

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: P221903

Luminaire Tested: **9004-W2-[RW, RI]-LED4097-S-BK-L3-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221903
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29491)
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]-LED4097-S-BK-L3-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, SPOT OPTIC, BLACK HOUSING.
Light Source: (1) 4000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

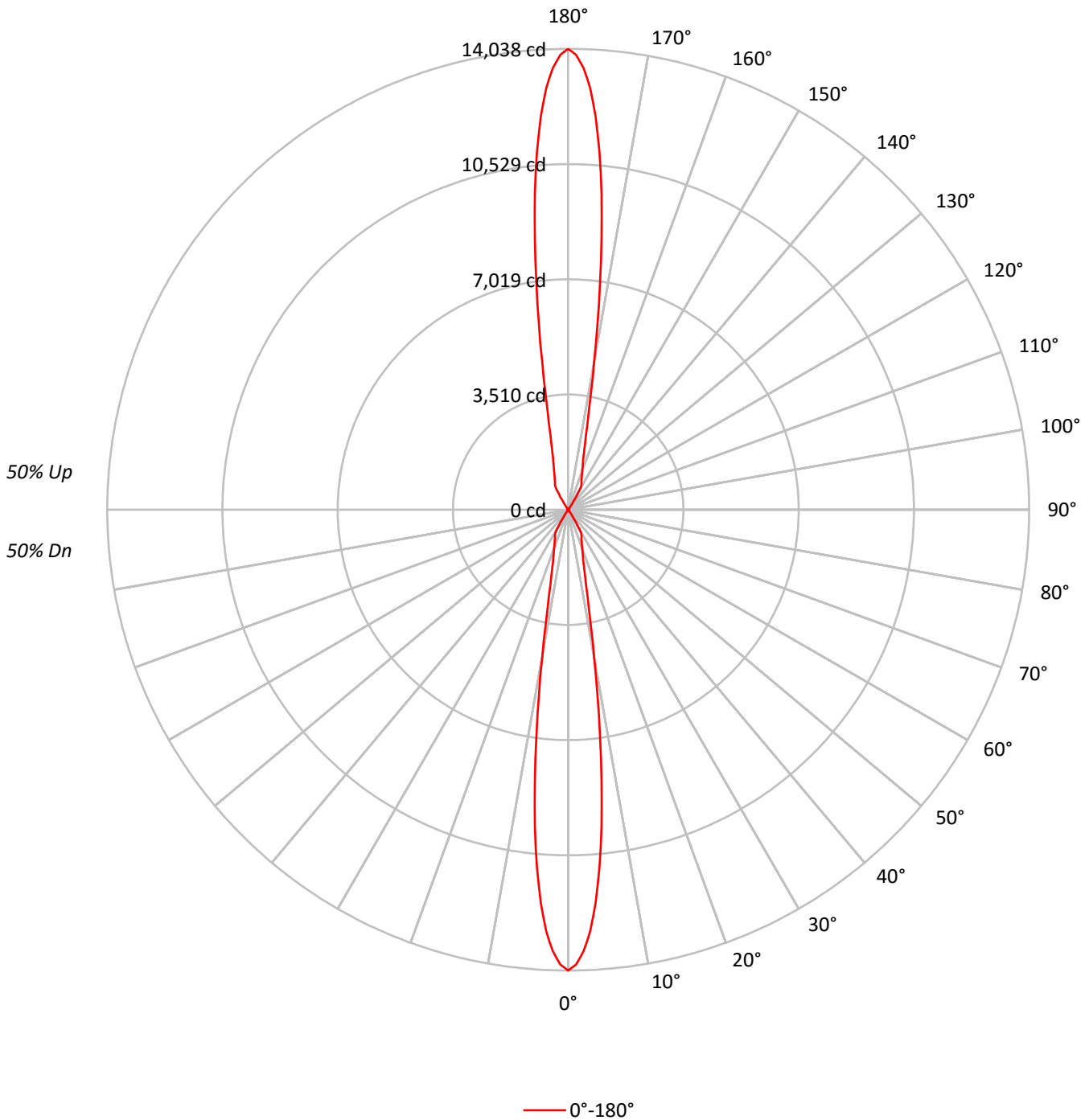
Lumens per Lamp: N/A
Luminaire Lumens: 3936.1 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 0.27 / 0.27 / 0.27
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57
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: P221903

