

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: P251457

Luminaire Tested: **LD8B70D010 ER8B70950 8LBN0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P251457  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201839)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B70D010 ER8B70950 8LBN0MW  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT  
90 CRI 5000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6393.9 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.85  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

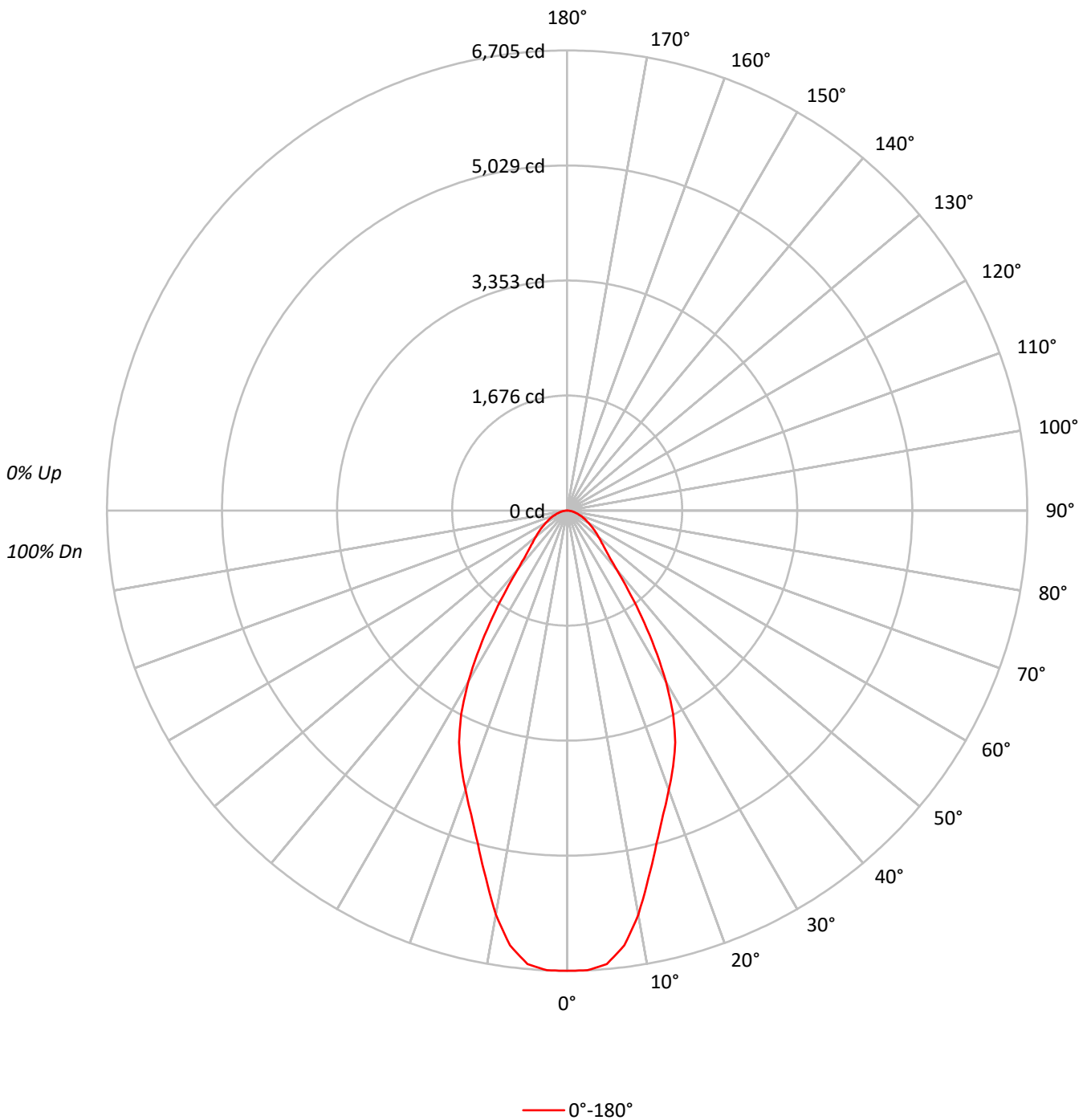
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 | 100 |
| 1   | 112 | 109 | 106 | 103 | 109 | 106 | 104 | 101 | 102 | 100 | 98  |  | 98  | 97  | 95  |  | 95  | 94  | 92  | 90  |
| 2   | 105 | 99  | 94  | 90  | 103 | 97  | 93  | 89  | 94  | 90  | 87  |  | 91  | 88  | 85  |  | 88  | 86  | 83  | 82  |
| 3   | 99  | 91  | 85  | 80  | 96  | 89  | 84  | 79  | 87  | 82  | 78  |  | 84  | 80  | 77  |  | 82  | 78  | 76  | 74  |
| 4   | 93  | 84  | 77  | 72  | 91  | 83  | 76  | 72  | 80  | 75  | 71  |  | 78  | 74  | 70  |  | 76  | 72  | 69  | 67  |
| 5   | 87  | 78  | 71  | 66  | 85  | 77  | 70  | 65  | 75  | 69  | 65  |  | 73  | 68  | 64  |  | 71  | 67  | 64  | 62  |
| 6   | 82  | 72  | 65  | 60  | 81  | 71  | 65  | 60  | 70  | 64  | 60  |  | 68  | 63  | 59  |  | 67  | 62  | 59  | 57  |
| 7   | 78  | 67  | 60  | 56  | 76  | 67  | 60  | 55  | 65  | 59  | 55  |  | 64  | 59  | 55  |  | 63  | 58  | 54  | 53  |
| 8   | 74  | 63  | 56  | 52  | 72  | 62  | 56  | 51  | 61  | 55  | 51  |  | 60  | 55  | 51  |  | 59  | 54  | 51  | 49  |
| 9   | 70  | 59  | 53  | 48  | 69  | 59  | 52  | 48  | 58  | 52  | 48  |  | 57  | 51  | 48  |  | 56  | 51  | 47  | 46  |
| 10  | 66  | 56  | 49  | 45  | 65  | 55  | 49  | 45  | 54  | 49  | 45  |  | 54  | 48  | 45  |  | 53  | 48  | 45  | 43  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 206767 |
| 5°  | 205285 |
| 10° | 187070 |
| 15° | 160348 |
| 20° | 142107 |
| 25° | 126808 |
| 30° | 102412 |
| 35° | 71057  |
| 40° | 45084  |
| 45° | 33492  |
| 50° | 28587  |
| 55° | 25058  |
| 60° | 22424  |
| 65° | 20036  |
| 70° | 17266  |
| 75° | 15882  |
| 80° | 14792  |
| 85° | 13055  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 611.7  | 9.6       |
| 10°-20°   | 1414.8 | 22.1      |
| 20°-30°   | 1682.5 | 26.3      |
| 30°-40°   | 1189.4 | 18.6      |
| 40°-50°   | 614.0  | 9.6       |
| 50°-60°   | 420.9  | 6.6       |
| 60°-70°   | 273.2  | 4.3       |
| 70°-80°   | 143.3  | 2.2       |
| 80°-90°   | 44.0   | 0.7       |
| 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°    | 3709.1 | 58.0      |
| 0°-40°    | 4898.5 | 76.6      |
| 0°-60°    | 5933.4 | 92.8      |
| 0°-90°    | 6393.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6393.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 6705 |      |
| 5°   | 6632 | 612  |
| 15°  | 5023 | 1415 |
| 25°  | 3727 | 1683 |
| 35°  | 1888 | 1189 |
| 45°  | 768  | 614  |
| 55°  | 466  | 421  |
| 65°  | 275  | 273  |
| 75°  | 133  | 143  |
| 85°  | 37   | 41   |
| 90°  | 0    | 3    |
| 95°  | 0    | 0    |
| 105° | 0    | 0    |
| 115° | 0    | 0    |
| 125° | 0    | 0    |
| 135° | 0    | 0    |
| 145° | 0    | 0    |
| 155° | 0    | 0    |
| 165° | 0    | 0    |
| 175° | 0    | 0    |
| 180° | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

