

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P637217

Luminaire Tested: GWS-SA4C-735-U-SLL-W

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P637217  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4C-735-U-SLL-W  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS  
Light Source: (64) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

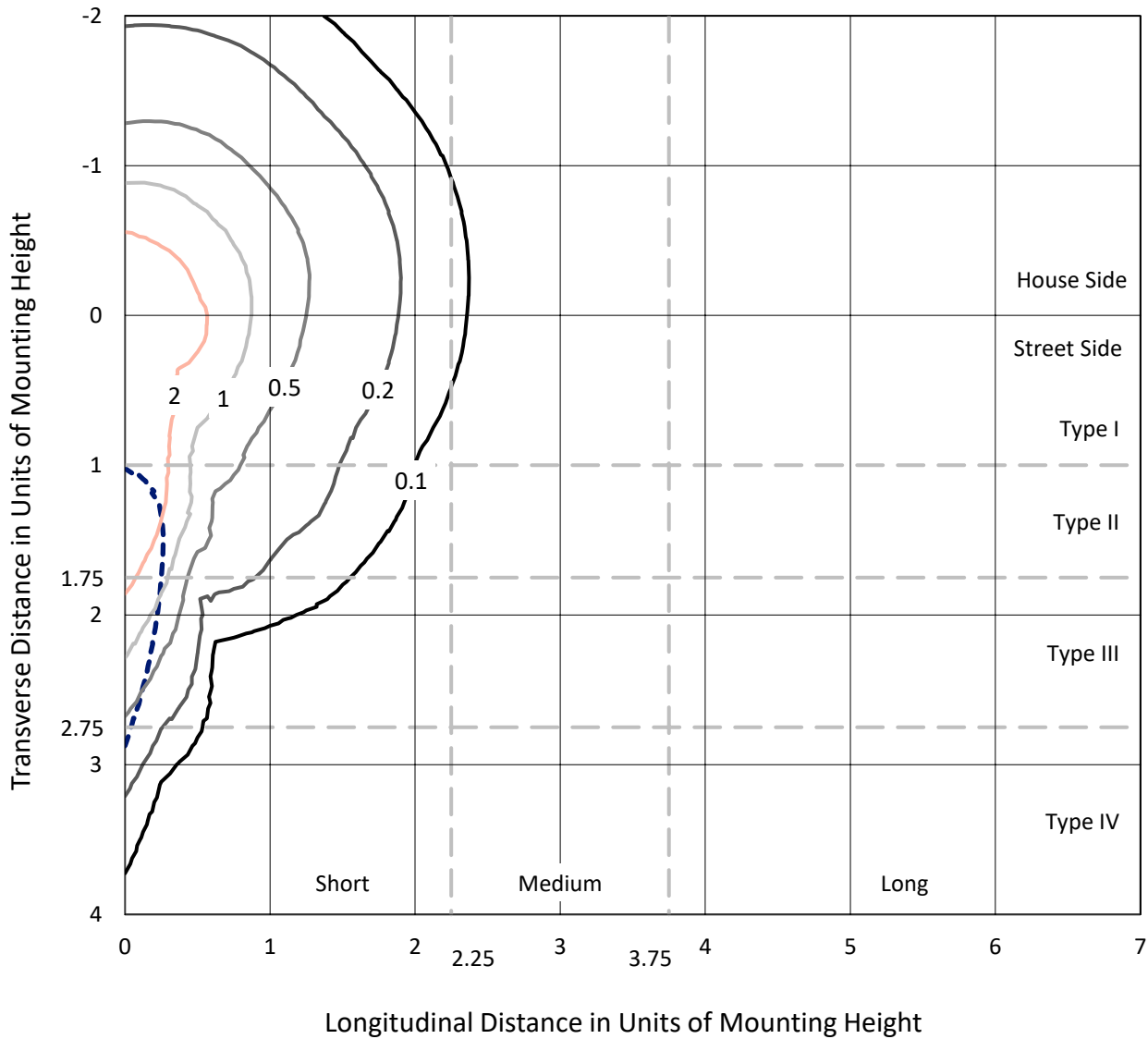
Lumens per Lamp: N/A  
Luminaire Lumens: 17944 lumens  
Efficiency: N/A  
Efficacy: 139.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 128.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

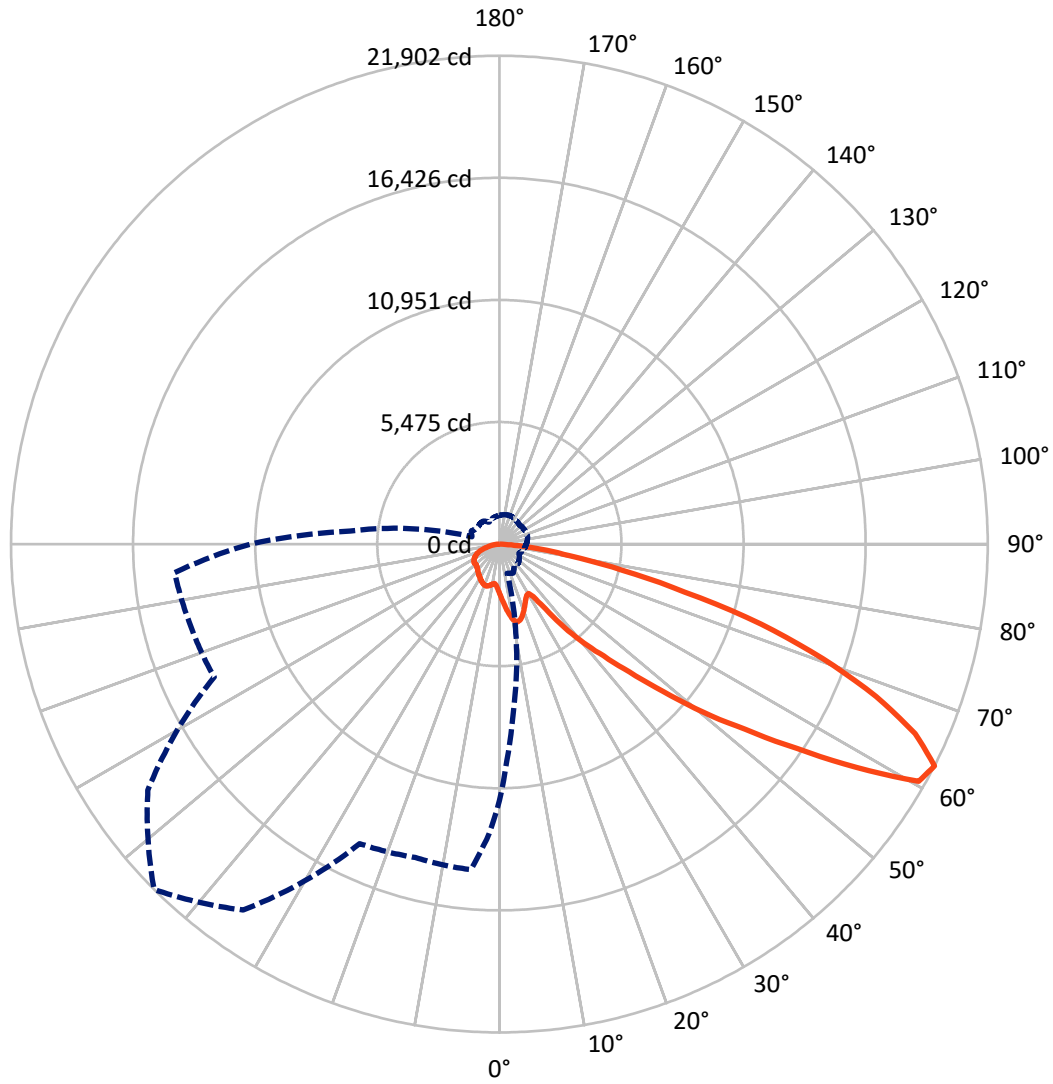
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type III - Short - N/A

REPORT NUMBER: P637217  
CATALOG NUMBER: GWS-SA4C-735-U-SLL-W

### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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CATALOG NUMBER: GWS-SA4C-735-U-SLL-W

