

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: STREETWORKS

Report Number: P879960

Luminaire Tested: **MEM2-HTN-VA-80-830-U-WQ**

Issue Date: 10/01/2024



Test Information

Test Method: LM-79-08
Report Number: P879960
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/01/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: MEM2-HTN-VA-80-830-U-WQ
Description: EPIC MODERN TALL HOUSING 80W 80CRI 3000K VISUAL COMFORT FIXTURE w/
TYPE V WIDE DISTRIBUTION OPTIC
Light Source: (1) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

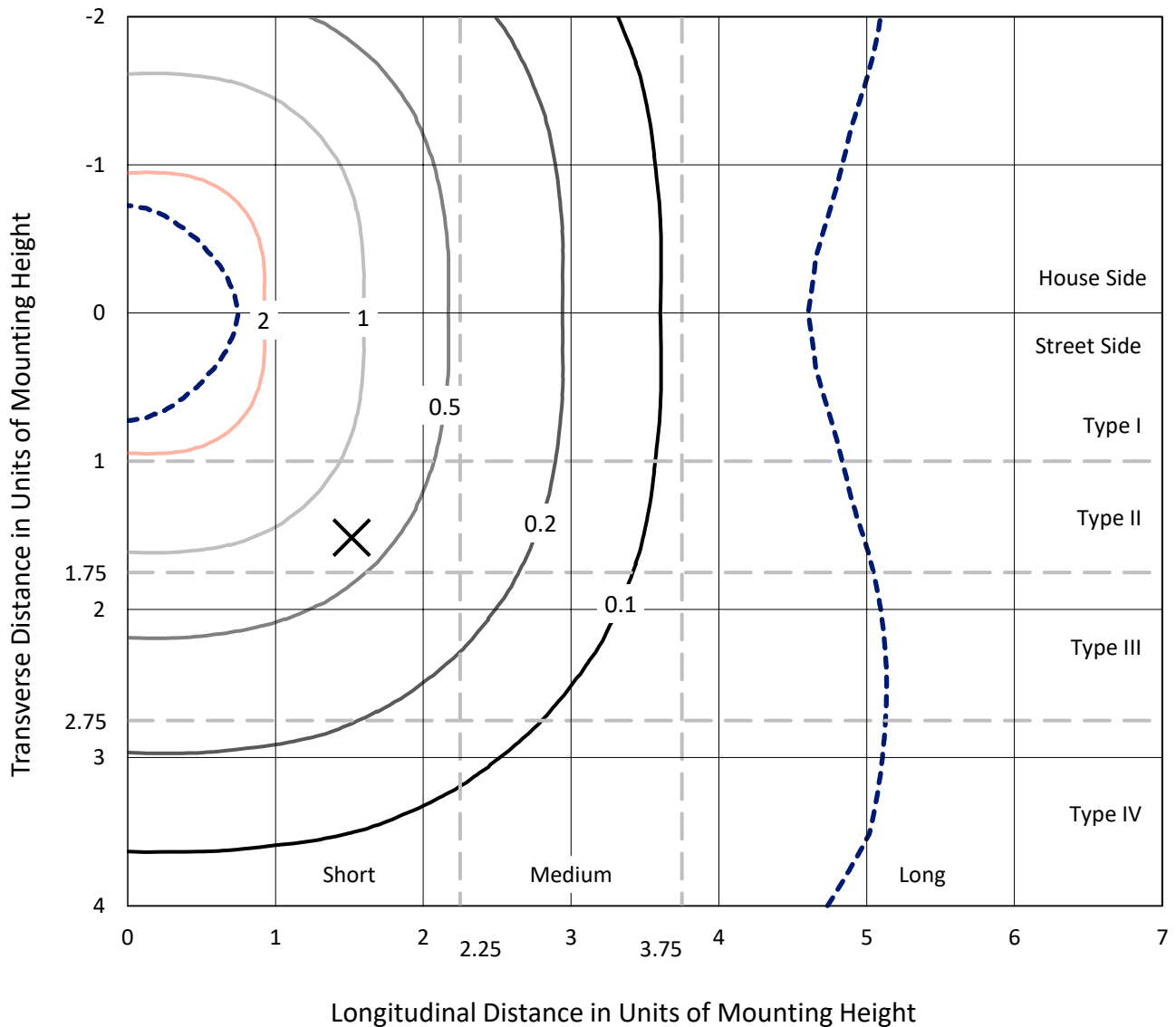
Lumens per Lamp: N/A
Luminaire Lumens: 7209.7 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G2

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: P879960
 CATALOG NUMBER: MEM2-HTN-VA-80-830-U-WQ

