

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: P1057386

Luminaire Tested: PRLX-CYL2W-DI-X-940-20L-MD-MD-U-S-X-X-BLAK

Issue Date: 8/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057386
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2504-407-4, 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-940-20L-MD-MD-U-S-X-X-BLAK
Description: PrentaLux 2-INCH CYLINDER
DOWNLIGHT 1000 LUMENS, MEDIUM OPTIC (23-DEGREES)
UPLIGHT 1000 LUMENS, MEDIUM OPTIC (23-DEGREES)
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

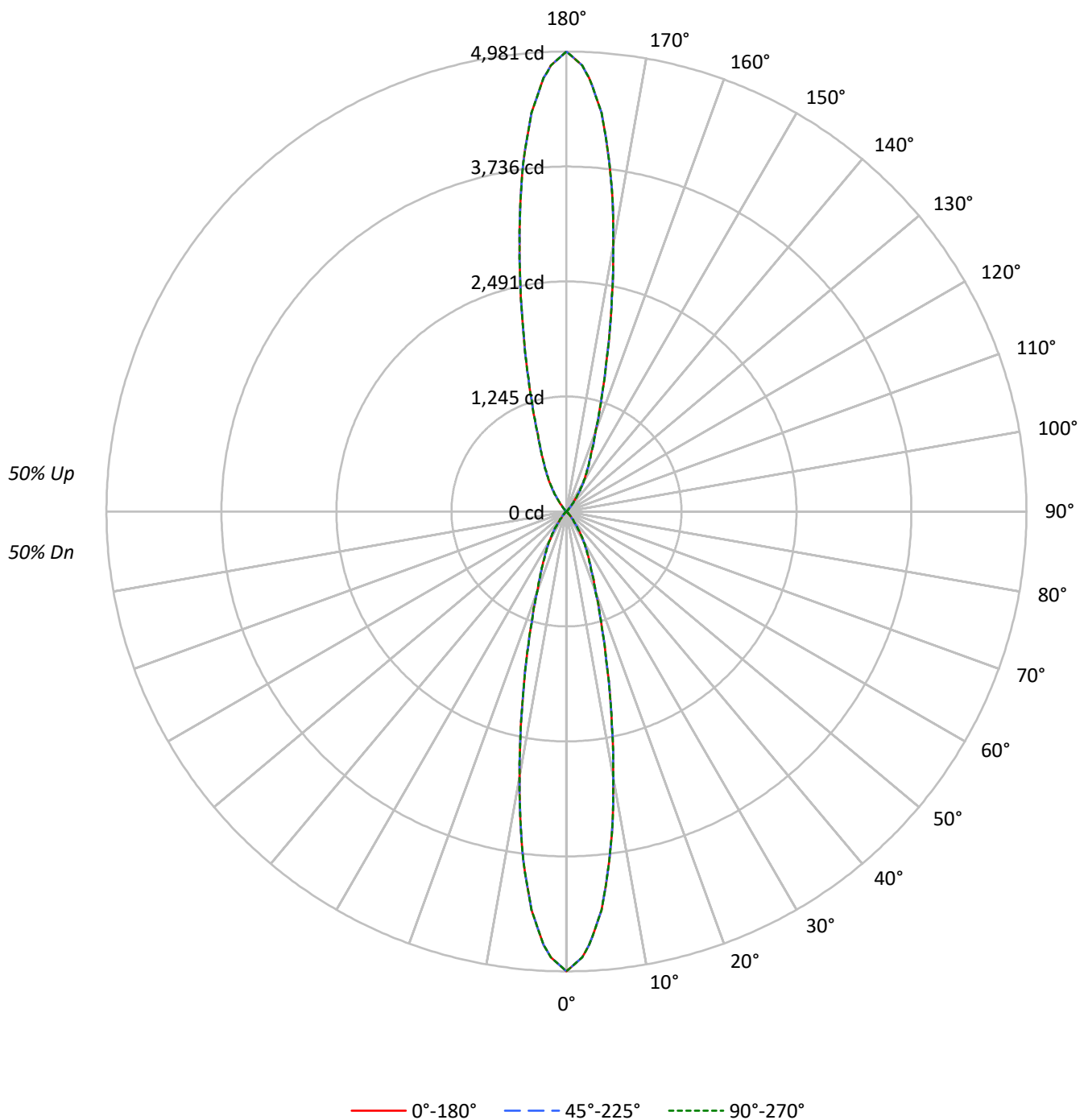
Lumens per Lamp: N/A
Luminaire Lumens: 2512.3 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.42
Luminous Opening: Circular (Dia: 0.15' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 17.8
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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CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-U-S-X-X-BLAK

