

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: P247369

Luminaire Tested: **LSR8B120D010 EC8B120940 8LBS0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247369  
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: LSR8B120D010 EC8B120940 8LBS0WMH  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11764.0 lumens  
Efficiency: N/A  
Efficacy: 99.4 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

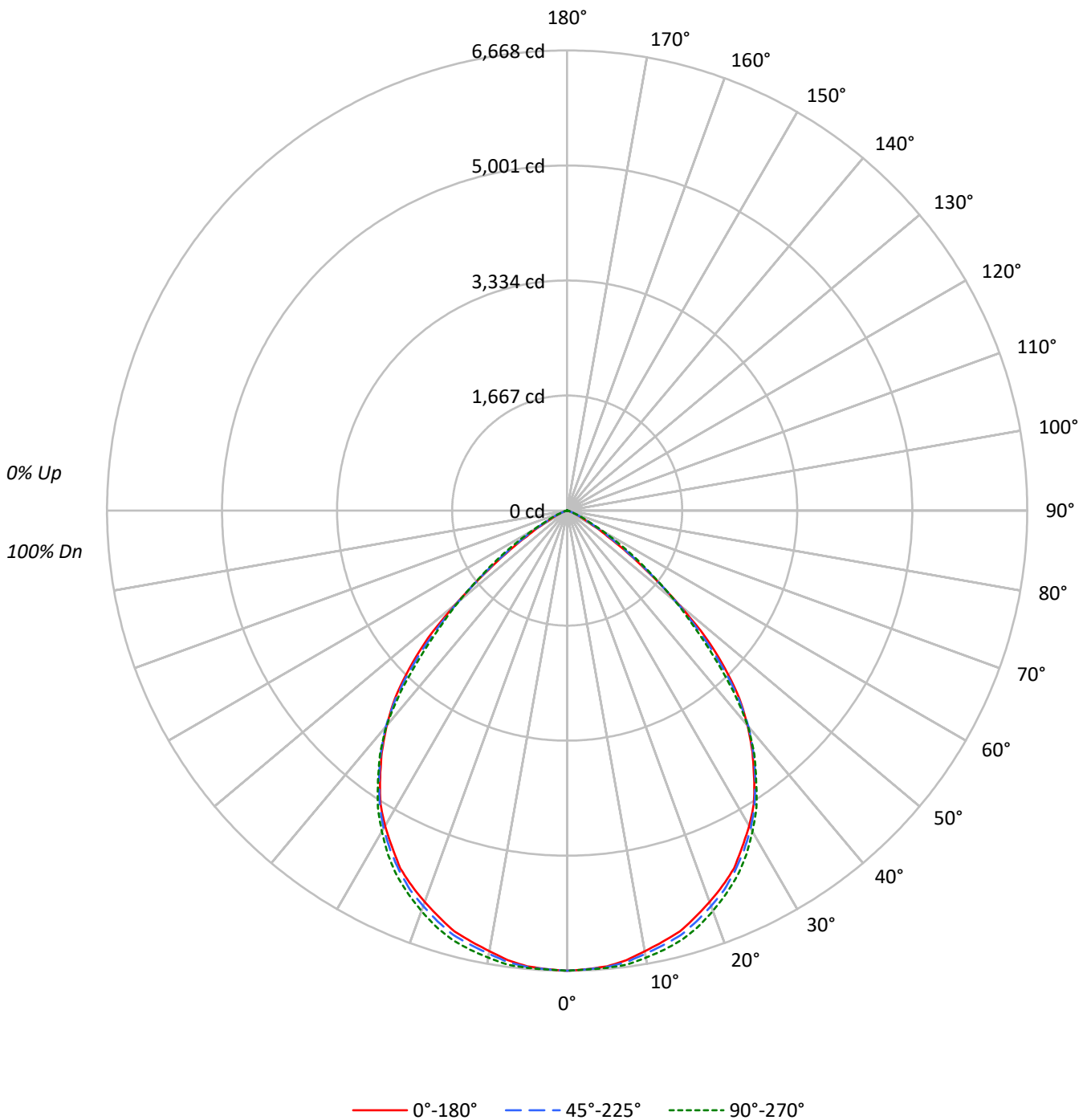
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°  | 205617 | 205617 | 205617 |
| 5°  | 205185 | 205507 | 205876 |
| 10° | 202996 | 204189 | 205995 |
| 15° | 201562 | 203321 | 205499 |
| 20° | 198060 | 200128 | 202582 |
| 25° | 194642 | 195890 | 198616 |
| 30° | 187904 | 189399 | 191172 |
| 35° | 177812 | 178900 | 179838 |
| 40° | 163733 | 164522 | 164099 |
| 45° | 141158 | 137439 | 131948 |
| 50° | 100772 | 99265  | 98066  |
| 55° | 57842  | 61299  | 66379  |
| 60° | 27432  | 32125  | 37139  |
| 65° | 12922  | 15607  | 17906  |
| 70° | 6032   | 6744   | 7691   |
| 75° | 2812   | 4063   | 4694   |
| 80° | 2326   | 2095   | 3267   |
| 85° | 920    | 2335   | 1380   |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 630.0   | 5.4       |
| 10°-20°   | 1792.8  | 15.2      |
| 20°-30°   | 2648.6  | 22.5      |
| 30°-40°   | 2959.6  | 25.2      |
| 40°-50°   | 2389.4  | 20.3      |
| 50°-60°   | 1062.8  | 9.0       |
| 60°-70°   | 239.4   | 2.0       |
| 70°-80°   | 37.0    | 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°    | 5071.5  | 43.1      |
| 0°-40°    | 8031.1  | 68.3      |
| 0°-60°    | 11483.3 | 97.6      |
| 0°-90°    | 11764.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 11764.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 6668 | 6668  | 6668 | 6668  | 6668 |      |
| 5°  | 6629 | 6627  | 6639 | 6640  | 6651 | 628  |
| 15° | 6314 | 6318  | 6369 | 6416  | 6437 | 1776 |
| 25° | 5721 | 5721  | 5757 | 5805  | 5838 | 2623 |
| 35° | 4724 | 4721  | 4752 | 4758  | 4777 | 2944 |
| 45° | 3237 | 3212  | 3152 | 3040  | 3026 | 2447 |
| 55° | 1076 | 1092  | 1140 | 1199  | 1235 | 1012 |
