

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: P220838

Luminaire Tested: **9004-W1-[RW, RI]-LED4097-S-BK-L3-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220838
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29491)
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]-LED4097-S-BK-L3-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED 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: 1968.0 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 0.27 / 0.27 / 0.27
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

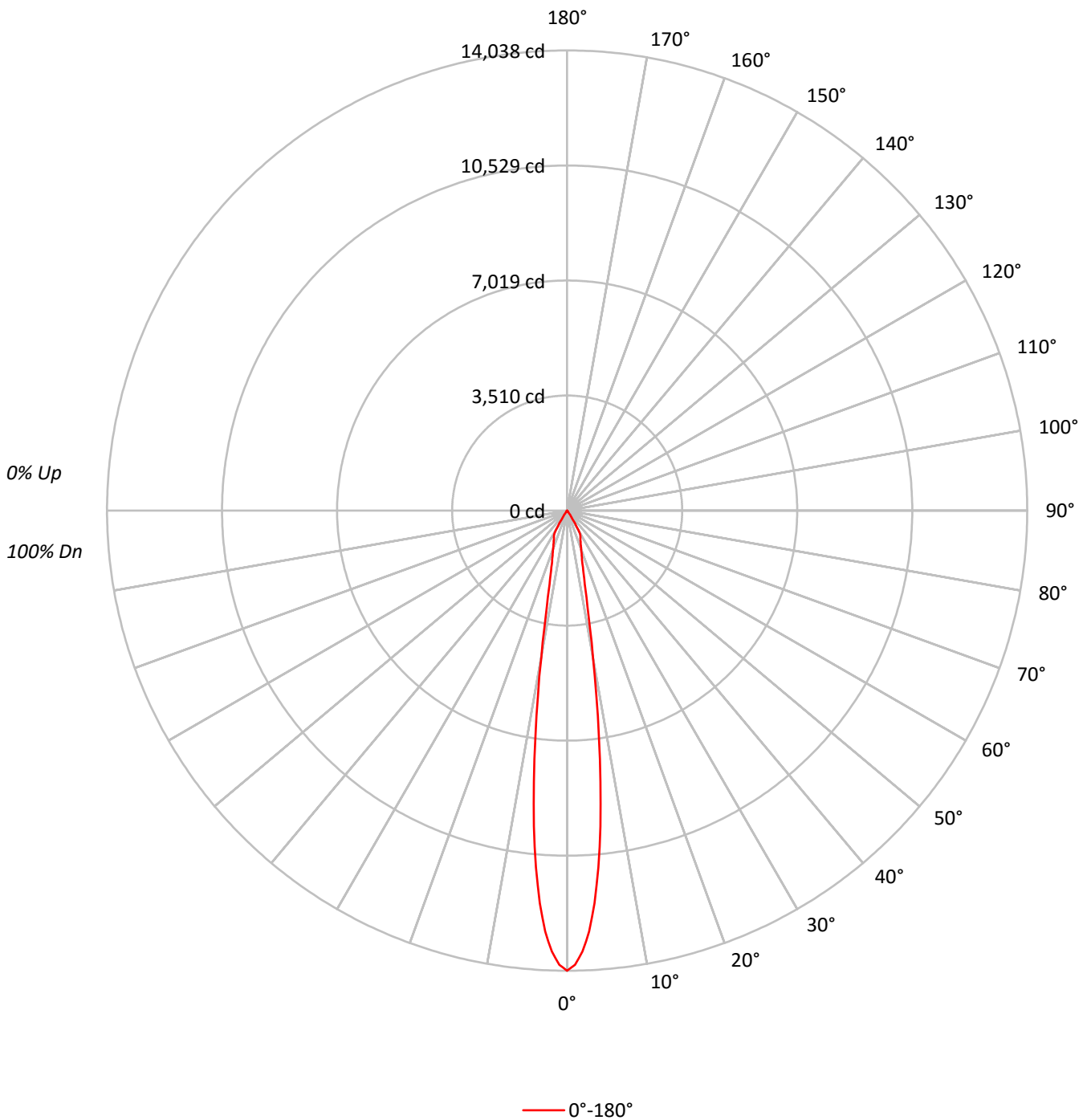
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P220838

CATALOG NUMBER: 9004-W1-[RW, RI]-LED4097-S-BK-L3-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P220838

