

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: P191191

Luminaire Tested: **GLEON-AF-03-LED-E1-SL4-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191191  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-03-LED-E1-SL4-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9941 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

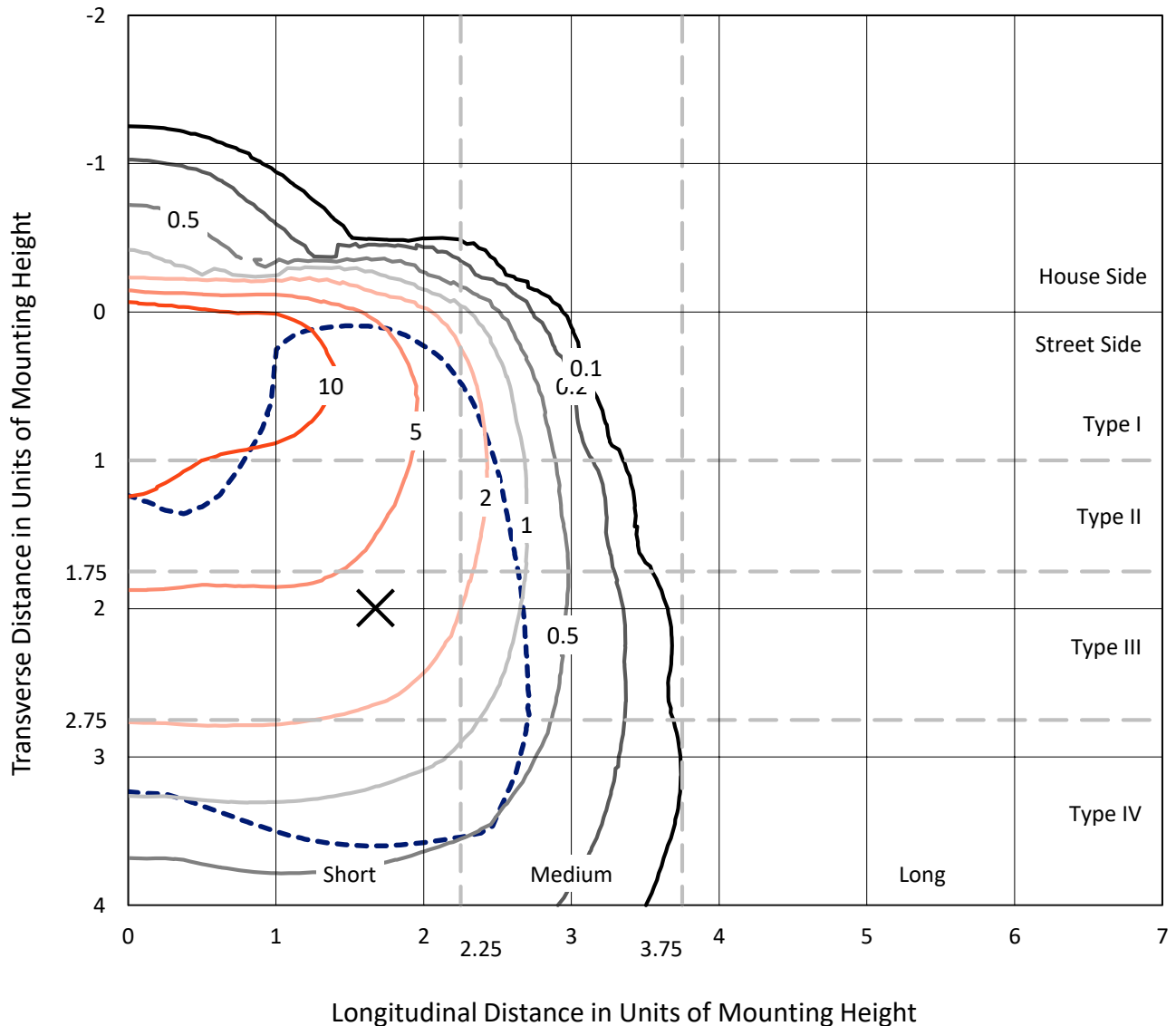
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P191191  
 CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-600-HSS

### Iso-Footcandle Lines of Horizontal Illumination

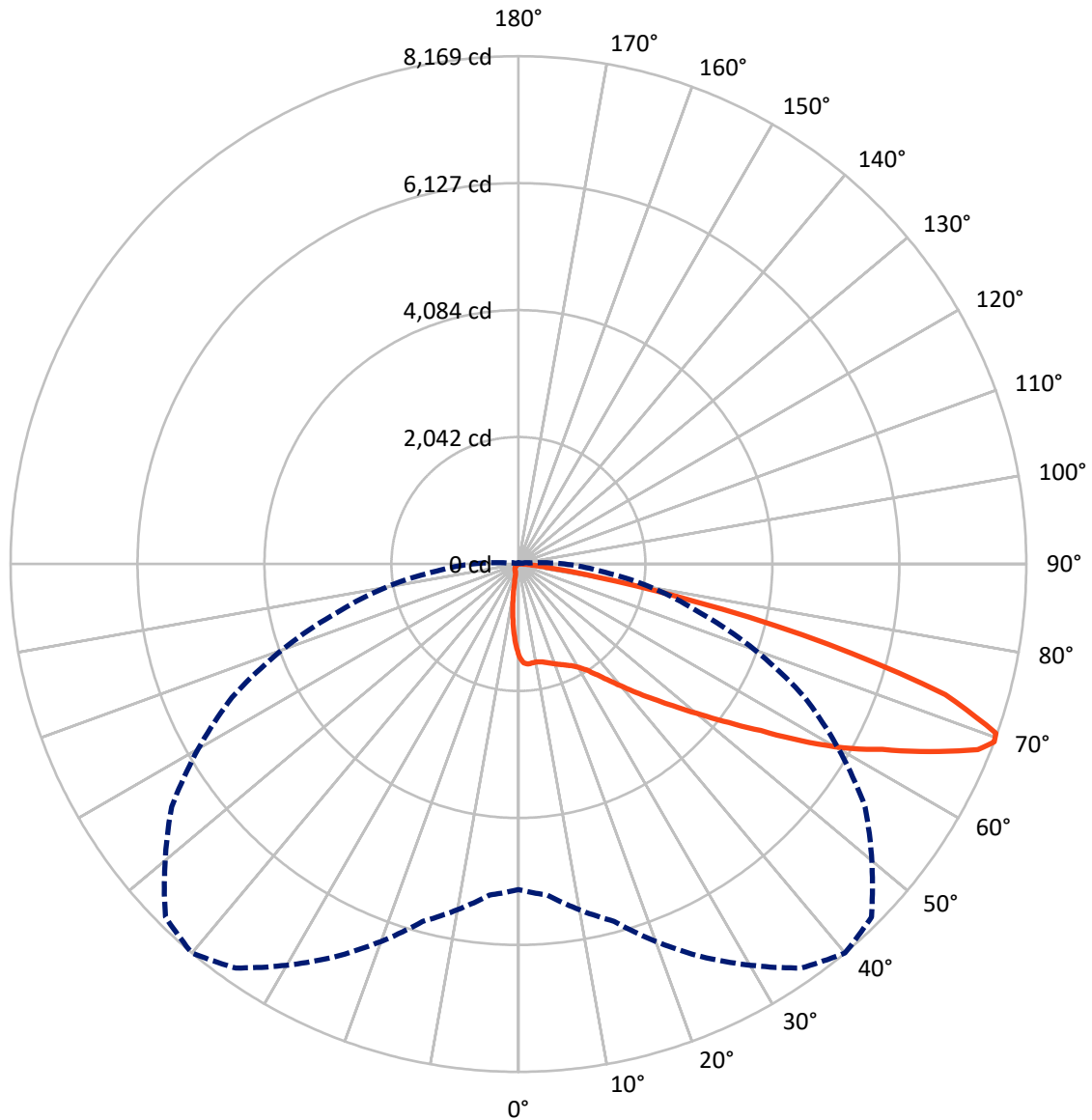
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.3 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P191191  
CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-600-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P191191

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-600-HSS

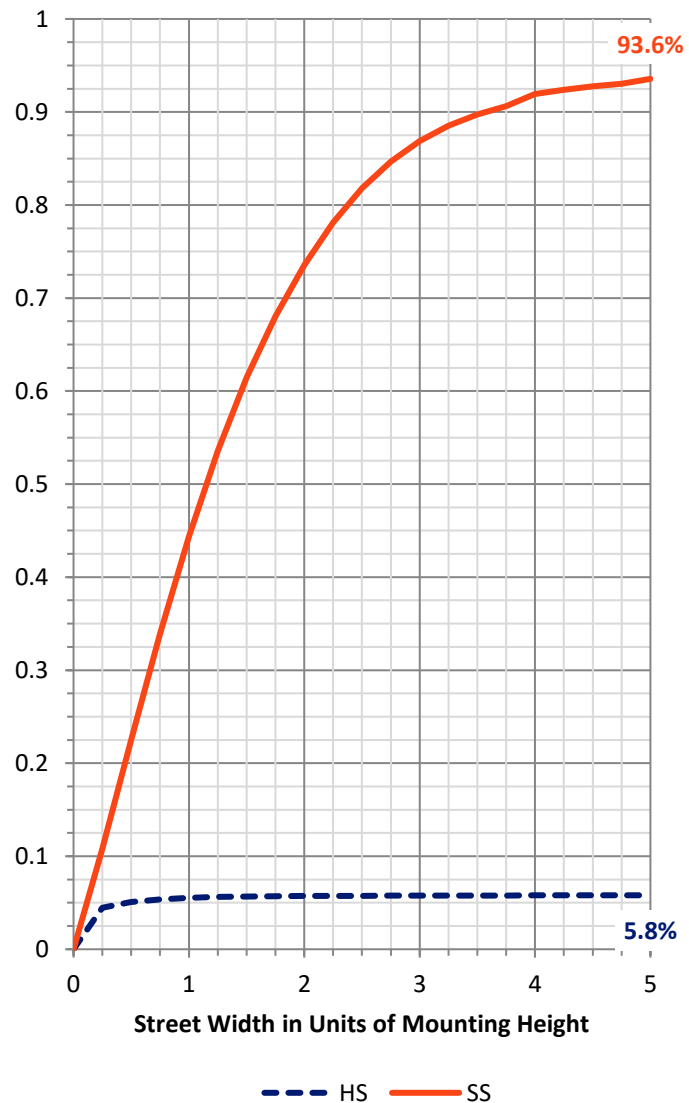
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	581.6	0.0	581.6
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	9359.4	0.0	9359.4
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	9941.0	0.0	9941.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.4	1.2
10°-20°	296.1	3.0
20°-30°	498.8	5.0
