

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: P1255630

Luminaire Tested: P3A20R709035D010 E3LDWW1H

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1255630
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2509-551-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A20R709035D010 E3LDWW1H
Description: 3in Adjustable LED luminaire with, R70 optic, 3500K CCT AND, 90CRI , E3LDWW1H TRIM
Light Source: -
Ballast/Driver: -

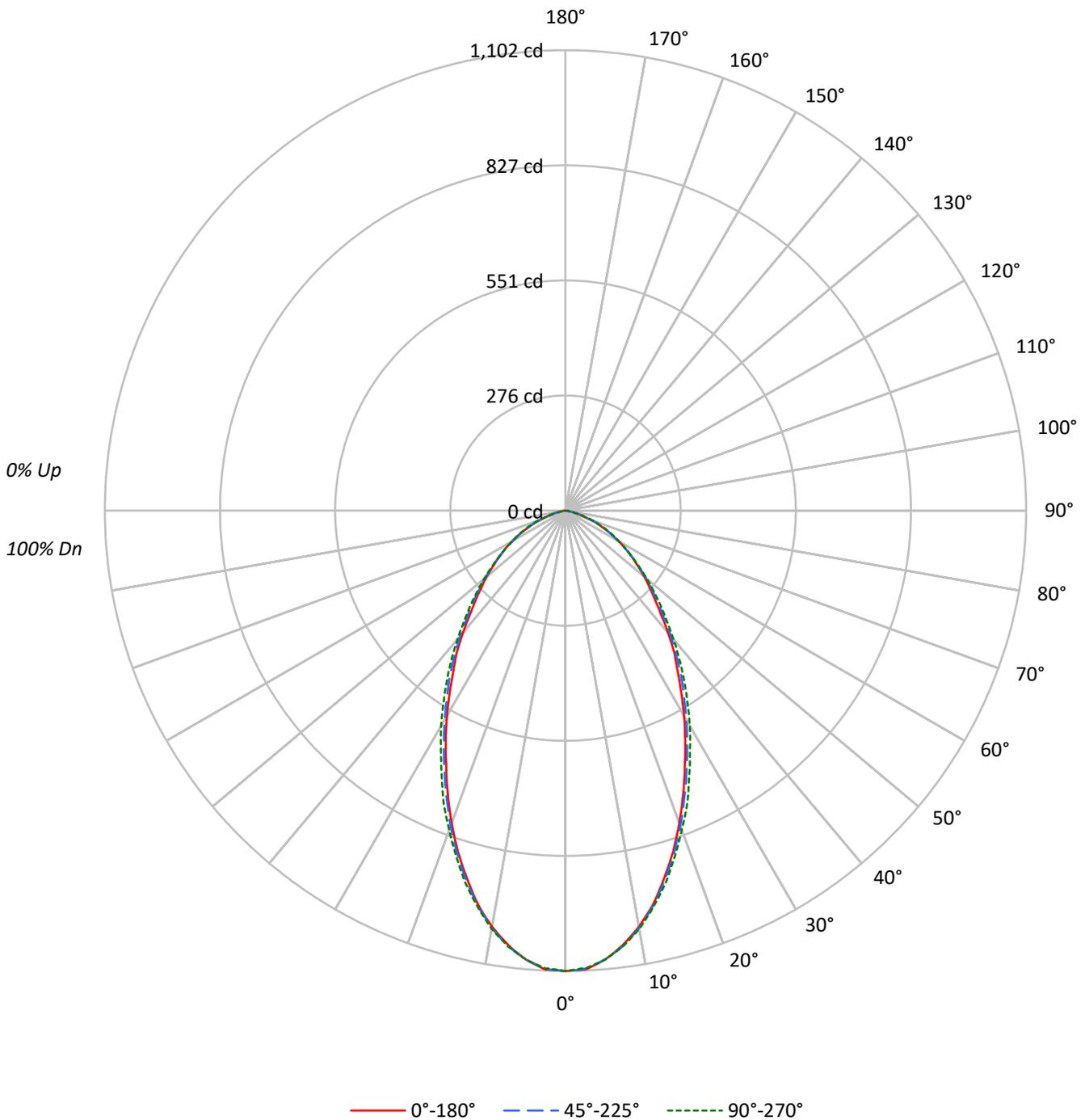
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1535.0 lumens
Efficiency: N/A
Efficacy: 53.3 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.89 / 0.97
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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: P1255630
CATALOG NUMBER: P3A20R709035D010 E3LDWW1H

