

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: PORTFOLIO

Report Number: P840055

Luminaire Tested: **LDS4C45D010 EU4459027 4LBSWMH**

Issue Date: 8/24/2022



Test Information

Test Method: LM-79-08
Report Number: P840055
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P205729)
Test Lab: INNOVATION CENTER
Issue Date: 8/24/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LDS4C45D010 EU4459027 4LBSWMH
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBS TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

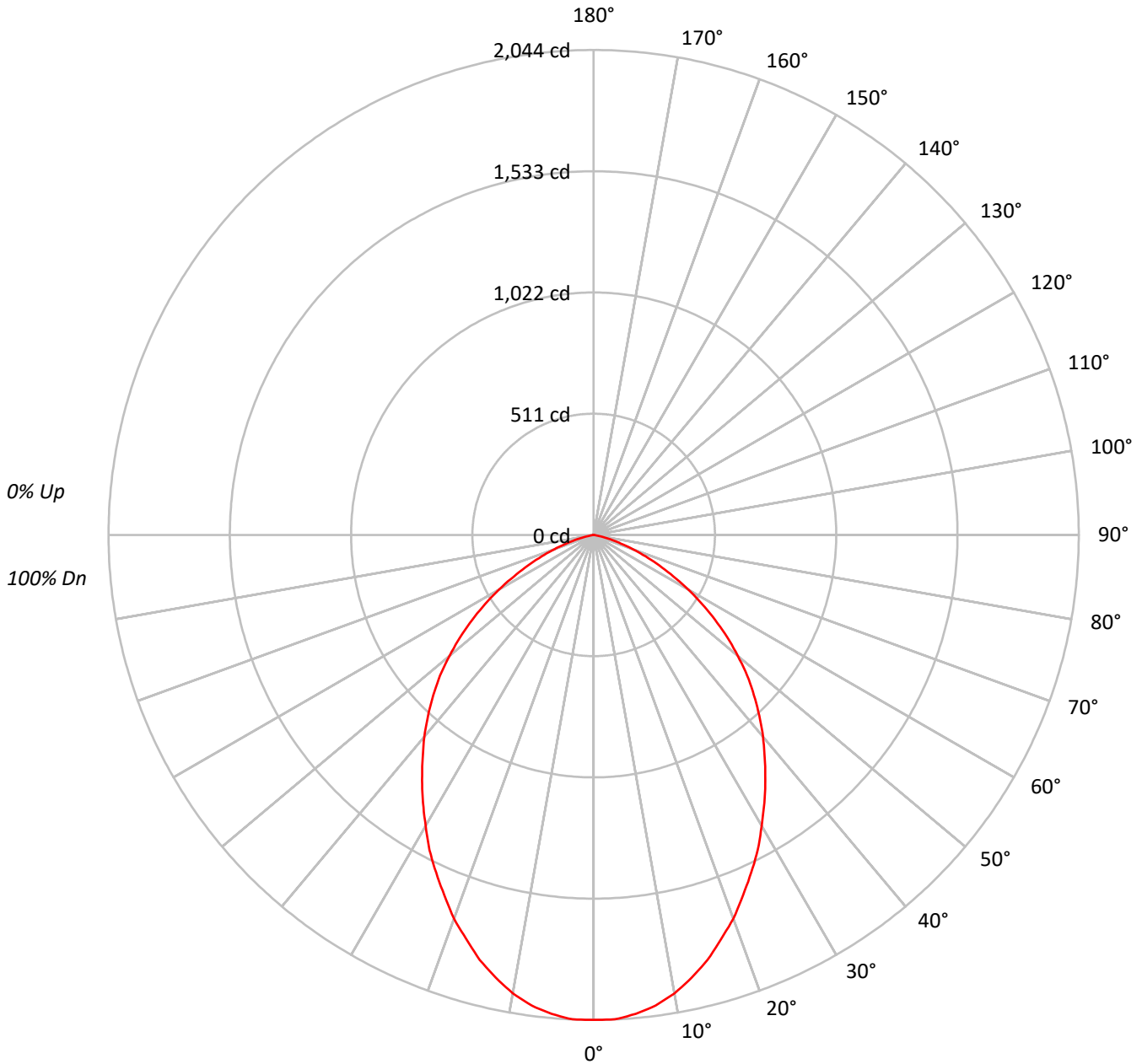
Lumens per Lamp: N/A
Luminaire Lumens: 3908.0 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 49.6
Input Voltage (V):
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 | 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 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 92 | 90 | 88 | | | |
| 2 | 102 | 96 | 90 | 85 | 100 | 94 | 88 | 84 | 90 | 86 | 82 | 87 | 83 | 80 | 84 | 81 | 79 | 77 | | | |
| 3 | 95 | 85 | 78 | 73 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 69 | 67 | | | |
| 4 | 87 | 77 | 69 | 63 | 85 | 75 | 68 | 63 | 73 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 60 | 58 | | | |
| 5 | 81 | 69 | 61 | 55 | 79 | 68 | 61 | 55 | 66 | 60 | 55 | 64 | 59 | 54 | 63 | 58 | 53 | 51 | | | |
| 6 | 75 | 63 | 55 | 49 | 73 | 62 | 54 | 49 | 60 | 54 | 49 | 59 | 53 | 48 | 57 | 52 | 48 | 46 | | | |
| 7 | 70 | 58 | 50 | 44 | 68 | 57 | 49 | 44 | 55 | 49 | 44 | 54 | 48 | 43 | 53 | 47 | 43 | 41 | | | |
| 8 | 65 | 53 | 45 | 40 | 64 | 52 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | 37 | | | |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 36 | 45 | 40 | 35 | 34 | | | |
