

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1257144

Luminaire Tested: P3A09R609040DE010 E3DL1WMH

Issue Date: 1/30/2026

Test Information

Test Method: LM-79-2019
Report Number: P1257144
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2601-647-39)
Test Lab: INNOVATION CENTER
Issue Date: 1/30/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R609040DE010 E3DL1WMH
Description: 3in Adjustable LED luminaire with, R60 optic, 4000K CCT AND, 90CRI , E3DL1WMH TRIM
Light Source: -
Ballast/Driver: -

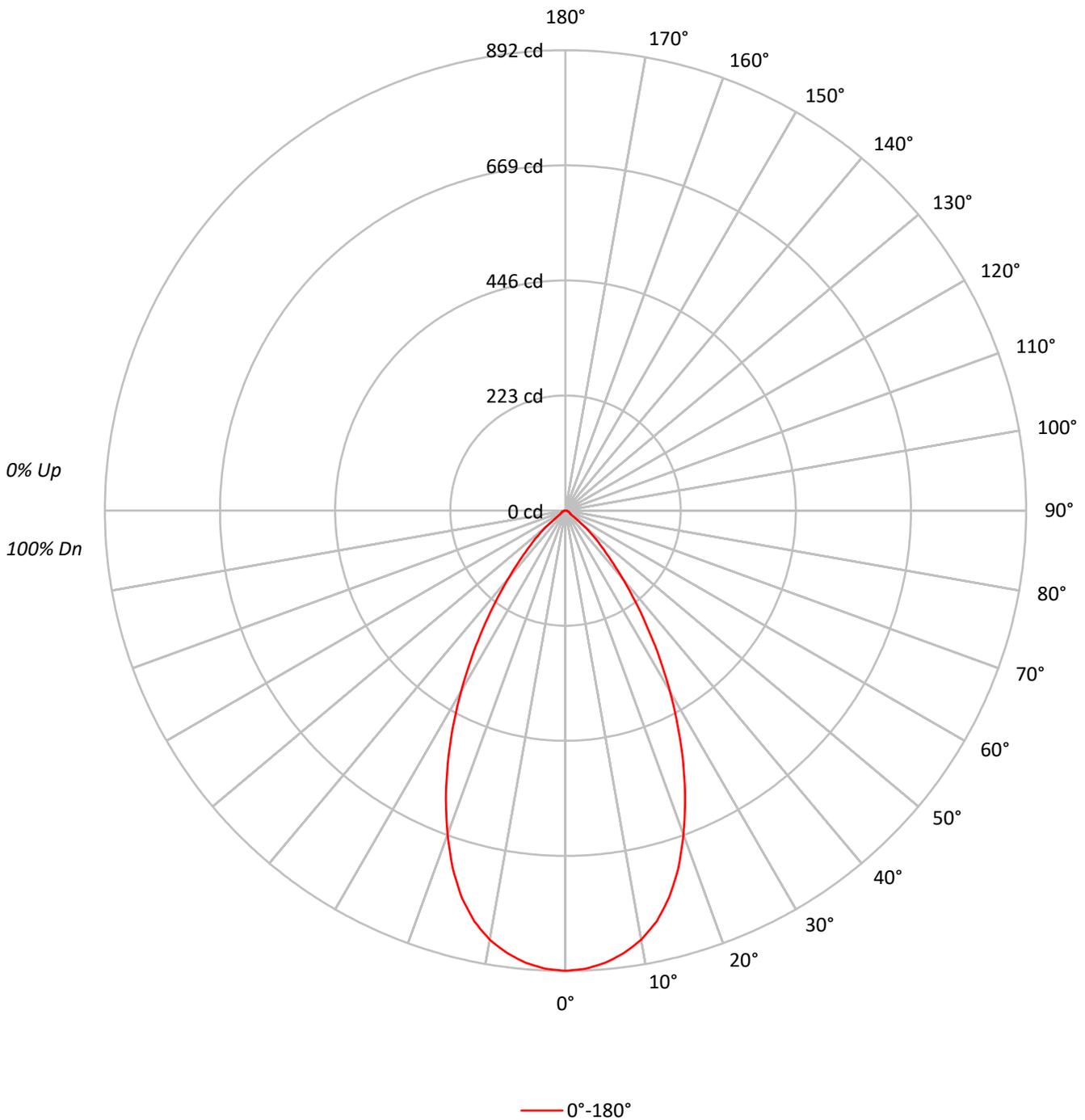
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 828.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.87
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1257144
CATALOG NUMBER: P3A09R609040DE010 E3DL1WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1257144
 CATALOG NUMBER: P3A09R609040DE010 E3DL1WMH

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 82.9 | 10.0 |
| 10°-20° | 215.3 | 26.0 |
| 20°-30° | 245.4 | 29.6 |
| 30°-40° | 174.0 | 21.0 |
| 40°-50° | 79.0 | 9.5 |
| 50°-60° | 16.7 | 2.0 |
| 60°-70° | 8.1 | 1.0 |
| 70°-80° | 5.0 | 0.6 |
| 80°-90° | 1.7 | 0.2 |
| 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°-30° | 543.5 | 65.6 |
| 0°-40° | 717.5 | 86.7 |
| 0°-60° | 813.2 | 98.2 |
| 0°-90° | 828.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 828.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 892 | |
| 5° | 880 | 83 |
| 15° | 776 | 215 |
| 25° | 539 | 245 |
| 35° | 277 | 174 |
| 45° | 99 | 79 |
| 55° | 13 | 17 |
| 65° | 8 | 8 |
| 75° | 5 | 5 |
| 85° | 2 | 2 |
| 90° | 0 | |



