

Signify Classified - Internal  
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: P798554

Luminaire Tested: **LT4069FS1EWHR-935**

Issue Date: 04/03/2024



**Test Information**

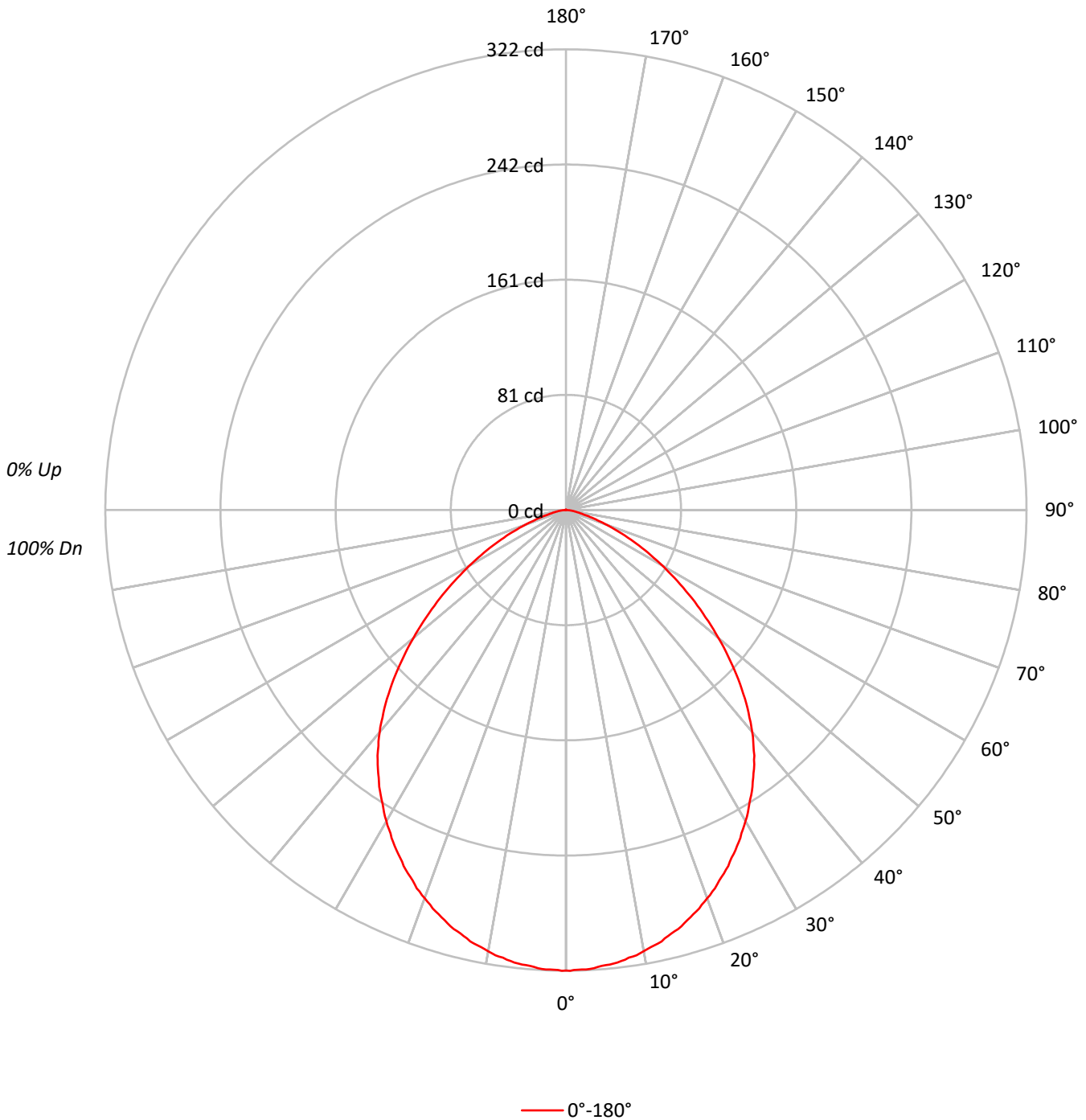
Test Method: LM-79-08  
Report Number: P798554  
Test Lab: ETA Testing Technology(A2)  
Issue Date: 04/03/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: LT4069FS1EWHR-935  
Description: 4 inch 90 CRI COLOR TUNING RECESSED DOWNLIGHT with DRIVER ON BOARD  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 684.6 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.26  
Luminous Opening: Circular (Dia: 0.3' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 7  
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

TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

### Luminous Intensity Polar Plot





TEST NUMBER: P798554  
 CATALOG NUMBER: LT4069FS1EWHR-935

**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	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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66			
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	59	57			
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51			
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45			
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40			
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36			
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33			
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30			

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

	0°
0°	49018
5°	48808
10°	48429
15°	47799
20°	46784
25°	45567
30°	44152
35°	42422
40°	40274
45°	37062
50°	32977
55°	28540
60°	23786
65°	18809
70°	13713
75°	8884
80°	6226
85°	5067



TEST NUMBER: P798554  
 CATALOG NUMBER: LT4069FS1EWHR-935

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.3	4.4
10°-20°	85.3	12.5
20°-30°	124.8	18.2
30°-40°	142.5	20.8
40°-50°	132.3	19.3
50°-60°	96.2	14.0
60°-70°	52.2	7.6
70°-80°	17.3	2.5
80°-90°	3.3	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.1	0.0
120°-130°	0.1	0.0
130°-140°	0.1	0.0
140°-150°	0.1	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	240.4	35.1
0°-40°	383.0	55.9
0°-60°	611.5	89.3
0°-90°	684.2	99.9
90°-120°	0.1	0.0
90°-150°	0.3	0.0
90°-180°	0.0	0.0
0°-180°	684.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	322	
5°	319	30
15°	303	85
25°	271	125
35°	228	143
45°	172	132
55°	108	96
65°	52	52
75°	15	17
85°	3	3
90°	0	0
95°	0	0
105°	0	0
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	0	0
165°	0	0
175°	0	0
180°	0	0



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	321.9
0.5°	322.1
1°	321.5
1.5°	321.5
2°	321.3
2.5°	321.5
3°	321.2
3.5°	320.9
4°	320.2
4.5°	319.7
5°	319.3
5.5°	319.2
6°	318.8
6.5°	318.4
7°	317.5
7.5°	317.0
8°	316.0
8.5°	315.6
9°	315.1
9.5°	314.1
10°	313.2
10.5°	312.2
11°	311.2
11.5°	310.4
12°	309.8
12.5°	308.9
13°	307.3
13.5°	306.3
14°	305.0
14.5°	304.1
15°	303.2
15.5°	301.9
16°	300.5
16.5°	299.0
17°	297.7
17.5°	296.2
18°	294.9
18.5°	293.7
19°	291.7
19.5°	290.3
20°	288.7
20.5°	287.4
21°	285.6
21.5°	284.3
22°	282.2



