

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: METALUX

Report Number: P976895

Luminaire Tested: 24SR-LD2-C-64-UNV-L850-CD1-PL-U

Issue Date: 03/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P976895
Test Lab: INNOVATION CENTER(P3)
Issue Date: 03/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24SR-LD2-C-64-UNV-L850-CD1-PL-U
Description: METALUX SKYRIDGE 2x4 6400LM PACKAGE 80CRI 5000K TROFFER with Pearl SKYTRIM
Light Source: 5000K CCT, 80+ CRI LEDS
Ballast/Driver: -

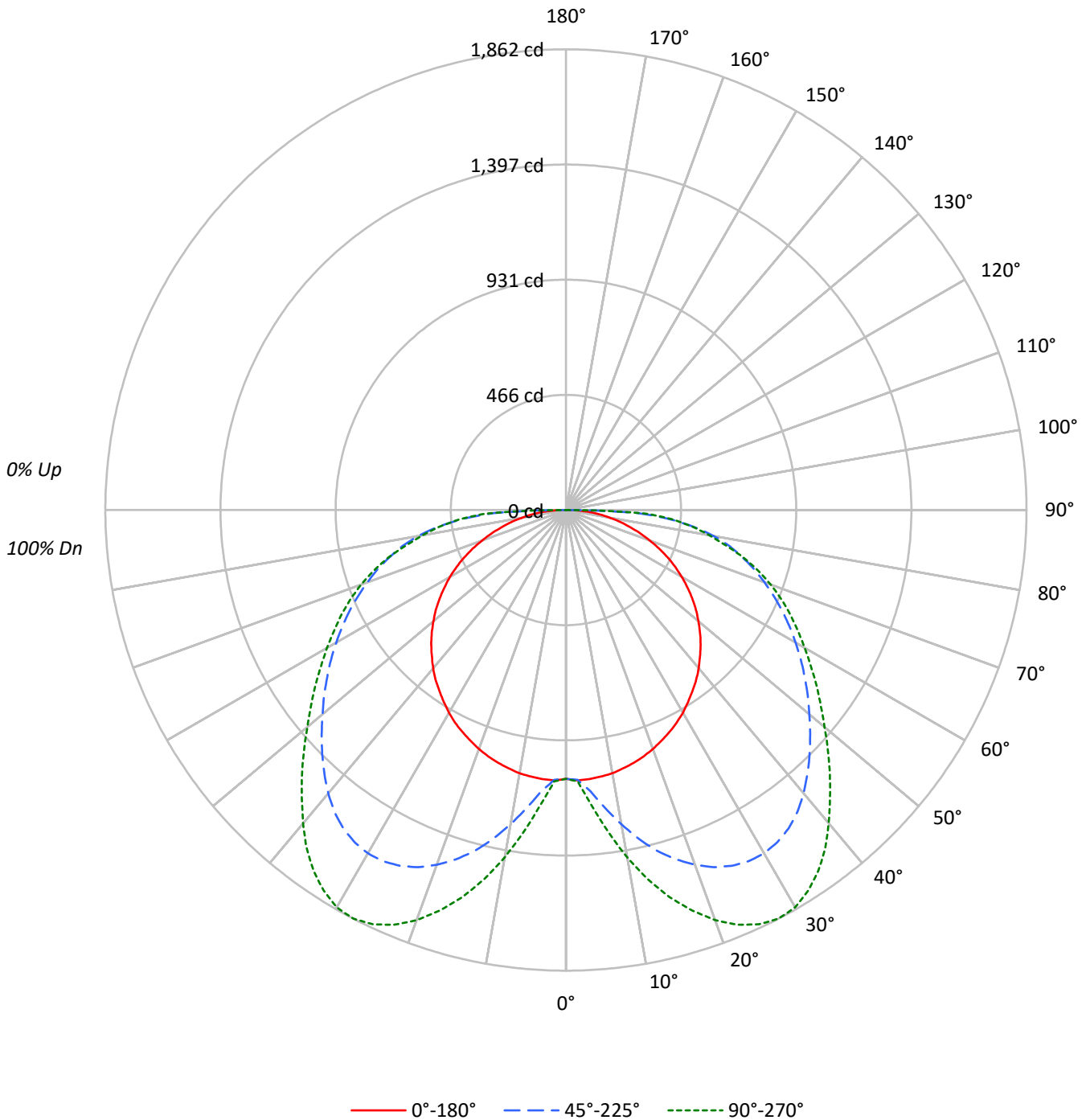
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5991.0 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (A_{in}): 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: 28.75 FT

