

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: P191691

Luminaire Tested: **GLEON-AF-03-LED-E1-5WQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191691  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
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-E1-5WQ-7050  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19141 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G3

Input Watts (W): 166  
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

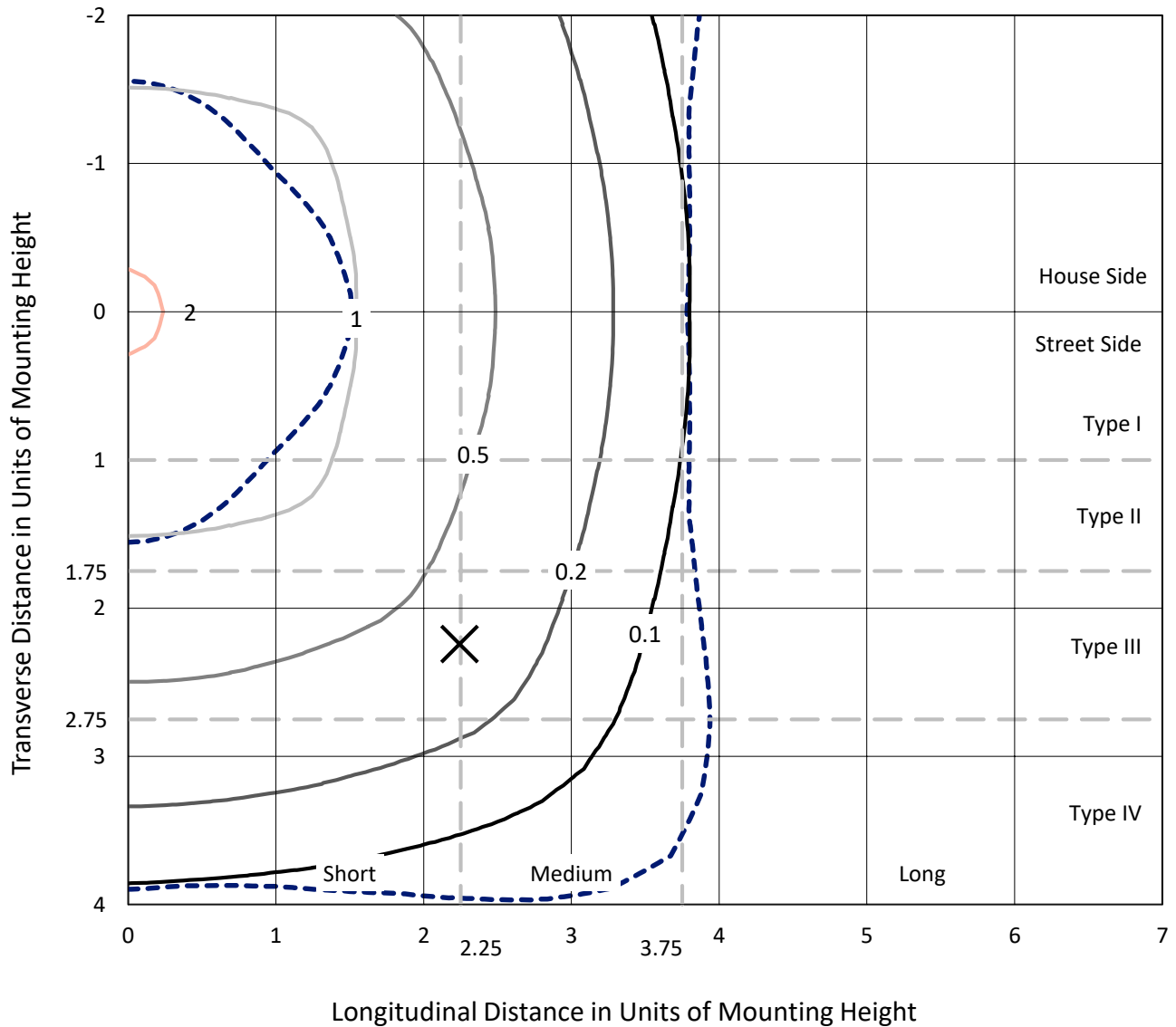


REPORT NUMBER: P191691

CATALOG NUMBER: GLEON-AF-03-LED-E1-5WQ-7050

### Iso-Footcandle Lines of Horizontal Illumination

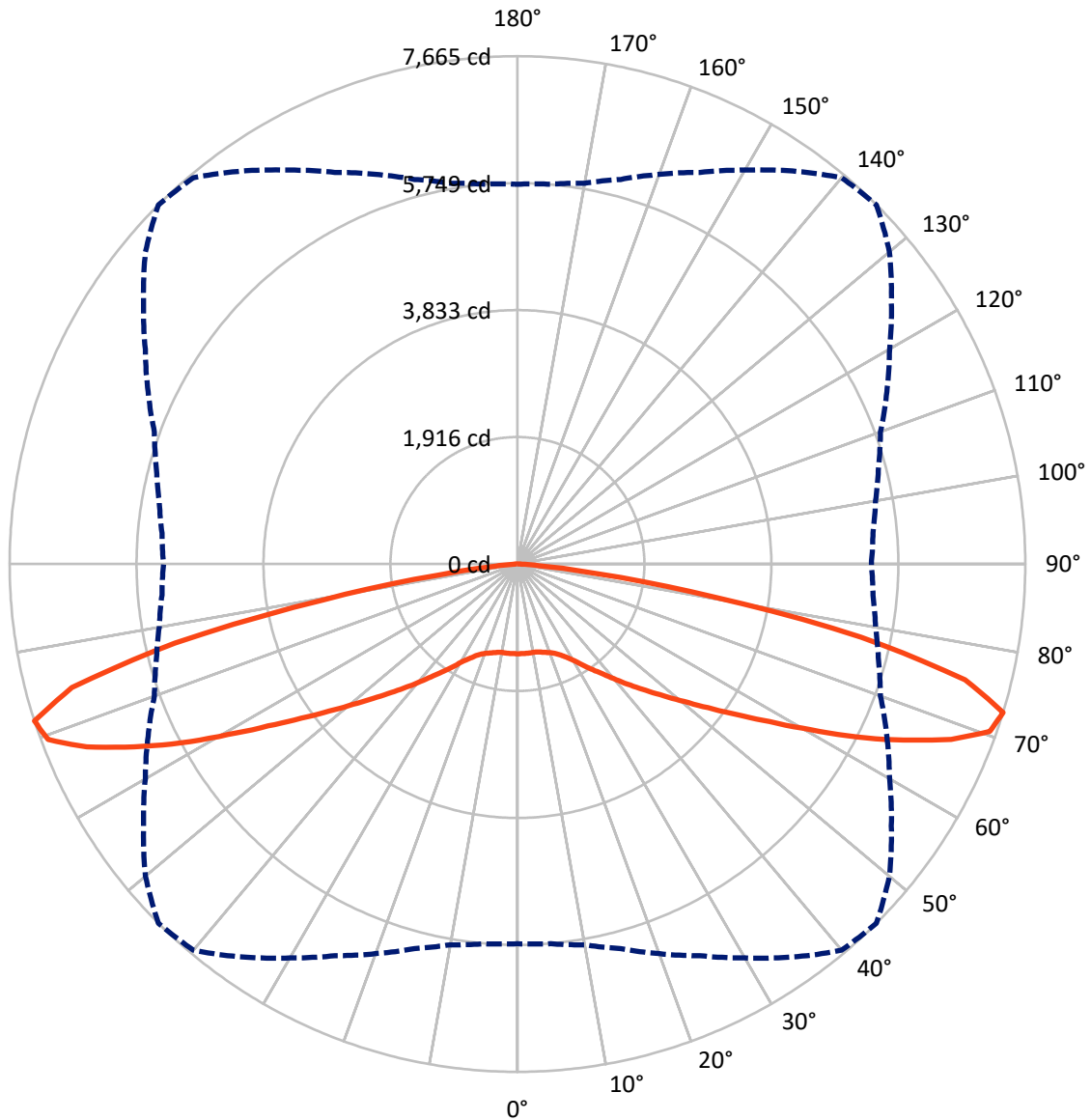
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type V - Short - Semi-Cutoff

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CATALOG NUMBER: GLEON-AF-03-LED-E1-5WQ-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9570.5   | 0.0    | 9570.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 9570.5   | 0.0    | 9570.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 19141.0  | 0.0    | 19141.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 129.4   | 0.7       |
| 10°-20°   | 393.1   | 2.1       |
| 20°-30°   | 718.4   | 3.8       |
| 30°-40°   | 1238.6  | 6.5       |
| 40°-50°   | 2117.3  | 11.1      |
| 50°-60°   | 3431.9  | 17.9      |
| 60°-70°   | 5693.4  | 29.7      |
| 70°-80°   | 5014.6  | 26.2      |
| 80°-90°   | 404.3   | 2.1       |
| 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°    | 19141.0 | 100.0     |
| 0°-180°   | 19141.0 | 100.0     |



