

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: P600635

Luminaire Tested: 235-90-40K-LL3-UNV-STD-X-X-WHHR-FL-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600635  
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-LL3-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**

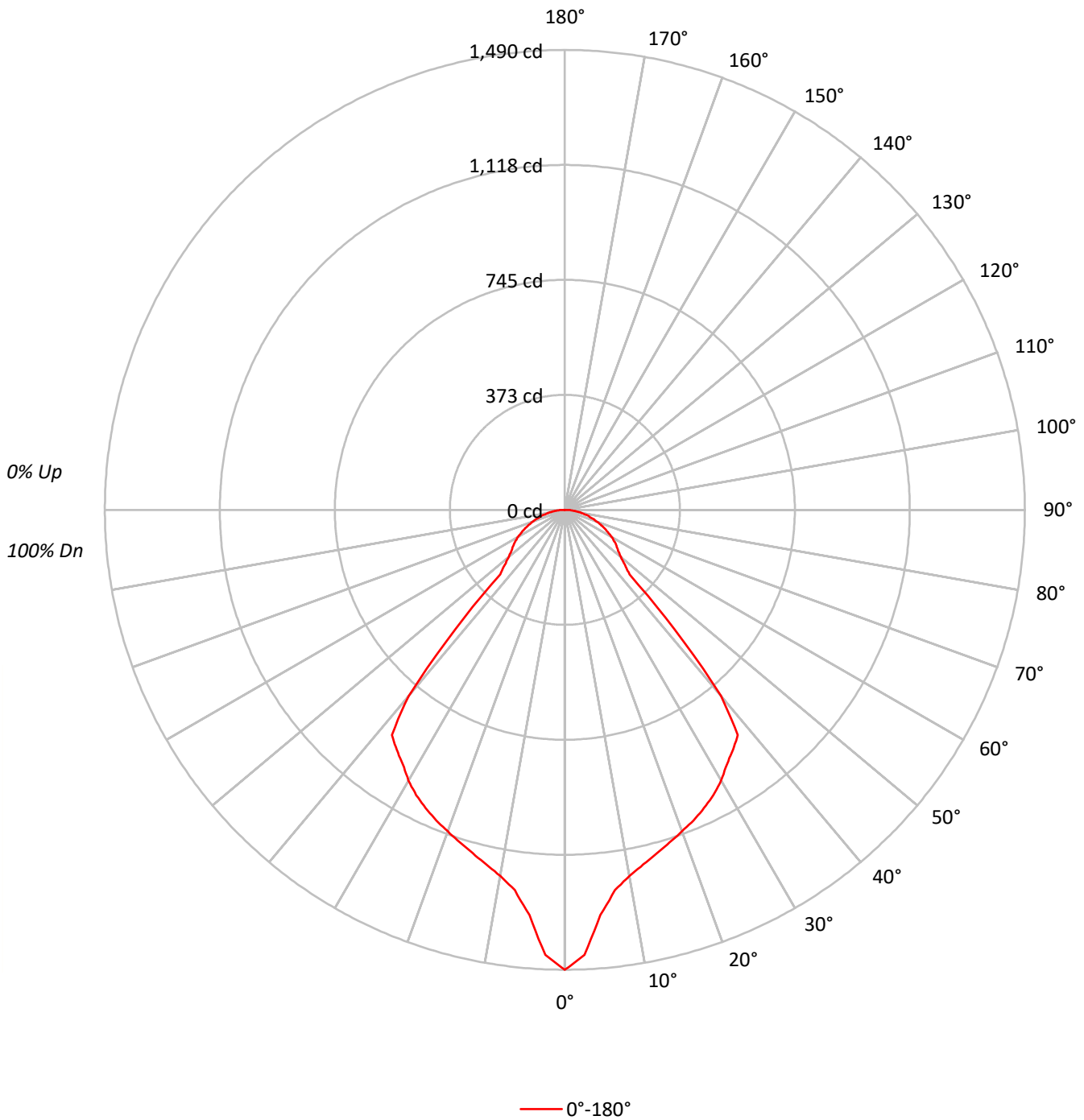
Lumens per Lamp: N/A  
Luminaire Lumens: 2263.3 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.4  
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°	11487
5°	10201
10°	9424
15°	9193
20°	9094
25°	9073
30°	9011
35°	8933
40°	7918
45°	3223
50°	2836
55°	2745
60°	2686
65°	2574
70°	2470
75°	2371
80°	2273
85°	2229

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3223 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.7	5.4
10°-20°	325.6	14.4
20°-30°	491.4	21.7
30°-40°	586.0	25.9
40°-50°	303.0	13.4
50°-60°	182.8	8.1
60°-70°	140.1	6.2
70°-80°	84.0	3.7
80°-90°	27.5	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°	939.8	41.5
0°-40°	1525.8	67.4
0°-60°	2011.7	88.9
0°-90°	2263.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2263.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1490	
5°	1318	123
15°	1152	326
25°	1067	491
35°	949	586
45°	296	303
55°	204	183
65°	141	140
75°	80	84
85°	25	28
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1490.1
2.5°	1442.7
5°	1318.2
7.5°	1242.5
10°	1203.9
12.5°	1176.3
15°	1151.8
17.5°	1129.8
20°	1108.5
22.5°	1088.8
25°	1066.7
27.5°	1042.2
30°	1012.3
32.5°	976.8
35°	949.2
37.5°	920.0
40°	786.8
42.5°	524.3
45°	295.6
47.5°	263.3
50°	236.5
52.5°	217.6
55°	204.2
57.5°	190.0
60°	174.2
62.5°	157.7
65°	141.1
67.5°	125.4
70°	109.6
72.5°	93.8
75°	79.6
77.5°	64.6
80°	51.2
82.5°	37.8
85°	25.2
87.5°	12.6
90°	0.0

(END OF REPORT)