

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: P980223

Luminaire Tested: PRLX-243-927-12L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980223
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-12L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

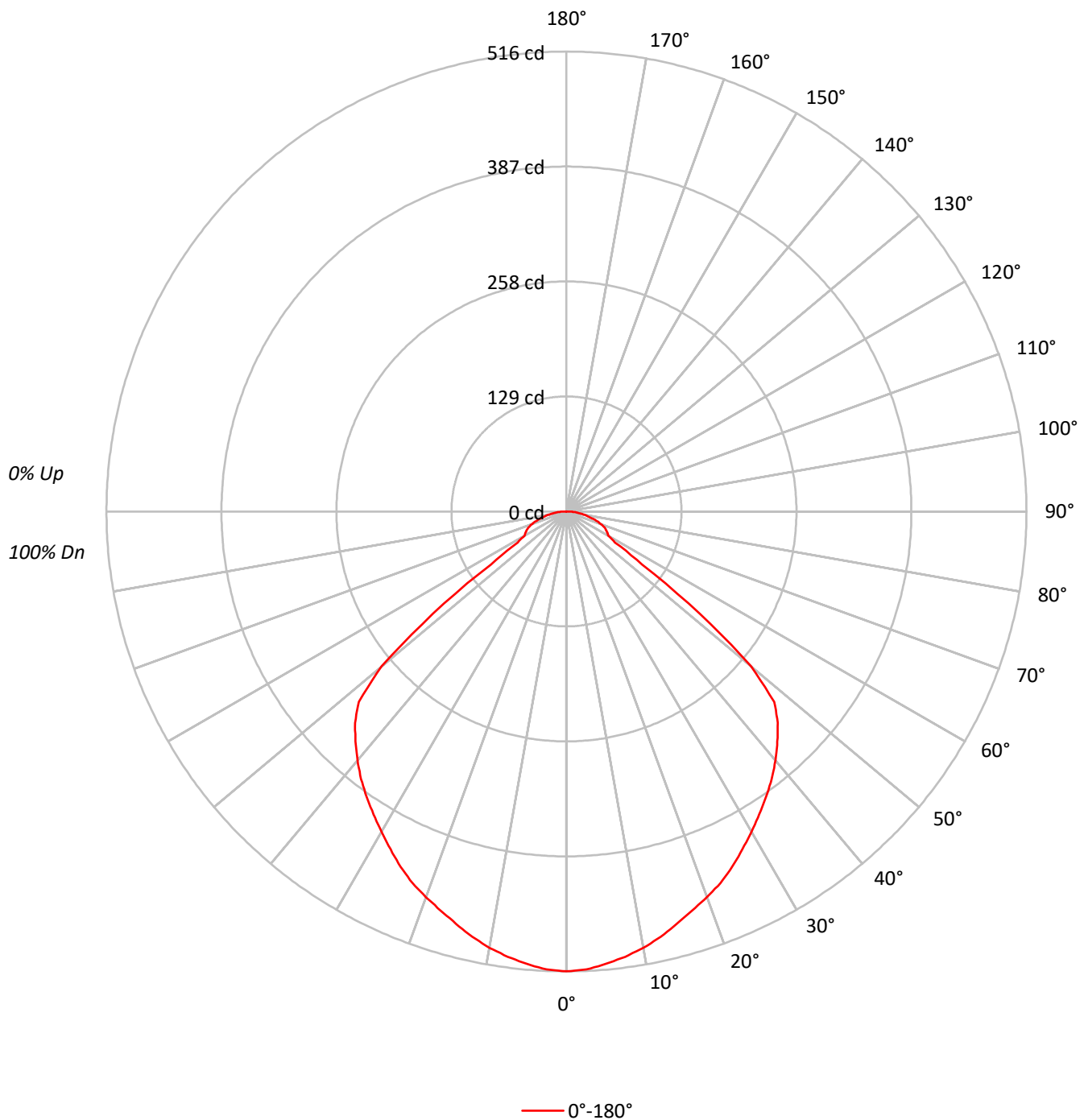
Lumens per Lamp: N/A
Luminaire Lumens: 1090.2 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.35
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	105	101	99	100	98	95		97	95	93		93
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		84
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		76
4	88	77	70	64	86	76	69	63	74	67	63		71	66	62		69
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		63
6	76	64	56	50	74	63	55	50	61	54	49		59	53	49		58
7	70	58	50	44	69	57	50	44	56	49	44		54	48	44		53
8	66	53	45	40	64	53	45	40	51	45	40		50	44	39		49
9	61	49	41	36	60	48	41	36	47	41	36		46	40	36		45
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2545
5°	2523
10°	2491
15°	2446
20°	2418
25°	2395
30°	2364
35°	2353
40°	2348
45°	2340
50°	2075
55°	889
60°	536
65°	572
70°	590
75°	572
80°	551
85°	560

