

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: IRiS

Report Number: P1253268

Luminaire Tested: P3A24R709030D010 E3LDWW1H

Issue Date: 1/29/2026

**Test Information**

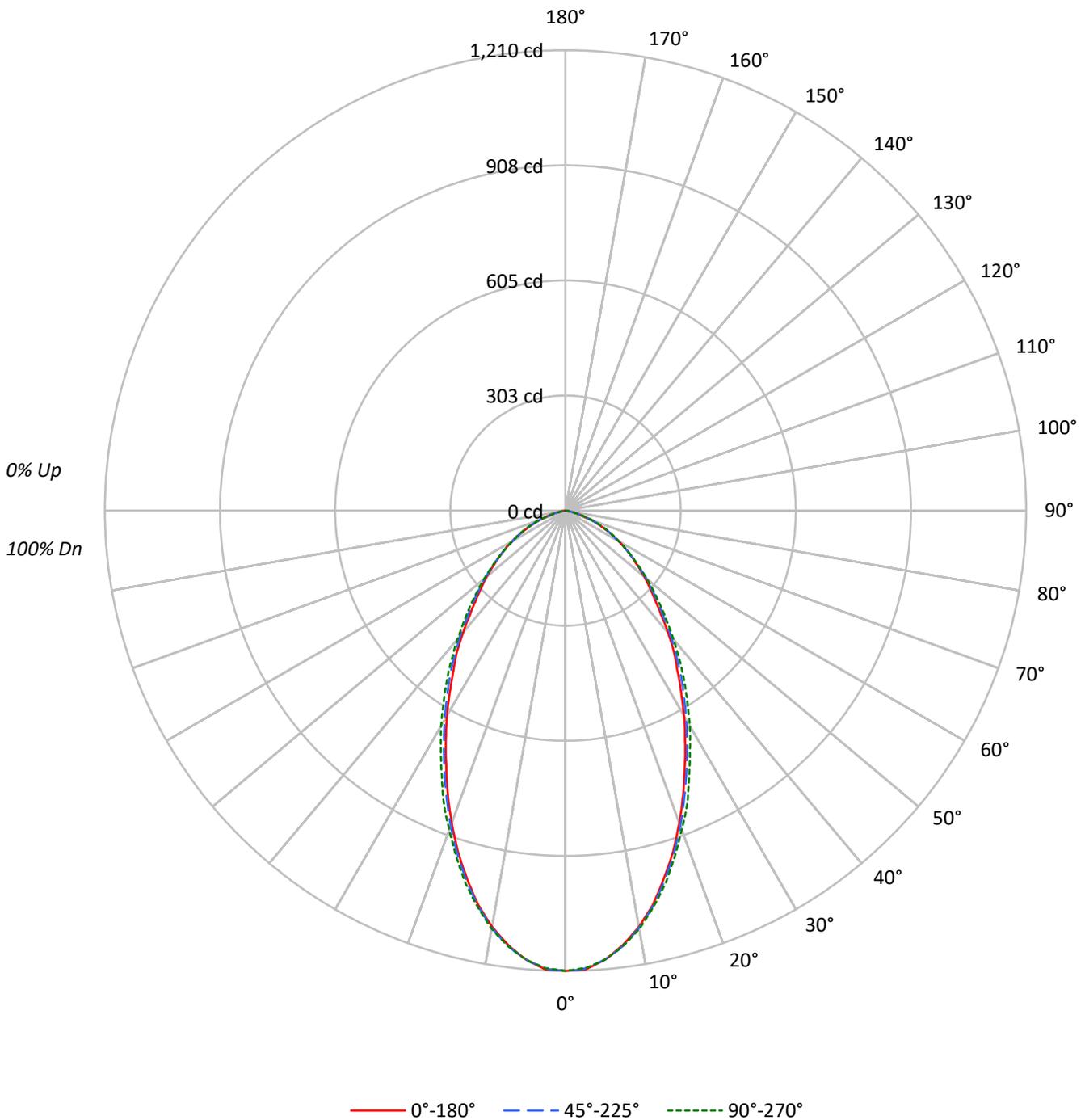
Test Method: LM-79-2019  
Report Number: P1253268  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2509-551-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A24R709030D010 E3LDWW1H  
Description: 3in Adjustable LED luminaire with, R70 optic, 3000K CCT AND, 90CRI , E3LDWW1H TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1685.0 lumens  
Efficiency: N/A  
Efficacy: 58.5 lumens/watt  
Spacing Criteria (0/90/45): 0.87 / 0.89 / 0.97  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.8  
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: P1253268  
CATALOG NUMBER: P3A24R709030D010 E3LDWW1H

### Luminous Intensity Polar Plot





TEST NUMBER: P1253268

CATALOG NUMBER: P3A24R709030D010 E3LDWW1H

**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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	59	69	63	58	67	62	57	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	73	61	53	48	71	60	53	48	59	52	47	57	52	47	56	51	47	45
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35

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

	0°	45°	90°
0°	265286	265286	265286
5°	260840	260840	260840
10°	247268	247891	248515
15°	227084	228333	230217
20°	203858	205771	208338
25°	179357	182019	186011
30°	157695	160480	165367
35°	137219	141636	145330
40°	119910	123059	126208
45°	103391	106833	109376
50°	92142	94018	94939
55°	81125	82157	82157
60°	71310	70082	71310
65°	58631	60032	61485
70°	45905	45905	47700
75°	30331	28043	28043
80°	17426	13891	10481
85°	7045	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 75°  
 Vertical Angle: 45°  
 Luminance: 109376 cd/sqm



