

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: P192941

Luminaire Tested: **GLEON-AF-03-LED-E1-SL4-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192941  
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-SL4-7030-800-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K, 800mA 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: 11525.8 lumens  
Efficiency: N/A  
Efficacy: 92.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 124  
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



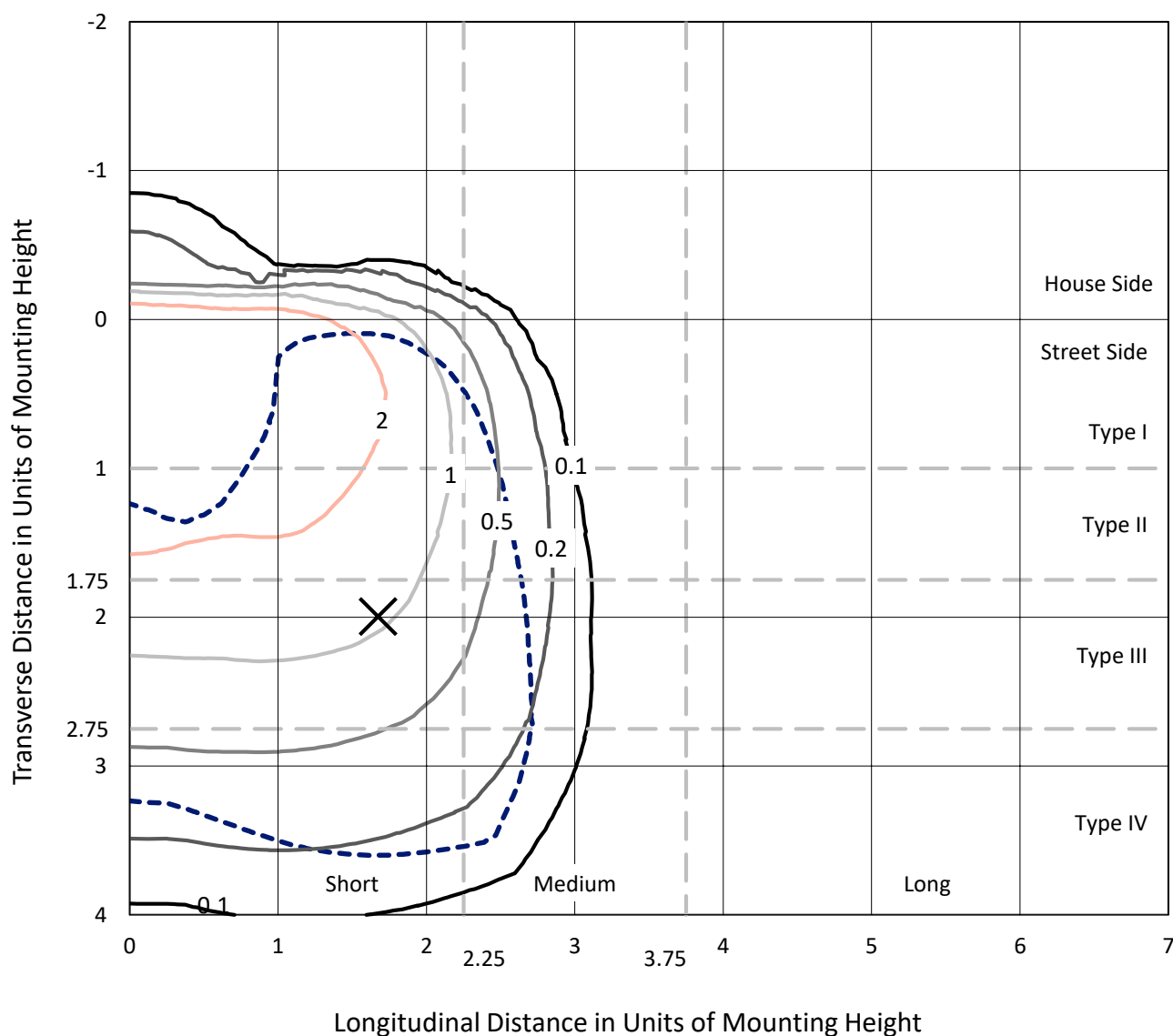
REPORT NUMBER: P192941

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-7030-800-HSS

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

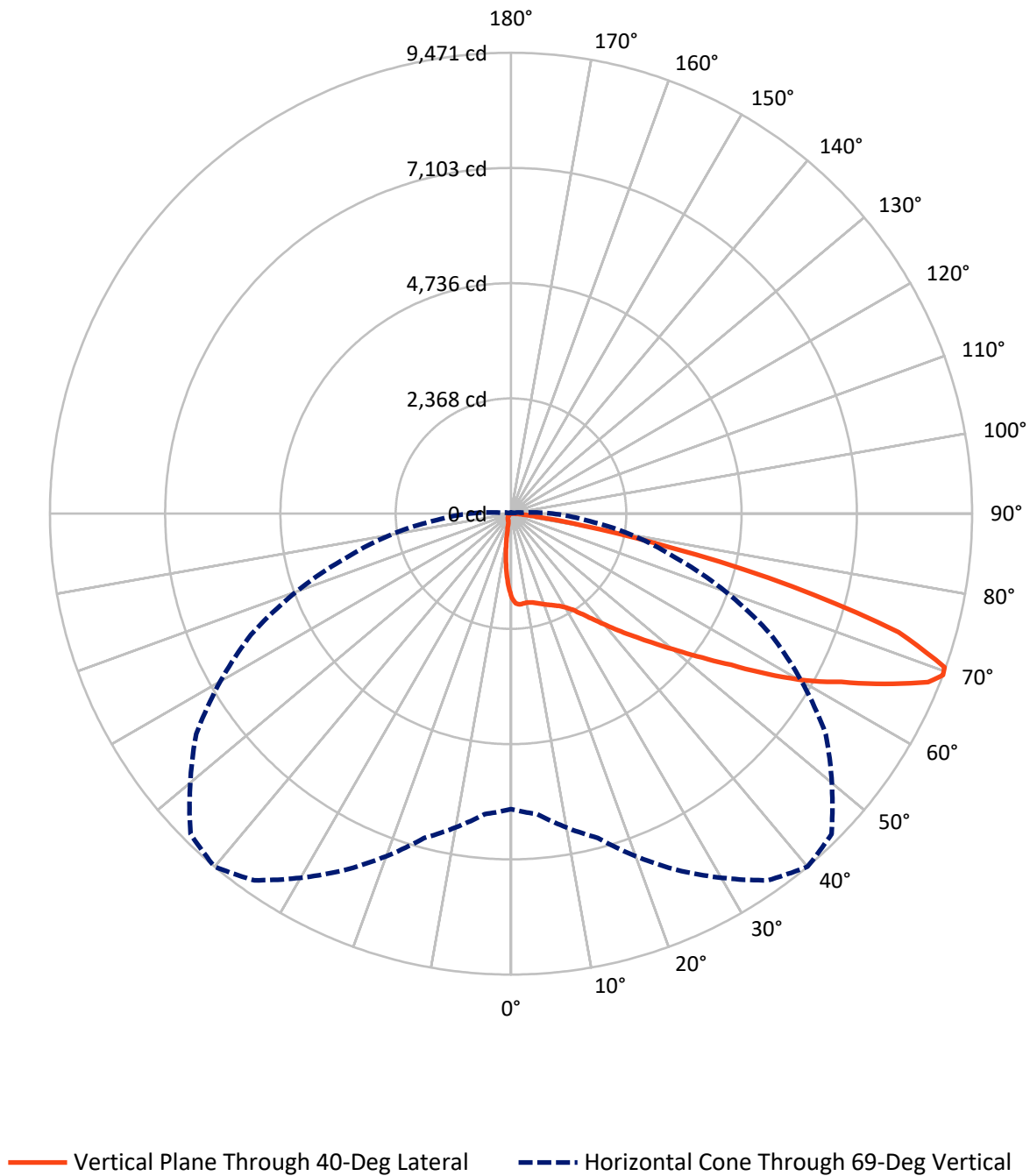


Based on 20 foot mounting height. Maximum calculated value = 4.7 fc  
 Type IV - Short - Semi-Cutoff

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CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-7030-800-HSS

