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: P1360683

Luminaire Tested: **GSS-SB6A-740-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: | P1360683 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB6A-740-U-T1 |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 6SQUARE 170W 70CRI 4000K FIXTURE w/ TYPE I DISTRIBUTION OPTIC |
| Light Source: | (156) 4000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 27302.3 lumens |
| Efficiency: | N/A |
| Efficacy: | 160.6 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type I - Short |
| BUG Rating: | B4 - U0 - G4 |

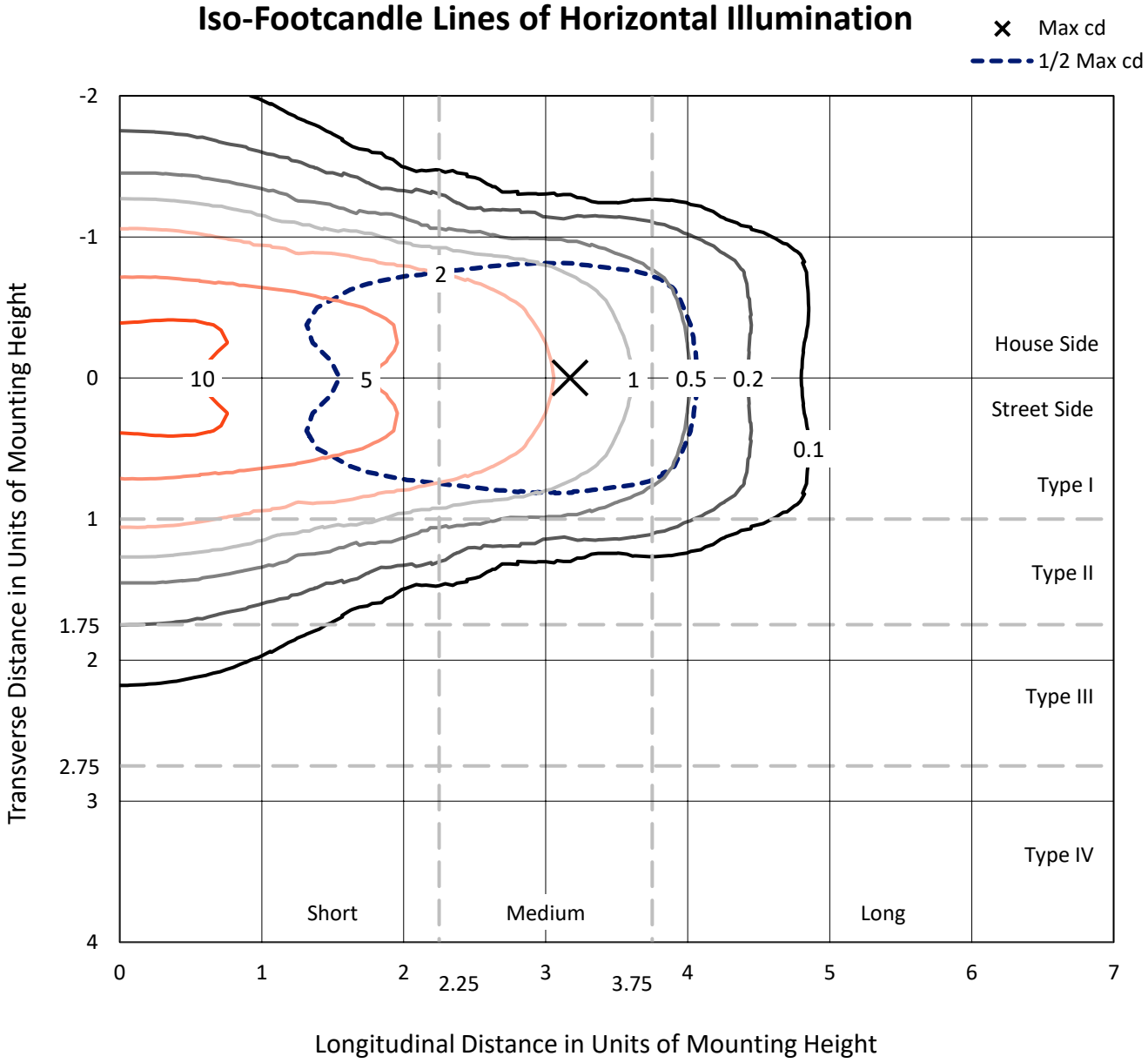
| | |
|---|---|
| Input Watts (W): | 170 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 12.0% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature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

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Scaled Data Report

REPORT NUMBER: P1360683
CATALOG NUMBER: GSS-SB6A-740-U-T1

## Iso-Footcandle Lines of Horizontal Illumination



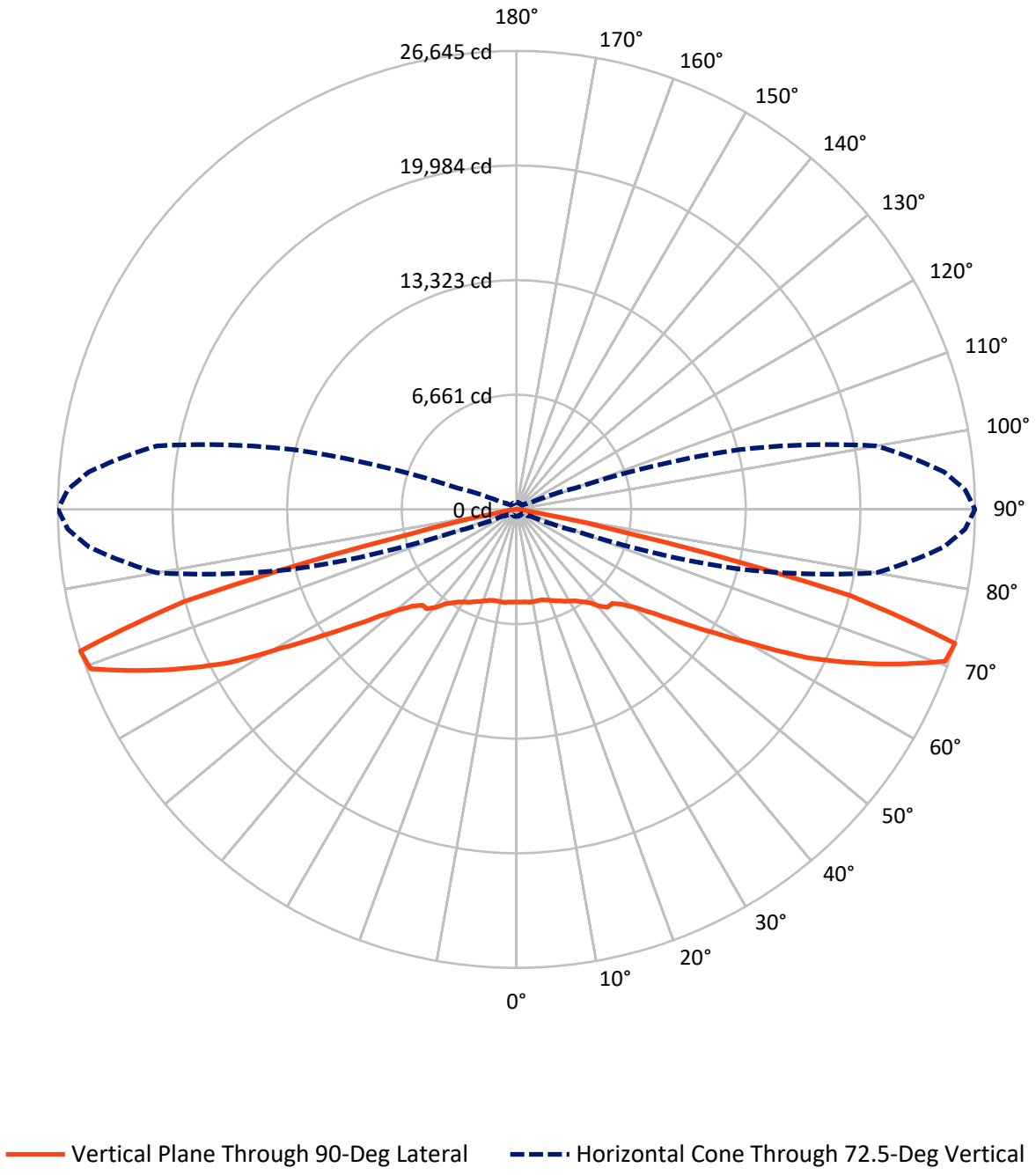

Based on 20 foot mounting height. Maximum calculated value = 13.4 fc
Type I - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

