

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: P979973

Luminaire Tested: PRLX-242-927-LL8-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979973
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-242-927-LL8-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

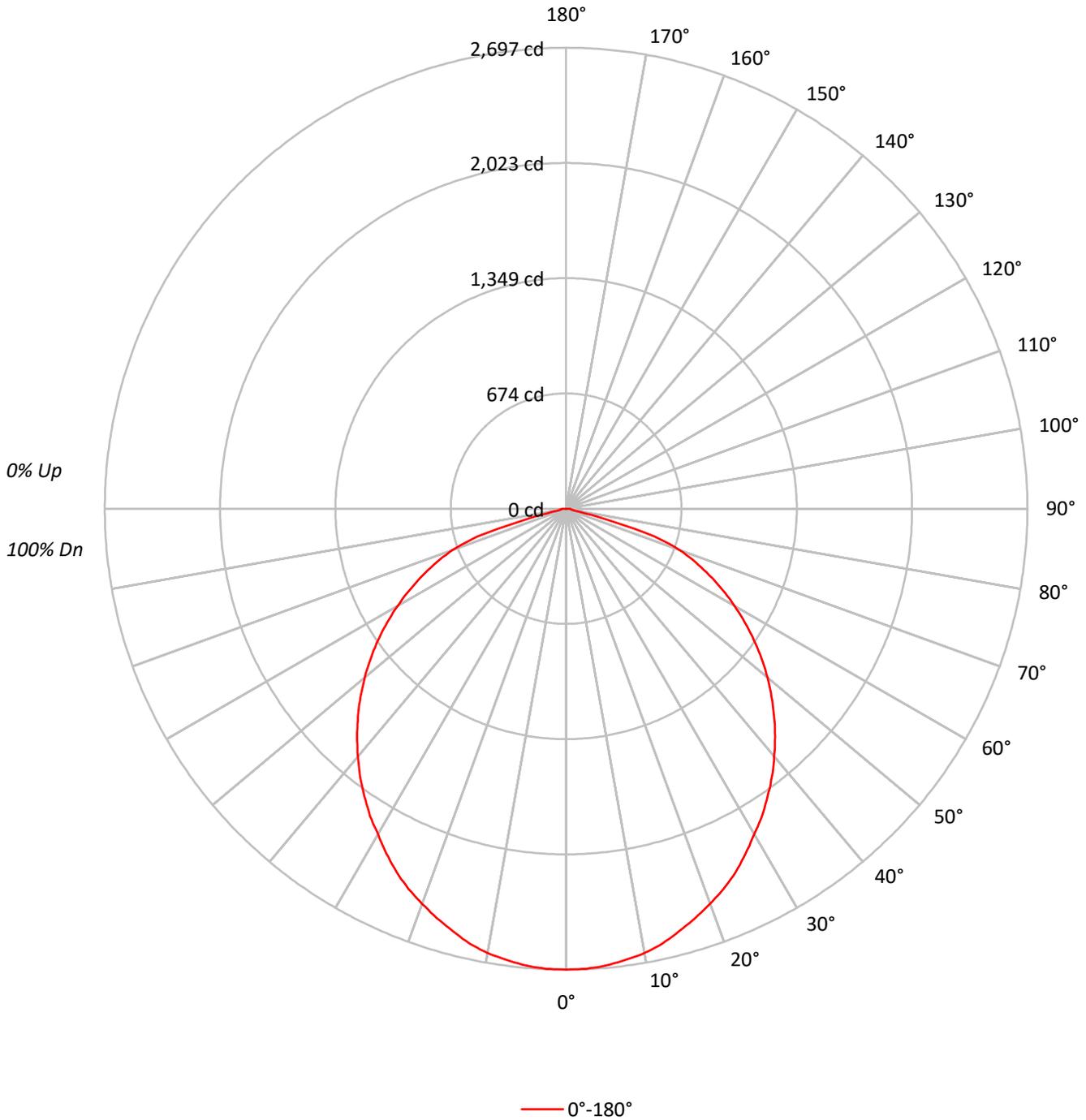
Lumens per Lamp: N/A
Luminaire Lumens: 7115.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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°	12070
5°	12058
10°	12001
15°	11856
20°	11715
25°	11582
30°	11363
35°	11225
40°	11058
45°	10888
50°	10702
55°	10463
60°	10169
65°	9794
70°	9252
75°	3840
80°	832
85°	1330