TEST NUMBER: P1257144
CATALOG NUMBER: P3A09R609040DE010 E3DL1WMH

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 891.6 |
| 2.5° | 888.5 |
| 5° | 879.8 |
| 7.5° | 864.9 |
| 10° | 844.4 |
| 12.5° | 815.3 |
| 15° | 775.9 |
| 17.5° | 726.4 |
| 20° | 668.1 |
| 22.5° | 605.2 |
| 25° | 539.1 |
| 27.5° | 471.4 |
| 30° | 403.7 |
| 32.5° | 339.2 |
| 35° | 277.0 |
| 37.5° | 221.9 |
| 40° | 172.3 |
| 42.5° | 130.6 |
| 45° | 99.2 |
| 47.5° | 74.0 |
| 50° | 48.8 |
| 52.5° | 22.8 |
| 55° | 12.6 |
| 57.5° | 11.0 |
| 60° | 10.2 |
| 62.5° | 9.4 |
| 65° | 7.9 |
| 67.5° | 7.1 |
| 70° | 6.3 |
| 72.5° | 5.5 |
| 75° | 4.7 |
| 77.5° | 3.9 |
| 80° | 3.1 |
| 82.5° | 2.4 |
| 85° | 1.6 |
| 87.5° | 0.8 |
| 90° | 0.0 |

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

Report Prepared for

Cooper Lighting Solutions

IRiS

Report Number: SP1-2504-409-14

Test Date: 05/14/2025

Luminaire Tested: LD3A05R129040D010 E3D1H

Data in this report applies to families of products including LD3A

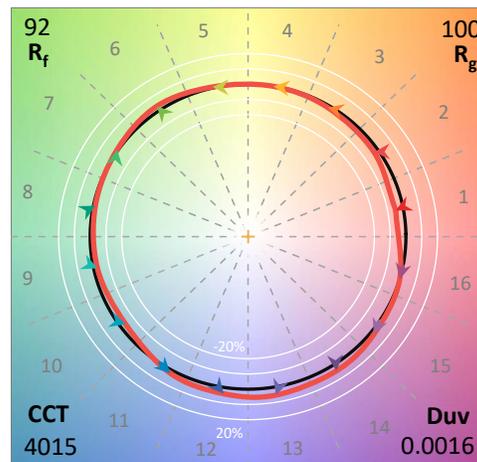
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2504-409-14
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 05/18/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: IRiS
 Catalog Number: **LD3A05R129040D010 E3D1H**
 Description: 3in Adjustable LED luminaire with, R12 optic, 4000K CCT AND, 90CRI LEDS, E3D1H TRIM

Spectral Parameters

CCT (K): 4015
 CIE u': 0.2239
 CIE v': 0.5033
 Duv: 0.0016
 CIE x: 0.3809
 CIE y: 0.3805
 CIE z: 0.2386
 Peak Wavelength (nm): 450
 Dominant Wavelength (nm): 578
 Purity: 28.51686
 Rf: 91.5
 Rg: 100.3

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 92.3 | | |
| R1: | 93.1 | R9: | 58.4 |
| R2: | 93.8 | R10: | 85.3 |
| R3: | 94.2 | R11: | 94.4 |
| R4: | 94.2 | R12: | 74.9 |
| R5: | 92.7 | R13: | 93.3 |
| R6: | 91.9 | R14: | 96.5 |
| R7: | 94.0 | R15: | 89.0 |
| R8: | 84.8 | | |



Test Conditions

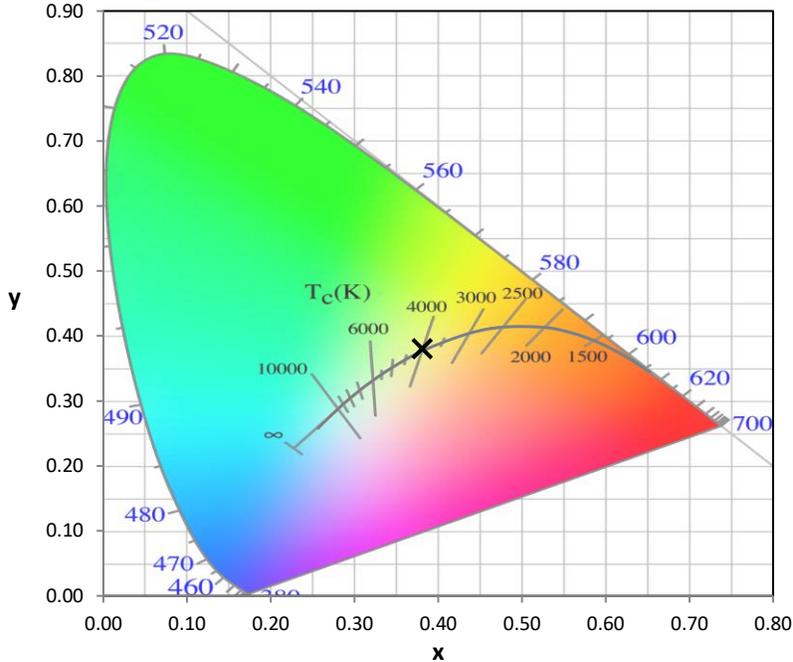
Stabilization Time: 26M
 Operation Time: 1H 26M
 Sphere Temperature (°C): 24.9