## Luminous Intensity Polar Plot



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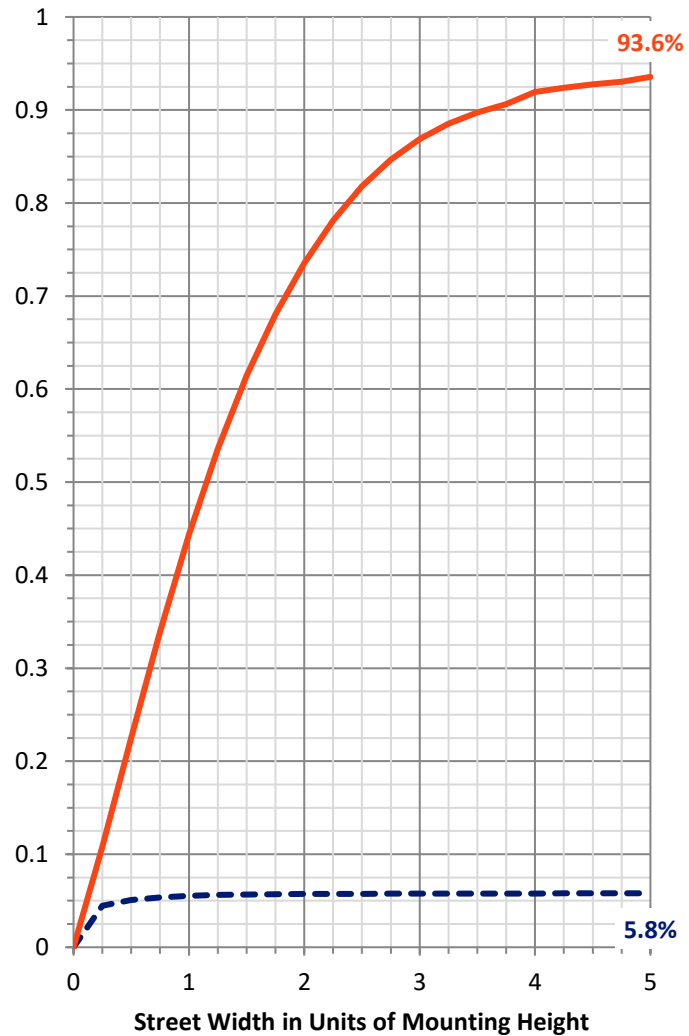
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 674.3    | 0.0    | 674.3   |
|                    | % Fixture | 5.9      | 0.0    | 5.9     |
| <b>Street Side</b> | Lumens    | 10851.4  | 0.0    | 10851.4 |
|                    | % Fixture | 94.1     | 0.0    | 94.1    |
| <b>Total</b>       | Lumens    | 11525.8  | 0.0    | 11525.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 139.6   | 1.2       |
| 10°-20°   | 343.4   | 3.0       |
| 20°-30°   | 578.3   | 5.0       |
| 30°-40°   | 946.7   | 8.2       |
| 40°-50°   | 1639.2  | 14.2      |
| 50°-60°   | 2582.0  | 22.4      |
| 60°-70°   | 3371.9  | 29.3      |
| 70°-80°   | 1736.7  | 15.1      |
| 80°-90°   | 187.9   | 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°    | 11525.8 | 100.0     |
| 0°-180°   | 11525.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P192941

