

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: P1356795

Luminaire Tested: 2ASL4-10-1-65-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1356795
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: 2ASL4-10-1-65-UNV
Description: 2FT 1000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND 6500K LEDS 1 ROW
Light Source: -
Ballast/Driver: -

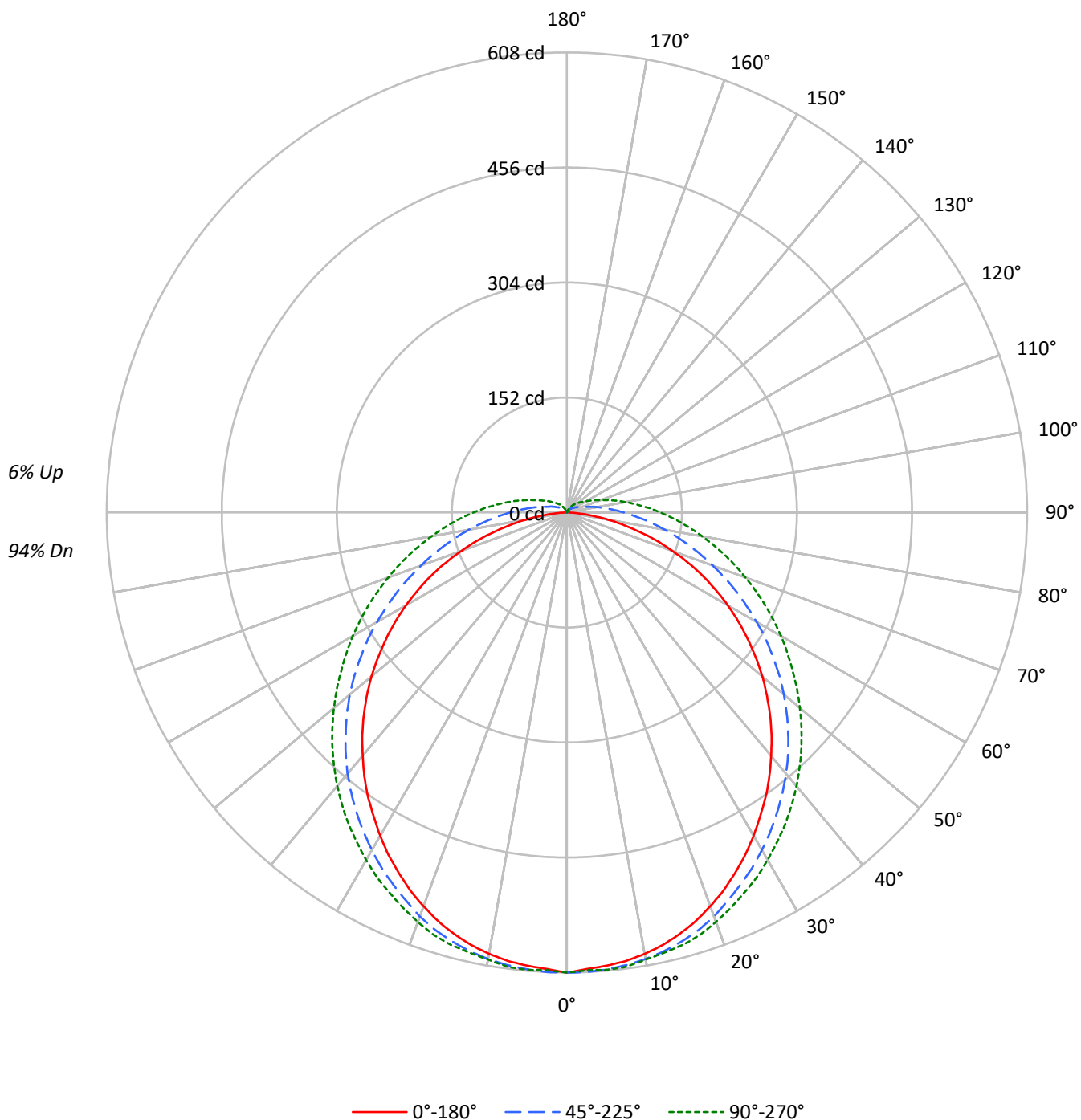
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2036.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 17.6
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: P1356795
CATALOG NUMBER: 2ASL4-10-1-65-UNV

Luminous Intensity Polar Plot



TEST NUMBER: P1356795

CATALOG NUMBER: 2ASL4-10-1-65-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	0
RCR																				
0	118	118	118	118	114	114	114	114	108	108	108		102	102	102		96	96	96	94
1	106	100	95	91	102	97	93	89	92	88	85		87	84	81		82	80	78	75
2	95	86	79	73	92	84	77	71	79	74	69		75	70	66		71	67	64	61
3	87	76	67	60	84	73	65	59	69	63	57		66	60	55		62	58	54	51
4	79	67	57	50	76	65	56	50	62	54	48		58	52	47		56	50	46	43
5	73	59	50	43	70	58	49	43	55	47	42		52	46	41		50	44	40	37
6	67	53	44	38	65	52	43	37	50	42	36		47	41	35		45	39	35	32
7	62	48	39	33	60	47	39	33	45	37	32		43	36	31		41	35	31	29
8	58	44	35	29	56	43	35	29	41	34	29		39	33	28		38	32	27	25
9	54	40	32	26	52	39	32	26	38	31	26		36	30	25		35	29	25	23
10	51	37	29	24	49	36	29	24	35	28	23		34	27	23		32	27	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9922	9922	9922
5°	9803	9708	9674
10°	9723	9495	9420
15°	9603	9271	9221
20°	9435	9018	8977
25°	9236	8722	8713
30°	9020	8449	8465
35°	8802	8169	8218
40°	8559	7888	7963
45°	8323	7581	7704
50°	8052	7263	7431
55°	7718	6906	7157
60°	7345	6530	6919
65°	6872	6138	6678
70°	6164	5721	6445
75°	5259	5345	6265
80°	4031	5010	6155
85°	2174	4757	6195