TEST NUMBER: P976895
CATALOG NUMBER: 24SR-LD2-C-64-UNV-L850-CD1-PL-U

Luminous Intensity Polar Plot





TEST NUMBER: P976895

CATALOG NUMBER: 24SR-LD2-C-64-UNV-L850-CD1-PL-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | 0 | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 |
| 1 | 106 | 100 | 95 | 90 | 103 | 98 | 93 | 88 | 93 | 89 | 85 | 89 | 86 | 83 | 86 | 83 | 80 | 78 | 78 | 78 | 78 |
| 2 | 95 | 85 | 77 | 70 | 92 | 83 | 76 | 70 | 80 | 73 | 68 | 76 | 71 | 66 | 73 | 69 | 65 | 62 | 62 | 62 | 62 |
| 3 | 86 | 74 | 64 | 57 | 83 | 72 | 63 | 56 | 69 | 61 | 55 | 66 | 60 | 54 | 63 | 58 | 53 | 51 | 51 | 51 | 51 |
| 4 | 78 | 64 | 55 | 47 | 75 | 63 | 54 | 47 | 60 | 52 | 46 | 58 | 51 | 45 | 56 | 50 | 45 | 42 | 42 | 42 | 42 |
| 5 | 71 | 57 | 47 | 40 | 69 | 56 | 47 | 40 | 54 | 45 | 39 | 52 | 44 | 39 | 50 | 43 | 38 | 36 | 36 | 36 | 36 |
| 6 | 65 | 51 | 41 | 34 | 63 | 50 | 41 | 34 | 48 | 40 | 34 | 46 | 39 | 33 | 45 | 38 | 33 | 31 | 31 | 31 | 31 |
| 7 | 60 | 46 | 36 | 30 | 59 | 45 | 36 | 30 | 43 | 35 | 29 | 42 | 35 | 29 | 40 | 34 | 29 | 27 | 27 | 27 | 27 |
| 8 | 56 | 42 | 32 | 26 | 54 | 41 | 32 | 26 | 39 | 32 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 23 | 23 | 23 | 23 |
| 9 | 52 | 38 | 29 | 23 | 51 | 37 | 29 | 23 | 36 | 28 | 23 | 35 | 28 | 23 | 34 | 27 | 23 | 21 | 21 | 21 | 21 |
| 10 | 49 | 35 | 26 | 21 | 48 | 34 | 26 | 21 | 33 | 26 | 21 | 32 | 25 | 21 | 31 | 25 | 20 | 19 | 19 | 19 | 19 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1462 | 1462 | 1462 |
| 5° | 1474 | 1540 | 1619 |
| 10° | 1476 | 1761 | 1947 |
| 15° | 1474 | 1987 | 2256 |
| 20° | 1472 | 2185 | 2525 |
| 25° | 1470 | 2355 | 2742 |
| 30° | 1469 | 2489 | 2880 |
| 35° | 1465 | 2579 | 2922 |
| 40° | 1467 | 2625 | 2903 |
| 45° | 1466 | 2651 | 2871 |
| 50° | 1463 | 2688 | 2857 |
| 55° | 1462 | 2764 | 2901 |
| 60° | 1456 | 2885 | 3000 |
| 65° | 1445 | 3071 | 3187 |
| 70° | 1418 | 3360 | 3465 |
| 75° | 1397 | 3839 | 3865 |
| 80° | 1410 | 4706 | 4558 |
| 85° | 1538 | 6518 | 6640 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 9908 cd/sqm