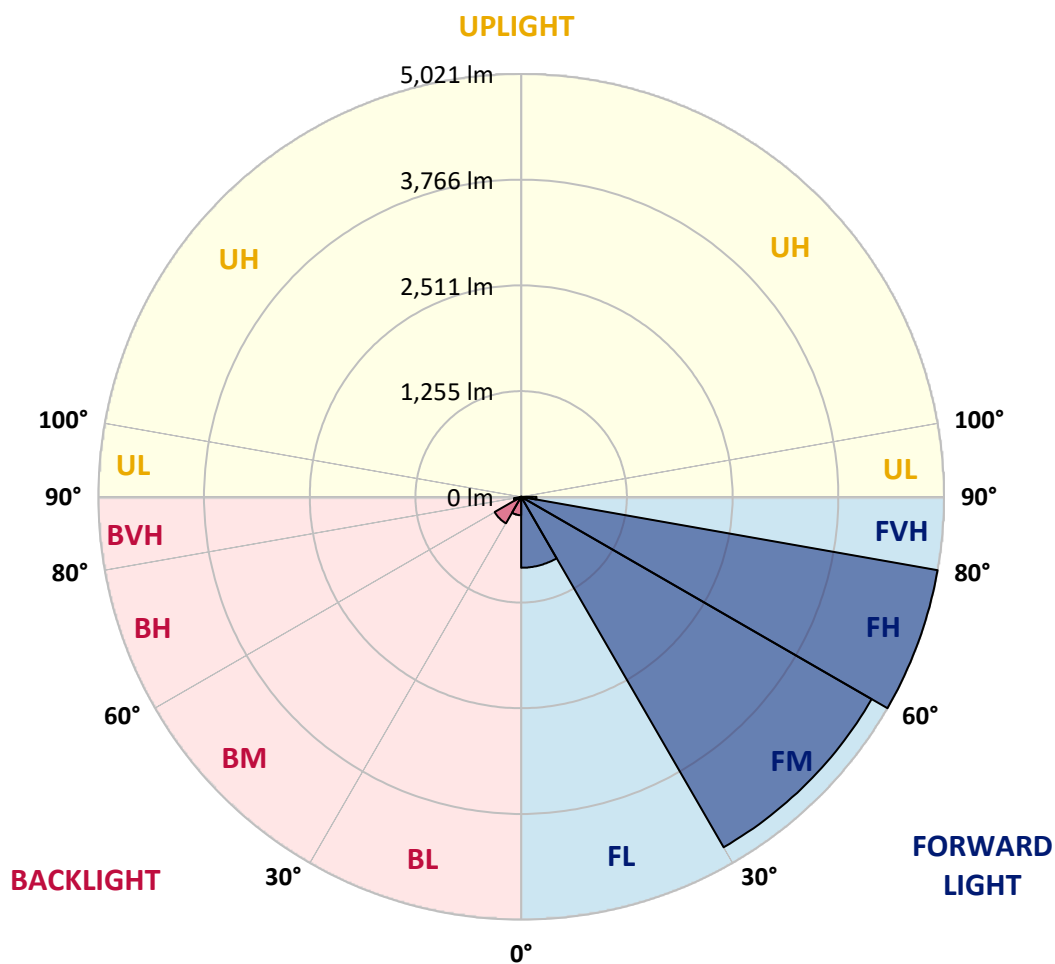
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 842.9  | 7.3       |                         |      |         |
| FM   | (30°-60°)   | 4805.5 | 41.7      |                         |      |         |
| FH   | (60°-80°)   | 5021.1 | 43.6      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 182.0  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 218.4  | 1.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 362.4  | 3.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 87.6   | 0.8       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 5.9    | 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-G3**