Iso-Footcandle Lines of Horizontal Illumination

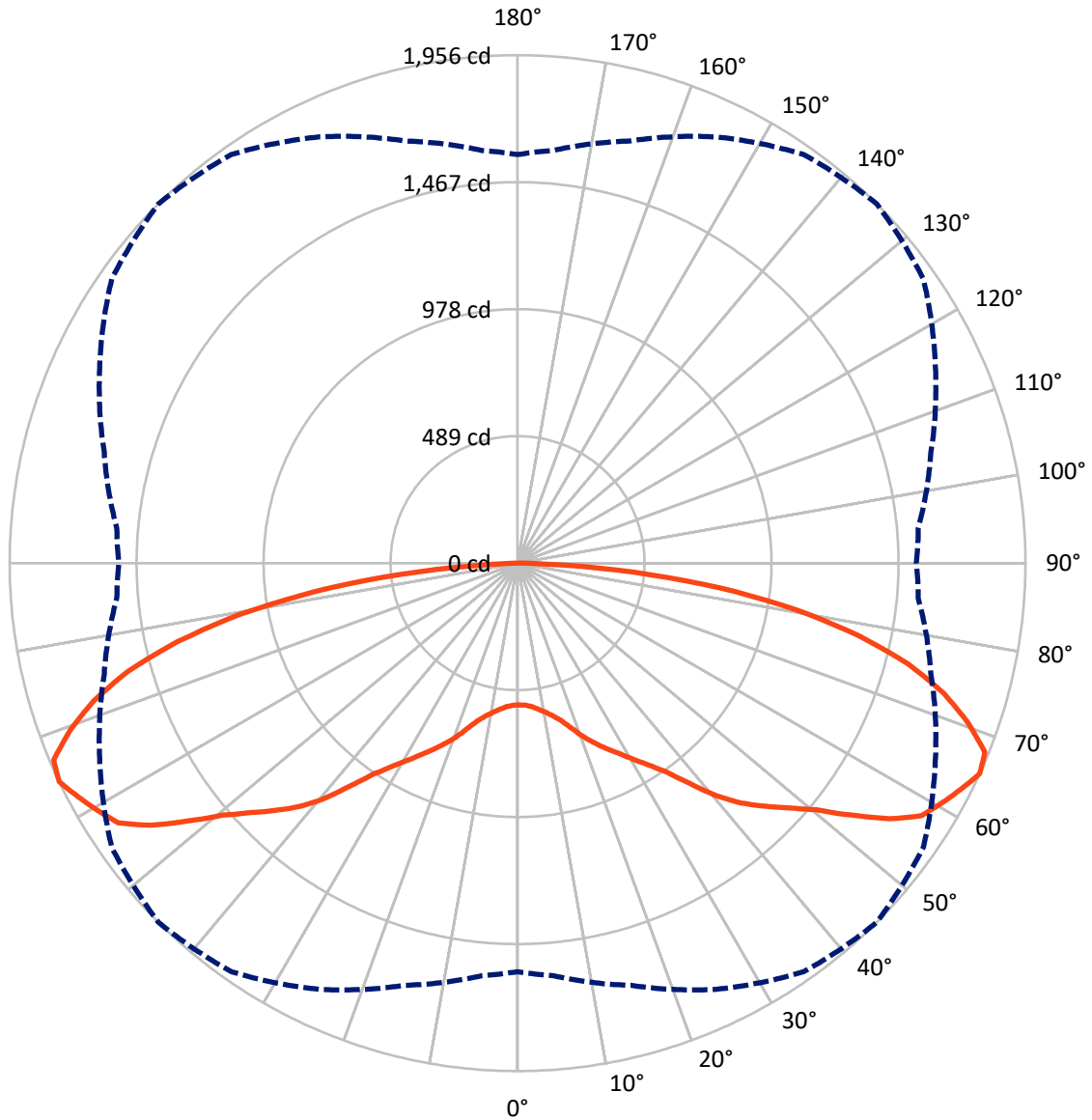
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - N/A

REPORT NUMBER: P879960
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Luminous Intensity Polar Plot



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

REPORT NUMBER: P879960
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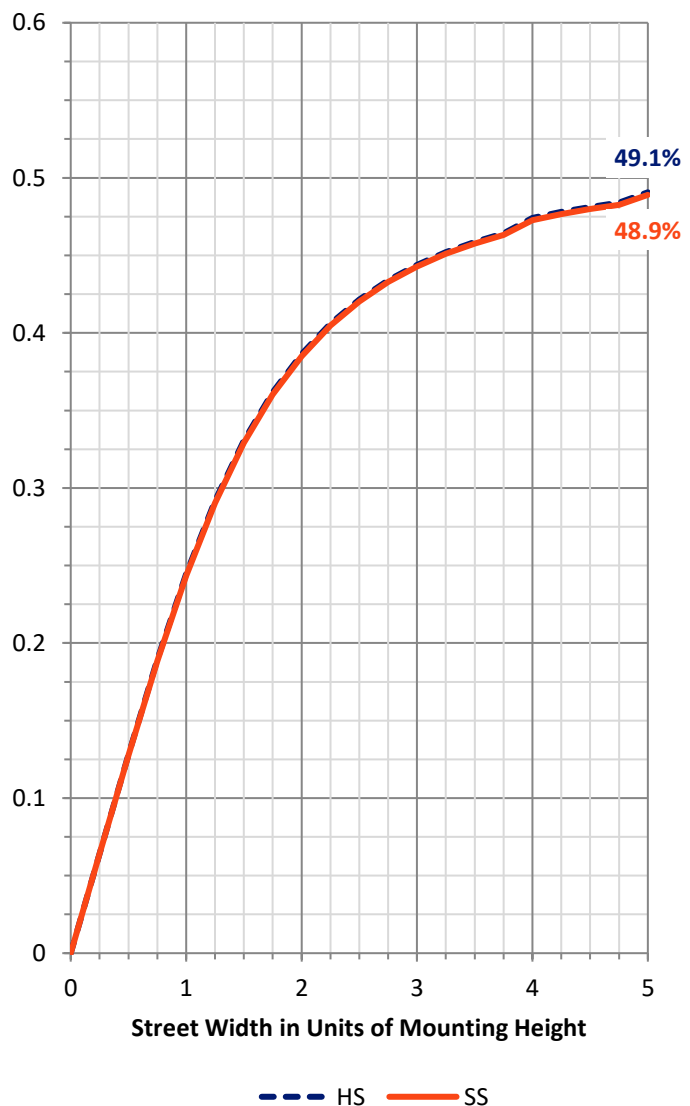
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3604.8 | 0.0 | 3604.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 3604.8 | 0.0 | 3604.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 7209.7 | 0.0 | 7209.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 53.9 | 0.7 |
| 10°-20° | 181.4 | 2.5 |
| 20°-30° | 364.5 | 5.1 |
| 30°-40° | 616.9 | 8.6 |
| 40°-50° | 986.3 | 13.7 |
| 50°-60° | 1424.5 | 19.8 |
| 60°-70° | 1715.3 | 23.8 |
| 70°-80° | 1421.0 | 19.7 |
| 80°-90° | 445.9 | 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° | 7209.7 | 100.0 |
| 0°-180° | 7209.7 | 100.0 |



