

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: P191313

Luminaire Tested: **GLEON-AF-05-LED-E1-SLR-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191313
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-05-LED-E1-SLR-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 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: 17621.4 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 162
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

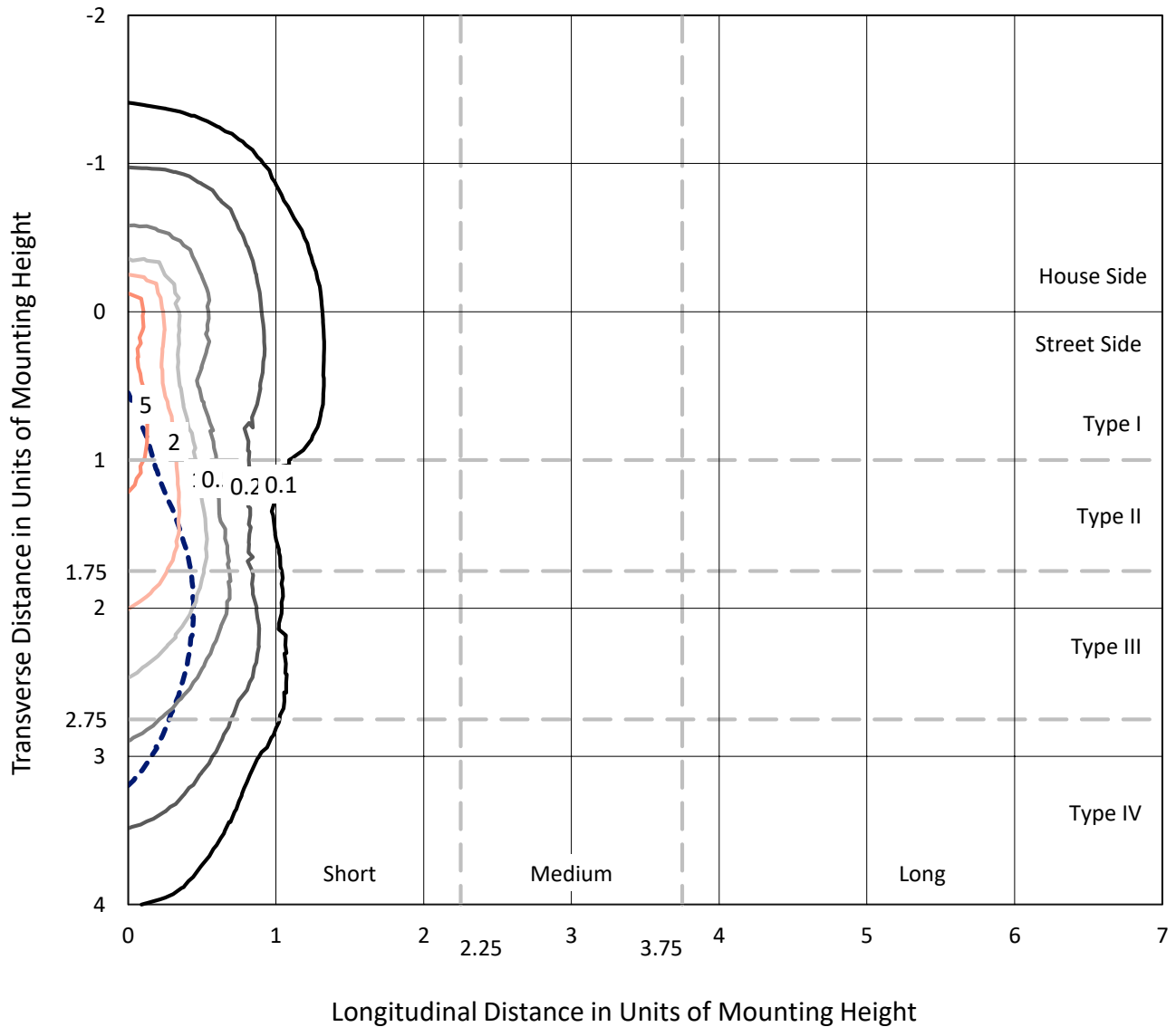


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

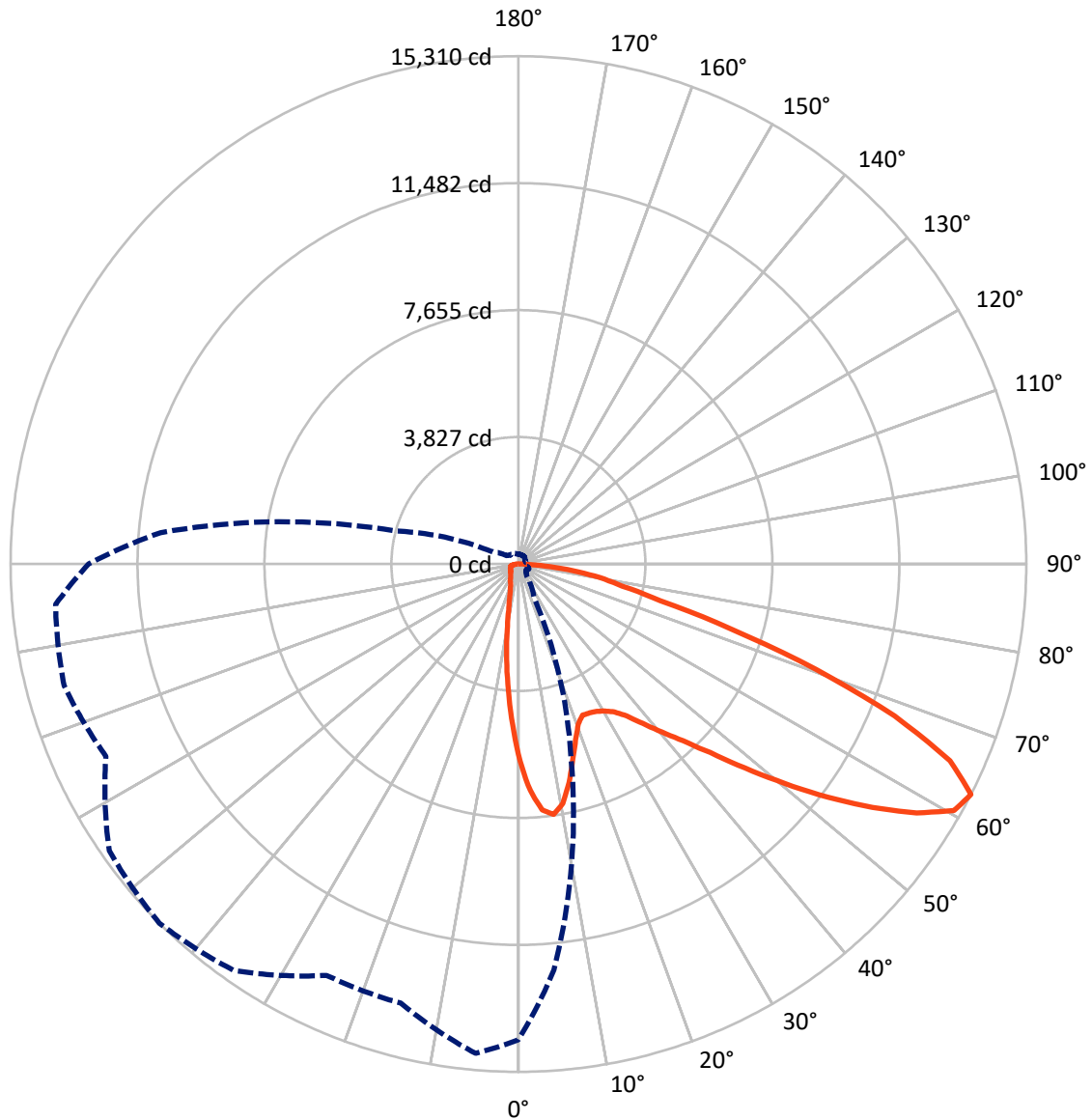


Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type IV - Short - Non-Cutoff

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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	2916.1	0.0	2916.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	14705.3	0.0	14705.3
	% Fixture	83.5	0.0	83.5
Total	Lumens	17621.4	0.0	17621.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.4	2.5
10°-20°	794.7	4.5
20°-30°	1158.7	6.6
30°-40°	1784.5	10.1
40°-50°	2626.4	14.9
50°-60°	3852.3	21.9
60°-70°	4306.3	24.4
70°-80°	2108.3	12.0
80°-90°	556.7	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°	17621.4	100.0
0°-180°	17621.4	100.0



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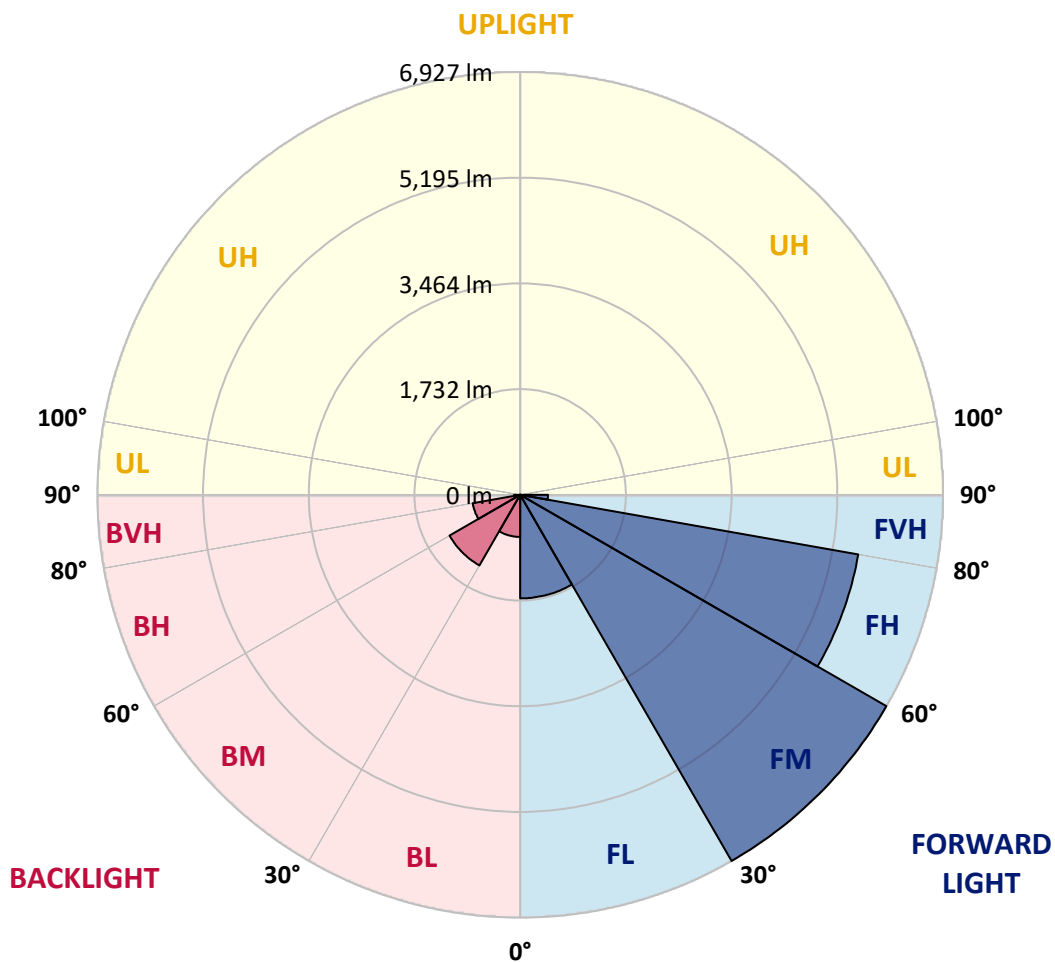
CATALOG NUMBER: GLEON-AF-05-LED-E1-SLR-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1696.9	9.6			
FM	(30°-60°)	6927.1	39.3			
FH	(60°-80°)	5624.1	31.9			G3/7500
FVH	(80°-90°)	457.1	2.6			G3/500
BL	(0°-30°)	689.9	3.9	B2/1000		
BM	(30°-60°)	1336.1	7.6	B2/2500		
BH	(60°-80°)	790.6	4.5	B2/1000		G2/1000
BVH	(80°-90°)	99.5	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5
