

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: P635622

Luminaire Tested: GWS-SA3E-727-U-SLL-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635622
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-SA3E-727-U-SLL-W
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: (48) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17237.2 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

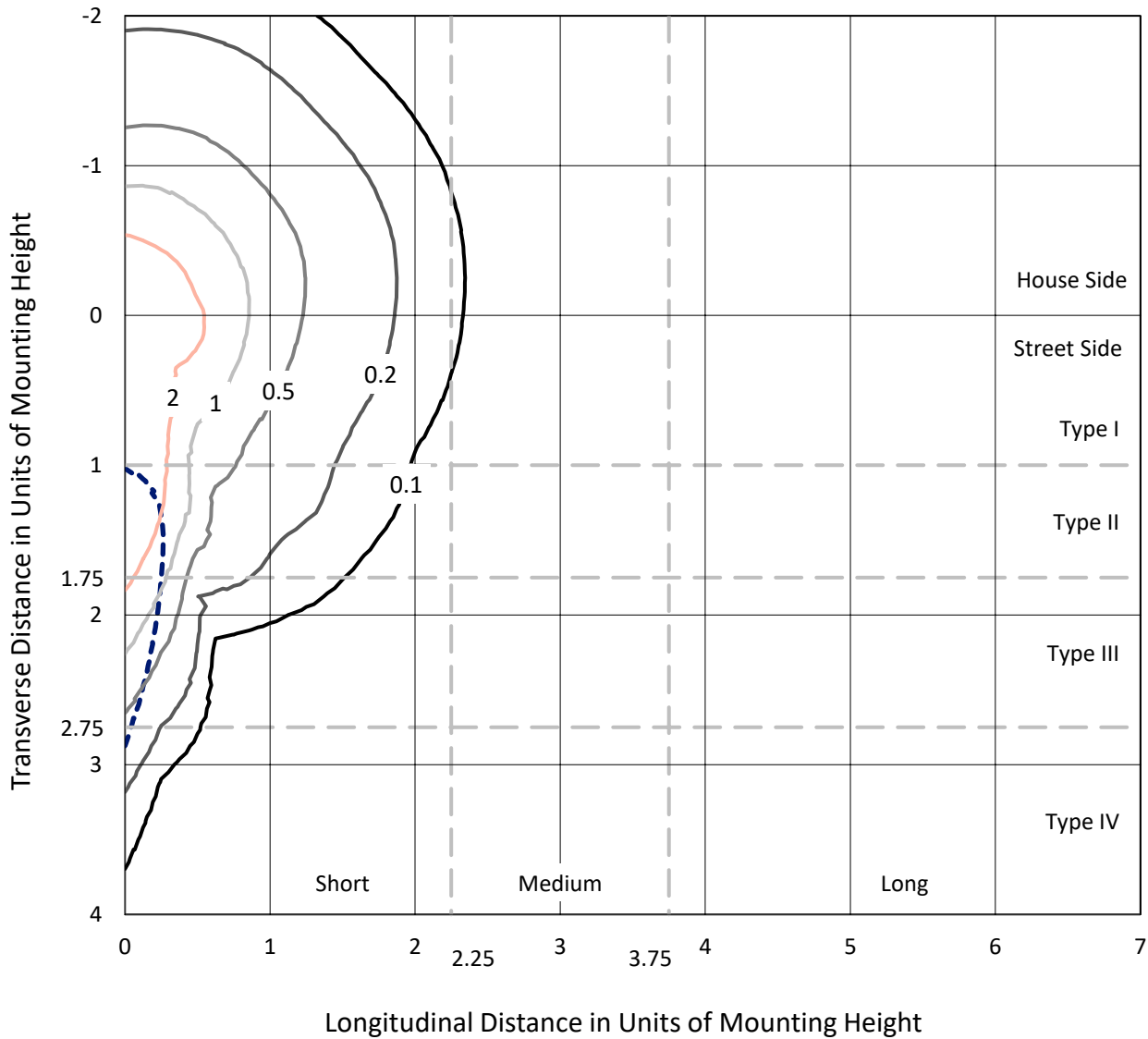
Input Watts (W): 159.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

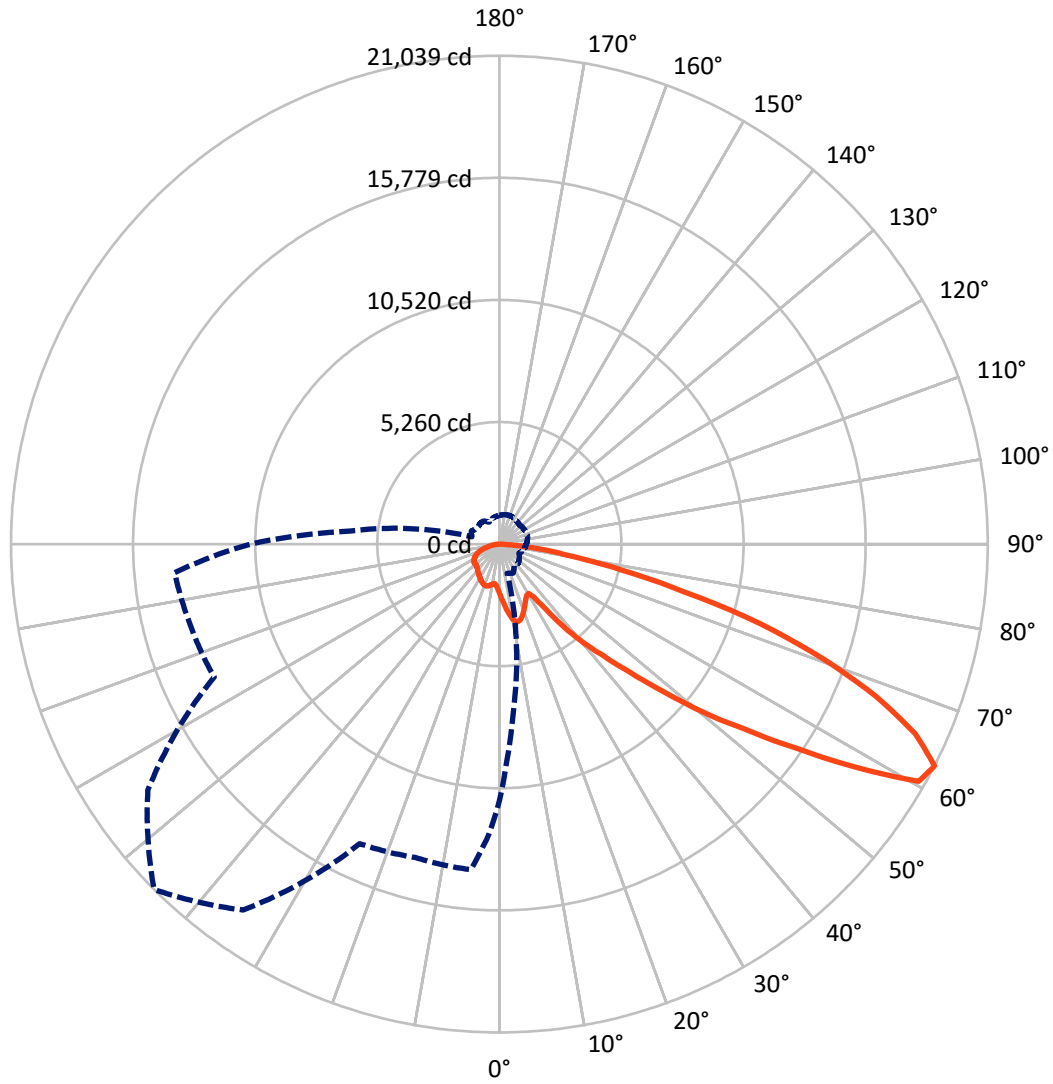
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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CATALOG NUMBER: GWS-SA3E-727-U-SLL-W

