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: P1360755

Luminaire Tested: **GSS-SB6A-730-U-T1**

Issue Date: 02/18/2026

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: | P1360755 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB6A-730-U-T1 |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 6SQUARE 170W 70CRI 3000K FIXTURE w/ TYPE I DISTRIBUTION OPTIC |
| Light Source: | (156) 3000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 25800.7 lumens |
| Efficiency: | N/A |
| Efficacy: | 151.8 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type I - Short |
| BUG Rating: | B4 - U0 - G4 |

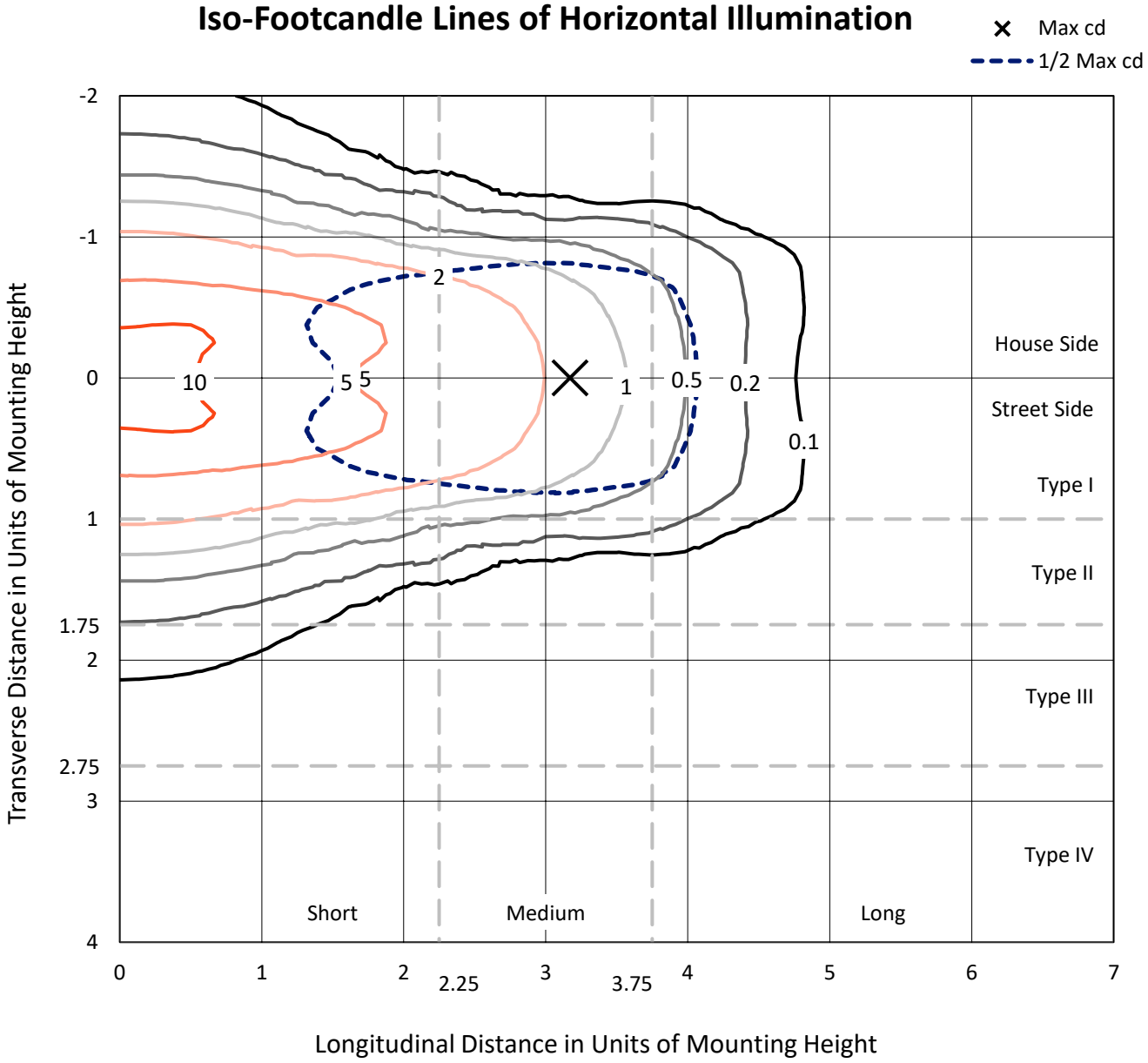
| | |
|---|---|
| Input Watts (W): | 170 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 12.0% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1360755
CATALOG NUMBER: GSS-SB6A-730-U-T1