Luminous Intensity Polar Plot





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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	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89	89	89	89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78	78	78	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	69	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61	61	61	61
5	83	72	64	59	81	71	64	59	69	63	58	67	62	57	66	61	57	55	55	55	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50
7	73	61	53	48	71	60	53	48	59	52	47	57	52	47	56	51	47	45	45	45	45
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43	41	41	41	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	40	38	38	38	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35	35	35	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	241669	241669	241669
5°	237618	237618	237618
10°	225269	225825	226382
15°	206880	208015	209717
20°	185703	187453	189810
25°	163388	165808	169461
30°	143642	146200	150656
35°	124986	129028	132374
40°	109233	112096	114987
45°	94211	97312	99638
50°	83920	85626	86479
55°	73899	74855	74855
60°	64951	63855	64951
65°	53391	54688	55985
70°	41866	41866	43469
75°	27620	25502	25502
80°	15911	12628	9471
85°	6290	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 75°
 Vertical Angle: 45°
 Luminance: 99638 cd/sqm



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 CATALOG NUMBER: P3A20R709035D010 E3LDWW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	6.6
10°-20°	255.9	16.7
20°-30°	315.6	20.6
30°-40°	300.8	19.6
40°-50°	243.3	15.9
50°-60°	175.3	11.4
60°-70°	104.9	6.8
70°-80°	35.2	2.3
80°-90°	3.0	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°	672.5	43.8
0°-40°	973.3	63.4
0°-60°	1391.9	90.7
0°-90°	1535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1535.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1080	1080	1080	1080	1080	101
15°	911	913	916	919	924	255
25°	675	680	685	696	700	311
35°	467	471	482	491	494	293
45°	304	308	314	319	321	237
55°	193	193	196	196	196	174
65°	103	105	105	108	108	103
75°	33	33	30	30	30	37
85°	2	2	0	0	0	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1102.1	1102.1	1102.1	1102.1	1102.1	1102.1	1102.1	1102.1	1102.1	1102.1	1102.1
2°	1099.5	1099.5	1099.5	1099.5	1099.5	1099.5	1099.5	1099.5	1099.5	1099.5	1097.0
2.5°	1099.5	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1099.5	1097.0
5°	1079.5	1079.5	1079.5	1079.5	1079.5	1079.5	1079.5	1079.5	1082.0	1079.5	1079.5
7.5°	1049.3	1049.3	1049.3	1049.3	1051.9	1051.9	1051.9	1051.9	1054.4	1054.4	1051.9
10°	1011.7	1011.7	1011.7	1011.7	1014.2	1014.2	1016.7	1014.2	1014.2	1016.7	1016.7
12.5°	966.5	964.0	964.0	964.0	966.5	969.0	969.0	969.0	971.5	971.5	971.5
15°	911.3	911.3	911.3	913.8	913.8	916.3	918.8	918.8	921.3	921.3	923.8
17.5°	856.0	856.0	853.5	856.0	858.6	861.1	863.6	866.1	868.6	868.6	868.6
20°	795.8	793.3	795.8	798.3	800.8	803.3	805.8	810.9	813.4	813.4	813.4
22.5°	735.5	733.0	735.5	738.1	740.6	743.1	750.6	753.1	755.6	755.6	760.6
25°	675.3	675.3	677.8	680.3	682.8	685.3	690.4	695.4	697.9	700.4	700.4
27.5°	620.1	620.1	620.1	620.1	625.1	630.1	635.1	640.1	642.7	645.2	645.2
30°	567.3	564.8	564.8	567.3	572.4	577.4	582.4	587.4	589.9	592.5	595.0
32.5°	514.6	514.6	514.6	517.1	519.6	527.2	532.2	534.7	539.7	542.2	542.2
35°	466.9	466.9	466.9	472.0	477.0	482.0	484.5	489.5	494.5	494.5	494.5
37.5°	426.8	429.3	434.3	431.8	431.8	434.3	436.8	441.8	446.8	446.8	446.8
40°	381.6	384.1	386.6	384.1	386.6	391.6	394.1	396.6	399.2	401.7	401.7
42.5°	338.9	338.9	338.9	341.4	346.4	348.9	354.0	356.5	359.0	359.0	359.0
45°	303.8	303.8	306.3	308.8	311.3	313.8	316.3	318.8	321.3	321.3	321.3
47.5°	273.6	273.6	276.1	276.1	278.7	281.2	283.7	283.7	286.2	288.7	286.2
50°	246.0	246.0	246.0	248.5	248.5	251.0	251.0	253.5	253.5	253.5	253.5
52.5°	218.4	218.4	218.4	218.4	220.9	220.9	220.9	223.4	223.4	223.4	223.4
55°	193.3	193.3	193.3	193.3	193.3	195.8	195.8	195.8	195.8	195.8	195.8
57.5°	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7
60°	148.1	148.1	148.1	148.1	148.1	145.6	148.1	148.1	148.1	148.1	148.1
62.5°	125.5	125.5	125.5	125.5	125.5	125.5	125.5	128.0	128.0	128.0	128.0
65°	102.9	105.4	105.4	105.4	105.4	105.4	105.4	107.9	107.9	107.9	107.9
67.5°	82.8	85.4	85.4	85.4	85.4	85.4	85.4	85.4	87.9	87.9	87.9
70°	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	67.8
72.5°	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	47.7	47.7	47.7
75°	32.6	32.6	32.6	32.6	30.1	30.1	30.1	30.1	30.1	30.1	30.1
77.5°	22.6	22.6	22.6	20.1	20.1	17.6	17.6	17.6	17.6	17.6	15.1
80°	12.6	12.6	12.6	12.6	12.6	10.0	10.0	7.5	7.5	7.5	7.5
82.5°	7.5	7.5	7.5	5.0	5.0	5.0	5.0	2.5	2.5	2.5	2.5
85°	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: SP1-2504-409-24

