

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: P248083

Luminaire Tested: **LD8B200D010 ER8B200950 8LBS0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248083  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-93)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B200D010 ER8B200950 8LBS0WMH  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT  
90 CRI 5000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21250.0 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.22  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

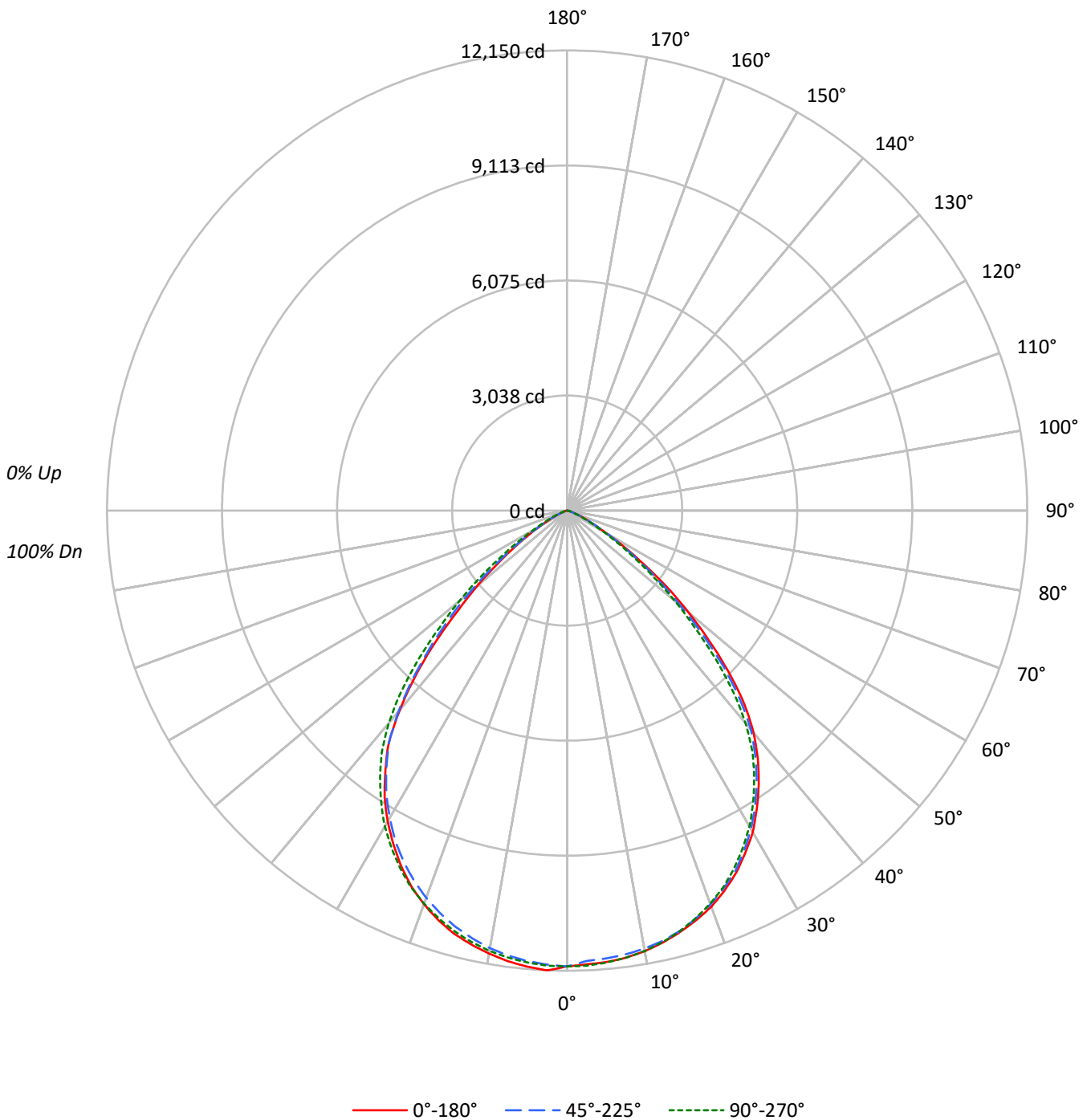
Input Watts (W): 223.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 109 | 106 | 104 | 101 | 102 | 100 | 98  | 99  | 97  | 95  | 95  | 94  | 92  | 90  |    |    |    |    | 90  |   |  |   |
| 2   | 105 | 99  | 93  | 89  | 102 | 97  | 92  | 88  | 93  | 90  | 86  | 90  | 87  | 84  | 87  | 85  | 83  | 81  |    |    |    |    | 81  |   |  |   |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 83  | 78  | 75  | 80  | 77  | 74  | 72  |    |    |    |    | 72  |   |  |   |
| 4   | 91  | 81  | 74  | 69  | 89  | 80  | 74  | 69  | 78  | 72  | 68  | 76  | 71  | 67  | 74  | 69  | 66  | 64  |    |    |    |    | 64  |   |  |   |
| 5   | 85  | 74  | 67  | 61  | 83  | 73  | 66  | 61  | 71  | 65  | 61  | 69  | 64  | 60  | 68  | 63  | 59  | 58  |    |    |    |    | 58  |   |  |   |
| 6   | 79  | 68  | 60  | 55  | 77  | 67  | 60  | 55  | 65  | 59  | 54  | 64  | 58  | 54  | 62  | 57  | 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  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 56  | 49  | 45  | 54  | 49  | 45  | 53  | 48  | 44  | 43  |    |    |    |    | 43  |   |  |   |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 41  | 39  |    |    |    |    | 39  |   |  |   |
| 10  | 61  | 49  | 42  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 41  | 37  | 46  | 41  | 37  | 36  |    |    |    |    | 36  |   |  |   |

