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: P1360741

Luminaire Tested: **GSS-SB2C-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: | P1360741 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB2C-730-U-T1 |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 102W 70CRI 3000K FIXTURE w/ TYPE I DISTRIBUTION OPTIC |
| Light Source: | (52) 3000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 13646 lumens |
| Efficiency: | N/A |
| Efficacy: | 133.8 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type I - Short |
| BUG Rating: | B3 - U0 - G3 |

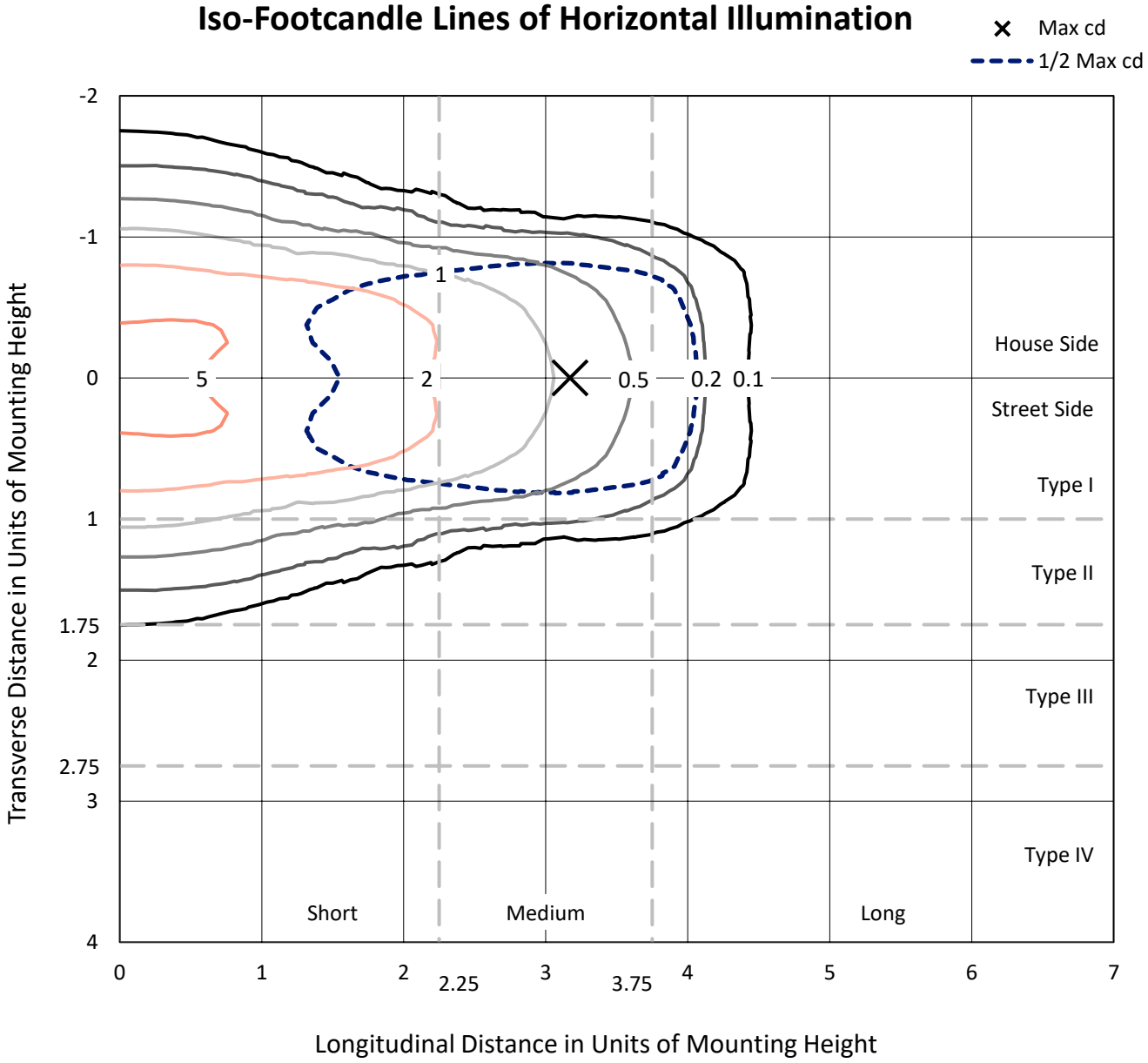
| | |
|---|---|
| Input Watts (W): | 102 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 9.5% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1360741
CATALOG NUMBER: GSS-SB2C-730-U-T1