Type IV Short



REPORT NUMBER: P192941

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 40°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 |
| 2.5°  | 1890.7 | 1880.5 | 1874.4 | 1866.0 | 1855.8 | 1846.9 | 1843.4 | 1818.1 | 1794.0 | 1761.2 | 1723.3 |
| 5°    | 1925.8 | 1922.3 | 1911.4 | 1900.3 | 1888.0 | 1874.4 | 1866.8 | 1836.5 | 1802.2 | 1754.2 | 1688.4 |
| 7.5°  | 1929.2 | 1925.0 | 1911.4 | 1896.3 | 1879.2 | 1862.7 | 1849.6 | 1819.3 | 1787.9 | 1739.2 | 1658.9 |
| 10°   | 1923.7 | 1918.9 | 1908.6 | 1892.2 | 1870.8 | 1855.1 | 1842.1 | 1813.2 | 1786.5 | 1742.5 | 1653.4 |
| 12.5° | 1917.5 | 1912.7 | 1907.8 | 1899.7 | 1881.2 | 1870.2 | 1859.3 | 1831.7 | 1807.8 | 1770.8 | 1673.3 |
| 15°   | 1923.7 | 1921.0 | 1926.5 | 1923.1 | 1912.7 | 1903.1 | 1892.2 | 1867.5 | 1845.5 | 1814.6 | 1709.7 |
| 17.5° | 1949.7 | 1949.7 | 1966.8 | 1969.0 | 1959.3 | 1945.7 | 1929.8 | 1905.2 | 1886.7 | 1860.5 | 1752.8 |
| 20°   | 2010.8 | 2008.7 | 2030.7 | 2034.9 | 2011.6 | 1990.2 | 1966.8 | 1936.7 | 1922.3 | 1905.9 | 1795.4 |
| 22.5° | 2115.8 | 2106.2 | 2119.2 | 2115.2 | 2069.2 | 2036.3 | 2007.4 | 1970.4 | 1962.9 | 1955.3 | 1842.7 |
| 25°   | 2252.4 | 2246.8 | 2255.7 | 2215.2 | 2134.4 | 2089.7 | 2055.3 | 2013.5 | 2013.5 | 2021.1 | 1896.3 |
| 27.5° | 2450.5 | 2430.0 | 2399.9 | 2328.6 | 2207.0 | 2150.1 | 2113.1 | 2068.5 | 2080.1 | 2108.2 | 1966.8 |
| 30°   | 2653.7 | 2631.1 | 2561.7 | 2452.0 | 2295.5 | 2235.9 | 2192.7 | 2146.0 | 2173.3 | 2224.8 | 2061.6 |
| 32.5° | 2854.0 | 2828.6 | 2730.5 | 2591.9 | 2422.5 | 2362.8 | 2320.8 | 2269.6 | 2315.4 | 2401.8 | 2200.2 |
| 35°   | 3048.2 | 3025.5 | 2912.3 | 2749.1 | 2591.2 | 2541.8 | 2503.4 | 2458.9 | 2517.9 | 2638.6 | 2395.7 |
| 37.5° | 3266.3 | 3241.6 | 3103.7 | 2926.7 | 2796.4 | 2760.7 | 2732.6 | 2688.0 | 2790.9 | 2967.9 | 2668.1 |
| 40°   | 3534.5 | 3492.7 | 3306.8 | 3130.5 | 3033.8 | 3016.6 | 2997.4 | 2991.2 | 3151.0 | 3396.0 | 3031.0 |
| 42.5° | 3841.9 | 3773.4 | 3519.5 | 3345.2 | 3294.5 | 3306.8 | 3302.1 | 3329.4 | 3601.8 | 3928.4 | 3472.8 |
| 45°   | 4149.2 | 4060.7 | 3756.3 | 3574.4 | 3581.2 | 3624.4 | 3651.2 | 3760.9 | 4166.4 | 4538.9 | 3948.3 |
