

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979963

Luminaire Tested: PRLX-242-927-LL7-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979963
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-242-927-LL7-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

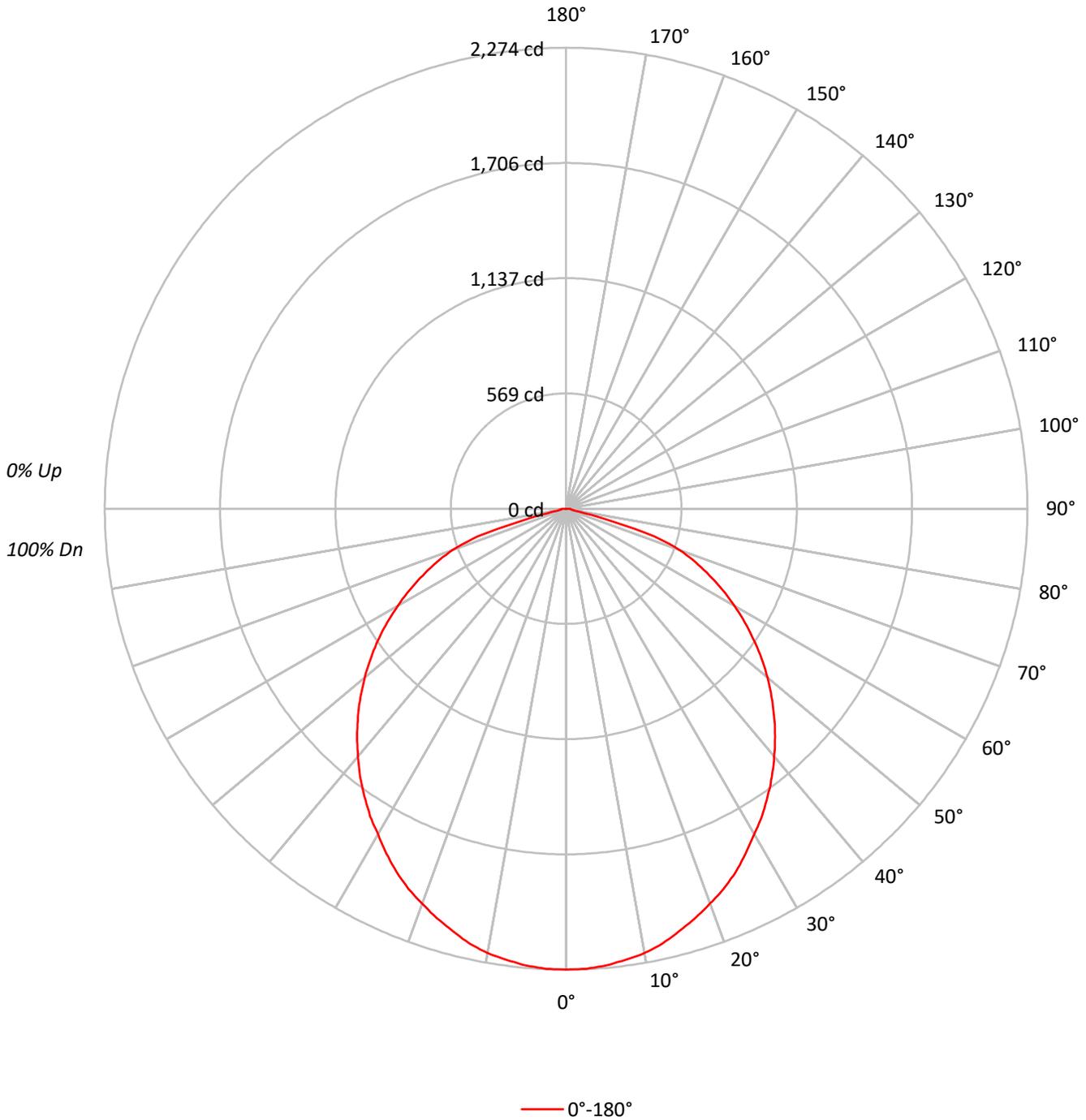
Lumens per Lamp: N/A
Luminaire Lumens: 5998.3 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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: P979963
CATALOG NUMBER: PRLX-242-927-LL7-F-U-S-WHTE-X