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4290.4   | 0.0    | 4290.4  |
|                    | % Fixture | 23.9     | 0.0    | 23.9    |
| <b>Street Side</b> | Lumens    | 13653.6  | 0.0    | 13653.6 |
|                    | % Fixture | 76.1     | 0.0    | 76.1    |
| <b>Total</b>       | Lumens    | 17944.0  | 0.0    | 17944.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 220.4   | 1.2       |
| 10°-20°   | 716.3   | 4.0       |
| 20°-30°   | 1127.6  | 6.3       |
| 30°-40°   | 1545.6  | 8.6       |
| 40°-50°   | 2411.7  | 13.4      |
| 50°-60°   | 4158.2  | 23.2      |
| 60°-70°   | 4818.8  | 26.9      |
| 70°-80°   | 2543.6  | 14.2      |
| 80°-90°   | 401.8   | 2.2       |
| 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°    | 17944.0 | 100.0     |
| 0°-180°   | 17944.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P637217

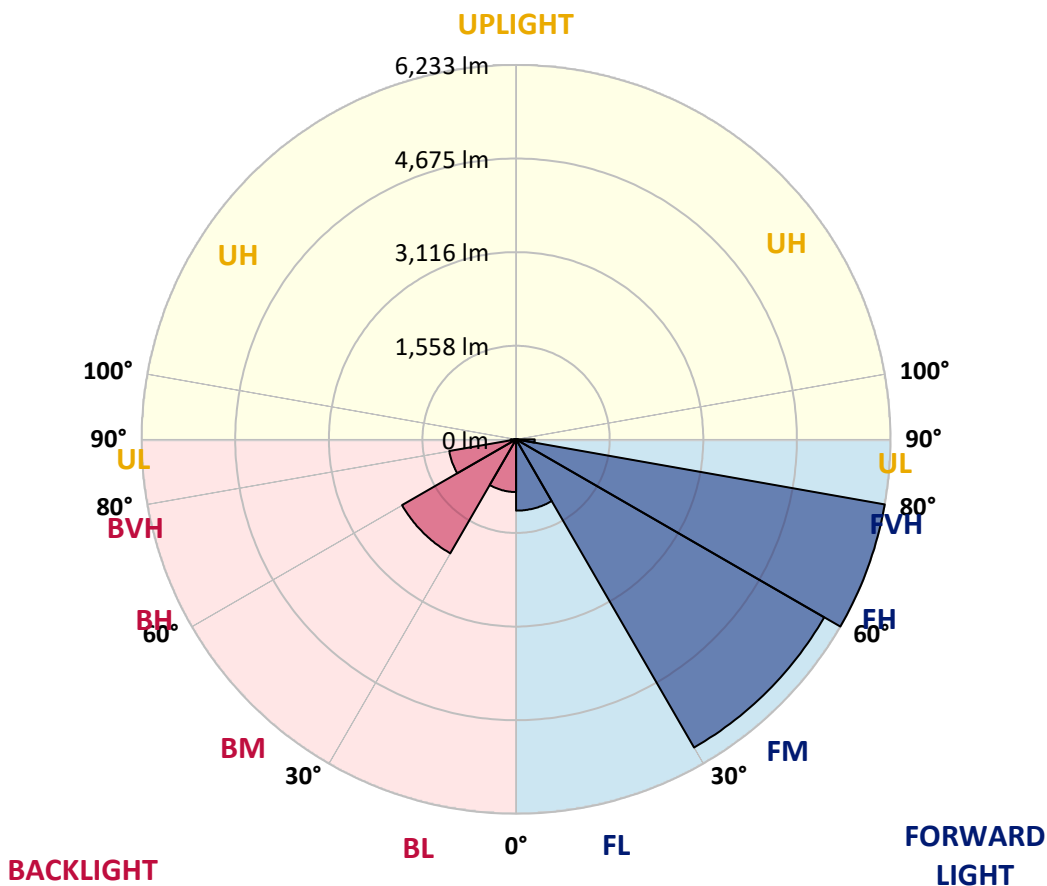
CATALOG NUMBER: GWS-SA4C-735-U-SLL-W

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1186.8 | 6.6       |                         |      |         |
| FM (30°-60°)   | 5923.9 | 33.0      |                         |      |         |
| FH (60°-80°)   | 6232.7 | 34.7      |                         |      | G3/7500 |
| FVH (80°-90°)  | 310.1  | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 877.5  | 4.9       | B2/1000                 |      |         |
| BM (30°-60°)   | 2191.5 | 12.2      | B2/2500                 |      |         |
| BH (60°-80°)   | 1129.7 | 6.3       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 91.7   | 0.5       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type III Short





