

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: FAIL-SAFE

Report Number: P1356994

Luminaire Tested: 3ASL4-10HE-2-A59-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1356994
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-7)
Test Lab: INNOVATION CENTER
Issue Date: 2/17/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: 3ASL4-10HE-2-A59-UNV
Description: 3FT 1000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND A59 LEDS 2 ROW
Light Source: -
Ballast/Driver: -

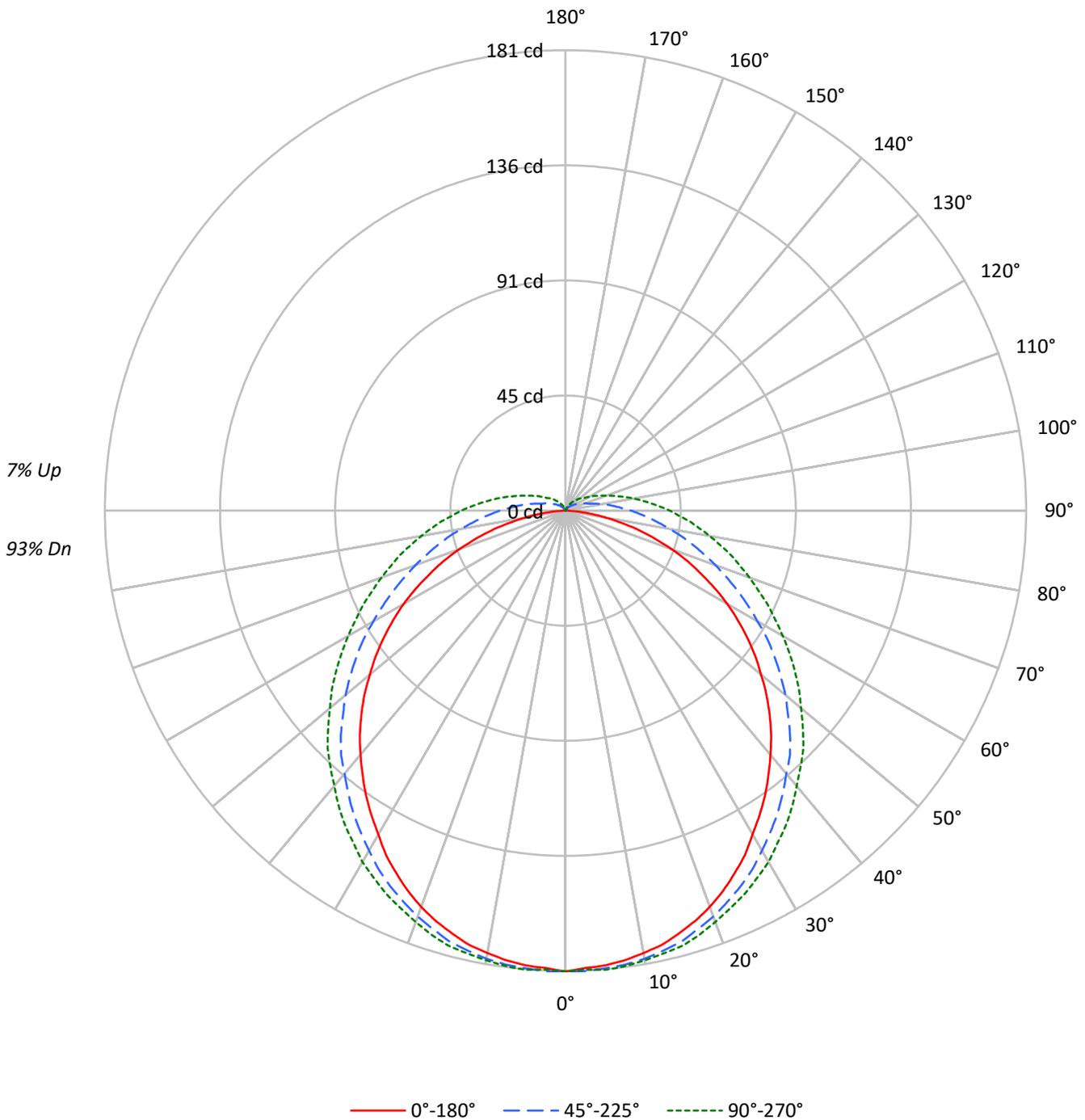
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 622.0 lumens
Efficiency: N/A
Efficacy: 36.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (A_{in}): 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

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Luminous Intensity Polar Plot