Luminous Intensity Polar Plot



TEST NUMBER: P1057386

CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-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	30	10
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	101	97	95	92	93	90	88	86	77	76	74	65	64	63	54	53	53
2	95	89	85	81	88	83	79	76	72	69	67	62	60	58	52	51	50
3	89	82	77	73	83	77	72	69	67	64	61	58	56	54	50	49	48
4	84	76	70	66	78	72	67	63	63	60	57	55	53	51	48	46	45
5	79	71	65	60	74	67	62	58	59	56	53	53	50	48	46	44	43
6	75	66	60	56	70	63	57	54	56	52	49	50	47	45	44	43	41
7	71	62	56	52	67	59	54	50	53	49	47	48	45	43	43	41	39
8	68	59	53	49	64	56	51	47	51	47	44	46	43	41	41	39	38
9	65	55	50	46	61	53	48	44	48	44	42	44	41	39	40	38	36
10	62	53	47	43	58	50	45	42	46	42	40	42	39	37	39	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3209725	3209725	3209725
5°	2803907	2803907	2803907
10°	1912566	1912566	1912566
15°	1114611	1114611	1114611
20°	635098	635098	635098
25°	411051	411051	411051
30°	271824	271824	271824
35°	142784	142784	142784
40°	55437	55437	55437
45°	17954	17954	17954
50°	9223	9223	9223
55°	6516	6516	6516
60°	4511	4511	4511
65°	3507	3507	3507
70°	2261	2261	2261
75°	2988	2988	2988
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17954 cd/sqm

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CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-U-S-X-X-BLAK

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	366.6	14.6
10°-20°	470.4	18.7
20°-30°	271.5	10.8
30°-40°	118.8	4.7
40°-50°	20.2	0.8
50°-60°	5.3	0.2
60°-70°	2.6	0.1
70°-80°	0.8	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.8	0.0
110°-120°	2.6	0.1
120°-130°	5.3	0.2
130°-140°	20.2	0.8
140°-150°	118.8	4.7
150°-160°	271.5	10.8
160°-170°	470.4	18.7
170°-180°	366.6	14.6
0°-30°	1108.6	44.1
0°-40°	1227.4	48.9
0°-60°	1252.8	49.9
0°-90°	1256.2	50.0
90°-120°	3.4	0.1
90°-150°	147.6	5.9
90°-180°	1256.0	50.0
0°-180°	2512.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4981	4981	4981	4981	4981	
5°	4334	4334	4334	4334	4334	367
15°	1671	1671	1671	1671	1671	470
25°	578	578	578	578	578	272
35°	182	182	182	182	182	119
45°	20	20	20	20	20	20
55°	6	6	6	6	6	5
65°	2	2	2	2	2	3
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°	1	1	1	1	1	1
115°	2	2	2	2	2	3
125°	6	6	6	6	6	5
135°	20	20	20	20	20	20
145°	182	182	182	182	182	119
155°	578	578	578	578	578	272
165°	1671	1671	1671	1671	1671	470
175°	4334	4334	4334	4334	4334	367
180°	4981	4981	4981	4981	4981	

TEST NUMBER: P1057386

CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4980.8	4980.8	4980.8	4980.8	4980.8
1°	4906.3	4906.3	4906.3	4906.3	4906.3
2°	4831.8	4831.8	4831.8	4831.8	4831.8
3°	4702.6	4702.6	4702.6	4702.6	4702.6
4°	4518.5	4518.5	4518.5	4518.5	4518.5
5°	4334.5	4334.5	4334.5	4334.5	4334.5
6°	4074.1	4074.1	4074.1	4074.1	4074.1
7°	3813.7	3813.7	3813.7	3813.7	3813.7
8°	3531.4	3531.4	3531.4	3531.4	3531.4
9°	3227.1	3227.1	3227.1	3227.1	3227.1
10°	2922.8	2922.8	2922.8	2922.8	2922.8
11°	2646.2	2646.2	2646.2	2646.2	2646.2
12°	2369.7	2369.7	2369.7	2369.7	2369.7
13°	2119.3	2119.3	2119.3	2119.3	2119.3
14°	1895.0	1895.0	1895.0	1895.0	1895.0
15°	1670.7	1670.7	1670.7	1670.7	1670.7
16°	1496.8	1496.8	1496.8	1496.8	1496.8
17°	1322.9	1322.9	1322.9	1322.9	1322.9
18°	1174.0	1174.0	1174.0	1174.0	1174.0
19°	1050.0	1050.0	1050.0	1050.0	1050.0
20°	926.1	926.1	926.1	926.1	926.1
21°	844.2	844.2	844.2	844.2	844.2
22°	762.4	762.4	762.4	762.4	762.4
23°	692.8	692.8	692.8	692.8	692.8
24°	635.4	635.4	635.4	635.4	635.4
25°	578.1	578.1	578.1	578.1	578.1
26°	533.7	533.7	533.7	533.7	533.7
27°	489.3	489.3	489.3	489.3	489.3
28°	446.7	446.7	446.7	446.7	446.7
29°	406.0	406.0	406.0	406.0	406.0
30°	365.3	365.3	365.3	365.3	365.3
31°	327.0	327.0	327.0	327.0	327.0
32°	288.6	288.6	288.6	288.6	288.6
33°	251.8	251.8	251.8	251.8	251.8
34°	216.7	216.7	216.7	216.7	216.7
35°	181.5	181.5	181.5	181.5	181.5
36°	154.7	154.7	154.7	154.7	154.7
37°	127.9	127.9	127.9	127.9	127.9
38°	104.7	104.7	104.7	104.7	104.7
39°	85.3	85.3	85.3	85.3	85.3
40°	65.9	65.9	65.9	65.9	65.9
41°	54.3	54.3	54.3	54.3	54.3
42°	42.8	42.8	42.8	42.8	42.8
43°	33.5	33.5	33.5	33.5	33.5
44°	26.6	26.6	26.6	26.6	26.6

