

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: P247352

Luminaire Tested: **LSR8B100D010 EC8B100850 8LBS0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247352  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-84)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B100D010 EC8B100850 8LBS0WMH  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11802.0 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.2 / 1.23  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

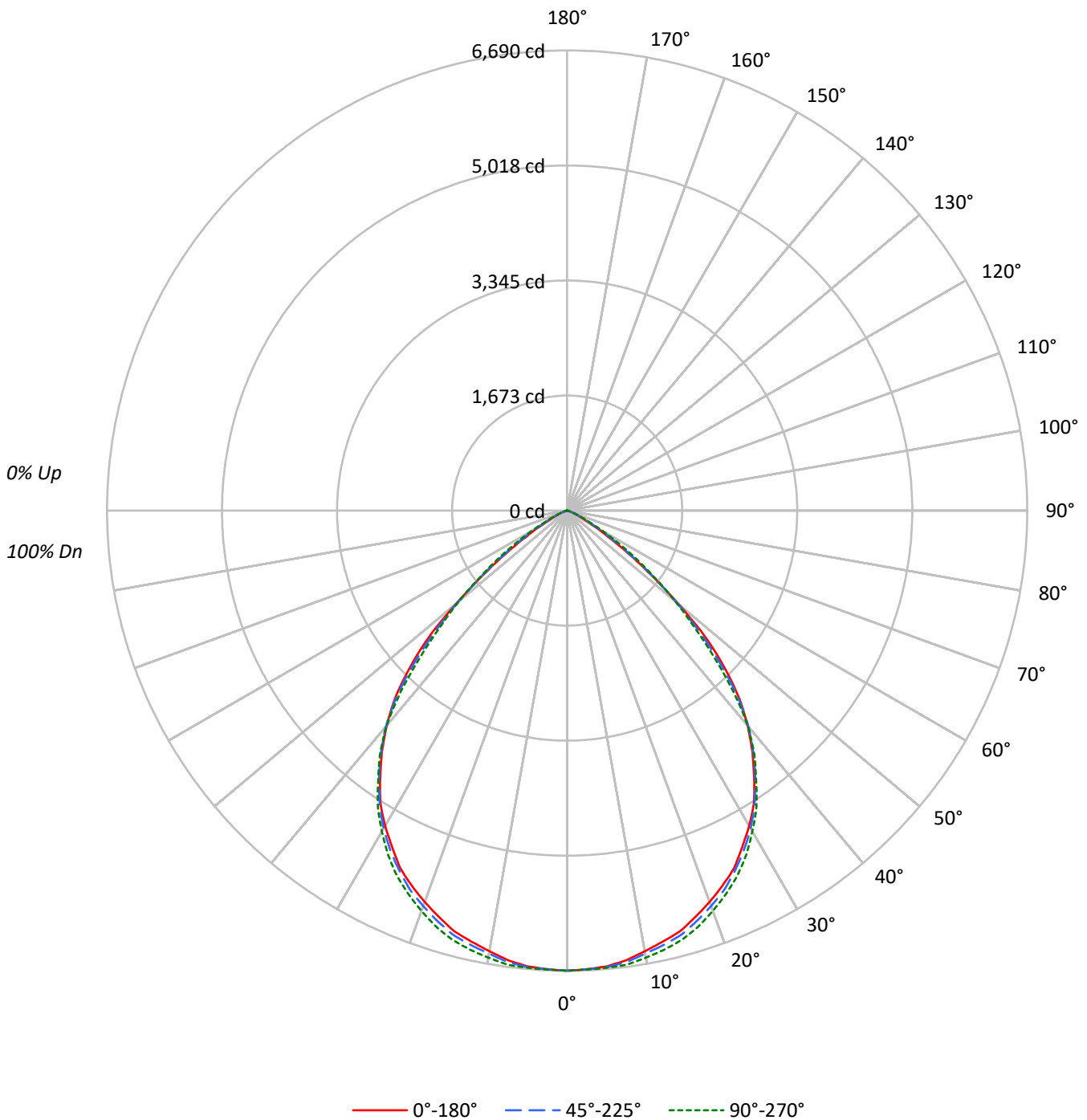
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 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 |    |    |    |    | 100 |   |  |   |
| 1   | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 101 | 102 | 100 | 98  | 99  | 97  | 95  | 95  | 94  | 92  | 91  |    |    |    |    | 91  |   |  |   |
| 2   | 105 | 99  | 94  | 89  | 102 | 97  | 92  | 88  | 94  | 90  | 86  | 90  | 87  | 85  | 88  | 85  | 83  | 81  |    |    |    |    | 81  |   |  |   |
| 3   | 98  | 90  | 83  | 78  | 95  | 88  | 82  | 78  | 85  | 80  | 76  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |    |    |    |    | 72  |   |  |   |
| 4   | 91  | 81  | 75  | 69  | 89  | 80  | 74  | 69  | 78  | 72  | 68  | 76  | 71  | 67  | 74  | 70  | 66  | 64  |    |    |    |    | 64  |   |  |   |
| 5   | 85  | 74  | 67  | 62  | 83  | 73  | 66  | 61  | 71  | 65  | 61  | 70  | 64  | 60  | 68  | 63  | 60  | 58  |    |    |    |    | 58  |   |  |   |
| 6   | 79  | 68  | 61  | 55  | 77  | 67  | 60  | 55  | 65  | 59  | 55  | 64  | 58  | 54  | 62  | 58  | 54  | 52  |    |    |    |    | 52  |   |  |   |
| 7   | 74  | 62  | 55  | 50  | 72  | 62  | 55  | 50  | 60  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 47  |    |    |    |    | 47  |   |  |   |
| 8   | 69  | 58  | 50  | 45  | 68  | 57  | 50  | 45  | 56  | 49  | 45  | 55  | 49  | 45  | 54  | 48  | 44  | 43  |    |    |    |    | 43  |   |  |   |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 39  |    |    |    |    | 39  |   |  |   |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 46  | 41  | 37  | 36  |    |    |    |    | 36  |   |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 206283 | 206283 | 206283 |