REPORT NUMBER: P191691

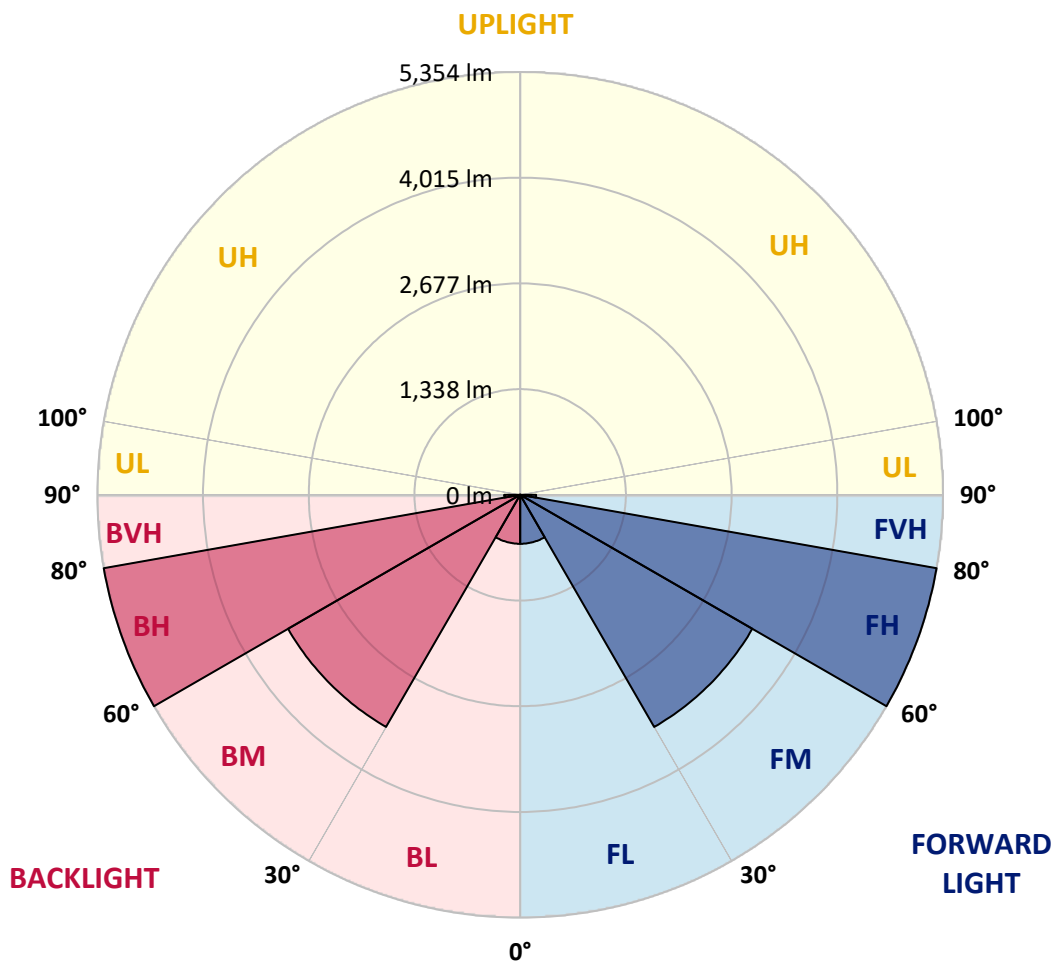
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 620.4  | 3.2       |                         |      |         |
| FM (30°-60°)   | 3393.9 | 17.7      |                         |      |         |
| FH (60°-80°)   | 5354.0 | 28.0      |                         |      | G3/7500 |
| FVH (80°-90°)  | 202.2  | 1.1       |                         |      | G2/225  |
| BL (0°-30°)    | 620.4  | 3.2       | B2/1000                 |      |         |
| BM (30°-60°)   | 3393.9 | 17.7      | B3/5000                 |      |         |
| BH (60°-80°)   | 5354.0 | 28.0      | B5                      |      | G3/7500 |
| BVH (80°-90°)  | 202.2  | 1.1       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G3**

