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: McGRAW-EDISON

Report Number: P1212020

Luminaire Tested: **GKO-PB2B-827-U-T1**

Issue Date: 11/5/2025

Report Generated By 670245763

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P1212020 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 11/5/2025 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GKO-PB2B-827-U-T1 |
| Description: | GEKKO WALL PACK 6000LM PACKAGE 80CRI 2700K FIXTURE w/ TYPE I DISTRIBUTION OPTIC |
| Light Source: | (20) 2700K CCT, 80 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 5666.8 lumens |
| Efficiency: | N/A |
| Efficacy: | 135.6 lumens/watt |
| Luminous Opening: | Rectangular (W 0.67' x L: 0.33' x H: 0') |
| IES Classification: | Type I - Short |
| BUG Rating: | B2 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 41.8 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.97 |
| Total Harmonic Distortion (THDi): | 8% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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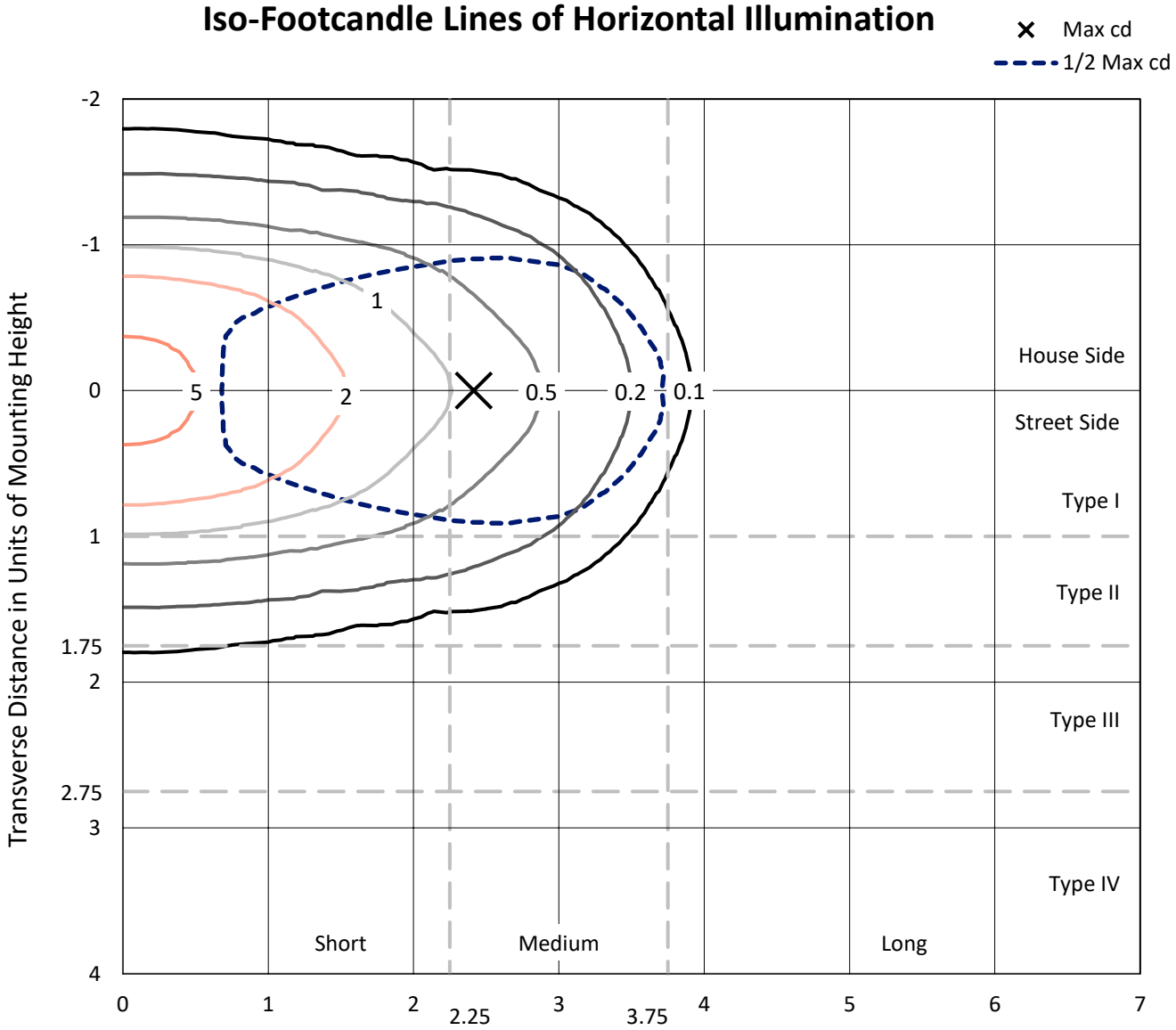
Scaled Data Report

REPORT NUMBER: P1212020
CATALOG NUMBER: GKO-PB2B-827-U-T1

## Iso-Footcandle Lines of Horizontal Illumination




Based on 15 foot mounting height. Maximum calculated value = 6.2 fc
Type I - Short - N/A

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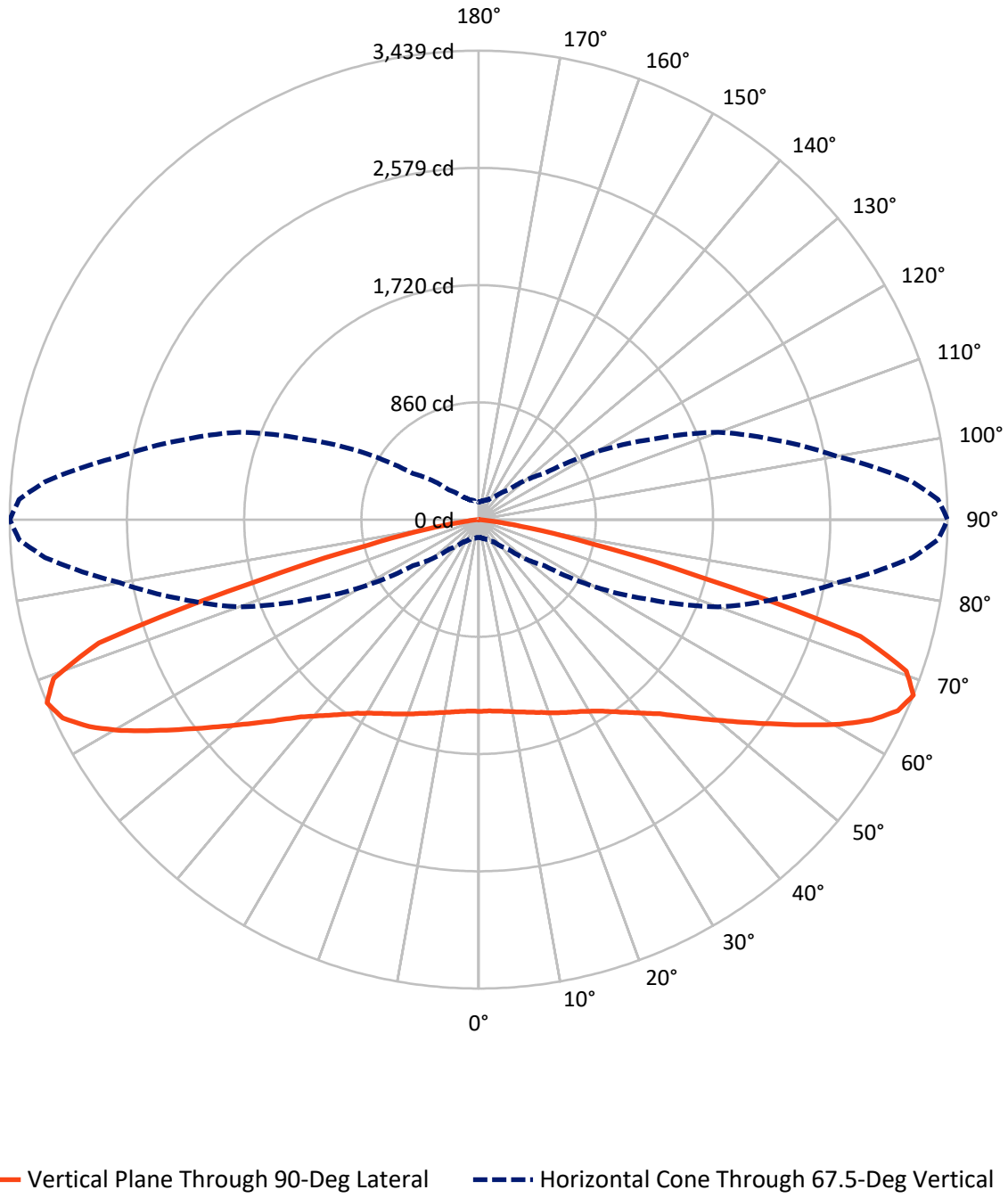
## Luminous Intensity Polar Plot



