

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: P1357558

Luminaire Tested: 8ASL4-5-1-A59-UNV

Issue Date: 2/17/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1357558  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/17/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: 8ASL4-5-1-A59-UNV  
Description: 8FT 500 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND A59 LEDS 1 ROW  
Light Source: -  
Ballast/Driver: -

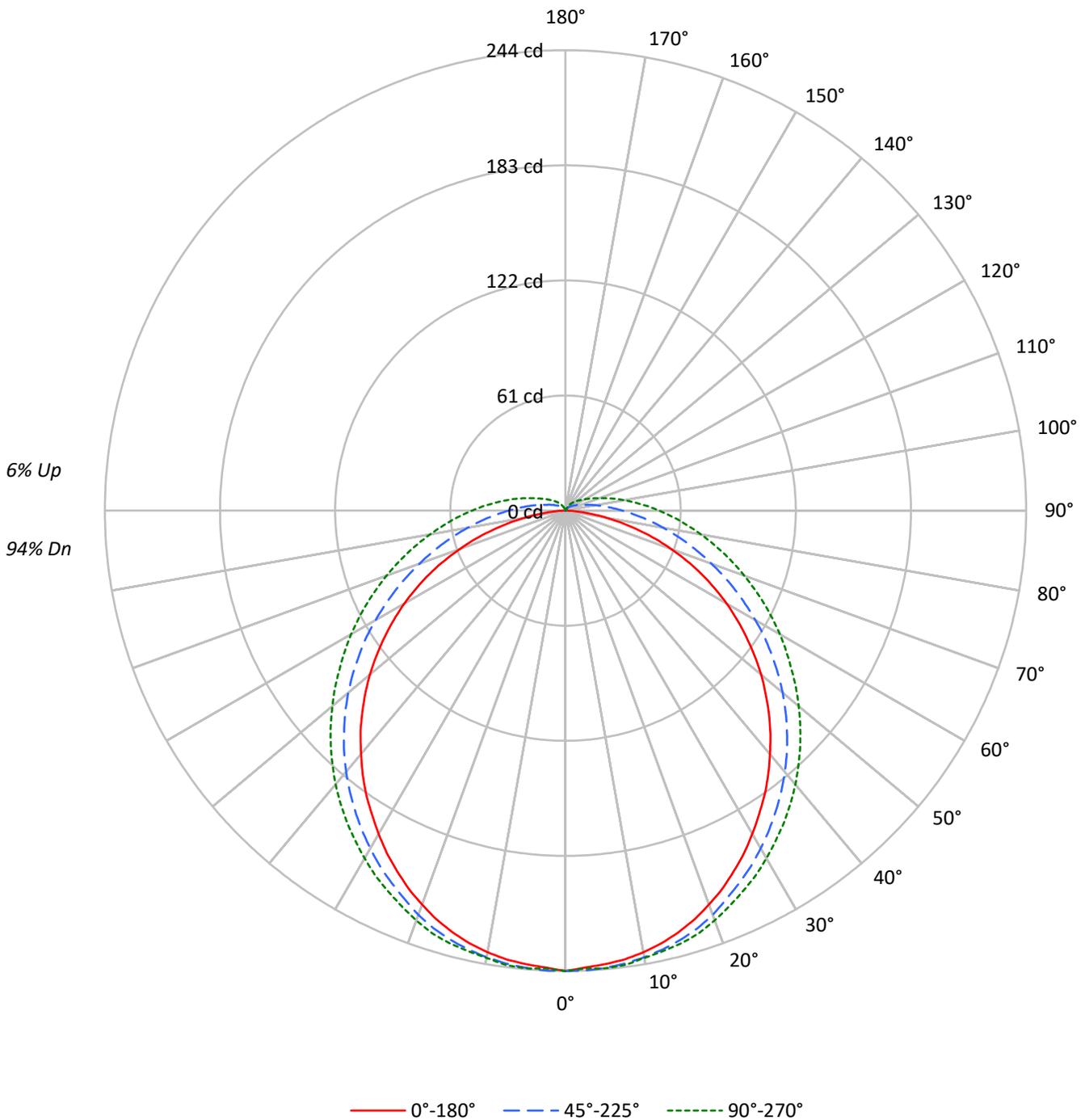
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 817.0 lumens  
Efficiency: N/A  
Efficacy: 35.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 7.98' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 23.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P1357558  
CATALOG NUMBER: 8ASL4-5-1-A59-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P1357558  
 CATALOG NUMBER: 8ASL4-5-1-A59-UNV