| 5°  | 205848 | 206173 | 206538 |
| 10° | 203653 | 204846 | 206659 |
| 15° | 202210 | 203976 | 206163 |
| 20° | 198700 | 200774 | 203235 |
| 25° | 195271 | 196523 | 199255 |
| 30° | 188513 | 190012 | 191792 |
| 35° | 178388 | 179476 | 180417 |
| 40° | 164260 | 165053 | 164631 |
| 45° | 141616 | 137883 | 132371 |
| 50° | 101098 | 99582  | 98383  |
| 55° | 58030  | 61498  | 66594  |
| 60° | 27518  | 32230  | 37263  |
| 65° | 12966  | 15658  | 17964  |
| 70° | 6050   | 6762   | 7718   |
| 75° | 2824   | 4075   | 4706   |
| 80° | 2344   | 2095   | 3267   |
| 85° | 920    | 2335   | 1380   |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 632.1   | 5.4       |
| 10°-20°   | 1798.6  | 15.2      |
| 20°-30°   | 2657.1  | 22.5      |
| 30°-40°   | 2969.2  | 25.2      |
| 40°-50°   | 2397.1  | 20.3      |
| 50°-60°   | 1066.2  | 9.0       |
| 60°-70°   | 240.2   | 2.0       |
| 70°-80°   | 37.1    | 0.3       |
| 80°-90°   | 4.4     | 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°    | 5087.8  | 43.1      |
| 0°-40°    | 8057.0  | 68.3      |
| 0°-60°    | 11520.3 | 97.6      |
| 0°-90°    | 11802.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 11802.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 6690 | 6690  | 6690 | 6690  | 6690 |      |
| 5°  | 6650 | 6649  | 6661 | 6662  | 6672 | 630  |
| 15° | 6334 | 6338  | 6389 | 6437  | 6458 | 1781 |
| 25° | 5739 | 5739  | 5776 | 5823  | 5856 | 2631 |
| 35° | 4739 | 4736  | 4768 | 4773  | 4793 | 2954 |
| 45° | 3247 | 3222  | 3162 | 3050  | 3035 | 2455 |
| 55° | 1079 | 1095  | 1144 | 1203  | 1239 | 1015 |
| 65° | 178  | 200   | 215  | 233   | 246  | 207  |
| 75° | 24   | 33    | 34   | 33    | 40   | 31   |
| 85° | 3    | 4     | 7    | 14    | 4    | 2    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 6689.6 | 6689.6 | 6689.6 | 6689.6 | 6689.6 |
