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: P1361475

Luminaire Tested: **GSS-SB6A-722-U-5MQ**

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: | P1361475 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB6A-722-U-5MQ |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 6SQUARE 170W 70CRI 2200K FIXTURE w/ TYPE V SQUARE MEDIUM DISTRIBUTION OPTIC |
| Light Source: | (156) 2200K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 21818.2 lumens |
| Efficiency: | N/A |
| Efficacy: | 128.3 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type V - Short |
| BUG Rating: | B4 - U0 - G2 |

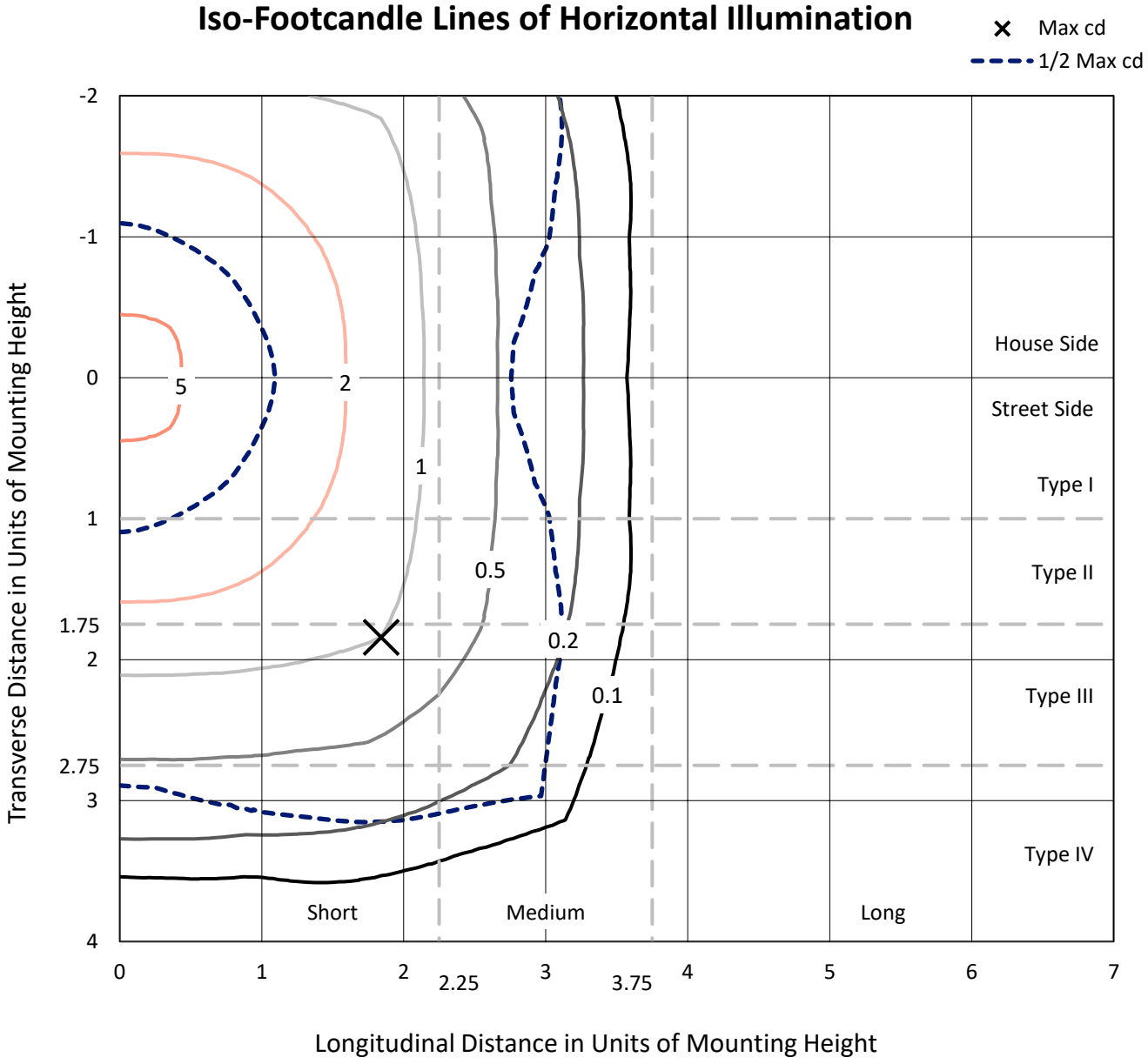
| | |
|---|---|
| Input Watts (W): | 170 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 12.0% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature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

