

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: P1215681

Luminaire Tested: 24-ID2-45-CFR2-L830-U

Issue Date: 12/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1215681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2508-510-7)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24-ID2-45-CFR2-L830-U
Description: 2X4 IN DEPTH TROFFER WITH 2INCH CUBE REGRESS LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

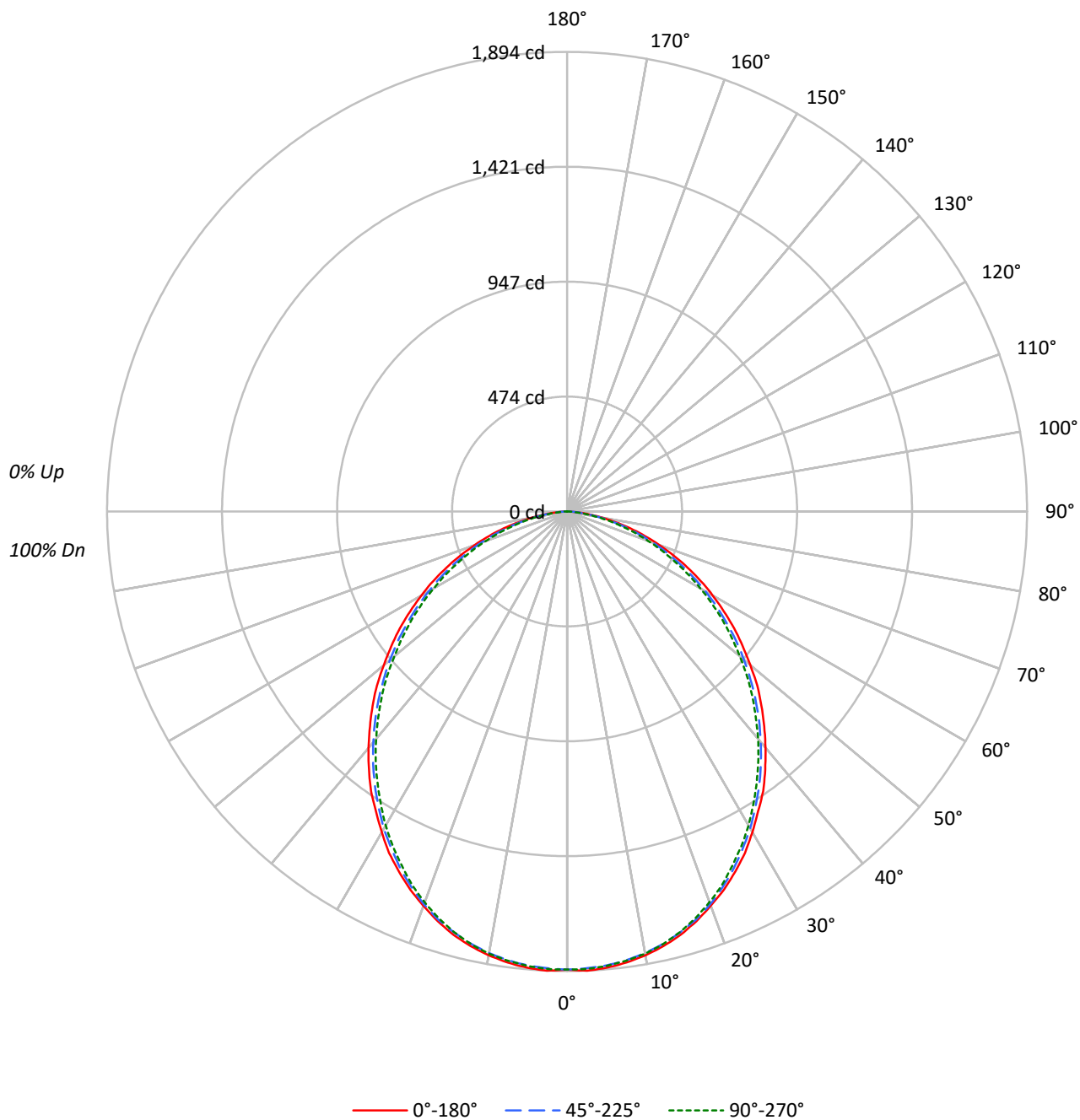
Lumens per Lamp: N/A
Luminaire Lumens: 4698.3 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39
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



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Luminous Intensity Polar Plot