CATALOG NUMBER: 9004-W1-[RW, RI]-LED4097-S-BK-L3-UNV

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 | 113 | 111 | 109 | 108 | 107 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 |
| 2 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 103 | 101 | 99 | 100 | 98 | 97 | 97 | 96 | 95 | 93 |
| 3 | 108 | 103 | 99 | 97 | 106 | 102 | 98 | 96 | 99 | 97 | 94 | 97 | 95 | 93 | 95 | 93 | 92 | 90 |
| 4 | 104 | 99 | 95 | 92 | 103 | 98 | 94 | 92 | 96 | 93 | 91 | 94 | 92 | 90 | 92 | 90 | 89 | 87 |
| 5 | 101 | 95 | 91 | 88 | 100 | 95 | 91 | 88 | 93 | 90 | 87 | 91 | 89 | 86 | 90 | 88 | 86 | 85 |
| 6 | 98 | 92 | 88 | 85 | 97 | 91 | 88 | 85 | 90 | 87 | 84 | 89 | 86 | 84 | 88 | 85 | 83 | 82 |
| 7 | 96 | 89 | 85 | 82 | 95 | 89 | 85 | 82 | 87 | 84 | 81 | 86 | 83 | 81 | 86 | 83 | 81 | 80 |
| 8 | 93 | 86 | 82 | 80 | 92 | 86 | 82 | 79 | 85 | 82 | 79 | 84 | 81 | 79 | 83 | 81 | 78 | 78 |
| 9 | 91 | 84 | 80 | 77 | 90 | 84 | 80 | 77 | 83 | 79 | 77 | 82 | 79 | 77 | 81 | 78 | 76 | 75 |
| 10 | 88 | 82 | 78 | 75 | 88 | 81 | 78 | 75 | 81 | 77 | 75 | 80 | 77 | 75 | 79 | 77 | 74 | 74 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1731563 |
| 5° | 1352847 |
| 10° | 569843 |
| 15° | 241487 |
| 20° | 163500 |
| 25° | 129823 |
| 30° | 96110 |
| 35° | 8718 |
| 40° | 3188 |
| 45° | 977 |
| 50° | 768 |
| 55° | 860 |
| 60° | 592 |
| 65° | 467 |
| 70° | 289 |
| 75° | 381 |
| 80° | 568 |
| 85° | 0 |



TEST NUMBER: P220838

CATALOG NUMBER: 9004-W1-[RW, RI]-LED4097-S-BK-L3-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 822.5 | 41.8 |
| 10°-20° | 581.2 | 29.5 |
| 20°-30° | 443.8 | 22.5 |
| 30°-40° | 108.8 | 5.5 |
| 40°-50° | 5.9 | 0.3 |
| 50°-60° | 3.2 | 0.2 |
| 60°-70° | 1.6 | 0.1 |
| 70°-80° | 0.8 | 0.0 |
| 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° | 1847.4 | 93.9 |
| 0°-40° | 1956.2 | 99.4 |
| 0°-60° | 1965.3 | 99.9 |
| 0°-90° | 1968.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1968.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 14038 | |
| 5° | 10926 | 822 |
| 15° | 1891 | 581 |
| 25° | 954 | 444 |
| 35° | 58 | 109 |
| 45° | 6 | 6 |
| 55° | 4 | 3 |
| 65° | 2 | 2 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



TEST NUMBER: P220838

CATALOG NUMBER: 9004-W1-[RW, RI]-LED4097-S-BK-L3-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|---------|
| 0° | 14038.3 |
| 1° | 13858.3 |
| 2° | 13461.9 |
| 3° | 12853.7 |
| 4° | 12002.2 |
| 5° | 10926.2 |
| 6° | 9689.3 |
| 7° | 8330.2 |
| 8° | 6961.7 |
| 9° | 5708.9 |
| 10° | 4549.7 |
| 11° | 3631.5 |
| 12° | 2959.1 |
| 13° | 2483.4 |
| 14° | 2144.8 |
| 15° | 1891.1 |
| 16° | 1696.0 |
| 17° | 1554.1 |
| 18° | 1441.5 |
| 19° | 1336.0 |
| 20° | 1245.6 |
| 22.5° | 1074.4 |
| 25° | 953.9 |
| 26° | 921.4 |
| 27° | 894.4 |
| 28° | 867.4 |
| 29° | 796.1 |
| 30° | 674.8 |
| 32.5° | 303.7 |
| 35° | 57.9 |
| 37.5° | 31.7 |
| 40° | 19.8 |
| 42.5° | 8.7 |
| 45° | 5.6 |
| 47.5° | 4.8 |
| 50° | 4.0 |
| 52.5° | 4.0 |
| 55° | 4.0 |
| 57.5° | 3.2 |
| 60° | 2.4 |
| 62.5° | 2.4 |
| 65° | 1.6 |
| 67.5° | 0.8 |
| 70° | 0.8 |
| 72.5° | 0.8 |



TEST NUMBER: P220838

CATALOG NUMBER: 9004-W1-[RW, RI]-LED4097-S-BK-L3-UNV

CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)