TEST NUMBER: P1356994
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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	95	95	95	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	65	70	66	63	63	63	63	60
3	86	75	66	59	83	73	65	58	69	62	56	65	59	55	62	57	53	53	53	53	50
4	79	66	57	50	76	64	56	49	61	54	48	58	51	46	55	49	45	45	45	45	42
5	72	59	50	43	70	57	49	42	54	47	41	52	45	40	49	43	39	39	39	39	36
6	67	53	44	37	64	52	43	37	49	41	36	47	40	35	44	39	34	34	34	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	34	29	41	33	28	39	32	28	37	31	27	27	27	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	29	24	24	24	24	22
10	50	37	29	24	49	36	28	23	35	28	23	33	27	22	32	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1964	1964	1964
5°	1947	1924	1919
10°	1932	1887	1872
15°	1913	1848	1835
20°	1888	1798	1782
25°	1851	1748	1737
30°	1803	1692	1691
35°	1766	1640	1639
40°	1722	1584	1584
45°	1680	1536	1544
50°	1624	1471	1484
55°	1570	1403	1437
60°	1502	1326	1387
65°	1401	1253	1347
70°	1284	1186	1311
75°	1119	1132	1299
80°	860	1085	1295
85°	506	1078	1333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1680 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.2	2.8
10°-20°	49.4	7.9
20°-30°	74.8	12.0
30°-40°	90.5	14.6
40°-50°	95.4	15.3
50°-60°	89.1	14.3
60°-70°	73.5	11.8
70°-80°	53.3	8.6
80°-90°	33.7	5.4
90°-100°	20.1	3.2
100°-110°	11.5	1.9
110°-120°	6.5	1.1
120°-130°	3.7	0.6
130°-140°	2.0	0.3
140°-150°	0.9	0.1
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	141.4	22.7
0°-40°	231.9	37.3
0°-60°	416.4	67.0
0°-90°	577.0	92.8
90°-120°	38.2	6.1
90°-150°	44.8	7.2
90°-180°	45.0	7.2
0°-180°	622.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	181	181	181	181	181	
5°	180	181	181	181	181	17
15°	172	174	176	176	177	49
25°	157	160	163	165	166	72
35°	137	140	145	149	151	85
45°	113	118	125	130	132	87
55°	87	92	100	107	110	78
65°	59	65	75	84	88	58
75°	30	38	52	63	67	32
85°	6	18	33	44	49	7
90°	0	11	26	36	41	0
95°	0	7	19	30	34	0
105°	0	2	11	19	22	0
115°	0	1	6	11	14	0
125°	0	1	4	7	8	0
135°	0	0	2	5	6	0
145°	0	0	1	3	3	0
155°	0	0	0	1	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	181.2	181.2	181.2	181.2	181.2
2.5°	180.0	181.8	181.2	180.6	180.6
5°	179.5	181.2	180.6	180.6	181.2
7.5°	178.3	180.0	180.0	180.0	180.6
10°	176.6	178.9	178.9	178.9	179.5
12.5°	174.9	176.6	177.2	177.8	178.3
15°	172.1	174.3	175.5	176.1	177.2
17.5°	169.2	170.9	172.6	174.3	174.9
20°	165.8	168.1	169.8	171.5	172.1
22.5°	161.8	164.1	166.4	168.1	169.2
25°	157.3	159.5	162.9	165.2	166.4
27.5°	152.7	155.0	159.0	161.8	162.9
30°	147.0	150.4	154.4	157.8	159.5
32.5°	141.9	145.3	149.8	153.8	155.0
35°	136.7	140.2	145.3	149.3	151.0
37.5°	131.0	135.0	140.2	144.7	146.4
