

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: P191308

Luminaire Tested: **GLEON-AF-10-LED-E1-SLL-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191308
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-10-LED-E1-SLL-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 4000K, 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: 58101.6 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B4 - U0 - G5

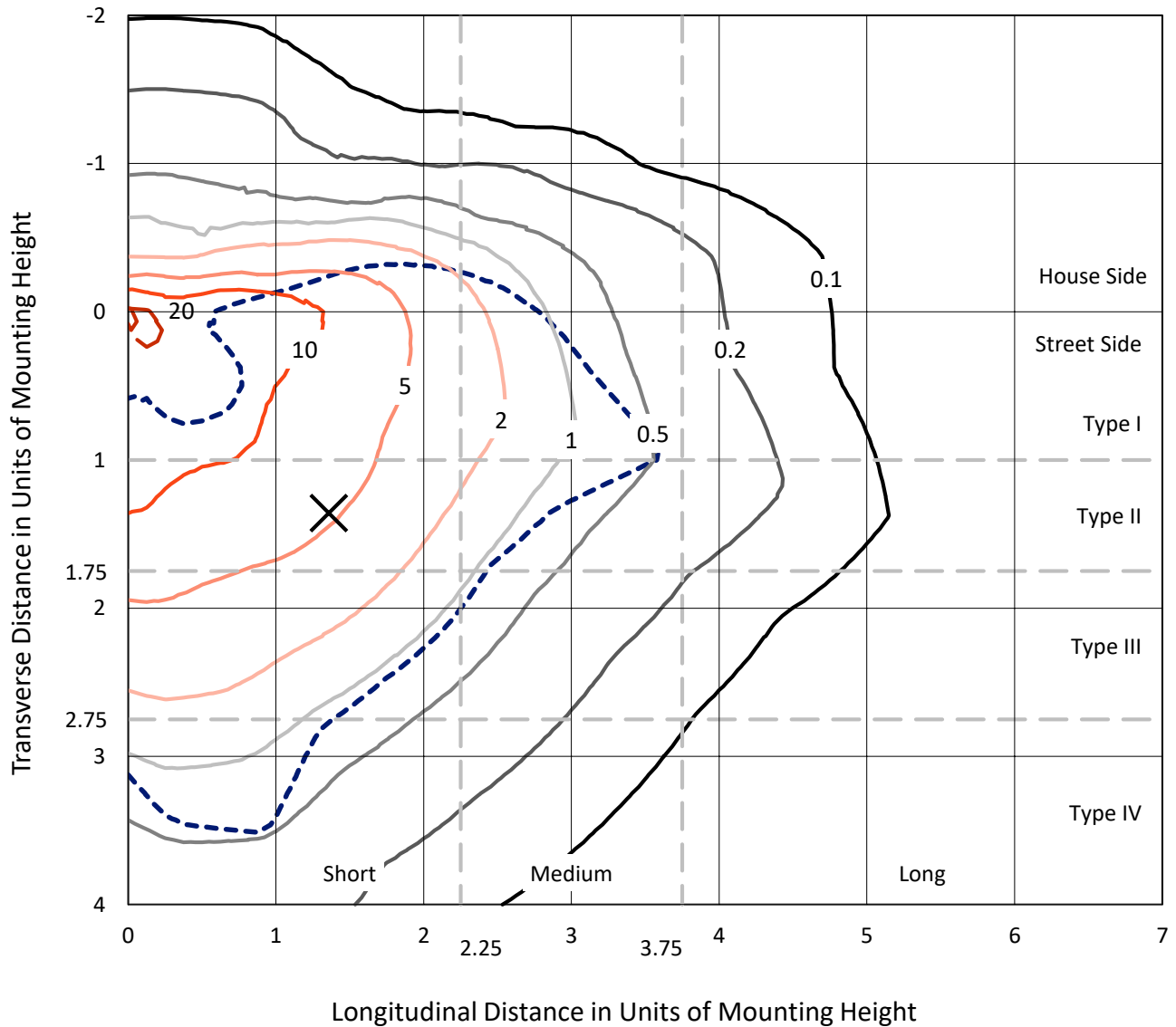
Input Watts (W): 640
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

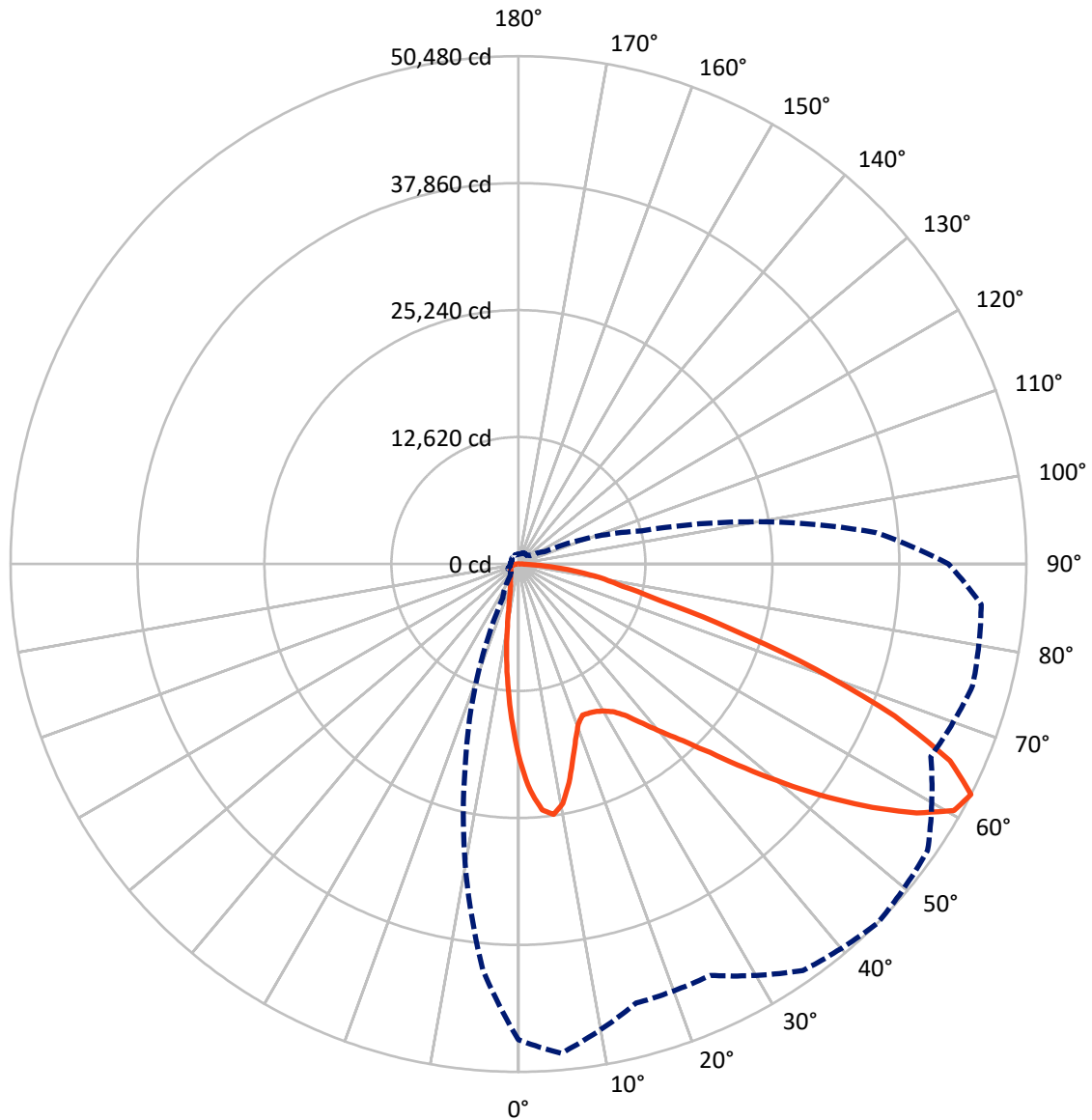
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 25.7 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	9615.0	0.0	9615.0
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	48486.6	0.0	48486.6
	% Fixture	83.5	0.0	83.5
Total	Lumens	58101.6	0.0	58101.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1429.0	2.5
10°-20°	2620.3	4.5
20°-30°	3820.4	6.6
30°-40°	5884.0	10.1
40°-50°	8659.7	14.9
50°-60°	12702.0	21.9
60°-70°	14199.0	24.4
70°-80°	6951.6	12.0
80°-90°	1835.4	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°	58101.6	100.0
0°-180°	58101.6	100.0

Coefficient of Utilization



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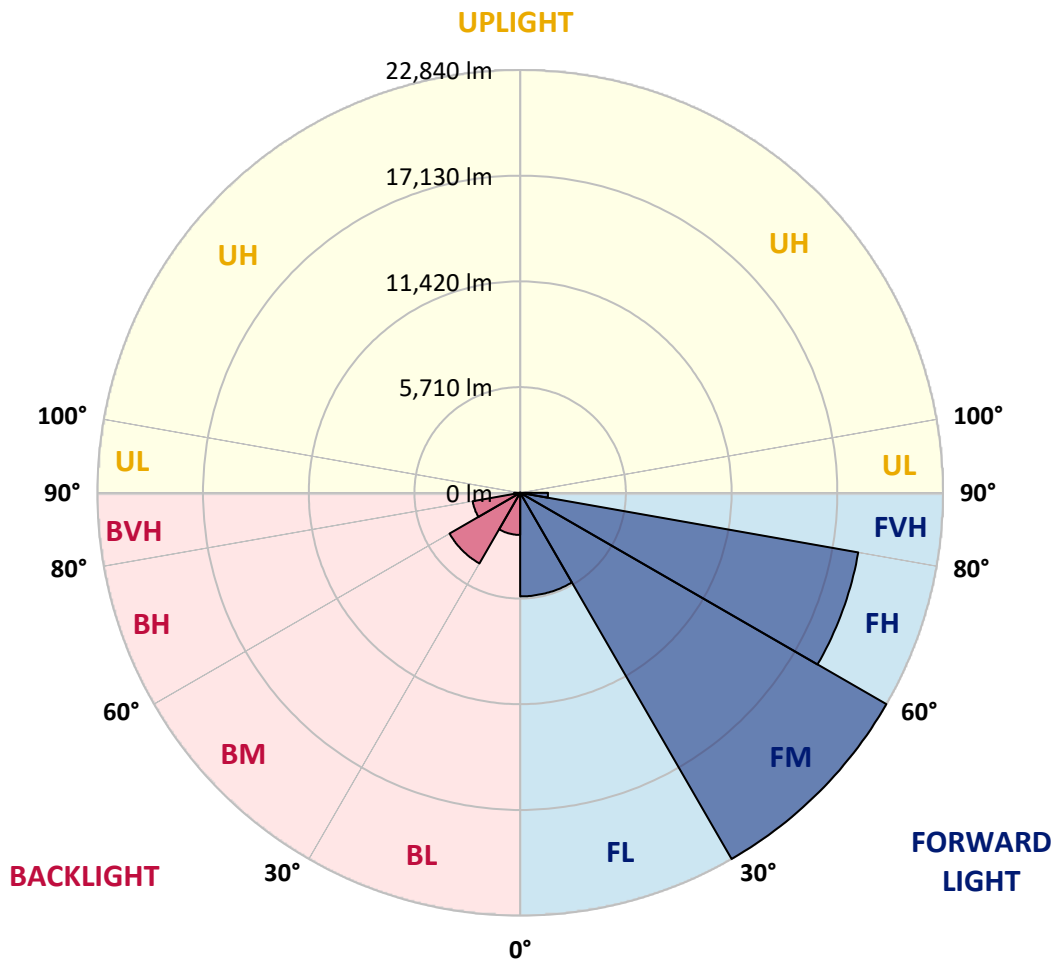
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5595.0	9.6			
FM (30°-60°)	22840.2	39.3			
FH (60°-80°)	18544.0	31.9			G5
FVH (80°-90°)	1507.3	2.6			G5
BL (0°-30°)	2274.8	3.9	B3/2500		
BM (30°-60°)	4405.5	7.6	B3/5000		
BH (60°-80°)	2606.6	4.5	B4/5000		G4/5000
BVH (80°-90°)	328.1	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8