TEST NUMBER: P976895
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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 113.0 | 1.9 |
| 10°-20° | 392.4 | 6.5 |
| 20°-30° | 695.5 | 11.6 |
| 30°-40° | 915.3 | 15.3 |
| 40°-50° | 992.5 | 16.6 |
| 50°-60° | 966.2 | 16.1 |
| 60°-70° | 868.1 | 14.5 |
| 70°-80° | 687.6 | 11.5 |
| 80°-90° | 360.4 | 6.0 |
| 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°-30° | 1200.9 | 20.0 |
| 0°-40° | 2116.2 | 35.3 |
| 0°-60° | 4074.9 | 68.0 |
| 0°-90° | 5991.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5991.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1086 | 1086 | 1086 | 1086 | 1086 | |
| 5° | 1091 | 1091 | 1140 | 1184 | 1199 | 104 |
| 15° | 1058 | 1196 | 1427 | 1570 | 1620 | 299 |
| 25° | 990 | 1261 | 1586 | 1778 | 1847 | 457 |
| 35° | 892 | 1228 | 1570 | 1730 | 1779 | 559 |
| 45° | 770 | 1114 | 1393 | 1485 | 1509 | 594 |
| 55° | 623 | 969 | 1178 | 1219 | 1237 | 557 |
| 65° | 454 | 812 | 965 | 983 | 1001 | 448 |
| 75° | 269 | 610 | 738 | 739 | 743 | 286 |
| 85° | 100 | 324 | 422 | 423 | 430 | 106 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 |
| 2.5° | 1094.3 | 1092.9 | 1091.4 | 1089.7 | 1088.2 | 1086.5 | 1086.5 | 1086.5 | 1088.2 | 1091.4 | 1096.0 |
| 5° | 1091.4 | 1089.7 | 1088.2 | 1088.2 | 1089.7 | 1092.9 | 1102.4 | 1113.5 | 1124.6 | 1140.3 | 1157.8 |
| 7.5° | 1086.5 | 1085.0 | 1085.0 | 1088.2 | 1100.7 | 1119.7 | 1141.8 | 1165.6 | 1189.3 | 1214.6 | 1238.4 |
| 10° | 1080.3 | 1078.6 | 1080.3 | 1094.3 | 1122.9 | 1154.6 | 1187.8 | 1221.0 | 1252.7 | 1289.1 | 1322.3 |
| 12.5° | 1069.2 | 1069.2 | 1077.1 | 1105.4 | 1146.7 | 1189.3 | 1232.0 | 1276.3 | 1317.4 | 1361.6 | 1399.7 |
| 15° | 1058.2 | 1058.2 | 1075.4 | 1118.2 | 1170.3 | 1221.0 | 1274.8 | 1327.0 | 1375.9 | 1426.6 | 1470.8 |
| 17.5° | 1043.9 | 1043.9 | 1073.9 | 1127.8 | 1187.8 | 1249.5 | 1311.2 | 1369.7 | 1425.1 | 1480.4 | 1527.9 |
| 20° | 1027.9 | 1031.1 | 1070.7 | 1135.6 | 1203.5 | 1273.1 | 1339.5 | 1404.4 | 1466.1 | 1526.2 | 1578.3 |
| 22.5° | 1009.0 | 1015.4 | 1066.0 | 1138.8 | 1216.3 | 1289.1 | 1361.6 | 1431.2 | 1496.2 | 1562.6 | 1614.7 |
| 25° | 990.1 | 999.6 | 1059.7 | 1138.8 | 1221.0 | 1300.1 | 1375.9 | 1448.7 | 1518.3 | 1586.4 | 1643.2 |
| 27.5° | 969.4 | 982.2 | 1050.1 | 1133.9 | 1222.5 | 1303.1 | 1382.3 | 1458.3 | 1531.1 | 1600.4 | 1659.0 |
| 30° | 945.8 | 961.5 | 1036.0 | 1124.6 | 1216.3 | 1298.4 | 1380.8 | 1459.8 | 1532.5 | 1602.1 | 1659.0 |
| 32.5° | 919.0 | 939.4 | 1018.6 | 1110.3 | 1203.5 | 1287.4 | 1369.7 | 1448.7 | 1523.0 | 1591.1 | 1644.9 |
| 35° | 891.9 | 917.3 | 999.6 | 1092.9 | 1186.1 | 1269.9 | 1352.3 | 1432.9 | 1505.7 | 1570.4 | 1617.9 |
| 37.5° | 865.1 | 891.9 | 975.8 | 1069.2 | 1162.4 | 1246.3 | 1330.2 | 1407.6 | 1477.2 | 1537.2 | 1580.0 |
| 40° | 835.1 | 865.1 | 949.0 | 1043.9 | 1135.6 | 1219.5 | 1301.6 | 1375.9 | 1439.3 | 1494.7 | 1534.0 |
| 42.5° | 801.9 | 835.1 | 920.5 | 1015.4 | 1105.4 | 1187.8 | 1266.7 | 1336.3 | 1396.6 | 1445.5 | 1478.7 |
| 45° | 770.2 | 805.1 | 890.5 | 985.4 | 1073.9 | 1154.6 | 1230.5 | 1295.2 | 1349.1 | 1393.4 | 1421.9 |
| 47.5° | 735.5 | 771.7 | 860.4 | 952.2 | 1039.0 | 1118.2 | 1191.0 | 1249.5 | 1301.6 | 1339.5 | 1364.8 |
| 50° | 699.1 | 738.5 | 827.2 | 919.0 | 1004.3 | 1081.8 | 1151.4 | 1205.2 | 1252.7 | 1284.2 | 1308.0 |
| 52.5° | 662.7 | 703.8 | 792.3 | 884.1 | 969.4 | 1043.9 | 1110.3 | 1162.4 | 1203.5 | 1232.0 | 1252.7 |
| 55° | 623.1 | 668.9 | 757.7 | 849.4 | 931.5 | 1005.8 | 1069.2 | 1116.7 | 1154.6 | 1178.2 | 1197.3 |
| 57.5° | 582.1 | 631.0 | 722.8 | 814.5 | 896.8 | 967.9 | 1027.9 | 1072.2 | 1105.4 | 1126.1 | 1140.3 |
| 60° | 541.0 | 593.1 | 684.9 | 776.6 | 857.3 | 928.3 | 985.4 | 1026.5 | 1056.5 | 1072.2 | 1083.3 |
| 62.5° | 498.2 | 553.6 | 646.8 | 738.5 | 820.9 | 887.3 | 941.1 | 979.0 | 1005.8 | 1018.6 | 1029.6 |
| 65° | 454.0 | 512.5 | 607.4 | 699.1 | 781.3 | 843.0 | 895.1 | 930.0 | 953.7 | 964.7 | 971.1 |
| 67.5° | 408.0 | 469.7 | 566.1 | 657.8 | 737.0 | 797.0 | 846.2 | 880.9 | 899.8 | 909.4 | 914.1 |
| 70° | 360.5 | 425.4 | 521.8 | 613.6 | 689.6 | 746.6 | 794.0 | 825.5 | 844.5 | 854.1 | 855.6 |
| 72.5° | 316.3 | 379.7 | 477.6 | 566.1 | 638.9 | 694.2 | 738.5 | 771.7 | 790.9 | 798.7 | 798.7 |
| 75° | 268.8 | 332.2 | 428.6 | 514.0 | 583.6 | 637.4 | 681.7 | 713.4 | 730.6 | 738.5 | 738.5 |
| 77.5° | 227.7 | 286.2 | 376.5 | 458.6 | 523.5 | 575.7 | 618.5 | 651.7 | 670.6 | 678.5 | 678.5 |
| 80° | 182.0 | 238.8 | 322.6 | 398.6 | 458.6 | 506.1 | 550.4 | 585.3 | 604.2 | 607.4 | 602.5 |
| 82.5° | 140.7 | 193.0 | 264.1 | 332.2 | 387.6 | 431.8 | 476.1 | 504.6 | 518.7 | 521.8 | 520.4 |
| 85° | 99.6 | 142.4 | 202.4 | 257.7 | 303.7 | 344.8 | 376.5 | 403.3 | 417.6 | 422.2 | 425.4 |
| 87.5° | 58.5 | 82.2 | 120.2 | 162.8 | 197.7 | 224.5 | 243.5 | 267.3 | 281.6 | 290.9 | 300.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P976895

