Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P995472

Luminaire Tested: **LTC305FS5BMB-940**

Issue Date: 06/09/2025

Report Generated By 670245763 / DESKTOP-DVLU35A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P995472
Test Lab:	INNOVATION CENTER (G1)
Issue Date:	06/09/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	HALO
Catalog Number:	LTC305FS5BMB-940
Description:	HALO LT BLACK TRIM DIRECT MOUNT 3 inch 90 CRI COLOR SELECTABLE FIXTURE
Light Source:	4000K CCT, 90 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	585.0 lumens
Efficiency:	N/A
Efficacy:	88.6 lumens/watt
Spacing Criteria (0/90/45):	1.09 / 1.09 / 1.16
Luminous Opening:	Circular (Dia: 0.2' x H: 0')
CIE Type:	Direct

Input Watts (W):	6.6
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:	25 FT

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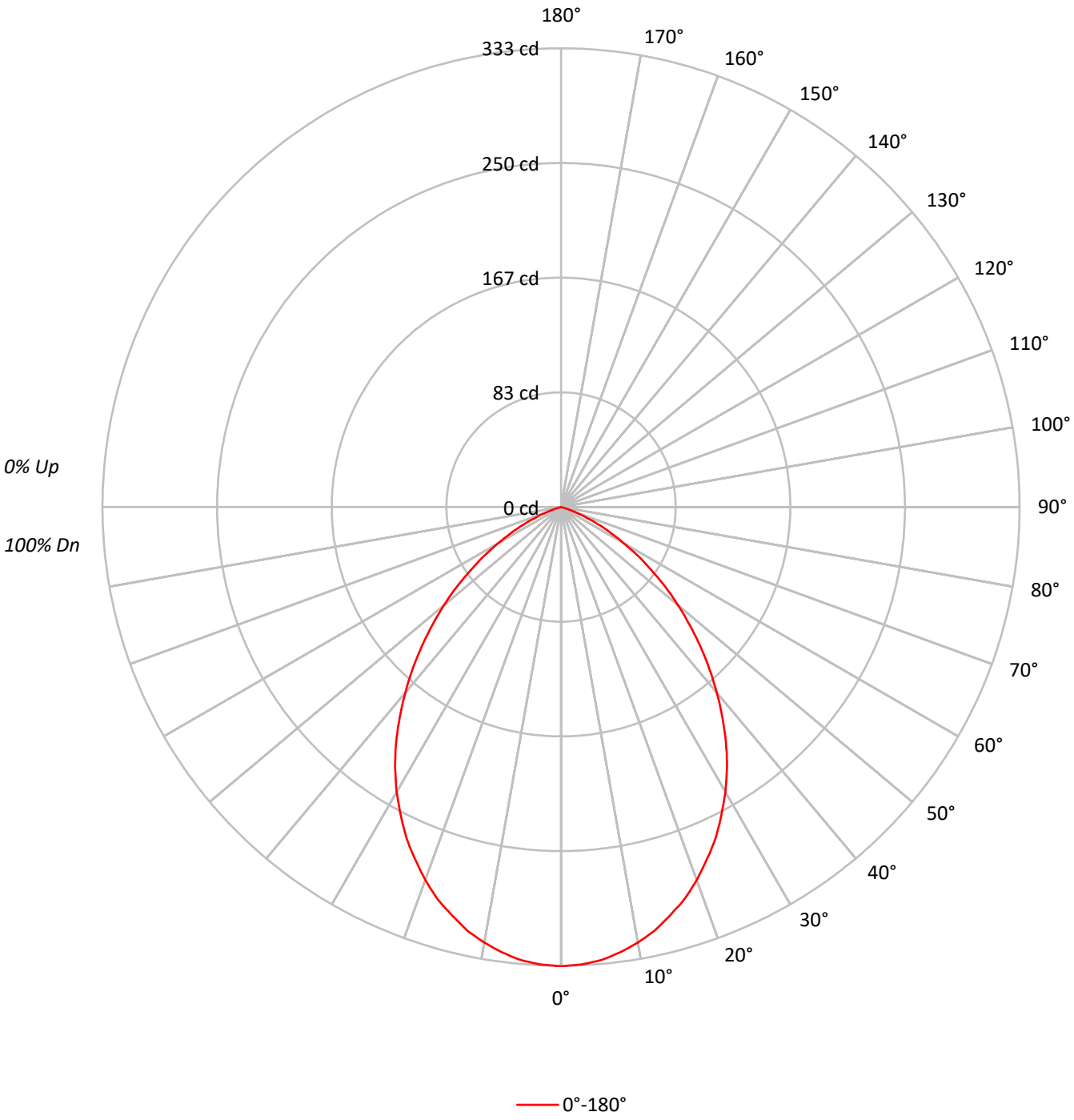
Scaled Data Report

TEST NUMBER: P995472
CATALOG NUMBER: LTC305FS5BMB-940

Luminous Intensity Polar Plot



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Scaled Data Report

TEST NUMBER: P995472
CATALOG NUMBER: LTC305FS5BMB-940

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	79	72	67	87	78	71	66	76	70	65	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	57	66	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	42	51	46	42	40
9	64	51	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	37
10	60	48	41	36	59	47	40	36	46	40	36	46	40	36	45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	114232
5°	113602
10°	111714
15°	108755
20°	105046
25°	100371
30°	94437
35°	87376
40°	78719
45°	69290
50°	59220
55°	47967
60°	35976
65°	24160
70°	11320
75°	1324
80°	0
85°	0

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Scaled Data Report

TEST NUMBER: P995472
CATALOG NUMBER: LTC305FS5BMB-940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	5.3
10°-20°	86.3	14.8
20°-30°	121.7	20.8
30°-40°	130.0	22.2
40°-50°	110.2	18.8
50°-60°	72.3	12.4
60°-70°	30.1	5.2
70°-80°	3.1	0.5
80°-90°	0.0	0.0
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°	239.3	40.9
0°-40°	369.3	63.1
0°-60°	551.8	94.3
0°-90°	585.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	585.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	333	
5°	330	31
15°	307	86
25°	266	122
35°	209	130
45°	143	110
55°	80	72
65°	30	30
75°	1	3
85°	0	0
90°	0	