Test Date: 05/15/2025

Luminaire Tested: LD3A17R159035D010 E3D1WH

Data in this report applies to families of products including LD3A

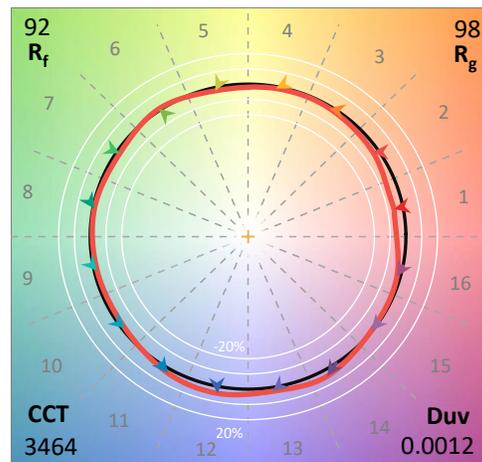
Test Information

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
 Rf: 91.8
 Rg: 98.4

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



Test Conditions

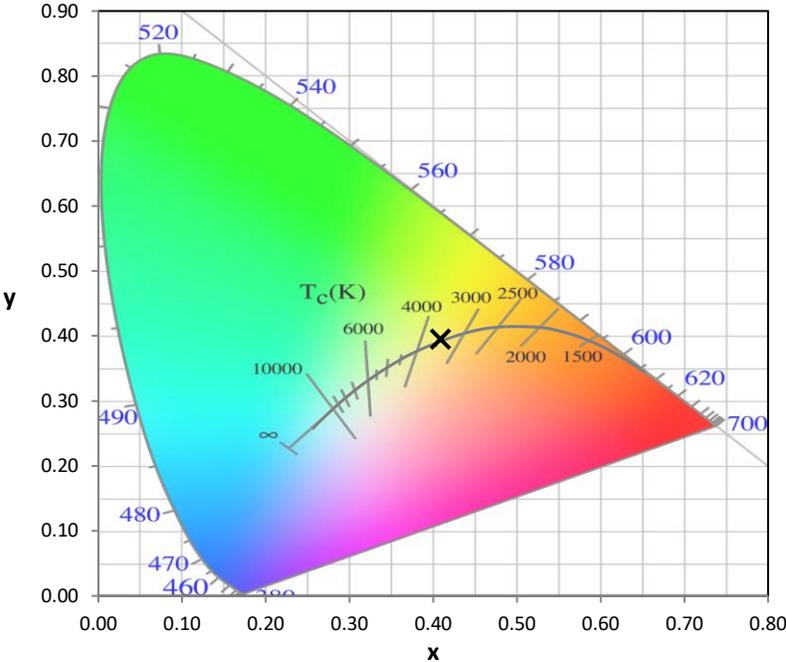
Stabilization Time: 62M
 Operation Time: 2H 2M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2504-409-24