CATALOG NUMBER: 24SR-LD2-C-64-UNV-L850-CD1-PL-U

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 | 1086.5 |
| 2.5° | 1094.3 | 1096.0 | 1097.5 | 1097.5 | 1097.5 | 1099.2 | 1097.5 | 1097.5 |
| 5° | 1163.9 | 1173.5 | 1181.4 | 1186.1 | 1191.0 | 1198.8 | 1197.3 | 1198.8 |
| 7.5° | 1251.0 | 1266.7 | 1284.2 | 1293.8 | 1300.1 | 1309.5 | 1312.7 | 1312.7 |
| 10° | 1341.2 | 1363.4 | 1383.8 | 1398.0 | 1407.6 | 1421.9 | 1423.4 | 1425.1 |
| 12.5° | 1426.6 | 1453.4 | 1477.2 | 1493.0 | 1507.2 | 1519.8 | 1526.2 | 1527.9 |
| 15° | 1499.3 | 1532.5 | 1559.4 | 1580.0 | 1594.3 | 1608.5 | 1616.4 | 1619.6 |
| 17.5° | 1564.3 | 1598.9 | 1629.0 | 1652.8 | 1670.0 | 1684.3 | 1693.9 | 1697.1 |
| 20° | 1614.7 | 1652.8 | 1686.0 | 1711.3 | 1731.8 | 1747.7 | 1760.3 | 1763.5 |
| 22.5° | 1656.0 | 1695.4 | 1730.3 | 1758.8 | 1779.2 | 1798.2 | 1809.2 | 1814.1 |
| 25° | 1686.0 | 1728.6 | 1765.0 | 1792.0 | 1814.1 | 1831.4 | 1842.4 | 1847.3 |
| 27.5° | 1703.4 | 1746.0 | 1780.9 | 1807.7 | 1829.9 | 1845.6 | 1856.7 | 1861.6 |
| 30° | 1703.4 | 1744.5 | 1779.2 | 1804.5 | 1825.2 | 1840.9 | 1848.8 | 1853.7 |
| 32.5° | 1686.0 | 1725.6 | 1757.1 | 1779.2 | 1798.2 | 1814.1 | 1820.3 | 1823.5 |
| 35° | 1657.5 | 1692.4 | 1720.7 | 1739.6 | 1755.6 | 1769.8 | 1776.0 | 1779.2 |
| 37.5° | 1616.4 | 1647.9 | 1670.0 | 1687.5 | 1700.3 | 1714.5 | 1719.2 | 1722.4 |
| 40° | 1564.3 | 1594.3 | 1610.0 | 1625.8 | 1636.8 | 1649.6 | 1652.8 | 1652.8 |
| 42.5° | 1507.2 | 1532.5 | 1548.3 | 1559.4 | 1567.2 | 1575.3 | 1580.0 | 1580.0 |
| 45° | 1447.2 | 1469.3 | 1480.4 | 1489.8 | 1497.6 | 1504.0 | 1508.7 | 1508.7 |
| 47.5° | 1387.0 | 1404.4 | 1414.0 | 1420.2 | 1426.6 | 1432.9 | 1436.1 | 1436.1 |
| 50° | 1327.0 | 1339.5 | 1347.4 | 1352.3 | 1358.7 | 1363.4 | 1366.5 | 1364.8 |
| 52.5° | 1266.7 | 1276.3 | 1282.7 | 1287.4 | 1290.6 | 1295.2 | 1297.0 | 1298.4 |
| 55° | 1206.7 | 1213.1 | 1217.8 | 1221.0 | 1227.4 | 1232.0 | 1233.5 | 1236.7 |
| 57.5° | 1148.2 | 1151.4 | 1157.8 | 1159.3 | 1165.6 | 1170.3 | 1172.0 | 1173.5 |
| 60° | 1088.2 | 1091.4 | 1096.0 | 1099.2 | 1107.1 | 1110.3 | 1111.8 | 1115.0 |
| 62.5° | 1029.6 | 1031.1 | 1037.5 | 1043.9 | 1050.1 | 1053.3 | 1055.0 | 1056.5 |
| 65° | 971.1 | 975.8 | 980.5 | 985.4 | 991.5 | 996.4 | 997.9 | 1001.1 |
| 67.5° | 914.1 | 917.3 | 923.7 | 928.3 | 933.0 | 937.9 | 941.1 | 942.6 |
| 70° | 855.6 | 858.7 | 863.6 | 866.6 | 871.5 | 876.2 | 880.9 | 880.9 |
| 72.5° | 798.7 | 798.7 | 801.9 | 805.1 | 809.8 | 813.0 | 814.5 | 814.5 |
| 75° | 737.0 | 735.5 | 738.5 | 740.2 | 740.2 | 740.2 | 741.7 | 743.4 |
| 77.5° | 670.6 | 664.2 | 661.0 | 661.0 | 662.7 | 659.5 | 661.0 | 662.7 |
| 80° | 594.6 | 588.2 | 586.8 | 586.8 | 588.2 | 586.8 | 588.2 | 588.2 |
| 82.5° | 514.0 | 514.0 | 509.3 | 510.8 | 512.5 | 509.3 | 512.5 | 515.7 |
| 85° | 420.8 | 422.2 | 420.8 | 425.4 | 425.4 | 425.4 | 426.9 | 430.1 |
| 87.5° | 302.0 | 311.6 | 308.4 | 314.8 | 313.1 | 314.8 | 316.3 | 321.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P976895
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CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|------|------|------|------|----------------|------|------|------|------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room Dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 14.3 | 16.1 | 14.6 | 16.4 | 16.7 | 16.3 | 18.0 | 16.6 | 18.4 | 18.7 |
| | 3H | 16.2 | 17.9 | 16.6 | 18.2 | 18.6 | 18.9 | 20.5 | 19.2 | 20.8 | 21.2 |
| | 4H | 17.0 | 18.6 | 17.4 | 18.9 | 19.3 | 20.1 | 21.6 | 20.5 | 22.0 | 22.3 |
| | 6H | 17.6 | 19.0 | 18.0 | 19.4 | 19.8 | 21.3 | 22.7 | 21.7 | 23.1 | 23.5 |
| | 8H | 17.8 | 19.2 | 18.2 | 19.6 | 20.0 | 21.8 | 23.2 | 22.2 | 23.6 | 24.0 |
| | 12H | 18.0 | 19.3 | 18.4 | 19.7 | 20.1 | 22.4 | 23.7 | 22.8 | 24.1 | 24.6 |
| 4H | 2H | 15.7 | 17.2 | 16.1 | 17.6 | 17.9 | 17.1 | 18.6 | 17.5 | 19.0 | 19.3 |
| | 3H | 18.2 | 19.5 | 18.6 | 19.9 | 20.3 | 19.9 | 21.2 | 20.3 | 21.6 | 22.0 |
| | 4H | 19.3 | 20.5 | 19.7 | 20.9 | 21.3 | 21.3 | 22.5 | 21.7 | 22.9 | 23.4 |
| | 6H | 20.1 | 21.2 | 20.6 | 21.7 | 22.1 | 22.7 | 23.8 | 23.1 | 24.2 | 24.6 |
| | 8H | 20.5 | 21.5 | 20.9 | 21.9 | 22.4 | 23.4 | 24.4 | 23.8 | 24.8 | 25.3 |
| | 12H | 20.7 | 21.6 | 21.2 | 22.1 | 22.6 | 24.0 | 25.0 | 24.5 | 25.4 | 25.9 |
| 8H | 4H | 20.3 | 21.3 | 20.7 | 21.7 | 22.2 | 21.9 | 22.9 | 22.3 | 23.3 | 23.8 |
| | 6H | 21.6 | 22.5 | 22.1 | 23.0 | 23.4 | 23.5 | 24.3 | 24.0 | 24.8 | 25.3 |
| | 8H | 22.2 | 23.0 | 22.7 | 23.5 | 23.9 | 24.3 | 25.1 | 24.8 | 25.6 | 26.1 |
| | 12H | 22.6 | 23.3 | 23.1 | 23.8 | 24.4 | 25.2 | 25.9 | 25.7 | 26.4 | 26.9 |
| 12H | 4H | 20.5 | 21.4 | 21.0 | 21.9 | 22.4 | 22.0 | 22.9 | 22.5 | 23.4 | 23.9 |
| | 6H | 22.0 | 22.8 | 22.5 | 23.2 | 23.8 | 23.7 | 24.5 | 24.2 | 24.9 | 25.5 |
| | 8H | 22.7 | 23.4 | 23.2 | 23.9 | 24.5 | 24.6 | 25.3 | 25.1 | 25.8 | 26.4 |

