450.1	14.9
50°-60°	5060.6	21.9
60°-70°	5657.0	24.4
70°-80°	2769.6	12.0
80°-90°	731.2	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°	23148.0	100.0
0°-180°	23148.0	100.0

Coefficient of Utilization



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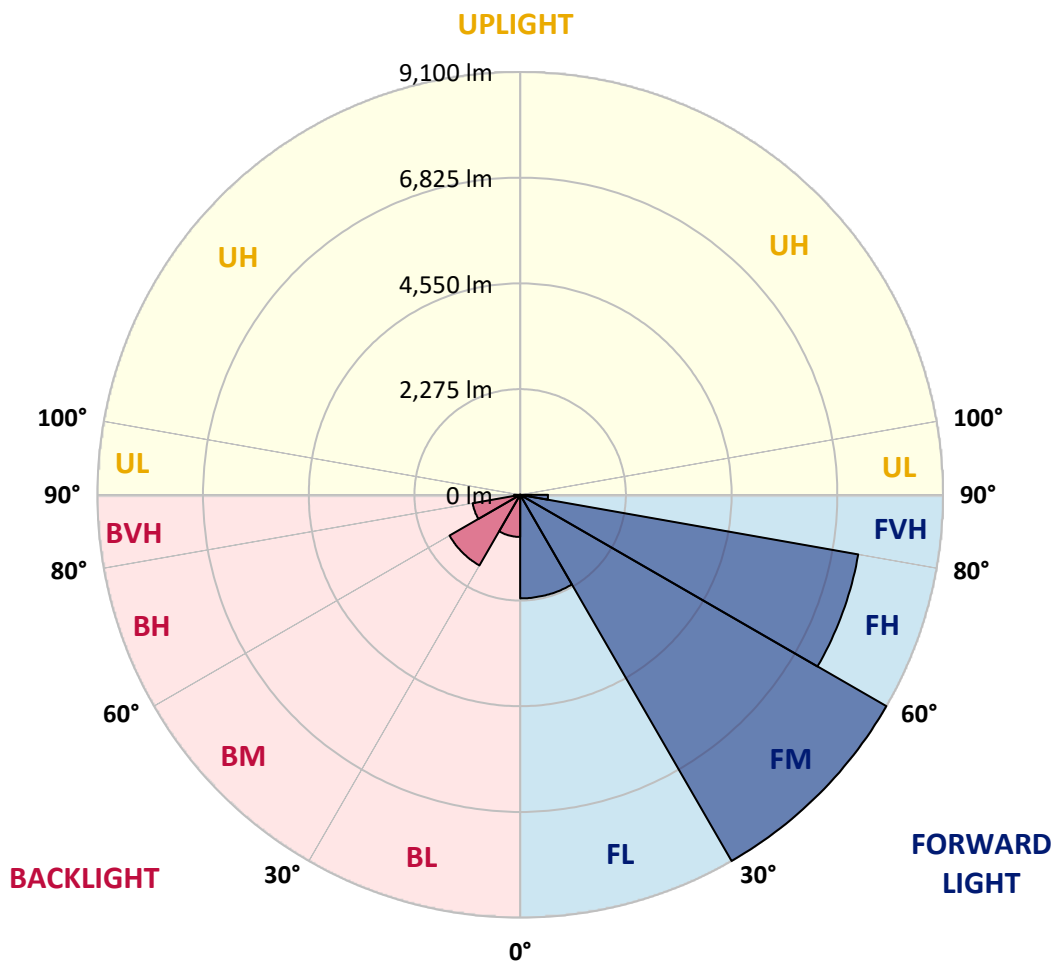
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2229.1	9.6			
FM (30°-60°)	9099.7	39.3			
FH (60°-80°)	7388.0	31.9			G3/7500
FVH (80°-90°)	600.5	2.6			G4/750
BL (0°-30°)	906.3	3.9	B2/1000		
BM (30°-60°)	1755.2	7.6	B2/2500		
BH (60°-80°)	1038.5	4.5	B3/2500		G3/2500
BVH (80°-90°)	130.7	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-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6
2.5°	8126.0	8255.8	8509.1	8698.7	8929.0	8982.4	9056.2	8983.7	8855.2	8684.7	8628.7
5°	7641.2	7918.6	8533.2	9074.0	9555.0	9779.0	9841.3	9656.8	9284.0	8794.1	8495.1
7.5°	6863.7	7258.2	8090.4	8887.0	9595.7	10014.4	10004.2	9575.4	8889.5	8091.7	7612.0
10°	6193.1	6643.6	7598.0	8488.7	9240.7	9646.6	9490.1	8941.7	8123.5	7204.8	6684.3
12.5°	5817.8	6259.3	7227.7	8122.2	8750.8	8890.8	8771.2	8234.2	7463.1	6534.2	6078.6
15°	5752.9	6237.7	7080.1	7807.9	8160.4	8038.2	7895.7	7655.2	7110.6	6317.8	5843.2
17.5°	6034.1	6568.5	7249.3	7589.1	7529.2	7316.7	7276.0	7302.7	7171.7	6558.3	6011.2
20°	6573.6	7214.9	7652.7	7486.0	7049.5	6756.9	6767.0	7175.5	7563.6	7167.9	6543.1
22.5°	7330.7	8062.4	8234.2	7540.7	6847.2	6499.8	6583.8	7245.5	8188.4	8058.6	7260.8
25°	8310.5	8977.3	8853.9	7739.2	6867.6	6531.6	6599.1	7487.3	8926.4	8949.3	8148.9
27.5°	9259.8	9878.2	9374.3	8002.6	6951.5	6606.7	6695.8	7867.7	9631.4	9916.4	9164.4
30°	10000.4	10430.5	9580.5	8243.1	7117.0	6753.0	6863.7	8229.1	9952.0	10569.2	9945.7
32.5°	10613.7	10922.9	9908.8	8540.9	7421.1	6983.4	7178.0	8668.1	10413.9	11190.2	10710.4
35°	11397.6	11485.4	10317.2	8873.0	7890.6	7384.2	7626.0	9098.2	10854.2	11817.5	11463.7
37.5°	12316.3	12203.1	10702.8	9327.3	8497.6	8011.5	8211.3	9570.3	11216.9	12528.8	12233.6
40°	13224.8	12952.5	11186.3	10032.2	9383.2	8750.8	8987.5	10074.2	11555.4	13241.4	12985.6
42.5°	13997.2	13593.9	11663.5	10807.1	10207.8	9566.5	9849.0	10581.9	11878.6	13849.6	13638.4
45°	14568.6	14067.2	12117.8	11551.5	11344.1	10650.6	10784.2	11163.4	12228.5	14357.4	14175.4
47.5°	15078.8	14543.1	12631.9	12302.3	12337.9	12060.5	11845.5	11840.4	12640.8	14772.2	14683.1
