

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: P980031

Luminaire Tested: PRLX-242-930-48L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980031
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-242-930-48L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

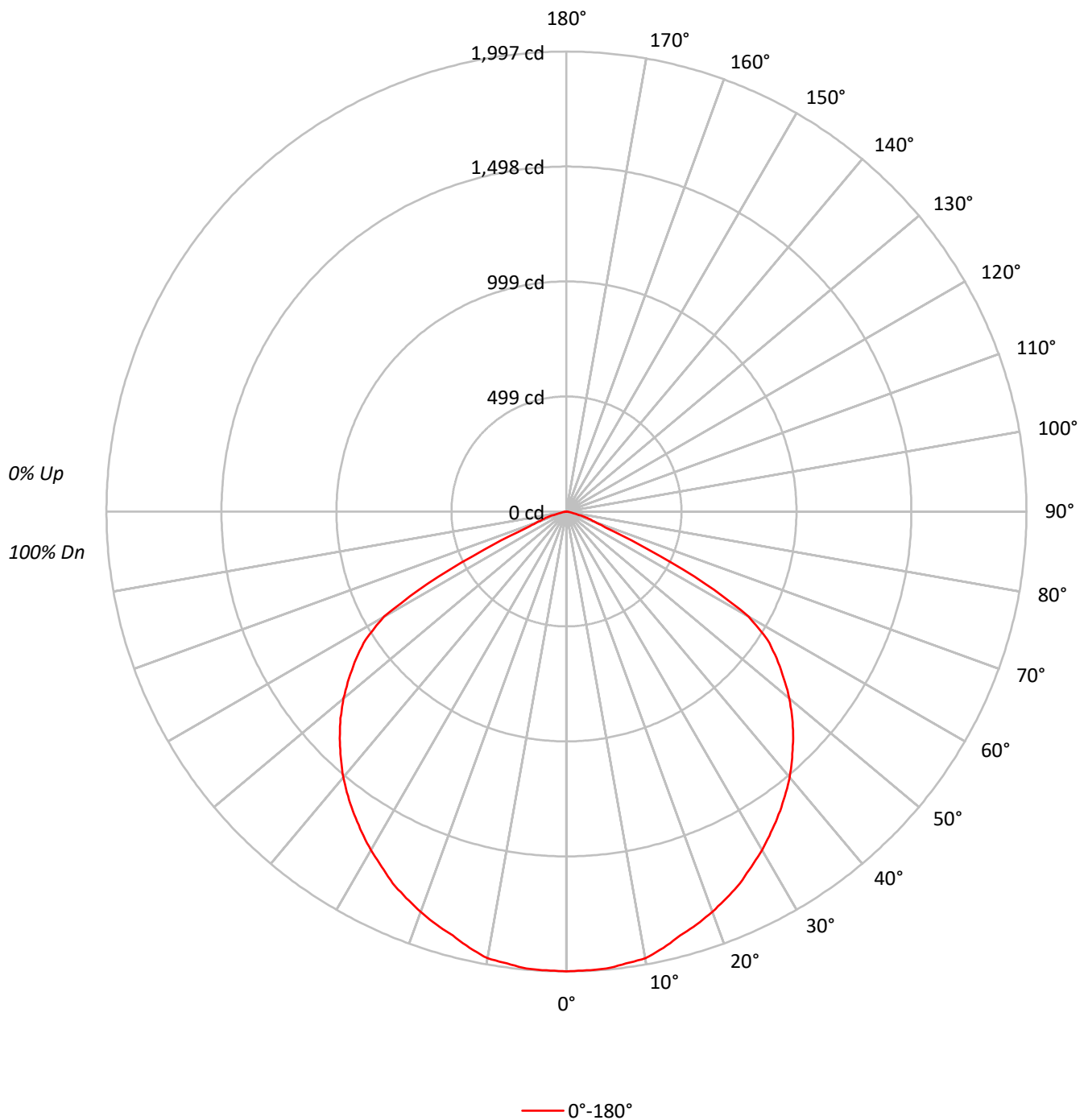
Lumens per Lamp: N/A
Luminaire Lumens: 5117.5 lumens
Efficiency: N/A
Efficacy: 152.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
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
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	111	107	103	100	108	104	101	98	100	98	95		96	94	92		93
2	102	95	89	84	99	93	87	83	89	85	81		86	82	79		83
3	93	84	76	71	91	82	75	70	79	74	69		77	72	68		74
4	86	75	67	60	83	73	66	60	71	64	59		69	63	58		67
5	79	67	58	52	77	66	58	52	64	57	51		62	56	51		60
6	73	60	52	46	71	59	51	45	57	50	45		56	49	45		54
7	68	55	46	40	66	54	46	40	52	45	40		51	44	40		49
8	63	50	42	36	61	49	41	36	48	41	36		47	40	35		45
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	42	34	29	41	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8938
5°	8952
10°	8955
15°	8835
20°	8814
25°	8803
30°	8776
35°	8777
40°	8807
45°	8810
50°	8796
55°	8692
60°	8170
65°	4183
70°	1684
75°	794
80°	152
85°	226