TEST NUMBER: P1253268  
 CATALOG NUMBER: P3A24R709030D010 E3LDWW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.8	6.6
10°-20°	280.9	16.7
20°-30°	346.5	20.6
30°-40°	330.2	19.6
40°-50°	267.1	15.9
50°-60°	192.4	11.4
60°-70°	115.2	6.8
70°-80°	38.6	2.3
80°-90°	3.3	0.2
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°	738.3	43.8
0°-40°	1068.4	63.4
0°-60°	1527.9	90.7
0°-90°	1685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1685.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1185	1185	1185	1186	1185	111
15°	1000	1002	1006	1009	1014	280
25°	741	746	752	764	769	341
35°	513	517	529	539	543	322
45°	333	338	344	351	353	260
55°	212	212	215	215	215	191
65°	113	116	116	118	118	113
75°	36	36	33	33	33	40
85°	3	3	0	0	0	5
90°	0	0	0	0	0	



TEST NUMBER: P1253268  
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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1209.8	1209.8	1209.8	1209.8	1209.8	1209.8	1209.8	1209.8	1209.8	1209.8	1209.8
2°	1207.0	1207.0	1207.0	1207.0	1207.0	1207.0	1207.0	1207.0	1207.0	1207.0	1204.2
2.5°	1207.0	1204.2	1204.2	1204.2	1204.2	1204.2	1204.2	1204.2	1204.2	1207.0	1204.2
5°	1185.0	1185.0	1185.0	1185.0	1185.0	1185.0	1185.0	1185.0	1187.7	1185.0	1185.0
7.5°	1151.9	1151.9	1151.9	1151.9	1154.6	1154.6	1154.6	1154.6	1157.4	1157.4	1154.6
10°	1110.5	1110.5	1110.5	1110.5	1113.3	1113.3	1116.1	1113.3	1113.3	1116.1	1116.1
12.5°	1060.9	1058.2	1058.2	1058.2	1060.9	1063.7	1063.7	1063.7	1066.5	1066.5	1066.5
15°	1000.3	1000.3	1000.3	1003.1	1003.1	1005.8	1008.6	1008.6	1011.3	1011.3	1014.1
17.5°	939.7	939.7	936.9	939.7	942.4	945.2	948.0	950.7	953.5	953.5	953.5
20°	873.6	870.8	873.6	876.3	879.1	881.8	884.6	890.1	892.8	892.8	892.8
22.5°	807.4	804.7	807.4	810.2	812.9	815.7	824.0	826.7	829.5	829.5	835.0
25°	741.3	741.3	744.0	746.8	749.5	752.3	757.8	763.3	766.1	768.8	768.8
27.5°	680.7	680.7	680.7	680.7	686.2	691.7	697.2	702.7	705.5	708.2	708.2
30°	622.8	620.0	620.0	622.8	628.3	633.8	639.3	644.8	647.6	650.3	653.1
32.5°	564.9	564.9	564.9	567.7	570.4	578.7	584.2	587.0	592.5	595.2	595.2
35°	512.6	512.6	512.6	518.1	523.6	529.1	531.8	537.4	542.9	542.9	542.9
37.5°	468.5	471.2	476.7	474.0	474.0	476.7	479.5	485.0	490.5	490.5	490.5
40°	418.9	421.6	424.4	421.6	424.4	429.9	432.6	435.4	438.2	440.9	440.9
42.5°	372.0	372.0	372.0	374.8	380.3	383.0	388.6	391.3	394.1	394.1	394.1
45°	333.4	333.4	336.2	339.0	341.7	344.5	347.2	350.0	352.7	352.7	352.7
47.5°	300.4	300.4	303.1	303.1	305.9	308.6	311.4	311.4	314.1	316.9	314.1
50°	270.1	270.1	270.1	272.8	272.8	275.6	275.6	278.3	278.3	278.3	278.3
52.5°	239.7	239.7	239.7	239.7	242.5	242.5	242.5	245.3	245.3	245.3	245.3
55°	212.2	212.2	212.2	212.2	212.2	214.9	214.9	214.9	214.9	214.9	214.9
57.5°	187.4	187.4	187.4	187.4	187.4	187.4	187.4	187.4	187.4	187.4	187.4
60°	162.6	162.6	162.6	162.6	162.6	159.8	162.6	162.6	162.6	162.6	162.6
62.5°	137.8	137.8	137.8	137.8	137.8	137.8	137.8	140.5	140.5	140.5	140.5
65°	113.0	115.7	115.7	115.7	115.7	115.7	115.7	118.5	118.5	118.5	118.5
67.5°	90.9	93.7	93.7	93.7	93.7	93.7	93.7	93.7	96.4	96.4	96.4
70°	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	74.4
72.5°	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	52.4	52.4	52.4
75°	35.8	35.8	35.8	35.8	33.1	33.1	33.1	33.1	33.1	33.1	33.1
77.5°	24.8	24.8	24.8	22.0	22.0	19.3	19.3	19.3	19.3	19.3	16.5
80°	13.8	13.8	13.8	13.8	13.8	11.0	11.0	8.3	8.3	8.3	8.3
82.5°	8.3	8.3	8.3	5.5	5.5	5.5	5.5	2.8	2.8	2.8	2.8
85°	2.8	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

IRiS

Report Number: SP1-2508-518-2

Test Date: 09/10/2025

Luminaire Tested: LD3A24R159030D010 E3D1LI

Data in this report applies to families of products including LD3A24R159030D010 E3D1LI

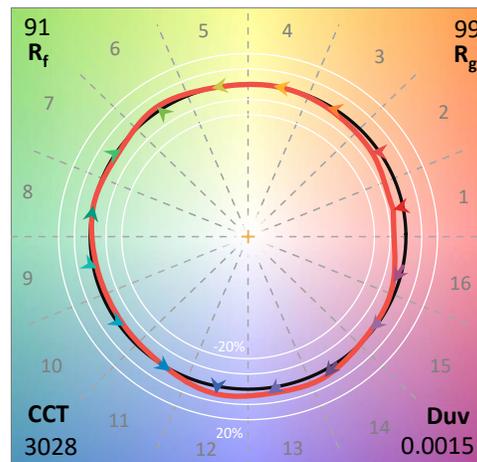
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2508-518-2  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 09/16/2025  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: IRiS  
 Catalog Number: **LD3A24R159030D010 E3D1LI**  
 Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 90CRI , E3D1LI TRIM