2.5°	20396.4	20722.1	21357.8	21833.7	22411.7	22545.8	22731.1	22549.1	22226.5	21798.5	21658.0
5°	19179.5	19875.7	21418.4	22775.9	23983.2	24545.3	24701.8	24238.6	23302.8	22073.2	21322.6
7.5°	17228.0	18218.1	20306.9	22306.4	24085.4	25136.2	25110.6	24034.2	22312.7	20310.2	19106.1
10°	15544.9	16675.4	19070.9	21306.6	23194.3	24213.1	23820.2	22443.6	20390.0	18083.9	16777.6
12.5°	14602.6	15710.9	18141.4	20386.8	21964.6	22315.9	22015.7	20667.9	18732.4	16400.8	15257.3
15°	14439.7	15656.6	17771.0	19597.9	20482.6	20176.0	19818.2	19214.6	17847.6	15857.8	14666.5
17.5°	15145.6	16487.0	18195.7	19048.6	18898.4	18365.0	18262.8	18329.9	18001.0	16461.4	15088.1
20°	16499.8	18109.5	19208.3	18789.9	17694.3	16959.7	16985.3	18010.5	18984.6	17991.4	16423.2
22.5°	18400.2	20236.7	20667.9	18927.1	17186.5	16314.5	16525.4	18186.2	20552.9	20227.1	18224.5
25°	20859.5	22533.2	22223.3	19425.4	17237.5	16394.4	16563.7	18793.0	22405.4	22462.9	20453.9
27.5°	23242.2	24794.4	23529.6	20086.6	17448.4	16582.9	16806.4	19748.0	24174.8	24890.2	23002.6
30°	25101.1	26180.6	24047.0	20690.2	17863.6	16950.1	17228.0	20655.1	24979.6	26528.7	24963.7
32.5°	26640.5	27416.6	24871.1	21437.6	18626.9	17528.3	18016.9	21757.0	26139.1	28087.4	26883.2
35°	28607.9	28828.3	25896.3	22271.2	19805.5	18534.3	19141.1	22836.6	27244.1	29661.9	28774.1
37.5°	30914.0	30629.7	26864.0	23411.5	21329.0	20109.0	20610.4	24021.4	28154.4	31447.3	30706.3
40°	33194.4	32510.9	28077.7	25180.9	23552.0	21964.6	22558.6	25286.3	29004.0	33236.0	32594.0
42.5°	35133.1	34120.6	29275.5	27126.0	25621.6	24011.9	24720.9	26560.6	29815.2	34762.6	34232.4
45°	36567.2	35308.8	30415.7	28994.4	28473.8	26733.1	27068.5	28020.3	30693.5	36037.0	35580.3
