

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: METALUX

Report Number: P828363

Luminaire Tested: **OHBL-30HE-A-UNV-L940-CD-UPL15**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828363
REPORT IS A COMBINATION OF REPORTS P826119 AND G3-2310-221-10
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-30HE-A-UNV-L940-CD-UPL15
Description:
Light Source: -
Ballast/Driver: -

Summary

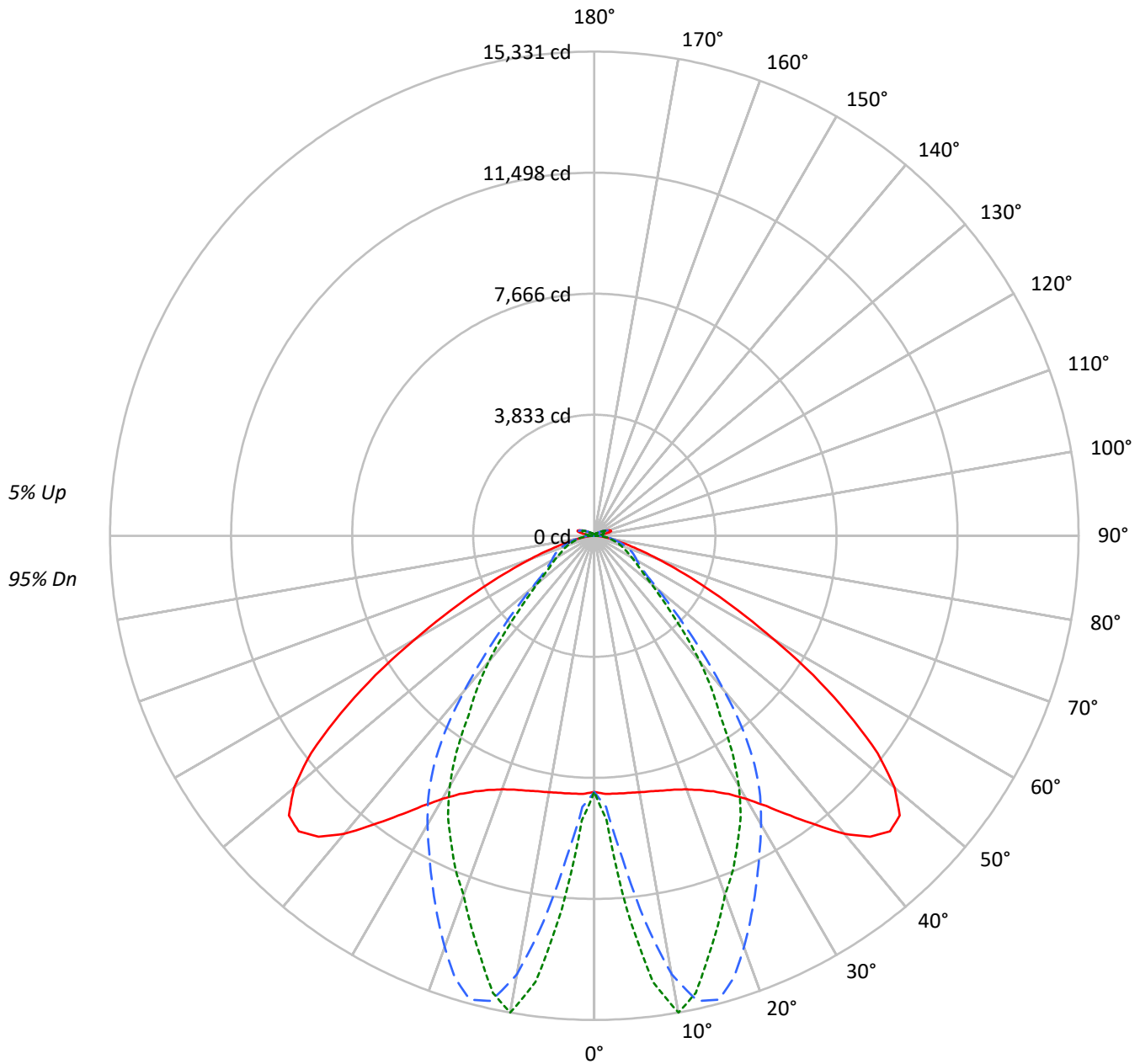
Lumens per Lamp: N/A
Luminaire Lumens: 27355.5 lumens
Efficiency: N/A
Efficacy: 157.1 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 174.1
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: 25 FT

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CATALOG NUMBER: OHBL-30HE-A-UNV-L940-CD-UPL15

Luminous Intensity Polar Plot





TEST NUMBER: P828363

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	118	118	118	118	115	115	115	115	108	108	108	103	103	103	98	98	98	95		
1	109	105	102	99	106	103	100	97	98	95	93	93	91	89	89	87	86	83		
2	101	94	88	84	98	92	87	82	88	83	80	84	80	77	80	77	75	73		
3	94	85	78	72	91	83	76	71	79	74	69	76	71	68	73	69	66	64		
4	87	76	69	63	84	75	68	62	72	66	61	69	64	60	66	62	58	56		
5	81	69	61	56	78	68	61	55	65	59	54	63	57	53	61	56	52	50		
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	56	51	47	45		
7	70	58	50	44	68	57	49	44	55	48	43	53	47	43	51	46	42	40		
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	37		
9	61	49	42	37	60	48	41	36	47	40	36	46	40	36	44	39	35	33		
10	58	46	38	33	56	45	38	33	44	37	33	42	37	33	41	36	32	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12831	12831	12831
5°	12904	16145	18808
10°	13028	22269	24430
15°	13347	24270	22423
20°	13908	22529	20039
25°	14933	20271	18330
30°	16663	18263	16299
35°	19605	15994	12988
40°	23595	12187	10337
45°	27092	8309	7357
50°	27498	5704	5442
55°	23835	4494	4445
60°	17834	4210	3999
65°	12251	4229	3788
70°	7856	4088	3669
75°	4744	3795	3510
80°	2811	3350	3622
85°	1371	2903	3358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1059.2	3.9
10°-20°	3738.3	13.7
20°-30°	5508.6	20.1
30°-40°	5788.7	21.2
40°-50°	4429.4	16.2
50°-60°	2674.7	9.8
60°-70°	1632.2	6.0
70°-80°	890.9	3.3
80°-90°	316.0	1.2
90°-100°	126.6	0.5
100°-110°	438.7	1.6
110°-120°	377.0	1.4
120°-130°	180.9	0.7
130°-140°	90.4	0.3
140°-150°	52.5	0.2
150°-160°	30.6	0.1
160°-170°	15.9	0.1
170°-180°	4.8	0.0
0°-30°	10306.1	37.7
0°-40°	16094.8	58.8
0°-60°	23198.9	84.8
0°-90°	26038.0	95.2
90°-120°	942.3	3.4
90°-150°	1266.2	4.6
90°-180°	1318.0	4.8
0°-180°	27355.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8113	8113	8113	8113	8113	
5°	8194	8792	10256	11452	11893	783
15°	8354	13012	15207	14191	13857	2375
25°	8927	15102	12141	10992	10720	4172
35°	10814	12094	8845	7366	6935	6860
45°	13235	6901	4074	3585	3434	10000
55°	9788	2340	1855	1719	1714	8649
65°	3924	1481	1364	1168	1108	4021
75°	1045	921	845	697	669	1202
85°	156	286	337	307	278	192
90°	3	19	25	33	37	10
95°	24	63	93	124	144	87
105°	550	542	462	327	300	521
115°	379	379	383	381	373	383
125°	184	194	199	197	196	173
135°	109	112	115	116	117	86
145°	79	81	83	84	84	51
155°	64	64	66	66	67	30
165°	55	55	56	56	56	16
175°	50	50	50	50	50	5
180°	50	50	50	50	50	