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8323 cd/sqm

TEST NUMBER: P1356795

CATALOG NUMBER: 2ASL4-10-1-65-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	2.8
10°-20°	165.3	8.1
20°-30°	250.0	12.3
30°-40°	302.1	14.8
40°-50°	317.6	15.6
50°-60°	295.9	14.5
60°-70°	243.1	11.9
70°-80°	172.6	8.5
80°-90°	104.0	5.1
90°-100°	58.3	2.9
100°-110°	32.3	1.6
110°-120°	18.0	0.9
120°-130°	10.4	0.5
130°-140°	5.7	0.3
140°-150°	2.5	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	472.9	23.2
0°-40°	775.0	38.1
0°-60°	1388.6	68.2
0°-90°	1908.3	93.7
90°-120°	108.6	5.3
90°-150°	127.1	6.2
90°-180°	128.0	6.3
0°-180°	2036.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	601	607	606	605	607	57
15°	576	584	587	590	592	163
25°	526	535	543	550	554	242
35°	458	470	484	497	503	286
45°	380	394	413	431	438	293
55°	292	308	332	354	364	261
65°	198	216	247	276	289	195
75°	100	125	166	201	215	107
85°	19	54	100	138	151	23
90°	0	32	75	110	123	1
95°	0	19	55	87	99	0
105°	0	7	29	52	62	0
115°	0	3	18	32	38	0
125°	0	2	11	21	24	0
135°	0	1	7	13	16	0
145°	1	0	3	8	10	0
155°	1	1	0	2	3	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P1356795

CATALOG NUMBER: 2ASL4-10-1-65-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	608.1	608.1	608.1	608.1	608.1
2.5°	604.0	609.5	608.1	605.4	605.4
5°	601.3	606.8	606.1	605.4	606.8
7.5°	597.8	603.3	603.3	604.0	605.4
10°	592.3	599.2	599.2	599.2	599.9
12.5°	585.4	592.3	593.7	594.4	595.8
15°	576.5	584.1	586.8	589.6	591.6
17.5°	566.2	573.7	578.6	582.0	585.4
20°	553.8	562.0	568.2	572.4	575.8
22.5°	540.7	549.0	555.2	561.4	565.5
25°	525.6	535.2	542.8	550.3	554.5
27.5°	510.4	520.1	529.7	538.7	543.5
30°	493.3	504.3	515.3	525.6	530.4
32.5°	475.4	487.1	500.1	511.1	516.6
35°	458.2	469.9	484.3	496.7	502.9
37.5°	439.6	451.3	467.8	481.6	487.7
40°	419.6	432.7	450.6	465.0	471.9
42.5°	400.4	413.4	432.7	448.5	455.4
45°	379.7	393.5	413.4	430.6	438.2
47.5°	358.4	372.9	394.2	412.1	420.3
50°	337.1	352.2	374.2	393.5	401.8
52.5°	314.4	330.2	353.6	374.2	383.2
55°	291.7	308.2	332.3	354.3	363.9
57.5°	269.0	285.5	311.6	335.0	345.3
60°	245.6	262.8	289.6	315.1	326.8
62.5°	221.5	239.4	267.6	295.1	307.5
65°	198.1	216.0	247.0	275.9	288.9
67.5°	173.4	192.6	225.6	255.9	269.7
70°	147.9	169.9	205.0	237.3	251.1
72.5°	125.2	147.9	185.7	218.8	233.2
75°	99.8	125.2	166.5	200.9	215.3
77.5°	77.7	105.3	148.6	183.7	198.1
80°	55.7	86.0	131.4	167.2	181.6
82.5°	35.8	68.8	115.6	152.0	165.8
85°	18.6	53.7	100.4	137.6	151.3
87.5°	5.5	41.3	86.7	123.1	136.9
90°	0.0	31.6	75.0	110.1	123.1
92.5°	0.0	24.1	64.7	98.4	111.4
95°	0.0	18.6	55.0	86.7	99.1
97.5°	0.0	14.4	47.5	76.4	88.7
100°	0.0	11.7	40.6	67.4	79.1
102.5°	0.0	9.6	35.1	59.9	70.2
105°	0.0	6.9	28.9	52.3	61.9
107.5°	0.0	4.8	25.5	46.1	54.3
110°	0.0	4.1	22.7	39.9	48.2



TEST NUMBER: P1356795

CATALOG NUMBER: 2ASL4-10-1-65-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	3.4	20.0	35.8	42.7
115°	0.0	3.4	17.9	31.6	37.8
117.5°	0.0	2.8	15.1	28.2	33.7
120°	0.0	2.8	13.8	25.5	30.3
122.5°	0.0	2.1	12.4	22.7	27.5
125°	0.0	2.1	11.0	20.6	24.1
127.5°	0.0	1.4	9.6	18.6	22.0
130°	0.0	1.4	8.9	16.5	20.0
132.5°	0.0	0.7	8.3	15.1	17.9
135°	0.0	0.7	6.9	13.1	16.5
137.5°	0.0	0.0	6.2	11.7	14.4
140°	0.0	0.0	4.8	10.3	13.1
142.5°	0.7	0.0	4.1	8.9	11.0
145°	0.7	0.0	2.8	7.6	9.6
147.5°	0.7	0.7	2.1	6.2	7.6
150°	0.7	0.7	1.4	4.1	6.2
152.5°	0.7	0.7	0.7	2.8	4.1
155°	0.7	0.7	0.0	2.1	2.8
157.5°	0.7	0.7	0.0	0.7	1.4
160°	0.7	0.7	0.0	0.0	0.7
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