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Scaled Data Report

REPORT NUMBER: P1361475
CATALOG NUMBER: GSS-SB6A-722-U-5MQ

## Iso-Footcandle Lines of Horizontal Illumination



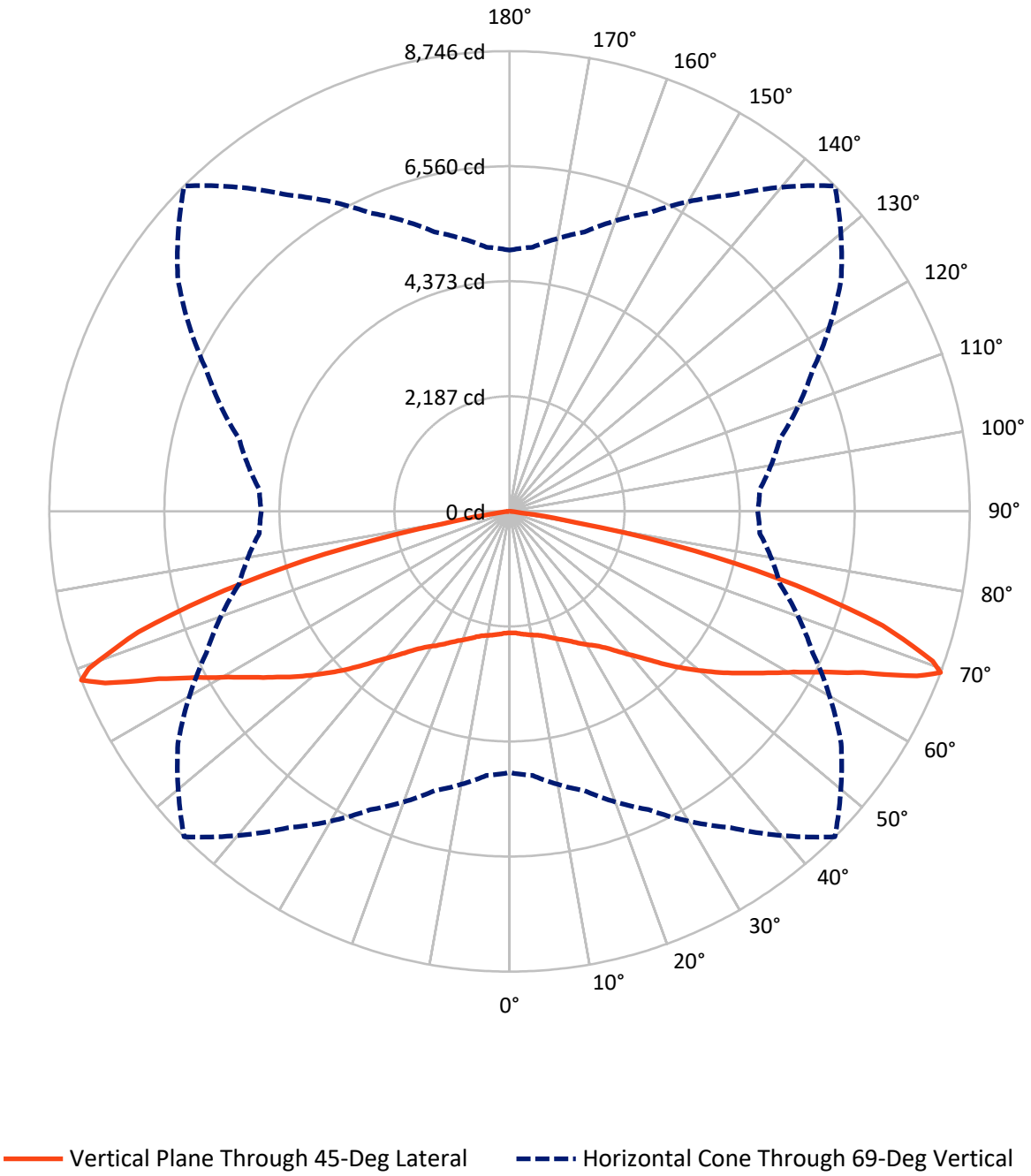

Based on 20 foot mounting height. Maximum calculated value = 5.8 fc
Type V - Short - N/A

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REPORT NUMBER: P1361475
CATALOG NUMBER: GSS-SB6A-722-U-5MQ

## Luminous Intensity Polar Plot



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Scaled Data Report

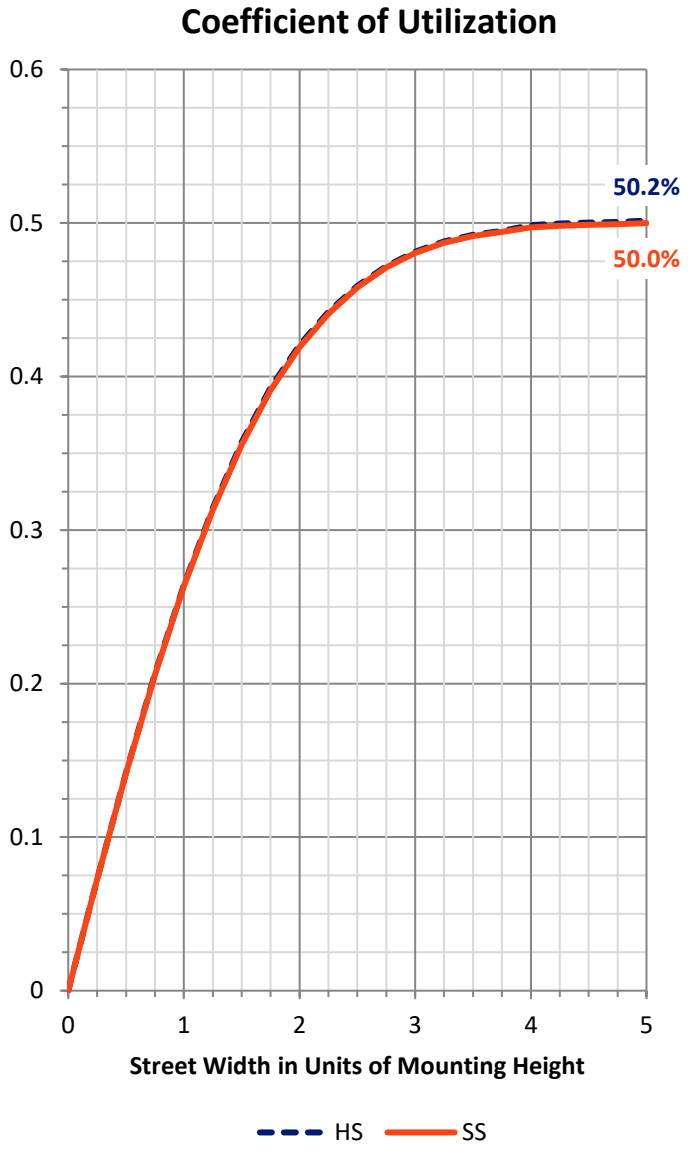
REPORT NUMBER: P1361475
CATALOG NUMBER: GSS-SB6A-722-U-5MQ

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 10909.1 | 0.0 | 10909.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 10909.1 | 0.0 | 10909.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 21818.2 | 0.0 | 21818.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 225.0 | 1.0 |
| 10°-20° | 698.4 | 3.2 |
| 20°-30° | 1253.0 | 5.7 |
| 30°-40° | 2017.0 | 9.2 |
| 40°-50° | 3219.5 | 14.8 |
| 50°-60° | 4770.7 | 21.9 |
| 60°-70° | 6126.4 | 28.1 |
| 70°-80° | 3393.5 | 15.6 |
| 80°-90° | 114.6 | 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° | 21818.2 | 100.0 |
| 0°-180° | 21818.2 | 100.0 |



