

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: P247958

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBS0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247958  
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: LSR8B150D010 EC8B150850 8LBS0H  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17856.0 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.22  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

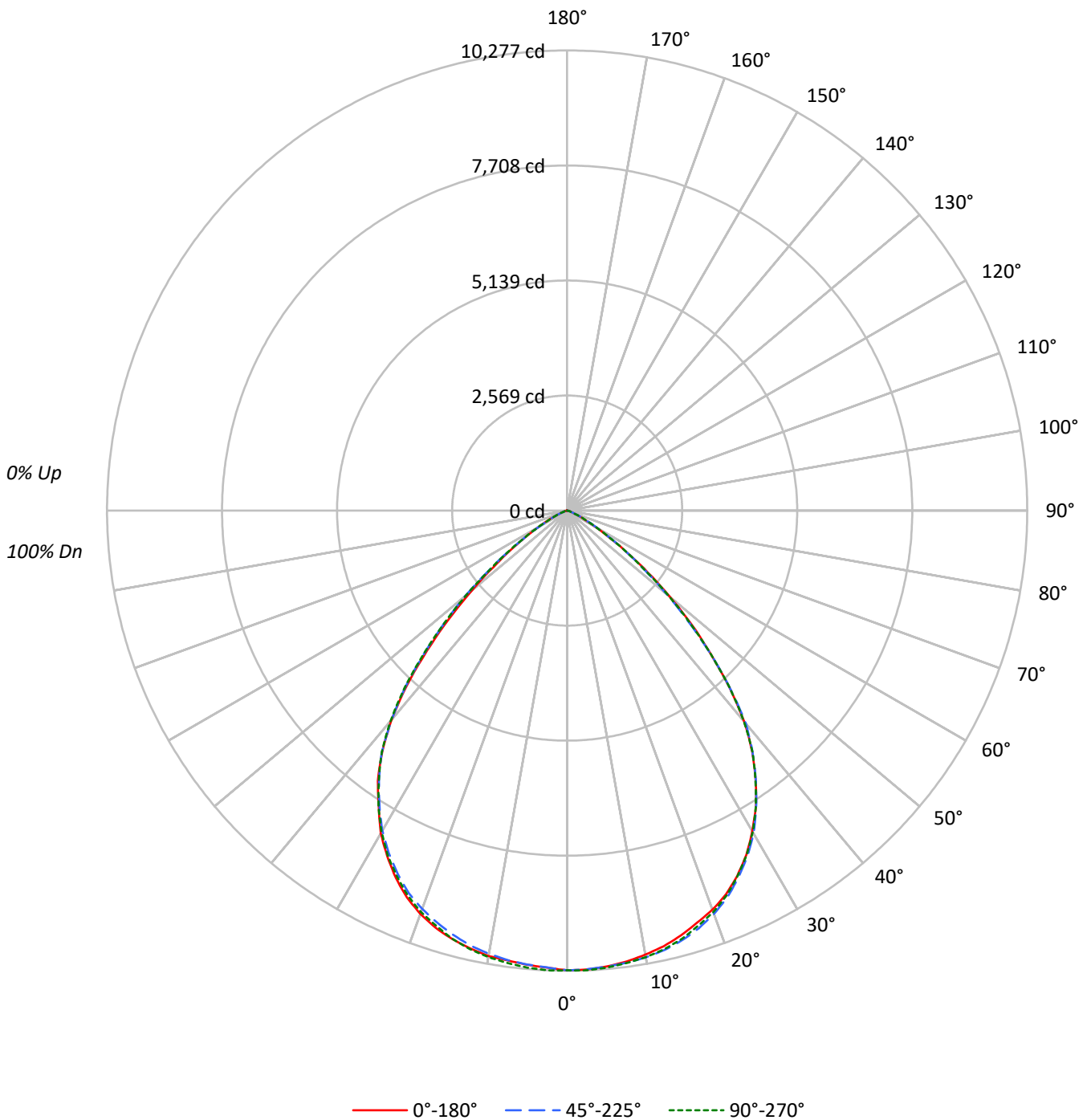
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°  | 316606 | 316606 | 316606 |
| 5°  | 316373 | 317125 | 315212 |
| 10° | 315271 | 317015 | 316317 |
| 15° | 313578 | 316100 | 316326 |
| 20° | 311296 | 313124 | 314518 |
| 25° | 306013 | 306356 | 308081 |
| 30° | 294421 | 295069 | 296404 |
| 35° | 276418 | 275921 | 277520 |
| 40° | 247831 | 247179 | 245424 |
| 45° | 197942 | 197898 | 192909 |
| 50° | 143060 | 141702 | 133537 |
| 55° | 87674  | 87024  | 83045  |
| 60° | 45040  | 46791  | 46106  |
| 65° | 21948  | 22838  | 23210  |
| 70° | 9404   | 9683   | 9223   |
| 75° | 7363   | 7363   | 6398   |
| 80° | 3960   | 3605   | 3232   |
| 85° | 3220   | 2158   | 4670   |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 972.1   | 5.4       |
| 10°-20°   | 2788.3  | 15.6      |
| 20°-30°   | 4142.4  | 23.2      |
| 30°-40°   | 4565.0  | 25.6      |
| 40°-50°   | 3477.0  | 19.5      |
| 50°-60°   | 1498.9  | 8.4       |
| 60°-70°   | 344.3   | 1.9       |
| 70°-80°   | 57.2    | 0.3       |
| 80°-90°   | 10.8    | 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°    | 7902.8  | 44.3      |
| 0°-40°    | 12467.8 | 69.8      |
| 0°-60°    | 17443.7 | 97.7      |
| 0°-90°    | 17856.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 17856.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 45°   | 90°   | 135°  | 180°  | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 10267 | 10267 | 10267 | 10267 | 10267 |      |
| 5°  | 10221 | 10220 | 10245 | 10176 | 10183 | 971  |
| 15° | 9823  | 9932  | 9902  | 9814  | 9909  | 2771 |
