

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: P247977

Luminaire Tested: **LD8B175D010 ER8B1759727 8LBS0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247977  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-92)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B175D010 ER8B1759727 8LBS0H  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT  
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13858.0 lumens  
Efficiency: N/A  
Efficacy: 78.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.22  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

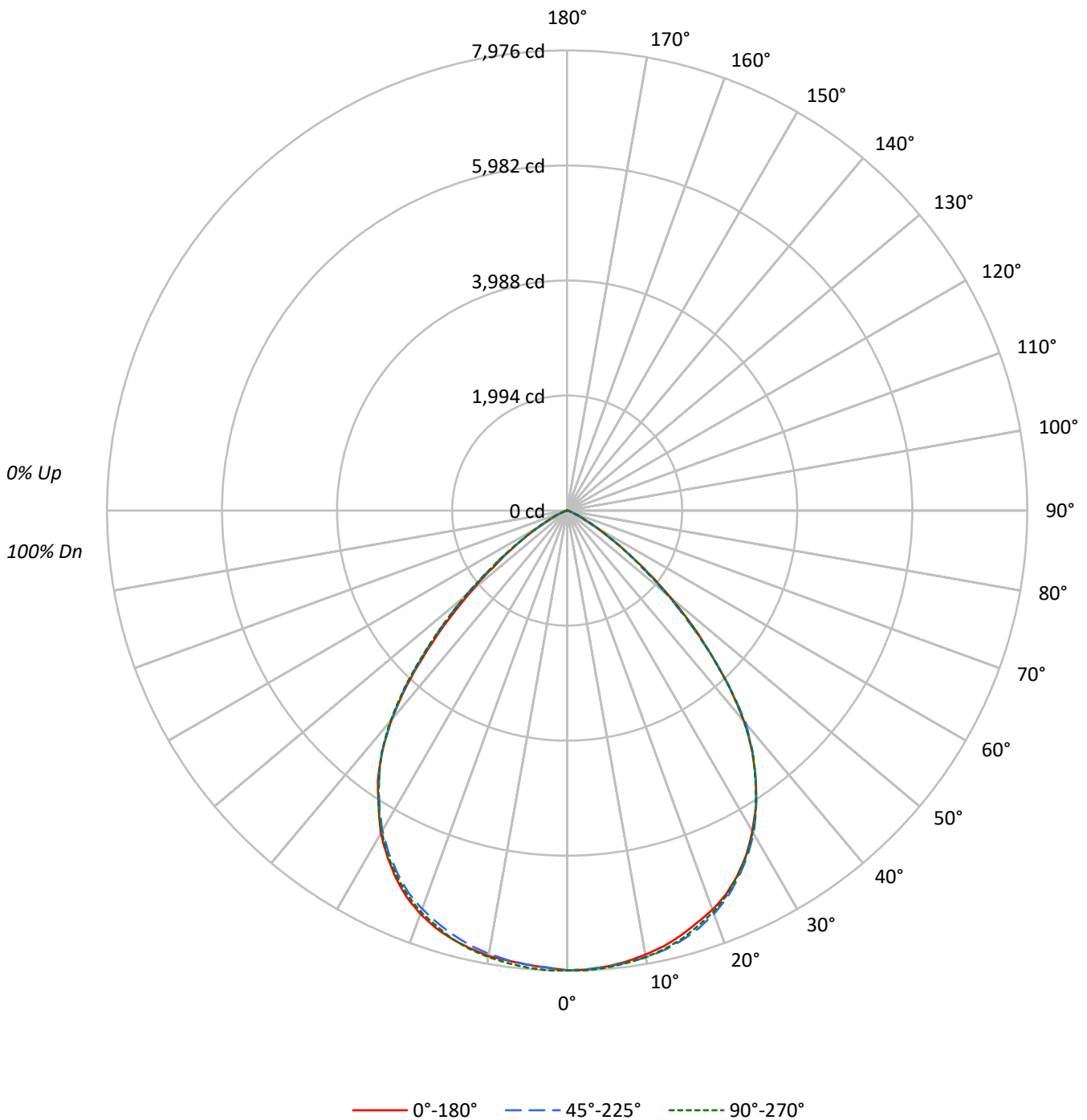
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 101 | 103 | 100 | 98  | 99  | 97  | 95  | 95  | 94  | 93  | 91  |
| 2   | 105 | 99  | 94  | 90  | 103 | 97  | 93  | 89  | 94  | 90  | 87  | 91  | 88  | 85  | 88  | 85  | 83  | 81  |
| 3   | 98  | 90  | 84  | 79  | 96  | 88  | 83  | 78  | 86  | 81  | 77  | 83  | 79  | 76  | 81  | 77  | 74  | 73  |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 68  | 76  | 71  | 68  | 74  | 70  | 67  | 65  |
| 5   | 85  | 75  | 68  | 62  | 83  | 74  | 67  | 62  | 72  | 66  | 61  | 70  | 65  | 61  | 68  | 64  | 60  | 58  |
| 6   | 79  | 69  | 61  | 56  | 78  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 63  | 58  | 54  | 53  |
| 7   | 74  | 63  | 56  | 50  | 73  | 62  | 55  | 50  | 61  | 55  | 50  | 60  | 54  | 50  | 58  | 53  | 49  | 48  |
| 8   | 70  | 58  | 51  | 46  | 68  | 58  | 51  | 46  | 56  | 50  | 46  | 55  | 49  | 45  | 54  | 49  | 45  | 43  |
| 9   | 65  | 54  | 47  | 42  | 64  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 41  | 50  | 45  | 41  | 40  |
| 10  | 62  | 50  | 43  | 38  | 60  | 50  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 36  |

