

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: G2-2404-080-1

Luminaire Tested: PRLX-309-WC-FIL-120-TRBLGY-TFIN-DW-WH

Test Date: 2024-06-19

**Test Information**

Test Method: LM-79-2019  
Report Number: G2-2404-080-1  
Test Lab: Cooper Lighting Solutions  
Test Date: 2024-06-19  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-309-WC-FIL-120-TRBLGY-TFIN-DW-WH  
Description: 3D PRINTED LED LAMP BASED DECORATIVE LUMIANIRE, 309 WATER JUG SHADE, FILAMENT LAMP  
Light Source: Philips  
FILAMENT BULB - 60W Equivalent 929001969604  
8A19/PER/927-922/CL/G/E26/WGX 1FB T20  
Ballast/Driver: PHILIPS @Current  
INTEGRAL TO LAMP

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 549.9 lumens  
Efficiency: N/A  
Efficacy: 70.5 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.43 / 1.37  
Luminous Opening: Vertical Cylinder (Dia: 0.62' x H: 0.79')  
CIE Type: Semi-Direct

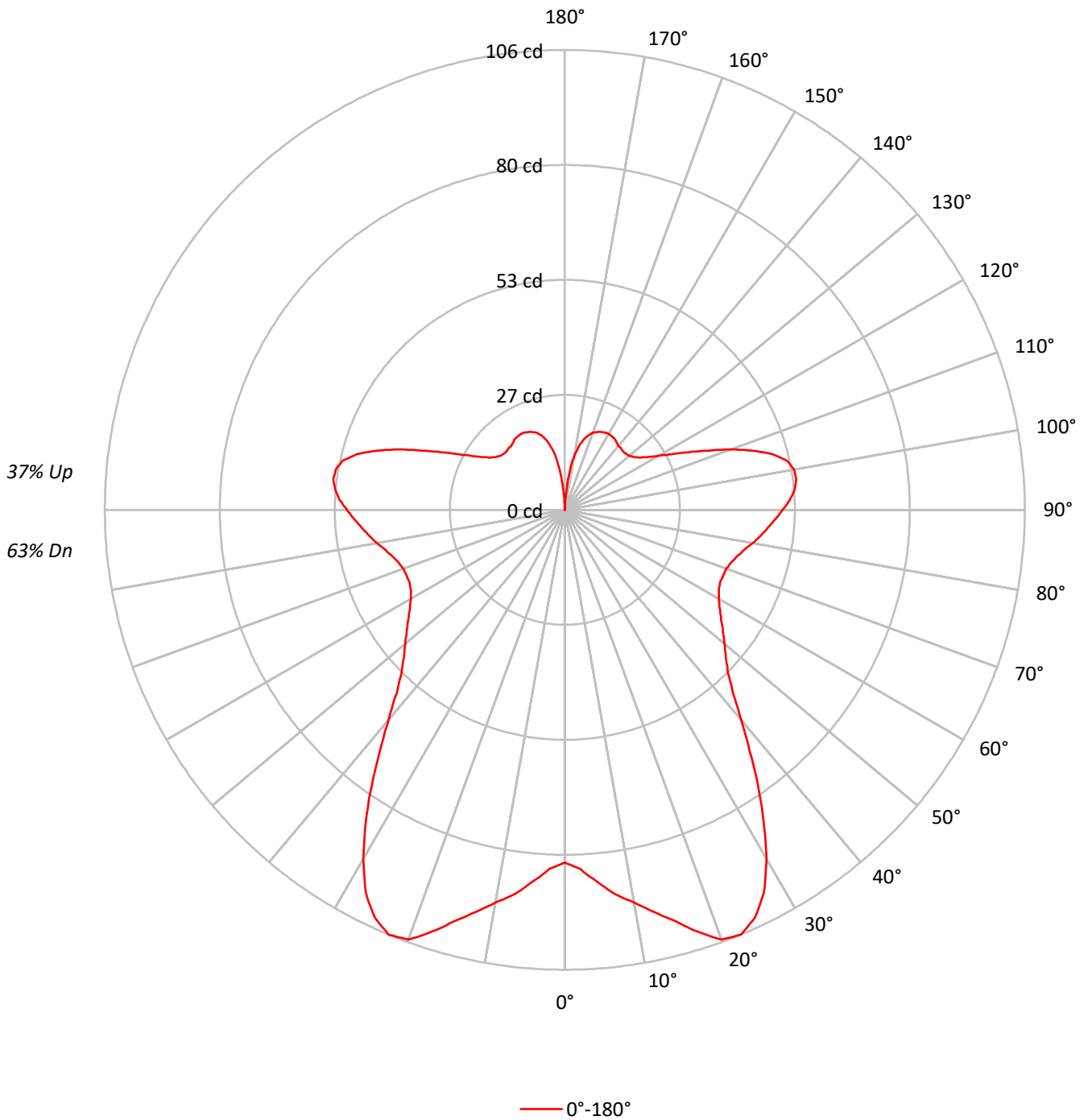
Input Watts (W): 7.8  
Input Voltage (V): 120.0  
Input Current (Ain): 0.0794  
Voltage Rise (V): NR  
Power Factor: 0.8152  
Total Harmonic Distortion (THDi): 70.5%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): 25.3  
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68	63
1	97	91	86	81	90	85	80	76	74	70	67	64	61	58	54	52	50	46
2	87	78	70	64	81	73	66	60	64	58	53	55	51	47	47	43	41	36
3	79	68	60	53	74	64	56	50	56	49	44	48	43	39	41	37	34	30
4	73	60	51	44	67	56	48	42	49	43	37	43	37	33	36	32	29	25
5	67	54	45	38	62	50	42	36	44	37	32	38	33	29	33	29	25	22
6	61	48	39	33	57	45	37	31	40	33	28	35	29	25	30	26	22	19
7	57	44	35	29	53	41	33	28	36	30	25	32	26	22	27	23	20	17
8	53	40	31	26	49	37	30	24	33	27	22	29	24	20	25	21	18	15
9	49	36	28	23	46	34	27	22	30	24	20	27	22	18	23	19	16	14
10	46	33	26	21	43	32	24	20	28	22	18	25	20	16	22	18	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	2852
5°	2657
10°	2549
15°	2488
20°	2480
25°	2291
30°	1949
35°	1561
40°	1230
45°	1010
50°	897
55°	815
60°	758
65°	735
70°	748
75°	796
80°	876
85°	974

