

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: P1057244

Luminaire Tested: PRLX-CYL2W-DI-X-927-20L-MD-SP-U-S-X-X-BLAK

Issue Date: 8/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057244
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-927-20L-MD-SP-U-S-X-X-BLAK
Description: PrentaLux 2-INCH CYLINDER
DOWNLIGHT 1000 LUMENS, MEDIUM OPTIC (23-DEGREES)
UPLIGHT 1000 LUMENS, SPOT OPTIC (19-DEGREES)
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

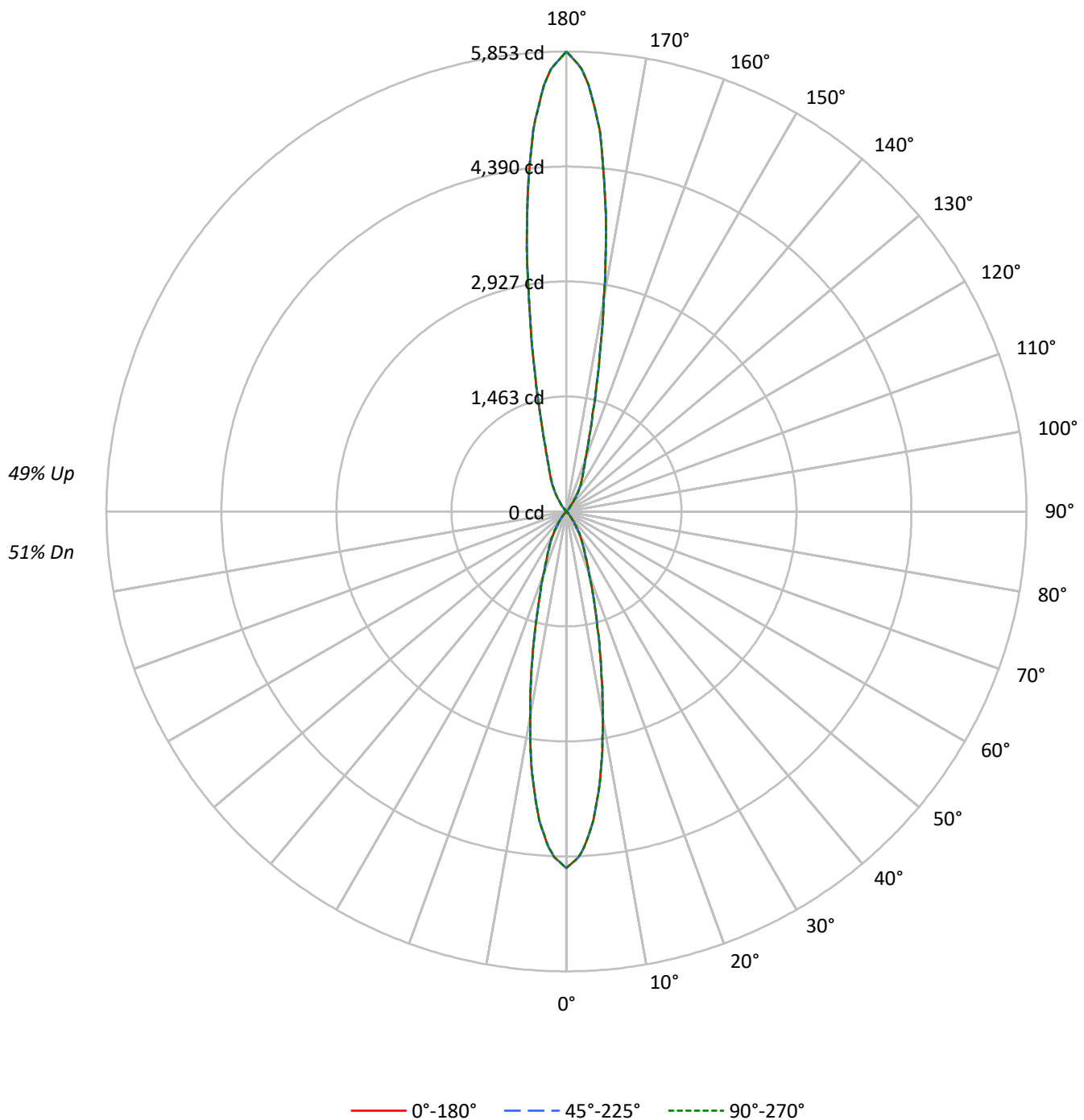
Lumens per Lamp: N/A
Luminaire Lumens: 2260.3 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.42
Luminous Opening: Circular (Dia: 0.15' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 18.1
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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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-MD-SP-U-S-X-X-BLAK

Luminous Intensity Polar Plot



TEST NUMBER: P1057244

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-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°	2924247	2924247	2924247
5°	2554469	2554469	2554469
10°	1742432	1742432	1742432
15°	1015473	1015473	1015473
20°	578590	578590	578590
25°	374504	374504	374504
30°	247715	247715	247715
35°	130119	130119	130119
40°	50474	50474	50474
45°	16313	16313	16313
50°	8421	8421	8421
55°	5955	5955	5955
60°	4124	4124	4124
65°	3202	3202	3202
70°	2073	2073	2073
75°	2739	2739	2739
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16313 cd/sqm

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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-MD-SP-U-S-X-X-BLAK