40°	125.3	129.3	135.0	140.2	141.3
42.5°	119.6	123.6	130.5	135.0	136.7
45°	113.4	117.9	124.8	129.9	132.2
47.5°	107.1	111.7	118.5	124.2	126.5
50°	100.3	105.4	112.8	118.5	120.8
52.5°	94.0	99.1	106.5	112.8	115.7
55°	87.2	92.3	100.3	107.1	110.0
57.5°	80.3	85.5	94.0	101.4	104.3
60°	73.5	78.6	87.2	95.7	98.6
62.5°	66.1	71.8	80.9	89.5	92.9
65°	58.7	65.0	74.6	83.8	87.7
67.5°	51.8	58.1	68.4	78.6	82.0
70°	44.4	51.3	62.7	72.9	76.9
72.5°	37.0	44.4	57.0	67.8	71.8
75°	30.2	38.2	51.8	62.7	67.2
77.5°	22.8	32.5	46.7	58.1	62.1
80°	16.5	26.8	41.6	53.6	57.5
82.5°	10.8	21.7	37.0	49.0	53.0
85°	5.7	17.7	33.0	44.4	49.0
87.5°	1.7	13.7	29.1	40.5	44.4
90°	0.0	10.8	25.6	36.5	41.0
92.5°	0.0	8.5	22.2	33.0	37.0
95°	0.0	6.8	19.4	29.6	33.6
97.5°	0.0	5.7	17.1	26.8	30.2
100°	0.0	4.6	14.8	23.9	27.3
102.5°	0.0	3.4	12.5	21.1	24.5
105°	0.0	2.3	10.8	18.8	21.7
107.5°	0.0	1.7	9.1	16.5	19.4
110°	0.0	1.7	8.5	14.2	17.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.1	7.4	13.1	15.4
115°	0.0	1.1	6.3	11.4	13.7
117.5°	0.0	1.1	5.7	10.3	12.5
120°	0.0	1.1	5.1	9.1	10.8
122.5°	0.0	0.6	4.6	8.0	9.7
125°	0.0	0.6	4.0	7.4	8.5
127.5°	0.0	0.6	3.4	6.8	8.0
130°	0.0	0.6	3.4	6.3	7.4
132.5°	0.0	0.0	2.8	5.7	6.8
135°	0.0	0.0	2.3	4.6	5.7
137.5°	0.0	0.0	2.3	4.0	5.1
140°	0.0	0.0	1.7	4.0	4.6
142.5°	0.0	0.0	1.1	3.4	4.0
145°	0.0	0.0	1.1	2.8	3.4
147.5°	0.0	0.0	0.6	2.3	2.8
150°	0.0	0.0	0.6	1.7	2.3
152.5°	0.0	0.0	0.0	1.1	1.7
155°	0.0	0.0	0.0	0.6	1.1
157.5°	0.0	0.0	0.0	0.0	0.6
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.65	13.18	12.12	13.64	14.13	13.68	15.21	14.15	15.67	16.16
	3H	13.15	14.55	13.64	15.02	15.55	16.12	17.52	16.60	17.99	18.52
	4H	13.63	14.96	14.14	15.45	15.99	17.32	18.64	17.82	19.13	19.67
	6H	13.91	15.14	14.42	15.64	16.20	18.57	19.81	19.09	20.31	20.87
	8H	13.96	15.14	14.49	15.67	16.24	19.21	20.40	19.75	20.92	21.49
	12H	13.97	15.11	14.51	15.63	16.23	19.92	21.06	20.46	21.58	22.17
4H	2H	12.52	13.85	13.03	14.34	14.88	14.11	15.44	14.62	15.93	16.47
	3H	14.26	15.40	14.78	15.93	16.49	16.78	17.91	17.30	18.44	19.01
	4H	14.87	15.91	15.41	16.45	17.05	18.15	19.19	18.69	19.73	20.33
	6H	15.28	16.19	15.83	16.76	17.37	19.60	20.52	20.16	21.09	21.70
	8H	15.37	16.23	15.94	16.80	17.43	20.36	21.22	20.92	21.79	22.41
	12H	15.42	16.20	16.01	16.80	17.43	21.19	21.97	21.78	22.57	23.20
8H	4H	15.56	16.42	16.13	16.99	17.62	18.37	19.24	18.94	19.80	20.43
	6H	16.15	16.88	16.74	17.49	18.12	20.00	20.73	20.60	21.34	21.97
	8H	16.34	17.00	16.95	17.62	18.26	20.90	21.56	21.51	22.18	22.82
	12H	16.46	17.05	17.07	17.66	18.37	21.92	22.51	22.53	23.12	23.83
12H	4H	15.76	16.54	16.34	17.14	17.77	18.38	19.17	18.97	19.76	20.39
	6H	16.45	17.11	17.06	17.73	18.37	20.04	20.70	20.65	21.32	21.96
	8H	16.74	17.33	17.35	17.93	18.64	21.01	21.60	21.62	22.21	22.92

