

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: P980333

Luminaire Tested: PRLX-243-930-31L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980333
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-930-31L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

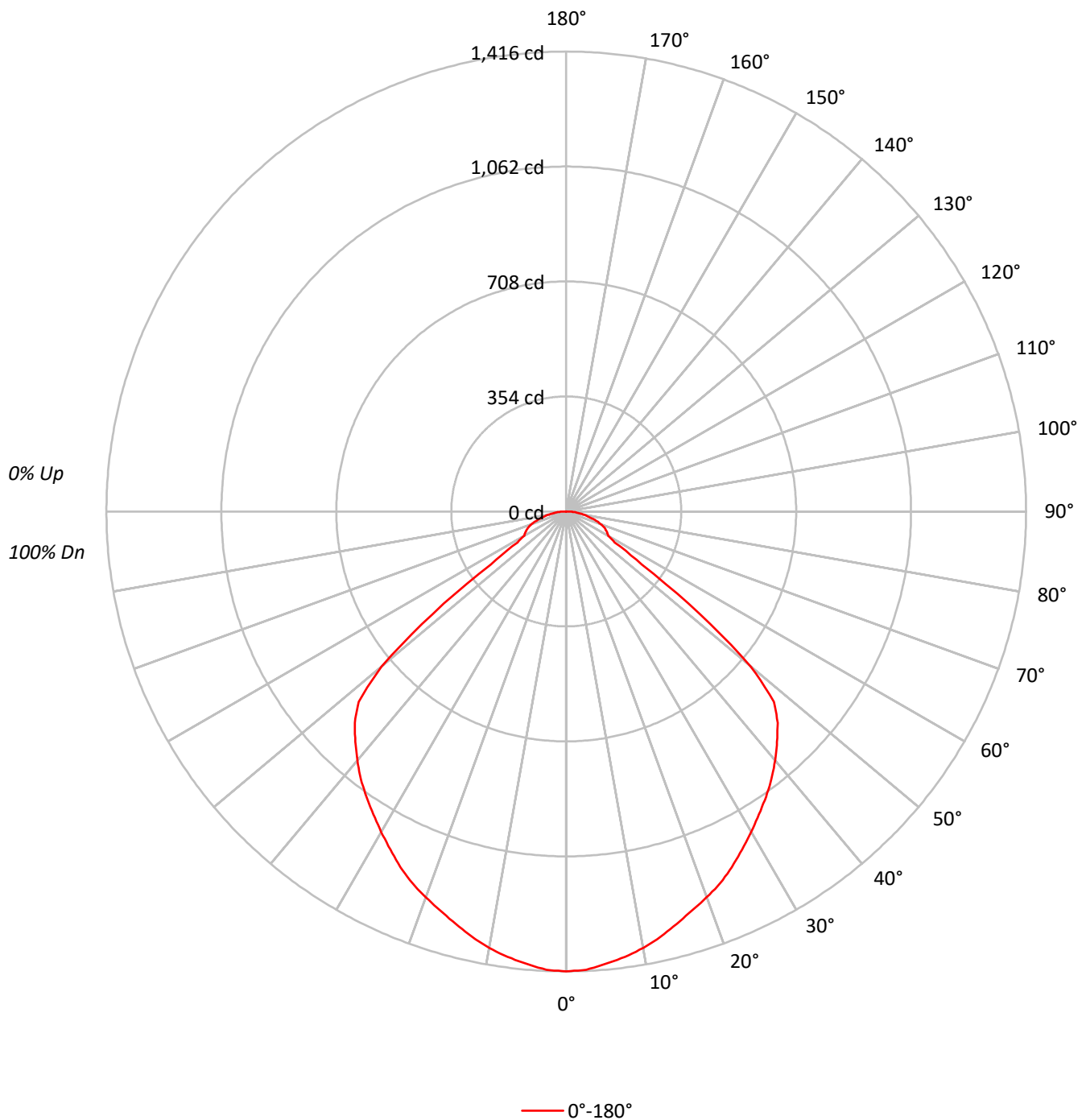
Lumens per Lamp: N/A
Luminaire Lumens: 2993.0 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 20.7
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: P980333

