

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: iO LED

Report Number: P861225

Luminaire Tested: CS-SL-9SCT-120-ID-UNV-W-SA-STD-COR (Low-3500K)

Issue Date: 8/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P861225
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2312-259-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: CS-SL-9SCT-120-ID-UNV-W-SA-STD-COR (Low-3500K)
Description: iO CovSelect LED LINEAR LUMINAIRE, 1 FOOT, HIGH OUTPUT
ADJUSTED TO 3500K
Light Source: 3500 CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 368.6 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 1' x H: 0.02')
CIE Type: Direct

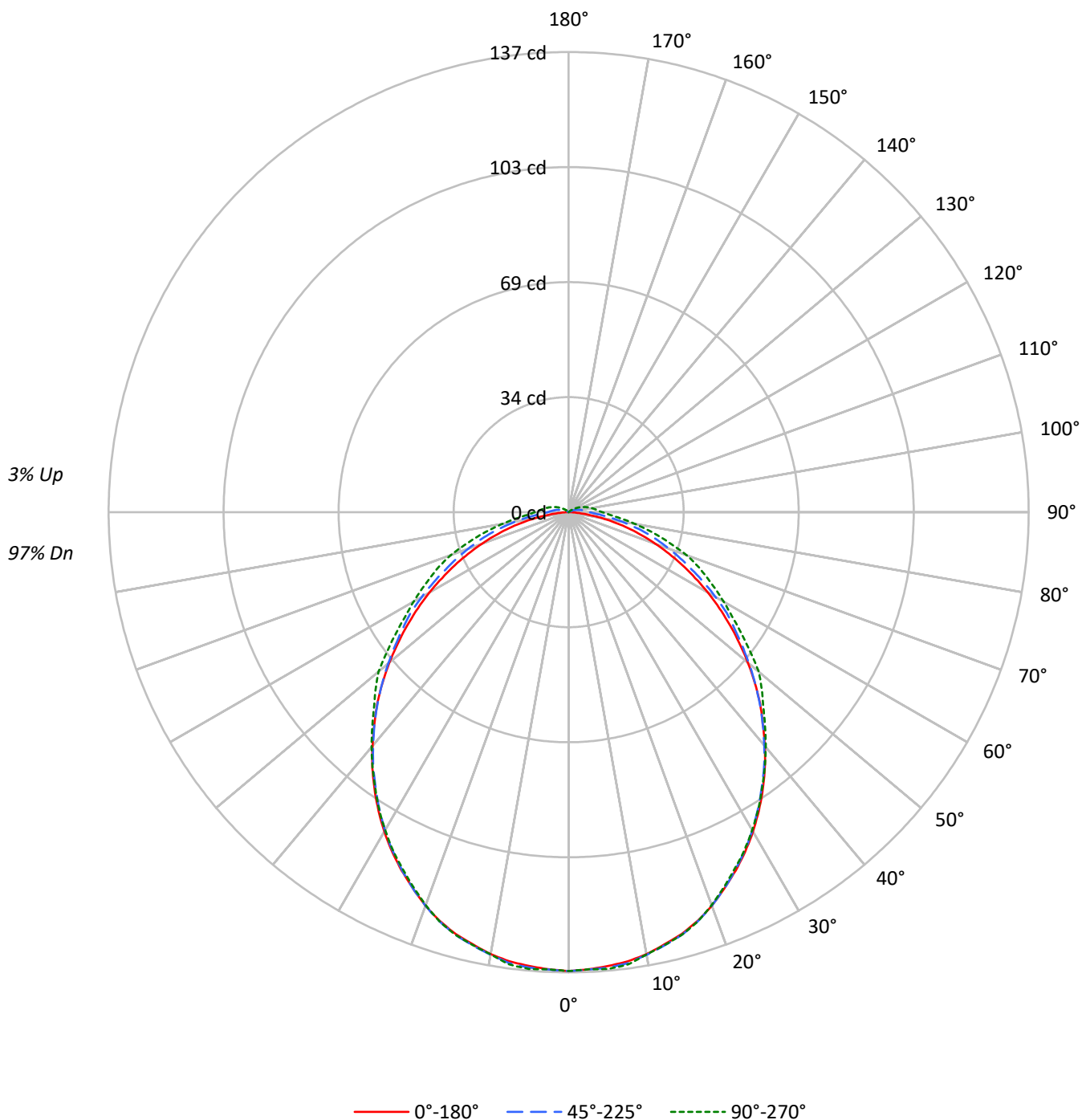
Input Watts (W): 3.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9414
Total Harmonic Distortion (THDi): 0.075
Frequency (hertz): 60
Stabilization Time: 0.333 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P861225

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-COR (Low-3500K)

Luminous Intensity Polar Plot



TEST NUMBER: P861225

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-COR (Low-3500K)

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
RCR																				
0	118	118	118	118	115	115	115	115		110	110	110		104	104	104		100	100	100
1	108	103	99	95	105	101	97	93		96	93	90		91	89	86		87	85	83
2	98	90	83	77	95	88	82	76		84	79	74		80	76	72		77	73	70
3	90	79	71	65	87	77	70	64		74	68	62		71	65	61		68	63	60
4	82	70	62	55	80	69	61	54		66	59	53		63	57	52		61	56	51
5	76	63	54	47	73	62	53	47		59	52	46		57	51	46		55	49	45
6	70	57	48	42	68	56	47	41		54	46	41		52	45	40		50	44	40
7	65	52	43	37	63	51	42	37		49	41	36		47	41	36		46	40	35
8	61	47	39	33	59	46	38	33		45	38	32		43	37	32		42	36	32
9	57	43	35	30	55	43	35	30		41	34	29		40	34	29		39	33	29
10	53	40	32	27	52	39	32	27		38	31	27		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17644	17644	17644
5°	17550	17356	17320
10°	17459	16976	16796
15°	17288	16574	16330
20°	17012	16024	15686
25°	16613	15373	14947
30°	16182	14692	14246
35°	15666	13932	13473
40°	15064	13162	12725
45°	14423	12326	11969
50°	13667	11469	11441
55°	12815	10645	10405
60°	11943	9796	9609
65°	10942	8775	8973
70°	9823	7869	8351
75°	8474	6956	7255
80°	6586	5705	6122
85°	3711	4508	5187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14423 cd/sqm