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

Report Prepared for

Cooper Lighting Solutions

Fail-Safe

Report Number: SP1-2511-597-9

Test Date: 01/22/2026

Luminaire Tested: 4ASL-2-A590-UNV-OPL-1_600mA

Data in this report applies to families of products including 4ASL

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2511-597-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 01/29/2026
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Fail-Safe
 Catalog Number: **4ASL-2-A590-UNV-OPL-1_600mA**
 Description: 2foot 4ASL LED LUMINAIRE WITH OPL LENS AND AMBER 590 LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K): 1535
 CIE u': 0.3534
 CIE v': 0.5468
 Duv: 0.0117
 CIE x: 0.5921
 CIE y: 0.4072
 CIE z: 0.0007
 Peak Wavelength (nm): 598
 Dominant Wavelength (nm): 592
 Purity: 99.97894
 R_f: 1.3
 R_g: 0.1

CRI (Ra):	-20.0		
R1:	-32.1	R9:	-380.5
R2:	53.1	R10:	29.9
R3:	18.5	R11:	-92.0
R4:	-65.7	R12:	-8.5
R5:	-38.6	R13:	-13.5
R6:	42.8	R14:	47.1
R7:	-6.2	R15:	-65.4
R8:	-132.3		



Test Conditions

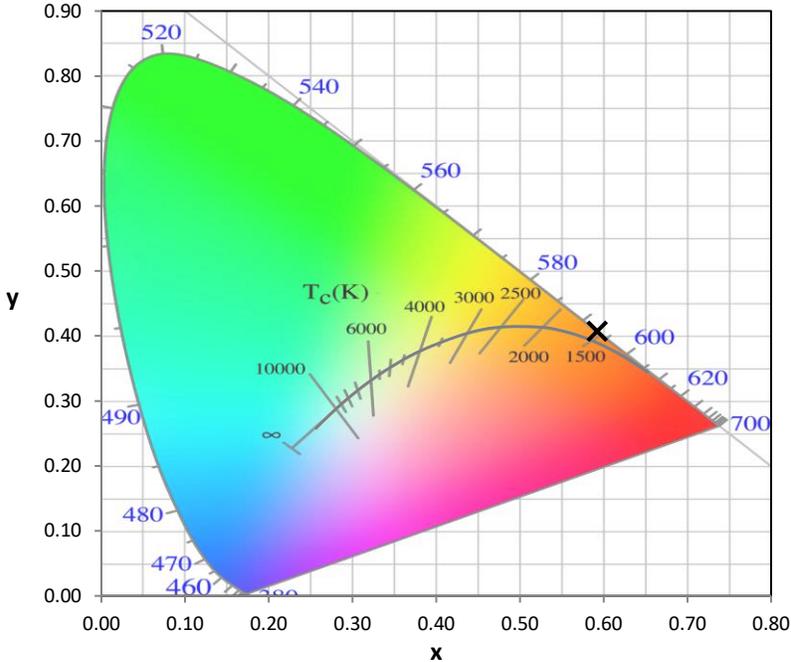
Stabilization Time: 77M
 Operation Time: 2H 17M
 Sphere Temperature (°C): 25.1

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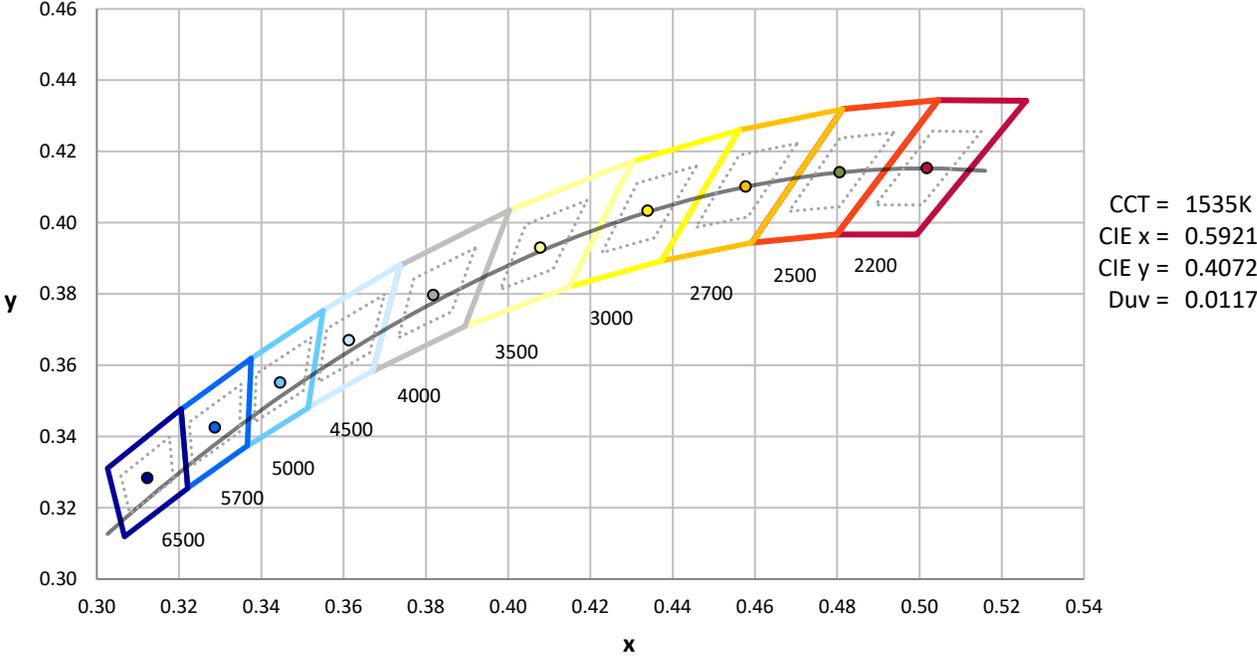
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

