

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: P980193

Luminaire Tested: PRLX-242-940-48L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980193
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-242-940-48L-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

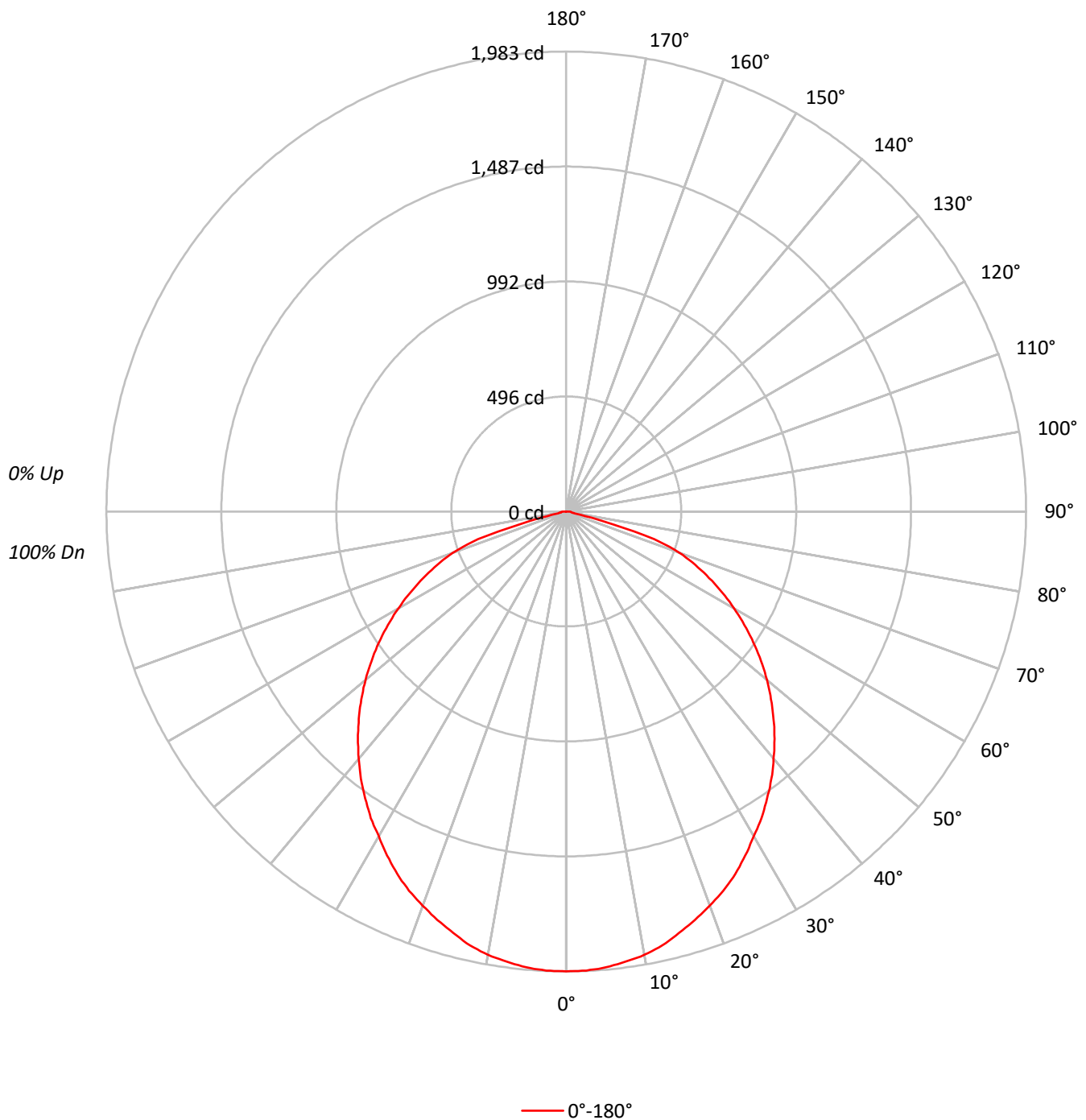
Lumens per Lamp: N/A
Luminaire Lumens: 5231.6 lumens
Efficiency: N/A
Efficacy: 156.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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		0
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°	8875
5°	8866
10°	8824
15°	8718
20°	8614
25°	8516
30°	8356
35°	8253
40°	8131
45°	8006
50°	7869
55°	7693
60°	7477
65°	7202
70°	6804
75°	2824
80°	613
85°	976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8006 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.3	3.6
10°-20°	531.0	10.1
20°-30°	793.6	15.2
30°-40°	945.3	18.1
40°-50°	975.8	18.7
50°-60°	881.0	16.8
60°-70°	672.9	12.9
70°-80°	227.3	4.3
80°-90°	17.5	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°	1511.9	28.9
0°-40°	2457.1	47.0
0°-60°	4314.0	82.5
0°-90°	5231.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5231.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1983	
5°	1974	187
15°	1882	531
25°	1725	794
35°	1511	945
45°	1265	976
55°	986	881
65°	680	673
75°	163	227
85°	19	17
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1983.1
2.5°	1981.6
5°	1973.6
7.5°	1957.8
10°	1941.9
12.5°	1916.6
15°	1881.7
17.5°	1846.8
20°	1808.8
22.5°	1770.7
25°	1724.7
27.5°	1672.4
30°	1617.0
