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: P1057224

Luminaire Tested: PRLX-CYL2W-DI-X-927-15L-FL-SP-U-S-X-X-BLAK

Issue Date: 8/6/2025

Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1057224
	REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2504-407-5, G2-2504-407-2)
Test Lab:	INNOVATION CENTER
Issue Date:	8/6/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	PrentaLux
Catalog Number:	PRLX-CYL2W-DI-X-927-15L-FL-SP-U-S-X-X-BLAK
Description:	PrentaLux 2-INCH CYLINDER
	DOWNLIGHT 750 LUMENS, FLOOD OPTIC (38-DEGREES)
	UPLIGHT 750 LUMENS, SPOT OPTIC (19-DEGREES)
Light Source:	2700K CCT, 90 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1588.9 lumens
Efficiency:	N/A
Efficacy:	124.1 lumens/watt
Spacing Criteria (0/90/45):	0.61 / 0.61 / 0.6
Luminous Opening:	Circular (Dia: 0.15' x H: 0')
CIE Type:	General Diffuse

Input Watts (W):	12.8
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

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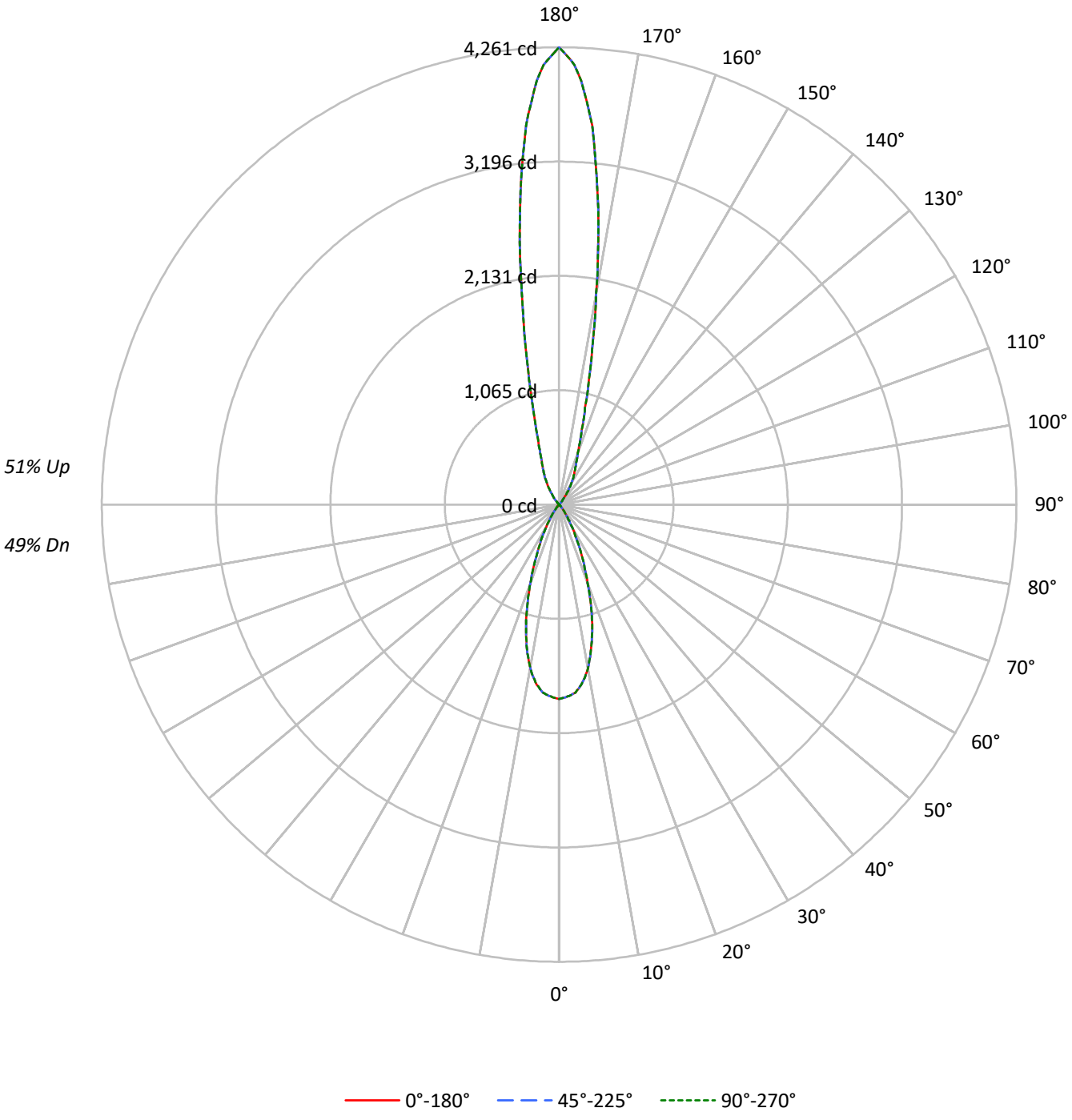
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	0
RCR																		
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	100	97	94	92	92	90	87	85	76	75	73	64	63	62	53	52	52	47
2	94	89	84	80	87	82	79	75	71	68	66	60	59	57	51	50	49	44
3	88	81	76	72	82	76	71	68	66	63	60	57	55	53	48	47	46	42
4	83	75	69	65	77	70	65	61	62	58	55	54	51	49	46	45	44	40
5	78	70	63	59	73	66	60	56	58	54	51	51	48	46	44	43	41	38
6	74	65	59	54	69	61	56	52	55	51	48	48	46	43	43	41	39	37
7	70	61	54	50	66	57	52	48	52	48	45	46	43	41	41	39	37	35
8	66	57	51	47	62	54	49	45	49	45	42	44	41	39	39	37	36	34
9	63	54	48	44	59	51	46	42	46	42	40	42	39	37	38	36	34	32
10	60	51	45	41	57	48	43	40	44	40	38	40	37	35	36	34	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1167753	1167753	1167753
5°	1136441	1136441	1136441
10°	1012623	1012623	1012623
15°	794512	794512	794512
20°	535866	535866	535866
25°	322811	322811	322811
30°	174643	174643	174643
35°	73634	73634	73634
40°	24480	24480	24480
45°	10480	10480	10480
50°	6115	6115	6115
55°	4269	4269	4269
60°	2964	2964	2964
65°	2287	2287	2287
70°	1507	1507	1507
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 10480 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.8	10.1
10°-20°	323.0	20.3
20°-30°	212.1	13.3
30°-40°	65.3	4.1
40°-50°	10.3	0.7
50°-60°	3.5	0.2
60°-70°	1.3	0.1
70°-80°	0.3	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.3	0.0
110°-120°	1.3	0.1
120°-130°	2.7	0.2
130°-140°	11.2	0.7
140°-150°	73.7	4.6
150°-160°	159.9	10.1
160°-170°	277.8	17.5
170°-180°	285.4	18.0
0°-30°	695.8	43.8
0°-40°	761.1	47.9
0°-60°	774.9	48.8
0°-90°	776.6	48.9
90°-120°	1.6	0.1
90°-150°	89.2	5.6
90°-180°	812.0	51.1
0°-180°	1588.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1812	1812	1812	1812	1812	
5°	1757	1757	1757	1757	1757	161
15°	1191	1191	1191	1191	1191	323
25°	454	454	454	454	454	212
35°	94	94	94	94	94	65
45°	12	12	12	12	12	10