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4121.4 | 0.0 | 4121.4 |
| | % Fixture | 23.9 | 0.0 | 23.9 |
| Street Side | Lumens | 13115.8 | 0.0 | 13115.8 |
| | % Fixture | 76.1 | 0.0 | 76.1 |
| Total | Lumens | 17237.2 | 0.0 | 17237.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 211.7 | 1.2 |
| 10°-20° | 688.1 | 4.0 |
| 20°-30° | 1083.2 | 6.3 |
| 30°-40° | 1484.8 | 8.6 |
| 40°-50° | 2316.7 | 13.4 |
| 50°-60° | 3994.4 | 23.2 |
| 60°-70° | 4629.0 | 26.9 |
| 70°-80° | 2443.4 | 14.2 |
| 80°-90° | 386.0 | 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° | 17237.2 | 100.0 |
| 0°-180° | 17237.2 | 100.0 |

Coefficient of Utilization



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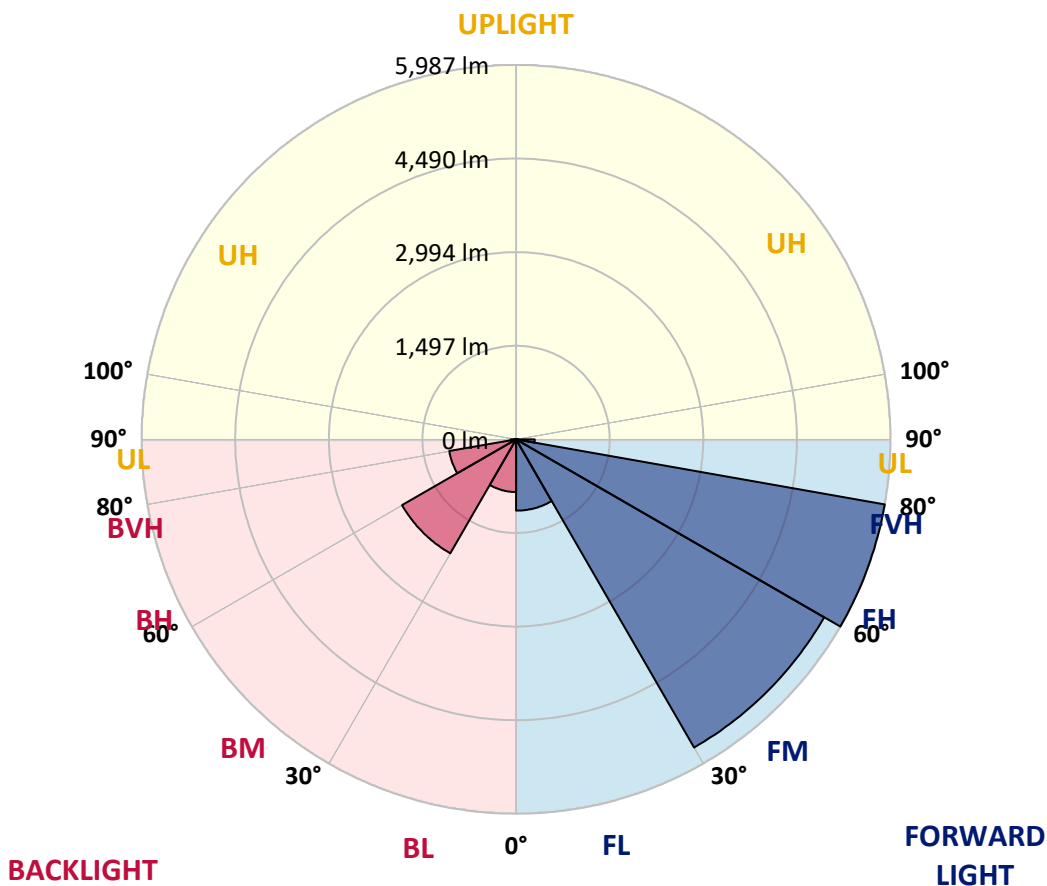
CATALOG NUMBER: GWS-SA3E-727-U-SLL-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1140.0 | 6.6 | | | |
| FM (30°-60°) | 5690.6 | 33.0 | | | |
| FH (60°-80°) | 5987.2 | 34.7 | | | G3/7500 |
| FVH (80°-90°) | 297.9 | 1.7 | | | G3/500 |
| BL (0°-30°) | 843.0 | 4.9 | B2/1000 | | |
| BM (30°-60°) | 2105.2 | 12.2 | B2/2500 | | |
| BH (60°-80°) | 1085.2 | 6.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 88.1 | 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





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CANDELA DISTRIBUTION (FULL):