50°	15762.2	15203.6	13184.1	13076.0	13829.3	13644.8	13170.1	12630.6	13162.5	15243.0	15232.8
52.5°	16703.8	16249.5	13858.5	13909.4	15221.4	15342.3	14754.4	13579.9	13979.4	16107.0	16045.9
55°	17817.2	17552.5	14777.3	14867.6	16929.0	17015.6	16431.5	14767.1	15180.6	17357.9	17188.6
57.5°	18686.3	18630.3	15785.1	16017.9	18204.1	18593.4	18056.4	16141.4	16534.6	18411.5	17986.5
60°	19032.4	19303.5	16857.8	17178.4	19383.6	19815.0	19344.2	17348.9	17734.5	18847.9	17931.7
62.5°	18845.4	19451.1	18000.5	17973.7	19647.0	20111.5	19780.6	18020.8	18624.0	18397.5	17024.5
65°	17981.4	18920.5	18663.4	17768.9	18746.1	18784.3	18677.4	17720.5	18833.9	16973.6	15271.0
67.5°	16099.4	17450.7	17790.5	16012.8	16315.7	16067.6	15888.1	16076.5	17739.6	14839.6	12834.2
70°	13112.9	15146.3	15309.2	12807.5	12670.0	12503.4	12145.8	13180.3	15580.2	12162.3	10183.6
72.5°	9641.6	11779.3	12279.4	9393.4	8757.2	8791.5	8509.1	9933.0	12667.5	9034.6	7603.0
75°	6596.5	8529.4	9607.2	6554.5	5791.0	5805.0	5769.4	7038.1	10089.5	6284.8	5689.2
77.5°	4818.9	6093.9	7245.5	4406.6	4278.1	4199.2	4180.1	4924.5	7735.4	4563.1	4418.0
80°	3867.1	4502.0	4867.2	3053.9	3284.3	3277.9	3172.3	3386.1	5051.7	3337.7	3304.6
82.5°	2682.4	3459.9	3943.4	2393.5	2216.7	2179.8	2205.2	2522.0	3570.6	2281.6	2169.6
85°	1415.0	2298.1	3905.2	2121.2	1315.7	1049.8	1305.6	2065.2	3093.4	1208.9	1058.7
87.5°	180.7	664.2	2585.7	846.2	519.2	279.9	619.7	1163.0	1986.3	246.9	215.0
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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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6
2.5°	8484.9	8315.6	8094.2	7889.4	7676.9	7465.6	7189.5	7016.4	6896.8	6873.9	6823.0
5°	8278.7	7716.3	7291.3	6923.5	6590.2	6119.3	5858.5	5642.2	5526.4	5514.9	5486.9
7.5°	7328.2	6552.0	5978.1	5457.7	4985.6	4605.1	4185.2	3989.2	3909.0	3928.1	3947.2
10°	6339.5	5471.6	4812.5	4280.6	3864.5	3543.8	3206.6	2978.9	2821.1	2789.3	2782.9
12.5°	5616.7	4664.9	4024.8	3649.5	3327.5	3025.9	2668.4	2399.9	2195.0	2125.0	2078.0
15°	5311.3	4270.4	3599.8	3195.2	2840.2	2457.2	2125.0	1843.8	1655.5	1594.4	1560.1
17.5°	5376.2	4161.0	3307.2	2789.3	2335.0	1935.4	1516.8	1276.3	1163.0	1133.8	1133.8
20°	5717.2	4140.6	3065.4	2415.2	1848.9	1385.7	1042.2	904.7	867.8	864.0	874.2
22.5°	6195.7	4211.9	2884.7	2090.7	1436.6	1011.6	811.8	760.9	744.4	748.2	759.7
