

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: P247807

Luminaire Tested: **LD8B200D010 ER8B200830 8LBNOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247807
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-89)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B200D010 ER8B200830 8LBNOLI
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19204.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.63
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

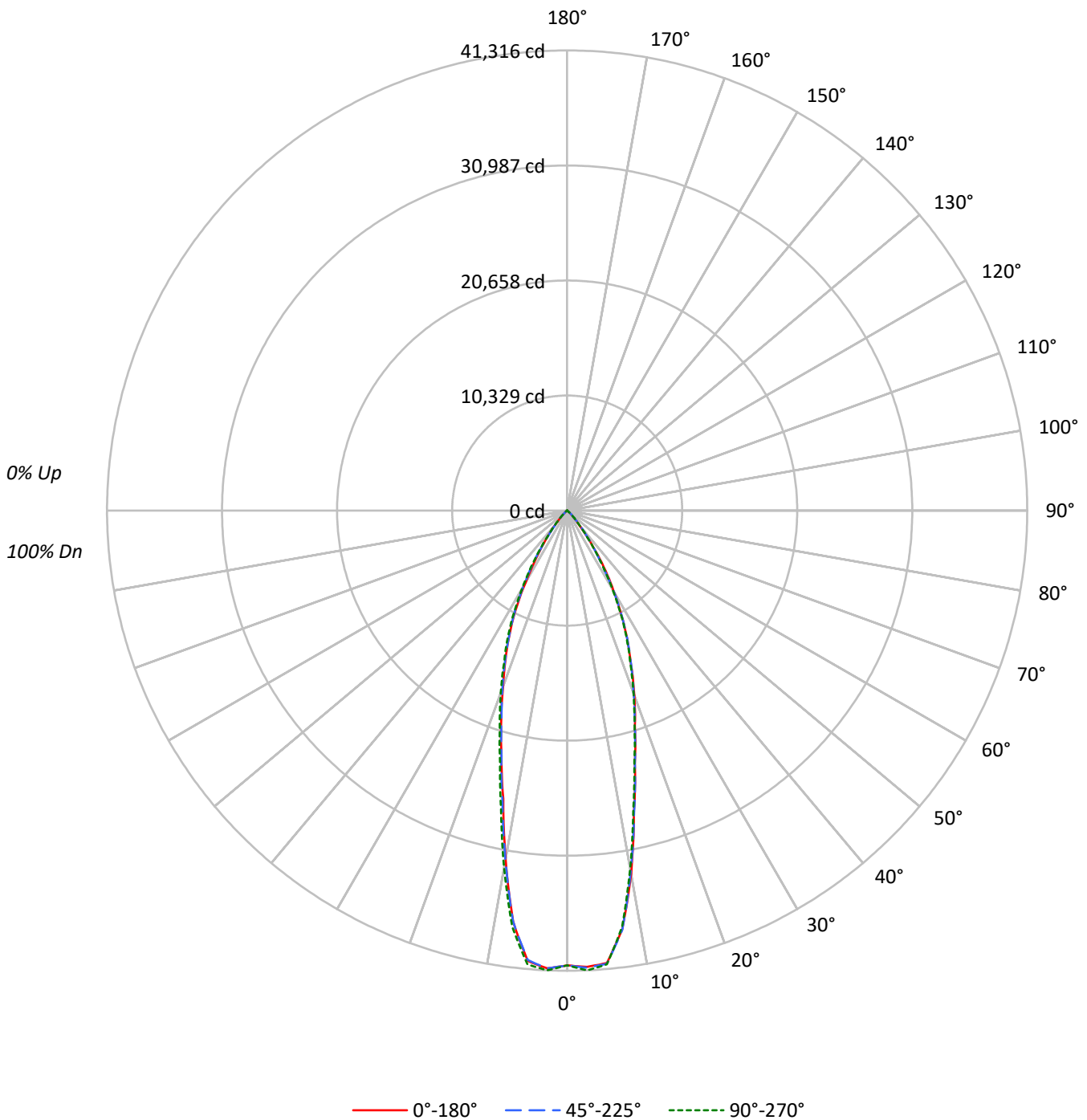
Input Watts (W): 223.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 114 | 112 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 101 | 99 | 98 | 97 | 97 | 95 | | | | | 95 | | | |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 97 | 95 | 97 | 95 | 93 | 94 | 93 | 91 | 90 | | | | | 90 | | | |
| 3 | 105 | 99 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 92 | 89 | 93 | 90 | 88 | 90 | 88 | 86 | 85 | | | | | 85 | | | |
| 4 | 100 | 94 | 89 | 85 | 98 | 92 | 88 | 84 | 90 | 87 | 83 | 88 | 85 | 83 | 87 | 84 | 82 | 80 | | | | | 80 | | | |
| 5 | 96 | 89 | 83 | 80 | 94 | 88 | 83 | 79 | 86 | 82 | 79 | 84 | 81 | 78 | 83 | 80 | 77 | 76 | | | | | 76 | | | |
| 6 | 92 | 84 | 79 | 75 | 91 | 83 | 78 | 75 | 82 | 78 | 74 | 81 | 77 | 74 | 79 | 76 | 73 | 72 | | | | | 72 | | | |
| 7 | 88 | 80 | 75 | 71 | 87 | 79 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 70 | 76 | 73 | 70 | 69 | | | | | 69 | | | |
| 8 | 85 | 76 | 71 | 67 | 84 | 76 | 71 | 67 | 75 | 70 | 67 | 74 | 70 | 67 | 73 | 69 | 67 | 65 | | | | | 65 | | | |
| 9 | 81 | 73 | 68 | 64 | 80 | 72 | 67 | 64 | 72 | 67 | 64 | 71 | 67 | 64 | 70 | 66 | 63 | 62 | | | | | 62 | | | |
| 10 | 78 | 70 | 65 | 61 | 77 | 69 | 64 | 61 | 69 | 64 | 61 | 68 | 64 | 61 | 67 | 63 | 61 | 60 | | | | | 60 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|---------|---------|---------|
| 0° | 1259081 | 1259081 | 1259081 |
| 5° | 1262423 | 1265750 | 1256758 |
| 10° | 1036597 | 1020208 | 994801 |
| 15° | 751107 | 743464 | 726347 |
| 20° | 579443 | 571548 | 552692 |
| 25° | 435114 | 429932 | 415604 |
| 30° | 296914 | 288621 | 266064 |
| 35° | 167840 | 160662 | 147076 |
| 40° | 67534 | 70215 | 67586 |