Type V Short





REPORT NUMBER: P191691

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 |
| 2.5°  | 1355.5 | 1356.4 | 1357.2 | 1356.4 | 1356.4 | 1355.5 | 1354.6 | 1355.5 | 1354.6 | 1352.8 | 1353.7 |
| 5°    | 1359.9 | 1361.6 | 1361.6 | 1359.9 | 1360.7 | 1359.9 | 1358.1 | 1359.0 | 1357.2 | 1354.6 | 1354.6 |
| 7.5°  | 1365.1 | 1366.0 | 1366.0 | 1364.3 | 1365.1 | 1363.4 | 1361.6 | 1360.7 | 1359.0 | 1355.5 | 1352.8 |
| 10°   | 1373.0 | 1373.9 | 1373.0 | 1371.3 | 1371.3 | 1368.6 | 1364.3 | 1362.5 | 1359.0 | 1353.7 | 1351.1 |
| 12.5° | 1381.8 | 1382.7 | 1381.8 | 1380.1 | 1379.2 | 1374.8 | 1371.3 | 1368.6 | 1366.0 | 1361.6 | 1357.2 |
| 15°   | 1394.1 | 1395.9 | 1394.1 | 1390.6 | 1388.0 | 1384.5 | 1382.7 | 1383.6 | 1384.5 | 1380.9 | 1376.5 |
| 17.5° | 1416.9 | 1417.8 | 1415.2 | 1407.3 | 1403.8 | 1400.3 | 1400.3 | 1402.0 | 1404.6 | 1402.9 | 1398.5 |
| 20°   | 1459.1 | 1456.4 | 1450.3 | 1440.6 | 1436.2 | 1430.1 | 1429.2 | 1430.1 | 1430.1 | 1429.2 | 1425.7 |
| 22.5° | 1511.7 | 1510.0 | 1502.1 | 1489.8 | 1483.7 | 1480.1 | 1474.9 | 1470.5 | 1469.6 | 1467.0 | 1463.5 |
| 25°   | 1575.0 | 1574.1 | 1564.4 | 1553.9 | 1549.5 | 1545.1 | 1540.7 | 1534.6 | 1529.3 | 1523.2 | 1519.6 |
| 27.5° | 1655.7 | 1652.2 | 1638.2 | 1632.9 | 1626.8 | 1624.1 | 1618.0 | 1610.9 | 1606.6 | 1598.7 | 1594.3 |
| 30°   | 1744.4 | 1744.4 | 1733.0 | 1731.2 | 1731.2 | 1725.1 | 1718.1 | 1705.8 | 1697.9 | 1690.0 | 1687.3 |
| 32.5° | 1833.1 | 1833.9 | 1822.5 | 1826.0 | 1828.7 | 1833.1 | 1834.8 | 1830.4 | 1825.2 | 1824.3 | 1819.0 |
| 35°   | 1961.2 | 1957.7 | 1946.3 | 1948.9 | 1948.1 | 1947.2 | 1947.2 | 1956.8 | 1958.6 | 1960.4 | 1949.8 |
| 37.5° | 2120.1 | 2120.1 | 2108.7 | 2108.7 | 2103.5 | 2098.2 | 2091.2 | 2097.3 | 2107.0 | 2109.6 | 2102.6 |
| 40°   | 2301.9 | 2308.0 | 2294.0 | 2293.1 | 2294.8 | 2278.2 | 2270.3 | 2279.9 | 2286.1 | 2296.6 | 2288.7 |
| 42.5° | 2516.1 | 2511.7 | 2497.6 | 2495.9 | 2486.2 | 2481.0 | 2473.9 | 2481.8 | 2491.5 | 2498.5 | 2501.1 |
