

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: P1357534

Luminaire Tested: 8ASL4-30VHE-3-A59-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-12)
Test Lab: INNOVATION CENTER
Issue Date: 2/17/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: 8ASL4-30VHE-3-A59-UNV
Description: 8FT 3000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND A59 LEDS 3 ROW
Light Source: -
Ballast/Driver: -

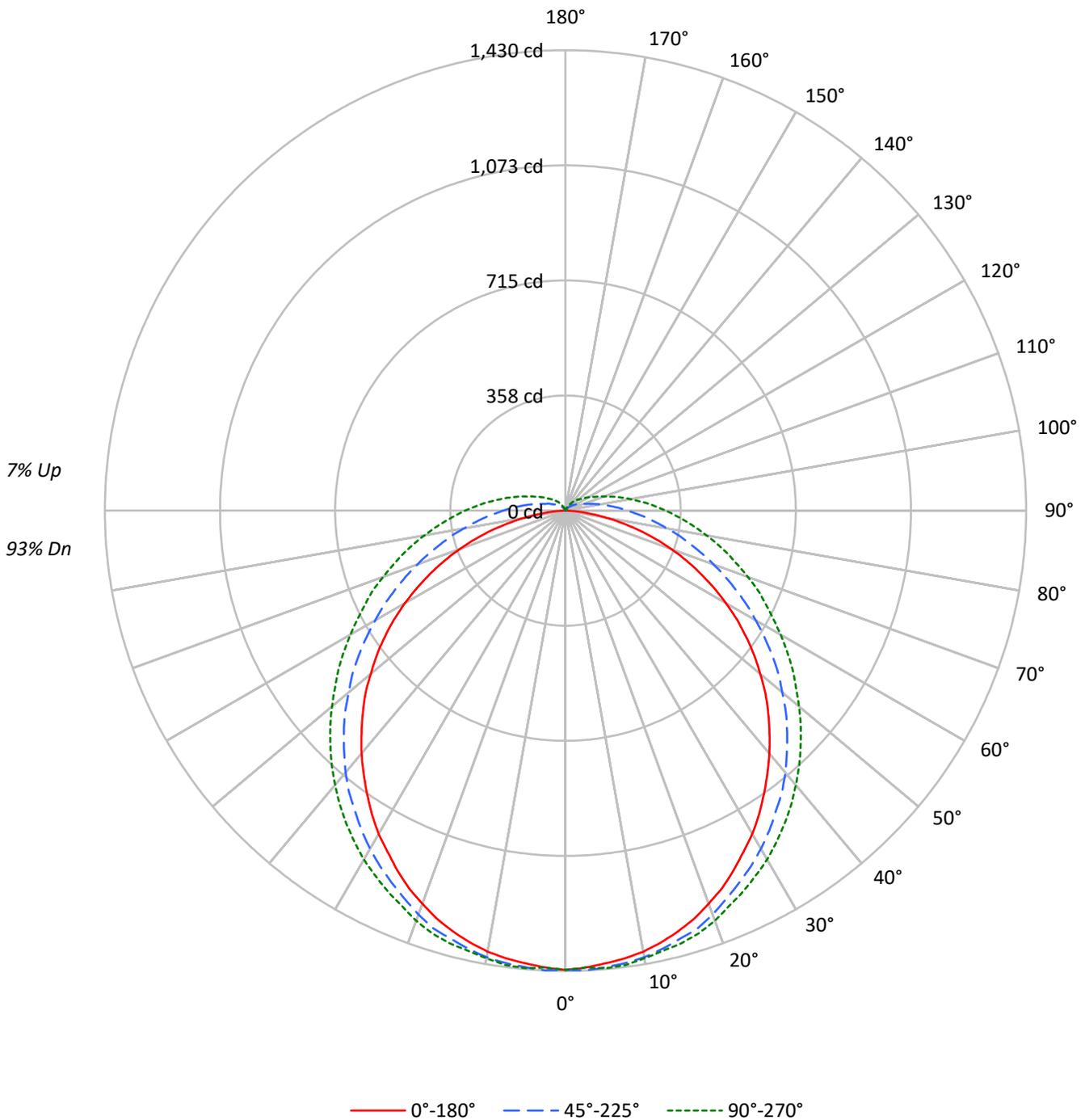
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4851.0 lumens
Efficiency: N/A
Efficacy: 33.3 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): 145.7
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: P1357534
CATALOG NUMBER: 8ASL4-30VHE-3-A59-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P1357534
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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	96	96	96	96	96	96	93
1	105	100	95	91	102	97	92	88	91	88	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	63	63	63	61
3	86	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	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	35	29	41	34	28	39	32	28	37	32	27	27	27	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	24	24	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5774	5774	5774
5°	5729	5670	5642
10°	5704	5564	5499
15°	5647	5431	5378
20°	5569	5304	5242
25°	5477	5144	5087
30°	5379	5004	4955
35°	5257	4846	4810
40°	5146	4702	4656
45°	5028	4526	4501
50°	4892	4338	4341
55°	4746	4158	4197
60°	4554	3948	4050
65°	4310	3746	3929
70°	3998	3547	3833
75°	3538	3368	3769
80°	2832	3239	3740
85°	1798	3224	3795