TEST NUMBER: P1356795

CATALOG NUMBER: 2ASL4-10-1-65-UNV

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	17.35	18.90	17.81	19.34	19.81	19.25	20.80	19.70	21.24	21.71
	3H	18.84	20.25	19.31	20.71	21.22	21.62	23.03	22.09	23.49	24.00
	4H	19.32	20.66	19.81	21.13	21.65	22.76	24.10	23.25	24.57	25.09
	6H	19.60	20.84	20.10	21.33	21.87	23.92	25.16	24.42	25.65	26.19
	8H	19.65	20.84	20.17	21.35	21.90	24.50	25.70	25.02	26.20	26.75
	12H	19.66	20.81	20.19	21.31	21.88	25.13	26.27	25.65	26.77	27.35
4H	2H	18.20	19.54	18.69	20.01	20.53	19.68	21.03	20.18	21.50	22.02
	3H	19.93	21.07	20.43	21.58	22.13	22.28	23.42	22.79	23.94	24.48
	4H	20.52	21.57	21.05	22.09	22.67	23.59	24.63	24.11	25.16	25.73
	6H	20.92	21.84	21.47	22.40	22.99	24.94	25.86	25.48	26.41	27.00
	8H	21.02	21.88	21.57	22.43	23.04	25.62	26.49	26.18	27.04	27.65
	12H	21.06	21.85	21.63	22.43	23.04	26.37	27.16	26.94	27.74	28.35
8H	4H	21.16	22.02	21.71	22.58	23.18	23.80	24.67	24.36	25.22	25.83
	6H	21.73	22.46	22.31	23.05	23.66	25.32	26.05	25.90	26.65	27.26
	8H	21.90	22.57	22.50	23.17	23.79	26.15	26.81	26.74	27.41	28.04
	12H	22.01	22.60	22.61	23.20	23.89	27.08	27.67	27.67	28.26	28.95
12H	4H	21.33	22.12	21.90	22.70	23.31	23.81	24.60	24.39	25.18	25.79
	6H	21.99	22.65	22.58	23.26	23.88	25.36	26.02	25.95	26.63	27.25
	8H	22.26	22.85	22.86	23.44	24.13	26.25	26.84	26.85	27.44	28.13

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

Report Prepared for

Cooper Lighting Solutions

Fail-Safe

Report Number: SP1-2511-597-6

Test Date: 11/18/2025

Luminaire Tested: 4ASL-2-65-UNV-OPL-1_600mA

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

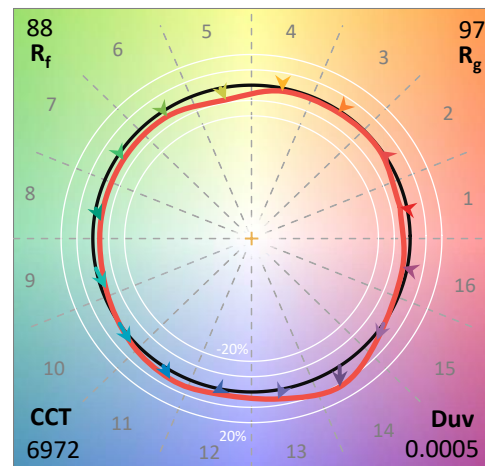
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2511-597-6
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 11/18/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Fail-Safe
 Catalog Number: **4ASL-2-65-UNV-OPL-1_600mA**
 Description: 2foot 4ASL LED LUMINAIRE WITH OPL LENS AND 6500K LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K): 6972
 CIE u' : 0.1979
 CIE v' : 0.4612
 Duv: 0.0005
 CIE x: 0.3066
 CIE y: 0.3177
 CIE z: 0.3758
 Peak Wavelength (nm): 455
 Dominant Wavelength (nm): 483
 Purity: 10.33335
 R_f: 88.2
 R_g: 97.1

CRI (Ra): 94.3
 R1: 96.1
 R2: 98.8
 R3: 96.4
 R4: 92.8
 R5: 92.9
 R6: 92.2
 R7: 93.5
 R8: 91.4
 R9: 82.6
 R10: 95.4
 R11: 95.2
 R12: 63.5
 R13: 99.3
 R14: 98.1
 R15: 93.7



Test Conditions

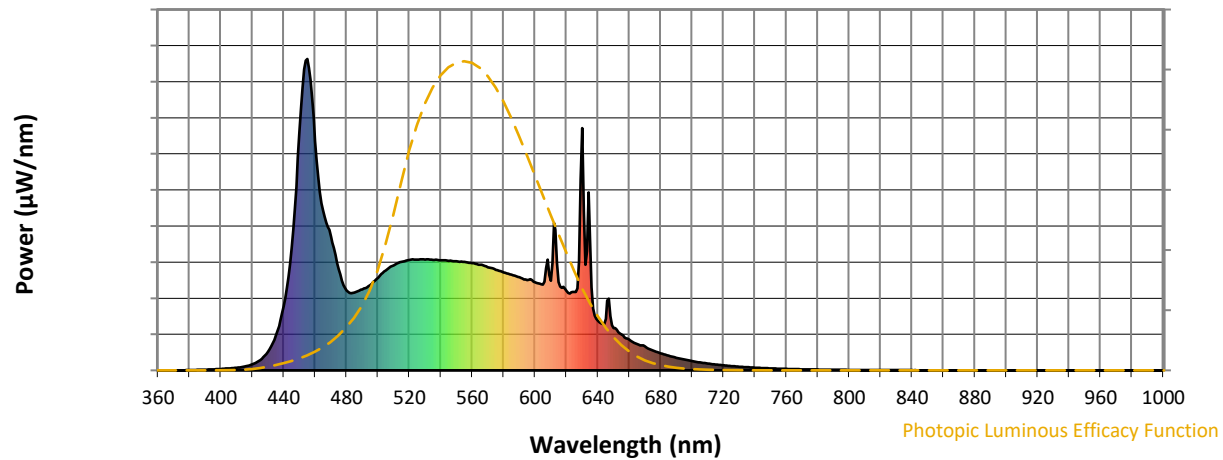
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2511-597-6