## Iso-Footcandle Lines of Horizontal Illumination



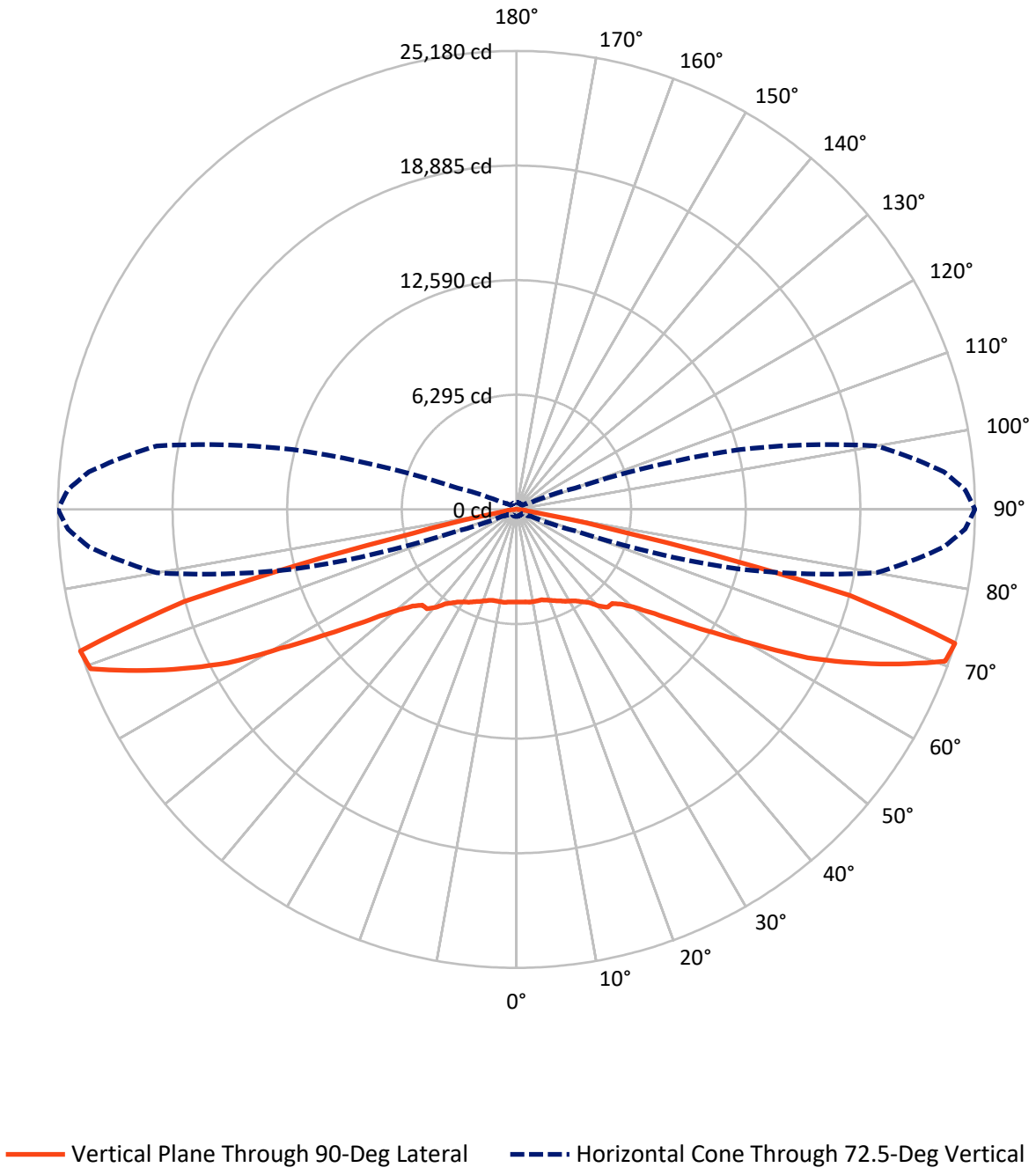

Based on 20 foot mounting height. Maximum calculated value = 12.7 fc
Type I - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

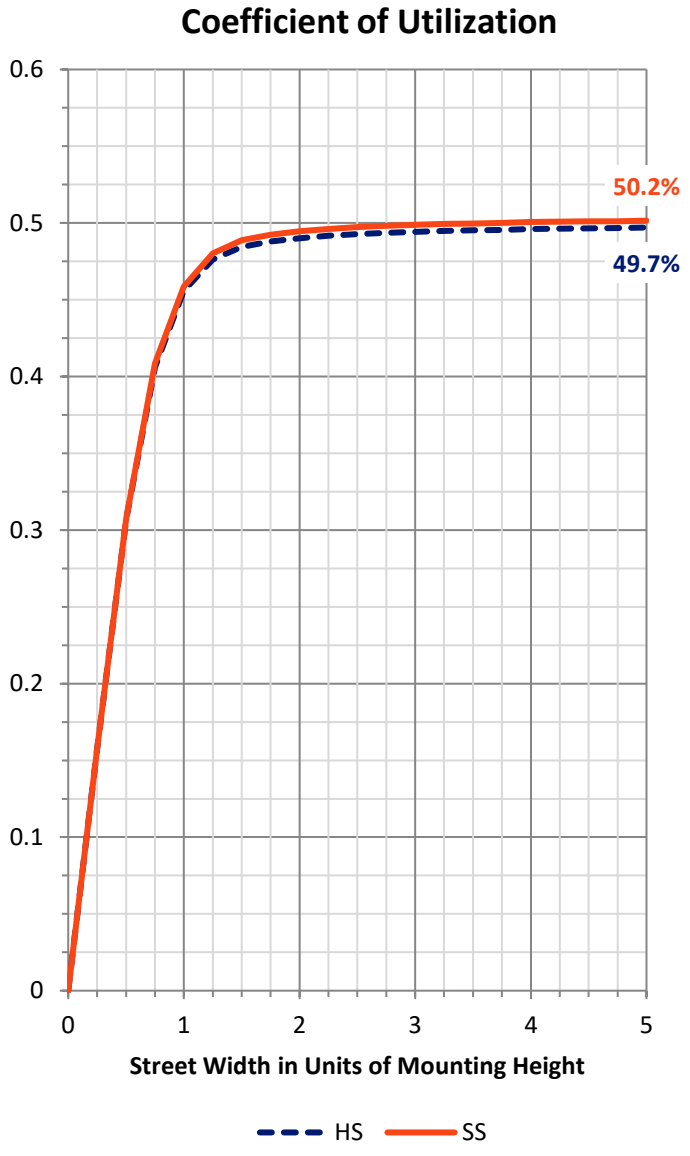
REPORT NUMBER: P1360755
CATALOG NUMBER: GSS-SB6A-730-U-T1

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 12900.3 | 0.0 | 12900.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 12900.3 | 0.0 | 12900.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 25800.7 | 0.0 | 25800.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 492.0 | 1.9 |
| 10°-20° | 1499.6 | 5.8 |
| 20°-30° | 2506.5 | 9.7 |
| 30°-40° | 3456.6 | 13.4 |
| 40°-50° | 4237.4 | 16.4 |
| 50°-60° | 4965.6 | 19.2 |
| 60°-70° | 5514.3 | 21.4 |
| 70°-80° | 2998.7 | 11.6 |
| 80°-90° | 129.9 | 0.5 |
| 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° | 25800.7 | 100.0 |
| 0°-180° | 25800.7 | 100.0 |



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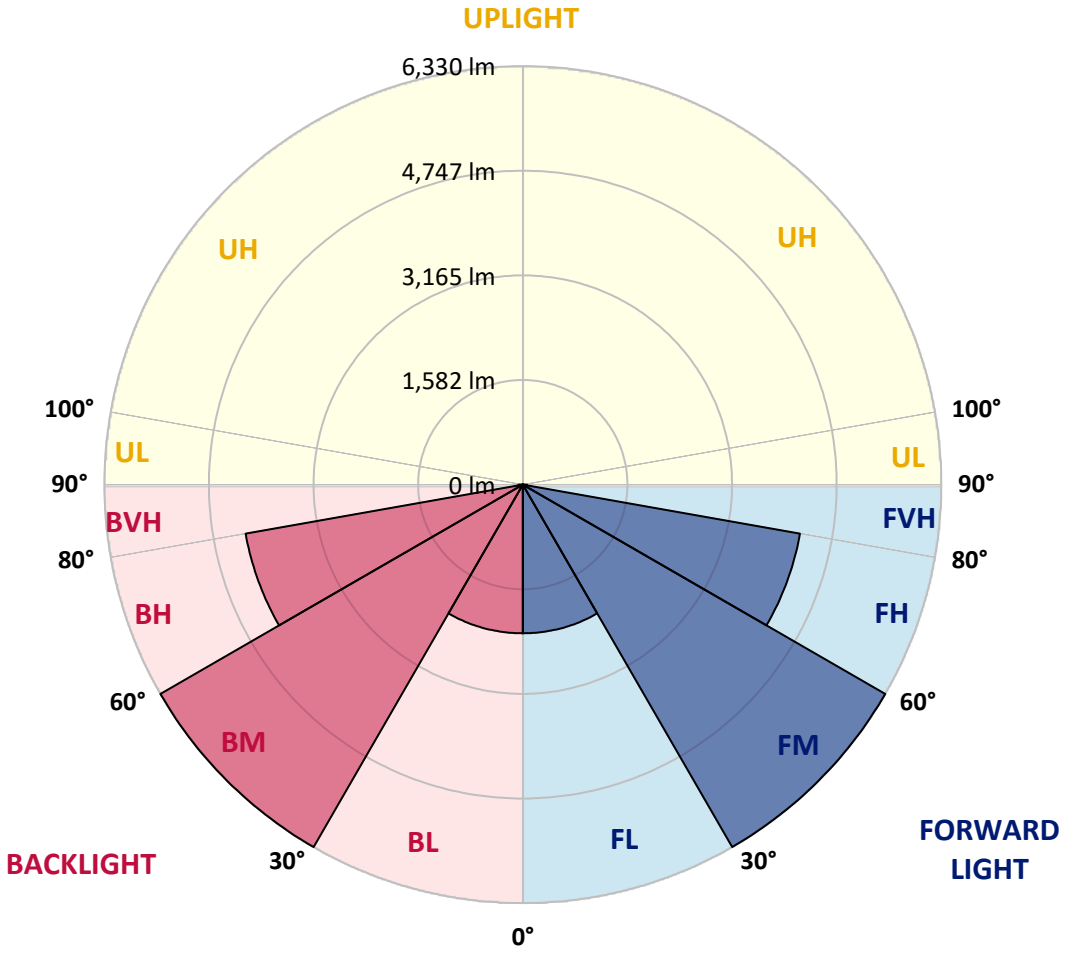
Scaled Data Report

