

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: CORELITE

Report Number: P1215907

Luminaire Tested: 24-ID2-35-CFD2-L840-U

Issue Date: 12/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1215907
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2506-458-28)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24-ID2-35-CFD2-L840-U
Description: 2X4 IN DEPTH TROFFER WITH 2INCH CUBE DROP LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

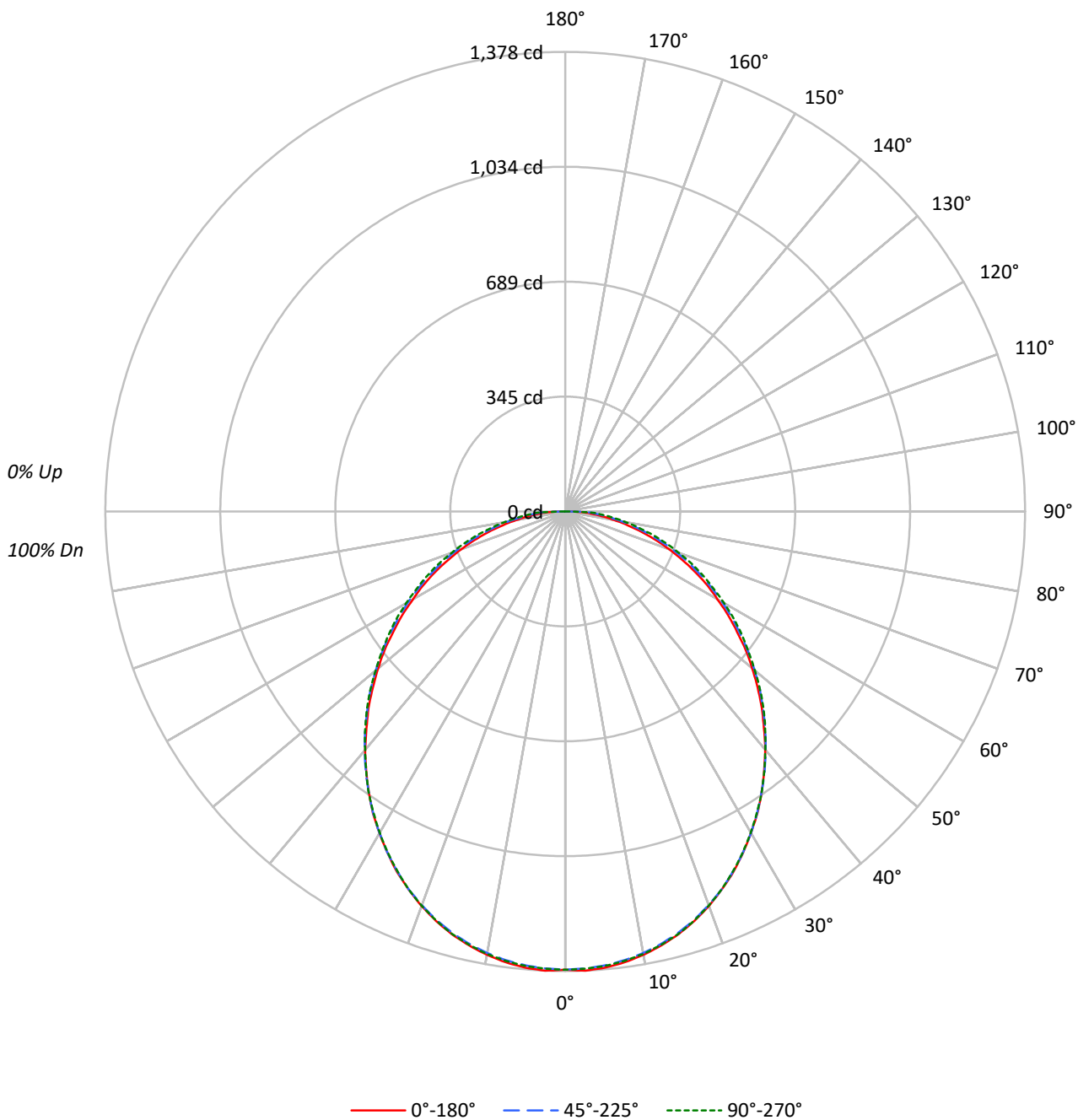
Lumens per Lamp: N/A
Luminaire Lumens: 3727.4 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.16')
CIE Type: Direct

Input Watts (W): 30.4
Input Voltage (V): 120
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: 24 FT



TEST NUMBER: P1215907
CATALOG NUMBER: 24-ID2-35-CFD2-L840-U

Luminous Intensity Polar Plot





TEST NUMBER: P1215907
 CATALOG NUMBER: 24-ID2-35-CFD2-L840-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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 94 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 55 | 80 | 69 | 61 | 54 | 66 | 59 | 53 | 64 | 58 | 53 | 62 | 56 | 52 | 50 |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 60 | 52 | 46 | 58 | 51 | 46 | 56 | 50 | 45 | 43 |
| 6 | 70 | 57 | 48 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 41 | 52 | 45 | 40 | 51 | 45 | 40 | 38 |
| 7 | 65 | 51 | 43 | 36 | 63 | 51 | 42 | 36 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | 34 |
| 8 | 61 | 47 | 38 | 33 | 59 | 46 | 38 | 32 | 45 | 38 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 30 |
| 9 | 57 | 43 | 35 | 29 | 55 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 26 | 37 | 31 | 26 | 37 | 31 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1849 | 1849 | 1849 |
| 5° | 1848 | 1832 | 1834 |
| 10° | 1832 | 1809 | 1815 |
| 15° | 1809 | 1782 | 1788 |
| 20° | 1777 | 1744 | 1749 |
| 25° | 1738 | 1700 | 1703 |
| 30° | 1690 | 1649 | 1651 |
| 35° | 1640 | 1591 | 1597 |
| 40° | 1584 | 1532 | 1535 |
| 45° | 1524 | 1470 | 1482 |
| 50° | 1461 | 1408 | 1417 |
| 55° | 1394 | 1341 | 1361 |
| 60° | 1326 | 1274 | 1299 |
| 65° | 1263 | 1199 | 1240 |
| 70° | 1174 | 1124 | 1167 |
| 75° | 1076 | 1015 | 1086 |
| 80° | 951 | 905 | 989 |
| 85° | 831 | 791 | 893 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1524 cd/sqm