REPORT NUMBER: SP1-2504-409-14

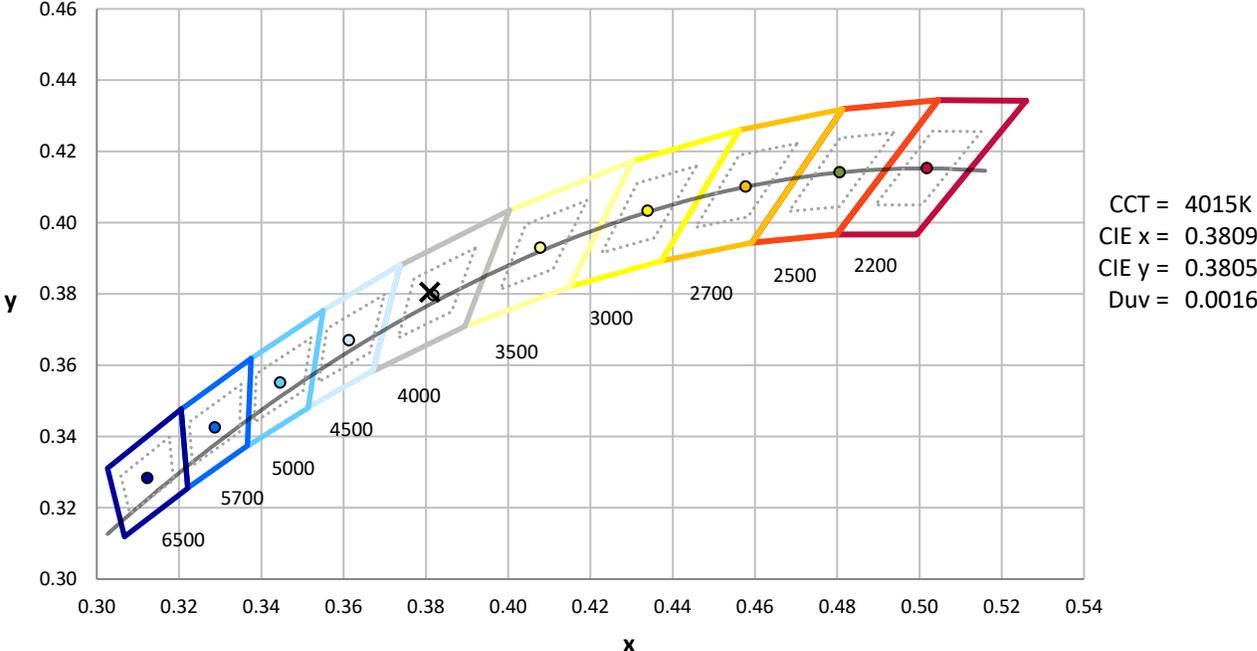
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 12/16/2024 | 6/16/2025 |
| Power Meter | INXT2011004 | 1/21/2025 | 1/21/2026 |
| AC Power Source | IN0063 | 10/22/2024 | 10/22/2025 |
| DC Power Source | IN0208 | 10/22/2024 | 10/22/2025 |
| Sphere Thermometer | IN0085 | 10/22/2024 | 10/22/2025 |
| Room Thermometer | IN0046 | 10/22/2024 | 10/22/2025 |

REPORT NUMBER: SP1-2504-409-14

CIE 1931 Chromaticity Diagram



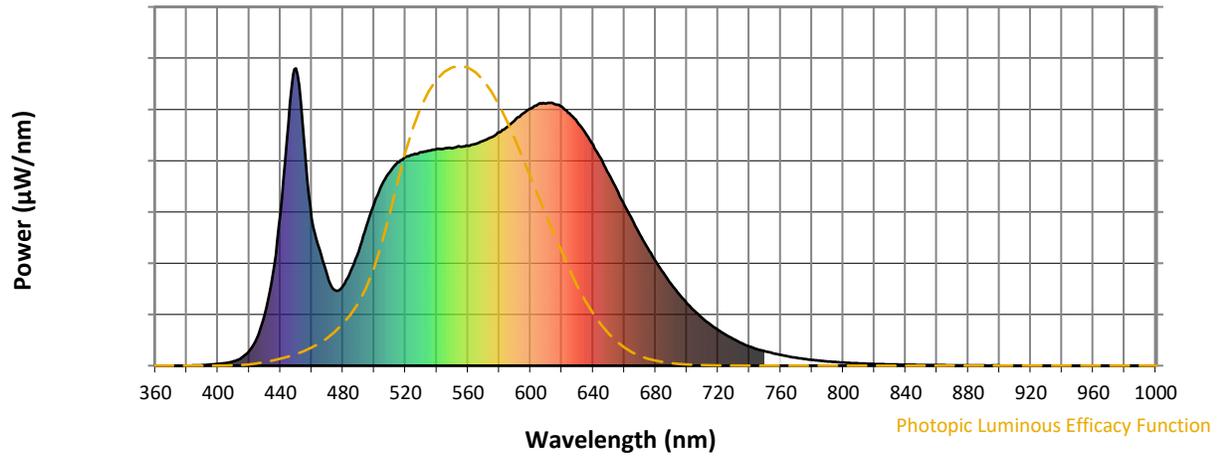
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2504-409-14

