

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: INVUE

Report Number: P880332

Luminaire Tested: **EMM2-HSN-VA5-730-U-WQ**

Issue Date: 10/01/2024



Test Information

Test Method: LM-79-08
Report Number: P880332
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/01/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM2-HSN-VA5-730-U-WQ
Description: EPIC MODERN SHORT HOUSING 5W 70CRI 3000K VISUAL COMFORT FIXTURE w/
TYPE V WIDE DISTRIBUTION OPTIC
Light Source: (1) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

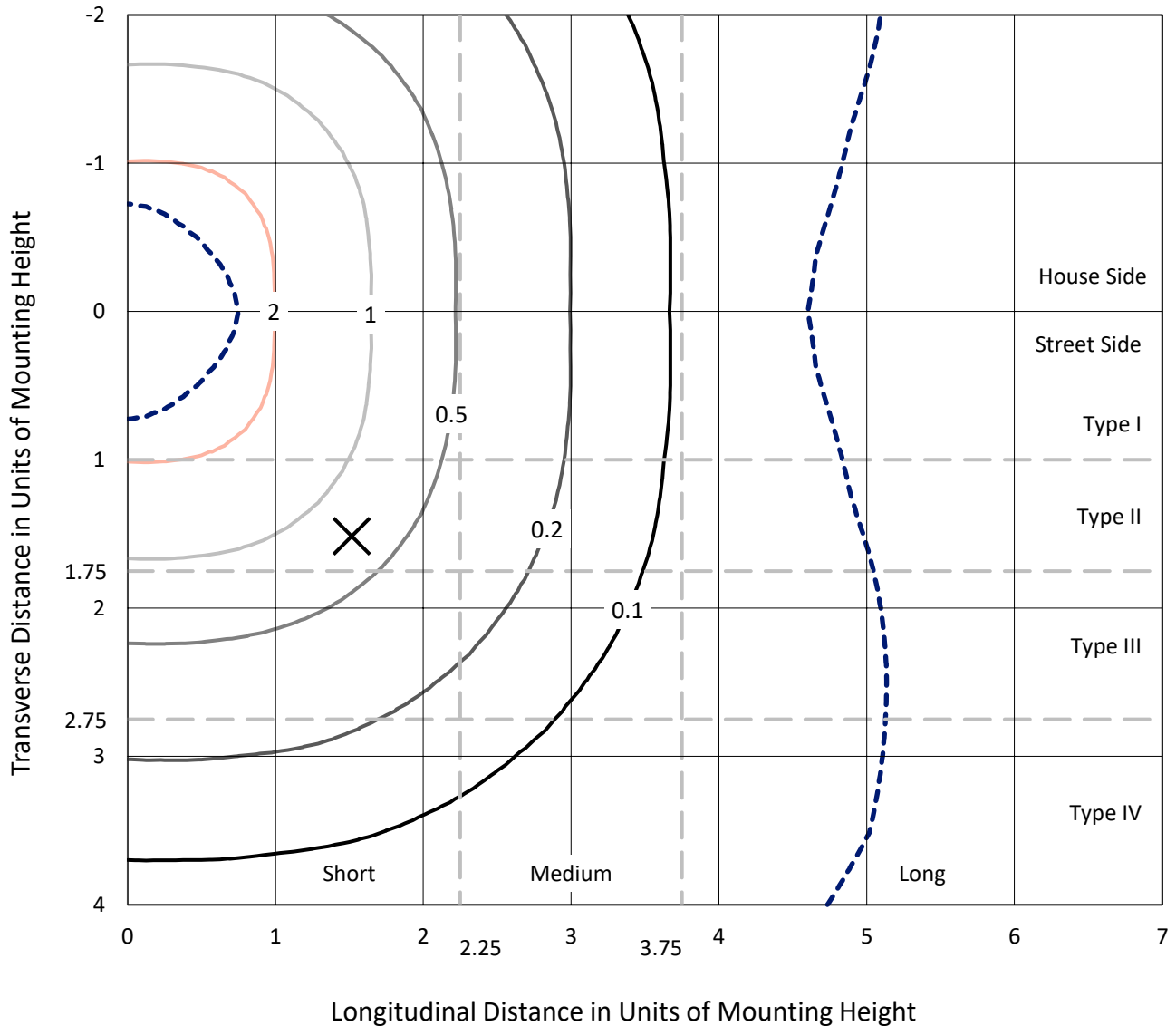
Lumens per Lamp: N/A
Luminaire Lumens: 7655.2 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 78
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 6%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

REPORT NUMBER: P880332
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Iso-Footcandle Lines of Horizontal Illumination

