

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: P865757

Luminaire Tested: PRLX-2004-S-927-20L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-S-927-20L-G-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

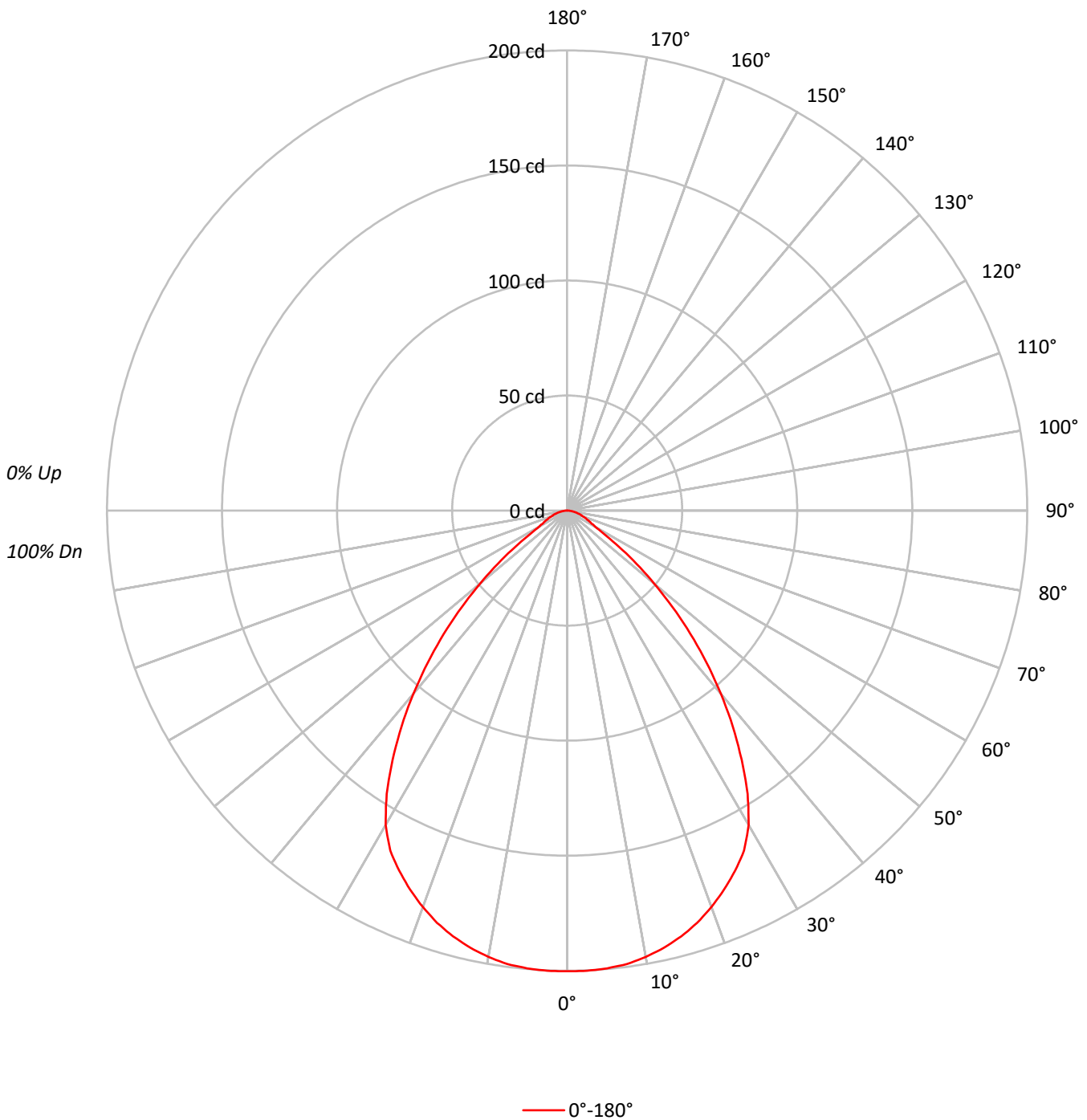
Lumens per Lamp: N/A
Luminaire Lumens: 335.4 lumens
Efficiency: N/A
Efficacy: 15.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.16
Luminous Opening: Circular (Dia: 0.92' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
Input Voltage (V): 120
Input Current (A_{in}): 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	112	108	105	102	109	106	103	101	102	100	98		98	96	95		95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86		90	87	84		87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76		82	78	75		80	76	73	72
4	91	81	74	69	89	80	73	68	78	72	68		76	71	67		74	69	66	64
5	85	74	67	62	83	73	66	61	71	65	61		69	64	60		68	63	60	58
6	79	68	61	55	78	67	60	55	66	59	55		64	59	54		63	58	54	52
7	74	63	55	50	73	62	55	50	61	54	50		59	54	49		58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45		55	49	45		54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42		51	46	41		50	45	41	40
10	62	50	43	39	61	50	43	39	49	43	38		48	42	38		47	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3265
5°	3270
10°	3263
15°	3235
20°	3183
25°	3108
30°	2970
35°	2632
40°	2212
45°	1748
50°	1253
55°	776
60°	460
65°	390
70°	343
75°	315
80°	272
85°	262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1748 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.0	5.7
10°-20°	54.0	16.1
20°-30°	79.3	23.6
30°-40°	82.1	24.5
40°-50°	58.3	17.4
50°-60°	25.7	7.7
60°-70°	10.2	3.0
70°-80°	5.3	1.6
80°-90°	1.5	0.5
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°	152.2	45.4
0°-40°	234.4	69.9
0°-60°	318.4	94.9