55°	4	4	4	4	4	3
65°	2	2	2	2	2	1
75°	0	0	0	0	0	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°	2	2	2	2	2	1
125°	3	3	3	3	3	3
135°	11	11	11	11	11	11
145°	114	114	114	114	114	74
155°	345	345	345	345	345	160
165°	938	938	938	938	938	278
175°	3544	3544	3544	3544	3544	285
180°	4261	4261	4261	4261	4261	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*1812.1*	1812.1	1812.1	1812.1	1812.1
1°	*1803.8*	1803.8	1803.8	1803.8	1803.8
2°	*1795.5*	1795.5	1795.5	1795.5	1795.5
3°	*1784.5*	1784.5	1784.5	1784.5	1784.5
4°	*1770.6*	1770.6	1770.6	1770.6	1770.6
5°	*1756.8*	1756.8	1756.8	1756.8	1756.8
6°	*1724.6*	1724.6	1724.6	1724.6	1724.6
7°	*1692.4*	1692.4	1692.4	1692.4	1692.4
8°	*1650.6*	1650.6	1650.6	1650.6	1650.6
9°	*1599.0*	1599.0	1599.0	1599.0	1599.0
10°	*1547.5*	1547.5	1547.5	1547.5	1547.5
11°	*1481.9*	1481.9	1481.9	1481.9	1481.9
12°	*1416.2*	1416.2	1416.2	1416.2	1416.2
13°	*1344.9*	1344.9	1344.9	1344.9	1344.9
14°	*1267.9*	1267.9	1267.9	1267.9	1267.9
15°	*1190.9*	1190.9	1190.9	1190.9	1190.9
16°	*1109.0*	1109.0	1109.0	1109.0	1109.0
17°	*1027.1*	1027.1	1027.1	1027.1	1027.1
18°	*945.2*	945.2	945.2	945.2	945.2
19°	*863.3*	863.3	863.3	863.3	863.3
20°	*781.4*	781.4	781.4	781.4	781.4
21°	*709.9*	709.9	709.9	709.9	709.9
22°	*638.5*	638.5	638.5	638.5	638.5
23°	*573.0*	573.0	573.0	573.0	573.0
24°	*513.5*	513.5	513.5	513.5	513.5
25°	*454.0*	454.0	454.0	454.0	454.0
26°	*406.1*	406.1	406.1	406.1	406.1
27°	*358.3*	358.3	358.3	358.3	358.3
28°	*314.4*	314.4	314.4	314.4	314.4
29°	*274.5*	274.5	274.5	274.5	274.5
30°	*234.7*	234.7	234.7	234.7	234.7
31°	*202.1*	202.1	202.1	202.1	202.1
32°	*169.6*	169.6	169.6	169.6	169.6
33°	*141.4*	141.4	141.4	141.4	141.4
34°	*117.5*	117.5	117.5	117.5	117.5
35°	*93.6*	93.6	93.6	93.6	93.6
36°	*77.3*	77.3	77.3	77.3	77.3
37°	*61.0*	61.0	61.0	61.0	61.0
38°	*48.2*	48.2	48.2	48.2	48.2
39°	*38.6*	38.6	38.6	38.6	38.6
40°	*29.1*	29.1	29.1	29.1	29.1
41°	*24.2*	24.2	24.2	24.2	24.2
42°	*19.3*	19.3	19.3	19.3	19.3
43°	*15.8*	15.8	15.8	15.8	15.8
44°	*13.6*	13.6	13.6	13.6	13.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	11.5	11.5	11.5	11.5	11.5
46°	10.3	10.3	10.3	10.3	10.3
47°	9.0	9.0	9.0	9.0	9.0
48°	8.0	8.0	8.0	8.0	8.0
49°	7.1	7.1	7.1	7.1	7.1
50°	6.1	6.1	6.1	6.1	6.1
51°	5.5	5.5	5.5	5.5	5.5
52°	4.9	4.9	4.9	4.9	4.9
53°	4.4	4.4	4.4	4.4	4.4
54°	4.1	4.1	4.1	4.1	4.1
55°	3.8	3.8	3.8	3.8	3.8
56°	3.5	3.5	3.5	3.5	3.5
57°	3.2	3.2	3.2	3.2	3.2
58°	2.9	2.9	2.9	2.9	2.9
59°	2.6	2.6	2.6	2.6	2.6
60°	2.3	2.3	2.3	2.3	2.3
61°	2.0	2.0	2.0	2.0	2.0
62°	1.7	1.7	1.7	1.7	1.7
63°	1.5	1.5	1.5	1.5	1.5
64°	1.5	1.5	1.5	1.5	1.5
65°	1.5	1.5	1.5	1.5	1.5
66°	1.2	1.2	1.2	1.2	1.2
67°	0.9	0.9	0.9	0.9	0.9
68°	0.8	0.8	0.8	0.8	0.8
69°	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.8
71°	0.8	0.8	0.8	0.8	0.8
72°	0.8	0.8	0.8	0.8	0.8
73°	0.6	0.6	0.6	0.6	0.6
74°	0.3	0.3	0.3	0.3	0.3
75°	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0
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