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5028 cd/sqm



TEST NUMBER: P1357534
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.3	2.8
10°-20°	388.5	8.0
20°-30°	587.3	12.1
30°-40°	711.1	14.7
40°-50°	746.9	15.4
50°-60°	696.8	14.4
60°-70°	575.9	11.9
70°-80°	414.6	8.5
80°-90°	257.7	5.3
90°-100°	151.0	3.1
100°-110°	86.4	1.8
110°-120°	48.8	1.0
120°-130°	28.1	0.6
130°-140°	15.1	0.3
140°-150°	6.4	0.1
150°-160°	1.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1111.1	22.9
0°-40°	1822.2	37.6
0°-60°	3265.9	67.3
0°-90°	4514.1	93.1
90°-120°	286.1	5.9
90°-150°	335.7	6.9
90°-180°	337.0	6.9
0°-180°	4851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1412	1424	1424	1424	1427	134
15°	1353	1370	1376	1385	1391	381
25°	1234	1255	1276	1293	1305	568
35°	1074	1103	1139	1172	1186	672
45°	890	922	973	1014	1032	687
55°	685	724	783	839	860	612
65°	463	507	584	658	685	458
75°	237	297	400	486	522	251
85°	44	134	252	341	374	54
90°	0	80	193	276	312	2
95°	0	50	145	222	255	0
105°	0	18	80	139	163	0
115°	0	9	48	86	101	0
125°	0	6	30	56	65	0
135°	0	0	18	36	44	0
145°	0	0	9	21	24	0
155°	0	0	0	6	9	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°	1426.7	1426.7	1426.7	1426.7	1426.7
2.5°	1420.8	1429.7	1429.7	1420.8	1420.8
5°	1411.9	1423.8	1423.8	1423.8	1426.7
7.5°	1403.0	1417.8	1417.8	1417.8	1423.8
10°	1391.1	1406.0	1408.9	1408.9	1411.9
12.5°	1373.4	1391.1	1394.1	1397.1	1400.0
15°	1352.6	1370.4	1376.3	1385.2	1391.1
17.5°	1328.9	1349.6	1361.5	1370.4	1376.3
20°	1299.2	1320.0	1334.8	1346.7	1355.6
22.5°	1269.5	1287.3	1305.1	1320.0	1328.9
25°	1233.9	1254.7	1275.5	1293.3	1305.1
27.5°	1195.4	1219.1	1245.8	1266.6	1278.4
30°	1159.8	1183.5	1213.2	1239.9	1251.7
32.5°	1118.3	1145.0	1177.6	1204.3	1219.1
35°	1073.8	1103.4	1139.0	1171.7	1186.5
37.5°	1029.3	1058.9	1103.4	1136.1	1150.9
40°	984.8	1014.4	1061.9	1097.5	1112.3
42.5°	937.3	967.0	1017.4	1056.0	1073.8
45°	889.9	922.5	972.9	1014.4	1032.2
47.5°	842.4	875.0	928.4	972.9	990.7
50°	789.0	824.6	878.0	928.4	946.2
52.5°	738.6	774.2	833.5	883.9	901.7
55°	685.2	723.8	783.1	839.4	860.2
57.5°	631.8	670.4	732.7	792.0	815.7
60°	575.4	617.0	682.2	744.5	771.2
62.5°	519.1	563.6	634.8	700.0	726.7
65°	462.7	507.2	584.3	658.5	685.2
67.5°	406.4	453.8	536.9	614.0	646.6
70°	350.0	400.4	489.4	569.5	602.1
72.5°	293.7	347.0	444.9	528.0	560.6
75°	237.3	296.6	400.4	486.5	522.1
