

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: P193813

Luminaire Tested: **GLEON-AF-05-LED-E1-SLL-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193813
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-SLL-8030-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA 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: 14056 lumens
Efficiency: N/A
Efficacy: 86.8 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

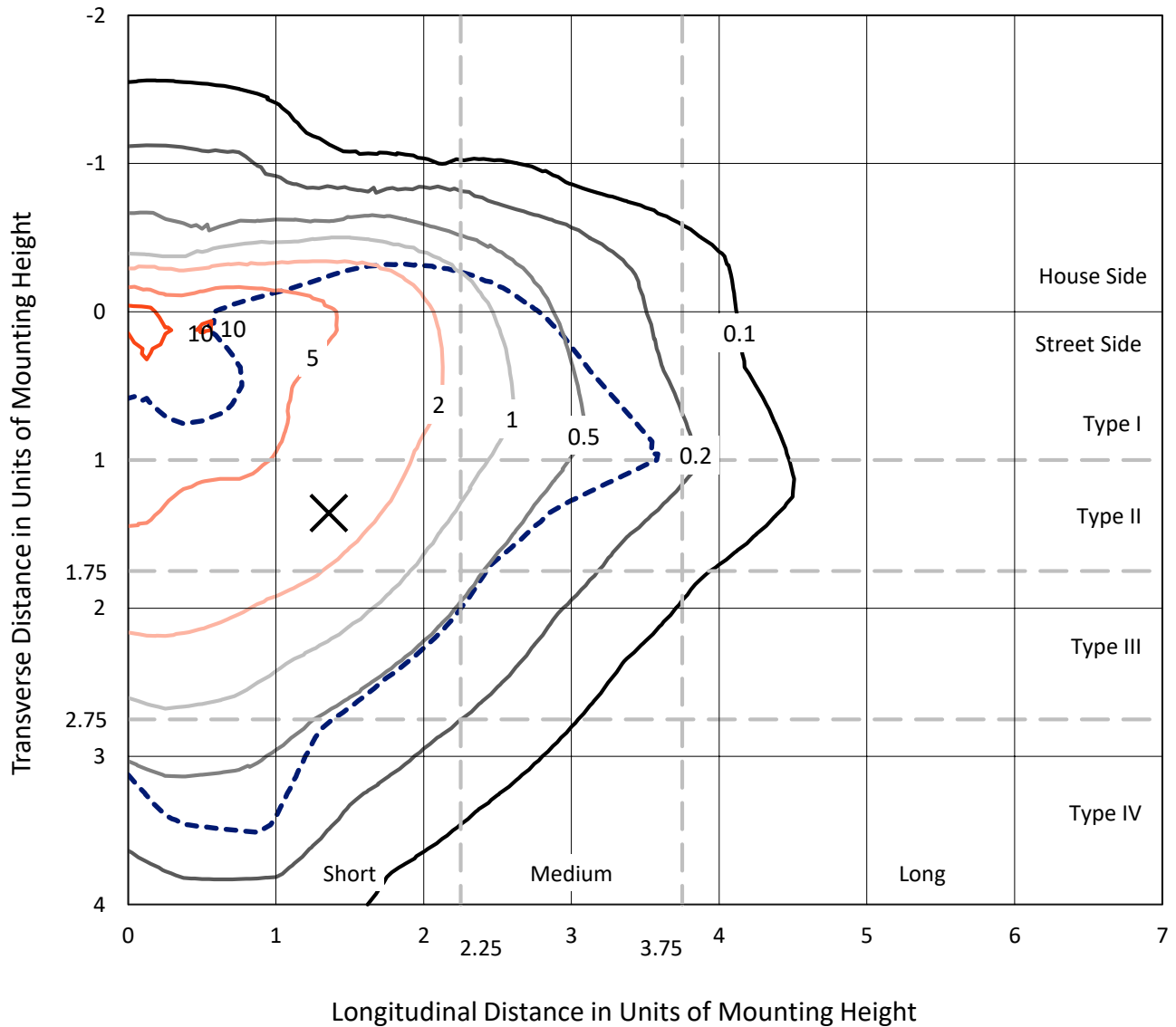
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

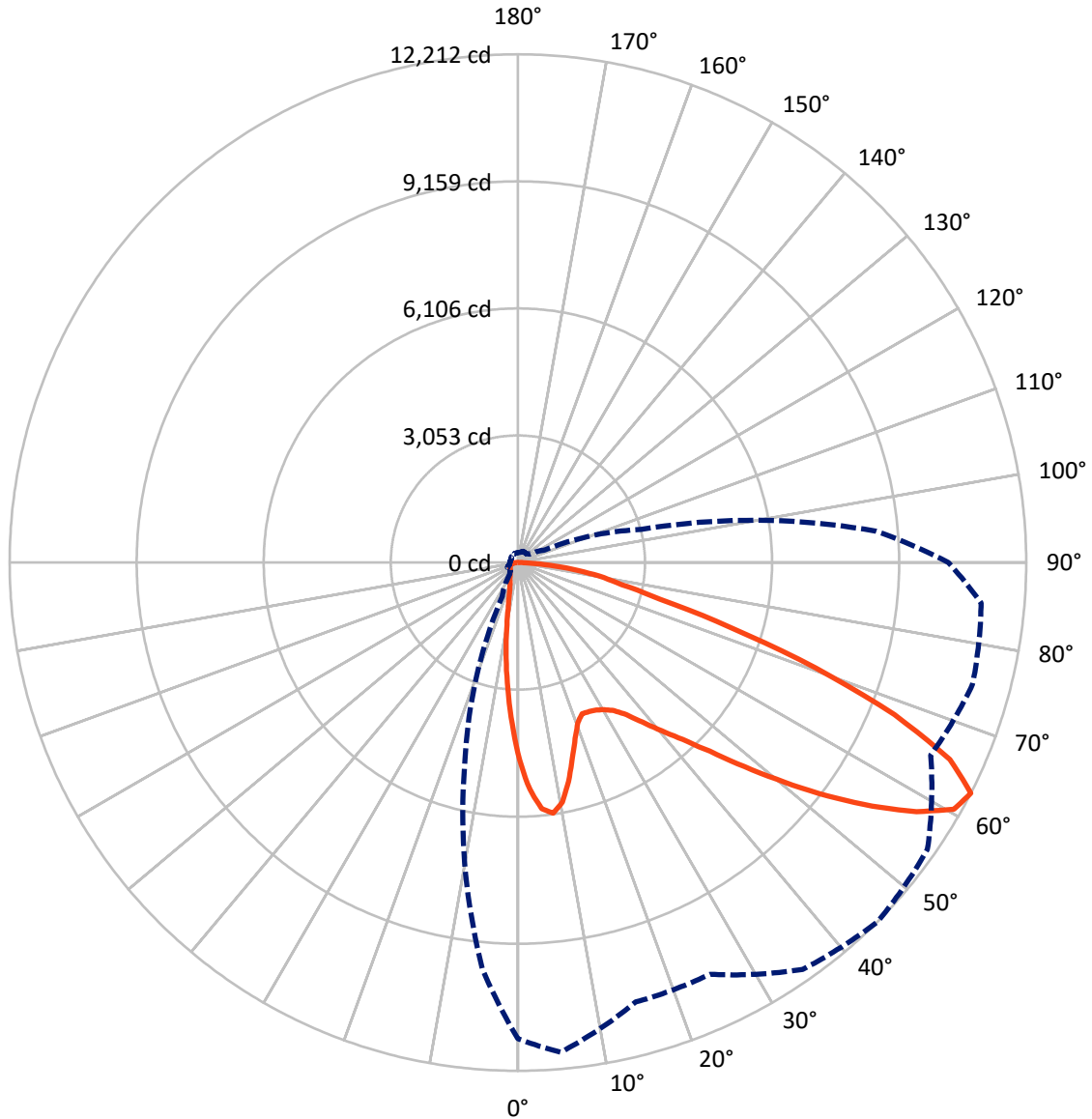
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 14 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	2326.1	0.0	2326.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	11729.9	0.0	11729.9
	% Fixture	83.5	0.0	83.5
Total	Lumens	14056.0	0.0	14056.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.7	2.5
10°-20°	633.9	4.5
20°-30°	924.2	6.6
30°-40°	1423.5	10.1
40°-50°	2095.0	14.9
50°-60°	3072.9	21.9
60°-70°	3435.0	24.4
70°-80°	1681.7	12.0
80°-90°	444.0	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°	14056.0	100.0
0°-180°	14056.0	100.0



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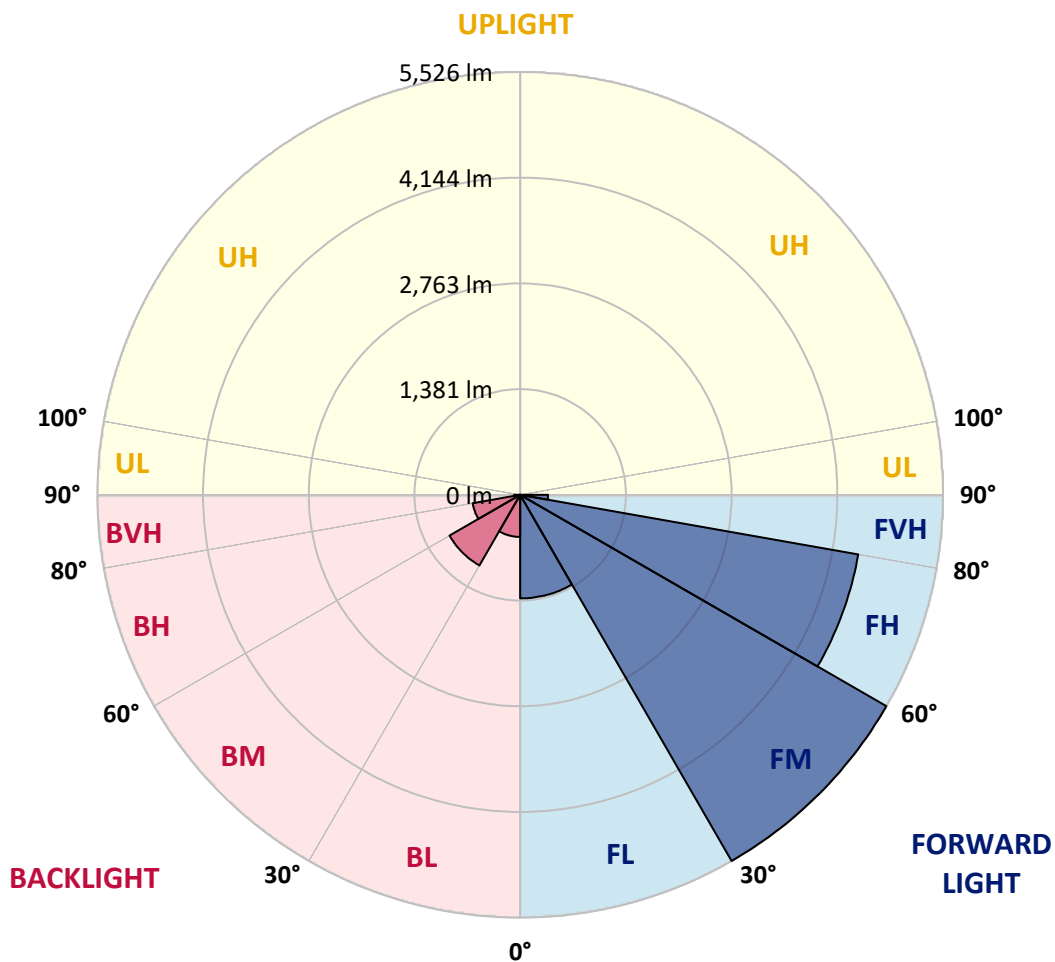
CATALOG NUMBER: GLEON-AF-05-LED-E1-SLL-8030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1353.5	9.6			
FM	(30°-60°)	5525.5	39.3			
FH	(60°-80°)	4486.2	31.9			G2/5000
FVH	(80°-90°)	364.6	2.6			G3/500
BL	(0°-30°)	550.3	3.9	B2/1000		
BM	(30°-60°)	1065.8	7.6	B2/2500		
BH	(60°-80°)	630.6	4.5	B2/1000		G2/1000
BVH	(80°-90°)	79.4	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°	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9
2.5°	4934.3	5013.1	5166.9	5282.0	5421.9	5454.3	5499.1	5455.1	5377.1	5273.5	5239.5