Photopic Flux vs. Wavelength

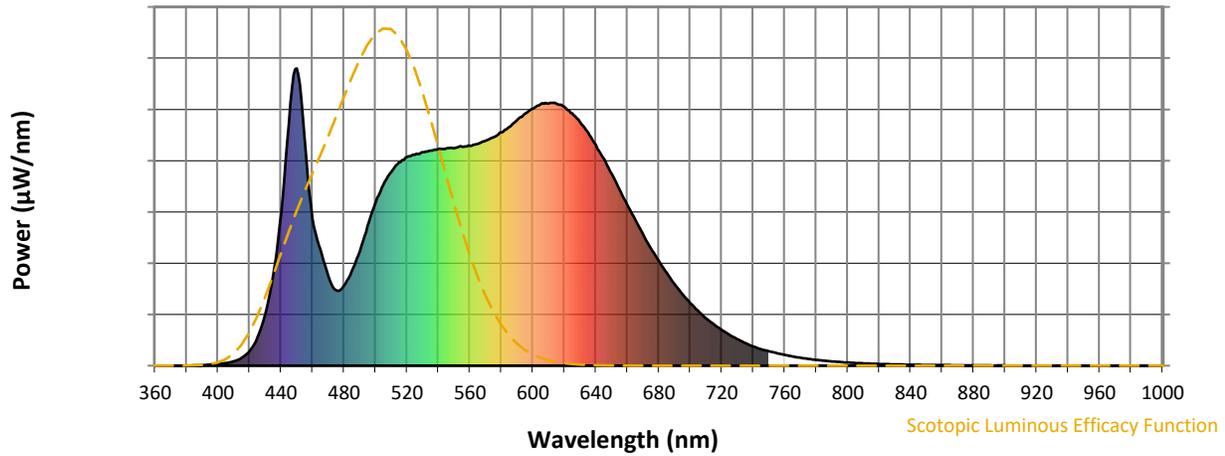


Photopic Lumens: NR

| 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 | 385 | NR | 620 | 871 | NR | 750 | 49 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 468 | NR | 625 | 849 | NR | 755 | 42 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 547 | NR | 630 | 819 | NR | 760 | 36 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 609 | NR | 635 | 784 | NR | 765 | 31 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 652 | NR | 640 | 744 | NR | 770 | 27 | NR | 900 | 1 | NR |
| 385 | 1 | NR | 515 | 684 | NR | 645 | 697 | NR | 775 | 23 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 702 | NR | 650 | 645 | NR | 780 | 20 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 710 | NR | 655 | 594 | NR | 785 | 17 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 718 | NR | 660 | 541 | NR | 790 | 14 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 723 | NR | 665 | 491 | NR | 795 | 12 | NR | 925 | 0 | NR |
| 410 | 15 | NR | 540 | 729 | NR | 670 | 441 | NR | 800 | 11 | NR | 930 | 0 | NR |
| 415 | 26 | NR | 545 | 731 | NR | 675 | 395 | NR | 805 | 9 | NR | 935 | 0 | NR |
| 420 | 49 | NR | 550 | 731 | NR | 680 | 352 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 95 | NR | 555 | 736 | NR | 685 | 312 | NR | 815 | 7 | NR | 945 | 0 | NR |
| 430 | 173 | NR | 560 | 740 | NR | 690 | 275 | NR | 820 | 6 | NR | 950 | 0 | NR |
| 435 | 305 | NR | 565 | 746 | NR | 695 | 241 | NR | 825 | 5 | NR | 955 | 0 | NR |
| 440 | 511 | NR | 570 | 757 | NR | 700 | 210 | NR | 830 | 4 | NR | 960 | 0 | NR |
| 445 | 811 | NR | 575 | 768 | NR | 705 | 184 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 1000 | NR | 580 | 785 | NR | 710 | 159 | NR | 840 | 3 | NR | 970 | 0 | NR |
| 455 | 760 | NR | 585 | 803 | NR | 715 | 139 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 496 | NR | 590 | 826 | NR | 720 | 120 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 392 | NR | 595 | 848 | NR | 725 | 104 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 302 | NR | 600 | 865 | NR | 730 | 89 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 253 | NR | 605 | 879 | NR | 735 | 76 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 269 | NR | 610 | 882 | NR | 740 | 65 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 319 | NR | 615 | 881 | NR | 745 | 55 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2504-409-14