TEST NUMBER: P1215907
 CATALOG NUMBER: 24-ID2-35-CFD2-L840-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 129.8 | 3.5 |
| 10°-20° | 368.9 | 9.9 |
| 20°-30° | 548.1 | 14.7 |
| 30°-40° | 642.2 | 17.2 |
| 40°-50° | 646.4 | 17.3 |
| 50°-60° | 572.9 | 15.4 |
| 60°-70° | 440.8 | 11.8 |
| 70°-80° | 272.5 | 7.3 |
| 80°-90° | 105.7 | 2.8 |
| 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° | 1046.9 | 28.1 |
| 0°-40° | 1689.1 | 45.3 |
| 0°-60° | 2908.4 | 78.0 |
| 0°-90° | 3727.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3727.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1374 | 1374 | 1374 | 1374 | 1374 | |
| 5° | 1373 | 1369 | 1366 | 1365 | 1368 | 130 |
| 15° | 1312 | 1309 | 1308 | 1308 | 1311 | 370 |
| 25° | 1193 | 1191 | 1191 | 1190 | 1190 | 549 |
| 35° | 1026 | 1027 | 1026 | 1027 | 1027 | 642 |
| 45° | 833 | 836 | 838 | 839 | 841 | 642 |
| 55° | 628 | 636 | 641 | 646 | 646 | 563 |
| 65° | 431 | 437 | 445 | 454 | 456 | 425 |
| 75° | 238 | 246 | 257 | 270 | 271 | 252 |
| 85° | 78 | 88 | 101 | 110 | 111 | 86 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1215907
 CATALOG NUMBER: 24-ID2-35-CFD2-L840-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1374.0 | 1374.0 | 1374.0 | 1374.0 | 1374.0 |
| 2.5° | 1378.2 | 1374.0 | 1371.4 | 1369.8 | 1372.4 |
| 5° | 1372.9 | 1368.8 | 1366.2 | 1365.1 | 1367.7 |
| 7.5° | 1363.5 | 1359.4 | 1357.3 | 1356.7 | 1359.4 |
| 10° | 1350.0 | 1345.8 | 1344.2 | 1343.7 | 1347.3 |
| 12.5° | 1332.7 | 1329.0 | 1328.0 | 1328.5 | 1330.6 |
| 15° | 1312.3 | 1308.7 | 1308.1 | 1307.6 | 1310.8 |
| 17.5° | 1287.2 | 1284.1 | 1284.1 | 1283.1 | 1286.2 |
| 20° | 1259.0 | 1255.4 | 1255.9 | 1255.4 | 1257.4 |
| 22.5° | 1226.6 | 1224.5 | 1226.1 | 1225.6 | 1226.1 |
| 25° | 1192.6 | 1190.6 | 1190.6 | 1190.0 | 1190.0 |
| 27.5° | 1154.0 | 1153.4 | 1153.4 | 1151.9 | 1152.4 |
| 30° | 1113.2 | 1113.7 | 1113.2 | 1112.7 | 1111.6 |
| 32.5° | 1072.4 | 1071.4 | 1071.4 | 1071.4 | 1069.8 |
| 35° | 1026.4 | 1027.0 | 1026.4 | 1027.0 | 1027.0 |
| 37.5° | 979.4 | 982.5 | 981.5 | 982.5 | 979.9 |
| 40° | 932.4 | 933.4 | 934.5 | 934.5 | 932.9 |
| 42.5° | 881.2 | 886.9 | 887.4 | 887.4 | 887.4 |
| 45° | 833.1 | 835.7 | 838.3 | 839.3 | 840.9 |
| 47.5° | 781.9 | 786.6 | 791.3 | 790.2 | 792.3 |
| 50° | 731.2 | 737.4 | 740.6 | 743.2 | 741.6 |
| 52.5° | 682.0 | 685.7 | 690.9 | 694.1 | 693.5 |
| 55° | 628.2 | 635.5 | 640.7 | 646.5 | 646.5 |
| 57.5° | 579.1 | 587.4 | 591.6 | 598.4 | 599.5 |
| 60° | 526.8 | 536.2 | 543.0 | 549.3 | 549.8 |
| 62.5° | 480.3 | 486.6 | 493.9 | 502.8 | 501.2 |
| 65° | 430.6 | 436.9 | 445.3 | 453.6 | 456.3 |
| 67.5° | 379.4 | 388.3 | 398.2 | 406.6 | 410.3 |
| 70° | 331.3 | 340.8 | 352.3 | 360.6 | 361.7 |
| 72.5° | 284.3 | 294.2 | 303.6 | 314.1 | 316.7 |
| 75° | 237.8 | 246.2 | 257.1 | 269.7 | 271.2 |
| 77.5° | 191.3 | 202.8 | 213.8 | 225.3 | 225.8 |
| 80° | 150.5 | 159.9 | 173.0 | 183.4 | 185.5 |
| 82.5° | 110.8 | 121.3 | 133.8 | 144.8 | 145.8 |
| 85° | 78.4 | 88.3 | 100.9 | 109.8 | 110.8 |
| 87.5° | 52.8 | 62.7 | 74.2 | 83.1 | 84.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

