

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: P243986

Luminaire Tested: **LSR8B20D010 EC8B20935 8LBM0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243986  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-11)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B20D010 EC8B20935 8LBM0LI  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1928.0 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Spacing Criteria (0/90/45): 0.63 / 0.63 / 0.72  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

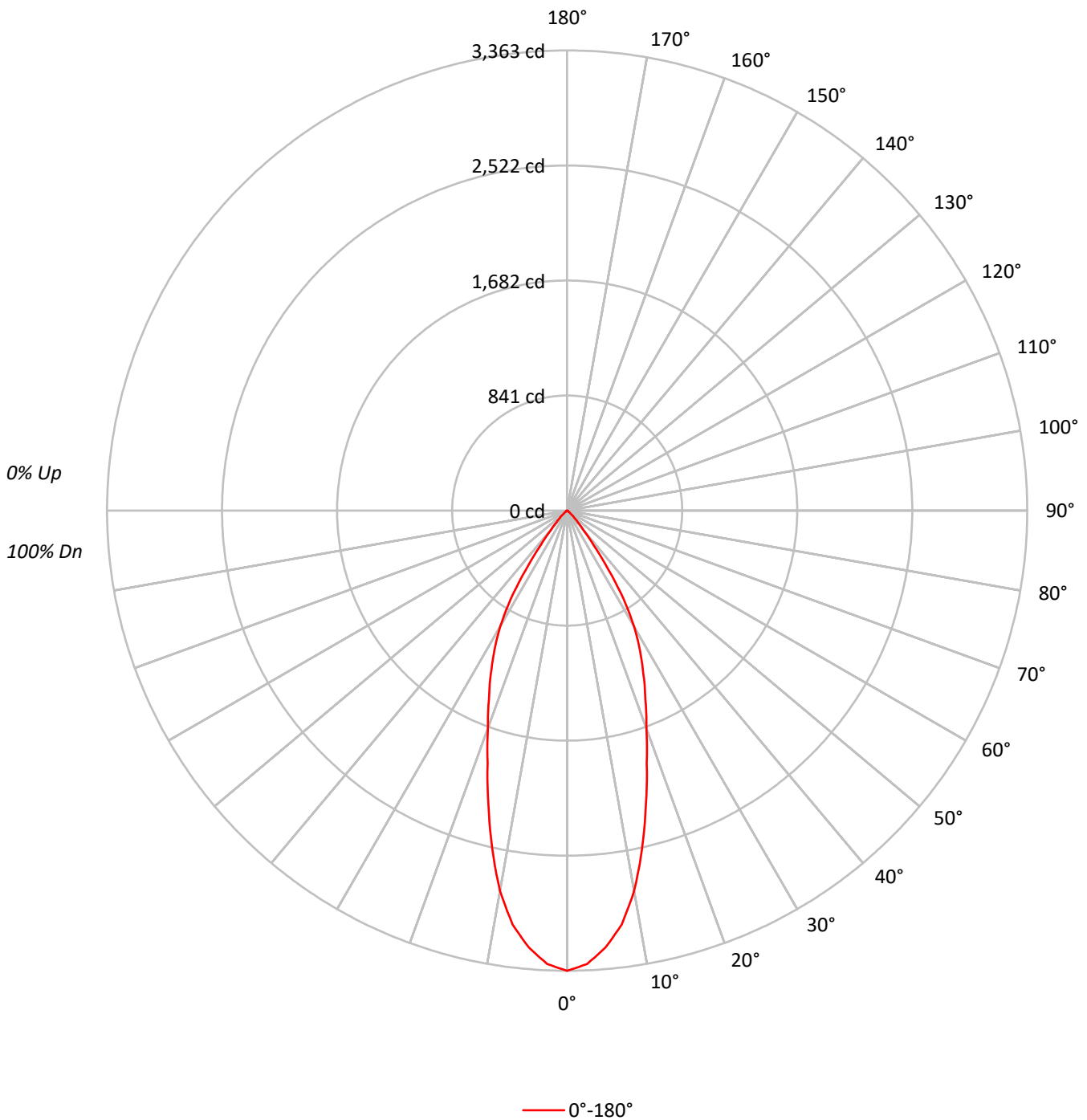
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 114 | 111 | 109 | 107 | 111 | 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  | 73  | 80  | 75  | 72  |  | 79  | 75  | 72  |  | 77  | 74  | 71  | 70  |
| 7   | 86  | 78  | 72  | 69  | 85  | 77  | 72  | 68  | 76  | 71  | 68  |  | 75  | 71  | 68  |  | 74  | 70  | 67  | 66  |
| 8   | 83  | 74  | 68  | 65  | 82  | 73  | 68  | 65  | 72  | 68  | 64  |  | 71  | 67  | 64  |  | 70  | 67  | 64  | 62  |
| 9   | 79  | 70  | 65  | 61  | 78  | 70  | 65  | 61  | 69  | 64  | 61  |  | 68  | 64  | 61  |  | 67  | 63  | 60  | 59  |
| 10  | 76  | 67  | 62  | 58  | 75  | 67  | 61  | 58  | 66  | 61  | 58  |  | 65  | 61  | 58  |  | 64  | 60  | 58  | 56  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 103715 |
| 5°  | 99257  |
| 10° | 88363  |
| 15° | 70986  |
| 20° | 55599  |
| 25° | 44891  |
| 30° | 34784  |
| 35° | 19812  |
| 40° | 7475   |
| 45° | 3223   |
| 50° | 1295   |
| 55° | 484    |
| 60° | 259    |
| 65° | 175    |