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (continued):**

	0°
22.5°	280.2
23°	278.6
23.5°	277.0
24°	275.2
24.5°	273.5
25°	271.2
25.5°	269.2
26°	267.4
26.5°	265.6
27°	263.6
27.5°	261.6
28°	259.6
28.5°	257.1
29°	255.1
29.5°	253.3
30°	251.1
30.5°	249.1
31°	246.8
31.5°	244.5
32°	242.0
32.5°	239.8
33°	237.7
33.5°	235.5
34°	233.3
34.5°	230.7
35°	228.2
35.5°	225.9
36°	223.7
36.5°	221.2
37°	218.6
37.5°	216.4
38°	213.4
38.5°	210.7
39°	208.2
39.5°	205.6
40°	202.6
40.5°	199.8
41°	196.8
41.5°	193.6
42°	190.9
42.5°	187.9
43°	184.8
43.5°	181.9
44°	178.4
44.5°	175.3



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (continued):**

	0°
45°	172.1
45.5°	168.9
46°	165.8
46.5°	162.4
47°	159.1
47.5°	155.7
48°	152.5
48.5°	149.4
49°	146.1
49.5°	142.6
50°	139.2
50.5°	136.0
51°	132.8
51.5°	129.6
52°	126.5
52.5°	123.0
53°	119.8
53.5°	116.7
54°	113.6
54.5°	110.6
55°	107.5
55.5°	104.4
56°	101.2
56.5°	98.3
57°	95.3
57.5°	92.4
58°	89.5
58.5°	86.5
59°	83.6
59.5°	80.8
60°	78.1
60.5°	75.4
61°	72.6
61.5°	69.9
62°	67.2
62.5°	64.7
63°	62.1
63.5°	59.6
64°	57.1
64.5°	54.6
65°	52.2
65.5°	49.8
66°	47.5
66.5°	45.2
67°	42.9





TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	40.8
68°	38.6
68.5°	36.5
69°	34.6
69.5°	32.7
70°	30.8
70.5°	28.9
71°	27.0
71.5°	25.2
72°	23.5
72.5°	22.0
73°	20.4
73.5°	19.0
74°	17.5
74.5°	16.3
75°	15.1
75.5°	14.0
76°	12.9
76.5°	12.0
77°	11.1
77.5°	10.3
78°	9.6
78.5°	8.9
79°	8.2
79.5°	7.6
80°	7.1
80.5°	6.6
81°	6.2
81.5°	5.8
82°	5.3
82.5°	4.9
83°	4.5
83.5°	4.0
84°	3.6
84.5°	3.3
85°	2.9
85.5°	2.5
86°	2.1
86.5°	1.7
87°	1.3
87.5°	1.0
88°	0.6
88.5°	0.2
89°	0.0
89.5°	0.0



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (continued):**

	0°
90°	0.0
90.5°	0.0
91°	0.0
91.5°	0.0
92°	0.0
92.5°	0.0
93°	0.0
93.5°	0.0
94°	0.0
94.5°	0.0
95°	0.0
95.5°	0.0
96°	0.0
96.5°	0.0
97°	0.0
97.5°	0.0
98°	0.0
98.5°	0.0
99°	0.0
99.5°	0.0
100°	0.0
100.5°	0.0
101°	0.0
101.5°	0.0
102°	0.0
102.5°	0.0
103°	0.0
103.5°	0.0
104°	0.0
104.5°	0.0
105°	0.0
105.5°	0.0
106°	0.0
106.5°	0.0
107°	0.0
107.5°	0.0
108°	0.0
108.5°	0.0
109°	0.0
109.5°	0.0
110°	0.0
110.5°	0.0
111°	0.0
111.5°	0.0
112°	0.0



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	0.0
113°	0.0
113.5°	0.0
114°	0.0
114.5°	0.0
115°	0.0
115.5°	0.0
116°	0.0
116.5°	0.0
117°	0.0
117.5°	0.1
118°	0.1
118.5°	0.1
119°	0.1
119.5°	0.1
120°	0.1
120.5°	0.1
121°	0.1
121.5°	0.1
122°	0.1
122.5°	0.1
123°	0.1
123.5°	0.1
124°	0.1
124.5°	0.1
125°	0.1
125.5°	0.1
126°	0.1
126.5°	0.1
127°	0.1
127.5°	0.1
128°	0.1
128.5°	0.1
129°	0.1
129.5°	0.1
130°	0.1
130.5°	0.1
131°	0.1
131.5°	0.1
132°	0.1
132.5°	0.1
133°	0.1
133.5°	0.1
134°	0.1
134.5°	0.1



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (continued):**

	0°
135°	0.1
135.5°	0.1
136°	0.1
136.5°	0.1
137°	0.1
137.5°	0.1
138°	0.1
138.5°	0.1
139°	0.1
139.5°	0.1
140°	0.1
140.5°	0.1
141°	0.1
141.5°	0.1
142°	0.1
142.5°	0.1
143°	0.1
143.5°	0.1
144°	0.1
144.5°	0.1
145°	0.1
145.5°	0.1
146°	0.1
146.5°	0.1
147°	0.1
147.5°	0.1
148°	0.1
148.5°	0.1
149°	0.1
149.5°	0.1
150°	0.1
150.5°	0.1
151°	0.1
151.5°	0.1
152°	0.1
152.5°	0.1
153°	0.1
153.5°	0.1
154°	0.1
154.5°	0.1
155°	0.1
155.5°	0.2
156°	0.2
156.5°	0.2
157°	0.2



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

**CANDELA DISTRIBUTION (continued):**

	0°
157.5°	0.2
158°	0.2
158.5°	0.2
159°	0.2
159.5°	0.2
160°	0.2
160.5°	0.2
161°	0.2
161.5°	0.2
162°	0.2
162.5°	0.2
163°	0.2
163.5°	0.2
164°	0.2
164.5°	0.2
165°	0.2
165.5°	0.2
166°	0.2
166.5°	0.2
167°	0.2
167.5°	0.2
168°	0.2
168.5°	0.2
169°	0.2
169.5°	0.2
170°	0.2
170.5°	0.2
171°	0.2
171.5°	0.2
172°	0.2
172.5°	0.2
173°	0.2
173.5°	0.2
174°	0.2
174.5°	0.2
175°	0.2
175.5°	0.2
176°	0.2
176.5°	0.2
177°	0.2
177.5°	0.2
178°	0.2
178.5°	0.2
179°	0.2
179.5°	0.2

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



TEST NUMBER: P798554  
CATALOG NUMBER: LT4069FS1EWHR-935

CANDELA DISTRIBUTION (continued):

0°  
180° | 0.2

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

Report Prepared for

Cooper Lighting Solutions

HALO

Report Number: SP1-2401-294-3

Test Date: 03/08/2024

Luminaire Tested: LT4069FS1EWHR-3500K

Data in this report applies to families of products LT4069FS1EWHR-3500K.

