

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: CORELITE

Report Number: P1215875

Luminaire Tested: 24-ID2-100-CFD2-L840-U

Issue Date: 12/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1215875
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2506-458-28)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24-ID2-100-CFD2-L840-U
Description: 2X4 IN DEPTH TROFFER WITH 2INCH CUBE DROP LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

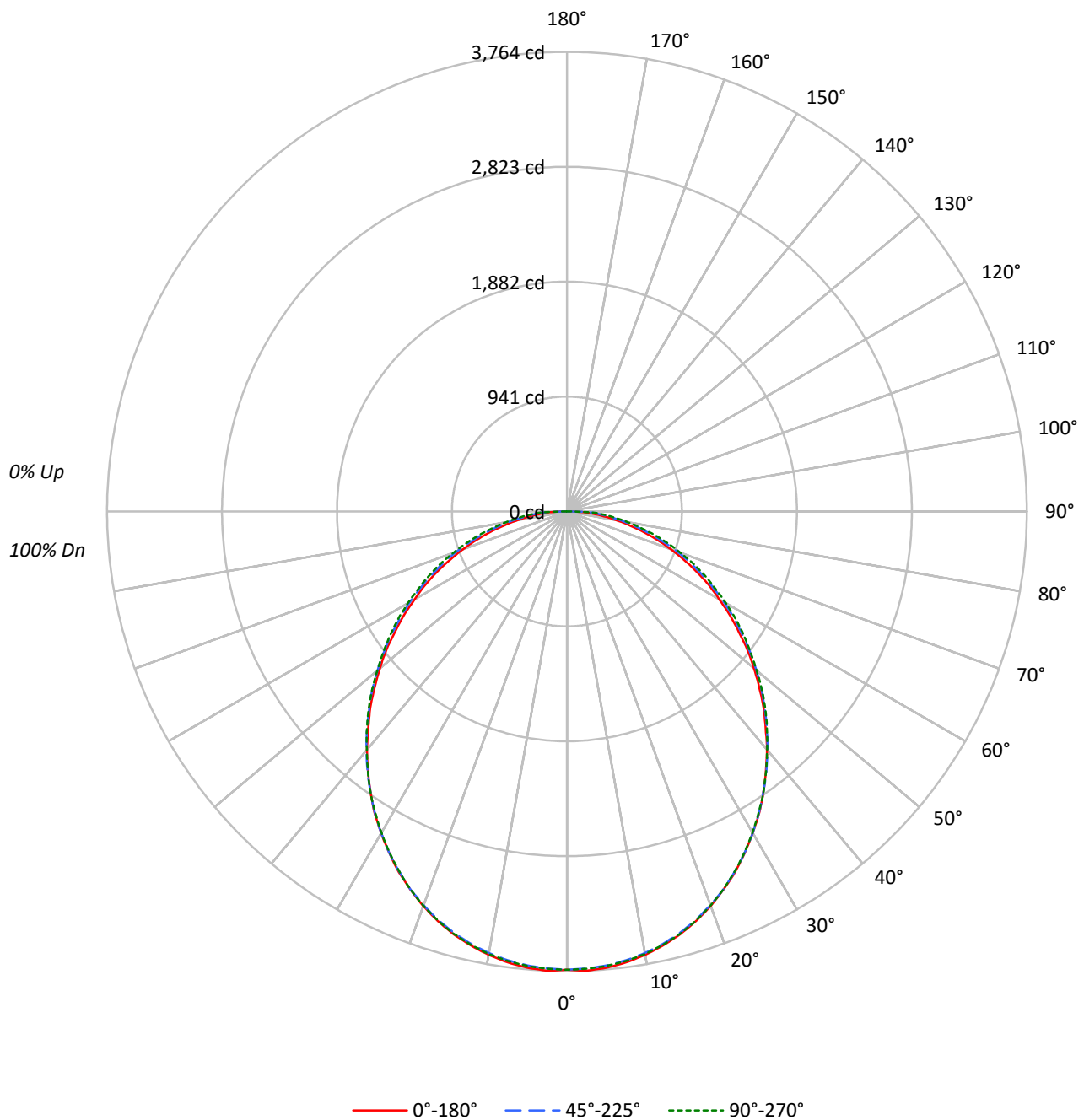
Lumens per Lamp: N/A
Luminaire Lumens: 10181.1 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.16')
CIE Type: Direct

Input Watts (W): 86.8
Input Voltage (V): 120
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: P1215875
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Luminous Intensity Polar Plot