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CIE 1931 Chromaticity Diagram



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



CCT = 1535K
 CIE x = 0.5921
 CIE y = 0.4072
 Duv = 0.0117

Point lies outside the range

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Photopic Flux vs. Wavelength

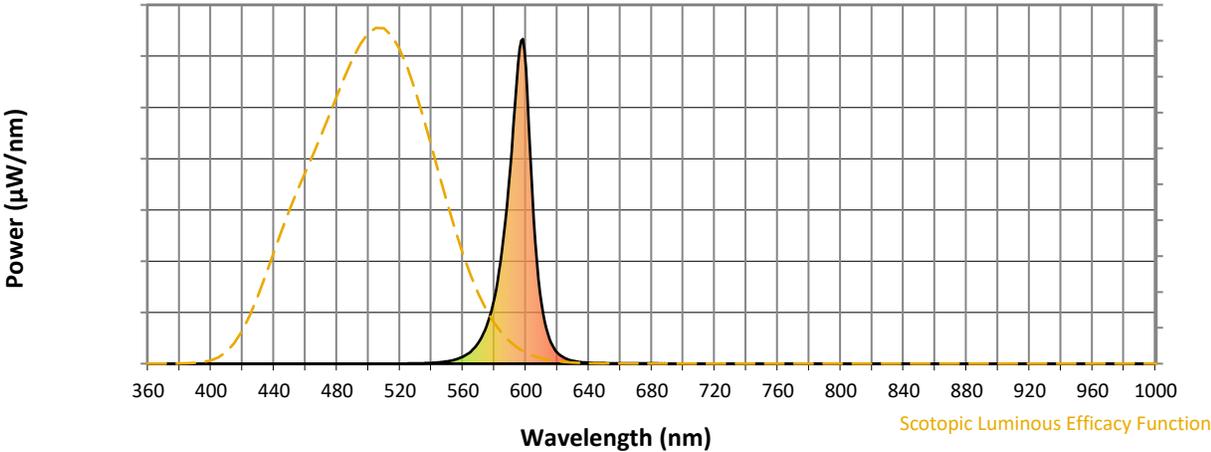


Photopic Lumens: NR

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	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 0.22

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	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



