

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: P979921

Luminaire Tested: PRLX-242-927-23L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979921
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-927-23L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

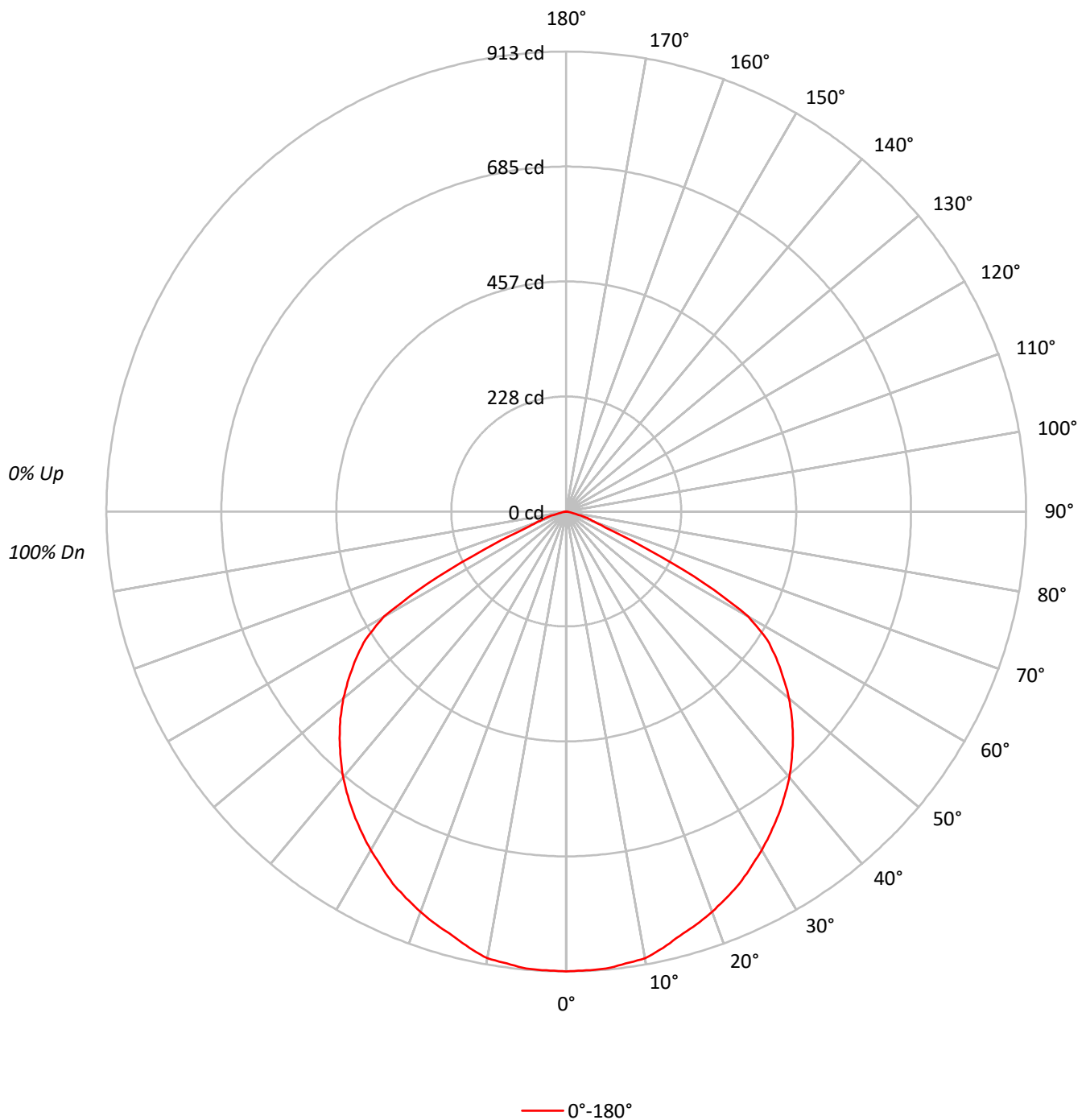
Lumens per Lamp: N/A
Luminaire Lumens: 2339.9 lumens
Efficiency: N/A
Efficacy: 156.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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		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	103	100		108	104	101	98		100	98	95		96	94	92		93	91	90
2	102	95	89	84		99	93	87	83		89	85	81		86	82	79		83	80	77
3	93	84	76	71		91	82	75	70		79	74	69		77	72	68		74	70	66
4	86	75	67	60		83	73	66	60		71	64	59		69	63	58		67	62	58
5	79	67	58	52		77	66	58	52		64	57	51		62	56	51		60	55	50
6	73	60	52	46		71	59	51	45		57	50	45		56	49	45		54	49	44
7	68	55	46	40		66	54	46	40		52	45	40		51	44	40		49	44	39
8	63	50	42	36		61	49	41	36		48	41	36		47	40	35		45	40	35
9	59	46	38	32		57	45	37	32		44	37	32		43	36	32		42	36	32
10	55	42	34	29		54	42	34	29		41	34	29		40	33	29		39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4087
5°	4093
10°	4094
15°	4039
20°	4030
25°	4025
30°	4013
35°	4013
40°	4027
45°	4028
50°	4022
55°	3974
60°	3736
65°	1912
70°	769
75°	363
80°	70
85°	103

