

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: P221969

Luminaire Tested: **9004-W2-FL-LED2790-M-BK-L3-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29497)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9004-W2-FL-LED2790-M-BK-L3-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, FLUSH LENS, MEDIUM FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 2700K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4264.5 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: General Diffuse

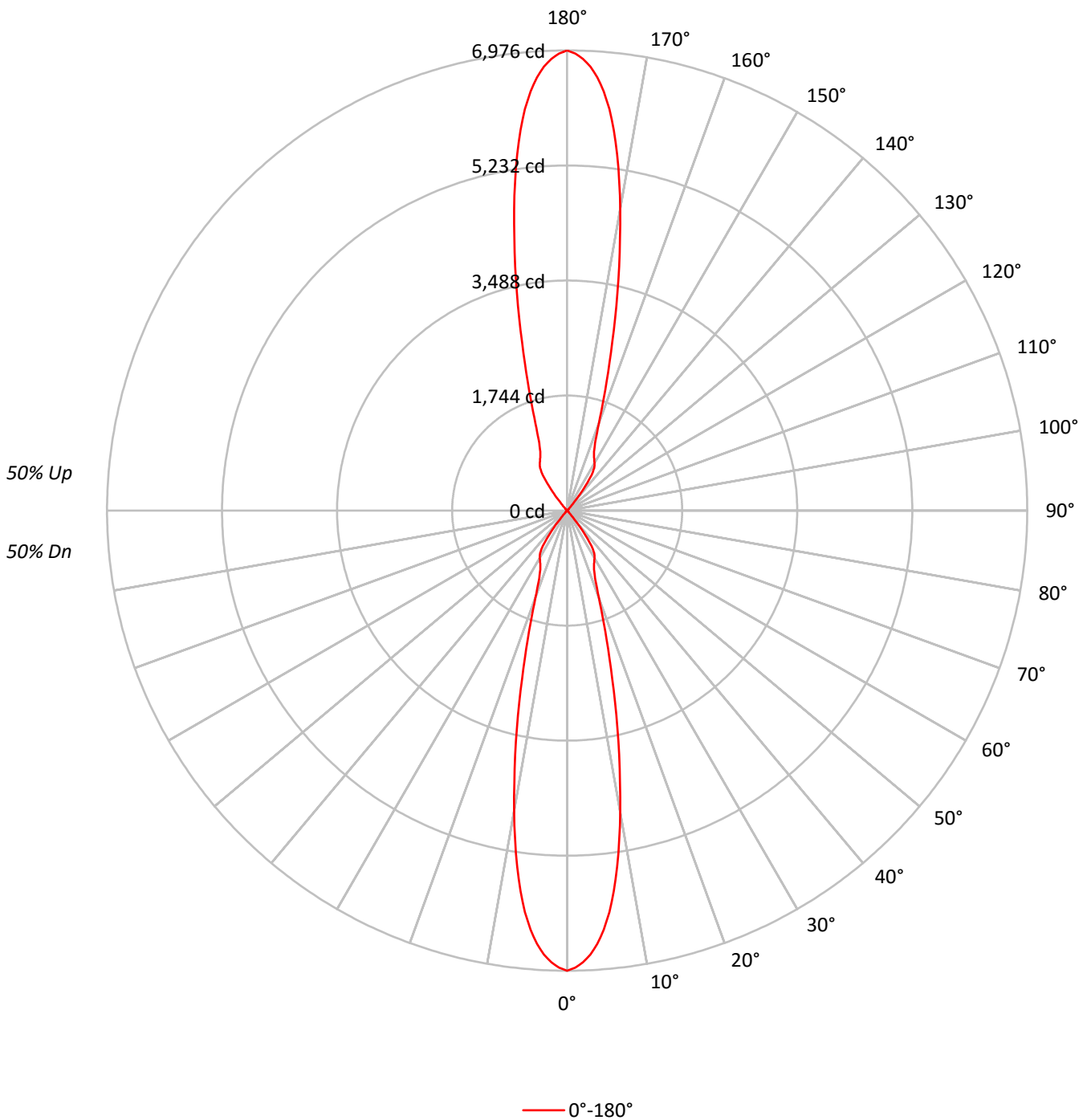
Input Watts (W): 57.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | | 69 | 69 | 69 | | 56 | 56 | 56 | 50 |
| 1 | 101 | 97 | 94 | 92 | 93 | 90 | 88 | 86 | 77 | 76 | 74 | | 65 | 64 | 63 | | 54 | 53 | 53 | 48 |
| 2 | 94 | 89 | 84 | 81 | 87 | 83 | 79 | 76 | 72 | 69 | 67 | | 61 | 59 | 58 | | 52 | 51 | 50 | 45 |
| 3 | 89 | 82 | 76 | 72 | 82 | 76 | 72 | 68 | 67 | 63 | 61 | | 58 | 56 | 54 | | 49 | 48 | 47 | 43 |
| 4 | 83 | 75 | 69 | 65 | 78 | 71 | 66 | 62 | 62 | 59 | 56 | | 55 | 52 | 50 | | 47 | 46 | 44 | 41 |
| 5 | 79 | 70 | 64 | 59 | 73 | 66 | 61 | 57 | 59 | 55 | 52 | | 52 | 49 | 47 | | 45 | 43 | 42 | 39 |
| 6 | 74 | 65 | 59 | 55 | 70 | 62 | 56 | 52 | 55 | 51 | 48 | | 49 | 46 | 44 | | 43 | 41 | 40 | 38 |
| 7 | 70 | 61 | 55 | 51 | 66 | 58 | 53 | 49 | 52 | 48 | 45 | | 47 | 44 | 42 | | 42 | 40 | 38 | 36 |
| 8 | 67 | 57 | 51 | 47 | 63 | 55 | 49 | 46 | 49 | 45 | 42 | | 45 | 42 | 39 | | 40 | 38 | 36 | 34 |
| 9 | 64 | 54 | 48 | 44 | 60 | 52 | 46 | 43 | 47 | 43 | 40 | | 43 | 40 | 38 | | 38 | 36 | 35 | 33 |
| 10 | 61 | 51 | 45 | 42 | 57 | 49 | 44 | 40 | 45 | 41 | 38 | | 41 | 38 | 36 | | 37 | 35 | 33 | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 860496 |
| 5° | 789617 |
| 10° | 580176 |
| 15° | 337771 |
| 20° | 184200 |
| 25° | 130912 |
| 30° | 117987 |
| 35° | 92921 |
| 40° | 20658 |
| 45° | 5652 |
| 50° | 1881 |
| 55° | 1140 |
| 60° | 740 |
| 65° | 438 |