TEST NUMBER: P1215875

CATALOG NUMBER: 24-ID2-100-CFD2-L840-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	108	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	85	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	71	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	60	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	38
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	36	36	36	34
8	61	47	38	33	59	46	38	32	45	38	32	44	37	32	43	36	32	32	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	29	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	37	31	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5049	5049	5049
5°	5047	5003	5011
10°	5002	4942	4958
15°	4940	4867	4882
20°	4853	4764	4779
25°	4748	4644	4652
30°	4617	4503	4509
35°	4480	4347	4363
40°	4328	4185	4194
45°	4163	4016	4047
50°	3990	3845	3871
55°	3808	3662	3717
60°	3621	3480	3549
65°	3449	3276	3387
70°	3208	3069	3186
75°	2938	2773	2966
80°	2596	2472	2701
85°	2268	2159	2440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4163 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.7	3.5
10°-20°	1007.6	9.9
20°-30°	1497.2	14.7
30°-40°	1754.1	17.2
40°-50°	1765.7	17.3
50°-60°	1564.9	15.4
60°-70°	1204.0	11.8
70°-80°	744.4	7.3
80°-90°	288.6	2.8
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°	2859.5	28.1
0°-40°	4613.6	45.3
0°-60°	7944.1	78.0
0°-90°	10181.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10181.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3753	3753	3753	3753	3753	
5°	3750	3739	3732	3729	3736	356
15°	3584	3574	3573	3572	3580	1010
25°	3258	3252	3252	3250	3250	1499
35°	2804	2805	2804	2805	2805	1753
45°	2276	2283	2290	2293	2297	1754
55°	1716	1736	1750	1766	1766	1538
65°	1176	1193	1216	1239	1246	1162
75°	650	672	702	737	741	687
85°	214	241	276	300	303	236
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3752.9	3752.9	3752.9	3752.9	3752.9
2.5°	3764.4	3752.9	3745.8	3741.5	3748.7
5°	3750.1	3738.7	3731.5	3728.7	3735.8
7.5°	3724.4	3713.0	3707.3	3705.8	3713.0
10°	3687.3	3675.9	3671.6	3670.2	3680.1
12.5°	3640.2	3630.2	3627.3	3628.8	3634.5
15°	3584.5	3574.5	3573.1	3571.7	3580.2
17.5°	3516.0	3507.4	3507.4	3504.6	3513.1
20°	3438.9	3428.9	3430.3	3428.9	3434.6
22.5°	3350.4	3344.7	3349.0	3347.5	3349.0
25°	3257.6	3251.9	3251.9	3250.5	3250.5
27.5°	3152.0	3150.5	3150.5	3146.3	3147.7
30°	3040.6	3042.0	3040.6	3039.2	3036.3
32.5°	2929.3	2926.4	2926.4	2926.4	2922.1
35°	2803.6	2805.1	2803.6	2805.1	2805.1
37.5°	2675.2	2683.7	2680.9	2683.7	2676.6
40°	2546.7	2549.5	2552.4	2552.4	2548.1
42.5°	2406.8	2422.5	2423.9	2423.9	2423.9
45°	2275.5	2282.6	2289.7	2292.6	2296.9
47.5°	2135.6	2148.4	2161.3	2158.4	2164.1
50°	1997.1	2014.2	2022.8	2029.9	2025.6
52.5°	1862.9	1872.9	1887.2	1895.7	1894.3
55°	1715.9	1735.9	1750.1	1765.8	1765.8
57.5°	1581.7	1604.5	1616.0	1634.5	1637.4
60°	1438.9	1464.6	1483.2	1500.3	1501.7
62.5°	1311.9	1329.0	1349.0	1373.3	1369.0
65°	1176.3	1193.4	1216.2	1239.1	1246.2
67.5°	1036.4	1060.6	1087.8	1110.6	1120.6
70°	905.0	930.7	962.1	985.0	987.8
72.5°	776.6	803.7	829.4	857.9	865.1
75°	649.5	672.4	702.3	736.6	740.9
77.5°	522.5	553.9	583.9	615.3	616.7
80°	411.1	436.8	472.5	501.1	506.8
82.5°	302.6	331.2	365.4	395.4	398.3
85°	214.1	241.3	275.5	299.8	302.6
87.5°	144.2	171.3	202.7	227.0	229.8
90°	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	16.36	18.00	16.73	18.31	18.63	16.64	18.28	17.00	18.59	18.90
	3H	18.07	19.56	18.45	19.88	20.24	18.53	20.01	18.90	20.34	20.70
	4H	18.71	20.11	19.11	20.46	20.83	19.29	20.69	19.69	21.04	21.41
	6H	19.17	20.47	19.58	20.84	21.23	19.91	21.22	20.33	21.58	21.97
	8H	19.32	20.57	19.75	20.96	21.35	20.16	21.40	20.59	21.79	22.19
	12H	19.43	20.62	19.86	21.01	21.43	20.37	21.57	20.80	21.95	22.38
4H	2H	17.00	18.40	17.40	18.75	19.12	17.22	18.62	17.62	18.97	19.34
	3H	18.94	20.12	19.35	20.52	20.92	19.33	20.51	19.74	20.91	21.31
	4H	19.71	20.78	20.14	21.19	21.62	20.23	21.31	20.67	21.72	22.15
	6H	20.30	21.24	20.75	21.68	22.13	21.01	21.95	21.46	22.39	22.84
	8H	20.50	21.38	20.96	21.82	22.28	21.32	22.20	21.78	22.64	23.10
	12H	20.65	21.45	21.13	21.92	22.39	21.60	22.39	22.08	22.87	23.34
8H	4H	20.06	20.94	20.52	21.38	21.84	20.53	21.41	20.98	21.85	22.31
	6H	20.78	21.52	21.27	22.01	22.48	21.44	22.17	21.93	22.66	23.13
	8H	21.06	21.72	21.57	22.23	22.71	21.84	22.50	22.35	23.01	23.49
	12H	21.30	21.89	21.80	22.38	22.93	22.24	22.82	22.74	23.31	23.87
12H	4H	20.11	20.91	20.59	21.38	21.85	20.56	21.35	21.04	21.82	22.29
	6H	20.87	21.53	21.37	22.04	22.52	21.49	22.15	22.00	22.66	23.14
	8H	21.21	21.80	21.72	22.29	22.85	21.96	22.55	22.47	23.04	23.60

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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-5

Test Date: 08/26/2025

Luminaire Tested: 22ID2-55-CFR1-L840-U

Data in this report applies to families of products including 22ID2-55-CFR1-L840-U

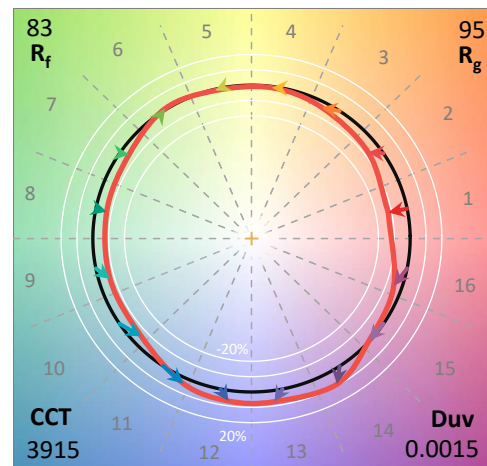
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-5
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/27/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Corelite
 Catalog Number: **22ID2-55-CFR1-L840-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 4000K 80CRI

