

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P980281

Luminaire Tested: PRLX-243-927-LL7-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980281
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-LL7-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

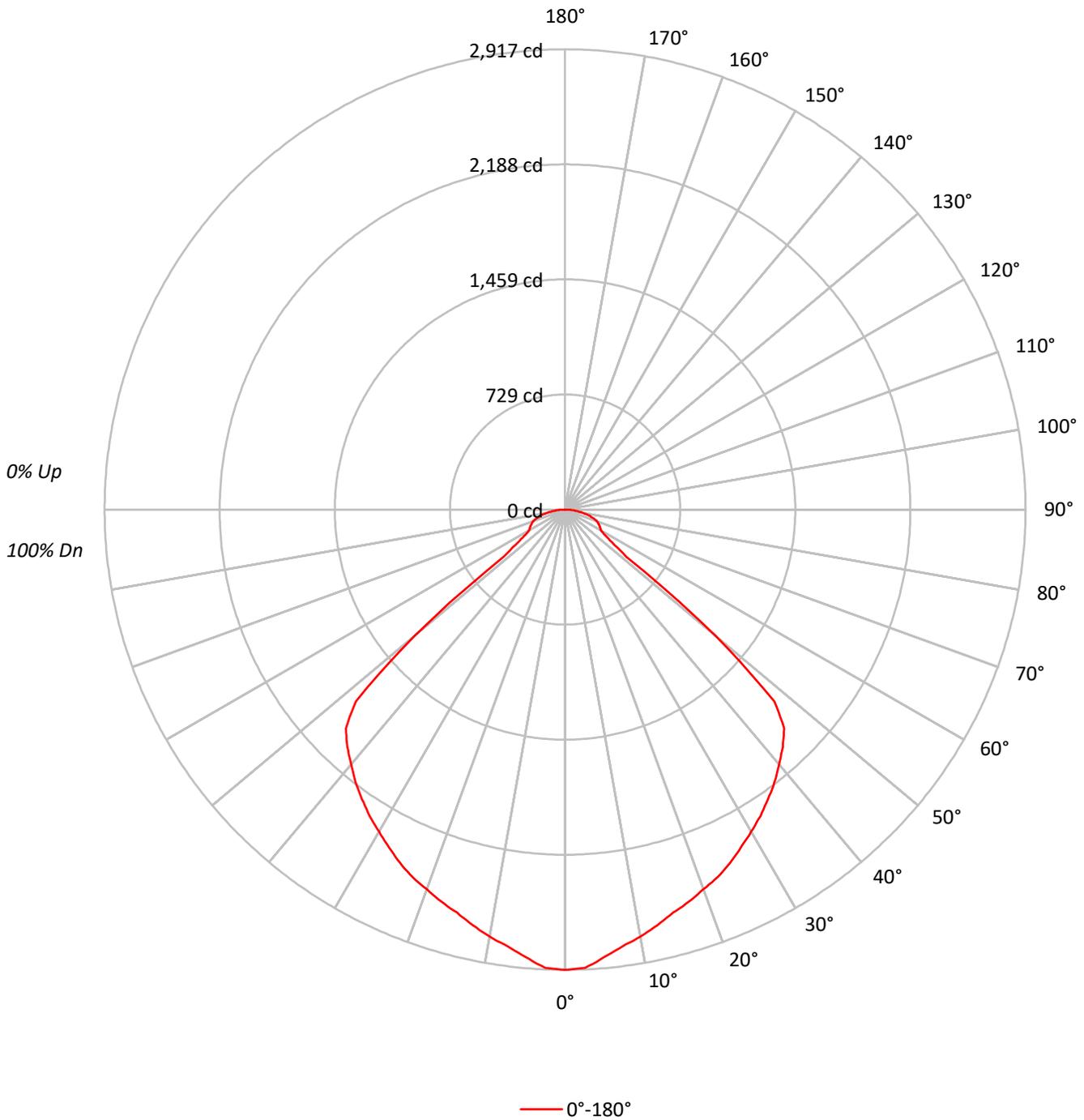
Lumens per Lamp: N/A
Luminaire Lumens: 5887.7 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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	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	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88																												
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77																												
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68																												
4	88	78	71	65	86	77	70	65	75	68	64	72	67	63	70	66	62	60																												
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53																												
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48																												
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43																												
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39																												
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																												
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																												