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CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	19.7	19.7	19.7	19.7	19.7
46°	16.9	16.9	16.9	16.9	16.9
47°	14.1	14.1	14.1	14.1	14.1
48°	12.0	12.0	12.0	12.0	12.0
49°	10.6	10.6	10.6	10.6	10.6
50°	9.2	9.2	9.2	9.2	9.2
51°	8.3	8.3	8.3	8.3	8.3
52°	7.4	7.4	7.4	7.4	7.4
53°	6.7	6.7	6.7	6.7	6.7
54°	6.2	6.2	6.2	6.2	6.2
55°	5.8	5.8	5.8	5.8	5.8
56°	5.3	5.3	5.3	5.3	5.3
57°	4.9	4.9	4.9	4.9	4.9
58°	4.4	4.4	4.4	4.4	4.4
59°	3.9	3.9	3.9	3.9	3.9
60°	3.5	3.5	3.5	3.5	3.5
61°	3.5	3.5	3.5	3.5	3.5
62°	3.5	3.5	3.5	3.5	3.5
63°	3.2	3.2	3.2	3.2	3.2
64°	2.8	2.8	2.8	2.8	2.8
65°	2.3	2.3	2.3	2.3	2.3
66°	2.3	2.3	2.3	2.3	2.3
67°	2.3	2.3	2.3	2.3	2.3
68°	2.1	2.1	2.1	2.1	2.1
69°	1.6	1.6	1.6	1.6	1.6
70°	1.2	1.2	1.2	1.2	1.2
71°	1.2	1.2	1.2	1.2	1.2
72°	1.2	1.2	1.2	1.2	1.2
73°	1.2	1.2	1.2	1.2	1.2
74°	1.2	1.2	1.2	1.2	1.2
75°	1.2	1.2	1.2	1.2	1.2
76°	0.7	0.7	0.7	0.7	0.7
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-940-20L-MD-MD-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°	0.2	0.2	0.2	0.2	0.2
104°	0.7	0.7	0.7	0.7	0.7
105°	1.2	1.2	1.2	1.2	1.2
106°	1.2	1.2	1.2	1.2	1.2
107°	1.2	1.2	1.2	1.2	1.2
108°	1.2	1.2	1.2	1.2	1.2
109°	1.2	1.2	1.2	1.2	1.2
110°	1.2	1.2	1.2	1.2	1.2
111°	1.6	1.6	1.6	1.6	1.6
112°	2.1	2.1	2.1	2.1	2.1
113°	2.3	2.3	2.3	2.3	2.3
114°	2.3	2.3	2.3	2.3	2.3
115°	2.3	2.3	2.3	2.3	2.3
116°	2.8	2.8	2.8	2.8	2.8
117°	3.2	3.2	3.2	3.2	3.2
118°	3.5	3.5	3.5	3.5	3.5
119°	3.5	3.5	3.5	3.5	3.5
120°	3.5	3.5	3.5	3.5	3.5
121°	3.9	3.9	3.9	3.9	3.9
122°	4.4	4.4	4.4	4.4	4.4
123°	4.9	4.9	4.9	4.9	4.9
124°	5.3	5.3	5.3	5.3	5.3
125°	5.8	5.8	5.8	5.8	5.8
126°	6.2	6.2	6.2	6.2	6.2
127°	6.7	6.7	6.7	6.7	6.7
128°	7.4	7.4	7.4	7.4	7.4
129°	8.3	8.3	8.3	8.3	8.3
130°	9.2	9.2	9.2	9.2	9.2
131°	10.6	10.6	10.6	10.6	10.6
132°	12.0	12.0	12.0	12.0	12.0
133°	14.1	14.1	14.1	14.1	14.1
134°	16.9	16.9	16.9	16.9	16.9

