

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: P221795

Luminaire Tested: **9004-W2-[RW, RI]-LED3097-F-BK-L3-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221795
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-W2-[RW, RI]-LED3097-F-BK-L3-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 3000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3545.4 lumens
Efficiency: N/A
Efficacy: 62.0 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.56
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: General Diffuse

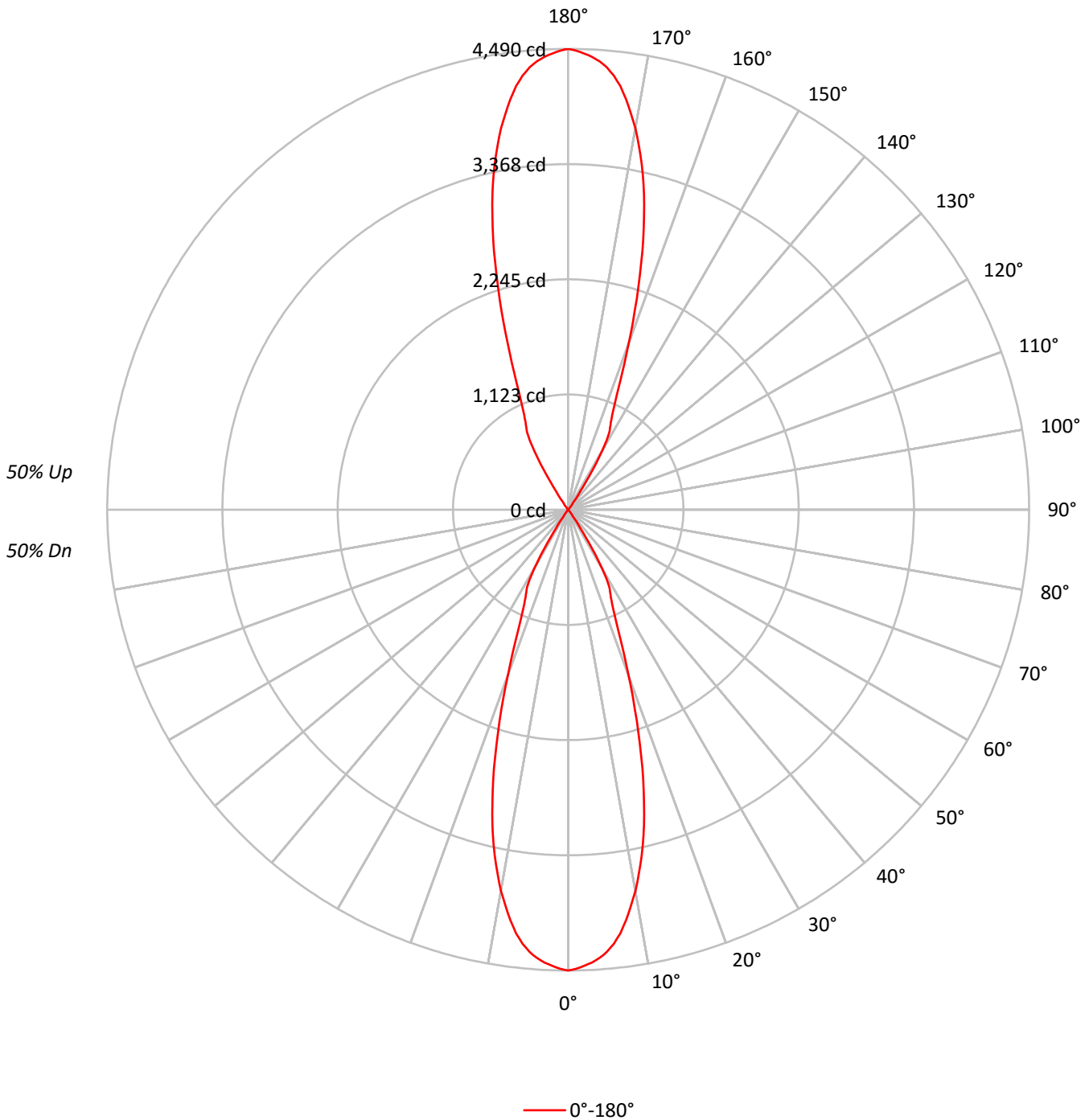
Input Watts (W): 57.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 50 | | | | |
| 1 | 101 | 97 | 95 | 92 | 93 | 90 | 88 | 86 | 77 | 76 | 74 | 65 | 64 | 63 | 54 | 53 | 53 | 48 | | | | |
| 2 | 95 | 89 | 85 | 81 | 88 | 83 | 79 | 76 | 72 | 69 | 67 | 61 | 60 | 58 | 52 | 51 | 50 | 46 | | | | |
| 3 | 89 | 82 | 77 | 73 | 83 | 77 | 72 | 69 | 67 | 64 | 61 | 58 | 56 | 54 | 50 | 49 | 47 | 44 | | | | |
| 4 | 84 | 76 | 70 | 66 | 78 | 71 | 66 | 63 | 63 | 59 | 57 | 55 | 53 | 51 | 48 | 46 | 45 | 42 | | | | |
| 5 | 79 | 71 | 65 | 60 | 74 | 67 | 61 | 58 | 59 | 55 | 53 | 52 | 50 | 48 | 46 | 44 | 43 | 40 | | | | |
| 6 | 75 | 66 | 60 | 55 | 70 | 62 | 57 | 53 | 56 | 52 | 49 | 50 | 47 | 45 | 44 | 42 | 41 | 38 | | | | |
| 7 | 71 | 62 | 56 | 52 | 67 | 59 | 53 | 50 | 53 | 49 | 46 | 48 | 45 | 43 | 42 | 41 | 39 | 37 | | | | |
| 8 | 68 | 58 | 52 | 48 | 64 | 55 | 50 | 47 | 50 | 46 | 44 | 45 | 43 | 40 | 41 | 39 | 37 | 35 | | | | |