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	334.0	14.8
10°-20°	428.6	19.0
20°-30°	247.4	10.9
30°-40°	108.2	4.8
40°-50°	18.4	0.8
50°-60°	4.8	0.2
60°-70°	2.3	0.1
70°-80°	0.7	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.4	0.0
110°-120°	1.8	0.1
120°-130°	3.7	0.2
130°-140°	15.4	0.7
140°-150°	101.3	4.5
150°-160°	219.6	9.7
160°-170°	381.6	16.9
170°-180°	392.0	17.3
0°-30°	1010.0	44.7
0°-40°	1118.2	49.5
0°-60°	1141.4	50.5
0°-90°	1144.5	50.6
90°-120°	2.2	0.1
90°-150°	122.6	5.4
90°-180°	1116.0	49.4
0°-180°	2260.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4538	4538	4538	4538	4538	
5°	3949	3949	3949	3949	3949	334
15°	1522	1522	1522	1522	1522	429
25°	527	527	527	527	527	247
35°	165	165	165	165	165	108
45°	18	18	18	18	18	18
55°	5	5	5	5	5	5
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
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	2
125°	4	4	4	4	4	4
135°	15	15	15	15	15	15
145°	156	156	156	156	156	101
155°	474	474	474	474	474	220
165°	1288	1288	1288	1288	1288	382
175°	4868	4868	4868	4868	4868	392
180°	5853	5853	5853	5853	5853	

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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4537.8	4537.8	4537.8	4537.8	4537.8
1°	4469.9	4469.9	4469.9	4469.9	4469.9
2°	4402.1	4402.1	4402.1	4402.1	4402.1
3°	4284.3	4284.3	4284.3	4284.3	4284.3
4°	4116.6	4116.6	4116.6	4116.6	4116.6
5°	3948.9	3948.9	3948.9	3948.9	3948.9
6°	3711.7	3711.7	3711.7	3711.7	3711.7
7°	3474.5	3474.5	3474.5	3474.5	3474.5
8°	3217.3	3217.3	3217.3	3217.3	3217.3
9°	2940.1	2940.1	2940.1	2940.1	2940.1
10°	2662.8	2662.8	2662.8	2662.8	2662.8
11°	2410.9	2410.9	2410.9	2410.9	2410.9
12°	2158.9	2158.9	2158.9	2158.9	2158.9
13°	1930.8	1930.8	1930.8	1930.8	1930.8
14°	1726.4	1726.4	1726.4	1726.4	1726.4
15°	1522.1	1522.1	1522.1	1522.1	1522.1
16°	1363.6	1363.6	1363.6	1363.6	1363.6
17°	1205.2	1205.2	1205.2	1205.2	1205.2
18°	1069.6	1069.6	1069.6	1069.6	1069.6
19°	956.6	956.6	956.6	956.6	956.6
20°	843.7	843.7	843.7	843.7	843.7
21°	769.1	769.1	769.1	769.1	769.1
22°	694.6	694.6	694.6	694.6	694.6
23°	631.2	631.2	631.2	631.2	631.2
24°	578.9	578.9	578.9	578.9	578.9
25°	526.7	526.7	526.7	526.7	526.7
26°	486.2	486.2	486.2	486.2	486.2
27°	445.8	445.8	445.8	445.8	445.8
28°	407.0	407.0	407.0	407.0	407.0
29°	369.9	369.9	369.9	369.9	369.9
30°	332.9	332.9	332.9	332.9	332.9
31°	297.9	297.9	297.9	297.9	297.9
32°	262.9	262.9	262.9	262.9	262.9
33°	229.4	229.4	229.4	229.4	229.4
34°	197.4	197.4	197.4	197.4	197.4
35°	165.4	165.4	165.4	165.4	165.4
36°	140.9	140.9	140.9	140.9	140.9
37°	116.5	116.5	116.5	116.5	116.5
38°	95.4	95.4	95.4	95.4	95.4
39°	77.7	77.7	77.7	77.7	77.7
40°	60.0	60.0	60.0	60.0	60.0
41°	49.5	49.5	49.5	49.5	49.5
42°	39.0	39.0	39.0	39.0	39.0
43°	30.5	30.5	30.5	30.5	30.5
44°	24.2	24.2	24.2	24.2	24.2

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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	17.9	17.9	17.9	17.9	17.9
46°	15.4	15.4	15.4	15.4	15.4
47°	12.9	12.9	12.9	12.9	12.9
48°	11.0	11.0	11.0	11.0	11.0
49°	9.7	9.7	9.7	9.7	9.7
50°	8.4	8.4	8.4	8.4	8.4
51°	7.6	7.6	7.6	7.6	7.6
52°	6.7	6.7	6.7	6.7	6.7
53°	6.1	6.1	6.1	6.1	6.1
54°	5.7	5.7	5.7	5.7	5.7
55°	5.3	5.3	5.3	5.3	5.3
56°	4.8	4.8	4.8	4.8	4.8
57°	4.4	4.4	4.4	4.4	4.4
58°	4.0	4.0	4.0	4.0	4.0
59°	3.6	3.6	3.6	3.6	3.6
60°	3.2	3.2	3.2	3.2	3.2
61°	3.2	3.2	3.2	3.2	3.2
62°	3.2	3.2	3.2	3.2	3.2
63°	2.9	2.9	2.9	2.9	2.9
64°	2.5	2.5	2.5	2.5	2.5
65°	2.1	2.1	2.1	2.1	2.1
66°	2.1	2.1	2.1	2.1	2.1
67°	2.1	2.1	2.1	2.1	2.1
68°	1.9	1.9	1.9	1.9	1.9
69°	1.5	1.5	1.5	1.5	1.5
70°	1.1	1.1	1.1	1.1	1.1
71°	1.1	1.1	1.1	1.1	1.1
72°	1.1	1.1	1.1	1.1	1.1
73°	1.1	1.1	1.1	1.1	1.1
74°	1.1	1.1	1.1	1.1	1.1
75°	1.1	1.1	1.1	1.1	1.1
76°	0.6	0.6	0.6	0.6	0.6
77°	0.2	0.2	0.2	0.2	0.2
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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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-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°	0.4	0.4	0.4	0.4	0.4
107°	0.8	0.8	0.8	0.8	0.8
108°	1.1	1.1	1.1	1.1	1.1
109°	1.1	1.1	1.1	1.1	1.1
110°	1.1	1.1	1.1	1.1	1.1
111°	1.1	1.1	1.1	1.1	1.1
112°	1.1	1.1	1.1	1.1	1.1
113°	1.3	1.3	1.3	1.3	1.3
114°	1.7	1.7	1.7	1.7	1.7
115°	2.1	2.1	2.1	2.1	2.1
116°	2.1	2.1	2.1	2.1	2.1
117°	2.1	2.1	2.1	2.1	2.1
118°	2.3	2.3	2.3	2.3	2.3
119°	2.7	2.7	2.7	2.7	2.7
120°	3.2	3.2	3.2	3.2	3.2
121°	3.2	3.2	3.2	3.2	3.2
122°	3.2	3.2	3.2	3.2	3.2
123°	3.4	3.4	3.4	3.4	3.4
124°	3.8	3.8	3.8	3.8	3.8
125°	4.2	4.2	4.2	4.2	4.2
126°	4.2	4.2	4.2	4.2	4.2
127°	4.2	4.2	4.2	4.2	4.2
128°	4.6	4.6	4.6	4.6	4.6
129°	5.5	5.5	5.5	5.5	5.5
130°	6.3	6.3	6.3	6.3	6.3
131°	7.2	7.2	7.2	7.2	7.2
132°	8.0	8.0	8.0	8.0	8.0
133°	9.7	9.7	9.7	9.7	9.7
134°	12.2	12.2	12.2	12.2	12.2

