

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: P600640

Luminaire Tested: 235-90-40K-LL5-UNV-STD-X-X-WHHR-BR-X

Issue Date: 7/6/2022

Test Information

Test Method: LM-79-2019
Report Number: P600640
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-LL5-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

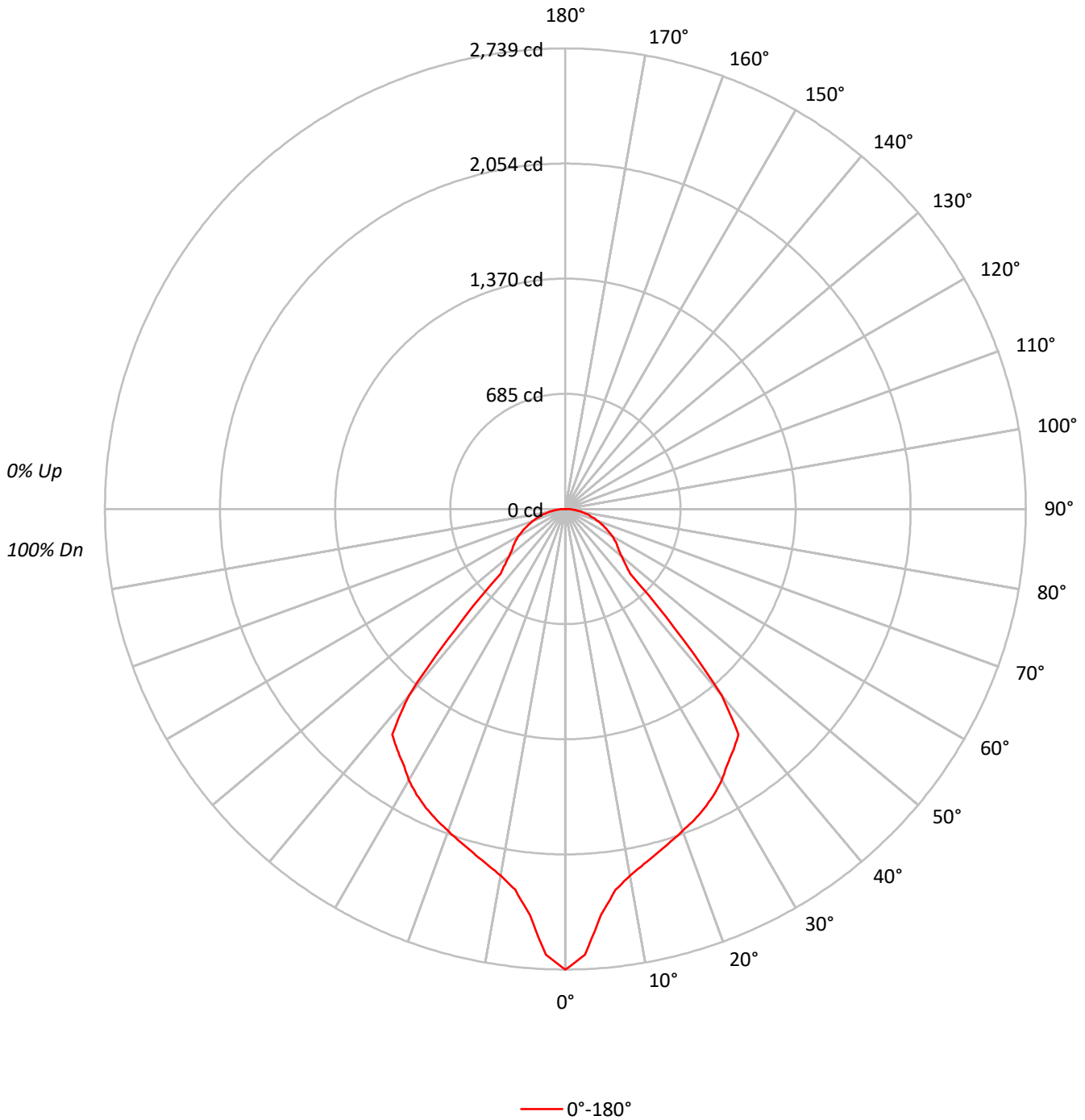
Lumens per Lamp: N/A
Luminaire Lumens: 4161.0 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 33.6
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°	21118
5°	18754
10°	17326
15°	16901
20°	16719
25°	16681
30°	16566
35°	16423
40°	14557
45°	5925
50°	5215
55°	5046
60°	4938
65°	4732
70°	4542
75°	4361
80°	4182
85°	4104

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5925 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.7	5.4
10°-20°	598.6	14.4
20°-30°	903.5	21.7
30°-40°	1077.4	25.9
40°-50°	557.2	13.4
50°-60°	336.0	8.1
60°-70°	257.5	6.2
70°-80°	154.5	3.7
80°-90°	50.7	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°	1727.8	41.5
0°-40°	2805.2	67.4
0°-60°	3698.4	88.9
0°-90°	4161.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4161.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2739	
5°	2423	226
15°	2118	599
25°	1961	903
35°	1745	1077
45°	544	557
55°	375	336
65°	259	258
75°	146	154
85°	46	51
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2739.4
2.5°	2652.4
5°	2423.4
7.5°	2284.3
10°	2213.3
12.5°	2162.5
15°	2117.6
17.5°	2077.0
20°	2037.9
22.5°	2001.6
25°	1961.1
27.5°	1916.1
30°	1861.0
32.5°	1795.8
35°	1745.1
37.5°	1691.5
40°	1446.5
42.5°	963.9
45°	543.5
47.5°	484.1
50°	434.8
52.5°	400.0
55°	375.4
57.5°	349.3
60°	320.3
62.5°	289.9
65°	259.4
67.5°	230.5
70°	201.5
72.5°	172.5
75°	146.4
77.5°	118.9
80°	94.2
82.5°	69.6
85°	46.4
87.5°	23.2
90°	0.0

(END OF REPORT)