

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: P246728

Luminaire Tested: **LSR8B20D010 EC8B20940 8LBM0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246728  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201674)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B20D010 EC8B20940 8LBM0MW  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1938.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.93  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

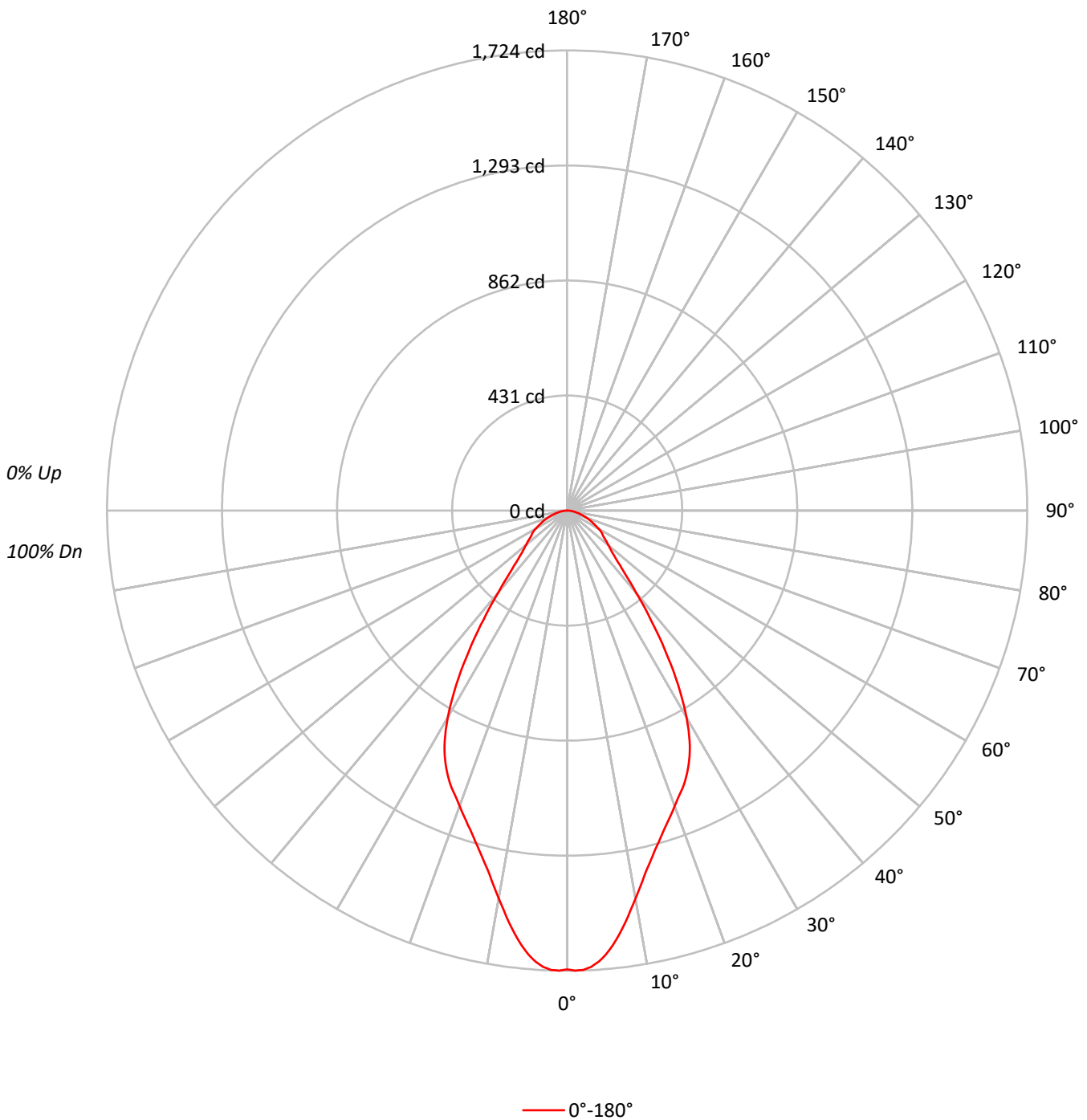
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99  | 97  |  | 98  | 96  | 94  |  | 94  | 93  | 91  | 89  |
| 2   | 104 | 98  | 93  | 88  | 102 | 96  | 91  | 87  | 93  | 89  | 85  |  | 90  | 86  | 83  |  | 87  | 84  | 82  | 80  |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  |  | 82  | 78  | 75  |  | 80  | 76  | 73  | 71  |
| 4   | 91  | 82  | 75  | 69  | 89  | 80  | 74  | 69  | 78  | 72  | 68  |  | 76  | 71  | 67  |  | 74  | 70  | 66  | 65  |
| 5   | 85  | 75  | 68  | 63  | 83  | 74  | 67  | 62  | 72  | 66  | 62  |  | 70  | 65  | 61  |  | 69  | 64  | 60  | 59  |
| 6   | 80  | 69  | 62  | 57  | 78  | 68  | 62  | 57  | 67  | 61  | 56  |  | 65  | 60  | 56  |  | 64  | 59  | 55  | 54  |
| 7   | 75  | 64  | 57  | 52  | 74  | 64  | 57  | 52  | 62  | 56  | 52  |  | 61  | 55  | 51  |  | 60  | 55  | 51  | 49  |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 53  | 48  | 58  | 52  | 48  |  | 57  | 51  | 47  |  | 56  | 51  | 47  | 46  |
| 9   | 67  | 56  | 49  | 44  | 66  | 56  | 49  | 44  | 54  | 48  | 44  |  | 54  | 48  | 44  |  | 53  | 48  | 44  | 42  |
| 10  | 64  | 53  | 46  | 41  | 63  | 52  | 46  | 41  | 51  | 45  | 41  |  | 50  | 45  | 41  |  | 50  | 45  | 41  | 39  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 53014 |
| 5°  | 51669 |
| 10° | 46191 |
| 15° | 41508 |
| 20° | 38656 |
| 25° | 36416 |
| 30° | 31840 |
| 35° | 24126 |
| 40° | 16202 |
| 45° | 11421 |
| 50° | 9686  |
| 55° | 8833  |
| 60° | 8369  |
| 65° | 7530  |
| 70° | 6771  |
| 75° | 6088  |
| 80° | 5363  |
