

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: P866182

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-40)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-927-45L-G-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

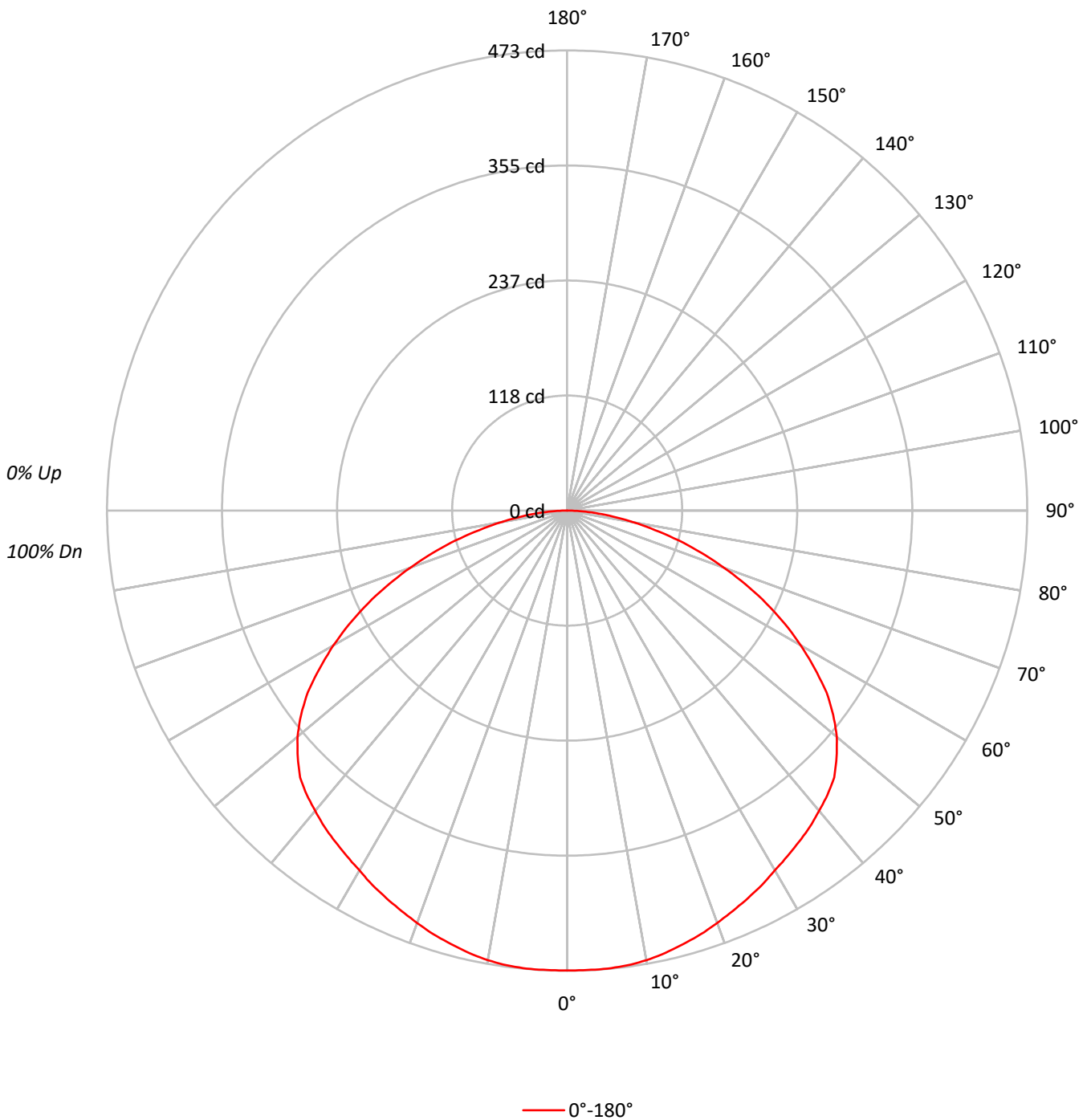
Lumens per Lamp: N/A
Luminaire Lumens: 1608.7 lumens
Efficiency: N/A
Efficacy: 41.5 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.53
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	72		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		68	63	58	56
4	81	68	59	52	78	67	58	52	64	57	51		62	55	50		60	54	49	47
5	74	61	51	44	72	59	51	44	57	49	44		55	48	43		53	47	43	40
6	68	54	45	38	66	53	44	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33		45	38	33		44	37	33	31
8	58	44	36	30	57	44	35	30	42	35	29		41	34	29		40	34	29	27
9	55	41	32	26	53	40	32	26	39	31	26		38	31	26		37	31	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	24		34	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3761
5°	3775
10°	3791
15°	3799
20°	3818
25°	3859
30°	3923
35°	4036
40°	4185
45°	4368
50°	4479
55°	4513
60°	4415
65°	4256
70°	3985
75°	3649
80°	3189
85°	2602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 4513 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	2.8
10°-20°	130.4	8.1
20°-30°	203.1	12.6
30°-40°	260.7	16.2
40°-50°	298.2	18.5
50°-60°	288.9	18.0
60°-70°	223.0	13.9
70°-80°	125.7	7.8
80°-90°	33.7	2.1
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°	378.5	23.5
0°-40°	639.2	39.7
0°-60°	1226.3	76.2
0°-90°	1608.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1608.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	473	
5°	473	45
15°	461	130
25°	440	203
35°	416	261
45°	388	298
55°	325	289
65°	226	223
