

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: P980161

Luminaire Tested: PRLX-242-940-23L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980161
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-242-940-23L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

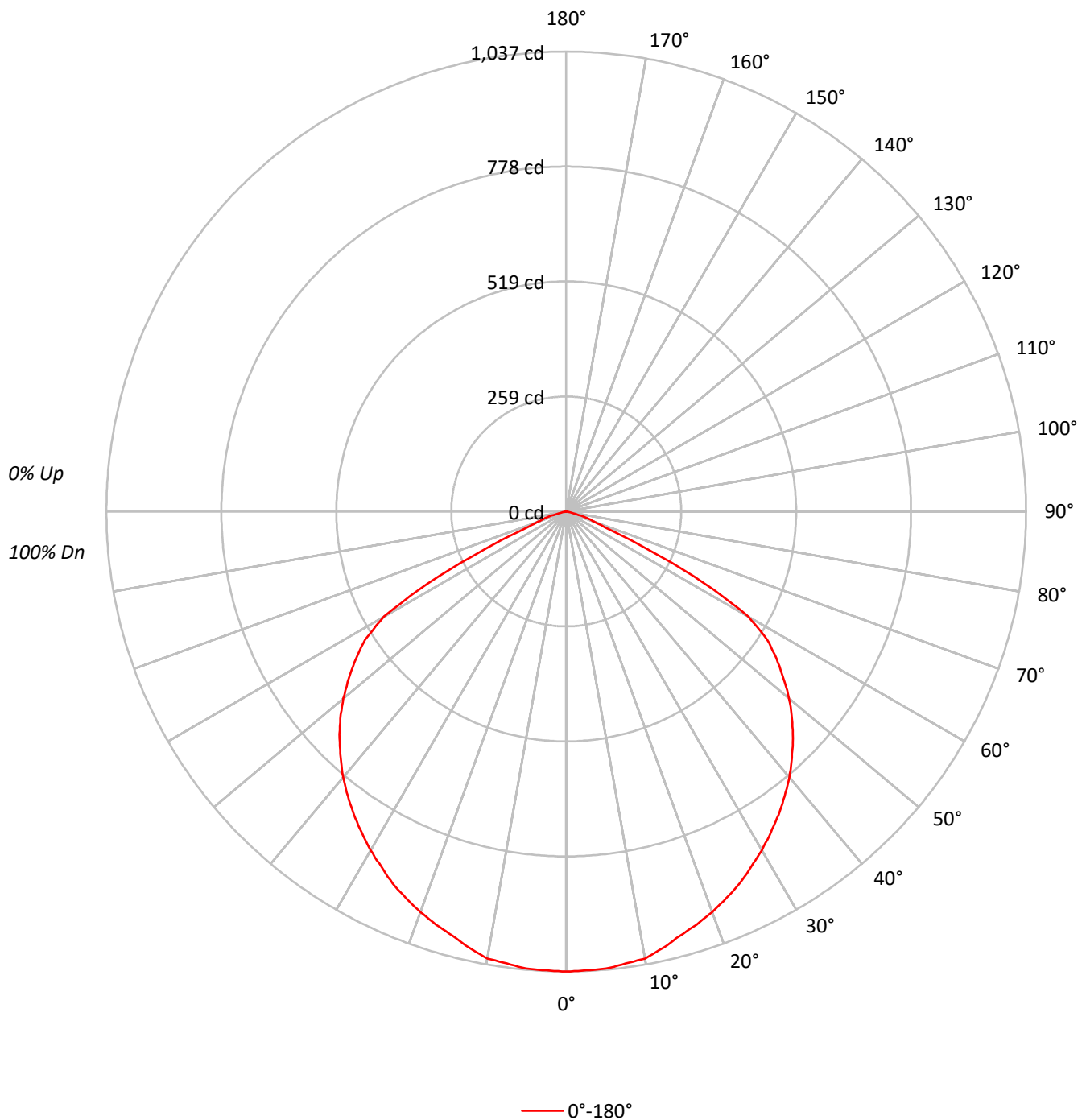
Lumens per Lamp: N/A
Luminaire Lumens: 2658.0 lumens
Efficiency: N/A
Efficacy: 177.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P980161