| | 0° | 2° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 |
| 2.5° | 2335.0 | 2325.8 | 2312.6 | 2267.8 | 2240.1 | 2208.5 | 2175.5 | 2137.3 | 2093.7 | 2063.4 | 2033.1 |
| 5° | 2532.8 | 2518.3 | 2486.7 | 2379.9 | 2306.0 | 2225.6 | 2158.4 | 2081.9 | 2006.7 | 1955.3 | 1903.9 |
| 7.5° | 2722.7 | 2704.2 | 2655.4 | 2491.9 | 2371.9 | 2255.9 | 2154.4 | 2043.6 | 1931.6 | 1855.1 | 1794.5 |
| 10° | 2912.5 | 2874.3 | 2812.3 | 2598.7 | 2440.5 | 2306.0 | 2190.0 | 2054.2 | 1905.2 | 1801.0 | 1736.4 |
| 12.5° | 3057.6 | 3022.0 | 2954.7 | 2696.3 | 2509.1 | 2340.3 | 2209.8 | 2084.5 | 1957.9 | 1847.2 | 1781.3 |
| 15° | 3193.4 | 3147.2 | 3070.7 | 2787.3 | 2565.8 | 2339.0 | 2170.2 | 2060.8 | 2042.3 | 2014.6 | 1928.9 |
| 17.5° | 3290.9 | 3248.7 | 3169.6 | 2861.1 | 2597.4 | 2298.1 | 2060.8 | 1996.2 | 2079.2 | 2163.6 | 2081.9 |
| 20° | 3376.6 | 3327.8 | 3247.4 | 2912.5 | 2604.0 | 2207.1 | 1927.6 | 1928.9 | 2059.5 | 2175.5 | 2155.7 |
| 22.5° | 3449.1 | 3395.1 | 3323.9 | 2970.5 | 2601.4 | 2080.6 | 1811.6 | 1890.7 | 2021.2 | 2112.2 | 2114.8 |
| 25° | 3538.8 | 3494.0 | 3434.6 | 3056.2 | 2601.4 | 1951.3 | 1727.2 | 1844.6 | 1956.6 | 2033.1 | 2030.5 |
| 27.5° | 3648.2 | 3617.9 | 3569.1 | 3186.8 | 2625.1 | 1843.2 | 1679.7 | 1785.2 | 1873.6 | 1939.5 | 1938.2 |
| 30° | 3770.9 | 3743.2 | 3706.2 | 3325.2 | 2666.0 | 1762.8 | 1653.4 | 1711.4 | 1776.0 | 1828.7 | 1828.7 |
| 32.5° | 3896.1 | 3885.6 | 3846.0 | 3436.0 | 2634.3 | 1737.8 | 1631.0 | 1637.6 | 1671.8 | 1715.3 | 1711.4 |
| 35° | 4070.1 | 4059.6 | 4009.5 | 3521.7 | 2497.2 | 1702.2 | 1595.4 | 1562.4 | 1566.4 | 1594.0 | 1603.3 |
| 37.5° | 4324.6 | 4308.8 | 4235.0 | 3621.9 | 2290.2 | 1612.5 | 1537.3 | 1483.3 | 1471.4 | 1483.3 | 1500.4 |
| 40° | 4631.8 | 4608.1 | 4507.9 | 3757.7 | 2051.6 | 1491.2 | 1446.4 | 1401.5 | 1381.8 | 1385.7 | 1405.5 |
| 42.5° | 5016.8 | 4966.7 | 4823.0 | 3901.4 | 1815.5 | 1384.4 | 1344.8 | 1317.2 | 1294.7 | 1292.1 | 1330.3 |
| 45° | 5641.8 | 5504.7 | 5276.6 | 4029.3 | 1616.5 | 1327.7 | 1253.9 | 1234.1 | 1215.6 | 1226.2 | 1271.0 |
| 47.5° | 6733.5 | 6480.3 | 6036.0 | 4138.7 | 1495.2 | 1329.0 | 1181.4 | 1160.3 | 1158.9 | 1180.0 | 1230.1 |
| 50° | 8233.9 | 7868.7 | 7183.1 | 4212.5 | 1431.9 | 1344.8 | 1137.8 | 1103.6 | 1128.6 | 1149.7 | 1197.2 |
| 52.5° | 9671.0 | 9113.3 | 8297.2 | 4211.2 | 1404.2 | 1347.5 | 1149.7 | 1050.8 | 1128.6 | 1133.9 | 1178.7 |
| 55° | 10898.6 | 9888.6 | 8597.8 | 3778.8 | 1364.6 | 1336.9 | 1195.9 | 1010.0 | 1114.1 | 1133.9 | 1169.5 |
| 57.5° | 11874.2 | 10381.7 | 8575.4 | 3052.3 | 1484.6 | 1278.9 | 1223.5 | 1000.7 | 1071.9 | 1136.5 | 1177.4 |
| 60° | 11766.1 | 10156.2 | 8022.9 | 1873.6 | 1472.7 | 1176.1 | 1219.6 | 1017.9 | 1000.7 | 1100.9 | 1168.2 |
| 62.5° | 11047.5 | 9348.0 | 7072.3 | 1300.0 | 1383.1 | 1116.8 | 1155.0 | 1048.2 | 934.8 | 1049.5 | 1123.3 |
| 65° | 10041.5 | 8305.1 | 5893.6 | 996.8 | 1145.8 | 1119.4 | 1045.6 | 1027.1 | 876.8 | 967.8 | 1046.9 |
| 67.5° | 8711.2 | 7011.7 | 4652.9 | 789.8 | 799.0 | 969.1 | 949.3 | 912.4 | 822.7 | 895.2 | 966.4 |
| 70° | 6548.9 | 5117.0 | 3201.3 | 635.5 | 605.2 | 809.5 | 853.1 | 820.1 | 770.0 | 791.1 | 866.2 |
| 72.5° | 4614.7 | 3341.0 | 1753.6 | 503.7 | 466.7 | 622.3 | 741.0 | 735.7 | 680.3 | 696.2 | 770.0 |
| 75° | 3429.4 | 2364.0 | 1095.7 | 398.2 | 379.7 | 445.6 | 621.0 | 636.8 | 590.7 | 609.1 | 665.8 |
| 77.5° | 2282.3 | 1530.8 | 609.1 | 295.3 | 295.3 | 325.7 | 462.8 | 536.6 | 502.3 | 516.8 | 556.4 |
| 80° | 1259.1 | 779.2 | 304.6 | 193.8 | 199.1 | 224.1 | 337.5 | 386.3 | 387.6 | 423.2 | 433.8 |
| 82.5° | 398.2 | 247.9 | 135.8 | 113.4 | 106.8 | 127.9 | 217.5 | 276.9 | 258.4 | 329.6 | 303.3 |
| 85° | 91.0 | 58.0 | 25.1 | 25.1 | 27.7 | 42.2 | 83.1 | 147.7 | 188.5 | 226.8 | 164.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 58.0 | 85.7 | 76.5 |
| 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: P635622
 CATALOG NUMBER: GWS-SA3E-727-U-SLL-W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 |
| 2.5° | 2014.6 | 1988.3 | 1980.4 | 1957.9 | 1955.3 | 1934.2 | 1926.3 | 1926.3 | 1935.5 | 1935.5 | 1944.8 |
| 5° | 1882.8 | 1849.8 | 1831.4 | 1805.0 | 1798.4 | 1782.6 | 1772.0 | 1773.4 | 1785.2 | 1793.1 | 1809.0 |
| 7.5° | 1766.8 | 1744.3 | 1731.2 | 1719.3 | 1716.7 | 1714.0 | 1702.2 | 1700.8 | 1704.8 | 1716.7 | 1728.5 |
| 10° | 1718.0 | 1702.2 | 1706.1 | 1715.3 | 1729.8 | 1737.8 | 1727.2 | 1721.9 | 1718.0 | 1725.9 | 1736.4 |
| 12.5° | 1765.4 | 1749.6 | 1757.5 | 1773.4 | 1793.1 | 1801.0 | 1797.1 | 1795.8 | 1799.7 | 1830.0 | 1852.5 |
| 15° | 1869.6 | 1839.3 | 1828.7 | 1835.3 | 1851.1 | 1859.1 | 1855.1 | 1860.4 | 1885.4 | 1964.5 | 2021.2 |
| 17.5° | 1998.8 | 1925.0 | 1882.8 | 1870.9 | 1877.5 | 1884.1 | 1884.1 | 1897.3 | 1940.8 | 2056.8 | 2128.0 |
| 20° | 2068.7 | 1972.4 | 1901.2 | 1872.2 | 1874.9 | 1881.5 | 1881.5 | 1899.9 | 1948.7 | 2072.7 | 2118.8 |
| 22.5° | 2050.2 | 1961.9 | 1874.9 | 1843.2 | 1844.6 | 1849.8 | 1849.8 | 1865.6 | 1909.2 | 2018.6 | 2039.7 |
| 25° | 1977.7 | 1899.9 | 1814.2 | 1786.5 | 1789.2 | 1798.4 | 1795.8 | 1805.0 | 1838.0 | 1927.6 | 1939.5 |
| 27.5° | 1890.7 | 1822.1 | 1737.8 | 1716.7 | 1728.5 | 1747.0 | 1731.2 | 1732.5 | 1762.8 | 1838.0 | 1839.3 |
| 30° | 1797.1 | 1740.4 | 1665.2 | 1649.4 | 1671.8 | 1681.1 | 1666.6 | 1666.6 | 1696.9 | 1748.3 | 1747.0 |
| 32.5° | 1695.6 | 1660.0 | 1605.9 | 1588.8 | 1613.8 | 1628.3 | 1609.9 | 1612.5 | 1636.2 | 1670.5 | 1657.3 |
| 35° | 1600.6 | 1582.2 | 1557.1 | 1545.3 | 1561.1 | 1574.3 | 1562.4 | 1567.7 | 1590.1 | 1599.3 | 1580.9 |
| 37.5° | 1509.7 | 1507.0 | 1509.7 | 1509.7 | 1513.6 | 1517.6 | 1509.7 | 1522.8 | 1542.6 | 1530.8 | 1509.7 |
| 40° | 1430.6 | 1441.1 | 1466.1 | 1459.6 | 1455.6 | 1459.6 | 1454.3 | 1476.7 | 1496.5 | 1475.4 | 1450.3 |
| 42.5° | 1364.6 | 1384.4 | 1422.6 | 1422.6 | 1414.7 | 1417.4 | 1414.7 | 1442.4 | 1456.9 | 1427.9 | 1400.2 |
| 45° | 1307.9 | 1336.9 | 1385.7 | 1392.3 | 1379.1 | 1379.1 | 1384.4 | 1418.7 | 1424.0 | 1384.4 | 1355.4 |
| 47.5° | 1268.4 | 1304.0 | 1359.4 | 1371.2 | 1351.4 | 1350.1 | 1364.6 | 1401.5 | 1401.5 | 1355.4 | 1322.4 |
| 50° | 1240.7 | 1280.2 | 1346.2 | 1362.0 | 1342.2 | 1336.9 | 1360.7 | 1396.3 | 1388.4 | 1333.0 | 1300.0 |
| 52.5° | 1222.2 | 1263.1 | 1344.8 | 1367.3 | 1354.1 | 1348.8 | 1372.5 | 1397.6 | 1377.8 | 1318.5 | 1284.2 |
| 55° | 1210.4 | 1255.2 | 1348.8 | 1367.3 | 1352.8 | 1343.5 | 1367.3 | 1389.7 | 1379.1 | 1310.6 | 1277.6 |
| 57.5° | 1217.0 | 1261.8 | 1343.5 | 1352.8 | 1335.6 | 1319.8 | 1347.5 | 1379.1 | 1375.2 | 1313.2 | 1280.2 |
| 60° | 1206.4 | 1247.3 | 1314.5 | 1317.2 | 1288.2 | 1263.1 | 1304.0 | 1351.4 | 1351.4 | 1304.0 | 1275.0 |
| 62.5° | 1157.6 | 1198.5 | 1257.8 | 1260.5 | 1227.5 | 1199.8 | 1247.3 | 1304.0 | 1302.7 | 1264.4 | 1234.1 |
| 65° | 1077.2 | 1115.4 | 1182.7 | 1189.3 | 1156.3 | 1127.3 | 1176.1 | 1228.8 | 1232.8 | 1198.5 | 1172.1 |
| 67.5° | 988.9 | 1023.1 | 1073.2 | 1099.6 | 1071.9 | 1041.6 | 1086.4 | 1136.5 | 1135.2 | 1094.3 | 1066.7 |
| 70° | 883.4 | 915.0 | 961.2 | 983.6 | 966.4 | 937.4 | 978.3 | 1004.7 | 992.8 | 973.0 | 954.6 |
| 72.5° | 779.2 | 809.5 | 853.1 | 853.1 | 834.6 | 806.9 | 818.8 | 866.2 | 880.7 | 866.2 | 854.4 |
| 75° | 669.8 | 696.2 | 726.5 | 733.1 | 692.2 | 642.1 | 697.5 | 738.3 | 755.5 | 748.9 | 734.4 |
| 77.5° | 557.7 | 577.5 | 622.3 | 610.5 | 534.0 | 507.6 | 552.4 | 613.1 | 625.0 | 621.0 | 601.2 |
| 80° | 429.8 | 441.7 | 489.2 | 465.4 | 406.1 | 389.0 | 408.7 | 456.2 | 458.8 | 445.6 | 420.6 |
| 82.5° | 288.7 | 304.6 | 336.2 | 290.1 | 288.7 | 272.9 | 257.1 | 262.4 | 286.1 | 283.5 | 266.3 |
| 85° | 147.7 | 155.6 | 185.9 | 174.0 | 149.0 | 129.2 | 122.6 | 130.5 | 117.3 | 106.8 | 92.3 |
| 87.5° | 62.0 | 67.2 | 92.3 | 51.4 | 15.8 | 0.0 | 0.0 | 7.9 | 11.9 | 17.1 | 18.5 |
| 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-SA3E-727-U-SLL-W

