

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: P220649

Luminaire Tested: **1003-[A1, S1, SU1]-FL-LED4097-S-BK-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220649
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29476)
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]-FL-LED4097-S-BK-L1-UNV
Description: LUMIERE LANTERRA 1003 LED ACCENT/SIGN LUMINAIRE, FLUSH LENS, SPOT OPTIC, BLACK HOUSING.
Light Source: (1) 4000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 730.8 lumens
Efficiency: N/A
Efficacy: 74.6 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

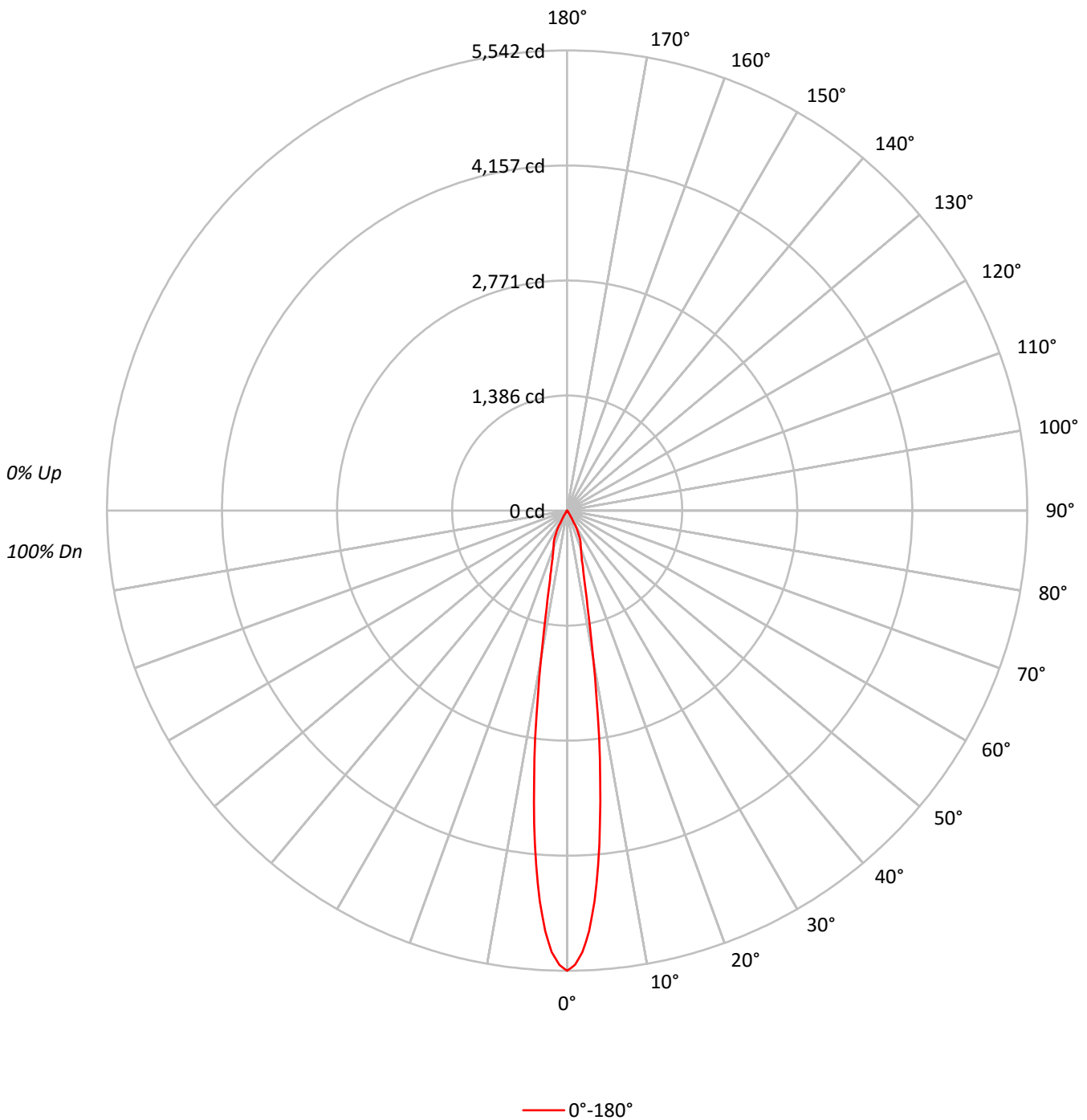
Input Watts (W): 9.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 110 | 113 | 111 | 109 | 108 | 107 | 106 | 105 | 103 | 102 | 101 | 100 | 99 | 99 | 97 |
| 2 | 111 | 108 | 105 | 103 | 109 | 106 | 104 | 101 | 103 | 101 | 99 | 100 | 99 | 97 | 98 | 96 | 95 | 94 |
| 3 | 108 | 104 | 100 | 97 | 106 | 102 | 99 | 97 | 100 | 97 | 95 | 98 | 95 | 94 | 95 | 94 | 92 | 91 |
| 4 | 105 | 100 | 96 | 93 | 103 | 99 | 95 | 92 | 97 | 94 | 91 | 95 | 92 | 90 | 93 | 91 | 89 | 88 |
| 5 | 102 | 96 | 92 | 89 | 101 | 95 | 92 | 89 | 94 | 91 | 88 | 92 | 90 | 88 | 91 | 89 | 87 | 86 |
| 6 | 99 | 93 | 89 | 86 | 98 | 93 | 89 | 86 | 91 | 88 | 86 | 90 | 87 | 85 | 89 | 86 | 85 | 83 |
| 7 | 97 | 90 | 86 | 84 | 96 | 90 | 86 | 83 | 89 | 85 | 83 | 88 | 85 | 83 | 87 | 84 | 82 | 81 |
| 8 | 94 | 88 | 84 | 81 | 93 | 87 | 84 | 81 | 87 | 83 | 81 | 86 | 83 | 81 | 85 | 82 | 80 | 79 |
| 9 | 92 | 86 | 82 | 79 | 91 | 85 | 82 | 79 | 84 | 81 | 79 | 84 | 81 | 79 | 83 | 80 | 78 | 77 |
| 10 | 90 | 83 | 80 | 77 | 89 | 83 | 79 | 77 | 82 | 79 | 77 | 82 | 79 | 77 | 81 | 78 | 77 | 76 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1215232 |
| 5° | 943515 |
| 10° | 403065 |
| 15° | 170421 |
| 20° | 112966 |