| 0°     |        |
|--------|--------|
| 0°     | 6705.3 |
| 2.5°   | 6705.3 |
| 5°     | 6631.9 |
| 7.5°   | 6388.1 |
| 10°    | 5974.4 |
| 12.5°  | 5481.1 |
| 15°    | 5022.8 |
| 17.5°  | 4645.6 |
| 20°    | 4330.5 |
| 22.5°  | 4032.5 |
| 25°    | 3727.0 |
| 27.5°  | 3343.8 |
| 30°    | 2876.2 |
| 32.5°  | 2373.1 |
| 35°    | 1887.6 |
| 37.5°  | 1454.3 |
| 40°    | 1120.0 |
| 42.5°  | 901.3  |
| 45°    | 768.0  |
| 47.5°  | 671.2  |
| 50°    | 595.9  |
| 52.5°  | 529.8  |
| 55°    | 466.1  |
| 57.5°  | 410.0  |
| 60°    | 363.6  |
| 62.5°  | 315.1  |
| 65°    | 274.6  |
| 67.5°  | 237.9  |
| 70°    | 191.5  |
| 72.5°  | 164.5  |
| 75°    | 133.3  |
| 77.5°  | 108.2  |
| 80°    | 83.3   |
| 82.5°  | 62.0   |
| 85°    | 36.9   |
| 87.5°  | 21.3   |
| 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° | 0.0    |
| 110°   | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  |
|--------|-----|
| 112.5° | 0.0 |
| 115°   | 0.0 |
| 117.5° | 0.0 |
| 120°   | 0.0 |
| 122.5° | 0.0 |
| 125°   | 0.0 |
| 127.5° | 0.0 |
| 130°   | 0.0 |
| 132.5° | 0.0 |
| 135°   | 0.0 |
| 137.5° | 0.0 |
| 140°   | 0.0 |
| 142.5° | 0.0 |
| 145°   | 0.0 |
| 147.5° | 0.0 |
| 150°   | 0.0 |
| 152.5° | 0.0 |
| 155°   | 0.0 |
| 157.5° | 0.0 |
| 160°   | 0.0 |
| 162.5° | 0.0 |
| 165°   | 0.0 |
| 167.5° | 0.0 |
| 170°   | 0.0 |
| 172.5° | 0.0 |
| 175°   | 0.0 |
| 177.5° | 0.0 |
| 180°   | 0.0 |

(END OF REPORT)