

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: PrentaLux

Report Number: P1057212

Luminaire Tested: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

Issue Date: 8/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057212
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2504-407-5, G2-2504-407-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK
Description: PrentaLux 2-INCH CYLINDER
DOWNLIGHT 500 LUMENS, MEDIUM OPTIC (23-DEGREES)
UPLIGHT 500 LUMENS, SPOT OPTIC (19-DEGREES)
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

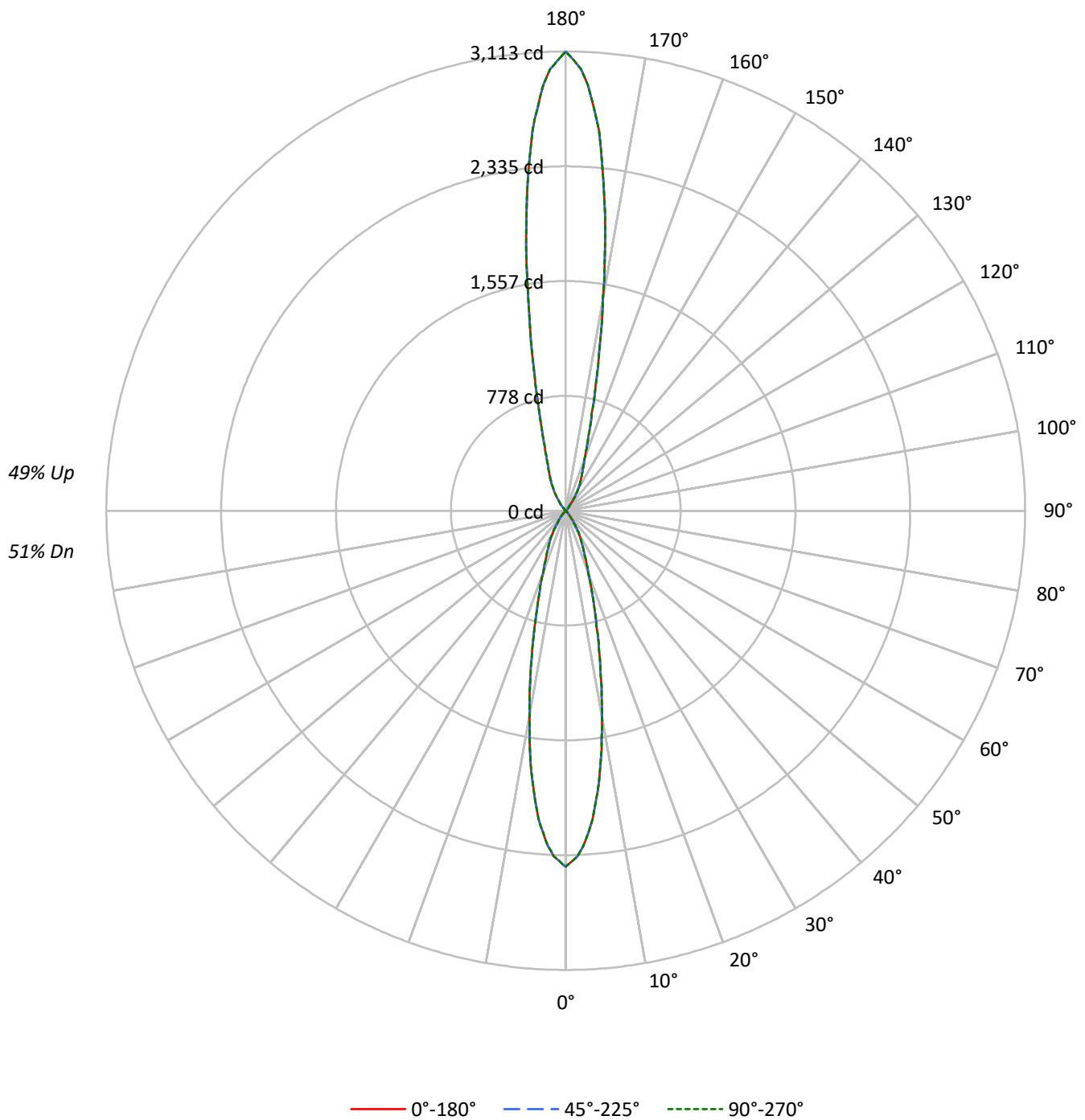
Lumens per Lamp: N/A
Luminaire Lumens: 1202.0 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.42
Luminous Opening: Circular (Dia: 0.15' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 8.8
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: 24 FT

TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

Luminous Intensity Polar Plot



TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

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
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84		70	70	70		57
1	101	98	95	92	93	91	88	86	78	76	75		66	65	64		55
2	95	89	85	81	88	83	80	77	72	70	68		62	60	59		52
3	89	82	77	73	83	77	73	69	68	64	62		59	57	55		50
4	84	76	71	66	78	72	67	63	63	60	57		56	53	51		48
5	80	71	65	61	74	67	62	58	60	56	53		53	50	48		47
6	75	66	60	56	71	63	58	54	57	53	50		51	48	46		45
7	72	62	56	52	67	59	54	50	54	50	47		48	45	43		43
8	68	59	53	49	64	56	51	47	51	47	44		46	43	41		42
9	65	56	50	46	61	53	48	45	49	45	42		44	42	40		40
10	62	53	47	44	59	51	46	42	47	43	40		43	40	38		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1555049	1555049	1555049
5°	1358451	1358451	1358451
10°	926575	926575	926575
15°	539993	539993	539993
20°	307708	307708	307708
25°	199162	199162	199162
30°	131708	131708	131708
35°	69150	69150	69150
40°	26835	26835	26835
45°	8658	8658	8658
50°	4511	4511	4511
55°	3146	3146	3146
60°	2191	2191	2191
65°	1677	1677	1677
70°	1130	1130	1130
75°	1494	1494	1494
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8658 cd/sqm

TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.6	14.8
10°-20°	227.9	19.0
20°-30°	131.6	10.9
30°-40°	57.6	4.8
40°-50°	9.8	0.8
50°-60°	2.6	0.2
60°-70°	1.2	0.1
70°-80°	0.4	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.2	0.0
110°-120°	1.0	0.1
120°-130°	1.9	0.2
130°-140°	8.2	0.7
140°-150°	53.9	4.5
150°-160°	116.8	9.7
160°-170°	203.0	16.9
170°-180°	208.5	17.3
0°-30°	537.1	44.7
0°-40°	594.7	49.5
0°-60°	607.0	50.5
0°-90°	608.6	50.6
90°-120°	1.2	0.1
90°-150°	65.2	5.4
90°-180°	593.0	49.3
0°-180°	1202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2413	2413	2413	2413	2413	
5°	2100	2100	2100	2100	2100	178
15°	809	809	809	809	809	228
25°	280	280	280	280	280	132
35°	88	88	88	88	88	58
45°	10	10	10	10	10	10
55°	3	3	3	3	3	3
65°	1	1	1	1	1	1
75°	1	1	1	1	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	1	1	1	1	1	1
125°	2	2	2	2	2	2
135°	8	8	8	8	8	8
145°	83	83	83	83	83	54
155°	252	252	252	252	252	117
165°	685	685	685	685	685	203
175°	2588	2588	2588	2588	2588	208
180°	3113	3113	3113	3113	3113	

TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2413.1	2413.1	2413.1	2413.1	2413.1
1°	2377.0	2377.0	2377.0	2377.0	2377.0
2°	2341.0	2341.0	2341.0	2341.0	2341.0
3°	2278.3	2278.3	2278.3	2278.3	2278.3
4°	2189.2	2189.2	2189.2	2189.2	2189.2
5°	2100.0	2100.0	2100.0	2100.0	2100.0
6°	1973.8	1973.8	1973.8	1973.8	1973.8
7°	1847.7	1847.7	1847.7	1847.7	1847.7
8°	1710.9	1710.9	1710.9	1710.9	1710.9
9°	1563.5	1563.5	1563.5	1563.5	1563.5
10°	1416.0	1416.0	1416.0	1416.0	1416.0
11°	1282.1	1282.1	1282.1	1282.1	1282.1
12°	1148.1	1148.1	1148.1	1148.1	1148.1
13°	1026.7	1026.7	1026.7	1026.7	1026.7
14°	918.1	918.1	918.1	918.1	918.1
15°	809.4	809.4	809.4	809.4	809.4
16°	725.2	725.2	725.2	725.2	725.2
17°	640.9	640.9	640.9	640.9	640.9
18°	568.8	568.8	568.8	568.8	568.8
19°	508.7	508.7	508.7	508.7	508.7
20°	448.7	448.7	448.7	448.7	448.7
21°	409.0	409.0	409.0	409.0	409.0
22°	369.4	369.4	369.4	369.4	369.4
23°	335.6	335.6	335.6	335.6	335.6
24°	307.9	307.9	307.9	307.9	307.9
25°	280.1	280.1	280.1	280.1	280.1
26°	258.6	258.6	258.6	258.6	258.6
27°	237.1	237.1	237.1	237.1	237.1
28°	216.4	216.4	216.4	216.4	216.4
29°	196.7	196.7	196.7	196.7	196.7
30°	177.0	177.0	177.0	177.0	177.0
31°	158.4	158.4	158.4	158.4	158.4
32°	139.8	139.8	139.8	139.8	139.8
33°	122.0	122.0	122.0	122.0	122.0
34°	105.0	105.0	105.0	105.0	105.0
35°	87.9	87.9	87.9	87.9	87.9
36°	74.9	74.9	74.9	74.9	74.9
37°	62.0	62.0	62.0	62.0	62.0
38°	50.7	50.7	50.7	50.7	50.7
39°	41.3	41.3	41.3	41.3	41.3
40°	31.9	31.9	31.9	31.9	31.9
41°	26.3	26.3	26.3	26.3	26.3
42°	20.7	20.7	20.7	20.7	20.7
43°	16.2	16.2	16.2	16.2	16.2
44°	12.9	12.9	12.9	12.9	12.9

TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	9.5	9.5	9.5	9.5	9.5
46°	8.2	8.2	8.2	8.2	8.2
47°	6.8	6.8	6.8	6.8	6.8
48°	5.8	5.8	5.8	5.8	5.8
49°	5.2	5.2	5.2	5.2	5.2
50°	4.5	4.5	4.5	4.5	4.5
51°	4.0	4.0	4.0	4.0	4.0
52°	3.6	3.6	3.6	3.6	3.6
53°	3.2	3.2	3.2	3.2	3.2
54°	3.0	3.0	3.0	3.0	3.0
55°	2.8	2.8	2.8	2.8	2.8
56°	2.6	2.6	2.6	2.6	2.6
57°	2.4	2.4	2.4	2.4	2.4
58°	2.1	2.1	2.1	2.1	2.1
59°	1.9	1.9	1.9	1.9	1.9
60°	1.7	1.7	1.7	1.7	1.7
61°	1.7	1.7	1.7	1.7	1.7
62°	1.7	1.7	1.7	1.7	1.7
63°	1.6	1.6	1.6	1.6	1.6
64°	1.3	1.3	1.3	1.3	1.3
65°	1.1	1.1	1.1	1.1	1.1
66°	1.1	1.1	1.1	1.1	1.1
67°	1.1	1.1	1.1	1.1	1.1
68°	1.0	1.0	1.0	1.0	1.0
69°	0.8	0.8	0.8	0.8	0.8
70°	0.6	0.6	0.6	0.6	0.6
71°	0.6	0.6	0.6	0.6	0.6
72°	0.6	0.6	0.6	0.6	0.6
73°	0.6	0.6	0.6	0.6	0.6
74°	0.6	0.6	0.6	0.6	0.6
75°	0.6	0.6	0.6	0.6	0.6
76°	0.3	0.3	0.3	0.3	0.3
77°	0.1	0.1	0.1	0.1	0.1
78°	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0
89°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
90°	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
106°	0.2	0.2	0.2	0.2	0.2
107°	0.4	0.4	0.4	0.4	0.4
108°	0.6	0.6	0.6	0.6	0.6
109°	0.6	0.6	0.6	0.6	0.6
110°	0.6	0.6	0.6	0.6	0.6
111°	0.6	0.6	0.6	0.6	0.6
112°	0.6	0.6	0.6	0.6	0.6
113°	0.7	0.7	0.7	0.7	0.7
114°	0.9	0.9	0.9	0.9	0.9
115°	1.1	1.1	1.1	1.1	1.1
116°	1.1	1.1	1.1	1.1	1.1
117°	1.1	1.1	1.1	1.1	1.1
118°	1.2	1.2	1.2	1.2	1.2
119°	1.5	1.5	1.5	1.5	1.5
120°	1.7	1.7	1.7	1.7	1.7
121°	1.7	1.7	1.7	1.7	1.7
122°	1.7	1.7	1.7	1.7	1.7
123°	1.8	1.8	1.8	1.8	1.8
124°	2.0	2.0	2.0	2.0	2.0
125°	2.2	2.2	2.2	2.2	2.2
126°	2.2	2.2	2.2	2.2	2.2
127°	2.2	2.2	2.2	2.2	2.2
128°	2.5	2.5	2.5	2.5	2.5
129°	2.9	2.9	2.9	2.9	2.9
130°	3.4	3.4	3.4	3.4	3.4
131°	3.8	3.8	3.8	3.8	3.8
132°	4.3	4.3	4.3	4.3	4.3
133°	5.2	5.2	5.2	5.2	5.2
134°	6.5	6.5	6.5	6.5	6.5

TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
135°	7.8	7.8	7.8	7.8	7.8
136°	10.8	10.8	10.8	10.8	10.8
137°	13.7	13.7	13.7	13.7	13.7
138°	17.8	17.8	17.8	17.8	17.8
139°	23.2	23.2	23.2	23.2	23.2
140°	28.6	28.6	28.6	28.6	28.6
141°	37.5	37.5	37.5	37.5	37.5
142°	46.5	46.5	46.5	46.5	46.5
143°	57.4	57.4	57.4	57.4	57.4
144°	70.1	70.1	70.1	70.1	70.1
145°	82.9	82.9	82.9	82.9	82.9
146°	98.8	98.8	98.8	98.8	98.8
147°	114.7	114.7	114.7	114.7	114.7
148°	131.5	131.5	131.5	131.5	131.5
149°	149.2	149.2	149.2	149.2	149.2
150°	166.9	166.9	166.9	166.9	166.9
151°	184.0	184.0	184.0	184.0	184.0
152°	201.0	201.0	201.0	201.0	201.0
153°	218.0	218.0	218.0	218.0	218.0
154°	235.0	235.0	235.0	235.0	235.0
155°	252.1	252.1	252.1	252.1	252.1
156°	272.0	272.0	272.0	272.0	272.0
157°	291.9	291.9	291.9	291.9	291.9
158°	316.1	316.1	316.1	316.1	316.1
159°	344.6	344.6	344.6	344.6	344.6
160°	373.1	373.1	373.1	373.1	373.1
161°	419.4	419.4	419.4	419.4	419.4
162°	465.8	465.8	465.8	465.8	465.8
163°	528.2	528.2	528.2	528.2	528.2
164°	606.6	606.6	606.6	606.6	606.6
165°	685.1	685.1	685.1	685.1	685.1
166°	810.1	810.1	810.1	810.1	810.1
167°	935.1	935.1	935.1	935.1	935.1
168°	1089.9	1089.9	1089.9	1089.9	1089.9
169°	1274.6	1274.6	1274.6	1274.6	1274.6
170°	1459.2	1459.2	1459.2	1459.2	1459.2
171°	1690.6	1690.6	1690.6	1690.6	1690.6
172°	1922.1	1922.1	1922.1	1922.1	1922.1
173°	2147.9	2147.9	2147.9	2147.9	2147.9
174°	2368.2	2368.2	2368.2	2368.2	2368.2
175°	2588.4	2588.4	2588.4	2588.4	2588.4
176°	2739.2	2739.2	2739.2	2739.2	2739.2
177°	2890.0	2890.0	2890.0	2890.0	2890.0
178°	2994.9	2994.9	2994.9	2994.9	2994.9
179°	3053.8	3053.8	3053.8	3053.8	3053.8



TEST NUMBER: P1057212
CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	3112.7	3112.7	3112.7	3112.7	3112.7

TEST NUMBER: P1057212

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-10L-MD-SP-U-S-X-X-BLAK

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	0.00	0.00	0.00	0.45	1.73	0.00	0.00	0.00	0.45	1.73
	3H	0.00	0.14	0.58	1.12	2.43	0.00	0.14	0.58	1.12	2.43
	4H	0.00	0.41	0.90	1.40	2.71	0.00	0.41	0.90	1.40	2.71
	6H	0.00	0.25	0.79	1.25	2.57	0.00	0.25	0.79	1.25	2.57
	8H	0.00	0.16	0.73	1.17	2.49	0.00	0.16	0.73	1.17	2.49
	12H	0.00	0.08	0.67	1.08	2.42	0.00	0.08	0.67	1.08	2.42
4H	2H	0.00	0.00	0.00	0.46	1.77	0.00	0.00	0.00	0.46	1.77
	3H	0.00	0.21	0.80	1.23	2.56	0.00	0.21	0.80	1.23	2.56
	4H	0.20	0.60	1.23	1.62	2.96	0.20	0.60	1.23	1.62	2.96
	6H	0.08	0.43	1.13	1.46	2.81	0.08	0.43	1.13	1.46	2.81
	8H	0.02	0.34	1.06	1.37	2.72	0.02	0.34	1.06	1.37	2.72
	12H	0.00	0.23	1.00	1.27	2.63	0.00	0.23	1.00	1.27	2.63
8H	4H	0.15	0.47	1.19	1.49	2.85	0.15	0.47	1.19	1.49	2.85
	6H	0.03	0.29	1.09	1.36	2.71	0.03	0.29	1.09	1.36	2.71
	8H	0.00	0.19	1.04	1.25	2.62	0.00	0.19	1.04	1.25	2.62
	12H	0.00	0.09	0.97	1.14	2.56	0.00	0.09	0.97	1.14	2.56
12H	4H	0.07	0.36	1.13	1.40	2.76	0.07	0.36	1.13	1.40	2.76
	6H	0.00	0.19	1.04	1.25	2.62	0.00	0.19	1.04	1.25	2.62
	8H	0.00	0.09	0.97	1.14	2.56	0.00	0.09	0.97	1.14	2.56

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

Report Prepared for

Cooper Lighting Solutions

PrentaLux 3D Printing

Report Number: SP1-2504-407-1

Test Date: 07/16/2025

Luminaire Tested: PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK

Data in this report applies to families of products including PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK

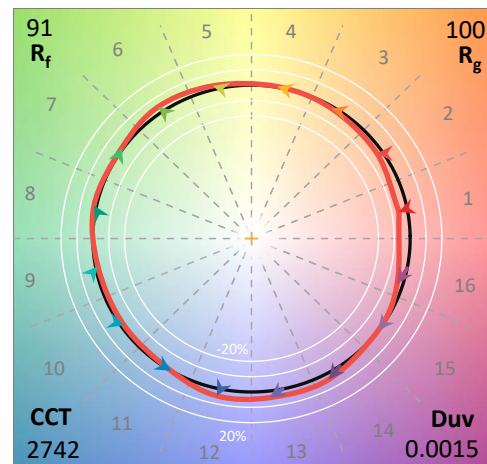
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2504-407-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 07/30/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: PrentaLux 3D Printing
 Catalog Number: **PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK**
 Description: PrentaLux 2-INCH CYLINDER, BLACK TRIM, FLOOD OPTIC, 1000 LUMENS, 2700K

Spectral Parameters

CCT (K): 2742
 CIE u' : 0.2602
 CIE v' : 0.5287
 Duv: 0.0015
 CIE x: 0.4591
 CIE y: 0.4146
 CIE z: 0.1264
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 583
 Purity: 62.24215
 R_f: 91.5
 R_g: 100.2

CRI (Ra): 93.2
 R1: 94.5
 R2: 95.6
 R3: 95.5
 R4: 95.6
 R5: 93.8
 R6: 96.5
 R7: 92.3
 R8: 81.6
 R9: 55.9
 R10: 87.9
 R11: 97.0
 R12: 84.0
 R13: 94.5
 R14: 96.0
 R15: 88.9