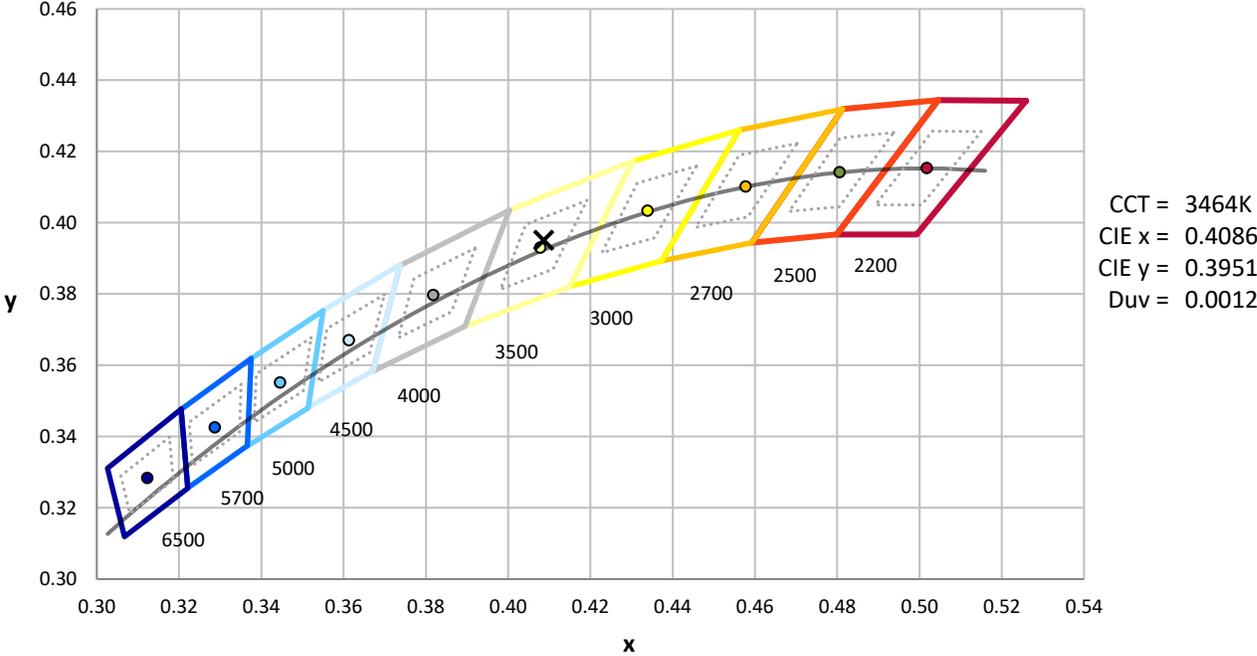
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



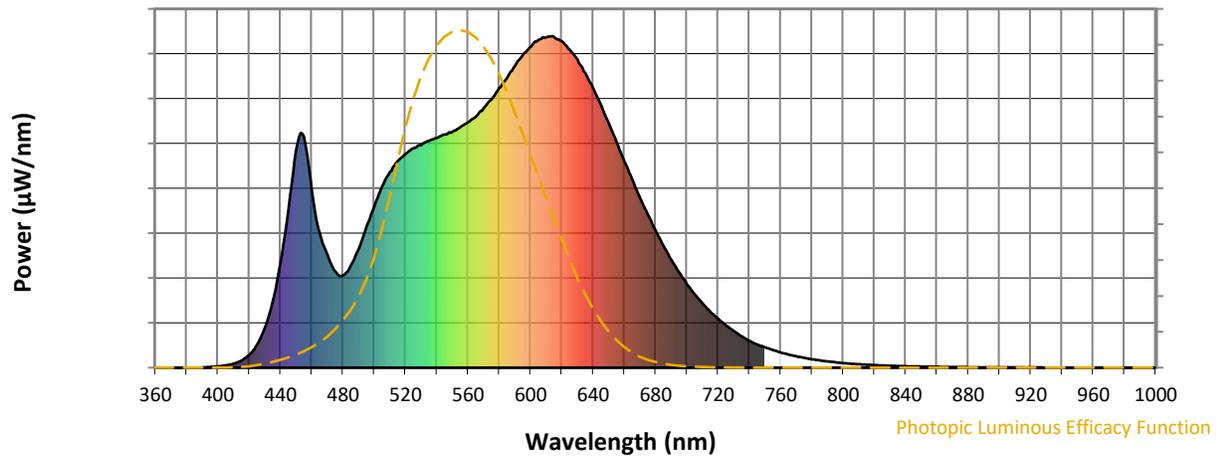
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

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Photopic Flux vs. Wavelength

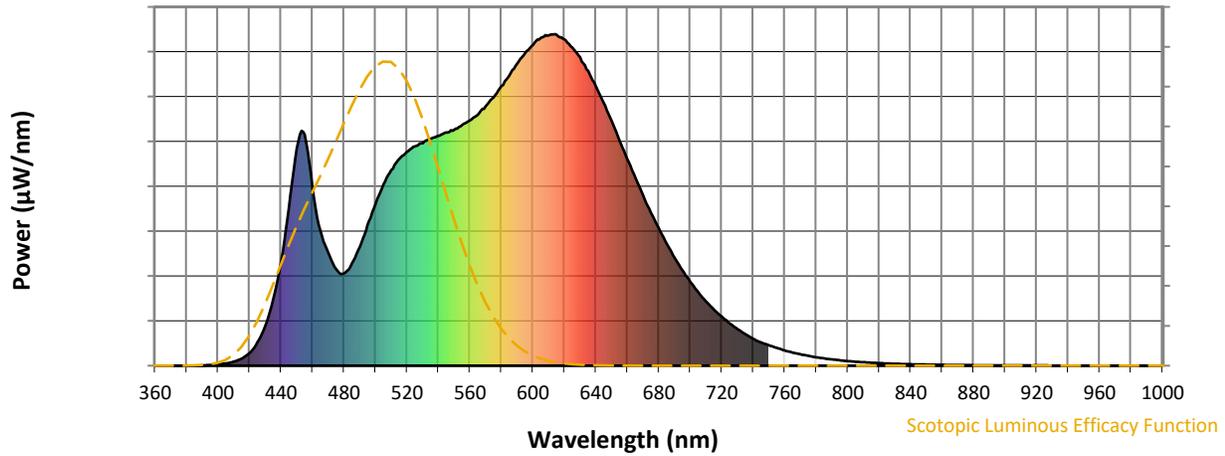


Photopic Lumens: NR

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	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