Scotopic Flux vs. Wavelength



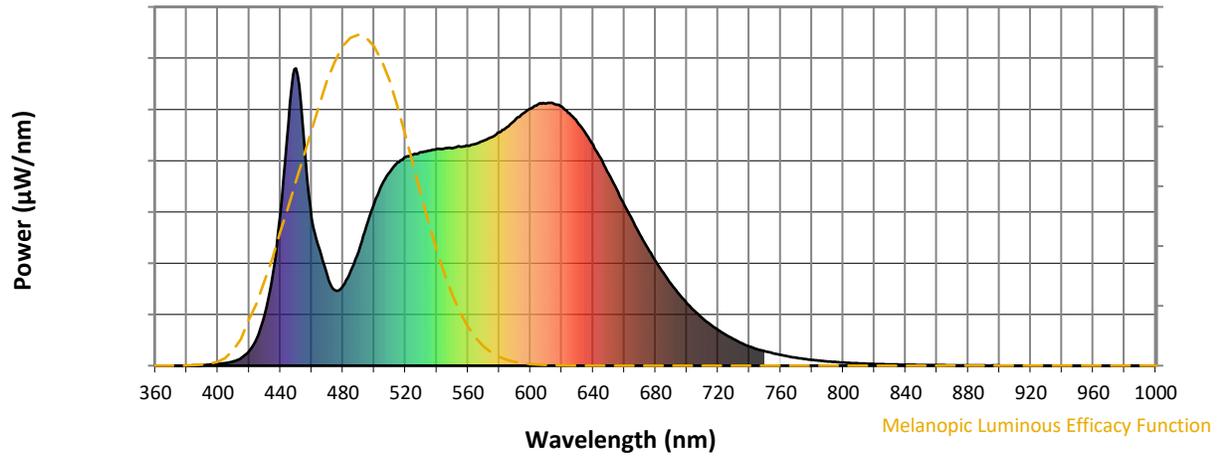
Scotopic Lumens: NR

S/P: 1.77

| 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 | 385 | NR | 620 | 871 | NR | 750 | 49 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 468 | NR | 625 | 849 | NR | 755 | 42 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 547 | NR | 630 | 819 | NR | 760 | 36 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 609 | NR | 635 | 784 | NR | 765 | 31 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 652 | NR | 640 | 744 | NR | 770 | 27 | NR | 900 | 1 | NR |
| 385 | 1 | NR | 515 | 684 | NR | 645 | 697 | NR | 775 | 23 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 702 | NR | 650 | 645 | NR | 780 | 20 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 710 | NR | 655 | 594 | NR | 785 | 17 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 718 | NR | 660 | 541 | NR | 790 | 14 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 723 | NR | 665 | 491 | NR | 795 | 12 | NR | 925 | 0 | NR |
| 410 | 15 | NR | 540 | 729 | NR | 670 | 441 | NR | 800 | 11 | NR | 930 | 0 | NR |
| 415 | 26 | NR | 545 | 731 | NR | 675 | 395 | NR | 805 | 9 | NR | 935 | 0 | NR |
| 420 | 49 | NR | 550 | 731 | NR | 680 | 352 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 95 | NR | 555 | 736 | NR | 685 | 312 | NR | 815 | 7 | NR | 945 | 0 | NR |
| 430 | 173 | NR | 560 | 740 | NR | 690 | 275 | NR | 820 | 6 | NR | 950 | 0 | NR |
| 435 | 305 | NR | 565 | 746 | NR | 695 | 241 | NR | 825 | 5 | NR | 955 | 0 | NR |
| 440 | 511 | NR | 570 | 757 | NR | 700 | 210 | NR | 830 | 4 | NR | 960 | 0 | NR |
| 445 | 811 | NR | 575 | 768 | NR | 705 | 184 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 1000 | NR | 580 | 785 | NR | 710 | 159 | NR | 840 | 3 | NR | 970 | 0 | NR |
| 455 | 760 | NR | 585 | 803 | NR | 715 | 139 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 496 | NR | 590 | 826 | NR | 720 | 120 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 392 | NR | 595 | 848 | NR | 725 | 104 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 302 | NR | 600 | 865 | NR | 730 | 89 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 253 | NR | 605 | 879 | NR | 735 | 76 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 269 | NR | 610 | 882 | NR | 740 | 65 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 319 | NR | 615 | 881 | NR | 745 | 55 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2504-409-14

