

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: P980481

Luminaire Tested: PRLX-243-940-23L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980481
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-243-940-23L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

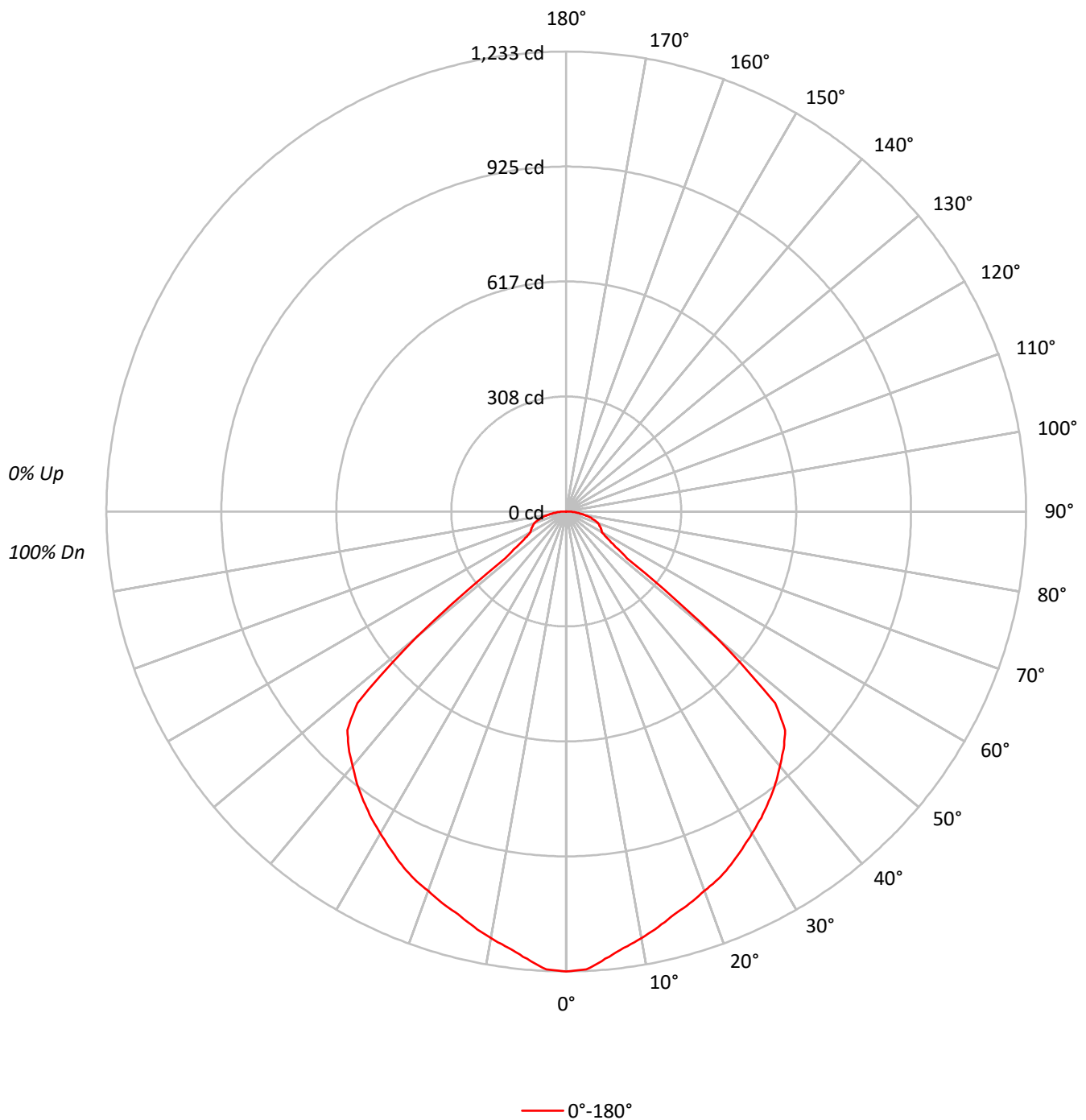
Lumens per Lamp: N/A
Luminaire Lumens: 2489.0 lumens
Efficiency: N/A
Efficacy: 165.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 15
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	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°	6085
5°	5963
10°	5821
15°	5711
20°	5685
25°	5689
30°	5678
35°	5706
40°	5741
45°	5791
50°	4022
55°	1308
60°	1091
65°	1184
70°	1297
75°	1348
80°	1287
85°	1308