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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°	*0.3*	0.3	0.3	0.3	0.3
107°	*0.6*	0.6	0.6	0.6	0.6
108°	*0.8*	0.8	0.8	0.8	0.8
109°	*0.8*	0.8	0.8	0.8	0.8
110°	*0.8*	0.8	0.8	0.8	0.8
111°	*0.8*	0.8	0.8	0.8	0.8
112°	*0.8*	0.8	0.8	0.8	0.8
113°	*0.9*	0.9	0.9	0.9	0.9
114°	*1.2*	1.2	1.2	1.2	1.2
115°	*1.5*	1.5	1.5	1.5	1.5
116°	*1.5*	1.5	1.5	1.5	1.5
117°	*1.5*	1.5	1.5	1.5	1.5
118°	*1.7*	1.7	1.7	1.7	1.7
119°	*2.0*	2.0	2.0	2.0	2.0
120°	*2.3*	2.3	2.3	2.3	2.3
121°	*2.3*	2.3	2.3	2.3	2.3
122°	*2.3*	2.3	2.3	2.3	2.3
123°	*2.5*	2.5	2.5	2.5	2.5
124°	*2.8*	2.8	2.8	2.8	2.8
125°	*3.1*	3.1	3.1	3.1	3.1
126°	*3.1*	3.1	3.1	3.1	3.1
127°	*3.1*	3.1	3.1	3.1	3.1
128°	*3.4*	3.4	3.4	3.4	3.4
129°	*4.0*	4.0	4.0	4.0	4.0
130°	*4.6*	4.6	4.6	4.6	4.6
131°	*5.2*	5.2	5.2	5.2	5.2
132°	*5.8*	5.8	5.8	5.8	5.8
133°	*7.1*	7.1	7.1	7.1	7.1
134°	*8.9*	8.9	8.9	8.9	8.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
135°	*10.7*	10.7	10.7	10.7	10.7
136°	*14.7*	14.7	14.7	14.7	14.7
137°	*18.7*	18.7	18.7	18.7	18.7
138°	*24.4*	24.4	24.4	24.4	24.4
139°	*31.7*	31.7	31.7	31.7	31.7
140°	*39.1*	39.1	39.1	39.1	39.1
141°	*51.4*	51.4	51.4	51.4	51.4
142°	*63.6*	63.6	63.6	63.6	63.6
143°	*78.5*	78.5	78.5	78.5	78.5
144°	*96.0*	96.0	96.0	96.0	96.0
145°	*113.5*	113.5	113.5	113.5	113.5
146°	*135.3*	135.3	135.3	135.3	135.3
147°	*157.0*	157.0	157.0	157.0	157.0
148°	*180.1*	180.1	180.1	180.1	180.1
149°	*204.3*	204.3	204.3	204.3	204.3
150°	*228.5*	228.5	228.5	228.5	228.5
151°	*251.8*	251.8	251.8	251.8	251.8
152°	*275.1*	275.1	275.1	275.1	275.1
153°	*298.5*	298.5	298.5	298.5	298.5
154°	*321.8*	321.8	321.8	321.8	321.8
155°	*345.1*	345.1	345.1	345.1	345.1
156°	*372.4*	372.4	372.4	372.4	372.4
157°	*399.7*	399.7	399.7	399.7	399.7
158°	*432.8*	432.8	432.8	432.8	432.8
159°	*471.8*	471.8	471.8	471.8	471.8
160°	*510.7*	510.7	510.7	510.7	510.7
161°	*574.2*	574.2	574.2	574.2	574.2
162°	*637.7*	637.7	637.7	637.7	637.7
163°	*723.1*	723.1	723.1	723.1	723.1
164°	*830.5*	830.5	830.5	830.5	830.5
165°	*937.8*	937.8	937.8	937.8	937.8
166°	*1109.0*	1109.0	1109.0	1109.0	1109.0
167°	*1280.2*	1280.2	1280.2	1280.2	1280.2
168°	*1492.1*	1492.1	1492.1	1492.1	1492.1
169°	*1744.9*	1744.9	1744.9	1744.9	1744.9
170°	*1997.6*	1997.6	1997.6	1997.6	1997.6
171°	*2314.5*	2314.5	2314.5	2314.5	2314.5
172°	*2631.3*	2631.3	2631.3	2631.3	2631.3
173°	*2940.5*	2940.5	2940.5	2940.5	2940.5
174°	*3242.0*	3242.0	3242.0	3242.0	3242.0
175°	*3543.5*	3543.5	3543.5	3543.5	3543.5
176°	*3750.0*	3750.0	3750.0	3750.0	3750.0
177°	*3956.4*	3956.4	3956.4	3956.4	3956.4
178°	*4100.0*	4100.0	4100.0	4100.0	4100.0
179°	*4180.6*	4180.6	4180.6	4180.6	4180.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	*4261.3*	*4261.3*	*4261.3*	*4261.3*	*4261.3*