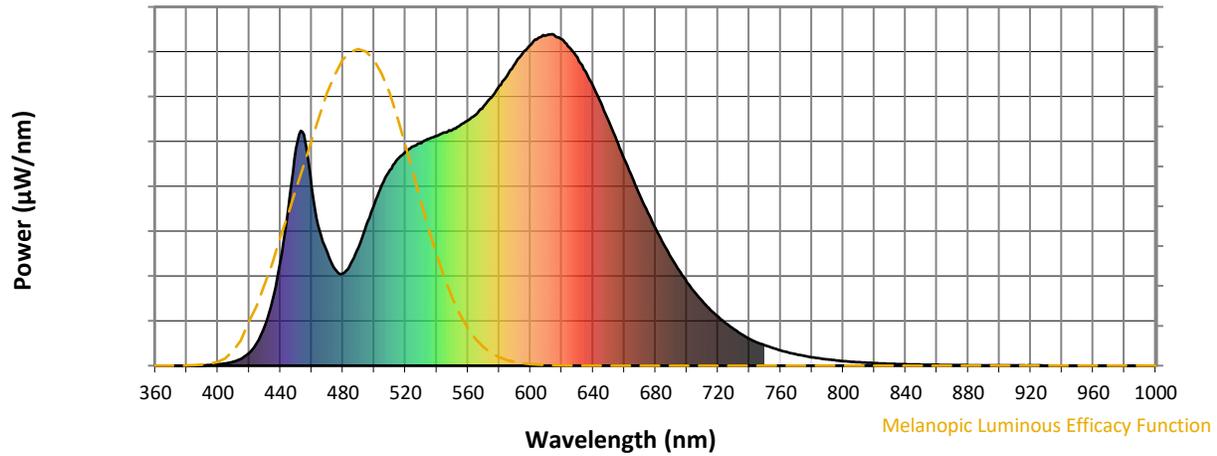
Scotopic Lumens: NR

S/P: 1.6

λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/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



