

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: P247711

Luminaire Tested: **LSR8B90D010 EC8B909727 8LBW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-63)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B90D010 EC8B909727 8LBW0MW  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6788.0 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.09 / 1.05  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

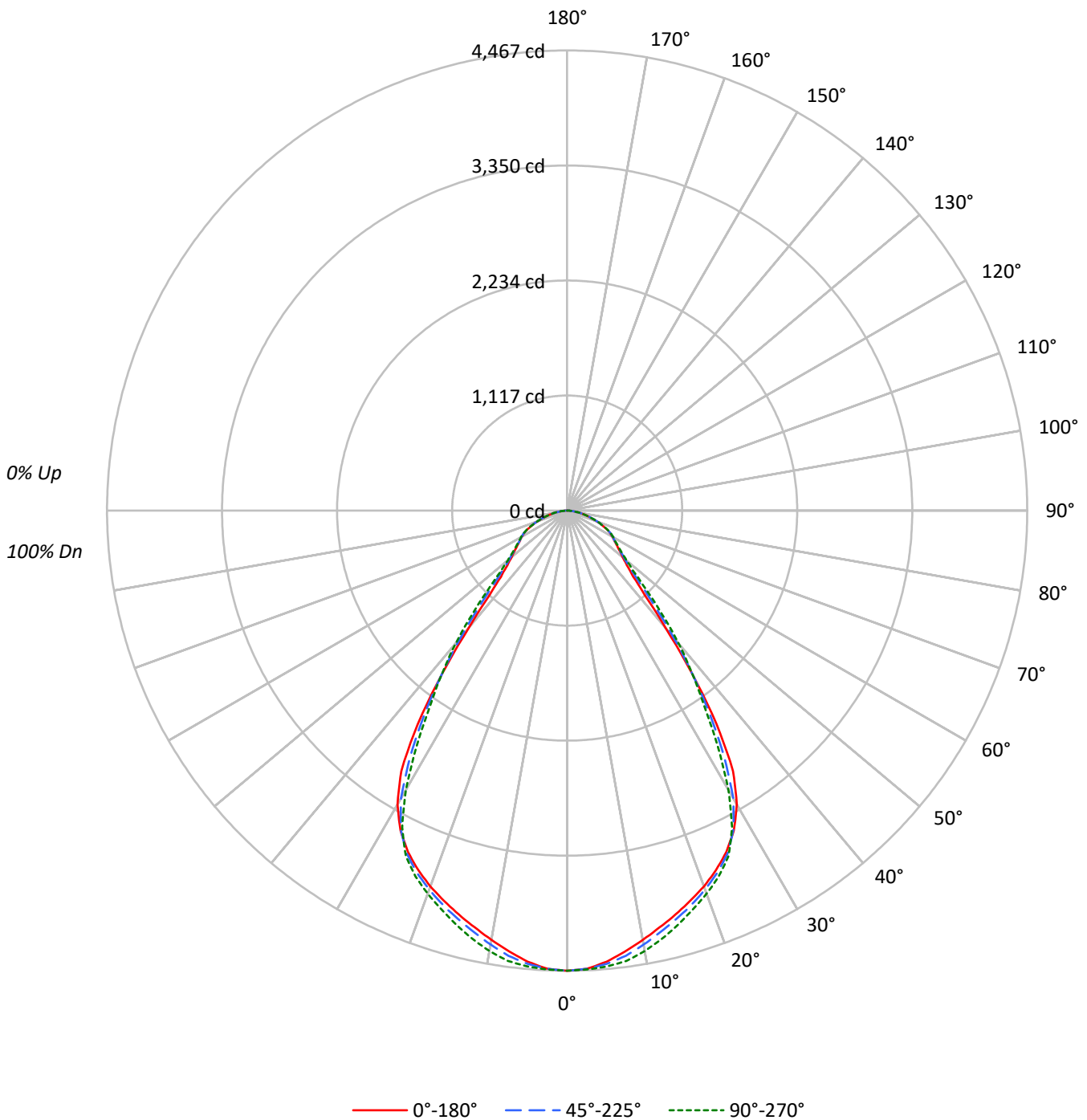
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |     |    |    |  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 |  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |  |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |  |
| 1   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 99  | 101 | 99  | 96  | 97  | 95  | 93  | 94  | 92  | 91  | 89  |    |    |  |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 92  | 88  | 84  | 89  | 85  | 82  | 86  | 83  | 80  | 78  |    |    |  |
| 3   | 96  | 88  | 81  | 76  | 94  | 86  | 80  | 75  | 84  | 78  | 74  | 81  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |  |
| 4   | 90  | 80  | 73  | 67  | 88  | 79  | 72  | 67  | 76  | 71  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 63  |    |    |  |
| 5   | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 59  | 68  | 63  | 59  | 67  | 62  | 58  | 57  |    |    |  |
| 6   | 79  | 67  | 60  | 55  | 77  | 67  | 60  | 54  | 65  | 59  | 54  | 63  | 58  | 54  | 62  | 57  | 53  | 51  |    |    |  |
| 7   | 74  | 62  | 55  | 50  | 72  | 62  | 55  | 50  | 60  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 47  |    |    |  |
| 8   | 69  | 58  | 51  | 46  | 68  | 57  | 50  | 45  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 45  | 43  |    |    |  |
| 9   | 66  | 54  | 47  | 42  | 64  | 53  | 47  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 50  | 45  | 41  | 40  |    |    |  |
| 10  | 62  | 50  | 43  | 39  | 61  | 50  | 43  | 39  | 49  | 43  | 39  | 48  | 42  | 38  | 47  | 42  | 38  | 37  |    |    |  |