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	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

REPORT NUMBER: SP1-2511-597-6

Photopic Flux vs. Wavelength

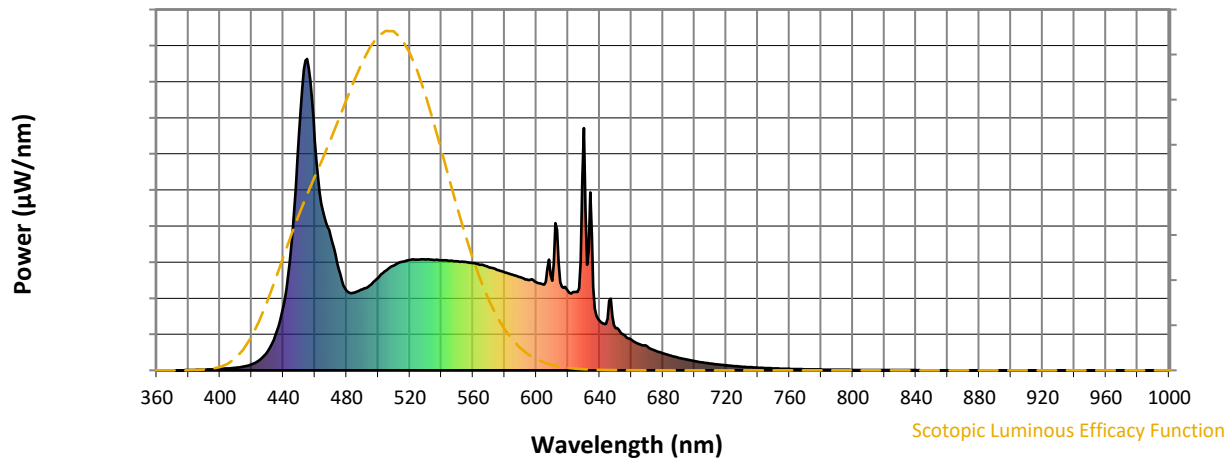


Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	260	NR	620	255	NR	750	6	NR	880	0	NR
365	0	NR	495	274	NR	625	252	NR	755	6	NR	885	0	NR
370	0	NR	500	297	NR	630	778	NR	760	5	NR	890	0	NR
375	0	NR	505	320	NR	635	431	NR	765	4	NR	895	0	NR
380	1	NR	510	337	NR	640	160	NR	770	4	NR	900	0	NR
385	2	NR	515	349	NR	645	165	NR	775	3	NR	905	0	NR
390	2	NR	520	354	NR	650	135	NR	780	3	NR	910	0	NR
395	3	NR	525	356	NR	655	115	NR	785	2	NR	915	0	NR
400	5	NR	530	356	NR	660	99	NR	790	2	NR	920	0	NR
405	6	NR	535	355	NR	665	84	NR	795	2	NR	925	0	NR
410	8	NR	540	354	NR	670	77	NR	800	2	NR	930	0	NR
415	12	NR	545	351	NR	675	64	NR	805	1	NR	935	0	NR
420	19	NR	550	350	NR	680	55	NR	810	1	NR	940	0	NR
425	33	NR	555	348	NR	685	47	NR	815	1	NR	945	0	NR
430	60	NR	560	344	NR	690	41	NR	820	1	NR	950	0	NR
435	113	NR	565	339	NR	695	35	NR	825	1	NR	955	0	NR
440	206	NR	570	331	NR	700	30	NR	830	1	NR	960	0	NR
445	392	NR	575	323	NR	705	26	NR	835	1	NR	965	0	NR
450	764	NR	580	315	NR	710	22	NR	840	1	NR	970	0	NR
455	1000	NR	585	307	NR	715	19	NR	845	0	NR	975	0	NR
460	736	NR	590	299	NR	720	16	NR	850	0	NR	980	0	NR
465	513	NR	595	290	NR	725	14	NR	855	0	NR	985	0	NR
470	430	NR	600	282	NR	730	12	NR	860	0	NR	990	0	NR
475	325	NR	605	276	NR	735	10	NR	865	0	NR	995	0	NR
480	256	NR	610	287	NR	740	9	NR	870	0	NR	1000	0	NR
485	250	NR	615	284	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2511-597-6

