

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: P1254544

Luminaire Tested: P3A13R129035DE010 E3CD1MMS

Issue Date: 1/30/2026

Test Information

Test Method: LM-79-2019
Report Number: P1254544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2501-338-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/30/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R129035DE010 E3CD1MMS
Description: 3in Adjustable LED luminaire with, R12 optic, 3500K CCT AND, 90CRI , E3CD1MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

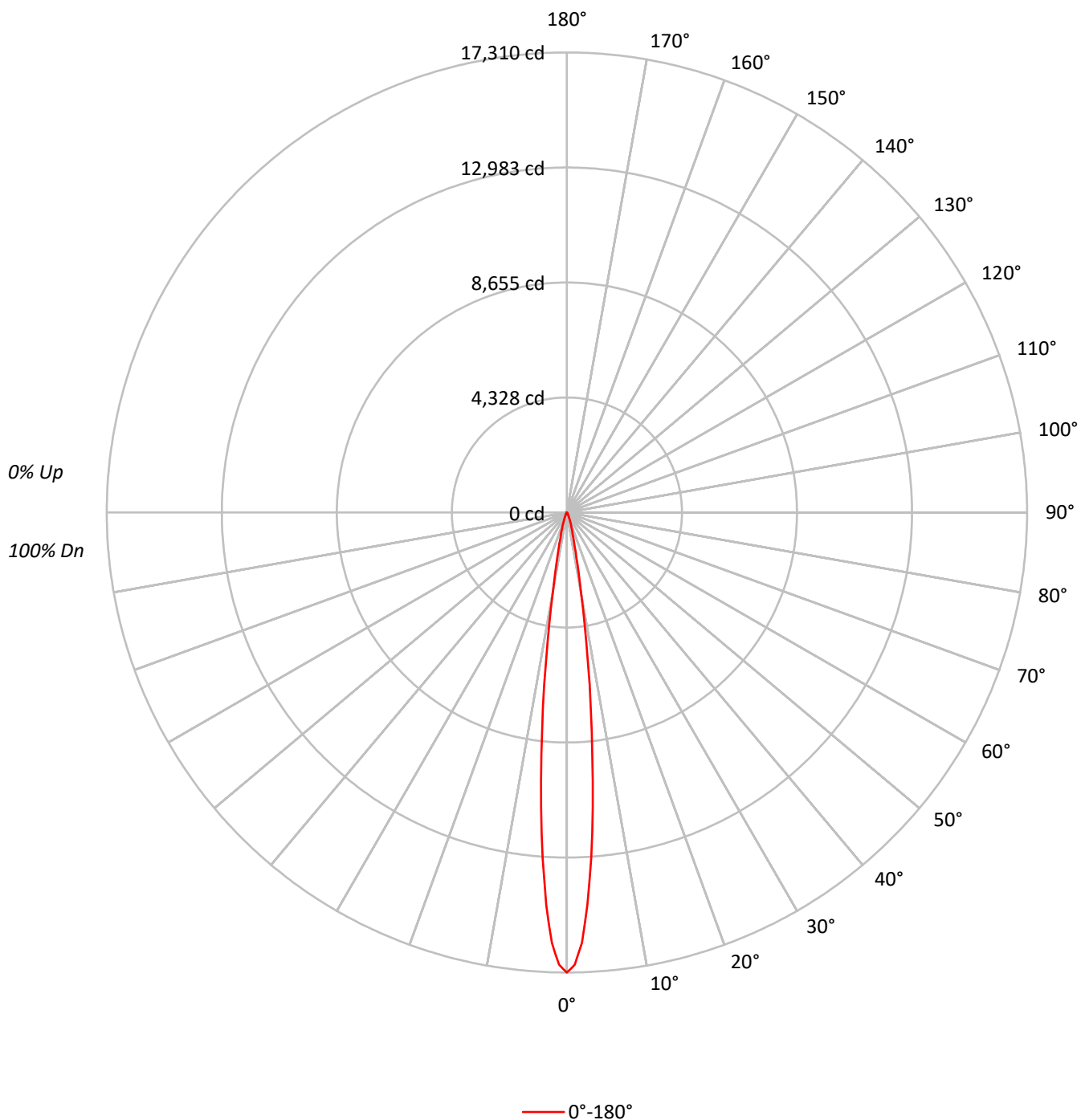
Lumens per Lamp: N/A
Luminaire Lumens: 1175.0 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.22
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 15.5
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: P1254544

CATALOG NUMBER: P3A13R129035DE010 E3CD1MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1254544

CATALOG NUMBER: P3A13R129035DE010 E3CD1MMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	116	114	113	111	114	112	111	109	108	107	106		104	104	103		101	101	100	98
2	113	110	108	106	111	108	106	104	105	104	102		103	101	100		100	99	98	97
3	110	107	104	102	109	105	103	101	103	101	99		101	99	98		99	98	96	95
4	108	104	101	98	107	103	100	98	101	99	97		99	97	96		98	96	95	94
5	106	102	98	96	105	101	98	96	99	97	95		98	96	94		97	95	93	92
6	104	99	96	94	103	99	96	94	98	95	93		96	94	93		95	93	92	91
7	102	98	94	92	101	97	94	92	96	93	92		95	93	91		94	92	91	90
8	101	96	93	91	100	95	93	90	95	92	90		94	92	90		93	91	90	89
9	99	94	91	89	98	94	91	89	93	91	89		93	90	89		92	90	88	88
10	98	93	90	88	97	93	90	88	92	90	88		91	89	88		91	89	87	87

