

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: P221260

Luminaire Tested: **9002-W2-[RW, RI]-LED3597-M-WT-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221260
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29410)
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]-LED3597-M-WT-L1-UNV
Description: LUMIERE LANTERRA 9002 LED WALL LUMINAIRE, RECESSED LENS, MEDIUM FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 3500K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1600.3 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 0.4 / 0.4 / 0.37
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: General Diffuse

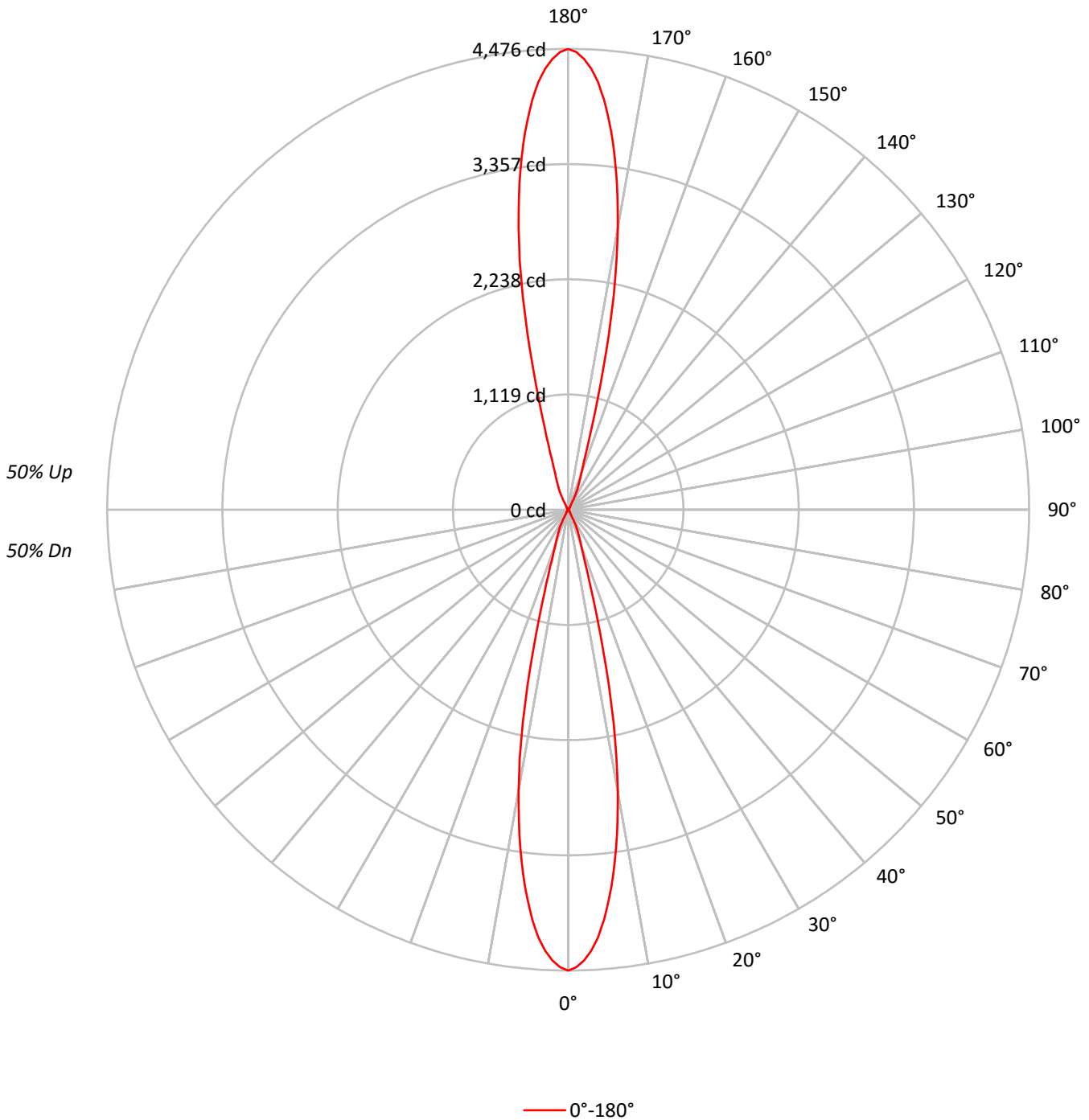
Input Watts (W): 20
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 101 | 98 | 95 | 92 | 93 | 91 | 88 | 86 | 77 | 76 | 75 | 65 | 64 | 64 | 54 | 54 | 53 | 48 |
| 2 | 95 | 90 | 85 | 82 | 88 | 84 | 80 | 77 | 72 | 70 | 68 | 62 | 60 | 59 | 52 | 52 | 51 | 46 |
| 3 | 90 | 83 | 78 | 74 | 83 | 78 | 74 | 70 | 68 | 65 | 63 | 59 | 57 | 56 | 51 | 50 | 49 | 45 |
| 4 | 85 | 77 | 72 | 68 | 79 | 73 | 68 | 64 | 64 | 61 | 58 | 57 | 54 | 53 | 49 | 48 | 47 | 44 |
| 5 | 81 | 72 | 67 | 63 | 75 | 69 | 64 | 60 | 61 | 58 | 55 | 54 | 52 | 50 | 48 | 46 | 45 | 43 |
| 6 | 77 | 68 | 63 | 58 | 72 | 65 | 60 | 56 | 58 | 55 | 52 | 52 | 50 | 48 | 47 | 45 | 44 | 41 |
| 7 | 73 | 65 | 59 | 55 | 69 | 62 | 57 | 53 | 56 | 52 | 50 | 50 | 48 | 46 | 45 | 44 | 43 | 40 |
| 8 | 70 | 61 | 56 | 52 | 66 | 59 | 54 | 51 | 54 | 50 | 47 | 49 | 46 | 44 | 44 | 43 | 41 | 39 |
| 9 | 67 | 59 | 53 | 50 | 64 | 56 | 52 | 48 | 52 | 48 | 46 | 47 | 45 | 43 | 43 | 42 | 40 | 39 |