32.5°	1567.8
35°	1510.7
37.5°	1453.7
40°	1391.8
42.5°	1330.0
45°	1265.0
47.5°	1198.4
50°	1130.3
52.5°	1058.9
55°	986.0
57.5°	911.5
60°	835.4
62.5°	759.3
65°	680.1
67.5°	602.4
70°	520.0
72.5°	397.9
75°	163.3
77.5°	34.9
80°	23.8
82.5°	22.2
85°	19.0
87.5°	11.1
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	19.44	21.05	19.81	21.36	21.67	19.44	21.05	19.81	21.36	21.67
	3H	21.27	22.71	21.65	23.04	23.40	21.27	22.71	21.65	23.04	23.40
	4H	21.50	22.85	21.90	23.20	23.58	21.50	22.85	21.90	23.20	23.58
	6H	21.45	22.70	21.86	23.07	23.46	21.45	22.70	21.86	23.07	23.46
	8H	21.42	22.61	21.85	23.00	23.40	21.42	22.61	21.85	23.00	23.40
	12H	21.40	22.54	21.83	22.92	23.35	21.40	22.54	21.83	22.92	23.35
4H	2H	20.09	21.45	20.49	21.79	22.17	20.09	21.45	20.49	21.79	22.17
	3H	22.10	23.22	22.51	23.62	24.02	22.10	23.22	22.51	23.62	24.02
	4H	22.31	23.32	22.75	23.74	24.17	22.31	23.32	22.75	23.74	24.17
	6H	22.28	23.15	22.73	23.59	24.05	22.28	23.15	22.73	23.59	24.05
	8H	22.24	23.06	22.71	23.50	23.97	22.24	23.06	22.71	23.50	23.97
	12H	22.23	22.96	22.71	23.43	23.90	22.23	22.96	22.71	23.43	23.90
8H	4H	22.37	23.18	22.83	23.63	24.09	22.37	23.18	22.83	23.63	24.09
	6H	22.31	22.98	22.81	23.47	23.95	22.31	22.98	22.81	23.47	23.95
	8H	22.28	22.88	22.79	23.39	23.87	22.28	22.88	22.79	23.39	23.87
	12H	22.27	22.80	22.78	23.29	23.85	22.27	22.80	22.78	23.29	23.85
12H	4H	22.34	23.07	22.82	23.55	24.02	22.34	23.07	22.82	23.55	24.02
	6H	22.27	22.87	22.78	23.38	23.87	22.27	22.87	22.78	23.38	23.87
	8H	22.26	22.79	22.77	23.28	23.84	22.26	22.79	22.77	23.28	23.84