2.5°	6185.9	6060.0	5850.8	5632.8	5500.1	5345.1	5224.0	5117.5	4904.3	4862.7	4900.5
5°	5816.9	5564.0	5169.8	4772.7	4508.1	4224.4	4003.5	3826.2	3556.0	3508.5	3565.7
7.5°	5225.0	4922.7	4401.7	3895.0	3521.1	3166.5	2928.3	2738.4	2527.3	2436.2	2442.0
10°	4714.5	4373.5	3757.5	3206.3	2900.2	2660.9	2460.4	2265.7	2051.6	1911.2	1872.4
12.5°	4428.8	4036.5	3326.4	2834.3	2550.5	2298.7	2082.6	1874.4	1645.7	1502.4	1461.7
15°	4379.4	3953.1	3164.6	2596.0	2240.6	1921.8	1667.1	1434.6	1199.2	1083.0	1058.8
17.5°	4593.5	4102.3	3112.3	2383.9	1948.9	1555.7	1242.8	983.2	791.4	733.3	728.4
20°	5004.2	4389.1	3105.6	2184.3	1661.3	1200.2	866.0	677.1	592.8	576.3	577.4
22.5°	5580.5	4833.6	3188.8	2034.2	1396.8	895.1	650.9	566.7	533.8	518.2	518.2
25°	6326.3	5445.9	3380.6	1924.8	1167.3	714.8	574.4	524.1	493.1	482.4	484.4
27.5°	7049.1	6041.5	3603.4	1838.5	1017.1	649.0	544.4	498.9	471.8	461.0	466.0
30°	7612.8	6570.5	3789.4	1721.3	940.6	630.6	555.1	508.5	469.8	453.4	454.3
32.5°	8079.7	7033.5	3945.4	1637.0	872.8	540.5	478.5	458.2	453.4	433.9	424.3
35°	8676.4	7538.2	4050.0	1639.0	840.8	482.4	426.3	390.4	364.2	342.0	342.0
37.5°	9375.8	8117.4	4161.4	1661.3	829.2	448.5	407.9	371.9	347.8	326.4	322.5
40°	10067.4	8685.1	4263.1	1682.5	822.4	428.1	393.3	360.4	338.1	316.7	311.0
42.5°	10655.4	9152.0	4354.2	1693.2	799.1	426.3	382.6	352.6	331.3	308.0	302.2
45°	11090.3	9543.3	4452.0	1709.7	775.9	433.9	382.6	351.6	325.5	303.2	297.4
47.5°	11478.7	10002.5	4615.8	1709.7	747.8	419.4	395.3	352.6	324.5	301.3	296.5
50°	11998.9	10632.1	4925.7	1670.0	708.1	404.0	416.5	348.7	315.8	297.4	291.5
52.5°	12715.7	11439.0	5417.8	1601.2	647.1	373.9	413.6	346.8	307.1	287.7	280.9
55°	13563.3	12303.0	5954.4	1520.8	556.0	352.6	399.1	342.0	297.4	276.1	269.2
57.5°	14224.9	12897.9	6332.2	1396.8	476.6	340.9	353.5	337.1	285.7	263.5	257.7