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10888 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.7	3.6
10°-20°	722.1	10.1
20°-30°	1079.3	15.2
30°-40°	1285.6	18.1
40°-50°	1327.1	18.7
50°-60°	1198.2	16.8
60°-70°	915.1	12.9
70°-80°	309.0	4.3
80°-90°	23.8	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°	2056.1	28.9
0°-40°	3341.7	47.0
0°-60°	5867.1	82.5
0°-90°	7115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7115.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2697	
5°	2684	255
15°	2559	722
25°	2346	1079
35°	2055	1286
45°	1720	1327
55°	1341	1198
65°	925	915
75°	222	309
85°	26	24
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2697.1
2.5°	2694.9
5°	2684.1
7.5°	2662.6
10°	2641.0
12.5°	2606.5
15°	2559.1
17.5°	2511.7
20°	2459.9
22.5°	2408.2
25°	2345.6
27.5°	2274.5
30°	2199.0
32.5°	2132.2
35°	2054.6
37.5°	1977.0
40°	1892.9
42.5°	1808.8
45°	1720.4
47.5°	1629.9
50°	1537.2
52.5°	1440.2
55°	1341.0
57.5°	1239.7
60°	1136.2
62.5°	1032.7
65°	924.9
67.5°	819.3
70°	707.1
72.5°	541.1
75°	222.1
77.5°	47.4
80°	32.3
82.5°	30.2
85°	25.9
87.5°	15.1
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	20.51	22.11	20.87	22.43	22.74	20.51	22.11	20.87	22.43	22.74
	3H	22.34	23.78	22.71	24.11	24.47	22.34	23.78	22.71	24.11	24.47
	4H	22.57	23.92	22.97	24.27	24.65	22.57	23.92	22.97	24.27	24.65
	6H	22.52	23.77	22.93	24.13	24.52	22.52	23.77	22.93	24.13	24.52
	8H	22.49	23.68	22.91	24.07	24.47	22.49	23.68	22.91	24.07	24.47
	12H	22.47	23.61	22.90	23.99	24.42	22.47	23.61	22.90	23.99	24.42
4H	2H	21.16	22.51	21.56	22.86	23.24	21.16	22.51	21.56	22.86	23.24
	3H	23.17	24.29	23.57	24.69	25.09	23.17	24.29	23.57	24.69	25.09
	4H	23.38	24.39	23.81	24.81	25.24	23.38	24.39	23.81	24.81	25.24
	6H	23.34	24.22	23.80	24.66	25.12	23.34	24.22	23.80	24.66	25.12
	8H	23.31	24.13	23.77	24.57	25.04	23.31	24.13	23.77	24.57	25.04
	12H	23.30	24.02	23.78	24.50	24.97	23.30	24.02	23.78	24.50	24.97
8H	4H	23.44	24.25	23.90	24.69	25.16	23.44	24.25	23.90	24.69	25.16
	6H	23.38	24.05	23.88	24.54	25.02	23.38	24.05	23.88	24.54	25.02
	8H	23.35	23.95	23.86	24.46	24.94	23.35	23.95	23.86	24.46	24.94
	12H	23.34	23.86	23.85	24.36	24.92	23.34	23.86	23.85	24.36	24.92
12H	4H	23.41	24.14	23.89	24.62	25.09	23.41	24.14	23.89	24.62	25.09
	6H	23.34	23.94	23.85	24.45	24.93	23.34	23.94	23.85	24.45	24.93
	8H	23.33	23.85	23.84	24.35	24.91	23.33	23.85	23.84	24.35	24.91