CANDELA DISTRIBUTION (continued):

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 0° | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 |
| 2.5° | 1965.9 | 1980.4 | 2016.0 | 2060.8 | 2104.3 | 2149.1 | 2197.9 | 2228.2 | 2265.1 | 2312.6 | 2313.9 |
| 5° | 1828.7 | 1861.7 | 1913.1 | 1981.7 | 2052.9 | 2134.6 | 2229.5 | 2308.7 | 2403.6 | 2478.7 | 2509.1 |
| 7.5° | 1744.3 | 1791.8 | 1856.4 | 1943.4 | 2037.1 | 2138.6 | 2262.5 | 2395.7 | 2551.3 | 2651.5 | 2710.8 |
| 10° | 1752.3 | 1824.8 | 1889.4 | 1963.2 | 2047.6 | 2157.0 | 2316.6 | 2493.2 | 2684.4 | 2816.3 | 2890.1 |
| 12.5° | 1893.3 | 1969.8 | 1957.9 | 1954.0 | 2010.7 | 2143.8 | 2360.1 | 2592.1 | 2825.5 | 2957.3 | 3045.7 |
| 15° | 2071.3 | 2100.3 | 1988.3 | 1903.9 | 1938.2 | 2096.4 | 2383.8 | 2680.5 | 2942.8 | 3103.7 | 3190.7 |
| 17.5° | 2162.3 | 2104.3 | 1968.5 | 1841.9 | 1832.7 | 2023.9 | 2395.7 | 2770.1 | 3074.7 | 3235.5 | 3327.8 |
| 20° | 2120.1 | 2035.7 | 1921.0 | 1801.0 | 1735.1 | 1925.0 | 2389.1 | 2841.3 | 3194.7 | 3374.0 | 3449.1 |
| 22.5° | 2029.1 | 1955.3 | 1865.6 | 1750.9 | 1656.0 | 1816.9 | 2371.9 | 2912.5 | 3301.5 | 3482.1 | 3548.0 |
| 25° | 1930.3 | 1874.9 | 1801.0 | 1700.8 | 1611.2 | 1721.9 | 2360.1 | 3007.5 | 3424.1 | 3596.8 | 3639.0 |
| 27.5° | 1831.4 | 1790.5 | 1729.8 | 1652.1 | 1600.6 | 1656.0 | 2364.0 | 3131.4 | 3582.3 | 3745.8 | 3728.7 |
| 30° | 1733.8 | 1698.2 | 1656.0 | 1621.7 | 1599.3 | 1640.2 | 2353.5 | 3263.2 | 3756.3 | 3908.0 | 3806.5 |
| 32.5° | 1641.5 | 1608.5 | 1582.2 | 1587.4 | 1600.6 | 1646.8 | 2299.4 | 3383.2 | 3915.9 | 4045.1 | 3890.8 |
| 35° | 1562.4 | 1528.1 | 1528.1 | 1546.6 | 1595.4 | 1624.4 | 2159.7 | 3476.8 | 4092.6 | 4221.8 | 4010.8 |
| 37.5° | 1488.6 | 1458.2 | 1478.0 | 1508.3 | 1554.5 | 1563.7 | 1980.4 | 3567.8 | 4349.7 | 4471.0 | 4196.7 |
| 40° | 1424.0 | 1393.6 | 1429.2 | 1467.5 | 1491.2 | 1487.2 | 1798.4 | 3694.4 | 4652.9 | 4778.2 | 4443.3 |
| 42.5° | 1372.5 | 1344.8 | 1376.5 | 1425.3 | 1429.2 | 1433.2 | 1665.2 | 3815.7 | 5004.9 | 5164.5 | 4867.8 |
| 45° | 1330.3 | 1310.6 | 1326.4 | 1375.2 | 1375.2 | 1435.8 | 1582.2 | 3917.2 | 5535.0 | 5817.1 | 5647.0 |
| 47.5° | 1297.4 | 1285.5 | 1293.4 | 1309.3 | 1335.6 | 1483.3 | 1529.4 | 3995.0 | 6500.1 | 7053.9 | 6882.5 |
| 50° | 1278.9 | 1267.1 | 1277.6 | 1244.6 | 1323.8 | 1507.0 | 1512.3 | 4054.3 | 7772.4 | 8640.0 | 8427.7 |
| 52.5° | 1263.1 | 1259.1 | 1265.7 | 1189.3 | 1350.1 | 1491.2 | 1499.1 | 3975.2 | 8625.5 | 10201.1 | 10410.7 |
| 55° | 1257.8 | 1260.5 | 1228.8 | 1148.4 | 1381.8 | 1438.5 | 1459.6 | 3409.6 | 8857.5 | 11547.2 | 12848.6 |
| 57.5° | 1260.5 | 1252.6 | 1172.1 | 1152.4 | 1383.1 | 1333.0 | 1516.3 | 2432.6 | 8520.0 | 12132.7 | 15233.7 |
| 60° | 1251.2 | 1211.7 | 1103.6 | 1188.0 | 1322.4 | 1209.0 | 1475.4 | 1586.1 | 7630.0 | 11683.0 | 15372.2 |
| 62.5° | 1210.4 | 1152.4 | 1044.2 | 1207.7 | 1214.3 | 1135.2 | 1339.6 | 1222.2 | 6443.4 | 10720.6 | 14037.9 |
| 65° | 1151.0 | 1073.2 | 994.1 | 1166.9 | 1104.9 | 1100.9 | 1007.3 | 979.6 | 5181.6 | 9574.8 | 12772.1 |
| 67.5° | 1053.5 | 975.7 | 957.2 | 1073.2 | 994.1 | 975.7 | 809.5 | 812.2 | 4134.8 | 8353.9 | 11499.8 |
| 70° | 942.7 | 864.9 | 879.4 | 970.4 | 884.7 | 810.9 | 655.3 | 676.4 | 3136.7 | 6960.3 | 9784.4 |
| 72.5° | 870.2 | 766.0 | 767.4 | 854.4 | 777.9 | 656.6 | 539.3 | 557.7 | 1990.9 | 5246.2 | 7779.0 |
| 75° | 734.4 | 675.1 | 646.1 | 692.2 | 660.6 | 511.6 | 453.6 | 449.6 | 1180.0 | 3760.3 | 5825.0 |
| 77.5° | 613.1 | 566.9 | 552.4 | 570.9 | 493.1 | 378.4 | 365.2 | 358.6 | 668.5 | 2408.9 | 3817.0 |
| 80° | 444.3 | 432.5 | 431.1 | 440.4 | 379.7 | 278.2 | 278.2 | 279.5 | 359.9 | 1307.9 | 2151.8 |
| 82.5° | 282.2 | 308.5 | 272.9 | 303.3 | 258.4 | 197.8 | 184.6 | 209.6 | 207.0 | 557.7 | 907.1 |
| 85° | 117.3 | 160.9 | 150.3 | 159.5 | 122.6 | 108.1 | 116.0 | 125.3 | 120.0 | 214.9 | 353.4 |
| 87.5° | 22.4 | 26.4 | 29.0 | 27.7 | 27.7 | 34.3 | 38.2 | 46.1 | 46.1 | 62.0 | 106.8 |
| 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: P635622
 CATALOG NUMBER: GWS-SA3E-727-U-SLL-W