Scotopic Flux vs. Wavelength



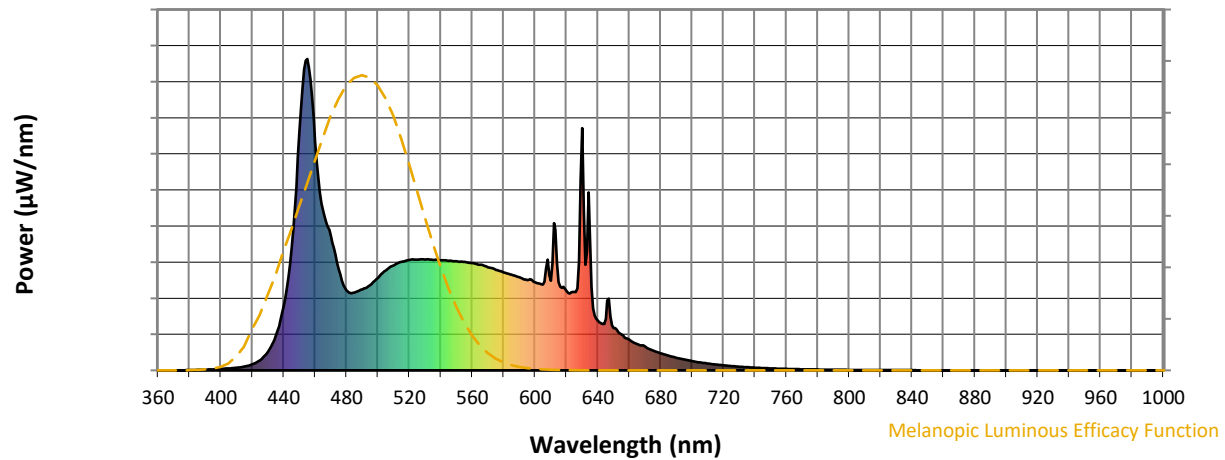
Scotopic Lumens: NR

S/P: 2.48

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	260	NR	620	255	NR	750	6	NR	880	0	NR
365	0	NR	495	274	NR	625	252	NR	755	6	NR	885	0	NR
370	0	NR	500	297	NR	630	778	NR	760	5	NR	890	0	NR
375	0	NR	505	320	NR	635	431	NR	765	4	NR	895	0	NR
380	1	NR	510	337	NR	640	160	NR	770	4	NR	900	0	NR
385	2	NR	515	349	NR	645	165	NR	775	3	NR	905	0	NR
390	2	NR	520	354	NR	650	135	NR	780	3	NR	910	0	NR
395	3	NR	525	356	NR	655	115	NR	785	2	NR	915	0	NR
400	5	NR	530	356	NR	660	99	NR	790	2	NR	920	0	NR
405	6	NR	535	355	NR	665	84	NR	795	2	NR	925	0	NR
410	8	NR	540	354	NR	670	77	NR	800	2	NR	930	0	NR
415	12	NR	545	351	NR	675	64	NR	805	1	NR	935	0	NR
420	19	NR	550	350	NR	680	55	NR	810	1	NR	940	0	NR
425	33	NR	555	348	NR	685	47	NR	815	1	NR	945	0	NR
430	60	NR	560	344	NR	690	41	NR	820	1	NR	950	0	NR
435	113	NR	565	339	NR	695	35	NR	825	1	NR	955	0	NR
440	206	NR	570	331	NR	700	30	NR	830	1	NR	960	0	NR
445	392	NR	575	323	NR	705	26	NR	835	1	NR	965	0	NR
450	764	NR	580	315	NR	710	22	NR	840	1	NR	970	0	NR
455	1000	NR	585	307	NR	715	19	NR	845	0	NR	975	0	NR
460	736	NR	590	299	NR	720	16	NR	850	0	NR	980	0	NR
465	513	NR	595	290	NR	725	14	NR	855	0	NR	985	0	NR
470	430	NR	600	282	NR	730	12	NR	860	0	NR	990	0	NR
475	325	NR	605	276	NR	735	10	NR	865	0	NR	995	0	NR
480	256	NR	610	287	NR	740	9	NR	870	0	NR	1000	0	NR
485	250	NR	615	284	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2511-597-6

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 5.67

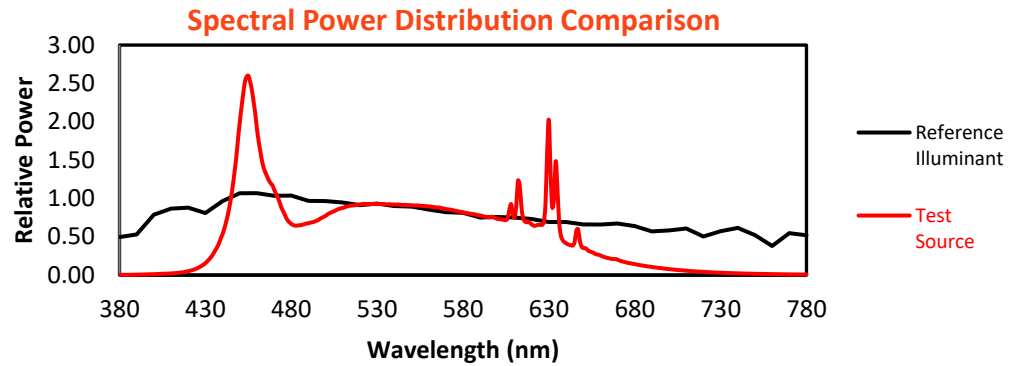
λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	260	NR	620	255	NR	750	6	NR	880	0	NR
365	0	NR	495	274	NR	625	252	NR	755	6	NR	885	0	NR
370	0	NR	500	297	NR	630	778	NR	760	5	NR	890	0	NR
375	0	NR	505	320	NR	635	431	NR	765	4	NR	895	0	NR
380	1	NR	510	337	NR	640	160	NR	770	4	NR	900	0	NR
385	2	NR	515	349	NR	645	165	NR	775	3	NR	905	0	NR
390	2	NR	520	354	NR	650	135	NR	780	3	NR	910	0	NR
395	3	NR	525	356	NR	655	115	NR	785	2	NR	915	0	NR
400	5	NR	530	356	NR	660	99	NR	790	2	NR	920	0	NR
405	6	NR	535	355	NR	665	84	NR	795	2	NR	925	0	NR
410	8	NR	540	354	NR	670	77	NR	800	2	NR	930	0	NR
415	12	NR	545	351	NR	675	64	NR	805	1	NR	935	0	NR
420	19	NR	550	350	NR	680	55	NR	810	1	NR	940	0	NR
425	33	NR	555	348	NR	685	47	NR	815	1	NR	945	0	NR
430	60	NR	560	344	NR	690	41	NR	820	1	NR	950	0	NR
435	113	NR	565	339	NR	695	35	NR	825	1	NR	955	0	NR
440	206	NR	570	331	NR	700	30	NR	830	1	NR	960	0	NR
445	392	NR	575	323	NR	705	26	NR	835	1	NR	965	0	NR
450	764	NR	580	315	NR	710	22	NR	840	1	NR	970	0	NR
455	1000	NR	585	307	NR	715	19	NR	845	0	NR	975	0	NR
460	736	NR	590	299	NR	720	16	NR	850	0	NR	980	0	NR
465	513	NR	595	290	NR	725	14	NR	855	0	NR	985	0	NR
470	430	NR	600	282	NR	730	12	NR	860	0	NR	990	0	NR
475	325	NR	605	276	NR	735	10	NR	865	0	NR	995	0	NR
480	256	NR	610	287	NR	740	9	NR	870	0	NR	1000	0	NR
485	250	NR	615	284	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2511-597-6

