

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: P861231

Luminaire Tested: CS-SL-9SCT-120-ID-UNV-W-SA-STD-4F (Low-2400K)

Issue Date: 8/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P861231  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2312-259-3)  
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-4F (Low-2400K)  
Description: iO CovSelect LED LINEAR LUMINAIRE, 4 FOOT, HIGH OUTPUT  
ADJUSTED TO 2400K  
Light Source: 2400 CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

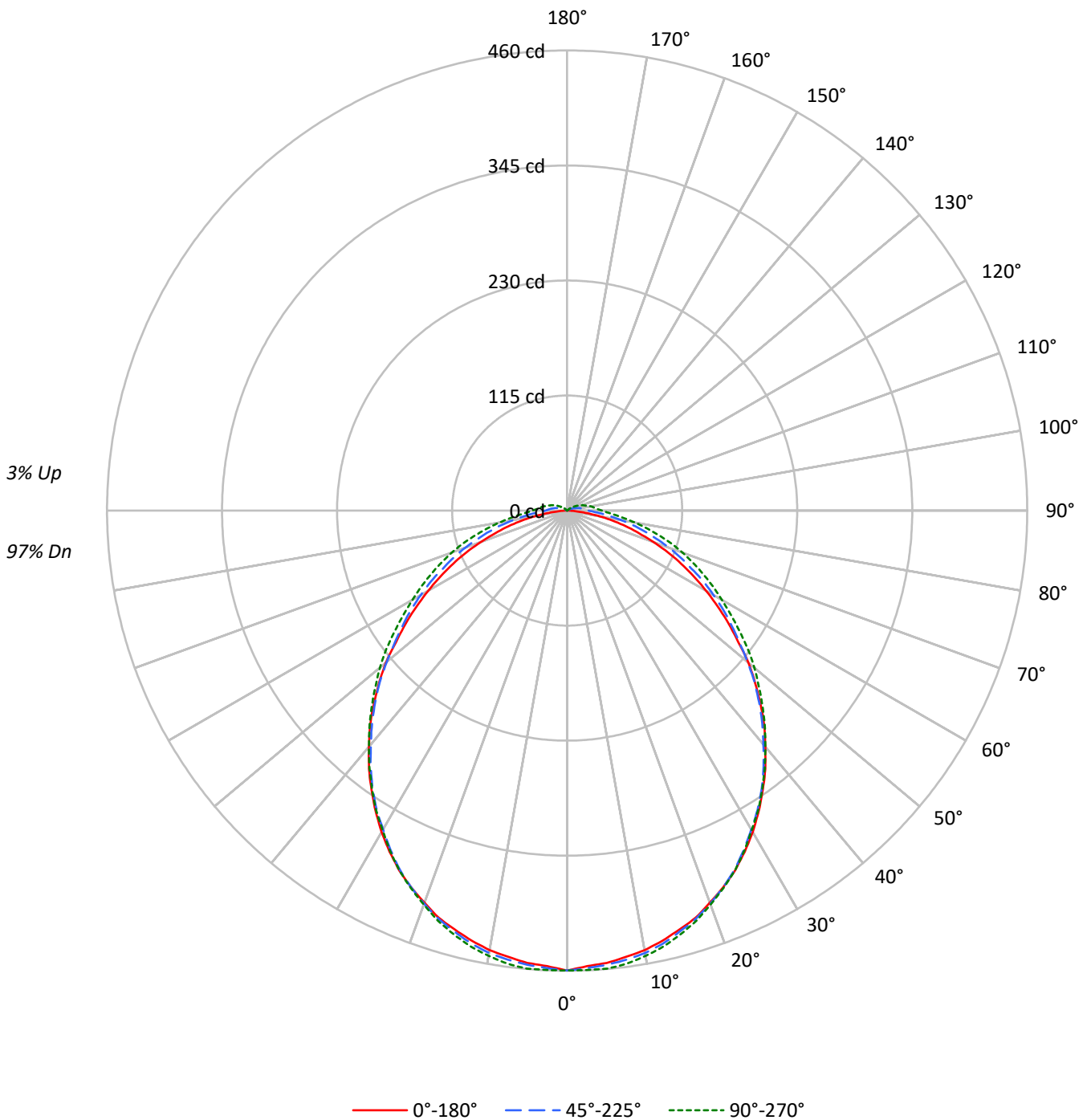
Lumens per Lamp: N/A  
Luminaire Lumens: 1245.5 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 4' x H: 0.02')  
CIE Type: Direct  
  
Input Watts (W): 10.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.9845  
Total Harmonic Distortion (THDi): 0.08  
Frequency (hertz): 60  
Stabilization Time: 0.333 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P861231

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-4F (Low-2400K)

### Luminous Intensity Polar Plot





TEST NUMBER: P861231

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-4F (Low-2400K)

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97																												
1	108	103	99	95	105	100	96	93	96	92	89	91	89	86	87	85	83	81																												
2	98	90	83	77	95	88	81	76	84	79	74	80	76	72	77	73	70	68																												
3	90	79	71	65	87	77	70	64	74	68	62	71	65	61	68	63	59	57																												
4	82	70	62	55	80	69	61	54	66	59	53	63	57	52	61	56	51	49																												
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	55	49	45	43																												
6	70	57	48	42	68	56	47	41	54	46	41	52	45	40	50	44	40	37																												
7	65	52	43	37	63	51	42	37	49	41	36	47	41	36	46	40	35	33																												
8	61	47	39	33	59	46	38	33	45	38	32	43	37	32	42	36	32	30																												
9	57	43	35	30	55	43	35	30	41	34	29	40	34	29	39	33	29	27																												
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	36	30	26	24																												

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

	0°	45°	90°
0°	14845	14845	14845
5°	14707	14545	14582
10°	14617	14272	14195
15°	14475	13891	13739
20°	14310	13485	13201
25°	14107	13014	12665
30°	13788	12427	12020
35°	13390	11865	11406
40°	12931	11174	10736
45°	12416	10499	10091
50°	11813	9741	9456
55°	11009	8993	8733
60°	10260	8316	8054
65°	9491	7553	7446
70°	8536	6830	6868
75°	7441	5979	6106
80°	5925	5055	5276
85°	3707	4089	4543

