

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: P600651

Luminaire Tested: 235-90-40K-LL8-UNV-STD-X-X-WHHR-SR-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600651  
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-LL8-UNV-STD-X-X-WHHR-SR-X  
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

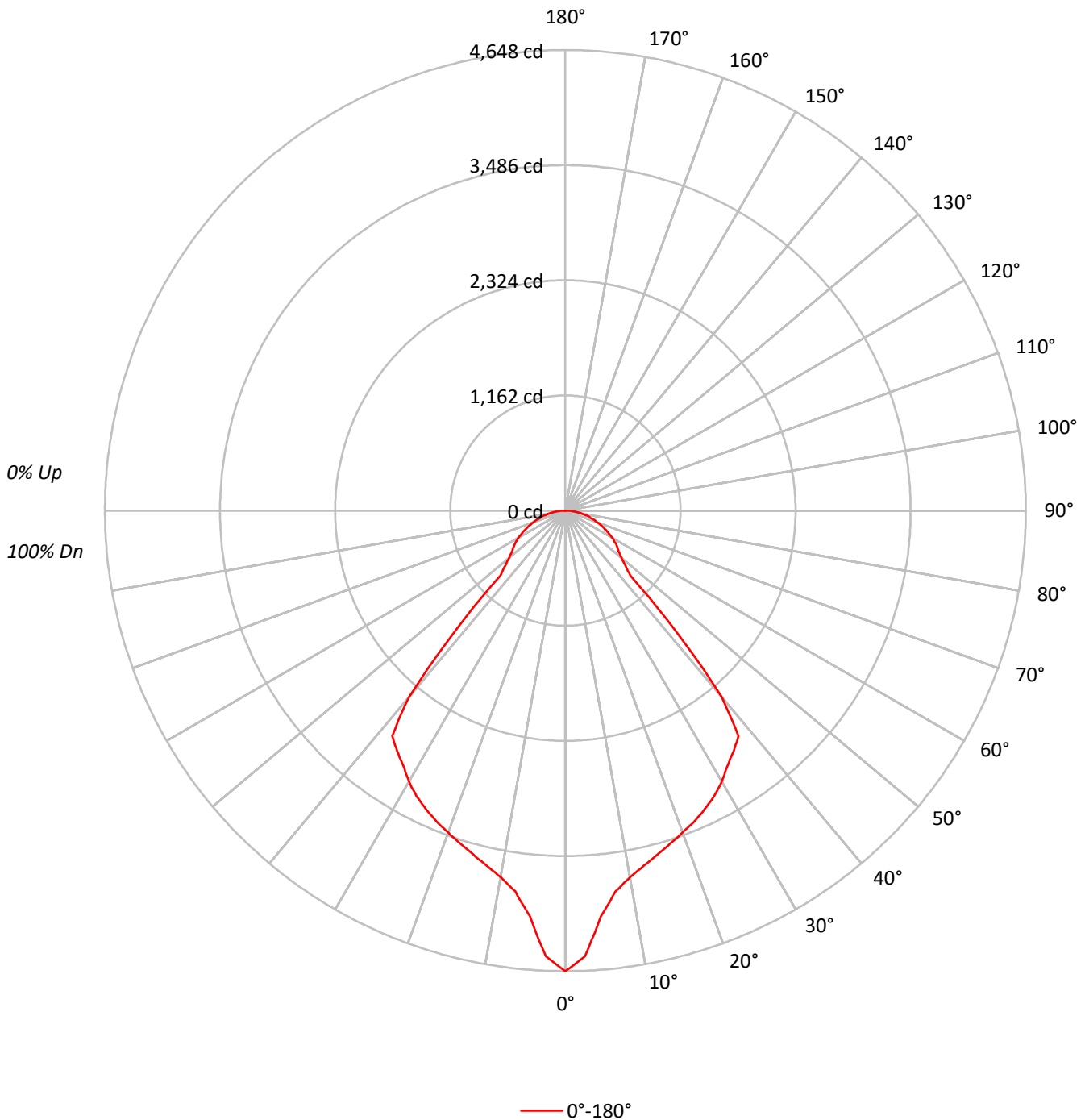
Lumens per Lamp: N/A  
Luminaire Lumens: 7060.4 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 72.2  
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°	35834
5°	31822
10°	29398
15°	28677
20°	28368
25°	28304
30°	28110
35°	27867
40°	24701
45°	10055
50°	8849
55°	8562
60°	8380
65°	8030
70°	7706
75°	7399
80°	7099
85°	6961

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10055 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	382.9	5.4
10°-20°	1015.8	14.4
20°-30°	1533.1	21.7
30°-40°	1828.2	25.9
40°-50°	945.4	13.4
50°-60°	570.2	8.1
60°-70°	436.9	6.2
70°-80°	262.1	3.7
80°-90°	86.0	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°	2931.7	41.5
0°-40°	4759.9	67.4
0°-60°	6275.4	88.9
0°-90°	7060.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7060.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4648	
5°	4112	383
15°	3593	1016
25°	3328	1533
35°	2961	1828
45°	922	945
55°	637	570
65°	440	437
75°	248	262
85°	79	86
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4648.2
2.5°	4500.7
5°	4112.1
7.5°	3876.0
10°	3755.5
12.5°	3669.4
15°	3593.1
17.5°	3524.3
20°	3457.9
22.5°	3396.4
25°	3327.5
27.5°	3251.3
30°	3157.8
32.5°	3047.2
35°	2961.1
37.5°	2870.1
40°	2454.5
42.5°	1635.5
45°	922.3
47.5°	821.4
50°	737.8
52.5°	678.8
55°	637.0
57.5°	592.7
60°	543.5
62.5°	491.9
65°	440.2
67.5°	391.0
70°	341.9
72.5°	292.7
75°	248.4
77.5°	201.7
80°	159.9
82.5°	118.0
85°	78.7
87.5°	39.3
90°	0.0

(END OF REPORT)