

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: P247888

Luminaire Tested: **LD8B200D010 ER8B200850 8LBSOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247888
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-91)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B200D010 ER8B200850 8LBS0LI
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24449.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.24
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

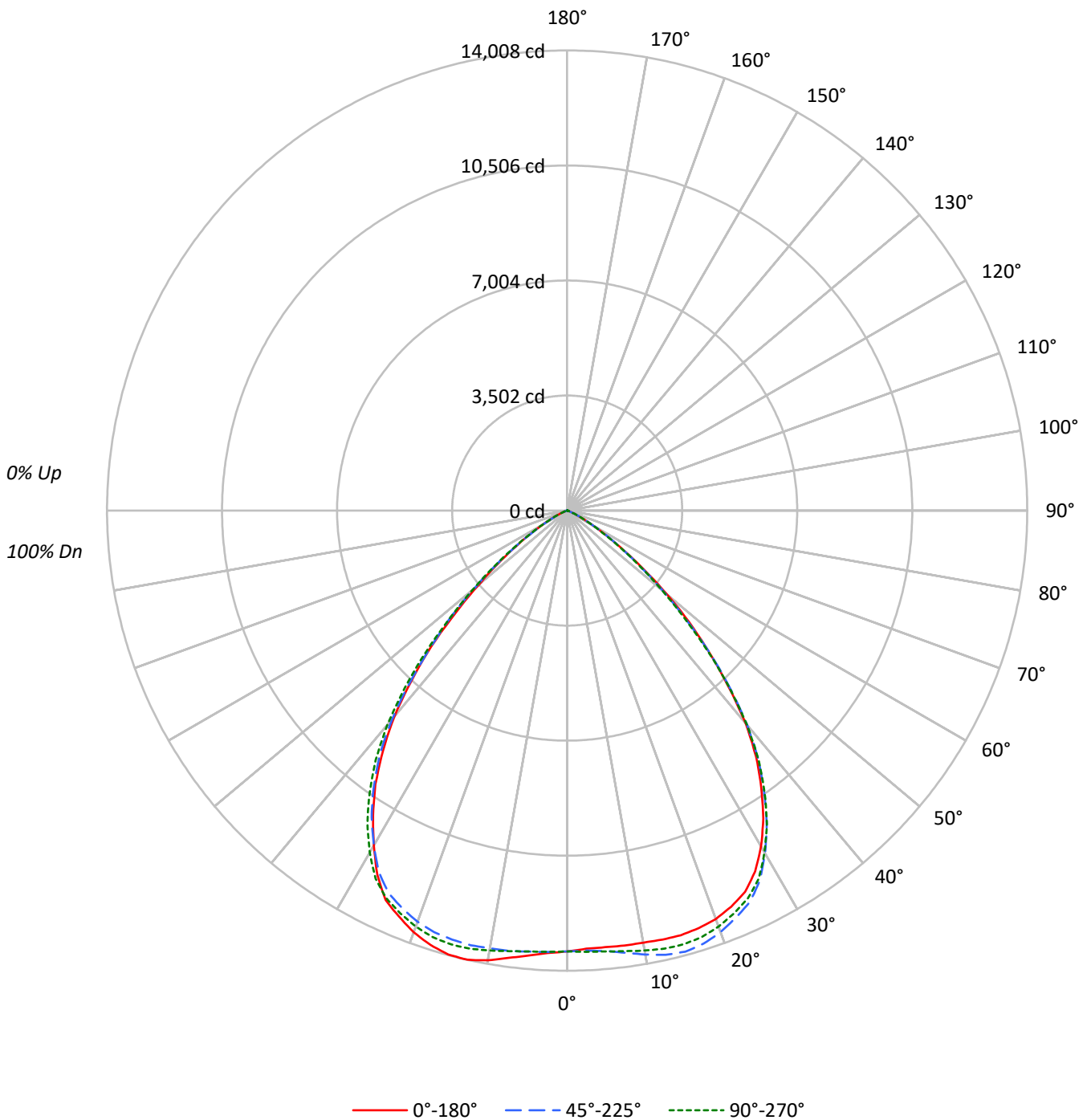
Input Watts (W): 223.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 83 | 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 | 66 | 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 | 50 | 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 | 51 | 44 | 39 | 61 | 50 | 43 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 47 | 42 | 39 | 37 | | | | | 37 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 413777 | 413777 | 413777 |
| 5° | 412977 | 416942 | 420821 |
| 10° | 418175 | 425815 | 435271 |
| 15° | 427212 | 436463 | 446618 |
| 20° | 434183 | 442190 | 448293 |
| 25° | 435866 | 442973 | 445131 |
| 30° | 420426 | 427772 | 418938 |
| 35° | 387750 | 394553 | 382932 |
| 40° | 339965 | 342517 | 329491 |
| 45° | 266953 | 264777 | 254664 |