TEST NUMBER: P828363

CATALOG NUMBER: OHBL-30HE-A-UNV-L940-CD-UPL15

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8113.1	8113.1	8113.1	8113.1	8113.1
2.5°	8179.6	8263.0	8592.2	8933.8	9016.9
5°	8194.5	8791.5	10255.9	11451.5	11893.4
7.5°	8211.9	9647.7	12317.2	13781.1	14249.8
10°	8244.9	10730.3	14103.3	15154.3	15331.4
12.5°	8286.0	11877.4	15086.2	15047.8	14824.5
15°	8354.2	13011.9	15207.2	14190.6	13856.9
17.5°	8425.9	13971.8	14679.1	13257.5	12967.1
20°	8542.4	14684.3	13857.6	12428.2	12098.0
22.5°	8710.4	15076.1	12996.3	11678.0	11462.8
25°	8927.2	15101.5	12140.7	10991.7	10720.2
27.5°	9217.7	14751.1	11320.8	10319.2	10032.5
30°	9612.9	14080.3	10558.9	9508.2	9152.6
32.5°	10149.7	13114.9	9773.3	8529.2	8130.5
35°	10813.5	12093.5	8844.8	7365.8	6935.1
37.5°	11537.9	10959.3	7717.9	6335.6	6084.8
40°	12317.2	9790.7	6382.2	5371.6	5192.1
42.5°	12925.3	8520.1	5141.6	4464.0	4273.0
45°	13235.3	6900.7	4074.3	3585.2	3434.5
47.5°	13114.5	5356.6	3229.9	2848.6	2803.4
50°	12410.0	3955.3	2585.6	2346.6	2327.9
52.5°	11308.6	2948.1	2135.8	1987.9	1955.6
55°	9787.9	2340.0	1854.7	1719.0	1713.8
57.5°	8217.8	1987.9	1683.5	1578.5	1541.9
60°	6543.0	1772.5	1553.7	1435.1	1361.0
62.5°	5128.8	1621.9	1458.4	1297.3	1228.1
65°	3924.0	1481.4	1364.5	1167.6	1108.1
67.5°	2925.2	1347.5	1249.7	1031.2	996.4
70°	2131.3	1210.0	1118.9	917.1	889.6
72.5°	1518.9	1072.9	988.0	809.9	779.6
75°	1044.7	921.3	845.1	697.2	669.0
77.5°	704.9	766.4	704.2	595.2	583.4
80°	470.7	607.8	569.5	504.5	497.1
82.5°	285.6	441.2	449.5	410.2	390.4
85°	155.5	285.6	336.7	306.8	278.3
87.5°	60.9	158.3	232.1	208.4	196.2
90°	2.6	19.1	25.2	33.0	37.4
92.5°	8.7	24.3	40.0	55.6	64.3
95°	24.3	62.6	93.0	123.5	143.5
97.5°	144.3	162.6	177.4	204.3	220.0
100°	293.0	316.5	260.0	273.0	279.1
102.5°	471.2	455.6	336.5	302.6	297.4
105°	550.4	542.5	462.5	326.9	300.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.5	448.6	440.8	425.2	409.5
115°	379.1	379.1	382.6	380.8	373.0
117.5°	325.2	323.4	326.9	325.2	323.4
120°	271.3	274.7	275.6	273.9	273.0
122.5°	224.3	231.3	235.6	233.0	232.1
125°	183.5	193.9	199.1	197.4	196.5
127.5°	156.5	162.6	169.5	169.5	167.8
130°	135.6	140.0	145.2	146.1	146.1
132.5°	120.9	124.3	128.7	129.5	130.4
135°	108.7	112.2	114.8	116.5	117.4
137.5°	100.0	101.7	105.2	106.1	106.9
140°	91.3	93.9	96.5	97.4	98.2
142.5°	85.2	86.9	88.7	90.4	90.4
145°	79.1	80.9	82.6	84.3	84.3
147.5°	74.8	76.5	78.2	78.2	79.1
150°	70.4	72.2	73.0	73.9	73.9
152.5°	66.9	67.8	69.6	69.6	70.4
155°	63.5	64.3	66.1	66.1	66.9
157.5°	60.9	61.7	62.6	63.5	63.5
160°	58.3	59.1	60.0	60.0	60.9
162.5°	56.5	57.4	57.4	58.3	58.3
165°	54.8	54.8	55.6	55.6	55.6
167.5°	53.0	53.0	53.9	53.9	54.8
170°	51.3	52.2	52.2	52.2	53.0
172.5°	50.4	50.4	51.3	51.3	51.3
175°	49.6	49.6	49.6	50.4	50.4
177.5°	48.7	49.6	49.6	49.6	49.6
180°	49.6	49.6	49.6	49.6	49.6



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - 90°-270°







107.5°	550.4	551.2	510.4	393.0	329.5
110°	507.8	512.1	489.5	445.2	391.2



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

Report Prepared for

Cooper Lighting Solutions

METALUX

Report Number: SP1-2307-100-8

Test Date: 08/01/2023

Luminaire Tested: OHB-15SE-N-UNV-L940-CD

Data in this report applies to families of products including OHB-15SE-N-UNV-L940-CD.

