

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: P867421

Luminaire Tested: PRLX-2004-L-940-83L-L-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-85)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-L-940-83L-L-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

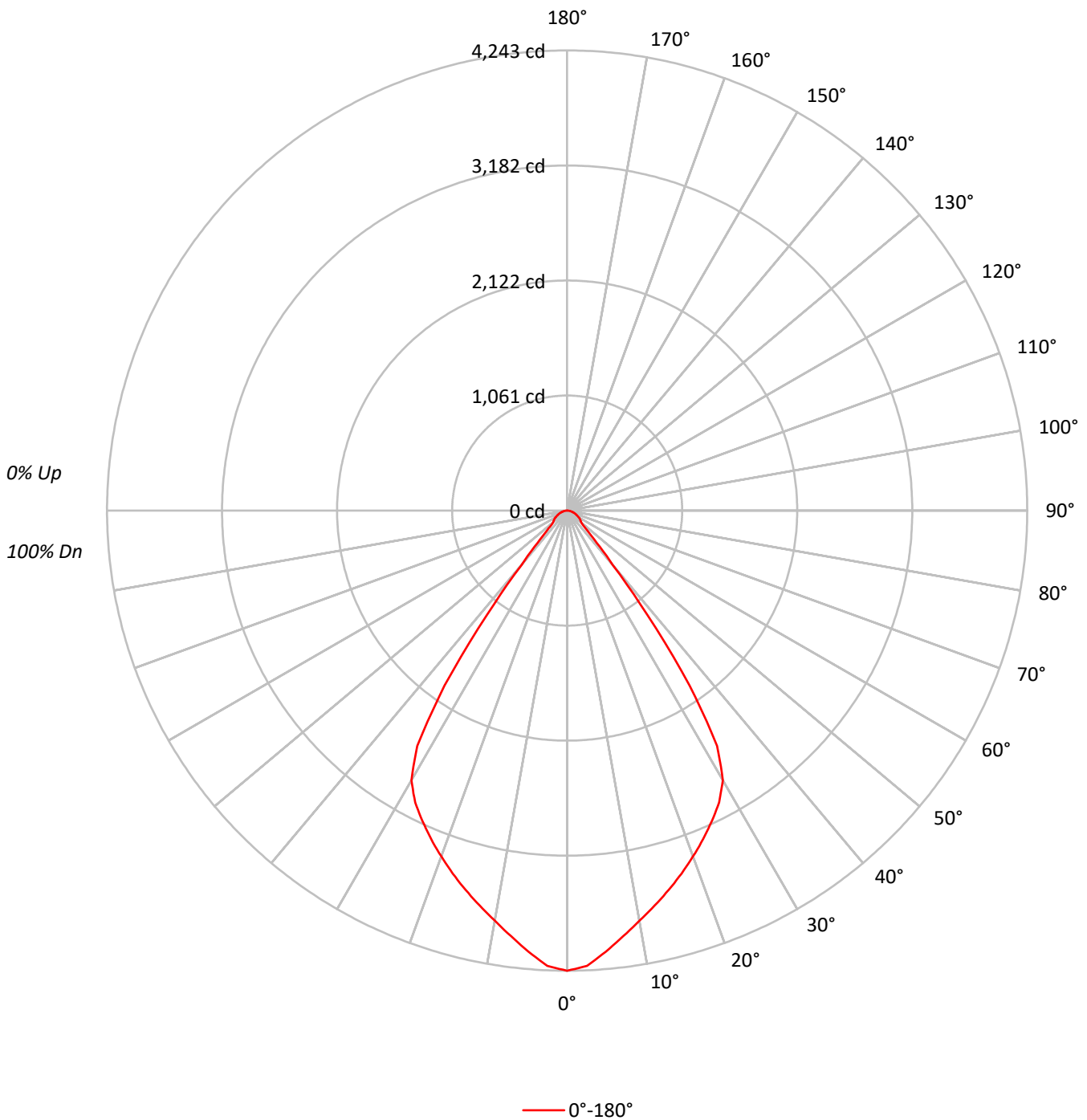
Lumens per Lamp: N/A
Luminaire Lumens: 4544.3 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.04 / 0.99
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	97	96	95	94	92				92
2	106	101	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84				84
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79	77				77
4	95	87	80	76	93	85	80	75	83	78	74	81	77	74	79	76	73	71				71
5	90	80	74	69	88	79	73	69	78	72	68	76	71	68	74	70	67	66				66
6	85	75	68	64	83	74	68	64	73	67	63	71	66	63	70	66	62	61				61
7	80	70	64	59	79	69	63	59	68	63	58	67	62	58	66	61	58	56				56
8	76	66	59	55	75	65	59	55	64	58	54	63	58	54	62	57	54	52				52
9	72	62	55	51	71	61	55	51	60	55	51	59	54	51	58	54	50	49				49
10	68	58	52	48	67	58	52	48	57	51	47	56	51	47	55	50	47	46				46