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Scaled Data Report

TEST NUMBER: P995472
CATALOG NUMBER: LTC305FS5BMB-940

CANDELA DISTRIBUTION (FULL):

	0°
0°	333.4
2.5°	332.4
5°	330.3
7.5°	326.2
10°	321.1
12.5°	314.9
15°	306.6
17.5°	298.4
20°	288.1
22.5°	276.8
25°	265.5
27.5°	252.1
30°	238.7
32.5°	224.3
35°	208.9
37.5°	192.4
40°	176.0
42.5°	159.5
45°	143.0
47.5°	126.6
50°	111.1
52.5°	95.7
55°	80.3
57.5°	66.9
60°	52.5
62.5°	41.2
65°	29.8
67.5°	19.6
70°	11.3
72.5°	5.1
75°	1.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

Cooper Lighting Solutions Photometric Lab
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TEST NUMBER: P995472
CATALOG NUMBER: LTC305FS5BMB-940

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	24.19	25.57	24.56	25.89	26.20	24.19	25.57	24.56	25.89	26.20
	3H	24.43	25.65	24.81	25.98	26.35	24.43	25.65	24.81	25.98	26.35
	4H	24.37	25.50	24.77	25.85	26.24	24.37	25.50	24.77	25.85	26.24
	6H	24.29	25.33	24.71	25.70	26.10	24.29	25.33	24.71	25.70	26.10
	8H	24.25	25.24	24.68	25.63	26.03	24.25	25.24	24.68	25.63	26.03
	12H	24.21	25.15	24.65	25.54	25.97	24.21	25.15	24.65	25.54	25.97
4H	2H	24.33	25.46	24.73	25.81	26.20	24.33	25.46	24.73	25.81	26.20
	3H	24.60	25.52	25.01	25.92	26.32	24.60	25.52	25.01	25.92	26.32
	4H	24.52	25.34	24.96	25.76	26.20	24.52	25.34	24.96	25.76	26.20
	6H	24.45	25.15	24.91	25.59	26.06	24.45	25.15	24.91	25.59	26.06
	8H	24.39	25.05	24.86	25.49	25.96	24.39	25.05	24.86	25.49	25.96
	12H	24.35	24.93	24.83	25.41	25.88	24.35	24.93	24.83	25.41	25.88
8H	4H	24.40	25.06	24.87	25.51	25.98	24.40	25.06	24.87	25.51	25.98
	6H	24.31	24.84	24.81	25.34	25.82	24.31	24.84	24.81	25.34	25.82
	8H	24.24	24.72	24.77	25.24	25.73	24.24	24.72	24.77	25.24	25.73
	12H	24.20	24.62	24.71	25.12	25.69	24.20	24.62	24.71	25.12	25.69
12H	4H	24.36	24.94	24.85	25.42	25.89	24.36	24.94	24.85	25.42	25.89
	6H	24.24	24.72	24.76	25.24	25.73	24.24	24.72	24.76	25.24	25.73
	8H	24.20	24.62	24.71	25.12	25.69	24.20	24.62	24.71	25.12	25.69

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

Report Prepared for

Cooper Lighting Solutions

Halo Recessed

Report Number: SP2-2504-410-4

Test Date: 05/22/2025

Luminaire Tested: LTT5607FSMBSS-4000K

Data in this report applies to families of products including LTT5607FSMBSS-4000K

The results of this test have not been influenced by sources from within Eaton or from external interests.

Report Generated By FNC07603 / LDUCLS01DT447
Version: v7.04

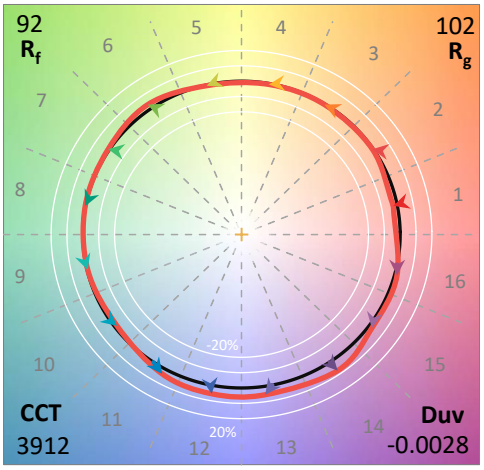
Test Information

Test Method:	LM-79-2019
Report Number:	SP2-2504-410-4
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP2 - 165CM SPHERE
Measurement Geometry:	4π
Issue Date:	05/22/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Halo Recessed
Catalog Number:	**LTT5607FSMBSS-4000K**
Description:	HALO LT BLACK LED TRIM 6 INCH SMOOTH

Spectral Parameters

CCT (K):	3912
CIE u':	0.2283
CIE v':	0.4998
Duv:	-0.0028
CIE x:	0.3824
CIE y:	0.3720
CIE z:	0.2456
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	581
Purity:	26.37733
Rf:	92
Rg:	102.2

CRI (Ra):	96.7				
R1:	98.8	R9:	89.6		
R2:	97.8	R10:	91.8		
R3:	92.4	R11:	94.4		
R4:	96.5	R12:	77.0		
R5:	98.7	R13:	99.7		
R6:	94.9	R14:	94.4		
R7:	97.2	R15:	98.9		
R8:	97.1				



