

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: P247143

Luminaire Tested: **LD8B90D010 ER8B90827 8LBW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247143  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-58)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B90D010 ER8B90827 8LBW0H  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT  
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8912.0 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.13 / 1.06  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

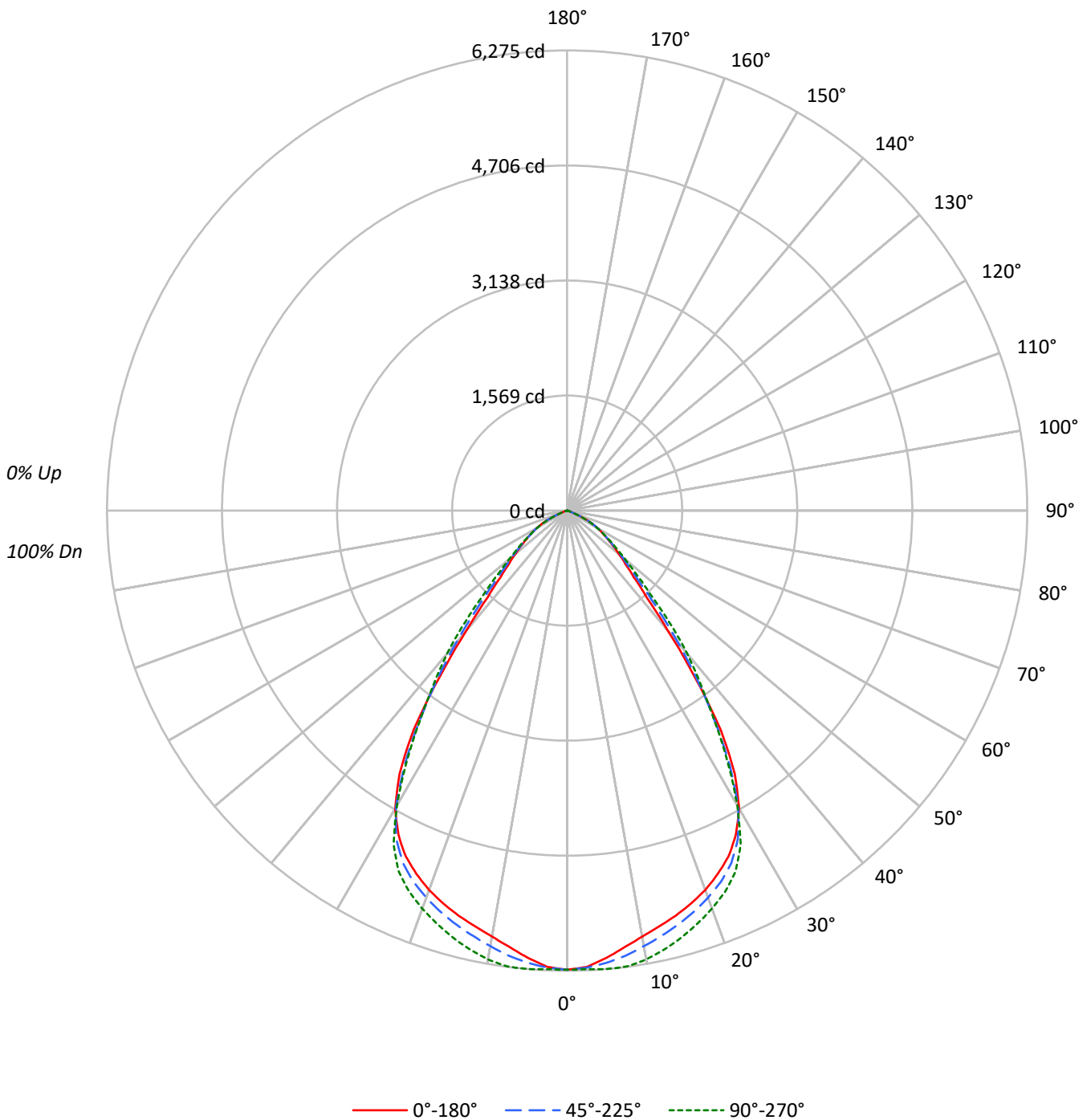
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 |    |     |   |  | 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 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 96  | 94  | 93  | 91  |    |    |    |    | 91  |   |  |   |
| 2   | 106 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 86  | 84  | 82  |    |    |    |    | 82  |   |  |   |
| 3   | 99  | 91  | 85  | 81  | 97  | 90  | 84  | 80  | 87  | 82  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |    |    | 74  |   |  |   |
| 4   | 93  | 84  | 77  | 72  | 91  | 82  | 76  | 72  | 80  | 75  | 71  | 78  | 74  | 70  | 76  | 72  | 69  | 67  |    |    |    |    | 67  |   |  |   |
| 5   | 87  | 77  | 70  | 65  | 85  | 76  | 69  | 65  | 74  | 68  | 64  | 72  | 67  | 63  | 71  | 66  | 63  | 61  |    |    |    |    | 61  |   |  |   |
| 6   | 81  | 71  | 64  | 59  | 80  | 70  | 64  | 59  | 69  | 63  | 58  | 67  | 62  | 58  | 66  | 61  | 57  | 56  |    |    |    |    | 56  |   |  |   |
| 7   | 77  | 66  | 59  | 54  | 75  | 65  | 58  | 54  | 64  | 58  | 53  | 62  | 57  | 53  | 61  | 56  | 53  | 51  |    |    |    |    | 51  |   |  |   |
| 8   | 72  | 61  | 54  | 49  | 71  | 60  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 57  | 52  | 49  | 47  |    |    |    |    | 47  |   |  |   |
| 9   | 68  | 57  | 50  | 45  | 67  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 45  | 53  | 48  | 45  | 43  |    |    |    |    | 43  |   |  |   |