**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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	106	100	95	91	102	97	93	89	92	88	85	87	84	81	82	80	78	82	80	78	75
2	95	86	79	73	92	84	77	71	79	74	69	75	70	66	71	67	64	71	67	64	61
3	87	76	67	60	84	73	65	59	69	63	57	66	60	55	62	58	54	62	58	54	51
4	79	67	57	50	76	65	56	50	62	54	48	58	52	47	56	50	46	56	50	46	43
5	73	59	50	43	70	58	49	43	55	47	42	52	46	41	50	44	40	50	44	40	37
6	67	53	44	38	65	52	43	37	50	42	36	47	41	35	45	39	35	45	39	35	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	31	41	35	31	29
8	58	44	35	29	56	43	35	29	41	34	29	39	33	28	38	32	27	38	32	27	25
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25	35	29	25	23
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22	32	27	22	21

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	987	987	987
5°	979	968	963
10°	975	949	937
15°	966	929	918
20°	952	906	894
25°	936	878	867
30°	918	853	842
35°	900	827	818
40°	880	801	793
45°	861	772	767
50°	839	742	740
55°	810	708	712
60°	780	672	688
65°	741	635	665
70°	679	597	642
75°	596	562	624
80°	486	533	613
85°	303	515	616

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 861 cd/sqm



TEST NUMBER: P1357558  
 CATALOG NUMBER: 8ASL4-5-1-A59-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.1	2.8
10°-20°	66.3	8.1
20°-30°	100.3	12.3
30°-40°	121.2	14.8
40°-50°	127.5	15.6
50°-60°	118.8	14.5
60°-70°	97.6	11.9
70°-80°	69.2	8.5
80°-90°	41.8	5.1
90°-100°	23.4	2.9
100°-110°	13.0	1.6
110°-120°	7.2	0.9
120°-130°	4.2	0.5
130°-140°	2.3	0.3
140°-150°	1.0	0.1
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
<b>0°-30°</b>	<b>189.7</b>	<b>23.2</b>
<b>0°-40°</b>	<b>311.0</b>	<b>38.1</b>
<b>0°-60°</b>	<b>557.2</b>	<b>68.2</b>
<b>0°-90°</b>	<b>765.7</b>	<b>93.7</b>
90°-120°	43.6	5.3
90°-150°	51.0	6.2
<b>90°-180°</b>	<b>51.0</b>	<b>6.2</b>
<b>0°-180°</b>	<b>817.0</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	244	244	244	244	244	
5°	241	244	243	243	244	23
15°	231	234	236	237	237	65
25°	211	215	218	221	222	97
35°	184	188	194	199	202	115
45°	152	158	166	173	176	118
55°	117	124	133	142	146	105
65°	80	87	99	111	116	78
75°	40	50	67	81	86	43
85°	8	22	40	55	61	9
90°	0	13	30	44	49	0
95°	0	8	22	35	40	0
105°	0	3	12	21	25	0
115°	0	1	7	13	15	0
125°	0	1	4	8	10	0
135°	0	0	3	5	7	0
145°	0	0	1	3	4	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



