

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: P600647

Luminaire Tested: 235-90-40K-LL7-UNV-STD-X-X-WHHR-FL-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600647  
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-LL7-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**

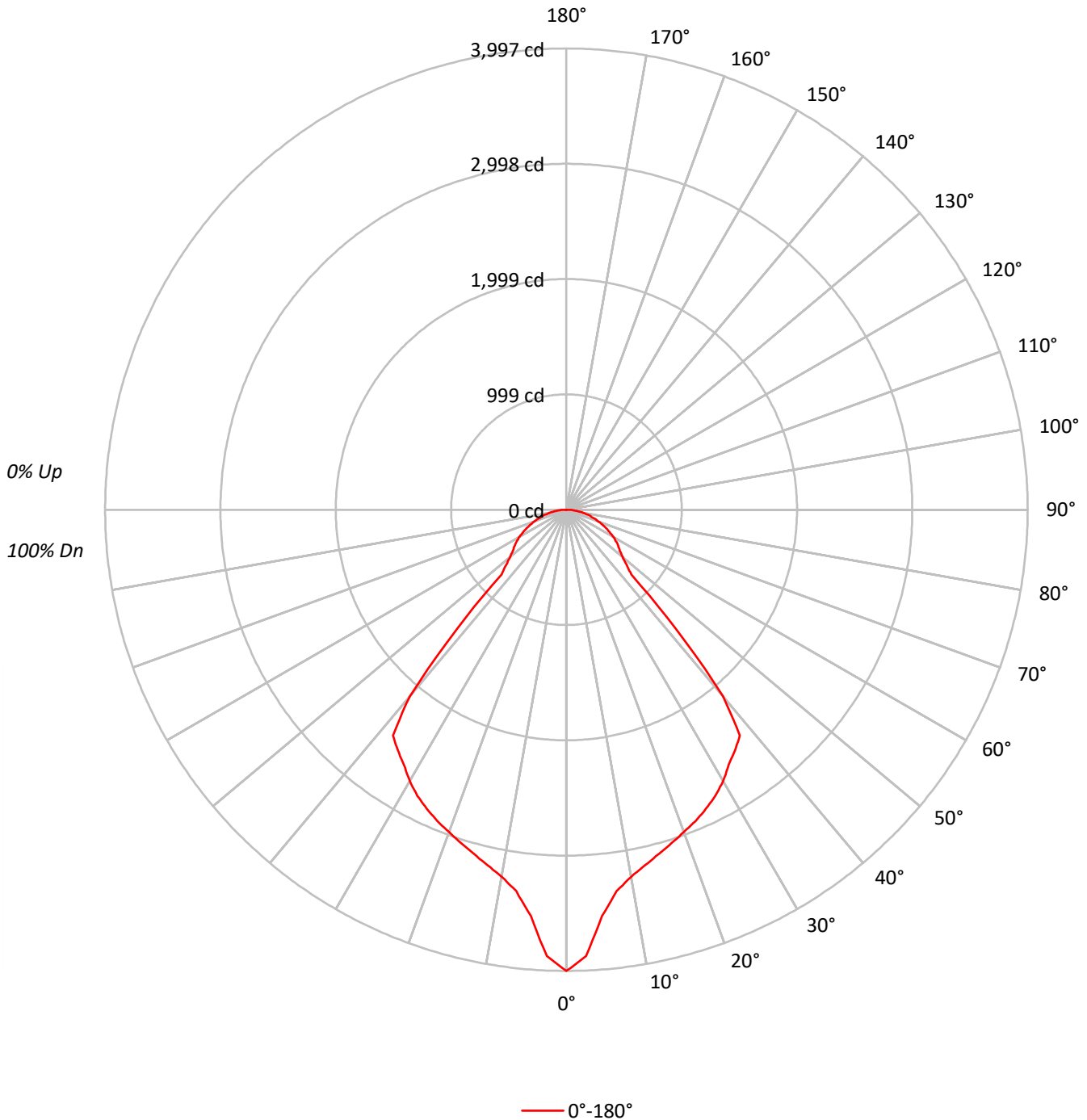
Lumens per Lamp: N/A  
Luminaire Lumens: 6070.9 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 55.4  
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: P600647  
CATALOG NUMBER: 235-90-40K-LL7-UNV-STD-X-X-WHHR-FL-X

### Luminous Intensity Polar Plot





TEST NUMBER: P600647

CATALOG NUMBER: 235-90-40K-LL7-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°	30812
5°	27362
10°	25278
15°	24658
20°	24393
25°	24338
30°	24171
35°	23962
40°	21239
45°	8646
50°	7609
55°	7361
60°	7205
65°	6904
70°	6624
75°	6362
80°	6104
85°	5988

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8646 cd/sqm



TEST NUMBER: P600647

CATALOG NUMBER: 235-90-40K-LL7-UNV-STD-X-X-WHHR-FL-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	329.2	5.4
10°-20°	873.4	14.4
20°-30°	1318.2	21.7
30°-40°	1572.0	25.9
40°-50°	812.9	13.4
50°-60°	490.2	8.1
60°-70°	375.7	6.2
70°-80°	225.3	3.7
80°-90°	73.9	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°	2520.9	41.5
0°-40°	4092.8	67.4
0°-60°	5396.0	88.9
0°-90°	6070.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6070.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3997	
5°	3536	329
15°	3090	873
25°	2861	1318
35°	2546	1572
45°	793	813
55°	548	490
65°	378	376
75°	214	225
85°	68	74
90°	0	



TEST NUMBER: P600647

CATALOG NUMBER: 235-90-40K-LL7-UNV-STD-X-X-WHHR-FL-X

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3996.8
2.5°	3869.9
5°	3535.8
7.5°	3332.8
10°	3229.2
12.5°	3155.1
15°	3089.6
17.5°	3030.4
20°	2973.3
22.5°	2920.4
25°	2861.2
27.5°	2795.6
30°	2715.3
32.5°	2620.1
35°	2546.1
37.5°	2467.9
40°	2110.5
42.5°	1406.3
45°	793.0
47.5°	706.3
50°	634.4
52.5°	583.7
55°	547.7
57.5°	509.6
60°	467.3
62.5°	422.9
65°	378.5
67.5°	336.2
70°	293.9
72.5°	251.6
75°	213.6
77.5°	173.4
80°	137.5
82.5°	101.5
85°	67.7
87.5°	33.8
90°	0.0

(END OF REPORT)