

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: P191409

Luminaire Tested: **GLEON-AF-01-LED-E1-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-01-LED-E1-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6642 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 59
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

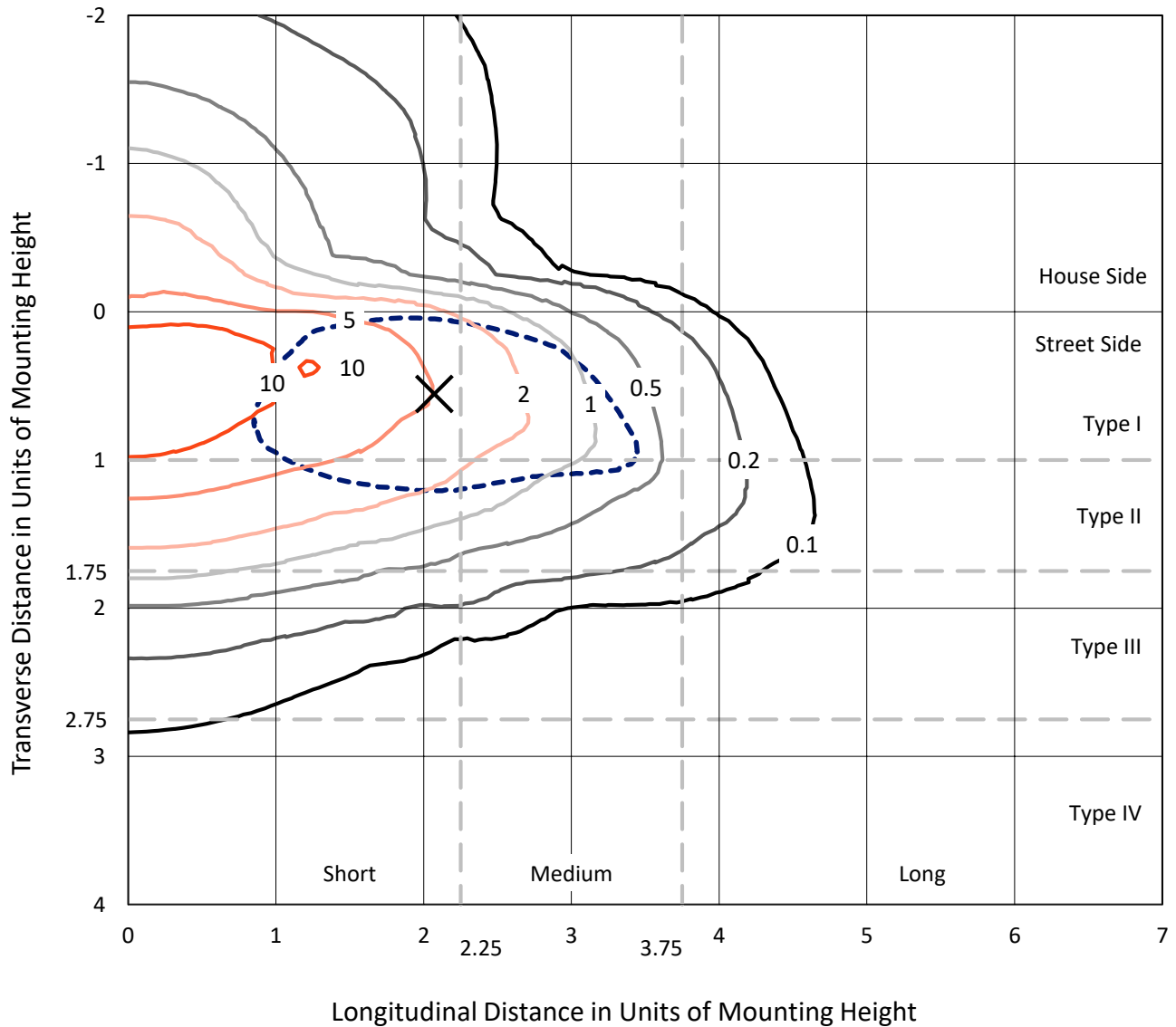


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Iso-Footcandle Lines of Horizontal Illumination

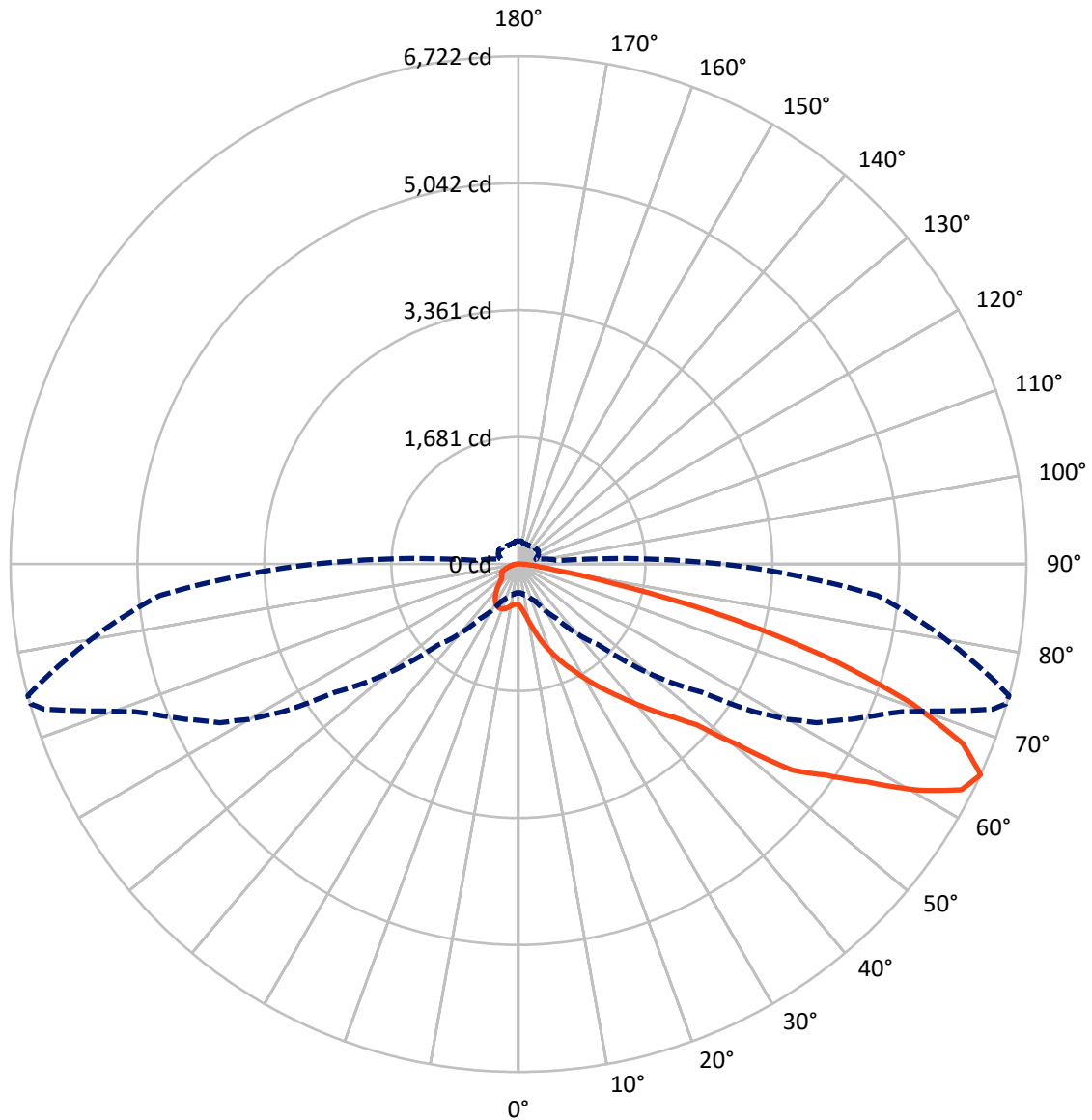
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1024.0	0.0	1024.0
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	5618.0	0.0	5618.0
	% Fixture	84.6	0.0	84.6
Total	Lumens	6642.0	0.0	6642.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.0
10°-20°	260.7	3.9
20°-30°	534.9	8.1
30°-40°	899.9	13.5
40°-50°	1243.4	18.7
50°-60°	1552.1	23.4
60°-70°	1396.7	21.0
70°-80°	585.5	8.8
80°-90°	102.3	1.5
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°	6642.0	100.0
0°-180°	6642.0	100.0



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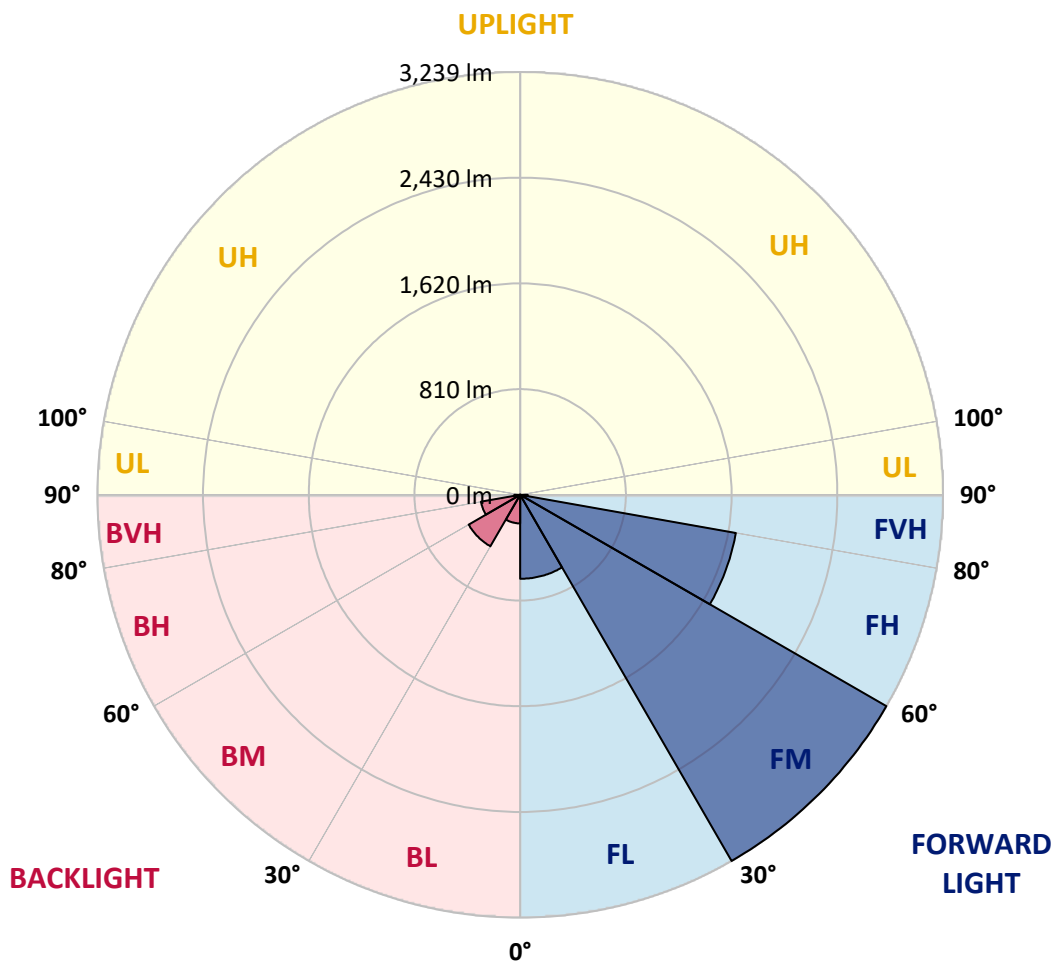
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	643.3	9.7			
FM (30°-60°)	3239.5	48.8			
FH (60°-80°)	1677.7	25.3			G1/1800
FVH (80°-90°)	57.5	0.9			G1/100
BL (0°-30°)	219.0	3.3	B1/500		
BM (30°-60°)	455.8	6.9	B1/1000		
BH (60°-80°)	304.4	4.6	B1/500		G1/500
BVH (80°-90°)	44.8	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8
2.5°	685.4	677.8	679.6	667.1	651.7	631.6	609.3	609.0	609.3	607.0	598.9
5°	950.3	941.2	937.8	909.5	868.0	808.9	744.8	737.9	735.0	727.8	711.2
