

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: P220885

Luminaire Tested: **9004-W1-[RW, RI]-LED3590-F-BK-L3-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220885
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29493)
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]-LED3590-F-BK-L3-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 3500K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

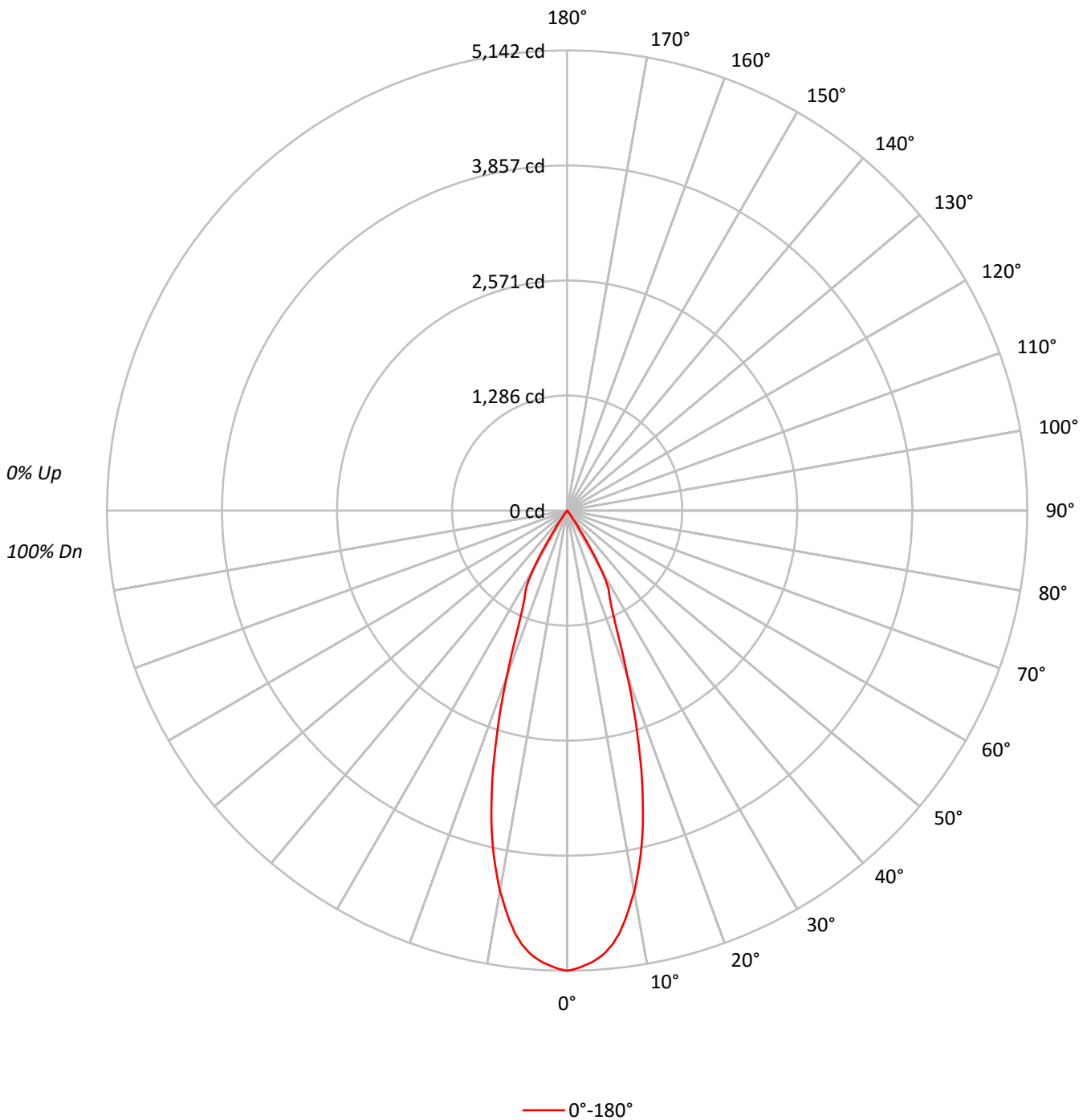
Lumens per Lamp: N/A
Luminaire Lumens: 2030.1 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.56
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 28.6
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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 | 106 | 105 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 |
| 2 | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 99 | 97 | 99 | 97 | 95 | 96 | 94 | 93 | 91 |
| 3 | 106 | 101 | 97 | 94 | 104 | 100 | 96 | 93 | 97 | 94 | 92 | 95 | 92 | 90 | 93 | 91 | 89 | 87 |
| 4 | 102 | 96 | 92 | 88 | 101 | 95 | 91 | 88 | 93 | 90 | 87 | 91 | 88 | 86 | 90 | 87 | 85 | 84 |
| 5 | 99 | 92 | 87 | 84 | 97 | 91 | 87 | 84 | 89 | 86 | 83 | 88 | 85 | 82 | 86 | 84 | 81 | 80 |
| 6 | 95 | 88 | 83 | 80 | 94 | 87 | 83 | 80 | 86 | 82 | 79 | 85 | 81 | 79 | 83 | 80 | 78 | 77 |
| 7 | 92 | 84 | 80 | 76 | 91 | 84 | 79 | 76 | 83 | 79 | 76 | 82 | 78 | 75 | 81 | 77 | 75 | 74 |
| 8 | 89 | 81 | 76 | 73 | 88 | 81 | 76 | 73 | 80 | 76 | 73 | 79 | 75 | 72 | 78 | 75 | 72 | 71 |
| 9 | 86 | 78 | 73 | 70 | 85 | 77 | 73 | 70 | 77 | 73 | 70 | 76 | 72 | 70 | 75 | 72 | 69 | 68 |
| 10 | 83 | 75 | 70 | 67 | 82 | 75 | 70 | 67 | 74 | 70 | 67 | 73 | 70 | 67 | 73 | 69 | 67 | 66 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 634219 |