Test Conditions

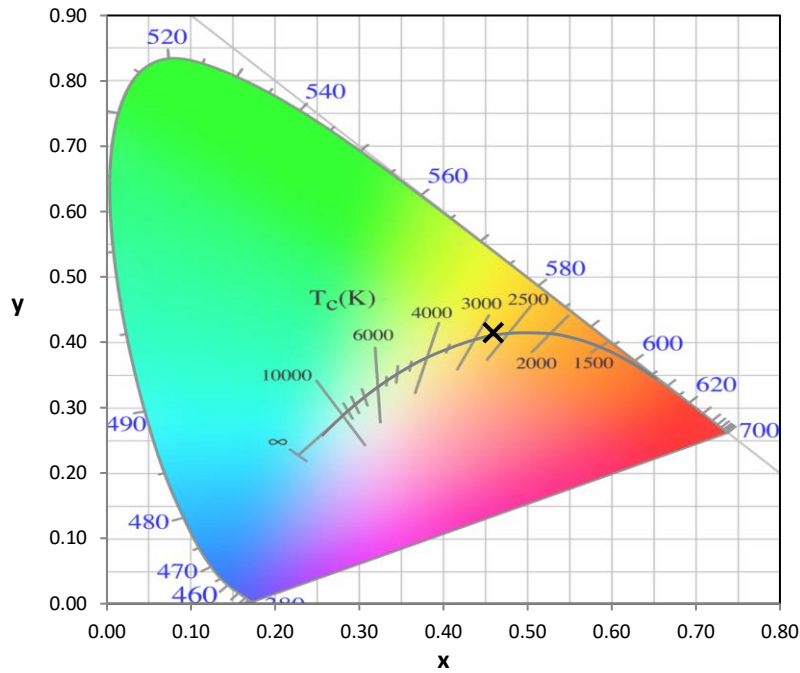
Stabilization Time: 41M
 Operation Time: 1H 41M
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2504-407-1

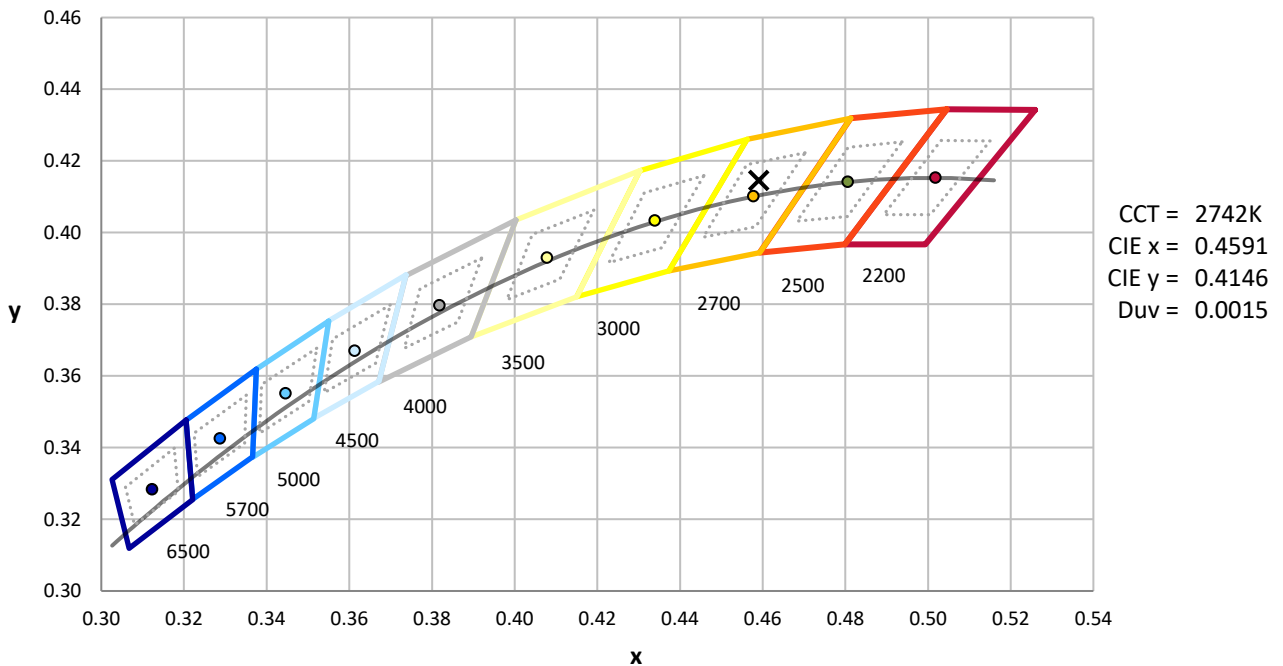
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2504-407-1

CIE 1931 Chromaticity Diagram



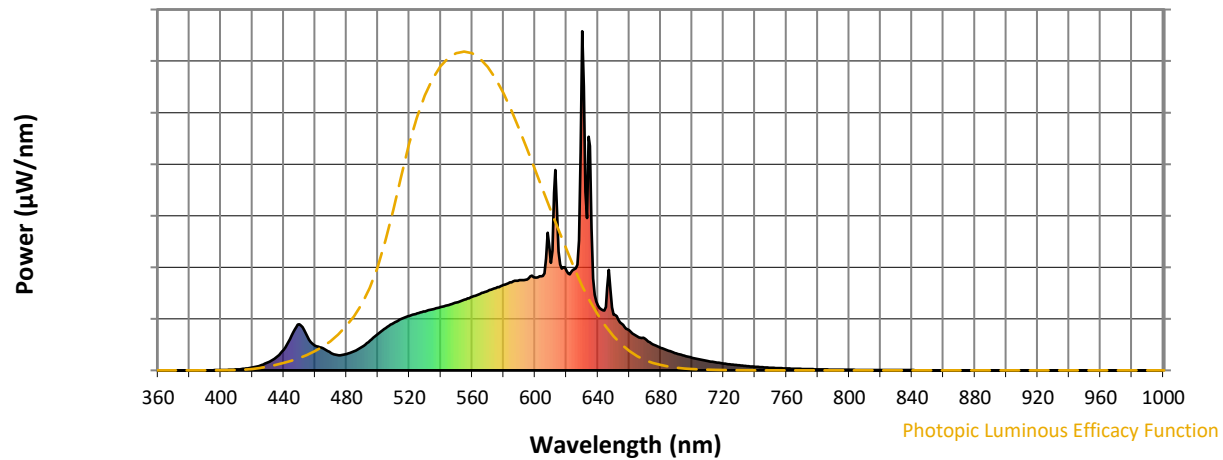
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2504-407-1