CATALOG NUMBER: PRLX-243-930-31L-F-U-S-WHTE-X

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
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	99	100	98	95		97	95	93		93
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		84
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		76
4	88	77	70	64	86	76	69	63	74	67	63		71	66	62		69
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		63
6	76	64	56	50	74	63	55	50	61	54	49		59	53	49		58
7	70	58	50	44	69	57	50	44	56	49	44		54	48	44		53
8	66	53	45	40	64	53	45	40	51	45	40		50	44	39		49
9	61	49	41	36	60	48	41	36	47	41	36		46	40	36		45
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	6987
5°	6927
10°	6838
15°	6714
20°	6637
25°	6576
30°	6491
35°	6460
40°	6446
45°	6423
50°	5698
55°	2439
60°	1471
65°	1570
70°	1620
75°	1569
80°	1512
85°	1534

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6423 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.5	4.4
10°-20°	371.2	12.4
20°-30°	556.2	18.6
30°-40°	671.5	22.4
40°-50°	698.6	23.3
50°-60°	314.2	10.5
60°-70°	131.9	4.4
70°-80°	87.2	2.9
80°-90°	29.6	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°	1059.9	35.4
0°-40°	1731.4	57.8
0°-60°	2744.2	91.7
0°-90°	2993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2993.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1416	
5°	1399	132
15°	1314	371
25°	1208	556
35°	1072	672
45°	920	699
55°	284	314
65°	134	132
75°	82	87
85°	27	30
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1416.1
2.5°	1412.2
5°	1398.7
7.5°	1383.2
10°	1364.8
12.5°	1341.6
15°	1314.4
17.5°	1288.3
20°	1264.1
22.5°	1239.0
25°	1208.0
27.5°	1173.1
30°	1139.3
32.5°	1105.4
35°	1072.5
37.5°	1038.6
40°	1000.8
42.5°	961.2
45°	920.5
47.5°	867.3
50°	742.4
52.5°	518.8
55°	283.6
57.5°	177.1
60°	149.1
62.5°	142.3
65°	134.5
67.5°	124.9
70°	112.3
72.5°	97.8
75°	82.3
77.5°	67.8
80°	53.2
82.5°	39.7
85°	27.1
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	10.50	11.94	10.86	12.26	12.57	10.50	11.94	10.86	12.26	12.57
	3H	12.59	13.88	12.97	14.20	14.57	12.59	13.88	12.97	14.20	14.57
	4H	13.42	14.62	13.82	14.97	15.35	13.42	14.62	13.82	14.97	15.35
	6H	14.06	15.17	14.48	15.54	15.93	14.06	15.17	14.48	15.54	15.93
	8H	14.30	15.35	14.73	15.74	16.14	14.30	15.35	14.73	15.74	16.14
	12H	14.48	15.49	14.91	15.87	16.30	14.48	15.49	14.91	15.87	16.30
4H	2H	11.16	12.36	11.56	12.71	13.09	11.16	12.36	11.56	12.71	13.09
	3H	13.50	14.49	13.91	14.89	15.29	13.50	14.49	13.91	14.89	15.29
	4H	14.46	15.35	14.90	15.76	16.20	14.46	15.35	14.90	15.76	16.20
	6H	15.25	16.01	15.71	16.46	16.92	15.25	16.01	15.71	16.46	16.92
	8H	15.53	16.25	16.00	16.69	17.16	15.53	16.25	16.00	16.69	17.16
	12H	15.77	16.41	16.25	16.89	17.36	15.77	16.41	16.25	16.89	17.36
8H	4H	14.82	15.53	15.28	15.98	16.45	14.82	15.53	15.28	15.98	16.45
	6H	15.74	16.33	16.24	16.83	17.31	15.74	16.33	16.24	16.83	17.31
	8H	16.12	16.65	16.63	17.17	17.66	16.12	16.65	16.63	17.17	17.66
	12H	16.45	16.93	16.96	17.43	17.99	16.45	16.93	16.96	17.43	17.99
12H	4H	14.85	15.49	15.34	15.97	16.45	14.85	15.49	15.34	15.97	16.45
	6H	15.81	16.35	16.33	16.86	17.35	15.81	16.35	16.33	16.86	17.35
	8H	16.26	16.74	16.77	17.23	17.80	16.26	16.74	16.77	17.23	17.80