Spectral Parameters

CCT (K): 3915
 CIE u' : 0.2259
 CIE v' : 0.5051
 Duv: 0.0015
 CIE x: 0.3854
 CIE y: 0.3830
 CIE z: 0.2316
 Peak Wavelength (nm): 453
 Dominant Wavelength (nm): 578
 Purity: 30.6207
 R_f: 83.2
 R_g: 94.6

CRI (Ra): 82.3
 R1: 80.6
 R2: 88.9
 R3: 94.6
 R4: 80.5
 R5: 80.0
 R6: 84.0
 R7: 86.1
 R8: 64.0
 R9: 7.6
 R10: 72.9
 R11: 78.7
 R12: 57.3
 R13: 82.7
 R14: 97.1
 R15: 74.3



Test Conditions

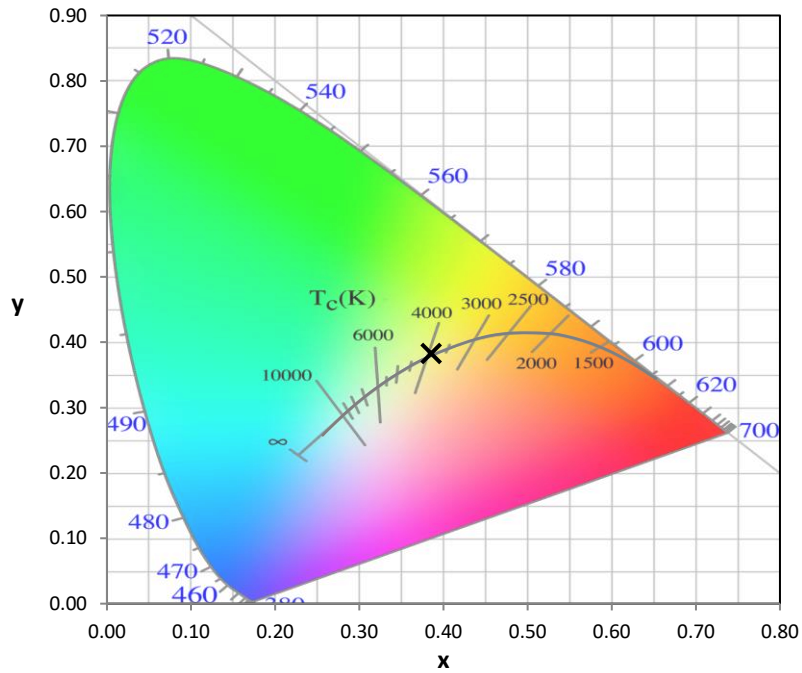
Stabilization Time: 34M
 Operation Time: 1H 34M
 Sphere Temperature (°C): 25.2

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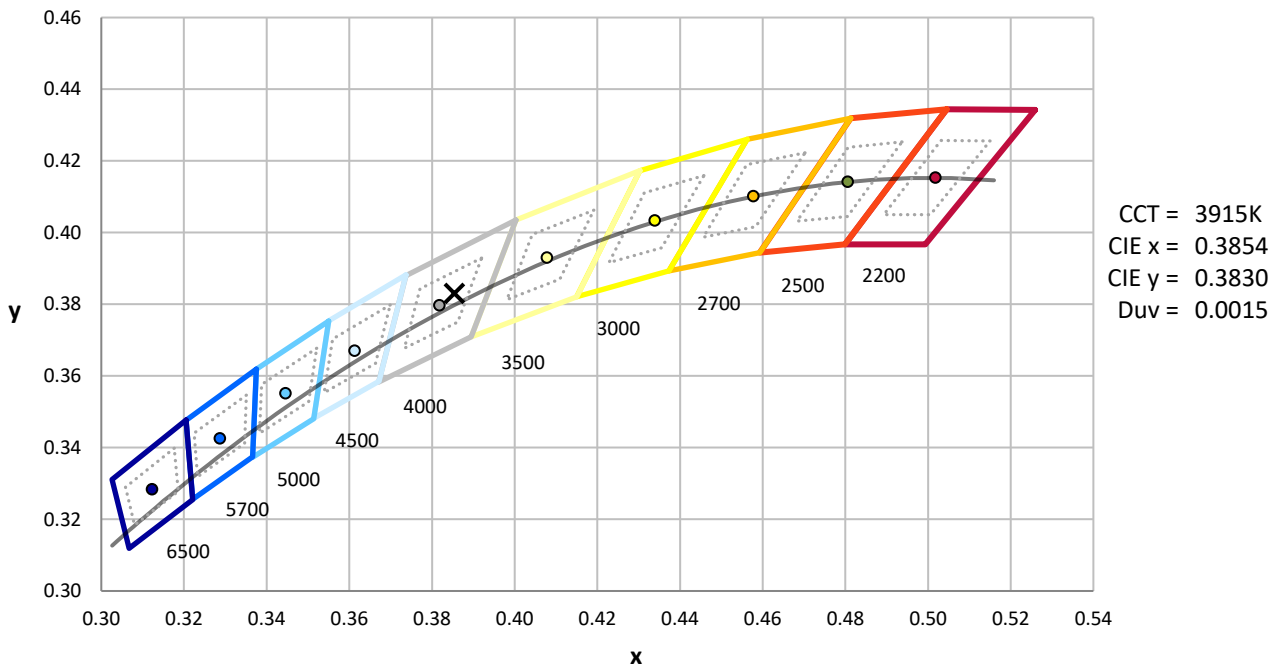
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



