

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: P866187

Luminaire Tested: PRLX-2002-M-927-45L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-50)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-927-45L-L-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

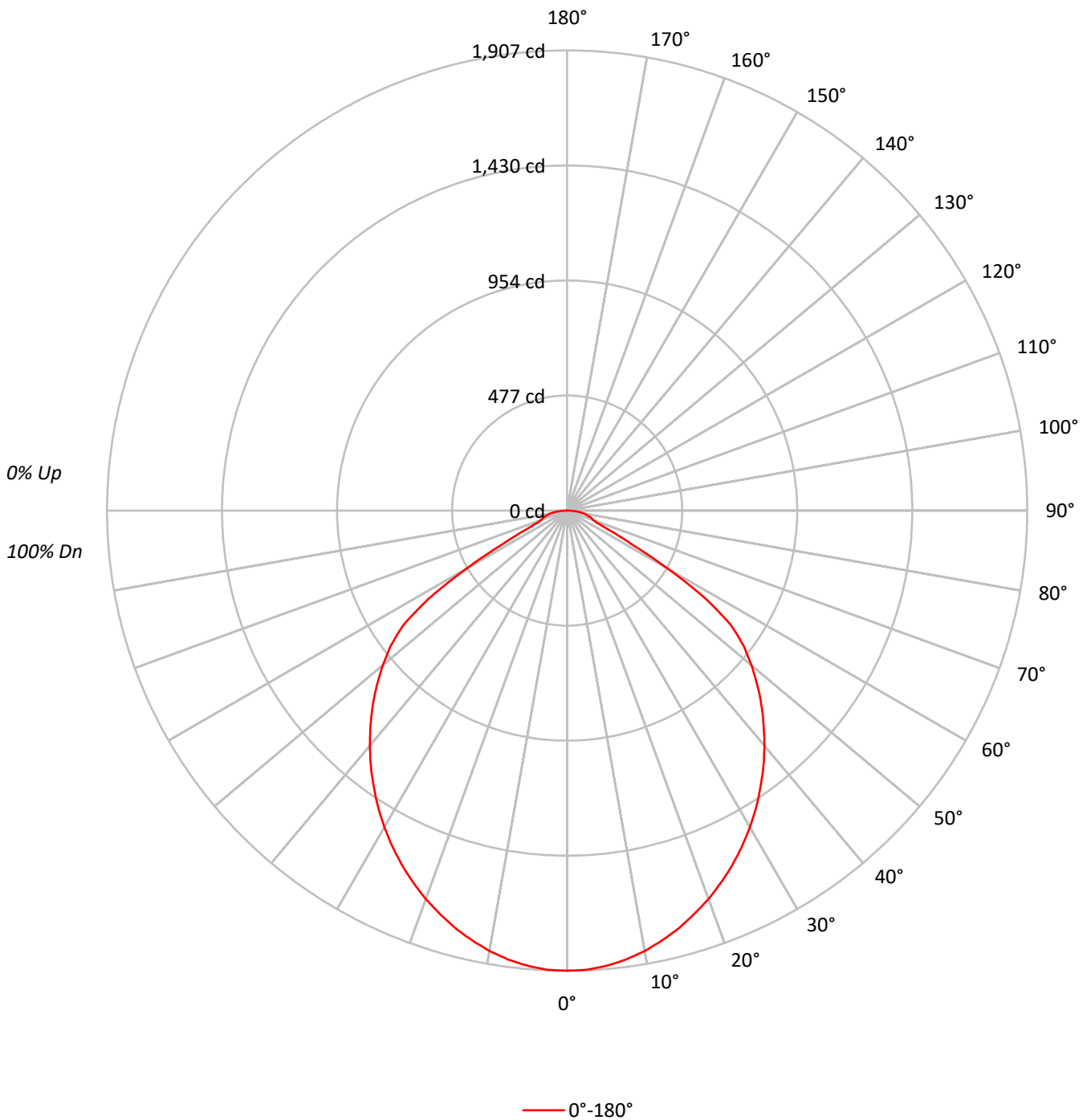
Lumens per Lamp: N/A
Luminaire Lumens: 4258.7 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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: 0.333 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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	51	47	56	51	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	15170
5°	15119
10°	14970
15°	14756
20°	14500
25°	14222
30°	13918
35°	13573
40°	13209
45°	12808
50°	12337
55°	11497
60°	7722
65°	3654
70°	2682
75°	2877
80°	3189
85°	3542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12808 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.4	4.2
10°-20°	504.7	11.9
20°-30°	746.1	17.5
30°-40°	874.1	20.5
40°-50°	877.5	20.6
50°-60°	708.2	16.6
60°-70°	228.9	5.4
70°-80°	98.9	2.3
80°-90°	40.9	1.0
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°	1430.2	33.6
0°-40°	2304.4	54.1
0°-60°	3890.1	91.3
0°-90°	4258.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4258.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1907	
5°	1893	179
15°	1792	505
25°	1620	746
35°	1398	874
45°	1138	877
55°	829	708
65°	194	229
75°	94	99
85°	39	41
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1906.8
2.5°	1904.5
5°	1893.1
7.5°	1875.9
10°	1853.1
12.5°	1823.4
15°	1791.5
17.5°	1752.6
20°	1712.7