CANDELA DISTRIBUTION (continued):

| | 285° | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 358° | 360° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 | 2149.1 |
| 2.5° | 2364.0 | 2402.3 | 2394.4 | 2411.5 | 2389.1 | 2397.0 | 2352.2 | 2340.3 | 2332.4 | 2335.0 |
| 5° | 2606.6 | 2684.4 | 2698.9 | 2727.9 | 2708.2 | 2708.2 | 2629.0 | 2569.7 | 2548.6 | 2532.8 |
| 7.5° | 2853.2 | 2965.3 | 3039.1 | 3047.0 | 3036.5 | 3015.4 | 2900.7 | 2793.9 | 2755.6 | 2722.7 |
| 10° | 3072.1 | 3206.5 | 3289.6 | 3329.2 | 3309.4 | 3276.4 | 3134.0 | 2987.7 | 2941.5 | 2912.5 |
| 12.5° | 3239.5 | 3358.2 | 3413.5 | 3439.9 | 3437.3 | 3425.4 | 3309.4 | 3151.2 | 3102.4 | 3057.6 |
| 15° | 3347.6 | 3407.0 | 3385.9 | 3384.5 | 3403.0 | 3450.5 | 3414.9 | 3290.9 | 3234.2 | 3193.4 |
| 17.5° | 3417.5 | 3360.8 | 3267.2 | 3223.7 | 3263.2 | 3375.3 | 3457.1 | 3387.2 | 3335.8 | 3290.9 |
| 20° | 3442.6 | 3240.8 | 3105.0 | 3024.6 | 3070.7 | 3232.9 | 3434.6 | 3457.1 | 3413.5 | 3376.6 |
| 22.5° | 3413.5 | 3094.5 | 2909.9 | 2815.0 | 2859.8 | 3053.6 | 3368.7 | 3513.7 | 3484.7 | 3449.1 |
| 25° | 3342.3 | 2941.5 | 2720.0 | 2634.3 | 2683.1 | 2880.9 | 3251.4 | 3566.5 | 3567.8 | 3538.8 |
| 27.5° | 3254.0 | 2800.5 | 2586.9 | 2506.4 | 2553.9 | 2738.5 | 3136.7 | 3612.6 | 3658.8 | 3648.2 |
| 30° | 3164.4 | 2716.1 | 2523.6 | 2466.9 | 2502.5 | 2666.0 | 3019.3 | 3660.1 | 3752.4 | 3770.9 |
| 32.5° | 3123.5 | 2756.9 | 2672.6 | 2697.6 | 2651.5 | 2708.2 | 2977.1 | 3727.3 | 3865.8 | 3896.1 |
| 35° | 3177.5 | 3119.5 | 3333.1 | 3432.0 | 3268.5 | 3053.6 | 3031.2 | 3828.9 | 4025.3 | 4070.1 |
| 37.5° | 3439.9 | 3896.1 | 4215.2 | 4563.3 | 4279.8 | 3806.5 | 3298.8 | 4001.6 | 4253.4 | 4324.6 |
| 40° | 4010.8 | 4573.8 | 5150.0 | 5599.6 | 5171.1 | 4534.3 | 3807.8 | 4258.7 | 4567.2 | 4631.8 |
| 42.5° | 4548.8 | 5209.3 | 6003.0 | 6584.5 | 6028.1 | 5128.9 | 4356.3 | 4691.2 | 4981.2 | 5016.8 |
| 45° | 5076.1 | 5833.0 | 7035.4 | 7843.6 | 7088.1 | 5694.5 | 4916.6 | 5421.6 | 5640.5 | 5641.8 |
| 47.5° | 5694.5 | 6535.7 | 8330.2 | 9481.2 | 8495.0 | 6320.8 | 5442.7 | 6577.9 | 6882.5 | 6733.5 |
| 50° | 6434.2 | 7234.5 | 9663.1 | 11386.4 | 10210.3 | 7090.8 | 6111.2 | 7987.4 | 8402.7 | 8233.9 |
| 52.5° | 7424.4 | 8004.5 | 11131.9 | 13244.1 | 12079.9 | 7967.6 | 7080.2 | 9849.0 | 9986.2 | 9671.0 |
| 55° | 8818.0 | 9116.0 | 13017.4 | 15538.3 | 14167.1 | 9047.4 | 8497.6 | 12185.4 | 11801.7 | 10898.6 |
| 57.5° | 11991.6 | 10874.8 | 15438.1 | 18155.5 | 16528.5 | 11009.3 | 11603.9 | 14761.7 | 13397.1 | 11874.2 |
| 60° | 14647.0 | 13010.8 | 17678.2 | 20752.9 | 18552.3 | 13171.6 | 14520.4 | 15210.0 | 13337.7 | 11766.1 |
| 62.5° | 13751.7 | 13555.3 | 18486.4 | 21039.0 | 19243.2 | 14235.6 | 13978.5 | 14080.0 | 12467.5 | 11047.5 |
| 65° | 12065.4 | 12504.5 | 17765.2 | 19682.3 | 18477.2 | 13282.4 | 12644.2 | 13035.8 | 11472.1 | 10041.5 |
| 67.5° | 11070.0 | 11393.0 | 16482.3 | 17510.7 | 17084.9 | 12251.3 | 11606.6 | 11323.1 | 9926.8 | 8711.2 |
| 70° | 10052.1 | 10319.7 | 14681.3 | 14785.4 | 14913.3 | 10537.3 | 9490.4 | 8646.6 | 7399.3 | 6548.9 |
| 72.5° | 8686.1 | 8700.6 | 12404.3 | 11800.4 | 12043.0 | 8245.8 | 7639.3 | 6464.5 | 5386.0 | 4614.7 |
| 75° | 7287.2 | 6889.1 | 9818.7 | 8248.4 | 8734.9 | 6414.4 | 6343.2 | 4871.8 | 4062.2 | 3429.4 |
| 77.5° | 5556.1 | 5090.7 | 7172.5 | 5424.2 | 6134.9 | 4271.9 | 4768.9 | 3304.1 | 2858.5 | 2282.3 |
| 80° | 3730.0 | 3439.9 | 3963.3 | 3061.5 | 4013.5 | 2944.2 | 3110.3 | 1872.2 | 1623.0 | 1259.1 |
| 82.5° | 1967.2 | 1679.7 | 2449.7 | 1815.5 | 2420.7 | 1617.8 | 1166.9 | 578.8 | 493.1 | 398.2 |
| 85° | 762.1 | 882.1 | 1201.1 | 646.1 | 938.8 | 577.5 | 337.5 | 143.7 | 120.0 | 91.0 |
| 87.5° | 147.7 | 228.1 | 125.3 | 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 |

