

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: P247103

Luminaire Tested: **LSR8B90D010 EC8B90835 8LBSOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247103  
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: LSR8B90D010 EC8B90835 8LBS0LI  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10590.0 lumens  
Efficiency: N/A  
Efficacy: 123.0 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

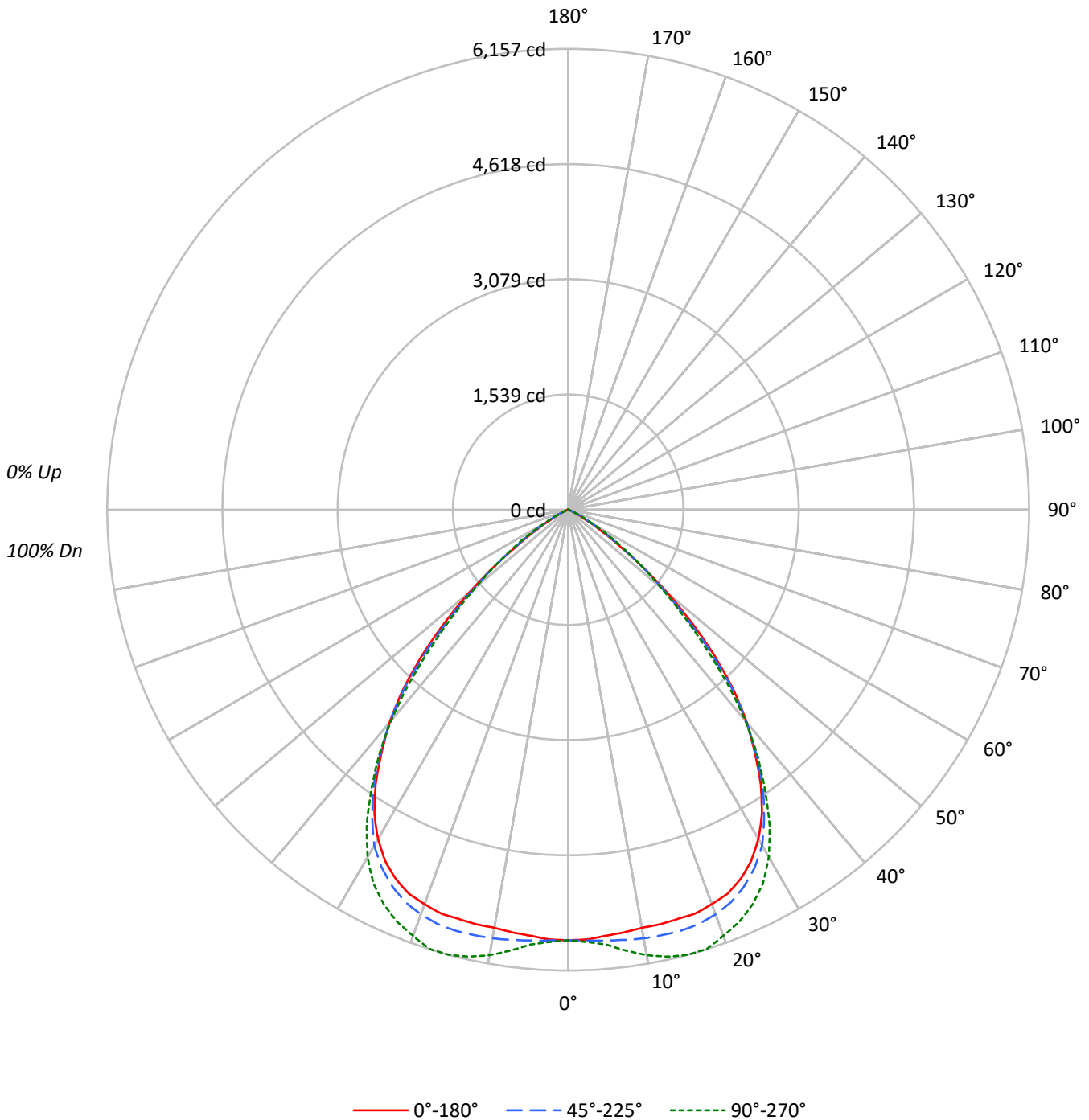
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 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°  | 177383 | 177383 | 177383 |
| 5°  | 176909 | 178862 | 180534 |
| 10° | 177614 | 182095 | 189219 |
| 15° | 180690 | 185904 | 196547 |
| 20° | 184035 | 188803 | 198858 |
| 25° | 185258 | 189014 | 198058 |
| 30° | 180879 | 184489 | 190745 |
| 35° | 168842 | 170581 | 172617 |
| 40° | 149306 | 149173 | 148038 |
| 45° | 120736 | 117300 | 112141 |
| 50° | 82945  | 79755  | 77164  |
| 55° | 42692  | 45418  | 48627  |
| 60° | 17786  | 21049  | 23621  |
| 65° | 6902   | 7311   | 8632   |
| 70° | 1830   | 1722   | 2335   |
| 75° | 810    | 1477   | 1346   |
| 80° | 1208   | 1403   | 0      |
| 85° | 0      | 0      | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 553.5   | 5.2       |
| 10°-20°   | 1657.2  | 15.6      |
| 20°-30°   | 2564.4  | 24.2      |
| 30°-40°   | 2808.8  | 26.5      |
| 40°-50°   | 2054.9  | 19.4      |
| 50°-60°   | 806.3   | 7.6       |
| 60°-70°   | 130.5   | 1.2       |
| 70°-80°   | 12.0    | 0.1       |
| 80°-90°   | 2.4     | 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°    | 4775.1  | 45.1      |
| 0°-40°    | 7583.9  | 71.6      |
| 0°-60°    | 10445.1 | 98.6      |
| 0°-90°    | 10590.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 10590.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 5752 | 5752  | 5752 | 5752  | 5752 |      |
| 5°  | 5715 | 5729  | 5778 | 5820  | 5832 | 544  |
| 15° | 5660 | 5697  | 5823 | 6040  | 6157 | 1603 |
| 25° | 5445 | 5462  | 5555 | 5723  | 5821 | 2497 |
| 35° | 4485 | 4493  | 4531 | 4574  | 4586 | 2777 |
| 45° | 2769 | 2764  | 2690 | 2608  | 2572 | 2108 |
| 55° | 794  | 811   | 845  | 875   | 904  | 781  |