TEST NUMBER: P1215681

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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		0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111			106	106	106		102
1	109	105	101	97	107	103	99	96	98	95	93			95	92	90		91
2	100	92	86	80	97	90	84	79	87	82	77			83	79	76		80
3	91	81	74	67	89	80	73	67	77	71	65			74	69	64		72
4	84	72	64	57	82	71	63	57	69	62	56			66	60	55		64
5	77	65	56	50	75	64	56	49	62	54	49			60	53	48		58
6	72	59	50	44	70	58	49	43	56	49	43			54	48	43		53
7	67	53	45	39	65	53	44	39	51	44	38			50	43	38		48
8	62	49	40	35	60	48	40	35	47	40	34			46	39	34		44
9	58	45	37	31	57	44	37	31	43	36	31			42	36	31		41
10	54	41	34	29	53	41	33	28	40	33	28			39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2540	2540	2540
5°	2549	2536	2539
10°	2537	2525	2529
15°	2516	2503	2500
20°	2476	2467	2454
25°	2431	2410	2390
30°	2371	2343	2321
35°	2312	2265	2236
40°	2233	2179	2149
45°	2154	2089	2053
50°	2061	1990	1943
55°	1971	1882	1834
60°	1864	1766	1704
65°	1742	1636	1560
70°	1590	1486	1406
75°	1407	1280	1187
80°	1134	1009	924
85°	753	644	525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2154 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.4	3.8
10°-20°	506.4	10.8
20°-30°	747.2	15.9
30°-40°	864.0	18.4
40°-50°	849.8	18.1
50°-60°	721.7	15.4
60°-70°	511.6	10.9
70°-80°	263.7	5.6
80°-90°	55.5	1.2
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°	1432.0	30.5
0°-40°	2296.1	48.9
0°-60°	3867.5	82.3
0°-90°	4698.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4698.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1888	1888	1888	1888	1888	
5°	1887	1880	1878	1876	1880	179
15°	1806	1799	1797	1793	1795	509
25°	1638	1632	1624	1613	1610	754
35°	1407	1400	1379	1367	1361	878
45°	1132	1123	1098	1082	1079	873
55°	840	828	802	788	782	750
65°	547	534	514	497	490	542
75°	271	259	246	232	228	286
85°	49	46	42	37	34	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1887.9	1887.9	1887.9	1887.9	1887.9
2.5°	1894.3	1887.9	1884.1	1882.8	1887.3
5°	1887.3	1880.2	1877.7	1875.7	1879.6
7.5°	1875.1	1868.0	1865.5	1863.5	1867.4
10°	1857.1	1850.7	1848.2	1846.2	1850.7
12.5°	1834.7	1828.3	1825.1	1823.1	1826.3
15°	1806.5	1799.4	1796.8	1793.0	1794.9
17.5°	1770.5	1765.4	1763.5	1756.4	1757.1
20°	1729.5	1725.6	1723.1	1712.8	1714.1
22.5°	1687.1	1682.0	1675.6	1666.6	1666.6
25°	1637.7	1632.0	1623.6	1613.4	1610.2
27.5°	1586.4	1580.0	1566.5	1557.6	1554.3
30°	1526.1	1522.3	1508.2	1496.6	1494.0
32.5°	1464.5	1462.0	1444.0	1434.4	1428.0
35°	1407.4	1399.7	1379.2	1367.0	1361.3
37.5°	1340.1	1333.0	1311.2	1300.3	1293.9
40°	1271.4	1262.5	1240.7	1231.7	1223.3
42.5°	1201.5	1195.1	1170.1	1156.0	1150.2
45°	1132.2	1122.6	1097.6	1082.2	1079.0
47.5°	1062.3	1048.8	1024.5	1008.4	1005.2
50°	984.7	975.1	950.7	934.0	928.2
52.5°	911.6	900.0	878.2	862.2	854.5
55°	840.4	827.5	802.5	788.4	782.0
57.5°	765.3	753.8	731.3	713.3	708.2
60°	692.8	678.1	656.3	641.5	633.2
62.5°	621.6	606.9	585.7	567.1	563.2
65°	547.2	533.7	513.8	497.2	490.1
67.5°	475.3	461.9	442.6	429.8	423.4
70°	404.1	393.2	377.8	361.2	357.3
72.5°	336.1	325.9	309.8	295.7	292.5
75°	270.7	259.2	246.3	232.2	228.4
77.5°	204.6	198.9	185.4	177.7	173.2
80°	146.3	139.2	130.2	123.2	119.3
82.5°	91.1	88.5	82.8	76.3	72.5
85°	48.8	46.2	41.7	37.2	34.0
87.5°	13.5	14.8	14.8	14.1	14.1
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	14.35	15.94	14.72	16.25	16.57	13.94	15.53	14.31	15.84	16.15
	3H	15.98	17.41	16.36	17.73	18.09	15.46	16.89	15.84	17.22	17.58
	4H	16.55	17.89	16.94	18.24	18.61	15.96	17.30	16.36	17.65	18.02
	6H	16.91	18.15	17.32	18.51	18.91	16.26	17.50	16.67	17.87	18.26
	8H	16.99	18.18	17.42	18.57	18.97	16.33	17.51	16.75	17.90	18.30
	12H	17.03	18.17	17.46	18.55	18.98	16.34	17.48	16.77	17.86	18.29
4H	2H	14.87	16.21	15.27	16.56	16.94	14.54	15.88	14.94	16.23	16.60
	3H	16.70	17.82	17.11	18.22	18.62	16.26	17.38	16.67	17.78	18.18
	4H	17.38	18.39	17.82	18.81	19.24	16.86	17.87	17.29	18.28	18.72
	6H	17.85	18.73	18.31	19.17	19.63	17.26	18.14	17.72	18.58	19.04
	8H	17.97	18.79	18.43	19.24	19.70	17.35	18.17	17.81	18.61	19.08
	12H	18.04	18.77	18.52	19.25	19.72	17.39	18.12	17.87	18.60	19.07
8H	4H	17.59	18.41	18.05	18.85	19.32	17.12	17.94	17.58	18.38	18.85
	6H	18.14	18.82	18.64	19.31	19.79	17.60	18.28	18.10	18.77	19.25
	8H	18.31	18.92	18.82	19.43	19.91	17.73	18.34	18.24	18.85	19.33
	12H	18.42	18.96	18.93	19.45	20.01	17.80	18.34	18.31	18.83	19.40
12H	4H	17.60	18.33	18.08	18.81	19.28	17.14	17.87	17.62	18.35	18.82
	6H	18.16	18.77	18.67	19.27	19.76	17.63	18.24	18.14	18.75	19.23
	8H	18.36	18.90	18.87	19.39	19.95	17.80	18.34	18.31	18.83	19.39

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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-3

Test Date: 07/24/2025

Luminaire Tested: 22ID2-55-CFR1-L830-U

Data in this report applies to families of products including 22ID2-55-CFR1-L830-U

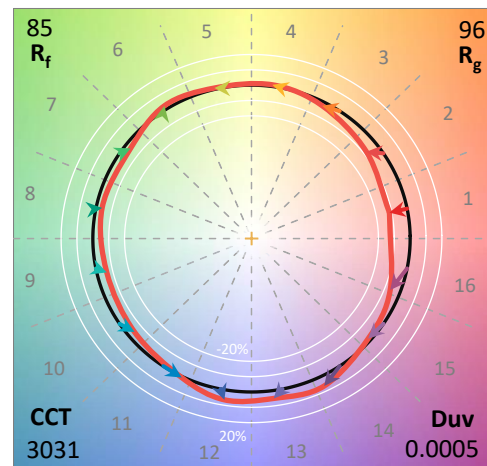
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-3
 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-L830-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 3000K 80CRI