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-457-8

Test Date: 07/02/2025

Luminaire Tested: 24SR-LD2-64-C-UNV-L950-CD1-U

Data in this report applies to families of products including 24SR-LD2-64-C-UNV-L950-CD1-U

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-457-8
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 07/02/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **24SR-LD2-64-C-UNV-L950-CD1-U**
 Description: 2X4 SKYRIDGE 6400LM Fixture with new LTN chip

Spectral Parameters

CCT (K): 4803
 CIE u': 0.2133
 CIE v': 0.4881
 Duv: 0.0004
 CIE x: 0.3510
 CIE y: 0.3570
 CIE z: 0.2921
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 574
 Purity: 12.41797
 Rf: 91.5
 Rg: 100.9

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 94.6 | | |
| R1: | 95.9 | R9: | 74.3 |
| R2: | 96.0 | R10: | 88.6 |
| R3: | 94.0 | R11: | 95.2 |
| R4: | 95.8 | R12: | 71.3 |
| R5: | 94.6 | R13: | 96.0 |
| R6: | 92.9 | R14: | 96.1 |
| R7: | 96.3 | R15: | 94.1 |
| R8: | 91.2 | | |



Test Conditions

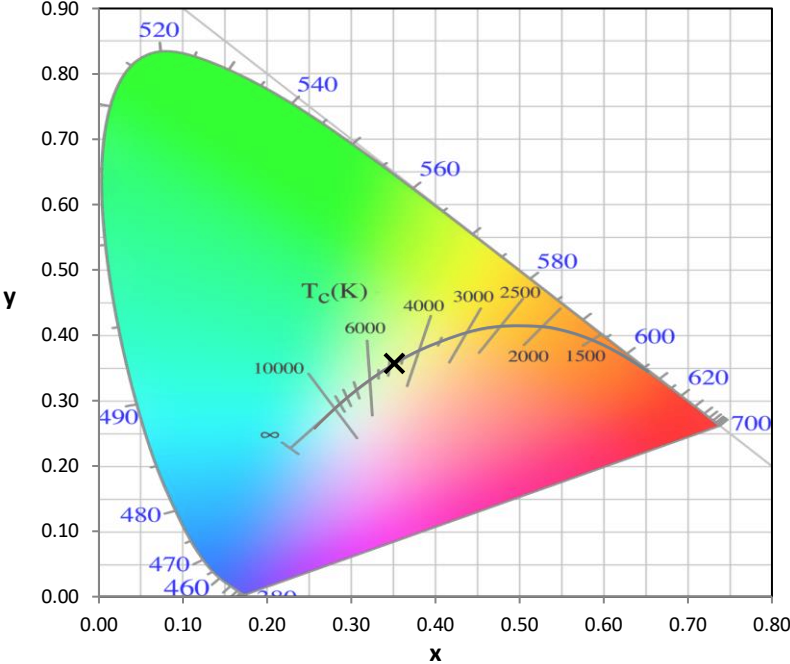
Stabilization Time: 43M
 Operation Time: 1H 43M
 Sphere Temperature (°C): 24.9