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	20936
5°	20225
10°	19238
15°	18492
20°	17818
25°	17190
30°	16359
35°	11866
40°	4217
45°	1856
50°	1284
55°	1267
60°	1195
65°	1125
70°	1057
75°	999
80°	943
85°	872

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1856 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	382.1	8.4
10°-20°	1019.5	22.4
20°-30°	1451.4	31.9
30°-40°	1150.8	25.3
40°-50°	241.2	5.3
50°-60°	130.7	2.9
60°-70°	95.8	2.1
70°-80°	55.5	1.2
80°-90°	17.3	0.4
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°	2853.0	62.8
0°-40°	4003.8	88.1
0°-60°	4375.7	96.3
0°-90°	4544.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4544.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4243	
5°	4084	382
15°	3620	1020
25°	3158	1451
35°	1970	1151
45°	266	241
55°	147	131
65°	96	96
75°	52	56
85°	15	17
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	4243.3
2.5°	4200.9
5°	4083.7
7.5°	3958.0
10°	3840.0
12.5°	3730.5
15°	3620.3
17.5°	3509.2
20°	3393.6
22.5°	3277.9
25°	3157.6
27.5°	3034.2
30°	2871.5
32.5°	2572.3
35°	1970.1
37.5°	1210.6
40°	654.7
42.5°	400.2
45°	266.0
47.5°	193.5
50°	167.3
52.5°	158.8
55°	147.3
57.5°	134.2
60°	121.1
62.5°	108.7
65°	96.4
67.5°	84.8
70°	73.3
72.5°	62.5
75°	52.4
77.5°	42.4
80°	33.2
82.5°	23.9
85°	15.4
87.5°	7.7
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	7.64	8.70	8.01	9.01	9.33	7.64	8.70	8.01	9.01	9.33
	3H	9.27	10.21	9.66	10.54	10.91	9.27	10.21	9.66	10.54	10.91
	4H	9.90	10.77	10.31	11.12	11.51	9.90	10.77	10.31	11.12	11.51
	6H	10.38	11.17	10.80	11.55	11.94	10.38	11.17	10.80	11.55	11.94
	8H	10.54	11.29	10.97	11.68	12.09	10.54	11.29	10.97	11.68	12.09
	12H	10.65	11.36	11.08	11.74	12.17	10.65	11.36	11.08	11.74	12.17
4H	2H	8.13	9.00	8.54	9.35	9.74	8.13	9.00	8.54	9.35	9.74
	3H	9.97	10.68	10.39	11.09	11.50	9.97	10.68	10.39	11.09	11.50
	4H	10.73	11.36	11.16	11.78	12.23	10.73	11.36	11.16	11.78	12.23
	6H	11.34	11.88	11.81	12.33	12.80	11.34	11.88	11.81	12.33	12.80
	8H	11.54	12.05	12.02	12.50	12.98	11.54	12.05	12.02	12.50	12.98
	12H	11.69	12.13	12.18	12.62	13.10	11.69	12.13	12.18	12.62	13.10
8H	4H	10.96	11.47	11.43	11.92	12.39	10.96	11.47	11.43	11.92	12.39
	6H	11.71	12.12	12.22	12.62	13.10	11.71	12.12	12.22	12.62	13.10
	8H	12.00	12.36	12.54	12.89	13.38	12.00	12.36	12.54	12.89	13.38
	12H	12.25	12.56	12.77	13.06	13.64	12.25	12.56	12.77	13.06	13.64
12H	4H	10.96	11.40	11.45	11.89	12.37	10.96	11.40	11.45	11.89	12.37
	6H	11.75	12.11	12.28	12.63	13.13	11.75	12.11	12.28	12.63	13.13
	8H	12.11	12.42	12.63	12.92	13.49	12.11	12.42	12.63	12.92	13.49