TEST NUMBER: P1215907
 CATALOG NUMBER: 24-ID2-35-CFD2-L840-U

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 | 12.87 | 14.51 | 13.23 | 14.82 | 15.14 | 13.15 | 14.78 | 13.51 | 15.10 | 15.41 |
| | 3H | 14.58 | 16.07 | 14.96 | 16.39 | 16.75 | 15.04 | 16.52 | 15.41 | 16.85 | 17.21 |
| | 4H | 15.22 | 16.62 | 15.62 | 16.97 | 17.34 | 15.80 | 17.20 | 16.20 | 17.55 | 17.92 |
| | 6H | 15.68 | 16.98 | 16.09 | 17.35 | 17.74 | 16.42 | 17.72 | 16.83 | 18.09 | 18.48 |
| | 8H | 15.83 | 17.08 | 16.26 | 17.46 | 17.86 | 16.67 | 17.91 | 17.09 | 18.30 | 18.70 |
| | 12H | 15.94 | 17.13 | 16.37 | 17.51 | 17.94 | 16.88 | 18.08 | 17.31 | 18.46 | 18.89 |
| 4H | 2H | 13.51 | 14.91 | 13.91 | 15.26 | 15.63 | 13.73 | 15.13 | 14.13 | 15.48 | 15.85 |
| | 3H | 15.45 | 16.63 | 15.86 | 17.03 | 17.43 | 15.84 | 17.02 | 16.25 | 17.42 | 17.82 |
| | 4H | 16.21 | 17.29 | 16.65 | 17.70 | 18.13 | 16.74 | 17.81 | 17.17 | 18.23 | 18.66 |
| | 6H | 16.81 | 17.75 | 17.26 | 18.19 | 18.64 | 17.52 | 18.46 | 17.97 | 18.90 | 19.35 |
| | 8H | 17.01 | 17.89 | 17.47 | 18.33 | 18.79 | 17.83 | 18.71 | 18.29 | 19.15 | 19.61 |
| | 12H | 17.16 | 17.96 | 17.64 | 18.43 | 18.90 | 18.11 | 18.90 | 18.59 | 19.38 | 19.85 |
| 8H | 4H | 16.57 | 17.45 | 17.03 | 17.89 | 18.35 | 17.03 | 17.92 | 17.49 | 18.36 | 18.82 |
| | 6H | 17.29 | 18.03 | 17.78 | 18.51 | 18.99 | 17.94 | 18.68 | 18.44 | 19.17 | 19.64 |
| | 8H | 17.57 | 18.23 | 18.08 | 18.74 | 19.22 | 18.35 | 19.01 | 18.86 | 19.52 | 20.00 |
| | 12H | 17.81 | 18.40 | 18.31 | 18.88 | 19.44 | 18.75 | 19.33 | 19.25 | 19.82 | 20.38 |
| 12H | 4H | 16.62 | 17.41 | 17.10 | 17.89 | 18.36 | 17.07 | 17.86 | 17.54 | 18.33 | 18.80 |
| | 6H | 17.38 | 18.04 | 17.88 | 18.55 | 19.03 | 18.00 | 18.66 | 18.51 | 19.17 | 19.65 |
| | 8H | 17.72 | 18.31 | 18.23 | 18.80 | 19.36 | 18.47 | 19.06 | 18.98 | 19.55 | 20.11 |

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

Corelite

Report Number: SP1-2506-458-5

Test Date: 08/26/2025

Luminaire Tested: 22ID2-55-CFR1-L840-U

Data in this report applies to families of products including 22ID2-55-CFR1-L840-U

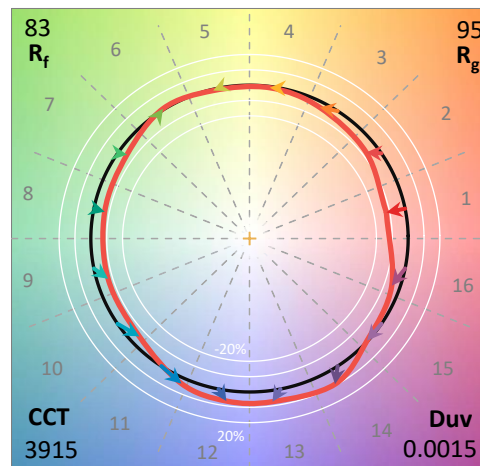
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-5
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/27/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Corelite
 Catalog Number: **22ID2-55-CFR1-L840-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 4000K 80CRI

Spectral Parameters

CCT (K): 3915
 CIE u': 0.2259
 CIE v': 0.5051
 Duv: 0.0015
 CIE x: 0.3854
 CIE y: 0.3830
 CIE z: 0.2316
 Peak Wavelength (nm): 453
 Dominant Wavelength (nm): 578
 Purity: 30.6207
 Rf: 83.2
 Rg: 94.6

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 82.3 | | |
| R1: | 80.6 | R9: | 7.6 |
| R2: | 88.9 | R10: | 72.9 |
| R3: | 94.6 | R11: | 78.7 |
| R4: | 80.5 | R12: | 57.3 |
| R5: | 80.0 | R13: | 82.7 |
| R6: | 84.0 | R14: | 97.1 |
| R7: | 86.1 | R15: | 74.3 |
| R8: | 64.0 | | |



Test Conditions

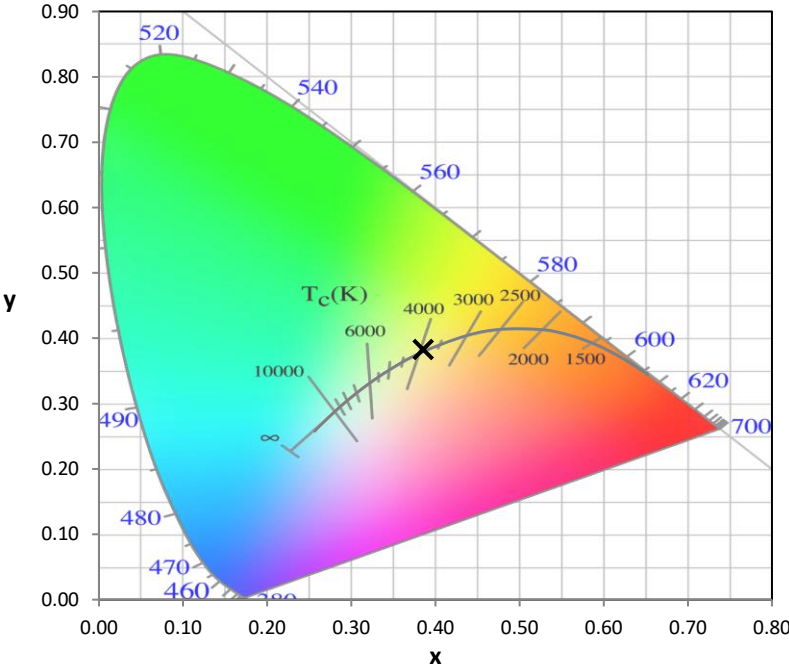
Stabilization Time: 34M
 Operation Time: 1H 34M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2506-458-5

