

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: P600591

Luminaire Tested: 235-90-30K-LL4-UNV-STD-X-X-WHHR-SR-X

Issue Date: 7/6/2022

Test Information

Test Method: LM-79-2019
Report Number: P600591
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: 235-90-30K-LL4-UNV-STD-X-X-WHHR-SR-X
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

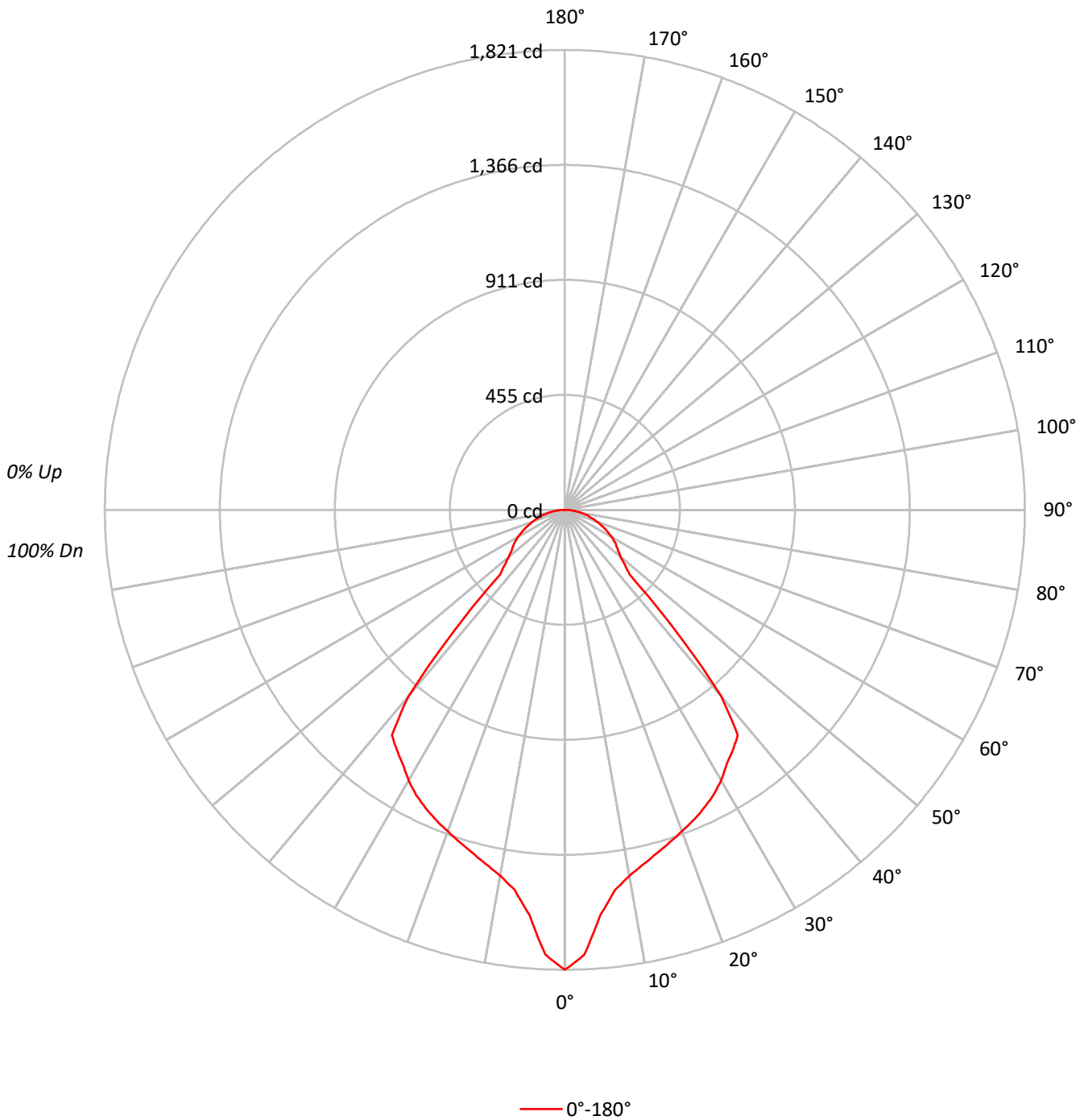
Lumens per Lamp: N/A
Luminaire Lumens: 2765.6 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

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°	14036
5°	12465
10°	11515
15°	11233
20°	11112
25°	11087
30°	11011
35°	10916
40°	9675
45°	3939
50°	3466
55°	3353
60°	3283
65°	3145
70°	3018
75°	2898
80°	2779
85°	2724

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3939 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	5.4
10°-20°	397.9	14.4
20°-30°	600.5	21.7
30°-40°	716.1	25.9
40°-50°	370.3	13.4
50°-60°	223.3	8.1
60°-70°	171.1	6.2
70°-80°	102.6	3.7
80°-90°	33.7	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°	1148.4	41.5
0°-40°	1864.5	67.4
0°-60°	2458.1	88.9
0°-90°	2765.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2765.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1821	
5°	1611	150
15°	1407	398
25°	1303	601
35°	1160	716
45°	361	370
55°	250	223
65°	172	171
75°	97	103
85°	31	34
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1820.7
2.5°	1762.9
5°	1610.7
7.5°	1518.2
10°	1471.0
12.5°	1437.3
15°	1407.4
17.5°	1380.5
20°	1354.5
22.5°	1330.4
25°	1303.4
27.5°	1273.5
30°	1236.9
32.5°	1193.6
35°	1159.9
37.5°	1124.2
40°	961.4
42.5°	640.6
45°	361.3
47.5°	321.8
50°	289.0
52.5°	265.9
55°	249.5
57.5°	232.2
60°	212.9
62.5°	192.7
65°	172.4
67.5°	153.2
70°	133.9
72.5°	114.6
75°	97.3
77.5°	79.0
80°	62.6
82.5°	46.2
85°	30.8
87.5°	15.4
90°	0.0

(END OF REPORT)