7.5°	1143.8	1138.6	1133.3	1111.9	1074.2	1008.2	922.1	907.3	893.1	889.7	870.8
10°	1268.6	1267.2	1256.0	1250.3	1226.7	1169.5	1085.6	1071.4	1056.0	1050.7	1030.8
12.5°	1367.3	1367.0	1361.5	1363.2	1342.7	1301.2	1228.9	1216.0	1204.7	1188.4	1174.2
15°	1435.5	1435.8	1443.6	1452.5	1449.3	1421.3	1353.4	1347.7	1338.0	1326.7	1310.0
17.5°	1491.5	1493.0	1501.2	1517.2	1534.5	1532.3	1478.6	1473.8	1465.4	1449.9	1441.1
20°	1617.8	1623.7	1608.1	1608.1	1609.9	1618.4	1592.6	1588.8	1577.0	1568.8	1561.8
22.5°	1831.3	1838.1	1802.6	1766.5	1730.9	1705.2	1679.4	1684.2	1676.0	1670.3	1666.2
25°	2108.5	2113.9	2056.3	1995.4	1923.0	1828.7	1764.9	1762.1	1757.7	1754.3	1752.3
27.5°	2369.5	2371.7	2317.3	2228.0	2144.1	2008.6	1851.7	1848.3	1842.9	1836.3	1830.7
30°	2592.7	2592.1	2536.1	2450.9	2361.0	2211.0	1983.4	1972.8	1957.0	1939.1	1925.3
32.5°	2786.0	2785.1	2723.8	2635.4	2541.1	2411.6	2163.8	2141.9	2117.3	2082.4	2061.3
35°	2938.2	2937.6	2879.7	2787.6	2679.4	2600.5	2370.8	2343.7	2312.6	2265.7	2233.4
37.5°	2995.7	2995.7	2963.4	2900.5	2804.9	2750.8	2600.5	2567.8	2534.6	2481.4	2445.0
40°	2962.1	2962.7	2969.6	2958.0	2911.5	2870.0	2815.0	2795.5	2766.9	2719.1	2681.1
42.5°	2849.2	2852.7	2898.6	2954.9	2978.1	2971.6	3005.1	2996.3	2976.3	2939.4	2909.3
45°	2706.2	2716.9	2767.2	2873.5	2996.6	3059.2	3164.6	3165.5	3161.7	3141.9	3118.7
47.5°	2509.7	2524.7	2591.1	2734.8	2953.3	3144.4	3326.4	3334.9	3342.8	3329.9	3319.3
50°	2248.8	2266.7	2366.0	2556.6	2865.0	3232.7	3632.4	3670.7	3706.6	3702.2	3709.4
52.5°	1969.3	1990.4	2112.0	2324.2	2713.1	3253.2	3827.9	3890.5	3953.0	4004.2	4058.7
55°	1717.1	1705.9	1827.5	2051.0	2463.5	3161.1	4003.6	4079.1	4148.9	4211.8	4276.5