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 5791 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	4.6
10°-20°	316.6	12.7
20°-30°	481.5	19.3
30°-40°	593.3	23.8
40°-50°	608.7	24.5
50°-60°	176.8	7.1
60°-70°	100.0	4.0
70°-80°	73.2	2.9
80°-90°	25.2	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°	911.7	36.6
0°-40°	1505.0	60.5
0°-60°	2290.5	92.0
0°-90°	2489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2489.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1233	
5°	1204	114
15°	1118	317
25°	1045	482
35°	947	593
45°	830	609
55°	152	177
65°	101	100
75°	71	73
85°	23	25
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1233.3
2.5°	1229.4
5°	1204.1
7.5°	1180.2
10°	1161.8
12.5°	1141.1
15°	1118.0
17.5°	1101.9
20°	1082.7
22.5°	1066.5
25°	1045.0
27.5°	1020.4
30°	996.6
32.5°	973.5
35°	947.4
37.5°	921.3
40°	891.3
42.5°	862.9
45°	829.9
47.5°	759.9
50°	524.0
52.5°	205.9
55°	152.1
57.5°	125.2
60°	110.6
62.5°	106.0
65°	101.4
67.5°	96.0
70°	89.9
72.5°	81.4
75°	70.7
77.5°	57.6
80°	45.3
82.5°	33.8
85°	23.1
87.5°	13.1
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	8.79	10.21	9.16	10.52	10.84	8.79	10.21	9.16	10.52	10.84
	3H	11.22	12.47	11.60	12.80	13.16	11.22	12.47	11.60	12.80	13.16
	4H	12.27	13.45	12.68	13.80	14.18	12.27	13.45	12.68	13.80	14.18
	6H	13.06	14.14	13.47	14.51	14.90	13.06	14.14	13.47	14.51	14.90
	8H	13.34	14.36	13.77	14.75	15.15	13.34	14.36	13.77	14.75	15.15
	12H	13.55	14.53	13.98	14.91	15.34	13.55	14.53	13.98	14.91	15.34
4H	2H	9.54	10.72	9.95	11.06	11.45	9.54	10.72	9.95	11.06	11.45
	3H	12.24	13.20	12.65	13.60	14.00	12.24	13.20	12.65	13.60	14.00
	4H	13.43	14.29	13.87	14.71	15.15	13.43	14.29	13.87	14.71	15.15
	6H	14.34	15.09	14.80	15.53	16.00	14.34	15.09	14.80	15.53	16.00
	8H	14.67	15.37	15.14	15.82	16.28	14.67	15.37	15.14	15.82	16.28
	12H	14.94	15.56	15.42	16.04	16.51	14.94	15.56	15.42	16.04	16.51
8H	4H	13.85	14.55	14.32	15.00	15.47	13.85	14.55	14.32	15.00	15.47
	6H	14.91	15.49	15.41	15.98	16.46	14.91	15.49	15.41	15.98	16.46
	8H	15.33	15.85	15.85	16.37	16.86	15.33	15.85	15.85	16.37	16.86
	12H	15.70	16.17	16.21	16.66	17.23	15.70	16.17	16.21	16.66	17.23
12H	4H	13.90	14.52	14.38	15.00	15.48	13.90	14.52	14.38	15.00	15.48
	6H	14.99	15.51	15.51	16.03	16.52	14.99	15.51	15.51	16.03	16.52
	8H	15.49	15.95	16.00	16.45	17.01	15.49	15.95	16.00	16.45	17.01