

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: P866185

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-51)
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-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

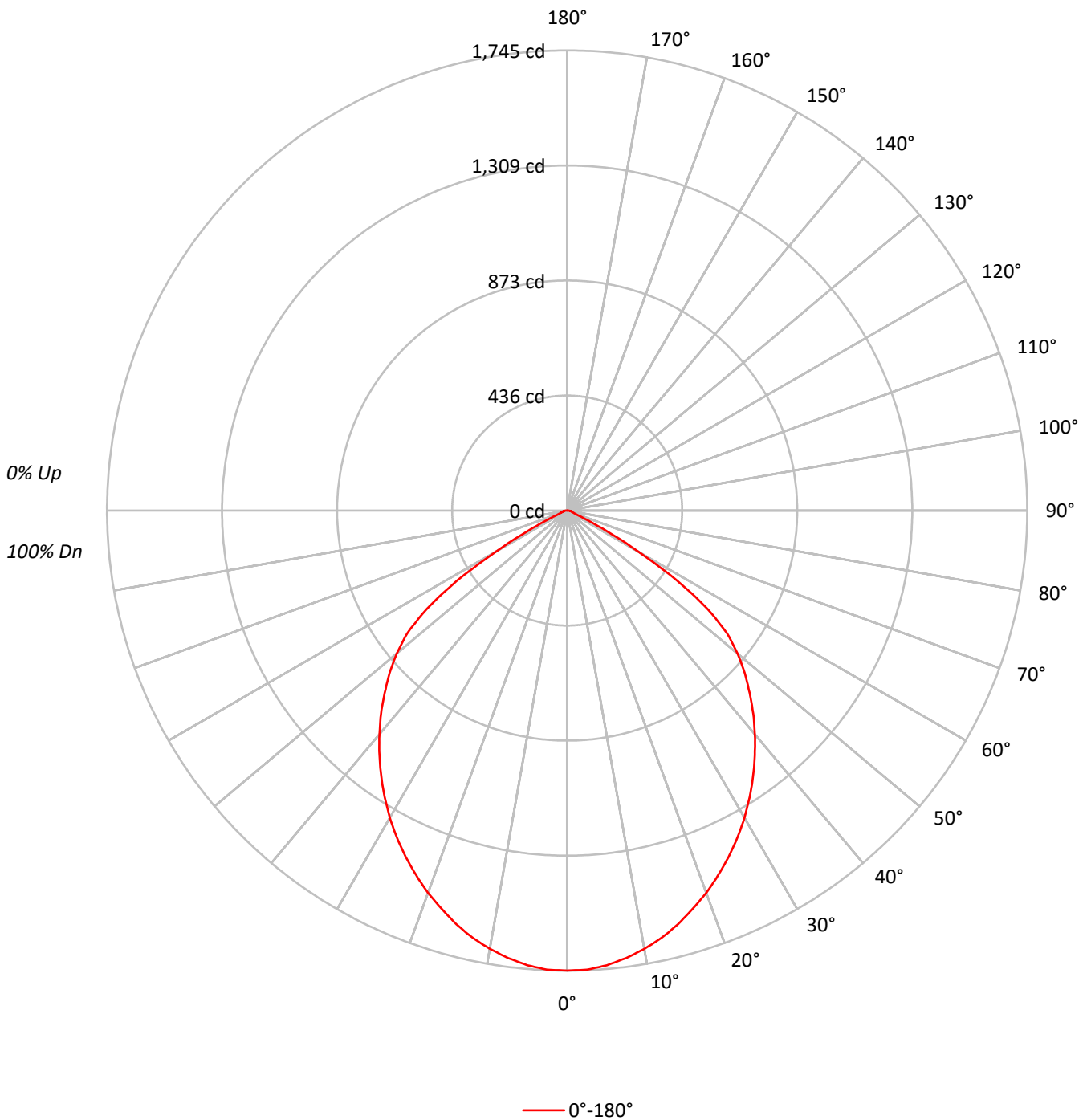
Lumens per Lamp: N/A
Luminaire Lumens: 3503.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