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



LM-79-2008: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGRAW-EDISON

Report Number: SP1-1908-441-1-R4

Test Date: 08/20/2019

Luminaire Tested: SA1C-727-U-5WQ

Test Information

Test Method: LM-79-2008
 Report Number: SP1-1908-441-1-R4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/28/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGRAW-EDISON
 Catalog Number: **SA1C-727-U-5WQ**
 Description: McGRAW EDISON ROADWAY AND AREA LUMINAIRE

THIS IS A REVISION OF SP1-1908-441-1-R3. TO UPDATE THE CATALOG NUMBER.TESTED IN
 SITU. (1) 70 CRI, 2700K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

Spectral Parameters

CCT (K): 2741
 CIE u': 0.2605
 CIE v': 0.5272
 Duv: 0.0005
 CIE x: 0.4573
 CIE y: 0.4113
 CIE z: 0.1313
 Peak Wavelength (nm): 602
 Dominant Wavelength (nm): 583
 Purity: 61.2
 Rf: 69.9
 Rg: 98.3

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.5 | | |
| R1: | 69.2 | R9: | -16.1 |
| R2: | 79.4 | R10: | 51.4 |
| R3: | 87.8 | R11: | 63.1 |
| R4: | 69.4 | R12: | 42.0 |
| R5: | 66.4 | R13: | 70.2 |
| R6: | 69.8 | R14: | 92.4 |
| R7: | 79.8 | | |
| R8: | 50.1 | | |



Test Conditions

Stabilization Time: 56M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 25.3./42%
 Sphere Temperature (°C): 25.7

REPORT NUMBER: SP1-1908-441-1-R4

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/28/2019 | 12/28/2019 |
| Power Meter | IN0071 | 12/5/2018 | 12/5/2019 |
| AC Power Source | IN0063 | 12/5/2018 | 12/5/2019 |
| DC Power Source | IN0208 | 12/5/2018 | 12/5/2019 |
| Sphere Thermometer | IN0085 | 12/5/2018 | 12/5/2019 |
| Room Thermometer | IN0046 | 12/5/2018 | 12/5/2019 |

REPORT NUMBER: SP1-1908-441-1-R4

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-1908-441-1-R4

Photopic Flux vs. Wavelength



Photopic Lumens: 6211.7

| 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 | 2044 | 0.0 | 490 | 7179 | 1.0 | 620 | 118034 | 30.7 | 750 | 8362 | 0.0 | 880 | 3128 | 0.0 |
| 365 | 2016 | 0.0 | 495 | 10476 | 1.9 | 625 | 111884 | 24.7 | 755 | 7635 | 0.0 | 885 | 3110 | 0.0 |
| 370 | 2020 | 0.0 | 500 | 15549 | 3.4 | 630 | 106119 | 19.2 | 760 | 6582 | 0.0 | 890 | 2632 | 0.0 |
| 375 | 2137 | 0.0 | 505 | 22477 | 6.3 | 635 | 99706 | 15.0 | 765 | 5777 | 0.0 | 895 | 2709 | 0.0 |
| 380 | 2046 | 0.0 | 510 | 30417 | 10.4 | 640 | 92142 | 11.0 | 770 | 5474 | 0.0 | 900 | 2016 | 0.0 |
| 385 | 1925 | 0.0 | 515 | 39274 | 16.3 | 645 | 84987 | 8.2 | 775 | 4977 | 0.0 | 905 | 1748 | 0.0 |
| 390 | 1893 | 0.0 | 520 | 47282 | 22.9 | 650 | 78016 | 5.7 | 780 | 4723 | 0.0 | 910 | 2046 | 0.0 |
| 395 | 1695 | 0.0 | 525 | 55413 | 29.7 | 655 | 71541 | 4.1 | 785 | 4219 | 0.0 | 915 | 1844 | 0.0 |
| 400 | 1633 | 0.0 | 530 | 62377 | 36.7 | 660 | 64863 | 2.7 | 790 | 3969 | 0.0 | 920 | 2734 | 0.0 |
| 405 | 2065 | 0.0 | 535 | 68520 | 42.5 | 665 | 58485 | 1.9 | 795 | 4122 | 0.0 | 925 | 2307 | 0.0 |
| 410 | 3449 | 0.0 | 540 | 73435 | 47.8 | 670 | 51641 | 1.1 | 800 | 2864 | 0.0 | 930 | 2039 | 0.0 |
| 415 | 7117 | 0.0 | 545 | 78677 | 52.4 | 675 | 46030 | 0.8 | 805 | 3151 | 0.0 | 935 | 1784 | 0.0 |
| 420 | 13992 | 0.0 | 550 | 83331 | 56.6 | 680 | 40590 | 0.5 | 810 | 3022 | 0.0 | 940 | 2464 | 0.0 |
| 425 | 25176 | 0.1 | 555 | 89120 | 60.9 | 685 | 35691 | 0.3 | 815 | 3471 | 0.0 | 945 | 2794 | 0.0 |
| 430 | 38151 | 0.3 | 560 | 94613 | 64.3 | 690 | 31631 | 0.2 | 820 | 2749 | 0.0 | 950 | 3090 | 0.0 |
| 435 | 49673 | 0.6 | 565 | 99818 | 66.4 | 695 | 27437 | 0.1 | 825 | 2729 | 0.0 | 955 | 1866 | 0.0 |
| 440 | 57273 | 0.9 | 570 | 106526 | 69.3 | 700 | 24589 | 0.1 | 830 | 2282 | 0.0 | 960 | 3110 | 0.0 |
| 445 | 54802 | 1.1 | 575 | 111610 | 69.4 | 705 | 21832 | 0.0 | 835 | 3140 | 0.0 | 965 | 3880 | 0.0 |
| 450 | 39184 | 1.0 | 580 | 117163 | 69.6 | 710 | 19500 | 0.0 | 840 | 2365 | 0.0 | 970 | 3243 | 0.0 |
| 455 | 22506 | 0.8 | 585 | 122201 | 67.9 | 715 | 17870 | 0.0 | 845 | 3024 | 0.0 | 975 | 2014 | 0.0 |
| 460 | 13692 | 0.6 | 590 | 125662 | 65.0 | 720 | 15924 | 0.0 | 850 | 2510 | 0.0 | 980 | 1688 | 0.0 |
| 465 | 9446 | 0.5 | 595 | 127415 | 60.4 | 725 | 14268 | 0.0 | 855 | 2739 | 0.0 | 985 | 2827 | 0.0 |
| 470 | 6698 | 0.4 | 600 | 129155 | 55.7 | 730 | 12438 | 0.0 | 860 | 3515 | 0.0 | 990 | 4172 | 0.0 |
| 475 | 5328 | 0.4 | 605 | 128057 | 49.6 | 735 | 11255 | 0.0 | 865 | 3600 | 0.0 | 995 | 3177 | 0.0 |
| 480 | 5081 | 0.5 | 610 | 126031 | 43.3 | 740 | 9951 | 0.0 | 870 | 3609 | 0.0 | 1000 | 3241 | 0.0 |
| 485 | 5579 | 0.7 | 615 | 123059 | 37.1 | 745 | 8870 | 0.0 | 875 | 3208 | 0.0 | | | |