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

|     |                                                              |     |      |
|-----|--------------------------------------------------------------|-----|------|
|     | 0°                                                           | 90° | 180° |
| 0°  | Luminaire represents a point source (luminous area is zero). |     |      |
| 5°  | No luminance values can be calculated.                       |     |      |
| 10° |                                                              |     |      |
| 15° |                                                              |     |      |
| 20° |                                                              |     |      |
| 25° |                                                              |     |      |
| 30° |                                                              |     |      |
| 35° |                                                              |     |      |
| 40° |                                                              |     |      |
| 45° |                                                              |     |      |
| 50° |                                                              |     |      |
| 55° |                                                              |     |      |
| 60° |                                                              |     |      |
| 65° |                                                              |     |      |
| 70° |                                                              |     |      |
| 75° |                                                              |     |      |
| 80° |                                                              |     |      |
| 85° |                                                              |     |      |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 754.4   | 5.4       |
| 10°-20°   | 2164.0  | 15.6      |
| 20°-30°   | 3214.9  | 23.2      |
| 30°-40°   | 3542.9  | 25.6      |
| 40°-50°   | 2698.5  | 19.5      |
| 50°-60°   | 1163.3  | 8.4       |
| 60°-70°   | 267.2   | 1.9       |
| 70°-80°   | 44.4    | 0.3       |
| 80°-90°   | 8.3     | 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°    | 6133.3  | 44.3      |
| 0°-40°    | 9676.2  | 69.8      |
| 0°-60°    | 13538.0 | 97.7      |
| 0°-90°    | 13858.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 13858.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 7968 | 7968 | 7968 | 7968 | 7968 |      |
| 5°  | 7932 | 7931 | 7951 | 7898 | 7903 | 753  |
| 15° | 7623 | 7708 | 7685 | 7616 | 7690 | 2150 |
| 25° | 6980 | 7020 | 6988 | 6947 | 7027 | 3203 |
| 35° | 5699 | 5702 | 5689 | 5684 | 5722 | 3538 |
| 45° | 3523 | 3516 | 3522 | 3503 | 3433 | 2717 |
| 55° | 1266 | 1265 | 1256 | 1264 | 1199 | 1180 |
| 65° | 234  | 256  | 243  | 241  | 247  | 261  |
| 75° | 48   | 48   | 48   | 49   | 42   | 44   |
| 85° | 7    | 5    | 5    | 14   | 10   | 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°    | 7968.4 | 7968.4 | 7968.4 | 7968.4 | 7968.4 | 7968.4 | 7968.4 | 7968.4 | 7968.4 |
| 2.5°  | 7959.7 | 7960.5 | 7955.0 | 7966.8 | 7976.3 | 7945.6 | 7927.5 | 7968.4 | 7929.1 |