5°	4639.9	4808.4	5181.6	5510.0	5802.0	5938.0	5975.9	5863.8	5637.5	5340.0	5158.4
7.5°	4167.8	4407.4	4912.7	5396.4	5826.8	6081.0	6074.8	5814.4	5397.9	4913.5	4622.2
10°	3760.6	4034.1	4613.7	5154.5	5611.2	5857.7	5762.6	5429.6	4932.8	4374.9	4058.9
12.5°	3532.7	3800.8	4388.8	4932.0	5313.7	5398.7	5326.1	5000.0	4531.8	3967.7	3691.1
15°	3493.3	3787.7	4299.2	4741.1	4955.2	4881.0	4794.5	4648.4	4317.7	3836.3	3548.1
17.5°	3664.0	3988.6	4401.9	4608.2	4571.9	4442.9	4418.2	4434.4	4354.8	3982.4	3650.1
20°	3991.7	4381.1	4646.9	4545.7	4280.6	4102.9	4109.1	4357.1	4592.8	4352.5	3973.1
22.5°	4451.4	4895.7	5000.0	4578.9	4157.8	3946.8	3997.8	4399.6	4972.2	4893.4	4408.9
25°	5046.4	5451.2	5376.3	4699.4	4170.1	3966.2	4007.1	4546.4	5420.3	5434.2	4948.2
27.5°	5622.8	5998.3	5692.3	4859.4	4221.1	4011.7	4065.8	4777.5	5848.4	6021.5	5564.8
30°	6072.5	6333.6	5817.5	5005.4	4321.6	4100.6	4167.8	4996.9	6043.1	6417.9	6039.2
32.5°	6444.9	6632.7	6016.8	5186.2	4506.3	4240.5	4358.7	5263.5	6323.6	6794.9	6503.6
35°	6920.9	6974.2	6264.9	5387.9	4791.4	4483.8	4630.7	5524.6	6590.9	7175.9	6961.0
37.5°	7478.7	7410.0	6499.0	5663.7	5159.9	4864.8	4986.1	5811.3	6811.1	7607.8	7428.5
40°	8030.4	7865.1	6792.6	6091.8	5697.7	5313.7	5457.4	6117.3	7016.7	8040.5	7885.2
42.5°	8499.4	8254.5	7082.4	6562.3	6198.4	5809.0	5980.5	6425.6	7212.9	8409.8	8281.6
45°	8846.4	8541.9	7358.2	7014.4	6888.4	6467.3	6548.4	6778.7	7425.4	8718.1	8607.6
47.5°	9156.2	8830.9	7670.4	7470.2	7491.9	7323.4	7192.9	7189.8	7675.8	8970.0	8915.9
50°	9571.2	9231.9	8005.7	7940.0	8397.5	8285.4	7997.2	7669.6	7992.6	9255.9	9249.7
52.5°	10142.9	9867.1	8415.2	8446.1	9242.8	9316.2	8959.2	8246.0	8488.6	9780.5	9743.5
55°	10819.0	10658.3	8973.1	9028.0	10279.7	10332.2	9977.6	8966.9	9218.0	10540.1	10437.3