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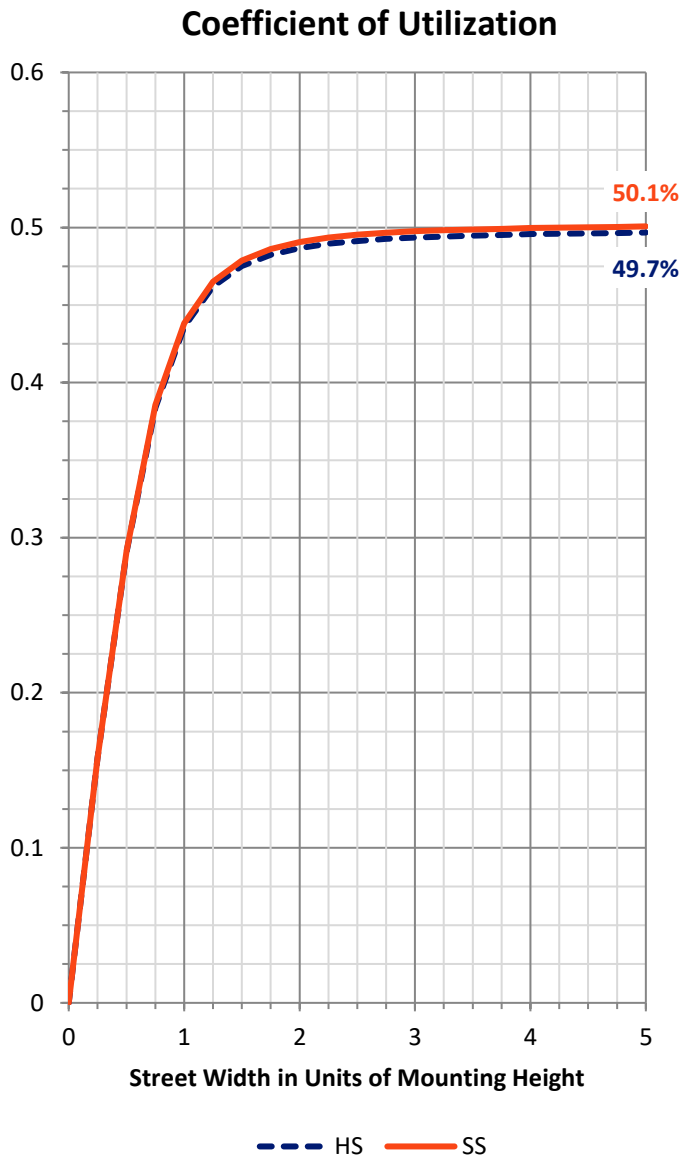
**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 2833.4 | 0.0 | 2833.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 2833.4 | 0.0 | 2833.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 5666.8 | 0.0 | 5666.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 134.9 | 2.4 |
| 10°-20° | 406.4 | 7.2 |
| 20°-30° | 675.8 | 11.9 |
| 30°-40° | 897.7 | 15.8 |
| 40°-50° | 1012.1 | 17.9 |
| 50°-60° | 1040.7 | 18.4 |
| 60°-70° | 983.5 | 17.4 |
| 70°-80° | 481.4 | 8.5 |
| 80°-90° | 34.4 | 0.6 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 5666.8 | 100.0 |
| 0°-180° | 5666.8 | 100.0 |



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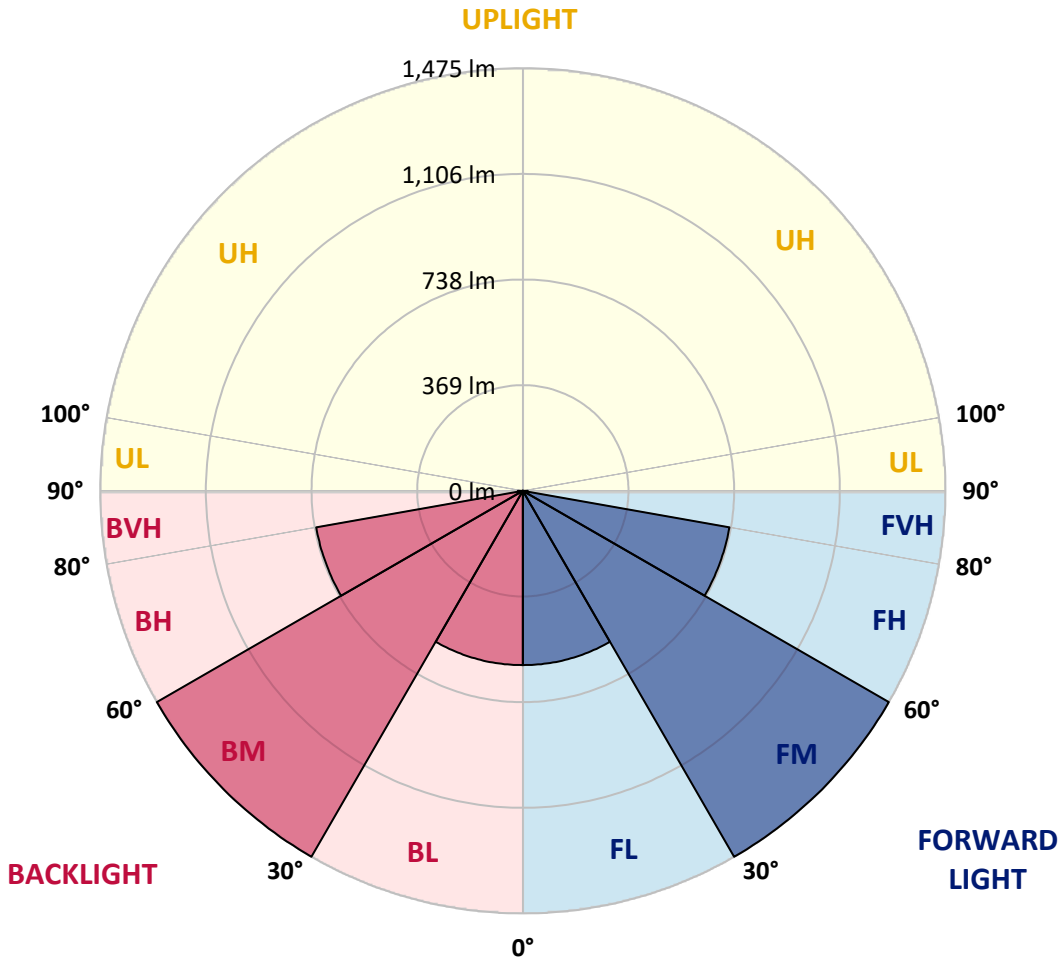
CATALOG NUMBER: GKO-PB2B-827-U-T1