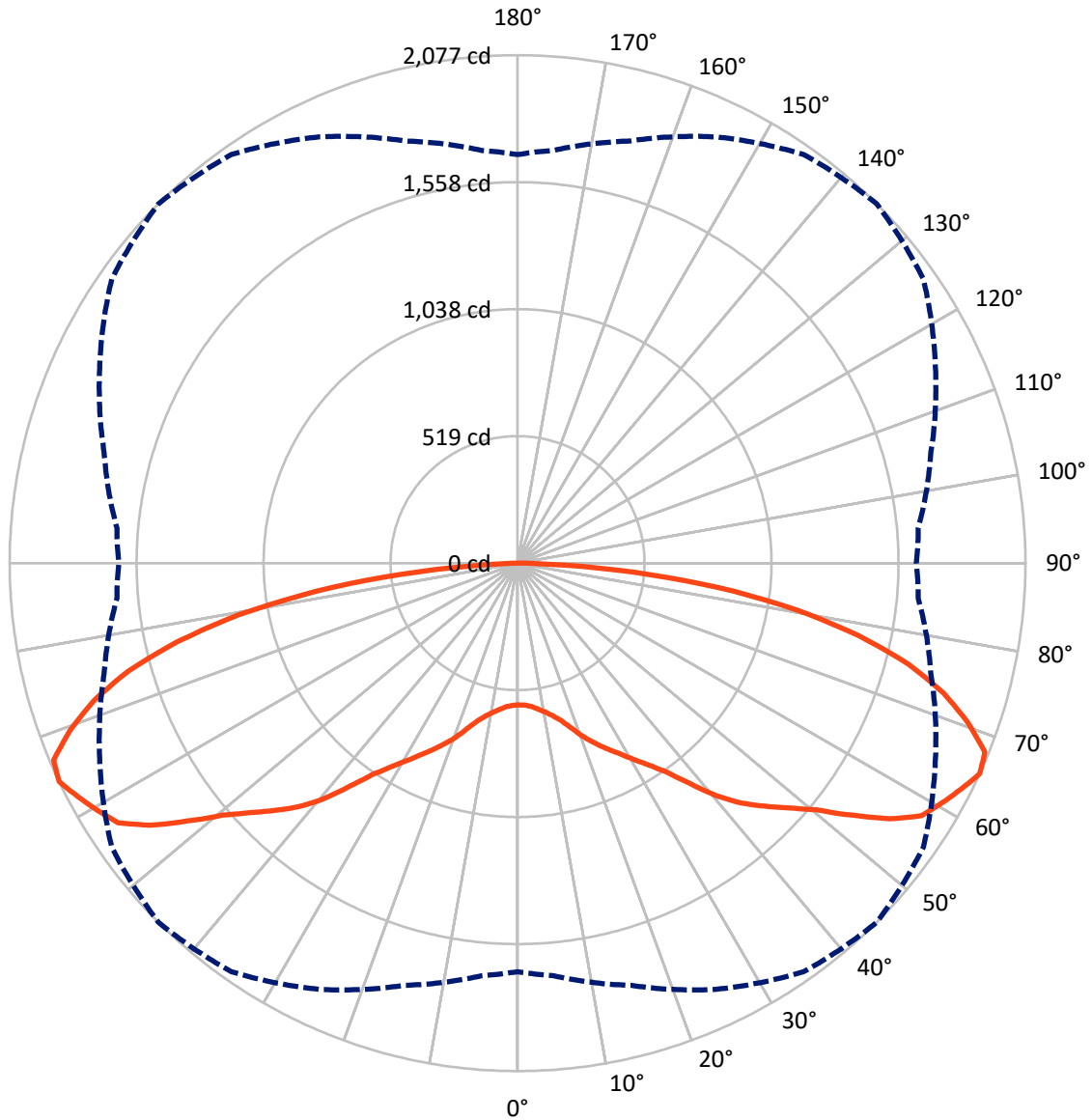
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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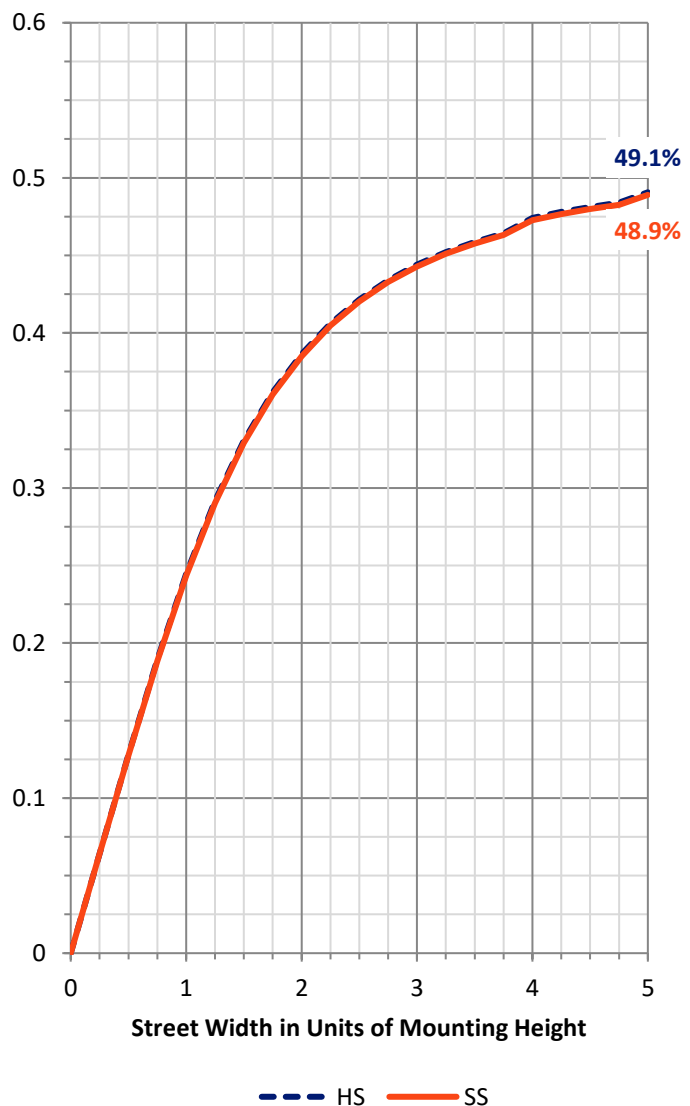
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3827.6 | 0.0 | 3827.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 3827.6 | 0.0 | 3827.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 7655.2 | 0.0 | 7655.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 57.2 | 0.7 |
| 10°-20° | 192.6 | 2.5 |
| 20°-30° | 387.0 | 5.1 |
| 30°-40° | 655.0 | 8.6 |
| 40°-50° | 1047.2 | 13.7 |
| 50°-60° | 1512.5 | 19.8 |
| 60°-70° | 1821.3 | 23.8 |
| 70°-80° | 1508.9 | 19.7 |
| 80°-90° | 473.5 | 6.2 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 7655.2 | 100.0 |
| 0°-180° | 7655.2 | 100.0 |