TEST NUMBER: P861225

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-COR (Low-3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.9	3.5
10°-20°	36.6	9.9
20°-30°	54.0	14.7
30°-40°	62.8	17.0
40°-50°	62.4	16.9
50°-60°	54.2	14.7
60°-70°	40.6	11.0
70°-80°	24.9	6.8
80°-90°	10.5	2.8
90°-100°	4.9	1.3
100°-110°	2.9	0.8
110°-120°	1.3	0.4
120°-130°	0.4	0.1
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°	103.6	28.1
0°-40°	166.3	45.1
0°-60°	282.9	76.8
0°-90°	359.0	97.4
90°-120°	9.1	2.5
90°-150°	9.6	2.6
90°-180°	10.0	2.7
0°-180°	368.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	137	137	137	137	137	
5°	136	136	136	136	136	13
15°	130	130	130	130	130	37
25°	118	117	118	117	117	54
35°	101	100	100	101	100	63
45°	81	80	80	82	82	62
55°	59	58	60	63	63	52
65°	37	38	40	44	45	37
75°	18	20	24	27	28	19
85°	3	6	10	13	14	4
90°	0	2	6	9	10	0
95°	0	2	5	7	8	0
105°	0	0	3	5	6	0
115°	0	0	1	3	3	0
125°	0	0	0	1	1	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P861225

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-COR (Low-3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	136.6	136.6	136.6	136.6	136.6
2.5°	136.2	135.8	136.3	136.1	136.2
5°	135.6	135.5	136.1	136.2	136.5
7.5°	134.9	134.7	135.4	135.5	135.8
10°	133.6	133.3	133.8	133.7	133.7
12.5°	131.8	131.6	132.1	131.9	132.0
15°	130.0	129.6	130.3	130.2	130.3
17.5°	127.6	127.3	127.8	127.6	127.8
20°	124.7	124.3	124.7	124.5	124.5
22.5°	121.2	120.9	121.2	120.9	120.8
25°	117.7	117.2	117.5	117.2	117.1
27.5°	113.9	113.4	113.6	113.5	113.4
30°	109.8	109.2	109.4	109.4	109.3
32.5°	105.4	104.6	104.9	105.1	105.0
35°	100.8	99.9	100.2	100.6	100.4
37.5°	96.0	95.3	95.6	95.8	95.9
40°	90.9	90.4	90.6	91.2	91.3
42.5°	85.6	85.2	85.6	86.5	86.6
45°	80.6	80.0	80.4	81.6	81.9
47.5°	75.2	74.6	75.3	76.8	78.0
50°	69.7	69.3	70.1	72.8	73.9
52.5°	64.1	63.8	65.0	68.3	68.1
55°	58.6	58.4	60.2	62.6	62.7
57.5°	53.2	53.1	55.8	57.2	57.6
60°	47.9	48.0	50.5	52.3	53.3
62.5°	42.5	42.8	45.4	47.9	49.1
65°	37.4	37.9	40.5	43.8	45.1
67.5°	32.4	33.3	36.0	39.9	41.4
70°	27.5	28.8	31.8	36.0	37.3
72.5°	22.8	24.2	27.8	31.6	32.4
75°	18.3	19.8	23.9	27.1	28.1
77.5°	14.0	15.7	19.8	23.1	23.9
80°	9.9	12.1	16.0	19.1	19.9
82.5°	6.2	8.7	12.6	15.6	16.5
85°	3.1	5.8	9.7	12.6	13.5
87.5°	0.9	3.5	7.3	10.3	11.4
90°	0.0	2.3	6.2	8.9	10.0
92.5°	0.0	1.9	5.5	8.1	9.0
95°	0.0	1.5	4.8	7.3	8.3
97.5°	0.0	1.2	4.3	6.7	7.6
100°	0.0	0.8	3.8	6.1	6.9
102.5°	0.0	0.5	3.3	5.5	6.3
105°	0.0	0.3	2.7	4.8	5.7
107.5°	0.0	0.2	2.2	4.3	5.0
110°	0.0	0.1	1.8	3.7	4.5

TEST NUMBER: P861225

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-COR (Low-3500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	1.4	3.1	3.9
115°	0.0	0.0	1.0	2.6	3.4
117.5°	0.0	0.0	0.7	2.1	2.8
120°	0.0	0.0	0.5	1.7	2.2
122.5°	0.0	0.0	0.3	1.3	1.8
125°	0.0	0.0	0.2	0.9	1.4
127.5°	0.0	0.0	0.1	0.7	1.0
130°	0.0	0.0	0.0	0.4	0.7
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

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

Report Prepared for

Cooper Lighting Solutions

iO LED

Report Number: SP1-2312-259-9

Test Date: 02/01/2024

Luminaire Tested: CS-SL-8SCT-120-ID-UNV-W-SA-STD-1F (HIGH-3500K)

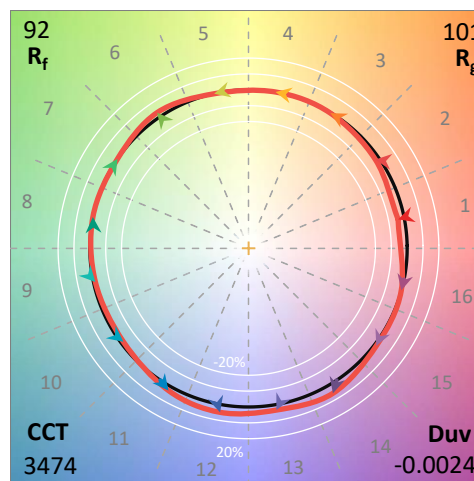
Data in this report applies to families of CS-SL-8SCT products

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2312-259-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 02/08/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: iO LED
 Catalog Number: **CS-SL-9SCT-120-ID-UNV-W-SA-STD-1F (HIGH-3500K)**
 Description: IO LED COVSELECT ARCHITECTURAL COVE