This test was performed under the Supervised Manufacturer's Testing Program.  
The results of this test have not been influenced by sources from within Eaton or from external interests.

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2401-294-3  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 03/08/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: HALO  
 Catalog Number: **LT4069FS1EWHR-3500K**  
 Description: 4 INCH HALO LT 5CCT DOB .

**Spectral Parameters**

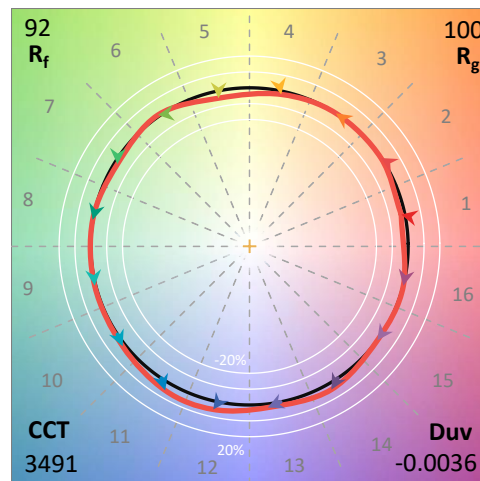
CCT (K): 3491  
 CIE u': 0.2376  
 CIE v': 0.5066  
 Duv: -0.0036  
 CIE x: 0.4020  
 CIE y: 0.3809  
 CIE z: 0.2171  
 Peak Wavelength (nm): 632  
 Dominant Wavelength (nm): 582  
 Purity: 35.2

CRI (Ra):	96.7		
R1:	96.5	R9:	91.8
R2:	97.9	R10:	98.8
R3:	96.9	R11:	96.3
R4:	99.1	R12:	79.6
R5:	97.4	R13:	96.9
R6:	93.9	R14:	96.6
R7:	95.8		
R8:	96.1		

Rf: 91.8  
 Rg: 100.4

**Test Conditions**

Stabilization Time: 10M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 25.8/43%  
 Sphere Temperature (°C): 25.0





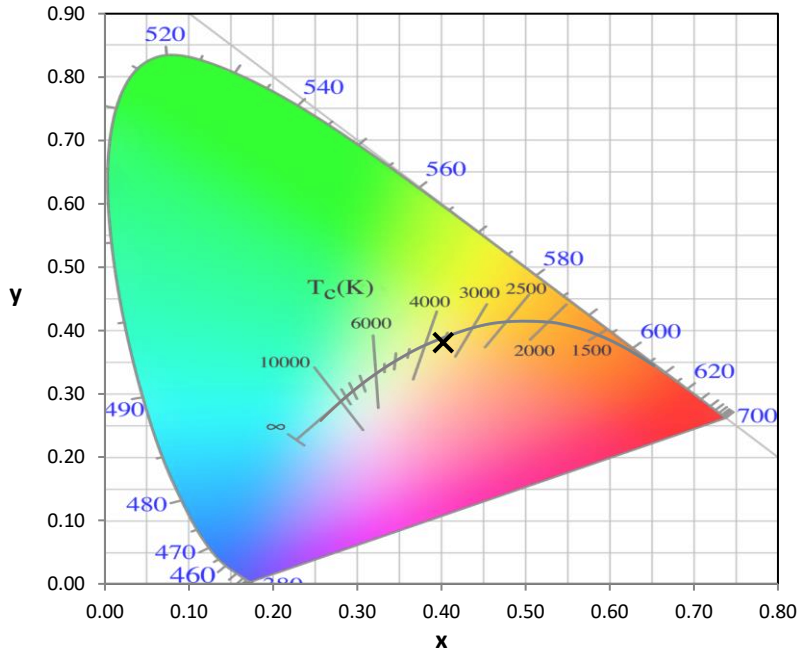
REPORT NUMBER: SP1-2401-294-3

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	2/12/2024	8/12/2024
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

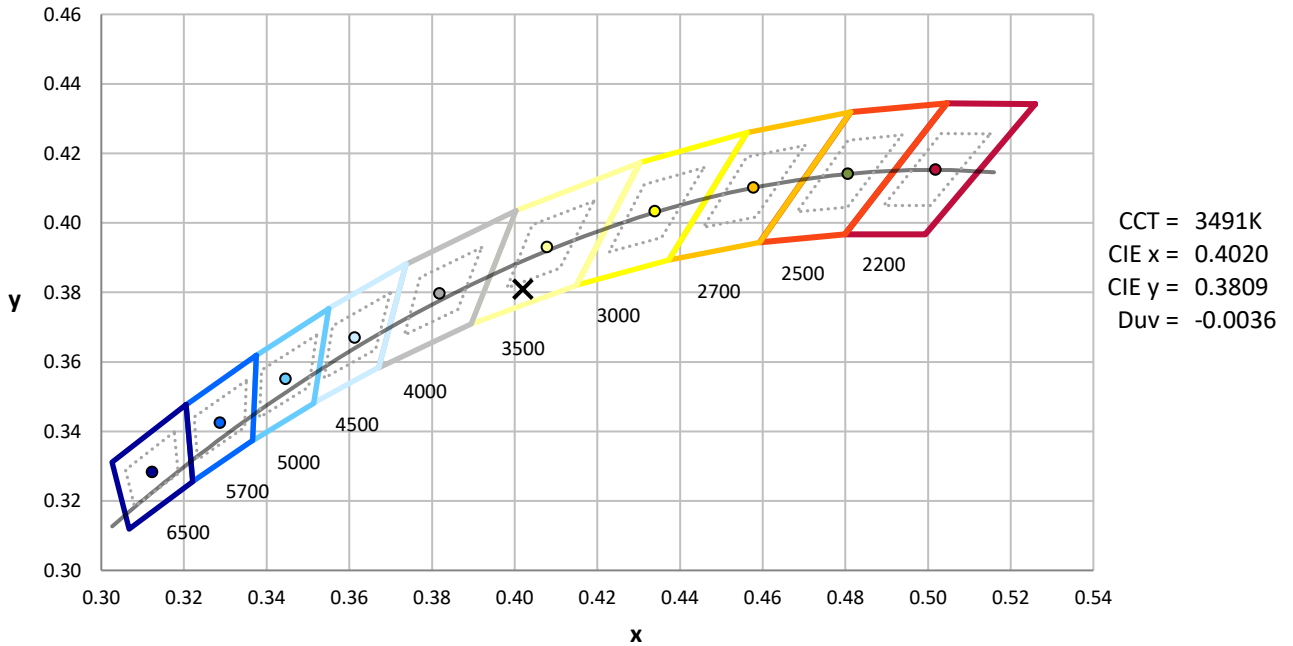
Sample Number	Condition	Description
2401-294-LM1	Good	LT4069FS1EWHR

