

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: P247812

Luminaire Tested: **LD8B175D010 ER8B175840 8LBNOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247812
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: LD8B175D010 ER8B175840 8LBNOLI
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16831.0 lumens
Efficiency: N/A
Efficacy: 95.0 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

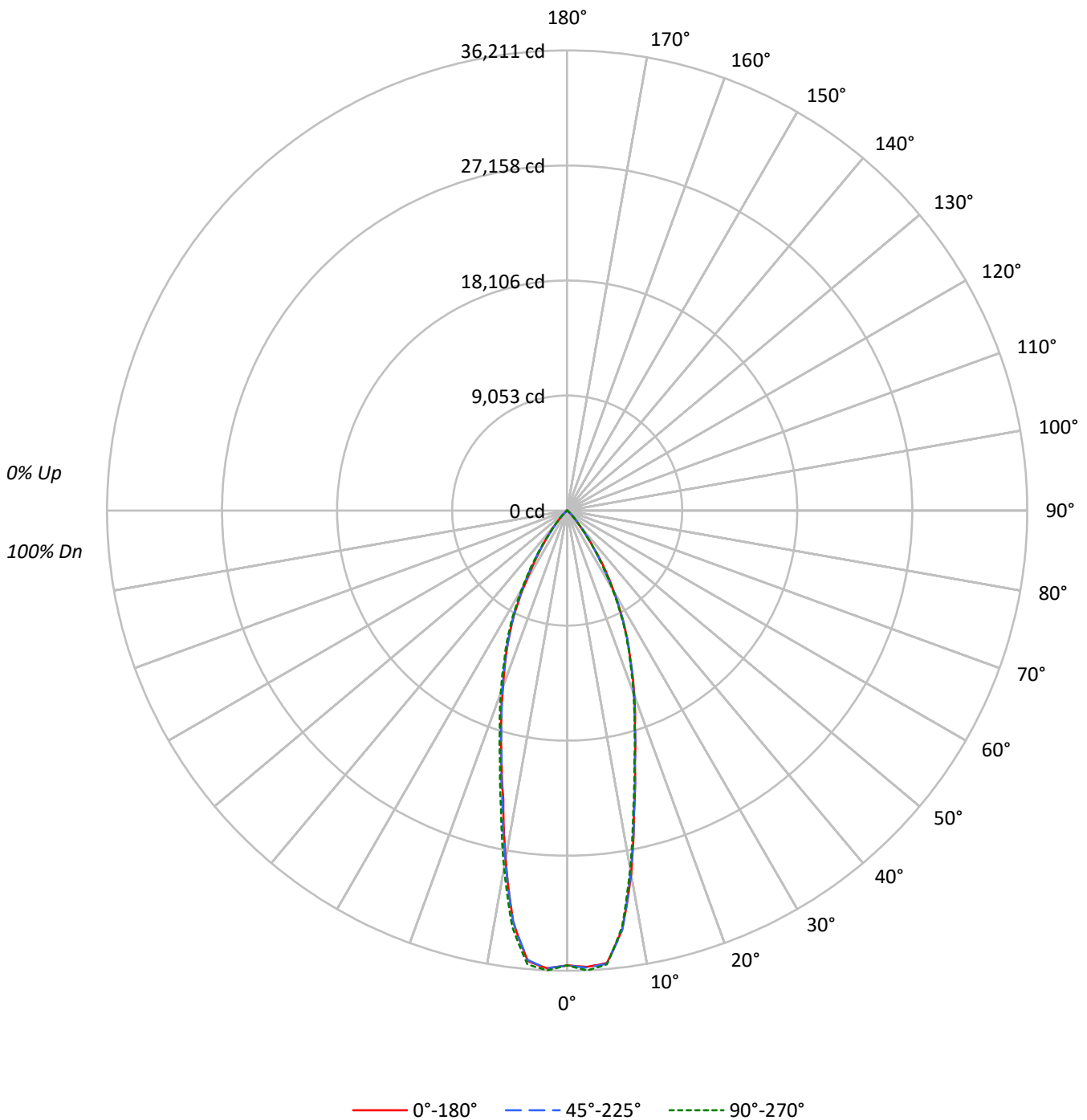
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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° | 1103499 | 1103499 | 1103499 |
| 5° | 1106430 | 1109346 | 1101465 |
| 10° | 908506 | 894143 | 871877 |
| 15° | 658294 | 651596 | 636595 |
| 20° | 507843 | 500923 | 484397 |
| 25° | 381346 | 376807 | 364248 |
| 30° | 260225 | 252957 | 233188 |
| 35° | 147098 | 140808 | 128901 |
| 40° | 59189 | 61536 | 59234 |
| 45° | 24408 | 25045 | 23183 |
| 50° | 7426 | 7316 | 5325 |
| 55° | 2113 | 1570 | 1086 |
| 60° | 1659 | 1523 | 413 |
| 65° | 737 | 1554 | 328 |
| 70° | 406 | 811 | 0 |
| 75° | 2276 | 1334 | 941 |