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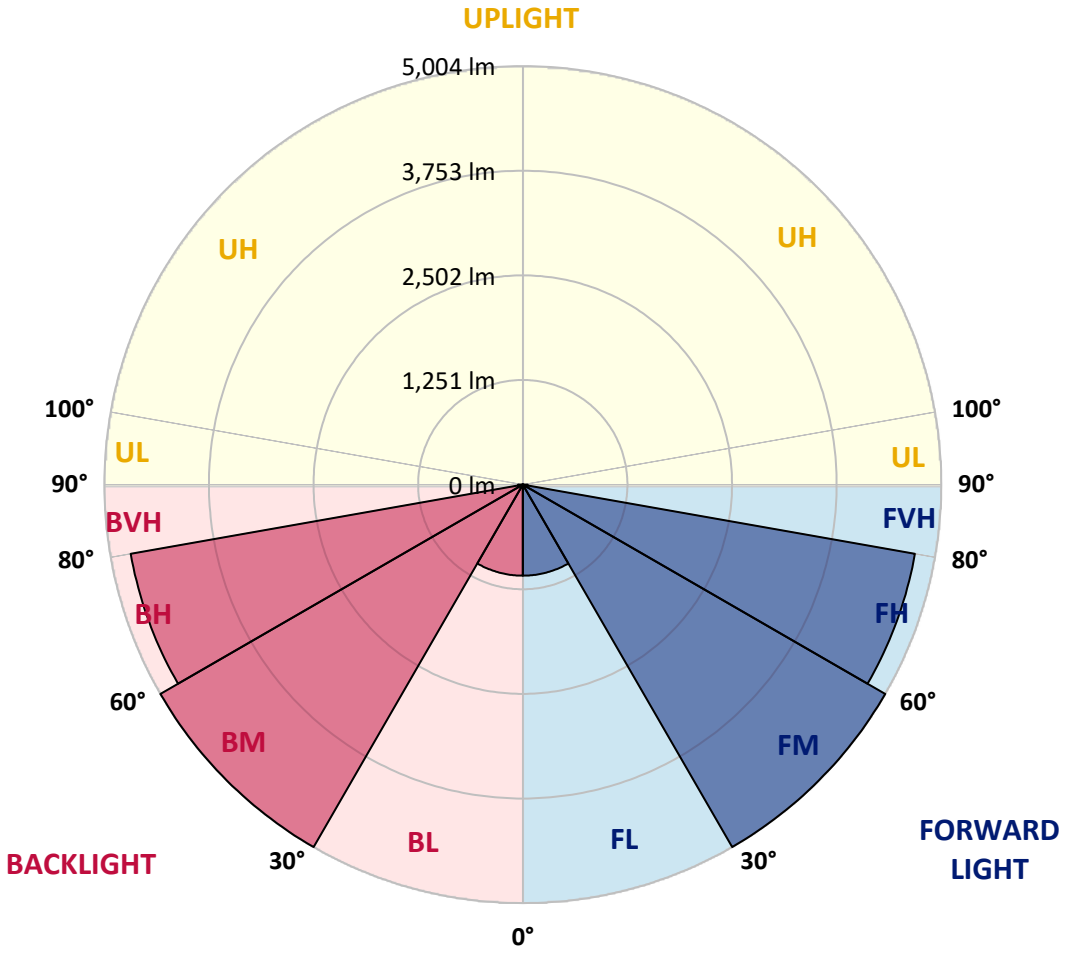
Scaled Data Report

REPORT NUMBER: P1361475
CATALOG NUMBER: GSS-SB6A-722-U-5MQ

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1088.2 | 5.0 | | | |
| FM | (30°-60°) | 5003.6 | 22.9 | | | |
| FH | (60°-80°) | 4759.9 | 21.8 | | | G2/5000 |
| FVH | (80°-90°) | 57.3 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 1088.2 | 5.0 | B3/2500 | | |
| BM | (30°-60°) | 5003.6 | 22.9 | B4/8500 | | |
| BH | (60°-80°) | 4759.9 | 21.8 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 57.3 | 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-G2**
Type V Short



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REPORT NUMBER: P1361475
CATALOG NUMBER: GSS-SB6A-722-U-5MQ

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2309.2 | 2309.2 | 2309.2 | 2309.2 | 2309.2 | 2309.2 | 2309.2 | 2309.2 | 2309.2 | 2309.2 | 2309.2 |
| 2.5° | 2334.3 | 2324.2 | 2324.2 | 2319.2 | 2314.2 | 2314.2 | 2319.2 | 2314.2 | 2324.2 | 2319.2 | 2319.2 |
| 5° | 2349.3 | 2339.3 | 2339.3 | 2344.3 | 2334.3 | 2339.3 | 2344.3 | 2334.3 | 2349.3 | 2339.3 | 2339.3 |
| 7.5° | 2369.3 | 2364.3 | 2359.3 | 2369.3 | 2364.3 | 2364.3 | 2374.3 | 2364.3 | 2374.3 | 2359.3 | 2354.3 |
| 10° | 2399.4 | 2384.4 | 2384.4 | 2389.4 | 2384.4 | 2389.4 | 2399.4 | 2389.4 | 2389.4 | 2379.3 | 2379.3 |
| 12.5° | 2419.4 | 2414.4 | 2409.4 | 2414.4 | 2414.4 | 2414.4 | 2419.4 | 2409.4 | 2414.4 | 2409.4 | 2404.4 |
| 15° | 2449.5 | 2444.5 | 2444.5 | 2444.5 | 2449.5 | 2459.5 | 2454.5 | 2439.5 | 2444.5 | 2434.4 | 2434.4 |
| 17.5° | 2494.6 | 2484.5 | 2489.5 | 2494.6 | 2504.6 | 2519.6 | 2504.6 | 2484.5 | 2484.5 | 2474.5 | 2469.5 |
| 20° | 2544.7 | 2539.6 | 2544.7 | 2554.7 | 2564.7 | 2584.7 | 2564.7 | 2544.7 | 2534.6 | 2524.6 | 2514.6 |
| 22.5° | 2599.8 | 2594.7 | 2609.8 | 2619.8 | 2629.8 | 2654.9 | 2634.8 | 2614.8 | 2589.7 | 2579.7 | 2574.7 |
| 25° | 2659.9 | 2654.9 | 2669.9 | 2699.9 | 2725.0 | 2740.0 | 2720.0 | 2684.9 | 2664.9 | 2644.8 | 2634.8 |
| 27.5° | 2725.0 | 2725.0 | 2750.0 | 2780.1 | 2815.1 | 2840.2 | 2820.2 | 2775.1 | 2735.0 | 2715.0 | 2710.0 |
| 30° | 2825.2 | 2825.2 | 2850.2 | 2890.3 | 2920.3 | 2940.4 | 2920.3 | 2885.3 | 2845.2 | 2825.2 | 2820.2 |
| 32.5° | 2960.4 | 2960.4 | 2990.5 | 3020.5 | 3035.5 | 3045.6 | 3040.6 | 3025.5 | 2990.5 | 2960.4 | 2950.4 |
| 35° | 3120.7 | 3125.7 | 3160.8 | 3185.8 | 3200.8 | 3190.8 | 3200.8 | 3190.8 | 3160.8 | 3135.7 | 3130.7 |
| 37.5° | 3326.1 | 3326.1 | 3361.1 | 3386.2 | 3376.2 | 3386.2 | 3386.2 | 3391.2 | 3376.2 | 3341.1 | 3326.1 |
| 40° | 3551.5 | 3556.5 | 3596.6 | 3611.6 | 3606.6 | 3596.6 | 3611.6 | 3626.6 | 3606.6 | 3571.5 | 3561.5 |
| 42.5° | 3801.9 | 3812.0 | 3842.0 | 3872.1 | 3862.1 | 3847.0 | 3877.1 | 3887.1 | 3852.0 | 3822.0 | 3822.0 |
| 45° | 4062.4 | 4062.4 | 4107.5 | 4162.6 | 4167.6 | 4142.6 | 4162.6 | 4167.6 | 4122.5 | 4082.5 | 4067.4 |
| 47.5° | 4327.9 | 4337.9 | 4398.0 | 4458.1 | 4478.2 | 4453.1 | 4468.2 | 4473.2 | 4398.0 | 4358.0 | 4332.9 |
| 50° | 4593.4 | 4608.4 | 4688.6 | 4783.7 | 4803.8 | 4763.7 | 4793.8 | 4773.7 | 4693.6 | 4608.4 | 4588.4 |
| 52.5° | 4808.8 | 4843.9 | 4964.1 | 5094.3 | 5149.4 | 5094.3 | 5134.4 | 5099.3 | 4964.1 | 4853.9 | 4818.8 |
| 55° | 5049.2 | 5074.3 | 5229.6 | 5399.9 | 5475.0 | 5424.9 | 5465.0 | 5404.9 | 5214.5 | 5079.3 | 5044.2 |
| 57.5° | 5284.7 | 5294.7 | 5470.0 | 5710.4 | 5830.7 | 5790.6 | 5795.6 | 5680.4 | 5475.0 | 5299.7 | 5249.6 |
| 60° | 5470.0 | 5500.1 | 5725.5 | 6006.0 | 6196.3 | 6201.3 | 6156.2 | 5980.9 | 5740.5 | 5540.1 | 5500.1 |
| 62.5° | 5229.6 | 5294.7 | 5700.4 | 6296.5 | 6607.1 | 6722.3 | 6587.0 | 6316.5 | 5795.6 | 5434.9 | 5374.8 |
| 65° | 5069.3 | 5109.3 | 5414.9 | 6141.2 | 7098.0 | 7383.5 | 7113.0 | 6276.5 | 5605.2 | 5319.7 | 5264.6 |
| 67.5° | 5174.5 | 5224.5 | 5565.2 | 6126.2 | 7213.2 | 8350.3 | 7428.6 | 6406.7 | 5720.5 | 5274.6 | 5219.5 |
| 69° | 4964.1 | 5039.2 | 5495.0 | 6256.4 | 7338.4 | 8746.0 | 7694.1 | 6356.6 | 5319.7 | 4773.7 | 4718.6 |
| 70° | 4723.6 | 4788.8 | 5279.6 | 6186.3 | 7518.7 | 8535.6 | 7799.3 | 6051.1 | 4929.0 | 4408.1 | 4358.0 |
| 72.5° | 3681.7 | 3751.9 | 4327.9 | 5465.0 | 7133.0 | 7418.6 | 6807.4 | 5054.2 | 4087.5 | 3621.6 | 3566.5 |
| 75° | 1217.2 | 1342.5 | 1888.5 | 3411.2 | 4588.4 | 5625.3 | 4398.0 | 3396.2 | 2194.0 | 1658.0 | 1492.7 |
| 77.5° | 260.5 | 280.5 | 490.9 | 876.6 | 1903.5 | 3601.6 | 2138.9 | 836.5 | 450.8 | 315.6 | 285.5 |
| 80° | 140.3 | 150.3 | 205.4 | 255.5 | 470.9 | 1287.4 | 410.8 | 225.4 | 215.4 | 155.3 | 145.3 |
| 82.5° | 90.2 | 90.2 | 115.2 | 140.3 | 180.3 | 240.4 | 160.3 | 135.2 | 120.2 | 85.2 | 85.2 |
| 85° | 50.1 | 50.1 | 55.1 | 70.1 | 70.1 | 75.1 | 70.1 | 65.1 | 55.1 | 50.1 | 45.1 |
| 87.5° | 30.1 | 35.1 | 35.1 | 30.1 | 30.1 | 30.1 | 30.1 | 30.1 | 30.1 | 35.1 | 30.1 |
| 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

