

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: P866205

Luminaire Tested: PRLX-2002-M-927-75L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866205
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-39)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-927-75L-G-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

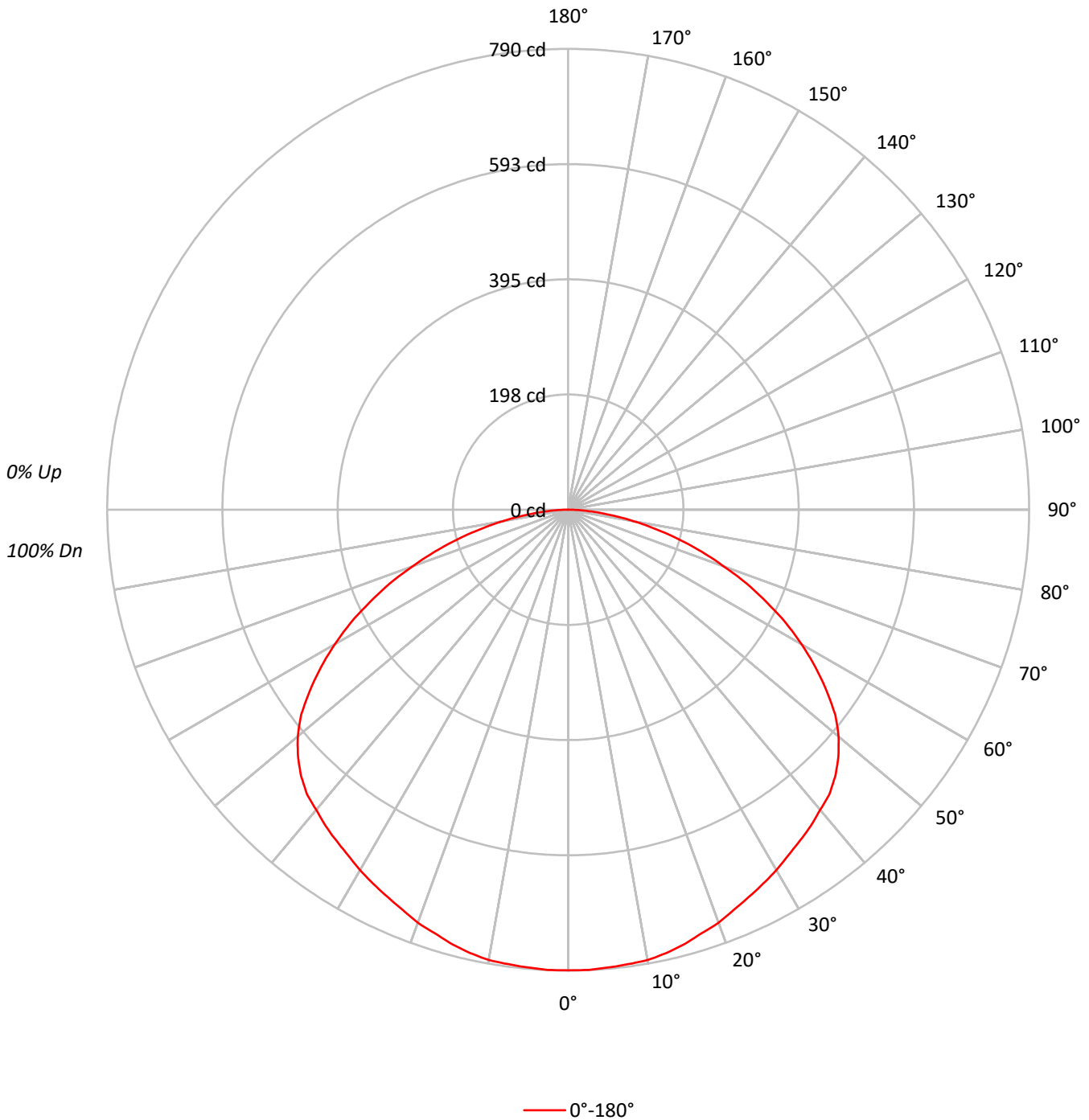
Lumens per Lamp: N/A
Luminaire Lumens: 2679.6 lumens
Efficiency: N/A
Efficacy: 38.4 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.53
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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	60		68	63	58	56
4	81	68	59	52	78	67	58	52	64	57	51		62	56	50		60	54	50	47
5	74	61	51	44	72	59	51	44	57	50	44		55	48	43		53	47	43	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	42	35	29		41	34	29		40	34	29	27
9	55	41	32	27	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°	6283
5°	6291
10°	6334
15°	6348
20°	6380
25°	6431
30°	6556
35°	6728
40°	6976
45°	7279
50°	7489
55°	7496
60°	7357
65°	7057
70°	6595
75°	6025
80°	5232
85°	4172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 7535 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	2.8
10°-20°	217.7	8.1
20°-30°	338.7	12.6
30°-40°	434.7	16.2
40°-50°	498.0	18.6
50°-60°	481.7	18.0
60°-70°	371.0	13.8
70°-80°	207.9	7.8
80°-90°	54.9	2.0
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°	631.5	23.6
0°-40°	1066.2	39.8
0°-60°	2045.8	76.3
0°-90°	2679.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2679.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	790	
5°	788	75
15°	771	218
25°	733	339
35°	693	435
45°	647	498
55°	540	482
65°	375	371
75°	196	208
85°	46	55