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12416 cd/sqm



TEST NUMBER: P861231

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-4F (Low-2400K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.4	3.5
10°-20°	123.3	9.9
20°-30°	182.7	14.7
30°-40°	212.7	17.1
40°-50°	210.9	16.9
50°-60°	181.7	14.6
60°-70°	136.5	11.0
70°-80°	84.0	6.7
80°-90°	36.3	2.9
90°-100°	17.1	1.4
100°-110°	10.2	0.8
110°-120°	4.9	0.4
120°-130°	1.7	0.1
130°-140°	0.1	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°	349.4	28.1
0°-40°	562.1	45.1
0°-60°	954.7	76.7
0°-90°	1211.5	97.3
90°-120°	32.1	2.6
90°-150°	34.0	2.7
90°-180°	34.0	2.7
0°-180°	1245.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	454	462	456	456	460	43
15°	434	441	436	436	438	122
25°	397	402	396	394	397	183
35°	341	344	339	338	340	213
45°	273	274	271	273	276	211
55°	197	199	201	208	210	176
65°	126	129	137	146	150	125
75°	61	68	80	91	95	65
85°	11	20	34	44	47	13
90°	0	9	21	31	35	0
95°	0	5	17	25	28	0
105°	0	1	10	17	19	0
115°	0	0	4	10	12	0
125°	0	0	1	4	5	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: P861231

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-4F (Low-2400K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	459.7	459.7	459.7	459.7	459.7
2.5°	455.8	463.6	457.8	457.8	459.7
5°	453.9	461.6	455.8	455.8	459.7
7.5°	450.1	458.7	452.9	452.9	456.8
10°	446.2	453.9	449.1	449.1	452.0
12.5°	440.4	448.1	443.3	443.3	446.2
15°	433.6	441.4	435.6	436.5	438.5
17.5°	426.9	433.6	427.8	427.8	429.8
20°	417.2	424.0	418.2	417.2	419.1
22.5°	407.6	413.4	407.6	406.6	408.5
25°	396.9	401.8	396.0	394.0	396.9
27.5°	384.4	388.2	382.4	381.5	383.4
30°	370.9	373.8	368.0	367.0	368.9
32.5°	356.4	359.3	354.4	353.5	355.4
35°	340.9	343.8	339.0	338.0	340.0
37.5°	325.5	327.4	322.6	322.6	324.5
40°	308.1	310.0	305.2	306.2	308.1
42.5°	291.7	292.6	288.8	289.7	292.6
45°	273.3	274.3	271.4	273.3	276.2
47.5°	255.0	255.9	254.0	256.9	259.8
50°	236.6	237.6	235.6	240.5	244.3
52.5°	215.4	217.3	217.3	224.1	227.9
55°	197.0	198.9	200.9	207.6	210.5
57.5°	178.7	180.6	185.4	191.2	194.1
60°	160.3	163.2	169.0	175.8	178.7
62.5°	142.9	145.8	153.6	160.3	164.2
65°	125.6	129.4	137.1	145.8	149.7
67.5°	109.1	113.0	122.7	131.3	136.2
70°	91.7	97.5	108.2	117.8	122.7
72.5°	75.3	82.1	93.7	105.3	109.1
75°	60.8	67.6	80.2	90.8	94.6
77.5°	46.4	54.1	67.6	77.3	81.1
80°	32.8	41.5	55.0	64.7	68.6
82.5°	20.3	29.9	43.5	53.1	57.0
85°	10.6	20.3	33.8	43.5	47.3
87.5°	2.9	12.6	26.1	35.7	39.6
90°	0.0	8.7	21.2	30.9	34.8
92.5°	0.0	6.8	19.3	28.0	30.9
95°	0.0	4.8	17.4	25.1	28.0
97.5°	0.0	3.9	15.5	23.2	26.1
100°	0.0	2.9	13.5	21.2	24.1
102.5°	0.0	1.9	11.6	19.3	21.2
105°	0.0	1.0	9.7	17.4	19.3
107.5°	0.0	1.0	7.7	15.5	17.4
110°	0.0	1.0	6.8	13.5	15.5



TEST NUMBER: P861231

CATALOG NUMBER: CS-SL-9SCT-120-ID-UNV-W-SA-STD-4F (Low-2400K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	4.8	11.6	13.5
115°	0.0	0.0	3.9	9.7	11.6
117.5°	0.0	0.0	2.9	7.7	9.7
120°	0.0	0.0	1.9	5.8	7.7
122.5°	0.0	0.0	1.9	4.8	6.8
125°	0.0	0.0	1.0	3.9	4.8
127.5°	0.0	0.0	1.0	2.9	3.9
130°	0.0	0.0	0.0	1.9	2.9
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: SP1-2312-259-1

Test Date: 02/01/2024

Luminaire Tested: CS-SL-8SCT-120-ID-UNV-W-SA-STD-1F (LOW-2400K)

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



**Test Information**

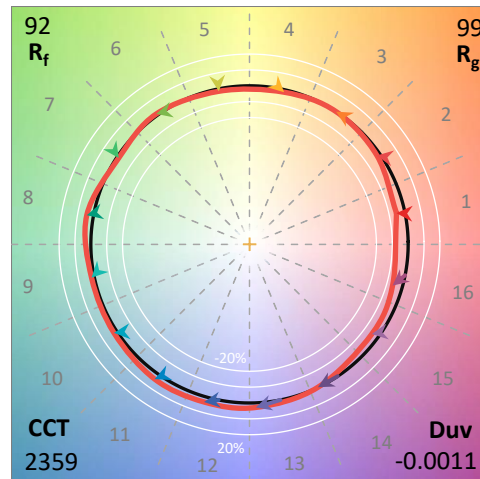
Test Method: LM-79-2019  
 Report Number: SP1-2312-259-1  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 02/08/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: iO LED  
 Catalog Number: **CS-SL-9SCT-120-ID-UNV-W-SA-STD-1F (LOW-2400K)**  
 Description: IO LED COVSELECT ARCHITECTURAL COVE

