

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: P221248

Luminaire Tested: **9002-W2-[RW, RI]-LED3097-W-WT-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221248
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29412)
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]-LED3097-W-WT-L1-UNV
Description: LUMIERE LANTERRA 9002 LED WALL LUMINAIRE, RECESSED LENS, WIDE FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 3000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1495.7 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.86
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: General Diffuse

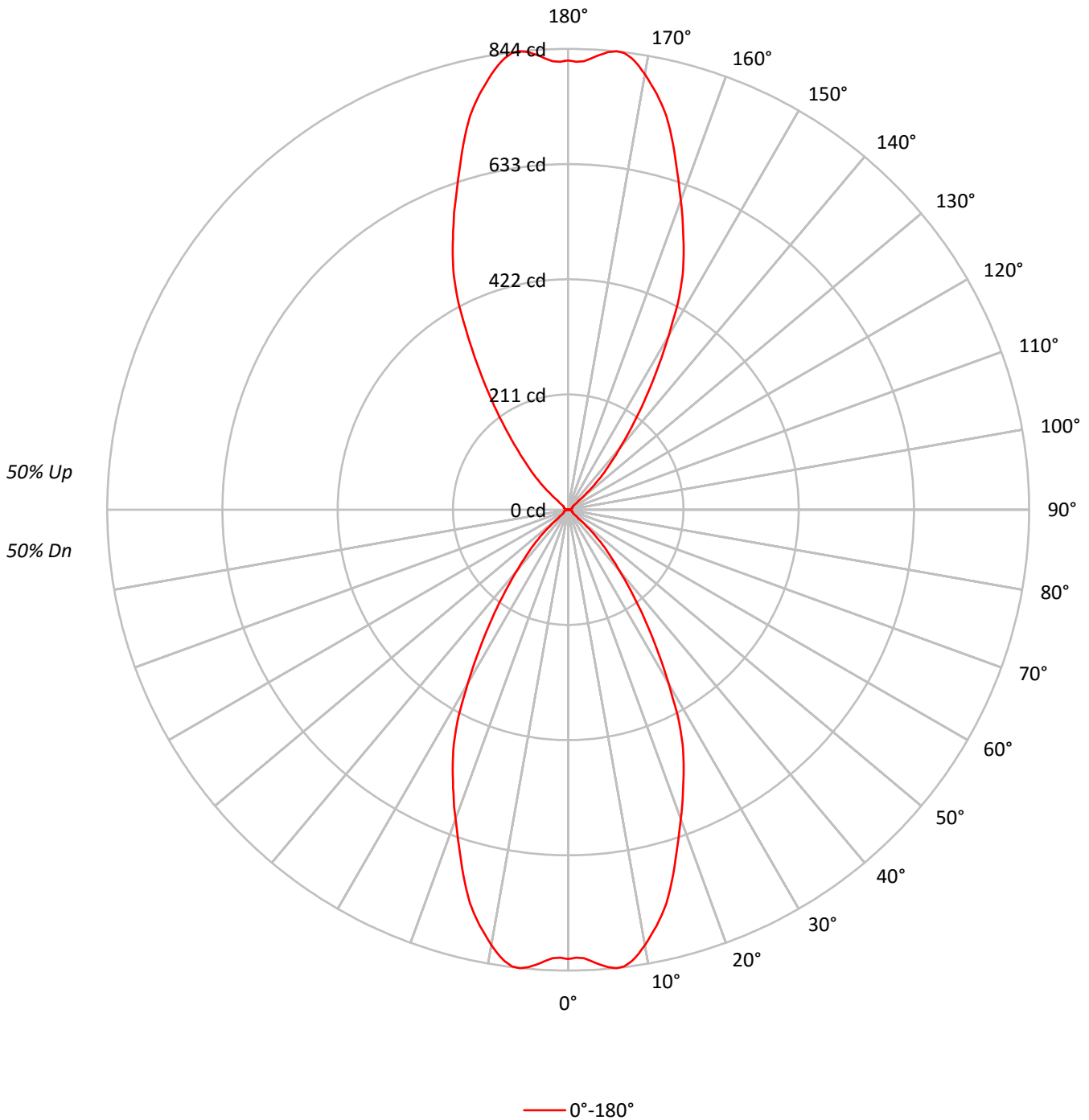
Input Watts (W): 20
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 96 | 93 | 90 | 92 | 89 | 87 | 84 | 76 | 74 | 73 | | 64 | 63 | 62 | | 53 | 52 | 51 | 46 |
| 2 | 93 | 87 | 82 | 78 | 86 | 81 | 77 | 73 | 70 | 67 | 64 | | 59 | 57 | 55 | | 50 | 48 | 47 | 43 |
| 3 | 87 | 79 | 73 | 68 | 80 | 74 | 69 | 65 | 64 | 60 | 57 | | 55 | 52 | 50 | | 46 | 45 | 43 | 40 |
| 4 | 81 | 72 | 66 | 61 | 75 | 67 | 62 | 58 | 59 | 55 | 52 | | 51 | 48 | 46 | | 44 | 42 | 40 | 37 |
| 5 | 75 | 66 | 59 | 54 | 70 | 62 | 56 | 52 | 54 | 50 | 47 | | 47 | 44 | 42 | | 41 | 39 | 37 | 34 |
| 6 | 71 | 61 | 54 | 49 | 66 | 57 | 51 | 47 | 50 | 46 | 43 | | 44 | 41 | 38 | | 39 | 36 | 34 | 32 |
| 7 | 66 | 56 | 49 | 44 | 62 | 53 | 47 | 43 | 47 | 42 | 39 | | 41 | 38 | 36 | | 36 | 34 | 32 | 30 |
| 8 | 62 | 52 | 45 | 41 | 58 | 49 | 43 | 39 | 44 | 39 | 36 | | 39 | 35 | 33 | | 34 | 32 | 30 | 28 |
| 9 | 59 | 48 | 42 | 37 | 55 | 46 | 40 | 36 | 41 | 36 | 33 | | 37 | 33 | 31 | | 32 | 30 | 28 | 26 |
