

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: P220379

Luminaire Tested: **9002-W1-FL-LED3590-M-WT-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29418)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9002-W1-FL-LED3590-M-WT-L1-UNV
Description: LUMIERE LANTERRA 9002 LED WALL LUMINAIRE, FLUSH LENS, MEDIUM FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 3500K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 881.7 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 0.4 / 0.4 / 0.36
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

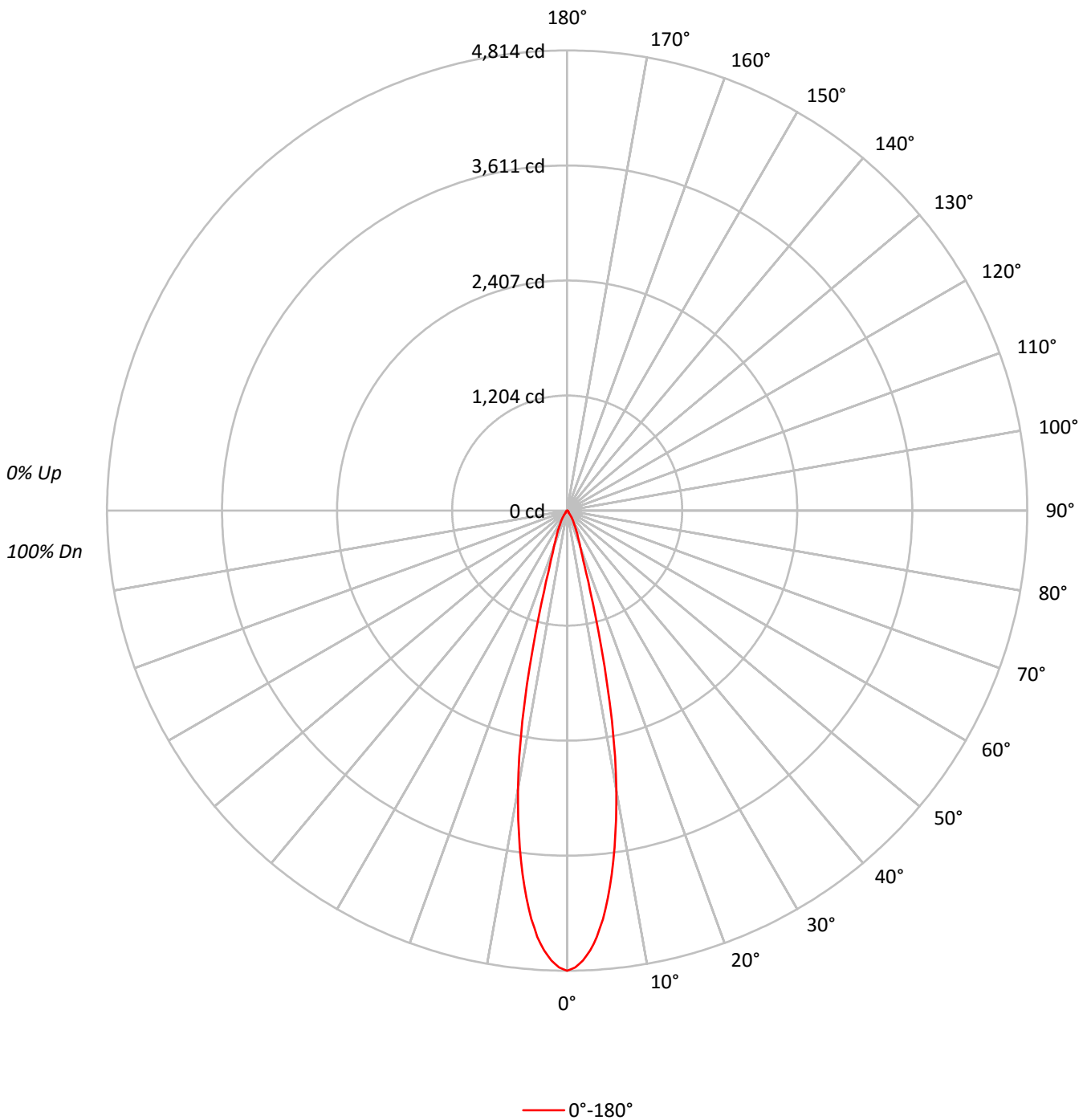
Input Watts (W): 10
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P220379

CATALOG NUMBER: 9002-W1-FL-LED3590-M-WT-L1-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P220379