| 5°    | 7932.2 | 7937.7 | 7931.4 | 7946.4 | 7951.1 | 7925.9 | 7897.6 | 7941.7 | 7903.1 |
| 7.5°  | 7885.1 | 7896.1 | 7905.5 | 7922.8 | 7910.2 | 7878.8 | 7859.9 | 7911.8 | 7864.6 |
| 10°   | 7814.3 | 7841.8 | 7862.3 | 7888.2 | 7857.5 | 7823.7 | 7800.9 | 7871.7 | 7840.3 |
| 12.5° | 7734.9 | 7766.4 | 7800.9 | 7832.4 | 7786.0 | 7736.5 | 7724.7 | 7800.2 | 7771.9 |
| 15°   | 7623.3 | 7652.4 | 7708.2 | 7738.1 | 7684.6 | 7628.0 | 7616.2 | 7712.1 | 7690.1 |
| 17.5° | 7492.0 | 7543.1 | 7590.3 | 7613.8 | 7546.2 | 7497.5 | 7491.2 | 7590.3 | 7581.6 |
| 20°   | 7362.3 | 7389.8 | 7438.5 | 7470.0 | 7405.5 | 7347.3 | 7345.0 | 7447.2 | 7438.5 |
| 22.5° | 7198.0 | 7222.3 | 7254.6 | 7283.7 | 7223.1 | 7174.4 | 7177.5 | 7261.6 | 7260.1 |
| 25°   | 6980.2 | 6996.7 | 7019.5 | 7051.7 | 6988.1 | 6953.5 | 6947.2 | 7036.8 | 7027.4 |
| 27.5° | 6726.3 | 6737.3 | 6763.2 | 6790.7 | 6735.7 | 6705.1 | 6694.0 | 6783.7 | 6752.2 |
| 30°   | 6417.3 | 6442.5 | 6460.6 | 6472.4 | 6431.5 | 6412.6 | 6404.7 | 6475.5 | 6460.6 |
| 32.5° | 6089.5 | 6098.1 | 6098.9 | 6128.0 | 6084.8 | 6058.1 | 6058.1 | 6114.7 | 6080.9 |
| 35°   | 5698.8 | 5697.2 | 5701.9 | 5733.4 | 5688.6 | 5698.0 | 5683.8 | 5728.7 | 5721.6 |
| 37.5° | 5270.3 | 5277.4 | 5279.0 | 5304.1 | 5279.0 | 5285.3 | 5279.8 | 5286.8 | 5264.0 |
| 40°   | 4778.2 | 4808.9 | 4819.1 | 4814.4 | 4765.6 | 4749.1 | 4735.0 | 4760.9 | 4731.8 |
| 42.5° | 4167.4 | 4181.5 | 4183.1 | 4186.2 | 4172.9 | 4170.5 | 4153.2 | 4164.2 | 4118.6 |
| 45°   | 3522.7 | 3529.0 | 3515.7 | 3513.3 | 3521.9 | 3535.3 | 3503.1 | 3477.9 | 3433.1 |
| 47.5° | 2933.9 | 2911.9 | 2851.4 | 2873.4 | 2882.8 | 2916.6 | 2882.0 | 2814.4 | 2777.5 |
| 50°   | 2314.4 | 2291.6 | 2245.2 | 2255.5 | 2292.4 | 2343.5 | 2303.4 | 2209.9 | 2160.3 |
| 52.5° | 1768.0 | 1742.1 | 1690.2 | 1699.7 | 1710.7 | 1749.2 | 1728.0 | 1664.3 | 1616.3 |
| 55°   | 1265.7 | 1247.6 | 1264.9 | 1250.8 | 1256.3 | 1293.2 | 1264.1 | 1211.5 | 1198.9 |
| 57.5° | 855.3  | 865.5  | 879.7  | 882.1  | 871.1  | 860.0  | 856.1  | 835.7  | 846.7  |
| 60°   | 566.8  | 574.7  | 598.3  | 605.3  | 588.8  | 565.2  | 570.0  | 570.0  | 580.2  |
| 62.5° | 366.3  | 373.4  | 400.9  | 405.7  | 382.1  | 375.8  | 375.8  | 373.4  | 392.3  |
| 65°   | 233.5  | 247.6  | 256.3  | 243.7  | 242.9  | 234.3  | 241.3  | 241.3  | 246.9  |
| 67.5° | 139.9  | 127.4  | 136.0  | 141.5  | 136.0  | 128.9  | 127.4  | 128.1  | 136.0  |
| 70°   | 81.0   | 77.8   | 83.3   | 80.2   | 83.3   | 72.3   | 81.0   | 77.0   | 79.4   |
| 72.5° | 51.9   | 51.1   | 51.1   | 54.2   | 51.1   | 49.5   | 52.7   | 45.6   | 50.3   |
| 75°   | 48.0   | 48.0   | 48.0   | 41.7   | 48.0   | 46.4   | 48.7   | 36.9   | 41.7   |
| 77.5° | 18.9   | 22.0   | 26.7   | 25.9   | 25.9   | 24.4   | 22.0   | 18.9   | 29.1   |
| 80°   | 17.3   | 15.7   | 21.2   | 25.2   | 15.7   | 18.9   | 21.2   | 13.4   | 14.2   |
| 82.5° | 8.6    | 7.9    | 10.2   | 10.2   | 10.2   | 5.5    | 14.2   | 8.6    | 7.1    |
| 85°   | 7.1    | 3.1    | 4.7    | 4.7    | 4.7    | 6.3    | 14.2   | 3.9    | 10.2   |
| 87.5° | 1.6    | 2.4    | 3.9    | 3.9    | 4.7    | 7.9    | 14.2   | 3.1    | 11.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)