

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: P980201

Luminaire Tested: PRLX-242-940-LL7-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980201
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-940-LL7-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

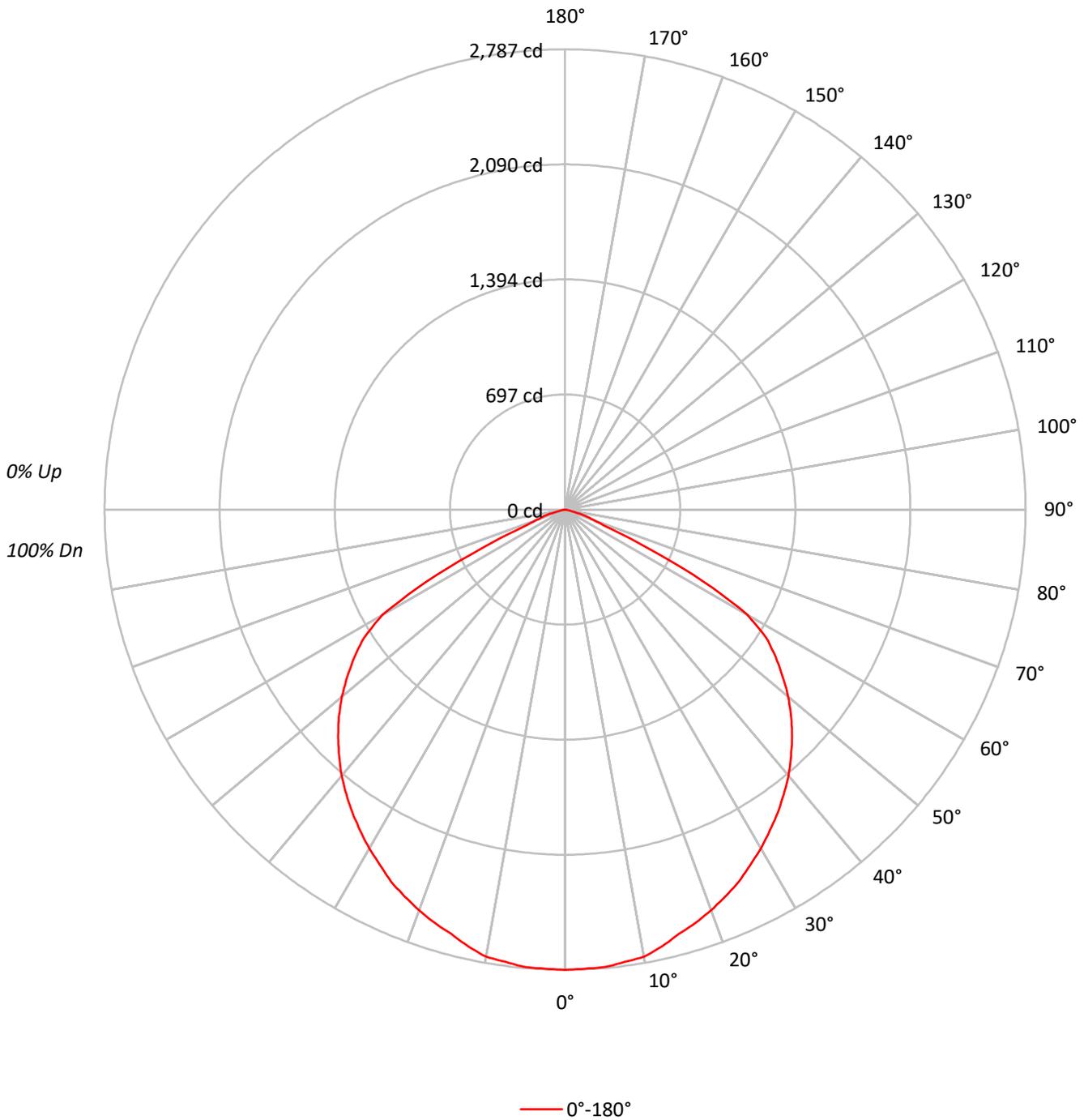
Lumens per Lamp: N/A
Luminaire Lumens: 7142.1 lumens
Efficiency: N/A
Efficacy: 148.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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	
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58	56
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12473
5°	12493
10°	12497
15°	12330
20°	12301
25°	12285
30°	12248
35°	12250
40°	12291
45°	12296
50°	12275
55°	12130
60°	11402
65°	5838
70°	2350
75°	1107
80°	214
85°	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12296 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.2	3.7
10°-20°	753.1	10.5
20°-30°	1145.7	16.0
30°-40°	1403.9	19.7
40°-50°	1498.1	21.0
50°-60°	1381.3	19.3
60°-70°	608.2	8.5
70°-80°	81.4	1.1
80°-90°	6.2	0.1
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°	2163.0	30.3
0°-40°	3566.9	49.9
0°-60°	6446.3	90.3
0°-90°	7142.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7142.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2787	
5°	2781	264
15°	2661	753
25°	2488	1146
35°	2242	1404
45°	1943	1498
55°	1555	1381
65°	551	608
75°	64	81
85°	6	6
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2787.3
2.5°	2783.2
5°	2781.1
7.5°	2762.6
10°	2750.2
12.5°	2708.9
15°	2661.4
17.5°	2624.2
20°	2582.9
22.5°	2535.4