| 9 | 64 | 55 | 49 | 45 | 61 | 52 | 47 | 44 | 48 | 44 | 41 | 43 | 41 | 39 | 39 | 37 | 36 | 34 | | | | |
| 10 | 61 | 52 | 46 | 43 | 58 | 50 | 45 | 41 | 46 | 42 | 39 | 42 | 39 | 37 | 38 | 36 | 35 | 33 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 553797 |
| 5° | 535470 |
| 10° | 472174 |
| 15° | 363502 |
| 20° | 225508 |
| 25° | 137948 |
| 30° | 93902 |
| 35° | 12438 |
| 40° | 3526 |
| 45° | 855 |
| 50° | 672 |
| 55° | 452 |
| 60° | 345 |
| 65° | 409 |
| 70° | 252 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 395.1 | 11.1 |
| 10°-20° | 763.6 | 21.5 |
| 20°-30° | 489.6 | 13.8 |
| 30°-40° | 115.4 | 3.3 |
| 40°-50° | 5.5 | 0.2 |
| 50°-60° | 2.1 | 0.1 |
| 60°-70° | 1.1 | 0.0 |
| 70°-80° | 0.3 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.5 | 0.0 |
| 110°-120° | 1.1 | 0.0 |
| 120°-130° | 2.1 | 0.1 |
| 130°-140° | 5.5 | 0.2 |
| 140°-150° | 115.4 | 3.3 |
| 150°-160° | 489.6 | 13.8 |
| 160°-170° | 763.6 | 21.5 |
| 170°-180° | 395.1 | 11.1 |
| 0°-30° | 1648.3 | 46.5 |
| 0°-40° | 1763.7 | 49.7 |
| 0°-60° | 1771.3 | 50.0 |
| 0°-90° | 1772.7 | 50.0 |
| 90°-120° | 1.6 | 0.0 |
| 90°-150° | 124.5 | 3.5 |
| 90°-180° | 1773.0 | 50.0 |
| 0°-180° | 3545.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 4490 | |
| 5° | 4325 | 395 |
| 15° | 2847 | 764 |
| 25° | 1014 | 490 |
| 35° | 83 | 115 |
| 45° | 5 | 5 |
| 55° | 2 | 2 |
| 65° | 1 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | 0 |
| 95° | 0 | 0 |
| 105° | 0 | 0 |
| 115° | 1 | 1 |
| 125° | 2 | 2 |
| 135° | 5 | 5 |
| 145° | 83 | 115 |
| 155° | 1014 | 490 |
| 165° | 2847 | 764 |
| 175° | 4325 | 395 |
| 180° | 4490 | |