REPORT NUMBER: P1360755
CATALOG NUMBER: GSS-SB6A-730-U-T1

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 2249.1 | 8.7 | | | |
| FM | (30°-60°) | 6329.8 | 24.5 | | | |
| FH | (60°-80°) | 4256.5 | 16.5 | | | G2/5000 |
| FVH | (80°-90°) | 65.0 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 2249.1 | 8.7 | B3/2500 | | |
| BM | (30°-60°) | 6329.8 | 24.5 | B4/8500 | | |
| BH | (60°-80°) | 4256.5 | 16.5 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 65.0 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B4-U0-G4**
Type I Short



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REPORT NUMBER: P1360755
CATALOG NUMBER: GSS-SB6A-730-U-T1

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 80° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 5083.4 | 5083.4 | 5083.4 | 5083.4 | 5083.4 | 5083.4 | 5083.4 | 5083.4 | 5083.4 | 5083.4 | 5083.4 |
| 2.5° | 5089.0 | 5089.0 | 5072.1 | 5094.7 | 5083.4 | 5089.0 | 5094.7 | 5089.0 | 5083.4 | 5089.0 | 5094.7 |
| 5° | 5117.3 | 5106.0 | 5117.3 | 5128.6 | 5111.6 | 5122.9 | 5117.3 | 5089.0 | 5106.0 | 5106.0 | 5106.0 |
| 7.5° | 5168.1 | 5179.4 | 5168.1 | 5196.3 | 5179.4 | 5213.3 | 5179.4 | 5156.8 | 5151.2 | 5145.5 | 5145.5 |
| 10° | 5190.7 | 5190.7 | 5185.0 | 5235.9 | 5247.2 | 5281.1 | 5258.5 | 5224.6 | 5207.6 | 5185.0 | 5162.5 |
| 12.5° | 5128.6 | 5139.9 | 5168.1 | 5264.1 | 5309.3 | 5377.1 | 5360.1 | 5292.4 | 5241.5 | 5224.6 | 5190.7 |
| 15° | 5060.8 | 5072.1 | 5128.6 | 5247.2 | 5354.5 | 5456.2 | 5450.5 | 5365.8 | 5303.7 | 5258.5 | 5207.6 |
| 17.5° | 4953.5 | 4970.4 | 5049.5 | 5230.2 | 5422.3 | 5535.2 | 5569.1 | 5484.4 | 5416.6 | 5343.2 | 5275.4 |
| 20° | 4772.7 | 4772.7 | 4913.9 | 5145.5 | 5411.0 | 5665.1 | 5755.5 | 5687.7 | 5608.7 | 5490.0 | 5399.7 |
| 22.5° | 4569.4 | 4580.7 | 4721.9 | 5026.9 | 5405.3 | 5778.1 | 5953.2 | 5879.8 | 5800.7 | 5670.8 | 5535.2 |
| 25° | 4366.1 | 4366.1 | 4524.2 | 4868.7 | 5331.9 | 5857.2 | 6184.8 | 6145.2 | 5987.1 | 5868.5 | 5693.4 |
| 27.5° | 4179.7 | 4179.7 | 4349.1 | 4710.6 | 5207.6 | 5879.8 | 6416.4 | 6416.4 | 6241.3 | 6066.2 | 5874.1 |
| 30° | 3959.4 | 4015.9 | 4207.9 | 4586.3 | 5094.7 | 5840.2 | 6585.8 | 6693.1 | 6535.0 | 6309.0 | 6026.6 |
| 32.5° | 3773.0 | 3812.5 | 4010.2 | 4411.2 | 4930.9 | 5795.0 | 6777.8 | 7043.3 | 6879.5 | 6568.9 | 6252.6 |
| 35° | 3552.7 | 3547.1 | 3773.0 | 4168.4 | 4699.3 | 5693.4 | 6930.3 | 7461.3 | 7303.1 | 6969.9 | 6540.6 |
| 37.5° | 3264.7 | 3264.7 | 3496.2 | 3880.3 | 4479.0 | 5518.3 | 7054.6 | 7924.4 | 7805.8 | 7427.4 | 6969.9 |
| 40° | 2954.0 | 2987.9 | 3191.2 | 3581.0 | 4213.6 | 5309.3 | 7054.6 | 8302.8 | 8365.0 | 7975.3 | 7500.8 |
| 42.5° | 2728.1 | 2739.4 | 2925.8 | 3292.9 | 3919.8 | 5038.2 | 6964.2 | 8630.4 | 8816.8 | 8489.2 | 7873.6 |
| 45° | 2490.9 | 2519.1 | 2677.2 | 3016.1 | 3614.8 | 4716.2 | 6806.1 | 8997.6 | 9296.9 | 9071.0 | 8263.3 |
| 47.5° | 2202.8 | 2231.0 | 2411.8 | 2756.3 | 3326.8 | 4366.1 | 6540.6 | 9381.7 | 10008.6 | 9844.8 | 8958.0 |
| 50° | 1869.6 | 1892.1 | 2061.6 | 2428.7 | 3004.8 | 3965.0 | 6207.4 | 9669.7 | 10720.3 | 10884.1 | 10008.6 |
| 52.5° | 1462.9 | 1479.8 | 1660.6 | 2016.4 | 2620.8 | 3581.0 | 5738.6 | 9844.8 | 11437.6 | 12013.7 | 11415.0 |
| 55° | 1050.6 | 1078.8 | 1237.0 | 1530.7 | 2112.4 | 3067.0 | 5179.4 | 9935.2 | 12222.7 | 13352.3 | 13160.3 |
| 57.5° | 756.9 | 768.2 | 875.5 | 1101.4 | 1570.2 | 2462.6 | 4462.1 | 9782.7 | 12928.7 | 14950.8 | 15351.8 |
| 60° | 626.9 | 626.9 | 643.9 | 751.2 | 1073.2 | 1739.6 | 3603.5 | 9217.9 | 13533.1 | 16566.2 | 17803.1 |
| 62.5° | 576.1 | 576.1 | 587.4 | 604.4 | 706.0 | 1129.6 | 2575.6 | 8071.3 | 13600.9 | 18119.4 | 20491.7 |
| 65° | 525.3 | 525.3 | 536.6 | 547.9 | 570.5 | 734.3 | 1553.3 | 5908.0 | 12273.5 | 18136.4 | 21937.6 |
| 67.5° | 480.1 | 480.1 | 485.7 | 491.4 | 502.7 | 536.6 | 852.9 | 3581.0 | 9822.2 | 17656.3 | 22491.1 |
| 70° | 434.9 | 434.9 | 434.9 | 429.3 | 446.2 | 451.9 | 564.8 | 1818.7 | 6568.9 | 15944.9 | 22225.7 |
| 72.5° | *384.1* | *384.1* | *378.4* | *367.1* | *372.8* | *372.8* | *418.0* | *892.4* | *3411.5* | *12674.6* | *20068.0* |
| 75° | 327.6 | 333.2 | 310.7 | 299.4 | 293.7 | 299.4 | 333.2 | 508.3 | 1525.0 | 7687.2 | 14996.0 |
| 77.5° | 276.8 | 288.1 | 254.2 | 231.6 | 225.9 | 225.9 | 259.8 | 316.3 | 655.2 | 2790.2 | 6721.4 |
| 80° | 209.0 | 214.6 | 186.4 | 163.8 | 163.8 | 158.1 | 192.0 | 231.6 | 310.7 | 830.3 | 1508.1 |
| 82.5° | 118.6 | 118.6 | 107.3 | 96.0 | 90.4 | 96.0 | 129.9 | 158.1 | 192.0 | 293.7 | 412.3 |
| 85° | 28.2 | 28.2 | 33.9 | 39.5 | 39.5 | 50.8 | 73.4 | 84.7 | 101.7 | 118.6 | 158.1 |
| 87.5° | 5.6 | 5.6 | 5.6 | 11.3 | 16.9 | 16.9 | 28.2 | 39.5 | 50.8 | 62.1 | 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 |