**Spectral Parameters**

CCT (K): 3028  
 CIE u': 0.2491  
 CIE v': 0.5229  
 Duv: 0.0015  
 CIE x: 0.4371  
 CIE y: 0.4078  
 CIE z: 0.1551  
 Peak Wavelength (nm): 630  
 Dominant Wavelength (nm): 582  
 Purity: 53.60472  
 Rf: 90.8  
 Rg: 98.9

CRI (Ra):	91.6		
R1:	92.4	R9:	48.5
R2:	94.8	R10:	86.1
R3:	96.1	R11:	94.5
R4:	93.3	R12:	79.7
R5:	91.7	R13:	92.8
R6:	94.8	R14:	96.7
R7:	91.4	R15:	86.9
R8:	78.7		



**Test Conditions**

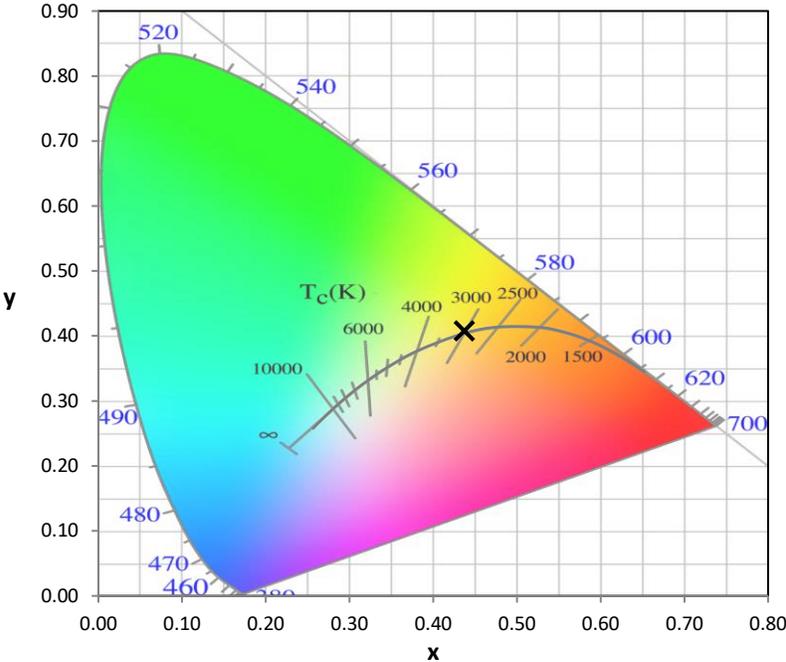
Stabilization Time: 65M  
 Operation Time: 2H 5M  
 Sphere Temperature (°C): 25.1

REPORT NUMBER: SP1-2508-518-2

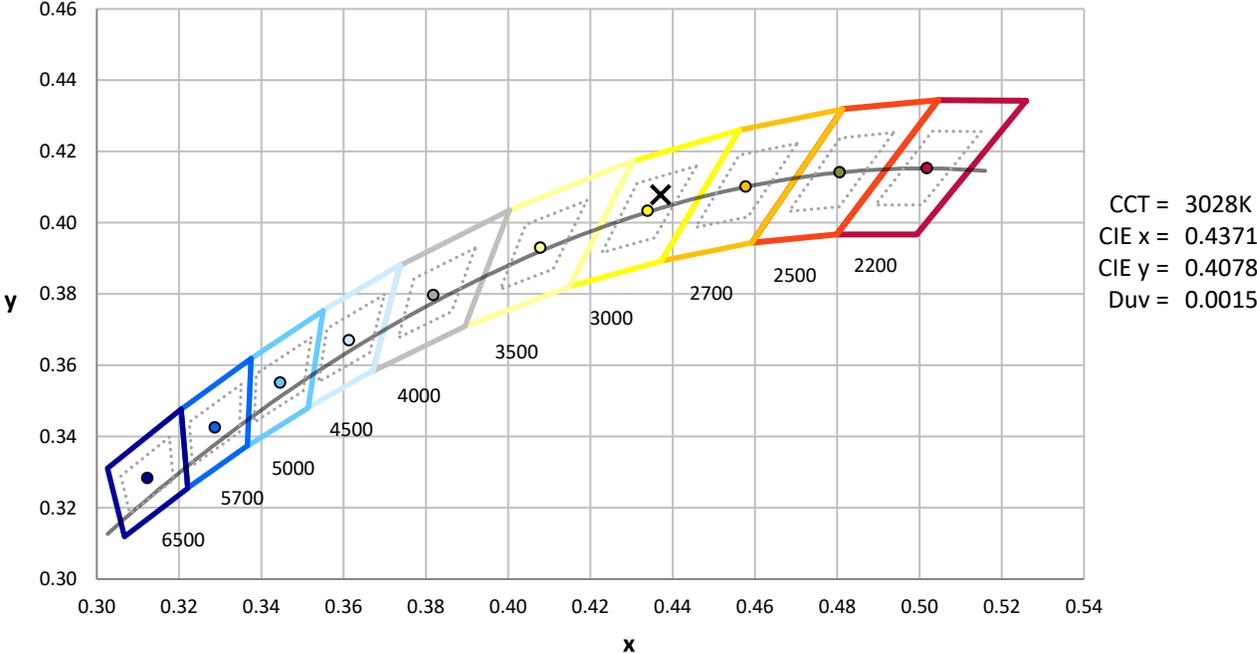
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



