

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: P979931

Luminaire Tested: PRLX-242-927-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979931
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-927-31L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

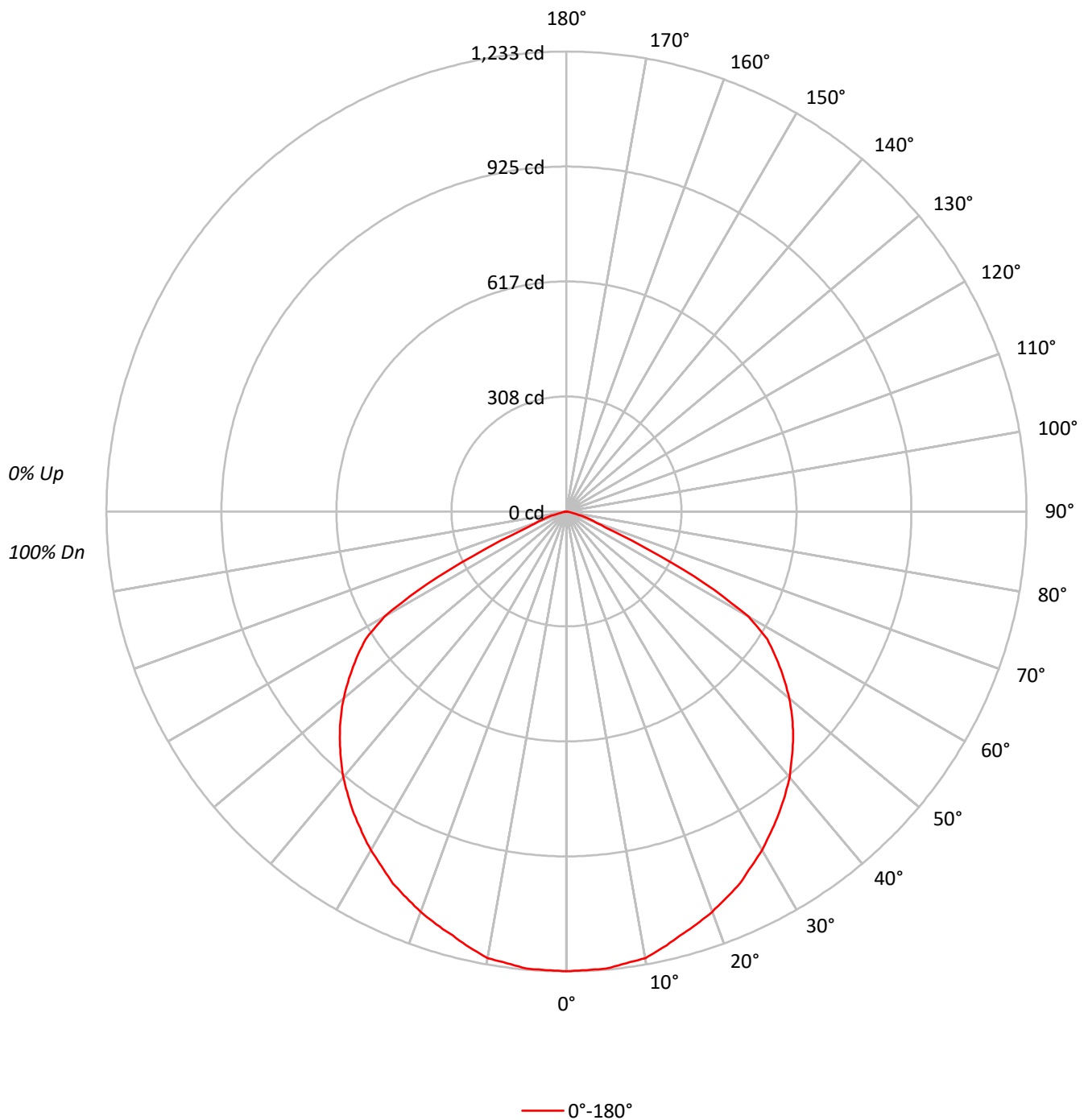
Lumens per Lamp: N/A
Luminaire Lumens: 3158.3 lumens
Efficiency: N/A
Efficacy: 153.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.6
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: P979931