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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-MD-SP-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
135°	14.7	14.7	14.7	14.7	14.7
136°	20.2	20.2	20.2	20.2	20.2
137°	25.7	25.7	25.7	25.7	25.7
138°	33.5	33.5	33.5	33.5	33.5
139°	43.6	43.6	43.6	43.6	43.6
140°	53.7	53.7	53.7	53.7	53.7
141°	70.6	70.6	70.6	70.6	70.6
142°	87.4	87.4	87.4	87.4	87.4
143°	107.9	107.9	107.9	107.9	107.9
144°	131.9	131.9	131.9	131.9	131.9
145°	155.9	155.9	155.9	155.9	155.9
146°	185.8	185.8	185.8	185.8	185.8
147°	215.7	215.7	215.7	215.7	215.7
148°	247.3	247.3	247.3	247.3	247.3
149°	280.6	280.6	280.6	280.6	280.6
150°	313.9	313.9	313.9	313.9	313.9
151°	345.9	345.9	345.9	345.9	345.9
152°	377.9	377.9	377.9	377.9	377.9
153°	410.0	410.0	410.0	410.0	410.0
154°	442.0	442.0	442.0	442.0	442.0
155°	474.0	474.0	474.0	474.0	474.0
156°	511.5	511.5	511.5	511.5	511.5
157°	549.0	549.0	549.0	549.0	549.0
158°	594.5	594.5	594.5	594.5	594.5
159°	648.0	648.0	648.0	648.0	648.0
160°	701.5	701.5	701.5	701.5	701.5
161°	788.7	788.7	788.7	788.7	788.7
162°	876.0	876.0	876.0	876.0	876.0
163°	993.3	993.3	993.3	993.3	993.3
164°	1140.8	1140.8	1140.8	1140.8	1140.8
165°	1288.2	1288.2	1288.2	1288.2	1288.2
166°	1523.3	1523.3	1523.3	1523.3	1523.3
167°	1758.4	1758.4	1758.4	1758.4	1758.4
168°	2049.6	2049.6	2049.6	2049.6	2049.6
169°	2396.8	2396.8	2396.8	2396.8	2396.8
170°	2743.9	2743.9	2743.9	2743.9	2743.9
171°	3179.2	3179.2	3179.2	3179.2	3179.2
172°	3614.4	3614.4	3614.4	3614.4	3614.4
173°	4039.1	4039.1	4039.1	4039.1	4039.1
174°	4453.3	4453.3	4453.3	4453.3	4453.3
175°	4867.5	4867.5	4867.5	4867.5	4867.5
176°	5151.0	5151.0	5151.0	5151.0	5151.0
177°	5434.6	5434.6	5434.6	5434.6	5434.6
178°	5631.8	5631.8	5631.8	5631.8	5631.8
179°	5742.6	5742.6	5742.6	5742.6	5742.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	5853.4	5853.4	5853.4	5853.4	5853.4

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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-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	1.02	1.66	2.03	2.64	3.92	1.02	1.66	2.03	2.64	3.92
	3H	1.77	2.34	2.78	3.32	4.63	1.77	2.34	2.78	3.32	4.63
	4H	2.05	2.59	3.08	3.58	4.89	2.05	2.59	3.08	3.58	4.89
	6H	1.94	2.43	2.97	3.43	4.75	1.94	2.43	2.97	3.43	4.75
	8H	1.88	2.34	2.91	3.35	4.67	1.88	2.34	2.91	3.35	4.67
	12H	1.81	2.26	2.85	3.26	4.60	1.81	2.26	2.85	3.26	4.60
4H	2H	1.14	1.68	2.17	2.67	3.98	1.14	1.68	2.17	2.67	3.98
	3H	1.97	2.41	3.00	3.43	4.76	1.97	2.41	3.00	3.43	4.76
	4H	2.38	2.78	3.41	3.79	5.14	2.38	2.78	3.41	3.79	5.14
	6H	2.26	2.61	3.31	3.64	4.99	2.26	2.61	3.31	3.64	4.99
	8H	2.20	2.52	3.24	3.55	4.90	2.20	2.52	3.24	3.55	4.90
	12H	2.12	2.41	3.18	3.45	4.81	2.12	2.41	3.18	3.45	4.81
8H	4H	2.32	2.64	3.37	3.67	5.02	2.32	2.64	3.37	3.67	5.02
	6H	2.20	2.46	3.27	3.53	4.89	2.20	2.46	3.27	3.53	4.89
	8H	2.14	2.37	3.22	3.42	4.80	2.14	2.37	3.22	3.42	4.80
	12H	2.07	2.27	3.15	3.32	4.74	2.07	2.27	3.15	3.32	4.74
12H	4H	2.25	2.53	3.31	3.58	4.93	2.25	2.53	3.31	3.58	4.93
	6H	2.14	2.37	3.22	3.42	4.80	2.14	2.37	3.22	3.42	4.80
	8H	2.07	2.27	3.15	3.32	4.74	2.07	2.27	3.15	3.32	4.74

