

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: P865721

Luminaire Tested: PRLX-2002-S-940-20L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865721
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-20)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-S-940-20L-L-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

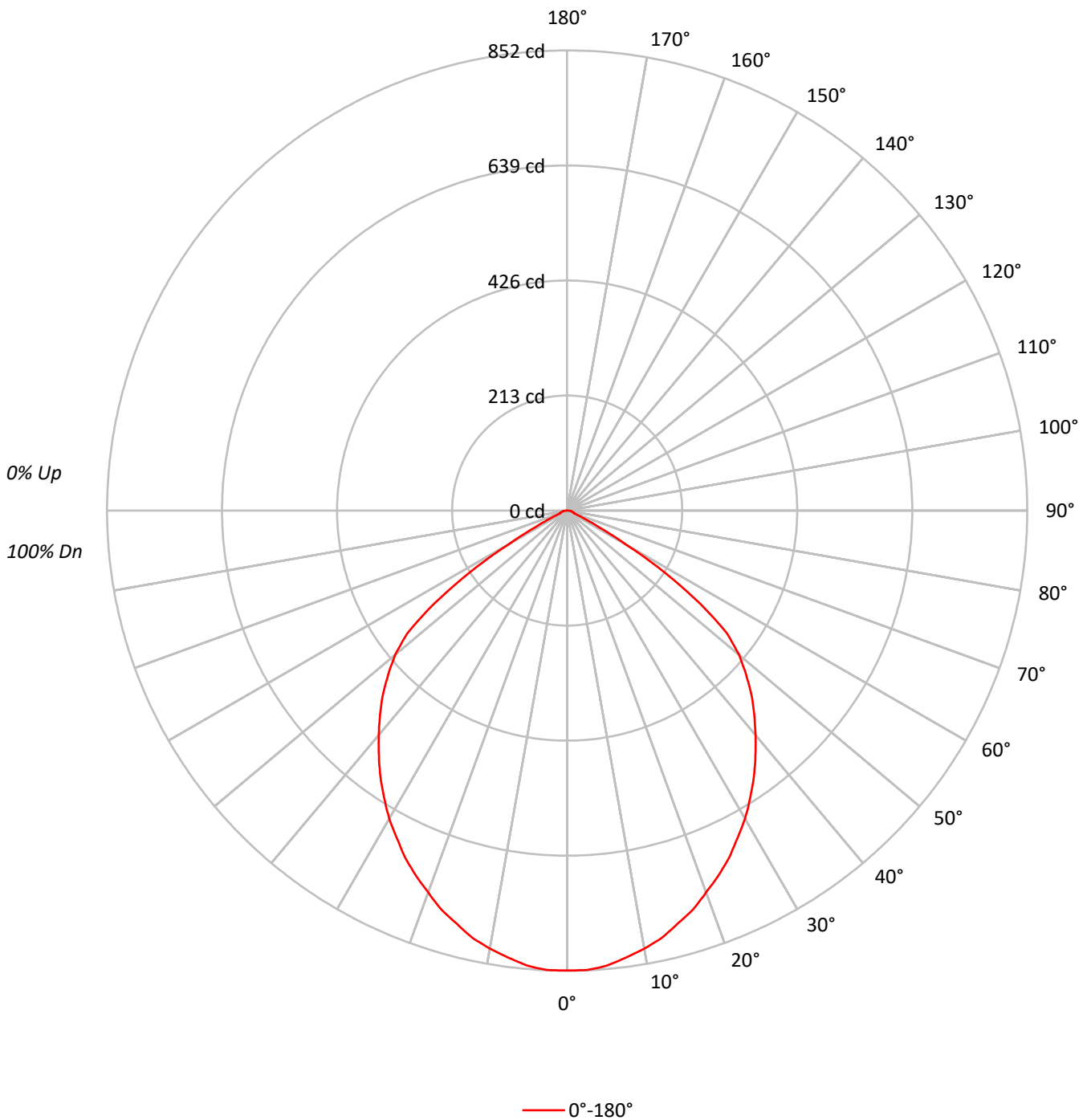
Lumens per Lamp: N/A
Luminaire Lumens: 1696.5 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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: 0.333 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P865721