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 608.5 | 10.7 | | | |
| FM | (30°-60°) | 1475.2 | 26.0 | | | |
| FH | (60°-80°) | 732.5 | 12.9 | | | G1/1800 |
| FVH | (80°-90°) | 17.2 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 608.5 | 10.7 | B2/1000 | | |
| BM | (30°-60°) | 1475.2 | 26.0 | B2/2500 | | |
| BH | (60°-80°) | 732.5 | 12.9 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 17.2 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B2-U0-G2**
Type I Short



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REPORT NUMBER: P1212020
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 80° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1406.2 | 1406.2 | 1406.2 | 1406.2 | 1406.2 | 1406.2 | 1406.2 | 1406.2 | 1406.2 | 1406.2 | 1406.2 |
| 2.5° | 1407.2 | 1409.3 | 1405.1 | 1405.1 | 1407.2 | 1408.3 | 1408.3 | 1409.3 | 1407.2 | 1407.2 | 1406.2 |
| 5° | 1407.2 | 1408.3 | 1406.2 | 1406.2 | 1408.3 | 1411.4 | 1410.3 | 1412.4 | 1412.4 | 1411.4 | 1411.4 |
| 7.5° | 1406.2 | 1408.3 | 1406.2 | 1407.2 | 1410.3 | 1416.6 | 1416.6 | 1416.6 | 1418.7 | 1420.8 | 1420.8 |
| 10° | 1405.1 | 1407.2 | 1408.3 | 1409.3 | 1413.5 | 1422.9 | 1425.0 | 1426.0 | 1429.2 | 1432.3 | 1432.3 |
| 12.5° | 1399.9 | 1402.0 | 1405.1 | 1409.3 | 1416.6 | 1429.2 | 1433.3 | 1436.5 | 1441.7 | 1444.8 | 1446.9 |
| 15° | 1392.6 | 1393.6 | 1400.9 | 1409.3 | 1420.8 | 1436.5 | 1444.8 | 1450.0 | 1457.4 | 1461.5 | 1464.7 |
| 17.5° | 1382.1 | 1383.2 | 1394.7 | 1407.2 | 1423.9 | 1445.9 | 1459.5 | 1467.8 | 1475.1 | 1481.4 | 1485.6 |
| 20° | 1368.6 | 1371.7 | 1385.3 | 1405.1 | 1429.2 | 1455.3 | 1475.1 | 1489.7 | 1497.1 | 1503.3 | 1509.6 |
| 22.5° | 1351.8 | 1355.0 | 1371.7 | 1399.9 | 1434.4 | 1467.8 | 1493.9 | 1512.7 | 1522.1 | 1530.5 | 1537.8 |
| 25° | 1326.8 | 1331.0 | 1350.8 | 1387.4 | 1436.5 | 1481.4 | 1514.8 | 1538.8 | 1547.2 | 1557.7 | 1563.9 |
| 27.5° | 1288.1 | 1291.3 | 1315.3 | 1362.3 | 1430.2 | 1496.0 | 1538.8 | 1567.1 | 1576.5 | 1587.9 | 1594.2 |
| 30° | 1227.5 | 1233.8 | 1263.0 | 1321.5 | 1414.5 | 1507.5 | 1567.1 | 1595.3 | 1606.8 | 1618.2 | 1626.6 |
| 32.5° | 1149.2 | 1158.6 | 1191.0 | 1266.2 | 1384.2 | 1511.7 | 1597.4 | 1629.7 | 1644.4 | 1656.9 | 1667.3 |
| 35° | 1052.0 | 1061.4 | 1100.1 | 1195.1 | 1336.2 | 1503.3 | 1627.6 | 1669.4 | 1687.2 | 1703.9 | 1716.4 |
| 37.5° | 941.3 | 949.6 | 996.6 | 1105.3 | 1267.2 | 1477.2 | 1651.7 | 1713.3 | 1737.3 | 1759.3 | 1776.0 |
| 40° | 829.5 | 838.9 | 890.1 | 1006.0 | 1183.6 | 1427.1 | 1662.1 | 1761.4 | 1791.7 | 1819.9 | 1840.8 |
| 42.5° | 708.3 | 719.8 | 777.3 | 900.5 | 1086.5 | 1358.1 | 1653.8 | 1808.4 | 1846.0 | 1884.6 | 1916.0 |
| 45° | 600.7 | 602.8 | 665.5 | 784.6 | 979.9 | 1269.3 | 1624.5 | 1853.3 | 1904.5 | 1958.8 | 2003.7 |
| 47.5° | 497.3 | 501.5 | 555.8 | 673.8 | 869.2 | 1169.0 | 1571.2 | 1888.8 | 1970.3 | 2040.3 | 2106.1 |
| 50° | 405.3 | 410.6 | 459.7 | 565.2 | 758.5 | 1059.3 | 1499.1 | 1909.7 | 2026.7 | 2121.8 | 2213.7 |
| 52.5° | 330.1 | 336.4 | 377.1 | 470.1 | 646.7 | 944.4 | 1410.3 | 1912.9 | 2077.9 | 2203.3 | 2325.5 |
| 55° | 274.8 | 278.9 | 310.3 | 384.5 | 539.1 | 825.3 | 1309.0 | 1897.2 | 2111.3 | 2276.4 | 2439.4 |
| 57.5° | 231.9 | 236.1 | 258.0 | 316.5 | 441.9 | 703.1 | 1185.7 | 1860.6 | 2129.1 | 2340.1 | 2554.3 |
| 60° | 201.6 | 204.8 | 220.4 | 262.2 | 363.6 | 588.2 | 1053.1 | 1795.8 | 2123.9 | 2379.8 | 2649.4 |
| 62.5° | 179.7 | 180.7 | 194.3 | 223.6 | 299.8 | 479.5 | 903.7 | 1698.7 | 2081.0 | 2385.1 | 2714.1 |
| 65° | 159.8 | 160.9 | 169.2 | 190.1 | 246.5 | 385.5 | 748.0 | 1565.0 | 1999.6 | 2348.5 | 2723.5 |
| 67.5° | *129.5* | *131.6* | *144.2* | *159.8* | *202.7* | *305.1* | *589.2* | *1389.5* | *1872.1* | *2253.4* | *2670.3* |
| 70° | 103.4 | 104.5 | 117.0 | 134.8 | 165.1 | 240.3 | 452.4 | 1153.4 | 1672.6 | 2098.8 | 2532.4 |
| 72.5° | 77.3 | 79.4 | 90.9 | 108.6 | 134.8 | 186.0 | 327.0 | 872.3 | 1337.2 | 1769.7 | 2205.4 |
| 75° | 61.6 | 62.7 | 66.9 | 83.6 | 104.5 | 141.0 | 220.4 | 528.6 | 805.5 | 1094.8 | 1351.8 |
| 77.5° | 52.2 | 53.3 | 53.3 | 64.8 | 77.3 | 95.1 | 117.0 | 210.0 | 340.6 | 484.7 | 642.5 |
| 80° | 42.8 | 44.9 | 40.7 | 48.1 | 55.4 | 55.4 | 54.3 | 100.3 | 160.9 | 227.7 | 298.8 |
| 82.5° | 31.3 | 33.4 | 31.3 | 33.4 | 33.4 | 30.3 | 28.2 | 37.6 | 51.2 | 70.0 | 76.3 |
| 85° | 21.9 | 23.0 | 25.1 | 23.0 | 21.9 | 17.8 | 13.6 | 10.4 | 6.3 | 7.3 | 10.4 |
| 87.5° | 14.6 | 17.8 | 20.9 | 19.8 | 16.7 | 13.6 | 9.4 | 6.3 | 3.1 | 4.2 | 4.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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REPORT NUMBER: P1212020
CATALOG NUMBER: GKO-PB2B-827-U-T1

