

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: P221331

Luminaire Tested: **9002-W2-FL-LED3097-W-BK-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29424)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9002-W2-FL-LED3097-W-BK-L1-UNV
Description: LUMIERE LANTERRA 9002 LED WALL LUMINAIRE, FLUSH LENS, WIDE FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 3000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1463.0 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.88
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: General Diffuse

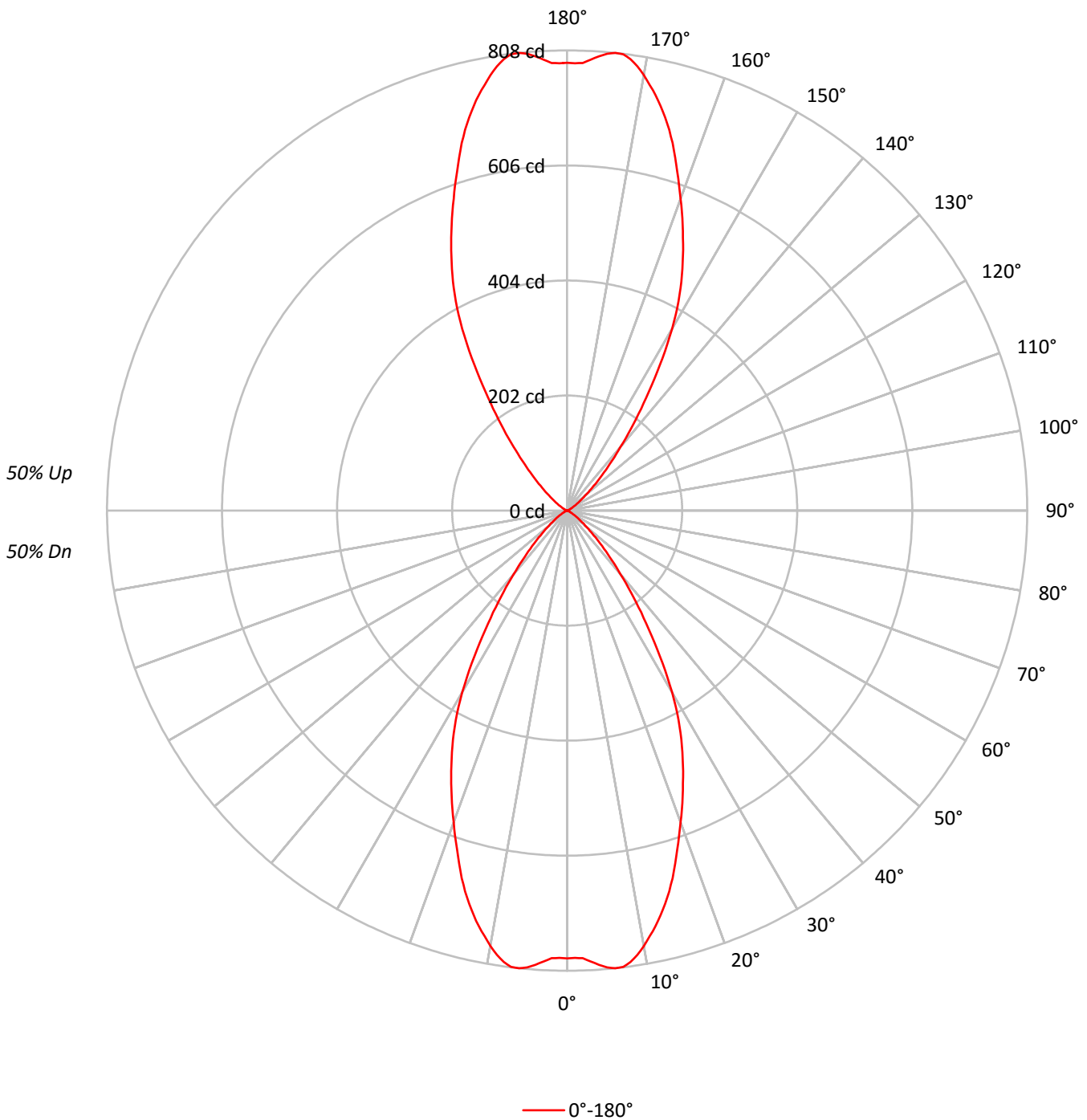
Input Watts (W): 20
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P221331