57.5°	11346.8	11312.8	9585.1	9726.5	11053.9	11290.4	10964.3	9801.4	10040.2	11179.9	10921.8
60°	11556.9	11721.5	10236.4	10431.1	11770.2	12032.1	11746.2	10534.7	10768.8	11444.9	10888.6
62.5°	11443.3	11811.1	10930.3	10914.1	11930.1	12212.2	12011.3	10942.7	11308.9	11171.4	10337.6
65°	10918.7	11488.9	11332.9	10789.7	11383.1	11406.3	11341.4	10760.3	11436.4	10306.7	9272.9
67.5°	9775.9	10596.5	10802.8	9723.4	9907.3	9756.6	9647.6	9762.0	10771.9	9011.0	7793.2
70°	7962.4	9197.2	9296.1	7777.0	7693.5	7592.3	7375.2	8003.4	9460.7	7385.2	6183.7
72.5°	5854.6	7152.7	7456.3	5703.9	5317.6	5338.4	5166.9	6031.5	7692.0	5486.0	4616.7
75°	4005.6	5179.3	5833.7	3980.1	3516.5	3525.0	3503.3	4273.7	6126.6	3816.3	3454.6
77.5°	2926.1	3700.4	4399.6	2675.8	2597.7	2549.8	2538.2	2990.3	4697.1	2770.8	2682.7
80°	2348.2	2733.7	2955.5	1854.4	1994.3	1990.4	1926.3	2056.1	3067.5	2026.7	2006.6
82.5°	1628.8	2100.9	2394.5	1453.4	1346.0	1323.6	1339.0	1531.4	2168.1	1385.4	1317.4
85°	859.2	1395.5	2371.3	1288.1	798.9	637.5	792.8	1254.1	1878.4	734.0	642.9
87.5°	109.7	403.3	1570.1	513.8	315.3	170.0	376.3	706.2	1206.1	149.9	130.6
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°	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9
2.5°	5152.2	5049.4	4915.0	4790.6	4661.6	4533.3	4365.6	4260.5	4187.9	4174.0	4143.1
5°	5027.0	4685.5	4427.4	4204.1	4001.7	3715.8	3557.4	3426.1	3355.7	3348.8	3331.8
7.5°	4449.8	3978.5	3630.0	3314.0	3027.3	2796.3	2541.3	2422.3	2373.7	2385.3	2396.8
10°	3849.5	3322.5	2922.3	2599.3	2346.6	2151.9	1947.1	1808.8	1713.0	1693.7	1689.8
12.5°	3410.6	2832.6	2444.0	2216.0	2020.6	1837.4	1620.3	1457.3	1332.9	1290.4	1261.8
15°	3225.2	2593.1	2185.9	1940.2	1724.6	1492.0	1290.4	1119.6	1005.3	968.2	947.3