REPORT NUMBER: P637217  
 CATALOG NUMBER: GWS-SA4C-735-U-SLL-W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 2°      | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2237.2  | 2237.2  | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 |
| 2.5°  | 2430.8  | 2421.2  | 2407.4 | 2360.8 | 2332.0 | 2299.0 | 2264.7 | 2224.9 | 2179.6 | 2148.0 | 2116.5 |
| 5°    | 2636.7  | 2621.6  | 2588.6 | 2477.4 | 2400.6 | 2316.9 | 2246.9 | 2167.2 | 2089.0 | 2035.5 | 1982.0 |
| 7.5°  | 2834.3  | 2815.1  | 2764.3 | 2594.1 | 2469.2 | 2348.4 | 2242.7 | 2127.4 | 2010.8 | 1931.2 | 1868.0 |
| 10°   | 3031.9  | 2992.1  | 2927.6 | 2705.3 | 2540.6 | 2400.6 | 2279.8 | 2138.4 | 1983.3 | 1874.9 | 1807.6 |
| 12.5° | 3182.9  | 3145.9  | 3075.9 | 2806.9 | 2611.9 | 2436.3 | 2300.4 | 2170.0 | 2038.2 | 1922.9 | 1854.3 |
| 15°   | 3324.3  | 3276.3  | 3196.7 | 2901.6 | 2671.0 | 2434.9 | 2259.2 | 2145.3 | 2126.1 | 2097.2 | 2008.0 |
| 17.5° | 3425.9  | 3381.9  | 3299.6 | 2978.4 | 2703.9 | 2392.3 | 2145.3 | 2078.0 | 2164.5 | 2252.3 | 2167.2 |
| 20°   | 3515.1  | 3464.3  | 3380.6 | 3031.9 | 2710.8 | 2297.6 | 2006.7 | 2008.0 | 2143.9 | 2264.7 | 2244.1 |
| 22.5° | 3590.6  | 3534.3  | 3460.2 | 3092.3 | 2708.0 | 2165.9 | 1885.9 | 1968.2 | 2104.1 | 2198.8 | 2201.6 |
| 25°   | 3683.9  | 3637.2  | 3575.5 | 3181.6 | 2708.0 | 2031.4 | 1798.0 | 1920.2 | 2036.9 | 2116.5 | 2113.7 |
| 27.5° | 3797.8  | 3766.3  | 3715.5 | 3317.4 | 2732.7 | 1918.8 | 1748.6 | 1858.4 | 1950.4 | 2019.0 | 2017.6 |
| 30°   | 3925.5  | 3896.6  | 3858.2 | 3461.6 | 2775.3 | 1835.1 | 1721.2 | 1781.6 | 1848.8 | 1903.7 | 1903.7 |
| 32.5° | 4055.9  | 4044.9  | 4003.7 | 3576.8 | 2742.3 | 1809.0 | 1697.8 | 1704.7 | 1740.4 | 1785.7 | 1781.6 |
| 35°   | 4237.0  | 4226.1  | 4173.9 | 3666.1 | 2599.6 | 1772.0 | 1660.8 | 1626.5 | 1630.6 | 1659.4 | 1669.0 |
| 37.5° | 4501.9  | 4485.5  | 4408.6 | 3770.4 | 2384.1 | 1678.6 | 1600.4 | 1544.1 | 1531.8 | 1544.1 | 1562.0 |
| 40°   | 4821.7  | 4797.0  | 4692.7 | 3911.7 | 2135.7 | 1552.3 | 1505.7 | 1459.0 | 1438.4 | 1442.5 | 1463.1 |
| 42.5° | 5222.5  | 5170.4  | 5020.8 | 4061.4 | 1890.0 | 1441.2 | 1400.0 | 1371.2 | 1347.8 | 1345.1 | 1384.9 |
| 45°   | 5873.1  | 5730.4  | 5492.9 | 4194.5 | 1682.7 | 1382.2 | 1305.3 | 1284.7 | 1265.5 | 1276.5 | 1323.1 |
| 47.5° | 7009.6  | 6746.0  | 6283.5 | 4308.4 | 1556.5 | 1383.5 | 1229.8 | 1207.8 | 1206.5 | 1228.4 | 1280.6 |
| 50°   | 8571.5  | 8191.3  | 7477.6 | 4385.3 | 1490.6 | 1400.0 | 1184.5 | 1148.8 | 1174.9 | 1196.9 | 1246.3 |
| 52.5° | 10067.6 | 9487.0  | 8637.4 | 4383.9 | 1461.8 | 1402.7 | 1196.9 | 1093.9 | 1174.9 | 1180.4 | 1227.1 |
| 55°   | 11345.4 | 10294.1 | 8950.4 | 3933.7 | 1420.6 | 1391.8 | 1244.9 | 1051.4 | 1159.8 | 1180.4 | 1217.4 |
| 57.5° | 12361.1 | 10807.4 | 8927.0 | 3177.4 | 1545.5 | 1331.4 | 1273.7 | 1041.8 | 1115.9 | 1183.1 | 1225.7 |
| 60°   | 12248.6 | 10572.7 | 8351.9 | 1950.4 | 1533.1 | 1224.3 | 1269.6 | 1059.6 | 1041.8 | 1146.1 | 1216.1 |
| 62.5° | 11500.5 | 9731.3  | 7362.3 | 1353.3 | 1439.8 | 1162.5 | 1202.3 | 1091.2 | 973.1  | 1092.5 | 1169.4 |
| 65°   | 10453.3 | 8645.6  | 6135.3 | 1037.6 | 1192.7 | 1165.3 | 1088.4 | 1069.2 | 912.7  | 1007.4 | 1089.8 |
| 67.5° | 9068.4  | 7299.2  | 4843.7 | 822.2  | 831.8  | 1008.8 | 988.2  | 949.8  | 856.5  | 932.0  | 1006.1 |
| 70°   | 6817.4  | 5326.8  | 3332.5 | 661.6  | 630.0  | 842.7  | 888.0  | 853.7  | 801.6  | 823.5  | 901.8  |
| 72.5° | 4803.9  | 3478.0  | 1825.5 | 524.3  | 485.9  | 647.8  | 771.4  | 765.9  | 708.2  | 724.7  | 801.6  |
| 75°   | 3570.0  | 2461.0  | 1140.6 | 414.5  | 395.3  | 463.9  | 646.5  | 662.9  | 614.9  | 634.1  | 693.1  |
| 77.5° | 2375.9  | 1593.5  | 634.1  | 307.4  | 307.4  | 339.0  | 481.8  | 558.6  | 522.9  | 538.0  | 579.2  |
| 80°   | 1310.8  | 811.2   | 317.1  | 201.8  | 207.3  | 233.3  | 351.4  | 402.2  | 403.5  | 440.6  | 451.6  |
| 82.5° | 414.5   | 258.0   | 141.4  | 118.0  | 111.2  | 133.1  | 226.5  | 288.2  | 269.0  | 343.1  | 315.7  |
| 85°   | 94.7    | 60.4    | 26.1   | 26.1   | 28.8   | 43.9   | 86.5   | 153.7  | 196.3  | 236.1  | 171.6  |
| 87.5° | 0.0     | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.4    | 60.4   | 89.2   | 79.6   |
| 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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 CATALOG NUMBER: GWS-SA4C-735-U-SLL-W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 |
| 2.5°  | 2097.2 | 2069.8 | 2061.6 | 2038.2 | 2035.5 | 2013.5 | 2005.3 | 2005.3 | 2014.9 | 2014.9 | 2024.5 |
| 5°    | 1960.0 | 1925.7 | 1906.5 | 1879.0 | 1872.1 | 1855.7 | 1844.7 | 1846.1 | 1858.4 | 1866.7 | 1883.1 |
| 7.5°  | 1839.2 | 1815.9 | 1802.1 | 1789.8 | 1787.1 | 1784.3 | 1772.0 | 1770.6 | 1774.7 | 1787.1 | 1799.4 |
| 10°   | 1788.4 | 1772.0 | 1776.1 | 1785.7 | 1800.8 | 1809.0 | 1798.0 | 1792.5 | 1788.4 | 1796.7 | 1807.6 |
| 12.5° | 1837.8 | 1821.4 | 1829.6 | 1846.1 | 1866.7 | 1874.9 | 1870.8 | 1869.4 | 1873.5 | 1905.1 | 1928.4 |
| 15°   | 1946.3 | 1914.7 | 1903.7 | 1910.6 | 1927.1 | 1935.3 | 1931.2 | 1936.7 | 1962.7 | 2045.1 | 2104.1 |
| 17.5° | 2080.8 | 2003.9 | 1960.0 | 1947.6 | 1954.5 | 1961.4 | 1961.4 | 1975.1 | 2020.4 | 2141.2 | 2215.3 |
| 20°   | 2153.5 | 2053.3 | 1979.2 | 1949.0 | 1951.8 | 1958.6 | 1958.6 | 1977.8 | 2028.6 | 2157.6 | 2205.7 |
| 22.5° | 2134.3 | 2042.3 | 1951.8 | 1918.8 | 1920.2 | 1925.7 | 1925.7 | 1942.1 | 1987.4 | 2101.4 | 2123.3 |
| 25°   | 2058.8 | 1977.8 | 1888.6 | 1859.8 | 1862.5 | 1872.1 | 1869.4 | 1879.0 | 1913.3 | 2006.7 | 2019.0 |
| 27.5° | 1968.2 | 1896.9 | 1809.0 | 1787.1 | 1799.4 | 1818.6 | 1802.1 | 1803.5 | 1835.1 | 1913.3 | 1914.7 |
| 30°   | 1870.8 | 1811.8 | 1733.5 | 1717.1 | 1740.4 | 1750.0 | 1734.9 | 1734.9 | 1766.5 | 1820.0 | 1818.6 |
| 32.5° | 1765.1 | 1728.0 | 1671.8 | 1653.9 | 1680.0 | 1695.1 | 1675.9 | 1678.6 | 1703.3 | 1739.0 | 1725.3 |
| 35°   | 1666.3 | 1647.1 | 1621.0 | 1608.6 | 1625.1 | 1638.8 | 1626.5 | 1632.0 | 1655.3 | 1664.9 | 1645.7 |
| 37.5° | 1571.6 | 1568.8 | 1571.6 | 1571.6 | 1575.7 | 1579.8 | 1571.6 | 1585.3 | 1605.9 | 1593.5 | 1571.6 |
| 40°   | 1489.2 | 1500.2 | 1526.3 | 1519.4 | 1515.3 | 1519.4 | 1513.9 | 1537.2 | 1557.8 | 1535.9 | 1509.8 |
| 42.5° | 1420.6 | 1441.2 | 1481.0 | 1481.0 | 1472.7 | 1475.5 | 1472.7 | 1501.6 | 1516.7 | 1486.5 | 1457.6 |
