

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: P191332

Luminaire Tested: **GLEON-AF-04-LED-E1-SLR**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191332
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-SLR
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 21586.3 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 225
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

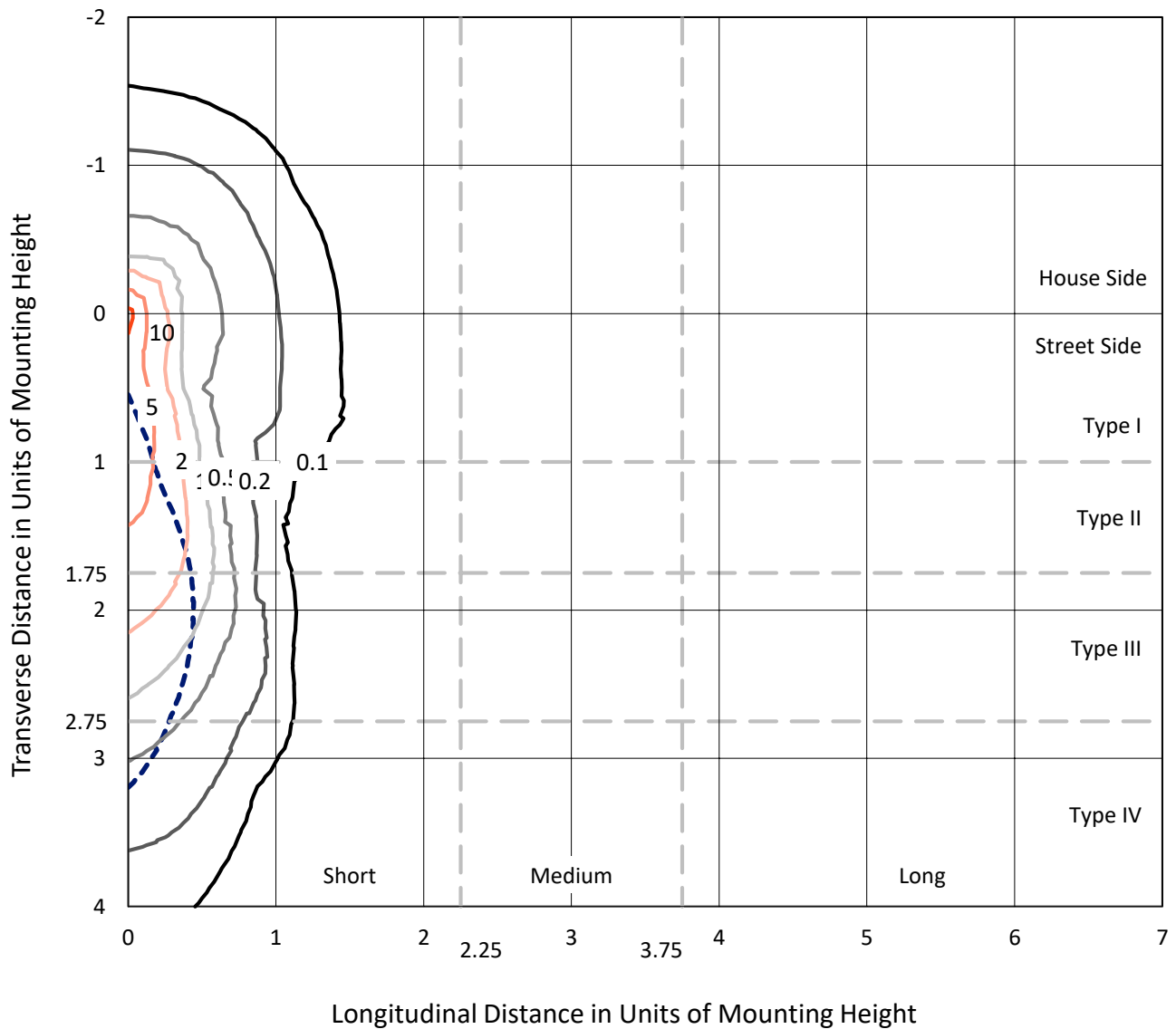


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

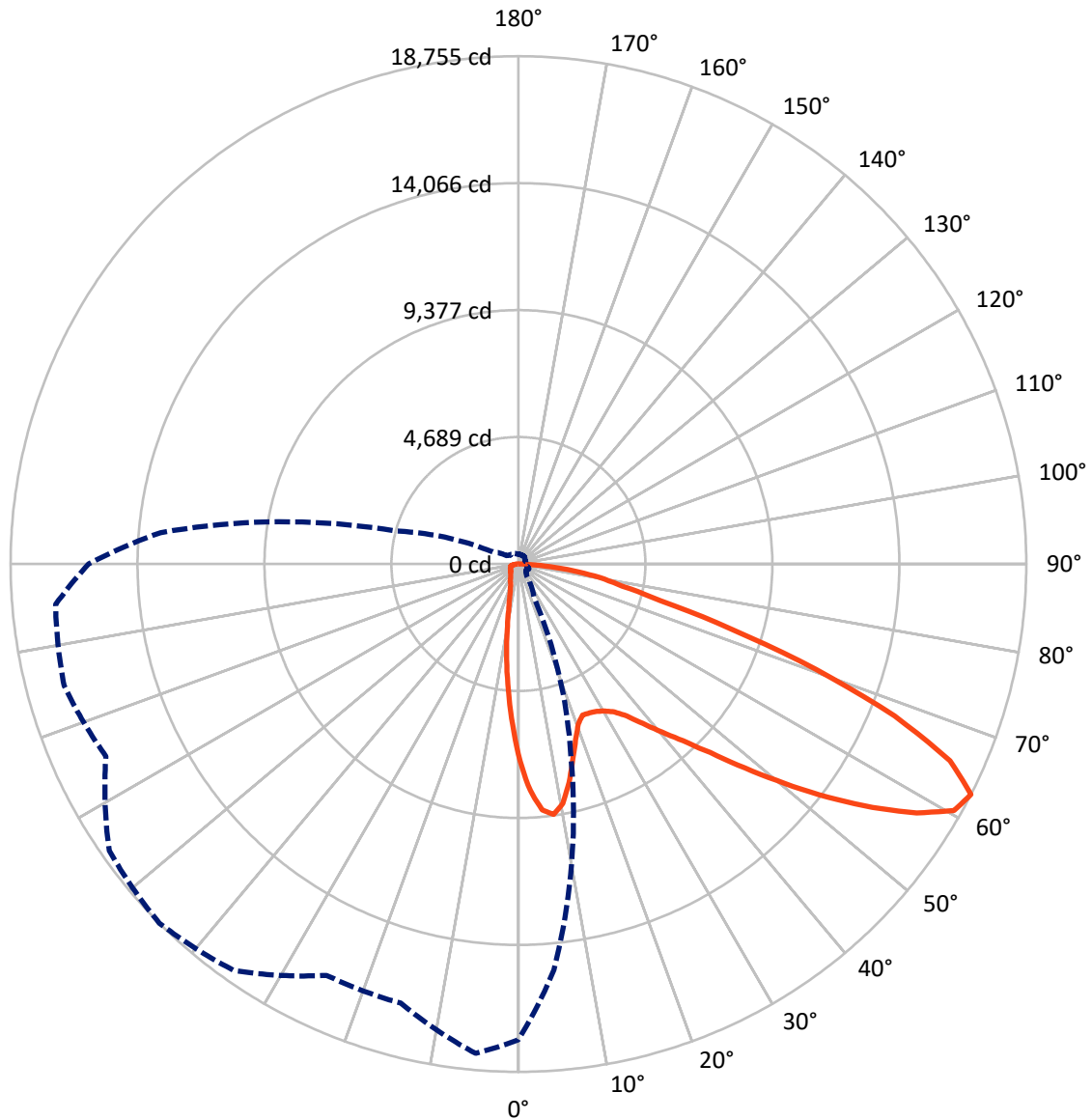


Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
 Type IV - Short - Non-Cutoff

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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	3572.2	0.0	3572.2
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	18014.1	0.0	18014.1
	% Fixture	83.5	0.0	83.5
Total	Lumens	21586.3	0.0	21586.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.9	2.5
10°-20°	973.5	4.5
20°-30°	1419.4	6.6
30°-40°	2186.1	10.1
40°-50°	3217.3	14.9
50°-60°	4719.1	21.9
60°-70°	5275.3	24.4
70°-80°	2582.7	12.0
80°-90°	681.9	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°	21586.3	100.0
0°-180°	21586.3	100.0

Coefficient of Utilization



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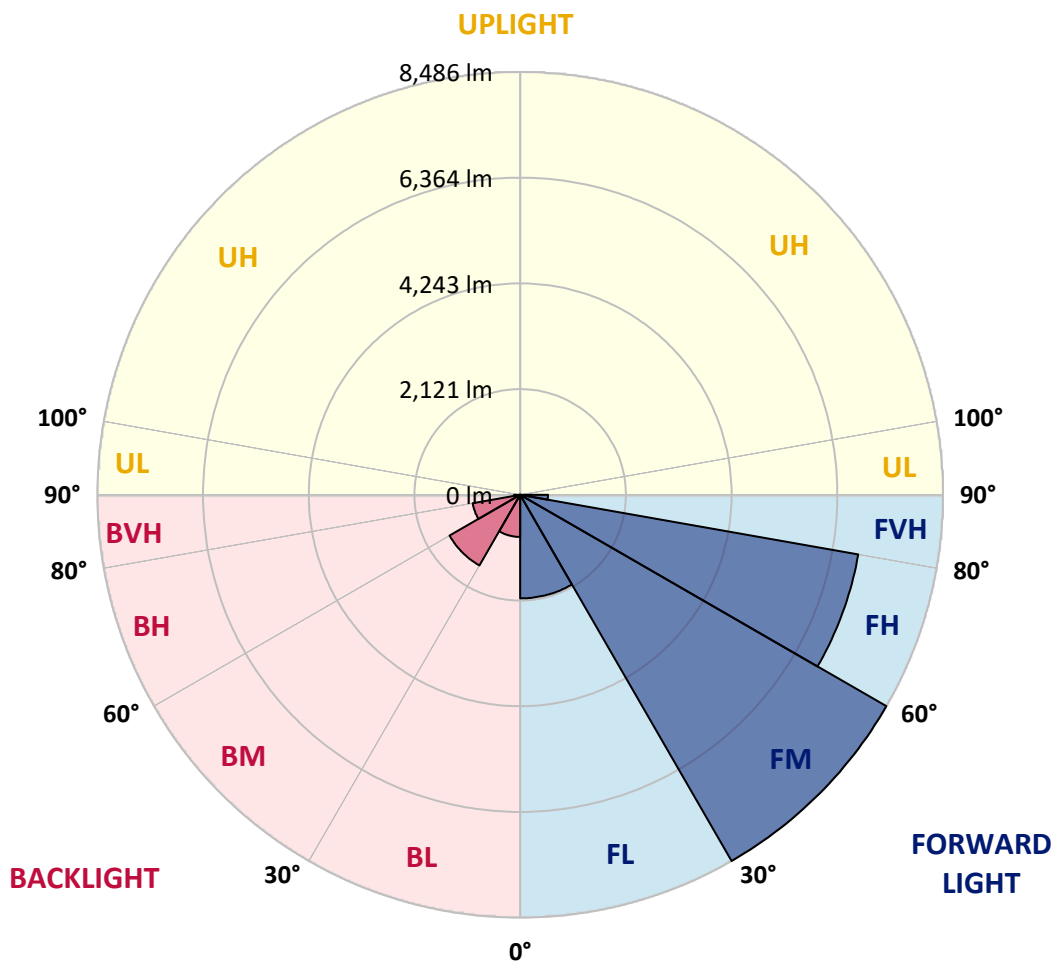
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLR

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2078.7	9.6			
FM	(30°-60°)	8485.8	39.3			
FH	(60°-80°)	6889.6	31.9			G3/7500
FVH	(80°-90°)	560.0	2.6			G4/750
BL	(0°-30°)	845.1	3.9	B2/1000		
BM	(30°-60°)	1636.8	7.6	B2/2500		
BH	(60°-80°)	968.4	4.5	B2/1000		G2/1000
BVH	(80°-90°)	121.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	7577.8	7423.6	7167.2	6900.2	6737.7	6547.8	6399.5	6268.9	6007.9	5956.8	6003.2