CATALOG NUMBER: PRLX-242-940-23L-C-U-S-WHTE-X

Luminous Intensity Polar Plot



TEST NUMBER: P980161

CATALOG NUMBER: PRLX-242-940-23L-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	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°	4642
5°	4649
10°	4651
15°	4589
20°	4578
25°	4572
30°	4558
35°	4559
40°	4574
45°	4576
50°	4568
55°	4514
60°	4243
65°	2173
70°	874
75°	412
80°	80
85°	118

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4576 cd/sqm

TEST NUMBER: P980161

CATALOG NUMBER: PRLX-242-940-23L-C-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	3.7
10°-20°	280.3	10.5
20°-30°	426.4	16.0
30°-40°	522.5	19.7
40°-50°	557.5	21.0
50°-60°	514.1	19.3
60°-70°	226.3	8.5
70°-80°	30.3	1.1
80°-90°	2.3	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°	805.0	30.3
0°-40°	1327.4	49.9
0°-60°	2399.1	90.3
0°-90°	2658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2658.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1037	
5°	1035	98
15°	990	280
25°	926	426
35°	834	522
45°	723	558
55°	579	514
65°	205	226
75°	24	30
85°	2	2
90°	0	

TEST NUMBER: P980161

CATALOG NUMBER: PRLX-242-940-23L-C-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	1037.3
2.5°	1035.8
5°	1035.0
7.5°	1028.1
10°	1023.5
12.5°	1008.1
15°	990.5
17.5°	976.6
20°	961.3
22.5°	943.6
25°	925.9
27.5°	902.9
30°	882.1
32.5°	858.3
35°	834.5
37.5°	809.1
40°	783.0
42.5°	753.0
45°	723.1
47.5°	690.8
50°	656.2
52.5°	617.8
55°	578.6
57.5°	537.1
60°	474.1
62.5°	352.7
65°	205.2
67.5°	95.3
70°	66.8
72.5°	49.9
75°	23.8
77.5°	6.9
80°	3.1
82.5°	3.1
85°	2.3
87.5°	1.5
90°	0.0

TEST NUMBER: P980161

CATALOG NUMBER: PRLX-242-940-23L-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	18.17	19.72	18.54	20.03	20.35	18.17	19.72	18.54	20.03	20.35
	3H	18.22	19.60	18.60	19.92	20.28	18.22	19.60	18.60	19.92	20.28
	4H	18.18	19.47	18.58	19.82	20.20	18.18	19.47	18.58	19.82	20.20
	6H	18.12	19.31	18.54	19.67	20.07	18.12	19.31	18.54	19.67	20.07
	8H	18.09	19.21	18.52	19.60	20.00	18.09	19.21	18.52	19.60	20.00
	12H	18.06	19.13	18.49	19.52	19.94	18.06	19.13	18.49	19.52	19.94
4H	2H	18.27	19.55	18.67	19.90	20.28	18.27	19.55	18.67	19.90	20.28
	3H	18.36	19.40	18.77	19.80	20.21	18.36	19.40	18.77	19.80	20.21
	4H	18.32	19.25	18.75	19.67	20.11	18.32	19.25	18.75	19.67	20.11
	6H	18.26	19.07	18.72	19.51	19.97	18.26	19.07	18.72	19.51	19.97
	8H	18.22	18.97	18.68	19.42	19.88	18.22	18.97	18.68	19.42	19.88
	12H	18.19	18.86	18.67	19.34	19.81	18.19	18.86	18.67	19.34	19.81
8H	4H	18.23	18.98	18.70	19.43	19.90	18.23	18.98	18.70	19.43	19.90
	6H	18.15	18.77	18.65	19.26	19.74	18.15	18.77	18.65	19.26	19.74
	8H	18.10	18.66	18.62	19.17	19.66	18.10	18.66	18.62	19.17	19.66
	12H	18.07	18.56	18.58	19.05	19.62	18.07	18.56	18.58	19.05	19.62
12H	4H	18.20	18.87	18.68	19.35	19.82	18.20	18.87	18.68	19.35	19.82
	6H	18.10	18.65	18.61	19.17	19.65	18.10	18.65	18.61	19.17	19.65
	8H	18.07	18.56	18.58	19.05	19.62	18.07	18.56	18.58	19.05	19.62