17.5°	3264.6	2526.7	2008.2	1693.7	1417.9	1175.2	921.0	775.0	706.2	688.5	688.5
20°	3471.6	2514.3	1861.4	1466.5	1122.7	841.4	632.8	549.4	527.0	524.6	530.8
22.5°	3762.2	2557.6	1751.7	1269.5	872.4	614.3	493.0	462.1	452.0	454.3	461.3
25°	4194.9	2703.6	1672.1	1094.1	684.6	503.0	439.7	421.1	416.5	422.7	431.2
27.5°	4707.9	2849.6	1622.6	962.0	578.0	459.7	418.0	398.7	401.8	409.5	417.2
30°	5158.4	2969.4	1544.6	867.7	544.7	462.1	418.0	391.7	388.7	390.2	392.5
32.5°	5562.5	3050.5	1453.4	778.1	469.8	410.3	390.2	386.3	369.3	363.2	363.9
35°	5911.0	3050.5	1398.5	725.5	421.1	363.9	331.5	312.2	303.7	304.4	312.9
37.5°	6247.1	2989.5	1371.5	696.2	394.8	346.2	317.6	300.6	289.0	286.7	288.2
40°	6543.8	2900.6	1340.6	683.8	374.7	335.3	308.3	294.4	282.0	278.2	278.9
42.5°	6781.8	2828.8	1306.6	667.6	362.4	327.6	302.1	289.8	275.8	272.0	271.2
45°	7039.1	2804.8	1261.8	635.1	368.6	328.4	300.6	287.4	273.5	268.9	267.3
47.5°	7378.3	2879.8	1215.4	596.5	381.7	332.3	302.9	287.4	272.8	268.9	267.3
50°	7805.6	3055.9	1156.7	540.1	368.6	343.1	302.1	285.1	272.8	268.9	265.8
52.5°	8354.2	3293.9	1079.4	475.2	360.8	369.3	300.6	280.5	268.9	263.5	258.1
55°	9021.0	3488.6	987.5	421.9	343.1	362.4	298.3	275.1	262.7	255.0	250.3
57.5°	9509.3	3559.0	869.3	387.1	318.3	350.8	295.2	268.1	255.0	248.8	242.6
60°	9412.8	3423.0	769.6	365.5	303.7	316.8	292.8	261.9	248.0	243.4	238.0
62.5°	8639.3	3067.5	705.5	355.4	294.4	289.0	295.2	255.8	241.8	237.2	235.7
65°	7479.5	2542.9	680.0	353.1	286.7	272.8	274.3	248.8	234.9	231.0	229.5
67.5°	6169.8	2052.2	657.5	360.8	276.6	261.2	253.4	239.5	227.9	224.1	221.0
70°	4865.5	1706.8	647.5	356.2	264.3	249.6	241.1	229.5	219.4	215.6	213.3
72.5°	3918.2	1441.8	642.1	351.6	248.0	234.1	226.4	216.3	205.5	204.0	201.7
75°	3315.6	1133.5	588.0	336.9	229.5	215.6	210.2	200.9	190.1	190.1	188.5
