

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: P979901

Luminaire Tested: PRLX-242-927-LL1-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979901
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-242-927-LL1-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

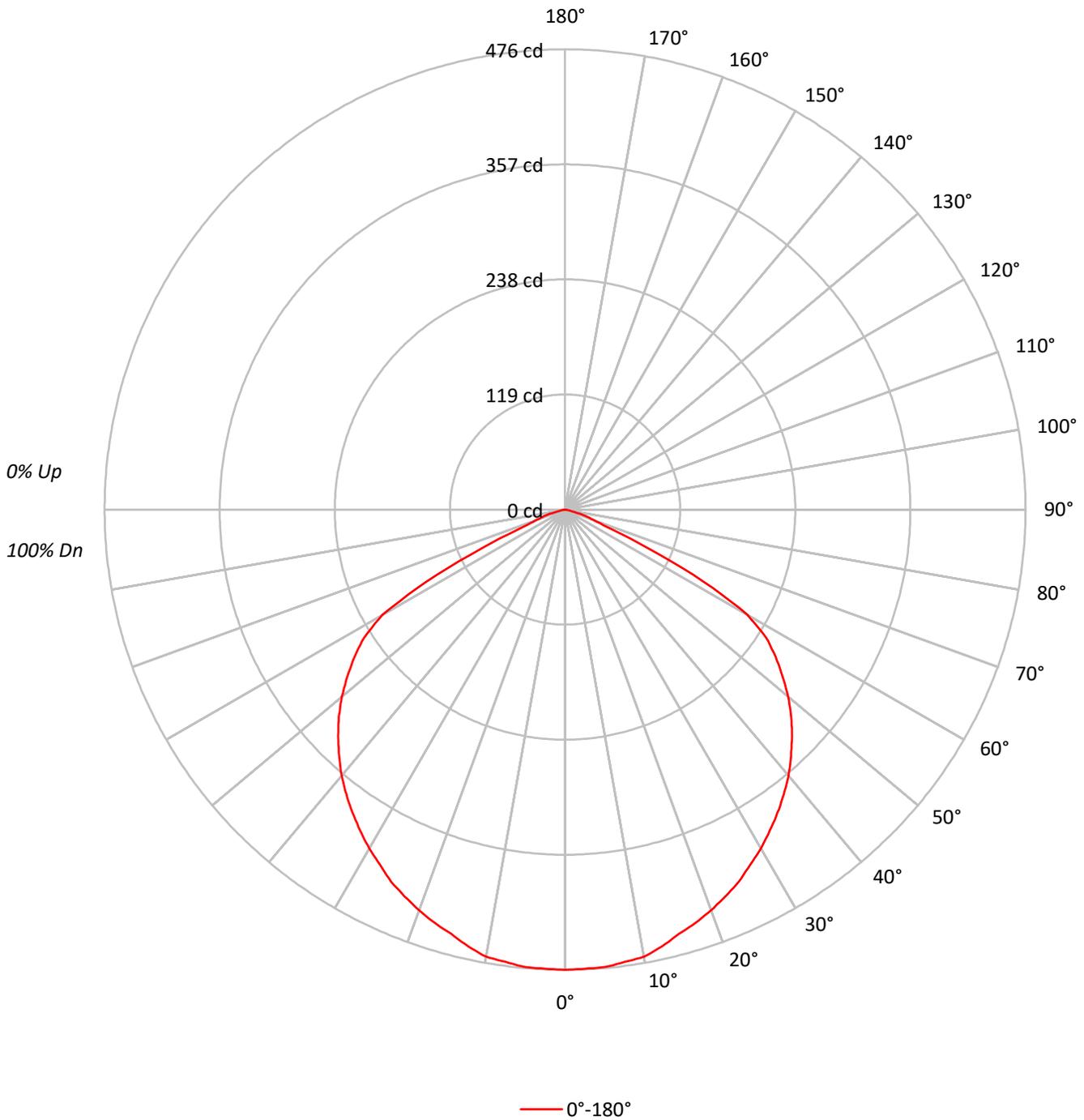
Lumens per Lamp: N/A
Luminaire Lumens: 1219.7 lumens
Efficiency: N/A
Efficacy: 162.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	2130
5°	2134
10°	2134
15°	2106
20°	2101
25°	2098
30°	2092
35°	2092
40°	2099
45°	2100
50°	2096
55°	2071
60°	1948
65°	996
70°	402
75°	188
80°	36
85°	56