| 70° | 289 |
| 75° | 381 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 552.4 | 13.0 |
| 10°-20° | 737.3 | 17.3 |
| 20°-30° | 461.1 | 10.8 |
| 30°-40° | 342.0 | 8.0 |
| 40°-50° | 31.9 | 0.7 |
| 50°-60° | 5.1 | 0.1 |
| 60°-70° | 1.8 | 0.0 |
| 70°-80° | 0.7 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.7 | 0.0 |
| 110°-120° | 1.8 | 0.0 |
| 120°-130° | 5.1 | 0.1 |
| 130°-140° | 31.9 | 0.7 |
| 140°-150° | 342.0 | 8.0 |
| 150°-160° | 461.1 | 10.8 |
| 160°-170° | 737.3 | 17.3 |
| 170°-180° | 552.4 | 13.0 |
| 0°-30° | 1750.8 | 41.1 |
| 0°-40° | 2092.8 | 49.1 |
| 0°-60° | 2129.7 | 49.9 |
| 0°-90° | 2132.2 | 50.0 |
| 90°-120° | 2.5 | 0.1 |
| 90°-150° | 381.5 | 8.9 |
| 90°-180° | 2132.0 | 50.0 |
| 0°-180° | 4264.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 6976 | |
| 5° | 6377 | 552 |
| 15° | 2645 | 737 |
| 25° | 962 | 461 |
| 35° | 617 | 342 |
| 45° | 32 | 32 |
| 55° | 5 | 5 |
| 65° | 2 | 2 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | 0 |
| 95° | 0 | 0 |
| 105° | 1 | 1 |
| 115° | 2 | 2 |
| 125° | 5 | 5 |
| 135° | 32 | 32 |
| 145° | 617 | 342 |
| 155° | 962 | 461 |
| 165° | 2645 | 737 |
| 175° | 6377 | 552 |
| 180° | 6976 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 6976.3 |
| 1° | 6930.3 |
| 2° | 6851.8 |
| 3° | 6738.6 |
| 4° | 6583.2 |
| 5° | 6377.3 |
| 6° | 6121.5 |
| 7° | 5812.9 |
| 8° | 5453.1 |
| 9° | 5051.7 |
| 10° | 4632.2 |
| 11° | 4203.0 |
| 12° | 3787.3 |
| 13° | 3382.1 |
| 14° | 2997.4 |
| 15° | 2645.1 |
| 16° | 2324.4 |
| 17° | 2044.5 |
| 18° | 1793.3 |
| 19° | 1580.5 |
| 20° | 1403.3 |
| 21° | 1262.9 |
| 22° | 1150.5 |
| 23° | 1067.5 |
| 24° | 1006.4 |
| 25° | 961.9 |
| 26° | 928.7 |
| 27° | 900.0 |
| 28° | 873.6 |
| 29° | 851.0 |
| 30° | 828.4 |
| 32.5° | 765.8 |
| 35° | 617.1 |
| 37.5° | 373.4 |
| 40° | 128.3 |
| 42.5° | 44.5 |
| 45° | 32.4 |
| 47.5° | 23.4 |
| 50° | 9.8 |
| 52.5° | 7.5 |
| 55° | 5.3 |
| 57.5° | 3.8 |
| 60° | 3.0 |
| 62.5° | 2.3 |
| 65° | 1.5 |