77.5°	2557.6	819.8	489.1	298.3	210.2	194.7	190.1	183.1	170.8	173.1	172.3
80°	1889.2	534.7	382.5	247.3	186.2	171.5	169.2	162.3	149.1	152.2	152.2
82.5°	1294.2	350.8	275.1	202.4	159.2	145.3	145.3	138.3	123.6	125.2	129.8
85°	649.8	241.1	205.5	156.9	123.6	116.7	116.7	111.3	96.6	97.4	103.5
87.5°	197.8	145.3	136.0	112.0	88.9	87.3	83.4	79.6	70.3	69.5	73.4
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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CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9
2.5°	4096.0	4051.9	3998.6	3881.2	3841.8	3839.4	3875.0	3837.9	3909.0	3878.8	3912.1
5°	3303.2	3259.9	3200.4	3050.5	2959.4	2897.5	2868.2	2781.6	2844.2	2798.6	2836.5
7.5°	2429.3	2439.3	2399.9	2311.9	2113.3	2013.6	1954.9	1902.3	1947.9	1943.3	2015.9
10°	1707.6	1734.7	1706.8	1618.0	1457.3	1402.4	1413.2	1434.1	1493.6	1524.5	1636.5
12.5°	1229.3	1227.8	1210.0	1130.4	1024.6	1030.8	1074.8	1111.1	1166.0	1198.4	1312.8
15°	917.9	904.0	896.3	831.4	771.1	784.3	805.9	809.8	844.5	863.9	956.6
17.5°	693.9	700.8	709.3	663.0	617.4	608.9	591.9	571.0	581.1	584.9	631.3
20°	550.9	578.7	599.6	567.1	520.8	496.1	474.4	460.5	460.5	459.7	472.9
22.5°	481.4	501.5	523.9	501.5	459.7	438.1	425.7	414.9	413.4	413.4	425.7
25°	443.5	458.2	479.8	464.4	433.5	417.2	405.7	391.7	386.3	384.8	393.3
27.5°	425.0	431.2	442.0	428.1	401.8	394.1	391.0	378.6	371.7	367.8	376.3
30°	393.3	391.7	392.5	378.6	357.7	357.0	362.4	364.7	362.4	361.6	374.7
32.5°	363.9	360.8	360.1	347.7	328.4	323.8	328.4	333.0	338.4	346.2	361.6
35°	326.8	334.6	339.2	328.4	305.2	291.3	285.9	277.4	272.8	272.8	290.5
37.5°	297.5	315.3	322.2	312.2	286.7	267.3	258.1	256.5	257.3	260.4	277.4
40°	287.4	300.6	306.8	296.7	271.2	253.4	248.0	246.5	248.0	252.7	269.7