Test Conditions

Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.7

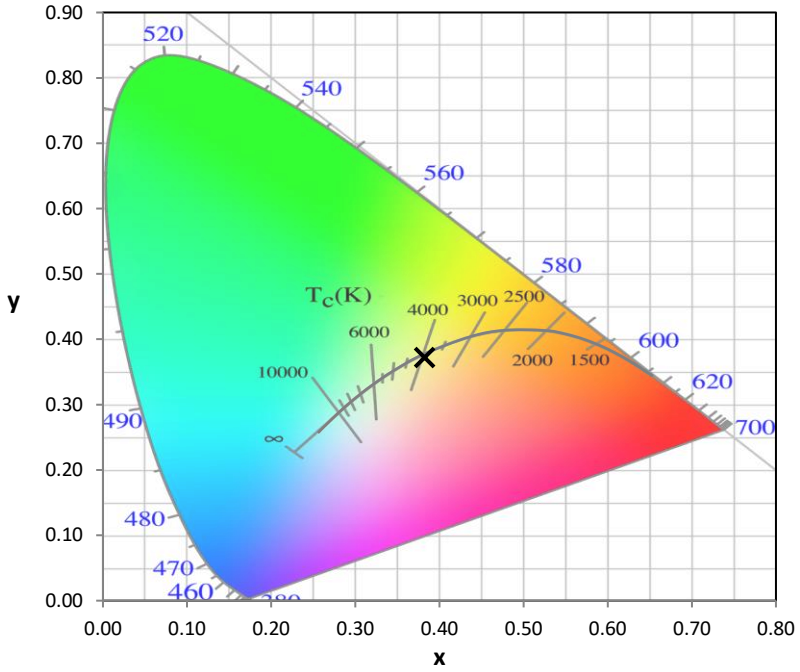
REPORT NUMBER: SP2-2504-410-4

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN2187	1/6/2025	7/6/2025
Power Meter	INXT2011002	1/21/2025	1/21/2026
AC Power Source	IN0458	10/22/2024	10/22/2025
DC Power Source	IN0212	10/22/2024	10/22/2025
Sphere Thermometer	IN4036B	10/22/2024	10/22/2025
Room Thermometer	IN0046	10/22/2024	10/22/2025

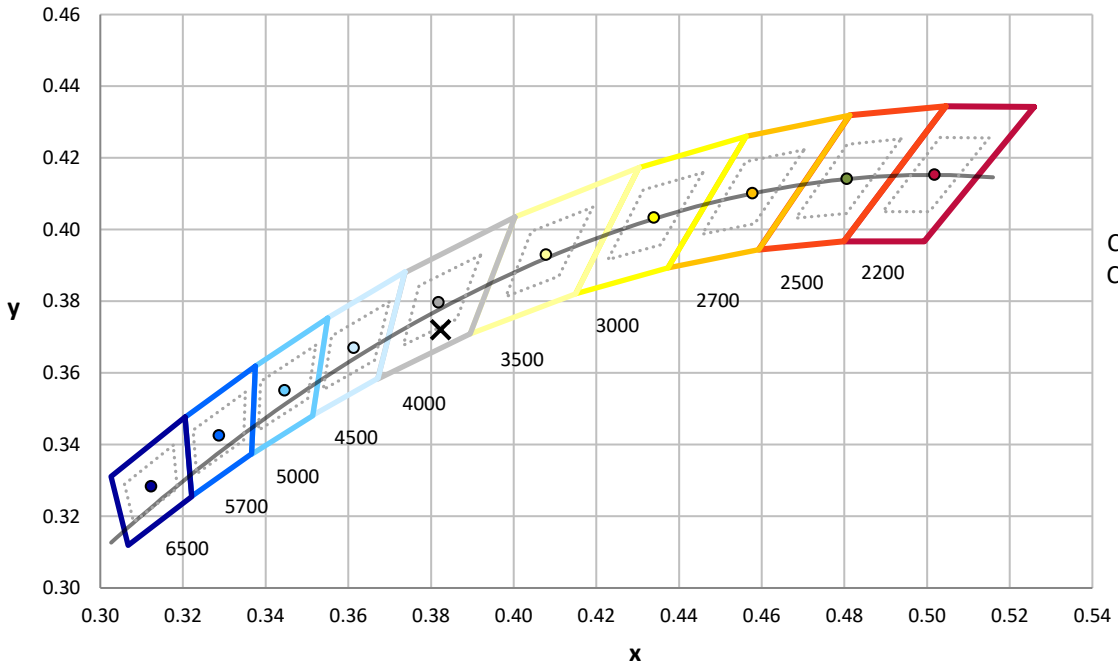
Sample Number	Condition	Description
P2504-410-LM.1	Good	HALO LT BLACK LED TRIM 6 INCH SMOOTH