**CANDELA DISTRIBUTION (continued):**

| | 85° | 87.5° | 90° |
|---|---|---|---|
| 0° | 1406.2 | 1406.2 | *1406.2* |
| 2.5° | 1407.2 | 1406.2 | *1405.1* |
| 5° | 1412.4 | 1411.4 | *1410.3* |
| 7.5° | 1419.8 | 1419.8 | *1419.8* |
| 10° | 1431.2 | 1433.3 | *1433.3* |
| 12.5° | 1445.9 | 1448.0 | *1448.0* |
| 15° | 1463.6 | 1464.7 | *1466.8* |
| 17.5° | 1485.6 | 1486.6 | *1486.6* |
| 20° | 1511.7 | 1510.6 | *1512.7* |
| 22.5° | 1537.8 | 1537.8 | *1537.8* |
| 25° | 1565.0 | 1565.0 | *1565.0* |
| 27.5° | 1596.3 | 1596.3 | *1594.2* |
| 30° | 1630.8 | 1630.8 | *1630.8* |
| 32.5° | 1672.6 | 1673.6 | *1674.7* |
| 35° | 1725.8 | 1727.9 | *1731.1* |
| 37.5° | 1786.4 | 1791.7 | *1794.8* |
| 40° | 1858.5 | 1860.6 | *1865.8* |
| 42.5° | 1939.0 | 1945.2 | *1946.3* |
| 45° | 2039.3 | 2049.7 | *2053.9* |
| 47.5° | 2157.3 | 2171.9 | *2179.3* |
| 50° | 2288.9 | 2305.7 | *2316.1* |
| 52.5° | 2432.1 | 2459.2 | *2471.8* |
| 55° | 2584.6 | 2631.6 | *2645.2* |
| 57.5° | 2757.0 | 2820.7 | *2839.5* |
| 60° | 2926.2 | 3016.1 | *3046.4* |
| 62.5° | 3070.4 | 3196.8 | *3234.4* |
| 65° | 3171.7 | 3324.2 | *3379.6* |
| 67.5° | *3192.6* | *3373.3* | *3439.2* |
| 70° | 3067.2 | 3252.2 | *3328.4* |
| 72.5° | 2667.1 | 2834.3 | *2929.3* |
| 75° | 1575.4 | 1695.6 | *1666.3* |
| 77.5° | 790.8 | 825.3 | *830.5* |
| 80° | 346.8 | 367.7 | *376.1* |
| 82.5° | 85.7 | 87.8 | *99.2* |
| 85° | 11.5 | 13.6 | *12.5* |
| 87.5° | 4.2 | 4.2 | *5.2* |
| 90° | 0.0 | 0.0 | *0.0* |

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP3-2511-595-2

Test Date: 11/12/2025

Luminaire Tested: GKO-PB1C-827-U-T4W

Data in this report applies to families of products including GKO-PB1C-827*

Report Generated By FNC07603 / LDUCLS01DT01661
Version: v7.05

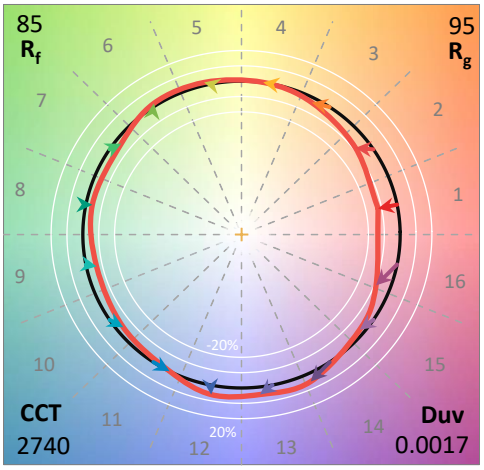
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP3-2511-595-2 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP3 - 3M SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 01/27/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGraw-Edison |
| Catalog Number: | **GKO-PB1C-827-U-T4W** |
| Description: | Gekko Wedge Wall Pack Fixture 1 SQ w/ T4W distribution |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 2740 |
| CIE u': | 0.2602 |
| CIE v': | 0.5290 |
| Duv: | 0.0017 |
| CIE x: | 0.4595 |
| CIE y: | 0.4151 |
| CIE z: | 0.1255 |
| Peak Wavelength (nm): | 605 |
| Dominant Wavelength (nm): | 583 |
| Purity: | 62.5206 |
| Rf: | 84.8 |
| Rg: | 94.5 |

| | |
|---|---|
| CRI (Ra): | 81.1 |
| R1: | 79.2 |
| R2: | 90.4 |
| R3: | 95.8 |
| R4: | 79.2 |
| R5: | 79.6 |
| R6: | 89.5 |
| R7: | 81.1 |
| R8: | 54.5 |
| R9: | -0.3 |
| R10: | 79.1 |
| R11: | 79.0 |
| R12: | 72.7 |
| R13: | 81.7 |
| R14: | 98.3 |
| R15: | 70.3 |




## Test Conditions

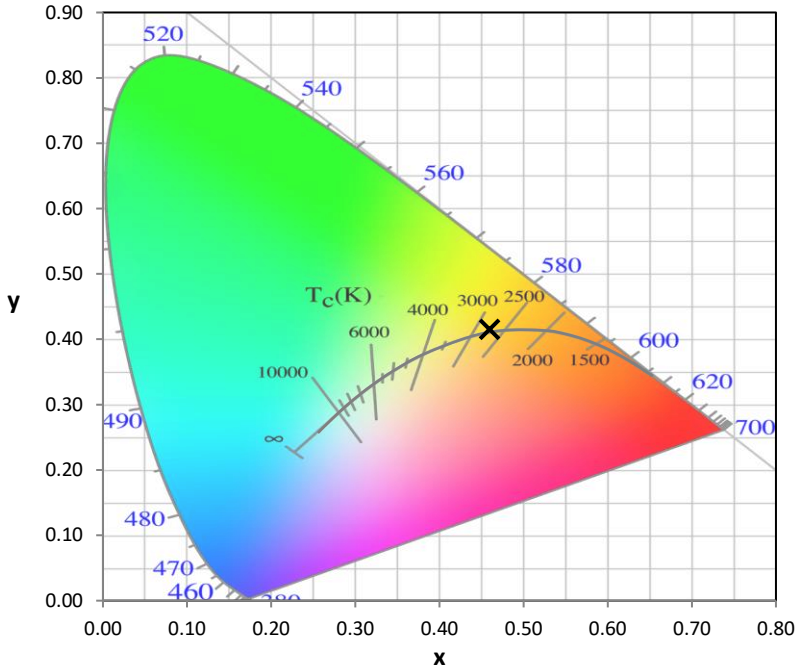
| | |
|---|---|
| Stabilization Time: | 20M |
| Operation Time: | 1H 20M |
| Sphere Temperature (°C): | 25.0 |