47.5°	37848.0	36503.3	31706.1	30878.8	30968.3	30272.0	29732.2	29719.5	31728.5	37078.2	36854.7
50°	39563.1	38161.0	33092.3	32820.8	34711.5	34248.4	33057.1	31702.9	33037.9	38260.0	38234.4
52.5°	41926.6	40786.4	34785.0	34912.7	38205.7	38509.1	37033.5	34085.5	35088.4	40428.7	40275.3
55°	44721.3	44057.0	37091.0	37317.8	42491.9	42709.1	41243.1	37065.5	38103.5	43568.3	43143.5
57.5°	46902.7	46762.2	39620.6	40205.0	45692.2	46669.6	45321.7	40514.9	41501.8	46212.8	45146.1
60°	47771.5	48451.8	42313.0	43117.9	48653.0	49735.8	48554.0	43545.9	44513.7	47308.3	45008.7
62.5°	47302.0	48822.3	45181.2	45114.2	49314.1	50480.0	49649.5	45232.3	46746.2	46177.7	42731.4
65°	45133.3	47490.4	46845.2	44599.9	47052.9	47148.6	46880.4	44478.5	47273.2	42603.8	38330.3
67.5°	40409.5	43801.4	44654.2	40192.2	40952.4	40329.6	39879.3	40352.0	44526.5	37247.5	32213.8
70°	32913.3	38017.3	38426.0	32146.8	31801.9	31383.4	30486.0	33082.6	39106.4	30527.5	25561.0
72.5°	24200.4	29566.1	30821.3	23577.5	21980.6	22066.8	21357.8	24931.8	31795.5	22676.9	19083.7
75°	16557.3	21408.8	24114.1	16451.9	14535.5	14570.7	14481.2	17665.5	25324.6	15774.8	14280.0
77.5°	12095.4	15295.7	18186.2	11060.6	10737.9	10540.0	10492.0	12360.5	19415.8	11453.4	11089.3
80°	9706.4	11300.1	12216.8	7665.4	8243.6	8227.5	7962.4	8499.0	12679.9	8377.7	8294.6
82.5°	6732.8	8684.2	9898.0	6007.8	5563.8	5471.2	5535.1	6330.3	8962.2	5726.7	5445.7
85°	3551.7	5768.2	9802.1	5324.3	3302.5	2635.0	3276.9	5183.7	7764.4	3034.2	2657.3
87.5°	453.6	1667.2	6490.0	2124.0	1303.1	702.7	1555.4	2919.2	4985.8	619.6	539.8
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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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8
