

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: P979851

Luminaire Tested: PRLX-241-940-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979851
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-940-31L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

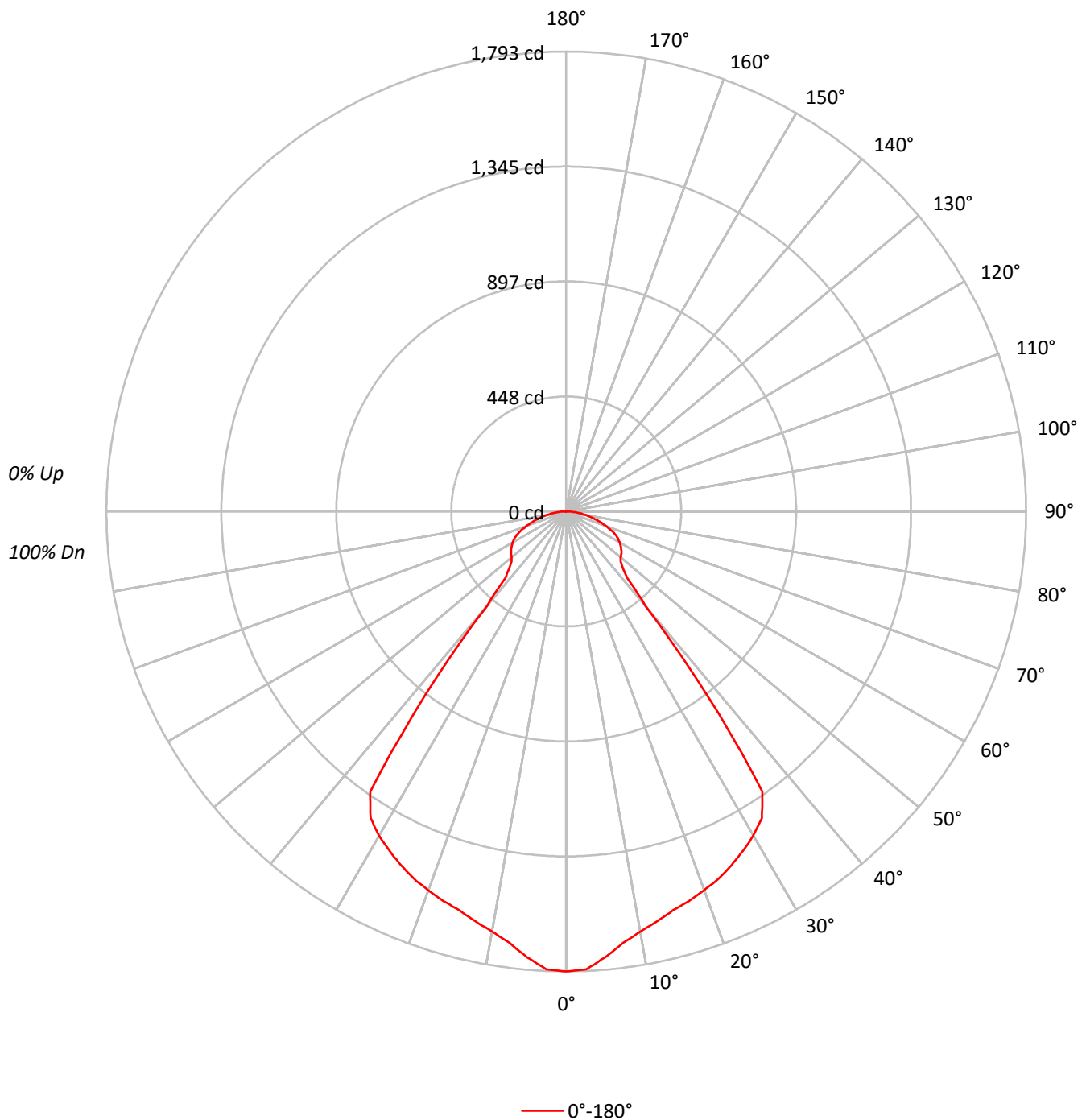
Lumens per Lamp: N/A
Luminaire Lumens: 2893.5 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.09
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