| 25° | 8994  | 9045  | 9004  | 8951  | 9055  | 4128 |
| 35° | 7343  | 7347  | 7330  | 7324  | 7372  | 4559 |
| 45° | 4539  | 4530  | 4538  | 4514  | 4424  | 3501 |
| 55° | 1631  | 1630  | 1619  | 1629  | 1545  | 1521 |
| 65° | 301   | 330   | 313   | 311   | 318   | 336  |
| 75° | 62    | 62    | 62    | 63    | 54    | 57   |
| 85° | 9     | 6     | 6     | 18    | 13    | 9    |
| 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°    | 10267.3 | 10267.3 | 10267.3 | 10267.3 | 10267.3 | 10267.3 | 10267.3 | 10267.3 | 10267.3 |
| 2.5°  | 10256.1 | 10257.1 | 10250.0 | 10265.2 | 10277.4 | 10237.9 | 10214.6 | 10267.3 | 10216.6 |
| 5°    | 10220.7 | 10227.8 | 10219.6 | 10238.9 | 10245.0 | 10212.6 | 10176.1 | 10232.8 | 10183.2 |
| 7.5°  | 10159.9 | 10174.1 | 10186.2 | 10208.5 | 10192.3 | 10151.8 | 10127.5 | 10194.3 | 10133.5 |
| 10°   | 10068.7 | 10104.2 | 10130.5 | 10163.9 | 10124.4 | 10080.9 | 10051.5 | 10142.7 | 10102.1 |
| 12.5° | 9966.4  | 10006.9 | 10051.5 | 10092.0 | 10032.3 | 9968.4  | 9953.2  | 10050.5 | 10014.0 |
| 15°   | 9822.6  | 9860.1  | 9932.0  | 9970.5  | 9901.6  | 9828.6  | 9813.5  | 9937.0  | 9908.7  |
| 17.5° | 9653.4  | 9719.3  | 9780.0  | 9810.4  | 9723.3  | 9660.5  | 9652.4  | 9780.0  | 9768.9  |
| 20°   | 9486.3  | 9521.7  | 9584.5  | 9625.0  | 9542.0  | 9467.0  | 9464.0  | 9595.7  | 9584.5  |
| 22.5° | 9274.6  | 9306.0  | 9347.5  | 9385.0  | 9307.0  | 9244.2  | 9248.2  | 9356.6  | 9354.6  |
| 25°   | 8994.0  | 9015.3  | 9044.6  | 9086.2  | 9004.1  | 8959.5  | 8951.4  | 9066.9  | 9054.8  |
| 27.5° | 8666.8  | 8681.0  | 8714.4  | 8749.9  | 8679.0  | 8639.4  | 8625.3  | 8740.7  | 8700.2  |
| 30°   | 8268.7  | 8301.1  | 8324.4  | 8339.6  | 8286.9  | 8262.6  | 8252.5  | 8343.7  | 8324.4  |
| 32.5° | 7846.3  | 7857.4  | 7858.5  | 7895.9  | 7840.2  | 7805.8  | 7805.8  | 7878.7  | 7835.2  |
| 35°   | 7342.9  | 7340.8  | 7346.9  | 7387.4  | 7329.7  | 7341.9  | 7323.6  | 7381.4  | 7372.2  |
| 37.5° | 6790.8  | 6799.9  | 6802.0  | 6834.4  | 6802.0  | 6810.1  | 6803.0  | 6812.1  | 6782.7  |