REPORT NUMBER: SP2-2504-410-4

CIE 1931 Chromaticity Diagram



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

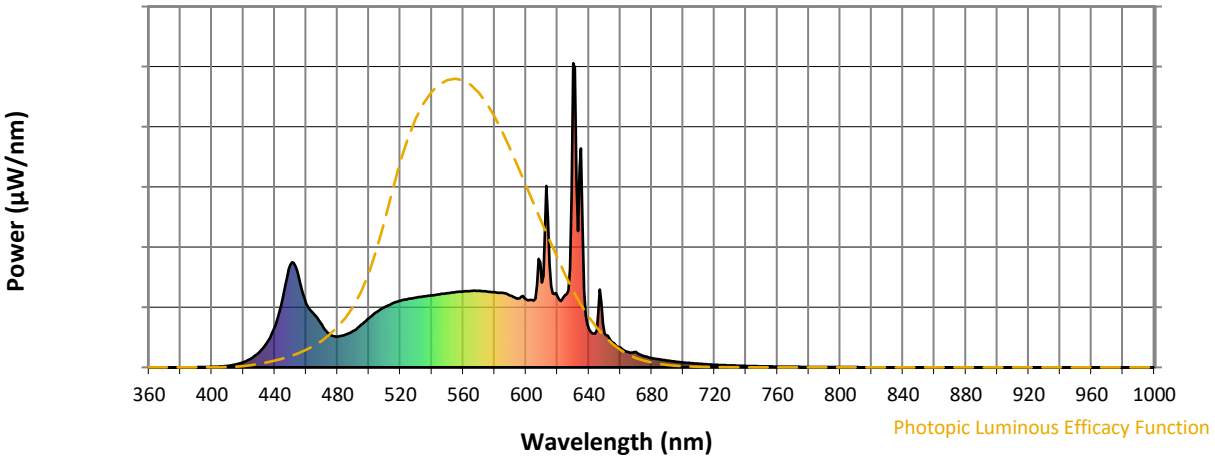


CCT = 3912K
CIE x = 0.3824
CIE y = 0.3720
Duv = -0.0028

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP2-2504-410-4

Photopic Flux vs. Wavelength

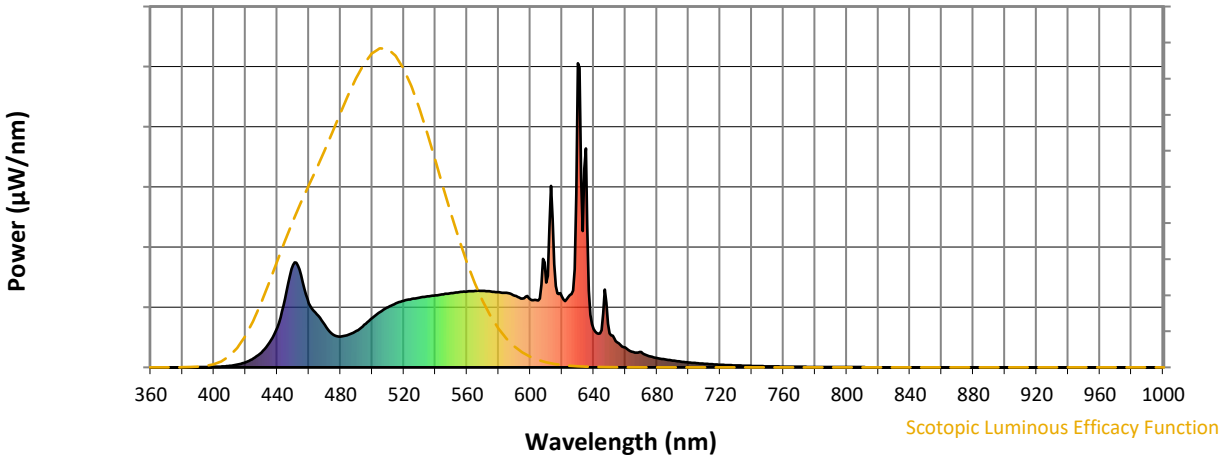


Photopic Lumens: NR

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	120	NR	620	233	NR	750	3	NR	880	0	NR
365	0	NR	495	140	NR	625	238	NR	755	3	NR	885	0	NR
370	0	NR	500	162	NR	630	1000	NR	760	3	NR	890	0	NR
375	0	NR	505	182	NR	635	720	NR	765	2	NR	895	0	NR
380	0	NR	510	198	NR	640	126	NR	770	2	NR	900	0	NR
385	0	NR	515	211	NR	645	122	NR	775	2	NR	905	0	NR
390	1	NR	520	219	NR	650	111	NR	780	1	NR	910	0	NR
395	1	NR	525	225	NR	655	82	NR	785	1	NR	915	0	NR
400	2	NR	530	230	NR	660	65	NR	790	1	NR	920	0	NR
405	3	NR	535	233	NR	665	50	NR	795	1	NR	925	0	NR
410	5	NR	540	237	NR	670	50	NR	800	1	NR	930	0	NR
415	9	NR	545	240	NR	675	37	NR	805	1	NR	935	0	NR
420	17	NR	550	244	NR	680	31	NR	810	1	NR	940	0	NR
425	29	NR	555	247	NR	685	26	NR	815	0	NR	945	0	NR
430	49	NR	560	249	NR	690	22	NR	820	0	NR	950	0	NR
435	81	NR	565	251	NR	695	19	NR	825	0	NR	955	0	NR
440	132	NR	570	251	NR	700	16	NR	830	0	NR	960	0	NR
445	226	NR	575	250	NR	705	14	NR	835	0	NR	965	0	NR
450	337	NR	580	247	NR	710	12	NR	840	0	NR	970	0	NR
455	303	NR	585	245	NR	715	10	NR	845	0	NR	975	0	NR
460	211	NR	590	236	NR	720	9	NR	850	0	NR	980	0	NR
465	175	NR	595	226	NR	725	7	NR	855	0	NR	985	0	NR
470	140	NR	600	223	NR	730	6	NR	860	0	NR	990	0	NR
475	108	NR	605	220	NR	735	5	NR	865	0	NR	995	0	NR
480	101	NR	610	279	NR	740	5	NR	870	0	NR	1000	0	NR
485	108	NR	615	339	NR	745	4	NR	875	0	NR			