2.5°	21297.0	20872.3	20316.5	19802.3	19268.9	18738.7	18045.7	17611.3	17311.1	17253.6	17125.8
5°	20779.6	19367.9	18301.2	17378.1	16541.3	15359.6	14704.8	14161.8	13871.2	13842.5	13772.2
7.5°	18393.8	16445.5	15005.1	13698.7	12513.8	11558.8	10504.8	10012.9	9811.7	9859.6	9907.6
10°	15912.1	13733.8	12079.4	10744.4	9699.9	8895.1	8048.7	7477.0	7081.0	7001.1	6985.1
12.5°	14098.0	11708.9	10102.4	9160.1	8352.1	7595.1	6697.7	6023.7	5509.5	5333.9	5215.7
15°	13331.4	10718.8	9035.6	8019.9	7128.8	6167.5	5333.9	4628.0	4155.3	4002.0	3915.8
17.5°	13494.4	10444.1	8301.0	7001.1	5860.9	4858.0	3807.1	3203.5	2919.2	2845.7	2845.7
20°	14350.3	10393.0	7694.1	6062.1	4640.7	3478.1	2615.8	2270.8	2178.3	2168.7	2194.2
22.5°	15551.2	10571.9	7240.7	5247.6	3605.9	2539.2	2037.7	1910.0	1868.4	1878.0	1906.8
25°	17339.8	11175.5	6911.7	4522.6	2829.8	2079.2	1817.4	1740.7	1721.5	1747.1	1782.2
27.5°	19460.5	11779.2	6707.3	3976.4	2389.1	1900.3	1727.9	1648.1	1660.9	1692.8	1724.7
30°	21322.6	12274.3	6384.6	3586.8	2251.7	1910.0	1727.9	1619.3	1606.5	1612.9	1622.5
32.5°	22993.1	12609.6	6007.8	3216.3	1941.9	1696.0	1612.9	1596.9	1526.7	1501.2	1504.4
35°	24433.5	12609.6	5781.0	2999.1	1740.7	1504.4	1370.2	1290.4	1255.2	1258.4	1293.5
37.5°	25822.9	12357.2	5669.2	2877.8	1632.1	1430.9	1312.7	1242.5	1194.5	1185.0	1191.3
40°	27049.3	11990.0	5541.4	2826.6	1549.1	1386.2	1274.4	1216.9	1165.8	1149.8	1153.0
42.5°	28033.0	11692.9	5400.9	2759.5	1497.9	1354.2	1248.8	1197.7	1140.2	1124.2	1121.1
45°	29096.6	11593.9	5215.7	2625.4	1523.5	1357.5	1242.5	1188.2	1130.7	1111.4	1105.1