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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 | 93 | 91 | 92 | 89 | 87 | 85 | 76 | 75 | 73 | | 64 | 63 | 62 | | 53 | 52 | 52 | 47 |
| 2 | 93 | 87 | 82 | 78 | 86 | 81 | 77 | 73 | 70 | 67 | 64 | | 59 | 57 | 56 | | 50 | 49 | 47 | 43 |
| 3 | 87 | 79 | 73 | 69 | 80 | 74 | 69 | 65 | 64 | 60 | 57 | | 55 | 52 | 50 | | 47 | 45 | 44 | 40 |
| 4 | 81 | 72 | 66 | 61 | 75 | 68 | 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 | 60 | 54 | 49 | 66 | 57 | 51 | 47 | 50 | 46 | 43 | | 44 | 41 | 38 | | 38 | 36 | 34 | 32 |
| 7 | 66 | 56 | 49 | 44 | 62 | 53 | 47 | 43 | 47 | 42 | 39 | | 41 | 38 | 35 | | 36 | 34 | 32 | 30 |
| 8 | 62 | 52 | 45 | 40 | 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 | | 36 | 33 | 30 | | 32 | 30 | 28 | 26 |
| 10 | 55 | 45 | 38 | 34 | 52 | 43 | 37 | 33 | 38 | 34 | 31 | | 34 | 31 | 28 | | 30 | 28 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 388043 |
| 5° | 398688 |
| 10° | 388969 |
| 15° | 353565 |
| 20° | 305838 |
| 25° | 261195 |
| 30° | 209937 |
| 35° | 145637 |
| 40° | 94033 |
| 45° | 57145 |
| 50° | 33235 |
| 55° | 18580 |
| 60° | 9868 |
| 65° | 5370 |
| 70° | 2164 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 76.1 | 5.2 |
| 10°-20° | 191.7 | 13.1 |
| 20°-30° | 218.6 | 14.9 |
| 30°-40° | 153.0 | 10.5 |
| 40°-50° | 66.0 | 4.5 |
| 50°-60° | 20.8 | 1.4 |
| 60°-70° | 4.8 | 0.3 |
| 70°-80° | 0.4 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.6 | 0.0 |
| 110°-120° | 4.8 | 0.3 |
| 120°-130° | 20.8 | 1.4 |
| 130°-140° | 66.0 | 4.5 |
| 140°-150° | 153.0 | 10.5 |
| 150°-160° | 218.6 | 14.9 |
| 160°-170° | 191.7 | 13.1 |
| 170°-180° | 76.1 | 5.2 |
| 0°-30° | 486.4 | 33.3 |
| 0°-40° | 639.5 | 43.7 |
| 0°-60° | 726.3 | 49.6 |
| 0°-90° | 731.5 | 50.0 |
| 90°-120° | 5.4 | 0.4 |
| 90°-150° | 245.3 | 16.8 |
| 90°-180° | 732.0 | 50.0 |
| 0°-180° | 1463.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|-----|------|
| 0° | 786 | |
| 5° | 805 | 76 |
| 15° | 692 | 192 |
| 25° | 480 | 219 |
| 35° | 242 | 153 |
| 45° | 82 | 66 |
| 55° | 22 | 21 |
| 65° | 5 | 5 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | 0 |
| 95° | 0 | 0 |
| 105° | 0 | 1 |
| 115° | 5 | 5 |
| 125° | 22 | 21 |
| 135° | 82 | 66 |
| 145° | 242 | 153 |
| 155° | 480 | 219 |
| 165° | 692 | 192 |
| 175° | 805 | 76 |
| 180° | 786 | |



TEST NUMBER: P221331

CATALOG NUMBER: 9002-W2-FL-LED3097-W-BK-L1-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 786.5 |
| 1° | 785.7 |
| 2° | 786.5 |
| 3° | 792.7 |
| 4° | 799.6 |
| 5° | 805.0 |
| 6° | 808.1 |
| 7° | 807.3 |
| 8° | 800.4 |
| 9° | 789.6 |
| 10° | 776.4 |
| 11° | 761.0 |
| 12° | 746.3 |
| 13° | 729.3 |
| 14° | 711.5 |
| 15° | 692.2 |
| 16° | 671.4 |
| 17° | 648.2 |
| 18° | 625.8 |
| 19° | 604.2 |
| 20° | 582.5 |
| 21° | 562.4 |
| 22° | 541.6 |
| 23° | 520.7 |
| 24° | 500.6 |
| 25° | 479.8 |
| 26° | 459.7 |
| 27° | 438.8 |
| 28° | 416.4 |
| 29° | 393.2 |
| 30° | 368.5 |
| 32.5° | 302.8 |
| 35° | 241.8 |
| 37.5° | 190.1 |
| 40° | 146.0 |
| 42.5° | 110.5 |
| 45° | 81.9 |
| 47.5° | 59.5 |
| 50° | 43.3 |
| 52.5° | 30.9 |
| 55° | 21.6 |
| 57.5° | 14.7 |
| 60° | 10.0 |
| 62.5° | 7.0 |
| 65° | 4.6 |



TEST NUMBER: P221331

CATALOG NUMBER: 9002-W2-FL-LED3097-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-------|
| 67.5° | 2.3 |
| 70° | 1.5 |
| 72.5° | 0.8 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |
| 92.5° | 0.0 |
| 95° | 0.0 |
| 97.5° | 0.0 |
| 100° | 0.0 |
| 102.5° | 0.0 |
| 105° | 0.0 |
| 107.5° | 0.8 |
| 110° | 1.5 |
| 112.5° | 2.3 |
| 115° | 4.6 |
| 117.5° | 7.0 |
| 120° | 10.0 |
| 122.5° | 14.7 |
| 125° | 21.6 |
| 127.5° | 30.9 |
| 130° | 43.3 |
| 132.5° | 59.5 |
| 135° | 81.9 |
| 137.5° | 110.5 |
| 140° | 146.0 |
| 142.5° | 190.1 |
| 145° | 241.8 |
| 147.5° | 302.8 |
| 150° | 368.5 |
| 151° | 393.2 |
| 152° | 416.4 |
| 153° | 438.8 |
| 154° | 459.7 |
| 155° | 479.8 |
| 156° | 500.6 |
| 157° | 520.7 |
| 158° | 541.6 |
| 159° | 562.4 |
| 160° | 582.5 |
| 161° | 604.2 |



TEST NUMBER: P221331

CATALOG NUMBER: 9002-W2-FL-LED3097-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|------|-------|
| 162° | 625.8 |
| 163° | 648.2 |
| 164° | 671.4 |
| 165° | 692.2 |
| 166° | 711.5 |
| 167° | 729.3 |
| 168° | 746.3 |
| 169° | 761.0 |
| 170° | 776.4 |
| 171° | 789.6 |
| 172° | 800.4 |
| 173° | 807.3 |
| 174° | 808.1 |
| 175° | 805.0 |
| 176° | 799.6 |
| 177° | 792.7 |
| 178° | 786.5 |
| 179° | 785.7 |
| 180° | 786.5 |

(END OF REPORT)