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

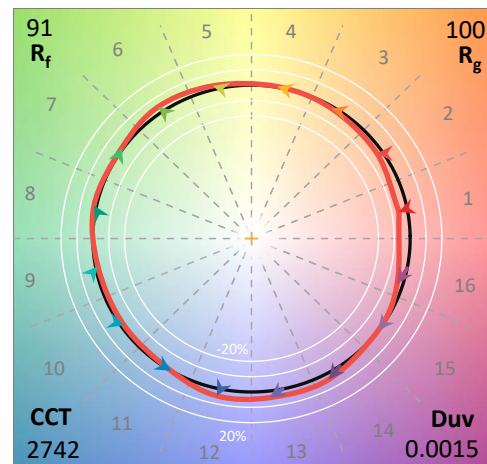
Test Information

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: PentaLux 3D Printing
 Catalog Number: **PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK**
 Description: PentaLux 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

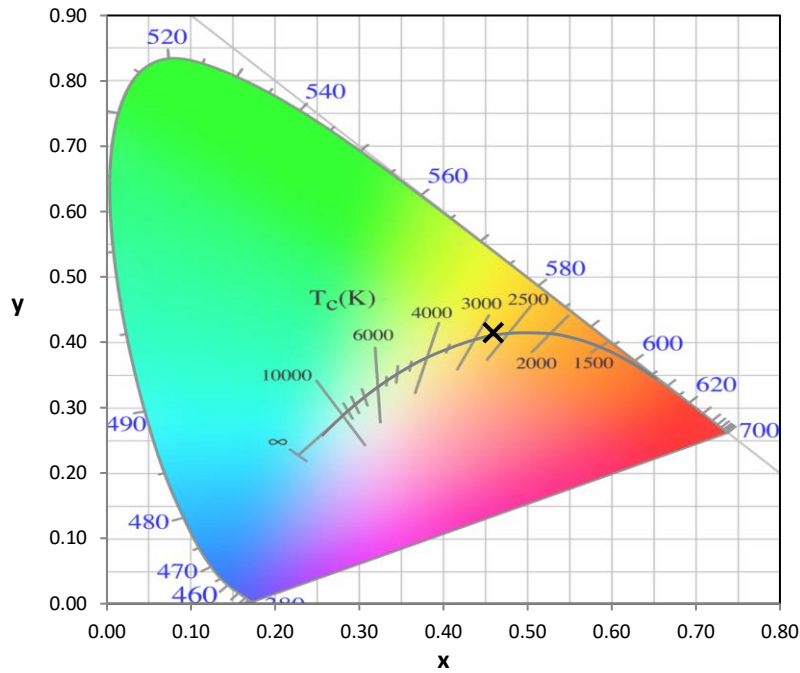
Stabilization Time: 41M
 Operation Time: 1H 41M
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2504-407-1

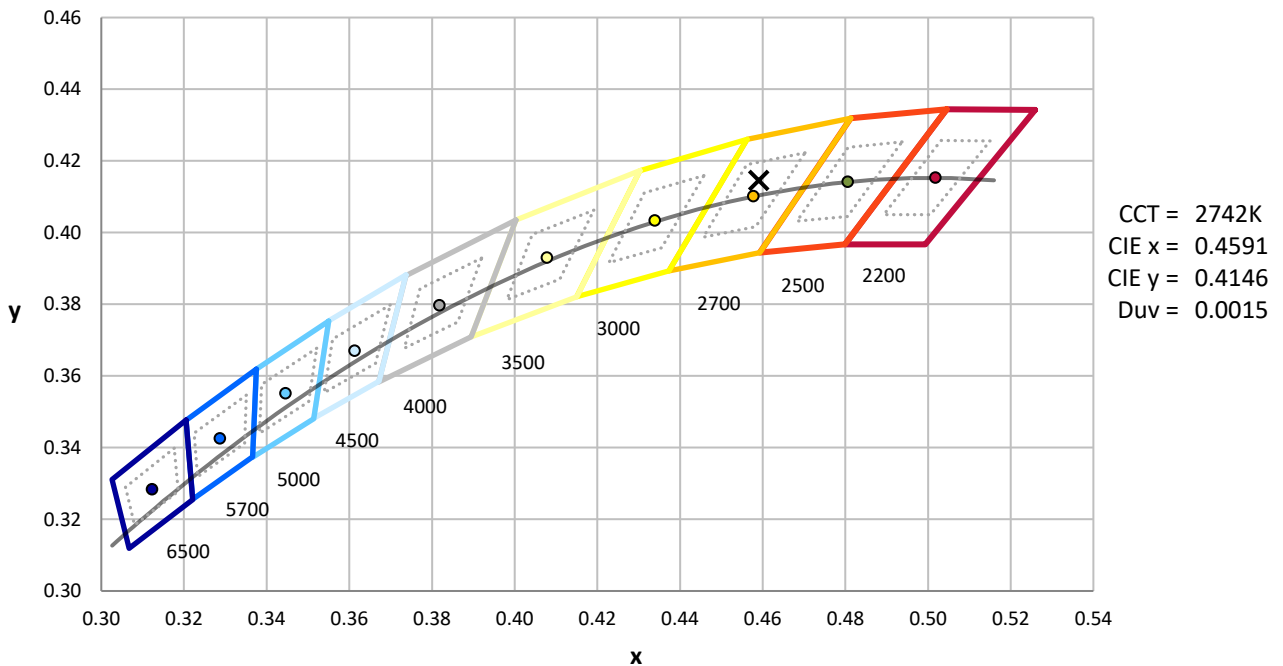
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

