

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: P979933

Luminaire Tested: PRLX-242-927-LL4-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979933
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-927-LL4-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

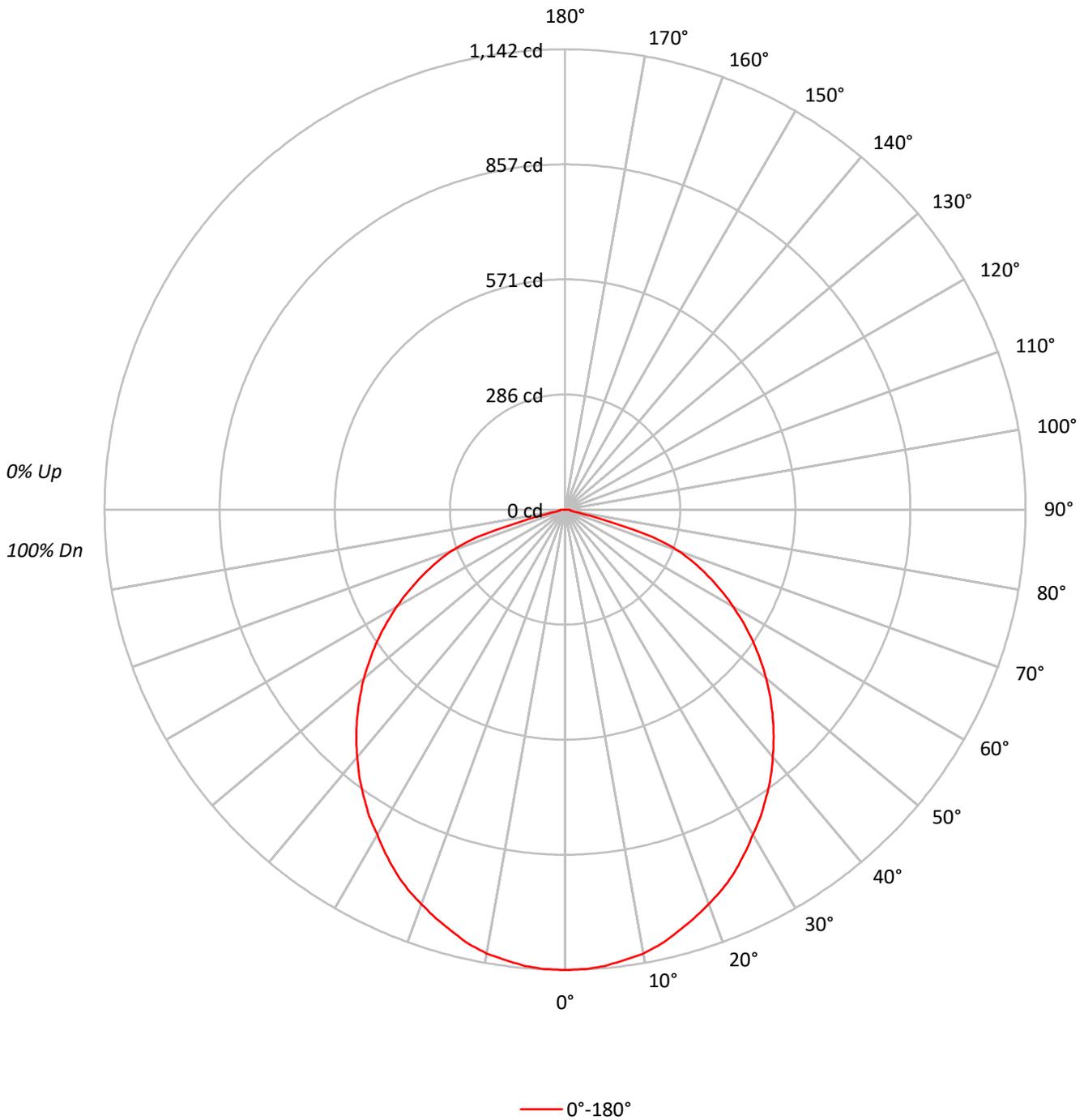
Lumens per Lamp: N/A
Luminaire Lumens: 3013.2 lumens
Efficiency: N/A
Efficacy: 145.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.7
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5111
5°	5106
10°	5083
15°	5021
20°	4961
25°	4905
30°	4812
35°	4753
40°	4683
45°	4611
50°	4532
55°	4431
60°	4307
65°	4148
70°	3919
75°	1625
80°	353
85°	565