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

|     | 0°     | 90°    | 180°   |
|-----|--------|--------|--------|
| 0°  | 371137 | 371137 | 371137 |
| 5°  | 370391 | 370771 | 374074 |
| 10° | 369870 | 369638 | 371905 |
| 15° | 367737 | 367070 | 369068 |
| 20° | 365274 | 362376 | 362941 |
| 25° | 359104 | 354803 | 352673 |
| 30° | 349021 | 342861 | 337441 |
| 35° | 332127 | 324135 | 315123 |
| 40° | 308418 | 295178 | 276947 |
| 45° | 262889 | 241961 | 214827 |
| 50° | 200176 | 178334 | 148778 |
| 55° | 131958 | 115001 | 92636  |
| 60° | 74100  | 65169  | 51164  |
| 65° | 38861  | 34746  | 24713  |
| 70° | 18591  | 16373  | 10287  |
| 75° | 10532  | 11402  | 7160   |
| 80° | 8062   | 7849   | 4138   |
| 85° | 4776   | 3892   | 1734   |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1136.6  | 5.3       |
| 10°-20°   | 3237.4  | 15.2      |
| 20°-30°   | 4782.7  | 22.5      |
| 30°-40°   | 5329.8  | 25.1      |
| 40°-50°   | 4209.1  | 19.8      |
| 50°-60°   | 1943.8  | 9.1       |
| 60°-70°   | 499.4   | 2.3       |
| 70°-80°   | 96.2    | 0.5       |
| 80°-90°   | 15.1    | 0.1       |
| 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°    | 9156.7  | 43.1      |
| 0°-40°    | 14486.5 | 68.2      |
| 0°-60°    | 20639.4 | 97.1      |
| 0°-90°    | 21250.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 21250.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 45°   | 90°   | 135°  | 180°  | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 12036 | 12036 | 12036 | 12036 | 12036 |      |
| 5°  | 11966 | 11870 | 11978 | 11941 | 12085 | ###  |
| 15° | 11519 | 11492 | 11498 | 11378 | 11561 | 3251 |
| 25° | 10554 | 10505 | 10428 | 10219 | 10365 | 4850 |
| 35° | 8823  | 8725  | 8610  | 8323  | 8371  | 5494 |
| 45° | 6028  | 5853  | 5548  | 5105  | 4926  | 4601 |
| 55° | 2454  | 2313  | 2139  | 1831  | 1723  | 2275 |
| 65° | 533   | 540   | 476   | 364   | 339   | 585  |
| 75° | 88    | 93    | 96    | 72    | 60    | 106  |
| 85° | 14    | 14    | 11    | 6     | 5     | 19   |
| 90° | 0     | 0     | 0     | 0     | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     | 112.5°  | 135°    | 157.5°  | 180°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 12035.7 | 12035.7 | 12035.7 | 12035.7 | 12035.7 | 12035.7 | 12035.7 | 12035.7 | 12035.7 |
| 2.5°  | 11990.3 | 12046.8 | 11903.2 | 12019.8 | 12024.7 | 11942.5 | 11998.9 | 12066.4 | 12149.9 |
| 5°    | 11965.8 | 12023.5 | 11870.1 | 11978.1 | 11978.1 | 11888.5 | 11941.2 | 12000.1 | 12084.8 |
| 7.5°  | 11908.1 | 11970.7 | 11819.7 | 11920.4 | 11904.4 | 11806.2 | 11852.9 | 11910.6 | 12001.4 |
| 10°   | 11812.4 | 11889.7 | 11742.4 | 11838.1 | 11805.0 | 11692.1 | 11732.6 | 11792.7 | 11877.4 |
| 12.5° | 11681.1 | 11773.1 | 11635.7 | 11719.1 | 11666.3 | 11537.5 | 11570.6 | 11647.9 | 11731.4 |
| 15°   | 11519.1 | 11613.6 | 11492.1 | 11564.5 | 11498.2 | 11354.6 | 11377.9 | 11456.5 | 11560.8 |