| 5° | 613215 |
| 10° | 540735 |
| 15° | 416292 |
| 20° | 258257 |
| 25° | 157981 |
| 30° | 107533 |
| 35° | 14245 |
| 40° | 4042 |
| 45° | 994 |
| 50° | 768 |
| 55° | 516 |
| 60° | 395 |
| 65° | 467 |
| 70° | 289 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 452.4 | 22.3 |
| 10°-20° | 874.5 | 43.1 |
| 20°-30° | 560.7 | 27.6 |
| 30°-40° | 132.2 | 6.5 |
| 40°-50° | 6.3 | 0.3 |
| 50°-60° | 2.4 | 0.1 |
| 60°-70° | 1.3 | 0.1 |
| 70°-80° | 0.3 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 1887.7 | 93.0 |
| 0°-40° | 2019.8 | 99.5 |
| 0°-60° | 2028.5 | 99.9 |
| 0°-90° | 2030.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2030.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5142 | |
| 5° | 4953 | 452 |
| 15° | 3260 | 875 |
| 25° | 1161 | 561 |
| 35° | 95 | 132 |
| 45° | 6 | 6 |
| 55° | 2 | 2 |
| 65° | 2 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5141.8 |
| 1° | 5123.2 |
| 2° | 5093.3 |
| 3° | 5059.3 |
| 4° | 5014.9 |
| 5° | 4952.6 |
| 6° | 4869.4 |
| 7° | 4763.5 |
| 8° | 4626.0 |
| 9° | 4476.5 |
| 10° | 4317.3 |
| 11° | 4137.0 |
| 12° | 3943.8 |
| 13° | 3734.5 |
| 14° | 3502.5 |
| 15° | 3260.0 |
| 16° | 3002.9 |
| 17° | 2737.0 |
| 18° | 2471.9 |
| 19° | 2214.8 |
| 20° | 1967.5 |
| 21° | 1747.6 |
| 22° | 1551.2 |
| 23° | 1386.3 |
| 24° | 1261.0 |
| 25° | 1160.8 |
| 26° | 1085.6 |
| 27° | 1027.4 |
| 28° | 975.6 |
| 29° | 887.5 |
| 30° | 755.0 |
| 32.5° | 360.5 |
| 35° | 94.6 |
| 37.5° | 50.1 |
| 40° | 25.1 |
| 42.5° | 8.1 |
| 45° | 5.7 |
| 47.5° | 4.8 |
| 50° | 4.0 |
| 52.5° | 3.2 |
| 55° | 2.4 |
| 57.5° | 2.4 |
| 60° | 1.6 |
| 62.5° | 1.6 |
| 65° | 1.6 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 67.5° | 0.8 |
| 70° | 0.8 |
| 72.5° | 0.8 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)