Test Information

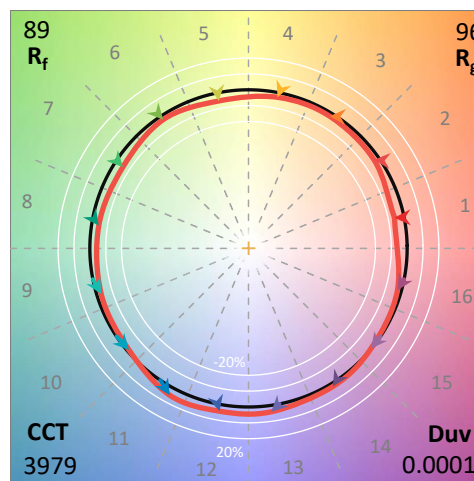
Test Method: LM-79-2019
 Report Number: SP1-2307-100-8
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/04/2023
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: METALUX
 Catalog Number: **OHB-15SE-N-UNV-L940-CD**
 Description: 15000 LUMEN OHB SE LED LUMINAIRE WITH 90CRI, 4000K LEDS AND NARROW LENS

LENS

Spectral Parameters

CCT (K): 3979
 CIE u': 0.2254
 CIE v': 0.5020
 Duv: 0.0001
 CIE x: 0.3813
 CIE y: 0.3773
 CIE z: 0.2414
 Peak Wavelength (nm): 455
 Dominant Wavelength (nm): 579
 Purity: 27.8
 Rf: 88.6
 Rg: 96.2

CRI (Ra): 91.5
 R1: 91.7
 R2: 96.4
 R3: 97.6
 R4: 89.2
 R5: 90.3
 R6: 93.0
 R7: 91.6
 R8: 81.9
 R9: 57.0
 R10: 89.6
 R11: 89.1
 R12: 69.6
 R13: 93.4
 R14: 98.9



Test Conditions

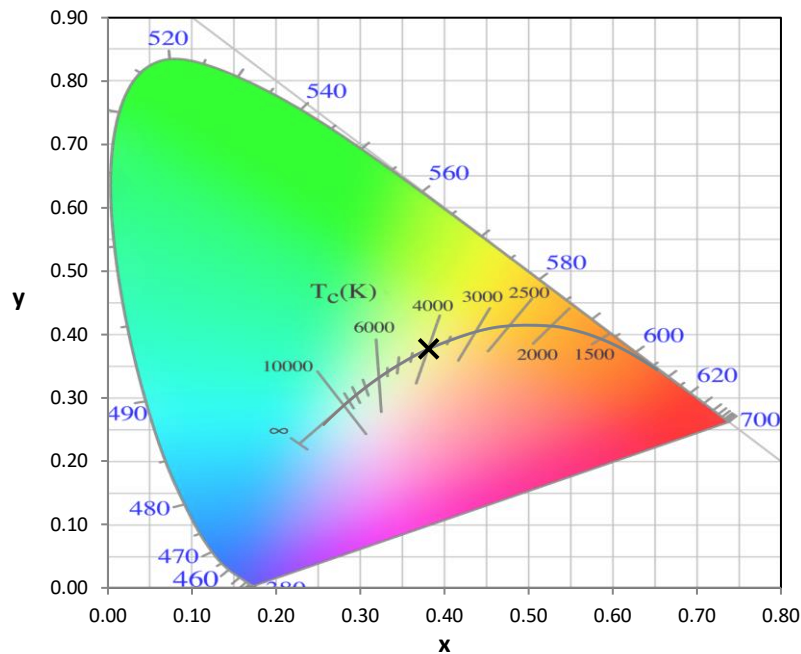
Stabilization Time: 23M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 25.7/57%
 Sphere Temperature (°C): 25.2

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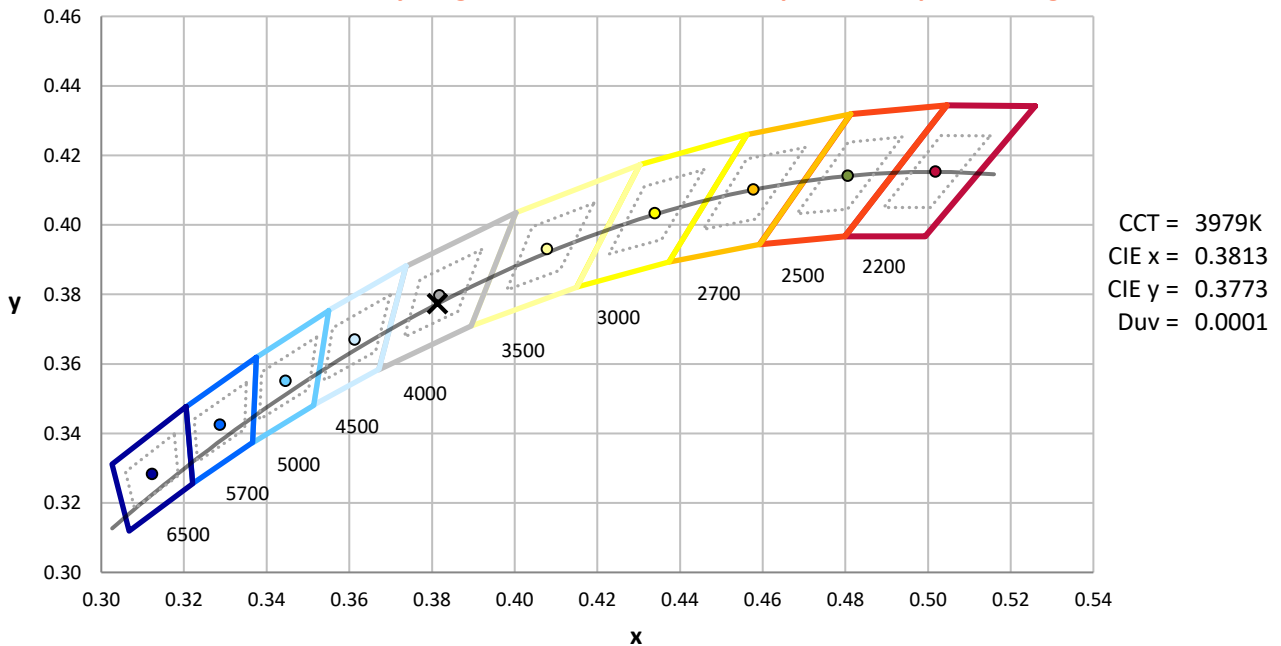
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	2/9/2023	8/9/2023
Power Meter	XITRON 2801 IN0071	11/29/2022	11/29/2023
AC Power Source	CHROMA 61603 IN0063	11/28/2022	11/28/2023
DC Power Source	AGILENT E3634A IN0208	11/28/2022	11/28/2023
Sphere Thermometer	ONSET IN0085	11/28/2022	11/28/2023
Room Thermometer	ONSET IN0046	11/28/2022	11/28/2023