| 10 | 55 | 45 | 39 | 34 | 52 | 43 | 37 | 33 | 38 | 34 | 31 | | 34 | 31 | 29 | | 31 | 28 | 26 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 405953 |
| 5° | 416666 |
| 10° | 405652 |
| 15° | 368173 |
| 20° | 316391 |
| 25° | 271702 |
| 30° | 209481 |
| 35° | 146119 |
| 40° | 94548 |
| 45° | 58192 |
| 50° | 18345 |
| 55° | 9290 |
| 60° | 9177 |
| 65° | 9923 |
| 70° | 10098 |
| 75° | 11819 |
| 80° | 11081 |
| 85° | 13020 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.4 | 5.3 |
| 10°-20° | 199.2 | 13.3 |
| 20°-30° | 225.4 | 15.1 |
| 30°-40° | 153.1 | 10.2 |
| 40°-50° | 63.2 | 4.2 |
| 50°-60° | 10.9 | 0.7 |
| 60°-70° | 8.1 | 0.5 |
| 70°-80° | 6.1 | 0.4 |
| 80°-90° | 2.2 | 0.1 |
| 90°-100° | 2.2 | 0.1 |
| 100°-110° | 6.1 | 0.4 |
| 110°-120° | 8.1 | 0.5 |
| 120°-130° | 10.9 | 0.7 |
| 130°-140° | 63.2 | 4.2 |
| 140°-150° | 153.1 | 10.2 |
| 150°-160° | 225.4 | 15.1 |
| 160°-170° | 199.2 | 13.3 |
| 170°-180° | 79.4 | 5.3 |
| 0°-30° | 504.1 | 33.7 |
| 0°-40° | 657.2 | 43.9 |
| 0°-60° | 731.3 | 48.9 |
| 0°-90° | 747.8 | 50.0 |
| 90°-120° | 16.5 | 1.1 |
| 90°-150° | 243.7 | 16.3 |
| 90°-180° | 748.0 | 50.0 |
| 0°-180° | 1495.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|-----|------|
| 0° | 823 | |
| 5° | 841 | 79 |
| 15° | 721 | 199 |
| 25° | 499 | 225 |
| 35° | 243 | 153 |
| 45° | 83 | 63 |
| 55° | 11 | 11 |
| 65° | 8 | 8 |
| 75° | 6 | 6 |
| 85° | 2 | 2 |
| 90° | 0 | 0 |
| 95° | 2 | 2 |
| 105° | 6 | 6 |
| 115° | 8 | 8 |
| 125° | 11 | 11 |
| 135° | 83 | 63 |
| 145° | 243 | 153 |
| 155° | 499 | 225 |
| 165° | 721 | 199 |
| 175° | 841 | 79 |
| 180° | 823 | |



