

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: P979913

Luminaire Tested: PRLX-242-927-18L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979913
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-242-927-18L-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

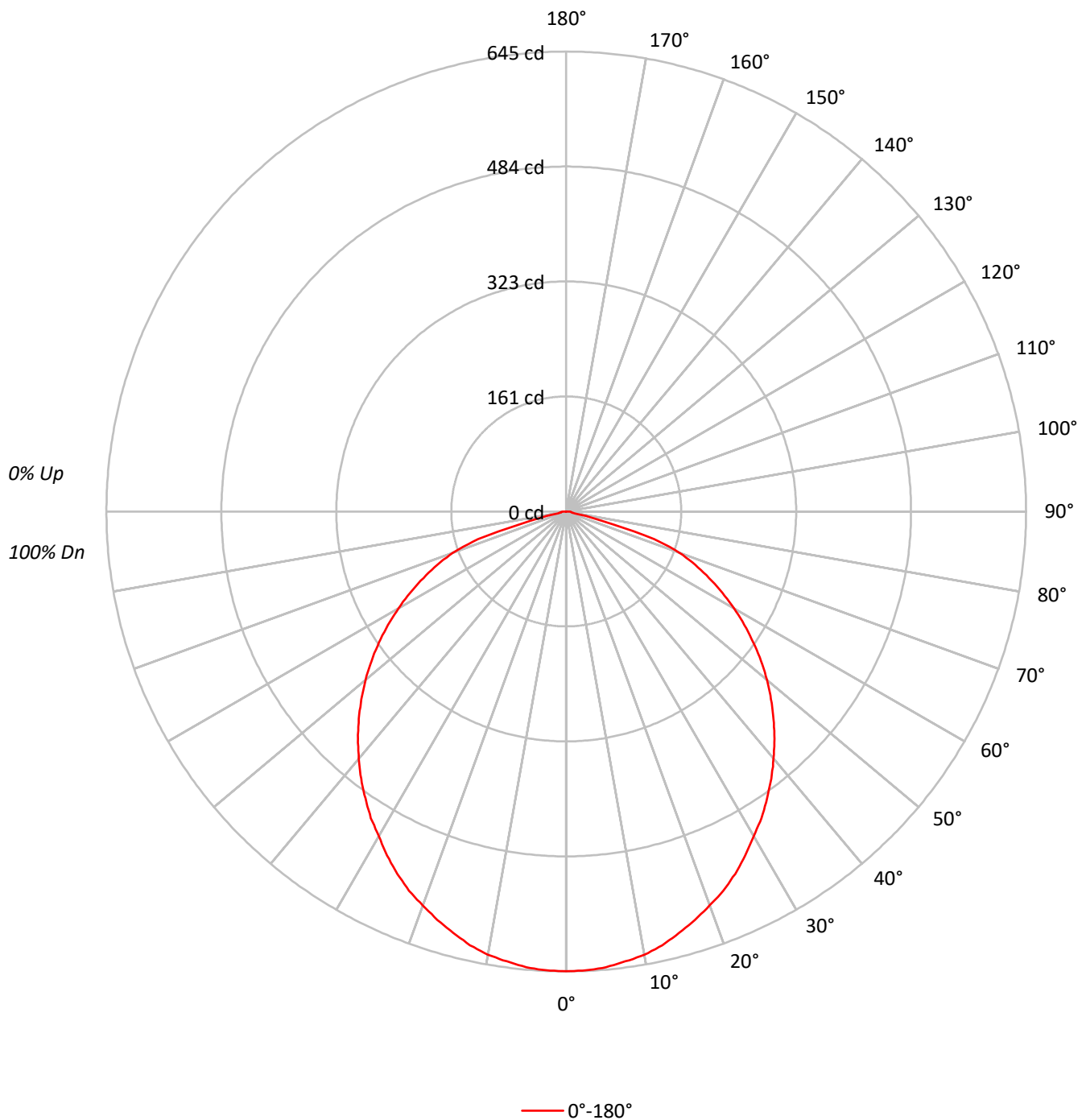
Lumens per Lamp: N/A
Luminaire Lumens: 1701.0 lumens
Efficiency: N/A
Efficacy: 154.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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	110	105	101	98	107	103	100	96	99	96	93		95	93	90		91
2	100	92	86	80	98	90	85	79	87	82	78		84	80	76		81
3	91	81	73	67	89	80	72	67	77	71	65		74	69	64		71
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	50	43	37		49	42	37		47
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2886
5°	2883
10°	2869
15°	2834
20°	2801
25°	2769
30°	2717
35°	2683
40°	2643
45°	2603
50°	2559
55°	2501
60°	2431
65°	2341
70°	2213
75°	918
80°	198
85°	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2603 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.9	3.6
10°-20°	172.6	10.1
20°-30°	258.0	15.2
30°-40°	307.3	18.1
40°-50°	317.3	18.7
50°-60°	286.5	16.8
60°-70°	218.8	12.9
70°-80°	73.9	4.3
80°-90°	5.7	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°	491.6	28.9
0°-40°	798.9	47.0
0°-60°	1402.6	82.5
0°-90°	1701.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1701.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	645	
5°	642	61
15°	612	173
25°	561	258
35°	491	307
45°	411	317
55°	321	286
65°	221	219
75°	53	74
85°	6	6
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	644.8
2.5°	644.3
5°	641.7