TEST NUMBER: P1357558  
 CATALOG NUMBER: 8ASL4-5-1-A59-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	244.0	244.0	244.0	244.0	244.0
2.5°	242.4	244.6	244.0	242.9	242.9
5°	241.3	243.5	243.2	242.9	243.5
7.5°	239.9	242.1	242.1	242.4	242.9
10°	237.7	240.4	240.4	240.4	240.7
12.5°	234.9	237.7	238.2	238.5	239.1
15°	231.3	234.4	235.5	236.6	237.4
17.5°	227.2	230.2	232.2	233.5	234.9
20°	222.2	225.5	228.0	229.7	231.1
22.5°	217.0	220.3	222.8	225.3	226.9
25°	210.9	214.8	217.8	220.8	222.5
27.5°	204.8	208.7	212.6	216.1	218.1
30°	197.9	202.3	206.8	210.9	212.8
32.5°	190.8	195.4	200.7	205.1	207.3
35°	183.9	188.5	194.3	199.3	201.8
37.5°	176.4	181.1	187.7	193.2	195.7
40°	168.4	173.6	180.8	186.6	189.4
42.5°	160.7	165.9	173.6	180.0	182.7
45°	152.4	157.9	165.9	172.8	175.8
47.5°	143.8	149.6	158.2	165.4	168.7
50°	135.3	141.3	150.2	157.9	161.2
52.5°	126.2	132.5	141.9	150.2	153.8
55°	117.0	123.7	133.3	142.2	146.0
57.5°	107.9	114.6	125.1	134.4	138.6
60°	98.6	105.5	116.2	126.4	131.1
62.5°	88.9	96.1	107.4	118.4	123.4
65°	79.5	86.7	99.1	110.7	115.9
67.5°	69.6	77.3	90.5	102.7	108.2
70°	59.4	68.2	82.3	95.2	100.8
72.5°	50.2	59.4	74.5	87.8	93.6
75°	40.0	50.2	66.8	80.6	86.4
77.5°	31.2	42.2	59.6	73.7	79.5
80°	22.4	34.5	52.7	67.1	72.9
82.5°	14.4	27.6	46.4	61.0	66.5
85°	7.5	21.5	40.3	55.2	60.7
87.5°	2.2	16.6	34.8	49.4	54.9
90°	0.0	12.7	30.1	44.2	49.4
92.5°	0.0	9.7	25.9	39.5	44.7
95°	0.0	7.5	22.1	34.8	39.8
97.5°	0.0	5.8	19.0	30.6	35.6
100°	0.0	4.7	16.3	27.1	31.7
102.5°	0.0	3.9	14.1	24.0	28.2
105°	0.0	2.8	11.6	21.0	24.8
107.5°	0.0	1.9	10.2	18.5	21.8
110°	0.0	1.7	9.1	16.0	19.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.4	8.0	14.4	17.1
115°	0.0	1.4	7.2	12.7	15.2
117.5°	0.0	1.1	6.1	11.3	13.5
120°	0.0	1.1	5.5	10.2	12.1
122.5°	0.0	0.8	5.0	9.1	11.0
125°	0.0	0.8	4.4	8.3	9.7
127.5°	0.0	0.6	3.9	7.5	8.8
130°	0.0	0.6	3.6	6.6	8.0
132.5°	0.0	0.3	3.3	6.1	7.2
135°	0.0	0.3	2.8	5.2	6.6
137.5°	0.0	0.0	2.5	4.7	5.8
140°	0.0	0.0	1.9	4.1	5.2
142.5°	0.3	0.0	1.7	3.6	4.4
145°	0.3	0.0	1.1	3.0	3.9
147.5°	0.3	0.3	0.8	2.5	3.0
150°	0.3	0.3	0.6	1.7	2.5
152.5°	0.3	0.3	0.3	1.1	1.7
155°	0.3	0.3	0.0	0.8	1.1
157.5°	0.3	0.3	0.0	0.3	0.6
160°	0.3	0.3	0.0	0.0	0.3
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	9.38	10.93	9.84	11.37	11.84	11.40	12.95	11.86	13.39	13.86
	3H	10.87	12.28	11.34	12.74	13.25	13.83	15.24	14.30	15.70	16.21
	4H	11.34	12.68	11.84	13.15	13.68	15.01	16.35	15.50	16.82	17.35
	6H	11.62	12.87	12.13	13.35	13.89	16.25	17.50	16.75	17.98	18.52
	8H	11.67	12.87	12.19	13.38	13.92	16.89	18.09	17.41	18.59	19.14
	12H	11.69	12.83	12.21	13.33	13.91	17.61	18.75	18.13	19.26	19.83
4H	2H	10.25	11.59	10.74	12.06	12.58	11.83	13.17	12.33	13.64	14.17
	3H	11.98	13.12	12.48	13.63	14.18	14.49	15.63	14.99	16.14	16.69
	4H	12.58	13.62	13.10	14.15	14.72	15.83	16.88	16.36	17.40	17.98
	6H	12.97	13.89	13.52	14.44	15.04	17.26	18.18	17.80	18.73	19.32
	8H	13.06	13.93	13.62	14.48	15.09	18.01	18.87	18.56	19.42	20.03
	12H	13.11	13.89	13.68	14.47	15.08	18.85	19.63	19.42	20.21	20.82
8H	4H	13.24	14.10	13.79	14.65	15.26	16.05	16.91	16.60	17.46	18.07
	6H	13.80	14.54	14.39	15.13	15.74	17.63	18.37	18.22	18.96	19.57
	8H	13.98	14.64	14.58	15.25	15.87	18.52	19.18	19.12	19.79	20.41
	12H	14.09	14.68	14.69	15.27	15.97	19.54	20.13	20.14	20.73	21.42
12H	4H	13.42	14.21	13.99	14.79	15.40	16.05	16.84	16.63	17.42	18.03
	6H	14.08	14.75	14.68	15.35	15.98	17.67	18.33	18.26	18.94	19.56
	8H	14.36	14.95	14.95	15.54	16.23	18.62	19.21	19.22	19.81	20.50

