

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: P865715

Luminaire Tested: PRLX-2002-S-940-15L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-19)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-S-940-15L-L-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

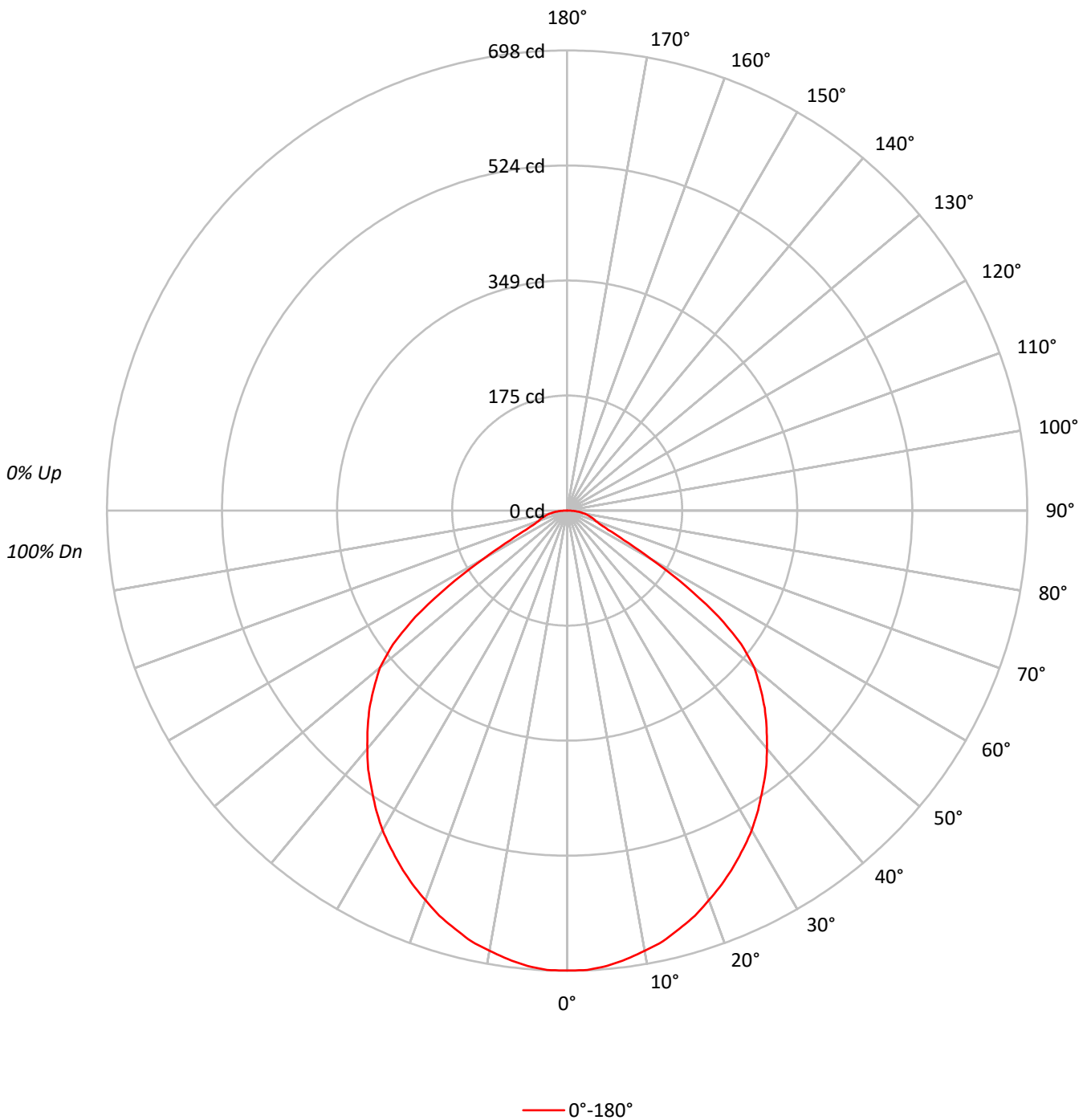
Lumens per Lamp: N/A
Luminaire Lumens: 1548.6 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 15.6
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: 0.333 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P865715