77.5°	180.9	249.2	361.9	447.9	483.5
80°	130.5	207.6	320.4	409.3	444.9
82.5°	83.1	166.1	284.8	373.7	409.3
85°	44.5	133.5	252.1	341.1	373.7
87.5°	14.8	103.8	219.5	308.5	341.1
90°	0.0	80.1	192.8	275.9	311.5
92.5°	0.0	62.3	169.1	249.2	281.8
95°	0.0	50.4	145.3	222.5	255.1
97.5°	0.0	41.5	127.5	198.7	228.4
100°	0.0	32.6	109.7	178.0	204.7
102.5°	0.0	26.7	94.9	157.2	183.9
105°	0.0	17.8	80.1	139.4	163.1
107.5°	0.0	14.8	68.2	124.6	145.3
110°	0.0	11.9	62.3	106.8	127.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	8.9	56.4	94.9	115.7
115°	0.0	8.9	47.5	86.0	100.9
117.5°	0.0	8.9	41.5	77.1	92.0
120°	0.0	5.9	38.6	68.2	83.1
122.5°	0.0	5.9	32.6	62.3	74.2
125°	0.0	5.9	29.7	56.4	65.3
127.5°	0.0	3.0	26.7	50.4	59.3
130°	0.0	3.0	23.7	44.5	53.4
132.5°	0.0	3.0	20.8	41.5	50.4
135°	0.0	0.0	17.8	35.6	44.5
137.5°	0.0	0.0	14.8	32.6	38.6
140°	0.0	0.0	11.9	26.7	35.6
142.5°	0.0	0.0	8.9	23.7	29.7
145°	0.0	0.0	8.9	20.8	23.7
147.5°	0.0	0.0	5.9	14.8	20.8
150°	0.0	0.0	3.0	11.9	14.8
152.5°	0.0	0.0	0.0	8.9	11.9
155°	0.0	0.0	0.0	5.9	8.9
157.5°	0.0	0.0	0.0	0.0	3.0
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	15.44	16.98	15.91	17.44	17.92	17.51	19.05	17.98	19.50	19.99
	3H	16.94	18.34	17.42	18.81	19.33	19.99	21.40	20.47	21.86	22.38
	4H	17.42	18.75	17.92	19.23	19.77	21.21	22.54	21.71	23.02	23.56
	6H	17.69	18.93	18.21	19.43	19.98	22.49	23.73	23.00	24.22	24.77
	8H	17.74	18.93	18.27	19.45	20.01	23.15	24.34	23.68	24.86	25.42
	12H	17.76	18.90	18.29	19.41	20.00	23.90	25.04	24.43	25.55	26.14
4H	2H	16.32	17.66	16.83	18.14	18.68	17.94	19.27	18.44	19.76	20.29
	3H	18.06	19.19	18.57	19.72	20.28	20.65	21.78	21.16	22.31	22.87
	4H	18.66	19.70	19.20	20.24	20.83	22.03	23.07	22.57	23.61	24.20
	6H	19.06	19.98	19.62	20.54	21.15	23.50	24.42	24.06	24.98	25.59
	8H	19.15	20.02	19.71	20.58	21.20	24.28	25.14	24.84	25.70	26.32
	12H	19.20	19.98	19.78	20.57	21.20	25.15	25.94	25.73	26.53	27.15
8H	4H	19.35	20.22	19.91	20.78	21.40	22.25	23.11	22.81	23.67	24.29
	6H	19.93	20.67	20.53	21.27	21.89	23.89	24.62	24.48	25.22	25.85
	8H	20.11	20.78	20.72	21.39	22.03	24.80	25.46	25.41	26.08	26.72
	12H	20.23	20.82	20.84	21.42	22.13	25.86	26.45	26.47	27.05	27.76
12H	4H	19.55	20.34	20.13	20.93	21.55	22.26	23.04	22.84	23.63	24.25
	6H	20.23	20.89	20.84	21.51	22.15	23.92	24.59	24.53	25.20	25.84
	8H	20.51	21.10	21.12	21.71	22.41	24.91	25.50	25.51	26.10	26.81