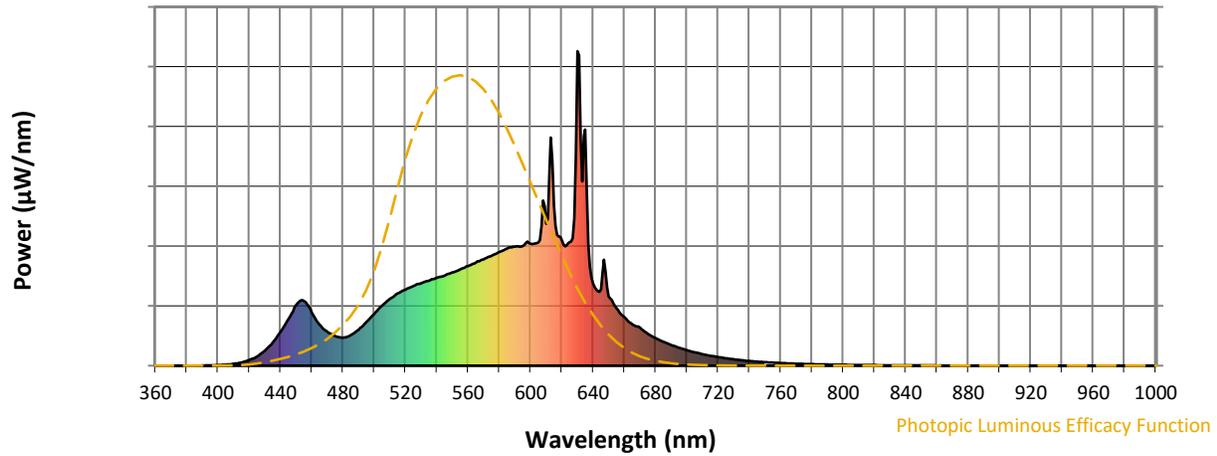
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

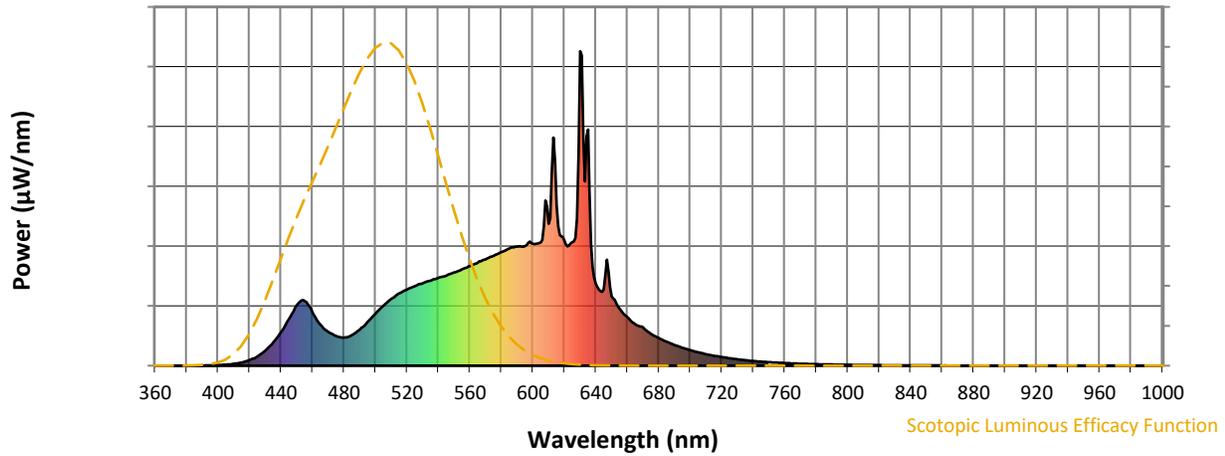


**Photopic Lumens: NR**

λ (nm)	Power 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	115	NR	620	398	NR	750	11	NR	880	0	NR
365	0	NR	495	138	NR	625	392	NR	755	10	NR	885	0	NR
370	0	NR	500	165	NR	630	1000	NR	760	9	NR	890	0	NR
375	0	NR	505	190	NR	635	751	NR	765	7	NR	895	0	NR
380	0	NR	510	212	NR	640	261	NR	770	6	NR	900	0	NR
385	0	NR	515	230	NR	645	243	NR	775	5	NR	905	0	NR
390	1	NR	520	242	NR	650	220	NR	780	5	NR	910	0	NR
395	1	NR	525	253	NR	655	183	NR	785	4	NR	915	0	NR
400	2	NR	530	262	NR	660	155	NR	790	4	NR	920	0	NR
405	3	NR	535	270	NR	665	132	NR	795	3	NR	925	0	NR
410	6	NR	540	279	NR	670	121	NR	800	3	NR	930	0	NR
415	10	NR	545	287	NR	675	101	NR	805	2	NR	935	0	NR
420	18	NR	550	296	NR	680	88	NR	810	2	NR	940	0	NR
425	30	NR	555	307	NR	685	76	NR	815	2	NR	945	0	NR
430	48	NR	560	317	NR	690	66	NR	820	2	NR	950	0	NR
435	73	NR	565	327	NR	695	57	NR	825	1	NR	955	0	NR
440	107	NR	570	338	NR	700	49	NR	830	1	NR	960	0	NR
445	147	NR	575	349	NR	705	43	NR	835	1	NR	965	0	NR
450	193	NR	580	361	NR	710	37	NR	840	1	NR	970	0	NR
455	206	NR	585	372	NR	715	32	NR	845	1	NR	975	0	NR
460	170	NR	590	379	NR	720	28	NR	850	1	NR	980	0	NR
465	131	NR	595	380	NR	725	24	NR	855	1	NR	985	0	NR
470	107	NR	600	388	NR	730	20	NR	860	1	NR	990	0	NR
475	94	NR	605	392	NR	735	17	NR	865	1	NR	995	0	NR
480	89	NR	610	451	NR	740	15	NR	870	0	NR	1000	0	NR
485	97	NR	615	511	NR	745	13	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