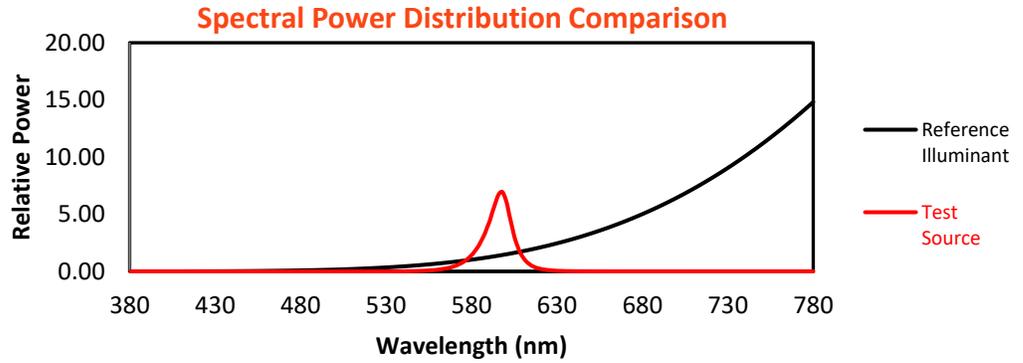
Melanopic Lumens: NR

M/P: 0.12

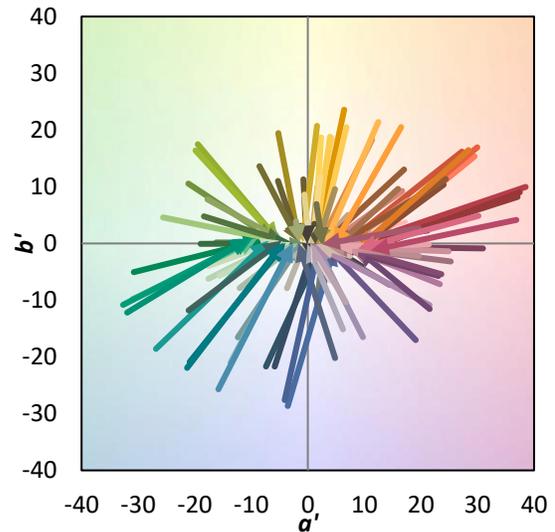
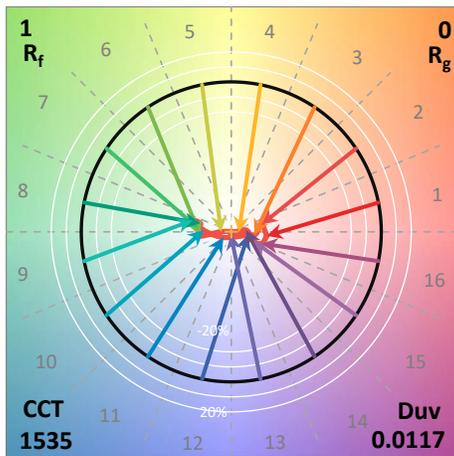
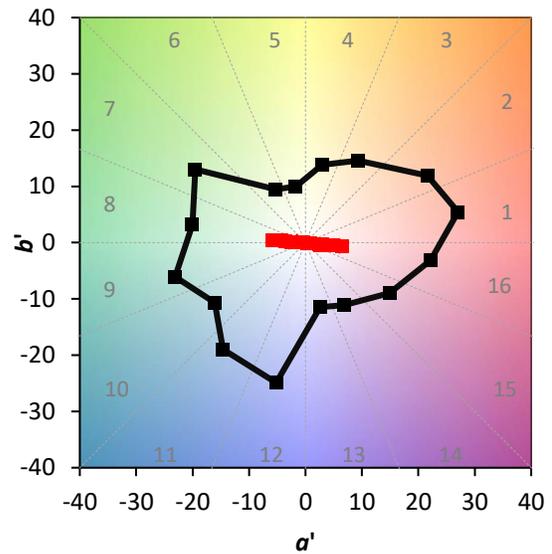
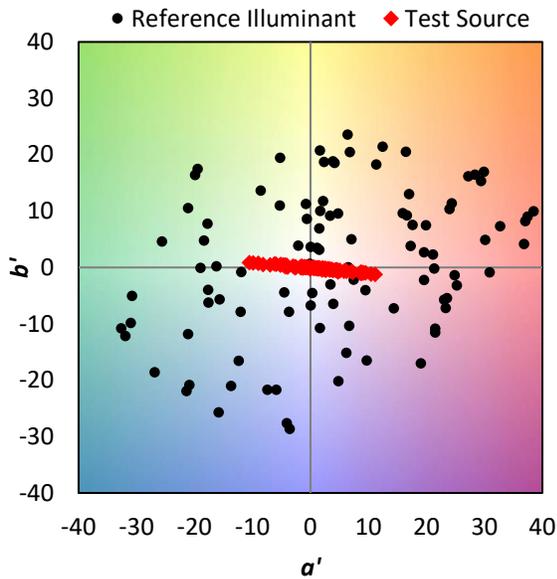
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