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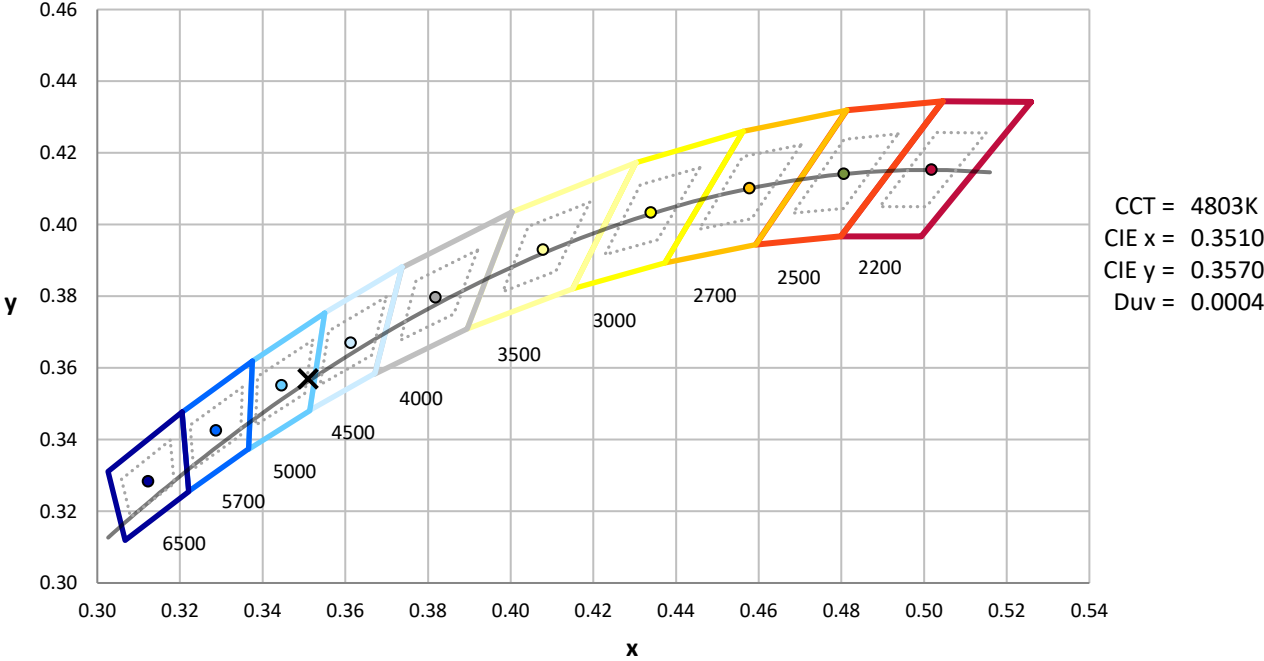
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 6/16/2025 | 12/16/2025 |
| Power Meter | XITRON INXT2011004 | 1/21/2025 | 1/21/2026 |
| AC Power Source | CHROMA 61603 IN0063 | 10/22/2024 | 10/22/2025 |
| DC Power Source | AGILENT E3634A IN0208 | 10/22/2024 | 10/22/2025 |
| Sphere Thermometer | ONSET IN0085 | 10/22/2024 | 10/22/2025 |
| Room Thermometer | ONSET IN0046 | 10/22/2024 | 10/22/2025 |

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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 5000K 7-step quadrangle

REPORT NUMBER: SP1-2506-457-8

Photopic Flux vs. Wavelength



Photopic Lumens: NR

| λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) |
|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|
| 360 | 0 | NR | 490 | 227 | NR | 620 | 318 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 259 | NR | 625 | 318 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 292 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 315 | NR | 635 | 686 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 329 | NR | 640 | 202 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 338 | NR | 645 | 192 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 343 | NR | 650 | 169 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 347 | NR | 655 | 141 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 350 | NR | 660 | 119 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 356 | NR | 665 | 100 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 359 | NR | 670 | 92 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 19 | NR | 545 | 363 | NR | 675 | 75 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 365 | NR | 680 | 64 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 57 | NR | 555 | 368 | NR | 685 | 55 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 96 | NR | 560 | 367 | NR | 690 | 47 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 157 | NR | 565 | 366 | NR | 695 | 41 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 252 | NR | 570 | 361 | NR | 700 | 34 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 427 | NR | 575 | 356 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 625 | NR | 580 | 352 | NR | 710 | 25 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 348 | NR | 715 | 21 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 360 | NR | 590 | 342 | NR | 720 | 18 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 292 | NR | 595 | 333 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 232 | NR | 600 | 329 | NR | 730 | 12 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 184 | NR | 605 | 325 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 180 | NR | 610 | 357 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 201 | NR | 615 | 384 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-457-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 2.02