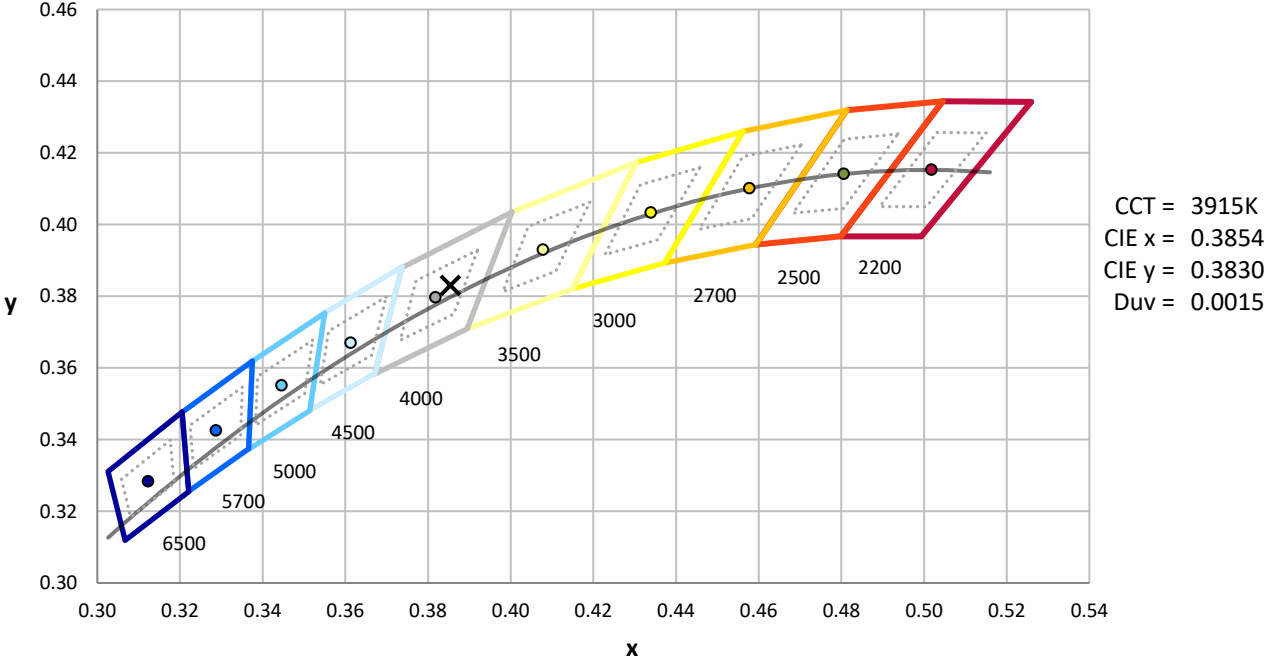
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 6/16/2025 | 12/16/2025 |
| Power Meter | 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 |

REPORT NUMBER: SP1-2506-458-5

CIE 1931 Chromaticity Diagram



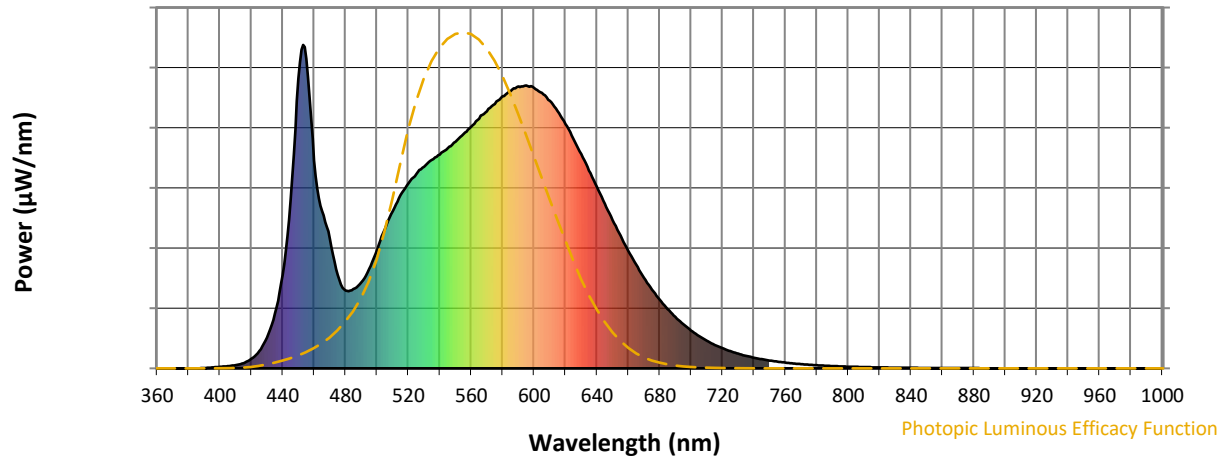
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

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Photopic Flux vs. Wavelength