47.5°	30498.8	11903.8	5024.0	2465.7	1577.8	1373.4	1252.0	1188.2	1127.5	1111.4	1105.1
50°	32265.0	12631.9	4781.3	2232.6	1523.5	1418.1	1248.8	1178.5	1127.5	1111.4	1098.8
52.5°	34532.7	13615.7	4461.9	1964.3	1491.6	1526.7	1242.5	1159.4	1111.4	1089.1	1066.7
55°	37289.0	14420.5	4081.9	1743.9	1418.1	1497.9	1232.9	1137.0	1086.0	1053.9	1034.8
57.5°	39307.6	14711.2	3593.1	1600.2	1315.9	1450.0	1220.1	1108.3	1053.9	1028.5	1002.9
60°	38908.3	14149.0	3181.2	1510.7	1255.2	1309.5	1210.5	1082.7	1025.2	1006.1	983.8
62.5°	35711.2	12679.9	2916.0	1469.2	1216.9	1194.5	1220.1	1057.2	999.7	980.5	974.2
65°	30917.2	10511.2	2810.7	1459.6	1185.0	1127.5	1133.8	1028.5	971.0	955.0	948.6
67.5°	25503.5	8483.0	2718.0	1491.6	1143.5	1079.5	1047.6	990.1	942.2	926.3	913.5
70°	20112.1	7055.4	2676.6	1472.4	1092.3	1031.6	996.5	948.6	907.1	891.1	881.5
72.5°	16196.4	5959.8	2654.1	1453.2	1025.2	967.7	935.8	894.3	849.6	843.2	833.6
75°	13705.1	4685.5	2430.5	1392.5	948.6	891.1	868.8	830.4	785.7	785.7	779.3
77.5°	10571.9	3388.7	2021.8	1232.9	868.8	804.9	785.7	757.0	705.8	715.5	712.3
80°	7809.1	2210.2	1581.0	1022.0	769.8	709.0	699.5	670.7	616.4	629.2	629.2
82.5°	5349.8	1450.0	1137.0	836.8	658.0	600.5	600.5	571.7	511.1	517.4	536.5
85°	2686.1	996.5	849.6	648.3	511.1	482.3	482.3	459.9	399.3	402.4	428.0
87.5°	817.6	600.5	562.1	463.1	367.3	360.9	344.9	329.0	290.6	287.4	303.4
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°	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8
2.5°	16931.0	16748.9	16528.5	16043.0	15880.2	15870.6	16017.5	15864.2	16158.0	16033.5	16170.8
5°	13654.0	13475.1	13229.2	12609.6	12232.8	11977.2	11855.8	11498.1	11756.8	11568.3	11724.9
