

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: P600643

Luminaire Tested: 235-90-40K-LL6-UNV-STD-X-X-WHHR-BR-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600643  
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-LL6-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**

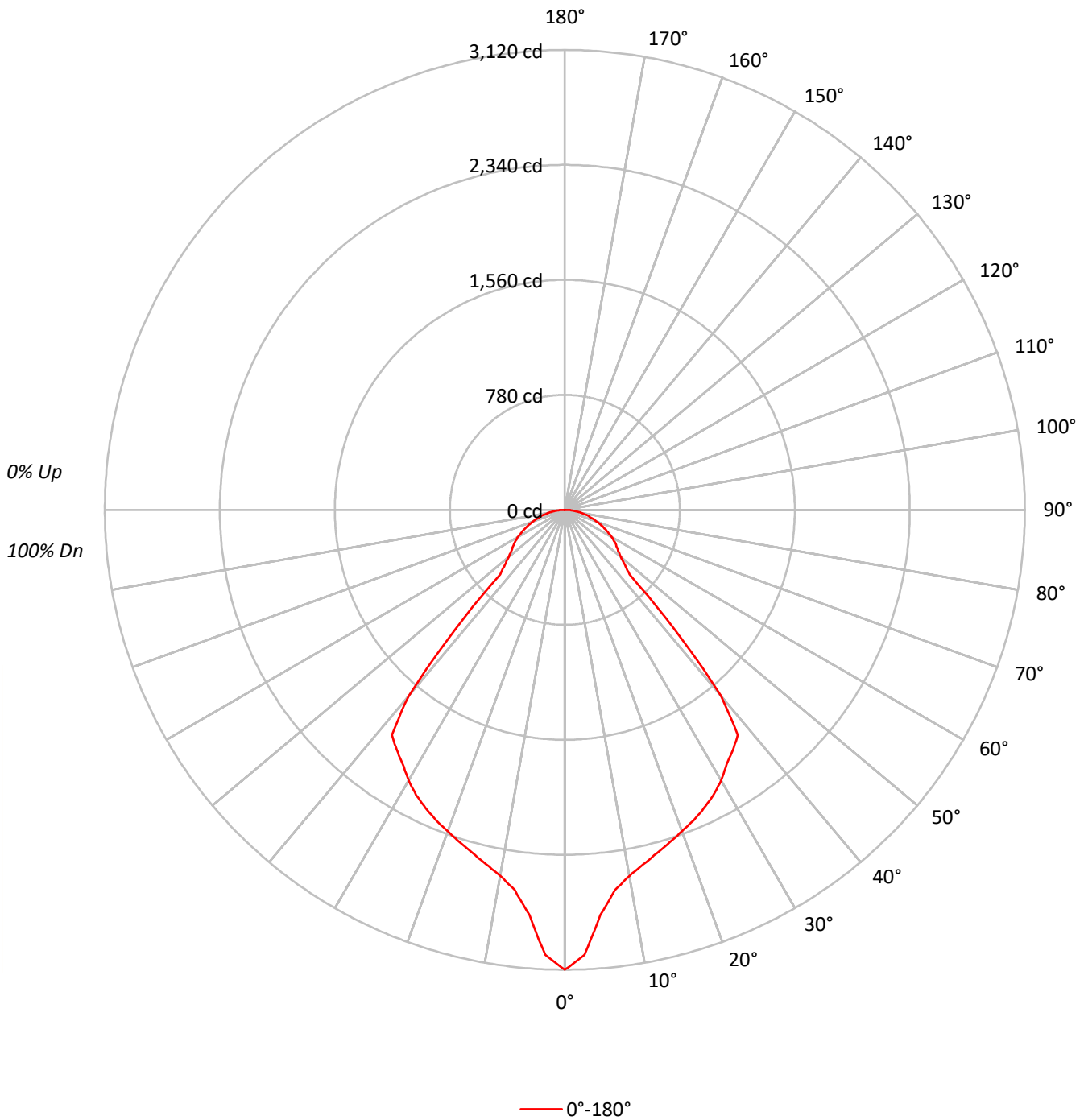
Lumens per Lamp: N/A  
Luminaire Lumens: 4738.8 lumens  
Efficiency: N/A  
Efficacy: 120.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 39.3  
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°	24051
5°	21358
10°	19731
15°	19248
20°	19040
25°	18997
30°	18867
35°	18704
40°	16579
45°	6749
50°	5939
55°	5746
60°	5625
65°	5390
70°	5171
75°	4965
80°	4764
85°	4670

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6749 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.0	5.4
10°-20°	681.8	14.4
20°-30°	1029.0	21.7
30°-40°	1227.0	25.9
40°-50°	634.5	13.4
50°-60°	382.7	8.1
60°-70°	293.3	6.2
70°-80°	175.9	3.7
80°-90°	57.7	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°	1967.7	41.5
0°-40°	3194.8	67.4
0°-60°	4212.0	88.9
0°-90°	4738.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4738.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3120	
5°	2760	257
15°	2412	682
25°	2233	1029
35°	1987	1227
45°	619	635
55°	428	383
65°	296	293
75°	167	176
85°	53	58
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3119.8
2.5°	3020.8
5°	2760.0
7.5°	2601.5
10°	2520.6
12.5°	2462.8
15°	2411.7
17.5°	2365.4
20°	2320.9
22.5°	2279.6
25°	2233.4
27.5°	2182.2
30°	2119.5
32.5°	2045.2
35°	1987.4
37.5°	1926.4
40°	1647.4
42.5°	1097.7
45°	619.0
47.5°	551.3
50°	495.2
52.5°	455.6
55°	427.5
57.5°	397.8
60°	364.8
62.5°	330.1
65°	295.5
67.5°	262.5
70°	229.4
72.5°	196.4
75°	166.7
77.5°	135.4
80°	107.3
82.5°	79.2
85°	52.8
87.5°	26.4
90°	0.0

(END OF REPORT)