REPORT NUMBER: SP1-2401-294-3

CIE 1931 Chromaticity Diagram



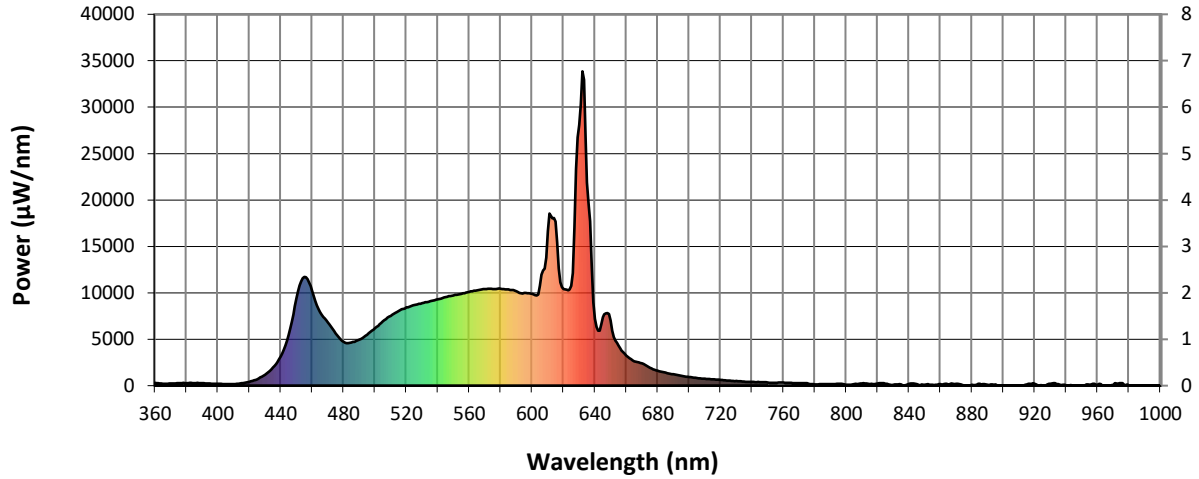
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2401-294-3

**Photopic Flux vs. Wavelength**

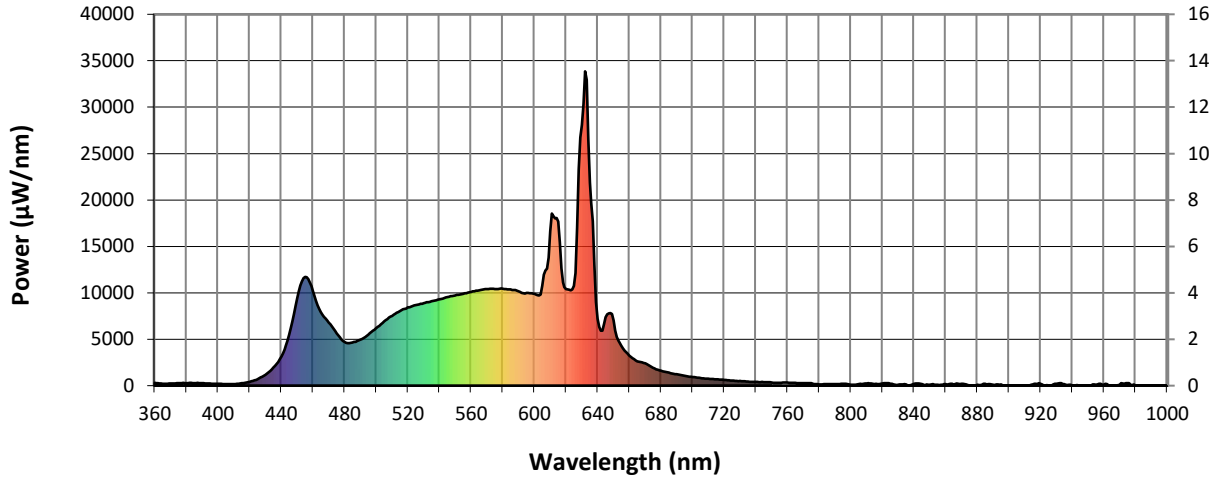


#####

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	309	NR	490	4964	NR	620	10402	NR	750	333	NR	880	87	NR
365	205	NR	495	5481	NR	625	10741	NR	755	300	NR	885	199	NR
370	225	NR	500	6189	NR	630	28088	NR	760	322	NR	890	89	NR
375	284	NR	505	6912	NR	635	21867	NR	765	302	NR	895	114	NR
380	281	NR	510	7525	NR	640	7209	NR	770	268	NR	900	0	NR
385	274	NR	515	8022	NR	645	7380	NR	775	256	NR	905	0	NR
390	259	NR	520	8425	NR	650	7011	NR	780	139	NR	910	0	NR
395	219	NR	525	8692	NR	655	4296	NR	785	178	NR	915	139	NR
400	197	NR	530	8874	NR	660	3245	NR	790	169	NR	920	196	NR
405	168	NR	535	9095	NR	665	2620	NR	795	200	NR	925	0	NR
410	171	NR	540	9302	NR	670	2401	NR	800	98	NR	930	198	NR
415	258	NR	545	9528	NR	675	1933	NR	805	154	NR	935	152	NR
420	411	NR	550	9697	NR	680	1599	NR	810	234	NR	940	37	NR
425	697	NR	555	9888	NR	685	1393	NR	815	172	NR	945	0	NR
430	1161	NR	560	10108	NR	690	1222	NR	820	244	NR	950	0	NR
435	1943	NR	565	10260	NR	695	1067	NR	825	217	NR	955	103	NR
440	3135	NR	570	10411	NR	700	939	NR	830	85	NR	960	87	NR
445	5466	NR	575	10402	NR	705	821	NR	835	115	NR	965	0	NR
450	9379	NR	580	10447	NR	710	743	NR	840	196	NR	970	64	NR
455	11712	NR	585	10377	NR	715	677	NR	845	167	NR	975	254	NR
460	10232	NR	590	10148	NR	720	617	NR	850	112	NR	980	0	NR
465	7909	NR	595	9978	NR	725	548	NR	855	111	NR	985	0	NR
470	6801	NR	600	9893	NR	730	496	NR	860	155	NR	990	0	NR
475	5624	NR	605	10742	NR	735	430	NR	865	141	NR	995	0	NR
480	4709	NR	610	16642	NR	740	412	NR	870	189	NR	1000	0	NR
485	4661	NR	615	17674	NR	745	382	NR	875	43	NR			

