

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: P221274

Luminaire Tested: **9002-W2-[RW, RI]-LED4097-F-WT-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221274
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29411)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9002-W2-[RW, RI]-LED4097-F-WT-L1-UNV
Description: LUMIERE LANTERRA 9002 LED WALL LUMINAIRE, RECESSED LENS, FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 4000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1734.2 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 0.66 / 0.66 / 0.63
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: General Diffuse

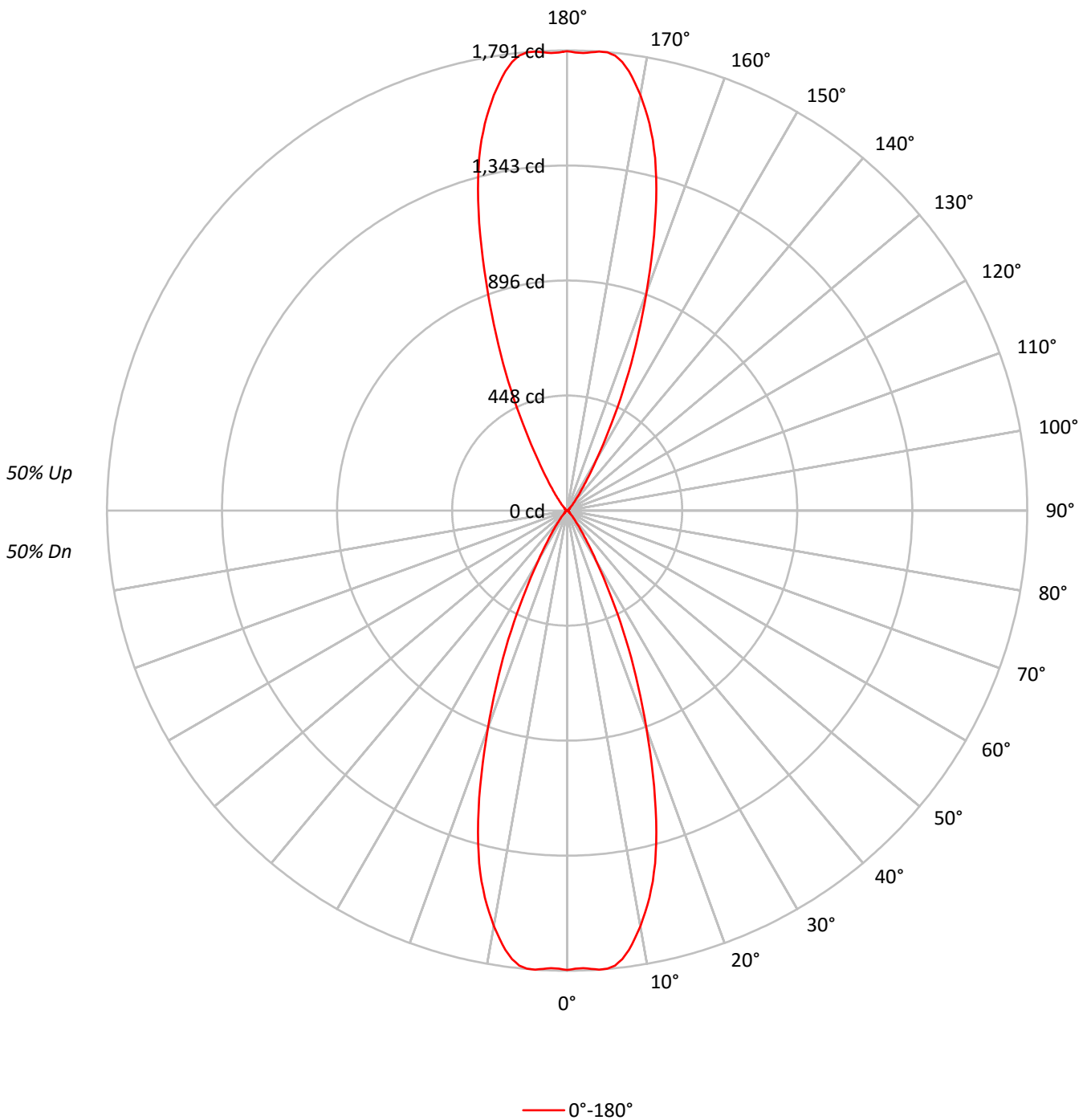
Input Watts (W): 20
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 50 |
| 1 | 100 | 97 | 94 | 92 | 93 | 90 | 88 | 85 | 77 | 75 | 74 | 65 | 64 | 63 | 54 | 53 | 52 | 47 |
| 2 | 94 | 89 | 84 | 80 | 87 | 82 | 79 | 75 | 71 | 69 | 66 | 61 | 59 | 57 | 51 | 50 | 49 | 45 |
| 3 | 88 | 81 | 76 | 71 | 82 | 76 | 71 | 68 | 66 | 63 | 60 | 57 | 55 | 53 | 49 | 47 | 46 | 43 |
| 4 | 83 | 75 | 69 | 64 | 77 | 70 | 65 | 61 | 62 | 58 | 55 | 54 | 51 | 49 | 47 | 45 | 44 | 40 |
| 5 | 78 | 69 | 63 | 59 | 73 | 65 | 60 | 56 | 58 | 54 | 51 | 51 | 48 | 46 | 45 | 43 | 41 | 39 |
| 6 | 74 | 65 | 58 | 54 | 69 | 61 | 56 | 52 | 55 | 51 | 47 | 48 | 46 | 43 | 43 | 41 | 39 | 37 |
| 7 | 70 | 60 | 54 | 50 | 66 | 57 | 52 | 48 | 52 | 47 | 44 | 46 | 43 | 41 | 41 | 39 | 37 | 35 |
| 8 | 66 | 57 | 51 | 46 | 62 | 54 | 49 | 45 | 49 | 45 | 42 | 44 | 41 | 39 | 39 | 37 | 36 | 34 |
| 9 | 63 | 53 | 47 | 43 | 59 | 51 | 46 | 42 | 46 | 42 | 39 | 42 | 39 | 37 | 38 | 36 | 34 | 32 |