30°-40°	816.6	8.2
40°-50°	1413.9	14.2
50°-60°	2227.0	22.4
60°-70°	2908.3	29.3
70°-80°	1497.9	15.1
80°-90°	162.0	1.6
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°	9941.0	100.0
0°-180°	9941.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P191191

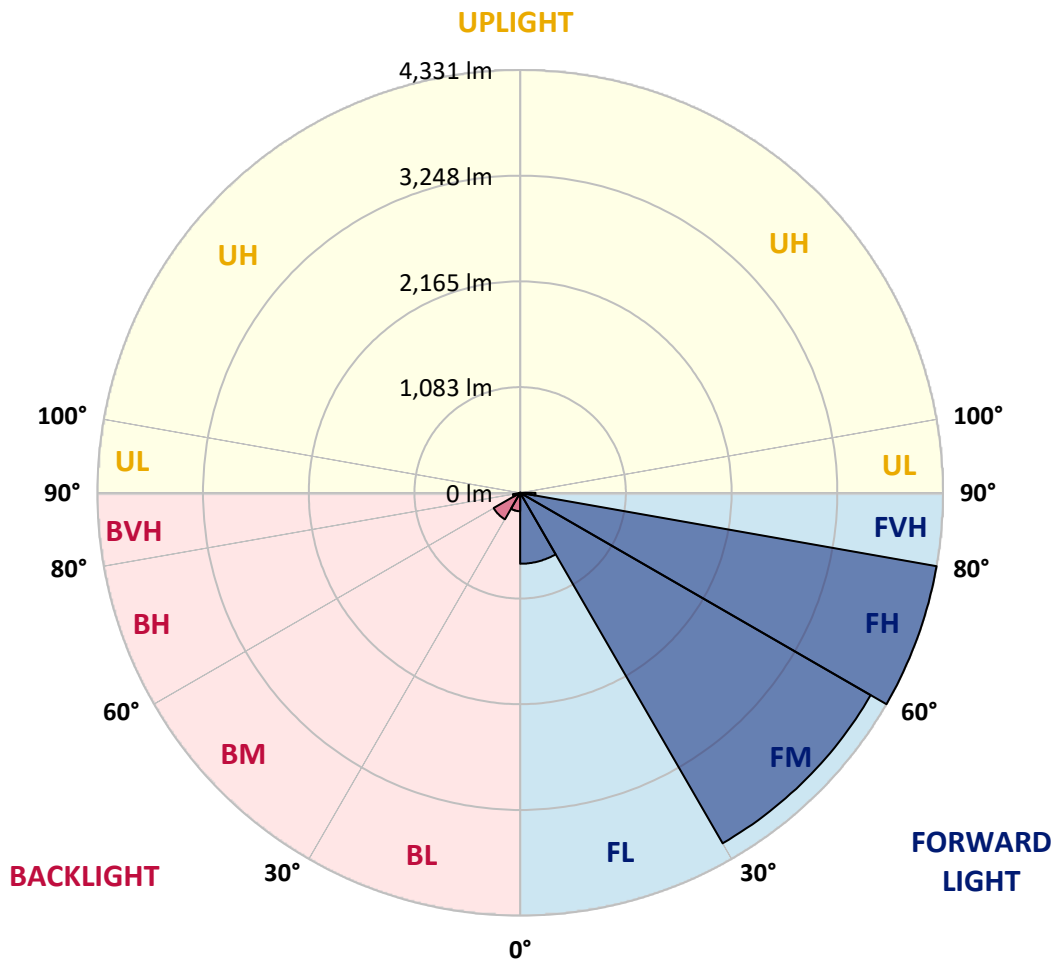
CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-600-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	727.0	7.3			
FM	(30°-60°)	4144.8	41.7			
FH	(60°-80°)	4330.7	43.6			G2/5000
FVH	(80°-90°)	156.9	1.6			G2/225
BL	(0°-30°)	188.4	1.9	B1/500		
BM	(30°-60°)	312.6	3.1	B1/1000		
BH	(60°-80°)	75.5	0.8	B0/110		G0/110
BVH	(80°-90°)	5.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P191191

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-600-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2
2.5°	1630.8	1621.9	1616.6	1609.5	1600.6	1592.9	1590.0	1568.1	1547.4	1519.0	1486.4
5°	1661.0	1658.0	1648.6	1639.1	1628.4	1616.6	1610.1	1584.0	1554.5	1513.0	1456.3
7.5°	1663.9	1660.4	1648.6	1635.5	1620.8	1606.5	1595.3	1569.3	1542.1	1500.1	1430.8
10°	1659.2	1655.0	1646.2	1632.0	1613.6	1600.0	1588.7	1564.0	1540.9	1503.0	1426.1
12.5°	1653.9	1649.7	1645.6	1638.5	1622.5	1613.1	1603.6	1579.9	1559.2	1527.3	1443.2
15°	1659.2	1656.9	1661.6	1658.6	1649.7	1641.4	1632.0	1610.7	1591.7	1565.1	1474.6
