

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: P840057

Luminaire Tested: **LDS4C45D010 EU4459030 4LBCSMMS**

Issue Date: 8/24/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P840057  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2105-247-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/24/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LDS4C45D010 EU4459030 4LBCSMMS  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBCS TRIM WITH MMS FINISH  
Light Source: -  
Ballast/Driver: -

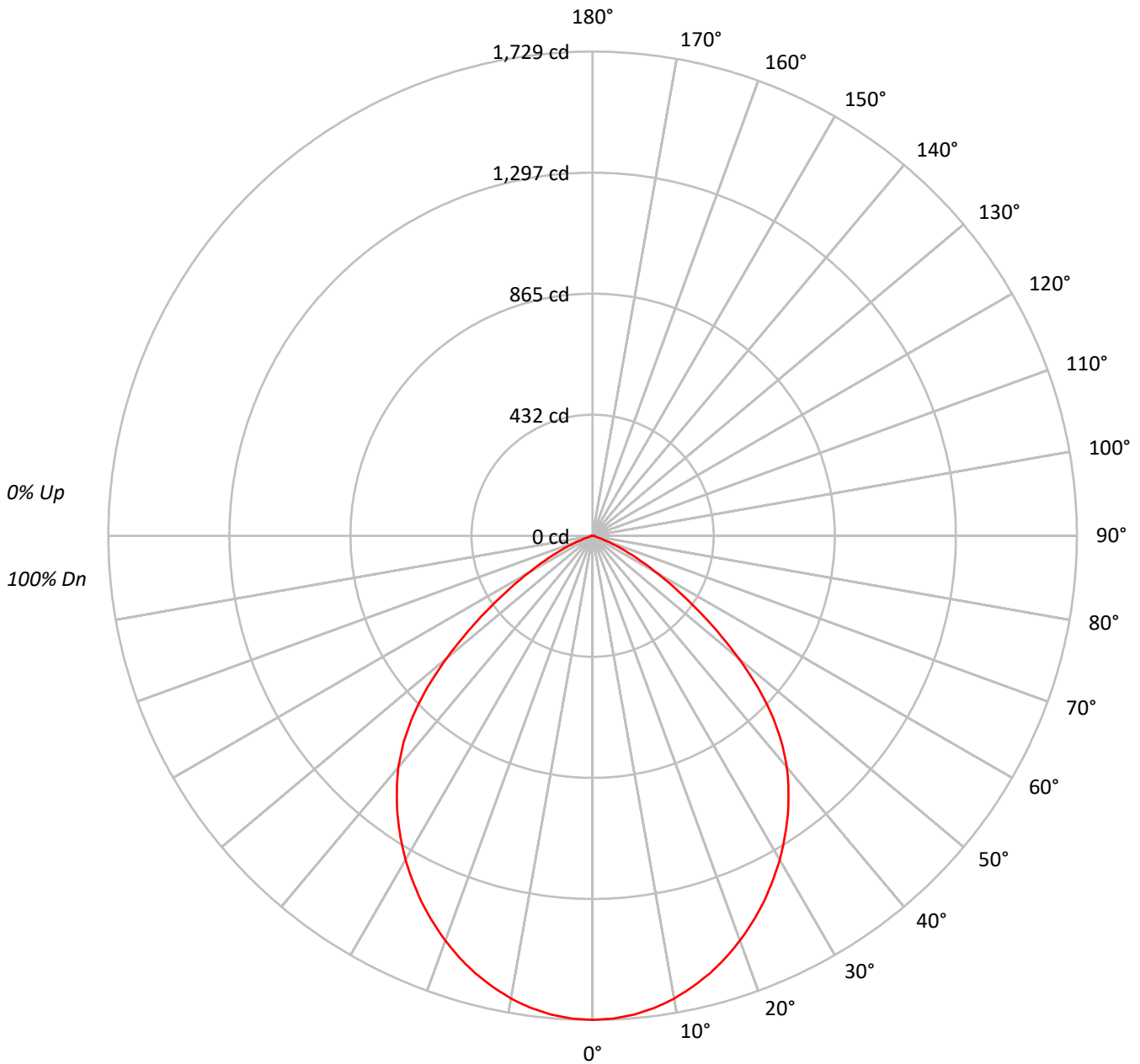
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3292.0 lumens  
Efficiency: N/A  
Efficacy: 66.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.25  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 49.6  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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: P840057