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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	0.60	0.99	1.59	2.90	0.00	0.60	0.99	1.59	2.90
	3H	0.21	0.77	1.24	1.77	3.10	0.21	0.77	1.24	1.77	3.10
	4H	0.14	0.67	1.18	1.67	3.01	0.14	0.67	1.18	1.67	3.01
	6H	0.02	0.51	1.07	1.52	2.86	0.02	0.51	1.07	1.52	2.86
	8H	0.00	0.42	1.01	1.44	2.78	0.00	0.42	1.01	1.44	2.78
	12H	0.00	0.33	0.95	1.35	2.71	0.00	0.33	0.95	1.35	2.71
4H	2H	0.04	0.57	1.08	1.57	2.91	0.04	0.57	1.08	1.57	2.91
	3H	0.45	0.89	1.49	1.92	3.27	0.45	0.89	1.49	1.92	3.27
	4H	0.37	0.77	1.42	1.79	3.16	0.37	0.77	1.42	1.79	3.16
	6H	0.25	0.59	1.31	1.64	3.01	0.25	0.59	1.31	1.64	3.01
	8H	0.18	0.50	1.24	1.54	2.92	0.18	0.50	1.24	1.54	2.92
	12H	0.11	0.39	1.18	1.45	2.83	0.11	0.39	1.18	1.45	2.83
8H	4H	0.23	0.55	1.29	1.59	2.97	0.23	0.55	1.29	1.59	2.97
	6H	0.11	0.37	1.19	1.45	2.83	0.11	0.37	1.19	1.45	2.83
	8H	0.05	0.28	1.14	1.34	2.74	0.05	0.28	1.14	1.34	2.74
	12H	0.00	0.18	1.07	1.24	2.68	0.00	0.18	1.07	1.24	2.68
12H	4H	0.16	0.44	1.23	1.50	2.88	0.16	0.44	1.23	1.50	2.88
	6H	0.05	0.28	1.14	1.34	2.74	0.05	0.28	1.14	1.34	2.74
	8H	0.00	0.18	1.07	1.24	2.68	0.00	0.18	1.07	1.24	2.68

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

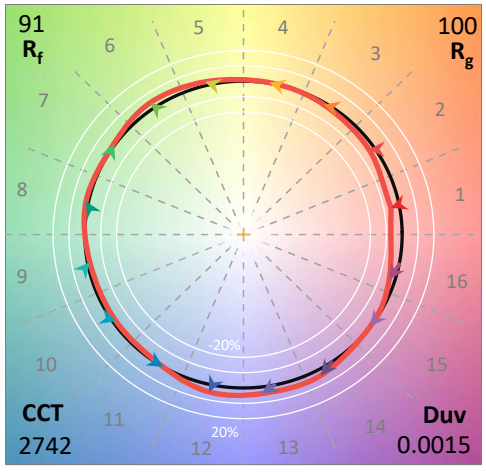
Test Information

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
Rf:	91.5
Rg:	100.2

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



Test Conditions

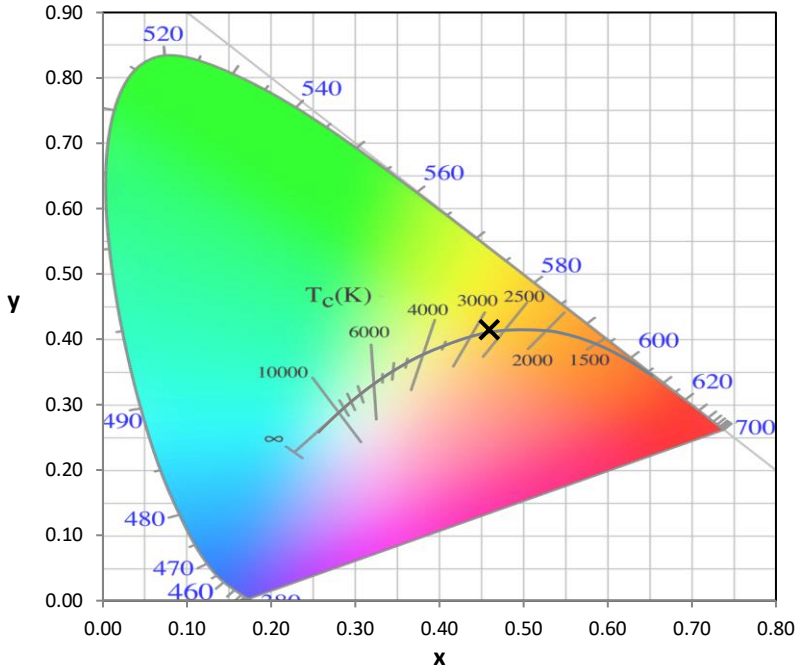
Stabilization Time:	41M
Operation Time:	1H 41M
Sphere Temperature (°C):	24.0