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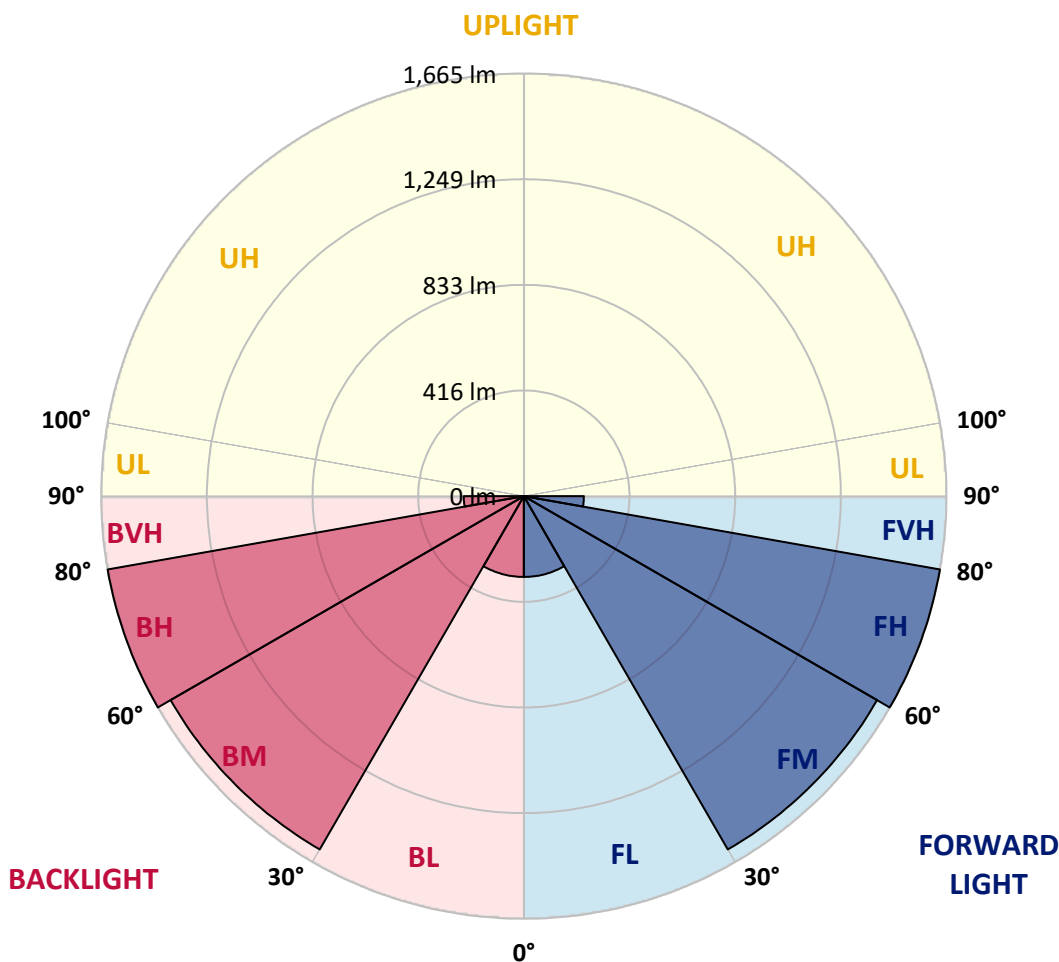
CATALOG NUMBER: EMM2-HSN-VA5-730-U-WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 318.4 | 4.2 | | | |
| FM (30°-60°) | 1607.4 | 21.0 | | | |
| FH (60°-80°) | 1665.1 | 21.8 | | | G1/1800 |
| FVH (80°-90°) | 236.7 | 3.1 | | | G3/500 |
| BL (0°-30°) | 318.4 | 4.2 | B1/500 | | |
| BM (30°-60°) | 1607.4 | 21.0 | B2/2500 | | |
| BH (60°-80°) | 1665.1 | 21.8 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 236.7 | 3.1 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type V Short