Spectral Parameters

CCT (K): 3031
 CIE u' : 0.2493
 CIE v' : 0.5215
 Duv: 0.0005
 CIE x: 0.4355
 CIE y: 0.4049
 CIE z: 0.1596
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 582
 Purity: 52.24762
 R_f: 84.8
 R_g: 95.8

CRI (Ra): 82.5
 R1: 80.7
 R2: 90.5
 R3: 96.7
 R4: 80.7
 R5: 80.9
 R6: 88.5
 R7: 83.0
 R8: 58.8
 R9: 5.8
 R10: 78.6
 R11: 80.2
 R12: 69.8
 R13: 83.0
 R14: 98.8
 R15: 73.0



Test Conditions

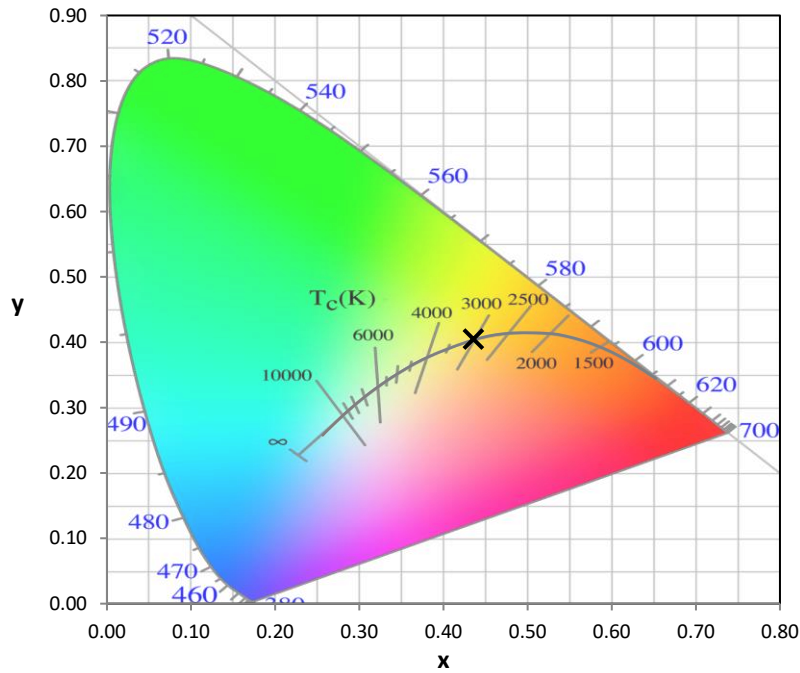
Stabilization Time: 38M
 Operation Time: 1H 38M
 Sphere Temperature (°C): 24.0

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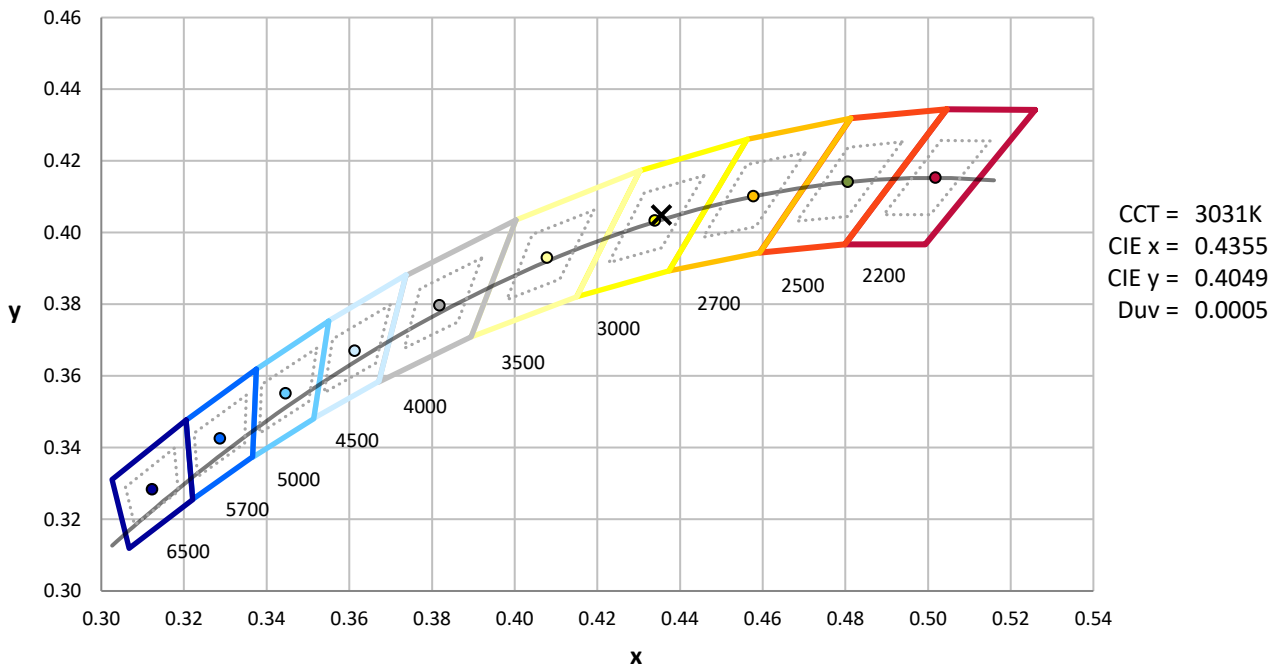
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



