

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: P600632

Luminaire Tested: 235-90-40K-LL2-UNV-STD-X-X-WHHR-FL-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600632  
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-LL2-UNV-STD-X-X-WHHR-FL-X  
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

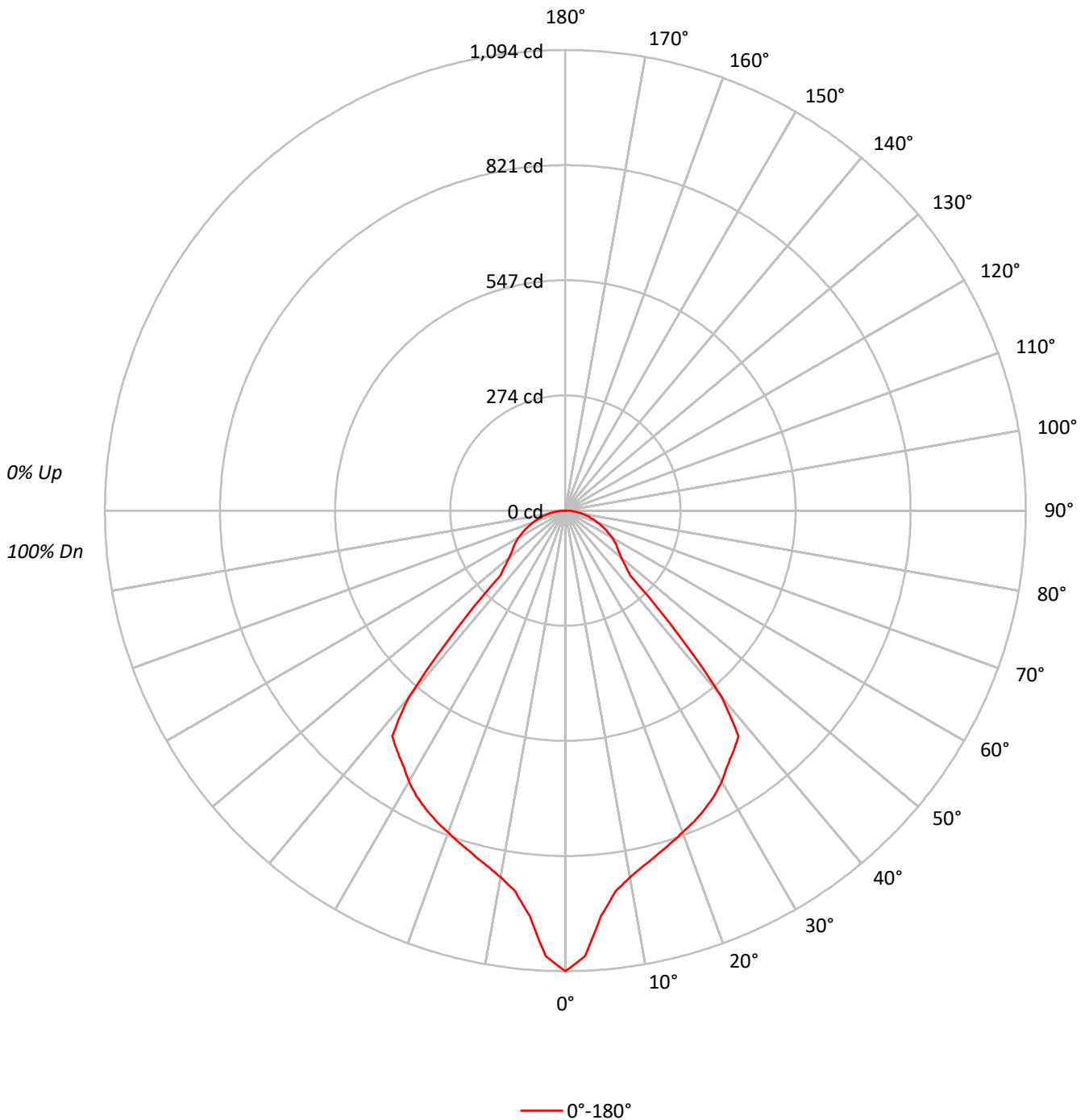
Lumens per Lamp: N/A  
Luminaire Lumens: 1661.7 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	8434
5°	7489
10°	6919
15°	6750
20°	6676
25°	6661
30°	6616
35°	6559
40°	5814
45°	2367
50°	2082
55°	2015
60°	1972
65°	1890
70°	1814
75°	1742
80°	1669
85°	1636

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2367 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	5.4
10°-20°	239.1	14.4
20°-30°	360.8	21.7
30°-40°	430.3	25.9
40°-50°	222.5	13.4
50°-60°	134.2	8.1
60°-70°	102.8	6.2
70°-80°	61.7	3.7
80°-90°	20.2	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°	690.0	41.5
0°-40°	1120.3	67.4
0°-60°	1476.9	88.9
0°-90°	1661.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1661.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1094	
5°	968	90
15°	846	239
25°	783	361
35°	697	430
45°	217	222
55°	150	134
65°	104	103
75°	58	62
85°	18	20
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1094.0
2.5°	1059.2
5°	967.8
7.5°	912.2
10°	883.9
12.5°	863.6
15°	845.7
17.5°	829.4
20°	813.8
22.5°	799.3
25°	783.1
27.5°	765.2
30°	743.2
32.5°	717.2
35°	696.9
37.5°	675.5
40°	577.7
42.5°	384.9
45°	217.1
47.5°	193.3
50°	173.6
52.5°	159.8
55°	149.9
57.5°	139.5
60°	127.9
62.5°	115.8
65°	103.6
67.5°	92.0
70°	80.5
72.5°	68.9
75°	58.5
77.5°	47.5
80°	37.6
82.5°	27.8
85°	18.5
87.5°	9.3
90°	0.0

(END OF REPORT)