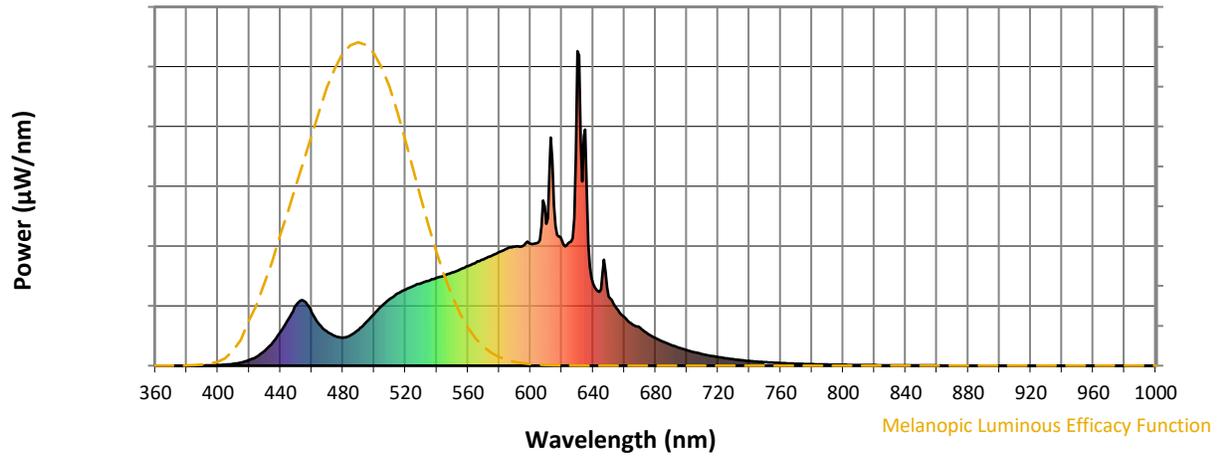
**Scotopic Lumens: NR**

**S/P: 1.4**

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	115	NR	620	398	NR	750	11	NR	880	0	NR
365	0	NR	495	138	NR	625	392	NR	755	10	NR	885	0	NR
370	0	NR	500	165	NR	630	1000	NR	760	9	NR	890	0	NR
375	0	NR	505	190	NR	635	751	NR	765	7	NR	895	0	NR
380	0	NR	510	212	NR	640	261	NR	770	6	NR	900	0	NR
385	0	NR	515	230	NR	645	243	NR	775	5	NR	905	0	NR
390	1	NR	520	242	NR	650	220	NR	780	5	NR	910	0	NR
395	1	NR	525	253	NR	655	183	NR	785	4	NR	915	0	NR
400	2	NR	530	262	NR	660	155	NR	790	4	NR	920	0	NR
405	3	NR	535	270	NR	665	132	NR	795	3	NR	925	0	NR
410	6	NR	540	279	NR	670	121	NR	800	3	NR	930	0	NR
415	10	NR	545	287	NR	675	101	NR	805	2	NR	935	0	NR
420	18	NR	550	296	NR	680	88	NR	810	2	NR	940	0	NR
425	30	NR	555	307	NR	685	76	NR	815	2	NR	945	0	NR
430	48	NR	560	317	NR	690	66	NR	820	2	NR	950	0	NR
435	73	NR	565	327	NR	695	57	NR	825	1	NR	955	0	NR
440	107	NR	570	338	NR	700	49	NR	830	1	NR	960	0	NR
445	147	NR	575	349	NR	705	43	NR	835	1	NR	965	0	NR
450	193	NR	580	361	NR	710	37	NR	840	1	NR	970	0	NR
455	206	NR	585	372	NR	715	32	NR	845	1	NR	975	0	NR
460	170	NR	590	379	NR	720	28	NR	850	1	NR	980	0	NR
465	131	NR	595	380	NR	725	24	NR	855	1	NR	985	0	NR
470	107	NR	600	388	NR	730	20	NR	860	1	NR	990	0	NR
475	94	NR	605	392	NR	735	17	NR	865	1	NR	995	0	NR
480	89	NR	610	451	NR	740	15	NR	870	0	NR	1000	0	NR
485	97	NR	615	511	NR	745	13	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