## Iso-Footcandle Lines of Horizontal Illumination



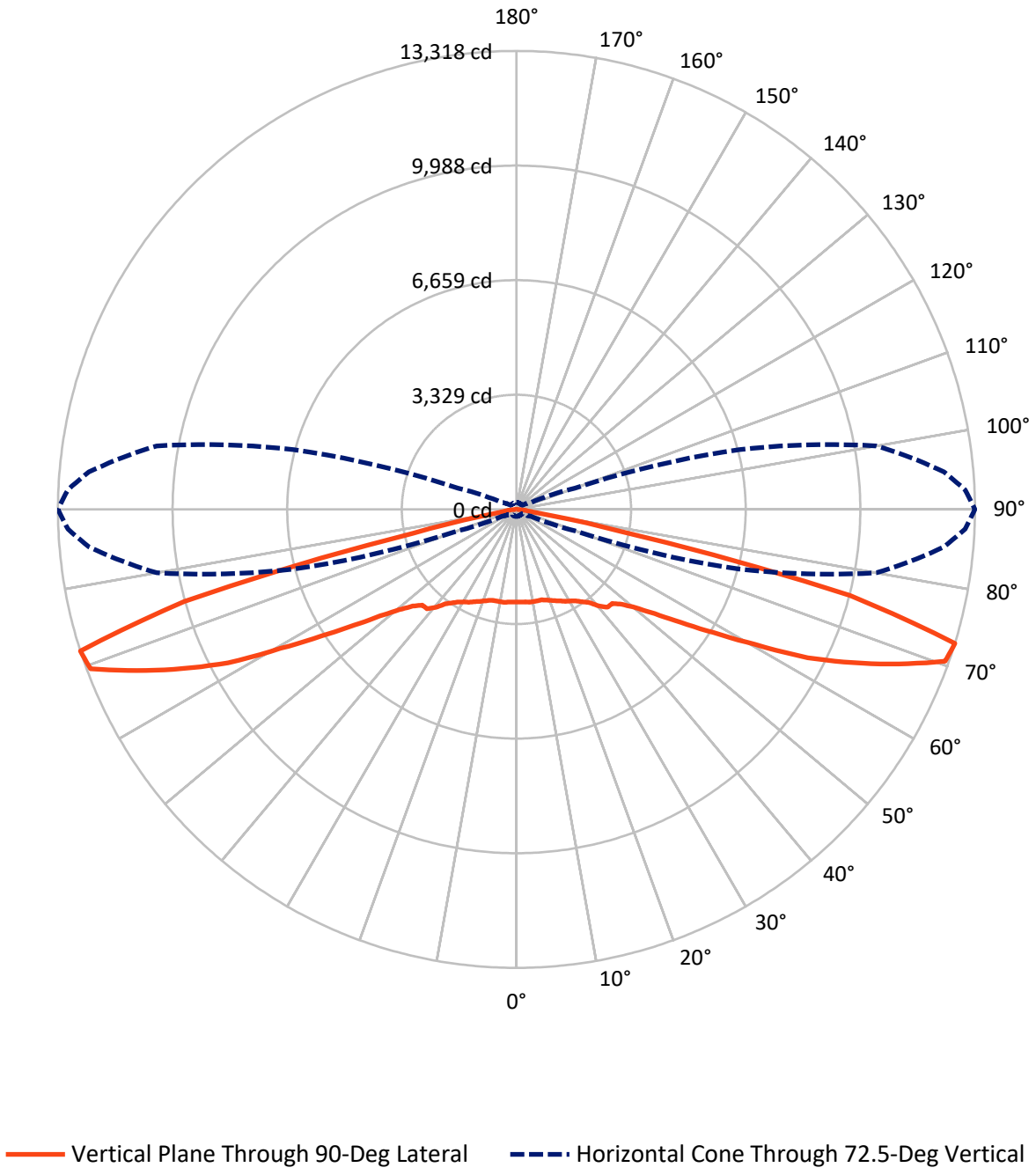

Based on 20 foot mounting height. Maximum calculated value = 6.7 fc
Type I - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

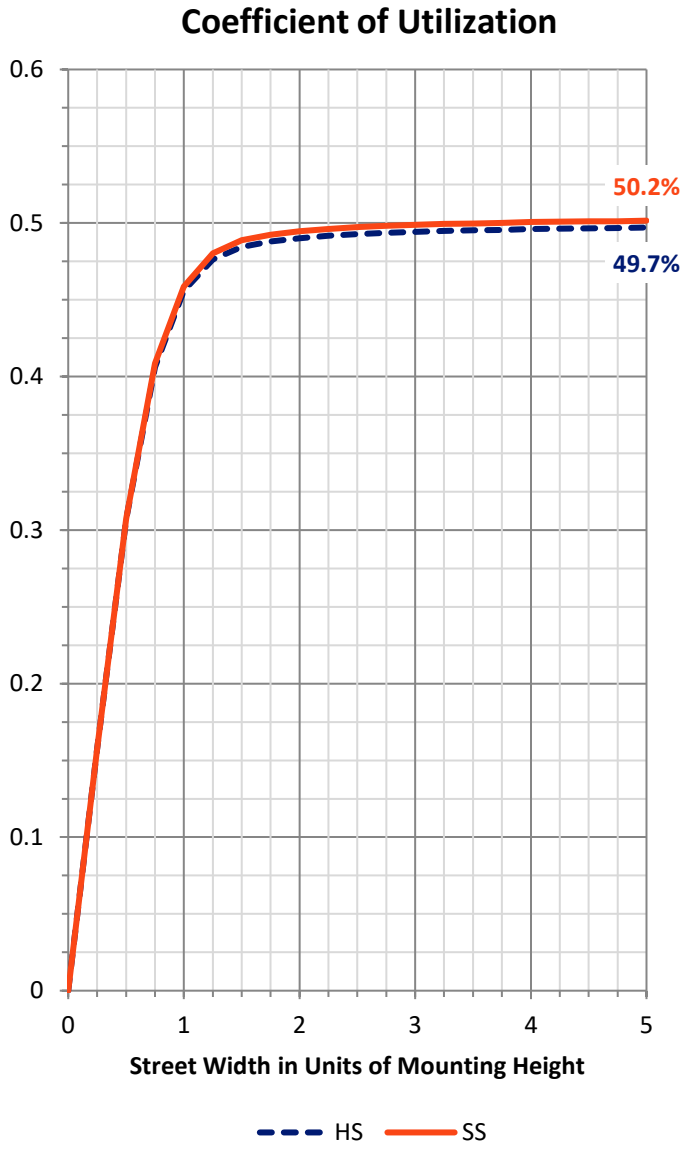
REPORT NUMBER: P1360741
CATALOG NUMBER: GSS-SB2C-730-U-T1

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 6823.0 | 0.0 | 6823.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 6823.0 | 0.0 | 6823.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 13646.0 | 0.0 | 13646.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 260.2 | 1.9 |
| 10°-20° | 793.2 | 5.8 |
| 20°-30° | 1325.7 | 9.7 |
| 30°-40° | 1828.2 | 13.4 |
| 40°-50° | 2241.2 | 16.4 |
| 50°-60° | 2626.3 | 19.2 |
| 60°-70° | 2916.5 | 21.4 |
| 70°-80° | 1586.0 | 11.6 |
| 80°-90° | 68.7 | 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° | 13646.0 | 100.0 |
| 0°-180° | 13646.0 | 100.0 |