REPORT NUMBER: P880332

CATALOG NUMBER: EMM2-HSN-VA5-730-U-WQ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 579.4 | 579.4 | 579.4 | 579.4 | 579.4 | 579.4 | 579.4 | 579.4 | 579.4 | 579.4 | 579.4 |
| 2.5° | 581.7 | 581.7 | 581.7 | 581.7 | 581.7 | 581.7 | 581.7 | 581.7 | 581.7 | 581.7 | 581.7 |
| 5° | 591.1 | 591.1 | 591.1 | 588.7 | 588.7 | 588.7 | 591.1 | 591.1 | 591.1 | 591.1 | 591.1 |
| 7.5° | 602.8 | 602.8 | 602.8 | 602.8 | 602.8 | 602.8 | 600.4 | 600.4 | 600.4 | 600.4 | 602.8 |
| 10° | 619.1 | 621.4 | 621.4 | 619.1 | 619.1 | 619.1 | 616.8 | 616.8 | 619.1 | 619.1 | 616.8 |
| 12.5° | 642.5 | 642.5 | 642.5 | 642.5 | 640.1 | 640.1 | 640.1 | 640.1 | 640.1 | 640.1 | 640.1 |
| 15° | 668.2 | 668.2 | 668.2 | 668.2 | 668.2 | 668.2 | 668.2 | 668.2 | 665.8 | 663.5 | 663.5 |
| 17.5° | 700.9 | 698.5 | 703.2 | 700.9 | 705.5 | 707.9 | 703.2 | 700.9 | 698.5 | 696.2 | 693.9 |
| 20° | 740.6 | 742.9 | 747.6 | 749.9 | 752.3 | 754.6 | 747.6 | 745.3 | 740.6 | 738.3 | 735.9 |
| 22.5° | 787.3 | 787.3 | 792.0 | 792.0 | 796.7 | 796.7 | 794.3 | 787.3 | 782.6 | 782.6 | 780.3 |
| 25° | 827.0 | 829.4 | 834.0 | 834.0 | 838.7 | 838.7 | 836.4 | 831.7 | 824.7 | 820.0 | 817.7 |
| 27.5° | 869.1 | 869.1 | 871.4 | 878.4 | 880.8 | 880.8 | 878.4 | 871.4 | 862.1 | 857.4 | 857.4 |
| 30° | 908.8 | 911.1 | 913.5 | 922.8 | 927.5 | 929.8 | 920.5 | 913.5 | 901.8 | 897.1 | 897.1 |
| 32.5° | 955.5 | 955.5 | 960.2 | 974.2 | 981.2 | 983.6 | 974.2 | 962.5 | 948.5 | 939.2 | 939.2 |
| 35° | 1006.9 | 1004.6 | 1018.6 | 1032.6 | 1049.0 | 1049.0 | 1042.0 | 1023.3 | 1002.3 | 990.6 | 988.2 |
| 37.5° | 1074.7 | 1077.0 | 1091.0 | 1116.7 | 1142.4 | 1142.4 | 1135.4 | 1102.7 | 1079.3 | 1058.3 | 1053.6 |
| 40° | 1154.1 | 1156.4 | 1182.1 | 1212.5 | 1240.5 | 1249.9 | 1235.9 | 1203.2 | 1163.5 | 1133.1 | 1130.7 |
| 42.5° | 1221.9 | 1231.2 | 1256.9 | 1299.0 | 1327.0 | 1341.0 | 1320.0 | 1282.6 | 1238.2 | 1203.2 | 1196.2 |
| 45° | 1287.3 | 1296.6 | 1329.3 | 1373.7 | 1408.8 | 1418.1 | 1399.4 | 1355.0 | 1303.6 | 1266.2 | 1261.6 |
| 47.5° | 1348.0 | 1357.4 | 1390.1 | 1448.5 | 1485.9 | 1495.2 | 1478.8 | 1427.4 | 1364.4 | 1327.0 | 1322.3 |
| 50° | 1404.1 | 1425.1 | 1464.8 | 1527.9 | 1581.6 | 1586.3 | 1563.0 | 1502.2 | 1436.8 | 1385.4 | 1378.4 |
| 52.5° | 1481.2 | 1490.5 | 1546.6 | 1630.7 | 1691.4 | 1712.5 | 1675.1 | 1609.7 | 1513.9 | 1453.1 | 1441.5 |
| 55° | 1574.6 | 1579.3 | 1640.0 | 1738.2 | 1817.6 | 1845.6 | 1798.9 | 1714.8 | 1605.0 | 1544.3 | 1534.9 |