| 45° | 27849 | 28573 | 26453 |
| 50° | 8472 | 8347 | 6078 |
| 55° | 2409 | 1790 | 1237 |
| 60° | 1893 | 1739 | 475 |
| 65° | 839 | 1773 | 372 |
| 70° | 460 | 920 | 0 |
| 75° | 2597 | 1525 | 1072 |
| 80° | 2042 | 906 | 2504 |
| 85° | 2724 | 4989 | 6793 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 3609.1 | 18.8 |
| 10°-20° | 6540.1 | 34.1 |
| 20°-30° | 5698.6 | 29.7 |
| 30°-40° | 2714.3 | 14.1 |
| 40°-50° | 564.0 | 2.9 |
| 50°-60° | 44.8 | 0.2 |
| 60°-70° | 17.4 | 0.1 |
| 70°-80° | 7.7 | 0.0 |
| 80°-90° | 8.0 | 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° | 15847.8 | 82.5 |
| 0°-40° | 18562.1 | 96.7 |
| 0°-60° | 19170.9 | 99.8 |
| 0°-90° | 19204.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 19204.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 40831 | 40831 | 40831 | 40831 | 40831 | |
| 5° | 40784 | 40849 | 40891 | 40507 | 40601 | ### |
| 15° | 23528 | 23530 | 23288 | 22806 | 22752 | 6644 |
| 25° | 12788 | 12776 | 12636 | 12256 | 12215 | 5814 |
| 35° | 4459 | 4308 | 4268 | 4052 | 3907 | 2854 |
| 45° | 639 | 706 | 655 | 587 | 607 | 564 |
| 55° | 45 | 35 | 33 | 31 | 23 | 49 |
| 65° | 12 | 19 | 24 | 8 | 5 | 17 |
| 75° | 22 | 14 | 13 | 15 | 9 | 10 |
| 85° | 8 | 8 | 14 | 9 | 19 | 7 |
| 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° | 40831.1 | 40831.1 | 40831.1 | 40831.1 | 40831.1 | 40831.1 | 40831.1 | 40831.1 | 40831.1 |
| 2.5° | 41009.0 | 41016.7 | 41080.6 | 41263.6 | 41316.1 | 41275.2 | 41137.0 | 41087.0 | 41137.0 |
| 5° | 40783.7 | 40756.9 | 40849.0 | 40984.7 | 40891.2 | 40723.6 | 40507.3 | 40457.4 | 40600.7 |
| 7.5° | 37896.7 | 37878.8 | 37965.8 | 37955.5 | 37708.6 | 37392.5 | 37212.0 | 37070.0 | 37192.8 |
| 10° | 33105.4 | 32945.4 | 32887.8 | 32988.9 | 32582.0 | 32145.6 | 31885.8 | 31981.8 | 31770.6 |
| 12.5° | 27711.3 | 27689.5 | 27791.9 | 27667.8 | 27432.3 | 27164.9 | 26846.2 | 26674.7 | 26521.1 |
| 15° | 23527.9 | 23585.4 | 23530.4 | 23479.2 | 23288.5 | 23087.6 | 22806.1 | 22687.1 | 22752.3 |
| 17.5° | 20244.1 | 20227.4 | 20169.8 | 20255.6 | 20108.4 | 19820.5 | 19573.5 | 19615.7 | 19687.4 |
| 20° | 17657.7 | 17587.3 | 17451.7 | 17487.5 | 17417.1 | 17193.2 | 16968.0 | 16816.9 | 16842.5 |