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2100 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.1	3.7
10°-20°	128.6	10.5
20°-30°	195.7	16.0
30°-40°	239.8	19.7
40°-50°	255.8	21.0
50°-60°	235.9	19.3
60°-70°	103.8	8.5
70°-80°	13.9	1.1
80°-90°	1.1	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°	369.4	30.3
0°-40°	609.1	49.9
0°-60°	1100.9	90.3
0°-90°	1219.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1219.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	476	
5°	475	45
15°	454	129
25°	425	196
35°	383	240
45°	332	256
55°	266	236
65°	94	104
75°	11	14
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	476.0
2.5°	475.3
5°	475.0
7.5°	471.8
10°	469.7
12.5°	462.6
15°	454.5
17.5°	448.2
20°	441.1
22.5°	433.0
25°	424.9
27.5°	414.3
30°	404.8
32.5°	393.9
35°	382.9
37.5°	371.3
40°	359.3
42.5°	345.6
45°	331.8
47.5°	317.0
50°	301.1
52.5°	283.5
55°	265.5
57.5°	246.5
60°	217.6
62.5°	161.8
65°	94.1
67.5°	43.7
70°	30.7
72.5°	22.9
75°	10.9
77.5°	3.2
80°	1.4
82.5°	1.4
85°	1.1
87.5°	0.7
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	15.47	17.02	15.83	17.33	17.64	15.47	17.02	15.83	17.33	17.64
	3H	15.51	16.89	15.89	17.22	17.58	15.51	16.89	15.89	17.22	17.58
	4H	15.48	16.76	15.88	17.11	17.49	15.48	16.76	15.88	17.11	17.49
	6H	15.42	16.60	15.83	16.97	17.36	15.42	16.60	15.83	16.97	17.36
	8H	15.38	16.51	15.81	16.90	17.30	15.38	16.51	15.81	16.90	17.30
	12H	15.35	16.43	15.78	16.81	17.24	15.35	16.43	15.78	16.81	17.24
4H	2H	15.56	16.85	15.96	17.19	17.57	15.56	16.85	15.96	17.19	17.57
	3H	15.65	16.70	16.06	17.10	17.50	15.65	16.70	16.06	17.10	17.50
	4H	15.61	16.55	16.05	16.96	17.40	15.61	16.55	16.05	16.96	17.40
	6H	15.56	16.36	16.02	16.81	17.27	15.56	16.36	16.02	16.81	17.27
	8H	15.51	16.27	15.98	16.71	17.18	15.51	16.27	15.98	16.71	17.18
	12H	15.48	16.15	15.96	16.63	17.10	15.48	16.15	15.96	16.63	17.10
8H	4H	15.53	16.28	15.99	16.72	17.19	15.53	16.28	15.99	16.72	17.19
	6H	15.45	16.06	15.95	16.56	17.03	15.45	16.06	15.95	16.56	17.03
	8H	15.40	15.95	15.91	16.46	16.95	15.40	15.95	15.91	16.46	16.95
	12H	15.36	15.85	15.87	16.35	16.91	15.36	15.85	15.87	16.35	16.91
12H	4H	15.49	16.16	15.98	16.64	17.11	15.49	16.16	15.98	16.64	17.11
	6H	15.39	15.95	15.91	16.46	16.95	15.39	15.95	15.91	16.46	16.95
	8H	15.36	15.85	15.87	16.34	16.91	15.36	15.85	15.87	16.34	16.91