REPORT NUMBER: SP2-2504-410-4

Scotopic Flux vs. Wavelength

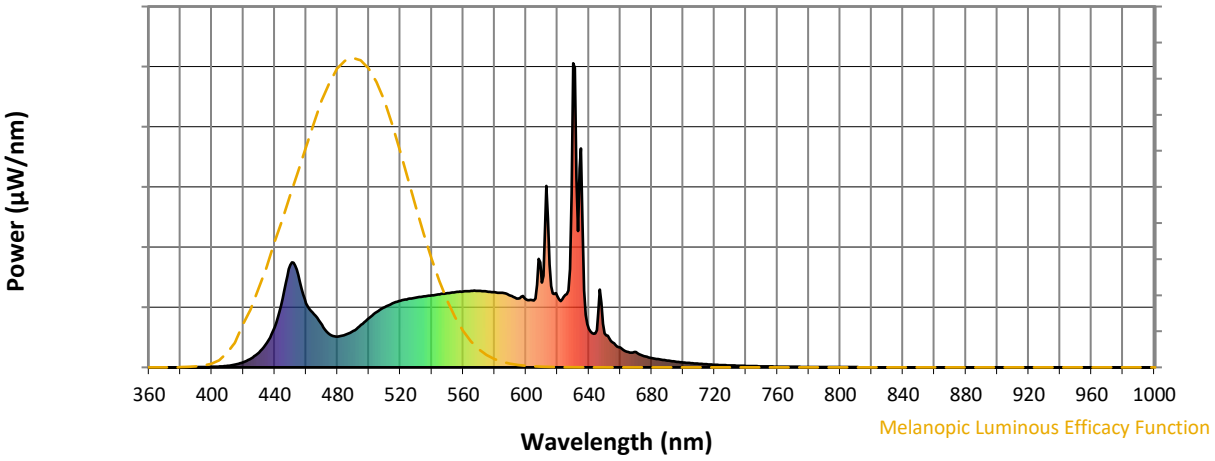


Scotopic Lumens: NR **S/P: 1.78**

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	120	NR	620	233	NR	750	3	NR	880	0	NR
365	0	NR	495	140	NR	625	238	NR	755	3	NR	885	0	NR
370	0	NR	500	162	NR	630	1000	NR	760	3	NR	890	0	NR
375	0	NR	505	182	NR	635	720	NR	765	2	NR	895	0	NR
380	0	NR	510	198	NR	640	126	NR	770	2	NR	900	0	NR
385	0	NR	515	211	NR	645	122	NR	775	2	NR	905	0	NR
390	1	NR	520	219	NR	650	111	NR	780	1	NR	910	0	NR
395	1	NR	525	225	NR	655	82	NR	785	1	NR	915	0	NR
400	2	NR	530	230	NR	660	65	NR	790	1	NR	920	0	NR
405	3	NR	535	233	NR	665	50	NR	795	1	NR	925	0	NR
410	5	NR	540	237	NR	670	50	NR	800	1	NR	930	0	NR
415	9	NR	545	240	NR	675	37	NR	805	1	NR	935	0	NR
420	17	NR	550	244	NR	680	31	NR	810	1	NR	940	0	NR
425	29	NR	555	247	NR	685	26	NR	815	0	NR	945	0	NR
430	49	NR	560	249	NR	690	22	NR	820	0	NR	950	0	NR
435	81	NR	565	251	NR	695	19	NR	825	0	NR	955	0	NR
440	132	NR	570	251	NR	700	16	NR	830	0	NR	960	0	NR
445	226	NR	575	250	NR	705	14	NR	835	0	NR	965	0	NR
450	337	NR	580	247	NR	710	12	NR	840	0	NR	970	0	NR
455	303	NR	585	245	NR	715	10	NR	845	0	NR	975	0	NR
460	211	NR	590	236	NR	720	9	NR	850	0	NR	980	0	NR
465	175	NR	595	226	NR	725	7	NR	855	0	NR	985	0	NR
470	140	NR	600	223	NR	730	6	NR	860	0	NR	990	0	NR
475	108	NR	605	220	NR	735	5	NR	865	0	NR	995	0	NR
480	101	NR	610	279	NR	740	5	NR	870	0	NR	1000	0	NR
485	108	NR	615	339	NR	745	4	NR	875	0	NR			

REPORT NUMBER: SP2-2504-410-4

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.7**

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	120	NR	620	233	NR	750	3	NR	880	0	NR
365	0	NR	495	140	NR	625	238	NR	755	3	NR	885	0	NR
370	0	NR	500	162	NR	630	1000	NR	760	3	NR	890	0	NR
375	0	NR	505	182	NR	635	720	NR	765	2	NR	895	0	NR
380	0	NR	510	198	NR	640	126	NR	770	2	NR	900	0	NR
385	0	NR	515	211	NR	645	122	NR	775	2	NR	905	0	NR
390	1	NR	520	219	NR	650	111	NR	780	1	NR	910	0	NR
395	1	NR	525	225	NR	655	82	NR	785	1	NR	915	0	NR
400	2	NR	530	230	NR	660	65	NR	790	1	NR	920	0	NR
405	3	NR	535	233	NR	665	50	NR	795	1	NR	925	0	NR
410	5	NR	540	237	NR	670	50	NR	800	1	NR	930	0	NR
415	9	NR	545	240	NR	675	37	NR	805	1	NR	935	0	NR
420	17	NR	550	244	NR	680	31	NR	810	1	NR	940	0	NR
425	29	NR	555	247	NR	685	26	NR	815	0	NR	945	0	NR
430	49	NR	560	249	NR	690	22	NR	820	0	NR	950	0	NR
435	81	NR	565	251	NR	695	19	NR	825	0	NR	955	0	NR
440	132	NR	570	251	NR	700	16	NR	830	0	NR	960	0	NR
445	226	NR	575	250	NR	705	14	NR	835	0	NR	965	0	NR
450	337	NR	580	247	NR	710	12	NR	840	0	NR	970	0	NR
455	303	NR	585	245	NR	715	10	NR	845	0	NR	975	0	NR
460	211	NR	590	236	NR	720	9	NR	850	0	NR	980	0	NR
465	175	NR	595	226	NR	725	7	NR	855	0	NR	985	0	NR
470	140	NR	600	223	NR	730	6	NR	860	0	NR	990	0	NR
475	108	NR	605	220	NR	735	5	NR	865	0	NR	995	0	NR
480	101	NR	610	279	NR	740	5	NR	870	0	NR	1000	0	NR
485	108	NR	615	339	NR	745	4	NR	875	0	NR			