Spectral Parameters

CCT (K):	3474	CRI (Ra):	94.8		
CIE u':	0.2374	R1:	96.3	R9:	68.8
CIE v':	0.5086	R2:	97.4	R10:	93.0
Duv:	-0.0024	R3:	96.9	R11:	95.8
CIE x:	0.4041	R4:	95.8	R12:	81.2
CIE y:	0.3847	R5:	96.0	R13:	97.0
CIE z:	0.2112	R6:	95.5	R14:	97.8
Peak Wavelength (nm):	614	R7:	93.7		
Dominant Wavelength (nm):	582	R8:	86.9		
Purity:	36.9				
Rf:	92.4				
Rg:	101				



Test Conditions

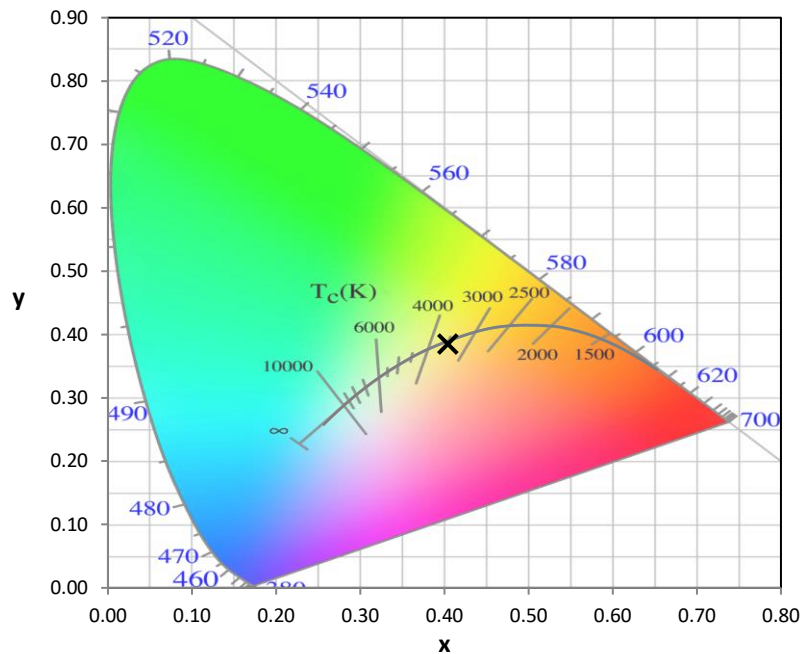
Stabilization Time: 11M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 25.4/24%
 Sphere Temperature (°C): 25.1

REPORT NUMBER: SP1-2312-259-9

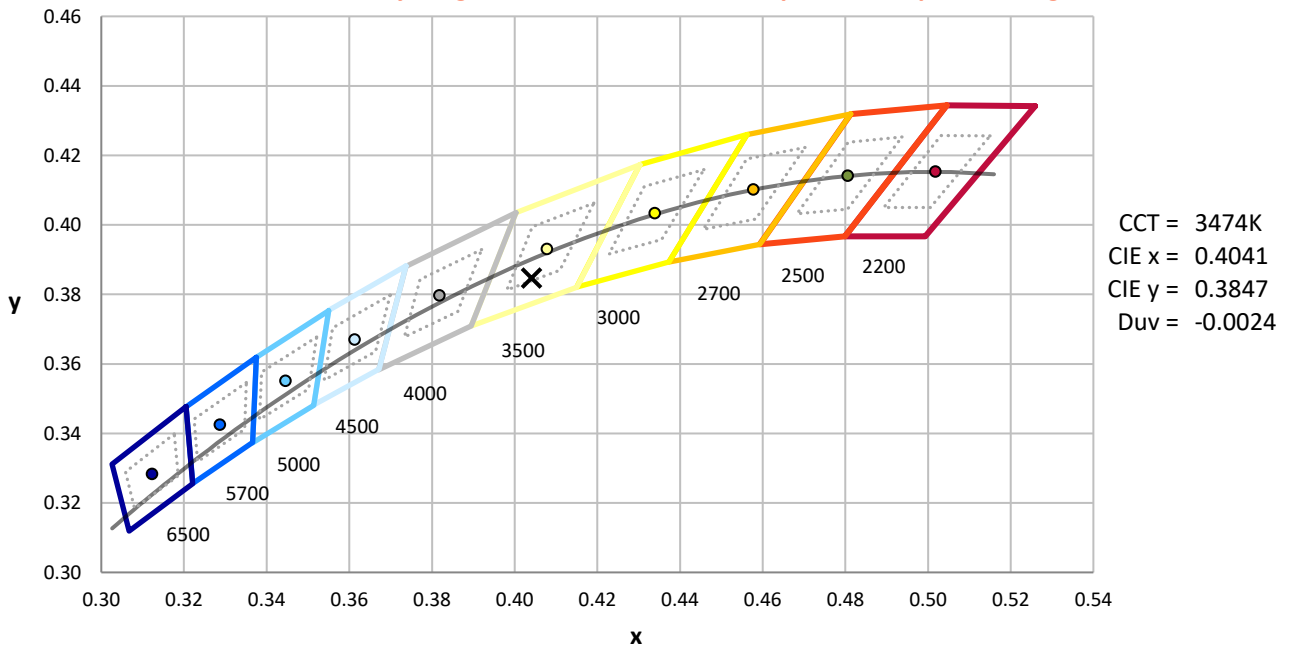
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	8/9/2023	2/9/2024
Power Meter	XITRON 2801 IN0071	10/23/2023	10/23/2024
AC Power Source	CHROMA 61603 IN0063	10/24/2023	10/24/2024
DC Power Source	AGILENT E3634A IN0208	10/24/2023	10/24/2024
Sphere Thermometer	ONSET IN0085	10/24/2023	10/24/2024
Room Thermometer	ONSET IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2312-259-9