| 17.5° | 11338.7 | 11430.7 | 11294.5 | 11373.0 | 11284.7 | 11136.2 | 11144.7 | 11235.6 | 11330.1 |
| 20°   | 11131.2 | 11207.3 | 11067.4 | 11142.3 | 11042.9 | 10879.7 | 10880.9 | 10961.9 | 11060.1 |
| 22.5° | 10858.8 | 10938.6 | 10793.8 | 10856.3 | 10765.5 | 10591.3 | 10570.4 | 10648.9 | 10743.4 |
| 25°   | 10554.4 | 10637.9 | 10505.3 | 10527.4 | 10428.0 | 10247.6 | 10219.4 | 10277.1 | 10365.4 |
| 27.5° | 10189.9 | 10272.2 | 10122.4 | 10150.7 | 10041.4 | 9868.4  | 9830.4  | 9861.0  | 9931.0  |
| 30°   | 9802.1  | 9853.7  | 9711.3  | 9734.6  | 9629.1  | 9424.1  | 9366.4  | 9408.2  | 9476.9  |
| 32.5° | 9324.7  | 9361.5  | 9240.0  | 9252.3  | 9138.2  | 8961.5  | 8885.4  | 8897.6  | 8967.6  |
| 35°   | 8822.8  | 8842.4  | 8724.6  | 8727.0  | 8610.5  | 8431.3  | 8323.3  | 8317.1  | 8371.1  |
| 37.5° | 8269.3  | 8282.8  | 8163.7  | 8157.6  | 8037.3  | 7843.4  | 7730.5  | 7710.9  | 7744.0  |
| 40°   | 7661.8  | 7680.2  | 7556.2  | 7517.0  | 7332.9  | 7112.0  | 6927.9  | 6893.5  | 6880.0  |
| 42.5° | 6925.4  | 6875.1  | 6745.0  | 6678.7  | 6493.4  | 6209.9  | 6039.3  | 5987.8  | 5943.6  |
| 45°   | 6028.3  | 5987.8  | 5852.8  | 5703.1  | 5548.4  | 5334.9  | 5105.4  | 4964.3  | 4926.2  |
| 47.5° | 5087.0  | 5039.1  | 4845.2  | 4713.9  | 4561.7  | 4463.5  | 4216.9  | 3999.6  | 3905.1  |
| 50°   | 4172.7  | 4119.9  | 3903.9  | 3807.0  | 3717.4  | 3571.3  | 3332.0  | 3136.9  | 3101.3  |
| 52.5° | 3327.1  | 3247.3  | 3062.0  | 2961.4  | 2881.6  | 2719.6  | 2503.6  | 2390.7  | 2330.6  |
| 55°   | 2454.5  | 2442.2  | 2313.4  | 2241.0  | 2139.1  | 2010.3  | 1831.1  | 1746.4  | 1723.1  |
| 57.5° | 1788.1  | 1742.7  | 1693.6  | 1632.3  | 1543.9  | 1381.9  | 1271.4  | 1207.6  | 1202.7  |
| 60°   | 1201.5  | 1216.2  | 1216.2  | 1148.7  | 1056.7  | 951.1   | 862.8   | 828.4   | 829.6   |
| 62.5° | 806.3   | 816.1   | 813.7   | 784.2   | 713.0   | 627.1   | 569.4   | 544.9   | 546.1   |
| 65°   | 532.6   | 530.2   | 540.0   | 519.1   | 476.2   | 416.0   | 364.5   | 351.0   | 338.7   |
| 67.5° | 338.7   | 342.4   | 338.7   | 327.7   | 301.9   | 259.0   | 224.6   | 203.7   | 197.6   |
| 70°   | 206.2   | 201.3   | 202.5   | 200.0   | 181.6   | 160.8   | 136.2   | 119.0   | 114.1   |
| 72.5° | 124.0   | 127.6   | 128.9   | 132.5   | 130.1   | 115.4   | 98.2    | 85.9    | 83.5    |
| 75°   | 88.4    | 89.6    | 93.3    | 97.0    | 95.7    | 85.9    | 72.4    | 63.8    | 60.1    |
| 77.5° | 66.3    | 66.3    | 68.7    | 73.6    | 70.0    | 61.4    | 51.5    | 44.2    | 41.7    |
| 80°   | 45.4    | 46.6    | 47.9    | 47.9    | 44.2    | 39.3    | 30.7    | 25.8    | 23.3    |
| 82.5° | 27.0    | 28.2    | 27.0    | 27.0    | 24.5    | 19.6    | 14.7    | 13.5    | 12.3    |
| 85°   | 13.5    | 13.5    | 13.5    | 13.5    | 11.0    | 8.6     | 6.1     | 4.9     | 4.9     |
| 87.5° | 6.1     | 6.1     | 6.1     | 4.9     | 3.7     | 2.5     | 2.5     | 1.2     | 1.2     |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)