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Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1360755
CATALOG NUMBER: GSS-SB6A-730-U-T1

**CANDELA DISTRIBUTION (continued):**

| | 85° | 87.5° | 90° |
|---|---|---|---|
| 0° | 5083.4 | 5083.4 | *5083.4* |
| 2.5° | 5094.7 | 5100.3 | *5094.7* |
| 5° | 5128.6 | 5117.3 | *5100.3* |
| 7.5° | 5134.2 | 5139.9 | *5145.5* |
| 10° | 5156.8 | 5179.4 | *5145.5* |
| 12.5° | 5179.4 | 5162.5 | *5151.2* |
| 15° | 5196.3 | 5190.7 | *5156.8* |
| 17.5° | 5258.5 | 5235.9 | *5230.2* |
| 20° | 5354.5 | 5348.8 | *5331.9* |
| 22.5° | 5467.5 | 5456.2 | *5450.5* |
| 25° | 5631.3 | 5591.7 | *5569.1* |
| 27.5° | 5766.8 | 5732.9 | *5721.6* |
| 30° | 5902.4 | 5834.6 | *5834.6* |
| 32.5° | 6021.0 | 6004.0 | *5992.7* |
| 35° | 6303.4 | 6218.7 | *6230.0* |
| 37.5° | 6647.9 | 6563.2 | *6489.8* |
| 40° | 7133.7 | 7020.7 | *6975.5* |
| 42.5° | 7444.3 | 7331.4 | *7342.7* |
| 45° | 7619.4 | 7421.7 | *7370.9* |
| 47.5° | 8093.9 | 7845.3 | *7777.6* |
| 50° | 8862.0 | 8557.0 | *8472.3* |
| 52.5° | 10104.6 | 9613.2 | *9500.3* |
| 55° | 11663.5 | 11059.2 | *10946.2* |
| 57.5° | 13798.5 | 12996.5 | *12753.6* |
| 60° | 16396.7 | 15402.6 | *15035.5* |
| 62.5° | 19520.2 | 18294.5 | *17944.3* |
| 65° | 21869.8 | 20847.5 | *20305.3* |
| 67.5° | 23750.7 | 22909.1 | *22649.3* |
| 70° | 24869.0 | 24908.5 | *24976.3* |
| 72.5° | *23575.6* | *24660.0* | *25179.7* |
| 75° | 17277.8 | 18119.4 | *18927.1* |
| 77.5° | 6676.2 | 6021.0 | *5828.9* |
| 80° | 1078.8 | 1011.0 | *1044.9* |
| 82.5° | 485.7 | 514.0 | *542.2* |
| 85° | 316.3 | 367.1 | *389.7* |
| 87.5° | 73.4 | 73.4 | *73.4* |
| 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: SP1-2407-184-4

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-730-U-5WQ

Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

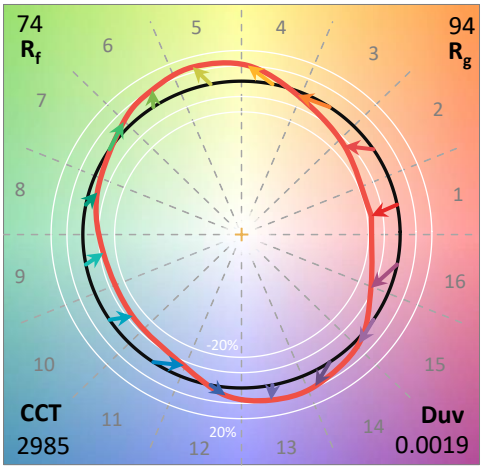
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/15/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGraw-Edison |
| Catalog Number: | **GSS-SB1A-730-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3000K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 2985 |
| CIE u': | 0.2504 |
| CIE v': | 0.5243 |
| Duv: | 0.0019 |
| CIE x: | 0.4408 |
| CIE y: | 0.4101 |
| CIE z: | 0.1491 |
| Peak Wavelength (nm): | 595 |
| Dominant Wavelength (nm): | 582 |
| Purity: | 55.41818 |
| Rf: | 73.8 |
| Rg: | 94.4 |

| | |
|---|---|
| CRI (Ra): | 70.8 |
| R1: | 66.3 |
| R2: | 80.6 |
| R3: | 94.5 |
| R4: | 68.2 |
| R5: | 66.5 |
| R6: | 74.7 |
| R7: | 76.2 |
| R8: | 39.6 |
| R9: | -43.2 |
| R10: | 57.6 |
| R11: | 64.8 |
| R12: | 53.5 |
| R13: | 68.7 |
| R14: | 97.0 |
| R15: | 56.4 |