CATALOG NUMBER: PRLX-2002-S-940-15L-L-U-S-X-X-WHHR-X

Luminous Intensity Polar Plot





TEST NUMBER: P865715

CATALOG NUMBER: PRLX-2002-S-940-15L-L-U-S-X-X-WHHR-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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13104
5°	13075
10°	12930
15°	12775
20°	12570
25°	12363
30°	12147
35°	11844
40°	11564
45°	11261
50°	10830
55°	9193
60°	5485
65°	3058
70°	2543
75°	2649
80°	2888
85°	3017

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11261 cd/sqm

TEST NUMBER: P865715

CATALOG NUMBER: PRLX-2002-S-940-15L-L-U-S-X-X-WHHR-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.7	4.2
10°-20°	185.2	12.0
20°-30°	274.8	17.7
30°-40°	323.5	20.9
40°-50°	326.1	21.1
50°-60°	241.7	15.6
60°-70°	77.6	5.0
70°-80°	38.9	2.5
80°-90°	15.1	1.0
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°	525.7	33.9
0°-40°	849.2	54.8
0°-60°	1417.1	91.5
0°-90°	1548.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1548.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	698	
5°	693	66
15°	657	185
25°	596	275
35°	516	324
45°	424	326
55°	281	242
65°	69	78
75°	36	39
85°	14	15
90°	0	

TEST NUMBER: P865715

CATALOG NUMBER: PRLX-2002-S-940-15L-L-U-S-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

	0°
0°	697.6
2.5°	697.6
5°	693.4
7.5°	686.4
10°	677.9
12.5°	669.5
15°	656.9
17.5°	644.3
20°	628.8
22.5°	613.4
25°	596.5
27.5°	578.3
30°	560.0
32.5°	539.0
35°	516.5
37.5°	495.5
40°	471.6
42.5°	447.8
45°	423.9
47.5°	397.2
50°	370.6
52.5°	332.7
55°	280.7
57.5°	214.8
60°	146.0
62.5°	96.8
65°	68.8
67.5°	53.3
70°	46.3
72.5°	42.1
75°	36.5
77.5°	32.3
80°	26.7
82.5°	21.1
85°	14.0
87.5°	7.0
90°	0.0



TEST NUMBER: P865715
 CATALOG NUMBER: PRLX-2002-S-940-15L-L-U-S-X-X-WHHR-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	18.63	20.12	19.00	20.43	20.75	18.63	20.12	19.00	20.43	20.75
	3H	18.87	20.20	19.25	20.53	20.89	18.87	20.20	19.25	20.53	20.89
	4H	19.04	20.27	19.44	20.62	21.00	19.04	20.27	19.44	20.62	21.00
	6H	19.23	20.37	19.64	20.73	21.13	19.23	20.37	19.64	20.73	21.13
	8H	19.31	20.40	19.74	20.79	21.19	19.31	20.40	19.74	20.79	21.19
	12H	19.38	20.42	19.82	20.80	21.23	19.38	20.42	19.82	20.80	21.23
4H	2H	18.63	19.86	19.03	20.21	20.59	18.63	19.86	19.03	20.21	20.59
	3H	19.01	20.02	19.42	20.42	20.82	19.01	20.02	19.42	20.42	20.82
	4H	19.27	20.18	19.71	20.59	21.03	19.27	20.18	19.71	20.59	21.03
	6H	19.60	20.38	20.06	20.83	21.29	19.60	20.38	20.06	20.83	21.29
	8H	19.75	20.48	20.21	20.93	21.39	19.75	20.48	20.21	20.93	21.39
	12H	19.87	20.53	20.36	21.01	21.48	19.87	20.53	20.36	21.01	21.48
8H	4H	19.34	20.08	19.81	20.52	20.99	19.34	20.08	19.81	20.52	20.99
	6H	19.77	20.38	20.27	20.88	21.35	19.77	20.38	20.27	20.88	21.35
	8H	20.00	20.55	20.51	21.06	21.55	20.00	20.55	20.51	21.06	21.55
	12H	20.21	20.70	20.72	21.19	21.76	20.21	20.70	20.72	21.19	21.76
12H	4H	19.34	20.00	19.82	20.48	20.95	19.34	20.00	19.82	20.48	20.95
	6H	19.79	20.35	20.31	20.86	21.35	19.79	20.35	20.31	20.86	21.35
	8H	20.07	20.57	20.58	21.06	21.62	20.07	20.57	20.58	21.06	21.62