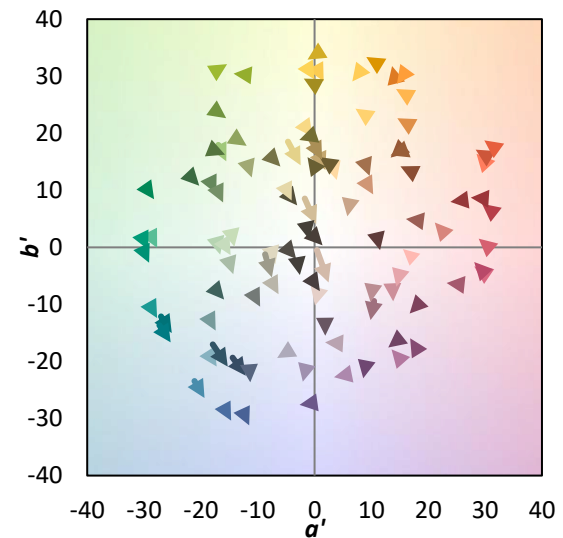
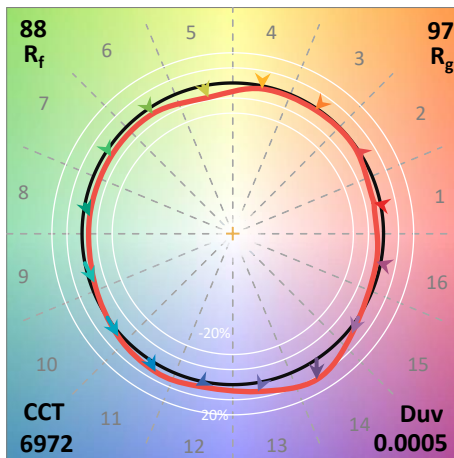
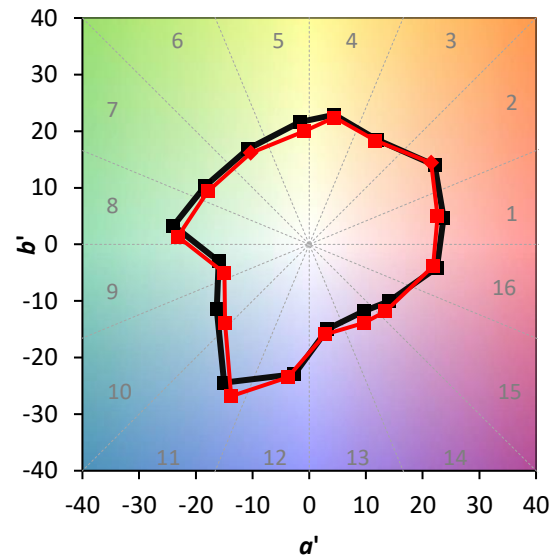
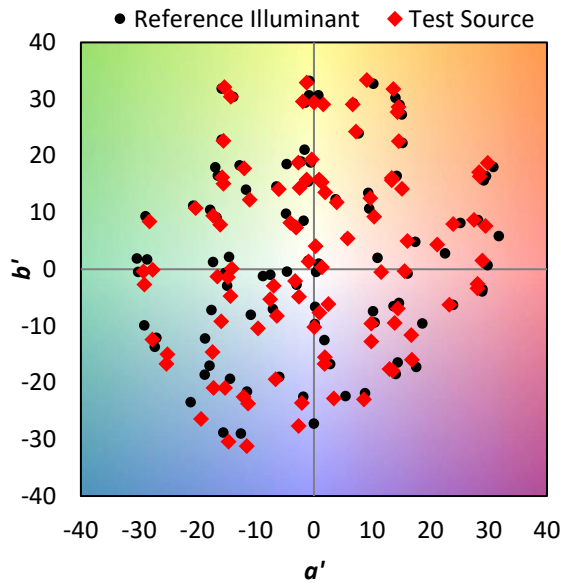
TM-30-18