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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 | 93 | 93 | 91 | 88 | 86 | 78 | 76 | 75 | 65 | 65 | 64 | 54 | 54 | 53 | 48 |
| 2 | 95 | 90 | 86 | 82 | 88 | 84 | 80 | 77 | 73 | 70 | 68 | 62 | 61 | 59 | 53 | 52 | 51 | 47 |
| 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 | 62 | 75 | 68 | 63 | 60 | 61 | 57 | 55 | 54 | 52 | 50 | 48 | 46 | 45 | 42 |
| 6 | 77 | 68 | 62 | 58 | 72 | 65 | 60 | 56 | 58 | 54 | 52 | 52 | 49 | 48 | 46 | 45 | 43 | 41 |
| 7 | 73 | 64 | 58 | 54 | 69 | 61 | 56 | 53 | 55 | 52 | 49 | 50 | 47 | 45 | 45 | 43 | 42 | 40 |
| 8 | 70 | 61 | 55 | 51 | 66 | 58 | 53 | 50 | 53 | 49 | 47 | 48 | 46 | 44 | 44 | 42 | 41 | 39 |
| 9 | 67 | 58 | 52 | 49 | 63 | 56 | 51 | 47 | 51 | 47 | 45 | 47 | 44 | 42 | 42 | 41 | 39 | 38 |
| 10 | 64 | 55 | 50 | 47 | 61 | 53 | 48 | 45 | 49 | 45 | 43 | 45 | 42 | 41 | 41 | 40 | 38 | 37 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1731563 |
| 5° | 1352847 |
| 10° | 569843 |
| 15° | 241487 |
| 20° | 163500 |
| 25° | 129823 |
| 30° | 96110 |
| 35° | 8718 |
| 40° | 3188 |
| 45° | 977 |
| 50° | 768 |
| 55° | 860 |
| 60° | 592 |
| 65° | 467 |
| 70° | 289 |
| 75° | 381 |
| 80° | 568 |
| 85° | 0 |



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CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L3-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 822.5 | 20.9 |
| 10°-20° | 581.2 | 14.8 |
| 20°-30° | 443.8 | 11.3 |
| 30°-40° | 108.8 | 2.8 |
| 40°-50° | 5.9 | 0.1 |
| 50°-60° | 3.2 | 0.1 |
| 60°-70° | 1.6 | 0.0 |
| 70°-80° | 0.8 | 0.0 |
| 80°-90° | 0.3 | 0.0 |
| 90°-100° | 0.5 | 0.0 |
| 100°-110° | 0.8 | 0.0 |
| 110°-120° | 1.6 | 0.0 |
| 120°-130° | 3.2 | 0.1 |
| 130°-140° | 5.9 | 0.1 |
| 140°-150° | 108.8 | 2.8 |
| 150°-160° | 443.8 | 11.3 |
| 160°-170° | 581.2 | 14.8 |
| 170°-180° | 822.5 | 20.9 |
| 0°-30° | 1847.4 | 46.9 |
| 0°-40° | 1956.2 | 49.7 |
| 0°-60° | 1965.3 | 49.9 |
| 0°-90° | 1968.0 | 50.0 |
| 90°-120° | 3.0 | 0.1 |
| 90°-150° | 120.8 | 3.1 |
| 90°-180° | 1968.0 | 50.0 |
| 0°-180° | 3936.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|-------|------|
| 0° | 14038 | |
| 5° | 10926 | 822 |
| 15° | 1891 | 581 |
| 25° | 954 | 444 |
| 35° | 58 | 109 |
| 45° | 6 | 6 |
| 55° | 4 | 3 |
| 65° | 2 | 2 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | 0 |
| 95° | 0 | 0 |
| 105° | 1 | 1 |
| 115° | 2 | 2 |
| 125° | 4 | 3 |
| 135° | 6 | 6 |
| 145° | 58 | 109 |
| 155° | 954 | 444 |
| 165° | 1891 | 581 |
| 175° | 10926 | 822 |
| 180° | 14038 | |