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

|     | 0°   | 45° | 90° |
|-----|--|-----|-----|
| 0°  | Luminaire represents a point source (luminous area is zero). |     |     |
| 5°  | No luminance values can be calculated.                       |     |     |
| 10° |  |     |     |
| 15° |  |     |     |
| 20° |  |     |     |
| 25° |  |     |     |
| 30° |  |     |     |
| 35° |  |     |     |
| 40° |  |     |     |
| 45° |  |     |     |
| 50° |  |     |     |
| 55° |  |     |     |
| 60° |  |     |     |
| 65° |  |     |     |
| 70° |  |     |     |
| 75° |  |     |     |
| 80° |  |     |     |
| 85° |  |     |     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 417.4  | 6.1       |
| 10°-20°   | 1158.1 | 17.1      |
| 20°-30°   | 1674.2 | 24.7      |
| 30°-40°   | 1498.3 | 22.1      |
| 40°-50°   | 810.8  | 11.9      |
| 50°-60°   | 540.4  | 8.0       |
| 60°-70°   | 413.9  | 6.1       |
| 70°-80°   | 219.3  | 3.2       |
| 80°-90°   | 55.5   | 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°    | 3249.7 | 47.9      |
| 0°-40°    | 4748.0 | 69.9      |
| 0°-60°    | 6099.3 | 89.9      |
| 0°-90°    | 6788.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6788.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 4467 | 4467  | 4467 | 4467  | 4467 |      |
| 5°  | 4396 | 4398  | 4417 | 4434  | 4442 | 414  |
| 15° | 4060 | 4068  | 4103 | 4143  | 4162 | 1145 |
| 25° | 3656 | 3665  | 3679 | 3696  | 3703 | 1673 |
| 35° | 2529 | 2503  | 2415 | 2346  | 2323 | 1531 |
| 45° | 910  | 936   | 995  | 1057  | 1080 | 749  |
| 55° | 588  | 590   | 596  | 602   | 605  | 532  |
| 65° | 419  | 420   | 424  | 427   | 427  | 411  |
| 75° | 203  | 203   | 206  | 206   | 206  | 218  |
| 85° | 47   | 47    | 47   | 48    | 47   | 56   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 4467.0 | 4467.0 | 4467.0 | 4467.0 | 4467.0 |
| 2.5°  | 4452.1 | 4450.5 | 4451.3 | 4456.0 | 4458.4 |
| 5°    | 4395.6 | 4398.0 | 4416.8 | 4434.0 | 4441.9 |
| 7.5°  | 4316.4 | 4326.6 | 4358.8 | 4392.5 | 4409.7 |
| 10°   | 4231.7 | 4241.9 | 4278.8 | 4326.6 | 4341.5 |
| 12.5° | 4144.7 | 4157.2 | 4190.1 | 4238.8 | 4256.8 |
| 15°   | 4060.0 | 4067.8 | 4103.1 | 4143.1 | 4161.9 |
| 17.5° | 3972.9 | 3980.8 | 4012.9 | 4044.3 | 4059.2 |
| 20°   | 3881.9 | 3890.6 | 3914.9 | 3941.5 | 3958.0 |
| 22.5° | 3777.6 | 3786.3 | 3806.7 | 3830.2 | 3845.1 |
| 25°   | 3656.1 | 3664.7 | 3678.8 | 3696.1 | 3703.1 |
| 27.5° | 3502.4 | 3507.9 | 3494.5 | 3480.4 | 3467.9 |
| 30°   | 3293.8 | 3276.5 | 3223.2 | 3155.0 | 3128.3 |
| 32.5° | 2997.3 | 2941.7 | 2838.9 | 2755.8 | 2725.2 |
| 35°   | 2529.1 | 2503.3 | 2415.4 | 2345.6 | 2322.9 |
| 37.5° | 1983.3 | 2000.6 | 1994.3 | 1989.6 | 1994.3 |
| 40°   | 1479.1 | 1519.1 | 1605.3 | 1664.1 | 1683.0 |
| 42.5° | 1119.9 | 1158.3 | 1255.6 | 1337.1 | 1365.3 |
| 45°   | 909.7  | 936.4  | 995.2  | 1057.1 | 1079.9 |
| 47.5° | 785.0  | 799.9  | 829.7  | 862.7  | 873.6  |
| 50°   | 705.0  | 711.3  | 726.2  | 745.0  | 751.3  |
| 52.5° | 641.5  | 644.6  | 653.3  | 663.5  | 665.0  |
| 55°   | 588.2  | 590.5  | 596.0  | 602.3  | 604.6  |
| 57.5° | 543.5  | 545.8  | 547.4  | 551.3  | 552.9  |
| 60°   | 508.2  | 508.2  | 511.3  | 514.5  | 516.0  |
| 62.5° | 469.8  | 469.8  | 472.9  | 476.0  | 476.0  |
| 65°   | 418.8  | 420.3  | 423.5  | 426.6  | 426.6  |
| 67.5° | 363.1  | 363.9  | 366.2  | 369.4  | 368.6  |
| 70°   | 307.4  | 307.4  | 309.8  | 311.3  | 312.1  |
| 72.5° | 254.1  | 253.3  | 257.2  | 258.0  | 255.7  |
| 75°   | 203.1  | 203.1  | 205.5  | 206.3  | 206.3  |
| 77.5° | 158.4  | 157.6  | 157.6  | 158.4  | 159.2  |
| 80°   | 116.1  | 116.9  | 116.1  | 117.6  | 119.2  |
| 82.5° | 80.8   | 80.0   | 80.0   | 80.0   | 79.2   |
| 85°   | 47.1   | 47.1   | 47.1   | 47.8   | 47.1   |
| 87.5° | 18.8   | 18.8   | 18.0   | 18.0   | 17.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)