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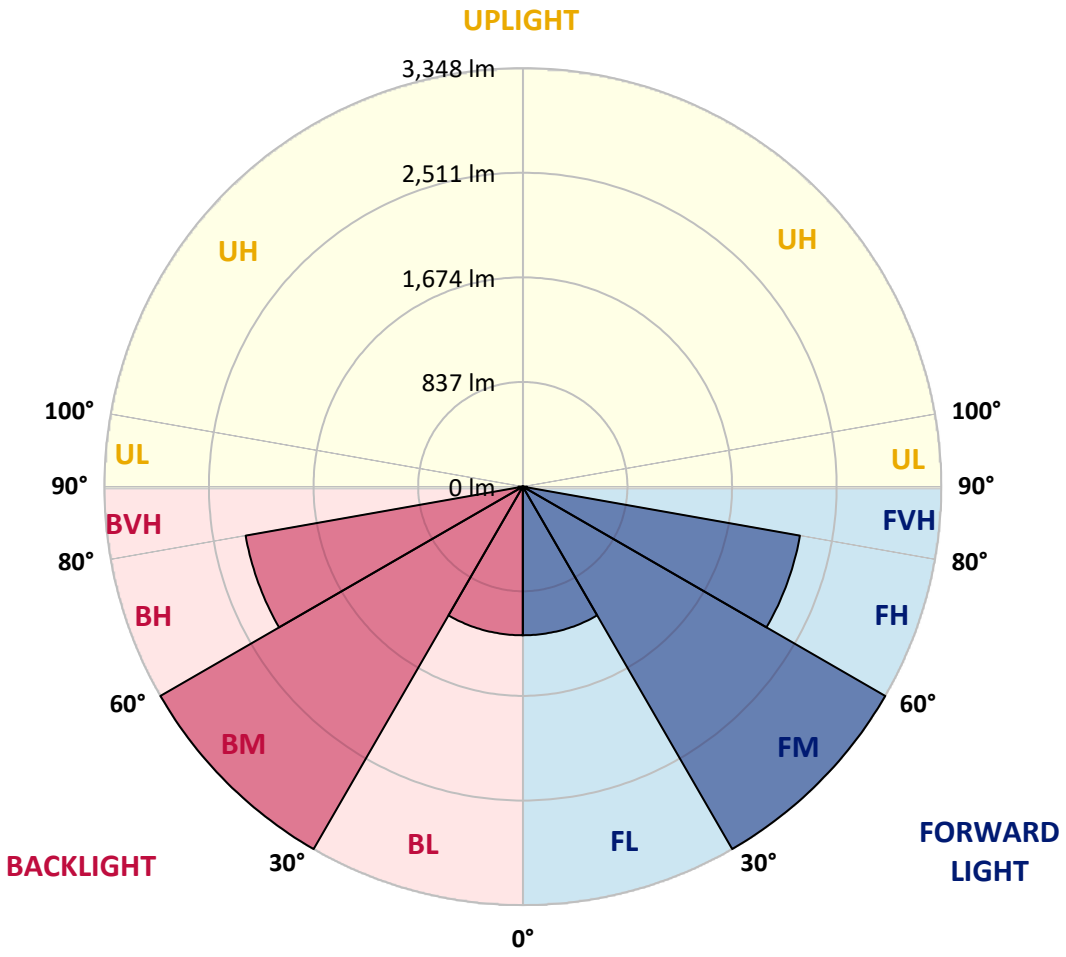
Scaled Data Report

REPORT NUMBER: P1360741
CATALOG NUMBER: GSS-SB2C-730-U-T1

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1189.5 | 8.7 | | | |
| FM | (30°-60°) | 3347.9 | 24.5 | | | |
| FH | (60°-80°) | 2251.2 | 16.5 | | | G2/5000 |
| FVH | (80°-90°) | 34.4 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 1189.5 | 8.7 | B3/2500 | | |
| BM | (30°-60°) | 3347.9 | 24.5 | B3/5000 | | |
| BH | (60°-80°) | 2251.2 | 16.5 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 34.4 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B3-U0-G3**
Type I Short



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Scaled Data Report

REPORT NUMBER: P1360741
CATALOG NUMBER: GSS-SB2C-730-U-T1

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 80° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2688.6 | 2688.6 | 2688.6 | 2688.6 | 2688.6 | 2688.6 | 2688.6 | 2688.6 | 2688.6 | 2688.6 | 2688.6 |
| 2.5° | 2691.6 | 2691.6 | 2682.6 | 2694.6 | 2688.6 | 2691.6 | 2694.6 | 2691.6 | 2688.6 | 2691.6 | 2694.6 |
| 5° | 2706.5 | 2700.6 | 2706.5 | 2712.5 | 2703.5 | 2709.5 | 2706.5 | 2691.6 | 2700.6 | 2700.6 | 2700.6 |
| 7.5° | 2733.4 | 2739.4 | 2733.4 | 2748.3 | 2739.4 | 2757.3 | 2739.4 | 2727.4 | 2724.5 | 2721.5 | 2721.5 |
| 10° | 2745.4 | 2745.4 | 2742.4 | 2769.3 | 2775.2 | 2793.2 | 2781.2 | 2763.3 | 2754.3 | 2742.4 | 2730.4 |
| 12.5° | 2712.5 | 2718.5 | 2733.4 | 2784.2 | 2808.1 | 2843.9 | 2835.0 | 2799.1 | 2772.2 | 2763.3 | 2745.4 |
| 15° | 2676.7 | 2682.6 | 2712.5 | 2775.2 | 2832.0 | 2885.8 | 2882.8 | 2838.0 | 2805.1 | 2781.2 | 2754.3 |
| 17.5° | 2619.9 | 2628.9 | 2670.7 | 2766.3 | 2867.8 | 2927.6 | 2945.5 | 2900.7 | 2864.9 | 2826.0 | 2790.2 |
| 20° | 2524.3 | 2524.3 | 2599.0 | 2721.5 | 2861.9 | 2996.3 | 3044.1 | 3008.2 | 2966.4 | 2903.7 | 2855.9 |
| 22.5° | 2416.8 | 2422.7 | 2497.4 | 2658.7 | 2858.9 | 3056.0 | 3148.7 | 3109.8 | 3068.0 | 2999.3 | 2927.6 |
| 25° | 2309.2 | 2309.2 | 2392.9 | 2575.1 | 2820.0 | 3097.9 | 3271.1 | 3250.2 | 3166.6 | 3103.8 | 3011.2 |
| 27.5° | 2210.6 | 2210.6 | 2300.2 | 2491.4 | 2754.3 | 3109.8 | 3393.6 | 3393.6 | 3301.0 | 3208.4 | 3106.8 |
| 30° | 2094.1 | 2124.0 | 2225.6 | 2425.7 | 2694.6 | 3088.9 | 3483.2 | 3540.0 | 3456.3 | 3336.9 | 3187.5 |
| 32.5° | 1995.5 | 2016.5 | 2121.0 | 2333.1 | 2607.9 | 3065.0 | 3584.8 | 3725.2 | 3638.6 | 3474.3 | 3307.0 |
| 35° | 1879.0 | 1876.0 | 1995.5 | 2204.7 | 2485.5 | 3011.2 | 3665.5 | 3946.3 | 3862.6 | 3686.4 | 3459.3 |
| 37.5° | 1726.7 | 1726.7 | 1849.2 | 2052.3 | 2369.0 | 2918.6 | 3731.2 | 4191.2 | 4128.5 | 3928.3 | 3686.4 |
| 40° | 1562.4 | 1580.3 | 1687.8 | 1894.0 | 2228.6 | 2808.1 | 3731.2 | 4391.4 | 4424.2 | 4218.1 | 3967.2 |
| 42.5° | 1442.9 | 1448.9 | 1547.4 | 1741.6 | 2073.2 | 2664.7 | 3683.4 | 4564.6 | 4663.2 | 4490.0 | 4164.3 |
| 45° | 1317.4 | 1332.4 | 1416.0 | 1595.2 | 1911.9 | 2494.4 | 3599.7 | 4758.8 | 4917.2 | 4797.7 | 4370.5 |
| 47.5° | 1165.1 | 1180.0 | 1275.6 | 1457.8 | 1759.5 | 2309.2 | 3459.3 | 4962.0 | 5293.6 | 5206.9 | 4737.9 |
| 50° | 988.8 | 1000.8 | 1090.4 | 1284.6 | 1589.3 | 2097.1 | 3283.1 | 5114.3 | 5670.0 | 5756.6 | 5293.6 |
| 52.5° | 773.7 | 782.7 | 878.3 | 1066.5 | 1386.1 | 1894.0 | 3035.1 | 5206.9 | 6049.4 | 6354.1 | 6037.4 |
| 55° | 555.6 | 570.6 | 654.2 | 809.6 | 1117.3 | 1622.1 | 2739.4 | 5254.7 | 6464.6 | 7062.1 | 6960.5 |
| 57.5° | 400.3 | 406.3 | 463.0 | 582.5 | 830.5 | 1302.5 | 2360.0 | 5174.1 | 6838.0 | 7907.5 | 8119.6 |
| 60° | 331.6 | 331.6 | 340.6 | 397.3 | 567.6 | 920.1 | 1905.9 | 4875.3 | 7157.7 | 8761.9 | 9416.1 |
| 62.5° | 304.7 | 304.7 | 310.7 | 319.6 | 373.4 | 597.5 | 1362.2 | 4268.9 | 7193.5 | 9583.4 | 10838.1 |
| 65° | 277.8 | 277.8 | 283.8 | 289.8 | 301.7 | 388.4 | 821.5 | 3124.8 | 6491.5 | 9592.3 | 11602.8 |
| 67.5° | 253.9 | 253.9 | 256.9 | 259.9 | 265.9 | 283.8 | 451.1 | 1894.0 | 5195.0 | 9338.4 | 11895.6 |
| 70° | 230.0 | 230.0 | 230.0 | 227.0 | 236.0 | 239.0 | 298.7 | 961.9 | 3474.3 | 8433.3 | 11755.2 |
| 72.5° | *203.1* | *203.1* | *200.2* | *194.2* | *197.2* | *197.2* | *221.1* | *472.0* | *1804.4* | *6703.6* | *10614.0* |
| 75° | 173.3 | 176.3 | 164.3 | 158.3 | 155.3 | 158.3 | 176.3 | 268.9 | 806.6 | 4065.8 | 7931.4 |
| 77.5° | 146.4 | 152.4 | 134.4 | 122.5 | 119.5 | 119.5 | 137.4 | 167.3 | 346.5 | 1475.7 | 3554.9 |
| 80° | 110.5 | 113.5 | 98.6 | 86.6 | 86.6 | 83.6 | 101.6 | 122.5 | 164.3 | 439.1 | 797.6 |
| 82.5° | 62.7 | 62.7 | 56.8 | 50.8 | 47.8 | 50.8 | 68.7 | 83.6 | 101.6 | 155.3 | 218.1 |
| 85° | 14.9 | 14.9 | 17.9 | 20.9 | 20.9 | 26.9 | 38.8 | 44.8 | 53.8 | 62.7 | 83.6 |
| 87.5° | 3.0 | 3.0 | 3.0 | 6.0 | 9.0 | 9.0 | 14.9 | 20.9 | 26.9 | 32.9 | 35.8 |
| 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: P1360741
CATALOG NUMBER: GSS-SB2C-730-U-T1