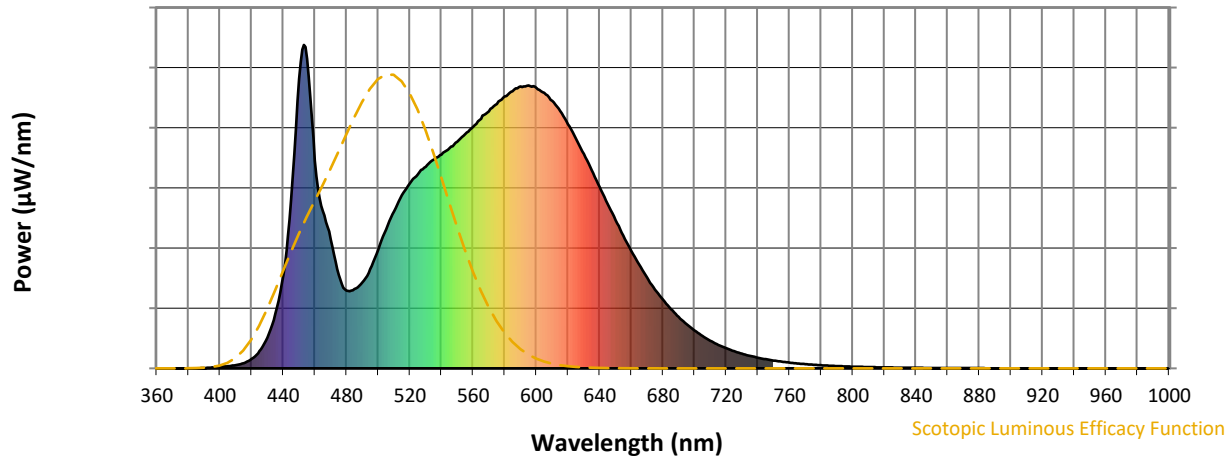


Photopic Lumens: NR

| 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 | 266 | NR | 620 | 755 | NR | 750 | 24 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 307 | NR | 625 | 710 | NR | 755 | 21 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 366 | NR | 630 | 663 | NR | 760 | 18 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 430 | NR | 635 | 612 | NR | 765 | 15 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 486 | NR | 640 | 561 | NR | 770 | 13 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 536 | NR | 645 | 509 | NR | 775 | 11 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 571 | NR | 650 | 458 | NR | 780 | 10 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 600 | NR | 655 | 410 | NR | 785 | 8 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 624 | NR | 660 | 363 | NR | 790 | 7 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 645 | NR | 665 | 321 | NR | 795 | 6 | NR | 925 | 0 | NR |
| 410 | 10 | NR | 540 | 661 | NR | 670 | 280 | NR | 800 | 5 | NR | 930 | 0 | NR |
| 415 | 16 | NR | 545 | 681 | NR | 675 | 244 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 30 | NR | 550 | 701 | NR | 680 | 213 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 53 | NR | 555 | 724 | NR | 685 | 183 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 95 | NR | 560 | 747 | NR | 690 | 159 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 170 | NR | 565 | 772 | NR | 695 | 136 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 289 | NR | 570 | 795 | NR | 700 | 117 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 522 | NR | 575 | 817 | NR | 705 | 100 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 895 | NR | 580 | 841 | NR | 710 | 85 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 957 | NR | 585 | 857 | NR | 715 | 72 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 642 | NR | 590 | 871 | NR | 720 | 62 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 487 | NR | 595 | 875 | NR | 725 | 53 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 397 | NR | 600 | 866 | NR | 730 | 45 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 289 | NR | 605 | 852 | NR | 735 | 39 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 241 | NR | 610 | 827 | NR | 740 | 33 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 245 | NR | 615 | 796 | NR | 745 | 28 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2506-458-5

Scotopic Flux vs. Wavelength



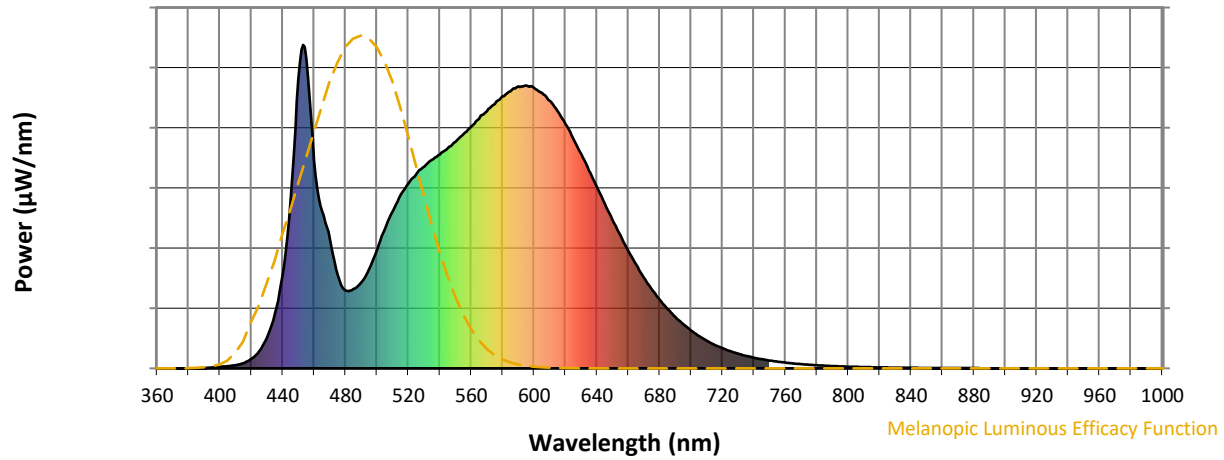
Scotopic Lumens: NR

S/P: 1.65

| 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 | 266 | NR | 620 | 755 | NR | 750 | 24 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 307 | NR | 625 | 710 | NR | 755 | 21 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 366 | NR | 630 | 663 | NR | 760 | 18 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 430 | NR | 635 | 612 | NR | 765 | 15 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 486 | NR | 640 | 561 | NR | 770 | 13 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 536 | NR | 645 | 509 | NR | 775 | 11 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 571 | NR | 650 | 458 | NR | 780 | 10 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 600 | NR | 655 | 410 | NR | 785 | 8 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 624 | NR | 660 | 363 | NR | 790 | 7 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 645 | NR | 665 | 321 | NR | 795 | 6 | NR | 925 | 0 | NR |
| 410 | 10 | NR | 540 | 661 | NR | 670 | 280 | NR | 800 | 5 | NR | 930 | 0 | NR |
| 415 | 16 | NR | 545 | 681 | NR | 675 | 244 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 30 | NR | 550 | 701 | NR | 680 | 213 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 53 | NR | 555 | 724 | NR | 685 | 183 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 95 | NR | 560 | 747 | NR | 690 | 159 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 170 | NR | 565 | 772 | NR | 695 | 136 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 289 | NR | 570 | 795 | NR | 700 | 117 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 522 | NR | 575 | 817 | NR | 705 | 100 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 895 | NR | 580 | 841 | NR | 710 | 85 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 957 | NR | 585 | 857 | NR | 715 | 72 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 642 | NR | 590 | 871 | NR | 720 | 62 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 487 | NR | 595 | 875 | NR | 725 | 53 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 397 | NR | 600 | 866 | NR | 730 | 45 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 289 | NR | 605 | 852 | NR | 735 | 39 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 241 | NR | 610 | 827 | NR | 740 | 33 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 245 | NR | 615 | 796 | NR | 745 | 28 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2506-458-5

