

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: P600584

Luminaire Tested: 235-90-30K-LL2-UNV-STD-X-X-WHHR-FL-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600584  
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: 235-90-30K-LL2-UNV-STD-X-X-WHHR-FL-X  
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE  
Light Source: 3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

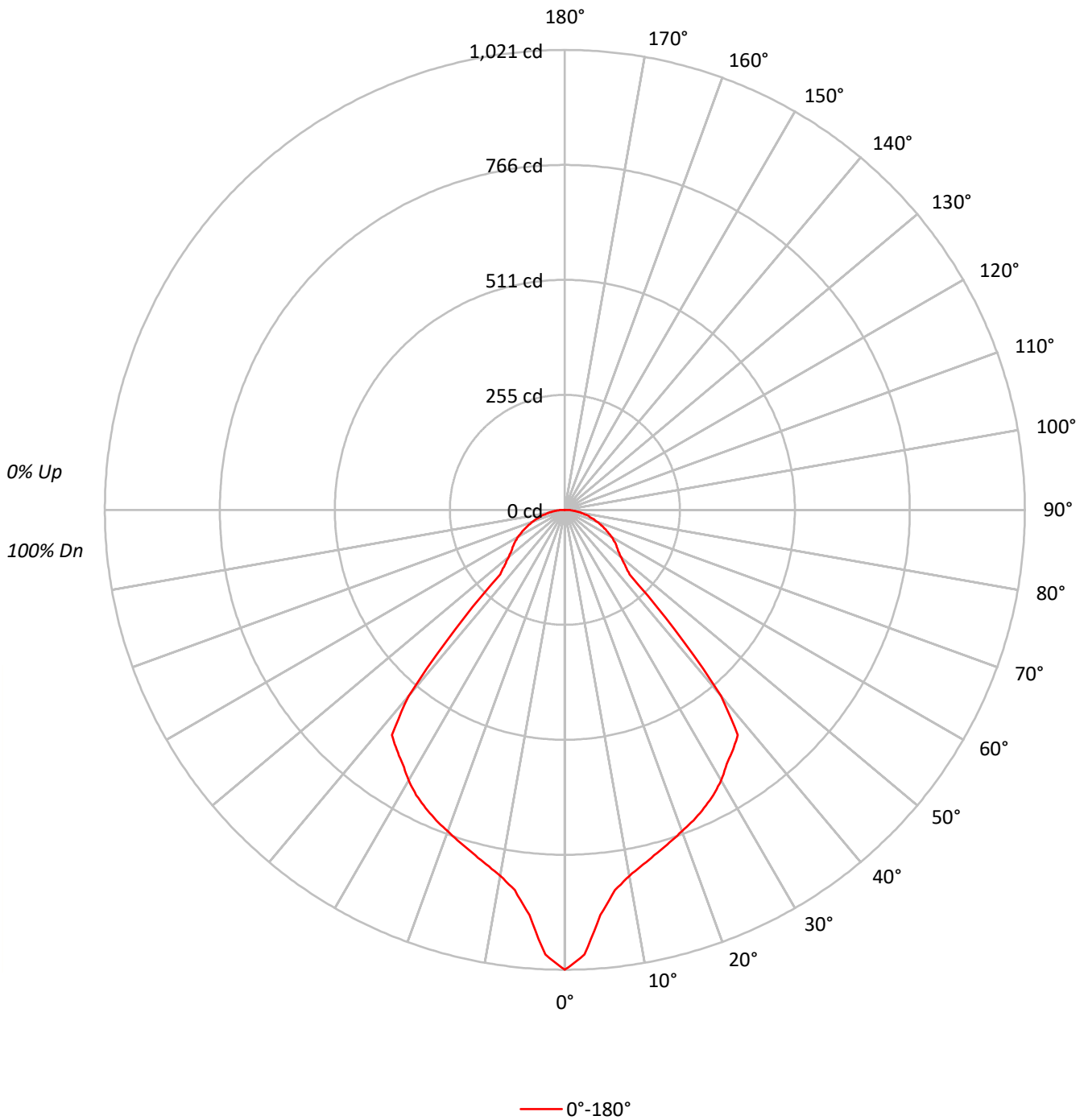
Lumens per Lamp: N/A  
Luminaire Lumens: 1550.8 lumens  
Efficiency: N/A  
Efficacy: 120.2 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 12.9  
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°	7870
5°	6989
10°	6457
15°	6299
20°	6231
25°	6217
30°	6174
35°	6121
40°	5425
45°	2209
50°	1944
55°	1880
60°	1841
65°	1764
70°	1693
75°	1626
80°	1558
85°	1530

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2209 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.1	5.4
10°-20°	223.1	14.4
20°-30°	336.7	21.7
30°-40°	401.5	25.9
40°-50°	207.6	13.4
50°-60°	125.2	8.1
60°-70°	96.0	6.2
70°-80°	57.6	3.7
80°-90°	18.9	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°	643.9	41.5
0°-40°	1045.5	67.4
0°-60°	1378.4	88.9
0°-90°	1550.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1550.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1021	
5°	903	84
15°	789	223
25°	731	337
35°	650	402
45°	203	208
55°	140	125
65°	97	96
75°	55	58
85°	17	19
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1020.9
2.5°	988.5
5°	903.2
7.5°	851.3
10°	824.9
12.5°	805.9
15°	789.2
17.5°	774.1
20°	759.5
22.5°	746.0
25°	730.9
27.5°	714.1
30°	693.6
32.5°	669.3
35°	650.4
37.5°	630.4
40°	539.1
42.5°	359.2
45°	202.6
47.5°	180.4
50°	162.1
52.5°	149.1
55°	139.9
57.5°	130.2
60°	119.4
62.5°	108.0
65°	96.7
67.5°	85.9
70°	75.1
72.5°	64.3
75°	54.6
77.5°	44.3
80°	35.1
82.5°	25.9
85°	17.3
87.5°	8.6
90°	0.0

(END OF REPORT)