

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: P980251

Luminaire Tested: PRLX-243-927-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980251
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-243-927-31L-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

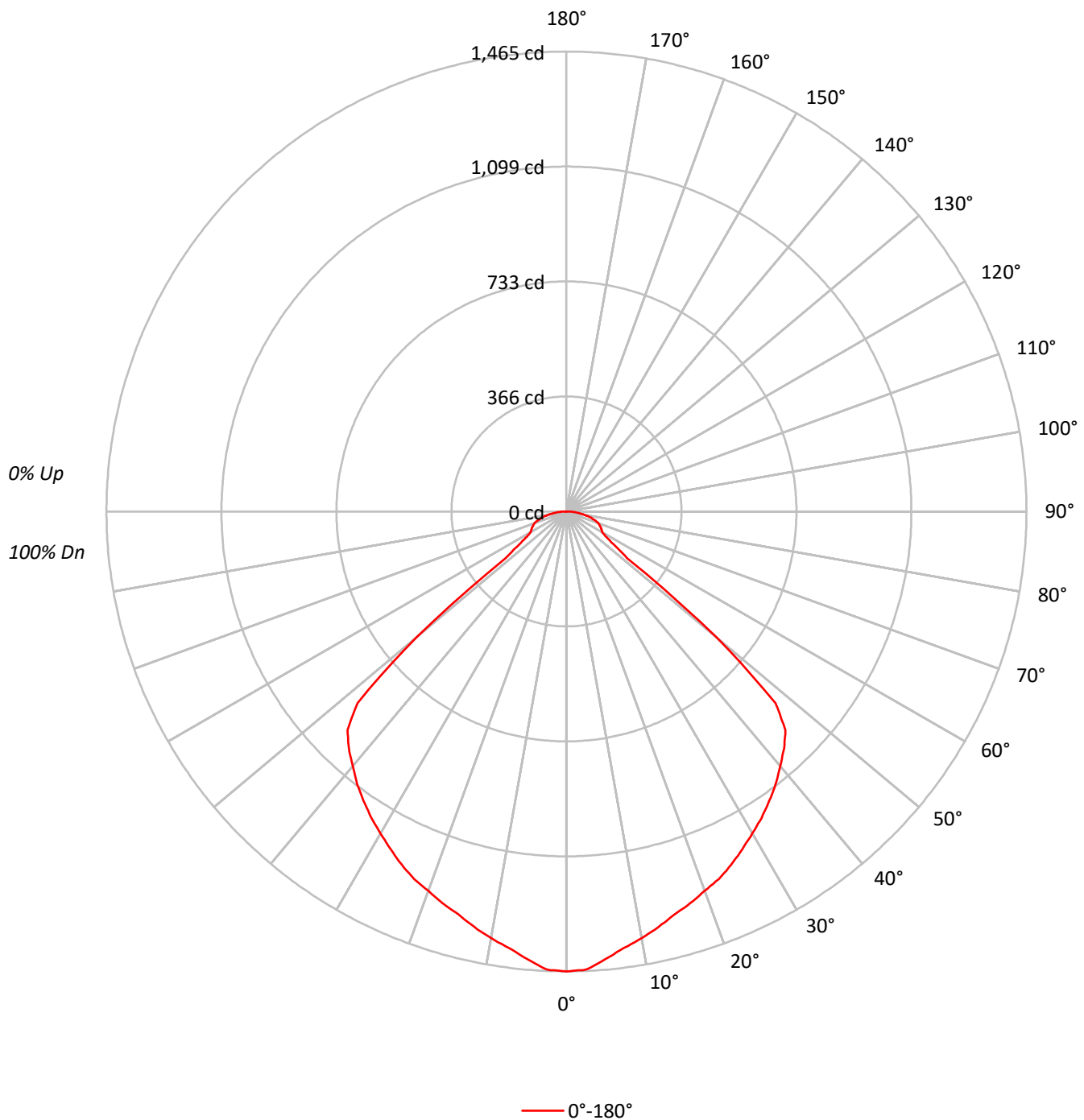
Lumens per Lamp: N/A
Luminaire Lumens: 2957.6 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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		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	49	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°	7230
5°	7086
10°	6916
15°	6786
20°	6755
25°	6760
30°	6746
35°	6781
40°	6821
45°	6880
50°	4780
55°	1555
60°	1298
65°	1407
70°	1541
75°	1601
80°	1531
85°	1551

