

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: P866180

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866180
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-41)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-M-927-45L-G-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

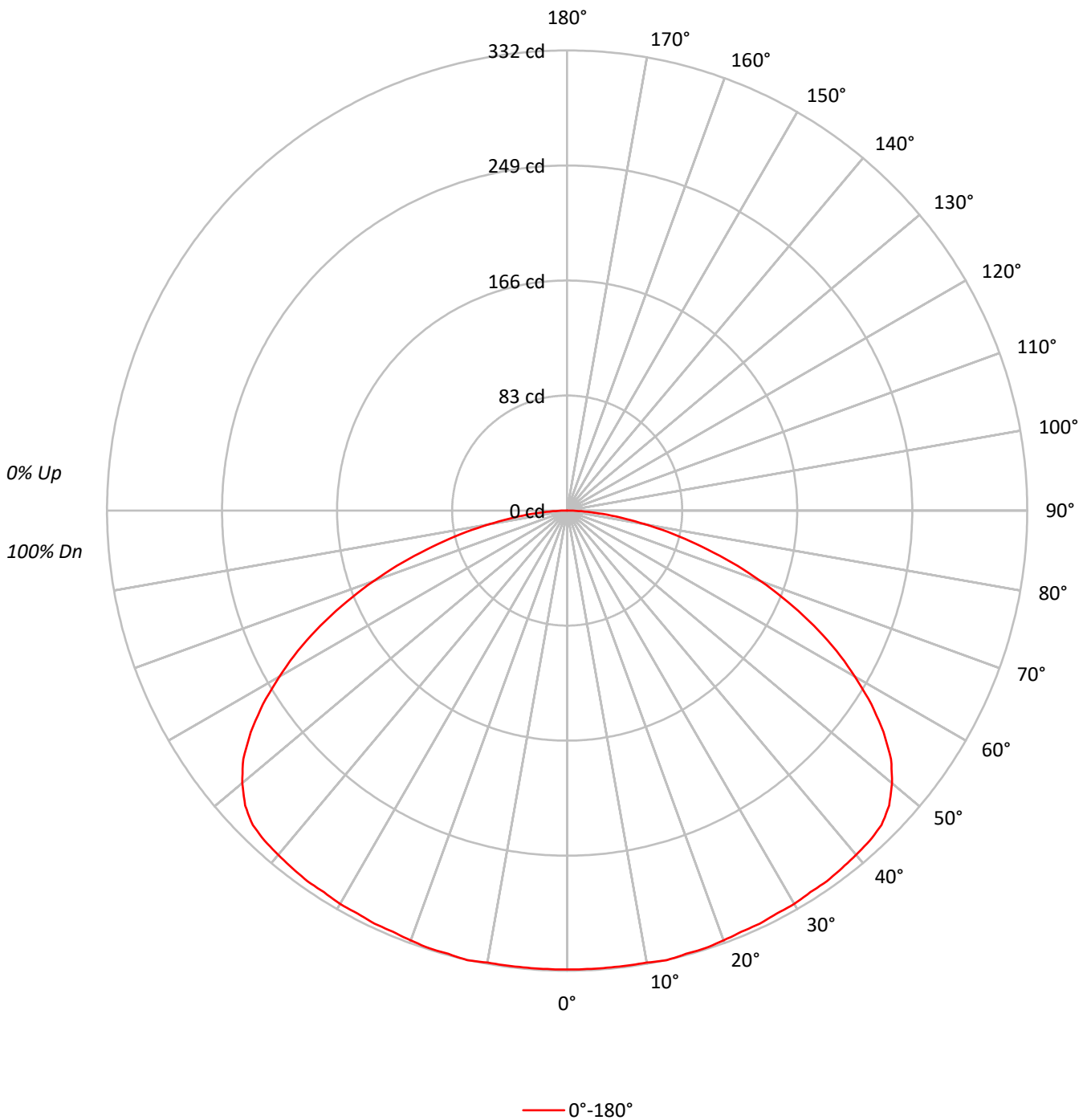
Lumens per Lamp: N/A
Luminaire Lumens: 1304.4 lumens
Efficiency: N/A
Efficacy: 33.6 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