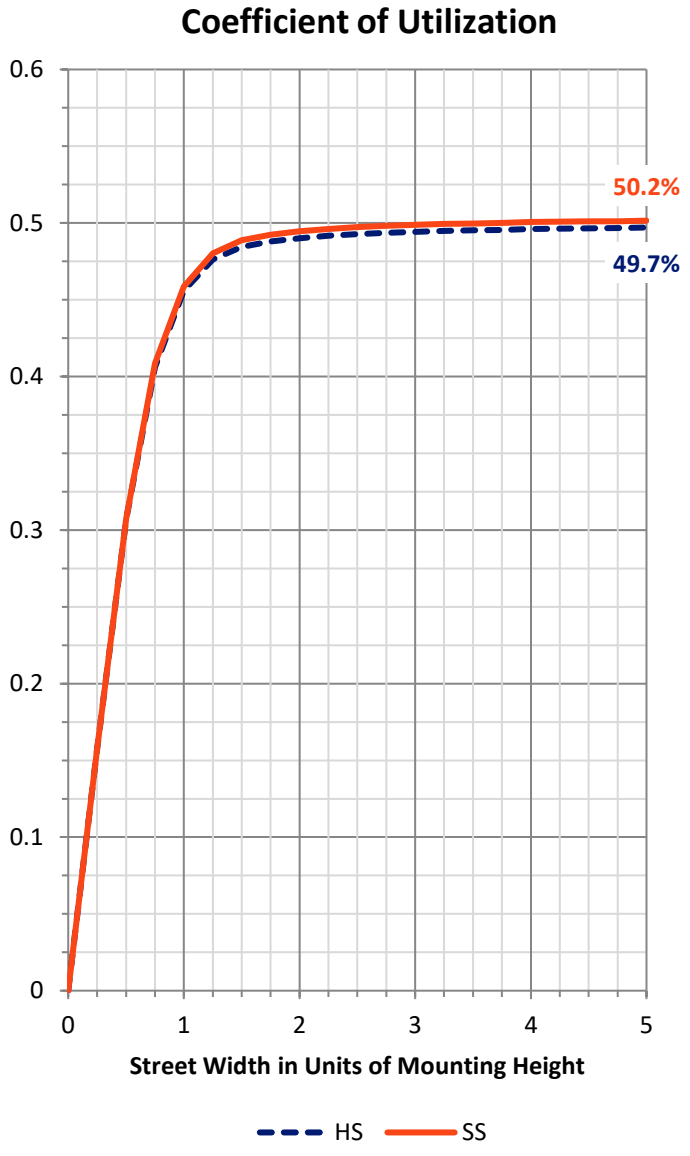
REPORT NUMBER: P1360683
CATALOG NUMBER: GSS-SB6A-740-U-T1

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 13651.2 | 0.0 | 13651.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 13651.2 | 0.0 | 13651.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 27302.3 | 0.0 | 27302.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 520.7 | 1.9 |
| 10°-20° | 1586.9 | 5.8 |
| 20°-30° | 2652.4 | 9.7 |
| 30°-40° | 3657.8 | 13.4 |
| 40°-50° | 4484.0 | 16.4 |
| 50°-60° | 5254.6 | 19.2 |
| 60°-70° | 5835.2 | 21.4 |
| 70°-80° | 3173.2 | 11.6 |
| 80°-90° | 137.5 | 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° | 27302.3 | 100.0 |
| 0°-180° | 27302.3 | 100.0 |



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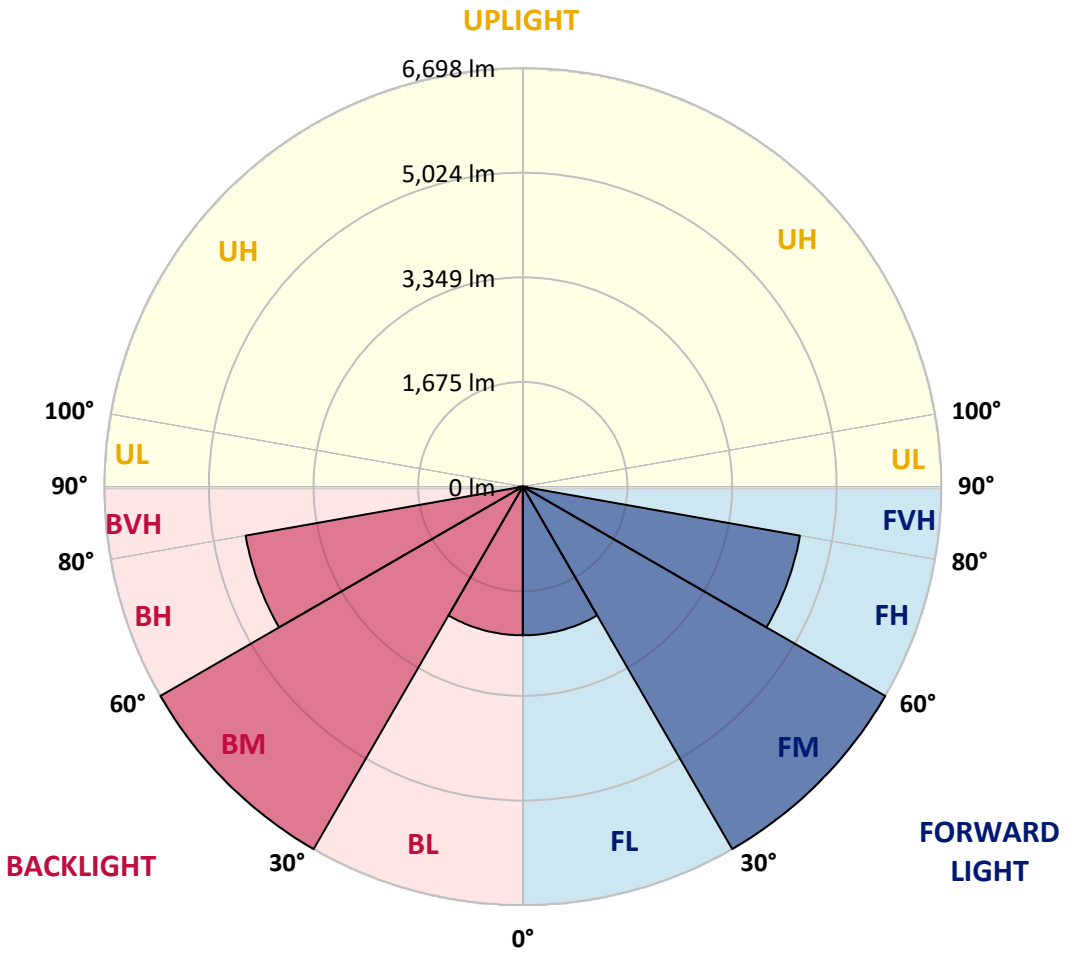
Scaled Data Report