REPORT NUMBER: P879960

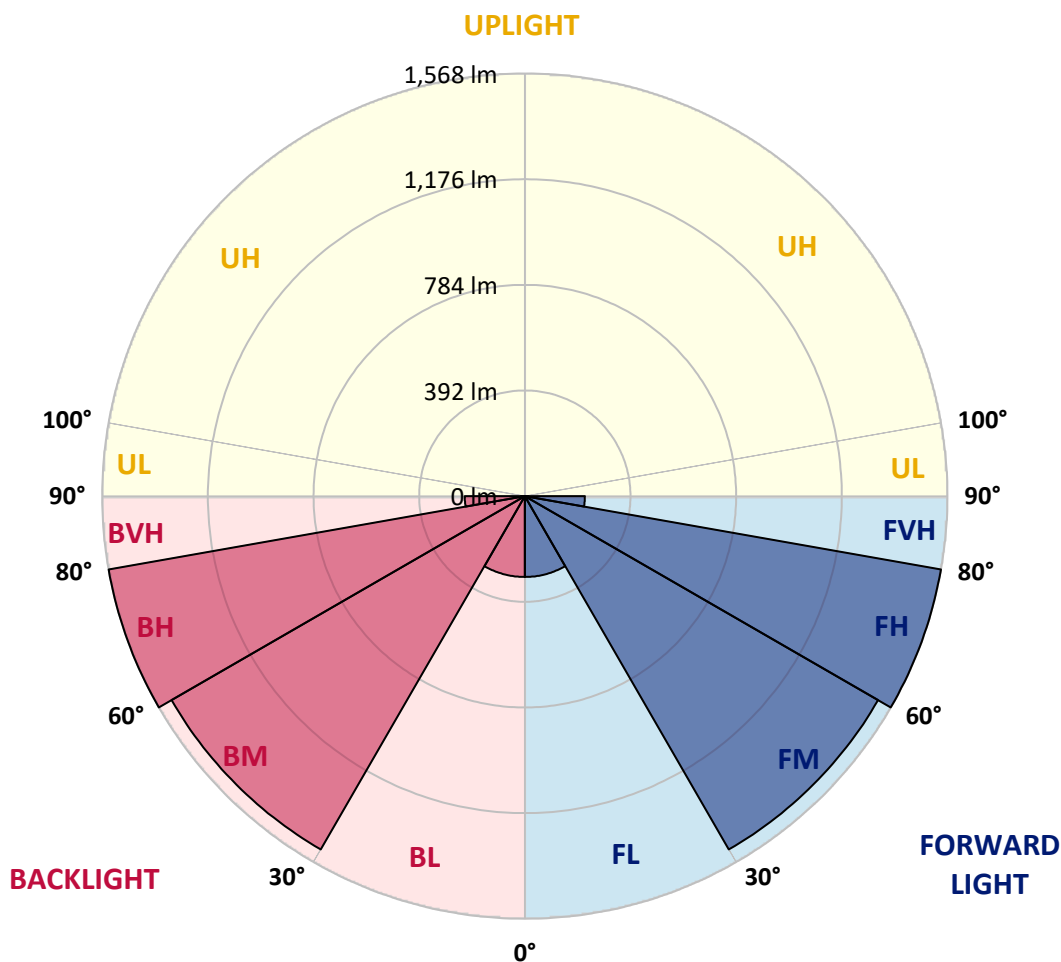
CATALOG NUMBER: MEM2-HTN-VA-80-830-U-WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 299.9 | 4.2 | | | |
| FM (30°-60°) | 1513.8 | 21.0 | | | |
| FH (60°-80°) | 1568.2 | 21.8 | | | G1/1800 |
| FVH (80°-90°) | 222.9 | 3.1 | | | G2/225 |
| BL (0°-30°) | 299.9 | 4.2 | B1/500 | | |
| BM (30°-60°) | 1513.8 | 21.0 | B2/2500 | | |
| BH (60°-80°) | 1568.2 | 21.8 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 222.9 | 3.1 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type V Short





