

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: P247094

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBSOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247094  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-82)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B80D010 EC8B80827 8LBS0LI  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8820.0 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.31 / 1.25  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

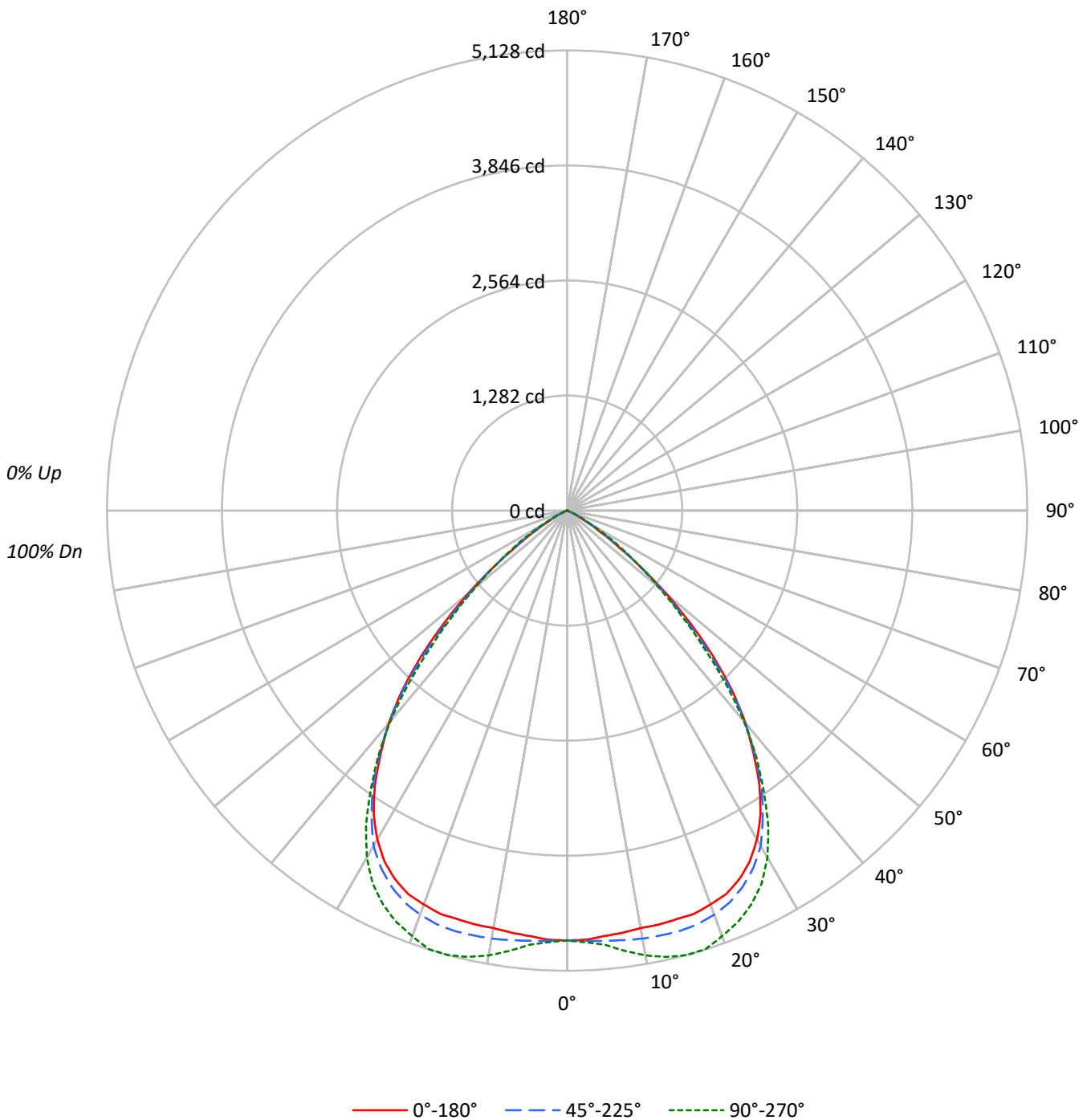
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 95  | 94  | 93  | 91  |    |    |    |    | 91  |   |  |   |
| 2   | 105 | 99  | 94  | 90  | 103 | 97  | 93  | 89  | 94  | 90  | 87  | 91  | 88  | 85  | 88  | 86  | 84  | 82  |    |    |    |    | 82  |   |  |   |
| 3   | 98  | 90  | 84  | 79  | 96  | 89  | 83  | 79  | 86  | 81  | 77  | 84  | 80  | 76  | 81  | 78  | 75  | 73  |    |    |    |    | 73  |   |  |   |
| 4   | 92  | 82  | 76  | 70  | 90  | 81  | 75  | 70  | 79  | 73  | 69  | 77  | 72  | 68  | 75  | 71  | 67  | 66  |    |    |    |    | 66  |   |  |   |
| 5   | 86  | 75  | 68  | 63  | 84  | 74  | 68  | 63  | 72  | 67  | 62  | 71  | 65  | 61  | 69  | 64  | 61  | 59  |    |    |    |    | 59  |   |  |   |
| 6   | 80  | 69  | 62  | 57  | 78  | 68  | 61  | 56  | 67  | 60  | 56  | 65  | 60  | 55  | 64  | 59  | 55  | 53  |    |    |    |    | 53  |   |  |   |
| 7   | 75  | 64  | 56  | 51  | 73  | 63  | 56  | 51  | 61  | 55  | 51  | 60  | 55  | 50  | 59  | 54  | 50  | 48  |    |    |    |    | 48  |   |  |   |
| 8   | 70  | 59  | 51  | 46  | 69  | 58  | 51  | 46  | 57  | 51  | 46  | 56  | 50  | 46  | 55  | 49  | 46  | 44  |    |    |    |    | 44  |   |  |   |
| 9   | 66  | 54  | 47  | 42  | 65  | 54  | 47  | 42  | 53  | 47  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 40  |    |    |    |    | 40  |   |  |   |