CATALOG NUMBER: 9002-W1-FL-LED3590-M-WT-L1-UNV

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 | 115 | 113 | 111 | 109 | 113 | 111 | 109 | 107 | 107 | 105 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 96 |
| 2 | 111 | 107 | 104 | 102 | 109 | 106 | 103 | 101 | 103 | 100 | 99 | 100 | 98 | 97 | 97 | 96 | 95 | 93 |
| 3 | 108 | 103 | 99 | 96 | 106 | 102 | 98 | 96 | 99 | 96 | 94 | 97 | 95 | 93 | 95 | 93 | 91 | 90 |
| 4 | 104 | 99 | 95 | 92 | 103 | 98 | 94 | 91 | 96 | 93 | 90 | 94 | 92 | 89 | 92 | 90 | 88 | 87 |
| 5 | 101 | 96 | 91 | 88 | 100 | 95 | 91 | 88 | 93 | 90 | 87 | 92 | 89 | 87 | 90 | 88 | 86 | 85 |
| 6 | 99 | 92 | 88 | 85 | 97 | 92 | 88 | 85 | 90 | 87 | 85 | 89 | 86 | 84 | 88 | 85 | 83 | 82 |
| 7 | 96 | 90 | 86 | 83 | 95 | 89 | 85 | 82 | 88 | 85 | 82 | 87 | 84 | 82 | 86 | 83 | 81 | 80 |
| 8 | 94 | 87 | 83 | 80 | 93 | 87 | 83 | 80 | 86 | 82 | 80 | 85 | 82 | 80 | 84 | 81 | 79 | 78 |
| 9 | 91 | 85 | 81 | 78 | 90 | 84 | 81 | 78 | 84 | 80 | 78 | 83 | 80 | 78 | 82 | 79 | 77 | 76 |
| 10 | 89 | 83 | 79 | 76 | 88 | 82 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 76 | 80 | 78 | 76 | 75 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 2375178 |
| 5° | 2124386 |
| 10° | 1483133 |
| 15° | 585256 |
| 20° | 210280 |
| 25° | 118676 |
| 30° | 67795 |
| 35° | 36620 |
| 40° | 14556 |
| 45° | 9699 |
| 50° | 6678 |
| 55° | 5935 |
| 60° | 6019 |
| 65° | 7121 |
| 70° | 7501 |
| 75° | 8197 |
| 80° | 4830 |
| 85° | 5095 |



TEST NUMBER: P220379

CATALOG NUMBER: 9002-W1-FL-LED3590-M-WT-L1-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 366.3 | 41.5 |
| 10°-20° | 344.2 | 39.0 |
| 20°-30° | 103.9 | 11.8 |
| 30°-40° | 38.4 | 4.4 |
| 40°-50° | 11.1 | 1.3 |
| 50°-60° | 6.5 | 0.7 |
| 60°-70° | 5.9 | 0.7 |
| 70°-80° | 4.1 | 0.5 |
| 80°-90° | 1.2 | 0.1 |
| 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° | 814.5 | 92.4 |
| 0°-40° | 852.9 | 96.7 |
| 0°-60° | 870.5 | 98.7 |
| 0°-90° | 881.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 881.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4814 | |
| 5° | 4289 | 366 |
| 15° | 1146 | 344 |
| 25° | 218 | 104 |
| 35° | 61 | 38 |
| 45° | 14 | 11 |
| 55° | 7 | 6 |
| 65° | 6 | 6 |
| 75° | 4 | 4 |
| 85° | 1 | 1 |
| 90° | 0 | |



TEST NUMBER: P220379

CATALOG NUMBER: 9002-W1-FL-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 4814.1 |
| 1° | 4780.2 |
| 2° | 4709.9 |
| 3° | 4608.2 |
| 4° | 4470.1 |
| 5° | 4289.4 |
| 6° | 4074.0 |
| 7° | 3834.3 |
| 8° | 3562.4 |
| 9° | 3271.4 |
| 10° | 2960.4 |
| 11° | 2621.6 |
| 12° | 2251.6 |
| 13° | 1864.1 |
| 14° | 1483.7 |
| 15° | 1145.8 |
| 16° | 875.6 |
| 17° | 678.4 |
| 18° | 548.1 |
| 19° | 461.3 |
| 20° | 400.5 |
| 22.5° | 294.5 |
| 25° | 218.0 |
| 26° | 192.8 |
| 27° | 171.1 |
| 28° | 152.0 |
| 29° | 134.6 |
| 30° | 119.0 |
| 32.5° | 86.9 |
| 35° | 60.8 |
| 37.5° | 33.9 |
| 40° | 22.6 |
| 42.5° | 17.4 |
| 45° | 13.9 |
| 47.5° | 11.3 |
| 50° | 8.7 |
| 52.5° | 7.8 |
| 55° | 6.9 |
| 57.5° | 6.9 |
| 60° | 6.1 |
| 62.5° | 6.1 |
| 65° | 6.1 |
| 67.5° | 6.1 |
| 70° | 5.2 |
| 72.5° | 4.3 |



TEST NUMBER: P220379

CATALOG NUMBER: 9002-W1-FL-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 75° | 4.3 |
| 77.5° | 3.5 |
| 80° | 1.7 |
| 82.5° | 1.7 |
| 85° | 0.9 |
| 87.5° | 0.9 |
| 90° | 0.0 |

(END OF REPORT)