

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: P867840

Luminaire Tested: **MEM2-HTN-SA-150-740-U-5WQ**

Issue Date: 08/21/2024

Test Information

Test Method: LM-79-08
Report Number: P867840
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: MEM2-HTN-SA-150-740-U-5WQ
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 150W 70CRI 4000K
FITXURE w/ TYPE V SQUARE WIDE DISTRIBUTION OPTIC
Light Source: (30) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

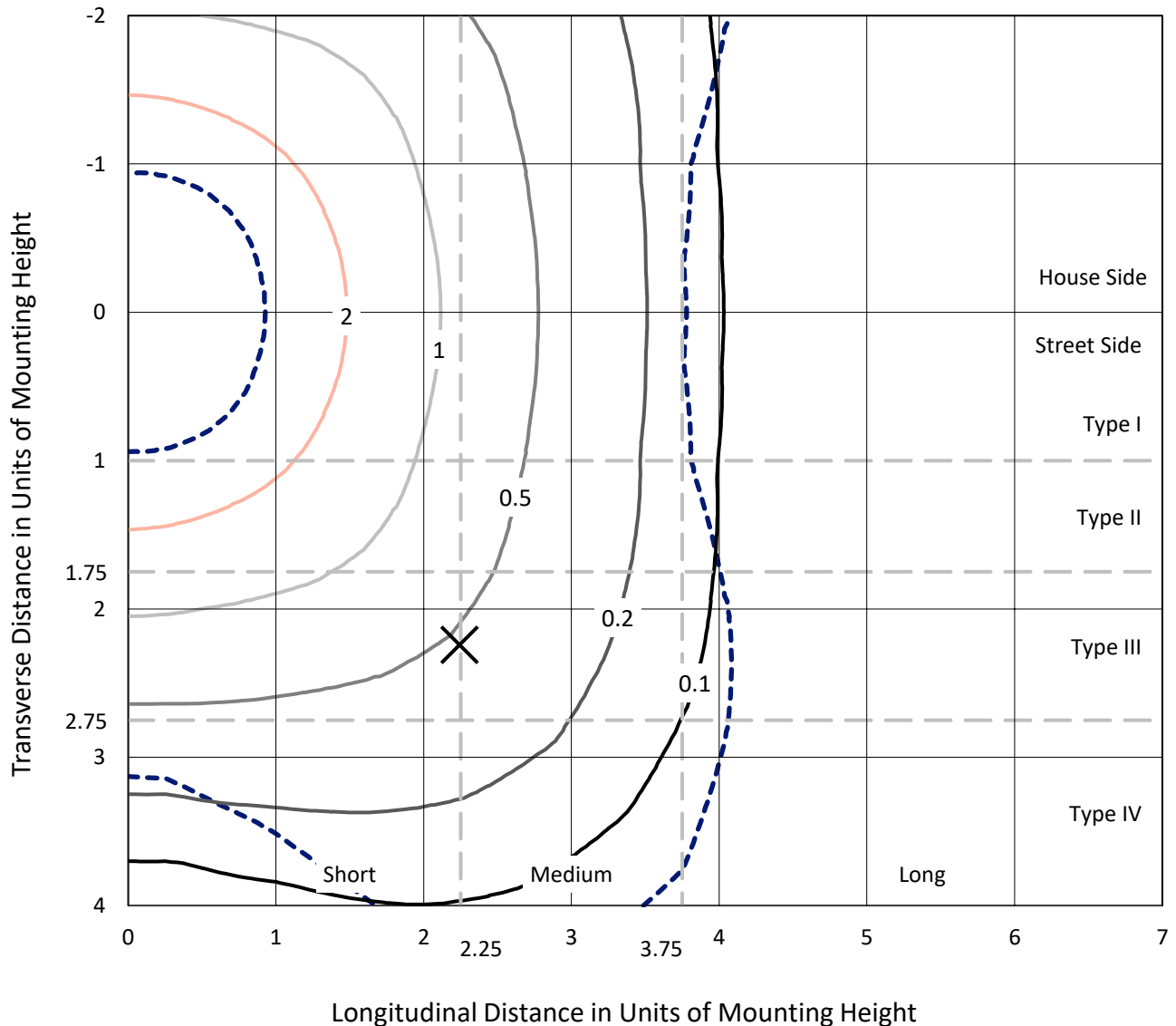
Lumens per Lamp: N/A
Luminaire Lumens: 19702.9 lumens
Efficiency: N/A
Efficacy: 147.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

Input Watts (W): 134
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 6.70%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

REPORT NUMBER: P867840
 CATALOG NUMBER: MEM2-HTN-SA-150-740-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