CIE 1931 Chromaticity Diagram



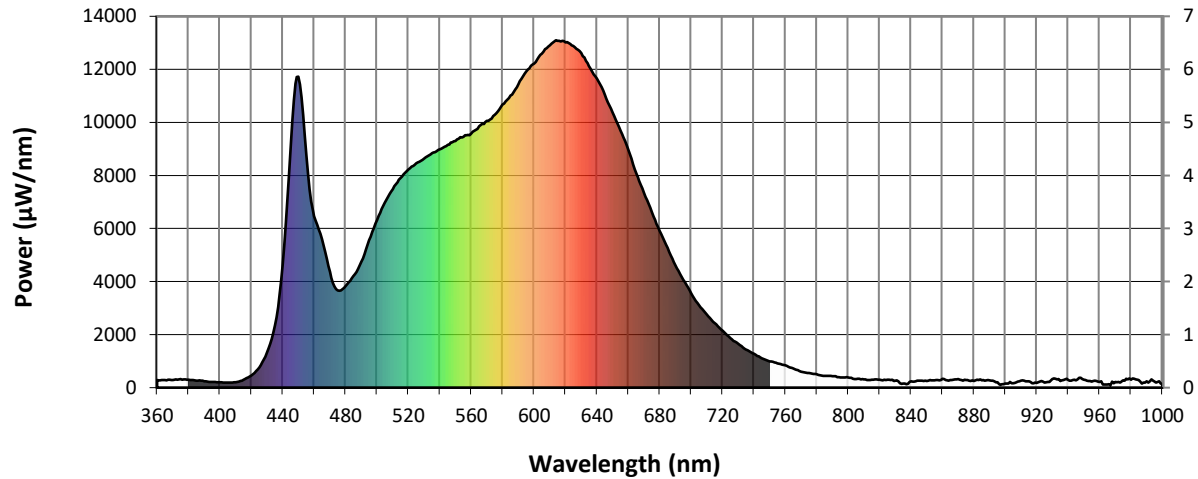
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2312-259-9

Photopic Flux vs. Wavelength

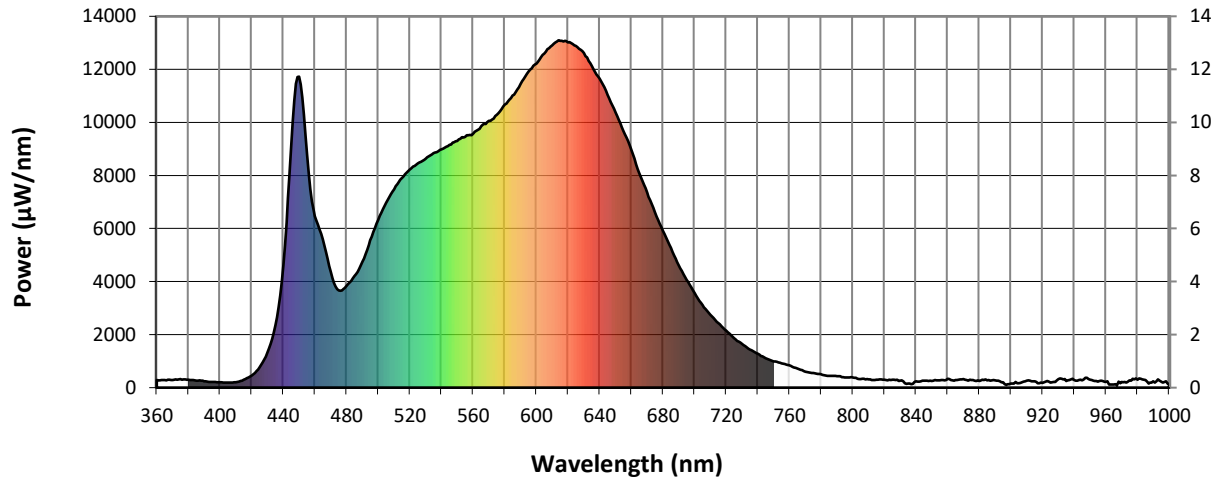


#####

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	291	NR	490	4747	NR	620	13009	NR	750	988	NR	880	252	NR
365	282	NR	495	5555	NR	625	12881	NR	755	912	NR	885	276	NR
370	290	NR	500	6319	NR	630	12622	NR	760	836	NR	890	280	NR
375	328	NR	505	6975	NR	635	12118	NR	765	724	NR	895	201	NR
380	305	NR	510	7477	NR	640	11658	NR	770	604	NR	900	157	NR
385	268	NR	515	7901	NR	645	11039	NR	775	552	NR	905	168	NR
390	244	NR	520	8226	NR	650	10377	NR	780	501	NR	910	258	NR
395	218	NR	525	8460	NR	655	9681	NR	785	439	NR	915	233	NR
400	202	NR	530	8638	NR	660	8972	NR	790	437	NR	920	184	NR
405	190	NR	535	8835	NR	665	8081	NR	795	390	NR	925	194	NR
410	207	NR	540	8980	NR	670	7347	NR	800	387	NR	930	323	NR
415	297	NR	545	9149	NR	675	6606	NR	805	321	NR	935	257	NR
420	459	NR	550	9305	NR	680	5911	NR	810	316	NR	940	285	NR
425	760	NR	555	9458	NR	685	5264	NR	815	296	NR	945	273	NR
430	1320	NR	560	9576	NR	690	4617	NR	820	296	NR	950	304	NR
435	2349	NR	565	9850	NR	695	4067	NR	825	296	NR	955	225	NR
440	4635	NR	570	10059	NR	700	3570	NR	830	267	NR	960	213	NR
445	9061	NR	575	10295	NR	705	3110	NR	835	156	NR	965	123	NR
450	11728	NR	580	10672	NR	710	2744	NR	840	242	NR	970	212	NR
455	8770	NR	585	11012	NR	715	2433	NR	845	266	NR	975	276	NR
460	6469	NR	590	11448	NR	720	2148	NR	850	246	NR	980	295	NR
465	5601	NR	595	11922	NR	725	1872	NR	855	278	NR	985	282	NR
470	4361	NR	600	12225	NR	730	1650	NR	860	332	NR	990	244	NR
475	3665	NR	605	12594	NR	735	1434	NR	865	291	NR	995	228	NR
480	3839	NR	610	12912	NR	740	1274	NR	870	323	NR	1000	132	NR
485	4204	NR	615	13069	NR	745	1106	NR	875	292	NR			