5°	7125.7	6816.0	6333.0	5846.5	5522.6	5174.9	4904.3	4687.2	4356.1	4297.9	4368.0
7.5°	6400.7	6030.4	5392.1	4771.5	4313.4	3879.1	3587.2	3354.6	3096.0	2984.4	2991.5
10°	5775.3	5357.6	4603.0	3927.7	3552.8	3259.6	3014.0	2775.6	2513.3	2341.2	2293.8
12.5°	5425.2	4944.6	4074.9	3472.1	3124.4	2815.9	2551.2	2296.1	2016.0	1840.5	1790.6
15°	5364.8	4842.6	3876.7	3180.1	2744.7	2354.3	2042.2	1757.4	1469.1	1326.7	1297.0
17.5°	5626.9	5025.3	3812.6	2920.3	2387.5	1905.8	1522.5	1204.4	969.5	898.3	892.3
20°	6130.1	5376.6	3804.4	2675.8	2035.1	1470.2	1060.8	829.4	726.2	706.0	707.3
22.5°	6836.2	5921.2	3906.3	2491.9	1711.1	1096.4	797.4	694.2	653.9	634.8	634.8
25°	7749.9	6671.2	4141.3	2357.8	1429.9	875.7	703.7	642.0	604.0	591.0	593.3
27.5°	8635.1	7401.0	4414.2	2252.2	1246.0	795.0	666.9	611.1	577.9	564.9	570.8
30°	9325.7	8048.9	4642.0	2108.6	1152.3	772.5	680.0	623.0	575.5	555.4	556.5
32.5°	9897.7	8616.1	4833.1	2005.4	1069.2	662.2	586.2	561.3	555.4	531.6	519.8
35°	10628.7	9234.4	4961.3	2007.7	1030.0	591.0	522.1	478.2	446.2	418.9	418.9
37.5°	11485.4	9943.9	5097.8	2035.1	1015.8	549.4	499.6	455.6	426.0	399.9	395.2
40°	12332.6	10639.3	5222.4	2061.1	1007.4	524.5	481.8	441.4	414.1	388.0	380.9
42.5°	13053.0	11211.2	5333.9	2074.2	979.0	522.1	468.7	431.9	405.8	377.4	370.2
45°	13585.7	11690.7	5453.8	2094.4	950.5	531.6	468.7	430.8	398.7	371.4	364.3
47.5°	14061.6	12253.1	5654.3	2094.4	916.1	513.8	484.2	431.9	397.5	369.1	363.1
50°	14698.8	13024.4	6034.0	2045.7	867.5	494.8	510.2	427.2	386.9	364.3	357.2
52.5°	15576.9	14012.9	6636.8	1961.5	792.7	458.1	506.7	424.8	376.1	352.4	344.1
55°	16615.2	15071.3	7294.3	1863.0	681.1	431.9	488.9	418.9	364.3	338.2	329.9
57.5°	17425.7	15800.0	7757.0	1711.1	583.8	417.7	433.1	413.0	350.1	322.7	315.7
60°	17748.4	15771.4	7884.0	1508.2	536.3	405.8	378.5	462.8	338.2	310.9	302.6