Summary

$R_f = 1.3$
 $R_g = 0.1$
 CIE $R_a = -20.0$
 $R_9 = -380.5$

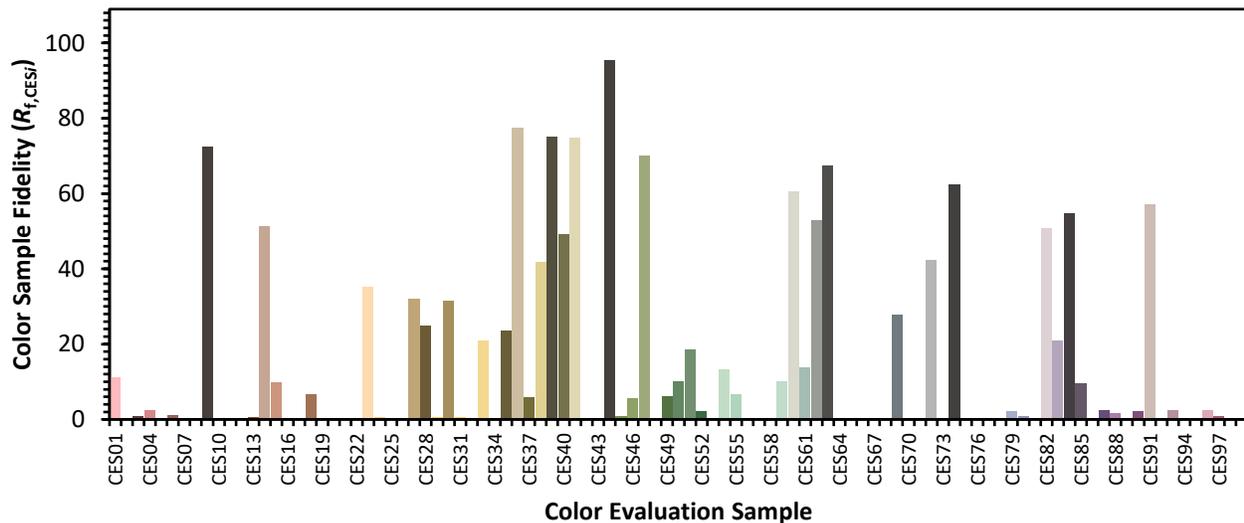


Color Vector Graphics

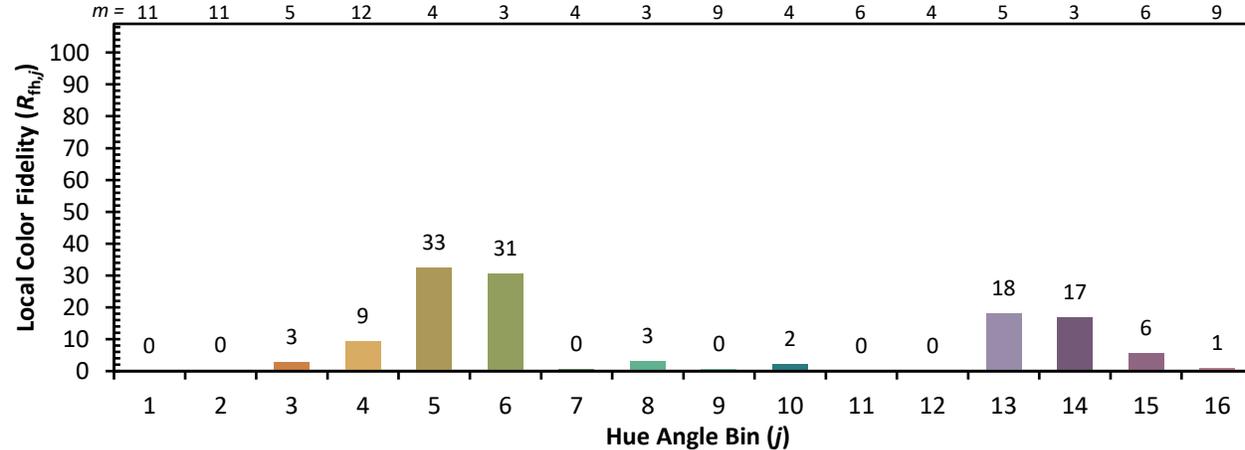
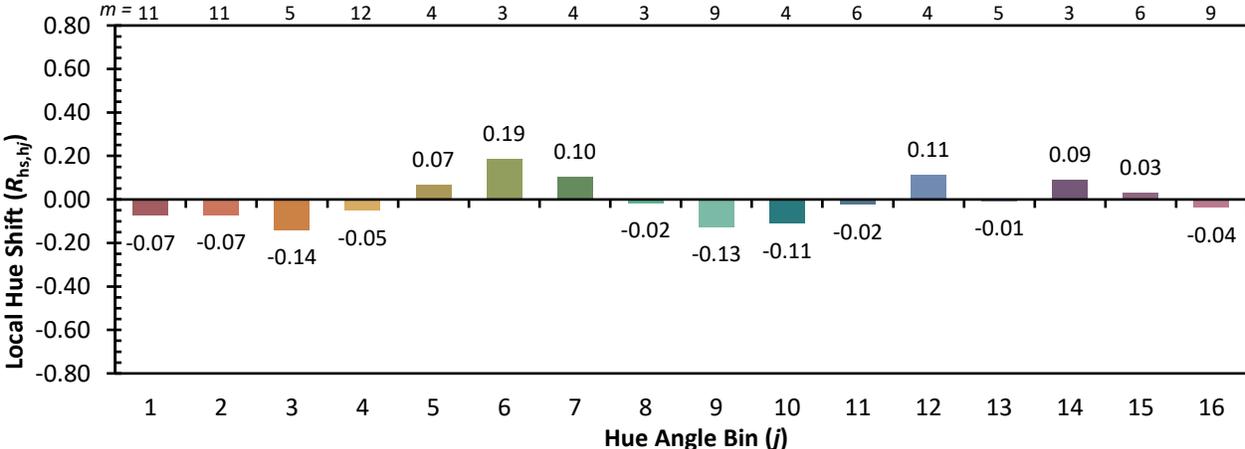
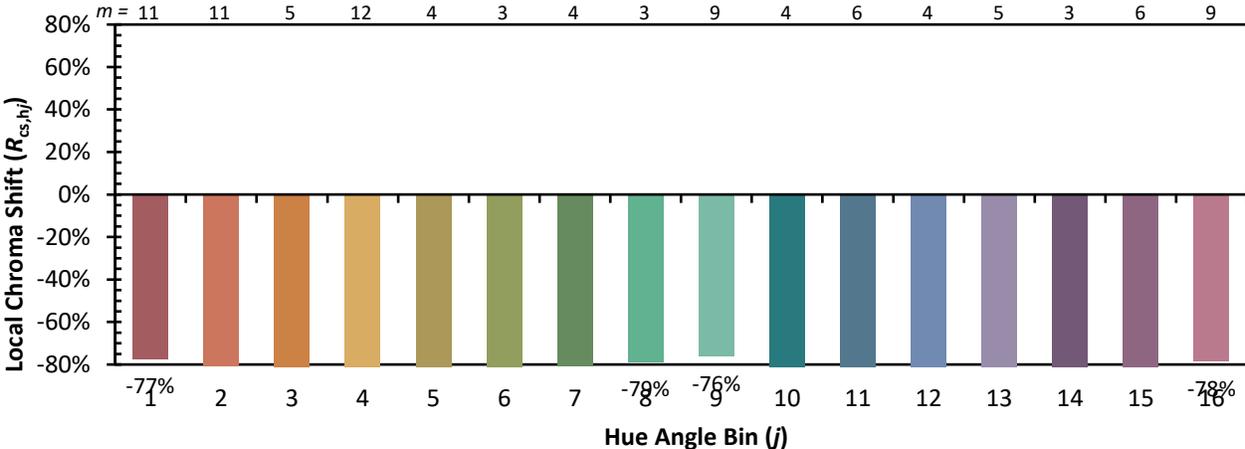