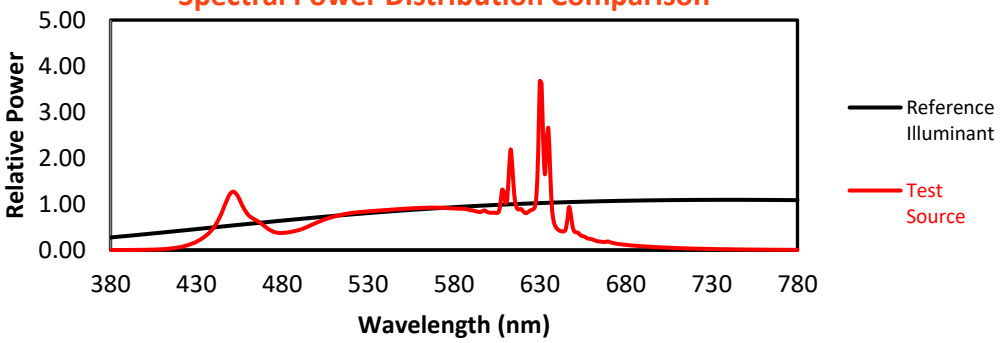
REPORT NUMBER: SP2-2504-410-4

TM-30-18

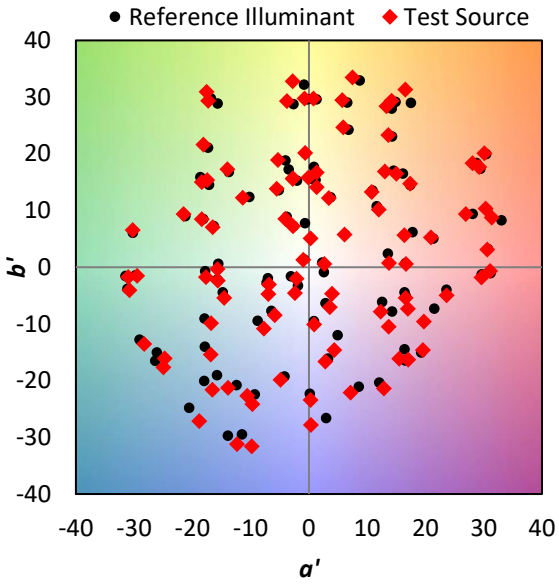
Summary

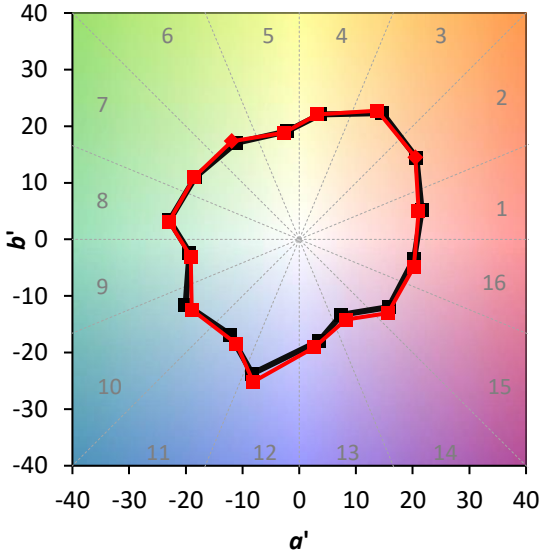
R_f = 92
R_g = 102.2
CIE R_a = 96.7
R_9 = 89.6