REPORT NUMBER: SP1-2504-407-1

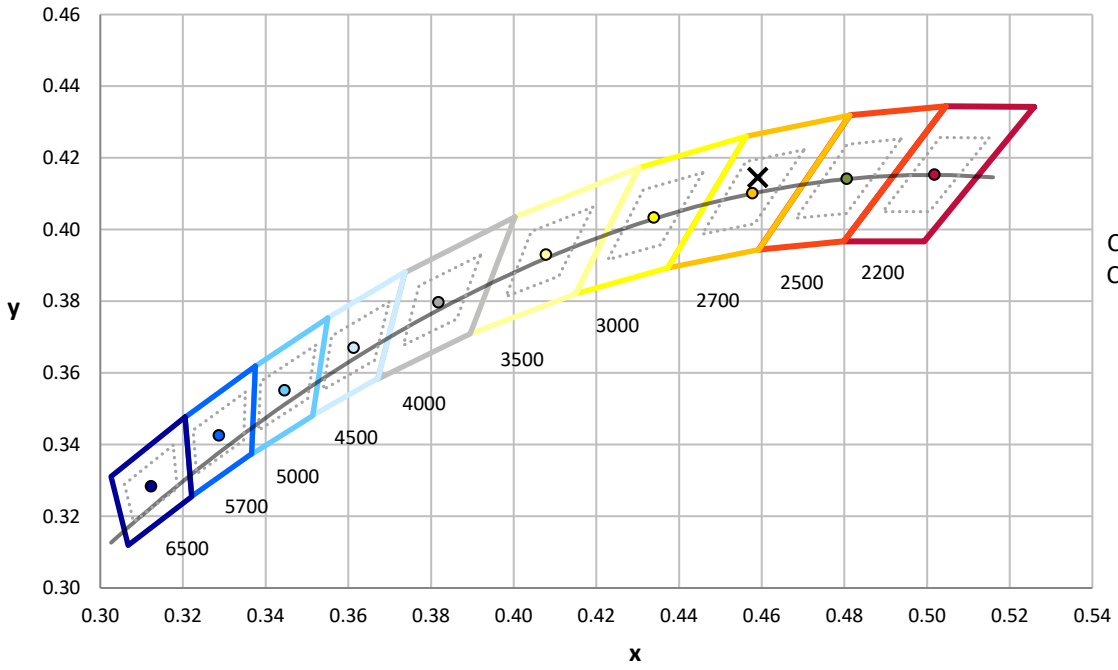
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