Photopic Flux vs. Wavelength

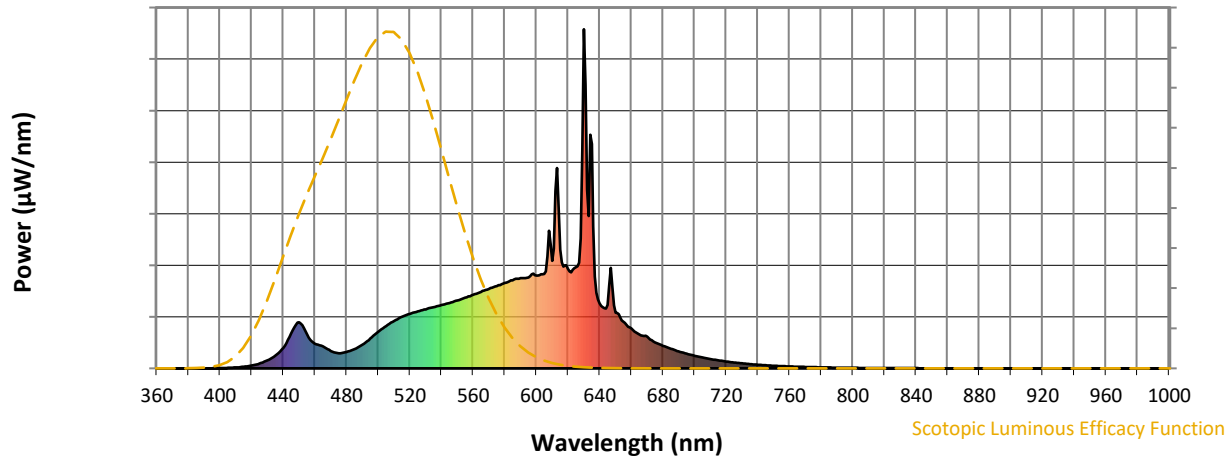


Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	125	NR	635	661	NR	765	5	NR	895	0	NR
380	0	NR	510	140	NR	640	192	NR	770	4	NR	900	0	NR
385	0	NR	515	152	NR	645	187	NR	775	4	NR	905	0	NR
390	0	NR	520	160	NR	650	164	NR	780	3	NR	910	0	NR
395	0	NR	525	168	NR	655	138	NR	785	3	NR	915	0	NR
400	1	NR	530	174	NR	660	118	NR	790	2	NR	920	0	NR
405	2	NR	535	180	NR	665	100	NR	795	2	NR	925	0	NR
410	3	NR	540	187	NR	670	94	NR	800	2	NR	930	0	NR
415	5	NR	545	193	NR	675	77	NR	805	1	NR	935	0	NR
420	9	NR	550	200	NR	680	67	NR	810	1	NR	940	0	NR
425	14	NR	555	208	NR	685	58	NR	815	1	NR	945	0	NR
430	23	NR	560	217	NR	690	50	NR	820	1	NR	950	0	NR
435	38	NR	565	226	NR	695	43	NR	825	1	NR	955	0	NR
440	61	NR	570	234	NR	700	37	NR	830	1	NR	960	0	NR
445	103	NR	575	243	NR	705	32	NR	835	1	NR	965	0	NR
450	135	NR	580	252	NR	710	28	NR	840	1	NR	970	0	NR
455	100	NR	585	260	NR	715	23	NR	845	0	NR	975	0	NR
460	72	NR	590	266	NR	720	20	NR	850	0	NR	980	0	NR
465	65	NR	595	268	NR	725	17	NR	855	0	NR	985	0	NR
470	51	NR	600	274	NR	730	15	NR	860	0	NR	990	0	NR
475	45	NR	605	278	NR	735	13	NR	865	0	NR	995	0	NR
480	48	NR	610	317	NR	740	11	NR	870	0	NR	1000	0	NR
485	57	NR	615	350	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2504-407-1

Scotopic Flux vs. Wavelength



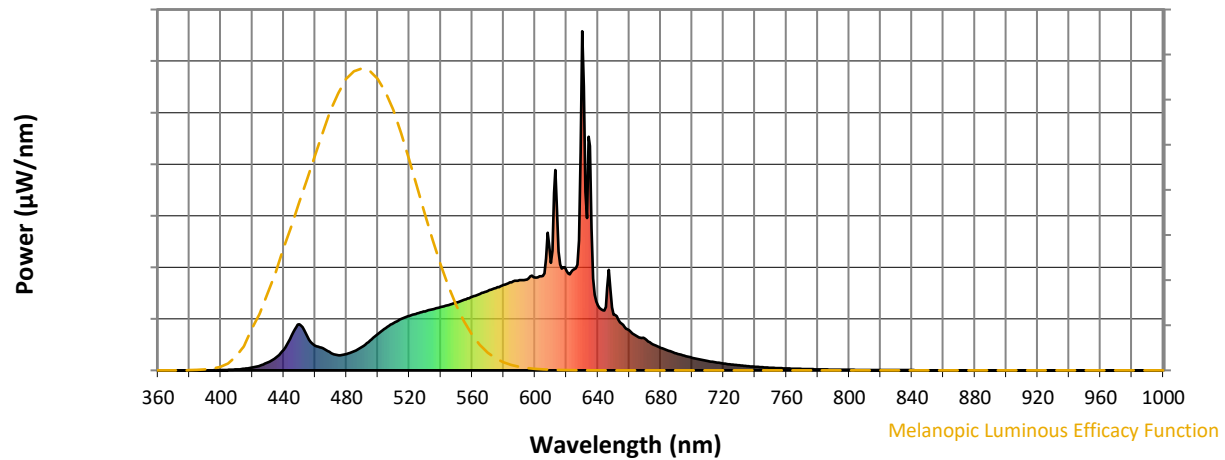
Scotopic Lumens: NR

S/P: 1.28

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	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	125	NR	635	661	NR	765	5	NR	895	0	NR
380	0	NR	510	140	NR	640	192	NR	770	4	NR	900	0	NR
385	0	NR	515	152	NR	645	187	NR	775	4	NR	905	0	NR
390	0	NR	520	160	NR	650	164	NR	780	3	NR	910	0	NR
395	0	NR	525	168	NR	655	138	NR	785	3	NR	915	0	NR
400	1	NR	530	174	NR	660	118	NR	790	2	NR	920	0	NR
405	2	NR	535	180	NR	665	100	NR	795	2	NR	925	0	NR
410	3	NR	540	187	NR	670	94	NR	800	2	NR	930	0	NR
415	5	NR	545	193	NR	675	77	NR	805	1	NR	935	0	NR
420	9	NR	550	200	NR	680	67	NR	810	1	NR	940	0	NR
425	14	NR	555	208	NR	685	58	NR	815	1	NR	945	0	NR
430	23	NR	560	217	NR	690	50	NR	820	1	NR	950	0	NR
435	38	NR	565	226	NR	695	43	NR	825	1	NR	955	0	NR
440	61	NR	570	234	NR	700	37	NR	830	1	NR	960	0	NR
445	103	NR	575	243	NR	705	32	NR	835	1	NR	965	0	NR
450	135	NR	580	252	NR	710	28	NR	840	1	NR	970	0	NR
455	100	NR	585	260	NR	715	23	NR	845	0	NR	975	0	NR
460	72	NR	590	266	NR	720	20	NR	850	0	NR	980	0	NR
465	65	NR	595	268	NR	725	17	NR	855	0	NR	985	0	NR
470	51	NR	600	274	NR	730	15	NR	860	0	NR	990	0	NR
475	45	NR	605	278	NR	735	13	NR	865	0	NR	995	0	NR
480	48	NR	610	317	NR	740	11	NR	870	0	NR	1000	0	NR
485	57	NR	615	350	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2504-407-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.38