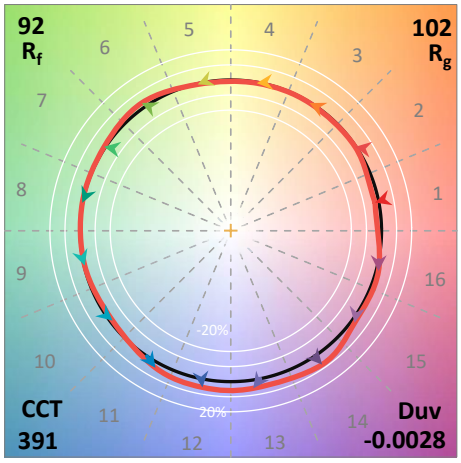
Spectral Power Distribution Comparison

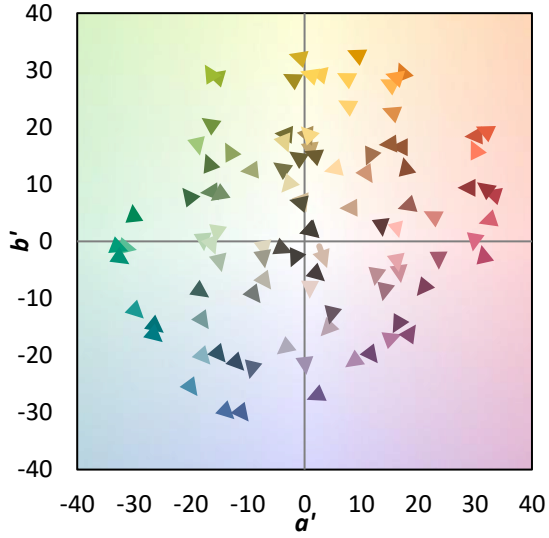


Color Vector Graphics









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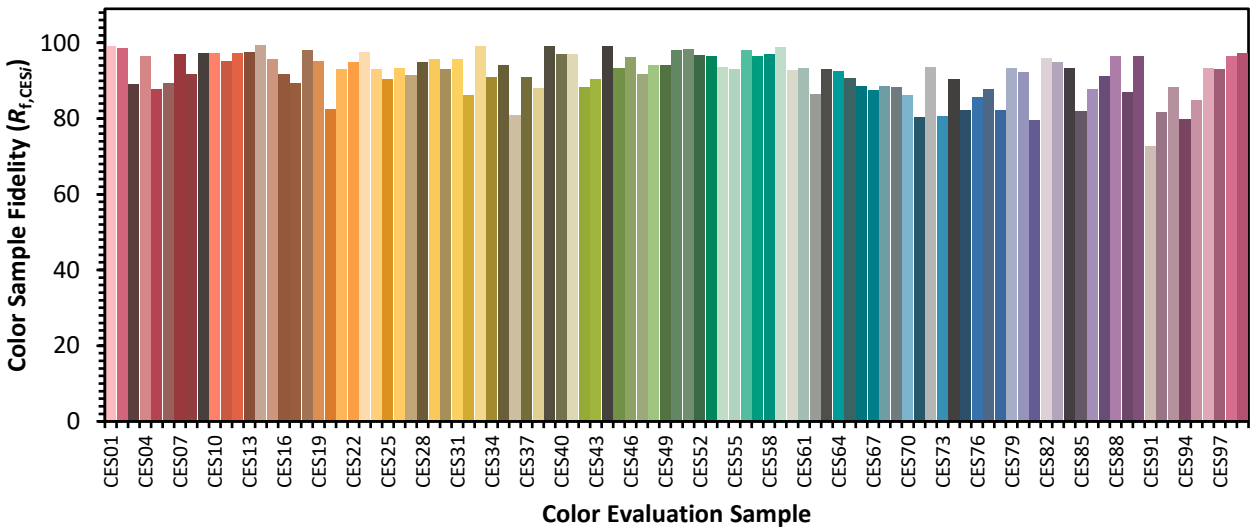
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 93	CES51 = 98	CES76 = 86
CES02 = 62	CES27 = 92	CES52 = 97	CES77 = 88
CES03 = 31	CES28 = 95	CES53 = 97	CES78 = 82
CES04 = 69	CES29 = 96	CES54 = 94	CES79 = 93
CES05 = 49	CES30 = 93	CES55 = 93	CES80 = 92
CES06 = 50	CES31 = 96	CES56 = 98	CES81 = 80
CES07 = 43	CES32 = 86	CES57 = 97	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 97	CES83 = 95
CES09 = 29	CES34 = 91	CES59 = 99	CES84 = 93
CES10 = 74	CES35 = 94	CES60 = 93	CES85 = 82
CES11 = 57	CES36 = 81	CES61 = 93	CES86 = 88
CES12 = 63	CES37 = 91	CES62 = 86	CES87 = 91
CES13 = 43	CES38 = 88	CES63 = 93	CES88 = 96
CES14 = 74	CES39 = 99	CES64 = 92	CES89 = 87
CES15 = 71	CES40 = 97	CES65 = 91	CES90 = 96
CES16 = 47	CES41 = 97	CES66 = 89	CES91 = 73
CES17 = 49	CES42 = 88	CES67 = 87	CES92 = 82
CES18 = 56	CES43 = 90	CES68 = 89	CES93 = 88
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 80
CES20 = 66	CES45 = 93	CES70 = 86	CES95 = 85
CES21 = 85	CES46 = 96	CES71 = 80	CES96 = 93
CES22 = 78	CES47 = 92	CES72 = 94	CES97 = 93
CES23 = 91	CES48 = 94	CES73 = 81	CES98 = 96
CES24 = 90	CES49 = 94	CES74 = 91	CES99 = 97
CES25 = 71	CES50 = 98	CES75 = 82	



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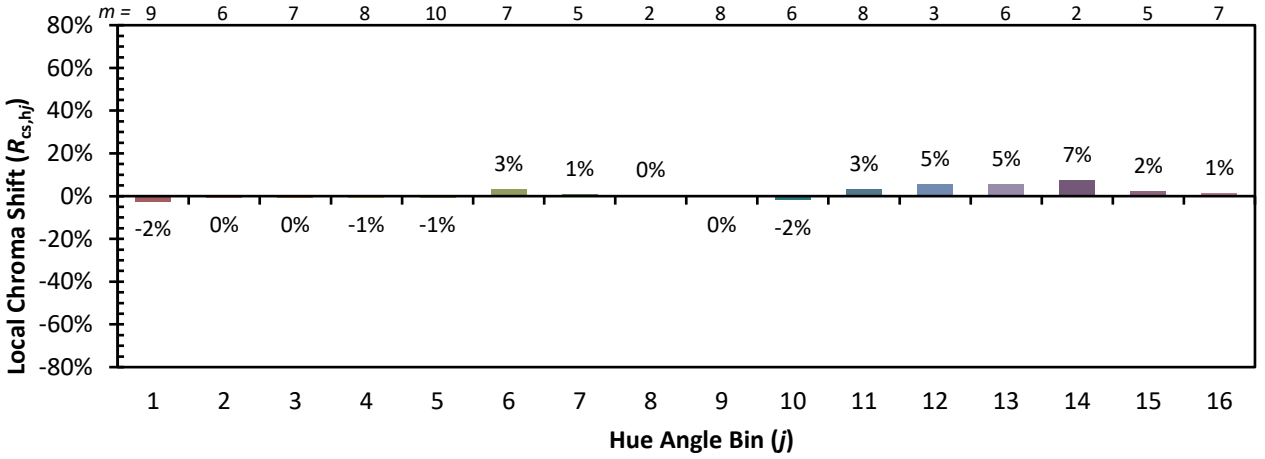
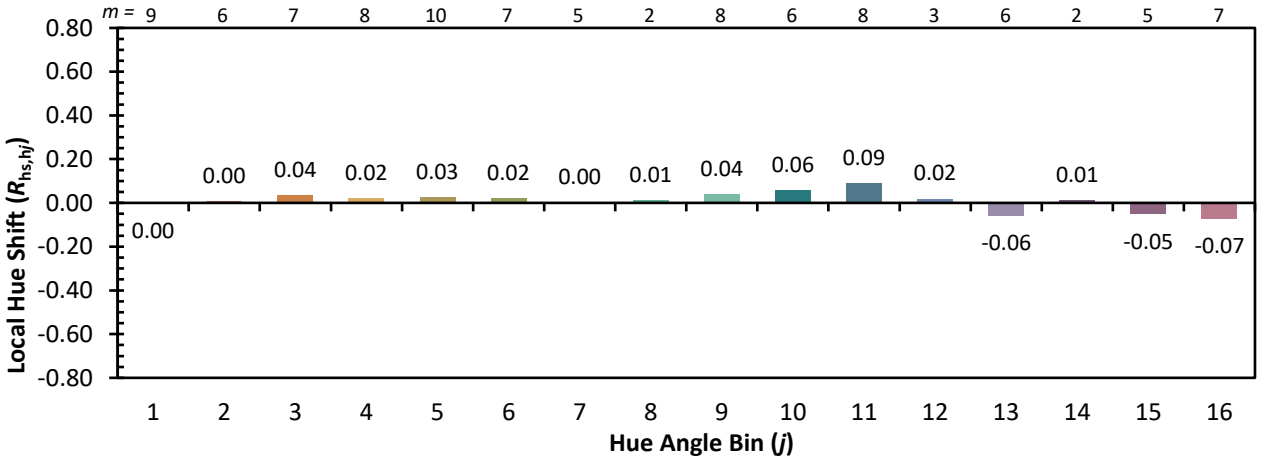
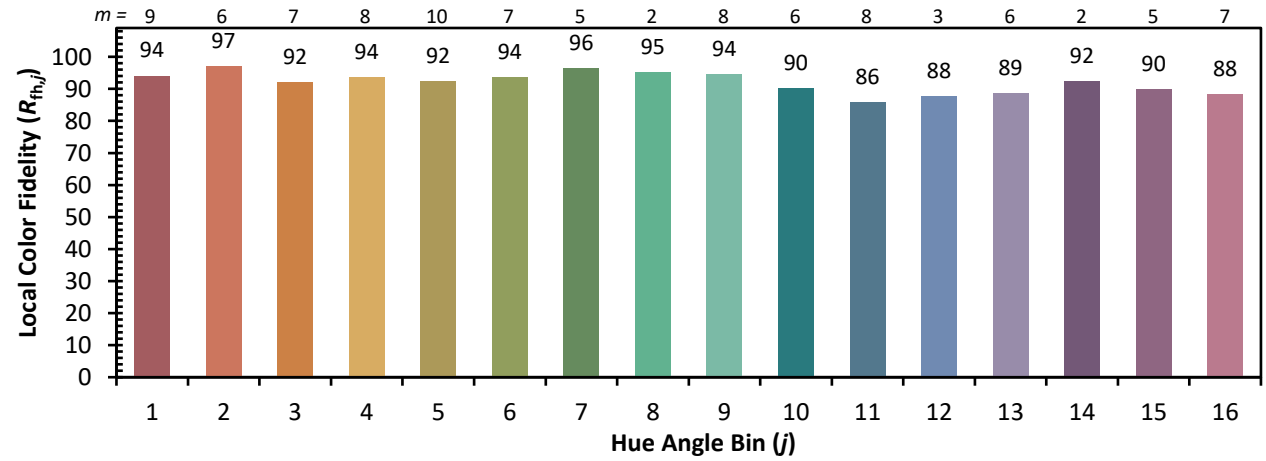
Color Rendition by Hue-Angle Bin