| 10 | 60 | 50 | 45 | 41 | 57 | 48 | 43 | 40 | 44 | 40 | 37 | 40 | 37 | 35 | 36 | 34 | 33 | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 882064 |
| 5° | 886671 |
| 10° | 822627 |
| 15° | 684655 |
| 20° | 473274 |
| 25° | 280739 |
| 30° | 127215 |
| 35° | 56677 |
| 40° | 25762 |
| 45° | 13397 |
| 50° | 8980 |
| 55° | 8602 |
| 60° | 8190 |
| 65° | 7822 |
| 70° | 8367 |
| 75° | 9531 |
| 80° | 9376 |
| 85° | 9624 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 166.2 | 9.6 |
| 10°-20° | 360.9 | 20.8 |
| 20°-30° | 235.8 | 13.6 |
| 30°-40° | 65.2 | 3.8 |
| 40°-50° | 16.5 | 1.0 |
| 50°-60° | 8.8 | 0.5 |
| 60°-70° | 6.9 | 0.4 |
| 70°-80° | 5.0 | 0.3 |
| 80°-90° | 1.8 | 0.1 |
| 90°-100° | 1.8 | 0.1 |
| 100°-110° | 5.0 | 0.3 |
| 110°-120° | 6.9 | 0.4 |
| 120°-130° | 8.8 | 0.5 |
| 130°-140° | 16.5 | 1.0 |
| 140°-150° | 65.2 | 3.8 |
| 150°-160° | 235.8 | 13.6 |
| 160°-170° | 360.9 | 20.8 |
| 170°-180° | 166.2 | 9.6 |
| 0°-30° | 762.9 | 44.0 |
| 0°-40° | 828.2 | 47.8 |
| 0°-60° | 853.4 | 49.2 |
| 0°-90° | 867.1 | 50.0 |
| 90°-120° | 13.7 | 0.8 |
| 90°-150° | 104.2 | 6.0 |
| 90°-180° | 867.0 | 50.0 |
| 0°-180° | 1734.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 1788 | |
| 5° | 1790 | 166 |
| 15° | 1340 | 361 |
| 25° | 516 | 236 |
| 35° | 94 | 65 |
| 45° | 19 | 17 |
| 55° | 10 | 9 |
| 65° | 7 | 7 |
| 75° | 5 | 5 |
| 85° | 2 | 2 |
| 90° | 0 | 0 |
| 95° | 2 | 2 |
| 105° | 5 | 5 |
| 115° | 7 | 7 |
| 125° | 10 | 9 |
| 135° | 19 | 17 |
| 145° | 94 | 65 |
| 155° | 516 | 236 |
| 165° | 1340 | 361 |
| 175° | 1790 | 166 |
| 180° | 1788 | |