7.5°	10041.7	10083.2	9920.3	9556.2	8735.4	8323.3	8080.6	7863.4	8051.9	8032.7	8333.0
10°	7058.6	7170.4	7055.4	6688.1	6023.7	5797.0	5841.7	5927.9	6173.8	6301.6	6764.8
12.5°	5081.5	5075.2	5001.7	4672.7	4235.1	4260.7	4442.8	4592.8	4819.6	4953.7	5426.4
15°	3794.3	3736.8	3704.9	3436.7	3187.5	3241.8	3331.2	3347.2	3490.9	3570.8	3954.1
17.5°	2868.1	2896.9	2932.0	2740.4	2552.0	2516.8	2446.6	2360.4	2401.8	2417.8	2609.4
20°	2277.3	2392.3	2478.5	2344.3	2152.7	2050.5	1961.1	1903.6	1903.6	1900.3	1954.7
22.5°	1989.8	2072.8	2165.5	2072.8	1900.3	1810.9	1759.9	1715.2	1708.7	1708.7	1759.9
25°	1833.3	1894.0	1983.4	1919.6	1791.8	1724.7	1676.8	1619.3	1596.9	1590.6	1625.7
27.5°	1756.6	1782.2	1826.9	1769.4	1660.9	1628.9	1616.2	1565.0	1536.3	1520.3	1555.4
30°	1625.7	1619.3	1622.5	1565.0	1478.8	1475.6	1497.9	1507.5	1497.9	1494.7	1549.1
32.5°	1504.4	1491.6	1488.4	1437.2	1357.5	1338.2	1357.5	1376.6	1399.0	1430.9	1494.7
35°	1351.0	1382.9	1402.2	1357.5	1261.6	1204.1	1181.7	1146.6	1127.5	1127.5	1200.9
37.5°	1229.7	1303.1	1331.9	1290.4	1185.0	1105.1	1066.7	1060.4	1063.6	1076.3	1146.6
40°	1188.2	1242.5	1267.9	1226.4	1121.1	1047.6	1025.2	1018.9	1025.2	1044.4	1114.7
42.5°	1162.6	1200.9	1197.7	1146.6	1060.4	1009.2	996.5	990.1	996.5	1015.7	1092.3
45°	1140.2	1165.8	1140.2	1079.5	999.7	974.2	977.3	974.2	980.5	999.7	1073.2
47.5°	1121.1	1130.7	1098.8	1038.0	955.0	948.6	961.4	971.0	977.3	993.3	1070.0
50°	1092.3	1092.3	1063.6	999.7	916.7	919.8	935.8	958.2	961.4	980.5	1041.3
52.5°	1057.2	1053.9	1034.8	974.2	884.8	894.3	894.3	919.8	926.3	948.6	1012.5
55°	1028.5	1022.0	1012.5	955.0	856.0	872.0	862.3	872.0	887.9	910.2	980.5
57.5°	1002.9	990.1	990.1	939.0	833.6	840.0	817.6	830.4	849.6	868.8	942.2