REPORT NUMBER: SP3-2511-595-2

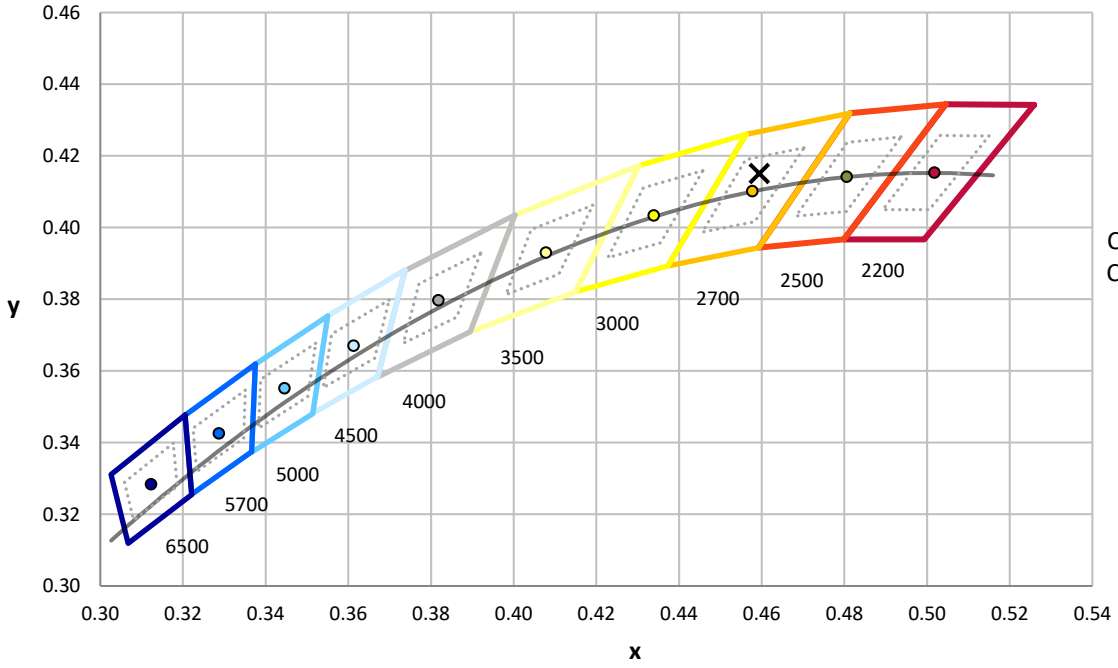
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 3M SPHERE IN02505 | 7/1/2025 | 1/1/2026 |
| Power Meter | XITRON INXT2011006 | 10/21/2025 | 10/21/2026 |
| AC Power Source | CHROMA 61604 IN6064A | 10/20/2025 | 10/20/2026 |
| DC Power Source | EYSIGHT N5770A IN0534 | 10/20/2025 | 10/20/2026 |
| Sphere Thermometer | TANDD IN4036E | 10/21/2025 | 10/21/2026 |
| | | | |

REPORT NUMBER: SP3-2511-595-2

## CIE 1931 Chromaticity Diagram




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

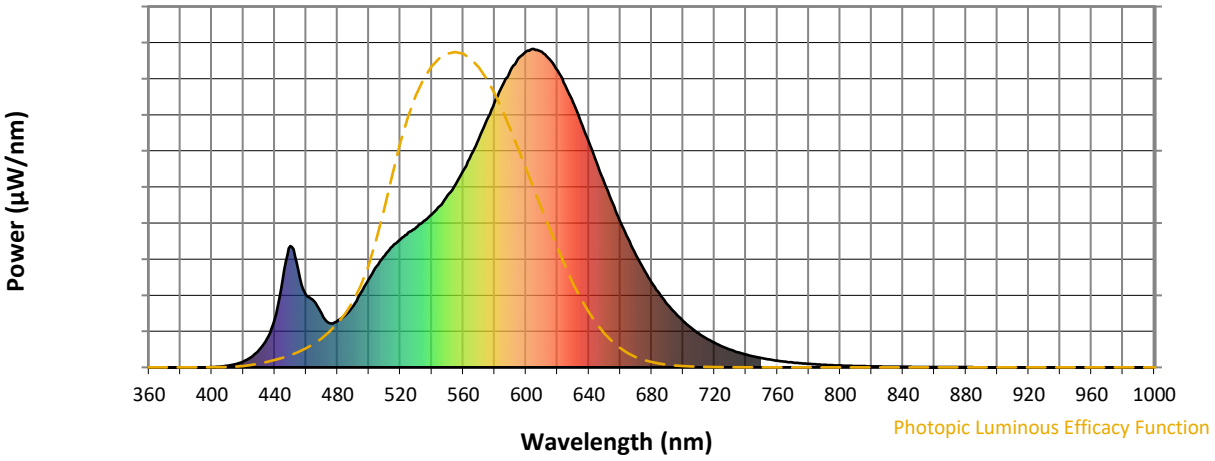



CCT = 2740K
CIE x = 0.4595
CIE y = 0.4151
Duv = 0.0017

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP3-2511-595-2

## 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 | 193 | NR | 620 | 932 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 235 | NR | 625 | 886 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 278 | NR | 630 | 832 | NR | 760 | 21 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 318 | NR | 635 | 771 | NR | 765 | 18 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 351 | NR | 640 | 708 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 380 | NR | 645 | 642 | NR | 775 | 13 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 402 | NR | 650 | 578 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 423 | NR | 655 | 517 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 440 | NR | 660 | 457 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 2 | NR | 535 | 460 | NR | 665 | 404 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 5 | NR | 540 | 480 | NR | 670 | 352 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 10 | NR | 545 | 507 | NR | 675 | 308 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 19 | NR | 550 | 539 | NR | 680 | 267 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 32 | NR | 555 | 574 | NR | 685 | 231 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 55 | NR | 560 | 617 | NR | 690 | 198 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 90 | NR | 565 | 668 | NR | 695 | 171 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 151 | NR | 570 | 718 | NR | 700 | 146 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 275 | NR | 575 | 777 | NR | 705 | 124 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 381 | NR | 580 | 832 | NR | 710 | 106 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 304 | NR | 585 | 886 | NR | 715 | 90 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 227 | NR | 590 | 933 | NR | 720 | 77 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 208 | NR | 595 | 970 | NR | 725 | 66 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 167 | NR | 600 | 992 | NR | 730 | 56 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 138 | NR | 605 | 1000 | NR | 735 | 47 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 146 | NR | 610 | 991 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 164 | NR | 615 | 969 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

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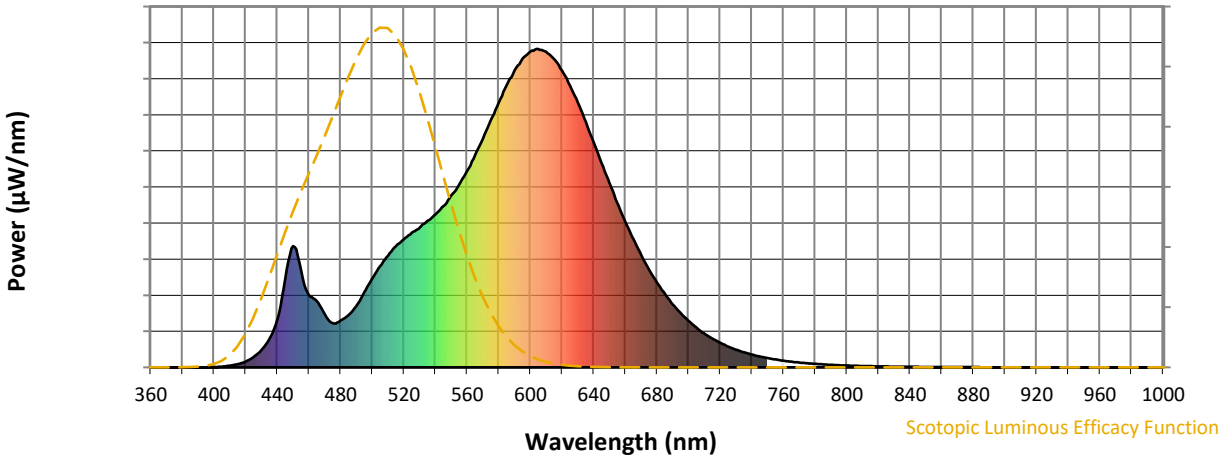
## Scotopic Flux vs. Wavelength