| 45°   | 1361.6 | 1391.8 | 1442.5 | 1449.4 | 1435.7 | 1435.7 | 1441.2 | 1476.9 | 1482.3 | 1441.2 | 1411.0 |
| 47.5° | 1320.4 | 1357.4 | 1415.1 | 1427.4 | 1406.9 | 1405.5 | 1420.6 | 1459.0 | 1459.0 | 1411.0 | 1376.7 |
| 50°   | 1291.6 | 1332.7 | 1401.4 | 1417.8 | 1397.2 | 1391.8 | 1416.5 | 1453.5 | 1445.3 | 1387.6 | 1353.3 |
| 52.5° | 1272.3 | 1314.9 | 1400.0 | 1423.3 | 1409.6 | 1404.1 | 1428.8 | 1454.9 | 1434.3 | 1372.5 | 1336.9 |
| 55°   | 1260.0 | 1306.7 | 1404.1 | 1423.3 | 1408.2 | 1398.6 | 1423.3 | 1446.7 | 1435.7 | 1364.3 | 1330.0 |
| 57.5° | 1266.9 | 1313.5 | 1398.6 | 1408.2 | 1390.4 | 1373.9 | 1402.7 | 1435.7 | 1431.6 | 1367.1 | 1332.7 |
| 60°   | 1255.9 | 1298.4 | 1368.4 | 1371.2 | 1341.0 | 1314.9 | 1357.4 | 1406.9 | 1406.9 | 1357.4 | 1327.2 |
| 62.5° | 1205.1 | 1247.6 | 1309.4 | 1312.2 | 1277.8 | 1249.0 | 1298.4 | 1357.4 | 1356.1 | 1316.3 | 1284.7 |
| 65°   | 1121.4 | 1161.2 | 1231.2 | 1238.0 | 1203.7 | 1173.5 | 1224.3 | 1279.2 | 1283.3 | 1247.6 | 1220.2 |
| 67.5° | 1029.4 | 1065.1 | 1117.3 | 1144.7 | 1115.9 | 1084.3 | 1131.0 | 1183.1 | 1181.8 | 1139.2 | 1110.4 |
| 70°   | 919.6  | 952.5  | 1000.6 | 1023.9 | 1006.1 | 975.9  | 1018.4 | 1045.9 | 1033.5 | 1012.9 | 993.7  |
| 72.5° | 811.2  | 842.7  | 888.0  | 888.0  | 868.8  | 840.0  | 852.3  | 901.8  | 916.9  | 901.8  | 889.4  |
| 75°   | 697.3  | 724.7  | 756.3  | 763.1  | 720.6  | 668.4  | 726.1  | 768.6  | 786.5  | 779.6  | 764.5  |
| 77.5° | 580.6  | 601.2  | 647.8  | 635.5  | 555.9  | 528.4  | 575.1  | 638.2  | 650.6  | 646.5  | 625.9  |
| 80°   | 447.4  | 459.8  | 509.2  | 484.5  | 422.7  | 404.9  | 425.5  | 474.9  | 477.6  | 463.9  | 437.8  |
| 82.5° | 300.6  | 317.1  | 350.0  | 302.0  | 300.6  | 284.1  | 267.6  | 273.1  | 297.8  | 295.1  | 277.3  |
| 85°   | 153.7  | 162.0  | 193.5  | 181.2  | 155.1  | 134.5  | 127.6  | 135.9  | 122.2  | 111.2  | 96.1   |
| 87.5° | 64.5   | 70.0   | 96.1   | 53.5   | 16.5   | 0.0    | 0.0    | 8.2    | 12.4   | 17.8   | 19.2   |
| 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):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°    | 275°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 0°    | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2 | 2237.2  | 2237.2  |
| 2.5°  | 2046.5 | 2061.6 | 2098.6 | 2145.3 | 2190.6 | 2237.2 | 2288.0 | 2319.6 | 2358.0 | 2407.4  | 2408.8  |
| 5°    | 1903.7 | 1938.0 | 1991.6 | 2062.9 | 2137.0 | 2222.1 | 2321.0 | 2403.3 | 2502.1 | 2580.4  | 2611.9  |
| 7.5°  | 1815.9 | 1865.3 | 1932.5 | 2023.1 | 2120.6 | 2226.3 | 2355.3 | 2493.9 | 2655.9 | 2760.2  | 2821.9  |
| 10°   | 1824.1 | 1899.6 | 1966.9 | 2043.7 | 2131.6 | 2245.5 | 2411.6 | 2595.5 | 2794.5 | 2931.8  | 3008.6  |
| 12.5° | 1971.0 | 2050.6 | 2038.2 | 2034.1 | 2093.1 | 2231.8 | 2456.9 | 2698.4 | 2941.4 | 3078.6  | 3170.6  |
| 15°   | 2156.3 | 2186.5 | 2069.8 | 1982.0 | 2017.6 | 2182.3 | 2481.6 | 2790.4 | 3063.5 | 3231.0  | 3321.6  |
| 17.5° | 2251.0 | 2190.6 | 2049.2 | 1917.4 | 1907.8 | 2106.9 | 2493.9 | 2883.7 | 3200.8 | 3368.2  | 3464.3  |
| 20°   | 2207.0 | 2119.2 | 1999.8 | 1874.9 | 1806.3 | 2003.9 | 2487.0 | 2957.8 | 3325.7 | 3512.3  | 3590.6  |
| 22.5° | 2112.3 | 2035.5 | 1942.1 | 1822.7 | 1723.9 | 1891.4 | 2469.2 | 3031.9 | 3436.8 | 3624.9  | 3693.5  |
| 25°   | 2009.4 | 1951.8 | 1874.9 | 1770.6 | 1677.2 | 1792.5 | 2456.9 | 3130.8 | 3564.5 | 3744.3  | 3788.2  |
| 27.5° | 1906.5 | 1863.9 | 1800.8 | 1719.8 | 1666.3 | 1723.9 | 2461.0 | 3259.8 | 3729.2 | 3899.4  | 3881.6  |
| 30°   | 1804.9 | 1767.8 | 1723.9 | 1688.2 | 1664.9 | 1707.4 | 2450.0 | 3397.0 | 3910.4 | 4068.2  | 3962.5  |
| 32.5° | 1708.8 | 1674.5 | 1647.1 | 1652.5 | 1666.3 | 1714.3 | 2393.7 | 3521.9 | 4076.5 | 4211.0  | 4050.4  |
| 35°   | 1626.5 | 1590.8 | 1590.8 | 1610.0 | 1660.8 | 1691.0 | 2248.2 | 3619.4 | 4260.4 | 4394.9  | 4175.3  |
| 37.5° | 1549.6 | 1518.0 | 1538.6 | 1570.2 | 1618.2 | 1627.8 | 2061.6 | 3714.1 | 4528.0 | 4654.3  | 4368.8  |
| 40°   | 1482.3 | 1450.8 | 1487.8 | 1527.6 | 1552.3 | 1548.2 | 1872.1 | 3845.9 | 4843.7 | 4974.1  | 4625.5  |
| 42.5° | 1428.8 | 1400.0 | 1432.9 | 1483.7 | 1487.8 | 1492.0 | 1733.5 | 3972.1 | 5210.2 | 5376.3  | 5067.4  |
| 45°   | 1384.9 | 1364.3 | 1380.8 | 1431.6 | 1431.6 | 1494.7 | 1647.1 | 4077.8 | 5761.9 | 6055.7  | 5878.6  |
| 47.5° | 1350.6 | 1338.2 | 1346.5 | 1362.9 | 1390.4 | 1544.1 | 1592.1 | 4158.8 | 6766.6 | 7343.1  | 7164.7  |
| 50°   | 1331.4 | 1319.0 | 1330.0 | 1295.7 | 1378.0 | 1568.8 | 1574.3 | 4220.6 | 8091.1 | 8994.3  | 8773.3  |
| 52.5° | 1314.9 | 1310.8 | 1317.6 | 1238.0 | 1405.5 | 1552.3 | 1560.6 | 4138.2 | 8979.2 | 10619.4 | 10837.6 |
| 55°   | 1309.4 | 1312.2 | 1279.2 | 1195.5 | 1438.4 | 1497.4 | 1519.4 | 3549.4 | 9220.7 | 12020.7 | 13375.4 |
| 57.5° | 1312.2 | 1303.9 | 1220.2 | 1199.6 | 1439.8 | 1387.6 | 1578.4 | 2532.3 | 8869.4 | 12630.1 | 15858.4 |
| 60°   | 1302.5 | 1261.4 | 1148.8 | 1236.7 | 1376.7 | 1258.6 | 1535.9 | 1651.2 | 7942.9 | 12162.1 | 16002.5 |
| 62.5° | 1260.0 | 1199.6 | 1087.1 | 1257.2 | 1264.1 | 1181.8 | 1394.5 | 1272.3 | 6707.6 | 11160.1 | 14613.5 |
| 65°   | 1198.2 | 1117.3 | 1034.9 | 1214.7 | 1150.2 | 1146.1 | 1048.6 | 1019.8 | 5394.1 | 9967.4  | 13295.8 |
| 67.5° | 1096.7 | 1015.7 | 996.5  | 1117.3 | 1034.9 | 1015.7 | 842.7  | 845.5  | 4304.3 | 8696.4  | 11971.3 |
| 70°   | 981.4  | 900.4  | 915.5  | 1010.2 | 921.0  | 844.1  | 682.2  | 704.1  | 3265.3 | 7245.7  | 10185.6 |
| 72.5° | 905.9  | 797.4  | 798.8  | 889.4  | 809.8  | 683.5  | 561.4  | 580.6  | 2072.5 | 5461.3  | 8098.0  |
| 75°   | 764.5  | 702.7  | 672.5  | 720.6  | 687.6  | 532.5  | 472.2  | 468.0  | 1228.4 | 3914.5  | 6063.9  |
| 77.5° | 638.2  | 590.2  | 575.1  | 594.3  | 513.3  | 393.9  | 380.2  | 373.3  | 695.9  | 2507.6  | 3973.5  |
| 80°   | 462.5  | 450.2  | 448.8  | 458.4  | 395.3  | 289.6  | 289.6  | 291.0  | 374.7  | 1361.6  | 2240.0  |
| 82.5° | 293.7  | 321.2  | 284.1  | 315.7  | 269.0  | 205.9  | 192.2  | 218.2  | 215.5  | 580.6   | 944.3   |
| 85°   | 122.2  | 167.5  | 156.5  | 166.1  | 127.6  | 112.5  | 120.8  | 130.4  | 124.9  | 223.7   | 367.8   |
| 87.5° | 23.3   | 27.5   | 30.2   | 28.8   | 28.8   | 35.7   | 39.8   | 48.0   | 48.0   | 64.5    | 111.2   |
| 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: P637217

