

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: P980183

Luminaire Tested: PRLX-242-940-LL5-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980183
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-LL5-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

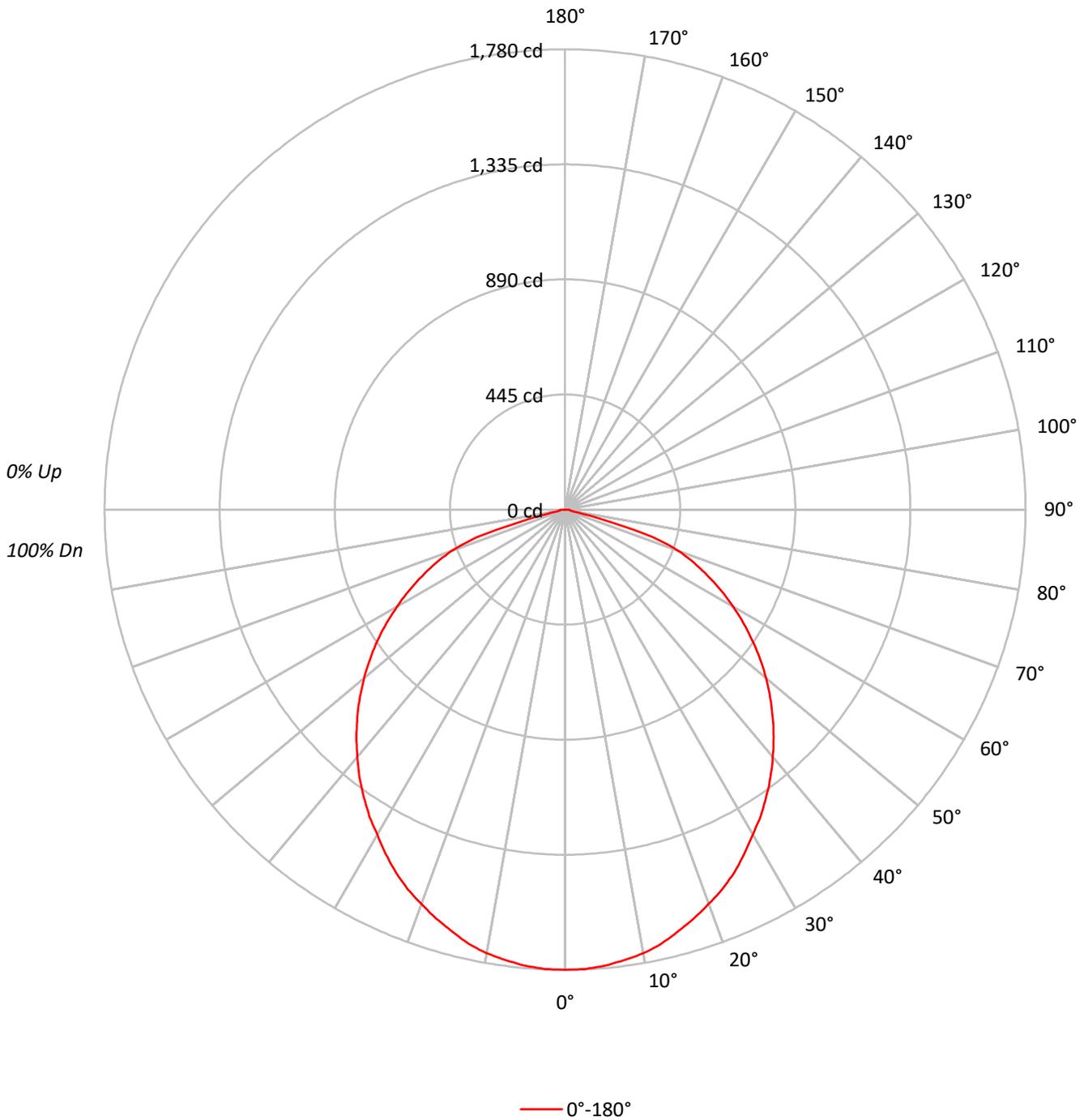
Lumens per Lamp: N/A
Luminaire Lumens: 4695.1 lumens
Efficiency: N/A
Efficacy: 159.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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	0
RW	70	50	30	10	70	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
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7965
5°	7957
10°	7920
15°	7824
20°	7731
25°	7643
30°	7498
35°	7407
40°	7297
45°	7185
50°	7062
55°	6904
60°	6711
65°	6462
70°	6105
75°	2533
80°	549
85°	878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7185 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.1	3.6
10°-20°	476.5	10.1
20°-30°	712.2	15.2
30°-40°	848.3	18.1
40°-50°	875.8	18.7
50°-60°	790.7	16.8
60°-70°	603.9	12.9
70°-80°	203.9	4.3
80°-90°	15.7	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°	1356.8	28.9
0°-40°	2205.2	47.0
0°-60°	3871.6	82.5
0°-90°	4695.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4695.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1780	
5°	1771	168
15°	1689	477
25°	1548	712
35°	1356	848
45°	1135	876
55°	885	791
65°	610	604
75°	146	204
85°	17	16
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1779.8
2.5°	1778.4
5°	1771.2
7.5°	1757.0
10°	1742.8
12.5°	1720.0
15°	1688.7
17.5°	1657.4
20°	1623.3
22.5°	1589.1
