

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



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P1449848

Luminaire Tested: **TWC100\_T4\_80W\_3000K**

Issue Date: 5/19/2026

**Test Information**

Test Method: LM-79-08  
Report Number: P1449848  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( 20260310010)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: TWC100\_T4\_80W\_3000K  
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T4 distribution, 80W  
3000K settings  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6386 lumens  
Efficiency: N/A  
Efficacy: 162.9 lumens/watt  
Luminous Opening: Rectangular (W 0.92' x L: 0.42' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U3 - G1

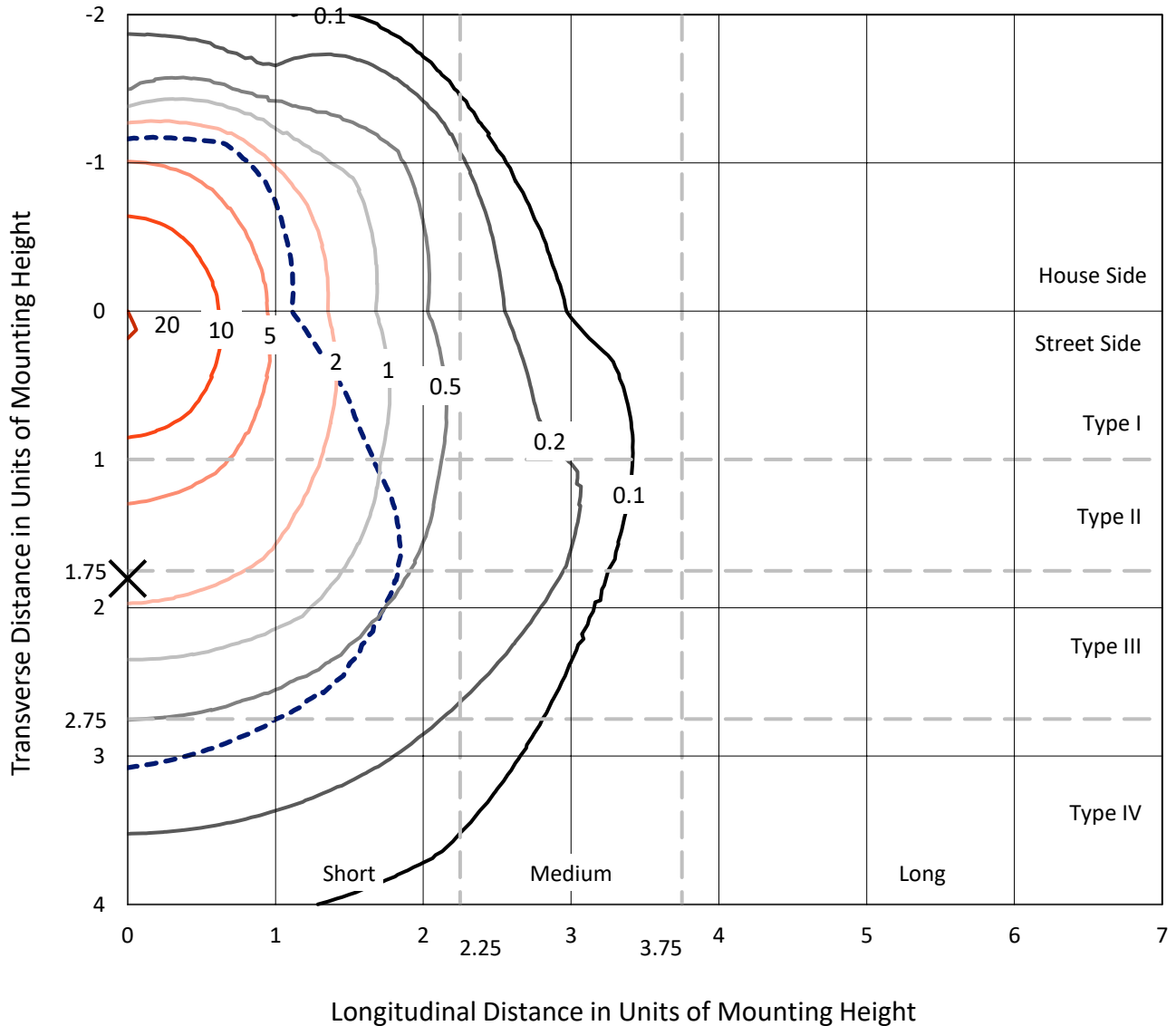
Input Watts (W): 39.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

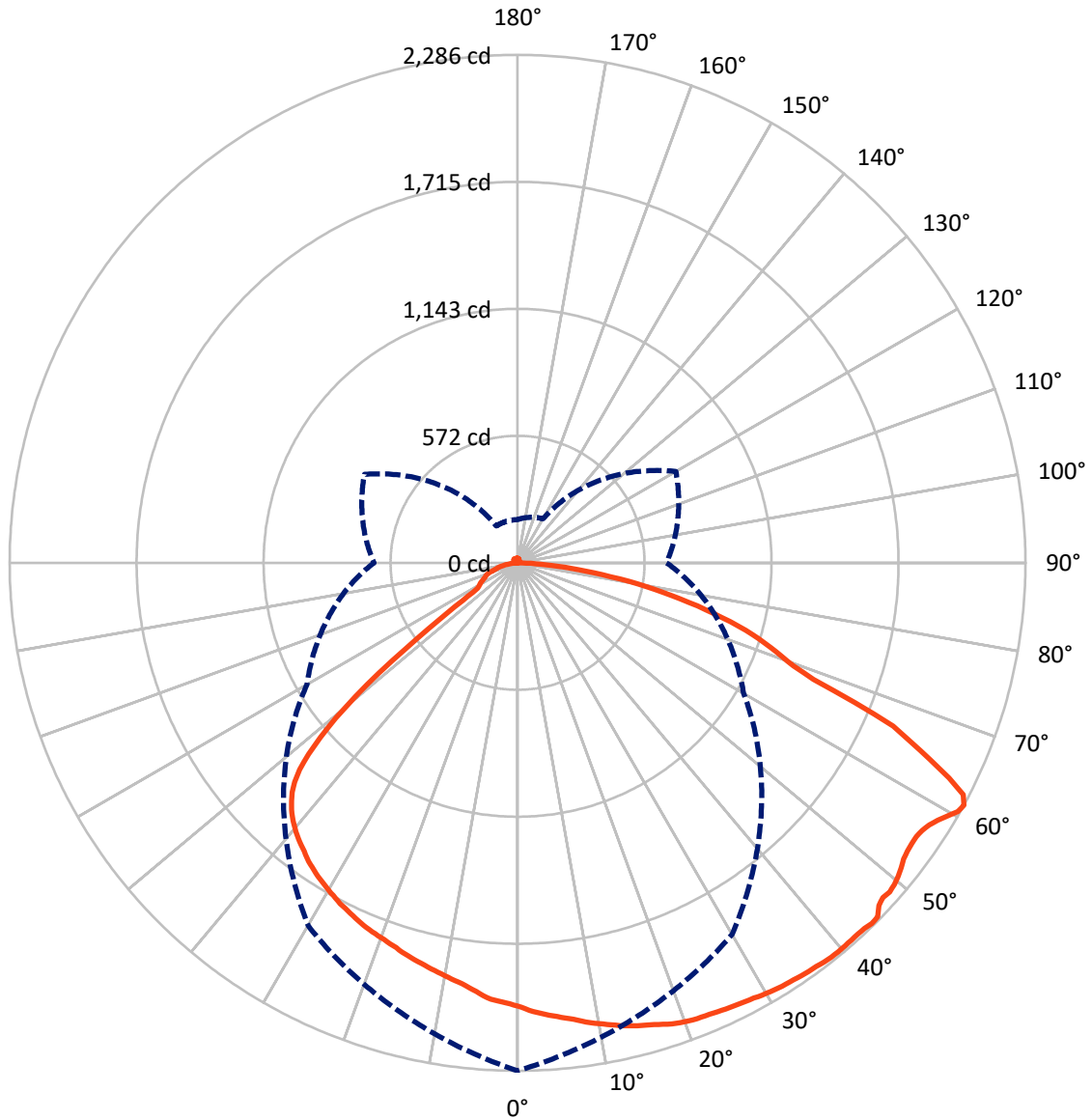
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 61-Deg Vertical

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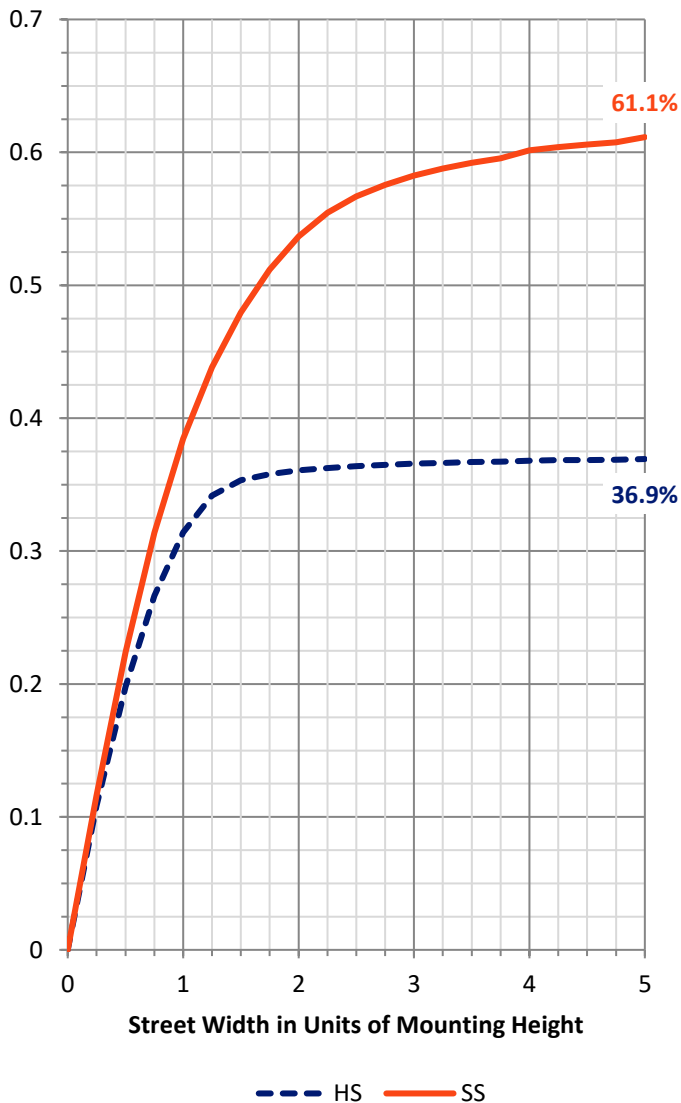
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2375.2   | 42.4   | 2417.6 |
|                    | % Fixture | 37.2     | 0.7    | 37.9   |
| <b>Street Side</b> | Lumens    | 3941.8   | 26.6   | 3968.4 |
|                    | % Fixture | 61.7     | 0.4    | 62.1   |
| <b>Total</b>       | Lumens    | 6317.1   | 69.0   | 6386.0 |
|                    | % Fixture | 98.9     | 1.1    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 190.1  | 3.0       |
| 10°-20°   | 553.0  | 8.7       |
| 20°-30°   | 863.0  | 13.5      |
| 30°-40°   | 1089.8 | 17.1      |
| 40°-50°   | 1201.5 | 18.8      |
| 50°-60°   | 1085.4 | 17.0      |
| 60°-70°   | 820.0  | 12.8      |
| 70°-80°   | 414.9  | 6.5       |
| 80°-90°   | 99.4   | 1.6       |
| 90°-100°  | 3.7    | 0.1       |
| 100°-110° | 6.5    | 0.1       |
| 110°-120° | 9.2    | 0.1       |
| 120°-130° | 11.1   | 0.2       |
| 130°-140° | 11.6   | 0.2       |
| 140°-150° | 10.7   | 0.2       |
| 150°-160° | 8.6    | 0.1       |
| 160°-170° | 5.6    | 0.1       |
| 170°-180° | 1.9    | 0.0       |
| 0°-90°    | 6317.1 | 98.9      |
| 0°-180°   | 6386.0 | 100.0     |