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CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
135°	19.7	19.7	19.7	19.7	19.7
136°	26.6	26.6	26.6	26.6	26.6
137°	33.5	33.5	33.5	33.5	33.5
138°	42.8	42.8	42.8	42.8	42.8
139°	54.3	54.3	54.3	54.3	54.3
140°	65.9	65.9	65.9	65.9	65.9
141°	85.3	85.3	85.3	85.3	85.3
142°	104.7	104.7	104.7	104.7	104.7
143°	127.9	127.9	127.9	127.9	127.9
144°	154.7	154.7	154.7	154.7	154.7
145°	181.5	181.5	181.5	181.5	181.5
146°	216.7	216.7	216.7	216.7	216.7
147°	251.8	251.8	251.8	251.8	251.8
148°	288.6	288.6	288.6	288.6	288.6
149°	327.0	327.0	327.0	327.0	327.0
150°	365.3	365.3	365.3	365.3	365.3
151°	406.0	406.0	406.0	406.0	406.0
152°	446.7	446.7	446.7	446.7	446.7
153°	489.3	489.3	489.3	489.3	489.3
154°	533.7	533.7	533.7	533.7	533.7
155°	578.1	578.1	578.1	578.1	578.1
156°	635.4	635.4	635.4	635.4	635.4
157°	692.8	692.8	692.8	692.8	692.8
158°	762.4	762.4	762.4	762.4	762.4
159°	844.2	844.2	844.2	844.2	844.2
160°	926.1	926.1	926.1	926.1	926.1
161°	1050.0	1050.0	1050.0	1050.0	1050.0
162°	1174.0	1174.0	1174.0	1174.0	1174.0
163°	1322.9	1322.9	1322.9	1322.9	1322.9
164°	1496.8	1496.8	1496.8	1496.8	1496.8
165°	1670.7	1670.7	1670.7	1670.7	1670.7
166°	1895.0	1895.0	1895.0	1895.0	1895.0
167°	2119.3	2119.3	2119.3	2119.3	2119.3
168°	2369.7	2369.7	2369.7	2369.7	2369.7
169°	2646.2	2646.2	2646.2	2646.2	2646.2
170°	2922.8	2922.8	2922.8	2922.8	2922.8
171°	3227.1	3227.1	3227.1	3227.1	3227.1
172°	3531.4	3531.4	3531.4	3531.4	3531.4
173°	3813.7	3813.7	3813.7	3813.7	3813.7
174°	4074.1	4074.1	4074.1	4074.1	4074.1
175°	4334.5	4334.5	4334.5	4334.5	4334.5
176°	4518.5	4518.5	4518.5	4518.5	4518.5
177°	4702.6	4702.6	4702.6	4702.6	4702.6
178°	4831.8	4831.8	4831.8	4831.8	4831.8
179°	4906.3	4906.3	4906.3	4906.3	4906.3



TEST NUMBER: P1057386
CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	4980.8	4980.8	4980.8	4980.8	4980.8

TEST NUMBER: P1057386

CATALOG NUMBER: PRLX-CYL2W-DI-X-940-20L-MD-MD-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	1.33	1.97	2.34	2.95	4.24	1.33	1.97	2.34	2.95	4.24
	3H	2.04	2.61	3.06	3.60	4.91	2.04	2.61	3.06	3.60	4.91
	4H	2.32	2.86	3.35	3.85	5.17	2.32	2.86	3.35	3.85	5.17
	6H	2.21	2.70	3.25	3.70	5.03	2.21	2.70	3.25	3.70	5.03
	8H	2.15	2.61	3.19	3.62	4.95	2.15	2.61	3.19	3.62	4.95
	12H	2.08	2.52	3.12	3.53	4.88	2.08	2.52	3.12	3.53	4.88
4H	2H	1.44	1.98	2.48	2.97	4.29	1.44	1.98	2.48	2.97	4.29
	3H	2.24	2.69	3.28	3.71	5.04	2.24	2.69	3.28	3.71	5.04
	4H	2.65	3.05	3.69	4.07	5.42	2.65	3.05	3.69	4.07	5.42
	6H	2.53	2.88	3.58	3.92	5.27	2.53	2.88	3.58	3.92	5.27
	8H	2.47	2.79	3.52	3.82	5.18	2.47	2.79	3.52	3.82	5.18
	12H	2.39	2.68	3.46	3.73	5.09	2.39	2.68	3.46	3.73	5.09
8H	4H	2.59	2.91	3.64	3.94	5.30	2.59	2.91	3.64	3.94	5.30
	6H	2.47	2.73	3.54	3.80	5.17	2.47	2.73	3.54	3.80	5.17
	8H	2.41	2.64	3.49	3.70	5.08	2.41	2.64	3.49	3.70	5.08
	12H	2.34	2.54	3.42	3.59	5.01	2.34	2.54	3.42	3.59	5.01
12H	4H	2.51	2.80	3.58	3.85	5.21	2.51	2.80	3.58	3.85	5.21
	6H	2.41	2.64	3.49	3.70	5.08	2.41	2.64	3.49	3.70	5.08
	8H	2.34	2.54	3.42	3.59	5.01	2.34	2.54	3.42	3.59	5.01

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: SP1-2504-407-3

Test Date: 07/17/2025

Luminaire Tested: PRLX-CYL2-X-940-10L-FL-U-S-X-X-BLAK

Data in this report applies to families of products including PRLX-CYL2-X-940-10L-FL-U-S-X-X-BLAK

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2504-407-3
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 07/17/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: PrentaLux 3D Printing
 Catalog Number: **PRLX-CYL2-X-940-10L-FL-U-S-X-X-BLAK**
 Description: PrentaLux 2-INCH CYLINDER, BLACK TRIM, FLOOD OPTIC, 1000 LUMENS, 4000K

Spectral Parameters

CCT (K): 3954
 CIE u' : 0.2250
 CIE v' : 0.5045
 Duv: 0.0017
 CIE x: 0.3837
 CIE y: 0.3823
 CIE z: 0.2340
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 578
 Purity: 29.89095
 R_f: 90.1
 R_g: 100.8

CRI (Ra): 91.7
 R1: 93.4
 R2: 92.6
 R3: 90.2
 R4: 93.3
 R5: 91.9
 R6: 90.2
 R7: 94.3
 R8: 88.1
 R9: 64.7
 R10: 80.5
 R11: 93.0
 R12: 70.7
 R13: 92.6
 R14: 93.6
 R15: 90.8