TEST NUMBER: P221903

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L3-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 14038.3 |
| 1° | 13858.3 |
| 2° | 13461.9 |
| 3° | 12853.7 |
| 4° | 12002.2 |
| 5° | 10926.2 |
| 6° | 9689.3 |
| 7° | 8330.2 |
| 8° | 6961.7 |
| 9° | 5708.9 |
| 10° | 4549.7 |
| 11° | 3631.5 |
| 12° | 2959.1 |
| 13° | 2483.4 |
| 14° | 2144.8 |
| 15° | 1891.1 |
| 16° | 1696.0 |
| 17° | 1554.1 |
| 18° | 1441.5 |
| 19° | 1336.0 |
| 20° | 1245.6 |
| 22.5° | 1074.4 |
| 25° | 953.9 |
| 26° | 921.4 |
| 27° | 894.4 |
| 28° | 867.4 |
| 29° | 796.1 |
| 30° | 674.8 |
| 32.5° | 303.7 |
| 35° | 57.9 |
| 37.5° | 31.7 |
| 40° | 19.8 |
| 42.5° | 8.7 |
| 45° | 5.6 |
| 47.5° | 4.8 |
| 50° | 4.0 |
| 52.5° | 4.0 |
| 55° | 4.0 |
| 57.5° | 3.2 |
| 60° | 2.4 |
| 62.5° | 2.4 |
| 65° | 1.6 |
| 67.5° | 0.8 |
| 70° | 0.8 |
| 72.5° | 0.8 |

TEST NUMBER: P221903

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L3-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|--------|
| 75° | 0.8 |
| 77.5° | 0.8 |
| 80° | 0.8 |
| 82.5° | 0.8 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |
| 92.5° | 0.0 |
| 95° | 0.0 |
| 97.5° | 0.8 |
| 100° | 0.8 |
| 102.5° | 0.8 |
| 105° | 0.8 |
| 107.5° | 0.8 |
| 110° | 0.8 |
| 112.5° | 0.8 |
| 115° | 1.6 |
| 117.5° | 2.4 |
| 120° | 2.4 |
| 122.5° | 3.2 |
| 125° | 4.0 |
| 127.5° | 4.0 |
| 130° | 4.0 |
| 132.5° | 4.8 |
| 135° | 5.6 |
| 137.5° | 8.7 |
| 140° | 19.8 |
| 142.5° | 31.7 |
| 145° | 57.9 |
| 147.5° | 303.7 |
| 150° | 674.8 |
| 151° | 796.1 |
| 152° | 867.4 |
| 153° | 894.4 |
| 154° | 921.4 |
| 155° | 953.9 |
| 157.5° | 1074.4 |
| 160° | 1245.6 |
| 161° | 1336.0 |
| 162° | 1441.5 |
| 163° | 1554.1 |
| 164° | 1696.0 |
| 165° | 1891.1 |
| 166° | 2144.8 |
| 167° | 2483.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|------|---------|
| 168° | 2959.1 |
| 169° | 3631.5 |
| 170° | 4549.7 |
| 171° | 5708.9 |
| 172° | 6961.7 |
| 173° | 8330.2 |
| 174° | 9689.3 |
| 175° | 10926.2 |
| 176° | 12002.2 |
| 177° | 12853.7 |
| 178° | 13461.9 |
| 179° | 13858.3 |
| 180° | 14038.3 |

(END OF REPORT)