

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: SHAPER

Report Number: P600646

Luminaire Tested: 235-90-40K-LL7-UNV-STD-X-X-WHHR-BR-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600646  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-582-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/6/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: SHAPER  
Catalog Number: 235-90-40K-LL7-UNV-STD-X-X-WHHR-BR-X  
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

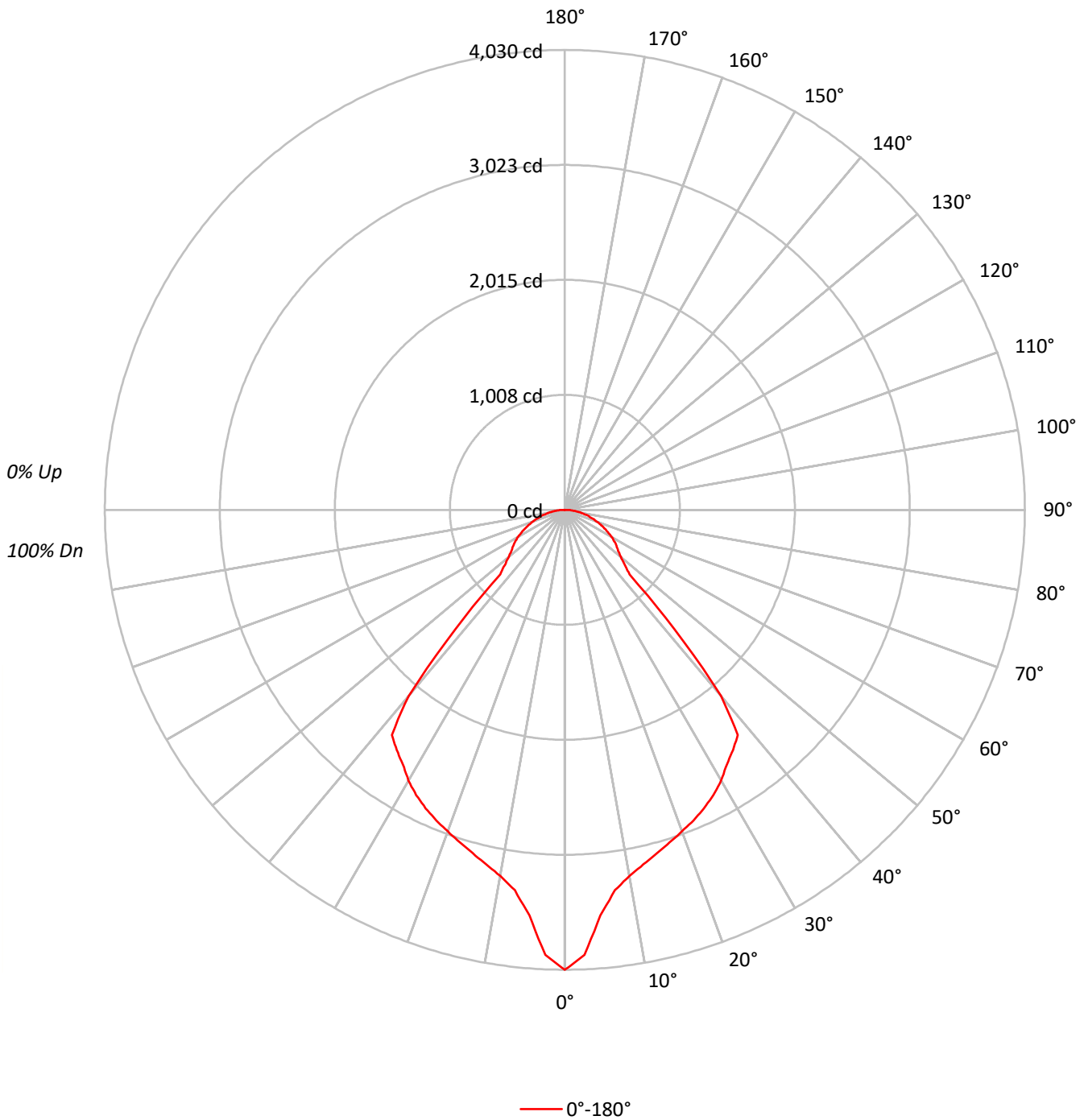
Lumens per Lamp: N/A  
Luminaire Lumens: 6121.9 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 55.4  
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: NR  
Operation Time: NR  
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	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	46	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	42	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°
0°	31070
5°	27591
10°	25490
15°	24865
20°	24597
25°	24542
30°	24374
35°	24163
40°	21417
45°	8719
50°	7672
55°	7423
60°	7267
65°	6963
70°	6681
75°	6416
80°	6153
85°	6032

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8719 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.0	5.4
10°-20°	880.7	14.4
20°-30°	1329.3	21.7
30°-40°	1585.2	25.9
40°-50°	819.7	13.4
50°-60°	494.4	8.1
60°-70°	378.9	6.2
70°-80°	227.3	3.7
80°-90°	74.6	1.2
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°	2542.0	41.5
0°-40°	4127.2	67.4
0°-60°	5441.2	88.9
0°-90°	6121.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6121.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4030	
5°	3565	332
15°	3116	881
25°	2885	1329
35°	2568	1585
45°	800	820
55°	552	494
65°	382	379
75°	215	227
85°	68	75
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4030.3
2.5°	3902.4
5°	3565.4
7.5°	3360.7
10°	3256.2
12.5°	3181.6
15°	3115.5
17.5°	3055.8
20°	2998.2
22.5°	2944.9
25°	2885.2
27.5°	2819.1
30°	2738.1
32.5°	2642.1
35°	2567.5
37.5°	2488.6
40°	2128.2
42.5°	1418.1
45°	799.7
47.5°	712.2
50°	639.7
52.5°	588.6
55°	552.3
57.5°	513.9
60°	471.3
62.5°	426.5
65°	381.7
67.5°	339.1
70°	296.4
72.5°	253.8
75°	215.4
77.5°	174.9
80°	138.6
82.5°	102.4
85°	68.2
87.5°	34.1
90°	0.0

(END OF REPORT)