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4028 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	3.7
10°-20°	246.7	10.5
20°-30°	375.3	16.0
30°-40°	459.9	19.7
40°-50°	490.8	21.0
50°-60°	452.5	19.3
60°-70°	199.3	8.5
70°-80°	26.7	1.1
80°-90°	2.0	0.1
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°	708.6	30.3
0°-40°	1168.6	49.9
0°-60°	2111.9	90.3
0°-90°	2339.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2339.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	913	
5°	911	87
15°	872	247
25°	815	375
35°	735	460
45°	636	491
55°	509	453
65°	181	199
75°	21	27
85°	2	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	913.2
2.5°	911.8
5°	911.1
7.5°	905.1
10°	901.0
12.5°	887.5
15°	871.9
17.5°	859.7
20°	846.2
22.5°	830.6
25°	815.1
27.5°	794.8
30°	776.5
32.5°	755.6
35°	734.6
37.5°	712.3
40°	689.3
42.5°	662.9
45°	636.5
47.5°	608.1
50°	577.7
52.5°	543.8
55°	509.3
57.5°	472.8
60°	417.4
62.5°	310.5
65°	180.6
67.5°	83.9
70°	58.8
72.5°	44.0
75°	21.0
77.5°	6.1
80°	2.7
82.5°	2.7
85°	2.0
87.5°	1.4
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	17.73	19.28	18.09	19.59	19.91	17.73	19.28	18.09	19.59	19.91
	3H	17.78	19.15	18.15	19.48	19.84	17.78	19.15	18.15	19.48	19.84
	4H	17.74	19.03	18.14	19.38	19.75	17.74	19.03	18.14	19.38	19.75
	6H	17.68	18.86	18.09	19.23	19.62	17.68	18.86	18.09	19.23	19.62
	8H	17.65	18.77	18.07	19.16	19.56	17.65	18.77	18.07	19.16	19.56
	12H	17.62	18.69	18.05	19.07	19.50	17.62	18.69	18.05	19.07	19.50
4H	2H	17.82	19.11	18.22	19.46	19.84	17.82	19.11	18.22	19.46	19.84
	3H	17.91	18.96	18.32	19.36	19.76	17.91	18.96	18.32	19.36	19.76
	4H	17.88	18.81	18.31	19.23	19.67	17.88	18.81	18.31	19.23	19.67
	6H	17.82	18.63	18.28	19.07	19.53	17.82	18.63	18.28	19.07	19.53
	8H	17.78	18.53	18.24	18.97	19.44	17.78	18.53	18.24	18.97	19.44
	12H	17.74	18.41	18.23	18.89	19.36	17.74	18.41	18.23	18.89	19.36
8H	4H	17.79	18.54	18.25	18.99	19.45	17.79	18.54	18.25	18.99	19.45
	6H	17.71	18.33	18.21	18.82	19.30	17.71	18.33	18.21	18.82	19.30
	8H	17.66	18.21	18.17	18.72	19.21	17.66	18.21	18.17	18.72	19.21
	12H	17.62	18.12	18.13	18.61	19.17	17.62	18.12	18.13	18.61	19.17
12H	4H	17.76	18.43	18.24	18.91	19.38	17.76	18.43	18.24	18.91	19.38
	6H	17.66	18.21	18.17	18.72	19.21	17.66	18.21	18.17	18.72	19.21
	8H	17.62	18.11	18.13	18.61	19.17	17.62	18.11	18.13	18.61	19.17