Melanopic Flux vs. Wavelength



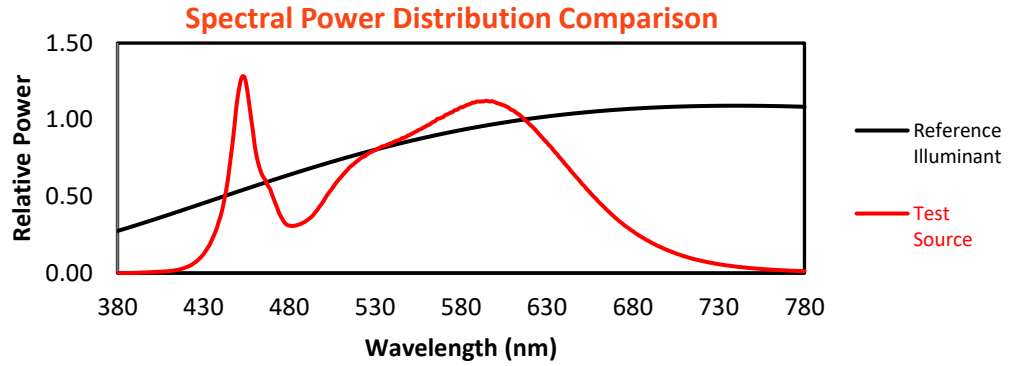
Melanopic Lumens: NR

M/P: 3.36

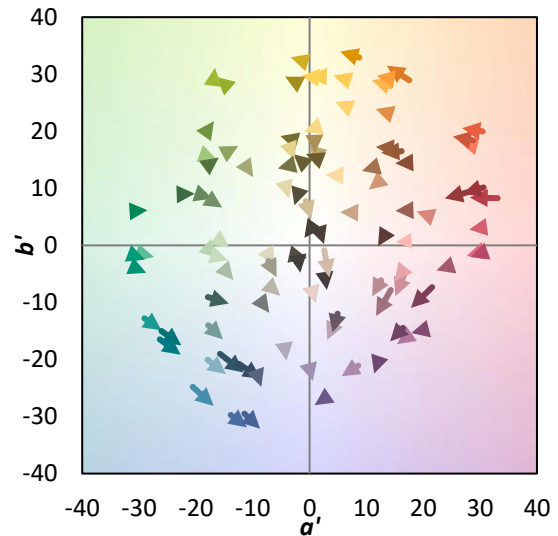
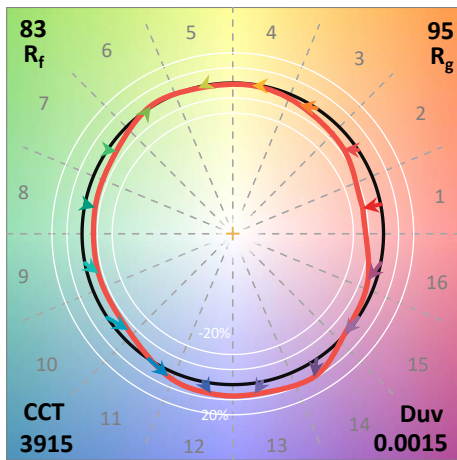
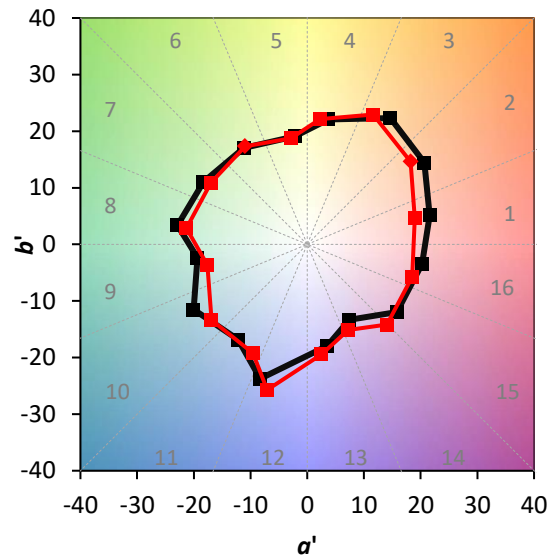
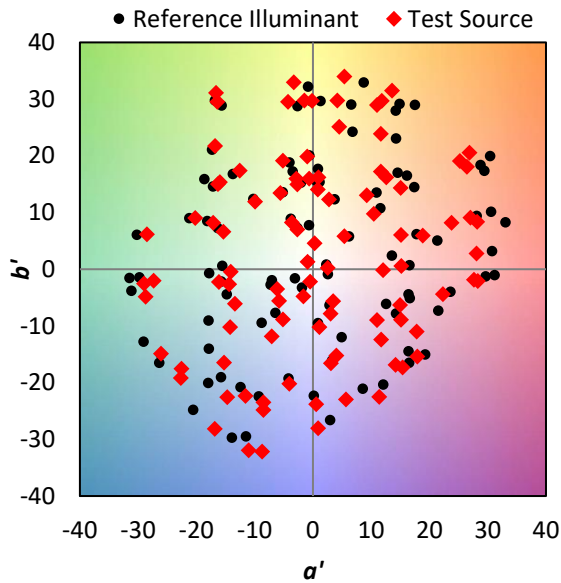
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 266 | NR | 620 | 755 | NR | 750 | 24 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 307 | NR | 625 | 710 | NR | 755 | 21 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 366 | NR | 630 | 663 | NR | 760 | 18 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 430 | NR | 635 | 612 | NR | 765 | 15 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 486 | NR | 640 | 561 | NR | 770 | 13 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 536 | NR | 645 | 509 | NR | 775 | 11 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 571 | NR | 650 | 458 | NR | 780 | 10 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 600 | NR | 655 | 410 | NR | 785 | 8 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 624 | NR | 660 | 363 | NR | 790 | 7 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 645 | NR | 665 | 321 | NR | 795 | 6 | NR | 925 | 0 | NR |
| 410 | 10 | NR | 540 | 661 | NR | 670 | 280 | NR | 800 | 5 | NR | 930 | 0 | NR |
| 415 | 16 | NR | 545 | 681 | NR | 675 | 244 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 30 | NR | 550 | 701 | NR | 680 | 213 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 53 | NR | 555 | 724 | NR | 685 | 183 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 95 | NR | 560 | 747 | NR | 690 | 159 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 170 | NR | 565 | 772 | NR | 695 | 136 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 289 | NR | 570 | 795 | NR | 700 | 117 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 522 | NR | 575 | 817 | NR | 705 | 100 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 895 | NR | 580 | 841 | NR | 710 | 85 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 957 | NR | 585 | 857 | NR | 715 | 72 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 642 | NR | 590 | 871 | NR | 720 | 62 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 487 | NR | 595 | 875 | NR | 725 | 53 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 397 | NR | 600 | 866 | NR | 730 | 45 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 289 | NR | 605 | 852 | NR | 735 | 39 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 241 | NR | 610 | 827 | NR | 740 | 33 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 245 | NR | 615 | 796 | NR | 745 | 28 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 83.2$
 $R_g = 94.6$
 CIE $R_a = 82.3$
 $R_9 = 7.6$