REPORT NUMBER: P1360683
CATALOG NUMBER: GSS-SB6A-740-U-T1

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 2380.0 | 8.7 | | | |
| FM | (30°-60°) | 6698.2 | 24.5 | | | |
| FH | (60°-80°) | 4504.2 | 16.5 | | | G2/5000 |
| FVH | (80°-90°) | 68.8 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 2380.0 | 8.7 | B3/2500 | | |
| BM | (30°-60°) | 6698.2 | 24.5 | B4/8500 | | |
| BH | (60°-80°) | 4504.2 | 16.5 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 68.8 | 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: P1360683
CATALOG NUMBER: GSS-SB6A-740-U-T1

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 80° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 5379.2 | 5379.2 | 5379.2 | 5379.2 | 5379.2 | 5379.2 | 5379.2 | 5379.2 | 5379.2 | 5379.2 | 5379.2 |
| 2.5° | 5385.2 | 5385.2 | 5367.3 | 5391.2 | 5379.2 | 5385.2 | 5391.2 | 5385.2 | 5379.2 | 5385.2 | 5391.2 |
| 5° | 5415.1 | 5403.1 | 5415.1 | 5427.1 | 5409.1 | 5421.1 | 5415.1 | 5385.2 | 5403.1 | 5403.1 | 5403.1 |
| 7.5° | 5468.9 | 5480.8 | 5468.9 | 5498.8 | 5480.8 | 5516.7 | 5480.8 | 5456.9 | 5451.0 | 5445.0 | 5445.0 |
| 10° | 5492.8 | 5492.8 | 5486.8 | 5540.6 | 5552.6 | 5588.4 | 5564.5 | 5528.7 | 5510.7 | 5486.8 | 5462.9 |
| 12.5° | 5427.1 | 5439.0 | 5468.9 | 5570.5 | 5618.3 | 5690.0 | 5672.1 | 5600.4 | 5546.6 | 5528.7 | 5492.8 |
| 15° | 5355.3 | 5367.3 | 5427.1 | 5552.6 | 5666.1 | 5773.7 | 5767.7 | 5678.1 | 5612.3 | 5564.5 | 5510.7 |
| 17.5° | 5241.8 | 5259.7 | 5343.4 | 5534.6 | 5737.9 | 5857.4 | 5893.3 | 5803.6 | 5731.9 | 5654.2 | 5582.5 |
| 20° | 5050.5 | 5050.5 | 5199.9 | 5445.0 | 5725.9 | 5994.9 | 6090.5 | 6018.8 | 5935.1 | 5809.6 | 5713.9 |
| 22.5° | 4835.3 | 4847.3 | 4996.7 | 5319.5 | 5719.9 | 6114.4 | 6299.7 | 6222.0 | 6138.3 | 6000.8 | 5857.4 |
| 25° | 4620.2 | 4620.2 | 4787.5 | 5152.1 | 5642.2 | 6198.1 | 6544.7 | 6502.9 | 6335.5 | 6210.0 | 6024.7 |
| 27.5° | 4422.9 | 4422.9 | 4602.2 | 4984.8 | 5510.7 | 6222.0 | 6789.8 | 6789.8 | 6604.5 | 6419.2 | 6216.0 |
| 30° | 4189.8 | 4249.6 | 4452.8 | 4853.3 | 5391.2 | 6180.1 | 6969.1 | 7082.7 | 6915.3 | 6676.2 | 6377.4 |
| 32.5° | 3992.6 | 4034.4 | 4243.6 | 4668.0 | 5217.9 | 6132.3 | 7172.3 | 7453.2 | 7279.9 | 6951.2 | 6616.5 |
| 35° | 3759.5 | 3753.5 | 3992.6 | 4411.0 | 4972.8 | 6024.7 | 7333.7 | 7895.5 | 7728.2 | 7375.5 | 6921.3 |
| 37.5° | 3454.7 | 3454.7 | 3699.7 | 4106.1 | 4739.7 | 5839.5 | 7465.2 | 8385.6 | 8260.1 | 7859.7 | 7375.5 |
| 40° | 3125.9 | 3161.8 | 3377.0 | 3789.4 | 4458.8 | 5618.3 | 7465.2 | 8786.1 | 8851.8 | 8439.4 | 7937.4 |
| 42.5° | 2886.9 | 2898.8 | 3096.0 | 3484.5 | 4148.0 | 5331.4 | 7369.6 | 9132.7 | 9330.0 | 8983.3 | 8331.8 |
| 45° | 2635.8 | 2665.7 | 2833.1 | 3191.7 | 3825.2 | 4990.7 | 7202.2 | 9521.2 | 9838.0 | 9598.9 | 8744.2 |
| 47.5° | 2331.0 | 2360.9 | 2552.1 | 2916.7 | 3520.4 | 4620.2 | 6921.3 | 9927.7 | 10591.1 | 10417.8 | 9479.4 |
| 50° | 1978.4 | 2002.3 | 2181.6 | 2570.1 | 3179.7 | 4195.8 | 6568.6 | 10232.5 | 11344.2 | 11517.5 | 10591.1 |
| 52.5° | 1548.0 | 1566.0 | 1757.2 | 2133.8 | 2773.3 | 3789.4 | 6072.6 | 10417.8 | 12103.3 | 12712.9 | 12079.4 |
| 55° | 1111.7 | 1141.6 | 1308.9 | 1619.7 | 2235.4 | 3245.5 | 5480.8 | 10513.4 | 12934.1 | 14129.5 | 13926.2 |
| 57.5° | 800.9 | 812.9 | 926.4 | 1165.5 | 1661.6 | 2605.9 | 4721.8 | 10352.0 | 13681.2 | 15820.9 | 16245.3 |
| 60° | 663.4 | 663.4 | 681.4 | 794.9 | 1135.6 | 1840.9 | 3813.3 | 9754.3 | 14320.7 | 17530.3 | 18839.3 |
| 62.5° | 609.6 | 609.6 | 621.6 | 639.5 | 747.1 | 1195.4 | 2725.5 | 8541.0 | 14392.4 | 19174.0 | 21684.3 |
| 65° | 555.9 | 555.9 | 567.8 | 579.8 | 603.7 | 777.0 | 1643.7 | 6251.9 | 12987.9 | 19191.9 | 23214.4 |
| 67.5° | 508.0 | 508.0 | 514.0 | 520.0 | 531.9 | 567.8 | 902.5 | 3789.4 | 10393.9 | 18683.9 | 23800.1 |
| 70° | 460.2 | 460.2 | 460.2 | 454.2 | 472.2 | 478.2 | 597.7 | 1924.6 | 6951.2 | 16872.9 | 23519.2 |
| 72.5° | *406.4* | *406.4* | *400.5* | *388.5* | *394.5* | *394.5* | *442.3* | *944.4* | *3610.1* | *13412.2* | *21236.0* |
| 75° | 346.7 | 352.6 | 328.7 | 316.8 | 310.8 | 316.8 | 352.6 | 537.9 | 1613.8 | 8134.6 | 15868.7 |
| 77.5° | 292.9 | 304.8 | 269.0 | 245.1 | 239.1 | 239.1 | 274.9 | 334.7 | 693.3 | 2952.6 | 7112.5 |
| 80° | 221.1 | 227.1 | 197.2 | 173.3 | 173.3 | 167.4 | 203.2 | 245.1 | 328.7 | 878.6 | 1595.8 |
| 82.5° | 125.5 | 125.5 | 113.6 | 101.6 | 95.6 | 101.6 | 137.5 | 167.4 | 203.2 | 310.8 | 436.3 |
| 85° | 29.9 | 29.9 | 35.9 | 41.8 | 41.8 | 53.8 | 77.7 | 89.7 | 107.6 | 125.5 | 167.4 |
| 87.5° | 6.0 | 6.0 | 6.0 | 12.0 | 17.9 | 17.9 | 29.9 | 41.8 | 53.8 | 65.7 | 71.7 |
| 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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Scaled Data Report