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.3	3.7
10°-20°	539.6	10.5
20°-30°	820.9	16.0
30°-40°	1005.9	19.7
40°-50°	1073.4	21.0
50°-60°	989.8	19.3
60°-70°	435.8	8.5
70°-80°	58.4	1.1
80°-90°	4.4	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°	1549.9	30.3
0°-40°	2555.8	49.9
0°-60°	4618.9	90.3
0°-90°	5117.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5117.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1997	
5°	1993	189
15°	1907	540
25°	1783	821
35°	1607	1006
45°	1392	1073
55°	1114	990
65°	395	436
75°	46	58
85°	4	4
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1997.2
2.5°	1994.3
5°	1992.8
7.5°	1979.5
10°	1970.6
12.5°	1941.0
15°	1907.0
17.5°	1880.3
20°	1850.8
22.5°	1816.7
25°	1782.7
27.5°	1738.3
30°	1698.4
32.5°	1652.5
35°	1606.6
37.5°	1557.8
40°	1507.5
42.5°	1449.8
45°	1392.1
47.5°	1330.0
50°	1263.4
52.5°	1189.5
55°	1114.0
57.5°	1034.1
60°	912.8
62.5°	679.1
65°	395.0
67.5°	183.4
70°	128.7
72.5°	96.2
75°	45.9
77.5°	13.3
80°	5.9
82.5°	5.9
85°	4.4
87.5°	3.0
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	20.45	22.00	20.81	22.31	22.63	20.45	22.00	20.81	22.31	22.63
	3H	20.49	21.87	20.87	22.20	22.56	20.49	21.87	20.87	22.20	22.56
	4H	20.46	21.75	20.86	22.09	22.47	20.46	21.75	20.86	22.09	22.47
	6H	20.40	21.58	20.81	21.95	22.34	20.40	21.58	20.81	21.95	22.34
	8H	20.37	21.49	20.79	21.88	22.28	20.37	21.49	20.79	21.88	22.28
	12H	20.34	21.41	20.77	21.79	22.22	20.34	21.41	20.77	21.79	22.22
4H	2H	20.54	21.83	20.94	22.18	22.55	20.54	21.83	20.94	22.18	22.55
	3H	20.63	21.68	21.04	22.08	22.48	20.63	21.68	21.04	22.08	22.48
	4H	20.60	21.53	21.03	21.95	22.39	20.60	21.53	21.03	21.95	22.39
	6H	20.54	21.35	21.00	21.79	22.25	20.54	21.35	21.00	21.79	22.25
	8H	20.50	21.25	20.96	21.69	22.16	20.50	21.25	20.96	21.69	22.16
	12H	20.46	21.13	20.95	21.61	22.08	20.46	21.13	20.95	21.61	22.08
8H	4H	20.51	21.26	20.97	21.71	22.17	20.51	21.26	20.97	21.71	22.17
	6H	20.43	21.05	20.93	21.54	22.02	20.43	21.05	20.93	21.54	22.02
	8H	20.38	20.93	20.89	21.44	21.93	20.38	20.93	20.89	21.44	21.93
	12H	20.34	20.83	20.85	21.33	21.89	20.34	20.83	20.85	21.33	21.89
12H	4H	20.48	21.14	20.96	21.62	22.10	20.48	21.14	20.96	21.62	22.10
	6H	20.38	20.93	20.89	21.44	21.93	20.38	20.93	20.89	21.44	21.93
	8H	20.34	20.83	20.85	21.33	21.89	20.34	20.83	20.85	21.33	21.89