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3795858
5°	2452624
10°	692016
15°	195665
20°	81814
25°	36220
30°	18484
35°	9771
40°	4179
45°	1147
50°	1262
55°	0
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 50°

Luminance: 1262 cd/sqm

TEST NUMBER: P1254544

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	785.1	66.8
10°-20°	284.8	24.2
20°-30°	76.3	6.5
30°-40°	24.0	2.0
40°-50°	4.5	0.4
50°-60°	0.4	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1146.1	97.5
0°-40°	1170.1	99.6
0°-60°	1175.0	100.0
0°-90°	1175.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1175.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	17310	
5°	11142	785
15°	862	285
25°	150	76
35°	36	24
45°	4	5
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	17310.5
1°	17018.4
2°	16196.7
3°	14790.7
4°	13045.0
5°	11142.3
6°	9159.2
7°	7384.4
8°	5682.5
9°	4229.0
10°	3107.9
11°	2289.8
12°	1723.8
13°	1336.6
14°	1059.1
15°	861.9
17.5°	547.8
20°	350.6
22.5°	226.4
25°	149.7
27.5°	102.3
30°	73.0
32.5°	51.1
35°	36.5
37.5°	25.6
40°	14.6
42.5°	7.3
45°	3.7
47.5°	3.7
50°	3.7
52.5°	0.0
55°	0.0
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0



TEST NUMBER: P1254544

CATALOG NUMBER: P3A13R129035DE010 E3CD1MMS

CANDELA DISTRIBUTION (continued):



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

Report Prepared for

Cooper Lighting Solutions

IRiS

Report Number: SP1-2504-409-24

Test Date: 05/15/2025

Luminaire Tested: LD3A17R159035D010 E3D1WH

Data in this report applies to families of products including LD3A

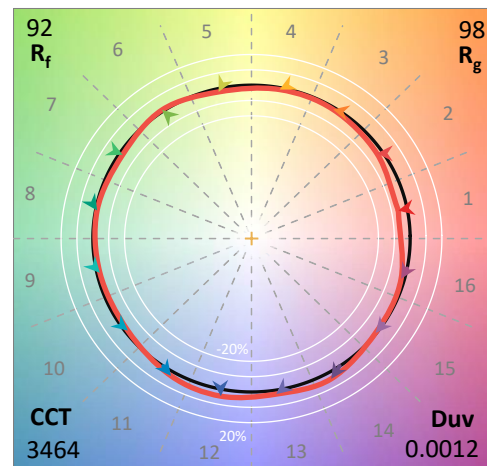
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2504-409-24
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 09/15/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: IRIS
 Catalog Number: **LD3A17R159035D010 E3D1WH**
 Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 90CRI LEDS, E3D1WH TRIM

Spectral Parameters

CCT (K): 3464
 CIE u' : 0.2361
 CIE v' : 0.5136
 Duv: 0.0012
 CIE x: 0.4086
 CIE y: 0.3951
 CIE z: 0.1963
 Peak Wavelength (nm): 614
 Dominant Wavelength (nm): 580
 Purity: 41.2143
 R_f: 91.8
 R_g: 98.4

CRI (Ra): 92.8
 R1: 93.1
 R2: 95.9
 R3: 98.0
 R4: 94.1
 R5: 92.9
 R6: 95.0
 R7: 92.5
 R8: 81.1
 R9: 53.9
 R10: 89.9
 R11: 95.7
 R12: 78.6
 R13: 94.0
 R14: 98.5
 R15: 88.0



Test Conditions

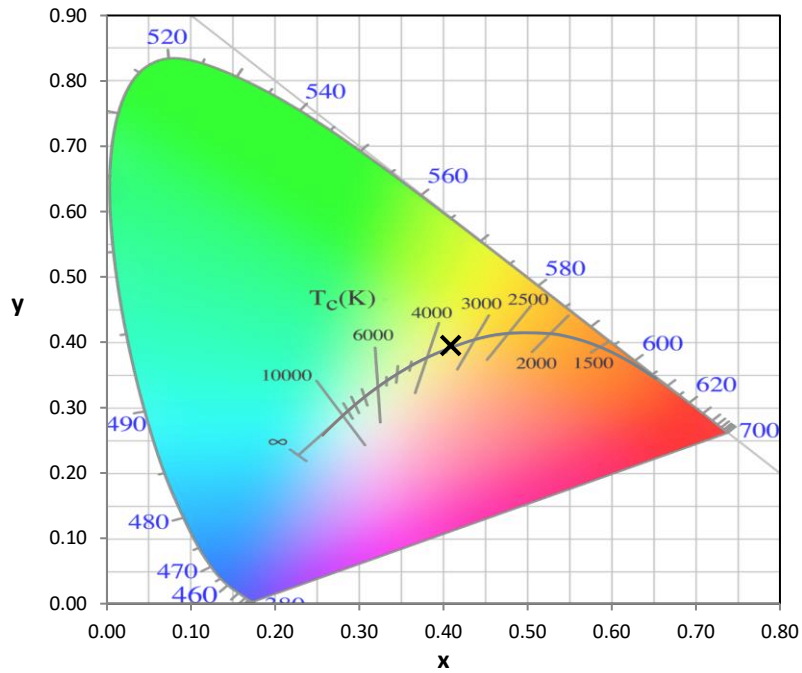
Stabilization Time: 62M
 Operation Time: 2H 2M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2504-409-24

