

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: P221802

Luminaire Tested: **9004-W2-[RW, RI]-LED3097-M-WT-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221802
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-W2-[RW, RI]-LED3097-M-WT-L1-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, MEDIUM FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 3000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1562.6 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: General Diffuse

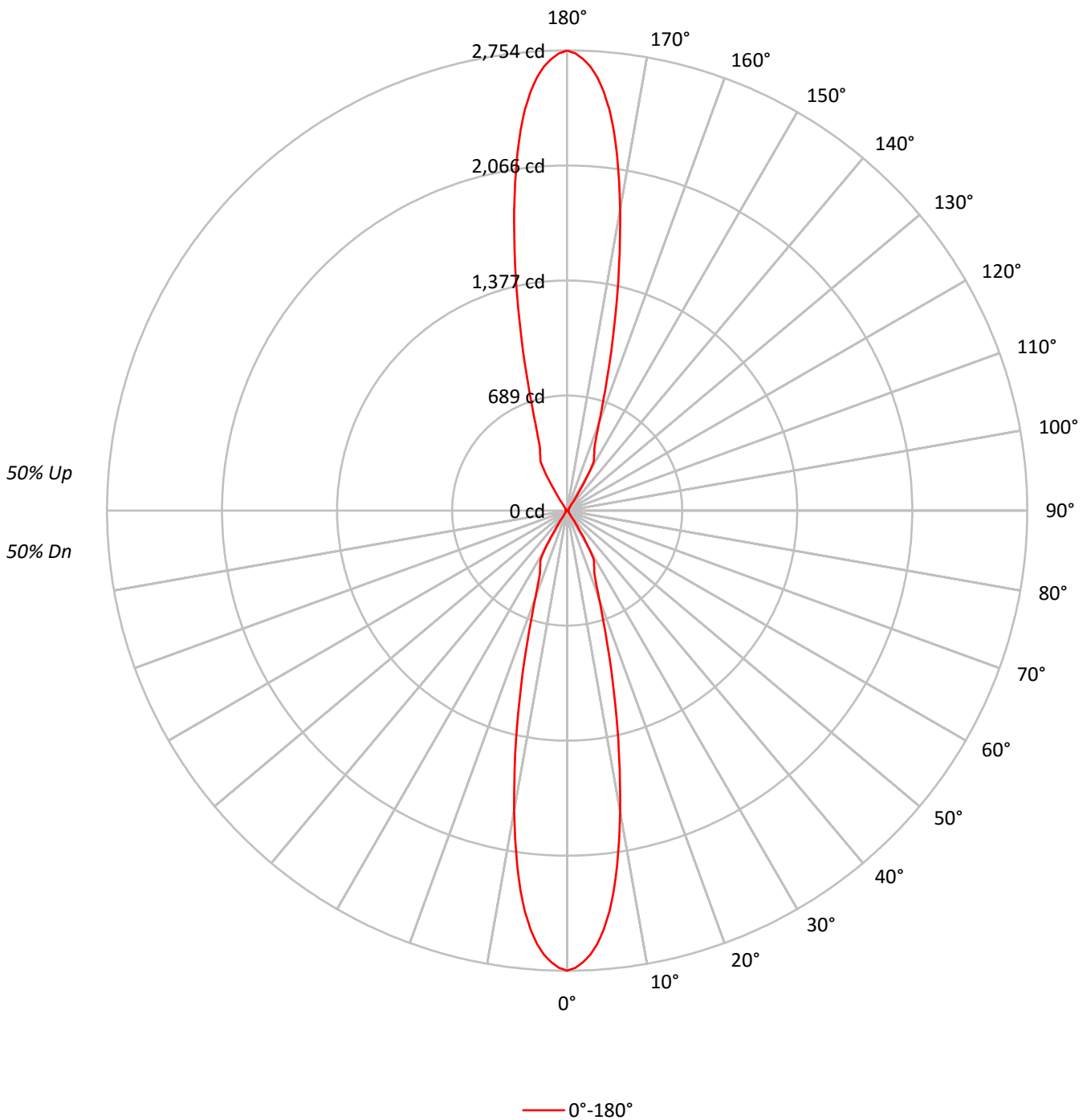
Input Watts (W): 19.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 83 | 79 | 75 | 71 | 69 | 66 | 61 | 59 | 58 | 51 | 50 | 49 | 45 |
| 3 | 88 | 81 | 76 | 72 | 82 | 76 | 72 | 68 | 67 | 63 | 61 | 57 | 55 | 53 | 49 | 48 | 47 | 43 |
| 4 | 83 | 75 | 69 | 65 | 78 | 71 | 66 | 62 | 62 | 59 | 56 | 54 | 52 | 50 | 47 | 46 | 44 | 41 |
| 5 | 79 | 70 | 64 | 59 | 73 | 66 | 61 | 57 | 59 | 55 | 52 | 52 | 49 | 47 | 45 | 44 | 42 | 39 |
| 6 | 75 | 65 | 59 | 55 | 70 | 62 | 57 | 53 | 55 | 51 | 48 | 49 | 46 | 44 | 44 | 42 | 40 | 38 |
| 7 | 71 | 61 | 55 | 51 | 66 | 58 | 53 | 49 | 53 | 49 | 46 | 47 | 44 | 42 | 42 | 40 | 39 | 36 |
| 8 | 67 | 58 | 52 | 48 | 63 | 55 | 50 | 46 | 50 | 46 | 43 | 45 | 42 | 40 | 41 | 39 | 37 | 35 |
| 9 | 64 | 55 | 49 | 45 | 60 | 52 | 47 | 44 | 48 | 44 | 41 | 43 | 40 | 38 | 39 | 37 | 36 | 34 |
| 10 | 61 | 52 | 46 | 43 | 58 | 50 | 45 | 41 | 46 | 42 | 39 | 42 | 39 | 37 | 38 | 36 | 34 | 33 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 339682 |