REPORT NUMBER: SP1-1908-441-1-R4

Scotopic Flux vs. Wavelength



Scotopic Lumens: 6474.3

S/P: 1.04

| 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 | 2044 | 0.0 | 490 | 7179 | 6.0 | 620 | 118034 | 0.1 | 750 | 8362 | 0.0 | 880 | 3128 | 0.0 |
| 365 | 2016 | 0.0 | 495 | 10476 | 8.6 | 625 | 111884 | 0.1 | 755 | 7635 | 0.0 | 885 | 3110 | 0.0 |
| 370 | 2020 | 0.0 | 500 | 15549 | 12.5 | 630 | 106119 | 0.0 | 760 | 6582 | 0.0 | 890 | 2632 | 0.0 |
| 375 | 2137 | 0.0 | 505 | 22477 | 17.3 | 635 | 99706 | 0.0 | 765 | 5777 | 0.0 | 895 | 2709 | 0.0 |
| 380 | 2046 | 0.0 | 510 | 30417 | 21.8 | 640 | 92142 | 0.0 | 770 | 5474 | 0.0 | 900 | 2016 | 0.0 |
| 385 | 1925 | 0.0 | 515 | 39274 | 25.7 | 645 | 84987 | 0.0 | 775 | 4977 | 0.0 | 905 | 1748 | 0.0 |
| 390 | 1893 | 0.0 | 520 | 47282 | 27.5 | 650 | 78016 | 0.0 | 780 | 4723 | 0.0 | 910 | 2046 | 0.0 |
| 395 | 1695 | 0.0 | 525 | 55413 | 28.1 | 655 | 71541 | 0.0 | 785 | 4219 | 0.0 | 915 | 1844 | 0.0 |
| 400 | 1633 | 0.0 | 530 | 62377 | 27.0 | 660 | 64863 | 0.0 | 790 | 3969 | 0.0 | 920 | 2734 | 0.0 |
| 405 | 2065 | 0.0 | 535 | 68520 | 24.7 | 665 | 58485 | 0.0 | 795 | 4122 | 0.0 | 925 | 2307 | 0.0 |
| 410 | 3449 | 0.1 | 540 | 73435 | 21.5 | 670 | 51641 | 0.0 | 800 | 2864 | 0.0 | 930 | 2039 | 0.0 |
| 415 | 7117 | 0.5 | 545 | 78677 | 18.3 | 675 | 46030 | 0.0 | 805 | 3151 | 0.0 | 935 | 1784 | 0.0 |
| 420 | 13992 | 1.6 | 550 | 83331 | 15.0 | 680 | 40590 | 0.0 | 810 | 3022 | 0.0 | 940 | 2464 | 0.0 |
| 425 | 25176 | 3.9 | 555 | 89120 | 12.0 | 685 | 35691 | 0.0 | 815 | 3471 | 0.0 | 945 | 2794 | 0.0 |
| 430 | 38151 | 8.1 | 560 | 94613 | 9.3 | 690 | 31631 | 0.0 | 820 | 2749 | 0.0 | 950 | 3090 | 0.0 |
| 435 | 49673 | 13.3 | 565 | 99818 | 7.0 | 695 | 27437 | 0.0 | 825 | 2729 | 0.0 | 955 | 1866 | 0.0 |
| 440 | 57273 | 19.1 | 570 | 106526 | 5.2 | 700 | 24589 | 0.0 | 830 | 2282 | 0.0 | 960 | 3110 | 0.0 |
| 445 | 54802 | 21.6 | 575 | 111610 | 3.7 | 705 | 21832 | 0.0 | 835 | 3140 | 0.0 | 965 | 3880 | 0.0 |
| 450 | 39184 | 18.1 | 580 | 117163 | 2.6 | 710 | 19500 | 0.0 | 840 | 2365 | 0.0 | 970 | 3243 | 0.0 |
| 455 | 22506 | 11.8 | 585 | 122201 | 1.8 | 715 | 17870 | 0.0 | 845 | 3024 | 0.0 | 975 | 2014 | 0.0 |
| 460 | 13692 | 8.1 | 590 | 125662 | 1.2 | 720 | 15924 | 0.0 | 850 | 2510 | 0.0 | 980 | 1688 | 0.0 |
| 465 | 9446 | 6.2 | 595 | 127415 | 0.8 | 725 | 14268 | 0.0 | 855 | 2739 | 0.0 | 985 | 2827 | 0.0 |
| 470 | 6698 | 4.8 | 600 | 129155 | 0.5 | 730 | 12438 | 0.0 | 860 | 3515 | 0.0 | 990 | 4172 | 0.0 |
| 475 | 5328 | 4.1 | 605 | 128057 | 0.4 | 735 | 11255 | 0.0 | 865 | 3600 | 0.0 | 995 | 3177 | 0.0 |
| 480 | 5081 | 4.1 | 610 | 126031 | 0.2 | 740 | 9951 | 0.0 | 870 | 3609 | 0.0 | 1000 | 3241 | 0.0 |
| 485 | 5579 | 4.6 | 615 | 123059 | 0.1 | 745 | 8870 | 0.0 | 875 | 3208 | 0.0 | | | |