| 65° | 177  | 199   | 214  | 232   | 245  | 206  |
| 75° | 24   | 33    | 34   | 33    | 39   | 30   |
| 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°    | 6668.0 | 6668.0 | 6668.0 | 6668.0 | 6668.0 |
| 2.5°  | 6651.0 | 6647.0 | 6653.6 | 6649.6 | 6656.2 |
| 5°    | 6628.7 | 6627.3 | 6639.1 | 6640.5 | 6651.0 |
| 7.5°  | 6570.9 | 6572.2 | 6597.2 | 6615.5 | 6636.5 |
| 10°   | 6483.0 | 6488.3 | 6521.1 | 6561.7 | 6578.8 |
| 12.5° | 6399.0 | 6405.6 | 6447.6 | 6504.0 | 6517.1 |
| 15°   | 6313.8 | 6317.7 | 6368.9 | 6416.1 | 6437.1 |
| 17.5° | 6174.7 | 6200.9 | 6240.3 | 6294.1 | 6321.6 |
| 20°   | 6035.6 | 6054.0 | 6098.6 | 6157.6 | 6173.4 |
| 22.5° | 5883.4 | 5903.1 | 5947.7 | 5996.2 | 6013.3 |
| 25°   | 5720.7 | 5720.7 | 5757.4 | 5804.7 | 5837.5 |
| 27.5° | 5493.7 | 5521.3 | 5547.5 | 5589.5 | 5622.3 |
| 30°   | 5277.2 | 5287.7 | 5319.2 | 5353.3 | 5369.0 |
| 32.5° | 5037.1 | 5038.4 | 5052.8 | 5090.9 | 5105.3 |
| 35°   | 4723.5 | 4720.9 | 4752.4 | 4757.6 | 4777.3 |
| 37.5° | 4409.9 | 4423.0 | 4434.8 | 4453.2 | 4454.5 |
| 40°   | 4067.5 | 4074.0 | 4087.1 | 4067.5 | 4076.6 |
| 42.5° | 3694.8 | 3685.6 | 3660.7 | 3601.7 | 3576.7 |
| 45°   | 3236.9 | 3212.0 | 3151.6 | 3040.1 | 3025.7 |
| 47.5° | 2731.8 | 2670.1 | 2596.6 | 2514.0 | 2498.2 |
| 50°   | 2100.6 | 2105.9 | 2069.2 | 2041.6 | 2044.2 |
| 52.5° | 1531.2 | 1549.6 | 1558.8 | 1585.0 | 1599.4 |
| 55°   | 1075.9 | 1091.7 | 1140.2 | 1199.2 | 1234.7 |
| 57.5° | 696.7  | 726.9  | 789.9  | 856.8  | 881.7  |
| 60°   | 444.8  | 464.5  | 520.9  | 569.4  | 602.2  |
| 62.5° | 291.3  | 297.8  | 329.3  | 373.9  | 375.3  |
| 65°   | 177.1  | 199.4  | 213.9  | 232.2  | 245.4  |
| 67.5° | 115.5  | 115.5  | 128.6  | 145.6  | 149.6  |
| 70°   | 66.9   | 68.2   | 74.8   | 81.3   | 85.3   |
| 72.5° | 36.7   | 40.7   | 44.6   | 51.2   | 57.7   |
| 75°   | 23.6   | 32.8   | 34.1   | 32.8   | 39.4   |
| 77.5° | 15.7   | 15.7   | 13.1   | 22.3   | 23.6   |
| 80°   | 13.1   | 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    | 14.4   | 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)