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6880 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.0	4.6
10°-20°	376.2	12.7
20°-30°	572.2	19.3
30°-40°	705.0	23.8
40°-50°	723.3	24.5
50°-60°	210.2	7.1
60°-70°	118.9	4.0
70°-80°	87.0	2.9
80°-90°	30.0	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°	1083.3	36.6
0°-40°	1788.3	60.5
0°-60°	2721.8	92.0
0°-90°	2957.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2957.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1465	
5°	1431	135
15°	1328	376
25°	1242	572
35°	1126	705
45°	986	723
55°	181	210
65°	120	119
75°	84	87
85°	27	30
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1465.4
2.5°	1460.8
5°	1430.7
7.5°	1402.4
10°	1380.5
12.5°	1355.8
15°	1328.5
17.5°	1309.3
20°	1286.5
22.5°	1267.3
25°	1241.7
27.5°	1212.5
30°	1184.2
32.5°	1156.8
35°	1125.8
37.5°	1094.7
40°	1059.1
42.5°	1025.3
45°	986.1
47.5°	903.0
50°	622.7
52.5°	244.7
55°	180.8
57.5°	148.8
60°	131.5
62.5°	126.0
65°	120.5
67.5°	114.1
70°	106.8
72.5°	96.8
75°	84.0
77.5°	68.5
80°	53.9
82.5°	40.2
85°	27.4
87.5°	15.5
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	9.40	10.81	9.76	11.12	11.44	9.40	10.81	9.76	11.12	11.44
	3H	11.82	13.07	12.20	13.40	13.76	11.82	13.07	12.20	13.40	13.76
	4H	12.87	14.05	13.28	14.40	14.78	12.87	14.05	13.28	14.40	14.78
	6H	13.66	14.74	14.07	15.11	15.50	13.66	14.74	14.07	15.11	15.50
	8H	13.94	14.96	14.37	15.35	15.76	13.94	14.96	14.37	15.35	15.76
	12H	14.15	15.13	14.58	15.51	15.94	14.15	15.13	14.58	15.51	15.94
4H	2H	10.14	11.32	10.55	11.67	12.05	10.14	11.32	10.55	11.67	12.05
	3H	12.84	13.80	13.25	14.20	14.60	12.84	13.80	13.25	14.20	14.60
	4H	14.03	14.89	14.47	15.31	15.75	14.03	14.89	14.47	15.31	15.75
	6H	14.95	15.69	15.41	16.14	16.60	14.95	15.69	15.41	16.14	16.60
	8H	15.27	15.97	15.74	16.42	16.89	15.27	15.97	15.74	16.42	16.89
	12H	15.54	16.16	16.02	16.64	17.12	15.54	16.16	16.02	16.64	17.12
8H	4H	14.45	15.15	14.92	15.60	16.07	14.45	15.15	14.92	15.60	16.07
	6H	15.51	16.09	16.01	16.58	17.06	15.51	16.09	16.01	16.58	17.06
	8H	15.93	16.46	16.45	16.97	17.46	15.93	16.46	16.45	16.97	17.46
	12H	16.30	16.77	16.82	17.26	17.83	16.30	16.77	16.82	17.26	17.83
12H	4H	14.50	15.12	14.99	15.60	16.08	14.50	15.12	14.99	15.60	16.08
	6H	15.59	16.12	16.11	16.63	17.12	15.59	16.12	16.11	16.63	17.12
	8H	16.09	16.55	16.60	17.05	17.62	16.09	16.55	16.60	17.05	17.62