REPORT NUMBER: SP1-2401-294-3

Scotopic Flux vs. Wavelength



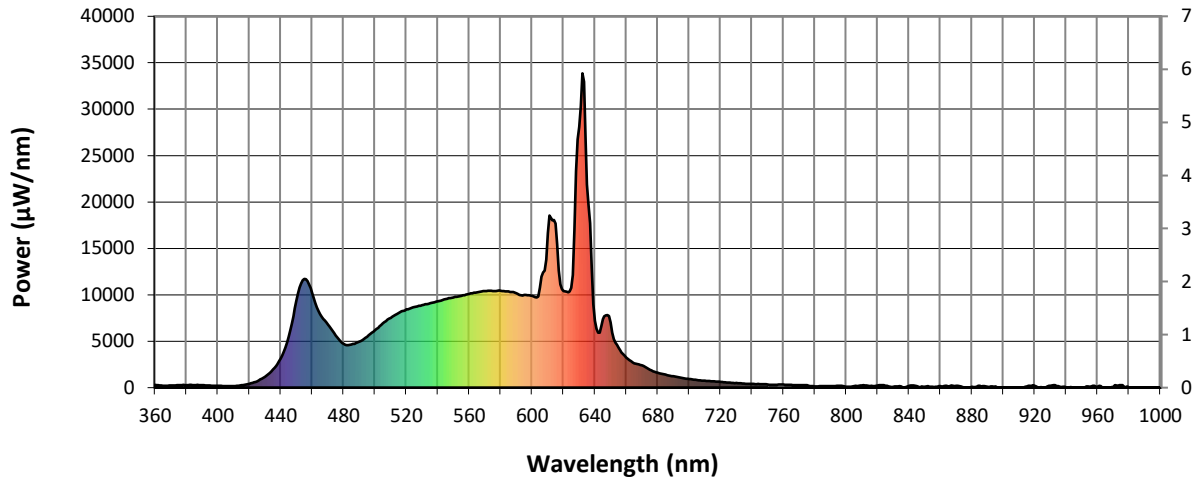
Scotopic Lumens: 1220.1

S/P: 1.69

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	309	NR	490	4964	NR	620	10402	NR	750	333	NR	880	87	NR
365	205	NR	495	5481	NR	625	10741	NR	755	300	NR	885	199	NR
370	225	NR	500	6189	NR	630	28088	NR	760	322	NR	890	89	NR
375	284	NR	505	6912	NR	635	21867	NR	765	302	NR	895	114	NR
380	281	NR	510	7525	NR	640	7209	NR	770	268	NR	900	0	NR
385	274	NR	515	8022	NR	645	7380	NR	775	256	NR	905	0	NR
390	259	NR	520	8425	NR	650	7011	NR	780	139	NR	910	0	NR
395	219	NR	525	8692	NR	655	4296	NR	785	178	NR	915	139	NR
400	197	NR	530	8874	NR	660	3245	NR	790	169	NR	920	196	NR
405	168	NR	535	9095	NR	665	2620	NR	795	200	NR	925	0	NR
410	171	NR	540	9302	NR	670	2401	NR	800	98	NR	930	198	NR
415	258	NR	545	9528	NR	675	1933	NR	805	154	NR	935	152	NR
420	411	NR	550	9697	NR	680	1599	NR	810	234	NR	940	37	NR
425	697	NR	555	9888	NR	685	1393	NR	815	172	NR	945	0	NR
430	1161	NR	560	10108	NR	690	1222	NR	820	244	NR	950	0	NR
435	1943	NR	565	10260	NR	695	1067	NR	825	217	NR	955	103	NR
440	3135	NR	570	10411	NR	700	939	NR	830	85	NR	960	87	NR
445	5466	NR	575	10402	NR	705	821	NR	835	115	NR	965	0	NR
450	9379	NR	580	10447	NR	710	743	NR	840	196	NR	970	64	NR
455	11712	NR	585	10377	NR	715	677	NR	845	167	NR	975	254	NR
460	10232	NR	590	10148	NR	720	617	NR	850	112	NR	980	0	NR
465	7909	NR	595	9978	NR	725	548	NR	855	111	NR	985	0	NR
470	6801	NR	600	9893	NR	730	496	NR	860	155	NR	990	0	NR
475	5624	NR	605	10742	NR	735	430	NR	865	141	NR	995	0	NR
480	4709	NR	610	16642	NR	740	412	NR	870	189	NR	1000	0	NR
485	4661	NR	615	17674	NR	745	382	NR	875	43	NR			

