

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: P220512

Luminaire Tested: **1003-[A1, S1, SU1]-[RW, RI]-LED3590-S-BK-L2-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29472)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 1003-[A1, S1, SU1]-[RW, RI]-LED3590-S-BK-L2-UNV
Description: LUMIERE LANTERRA 1003 LED ACCENT/SIGN LUMINAIRE, RECESSED LENS, SPOT OPTIC, BLACK HOUSING.
Light Source: (1) 3500K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1227.2 lumens
Efficiency: N/A
Efficacy: 61.1 lumens/watt
Spacing Criteria (0/90/45): 0.27 / 0.27 / 0.27
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

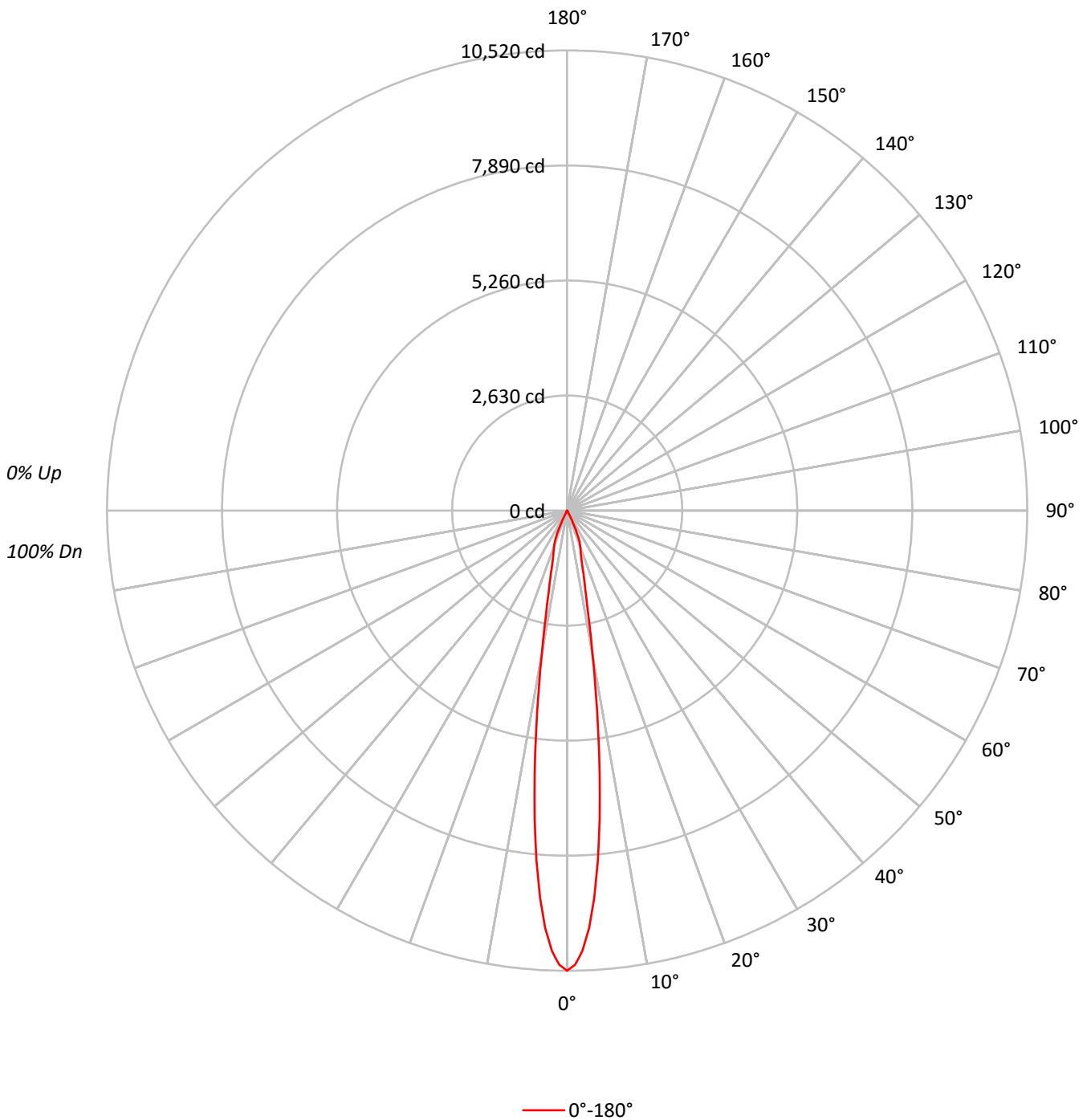
Input Watts (W): 20.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 112 | 110 | 113 | 111 | 110 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 100 | 100 | 99 | 97 |
| 2 | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 104 | 102 | 100 | 101 | 100 | 98 | 99 | 97 | 96 | 95 |
| 3 | 109 | 105 | 101 | 99 | 107 | 103 | 100 | 98 | 101 | 98 | 96 | 99 | 97 | 95 | 97 | 95 | 94 | 92 |
| 4 | 106 | 101 | 98 | 95 | 105 | 100 | 97 | 94 | 98 | 95 | 93 | 96 | 94 | 92 | 95 | 93 | 91 | 90 |
| 5 | 103 | 98 | 94 | 92 | 102 | 97 | 94 | 91 | 96 | 93 | 91 | 94 | 92 | 90 | 93 | 91 | 89 | 88 |
| 6 | 101 | 95 | 92 | 89 | 100 | 95 | 91 | 89 | 93 | 90 | 88 | 92 | 90 | 88 | 91 | 89 | 87 | 86 |
| 7 | 99 | 93 | 89 | 87 | 98 | 92 | 89 | 86 | 91 | 88 | 86 | 90 | 88 | 86 | 89 | 87 | 85 | 84 |
| 8 | 96 | 91 | 87 | 84 | 95 | 90 | 87 | 84 | 89 | 86 | 84 | 88 | 86 | 84 | 88 | 85 | 83 | 82 |
| 9 | 94 | 88 | 85 | 82 | 94 | 88 | 85 | 82 | 87 | 84 | 82 | 87 | 84 | 82 | 86 | 84 | 82 | 81 |
| 10 | 92 | 87 | 83 | 81 | 92 | 86 | 83 | 81 | 86 | 83 | 80 | 85 | 82 | 80 | 84 | 82 | 80 | 79 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 2306745 |