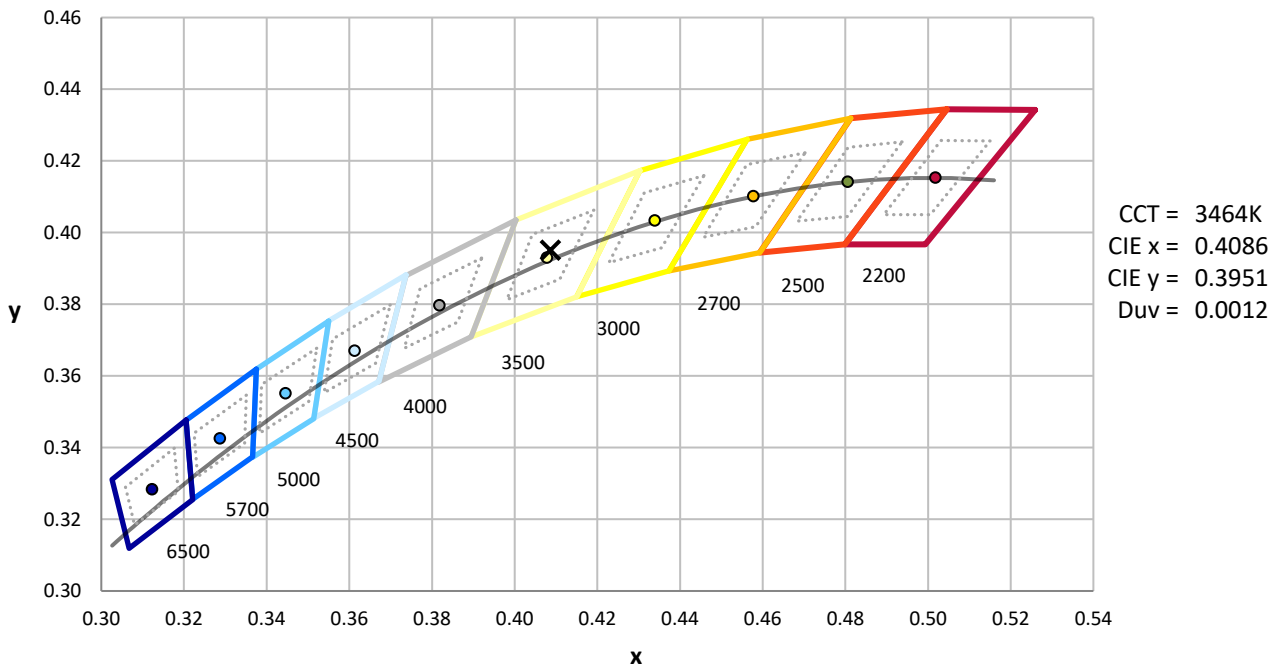
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

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CIE 1931 Chromaticity Diagram

