

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: P250316

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBN0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250316  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13948)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B80D010 EC8B80850 8LBN0GPH  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6872.0 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Spacing Criteria (0/90/45): 0.69 / 0.69 / 0.77  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

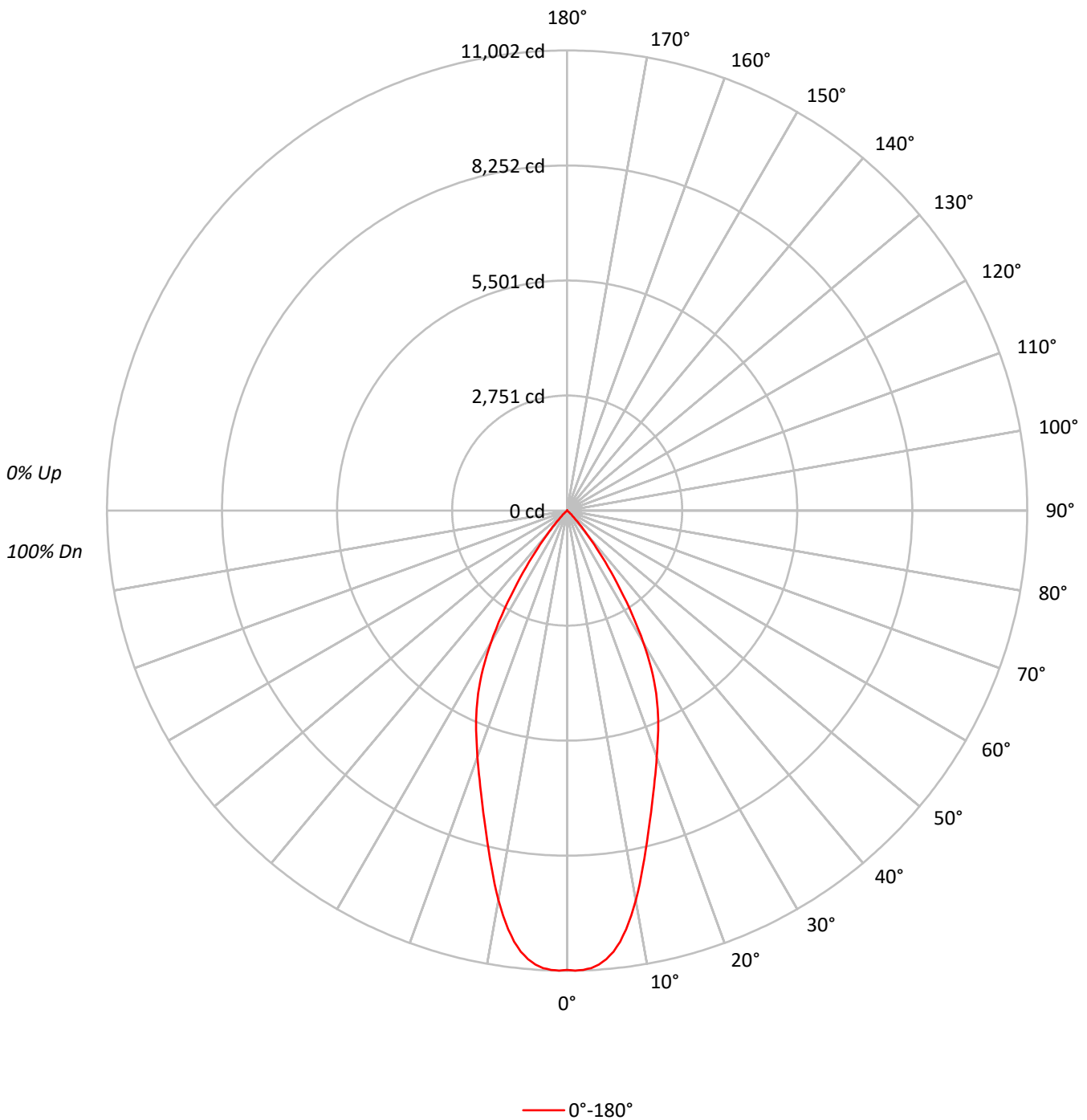
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 114 | 111 | 109 | 107 | 112 | 109 | 107 | 105 | 105 | 104 | 102 |  | 101 | 100 | 99  |  | 98  | 97  | 96  | 94  |
| 2   | 109 | 104 | 101 | 97  | 107 | 103 | 99  | 96  | 99  | 97  | 94  |  | 96  | 94  | 92  |  | 94  | 92  | 90  | 89  |
| 3   | 104 | 98  | 93  | 90  | 102 | 97  | 92  | 89  | 94  | 90  | 88  |  | 92  | 89  | 86  |  | 89  | 87  | 85  | 83  |
| 4   | 99  | 92  | 87  | 83  | 97  | 91  | 86  | 83  | 89  | 85  | 82  |  | 87  | 84  | 81  |  | 85  | 82  | 80  | 78  |
| 5   | 95  | 87  | 82  | 78  | 93  | 86  | 81  | 77  | 84  | 80  | 77  |  | 83  | 79  | 76  |  | 81  | 78  | 75  | 74  |
| 6   | 90  | 82  | 77  | 73  | 89  | 81  | 76  | 72  | 80  | 75  | 72  |  | 79  | 75  | 71  |  | 77  | 74  | 71  | 70  |
| 7   | 86  | 78  | 72  | 68  | 85  | 77  | 72  | 68  | 76  | 71  | 68  |  | 75  | 71  | 67  |  | 74  | 70  | 67  | 66  |
| 8   | 83  | 74  | 68  | 64  | 81  | 73  | 68  | 64  | 72  | 67  | 64  |  | 71  | 67  | 64  |  | 70  | 66  | 63  | 62  |
| 9   | 79  | 70  | 65  | 61  | 78  | 70  | 64  | 61  | 69  | 64  | 61  |  | 68  | 63  | 60  |  | 67  | 63  | 60  | 59  |
| 10  | 76  | 67  | 61  | 58  | 75  | 66  | 61  | 58  | 65  | 61  | 57  |  | 65  | 60  | 57  |  | 64  | 60  | 57  | 56  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 338607 |
| 5°  | 333196 |
| 10° | 296036 |
| 15° | 244207 |
| 20° | 205670 |
| 25° | 173472 |
| 30° | 129886 |
| 35° | 73508  |
| 40° | 29063  |
| 45° | 7802   |
| 50° | 1497   |
| 55° | 0      |
| 60° | 216    |