| 10  | 62  | 50  | 44  | 39  | 61  | 50  | 43  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 47  | 42  | 38  | 37  |    |    |    |    | 37  |   |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 147734 | 147734 | 147734 |
| 5°  | 147342 | 148967 | 150360 |
| 10° | 147927 | 151660 | 157593 |
| 15° | 150490 | 154832 | 163697 |
| 20° | 153277 | 157248 | 165619 |
| 25° | 154293 | 157423 | 164956 |
| 30° | 150648 | 153654 | 158866 |
| 35° | 140624 | 142069 | 143763 |
| 40° | 124353 | 124240 | 123294 |
| 45° | 100558 | 97693  | 93398  |
| 50° | 69081  | 66428  | 64264  |
| 55° | 35558  | 37827  | 40499  |
| 60° | 14814  | 17527  | 19674  |
| 65° | 5750   | 6093   | 7187   |
| 70° | 1524   | 1434   | 1947   |
| 75° | 667    | 1227   | 1120   |
| 80° | 994    | 1172   | 0      |
| 85° | 0      | 0      | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 461.0  | 5.2       |
| 10°-20°   | 1380.2 | 15.6      |
| 20°-30°   | 2135.8 | 24.2      |
| 30°-40°   | 2339.3 | 26.5      |
| 40°-50°   | 1711.4 | 19.4      |
| 50°-60°   | 671.5  | 7.6       |
| 60°-70°   | 108.7  | 1.2       |
| 70°-80°   | 10.0   | 0.1       |
| 80°-90°   | 2.0    | 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°    | 3977.0 | 45.1      |
| 0°-40°    | 6316.3 | 71.6      |
| 0°-60°    | 8699.3 | 98.6      |
| 0°-90°    | 8820.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 8820.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 4791 | 4791  | 4791 | 4791  | 4791 |      |
| 5°  | 4760 | 4771  | 4812 | 4847  | 4858 | 453  |
| 15° | 4714 | 4745  | 4850 | 5030  | 5128 | 1335 |
| 25° | 4535 | 4549  | 4627 | 4766  | 4848 | 2079 |
| 35° | 3736 | 3742  | 3774 | 3810  | 3819 | 2313 |
| 45° | 2306 | 2302  | 2240 | 2172  | 2142 | 1756 |
| 55° | 661  | 675   | 704  | 729   | 753  | 651  |
| 65° | 79   | 77    | 84   | 92    | 98   | 96   |
| 75° | 6    | 8     | 10   | 8     | 9    | 10   |
| 85° | 0    | 0     | 0    | 0     | 0    | 3    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 4790.9 | 4790.9 | 4790.9 | 4790.9 | 4790.9 |