| 10  | 64  | 53  | 47  | 42  | 63  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 50  | 45  | 42  | 40  |    |    |    |    | 40  |   |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 193069 | 193069 | 193069 |
| 5°  | 189523 | 191581 | 194231 |
| 10° | 184666 | 188868 | 194592 |
| 15° | 182574 | 186587 | 192391 |
| 20° | 180665 | 184307 | 189577 |
| 25° | 177109 | 180311 | 184839 |
| 30° | 166985 | 166233 | 165219 |
| 35° | 137360 | 132624 | 131868 |
| 40° | 86011  | 94899  | 102599 |
| 45° | 56129  | 62579  | 69356  |
| 50° | 44255  | 46385  | 49426  |
| 55° | 36074  | 36698  | 37837  |
| 60° | 29523  | 29325  | 29196  |
| 65° | 19124  | 18584  | 17577  |
| 70° | 6573   | 6095   | 5617   |
| 75° | 2264   | 2145   | 2014   |
| 80° | 941    | 746    | 746    |
| 85° | 389    | 389    | 389    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 586.5  | 6.6       |
| 10°-20°   | 1652.5 | 18.5      |
| 20°-30°   | 2416.8 | 27.1      |
| 30°-40°   | 2189.9 | 24.6      |
| 40°-50°   | 1164.4 | 13.1      |
| 50°-60°   | 621.5  | 7.0       |
| 60°-70°   | 253.5  | 2.8       |
| 70°-80°   | 25.6   | 0.3       |
| 80°-90°   | 1.5    | 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°    | 4655.7 | 52.2      |
| 0°-40°    | 6845.6 | 76.8      |
| 0°-60°    | 8631.5 | 96.9      |
| 0°-90°    | 8912.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 8912.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 6261 | 6261  | 6261 | 6261  | 6261 |      |
| 5°  | 6123 | 6138  | 6189 | 6245  | 6275 | 577  |
| 15° | 5719 | 5752  | 5845 | 5965  | 6026 | 1613 |
| 25° | 5205 | 5228  | 5300 | 5390  | 5433 | 2379 |
| 35° | 3649 | 3598  | 3523 | 3497  | 3503 | 2193 |
| 45° | 1287 | 1325  | 1435 | 1549  | 1590 | 1053 |
| 55° | 671  | 670   | 683  | 692   | 704  | 608  |
| 65° | 262  | 261   | 255  | 240   | 241  | 261  |
| 75° | 19   | 19    | 18   | 17    | 17   | 27   |