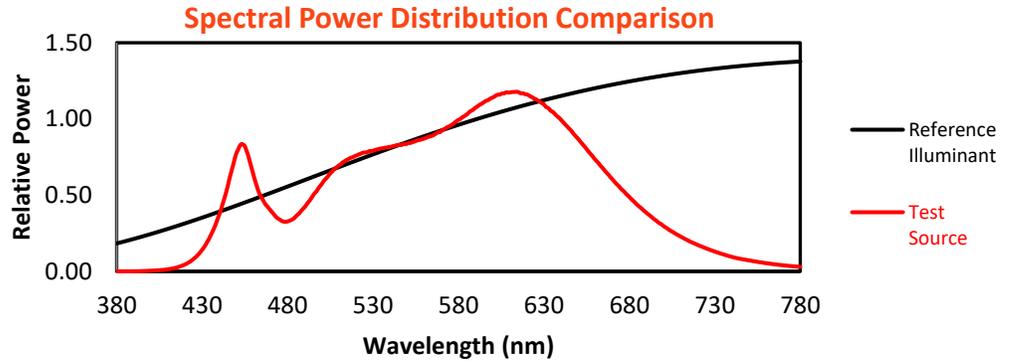
Melanopic Lumens: NR

M/P: 3.22

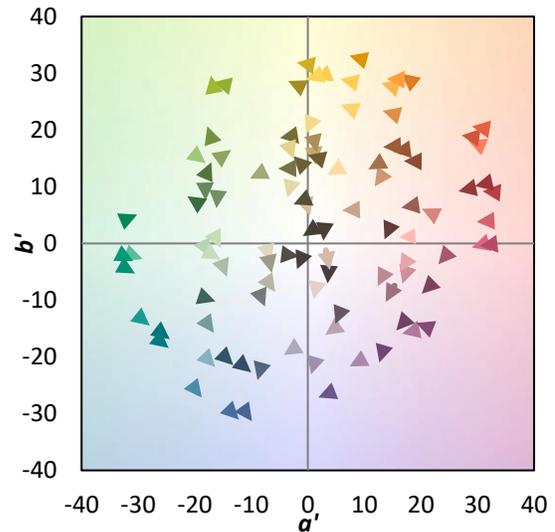
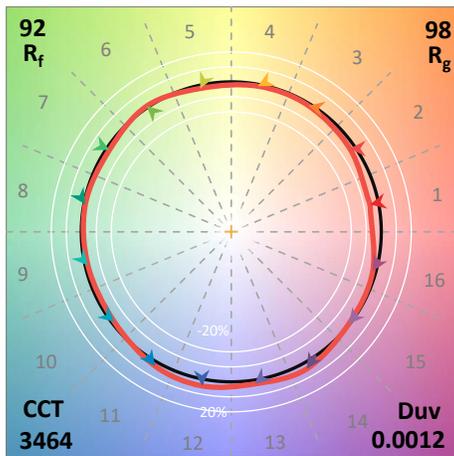
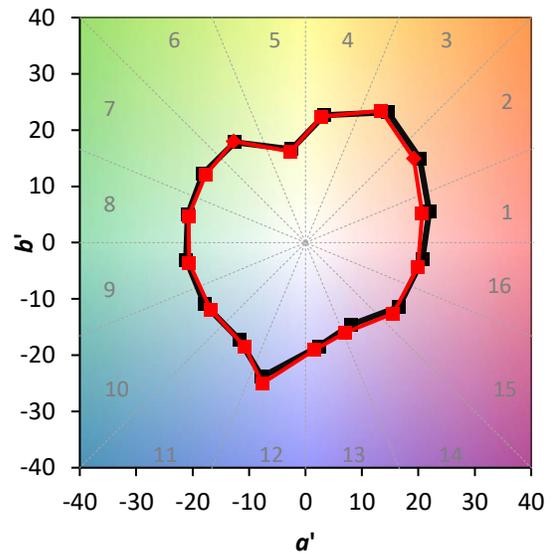
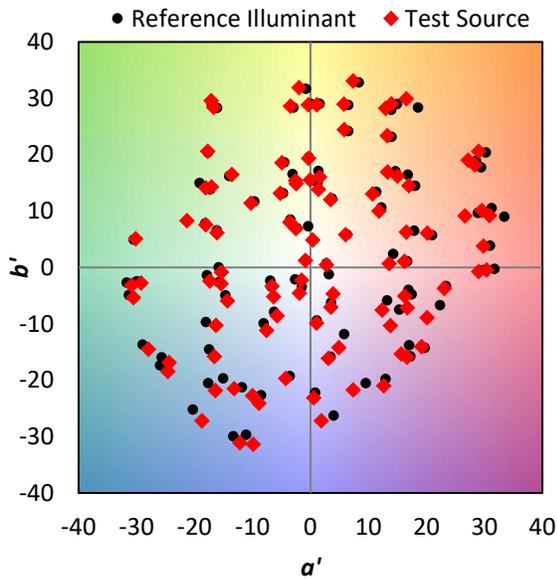
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	358	NR	620	985	NR	750	62	NR	880	1	NR
365	0	NR	495	424	NR	625	960	NR	755	53	NR	885	1	NR
370	0	NR	500	486	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			