Luminous Intensity Polar Plot



TEST NUMBER: P979963

CATALOG NUMBER: PRLX-242-927-LL7-F-U-S-WHTE-X

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	10176
5°	10165
10°	10118
15°	9996
20°	9877
25°	9764
30°	9580
35°	9463
40°	9322
45°	9179
50°	9022
55°	8820
60°	8573
65°	8256
70°	7801
75°	3237
80°	704
85°	1119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9179 cd/sqm

TEST NUMBER: P979963

CATALOG NUMBER: PRLX-242-927-LL7-F-U-S-WHTE-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.7	3.6
10°-20°	608.8	10.1
20°-30°	909.9	15.2
30°-40°	1083.8	18.1
40°-50°	1118.9	18.7
50°-60°	1010.1	16.8
60°-70°	771.5	12.9
70°-80°	260.6	4.3
80°-90°	20.0	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°	1733.4	28.9
0°-40°	2817.2	47.0
0°-60°	4946.2	82.5
0°-90°	5998.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5998.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2274	
5°	2263	215
15°	2158	609
25°	1978	910
35°	1732	1084
45°	1450	1119
55°	1130	1010
65°	780	771
75°	187	261
85°	22	20
90°	0	



TEST NUMBER: P979963

CATALOG NUMBER: PRLX-242-927-LL7-F-U-S-WHTE-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	2273.8
2.5°	2272.0
5°	2262.9
7.5°	2244.7
10°	2226.5
12.5°	2197.4
15°	2157.5
17.5°	2117.5
20°	2073.9
22.5°	2030.2
25°	1977.5
27.5°	1917.5
30°	1853.9
32.5°	1797.6
35°	1732.1
37.5°	1666.7
40°	1595.8
42.5°	1524.9
45°	1450.4
47.5°	1374.1
50°	1295.9
52.5°	1214.1
55°	1130.5
57.5°	1045.1
60°	957.9
62.5°	870.6
65°	779.7
67.5°	690.7
70°	596.2
72.5°	456.2
75°	187.2
77.5°	40.0
80°	27.3
82.5°	25.4
85°	21.8
87.5°	12.7
90°	0.0

TEST NUMBER: P979963
 CATALOG NUMBER: PRLX-242-927-LL7-F-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	19.92	21.52	20.28	21.83	22.15	19.92	21.52	20.28	21.83	22.15
	3H	21.74	23.19	22.12	23.51	23.87	21.74	23.19	22.12	23.51	23.87
	4H	21.97	23.33	22.37	23.68	24.05	21.97	23.33	22.37	23.68	24.05
	6H	21.92	23.18	22.34	23.54	23.93	21.92	23.18	22.34	23.54	23.93
	8H	21.90	23.09	22.32	23.48	23.88	21.90	23.09	22.32	23.48	23.88
	12H	21.87	23.01	22.30	23.40	23.82	21.87	23.01	22.30	23.40	23.82
4H	2H	20.57	21.92	20.96	22.27	22.64	20.57	21.92	20.96	22.27	22.64
	3H	22.57	23.70	22.98	24.09	24.49	22.57	23.70	22.98	24.09	24.49
	4H	22.79	23.80	23.22	24.21	24.65	22.79	23.80	23.22	24.21	24.65
	6H	22.75	23.63	23.21	24.07	24.52	22.75	23.63	23.21	24.07	24.52
	8H	22.72	23.53	23.18	23.98	24.44	22.72	23.53	23.18	23.98	24.44
	12H	22.70	23.43	23.18	23.91	24.38	22.70	23.43	23.18	23.91	24.38
8H	4H	22.84	23.66	23.30	24.10	24.57	22.84	23.66	23.30	24.10	24.57
	6H	22.79	23.46	23.28	23.95	24.42	22.79	23.46	23.28	23.95	24.42
	8H	22.76	23.35	23.27	23.86	24.35	22.76	23.35	23.27	23.86	24.35
	12H	22.75	23.27	23.26	23.76	24.33	22.75	23.27	23.26	23.76	24.33
12H	4H	22.82	23.55	23.30	24.02	24.49	22.82	23.55	23.30	24.02	24.49
	6H	22.75	23.35	23.26	23.85	24.34	22.75	23.35	23.26	23.85	24.34
	8H	22.74	23.26	23.25	23.75	24.32	22.74	23.26	23.25	23.75	24.32