REPORT NUMBER: SP1-2401-294-3

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: 499.3 M/P: 0.69**

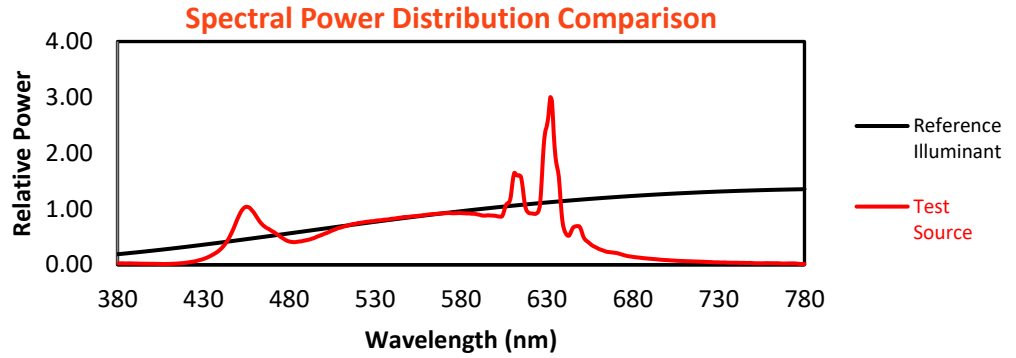
$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )	$\lambda$ (nm)	Power ( $\mu\text{W}/\text{nm}$ )	Lumens ( $\phi/\text{nm}$ )
360	309	NR	490	4964	NR	620	10402	NR	750	333	NR	880	87	NR
365	205	NR	495	5481	NR	625	10741	NR	755	300	NR	885	199	NR
370	225	NR	500	6189	NR	630	28088	NR	760	322	NR	890	89	NR
375	284	NR	505	6912	NR	635	21867	NR	765	302	NR	895	114	NR
380	281	NR	510	7525	NR	640	7209	NR	770	268	NR	900	0	NR
385	274	NR	515	8022	NR	645	7380	NR	775	256	NR	905	0	NR
390	259	NR	520	8425	NR	650	7011	NR	780	139	NR	910	0	NR
395	219	NR	525	8692	NR	655	4296	NR	785	178	NR	915	139	NR
400	197	NR	530	8874	NR	660	3245	NR	790	169	NR	920	196	NR
405	168	NR	535	9095	NR	665	2620	NR	795	200	NR	925	0	NR
410	171	NR	540	9302	NR	670	2401	NR	800	98	NR	930	198	NR
415	258	NR	545	9528	NR	675	1933	NR	805	154	NR	935	152	NR
420	411	NR	550	9697	NR	680	1599	NR	810	234	NR	940	37	NR
425	697	NR	555	9888	NR	685	1393	NR	815	172	NR	945	0	NR
430	1161	NR	560	10108	NR	690	1222	NR	820	244	NR	950	0	NR
435	1943	NR	565	10260	NR	695	1067	NR	825	217	NR	955	103	NR
440	3135	NR	570	10411	NR	700	939	NR	830	85	NR	960	87	NR
445	5466	NR	575	10402	NR	705	821	NR	835	115	NR	965	0	NR
450	9379	NR	580	10447	NR	710	743	NR	840	196	NR	970	64	NR
455	11712	NR	585	10377	NR	715	677	NR	845	167	NR	975	254	NR
460	10232	NR	590	10148	NR	720	617	NR	850	112	NR	980	0	NR
465	7909	NR	595	9978	NR	725	548	NR	855	111	NR	985	0	NR
470	6801	NR	600	9893	NR	730	496	NR	860	155	NR	990	0	NR
475	5624	NR	605	10742	NR	735	430	NR	865	141	NR	995	0	NR
480	4709	NR	610	16642	NR	740	412	NR	870	189	NR	1000	0	NR
485	4661	NR	615	17674	NR	745	382	NR	875	43	NR			

REPORT NUMBER: SP1-2401-294-3

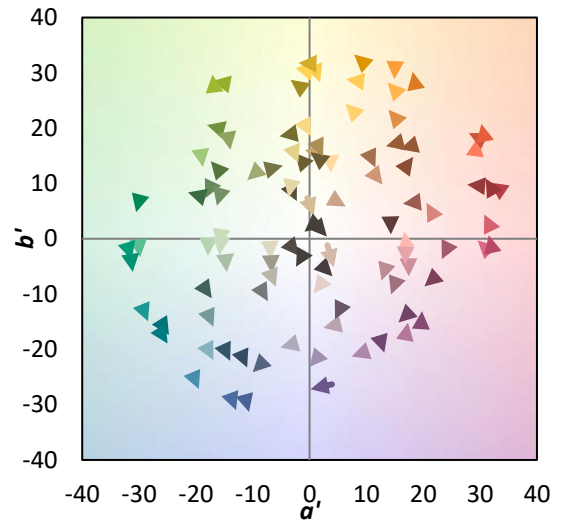
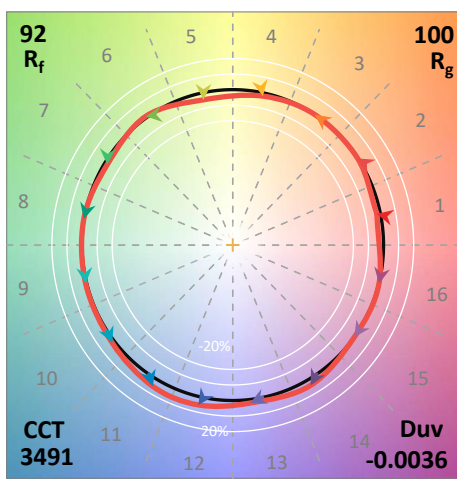
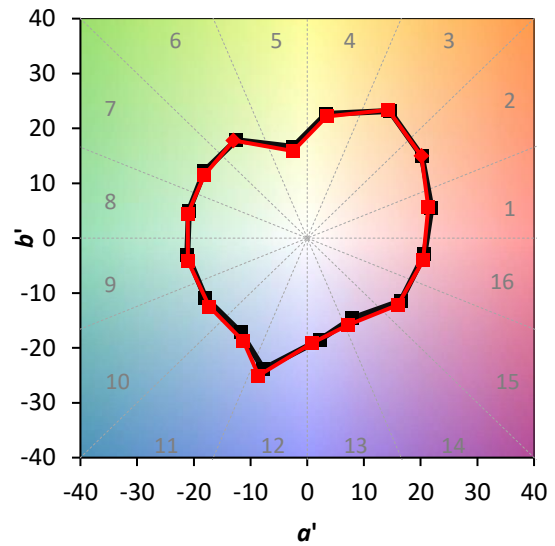
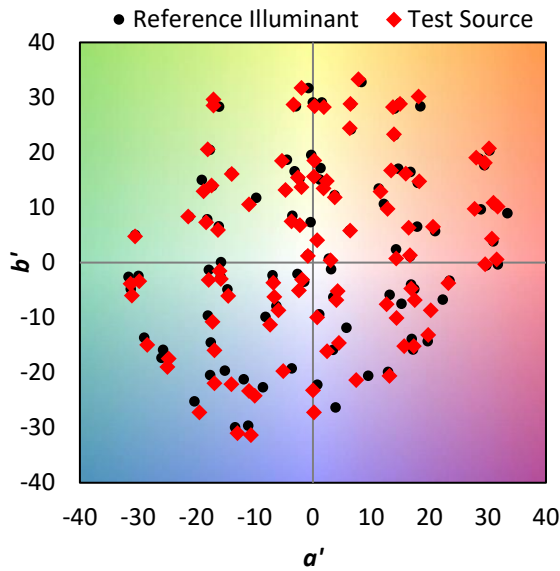
TM-30-18