Melanopic Flux vs. Wavelength



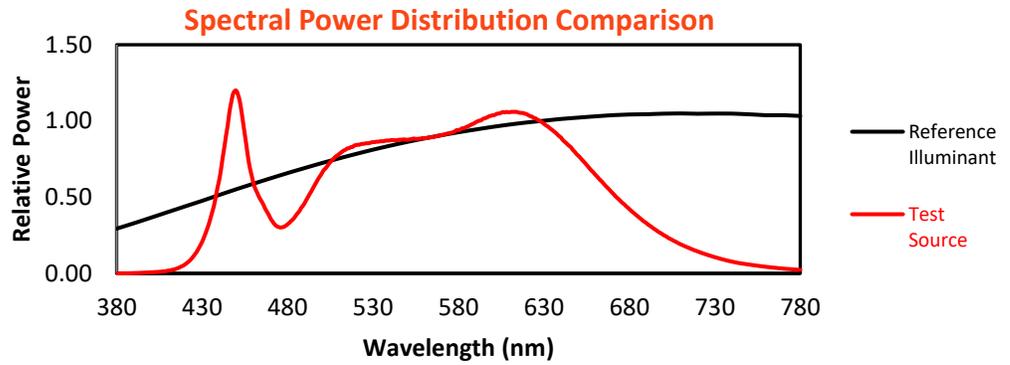
Melanopic Lumens: NR

M/P: 3.62

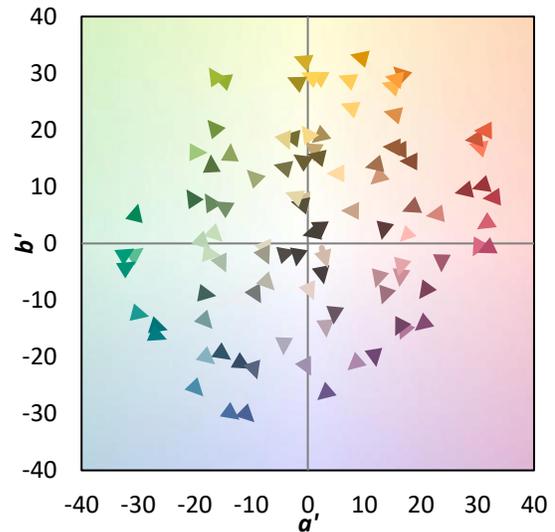
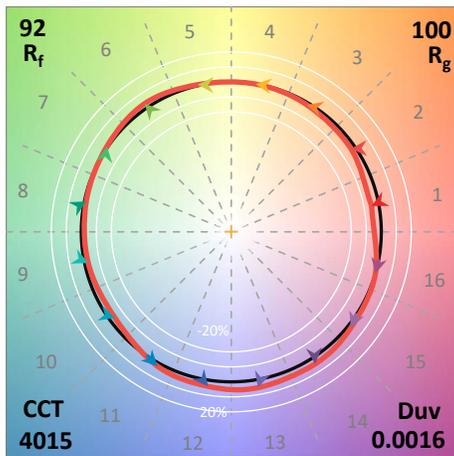
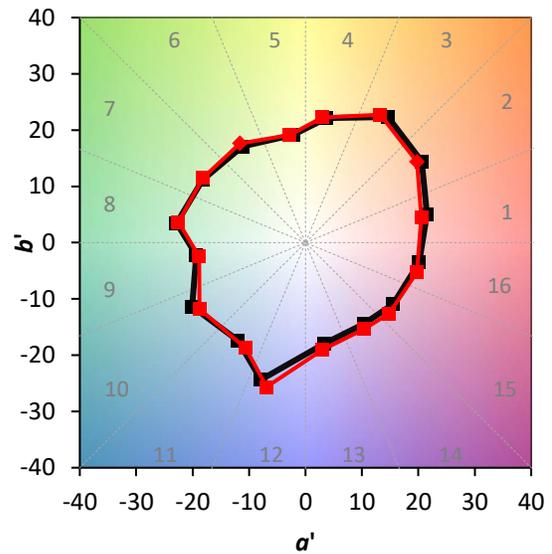
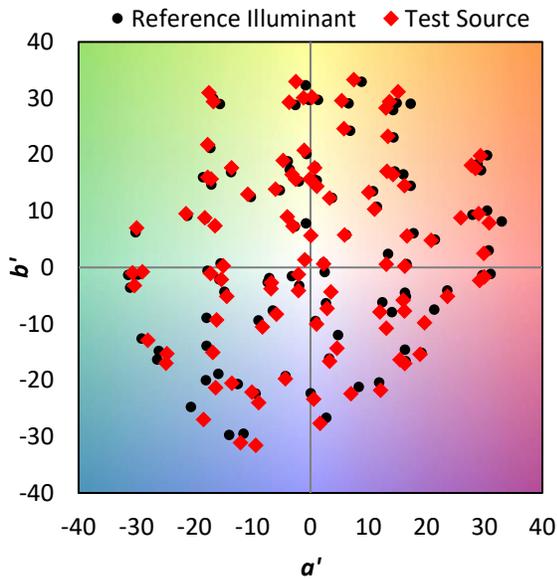
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 385 | NR | 620 | 871 | NR | 750 | 49 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 468 | NR | 625 | 849 | NR | 755 | 42 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 547 | NR | 630 | 819 | NR | 760 | 36 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 609 | NR | 635 | 784 | NR | 765 | 31 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 652 | NR | 640 | 744 | NR | 770 | 27 | NR | 900 | 1 | NR |
| 385 | 1 | NR | 515 | 684 | NR | 645 | 697 | NR | 775 | 23 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 702 | NR | 650 | 645 | NR | 780 | 20 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 710 | NR | 655 | 594 | NR | 785 | 17 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 718 | NR | 660 | 541 | NR | 790 | 14 | NR | 920 | 0 | NR |
| 405 | 9 | NR | 535 | 723 | NR | 665 | 491 | NR | 795 | 12 | NR | 925 | 0 | NR |
| 410 | 15 | NR | 540 | 729 | NR | 670 | 441 | NR | 800 | 11 | NR | 930 | 0 | NR |
| 415 | 26 | NR | 545 | 731 | NR | 675 | 395 | NR | 805 | 9 | NR | 935 | 0 | NR |
| 420 | 49 | NR | 550 | 731 | NR | 680 | 352 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 95 | NR | 555 | 736 | NR | 685 | 312 | NR | 815 | 7 | NR | 945 | 0 | NR |
| 430 | 173 | NR | 560 | 740 | NR | 690 | 275 | NR | 820 | 6 | NR | 950 | 0 | NR |
| 435 | 305 | NR | 565 | 746 | NR | 695 | 241 | NR | 825 | 5 | NR | 955 | 0 | NR |
| 440 | 511 | NR | 570 | 757 | NR | 700 | 210 | NR | 830 | 4 | NR | 960 | 0 | NR |
| 445 | 811 | NR | 575 | 768 | NR | 705 | 184 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 1000 | NR | 580 | 785 | NR | 710 | 159 | NR | 840 | 3 | NR | 970 | 0 | NR |
| 455 | 760 | NR | 585 | 803 | NR | 715 | 139 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 496 | NR | 590 | 826 | NR | 720 | 120 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 392 | NR | 595 | 848 | NR | 725 | 104 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 302 | NR | 600 | 865 | NR | 730 | 89 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 253 | NR | 605 | 879 | NR | 735 | 76 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 269 | NR | 610 | 882 | NR | 740 | 65 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 319 | NR | 615 | 881 | NR | 745 | 55 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 91.5$
 $R_g = 100.3$
 CIE $R_a = 92.3$
 $R_9 = 58.4$

