

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: P980491

Luminaire Tested: PRLX-243-940-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980491
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-243-940-31L-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

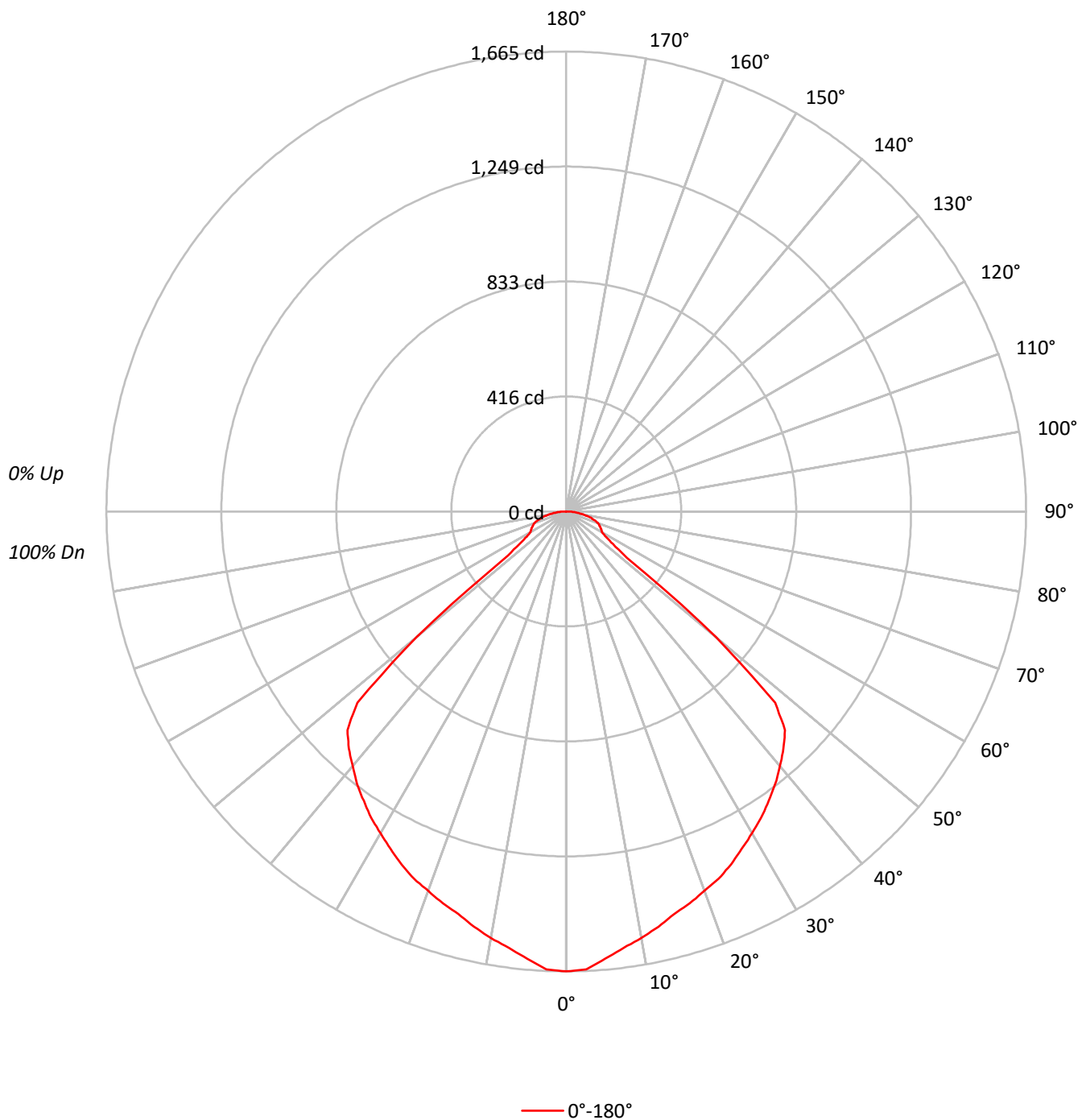
Lumens per Lamp: N/A
Luminaire Lumens: 3359.7 lumens
Efficiency: N/A
Efficacy: 163.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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		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	104	100		108	105	102	99		101	98	96		97	95	93		93	92	90
2	103	96	91	86		100	94	89	85		91	87	83		88	84	81		85	82	79
3	95	87	80	74		93	85	79	74		82	77	72		80	75	71		77	73	70
4	88	78	71	65		86	77	70	65		75	68	64		72	67	63		70	66	62
5	82	71	63	57		80	70	63	57		68	61	56		66	60	56		64	59	55
6	76	65	57	51		75	64	56	51		62	55	50		60	55	50		59	54	50
7	71	59	51	46		70	58	51	46		57	50	45		56	50	45		54	49	45
8	67	54	47	41		65	54	46	41		52	46	41		51	45	41		50	45	40
9	62	50	43	37		61	49	42	37		48	42	37		47	41	37		46	41	37
10	59	46	39	34		57	46	39	34		45	38	34		44	38	34		43	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8213
5°	8049
10°	7857
15°	7708
20°	7673
25°	7679
30°	7664
35°	7702
40°	7749
45°	7815
50°	5429
55°	1767
60°	1474
65°	1598
70°	1750
75°	1819
80°	1739
85°	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 7815 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.3	4.6
10°-20°	427.3	12.7
20°-30°	650.0	19.3
30°-40°	800.9	23.8
40°-50°	821.6	24.5
50°-60°	238.8	7.1
60°-70°	135.1	4.0
70°-80°	98.8	2.9
80°-90°	34.0	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°	1230.6	36.6
0°-40°	2031.5	60.5
0°-60°	3091.9	92.0
0°-90°	3359.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3359.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1665	
