

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: P220744

Luminaire Tested: **9004-W1-[RW, RI]-LED2790-M-WT-L2-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220744
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29488)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9004-W1-[RW, RI]-LED2790-M-WT-L2-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, MEDIUM FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 2700K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1541.9 lumens
Efficiency: N/A
Efficacy: 76.7 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

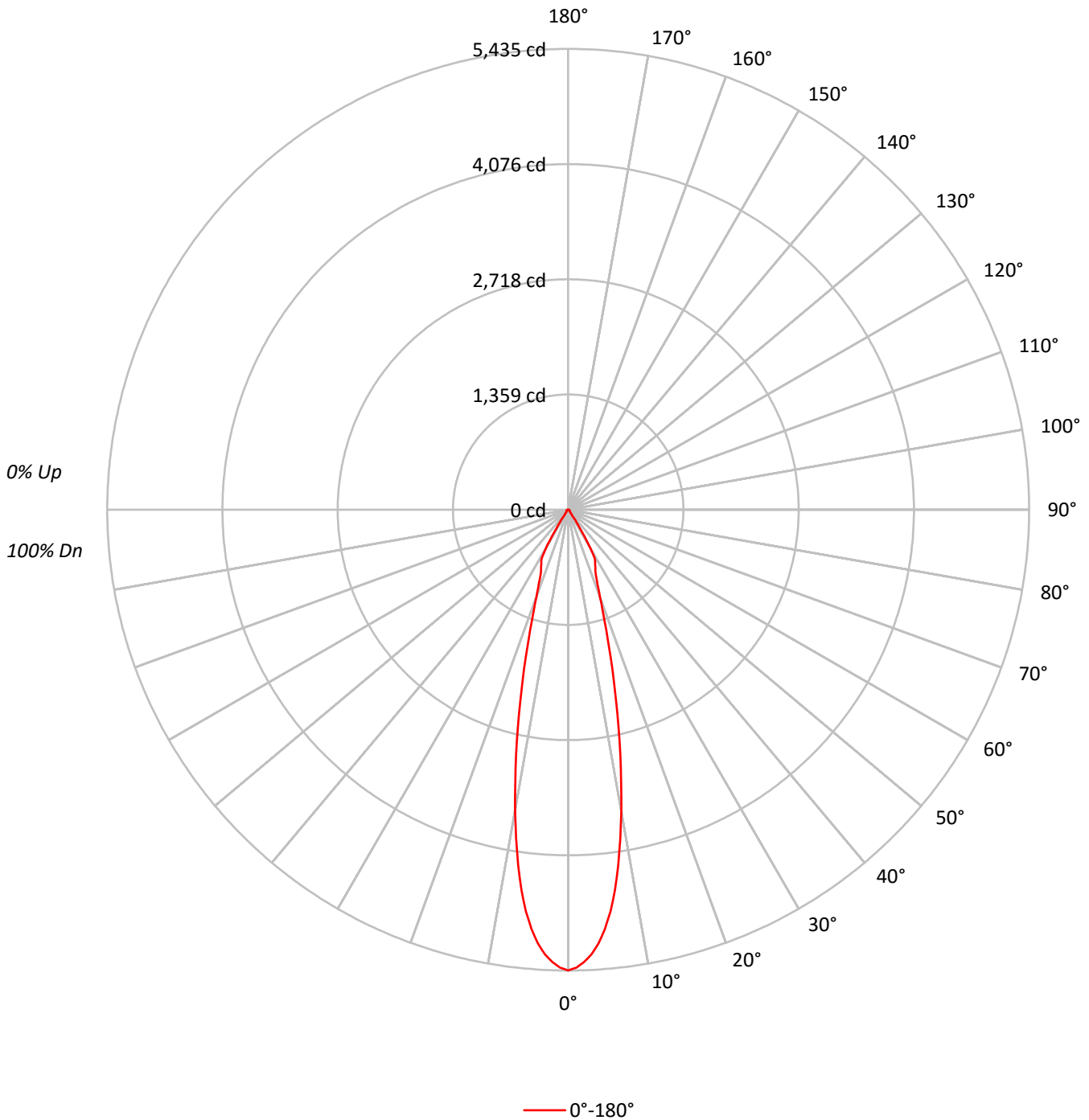
Input Watts (W): 20.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 95 |
| 2 | 109 | 105 | 102 | 99 | 107 | 104 | 100 | 98 | 100 | 98 | 95 | 97 | 95 | 93 | 95 | 93 | 92 | 90 |
| 3 | 105 | 100 | 95 | 92 | 103 | 98 | 94 | 91 | 96 | 93 | 90 | 93 | 91 | 89 | 91 | 89 | 87 | 86 |
| 4 | 101 | 95 | 90 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 90 | 87 | 84 | 88 | 86 | 83 | 82 |
| 5 | 98 | 91 | 86 | 82 | 96 | 90 | 85 | 82 | 88 | 84 | 81 | 87 | 83 | 81 | 85 | 82 | 80 | 79 |
| 6 | 94 | 87 | 82 | 79 | 93 | 86 | 82 | 78 | 85 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 77 | 76 |
| 7 | 91 | 83 | 79 | 75 | 90 | 83 | 78 | 75 | 82 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 74 | 73 |
| 8 | 88 | 80 | 76 | 72 | 87 | 80 | 75 | 72 | 79 | 75 | 72 | 78 | 74 | 72 | 77 | 74 | 71 | 70 |
| 9 | 85 | 77 | 73 | 70 | 84 | 77 | 73 | 69 | 76 | 72 | 69 | 75 | 72 | 69 | 75 | 71 | 69 | 68 |
| 10 | 83 | 75 | 70 | 67 | 82 | 74 | 70 | 67 | 74 | 70 | 67 | 73 | 69 | 67 | 72 | 69 | 67 | 66 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 670371 |
| 5° | 614738 |
| 10° | 451107 |
| 15° | 264205 |
| 20° | 144165 |
| 25° | 102712 |
| 30° | 75971 |
| 35° | 10962 |
| 40° | 6006 |