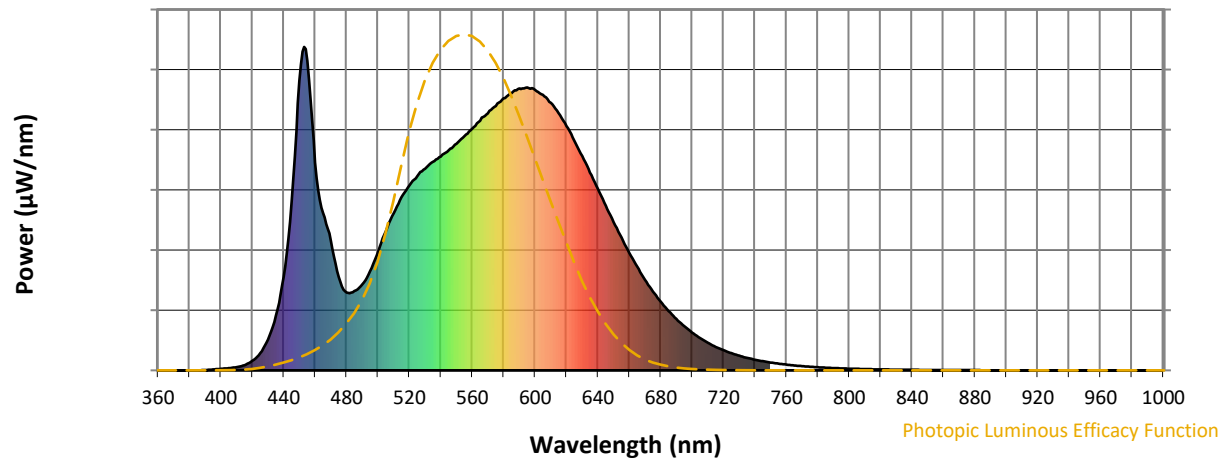
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

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Photopic Flux vs. Wavelength

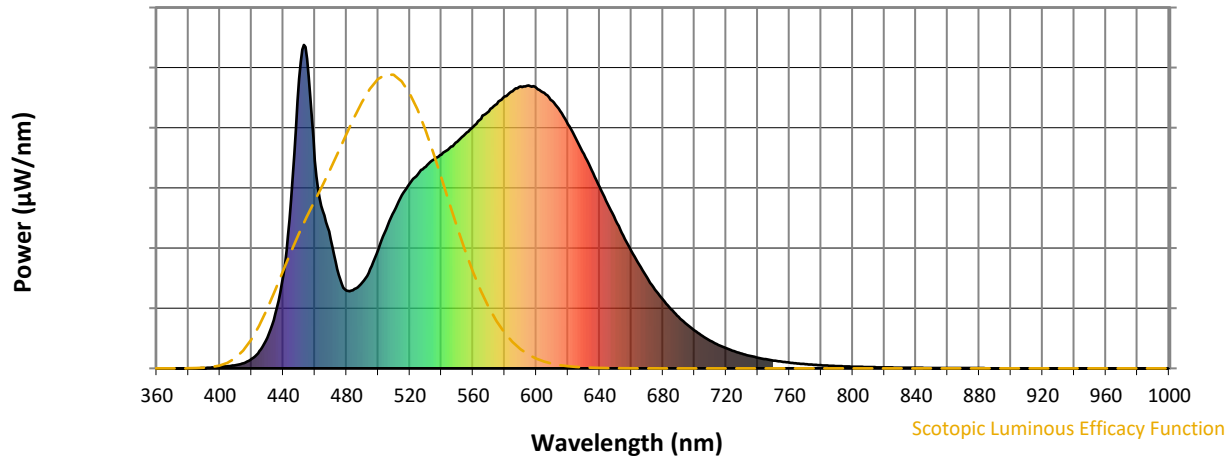


Photopic Lumens: NR

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	266	NR	620	755	NR	750	24	NR	880	1	NR
365	0	NR	495	307	NR	625	710	NR	755	21	NR	885	0	NR
370	0	NR	500	366	NR	630	663	NR	760	18	NR	890	0	NR
375	0	NR	505	430	NR	635	612	NR	765	15	NR	895	0	NR
380	0	NR	510	486	NR	640	561	NR	770	13	NR	900	0	NR
385	0	NR	515	536	NR	645	509	NR	775	11	NR	905	0	NR
390	1	NR	520	571	NR	650	458	NR	780	10	NR	910	0	NR
395	3	NR	525	600	NR	655	410	NR	785	8	NR	915	0	NR
400	5	NR	530	624	NR	660	363	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	321	NR	795	6	NR	925	0	NR
410	10	NR	540	661	NR	670	280	NR	800	5	NR	930	0	NR
415	16	NR	545	681	NR	675	244	NR	805	5	NR	935	0	NR
420	30	NR	550	701	NR	680	213	NR	810	4	NR	940	0	NR
425	53	NR	555	724	NR	685	183	NR	815	3	NR	945	0	NR
430	95	NR	560	747	NR	690	159	NR	820	3	NR	950	0	NR
435	170	NR	565	772	NR	695	136	NR	825	3	NR	955	0	NR
440	289	NR	570	795	NR	700	117	NR	830	2	NR	960	0	NR
445	522	NR	575	817	NR	705	100	NR	835	2	NR	965	0	NR
450	895	NR	580	841	NR	710	85	NR	840	2	NR	970	0	NR
455	957	NR	585	857	NR	715	72	NR	845	1	NR	975	0	NR
460	642	NR	590	871	NR	720	62	NR	850	1	NR	980	0	NR
465	487	NR	595	875	NR	725	53	NR	855	1	NR	985	0	NR
470	397	NR	600	866	NR	730	45	NR	860	1	NR	990	0	NR
475	289	NR	605	852	NR	735	39	NR	865	1	NR	995	0	NR
480	241	NR	610	827	NR	740	33	NR	870	1	NR	1000	0	NR
485	245	NR	615	796	NR	745	28	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