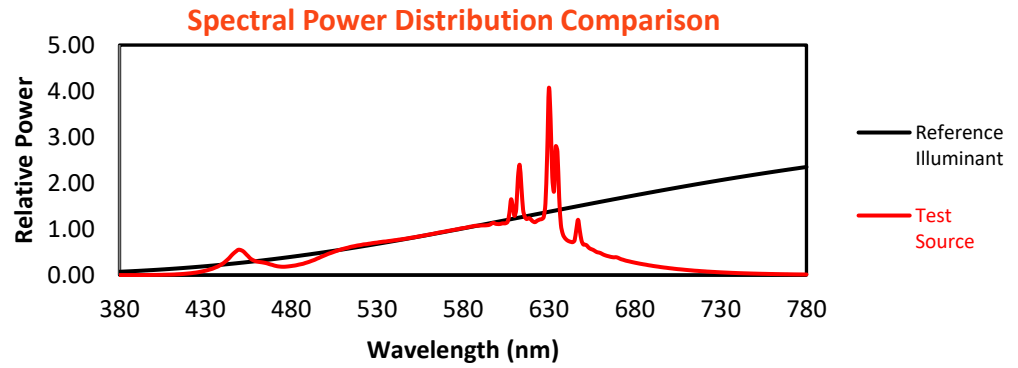
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	125	NR	635	661	NR	765	5	NR	895	0	NR
380	0	NR	510	140	NR	640	192	NR	770	4	NR	900	0	NR
385	0	NR	515	152	NR	645	187	NR	775	4	NR	905	0	NR
390	0	NR	520	160	NR	650	164	NR	780	3	NR	910	0	NR
395	0	NR	525	168	NR	655	138	NR	785	3	NR	915	0	NR
400	1	NR	530	174	NR	660	118	NR	790	2	NR	920	0	NR
405	2	NR	535	180	NR	665	100	NR	795	2	NR	925	0	NR
410	3	NR	540	187	NR	670	94	NR	800	2	NR	930	0	NR
415	5	NR	545	193	NR	675	77	NR	805	1	NR	935	0	NR
420	9	NR	550	200	NR	680	67	NR	810	1	NR	940	0	NR
425	14	NR	555	208	NR	685	58	NR	815	1	NR	945	0	NR
430	23	NR	560	217	NR	690	50	NR	820	1	NR	950	0	NR
435	38	NR	565	226	NR	695	43	NR	825	1	NR	955	0	NR
440	61	NR	570	234	NR	700	37	NR	830	1	NR	960	0	NR
445	103	NR	575	243	NR	705	32	NR	835	1	NR	965	0	NR
450	135	NR	580	252	NR	710	28	NR	840	1	NR	970	0	NR
455	100	NR	585	260	NR	715	23	NR	845	0	NR	975	0	NR
460	72	NR	590	266	NR	720	20	NR	850	0	NR	980	0	NR
465	65	NR	595	268	NR	725	17	NR	855	0	NR	985	0	NR
470	51	NR	600	274	NR	730	15	NR	860	0	NR	990	0	NR
475	45	NR	605	278	NR	735	13	NR	865	0	NR	995	0	NR
480	48	NR	610	317	NR	740	11	NR	870	0	NR	1000	0	NR
485	57	NR	615	350	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2504-407-1

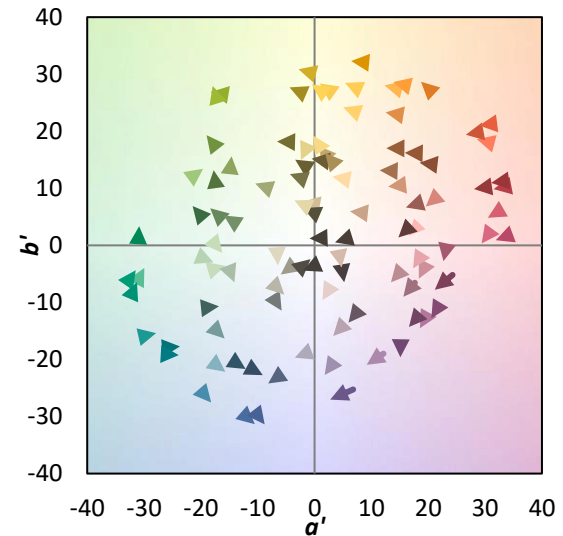
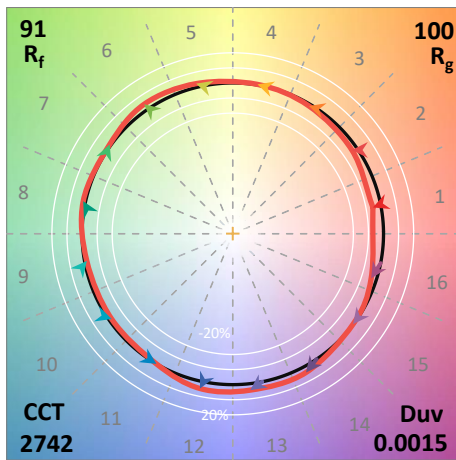
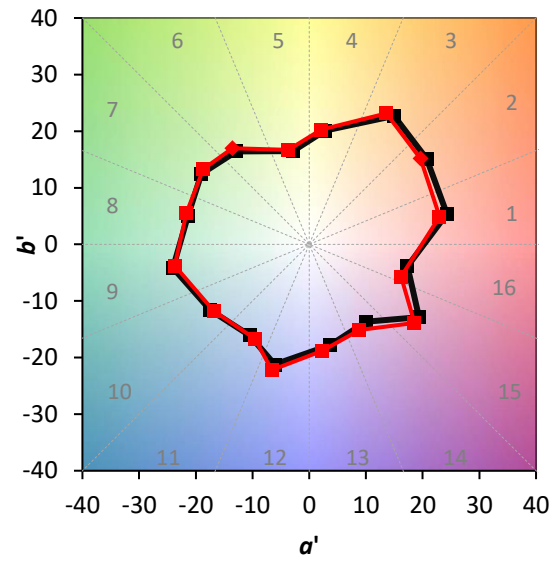
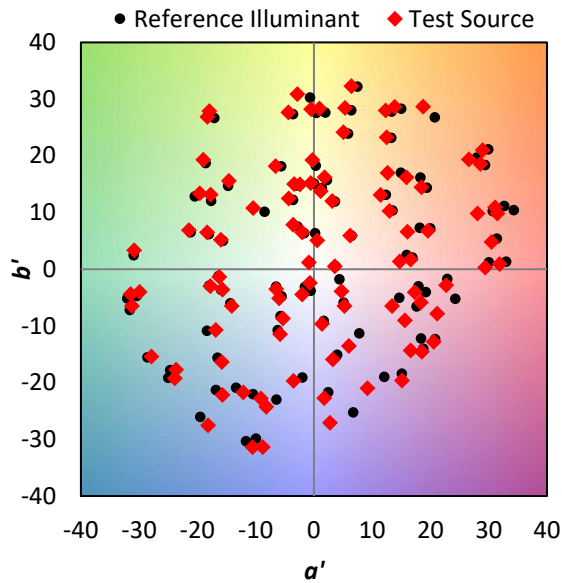
TM-30-18