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

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-2

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-722-U-5WQ

Data in this report applies to families of products including GSS-SB1A-722-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

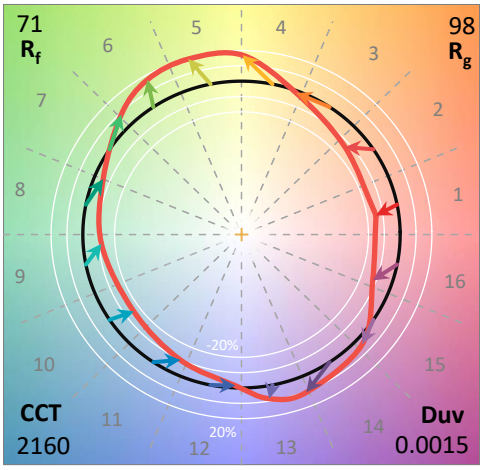
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-2 |
| 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-722-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 2200K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 2160 |
| CIE u': | 0.2927 |
| CIE v': | 0.5388 |
| Duv: | 0.0015 |
| CIE x: | 0.5130 |
| CIE y: | 0.4197 |
| CIE z: | 0.0674 |
| Peak Wavelength (nm): | 609 |
| Dominant Wavelength (nm): | 587 |
| Purity: | 79.96089 |
| Rf: | 70.6 |
| Rg: | 97.6 |

| | |
|---|---|
| CRI (Ra): | 71.9 |
| R1: | 68.7 |
| R2: | 82.6 |
| R3: | 95.5 |
| R4: | 66.4 |
| R5: | 65.4 |
| R6: | 75.9 |
| R7: | 77.2 |
| R8: | 43.5 |
| R9: | -17.8 |
| R10: | 60.5 |
| R11: | 60.2 |
| R12: | 48.2 |
| R13: | 70.7 |
| R14: | 96.8 |
| R15: | 61.8 |




## Test Conditions

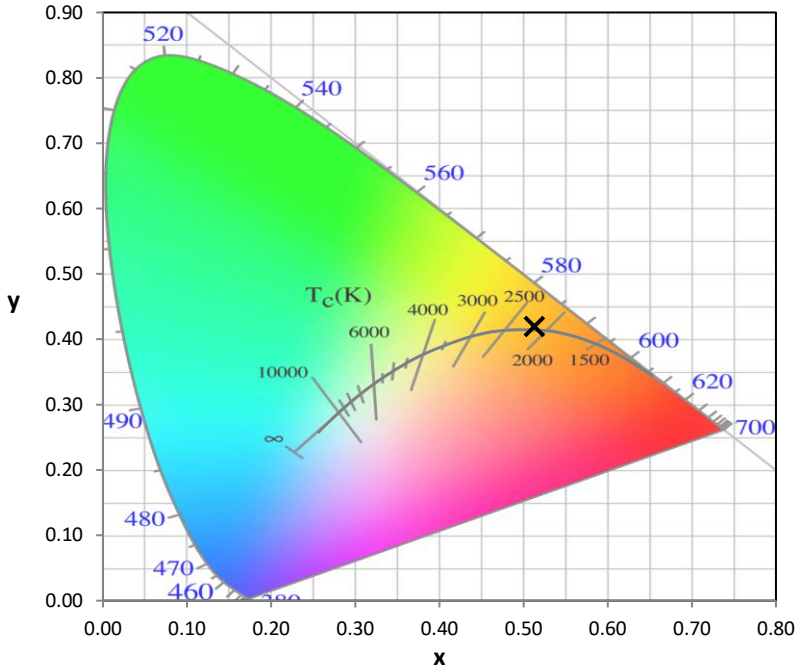
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-2