REPORT NUMBER: P1360683
CATALOG NUMBER: GSS-SB6A-740-U-T1

**CANDELA DISTRIBUTION (continued):**

| | 85° | 87.5° | 90° |
|---|---|---|---|
| 0° | 5379.2 | 5379.2 | *5379.2* |
| 2.5° | 5391.2 | 5397.2 | *5391.2* |
| 5° | 5427.1 | 5415.1 | *5397.2* |
| 7.5° | 5433.0 | 5439.0 | *5445.0* |
| 10° | 5456.9 | 5480.8 | *5445.0* |
| 12.5° | 5480.8 | 5462.9 | *5451.0* |
| 15° | 5498.8 | 5492.8 | *5456.9* |
| 17.5° | 5564.5 | 5540.6 | *5534.6* |
| 20° | 5666.1 | 5660.2 | *5642.2* |
| 22.5° | 5785.7 | 5773.7 | *5767.7* |
| 25° | 5959.0 | 5917.2 | *5893.3* |
| 27.5° | 6102.4 | 6066.6 | *6054.6* |
| 30° | 6245.9 | 6174.2 | *6174.2* |
| 32.5° | 6371.4 | 6353.5 | *6341.5* |
| 35° | 6670.3 | 6580.6 | *6592.6* |
| 37.5° | 7034.8 | 6945.2 | *6867.5* |
| 40° | 7548.9 | 7429.3 | *7381.5* |
| 42.5° | 7877.6 | 7758.1 | *7770.0* |
| 45° | 8062.9 | 7853.7 | *7799.9* |
| 47.5° | 8564.9 | 8302.0 | *8230.2* |
| 50° | 9377.8 | 9055.0 | *8965.4* |
| 52.5° | 10692.7 | 10172.7 | *10053.2* |
| 55° | 12342.4 | 11702.8 | *11583.3* |
| 57.5° | 14601.6 | 13752.9 | *13495.9* |
| 60° | 17351.0 | 16299.1 | *15910.6* |
| 62.5° | 20656.3 | 19359.3 | *18988.7* |
| 65° | 23142.7 | 22060.8 | *21487.1* |
| 67.5° | 25133.0 | 24242.4 | *23967.5* |
| 70° | 26316.4 | 26358.3 | *26430.0* |
| 72.5° | *24947.7* | *26095.3* | *26645.1* |
| 75° | 18283.4 | 19174.0 | *20028.7* |
| 77.5° | 7064.7 | 6371.4 | *6168.2* |
| 80° | 1141.6 | 1069.9 | *1105.7* |
| 82.5° | 514.0 | 543.9 | *573.8* |
| 85° | 334.7 | 388.5 | *412.4* |
| 87.5° | 77.7 | 77.7 | *77.7* |
| 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: SP1-2407-184-1

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-740-U-5WQ

Data in this report applies to families of products including GSS-SB1A-740-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

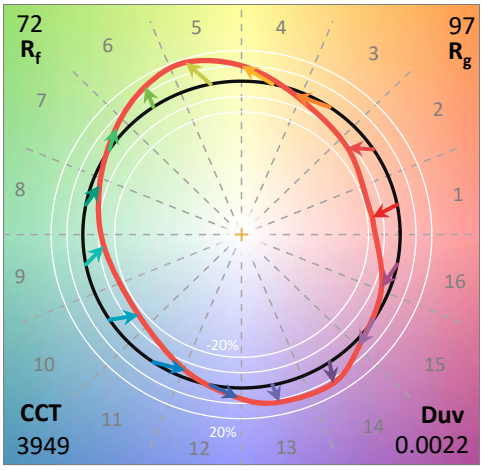
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-1 |
| 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-740-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 4000K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 3949 |
| CIE u': | 0.2248 |
| CIE v': | 0.5053 |
| Duv: | 0.0022 |
| CIE x: | 0.3844 |
| CIE y: | 0.3840 |
| CIE z: | 0.2316 |
| Peak Wavelength (nm): | 440 |
| Dominant Wavelength (nm): | 578 |
| Purity: | 30.60026 |
| Rf: | 71.8 |
| Rg: | 96.5 |

| | |
|---|---|
| CRI (Ra): | 70.7 |
| R1: | 68.0 |
| R2: | 76.0 |
| R3: | 84.3 |
| R4: | 72.0 |
| R5: | 68.6 |
| R6: | 68.3 |
| R7: | 77.9 |
| R8: | 50.3 |
| R9: | -36.7 |
| R10: | 45.1 |
| R11: | 70.7 |
| R12: | 47.1 |
| R13: | 68.5 |
| R14: | 91.1 |
| R15: | 58.7 |




## Test Conditions

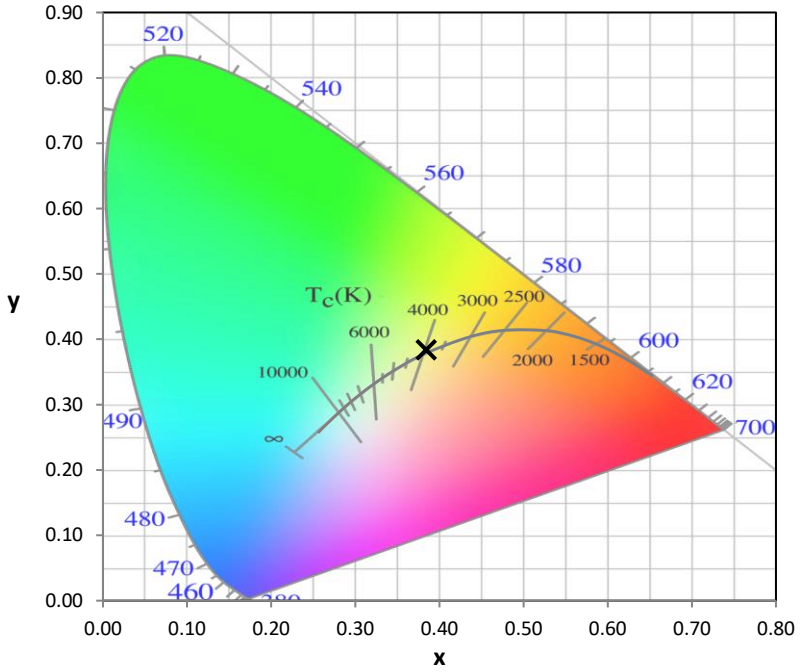
| | |
|---|---|
| Stabilization Time: | 34M |
| Operation Time: | 1H 34M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-1