Summary

$R_f = 91.5$
 $R_g = 100.2$
 $CIE R_a = 93.2$
 $R_9 = 55.9$

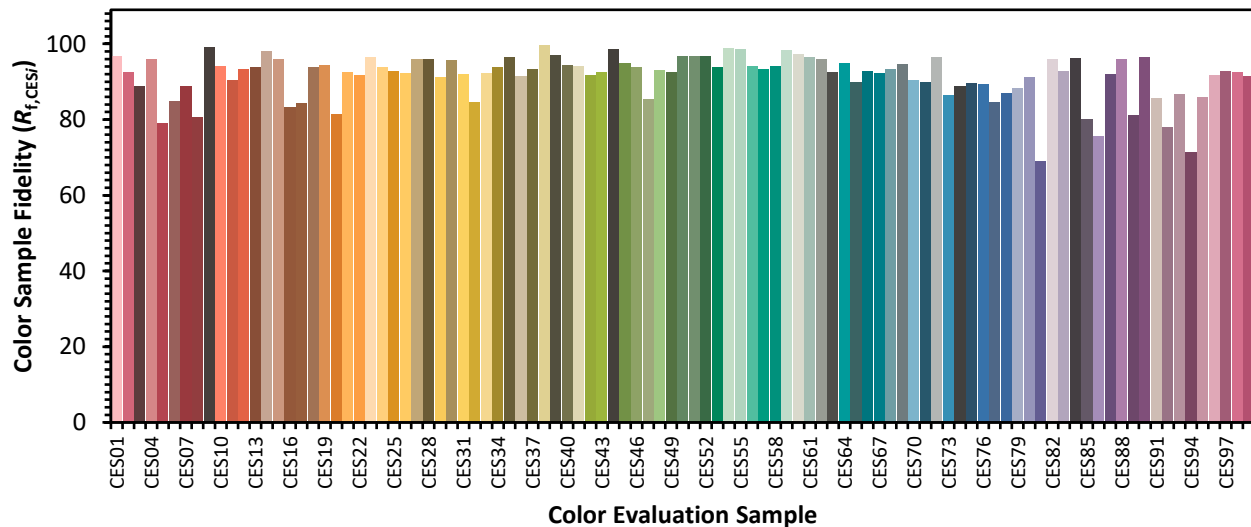


Color Vector Graphics

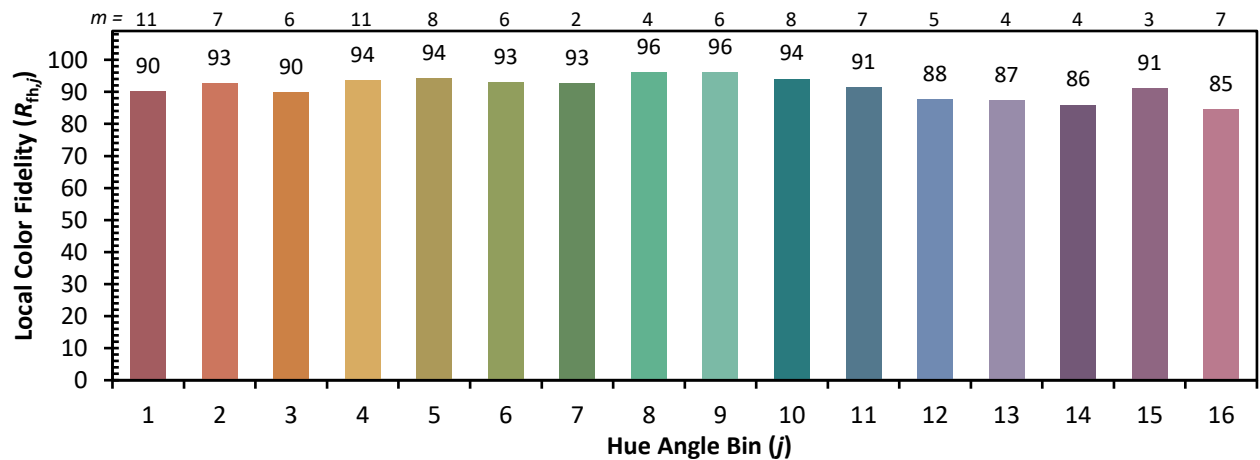
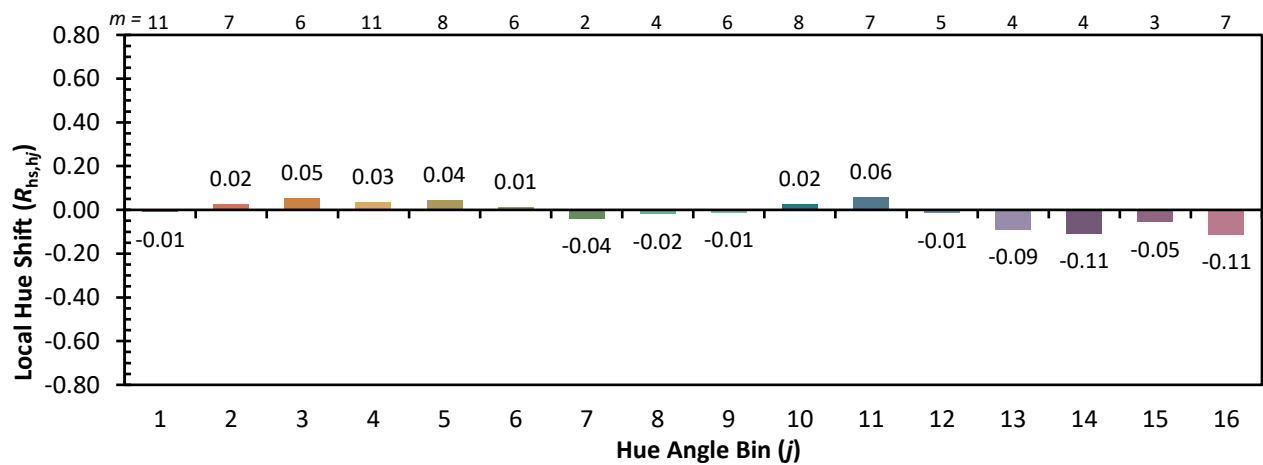
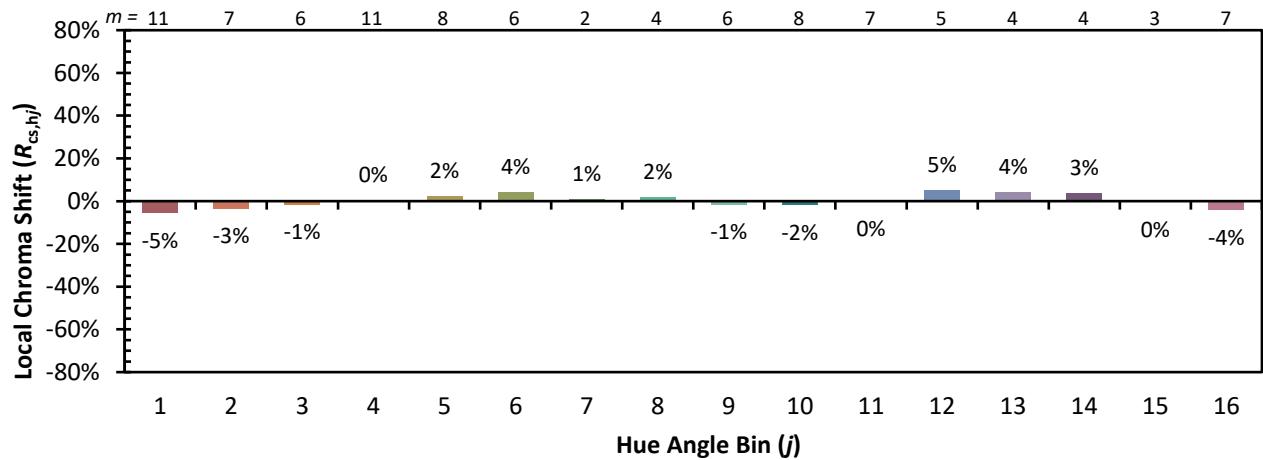