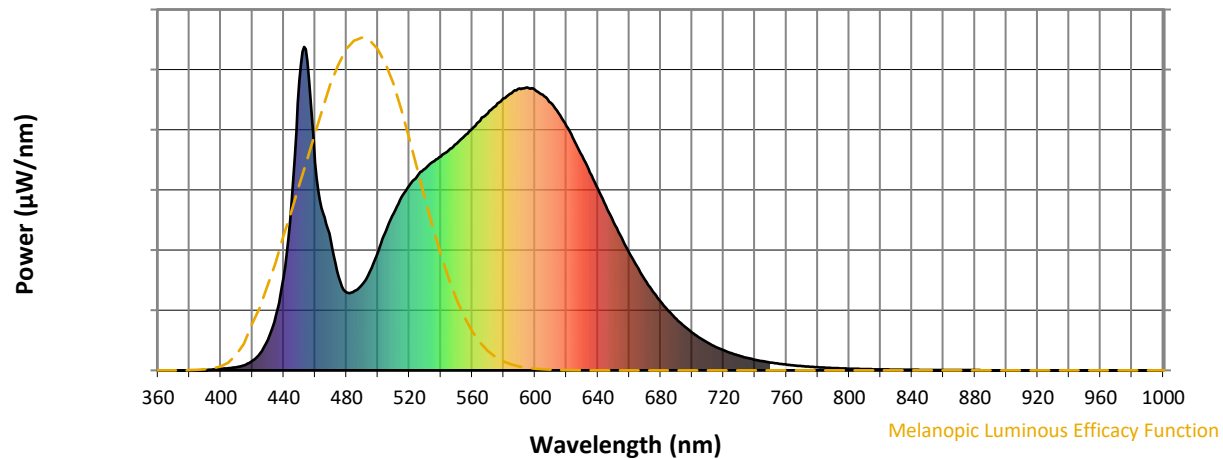
Scotopic Lumens: NR

S/P: 1.65

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	266	NR	620	755	NR	750	24	NR	880	1	NR
365	0	NR	495	307	NR	625	710	NR	755	21	NR	885	0	NR
370	0	NR	500	366	NR	630	663	NR	760	18	NR	890	0	NR
375	0	NR	505	430	NR	635	612	NR	765	15	NR	895	0	NR
380	0	NR	510	486	NR	640	561	NR	770	13	NR	900	0	NR
385	0	NR	515	536	NR	645	509	NR	775	11	NR	905	0	NR
390	1	NR	520	571	NR	650	458	NR	780	10	NR	910	0	NR
395	3	NR	525	600	NR	655	410	NR	785	8	NR	915	0	NR
400	5	NR	530	624	NR	660	363	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	321	NR	795	6	NR	925	0	NR
410	10	NR	540	661	NR	670	280	NR	800	5	NR	930	0	NR
415	16	NR	545	681	NR	675	244	NR	805	5	NR	935	0	NR
420	30	NR	550	701	NR	680	213	NR	810	4	NR	940	0	NR
425	53	NR	555	724	NR	685	183	NR	815	3	NR	945	0	NR
430	95	NR	560	747	NR	690	159	NR	820	3	NR	950	0	NR
435	170	NR	565	772	NR	695	136	NR	825	3	NR	955	0	NR
440	289	NR	570	795	NR	700	117	NR	830	2	NR	960	0	NR
445	522	NR	575	817	NR	705	100	NR	835	2	NR	965	0	NR
450	895	NR	580	841	NR	710	85	NR	840	2	NR	970	0	NR
455	957	NR	585	857	NR	715	72	NR	845	1	NR	975	0	NR
460	642	NR	590	871	NR	720	62	NR	850	1	NR	980	0	NR
465	487	NR	595	875	NR	725	53	NR	855	1	NR	985	0	NR
470	397	NR	600	866	NR	730	45	NR	860	1	NR	990	0	NR
475	289	NR	605	852	NR	735	39	NR	865	1	NR	995	0	NR
480	241	NR	610	827	NR	740	33	NR	870	1	NR	1000	0	NR
485	245	NR	615	796	NR	745	28	NR	875	1	NR			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 3.36

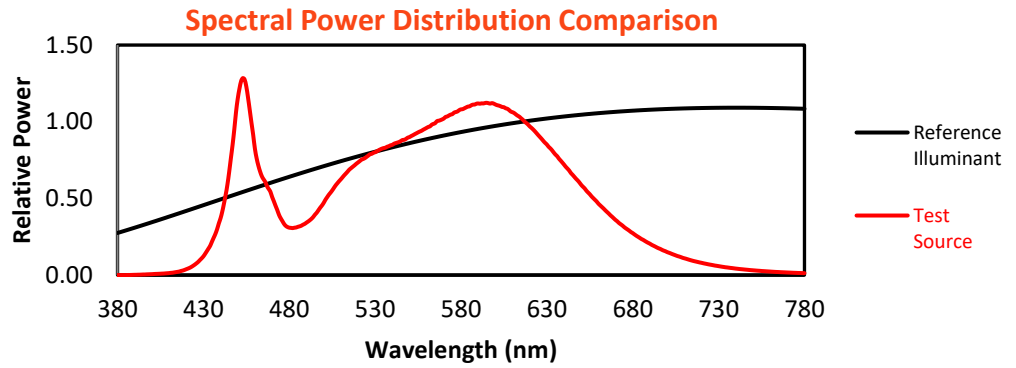
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	266	NR	620	755	NR	750	24	NR	880	1	NR
365	0	NR	495	307	NR	625	710	NR	755	21	NR	885	0	NR
370	0	NR	500	366	NR	630	663	NR	760	18	NR	890	0	NR
375	0	NR	505	430	NR	635	612	NR	765	15	NR	895	0	NR
380	0	NR	510	486	NR	640	561	NR	770	13	NR	900	0	NR
385	0	NR	515	536	NR	645	509	NR	775	11	NR	905	0	NR
390	1	NR	520	571	NR	650	458	NR	780	10	NR	910	0	NR
395	3	NR	525	600	NR	655	410	NR	785	8	NR	915	0	NR
400	5	NR	530	624	NR	660	363	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	321	NR	795	6	NR	925	0	NR
410	10	NR	540	661	NR	670	280	NR	800	5	NR	930	0	NR
415	16	NR	545	681	NR	675	244	NR	805	5	NR	935	0	NR
420	30	NR	550	701	NR	680	213	NR	810	4	NR	940	0	NR
425	53	NR	555	724	NR	685	183	NR	815	3	NR	945	0	NR
430	95	NR	560	747	NR	690	159	NR	820	3	NR	950	0	NR
435	170	NR	565	772	NR	695	136	NR	825	3	NR	955	0	NR
440	289	NR	570	795	NR	700	117	NR	830	2	NR	960	0	NR
445	522	NR	575	817	NR	705	100	NR	835	2	NR	965	0	NR
450	895	NR	580	841	NR	710	85	NR	840	2	NR	970	0	NR
455	957	NR	585	857	NR	715	72	NR	845	1	NR	975	0	NR
460	642	NR	590	871	NR	720	62	NR	850	1	NR	980	0	NR
465	487	NR	595	875	NR	725	53	NR	855	1	NR	985	0	NR
470	397	NR	600	866	NR	730	45	NR	860	1	NR	990	0	NR
475	289	NR	605	852	NR	735	39	NR	865	1	NR	995	0	NR
480	241	NR	610	827	NR	740	33	NR	870	1	NR	1000	0	NR
485	245	NR	615	796	NR	745	28	NR	875	1	NR			