25°	6908.3	4452.4	2753.6	1801.8	1127.4	828.4	724.0	693.5	685.9	696.0	710.0
27.5°	7753.2	4692.9	2672.2	1584.2	951.8	757.1	688.4	656.6	661.7	674.4	687.1
30°	8495.1	4890.1	2543.7	1429.0	897.1	760.9	688.4	645.1	640.1	642.6	646.4
32.5°	9160.6	5023.7	2393.5	1281.4	773.7	675.7	642.6	636.2	608.2	598.1	599.3
35°	9734.4	5023.7	2303.2	1194.9	693.5	599.3	545.9	514.1	500.1	501.4	515.4
37.5°	10288.0	4923.2	2258.6	1146.5	650.2	570.1	523.0	495.0	475.9	472.1	474.6
40°	10776.6	4776.9	2207.7	1126.1	617.2	552.3	507.7	484.8	464.5	458.1	459.4
42.5°	11168.5	4658.5	2151.8	1099.4	596.8	539.5	497.5	477.2	454.3	447.9	446.6
45°	11592.3	4619.1	2078.0	1046.0	607.0	540.8	495.0	473.4	450.5	442.8	440.3
47.5°	12150.9	4742.5	2001.6	982.4	628.6	547.2	498.8	473.4	449.2	442.8	440.3
50°	12854.6	5032.6	1904.9	889.5	607.0	565.0	497.5	469.5	449.2	442.8	437.7
52.5°	13758.0	5424.6	1777.6	782.6	594.2	608.2	495.0	461.9	442.8	433.9	425.0
55°	14856.2	5745.2	1626.2	694.8	565.0	596.8	491.2	453.0	432.6	419.9	412.3
57.5°	15660.4	5861.0	1431.5	637.5	524.3	577.7	486.1	441.5	419.9	409.7	399.6
60°	15501.3	5637.1	1267.4	601.9	500.1	521.7	482.3	431.4	408.5	400.8	391.9
62.5°	14227.6	5051.7	1161.8	585.3	484.8	475.9	486.1	421.2	398.3	390.7	388.1
65°	12317.6	4187.7	1119.8	581.5	472.1	449.2	451.7	409.7	386.8	380.5	377.9
67.5°	10160.7	3379.7	1082.9	594.2	455.5	430.1	417.4	394.5	375.4	369.0	363.9
70°	8012.8	2810.9	1066.3	586.6	435.2	411.0	397.0	377.9	361.4	355.0	351.2
72.5°	6452.7	2374.4	1057.4	579.0	408.5	385.6	372.8	356.3	338.5	335.9	332.1
75°	5460.2	1866.7	968.4	554.8	377.9	355.0	346.1	330.8	313.0	313.0	310.5
77.5°	4211.9	1350.1	805.5	491.2	346.1	320.7	313.0	301.6	281.2	285.0	283.8
80°	3111.2	880.6	629.9	407.2	306.7	282.5	278.7	267.2	245.6	250.7	250.7
82.5°	2131.4	577.7	453.0	333.4	262.1	239.2	239.2	227.8	203.6	206.1	213.8
85°	1070.2	397.0	338.5	258.3	203.6	192.1	192.1	183.2	159.1	160.3	170.5
87.5°	325.8	239.2	224.0	184.5	146.3	143.8	137.4	131.1	115.8	114.5	120.9
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°	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6
2.5°	6745.4	6672.9	6585.1	6391.7	6326.8	6322.9	6381.5	6320.4	6437.5	6387.8	6442.5
5°	5439.8	5368.6	5270.6	5023.7	4873.6	4771.8	4723.4	4580.9	4684.0	4608.9	4671.3
7.5°	4000.7	4017.2	3952.3	3807.3	3480.2	3316.1	3219.4	3132.8	3207.9	3200.3	3319.9