60°	14488.4	12874.6	6435.8	1231.2	437.8	331.3	309.0	377.8	276.1	253.8	247.0
62.5°	14346.0	12279.8	6145.3	1114.9	429.1	318.6	289.6	349.6	268.3	247.0	237.3
65°	13688.3	11225.9	5375.1	1083.9	454.3	306.1	277.0	274.2	257.7	237.3	227.6
67.5°	12255.6	9650.8	4303.8	1086.9	486.3	293.5	264.4	250.9	243.2	226.7	218.0
70°	9982.2	7630.2	3208.3	1094.6	502.8	279.0	250.9	236.4	227.6	211.1	205.4
72.5°	7339.6	5880.8	2330.6	1044.2	505.6	262.5	232.5	219.9	211.1	193.7	188.9
75°	5021.6	4498.5	1616.7	865.0	440.8	239.3	212.2	200.5	194.7	173.4	170.5
77.5°	3668.3	3376.8	1034.5	642.2	340.0	210.2	187.0	178.2	174.3	151.1	147.2
80°	2943.7	2671.6	647.1	439.8	249.0	176.3	156.9	152.1	148.2	125.0	122.0
82.5°	2041.9	1789.1	415.5	285.7	187.0	136.6	124.0	122.0	116.2	94.9	92.1
85°	1077.2	971.6	263.5	194.7	135.6	94.0	86.2	86.2	83.3	63.0	61.1
87.5°	137.6	223.7	133.7	101.7	74.6	41.6	41.6	40.7	43.6	35.8	31.0
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°	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5
2.5°	4811.3	4857.9	4813.3	4816.3	4865.7	5012.9	5079.7	5134.9	5194.0	5232.8	5250.2
5°	3487.2	3595.7	3632.5	3710.0	3824.3	4012.2	4086.8	4141.1	4176.9	4198.2	4206.9
7.5°	2384.9	2450.7	2524.3	2649.3	2898.2	3008.7	3058.1	3045.5	3004.8	2990.3	2975.8
10°	1797.8	1771.6	1758.1	1826.9	2028.4	2139.8	2174.7	2140.7	2118.4	2123.3	2147.6
12.5°	1393.0	1347.4	1292.2	1284.4	1417.2	1516.9	1539.2	1541.2	1581.8	1617.7	1671.0
15°	1015.2	1010.4	983.2	966.7	1042.3	1123.6	1133.3	1150.8	1187.5	1213.7	1260.3
17.5°	715.9	742.0	763.3	774.0	831.1	889.3	878.6	869.8	863.1	863.1	885.4
20°	577.4	594.7	621.9	652.8	711.1	751.7	725.6	690.7	665.4	657.8	660.6
22.5°	520.2	533.8	549.2	576.3	628.7	656.7	628.7	603.4	578.3	569.6	566.7
25°	491.1	508.5	523.0	543.4	582.2	601.5	574.4	556.0	540.5	529.9	522.1