TEST NUMBER: P221274

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1787.8 |
| 1° | 1783.6 |
| 2° | 1781.9 |
| 3° | 1786.1 |
| 4° | 1791.1 |
| 5° | 1790.3 |
| 6° | 1780.3 |
| 7° | 1759.4 |
| 8° | 1727.0 |
| 9° | 1686.1 |
| 10° | 1642.0 |
| 11° | 1592.8 |
| 12° | 1539.5 |
| 13° | 1481.2 |
| 14° | 1414.6 |
| 15° | 1340.4 |
| 16° | 1257.1 |
| 17° | 1169.6 |
| 18° | 1079.7 |
| 19° | 990.5 |
| 20° | 901.4 |
| 22.5° | 698.1 |
| 25° | 515.7 |
| 26° | 448.2 |
| 27° | 380.7 |
| 28° | 320.7 |
| 29° | 266.6 |
| 30° | 223.3 |
| 32.5° | 142.5 |
| 35° | 94.1 |
| 37.5° | 60.8 |
| 40° | 40.0 |
| 42.5° | 27.5 |
| 45° | 19.2 |
| 47.5° | 14.2 |
| 50° | 11.7 |
| 52.5° | 10.0 |
| 55° | 10.0 |
| 57.5° | 9.2 |
| 60° | 8.3 |
| 62.5° | 7.5 |
| 65° | 6.7 |
| 67.5° | 6.7 |
| 70° | 5.8 |
| 72.5° | 5.0 |



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CATALOG NUMBER: 9002-W2-[RW, RI]-LED4097-F-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|--------|
| 75° | 5.0 |
| 77.5° | 4.2 |
| 80° | 3.3 |
| 82.5° | 2.5 |
| 85° | 1.7 |
| 87.5° | 0.8 |
| 90° | 0.0 |
| 92.5° | 0.8 |
| 95° | 1.7 |
| 97.5° | 2.5 |
| 100° | 3.3 |
| 102.5° | 4.2 |
| 105° | 5.0 |
| 107.5° | 5.0 |
| 110° | 5.8 |
| 112.5° | 6.7 |
| 115° | 6.7 |
| 117.5° | 7.5 |
| 120° | 8.3 |
| 122.5° | 9.2 |
| 125° | 10.0 |
| 127.5° | 10.0 |
| 130° | 11.7 |
| 132.5° | 14.2 |
| 135° | 19.2 |
| 137.5° | 27.5 |
| 140° | 40.0 |
| 142.5° | 60.8 |
| 145° | 94.1 |
| 147.5° | 142.5 |
| 150° | 223.3 |
| 151° | 266.6 |
| 152° | 320.7 |
| 153° | 380.7 |
| 154° | 448.2 |
| 155° | 515.7 |
| 157.5° | 698.1 |
| 160° | 901.4 |
| 161° | 990.5 |
| 162° | 1079.7 |
| 163° | 1169.6 |
| 164° | 1257.1 |
| 165° | 1340.4 |
| 166° | 1414.6 |
| 167° | 1481.2 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|------|--------|
| 168° | 1539.5 |
| 169° | 1592.8 |
| 170° | 1642.0 |
| 171° | 1686.1 |
| 172° | 1727.0 |
| 173° | 1759.4 |
| 174° | 1780.3 |
| 175° | 1790.3 |
| 176° | 1791.1 |
| 177° | 1786.1 |
| 178° | 1781.9 |
| 179° | 1783.6 |
| 180° | 1787.8 |

(END OF REPORT)