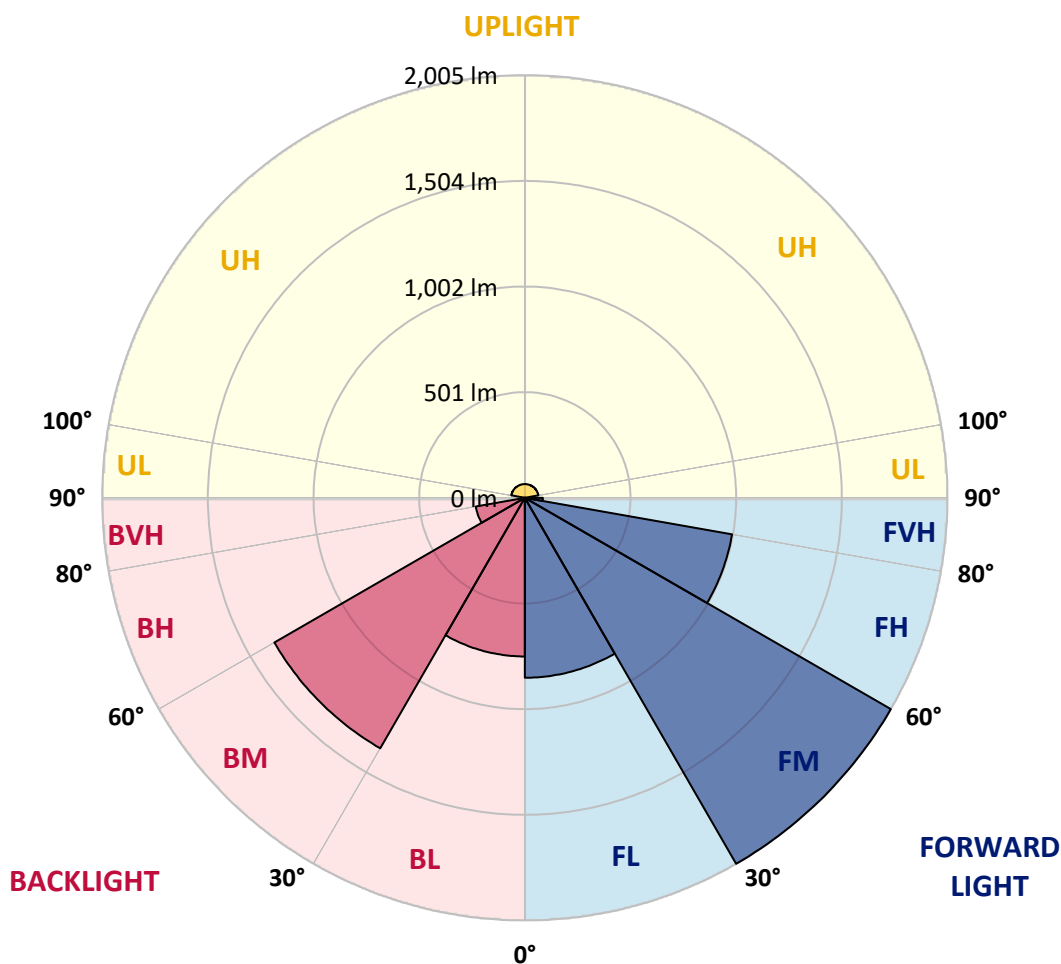


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |        |         |
|----------------|--------|-----------|-------------------------|--------|---------|
|                |        |           | B                       | U      | G       |
| FL (0°-30°)    | 853.4  | 13.4      |                         |        |         |
| FM (30°-60°)   | 2004.8 | 31.4      |                         |        |         |
| FH (60°-80°)   | 998.4  | 15.6      |                         |        | G1/1800 |
| FVH (80°-90°)  | 85.2   | 1.3       |                         |        | G1/100  |
| BL (0°-30°)    | 752.6  | 11.8      | B2/1000                 |        |         |
| BM (30°-60°)   | 1372.0 | 21.5      | B2/2500                 |        |         |
| BH (60°-80°)   | 236.5  | 3.7       | B1/500                  |        | G1/500  |
| BVH (80°-90°)  | 14.1   | 0.2       |                         |        | G1/100  |
| UL (90°-100°)  | 3.7    | 0.1       |                         | U1/10  |         |
| UH (100°-180°) | 65.2   | 1.0       |                         | U3/500 |         |

**BUG Rating: B2-U3-G1**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|     | 0°     | 30°    | 60°    | 90°    | 120°   | 150°   | 180°   | 210°   | 240°   | 270°   | 300°   |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°  | 2000.3 | 2000.3 | 2000.3 | 2000.3 | 2000.3 | 2000.3 | 2000.3 | 2000.3 | 2000.3 | 2000.3 | 2000.3 |
| 1°  | 2015.4 | 2012.3 | 2006.6 | 2000.0 | 1997.8 | 1989.7 | 1990.2 | 1989.6 | 1995.5 | 1998.5 | 2007.1 |
| 2°  | 2025.8 | 2021.1 | 2009.8 | 1998.9 | 1988.8 | 1980.9 | 1981.2 | 1981.0 | 1989.4 | 1999.5 | 2007.9 |
| 3°  | 2035.9 | 2029.3 | 2014.1 | 1998.7 | 1982.7 | 1974.4 | 1974.6 | 1973.3 | 1979.0 | 1996.9 | 2010.8 |
| 4°  | 2045.9 | 2037.8 | 2017.3 | 1995.9 | 1976.3 | 1967.2 | 1968.3 | 1968.3 | 1972.9 | 1993.2 | 2014.2 |
| 5°  | 2055.1 | 2044.5 | 2020.1 | 1993.3 | 1969.1 | 1960.5 | 1955.2 | 1959.9 | 1965.9 | 1989.1 | 2015.1 |
| 6°  | 2064.9 | 2051.9 | 2024.0 | 1989.7 | 1962.0 | 1951.6 | 1937.9 | 1946.2 | 1959.1 | 1980.4 | 2019.9 |
| 7°  | 2076.3 | 2060.3 | 2025.8 | 1984.9 | 1955.7 | 1935.0 | 1924.5 | 1927.6 | 1952.0 | 1974.9 | 2020.8 |
| 8°  | 2089.4 | 2070.0 | 2027.3 | 1979.2 | 1948.1 | 1919.4 | 1911.2 | 1914.6 | 1943.4 | 1968.0 | 2021.3 |
| 9°  | 2100.8 | 2079.1 | 2028.4 | 1969.9 | 1939.5 | 1905.3 | 1901.8 | 1903.9 | 1933.8 | 1961.0 | 2021.5 |
| 10° | 2111.2 | 2088.0 | 2029.3 | 1963.3 | 1930.1 | 1894.2 | 1891.9 | 1893.8 | 1920.1 | 1953.8 | 2020.8 |
| 11° | 2122.0 | 2095.4 | 2028.3 | 1955.1 | 1918.7 | 1882.7 | 1882.1 | 1880.4 | 1905.8 | 1944.9 | 2018.9 |
| 12° | 2134.1 | 2104.7 | 2026.2 | 1945.9 | 1902.5 | 1872.6 | 1872.7 | 1870.2 | 1891.4 | 1935.1 | 2017.1 |
| 13° | 2142.6 | 2110.5 | 2025.0 | 1939.0 | 1888.0 | 1862.5 | 1864.3 | 1860.0 | 1876.2 | 1922.8 | 2015.9 |
| 14° | 2152.4 | 2115.4 | 2023.9 | 1928.3 | 1872.3 | 1852.3 | 1854.6 | 1852.5 | 1858.6 | 1911.5 | 2011.0 |
| 15° | 2158.9 | 2119.3 | 2021.4 | 1917.5 | 1856.8 | 1842.4 | 1846.2 | 1842.0 | 1843.5 | 1899.9 | 2007.2 |
| 16° | 2167.9 | 2125.4 | 2020.4 | 1901.9 | 1841.8 | 1832.0 | 1836.8 | 1831.0 | 1828.0 | 1887.2 | 2002.5 |
| 17° | 2177.4 | 2131.0 | 2017.1 | 1889.6 | 1826.3 | 1817.6 | 1828.6 | 1820.0 | 1813.3 | 1871.7 | 1999.4 |
| 18° | 2189.1 | 2135.9 | 2012.3 | 1876.8 | 1810.2 | 1806.6 | 1816.3 | 1805.7 | 1799.3 | 1857.5 | 1993.5 |
| 19° | 2195.8 | 2142.3 | 2003.8 | 1863.2 | 1795.0 | 1795.0 | 1808.0 | 1794.7 | 1784.0 | 1842.9 | 1986.6 |
| 20° | 2201.0 | 2145.4 | 1996.6 | 1847.9 | 1776.4 | 1784.4 | 1799.0 | 1784.3 | 1768.9 | 1828.3 | 1973.8 |
| 21° | 2205.3 | 2145.9 | 1988.4 | 1832.5 | 1759.9 | 1774.6 | 1791.9 | 1773.9 | 1748.3 | 1813.0 | 1963.6 |
| 22° | 2206.7 | 2143.3 | 1979.0 | 1816.9 | 1743.6 | 1764.1 | 1785.2 | 1763.5 | 1732.9 | 1796.5 | 1952.2 |
| 23° | 2210.1 | 2141.2 | 1968.0 | 1799.4 | 1725.4 | 1753.1 | 1776.9 | 1753.1 | 1716.4 | 1779.9 | 1940.9 |
| 24° | 2213.8 | 2139.4 | 1957.3 | 1782.3 | 1708.9 | 1739.6 | 1768.0 | 1742.8 | 1700.0 | 1758.4 | 1930.0 |
| 25° | 2218.5 | 2137.3 | 1945.6 | 1763.9 | 1691.6 | 1729.1 | 1757.9 | 1732.1 | 1682.6 | 1740.1 | 1917.5 |
| 26° | 2221.5 | 2136.1 | 1934.3 | 1745.7 | 1674.5 | 1718.6 | 1748.4 | 1720.3 | 1665.1 | 1720.6 | 1903.6 |
| 27° | 2225.5 | 2134.6 | 1921.7 | 1722.5 | 1656.5 | 1707.7 | 1738.0 | 1708.5 | 1648.3 | 1699.5 | 1890.1 |
| 28° | 2229.1 | 2131.8 | 1907.5 | 1701.7 | 1638.9 | 1694.1 | 1729.3 | 1695.7 | 1628.3 | 1677.9 | 1873.2 |
| 29° | 2236.0 | 2129.2 | 1892.9 | 1679.9 | 1620.7 | 1680.4 | 1717.6 | 1680.4 | 1610.3 | 1655.6 | 1857.7 |
| 30° | 2240.5 | 2126.7 | 1873.7 | 1658.1 | 1601.6 | 1667.3 | 1706.8 | 1667.5 | 1591.3 | 1632.8 | 1841.2 |
| 31° | 2244.6 | 2123.5 | 1858.4 | 1635.5 | 1578.7 | 1654.6 | 1695.8 | 1655.1 | 1572.3 | 1607.8 | 1820.9 |
| 32° | 2248.6 | 2121.3 | 1842.6 | 1613.5 | 1559.2 | 1642.1 | 1683.9 | 1642.3 | 1549.7 | 1584.1 | 1804.2 |
| 33° | 2250.9 | 2116.1 | 1826.7 | 1591.1 | 1539.7 | 1629.4 | 1673.0 | 1629.5 | 1530.5 | 1560.1 | 1786.5 |
| 34° | 2254.9 | 2115.9 | 1810.1 | 1568.1 | 1520.3 | 1614.7 | 1660.1 | 1615.4 | 1510.6 | 1531.7 | 1767.8 |
| 35° | 2258.2 | 2114.4 | 1792.1 | 1540.8 | 1499.3 | 1600.6 | 1646.8 | 1601.2 | 1490.2 | 1505.8 | 1749.4 |
| 36° | 2260.8 | 2114.2 | 1773.1 | 1514.7 | 1479.4 | 1582.3 | 1632.8 | 1585.6 | 1468.5 | 1478.4 | 1728.3 |
| 37° | 2266.1 | 2115.9 | 1753.3 | 1487.3 | 1457.9 | 1566.9 | 1615.0 | 1566.9 | 1446.4 | 1449.9 | 1707.5 |
| 38° | 2267.9 | 2112.9 | 1729.1 | 1459.2 | 1435.1 | 1551.1 | 1600.4 | 1550.6 | 1423.6 | 1419.7 | 1686.3 |
| 39° | 2269.1 | 2110.1 | 1707.9 | 1426.2 | 1408.5 | 1534.9 | 1585.0 | 1534.4 | 1400.9 | 1390.5 | 1659.2 |
| 40° | 2268.5 | 2105.6 | 1686.3 | 1395.9 | 1384.9 | 1518.8 | 1568.2 | 1516.5 | 1375.4 | 1360.1 | 1636.3 |
| 41° | 2267.3 | 2099.0 | 1665.1 | 1365.5 | 1362.4 | 1501.8 | 1549.3 | 1499.1 | 1352.5 | 1329.5 | 1612.8 |
| 42° | 2266.6 | 2093.6 | 1640.9 | 1333.8 | 1337.7 | 1484.4 | 1528.5 | 1480.8 | 1329.7 | 1300.0 | 1588.9 |
| 43° | 2268.8 | 2088.0 | 1619.0 | 1303.6 | 1314.6 | 1466.5 | 1505.6 | 1462.5 | 1306.8 | 1265.5 | 1564.5 |
| 44° | 2275.5 | 2082.4 | 1597.3 | 1271.9 | 1291.5 | 1444.6 | 1477.7 | 1441.0 | 1282.2 | 1235.8 | 1542.0 |