42.5°	281.3	290.5	289.8	277.4	256.5	244.2	241.1	239.5	241.1	245.7	264.3
45°	275.8	282.0	275.8	261.2	241.8	235.7	236.4	235.7	237.2	241.8	259.6
47.5°	271.2	273.5	265.8	251.1	231.0	229.5	232.6	234.9	236.4	240.3	258.8
50°	264.3	264.3	257.3	241.8	221.8	222.5	226.4	231.8	232.6	237.2	251.9
52.5°	255.8	255.0	250.3	235.7	214.0	216.3	216.3	222.5	224.1	229.5	244.9
55°	248.8	247.3	244.9	231.0	207.1	210.9	208.6	210.9	214.8	220.2	237.2
57.5°	242.6	239.5	239.5	227.2	201.7	203.2	197.8	200.9	205.5	210.2	227.9
60°	236.4	233.3	234.9	221.8	193.2	191.6	189.3	195.5	197.0	202.4	220.2
62.5°	229.5	227.2	227.9	215.6	187.0	183.1	183.1	188.5	189.3	197.0	214.0
65°	224.1	221.0	220.2	209.4	180.0	175.4	177.7	180.0	181.6	189.3	205.5
67.5°	218.7	212.5	212.5	204.0	172.3	167.7	172.3	171.5	173.9	180.8	193.9
70°	211.7	203.2	204.0	200.1	164.6	159.2	163.0	162.3	163.8	168.4	181.6
72.5°	200.9	193.9	195.5	193.9	156.9	149.1	150.7	150.7	150.7	154.5	168.4
75°	187.0	181.6	186.2	190.1	147.6	136.8	138.3	138.3	136.0	138.3	155.3
77.5°	170.0	166.9	182.4	176.9	136.8	123.6	123.6	122.1	117.4	120.5	139.1
80°	151.4	149.1	168.4	148.4	124.4	107.4	105.9	102.0	97.4	99.7	118.2
82.5°	132.1	129.8	141.4	113.6	107.4	88.9	85.0	78.0	73.4	75.7	92.7
85°	108.2	108.2	108.9	85.8	81.9	68.0	63.4	54.1	48.7	50.2	66.5
87.5°	77.3	79.6	73.4	58.7	48.7	37.9	34.8	29.4	24.7	28.6	34.8
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-SLL-8030-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9	4748.9
2.5°	4082.1	4167.0	4263.6	4387.3	4493.1	4667.0	4833.9	4934.3
5°	3052.1	3193.5	3369.6	3596.0	3807.0	4123.8	4438.3	4639.9
7.5°	2184.4	2335.8	2525.9	2808.7	3106.9	3511.0	3926.7	4167.8
10°	1807.3	1962.6	2122.5	2313.4	2557.6	2997.2	3488.6	3760.6
12.5°	1495.1	1661.3	1833.6	2034.5	2260.9	2653.4	3219.7	3532.7