| 85° | 1    | 1     | 1    | 1     | 1    | 2    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 6261.1 | 6261.1 | 6261.1 | 6261.1 | 6261.1 |
| 2.5°  | 6227.3 | 6226.2 | 6237.8 | 6251.6 | 6259.0 |
| 5°    | 6122.7 | 6138.5 | 6189.2 | 6245.2 | 6274.8 |
| 7.5°  | 6004.3 | 6033.9 | 6121.6 | 6217.8 | 6269.5 |
| 10°   | 5897.6 | 5935.6 | 6031.8 | 6157.5 | 6214.6 |
| 12.5° | 5805.6 | 5842.6 | 5939.8 | 6068.8 | 6131.1 |
| 15°   | 5719.0 | 5751.7 | 5844.7 | 5965.2 | 6026.5 |
| 17.5° | 5618.6 | 5650.3 | 5740.1 | 5854.2 | 5907.1 |
| 20°   | 5505.5 | 5531.9 | 5616.5 | 5723.2 | 5777.1 |
| 22.5° | 5365.0 | 5393.5 | 5479.1 | 5577.4 | 5628.1 |
| 25°   | 5205.4 | 5227.6 | 5299.5 | 5390.3 | 5432.6 |
| 27.5° | 4983.5 | 5003.6 | 5045.9 | 5094.5 | 5126.2 |
| 30°   | 4689.7 | 4684.5 | 4668.6 | 4653.8 | 4640.1 |
| 32.5° | 4256.5 | 4205.8 | 4128.6 | 4080.0 | 4082.1 |
| 35°   | 3648.9 | 3598.1 | 3523.1 | 3496.7 | 3503.0 |
| 37.5° | 2851.0 | 2889.1 | 2919.7 | 2970.4 | 2994.8 |
| 40°   | 2136.7 | 2202.2 | 2357.5 | 2492.8 | 2548.8 |
| 42.5° | 1606.2 | 1670.7 | 1833.4 | 1976.1 | 2053.2 |
| 45°   | 1287.1 | 1325.1 | 1435.0 | 1549.2 | 1590.4 |
| 47.5° | 1077.9 | 1094.8 | 1158.2 | 1231.1 | 1267.0 |
| 50°   | 922.5  | 933.1  | 966.9  | 1007.1 | 1030.3 |
| 52.5° | 790.4  | 794.7  | 811.6  | 834.8  | 849.6  |
| 55°   | 671.0  | 670.0  | 682.6  | 692.2  | 703.8  |
| 57.5° | 567.5  | 566.4  | 566.4  | 569.6  | 577.0  |
| 60°   | 478.7  | 475.5  | 475.5  | 471.3  | 473.4  |
| 62.5° | 389.9  | 386.8  | 379.4  | 374.1  | 372.0  |
| 65°   | 262.1  | 261.0  | 254.7  | 239.9  | 240.9  |
| 67.5° | 136.3  | 135.3  | 128.9  | 124.7  | 122.6  |
| 70°   | 72.9   | 70.8   | 67.6   | 64.5   | 62.3   |
| 72.5° | 37.0   | 35.9   | 34.9   | 32.8   | 32.8   |
| 75°   | 19.0   | 19.0   | 18.0   | 16.9   | 16.9   |
| 77.5° | 9.5    | 9.5    | 8.5    | 8.5    | 8.5    |
| 80°   | 5.3    | 5.3    | 4.2    | 4.2    | 4.2    |
| 82.5° | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    |
| 85°   | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)