| 45°   | 2721.5 | 2718.0 | 2702.2 | 2702.2 | 2692.5 | 2688.1 | 2691.6 | 2704.8 | 2709.2 | 2718.9 | 2728.5 |
| 47.5° | 2924.3 | 2919.9 | 2909.4 | 2913.8 | 2914.6 | 2922.5 | 2933.9 | 2946.2 | 2958.5 | 2971.7 | 2976.1 |
| 50°   | 3131.5 | 3132.4 | 3120.9 | 3131.5 | 3144.6 | 3166.6 | 3197.3 | 3217.5 | 3243.0 | 3259.6 | 3264.9 |
| 52.5° | 3320.2 | 3323.7 | 3336.0 | 3360.6 | 3386.9 | 3430.0 | 3482.6 | 3531.8 | 3573.9 | 3602.0 | 3600.3 |
| 55°   | 3546.7 | 3552.0 | 3581.8 | 3624.0 | 3667.0 | 3732.0 | 3810.1 | 3897.0 | 3967.2 | 4007.6 | 3982.2 |
| 57.5° | 3836.4 | 3847.8 | 3881.2 | 3938.3 | 4002.4 | 4086.6 | 4193.7 | 4324.5 | 4433.4 | 4487.8 | 4446.6 |
| 60°   | 4234.1 | 4241.1 | 4281.5 | 4344.7 | 4422.0 | 4526.5 | 4669.6 | 4845.1 | 4998.8 | 5070.8 | 5023.4 |
| 62.5° | 4758.2 | 4771.4 | 4803.9 | 4868.0 | 4947.0 | 5065.5 | 5240.2 | 5459.7 | 5651.1 | 5751.1 | 5644.0 |
| 65°   | 5384.2 | 5426.3 | 5453.5 | 5518.5 | 5592.2 | 5717.8 | 5900.4 | 6135.7 | 6341.1 | 6406.9 | 6283.1 |
| 67.5° | 6004.0 | 6040.8 | 6088.2 | 6162.9 | 6237.5 | 6378.8 | 6548.3 | 6776.5 | 7002.1 | 7061.8 | 6869.6 |
| 70°   | 6275.2 | 6296.3 | 6370.1 | 6471.9 | 6615.0 | 6781.8 | 6977.6 | 7233.9 | 7513.1 | 7562.2 | 7318.2 |
| 72.5° | 5731.8 | 5752.9 | 5835.4 | 6008.4 | 6257.7 | 6522.8 | 6864.3 | 7240.9 | 7609.7 | 7665.0 | 7328.7 |
| 75°   | 4335.1 | 4300.8 | 4422.9 | 4652.0 | 4988.2 | 5357.8 | 5835.4 | 6375.3 | 6908.2 | 6977.6 | 6576.4 |
| 77.5° | 2240.4 | 2236.0 | 2328.2 | 2612.6 | 3013.8 | 3434.4 | 3960.2 | 4570.4 | 5091.8 | 5302.5 | 4975.9 |
| 80°   | 631.2  | 638.2  | 682.1  | 823.5  | 1057.9 | 1361.6 | 1772.5 | 2344.0 | 2770.7 | 2988.4 | 2805.8 |
| 82.5° | 247.6  | 266.9  | 283.6  | 309.9  | 340.6  | 385.4  | 514.5  | 765.5  | 1027.1 | 1227.3 | 1005.2 |
| 85°   | 88.7   | 94.8   | 134.3  | 158.9  | 161.5  | 170.3  | 194.0  | 226.5  | 273.0  | 325.7  | 267.8  |
| 87.5° | 33.4   | 36.9   | 43.0   | 71.1   | 70.2   | 64.1   | 78.1   | 81.6   | 61.5   | 56.2   | 69.4   |
| 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: P191691