## Test Conditions

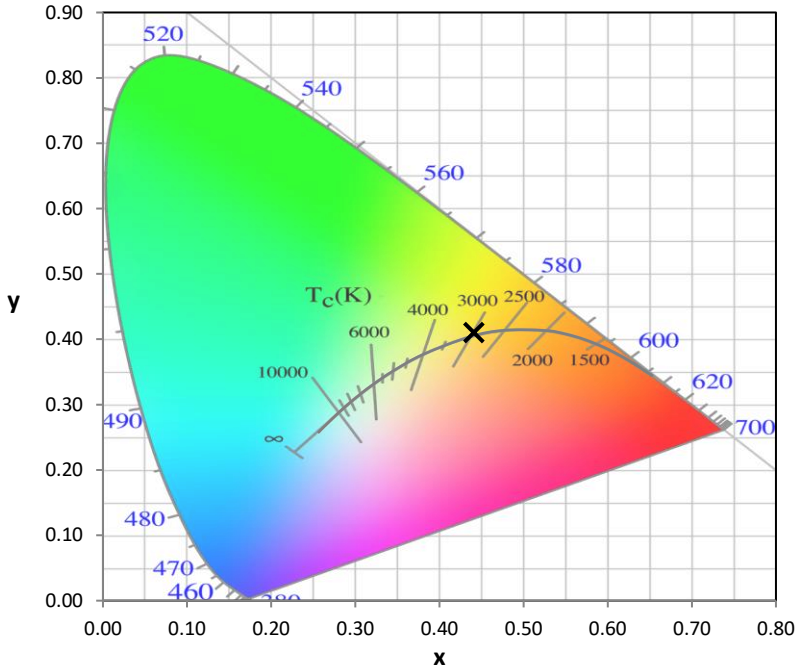
| | |
|---|---|
| Stabilization Time: | 36M |
| Operation Time: | 1H 36M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-4

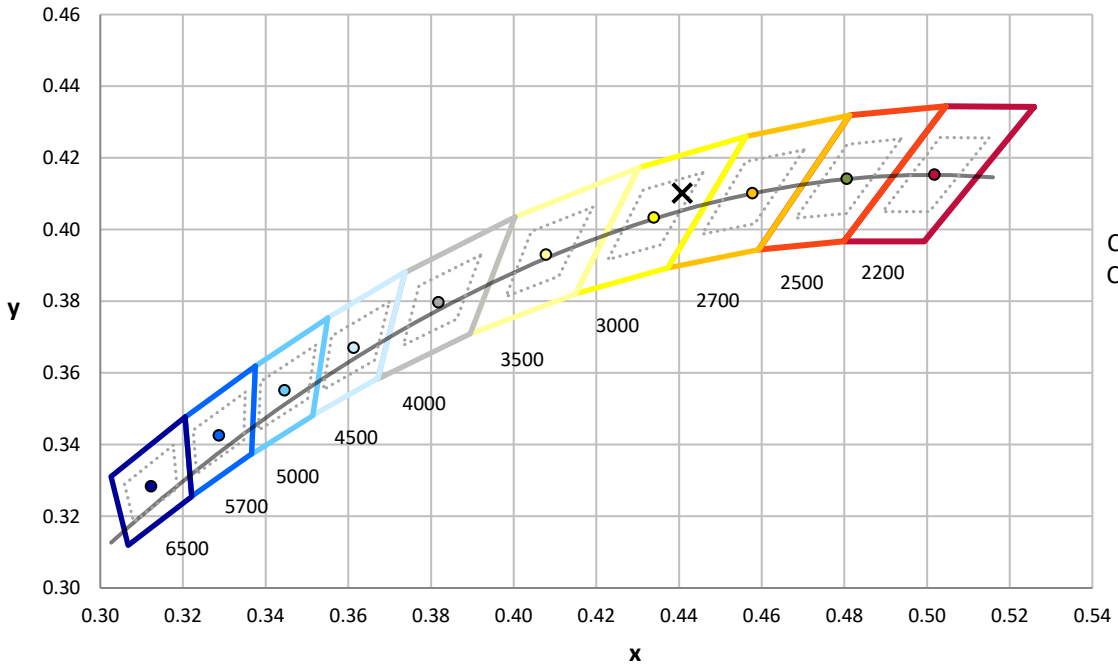
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC 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: SP1-2407-184-4

## CIE 1931 Chromaticity Diagram




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

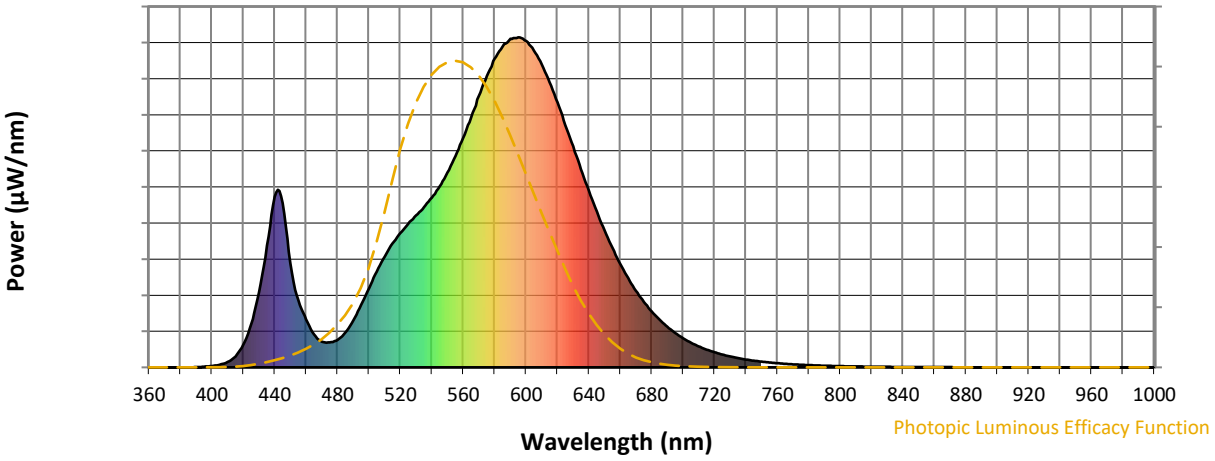



CCT = 2985K
CIE x = 0.4408
CIE y = 0.4101
Duv = 0.0019

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

## Photopic Flux vs. Wavelength

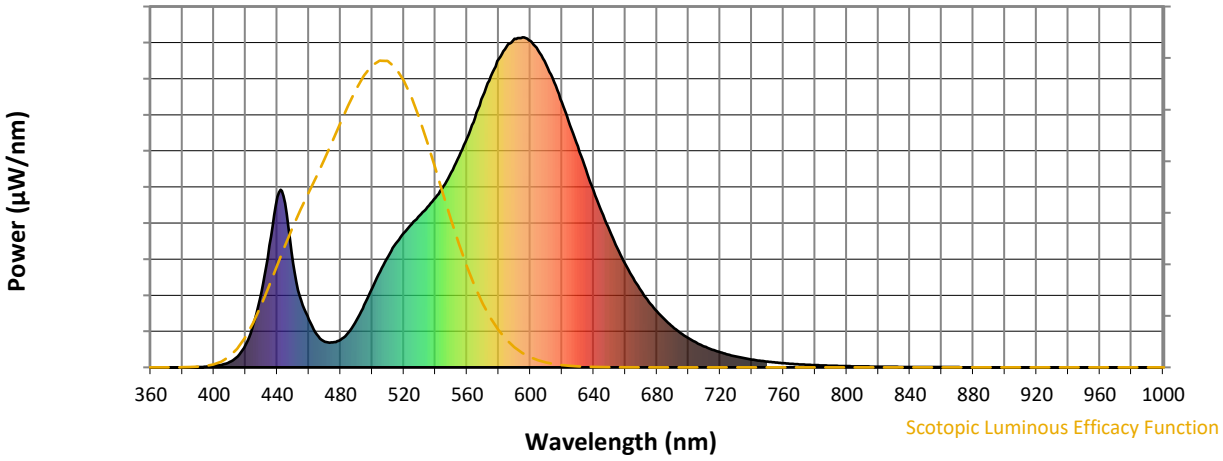



## Photopic Lumens: NR

| 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 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