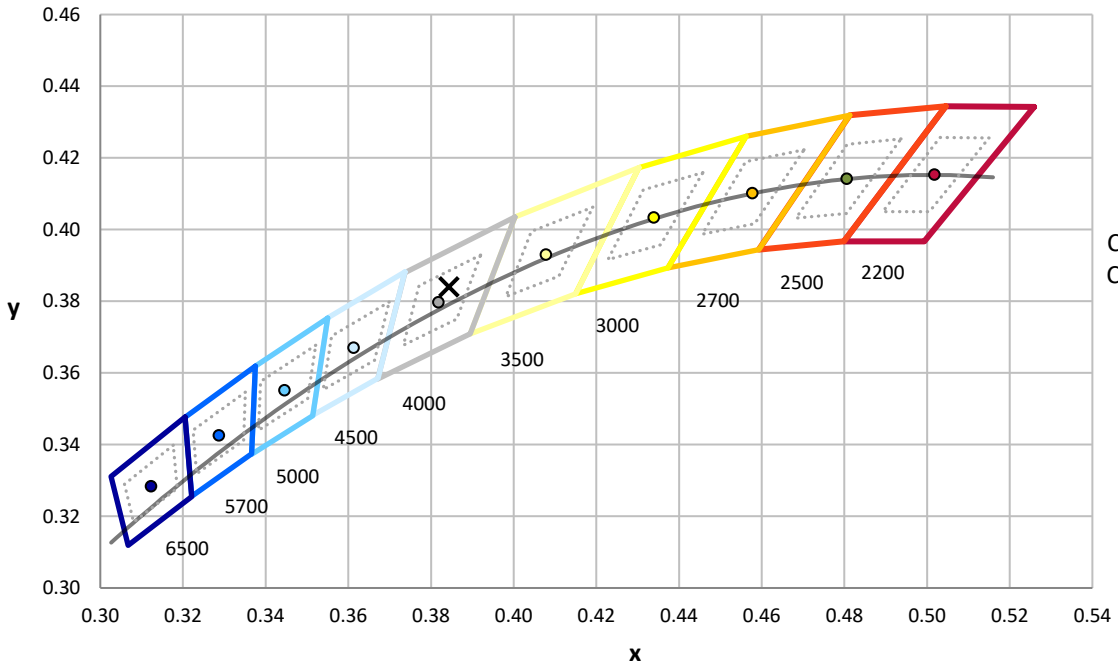
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC 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: SP1-2407-184-1

## CIE 1931 Chromaticity Diagram




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

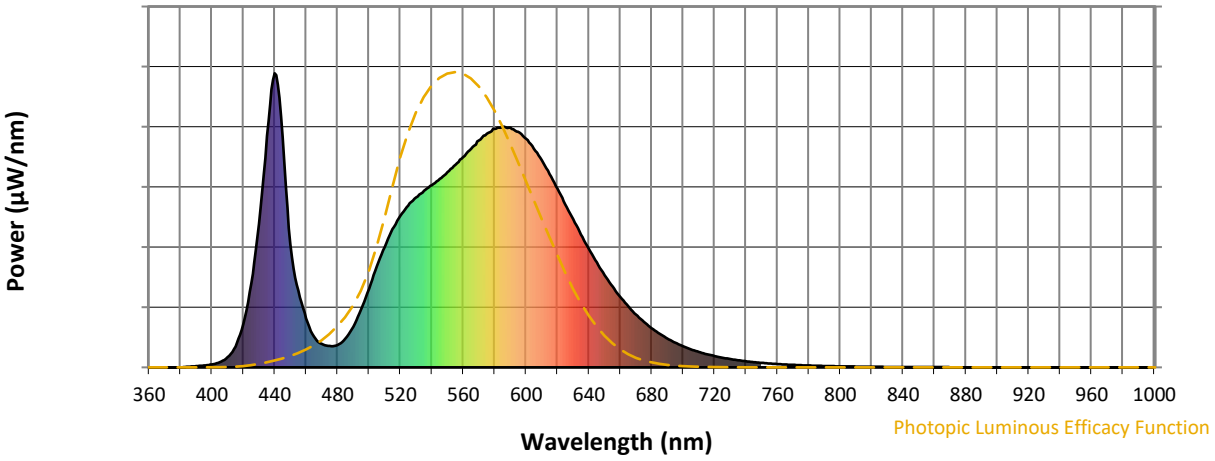



CCT = 3949K
CIE x = 0.3844
CIE y = 0.3840
Duv = 0.0022

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-1

## Photopic Flux vs. Wavelength

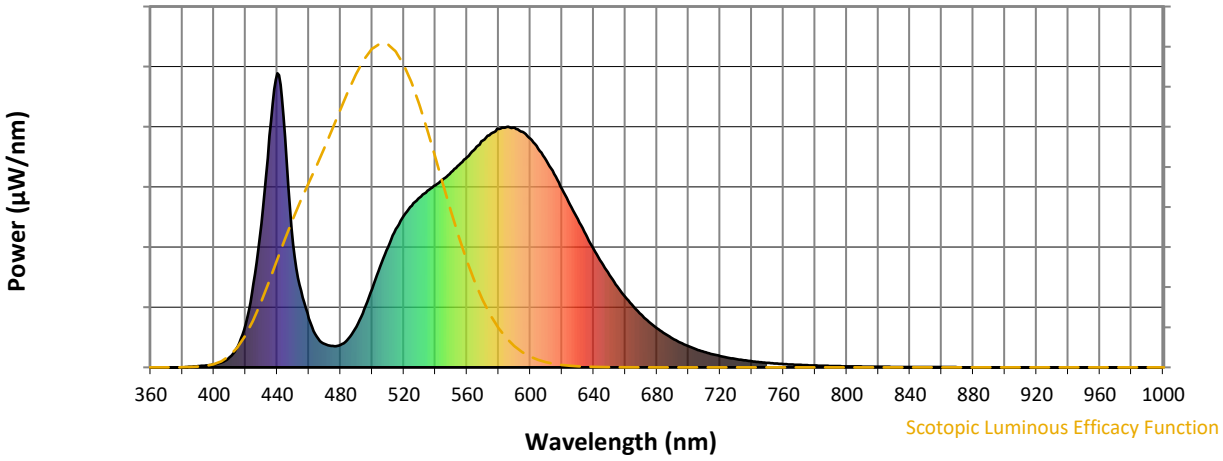



## Photopic Lumens: NR

| 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 | 139 | NR | 620 | 607 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 198 | NR | 625 | 554 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 267 | NR | 630 | 504 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 343 | NR | 635 | 452 | NR | 765 | 10 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 410 | NR | 640 | 403 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 470 | NR | 645 | 357 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 516 | NR | 650 | 314 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 7 | NR | 525 | 550 | NR | 655 | 275 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 10 | NR | 530 | 578 | NR | 660 | 240 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 17 | NR | 535 | 601 | NR | 665 | 208 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 35 | NR | 540 | 620 | NR | 670 | 179 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 70 | NR | 545 | 641 | NR | 675 | 155 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 147 | NR | 550 | 664 | NR | 680 | 133 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 285 | NR | 555 | 689 | NR | 685 | 114 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 487 | NR | 560 | 715 | NR | 690 | 98 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 787 | NR | 565 | 743 | NR | 695 | 84 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 1000 | NR | 570 | 771 | NR | 700 | 72 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 783 | NR | 575 | 794 | NR | 705 | 61 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 417 | NR | 580 | 811 | NR | 710 | 52 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 261 | NR | 585 | 817 | NR | 715 | 45 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 167 | NR | 590 | 815 | NR | 720 | 39 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 104 | NR | 595 | 801 | NR | 725 | 33 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 79 | NR | 600 | 777 | NR | 730 | 28 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 73 | NR | 605 | 744 | NR | 735 | 24 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 76 | NR | 610 | 704 | NR | 740 | 21 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 98 | NR | 615 | 657 | NR | 745 | 18 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-1

