

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: P221980

Luminaire Tested: **9004-W2-FL-LED2790-W-BK-L2-UNV**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P221980  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29499)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 9004-W2-FL-LED2790-W-BK-L2-UNV  
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, FLUSH LENS, WIDE FLOOD OPTIC, BLACK HOUSING.  
Light Source: (1) 2700K CCT, 90 CRI LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3249.6 lumens  
Efficiency: N/A  
Efficacy: 80.8 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: General Diffuse

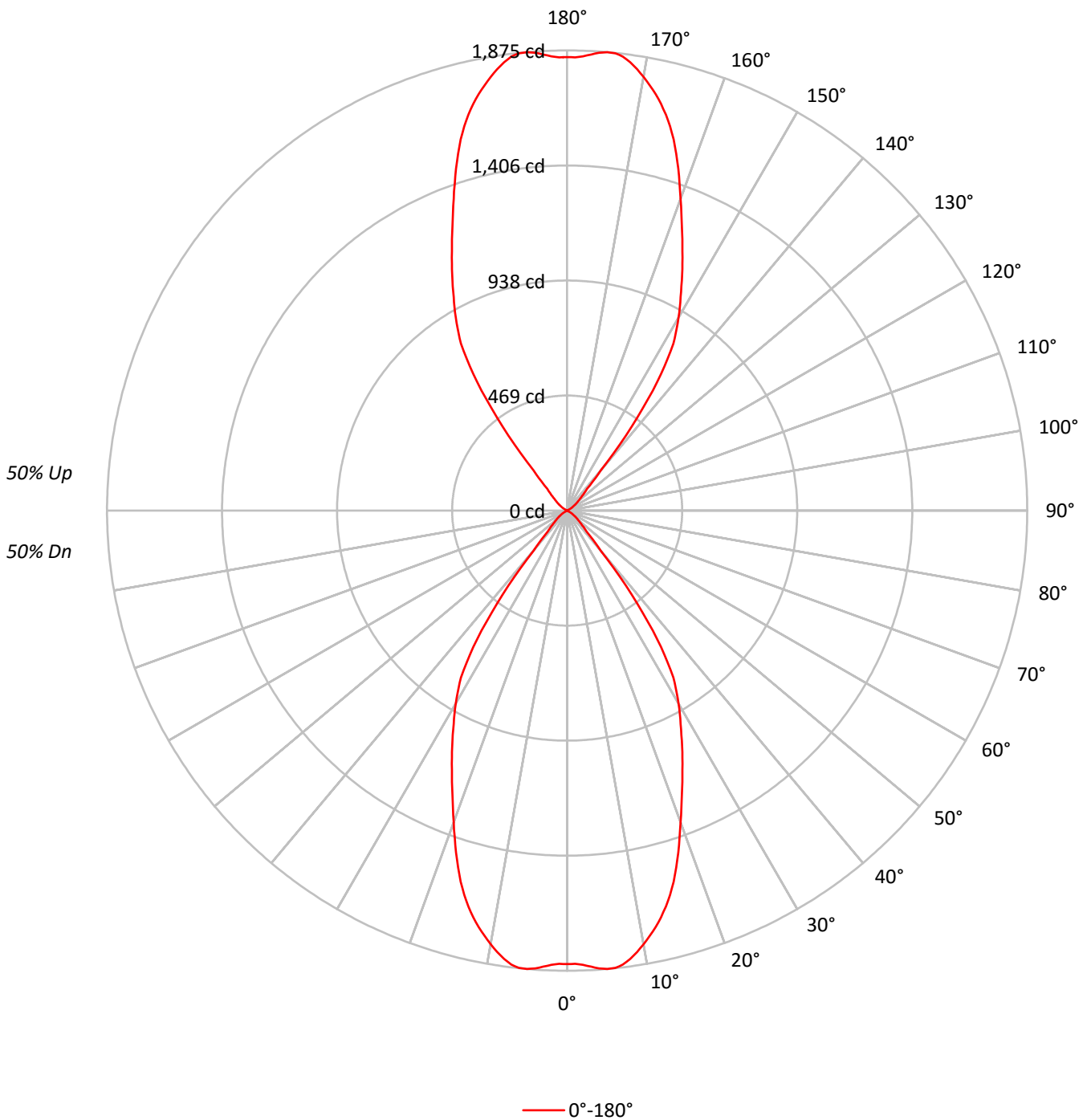
Input Watts (W): 40.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 91  | 92 | 90 | 87 | 85 | 76 | 75 | 73 |  | 64 | 63 | 62 |  | 53 | 53 | 52 | 47 |
| 2   | 93  | 88  | 83  | 79  | 86 | 81 | 77 | 74 | 70 | 67 | 65 |  | 60 | 58 | 56 |  | 50 | 49 | 48 | 43 |