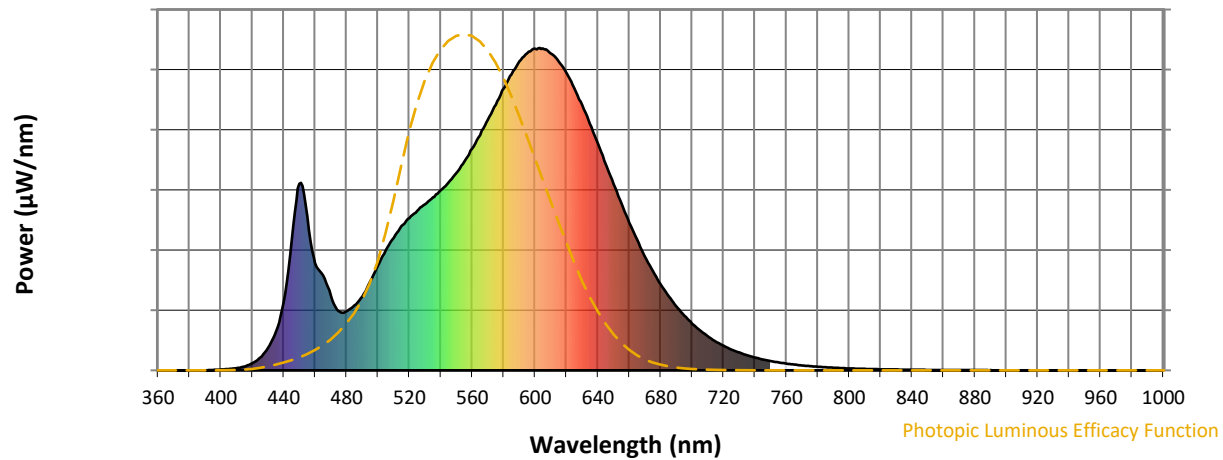
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

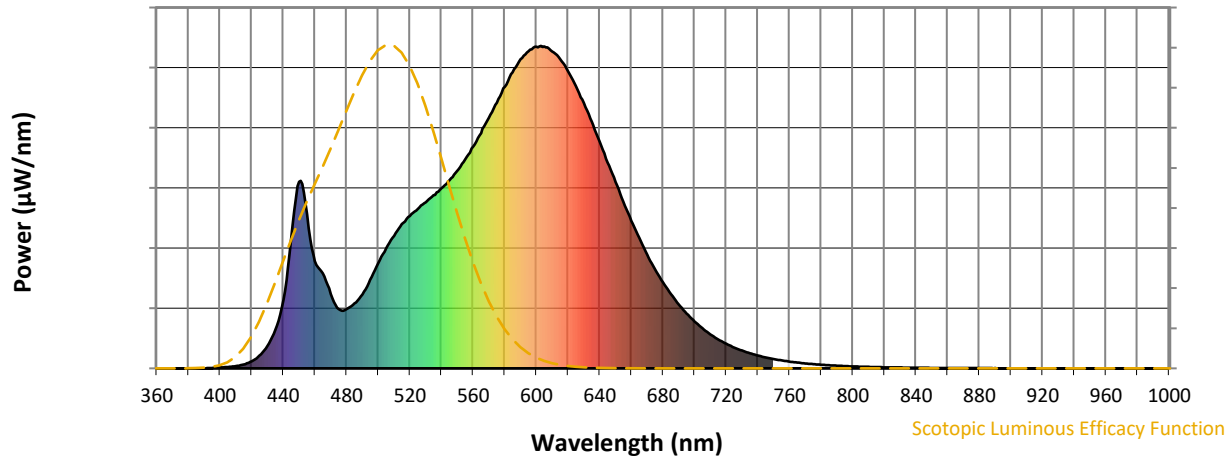


Photopic Lumens: NR

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	229	NR	620	922	NR	750	29	NR	880	1	NR
365	0	NR	495	275	NR	625	875	NR	755	25	NR	885	1	NR
370	0	NR	500	326	NR	630	822	NR	760	21	NR	890	1	NR
375	0	NR	505	372	NR	635	764	NR	765	18	NR	895	0	NR
380	0	NR	510	411	NR	640	704	NR	770	15	NR	900	0	NR
385	0	NR	515	447	NR	645	638	NR	775	13	NR	905	0	NR
390	0	NR	520	473	NR	650	577	NR	780	11	NR	910	0	NR
395	1	NR	525	495	NR	655	517	NR	785	10	NR	915	0	NR
400	3	NR	530	515	NR	660	457	NR	790	8	NR	920	0	NR
405	4	NR	535	537	NR	665	404	NR	795	7	NR	925	0	NR
410	7	NR	540	559	NR	670	353	NR	800	6	NR	930	0	NR
415	12	NR	545	584	NR	675	307	NR	805	5	NR	935	0	NR
420	22	NR	550	612	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	648	NR	685	230	NR	815	4	NR	945	0	NR
430	69	NR	560	688	NR	690	199	NR	820	3	NR	950	0	NR
435	120	NR	565	730	NR	695	170	NR	825	3	NR	955	0	NR
440	212	NR	570	777	NR	700	145	NR	830	3	NR	960	0	NR
445	400	NR	575	824	NR	705	124	NR	835	2	NR	965	0	NR
450	578	NR	580	873	NR	710	106	NR	840	2	NR	970	0	NR
455	478	NR	585	918	NR	715	90	NR	845	2	NR	975	0	NR
460	332	NR	590	958	NR	720	76	NR	850	1	NR	980	0	NR
465	295	NR	595	983	NR	725	65	NR	855	1	NR	985	0	NR
470	231	NR	600	997	NR	730	55	NR	860	1	NR	990	0	NR
475	183	NR	605	998	NR	735	47	NR	865	1	NR	995	0	NR
480	184	NR	610	982	NR	740	40	NR	870	1	NR	1000	0	NR
485	201	NR	615	958	NR	745	34	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