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CIE 1931 Chromaticity Diagram



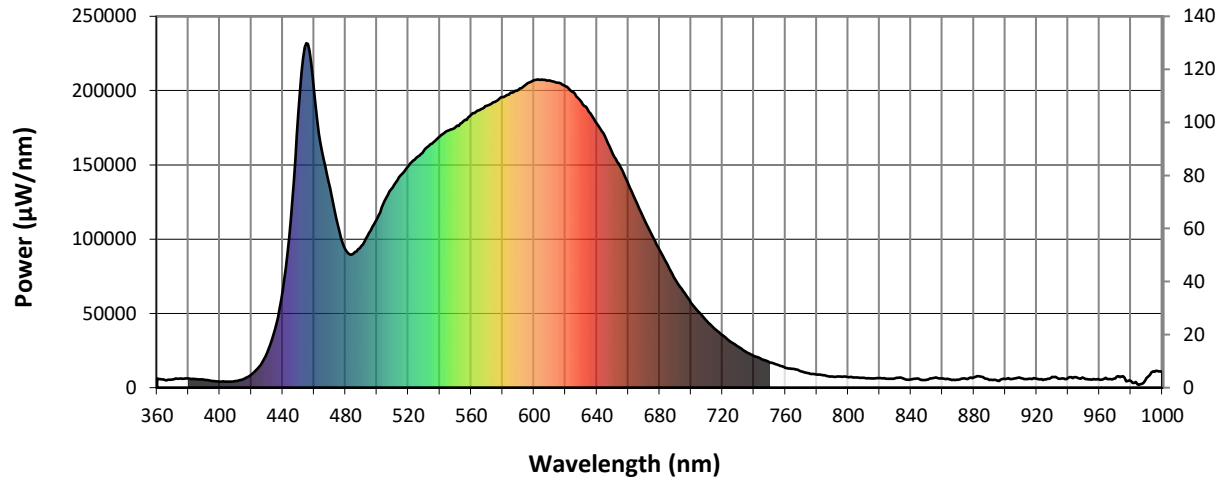
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

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Photopic Flux vs. Wavelength

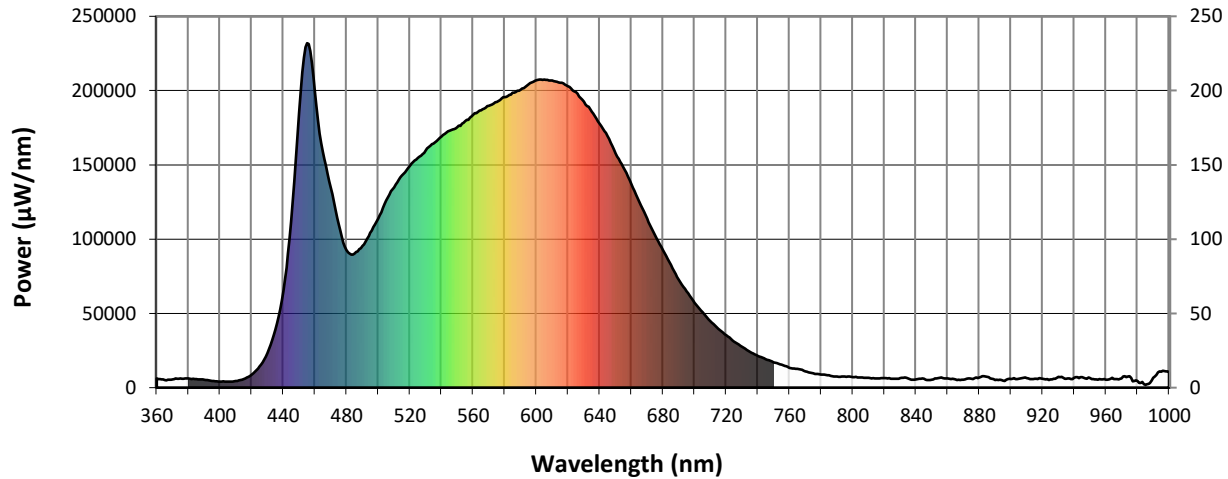


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λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)
360	6299	NR	490	95290	NR	620	202945	NR	750	17048	NR	880	6802	NR
365	5178	NR	495	104168	NR	625	198934	NR	755	15396	NR	885	7389	NR
370	5490	NR	500	113725	NR	630	192455	NR	760	13359	NR	890	5235	NR
375	6104	NR	505	126034	NR	635	185651	NR	765	12573	NR	895	4778	NR
380	6149	NR	510	134848	NR	640	177659	NR	770	10940	NR	900	5847	NR
385	5688	NR	515	142720	NR	645	169230	NR	775	9589	NR	905	5969	NR
390	5262	NR	520	149276	NR	650	157607	NR	780	8802	NR	910	6399	NR
395	4581	NR	525	154675	NR	655	148474	NR	785	8257	NR	915	5912	NR
400	4118	NR	530	159852	NR	660	137175	NR	790	7397	NR	920	6048	NR
405	4084	NR	535	164319	NR	665	125124	NR	795	7591	NR	925	5552	NR
410	4438	NR	540	169099	NR	670	113759	NR	800	7116	NR	930	7244	NR
415	5782	NR	545	173030	NR	675	102656	NR	805	6905	NR	935	6076	NR
420	8737	NR	550	175415	NR	680	92651	NR	810	6711	NR	940	6581	NR
425	14203	NR	555	179385	NR	685	82728	NR	815	6202	NR	945	7094	NR
430	23287	NR	560	183651	NR	690	72755	NR	820	6421	NR	950	6374	NR
435	39198	NR	565	186704	NR	695	64864	NR	825	6067	NR	955	5408	NR
440	65090	NR	570	189735	NR	700	57132	NR	830	6507	NR	960	5406	NR
445	111800	NR	575	192391	NR	705	50899	NR	835	6304	NR	965	5676	NR
450	185327	NR	580	195587	NR	710	44715	NR	840	5605	NR	970	6132	NR
455	231910	NR	585	198690	NR	715	39661	NR	845	5975	NR	975	7732	NR
460	199850	NR	590	200528	NR	720	35220	NR	850	5252	NR	980	4497	NR
465	159032	NR	595	204245	NR	725	31033	NR	855	6570	NR	985	1796	NR
470	134681	NR	600	206961	NR	730	27573	NR	860	6167	NR	990	6719	NR
475	109873	NR	605	207509	NR	735	24077	NR	865	5558	NR	995	10730	NR
480	92595	NR	610	206751	NR	740	21375	NR	870	5280	NR	1000	10317	NR
485	90323	NR	615	205233	NR	745	19152	NR	875	5889	NR			

