

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: P980142

Luminaire Tested: PRLX-242-940-12L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980142
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-940-12L-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

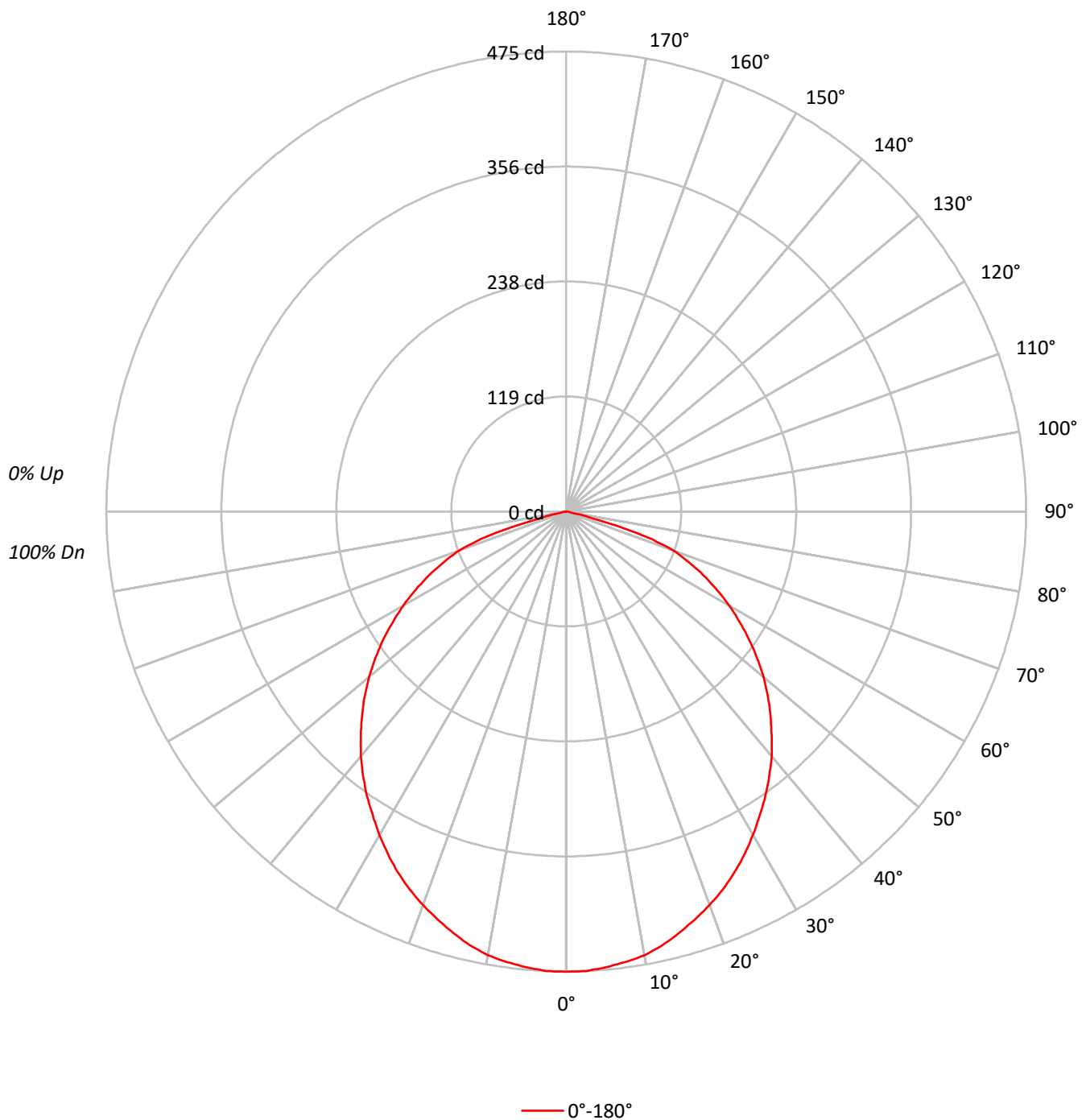
Lumens per Lamp: N/A
Luminaire Lumens: 1224.3 lumens
Efficiency: N/A
Efficacy: 163.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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: P980142