REPORT NUMBER: P879960

CATALOG NUMBER: MEM2-HTN-VA-80-830-U-WQ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 545.7 | 545.7 | 545.7 | 545.7 | 545.7 | 545.7 | 545.7 | 545.7 | 545.7 | 545.7 | 545.7 |
| 2.5° | 547.9 | 547.9 | 547.9 | 547.9 | 547.9 | 547.9 | 547.9 | 547.9 | 547.9 | 547.9 | 547.9 |
| 5° | 556.7 | 556.7 | 556.7 | 554.5 | 554.5 | 554.5 | 556.7 | 556.7 | 556.7 | 556.7 | 556.7 |
| 7.5° | 567.7 | 567.7 | 567.7 | 567.7 | 567.7 | 567.7 | 565.5 | 565.5 | 565.5 | 565.5 | 567.7 |
| 10° | 583.1 | 585.3 | 585.3 | 583.1 | 583.1 | 583.1 | 580.9 | 580.9 | 583.1 | 583.1 | 580.9 |
| 12.5° | 605.1 | 605.1 | 605.1 | 605.1 | 602.9 | 602.9 | 602.9 | 602.9 | 602.9 | 602.9 | 602.9 |
| 15° | 629.3 | 629.3 | 629.3 | 629.3 | 629.3 | 629.3 | 629.3 | 629.3 | 627.1 | 624.9 | 624.9 |
| 17.5° | 660.1 | 657.9 | 662.3 | 660.1 | 664.5 | 666.7 | 662.3 | 660.1 | 657.9 | 655.7 | 653.5 |
| 20° | 697.5 | 699.7 | 704.1 | 706.3 | 708.5 | 710.7 | 704.1 | 701.9 | 697.5 | 695.3 | 693.1 |
| 22.5° | 741.5 | 741.5 | 745.9 | 745.9 | 750.3 | 750.3 | 748.1 | 741.5 | 737.1 | 737.1 | 734.9 |
| 25° | 778.9 | 781.1 | 785.5 | 785.5 | 789.9 | 789.9 | 787.7 | 783.3 | 776.7 | 772.3 | 770.1 |
| 27.5° | 818.5 | 818.5 | 820.7 | 827.3 | 829.5 | 829.5 | 827.3 | 820.7 | 811.9 | 807.5 | 807.5 |
| 30° | 855.9 | 858.1 | 860.3 | 869.1 | 873.5 | 875.7 | 866.9 | 860.3 | 849.3 | 844.9 | 844.9 |
| 32.5° | 899.9 | 899.9 | 904.3 | 917.5 | 924.1 | 926.3 | 917.5 | 906.5 | 893.3 | 884.5 | 884.5 |
| 35° | 948.3 | 946.1 | 959.3 | 972.5 | 987.9 | 987.9 | 981.3 | 963.7 | 943.9 | 932.9 | 930.7 |
| 37.5° | 1012.1 | 1014.3 | 1027.5 | 1051.7 | 1075.9 | 1075.9 | 1069.3 | 1038.5 | 1016.5 | 996.7 | 992.3 |
| 40° | 1086.9 | 1089.1 | 1113.3 | 1141.9 | 1168.3 | 1177.1 | 1163.9 | 1133.1 | 1095.7 | 1067.1 | 1064.9 |
| 42.5° | 1150.7 | 1159.5 | 1183.7 | 1223.4 | 1249.8 | 1263.0 | 1243.2 | 1208.0 | 1166.1 | 1133.1 | 1126.5 |
| 45° | 1212.4 | 1221.2 | 1252.0 | 1293.8 | 1326.8 | 1335.6 | 1318.0 | 1276.2 | 1227.8 | 1192.6 | 1188.1 |
| 47.5° | 1269.6 | 1278.4 | 1309.2 | 1364.2 | 1399.4 | 1408.2 | 1392.8 | 1344.4 | 1285.0 | 1249.8 | 1245.4 |
| 50° | 1322.4 | 1342.2 | 1379.6 | 1439.0 | 1489.6 | 1494.0 | 1472.0 | 1414.8 | 1353.2 | 1304.8 | 1298.2 |
| 52.5° | 1395.0 | 1403.8 | 1456.6 | 1535.8 | 1593.0 | 1612.8 | 1577.6 | 1516.0 | 1425.8 | 1368.6 | 1357.6 |
| 55° | 1483.0 | 1487.4 | 1544.6 | 1637.0 | 1711.8 | 1738.2 | 1694.2 | 1615.0 | 1511.6 | 1454.4 | 1445.6 |
| 57.5° | 1533.6 | 1553.4 | 1619.4 | 1718.4 | 1799.8 | 1835.0 | 1793.2 | 1689.8 | 1588.6 | 1516.0 | 1496.2 |
| 60° | 1555.6 | 1575.4 | 1648.0 | 1766.8 | 1854.8 | 1876.8 | 1846.0 | 1744.8 | 1612.8 | 1531.4 | 1518.2 |
| 62.5° | 1577.6 | 1597.4 | 1670.0 | 1799.8 | 1885.6 | 1916.4 | 1868.0 | 1777.8 | 1634.8 | 1555.6 | 1538.0 |
| 65° | 1573.2 | 1595.2 | 1683.2 | 1810.8 | 1920.8 | 1956.0 | 1907.6 | 1775.6 | 1648.0 | 1549.0 | 1535.8 |
| 67.5° | 1529.2 | 1549.0 | 1641.4 | 1782.2 | 1903.2 | 1940.6 | 1887.8 | 1751.4 | 1608.4 | 1507.2 | 1491.8 |
| 70° | 1441.2 | 1465.4 | 1555.6 | 1709.6 | 1821.8 | 1839.4 | 1799.8 | 1676.6 | 1527.0 | 1419.2 | 1399.4 |
| 72.5° | 1322.4 | 1346.6 | 1439.0 | 1597.4 | 1685.4 | 1716.2 | 1672.2 | 1566.6 | 1414.8 | 1304.8 | 1287.2 |
| 75° | 1181.5 | 1197.0 | 1282.8 | 1432.4 | 1527.0 | 1555.6 | 1522.6 | 1408.2 | 1254.2 | 1166.1 | 1146.3 |
| 77.5° | 1016.5 | 1038.5 | 1115.5 | 1241.0 | 1315.8 | 1342.2 | 1311.4 | 1230.0 | 1086.9 | 1012.1 | 996.7 |
| 80° | 798.7 | 825.1 | 895.5 | 990.1 | 1069.3 | 1089.1 | 1062.7 | 974.7 | 884.5 | 803.1 | 785.5 |
| 82.5° | 576.5 | 583.1 | 646.9 | 715.1 | 774.5 | 785.5 | 765.7 | 717.3 | 622.7 | 567.7 | 543.5 |
| 85° | 301.4 | 310.2 | 356.4 | 407.1 | 444.5 | 451.1 | 442.3 | 389.4 | 358.6 | 308.0 | 288.2 |
| 87.5° | 68.2 | 70.4 | 83.6 | 92.4 | 112.2 | 110.0 | 116.6 | 92.4 | 88.0 | 72.6 | 63.8 |
| 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: SP1-2407-176-7

