

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: P980143

Luminaire Tested: PRLX-242-940-LL1-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980143
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-LL1-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: 1321.9 lumens
Efficiency: N/A
Efficacy: 176.3 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

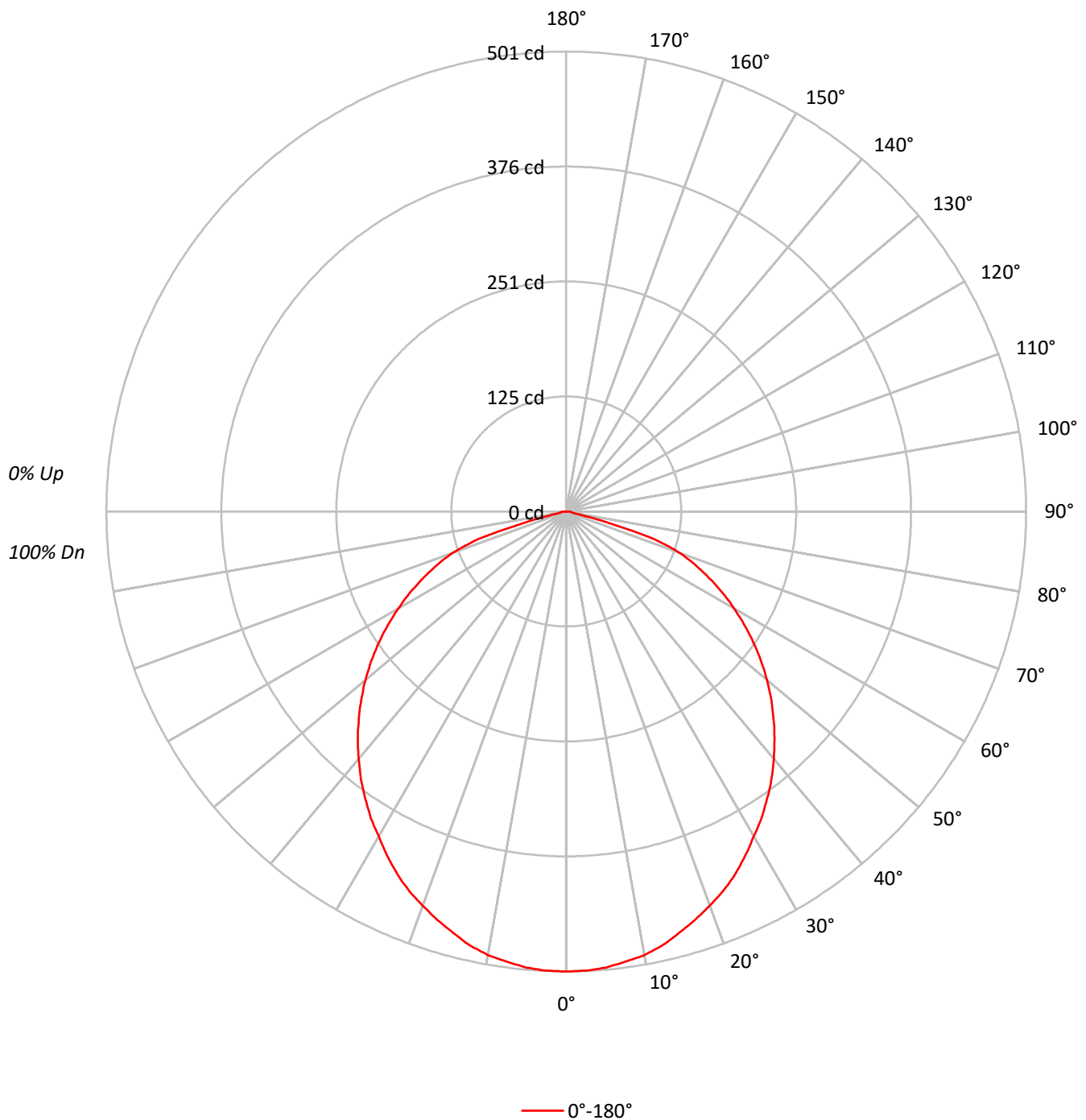
Input Watts (W): 7.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P980143