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:  $4\pi$   
 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<sub>f</sub>: 1.3  
 R<sub>g</sub>: 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**

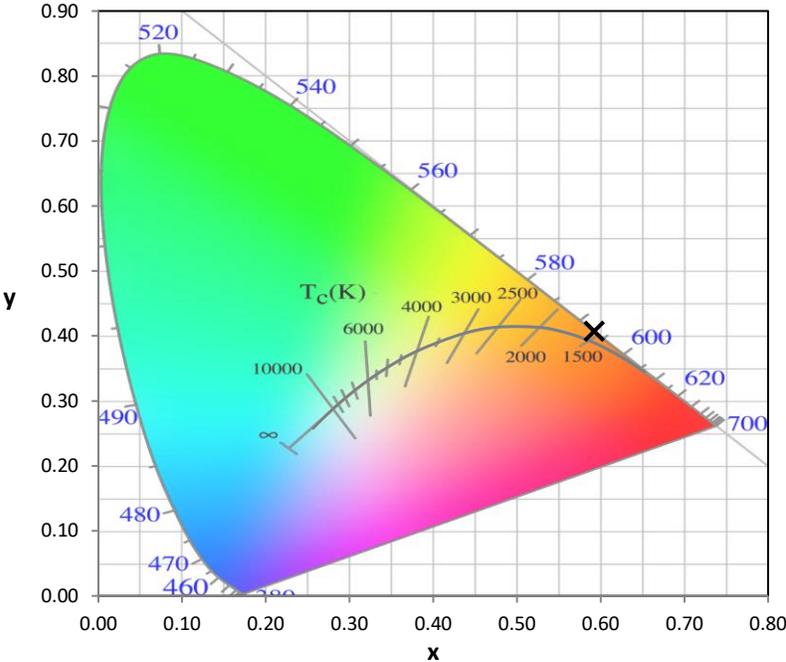
Stabilization Time: 77M  
 Operation Time: 2H 17M  
 Sphere Temperature (°C): 25.1

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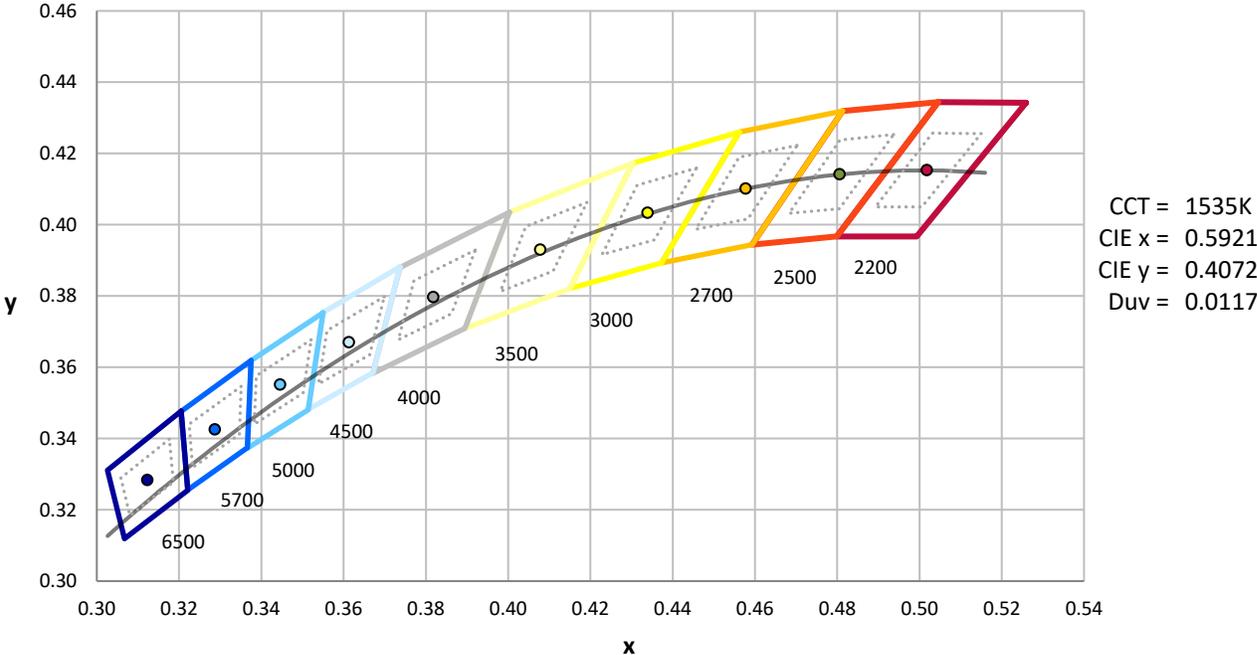
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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