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	14393
5°	14106
10°	13768
15°	13508
20°	13446
25°	13457
30°	13430
35°	13498
40°	13579
45°	13697
50°	9515
55°	3096
60°	2582
65°	2801
70°	3068
75°	3187
80°	3046
85°	3085

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13697 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.7	4.6
10°-20°	748.8	12.7
20°-30°	1139.0	19.3
30°-40°	1403.5	23.8
40°-50°	1439.9	24.5
50°-60°	418.4	7.1
60°-70°	236.7	4.0
70°-80°	173.1	2.9
80°-90°	59.6	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2156.5	36.6
0°-40°	3560.1	60.5
0°-60°	5418.3	92.0
0°-90°	5887.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5887.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2917	
5°	2848	269
15°	2645	749
25°	2472	1139
35°	2241	1404
45°	1963	1440
55°	360	418
65°	240	237
75°	167	173
85°	54	60
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2917.2
2.5°	2908.1
5°	2848.1
7.5°	2791.8
10°	2748.2
12.5°	2699.1
15°	2644.6
17.5°	2606.4
20°	2561.0
22.5°	2522.8
25°	2471.9
27.5°	2413.7
30°	2357.4
32.5°	2302.9
35°	2241.1
37.5°	2179.3
40°	2108.4
42.5°	2041.1
45°	1963.0
47.5°	1797.6
50°	1239.6
52.5°	487.1
55°	359.9
57.5°	296.3
60°	261.7
62.5°	250.8
65°	239.9
67.5°	227.2
70°	212.7
72.5°	192.7
75°	167.2
77.5°	136.3
80°	107.2
82.5°	80.0
85°	54.5
87.5°	30.9
90°	0.0



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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	11.79	13.20	12.15	13.52	13.83	11.79	13.20	12.15	13.52	13.83
	3H	14.21	15.47	14.59	15.79	16.16	14.21	15.47	14.59	15.79	16.16
	4H	15.27	16.44	15.67	16.79	17.17	15.27	16.44	15.67	16.79	17.17
	6H	16.05	17.13	16.47	17.50	17.89	16.05	17.13	16.47	17.50	17.89
	8H	16.33	17.35	16.76	17.74	18.15	16.33	17.35	16.76	17.74	18.15
	12H	16.54	17.52	16.98	17.91	18.34	16.54	17.52	16.98	17.91	18.34
4H	2H	12.54	13.71	12.94	14.06	14.44	12.54	13.71	12.94	14.06	14.44
	3H	15.23	16.19	15.64	16.59	17.00	15.23	16.19	15.64	16.59	17.00
	4H	16.42	17.28	16.86	17.70	18.14	16.42	17.28	16.86	17.70	18.14
	6H	17.34	18.08	17.80	18.53	18.99	17.34	18.08	17.80	18.53	18.99
	8H	17.67	18.36	18.13	18.81	19.28	17.67	18.36	18.13	18.81	19.28
	12H	17.93	18.55	18.42	19.03	19.51	17.93	18.55	18.42	19.03	19.51
8H	4H	16.85	17.54	17.31	17.99	18.46	16.85	17.54	17.31	17.99	18.46
	6H	17.90	18.48	18.40	18.97	19.45	17.90	18.48	18.40	18.97	19.45
	8H	18.32	18.85	18.84	19.36	19.85	18.32	18.85	18.84	19.36	19.85
	12H	18.69	19.16	19.21	19.65	20.22	18.69	19.16	19.21	19.65	20.22
12H	4H	16.89	17.51	17.38	18.00	18.47	16.89	17.51	17.38	18.00	18.47
	6H	17.99	18.51	18.50	19.02	19.51	17.99	18.51	18.50	19.02	19.51
	8H	18.48	18.95	18.99	19.44	20.01	18.48	18.95	18.99	19.44	20.01