**Spectral Parameters**

CCT (K): 2359  
 CIE u': 0.2802  
 CIE v': 0.5320  
 Duv: -0.0011  
 CIE x: 0.4878  
 CIE y: 0.4116  
 CIE z: 0.1006  
 Peak Wavelength (nm): 621  
 Dominant Wavelength (nm): 586  
 Purity: 70.4

CRI (Ra):	92.0		
R1:	98.7	R9:	54.9
R2:	96.9	R10:	92.2
R3:	92.4	R11:	90.2
R4:	98.9	R12:	83.8
R5:	98.0	R13:	98.5
R6:	87.7	R14:	96.7
R7:	86.9		
R8:	77.0		

Rf: 91.9  
 Rg: 98.9



**Test Conditions**

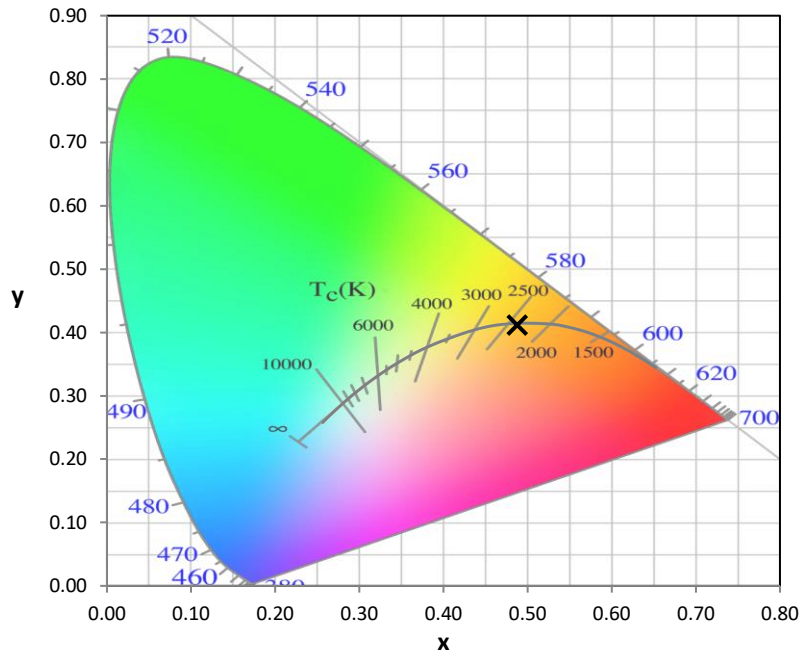
Stabilization Time: 25M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 25.4/24%  
 Sphere Temperature (°C): 25.1

REPORT NUMBER: SP1-2312-259-1

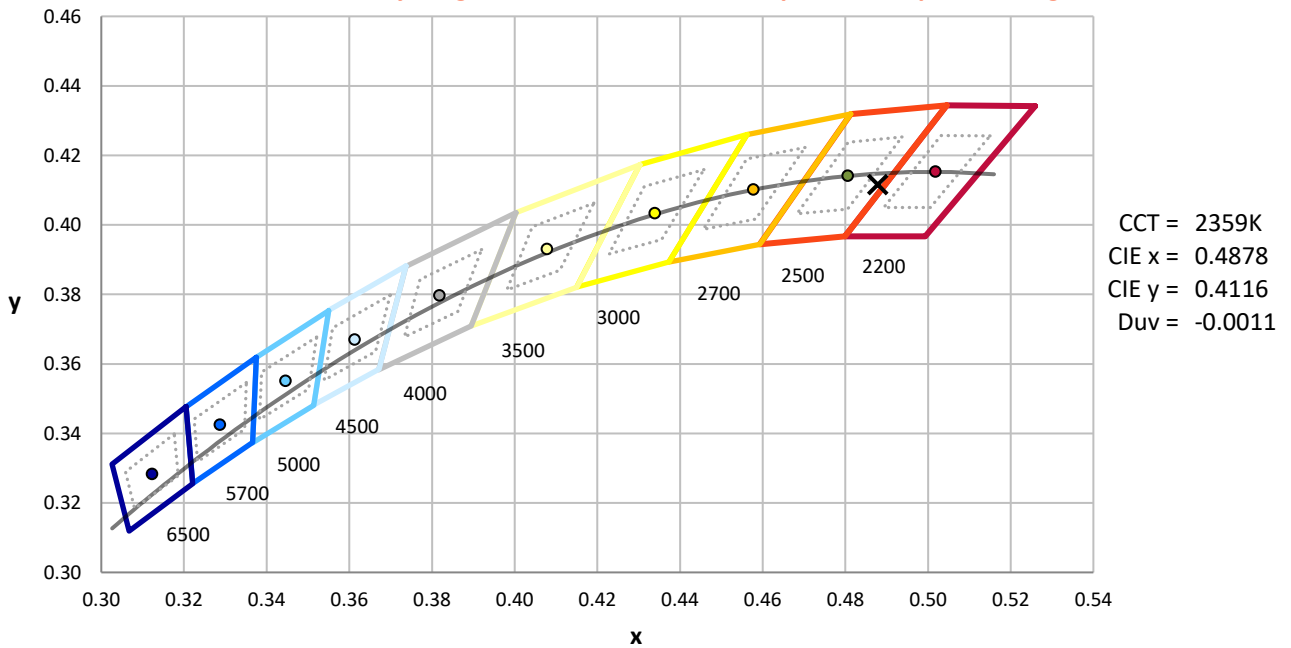
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	8/9/2023	2/9/2024
Power Meter	XITRON 2801 IN0071	10/23/2023	10/23/2024
AC Power Source	CHROMA 61603 IN0063	10/24/2023	10/24/2024
DC Power Source	AGILENT E3634A IN0208	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: SP1-2312-259-1