| 50° | 189675 | 180814 | 168466 |
| 55° | 112840 | 108781 | 101899 |
| 60° | 56615 | 54290 | 53871 |
| 65° | 23801 | 22918 | 23509 |
| 70° | 8872 | 7655 | 7411 |
| 75° | 3539 | 3860 | 3860 |
| 80° | 4067 | 2877 | 959 |
| 85° | 4281 | 8102 | 3326 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1290.4 | 5.3 |
| 10°-20° | 3863.7 | 15.8 |
| 20°-30° | 5938.1 | 24.3 |
| 30°-40° | 6423.9 | 26.3 |
| 40°-50° | 4630.2 | 18.9 |
| 50°-60° | 1879.5 | 7.7 |
| 60°-70° | 375.4 | 1.5 |
| 70°-80° | 37.6 | 0.2 |
| 80°-90° | 10.1 | 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° | 11092.2 | 45.4 |
| 0°-40° | 17516.2 | 71.6 |
| 0°-60° | 24025.9 | 98.3 |
| 0°-90° | 24449.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 24449.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 13418 | 13418 | 13418 | 13418 | 13418 | |
| 5° | 13342 | 13455 | 13470 | 13475 | 13595 | ### |
| 15° | 13382 | 13901 | 13672 | 13520 | 13990 | 3781 |
| 25° | 12810 | 13152 | 13019 | 12852 | 13083 | 5856 |
| 35° | 10300 | 10451 | 10481 | 10267 | 10172 | 6396 |
| 45° | 6122 | 6151 | 6072 | 5868 | 5840 | 4722 |
| 55° | 2099 | 2034 | 2023 | 1955 | 1895 | 1969 |
| 65° | 326 | 353 | 314 | 299 | 322 | 388 |
| 75° | 30 | 36 | 32 | 31 | 32 | 39 |
| 85° | 12 | 18 | 23 | 11 | 9 | 10 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247888

