

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: P866210

Luminaire Tested: PRLX-2002-M-927-75L-L-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866210  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-52)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-927-75L-L-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 8  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

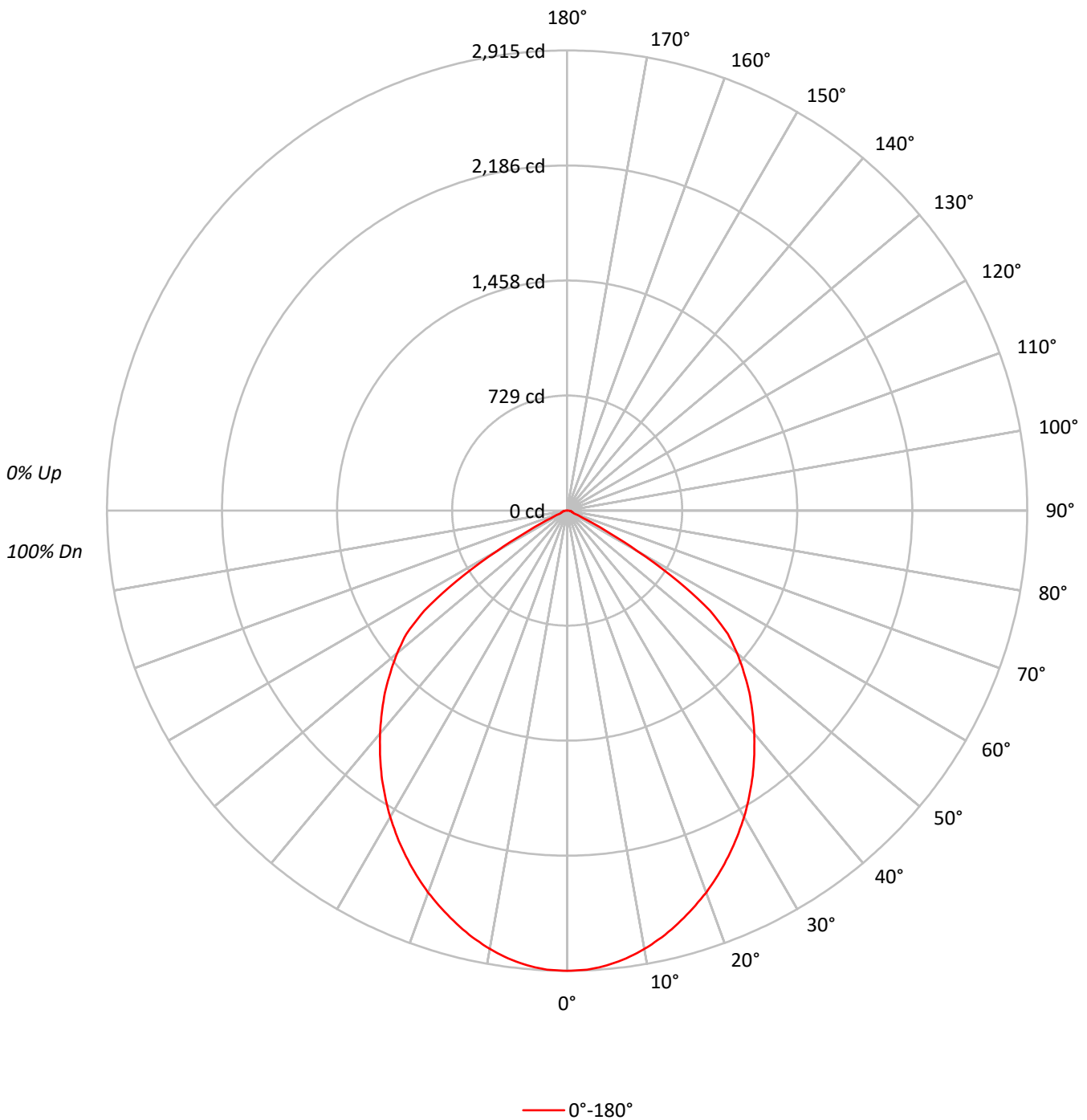
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5838.6 lumens  
Efficiency: N/A  
Efficacy: 83.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.27  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 69.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 3 HR  
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	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53
6	76	64	56	51	74	64	56	51	62	55	50	60	54	50	59	53	49	48
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	43
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	40	36	35
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

