

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: P979291

Luminaire Tested: PRLX-240-927-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979291
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-240-927-31L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 240 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

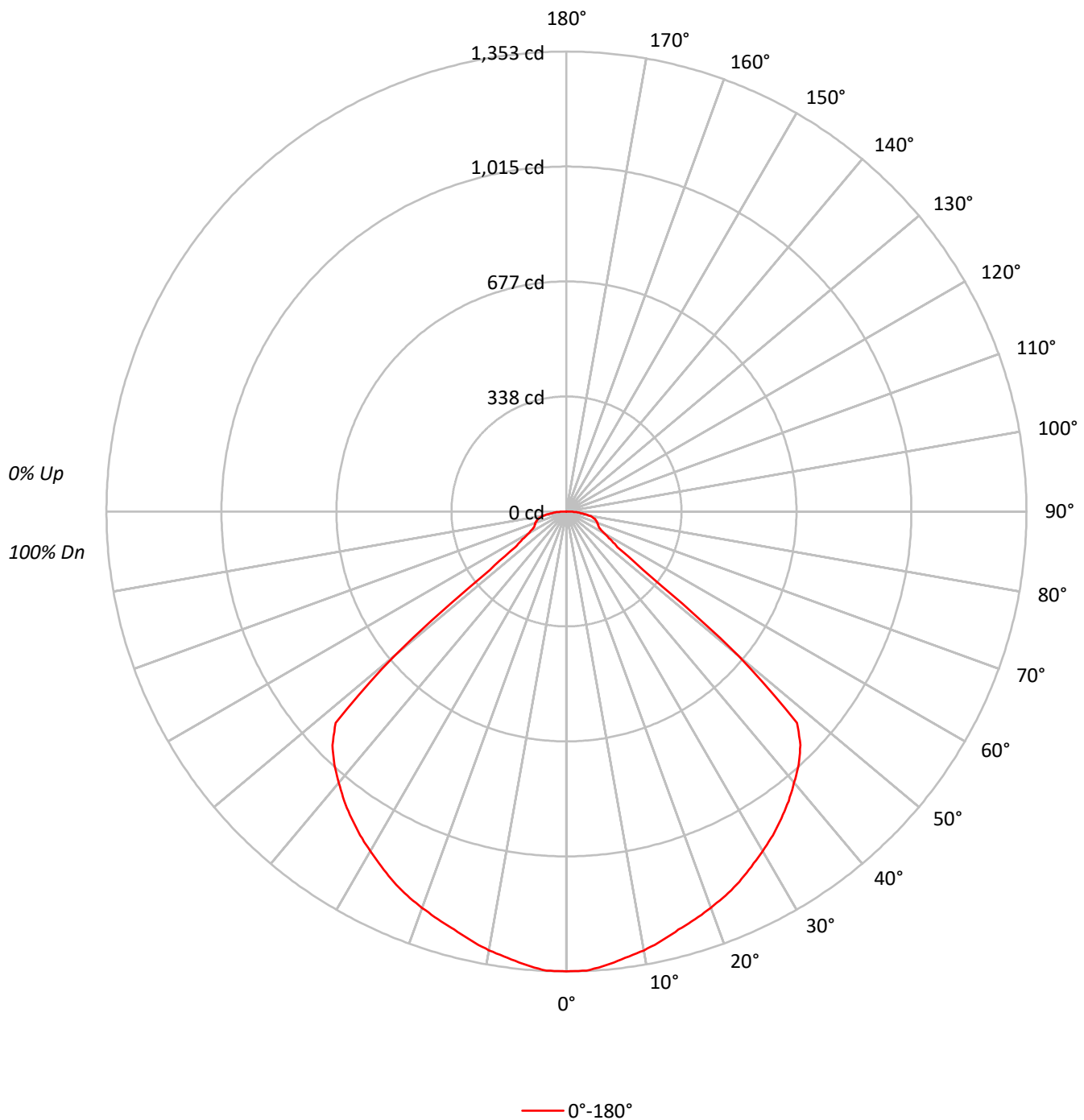
Lumens per Lamp: N/A
Luminaire Lumens: 2912.1 lumens
Efficiency: N/A
Efficacy: 141.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.43
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