| 10 | 65 | 56 | 51 | 47 | 62 | 54 | 49 | 46 | 50 | 46 | 44 | 46 | 43 | 42 | 42 | 41 | 39 | 38 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 2208466 |
| 5° | 1978679 |
| 10° | 1389748 |
| 15° | 554456 |
| 20° | 190696 |
| 25° | 106155 |
| 30° | 25922 |
| 35° | 14214 |
| 40° | 10498 |
| 45° | 9629 |
| 50° | 9364 |
| 55° | 9806 |
| 60° | 9670 |
| 65° | 9456 |
| 70° | 9377 |
| 75° | 9341 |
| 80° | 9376 |
| 85° | 9057 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 341.9 | 21.4 |
| 10°-20° | 324.1 | 20.3 |
| 20°-30° | 82.1 | 5.1 |
| 30°-40° | 16.0 | 1.0 |
| 40°-50° | 10.7 | 0.7 |
| 50°-60° | 10.1 | 0.6 |
| 60°-70° | 8.0 | 0.5 |
| 70°-80° | 5.4 | 0.3 |
| 80°-90° | 1.8 | 0.1 |
| 90°-100° | 1.8 | 0.1 |
| 100°-110° | 5.4 | 0.3 |
| 110°-120° | 8.0 | 0.5 |
| 120°-130° | 10.1 | 0.6 |
| 130°-140° | 10.7 | 0.7 |
| 140°-150° | 16.0 | 1.0 |
| 150°-160° | 82.1 | 5.1 |
| 160°-170° | 324.1 | 20.3 |
| 170°-180° | 341.9 | 21.4 |
| 0°-30° | 748.1 | 46.7 |
| 0°-40° | 764.1 | 47.7 |
| 0°-60° | 785.0 | 49.1 |
| 0°-90° | 800.1 | 50.0 |
| 90°-120° | 15.2 | 0.9 |
| 90°-150° | 52.0 | 3.3 |
| 90°-180° | 800.0 | 50.0 |
| 0°-180° | 1600.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 4476 | |
| 5° | 3995 | 342 |
| 15° | 1086 | 324 |
| 25° | 195 | 82 |
| 35° | 24 | 16 |
| 45° | 14 | 11 |
| 55° | 11 | 10 |
| 65° | 8 | 8 |
| 75° | 5 | 5 |
| 85° | 2 | 2 |
| 90° | 0 | 0 |
| 95° | 2 | 2 |
| 105° | 5 | 5 |
| 115° | 8 | 8 |
| 125° | 11 | 10 |
| 135° | 14 | 11 |
| 145° | 24 | 16 |
| 155° | 195 | 82 |
| 165° | 1086 | 324 |
| 175° | 3995 | 342 |
| 180° | 4476 | |