CATALOG NUMBER: GLEON-AF-03-LED-E1-5WQ-7050

**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 | 1355.5 |
| 2.5°  | 1352.0 | 1352.8 | 1352.8 | 1353.7 | 1354.6 | 1354.6 | 1356.4 | 1356.4 |
| 5°    | 1352.8 | 1352.8 | 1351.1 | 1352.0 | 1351.1 | 1351.1 | 1352.0 | 1352.0 |
| 7.5°  | 1351.1 | 1350.2 | 1348.5 | 1347.6 | 1345.8 | 1345.8 | 1345.8 | 1345.8 |
| 10°   | 1348.5 | 1347.6 | 1345.8 | 1344.9 | 1344.1 | 1344.1 | 1344.1 | 1344.1 |
| 12.5° | 1355.5 | 1352.8 | 1351.1 | 1350.2 | 1350.2 | 1350.2 | 1350.2 | 1350.2 |
| 15°   | 1373.9 | 1367.8 | 1363.4 | 1363.4 | 1364.3 | 1366.0 | 1366.0 | 1367.8 |
| 17.5° | 1396.7 | 1389.7 | 1385.3 | 1381.8 | 1383.6 | 1386.2 | 1388.0 | 1389.7 |
| 20°   | 1424.0 | 1420.4 | 1414.3 | 1410.8 | 1410.8 | 1414.3 | 1416.1 | 1416.9 |
| 22.5° | 1461.7 | 1459.1 | 1456.4 | 1452.0 | 1452.0 | 1453.8 | 1457.3 | 1457.3 |
| 25°   | 1517.9 | 1516.1 | 1514.4 | 1510.9 | 1510.0 | 1510.0 | 1511.7 | 1513.5 |
| 27.5° | 1588.1 | 1589.0 | 1587.2 | 1586.4 | 1583.7 | 1582.9 | 1585.5 | 1584.6 |
| 30°   | 1682.1 | 1686.4 | 1690.8 | 1687.3 | 1682.9 | 1680.3 | 1677.7 | 1674.2 |
| 32.5° | 1809.4 | 1804.1 | 1800.6 | 1794.4 | 1786.5 | 1779.5 | 1774.2 | 1768.1 |
| 35°   | 1929.6 | 1920.8 | 1917.3 | 1922.6 | 1921.7 | 1917.3 | 1911.2 | 1905.9 |
| 37.5° | 2077.1 | 2075.4 | 2077.1 | 2086.8 | 2085.0 | 2089.4 | 2077.1 | 2076.2 |
| 40°   | 2263.2 | 2265.0 | 2277.3 | 2288.7 | 2294.8 | 2301.0 | 2294.0 | 2286.9 |
| 42.5° | 2479.2 | 2478.3 | 2482.7 | 2498.5 | 2509.0 | 2516.1 | 2501.1 | 2499.4 |
| 45°   | 2707.4 | 2701.3 | 2704.8 | 2718.0 | 2728.5 | 2736.4 | 2719.7 | 2719.7 |
| 47.5° | 2958.5 | 2948.0 | 2936.6 | 2951.5 | 2957.7 | 2962.9 | 2949.7 | 2945.4 |
| 50°   | 3238.6 | 3216.6 | 3192.1 | 3198.2 | 3198.2 | 3196.4 | 3179.8 | 3178.9 |
| 52.5° | 3559.9 | 3519.5 | 3474.7 | 3458.1 | 3448.4 | 3437.9 | 3408.9 | 3394.8 |
| 55°   | 3929.5 | 3868.9 | 3798.7 | 3755.7 | 3732.8 | 3703.9 | 3655.6 | 3642.4 |
| 57.5° | 4361.4 | 4266.6 | 4145.5 | 4092.8 | 4041.9 | 3994.5 | 3940.9 | 3926.0 |
| 60°   | 4873.2 | 4733.6 | 4573.0 | 4475.5 | 4420.2 | 4374.6 | 4319.3 | 4316.6 |
| 62.5° | 5443.9 | 5223.5 | 5041.8 | 4954.0 | 4913.6 | 4873.2 | 4820.6 | 4827.6 |
| 65°   | 6024.2 | 5794.2 | 5623.8 | 5552.7 | 5515.0 | 5481.6 | 5428.9 | 5436.8 |
| 67.5° | 6596.6 | 6385.0 | 6198.0 | 6125.1 | 6083.0 | 6040.8 | 5993.4 | 6001.3 |
| 70°   | 7007.4 | 6744.9 | 6534.2 | 6372.7 | 6271.7 | 6157.6 | 6083.9 | 6065.4 |
| 72.5° | 6889.8 | 6485.1 | 6150.6 | 5830.1 | 5642.3 | 5489.5 | 5385.9 | 5341.2 |
| 75°   | 5962.7 | 5409.6 | 4979.5 | 4586.2 | 4364.9 | 4185.0 | 4054.1 | 3972.5 |
| 77.5° | 4428.1 | 3806.6 | 3298.3 | 2845.3 | 2487.1 | 2246.6 | 2077.1 | 1967.4 |
| 80°   | 2423.9 | 1843.6 | 1347.6 | 947.3  | 696.2  | 578.5  | 510.9  | 478.5  |
| 82.5° | 755.0  | 487.2  | 359.1  | 309.9  | 288.0  | 275.7  | 255.5  | 223.0  |
| 85°   | 240.5  | 210.7  | 195.8  | 187.0  | 178.2  | 155.4  | 107.1  | 97.4   |
| 87.5° | 93.1   | 95.7   | 94.8   | 89.5   | 91.3   | 65.8   | 52.7   | 46.5   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)