CIE 1931 Chromaticity Diagram



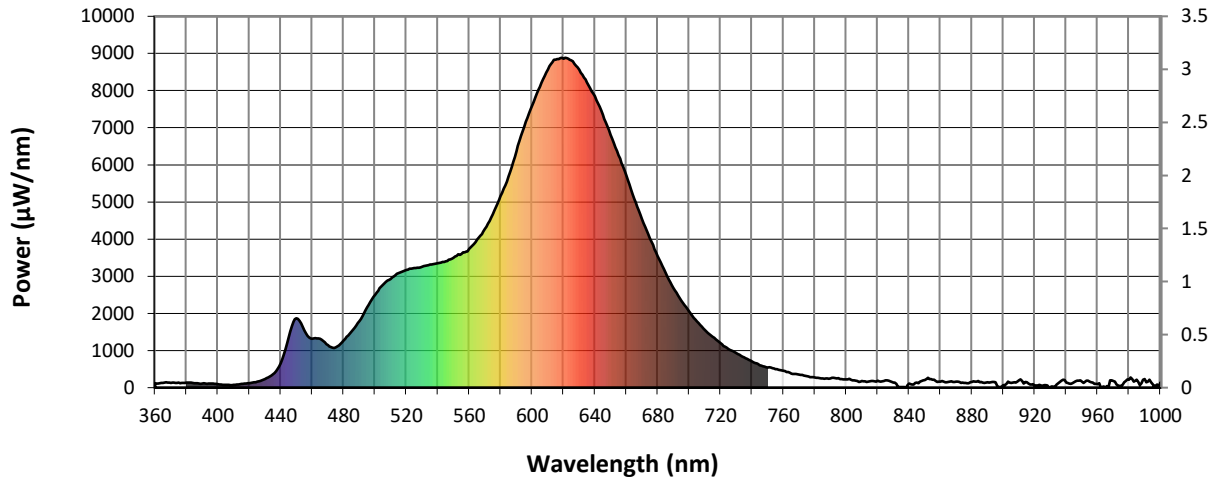
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2500K 7-step quadrangle

REPORT NUMBER: SP1-2312-259-1

**Photopic Flux vs. Wavelength**

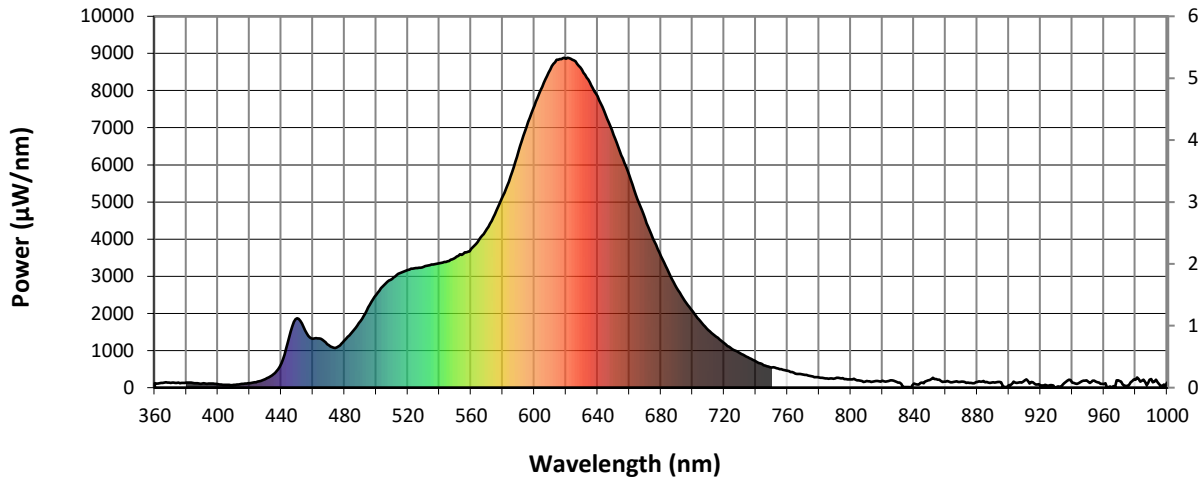


#####

$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )
360	115	NR	490	1795	NR	620	8857	NR	750	538	NR	880	150	NR
365	131	NR	495	2159	NR	625	8812	NR	755	499	NR	885	146	NR
370	131	NR	500	2496	NR	630	8561	NR	760	456	NR	890	146	NR
375	134	NR	505	2767	NR	635	8218	NR	765	380	NR	895	148	NR
380	134	NR	510	2927	NR	640	7850	NR	770	355	NR	900	68	NR
385	119	NR	515	3081	NR	645	7345	NR	775	304	NR	905	126	NR
390	110	NR	520	3168	NR	650	6810	NR	780	271	NR	910	201	NR
395	112	NR	525	3223	NR	655	6252	NR	785	245	NR	915	143	NR
400	93	NR	530	3256	NR	660	5723	NR	790	251	NR	920	62	NR
405	73	NR	535	3318	NR	665	5085	NR	795	254	NR	925	50	NR
410	74	NR	540	3347	NR	670	4538	NR	800	220	NR	930	16	NR
415	99	NR	545	3404	NR	675	4018	NR	805	193	NR	935	121	NR
420	120	NR	550	3493	NR	680	3544	NR	810	177	NR	940	139	NR
425	159	NR	555	3602	NR	685	3092	NR	815	174	NR	945	146	NR
430	230	NR	560	3734	NR	690	2689	NR	820	184	NR	950	160	NR
435	360	NR	565	3987	NR	695	2340	NR	825	192	NR	955	159	NR
440	656	NR	570	4274	NR	700	2054	NR	830	137	NR	960	95	NR
445	1351	NR	575	4673	NR	705	1779	NR	835	17	NR	965	0	NR
450	1866	NR	580	5162	NR	710	1553	NR	840	108	NR	970	181	NR
455	1543	NR	585	5690	NR	715	1368	NR	845	133	NR	975	53	NR
460	1319	NR	590	6371	NR	720	1199	NR	850	201	NR	980	216	NR
465	1313	NR	595	7025	NR	725	1045	NR	855	215	NR	985	217	NR
470	1144	NR	600	7597	NR	730	927	NR	860	161	NR	990	235	NR
475	1085	NR	605	8095	NR	735	814	NR	865	152	NR	995	91	NR
480	1275	NR	610	8568	NR	740	707	NR	870	162	NR	1000	137	NR
485	1508	NR	615	8828	NR	745	601	NR	875	124	NR			