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: P979291

CATALOG NUMBER: PRLX-240-927-31L-C-U-S-WHTE-X

Luminous Intensity Polar Plot



TEST NUMBER: P979291

CATALOG NUMBER: PRLX-240-927-31L-C-U-S-WHTE-X

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	111	107	103	100	108	105	101	99	100	98	95		97	95	93		88
2	103	96	90	85	100	94	89	84	91	86	83		87	84	81		77
3	95	86	79	74	93	85	78	73	82	76	72		79	75	71		68
4	88	78	70	64	86	77	70	64	74	68	63		72	67	62		60
5	82	71	63	57	80	69	62	57	67	61	56		66	60	55		53
6	76	64	56	51	74	63	56	50	62	55	50		60	54	50		47
7	71	59	51	45	69	58	50	45	56	50	45		55	49	44		42
8	66	54	46	41	65	53	46	41	52	45	40		51	45	40		38
9	62	50	42	37	61	49	42	37	48	41	37		47	41	36		35
10	58	46	38	34	57	45	38	34	44	38	33		43	37	33		32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13624
5°	13547
10°	13405
15°	13277
20°	13295
25°	13360
30°	13418
35°	13546
40°	13694
45°	13860
50°	10354
55°	3221
60°	2574
65°	2480
70°	2850
75°	3373
80°	3868
85°	3801

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13860 cd/sqm

TEST NUMBER: P979291

CATALOG NUMBER: PRLX-240-927-31L-C-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.0	4.4
10°-20°	360.5	12.4
20°-30°	554.4	19.0
30°-40°	690.1	23.7
40°-50°	724.0	24.9
50°-60°	223.8	7.7
60°-70°	106.1	3.6
70°-80°	89.6	3.1
80°-90°	36.7	1.3
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°	1041.9	35.8
0°-40°	1732.0	59.5
0°-60°	2679.8	92.0
0°-90°	2912.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2912.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1353	
5°	1340	127
15°	1274	361
25°	1202	554
35°	1102	690
45°	973	724
55°	184	224
65°	104	106
75°	87	90
85°	33	37
90°	0	

TEST NUMBER: P979291

CATALOG NUMBER: PRLX-240-927-31L-C-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	1353.1
2.5°	1352.2
5°	1340.3
7.5°	1324.8
10°	1311.1
12.5°	1293.8
15°	1273.7
17.5°	1258.2
20°	1240.8
22.5°	1223.5
25°	1202.5
27.5°	1177.8
30°	1154.1
32.5°	1129.4
35°	1102.0
37.5°	1073.7
40°	1041.8
42.5°	1010.7
45°	973.3
47.5°	920.3
50°	661.0
52.5°	284.0
55°	183.5
57.5°	152.5
60°	127.8
62.5°	111.4
65°	104.1
67.5°	100.4
70°	96.8
72.5°	92.2
75°	86.7
77.5°	78.5
80°	66.7
82.5°	50.2
85°	32.9
87.5°	18.3
90°	0.0

TEST NUMBER: P979291

CATALOG NUMBER: PRLX-240-927-31L-C-U-S-WHTE-X

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	12.06	13.48	12.42	13.80	14.11	12.06	13.48	12.42	13.80	14.11
	3H	14.02	15.29	14.40	15.61	15.98	14.02	15.29	14.40	15.61	15.98
	4H	15.18	16.36	15.58	16.71	17.09	15.18	16.36	15.58	16.71	17.09
	6H	16.31	17.40	16.72	17.77	18.16	16.31	17.40	16.72	17.77	18.16
	8H	16.74	17.77	17.17	18.16	18.56	16.74	17.77	17.17	18.16	18.56
	12H	17.04	18.03	17.47	18.41	18.84	17.04	18.03	17.47	18.41	18.84
4H	2H	12.57	13.75	12.97	14.10	14.48	12.57	13.75	12.97	14.10	14.48
	3H	14.93	15.90	15.35	16.30	16.71	14.93	15.90	15.35	16.30	16.71
	4H	16.31	17.18	16.74	17.60	18.04	16.31	17.18	16.74	17.60	18.04
	6H	17.64	18.39	18.10	18.83	19.30	17.64	18.39	18.10	18.83	19.30
	8H	18.13	18.84	18.60	19.29	19.75	18.13	18.84	18.60	19.29	19.75
	12H	18.50	19.13	18.99	19.61	20.09	18.50	19.13	18.99	19.61	20.09
8H	4H	16.84	17.55	17.31	18.00	18.46	16.84	17.55	17.31	18.00	18.46
	6H	18.35	18.94	18.85	19.43	19.91	18.35	18.94	18.85	19.43	19.91
	8H	18.95	19.49	19.47	20.00	20.49	18.95	19.49	19.47	20.00	20.49
	12H	19.43	19.91	19.94	20.40	20.97	19.43	19.91	19.94	20.40	20.97
12H	4H	16.94	17.57	17.42	18.05	18.52	16.94	17.57	17.42	18.05	18.52
	6H	18.49	19.02	19.00	19.53	20.02	18.49	19.02	19.00	19.53	20.02
	8H	19.17	19.65	19.68	20.14	20.71	19.17	19.65	19.68	20.14	20.71