| 5° | 1767176 |
| 10° | 741358 |
| 15° | 312874 |
| 20° | 203531 |
| 25° | 89183 |
| 30° | 12078 |
| 35° | 4551 |
| 40° | 3235 |
| 45° | 2512 |
| 50° | 2217 |
| 55° | 2179 |
| 60° | 1754 |
| 65° | 1245 |
| 70° | 513 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 604.4 | 49.2 |
| 10°-20° | 421.4 | 34.3 |
| 20°-30° | 173.7 | 14.2 |
| 30°-40° | 13.7 | 1.1 |
| 40°-50° | 6.5 | 0.5 |
| 50°-60° | 4.8 | 0.4 |
| 60°-70° | 2.4 | 0.2 |
| 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° | 1199.5 | 97.7 |
| 0°-40° | 1213.2 | 98.9 |
| 0°-60° | 1224.6 | 99.8 |
| 0°-90° | 1227.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1227.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 10520 | |
| 5° | 8028 | 604 |
| 15° | 1378 | 421 |
| 25° | 369 | 174 |
| 35° | 17 | 14 |
| 45° | 8 | 7 |
| 55° | 6 | 5 |
| 65° | 2 | 2 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|---------|
| 0° | 10519.6 |
| 1° | 10385.4 |
| 2° | 10070.9 |
| 3° | 9559.3 |
| 4° | 8876.2 |
| 5° | 8028.3 |
| 6° | 7085.0 |
| 7° | 6096.4 |
| 8° | 5079.5 |
| 9° | 4147.5 |
| 10° | 3329.5 |
| 11° | 2682.0 |
| 12° | 2202.7 |
| 13° | 1849.4 |
| 14° | 1591.6 |
| 15° | 1378.2 |
| 16° | 1206.0 |
| 17° | 1093.7 |
| 18° | 1007.2 |
| 19° | 931.2 |
| 20° | 872.2 |
| 21° | 818.0 |
| 22° | 735.6 |
| 23° | 623.2 |
| 24° | 495.5 |
| 25° | 368.6 |
| 26° | 256.2 |
| 27° | 153.6 |
| 28° | 85.7 |
| 29° | 57.4 |
| 30° | 47.7 |
| 32.5° | 30.7 |
| 35° | 17.0 |
| 37.5° | 12.9 |
| 40° | 11.3 |
| 42.5° | 9.7 |
| 45° | 8.1 |
| 47.5° | 7.3 |
| 50° | 6.5 |
| 52.5° | 5.7 |
| 55° | 5.7 |
| 57.5° | 4.8 |
| 60° | 4.0 |
| 62.5° | 3.2 |
| 65° | 2.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 67.5° | 1.6 |
| 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)