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Scotopic Flux vs. Wavelength



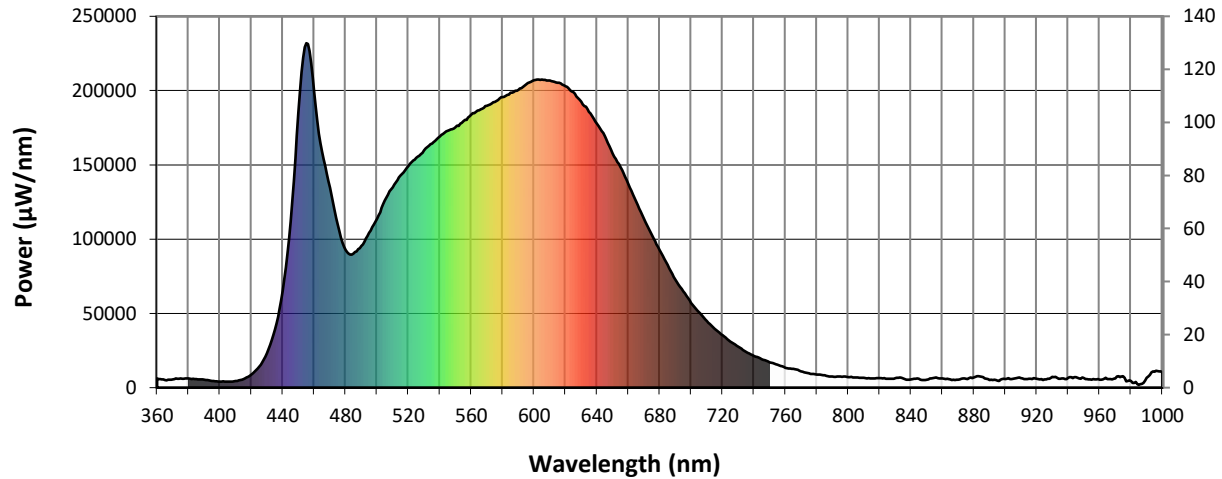
Scotopic Lumens: 22729.8

S/P: 1.79

λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)
360	6299	NR	490	95290	NR	620	202945	NR	750	17048	NR	880	6802	NR
365	5178	NR	495	104168	NR	625	198934	NR	755	15396	NR	885	7389	NR
370	5490	NR	500	113725	NR	630	192455	NR	760	13359	NR	890	5235	NR
375	6104	NR	505	126034	NR	635	185651	NR	765	12573	NR	895	4778	NR
380	6149	NR	510	134848	NR	640	177659	NR	770	10940	NR	900	5847	NR
385	5688	NR	515	142720	NR	645	169230	NR	775	9589	NR	905	5969	NR
390	5262	NR	520	149276	NR	650	157607	NR	780	8802	NR	910	6399	NR
395	4581	NR	525	154675	NR	655	148474	NR	785	8257	NR	915	5912	NR
400	4118	NR	530	159852	NR	660	137175	NR	790	7397	NR	920	6048	NR
405	4084	NR	535	164319	NR	665	125124	NR	795	7591	NR	925	5552	NR
410	4438	NR	540	169099	NR	670	113759	NR	800	7116	NR	930	7244	NR
415	5782	NR	545	173030	NR	675	102656	NR	805	6905	NR	935	6076	NR
420	8737	NR	550	175415	NR	680	92651	NR	810	6711	NR	940	6581	NR
425	14203	NR	555	179385	NR	685	82728	NR	815	6202	NR	945	7094	NR
430	23287	NR	560	183651	NR	690	72755	NR	820	6421	NR	950	6374	NR
435	39198	NR	565	186704	NR	695	64864	NR	825	6067	NR	955	5408	NR
440	65090	NR	570	189735	NR	700	57132	NR	830	6507	NR	960	5406	NR
445	111800	NR	575	192391	NR	705	50899	NR	835	6304	NR	965	5676	NR
450	185327	NR	580	195587	NR	710	44715	NR	840	5605	NR	970	6132	NR
455	231910	NR	585	198690	NR	715	39661	NR	845	5975	NR	975	7732	NR
460	199850	NR	590	200528	NR	720	35220	NR	850	5252	NR	980	4497	NR
465	159032	NR	595	204245	NR	725	31033	NR	855	6570	NR	985	1796	NR
470	134681	NR	600	206961	NR	730	27573	NR	860	6167	NR	990	6719	NR
475	109873	NR	605	207509	NR	735	24077	NR	865	5558	NR	995	10730	NR
480	92595	NR	610	206751	NR	740	21375	NR	870	5280	NR	1000	10317	NR
485	90323	NR	615	205233	NR	745	19152	NR	875	5889	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: 9423.4