CATALOG NUMBER: GWS-SA4C-735-U-SLL-W

**CANDELA DISTRIBUTION (continued):**

|       | 285°    | 295°    | 305°    | 315°    | 325°    | 335°    | 345°    | 355°    | 358°    | 360°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2237.2  | 2237.2  | 2237.2  | 2237.2  | 2237.2  | 2237.2  | 2237.2  | 2237.2  | 2237.2  | 2237.2  |
| 2.5°  | 2461.0  | 2500.8  | 2492.5  | 2510.4  | 2487.0  | 2495.3  | 2448.6  | 2436.3  | 2428.0  | 2430.8  |
| 5°    | 2713.5  | 2794.5  | 2809.6  | 2839.8  | 2819.2  | 2819.2  | 2736.9  | 2675.1  | 2653.1  | 2636.7  |
| 7.5°  | 2970.2  | 3086.8  | 3163.7  | 3171.9  | 3161.0  | 3139.0  | 3019.6  | 2908.4  | 2868.6  | 2834.3  |
| 10°   | 3198.0  | 3338.0  | 3424.5  | 3465.7  | 3445.1  | 3410.8  | 3262.5  | 3110.2  | 3062.1  | 3031.9  |
| 12.5° | 3372.3  | 3495.9  | 3553.5  | 3581.0  | 3578.2  | 3565.9  | 3445.1  | 3280.4  | 3229.6  | 3182.9  |
| 15°   | 3484.9  | 3546.7  | 3524.7  | 3523.3  | 3542.5  | 3591.9  | 3554.9  | 3425.9  | 3366.8  | 3324.3  |
| 17.5° | 3557.6  | 3498.6  | 3401.2  | 3355.9  | 3397.0  | 3513.7  | 3598.8  | 3526.1  | 3472.5  | 3425.9  |
| 20°   | 3583.7  | 3373.7  | 3232.3  | 3148.6  | 3196.7  | 3365.5  | 3575.5  | 3598.8  | 3553.5  | 3515.1  |
| 22.5° | 3553.5  | 3221.4  | 3029.2  | 2930.4  | 2977.0  | 3178.8  | 3506.8  | 3657.8  | 3627.6  | 3590.6  |
| 25°   | 3479.4  | 3062.1  | 2831.6  | 2742.3  | 2793.1  | 2999.0  | 3384.7  | 3712.7  | 3714.1  | 3683.9  |
| 27.5° | 3387.4  | 2915.3  | 2692.9  | 2609.2  | 2658.6  | 2850.8  | 3265.3  | 3760.8  | 3808.8  | 3797.8  |
| 30°   | 3294.1  | 2827.4  | 2627.0  | 2568.0  | 2605.1  | 2775.3  | 3143.1  | 3810.2  | 3906.3  | 3925.5  |
| 32.5° | 3251.6  | 2870.0  | 2782.1  | 2808.2  | 2760.2  | 2819.2  | 3099.2  | 3880.2  | 4024.3  | 4055.9  |
| 35°   | 3307.8  | 3247.4  | 3469.8  | 3572.7  | 3402.5  | 3178.8  | 3155.5  | 3985.9  | 4190.4  | 4237.0  |
| 37.5° | 3581.0  | 4055.9  | 4388.0  | 4750.4  | 4455.3  | 3962.5  | 3434.1  | 4165.7  | 4427.8  | 4501.9  |
| 40°   | 4175.3  | 4761.4  | 5361.2  | 5829.2  | 5383.1  | 4720.2  | 3963.9  | 4433.3  | 4754.5  | 4821.7  |
| 42.5° | 4735.3  | 5422.9  | 6249.2  | 6854.5  | 6275.3  | 5339.2  | 4534.9  | 4883.5  | 5185.5  | 5222.5  |
| 45°   | 5284.3  | 6072.1  | 7323.9  | 8165.3  | 7378.8  | 5928.0  | 5118.2  | 5643.9  | 5871.7  | 5873.1  |
| 47.5° | 5928.0  | 6803.7  | 8671.7  | 9870.0  | 8843.3  | 6580.0  | 5665.9  | 6847.6  | 7164.7  | 7009.6  |
| 50°   | 6698.0  | 7531.1  | 10059.4 | 11853.3 | 10629.0 | 7381.5  | 6361.7  | 8314.9  | 8747.2  | 8571.5  |
| 52.5° | 7728.8  | 8332.7  | 11588.4 | 13787.2 | 12575.2 | 8294.3  | 7370.6  | 10252.9 | 10395.6 | 10067.6 |
| 55°   | 9179.6  | 9489.8  | 13551.1 | 16175.4 | 14748.0 | 9418.4  | 8846.0  | 12685.0 | 12285.6 | 11345.4 |
| 57.5° | 12483.3 | 11320.7 | 16071.1 | 18899.9 | 17206.2 | 11460.7 | 12079.8 | 15367.0 | 13946.4 | 12361.1 |
| 60°   | 15247.6 | 13544.3 | 18403.1 | 21603.8 | 19313.1 | 13711.7 | 15115.8 | 15833.7 | 13884.6 | 12248.6 |
| 62.5° | 14315.6 | 14111.1 | 19244.4 | 21901.7 | 20032.3 | 14819.3 | 14551.7 | 14657.4 | 12978.8 | 11500.5 |
| 65°   | 12560.1 | 13017.2 | 18493.6 | 20489.3 | 19234.8 | 13827.0 | 13162.7 | 13570.3 | 11942.5 | 10453.3 |
| 67.5° | 11523.9 | 11860.1 | 17158.2 | 18228.7 | 17785.4 | 12753.7 | 12082.5 | 11787.4 | 10333.9 | 9068.4  |
| 70°   | 10464.3 | 10742.9 | 15283.3 | 15391.7 | 15524.8 | 10969.4 | 9879.6  | 9001.1  | 7702.7  | 6817.4  |
| 72.5° | 9042.3  | 9057.4  | 12912.9 | 12284.3 | 12536.8 | 8583.9  | 7952.5  | 6729.6  | 5606.8  | 4803.9  |
| 75°   | 7586.0  | 7171.5  | 10221.3 | 8586.6  | 9093.1  | 6677.4  | 6603.3  | 5071.5  | 4228.8  | 3570.0  |
| 77.5° | 5783.9  | 5299.4  | 7466.6  | 5646.6  | 6386.4  | 4447.0  | 4964.5  | 3439.6  | 2975.7  | 2375.9  |
| 80°   | 3882.9  | 3581.0  | 4125.9  | 3187.0  | 4178.0  | 3064.9  | 3237.8  | 1949.0  | 1689.6  | 1310.8  |
| 82.5° | 2047.8  | 1748.6  | 2550.2  | 1890.0  | 2520.0  | 1684.1  | 1214.7  | 602.5   | 513.3   | 414.5   |
| 85°   | 793.3   | 918.2   | 1250.4  | 672.5   | 977.3   | 601.2   | 351.4   | 149.6   | 124.9   | 94.7    |
| 87.5° | 153.7   | 237.4   | 130.4   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