REPORT NUMBER: SP1-2312-259-9

Scotopic Flux vs. Wavelength



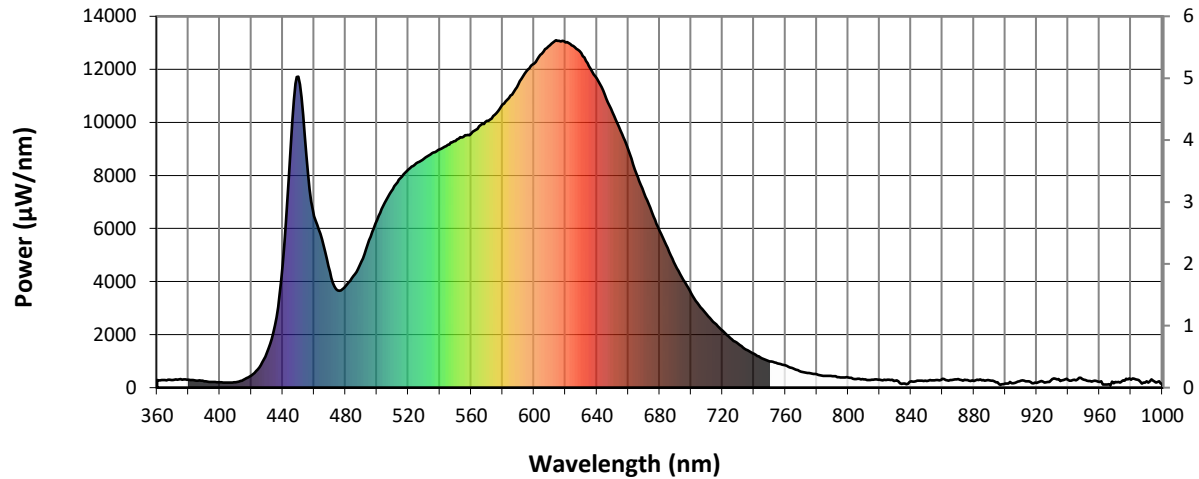
Scotopic Lumens: 1153

S/P: 1.63

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	291	NR	490	4747	NR	620	13009	NR	750	988	NR	880	252	NR
365	282	NR	495	5555	NR	625	12881	NR	755	912	NR	885	276	NR
370	290	NR	500	6319	NR	630	12622	NR	760	836	NR	890	280	NR
375	328	NR	505	6975	NR	635	12118	NR	765	724	NR	895	201	NR
380	305	NR	510	7477	NR	640	11658	NR	770	604	NR	900	157	NR
385	268	NR	515	7901	NR	645	11039	NR	775	552	NR	905	168	NR
390	244	NR	520	8226	NR	650	10377	NR	780	501	NR	910	258	NR
395	218	NR	525	8460	NR	655	9681	NR	785	439	NR	915	233	NR
400	202	NR	530	8638	NR	660	8972	NR	790	437	NR	920	184	NR
405	190	NR	535	8835	NR	665	8081	NR	795	390	NR	925	194	NR
410	207	NR	540	8980	NR	670	7347	NR	800	387	NR	930	323	NR
415	297	NR	545	9149	NR	675	6606	NR	805	321	NR	935	257	NR
420	459	NR	550	9305	NR	680	5911	NR	810	316	NR	940	285	NR
425	760	NR	555	9458	NR	685	5264	NR	815	296	NR	945	273	NR
430	1320	NR	560	9576	NR	690	4617	NR	820	296	NR	950	304	NR
435	2349	NR	565	9850	NR	695	4067	NR	825	296	NR	955	225	NR
440	4635	NR	570	10059	NR	700	3570	NR	830	267	NR	960	213	NR
445	9061	NR	575	10295	NR	705	3110	NR	835	156	NR	965	123	NR
450	11728	NR	580	10672	NR	710	2744	NR	840	242	NR	970	212	NR
455	8770	NR	585	11012	NR	715	2433	NR	845	266	NR	975	276	NR
460	6469	NR	590	11448	NR	720	2148	NR	850	246	NR	980	295	NR
465	5601	NR	595	11922	NR	725	1872	NR	855	278	NR	985	282	NR
470	4361	NR	600	12225	NR	730	1650	NR	860	332	NR	990	244	NR
475	3665	NR	605	12594	NR	735	1434	NR	865	291	NR	995	228	NR
480	3839	NR	610	12912	NR	740	1274	NR	870	323	NR	1000	132	NR
485	4204	NR	615	13069	NR	745	1106	NR	875	292	NR			

REPORT NUMBER: SP1-2312-259-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: 462.7

