

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: P980091

Luminaire Tested: PRLX-242-935-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

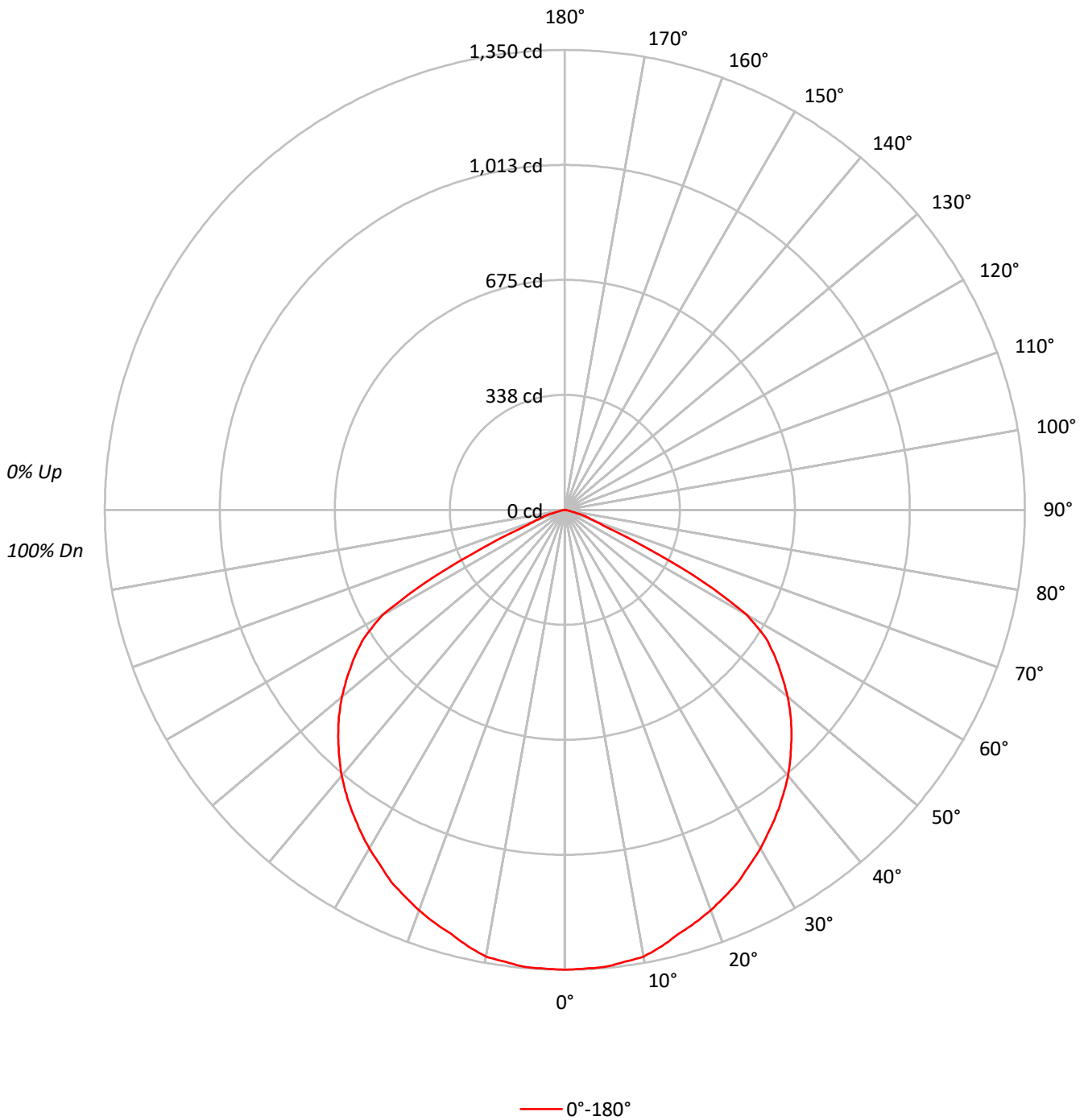
Test Method: LM-79-2019  
Report Number: P980091  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-935-31L-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3459.1 lumens  
Efficiency: N/A  
Efficacy: 167.9 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): 20.6  
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	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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58	56
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	6041
5°	6051
10°	6053
15°	5972
20°	5958
25°	5950
30°	5932
35°	5933
40°	5953
45°	5955
50°	5946
55°	5875
60°	5522
65°	2827
70°	1138
75°	536
80°	103
85°	154

