

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: P246674

Luminaire Tested: **LSR8B20D010 EC8B20930 8LBN0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246674  
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: LSR8B20D010 EC8B20930 8LBN0MW  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1695.0 lumens  
Efficiency: N/A  
Efficacy: 79.6 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.85  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

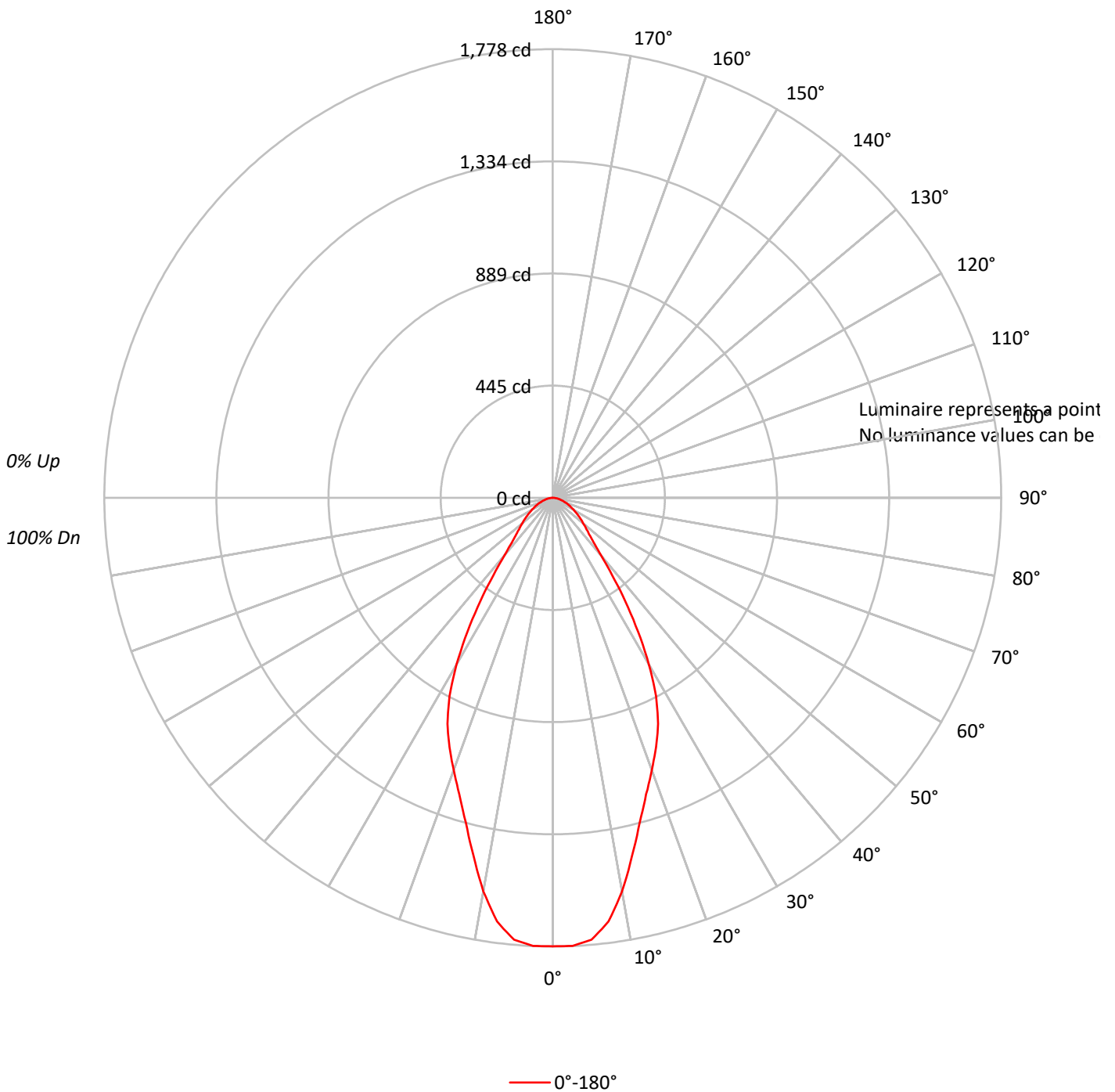
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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):**





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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 162.2  | 9.6       |
| 10°-20°   | 375.0  | 22.1      |
| 20°-30°   | 446.0  | 26.3      |
| 30°-40°   | 315.3  | 18.6      |
| 40°-50°   | 162.8  | 9.6       |
| 50°-60°   | 111.6  | 6.6       |
| 60°-70°   | 72.4   | 4.3       |
| 70°-80°   | 38.0   | 2.2       |
| 80°-90°   | 11.7   | 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°    | 983.2  | 58.0      |
| 0°-40°    | 1298.5 | 76.6      |
| 0°-60°    | 1572.9 | 92.8      |
| 0°-90°    | 1695.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1695.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 1778 |      |
| 5°   | 1758 | 162  |
| 15°  | 1331 | 375  |
| 25°  | 988  | 446  |
| 35°  | 500  | 315  |
| 45°  | 204  | 163  |
| 55°  | 124  | 112  |
| 65°  | 73   | 72   |
| 75°  | 35   | 38   |
| 85°  | 10   | 11   |
| 90°  | 0    | 1    |
| 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°     | 1777.5 |
| 2.5°   | 1777.5 |
| 5°     | 1758.1 |
| 7.5°   | 1693.4 |
| 10°    | 1583.7 |
| 12.5°  | 1452.9 |
| 15°    | 1331.4 |
| 17.5°  | 1231.5 |
| 20°    | 1147.9 |
| 22.5°  | 1069.0 |
| 25°    | 987.9  |
| 27.5°  | 886.4  |
| 30°    | 762.4  |
| 32.5°  | 629.1  |
| 35°    | 500.4  |
| 37.5°  | 385.5  |
| 40°    | 297.0  |
| 42.5°  | 238.9  |
| 45°    | 203.6  |
| 47.5°  | 177.9  |
| 50°    | 157.9  |
| 52.5°  | 140.5  |
| 55°    | 123.5  |
| 57.5°  | 108.7  |
| 60°    | 96.4   |
| 62.5°  | 83.5   |
| 65°    | 72.8   |
| 67.5°  | 63.1   |
| 70°    | 50.8   |
| 72.5°  | 43.6   |
| 75°    | 35.3   |
| 77.5°  | 28.7   |
| 80°    | 22.1   |
| 82.5°  | 16.5   |
| 85°    | 9.8    |
| 87.5°  | 5.6    |
| 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)