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2340 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	4.4
10°-20°	135.2	12.4
20°-30°	202.6	18.6
30°-40°	244.6	22.4
40°-50°	254.5	23.3
50°-60°	114.5	10.5
60°-70°	48.0	4.4
70°-80°	31.8	2.9
80°-90°	10.8	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°	386.1	35.4
0°-40°	630.7	57.9
0°-60°	999.6	91.7
0°-90°	1090.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1090.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	516	
5°	510	48
15°	479	135
25°	440	203
35°	391	245
45°	335	254
55°	103	114
65°	49	48
75°	30	32
85°	10	11
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	515.9
2.5°	514.4
5°	509.5
7.5°	503.9
10°	497.2
12.5°	488.7
15°	478.8
17.5°	469.3
20°	460.5
22.5°	451.3
25°	440.0
27.5°	427.4
30°	415.0
32.5°	402.7
35°	390.7
37.5°	378.3
40°	364.6
42.5°	350.1
45°	335.3
47.5°	315.9
50°	270.4
52.5°	189.0
55°	103.3
57.5°	64.5
60°	54.3
62.5°	51.8
65°	49.0
67.5°	45.5
70°	40.9
72.5°	35.6
75°	30.0
77.5°	24.7
80°	19.4
82.5°	14.5
85°	9.9
87.5°	5.6
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	6.99	8.43	7.35	8.75	9.06	6.99	8.43	7.35	8.75	9.06
	3H	9.08	10.37	9.46	10.70	11.06	9.08	10.37	9.46	10.70	11.06
	4H	9.91	11.11	10.31	11.46	11.84	9.91	11.11	10.31	11.46	11.84
	6H	10.56	11.66	10.97	12.03	12.42	10.56	11.66	10.97	12.03	12.42
	8H	10.79	11.84	11.22	12.23	12.63	10.79	11.84	11.22	12.23	12.63
	12H	10.97	11.98	11.41	12.36	12.79	10.97	11.98	11.41	12.36	12.79
4H	2H	7.65	8.85	8.05	9.20	9.58	7.65	8.85	8.05	9.20	9.58
	3H	9.99	10.98	10.40	11.38	11.78	9.99	10.98	10.40	11.38	11.78
	4H	10.96	11.84	11.39	12.25	12.69	10.96	11.84	11.39	12.25	12.69
	6H	11.74	12.50	12.20	12.95	13.41	11.74	12.50	12.20	12.95	13.41
	8H	12.03	12.74	12.49	13.19	13.66	12.03	12.74	12.49	13.19	13.66
	12H	12.26	12.90	12.75	13.38	13.85	12.26	12.90	12.75	13.38	13.85
8H	4H	11.31	12.02	11.78	12.47	12.94	11.31	12.02	11.78	12.47	12.94
	6H	12.23	12.83	12.73	13.32	13.80	12.23	12.83	12.73	13.32	13.80
	8H	12.61	13.15	13.13	13.66	14.15	12.61	13.15	13.13	13.66	14.15
	12H	12.95	13.43	13.46	13.92	14.49	12.95	13.43	13.46	13.92	14.49
12H	4H	11.35	11.98	11.83	12.46	12.94	11.35	11.98	11.83	12.46	12.94
	6H	12.30	12.84	12.82	13.35	13.84	12.30	12.84	12.82	13.35	13.84
	8H	12.75	13.23	13.26	13.72	14.29	12.75	13.23	13.26	13.72	14.29

END OF REPORT