**Scotopic Lumens: NR** **S/P: 1.22**

| 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 | 193 | NR | 620 | 932 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 235 | NR | 625 | 886 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 278 | NR | 630 | 832 | NR | 760 | 21 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 318 | NR | 635 | 771 | NR | 765 | 18 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 351 | NR | 640 | 708 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 380 | NR | 645 | 642 | NR | 775 | 13 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 402 | NR | 650 | 578 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 423 | NR | 655 | 517 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 440 | NR | 660 | 457 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 2 | NR | 535 | 460 | NR | 665 | 404 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 5 | NR | 540 | 480 | NR | 670 | 352 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 10 | NR | 545 | 507 | NR | 675 | 308 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 19 | NR | 550 | 539 | NR | 680 | 267 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 32 | NR | 555 | 574 | NR | 685 | 231 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 55 | NR | 560 | 617 | NR | 690 | 198 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 90 | NR | 565 | 668 | NR | 695 | 171 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 151 | NR | 570 | 718 | NR | 700 | 146 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 275 | NR | 575 | 777 | NR | 705 | 124 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 381 | NR | 580 | 832 | NR | 710 | 106 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 304 | NR | 585 | 886 | NR | 715 | 90 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 227 | NR | 590 | 933 | NR | 720 | 77 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 208 | NR | 595 | 970 | NR | 725 | 66 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 167 | NR | 600 | 992 | NR | 730 | 56 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 138 | NR | 605 | 1000 | NR | 735 | 47 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 146 | NR | 610 | 991 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 164 | NR | 615 | 969 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

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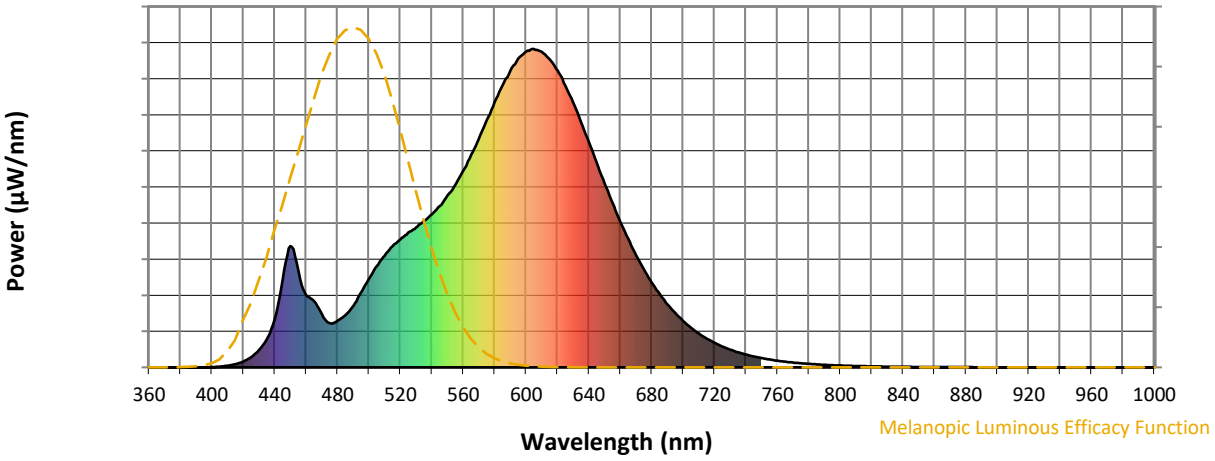
## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.26**

| 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 | 193 | NR | 620 | 932 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 235 | NR | 625 | 886 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 278 | NR | 630 | 832 | NR | 760 | 21 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 318 | NR | 635 | 771 | NR | 765 | 18 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 351 | NR | 640 | 708 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 380 | NR | 645 | 642 | NR | 775 | 13 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 402 | NR | 650 | 578 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 423 | NR | 655 | 517 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 440 | NR | 660 | 457 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 2 | NR | 535 | 460 | NR | 665 | 404 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 5 | NR | 540 | 480 | NR | 670 | 352 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 10 | NR | 545 | 507 | NR | 675 | 308 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 19 | NR | 550 | 539 | NR | 680 | 267 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 32 | NR | 555 | 574 | NR | 685 | 231 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 55 | NR | 560 | 617 | NR | 690 | 198 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 90 | NR | 565 | 668 | NR | 695 | 171 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 151 | NR | 570 | 718 | NR | 700 | 146 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 275 | NR | 575 | 777 | NR | 705 | 124 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 381 | NR | 580 | 832 | NR | 710 | 106 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 304 | NR | 585 | 886 | NR | 715 | 90 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 227 | NR | 590 | 933 | NR | 720 | 77 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 208 | NR | 595 | 970 | NR | 725 | 66 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 167 | NR | 600 | 992 | NR | 730 | 56 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 138 | NR | 605 | 1000 | NR | 735 | 47 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 146 | NR | 610 | 991 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 164 | NR | 615 | 969 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

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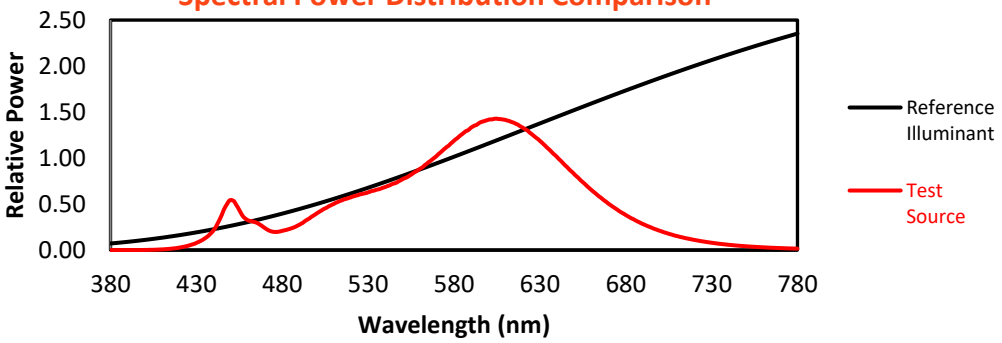
# TM-30-18

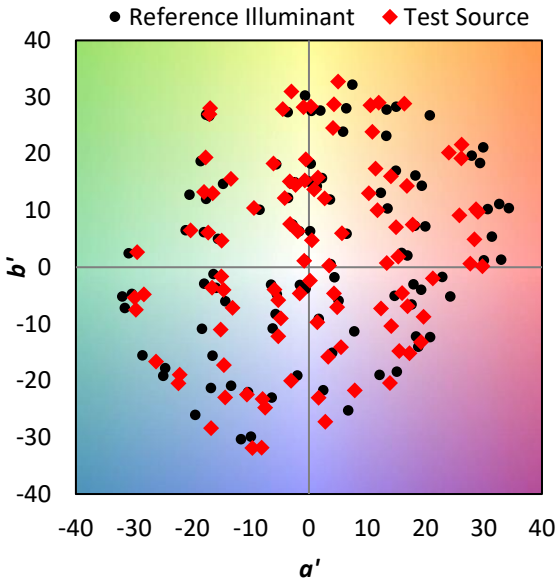
## Summary

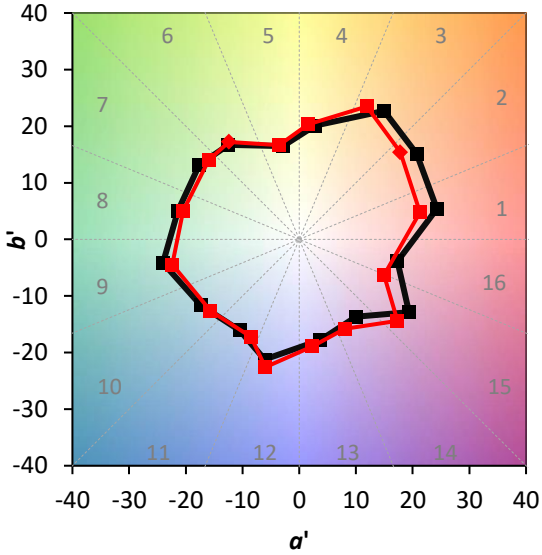
$R_f$ = 84.8
$R_g$ = 94.5
CIE $R_a$ = 81.1
$R_9$ = -0.3