57.5°	1375.5	1394.0	1515.9	1737.0	2133.1	2901.1	4124.6	4235.0	4335.3	4439.4	4531.2
60°	1005.4	1024.0	1156.2	1380.8	1774.4	2506.8	4032.3	4199.5	4360.1	4519.5	4644.0
62.5°	607.0	620.9	737.5	951.3	1368.2	2039.4	3620.4	3839.9	4076.3	4266.7	4457.6
65°	377.9	385.8	428.8	546.4	878.7	1522.6	2958.0	3197.2	3451.9	3693.7	3892.0
67.5°	309.3	312.2	320.1	345.1	482.5	992.8	2201.6	2413.4	2643.3	2877.3	3097.9
70°	278.2	276.3	276.3	277.9	309.3	533.8	1441.4	1579.4	1770.9	1974.3	2176.1
72.5°	251.2	249.3	245.8	241.1	252.5	325.7	745.1	849.2	987.1	1167.9	1361.2
75°	225.8	223.2	219.1	213.2	221.1	245.8	357.7	401.5	468.7	565.0	672.8
77.5°	199.3	196.2	192.4	188.0	198.0	191.2	209.7	225.5	251.2	282.0	322.5
80°	169.4	166.6	165.4	163.2	175.1	145.6	148.1	157.8	172.9	189.6	208.5
82.5°	132.7	132.7	137.7	138.6	151.8	104.6	110.7	119.2	127.1	135.8	144.6
85°	87.4	88.1	105.0	111.6	119.8	70.4	83.0	85.8	92.1	97.2	101.0
87.5°	27.3	29.6	64.1	71.1	68.8	39.9	50.9	52.2	56.6	60.0	63.2
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8
2.5°	598.9	595.2	591.7	591.4	588.8	585.3	586.7	581.2	581.6	578.8	575.6
5°	704.2	701.7	689.2	685.7	676.3	670.2	669.3	656.7	655.2	647.9	640.1
7.5°	855.7	847.6	829.9	821.4	805.5	793.5	787.9	771.2	763.0	744.1	735.6
10°	1014.5	1004.1	982.4	970.5	955.1	935.9	925.6	901.3	891.9	874.6	853.9
12.5°	1161.7	1151.2	1128.9	1119.8	1099.4	1078.9	1067.7	1040.2	1028.1	1000.3	984.0
15°	1297.7	1287.4	1267.8	1258.4	1238.1	1221.4	1206.3	1179.3	1164.7	1139.0	1117.6
17.5°	1429.8	1418.8	1401.9	1393.4	1373.5	1356.5	1340.2	1314.7	1300.0	1274.2	1255.0
20°	1552.4	1544.2	1532.0	1520.6	1500.9	1485.4	1466.0	1444.0	1422.6	1403.7	1385.5