**CANDELA DISTRIBUTION (continued):**

| | 85° | 87.5° | 90° |
|---|---|---|---|
| 0° | 2688.6 | 2688.6 | *2688.6* |
| 2.5° | 2694.6 | 2697.6 | *2694.6* |
| 5° | 2712.5 | 2706.5 | *2697.6* |
| 7.5° | 2715.5 | 2718.5 | *2721.5* |
| 10° | 2727.4 | 2739.4 | *2721.5* |
| 12.5° | 2739.4 | 2730.4 | *2724.5* |
| 15° | 2748.3 | 2745.4 | *2727.4* |
| 17.5° | 2781.2 | 2769.3 | *2766.3* |
| 20° | 2832.0 | 2829.0 | *2820.0* |
| 22.5° | 2891.7 | 2885.8 | *2882.8* |
| 25° | 2978.4 | 2957.5 | *2945.5* |
| 27.5° | 3050.1 | 3032.1 | *3026.2* |
| 30° | 3121.8 | 3085.9 | *3085.9* |
| 32.5° | 3184.5 | 3175.5 | *3169.6* |
| 35° | 3333.9 | 3289.1 | *3295.0* |
| 37.5° | 3516.1 | 3471.3 | *3432.4* |
| 40° | 3773.0 | 3713.3 | *3689.4* |
| 42.5° | 3937.3 | 3877.6 | *3883.5* |
| 45° | 4029.9 | 3925.4 | *3898.5* |
| 47.5° | 4280.9 | 4149.4 | *4113.6* |
| 50° | 4687.1 | 4525.8 | *4481.0* |
| 52.5° | 5344.3 | 5084.4 | *5024.7* |
| 55° | 6168.8 | 5849.2 | *5789.5* |
| 57.5° | 7298.1 | 6873.9 | *6745.4* |
| 60° | 8672.2 | 8146.5 | *7952.3* |
| 62.5° | 10324.2 | 9676.0 | *9490.8* |
| 65° | 11567.0 | 11026.3 | *10739.5* |
| 67.5° | 12561.7 | 12116.6 | *11979.2* |
| 70° | 13153.2 | 13174.2 | *13210.0* |
| 72.5° | *12469.1* | *13042.7* | *13317.5* |
| 75° | 9138.3 | 9583.4 | *10010.6* |
| 77.5° | 3531.0 | 3184.5 | *3082.9* |
| 80° | 570.6 | 534.7 | *552.7* |
| 82.5° | 256.9 | 271.8 | *286.8* |
| 85° | 167.3 | 194.2 | *206.1* |
| 87.5° | 38.8 | 38.8 | *38.8* |
| 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