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 1092 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.4	1.5
10°-20°	28.1	5.1
20°-30°	47.1	8.6
30°-40°	48.4	8.8
40°-50°	41.8	7.6
50°-60°	39.6	7.2
60°-70°	39.5	7.2
70°-80°	43.8	8.0
80°-90°	51.3	9.3
90°-100°	57.5	10.5
100°-110°	51.5	9.4
110°-120°	31.7	5.8
120°-130°	19.3	3.5
130°-140°	14.8	2.7
140°-150°	12.5	2.3
150°-160°	9.1	1.7
160°-170°	4.7	0.9
170°-180°	0.7	0.1
0°-30°	83.6	15.2
0°-40°	132.0	24.0
0°-60°	213.4	38.8
0°-90°	348.0	63.3
90°-120°	140.7	25.6
90°-150°	187.3	34.1
90°-180°	202.0	36.7
0°-180°	549.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	81	
5°	86	8
15°	98	28
25°	104	47
35°	78	48
45°	53	42
55°	44	40
65°	40	40
75°	41	44
85°	47	38
90°	50	28
95°	53	43
105°	50	51
115°	31	32
125°	21	19
135°	19	15
145°	20	12
155°	20	9
165°	17	5
175°	5	1
180°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	81.3
2.5°	82.9
5°	86.1
7.5°	89.4
10°	91.9
12.5°	94.9
15°	98.1
17.5°	102.0
20°	105.4
22.5°	106.0
25°	103.7
27.5°	99.4
30°	92.9
32.5°	85.3
35°	77.6
37.5°	69.9
40°	63.2
42.5°	57.4
45°	53.2
47.5°	50.3
50°	48.0
52.5°	45.9
55°	44.0
57.5°	42.3
60°	41.0
62.5°	40.0
65°	39.5
67.5°	39.5
70°	39.6
72.5°	40.2
75°	41.2
77.5°	42.4
80°	44.0
82.5°	45.5
85°	47.0
87.5°	48.6
90°	50.2
92.5°	51.9
95°	53.1
97.5°	53.8
100°	53.6
102.5°	52.4
105°	49.6
107.5°	45.4
110°	40.6



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	35.7
115°	31.4
117.5°	27.7
120°	24.8
122.5°	22.6
125°	21.0
127.5°	20.0
130°	19.4
132.5°	19.1
135°	19.0
137.5°	19.2
140°	19.2
142.5°	19.6
145°	20.0
147.5°	20.1
150°	20.2
152.5°	20.1
155°	19.8
157.5°	19.4
160°	18.9
162.5°	18.0
165°	16.8
167.5°	15.0
170°	12.8
172.5°	9.4
175°	5.1
177.5°	1.1
180°	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	6.94	8.01	7.76	8.87	9.93	6.94	8.01	7.76	8.87	9.93
	3H	9.51	10.50	10.34	11.36	12.45	9.51	10.50	10.34	11.36	12.45
	4H	10.91	11.86	11.76	12.73	13.83	10.91	11.86	11.76	12.73	13.83
	6H	12.46	13.34	13.31	14.21	15.32	12.46	13.34	13.31	14.21	15.32
	8H	13.24	14.08	14.10	14.98	16.09	13.24	14.08	14.10	14.98	16.09
	12H	14.03	14.85	14.91	15.73	16.87	14.03	14.85	14.91	15.73	16.87
4H	2H	7.56	8.51	8.41	9.38	10.47	7.56	8.51	8.41	9.38	10.47
	3H	10.40	11.22	11.26	12.12	13.24	10.40	11.22	11.26	12.12	13.24
	4H	11.99	12.75	12.86	13.65	14.78	11.99	12.75	12.86	13.65	14.78
	6H	13.72	14.40	14.61	15.32	16.46	13.72	14.40	14.61	15.32	16.46
	8H	14.62	15.26	15.50	16.17	17.32	14.62	15.26	15.50	16.17	17.32
	12H	15.53	16.12	16.43	17.05	18.21	15.53	16.12	16.43	17.05	18.21
8H	4H	12.53	13.17	13.42	14.09	15.24	12.53	13.17	13.42	14.09	15.24
	6H	14.49	15.04	15.40	15.99	17.14	14.49	15.04	15.40	15.99	17.14
	8H	15.54	16.04	16.46	16.98	18.15	15.54	16.04	16.46	16.98	18.15
	12H	16.64	17.09	17.56	18.03	19.24	16.64	17.09	17.56	18.03	19.24
12H	4H	12.66	13.25	13.57	14.18	15.34	12.66	13.25	13.57	14.18	15.34
	6H	14.70	15.21	15.62	16.15	17.31	14.70	15.21	15.62	16.15	17.31
	8H	15.84	16.29	16.76	17.23	18.44	15.84	16.29	16.76	17.23	18.44