| 22.5° | 14992.0 | 15053.5 | 15036.8 | 14930.6 | 14820.6 | 14656.8 | 14546.7 | 14349.6 | 14441.8 |
| 25° | 12788.4 | 12798.6 | 12775.6 | 12760.2 | 12636.1 | 12478.7 | 12256.0 | 12208.6 | 12215.0 |
| 27.5° | 10533.5 | 10582.1 | 10562.9 | 10497.6 | 10372.2 | 10240.4 | 10102.2 | 9993.4 | 9983.2 |
| 30° | 8338.7 | 8407.8 | 8270.9 | 8177.5 | 8105.8 | 8082.8 | 7851.1 | 7688.6 | 7472.3 |
| 32.5° | 6452.4 | 6350.0 | 5913.6 | 5914.9 | 6054.4 | 6109.4 | 5888.0 | 5519.5 | 5459.3 |
| 35° | 4458.6 | 4440.7 | 4307.6 | 4266.6 | 4267.9 | 4214.2 | 4051.6 | 3908.3 | 3907.0 |
| 37.5° | 2794.9 | 2861.5 | 2935.7 | 2919.1 | 2755.3 | 2588.9 | 2510.8 | 2595.3 | 2619.6 |
| 40° | 1677.7 | 1764.7 | 1854.3 | 1864.6 | 1744.3 | 1552.3 | 1528.0 | 1606.1 | 1679.0 |
| 42.5° | 1050.7 | 1087.8 | 1147.9 | 1159.4 | 1073.7 | 1003.3 | 958.5 | 1014.8 | 1014.8 |
| 45° | 638.6 | 673.1 | 706.4 | 709.0 | 655.2 | 596.4 | 587.4 | 609.2 | 606.6 |
| 47.5° | 376.2 | 377.5 | 390.3 | 381.4 | 363.4 | 335.3 | 323.8 | 335.3 | 337.8 |
| 50° | 176.6 | 172.8 | 179.2 | 195.8 | 174.0 | 147.2 | 149.7 | 140.8 | 126.7 |
| 52.5° | 42.2 | 38.4 | 46.1 | 49.9 | 48.6 | 51.2 | 48.6 | 48.6 | 37.1 |
| 55° | 44.8 | 28.2 | 34.6 | 35.8 | 33.3 | 35.8 | 30.7 | 20.5 | 23.0 |
| 57.5° | 30.7 | 32.0 | 32.0 | 35.8 | 30.7 | 38.4 | 32.0 | 23.0 | 25.6 |
| 60° | 30.7 | 21.8 | 20.5 | 34.6 | 28.2 | 19.2 | 21.8 | 29.4 | 7.7 |
| 62.5° | 23.0 | 21.8 | 24.3 | 34.6 | 24.3 | 28.2 | 21.8 | 34.6 | 23.0 |
| 65° | 11.5 | 19.2 | 19.2 | 19.2 | 24.3 | 21.8 | 7.7 | 15.4 | 5.1 |
| 67.5° | 16.6 | 9.0 | 7.7 | 16.6 | 20.5 | 14.1 | 6.4 | 6.4 | 11.5 |
| 70° | 5.1 | 7.7 | 3.8 | 9.0 | 10.2 | 9.0 | 6.4 | 1.3 | 0.0 |
| 72.5° | 9.0 | 3.8 | 9.0 | 7.7 | 12.8 | 9.0 | 7.7 | 6.4 | 5.1 |
| 75° | 21.8 | 16.6 | 14.1 | 15.4 | 12.8 | 7.7 | 15.4 | 15.4 | 9.0 |
| 77.5° | 0.0 | 0.0 | 2.6 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 |
| 80° | 11.5 | 9.0 | 9.0 | 9.0 | 5.1 | 7.7 | 3.8 | 1.3 | 14.1 |
| 82.5° | 11.5 | 14.1 | 14.1 | 6.4 | 16.6 | 10.2 | 9.0 | 2.6 | 14.1 |
| 85° | 7.7 | 14.1 | 7.7 | 6.4 | 14.1 | 11.5 | 9.0 | 3.8 | 19.2 |
| 87.5° | 0.0 | 7.7 | 7.7 | 5.1 | 7.7 | 2.6 | 6.4 | 3.8 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)