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

	0°
0°	23194
5°	23100
10°	22783
15°	22319
20°	21798
25°	21215
30°	20593
35°	19905
40°	19151
45°	18370
50°	17406
55°	15335
60°	8175
65°	2150
70°	886
75°	996
80°	1132
85°	1387

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18370 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.8	4.7
10°-20°	763.1	13.1
20°-30°	1112.7	19.1
30°-40°	1280.7	21.9
40°-50°	1256.5	21.5
50°-60°	930.7	15.9
60°-70°	171.8	2.9
70°-80°	33.9	0.6
80°-90°	15.3	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°	2149.6	36.8
0°-40°	3430.3	58.8
0°-60°	5617.6	96.2
0°-90°	5838.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5838.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2915	
5°	2892	274
15°	2710	763
25°	2417	1113
35°	2050	1281
45°	1633	1257
55°	1106	931
65°	114	172
75°	32	34
85°	15	15
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2915.4
2.5°	2911.5
5°	2892.5
7.5°	2862.1
10°	2820.2
12.5°	2768.8
15°	2709.8
17.5°	2643.2
20°	2574.7
22.5°	2498.6
25°	2416.8
27.5°	2331.1
30°	2241.7
32.5°	2146.6
35°	2049.5
37.5°	1946.7
40°	1844.0
42.5°	1737.4
45°	1632.7
47.5°	1518.6
50°	1406.3
52.5°	1282.6
55°	1105.6
57.5°	835.4
60°	513.8
62.5°	264.5
65°	114.2
67.5°	49.5
70°	38.1
72.5°	36.2
75°	32.4
77.5°	28.5
80°	24.7
82.5°	20.9
85°	15.2
87.5°	7.6
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	20.52	21.95	20.88	22.26	22.57	20.52	21.95	20.88	22.26	22.57
	3H	20.42	21.67	20.80	22.00	22.37	20.42	21.67	20.80	22.00	22.37
	4H	20.36	21.53	20.77	21.88	22.26	20.36	21.53	20.77	21.88	22.26
	6H	20.31	21.38	20.72	21.75	22.14	20.31	21.38	20.72	21.75	22.14
	8H	20.28	21.30	20.71	21.69	22.09	20.28	21.30	20.71	21.69	22.09
	12H	20.25	21.22	20.68	21.60	22.03	20.25	21.22	20.68	21.60	22.03
4H	2H	20.37	21.54	20.77	21.89	22.27	20.37	21.54	20.77	21.89	22.27
	3H	20.28	21.22	20.69	21.63	22.03	20.28	21.22	20.69	21.63	22.03
	4H	20.22	21.06	20.66	21.48	21.92	20.22	21.06	20.66	21.48	21.92
	6H	20.18	20.90	20.64	21.35	21.81	20.18	20.90	20.64	21.35	21.81
	8H	20.14	20.82	20.61	21.26	21.73	20.14	20.82	20.61	21.26	21.73
	12H	20.12	20.72	20.60	21.20	21.67	20.12	20.72	20.60	21.20	21.67
8H	4H	20.11	20.78	20.57	21.23	21.70	20.11	20.78	20.57	21.23	21.70
	6H	20.05	20.61	20.55	21.10	21.58	20.05	20.61	20.55	21.10	21.58
	8H	20.01	20.52	20.53	21.03	21.52	20.01	20.52	20.53	21.03	21.52
	12H	20.00	20.45	20.51	20.94	21.51	20.00	20.45	20.51	20.94	21.51
12H	4H	20.07	20.67	20.55	21.15	21.62	20.07	20.67	20.55	21.15	21.62
	6H	19.99	20.50	20.51	21.01	21.50	19.99	20.50	20.51	21.01	21.50
	8H	19.98	20.43	20.49	20.92	21.49	19.98	20.43	20.49	20.92	21.49