| 3   | 87  | 80  | 74  | 69  | 81 | 74 | 69 | 65 | 65 | 61 | 58 |  | 56 | 53 | 51 |  | 47 | 46 | 44 | 40 |
| 4   | 81  | 73  | 66  | 61  | 76 | 68 | 63 | 58 | 60 | 56 | 52 |  | 52 | 49 | 47 |  | 44 | 42 | 41 | 38 |
| 5   | 76  | 67  | 60  | 55  | 71 | 63 | 57 | 53 | 55 | 51 | 48 |  | 48 | 45 | 43 |  | 42 | 40 | 38 | 35 |
| 6   | 71  | 61  | 55  | 50  | 66 | 58 | 52 | 48 | 51 | 47 | 43 |  | 45 | 42 | 39 |  | 39 | 37 | 35 | 33 |
| 7   | 67  | 57  | 50  | 45  | 62 | 54 | 48 | 44 | 48 | 43 | 40 |  | 42 | 39 | 36 |  | 37 | 35 | 33 | 31 |
| 8   | 63  | 52  | 46  | 41  | 59 | 50 | 44 | 40 | 45 | 40 | 37 |  | 40 | 36 | 34 |  | 35 | 33 | 31 | 29 |
| 9   | 59  | 49  | 42  | 38  | 56 | 46 | 41 | 37 | 42 | 37 | 34 |  | 37 | 34 | 31 |  | 33 | 31 | 29 | 27 |
| 10  | 56  | 46  | 39  | 35  | 52 | 43 | 38 | 34 | 39 | 35 | 32 |  | 35 | 32 | 29 |  | 31 | 29 | 27 | 25 |

