

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: P980023

Luminaire Tested: PRLX-242-930-43L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980023
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-930-43L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH FROSTED LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

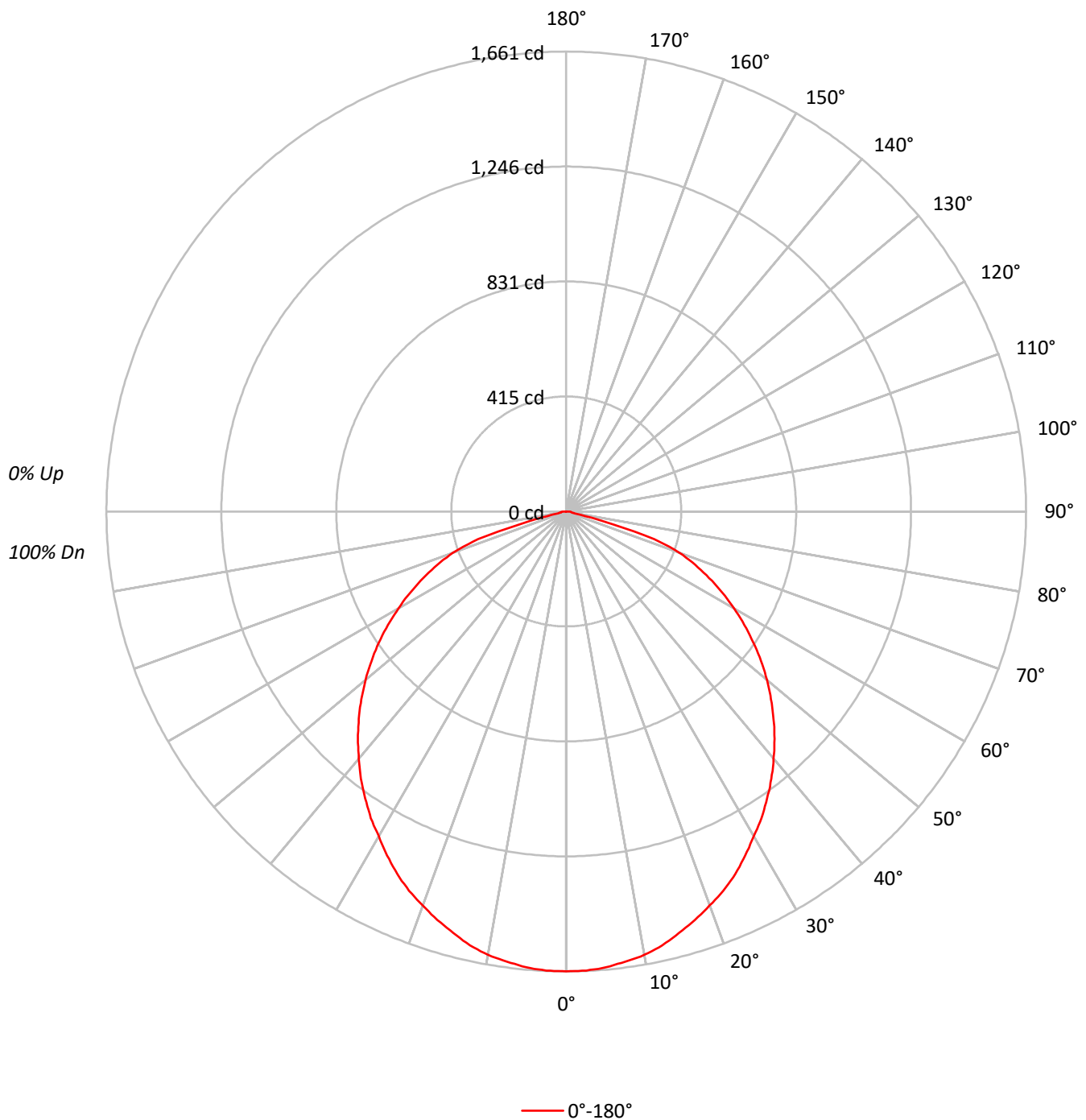
Lumens per Lamp: N/A
Luminaire Lumens: 4381.7 lumens
Efficiency: N/A
Efficacy: 148.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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: P980023