| 2.5°  | 4786.2 | 4789.1 | 4798.4 | 4807.8 | 4813.4 |
| 5°    | 4760.0 | 4771.2 | 4812.5 | 4847.2 | 4857.5 |
| 7.5°  | 4744.0 | 4762.8 | 4827.5 | 4914.8 | 4948.5 |
| 10°   | 4724.3 | 4751.5 | 4843.5 | 4967.3 | 5033.0 |
| 12.5° | 4725.3 | 4751.5 | 4849.1 | 5010.4 | 5094.9 |
| 15°   | 4714.0 | 4745.0 | 4850.0 | 5030.1 | 5127.7 |
| 17.5° | 4711.2 | 4726.2 | 4833.1 | 5016.1 | 5124.0 |
| 20°   | 4670.9 | 4691.5 | 4791.9 | 4954.2 | 5047.0 |
| 22.5° | 4626.8 | 4636.1 | 4728.1 | 4887.6 | 4966.4 |
| 25°   | 4534.8 | 4548.9 | 4626.8 | 4766.5 | 4848.2 |
| 27.5° | 4408.2 | 4411.0 | 4489.8 | 4619.3 | 4690.6 |
| 30°   | 4230.9 | 4244.9 | 4315.3 | 4411.0 | 4461.7 |
| 32.5° | 4011.4 | 4009.5 | 4055.5 | 4138.9 | 4171.8 |
| 35°   | 3735.6 | 3742.1 | 3774.0 | 3809.7 | 3819.0 |
| 37.5° | 3411.9 | 3420.3 | 3441.9 | 3454.1 | 3462.6 |
| 40°   | 3089.2 | 3089.2 | 3086.4 | 3073.2 | 3062.9 |
| 42.5° | 2721.5 | 2709.3 | 2695.2 | 2637.0 | 2611.7 |
| 45°   | 2305.9 | 2302.1 | 2240.2 | 2171.7 | 2141.7 |
| 47.5° | 1868.7 | 1848.1 | 1783.3 | 1728.0 | 1715.8 |
| 50°   | 1440.0 | 1418.4 | 1384.7 | 1357.4 | 1339.6 |
| 52.5° | 1026.3 | 1010.3 | 1024.4 | 1024.4 | 1022.5 |
| 55°   | 661.4  | 675.4  | 703.6  | 728.9  | 753.3  |
| 57.5° | 419.3  | 438.1  | 481.3  | 514.1  | 522.5  |
| 60°   | 240.2  | 254.2  | 284.2  | 313.3  | 319.0  |
| 62.5° | 151.0  | 152.0  | 171.7  | 188.6  | 198.9  |
| 65°   | 78.8   | 76.9   | 83.5   | 91.9   | 98.5   |
| 67.5° | 32.8   | 32.8   | 39.4   | 38.5   | 48.8   |
| 70°   | 16.9   | 14.1   | 15.9   | 18.8   | 21.6   |
| 72.5° | 12.2   | 9.4    | 13.1   | 16.9   | 7.5    |
| 75°   | 5.6    | 8.4    | 10.3   | 7.5    | 9.4    |
| 77.5° | 7.5    | 7.5    | 5.6    | 9.4    | 1.9    |
| 80°   | 5.6    | 3.8    | 6.6    | 2.8    | 0.0    |
| 82.5° | 0.9    | 1.9    | 0.9    | 0.9    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 6.6    | 2.8    | 4.7    | 3.8    | 5.6    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)