| 45° | 4274 |
| 50° | 4356 |
| 55° | 4516 |
| 60° | 5033 |
| 65° | 5604 |
| 70° | 6528 |
| 75° | 8054 |
| 80° | 9518 |
| 85° | 9057 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 429.7 | 27.9 |
| 10°-20° | 575.3 | 37.3 |
| 20°-30° | 355.2 | 23.0 |
| 30°-40° | 99.0 | 6.4 |
| 40°-50° | 20.0 | 1.3 |
| 50°-60° | 19.1 | 1.2 |
| 60°-70° | 19.2 | 1.2 |
| 70°-80° | 17.2 | 1.1 |
| 80°-90° | 7.2 | 0.5 |
| 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° | 1360.2 | 88.2 |
| 0°-40° | 1459.2 | 94.6 |
| 0°-60° | 1498.3 | 97.2 |
| 0°-90° | 1541.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1541.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5435 | |
| 5° | 4965 | 430 |
| 15° | 2069 | 575 |
| 25° | 755 | 355 |
| 35° | 73 | 99 |
| 45° | 24 | 20 |
| 55° | 21 | 19 |
| 65° | 19 | 19 |
| 75° | 17 | 17 |
| 85° | 6 | 7 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5434.9 |
| 1° | 5401.1 |
| 2° | 5338.8 |
| 3° | 5250.3 |
| 4° | 5128.6 |
| 5° | 4964.9 |
| 6° | 4762.3 |
| 7° | 4521.2 |
| 8° | 4233.5 |
| 9° | 3924.3 |
| 10° | 3601.7 |
| 11° | 3273.3 |
| 12° | 2948.9 |
| 13° | 2632.7 |
| 14° | 2339.2 |
| 15° | 2069.0 |
| 16° | 1820.4 |
| 17° | 1597.3 |
| 18° | 1401.7 |
| 19° | 1234.5 |
| 20° | 1098.3 |
| 21° | 985.9 |
| 22° | 901.4 |
| 23° | 837.4 |
| 24° | 789.6 |
| 25° | 754.7 |
| 26° | 726.2 |
| 27° | 701.1 |
| 28° | 677.2 |
| 29° | 623.7 |
| 30° | 533.4 |
| 32.5° | 258.6 |
| 35° | 72.8 |
| 37.5° | 50.1 |
| 40° | 37.3 |
| 42.5° | 26.2 |
| 45° | 24.5 |
| 47.5° | 23.3 |
| 50° | 22.7 |
| 52.5° | 21.5 |
| 55° | 21.0 |
| 57.5° | 21.0 |
| 60° | 20.4 |
| 62.5° | 20.4 |
| 65° | 19.2 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|------|
| 67.5° | 18.6 |
| 70° | 18.1 |
| 72.5° | 17.5 |
| 75° | 16.9 |
| 77.5° | 15.1 |
| 80° | 13.4 |
| 82.5° | 10.5 |
| 85° | 6.4 |
| 87.5° | 2.9 |
| 90° | 0.0 |

(END OF REPORT)