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4611 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.9	3.6
10°-20°	305.8	10.1
20°-30°	457.1	15.2
30°-40°	544.4	18.1
40°-50°	562.0	18.7
50°-60°	507.4	16.8
60°-70°	387.6	12.9
70°-80°	130.9	4.3
80°-90°	10.1	0.3
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°	870.8	28.9
0°-40°	1415.2	47.0
0°-60°	2484.7	82.5
0°-90°	3013.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3013.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1142	
5°	1137	108
15°	1084	306
25°	993	457
35°	870	544
45°	729	562
55°	568	507
65°	392	388
75°	94	131
85°	11	10
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1142.2
2.5°	1141.3
5°	1136.7
7.5°	1127.6
10°	1118.5
12.5°	1103.9
15°	1083.8
17.5°	1063.7
20°	1041.8
22.5°	1019.9
25°	993.4
27.5°	963.2
30°	931.3
32.5°	903.0
35°	870.1
37.5°	837.3
40°	801.6
42.5°	766.0
45°	728.6
47.5°	690.3
50°	651.0
52.5°	609.9
55°	567.9
57.5°	525.0
60°	481.2
62.5°	437.3
65°	391.7
67.5°	347.0
70°	299.5
72.5°	229.2
75°	94.0
77.5°	20.1
80°	13.7
82.5°	12.8
85°	11.0
87.5°	6.4
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	17.52	19.13	17.89	19.44	19.76	17.52	19.13	17.89	19.44	19.76
	3H	19.35	20.79	19.73	21.12	21.48	19.35	20.79	19.73	21.12	21.48
	4H	19.58	20.94	19.98	21.29	21.66	19.58	20.94	19.98	21.29	21.66
	6H	19.53	20.78	19.94	21.15	21.54	19.53	20.78	19.94	21.15	21.54
	8H	19.50	20.70	19.93	21.09	21.49	19.50	20.70	19.93	21.09	21.49
	12H	19.48	20.62	19.91	21.00	21.43	19.48	20.62	19.91	21.00	21.43
4H	2H	18.17	19.53	18.57	19.88	20.25	18.17	19.53	18.57	19.88	20.25
	3H	20.18	21.30	20.59	21.70	22.10	20.18	21.30	20.59	21.70	22.10
	4H	20.40	21.41	20.83	21.82	22.26	20.40	21.41	20.83	21.82	22.26
	6H	20.36	21.23	20.81	21.67	22.13	20.36	21.23	20.81	21.67	22.13
	8H	20.33	21.14	20.79	21.59	22.05	20.33	21.14	20.79	21.59	22.05
	12H	20.31	21.04	20.79	21.52	21.99	20.31	21.04	20.79	21.52	21.99
8H	4H	20.45	21.27	20.91	21.71	22.18	20.45	21.27	20.91	21.71	22.18
	6H	20.40	21.07	20.89	21.56	22.03	20.40	21.07	20.89	21.56	22.03
	8H	20.37	20.96	20.88	21.47	21.96	20.37	20.96	20.88	21.47	21.96
	12H	20.36	20.88	20.86	21.37	21.93	20.36	20.88	20.86	21.37	21.93
12H	4H	20.43	21.15	20.91	21.63	22.10	20.43	21.15	20.91	21.63	22.10
	6H	20.36	20.95	20.87	21.46	21.95	20.36	20.95	20.87	21.46	21.95
	8H	20.35	20.87	20.86	21.36	21.92	20.35	20.87	20.86	21.36	21.92