LM-79-08: Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

All Brands

Data applicable to all product families using SA light engines

Report Number: SP1-2101-121-7

Luminaire Tested: IFLD-S-SA2A-735-U-T2

Test Date: 03/04/2021

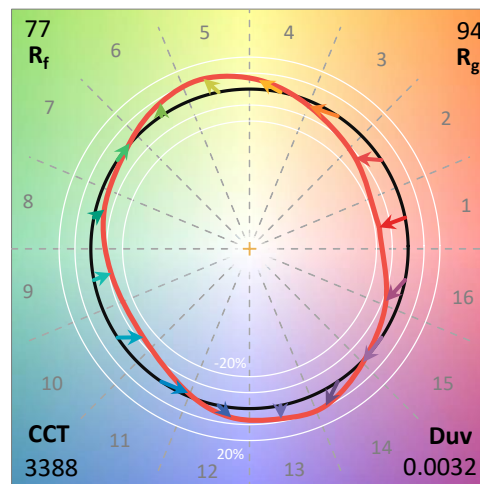
**Test Information**

Test Method: LM-79-08  
 Report Number: SP1-2101-121-7  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1  
 Measurement Geometry: 4π  
 Issue Date: 03/04/2021  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: **IFLD-S-SA2A-735-U-T2**  
 Description: STREETWORKS INF FLOOD

PROGRAMMED @ 615mA.

**Spectral Parameters**

|                           |        |           |      |      |       |
|---------------------------|--------|-----------|------|------|-------|
| CCT (K):                  | 3388   | CRI (Ra): | 73.1 | R9:  | -34.6 |
| CIE u':                   | 0.2371 | R1:       | 68.9 | R10: | 57.8  |
| CIE v':                   | 0.5177 | R2:       | 81.1 | R11: | 68.6  |
| Duv:                      | 0.0032 | R3:       | 93.1 | R12: | 53.9  |
| CIE x:                    | 0.4153 | R4:       | 71.6 | R13: | 70.9  |
| CIE y:                    | 0.4030 | R5:       | 69.4 | R14: | 96.2  |
| CIE z:                    | 0.1817 | R6:       | 75.0 |      |       |
| Peak Wavelength (nm):     | 590    | R7:       | 79.5 |      |       |
| Dominant Wavelength (nm): | 580    | R8:       | 46.4 |      |       |
| Purity:                   | 45.7   |           |      |      |       |
| Rf:                       | 76.9   |           |      |      |       |
| Rg:                       | 94.4   |           |      |      |       |



**Test Conditions**

Stabilization Time: 81M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 25.0/30%  
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2101-121-7

| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | IN0058                | 1/31/2021        | 7/31/2021            |
| Power Meter                    | IN0071                | 12/1/2020        | 12/1/2021            |
| AC Power Source                | IN0063                | 12/1/2020        | 12/1/2021            |
| DC Power Source                | IN0208                | 12/1/2020        | 12/1/2021            |
| Sphere Thermometer             | IN0085                | 12/1/2020        | 12/1/2021            |
| Room Thermometer               | IN0046                | 12/1/2020        | 12/1/2021            |

REPORT NUMBER: SP1-2101-121-7

CIE 1931 Chromaticity Diagram



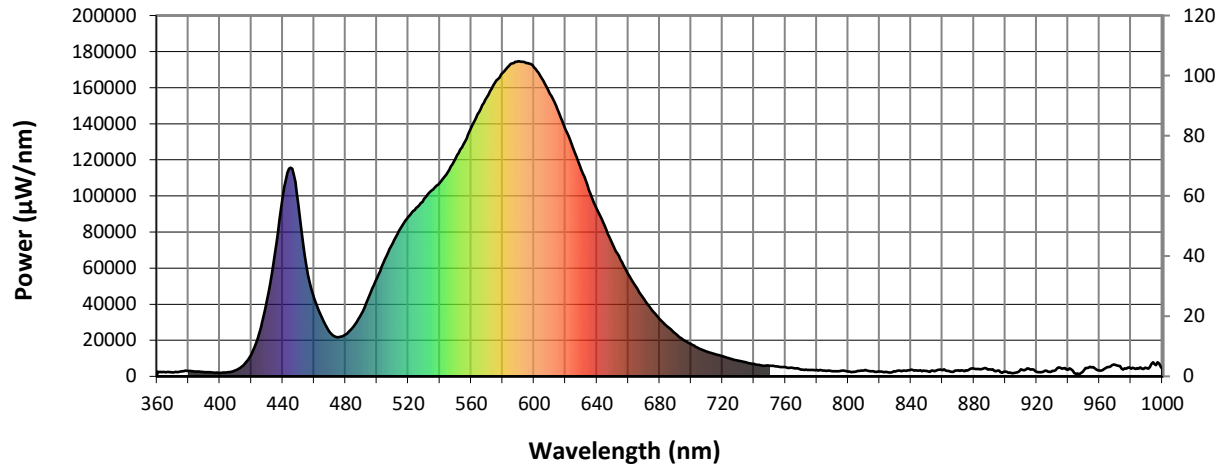
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2101-121-7