Point lies outside the range

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**Photopic Flux vs. Wavelength**

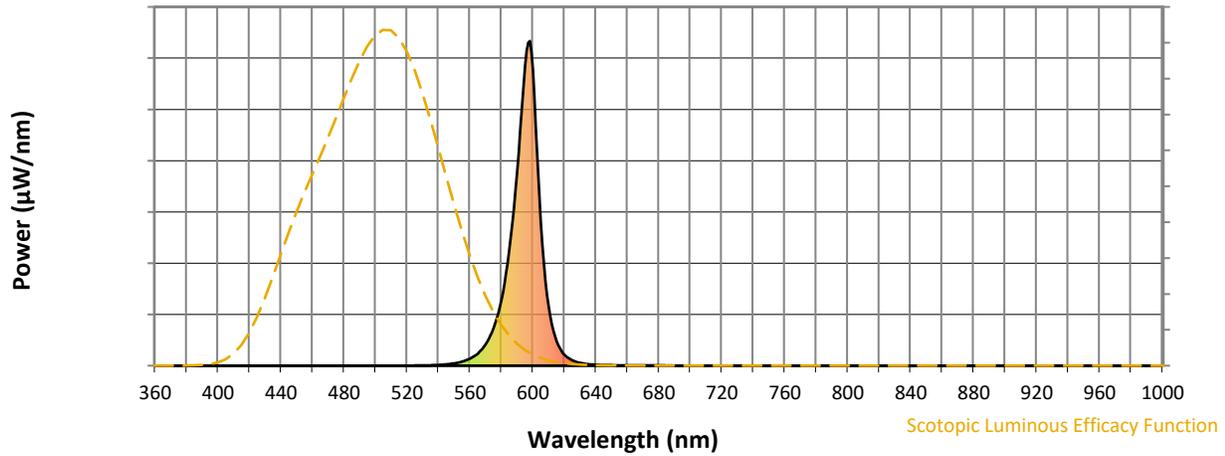


**Photopic Lumens: NR**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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			

REPORT NUMBER: SP1-2511-597-9

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 0.22**

$\lambda$ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens $(\phi/\text{nm})$												
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**