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

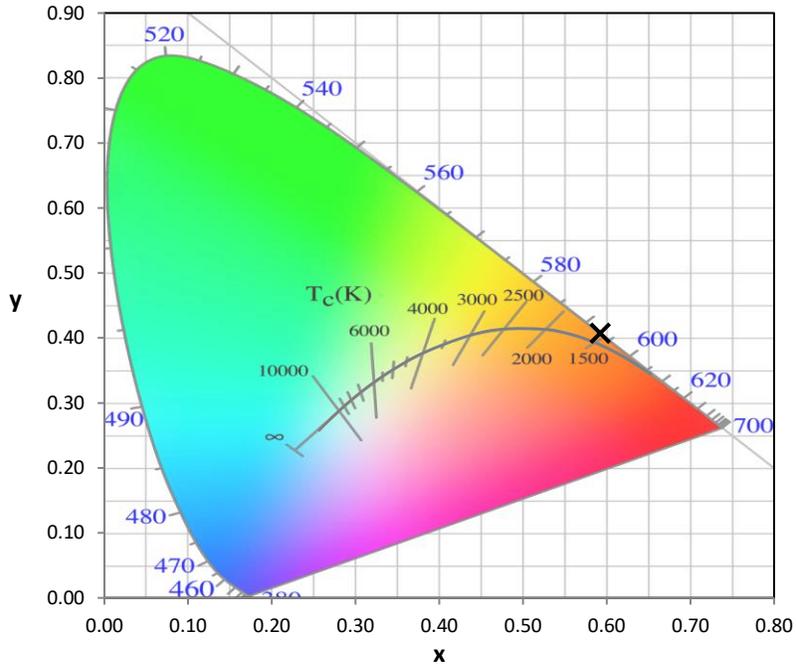
Stabilization Time: 77M
 Operation Time: 2H 17M
 Sphere Temperature (°C): 25.1

REPORT NUMBER: SP1-2511-597-9

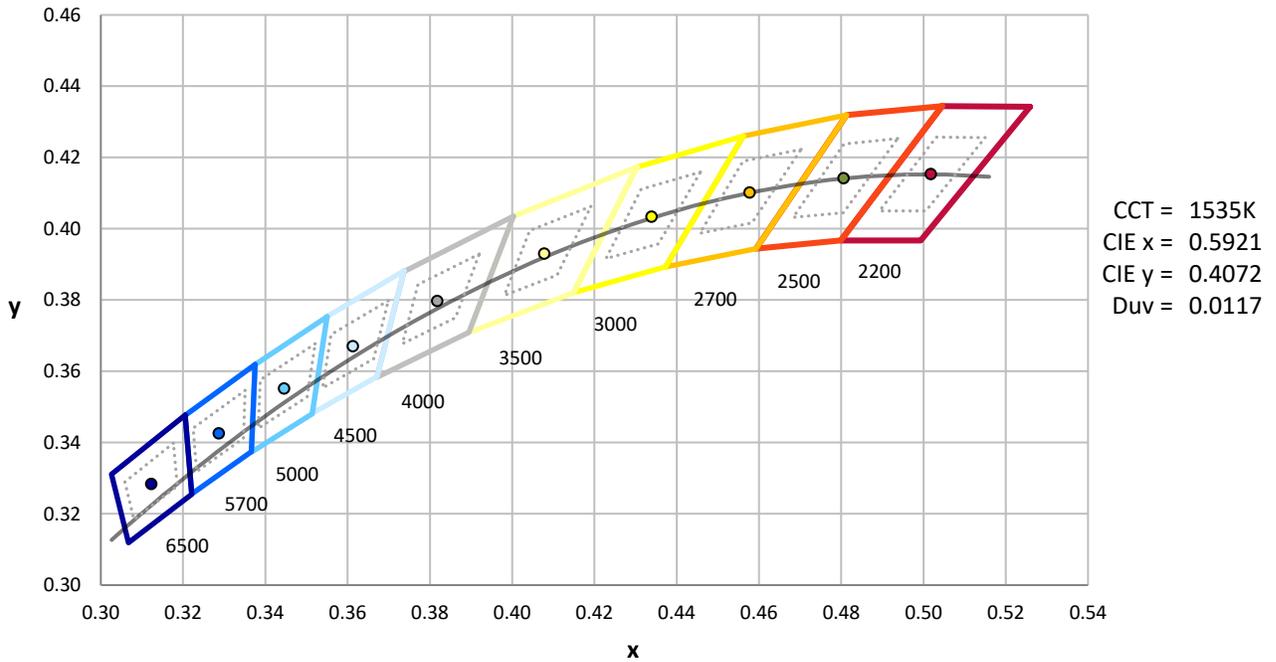
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