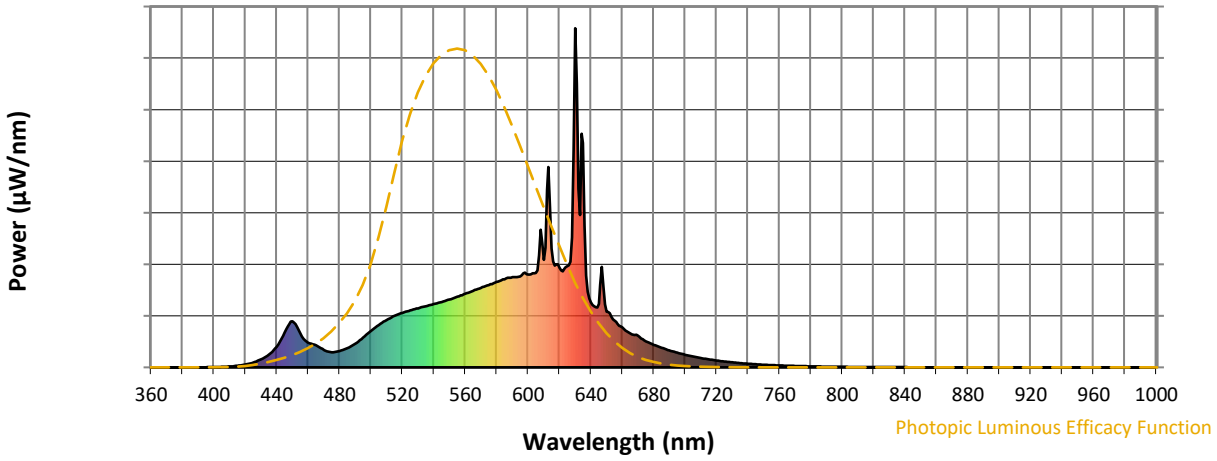


CCT = 2742K
CIE x = 0.4591
CIE y = 0.4146
Duv = 0.0015

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2504-407-1

Photopic Flux vs. Wavelength

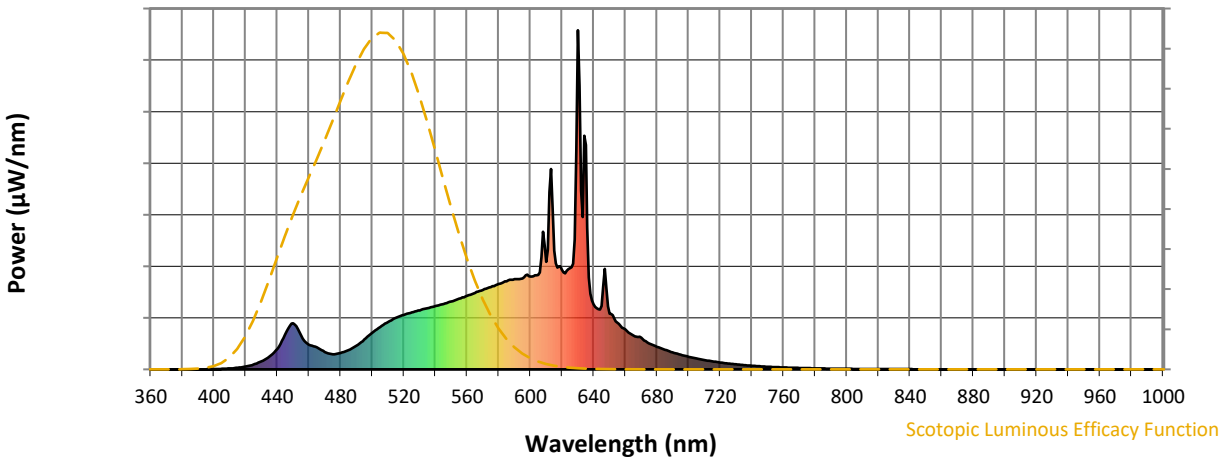


Photopic Lumens: NR

λ (nm)	Power 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

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			

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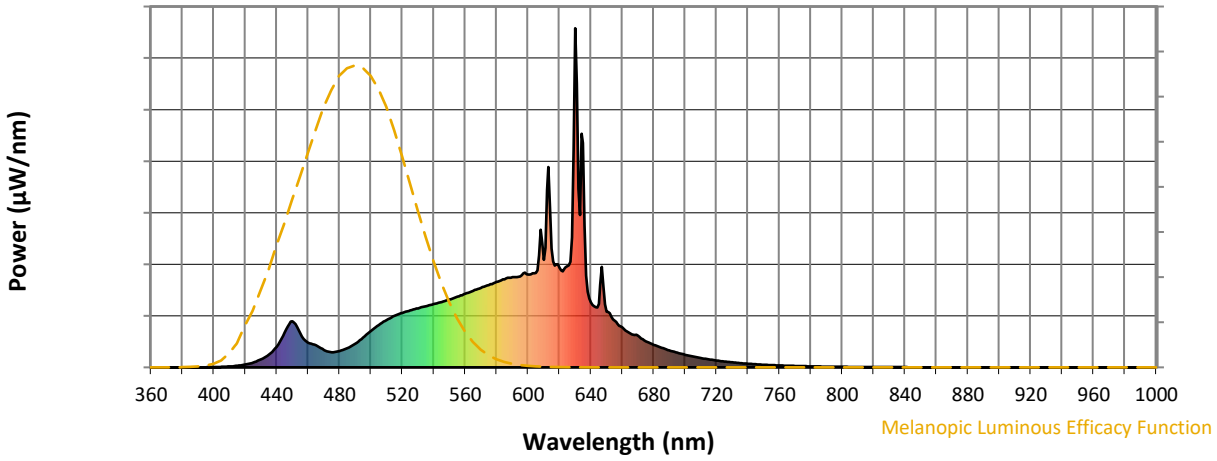
Melanopic Flux vs. Wavelength



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			

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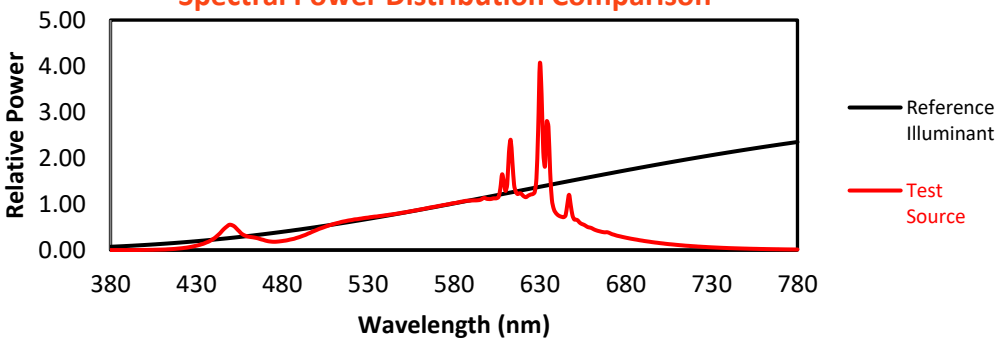
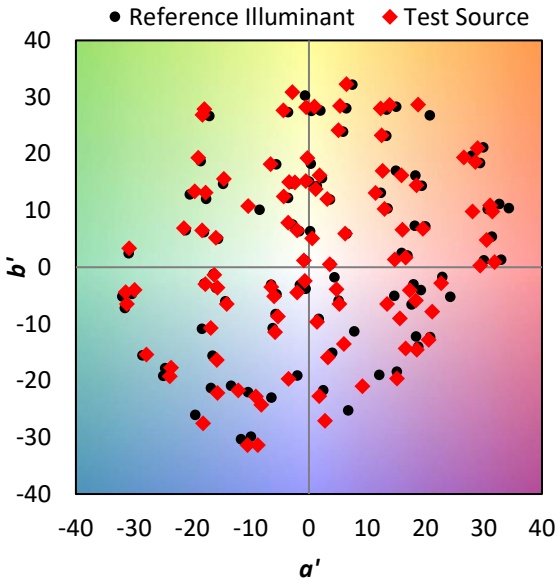
Summary

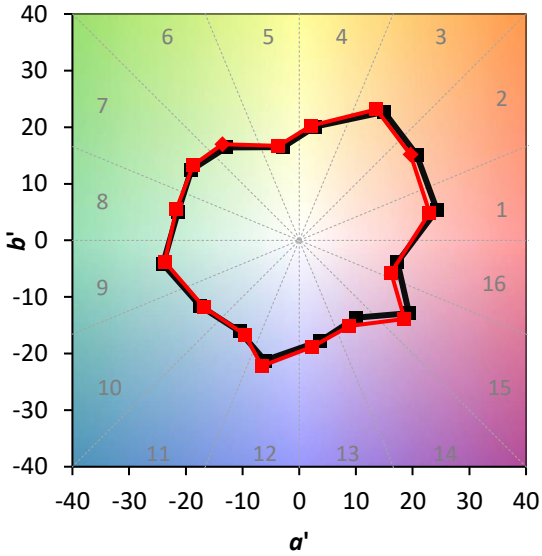
R_f = 91.5
R_g = 100.2
CIE R_a = 93.2
R_9 = 55.9