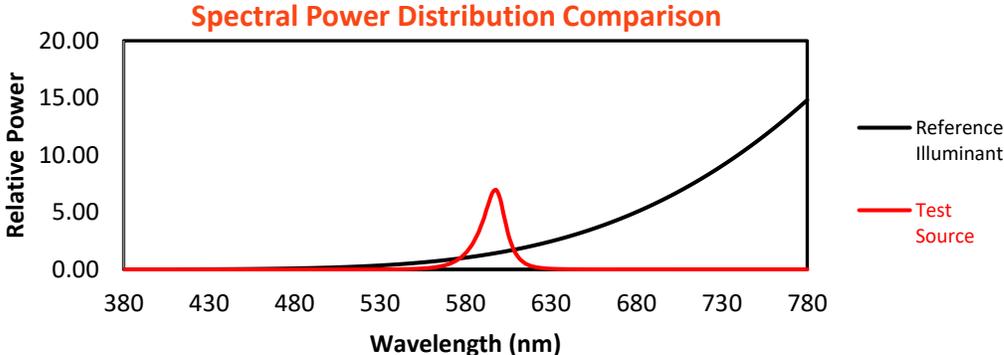
**Melanopic Lumens: NR**

**M/P: 0.12**

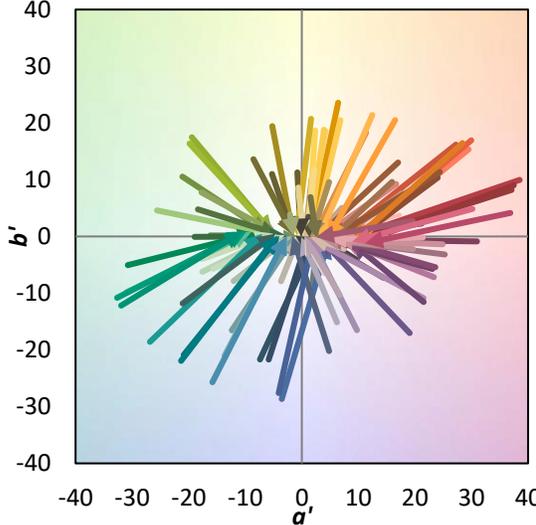
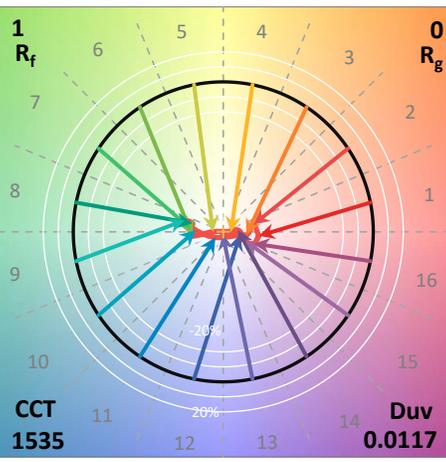
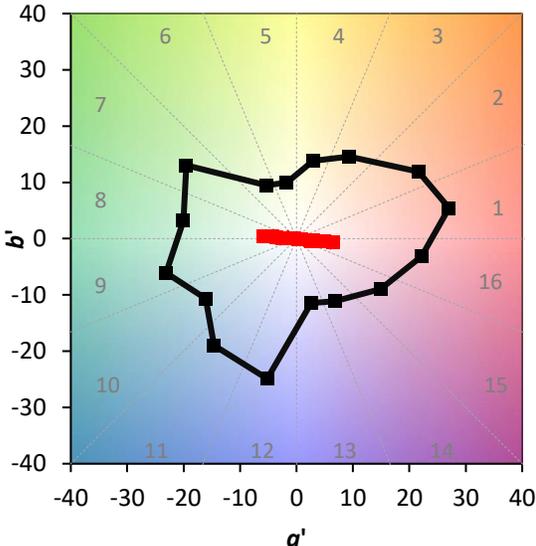
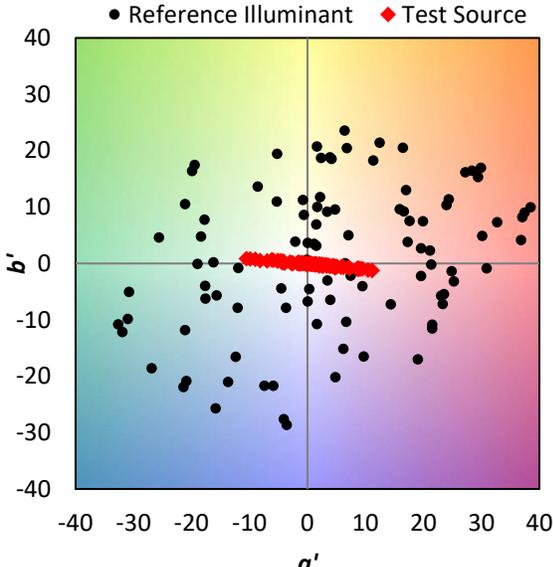
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	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**