25°	1547.9
27.5°	1500.9
30°	1451.1
32.5°	1407.0
35°	1355.8
37.5°	1304.6
40°	1249.1
42.5°	1193.6
45°	1135.3
47.5°	1075.6
50°	1014.4
52.5°	950.4
55°	884.9
57.5°	818.0
60°	749.8
62.5°	681.5
65°	610.3
67.5°	540.6
70°	466.6
72.5°	357.1
75°	146.5
77.5°	31.3
80°	21.3
82.5°	19.9
85°	17.1
87.5°	10.0
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	19.06	20.67	19.43	20.98	21.30	19.06	20.67	19.43	20.98	21.30
	3H	20.89	22.33	21.27	22.66	23.02	20.89	22.33	21.27	22.66	23.02
	4H	21.12	22.48	21.52	22.83	23.20	21.12	22.48	21.52	22.83	23.20
	6H	21.07	22.32	21.48	22.69	23.08	21.07	22.32	21.48	22.69	23.08
	8H	21.04	22.24	21.47	22.63	23.03	21.04	22.24	21.47	22.63	23.03
	12H	21.02	22.16	21.45	22.54	22.97	21.02	22.16	21.45	22.54	22.97
4H	2H	19.71	21.07	20.11	21.42	21.79	19.71	21.07	20.11	21.42	21.79
	3H	21.72	22.84	22.13	23.24	23.64	21.72	22.84	22.13	23.24	23.64
	4H	21.94	22.95	22.37	23.36	23.80	21.94	22.95	22.37	23.36	23.80
	6H	21.90	22.77	22.35	23.22	23.67	21.90	22.77	22.35	23.22	23.67
	8H	21.87	22.68	22.33	23.13	23.59	21.87	22.68	22.33	23.13	23.59
	12H	21.85	22.58	22.33	23.06	23.53	21.85	22.58	22.33	23.06	23.53
8H	4H	21.99	22.81	22.45	23.25	23.72	21.99	22.81	22.45	23.25	23.72
	6H	21.94	22.61	22.43	23.10	23.57	21.94	22.61	22.43	23.10	23.57
	8H	21.91	22.50	22.42	23.01	23.50	21.91	22.50	22.42	23.01	23.50
	12H	21.90	22.42	22.41	22.91	23.48	21.90	22.42	22.41	22.91	23.48
12H	4H	21.97	22.69	22.45	23.17	23.64	21.97	22.69	22.45	23.17	23.64
	6H	21.90	22.49	22.41	23.00	23.49	21.90	22.49	22.41	23.00	23.49
	8H	21.89	22.41	22.40	22.90	23.47	21.89	22.41	22.40	22.90	23.47