

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: P980261

Luminaire Tested: PRLX-243-927-43L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980261
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-43L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

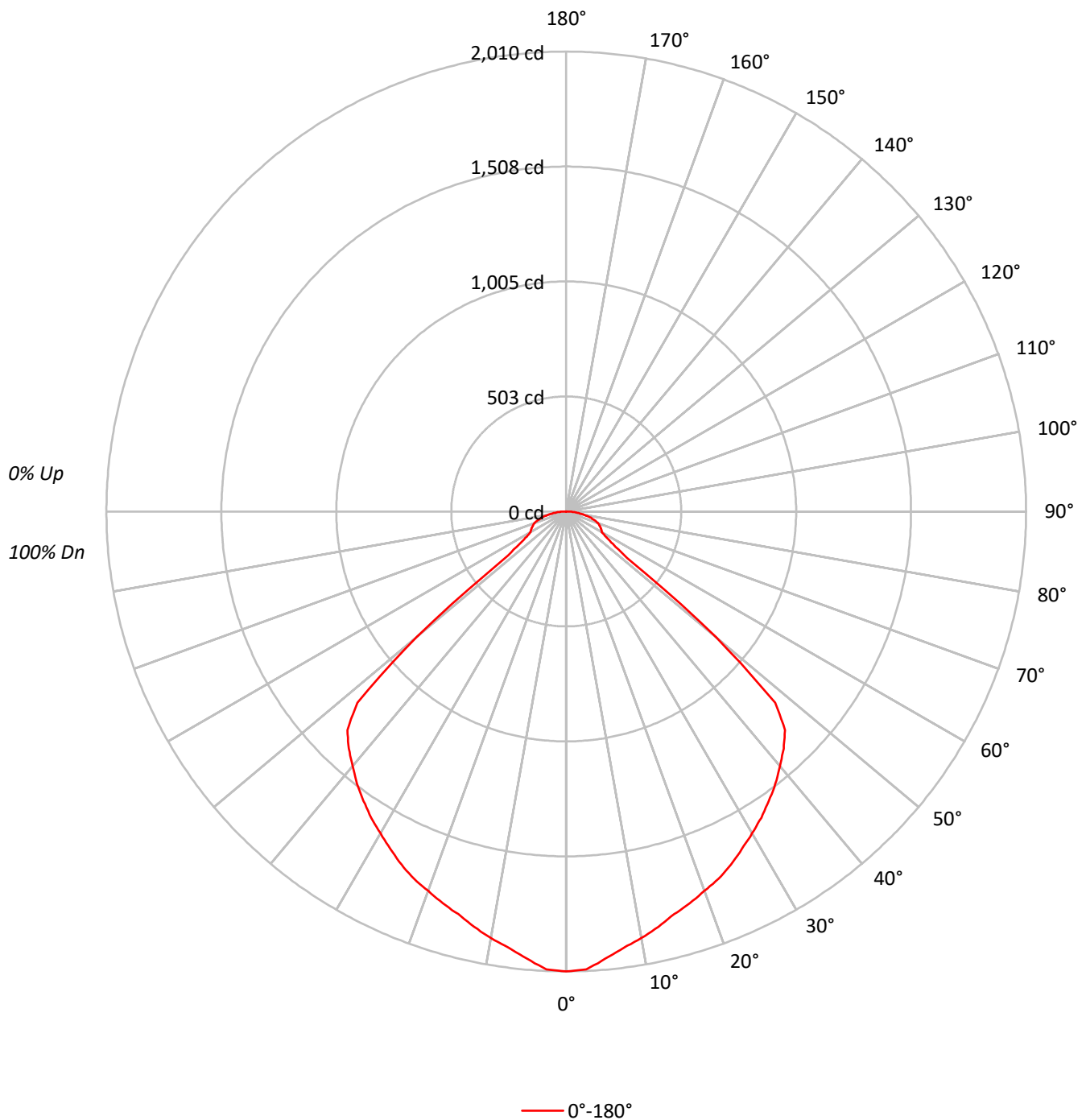
Lumens per Lamp: N/A
Luminaire Lumens: 4056.9 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P980261

