

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMIERE

Report Number: P221059

Luminaire Tested: **9004-W1-FL-LED2790-M-BK-L2-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221059
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29497)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9004-W1-FL-LED2790-M-BK-L2-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, FLUSH LENS, MEDIUM FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 2700K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1645.8 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

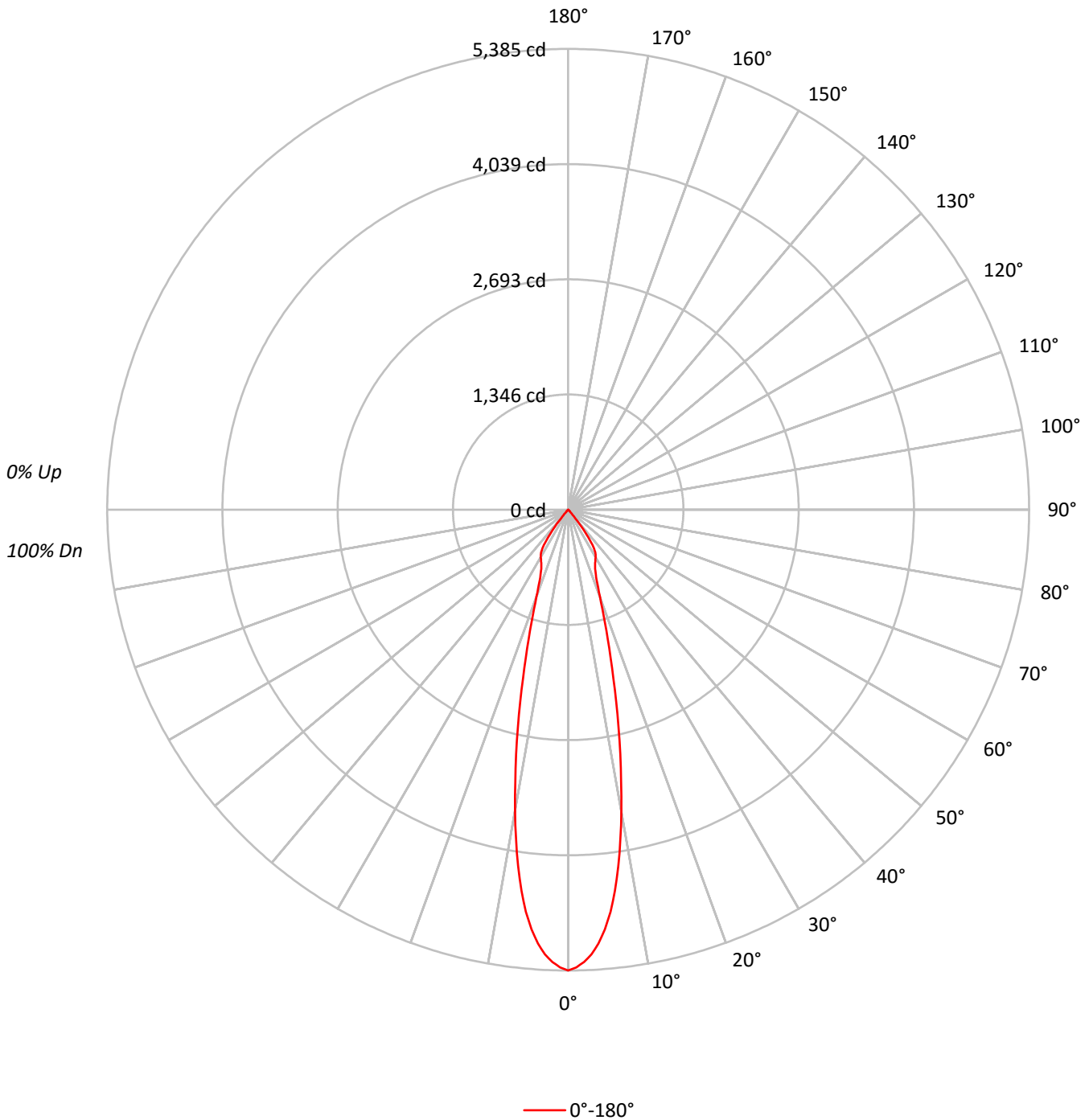
Input Watts (W): 20.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 95 |
| 2 | 110 | 106 | 102 | 99 | 108 | 104 | 101 | 98 | 101 | 98 | 96 | 98 | 96 | 94 | 95 | 94 | 92 | 91 |
| 3 | 106 | 100 | 96 | 93 | 104 | 99 | 95 | 92 | 96 | 93 | 90 | 94 | 91 | 89 | 92 | 90 | 88 | 86 |
| 4 | 101 | 95 | 91 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 90 | 87 | 85 | 88 | 86 | 84 | 82 |
| 5 | 97 | 91 | 86 | 82 | 96 | 90 | 85 | 82 | 88 | 84 | 81 | 86 | 83 | 80 | 85 | 82 | 80 | 78 |
| 6 | 94 | 86 | 82 | 78 | 92 | 86 | 81 | 78 | 84 | 80 | 77 | 83 | 79 | 77 | 82 | 79 | 76 | 75 |
| 7 | 90 | 83 | 78 | 74 | 89 | 82 | 77 | 74 | 81 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 73 | 72 |
| 8 | 87 | 79 | 74 | 71 | 86 | 79 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 70 | 76 | 73 | 70 | 69 |
| 9 | 84 | 76 | 71 | 68 | 83 | 76 | 71 | 68 | 75 | 71 | 68 | 74 | 70 | 67 | 73 | 70 | 67 | 66 |
| 10 | 81 | 73 | 68 | 65 | 80 | 73 | 68 | 65 | 72 | 68 | 65 | 71 | 68 | 65 | 71 | 67 | 65 | 64 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 664192 |
| 5° | 609476 |
| 10° | 447826 |
| 15° | 260706 |
| 20° | 142170 |