M/P: 0.66

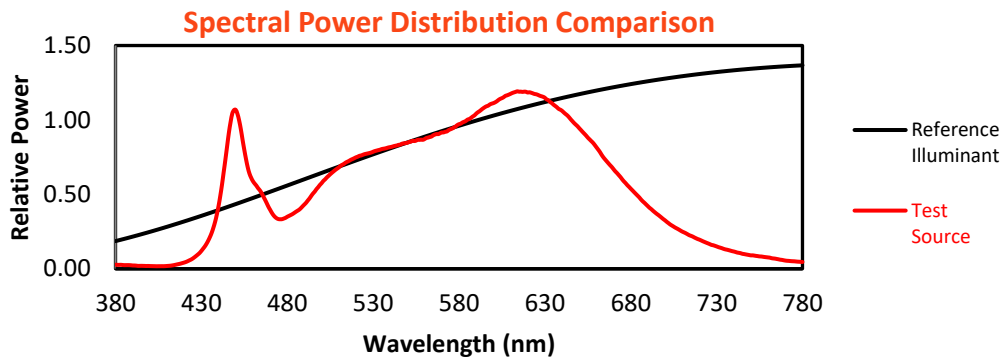
λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)	λ (nm)	Power (μW/nm)	Lumens (φ/nm)
360	291	NR	490	4747	NR	620	13009	NR	750	988	NR	880	252	NR
365	282	NR	495	5555	NR	625	12881	NR	755	912	NR	885	276	NR
370	290	NR	500	6319	NR	630	12622	NR	760	836	NR	890	280	NR
375	328	NR	505	6975	NR	635	12118	NR	765	724	NR	895	201	NR
380	305	NR	510	7477	NR	640	11658	NR	770	604	NR	900	157	NR
385	268	NR	515	7901	NR	645	11039	NR	775	552	NR	905	168	NR
390	244	NR	520	8226	NR	650	10377	NR	780	501	NR	910	258	NR
395	218	NR	525	8460	NR	655	9681	NR	785	439	NR	915	233	NR
400	202	NR	530	8638	NR	660	8972	NR	790	437	NR	920	184	NR
405	190	NR	535	8835	NR	665	8081	NR	795	390	NR	925	194	NR
410	207	NR	540	8980	NR	670	7347	NR	800	387	NR	930	323	NR
415	297	NR	545	9149	NR	675	6606	NR	805	321	NR	935	257	NR
420	459	NR	550	9305	NR	680	5911	NR	810	316	NR	940	285	NR
425	760	NR	555	9458	NR	685	5264	NR	815	296	NR	945	273	NR
430	1320	NR	560	9576	NR	690	4617	NR	820	296	NR	950	304	NR
435	2349	NR	565	9850	NR	695	4067	NR	825	296	NR	955	225	NR
440	4635	NR	570	10059	NR	700	3570	NR	830	267	NR	960	213	NR
445	9061	NR	575	10295	NR	705	3110	NR	835	156	NR	965	123	NR
450	11728	NR	580	10672	NR	710	2744	NR	840	242	NR	970	212	NR
455	8770	NR	585	11012	NR	715	2433	NR	845	266	NR	975	276	NR
460	6469	NR	590	11448	NR	720	2148	NR	850	246	NR	980	295	NR
465	5601	NR	595	11922	NR	725	1872	NR	855	278	NR	985	282	NR
470	4361	NR	600	12225	NR	730	1650	NR	860	332	NR	990	244	NR
475	3665	NR	605	12594	NR	735	1434	NR	865	291	NR	995	228	NR
480	3839	NR	610	12912	NR	740	1274	NR	870	323	NR	1000	132	NR
485	4204	NR	615	13069	NR	745	1106	NR	875	292	NR			

REPORT NUMBER: SP1-2312-259-9

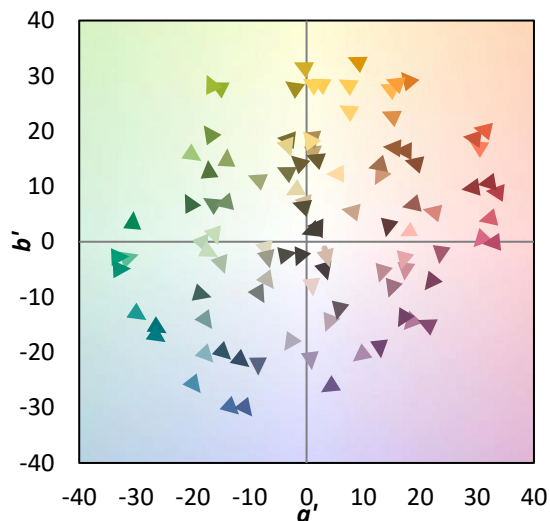
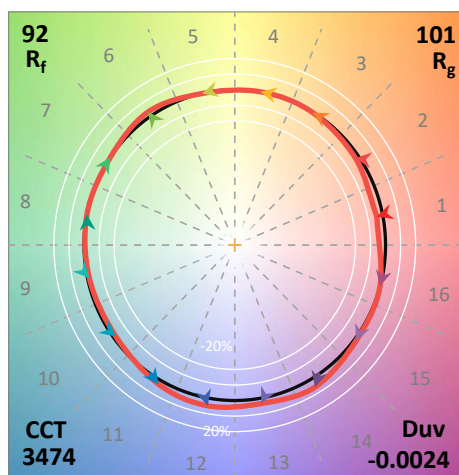
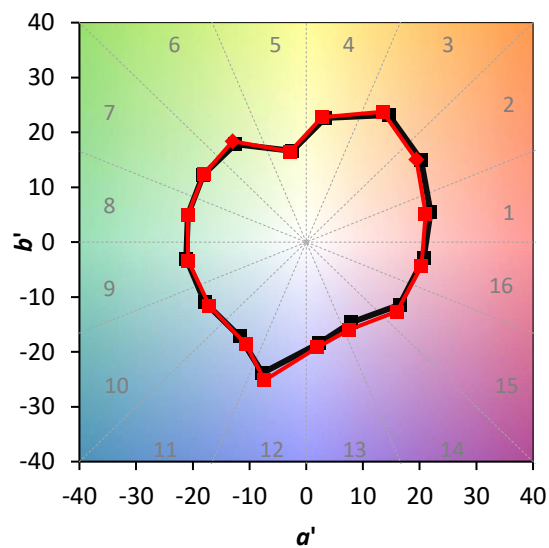
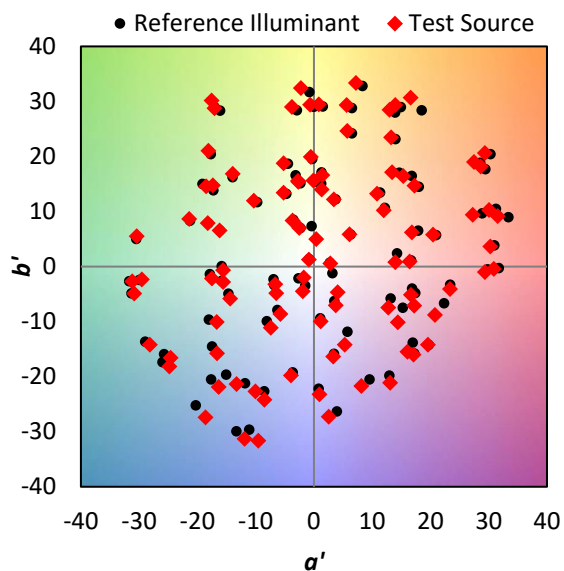
TM-30-18