Test Date: 09/27/2024

Luminaire Tested: MEM2-HTN-VA-30-830-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-830-U-WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-176-7
 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-30-830-U-WQ**
 Description: EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K): 2984
 CIE u': 0.2500
 CIE v': 0.5264
 Duv: 0.0033
 CIE x: 0.4431
 CIE y: 0.4147
 CIE z: 0.1422
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 581
 Purity: 57.4798
 Rf: 85.8
 Rg: 94.1

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 81.8 | | |
| R1: | 79.4 | R9: | -1.1 |
| R2: | 89.9 | R10: | 78.4 |
| R3: | 96.6 | R11: | 80.8 |
| R4: | 80.6 | R12: | 72.8 |
| R5: | 80.1 | R13: | 81.7 |
| R6: | 88.9 | R14: | 98.5 |
| R7: | 82.6 | R15: | 70.2 |
| R8: | 56.0 | | |



Test Conditions

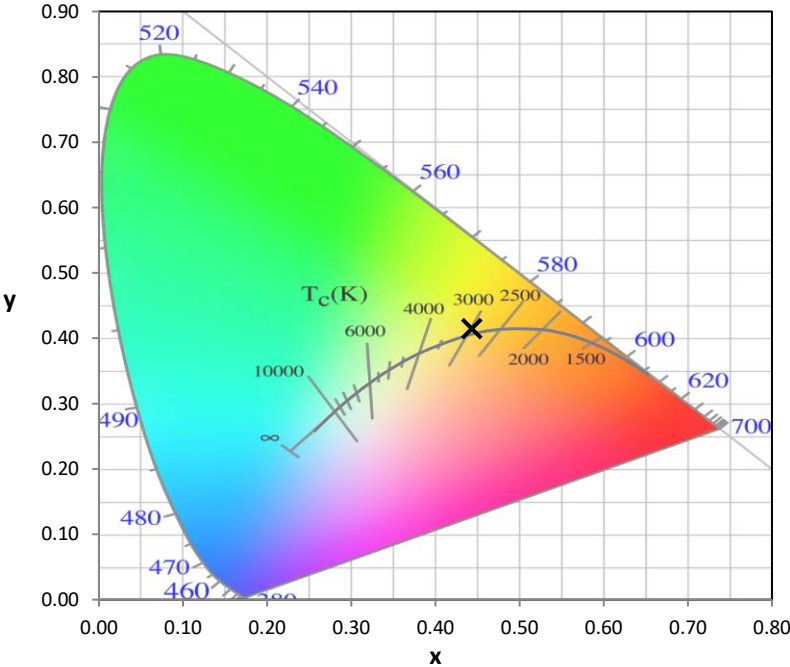
Stabilization Time: 29M
 Operation Time: 1H 29M
 Sphere Temperature (°C): 25.2