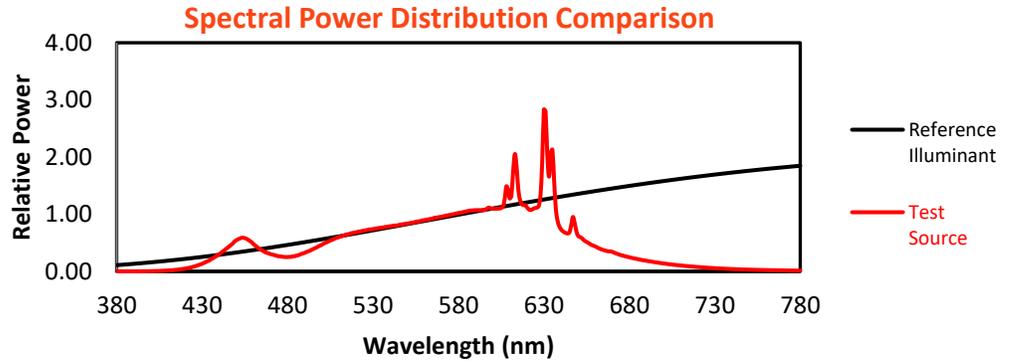
**Melanopic Lumens: NR**

**M/P: 2.69**

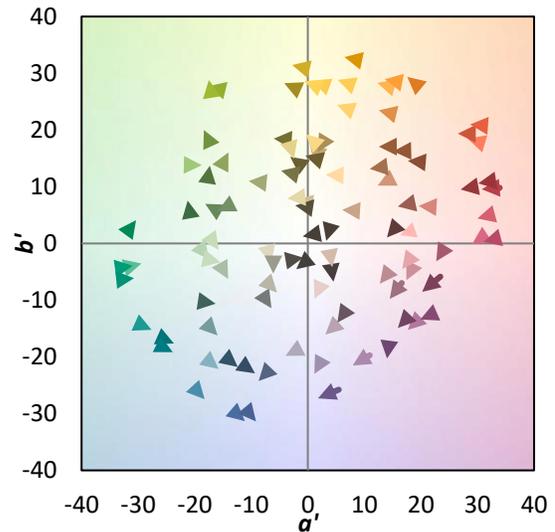
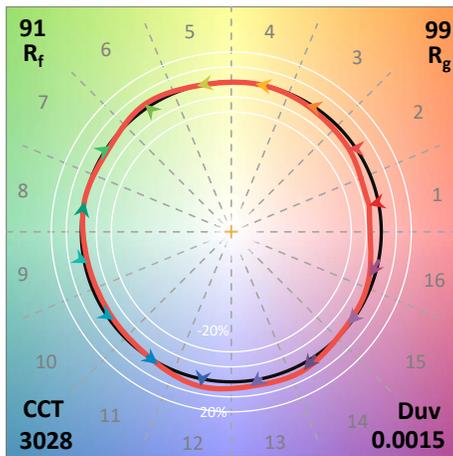
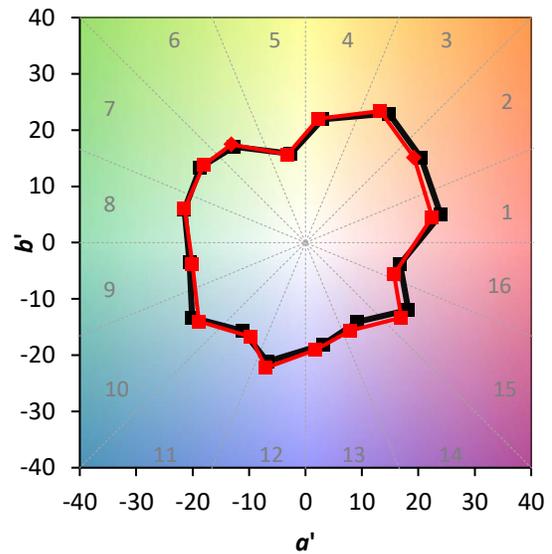
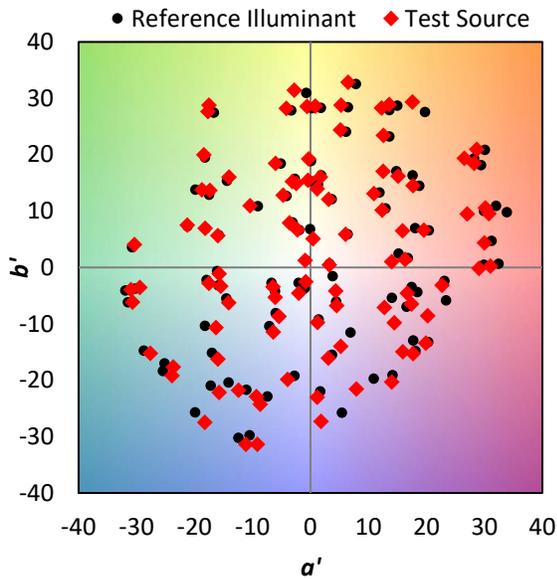
$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	115	NR	620	398	NR	750	11	NR	880	0	NR
365	0	NR	495	138	NR	625	392	NR	755	10	NR	885	0	NR
370	0	NR	500	165	NR	630	1000	NR	760	9	NR	890	0	NR
375	0	NR	505	190	NR	635	751	NR	765	7	NR	895	0	NR
380	0	NR	510	212	NR	640	261	NR	770	6	NR	900	0	NR
385	0	NR	515	230	NR	645	243	NR	775	5	NR	905	0	NR
390	1	NR	520	242	NR	650	220	NR	780	5	NR	910	0	NR
395	1	NR	525	253	NR	655	183	NR	785	4	NR	915	0	NR
400	2	NR	530	262	NR	660	155	NR	790	4	NR	920	0	NR
405	3	NR	535	270	NR	665	132	NR	795	3	NR	925	0	NR
410	6	NR	540	279	NR	670	121	NR	800	3	NR	930	0	NR
415	10	NR	545	287	NR	675	101	NR	805	2	NR	935	0	NR
420	18	NR	550	296	NR	680	88	NR	810	2	NR	940	0	NR
425	30	NR	555	307	NR	685	76	NR	815	2	NR	945	0	NR
430	48	NR	560	317	NR	690	66	NR	820	2	NR	950	0	NR
435	73	NR	565	327	NR	695	57	NR	825	1	NR	955	0	NR
440	107	NR	570	338	NR	700	49	NR	830	1	NR	960	0	NR
445	147	NR	575	349	NR	705	43	NR	835	1	NR	965	0	NR
450	193	NR	580	361	NR	710	37	NR	840	1	NR	970	0	NR
455	206	NR	585	372	NR	715	32	NR	845	1	NR	975	0	NR
460	170	NR	590	379	NR	720	28	NR	850	1	NR	980	0	NR
465	131	NR	595	380	NR	725	24	NR	855	1	NR	985	0	NR
470	107	NR	600	388	NR	730	20	NR	860	1	NR	990	0	NR
475	94	NR	605	392	NR	735	17	NR	865	1	NR	995	0	NR
480	89	NR	610	451	NR	740	15	NR	870	0	NR	1000	0	NR
485	97	NR	615	511	NR	745	13	NR	875	0	NR			