M/P: 0.74

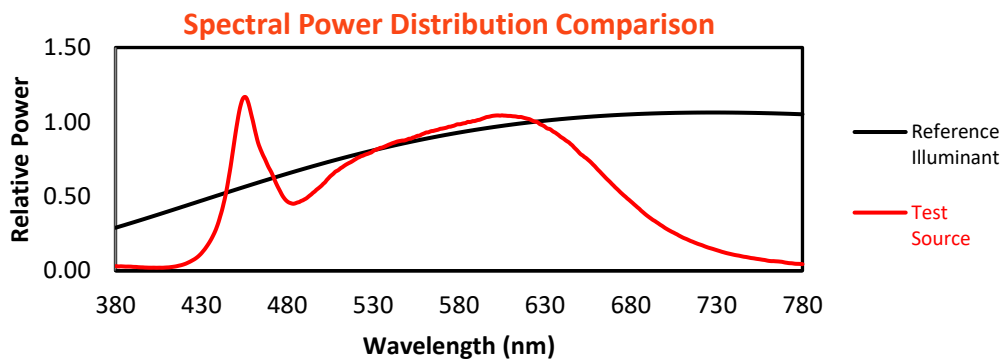
λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)
360	6299	NR	490	95290	NR	620	202945	NR	750	17048	NR	880	6802	NR
365	5178	NR	495	104168	NR	625	198934	NR	755	15396	NR	885	7389	NR
370	5490	NR	500	113725	NR	630	192455	NR	760	13359	NR	890	5235	NR
375	6104	NR	505	126034	NR	635	185651	NR	765	12573	NR	895	4778	NR
380	6149	NR	510	134848	NR	640	177659	NR	770	10940	NR	900	5847	NR
385	5688	NR	515	142720	NR	645	169230	NR	775	9589	NR	905	5969	NR
390	5262	NR	520	149276	NR	650	157607	NR	780	8802	NR	910	6399	NR
395	4581	NR	525	154675	NR	655	148474	NR	785	8257	NR	915	5912	NR
400	4118	NR	530	159852	NR	660	137175	NR	790	7397	NR	920	6048	NR
405	4084	NR	535	164319	NR	665	125124	NR	795	7591	NR	925	5552	NR
410	4438	NR	540	169099	NR	670	113759	NR	800	7116	NR	930	7244	NR
415	5782	NR	545	173030	NR	675	102656	NR	805	6905	NR	935	6076	NR
420	8737	NR	550	175415	NR	680	92651	NR	810	6711	NR	940	6581	NR
425	14203	NR	555	179385	NR	685	82728	NR	815	6202	NR	945	7094	NR
430	23287	NR	560	183651	NR	690	72755	NR	820	6421	NR	950	6374	NR
435	39198	NR	565	186704	NR	695	64864	NR	825	6067	NR	955	5408	NR
440	65090	NR	570	189735	NR	700	57132	NR	830	6507	NR	960	5406	NR
445	111800	NR	575	192391	NR	705	50899	NR	835	6304	NR	965	5676	NR
450	185327	NR	580	195587	NR	710	44715	NR	840	5605	NR	970	6132	NR
455	231910	NR	585	198690	NR	715	39661	NR	845	5975	NR	975	7732	NR
460	199850	NR	590	200528	NR	720	35220	NR	850	5252	NR	980	4497	NR
465	159032	NR	595	204245	NR	725	31033	NR	855	6570	NR	985	1796	NR
470	134681	NR	600	206961	NR	730	27573	NR	860	6167	NR	990	6719	NR
475	109873	NR	605	207509	NR	735	24077	NR	865	5558	NR	995	10730	NR
480	92595	NR	610	206751	NR	740	21375	NR	870	5280	NR	1000	10317	NR
485	90323	NR	615	205233	NR	745	19152	NR	875	5889	NR			

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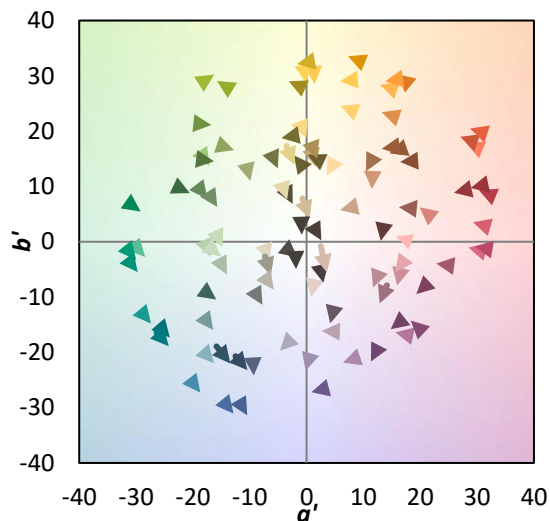
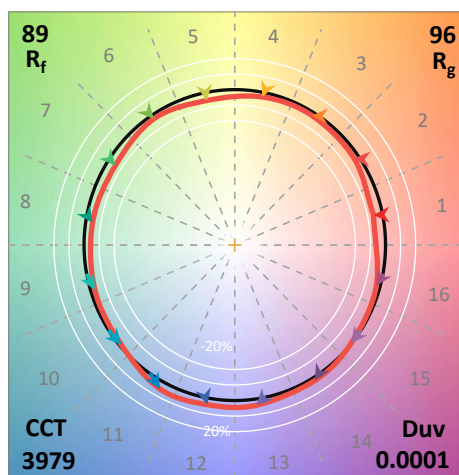
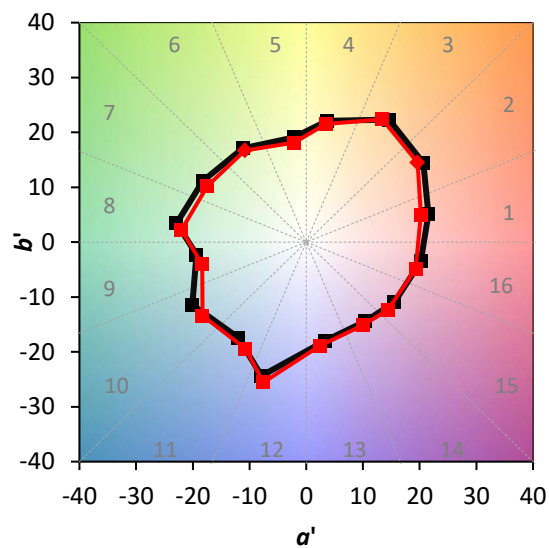
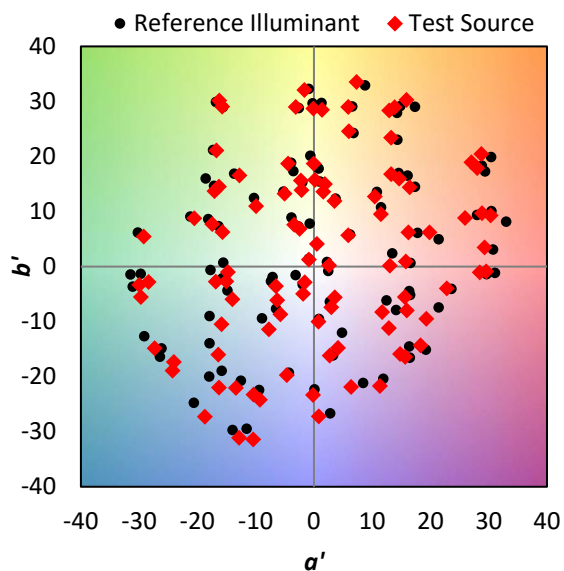
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Summary

