

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: P600639

Luminaire Tested: 235-90-40K-LL4-UNV-STD-X-X-WHHR-SR-X

Issue Date: 7/6/2022

Test Information

Test Method: LM-79-2019
Report Number: P600639
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-LL4-UNV-STD-X-X-WHHR-SR-X
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

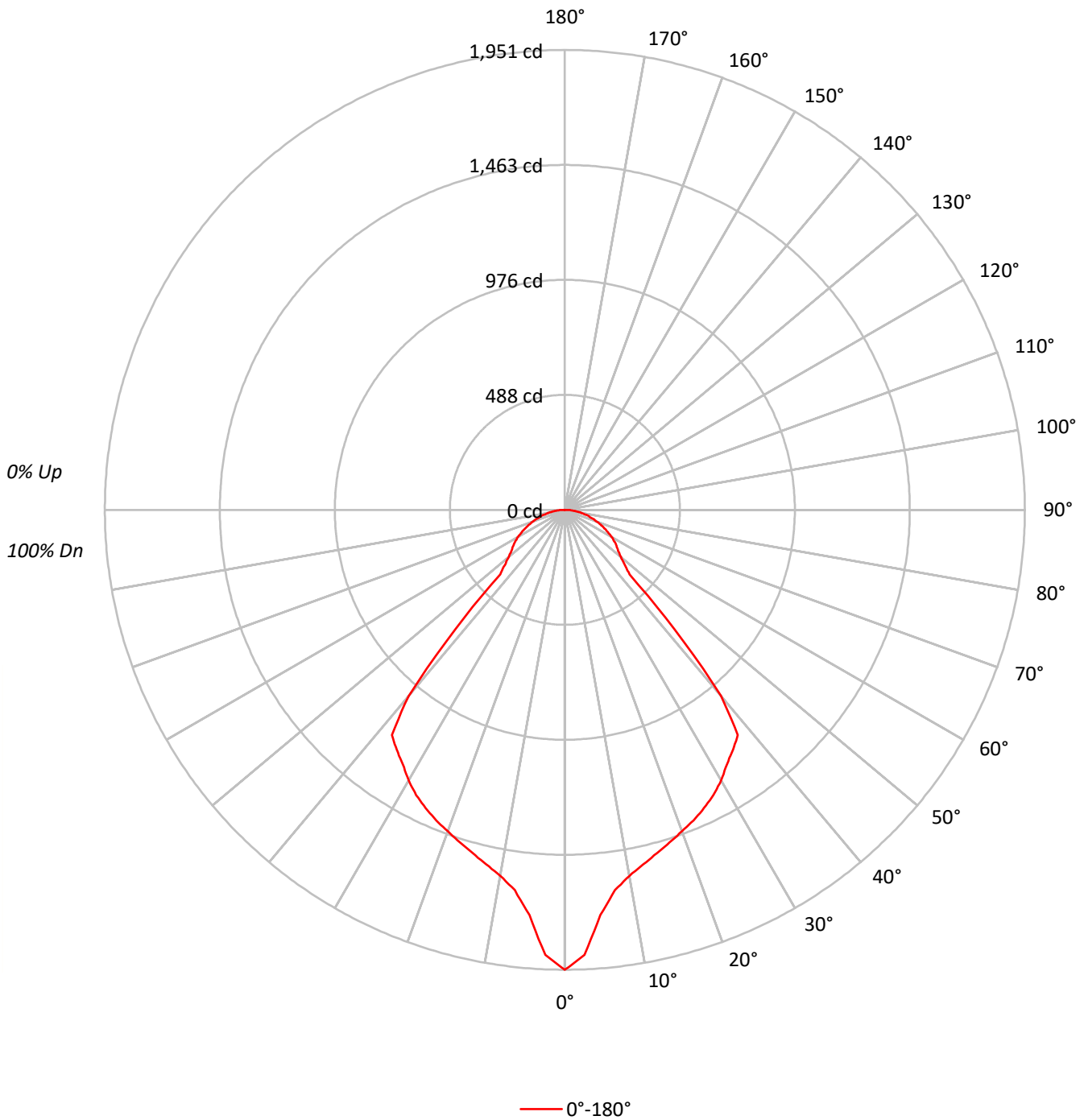
Lumens per Lamp: N/A
Luminaire Lumens: 2963.4 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 23.1
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°	15041
5°	13356
10°	12339
15°	12036
20°	11906
25°	11880
30°	11798
35°	11696
40°	10367
45°	4220
50°	3714
55°	3594
60°	3517
65°	3371
70°	3234
75°	3107
80°	2979
85°	2919

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4220 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	5.4
10°-20°	426.3	14.4
20°-30°	643.4	21.7
30°-40°	767.3	25.9
40°-50°	396.8	13.4
50°-60°	239.3	8.1
60°-70°	183.4	6.2
70°-80°	110.0	3.7
80°-90°	36.1	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°	1230.5	41.5
0°-40°	1997.8	67.4
0°-60°	2633.9	88.9
0°-90°	2963.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2963.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1951	
5°	1726	161
15°	1508	426
25°	1397	643
35°	1243	767
45°	387	397
55°	267	239
65°	185	183
75°	104	110
85°	33	36
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1951.0
2.5°	1889.0
5°	1725.9
7.5°	1626.8
10°	1576.2
12.5°	1540.1
15°	1508.1
17.5°	1479.2
20°	1451.3
22.5°	1425.5
25°	1396.6
27.5°	1364.6
30°	1325.4
32.5°	1279.0
35°	1242.8
37.5°	1204.6
40°	1030.2
42.5°	686.4
45°	387.1
47.5°	344.8
50°	309.7
52.5°	284.9
55°	267.4
57.5°	248.8
60°	228.1
62.5°	206.5
65°	184.8
67.5°	164.1
70°	143.5
72.5°	122.8
75°	104.3
77.5°	84.6
80°	67.1
82.5°	49.5
85°	33.0
87.5°	16.5
90°	0.0

(END OF REPORT)