CATALOG NUMBER: PRLX-242-940-12L-F-U-S-BLAK-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	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72
4	84	73	64	58	82	71	63	57	69	62	57		67	61	56		64
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		53
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		48
8	62	48	40	34	60	48	40	34	46	39	34		45	39	34		44
9	58	44	36	31	56	44	36	31	43	36	31		42	35	31		41
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2127
5°	2123
10°	2115
15°	2088
20°	2060
25°	2031
30°	1993
35°	1961
40°	1928
45°	1889
50°	1852
55°	1800
60°	1739
65°	1658
70°	1536
75°	602
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1889 cd/sqm

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CATALOG NUMBER: PRLX-242-940-12L-F-U-S-BLAK-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	3.7
10°-20°	127.1	10.4
20°-30°	189.4	15.5
30°-40°	224.4	18.3
40°-50°	230.3	18.8
50°-60°	206.1	16.8
60°-70°	154.6	12.6
70°-80°	47.6	3.9
80°-90°	0.0	0.0
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°	361.4	29.5
0°-40°	585.8	47.8
0°-60°	1022.1	83.5
0°-90°	1224.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1224.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	475	
5°	473	45
15°	451	127
25°	411	189
35°	359	224
45°	298	230
55°	231	206
65°	157	155
75°	35	48
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	475.4
2.5°	475.0
5°	472.6
7.5°	469.4
10°	465.4
12.5°	459.0
15°	450.6
17.5°	441.8
20°	432.6
22.5°	422.6
25°	411.4
27.5°	398.9
30°	385.7
32.5°	372.1
35°	358.9
37.5°	344.5
40°	330.0
42.5°	314.0
45°	298.4
47.5°	282.4
50°	266.0
52.5°	248.3
55°	230.7
57.5°	212.3
60°	194.3
62.5°	175.4
65°	156.6
67.5°	137.0
70°	117.4
72.5°	86.9
75°	34.8
77.5°	1.6
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
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	14.38	15.97	14.74	16.28	16.60	14.38	15.97	14.74	16.28	16.60
	3H	16.13	17.56	16.51	17.88	18.24	16.13	17.56	16.51	17.88	18.24
	4H	16.33	17.67	16.72	18.01	18.39	16.33	17.67	16.72	18.01	18.39
	6H	16.27	17.50	16.68	17.87	18.26	16.27	17.50	16.68	17.87	18.26
	8H	16.23	17.41	16.66	17.80	18.20	16.23	17.41	16.66	17.80	18.20
	12H	16.20	17.33	16.63	17.71	18.14	16.20	17.33	16.63	17.71	18.14
4H	2H	15.01	16.35	15.41	16.70	17.08	15.01	16.35	15.41	16.70	17.08
	3H	16.93	18.04	17.34	18.44	18.84	16.93	18.04	17.34	18.44	18.84
	4H	17.11	18.11	17.54	18.52	18.96	17.11	18.11	17.54	18.52	18.96
	6H	17.06	17.92	17.52	18.36	18.82	17.06	17.92	17.52	18.36	18.82
	8H	17.02	17.82	17.48	18.27	18.73	17.02	17.82	17.48	18.27	18.73
	12H	16.99	17.71	17.48	18.19	18.66	16.99	17.71	17.48	18.19	18.66
8H	4H	17.15	17.95	17.61	18.39	18.86	17.15	17.95	17.61	18.39	18.86
	6H	17.08	17.73	17.57	18.22	18.70	17.08	17.73	17.57	18.22	18.70
	8H	17.04	17.62	17.55	18.13	18.62	17.04	17.62	17.55	18.13	18.62
	12H	17.01	17.52	17.52	18.01	18.58	17.01	17.52	17.52	18.01	18.58
12H	4H	17.12	17.84	17.60	18.31	18.78	17.12	17.84	17.60	18.31	18.78
	6H	17.03	17.62	17.55	18.13	18.62	17.03	17.62	17.55	18.13	18.62
	8H	17.01	17.52	17.52	18.01	18.58	17.01	17.52	17.52	18.01	18.58