**Photopic Flux vs. Wavelength**



#####

| λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360    | 2672          | 0.0           | 490    | 34553         | 4.9           | 620    | 136720        | 35.6          | 750    | 5870          | 0.0           | 880    | 4216          | 0.0           |
| 365    | 2252          | 0.0           | 495    | 44336         | 8.0           | 625    | 126308        | 27.9          | 755    | 5421          | 0.0           | 885    | 4132          | 0.0           |
| 370    | 2217          | 0.0           | 500    | 54643         | 12.1          | 630    | 114625        | 20.7          | 760    | 5097          | 0.0           | 890    | 3992          | 0.0           |
| 375    | 2697          | 0.0           | 505    | 64676         | 18.1          | 635    | 103216        | 15.5          | 765    | 4626          | 0.0           | 895    | 3214          | 0.0           |
| 380    | 3039          | 0.0           | 510    | 73825         | 25.4          | 640    | 92605         | 11.1          | 770    | 3782          | 0.0           | 900    | 2580          | 0.0           |
| 385    | 2655          | 0.0           | 515    | 81872         | 33.9          | 645    | 83234         | 8.0           | 775    | 3506          | 0.0           | 905    | 1776          | 0.0           |
| 390    | 2357          | 0.0           | 520    | 88574         | 43.0          | 650    | 73263         | 5.4           | 780    | 3507          | 0.0           | 910    | 3995          | 0.0           |
| 395    | 2186          | 0.0           | 525    | 93289         | 50.1          | 655    | 64627         | 3.7           | 785    | 3267          | 0.0           | 915    | 4288          | 0.0           |
| 400    | 2015          | 0.0           | 530    | 98393         | 57.9          | 660    | 56614         | 2.4           | 790    | 2849          | 0.0           | 920    | 2446          | 0.0           |
| 405    | 2234          | 0.0           | 535    | 103269        | 64.0          | 665    | 49537         | 1.6           | 795    | 3037          | 0.0           | 925    | 3009          | 0.0           |
| 410    | 3412          | 0.0           | 540    | 107316        | 69.9          | 670    | 42866         | 0.9           | 800    | 2716          | 0.0           | 930    | 3026          | 0.0           |
| 415    | 6135          | 0.0           | 545    | 113101        | 75.3          | 675    | 36708         | 0.6           | 805    | 2648          | 0.0           | 935    | 4734          | 0.0           |
| 420    | 12146         | 0.0           | 550    | 120690        | 82.0          | 680    | 31814         | 0.4           | 810    | 3187          | 0.0           | 940    | 3719          | 0.0           |
| 425    | 23983         | 0.1           | 555    | 128583        | 87.8          | 685    | 27485         | 0.2           | 815    | 2931          | 0.0           | 945    | 1480          | 0.0           |
| 430    | 42142         | 0.3           | 560    | 137796        | 93.6          | 690    | 23698         | 0.1           | 820    | 2717          | 0.0           | 950    | 3450          | 0.0           |
| 435    | 68228         | 0.8           | 565    | 146577        | 97.5          | 695    | 20309         | 0.1           | 825    | 2236          | 0.0           | 955    | 5051          | 0.0           |
| 440    | 99323         | 1.6           | 570    | 154581        | 100.5         | 700    | 17890         | 0.1           | 830    | 2628          | 0.0           | 960    | 3176          | 0.0           |
| 445    | 115584        | 2.4           | 575    | 162633        | 101.2         | 705    | 15500         | 0.0           | 835    | 3140          | 0.0           | 965    | 5178          | 0.0           |
| 450    | 94997         | 2.5           | 580    | 168101        | 99.9          | 710    | 13699         | 0.0           | 840    | 3675          | 0.0           | 970    | 6385          | 0.0           |
| 455    | 61433         | 2.1           | 585    | 173145        | 96.2          | 715    | 12398         | 0.0           | 845    | 3283          | 0.0           | 975    | 3810          | 0.0           |
| 460    | 43373         | 1.8           | 590    | 174675        | 90.3          | 720    | 11147         | 0.0           | 850    | 3055          | 0.0           | 980    | 4322          | 0.0           |
| 465    | 32472         | 1.7           | 595    | 173724        | 82.3          | 725    | 9761          | 0.0           | 855    | 2932          | 0.0           | 985    | 4200          | 0.0           |
| 470    | 24257         | 1.5           | 600    | 171241        | 73.8          | 730    | 8651          | 0.0           | 860    | 3382          | 0.0           | 990    | 4661          | 0.0           |
| 475    | 21690         | 1.7           | 605    | 165134        | 64.0          | 735    | 7730          | 0.0           | 865    | 2605          | 0.0           | 995    | 6746          | 0.0           |
| 480    | 23173         | 2.2           | 610    | 156652        | 53.8          | 740    | 6847          | 0.0           | 870    | 3325          | 0.0           | 1000   | 4150          | 0.0           |
| 485    | 27564         | 3.3           | 615    | 147879        | 44.6          | 745    | 6124          | 0.0           | 875    | 3325          | 0.0           |        |               |               |

REPORT NUMBER: SP1-2101-121-7

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: 12126**

**S/P: 1.36**

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360    | 2672          | 0.0           | 490    | 34553         | 53.2          | 620    | 136720        | 1.7           | 750    | 5870          | 0.0           | 880    | 4216          | 0.0           |
| 365    | 2252          | 0.0           | 495    | 44336         | 71.7          | 625    | 126308        | 1.1           | 755    | 5421          | 0.0           | 885    | 4132          | 0.0           |
| 370    | 2217          | 0.0           | 500    | 54643         | 91.4          | 630    | 114625        | 0.6           | 760    | 5097          | 0.0           | 890    | 3992          | 0.0           |
| 375    | 2697          | 0.0           | 505    | 64676         | 110.0         | 635    | 103216        | 0.4           | 765    | 4626          | 0.0           | 895    | 3214          | 0.0           |
| 380    | 3039          | 0.0           | 510    | 73825         | 125.1         | 640    | 92605         | 0.2           | 770    | 3782          | 0.0           | 900    | 2580          | 0.0           |
| 385    | 2655          | 0.0           | 515    | 81872         | 135.7         | 645    | 83234         | 0.1           | 775    | 3506          | 0.0           | 905    | 1776          | 0.0           |
| 390    | 2357          | 0.0           | 520    | 88574         | 140.8         | 650    | 73263         | 0.1           | 780    | 3507          | 0.0           | 910    | 3995          | 0.0           |
| 395    | 2186          | 0.0           | 525    | 93289         | 139.6         | 655    | 64627         | 0.1           | 785    | 3267          | 0.0           | 915    | 4288          | 0.0           |
| 400    | 2015          | 0.0           | 530    | 98393         | 135.7         | 660    | 56614         | 0.0           | 790    | 2849          | 0.0           | 920    | 2446          | 0.0           |
| 405    | 2234          | 0.1           | 535    | 103269        | 128.7         | 665    | 49537         | 0.0           | 795    | 3037          | 0.0           | 925    | 3009          | 0.0           |
| 410    | 3412          | 0.2           | 540    | 107316        | 118.6         | 670    | 42866         | 0.0           | 800    | 2716          | 0.0           | 930    | 3026          | 0.0           |
| 415    | 6135          | 0.6           | 545    | 113101        | 108.4         | 675    | 36708         | 0.0           | 805    | 2648          | 0.0           | 935    | 4734          | 0.0           |
| 420    | 12146         | 2.0           | 550    | 120690        | 98.7          | 680    | 31814         | 0.0           | 810    | 3187          | 0.0           | 940    | 3719          | 0.0           |
| 425    | 23983         | 5.9           | 555    | 128583        | 87.9          | 685    | 27485         | 0.0           | 815    | 2931          | 0.0           | 945    | 1480          | 0.0           |
| 430    | 42142         | 14.3          | 560    | 137796        | 77.0          | 690    | 23698         | 0.0           | 820    | 2717          | 0.0           | 950    | 3450          | 0.0           |
| 435    | 68228         | 30.5          | 565    | 146577        | 65.8          | 695    | 20309         | 0.0           | 825    | 2236          | 0.0           | 955    | 5051          | 0.0           |
| 440    | 99323         | 55.5          | 570    | 154581        | 54.6          | 700    | 17890         | 0.0           | 830    | 2628          | 0.0           | 960    | 3176          | 0.0           |
| 445    | 115584        | 77.4          | 575    | 162633        | 44.3          | 705    | 15500         | 0.0           | 835    | 3140          | 0.0           | 965    | 5178          | 0.0           |
| 450    | 94997         | 73.6          | 580    | 168101        | 34.6          | 710    | 13699         | 0.0           | 840    | 3675          | 0.0           | 970    | 6385          | 0.0           |
| 455    | 61433         | 53.7          | 585    | 173145        | 26.5          | 715    | 12398         | 0.0           | 845    | 3283          | 0.0           | 975    | 3810          | 0.0           |
| 460    | 43373         | 41.9          | 590    | 174675        | 19.5          | 720    | 11147         | 0.0           | 850    | 3055          | 0.0           | 980    | 4322          | 0.0           |
| 465    | 32472         | 34.3          | 595    | 173724        | 13.9          | 725    | 9761          | 0.0           | 855    | 2932          | 0.0           | 985    | 4200          | 0.0           |
| 470    | 24257         | 27.9          | 600    | 171241        | 9.7           | 730    | 8651          | 0.0           | 860    | 3382          | 0.0           | 990    | 4661          | 0.0           |
| 475    | 21690         | 27.1          | 605    | 165134        | 6.5           | 735    | 7730          | 0.0           | 865    | 2605          | 0.0           | 995    | 6746          | 0.0           |
| 480    | 23173         | 31.3          | 610    | 156652        | 4.2           | 740    | 6847          | 0.0           | 870    | 3325          | 0.0           | 1000   | 4150          | 0.0           |
| 485    | 27564         | 40.0          | 615    | 147879        | 2.7           | 745    | 6124          | 0.0           | 875    | 3325          | 0.0           |        |               |               |