| 70° | 108    |
| 75° | 71     |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 294.3  | 15.3      |
| 10°-20°   | 617.5  | 32.0      |
| 20°-30°   | 604.2  | 31.3      |
| 30°-40°   | 334.3  | 17.3      |
| 40°-50°   | 64.7   | 3.4       |
| 50°-60°   | 9.9    | 0.5       |
| 60°-70°   | 2.4    | 0.1       |
| 70°-80°   | 0.6    | 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°    | 1516.0 | 78.6      |
| 0°-40°    | 1850.3 | 96.0      |
| 0°-60°    | 1924.9 | 99.8      |
| 0°-90°    | 1928.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1928.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3363 |      |
| 5°  | 3207 | 294  |
| 15° | 2224 | 617  |
| 25° | 1319 | 604  |
| 35° | 526  | 334  |
| 45° | 74   | 65   |
| 55° | 9    | 10   |
| 65° | 2    | 2    |
| 75° | 1    | 1    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3363.4 |
| 2.5°  | 3317.1 |
| 5°    | 3206.6 |
| 7.5°  | 3051.5 |
| 10°   | 2822.0 |
| 12.5° | 2531.8 |
| 15°   | 2223.6 |
| 17.5° | 1934.6 |
| 20°   | 1694.3 |
| 22.5° | 1495.4 |
| 25°   | 1319.4 |
| 27.5° | 1153.6 |
| 30°   | 976.9  |
| 32.5° | 769.6  |
| 35°   | 526.3  |
| 37.5° | 316.6  |
| 40°   | 185.7  |
| 42.5° | 116.0  |
| 45°   | 73.9   |
| 47.5° | 46.3   |
| 50°   | 27.0   |
| 52.5° | 15.0   |
| 55°   | 9.0    |
| 57.5° | 5.4    |
| 60°   | 4.2    |
| 62.5° | 3.0    |
| 65°   | 2.4    |
| 67.5° | 1.8    |
| 70°   | 1.2    |
| 72.5° | 0.6    |
| 75°   | 0.6    |
| 77.5° | 0.6    |
| 80°   | 0.0    |
| 82.5° | 0.0    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |

(END OF REPORT)