| 2.5°  | 6672.4 | 6668.5 | 6675.1 | 6671.1 | 6677.7 |
| 5°    | 6650.1 | 6648.7 | 6660.6 | 6661.9 | 6672.4 |
| 7.5°  | 6592.1 | 6593.5 | 6618.5 | 6636.9 | 6658.0 |
| 10°   | 6504.0 | 6509.2 | 6542.1 | 6582.9 | 6600.0 |
| 12.5° | 6419.7 | 6426.3 | 6468.4 | 6525.0 | 6538.2 |
| 15°   | 6334.1 | 6338.1 | 6389.4 | 6436.8 | 6457.9 |
| 17.5° | 6194.6 | 6220.9 | 6260.4 | 6314.4 | 6342.0 |
| 20°   | 6055.1 | 6073.5 | 6118.3 | 6177.5 | 6193.3 |
| 22.5° | 5902.4 | 5922.1 | 5966.9 | 6015.6 | 6032.7 |
| 25°   | 5739.2 | 5739.2 | 5776.0 | 5823.4 | 5856.3 |
| 27.5° | 5511.4 | 5539.1 | 5565.4 | 5607.5 | 5640.4 |
| 30°   | 5294.3 | 5304.8 | 5336.4 | 5370.6 | 5386.4 |
| 32.5° | 5053.4 | 5054.7 | 5069.2 | 5107.3 | 5121.8 |
| 35°   | 4738.8 | 4736.1 | 4767.7 | 4773.0 | 4792.7 |
| 37.5° | 4424.2 | 4437.3 | 4449.2 | 4467.6 | 4468.9 |
| 40°   | 4080.6 | 4087.2 | 4100.3 | 4080.6 | 4089.8 |
| 42.5° | 3706.8 | 3697.6 | 3672.5 | 3613.3 | 3588.3 |
| 45°   | 3247.4 | 3222.4 | 3161.8 | 3049.9 | 3035.4 |
| 47.5° | 2740.6 | 2678.7 | 2605.0 | 2522.1 | 2506.3 |
| 50°   | 2107.4 | 2112.7 | 2075.8 | 2048.2 | 2050.8 |
| 52.5° | 1536.1 | 1554.6 | 1563.8 | 1590.1 | 1604.6 |
| 55°   | 1079.4 | 1095.2 | 1143.9 | 1203.1 | 1238.7 |
| 57.5° | 699.0  | 729.2  | 792.4  | 859.6  | 884.6  |
| 60°   | 446.2  | 466.0  | 522.6  | 571.3  | 604.2  |
| 62.5° | 292.2  | 298.8  | 330.4  | 375.2  | 376.5  |
| 65°   | 177.7  | 200.1  | 214.6  | 233.0  | 246.2  |
| 67.5° | 115.8  | 115.8  | 129.0  | 146.1  | 150.1  |
| 70°   | 67.1   | 68.4   | 75.0   | 81.6   | 85.6   |
| 72.5° | 36.9   | 40.8   | 44.8   | 51.3   | 57.9   |
| 75°   | 23.7   | 32.9   | 34.2   | 32.9   | 39.5   |
| 77.5° | 15.8   | 15.8   | 13.2   | 22.4   | 23.7   |
| 80°   | 13.2   | 9.2    | 11.8   | 17.1   | 18.4   |
| 82.5° | 0.0    | 1.3    | 1.3    | 2.6    | 0.0    |
| 85°   | 2.6    | 3.9    | 6.6    | 14.5   | 3.9    |
| 87.5° | 0.0    | 3.9    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)