## Scotopic Flux vs. Wavelength

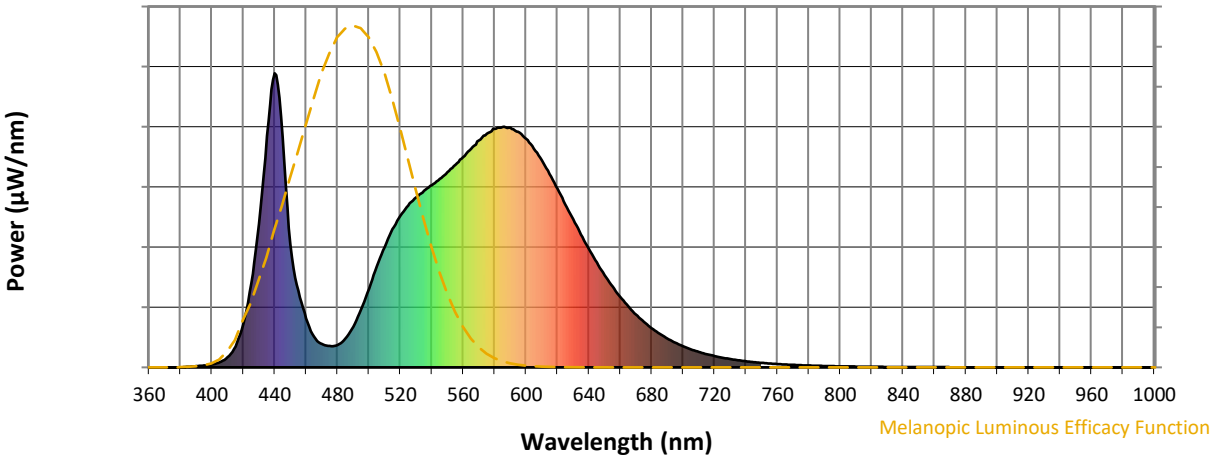



**Scotopic Lumens: NR** **S/P: 1.47**

| 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 | 139 | NR | 620 | 607 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 198 | NR | 625 | 554 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 267 | NR | 630 | 504 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 343 | NR | 635 | 452 | NR | 765 | 10 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 410 | NR | 640 | 403 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 470 | NR | 645 | 357 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 516 | NR | 650 | 314 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 7 | NR | 525 | 550 | NR | 655 | 275 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 10 | NR | 530 | 578 | NR | 660 | 240 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 17 | NR | 535 | 601 | NR | 665 | 208 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 35 | NR | 540 | 620 | NR | 670 | 179 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 70 | NR | 545 | 641 | NR | 675 | 155 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 147 | NR | 550 | 664 | NR | 680 | 133 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 285 | NR | 555 | 689 | NR | 685 | 114 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 487 | NR | 560 | 715 | NR | 690 | 98 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 787 | NR | 565 | 743 | NR | 695 | 84 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 1000 | NR | 570 | 771 | NR | 700 | 72 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 783 | NR | 575 | 794 | NR | 705 | 61 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 417 | NR | 580 | 811 | NR | 710 | 52 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 261 | NR | 585 | 817 | NR | 715 | 45 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 167 | NR | 590 | 815 | NR | 720 | 39 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 104 | NR | 595 | 801 | NR | 725 | 33 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 79 | NR | 600 | 777 | NR | 730 | 28 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 73 | NR | 605 | 744 | NR | 735 | 24 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 76 | NR | 610 | 704 | NR | 740 | 21 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 98 | NR | 615 | 657 | NR | 745 | 18 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-1

## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.78**

| 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 | 139 | NR | 620 | 607 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 198 | NR | 625 | 554 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 267 | NR | 630 | 504 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 343 | NR | 635 | 452 | NR | 765 | 10 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 410 | NR | 640 | 403 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 470 | NR | 645 | 357 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 516 | NR | 650 | 314 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 7 | NR | 525 | 550 | NR | 655 | 275 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 10 | NR | 530 | 578 | NR | 660 | 240 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 17 | NR | 535 | 601 | NR | 665 | 208 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 35 | NR | 540 | 620 | NR | 670 | 179 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 70 | NR | 545 | 641 | NR | 675 | 155 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 147 | NR | 550 | 664 | NR | 680 | 133 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 285 | NR | 555 | 689 | NR | 685 | 114 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 487 | NR | 560 | 715 | NR | 690 | 98 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 787 | NR | 565 | 743 | NR | 695 | 84 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 1000 | NR | 570 | 771 | NR | 700 | 72 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 783 | NR | 575 | 794 | NR | 705 | 61 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 417 | NR | 580 | 811 | NR | 710 | 52 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 261 | NR | 585 | 817 | NR | 715 | 45 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 167 | NR | 590 | 815 | NR | 720 | 39 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 104 | NR | 595 | 801 | NR | 725 | 33 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 79 | NR | 600 | 777 | NR | 730 | 28 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 73 | NR | 605 | 744 | NR | 735 | 24 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 76 | NR | 610 | 704 | NR | 740 | 21 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 98 | NR | 615 | 657 | NR | 745 | 18 | NR | 875 | 1 | NR | | | |

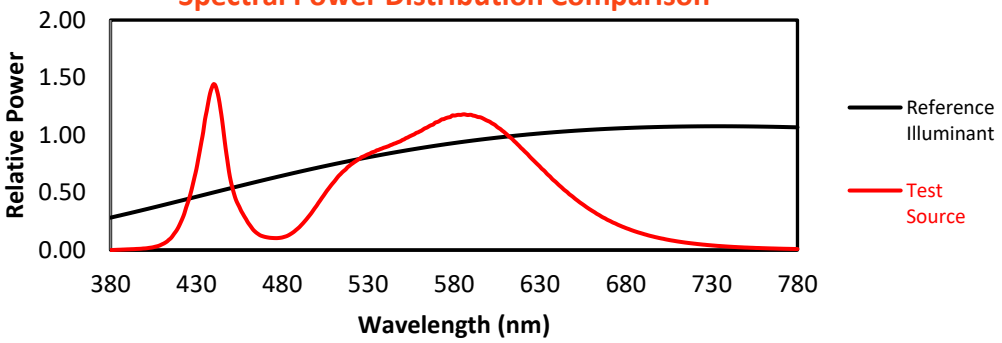
REPORT NUMBER: SP1-2407-184-1

# TM-30-18

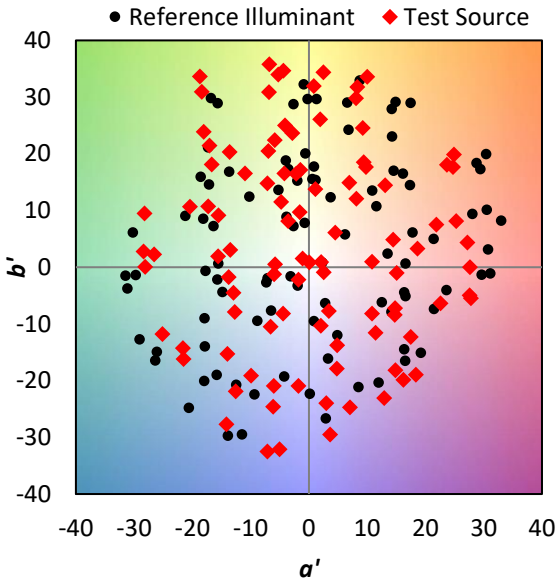
## Summary

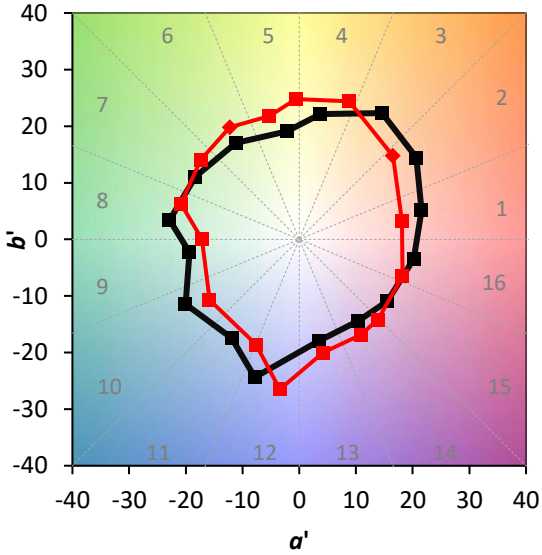
$R_f$ = 71.8
$R_g$ = 96.5
CIE $R_a$ = 70.7
$R_9$ = -36.7