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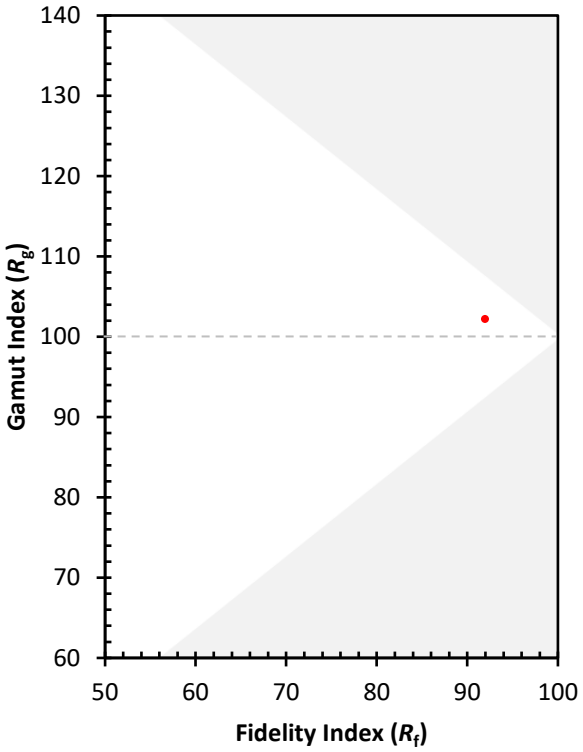
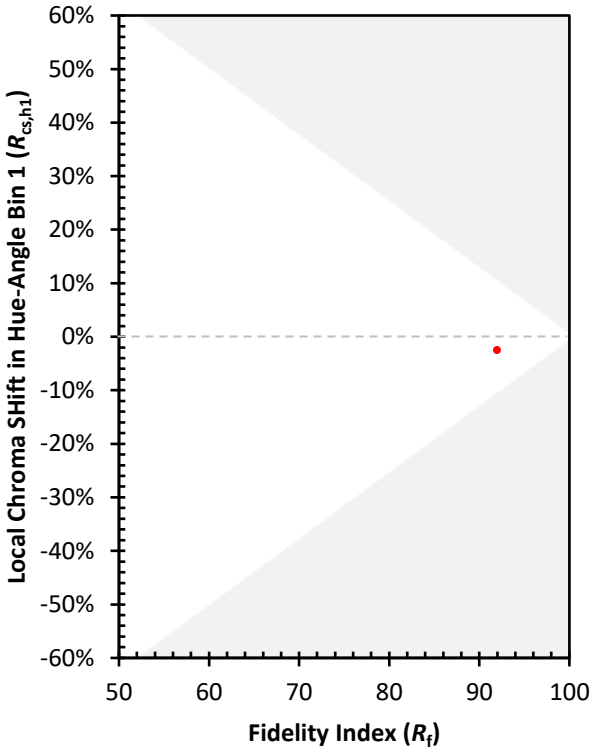
Measure Comparisons





(END OF REPORT)