**Summary**

$R_f = 90.8$   
 $R_g = 98.9$   
 $CIE R_a = 91.6$   
 $R_9 = 48.5$

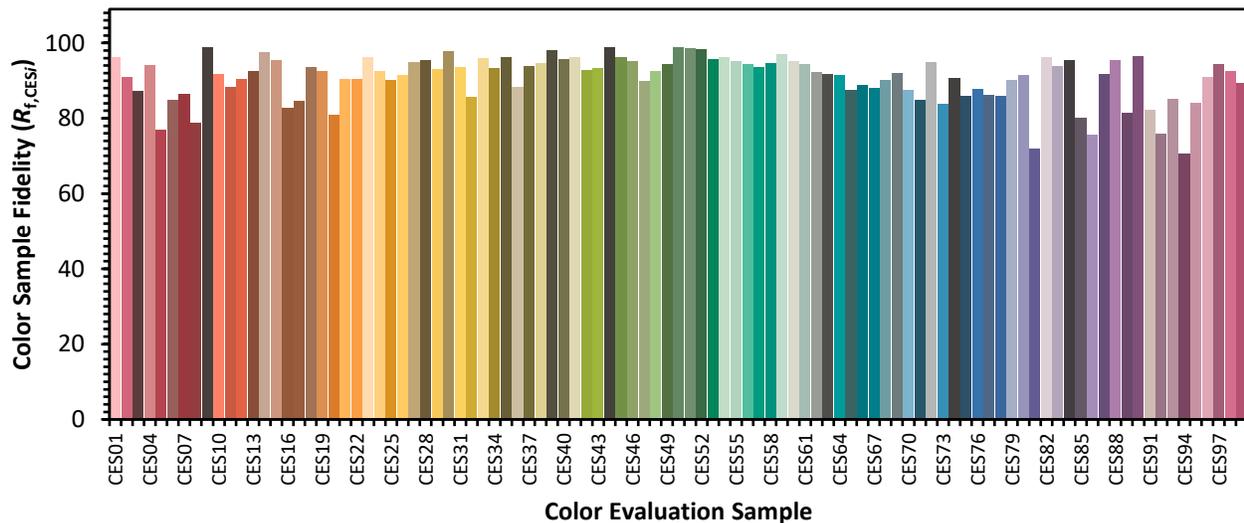


**Color Vector Graphics**

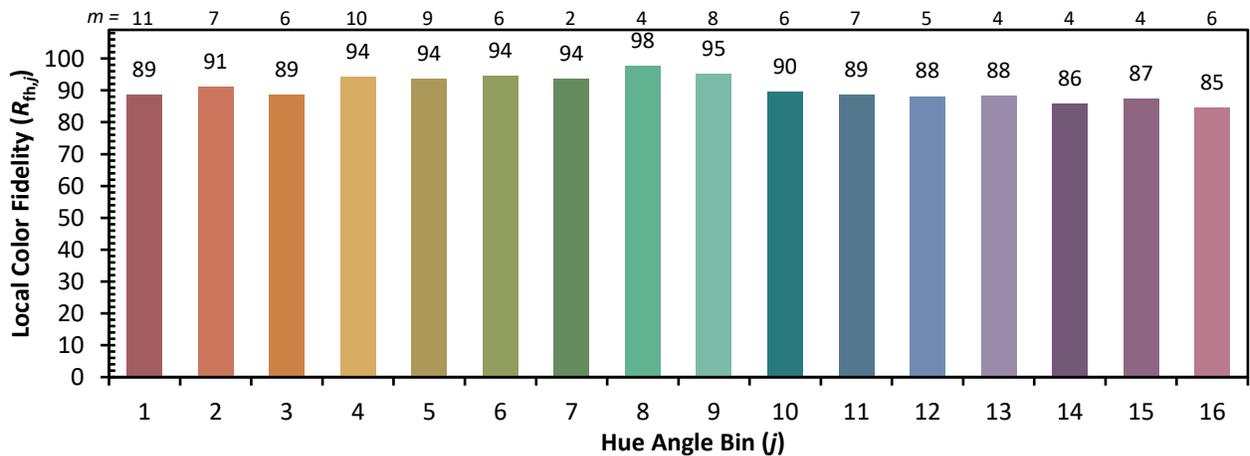
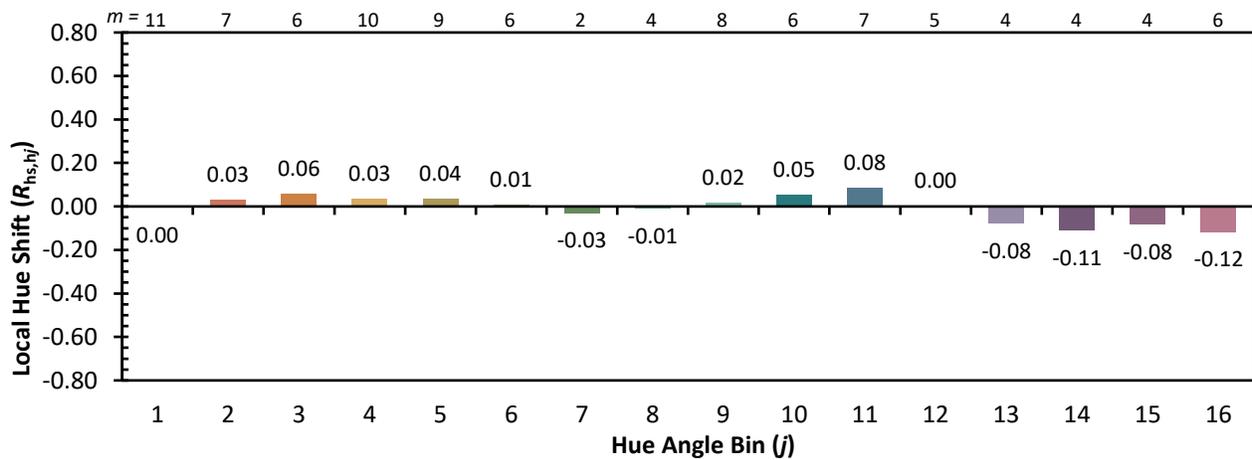
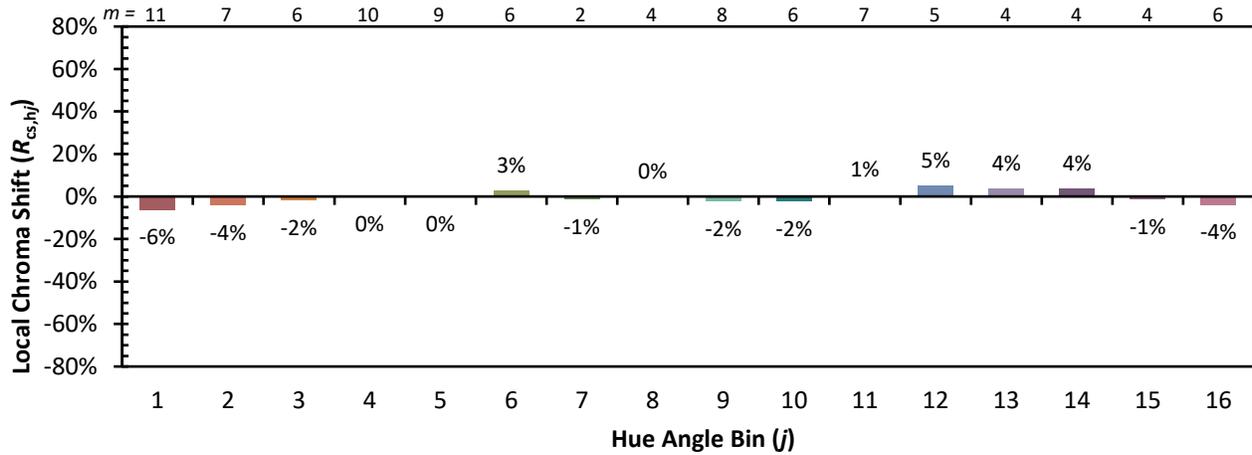