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 227 | NR | 620 | 318 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 259 | NR | 625 | 318 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 292 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 315 | NR | 635 | 686 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 329 | NR | 640 | 202 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 338 | NR | 645 | 192 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 343 | NR | 650 | 169 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 347 | NR | 655 | 141 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 350 | NR | 660 | 119 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 356 | NR | 665 | 100 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 359 | NR | 670 | 92 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 19 | NR | 545 | 363 | NR | 675 | 75 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 365 | NR | 680 | 64 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 57 | NR | 555 | 368 | NR | 685 | 55 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 96 | NR | 560 | 367 | NR | 690 | 47 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 157 | NR | 565 | 366 | NR | 695 | 41 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 252 | NR | 570 | 361 | NR | 700 | 34 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 427 | NR | 575 | 356 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 625 | NR | 580 | 352 | NR | 710 | 25 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 348 | NR | 715 | 21 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 360 | NR | 590 | 342 | NR | 720 | 18 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 292 | NR | 595 | 333 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 232 | NR | 600 | 329 | NR | 730 | 12 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 184 | NR | 605 | 325 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 180 | NR | 610 | 357 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 201 | NR | 615 | 384 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-457-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 4.33

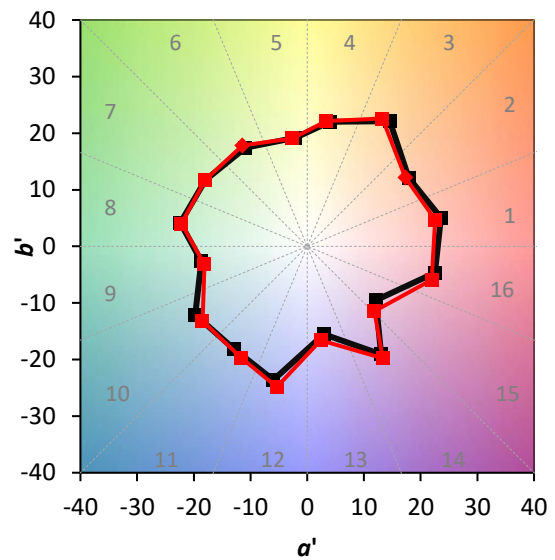
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 227 | NR | 620 | 318 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 259 | NR | 625 | 318 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 292 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 315 | NR | 635 | 686 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 329 | NR | 640 | 202 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 338 | NR | 645 | 192 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 343 | NR | 650 | 169 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 347 | NR | 655 | 141 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 350 | NR | 660 | 119 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 356 | NR | 665 | 100 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 359 | NR | 670 | 92 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 19 | NR | 545 | 363 | NR | 675 | 75 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 365 | NR | 680 | 64 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 57 | NR | 555 | 368 | NR | 685 | 55 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 96 | NR | 560 | 367 | NR | 690 | 47 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 157 | NR | 565 | 366 | NR | 695 | 41 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 252 | NR | 570 | 361 | NR | 700 | 34 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 427 | NR | 575 | 356 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 625 | NR | 580 | 352 | NR | 710 | 25 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 348 | NR | 715 | 21 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 360 | NR | 590 | 342 | NR | 720 | 18 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 292 | NR | 595 | 333 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 232 | NR | 600 | 329 | NR | 730 | 12 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 184 | NR | 605 | 325 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 180 | NR | 610 | 357 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 201 | NR | 615 | 384 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 91.5$
 $R_g = 100.9$
 $CIE R_a = 94.6$
 $R_9 = 74.3$



Color Vector Graphics

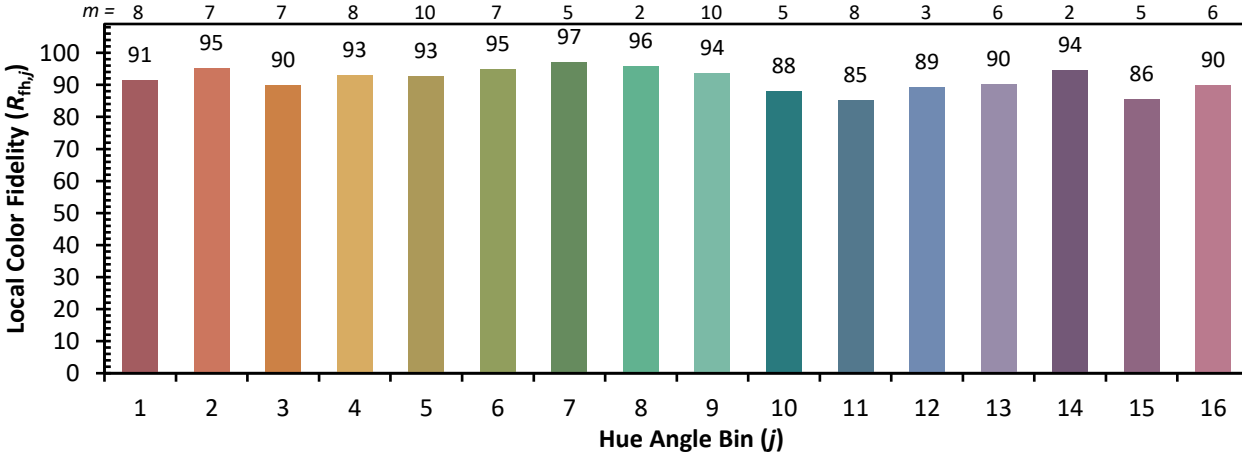


Individual Sample Fidelity Index ($R_{f,i}$)

