

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: P980163

Luminaire Tested: PRLX-242-940-LL3-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980163
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-242-940-LL3-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

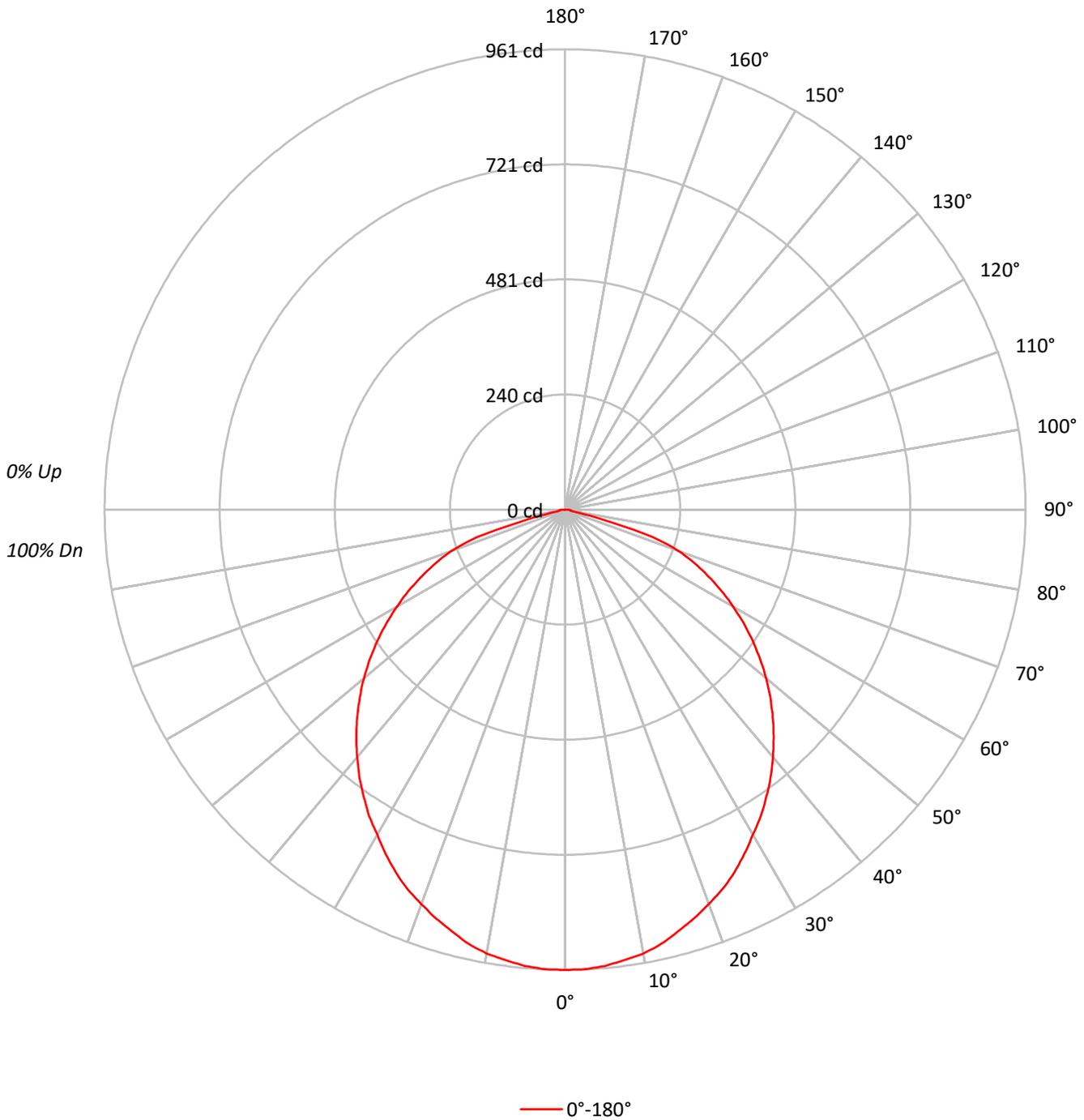
Lumens per Lamp: N/A
Luminaire Lumens: 2535.8 lumens
Efficiency: N/A
Efficacy: 169.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 15
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°	4302
5°	4297
10°	4277
15°	4226
20°	4175
25°	4128
30°	4050
35°	4001
40°	3941
45°	3881
50°	3815
55°	3729
60°	3624
65°	3490
70°	3297
75°	1368
80°	296
85°	472

