

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: P600641

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

Issue Date: 7/6/2022

Test Information

Test Method: LM-79-2019
Report Number: P600641
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-FL-X
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

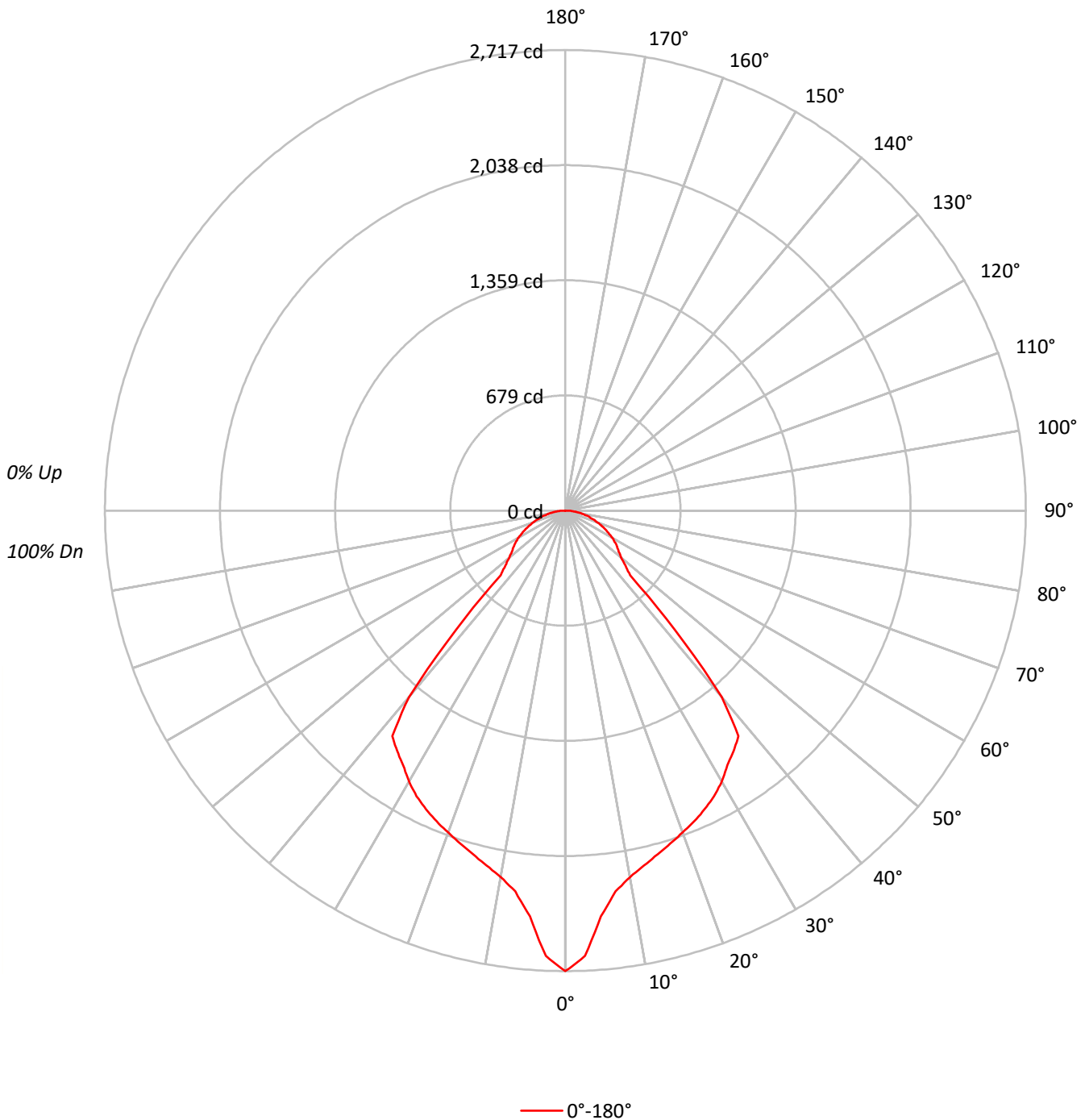
Lumens per Lamp: N/A
Luminaire Lumens: 4126.4 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P600641
CATALOG NUMBER: 235-90-40K-LL5-UNV-STD-X-X-WHHR-FL-X

Luminous Intensity Polar Plot





TEST NUMBER: P600641

CATALOG NUMBER: 235-90-40K-LL5-UNV-STD-X-X-WHHR-FL-X

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°	20943
5°	18598
10°	17181
15°	16760
20°	16579
25°	16542
30°	16429
35°	16287
40°	14436
45°	5876
50°	5171
55°	5004
60°	4898
65°	4693
70°	4503
75°	4325
80°	4147
85°	4069

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5876 cd/sqm



TEST NUMBER: P600641

CATALOG NUMBER: 235-90-40K-LL5-UNV-STD-X-X-WHHR-FL-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.8	5.4
10°-20°	593.6	14.4
20°-30°	896.0	21.7
30°-40°	1068.5	25.9
40°-50°	552.5	13.4
50°-60°	333.2	8.1
60°-70°	255.4	6.2
70°-80°	153.2	3.7
80°-90°	50.3	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°	1713.4	41.5
0°-40°	2781.9	67.4
0°-60°	3667.6	88.9
0°-90°	4126.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4126.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2717	
5°	2403	224
15°	2100	594
25°	1945	896
35°	1731	1068
45°	539	553
55°	372	333
65°	257	255
75°	145	153
85°	46	50
90°	0	



TEST NUMBER: P600641

CATALOG NUMBER: 235-90-40K-LL5-UNV-STD-X-X-WHHR-FL-X

CANDELA DISTRIBUTION (FULL):

	0°
0°	2716.6
2.5°	2630.4
5°	2403.3
7.5°	2265.3
10°	2194.8
12.5°	2144.5
15°	2100.0
17.5°	2059.7
20°	2020.9
22.5°	1985.0
25°	1944.7
27.5°	1900.2
30°	1845.6
32.5°	1780.9
35°	1730.6
37.5°	1677.4
40°	1434.5
42.5°	955.8
45°	539.0
47.5°	480.1
50°	431.2
52.5°	396.7
55°	372.3
57.5°	346.4
60°	317.7
62.5°	287.5
65°	257.3
67.5°	228.5
70°	199.8
72.5°	171.0
75°	145.2
77.5°	117.9
80°	93.4
82.5°	69.0
85°	46.0
87.5°	23.0
90°	0.0

(END OF REPORT)