17.5°	1681.7	1681.7	1696.5	1698.3	1690.0	1678.2	1664.5	1643.3	1627.2	1604.8	1511.8
20°	1734.3	1732.6	1751.5	1755.1	1734.9	1716.6	1696.5	1670.5	1658.0	1643.8	1548.5
22.5°	1824.9	1816.7	1827.8	1824.3	1784.6	1756.3	1731.4	1699.4	1693.0	1686.4	1589.4
25°	1942.7	1937.9	1945.7	1910.7	1840.9	1802.4	1772.8	1736.8	1736.8	1743.2	1635.5
27.5°	2113.6	2095.9	2069.8	2008.4	1903.6	1854.5	1822.5	1784.0	1794.2	1818.4	1696.5
30°	2288.9	2269.3	2209.5	2114.8	1979.9	1928.5	1891.1	1850.9	1874.6	1919.0	1778.2
32.5°	2461.6	2439.7	2355.0	2235.6	2089.4	2037.9	2001.8	1957.4	1997.1	2071.7	1897.7
35°	2629.1	2609.5	2511.9	2371.1	2234.9	2192.4	2159.2	2120.8	2171.6	2275.8	2066.4
37.5°	2817.2	2795.9	2677.0	2524.3	2411.9	2381.1	2356.9	2318.4	2407.2	2559.8	2301.2
40°	3048.6	3012.5	2852.1	2700.1	2616.6	2601.9	2585.3	2580.0	2717.8	2929.0	2614.3
42.5°	3313.6	3254.5	3035.6	2885.2	2841.5	2852.1	2848.0	2871.6	3106.6	3388.2	2995.3
45°	3578.8	3502.5	3239.7	3082.9	3088.8	3126.1	3149.2	3243.9	3593.6	3914.9	3405.4
47.5°	3803.6	3728.5	3435.6	3296.6	3367.6	3440.9	3503.6	3682.9	4094.2	4433.3	3724.4
50°	3996.0	3925.0	3643.2	3531.4	3691.2	3809.6	3911.4	4177.0	4632.6	4827.9	3948.0
52.5°	4153.4	4106.0	3858.7	3800.7	4061.0	4234.4	4383.5	4701.9	5109.5	5148.6	4122.0