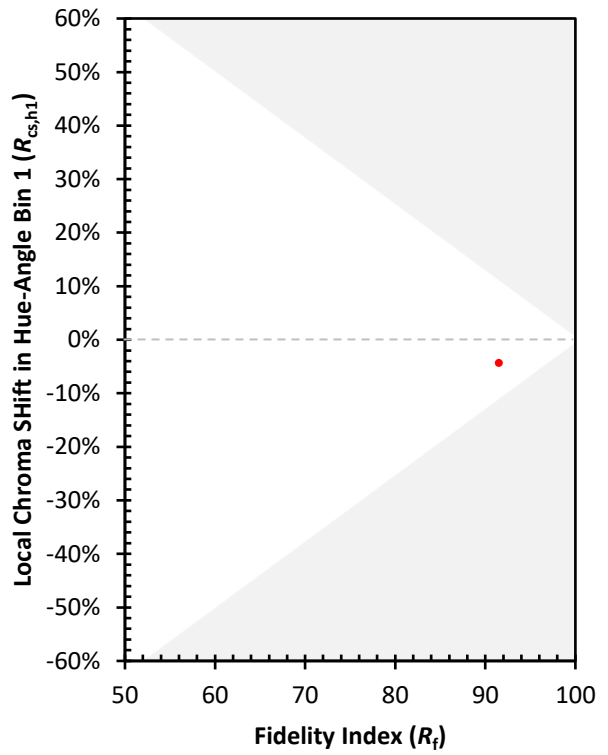
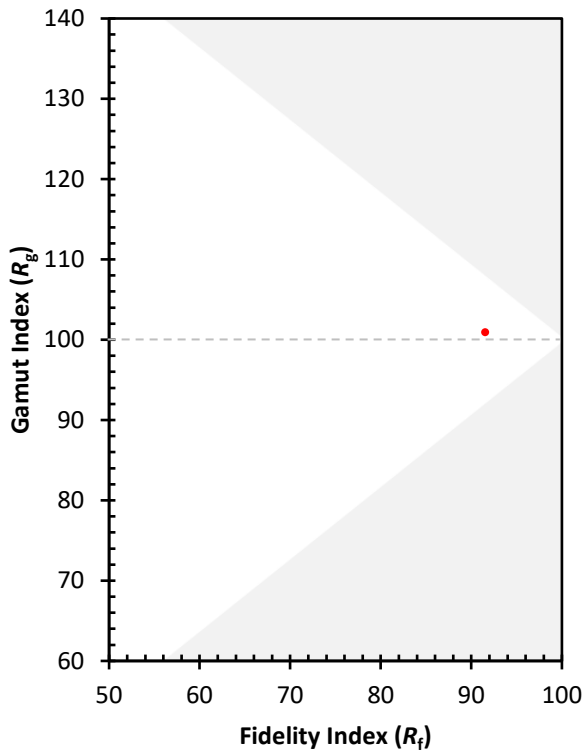
| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 91 | CES51 = 98 | CES76 = 84 |
| CES02 = 61 | CES27 = 93 | CES52 = 98 | CES77 = 88 |
| CES03 = 31 | CES28 = 95 | CES53 = 97 | CES78 = 81 |
| CES04 = 69 | CES29 = 94 | CES54 = 95 | CES79 = 95 |
| CES05 = 48 | CES30 = 96 | CES55 = 94 | CES80 = 92 |
| CES06 = 50 | CES31 = 94 | CES56 = 96 | CES81 = 84 |
| CES07 = 41 | CES32 = 87 | CES57 = 95 | CES82 = 96 |
| CES08 = 40 | CES33 = 97 | CES58 = 95 | CES83 = 96 |
| CES09 = 29 | CES34 = 91 | CES59 = 98 | CES84 = 93 |
| CES10 = 73 | CES35 = 94 | CES60 = 93 | CES85 = 84 |
| CES11 = 56 | CES36 = 83 | CES61 = 93 | CES86 = 87 |
| CES12 = 62 | CES37 = 93 | CES62 = 89 | CES87 = 91 |
| CES13 = 43 | CES38 = 91 | CES63 = 93 | CES88 = 98 |
| CES14 = 74 | CES39 = 99 | CES64 = 91 | CES89 = 87 |
| CES15 = 71 | CES40 = 97 | CES65 = 89 | CES90 = 99 |
| CES16 = 47 | CES41 = 98 | CES66 = 88 | CES91 = 75 |
| CES17 = 48 | CES42 = 91 | CES67 = 87 | CES92 = 80 |
| CES18 = 56 | CES43 = 91 | CES68 = 88 | CES93 = 88 |
| CES19 = 70 | CES44 = 99 | CES69 = 88 | CES94 = 79 |
| CES20 = 65 | CES45 = 95 | CES70 = 85 | CES95 = 84 |
| CES21 = 85 | CES46 = 96 | CES71 = 80 | CES96 = 92 |
| CES22 = 77 | CES47 = 94 | CES72 = 93 | CES97 = 94 |
| CES23 = 91 | CES48 = 95 | CES73 = 79 | CES98 = 95 |
| CES24 = 90 | CES49 = 95 | CES74 = 93 | CES99 = 95 |
| CES25 = 70 | CES50 = 99 | CES75 = 81 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)