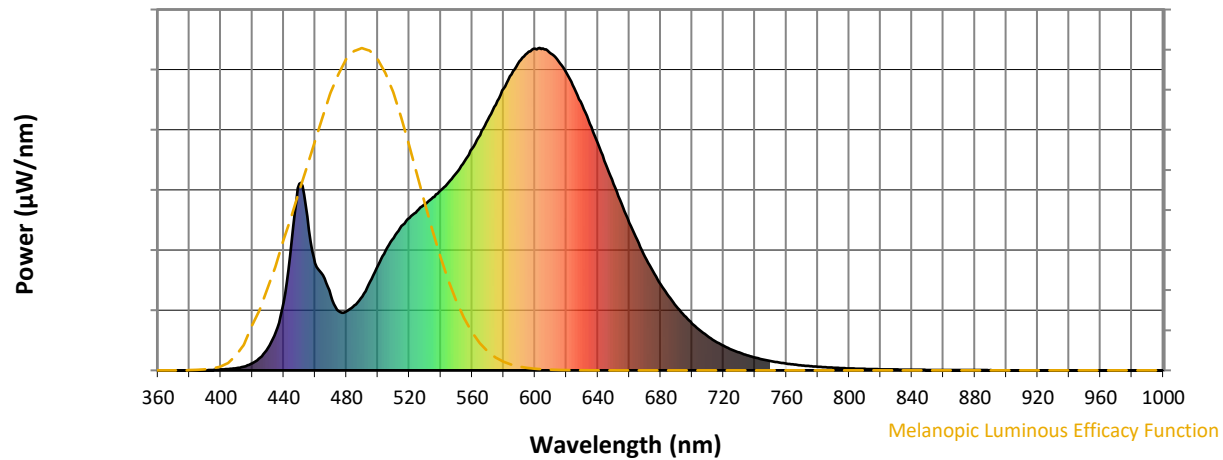
Scotopic Lumens: NR

S/P: 1.35

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	229	NR	620	922	NR	750	29	NR	880	1	NR
365	0	NR	495	275	NR	625	875	NR	755	25	NR	885	1	NR
370	0	NR	500	326	NR	630	822	NR	760	21	NR	890	1	NR
375	0	NR	505	372	NR	635	764	NR	765	18	NR	895	0	NR
380	0	NR	510	411	NR	640	704	NR	770	15	NR	900	0	NR
385	0	NR	515	447	NR	645	638	NR	775	13	NR	905	0	NR
390	0	NR	520	473	NR	650	577	NR	780	11	NR	910	0	NR
395	1	NR	525	495	NR	655	517	NR	785	10	NR	915	0	NR
400	3	NR	530	515	NR	660	457	NR	790	8	NR	920	0	NR
405	4	NR	535	537	NR	665	404	NR	795	7	NR	925	0	NR
410	7	NR	540	559	NR	670	353	NR	800	6	NR	930	0	NR
415	12	NR	545	584	NR	675	307	NR	805	5	NR	935	0	NR
420	22	NR	550	612	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	648	NR	685	230	NR	815	4	NR	945	0	NR
430	69	NR	560	688	NR	690	199	NR	820	3	NR	950	0	NR
435	120	NR	565	730	NR	695	170	NR	825	3	NR	955	0	NR
440	212	NR	570	777	NR	700	145	NR	830	3	NR	960	0	NR
445	400	NR	575	824	NR	705	124	NR	835	2	NR	965	0	NR
450	578	NR	580	873	NR	710	106	NR	840	2	NR	970	0	NR
455	478	NR	585	918	NR	715	90	NR	845	2	NR	975	0	NR
460	332	NR	590	958	NR	720	76	NR	850	1	NR	980	0	NR
465	295	NR	595	983	NR	725	65	NR	855	1	NR	985	0	NR
470	231	NR	600	997	NR	730	55	NR	860	1	NR	990	0	NR
475	183	NR	605	998	NR	735	47	NR	865	1	NR	995	0	NR
480	184	NR	610	982	NR	740	40	NR	870	1	NR	1000	0	NR
485	201	NR	615	958	NR	745	34	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.59

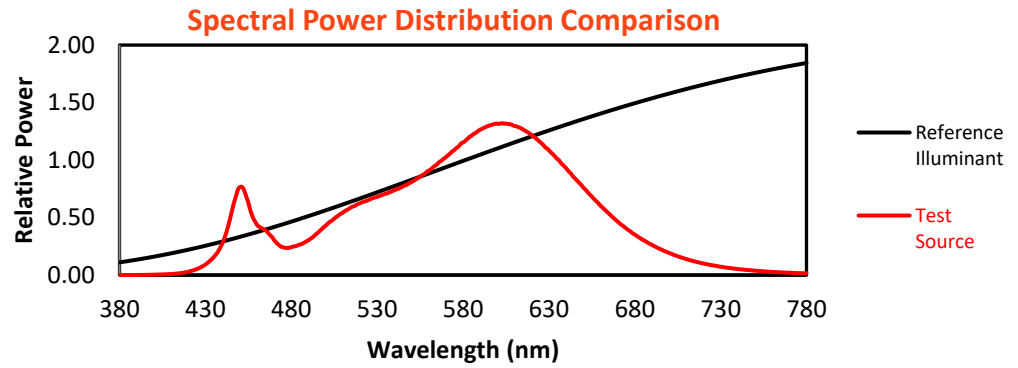
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	229	NR	620	922	NR	750	29	NR	880	1	NR
365	0	NR	495	275	NR	625	875	NR	755	25	NR	885	1	NR
370	0	NR	500	326	NR	630	822	NR	760	21	NR	890	1	NR
375	0	NR	505	372	NR	635	764	NR	765	18	NR	895	0	NR
380	0	NR	510	411	NR	640	704	NR	770	15	NR	900	0	NR
385	0	NR	515	447	NR	645	638	NR	775	13	NR	905	0	NR
390	0	NR	520	473	NR	650	577	NR	780	11	NR	910	0	NR
395	1	NR	525	495	NR	655	517	NR	785	10	NR	915	0	NR
400	3	NR	530	515	NR	660	457	NR	790	8	NR	920	0	NR
405	4	NR	535	537	NR	665	404	NR	795	7	NR	925	0	NR
410	7	NR	540	559	NR	670	353	NR	800	6	NR	930	0	NR
415	12	NR	545	584	NR	675	307	NR	805	5	NR	935	0	NR
420	22	NR	550	612	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	648	NR	685	230	NR	815	4	NR	945	0	NR
430	69	NR	560	688	NR	690	199	NR	820	3	NR	950	0	NR
435	120	NR	565	730	NR	695	170	NR	825	3	NR	955	0	NR
440	212	NR	570	777	NR	700	145	NR	830	3	NR	960	0	NR
445	400	NR	575	824	NR	705	124	NR	835	2	NR	965	0	NR
450	578	NR	580	873	NR	710	106	NR	840	2	NR	970	0	NR
455	478	NR	585	918	NR	715	90	NR	845	2	NR	975	0	NR
460	332	NR	590	958	NR	720	76	NR	850	1	NR	980	0	NR
465	295	NR	595	983	NR	725	65	NR	855	1	NR	985	0	NR
470	231	NR	600	997	NR	730	55	NR	860	1	NR	990	0	NR
475	183	NR	605	998	NR	735	47	NR	865	1	NR	995	0	NR
480	184	NR	610	982	NR	740	40	NR	870	1	NR	1000	0	NR
485	201	NR	615	958	NR	745	34	NR	875	1	NR			