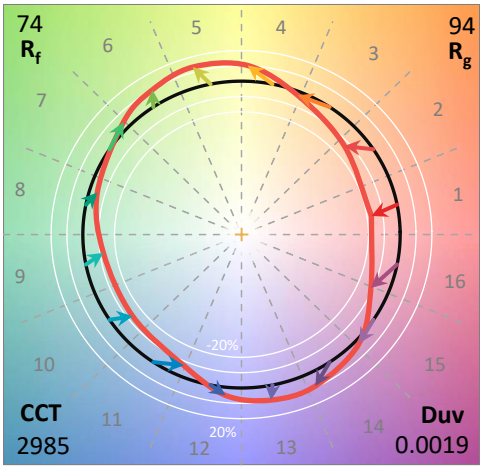
## Test Information

| | |
|---|---|
| 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

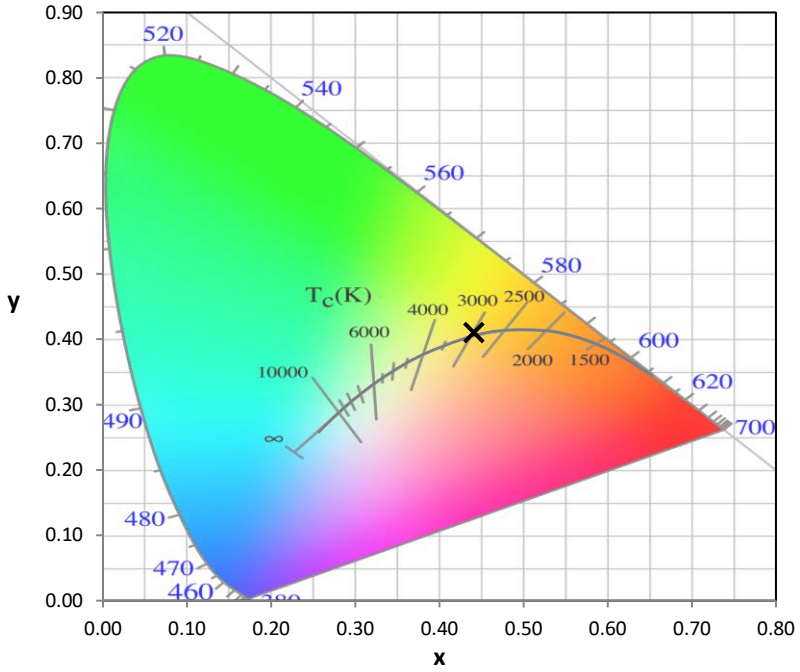
| | |
|---|---|
| Stabilization Time: | 36M |
| Operation Time: | 1H 36M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-4

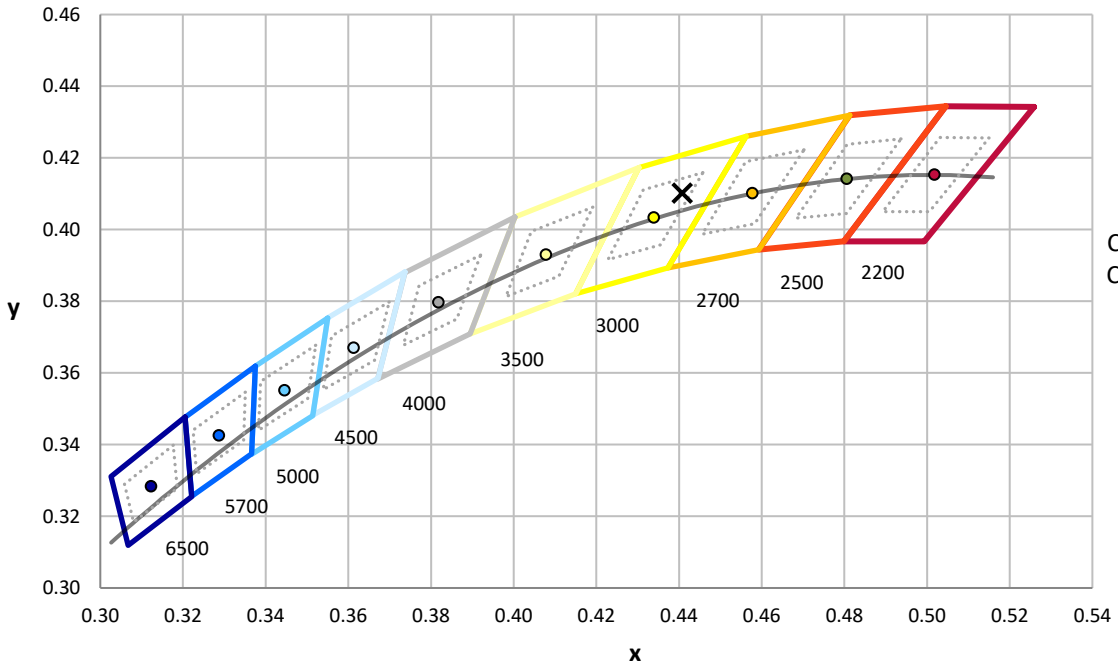
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

