

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: P865558

Luminaire Tested: PRLX-2001-S-940-20L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865558  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2001-S-940-20L-G-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS,  
TAPERED DRUM WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 4  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

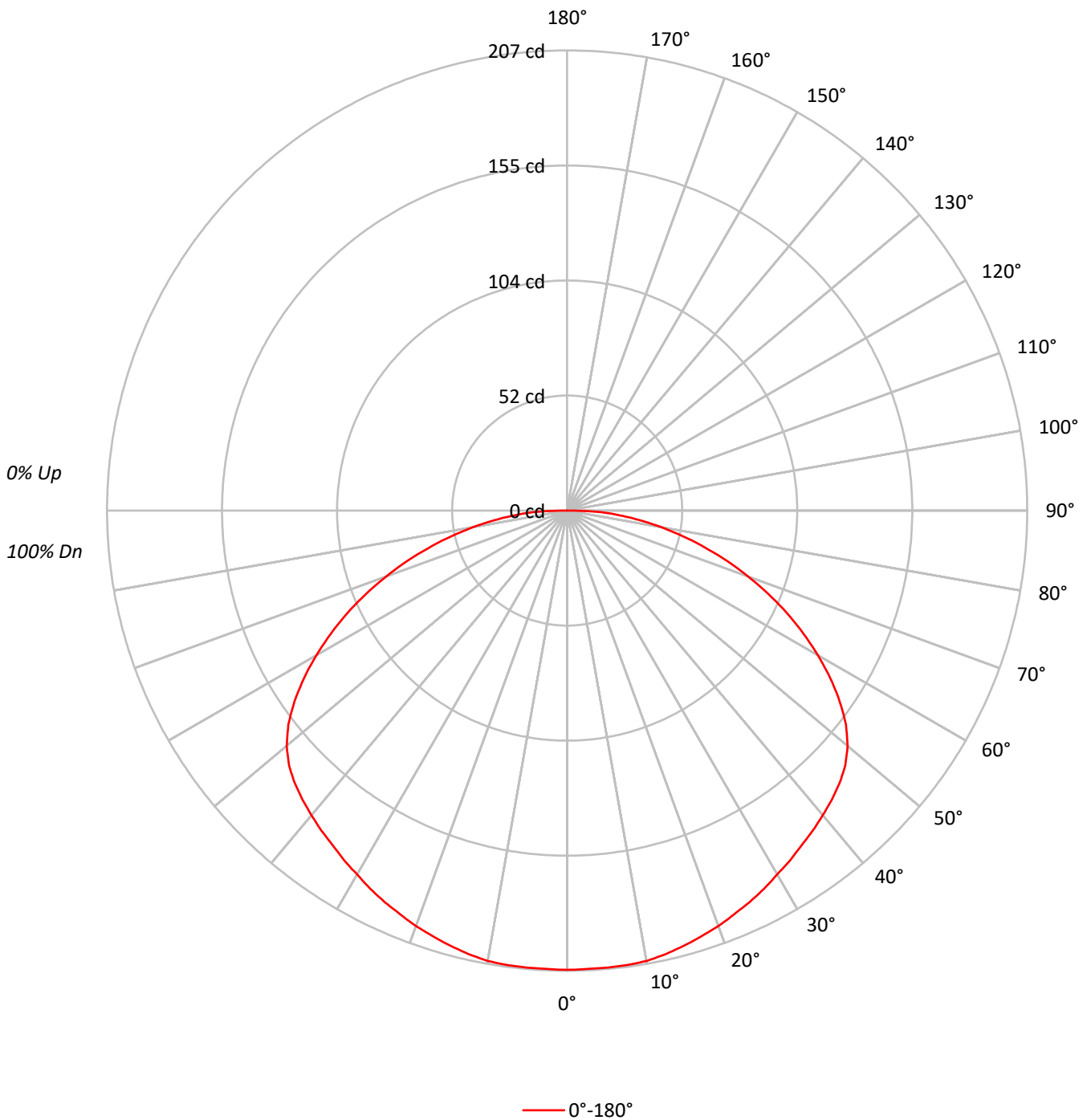
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 750.1 lumens  
Efficiency: N/A  
Efficacy: 34.4 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.55  
Luminous Opening: Circular (Dia: 0.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
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: 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	107	102	97	93	105	100	95	91	95	92	88		91	88	86		88	85	83	81
2	97	88	80	74	94	86	79	73	82	76	71		79	74	70		76	72	68	66
3	88	76	67	60	85	75	66	60	71	64	59		69	63	57		66	61	56	54
4	80	67	57	50	77	65	57	50	63	55	49		60	54	48		58	52	48	45
5	73	59	50	43	71	58	49	42	56	48	42		54	47	41		52	46	41	39
6	67	53	43	37	65	52	43	37	50	42	36		48	41	36		47	40	35	33
7	62	48	39	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39	32	28	26
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36	29	25	23
10	50	36	28	23	49	36	28	23	35	28	23		34	27	22		33	27	22	21