62.5°	17574.0	15042.9	7528.0	1365.8	525.7	390.4	354.8	428.4	328.7	302.6	290.7
65°	16768.2	13751.8	6584.6	1327.8	556.5	375.0	339.4	335.8	315.7	290.7	278.9
67.5°	15013.2	11822.3	5272.2	1331.4	595.7	359.6	324.0	307.3	297.9	277.6	267.0
70°	12228.3	9347.1	3930.1	1340.9	615.8	341.8	307.3	289.5	278.9	258.7	251.5
72.5°	8991.1	7204.0	2855.1	1279.2	619.4	321.6	284.8	269.3	258.7	237.3	231.4
75°	6151.5	5510.7	1980.4	1059.7	539.9	293.1	259.8	245.6	238.6	212.4	208.9
77.5°	4493.7	4136.6	1267.3	786.8	416.5	257.5	229.0	218.3	213.6	185.2	180.3
80°	3606.2	3272.7	792.7	538.7	304.9	215.9	192.2	186.3	181.6	153.0	149.6
82.5°	2501.4	2191.7	509.0	350.1	229.0	167.4	151.9	149.6	142.4	116.3	112.7
85°	1319.5	1190.2	322.7	238.6	166.1	115.1	105.6	105.6	102.1	77.1	74.8
87.5°	168.5	274.2	163.8	124.6	91.3	51.0	51.0	49.8	53.4	43.9	38.0
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°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	5893.9	5950.9	5896.4	5899.9	5960.4	6140.8	6222.7	6290.3	6362.7	6410.1	6431.5
5°	4271.8	4404.7	4449.8	4544.8	4684.8	4915.0	5006.4	5072.8	5116.7	5142.9	5153.5
7.5°	2921.4	3002.2	3092.4	3245.4	3550.4	3685.7	3746.1	3730.8	3680.9	3663.1	3645.3
10°	2202.4	2170.3	2153.7	2238.0	2484.8	2621.3	2664.0	2622.4	2595.1	2601.1	2630.7
12.5°	1706.4	1650.6	1582.9	1573.5	1736.0	1858.3	1885.5	1888.0	1937.8	1981.7	2046.9
15°	1243.6	1237.7	1204.4	1184.3	1276.8	1376.5	1388.3	1409.7	1454.8	1486.9	1543.8
17.5°	876.9	909.0	935.1	948.1	1018.1	1089.3	1076.2	1065.6	1057.3	1057.3	1084.5
20°	707.3	728.5	761.8	799.7	870.9	920.9	888.7	846.1	815.2	805.7	809.3
22.5°	637.2	653.9	672.8	706.0	770.1	804.6	770.1	739.3	708.4	697.8	694.2
25°	601.6	623.0	640.8	665.7	713.2	736.9	703.7	681.1	662.2	649.1	639.5
27.5°	581.4	600.5	605.2	617.0	657.3	678.7	662.2	652.6	640.8	628.9	617.0