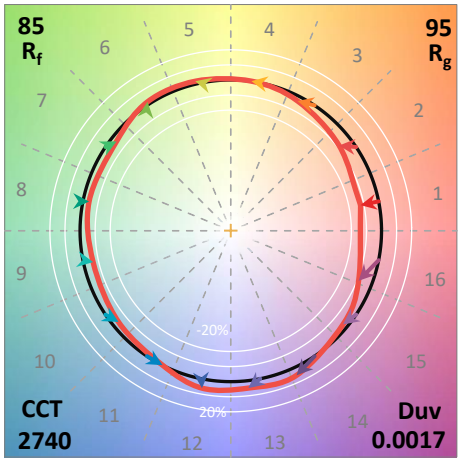
## Spectral Power Distribution Comparison

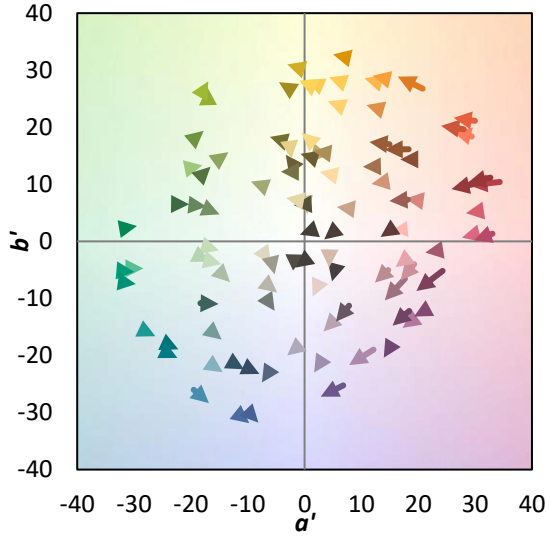



## Color Vector Graphics



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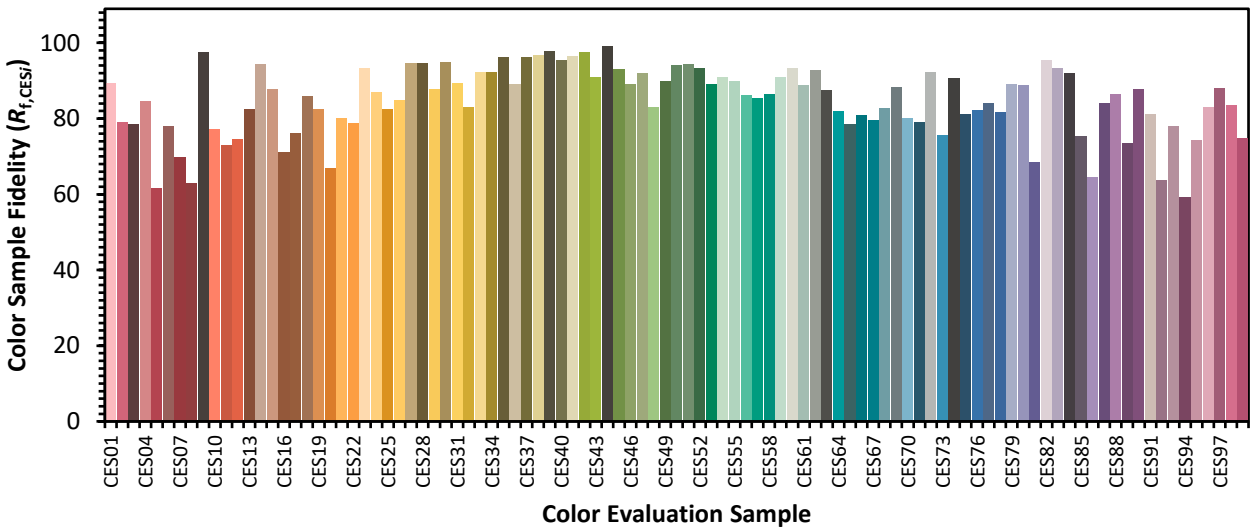
**Individual Sample Fidelity Index ($R_{f,i}$)**

| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 85 | CES51 = 94 | CES76 = 82 |
| CES02 = 63 | CES27 = 95 | CES52 = 93 | CES77 = 84 |
| CES03 = 31 | CES28 = 95 | CES53 = 89 | CES78 = 82 |
| CES04 = 71 | CES29 = 88 | CES54 = 91 | CES79 = 89 |
| CES05 = 50 | CES30 = 95 | CES55 = 90 | CES80 = 89 |
| CES06 = 52 | CES31 = 89 | CES56 = 86 | CES81 = 68 |
| CES07 = 43 | CES32 = 83 | CES57 = 85 | CES82 = 96 |
| CES08 = 41 | CES33 = 92 | CES58 = 86 | CES83 = 93 |
| CES09 = 29 | CES34 = 92 | CES59 = 91 | CES84 = 92 |
| CES10 = 77 | CES35 = 96 | CES60 = 93 | CES85 = 75 |
| CES11 = 60 | CES36 = 89 | CES61 = 89 | CES86 = 65 |
| CES12 = 66 | CES37 = 96 | CES62 = 93 | CES87 = 84 |
| CES13 = 44 | CES38 = 97 | CES63 = 87 | CES88 = 86 |
| CES14 = 74 | CES39 = 98 | CES64 = 82 | CES89 = 73 |
| CES15 = 72 | CES40 = 95 | CES65 = 79 | CES90 = 88 |
| CES16 = 48 | CES41 = 96 | CES66 = 81 | CES91 = 81 |
| CES17 = 50 | CES42 = 98 | CES67 = 80 | CES92 = 64 |
| CES18 = 57 | CES43 = 91 | CES68 = 83 | CES93 = 78 |
| CES19 = 73 | CES44 = 99 | CES69 = 88 | CES94 = 59 |
| CES20 = 67 | CES45 = 93 | CES70 = 80 | CES95 = 74 |
| CES21 = 87 | CES46 = 89 | CES71 = 79 | CES96 = 83 |
| CES22 = 79 | CES47 = 92 | CES72 = 92 | CES97 = 88 |
| CES23 = 92 | CES48 = 83 | CES73 = 76 | CES98 = 84 |
| CES24 = 91 | CES49 = 90 | CES74 = 91 | CES99 = 75 |
| CES25 = 72 | CES50 = 94 | CES75 = 81 | |