27.5°	474.6	490.1	494.0	503.7	536.6	554.0	540.5	532.8	523.0	513.4	503.7
30°	457.3	454.3	447.5	448.5	474.6	492.0	491.1	493.1	492.0	489.2	487.2
32.5°	417.5	411.6	405.9	411.6	435.9	451.4	452.3	456.2	456.2	455.3	463.0
35°	347.8	358.4	365.2	382.6	411.6	425.2	419.4	409.8	392.3	381.7	380.6
37.5°	321.6	323.6	335.1	359.4	391.4	404.0	395.3	373.0	361.3	359.4	362.3
40°	309.0	311.0	317.7	340.0	371.9	384.5	376.9	360.4	349.6	348.7	353.5
42.5°	300.3	302.2	306.1	321.6	347.8	363.2	364.2	352.6	340.0	340.9	345.9
45°	295.4	296.5	295.4	303.2	327.4	345.9	353.5	345.9	335.1	337.1	342.9
47.5°	294.5	291.5	287.7	289.6	314.9	333.2	342.9	340.0	335.1	337.1	342.0
50°	290.6	283.9	279.0	278.0	303.2	322.5	331.3	331.3	333.2	337.1	342.0
52.5°	279.0	271.2	271.2	268.3	295.4	313.8	319.7	320.6	323.6	330.3	337.1
55°	264.4	261.6	264.4	259.6	289.6	307.1	310.0	311.9	313.8	319.7	329.4
57.5°	251.9	248.0	254.7	252.9	284.8	300.3	300.3	304.1	304.1	311.9	319.7
60°	245.1	237.3	240.2	242.1	278.0	294.5	292.6	296.5	298.4	305.1	311.0
62.5°	236.4	229.6	229.6	234.5	270.3	285.7	284.8	287.7	295.4	297.4	303.2
65°	225.7	222.8	219.9	225.7	262.5	276.1	277.0	280.9	287.7	289.6	294.5
67.5°	215.0	216.0	210.2	216.0	255.7	266.4	266.4	274.2	277.0	280.9	285.7
70°	203.5	204.4	199.6	206.3	250.9	255.7	254.7	265.5	267.4	270.3	275.1
72.5°	188.9	188.9	187.0	196.6	243.2	245.1	243.2	251.9	252.9	255.7	257.7
75°	173.4	173.4	171.4	185.1	238.2	233.4	227.6	234.5	236.4	238.2	238.2
77.5°	153.0	155.0	155.0	171.4	221.8	228.6	209.2	213.1	216.0	217.0	214.1
80°	127.9	132.7	134.6	156.0	186.0	211.1	187.0	189.9	190.8	190.8	187.0
82.5°	97.8	106.6	111.4	134.6	142.4	177.3	162.8	165.6	162.8	156.9	155.0
85°	67.8	79.4	85.2	102.7	107.5	136.6	135.6	135.6	129.8	122.0	121.1
87.5°	36.8	43.6	47.5	61.1	73.7	92.1	99.7	96.9	92.1	87.2	88.2