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	789.7
2.5°	789.7
5°	787.8
7.5°	785.9
10°	784.0
12.5°	778.3
15°	770.7
17.5°	761.2
20°	753.6
22.5°	742.2
25°	732.6
27.5°	723.1
30°	713.6
32.5°	702.2
35°	692.7
37.5°	683.2
40°	671.7
42.5°	662.2
45°	647.0
47.5°	628.0
50°	605.1
52.5°	576.6
55°	540.4
57.5°	502.4
60°	462.4
62.5°	420.6
65°	374.9
67.5°	331.1
70°	283.5
72.5°	239.8
75°	196.0
77.5°	154.1
80°	114.2
82.5°	78.0
85°	45.7
87.5°	20.9
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	19.50	21.20	19.87	21.52	21.83	19.50	21.20	19.87	21.52	21.83
	3H	21.31	22.85	21.69	23.18	23.54	21.31	22.85	21.69	23.18	23.54
	4H	21.96	23.42	22.36	23.77	24.14	21.96	23.42	22.36	23.77	24.14
	6H	22.42	23.78	22.83	24.14	24.53	22.42	23.78	22.83	24.14	24.53
	8H	22.56	23.86	22.99	24.25	24.64	22.56	23.86	22.99	24.25	24.64
	12H	22.65	23.89	23.08	24.27	24.70	22.65	23.89	23.08	24.27	24.70
4H	2H	20.15	21.61	20.55	21.96	22.33	20.15	21.61	20.55	21.96	22.33
	3H	22.17	23.40	22.58	23.79	24.19	22.17	23.40	22.58	23.79	24.19
	4H	22.95	24.06	23.38	24.47	24.91	22.95	24.06	23.38	24.47	24.91
	6H	23.53	24.51	23.99	24.94	25.40	23.53	24.51	23.99	24.94	25.40
	8H	23.72	24.63	24.18	25.07	25.53	23.72	24.63	24.18	25.07	25.53
	12H	23.85	24.67	24.32	25.14	25.61	23.85	24.67	24.32	25.14	25.61
8H	4H	23.26	24.17	23.72	24.61	25.07	23.26	24.17	23.72	24.61	25.07
	6H	23.96	24.71	24.45	25.20	25.67	23.96	24.71	24.45	25.20	25.67
	8H	24.21	24.89	24.71	25.39	25.87	24.21	24.89	24.71	25.39	25.87
	12H	24.40	25.00	24.90	25.49	26.05	24.40	25.00	24.90	25.49	26.05
12H	4H	23.29	24.11	23.77	24.59	25.05	23.29	24.11	23.77	24.59	25.05
	6H	24.01	24.69	24.51	25.19	25.68	24.01	24.69	24.51	25.19	25.68
	8H	24.31	24.91	24.82	25.40	25.96	24.31	24.91	24.82	25.40	25.96