$R_f = 88.6$
 $R_g = 96.2$
 CIE $R_a = 91.5$
 $R_9 = 57.0$



Color Vector Graphics

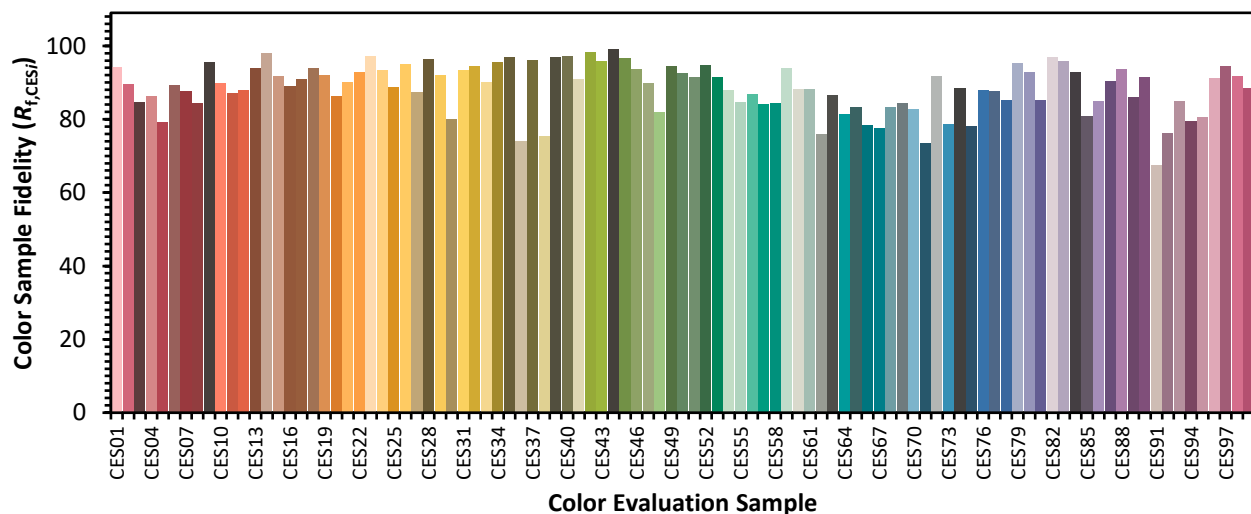


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Individual Sample Fidelity Index ($R_{f,i}$)

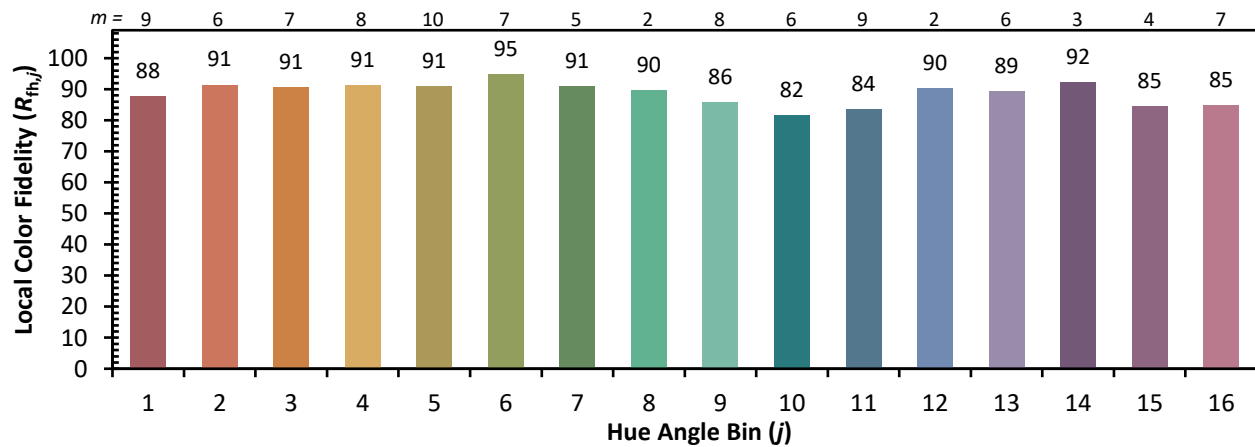
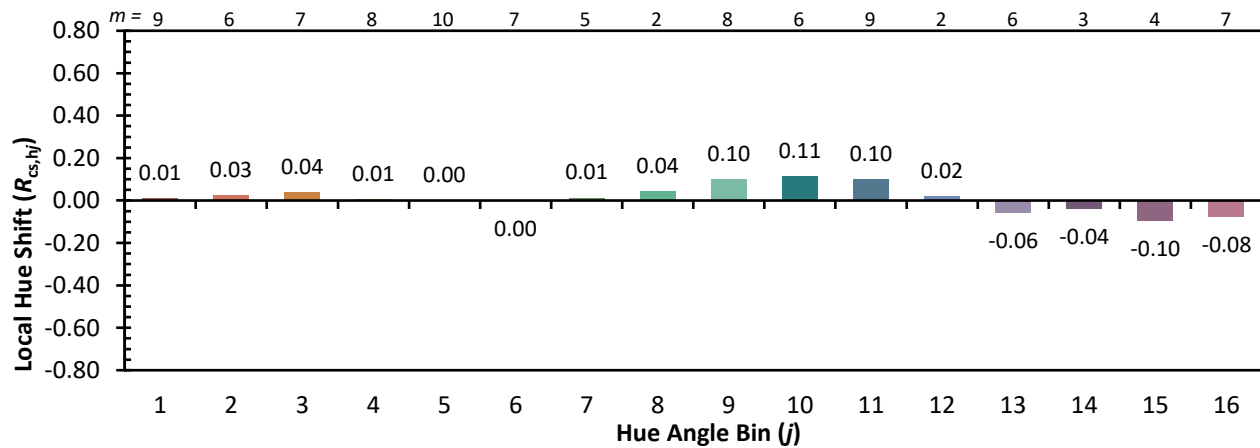
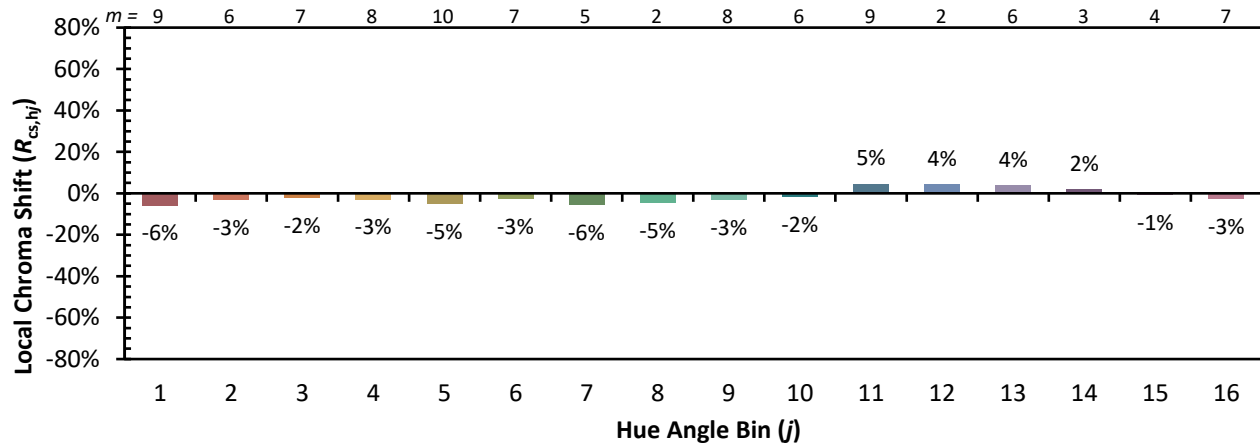
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CES02 = 62	CES27 = 87	CES52 = 95	CES77 = 88
CES03 = 31	CES28 = 96	CES53 = 92	CES78 = 85
CES04 = 69	CES29 = 92	CES54 = 88	CES79 = 95
CES05 = 49	CES30 = 80	CES55 = 85	CES80 = 93
CES06 = 50	CES31 = 93	CES56 = 87	CES81 = 85
CES07 = 42	CES32 = 94	CES57 = 84	CES82 = 97
CES08 = 41	CES33 = 90	CES58 = 84	CES83 = 96
CES09 = 29	CES34 = 96	CES59 = 94	CES84 = 93
CES10 = 74	CES35 = 97	CES60 = 88	CES85 = 81
CES11 = 57	CES36 = 74	CES61 = 88	CES86 = 85
CES12 = 63	CES37 = 96	CES62 = 76	CES87 = 90
CES13 = 43	CES38 = 75	CES63 = 86	CES88 = 94
CES14 = 74	CES39 = 97	CES64 = 81	CES89 = 86
CES15 = 71	CES40 = 97	CES65 = 83	CES90 = 91
CES16 = 47	CES41 = 91	CES66 = 78	CES91 = 67
CES17 = 49	CES42 = 98	CES67 = 78	CES92 = 76
CES18 = 56	CES43 = 96	CES68 = 83	CES93 = 85
CES19 = 71	CES44 = 99	CES69 = 84	CES94 = 79
CES20 = 66	CES45 = 97	CES70 = 83	CES95 = 81
CES21 = 85	CES46 = 94	CES71 = 74	CES96 = 91
CES22 = 78	CES47 = 90	CES72 = 92	CES97 = 94
CES23 = 91	CES48 = 82	CES73 = 79	CES98 = 92
CES24 = 90	CES49 = 94	CES74 = 89	CES99 = 89
CES25 = 71	CES50 = 93	CES75 = 78	