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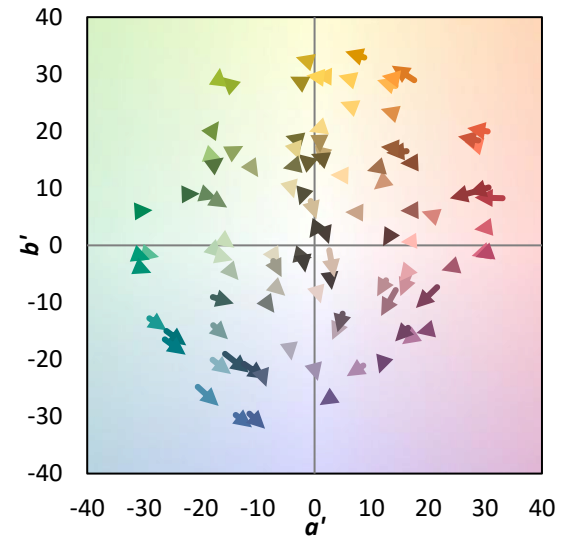
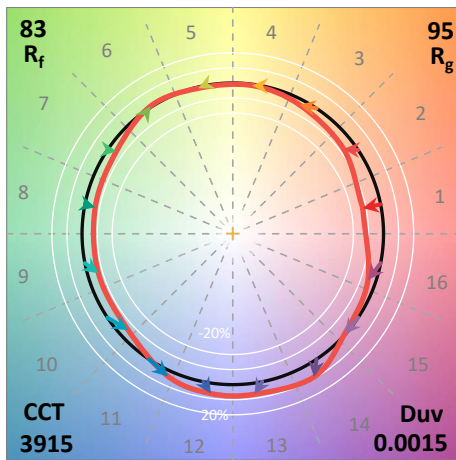
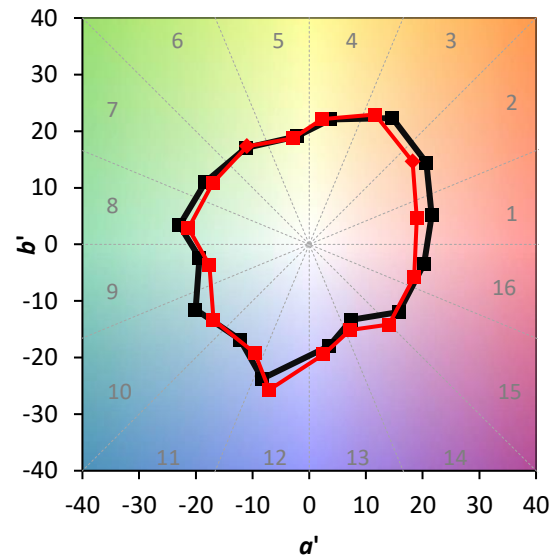
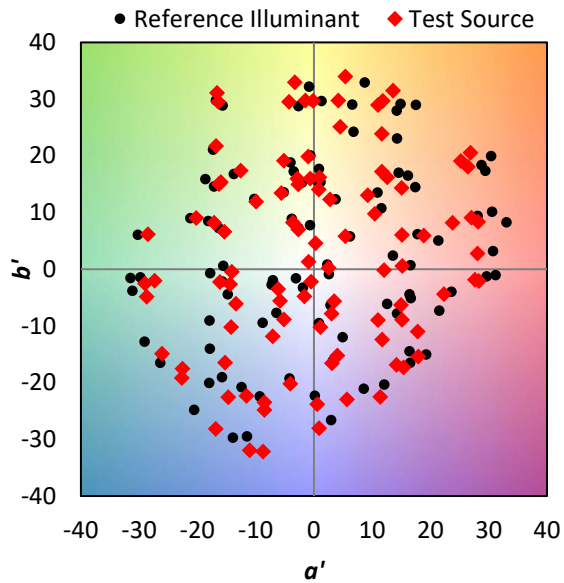
TM-30-18