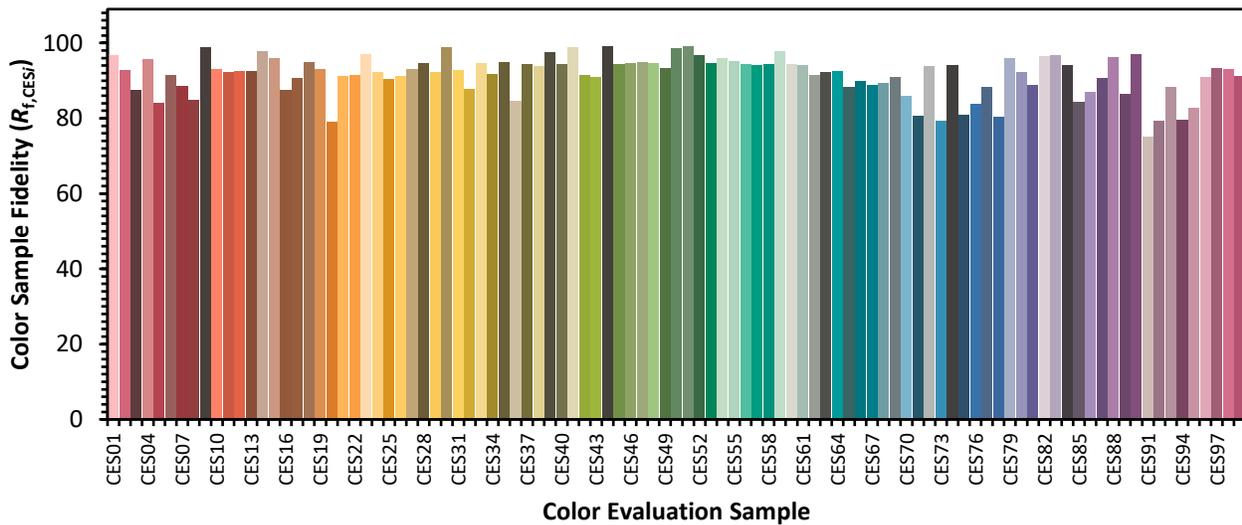


Color Vector Graphics

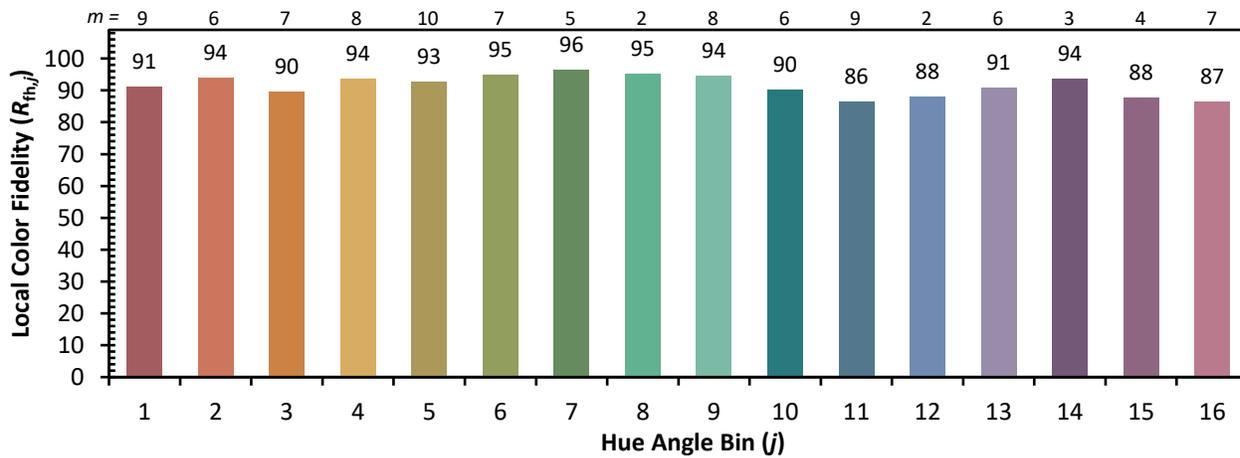
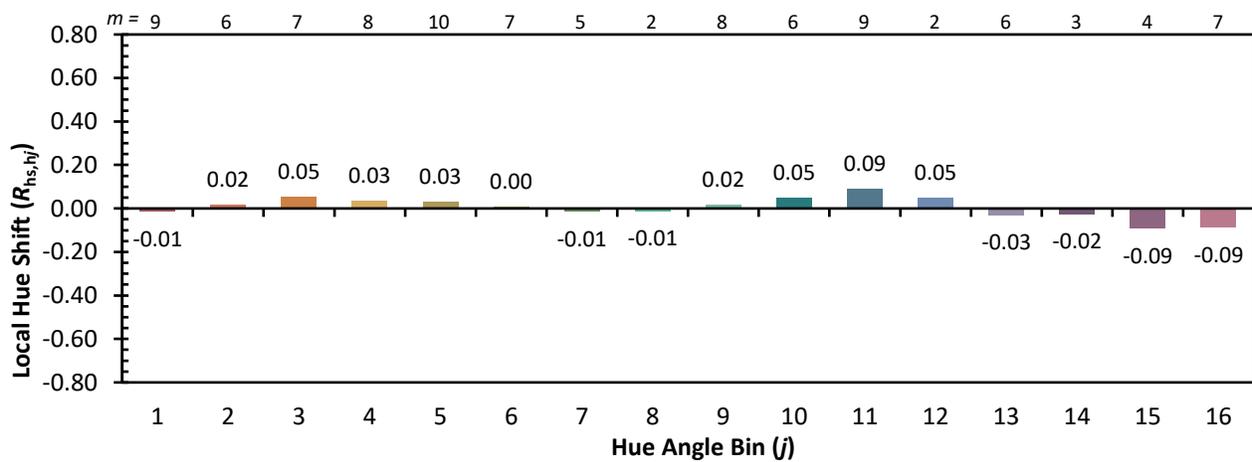
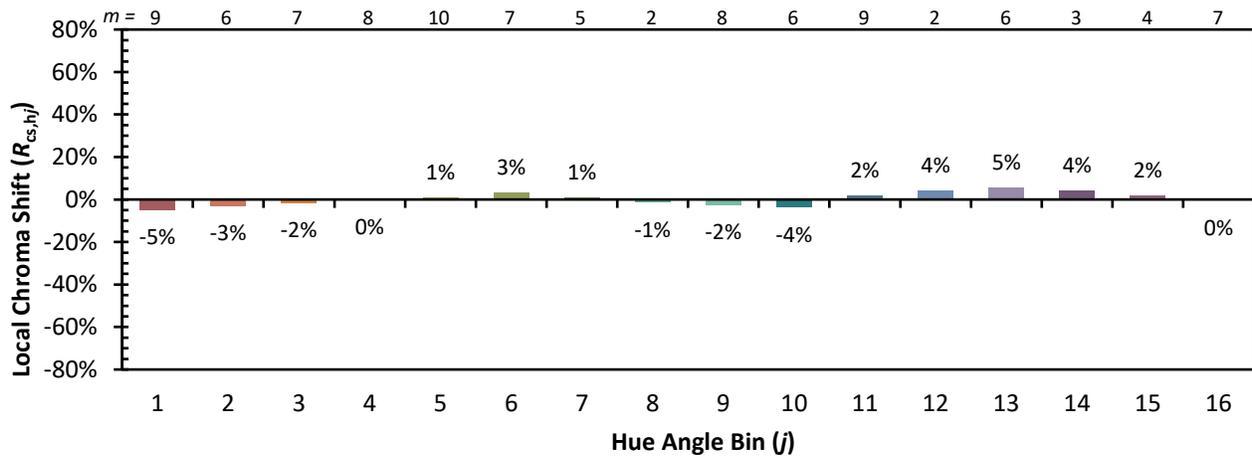