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CATALOG NUMBER: 9002-W2-[RW, RI]-LED3597-M-WT-L1-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 4476.2 |
| 1° | 4445.3 |
| 2° | 4381.2 |
| 3° | 4288.5 |
| 4° | 4161.0 |
| 5° | 3995.2 |
| 6° | 3800.2 |
| 7° | 3579.2 |
| 8° | 3332.2 |
| 9° | 3061.6 |
| 10° | 2774.0 |
| 11° | 2462.0 |
| 12° | 2116.6 |
| 13° | 1757.5 |
| 14° | 1400.8 |
| 15° | 1085.5 |
| 16° | 832.0 |
| 17° | 646.8 |
| 18° | 516.8 |
| 19° | 426.6 |
| 20° | 363.2 |
| 22.5° | 264.1 |
| 25° | 195.0 |
| 26° | 156.8 |
| 27° | 110.5 |
| 28° | 73.9 |
| 29° | 55.3 |
| 30° | 45.5 |
| 32.5° | 30.9 |
| 35° | 23.6 |
| 37.5° | 18.7 |
| 40° | 16.3 |
| 42.5° | 14.6 |
| 45° | 13.8 |
| 47.5° | 13.0 |
| 50° | 12.2 |
| 52.5° | 12.2 |
| 55° | 11.4 |
| 57.5° | 10.6 |
| 60° | 9.8 |
| 62.5° | 8.9 |
| 65° | 8.1 |
| 67.5° | 7.3 |
| 70° | 6.5 |
| 72.5° | 5.7 |



TEST NUMBER: P221260

CATALOG NUMBER: 9002-W2-[RW, RI]-LED3597-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|--------|
| 75° | 4.9 |
| 77.5° | 4.9 |
| 80° | 3.3 |
| 82.5° | 2.4 |
| 85° | 1.6 |
| 87.5° | 0.8 |
| 90° | 0.0 |
| 92.5° | 0.8 |
| 95° | 1.6 |
| 97.5° | 2.4 |
| 100° | 3.3 |
| 102.5° | 4.9 |
| 105° | 4.9 |
| 107.5° | 5.7 |
| 110° | 6.5 |
| 112.5° | 7.3 |
| 115° | 8.1 |
| 117.5° | 8.9 |
| 120° | 9.8 |
| 122.5° | 10.6 |
| 125° | 11.4 |
| 127.5° | 12.2 |
| 130° | 12.2 |
| 132.5° | 13.0 |
| 135° | 13.8 |
| 137.5° | 14.6 |
| 140° | 16.3 |
| 142.5° | 18.7 |
| 145° | 23.6 |
| 147.5° | 30.9 |
| 150° | 45.5 |
| 151° | 55.3 |
| 152° | 73.9 |
| 153° | 110.5 |
| 154° | 156.8 |
| 155° | 195.0 |
| 157.5° | 264.1 |
| 160° | 363.2 |
| 161° | 426.6 |
| 162° | 516.8 |
| 163° | 646.8 |
| 164° | 832.0 |
| 165° | 1085.5 |
| 166° | 1400.8 |
| 167° | 1757.5 |



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CATALOG NUMBER: 9002-W2-[RW, RI]-LED3597-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|------|--------|
| 168° | 2116.6 |
| 169° | 2462.0 |
| 170° | 2774.0 |
| 171° | 3061.6 |
| 172° | 3332.2 |
| 173° | 3579.2 |
| 174° | 3800.2 |
| 175° | 3995.2 |
| 176° | 4161.0 |
| 177° | 4288.5 |
| 178° | 4381.2 |
| 179° | 4445.3 |
| 180° | 4476.2 |

(END OF REPORT)