| 65° | 0      |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 985.7  | 14.3      |
| 10°-20°   | 2142.5 | 31.2      |
| 20°-30°   | 2300.1 | 33.5      |
| 30°-40°   | 1243.2 | 18.1      |
| 40°-50°   | 194.0  | 2.8       |
| 50°-60°   | 5.3    | 0.1       |
| 60°-70°   | 1.3    | 0.0       |
| 70°-80°   | 0.0    | 0.0       |
| 80°-90°   | 0.0    | 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°    | 5428.3 | 79.0      |
| 0°-40°    | 6671.4 | 97.1      |
| 0°-60°    | 6870.7 | 100.0     |
| 0°-90°    | 6872.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6872.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 10981 |      |
| 5°  | 10764 | 986  |
| 15° | 7650  | 2142 |
| 25° | 5098  | 2300 |
| 35° | 1953  | 1243 |
| 45° | 179   | 194  |
| 55° | 0     | 5    |
| 65° | 0     | 1    |
| 75° | 0     | 0    |
| 85° | 0     | 0    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |         |
|-------|---------|
| 0°    | 10980.8 |
| 1°    | 11001.6 |
| 2°    | 10991.3 |
| 3°    | 10953.6 |
| 4°    | 10881.3 |
| 5°    | 10764.2 |
| 6°    | 10603.0 |
| 7°    | 10386.0 |
| 8°    | 10114.5 |
| 9°    | 9802.0  |
| 10°   | 9454.4  |
| 11°   | 9089.9  |
| 12°   | 8711.8  |
| 13°   | 8333.9  |
| 14°   | 7982.9  |
| 15°   | 7649.6  |
| 16°   | 7343.5  |
| 17°   | 7047.8  |
| 18°   | 6772.8  |
| 19°   | 6515.2  |
| 20°   | 6267.5  |
| 21°   | 6026.7  |
| 22°   | 5799.7  |
| 23°   | 5573.1  |
| 24°   | 5335.9  |
| 25°   | 5098.5  |
| 26°   | 4857.7  |
| 27°   | 4582.9  |
| 28°   | 4280.2  |
| 29°   | 3971.1  |
| 30°   | 3647.8  |
| 31°   | 3300.6  |
| 32°   | 2953.1  |
| 33°   | 2609.4  |
| 34°   | 2262.2  |
| 35°   | 1952.7  |
| 37.5° | 1248.0  |
| 40°   | 722.0   |
| 42.5° | 385.2   |
| 45°   | 178.9   |
| 47.5° | 96.5    |
| 50°   | 31.2    |
| 52.5° | 3.5     |
| 55°   | 0.0     |
| 57.5° | 3.5     |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  |
|-------|-----|
| 60°   | 3.5 |
| 62.5° | 0.0 |
| 65°   | 0.0 |
| 67.5° | 3.5 |
| 70°   | 0.0 |
| 72.5° | 0.0 |
| 75°   | 0.0 |
| 77.5° | 0.0 |
| 80°   | 0.0 |
| 82.5° | 0.0 |
| 85°   | 0.0 |
| 87.5° | 0.0 |
| 90°   | 0.0 |

(END OF REPORT)