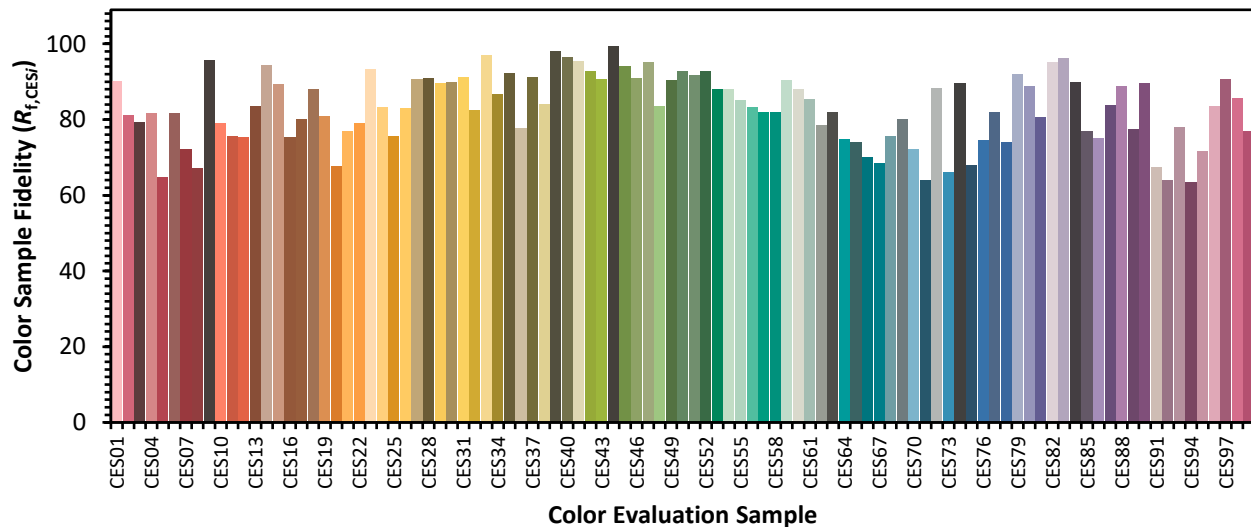


Color Vector Graphics

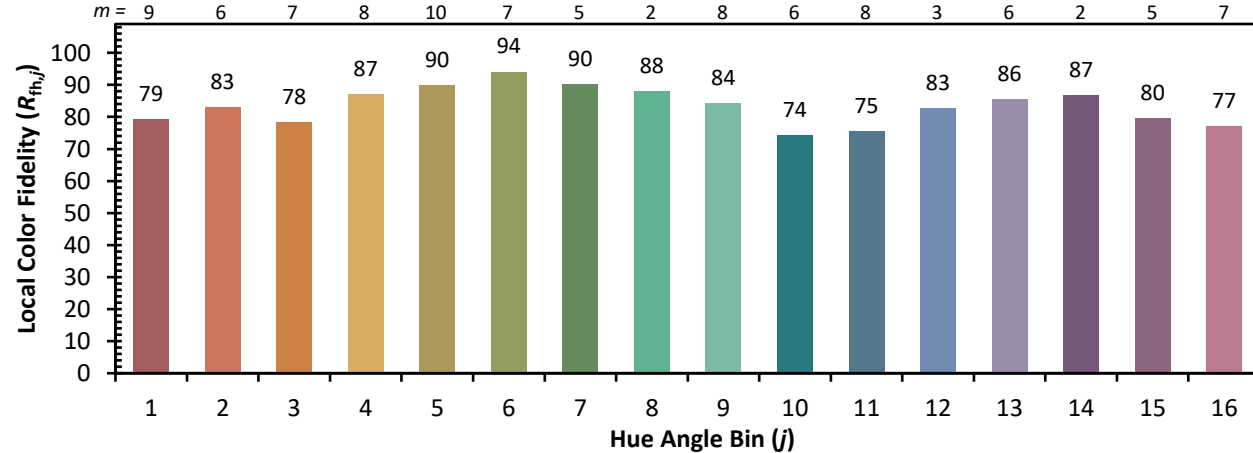
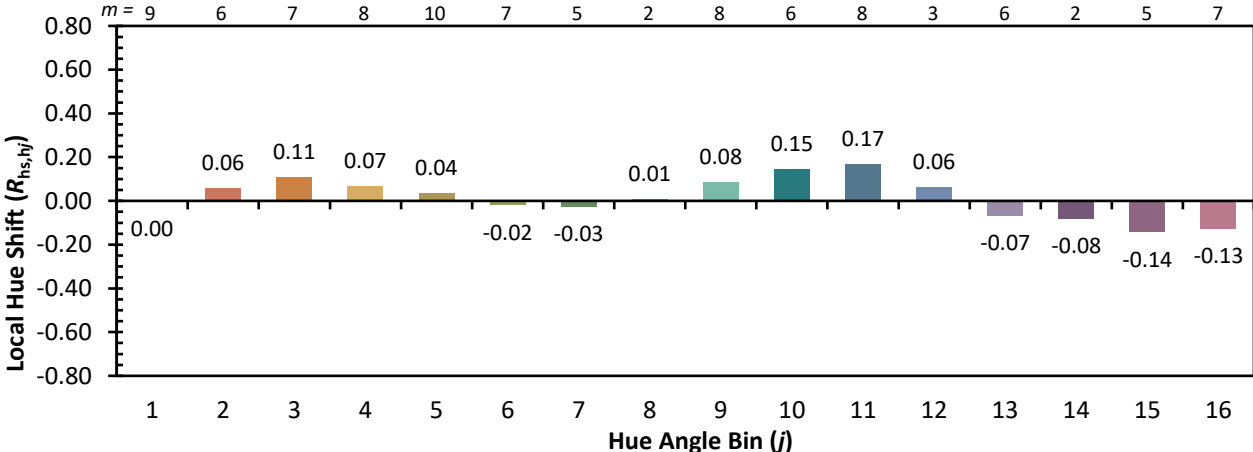
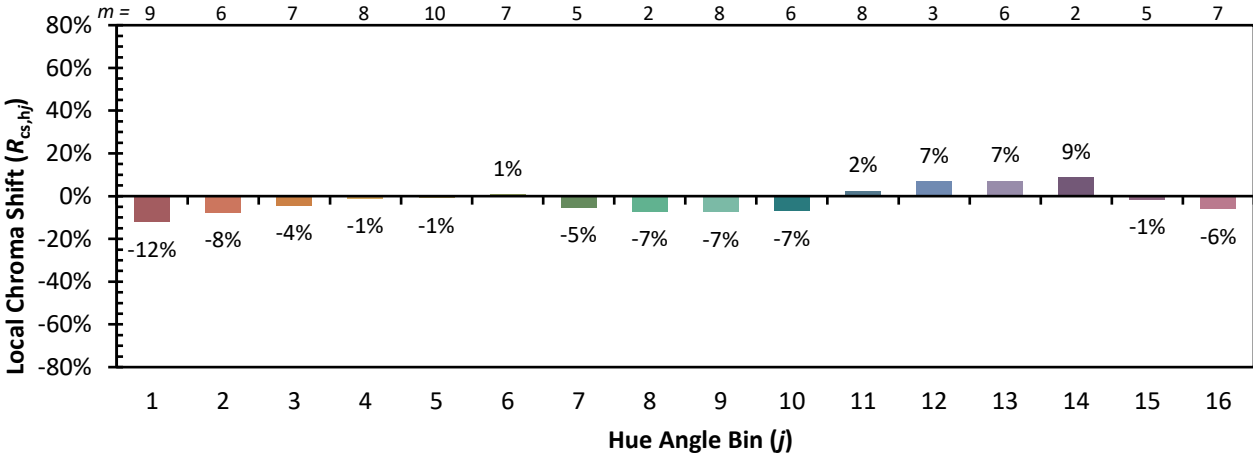