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CATALOG NUMBER: 9004-W2-[RW, RI]-LED3097-F-BK-L3-UNV

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 4489.8 |
| 1° | 4473.6 |
| 2° | 4447.5 |
| 3° | 4417.8 |
| 4° | 4379.0 |
| 5° | 4324.7 |
| 6° | 4252.0 |
| 7° | 4159.5 |
| 8° | 4039.5 |
| 9° | 3908.9 |
| 10° | 3769.9 |
| 11° | 3612.5 |
| 12° | 3443.8 |
| 13° | 3261.0 |
| 14° | 3058.4 |
| 15° | 2846.6 |
| 16° | 2622.2 |
| 17° | 2390.0 |
| 18° | 2158.5 |
| 19° | 1934.0 |
| 20° | 1718.0 |
| 21° | 1526.0 |
| 22° | 1354.5 |
| 23° | 1210.5 |
| 24° | 1101.1 |
| 25° | 1013.6 |
| 26° | 947.9 |
| 27° | 897.1 |
| 28° | 851.9 |
| 29° | 775.0 |
| 30° | 659.3 |
| 32.5° | 314.8 |
| 35° | 82.6 |
| 37.5° | 43.8 |
| 40° | 21.9 |
| 42.5° | 7.1 |
| 45° | 4.9 |
| 47.5° | 4.2 |
| 50° | 3.5 |
| 52.5° | 2.8 |
| 55° | 2.1 |
| 57.5° | 2.1 |
| 60° | 1.4 |
| 62.5° | 1.4 |
| 65° | 1.4 |



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CATALOG NUMBER: 9004-W2-[RW, RI]-LED3097-F-BK-L3-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|--------|
| 67.5° | 0.7 |
| 70° | 0.7 |
| 72.5° | 0.7 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |
| 92.5° | 0.0 |
| 95° | 0.0 |
| 97.5° | 0.0 |
| 100° | 0.0 |
| 102.5° | 0.0 |
| 105° | 0.0 |
| 107.5° | 0.7 |
| 110° | 0.7 |
| 112.5° | 0.7 |
| 115° | 1.4 |
| 117.5° | 1.4 |
| 120° | 1.4 |
| 122.5° | 2.1 |
| 125° | 2.1 |
| 127.5° | 2.8 |
| 130° | 3.5 |
| 132.5° | 4.2 |
| 135° | 4.9 |
| 137.5° | 7.1 |
| 140° | 21.9 |
| 142.5° | 43.8 |
| 145° | 82.6 |
| 147.5° | 314.8 |
| 150° | 659.3 |
| 151° | 775.0 |
| 152° | 851.9 |
| 153° | 897.1 |
| 154° | 947.9 |
| 155° | 1013.6 |
| 156° | 1101.1 |
| 157° | 1210.5 |
| 158° | 1354.5 |
| 159° | 1526.0 |
| 160° | 1718.0 |
| 161° | 1934.0 |



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CATALOG NUMBER: 9004-W2-[RW, RI]-LED3097-F-BK-L3-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|------|--------|
| 162° | 2158.5 |
| 163° | 2390.0 |
| 164° | 2622.2 |
| 165° | 2846.6 |
| 166° | 3058.4 |
| 167° | 3261.0 |
| 168° | 3443.8 |
| 169° | 3612.5 |
| 170° | 3769.9 |
| 171° | 3908.9 |
| 172° | 4039.5 |
| 173° | 4159.5 |
| 174° | 4252.0 |
| 175° | 4324.7 |
| 176° | 4379.0 |
| 177° | 4417.8 |
| 178° | 4447.5 |
| 179° | 4473.6 |
| 180° | 4489.8 |

(END OF REPORT)