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**CANDELA DISTRIBUTION (continued):**

|     | 0°     | 30°    | 60°    | 90°    | 120°   | 150°   | 180°   | 210°   | 240°   | 270°   | 300°   |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 45° | 2272.5 | 2078.3 | 1576.5 | 1240.1 | 1268.1 | 1425.3 | 1448.1 | 1419.1 | 1258.3 | 1204.9 | 1518.5 |
| 46° | 2241.6 | 2076.1 | 1555.4 | 1203.3 | 1243.5 | 1404.4 | 1406.7 | 1394.4 | 1235.3 | 1170.9 | 1496.6 |
| 47° | 2229.9 | 2075.7 | 1535.0 | 1171.0 | 1219.5 | 1377.7 | 1352.7 | 1367.4 | 1209.3 | 1138.9 | 1472.9 |
| 48° | 2235.8 | 2061.1 | 1514.2 | 1138.4 | 1195.1 | 1351.0 | 1275.9 | 1334.4 | 1185.8 | 1106.9 | 1451.3 |
| 49° | 2230.7 | 2023.4 | 1493.6 | 1105.8 | 1171.2 | 1322.3 | 1185.8 | 1300.9 | 1161.8 | 1075.8 | 1429.4 |
| 50° | 2219.3 | 2013.2 | 1468.3 | 1071.4 | 1146.4 | 1290.7 | 1076.5 | 1256.2 | 1137.8 | 1040.6 | 1404.2 |
| 51° | 2206.3 | 2012.1 | 1447.3 | 1038.2 | 1117.7 | 1246.5 | 944.3  | 1198.3 | 1112.8 | 1006.3 | 1381.5 |
| 52° | 2189.8 | 1994.5 | 1424.8 | 1005.2 | 1093.2 | 1191.8 | 799.4  | 1121.0 | 1084.4 | 973.6  | 1358.7 |
| 53° | 2182.4 | 1974.9 | 1400.6 | 970.7  | 1069.0 | 1124.1 | 635.0  | 1030.9 | 1059.3 | 939.6  | 1333.7 |
| 54° | 2178.5 | 1954.6 | 1377.0 | 932.3  | 1042.7 | 1039.1 | 499.3  | 920.5  | 1033.5 | 901.2  | 1306.8 |
| 55° | 2177.2 | 1937.9 | 1356.1 | 898.0  | 1017.0 | 921.4  | 387.3  | 790.7  | 1006.3 | 866.7  | 1283.5 |
| 56° | 2183.9 | 1926.8 | 1335.5 | 862.7  | 990.6  | 795.8  | 298.4  | 633.6  | 976.5  | 831.5  | 1261.0 |
| 57° | 2196.7 | 1917.7 | 1314.5 | 822.4  | 959.2  | 657.0  | 242.0  | 496.3  | 946.4  | 795.8  | 1239.2 |
| 58° | 2217.7 | 1913.6 | 1286.3 | 784.5  | 929.6  | 504.3  | 212.6  | 379.4  | 913.7  | 756.6  | 1211.5 |
| 59° | 2245.2 | 1911.0 | 1238.9 | 747.5  | 897.6  | 383.3  | 204.2  | 290.6  | 875.0  | 718.7  | 1167.9 |
| 60° | 2275.4 | 1914.3 | 1201.7 | 710.2  | 863.4  | 291.8  | 199.1  | 224.3  | 836.9  | 681.5  | 1125.2 |
| 61° | 2286.2 | 1931.4 | 1174.5 | 670.4  | 822.6  | 229.1  | 194.6  | 191.7  | 795.9  | 646.3  | 1094.2 |
| 62° | 2261.0 | 1960.9 | 1138.0 | 635.5  | 781.6  | 188.8  | 189.0  | 181.5  | 753.8  | 608.0  | 1056.4 |
| 63° | 2170.0 | 1998.0 | 1092.2 | 602.5  | 738.6  | 177.8  | 182.0  | 175.4  | 702.6  | 575.6  | 1009.5 |
| 64° | 2056.0 | 2012.3 | 1041.3 | 569.0  | 694.6  | 171.6  | 175.2  | 170.1  | 643.7  | 544.1  | 959.3  |
| 65° | 1946.7 | 1960.8 | 995.1  | 532.0  | 640.2  | 165.9  | 169.4  | 163.6  | 571.9  | 512.6  | 909.5  |
| 66° | 1842.8 | 1843.3 | 947.9  | 498.8  | 577.9  | 158.9  | 163.4  | 156.4  | 482.8  | 477.9  | 855.5  |
| 67° | 1642.7 | 1704.4 | 895.8  | 466.4  | 502.0  | 151.8  | 158.1  | 148.4  | 366.4  | 445.3  | 806.8  |
| 68° | 1431.0 | 1580.3 | 856.2  | 429.7  | 394.8  | 144.5  | 153.9  | 141.4  | 263.7  | 411.7  | 761.9  |
| 69° | 1325.5 | 1376.4 | 824.0  | 395.0  | 287.5  | 136.7  | 149.6  | 134.4  | 184.8  | 374.4  | 719.2  |
| 70° | 1260.9 | 1201.0 | 802.1  | 359.2  | 200.7  | 129.5  | 143.9  | 128.2  | 138.2  | 339.9  | 688.5  |
| 71° | 1201.7 | 1119.1 | 805.4  | 320.0  | 142.2  | 123.6  | 136.5  | 123.0  | 119.9  | 305.6  | 674.0  |
| 72° | 1139.6 | 1070.5 | 932.8  | 285.4  | 121.5  | 118.5  | 126.1  | 117.1  | 112.8  | 272.1  | 730.7  |
| 73° | 1071.7 | 1021.9 | 1085.9 | 252.8  | 113.1  | 111.8  | 116.3  | 110.0  | 105.3  | 236.4  | 953.4  |
| 74° | 993.1  | 970.7  | 840.5  | 222.2  | 105.1  | 104.4  | 106.9  | 103.2  | 97.2   | 205.8  | 806.6  |
| 75° | 913.3  | 919.5  | 535.1  | 190.7  | 96.4   | 97.5   | 97.9   | 94.1   | 90.6   | 177.1  | 487.6  |
| 76° | 833.4  | 861.1  | 445.3  | 163.8  | 89.2   | 88.7   | 92.0   | 85.3   | 84.0   | 150.9  | 381.2  |
| 77° | 749.0  | 797.5  | 395.0  | 139.6  | 82.0   | 80.2   | 86.7   | 75.9   | 77.4   | 127.8  | 332.6  |
| 78° | 670.8  | 736.3  | 393.1  | 117.0  | 75.2   | 70.5   | 81.2   | 67.1   | 71.1   | 105.5  | 322.3  |
| 79° | 590.2  | 686.4  | 390.3  | 95.4   | 67.7   | 62.2   | 71.1   | 61.0   | 64.8   | 87.0   | 343.4  |
| 80° | 510.9  | 635.5  | 303.5  | 78.0   | 61.6   | 55.8   | 63.2   | 55.4   | 59.0   | 70.2   | 251.8  |
| 81° | 424.3  | 571.3  | 204.2  | 63.2   | 55.7   | 50.2   | 56.2   | 49.7   | 51.8   | 55.3   | 164.3  |
| 82° | 347.9  | 493.5  | 170.6  | 49.5   | 47.6   | 44.7   | 46.6   | 43.1   | 44.5   | 41.5   | 136.7  |
| 83° | 276.8  | 411.0  | 150.5  | 36.5   | 40.2   | 37.9   | 35.9   | 37.2   | 36.3   | 31.9   | 122.5  |
| 84° | 214.4  | 354.8  | 131.9  | 27.3   | 32.5   | 31.7   | 26.9   | 31.2   | 29.5   | 24.4   | 107.8  |
| 85° | 151.1  | 300.4  | 112.6  | 20.1   | 25.7   | 25.8   | 21.8   | 23.4   | 22.7   | 17.9   | 92.0   |
| 86° | 102.3  | 216.5  | 93.8   | 14.0   | 18.9   | 18.4   | 14.0   | 16.7   | 18.0   | 12.2   | 73.4   |
| 87° | 60.6   | 147.9  | 66.6   | 8.5    | 13.7   | 11.2   | 8.9    | 10.8   | 12.6   | 8.0    | 51.1   |
| 88° | 20.3   | 56.7   | 26.8   | 4.4    | 8.2    | 6.2    | 6.8    | 7.2    | 7.7    | 4.6    | 16.4   |
| 89° | 1.7    | 1.2    | 1.6    | 1.8    | 3.6    | 3.5    | 5.8    | 5.8    | 4.2    | 2.4    | 1.9    |



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**CANDELA DISTRIBUTION (continued):**

|      | 0°   | 30°  | 60°  | 90°  | 120° | 150° | 180° | 210° | 240° | 270° | 300° |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 90°  | 0.6  | 0.6  | 0.7  | 0.8  | 1.7  | 2.5  | 6.0  | 5.8  | 3.9  | 2.0  | 1.7  |
| 91°  | 0.6  | 0.6  | 0.8  | 1.0  | 1.8  | 2.6  | 6.7  | 6.4  | 4.2  | 2.2  | 1.9  |
| 92°  | 0.7  | 0.7  | 0.8  | 0.9  | 2.1  | 3.0  | 7.3  | 6.8  | 4.5  | 2.4  | 2.0  |
| 93°  | 0.8  | 0.7  | 0.9  | 1.1  | 2.2  | 3.3  | 7.8  | 7.3  | 4.9  | 2.5  | 2.2  |
| 94°  | 0.8  | 0.7  | 1.0  | 1.2  | 2.4  | 3.6  | 8.3  | 7.8  | 5.2  | 2.7  | 2.3  |
| 95°  | 0.8  | 0.8  | 1.1  | 1.3  | 2.7  | 4.1  | 8.9  | 8.3  | 5.5  | 2.9  | 2.6  |
| 96°  | 0.7  | 0.7  | 1.1  | 1.4  | 2.8  | 4.3  | 9.5  | 8.8  | 5.8  | 3.2  | 2.8  |
| 97°  | 0.9  | 0.8  | 1.3  | 1.6  | 3.1  | 4.8  | 10.1 | 9.2  | 6.3  | 3.4  | 3.0  |
| 98°  | 0.9  | 0.9  | 1.4  | 1.7  | 3.4  | 5.2  | 10.6 | 9.7  | 6.6  | 3.7  | 3.2  |
| 99°  | 0.9  | 1.0  | 1.6  | 1.9  | 3.6  | 5.6  | 11.1 | 10.2 | 6.9  | 3.9  | 3.5  |
| 100° | 0.9  | 1.0  | 1.7  | 2.0  | 4.0  | 5.9  | 11.7 | 10.7 | 7.4  | 4.2  | 3.7  |
| 101° | 1.0  | 1.2  | 1.9  | 2.2  | 4.1  | 6.3  | 12.3 | 11.2 | 7.7  | 4.5  | 4.0  |
| 102° | 1.1  | 1.3  | 2.0  | 2.4  | 4.5  | 6.8  | 12.8 | 11.6 | 8.1  | 4.8  | 4.2  |
| 103° | 1.1  | 1.4  | 2.1  | 2.7  | 4.7  | 7.1  | 13.4 | 12.1 | 8.4  | 5.1  | 4.5  |
| 104° | 1.3  | 1.5  | 2.4  | 2.8  | 5.1  | 7.5  | 13.8 | 12.5 | 8.8  | 5.4  | 4.8  |
| 105° | 1.4  | 1.6  | 2.6  | 3.0  | 5.4  | 8.0  | 14.3 | 13.1 | 9.2  | 5.7  | 5.1  |
| 106° | 1.4  | 1.9  | 2.7  | 3.3  | 5.7  | 8.3  | 14.9 | 13.5 | 9.5  | 6.0  | 5.4  |
| 107° | 1.6  | 2.0  | 2.9  | 3.5  | 5.9  | 8.8  | 15.4 | 14.1 | 9.9  | 6.3  | 5.7  |
| 108° | 1.8  | 2.2  | 3.3  | 3.8  | 6.4  | 9.3  | 15.8 | 14.5 | 10.1 | 6.7  | 5.9  |
| 109° | 2.0  | 2.4  | 3.4  | 4.0  | 6.6  | 9.7  | 16.3 | 14.9 | 10.6 | 7.1  | 6.4  |
| 110° | 2.1  | 2.7  | 3.8  | 4.3  | 6.9  | 10.2 | 16.8 | 15.4 | 10.9 | 7.4  | 6.7  |
| 111° | 2.3  | 3.0  | 4.0  | 4.5  | 7.3  | 10.6 | 17.2 | 15.8 | 11.4 | 7.8  | 7.0  |
| 112° | 2.7  | 3.2  | 4.2  | 4.8  | 7.5  | 11.0 | 17.8 | 16.1 | 11.7 | 8.0  | 7.3  |
| 113° | 2.9  | 3.4  | 4.5  | 5.0  | 7.9  | 11.3 | 18.0 | 16.5 | 12.0 | 8.5  | 7.7  |
| 114° | 3.1  | 3.8  | 4.7  | 5.3  | 8.3  | 11.7 | 18.3 | 16.8 | 12.4 | 8.7  | 7.9  |
| 115° | 3.3  | 4.0  | 4.9  | 5.7  | 8.6  | 12.2 | 18.8 | 17.1 | 12.7 | 9.1  | 8.3  |
| 116° | 3.6  | 4.3  | 5.3  | 5.8  | 8.9  | 12.5 | 19.1 | 17.4 | 13.1 | 9.5  | 8.6  |
| 117° | 4.0  | 4.6  | 5.5  | 6.2  | 9.3  | 13.0 | 19.4 | 17.8 | 13.5 | 9.8  | 8.8  |
| 118° | 4.2  | 4.9  | 5.8  | 6.6  | 9.6  | 13.3 | 19.7 | 17.9 | 13.6 | 10.0 | 9.3  |
| 119° | 4.6  | 5.2  | 6.0  | 6.8  | 9.9  | 13.5 | 19.9 | 18.1 | 14.0 | 10.4 | 9.6  |
| 120° | 5.0  | 5.6  | 6.4  | 7.2  | 10.2 | 14.0 | 20.1 | 18.5 | 14.3 | 10.8 | 9.9  |
| 121° | 5.3  | 6.0  | 6.6  | 7.5  | 10.6 | 14.3 | 20.3 | 18.6 | 14.6 | 11.1 | 10.2 |
| 122° | 5.7  | 6.3  | 6.9  | 7.8  | 10.9 | 14.5 | 20.4 | 18.9 | 14.9 | 11.4 | 10.5 |
| 123° | 6.0  | 6.7  | 7.3  | 8.0  | 11.3 | 15.0 | 20.6 | 19.1 | 15.1 | 11.7 | 10.8 |
| 124° | 6.5  | 7.0  | 7.5  | 8.3  | 11.6 | 15.3 | 20.8 | 19.3 | 15.4 | 12.1 | 11.1 |
| 125° | 6.9  | 7.4  | 7.8  | 8.7  | 11.9 | 15.6 | 21.0 | 19.5 | 15.7 | 12.4 | 11.5 |
| 126° | 7.3  | 7.7  | 8.1  | 9.0  | 12.2 | 15.9 | 21.1 | 19.6 | 15.9 | 12.7 | 11.8 |
| 127° | 7.6  | 8.0  | 8.4  | 9.3  | 12.5 | 16.2 | 21.2 | 19.8 | 16.2 | 13.0 | 12.2 |
| 128° | 7.9  | 8.3  | 8.8  | 9.6  | 12.9 | 16.5 | 21.3 | 20.0 | 16.4 | 13.3 | 12.5 |
| 129° | 8.4  | 8.6  | 9.1  | 9.9  | 13.1 | 16.7 | 21.4 | 20.1 | 16.6 | 13.6 | 12.8 |
| 130° | 8.7  | 8.9  | 9.4  | 10.1 | 13.4 | 17.0 | 21.5 | 20.2 | 16.8 | 13.8 | 13.1 |
| 131° | 9.0  | 9.1  | 9.6  | 10.5 | 13.7 | 17.3 | 21.5 | 20.4 | 17.1 | 14.2 | 13.3 |
| 132° | 9.3  | 9.5  | 10.0 | 10.8 | 14.0 | 17.5 | 21.6 | 20.5 | 17.2 | 14.4 | 13.5 |
| 133° | 9.6  | 9.8  | 10.2 | 11.2 | 14.3 | 17.8 | 21.7 | 20.6 | 17.3 | 14.7 | 13.8 |
| 134° | 10.0 | 10.1 | 10.5 | 11.4 | 14.6 | 18.1 | 21.7 | 20.7 | 17.6 | 15.0 | 14.2 |