Individual Sample Fidelity Index ($R_{f,i}$)

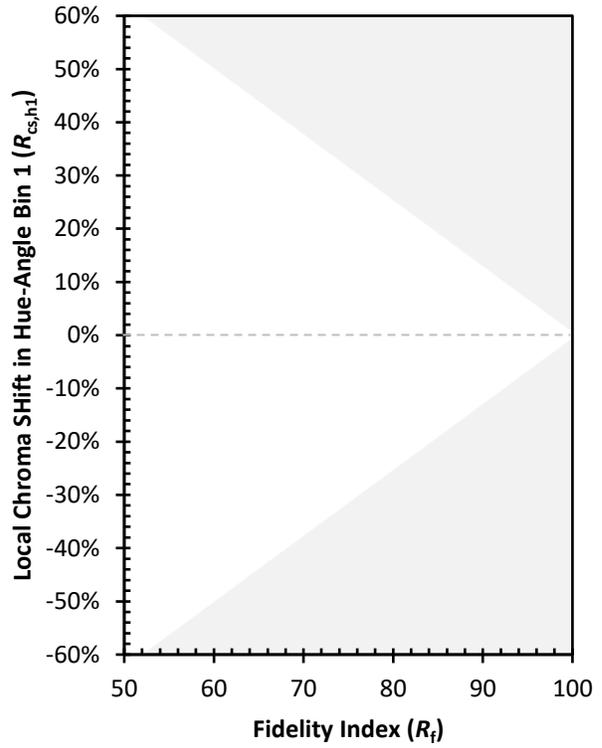
CES01 = 90	CES26 = 0	CES51 = 19	CES76 = 0
CES02 = 70	CES27 = 32	CES52 = 2	CES77 = 0
CES03 = 31	CES28 = 25	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 1	CES54 = 13	CES79 = 2
CES05 = 52	CES30 = 31	CES55 = 7	CES80 = 1
CES06 = 56	CES31 = 1	CES56 = 0	CES81 = 0
CES07 = 41	CES32 = 0	CES57 = 0	CES82 = 51
CES08 = 39	CES33 = 21	CES58 = 0	CES83 = 21
CES09 = 29	CES34 = 0	CES59 = 10	CES84 = 55
CES10 = 87	CES35 = 24	CES60 = 60	CES85 = 10
CES11 = 70	CES36 = 77	CES61 = 14	CES86 = 0
CES12 = 76	CES37 = 6	CES62 = 53	CES87 = 2
CES13 = 47	CES38 = 42	CES63 = 68	CES88 = 2
CES14 = 77	CES39 = 75	CES64 = 0	CES89 = 0
CES15 = 74	CES40 = 49	CES65 = 0	CES90 = 2
CES16 = 49	CES41 = 75	CES66 = 0	CES91 = 57
CES17 = 56	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 60	CES43 = 0	CES68 = 0	CES93 = 3
CES19 = 80	CES44 = 95	CES69 = 28	CES94 = 0
CES20 = 71	CES45 = 1	CES70 = 0	CES95 = 0
CES21 = 94	CES46 = 6	CES71 = 0	CES96 = 2
CES22 = 87	CES47 = 70	CES72 = 42	CES97 = 1
CES23 = 94	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 95	CES49 = 6	CES74 = 62	CES99 = 0
CES25 = 79	CES50 = 10	CES75 = 0	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)