10°	2812.2	2856.7	2810.9	2664.6	2399.9	2309.5	2327.4	2361.7	2459.7	2510.6	2695.1
12.5°	2024.5	2022.0	1992.7	1861.6	1687.3	1697.5	1770.0	1829.8	1920.2	1973.6	2161.9
15°	1511.7	1488.8	1476.1	1369.2	1269.9	1291.6	1327.2	1333.6	1390.8	1422.6	1575.3
17.5°	1142.7	1154.1	1168.1	1091.8	1016.7	1002.7	974.7	940.4	956.9	963.3	1039.6
20°	907.3	953.1	987.4	934.0	857.6	816.9	781.3	758.4	758.4	757.1	778.8
22.5°	792.8	825.8	862.7	825.8	757.1	721.5	701.1	683.3	680.8	680.8	701.1
25°	730.4	754.6	790.2	764.8	713.9	687.1	668.1	645.1	636.2	633.7	647.7
27.5°	699.9	710.0	727.9	705.0	661.7	649.0	643.9	623.5	612.1	605.7	619.7
30°	647.7	645.1	646.4	623.5	589.2	587.9	596.8	600.6	596.8	595.5	617.2
32.5°	599.3	594.2	593.0	572.6	540.8	533.2	540.8	548.4	557.3	570.1	595.5
35°	538.3	551.0	558.6	540.8	502.6	479.7	470.8	456.8	449.2	449.2	478.5
37.5°	489.9	519.2	530.6	514.1	472.1	440.3	425.0	422.5	423.7	428.8	456.8
40°	473.4	495.0	505.2	488.6	446.6	417.4	408.5	405.9	408.5	416.1	444.1
42.5°	463.2	478.5	477.2	456.8	422.5	402.1	397.0	394.5	397.0	404.6	435.2
45°	454.3	464.5	454.3	430.1	398.3	388.1	389.4	388.1	390.7	398.3	427.6
47.5°	446.6	450.5	437.7	413.6	380.5	377.9	383.0	386.8	389.4	395.7	426.3
50°	435.2	435.2	423.7	398.3	365.2	366.5	372.8	381.7	383.0	390.7	414.8
52.5°	421.2	419.9	412.3	388.1	352.5	356.3	356.3	366.5	369.0	377.9	403.4
55°	409.7	407.2	403.4	380.5	341.0	347.4	343.6	347.4	353.7	362.7	390.7
57.5°	399.6	394.5	394.5	374.1	332.1	334.7	325.8	330.8	338.5	346.1	375.4
60°	389.4	384.3	386.8	365.2	318.1	315.6	311.8	321.9	324.5	333.4	362.7
62.5°	377.9	374.1	375.4	355.0	307.9	301.6	301.6	310.5	311.8	324.5	352.5
65°	369.0	363.9	362.7	344.8	296.5	288.9	292.7	296.5	299.0	311.8	338.5
67.5°	360.1	349.9	349.9	335.9	283.8	276.1	283.8	282.5	286.3	297.8	319.4
70°	348.7	334.7	335.9	329.6	271.0	262.1	268.5	267.2	269.8	277.4	299.0
72.5°	330.8	319.4	321.9	319.4	258.3	245.6	248.1	248.1	248.1	254.5	277.4
75°	307.9	299.0	306.7	313.0	243.0	225.2	227.8	227.8	224.0	227.8	255.8
77.5°	279.9	274.9	300.3	291.4	225.2	203.6	203.6	201.1	193.4	198.5	229.0
80°	249.4	245.6	277.4	244.3	204.9	176.9	174.3	168.0	160.3	164.1	194.7
82.5°	217.6	213.8	232.9	187.1	176.9	146.3	140.0	128.5	120.9	124.7	152.7
85°	178.1	178.1	179.4	141.2	134.9	112.0	104.3	89.1	80.2	82.7	109.4
87.5°	127.2	131.1	120.9	96.7	80.2	62.4	57.3	48.4	40.7	47.1	57.3