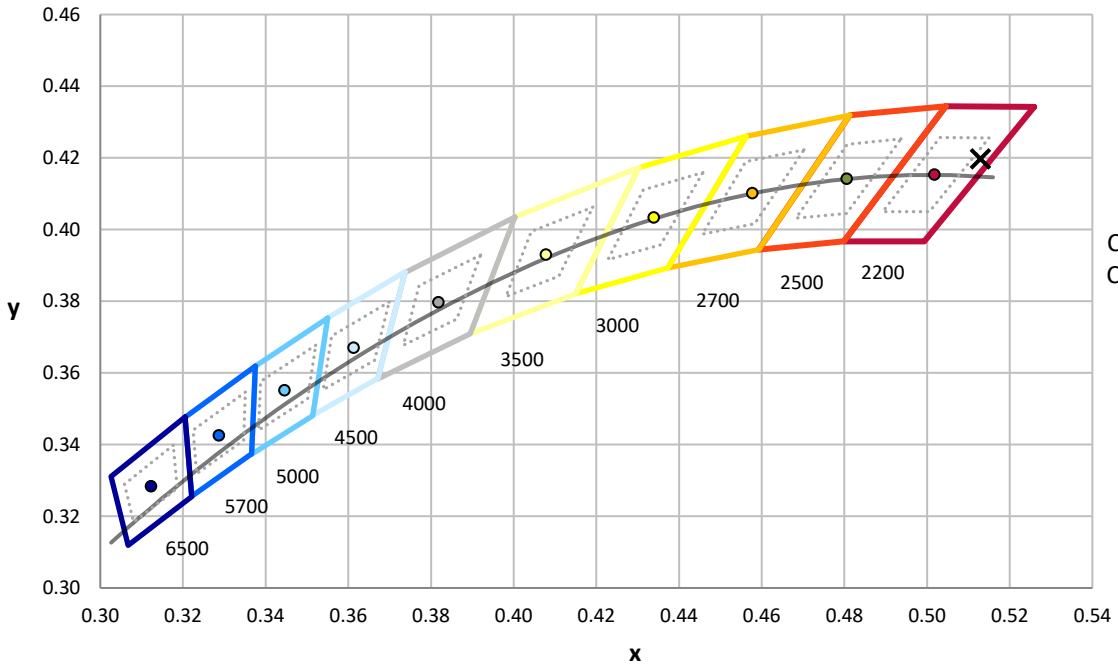
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

## CIE 1931 Chromaticity Diagram




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

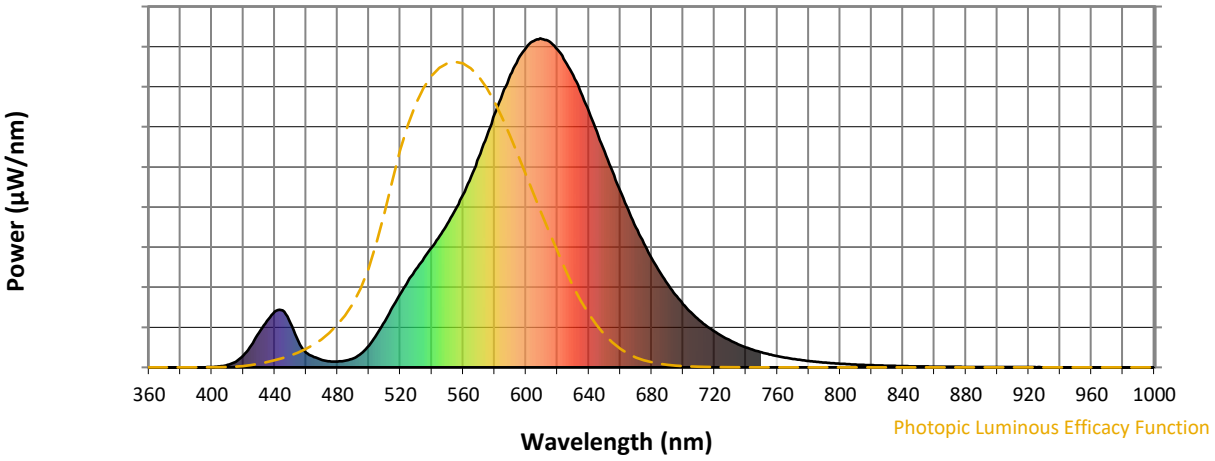



CCT = 2160K
CIE x = 0.5130
CIE y = 0.4197
Duv = 0.0015

Point lies inside the ANSI 2200K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-2

## Photopic Flux vs. Wavelength

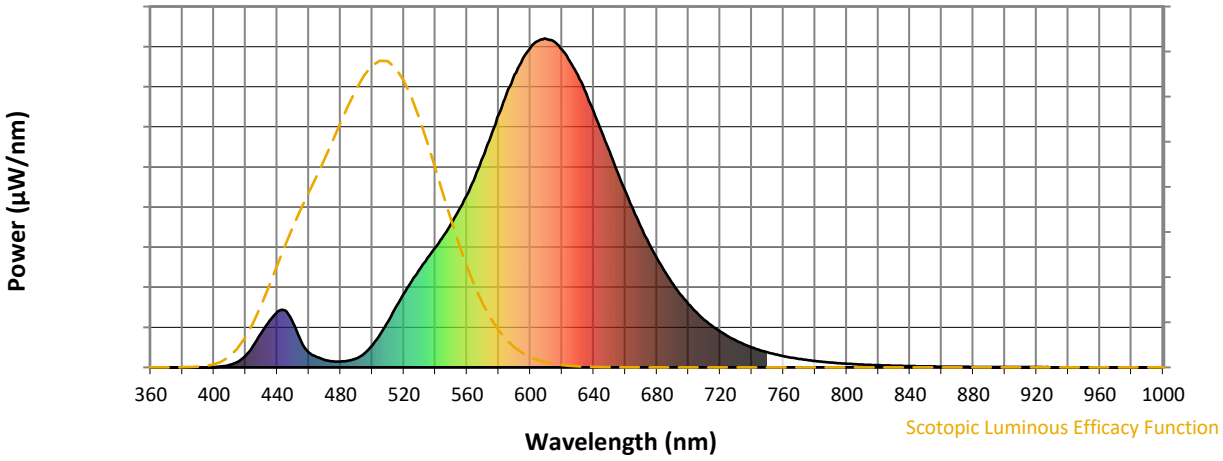



## Photopic Lumens: NR

| 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 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-2