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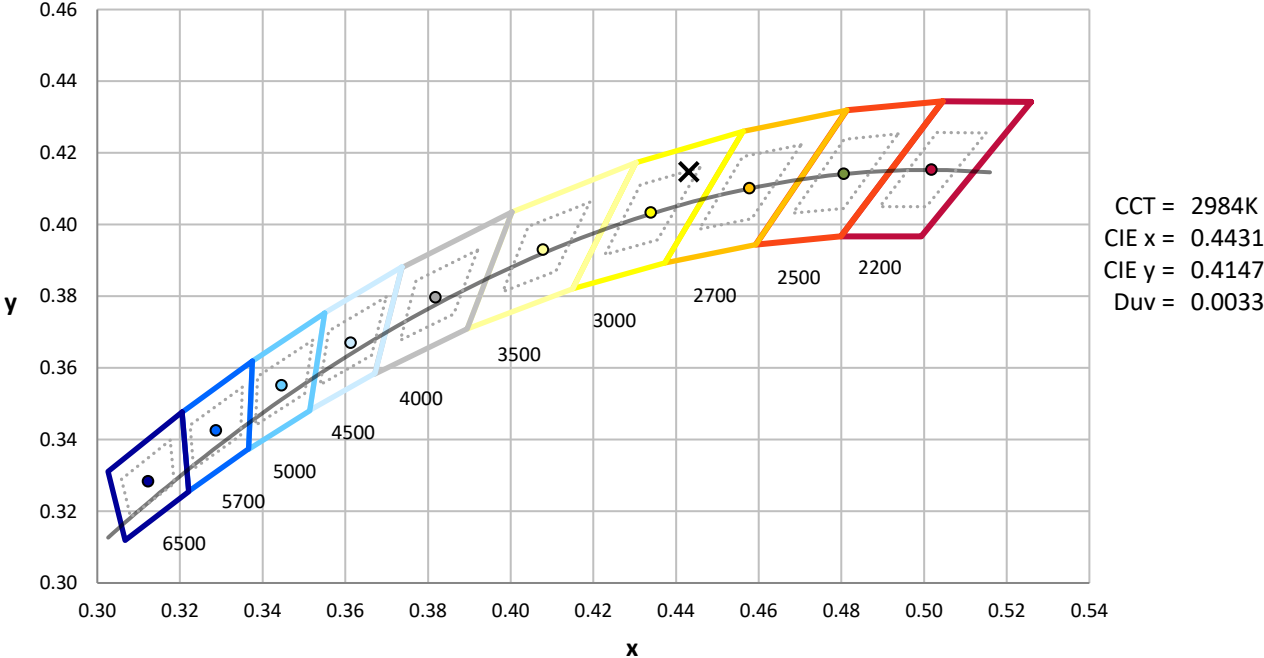
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 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

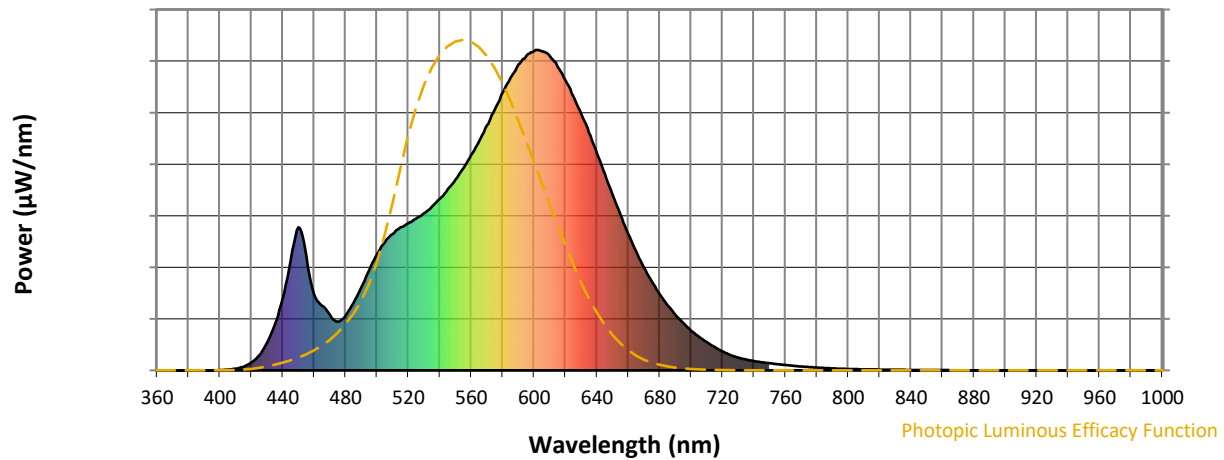


CCT = 2984K
 CIE x = 0.4431
 CIE y = 0.4147
 Duv = 0.0033

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 | 260 | NR | 620 | 905 | NR | 750 | 22 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 312 | NR | 625 | 856 | NR | 755 | 19 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 362 | NR | 630 | 801 | NR | 760 | 17 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 399 | NR | 635 | 742 | NR | 765 | 14 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 425 | NR | 640 | 677 | NR | 770 | 12 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 446 | NR | 645 | 613 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 459 | NR | 650 | 549 | NR | 780 | 9 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 473 | NR | 655 | 485 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 490 | NR | 660 | 425 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 2 | NR | 535 | 511 | NR | 665 | 371 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 5 | NR | 540 | 535 | NR | 670 | 321 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 11 | NR | 545 | 565 | NR | 675 | 276 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 24 | NR | 550 | 595 | NR | 680 | 238 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 47 | NR | 555 | 631 | NR | 685 | 203 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 86 | NR | 560 | 672 | NR | 690 | 174 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 144 | NR | 565 | 715 | NR | 695 | 148 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 224 | NR | 570 | 763 | NR | 700 | 124 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 342 | NR | 575 | 814 | NR | 705 | 105 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 446 | NR | 580 | 866 | NR | 710 | 88 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 357 | NR | 585 | 912 | NR | 715 | 73 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 237 | NR | 590 | 954 | NR | 720 | 59 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 202 | NR | 595 | 981 | NR | 725 | 48 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 172 | NR | 600 | 996 | NR | 730 | 40 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 152 | NR | 605 | 996 | NR | 735 | 34 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 171 | NR | 610 | 980 | NR | 740 | 29 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 210 | NR | 615 | 947 | NR | 745 | 25 | NR | 875 | 0 | NR | | | |

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Scotopic Flux vs. Wavelength