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

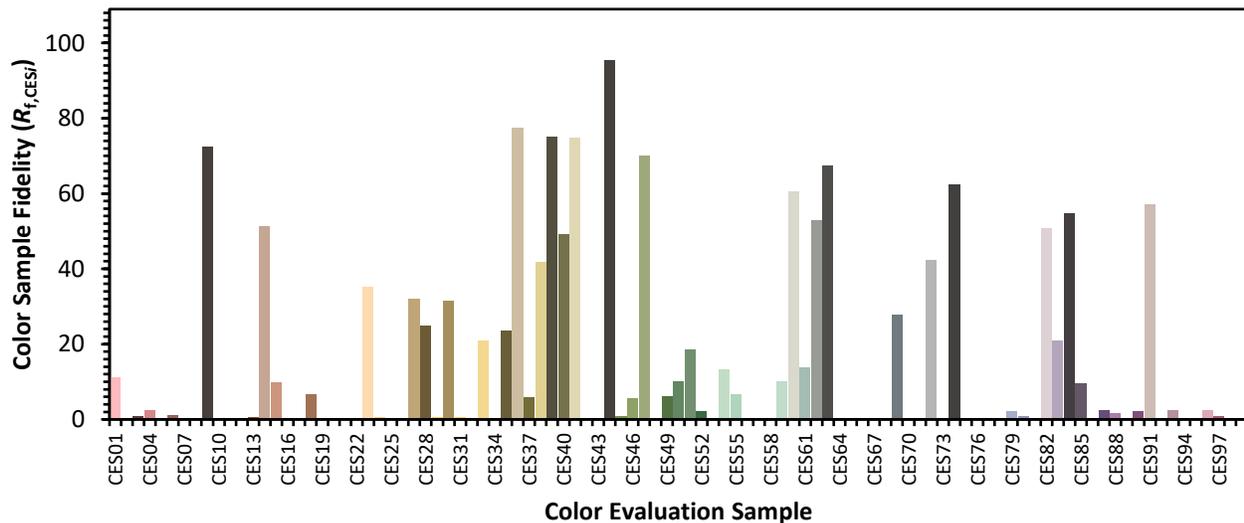


**Color Vector Graphics**

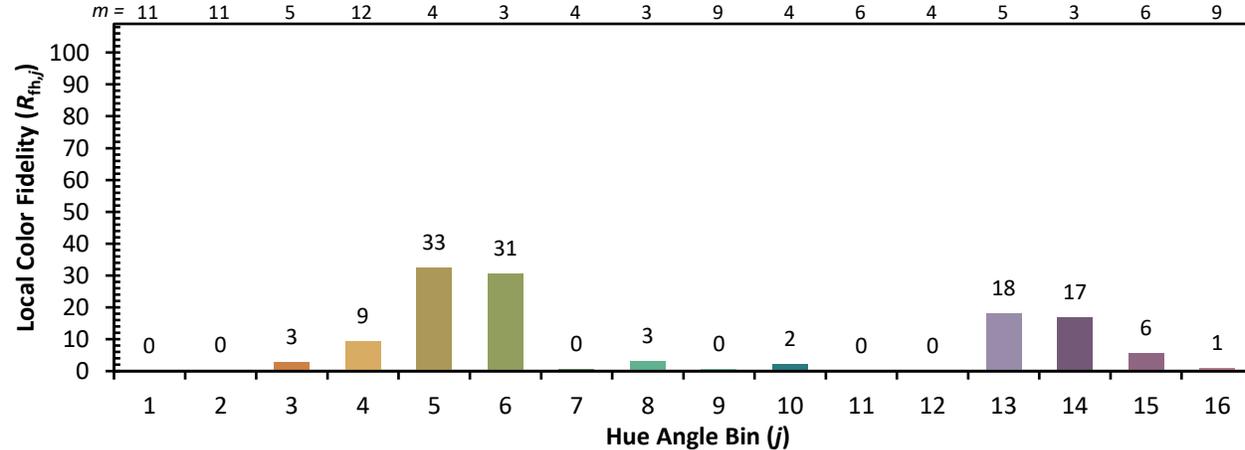
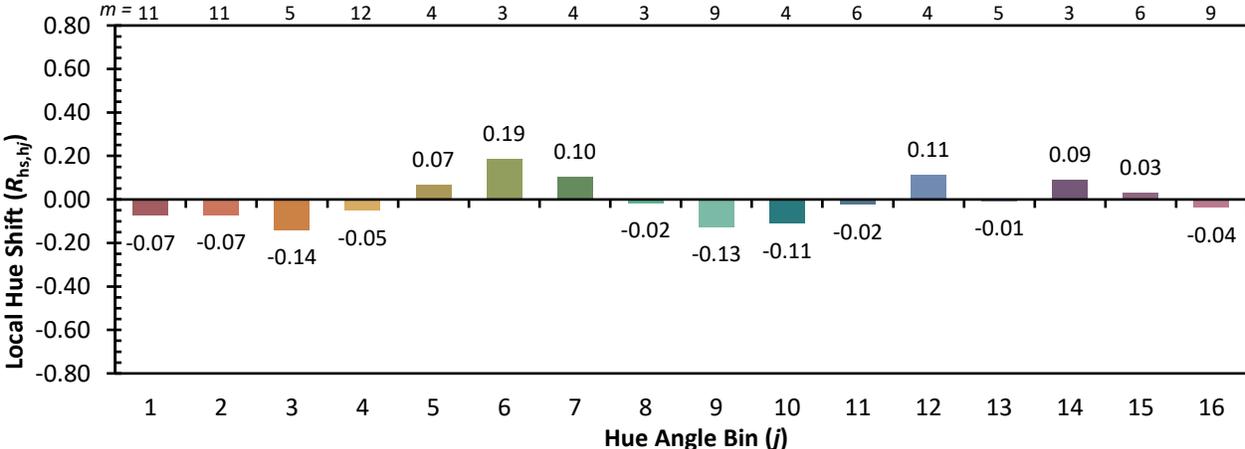
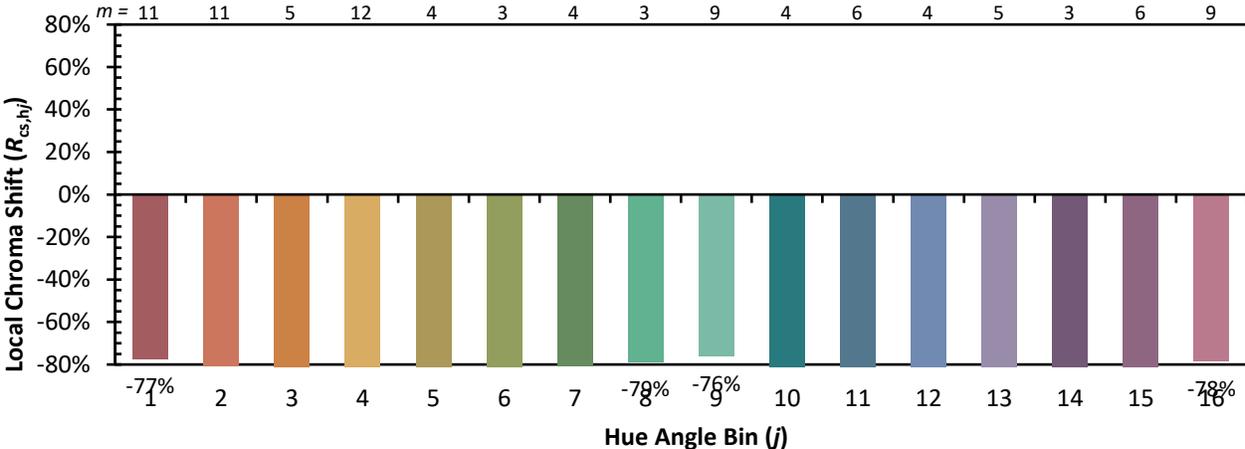