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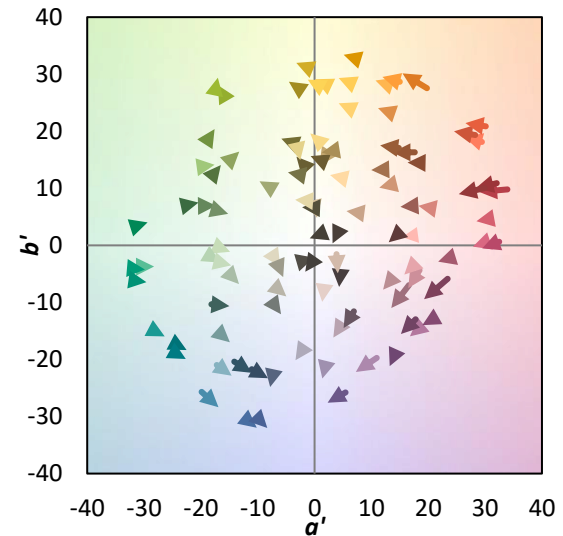
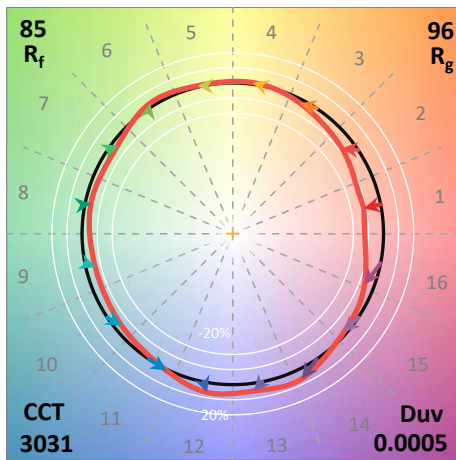
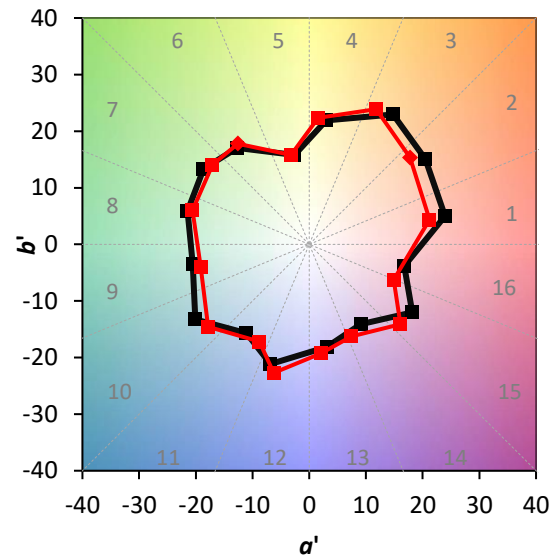
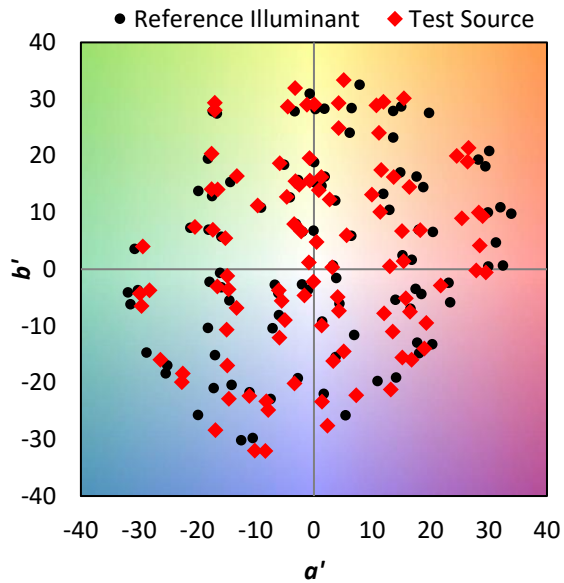
TM-30-18

