

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: P222085

Luminaire Tested: **9004-W2-FL-LED3597-F-WT-L2-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P222085
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29495)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9004-W2-FL-LED3597-F-WT-L2-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, FLUSH LENS, FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 3500K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3429.6 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.56
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: General Diffuse

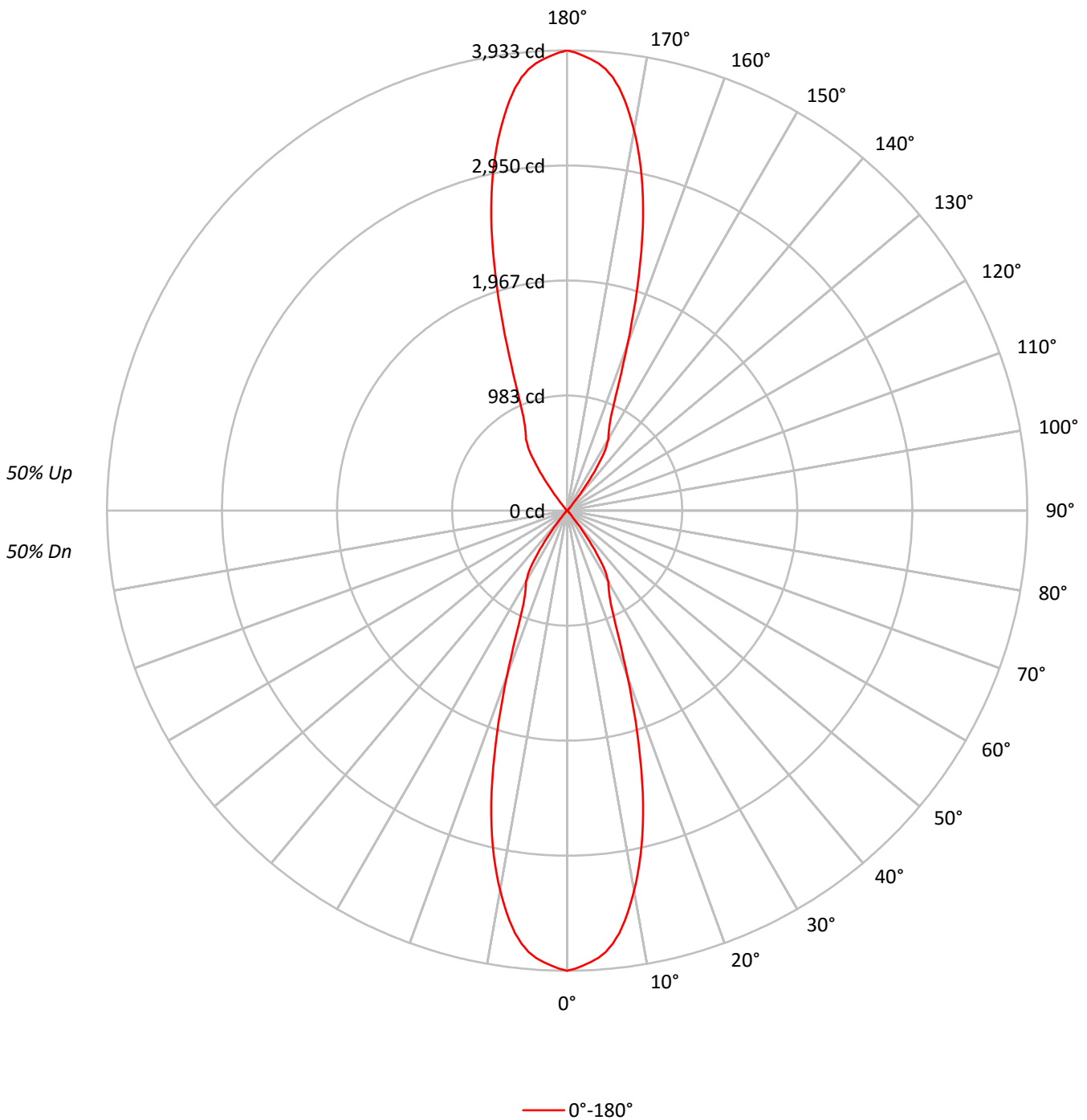
Input Watts (W): 40.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 86 | 77 | 75 | 74 | | 65 | 64 | 63 | | 54 | 53 | 53 | 48 |
| 2 | 94 | 89 | 84 | 80 | 87 | 83 | 79 | 76 | 71 | 69 | 67 | | 61 | 59 | 58 | | 51 | 50 | 50 | 45 |
| 3 | 88 | 81 | 76 | 72 | 82 | 76 | 72 | 68 | 67 | 63 | 61 | | 58 | 55 | 53 | | 49 | 48 | 47 | 43 |
| 4 | 83 | 75 | 69 | 65 | 77 | 71 | 66 | 62 | 62 | 58 | 56 | | 54 | 52 | 50 | | 47 | 45 | 44 | 41 |
| 5 | 78 | 70 | 63 | 59 | 73 | 66 | 60 | 56 | 58 | 54 | 51 | | 51 | 49 | 46 | | 45 | 43 | 42 | 39 |
| 6 | 74 | 65 | 59 | 54 | 69 | 61 | 56 | 52 | 55 | 51 | 48 | | 49 | 46 | 44 | | 43 | 41 | 40 | 37 |
| 7 | 70 | 61 | 54 | 50 | 66 | 57 | 52 | 48 | 52 | 48 | 45 | | 46 | 43 | 41 | | 41 | 39 | 38 | 35 |
| 8 | 66 | 57 | 51 | 47 | 62 | 54 | 49 | 45 | 49 | 45 | 42 | | 44 | 41 | 39 | | 39 | 37 | 36 | 34 |