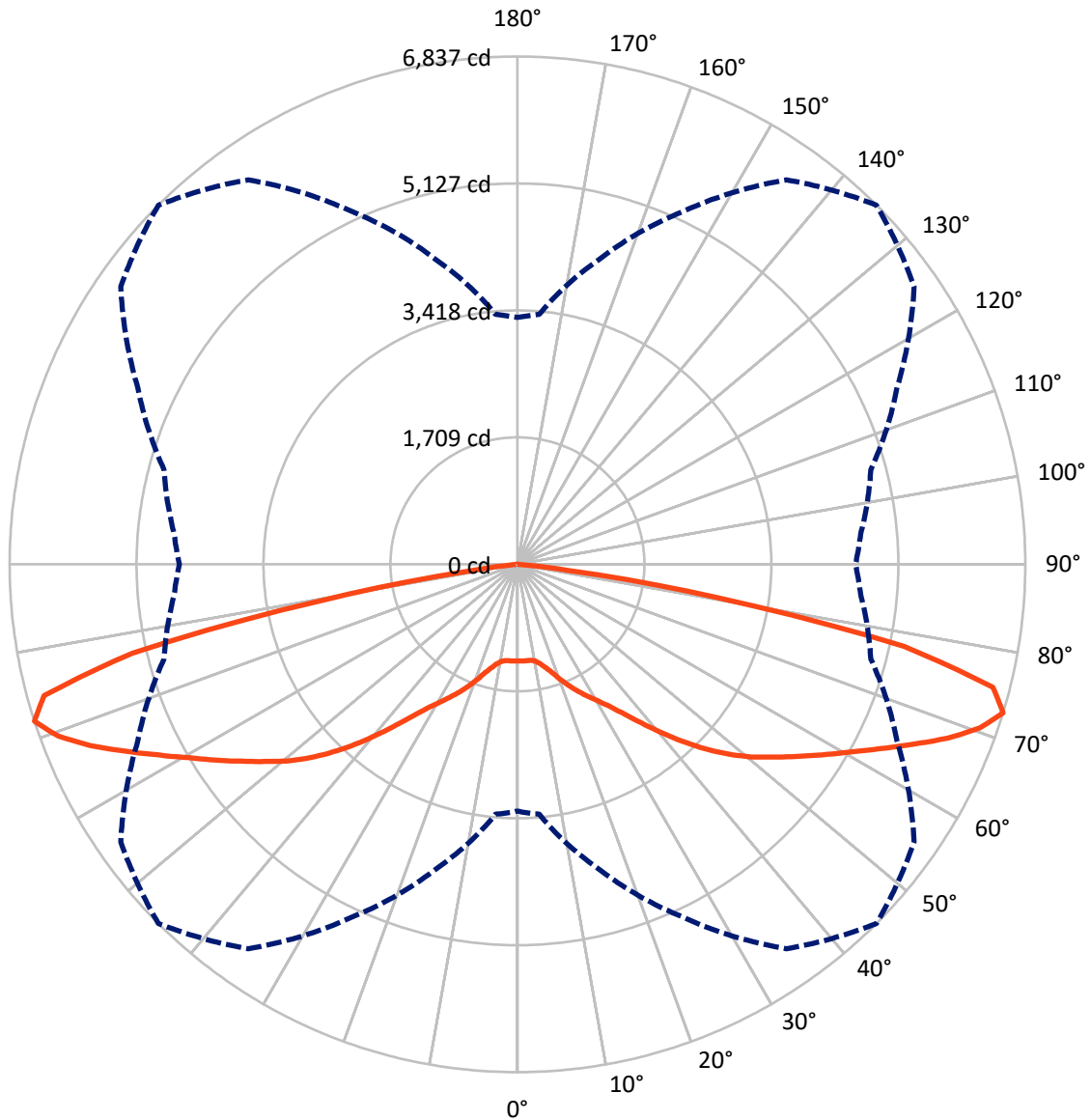
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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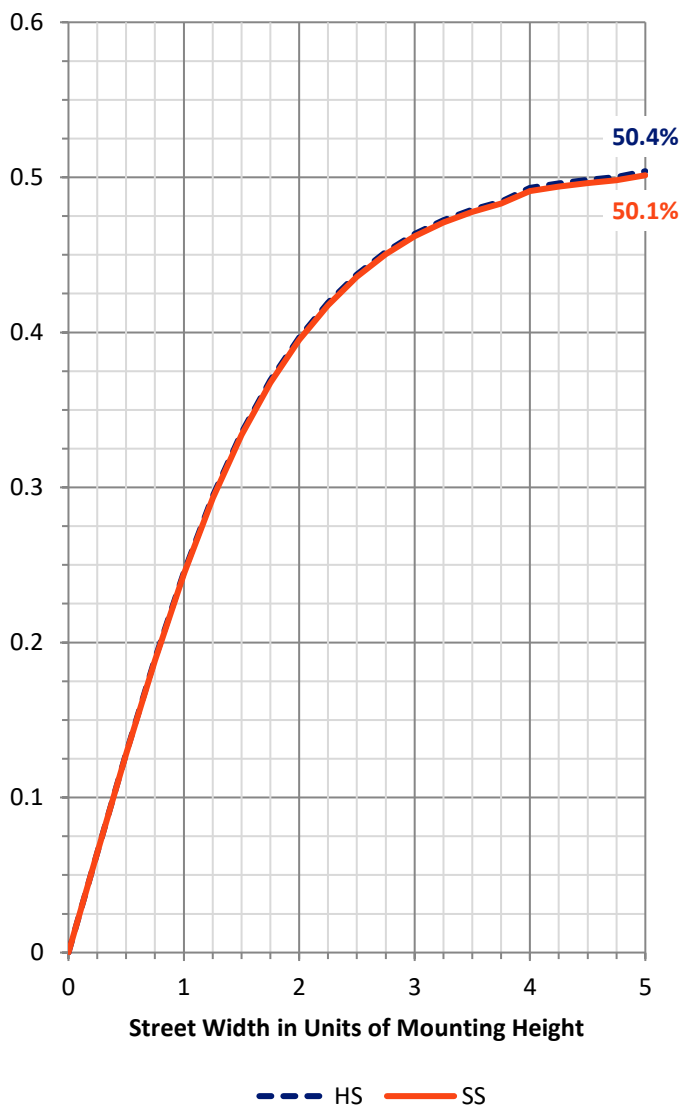
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9851.5 | 0.0 | 9851.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 9851.5 | 0.0 | 9851.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 19702.9 | 0.0 | 19702.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 124.7 | 0.6 |
| 10°-20° | 416.1 | 2.1 |
| 20°-30° | 858.5 | 4.4 |
| 30°-40° | 1580.4 | 8.0 |
| 40°-50° | 2778.8 | 14.1 |
| 50°-60° | 4030.2 | 20.5 |
| 60°-70° | 5253.9 | 26.7 |
| 70°-80° | 4367.2 | 22.2 |
| 80°-90° | 293.2 | 1.5 |
| 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° | 19702.9 | 100.0 |
| 0°-180° | 19702.9 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P867840