**Summary**

$R_f = 91.8$   
 $R_g = 100.4$   
 CIE  $R_a = 96.7$   
 $R_9 = 91.8$



**Color Vector Graphics**

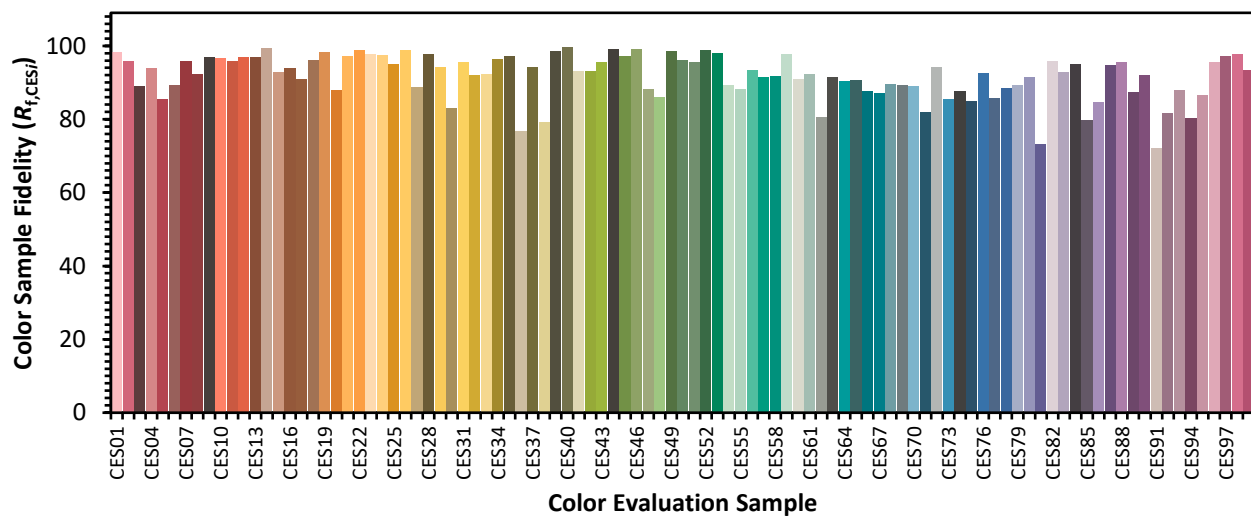


REPORT NUMBER: SP1-2401-294-3

TM-30-18

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

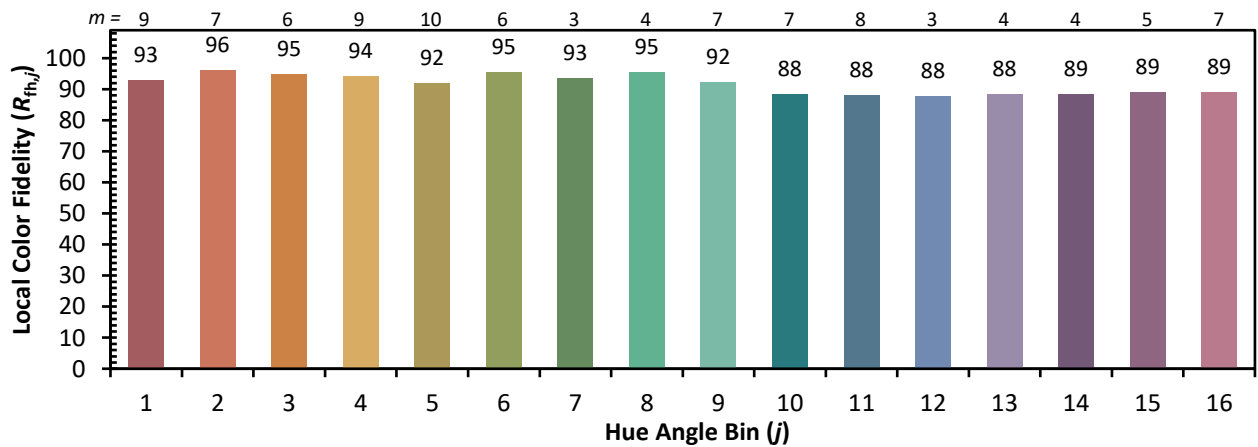
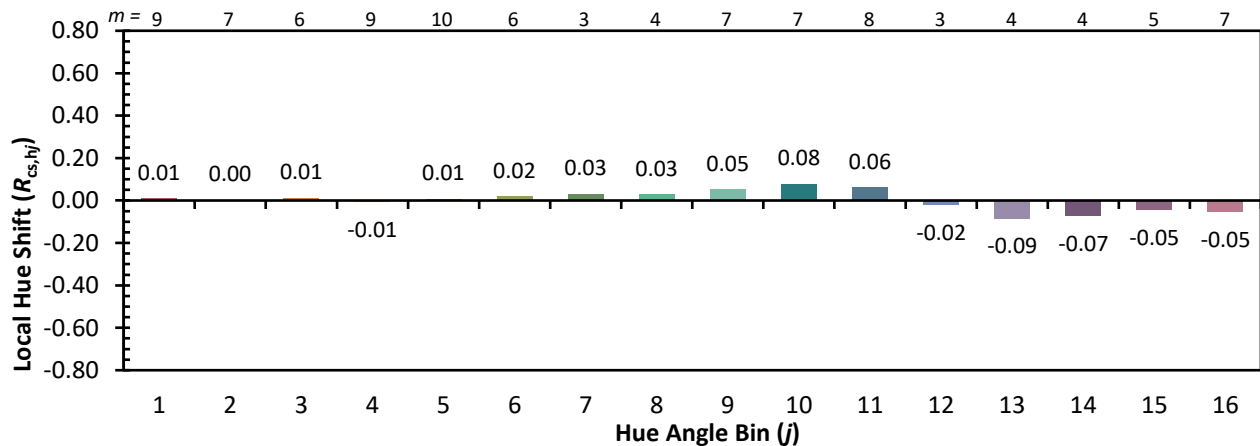
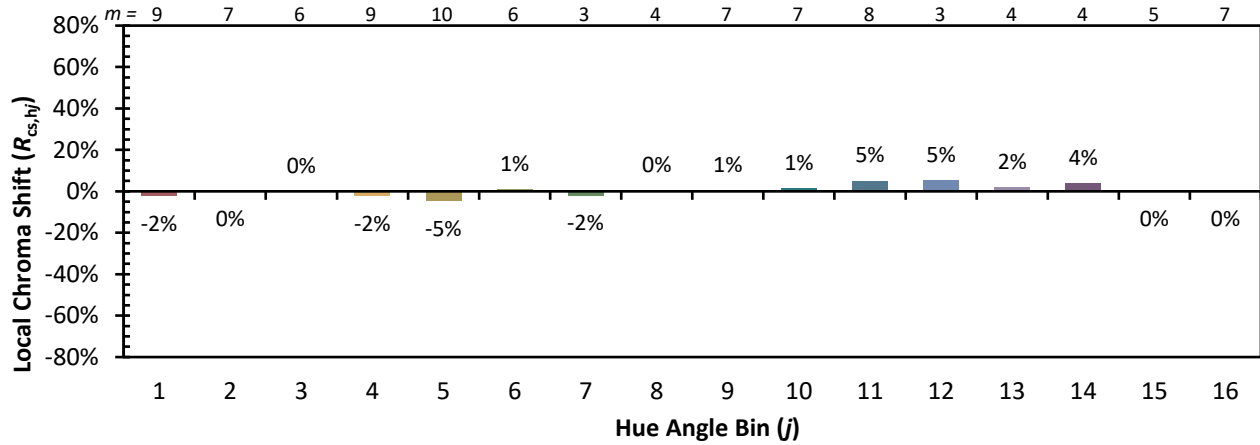
CES01 = 86	CES26 = 99	CES51 = 95	CES76 = 92
CES02 = 63	CES27 = 89	CES52 = 99	CES77 = 86
CES03 = 32	CES28 = 98	CES53 = 98	CES78 = 88
CES04 = 70	CES29 = 94	CES54 = 89	CES79 = 89
CES05 = 50	CES30 = 83	CES55 = 88	CES80 = 91
CES06 = 51	CES31 = 96	CES56 = 93	CES81 = 73
CES07 = 43	CES32 = 92	CES57 = 91	CES82 = 96
CES08 = 42	CES33 = 92	CES58 = 92	CES83 = 93
CES09 = 29	CES34 = 96	CES59 = 98	CES84 = 95
CES10 = 75	CES35 = 97	CES60 = 91	CES85 = 80
CES11 = 58	CES36 = 77	CES61 = 92	CES86 = 85
CES12 = 64	CES37 = 94	CES62 = 81	CES87 = 95
CES13 = 44	CES38 = 79	CES63 = 92	CES88 = 96
CES14 = 74	CES39 = 99	CES64 = 90	CES89 = 87
CES15 = 72	CES40 = 100	CES65 = 91	CES90 = 92
CES16 = 48	CES41 = 93	CES66 = 88	CES91 = 72
CES17 = 49	CES42 = 93	CES67 = 87	CES92 = 82
CES18 = 56	CES43 = 95	CES68 = 90	CES93 = 88
CES19 = 71	CES44 = 99	CES69 = 89	CES94 = 80
CES20 = 67	CES45 = 97	CES70 = 89	CES95 = 86
CES21 = 86	CES46 = 99	CES71 = 82	CES96 = 96
CES22 = 78	CES47 = 88	CES72 = 94	CES97 = 97
CES23 = 91	CES48 = 86	CES73 = 86	CES98 = 98
CES24 = 90	CES49 = 98	CES74 = 88	CES99 = 93
CES25 = 71	CES50 = 96	CES75 = 85	