Summary

$R_f = 84.8$
 $R_g = 95.8$
 $CIE R_a = 82.5$
 $R_9 = 5.8$

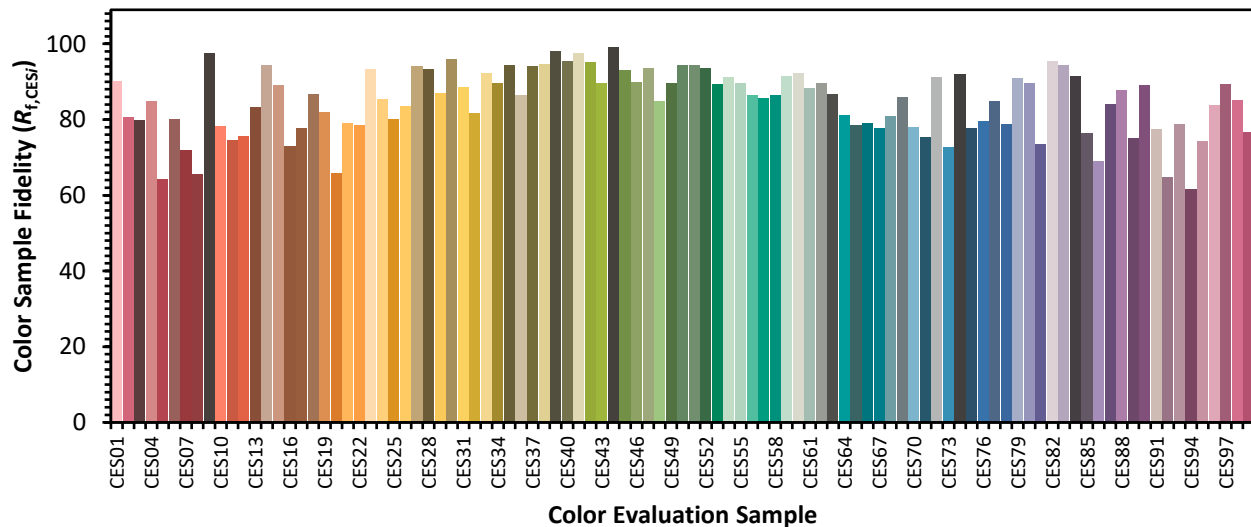


Color Vector Graphics

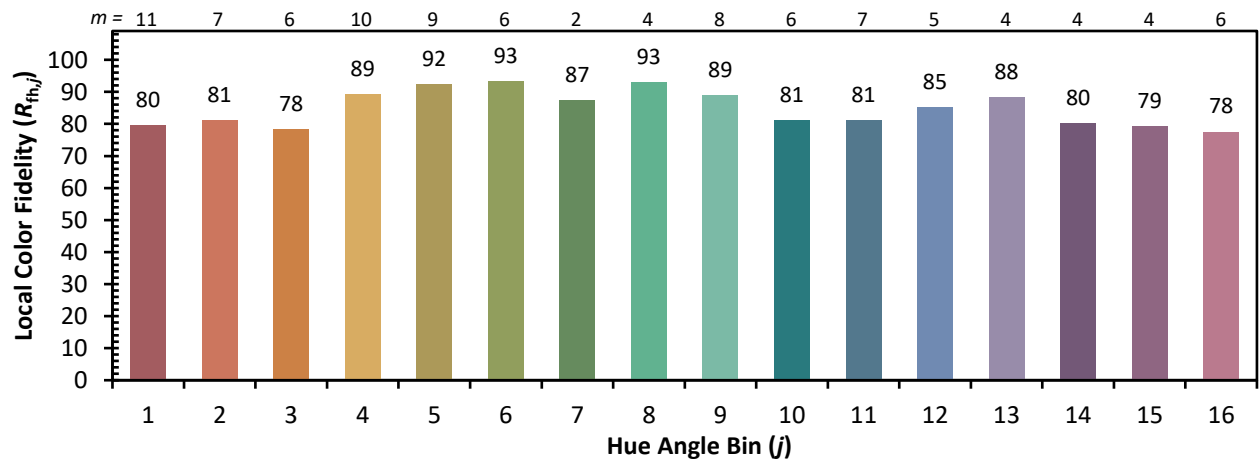
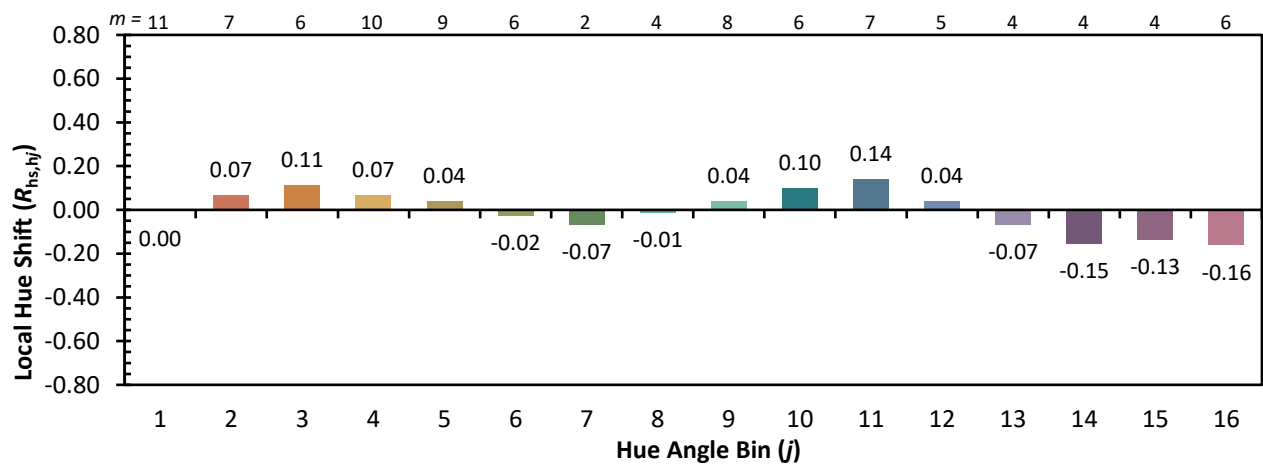
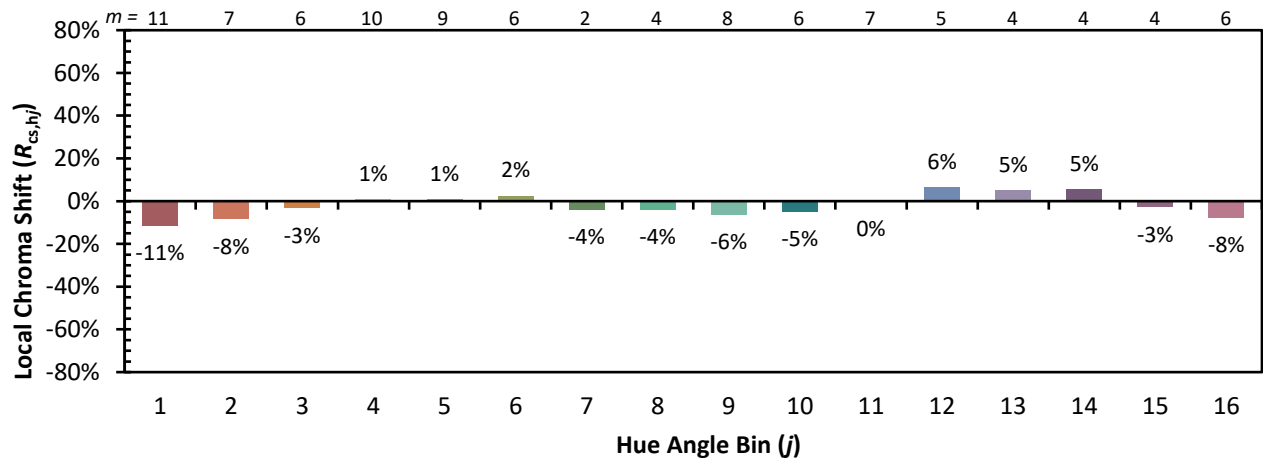