REPORT NUMBER: SP1-2312-259-1

Scotopic Flux vs. Wavelength



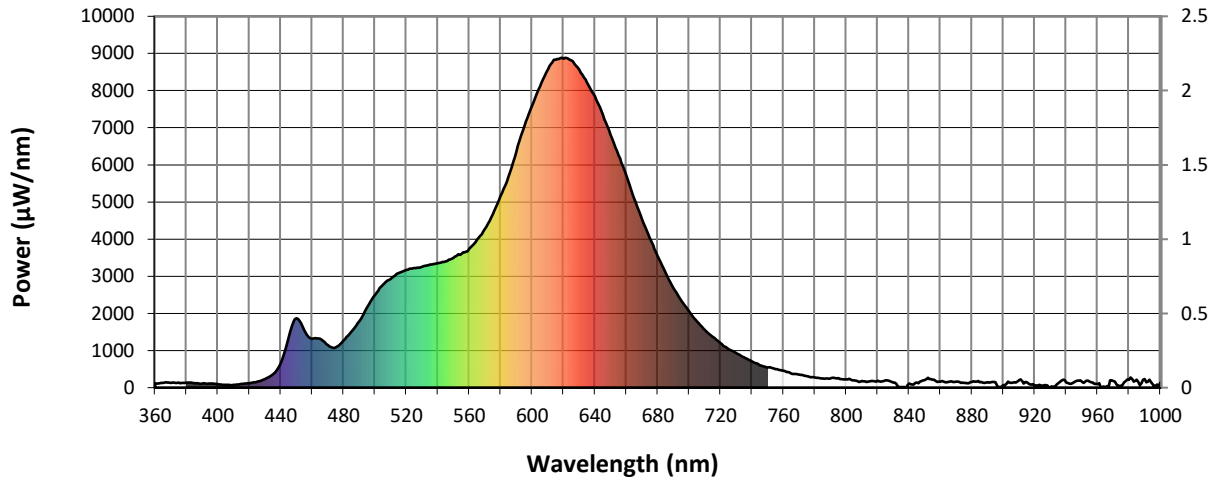
Scotopic Lumens: 404.5

S/P: 1.2

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	115	NR	490	1795	NR	620	8857	NR	750	538	NR	880	150	NR
365	131	NR	495	2159	NR	625	8812	NR	755	499	NR	885	146	NR
370	131	NR	500	2496	NR	630	8561	NR	760	456	NR	890	146	NR
375	134	NR	505	2767	NR	635	8218	NR	765	380	NR	895	148	NR
380	134	NR	510	2927	NR	640	7850	NR	770	355	NR	900	68	NR
385	119	NR	515	3081	NR	645	7345	NR	775	304	NR	905	126	NR
390	110	NR	520	3168	NR	650	6810	NR	780	271	NR	910	201	NR
395	112	NR	525	3223	NR	655	6252	NR	785	245	NR	915	143	NR
400	93	NR	530	3256	NR	660	5723	NR	790	251	NR	920	62	NR
405	73	NR	535	3318	NR	665	5085	NR	795	254	NR	925	50	NR
410	74	NR	540	3347	NR	670	4538	NR	800	220	NR	930	16	NR
415	99	NR	545	3404	NR	675	4018	NR	805	193	NR	935	121	NR
420	120	NR	550	3493	NR	680	3544	NR	810	177	NR	940	139	NR
425	159	NR	555	3602	NR	685	3092	NR	815	174	NR	945	146	NR
430	230	NR	560	3734	NR	690	2689	NR	820	184	NR	950	160	NR
435	360	NR	565	3987	NR	695	2340	NR	825	192	NR	955	159	NR
440	656	NR	570	4274	NR	700	2054	NR	830	137	NR	960	95	NR
445	1351	NR	575	4673	NR	705	1779	NR	835	17	NR	965	0	NR
450	1866	NR	580	5162	NR	710	1553	NR	840	108	NR	970	181	NR
455	1543	NR	585	5690	NR	715	1368	NR	845	133	NR	975	53	NR
460	1319	NR	590	6371	NR	720	1199	NR	850	201	NR	980	216	NR
465	1313	NR	595	7025	NR	725	1045	NR	855	215	NR	985	217	NR
470	1144	NR	600	7597	NR	730	927	NR	860	161	NR	990	235	NR
475	1085	NR	605	8095	NR	735	814	NR	865	152	NR	995	91	NR
480	1275	NR	610	8568	NR	740	707	NR	870	162	NR	1000	137	NR
485	1508	NR	615	8828	NR	745	601	NR	875	124	NR			