Individual Sample Fidelity Index ( $R_{f,i}$ )

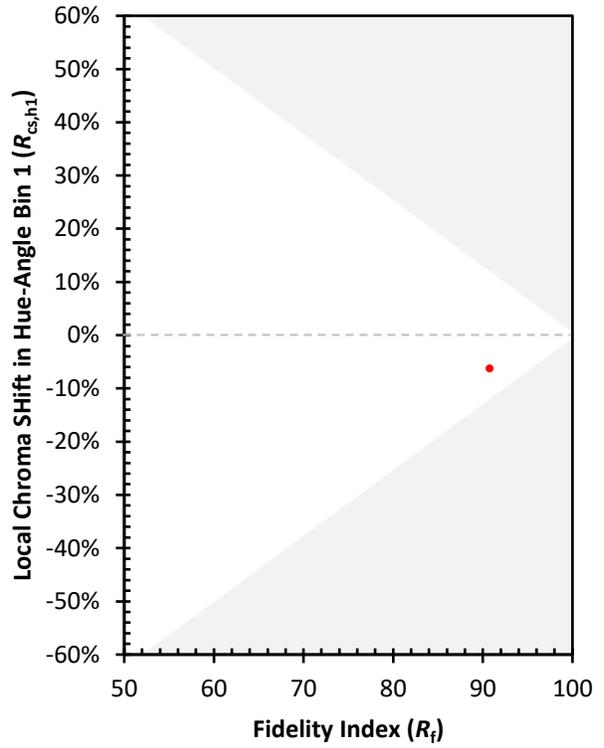
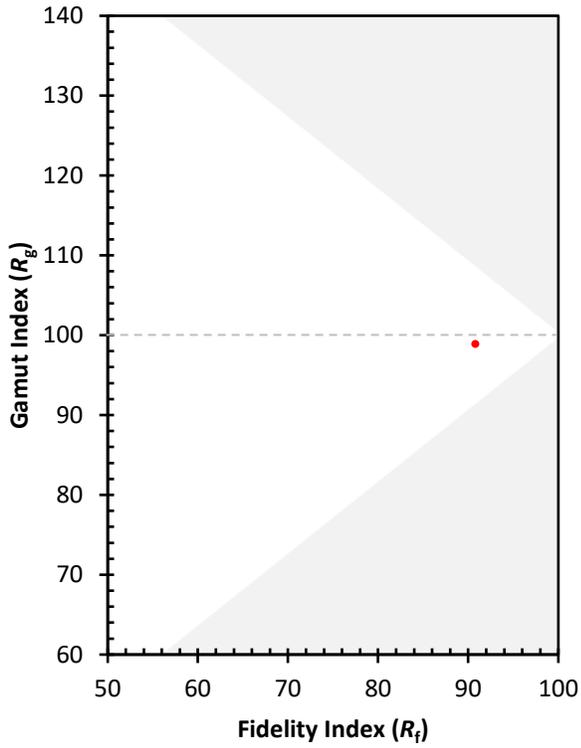
CES01 = 86	CES26 = 91	CES51 = 99	CES76 = 88
CES02 = 63	CES27 = 95	CES52 = 98	CES77 = 86
CES03 = 32	CES28 = 95	CES53 = 96	CES78 = 86
CES04 = 70	CES29 = 93	CES54 = 96	CES79 = 90
CES05 = 50	CES30 = 98	CES55 = 95	CES80 = 92
CES06 = 51	CES31 = 94	CES56 = 94	CES81 = 72
CES07 = 43	CES32 = 86	CES57 = 94	CES82 = 96
CES08 = 42	CES33 = 96	CES58 = 95	CES83 = 94
CES09 = 29	CES34 = 93	CES59 = 97	CES84 = 95
CES10 = 76	CES35 = 96	CES60 = 95	CES85 = 80
CES11 = 58	CES36 = 88	CES61 = 94	CES86 = 76
CES12 = 65	CES37 = 94	CES62 = 92	CES87 = 92
CES13 = 44	CES38 = 95	CES63 = 92	CES88 = 96
CES14 = 74	CES39 = 98	CES64 = 91	CES89 = 82
CES15 = 72	CES40 = 96	CES65 = 87	CES90 = 96
CES16 = 48	CES41 = 96	CES66 = 89	CES91 = 82
CES17 = 50	CES42 = 93	CES67 = 88	CES92 = 76
CES18 = 57	CES43 = 93	CES68 = 90	CES93 = 85
CES19 = 72	CES44 = 99	CES69 = 92	CES94 = 71
CES20 = 67	CES45 = 96	CES70 = 88	CES95 = 84
CES21 = 86	CES46 = 95	CES71 = 85	CES96 = 91
CES22 = 79	CES47 = 90	CES72 = 95	CES97 = 94
CES23 = 92	CES48 = 93	CES73 = 84	CES98 = 93
CES24 = 91	CES49 = 94	CES74 = 91	CES99 = 89
CES25 = 72	CES50 = 99	CES75 = 86	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)