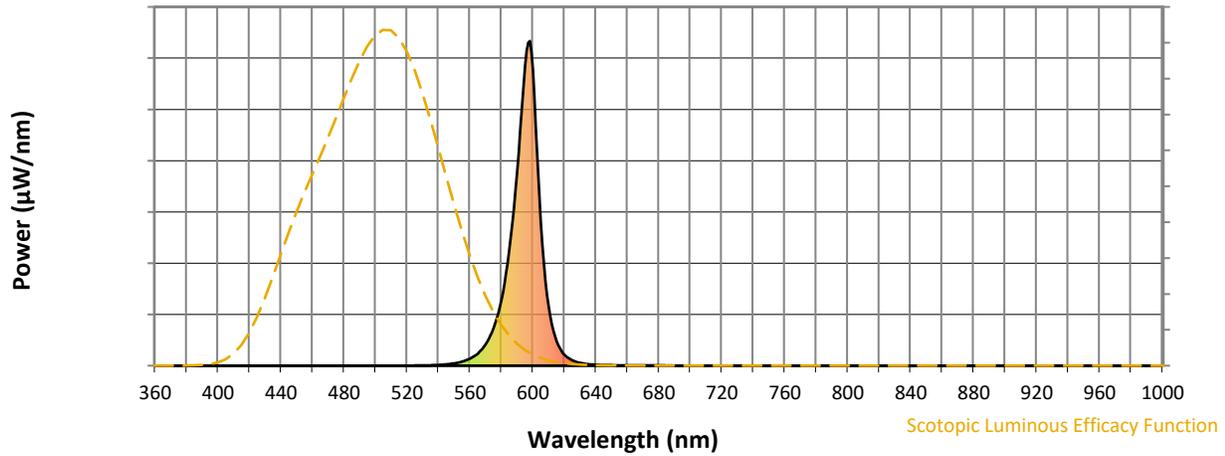


Photopic Lumens: NR

λ (nm)	Power W [^] /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



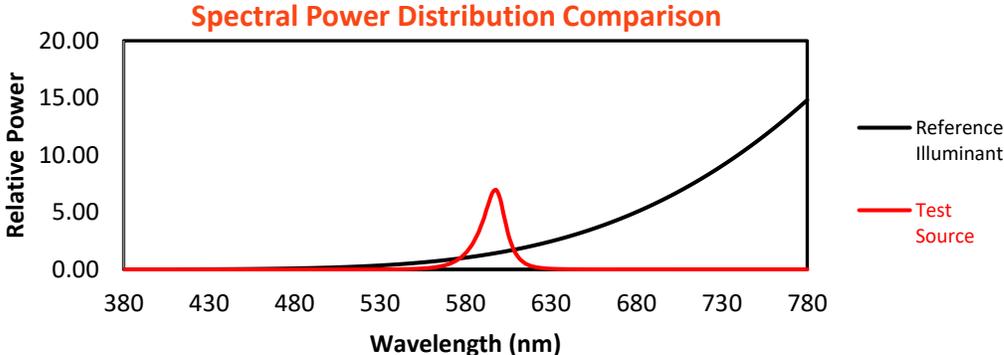
Melanopic Lumens: NR

M/P: 0.12

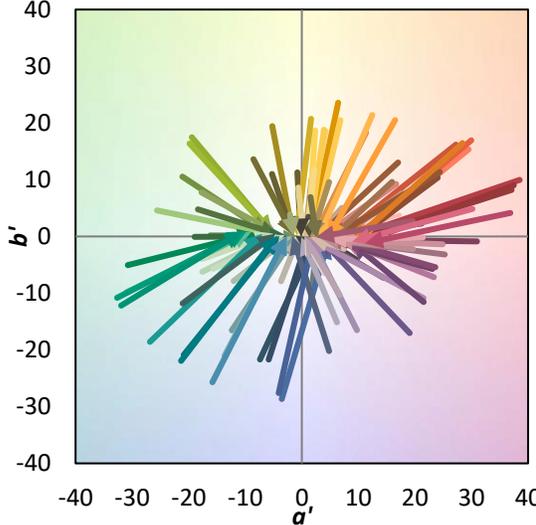
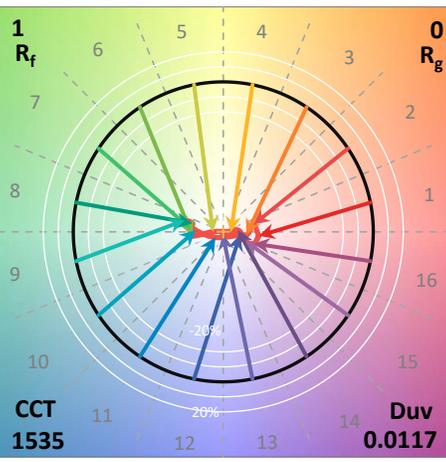
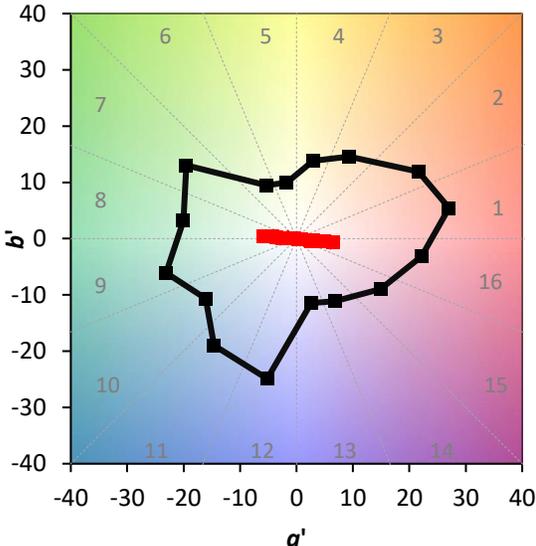
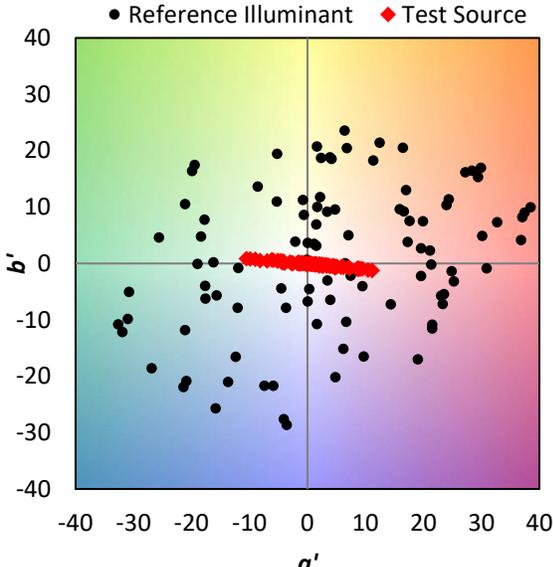
λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)
360	0	NR	490	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	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