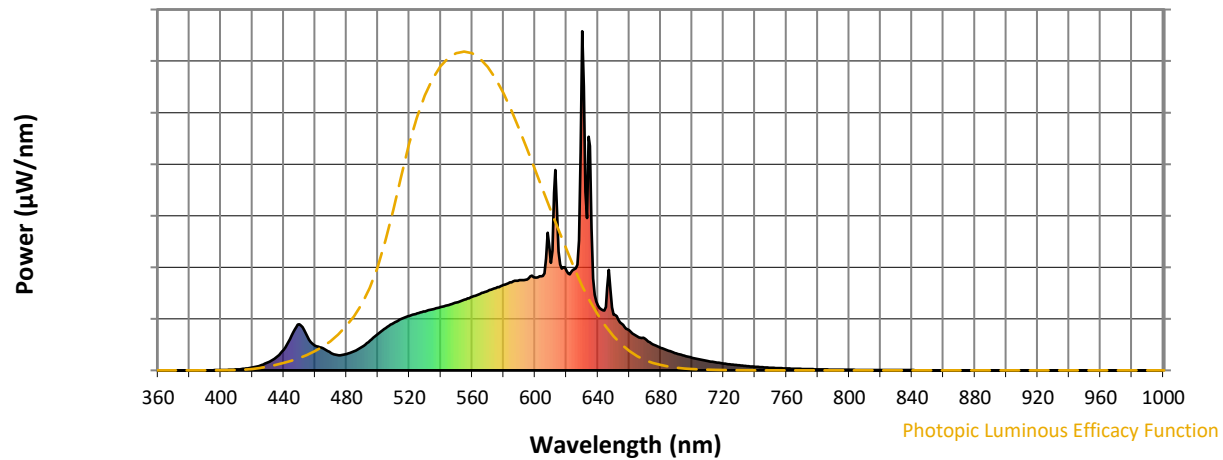


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



REPORT NUMBER: SP1-2504-407-1

Photopic Flux vs. Wavelength

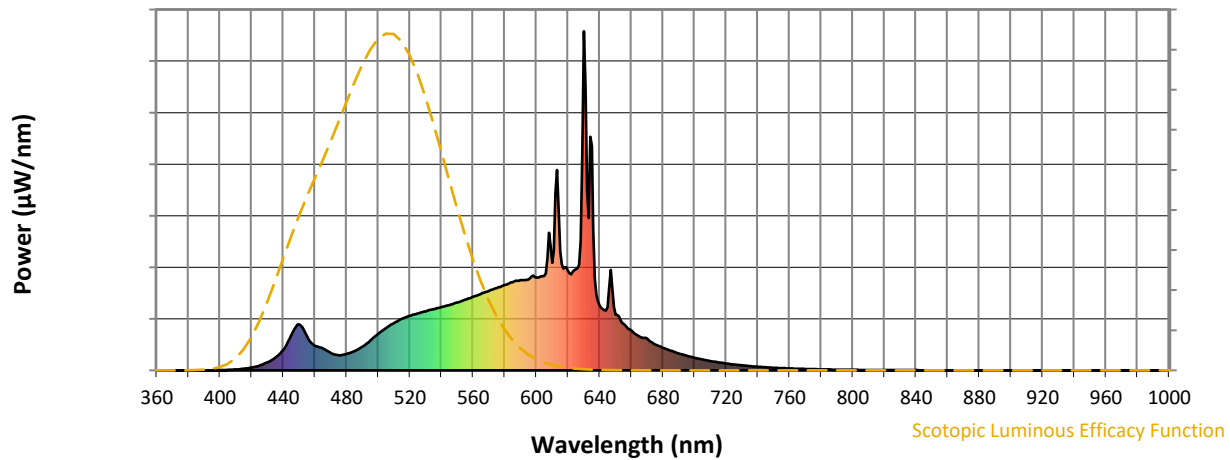


Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /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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Scotopic Flux vs. Wavelength