15°	1144.3	1329.8	1533.0	1787.2	2070.8	2524.3	3153.3	3493.3
17.5°	784.3	991.3	1240.9	1554.6	1901.6	2482.6	3272.3	3664.0
20°	540.1	690.8	957.3	1325.1	1742.4	2477.2	3501.0	3991.7
22.5°	452.0	519.2	714.0	1114.2	1622.6	2543.7	3855.7	4451.4
25°	418.0	458.2	570.2	931.1	1535.3	2696.6	4344.0	5046.4
27.5°	397.9	434.2	517.7	811.3	1466.5	2874.4	4819.2	5622.8
30°	405.7	442.7	503.0	750.3	1373.0	3022.7	5241.1	6072.5
32.5°	365.5	381.7	431.2	696.2	1305.8	3147.1	5610.4	6444.9
35°	311.4	340.0	384.8	670.7	1307.4	3230.6	6013.0	6920.9
37.5°	296.7	325.3	357.7	661.4	1325.1	3319.4	6475.0	7478.7
40°	287.4	313.7	341.5	656.0	1342.1	3400.6	6927.8	8030.4
42.5°	281.3	305.2	340.0	637.5	1350.6	3473.2	7300.3	8499.4
45°	280.5	305.2	346.2	618.9	1363.8	3551.2	7612.4	8846.4
47.5°	281.3	315.3	334.6	596.5	1363.8	3681.8	7978.7	9156.2
50°	278.2	332.3	322.2	564.8	1332.1	3929.1	8480.9	9571.2
52.5°	276.6	329.9	298.3	516.1	1277.2	4321.6	9124.5	10142.9
55°	272.8	318.3	281.3	443.5	1213.1	4749.6	9813.8	10819.0
57.5°	268.9	282.0	272.0	380.2	1114.2	5051.0	10288.2	11346.8
60°	301.3	246.5	264.3	349.3	982.1	5133.7	10269.7	11556.9
62.5°	278.9	231.0	254.2	342.3	889.4	4901.9	9795.2	11443.3
65°	218.7	221.0	244.2	362.4	864.6	4287.6	8954.6	10918.7
67.5°	200.1	210.9	234.1	387.9	866.9	3433.0	7698.2	9775.9
70°	188.5	200.1	222.5	401.0	873.1	2559.1	6086.4	7962.4
72.5°	175.4	185.4	209.4	403.3	832.9	1859.1	4690.9	5854.6
75°	159.9	169.2	190.9	351.6	690.0	1289.6	3588.3	4005.6
77.5°	142.2	149.1	167.7	271.2	512.3	825.2	2693.6	2926.1
80°	121.3	125.2	140.6	198.6	350.8	516.1	2131.0	2348.2
82.5°	97.4	98.9	108.9	149.1	227.9	331.5	1427.1	1628.8
85°	68.8	68.8	74.9	108.2	155.3	210.2	775.0	859.2
87.5°	32.5	33.2	33.2	59.5	81.1	106.6	178.5	109.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)