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

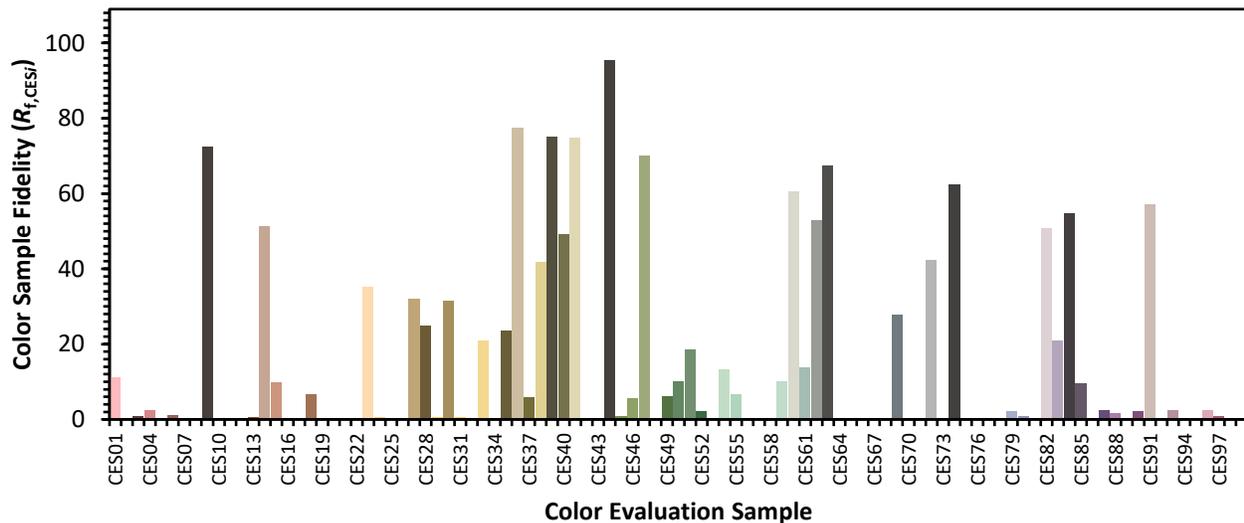


Color Vector Graphics