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5
2.5°	5341.2	5473.0	5683.2	5844.0	6005.7	6161.7	6330.2	6459.1	6568.6	6611.1	6740.9
5°	4295.1	4459.8	4658.3	5016.8	5270.5	5550.4	5874.0	6302.2	6466.8	6694.5	7067.4
7.5°	3036.7	3186.0	3505.7	3795.2	4154.6	4550.8	4987.7	5578.6	5794.6	6159.8	6767.1
10°	2267.7	2441.1	2697.7	2941.8	3258.6	3663.5	4165.3	4825.9	5088.5	5484.7	6183.9
12.5°	1826.9	2031.3	2303.5	2533.0	2778.1	3063.9	3551.2	4275.7	4627.3	4974.1	5681.3
15°	1403.6	1617.7	1870.5	2162.1	2432.4	2740.4	3250.8	4043.2	4448.1	4809.4	5412.9
17.5°	971.6	1154.6	1473.4	1777.5	2123.3	2517.6	3167.6	4092.6	4576.0	4992.5	5459.4
20°	688.8	793.3	1054.9	1407.5	1838.5	2333.6	3152.0	4352.2	4980.8	5456.5	5757.8
22.5°	579.3	618.0	770.1	1093.6	1591.5	2196.0	3206.3	4716.4	5527.2	6134.5	6233.4
25°	527.9	551.2	630.6	858.3	1371.7	2096.2	3389.3	5258.9	6203.4	6812.6	6795.3
27.5°	499.8	524.1	576.3	724.6	1206.0	2034.2	3572.5	5902.1	6976.3	7548.9	7331.9
30°	491.1	524.1	579.3	682.9	1087.8	1936.3	3722.6	6466.8	7571.2	8045.8	7576.0
32.5°	484.4	489.2	514.3	588.9	975.5	1822.1	3824.3	6973.5	8153.3	8518.5	7927.6
35°	391.4	415.5	456.2	527.9	909.6	1753.3	3824.3	7410.4	8726.7	8996.0	8262.8
37.5°	376.9	398.1	433.9	495.0	872.8	1719.4	3747.8	7831.7	9312.7	9537.5	8538.8
40°	369.1	386.5	420.4	469.8	857.2	1680.6	3636.4	8203.7	9885.3	10080.0	8796.5
42.5°	363.2	378.8	410.7	454.3	837.0	1638.1	3546.3	8502.1	10382.2	10543.0	9042.6
45°	360.4	376.9	411.6	462.1	796.3	1581.8	3516.3	8824.6	10791.0	10929.5	9309.0
47.5°	360.4	379.7	416.5	478.5	747.8	1523.7	3610.2	9249.8	11177.5	11245.3	9622.8
50°	357.4	378.8	430.0	462.1	677.1	1450.1	3831.1	9785.5	11596.0	11603.7	10019.9
52.5°	351.6	376.9	463.0	452.3	595.8	1353.3	4129.4	10473.3	12215.0	12261.4	10641.8
55°	344.8	373.9	454.3	430.0	528.9	1238.0	4373.5	11309.2	13084.8	13213.7	11556.3
