

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: P220850

Luminaire Tested: **9004-W1-[RW, RI]-LED3590-M-BK-L2-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220850
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29492)
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-M-BK-L2-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, MEDIUM FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 3500K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

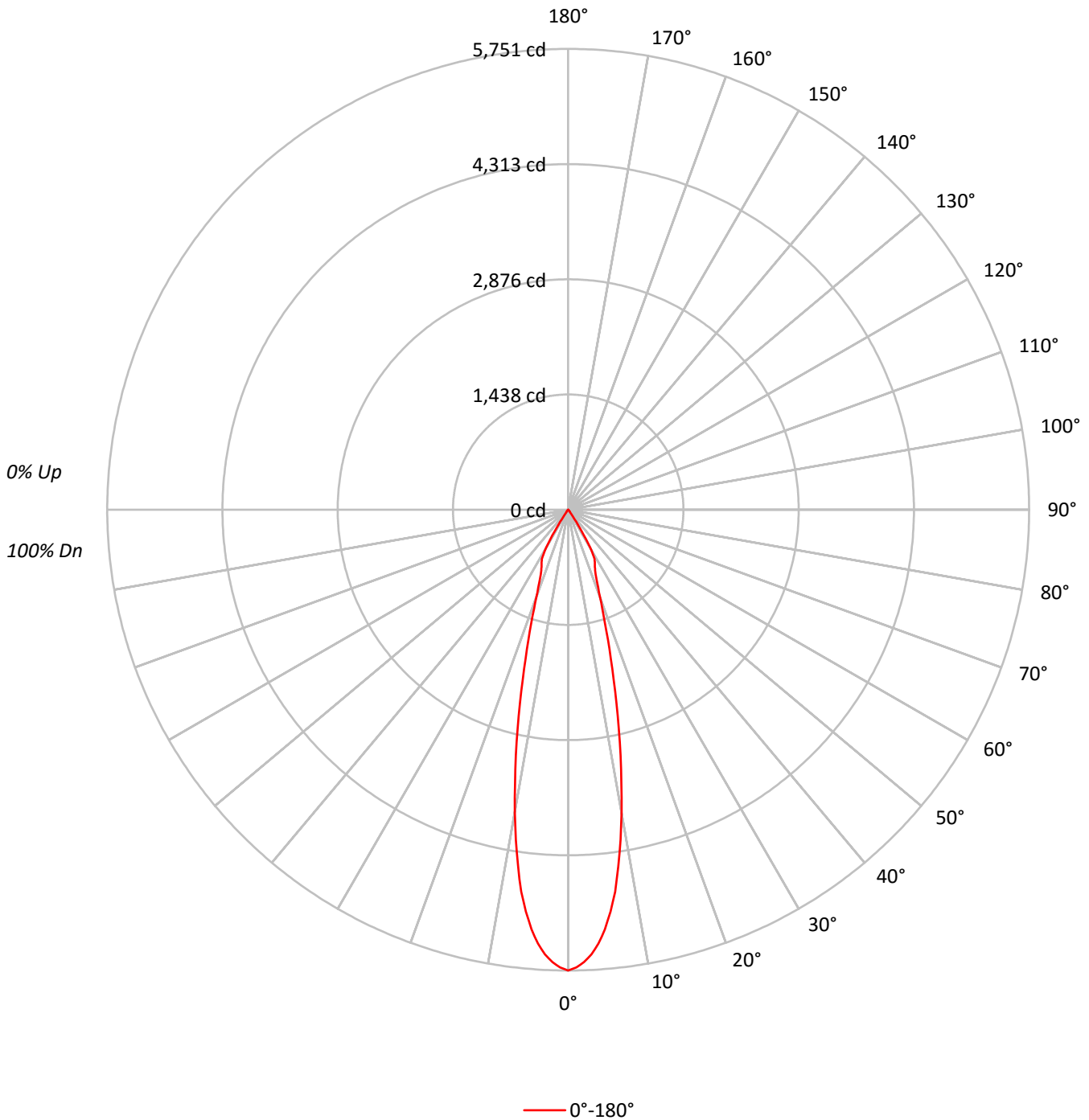
Lumens per Lamp: N/A
Luminaire Lumens: 1544.1 lumens
Efficiency: N/A
Efficacy: 76.8 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 20.1
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 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99 | 99 | 98 | 96 |
| 2 | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98 | 99 | 97 | 96 | 96 | 95 | 94 | 92 |
| 3 | 107 | 102 | 98 | 95 | 105 | 100 | 97 | 94 | 98 | 95 | 93 | 96 | 93 | 91 | 94 | 92 | 90 | 89 |
| 4 | 103 | 97 | 93 | 90 | 102 | 96 | 92 | 89 | 94 | 91 | 88 | 92 | 90 | 87 | 91 | 88 | 86 | 85 |
| 5 | 100 | 93 | 89 | 86 | 98 | 92 | 88 | 85 | 91 | 87 | 85 | 89 | 86 | 84 | 88 | 85 | 83 | 82 |
| 6 | 96 | 90 | 85 | 82 | 95 | 89 | 85 | 82 | 88 | 84 | 81 | 86 | 83 | 81 | 85 | 82 | 80 | 79 |
| 7 | 93 | 86 | 82 | 79 | 92 | 86 | 81 | 78 | 85 | 81 | 78 | 84 | 80 | 78 | 83 | 80 | 77 | 76 |
| 8 | 90 | 83 | 79 | 76 | 89 | 83 | 78 | 76 | 82 | 78 | 75 | 81 | 77 | 75 | 80 | 77 | 75 | 74 |
| 9 | 88 | 80 | 76 | 73 | 87 | 80 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 72 | 78 | 75 | 72 | 71 |
| 10 | 85 | 78 | 73 | 70 | 84 | 77 | 73 | 70 | 77 | 73 | 70 | 76 | 73 | 70 | 75 | 72 | 70 | 69 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 709398 |
| 5° | 650855 |
| 10° | 480202 |
| 15° | 280294 |