Test Conditions

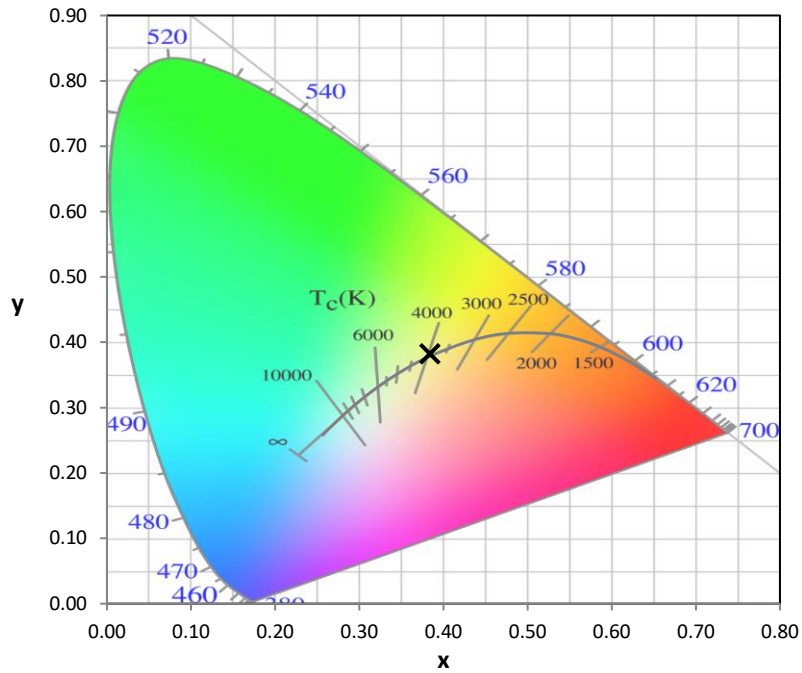
Stabilization Time: 52M
 Operation Time: 1H 52M
 Sphere Temperature (°C): 24.0

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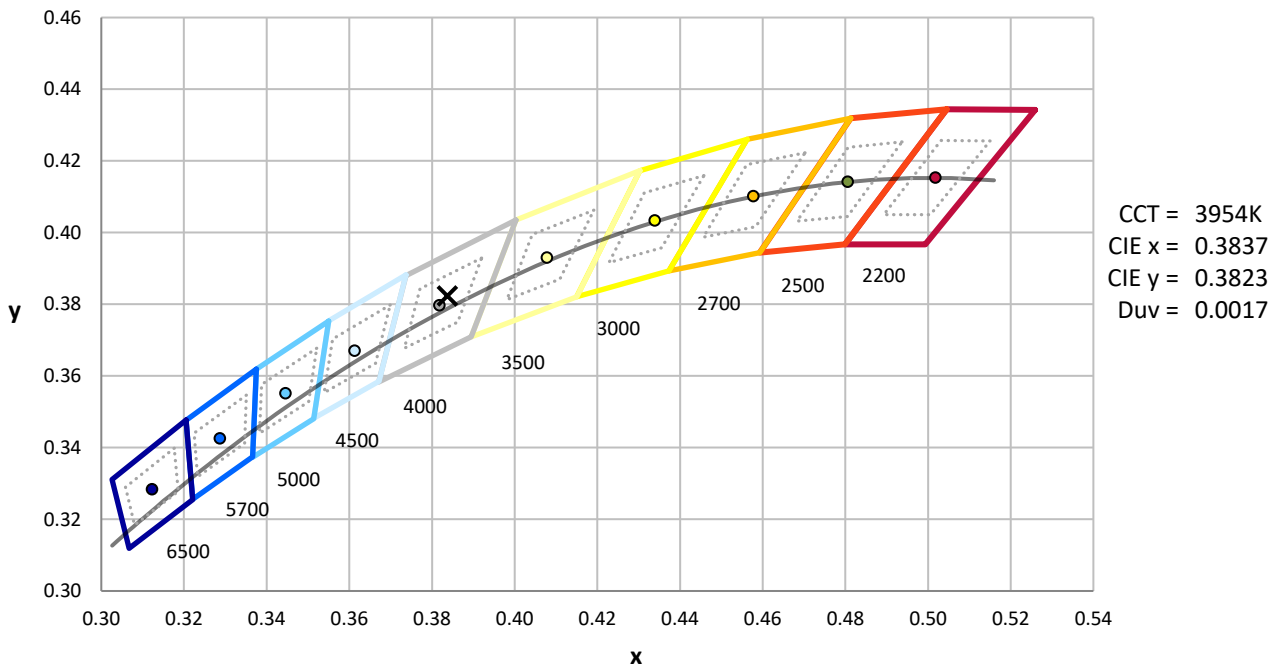
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

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CIE 1931 Chromaticity Diagram