REPORT NUMBER: SP1-2312-259-1

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: 150.3 M/P: 0.45**

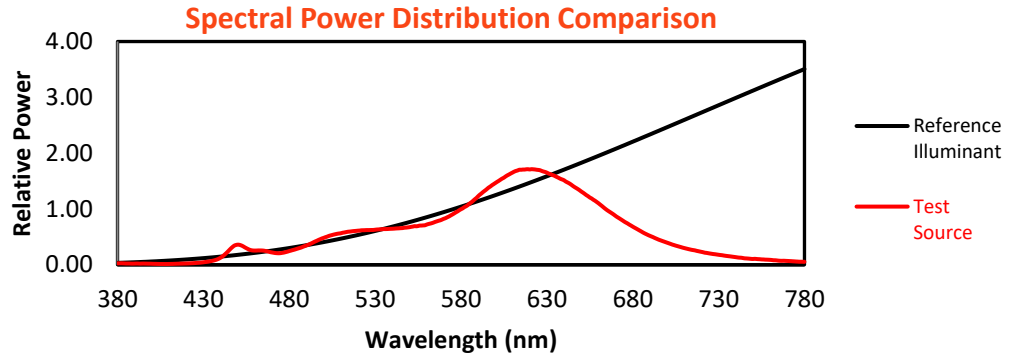
λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)
360	115	NR	490	1795	NR	620	8857	NR	750	538	NR	880	150	NR
365	131	NR	495	2159	NR	625	8812	NR	755	499	NR	885	146	NR
370	131	NR	500	2496	NR	630	8561	NR	760	456	NR	890	146	NR
375	134	NR	505	2767	NR	635	8218	NR	765	380	NR	895	148	NR
380	134	NR	510	2927	NR	640	7850	NR	770	355	NR	900	68	NR
385	119	NR	515	3081	NR	645	7345	NR	775	304	NR	905	126	NR
390	110	NR	520	3168	NR	650	6810	NR	780	271	NR	910	201	NR
395	112	NR	525	3223	NR	655	6252	NR	785	245	NR	915	143	NR
400	93	NR	530	3256	NR	660	5723	NR	790	251	NR	920	62	NR
405	73	NR	535	3318	NR	665	5085	NR	795	254	NR	925	50	NR
410	74	NR	540	3347	NR	670	4538	NR	800	220	NR	930	16	NR
415	99	NR	545	3404	NR	675	4018	NR	805	193	NR	935	121	NR
420	120	NR	550	3493	NR	680	3544	NR	810	177	NR	940	139	NR
425	159	NR	555	3602	NR	685	3092	NR	815	174	NR	945	146	NR
430	230	NR	560	3734	NR	690	2689	NR	820	184	NR	950	160	NR
435	360	NR	565	3987	NR	695	2340	NR	825	192	NR	955	159	NR
440	656	NR	570	4274	NR	700	2054	NR	830	137	NR	960	95	NR
445	1351	NR	575	4673	NR	705	1779	NR	835	17	NR	965	0	NR
450	1866	NR	580	5162	NR	710	1553	NR	840	108	NR	970	181	NR
455	1543	NR	585	5690	NR	715	1368	NR	845	133	NR	975	53	NR
460	1319	NR	590	6371	NR	720	1199	NR	850	201	NR	980	216	NR
465	1313	NR	595	7025	NR	725	1045	NR	855	215	NR	985	217	NR
470	1144	NR	600	7597	NR	730	927	NR	860	161	NR	990	235	NR
475	1085	NR	605	8095	NR	735	814	NR	865	152	NR	995	91	NR
480	1275	NR	610	8568	NR	740	707	NR	870	162	NR	1000	137	NR
485	1508	NR	615	8828	NR	745	601	NR	875	124	NR			

REPORT NUMBER: SP1-2312-259-1

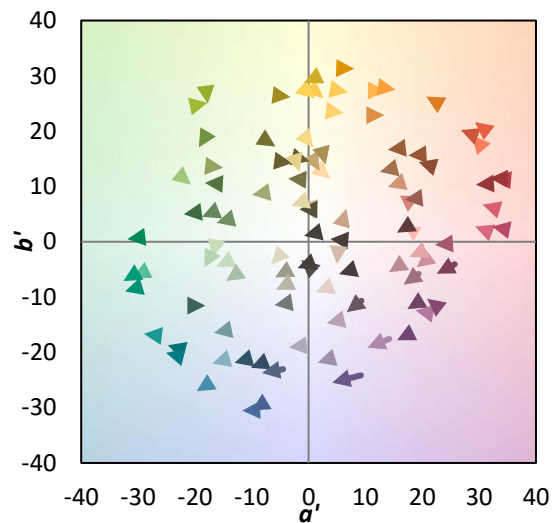
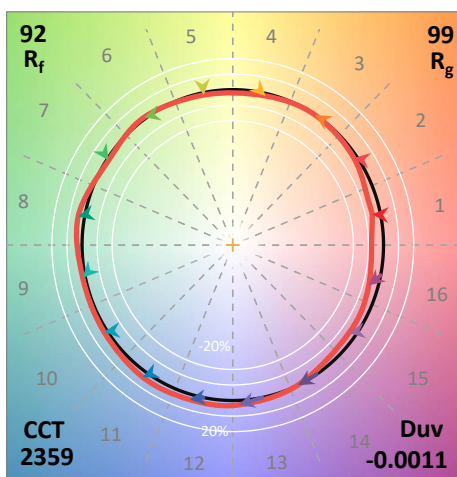
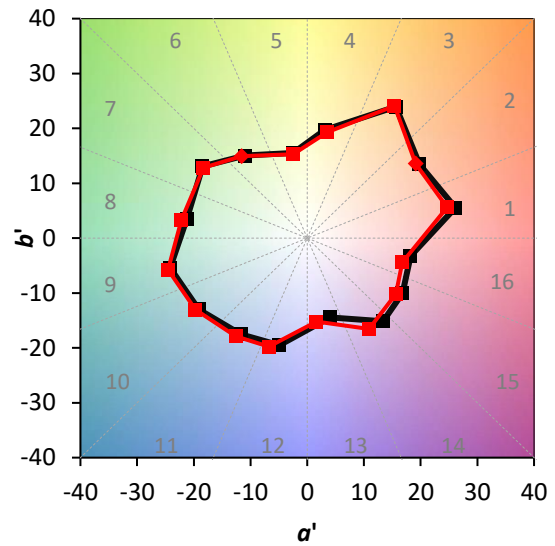
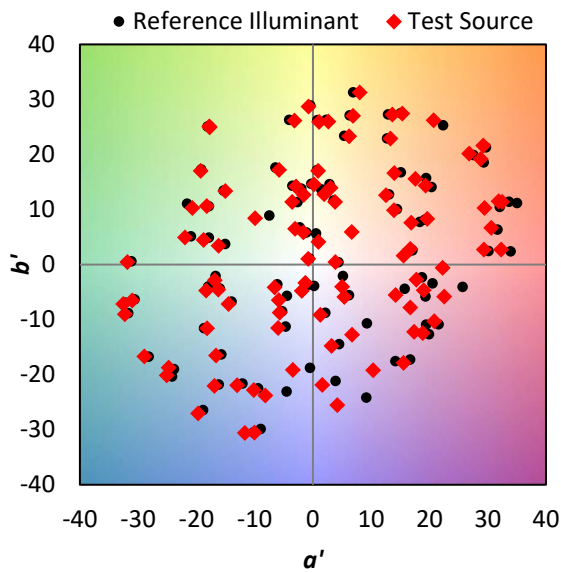
TM-30-18