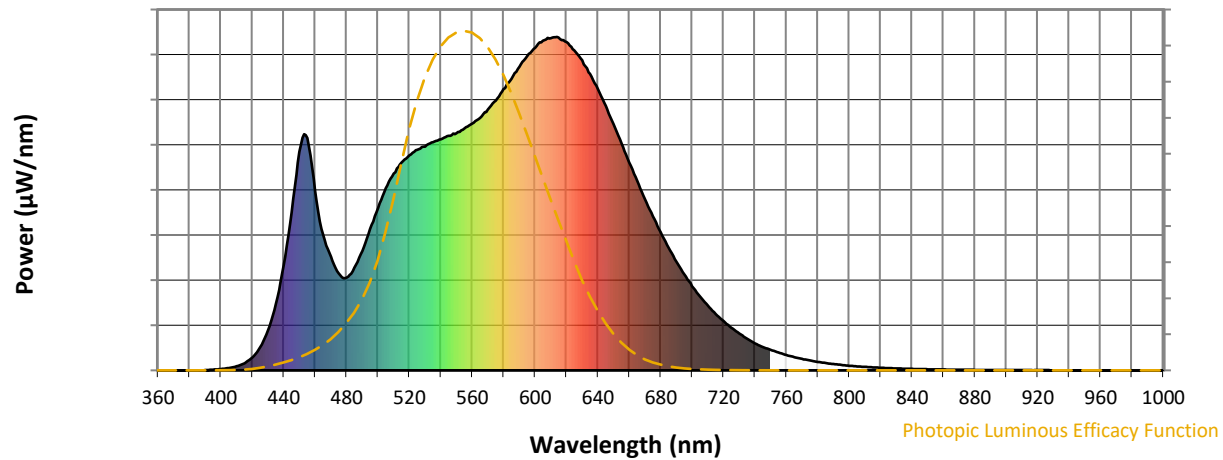


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

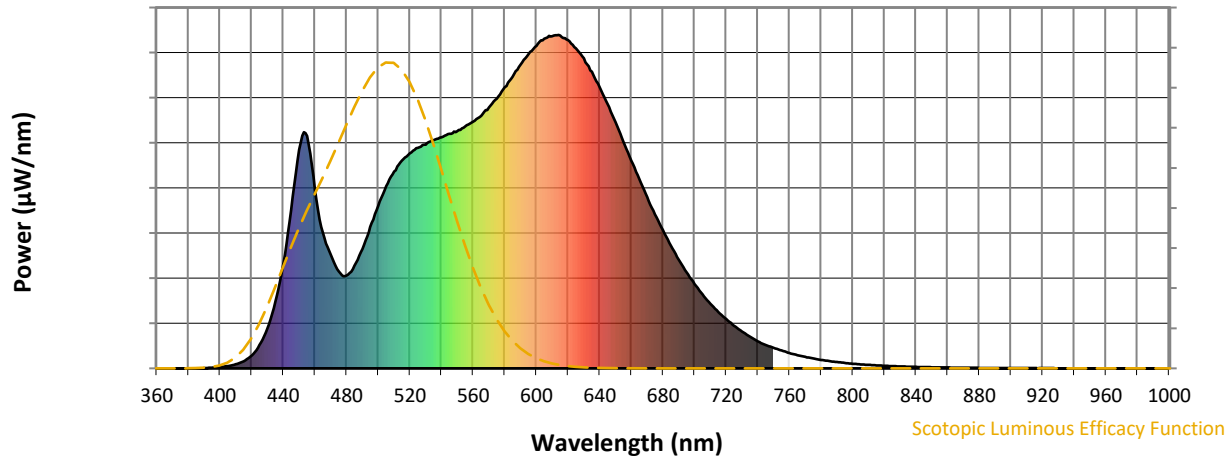
REPORT NUMBER: SP1-2504-409-24

Photopic Flux vs. Wavelength

Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	358	NR	620	985	NR	750	62	NR	880	1	NR
365	0	NR	495	424	NR	625	960	NR	755	53	NR	885	1	NR
370	0	NR	500	486	NR	630	930	NR	760	46	NR	890	1	NR
375	0	NR	505	547	NR	635	889	NR	765	40	NR	895	1	NR
380	0	NR	510	590	NR	640	844	NR	770	34	NR	900	1	NR
385	0	NR	515	623	NR	645	792	NR	775	30	NR	905	1	NR
390	1	NR	520	645	NR	650	738	NR	780	25	NR	910	1	NR
395	2	NR	525	662	NR	655	681	NR	785	22	NR	915	1	NR
400	4	NR	530	671	NR	660	623	NR	790	19	NR	920	1	NR
405	7	NR	535	685	NR	665	568	NR	795	16	NR	925	1	NR
410	12	NR	540	693	NR	670	513	NR	800	14	NR	930	0	NR
415	22	NR	545	704	NR	675	461	NR	805	12	NR	935	0	NR
420	39	NR	550	712	NR	680	414	NR	810	10	NR	940	0	NR
425	70	NR	555	726	NR	685	368	NR	815	9	NR	945	0	NR
430	120	NR	560	740	NR	690	326	NR	820	8	NR	950	0	NR
435	200	NR	565	757	NR	695	288	NR	825	7	NR	955	0	NR
440	315	NR	570	782	NR	700	253	NR	830	6	NR	960	0	NR
445	475	NR	575	809	NR	705	222	NR	835	5	NR	965	0	NR
450	656	NR	580	844	NR	710	194	NR	840	4	NR	970	0	NR
455	697	NR	585	874	NR	715	169	NR	845	4	NR	975	0	NR
460	539	NR	590	911	NR	720	148	NR	850	3	NR	980	0	NR
465	408	NR	595	943	NR	725	128	NR	855	3	NR	985	0	NR
470	341	NR	600	968	NR	730	111	NR	860	2	NR	990	0	NR
475	291	NR	605	988	NR	735	95	NR	865	2	NR	995	0	NR
480	278	NR	610	996	NR	740	81	NR	870	2	NR	1000	0	NR
485	308	NR	615	998	NR	745	70	NR	875	2	NR			

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Scotopic Flux vs. Wavelength