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.8	3.6
10°-20°	257.4	10.1
20°-30°	384.7	15.2
30°-40°	458.2	18.1
40°-50°	473.0	18.7
50°-60°	427.0	16.8
60°-70°	326.1	12.9
70°-80°	110.1	4.3
80°-90°	8.5	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°	732.8	28.9
0°-40°	1191.0	47.0
0°-60°	2091.1	82.5
0°-90°	2535.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2535.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	961	
5°	957	91
15°	912	257
25°	836	385
35°	732	458
45°	613	473
55°	478	427
65°	330	326
75°	79	110
85°	9	8
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	961.3
2.5°	960.5
5°	956.6
7.5°	949.0
10°	941.3
12.5°	929.0
15°	912.1
17.5°	895.2
20°	876.7
22.5°	858.3
25°	836.0
27.5°	810.7
30°	783.8
32.5°	759.9
35°	732.3
37.5°	704.6
40°	674.6
42.5°	644.7
45°	613.2
47.5°	580.9
50°	547.9
52.5°	513.3
55°	477.9
57.5°	441.8
60°	404.9
62.5°	368.1
65°	329.6
67.5°	292.0
70°	252.0
72.5°	192.9
75°	79.1
77.5°	16.9
80°	11.5
82.5°	10.8
85°	9.2
87.5°	5.4
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	16.92	18.53	17.29	18.84	19.16	16.92	18.53	17.29	18.84	19.16
	3H	18.75	20.19	19.13	20.52	20.88	18.75	20.19	19.13	20.52	20.88
	4H	18.98	20.34	19.38	20.69	21.06	18.98	20.34	19.38	20.69	21.06
	6H	18.93	20.18	19.34	20.55	20.94	18.93	20.18	19.34	20.55	20.94
	8H	18.90	20.10	19.33	20.49	20.89	18.90	20.10	19.33	20.49	20.89
	12H	18.88	20.02	19.31	20.40	20.83	18.88	20.02	19.31	20.40	20.83
4H	2H	17.57	18.93	17.97	19.28	19.65	17.57	18.93	17.97	19.28	19.65
	3H	19.58	20.70	19.99	21.10	21.50	19.58	20.70	19.99	21.10	21.50
	4H	19.80	20.81	20.23	21.22	21.66	19.80	20.81	20.23	21.22	21.66
	6H	19.76	20.63	20.21	21.07	21.53	19.76	20.63	20.21	21.07	21.53
	8H	19.73	20.54	20.19	20.99	21.45	19.73	20.54	20.19	20.99	21.45
	12H	19.71	20.44	20.19	20.92	21.39	19.71	20.44	20.19	20.92	21.39
8H	4H	19.85	20.67	20.31	21.11	21.58	19.85	20.67	20.31	21.11	21.58
	6H	19.80	20.47	20.29	20.96	21.43	19.80	20.47	20.29	20.96	21.43
	8H	19.77	20.36	20.28	20.87	21.36	19.77	20.36	20.28	20.87	21.36
	12H	19.76	20.28	20.27	20.77	21.33	19.76	20.28	20.27	20.77	21.33
12H	4H	19.83	20.55	20.31	21.03	21.50	19.83	20.55	20.31	21.03	21.50
	6H	19.76	20.35	20.27	20.86	21.35	19.76	20.35	20.27	20.86	21.35
	8H	19.75	20.27	20.26	20.76	21.33	19.75	20.27	20.26	20.76	21.33