| 57.5° | 1628.4 | 1649.4 | 1719.5 | 1824.6 | 1911.1 | 1948.4 | 1904.0 | 1794.2 | 1686.8 | 1609.7 | 1588.6 |
| 60° | 1651.7 | 1672.8 | 1749.9 | 1876.0 | 1969.5 | 1992.8 | 1960.1 | 1852.6 | 1712.5 | 1626.0 | 1612.0 |
| 62.5° | 1675.1 | 1696.1 | 1773.2 | 1911.1 | 2002.2 | 2034.9 | 1983.5 | 1887.7 | 1735.8 | 1651.7 | 1633.0 |
| 65° | 1670.4 | 1693.8 | 1787.2 | 1922.7 | 2039.5 | 2076.9 | 2025.5 | 1885.4 | 1749.9 | 1644.7 | 1630.7 |
| 67.5° | 1623.7 | 1644.7 | 1742.8 | 1892.4 | 2020.9 | 2060.6 | 2004.5 | 1859.7 | 1707.8 | 1600.3 | 1584.0 |
| 70° | 1530.2 | 1555.9 | 1651.7 | 1815.3 | 1934.4 | 1953.1 | 1911.1 | 1780.2 | 1621.4 | 1506.9 | 1485.9 |
| 72.5° | 1404.1 | 1429.8 | 1527.9 | 1696.1 | 1789.6 | 1822.3 | 1775.5 | 1663.4 | 1502.2 | 1385.4 | 1366.7 |
| 75° | 1254.6 | 1270.9 | 1362.0 | 1520.9 | 1621.4 | 1651.7 | 1616.7 | 1495.2 | 1331.7 | 1238.2 | 1217.2 |
| 77.5° | 1079.3 | 1102.7 | 1184.5 | 1317.6 | 1397.1 | 1425.1 | 1392.4 | 1306.0 | 1154.1 | 1074.7 | 1058.3 |
| 80° | 848.1 | 876.1 | 950.9 | 1051.3 | 1135.4 | 1156.4 | 1128.4 | 1035.0 | 939.2 | 852.7 | 834.0 |
| 82.5° | 612.1 | 619.1 | 686.9 | 759.3 | 822.4 | 834.0 | 813.0 | 761.6 | 661.2 | 602.8 | 577.1 |
| 85° | 320.1 | 329.4 | 378.5 | 432.2 | 471.9 | 478.9 | 469.6 | 413.5 | 380.8 | 327.1 | 306.0 |
| 87.5° | 72.4 | 74.8 | 88.8 | 98.1 | 119.1 | 116.8 | 123.8 | 98.1 | 93.4 | 77.1 | 67.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-176-3

Test Date: 09/24/2024

Luminaire Tested: MEM2-HTN-VA-30-730-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-730-U-WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-176-3
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 09/27/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Streetworks
 Catalog Number: **MEM2-HTN-VA-30-730-U-WQ**
 Description: EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K): 2986
 CIE u': 0.2503
 CIE v': 0.5248
 Duv: 0.0022
 CIE x: 0.4413
 CIE y: 0.4112
 CIE z: 0.1476
 Peak Wavelength (nm): 596
 Dominant Wavelength (nm): 582
 Purity: 55.87534
 Rf: 73.2
 Rg: 95.9

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.3 | | |
| R1: | 68.5 | R9: | -25.2 |
| R2: | 79.2 | R10: | 51.0 |
| R3: | 88.4 | R11: | 63.6 |
| R4: | 69.4 | R12: | 39.8 |
| R5: | 66.3 | R13: | 69.9 |
| R6: | 70.0 | R14: | 92.9 |
| R7: | 80.1 | R15: | 61.4 |
| R8: | 48.3 | | |



Test Conditions

Stabilization Time: 27M
 Operation Time: 1H 27M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-176-3