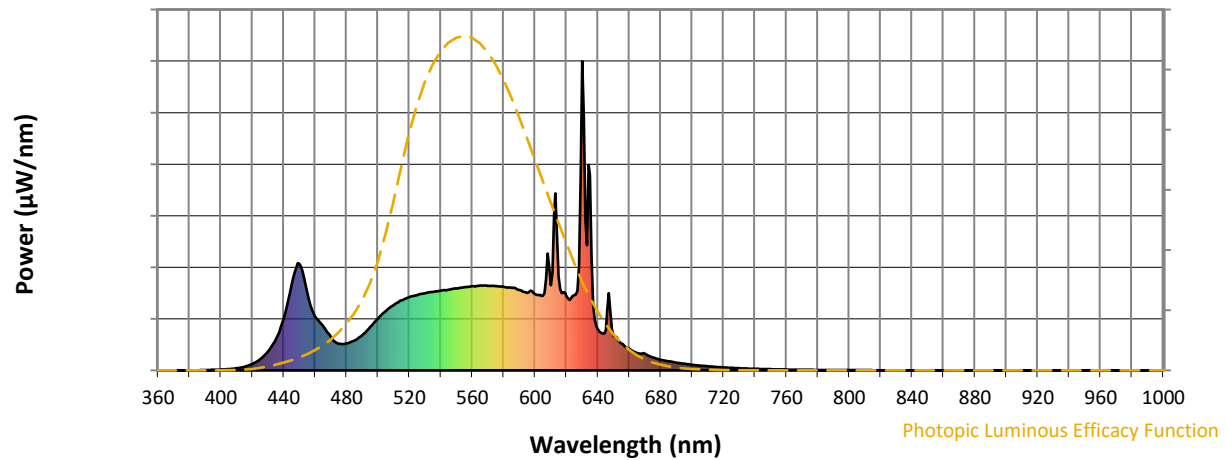
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

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Photopic Flux vs. Wavelength

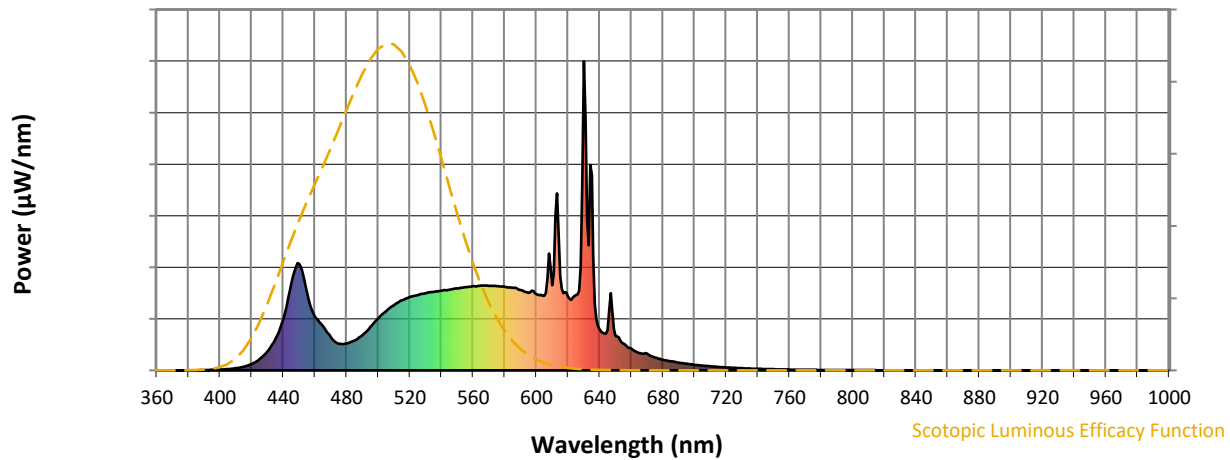


Photopic Lumens: NR

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	114	NR	620	240	NR	750	4	NR	880	0	NR
365	0	NR	495	140	NR	625	244	NR	755	3	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	3	NR	890	0	NR
375	0	NR	505	192	NR	635	631	NR	765	2	NR	895	0	NR
380	0	NR	510	212	NR	640	133	NR	770	2	NR	900	0	NR
385	0	NR	515	227	NR	645	131	NR	775	2	NR	905	0	NR
390	1	NR	520	237	NR	650	111	NR	780	1	NR	910	0	NR
395	2	NR	525	244	NR	655	87	NR	785	1	NR	915	0	NR
400	3	NR	530	249	NR	660	71	NR	790	1	NR	920	0	NR
405	4	NR	535	254	NR	665	56	NR	795	1	NR	925	0	NR
410	7	NR	540	257	NR	670	54	NR	800	1	NR	930	0	NR
415	12	NR	545	261	NR	675	41	NR	805	1	NR	935	0	NR
420	21	NR	550	265	NR	680	35	NR	810	1	NR	940	0	NR
425	36	NR	555	269	NR	685	29	NR	815	1	NR	945	0	NR
430	61	NR	560	273	NR	690	25	NR	820	0	NR	950	0	NR
435	101	NR	565	274	NR	695	21	NR	825	0	NR	955	0	NR
440	167	NR	570	273	NR	700	18	NR	830	0	NR	960	0	NR
445	278	NR	575	272	NR	705	15	NR	835	0	NR	965	0	NR
450	345	NR	580	270	NR	710	13	NR	840	0	NR	970	0	NR
455	250	NR	585	267	NR	715	11	NR	845	0	NR	975	0	NR
460	174	NR	590	260	NR	720	10	NR	850	0	NR	980	0	NR
465	144	NR	595	251	NR	725	8	NR	855	0	NR	985	0	NR
470	107	NR	600	246	NR	730	7	NR	860	0	NR	990	0	NR
475	86	NR	605	241	NR	735	6	NR	865	0	NR	995	0	NR
480	87	NR	610	276	NR	740	5	NR	870	0	NR	1000	0	NR
485	96	NR	615	304	NR	745	4	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