30°	560.1	556.5	548.2	549.4	581.4	602.8	601.6	604.0	602.8	599.2	596.9
32.5°	511.5	504.3	497.2	504.3	534.0	553.0	554.1	558.9	558.9	557.7	567.2
35°	426.0	439.1	447.3	468.7	504.3	520.9	513.8	502.0	480.6	467.5	466.4
37.5°	393.9	396.3	410.6	440.3	479.4	494.8	484.2	456.8	442.6	440.3	443.8
40°	378.5	380.9	389.2	416.5	455.6	471.1	461.6	441.4	428.4	427.2	433.1
42.5°	367.9	370.2	375.0	393.9	426.0	445.0	446.2	431.9	416.5	417.7	423.6
45°	361.9	363.1	361.9	371.4	401.1	423.6	433.1	423.6	410.6	413.0	420.0
47.5°	360.7	357.2	352.4	354.8	385.7	408.2	420.0	416.5	410.6	413.0	418.9
50°	356.0	347.7	341.8	340.5	371.4	395.2	405.8	405.8	408.2	413.0	418.9
52.5°	341.8	332.3	332.3	328.7	361.9	384.4	391.6	392.8	396.3	404.7	413.0
55°	324.0	320.4	324.0	318.0	354.8	376.1	379.7	382.1	384.4	391.6	403.5
57.5°	308.5	303.8	312.1	309.7	348.8	367.9	367.9	372.6	372.6	382.1	391.6
60°	300.2	290.7	294.3	296.7	340.5	360.7	358.3	363.1	365.5	373.8	380.9
62.5°	289.5	281.2	281.2	287.1	331.0	350.1	348.8	352.4	361.9	364.3	371.4
65°	276.5	272.9	269.3	276.5	321.6	338.2	339.4	344.1	352.4	354.8	360.7
67.5°	263.4	264.6	257.5	264.6	313.2	326.3	326.3	335.8	339.4	344.1	350.1
70°	249.2	250.4	244.5	252.8	307.3	313.2	312.1	325.1	327.5	331.0	337.0
72.5°	231.4	231.4	229.0	240.9	297.9	300.2	297.9	308.5	309.7	313.2	315.7
75°	212.4	212.4	210.0	226.7	292.0	286.0	278.9	287.1	289.5	292.0	292.0
77.5°	187.5	189.9	189.9	210.0	271.7	280.1	256.4	261.1	264.6	265.8	262.3
80°	156.6	162.5	164.9	191.1	227.8	258.7	229.0	232.6	233.7	233.7	229.0
82.5°	119.9	130.5	136.5	164.9	174.4	217.2	199.4	203.0	199.4	192.2	189.9
85°	83.1	97.3	104.4	125.8	131.8	167.4	166.1	166.1	159.0	149.6	148.3
87.5°	45.1	53.4	58.1	74.8	90.2	112.7	122.2	118.7	112.7	106.8	108.0