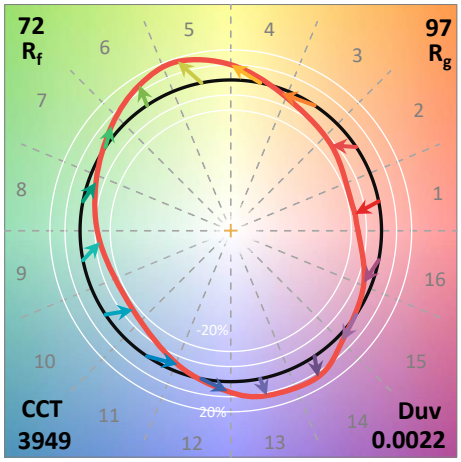
## Spectral Power Distribution Comparison

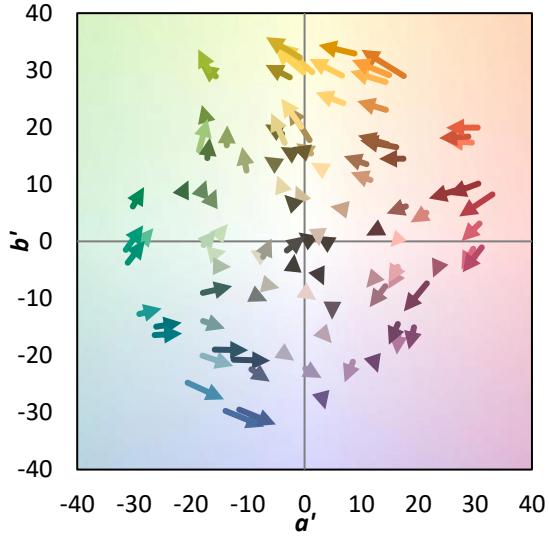



## Color Vector Graphics



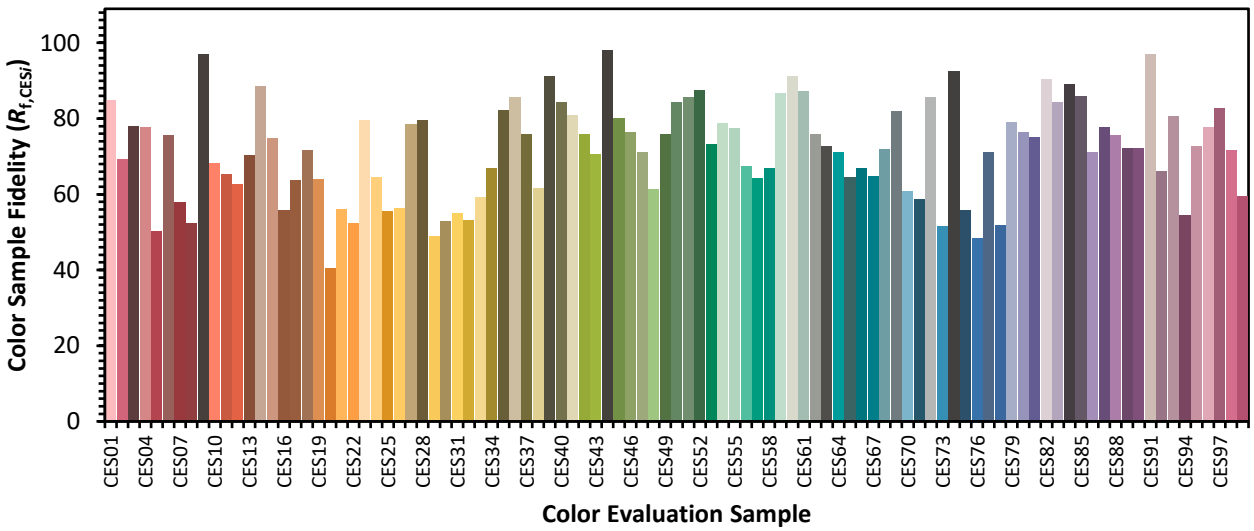



REPORT NUMBER: SP1-2407-184-1

# TM-30-18

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

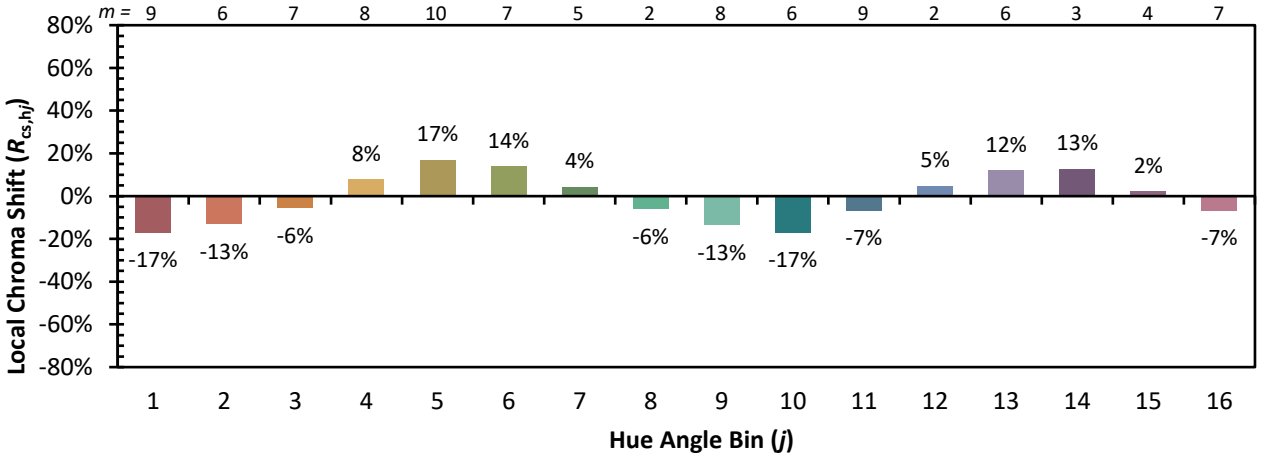
| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 56 | CES51 = 86 | CES76 = 48 |
| CES02 = 61 | CES27 = 79 | CES52 = 88 | CES77 = 71 |
| CES03 = 30 | CES28 = 80 | CES53 = 73 | CES78 = 52 |
| CES04 = 70 | CES29 = 49 | CES54 = 79 | CES79 = 79 |
| CES05 = 47 | CES30 = 53 | CES55 = 77 | CES80 = 77 |
| CES06 = 50 | CES31 = 55 | CES56 = 67 | CES81 = 75 |
| CES07 = 40 | CES32 = 53 | CES57 = 64 | CES82 = 90 |
| CES08 = 39 | CES33 = 59 | CES58 = 67 | CES83 = 84 |
| CES09 = 29 | CES34 = 67 | CES59 = 87 | CES84 = 89 |
| CES10 = 74 | CES35 = 82 | CES60 = 91 | CES85 = 86 |
| CES11 = 57 | CES36 = 86 | CES61 = 87 | CES86 = 71 |
| CES12 = 63 | CES37 = 76 | CES62 = 76 | CES87 = 78 |
| CES13 = 42 | CES38 = 62 | CES63 = 73 | CES88 = 76 |
| CES14 = 74 | CES39 = 91 | CES64 = 71 | CES89 = 72 |
| CES15 = 71 | CES40 = 84 | CES65 = 64 | CES90 = 72 |
| CES16 = 46 | CES41 = 81 | CES66 = 67 | CES91 = 97 |
| CES17 = 49 | CES42 = 76 | CES67 = 65 | CES92 = 66 |
| CES18 = 56 | CES43 = 71 | CES68 = 72 | CES93 = 81 |
| CES19 = 72 | CES44 = 98 | CES69 = 82 | CES94 = 55 |
| CES20 = 65 | CES45 = 80 | CES70 = 61 | CES95 = 73 |
| CES21 = 86 | CES46 = 76 | CES71 = 59 | CES96 = 78 |
| CES22 = 78 | CES47 = 71 | CES72 = 86 | CES97 = 83 |
| CES23 = 92 | CES48 = 61 | CES73 = 52 | CES98 = 72 |
| CES24 = 91 | CES49 = 76 | CES74 = 93 | CES99 = 60 |
| CES25 = 72 | CES50 = 84 | CES75 = 56 | |