CATALOG NUMBER: PRLX-243-927-43L-C-U-S-WHTE-X

Luminous Intensity Polar Plot



TEST NUMBER: P980261

CATALOG NUMBER: PRLX-243-927-43L-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	104	100	108	105	102	99	101	98	96		97	95	93		88
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		77
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		68
4	88	78	71	65	86	77	70	65	75	68	64		72	67	63		60
5	82	71	63	57	80	70	63	57	68	61	56		66	60	56		53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		43
8	67	54	47	41	65	54	46	41	52	46	41		51	45	41		39
9	62	50	43	37	61	49	42	37	48	42	37		47	41	37		35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	9917
5°	9720
10°	9487
15°	9308
20°	9265
25°	9273
30°	9254
35°	9301
40°	9357
45°	9438
50°	6556
55°	2133
60°	1779
65°	1930
70°	2113
75°	2196
80°	2100
85°	2129

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 9438 cd/sqm

TEST NUMBER: P980261

CATALOG NUMBER: PRLX-243-927-43L-C-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	4.6
10°-20°	516.0	12.7
20°-30°	784.8	19.3
30°-40°	967.1	23.8
40°-50°	992.1	24.5
50°-60°	288.3	7.1
60°-70°	163.1	4.0
70°-80°	119.3	2.9
80°-90°	41.1	1.0
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°	1485.9	36.6
0°-40°	2453.0	60.5
0°-60°	3733.4	92.0
0°-90°	4056.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4056.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2010	
5°	1962	185
15°	1822	516
25°	1703	785
35°	1544	967
45°	1353	992
55°	248	288
65°	165	163
75°	115	119
85°	38	41
90°	0	

TEST NUMBER: P980261

CATALOG NUMBER: PRLX-243-927-43L-C-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	2010.1
2.5°	2003.8
5°	1962.5
7.5°	1923.7
10°	1893.6
12.5°	1859.8
15°	1822.2
17.5°	1795.9
20°	1764.6
22.5°	1738.3
25°	1703.3
27.5°	1663.2
30°	1624.4
32.5°	1586.8
35°	1544.2
37.5°	1501.6
40°	1452.8
42.5°	1406.5
45°	1352.6
47.5°	1238.6
50°	854.1
52.5°	335.6
55°	248.0
57.5°	204.1
60°	180.3
62.5°	172.8
65°	165.3
67.5°	156.6
70°	146.5
72.5°	132.8
75°	115.2
77.5°	93.9
80°	73.9
82.5°	55.1
85°	37.6
87.5°	21.3
90°	0.0

TEST NUMBER: P980261

CATALOG NUMBER: PRLX-243-927-43L-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	10.49	11.91	10.86	12.22	12.53	10.49	11.91	10.86	12.22	12.53
	3H	12.92	14.17	13.29	14.50	14.86	12.92	14.17	13.29	14.50	14.86
	4H	13.97	15.14	14.38	15.49	15.88	13.97	15.14	14.38	15.49	15.88
	6H	14.76	15.84	15.17	16.20	16.60	14.76	15.84	15.17	16.20	16.60
	8H	15.04	16.06	15.46	16.45	16.85	15.04	16.06	15.46	16.45	16.85
	12H	15.25	16.23	15.68	16.61	17.04	15.25	16.23	15.68	16.61	17.04
4H	2H	11.24	12.41	11.64	12.76	13.14	11.24	12.41	11.64	12.76	13.14
	3H	13.94	14.90	14.35	15.30	15.70	13.94	14.90	14.35	15.30	15.70
	4H	15.13	15.99	15.56	16.41	16.85	15.13	15.99	15.56	16.41	16.85
	6H	16.04	16.79	16.50	17.23	17.70	16.04	16.79	16.50	17.23	17.70
	8H	16.37	17.07	16.84	17.51	17.98	16.37	17.07	16.84	17.51	17.98
	12H	16.64	17.26	17.12	17.74	18.21	16.64	17.26	17.12	17.74	18.21
8H	4H	15.55	16.25	16.02	16.70	17.16	15.55	16.25	16.02	16.70	17.16
	6H	16.61	17.18	17.11	17.68	18.16	16.61	17.18	17.11	17.68	18.16
	8H	17.03	17.55	17.55	18.06	18.55	17.03	17.55	17.55	18.06	18.55
	12H	17.40	17.87	17.91	18.36	18.93	17.40	17.87	17.91	18.36	18.93
12H	4H	15.60	16.22	16.08	16.70	17.17	15.60	16.22	16.08	16.70	17.17
	6H	16.69	17.21	17.21	17.73	18.22	16.69	17.21	17.21	17.73	18.22
	8H	17.18	17.65	17.70	18.14	18.71	17.18	17.65	17.70	18.14	18.71