Summary

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

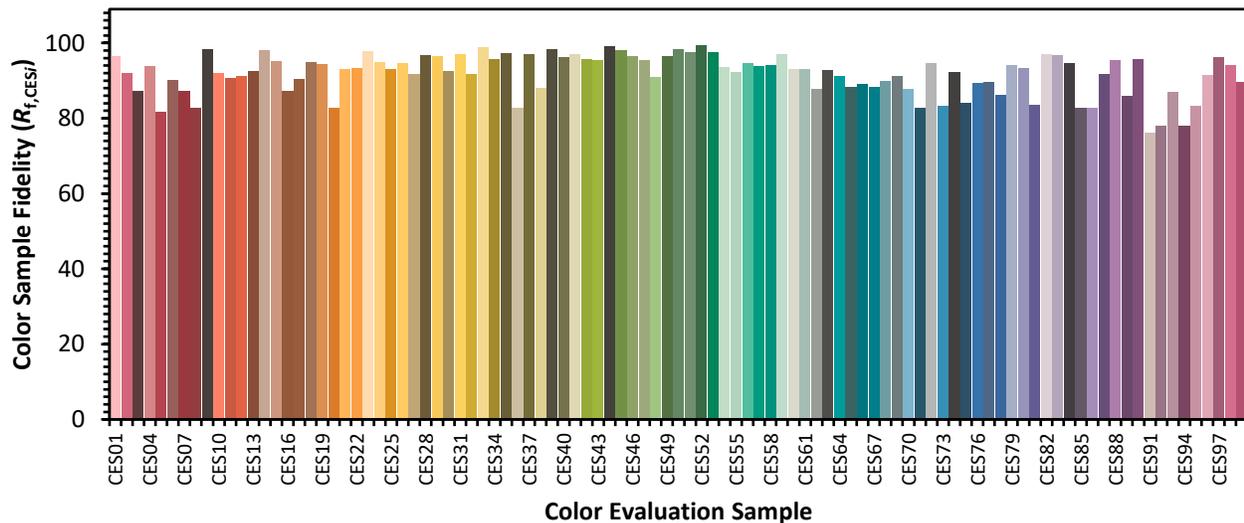


Color Vector Graphics

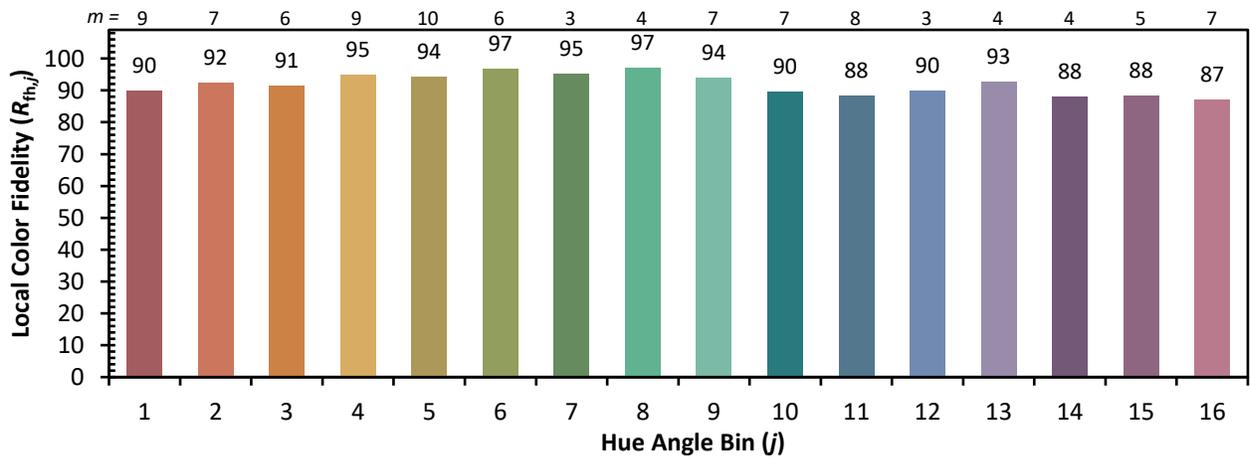
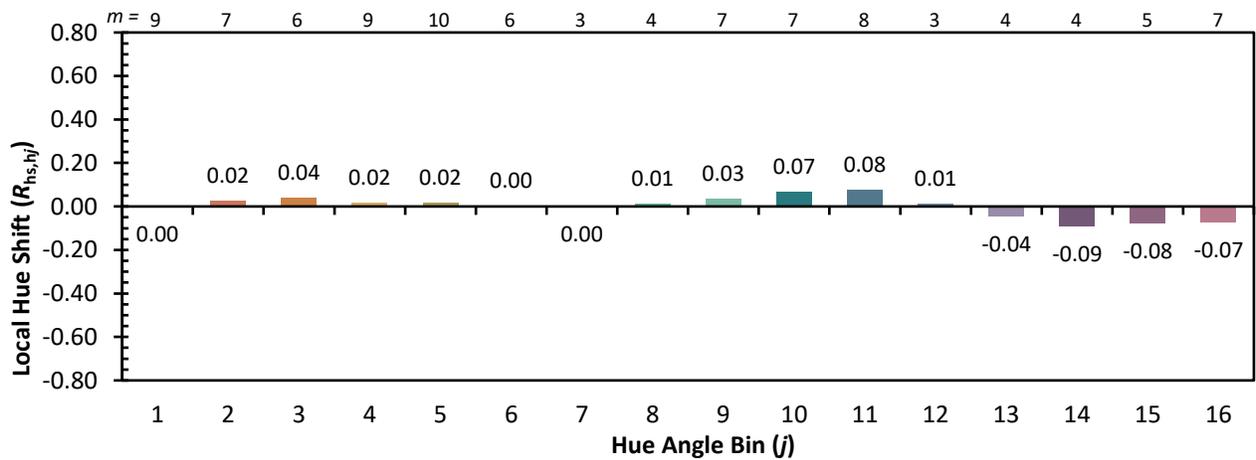
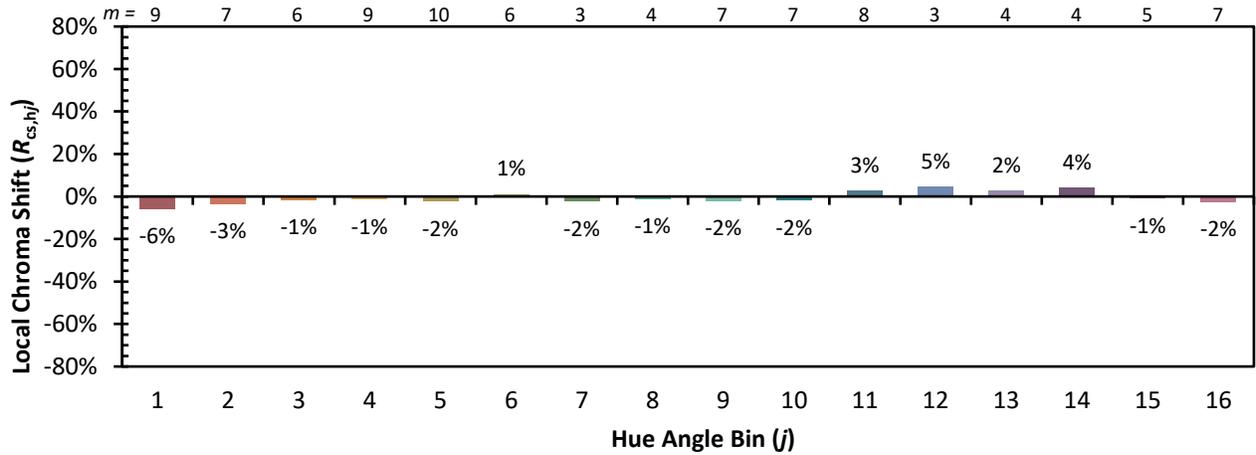