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CATALOG NUMBER: 9002-W2-[RW, RI]-LED3097-W-WT-L1-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 822.8 |
| 1° | 820.5 |
| 2° | 822.0 |
| 3° | 828.2 |
| 4° | 835.2 |
| 5° | 841.3 |
| 6° | 844.4 |
| 7° | 842.9 |
| 8° | 835.2 |
| 9° | 823.6 |
| 10° | 809.7 |
| 11° | 794.2 |
| 12° | 778.8 |
| 13° | 761.8 |
| 14° | 743.2 |
| 15° | 720.8 |
| 16° | 696.1 |
| 17° | 671.4 |
| 18° | 647.4 |
| 19° | 624.2 |
| 20° | 602.6 |
| 21° | 582.5 |
| 22° | 560.9 |
| 23° | 540.0 |
| 24° | 519.9 |
| 25° | 499.1 |
| 26° | 477.5 |
| 27° | 453.5 |
| 28° | 427.2 |
| 29° | 395.6 |
| 30° | 367.7 |
| 32.5° | 301.3 |
| 35° | 242.6 |
| 37.5° | 190.8 |
| 40° | 146.8 |
| 42.5° | 112.8 |
| 45° | 83.4 |
| 47.5° | 51.8 |
| 50° | 23.9 |
| 52.5° | 11.6 |
| 55° | 10.8 |
| 57.5° | 10.0 |
| 60° | 9.3 |
| 62.5° | 8.5 |
| 65° | 8.5 |



TEST NUMBER: P221248

CATALOG NUMBER: 9002-W2-[RW, RI]-LED3097-W-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-------|
| 67.5° | 7.7 |
| 70° | 7.0 |
| 72.5° | 6.2 |
| 75° | 6.2 |
| 77.5° | 5.4 |
| 80° | 3.9 |
| 82.5° | 3.1 |
| 85° | 2.3 |
| 87.5° | 0.8 |
| 90° | 0.0 |
| 92.5° | 0.8 |
| 95° | 2.3 |
| 97.5° | 3.1 |
| 100° | 3.9 |
| 102.5° | 5.4 |
| 105° | 6.2 |
| 107.5° | 6.2 |
| 110° | 7.0 |
| 112.5° | 7.7 |
| 115° | 8.5 |
| 117.5° | 8.5 |
| 120° | 9.3 |
| 122.5° | 10.0 |
| 125° | 10.8 |
| 127.5° | 11.6 |
| 130° | 23.9 |
| 132.5° | 51.8 |
| 135° | 83.4 |
| 137.5° | 112.8 |
| 140° | 146.8 |
| 142.5° | 190.8 |
| 145° | 242.6 |
| 147.5° | 301.3 |
| 150° | 367.7 |
| 151° | 395.6 |
| 152° | 427.2 |
| 153° | 453.5 |
| 154° | 477.5 |
| 155° | 499.1 |
| 156° | 519.9 |
| 157° | 540.0 |
| 158° | 560.9 |
| 159° | 582.5 |
| 160° | 602.6 |
| 161° | 624.2 |



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CATALOG NUMBER: 9002-W2-[RW, RI]-LED3097-W-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|------|-------|
| 162° | 647.4 |
| 163° | 671.4 |
| 164° | 696.1 |
| 165° | 720.8 |
| 166° | 743.2 |
| 167° | 761.8 |
| 168° | 778.8 |
| 169° | 794.2 |
| 170° | 809.7 |
| 171° | 823.6 |
| 172° | 835.2 |
| 173° | 842.9 |
| 174° | 844.4 |
| 175° | 841.3 |
| 176° | 835.2 |
| 177° | 828.2 |
| 178° | 822.0 |
| 179° | 820.5 |
| 180° | 822.8 |

(END OF REPORT)