75°	119	126
85°	28	34
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	472.7
2.5°	472.7
5°	472.7
7.5°	471.6
10°	469.3
12.5°	465.8
15°	461.3
17.5°	456.7
20°	451.0
22.5°	445.3
25°	439.6
27.5°	433.9
30°	427.0
32.5°	421.3
35°	415.6
37.5°	409.9
40°	403.0
42.5°	396.2
45°	388.2
47.5°	375.6
50°	361.9
52.5°	344.8
55°	325.4
57.5°	301.4
60°	277.5
62.5°	252.3
65°	226.1
67.5°	198.7
70°	171.3
72.5°	145.0
75°	118.7
77.5°	92.5
80°	69.6
82.5°	48.0
85°	28.5
87.5°	12.6
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	17.72	19.42	18.09	19.74	20.05	17.72	19.42	18.09	19.74	20.05
	3H	19.54	21.08	19.92	21.41	21.77	19.54	21.08	19.92	21.41	21.77
	4H	20.20	21.66	20.60	22.01	22.38	20.20	21.66	20.60	22.01	22.38
	6H	20.67	22.02	21.08	22.38	22.77	20.67	22.02	21.08	22.38	22.77
	8H	20.81	22.11	21.24	22.50	22.89	20.81	22.11	21.24	22.50	22.89
	12H	20.91	22.15	21.34	22.53	22.96	20.91	22.15	21.34	22.53	22.96
4H	2H	18.38	19.84	18.78	20.19	20.56	18.38	19.84	18.78	20.19	20.56
	3H	20.41	21.64	20.82	22.03	22.43	20.41	21.64	20.82	22.03	22.43
	4H	21.20	22.31	21.63	22.72	23.15	21.20	22.31	21.63	22.72	23.15
	6H	21.78	22.76	22.24	23.20	23.65	21.78	22.76	22.24	23.20	23.65
	8H	21.98	22.89	22.43	23.33	23.79	21.98	22.89	22.43	23.33	23.79
	12H	22.11	22.93	22.59	23.41	23.88	22.11	22.93	22.59	23.41	23.88
8H	4H	21.51	22.42	21.97	22.86	23.32	21.51	22.42	21.97	22.86	23.32
	6H	22.21	22.97	22.70	23.46	23.93	22.21	22.97	22.70	23.46	23.93
	8H	22.47	23.15	22.98	23.66	24.14	22.47	23.15	22.98	23.66	24.14
	12H	22.67	23.28	23.18	23.77	24.32	22.67	23.28	23.18	23.77	24.32
12H	4H	21.54	22.37	22.02	22.84	23.31	21.54	22.37	22.02	22.84	23.31
	6H	22.27	22.95	22.77	23.45	23.94	22.27	22.95	22.77	23.45	23.94
	8H	22.58	23.18	23.09	23.67	24.23	22.58	23.18	23.09	23.67	24.23