55°	4306.6	4272.9	4090.1	4120.9	4495.4	4731.5	4920.2	5258.7	5520.3	5416.1	4288.8
57.5°	4483.0	4452.2	4354.0	4526.8	5066.4	5363.4	5569.4	5752.2	5881.8	5689.4	4446.3
60°	4662.8	4645.1	4647.5	4977.7	5722.0	6007.3	6120.8	6168.2	6236.8	5946.9	4455.2
62.5°	4834.5	4868.1	4983.0	5479.4	6349.9	6568.8	6626.2	6672.9	6592.5	5987.7	4116.0
65°	5125.0	5180.0	5454.0	6151.0	7040.4	7274.7	7333.9	7173.5	6648.7	5459.9	3348.0
67.5°	5267.0	5367.6	5856.4	6777.0	7710.3	7970.6	7948.7	7206.1	5966.5	4163.4	2148.6
69°	5237.4	5344.5	5949.3	6968.9	7932.8	8168.9	8029.8	6807.8	5082.9	3016.1	1319.0
70°	5120.3	5228.5	5901.3	6961.7	7961.1	8148.1	7879.5	6316.1	4297.7	2205.4	824.9
72.5°	4275.8	4369.3	5239.1	6292.5	7333.9	7181.8	6591.9	4375.9	2094.1	600.6	185.8
75°	2632.1	2684.1	3759.2	4740.4	5539.2	5148.6	4391.8	2176.9	624.3	169.8	103.0
77.5°	1390.6	1414.2	2058.1	2794.2	3511.3	2905.4	2250.9	849.2	287.6	106.5	74.6
80°	821.9	839.6	1108.3	1277.6	1519.6	1269.3	900.0	521.3	205.9	66.9	66.3
82.5°	470.5	481.7	803.5	710.0	598.8	511.3	448.0	494.1	123.7	45.0	68.6
85°	172.8	175.1	452.0	540.2	356.2	211.9	222.5	409.5	33.1	28.4	53.8
87.5°	80.5	78.7	232.5	330.8	208.3	134.3	173.4	89.9	13.0	18.3	14.8
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: P191191