0°-90°	335.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	335.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	200	
5°	200	19
15°	192	54
25°	173	79
35°	132	82
45°	76	58
55°	27	26
65°	10	10
75°	5	5
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	200.2
2.5°	200.2
5°	199.7
7.5°	198.8
10°	197.0
12.5°	194.6
15°	191.6
17.5°	187.9
20°	183.4
22.5°	178.3
25°	172.7
27.5°	166.6
30°	157.7
32.5°	146.0
35°	132.2
37.5°	118.3
40°	103.9
42.5°	89.6
45°	75.8
47.5°	62.0
50°	49.4
52.5°	38.1
55°	27.3
57.5°	19.0
60°	14.1
62.5°	11.8
65°	10.1
67.5°	8.6
70°	7.2
72.5°	6.1
75°	5.0
77.5°	4.0
80°	2.9
82.5°	2.2
85°	1.4
87.5°	0.6
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	6.88	8.18	7.25	8.49	8.81	6.88	8.18	7.25	8.49	8.81
	3H	7.79	8.93	8.17	9.26	9.63	7.79	8.93	8.17	9.26	9.63
	4H	8.15	9.22	8.56	9.57	9.95	8.15	9.22	8.56	9.57	9.95
	6H	8.42	9.40	8.84	9.77	10.16	8.42	9.40	8.84	9.77	10.16
	8H	8.51	9.43	8.94	9.83	10.23	8.51	9.43	8.94	9.83	10.23
	12H	8.57	9.45	9.00	9.83	10.27	8.57	9.45	9.00	9.83	10.27
4H	2H	7.12	8.18	7.52	8.53	8.92	7.12	8.18	7.52	8.53	8.92
	3H	8.24	9.11	8.66	9.51	9.92	8.24	9.11	8.66	9.51	9.92
	4H	8.73	9.50	9.17	9.92	10.37	8.73	9.50	9.17	9.92	10.37
	6H	9.12	9.78	9.58	10.23	10.70	9.12	9.78	9.58	10.23	10.70
	8H	9.24	9.87	9.71	10.31	10.79	9.24	9.87	9.71	10.31	10.79
	12H	9.34	9.89	9.83	10.38	10.85	9.34	9.89	9.83	10.38	10.85
8H	4H	8.87	9.49	9.34	9.94	10.41	8.87	9.49	9.34	9.94	10.41
	6H	9.35	9.86	9.86	10.36	10.84	9.35	9.86	9.86	10.36	10.84
	8H	9.55	10.01	10.07	10.52	11.01	9.55	10.01	10.07	10.52	11.01
	12H	9.72	10.13	10.23	10.62	11.19	9.72	10.13	10.23	10.62	11.19
12H	4H	8.86	9.41	9.35	9.90	10.37	8.86	9.41	9.35	9.90	10.37
	6H	9.36	9.82	9.89	10.34	10.83	9.36	9.82	9.89	10.34	10.83
	8H	9.61	10.02	10.13	10.51	11.08	9.61	10.02	10.13	10.51	11.08