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CATALOG NUMBER: 9004-W2-FL-LED2790-M-BK-L3-UNV

CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|--------|
| 67.5° | 1.5 |
| 70° | 0.8 |
| 72.5° | 0.8 |
| 75° | 0.8 |
| 77.5° | 0.8 |
| 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° | 0.8 |
| 105° | 0.8 |
| 107.5° | 0.8 |
| 110° | 0.8 |
| 112.5° | 1.5 |
| 115° | 1.5 |
| 117.5° | 2.3 |
| 120° | 3.0 |
| 122.5° | 3.8 |
| 125° | 5.3 |
| 127.5° | 7.5 |
| 130° | 9.8 |
| 132.5° | 23.4 |
| 135° | 32.4 |
| 137.5° | 44.5 |
| 140° | 128.3 |
| 142.5° | 373.4 |
| 145° | 617.1 |
| 147.5° | 765.8 |
| 150° | 828.4 |
| 151° | 851.0 |
| 152° | 873.6 |
| 153° | 900.0 |
| 154° | 928.7 |
| 155° | 961.9 |
| 156° | 1006.4 |
| 157° | 1067.5 |
| 158° | 1150.5 |
| 159° | 1262.9 |
| 160° | 1403.3 |
| 161° | 1580.5 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|------|--------|
| 162° | 1793.3 |
| 163° | 2044.5 |
| 164° | 2324.4 |
| 165° | 2645.1 |
| 166° | 2997.4 |
| 167° | 3382.1 |
| 168° | 3787.3 |
| 169° | 4203.0 |
| 170° | 4632.2 |
| 171° | 5051.7 |
| 172° | 5453.1 |
| 173° | 5812.9 |
| 174° | 6121.5 |
| 175° | 6377.3 |
| 176° | 6583.2 |
| 177° | 6738.6 |
| 178° | 6851.8 |
| 179° | 6930.3 |
| 180° | 6976.3 |

(END OF REPORT)