| 20° | 152001 |
| 25° | 107421 |
| 30° | 77851 |
| 35° | 9682 |
| 40° | 3317 |
| 45° | 1308 |
| 50° | 844 |
| 55° | 667 |
| 60° | 469 |
| 65° | 350 |
| 70° | 216 |
| 75° | 286 |
| 80° | 426 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 455.8 | 29.5 |
| 10°-20° | 611.2 | 39.6 |
| 20°-30° | 370.8 | 24.0 |
| 30°-40° | 94.9 | 6.1 |
| 40°-50° | 6.8 | 0.4 |
| 50°-60° | 2.8 | 0.2 |
| 60°-70° | 1.2 | 0.1 |
| 70°-80° | 0.6 | 0.0 |
| 80°-90° | 0.1 | 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° | 1437.8 | 93.1 |
| 0°-40° | 1532.6 | 99.3 |
| 0°-60° | 1542.2 | 99.9 |
| 0°-90° | 1544.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1544.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5751 | |
| 5° | 5257 | 456 |
| 15° | 2195 | 611 |
| 25° | 789 | 371 |
| 35° | 64 | 95 |
| 45° | 8 | 7 |
| 55° | 3 | 3 |
| 65° | 1 | 1 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5751.3 |
| 1° | 5714.5 |
| 2° | 5649.0 |
| 3° | 5555.4 |
| 4° | 5427.5 |
| 5° | 5256.6 |
| 6° | 5043.2 |
| 7° | 4803.0 |
| 8° | 4496.0 |
| 9° | 4168.4 |
| 10° | 3834.0 |
| 11° | 3482.1 |
| 12° | 3136.5 |
| 13° | 2805.8 |
| 14° | 2488.2 |
| 15° | 2195.0 |
| 16° | 1932.9 |
| 17° | 1696.5 |
| 18° | 1485.6 |
| 19° | 1307.7 |
| 20° | 1158.0 |
| 21° | 1040.1 |
| 22° | 946.5 |
| 23° | 877.2 |
| 24° | 827.9 |
| 25° | 789.3 |
| 26° | 758.1 |
| 27° | 731.2 |
| 28° | 699.4 |
| 29° | 641.4 |
| 30° | 546.6 |
| 32.5° | 260.2 |
| 35° | 64.3 |
| 37.5° | 34.9 |
| 40° | 20.6 |
| 42.5° | 9.4 |
| 45° | 7.5 |
| 47.5° | 6.2 |
| 50° | 4.4 |
| 52.5° | 3.7 |
| 55° | 3.1 |
| 57.5° | 2.5 |
| 60° | 1.9 |
| 62.5° | 1.9 |
| 65° | 1.2 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 67.5° | 0.6 |
| 70° | 0.6 |
| 72.5° | 0.6 |
| 75° | 0.6 |
| 77.5° | 0.6 |
| 80° | 0.6 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)