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## Scotopic Flux vs. Wavelength

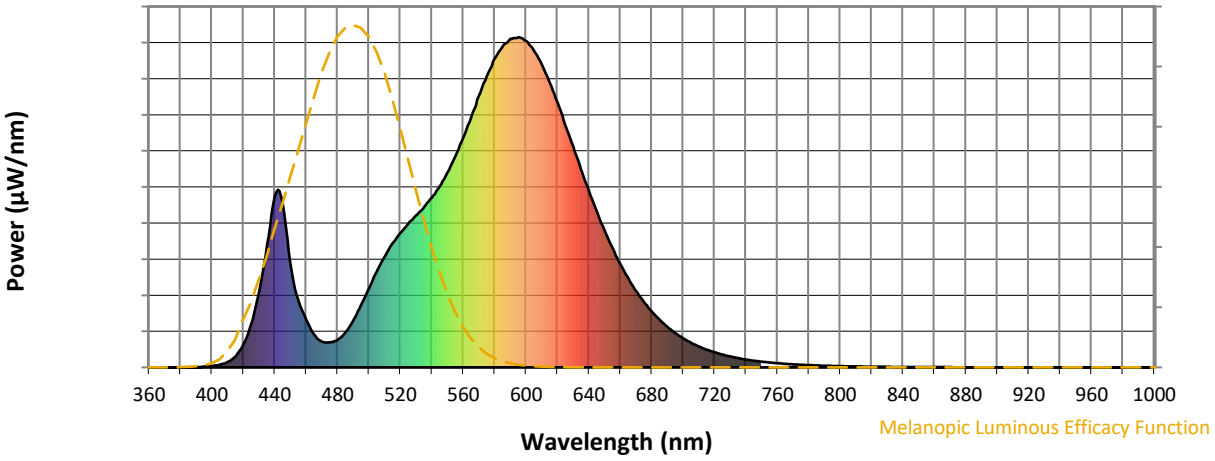



**Scotopic Lumens: NR** **S/P: 1.19**

| 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 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.13**

| 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 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

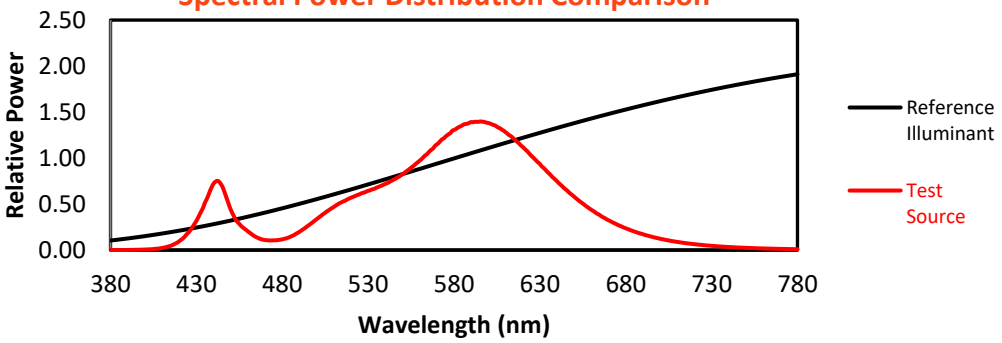
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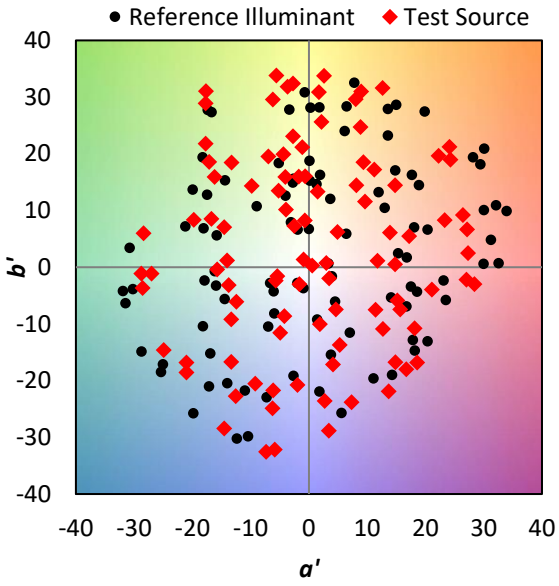
## Summary

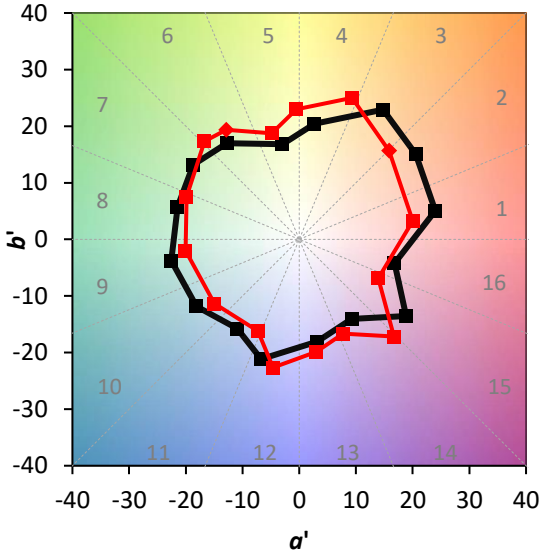
$R_f$ = 73.8
$R_g$ = 94.4
CIE $R_a$ = 70.8
$R_9$ = -43.2

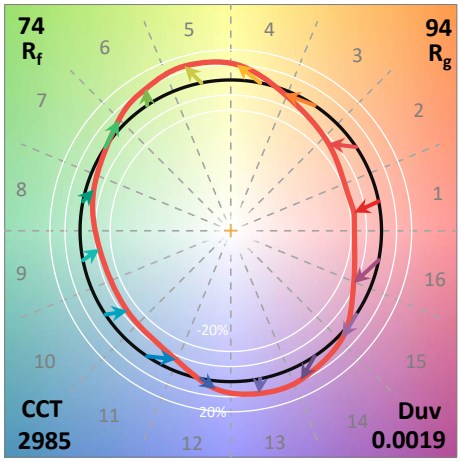
## Spectral Power Distribution Comparison

