

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: P600615

Luminaire Tested: 235-90-35K-LL4-UNV-STD-X-X-WHHR-SR-X

Issue Date: 7/6/2022

Test Information

Test Method: LM-79-2019
Report Number: P600615
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: 235-90-35K-LL4-UNV-STD-X-X-WHHR-SR-X
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

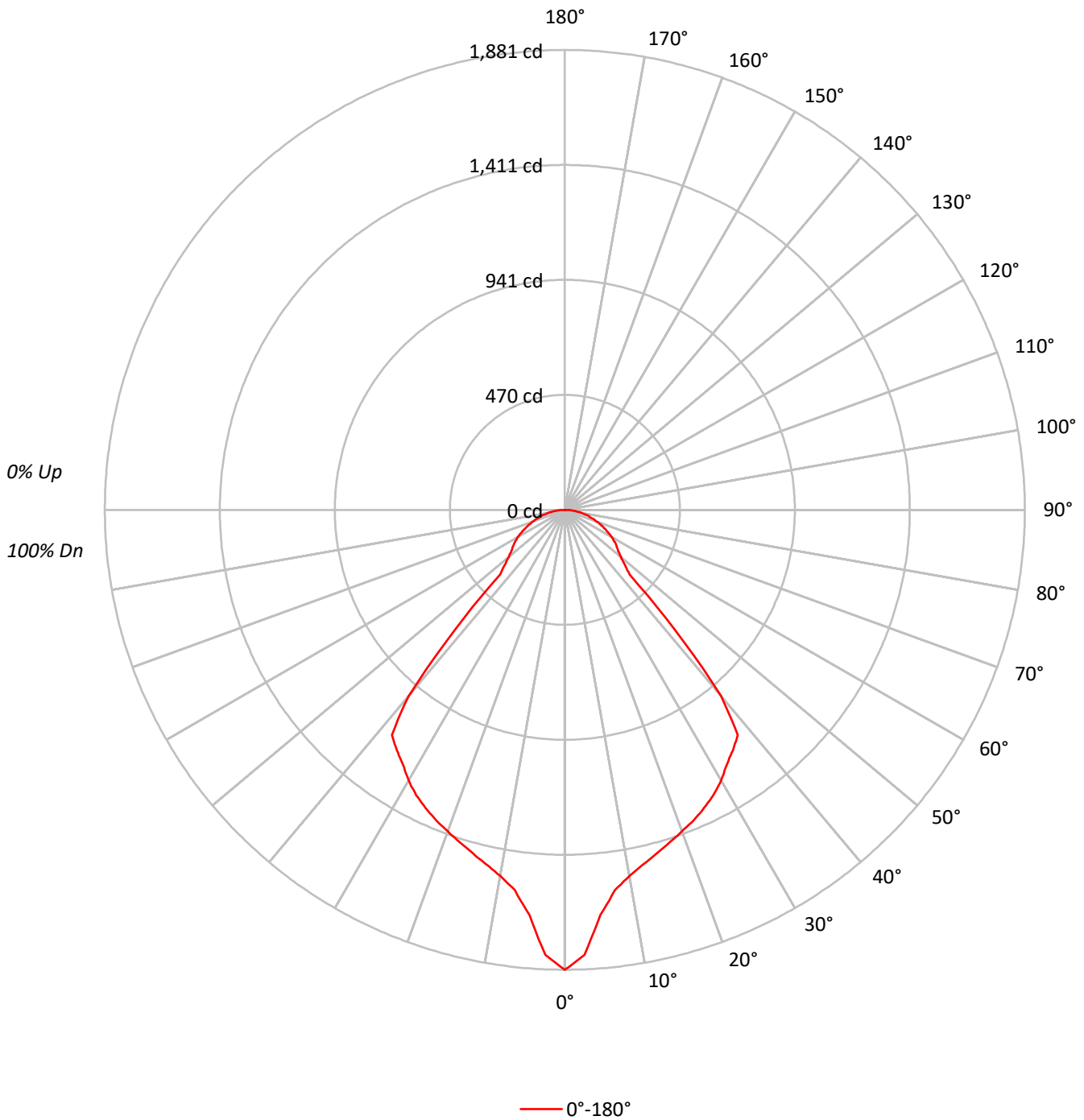
Lumens per Lamp: N/A
Luminaire Lumens: 2857.2 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 22.9
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°	14501
5°	12878
10°	11897
15°	11605
20°	11480
25°	11454
30°	11376
35°	11277
40°	9996
45°	4069
50°	3581
55°	3465
60°	3392
65°	3251
70°	3117
75°	2993
80°	2872
85°	2813

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4069 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.9	5.4
10°-20°	411.1	14.4
20°-30°	620.4	21.7
30°-40°	739.8	25.9
40°-50°	382.6	13.4
50°-60°	230.8	8.1
60°-70°	176.8	6.2
70°-80°	106.0	3.7
80°-90°	34.8	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°	1186.4	41.5
0°-40°	1926.2	67.4
0°-60°	2539.6	88.9
0°-90°	2857.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2857.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1881	
5°	1664	155
15°	1454	411
25°	1347	620
35°	1198	740
45°	373	383
55°	258	231
65°	178	177
75°	100	106
85°	32	35
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1881.0
2.5°	1821.3
5°	1664.1
7.5°	1568.5
10°	1519.8
12.5°	1484.9
15°	1454.1
17.5°	1426.2
20°	1399.3
22.5°	1374.5
25°	1346.6
27.5°	1315.7
30°	1277.9
32.5°	1233.1
35°	1198.3
37.5°	1161.5
40°	993.3
42.5°	661.8
45°	373.2
47.5°	332.4
50°	298.6
52.5°	274.7
55°	257.8
57.5°	239.9
60°	220.0
62.5°	199.1
65°	178.2
67.5°	158.2
70°	138.3
72.5°	118.4
75°	100.5
77.5°	81.6
80°	64.7
82.5°	47.8
85°	31.8
87.5°	15.9
90°	0.0

(END OF REPORT)