Summary

$R_f = 83.2$
 $R_g = 94.6$
 $CIE R_a = 82.3$
 $R_9 = 7.6$

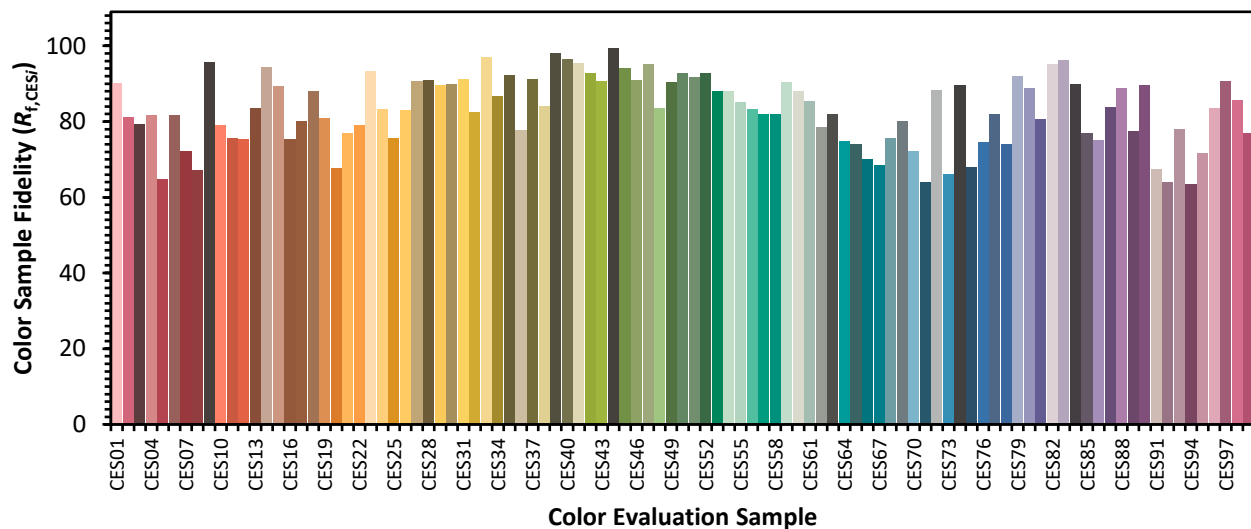


Color Vector Graphics

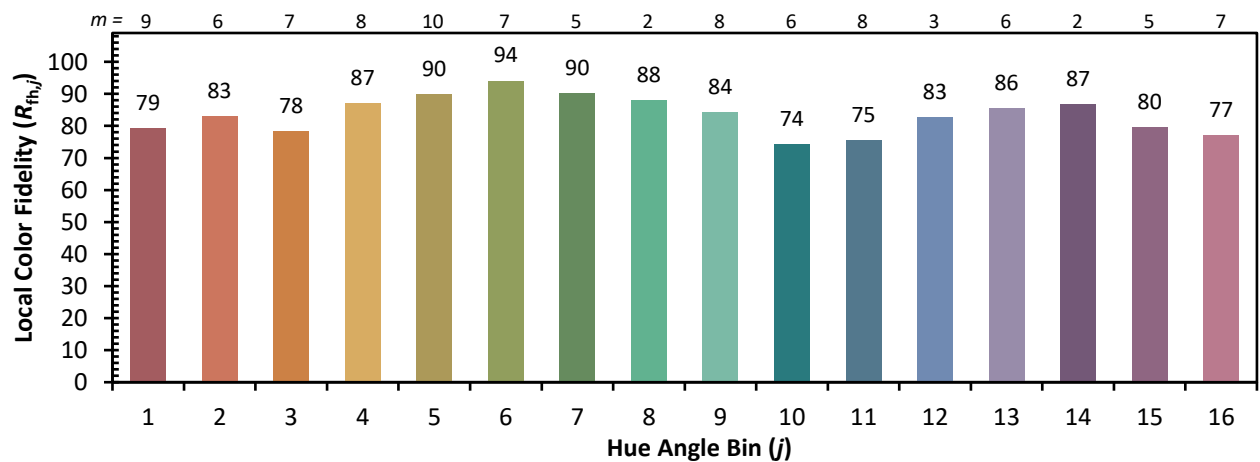
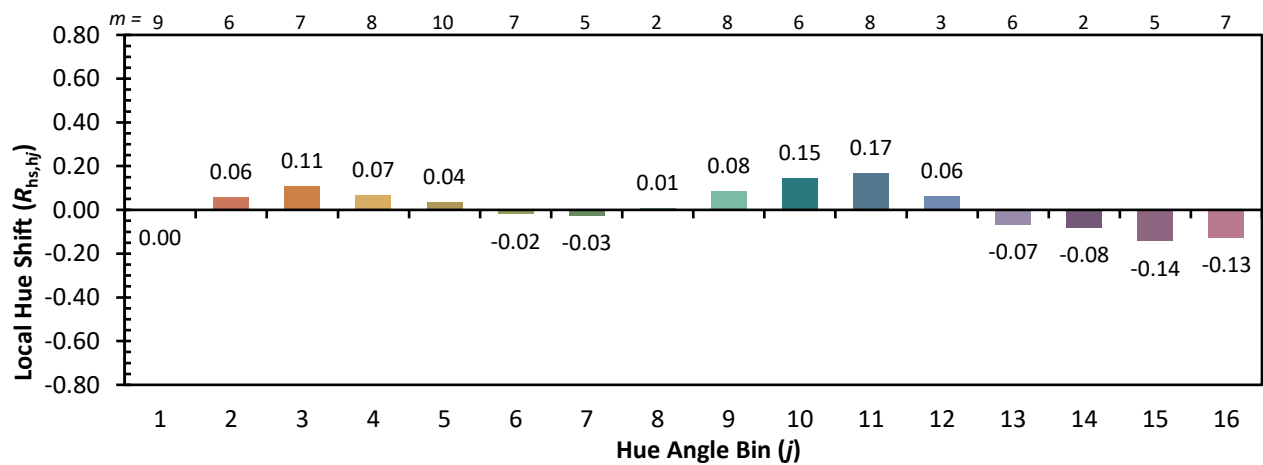
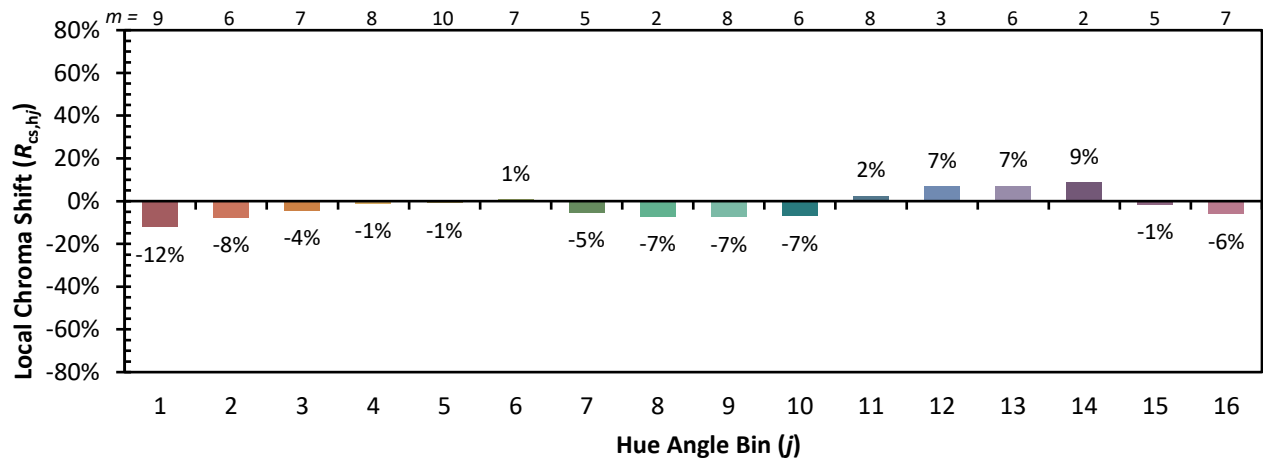