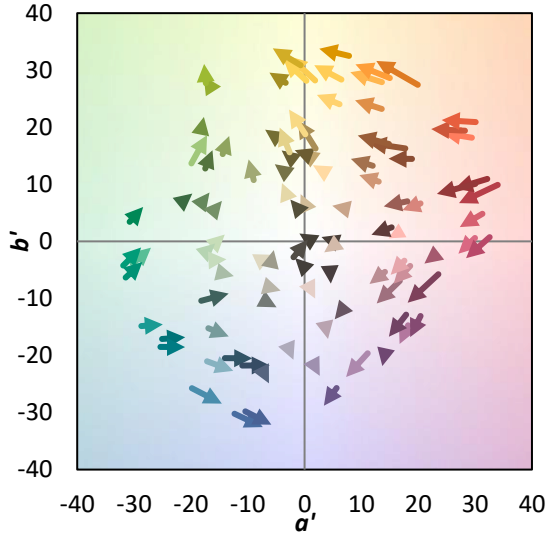



## Color Vector Graphics



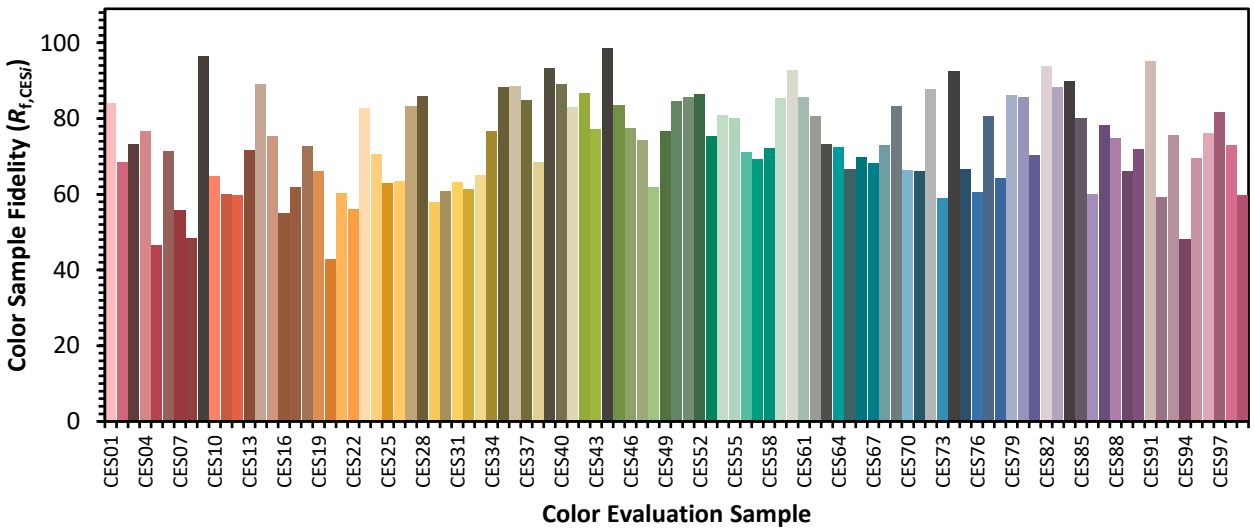



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**Individual Sample Fidelity Index ($R_{f,i}$)**

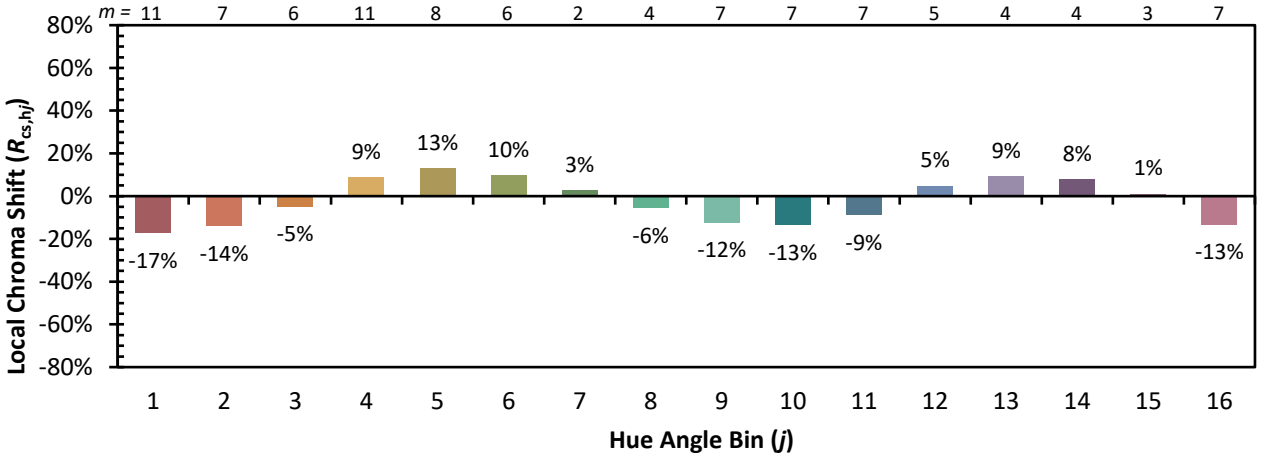
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 63 | CES51 = 86 | CES76 = 61 |
| CES02 = 62 | CES27 = 83 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 86 | CES53 = 75 | CES78 = 64 |
| CES04 = 71 | CES29 = 58 | CES54 = 81 | CES79 = 86 |
| CES05 = 49 | CES30 = 61 | CES55 = 80 | CES80 = 86 |
| CES06 = 51 | CES31 = 63 | CES56 = 71 | CES81 = 70 |
| CES07 = 41 | CES32 = 61 | CES57 = 69 | CES82 = 94 |
| CES08 = 40 | CES33 = 65 | CES58 = 72 | CES83 = 88 |
| CES09 = 29 | CES34 = 77 | CES59 = 85 | CES84 = 90 |
| CES10 = 76 | CES35 = 88 | CES60 = 93 | CES85 = 80 |
| CES11 = 59 | CES36 = 89 | CES61 = 86 | CES86 = 60 |
| CES12 = 65 | CES37 = 85 | CES62 = 81 | CES87 = 78 |
| CES13 = 43 | CES38 = 69 | CES63 = 73 | CES88 = 75 |
| CES14 = 74 | CES39 = 93 | CES64 = 72 | CES89 = 66 |
| CES15 = 71 | CES40 = 89 | CES65 = 67 | CES90 = 72 |
| CES16 = 47 | CES41 = 83 | CES66 = 70 | CES91 = 95 |
| CES17 = 50 | CES42 = 87 | CES67 = 68 | CES92 = 59 |
| CES18 = 56 | CES43 = 77 | CES68 = 73 | CES93 = 76 |
| CES19 = 73 | CES44 = 99 | CES69 = 83 | CES94 = 48 |
| CES20 = 66 | CES45 = 83 | CES70 = 66 | CES95 = 70 |
| CES21 = 87 | CES46 = 77 | CES71 = 66 | CES96 = 76 |
| CES22 = 79 | CES47 = 74 | CES72 = 88 | CES97 = 82 |
| CES23 = 92 | CES48 = 62 | CES73 = 59 | CES98 = 73 |
| CES24 = 91 | CES49 = 77 | CES74 = 93 | CES99 = 60 |
| CES25 = 73 | CES50 = 85 | CES75 = 67 | |