Summary

$R_f = 88.2$
 $R_g = 97.1$
 $CIE R_a = 94.3$
 $R_9 = 82.6$

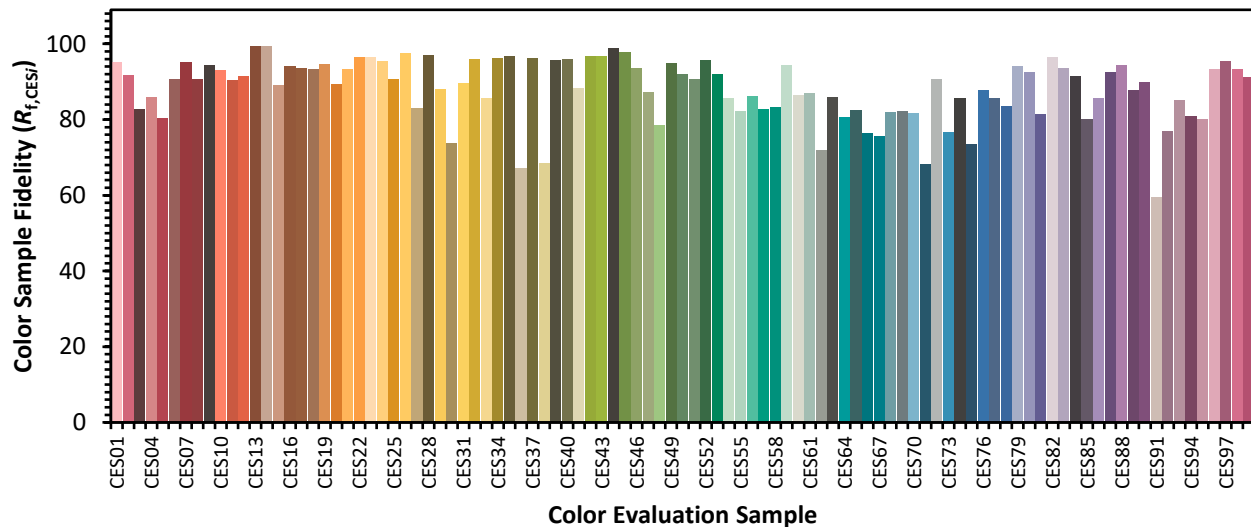


Color Vector Graphics

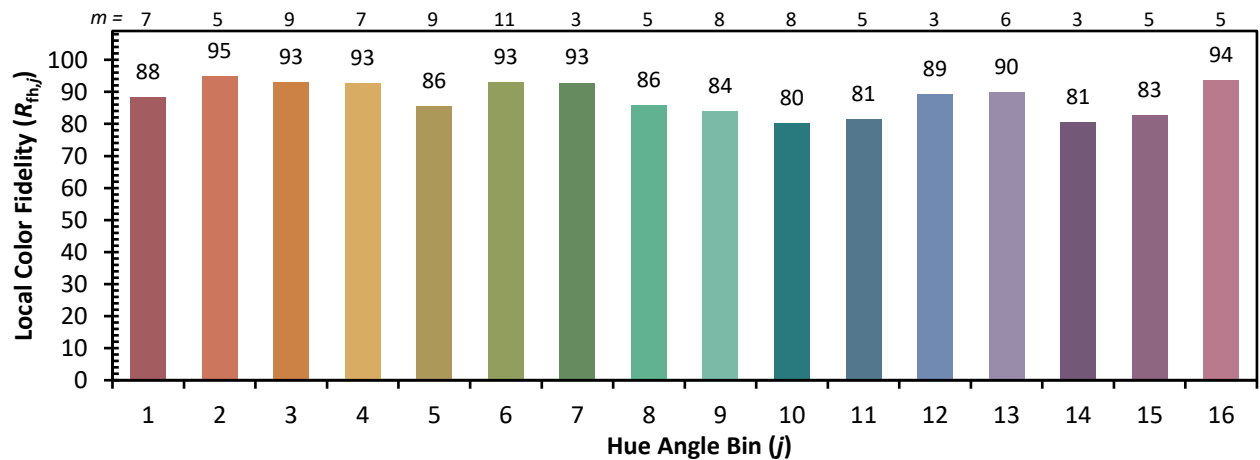
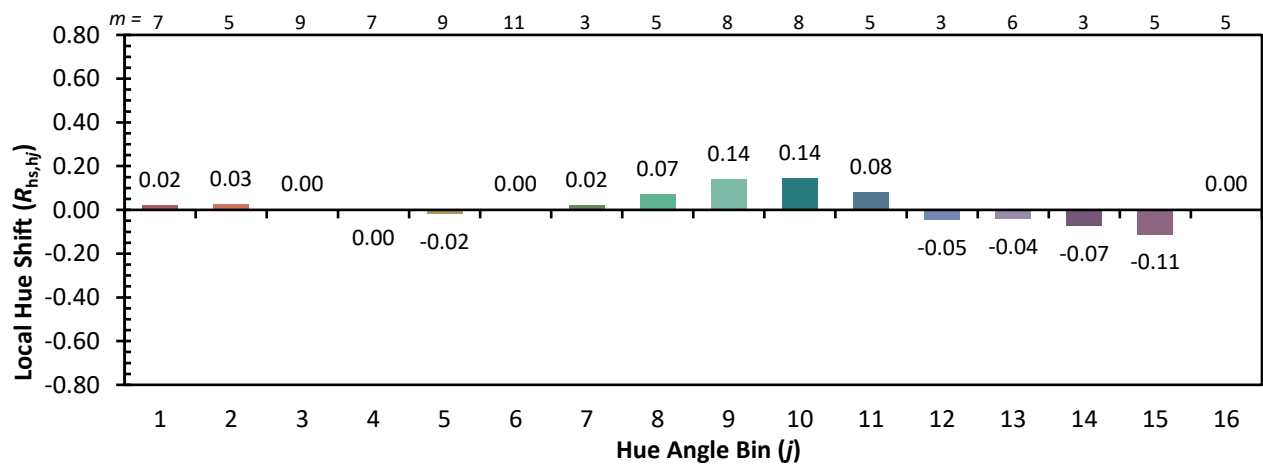
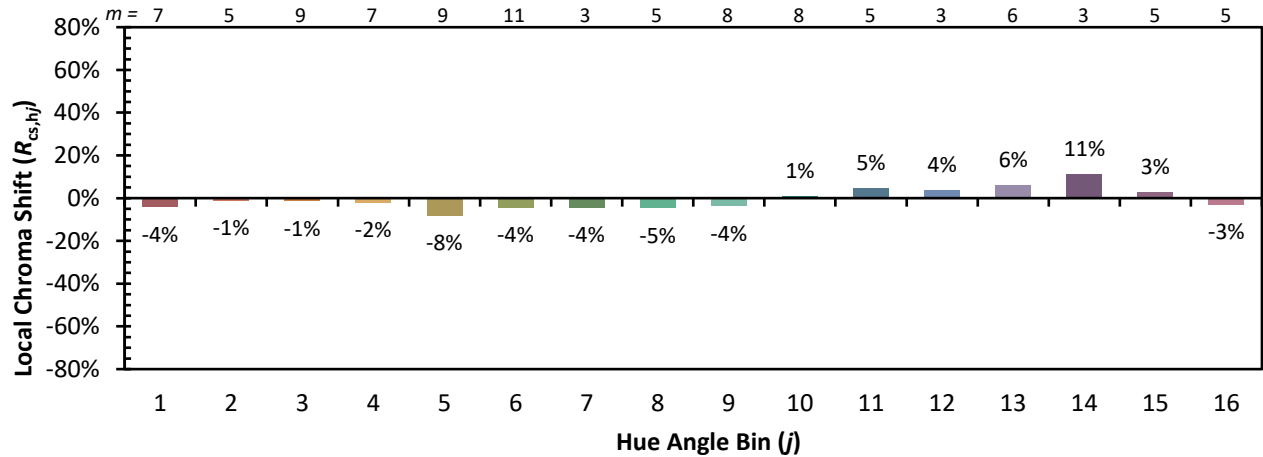