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-600-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2	1485.2
2.5°	1467.5	1445.6	1405.9	1365.1	1323.7	1291.8	1260.4	1235.5	1227.2	1211.9	1213.0
5°	1422.5	1382.3	1299.5	1215.4	1127.8	1055.7	987.6	932.5	905.9	878.7	878.7
7.5°	1383.4	1324.9	1195.3	1058.7	917.2	798.2	691.1	610.7	566.3	530.8	530.2
10°	1368.7	1289.4	1108.3	912.5	715.5	553.3	426.1	344.4	302.4	275.2	273.9
12.5°	1375.2	1276.9	1041.5	777.5	530.2	355.7	246.7	194.1	176.4	168.1	168.1
15°	1394.1	1273.4	974.6	645.6	374.6	222.5	163.9	149.7	148.5	148.5	148.5
17.5°	1417.2	1274.6	905.9	517.2	255.0	159.2	141.5	139.6	140.9	140.9	140.9
20°	1440.8	1275.2	832.0	398.2	179.8	138.5	133.2	132.6	133.7	133.7	134.3
22.5°	1469.9	1278.2	758.0	297.7	148.5	130.7	126.6	126.6	127.3	127.3	126.6
25°	1503.0	1284.0	681.1	220.8	135.5	125.4	121.9	121.3	121.9	121.3	120.7
27.5°	1544.5	1292.3	595.3	172.8	129.6	120.1	117.1	117.1	116.6	116.0	115.4
30°	1596.5	1301.8	498.8	146.8	123.7	115.4	112.4	111.8	111.2	110.1	110.1
32.5°	1675.8	1322.5	403.6	133.2	117.1	108.8	106.5	106.5	105.4	104.1	103.5
35°	1797.6	1363.4	318.3	124.9	110.1	101.8	98.8	98.8	97.6	97.1	96.5
37.5°	1966.3	1425.5	247.3	117.1	103.0	94.1	91.1	90.5	89.3	88.2	87.6
40°	2190.5	1502.4	194.7	110.1	95.9	86.4	84.0	82.9	80.5	78.7	78.7