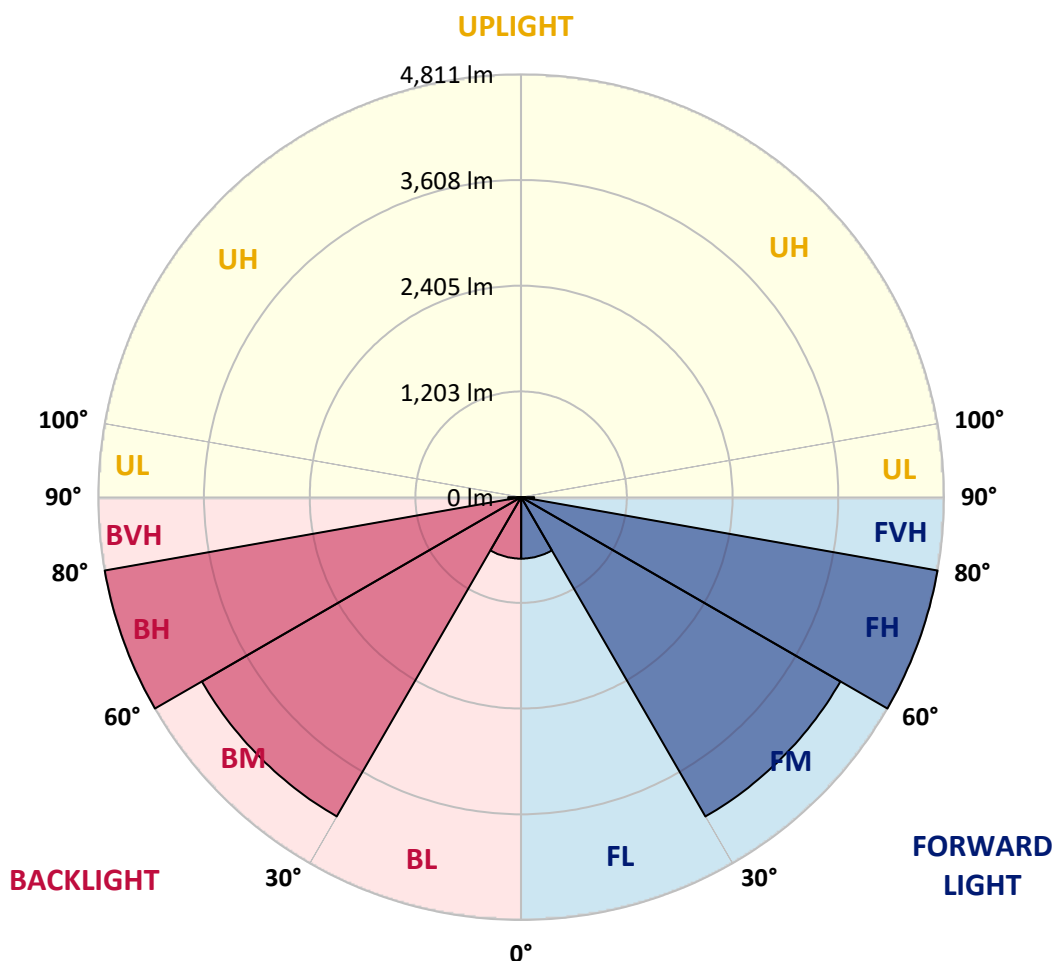
CATALOG NUMBER: MEM2-HTN-SA-150-740-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 699.6 | 3.6 | | | |
| FM (30°-60°) | 4194.7 | 21.3 | | | |
| FH (60°-80°) | 4810.5 | 24.4 | | | G2/5000 |
| FVH (80°-90°) | 146.6 | 0.7 | | | G2/225 |
| BL (0°-30°) | 699.6 | 3.6 | B2/1000 | | |
| BM (30°-60°) | 4194.7 | 21.3 | B3/5000 | | |
| BH (60°-80°) | 4810.5 | 24.4 | B4/5000 | | G2/5000 |
| BVH (80°-90°) | 146.6 | 0.7 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short