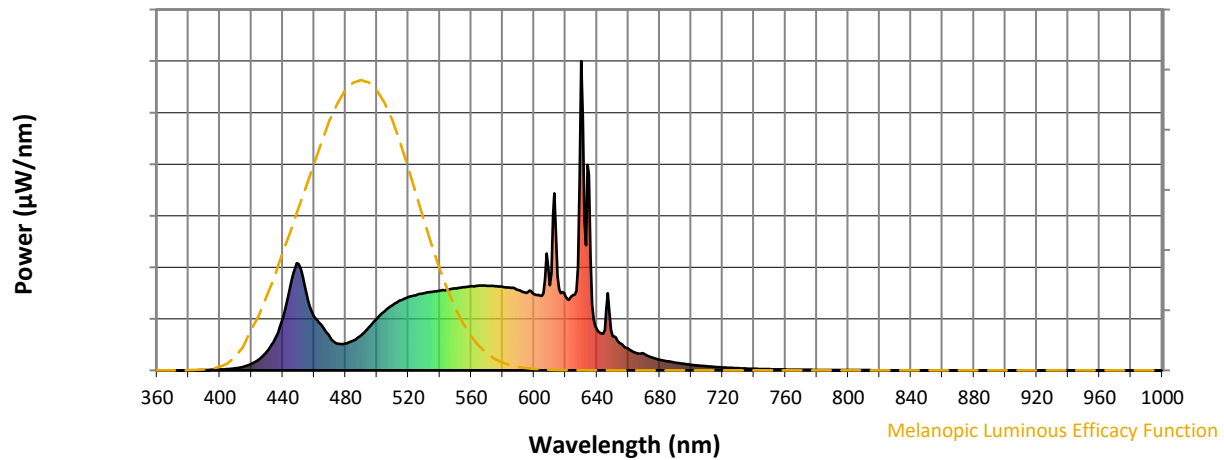
Scotopic Lumens: NR

S/P: 1.72

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	114	NR	620	240	NR	750	4	NR	880	0	NR
365	0	NR	495	140	NR	625	244	NR	755	3	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	3	NR	890	0	NR
375	0	NR	505	192	NR	635	631	NR	765	2	NR	895	0	NR
380	0	NR	510	212	NR	640	133	NR	770	2	NR	900	0	NR
385	0	NR	515	227	NR	645	131	NR	775	2	NR	905	0	NR
390	1	NR	520	237	NR	650	111	NR	780	1	NR	910	0	NR
395	2	NR	525	244	NR	655	87	NR	785	1	NR	915	0	NR
400	3	NR	530	249	NR	660	71	NR	790	1	NR	920	0	NR
405	4	NR	535	254	NR	665	56	NR	795	1	NR	925	0	NR
410	7	NR	540	257	NR	670	54	NR	800	1	NR	930	0	NR
415	12	NR	545	261	NR	675	41	NR	805	1	NR	935	0	NR
420	21	NR	550	265	NR	680	35	NR	810	1	NR	940	0	NR
425	36	NR	555	269	NR	685	29	NR	815	1	NR	945	0	NR
430	61	NR	560	273	NR	690	25	NR	820	0	NR	950	0	NR
435	101	NR	565	274	NR	695	21	NR	825	0	NR	955	0	NR
440	167	NR	570	273	NR	700	18	NR	830	0	NR	960	0	NR
445	278	NR	575	272	NR	705	15	NR	835	0	NR	965	0	NR
450	345	NR	580	270	NR	710	13	NR	840	0	NR	970	0	NR
455	250	NR	585	267	NR	715	11	NR	845	0	NR	975	0	NR
460	174	NR	590	260	NR	720	10	NR	850	0	NR	980	0	NR
465	144	NR	595	251	NR	725	8	NR	855	0	NR	985	0	NR
470	107	NR	600	246	NR	730	7	NR	860	0	NR	990	0	NR
475	86	NR	605	241	NR	735	6	NR	865	0	NR	995	0	NR
480	87	NR	610	276	NR	740	5	NR	870	0	NR	1000	0	NR
485	96	NR	615	304	NR	745	4	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.49