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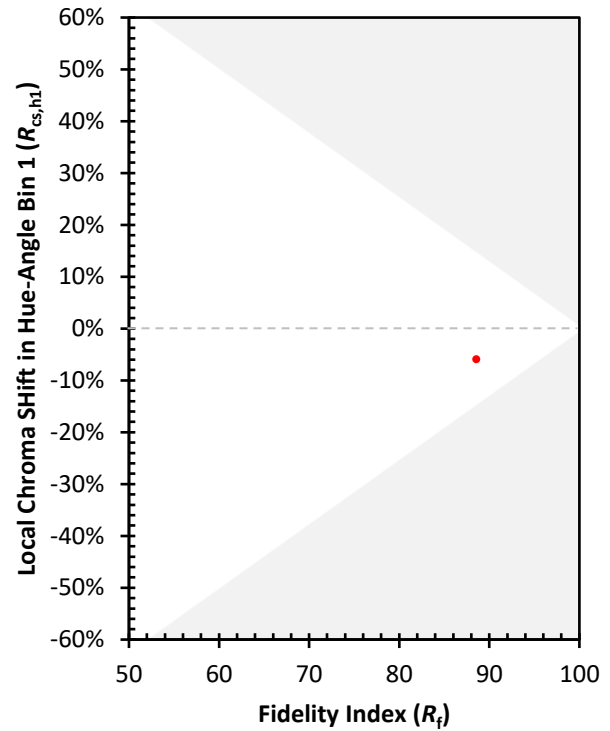
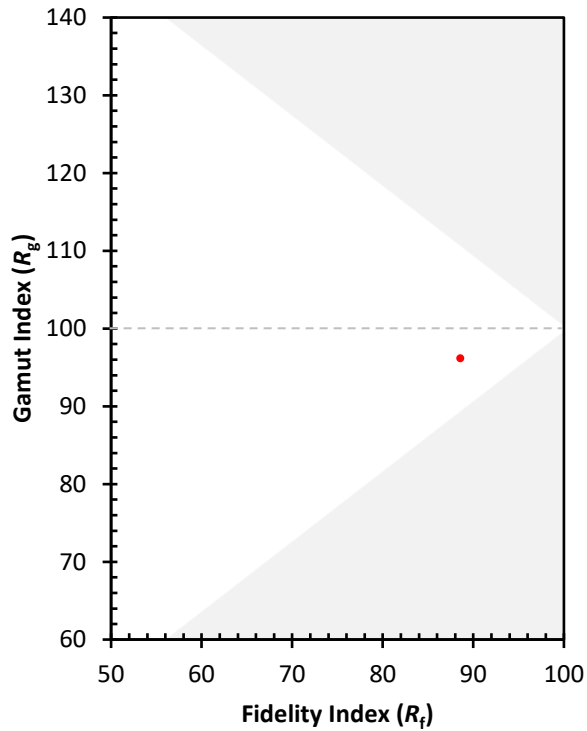
Color Rendition by Hue-Angle Bin



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Measure Comparisons



(END OF REPORT)