

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: P866631

Luminaire Tested: PRLX-2004-M-940-45L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866631
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-M-940-45L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

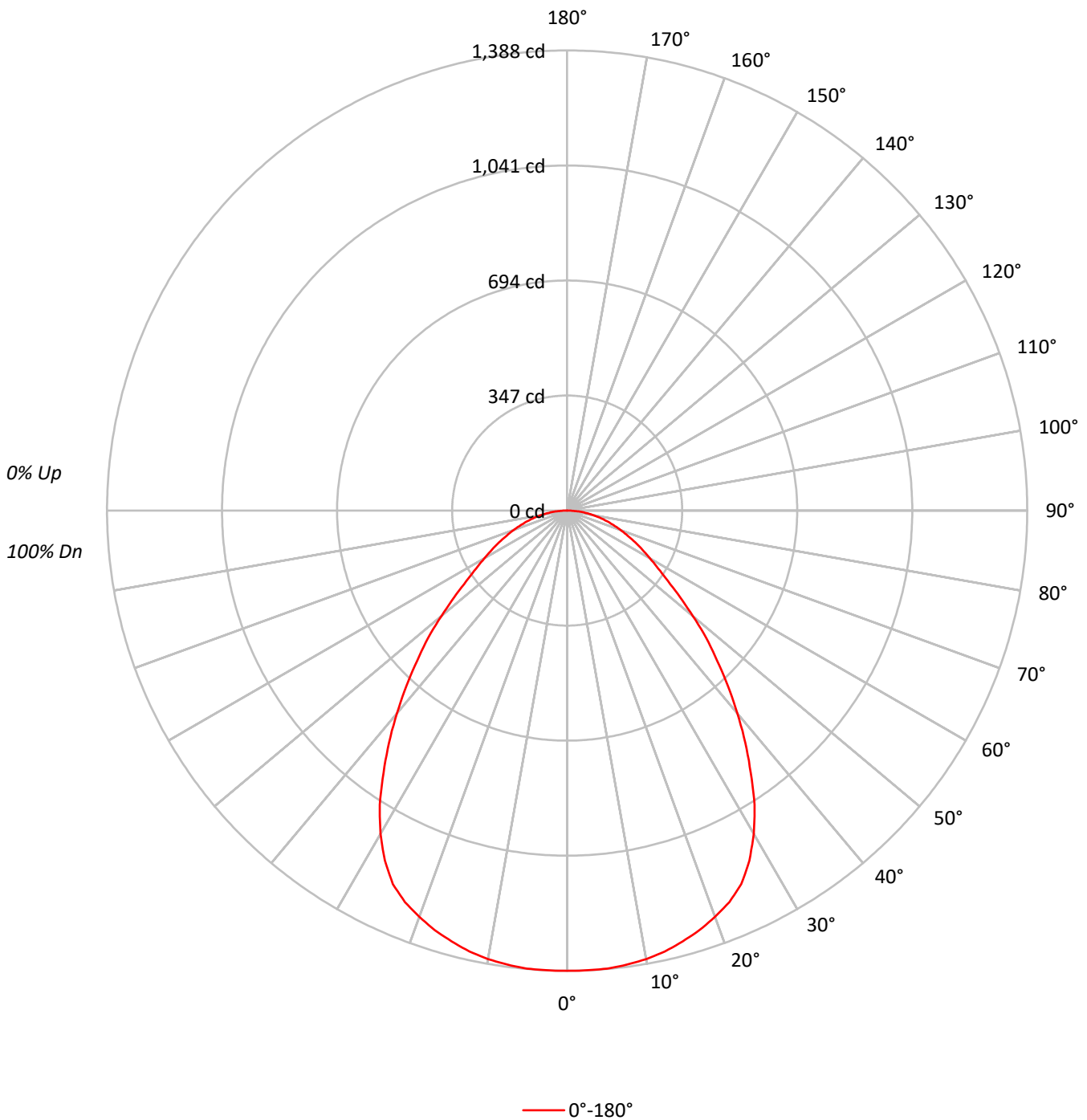
Lumens per Lamp: N/A
Luminaire Lumens: 2915.1 lumens
Efficiency: N/A
Efficacy: 75.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.2
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	87	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57
5	80	69	60	54	78	67	60	54	65	59	53	64	58	53	62	57	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	57	45	38	33	56	45	37	33	44	37	32	43	37	32	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	11043
5°	11075
10°	11098
15°	11081
20°	11040
25°	10914
30°	10341
35°	9376
40°	8295
45°	7197
50°	6127
55°	5145
60°	4586
65°	4258
70°	3999
75°	3815
80°	3670
85°	3542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7197 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	4.5
10°-20°	379.8	13.0
20°-30°	567.7	19.5
30°-40°	602.5	20.7
40°-50°	494.9	17.0
50°-60°	338.5	11.6
60°-70°	225.0	7.7
70°-80°	131.8	4.5
80°-90°	42.9	1.5
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°	1079.5	37.0
0°-40°	1682.0	57.7
0°-60°	2515.4	86.3
0°-90°	2915.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2915.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1388	
5°	1387	132
15°	1345	380
25°	1243	568
35°	965	603
45°	640	495
55°	371	339
65°	226	225
75°	124	132
85°	39	43
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1388.1
2.5°	1388.1
5°	1386.8
7.5°	1381.6