22.5°	1659.3	1656.2	1643.0	1637.9	1621.0	1607.8	1590.8	1569.1	1553.7	1529.8	1512.8
25°	1751.4	1750.5	1744.2	1742.6	1730.6	1718.0	1714.4	1696.4	1682.2	1661.2	1643.6
27.5°	1830.7	1831.6	1830.1	1834.5	1831.3	1825.6	1826.0	1819.9	1811.7	1794.2	1778.8
30°	1918.6	1913.6	1916.5	1922.7	1924.7	1925.3	1935.6	1939.1	1938.5	1926.8	1919.3
32.5°	2043.1	2031.2	2020.2	2019.3	2025.5	2028.1	2045.7	2054.8	2062.7	2065.4	2066.8
35°	2201.9	2178.1	2155.1	2142.8	2132.1	2135.0	2147.6	2162.3	2179.6	2191.6	2205.7
37.5°	2401.9	2372.6	2332.1	2303.2	2295.9	2280.2	2288.3	2300.0	2317.0	2335.5	2360.0
40°	2644.2	2599.9	2554.3	2515.9	2495.3	2466.3	2466.0	2463.8	2474.2	2491.5	2526.1
42.5°	2877.6	2838.2	2789.8	2749.6	2722.6	2683.9	2676.0	2655.6	2660.3	2675.4	2709.0
45°	3096.1	3063.6	3034.1	2987.5	2964.6	2922.8	2909.6	2885.3	2871.8	2878.8	2912.4
47.5°	3307.6	3286.8	3256.1	3225.9	3208.3	3170.8	3153.9	3136.6	3119.3	3118.7	3153.9
50°	3720.1	3709.0	3672.6	3641.2	3649.7	3603.8	3606.6	3560.1	3581.1	3583.6	3657.5
52.5°	4107.7	4146.0	4173.1	4206.1	4227.4	4231.5	4245.8	4266.7	4292.2	4342.5	4411.1
55°	4329.6	4377.7	4405.7	4430.9	4472.3	4481.1	4504.8	4532.7	4555.1	4611.7	4669.8
57.5°	4593.5	4682.7	4726.0	4766.0	4822.0	4843.4	4882.6	4913.1	4942.1	5009.0	5079.5
60°	4755.9	4864.7	4953.0	5016.2	5086.3	5136.6	5196.1	5243.9	5311.8	5392.0	5496.9
62.5°	4626.7	4786.5	4903.7	5012.2	5107.4	5203.6	5288.9	5378.1	5481.2	5602.6	5765.5
65°	4112.1	4274.6	4475.5	4588.0	4714.2	4862.5	4992.0	5136.6	5277.2	5453.9	5694.7
67.5°	3310.5	3499.4	3725.1	3838.6	3983.5	4149.2	4294.4	4471.1	4635.2	4849.3	5147.1
70°	2386.1	2630.4	2820.3	2938.8	3107.9	3278.7	3418.9	3624.5	3760.3	3979.8	4287.5