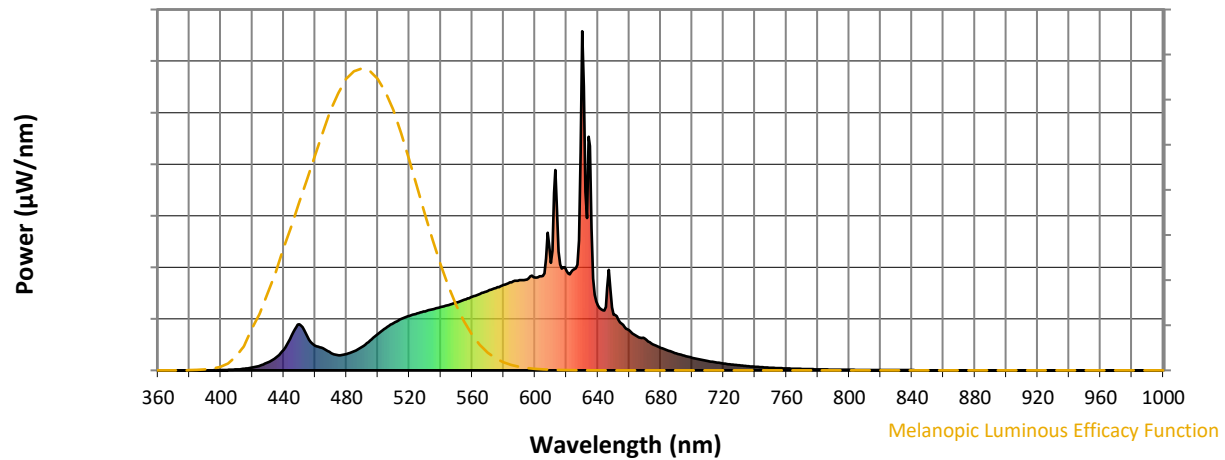
Scotopic Lumens: NR

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

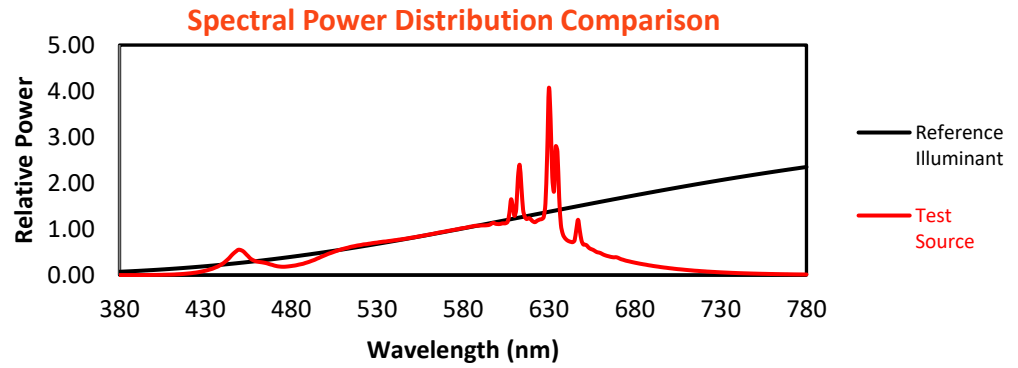
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	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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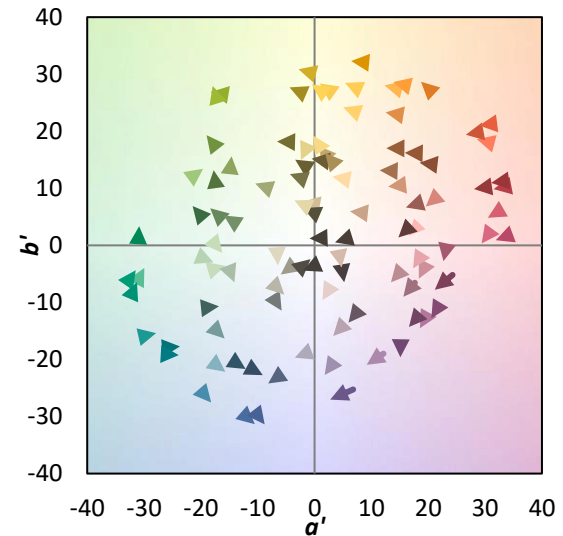
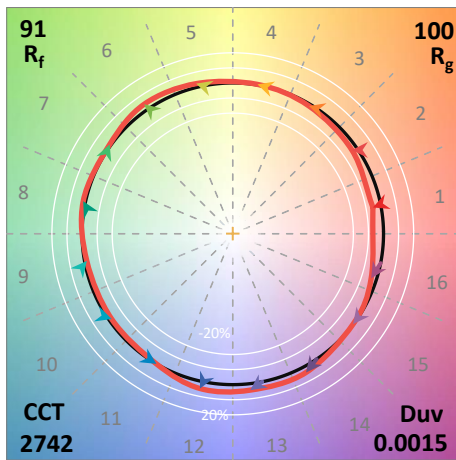
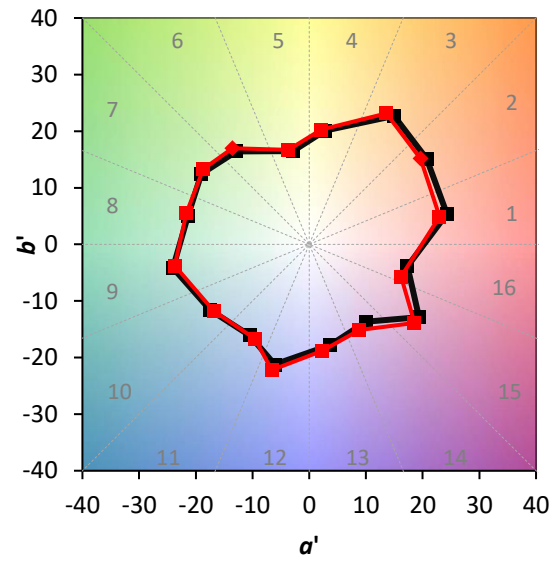
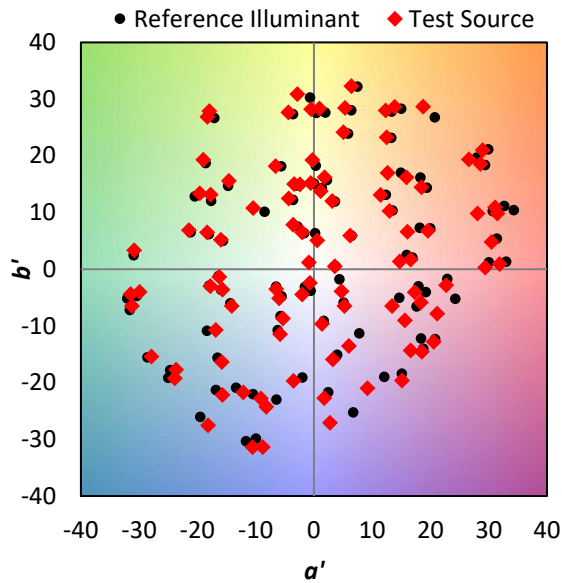
TM-30-18

