

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: P865719

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-S-940-20L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

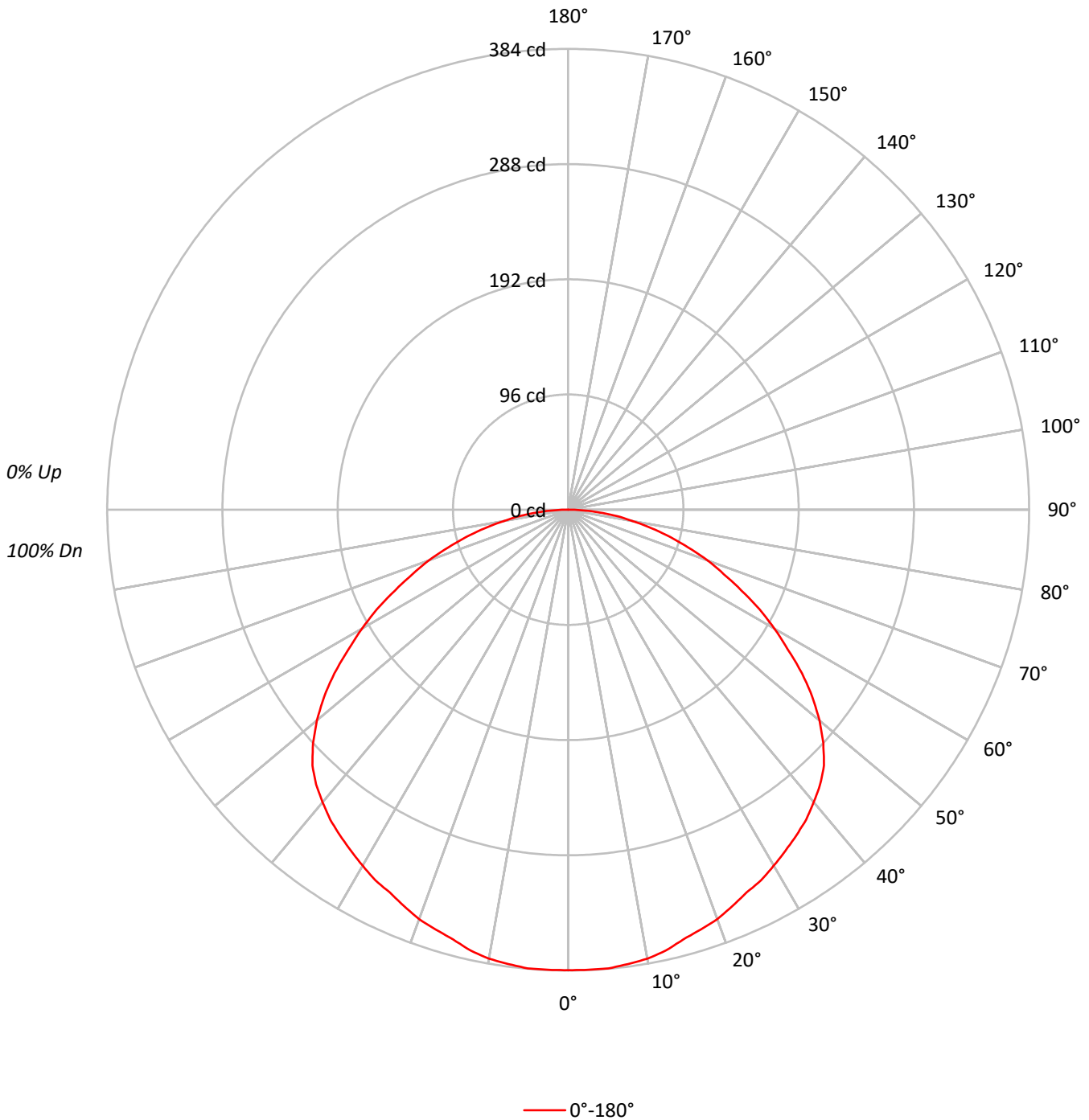
Lumens per Lamp: N/A
Luminaire Lumens: 1235.6 lumens
Efficiency: N/A
Efficacy: 56.7 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.49
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