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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°	2242
5°	2240
10°	2230
15°	2203
20°	2176
25°	2152
30°	2111
35°	2085
40°	2055
45°	2023
50°	1988
55°	1944
60°	1889
65°	1819
70°	1719
75°	714
80°	155
85°	246

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2023 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	3.6
10°-20°	134.2	10.1
20°-30°	200.5	15.2
30°-40°	238.8	18.1
40°-50°	246.6	18.7
50°-60°	222.6	16.8
60°-70°	170.0	12.9
70°-80°	57.4	4.3
80°-90°	4.4	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°	382.0	28.9
0°-40°	620.8	47.0
0°-60°	1090.0	82.5
0°-90°	1321.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1321.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	501	
5°	499	47
15°	475	134
25°	436	201
35°	382	239
45°	320	247
55°	249	223
65°	172	170
75°	41	57
85°	5	4
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	501.1
2.5°	500.7
5°	498.7
7.5°	494.7
10°	490.7
12.5°	484.3
15°	475.4
17.5°	466.6
20°	457.0
22.5°	447.4
25°	435.8
27.5°	422.6
30°	408.6
32.5°	396.1
35°	381.7
37.5°	367.3
40°	351.7
42.5°	336.1
45°	319.6
47.5°	302.8
50°	285.6
52.5°	267.6
55°	249.1
57.5°	230.3
60°	211.1
62.5°	191.9
65°	171.8
67.5°	152.2
70°	131.4
72.5°	100.5
75°	41.3
77.5°	8.8
80°	6.0
82.5°	5.6
85°	4.8
87.5°	2.8
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	14.66	16.27	15.03	16.58	16.89	14.66	16.27	15.03	16.58	16.89
	3H	16.49	17.93	16.87	18.26	18.62	16.49	17.93	16.87	18.26	18.62
	4H	16.72	18.07	17.12	18.42	18.80	16.72	18.07	17.12	18.42	18.80
	6H	16.67	17.92	17.08	18.29	18.68	16.67	17.92	17.08	18.29	18.68
	8H	16.64	17.83	17.07	18.22	18.62	16.64	17.83	17.07	18.22	18.62
	12H	16.62	17.76	17.05	18.14	18.57	16.62	17.76	17.05	18.14	18.57
4H	2H	15.31	16.67	15.71	17.01	17.39	15.31	16.67	15.71	17.01	17.39
	3H	17.32	18.44	17.73	18.84	19.24	17.32	18.44	17.73	18.84	19.24
	4H	17.53	18.54	17.97	18.96	19.40	17.53	18.54	17.97	18.96	19.40
	6H	17.50	18.37	17.95	18.81	19.27	17.50	18.37	17.95	18.81	19.27
	8H	17.46	18.28	17.93	18.72	19.19	17.46	18.28	17.93	18.72	19.19
	12H	17.45	18.18	17.93	18.65	19.12	17.45	18.18	17.93	18.65	19.12
8H	4H	17.59	18.40	18.05	18.85	19.31	17.59	18.40	18.05	18.85	19.31
	6H	17.53	18.20	18.03	18.69	19.17	17.53	18.20	18.03	18.69	19.17
	8H	17.50	18.10	18.01	18.61	19.09	17.50	18.10	18.01	18.61	19.09
	12H	17.49	18.02	18.00	18.51	19.07	17.49	18.02	18.00	18.51	19.07
12H	4H	17.56	18.29	18.04	18.77	19.24	17.56	18.29	18.04	18.77	19.24
	6H	17.49	18.09	18.01	18.60	19.09	17.49	18.09	18.01	18.60	19.09
	8H	17.48	18.01	17.99	18.50	19.06	17.48	18.01	17.99	18.50	19.06