| 47.5° | 4410.0 | 4322.9 | 3983.3 | 3822.0 | 3904.4 | 3989.4 | 4062.2 | 4270.1 | 4746.9 | 5140.0 | 4318.0 |
| 50°   | 4632.9 | 4550.6 | 4224.1 | 4094.4 | 4279.6 | 4416.8 | 4534.8 | 4842.9 | 5371.1 | 5597.6 | 4577.4 |
| 52.5° | 4815.5 | 4760.5 | 4473.8 | 4406.5 | 4708.4 | 4909.4 | 5082.3 | 5451.4 | 5924.1 | 5969.4 | 4779.1 |
| 55°   | 4993.1 | 4954.1 | 4742.1 | 4777.7 | 5212.0 | 5485.7 | 5704.5 | 6097.0 | 6400.2 | 6279.4 | 4972.6 |
| 57.5° | 5197.6 | 5162.0 | 5048.0 | 5248.4 | 5874.0 | 6218.5 | 6457.2 | 6669.1 | 6819.4 | 6596.4 | 5155.1 |
| 60°   | 5406.1 | 5385.6 | 5388.3 | 5771.1 | 6634.2 | 6964.8 | 7096.6 | 7151.4 | 7231.1 | 6895.0 | 5165.3 |
| 62.5° | 5605.1 | 5644.3 | 5777.3 | 6352.9 | 7362.1 | 7615.9 | 7682.4 | 7736.6 | 7643.3 | 6942.3 | 4772.2 |
| 65°   | 5941.9 | 6005.8 | 6323.4 | 7131.6 | 8162.8 | 8434.4 | 8503.0 | 8317.2 | 7708.6 | 6330.3 | 3881.8 |
| 67.5° | 6106.6 | 6223.2 | 6789.9 | 7857.4 | 8939.4 | 9241.2 | 9215.8 | 8354.8 | 6917.5 | 4827.1 | 2491.1 |
| 69°   | 6072.3 | 6196.5 | 6897.6 | 8079.7 | 9197.3 | 9471.0 | 9309.9 | 7893.1 | 5893.2 | 3496.9 | 1529.2 |
| 70°   | 5936.5 | 6062.0 | 6842.1 | 8071.5 | 9230.2 | 9447.0 | 9135.6 | 7323.0 | 4982.9 | 2557.0 | 956.3  |
| 72.5° | 4957.4 | 5065.8 | 6074.4 | 7295.6 | 8503.0 | 8326.6 | 7642.6 | 5073.5 | 2428.0 | 696.3  | 215.5  |
| 75°   | 3051.6 | 3111.9 | 4358.6 | 5496.1 | 6422.2 | 5969.4 | 5091.9 | 2524.0 | 723.9  | 196.8  | 119.4  |
| 77.5° | 1612.2 | 1639.7 | 2386.1 | 3239.5 | 4071.1 | 3368.6 | 2609.7 | 984.5  | 333.5  | 123.5  | 86.5   |
| 80°   | 953.0  | 973.5  | 1285.0 | 1481.2 | 1761.8 | 1471.6 | 1043.5 | 604.4  | 238.7  | 77.6   | 76.8   |
| 82.5° | 545.4  | 558.5  | 931.7  | 823.3  | 694.4  | 592.7  | 519.3  | 572.8  | 143.3  | 52.1   | 79.5   |
| 85°   | 200.4  | 203.1  | 524.1  | 626.4  | 413.0  | 245.7  | 258.0  | 474.7  | 38.5   | 32.9   | 62.4   |
| 87.5° | 93.3   | 91.2   | 269.7  | 383.5  | 241.5  | 155.7  | 201.0  | 104.3  | 15.1   | 21.3   | 17.2   |
| 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: P192941