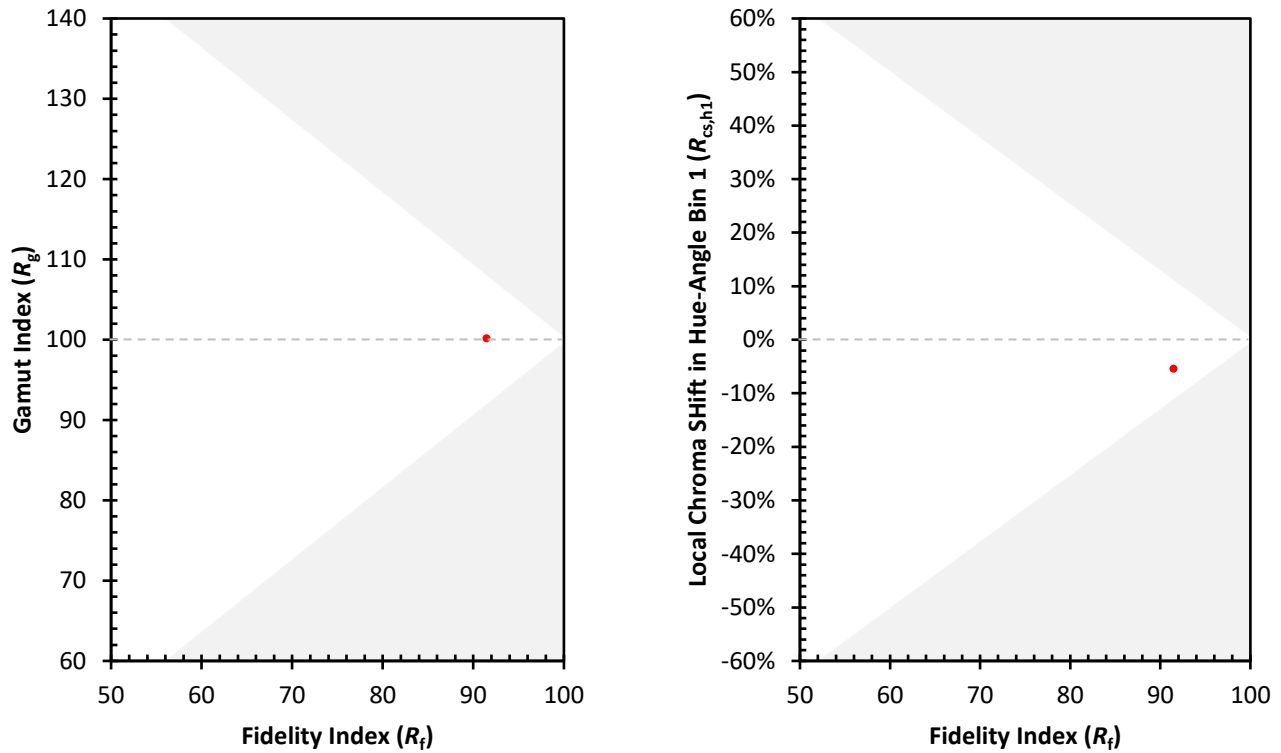
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 92	CES51 = 97	CES76 = 89
CES02 = 64	CES27 = 96	CES52 = 97	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 94	CES78 = 87
CES04 = 70	CES29 = 91	CES54 = 99	CES79 = 88
CES05 = 51	CES30 = 96	CES55 = 99	CES80 = 91
CES06 = 51	CES31 = 92	CES56 = 94	CES81 = 69
CES07 = 44	CES32 = 85	CES57 = 93	CES82 = 96
CES08 = 43	CES33 = 92	CES58 = 94	CES83 = 93
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 96
CES10 = 77	CES35 = 97	CES60 = 97	CES85 = 80
CES11 = 59	CES36 = 91	CES61 = 97	CES86 = 76
CES12 = 66	CES37 = 93	CES62 = 96	CES87 = 92
CES13 = 44	CES38 = 100	CES63 = 93	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 95	CES89 = 81
CES15 = 72	CES40 = 94	CES65 = 90	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 93	CES91 = 86
CES17 = 50	CES42 = 92	CES67 = 92	CES92 = 78
CES18 = 57	CES43 = 92	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 95	CES94 = 71
CES20 = 68	CES45 = 95	CES70 = 90	CES95 = 86
CES21 = 87	CES46 = 94	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 93	CES73 = 86	CES98 = 92
CES24 = 91	CES49 = 93	CES74 = 89	CES99 = 91
CES25 = 72	CES50 = 97	CES75 = 90	



Color Rendition by Hue-Angle Bin



Measure Comparisons


(END OF REPORT)