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: P865719

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

Luminous Intensity Polar Plot





TEST NUMBER: P865719

CATALOG NUMBER: PRLX-2002-S-940-20L-G-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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	76	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		60	55	50	48
5	75	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		51	44	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24		36	29	24		35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7208
5°	7235
10°	7246
15°	7207
20°	7258
25°	7291
30°	7429
35°	7597
40°	7803
45°	8004
50°	7984
55°	7785
60°	7454
65°	7072
70°	6783
75°	6387
80°	5874
85°	5647

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 47.5°
 Luminance: 8013 cd/sqm

TEST NUMBER: P865719

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.5	3.0
10°-20°	105.0	8.5
20°-30°	162.9	13.2
30°-40°	207.7	16.8
40°-50°	231.1	18.7
50°-60°	211.7	17.1
60°-70°	158.4	12.8
70°-80°	93.0	7.5
80°-90°	29.3	2.4
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°	304.4	24.6
0°-40°	512.1	41.4
0°-60°	954.9	77.3
0°-90°	1235.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1235.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	384	
5°	384	36
15°	371	105
25°	352	163
35°	331	208
45°	301	231
55°	238	212
65°	159	158
75°	88	93
85°	26	29
90°	0	

TEST NUMBER: P865719

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

CANDELA DISTRIBUTION (FULL):

	0°
0°	383.7
2.5°	383.7
5°	383.7
7.5°	381.8
10°	379.9
12.5°	376.2
15°	370.6
17.5°	366.8
20°	363.1
22.5°	357.5
25°	351.8
27.5°	348.1
30°	342.5
32.5°	336.9
35°	331.3
37.5°	325.6
40°	318.2
42.5°	310.7
45°	301.3
47.5°	288.2
50°	273.2
52.5°	256.4
55°	237.7
57.5°	217.1
60°	198.4
62.5°	179.7
65°	159.1
67.5°	140.4
70°	123.5
72.5°	104.8
75°	88.0
77.5°	71.1
80°	54.3
82.5°	41.2
85°	26.2
87.5°	13.1
90°	0.0



TEST NUMBER: P865719
 CATALOG NUMBER: PRLX-2002-S-940-20L-G-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	19.37	21.05	19.73	21.36	21.68	19.37	21.05	19.73	21.36	21.68
	3H	21.15	22.68	21.53	23.00	23.36	21.15	22.68	21.53	23.00	23.36
	4H	21.85	23.28	22.24	23.63	24.01	21.85	23.28	22.24	23.63	24.01
	6H	22.38	23.72	22.79	24.08	24.47	22.38	23.72	22.79	24.08	24.47
	8H	22.58	23.85	23.00	24.24	24.64	22.58	23.85	23.00	24.24	24.64
	12H	22.73	23.95	23.15	24.33	24.76	22.73	23.95	23.15	24.33	24.76
4H	2H	19.99	21.43	20.39	21.78	22.15	19.99	21.43	20.39	21.78	22.15
	3H	22.01	23.22	22.42	23.62	24.02	22.01	23.22	22.42	23.62	24.02
	4H	22.84	23.94	23.27	24.35	24.79	22.84	23.94	23.27	24.35	24.79
	6H	23.51	24.47	23.97	24.91	25.37	23.51	24.47	23.97	24.91	25.37
	8H	23.77	24.67	24.23	25.11	25.57	23.77	24.67	24.23	25.11	25.57
	12H	23.97	24.78	24.45	25.26	25.73	23.97	24.78	24.45	25.26	25.73
8H	4H	23.18	24.08	23.64	24.52	24.98	23.18	24.08	23.64	24.52	24.98
	6H	23.98	24.73	24.47	25.22	25.69	23.98	24.73	24.47	25.22	25.69
	8H	24.32	25.00	24.83	25.50	25.99	24.32	25.00	24.83	25.50	25.99
	12H	24.62	25.22	25.12	25.71	26.26	24.62	25.22	25.12	25.71	26.26
12H	4H	23.22	24.03	23.70	24.51	24.97	23.22	24.03	23.70	24.51	24.97
	6H	24.05	24.73	24.56	25.23	25.72	24.05	24.73	24.56	25.23	25.72
	8H	24.46	25.06	24.97	25.55	26.11	24.46	25.06	24.97	25.55	26.11