CATALOG NUMBER: PRLX-242-927-31L-C-U-S-WHTE-X

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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5516
5°	5525
10°	5527
15°	5453
20°	5440
25°	5433
30°	5416
35°	5417
40°	5435
45°	5438
50°	5428
55°	5364
60°	5042
65°	2582
70°	1039
75°	489
80°	95
85°	139

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5438 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	3.7
10°-20°	333.0	10.5
20°-30°	506.6	16.0
30°-40°	620.8	19.7
40°-50°	662.5	21.0
50°-60°	610.8	19.3
60°-70°	268.9	8.5
70°-80°	36.0	1.1
80°-90°	2.7	0.1
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°	956.5	30.3
0°-40°	1577.3	49.9
0°-60°	2850.6	90.3
0°-90°	3158.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3158.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1233	
5°	1230	117
15°	1177	333
25°	1100	507
35°	992	621
45°	859	662
55°	688	611
65°	244	269
75°	28	36
85°	3	3
90°	0	

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CATALOG NUMBER: PRLX-242-927-31L-C-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	1232.6
2.5°	1230.8
5°	1229.9
7.5°	1221.6
10°	1216.2
12.5°	1197.9
15°	1176.9
17.5°	1160.5
20°	1142.2
22.5°	1121.2
25°	1100.2
27.5°	1072.8
30°	1048.2
32.5°	1019.9
35°	991.6
37.5°	961.4
40°	930.4
42.5°	894.8
45°	859.2
47.5°	820.8
50°	779.7
52.5°	734.1
55°	687.5
57.5°	638.2
60°	563.3
62.5°	419.1
65°	243.8
67.5°	113.2
70°	79.4
72.5°	59.3
75°	28.3
77.5°	8.2
80°	3.7
82.5°	3.7
85°	2.7
87.5°	1.8
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	18.77	20.32	19.14	20.63	20.95	18.77	20.32	19.14	20.63	20.95
	3H	18.82	20.19	19.20	20.52	20.88	18.82	20.19	19.20	20.52	20.88
	4H	18.78	20.07	19.18	20.42	20.80	18.78	20.07	19.18	20.42	20.80
	6H	18.72	19.91	19.14	20.27	20.66	18.72	19.91	19.14	20.27	20.66
	8H	18.69	19.81	19.12	20.20	20.60	18.69	19.81	19.12	20.20	20.60
	12H	18.66	19.73	19.09	20.11	20.54	18.66	19.73	19.09	20.11	20.54
4H	2H	18.87	20.15	19.27	20.50	20.88	18.87	20.15	19.27	20.50	20.88
	3H	18.96	20.00	19.37	20.40	20.80	18.96	20.00	19.37	20.40	20.80
	4H	18.92	19.85	19.35	20.27	20.71	18.92	19.85	19.35	20.27	20.71
	6H	18.86	19.67	19.32	20.11	20.57	18.86	19.67	19.32	20.11	20.57
	8H	18.82	19.57	19.28	20.02	20.48	18.82	19.57	19.28	20.02	20.48
	12H	18.79	19.46	19.27	19.93	20.41	18.79	19.46	19.27	19.93	20.41
8H	4H	18.83	19.58	19.30	20.03	20.50	18.83	19.58	19.30	20.03	20.50
	6H	18.75	19.37	19.25	19.86	20.34	18.75	19.37	19.25	19.86	20.34
	8H	18.70	19.25	19.22	19.77	20.25	18.70	19.25	19.22	19.77	20.25
	12H	18.67	19.16	19.18	19.65	20.22	18.67	19.16	19.18	19.65	20.22
12H	4H	18.80	19.47	19.28	19.95	20.42	18.80	19.47	19.28	19.95	20.42
	6H	18.70	19.25	19.21	19.76	20.25	18.70	19.25	19.21	19.76	20.25
	8H	18.66	19.16	19.18	19.65	20.22	18.66	19.16	19.18	19.65	20.22