Summary

$R_f = 92.4$
 $R_g = 101$
 CIE $R_a = 94.8$
 $R_9 = 68.8$



Color Vector Graphics

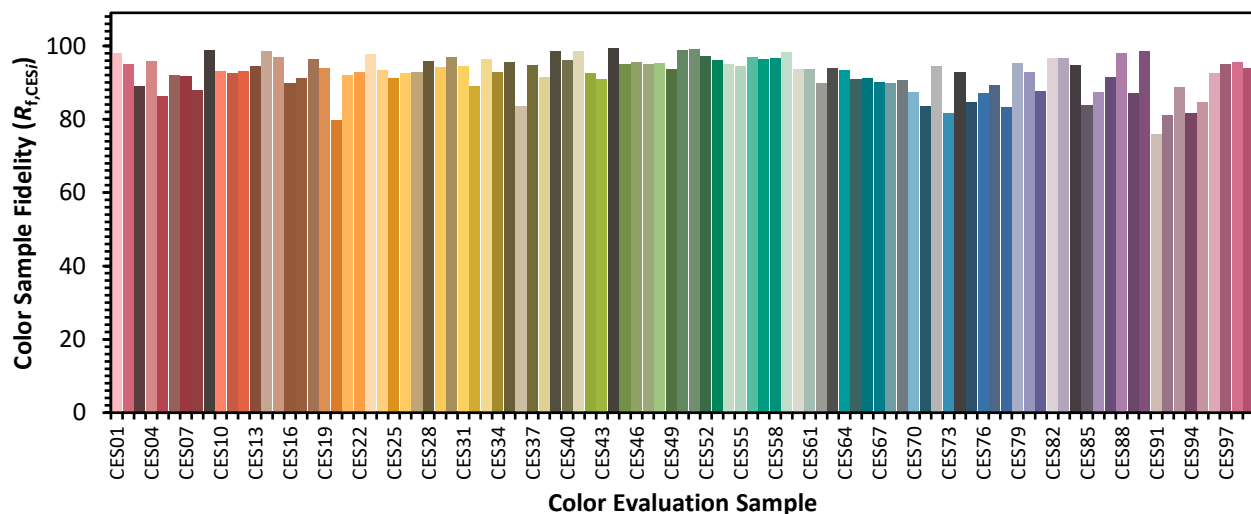


REPORT NUMBER: SP1-2312-259-9

TM-30-18

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

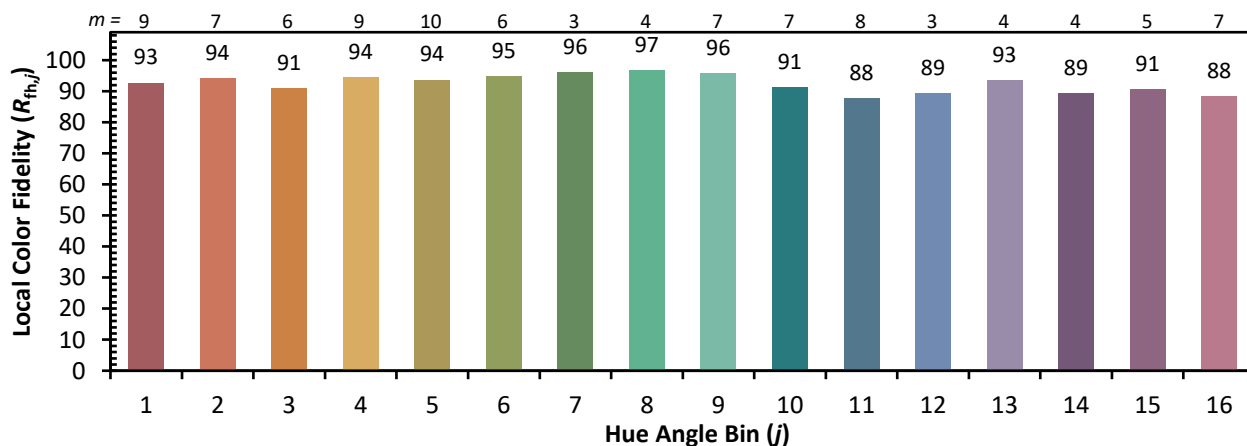
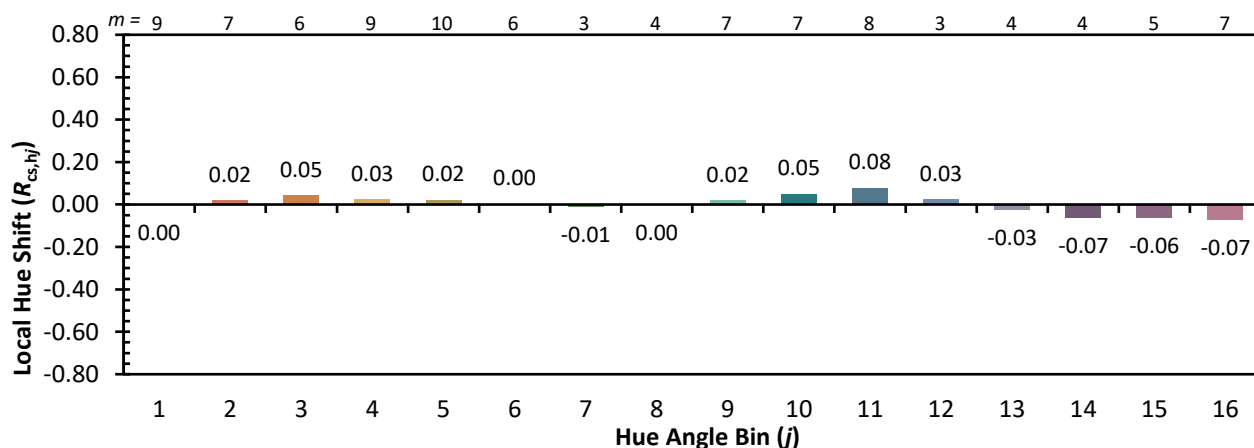
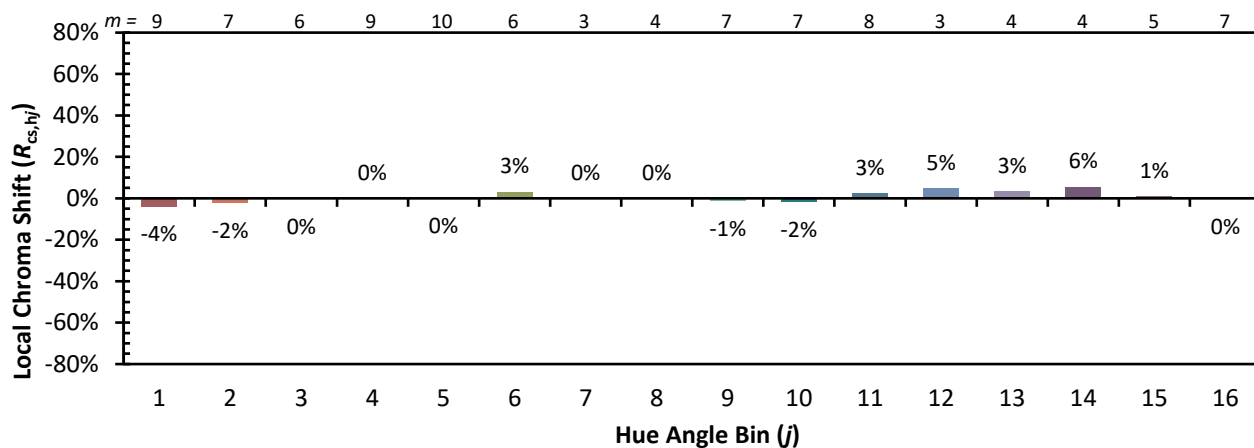
CES01 = 86	CES26 = 93	CES51 = 99	CES76 = 87
CES02 = 62	CES27 = 93	CES52 = 97	CES77 = 89
CES03 = 31	CES28 = 96	CES53 = 96	CES78 = 83
CES04 = 70	CES29 = 94	CES54 = 95	CES79 = 95
CES05 = 50	CES30 = 97	CES55 = 94	CES80 = 93
CES06 = 51	CES31 = 95	CES56 = 97	CES81 = 88
CES07 = 43	CES32 = 89	CES57 = 96	CES82 = 97
CES08 = 41	CES33 = 96	CES58 = 97	CES83 = 97
CES09 = 29	CES34 = 93	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 96	CES60 = 94	CES85 = 84
CES11 = 58	CES36 = 84	CES61 = 94	CES86 = 87
CES12 = 64	CES37 = 95	CES62 = 90	CES87 = 91
CES13 = 43	CES38 = 92	CES63 = 94	CES88 = 98
CES14 = 74	CES39 = 98	CES64 = 93	CES89 = 87
CES15 = 72	CES40 = 96	CES65 = 91	CES90 = 98
CES16 = 48	CES41 = 98	CES66 = 91	CES91 = 76
CES17 = 49	CES42 = 93	CES67 = 90	CES92 = 81
CES18 = 56	CES43 = 91	CES68 = 90	CES93 = 89
CES19 = 71	CES44 = 99	CES69 = 91	CES94 = 82
CES20 = 67	CES45 = 95	CES70 = 87	CES95 = 85
CES21 = 86	CES46 = 95	CES71 = 83	CES96 = 92
CES22 = 78	CES47 = 95	CES72 = 94	CES97 = 95
CES23 = 91	CES48 = 95	CES73 = 82	CES98 = 96
CES24 = 90	CES49 = 94	CES74 = 93	CES99 = 94
CES25 = 71	CES50 = 99	CES75 = 85	