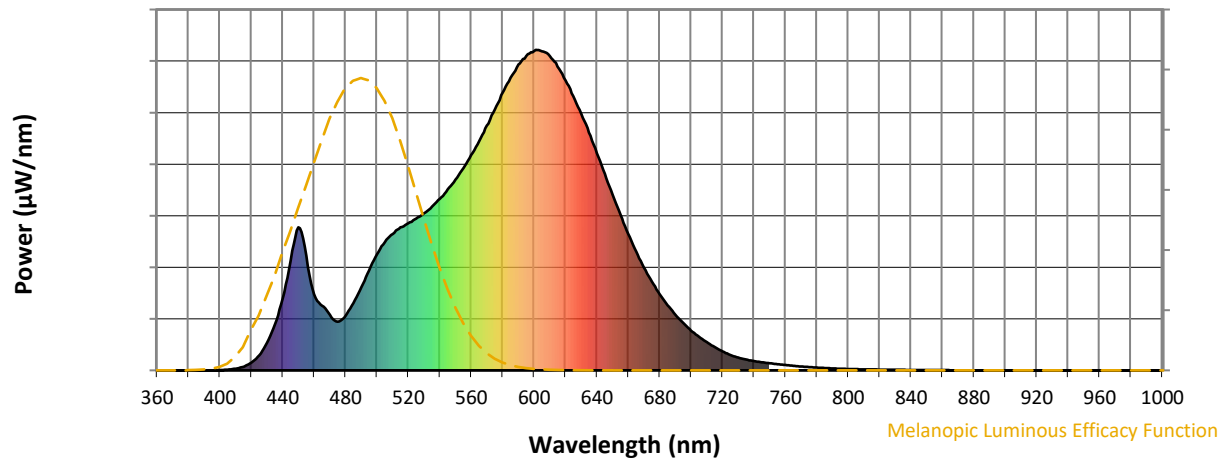
Scotopic Lumens: NR

S/P: 1.32

| 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 | 260 | NR | 620 | 905 | NR | 750 | 22 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 312 | NR | 625 | 856 | NR | 755 | 19 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 362 | NR | 630 | 801 | NR | 760 | 17 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 399 | NR | 635 | 742 | NR | 765 | 14 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 425 | NR | 640 | 677 | NR | 770 | 12 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 446 | NR | 645 | 613 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 459 | NR | 650 | 549 | NR | 780 | 9 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 473 | NR | 655 | 485 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 490 | NR | 660 | 425 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 2 | NR | 535 | 511 | NR | 665 | 371 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 5 | NR | 540 | 535 | NR | 670 | 321 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 11 | NR | 545 | 565 | NR | 675 | 276 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 24 | NR | 550 | 595 | NR | 680 | 238 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 47 | NR | 555 | 631 | NR | 685 | 203 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 86 | NR | 560 | 672 | NR | 690 | 174 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 144 | NR | 565 | 715 | NR | 695 | 148 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 224 | NR | 570 | 763 | NR | 700 | 124 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 342 | NR | 575 | 814 | NR | 705 | 105 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 446 | NR | 580 | 866 | NR | 710 | 88 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 357 | NR | 585 | 912 | NR | 715 | 73 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 237 | NR | 590 | 954 | NR | 720 | 59 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 202 | NR | 595 | 981 | NR | 725 | 48 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 172 | NR | 600 | 996 | NR | 730 | 40 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 152 | NR | 605 | 996 | NR | 735 | 34 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 171 | NR | 610 | 980 | NR | 740 | 29 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 210 | NR | 615 | 947 | NR | 745 | 25 | NR | 875 | 0 | NR | | | |

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Melanopic Flux vs. Wavelength