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

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CIE 1931 Chromaticity Diagram



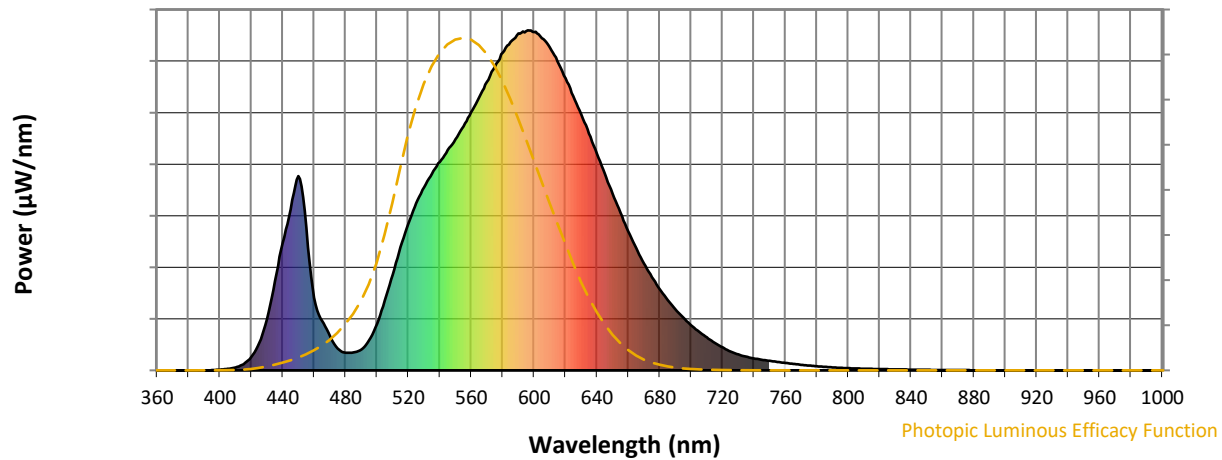
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength



Photopic Lumens: NR

| 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 | 61 | NR | 620 | 859 | NR | 750 | 28 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 88 | NR | 625 | 807 | NR | 755 | 25 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 137 | NR | 630 | 753 | NR | 760 | 22 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 205 | NR | 635 | 697 | NR | 765 | 19 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 281 | NR | 640 | 637 | NR | 770 | 16 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 363 | NR | 645 | 578 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 432 | NR | 650 | 520 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 492 | NR | 655 | 463 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 2 | NR | 530 | 539 | NR | 660 | 409 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 579 | NR | 665 | 359 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 9 | NR | 540 | 613 | NR | 670 | 315 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 18 | NR | 545 | 648 | NR | 675 | 274 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 39 | NR | 550 | 680 | NR | 680 | 239 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 81 | NR | 555 | 717 | NR | 685 | 207 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 151 | NR | 560 | 759 | NR | 690 | 180 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 263 | NR | 565 | 803 | NR | 695 | 155 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 375 | NR | 570 | 848 | NR | 700 | 133 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 474 | NR | 575 | 892 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 571 | NR | 580 | 933 | NR | 710 | 97 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 421 | NR | 585 | 966 | NR | 715 | 81 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 214 | NR | 590 | 991 | NR | 720 | 67 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 146 | NR | 595 | 998 | NR | 725 | 55 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 101 | NR | 600 | 995 | NR | 730 | 47 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 64 | NR | 605 | 977 | NR | 735 | 40 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 52 | NR | 610 | 949 | NR | 740 | 35 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 53 | NR | 615 | 908 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-176-3

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.15

| 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 | 61 | NR | 620 | 859 | NR | 750 | 28 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 88 | NR | 625 | 807 | NR | 755 | 25 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 137 | NR | 630 | 753 | NR | 760 | 22 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 205 | NR | 635 | 697 | NR | 765 | 19 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 281 | NR | 640 | 637 | NR | 770 | 16 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 363 | NR | 645 | 578 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 432 | NR | 650 | 520 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 492 | NR | 655 | 463 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 2 | NR | 530 | 539 | NR | 660 | 409 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 579 | NR | 665 | 359 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 9 | NR | 540 | 613 | NR | 670 | 315 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 18 | NR | 545 | 648 | NR | 675 | 274 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 39 | NR | 550 | 680 | NR | 680 | 239 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 81 | NR | 555 | 717 | NR | 685 | 207 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 151 | NR | 560 | 759 | NR | 690 | 180 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 263 | NR | 565 | 803 | NR | 695 | 155 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 375 | NR | 570 | 848 | NR | 700 | 133 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 474 | NR | 575 | 892 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 571 | NR | 580 | 933 | NR | 710 | 97 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 421 | NR | 585 | 966 | NR | 715 | 81 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 214 | NR | 590 | 991 | NR | 720 | 67 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 146 | NR | 595 | 998 | NR | 725 | 55 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 101 | NR | 600 | 995 | NR | 730 | 47 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 64 | NR | 605 | 977 | NR | 735 | 40 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 52 | NR | 610 | 949 | NR | 740 | 35 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 53 | NR | 615 | 908 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-176-3