60°	977.3	964.5	971.0	916.7	798.5	792.1	782.6	808.0	814.5	836.8	910.2
62.5°	948.6	939.0	942.2	891.1	772.9	757.0	757.0	779.3	782.6	814.5	884.8
65°	926.3	913.5	910.2	865.5	744.2	725.1	734.6	744.2	750.5	782.6	849.6
67.5°	903.9	878.3	878.3	843.2	712.3	693.0	712.3	709.0	718.6	747.4	801.7
70°	875.1	840.0	843.2	827.3	680.3	658.0	673.9	670.7	677.1	696.3	750.5
72.5°	830.4	801.7	808.0	801.7	648.3	616.4	622.8	622.8	622.8	638.8	696.3
75°	772.9	750.5	769.8	785.7	610.1	565.3	571.7	571.7	562.1	571.7	642.0
77.5°	702.7	689.9	753.8	731.4	565.3	511.1	511.1	504.6	485.5	498.3	574.9
80°	626.0	616.4	696.3	613.3	514.2	444.0	437.5	421.6	402.4	412.0	488.7
82.5°	546.2	536.5	584.5	469.5	444.0	367.3	351.3	322.5	303.4	313.0	383.3
85°	447.1	447.1	450.3	354.6	338.6	281.1	261.9	223.6	201.2	207.6	274.7
87.5°	319.4	329.0	303.4	242.7	201.2	156.5	143.7	121.3	102.2	118.2	143.7
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: P191308

CATALOG NUMBER: GLEON-AF-10-LED-E1-SLL-1200

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8	19629.8
2.5°	16873.5	17224.9	17624.0	18135.1	18572.7	19291.3	19981.2	20396.4
5°	12616.0	13200.5	13928.7	14864.5	15736.5	17045.9	18345.9	19179.5
7.5°	9029.2	9655.2	10441.0	11609.9	12842.7	14513.2	16231.5	17228.0
10°	7470.6	8112.5	8773.7	9562.6	10571.9	12389.3	14420.5	15544.9
12.5°	6180.3	6867.0	7579.1	8409.6	9345.4	10967.9	13309.1	14602.6
15°	4730.2	5496.7	6336.8	7387.5	8559.7	10434.5	13034.4	14439.7
17.5°	3241.8	4097.8	5129.5	6426.2	7860.3	10262.0	13526.3	15145.6
20°	2232.6	2855.4	3957.3	5477.6	7202.3	10239.7	14471.7	16499.8
22.5°	1868.4	2146.4	2951.2	4605.6	6707.3	10514.4	15937.7	18400.2