REPORT NUMBER: P867840

CATALOG NUMBER: MEM2-HTN-SA-150-740-U-5WQ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1300.7 | 1300.7 | 1300.7 | 1300.7 | 1300.7 | 1300.7 | 1300.7 | 1300.7 | 1300.7 | 1300.7 | 1300.7 |
| 2.5° | 1296.7 | 1298.7 | 1298.7 | 1298.7 | 1300.7 | 1302.8 | 1304.8 | 1306.9 | 1310.9 | 1313.0 | 1313.0 |
| 5° | 1302.8 | 1300.7 | 1298.7 | 1302.8 | 1302.8 | 1302.8 | 1304.8 | 1306.9 | 1306.9 | 1306.9 | 1308.9 |
| 7.5° | 1296.7 | 1298.7 | 1296.7 | 1296.7 | 1302.8 | 1304.8 | 1302.8 | 1300.7 | 1300.7 | 1302.8 | 1302.8 |
| 10° | 1319.1 | 1317.1 | 1315.0 | 1315.0 | 1321.2 | 1323.2 | 1321.2 | 1319.1 | 1319.1 | 1323.2 | 1323.2 |
| 12.5° | 1370.2 | 1374.2 | 1362.0 | 1362.0 | 1370.2 | 1374.2 | 1368.1 | 1366.1 | 1368.1 | 1372.2 | 1372.2 |
| 15° | 1449.8 | 1447.8 | 1439.6 | 1431.4 | 1439.6 | 1445.7 | 1437.5 | 1433.5 | 1435.5 | 1445.7 | 1437.5 |
| 17.5° | 1537.6 | 1539.6 | 1531.5 | 1523.3 | 1529.4 | 1537.6 | 1525.4 | 1515.1 | 1517.2 | 1521.3 | 1517.2 |
| 20° | 1635.6 | 1633.6 | 1631.5 | 1631.5 | 1643.8 | 1654.0 | 1635.6 | 1611.1 | 1605.0 | 1600.9 | 1600.9 |
| 22.5° | 1707.1 | 1713.2 | 1715.3 | 1733.6 | 1762.2 | 1772.4 | 1747.9 | 1715.3 | 1690.8 | 1678.5 | 1670.3 |
| 25° | 1819.4 | 1813.3 | 1809.2 | 1829.6 | 1872.5 | 1890.9 | 1860.2 | 1815.3 | 1790.8 | 1788.8 | 1794.9 |
| 27.5° | 1921.5 | 1921.5 | 1929.7 | 1950.1 | 1990.9 | 2009.3 | 1982.8 | 1937.8 | 1925.6 | 1925.6 | 1919.5 |
| 30° | 2054.2 | 2048.1 | 2056.3 | 2091.0 | 2121.6 | 2133.9 | 2111.4 | 2080.8 | 2070.6 | 2070.6 | 2060.4 |
| 32.5° | 2209.4 | 2211.5 | 2223.7 | 2246.2 | 2276.8 | 2278.8 | 2270.7 | 2256.4 | 2250.3 | 2244.1 | 2254.3 |
| 35° | 2446.3 | 2446.3 | 2442.2 | 2458.5 | 2466.7 | 2470.8 | 2474.9 | 2468.7 | 2468.7 | 2468.7 | 2460.6 |
| 37.5° | 2740.3 | 2724.0 | 2722.0 | 2707.7 | 2697.4 | 2707.7 | 2726.0 | 2746.5 | 2762.8 | 2752.6 | 2748.5 |
| 40° | 3032.3 | 3024.2 | 2999.7 | 2977.2 | 2969.0 | 2973.1 | 2995.6 | 3038.5 | 3056.8 | 3056.8 | 3073.2 |
| 42.5° | 3346.8 | 3330.5 | 3299.8 | 3273.3 | 3250.8 | 3256.9 | 3277.4 | 3330.5 | 3371.3 | 3389.7 | 3381.5 |
| 45° | 3628.6 | 3614.3 | 3583.7 | 3559.2 | 3542.8 | 3540.8 | 3567.3 | 3602.0 | 3657.2 | 3673.5 | 3685.8 |
| 47.5° | 3869.5 | 3859.3 | 3832.8 | 3808.3 | 3814.4 | 3816.4 | 3824.6 | 3855.2 | 3900.2 | 3922.6 | 3920.6 |
| 50° | 4065.6 | 4057.4 | 4032.9 | 4043.1 | 4059.4 | 4075.8 | 4065.6 | 4086.0 | 4114.6 | 4124.8 | 4133.0 |
| 52.5° | 4245.3 | 4233.0 | 4216.7 | 4235.1 | 4277.9 | 4310.6 | 4316.7 | 4302.4 | 4310.6 | 4316.7 | 4310.6 |