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5955 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.0	3.7
10°-20°	364.7	10.5
20°-30°	554.9	16.0
30°-40°	679.9	19.7
40°-50°	725.6	21.0
50°-60°	669.0	19.3
60°-70°	294.6	8.5
70°-80°	39.4	1.1
80°-90°	3.0	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°	1047.6	30.3
0°-40°	1727.5	49.9
0°-60°	3122.1	90.3
0°-90°	3459.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3459.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1350	
5°	1347	128
15°	1289	365
25°	1205	555
35°	1086	680
45°	941	726
55°	753	669
65°	267	295
75°	31	39
85°	3	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1350
2.5°	1348
5°	1347
7.5°	1338
10°	1332
12.5°	1312
15°	1289
17.5°	1271
20°	1251
22.5°	1228
25°	1205
27.5°	1175
30°	1148
32.5°	1117
35°	1086
37.5°	1053
40°	1019
42.5°	980
45°	941
47.5°	899
50°	854
52.5°	804
55°	753
57.5°	699
60°	617
62.5°	459
65°	267
67.5°	124
70°	87
72.5°	65
75°	31
77.5°	9
80°	4
82.5°	4
85°	3
87.5°	2
90°	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	19.09	20.64	19.45	20.95	21.26	19.09	20.64	19.45	20.95	21.26
	3H	19.13	20.51	19.51	20.84	21.20	19.13	20.51	19.51	20.84	21.20
	4H	19.10	20.39	19.50	20.73	21.11	19.10	20.39	19.50	20.73	21.11
	6H	19.04	20.22	19.45	20.59	20.98	19.04	20.22	19.45	20.59	20.98
	8H	19.01	20.13	19.43	20.52	20.92	19.01	20.13	19.43	20.52	20.92
	12H	18.97	20.05	19.41	20.43	20.86	18.97	20.05	19.41	20.43	20.86
4H	2H	19.18	20.47	19.58	20.82	21.19	19.18	20.47	19.58	20.82	21.19
	3H	19.27	20.32	19.68	20.72	21.12	19.27	20.32	19.68	20.72	21.12
	4H	19.24	20.17	19.67	20.59	21.03	19.24	20.17	19.67	20.59	21.03
	6H	19.18	19.99	19.64	20.43	20.89	19.18	19.99	19.64	20.43	20.89
	8H	19.14	19.89	19.60	20.33	20.80	19.14	19.89	19.60	20.33	20.80
	12H	19.10	19.77	19.59	20.25	20.72	19.10	19.77	19.59	20.25	20.72
8H	4H	19.15	19.90	19.61	20.35	20.81	19.15	19.90	19.61	20.35	20.81
	6H	19.07	19.69	19.57	20.18	20.66	19.07	19.69	19.57	20.18	20.66
	8H	19.02	19.57	19.53	20.08	20.57	19.02	19.57	19.53	20.08	20.57
	12H	18.98	19.47	19.49	19.97	20.53	18.98	19.47	19.49	19.97	20.53
12H	4H	19.12	19.78	19.60	20.26	20.74	19.12	19.78	19.60	20.26	20.74
	6H	19.01	19.57	19.53	20.08	20.57	19.01	19.57	19.53	20.08	20.57
	8H	18.98	19.47	19.49	19.97	20.53	18.98	19.47	19.49	19.97	20.53