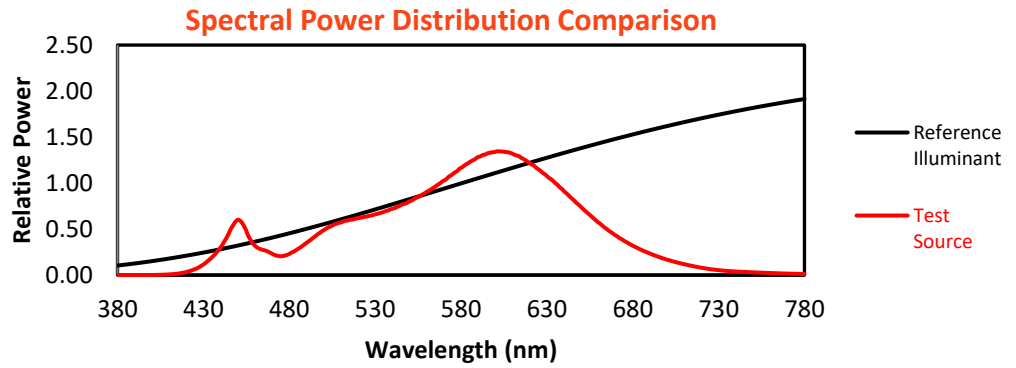
Melanopic Lumens: NR

M/P: 2.51

| 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 | 260 | NR | 620 | 905 | NR | 750 | 22 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 312 | NR | 625 | 856 | NR | 755 | 19 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 362 | NR | 630 | 801 | NR | 760 | 17 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 399 | NR | 635 | 742 | NR | 765 | 14 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 425 | NR | 640 | 677 | NR | 770 | 12 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 446 | NR | 645 | 613 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 459 | NR | 650 | 549 | NR | 780 | 9 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 473 | NR | 655 | 485 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 490 | NR | 660 | 425 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 2 | NR | 535 | 511 | NR | 665 | 371 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 5 | NR | 540 | 535 | NR | 670 | 321 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 11 | NR | 545 | 565 | NR | 675 | 276 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 24 | NR | 550 | 595 | NR | 680 | 238 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 47 | NR | 555 | 631 | NR | 685 | 203 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 86 | NR | 560 | 672 | NR | 690 | 174 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 144 | NR | 565 | 715 | NR | 695 | 148 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 224 | NR | 570 | 763 | NR | 700 | 124 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 342 | NR | 575 | 814 | NR | 705 | 105 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 446 | NR | 580 | 866 | NR | 710 | 88 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 357 | NR | 585 | 912 | NR | 715 | 73 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 237 | NR | 590 | 954 | NR | 720 | 59 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 202 | NR | 595 | 981 | NR | 725 | 48 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 172 | NR | 600 | 996 | NR | 730 | 40 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 152 | NR | 605 | 996 | NR | 735 | 34 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 171 | NR | 610 | 980 | NR | 740 | 29 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 210 | NR | 615 | 947 | NR | 745 | 25 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 85.8$
 $R_g = 94.1$
 $CIE R_a = 81.8$
 $R_9 = -1.1$



Color Vector Graphics

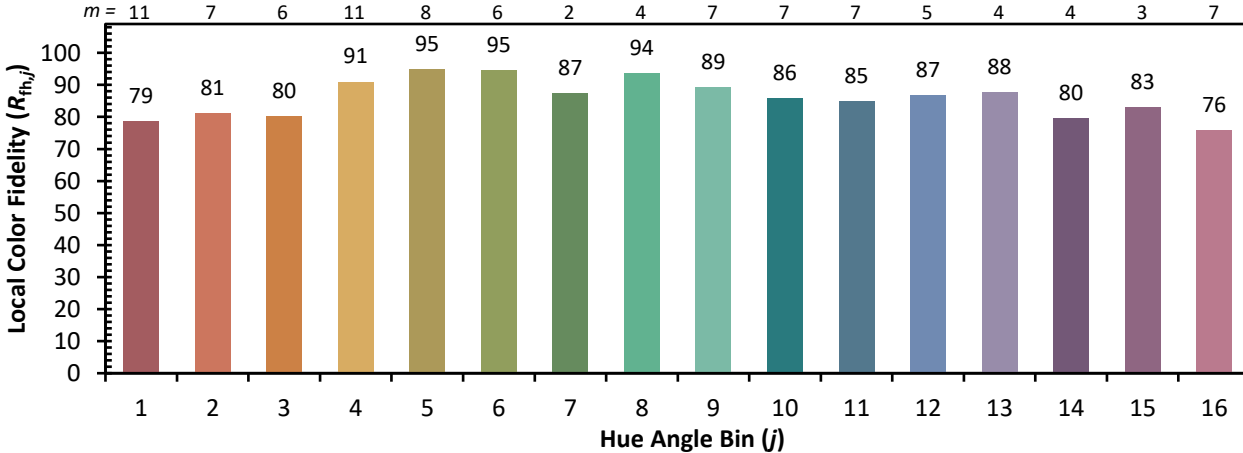


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 86 | CES51 = 95 | CES76 = 84 |
| CES02 = 63 | CES27 = 95 | CES52 = 94 | CES77 = 86 |
| CES03 = 31 | CES28 = 95 | CES53 = 90 | CES78 = 83 |
| CES04 = 70 | CES29 = 89 | CES54 = 91 | CES79 = 90 |
| CES05 = 50 | CES30 = 95 | CES55 = 91 | CES80 = 90 |
| CES06 = 51 | CES31 = 91 | CES56 = 87 | CES81 = 70 |
| CES07 = 42 | CES32 = 85 | CES57 = 86 | CES82 = 96 |
| CES08 = 41 | CES33 = 93 | CES58 = 87 | CES83 = 94 |
| CES09 = 29 | CES34 = 94 | CES59 = 92 | CES84 = 92 |
| CES10 = 76 | CES35 = 97 | CES60 = 94 | CES85 = 77 |
| CES11 = 59 | CES36 = 90 | CES61 = 90 | CES86 = 66 |
| CES12 = 65 | CES37 = 97 | CES62 = 94 | CES87 = 84 |
| CES13 = 43 | CES38 = 97 | CES63 = 88 | CES88 = 86 |
| CES14 = 74 | CES39 = 98 | CES64 = 84 | CES89 = 75 |
| CES15 = 72 | CES40 = 95 | CES65 = 80 | CES90 = 88 |
| CES16 = 47 | CES41 = 97 | CES66 = 83 | CES91 = 81 |
| CES17 = 50 | CES42 = 99 | CES67 = 82 | CES92 = 64 |
| CES18 = 56 | CES43 = 93 | CES68 = 84 | CES93 = 79 |
| CES19 = 72 | CES44 = 99 | CES69 = 89 | CES94 = 60 |
| CES20 = 67 | CES45 = 94 | CES70 = 82 | CES95 = 74 |
| CES21 = 87 | CES46 = 90 | CES71 = 81 | CES96 = 83 |
| CES22 = 79 | CES47 = 93 | CES72 = 93 | CES97 = 89 |
| CES23 = 92 | CES48 = 83 | CES73 = 77 | CES98 = 84 |
| CES24 = 91 | CES49 = 92 | CES74 = 92 | CES99 = 75 |
| CES25 = 72 | CES50 = 95 | CES75 = 83 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)