Individual Sample Fidelity Index ($R_{f,i}$)

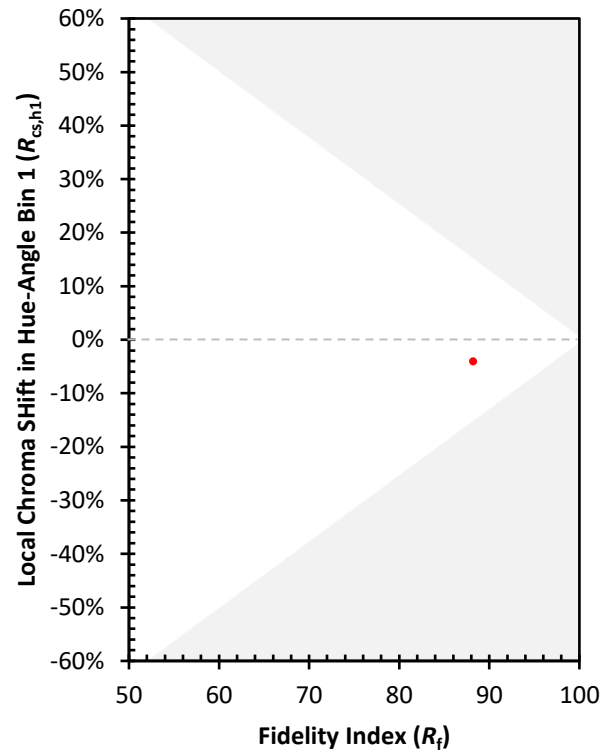
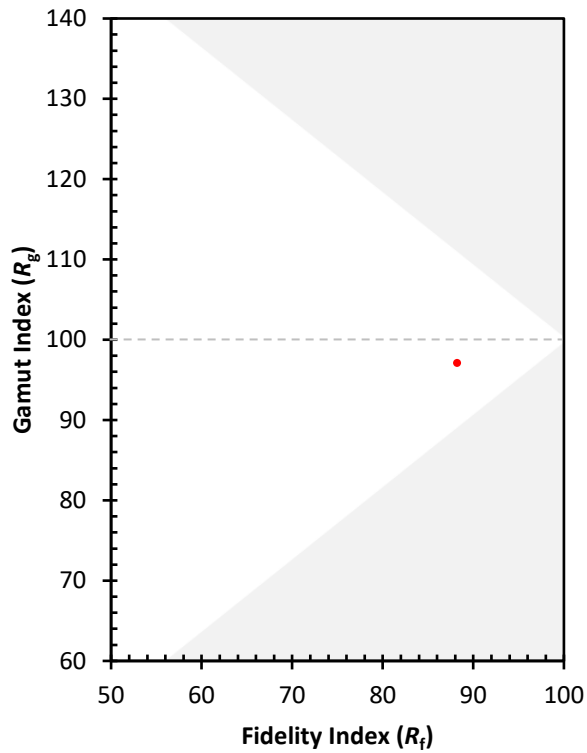
CES01 = 85	CES26 = 97	CES51 = 91	CES76 = 88
CES02 = 60	CES27 = 83	CES52 = 96	CES77 = 86
CES03 = 31	CES28 = 97	CES53 = 92	CES78 = 83
CES04 = 68	CES29 = 88	CES54 = 86	CES79 = 94
CES05 = 47	CES30 = 74	CES55 = 82	CES80 = 93
CES06 = 49	CES31 = 90	CES56 = 86	CES81 = 81
CES07 = 40	CES32 = 96	CES57 = 83	CES82 = 96
CES08 = 39	CES33 = 86	CES58 = 83	CES83 = 94
CES09 = 29	CES34 = 96	CES59 = 94	CES84 = 91
CES10 = 72	CES35 = 97	CES60 = 87	CES85 = 80
CES11 = 55	CES36 = 67	CES61 = 87	CES86 = 86
CES12 = 61	CES37 = 96	CES62 = 72	CES87 = 93
CES13 = 42	CES38 = 68	CES63 = 86	CES88 = 94
CES14 = 74	CES39 = 96	CES64 = 81	CES89 = 88
CES15 = 71	CES40 = 96	CES65 = 83	CES90 = 90
CES16 = 46	CES41 = 88	CES66 = 76	CES91 = 60
CES17 = 48	CES42 = 97	CES67 = 76	CES92 = 77
CES18 = 55	CES43 = 97	CES68 = 82	CES93 = 85
CES19 = 69	CES44 = 99	CES69 = 82	CES94 = 81
CES20 = 64	CES45 = 98	CES70 = 82	CES95 = 80
CES21 = 84	CES46 = 93	CES71 = 68	CES96 = 93
CES22 = 76	CES47 = 87	CES72 = 91	CES97 = 95
CES23 = 91	CES48 = 79	CES73 = 77	CES98 = 93
CES24 = 89	CES49 = 95	CES74 = 86	CES99 = 91
CES25 = 69	CES50 = 92	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)