25°	1727.9	1894.0	2357.1	3848.6	6346.3	11146.8	17956.3	20859.5
27.5°	1644.9	1795.0	2139.9	3353.6	6062.1	11881.4	19920.4	23242.2
30°	1676.8	1830.2	2079.2	3101.3	5675.6	12494.6	21664.4	25101.1
32.5°	1510.7	1577.8	1782.2	2877.8	5397.7	13008.9	23191.0	26640.5
35°	1287.2	1405.3	1590.6	2772.3	5404.1	13353.8	24855.0	28607.9
37.5°	1226.4	1344.7	1478.8	2734.0	5477.6	13721.0	26765.1	30914.0
40°	1188.2	1296.7	1411.7	2711.6	5547.9	14056.5	28636.7	33194.4
42.5°	1162.6	1261.6	1405.3	2635.0	5583.0	14356.7	30176.1	35133.1
45°	1159.4	1261.6	1430.9	2558.3	5637.3	14679.2	31466.5	36567.2
47.5°	1162.6	1303.1	1382.9	2465.7	5637.3	15219.1	32980.4	37848.0
50°	1149.8	1373.4	1331.9	2334.8	5506.3	16241.1	35056.5	39563.1
52.5°	1143.5	1363.8	1232.9	2133.6	5279.6	17863.6	37717.0	41926.6
55°	1127.5	1315.9	1162.6	1833.3	5014.5	19633.0	40566.0	44721.3
57.5°	1111.4	1165.8	1124.2	1571.5	4605.6	20878.6	42527.0	46902.7
60°	1245.6	1018.9	1092.3	1443.7	4059.5	21220.4	42450.4	47771.5
62.5°	1153.0	955.0	1050.8	1414.9	3676.2	20262.2	40489.3	47302.0
65°	903.9	913.5	1009.2	1497.9	3574.0	17723.0	37014.4	45133.3
67.5°	827.3	872.0	967.7	1603.4	3583.6	14190.6	31821.0	40409.5
70°	779.3	827.3	919.8	1657.7	3609.2	10578.2	25158.6	32913.3
72.5°	725.1	766.5	865.5	1667.2	3443.0	7684.6	19390.3	24200.4
75°	661.1	699.5	788.9	1453.2	2852.2	5330.7	14832.6	16557.3
77.5°	587.7	616.4	693.0	1121.1	2117.6	3411.1	11134.0	12095.4
80°	501.5	517.4	581.3	820.8	1450.0	2133.6	8808.8	9706.4
82.5°	402.4	408.8	450.3	616.4	942.2	1370.2	5899.2	6732.8
85°	284.3	284.3	309.9	447.1	642.0	868.8	3203.5	3551.7
87.5°	134.1	137.4	137.4	245.9	335.3	440.8	737.8	453.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)