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-7030-800-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 | 1722.0 |
| 2.5°  | 1701.3 | 1676.0 | 1630.0 | 1582.7 | 1534.8 | 1497.6 | 1461.4 | 1432.5 | 1422.9 | 1405.1 | 1406.3 |
| 5°    | 1649.3 | 1602.7 | 1506.5 | 1409.1 | 1307.7 | 1223.9 | 1145.0 | 1081.2 | 1050.3 | 1018.9 | 1018.9 |
| 7.5°  | 1604.0 | 1536.0 | 1385.9 | 1227.3 | 1063.4 | 925.5  | 801.3  | 708.0  | 656.5  | 615.3  | 614.7  |
| 10°   | 1586.9 | 1494.8 | 1285.0 | 1057.8 | 829.5  | 641.5  | 494.0  | 399.3  | 350.6  | 319.0  | 317.6  |
| 12.5° | 1594.4 | 1480.5 | 1207.5 | 901.5  | 614.7  | 412.4  | 286.0  | 225.1  | 204.5  | 194.8  | 194.8  |
| 15°   | 1616.4 | 1476.4 | 1130.0 | 748.5  | 434.3  | 258.0  | 190.0  | 173.6  | 172.2  | 172.2  | 172.2  |
| 17.5° | 1643.2 | 1477.7 | 1050.3 | 599.7  | 295.6  | 184.5  | 164.0  | 161.9  | 163.3  | 163.3  | 163.3  |
| 20°   | 1670.6 | 1478.5 | 964.6  | 461.7  | 208.5  | 160.5  | 154.4  | 153.7  | 155.0  | 155.0  | 155.7  |
| 22.5° | 1704.1 | 1481.9 | 878.9  | 345.0  | 172.2  | 151.7  | 146.9  | 146.9  | 147.5  | 147.5  | 146.9  |
| 25°   | 1742.5 | 1488.7 | 789.6  | 255.8  | 157.2  | 145.5  | 141.4  | 140.6  | 141.4  | 140.6  | 140.0  |
| 27.5° | 1790.6 | 1498.4 | 690.2  | 200.4  | 150.2  | 139.3  | 135.8  | 135.8  | 135.2  | 134.5  | 133.8  |
| 30°   | 1851.0 | 1509.3 | 578.3  | 170.1  | 143.3  | 133.8  | 130.3  | 129.7  | 128.9  | 127.7  | 127.7  |
| 32.5° | 1942.9 | 1533.4 | 467.8  | 154.4  | 135.8  | 126.2  | 123.5  | 123.5  | 122.2  | 120.7  | 120.0  |
| 35°   | 2084.2 | 1580.7 | 369.1  | 144.8  | 127.7  | 118.0  | 114.6  | 114.6  | 113.2  | 112.5  | 111.9  |
| 37.5° | 2279.8 | 1652.8 | 286.8  | 135.8  | 119.4  | 109.0  | 105.7  | 105.0  | 103.6  | 102.2  | 101.5  |
| 40°   | 2539.8 | 1741.9 | 225.7  | 127.7  | 111.1  | 100.2  | 97.5   | 96.0   | 93.3   | 91.2   | 91.2   |
| 42.5° | 2866.3 | 1843.4 | 183.2  | 118.6  | 101.5  | 91.9   | 89.9   | 87.9   | 83.0   | 81.0   | 80.3   |
| 45°   | 3208.0 | 1934.7 | 155.0  | 108.3  | 91.9   | 83.7   | 82.4   | 78.8   | 72.7   | 70.7   | 70.7   |
| 47.5° | 3454.3 | 1956.0 | 136.6  | 98.8   | 83.0   | 74.8   | 74.1   | 68.0   | 62.4   | 61.0   | 60.4   |
| 50°   | 3608.0 | 1914.1 | 121.4  | 89.1   | 74.8   | 66.5   | 64.5   | 57.0   | 53.5   | 52.1   | 51.5   |
| 52.5° | 3711.5 | 1839.3 | 109.0  | 81.0   | 67.2   | 59.0   | 54.2   | 48.7   | 46.0   | 44.6   | 44.6   |
| 55°   | 3794.6 | 1733.6 | 96.7   | 73.4   | 61.0   | 52.8   | 46.0   | 41.8   | 39.2   | 37.7   | 37.7   |
| 57.5° | 3817.9 | 1590.3 | 84.3   | 67.2   | 54.8   | 46.7   | 39.2   | 36.4   | 32.9   | 32.2   | 32.2   |
| 60°   | 3648.5 | 1331.7 | 74.8   | 59.6   | 49.3   | 40.4   | 34.3   | 30.9   | 27.5   | 26.8   | 26.1   |
| 62.5° | 3201.9 | 1030.5 | 65.9   | 52.8   | 43.2   | 35.0   | 29.5   | 25.3   | 22.6   | 22.6   | 22.6   |
| 65°   | 2442.4 | 690.8  | 57.6   | 46.0   | 37.7   | 29.5   | 25.3   | 20.5   | 19.2   | 19.2   | 19.8   |
| 67.5° | 1462.0 | 376.0  | 49.3   | 39.2   | 32.2   | 24.7   | 21.3   | 17.8   | 17.2   | 17.8   | 17.8   |
| 69°   | 856.9  | 220.9  | 44.6   | 35.0   | 28.1   | 22.0   | 18.6   | 15.8   | 17.2   | 17.8   | 17.8   |
| 70°   | 529.0  | 148.9  | 41.2   | 31.5   | 25.3   | 19.8   | 17.2   | 15.1   | 16.5   | 17.2   | 17.2   |
| 72.5° | 147.5  | 76.8   | 32.9   | 24.7   | 20.5   | 16.5   | 13.7   | 13.7   | 15.8   | 16.5   | 16.5   |
| 75°   | 96.0   | 57.0   | 25.3   | 18.6   | 15.8   | 13.0   | 11.7   | 13.0   | 15.1   | 15.8   | 15.8   |
| 77.5° | 79.5   | 46.7   | 20.5   | 15.1   | 13.0   | 12.3   | 10.9   | 11.7   | 13.7   | 14.4   | 14.4   |
| 80°   | 72.7   | 32.9   | 16.5   | 13.7   | 11.7   | 10.9   | 10.3   | 9.7    | 12.3   | 13.0   | 13.0   |
| 82.5° | 69.3   | 26.1   | 14.4   | 12.3   | 10.9   | 9.7    | 9.0    | 9.7    | 10.9   | 11.7   | 12.3   |
| 85°   | 43.2   | 17.2   | 13.0   | 11.7   | 9.7    | 9.0    | 9.0    | 9.0    | 10.3   | 10.9   | 10.9   |
| 87.5° | 15.8   | 13.7   | 11.7   | 9.7    | 8.2    | 8.2    | 8.2    | 8.2    | 9.0    | 10.3   | 10.3   |
| 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)