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 CATALOG NUMBER: TWC100\_T4\_80W\_3000K

**CANDELA DISTRIBUTION (continued):**

|      | 0°   | 30°  | 60°  | 90°  | 120° | 150° | 180° | 210° | 240° | 270° | 300° |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 135° | 10.2 | 10.4 | 10.8 | 11.7 | 14.8 | 18.4 | 21.9 | 20.7 | 17.8 | 15.2 | 14.5 |
| 136° | 10.5 | 10.7 | 11.2 | 12.0 | 15.1 | 18.6 | 21.9 | 20.9 | 17.9 | 15.4 | 14.7 |
| 137° | 10.8 | 11.0 | 11.4 | 12.4 | 15.3 | 18.9 | 21.8 | 21.0 | 18.1 | 15.7 | 15.0 |
| 138° | 11.1 | 11.4 | 11.8 | 12.6 | 15.4 | 19.0 | 21.8 | 20.9 | 18.2 | 16.0 | 15.2 |
| 139° | 11.4 | 11.6 | 12.0 | 13.0 | 15.7 | 19.1 | 21.9 | 21.0 | 18.4 | 16.2 | 15.4 |
| 140° | 11.6 | 11.9 | 12.4 | 13.3 | 15.9 | 19.3 | 21.9 | 21.1 | 18.6 | 16.4 | 15.7 |
| 141° | 11.9 | 12.2 | 12.7 | 13.4 | 16.1 | 19.4 | 21.8 | 21.1 | 18.8 | 16.7 | 15.9 |
| 142° | 12.2 | 12.4 | 13.1 | 13.7 | 16.3 | 19.6 | 21.8 | 21.0 | 18.9 | 16.8 | 16.1 |
| 143° | 12.5 | 12.8 | 13.4 | 14.0 | 16.5 | 19.7 | 21.8 | 21.1 | 19.0 | 17.0 | 16.2 |
| 144° | 12.8 | 13.0 | 13.5 | 14.3 | 16.8 | 19.8 | 21.8 | 21.1 | 19.2 | 17.3 | 16.5 |
| 145° | 13.2 | 13.5 | 13.9 | 14.5 | 16.8 | 19.8 | 21.7 | 21.1 | 19.3 | 17.4 | 16.7 |
| 146° | 13.5 | 13.8 | 14.2 | 14.7 | 17.1 | 19.9 | 21.8 | 21.2 | 19.4 | 17.7 | 16.9 |
| 147° | 13.8 | 14.0 | 14.5 | 14.9 | 17.3 | 20.0 | 21.7 | 21.1 | 19.6 | 17.9 | 17.2 |
| 148° | 14.2 | 14.5 | 14.6 | 15.3 | 17.5 | 20.0 | 21.7 | 21.1 | 19.7 | 18.0 | 17.4 |
| 149° | 14.6 | 14.6 | 15.0 | 15.5 | 17.7 | 20.0 | 21.8 | 21.3 | 19.8 | 18.2 | 17.5 |
| 150° | 14.9 | 15.0 | 15.2 | 15.7 | 17.9 | 20.2 | 21.7 | 21.3 | 19.9 | 18.5 | 17.7 |
| 151° | 15.2 | 15.3 | 15.4 | 16.0 | 18.0 | 20.2 | 21.7 | 21.3 | 20.0 | 18.6 | 17.9 |
| 152° | 15.6 | 15.6 | 15.6 | 16.2 | 18.2 | 20.4 | 21.6 | 21.3 | 20.1 | 18.8 | 18.1 |
| 153° | 15.8 | 15.8 | 15.8 | 16.4 | 18.3 | 20.3 | 21.5 | 21.3 | 20.3 | 19.0 | 18.2 |
| 154° | 16.1 | 16.1 | 16.1 | 16.6 | 18.5 | 20.4 | 21.6 | 21.3 | 20.3 | 19.0 | 18.3 |
| 155° | 16.4 | 16.2 | 16.4 | 16.9 | 18.6 | 20.5 | 21.6 | 21.3 | 20.4 | 19.3 | 18.5 |
| 156° | 16.7 | 16.5 | 16.6 | 17.1 | 18.8 | 20.5 | 21.4 | 21.3 | 20.5 | 19.4 | 18.6 |
| 157° | 16.8 | 16.7 | 16.8 | 17.3 | 18.9 | 20.6 | 21.3 | 21.2 | 20.4 | 19.5 | 18.9 |
| 158° | 17.0 | 16.9 | 16.9 | 17.5 | 19.2 | 20.7 | 21.3 | 21.2 | 20.5 | 19.6 | 19.0 |
| 159° | 17.2 | 17.0 | 17.2 | 17.7 | 19.3 | 20.7 | 21.3 | 21.2 | 20.6 | 19.8 | 19.2 |
| 160° | 17.4 | 17.2 | 17.3 | 17.8 | 19.5 | 20.7 | 21.2 | 21.2 | 20.6 | 19.8 | 19.3 |
| 161° | 17.6 | 17.4 | 17.5 | 18.1 | 19.5 | 20.8 | 21.1 | 21.1 | 20.7 | 20.0 | 19.4 |
| 162° | 17.8 | 17.5 | 17.8 | 18.2 | 19.7 | 20.8 | 21.0 | 21.1 | 20.7 | 20.0 | 19.5 |
| 163° | 17.8 | 17.7 | 17.8 | 18.5 | 19.8 | 20.9 | 21.0 | 21.1 | 20.7 | 20.1 | 19.6 |
| 164° | 18.0 | 17.7 | 18.0 | 18.7 | 20.0 | 20.9 | 21.0 | 21.0 | 20.8 | 20.2 | 19.8 |
| 165° | 18.2 | 18.1 | 18.3 | 18.8 | 20.1 | 21.0 | 20.9 | 21.0 | 20.8 | 20.3 | 19.9 |
| 166° | 18.3 | 18.2 | 18.5 | 19.0 | 20.1 | 21.0 | 20.9 | 21.0 | 20.8 | 20.3 | 19.9 |
| 167° | 18.5 | 18.5 | 18.6 | 19.2 | 20.2 | 21.0 | 20.9 | 21.0 | 20.8 | 20.4 | 20.0 |
| 168° | 18.6 | 18.6 | 18.9 | 19.2 | 20.3 | 21.0 | 20.8 | 20.9 | 20.8 | 20.5 | 20.2 |
| 169° | 18.8 | 18.8 | 19.0 | 19.5 | 20.5 | 21.1 | 20.9 | 20.9 | 20.8 | 20.6 | 20.2 |
| 170° | 18.9 | 18.9 | 19.2 | 19.7 | 20.5 | 21.0 | 20.8 | 21.0 | 20.9 | 20.7 | 20.4 |
| 171° | 19.1 | 19.1 | 19.4 | 19.8 | 20.6 | 21.1 | 21.0 | 20.9 | 20.8 | 20.7 | 20.4 |
| 172° | 19.4 | 19.2 | 19.5 | 20.0 | 20.6 | 21.0 | 20.8 | 20.9 | 20.8 | 20.8 | 20.5 |
| 173° | 19.6 | 19.4 | 19.6 | 20.2 | 20.7 | 21.0 | 21.0 | 21.0 | 20.8 | 20.9 | 20.6 |
| 174° | 19.7 | 19.5 | 19.8 | 20.3 | 20.7 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 | 20.7 |
| 175° | 19.9 | 19.7 | 20.1 | 20.3 | 20.9 | 21.1 | 20.9 | 20.7 | 20.8 | 20.9 | 20.8 |
| 176° | 20.1 | 19.9 | 20.0 | 20.6 | 20.9 | 21.2 | 20.9 | 20.8 | 20.8 | 20.9 | 20.9 |
| 177° | 20.2 | 20.0 | 20.3 | 20.7 | 20.9 | 21.1 | 20.8 | 20.7 | 20.7 | 20.9 | 20.9 |
| 178° | 20.4 | 20.2 | 20.3 | 20.7 | 21.1 | 21.1 | 20.8 | 20.6 | 20.8 | 21.0 | 20.9 |
| 179° | 20.5 | 20.3 | 20.5 | 20.8 | 21.0 | 21.0 | 20.8 | 20.6 | 20.7 | 21.0 | 20.9 |



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**CANDELA DISTRIBUTION (continued):**

|      | 0°   | 30°  | 60°  | 90°  | 120° | 150° | 180° | 210° | 240° | 270° | 300° |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 180° | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 |



REPORT NUMBER: P1449848  
CATALOG NUMBER: TWC100\_T4\_80W\_3000K

**CANDELA DISTRIBUTION (continued):**

|     | 330°   | 360°   |
|-----|--------|--------|
| 0°  | 2000.3 | 2000.3 |
| 1°  | 2010.5 | 2015.4 |
| 2°  | 2018.6 | 2025.8 |
| 3°  | 2027.3 | 2035.9 |
| 4°  | 2035.0 | 2045.9 |
| 5°  | 2042.5 | 2055.1 |
| 6°  | 2050.9 | 2064.9 |
| 7°  | 2058.7 | 2076.3 |
| 8°  | 2066.8 | 2089.4 |
| 9°  | 2074.9 | 2100.8 |
| 10° | 2081.9 | 2111.2 |
| 11° | 2089.0 | 2122.0 |
| 12° | 2098.3 | 2134.1 |
| 13° | 2103.3 | 2142.6 |
| 14° | 2108.7 | 2152.4 |
| 15° | 2109.9 | 2158.9 |
| 16° | 2114.9 | 2167.9 |
| 17° | 2120.4 | 2177.4 |
| 18° | 2123.0 | 2189.1 |
| 19° | 2127.6 | 2195.8 |
| 20° | 2129.3 | 2201.0 |
| 21° | 2128.4 | 2205.3 |
| 22° | 2126.1 | 2206.7 |
| 23° | 2123.8 | 2210.1 |
| 24° | 2120.9 | 2213.8 |
| 25° | 2118.5 | 2218.5 |
| 26° | 2114.6 | 2221.5 |
| 27° | 2111.2 | 2225.5 |
| 28° | 2108.0 | 2229.1 |
| 29° | 2103.5 | 2236.0 |
| 30° | 2103.1 | 2240.5 |
| 31° | 2099.6 | 2244.6 |
| 32° | 2096.8 | 2248.6 |
| 33° | 2094.2 | 2250.9 |
| 34° | 2089.1 | 2254.9 |
| 35° | 2087.8 | 2258.2 |
| 36° | 2086.6 | 2260.8 |
| 37° | 2085.8 | 2266.1 |
| 38° | 2081.4 | 2267.9 |
| 39° | 2077.9 | 2269.1 |
| 40° | 2072.7 | 2268.5 |
| 41° | 2066.6 | 2267.3 |
| 42° | 2060.3 | 2266.6 |
| 43° | 2054.3 | 2268.8 |
| 44° | 2047.9 | 2275.5 |