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

	0°
0°	3370
5°	3379
10°	3407
15°	3423
20°	3452
25°	3497
30°	3559
35°	3660
40°	3809
45°	3997
50°	4179
55°	4257
60°	4250
65°	4211
70°	4125
75°	4046
80°	4029
85°	4379

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 87.5°  
 Luminance: 5684 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.7	2.6
10°-20°	57.3	7.6
20°-30°	89.7	12.0
30°-40°	115.4	15.4
40°-50°	133.7	17.8
50°-60°	133.3	17.8
60°-70°	107.7	14.4
70°-80°	68.0	9.1
80°-90°	25.3	3.4
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°	166.7	22.2
0°-40°	282.2	37.6
0°-60°	549.1	73.2
0°-90°	750.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	207	
5°	206	20
15°	203	57
25°	194	90
35°	184	115
45°	173	134
55°	150	133
65°	109	108
75°	64	68
85°	23	25
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	206.6
2.5°	206.4
5°	206.4
7.5°	206.2
10°	205.7
12.5°	204.4
15°	202.7
17.5°	200.8
20°	198.9
22.5°	196.5
25°	194.3
27.5°	191.8
30°	189.0
32.5°	186.6
35°	183.8
37.5°	181.5
40°	178.9
42.5°	176.3
45°	173.3
47.5°	169.7
50°	164.7
52.5°	158.1
55°	149.7
57.5°	140.4
60°	130.3
62.5°	119.8
65°	109.1
67.5°	97.9
70°	86.5
72.5°	75.4
75°	64.2
77.5°	53.3
80°	42.9
82.5°	32.8
85°	23.4
87.5°	15.2
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	17.52	19.26	17.88	19.57	19.88	17.52	19.26	17.88	19.57	19.88
	3H	19.54	21.12	19.91	21.44	21.80	19.54	21.12	19.91	21.44	21.80
	4H	20.35	21.84	20.75	22.19	22.56	20.35	21.84	20.75	22.19	22.56
	6H	21.02	22.42	21.43	22.78	23.17	21.02	22.42	21.43	22.78	23.17
	8H	21.29	22.62	21.71	23.01	23.41	21.29	22.62	21.71	23.01	23.41
	12H	21.52	22.80	21.94	23.18	23.60	21.52	22.80	21.94	23.18	23.60
4H	2H	18.23	19.72	18.62	20.07	20.44	18.23	19.72	18.62	20.07	20.44
	3H	20.47	21.74	20.88	22.13	22.53	20.47	21.74	20.88	22.13	22.53
	4H	21.43	22.58	21.86	22.99	23.42	21.43	22.58	21.86	22.99	23.42
	6H	22.25	23.27	22.70	23.71	24.16	22.25	23.27	22.70	23.71	24.16
	8H	22.59	23.54	23.04	23.98	24.44	22.59	23.54	23.04	23.98	24.44
	12H	22.89	23.75	23.36	24.22	24.69	22.89	23.75	23.36	24.22	24.69
8H	4H	21.82	22.78	22.28	23.22	23.68	21.82	22.78	22.28	23.22	23.68
	6H	22.81	23.61	23.30	24.09	24.56	22.81	23.61	23.30	24.09	24.56
	8H	23.25	23.96	23.75	24.47	24.95	23.25	23.96	23.75	24.47	24.95
	12H	23.66	24.30	24.16	24.79	25.34	23.66	24.30	24.16	24.79	25.34
12H	4H	21.89	22.75	22.36	23.22	23.69	21.89	22.75	22.36	23.22	23.69
	6H	22.91	23.63	23.41	24.13	24.62	22.91	23.63	23.41	24.13	24.62
	8H	23.42	24.06	23.93	24.55	25.11	23.42	24.06	23.93	24.55	25.11