22.5°	1668.1
25°	1620.2
27.5°	1568.8
30°	1515.1
32.5°	1458.1
35°	1397.5
37.5°	1335.9
40°	1271.9
42.5°	1205.7
45°	1138.4
47.5°	1068.7
50°	996.8
52.5°	922.6
55°	828.9
57.5°	683.9
60°	485.3
62.5°	303.7
65°	194.1
67.5°	133.6
70°	115.3
72.5°	106.2
75°	93.6
77.5°	82.2
80°	69.6
82.5°	55.9
85°	38.8
87.5°	20.6
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	20.18	21.68	20.55	22.00	22.31	20.18	21.68	20.55	22.00	22.31
	3H	20.29	21.62	20.67	21.95	22.31	20.29	21.62	20.67	21.95	22.31
	4H	20.38	21.62	20.78	21.97	22.35	20.38	21.62	20.78	21.97	22.35
	6H	20.49	21.64	20.90	22.00	22.40	20.49	21.64	20.90	22.00	22.40
	8H	20.55	21.64	20.97	22.03	22.43	20.55	21.64	20.97	22.03	22.43
	12H	20.60	21.64	21.03	22.02	22.45	20.60	21.64	21.03	22.02	22.45
4H	2H	20.15	21.39	20.55	21.74	22.12	20.15	21.39	20.55	21.74	22.12
	3H	20.35	21.37	20.76	21.77	22.17	20.35	21.37	20.76	21.77	22.17
	4H	20.51	21.42	20.94	21.83	22.27	20.51	21.42	20.94	21.83	22.27
	6H	20.73	21.52	21.19	21.96	22.42	20.73	21.52	21.19	21.96	22.42
	8H	20.83	21.57	21.30	22.01	22.48	20.83	21.57	21.30	22.01	22.48
	12H	20.93	21.59	21.42	22.07	22.54	20.93	21.59	21.42	22.07	22.54
8H	4H	20.52	21.26	20.99	21.71	22.17	20.52	21.26	20.99	21.71	22.17
	6H	20.82	21.44	21.32	21.93	22.41	20.82	21.44	21.32	21.93	22.41
	8H	20.99	21.54	21.50	22.05	22.54	20.99	21.54	21.50	22.05	22.54
	12H	21.17	21.66	21.68	22.15	22.72	21.17	21.66	21.68	22.15	22.72
12H	4H	20.51	21.17	21.00	21.65	22.12	20.51	21.17	21.00	21.65	22.12
	6H	20.83	21.38	21.34	21.89	22.38	20.83	21.38	21.34	21.89	22.38
	8H	21.04	21.54	21.55	22.03	22.60	21.04	21.54	21.55	22.03	22.60