REPORT NUMBER: SP1-1908-441-1-R4

Melanopic Flux vs. Wavelength



Melanopic Lumens: 2145.7 M/P: 0.35

| λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) |
|----------------|-----------------------------------|-----------------------------|----------------|-----------------------------------|-----------------------------|----------------|-----------------------------------|-----------------------------|----------------|-----------------------------------|-----------------------------|----------------|-----------------------------------|-----------------------------|
| 360 | 2044 | 0.0 | 490 | 7179 | 11.1 | 620 | 118034 | 1.5 | 750 | 8362 | 0.0 | 880 | 3128 | 0.0 |
| 365 | 2016 | 0.0 | 495 | 10476 | 16.9 | 625 | 111884 | 0.9 | 755 | 7635 | 0.0 | 885 | 3110 | 0.0 |
| 370 | 2020 | 0.0 | 500 | 15549 | 26.0 | 630 | 106119 | 0.6 | 760 | 6582 | 0.0 | 890 | 2632 | 0.0 |
| 375 | 2137 | 0.0 | 505 | 22477 | 38.2 | 635 | 99706 | 0.4 | 765 | 5777 | 0.0 | 895 | 2709 | 0.0 |
| 380 | 2046 | 0.0 | 510 | 30417 | 51.6 | 640 | 92142 | 0.2 | 770 | 5474 | 0.0 | 900 | 2016 | 0.0 |
| 385 | 1925 | 0.0 | 515 | 39274 | 65.1 | 645 | 84987 | 0.1 | 775 | 4977 | 0.0 | 905 | 1748 | 0.0 |
| 390 | 1893 | 0.0 | 520 | 47282 | 75.2 | 650 | 78016 | 0.1 | 780 | 4723 | 0.0 | 910 | 2046 | 0.0 |
| 395 | 1695 | 0.0 | 525 | 55413 | 82.9 | 655 | 71541 | 0.1 | 785 | 4219 | 0.0 | 915 | 1844 | 0.0 |
| 400 | 1633 | 0.0 | 530 | 62377 | 86.0 | 660 | 64863 | 0.0 | 790 | 3969 | 0.0 | 920 | 2734 | 0.0 |
| 405 | 2065 | 0.1 | 535 | 68520 | 85.4 | 665 | 58485 | 0.0 | 795 | 4122 | 0.0 | 925 | 2307 | 0.0 |
| 410 | 3449 | 0.2 | 540 | 73435 | 81.1 | 670 | 51641 | 0.0 | 800 | 2864 | 0.0 | 930 | 2039 | 0.0 |
| 415 | 7117 | 0.7 | 545 | 78677 | 75.4 | 675 | 46030 | 0.0 | 805 | 3151 | 0.0 | 935 | 1784 | 0.0 |
| 420 | 13992 | 2.3 | 550 | 83331 | 68.1 | 680 | 40590 | 0.0 | 810 | 3022 | 0.0 | 940 | 2464 | 0.0 |
| 425 | 25176 | 6.2 | 555 | 89120 | 60.9 | 685 | 35691 | 0.0 | 815 | 3471 | 0.0 | 945 | 2794 | 0.0 |
| 430 | 38151 | 13.0 | 560 | 94613 | 52.9 | 690 | 31631 | 0.0 | 820 | 2749 | 0.0 | 950 | 3090 | 0.0 |
| 435 | 49673 | 22.2 | 565 | 99818 | 44.8 | 695 | 27437 | 0.0 | 825 | 2729 | 0.0 | 955 | 1866 | 0.0 |
| 440 | 57273 | 32.0 | 570 | 106526 | 37.6 | 700 | 24589 | 0.0 | 830 | 2282 | 0.0 | 960 | 3110 | 0.0 |
| 445 | 54802 | 36.7 | 575 | 111610 | 30.4 | 705 | 21832 | 0.0 | 835 | 3140 | 0.0 | 965 | 3880 | 0.0 |
| 450 | 39184 | 30.4 | 580 | 117163 | 24.1 | 710 | 19500 | 0.0 | 840 | 2365 | 0.0 | 970 | 3243 | 0.0 |
| 455 | 22506 | 19.7 | 585 | 122201 | 18.7 | 715 | 17870 | 0.0 | 845 | 3024 | 0.0 | 975 | 2014 | 0.0 |
| 460 | 13692 | 13.2 | 590 | 125662 | 14.0 | 720 | 15924 | 0.0 | 850 | 2510 | 0.0 | 980 | 1688 | 0.0 |
| 465 | 9446 | 10.0 | 595 | 127415 | 10.2 | 725 | 14268 | 0.0 | 855 | 2739 | 0.0 | 985 | 2827 | 0.0 |
| 470 | 6698 | 7.7 | 600 | 129155 | 7.3 | 730 | 12438 | 0.0 | 860 | 3515 | 0.0 | 990 | 4172 | 0.0 |
| 475 | 5328 | 6.7 | 605 | 128057 | 5.0 | 735 | 11255 | 0.0 | 865 | 3600 | 0.0 | 995 | 3177 | 0.0 |
| 480 | 5081 | 6.9 | 610 | 126031 | 3.4 | 740 | 9951 | 0.0 | 870 | 3609 | 0.0 | 1000 | 3241 | 0.0 |
| 485 | 5579 | 8.1 | 615 | 123059 | 2.3 | 745 | 8870 | 0.0 | 875 | 3208 | 0.0 | | | |

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Summary

$R_f = 69.9$
 $R_g = 98.3$
 CIE $R_a = 71.5$
 $R_g = -16.1$



Color Vector Graphics



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

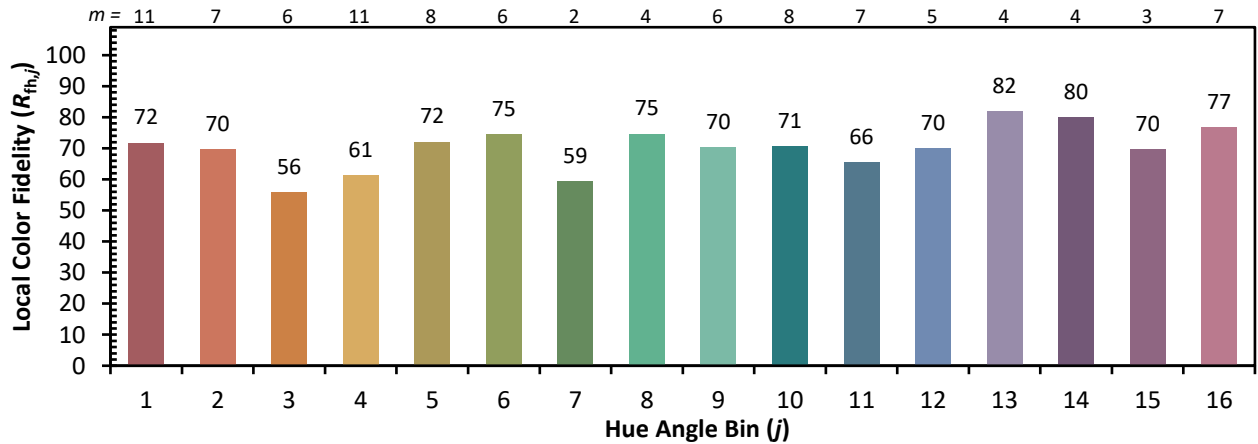
| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 54 | CES51 = 77 | CES76 = 48 |
| CES02 = 63 | CES27 = 74 | CES52 = 80 | CES77 = 75 |
| CES03 = 31 | CES28 = 80 | CES53 = 66 | CES78 = 56 |
| CES04 = 71 | CES29 = 44 | CES54 = 77 | CES79 = 81 |
| CES05 = 50 | CES30 = 46 | CES55 = 74 | CES80 = 80 |
| CES06 = 52 | CES31 = 50 | CES56 = 63 | CES81 = 73 |
| CES07 = 42 | CES32 = 49 | CES57 = 60 | CES82 = 91 |
| CES08 = 41 | CES33 = 53 | CES58 = 63 | CES83 = 84 |
| CES09 = 29 | CES34 = 66 | CES59 = 85 | CES84 = 90 |
| CES10 = 77 | CES35 = 82 | CES60 = 89 | CES85 = 87 |
| CES11 = 60 | CES36 = 78 | CES61 = 85 | CES86 = 65 |
| CES12 = 66 | CES37 = 75 | CES62 = 69 | CES87 = 78 |
| CES13 = 43 | CES38 = 53 | CES63 = 68 | CES88 = 73 |
| CES14 = 74 | CES39 = 91 | CES64 = 68 | CES89 = 68 |
| CES15 = 71 | CES40 = 85 | CES65 = 65 | CES90 = 68 |
| CES16 = 48 | CES41 = 76 | CES66 = 62 | CES91 = 91 |
| CES17 = 50 | CES42 = 76 | CES67 = 60 | CES92 = 71 |
| CES18 = 57 | CES43 = 65 | CES68 = 68 | CES93 = 82 |
| CES19 = 73 | CES44 = 98 | CES69 = 77 | CES94 = 57 |
| CES20 = 67 | CES45 = 75 | CES70 = 60 | CES95 = 78 |
| CES21 = 88 | CES46 = 70 | CES71 = 57 | CES96 = 80 |
| CES22 = 80 | CES47 = 63 | CES72 = 86 | CES97 = 79 |
| CES23 = 92 | CES48 = 51 | CES73 = 52 | CES98 = 71 |
| CES24 = 91 | CES49 = 68 | CES74 = 90 | CES99 = 64 |
| CES25 = 73 | CES50 = 77 | CES75 = 58 | |



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Color Rendition by Hue-Angle Bin



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Measure Comparisons



(END OF REPORT)