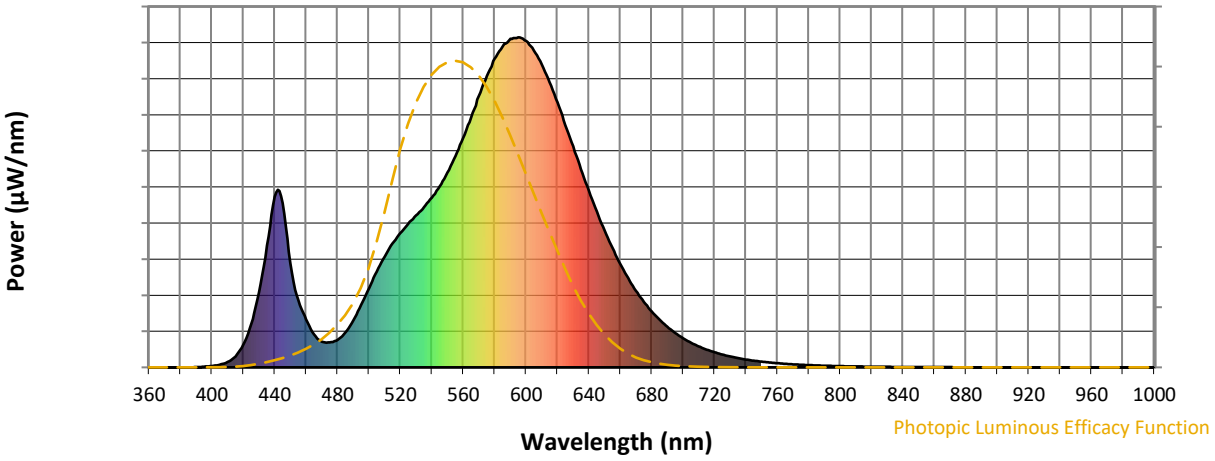



CCT = 2985K
CIE x = 0.4408
CIE y = 0.4101
Duv = 0.0019

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

## Photopic Flux vs. Wavelength

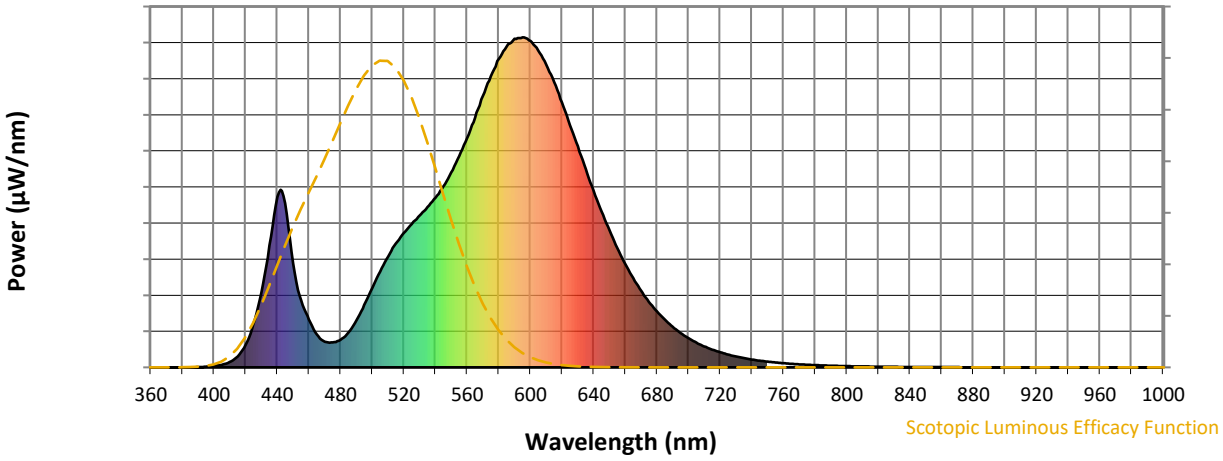



## Photopic Lumens: NR

| 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

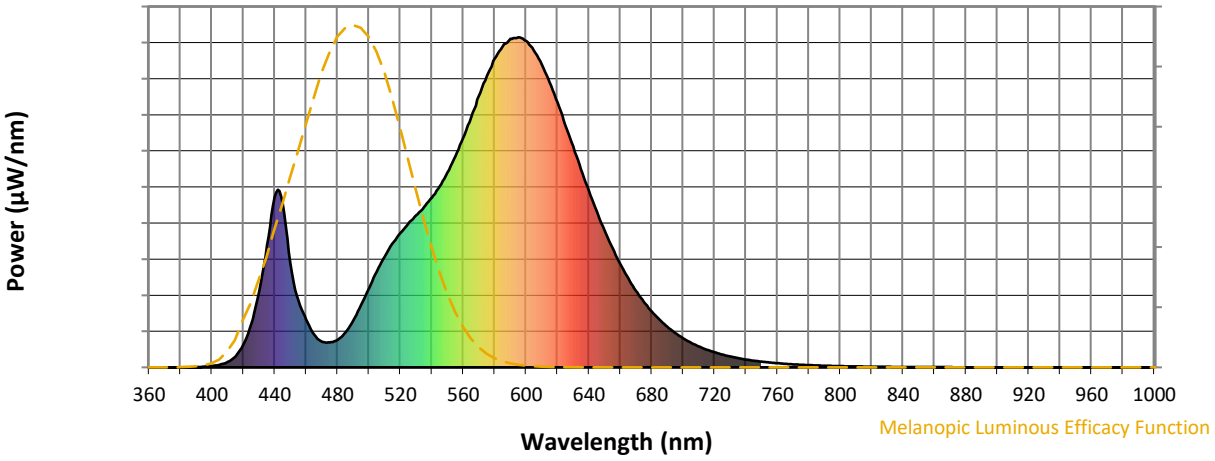



**Scotopic Lumens: NR** **S/P: 1.19**

| 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 | | | |

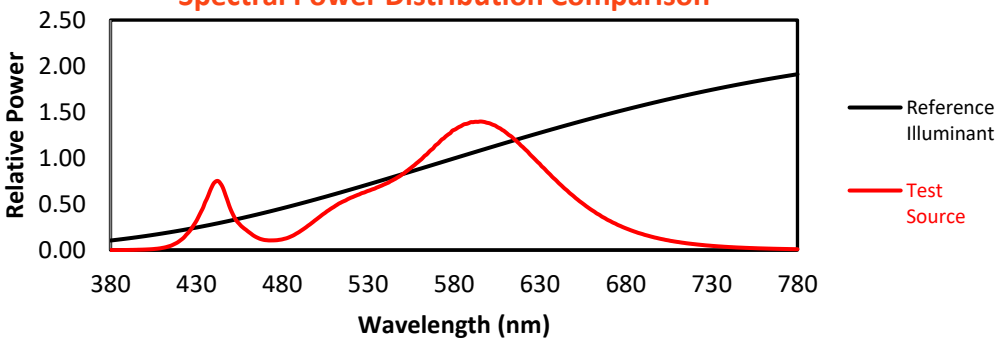
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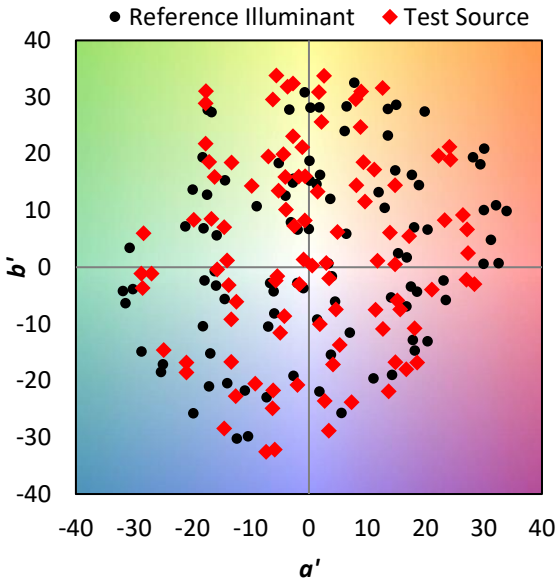
## Summary

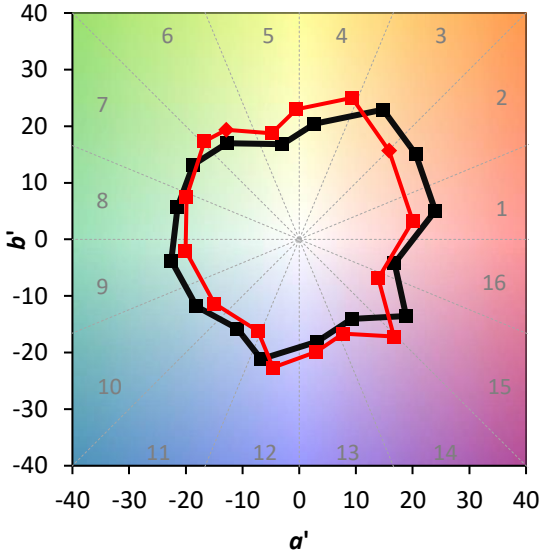
$R_f$ = 73.8
$R_g$ = 94.4
CIE $R_a$ = 70.8
$R_9$ = -43.2