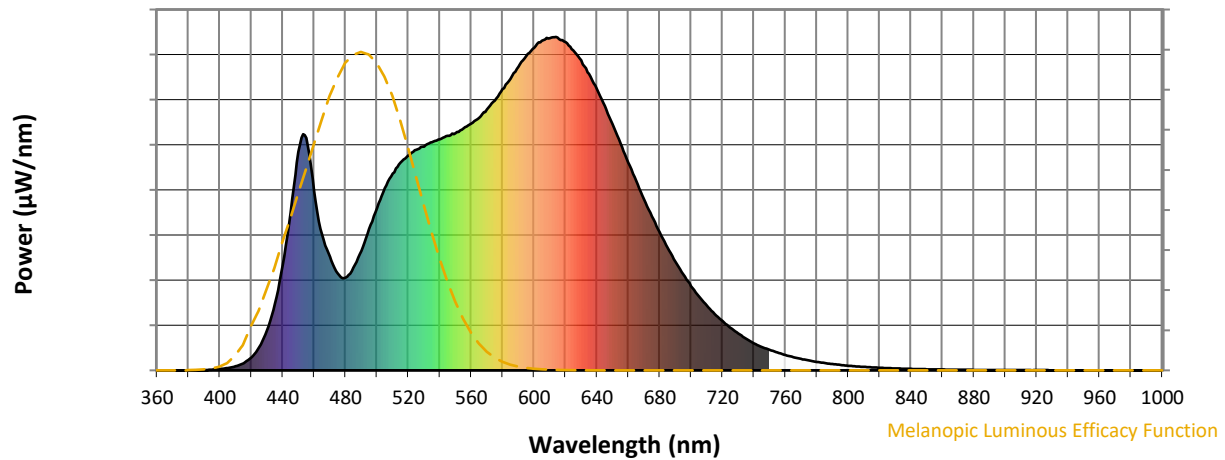
Scotopic Lumens: NR

S/P: 1.6

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	358	NR	620	985	NR	750	62	NR	880	1	NR
365	0	NR	495	424	NR	625	960	NR	755	53	NR	885	1	NR
370	0	NR	500	486	NR	630	930	NR	760	46	NR	890	1	NR
375	0	NR	505	547	NR	635	889	NR	765	40	NR	895	1	NR
380	0	NR	510	590	NR	640	844	NR	770	34	NR	900	1	NR
385	0	NR	515	623	NR	645	792	NR	775	30	NR	905	1	NR
390	1	NR	520	645	NR	650	738	NR	780	25	NR	910	1	NR
395	2	NR	525	662	NR	655	681	NR	785	22	NR	915	1	NR
400	4	NR	530	671	NR	660	623	NR	790	19	NR	920	1	NR
405	7	NR	535	685	NR	665	568	NR	795	16	NR	925	1	NR
410	12	NR	540	693	NR	670	513	NR	800	14	NR	930	0	NR
415	22	NR	545	704	NR	675	461	NR	805	12	NR	935	0	NR
420	39	NR	550	712	NR	680	414	NR	810	10	NR	940	0	NR
425	70	NR	555	726	NR	685	368	NR	815	9	NR	945	0	NR
430	120	NR	560	740	NR	690	326	NR	820	8	NR	950	0	NR
435	200	NR	565	757	NR	695	288	NR	825	7	NR	955	0	NR
440	315	NR	570	782	NR	700	253	NR	830	6	NR	960	0	NR
445	475	NR	575	809	NR	705	222	NR	835	5	NR	965	0	NR
450	656	NR	580	844	NR	710	194	NR	840	4	NR	970	0	NR
455	697	NR	585	874	NR	715	169	NR	845	4	NR	975	0	NR
460	539	NR	590	911	NR	720	148	NR	850	3	NR	980	0	NR
465	408	NR	595	943	NR	725	128	NR	855	3	NR	985	0	NR
470	341	NR	600	968	NR	730	111	NR	860	2	NR	990	0	NR
475	291	NR	605	988	NR	735	95	NR	865	2	NR	995	0	NR
480	278	NR	610	996	NR	740	81	NR	870	2	NR	1000	0	NR
485	308	NR	615	998	NR	745	70	NR	875	2	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.22

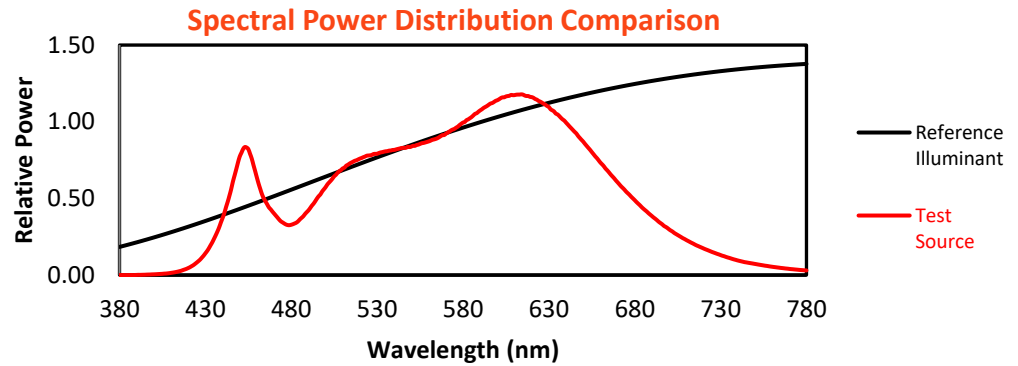
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	358	NR	620	985	NR	750	62	NR	880	1	NR
365	0	NR	495	424	NR	625	960	NR	755	53	NR	885	1	NR
370	0	NR	500	486	NR	630	930	NR	760	46	NR	890	1	NR
375	0	NR	505	547	NR	635	889	NR	765	40	NR	895	1	NR
380	0	NR	510	590	NR	640	844	NR	770	34	NR	900	1	NR
385	0	NR	515	623	NR	645	792	NR	775	30	NR	905	1	NR
390	1	NR	520	645	NR	650	738	NR	780	25	NR	910	1	NR
395	2	NR	525	662	NR	655	681	NR	785	22	NR	915	1	NR
400	4	NR	530	671	NR	660	623	NR	790	19	NR	920	1	NR
405	7	NR	535	685	NR	665	568	NR	795	16	NR	925	1	NR
410	12	NR	540	693	NR	670	513	NR	800	14	NR	930	0	NR
415	22	NR	545	704	NR	675	461	NR	805	12	NR	935	0	NR
420	39	NR	550	712	NR	680	414	NR	810	10	NR	940	0	NR
425	70	NR	555	726	NR	685	368	NR	815	9	NR	945	0	NR
430	120	NR	560	740	NR	690	326	NR	820	8	NR	950	0	NR
435	200	NR	565	757	NR	695	288	NR	825	7	NR	955	0	NR
440	315	NR	570	782	NR	700	253	NR	830	6	NR	960	0	NR
445	475	NR	575	809	NR	705	222	NR	835	5	NR	965	0	NR
450	656	NR	580	844	NR	710	194	NR	840	4	NR	970	0	NR
455	697	NR	585	874	NR	715	169	NR	845	4	NR	975	0	NR
460	539	NR	590	911	NR	720	148	NR	850	3	NR	980	0	NR
465	408	NR	595	943	NR	725	128	NR	855	3	NR	985	0	NR
470	341	NR	600	968	NR	730	111	NR	860	2	NR	990	0	NR
475	291	NR	605	988	NR	735	95	NR	865	2	NR	995	0	NR
480	278	NR	610	996	NR	740	81	NR	870	2	NR	1000	0	NR
485	308	NR	615	998	NR	745	70	NR	875	2	NR			

