

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: P980153

Luminaire Tested: PRLX-242-940-18L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980153
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-242-940-18L-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

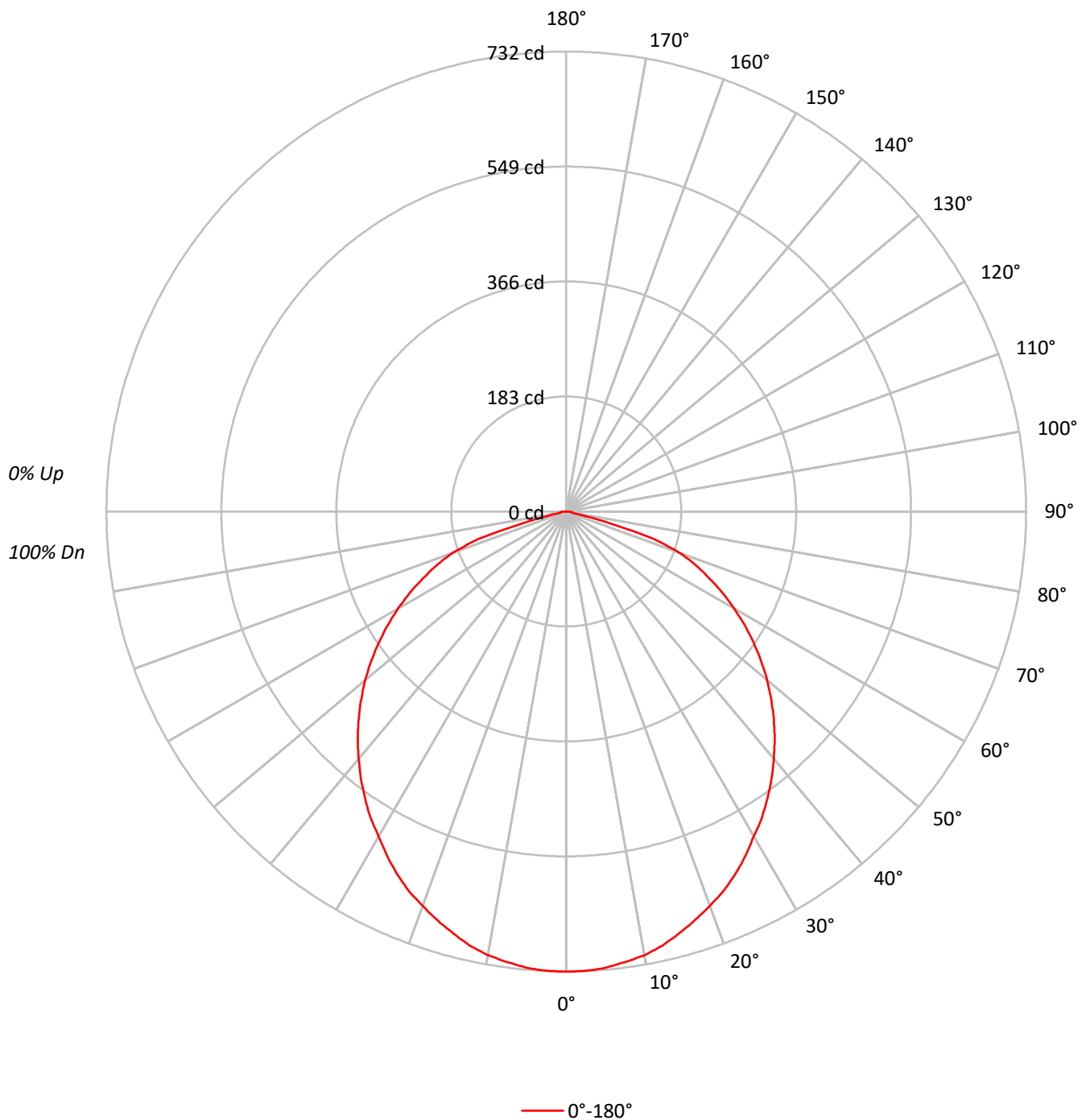
Lumens per Lamp: N/A
Luminaire Lumens: 1932.3 lumens
Efficiency: N/A
Efficacy: 175.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3278
5°	3274
10°	3259
15°	3220
20°	3182
25°	3145
30°	3086
35°	3048
40°	3003
45°	2957
50°	2907
55°	2842
60°	2762
65°	2660
70°	2512
75°	1043
80°	227
85°	359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2957 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	3.6
10°-20°	196.1	10.1
20°-30°	293.1	15.2
30°-40°	349.1	18.1
40°-50°	360.4	18.7
50°-60°	325.4	16.8
60°-70°	248.5	12.9
70°-80°	83.9	4.3
80°-90°	6.5	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°	558.4	28.9
0°-40°	907.5	47.0
0°-60°	1593.4	82.5
0°-90°	1932.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1932.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	732	
5°	729	69
15°	695	196
25°	637	293
35°	558	349
45°	467	360
55°	364	325
65°	251	249
75°	60	84
85°	7	6
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	732.5
2.5°	731.9
5°	728.9
7.5°	723.1
10°	717.2
12.5°	707.9
15°	695.0
17.5°	682.1
20°	668.1
22.5°	654.0
25°	637.0
27.5°	617.7
30°	597.2
32.5°	579.1
35°	558.0
37.5°	536.9
40°	514.1
42.5°	491.2
45°	467.2