CATALOG NUMBER: LD8B200D010 ER8B200850 8LBSOLI

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 13418.5 | 13418.5 | 13418.5 | 13418.5 | 13418.5 | 13418.5 | 13418.5 | 13418.5 | 13418.5 |
| 2.5° | 13349.7 | 13434.6 | 13406.3 | 13369.9 | 13446.8 | 13431.9 | 13448.1 | 13454.9 | 13480.5 |
| 5° | 13341.6 | 13437.3 | 13454.9 | 13415.8 | 13469.7 | 13444.1 | 13475.1 | 13533.0 | 13595.0 |
| 7.5° | 13355.1 | 13499.3 | 13574.8 | 13551.9 | 13526.3 | 13438.7 | 13519.6 | 13653.0 | 13735.2 |
| 10° | 13355.1 | 13546.5 | 13721.8 | 13720.4 | 13599.1 | 13436.0 | 13526.3 | 13756.8 | 13901.1 |
| 12.5° | 13376.7 | 13611.2 | 13851.2 | 13867.4 | 13661.1 | 13454.9 | 13551.9 | 13824.2 | 14007.6 |
| 15° | 13382.1 | 13612.6 | 13901.1 | 13909.1 | 13671.9 | 13429.2 | 13519.6 | 13812.1 | 13990.0 |
| 17.5° | 13325.4 | 13547.9 | 13821.5 | 13849.8 | 13611.2 | 13364.5 | 13456.2 | 13717.7 | 13859.3 |
| 20° | 13231.1 | 13430.6 | 13653.0 | 13700.2 | 13475.1 | 13240.5 | 13321.4 | 13546.5 | 13661.1 |
| 22.5° | 13050.4 | 13232.4 | 13415.8 | 13450.8 | 13270.2 | 13065.3 | 13105.7 | 13281.0 | 13376.7 |
| 25° | 12810.5 | 12991.1 | 13151.5 | 13170.4 | 13019.4 | 12836.1 | 12852.3 | 12985.7 | 13082.8 |
| 27.5° | 12384.5 | 12555.7 | 12701.3 | 12724.2 | 12633.9 | 12438.4 | 12408.8 | 12472.1 | 12512.6 |
| 30° | 11807.5 | 11924.8 | 12046.1 | 12118.9 | 12013.8 | 11852.0 | 11768.4 | 11802.1 | 11765.7 |
| 32.5° | 11114.6 | 11234.6 | 11308.8 | 11331.7 | 11315.5 | 11174.0 | 11075.5 | 10990.6 | 10996.0 |
| 35° | 10300.4 | 10409.6 | 10451.4 | 10493.2 | 10481.1 | 10370.5 | 10266.7 | 10187.2 | 10172.4 |
| 37.5° | 9447.1 | 9519.9 | 9567.1 | 9599.4 | 9572.5 | 9502.4 | 9367.6 | 9230.1 | 9207.2 |
| 40° | 8445.5 | 8556.1 | 8518.3 | 8534.5 | 8508.9 | 8419.9 | 8285.1 | 8206.9 | 8185.3 |
| 42.5° | 7270.0 | 7367.1 | 7359.0 | 7364.4 | 7307.8 | 7186.4 | 7069.2 | 7026.0 | 7003.1 |
| 45° | 6121.5 | 6168.7 | 6151.1 | 6094.5 | 6071.6 | 5996.1 | 5868.0 | 5785.8 | 5839.7 |
| 47.5° | 5040.3 | 5024.2 | 4906.9 | 4861.1 | 4827.4 | 4838.1 | 4809.8 | 4665.6 | 4587.4 |
| 50° | 3953.8 | 3912.0 | 3800.1 | 3731.4 | 3769.1 | 3798.8 | 3693.6 | 3607.4 | 3511.7 |
| 52.5° | 2932.0 | 2940.1 | 2833.6 | 2758.1 | 2793.2 | 2798.5 | 2736.5 | 2688.0 | 2659.7 |
| 55° | 2098.9 | 2098.9 | 2034.2 | 2009.9 | 2023.4 | 1997.8 | 1954.7 | 1938.5 | 1895.4 |
| 57.5° | 1427.6 | 1437.0 | 1433.0 | 1404.7 | 1341.3 | 1318.4 | 1294.1 | 1318.4 | 1333.2 |
| 60° | 918.0 | 940.9 | 936.9 | 934.2 | 880.3 | 826.4 | 849.3 | 870.8 | 873.5 |
| 62.5° | 564.8 | 575.6 | 594.5 | 578.3 | 551.4 | 508.2 | 502.8 | 535.2 | 564.8 |
| 65° | 326.2 | 338.4 | 353.2 | 342.4 | 314.1 | 307.4 | 299.3 | 316.8 | 322.2 |
| 67.5° | 186.0 | 180.6 | 182.0 | 173.9 | 165.8 | 156.4 | 157.7 | 165.8 | 177.9 |
| 70° | 98.4 | 84.9 | 86.3 | 78.2 | 84.9 | 75.5 | 72.8 | 79.5 | 82.2 |
| 72.5° | 49.9 | 48.5 | 55.3 | 55.3 | 59.3 | 52.6 | 52.6 | 49.9 | 56.6 |
| 75° | 29.7 | 33.7 | 36.4 | 40.4 | 32.4 | 31.0 | 31.0 | 31.0 | 32.4 |
| 77.5° | 8.1 | 4.0 | 5.4 | 17.5 | 6.7 | 13.5 | 6.7 | 5.4 | 12.1 |
| 80° | 22.9 | 13.5 | 8.1 | 14.8 | 16.2 | 8.1 | 20.2 | 18.9 | 5.4 |
| 82.5° | 8.1 | 0.0 | 14.8 | 16.2 | 13.5 | 13.5 | 16.2 | 16.2 | 14.8 |
| 85° | 12.1 | 8.1 | 17.5 | 20.2 | 22.9 | 13.5 | 10.8 | 6.7 | 9.4 |
| 87.5° | 5.4 | 0.0 | 8.1 | 6.7 | 4.0 | 1.3 | 4.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)