CATALOG NUMBER: PRLX-242-930-43L-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	110	105	101	98	107	103	100	96	99	96	93		95	93	90		91
2	100	92	86	80	98	90	85	79	87	82	78		84	80	76		81
3	91	81	73	67	89	80	72	67	77	71	65		74	69	64		71
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	50	43	37		49	42	37		47
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7433
5°	7426
10°	7391
15°	7302
20°	7214
25°	7133
30°	6998
35°	6912
40°	6810
45°	6705
50°	6591
55°	6443
60°	6262
65°	6032
70°	5698
75°	2365
80°	513
85°	816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6705 cd/sqm

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CATALOG NUMBER: PRLX-242-930-43L-F-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.9	3.6
10°-20°	444.7	10.1
20°-30°	664.7	15.2
30°-40°	791.7	18.1
40°-50°	817.3	18.7
50°-60°	737.9	16.8
60°-70°	563.6	12.9
70°-80°	190.3	4.3
80°-90°	14.6	0.3
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°	1266.3	28.9
0°-40°	2058.0	47.0
0°-60°	3613.2	82.5
0°-90°	4381.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4381.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1661	
5°	1653	157
15°	1576	445
25°	1445	665
35°	1265	792
45°	1060	817
55°	826	738
65°	570	564
75°	137	190
85°	16	15
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1661.0
2.5°	1659.6
5°	1653.0
7.5°	1639.7
10°	1626.4
12.5°	1605.2
15°	1576.0
17.5°	1546.8
20°	1514.9
22.5°	1483.1
25°	1444.6
27.5°	1400.7
30°	1354.3
32.5°	1313.1
35°	1265.3
37.5°	1217.5
40°	1165.7
42.5°	1114.0
45°	1059.5
47.5°	1003.8
50°	946.7
52.5°	886.9
55°	825.8
57.5°	763.4
60°	699.7
62.5°	636.0
65°	569.6
67.5°	504.5
70°	435.5
72.5°	333.3
75°	136.8
77.5°	29.2
80°	19.9
82.5°	18.6
85°	15.9
87.5°	9.3
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	18.82	20.43	19.19	20.74	21.06	18.82	20.43	19.19	20.74	21.06
	3H	20.65	22.09	21.03	22.42	22.78	20.65	22.09	21.03	22.42	22.78
	4H	20.88	22.24	21.28	22.59	22.96	20.88	22.24	21.28	22.59	22.96
	6H	20.83	22.08	21.24	22.45	22.84	20.83	22.08	21.24	22.45	22.84
	8H	20.80	22.00	21.23	22.39	22.79	20.80	22.00	21.23	22.39	22.79
	12H	20.78	21.92	21.21	22.30	22.73	20.78	21.92	21.21	22.30	22.73
4H	2H	19.47	20.83	19.87	21.18	21.55	19.47	20.83	19.87	21.18	21.55
	3H	21.48	22.60	21.89	23.00	23.40	21.48	22.60	21.89	23.00	23.40
	4H	21.70	22.71	22.13	23.12	23.56	21.70	22.71	22.13	23.12	23.56
	6H	21.66	22.53	22.11	22.98	23.43	21.66	22.53	22.11	22.98	23.43
	8H	21.63	22.44	22.09	22.89	23.35	21.63	22.44	22.09	22.89	23.35
	12H	21.61	22.34	22.09	22.82	23.29	21.61	22.34	22.09	22.82	23.29
8H	4H	21.75	22.57	22.21	23.01	23.48	21.75	22.57	22.21	23.01	23.48
	6H	21.70	22.37	22.19	22.86	23.33	21.70	22.37	22.19	22.86	23.33
	8H	21.67	22.26	22.18	22.77	23.26	21.67	22.26	22.18	22.77	23.26
	12H	21.66	22.18	22.17	22.67	23.24	21.66	22.18	22.17	22.67	23.24
12H	4H	21.73	22.46	22.21	22.93	23.40	21.73	22.46	22.21	22.93	23.40
	6H	21.66	22.25	22.17	22.76	23.25	21.66	22.25	22.17	22.76	23.25
	8H	21.65	22.17	22.16	22.66	23.23	21.65	22.17	22.16	22.66	23.23