72.5°	1510.9	1703.6	1936.2	2085.6	2235.9	2408.7	2552.2	2729.4	2856.2	3056.1	3334.9
75°	812.3	954.4	1158.8	1300.6	1461.6	1609.3	1777.2	1896.0	1989.7	2147.9	2374.2
77.5°	380.7	467.2	570.6	679.6	788.8	902.5	1013.2	1109.5	1149.7	1240.2	1373.8
80°	231.1	259.0	289.2	322.8	368.5	405.2	454.0	489.2	491.7	520.3	561.2
82.5°	154.4	164.7	173.9	182.3	194.0	203.1	213.5	225.8	230.8	237.3	250.5
85°	105.4	110.4	112.2	117.5	116.3	119.5	123.6	127.7	129.8	129.5	135.5
87.5°	64.8	67.3	68.5	69.8	68.8	67.6	69.5	71.7	72.3	70.4	71.1
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8
2.5°	576.2	573.5	570.6	568.8	568.0	551.5	544.2	539.5	529.4	521.2	514.6
5°	635.7	629.7	625.0	619.3	616.2	574.1	558.6	548.0	530.4	520.0	510.6
7.5°	731.2	714.6	704.8	693.9	684.5	608.3	582.9	566.2	541.7	527.8	517.2
10°	839.7	822.5	807.0	790.0	775.3	653.9	616.8	591.1	558.6	540.7	526.6
12.5°	960.8	943.8	924.2	902.5	883.7	711.8	660.2	623.4	579.1	555.2	535.4
15°	1103.8	1073.9	1050.4	1025.2	1003.2	780.9	710.8	659.9	600.8	568.4	542.0
17.5°	1236.7	1205.3	1173.2	1151.2	1125.8	858.6	761.8	696.9	618.7	576.8	543.3
20°	1366.7	1332.4	1304.7	1275.1	1248.4	939.1	816.1	729.7	630.3	577.3	535.4
22.5°	1481.0	1459.6	1428.9	1396.8	1369.7	1019.6	867.1	757.4	634.7	570.0	521.6
25°	1611.2	1588.5	1550.8	1523.8	1493.6	1101.6	917.1	778.7	632.2	556.5	500.2
27.5°	1750.2	1725.0	1686.3	1658.0	1621.6	1186.8	962.9	794.1	622.8	534.5	471.6
30°	1895.1	1872.1	1834.0	1805.5	1768.7	1277.1	1014.2	804.4	604.0	503.9	438.2
32.5°	2050.7	2031.5	1993.8	1964.0	1924.7	1374.7	1062.0	807.6	575.3	467.8	403.0
35°	2198.4	2185.2	2153.5	2125.5	2084.7	1467.2	1112.6	806.1	541.3	428.2	370.9