Melanopic Flux vs. Wavelength



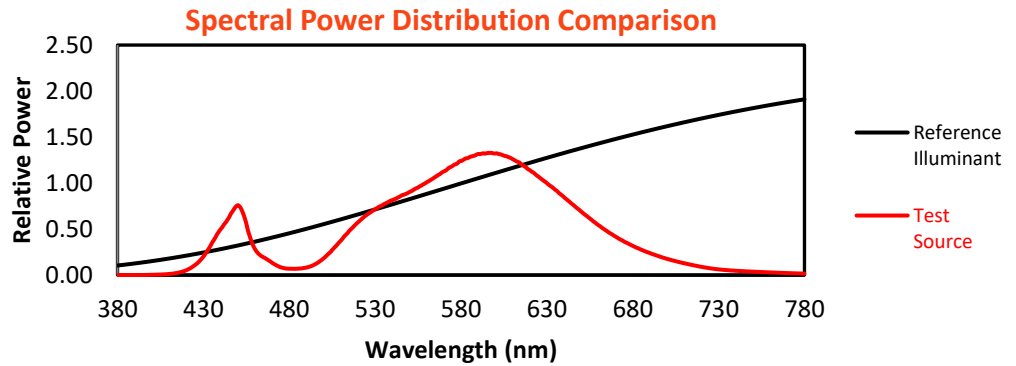
Melanopic Lumens: NR

M/P: 2.01

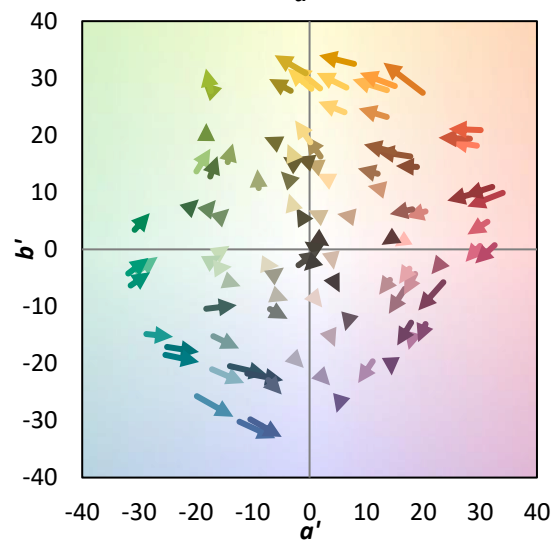
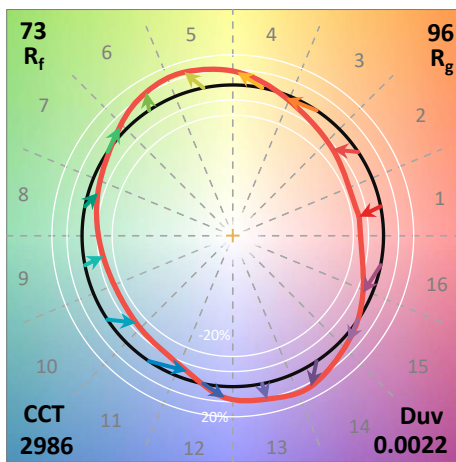
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 61 | NR | 620 | 859 | NR | 750 | 28 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 88 | NR | 625 | 807 | NR | 755 | 25 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 137 | NR | 630 | 753 | NR | 760 | 22 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 205 | NR | 635 | 697 | NR | 765 | 19 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 281 | NR | 640 | 637 | NR | 770 | 16 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 363 | NR | 645 | 578 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 432 | NR | 650 | 520 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 492 | NR | 655 | 463 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 2 | NR | 530 | 539 | NR | 660 | 409 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 579 | NR | 665 | 359 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 9 | NR | 540 | 613 | NR | 670 | 315 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 18 | NR | 545 | 648 | NR | 675 | 274 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 39 | NR | 550 | 680 | NR | 680 | 239 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 81 | NR | 555 | 717 | NR | 685 | 207 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 151 | NR | 560 | 759 | NR | 690 | 180 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 263 | NR | 565 | 803 | NR | 695 | 155 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 375 | NR | 570 | 848 | NR | 700 | 133 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 474 | NR | 575 | 892 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 571 | NR | 580 | 933 | NR | 710 | 97 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 421 | NR | 585 | 966 | NR | 715 | 81 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 214 | NR | 590 | 991 | NR | 720 | 67 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 146 | NR | 595 | 998 | NR | 725 | 55 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 101 | NR | 600 | 995 | NR | 730 | 47 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 64 | NR | 605 | 977 | NR | 735 | 40 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 52 | NR | 610 | 949 | NR | 740 | 35 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 53 | NR | 615 | 908 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 73.2$
 $R_g = 95.9$
 $CIE R_a = 71.3$
 $R_9 = -25.2$