**AVERAGE LUMINANCE (cd/sqm):**

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 227906 |
| 5°  | 232169 |
| 10° | 224783 |
| 15° | 207022 |
| 20° | 177413 |
| 25° | 151299 |
| 30° | 129381 |
| 35° | 96716  |
| 40° | 34313  |
| 45° | 16048  |
| 50° | 10612  |
| 55° | 7140   |
| 60° | 3602   |
| 65° | 846    |
| 70° | 613    |
| 75° | 572    |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 176.4  | 5.4       |
| 10°-20°   | 447.5  | 13.8      |
| 20°-30°   | 510.8  | 15.7      |
| 30°-40°   | 375.0  | 11.5      |
| 40°-50°   | 79.6   | 2.4       |
| 50°-60°   | 30.1   | 0.9       |
| 60°-70°   | 4.3    | 0.1       |
| 70°-80°   | 1.1    | 0.0       |
| 80°-90°   | 0.0    | 0.0       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 1.1    | 0.0       |
| 110°-120° | 4.3    | 0.1       |
| 120°-130° | 30.1   | 0.9       |
| 130°-140° | 79.6   | 2.4       |
| 140°-150° | 375.0  | 11.5      |
| 150°-160° | 510.8  | 15.7      |
| 160°-170° | 447.5  | 13.8      |
| 170°-180° | 176.4  | 5.4       |
| 0°-30°    | 1134.7 | 34.9      |
| 0°-40°    | 1509.7 | 46.5      |
| 0°-60°    | 1619.4 | 49.8      |
| 0°-90°    | 1624.8 | 50.0      |
| 90°-120°  | 5.4    | 0.2       |
| 90°-150°  | 490.1  | 15.1      |
| 90°-180°  | 1625.0 | 50.0      |
| 0°-180°   | 3249.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 1848 |      |
| 5°   | 1875 | 176  |
| 15°  | 1621 | 447  |
| 25°  | 1112 | 511  |
| 35°  | 642  | 375  |
| 45°  | 92   | 80   |
| 55°  | 33   | 30   |
| 65°  | 3    | 4    |
| 75°  | 1    | 1    |
| 85°  | 0    | 0    |
| 90°  | 0    | 0    |
| 95°  | 0    | 0    |
| 105° | 1    | 1    |
| 115° | 3    | 4    |
| 125° | 33   | 30   |
| 135° | 92   | 80   |
| 145° | 642  | 375  |
| 155° | 1112 | 511  |
| 165° | 1621 | 447  |
| 175° | 1875 | 176  |
| 180° | 1848 |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1847.7 |
| 1°    | 1847.1 |
| 2°    | 1851.8 |
| 3°    | 1861.1 |
| 4°    | 1869.9 |
| 5°    | 1875.1 |
| 6°    | 1873.9 |
| 7°    | 1864.0 |
| 8°    | 1844.8 |
| 9°    | 1820.9 |
| 10°   | 1794.7 |
| 11°   | 1765.0 |
| 12°   | 1734.8 |
| 13°   | 1700.4 |
| 14°   | 1663.1 |
| 15°   | 1621.2 |
| 16°   | 1573.5 |
| 17°   | 1520.5 |
| 18°   | 1465.7 |
| 19°   | 1408.1 |
| 20°   | 1351.6 |
| 21°   | 1299.2 |
| 22°   | 1248.5 |
| 23°   | 1200.8 |
| 24°   | 1155.3 |
| 25°   | 1111.7 |
| 26°   | 1069.2 |
| 27°   | 1026.1 |
| 28°   | 984.7  |
| 29°   | 946.3  |
| 30°   | 908.4  |
| 32.5° | 806.5  |
| 35°   | 642.3  |
| 37.5° | 433.8  |
| 40°   | 213.1  |
| 42.5° | 120.0  |
| 45°   | 92.0   |
| 47.5° | 72.2   |
| 50°   | 55.3   |
| 52.5° | 43.7   |
| 55°   | 33.2   |
| 57.5° | 23.9   |
| 60°   | 14.6   |
| 62.5° | 4.1    |
| 65°   | 2.9    |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     |
|--------|--------|
| 67.5°  | 2.3    |
| 70°    | 1.7    |
| 72.5°  | 1.7    |
| 75°    | 1.2    |
| 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°   | 1.2    |
| 107.5° | 1.7    |
| 110°   | 1.7    |
| 112.5° | 2.3    |
| 115°   | 2.9    |
| 117.5° | 4.1    |
| 120°   | 14.6   |
| 122.5° | 23.9   |
| 125°   | 33.2   |
| 127.5° | 43.7   |
| 130°   | 55.3   |
| 132.5° | 72.2   |
| 135°   | 92.0   |
| 137.5° | 120.0  |
| 140°   | 213.1  |
| 142.5° | 433.8  |
| 145°   | 642.3  |
| 147.5° | 806.5  |
| 150°   | 908.4  |
| 151°   | 946.3  |
| 152°   | 984.7  |
| 153°   | 1026.1 |
| 154°   | 1069.2 |
| 155°   | 1111.7 |
| 156°   | 1155.3 |
| 157°   | 1200.8 |
| 158°   | 1248.5 |
| 159°   | 1299.2 |
| 160°   | 1351.6 |
| 161°   | 1408.1 |



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**CANDELA DISTRIBUTION (continued):**

|      | 0°     |
|------|--------|
| 162° | 1465.7 |
| 163° | 1520.5 |
| 164° | 1573.5 |
| 165° | 1621.2 |
| 166° | 1663.1 |
| 167° | 1700.4 |
| 168° | 1734.8 |
| 169° | 1765.0 |
| 170° | 1794.7 |
| 171° | 1820.9 |
| 172° | 1844.8 |
| 173° | 1864.0 |
| 174° | 1873.9 |
| 175° | 1875.1 |
| 176° | 1869.9 |
| 177° | 1861.1 |
| 178° | 1851.8 |
| 179° | 1847.1 |
| 180° | 1847.7 |

(END OF REPORT)