

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: P980233

Luminaire Tested: PRLX-243-927-LL2-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980233
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-LL2-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

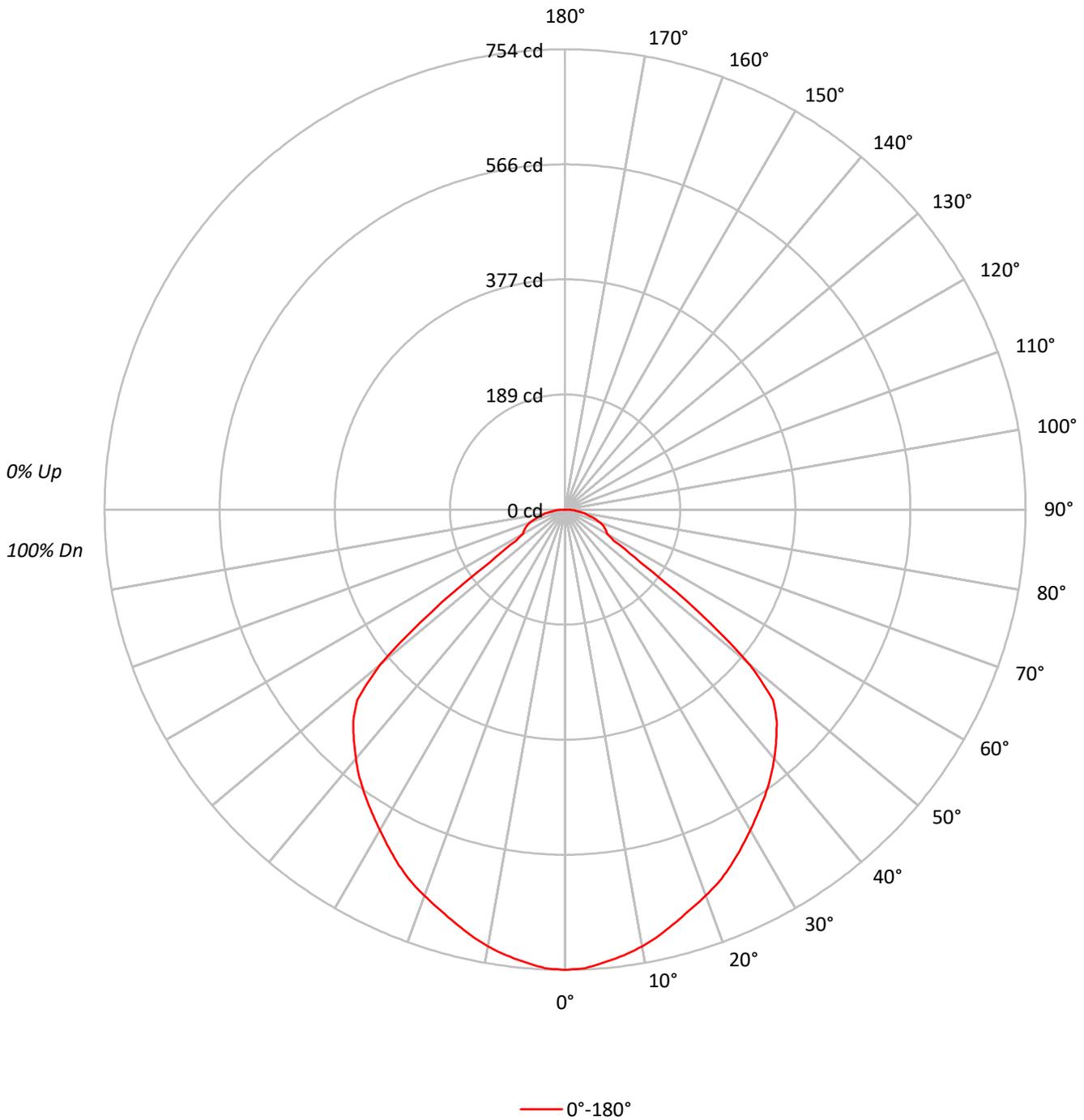
Lumens per Lamp: N/A
Luminaire Lumens: 1593.7 lumens
Efficiency: N/A
Efficacy: 144.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.35
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 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									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	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													100															
1	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88													88															
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77													77															
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67													67															
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59													59															
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52													52															
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	46													46															
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42													42															
8	66	53	45	40	64	53	45	40	51	45	40	50	44	39	49	43	39	37													37															
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34													34															
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31													31															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3721
5°	3689
10°	3641
15°	3575
20°	3534
25°	3501
30°	3456
35°	3440
40°	3432
45°	3420
50°	3034
55°	1299
60°	783
65°	836
70°	863
75°	835
80°	804
85°	815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3420 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	4.4
10°-20°	197.6	12.4
20°-30°	296.2	18.6
30°-40°	357.6	22.4
40°-50°	372.0	23.3
50°-60°	167.3	10.5
60°-70°	70.2	4.4
70°-80°	46.4	2.9