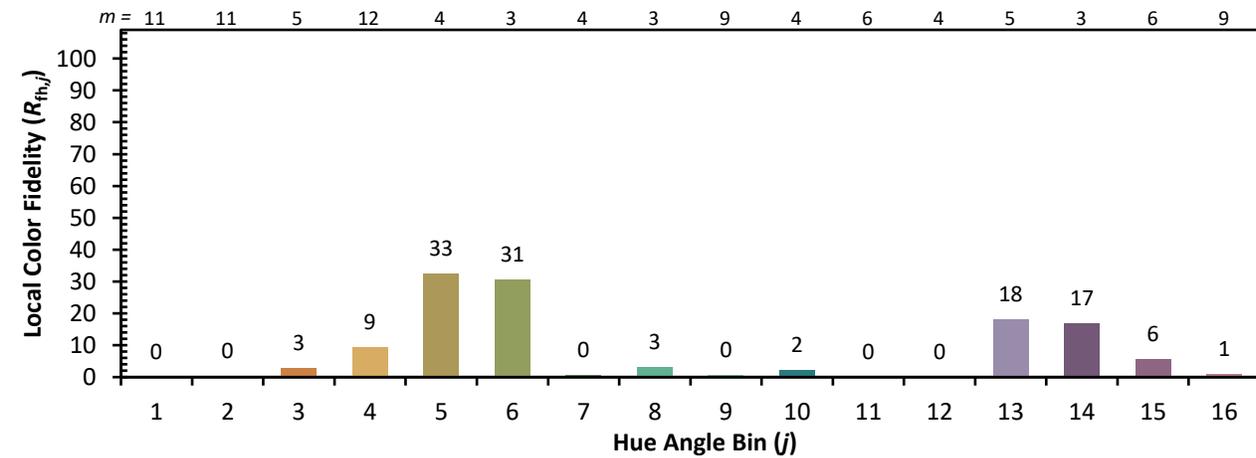
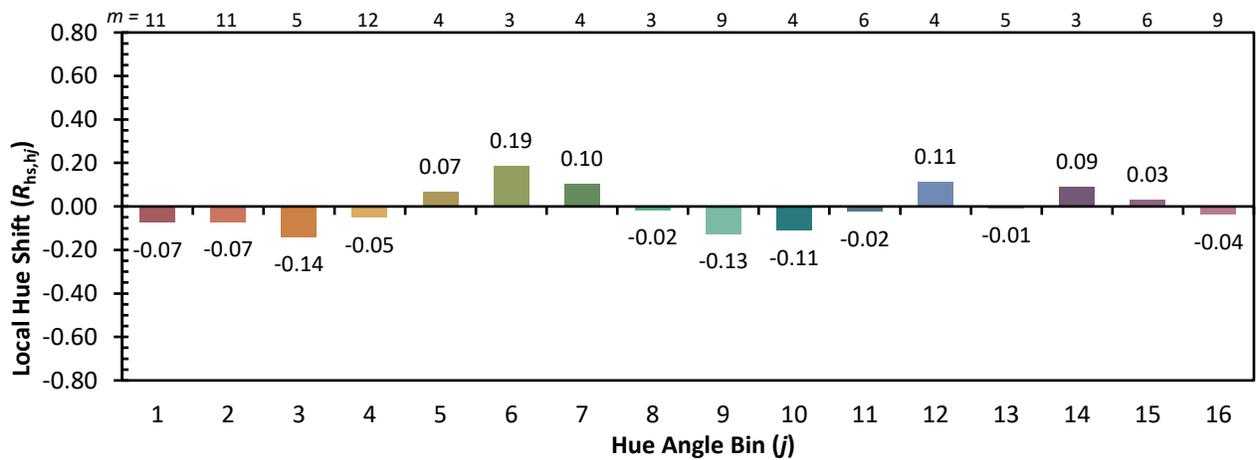
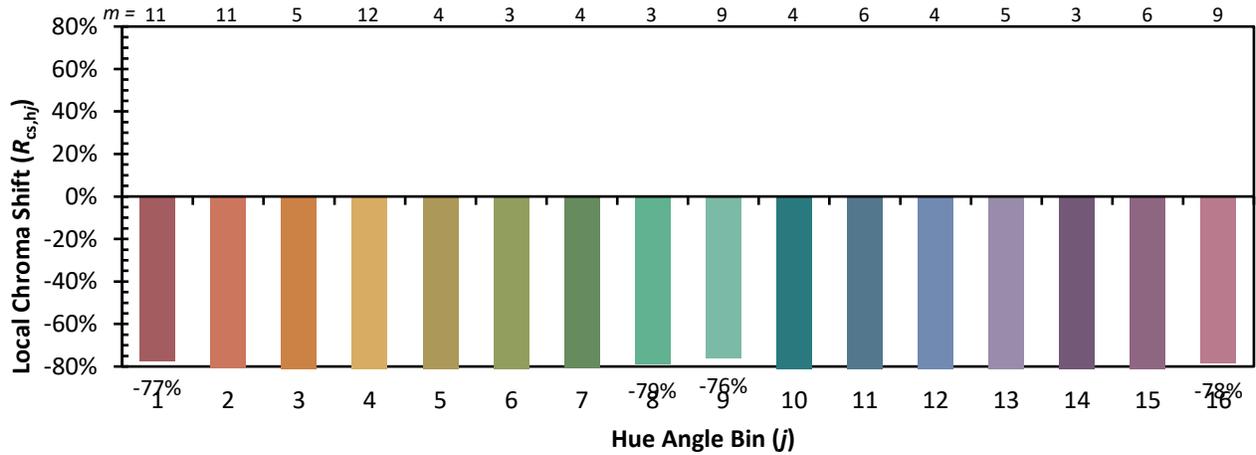