CATALOG NUMBER: PRLX-2002-S-940-20L-L-U-S-X-X-BRSS-X

Luminous Intensity Polar Plot





TEST NUMBER: P865721

CATALOG NUMBER: PRLX-2002-S-940-20L-L-U-S-X-X-BRSS-X

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	71	66	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	60	56	54
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	55	49	45	54	49	45	43
8	66	54	46	41	65	53	46	41	52	46	41	51	45	41	50	44	40	39
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	37	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	15995
5°	15950
10°	15707
15°	15394
20°	15038
25°	14701
30°	14290
35°	13818
40°	13308
45°	12826
50°	12142
55°	9867
60°	4711
65°	1498
70°	719
75°	813
80°	811
85°	1207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12826 cd/sqm

TEST NUMBER: P865721

CATALOG NUMBER: PRLX-2002-S-940-20L-L-U-S-X-X-BRSS-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	4.7
10°-20°	223.2	13.2
20°-30°	326.2	19.2
30°-40°	376.6	22.2
40°-50°	371.1	21.9
50°-60°	257.9	15.2
60°-70°	44.8	2.6
70°-80°	11.6	0.7
80°-90°	5.1	0.3
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°	629.4	37.1
0°-40°	1005.9	59.3
0°-60°	1635.0	96.4
0°-90°	1696.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1696.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	852	
5°	846	80
15°	792	223
25°	709	326
35°	603	377
45°	483	371
55°	301	258
65°	34	45
75°	11	12
85°	6	5
90°	0	

TEST NUMBER: P865721

CATALOG NUMBER: PRLX-2002-S-940-20L-L-U-S-X-X-BRSS-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	851.5
2.5°	851.5
5°	845.9
7.5°	834.7
10°	823.5
12.5°	810.4
15°	791.6
17.5°	774.8
20°	752.3
22.5°	731.8
25°	709.3
27.5°	683.1
30°	658.8
32.5°	630.7
35°	602.6
37.5°	572.7
40°	542.7
42.5°	512.8
45°	482.8
47.5°	449.2
50°	415.5
52.5°	372.4
55°	301.3
57.5°	217.1
60°	125.4
62.5°	65.5
65°	33.7
67.5°	15.0
70°	13.1
72.5°	13.1
75°	11.2
77.5°	9.4
80°	7.5
82.5°	7.5
85°	5.6
87.5°	1.9
90°	0.0



TEST NUMBER: P865721
 CATALOG NUMBER: PRLX-2002-S-940-20L-L-U-S-X-X-BRSS-X

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	18.42	19.84	18.79	20.16	20.47	18.42	19.84	18.79	20.16	20.47
	3H	18.33	19.58	18.71	19.91	20.27	18.33	19.58	18.71	19.91	20.27
	4H	18.29	19.45	18.69	19.80	20.18	18.29	19.45	18.69	19.80	20.18
	6H	18.24	19.31	18.65	19.68	20.07	18.24	19.31	18.65	19.68	20.07
	8H	18.22	19.23	18.65	19.62	20.02	18.22	19.23	18.65	19.62	20.02
	12H	18.20	19.16	18.63	19.55	19.98	18.20	19.16	18.63	19.55	19.98
4H	2H	18.28	19.44	18.68	19.79	20.18	18.28	19.44	18.68	19.79	20.18
	3H	18.21	19.15	18.62	19.55	19.95	18.21	19.15	18.62	19.55	19.95
	4H	18.17	19.00	18.60	19.42	19.86	18.17	19.00	18.60	19.42	19.86
	6H	18.13	18.85	18.60	19.30	19.76	18.13	18.85	18.60	19.30	19.76
	8H	18.11	18.78	18.58	19.23	19.70	18.11	18.78	18.58	19.23	19.70
	12H	18.10	18.70	18.59	19.18	19.66	18.10	18.70	18.59	19.18	19.66
8H	4H	18.06	18.73	18.52	19.18	19.65	18.06	18.73	18.52	19.18	19.65
	6H	18.02	18.57	18.52	19.07	19.55	18.02	18.57	18.52	19.07	19.55
	8H	18.00	18.51	18.52	19.02	19.51	18.00	18.51	18.52	19.02	19.51
	12H	18.02	18.47	18.53	18.96	19.53	18.02	18.47	18.53	18.96	19.53
12H	4H	18.02	18.61	18.50	19.10	19.57	18.02	18.61	18.50	19.10	19.57
	6H	17.96	18.47	18.48	18.98	19.47	17.96	18.47	18.48	18.98	19.47
	8H	17.98	18.43	18.49	18.92	19.49	17.98	18.43	18.49	18.92	19.49