47.5°	442.6
50°	417.5
52.5°	391.1
55°	364.2
57.5°	336.7
60°	308.6
62.5°	280.5
65°	251.2
67.5°	222.5
70°	192.0
72.5°	147.0
75°	60.3
77.5°	12.9
80°	8.8
82.5°	8.2
85°	7.0
87.5°	4.1
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	15.98	17.59	16.35	17.90	18.21	15.98	17.59	16.35	17.90	18.21
	3H	17.81	19.25	18.18	19.58	19.94	17.81	19.25	18.18	19.58	19.94
	4H	18.04	19.39	18.44	19.74	20.12	18.04	19.39	18.44	19.74	20.12
	6H	17.99	19.24	18.40	19.60	20.00	17.99	19.24	18.40	19.60	20.00
	8H	17.96	19.15	18.39	19.54	19.94	17.96	19.15	18.39	19.54	19.94
	12H	17.94	19.08	18.37	19.46	19.89	17.94	19.08	18.37	19.46	19.89
4H	2H	16.63	17.99	17.03	18.33	18.71	16.63	17.99	17.03	18.33	18.71
	3H	18.64	19.76	19.05	20.16	20.56	18.64	19.76	19.05	20.16	20.56
	4H	18.85	19.86	19.29	20.28	20.71	18.85	19.86	19.29	20.28	20.71
	6H	18.81	19.69	19.27	20.13	20.59	18.81	19.69	19.27	20.13	20.59
	8H	18.78	19.60	19.25	20.04	20.51	18.78	19.60	19.25	20.04	20.51
	12H	18.77	19.49	19.25	19.97	20.44	18.77	19.49	19.25	19.97	20.44
8H	4H	18.91	19.72	19.37	20.17	20.63	18.91	19.72	19.37	20.17	20.63
	6H	18.85	19.52	19.35	20.01	20.49	18.85	19.52	19.35	20.01	20.49
	8H	18.82	19.42	19.33	19.93	20.41	18.82	19.42	19.33	19.93	20.41
	12H	18.81	19.34	19.32	19.83	20.39	18.81	19.34	19.32	19.83	20.39
12H	4H	18.88	19.61	19.36	20.09	20.56	18.88	19.61	19.36	20.09	20.56
	6H	18.81	19.41	19.32	19.92	20.41	18.81	19.41	19.32	19.92	20.41
	8H	18.80	19.33	19.31	19.82	20.38	18.80	19.33	19.31	19.82	20.38

END OF REPORT