7.5°	636.5
10°	631.4
12.5°	623.1
15°	611.8
17.5°	600.5
20°	588.1
22.5°	575.7
25°	560.8
27.5°	543.8
30°	525.7
32.5°	509.8
35°	491.2
37.5°	472.6
40°	452.5
42.5°	432.4
45°	411.3
47.5°	389.7
50°	367.5
52.5°	344.3
55°	320.6
57.5°	296.4
60°	271.6
62.5°	246.9
65°	221.1
67.5°	195.9
70°	169.1
72.5°	129.4
75°	53.1
77.5°	11.3
80°	7.7
82.5°	7.2
85°	6.2
87.5°	3.6
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	15.54	17.14	15.90	17.46	17.77	15.54	17.14	15.90	17.46	17.77
	3H	17.37	18.81	17.74	19.14	19.50	17.37	18.81	17.74	19.14	19.50
	4H	17.60	18.95	18.00	19.30	19.68	17.60	18.95	18.00	19.30	19.68
	6H	17.55	18.80	17.96	19.16	19.55	17.55	18.80	17.96	19.16	19.55
	8H	17.52	18.71	17.94	19.10	19.50	17.52	18.71	17.94	19.10	19.50
	12H	17.50	18.64	17.93	19.02	19.45	17.50	18.64	17.93	19.02	19.45
4H	2H	16.19	17.54	16.59	17.89	18.27	16.19	17.54	16.59	17.89	18.27
	3H	18.19	19.32	18.60	19.72	20.12	18.19	19.32	18.60	19.72	20.12
	4H	18.41	19.42	18.84	19.84	20.27	18.41	19.42	18.84	19.84	20.27
	6H	18.37	19.25	18.83	19.69	20.15	18.37	19.25	18.83	19.69	20.15
	8H	18.34	19.16	18.80	19.60	20.07	18.34	19.16	18.80	19.60	20.07
	12H	18.32	19.05	18.81	19.53	20.00	18.32	19.05	18.81	19.53	20.00
8H	4H	18.46	19.28	18.93	19.72	20.19	18.46	19.28	18.93	19.72	20.19
	6H	18.41	19.08	18.91	19.57	20.05	18.41	19.08	18.91	19.57	20.05
	8H	18.38	18.98	18.89	19.48	19.97	18.38	18.98	18.89	19.48	19.97
	12H	18.37	18.89	18.88	19.39	19.95	18.37	18.89	18.88	19.39	19.95
12H	4H	18.44	19.17	18.92	19.65	20.12	18.44	19.17	18.92	19.65	20.12
	6H	18.37	18.97	18.88	19.48	19.96	18.37	18.97	18.88	19.48	19.96
	8H	18.36	18.88	18.87	19.38	19.94	18.36	18.88	18.87	19.38	19.94