**Summary**

$R_f = 91.9$   
 $R_g = 98.9$   
 CIE  $R_a = 92.0$   
 $R_9 = 54.9$



**Color Vector Graphics**

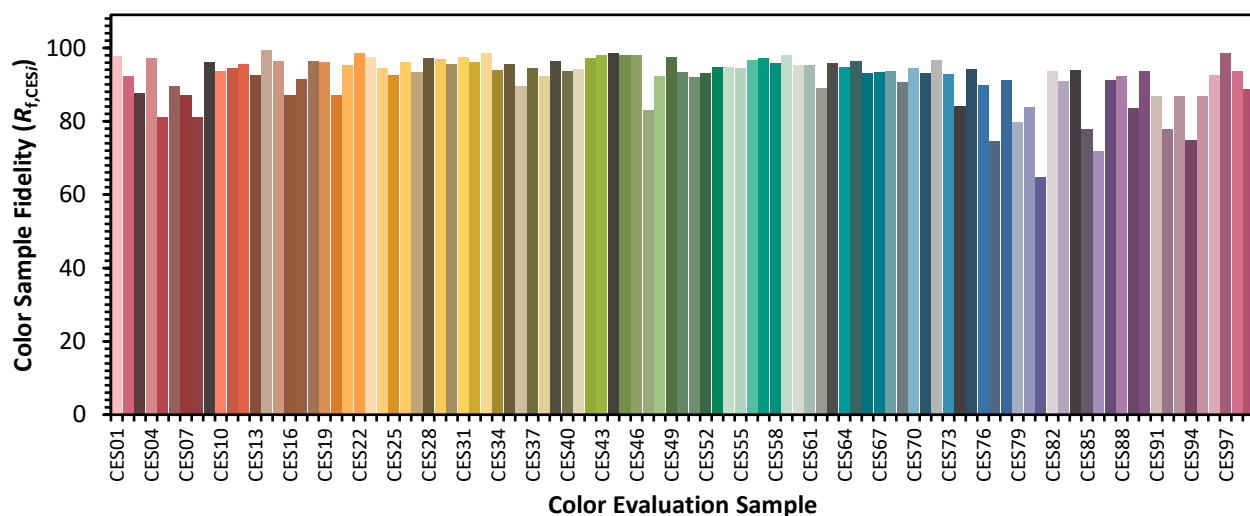


REPORT NUMBER: SP1-2312-259-1

TM-30-18

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

CES01 = 87	CES26 = 96	CES51 = 92	CES76 = 90
CES02 = 65	CES27 = 93	CES52 = 93	CES77 = 75
CES03 = 32	CES28 = 97	CES53 = 95	CES78 = 91
CES04 = 71	CES29 = 97	CES54 = 95	CES79 = 80
CES05 = 52	CES30 = 96	CES55 = 95	CES80 = 84
CES06 = 52	CES31 = 97	CES56 = 97	CES81 = 65
CES07 = 45	CES32 = 96	CES57 = 97	CES82 = 94
CES08 = 44	CES33 = 99	CES58 = 96	CES83 = 91
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 94
CES10 = 78	CES35 = 96	CES60 = 95	CES85 = 78
CES11 = 60	CES36 = 89	CES61 = 95	CES86 = 72
CES12 = 67	CES37 = 95	CES62 = 89	CES87 = 91
CES13 = 45	CES38 = 92	CES63 = 96	CES88 = 92
CES14 = 75	CES39 = 96	CES64 = 95	CES89 = 84
CES15 = 73	CES40 = 94	CES65 = 96	CES90 = 94
CES16 = 49	CES41 = 94	CES66 = 93	CES91 = 87
CES17 = 51	CES42 = 97	CES67 = 93	CES92 = 78
CES18 = 57	CES43 = 98	CES68 = 94	CES93 = 87
CES19 = 73	CES44 = 99	CES69 = 91	CES94 = 75
CES20 = 69	CES45 = 98	CES70 = 94	CES95 = 87
CES21 = 87	CES46 = 98	CES71 = 93	CES96 = 93
CES22 = 80	CES47 = 83	CES72 = 97	CES97 = 98
CES23 = 92	CES48 = 92	CES73 = 93	CES98 = 94
CES24 = 91	CES49 = 97	CES74 = 84	CES99 = 89
CES25 = 72	CES50 = 93	CES75 = 94	