| 55° | 4422.9 | 4408.6 | 4404.5 | 4437.2 | 4502.6 | 4563.8 | 4557.7 | 4516.8 | 4506.6 | 4494.4 | 4488.3 |
| 57.5° | 4567.9 | 4557.7 | 4574.0 | 4629.2 | 4755.8 | 4837.4 | 4810.9 | 4717.0 | 4676.1 | 4647.5 | 4639.4 |
| 60° | 4659.8 | 4657.7 | 4694.5 | 4823.1 | 5015.1 | 5129.4 | 5086.6 | 4925.2 | 4833.4 | 4806.8 | 4794.6 |
| 62.5° | 4708.8 | 4710.8 | 4776.2 | 5004.9 | 5311.2 | 5466.4 | 5390.8 | 5143.7 | 5000.8 | 4974.2 | 4978.3 |
| 65° | 4753.7 | 4747.6 | 4833.4 | 5158.0 | 5631.8 | 5842.1 | 5740.0 | 5407.1 | 5198.9 | 5145.8 | 5145.8 |
| 67.5° | 4786.4 | 4792.5 | 4921.2 | 5311.2 | 5944.2 | 6244.4 | 6095.3 | 5686.9 | 5411.2 | 5331.6 | 5321.4 |
| 70° | 4373.9 | 4433.1 | 4835.4 | 5413.3 | 6191.3 | 6599.7 | 6403.6 | 5858.4 | 5419.4 | 5192.7 | 5170.3 |
| 72.5° | 3322.3 | 3377.4 | 4247.3 | 5231.5 | 6317.9 | 6836.5 | 6518.0 | 5639.9 | 4925.2 | 4637.3 | 4551.6 |
| 75° | 2191.0 | 2229.8 | 3165.1 | 4569.9 | 5966.6 | 6611.9 | 5936.0 | 4857.9 | 3877.7 | 3504.0 | 3526.5 |
| 77.5° | 976.1 | 1100.6 | 2017.5 | 3565.3 | 4915.0 | 5321.4 | 4527.1 | 3314.1 | 2368.7 | 2005.2 | 1966.4 |
| 80° | 408.4 | 447.2 | 761.7 | 1901.1 | 2848.6 | 2726.0 | 1927.6 | 1110.8 | 706.5 | 549.3 | 530.9 |
| 82.5° | 118.4 | 122.5 | 151.1 | 328.8 | 579.9 | 682.0 | 410.4 | 208.3 | 198.1 | 157.2 | 145.0 |
| 85° | 8.2 | 8.2 | 12.3 | 20.4 | 28.6 | 47.0 | 53.1 | 61.3 | 69.4 | 59.2 | 59.2 |
| 87.5° | 4.1 | 4.1 | 4.1 | 6.1 | 6.1 | 8.2 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 |
| 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: SP1-2407-157-5

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-740-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-740-U-5WQ-2

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-157-5
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/20/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Streetworks
 Catalog Number: **MEM2-HTN-SA-40-740-U-5WQ-2**
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

Spectral Parameters

CCT (K): 3915
 CIE u': 0.2262
 CIE v': 0.5044
 Duv: 0.0010
 CIE x: 0.3850
 CIE y: 0.3816
 CIE z: 0.2334
 Peak Wavelength (nm): 449
 Dominant Wavelength (nm): 578
 Purity: 30.05482
 Rf: 73.2
 Rg: 93.9

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.0 | | |
| R1: | 67.6 | R9: | -38.4 |
| R2: | 78.3 | R10: | 48.9 |
| R3: | 87.1 | R11: | 65.3 |
| R4: | 69.7 | R12: | 40.4 |
| R5: | 67.4 | R13: | 69.3 |
| R6: | 69.3 | R14: | 92.6 |
| R7: | 79.7 | R15: | 59.9 |
| R8: | 48.7 | | |



