

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: P600580

Luminaire Tested: 235-90-30K-LL1-UNV-STD-X-X-WHHR-BR-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600580  
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-LL1-UNV-STD-X-X-WHHR-BR-X  
Description: SHAPER PrentaLux 200 SERIES 3D PRINTED LUMINAIRE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

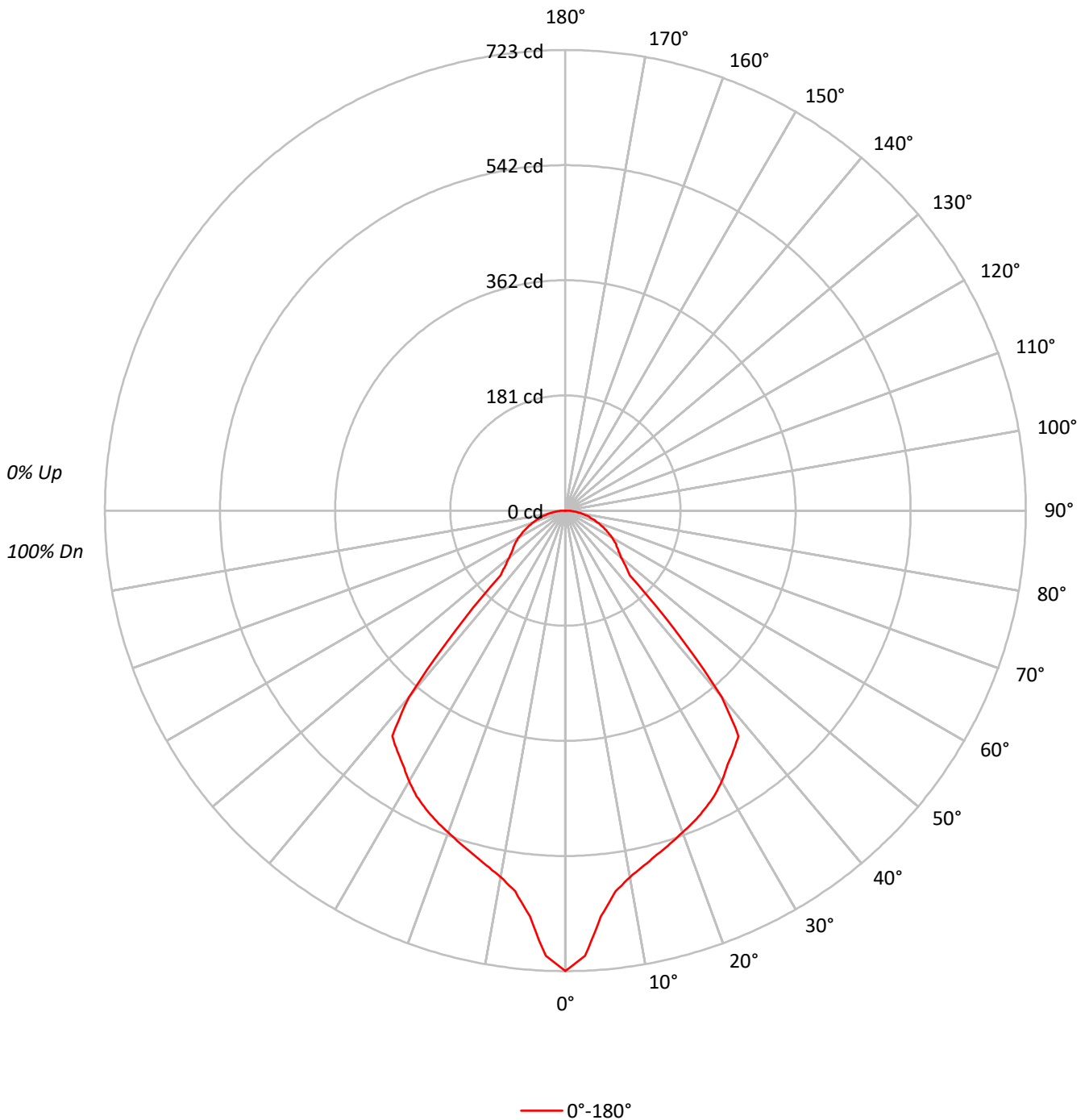
Lumens per Lamp: N/A  
Luminaire Lumens: 1097.9 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.5  
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 |  |  |  |  |  |  |  |  |    |   |
| 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  | 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 |    |    |    |    | 100 |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 1   | 111 | 107 | 103 | 100 | 108 | 105 | 101 | 99  | 100 | 98  | 95  | 97  | 95  | 93  | 93  | 91  | 90  | 88  |    |    |    |    | 88  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 2   | 103 | 96  | 90  | 86  | 100 | 94  | 89  | 85  | 91  | 86  | 83  | 88  | 84  | 81  | 85  | 82  | 79  | 77  |    |    |    |    | 77  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 3   | 95  | 87  | 80  | 74  | 93  | 85  | 79  | 74  | 82  | 77  | 72  | 80  | 75  | 71  | 77  | 73  | 70  | 68  |    |    |    |    | 68  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 4   | 89  | 79  | 71  | 65  | 87  | 77  | 70  | 65  | 75  | 69  | 64  | 73  | 68  | 63  | 71  | 66  | 63  | 61  |    |    |    |    | 61  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 5   | 83  | 72  | 64  | 58  | 81  | 71  | 63  | 58  | 69  | 62  | 57  | 67  | 61  | 57  | 65  | 60  | 56  | 54  |    |    |    |    | 54  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 6   | 77  | 66  | 58  | 52  | 75  | 65  | 57  | 52  | 63  | 56  | 52  | 61  | 56  | 51  | 60  | 55  | 51  | 49  |    |    |    |    | 49  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 7   | 72  | 60  | 53  | 47  | 71  | 60  | 52  | 47  | 58  | 52  | 47  | 57  | 51  | 46  | 56  | 50  | 46  | 44  |    |    |    |    | 44  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 8   | 68  | 56  | 48  | 43  | 66  | 55  | 48  | 43  | 54  | 47  | 43  | 53  | 47  | 42  | 52  | 46  | 42  | 41  |    |    |    |    | 41  