10°	1373.8
12.5°	1362.2
15°	1345.4
17.5°	1327.3
20°	1304.0
22.5°	1278.2
25°	1243.3
27.5°	1190.3
30°	1125.7
32.5°	1052.0
35°	965.4
37.5°	882.7
40°	798.7
42.5°	717.3
45°	639.7
47.5°	568.7
50°	495.0
52.5°	429.1
55°	370.9
57.5°	325.7
60°	288.2
62.5°	255.9
65°	226.2
67.5°	197.7
70°	171.9
72.5°	147.3
75°	124.1
77.5°	102.1
80°	80.1
82.5°	59.5
85°	38.8
87.5°	19.4
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	16.47	17.95	16.84	18.26	18.57	16.47	17.95	16.84	18.26	18.57
	3H	18.06	19.38	18.43	19.70	20.07	18.06	19.38	18.43	19.70	20.07
	4H	18.69	19.93	19.10	20.28	20.66	18.69	19.93	19.10	20.28	20.66
	6H	19.22	20.36	19.63	20.73	21.12	19.22	20.36	19.63	20.73	21.12
	8H	19.41	20.50	19.84	20.89	21.29	19.41	20.50	19.84	20.89	21.29
	12H	19.55	20.59	19.98	20.97	21.40	19.55	20.59	19.98	20.97	21.40
4H	2H	17.00	18.24	17.40	18.59	18.97	17.00	18.24	17.40	18.59	18.97
	3H	18.82	19.85	19.23	20.25	20.65	18.82	19.85	19.23	20.25	20.65
	4H	19.60	20.52	20.03	20.94	21.38	19.60	20.52	20.03	20.94	21.38
	6H	20.26	21.07	20.72	21.51	21.97	20.26	21.07	20.72	21.51	21.97
	8H	20.51	21.27	20.98	21.71	22.18	20.51	21.27	20.98	21.71	22.18
	12H	20.71	21.38	21.19	21.86	22.33	20.71	21.38	21.19	21.86	22.33
8H	4H	19.89	20.65	20.36	21.09	21.56	19.89	20.65	20.36	21.09	21.56
	6H	20.70	21.32	21.20	21.81	22.29	20.70	21.32	21.20	21.81	22.29
	8H	21.03	21.59	21.55	22.10	22.59	21.03	21.59	21.55	22.10	22.59
	12H	21.32	21.82	21.83	22.31	22.88	21.32	21.82	21.83	22.31	22.88
12H	4H	19.92	20.60	20.41	21.07	21.55	19.92	20.60	20.41	21.07	21.55
	6H	20.76	21.32	21.28	21.83	22.32	20.76	21.32	21.28	21.83	22.32
	8H	21.16	21.66	21.67	22.15	22.72	21.16	21.66	21.67	22.15	22.72