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	6543.1	6704.4	6962.0	7158.9	7357.1	7548.1	7754.6	7912.4	8046.5	8098.7	8257.8
5°	5261.5	5463.3	5706.5	6145.6	6456.5	6799.3	7195.7	7720.2	7921.9	8200.8	8657.6
7.5°	3720.1	3902.9	4294.4	4649.2	5089.5	5574.8	6110.0	6833.8	7098.5	7545.8	8289.8
10°	2777.9	2990.3	3304.7	3603.8	3991.9	4487.8	5102.5	5911.7	6233.4	6718.6	7575.5
12.5°	2238.0	2488.3	2821.8	3103.0	3403.3	3753.3	4350.2	5237.8	5668.5	6093.3	6959.5
15°	1719.4	1981.7	2291.4	2648.5	2979.7	3357.0	3982.3	4953.0	5449.0	5891.6	6630.9
17.5°	1190.2	1414.4	1804.9	2177.5	2601.1	3084.1	3880.3	5013.5	5605.7	6115.9	6687.8
20°	843.7	971.8	1292.2	1724.2	2252.2	2858.6	3861.3	5331.5	6101.6	6684.3	7053.3
22.5°	709.6	757.1	943.4	1339.7	1949.6	2690.1	3927.7	5777.7	6770.9	7514.9	7635.9
25°	646.7	675.1	772.5	1051.4	1680.3	2567.9	4152.1	6442.2	7599.2	8345.5	8324.2
27.5°	612.3	642.0	706.0	887.6	1477.3	2491.9	4376.3	7230.1	8546.1	9247.4	8981.6
30°	601.6	642.0	709.6	836.6	1332.6	2372.1	4560.2	7921.9	9274.7	9856.1	9280.6
32.5°	593.3	599.2	630.1	721.5	1194.9	2232.1	4684.8	8542.6	9987.9	10435.2	9711.4
35°	479.4	509.0	558.9	646.7	1114.2	2147.8	4684.8	9077.7	10690.3	11020.2	10121.9
37.5°	461.6	487.7	531.6	606.4	1069.2	2106.3	4591.1	9593.8	11408.3	11683.5	10460.1
40°	452.1	473.4	515.0	575.5	1050.2	2058.8	4454.6	10049.6	12109.6	12348.0	10775.8
42.5°	445.0	464.0	503.1	556.5	1025.2	2006.6	4344.3	10415.1	12718.2	12915.3	11077.1
45°	441.4	461.6	504.3	566.0	975.4	1937.8	4307.4	10810.1	13219.1	13388.7	11403.5
47.5°	441.4	465.1	510.2	586.2	916.1	1866.6	4422.5	11331.1	13692.5	13775.6	11788.0
50°	437.8	464.0	526.8	566.0	829.4	1776.4	4693.1	11987.3	14205.1	14214.6	12274.5
52.5°	430.8	461.6	567.2	554.1	729.8	1657.7	5058.6	12829.8	14963.4	15020.3	13036.3
55°	422.5	458.1	556.5	526.8	647.9	1516.5	5357.6	13853.9	16029.0	16186.8	14156.5