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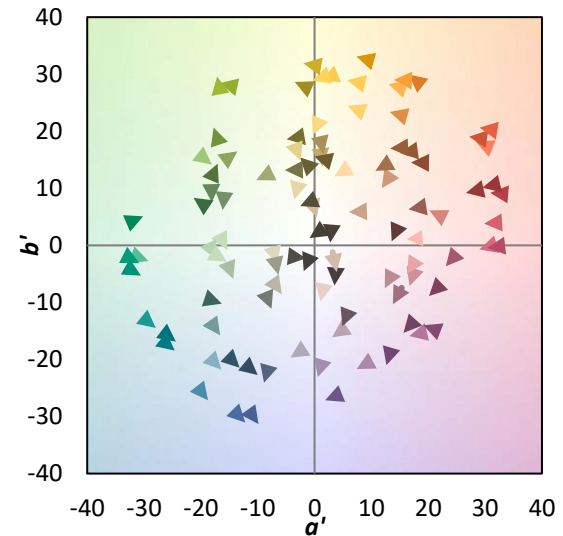
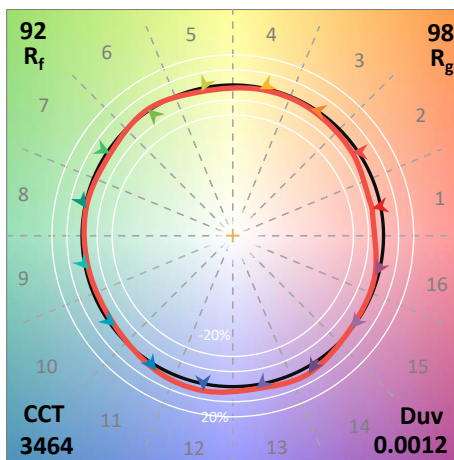
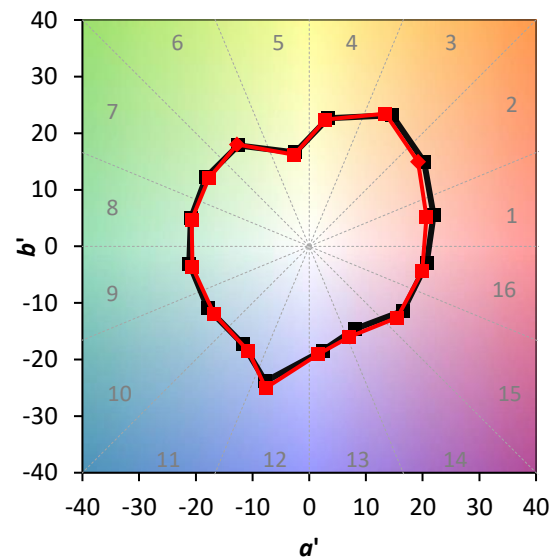
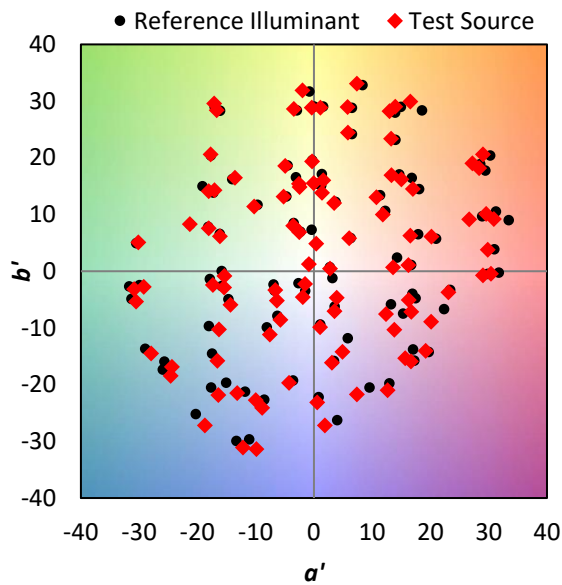
TM-30-18