Test Conditions

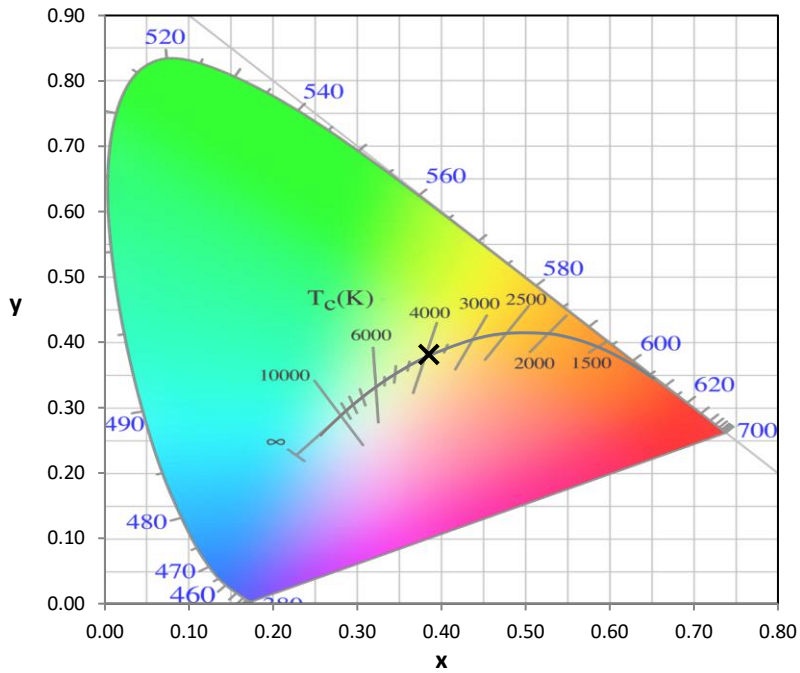
Stabilization Time: 21M
 Operation Time: 1H 21M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-157-5

| 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 |

REPORT NUMBER: SP1-2407-157-5

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

REPORT NUMBER: SP1-2407-157-5

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 | 112 | NR | 620 | 618 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 153 | NR | 625 | 563 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 216 | NR | 630 | 510 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 291 | NR | 635 | 456 | NR | 765 | 9 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 366 | NR | 640 | 407 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 436 | NR | 645 | 359 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 492 | NR | 650 | 316 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 536 | NR | 655 | 277 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 567 | NR | 660 | 240 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 596 | NR | 665 | 208 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 619 | NR | 670 | 179 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 25 | NR | 545 | 644 | NR | 675 | 154 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 51 | NR | 550 | 671 | NR | 680 | 133 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 100 | NR | 555 | 701 | NR | 685 | 114 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 180 | NR | 560 | 735 | NR | 690 | 98 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 315 | NR | 565 | 768 | NR | 695 | 83 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 514 | NR | 570 | 798 | NR | 700 | 71 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 828 | NR | 575 | 825 | NR | 705 | 61 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 992 | NR | 580 | 843 | NR | 710 | 52 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 652 | NR | 585 | 848 | NR | 715 | 44 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 382 | NR | 590 | 844 | NR | 720 | 38 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 282 | NR | 595 | 826 | NR | 725 | 32 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 180 | NR | 600 | 800 | NR | 730 | 28 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 119 | NR | 605 | 762 | NR | 735 | 24 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 101 | NR | 610 | 719 | NR | 740 | 20 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 98 | NR | 615 | 669 | NR | 745 | 17 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2407-157-5