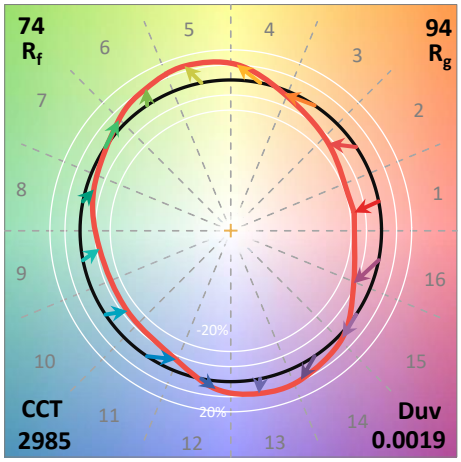
## Spectral Power Distribution Comparison

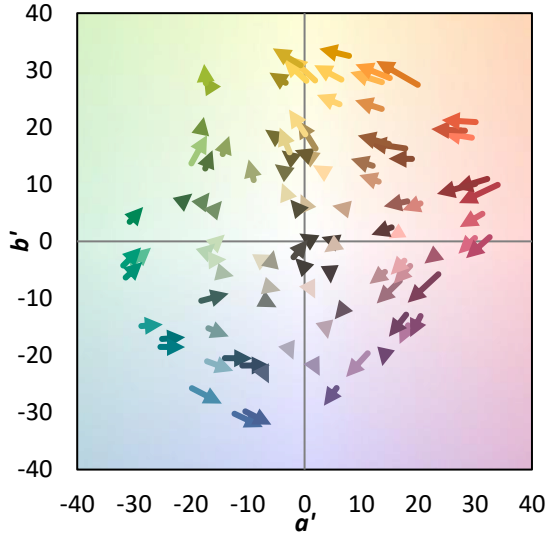



## Color Vector Graphics



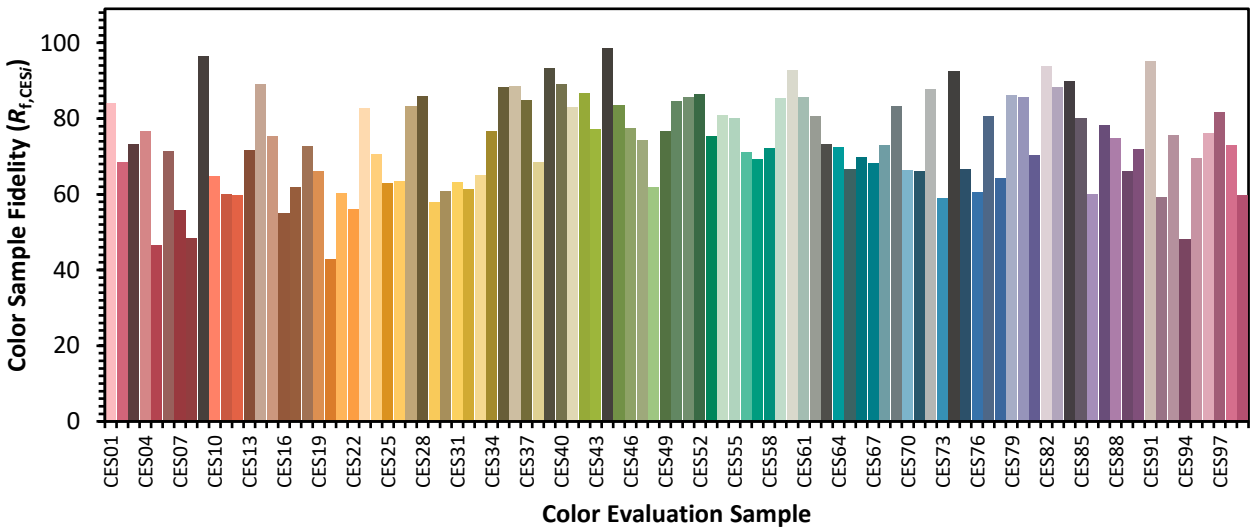



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**Individual Sample Fidelity Index ($R_{f,i}$)**

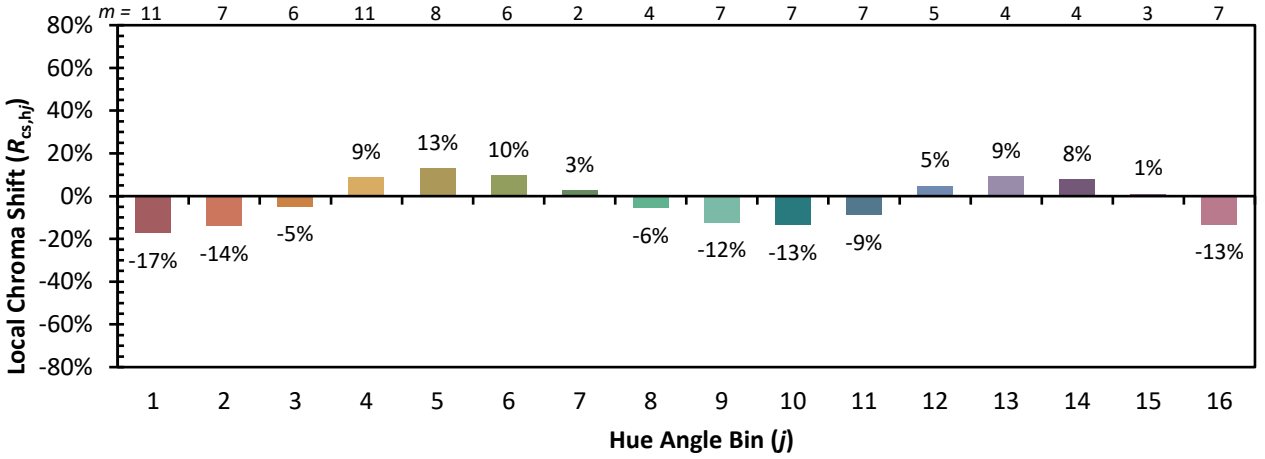
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 63 | CES51 = 86 | CES76 = 61 |
| CES02 = 62 | CES27 = 83 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 86 | CES53 = 75 | CES78 = 64 |
| CES04 = 71 | CES29 = 58 | CES54 = 81 | CES79 = 86 |
| CES05 = 49 | CES30 = 61 | CES55 = 80 | CES80 = 86 |
| CES06 = 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 | |

