

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: P250967

Luminaire Tested: **LSR8B70D010 EC8B70840 8LBM0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250967  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27951)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70840 8LBM0H  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7372.0 lumens  
Efficiency: N/A  
Efficacy: 97.1 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.91 / 0.93  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

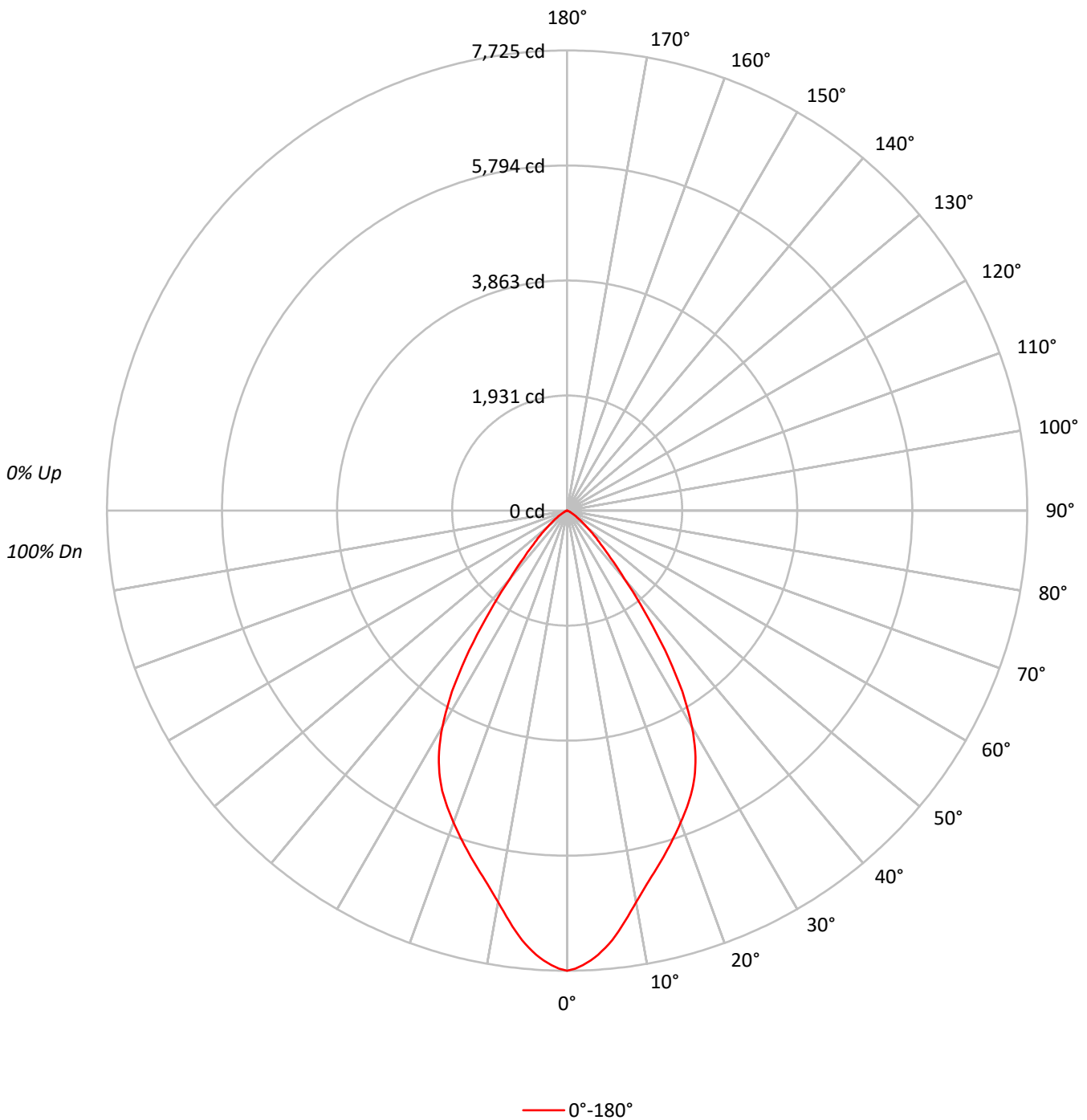
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99  | 97  | 97  | 96  | 95  | 93  |
| 2   | 107 | 102 | 98  | 94  | 105 | 100 | 96  | 93  | 97  | 94  | 91  | 94  | 91  | 89  | 91  | 89  | 87  | 85  |
| 3   | 101 | 94  | 89  | 85  | 99  | 93  | 88  | 84  | 90  | 86  | 83  | 88  | 84  | 82  | 86  | 83  | 80  | 79  |
| 4   | 96  | 88  | 82  | 77  | 94  | 86  | 81  | 77  | 84  | 80  | 76  | 82  | 78  | 75  | 80  | 77  | 74  | 73  |
| 5   | 90  | 82  | 75  | 71  | 89  | 81  | 75  | 70  | 79  | 74  | 70  | 77  | 73  | 69  | 75  | 72  | 69  | 67  |
| 6   | 85  | 76  | 70  | 65  | 84  | 75  | 69  | 65  | 74  | 68  | 64  | 72  | 68  | 64  | 71  | 67  | 64  | 62  |
| 7   | 81  | 71  | 65  | 60  | 80  | 70  | 64  | 60  | 69  | 64  | 60  | 68  | 63  | 59  | 67  | 62  | 59  | 58  |
| 8   | 77  | 67  | 60  | 56  | 75  | 66  | 60  | 56  | 65  | 59  | 56  | 64  | 59  | 55  | 63  | 58  | 55  | 54  |
| 9   | 73  | 63  | 56  | 52  | 72  | 62  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 52  | 59  | 55  | 51  | 50  |
| 10  | 69  | 59  | 53  | 49  | 68  | 58  | 53  | 49  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 48  | 47  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 238207 |
| 5°  | 228104 |
| 10° | 209014 |
| 15° | 194488 |
| 20° | 182926 |
| 25° | 171148 |
| 30° | 149256 |
| 35° | 107873 |
| 40° | 60478  |
| 45° | 34791  |
| 50° | 21290  |
| 55° | 12118  |
| 60° | 6303   |
| 65° | 3210   |
| 70° | 1749   |
| 75° | 1048   |