| 40°   | 6156.7  | 6196.2  | 6209.4  | 6203.3  | 6140.5  | 6119.2  | 6101.0  | 6134.4  | 6096.9  |
| 42.5° | 5369.6  | 5387.9  | 5389.9  | 5394.0  | 5376.7  | 5373.7  | 5351.4  | 5365.6  | 5306.8  |
| 45°   | 4539.0  | 4547.1  | 4529.9  | 4526.9  | 4538.0  | 4555.2  | 4513.7  | 4481.3  | 4423.6  |
| 47.5° | 3780.3  | 3752.0  | 3674.0  | 3702.3  | 3714.5  | 3758.0  | 3713.5  | 3626.4  | 3578.8  |
| 50°   | 2982.1  | 2952.7  | 2893.0  | 2906.2  | 2953.8  | 3019.6  | 2967.9  | 2847.4  | 2783.6  |
| 52.5° | 2278.1  | 2244.7  | 2177.8  | 2190.0  | 2204.2  | 2253.8  | 2226.5  | 2144.4  | 2082.6  |
| 55°   | 1630.8  | 1607.6  | 1629.8  | 1611.6  | 1618.7  | 1666.3  | 1628.8  | 1561.0  | 1544.7  |
| 57.5° | 1102.1  | 1115.3  | 1133.5  | 1136.5  | 1122.3  | 1108.2  | 1103.1  | 1076.8  | 1090.9  |
| 60°   | 730.3   | 740.5   | 770.9   | 780.0   | 758.7   | 728.3   | 734.4   | 734.4   | 747.6   |
| 62.5° | 472.0   | 481.2   | 516.6   | 522.7   | 492.3   | 484.2   | 484.2   | 481.2   | 505.5   |
| 65°   | 300.8   | 319.1   | 330.2   | 314.0   | 313.0   | 301.9   | 311.0   | 311.0   | 318.1   |
| 67.5° | 180.3   | 164.1   | 175.2   | 182.3   | 175.2   | 166.1   | 164.1   | 165.1   | 175.2   |
| 70°   | 104.3   | 100.3   | 107.4   | 103.3   | 107.4   | 93.2    | 104.3   | 99.3    | 102.3   |
| 72.5° | 66.9    | 65.8    | 65.8    | 69.9    | 65.8    | 63.8    | 67.9    | 58.8    | 64.8    |
| 75°   | 61.8    | 61.8    | 61.8    | 53.7    | 61.8    | 59.8    | 62.8    | 47.6    | 53.7    |
| 77.5° | 24.3    | 28.4    | 34.4    | 33.4    | 33.4    | 31.4    | 28.4    | 24.3    | 37.5    |
| 80°   | 22.3    | 20.3    | 27.3    | 32.4    | 20.3    | 24.3    | 27.3    | 17.2    | 18.2    |
| 82.5° | 11.1    | 10.1    | 13.2    | 13.2    | 13.2    | 7.1     | 18.2    | 11.1    | 9.1     |
| 85°   | 9.1     | 4.1     | 6.1     | 6.1     | 6.1     | 8.1     | 18.2    | 5.1     | 13.2    |
| 87.5° | 2.0     | 3.0     | 5.1     | 5.1     | 6.1     | 10.1    | 18.2    | 4.1     | 15.2    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)