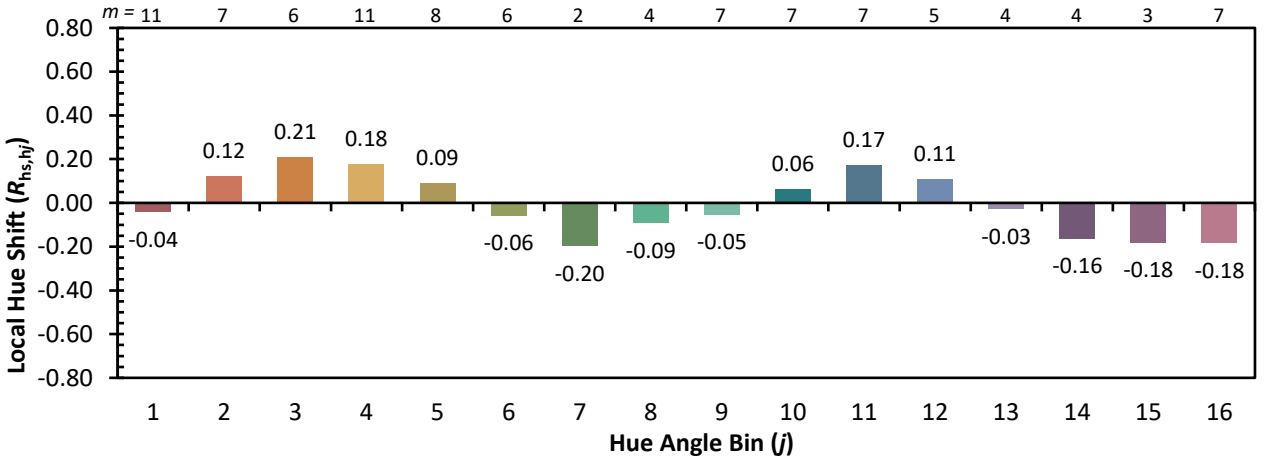


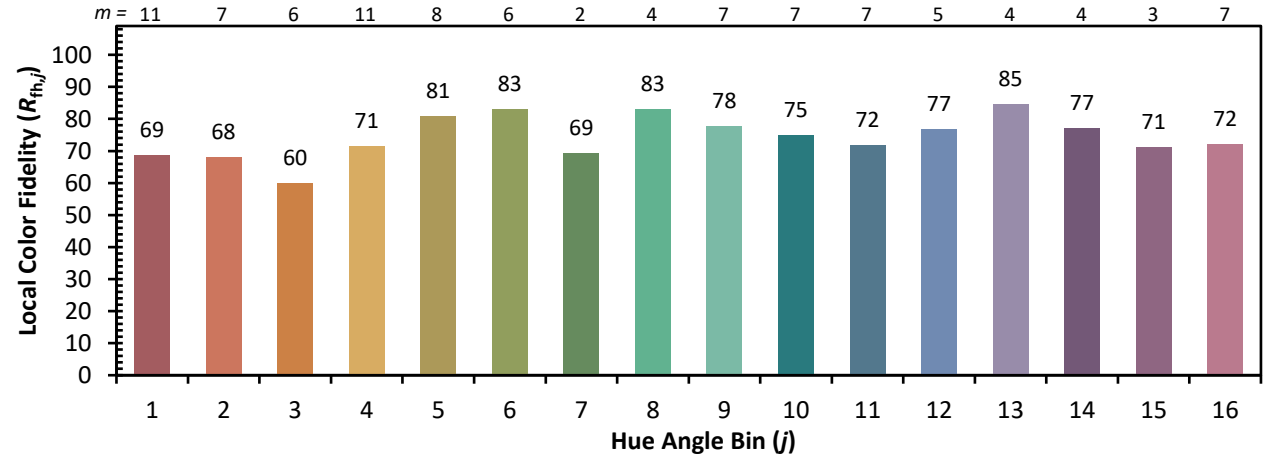
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## Color Rendition by Hue-Angle Bin



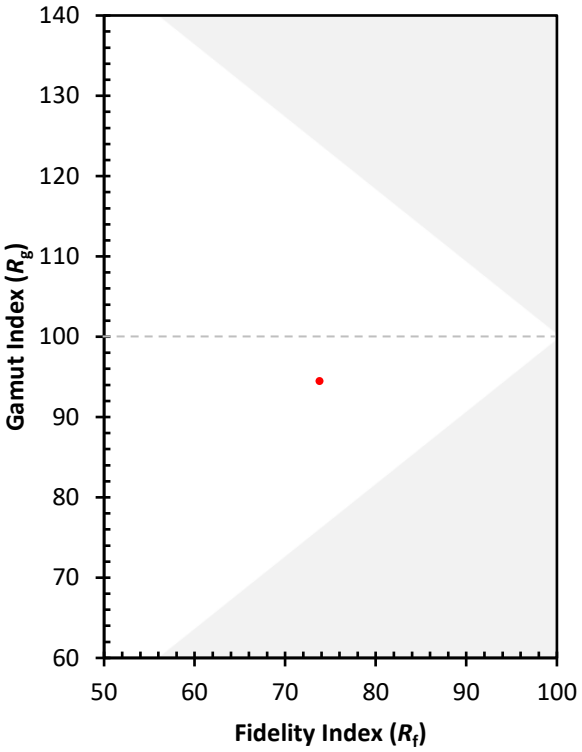



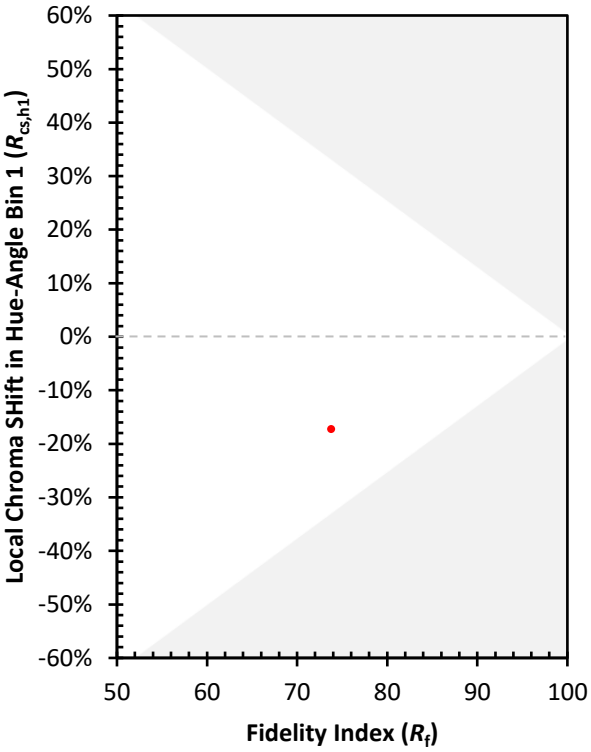



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## Measure Comparisons




(END OF REPORT)