Individual Sample Fidelity Index ($R_{f,i}$)

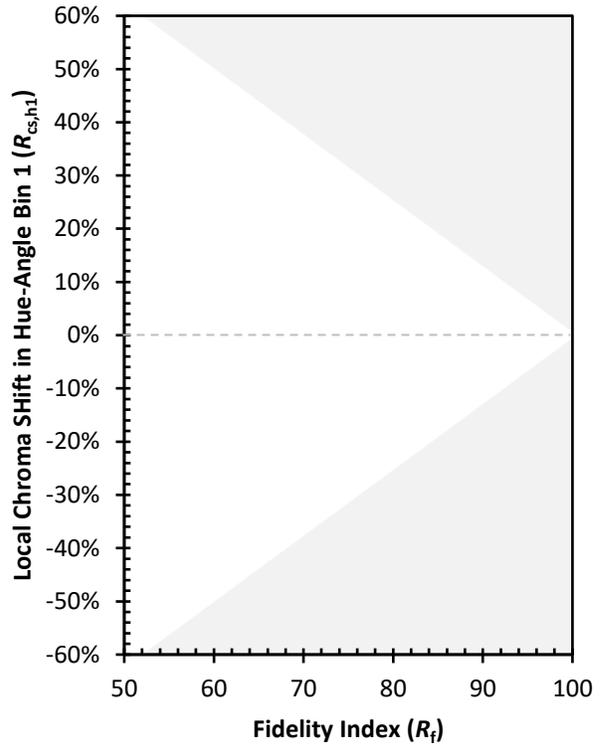
CES01 = 90	CES26 = 0	CES51 = 19	CES76 = 0
CES02 = 70	CES27 = 32	CES52 = 2	CES77 = 0
CES03 = 31	CES28 = 25	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 1	CES54 = 13	CES79 = 2
CES05 = 52	CES30 = 31	CES55 = 7	CES80 = 1
CES06 = 56	CES31 = 1	CES56 = 0	CES81 = 0
CES07 = 41	CES32 = 0	CES57 = 0	CES82 = 51
CES08 =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