## Scotopic Flux vs. Wavelength

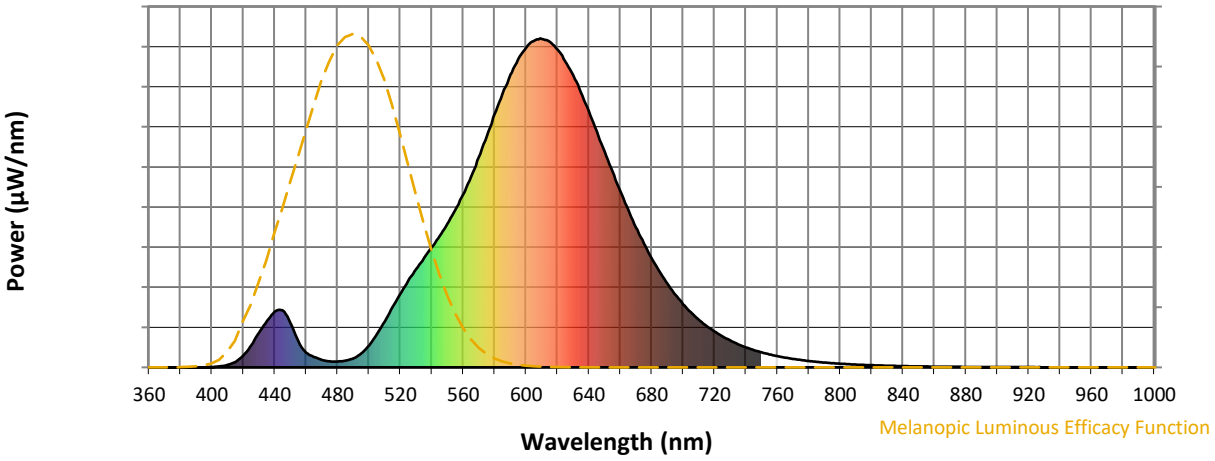



**Scotopic Lumens: NR** **S/P: 0.8**

| 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 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 1.21**

| 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 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

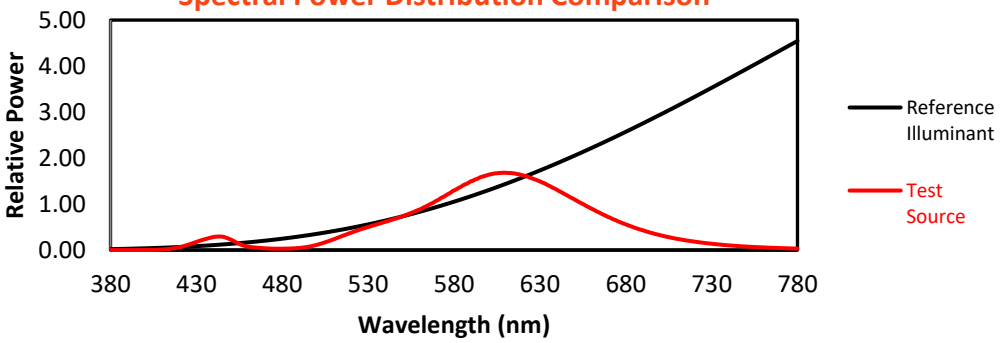
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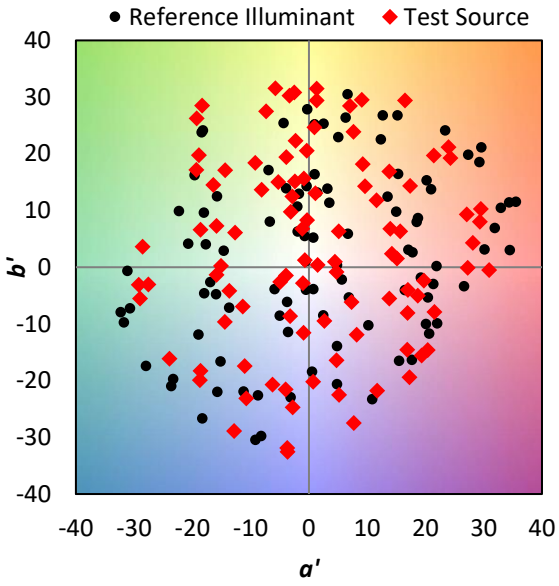
## Summary

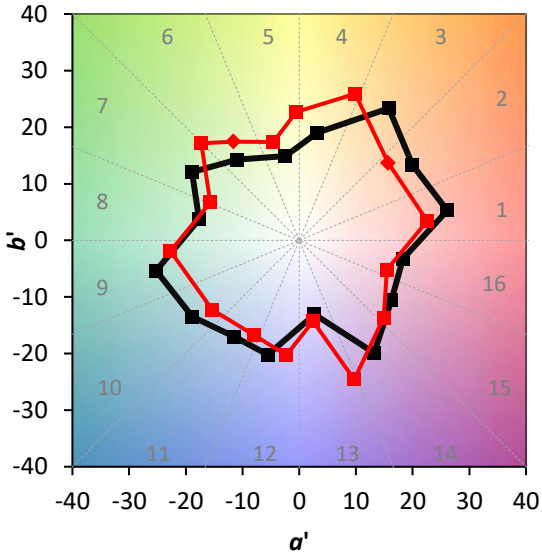
$R_f$ = 70.6
$R_g$ = 97.6
CIE $R_a$ = 71.9
$R_9$ = -17.8

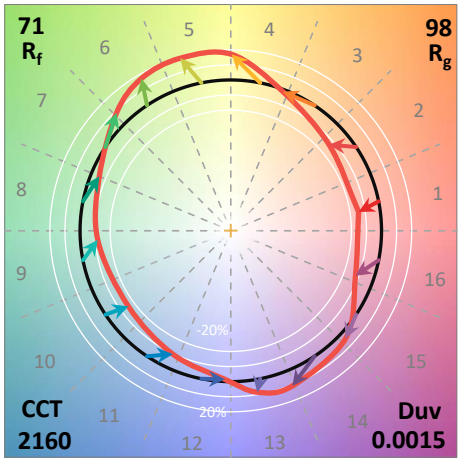
## Spectral Power Distribution Comparison

