

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: P600638

Luminaire Tested: 225-90-40K-LL4-UNV-STD-X-X-WHHR-FL-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600638  
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: 225-90-40K-LL4-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**

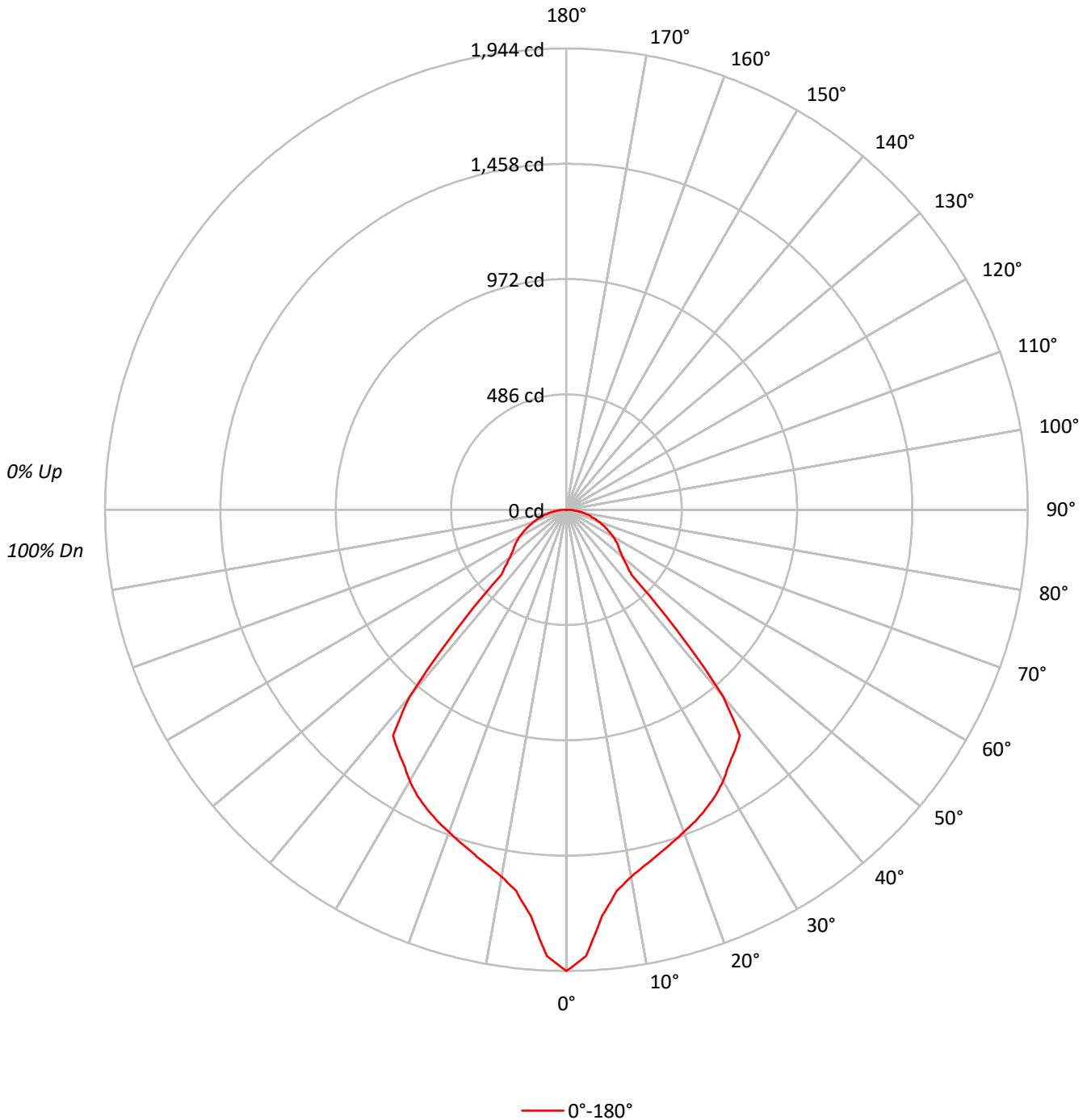
Lumens per Lamp: N/A  
Luminaire Lumens: 2952.8 lumens  
Efficiency: N/A  
Efficacy: 127.3 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.2  
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°	14986
5°	13308
10°	12295
15°	11993
20°	11864
25°	11837
30°	11756
35°	11655
40°	10330
45°	4205
50°	3701
55°	3581
60°	3505
65°	3358
70°	3223
75°	3095
80°	2970
85°	2910

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4205 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.1	5.4
10°-20°	424.8	14.4
20°-30°	641.1	21.7
30°-40°	764.6	25.9
40°-50°	395.4	13.4
50°-60°	238.5	8.1
60°-70°	182.7	6.2
70°-80°	109.6	3.7
80°-90°	36.0	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°	1226.1	41.5
0°-40°	1990.6	67.4
0°-60°	2624.5	88.9
0°-90°	2952.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2952.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1944	
5°	1720	160
15°	1503	425
25°	1392	641
35°	1238	765
45°	386	395
55°	266	238
65°	184	183
75°	104	110
85°	33	36
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1943.9
2.5°	1882.2
5°	1719.7
7.5°	1621.0
10°	1570.6
12.5°	1534.6
15°	1502.7
17.5°	1473.9
20°	1446.1
22.5°	1420.4
25°	1391.6
27.5°	1359.7
30°	1320.6
32.5°	1274.4
35°	1238.4
37.5°	1200.3
40°	1026.5
42.5°	684.0
45°	385.7
47.5°	343.5
50°	308.6
52.5°	283.9
55°	266.4
57.5°	247.9
60°	227.3
62.5°	205.7
65°	184.1
67.5°	163.5
70°	143.0
72.5°	122.4
75°	103.9
77.5°	84.3
80°	66.9
82.5°	49.4
85°	32.9
87.5°	16.5
90°	0.0

(END OF REPORT)