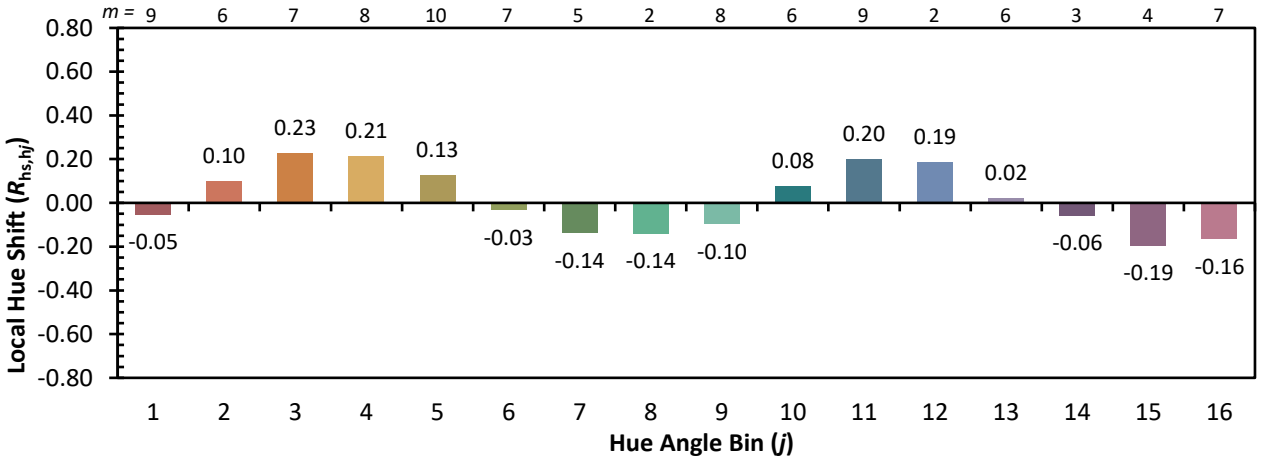


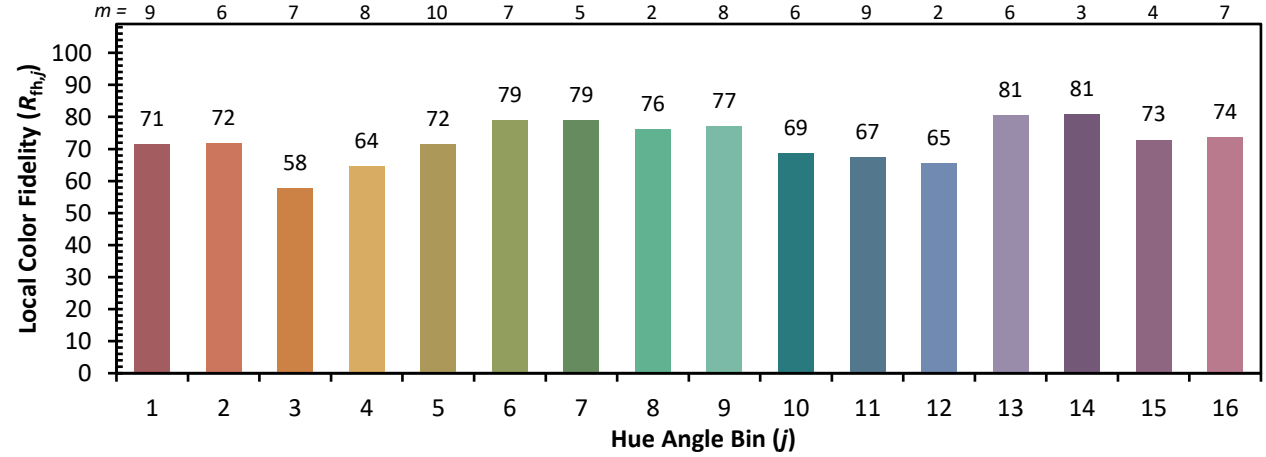
REPORT NUMBER: SP1-2407-184-1

**TM-30-18**

## Color Rendition by Hue-Angle Bin



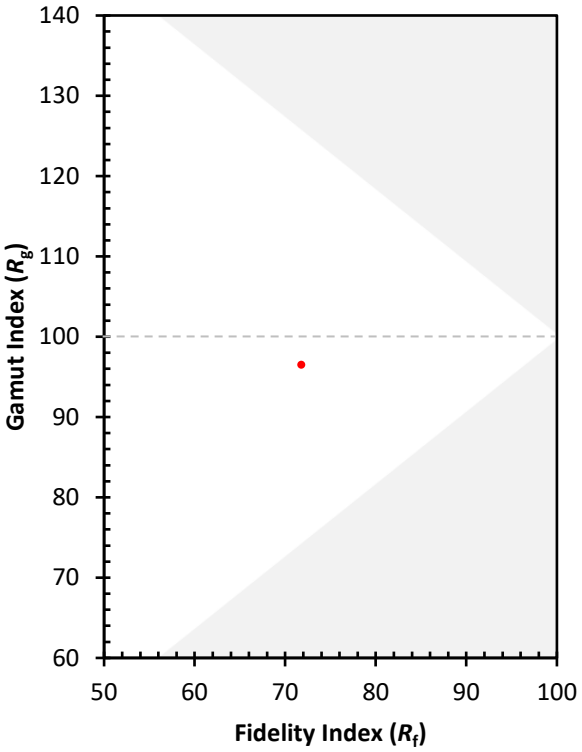



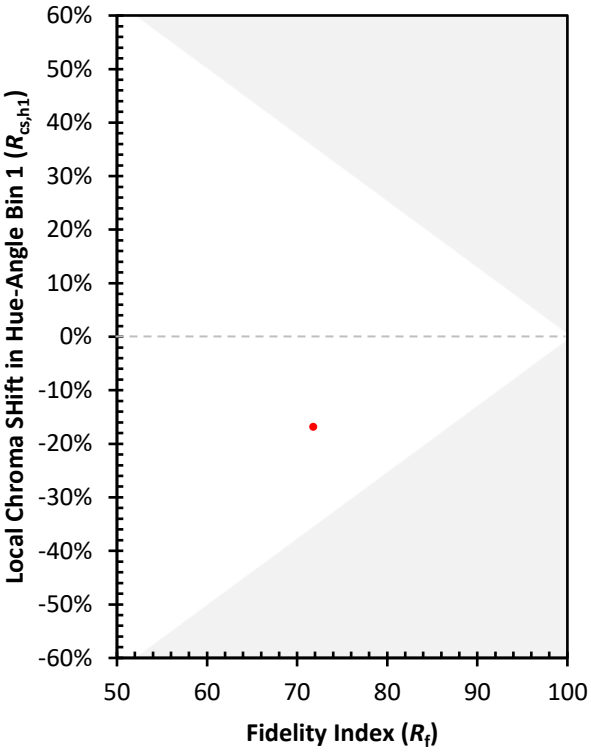



REPORT NUMBER: SP1-2407-184-1

# TM-30-18

## Measure Comparisons




(END OF REPORT)