| 9 | 63 | 53 | 47 | 44 | 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° | 485168 |
| 5° | 468808 |
| 10° | 413082 |
| 15° | 318974 |
| 20° | 198008 |
| 25° | 120772 |
| 30° | 100169 |
| 35° | 61134 |
| 40° | 10353 |
| 45° | 3768 |
| 50° | 825 |
| 55° | 409 |
| 60° | 296 |
| 65° | 350 |
| 70° | 216 |
| 75° | 286 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 345.9 | 10.1 |
| 10°-20° | 668.9 | 19.5 |
| 20°-30° | 435.6 | 12.7 |
| 30°-40° | 241.9 | 7.1 |
| 40°-50° | 18.9 | 0.6 |
| 50°-60° | 2.0 | 0.1 |
| 60°-70° | 1.1 | 0.0 |
| 70°-80° | 0.6 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.6 | 0.0 |
| 110°-120° | 1.1 | 0.0 |
| 120°-130° | 2.0 | 0.1 |
| 130°-140° | 18.9 | 0.6 |
| 140°-150° | 241.9 | 7.1 |
| 150°-160° | 435.6 | 12.7 |
| 160°-170° | 668.9 | 19.5 |
| 170°-180° | 345.9 | 10.1 |
| 0°-30° | 1450.3 | 42.3 |
| 0°-40° | 1692.2 | 49.3 |
| 0°-60° | 1713.1 | 50.0 |
| 0°-90° | 1714.8 | 50.0 |
| 90°-120° | 1.7 | 0.0 |
| 90°-150° | 264.5 | 7.7 |
| 90°-180° | 1715.0 | 50.0 |
| 0°-180° | 3429.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 3933 | |
| 5° | 3786 | 346 |
| 15° | 2498 | 669 |
| 25° | 887 | 436 |
| 35° | 406 | 242 |
| 45° | 22 | 19 |
| 55° | 2 | 2 |
| 65° | 1 | 1 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | 0 |
| 95° | 0 | 0 |
| 105° | 1 | 1 |
| 115° | 1 | 1 |
| 125° | 2 | 2 |
| 135° | 22 | 19 |
| 145° | 406 | 242 |
| 155° | 887 | 436 |
| 165° | 2498 | 669 |
| 175° | 3786 | 346 |
| 180° | 3933 | |