| 80° | 622    |
| 85° | 637    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 680.4  | 9.2       |
| 10°-20°   | 1712.6 | 23.2      |
| 20°-30°   | 2285.2 | 31.0      |
| 30°-40°   | 1761.4 | 23.9      |
| 40°-50°   | 656.7  | 8.9       |
| 50°-60°   | 214.8  | 2.9       |
| 60°-70°   | 49.5   | 0.7       |
| 70°-80°   | 10.0   | 0.1       |
| 80°-90°   | 1.5    | 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°    | 4678.2 | 63.5      |
| 0°-40°    | 6439.5 | 87.4      |
| 0°-60°    | 7311.0 | 99.2      |
| 0°-90°    | 7372.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7372.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 7725 |      |
| 5°  | 7369 | 680  |
| 15° | 6092 | 1713 |
| 25° | 5030 | 2285 |
| 35° | 2866 | 1761 |
| 45° | 798  | 657  |
| 55° | 225  | 215  |
| 65° | 44   | 50   |
| 75° | 9    | 10   |
| 85° | 2    | 1    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 7724.9 |
| 1°    | 7691.4 |
| 2°    | 7635.1 |
| 3°    | 7562.8 |
| 4°    | 7474.8 |
| 5°    | 7369.1 |
| 6°    | 7249.3 |
| 7°    | 7112.0 |
| 8°    | 6965.8 |
| 9°    | 6814.3 |
| 10°   | 6675.2 |
| 11°   | 6541.3 |
| 12°   | 6416.3 |
| 13°   | 6301.8 |
| 14°   | 6196.1 |
| 15°   | 6092.2 |
| 16°   | 5986.5 |
| 17°   | 5884.4 |
| 18°   | 5778.7 |
| 19°   | 5674.8 |
| 20°   | 5574.4 |
| 21°   | 5470.5 |
| 22°   | 5370.1 |
| 23°   | 5264.4 |
| 24°   | 5153.4 |
| 25°   | 5030.2 |
| 26°   | 4894.5 |
| 27°   | 4744.8 |
| 28°   | 4579.3 |
| 29°   | 4394.3 |
| 30°   | 4191.8 |
| 32.5° | 3598.2 |
| 35°   | 2865.6 |
| 37.5° | 2122.3 |
| 40°   | 1502.4 |
| 42.5° | 1076.1 |
| 45°   | 797.8  |
| 47.5° | 600.6  |
| 50°   | 443.8  |
| 52.5° | 317.0  |
| 55°   | 225.4  |
| 57.5° | 155.0  |
| 60°   | 102.2  |
| 62.5° | 66.9   |
| 65°   | 44.0   |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°   |
|-------|------|
| 67.5° | 29.9 |
| 70°   | 19.4 |
| 72.5° | 12.3 |
| 75°   | 8.8  |
| 77.5° | 5.3  |
| 80°   | 3.5  |
| 82.5° | 1.8  |
| 85°   | 1.8  |
| 87.5° | 0.0  |
| 90°   | 0.0  |

(END OF REPORT)