25°	2488.0
27.5°	2426.0
30°	2370.3
32.5°	2306.3
35°	2242.3
37.5°	2174.1
40°	2103.9
42.5°	2023.4
45°	1942.9
47.5°	1856.2
50°	1763.2
52.5°	1660.0
55°	1554.7
57.5°	1443.2
60°	1273.9
62.5°	947.7
65°	551.3
67.5°	256.0
70°	179.6
72.5°	134.2
75°	64.0
77.5°	18.6
80°	8.3
82.5°	8.3
85°	6.2
87.5°	4.1
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	21.61	23.16	21.97	23.47	23.78	21.61	23.16	21.97	23.47	23.78
	3H	21.65	23.03	22.03	23.36	23.72	21.65	23.03	22.03	23.36	23.72
	4H	21.62	22.90	22.02	23.25	23.63	21.62	22.90	22.02	23.25	23.63
	6H	21.56	22.74	21.97	23.11	23.50	21.56	22.74	21.97	23.11	23.50
	8H	21.52	22.65	21.95	23.04	23.44	21.52	22.65	21.95	23.04	23.44
	12H	21.49	22.57	21.92	22.95	23.38	21.49	22.57	21.92	22.95	23.38
4H	2H	21.70	22.99	22.10	23.33	23.71	21.70	22.99	22.10	23.33	23.71
	3H	21.79	22.84	22.20	23.24	23.64	21.79	22.84	22.20	23.24	23.64
	4H	21.75	22.69	22.19	23.10	23.54	21.75	22.69	22.19	23.10	23.54
	6H	21.70	22.50	22.16	22.95	23.41	21.70	22.50	22.16	22.95	23.41
	8H	21.65	22.41	22.12	22.85	23.32	21.65	22.41	22.12	22.85	23.32
	12H	21.62	22.29	22.10	22.77	23.24	21.62	22.29	22.10	22.77	23.24
8H	4H	21.67	22.42	22.13	22.86	23.33	21.67	22.42	22.13	22.86	23.33
	6H	21.59	22.20	22.09	22.70	23.18	21.59	22.20	22.09	22.70	23.18
	8H	21.54	22.09	22.05	22.60	23.09	21.54	22.09	22.05	22.60	23.09
	12H	21.50	21.99	22.01	22.49	23.05	21.50	21.99	22.01	22.49	23.05
12H	4H	21.63	22.30	22.12	22.78	23.25	21.63	22.30	22.12	22.78	23.25
	6H	21.53	22.09	22.05	22.60	23.09	21.53	22.09	22.05	22.60	23.09
	8H	21.50	21.99	22.01	22.48	23.05	21.50	21.99	22.01	22.48	23.05