| 25° | 84682 |
| 30° | 32435 |
| 35° | 4952 |
| 40° | 2719 |
| 45° | 1209 |
| 50° | 887 |
| 55° | 803 |
| 60° | 921 |
| 65° | 882 |
| 70° | 833 |
| 75° | 763 |
| 80° | 505 |
| 85° | 1006 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 323.9 | 44.3 |
| 10°-20° | 229.5 | 31.4 |
| 20°-30° | 148.0 | 20.2 |
| 30°-40° | 21.3 | 2.9 |
| 40°-50° | 3.4 | 0.5 |
| 50°-60° | 2.0 | 0.3 |
| 60°-70° | 1.6 | 0.2 |
| 70°-80° | 0.8 | 0.1 |
| 80°-90° | 0.3 | 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° | 701.4 | 96.0 |
| 0°-40° | 722.8 | 98.9 |
| 0°-60° | 728.2 | 99.6 |
| 0°-90° | 730.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 730.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5542 | |
| 5° | 4286 | 324 |
| 15° | 751 | 230 |
| 25° | 350 | 148 |
| 35° | 18 | 21 |
| 45° | 4 | 3 |
| 55° | 2 | 2 |
| 65° | 2 | 2 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5541.9 |
| 1° | 5472.7 |
| 2° | 5319.6 |
| 3° | 5068.1 |
| 4° | 4718.1 |
| 5° | 4286.4 |
| 6° | 3790.2 |
| 7° | 3272.1 |
| 8° | 2759.6 |
| 9° | 2253.0 |
| 10° | 1810.2 |
| 11° | 1448.6 |
| 12° | 1188.0 |
| 13° | 997.5 |
| 14° | 856.1 |
| 15° | 750.7 |
| 16° | 663.9 |
| 17° | 600.7 |
| 18° | 555.5 |
| 19° | 516.0 |
| 20° | 484.1 |
| 21° | 456.6 |
| 22° | 432.6 |
| 23° | 410.2 |
| 24° | 384.4 |
| 25° | 350.0 |
| 26° | 309.6 |
| 27° | 266.2 |
| 28° | 218.9 |
| 29° | 172.0 |
| 30° | 128.1 |
| 32.5° | 42.6 |
| 35° | 18.5 |
| 37.5° | 13.3 |
| 40° | 9.5 |
| 42.5° | 4.7 |
| 45° | 3.9 |
| 47.5° | 3.0 |
| 50° | 2.6 |
| 52.5° | 2.6 |
| 55° | 2.1 |
| 57.5° | 2.1 |
| 60° | 2.1 |
| 62.5° | 1.7 |
| 65° | 1.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 67.5° | 1.3 |
| 70° | 1.3 |
| 72.5° | 0.9 |
| 75° | 0.9 |
| 77.5° | 0.4 |
| 80° | 0.4 |
| 82.5° | 0.4 |
| 85° | 0.4 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)