| 5° | 311498 |
| 10° | 228578 |
| 15° | 133877 |
| 20° | 73047 |
| 25° | 52043 |
| 30° | 38498 |
| 35° | 5556 |
| 40° | 3043 |
| 45° | 2163 |
| 50° | 2207 |
| 55° | 2279 |
| 60° | 2541 |
| 65° | 2831 |
| 70° | 3282 |
| 75° | 4099 |
| 80° | 4830 |
| 85° | 4529 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 217.7 | 13.9 |
| 10°-20° | 291.5 | 18.7 |
| 20°-30° | 180.0 | 11.5 |
| 30°-40° | 50.2 | 3.2 |
| 40°-50° | 10.1 | 0.6 |
| 50°-60° | 9.6 | 0.6 |
| 60°-70° | 9.7 | 0.6 |
| 70°-80° | 8.8 | 0.6 |
| 80°-90° | 3.6 | 0.2 |
| 90°-100° | 3.6 | 0.2 |
| 100°-110° | 8.8 | 0.6 |
| 110°-120° | 9.7 | 0.6 |
| 120°-130° | 9.6 | 0.6 |
| 130°-140° | 10.1 | 0.6 |
| 140°-150° | 50.2 | 3.2 |
| 150°-160° | 180.0 | 11.5 |
| 160°-170° | 291.5 | 18.7 |
| 170°-180° | 217.7 | 13.9 |
| 0°-30° | 689.2 | 44.1 |
| 0°-40° | 739.4 | 47.3 |
| 0°-60° | 759.2 | 48.6 |
| 0°-90° | 781.3 | 50.0 |
| 90°-120° | 22.1 | 1.4 |
| 90°-150° | 92.0 | 5.9 |
| 90°-180° | 781.0 | 50.0 |
| 0°-180° | 1562.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 2754 | |
| 5° | 2516 | 218 |
| 15° | 1048 | 292 |
| 25° | 382 | 180 |
| 35° | 37 | 50 |
| 45° | 12 | 10 |
| 55° | 11 | 10 |
| 65° | 10 | 10 |
| 75° | 9 | 9 |
| 85° | 3 | 3 |
| 90° | 0 | 0 |
| 95° | 3 | 3 |
| 105° | 9 | 9 |
| 115° | 10 | 10 |
| 125° | 11 | 10 |
| 135° | 12 | 10 |
| 145° | 37 | 50 |
| 155° | 382 | 180 |
| 165° | 1048 | 292 |
| 175° | 2516 | 218 |
| 180° | 2754 | |