Summary

$R_f = 91.8$
 $R_g = 98.4$
 $CIE R_a = 92.8$
 $R_9 = 53.9$

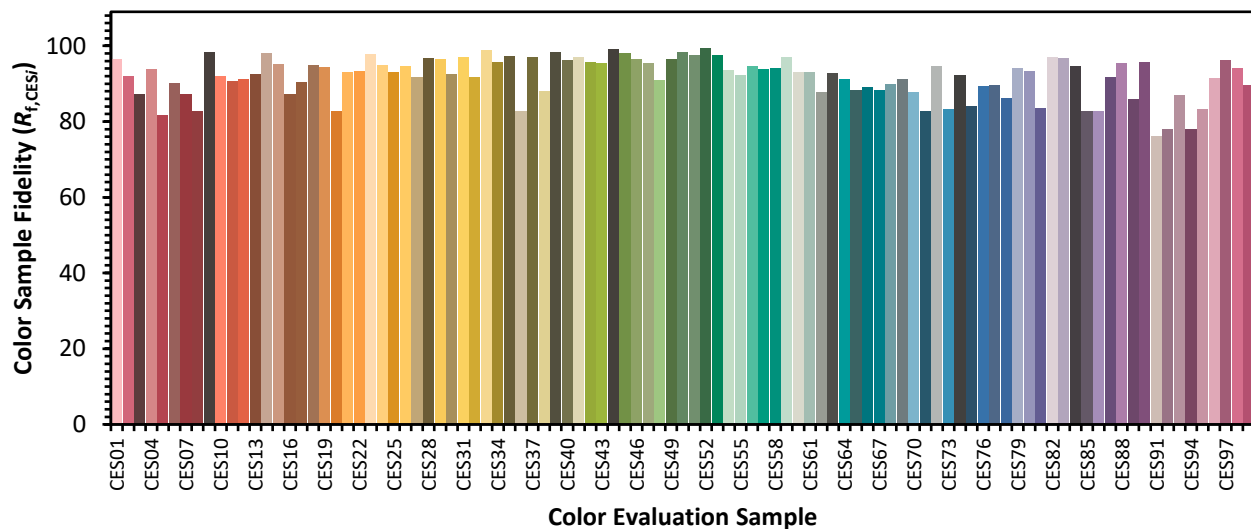


Color Vector Graphics

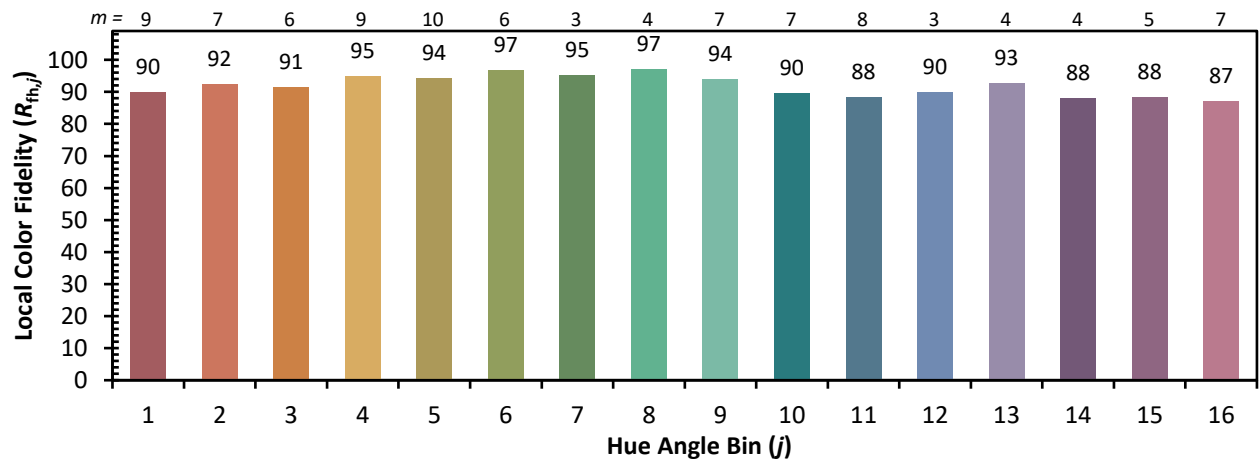
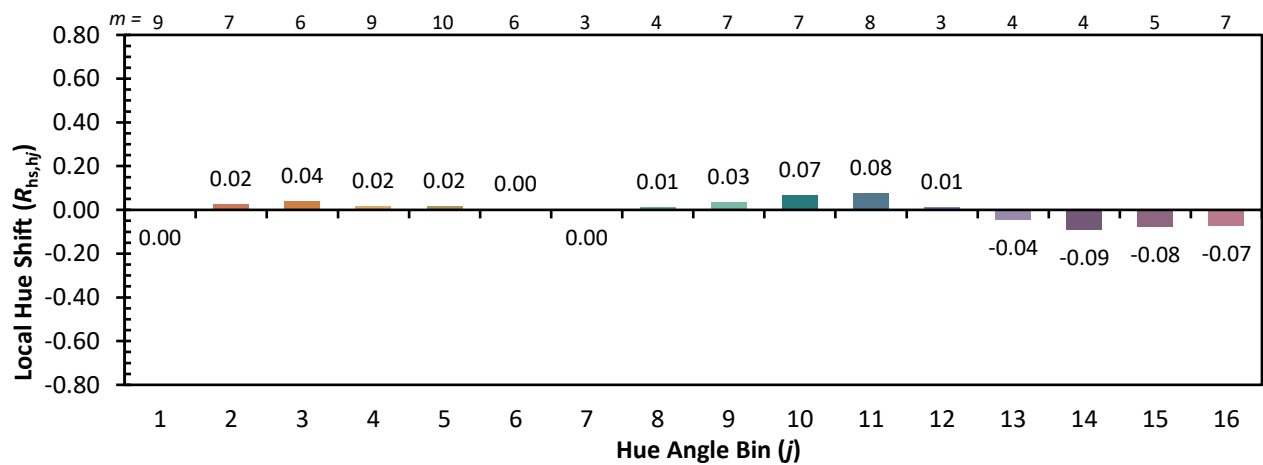
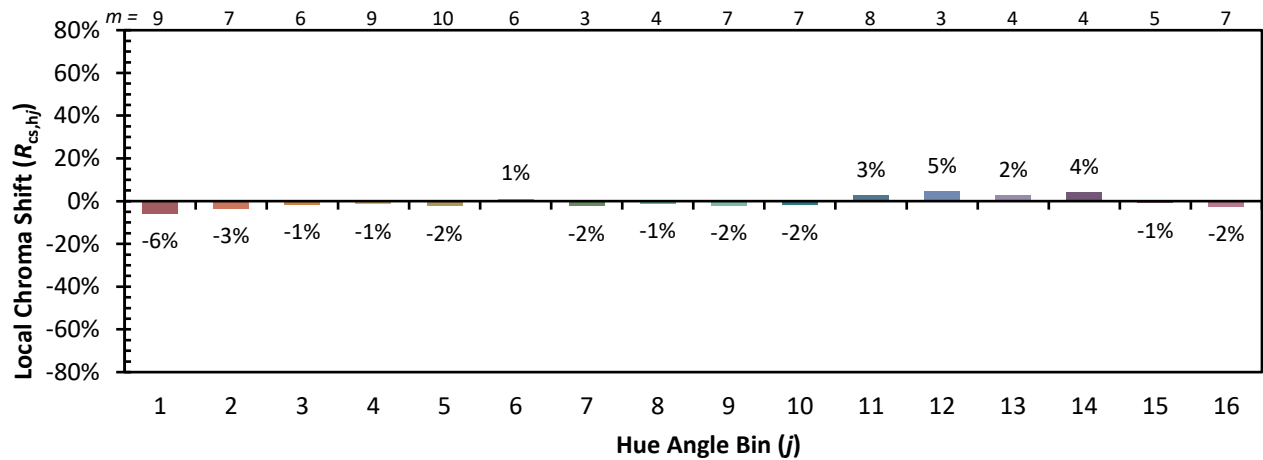