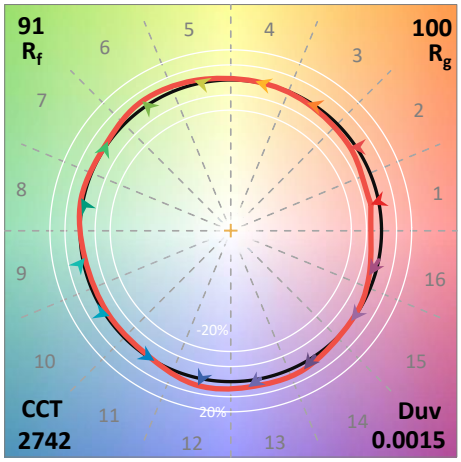
Spectral Power Distribution Comparison

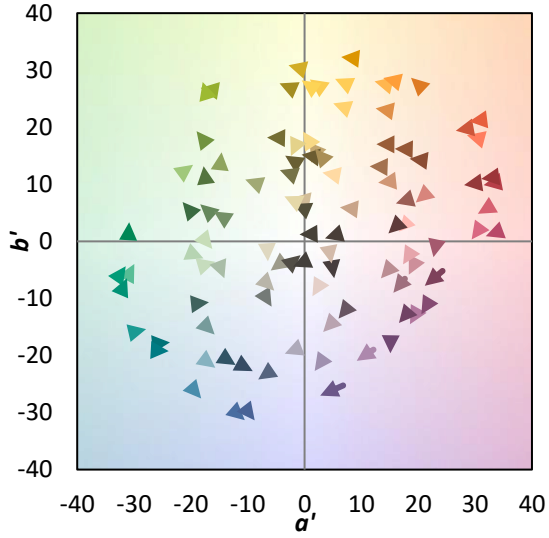


Color Vector Graphics









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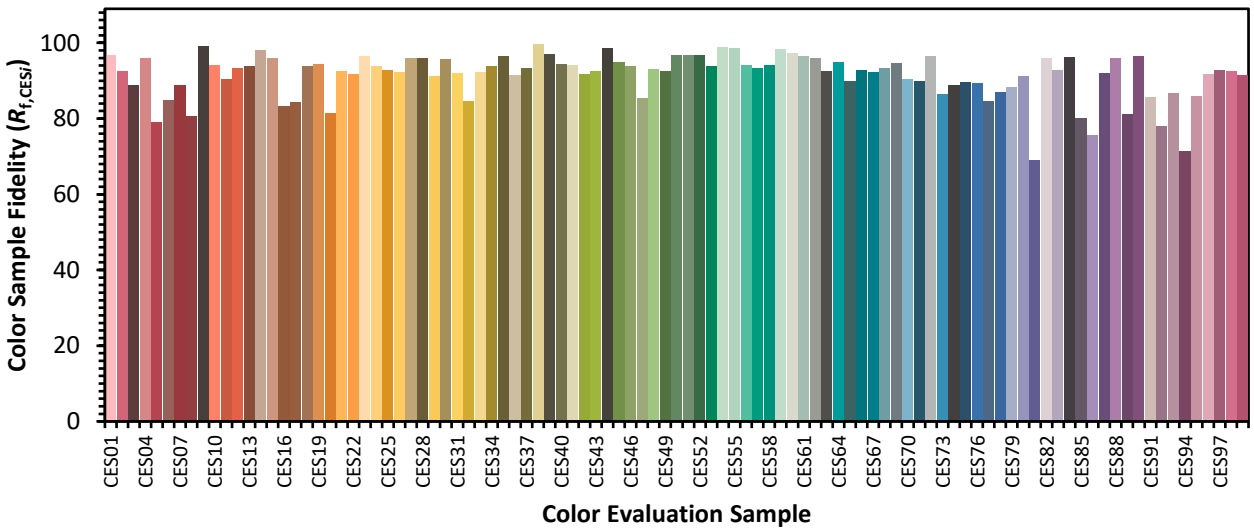
TM-30-18

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	



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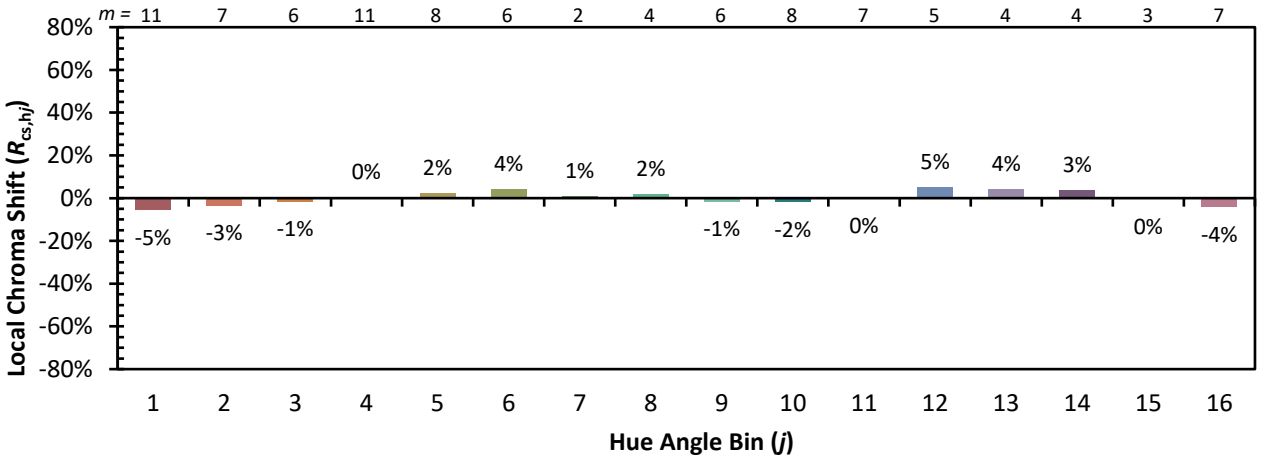
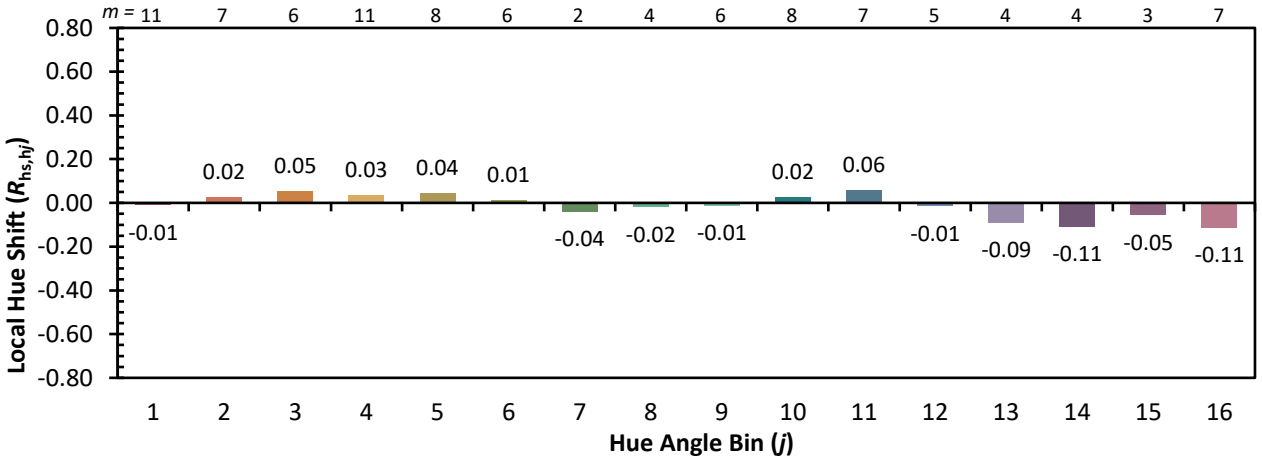
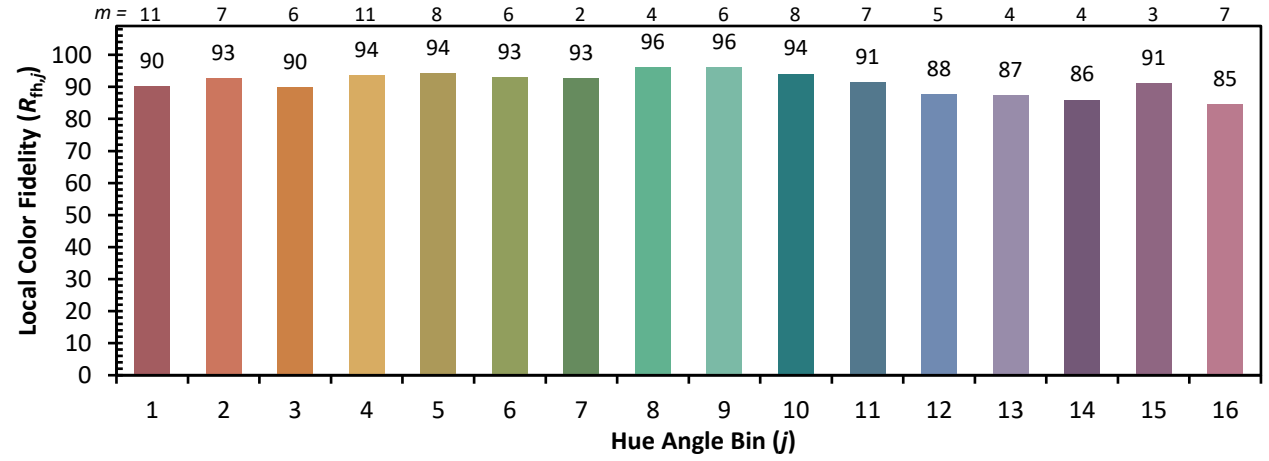
Color Rendition by Hue-Angle Bin