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 9   | 64  | 52  | 44  | 39  | 62  | 51  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 37  |    |    |    |    | 37  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 10  | 60  | 48  | 41  | 36  | 59  | 48  | 41  | 36  | 47  | 40  | 36  | 46  | 40  | 36  | 45  | 40  | 36  | 34  |    |    |    |    | 34  |   |  |  |  |    |  |  |  |  |  |  |  |  |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 5572 |
| 5°  | 4948 |
| 10° | 4572 |
| 15° | 4459 |
| 20° | 4411 |
| 25° | 4401 |
| 30° | 4371 |
| 35° | 4333 |
| 40° | 3841 |
| 45° | 1563 |
| 50° | 1376 |
| 55° | 1331 |
| 60° | 1303 |
| 65° | 1250 |
| 70° | 1199 |
| 75° | 1150 |
| 80° | 1105 |
| 85° | 1079 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1563 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 59.5   | 5.4       |
| 10°-20°   | 157.9  | 14.4      |
| 20°-30°   | 238.4  | 21.7      |
| 30°-40°   | 284.3  | 25.9      |
| 40°-50°   | 147.0  | 13.4      |
| 50°-60°   | 88.6   | 8.1       |
| 60°-70°   | 68.0   | 6.2       |
| 70°-80°   | 40.8   | 3.7       |
| 80°-90°   | 13.4   | 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°    | 455.9  | 41.5      |
| 0°-40°    | 740.1  | 67.4      |
| 0°-60°    | 975.8  | 88.9      |
| 0°-90°    | 1097.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1097.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 723 |      |
| 5°  | 639 | 60   |
| 15° | 559 | 158  |
| 25° | 517 | 238  |
| 35° | 460 | 284  |
| 45° | 143 | 147  |
| 55° | 99  | 89   |
| 65° | 68  | 68   |
| 75° | 39  | 41   |
| 85° | 12  | 13   |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 722.8 |
| 2.5°  | 699.8 |
| 5°    | 639.4 |
| 7.5°  | 602.7 |
| 10°   | 584.0 |
| 12.5° | 570.6 |
| 15°   | 558.7 |
| 17.5° | 548.0 |
| 20°   | 537.7 |
| 22.5° | 528.1 |
| 25°   | 517.4 |
| 27.5° | 505.6 |
| 30°   | 491.0 |
| 32.5° | 473.8 |
| 35°   | 460.4 |
| 37.5° | 446.3 |
| 40°   | 381.7 |
| 42.5° | 254.3 |
| 45°   | 143.4 |
| 47.5° | 127.7 |
| 50°   | 114.7 |
| 52.5° | 105.5 |
| 55°   | 99.0  |
| 57.5° | 92.2  |
| 60°   | 84.5  |
| 62.5° | 76.5  |
| 65°   | 68.5  |
| 67.5° | 60.8  |
| 70°   | 53.2  |
| 72.5° | 45.5  |
| 75°   | 38.6  |
| 77.5° | 31.4  |
| 80°   | 24.9  |
| 82.5° | 18.4  |
| 85°   | 12.2  |
| 87.5° | 6.1   |
| 90°   | 0.0   |

(END OF REPORT)