Individual Sample Fidelity Index ($R_{f,i}$)

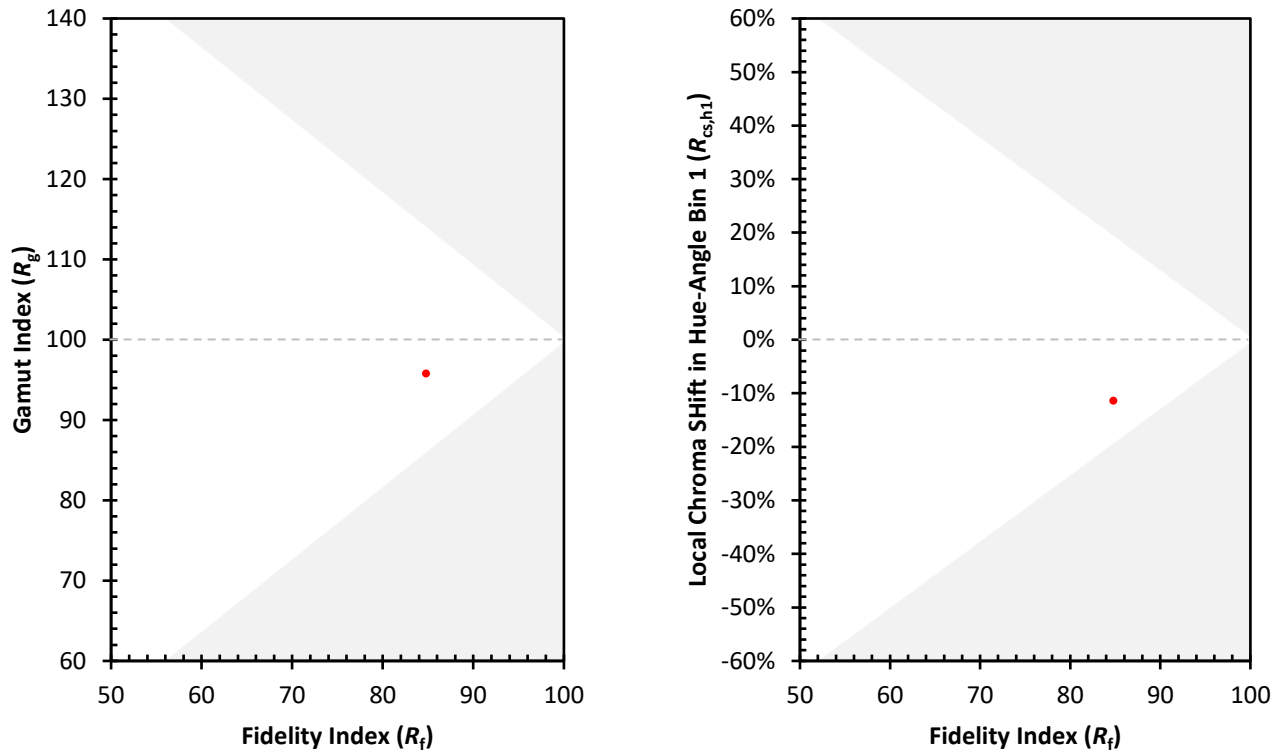
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CES02 = 63	CES27 = 94	CES52 = 94	CES77 = 85
CES03 = 31	CES28 = 93	CES53 = 89	CES78 = 79
CES04 = 70	CES29 = 87	CES54 = 91	CES79 = 91
CES05 = 50	CES30 = 96	CES55 = 90	CES80 = 90
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 74
CES07 = 42	CES32 = 82	CES57 = 86	CES82 = 95
CES08 = 41	CES33 = 92	CES58 = 87	CES83 = 94
CES09 = 29	CES34 = 90	CES59 = 91	CES84 = 92
CES10 = 76	CES35 = 94	CES60 = 92	CES85 = 77
CES11 = 59	CES36 = 86	CES61 = 88	CES86 = 69
CES12 = 65	CES37 = 94	CES62 = 90	CES87 = 84
CES13 = 43	CES38 = 95	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 81	CES89 = 75
CES15 = 72	CES40 = 95	CES65 = 79	CES90 = 89
CES16 = 47	CES41 = 97	CES66 = 79	CES91 = 77
CES17 = 50	CES42 = 95	CES67 = 78	CES92 = 65
CES18 = 56	CES43 = 90	CES68 = 81	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 86	CES94 = 62
CES20 = 67	CES45 = 93	CES70 = 78	CES95 = 74
CES21 = 87	CES46 = 90	CES71 = 75	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 89
CES23 = 92	CES48 = 85	CES73 = 73	CES98 = 85
CES24 = 91	CES49 = 90	CES74 = 92	CES99 = 77
CES25 = 72	CES50 = 94	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)