REPORT NUMBER: P1449848  
CATALOG NUMBER: TWC100\_T4\_80W\_3000K

**CANDELA DISTRIBUTION (continued):**

|     | 330°   | 360°   |
|-----|--------|--------|
| 45° | 2040.9 | 2272.5 |
| 46° | 2038.7 | 2241.6 |
| 47° | 2035.0 | 2229.9 |
| 48° | 2007.9 | 2235.8 |
| 49° | 1977.9 | 2230.7 |
| 50° | 1973.4 | 2219.3 |
| 51° | 1966.6 | 2206.3 |
| 52° | 1950.9 | 2189.8 |
| 53° | 1925.8 | 2182.4 |
| 54° | 1905.5 | 2178.5 |
| 55° | 1888.0 | 2177.2 |
| 56° | 1874.6 | 2183.9 |
| 57° | 1865.0 | 2196.7 |
| 58° | 1860.2 | 2217.7 |
| 59° | 1856.4 | 2245.2 |
| 60° | 1862.9 | 2275.4 |
| 61° | 1885.4 | 2286.2 |
| 62° | 1918.0 | 2261.0 |
| 63° | 1948.8 | 2170.0 |
| 64° | 1944.3 | 2056.0 |
| 65° | 1857.1 | 1946.7 |
| 66° | 1729.3 | 1842.8 |
| 67° | 1612.2 | 1642.7 |
| 68° | 1451.5 | 1431.0 |
| 69° | 1238.0 | 1325.5 |
| 70° | 1119.1 | 1260.9 |
| 71° | 1063.2 | 1201.7 |
| 72° | 1008.2 | 1139.6 |
| 73° | 960.1  | 1071.7 |
| 74° | 911.1  | 993.1  |
| 75° | 858.2  | 913.3  |
| 76° | 789.5  | 833.4  |
| 77° | 730.5  | 749.0  |
| 78° | 679.8  | 670.8  |
| 79° | 631.6  | 590.2  |
| 80° | 576.0  | 510.9  |
| 81° | 517.2  | 424.3  |
| 82° | 434.8  | 347.9  |
| 83° | 362.4  | 276.8  |
| 84° | 307.9  | 214.4  |
| 85° | 235.1  | 151.1  |
| 86° | 176.9  | 102.3  |
| 87° | 97.5   | 60.6   |
| 88° | 5.7    | 20.3   |
| 89° | 0.9    | 1.7    |



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CATALOG NUMBER: TWC100\_T4\_80W\_3000K

**CANDELA DISTRIBUTION (continued):**

|      | 330° | 360° |
|------|------|------|
| 90°  | 1.0  | 0.6  |
| 91°  | 1.1  | 0.6  |
| 92°  | 1.1  | 0.7  |
| 93°  | 1.3  | 0.8  |
| 94°  | 1.3  | 0.8  |
| 95°  | 1.5  | 0.8  |
| 96°  | 1.8  | 0.7  |
| 97°  | 1.8  | 0.9  |
| 98°  | 2.1  | 0.9  |
| 99°  | 2.3  | 0.9  |
| 100° | 2.5  | 0.9  |
| 101° | 2.8  | 1.0  |
| 102° | 3.1  | 1.1  |
| 103° | 3.4  | 1.1  |
| 104° | 3.6  | 1.3  |
| 105° | 3.9  | 1.4  |
| 106° | 4.2  | 1.4  |
| 107° | 4.6  | 1.6  |
| 108° | 4.8  | 1.8  |
| 109° | 5.1  | 2.0  |
| 110° | 5.5  | 2.1  |
| 111° | 5.9  | 2.3  |
| 112° | 6.2  | 2.7  |
| 113° | 6.7  | 2.9  |
| 114° | 7.0  | 3.1  |
| 115° | 7.5  | 3.3  |
| 116° | 7.8  | 3.6  |
| 117° | 8.2  | 4.0  |
| 118° | 8.5  | 4.2  |
| 119° | 8.9  | 4.6  |
| 120° | 9.4  | 5.0  |
| 121° | 9.8  | 5.3  |
| 122° | 10.1 | 5.7  |
| 123° | 10.5 | 6.0  |
| 124° | 10.9 | 6.5  |
| 125° | 11.2 | 6.9  |
| 126° | 11.5 | 7.3  |
| 127° | 11.8 | 7.6  |
| 128° | 12.2 | 7.9  |
| 129° | 12.5 | 8.4  |
| 130° | 12.8 | 8.7  |
| 131° | 13.1 | 9.0  |
| 132° | 13.5 | 9.3  |
| 133° | 13.6 | 9.6  |
| 134° | 13.9 | 10.0 |



REPORT NUMBER: P1449848  
CATALOG NUMBER: TWC100\_T4\_80W\_3000K

**CANDELA DISTRIBUTION (continued):**

|      | 330° | 360° |
|------|------|------|
| 135° | 14.2 | 10.2 |
| 136° | 14.4 | 10.5 |
| 137° | 14.6 | 10.8 |
| 138° | 15.0 | 11.1 |
| 139° | 15.2 | 11.4 |
| 140° | 15.5 | 11.6 |
| 141° | 15.6 | 11.9 |
| 142° | 15.9 | 12.2 |
| 143° | 16.1 | 12.5 |
| 144° | 16.4 | 12.8 |
| 145° | 16.6 | 13.2 |
| 146° | 16.7 | 13.5 |
| 147° | 16.8 | 13.8 |
| 148° | 17.0 | 14.2 |
| 149° | 17.2 | 14.6 |
| 150° | 17.4 | 14.9 |
| 151° | 17.5 | 15.2 |
| 152° | 17.7 | 15.6 |
| 153° | 17.8 | 15.8 |
| 154° | 17.9 | 16.1 |
| 155° | 18.1 | 16.4 |
| 156° | 18.2 | 16.7 |
| 157° | 18.3 | 16.8 |
| 158° | 18.5 | 17.0 |
| 159° | 18.6 | 17.2 |
| 160° | 18.8 | 17.4 |
| 161° | 18.8 | 17.6 |
| 162° | 19.0 | 17.8 |
| 163° | 19.1 | 17.8 |
| 164° | 19.2 | 18.0 |
| 165° | 19.4 | 18.2 |
| 166° | 19.5 | 18.3 |
| 167° | 19.5 | 18.5 |
| 168° | 19.7 | 18.6 |
| 169° | 19.8 | 18.8 |
| 170° | 19.9 | 18.9 |
| 171° | 20.1 | 19.1 |
| 172° | 20.1 | 19.4 |
| 173° | 20.3 | 19.6 |
| 174° | 20.5 | 19.7 |
| 175° | 20.5 | 19.9 |
| 176° | 20.6 | 20.1 |
| 177° | 20.8 | 20.2 |
| 178° | 21.0 | 20.4 |
| 179° | 21.0 | 20.5 |

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

Scaled Data Report



REPORT NUMBER: P1449848  
CATALOG NUMBER: TWC100\_T4\_80W\_3000K

**CANDELA DISTRIBUTION (continued):**

|      |      |      |
|------|------|------|
|      | 330° | 360° |
| 180° | 20.7 | 20.7 |

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2601-659-1

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-3000K

Data in this report applies to families of products including ;MWP2460W34VDDKYYAD

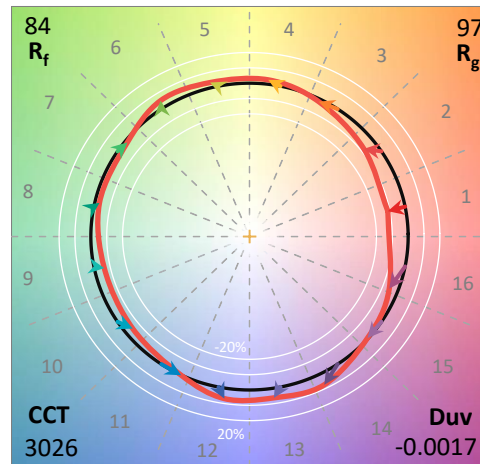
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2601-659-1  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 02/16/2026  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Lumark  
 Catalog Number: **MWP2460W34VDDKYYAD-T4-24W-3000K**  
 Description: Mester Wedge, at T4 beam setting, 24W output, 3000K

**Spectral Parameters**

CCT (K): 3026  
 CIE u': 0.2503  
 CIE v': 0.5184  
 Duv: -0.0017  
 CIE x: 0.4326  
 CIE y: 0.3983  
 CIE z: 0.1691  
 Peak Wavelength (nm): 604  
 Dominant Wavelength (nm): 583  
 Purity: 49.3886  
 Rf: 84  
 Rg: 97.4

|           |      |      |      |
|-----------|------|------|------|
| CRI (Ra): | 82.7 |      |      |
| R1:       | 81.4 | R9:  | 7.5  |
| R2:       | 90.7 | R10: | 78.8 |
| R3:       | 96.3 | R11: | 80.8 |
| R4:       | 81.1 | R12: | 70.7 |
| R5:       | 81.6 | R13: | 83.7 |
| R6:       | 88.6 | R14: | 98.6 |
| R7:       | 82.6 | R15: | 74.2 |
| R8:       | 59.3 |      |      |



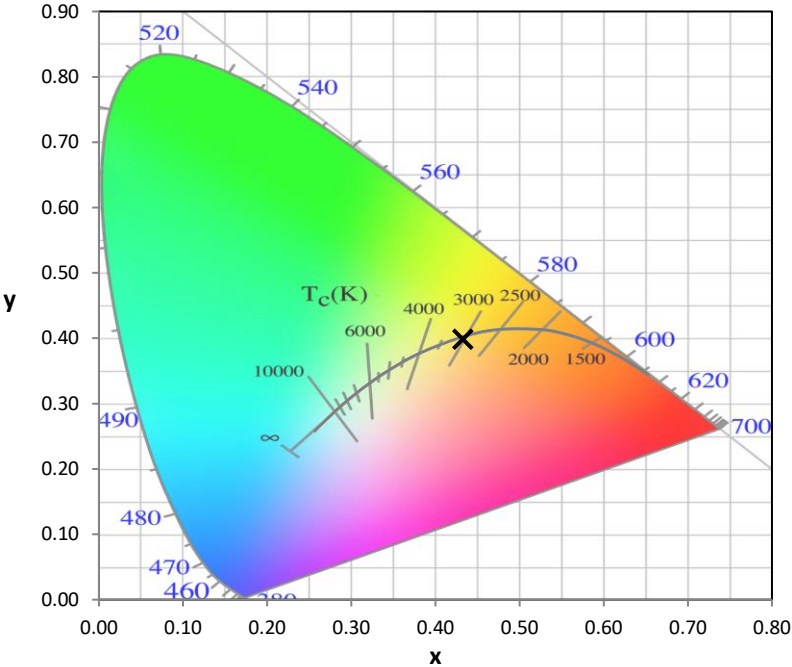
**Test Conditions**  
 Stabilization Time: 64M  
 Operation Time: 2H 4M  
 Sphere Temperature (°C): 24.8

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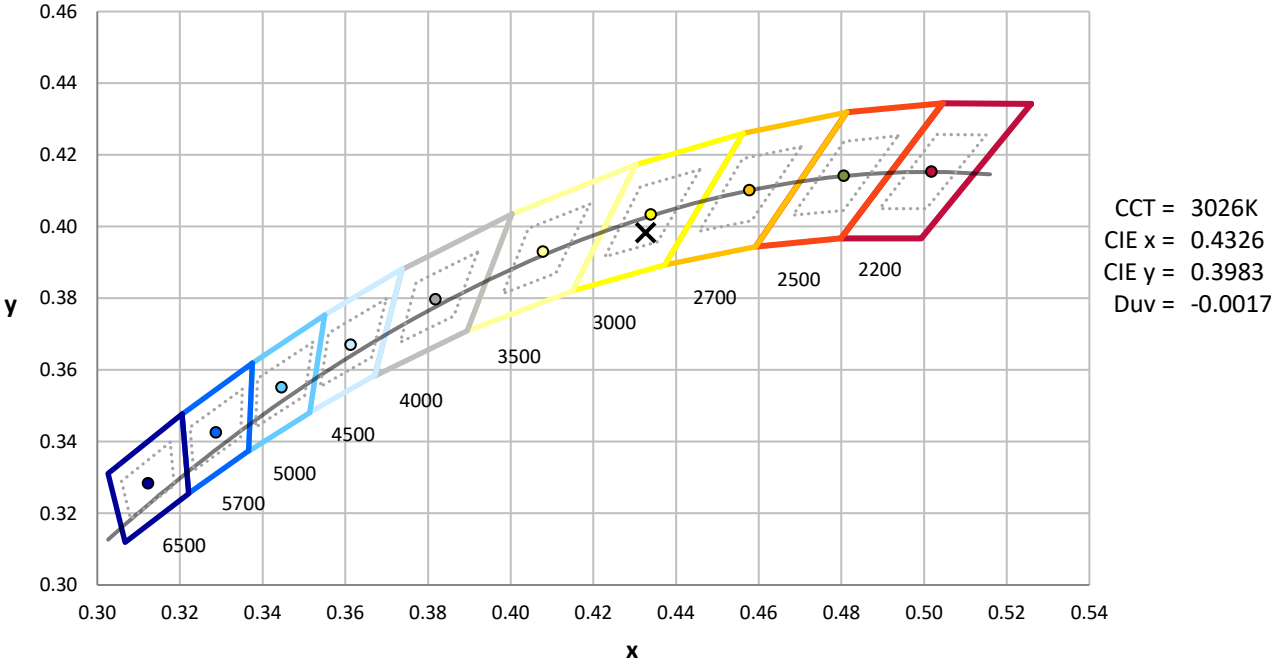
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | 76INCH SPHERE IN0058  | 12/16/2025       | 6/16/2026            |
| Power Meter                    | XITRON INXT2011004    | 10/21/2025       | 10/21/2026           |
| AC Power Source                | CHROMA 61603 IN0063   | 10/21/2025       | 10/21/2026           |
| DC Power Source                | AGILENT E3634A IN0208 | 10/21/2025       | 10/21/2026           |
| Sphere Thermometer             | ONSET IN0085          | 10/21/2025       | 10/21/2026           |
| Room Thermometer               | ONSET IN0046          | 10/21/2025       | 10/21/2026           |