| 65° | 95   | 92    | 100  | 110   | 118  | 115  |
| 75° | 7    | 10    | 12   | 9     | 11   | 12   |
| 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°    | 5752.4 | 5752.4 | 5752.4 | 5752.4 | 5752.4 |
| 2.5°  | 5746.7 | 5750.1 | 5761.4 | 5772.6 | 5779.4 |
| 5°    | 5715.2 | 5728.7 | 5778.3 | 5820.0 | 5832.3 |
| 7.5°  | 5696.1 | 5718.6 | 5796.3 | 5901.1 | 5941.6 |
| 10°   | 5672.4 | 5705.1 | 5815.5 | 5964.1 | 6043.0 |
| 12.5° | 5673.5 | 5705.1 | 5822.2 | 6015.9 | 6117.3 |
| 15°   | 5660.0 | 5697.2 | 5823.3 | 6039.6 | 6156.7 |
| 17.5° | 5656.6 | 5674.7 | 5803.1 | 6022.7 | 6152.2 |
| 20°   | 5608.2 | 5633.0 | 5753.5 | 5948.4 | 6059.9 |
| 22.5° | 5555.3 | 5566.5 | 5676.9 | 5868.4 | 5963.0 |
| 25°   | 5444.9 | 5461.8 | 5555.3 | 5723.1 | 5821.1 |
| 27.5° | 5292.8 | 5296.2 | 5390.8 | 5546.2 | 5631.9 |
| 30°   | 5079.9 | 5096.8 | 5181.3 | 5296.2 | 5357.0 |
| 32.5° | 4816.4 | 4814.1 | 4869.3 | 4969.5 | 5009.0 |
| 35°   | 4485.2 | 4493.1 | 4531.4 | 4574.2 | 4585.5 |
| 37.5° | 4096.6 | 4106.7 | 4132.7 | 4147.3 | 4157.4 |
| 40°   | 3709.1 | 3709.1 | 3705.8 | 3690.0 | 3677.6 |
| 42.5° | 3267.6 | 3253.0 | 3236.1 | 3166.2 | 3135.8 |
| 45°   | 2768.6 | 2764.1 | 2689.8 | 2607.5 | 2571.5 |
| 47.5° | 2243.7 | 2218.9 | 2141.2 | 2074.8 | 2060.1 |
| 50°   | 1729.0 | 1703.1 | 1662.5 | 1629.9 | 1608.5 |
| 52.5° | 1232.2 | 1213.1 | 1230.0 | 1230.0 | 1227.7 |
| 55°   | 794.1  | 811.0  | 844.8  | 875.2  | 904.5  |
| 57.5° | 503.5  | 526.0  | 577.8  | 617.3  | 627.4  |
| 60°   | 288.4  | 305.2  | 341.3  | 376.2  | 383.0  |
| 62.5° | 181.3  | 182.5  | 206.1  | 226.4  | 238.8  |
| 65°   | 94.6   | 92.4   | 100.2  | 110.4  | 118.3  |
| 67.5° | 39.4   | 39.4   | 47.3   | 46.2   | 58.6   |
| 70°   | 20.3   | 16.9   | 19.1   | 22.5   | 25.9   |
| 72.5° | 14.6   | 11.3   | 15.8   | 20.3   | 9.0    |
| 75°   | 6.8    | 10.1   | 12.4   | 9.0    | 11.3   |
| 77.5° | 9.0    | 9.0    | 6.8    | 11.3   | 2.3    |
| 80°   | 6.8    | 4.5    | 7.9    | 3.4    | 0.0    |
| 82.5° | 1.1    | 2.3    | 1.1    | 1.1    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 7.9    | 3.4    | 5.6    | 4.5    | 6.8    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)