REPORT NUMBER: SP1-2401-294-3

TM-30-18

Color Rendition by Hue-Angle Bin

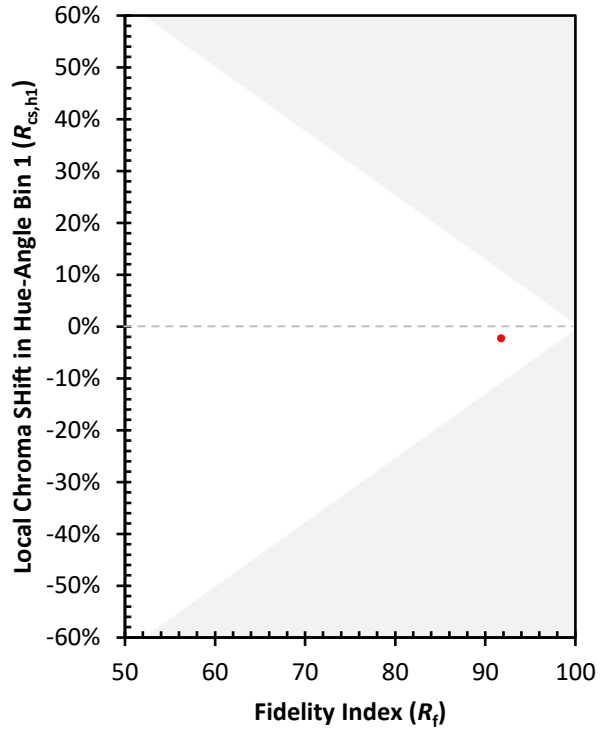
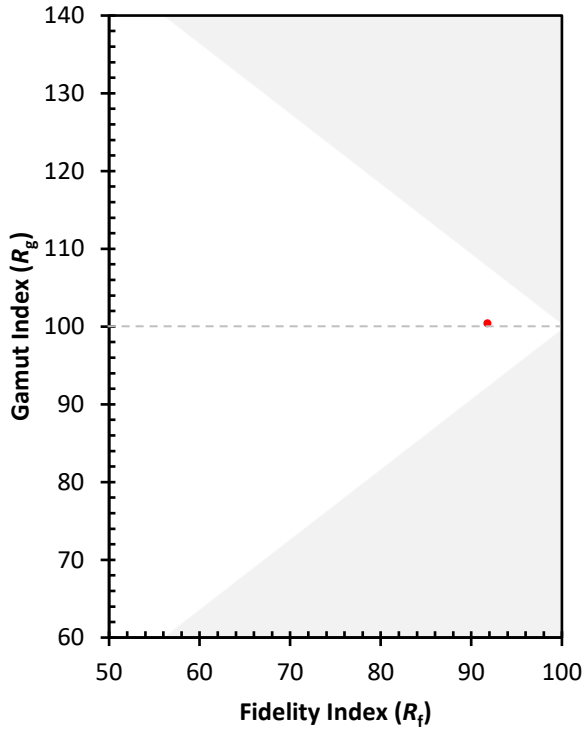




REPORT NUMBER: SP1-2401-294-3

TM-30-18

Measure Comparisons



(END OF REPORT)