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: P979851

CATALOG NUMBER: PRLX-241-940-31L-C-U-S-WHTE-X

Luminous Intensity Polar Plot



TEST NUMBER: P979851

CATALOG NUMBER: PRLX-241-940-31L-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		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	105	101	98	100	98	95		97	94	92		93
2	103	96	90	85	100	94	89	84	91	86	83		87	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	66	87	78	71	65	75	69	65		73	68	64		71
5	83	72	64	59	81	71	64	59	69	63	58		67	62	57		65
6	78	66	59	53	76	65	58	53	64	57	52		62	56	52		61
7	73	61	54	48	71	60	53	48	59	53	48		58	52	48		56
8	69	57	49	44	67	56	49	44	55	48	44		54	48	44		53
9	65	53	46	41	63	52	45	41	51	45	40		50	44	40		49
10	61	49	42	38	60	49	42	37	48	42	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13825
5°	13500
10°	13015
15°	12847
20°	12891
25°	12951
30°	12990
35°	12543
40°	4843
45°	3404
50°	3334
55°	3527
60°	3710
65°	3822
70°	3694
75°	3491
80°	3267
85°	3025

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 65°

Luminance: 3822 cd/sqm

TEST NUMBER: P979851

CATALOG NUMBER: PRLX-241-940-31L-C-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.8	5.7
10°-20°	456.2	15.8
20°-30°	702.0	24.3
30°-40°	714.0	24.7
40°-50°	255.8	8.8
50°-60°	233.9	8.1
60°-70°	204.4	7.1
70°-80°	124.3	4.3
80°-90°	39.1	1.4
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°	1321.9	45.7
0°-40°	2036.0	70.4
0°-60°	2525.7	87.3
0°-90°	2893.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2893.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1793	
5°	1744	164
15°	1610	456
25°	1523	702
35°	1333	714
45°	312	256
55°	262	234
65°	210	204
75°	117	124
85°	34	39
90°	0	

TEST NUMBER: P979851

CATALOG NUMBER: PRLX-241-940-31L-C-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	1793.3
2.5°	1787.0
5°	1744.5
7.5°	1696.8
10°	1662.6
12.5°	1636.7
15°	1609.7
17.5°	1592.1
20°	1571.3
22.5°	1550.6
25°	1522.6
27.5°	1491.5
30°	1459.3
32.5°	1418.8
35°	1332.8
37.5°	902.3
40°	481.2
42.5°	350.6
45°	312.2
47.5°	288.3
50°	278.0
52.5°	270.7
55°	262.4
57.5°	252.0
60°	240.6
62.5°	227.1
65°	209.5
67.5°	186.7
70°	163.9
72.5°	140.0
75°	117.2
77.5°	95.4
80°	73.6
82.5°	53.9
85°	34.2
87.5°	18.7
90°	0.0

TEST NUMBER: P979851

CATALOG NUMBER: PRLX-241-940-31L-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	14.84	16.16	15.20	16.47	16.79	14.84	16.16	15.20	16.47	16.79
	3H	16.99	18.18	17.37	18.51	18.88	16.99	18.18	17.37	18.51	18.88
	4H	17.78	18.89	18.18	19.24	19.62	17.78	18.89	18.18	19.24	19.62
	6H	18.36	19.39	18.78	19.76	20.15	18.36	19.39	18.78	19.76	20.15
	8H	18.57	19.54	19.00	19.93	20.34	18.57	19.54	19.00	19.93	20.34
	12H	18.71	19.64	19.14	20.02	20.45	18.71	19.64	19.14	20.02	20.45
4H	2H	15.58	16.69	15.99	17.05	17.43	15.58	16.69	15.99	17.05	17.43
	3H	17.90	18.83	18.31	19.23	19.63	17.90	18.83	18.31	19.23	19.63
	4H	18.80	19.63	19.23	20.05	20.49	18.80	19.63	19.23	20.05	20.49
	6H	19.51	20.24	19.97	20.68	21.15	19.51	20.24	19.97	20.68	21.15
	8H	19.76	20.44	20.23	20.89	21.36	19.76	20.44	20.23	20.89	21.36
	12H	19.95	20.55	20.43	21.03	21.50	19.95	20.55	20.43	21.03	21.50
8H	4H	19.12	19.80	19.59	20.24	20.71	19.12	19.80	19.59	20.24	20.71
	6H	19.97	20.53	20.48	21.02	21.50	19.97	20.53	20.48	21.02	21.50
	8H	20.31	20.81	20.83	21.32	21.81	20.31	20.81	20.83	21.32	21.81
	12H	20.60	21.03	21.11	21.52	22.09	20.60	21.03	21.11	21.52	22.09
12H	4H	19.15	19.75	19.63	20.23	20.70	19.15	19.75	19.63	20.23	20.70
	6H	20.04	20.53	20.56	21.05	21.54	20.04	20.53	20.56	21.05	21.54
	8H	20.44	20.87	20.96	21.37	21.94	20.44	20.87	20.96	21.37	21.94