REPORT NUMBER: SP1-2312-259-9

TM-30-18

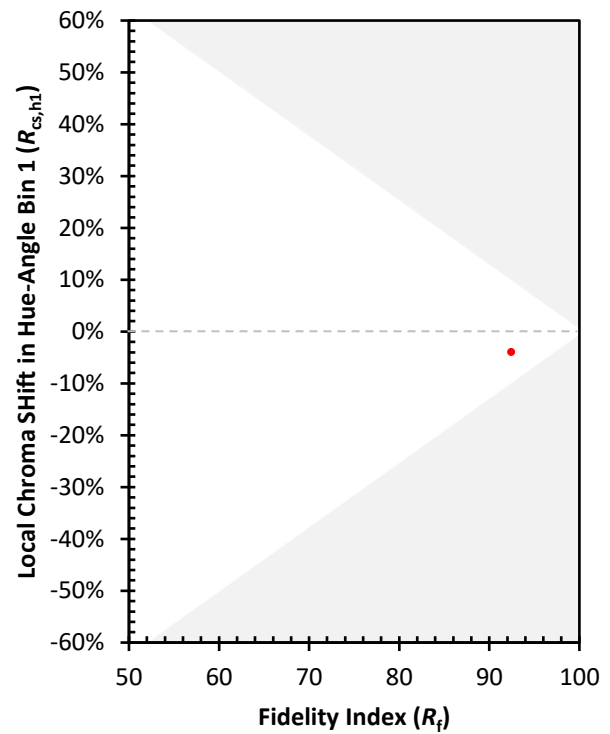
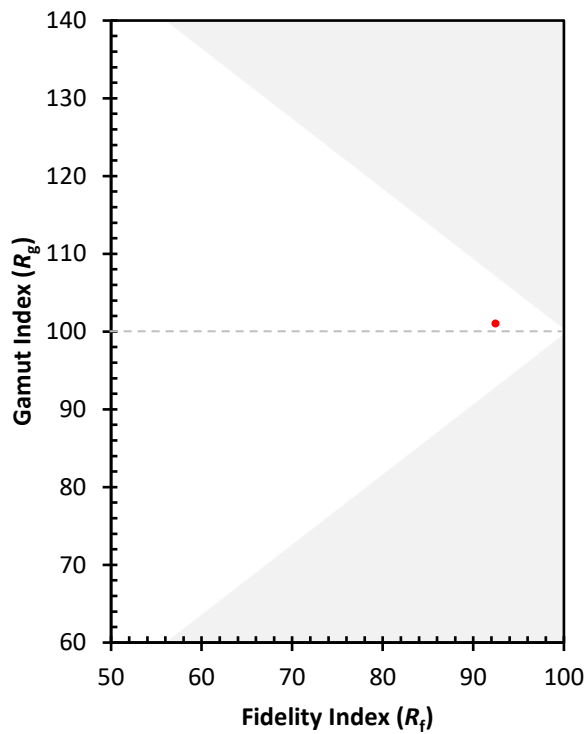
Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2312-259-9

TM-30-18

Measure Comparisons



(END OF REPORT)