| 80° | 1794 | 799 | 2184 |
| 85° | 2371 | 4352 | 5944 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 3163.1 | 18.8 |
| 10°-20° | 5732.0 | 34.1 |
| 20°-30° | 4994.4 | 29.7 |
| 30°-40° | 2378.9 | 14.1 |
| 40°-50° | 494.3 | 2.9 |
| 50°-60° | 39.3 | 0.2 |
| 60°-70° | 15.2 | 0.1 |
| 70°-80° | 6.8 | 0.0 |
| 80°-90° | 7.0 | 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° | 13889.5 | 82.5 |
| 0°-40° | 16268.4 | 96.7 |
| 0°-60° | 16802.0 | 99.8 |
| 0°-90° | 16831.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 16831.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 35786 | 35786 | 35786 | 35786 | 35786 | |
| 5° | 35744 | 35801 | 35838 | 35502 | 35584 | ### |
| 15° | 20621 | 20623 | 20411 | 19988 | 19941 | 5823 |
| 25° | 11208 | 11197 | 11075 | 10742 | 10706 | 5095 |
| 35° | 3908 | 3775 | 3740 | 3551 | 3424 | 2502 |
| 45° | 560 | 619 | 574 | 515 | 532 | 494 |
| 55° | 39 | 30 | 29 | 27 | 20 | 43 |
| 65° | 10 | 17 | 21 | 7 | 4 | 15 |
| 75° | 19 | 12 | 11 | 14 | 8 | 9 |
| 85° | 7 | 7 | 12 | 8 | 17 | 6 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247812