Scotopic Flux vs. Wavelength

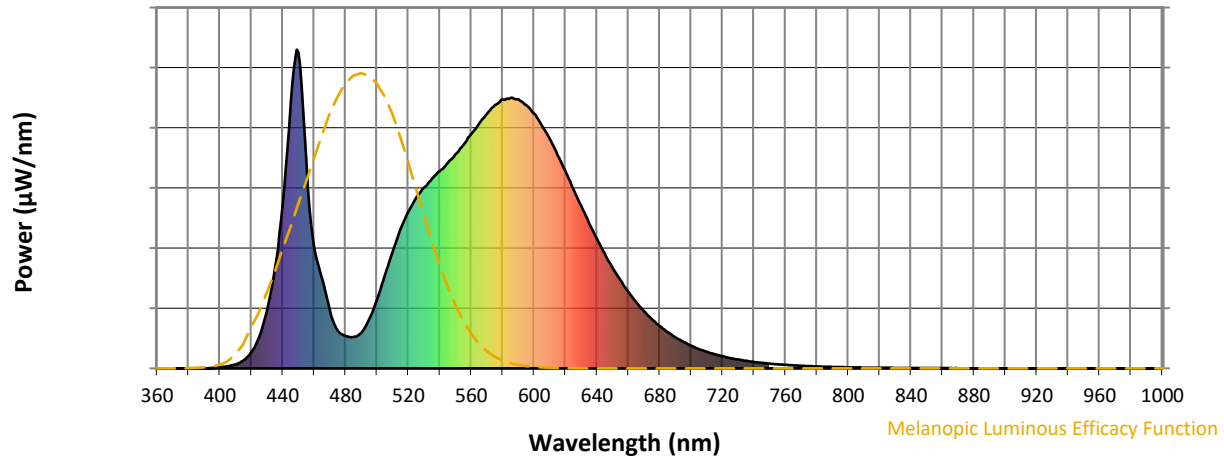


Scotopic Lumens: NR S/P: 1.49

| 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 | 112 | NR | 620 | 618 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 153 | NR | 625 | 563 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 216 | NR | 630 | 510 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 291 | NR | 635 | 456 | NR | 765 | 9 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 366 | NR | 640 | 407 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 436 | NR | 645 | 359 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 492 | NR | 650 | 316 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 536 | NR | 655 | 277 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 567 | NR | 660 | 240 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 596 | NR | 665 | 208 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 619 | NR | 670 | 179 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 25 | NR | 545 | 644 | NR | 675 | 154 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 51 | NR | 550 | 671 | NR | 680 | 133 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 100 | NR | 555 | 701 | NR | 685 | 114 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 180 | NR | 560 | 735 | NR | 690 | 98 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 315 | NR | 565 | 768 | NR | 695 | 83 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 514 | NR | 570 | 798 | NR | 700 | 71 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 828 | NR | 575 | 825 | NR | 705 | 61 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 992 | NR | 580 | 843 | NR | 710 | 52 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 652 | NR | 585 | 848 | NR | 715 | 44 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 382 | NR | 590 | 844 | NR | 720 | 38 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 282 | NR | 595 | 826 | NR | 725 | 32 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 180 | NR | 600 | 800 | NR | 730 | 28 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 119 | NR | 605 | 762 | NR | 735 | 24 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 101 | NR | 610 | 719 | NR | 740 | 20 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 98 | NR | 615 | 669 | NR | 745 | 17 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2407-157-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.88

| 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 | 112 | NR | 620 | 618 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 153 | NR | 625 | 563 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 216 | NR | 630 | 510 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 291 | NR | 635 | 456 | NR | 765 | 9 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 366 | NR | 640 | 407 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 436 | NR | 645 | 359 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 492 | NR | 650 | 316 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 536 | NR | 655 | 277 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 567 | NR | 660 | 240 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 596 | NR | 665 | 208 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 619 | NR | 670 | 179 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 25 | NR | 545 | 644 | NR | 675 | 154 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 51 | NR | 550 | 671 | NR | 680 | 133 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 100 | NR | 555 | 701 | NR | 685 | 114 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 180 | NR | 560 | 735 | NR | 690 | 98 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 315 | NR | 565 | 768 | NR | 695 | 83 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 514 | NR | 570 | 798 | NR | 700 | 71 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 828 | NR | 575 | 825 | NR | 705 | 61 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 992 | NR | 580 | 843 | NR | 710 | 52 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 652 | NR | 585 | 848 | NR | 715 | 44 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 382 | NR | 590 | 844 | NR | 720 | 38 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 282 | NR | 595 | 826 | NR | 725 | 32 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 180 | NR | 600 | 800 | NR | 730 | 28 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 119 | NR | 605 | 762 | NR | 735 | 24 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 101 | NR | 610 | 719 | NR | 740 | 20 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 98 | NR | 615 | 669 | NR | 745 | 17 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 73.2$
 $R_g = 93.9$
 CIE $R_a = 71.0$
 $R_g = -38.4$