57.5°	411.7	453.3	538.7	488.9	594.5	1335.0	5465.6	14603.9	16773.0	17169.3	15419.0
60°	402.2	449.7	486.5	466.4	561.3	1181.9	5256.7	14455.5	16722.0	17576.3	16538.0
62.5°	392.8	453.3	443.8	452.1	545.8	1083.4	4710.9	13267.7	15875.9	17156.3	17367.5
65°	382.1	421.3	418.9	440.3	542.3	1044.2	3905.2	11486.6	14240.7	15828.4	17563.2
67.5°	367.9	389.2	401.1	424.8	554.1	1009.9	3151.7	9475.2	11968.3	13838.5	16542.8
70°	352.4	370.2	383.3	405.8	547.1	994.4	2621.3	7472.2	9496.6	11341.8	14529.1
72.5°	332.3	347.7	359.6	380.9	539.9	986.1	2214.3	6017.4	7090.1	8425.0	11812.9
75°	308.5	322.7	331.0	352.4	517.4	903.1	1740.8	5091.8	5305.4	5860.8	9408.8
77.5°	281.2	292.0	299.0	322.7	458.1	751.2	1259.0	3927.7	4119.9	4255.3	7213.5
80°	249.2	259.8	263.4	286.0	379.7	587.4	821.1	2901.3	3081.6	3112.5	4710.9
82.5°	212.4	223.1	223.1	244.5	310.9	422.5	538.7	1987.6	2023.2	2127.6	3329.7
85°	170.8	179.2	179.2	189.9	240.9	315.7	370.2	998.0	987.2	1127.3	2884.7
87.5°	122.2	128.2	134.1	136.5	172.1	208.9	223.1	303.8	200.5	230.2	1852.4
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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CATALOG NUMBER: GLEON-AF-04-LED-E1-SLR

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0	7293.0
2.5°	8377.6	8445.3	8376.4	8326.6	8111.8	7935.0	7698.8	7577.8
5°	9005.3	9177.4	9119.2	8910.4	8461.8	7957.5	7384.4	7125.7
7.5°	8929.3	9329.3	9338.7	8948.4	8287.4	7544.6	6768.6	6400.7
10°	8338.5	8849.9	8995.8	8617.3	7916.0	7085.4	6195.4	5775.3
12.5°	7678.7	8179.4	8291.0	8160.5	7574.2	6740.0	5837.1	5425.2
15°	7138.8	7363.0	7496.0	7609.8	7281.2	6602.4	5816.8	5364.8
17.5°	6810.1	6785.1	6823.1	7021.3	7077.1	6760.2	6125.3	5626.9
20°	6691.4	6310.5	6301.0	6573.9	6980.9	7136.4	6728.2	6130.1
22.5°	6756.7	6139.6	6061.3	6385.3	7032.0	7678.7	7518.5	6836.2