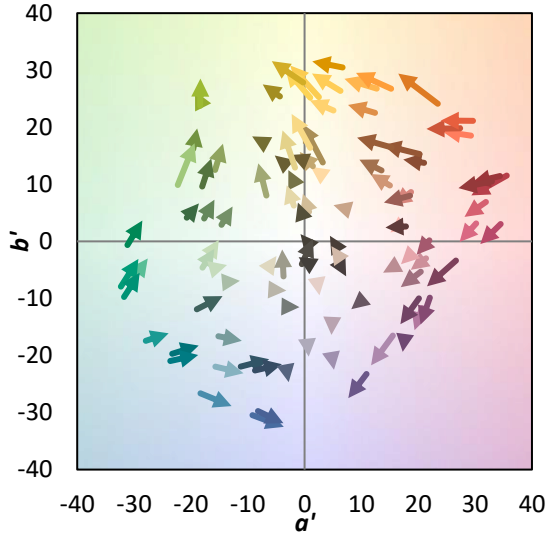



## Color Vector Graphics



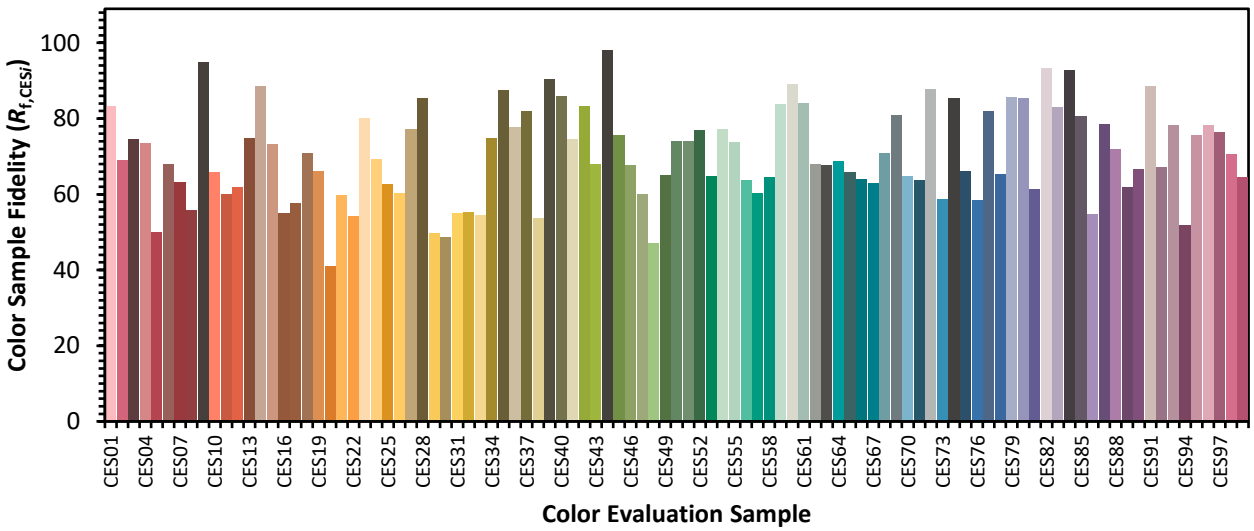



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**Individual Sample Fidelity Index ($R_{f,i}$)**

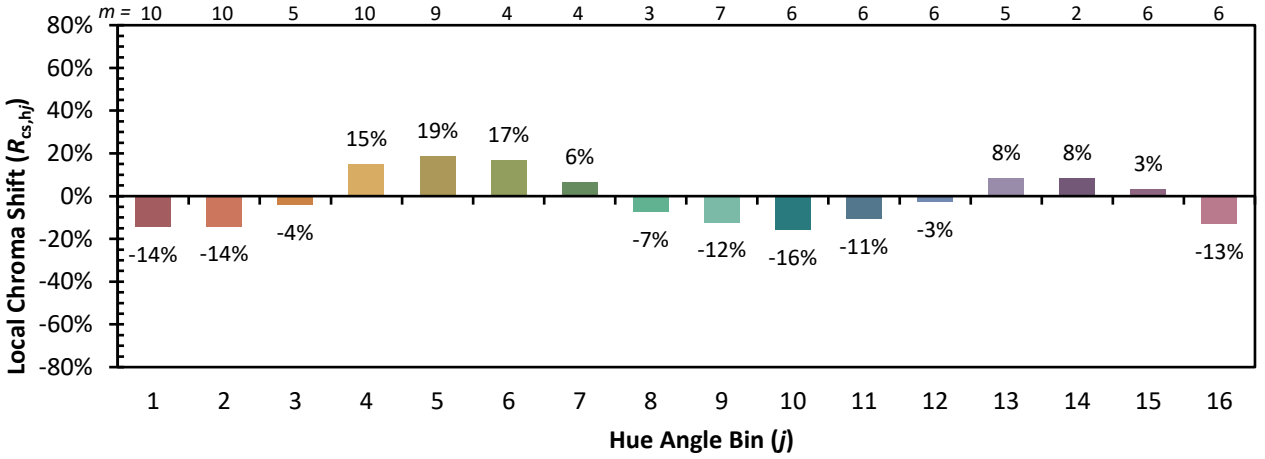
| | | | |
|---|---|---|---|
| CES01 = 87 | CES26 = 60 | CES51 = 74 | CES76 = 58 |
| CES02 = 65 | CES27 = 77 | CES52 = 77 | CES77 = 82 |
| CES03 = 32 | CES28 = 85 | CES53 = 65 | CES78 = 65 |
| CES04 = 72 | CES29 = 50 | CES54 = 77 | CES79 = 86 |
| CES05 = 52 | CES30 = 49 | CES55 = 74 | CES80 = 85 |
| CES06 = 53 | CES31 = 55 | CES56 = 64 | CES81 = 61 |
| CES07 = 44 | CES32 = 55 | CES57 = 60 | CES82 = 93 |
| CES08 = 43 | CES33 = 55 | CES58 = 64 | CES83 = 83 |
| CES09 = 29 | CES34 = 75 | CES59 = 84 | CES84 = 93 |
| CES10 = 79 | CES35 = 88 | CES60 = 89 | CES85 = 81 |
| CES11 = 62 | CES36 = 78 | CES61 = 84 | CES86 = 55 |
| CES12 = 68 | CES37 = 82 | CES62 = 68 | CES87 = 79 |
| CES13 = 45 | CES38 = 54 | CES63 = 68 | CES88 = 72 |
| CES14 = 75 | CES39 = 90 | CES64 = 69 | CES89 = 62 |
| CES15 = 72 | CES40 = 86 | CES65 = 66 | CES90 = 67 |
| CES16 = 49 | CES41 = 75 | CES66 = 64 | CES91 = 89 |
| CES17 = 51 | CES42 = 83 | CES67 = 63 | CES92 = 67 |
| CES18 = 57 | CES43 = 68 | CES68 = 71 | CES93 = 78 |
| CES19 = 74 | CES44 = 98 | CES69 = 81 | CES94 = 52 |
| CES20 = 68 | CES45 = 76 | CES70 = 65 | CES95 = 76 |
| CES21 = 89 | CES46 = 68 | CES71 = 64 | CES96 = 78 |
| CES22 = 81 | CES47 = 60 | CES72 = 88 | CES97 = 76 |
| CES23 = 92 | CES48 = 47 | CES73 = 59 | CES98 = 71 |
| CES24 = 92 | CES49 = 65 | CES74 = 85 | CES99 = 65 |
| CES25 = 74 | CES50 = 74 | CES75 = 66 | |