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CIE 1931 Chromaticity Diagram



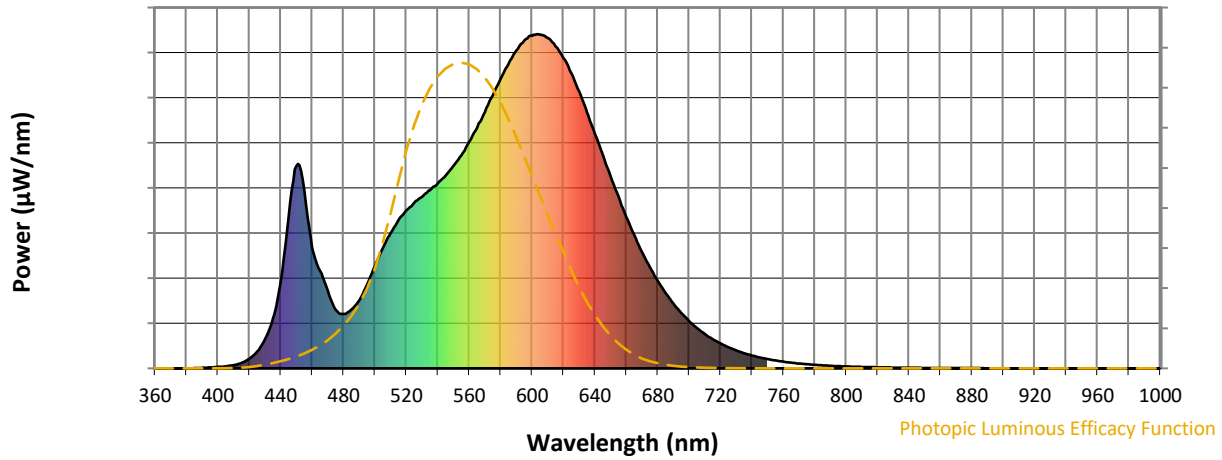
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

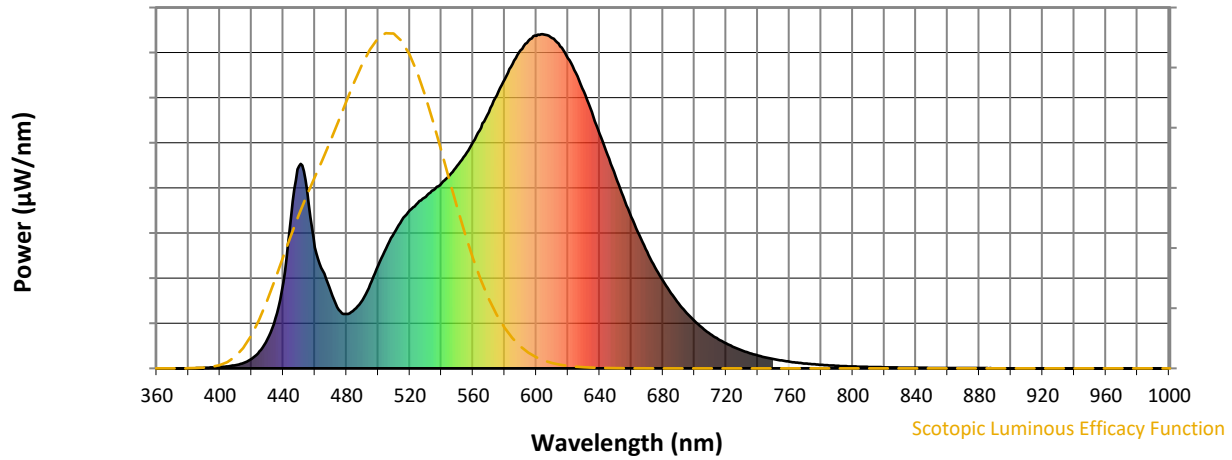


**Photopic Lumens: NR**

| $\lambda$<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>( $\phi$ /nm) | $\lambda$<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>( $\phi$ /nm) | $\lambda$<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>( $\phi$ /nm) | $\lambda$<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>( $\phi$ /nm) | $\lambda$<br>(nm) | Power<br>W <sup>^</sup> /nm | Lumens<br>( $\phi$ /nm) |
|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|
| 360               | 0                           | NR                      | 490               | 204                         | NR                      | 620               | 928                         | NR                      | 750               | 28                          | NR                      | 880               | 1                           | NR                      |
| 365               | 0                           | NR                      | 495               | 251                         | NR                      | 625               | 884                         | NR                      | 755               | 24                          | NR                      | 885               | 1                           | NR                      |
| 370               | 0                           | NR                      | 500               | 307                         | NR                      | 630               | 828                         | NR                      | 760               | 20                          | NR                      | 890               | 0                           | NR                      |
| 375               | 0                           | NR                      | 505               | 360                         | NR                      | 635               | 767                         | NR                      | 765               | 17                          | NR                      | 895               | 0                           | NR                      |
| 380               | 0                           | NR                      | 510               | 405                         | NR                      | 640               | 702                         | NR                      | 770               | 14                          | NR                      | 900               | 0                           | NR                      |
| 385               | 1                           | NR                      | 515               | 444                         | NR                      | 645               | 639                         | NR                      | 775               | 12                          | NR                      | 905               | 0                           | NR                      |
| 390               | 2                           | NR                      | 520               | 473                         | NR                      | 650               | 574                         | NR                      | 780               | 11                          | NR                      | 910               | 0                           | NR                      |
| 395               | 3                           | NR                      | 525               | 495                         | NR                      | 655               | 514                         | NR                      | 785               | 9                           | NR                      | 915               | 0                           | NR                      |
| 400               | 5                           | NR                      | 530               | 513                         | NR                      | 660               | 453                         | NR                      | 790               | 8                           | NR                      | 920               | 0                           | NR                      |
| 405               | 6                           | NR                      | 535               | 534                         | NR                      | 665               | 399                         | NR                      | 795               | 7                           | NR                      | 925               | 0                           | NR                      |
| 410               | 10                          | NR                      | 540               | 554                         | NR                      | 670               | 348                         | NR                      | 800               | 6                           | NR                      | 930               | 0                           | NR                      |
| 415               | 17                          | NR                      | 545               | 577                         | NR                      | 675               | 303                         | NR                      | 805               | 5                           | NR                      | 935               | 0                           | NR                      |
| 420               | 29                          | NR                      | 550               | 606                         | NR                      | 680               | 263                         | NR                      | 810               | 4                           | NR                      | 940               | 0                           | NR                      |
| 425               | 51                          | NR                      | 555               | 638                         | NR                      | 685               | 226                         | NR                      | 815               | 4                           | NR                      | 945               | 0                           | NR                      |
| 430               | 87                          | NR                      | 560               | 678                         | NR                      | 690               | 194                         | NR                      | 820               | 3                           | NR                      | 950               | 0                           | NR                      |
| 435               | 150                         | NR                      | 565               | 720                         | NR                      | 695               | 166                         | NR                      | 825               | 3                           | NR                      | 955               | 0                           | NR                      |
| 440               | 258                         | NR                      | 570               | 767                         | NR                      | 700               | 142                         | NR                      | 830               | 2                           | NR                      | 960               | 0                           | NR                      |
| 445               | 454                         | NR                      | 575               | 817                         | NR                      | 705               | 121                         | NR                      | 835               | 2                           | NR                      | 965               | 0                           | NR                      |
| 450               | 605                         | NR                      | 580               | 866                         | NR                      | 710               | 103                         | NR                      | 840               | 2                           | NR                      | 970               | 0                           | NR                      |
| 455               | 533                         | NR                      | 585               | 911                         | NR                      | 715               | 87                          | NR                      | 845               | 2                           | NR                      | 975               | 0                           | NR                      |
| 460               | 362                         | NR                      | 590               | 952                         | NR                      | 720               | 74                          | NR                      | 850               | 1                           | NR                      | 980               | 0                           | NR                      |
| 465               | 293                         | NR                      | 595               | 981                         | NR                      | 725               | 63                          | NR                      | 855               | 1                           | NR                      | 985               | 0                           | NR                      |
| 470               | 231                         | NR                      | 600               | 995                         | NR                      | 730               | 54                          | NR                      | 860               | 1                           | NR                      | 990               | 0                           | NR                      |
| 475               | 176                         | NR                      | 605               | 999                         | NR                      | 735               | 46                          | NR                      | 865               | 1                           | NR                      | 995               | 0                           | NR                      |
| 480               | 163                         | NR                      | 610               | 989                         | NR                      | 740               | 38                          | NR                      | 870               | 1                           | NR                      | 1000              | 0                           | NR                      |
| 485               | 176                         | NR                      | 615               | 964                         | NR                      | 745               | 33                          | NR                      | 875               | 1                           | NR                      |                   |                             |                         |

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**Scotopic Flux vs. Wavelength**