Individual Sample Fidelity Index ($R_{f,i}$)

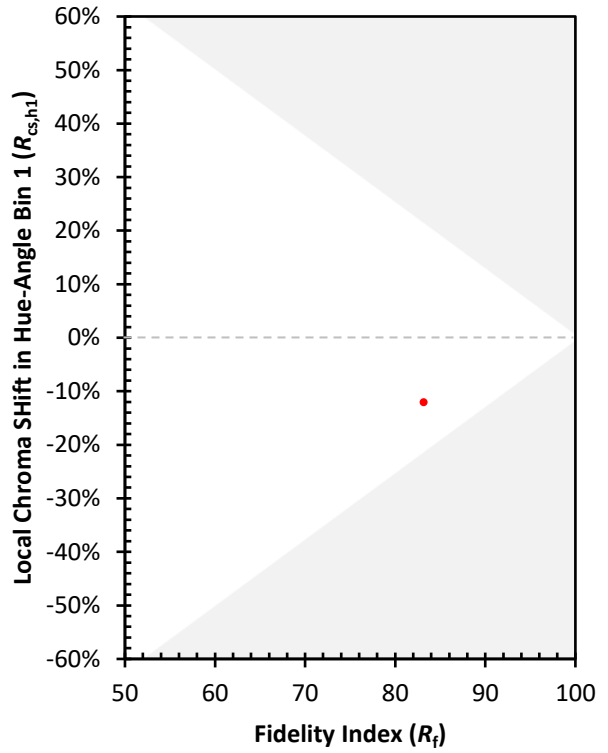
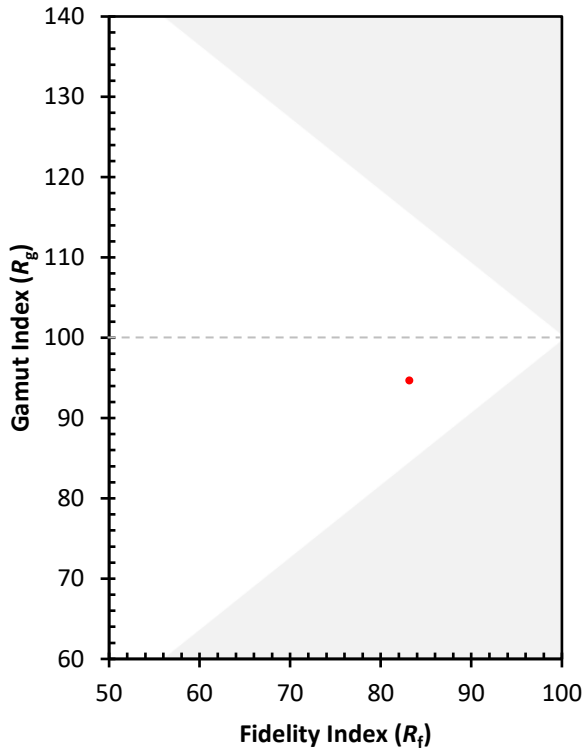
| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 83 | CES51 = 92 | CES76 = 75 |
| CES02 = 61 | CES27 = 91 | CES52 = 93 | CES77 = 82 |
| CES03 = 31 | CES28 = 91 | CES53 = 88 | CES78 = 74 |
| CES04 = 70 | CES29 = 90 | CES54 = 88 | CES79 = 92 |
| CES05 = 48 | CES30 = 90 | CES55 = 85 | CES80 = 89 |
| CES06 = 50 | CES31 = 91 | CES56 = 83 | CES81 = 81 |
| CES07 = 41 | CES32 = 83 | CES57 = 82 | CES82 = 95 |
| CES08 = 40 | CES33 = 97 | CES58 = 82 | CES83 = 96 |
| CES09 = 29 | CES34 = 87 | CES59 = 90 | CES84 = 90 |
| CES10 = 74 | CES35 = 92 | CES60 = 88 | CES85 = 77 |
| CES11 = 57 | CES36 = 78 | CES61 = 85 | CES86 = 75 |
| CES12 = 63 | CES37 = 91 | CES62 = 79 | CES87 = 84 |
| CES13 = 42 | CES38 = 84 | CES63 = 82 | CES88 = 89 |
| CES14 = 74 | CES39 = 98 | CES64 = 75 | CES89 = 77 |
| CES15 = 71 | CES40 = 96 | CES65 = 74 | CES90 = 90 |
| CES16 = 47 | CES41 = 95 | CES66 = 70 | CES91 = 67 |
| CES17 = 49 | CES42 = 93 | CES67 = 69 | CES92 = 64 |
| CES18 = 56 | CES43 = 91 | CES68 = 76 | CES93 = 78 |
| CES19 = 71 | CES44 = 99 | CES69 = 80 | CES94 = 63 |
| CES20 = 65 | CES45 = 94 | CES70 = 72 | CES95 = 72 |
| CES21 = 86 | CES46 = 91 | CES71 = 64 | CES96 = 84 |
| CES22 = 78 | CES47 = 95 | CES72 = 88 | CES97 = 91 |
| CES23 = 91 | CES48 = 83 | CES73 = 66 | CES98 = 86 |
| CES24 = 90 | CES49 = 90 | CES74 = 90 | CES99 = 77 |
| CES25 = 71 | CES50 = 93 | CES75 = 68 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)