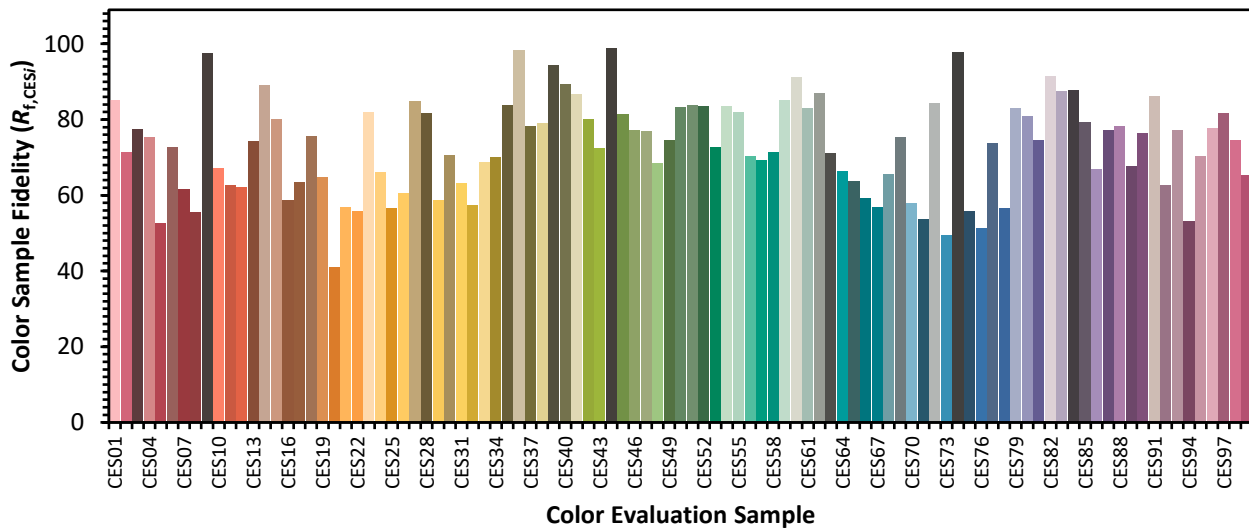


Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 61 | CES51 = 84 | CES76 = 51 |
| CES02 = 62 | CES27 = 85 | CES52 = 84 | CES77 = 74 |
| CES03 = 31 | CES28 = 82 | CES53 = 73 | CES78 = 56 |
| CES04 = 71 | CES29 = 59 | CES54 = 84 | CES79 = 83 |
| CES05 = 49 | CES30 = 71 | CES55 = 82 | CES80 = 81 |
| CES06 = 51 | CES31 = 63 | CES56 = 70 | CES81 = 75 |
| CES07 = 41 | CES32 = 57 | CES57 = 69 | CES82 = 92 |
| CES08 = 40 | CES33 = 69 | CES58 = 71 | CES83 = 88 |
| CES09 = 29 | CES34 = 70 | CES59 = 85 | CES84 = 88 |
| CES10 = 76 | CES35 = 84 | CES60 = 91 | CES85 = 79 |
| CES11 = 59 | CES36 = 98 | CES61 = 83 | CES86 = 67 |
| CES12 = 65 | CES37 = 78 | CES62 = 87 | CES87 = 77 |
| CES13 = 43 | CES38 = 79 | CES63 = 71 | CES88 = 78 |
| CES14 = 74 | CES39 = 94 | CES64 = 66 | CES89 = 68 |
| CES15 = 71 | CES40 = 89 | CES65 = 64 | CES90 = 76 |
| CES16 = 47 | CES41 = 87 | CES66 = 59 | CES91 = 86 |
| CES17 = 50 | CES42 = 80 | CES67 = 57 | CES92 = 63 |
| CES18 = 56 | CES43 = 73 | CES68 = 66 | CES93 = 77 |
| CES19 = 73 | CES44 = 99 | CES69 = 75 | CES94 = 53 |
| CES20 = 66 | CES45 = 81 | CES70 = 58 | CES95 = 70 |
| CES21 = 87 | CES46 = 77 | CES71 = 54 | CES96 = 78 |
| CES22 = 79 | CES47 = 77 | CES72 = 84 | CES97 = 82 |
| CES23 = 92 | CES48 = 68 | CES73 = 49 | CES98 = 75 |
| CES24 = 91 | CES49 = 74 | CES74 = 98 | CES99 = 65 |
| CES25 = 73 | CES50 = 83 | CES75 = 56 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)