Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P220738

Luminaire Tested: **9004-W1-[RW, RI]-LED4080-M-WT-L1-UNV**

Issue Date: 3/3/2020

Report Generated By E9808136 / USAU2WHP6039969

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Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P220738 |
| | 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-W1-[RW, RI]-LED4080-M-WT-L1-UNV |
| Description: | LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, MEDIUM FLOOD OPTIC, WHITE HOUSING. |
| Light Source: | (1) 4000K CCT, 80 CRI LED |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 1106.9 lumens |
| Efficiency: | N/A |
| Efficacy: | 112.9 lumens/watt |
| Spacing Criteria (0/90/45): | 0.43 / 0.43 / 0.44 |
| Luminous Opening: | Circular (Dia: 0.33' x H: 0') |
| CIE Type: | Direct |

| | |
|---|---|
| Input Watts (W): | 9.8 |
| 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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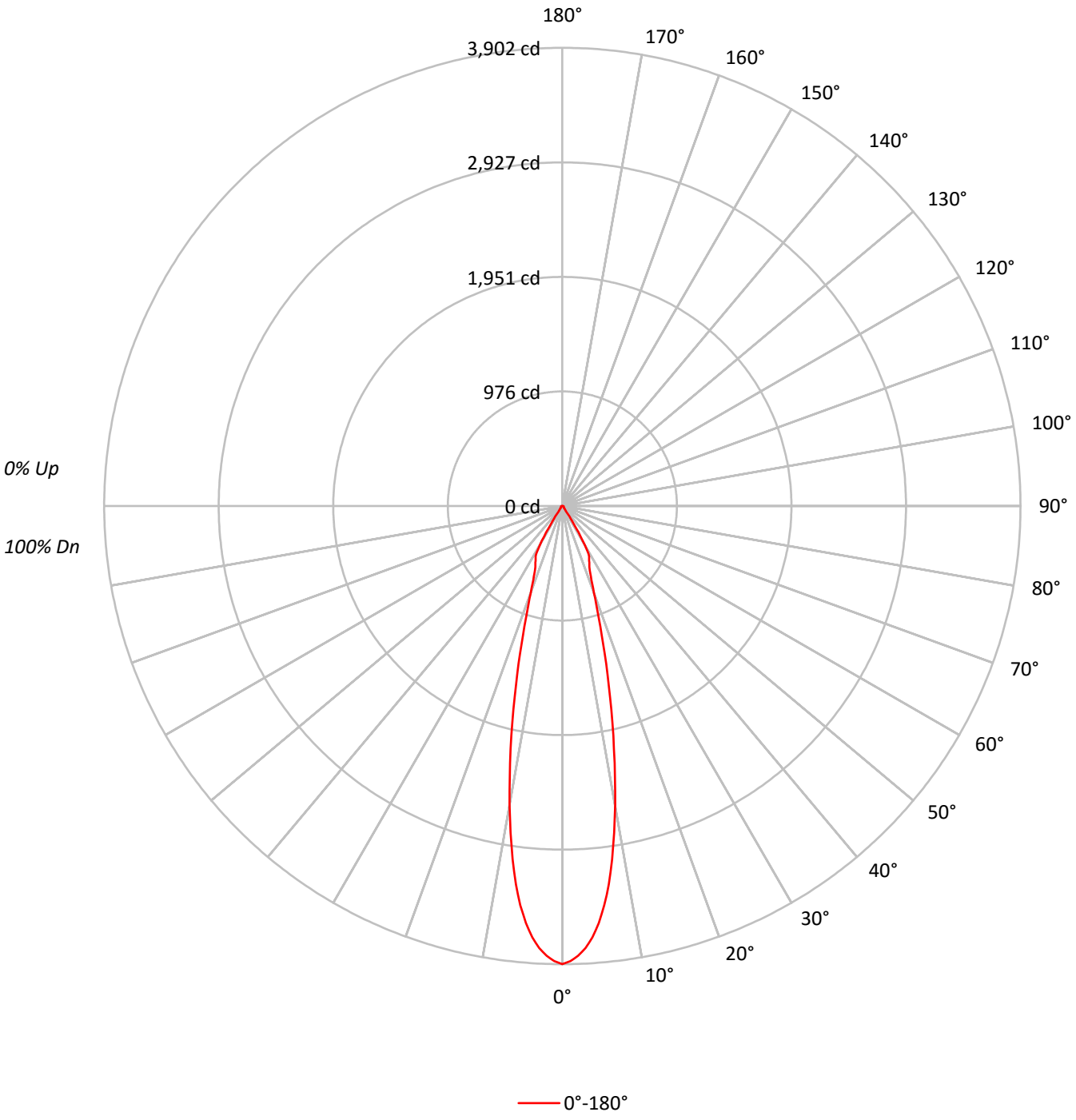
## Luminous Intensity Polar Plot