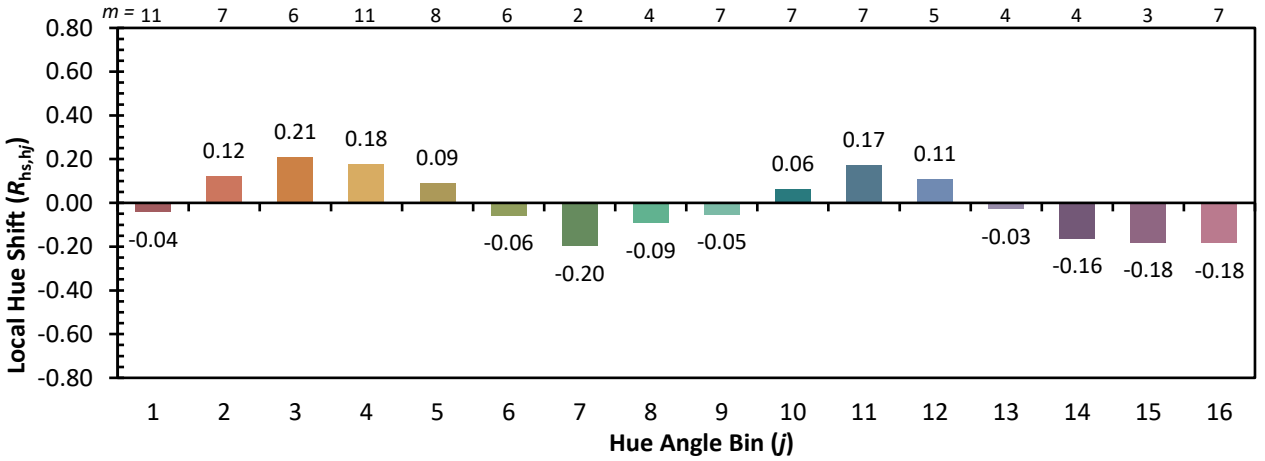


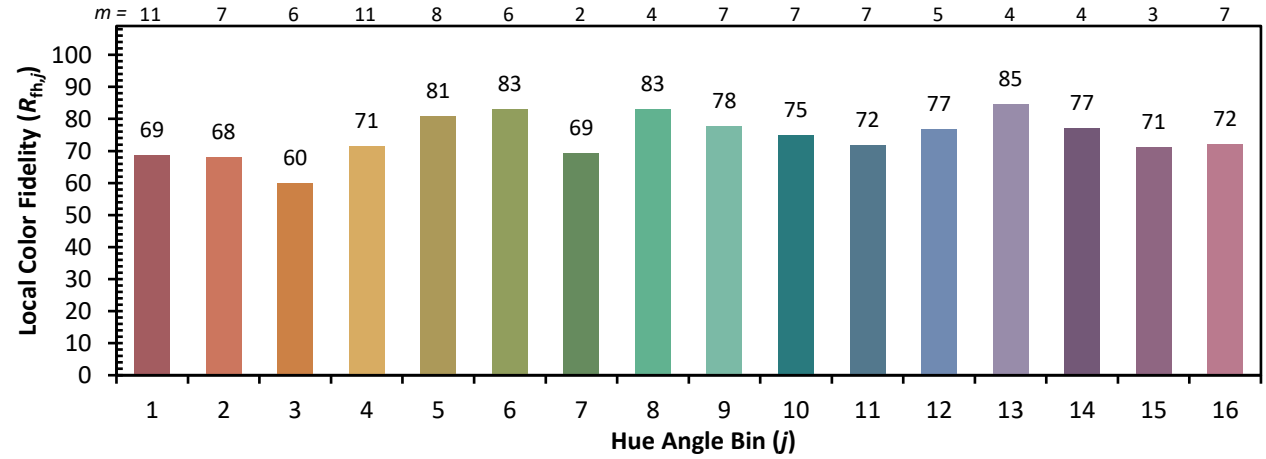
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## Color Rendition by Hue-Angle Bin



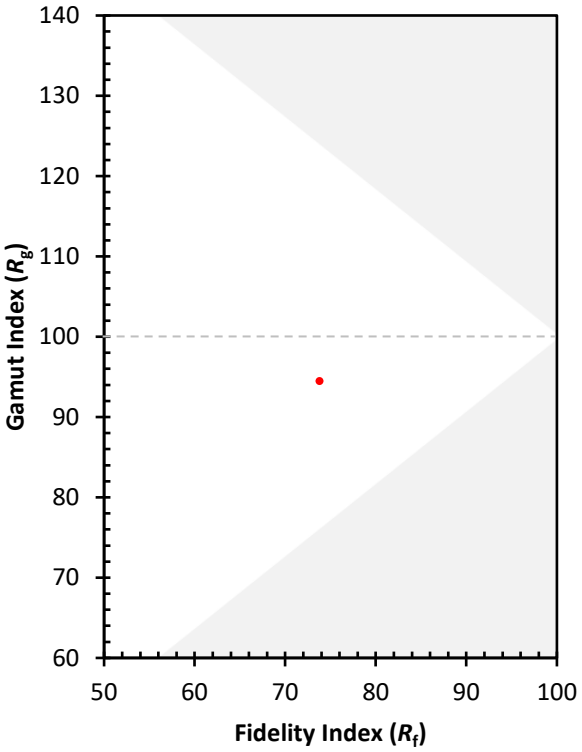



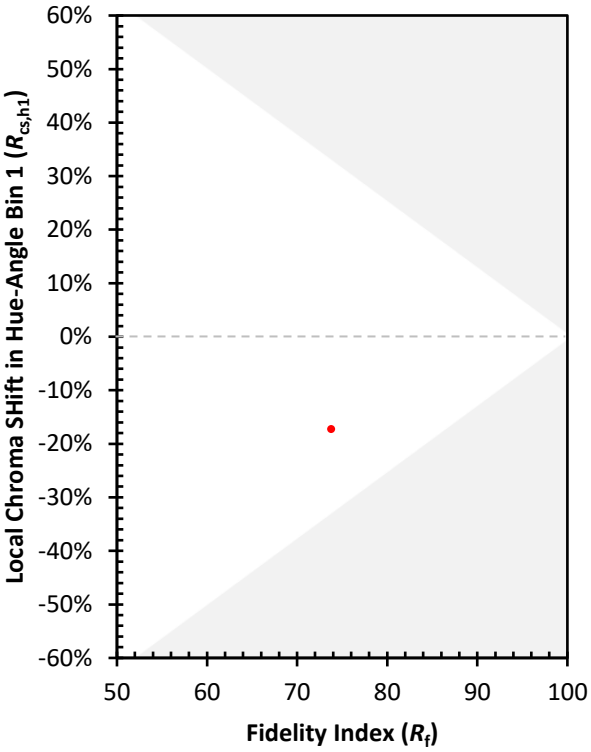



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## Measure Comparisons




(END OF REPORT)