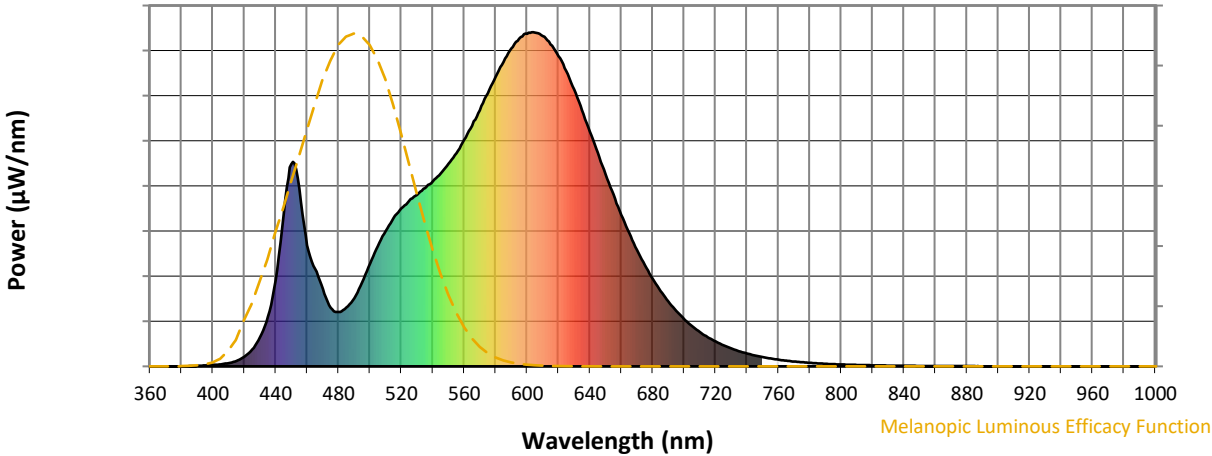
**Scotopic Lumens: NR**

**S/P: 1.35**

| $\lambda$ (nm) | Power W <sup>^</sup> /nm | Lumens ( $\phi$ /nm) | $\lambda$ (nm) | Power W <sup>^</sup> /nm | Lumens ( $\phi$ /nm) | $\lambda$ (nm) | Power W <sup>^</sup> /nm | Lumens ( $\phi$ /nm) | $\lambda$ (nm) | Power W <sup>^</sup> /nm | Lumens ( $\phi$ /nm) | $\lambda$ (nm) | Power W <sup>^</sup> /nm | Lumens ( $\phi$ /nm) |
|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|
| 360            | 0                        | NR                   | 490            | 204                      | NR                   | 620            | 928                      | NR                   | 750            | 28                       | NR                   | 880            | 1                        | NR                   |
| 365            | 0                        | NR                   | 495            | 251                      | NR                   | 625            | 884                      | NR                   | 755            | 24                       | NR                   | 885            | 1                        | NR                   |
| 370            | 0                        | NR                   | 500            | 307                      | NR                   | 630            | 828                      | NR                   | 760            | 20                       | NR                   | 890            | 0                        | NR                   |
| 375            | 0                        | NR                   | 505            | 360                      | NR                   | 635            | 767                      | NR                   | 765            | 17                       | NR                   | 895            | 0                        | NR                   |
| 380            | 0                        | NR                   | 510            | 405                      | NR                   | 640            | 702                      | NR                   | 770            | 14                       | NR                   | 900            | 0                        | NR                   |
| 385            | 1                        | NR                   | 515            | 444                      | NR                   | 645            | 639                      | NR                   | 775            | 12                       | NR                   | 905            | 0                        | NR                   |
| 390            | 2                        | NR                   | 520            | 473                      | NR                   | 650            | 574                      | NR                   | 780            | 11                       | NR                   | 910            | 0                        | NR                   |
| 395            | 3                        | NR                   | 525            | 495                      | NR                   | 655            | 514                      | NR                   | 785            | 9                        | NR                   | 915            | 0                        | NR                   |
| 400            | 5                        | NR                   | 530            | 513                      | NR                   | 660            | 453                      | NR                   | 790            | 8                        | NR                   | 920            | 0                        | NR                   |
| 405            | 6                        | NR                   | 535            | 534                      | NR                   | 665            | 399                      | NR                   | 795            | 7                        | NR                   | 925            | 0                        | NR                   |
| 410            | 10                       | NR                   | 540            | 554                      | NR                   | 670            | 348                      | NR                   | 800            | 6                        | NR                   | 930            | 0                        | NR                   |
| 415            | 17                       | NR                   | 545            | 577                      | NR                   | 675            | 303                      | NR                   | 805            | 5                        | NR                   | 935            | 0                        | NR                   |
| 420            | 29                       | NR                   | 550            | 606                      | NR                   | 680            | 263                      | NR                   | 810            | 4                        | NR                   | 940            | 0                        | NR                   |
| 425            | 51                       | NR                   | 555            | 638                      | NR                   | 685            | 226                      | NR                   | 815            | 4                        | NR                   | 945            | 0                        | NR                   |
| 430            | 87                       | NR                   | 560            | 678                      | NR                   | 690            | 194                      | NR                   | 820            | 3                        | NR                   | 950            | 0                        | NR                   |
| 435            | 150                      | NR                   | 565            | 720                      | NR                   | 695            | 166                      | NR                   | 825            | 3                        | NR                   | 955            | 0                        | NR                   |
| 440            | 258                      | NR                   | 570            | 767                      | NR                   | 700            | 142                      | NR                   | 830            | 2                        | NR                   | 960            | 0                        | NR                   |
| 445            | 454                      | NR                   | 575            | 817                      | NR                   | 705            | 121                      | NR                   | 835            | 2                        | NR                   | 965            | 0                        | NR                   |
| 450            | 605                      | NR                   | 580            | 866                      | NR                   | 710            | 103                      | NR                   | 840            | 2                        | NR                   | 970            | 0                        | NR                   |
| 455            | 533                      | NR                   | 585            | 911                      | NR                   | 715            | 87                       | NR                   | 845            | 2                        | NR                   | 975            | 0                        | NR                   |
| 460            | 362                      | NR                   | 590            | 952                      | NR                   | 720            | 74                       | NR                   | 850            | 1                        | NR                   | 980            | 0                        | NR                   |
| 465            | 293                      | NR                   | 595            | 981                      | NR                   | 725            | 63                       | NR                   | 855            | 1                        | NR                   | 985            | 0                        | NR                   |
| 470            | 231                      | NR                   | 600            | 995                      | NR                   | 730            | 54                       | NR                   | 860            | 1                        | NR                   | 990            | 0                        | NR                   |
| 475            | 176                      | NR                   | 605            | 999                      | NR                   | 735            | 46                       | NR                   | 865            | 1                        | NR                   | 995            | 0                        | NR                   |
| 480            | 163                      | NR                   | 610            | 989                      | NR                   | 740            | 38                       | NR                   | 870            | 1                        | NR                   | 1000           | 0                        | NR                   |
| 485            | 176                      | NR                   | 615            | 964                      | NR                   | 745            | 33                       | NR                   | 875            | 1                        | NR                   |                |                          |                      |

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Melanopic Flux vs. Wavelength



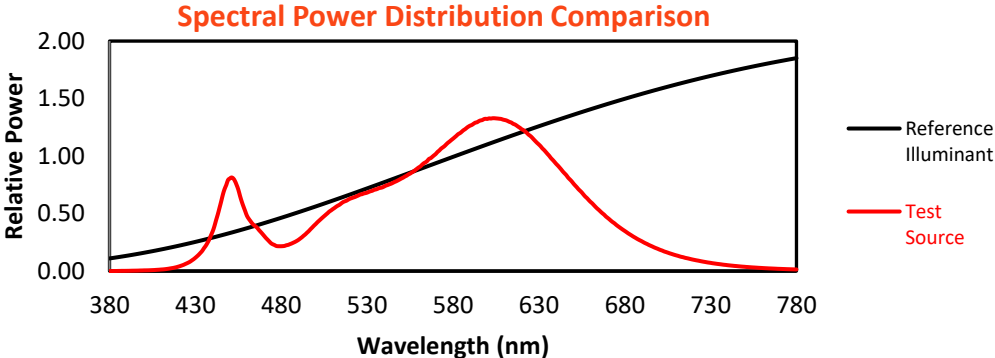
Melanopic Lumens: NR

M/P: 2.61

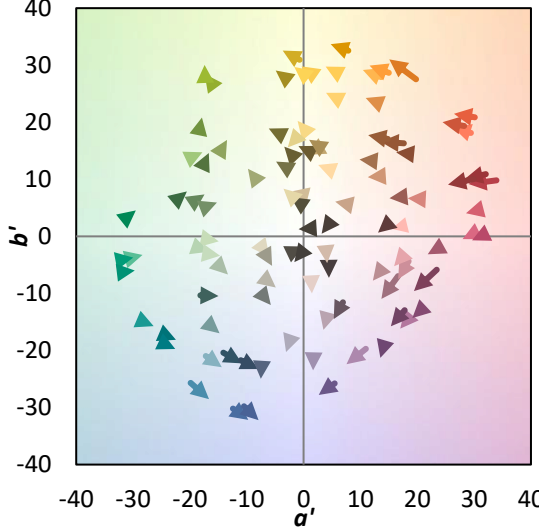
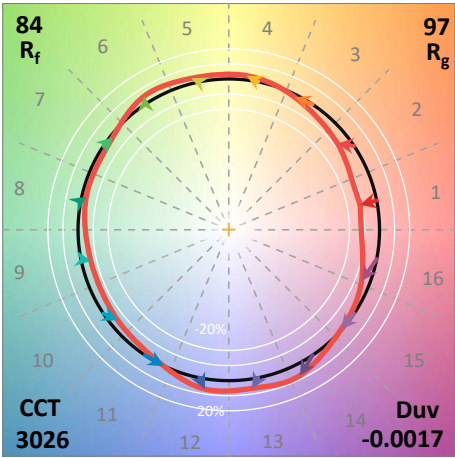
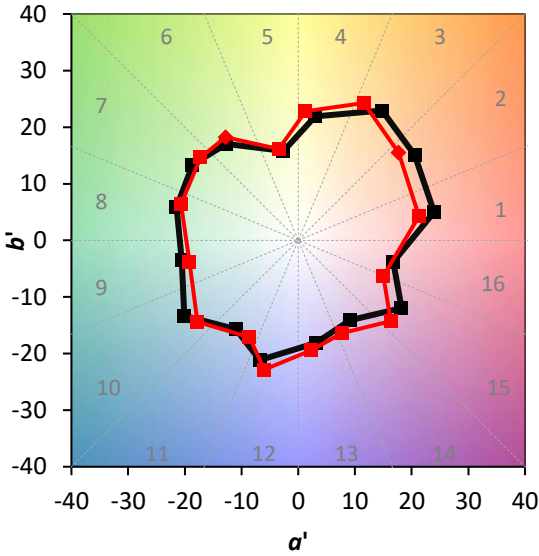
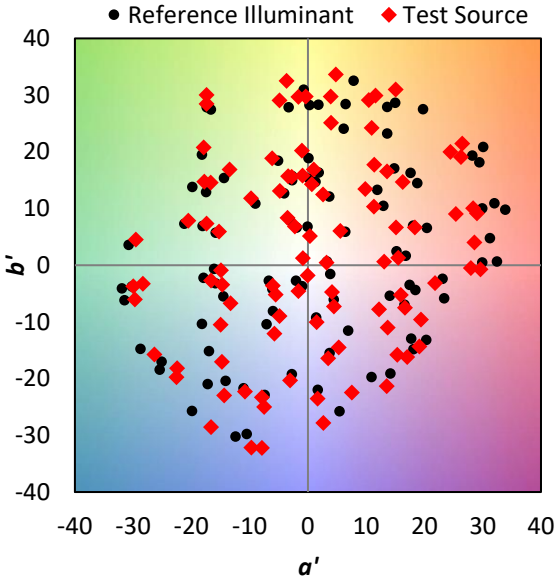
| λ (nm) | Power W <sup>^</sup> /nm | Lumens (φ/nm) | λ (nm) | Power W <sup>^</sup> /nm | Lumens (φ/nm) | λ (nm) | Power W <sup>^</sup> /nm | Lumens (φ/nm) | λ (nm) | Power W <sup>^</sup> /nm | Lumens (φ/nm) | λ (nm) | Power W <sup>^</sup> /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360    | 0                        | NR            | 490    | 204                      | NR            | 620    | 928                      | NR            | 750    | 28                       | NR            | 880    | 1                        | NR            |
| 365    | 0                        | NR            | 495    | 251                      | NR            | 625    | 884                      | NR            | 755    | 24                       | NR            | 885    | 1                        | NR            |
| 370    | 0                        | NR            | 500    | 307                      | NR            | 630    | 828                      | NR            | 760    | 20                       | NR            | 890    | 0                        | NR            |
| 375    | 0                        | NR            | 505    | 360                      | NR            | 635    | 767                      | NR            | 765    | 17                       | NR            | 895    | 0                        | NR            |
| 380    | 0                        | NR            | 510    | 405                      | NR            | 640    | 702                      | NR            | 770    | 14                       | NR            | 900    | 0                        | NR            |
| 385    | 1                        | NR            | 515    | 444                      | NR            | 645    | 639                      | NR            | 775    | 12                       | NR            | 905    | 0                        | NR            |
| 390    | 2                        | NR            | 520    | 473                      | NR            | 650    | 574                      | NR            | 780    | 11                       | NR            | 910    | 0                        | NR            |
| 395    | 3                        | NR            | 525    | 495                      | NR            | 655    | 514                      | NR            | 785    | 9                        | NR            | 915    | 0                        | NR            |
| 400    | 5                        | NR            | 530    | 513                      | NR            | 660    | 453                      | NR            | 790    | 8                        | NR            | 920    | 0                        | NR            |
| 405    | 6                        | NR            | 535    | 534                      | NR            | 665    | 399                      | NR            | 795    | 7                        | NR            | 925    | 0                        | NR            |
| 410    | 10                       | NR            | 540    | 554                      | NR            | 670    | 348                      | NR            | 800    | 6                        | NR            | 930    | 0                        | NR            |
| 415    | 17                       | NR            | 545    | 577                      | NR            | 675    | 303                      | NR            | 805    | 5                        | NR            | 935    | 0                        | NR            |
| 420    | 29                       | NR            | 550    | 606                      | NR            | 680    | 263                      | NR            | 810    | 4                        | NR            | 940    | 0                        | NR            |
| 425    | 51                       | NR            | 555    | 638                      | NR            | 685    | 226                      | NR            | 815    | 4                        | NR            | 945    | 0                        | NR            |
| 430    | 87                       | NR            | 560    | 678                      | NR            | 690    | 194                      | NR            | 820    | 3                        | NR            | 950    | 0                        | NR            |
| 435    | 150                      | NR            | 565    | 720                      | NR            | 695    | 166                      | NR            | 825    | 3                        | NR            | 955    | 0                        | NR            |
| 440    | 258                      | NR            | 570    | 767                      | NR            | 700    | 142                      | NR            | 830    | 2                        | NR            | 960    | 0                        | NR            |
| 445    | 454                      | NR            | 575    | 817                      | NR            | 705    | 121                      | NR            | 835    | 2                        | NR            | 965    | 0                        | NR            |
| 450    | 605                      | NR            | 580    | 866                      | NR            | 710    | 103                      | NR            | 840    | 2                        | NR            | 970    | 0                        | NR            |
| 455    | 533                      | NR            | 585    | 911                      | NR            | 715    | 87                       | NR            | 845    | 2                        | NR            | 975    | 0                        | NR            |
| 460    | 362                      | NR            | 590    | 952                      | NR            | 720    | 74                       | NR            | 850    | 1                        | NR            | 980    | 0                        | NR            |
| 465    | 293                      | NR            | 595    | 981                      | NR            | 725    | 63                       | NR            | 855    | 1                        | NR            | 985    | 0                        | NR            |
| 470    | 231                      | NR            | 600    | 995                      | NR            | 730    | 54                       | NR            | 860    | 1                        | NR            | 990    | 0                        | NR            |
| 475    | 176                      | NR            | 605    | 999                      | NR            | 735    | 46                       | NR            | 865    | 1                        | NR            | 995    | 0                        | NR            |
| 480    | 163                      | NR            | 610    | 989                      | NR            | 740    | 38                       | NR            | 870    | 1                        | NR            | 1000   | 0                        | NR            |
| 485    | 176                      | NR            | 615    | 964                      | NR            | 745    | 33                       | NR            | 875    | 1                        | NR            |        |                          |               |