| 10 | 58 | 45 | 38 | 33 | 56 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 42 | 37 | 33 | 31 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 251100 |
| 5° | 249938 |
| 10° | 244769 |
| 15° | 235882 |
| 20° | 225013 |
| 25° | 212887 |
| 30° | 200816 |
| 35° | 189075 |
| 40° | 178031 |
| 45° | 165957 |
| 50° | 151334 |
| 55° | 133654 |
| 60° | 113123 |
| 65° | 88808 |
| 70° | 63399 |
| 75° | 34746 |
| 80° | 6155 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 191.4 | 4.9 |
| 10°-20° | 520.4 | 13.3 |
| 20°-30° | 722.6 | 18.5 |
| 30°-40° | 788.6 | 20.2 |
| 40°-50° | 735.6 | 18.8 |
| 50°-60° | 558.4 | 14.3 |
| 60°-70° | 305.7 | 7.8 |
| 70°-80° | 84.2 | 2.2 |
| 80°-90° | 1.2 | 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° | 1434.4 | 36.7 |
| 0°-40° | 2223.0 | 56.9 |
| 0°-60° | 3517.0 | 90.0 |
| 0°-90° | 3908.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3908.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2044 | |
| 5° | 2027 | 191 |
| 15° | 1855 | 520 |
| 25° | 1570 | 723 |
| 35° | 1261 | 789 |
| 45° | 955 | 736 |
| 55° | 624 | 558 |
| 65° | 306 | 306 |
| 75° | 73 | 84 |
| 85° | 0 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2043.9 |
| 2.5° | 2043.9 |
| 5° | 2026.7 |
| 7.5° | 2000.9 |
| 10° | 1962.1 |
| 12.5° | 1910.5 |
| 15° | 1854.6 |
| 17.5° | 1785.8 |
| 20° | 1721.1 |
| 22.5° | 1643.7 |
| 25° | 1570.5 |
| 27.5° | 1497.4 |
| 30° | 1415.6 |
| 32.5° | 1338.2 |
| 35° | 1260.7 |
| 37.5° | 1183.3 |
| 40° | 1110.1 |
| 42.5° | 1032.7 |
| 45° | 955.2 |
| 47.5° | 877.8 |
| 50° | 791.8 |
| 52.5° | 710.0 |
| 55° | 624.0 |
| 57.5° | 542.1 |
| 60° | 460.4 |
| 62.5° | 378.7 |
| 65° | 305.5 |
| 67.5° | 236.6 |
| 70° | 176.5 |
| 72.5° | 120.5 |
| 75° | 73.2 |
| 77.5° | 34.4 |
| 80° | 8.7 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180°







(END OF REPORT)