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## COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| RF | 20 | | | | 20 | | | | 20 | | | 20 | | | 20 | | | 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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 114 | 112 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 95 |
| 2 | 109 | 105 | 102 | 99 | 107 | 104 | 100 | 98 | 100 | 98 | 95 | 97 | 95 | 93 | 95 | 93 | 92 | 90 |
| 3 | 105 | 100 | 95 | 92 | 103 | 98 | 95 | 91 | 96 | 93 | 90 | 94 | 91 | 89 | 91 | 89 | 87 | 86 |
| 4 | 101 | 95 | 90 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 90 | 87 | 84 | 88 | 86 | 83 | 82 |
| 5 | 98 | 91 | 86 | 82 | 96 | 90 | 85 | 82 | 88 | 84 | 81 | 87 | 83 | 81 | 85 | 82 | 80 | 79 |
| 6 | 94 | 87 | 82 | 79 | 93 | 86 | 82 | 78 | 85 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 77 | 76 |
| 7 | 91 | 83 | 79 | 75 | 90 | 83 | 78 | 75 | 82 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 74 | 73 |
| 8 | 88 | 80 | 76 | 72 | 87 | 80 | 75 | 72 | 79 | 75 | 72 | 78 | 74 | 72 | 77 | 74 | 71 | 70 |
| 9 | 85 | 77 | 73 | 70 | 84 | 77 | 73 | 69 | 76 | 72 | 69 | 75 | 72 | 69 | 75 | 71 | 69 | 68 |
| 10 | 83 | 75 | 70 | 67 | 82 | 74 | 70 | 67 | 74 | 70 | 67 | 73 | 69 | 67 | 72 | 69 | 67 | 66 |

## AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|---|---|
| 0° | 481245 |
| 5° | 441308 |
| 10° | 323842 |
| 15° | 189668 |
| 20° | 103487 |
| 25° | 73737 |
| 30° | 54535 |
| 35° | 7875 |
| 40° | 4315 |
| 45° | 3070 |
| 50° | 3128 |
| 55° | 3226 |
| 60° | 3602 |
| 65° | 4028 |
| 70° | 4688 |
| 75° | 5767 |
| 80° | 6819 |
| 85° | 6510 |

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**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 308.5 | 27.9 |
| 10°-20° | 413.0 | 37.3 |
| 20°-30° | 255.0 | 23.0 |
| 30°-40° | 71.1 | 6.4 |
| 40°-50° | 14.4 | 1.3 |
| 50°-60° | 13.7 | 1.2 |
| 60°-70° | 13.8 | 1.2 |
| 70°-80° | 12.4 | 1.1 |
| 80°-90° | 5.2 | 0.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 976.5 | 88.2 |
| 0°-40° | 1047.5 | 94.6 |
| 0°-60° | 1075.6 | 97.2 |
| 0°-90° | 1106.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1106.9 | 100.0 |

**CANDELA DISTRIBUTION:**

| | 0° | Flux |
|---|---|---|
| 0° | 3902 | |
| 5° | 3564 | 308 |
| 15° | 1485 | 413 |
| 25° | 542 | 255 |
| 35° | 52 | 71 |
| 45° | 18 | 14 |
| 55° | 15 | 14 |
| 65° | 14 | 14 |
| 75° | 12 | 12 |
| 85° | 5 | 5 |
| 90° | 0 | |

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**CANDELA DISTRIBUTION (FULL):**

| | 0° |
|---|---|
| 0° | 3901.6 |
| 1° | 3877.3 |
| 2° | 3832.6 |
| 3° | 3769.0 |
| 4° | 3681.7 |
| 5° | 3564.2 |
| 6° | 3418.7 |
| 7° | 3245.7 |
| 8° | 3039.1 |
| 9° | 2817.2 |
| 10° | 2585.6 |
| 11° | 2349.8 |
| 12° | 2117.0 |
| 13° | 1890.0 |
| 14° | 1679.3 |
| 15° | 1485.3 |
| 16° | 1306.8 |
| 17° | 1146.7 |
| 18° | 1006.2 |
| 19° | 886.2 |
| 20° | 788.4 |
| 21° | 707.7 |
| 22° | 647.1 |
| 23° | 601.1 |
| 24° | 566.9 |
| 25° | 541.8 |
| 26° | 521.3 |
| 27° | 503.3 |
| 28° | 486.2 |
| 29° | 447.7 |
| 30° | 382.9 |
| 32.5° | 185.6 |
| 35° | 52.3 |
| 37.5° | 36.0 |
| 40° | 26.8 |
| 42.5° | 18.8 |
| 45° | 17.6 |
| 47.5° | 16.7 |
| 50° | 16.3 |
| 52.5° | 15.5 |
| 55° | 15.0 |
| 57.5° | 15.0 |
| 60° | 14.6 |
| 62.5° | 14.6 |
| 65° | 13.8 |

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**CANDELA DISTRIBUTION (continued):**

| | 0° |
|---|---|
| 67.5° | *13.4* |
| 70° | *13.0* |
| 72.5° | *12.5* |
| 75° | *12.1* |
| 77.5° | *10.9* |
| 80° | *9.6* |
| 82.5° | *7.5* |
| 85° | *4.6* |
| 87.5° | *2.1* |
| 90° | *0.0* |

(END OF REPORT)