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: 0.5 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	62	57	68	61	56		66	60	56		64	59	55	53
6	76	64	56	51	74	63	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	40		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	44	38	34		44	38	33		43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13880
5°	13823
10°	13632
15°	13373
20°	13059
25°	12719
30°	12356
35°	11943
40°	11502
45°	11009
50°	10444
55°	8995
60°	4960
65°	1397
70°	558
75°	596
80°	678
85°	831

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11009 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.8	4.7
10°-20°	457.2	13.1
20°-30°	667.1	19.0
30°-40°	768.7	21.9
40°-50°	754.7	21.5
50°-60°	553.5	15.8
60°-70°	108.4	3.1
70°-80°	20.5	0.6
80°-90°	9.2	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°	1288.1	36.8
0°-40°	2056.8	58.7
0°-60°	3364.9	96.1
0°-90°	3503.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3503.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1745	
5°	1731	164
15°	1624	457
25°	1449	667
35°	1230	769
45°	978	755
55°	648	553
65°	74	108
75°	19	20
85°	9	9
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1744.6
2.5°	1742.4
5°	1730.9
7.5°	1711.5
10°	1687.5
12.5°	1659.0
15°	1623.6
17.5°	1583.6
20°	1542.5
22.5°	1496.9
25°	1448.9
27.5°	1398.7
30°	1345.0
32.5°	1287.9
35°	1229.7
37.5°	1169.2
40°	1107.5
42.5°	1044.7
45°	978.5
47.5°	913.4
50°	843.8
52.5°	765.0
55°	648.5
57.5°	496.7
60°	311.7
62.5°	167.8
65°	74.2
67.5°	34.3
70°	24.0
72.5°	21.7
75°	19.4
77.5°	17.1
80°	14.8
82.5°	12.6
85°	9.1
87.5°	4.6
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	18.68	20.11	19.05	20.43	20.74	18.68	20.11	19.05	20.43	20.74
	3H	18.59	19.85	18.97	20.18	20.54	18.59	19.85	18.97	20.18	20.54
	4H	18.54	19.71	18.94	20.06	20.44	18.54	19.71	18.94	20.06	20.44
	6H	18.48	19.56	18.90	19.92	20.32	18.48	19.56	18.90	19.92	20.32
	8H	18.45	19.47	18.88	19.86	20.26	18.45	19.47	18.88	19.86	20.26
	12H	18.42	19.40	18.86	19.78	20.21	18.42	19.40	18.86	19.78	20.21
4H	2H	18.55	19.72	18.95	20.07	20.45	18.55	19.72	18.95	20.07	20.45
	3H	18.46	19.41	18.88	19.81	20.21	18.46	19.41	18.88	19.81	20.21
	4H	18.40	19.24	18.84	19.66	20.10	18.40	19.24	18.84	19.66	20.10
	6H	18.36	19.08	18.82	19.53	19.99	18.36	19.08	18.82	19.53	19.99
	8H	18.32	19.00	18.79	19.45	19.92	18.32	19.00	18.79	19.45	19.92
	12H	18.30	18.90	18.78	19.38	19.85	18.30	18.90	18.78	19.38	19.85
8H	4H	18.29	18.96	18.76	19.41	19.88	18.29	18.96	18.76	19.41	19.88
	6H	18.23	18.79	18.73	19.28	19.76	18.23	18.79	18.73	19.28	19.76
	8H	18.19	18.70	18.71	19.22	19.71	18.19	18.70	18.71	19.22	19.71
	12H	18.18	18.63	18.69	19.13	19.70	18.18	18.63	18.69	19.13	19.70
12H	4H	18.25	18.85	18.73	19.33	19.80	18.25	18.85	18.73	19.33	19.80
	6H	18.17	18.68	18.69	19.19	19.68	18.17	18.68	18.69	19.19	19.68
	8H	18.16	18.61	18.67	19.11	19.68	18.16	18.61	18.67	19.11	19.68