REPORT NUMBER: SP1-2101-121-7

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: 4490.7 M/P: 0.5**

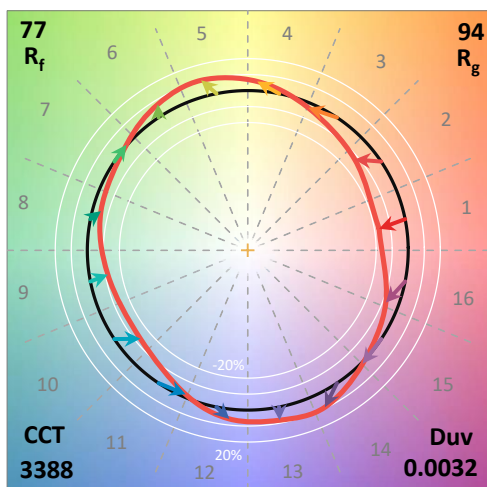
| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360    | 2672          | 0.0           | 490    | 34553         | 28.8          | 620    | 136720        | 0.1           | 750    | 5870          | 0.0           | 880    | 4216          | 0.0           |
| 365    | 2252          | 0.0           | 495    | 44336         | 36.6          | 625    | 126308        | 0.1           | 755    | 5421          | 0.0           | 885    | 4132          | 0.0           |
| 370    | 2217          | 0.0           | 500    | 54643         | 43.9          | 630    | 114625        | 0.0           | 760    | 5097          | 0.0           | 890    | 3992          | 0.0           |
| 375    | 2697          | 0.0           | 505    | 64676         | 49.6          | 635    | 103216        | 0.0           | 765    | 4626          | 0.0           | 895    | 3214          | 0.0           |
| 380    | 3039          | 0.0           | 510    | 73825         | 53.0          | 640    | 92605         | 0.0           | 770    | 3782          | 0.0           | 900    | 2580          | 0.0           |
| 385    | 2655          | 0.0           | 515    | 81872         | 53.5          | 645    | 83234         | 0.0           | 775    | 3506          | 0.0           | 905    | 1776          | 0.0           |
| 390    | 2357          | 0.0           | 520    | 88574         | 51.6          | 650    | 73263         | 0.0           | 780    | 3507          | 0.0           | 910    | 3995          | 0.0           |
| 395    | 2186          | 0.0           | 525    | 93289         | 47.3          | 655    | 64627         | 0.0           | 785    | 3267          | 0.0           | 915    | 4288          | 0.0           |
| 400    | 2015          | 0.0           | 530    | 98393         | 42.5          | 660    | 56614         | 0.0           | 790    | 2849          | 0.0           | 920    | 2446          | 0.0           |
| 405    | 2234          | 0.0           | 535    | 103269        | 37.2          | 665    | 49537         | 0.0           | 795    | 3037          | 0.0           | 925    | 3009          | 0.0           |
| 410    | 3412          | 0.1           | 540    | 107316        | 31.4          | 670    | 42866         | 0.0           | 800    | 2716          | 0.0           | 930    | 3026          | 0.0           |
| 415    | 6135          | 0.4           | 545    | 113101        | 26.3          | 675    | 36708         | 0.0           | 805    | 2648          | 0.0           | 935    | 4734          | 0.0           |
| 420    | 12146         | 1.4           | 550    | 120690        | 21.7          | 680    | 31814         | 0.0           | 810    | 3187          | 0.0           | 940    | 3719          | 0.0           |
| 425    | 23983         | 3.7           | 555    | 128583        | 17.3          | 685    | 27485         | 0.0           | 815    | 2931          | 0.0           | 945    | 1480          | 0.0           |
| 430    | 42142         | 8.9           | 560    | 137796        | 13.6          | 690    | 23698         | 0.0           | 820    | 2717          | 0.0           | 950    | 3450          | 0.0           |
| 435    | 68228         | 18.2          | 565    | 146577        | 10.3          | 695    | 20309         | 0.0           | 825    | 2236          | 0.0           | 955    | 5051          | 0.0           |
| 440    | 99323         | 33.2          | 570    | 154581        | 7.6           | 700    | 17890         | 0.0           | 830    | 2628          | 0.0           | 960    | 3176          | 0.0           |
| 445    | 115584        | 45.6          | 575    | 162633        | 5.4           | 705    | 15500         | 0.0           | 835    | 3140          | 0.0           | 965    | 5178          | 0.0           |
| 450    | 94997         | 43.8          | 580    | 168101        | 3.8           | 710    | 13699         | 0.0           | 840    | 3675          | 0.0           | 970    | 6385          | 0.0           |
| 455    | 61433         | 32.2          | 585    | 173145        | 2.6           | 715    | 12398         | 0.0           | 845    | 3283          | 0.0           | 975    | 3810          | 0.0           |
| 460    | 43373         | 25.6          | 590    | 174675        | 1.7           | 720    | 11147         | 0.0           | 850    | 3055          | 0.0           | 980    | 4322          | 0.0           |
| 465    | 32472         | 21.2          | 595    | 173724        | 1.1           | 725    | 9761          | 0.0           | 855    | 2932          | 0.0           | 985    | 4200          | 0.0           |
| 470    | 24257         | 17.4          | 600    | 171241        | 0.7           | 730    | 8651          | 0.0           | 860    | 3382          | 0.0           | 990    | 4661          | 0.0           |
| 475    | 21690         | 16.6          | 605    | 165134        | 0.5           | 735    | 7730          | 0.0           | 865    | 2605          | 0.0           | 995    | 6746          | 0.0           |
| 480    | 23173         | 18.6          | 610    | 156652        | 0.3           | 740    | 6847          | 0.0           | 870    | 3325          | 0.0           | 1000   | 4150          | 0.0           |
| 485    | 27564         | 22.7          | 615    | 147879        | 0.2           | 745    | 6124          | 0.0           | 875    | 3325          | 0.0           |        |               |               |

**Summary**

$R_f = 76.9$   
 $R_g = 94.4$   
 $CIE R_a = 73.1$   
 $R_g = -34.6$



**Color Vector Graphics**



**Individual Sample Fidelity Index ( $R_{f,i}$ )**

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 68 | CES51 = 90 | CES76 = 63 |
| CES02 = 62 | CES27 = 88 | CES52 = 89 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 80 | CES78 = 65 |
| CES04 = 70 | CES29 = 67 | CES54 = 84 | CES79 = 87 |
| CES05 = 48 | CES30 = 74 | CES55 = 84 | CES80 = 86 |
| CES06 = 51 | CES31 = 71 | CES56 = 75 | CES81 = 75 |
| CES07 = 40 | CES32 = 67 | CES57 = 74 | CES82 = 94 |
| CES08 = 39 | CES33 = 74 | CES58 = 76 | CES83 = 91 |
| CES09 = 29 | CES34 = 78 | CES59 = 87 | CES84 = 89 |
| CES10 = 75 | CES35 = 89 | CES60 = 93 | CES85 = 80 |
| CES11 = 58 | CES36 = 98 | CES61 = 86 | CES86 = 66 |
| CES12 = 64 | CES37 = 86 | CES62 = 89 | CES87 = 79 |
| CES13 = 43 | CES38 = 82 | CES63 = 77 | CES88 = 79 |
| CES14 = 74 | CES39 = 95 | CES64 = 74 | CES89 = 70 |
| CES15 = 71 | CES40 = 91 | CES65 = 68 | CES90 = 77 |
| CES16 = 47 | CES41 = 89 | CES66 = 71 | CES91 = 88 |
| CES17 = 50 | CES42 = 88 | CES67 = 69 | CES92 = 60 |
| CES18 = 56 | CES43 = 82 | CES68 = 74 | CES93 = 77 |
| CES19 = 72 | CES44 = 99 | CES69 = 82 | CES94 = 52 |
| CES20 = 65 | CES45 = 87 | CES70 = 67 | CES95 = 69 |
| CES21 = 86 | CES46 = 82 | CES71 = 66 | CES96 = 78 |
| CES22 = 79 | CES47 = 82 | CES72 = 88 | CES97 = 85 |
| CES23 = 92 | CES48 = 72 | CES73 = 59 | CES98 = 76 |
| CES24 = 91 | CES49 = 82 | CES74 = 97 | CES99 = 63 |
| CES25 = 72 | CES50 = 88 | CES75 = 66 |            |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)