25°	6982.2	6153.9	6091.0	6404.2	7217.1	8256.5	8371.6	7749.9
27.5°	7336.9	6244.0	6160.9	6482.5	7462.7	8741.9	9211.8	8635.1
30°	7674.0	6400.7	6297.4	6636.8	7687.0	8934.1	9726.8	9325.7
32.5°	8083.4	6693.8	6512.2	6920.5	7964.7	9240.3	10186.0	9897.7
35°	8484.4	7111.5	6886.0	7358.3	8274.3	9621.2	10710.5	10628.7
37.5°	8924.6	7657.3	7471.0	7924.3	8697.9	9980.7	11379.8	11485.4
40°	9394.6	8381.1	8160.5	8750.2	9355.4	10431.6	12078.7	12332.6
42.5°	9868.0	9184.5	8921.1	9519.2	10078.0	10876.6	12676.7	13053.0
45°	10410.3	10056.6	9932.0	10578.7	10772.2	11300.2	13118.2	13585.7
47.5°	11041.5	11046.3	11246.8	11505.5	11472.3	11779.7	13562.0	14061.6
50°	11778.5	12281.6	12724.2	12896.2	12193.8	12294.6	14177.8	14698.8
52.5°	12663.7	13759.0	14307.2	14194.5	12971.0	12923.6	15153.3	15576.9
55°	13770.9	15322.9	15867.6	15786.9	13864.6	13780.3	16368.3	16615.2
57.5°	15052.4	16838.3	17339.0	16975.9	14937.2	14720.2	17373.4	17425.7
60°	16178.5	18039.1	18478.2	18076.0	16019.5	15720.4	18001.2	17748.4
62.5°	16805.0	18446.2	18754.7	18321.6	16761.2	16786.0	18138.8	17574.0
65°	16525.0	17417.4	17517.0	17481.4	16570.1	17404.3	17644.0	16768.2
67.5°	14991.9	14816.2	14983.6	15215.0	14932.5	16590.2	16273.4	15013.2
70°	12291.1	11326.4	11659.8	11815.3	11943.5	14276.3	14124.4	12228.3
72.5°	9262.8	7935.0	8198.4	8166.4	8759.7	11451.0	10984.7	8991.1
75°	6563.3	5380.2	5413.4	5400.4	6112.3	8959.0	7954.0	6151.5
77.5°	4592.2	3898.1	3915.9	3989.4	4109.3	6756.7	5682.8	4493.7
80°	3157.6	2958.3	3056.8	3062.7	2847.9	4538.8	4198.3	3606.2
82.5°	2351.9	2056.4	2032.7	2067.1	2232.1	3677.4	3226.5	2501.4
85°	1925.9	1217.5	979.0	1226.9	1978.1	3641.8	2143.1	1319.5
87.5°	1084.5	577.9	261.1	484.2	789.1	2411.2	619.4	168.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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