42.5°	2472.3	1590.0	157.9	102.4	87.6	79.3	77.5	75.7	71.6	69.9	69.3
45°	2767.0	1668.6	133.7	93.5	79.3	72.2	71.0	68.0	62.7	61.0	61.0
47.5°	2979.3	1687.1	117.7	85.2	71.6	64.5	63.9	58.6	53.8	52.7	52.1
50°	3111.9	1650.9	104.8	76.9	64.5	57.4	55.6	49.1	46.1	45.0	44.4
52.5°	3201.2	1586.4	94.1	69.9	58.0	50.8	46.7	42.0	39.7	38.5	38.5
55°	3272.8	1495.3	83.5	63.3	52.7	45.5	39.7	36.1	33.8	32.5	32.5
57.5°	3293.0	1371.7	72.7	58.0	47.4	40.2	33.8	31.4	28.4	27.8	27.8
60°	3146.8	1148.6	64.5	51.5	42.6	34.9	29.6	26.6	23.6	23.1	22.5
62.5°	2761.6	888.7	56.8	45.5	37.2	30.2	25.5	21.9	19.5	19.5	19.5
65°	2106.6	595.9	49.7	39.7	32.5	25.5	21.9	17.8	16.6	16.6	17.2
67.5°	1261.0	324.3	42.6	33.8	27.8	21.3	18.3	15.3	14.8	15.3	15.3
69°	739.1	190.6	38.5	30.2	24.2	18.9	16.0	13.6	14.8	15.3	15.3
70°	456.2	128.4	35.5	27.2	21.9	17.2	14.8	13.0	14.2	14.8	14.8
72.5°	127.3	66.3	28.4	21.3	17.8	14.2	11.9	11.9	13.6	14.2	14.2
75°	82.9	49.1	21.9	16.0	13.6	11.3	10.0	11.3	13.0	13.6	13.6
77.5°	68.6	40.2	17.8	13.0	11.3	10.6	9.5	10.0	11.9	12.4	12.4
80°	62.7	28.4	14.2	11.9	10.0	9.5	8.9	8.3	10.6	11.3	11.3
82.5°	59.7	22.5	12.4	10.6	9.5	8.3	7.7	8.3	9.5	10.0	10.6
85°	37.2	14.8	11.3	10.0	8.3	7.7	7.7	7.7	8.9	9.5	9.5
87.5°	13.6	11.9	10.0	8.3	7.1	7.1	7.1	7.1	7.7	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)