TEST NUMBER: P222085

CATALOG NUMBER: 9004-W2-FL-LED3597-F-WT-L2-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 3933.4 |
| 1° | 3916.1 |
| 2° | 3890.8 |
| 3° | 3864.2 |
| 4° | 3832.7 |
| 5° | 3786.3 |
| 6° | 3723.9 |
| 7° | 3641.7 |
| 8° | 3539.8 |
| 9° | 3423.0 |
| 10° | 3298.1 |
| 11° | 3162.2 |
| 12° | 3014.5 |
| 13° | 2856.3 |
| 14° | 2682.0 |
| 15° | 2497.9 |
| 16° | 2297.6 |
| 17° | 2088.8 |
| 18° | 1891.0 |
| 19° | 1692.0 |
| 20° | 1508.5 |
| 21° | 1335.4 |
| 22° | 1185.3 |
| 23° | 1059.8 |
| 24° | 962.2 |
| 25° | 887.4 |
| 26° | 833.0 |
| 27° | 789.8 |
| 28° | 755.8 |
| 29° | 728.6 |
| 30° | 703.3 |
| 32.5° | 596.3 |
| 35° | 406.0 |
| 37.5° | 208.3 |
| 40° | 64.3 |
| 42.5° | 30.9 |
| 45° | 21.6 |
| 47.5° | 13.6 |
| 50° | 4.3 |
| 52.5° | 2.5 |
| 55° | 1.9 |
| 57.5° | 1.9 |
| 60° | 1.2 |
| 62.5° | 1.2 |
| 65° | 1.2 |



TEST NUMBER: P222085

CATALOG NUMBER: 9004-W2-FL-LED3597-F-WT-L2-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|--------|
| 67.5° | 1.2 |
| 70° | 0.6 |
| 72.5° | 0.6 |
| 75° | 0.6 |
| 77.5° | 0.6 |
| 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° | 0.6 |
| 105° | 0.6 |
| 107.5° | 0.6 |
| 110° | 0.6 |
| 112.5° | 1.2 |
| 115° | 1.2 |
| 117.5° | 1.2 |
| 120° | 1.2 |
| 122.5° | 1.9 |
| 125° | 1.9 |
| 127.5° | 2.5 |
| 130° | 4.3 |
| 132.5° | 13.6 |
| 135° | 21.6 |
| 137.5° | 30.9 |
| 140° | 64.3 |
| 142.5° | 208.3 |
| 145° | 406.0 |
| 147.5° | 596.3 |
| 150° | 703.3 |
| 151° | 728.6 |
| 152° | 755.8 |
| 153° | 789.8 |
| 154° | 833.0 |
| 155° | 887.4 |
| 156° | 962.2 |
| 157° | 1059.8 |
| 158° | 1185.3 |
| 159° | 1335.4 |
| 160° | 1508.5 |
| 161° | 1692.0 |



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CATALOG NUMBER: 9004-W2-FL-LED3597-F-WT-L2-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|------|--------|
| 162° | 1891.0 |
| 163° | 2088.8 |
| 164° | 2297.6 |
| 165° | 2497.9 |
| 166° | 2682.0 |
| 167° | 2856.3 |
| 168° | 3014.5 |
| 169° | 3162.2 |
| 170° | 3298.1 |
| 171° | 3423.0 |
| 172° | 3539.8 |
| 173° | 3641.7 |
| 174° | 3723.9 |
| 175° | 3786.3 |
| 176° | 3832.7 |
| 177° | 3864.2 |
| 178° | 3890.8 |
| 179° | 3916.1 |
| 180° | 3933.4 |

(END OF REPORT)