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: P192102

CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050-1200

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6	7820.6
2.5°	6722.5	6862.5	7021.5	7225.1	7399.5	7685.8	7960.6	8126.0
5°	5026.3	5259.1	5549.3	5922.1	6269.5	6791.2	7309.1	7641.2
7.5°	3597.3	3846.7	4159.7	4625.5	5116.6	5782.1	6466.7	6863.7
10°	2976.3	3232.1	3495.5	3809.8	4211.9	4935.9	5745.2	6193.1
12.5°	2462.2	2735.8	3019.6	3350.4	3723.3	4369.7	5302.4	5817.8
15°	1884.5	2189.9	2524.6	2943.2	3410.2	4157.2	5193.0	5752.9
17.5°	1291.6	1632.6	2043.6	2560.2	3131.6	4088.5	5388.9	6034.1
20°	889.5	1137.6	1576.6	2182.3	2869.4	4079.6	5765.6	6573.6
22.5°	744.4	855.1	1175.8	1834.9	2672.2	4189.0	6349.7	7330.7
25°	688.4	754.6	939.1	1533.3	2528.4	4440.9	7153.9	8310.5
27.5°	655.3	715.1	852.6	1336.1	2415.2	4733.6	7936.4	9259.8
30°	668.1	729.1	828.4	1235.6	2261.2	4977.9	8631.2	10000.4
32.5°	601.9	628.6	710.0	1146.5	2150.5	5182.8	9239.5	10613.7
35°	512.8	559.9	633.7	1104.5	2153.0	5320.2	9902.4	11397.6
37.5°	488.6	535.7	589.2	1089.2	2182.3	5466.6	10663.4	12316.3
40°	473.4	516.6	562.4	1080.3	2210.3	5600.2	11409.0	13224.8
42.5°	463.2	502.6	559.9	1049.8	2224.3	5719.8	12022.4	13997.2
45°	461.9	502.6	570.1	1019.3	2245.9	5848.3	12536.4	14568.6
47.5°	463.2	519.2	551.0	982.4	2245.9	6063.4	13139.6	15078.8
50°	458.1	547.2	530.6	930.2	2193.7	6470.5	13966.7	15762.2
52.5°	455.5	543.3	491.2	850.0	2103.4	7117.0	15026.7	16703.8
55°	449.2	524.3	463.2	730.4	1997.8	7821.9	16161.7	17817.2
57.5°	442.8	464.5	447.9	626.1	1834.9	8318.2	16943.0	18686.3
60°	496.3	405.9	435.2	575.2	1617.3	8454.3	16912.5	19032.4
62.5°	459.4	380.5	418.6	563.7	1464.6	8072.6	16131.2	18845.4
65°	360.1	363.9	402.1	596.8	1423.9	7061.0	14746.7	17981.4
67.5°	329.6	347.4	385.6	638.8	1427.7	5653.6	12677.7	16099.4
70°	310.5	329.6	366.5	660.4	1437.9	4214.4	10023.3	13112.9
72.5°	288.9	305.4	344.8	664.2	1371.7	3061.6	7725.2	9641.6
75°	263.4	278.7	314.3	579.0	1136.3	2123.8	5909.4	6596.5
77.5°	234.1	245.6	276.1	446.6	843.7	1359.0	4435.9	4818.9
80°	199.8	206.1	231.6	327.0	577.7	850.0	3509.5	3867.1
82.5°	160.3	162.9	179.4	245.6	375.4	545.9	2350.3	2682.4
85°	113.3	113.3	123.4	178.1	255.8	346.1	1276.3	1415.0
87.5°	53.4	54.7	54.7	98.0	133.6	175.6	293.9	180.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)