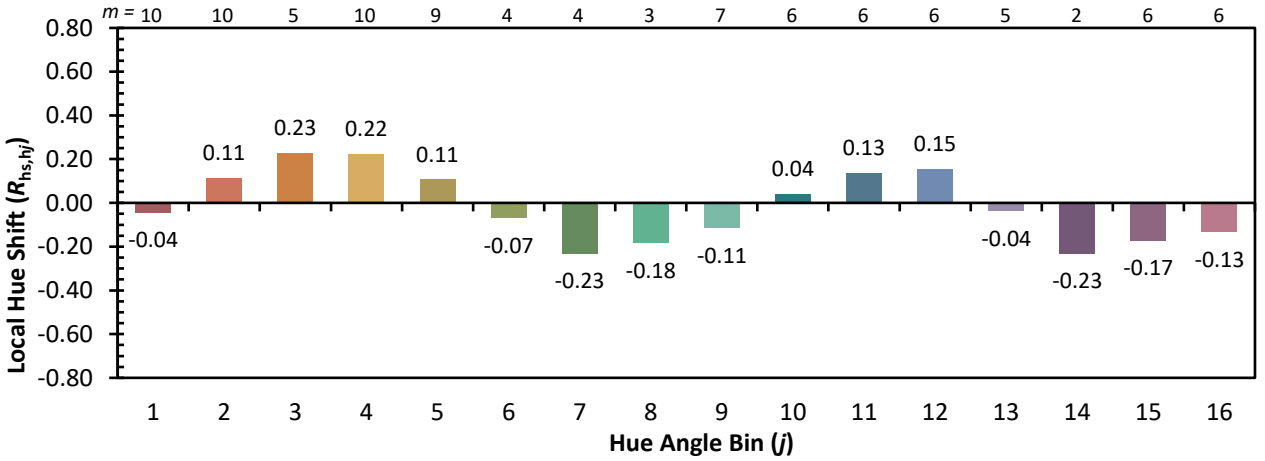


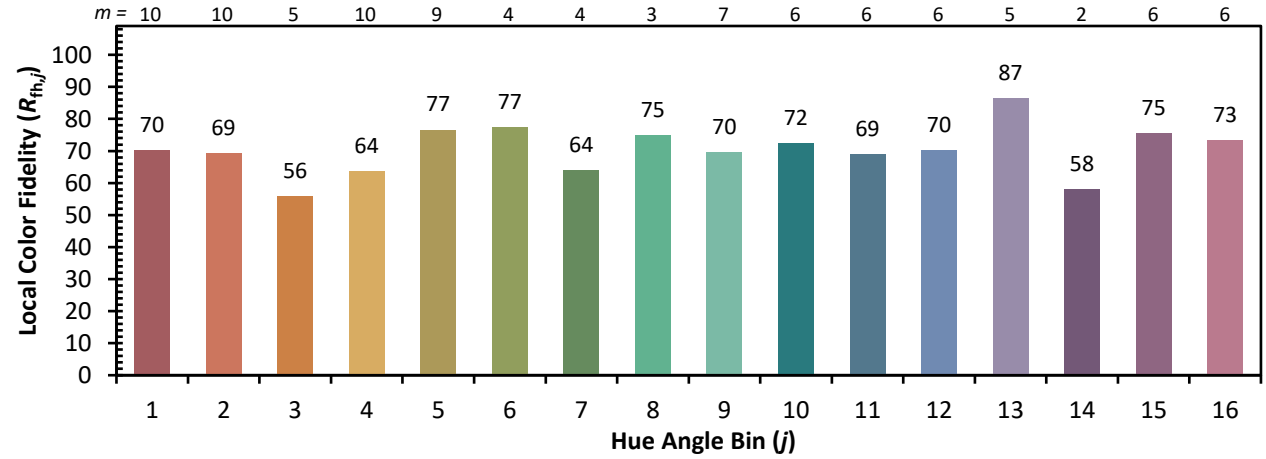
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## Color Rendition by Hue-Angle Bin



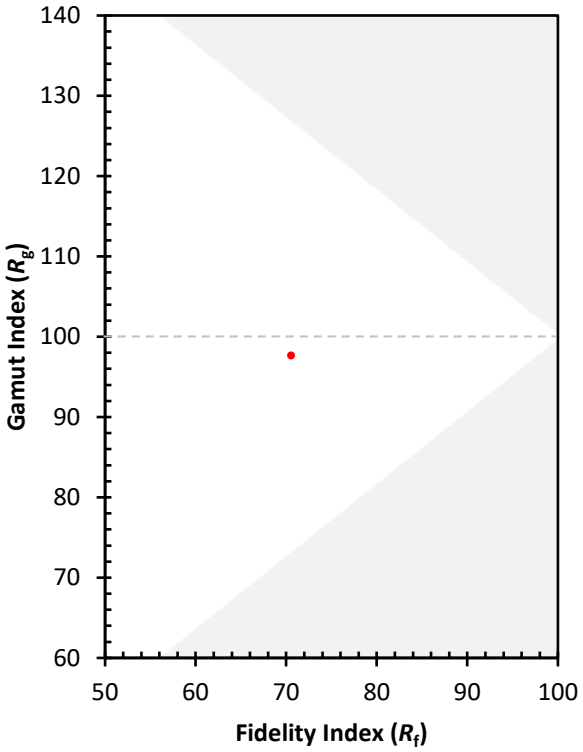



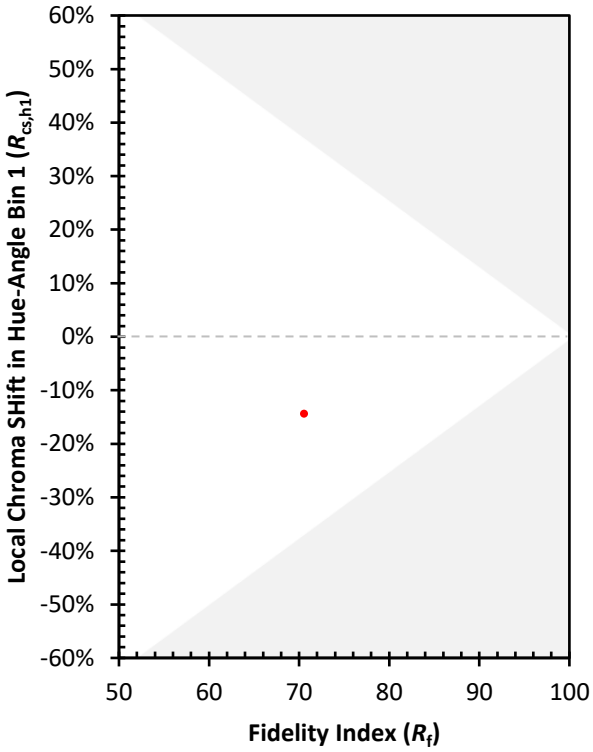



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## Measure Comparisons




(END OF REPORT)