Summary

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

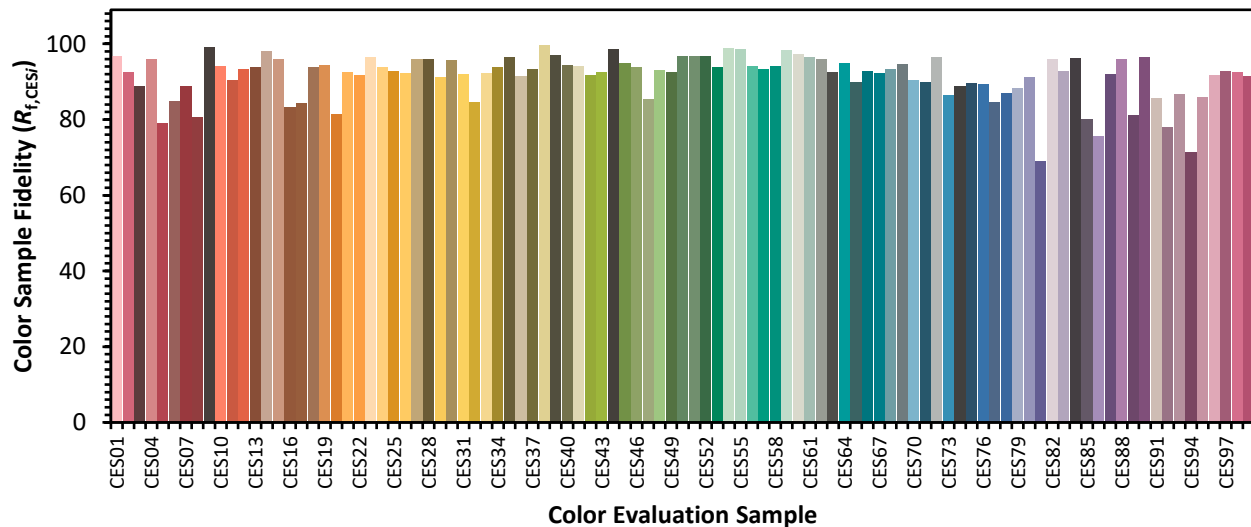


Color Vector Graphics

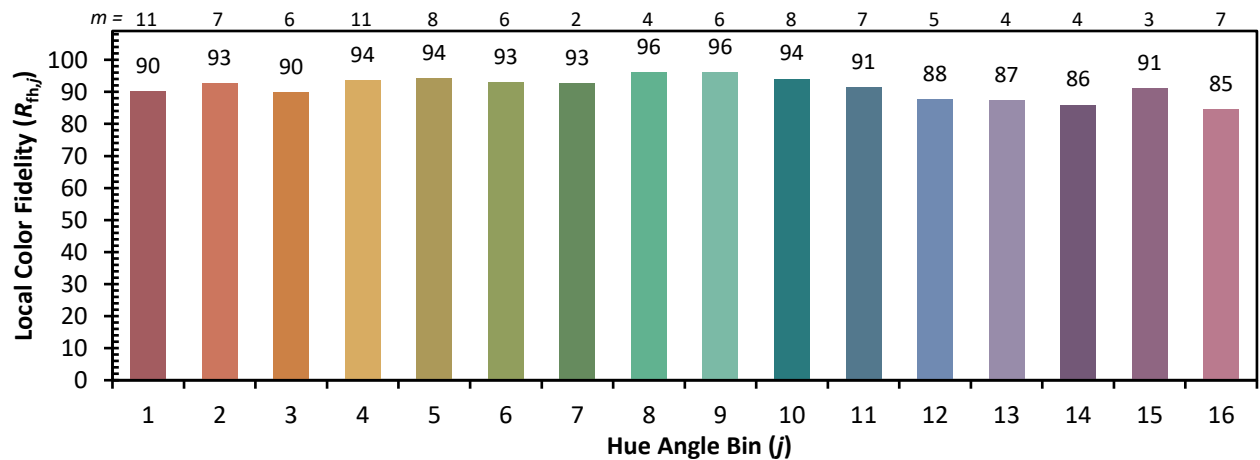
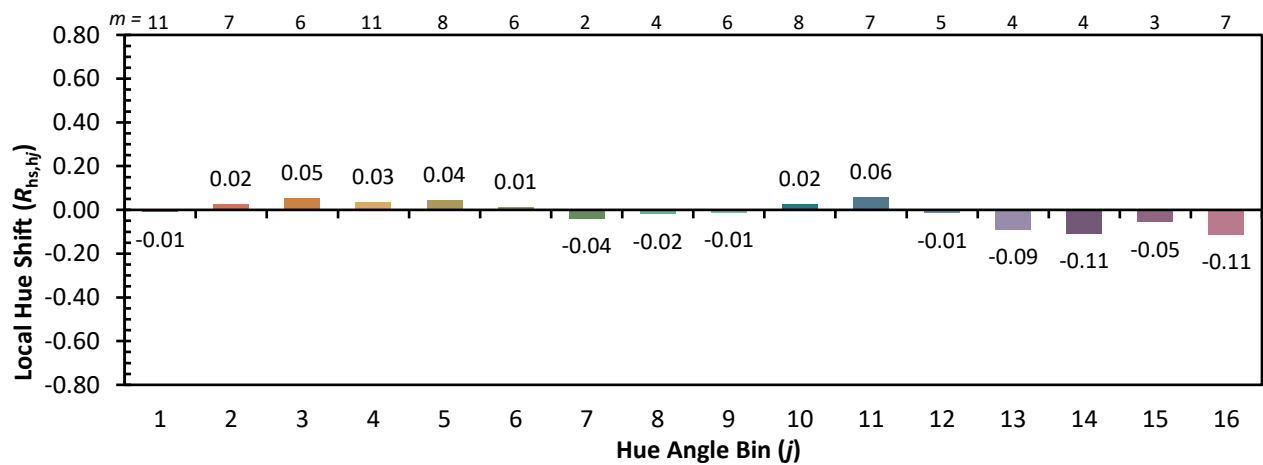
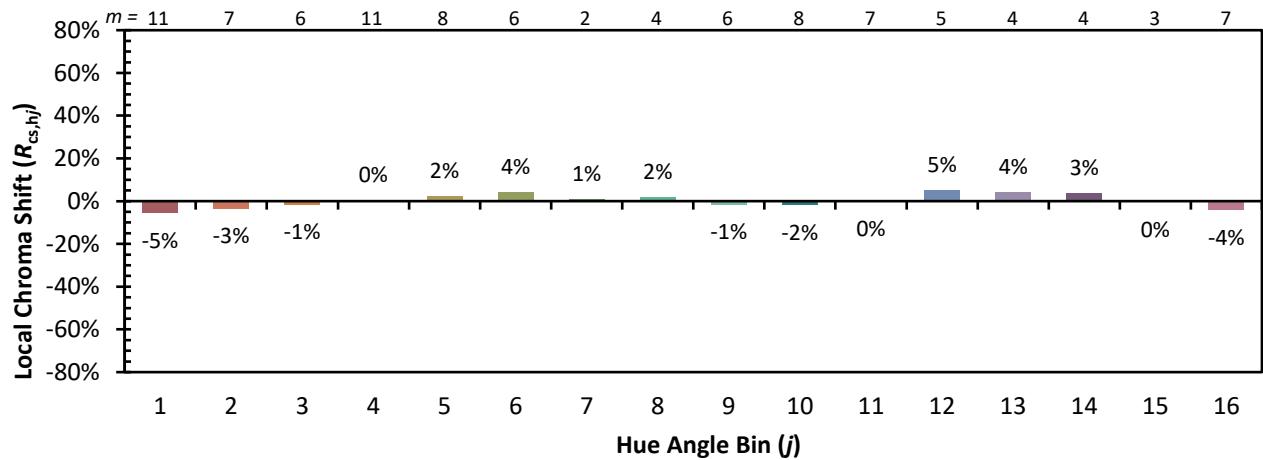