Individual Sample Fidelity Index ($R_{f,i}$)

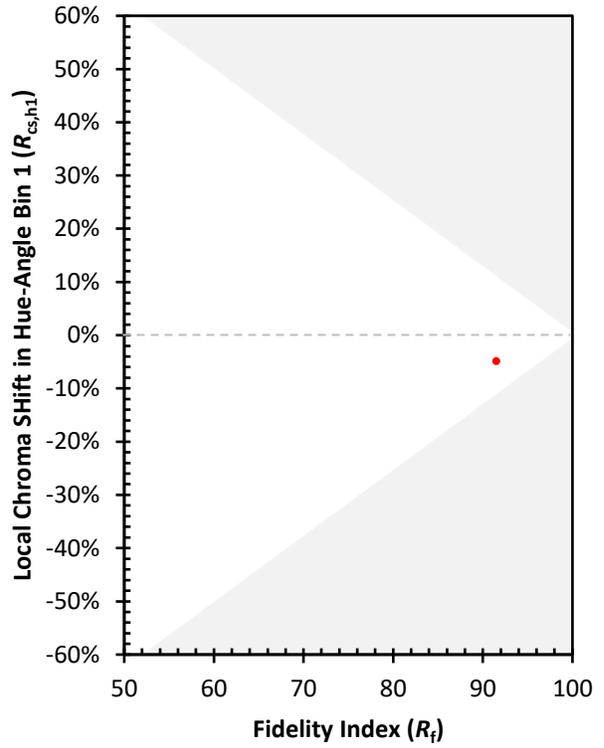
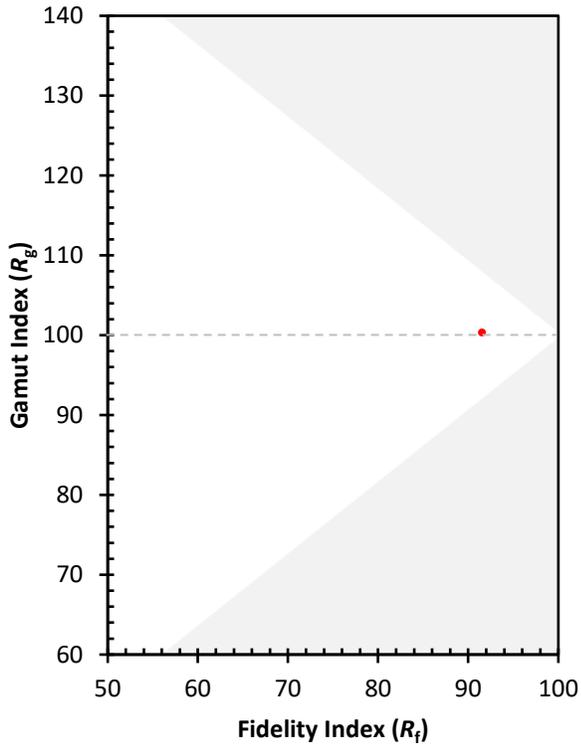
| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 91 | CES51 = 99 | CES76 = 84 |
| CES02 = 61 | CES27 = 93 | CES52 = 97 | CES77 = 88 |
| CES03 = 31 | CES28 = 95 | CES53 = 95 | CES78 = 80 |
| CES04 = 69 | CES29 = 92 | CES54 = 96 | CES79 = 96 |
| CES05 = 49 | CES30 = 99 | CES55 = 95 | CES80 = 92 |
| CES06 = 50 | CES31 = 93 | CES56 = 94 | CES81 = 89 |
| CES07 = 42 | CES32 = 88 | CES57 = 94 | CES82 = 96 |
| CES08 = 41 | CES33 = 95 | CES58 = 94 | CES83 = 97 |
| CES09 = 29 | CES34 = 92 | CES59 = 98 | CES84 = 94 |
| CES10 = 74 | CES35 = 95 | CES60 = 94 | CES85 = 84 |
| CES11 = 57 | CES36 = 85 | CES61 = 94 | CES86 = 87 |
| CES12 = 63 | CES37 = 94 | CES62 = 92 | CES87 = 91 |
| CES13 = 43 | CES38 = 94 | CES63 = 92 | CES88 = 96 |
| CES14 = 74 | CES39 = 98 | CES64 = 93 | CES89 = 87 |
| CES15 = 71 | CES40 = 94 | CES65 = 88 | CES90 = 97 |
| CES16 = 47 | CES41 = 99 | CES66 = 90 | CES91 = 75 |
| CES17 = 49 | CES42 = 91 | CES67 = 89 | CES92 = 79 |
| CES18 = 56 | CES43 = 91 | CES68 = 89 | CES93 = 88 |
| CES19 = 71 | CES44 = 99 | CES69 = 91 | CES94 = 80 |
| CES20 = 66 | CES45 = 94 | CES70 = 86 | CES95 = 83 |
| CES21 = 85 | CES46 = 95 | CES71 = 81 | CES96 = 91 |
| CES22 = 78 | CES47 = 95 | CES72 = 94 | CES97 = 93 |
| CES23 = 91 | CES48 = 95 | CES73 = 79 | CES98 = 93 |
| CES24 = 90 | CES49 = 93 | CES74 = 94 | CES99 = 91 |
| CES25 = 71 | CES50 = 99 | CES75 = 81 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)