Individual Sample Fidelity Index ($R_{f,i}$)

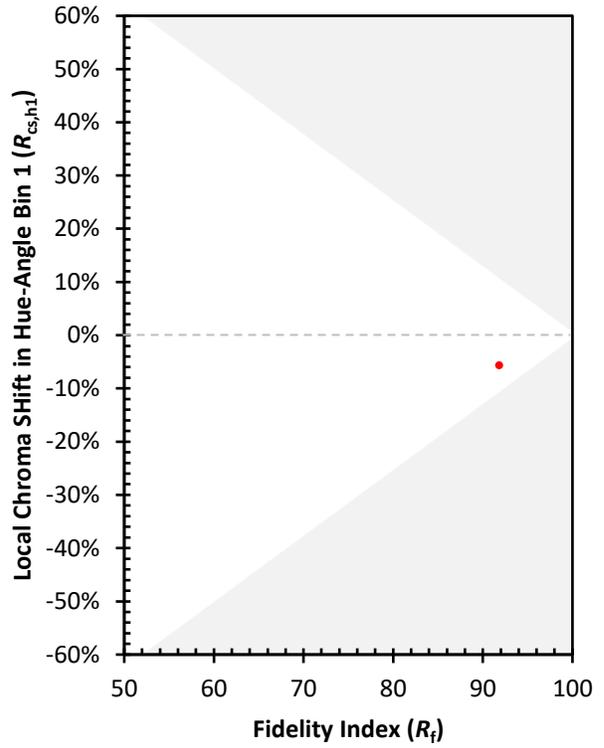
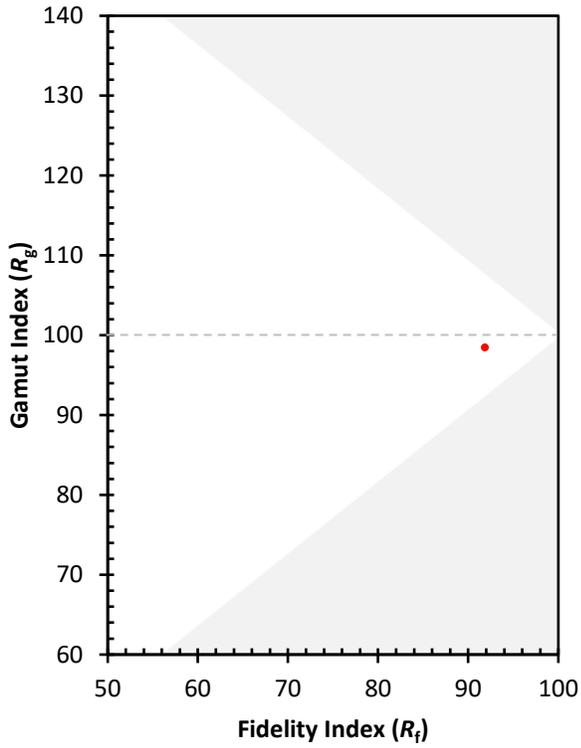
CES01 = 86	CES26 = 95	CES51 = 98	CES76 = 89
CES02 = 62	CES27 = 92	CES52 = 99	CES77 = 90
CES03 = 31	CES28 = 97	CES53 = 98	CES78 = 86
CES04 = 70	CES29 = 97	CES54 = 93	CES79 = 94
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 93
CES06 = 51	CES31 = 97	CES56 = 95	CES81 = 84
CES07 = 42	CES32 = 92	CES57 = 94	CES82 = 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)