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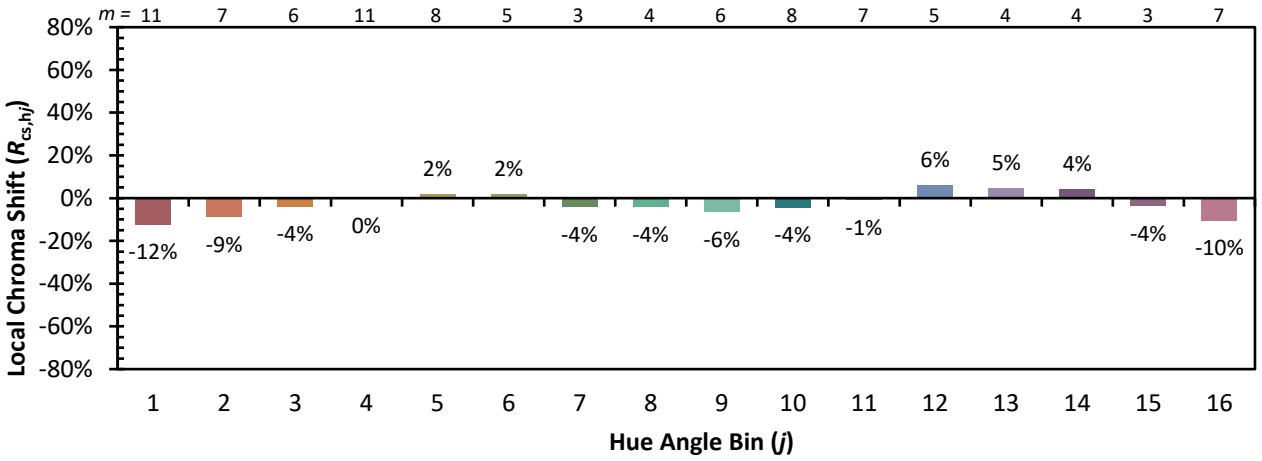
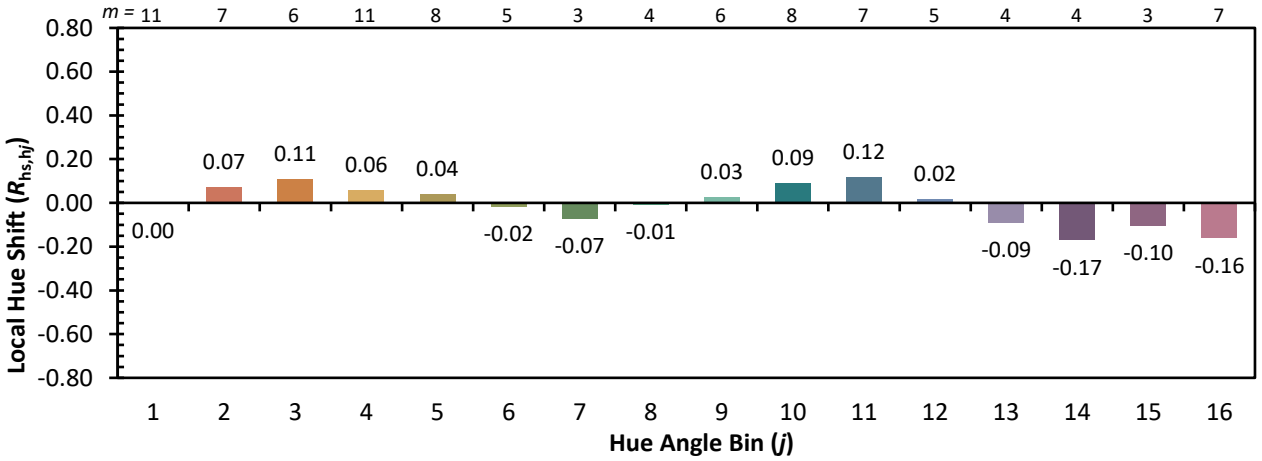
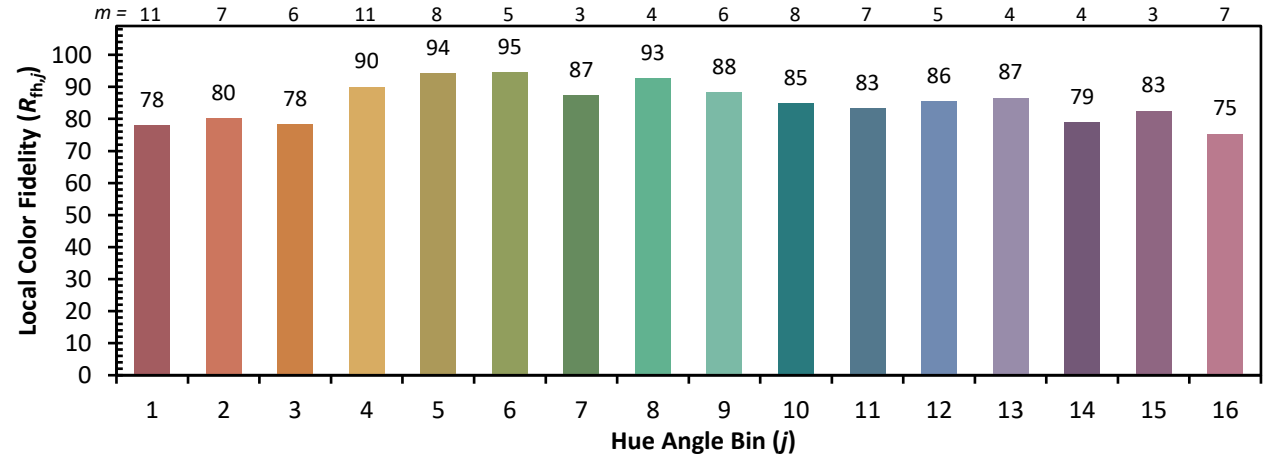
# TM-30-18

## Color Rendition by Hue-Angle Bin



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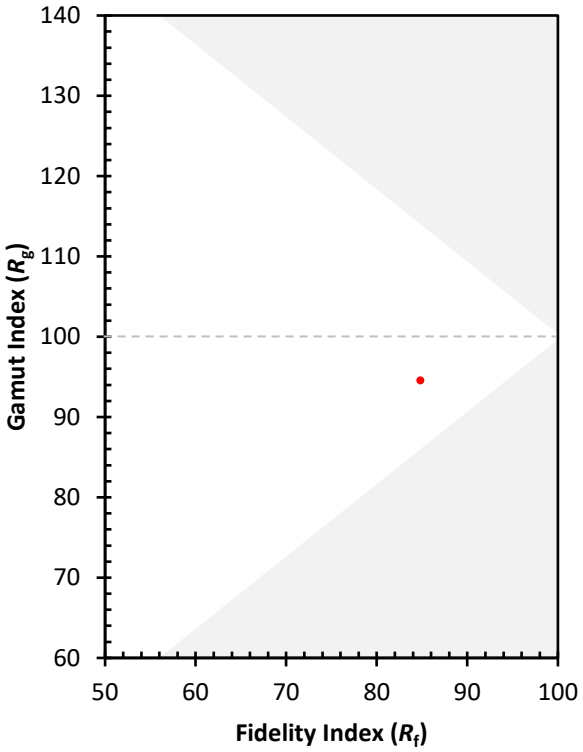
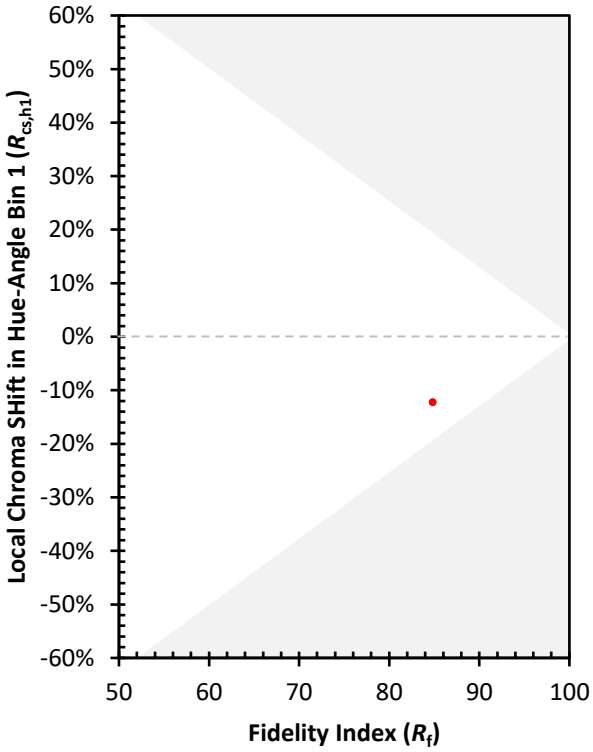
# TM-30-18

## Measure Comparisons




(END OF REPORT)