CATALOG NUMBER: LD8B175D010 ER8B175840 8LBNOLI

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 35785.7 | 35785.7 | 35785.7 | 35785.7 | 35785.7 | 35785.7 | 35785.7 | 35785.7 | 35785.7 |
| 2.5° | 35941.6 | 35948.3 | 36004.4 | 36164.8 | 36210.8 | 36174.9 | 36053.7 | 36010.0 | 36053.7 |
| 5° | 35744.2 | 35720.6 | 35801.4 | 35920.3 | 35838.4 | 35691.5 | 35501.9 | 35458.2 | 35583.8 |
| 7.5° | 33213.9 | 33198.2 | 33274.4 | 33265.5 | 33049.0 | 32771.9 | 32613.8 | 32489.3 | 32597.0 |
| 10° | 29014.6 | 28874.4 | 28823.9 | 28912.5 | 28555.9 | 28173.4 | 27945.7 | 28029.8 | 27844.8 |
| 12.5° | 24287.1 | 24268.0 | 24357.7 | 24248.9 | 24042.6 | 23808.1 | 23528.9 | 23378.6 | 23244.0 |
| 15° | 20620.6 | 20671.0 | 20622.8 | 20577.9 | 20410.8 | 20234.7 | 19988.0 | 19883.7 | 19940.9 |
| 17.5° | 17742.5 | 17728.0 | 17677.5 | 17752.6 | 17623.7 | 17371.3 | 17154.8 | 17191.8 | 17254.7 |
| 20° | 15475.8 | 15414.1 | 15295.2 | 15326.6 | 15264.9 | 15068.7 | 14871.3 | 14738.9 | 14761.3 |
| 22.5° | 13139.5 | 13193.3 | 13178.8 | 13085.7 | 12989.2 | 12845.7 | 12749.2 | 12576.5 | 12657.2 |
| 25° | 11208.1 | 11217.1 | 11196.9 | 11183.4 | 11074.7 | 10936.7 | 10741.5 | 10700.0 | 10705.6 |
| 27.5° | 9231.9 | 9274.5 | 9257.7 | 9200.5 | 9090.5 | 8975.0 | 8853.9 | 8758.6 | 8749.6 |
| 30° | 7308.3 | 7368.9 | 7248.9 | 7167.0 | 7104.2 | 7084.0 | 6881.0 | 6738.6 | 6549.0 |
| 32.5° | 5655.1 | 5565.4 | 5182.9 | 5184.0 | 5306.3 | 5354.5 | 5160.5 | 4837.4 | 4784.7 |
| 35° | 3907.6 | 3891.9 | 3775.3 | 3739.4 | 3740.5 | 3693.4 | 3551.0 | 3425.4 | 3424.2 |
| 37.5° | 2449.6 | 2507.9 | 2572.9 | 2558.4 | 2414.8 | 2269.0 | 2200.6 | 2274.6 | 2295.9 |
| 40° | 1470.4 | 1546.7 | 1625.2 | 1634.2 | 1528.7 | 1360.5 | 1339.2 | 1407.6 | 1471.5 |
| 42.5° | 920.8 | 953.4 | 1006.1 | 1016.2 | 941.0 | 879.3 | 840.1 | 889.4 | 889.4 |
| 45° | 559.7 | 590.0 | 619.1 | 621.4 | 574.3 | 522.7 | 514.8 | 533.9 | 531.6 |
| 47.5° | 329.7 | 330.9 | 342.1 | 334.2 | 318.5 | 293.9 | 283.8 | 293.9 | 296.1 |
| 50° | 154.8 | 151.4 | 157.0 | 171.6 | 152.5 | 129.0 | 131.2 | 123.4 | 111.0 |
| 52.5° | 37.0 | 33.6 | 40.4 | 43.7 | 42.6 | 44.9 | 42.6 | 42.6 | 32.5 |
| 55° | 39.3 | 24.7 | 30.3 | 31.4 | 29.2 | 31.4 | 26.9 | 17.9 | 20.2 |
| 57.5° | 26.9 | 28.0 | 28.0 | 31.4 | 26.9 | 33.6 | 28.0 | 20.2 | 22.4 |
| 60° | 26.9 | 19.1 | 17.9 | 30.3 | 24.7 | 16.8 | 19.1 | 25.8 | 6.7 |
| 62.5° | 20.2 | 19.1 | 21.3 | 30.3 | 21.3 | 24.7 | 19.1 | 30.3 | 20.2 |
| 65° | 10.1 | 16.8 | 16.8 | 16.8 | 21.3 | 19.1 | 6.7 | 13.5 | 4.5 |
| 67.5° | 14.6 | 7.9 | 6.7 | 14.6 | 17.9 | 12.3 | 5.6 | 5.6 | 10.1 |
| 70° | 4.5 | 6.7 | 3.4 | 7.9 | 9.0 | 7.9 | 5.6 | 1.1 | 0.0 |
| 72.5° | 7.9 | 3.4 | 7.9 | 6.7 | 11.2 | 7.9 | 6.7 | 5.6 | 4.5 |
| 75° | 19.1 | 14.6 | 12.3 | 13.5 | 11.2 | 6.7 | 13.5 | 13.5 | 7.9 |
| 77.5° | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 |
| 80° | 10.1 | 7.9 | 7.9 | 7.9 | 4.5 | 6.7 | 3.4 | 1.1 | 12.3 |
| 82.5° | 10.1 | 12.3 | 12.3 | 5.6 | 14.6 | 9.0 | 7.9 | 2.2 | 12.3 |
| 85° | 6.7 | 12.3 | 6.7 | 5.6 | 12.3 | 10.1 | 7.9 | 3.4 | 16.8 |
| 87.5° | 0.0 | 6.7 | 6.7 | 4.5 | 6.7 | 2.2 | 5.6 | 3.4 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)