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	114	NR	620	240	NR	750	4	NR	880	0	NR
365	0	NR	495	140	NR	625	244	NR	755	3	NR	885	0	NR
370	0	NR	500	168	NR	630	1000	NR	760	3	NR	890	0	NR
375	0	NR	505	192	NR	635	631	NR	765	2	NR	895	0	NR
380	0	NR	510	212	NR	640	133	NR	770	2	NR	900	0	NR
385	0	NR	515	227	NR	645	131	NR	775	2	NR	905	0	NR
390	1	NR	520	237	NR	650	111	NR	780	1	NR	910	0	NR
395	2	NR	525	244	NR	655	87	NR	785	1	NR	915	0	NR
400	3	NR	530	249	NR	660	71	NR	790	1	NR	920	0	NR
405	4	NR	535	254	NR	665	56	NR	795	1	NR	925	0	NR
410	7	NR	540	257	NR	670	54	NR	800	1	NR	930	0	NR
415	12	NR	545	261	NR	675	41	NR	805	1	NR	935	0	NR
420	21	NR	550	265	NR	680	35	NR	810	1	NR	940	0	NR
425	36	NR	555	269	NR	685	29	NR	815	1	NR	945	0	NR
430	61	NR	560	273	NR	690	25	NR	820	0	NR	950	0	NR
435	101	NR	565	274	NR	695	21	NR	825	0	NR	955	0	NR
440	167	NR	570	273	NR	700	18	NR	830	0	NR	960	0	NR
445	278	NR	575	272	NR	705	15	NR	835	0	NR	965	0	NR
450	345	NR	580	270	NR	710	13	NR	840	0	NR	970	0	NR
455	250	NR	585	267	NR	715	11	NR	845	0	NR	975	0	NR
460	174	NR	590	260	NR	720	10	NR	850	0	NR	980	0	NR
465	144	NR	595	251	NR	725	8	NR	855	0	NR	985	0	NR
470	107	NR	600	246	NR	730	7	NR	860	0	NR	990	0	NR
475	86	NR	605	241	NR	735	6	NR	865	0	NR	995	0	NR
480	87	NR	610	276	NR	740	5	NR	870	0	NR	1000	0	NR
485	96	NR	615	304	NR	745	4	NR	875	0	NR			

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TM-30-18

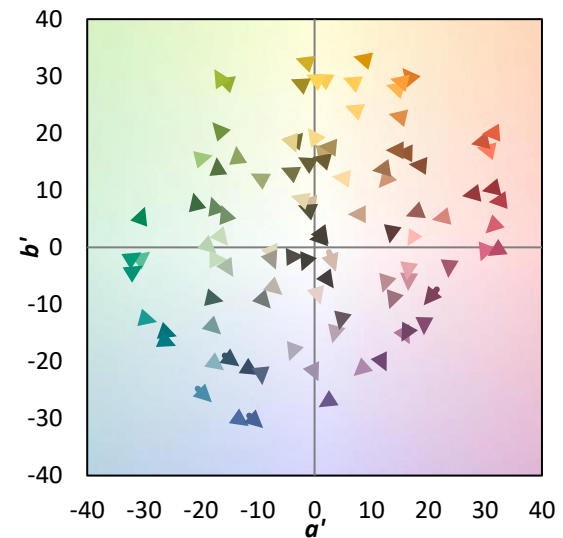
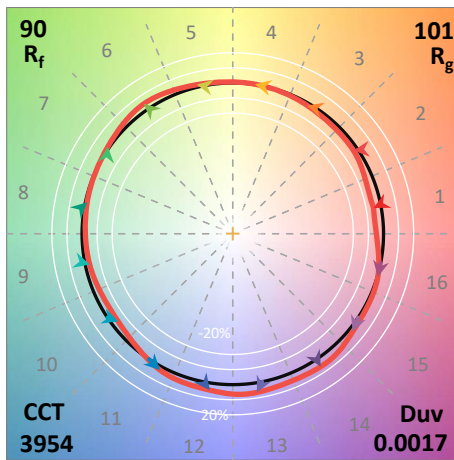
Summary

$R_f = 90.1$
 $R_g = 100.8$
 $CIE R_a = 91.7$
 $R_g = 64.7$

Spectral Power Distribution Comparison



Color Vector Graphics



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

CES01 = 85	CES26 = 88	CES51 = 99	CES76 = 80
CES02 = 61	CES27 = 94	CES52 = 96	CES77 = 87
CES03 = 31	CES28 = 93	CES53 = 93	CES78 = 78
CES04 = 69	CES29 = 90	CES54 = 97	CES79 = 94
CES05 = 49	CES30 = 99	CES55 = 96	CES80 = 91
CES06 = 50	CES31 = 90	CES56 = 93	CES81 = 81
CES07 = 42	CES32 = 82	CES57 = 92	CES82 = 96
CES08 = 41	CES33 = 93	CES58 = 93	CES83 = 95
CES09 = 29	CES34 = 88	CES59 = 97	CES84 = 93
CES10 = 74	CES35 = 93	CES60 = 94	CES85 = 82
CES11 = 57	CES36 = 85	CES61 = 94	CES86 = 84
CES12 = 63	CES37 = 90	CES62 = 91	CES87 = 89
CES13 = 43	CES38 = 95	CES63 = 91	CES88 = 96
CES14 = 74	CES39 = 98	CES64 = 90	CES89 = 84
CES15 = 71	CES40 = 95	CES65 = 87	CES90 = 97
CES16 = 47	CES41 = 97	CES66 = 86	CES91 = 75
CES17 = 49	CES42 = 87	CES67 = 85	CES92 = 78
CES18 = 56	CES43 = 89	CES68 = 87	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 75
CES20 = 66	CES45 = 92	CES70 = 83	CES95 = 83
CES21 = 85	CES46 = 94	CES71 = 78	CES96 = 91
CES22 = 78	CES47 = 92	CES72 = 93	CES97 = 91
CES23 = 91	CES48 = 95	CES73 = 77	CES98 = 91
CES24 = 90	CES49 = 92	CES74 = 93	CES99 = 94
CES25 = 71	CES50 = 98	CES75 = 79	



Color Rendition by Hue-Angle Bin


Measure Comparisons



(END OF REPORT)