Individual Sample Fidelity Index ($R_{f,i}$)

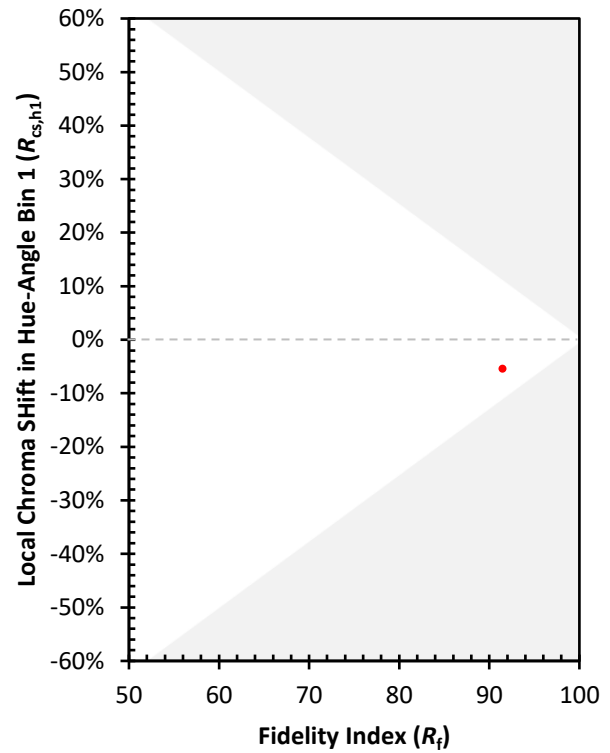
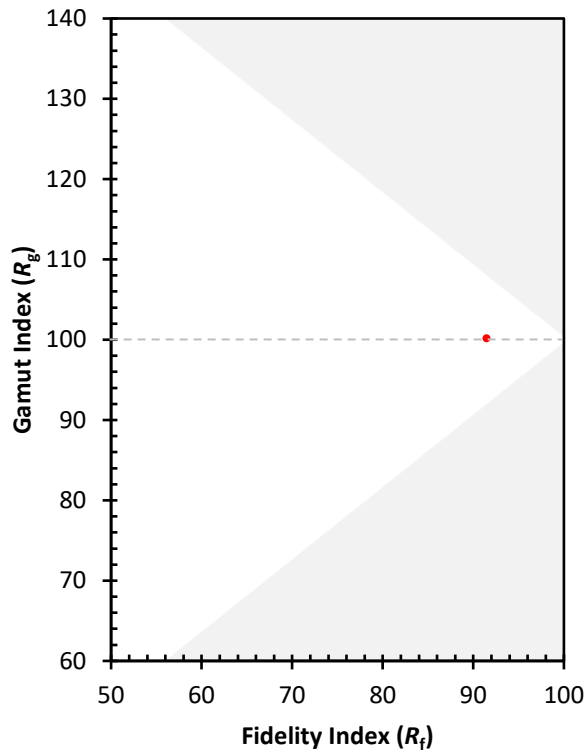
CES01 = 86	CES26 = 92	CES51 = 97	CES76 = 89
CES02 = 64	CES27 = 96	CES52 = 97	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 94	CES78 = 87
CES04 = 70	CES29 = 91	CES54 = 99	CES79 = 88
CES05 = 51	CES30 = 96	CES55 = 99	CES80 = 91
CES06 = 51	CES31 = 92	CES56 = 94	CES81 = 69
CES07 = 44	CES32 = 85	CES57 = 93	CES82 = 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)