| 85° | 5166  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 152.8  | 7.9       |
| 10°-20°   | 366.7  | 18.9      |
| 20°-30°   | 485.9  | 25.1      |
| 30°-40°   | 398.4  | 20.6      |
| 40°-50°   | 212.2  | 11.0      |
| 50°-60°   | 149.4  | 7.7       |
| 60°-70°   | 103.0  | 5.3       |
| 70°-80°   | 53.6   | 2.8       |
| 80°-90°   | 15.9   | 0.8       |
| 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°    | 1005.4 | 51.9      |
| 0°-40°    | 1403.8 | 72.4      |
| 0°-60°    | 1765.4 | 91.1      |
| 0°-90°    | 1938.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1938.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1719 |      |
| 5°  | 1669 | 153  |
| 15° | 1300 | 367  |
| 25° | 1070 | 486  |
| 35° | 641  | 398  |
| 45° | 262  | 212  |
| 55° | 164  | 149  |
| 65° | 103  | 103  |
| 75° | 51   | 54   |
| 85° | 15   | 16   |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1719.2 |
| 1°    | 1724.0 |
| 2°    | 1722.0 |
| 3°    | 1711.8 |
| 4°    | 1694.3 |
| 5°    | 1669.2 |
| 6°    | 1637.8 |
| 7°    | 1600.2 |
| 8°    | 1559.8 |
| 9°    | 1516.8 |
| 10°   | 1475.2 |
| 11°   | 1435.4 |
| 12°   | 1395.0 |
| 13°   | 1361.3 |
| 14°   | 1329.4 |
| 15°   | 1300.2 |
| 16°   | 1272.8 |
| 17°   | 1247.4 |
| 18°   | 1224.0 |
| 19°   | 1200.5 |
| 20°   | 1178.0 |
| 21°   | 1156.1 |
| 22°   | 1137.0 |
| 23°   | 1117.5 |
| 24°   | 1094.5 |
| 25°   | 1070.3 |
| 26°   | 1042.9 |
| 27°   | 1012.0 |
| 28°   | 977.2  |
| 29°   | 938.6  |
| 30°   | 894.2  |
| 31°   | 847.7  |
| 32°   | 798.9  |
| 33°   | 746.9  |
| 34°   | 694.6  |
| 35°   | 640.9  |
| 37.5° | 513.5  |
| 40°   | 402.5  |
| 42.5° | 317.9  |
| 45°   | 261.9  |
| 47.5° | 224.9  |
| 50°   | 201.9  |
| 52.5° | 181.7  |
| 55°   | 164.3  |
| 57.5° | 153.6  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°    |
|-------|-------|
| 60°   | 135.7 |
| 62.5° | 118.3 |
| 65°   | 103.2 |
| 67.5° | 89.7  |
| 70°   | 75.1  |
| 72.5° | 62.7  |
| 75°   | 51.1  |
| 77.5° | 37.0  |
| 80°   | 30.2  |
| 82.5° | 21.9  |
| 85°   | 14.6  |
| 87.5° | 6.8   |
| 90°   | 0.0   |

(END OF REPORT)