57.5°	336.1	370.0	439.8	399.1	485.3	1089.7	4461.7	11921.4	13692.1	14015.7	12586.9
60°	328.4	367.1	397.1	380.6	458.2	964.7	4291.2	11800.4	13650.5	14347.9	13500.4
62.5°	320.6	370.0	362.3	369.1	445.6	884.4	3845.6	10830.7	12959.9	14005.0	14177.5
65°	311.9	343.9	342.0	359.4	442.6	852.4	3187.9	9376.7	11625.0	12921.1	14337.3
67.5°	300.3	317.7	327.4	346.8	452.3	824.3	2572.8	7734.8	9770.0	11296.7	13504.2
70°	287.7	302.2	312.9	331.3	446.5	811.7	2139.8	6099.8	7752.2	9258.5	11860.4
72.5°	271.2	283.9	293.5	311.0	440.8	805.0	1807.6	4912.1	5787.8	6877.5	9643.2
75°	251.9	263.5	270.3	287.7	422.4	737.1	1421.1	4156.6	4331.0	4784.2	7680.6
77.5°	229.6	238.2	244.1	263.5	373.9	613.2	1027.8	3206.3	3363.3	3473.6	5888.5
80°	203.5	212.2	215.0	233.4	310.0	479.5	670.3	2368.4	2515.6	2540.8	3845.6
82.5°	173.4	182.1	182.1	199.6	253.8	344.8	439.8	1622.5	1651.6	1736.9	2718.1
85°	139.5	146.3	146.3	155.0	196.6	257.7	302.2	814.7	806.0	920.2	2354.8
87.5°	99.7	104.6	109.5	111.4	140.5	170.5	182.1	248.0	163.7	187.9	1512.1
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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CATALOG NUMBER: GLEON-AF-05-LED-E1-SLR-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5	5953.5
2.5°	6838.8	6894.0	6837.8	6797.2	6621.9	6477.5	6284.7	6185.9
5°	7351.2	7491.7	7444.2	7273.7	6907.6	6495.9	6028.0	5816.9
7.5°	7289.2	7615.7	7623.4	7304.7	6765.2	6158.8	5525.3	5225.0
10°	6806.8	7224.4	7343.5	7034.5	6462.0	5784.0	5057.5	4714.5
12.5°	6268.2	6677.0	6768.0	6661.6	6183.0	5502.0	4764.9	4428.8
15°	5827.5	6010.6	6119.1	6212.1	5943.8	5389.7	4748.4	4379.4
17.5°	5559.2	5538.9	5569.9	5731.6	5777.1	5518.5	5000.3	4593.5
20°	5462.4	5151.4	5143.6	5366.4	5698.7	5825.6	5492.3	5004.2
22.5°	5515.6	5011.8	4948.0	5212.4	5740.3	6268.2	6137.5	5580.5