**Summary**

$R_f = 84$   
 $R_g = 97.4$   
 $CIE R_a = 82.7$   
 $R_9 = 7.5$

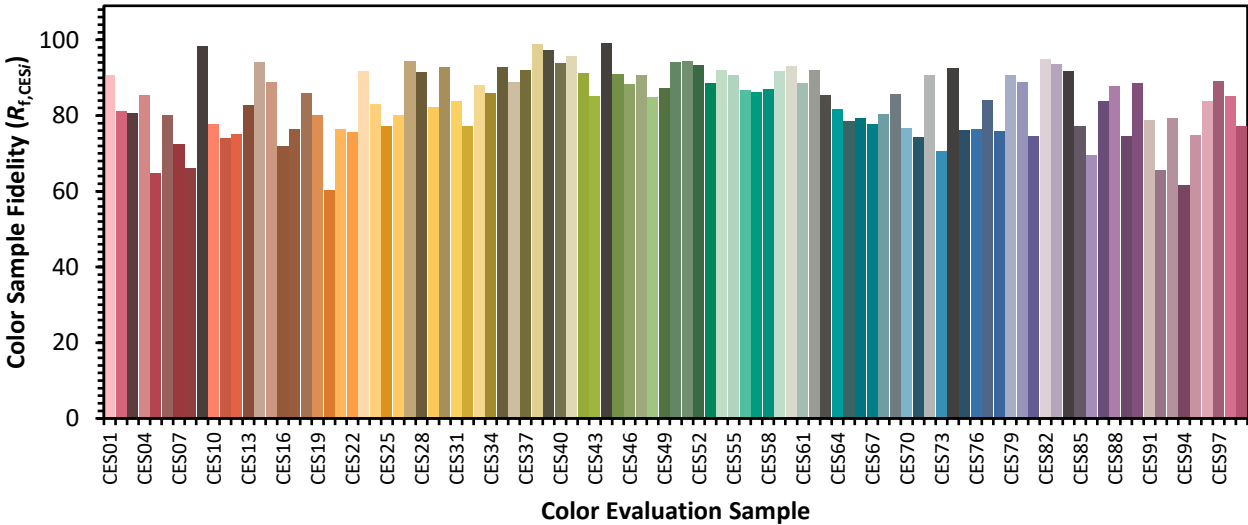


**Color Vector Graphics**

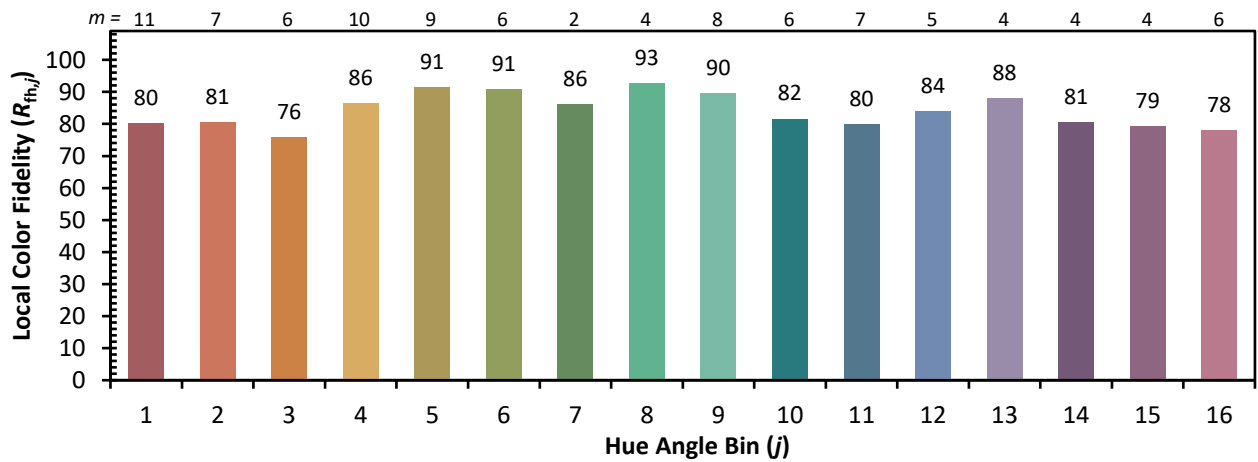
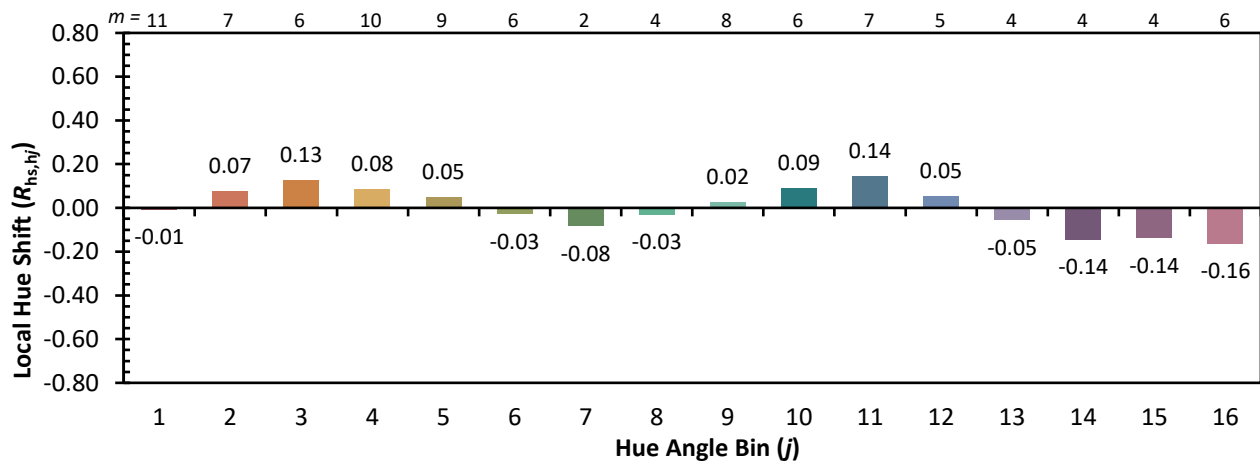
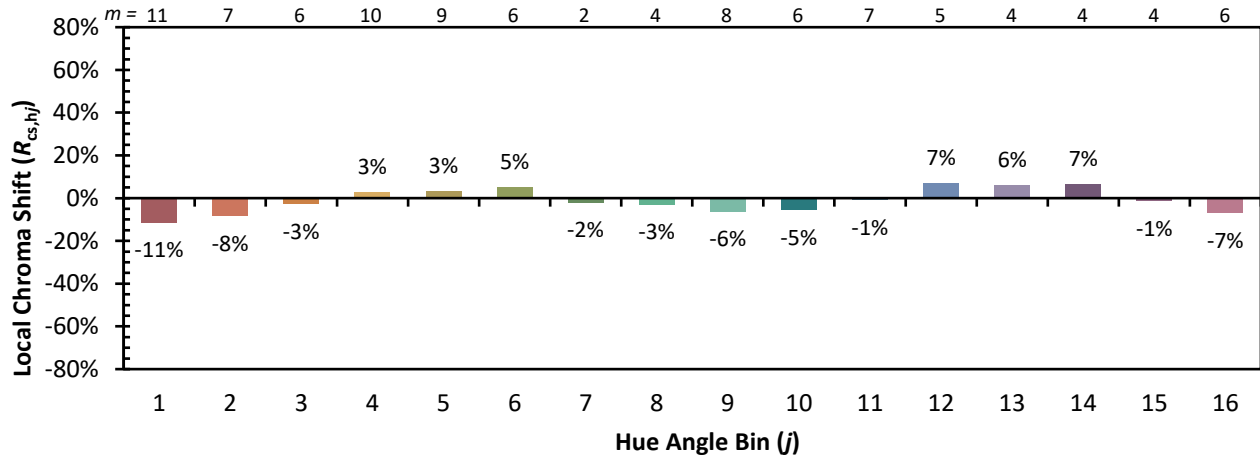


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

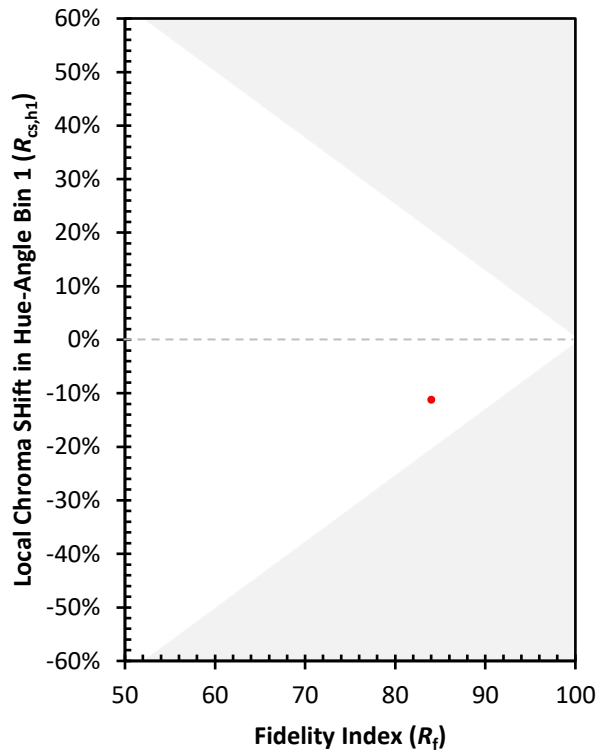
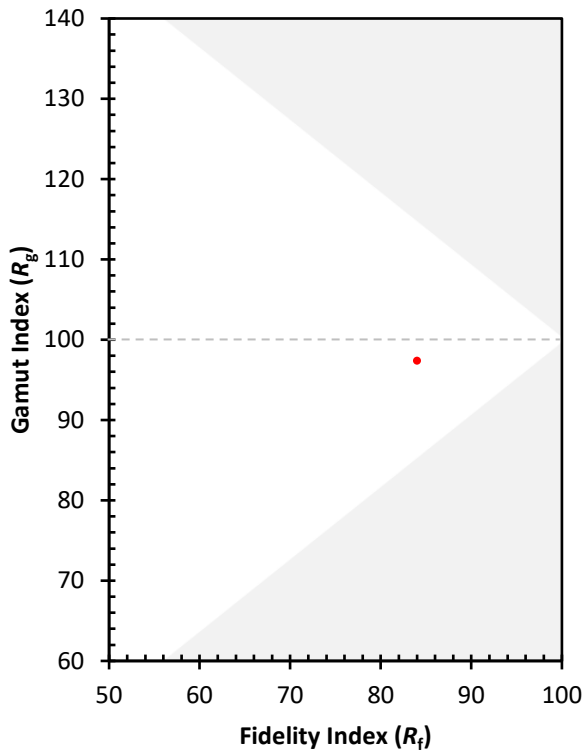
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 80 | CES51 = 94 | CES76 = 76 |
| CES02 = 63 | CES27 = 94 | CES52 = 93 | CES77 = 84 |
| CES03 = 31 | CES28 = 92 | CES53 = 88 | CES78 = 76 |
| CES04 = 70 | CES29 = 82 | CES54 = 92 | CES79 = 91 |
| CES05 = 50 | CES30 = 93 | CES55 = 91 | CES80 = 89 |
| CES06 = 51 | CES31 = 84 | CES56 = 87 | CES81 = 75 |
| CES07 = 42 | CES32 = 77 | CES57 = 86 | CES82 = 95 |
| CES08 = 41 | CES33 = 88 | CES58 = 87 | CES83 = 93 |
| CES09 = 29 | CES34 = 86 | CES59 = 92 | CES84 = 92 |
| CES10 = 76 | CES35 = 93 | CES60 = 93 | CES85 = 77 |
| CES11 = 59 | CES36 = 89 | CES61 = 89 | CES86 = 69 |
| CES12 = 65 | CES37 = 92 | CES62 = 92 | CES87 = 84 |
| CES13 = 43 | CES38 = 99 | CES63 = 85 | CES88 = 88 |
| CES14 = 74 | CES39 = 97 | CES64 = 82 | CES89 = 75 |
| CES15 = 72 | CES40 = 94 | CES65 = 79 | CES90 = 89 |
| CES16 = 48 | CES41 = 96 | CES66 = 79 | CES91 = 79 |
| CES17 = 50 | CES42 = 91 | CES67 = 78 | CES92 = 66 |
| CES18 = 57 | CES43 = 85 | CES68 = 80 | CES93 = 79 |
| CES19 = 72 | CES44 = 99 | CES69 = 86 | CES94 = 62 |
| CES20 = 67 | CES45 = 91 | CES70 = 77 | CES95 = 75 |
| CES21 = 87 | CES46 = 88 | CES71 = 74 | CES96 = 84 |
| CES22 = 79 | CES47 = 91 | CES72 = 91 | CES97 = 89 |
| CES23 = 92 | CES48 = 85 | CES73 = 71 | CES98 = 85 |
| CES24 = 91 | CES49 = 87 | CES74 = 93 | CES99 = 77 |
| CES25 = 72 | CES50 = 94 | CES75 = 76 |            |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)