| 25° | 101052 |
| 30° | 91068 |
| 35° | 71720 |
| 40° | 15941 |
| 45° | 4361 |
| 50° | 1458 |
| 55° | 882 |
| 60° | 567 |
| 65° | 350 |
| 70° | 216 |
| 75° | 286 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 426.4 | 25.9 |
| 10°-20° | 569.1 | 34.6 |
| 20°-30° | 355.9 | 21.6 |
| 30°-40° | 264.0 | 16.0 |
| 40°-50° | 24.6 | 1.5 |
| 50°-60° | 3.9 | 0.2 |
| 60°-70° | 1.4 | 0.1 |
| 70°-80° | 0.6 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 1351.4 | 82.1 |
| 0°-40° | 1615.4 | 98.1 |
| 0°-60° | 1643.9 | 99.9 |
| 0°-90° | 1645.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1645.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5385 | |
| 5° | 4922 | 426 |
| 15° | 2042 | 569 |
| 25° | 742 | 356 |
| 35° | 476 | 264 |
| 45° | 25 | 25 |
| 55° | 4 | 4 |
| 65° | 1 | 1 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5384.8 |
| 1° | 5349.3 |
| 2° | 5288.7 |
| 3° | 5201.4 |
| 4° | 5081.4 |
| 5° | 4922.4 |
| 6° | 4725.0 |
| 7° | 4486.8 |
| 8° | 4209.1 |
| 9° | 3899.3 |
| 10° | 3575.5 |
| 11° | 3244.2 |
| 12° | 2923.3 |
| 13° | 2610.6 |
| 14° | 2313.6 |
| 15° | 2041.6 |
| 16° | 1794.2 |
| 17° | 1578.1 |
| 18° | 1384.2 |
| 19° | 1220.0 |
| 20° | 1083.1 |
| 21° | 974.8 |
| 22° | 888.1 |
| 23° | 824.0 |
| 24° | 776.8 |
| 25° | 742.5 |
| 26° | 716.8 |
| 27° | 694.7 |
| 28° | 674.3 |
| 29° | 656.9 |
| 30° | 639.4 |
| 32.5° | 591.1 |
| 35° | 476.3 |
| 37.5° | 288.3 |
| 40° | 99.0 |
| 42.5° | 34.4 |
| 45° | 25.0 |
| 47.5° | 18.1 |
| 50° | 7.6 |
| 52.5° | 5.8 |
| 55° | 4.1 |
| 57.5° | 2.9 |
| 60° | 2.3 |
| 62.5° | 1.7 |
| 65° | 1.2 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 67.5° | 1.2 |
| 70° | 0.6 |
| 72.5° | 0.6 |
| 75° | 0.6 |
| 77.5° | 0.6 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)