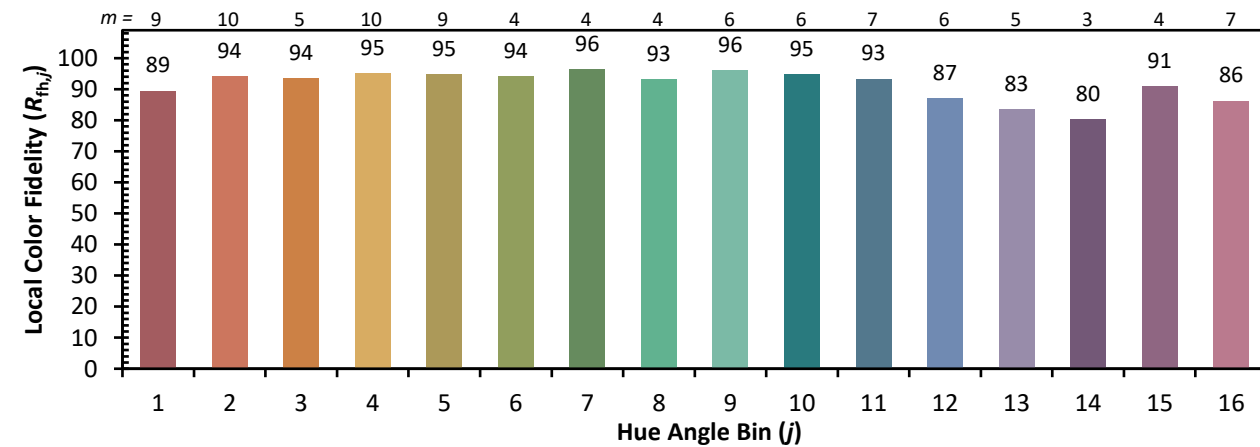
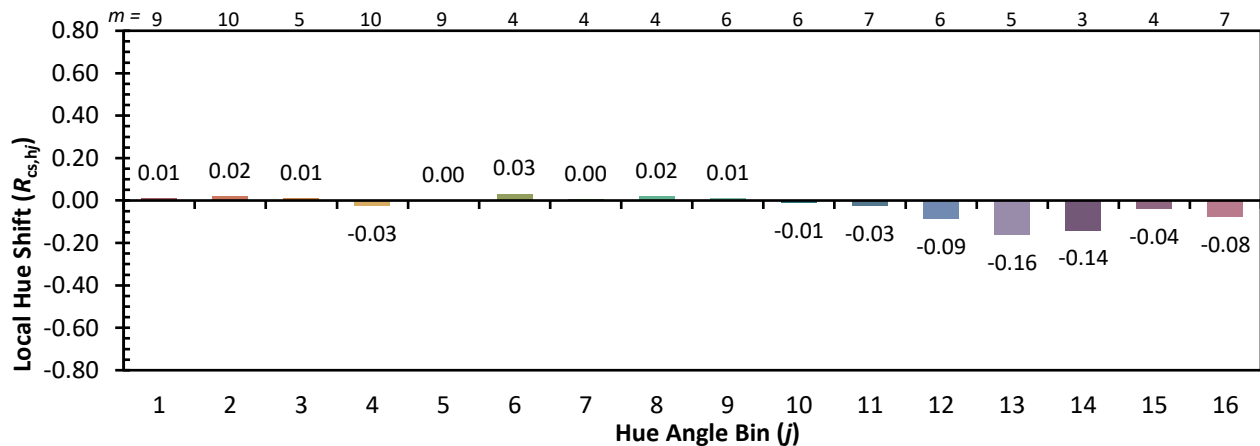
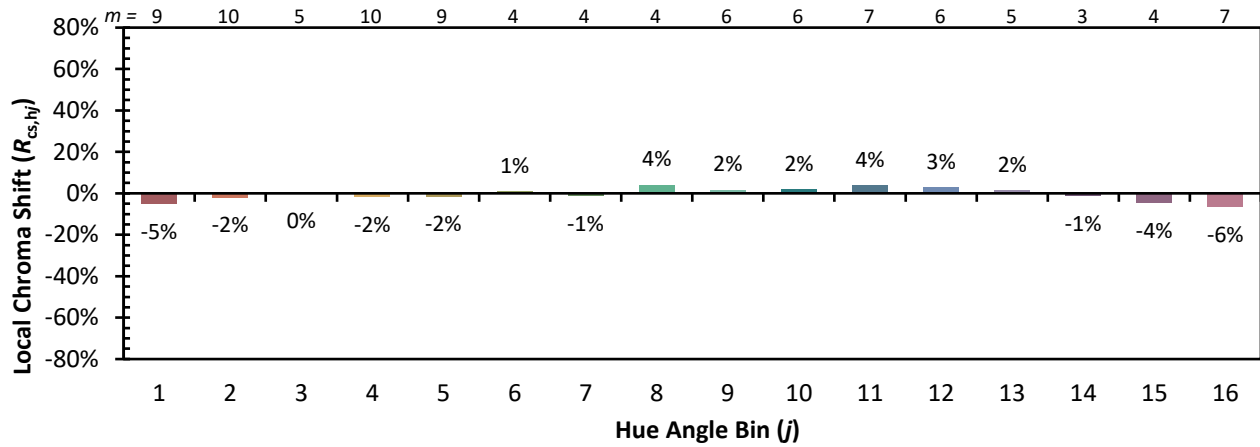




REPORT NUMBER: SP1-2312-259-1

TM-30-18

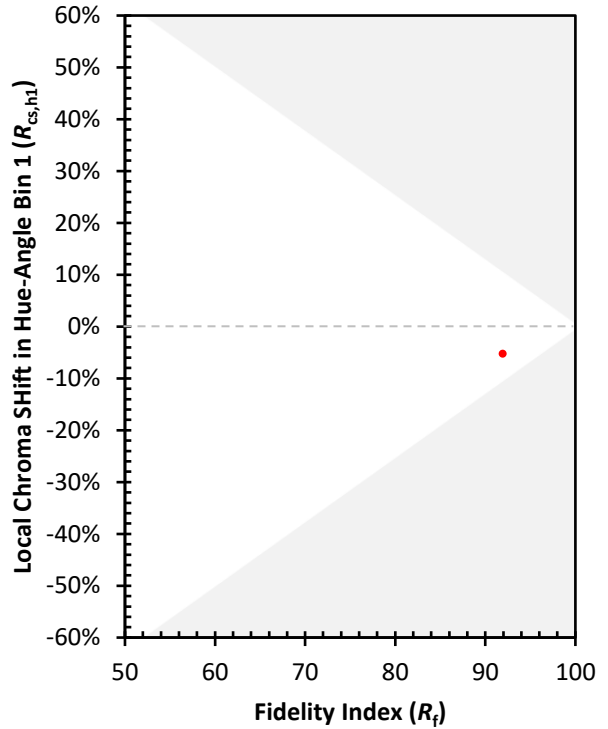
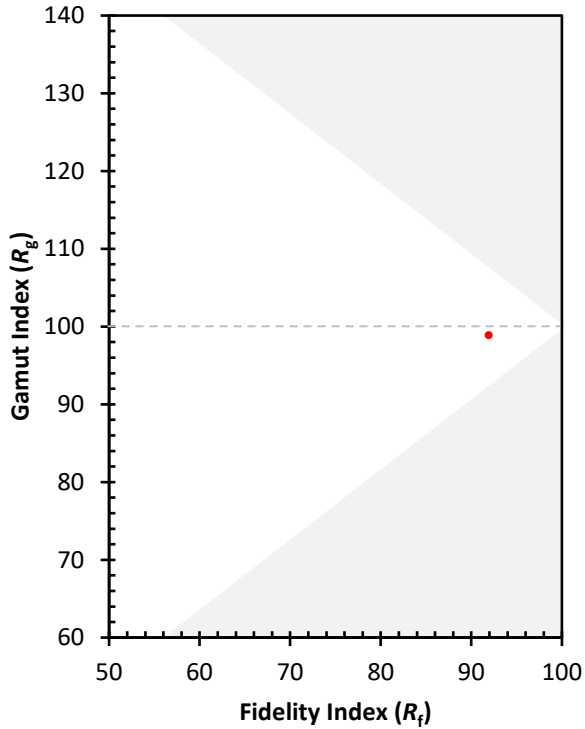
Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2312-259-1

TM-30-18

Measure Comparisons



(END OF REPORT)