Individual Sample Fidelity Index ($R_{f,i}$)

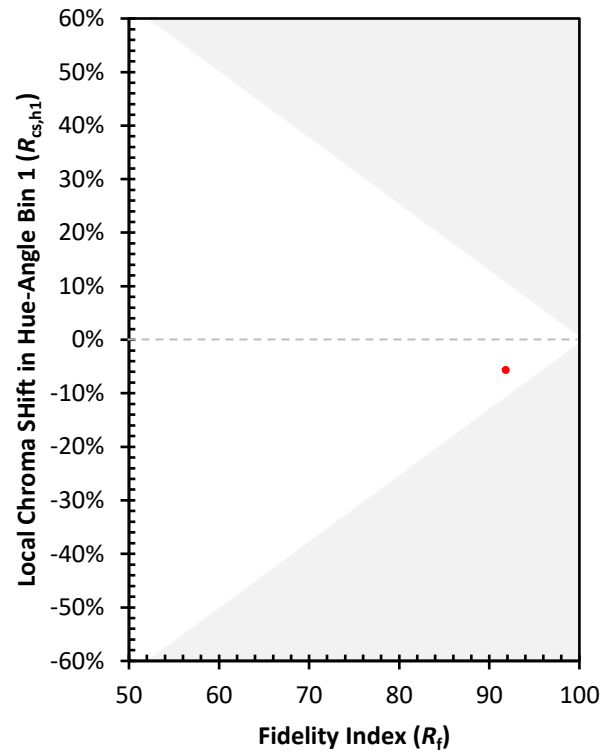
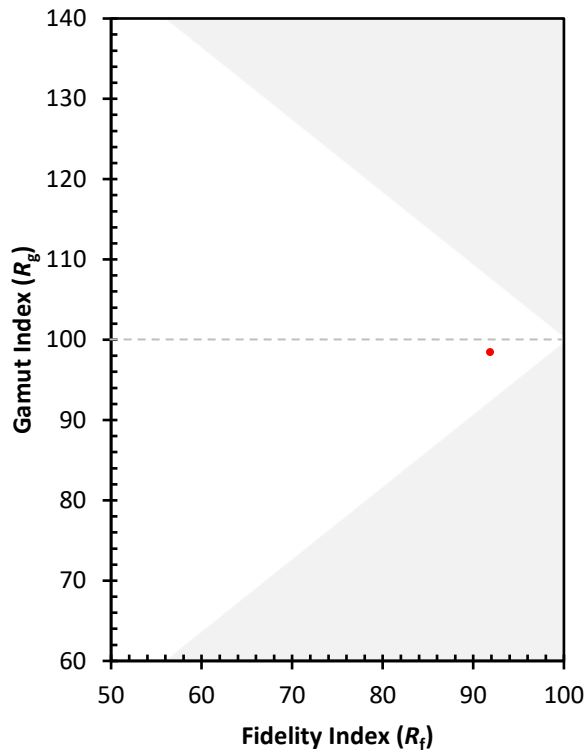
CES01 = 86	CES26 = 95	CES51 = 98	CES76 = 89
CES02 = 62	CES27 = 92	CES52 = 99	CES77 = 90
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 94
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 93
CES06 = 51	CES31 = 97	CES56 = 95	CES81 = 84
CES07 = 42	CES32 = 92	CES57 = 94	CES82 = 97
CES08 = 41	CES33 = 99	CES58 = 94	CES83 = 97
CES09 = 29	CES34 = 96	CES59 = 97	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 93	CES85 = 83
CES11 = 58	CES36 = 83	CES61 = 93	CES86 = 83
CES12 = 64	CES37 = 97	CES62 = 88	CES87 = 92
CES13 = 43	CES38 = 88	CES63 = 93	CES88 = 96
CES14 = 74	CES39 = 98	CES64 = 91	CES89 = 86
CES15 = 71	CES40 = 96	CES65 = 88	CES90 = 96
CES16 = 47	CES41 = 97	CES66 = 89	CES91 = 76
CES17 = 49	CES42 = 96	CES67 = 88	CES92 = 78
CES18 = 56	CES43 = 96	CES68 = 90	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 91	CES94 = 78
CES20 = 66	CES45 = 98	CES70 = 88	CES95 = 83
CES21 = 86	CES46 = 97	CES71 = 83	CES96 = 91
CES22 = 78	CES47 = 95	CES72 = 95	CES97 = 96
CES23 = 91	CES48 = 91	CES73 = 83	CES98 = 94
CES24 = 90	CES49 = 96	CES74 = 92	CES99 = 90
CES25 = 71	CES50 = 98	CES75 = 84	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)