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	98	94	105	100	96	92	96	93	90		92	89	87		89	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	85	75	67	60	72	65	59		69	63	58		67	61	57	55
4	80	67	58	51	78	66	57	50	63	56	49		61	54	49		59	53	48	46
5	73	59	50	43	71	58	49	42	56	48	42		54	47	41		52	46	41	39
6	67	53	43	37	65	52	43	37	50	42	36		48	41	36		47	40	35	33
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28		40	33	28		39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25		36	30	25		35	29	24	23
10	50	36	28	22	49	36	28	22	35	27	22		34	27	22		33	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2634
5°	2644
10°	2675
15°	2727
20°	2794
25°	2886
30°	3010
35°	3171
40°	3368
45°	3609
50°	3787
55°	3864
60°	3816
65°	3697
70°	3452
75°	3089
80°	2616
85°	2081

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 3864 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.6	2.4
10°-20°	93.9	7.2
20°-30°	152.0	11.7
30°-40°	204.8	15.7
40°-50°	246.5	18.9
50°-60°	247.6	19.0
60°-70°	193.5	14.8
70°-80°	107.2	8.2
80°-90°	27.3	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°	277.5	21.3
0°-40°	482.3	37.0
0°-60°	976.4	74.9
0°-90°	1304.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1304.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	331	
5°	331	32
15°	331	94
25°	329	152
35°	326	205
45°	321	247
55°	279	248
65°	196	193
75°	100	107
85°	23	27
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	331.1
2.5°	331.1
5°	331.1
7.5°	331.1
10°	331.1
12.5°	332.3
15°	331.1
17.5°	331.1
20°	330.0
22.5°	328.8
25°	328.8
27.5°	327.7
30°	327.7
32.5°	326.5
35°	326.5
37.5°	325.4
40°	324.3
42.5°	323.1
45°	320.8
47.5°	315.1
50°	306.0
52.5°	294.6
55°	278.6
57.5°	260.3
60°	239.8
62.5°	219.2
65°	196.4
67.5°	172.4
70°	148.4
72.5°	124.5
75°	100.5
77.5°	78.8
80°	57.1
82.5°	38.8
85°	22.8
87.5°	10.3
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	17.39	19.12	17.75	19.44	19.75	17.39	19.12	17.75	19.44	19.75
	3H	19.22	20.80	19.60	21.12	21.48	19.22	20.80	19.60	21.12	21.48
	4H	19.86	21.35	20.26	21.70	22.07	19.86	21.35	20.26	21.70	22.07
	6H	20.31	21.69	20.72	22.05	22.44	20.31	21.69	20.72	22.05	22.44
	8H	20.44	21.76	20.86	22.15	22.55	20.44	21.76	20.86	22.15	22.55
	12H	20.52	21.79	20.95	22.17	22.60	20.52	21.79	20.95	22.17	22.60
4H	2H	18.06	19.55	18.46	19.90	20.27	18.06	19.55	18.46	19.90	20.27
	3H	20.10	21.35	20.51	21.75	22.15	20.10	21.35	20.51	21.75	22.15
	4H	20.86	22.00	21.29	22.41	22.84	20.86	22.00	21.29	22.41	22.84
	6H	21.42	22.42	21.87	22.86	23.31	21.42	22.42	21.87	22.86	23.31
	8H	21.59	22.53	22.05	22.97	23.43	21.59	22.53	22.05	22.97	23.43
	12H	21.71	22.56	22.19	23.03	23.50	21.71	22.56	22.19	23.03	23.50
8H	4H	21.17	22.10	21.63	22.54	23.01	21.17	22.10	21.63	22.54	23.01
	6H	21.84	22.61	22.33	23.10	23.57	21.84	22.61	22.33	23.10	23.57
	8H	22.07	22.77	22.57	23.27	23.75	22.07	22.77	22.57	23.27	23.75
	12H	22.25	22.87	22.75	23.36	23.91	22.25	22.87	22.75	23.36	23.91
12H	4H	21.20	22.05	21.68	22.52	22.99	21.20	22.05	21.68	22.52	22.99
	6H	21.88	22.58	22.39	23.09	23.57	21.88	22.58	22.39	23.09	23.57
	8H	22.17	22.79	22.67	23.28	23.83	22.17	22.79	22.67	23.28	23.83