Individual Sample Fidelity Index ($R_{f,i}$)

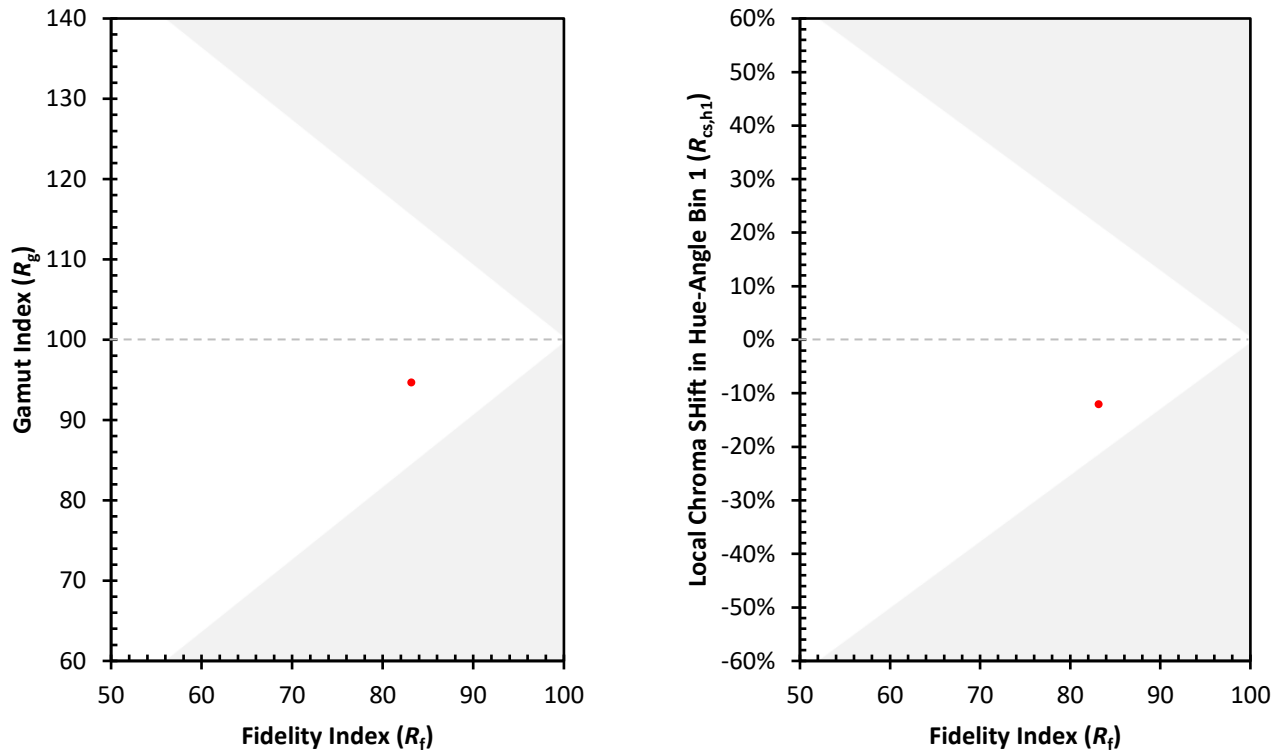
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CES02 = 61	CES27 = 91	CES52 = 93	CES77 = 82
CES03 = 31	CES28 = 91	CES53 = 88	CES78 = 74
CES04 = 70	CES29 = 90	CES54 = 88	CES79 = 92
CES05 = 48	CES30 = 90	CES55 = 85	CES80 = 89
CES06 = 50	CES31 = 91	CES56 = 83	CES81 = 81
CES07 = 41	CES32 = 83	CES57 = 82	CES82 = 95
CES08 = 40	CES33 = 97	CES58 = 82	CES83 = 96
CES09 = 29	CES34 = 87	CES59 = 90	CES84 = 90
CES10 = 74	CES35 = 92	CES60 = 88	CES85 = 77
CES11 = 57	CES36 = 78	CES61 = 85	CES86 = 75
CES12 = 63	CES37 = 91	CES62 = 79	CES87 = 84
CES13 = 42	CES38 = 84	CES63 = 82	CES88 = 89
CES14 = 74	CES39 = 98	CES64 = 75	CES89 = 77
CES15 = 71	CES40 = 96	CES65 = 74	CES90 = 90
CES16 = 47	CES41 = 95	CES66 = 70	CES91 = 67
CES17 = 49	CES42 = 93	CES67 = 69	CES92 = 64
CES18 = 56	CES43 = 91	CES68 = 76	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 80	CES94 = 63
CES20 = 65	CES45 = 94	CES70 = 72	CES95 = 72
CES21 = 86	CES46 = 91	CES71 = 64	CES96 = 84
CES22 = 78	CES47 = 95	CES72 = 88	CES97 = 91
CES23 = 91	CES48 = 83	CES73 = 66	CES98 = 86
CES24 = 90	CES49 = 90	CES74 = 90	CES99 = 77
CES25 = 71	CES50 = 93	CES75 = 68	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)