Color Vector Graphics

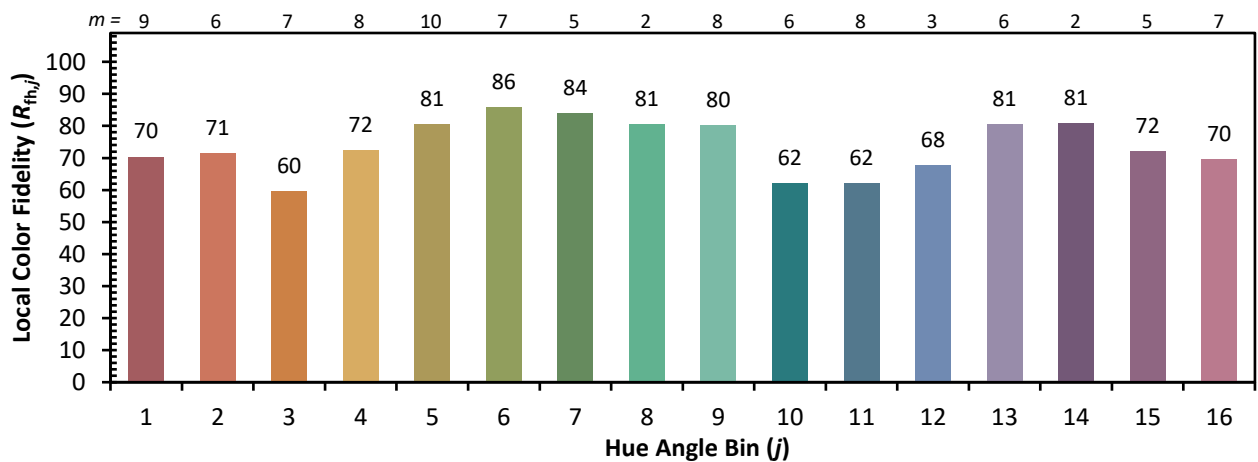
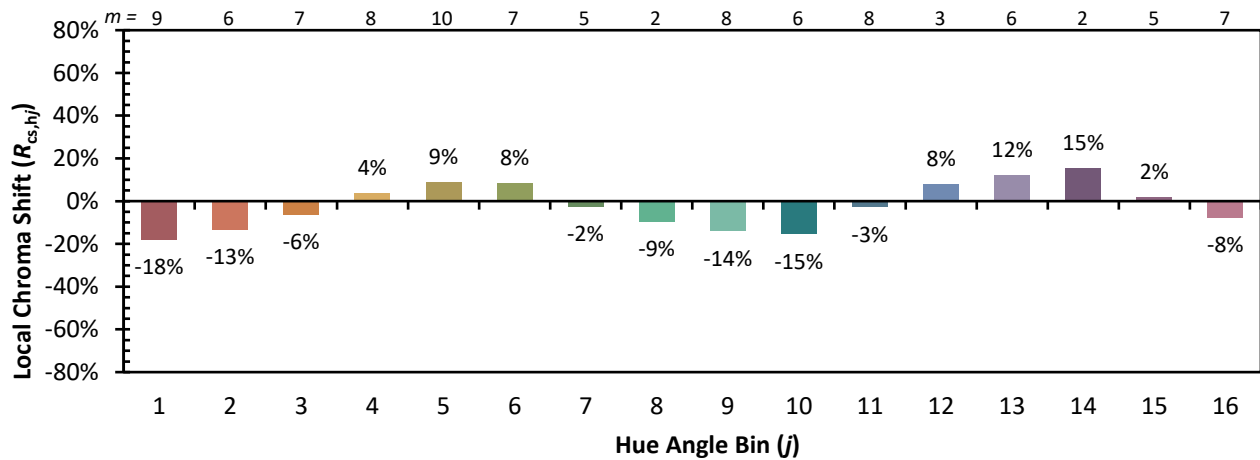


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 61 | CES51 = 88 | CES76 = 50 |
| CES02 = 61 | CES27 = 88 | CES52 = 87 | CES77 = 69 |
| CES03 = 30 | CES28 = 81 | CES53 = 77 | CES78 = 53 |
| CES04 = 70 | CES29 = 65 | CES54 = 84 | CES79 = 81 |
| CES05 = 47 | CES30 = 81 | CES55 = 83 | CES80 = 78 |
| CES06 = 50 | CES31 = 69 | CES56 = 73 | CES81 = 77 |
| CES07 = 40 | CES32 = 60 | CES57 = 72 | CES82 = 91 |
| CES08 = 39 | CES33 = 76 | CES58 = 73 | CES83 = 89 |
| CES09 = 29 | CES34 = 70 | CES59 = 85 | CES84 = 86 |
| CES10 = 74 | CES35 = 83 | CES60 = 89 | CES85 = 77 |
| CES11 = 57 | CES36 = 91 | CES61 = 81 | CES86 = 71 |
| CES12 = 63 | CES37 = 79 | CES62 = 85 | CES87 = 76 |
| CES13 = 42 | CES38 = 92 | CES63 = 72 | CES88 = 80 |
| CES14 = 74 | CES39 = 96 | CES64 = 64 | CES89 = 70 |
| CES15 = 71 | CES40 = 91 | CES65 = 61 | CES90 = 79 |
| CES16 = 46 | CES41 = 93 | CES66 = 57 | CES91 = 74 |
| CES17 = 49 | CES42 = 80 | CES67 = 54 | CES92 = 57 |
| CES18 = 56 | CES43 = 76 | CES68 = 63 | CES93 = 74 |
| CES19 = 72 | CES44 = 99 | CES69 = 73 | CES94 = 51 |
| CES20 = 65 | CES45 = 85 | CES70 = 55 | CES95 = 65 |
| CES21 = 86 | CES46 = 82 | CES71 = 48 | CES96 = 76 |
| CES22 = 78 | CES47 = 86 | CES72 = 83 | CES97 = 84 |
| CES23 = 92 | CES48 = 77 | CES73 = 45 | CES98 = 75 |
| CES24 = 91 | CES49 = 80 | CES74 = 93 | CES99 = 62 |
| CES25 = 72 | CES50 = 88 | CES75 = 51 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)