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

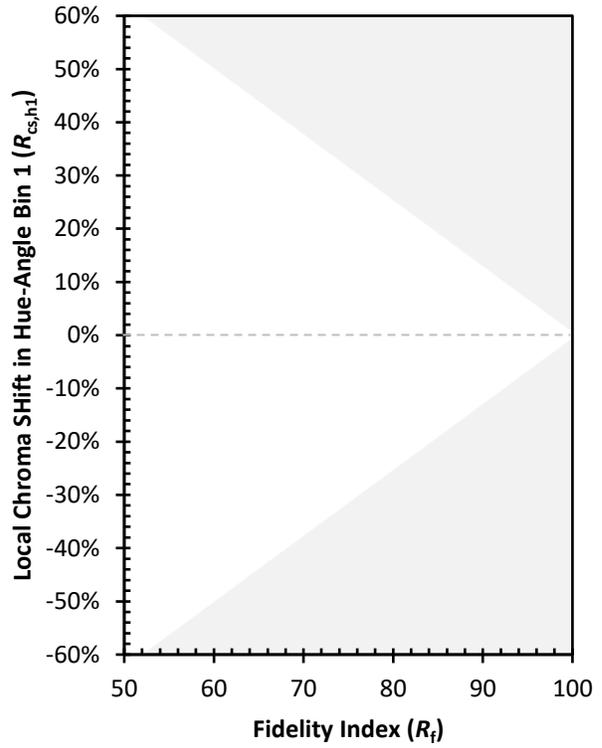
CES01 = 90	CES26 = 0	CES51 = 19	CES76 = 0
CES02 = 70	CES27 = 32	CES52 = 2	CES77 = 0
CES03 = 31	CES28 = 25	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 1	CES54 = 13	CES79 = 2
CES05 = 52	CES30 = 31	CES55 = 7	CES80 = 1
CES06 = 56	CES31 = 1	CES56 = 0	CES81 = 0
CES07 = 41	CES32 = 0	CES57 = 0	CES82 = 51
CES08 = 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)