5°	1625	153
15°	1509	427
25°	1410	650
35°	1279	801
45°	1120	822
55°	205	239
65°	137	135
75°	95	99
85°	31	34
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1664.7
2.5°	1659.5
5°	1625.2
7.5°	1593.1
10°	1568.2
12.5°	1540.2
15°	1509.1
17.5°	1487.3
20°	1461.4
22.5°	1439.6
25°	1410.5
27.5°	1377.4
30°	1345.2
32.5°	1314.1
35°	1278.8
37.5°	1243.6
40°	1203.1
42.5°	1164.7
45°	1120.1
47.5°	1025.8
50°	707.3
52.5°	278.0
55°	205.4
57.5°	169.1
60°	149.4
62.5°	143.1
65°	136.9
67.5°	129.6
70°	121.3
72.5°	109.9
75°	95.4
77.5°	77.8
80°	61.2
82.5°	45.6
85°	31.1
87.5°	17.6
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	9.84	11.25	10.21	11.57	11.88	9.84	11.25	10.21	11.57	11.88
	3H	12.26	13.52	12.64	13.84	14.21	12.26	13.52	12.64	13.84	14.21
	4H	13.32	14.49	13.72	14.84	15.22	13.32	14.49	13.72	14.84	15.22
	6H	14.10	15.18	14.52	15.55	15.94	14.10	15.18	14.52	15.55	15.94
	8H	14.38	15.40	14.81	15.79	16.20	14.38	15.40	14.81	15.79	16.20
	12H	14.59	15.57	15.03	15.96	16.39	14.59	15.57	15.03	15.96	16.39
4H	2H	10.59	11.76	10.99	12.11	12.49	10.59	11.76	10.99	12.11	12.49
	3H	13.28	14.24	13.69	14.64	15.05	13.28	14.24	13.69	14.64	15.05
	4H	14.47	15.33	14.91	15.75	16.19	14.47	15.33	14.91	15.75	16.19
	6H	15.39	16.13	15.85	16.58	17.04	15.39	16.13	15.85	16.58	17.04
	8H	15.72	16.41	16.18	16.86	17.33	15.72	16.41	16.18	16.86	17.33
	12H	15.98	16.60	16.47	17.08	17.56	15.98	16.60	16.47	17.08	17.56
8H	4H	14.90	15.59	15.36	16.04	16.51	14.90	15.59	15.36	16.04	16.51
	6H	15.95	16.53	16.45	17.02	17.50	15.95	16.53	16.45	17.02	17.50
	8H	16.37	16.90	16.89	17.41	17.90	16.37	16.90	16.89	17.41	17.90
	12H	16.74	17.21	17.26	17.70	18.27	16.74	17.21	17.26	17.70	18.27
12H	4H	14.94	15.56	15.43	16.05	16.52	14.94	15.56	15.43	16.05	16.52
	6H	16.04	16.56	16.55	17.07	17.56	16.04	16.56	16.55	17.07	17.56
	8H	16.53	17.00	17.04	17.49	18.06	16.53	17.00	17.04	17.49	18.06