37.5°	2364.8	2356.9	2341.2	2305.6	2255.7	1592.6	1173.2	799.4	499.8	388.9	346.5
40°	2542.0	2542.7	2525.8	2501.5	2455.0	1744.8	1245.5	786.5	454.6	354.4	324.2
42.5°	2729.7	2739.5	2731.4	2714.1	2669.4	1898.2	1332.0	770.9	410.6	320.7	302.1
45°	2944.8	2956.7	2969.3	2943.8	2900.5	2100.7	1445.8	750.4	363.1	292.7	287.0
47.5°	3192.8	3211.8	3223.0	3223.3	3179.9	2351.6	1630.7	738.2	321.0	273.8	279.8
50°	3716.3	3722.3	3749.0	3795.6	3762.2	2932.2	1953.5	730.6	292.4	262.2	274.5
52.5°	4470.5	4536.2	4582.4	4579.2	4534.0	3301.0	2131.5	691.6	275.4	257.8	271.9
55°	4777.6	4859.7	4945.3	4967.9	4932.7	3615.7	2299.7	652.6	267.2	261.0	272.9
57.5°	5187.0	5325.3	5442.5	5491.9	5441.0	4018.5	2521.1	632.2	264.7	269.4	278.9
60°	5665.1	5836.1	5990.2	6078.9	6078.9	4481.1	2750.5	623.7	261.3	282.0	288.9
62.5°	5972.3	6223.4	6456.1	6586.0	6582.2	4803.4	2852.4	594.8	253.4	290.8	302.8
65°	5973.5	6272.2	6568.7	6714.5	6722.1	4763.8	2684.2	525.3	239.0	292.1	316.6
67.5°	5475.5	5794.0	6139.5	6302.7	6340.5	4385.3	2323.6	432.0	215.3	279.5	321.6
70°	4624.6	4935.4	5288.1	5448.5	5515.4	3738.3	1871.5	333.0	185.2	251.9	311.3
72.5°	3643.3	3948.3	4193.8	4311.1	4363.3	2857.4	1362.9	251.5	151.8	212.2	283.3
75°	2579.5	2808.4	2938.8	2964.9	2973.1	1722.4	828.1	187.1	125.1	165.0	239.3
77.5°	1455.9	1554.0	1543.3	1554.9	1458.1	664.9	360.6	133.9	103.1	125.4	185.5
80°	568.4	586.0	550.4	539.5	494.8	247.5	159.1	93.4	82.3	94.9	129.8
82.5°	250.5	258.7	251.2	253.1	242.0	127.7	95.2	67.6	62.9	69.5	86.1
85°	138.0	140.6	139.9	144.0	138.0	50.9	45.3	41.5	44.0	47.2	55.3
87.5°	67.3	67.9	65.7	69.2	67.0	25.8	22.3	23.5	25.8	26.4	26.4
