

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: P600637

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

Issue Date: 7/6/2022

Test Information

Test Method: LM-79-2019
Report Number: P600637
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-BR-X
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

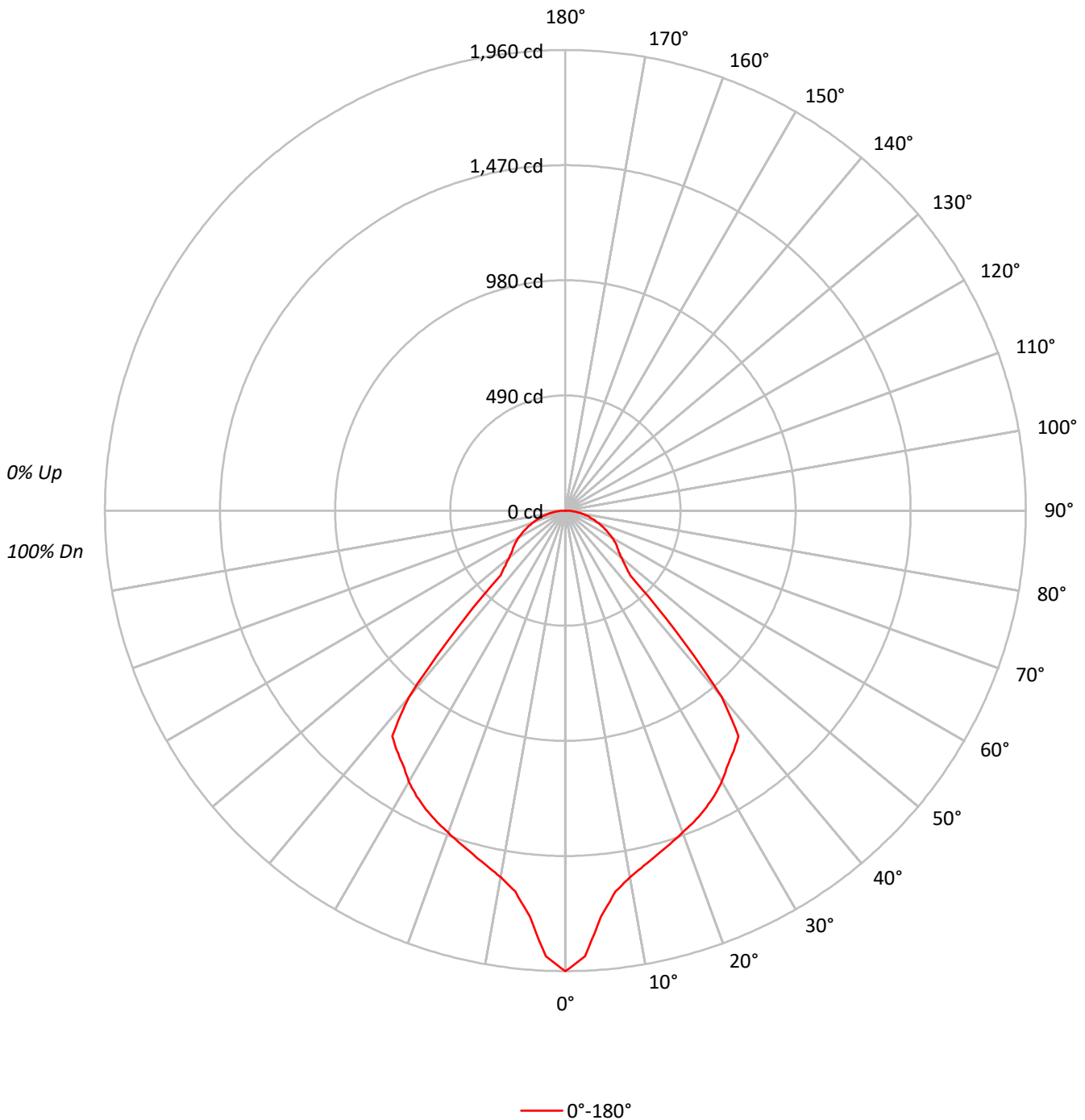
Lumens per Lamp: N/A
Luminaire Lumens: 2977.6 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 23.2
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88			88	
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77			77	
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68			68	
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61			61	
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54			54	
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49			49	
7	72	60	53	47	71	60	52	47	58	52	47	57	51	46	56	50	46	44			44	
8	68	56	48	43	66	55	48	43	54	47	43	53	47	42	52	46	42	41			41	
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37			37	
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34			34	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	15111
5°	13419
10°	12398
15°	12094
20°	11964
25°	11937
30°	11854
35°	11753
40°	10417
45°	4240
50°	3732
55°	3610
60°	3534
65°	3387
70°	3250
75°	3122
80°	2992
85°	2937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4240 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	5.4
10°-20°	428.4	14.4
20°-30°	646.5	21.7
30°-40°	771.0	25.9
40°-50°	398.7	13.4
50°-60°	240.5	8.1
60°-70°	184.3	6.2
70°-80°	110.5	3.7
80°-90°	36.3	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°	1236.4	41.5
0°-40°	2007.4	67.4
0°-60°	2646.5	88.9
0°-90°	2977.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2977.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1960	
5°	1734	161
15°	1515	428
25°	1403	647
35°	1249	771
45°	389	399
55°	269	240
65°	186	184
75°	105	111
85°	33	36
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1960.2
2.5°	1898.0
5°	1734.1
7.5°	1634.6
10°	1583.8
12.5°	1547.5
15°	1515.3
17.5°	1486.3
20°	1458.3
22.5°	1432.3
25°	1403.3
27.5°	1371.1
30°	1331.7
32.5°	1285.1
35°	1248.8
37.5°	1210.4
40°	1035.1
42.5°	689.7
45°	388.9
47.5°	346.4
50°	311.2
52.5°	286.3
55°	268.6
57.5°	250.0
60°	229.2
62.5°	207.4
65°	185.7
67.5°	164.9
70°	144.2
72.5°	123.4
75°	104.8
77.5°	85.0
80°	67.4
82.5°	49.8
85°	33.2
87.5°	16.6
90°	0.0

(END OF REPORT)