80°-90°	15.7	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°	564.4	35.4
0°-40°	921.9	57.9
0°-60°	1461.2	91.7
0°-90°	1593.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1593.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	754	
5°	745	71
15°	700	198
25°	643	296
35°	571	358
45°	490	372
55°	151	167
65°	72	70
75°	44	46
85°	14	16
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	754.1
2.5°	752.0
5°	744.8
7.5°	736.5
10°	726.7
12.5°	714.4
15°	699.9
17.5°	686.0
20°	673.1
22.5°	659.7
25°	643.2
27.5°	624.7
30°	606.6
32.5°	588.6
35°	571.1
37.5°	553.0
40°	532.9
42.5°	511.8
45°	490.2
47.5°	461.8
50°	395.3
52.5°	276.3
55°	151.0
57.5°	94.3
60°	79.4
62.5°	75.8
65°	71.6
67.5°	66.5
70°	59.8
72.5°	52.1
75°	43.8
77.5°	36.1
80°	28.3
82.5°	21.1
85°	14.4
87.5°	8.2
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	8.31	9.76	8.67	10.07	10.38	8.31	9.76	8.67	10.07	10.38
	3H	10.40	11.69	10.78	12.01	12.38	10.40	11.69	10.78	12.01	12.38
	4H	11.23	12.43	11.63	12.78	13.16	11.23	12.43	11.63	12.78	13.16
	6H	11.87	12.98	12.29	13.35	13.74	11.87	12.98	12.29	13.35	13.74
	8H	12.11	13.16	12.54	13.55	13.95	12.11	13.16	12.54	13.55	13.95
	12H	12.29	13.29	12.72	13.68	14.11	12.29	13.29	12.72	13.68	14.11
4H	2H	8.97	10.17	9.37	10.52	10.90	8.97	10.17	9.37	10.52	10.90
	3H	11.31	12.30	11.72	12.70	13.10	11.31	12.30	11.72	12.70	13.10
	4H	12.27	13.16	12.71	13.57	14.01	12.27	13.16	12.71	13.57	14.01
	6H	13.06	13.82	13.52	14.26	14.73	13.06	13.82	13.52	14.26	14.73
	8H	13.34	14.06	13.81	14.50	14.97	13.34	14.06	13.81	14.50	14.97
	12H	13.58	14.21	14.06	14.69	15.17	13.58	14.21	14.06	14.69	15.17
8H	4H	12.63	13.34	13.09	13.79	14.26	12.63	13.34	13.09	13.79	14.26
	6H	13.55	14.14	14.05	14.64	15.11	13.55	14.14	14.05	14.64	15.11
	8H	13.92	14.46	14.44	14.97	15.46	13.92	14.46	14.44	14.97	15.46
	12H	14.26	14.74	14.77	15.23	15.80	14.26	14.74	14.77	15.23	15.80
12H	4H	12.66	13.30	13.15	13.78	14.25	12.66	13.30	13.15	13.78	14.25
	6H	13.62	14.16	14.14	14.67	15.16	13.62	14.16	14.14	14.67	15.16
	8H	14.06	14.54	14.57	15.04	15.60	14.06	14.54	14.57	15.04	15.60