TEST NUMBER: P221802

CATALOG NUMBER: 9004-W2-[RW, RI]-LED3097-M-WT-L1-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 2753.9 |
| 1° | 2736.8 |
| 2° | 2705.2 |
| 3° | 2660.3 |
| 4° | 2598.7 |
| 5° | 2515.8 |
| 6° | 2413.1 |
| 7° | 2290.9 |
| 8° | 2145.1 |
| 9° | 1988.5 |
| 10° | 1825.0 |
| 11° | 1658.6 |
| 12° | 1494.2 |
| 13° | 1334.0 |
| 14° | 1185.3 |
| 15° | 1048.4 |
| 16° | 922.4 |
| 17° | 809.4 |
| 18° | 710.2 |
| 19° | 625.5 |
| 20° | 556.5 |
| 21° | 499.6 |
| 22° | 456.8 |
| 23° | 424.3 |
| 24° | 400.1 |
| 25° | 382.4 |
| 26° | 368.0 |
| 27° | 355.3 |
| 28° | 343.2 |
| 29° | 316.0 |
| 30° | 270.3 |
| 32.5° | 131.0 |
| 35° | 36.9 |
| 37.5° | 25.4 |
| 40° | 18.9 |
| 42.5° | 13.3 |
| 45° | 12.4 |
| 47.5° | 11.8 |
| 50° | 11.5 |
| 52.5° | 10.9 |
| 55° | 10.6 |
| 57.5° | 10.6 |
| 60° | 10.3 |
| 62.5° | 10.3 |
| 65° | 9.7 |



TEST NUMBER: P221802

CATALOG NUMBER: 9004-W2-[RW, RI]-LED3097-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-------|
| 67.5° | 9.4 |
| 70° | 9.1 |
| 72.5° | 8.9 |
| 75° | 8.6 |
| 77.5° | 7.7 |
| 80° | 6.8 |
| 82.5° | 5.3 |
| 85° | 3.2 |
| 87.5° | 1.5 |
| 90° | 0.0 |
| 92.5° | 1.5 |
| 95° | 3.2 |
| 97.5° | 5.3 |
| 100° | 6.8 |
| 102.5° | 7.7 |
| 105° | 8.6 |
| 107.5° | 8.9 |
| 110° | 9.1 |
| 112.5° | 9.4 |
| 115° | 9.7 |
| 117.5° | 10.3 |
| 120° | 10.3 |
| 122.5° | 10.6 |
| 125° | 10.6 |
| 127.5° | 10.9 |
| 130° | 11.5 |
| 132.5° | 11.8 |
| 135° | 12.4 |
| 137.5° | 13.3 |
| 140° | 18.9 |
| 142.5° | 25.4 |
| 145° | 36.9 |
| 147.5° | 131.0 |
| 150° | 270.3 |
| 151° | 316.0 |
| 152° | 343.2 |
| 153° | 355.3 |
| 154° | 368.0 |
| 155° | 382.4 |
| 156° | 400.1 |
| 157° | 424.3 |
| 158° | 456.8 |
| 159° | 499.6 |
| 160° | 556.5 |
| 161° | 625.5 |



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CATALOG NUMBER: 9004-W2-[RW, RI]-LED3097-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|------|--------|
| 162° | 710.2 |
| 163° | 809.4 |
| 164° | 922.4 |
| 165° | 1048.4 |
| 166° | 1185.3 |
| 167° | 1334.0 |
| 168° | 1494.2 |
| 169° | 1658.6 |
| 170° | 1825.0 |
| 171° | 1988.5 |
| 172° | 2145.1 |
| 173° | 2290.9 |
| 174° | 2413.1 |
| 175° | 2515.8 |
| 176° | 2598.7 |
| 177° | 2660.3 |
| 178° | 2705.2 |
| 179° | 2736.8 |
| 180° | 2753.9 |

(END OF REPORT)