25°	5699.7	5023.5	4972.2	5227.9	5891.5	6740.0	6833.9	6326.3
27.5°	5989.3	5097.2	5029.3	5291.8	6092.0	7136.2	7519.8	7049.1
30°	6264.3	5225.0	5140.7	5417.8	6275.1	7293.1	7940.1	7612.8
32.5°	6598.5	5464.3	5316.1	5649.2	6501.7	7543.0	8315.1	8079.7
35°	6926.0	5805.2	5621.2	6006.8	6754.5	7854.0	8743.2	8676.4
37.5°	7285.4	6250.8	6098.7	6468.7	7100.3	8147.5	9289.5	9375.8
40°	7669.0	6841.7	6661.6	7143.0	7636.9	8515.6	9860.1	10067.4
42.5°	8055.4	7497.5	7282.5	7770.6	8226.9	8878.8	10348.3	10655.4
45°	8498.2	8209.5	8107.8	8635.6	8793.6	9224.7	10708.7	11090.3
47.5°	9013.4	9017.3	9181.1	9392.2	9365.1	9615.9	11070.9	11478.7
50°	9615.0	10025.7	10387.0	10527.5	9954.0	10036.4	11573.7	11998.9
52.5°	10337.6	11231.7	11679.2	11587.3	10588.6	10549.8	12369.9	12715.7
55°	11241.4	12508.4	12953.0	12887.1	11317.9	11249.2	13361.8	13563.3
57.5°	12287.6	13745.4	14154.2	13857.8	12193.6	12016.3	14182.3	14224.9
60°	13206.8	14725.7	15084.1	14755.8	13077.0	12832.9	14694.7	14488.4
62.5°	13718.3	15057.9	15309.8	14956.3	13682.5	13702.8	14807.1	14346.0
65°	13489.7	14218.1	14299.5	14270.5	13526.5	14207.5	14403.1	13688.3
67.5°	12238.2	12094.8	12231.4	12420.3	12189.7	13542.9	13284.3	12255.6
70°	10033.5	9245.9	9518.1	9645.0	9749.6	11654.1	11530.1	9982.2
72.5°	7561.4	6477.5	6692.6	6666.4	7150.7	9347.6	8967.0	7339.6
75°	5357.7	4391.9	4419.0	4408.4	4989.6	7313.5	6493.0	5021.6
77.5°	3748.7	3182.1	3196.6	3256.7	3354.5	5515.6	4639.0	3668.3
80°	2577.6	2414.9	2495.3	2500.1	2324.8	3705.1	3427.2	2943.7
82.5°	1919.9	1678.7	1659.3	1687.5	1822.1	3002.0	2633.8	2041.9
85°	1572.2	993.9	799.1	1001.6	1614.7	2972.8	1749.5	1077.2
87.5°	885.4	471.8	213.1	395.3	644.2	1968.4	505.6	137.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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