CATALOG NUMBER: LDS4C45D010 EU4459030 4LBCSMMS

### Luminous Intensity Polar Plot





TEST NUMBER: P840057

CATALOG NUMBER: LDS4C45D010 EU4459030 4LBCSMMS

**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   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 92  | 90  |    |    |   |
| 2   | 104 | 97  | 92  | 88  | 101 | 96  | 91  | 87  | 92  | 88  | 85  | 89  | 86  | 83  | 86  | 83  | 81  | 79  |    |    |   |
| 3   | 96  | 88  | 81  | 76  | 94  | 86  | 80  | 75  | 83  | 78  | 74  | 81  | 76  | 73  | 78  | 75  | 72  | 70  |    |    |   |
| 4   | 89  | 79  | 72  | 66  | 87  | 78  | 71  | 66  | 76  | 70  | 65  | 73  | 68  | 64  | 71  | 67  | 63  | 62  |    |    |   |
| 5   | 83  | 72  | 64  | 59  | 81  | 71  | 64  | 58  | 69  | 63  | 58  | 67  | 61  | 57  | 65  | 60  | 57  | 55  |    |    |   |
| 6   | 77  | 66  | 58  | 52  | 75  | 65  | 57  | 52  | 63  | 56  | 52  | 61  | 56  | 51  | 60  | 55  | 51  | 49  |    |    |   |
| 7   | 72  | 60  | 52  | 47  | 70  | 59  | 52  | 47  | 58  | 51  | 46  | 56  | 50  | 46  | 55  | 50  | 46  | 44  |    |    |   |
| 8   | 67  | 55  | 47  | 42  | 66  | 54  | 47  | 42  | 53  | 47  | 42  | 52  | 46  | 42  | 51  | 46  | 41  | 40  |    |    |   |
| 9   | 63  | 51  | 43  | 38  | 62  | 50  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 36  |    |    |   |
| 10  | 59  | 47  | 40  | 35  | 58  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 35  | 44  | 39  | 35  | 33  |    |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 212365 |
| 5°  | 211634 |
| 10° | 209316 |
| 15° | 205713 |
| 20° | 201101 |
| 25° | 195726 |
| 30° | 189552 |
| 35° | 182251 |
| 40° | 173059 |
| 45° | 157357 |
| 50° | 129908 |
| 55° | 95657  |
| 60° | 64916  |
| 65° | 38023  |
| 70° | 15015  |
| 75° | 3370   |
| 80° | 4386   |
| 85° | 7471   |



TEST NUMBER: P840057

CATALOG NUMBER: LDS4C45D010 EU4459030 4LBCSMMS

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 162.6  | 4.9       |
| 10°-20°   | 455.4  | 13.8      |
| 20°-30°   | 664.3  | 20.2      |
| 30°-40°   | 758.2  | 23.0      |
| 40°-50°   | 689.3  | 20.9      |
| 50°-60°   | 406.6  | 12.4      |
| 60°-70°   | 136.4  | 4.1       |
| 70°-80°   | 14.2   | 0.4       |
| 80°-90°   | 4.9    | 0.1       |
| 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°    | 1282.3 | 39.0      |
| 0°-40°    | 2040.5 | 62.0      |
| 0°-60°    | 3136.4 | 95.3      |
| 0°-90°    | 3292.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3292.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1729 |      |
| 5°  | 1716 | 163  |
| 15° | 1617 | 455  |
| 25° | 1444 | 664  |
| 35° | 1215 | 758  |
| 45° | 906  | 689  |
| 55° | 447  | 407  |
| 65° | 131  | 136  |
| 75° | 7    | 14   |
| 85° | 5    | 5    |
| 90° | 0    |      |



TEST NUMBER: P840057

CATALOG NUMBER: LDS4C45D010 EU4459030 4LBCSMMS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1728.6 |
| 2.5°  | 1725.9 |
| 5°    | 1716.1 |
| 7.5°  | 1700.1 |
| 10°   | 1677.9 |
| 12.5° | 1649.4 |
| 15°   | 1617.4 |
| 17.5° | 1580.0 |
| 20°   | 1538.2 |
| 22.5° | 1492.8 |
| 25°   | 1443.9 |
| 27.5° | 1390.5 |
| 30°   | 1336.2 |
| 32.5° | 1276.6 |
| 35°   | 1215.2 |
| 37.5° | 1148.5 |
| 40°   | 1079.1 |
| 42.5° | 998.2  |
| 45°   | 905.7  |
| 47.5° | 798.9  |
| 50°   | 679.7  |
| 52.5° | 560.5  |
| 55°   | 446.6  |
| 57.5° | 349.6  |
| 60°   | 264.2  |
| 62.5° | 191.3  |
| 65°   | 130.8  |
| 67.5° | 80.1   |
| 70°   | 41.8   |
| 72.5° | 16.0   |
| 75°   | 7.1    |
| 77.5° | 7.1    |
| 80°   | 6.2    |
| 82.5° | 5.3    |
| 85°   | 5.3    |
| 87.5° | 4.4    |
| 90°   | 0.0    |



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°







(END OF REPORT)