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-01-LED-E1-T2R

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	539.8	539.8	539.8	539.8	539.8	539.8
2.5°	509.9	507.4	507.7	507.1	505.8	505.8
5°	505.5	503.0	503.0	502.4	500.8	501.1
7.5°	509.9	505.8	504.3	502.1	499.8	499.8
10°	515.0	507.7	503.3	499.5	496.7	496.7
12.5°	518.7	507.4	500.2	495.1	492.3	492.3
15°	520.0	505.2	495.1	489.2	486.6	486.3
17.5°	515.9	496.7	484.5	477.5	474.4	473.4
20°	503.3	481.3	466.6	458.7	454.3	452.8
22.5°	484.5	459.3	442.0	433.8	428.2	427.3
25°	458.1	431.0	414.0	406.2	403.0	402.1
27.5°	427.3	402.1	387.6	382.6	379.8	379.4
30°	398.0	376.7	365.9	362.1	358.7	358.0
32.5°	370.6	357.1	353.0	347.7	339.5	338.6
35°	351.2	350.0	347.1	335.1	325.1	322.2
37.5°	339.2	350.9	336.3	312.8	305.6	304.9
40°	332.3	341.1	316.3	308.1	308.7	308.1
42.5°	316.6	325.7	316.9	313.1	315.7	316.3
45°	300.8	310.9	321.6	319.1	325.1	325.1
47.5°	292.1	307.2	321.3	321.3	330.1	333.3
50°	282.0	304.0	316.3	320.7	327.5	325.1
52.5°	281.4	298.7	309.0	316.9	320.1	317.2
55°	282.3	294.3	301.8	310.6	314.4	314.7
57.5°	283.6	291.7	296.8	300.8	312.2	312.2
60°	286.7	289.5	292.4	294.6	309.3	309.6
62.5°	291.7	287.3	286.7	288.9	307.8	306.5
65°	299.6	284.2	279.5	281.7	306.2	302.4
67.5°	310.3	279.5	270.4	271.9	304.9	296.8
70°	320.1	271.9	259.0	257.5	293.0	278.5
72.5°	321.0	263.1	243.4	238.7	254.6	240.8
75°	305.2	257.2	226.1	212.2	210.3	208.5
77.5°	275.1	253.7	205.9	184.2	180.4	181.7
80°	230.2	240.8	181.7	155.9	176.4	174.2
82.5°	172.0	212.6	154.4	138.0	137.7	121.6
85°	95.5	165.7	125.7	103.4	72.0	69.8
87.5°	26.7	92.1	88.1	58.5	39.9	41.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)