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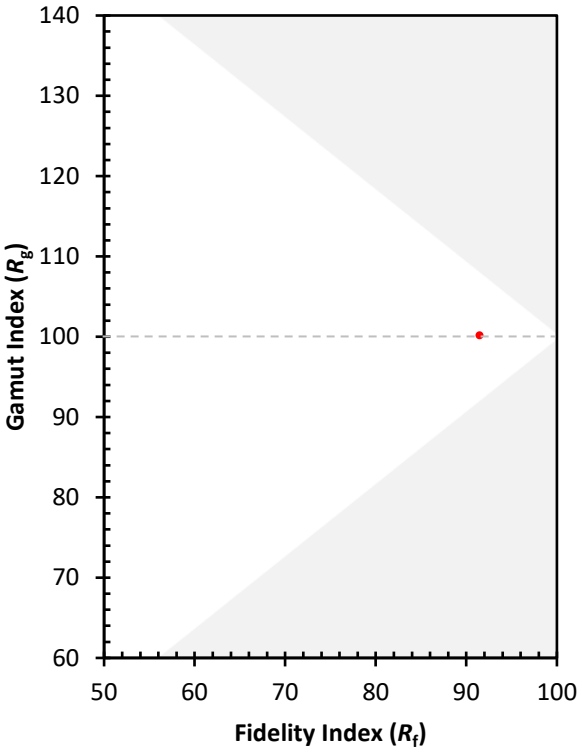
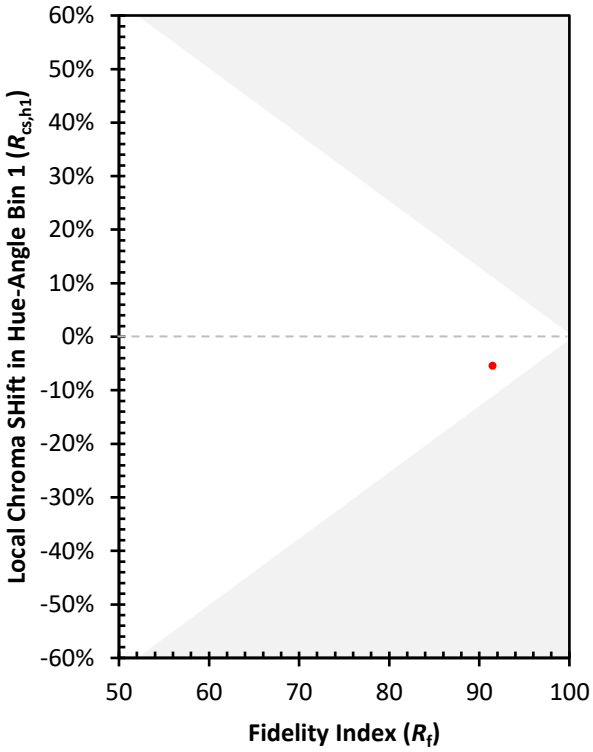
Measure Comparisons





(END OF REPORT)