

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: P250093

Luminaire Tested: **LSR8B90D010 EC8B90940 8LBN0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250093  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13946)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B90D010 EC8B90940 8LBN0WH  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7801.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 lumens/watt  
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.66  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

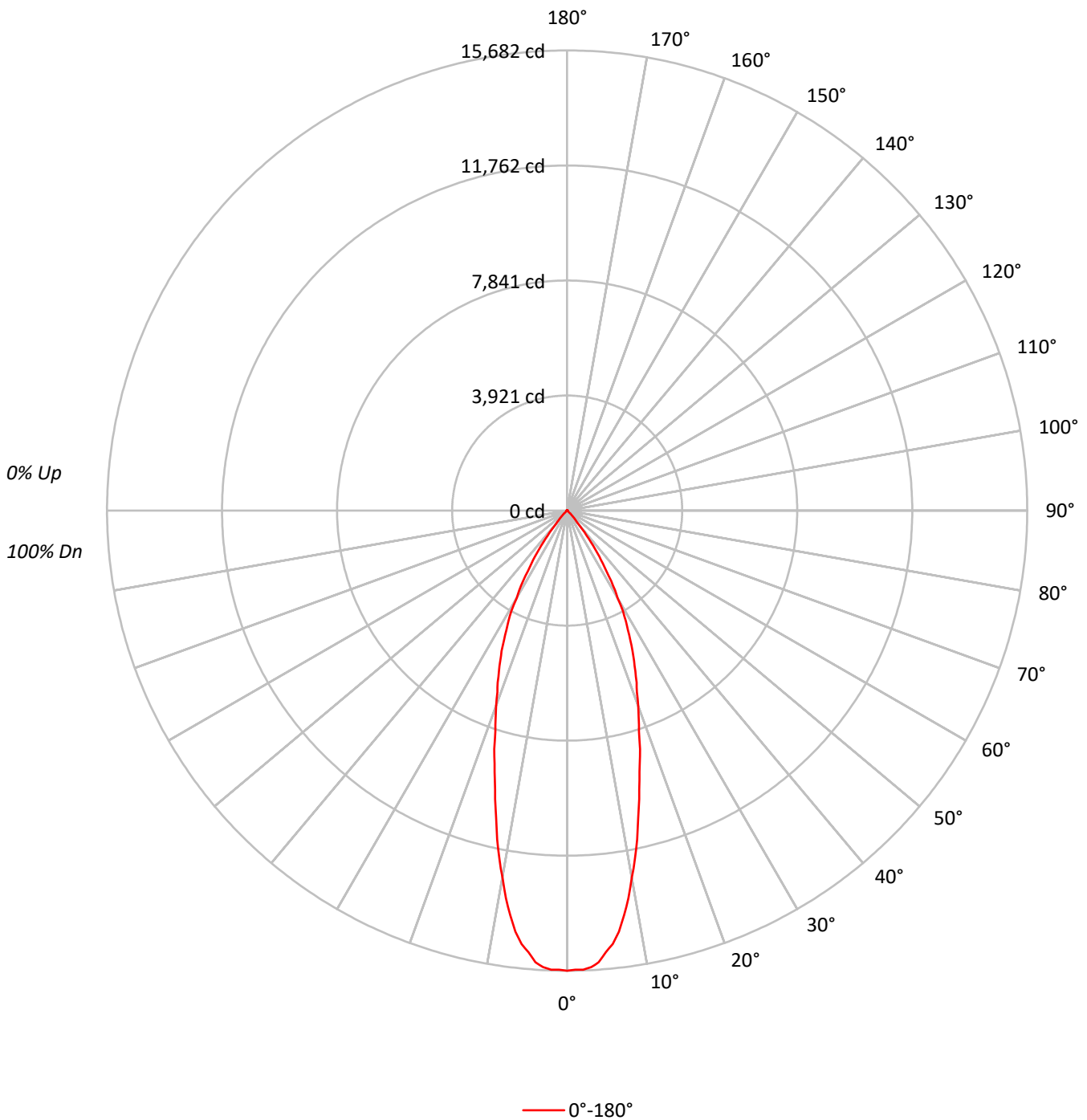
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P250093

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBN0WH

### Luminous Intensity Polar Plot





TEST NUMBER: P250093

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBN0WH

**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   | 114 | 112 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99  | 98  | 97  | 96  | 95  |
| 2   | 109 | 105 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 97  | 95  | 97  | 95  | 93  | 94  | 93  | 91  | 89  |
| 3   | 105 | 99  | 94  | 91  | 103 | 97  | 93  | 90  | 95  | 91  | 89  | 92  | 90  | 87  | 90  | 88  | 86  | 85  |
| 4   | 100 | 93  | 88  | 85  | 98  | 92  | 88  | 84  | 90  | 86  | 83  | 88  | 85  | 82  | 86  | 84  | 81  | 80  |
| 5   | 96  | 88  | 83  | 79  | 94  | 87  | 83  | 79  | 86  | 82  | 78  | 84  | 81  | 78  | 83  | 80  | 77  | 76  |
| 6   | 92  | 84  | 79  | 75  | 90  | 83  | 78  | 74  | 82  | 77  | 74  | 80  | 76  | 74  | 79  | 76  | 73  | 72  |
| 7   | 88  | 80  | 74  | 71  | 87  | 79  | 74  | 70  | 78  | 73  | 70  | 77  | 73  | 70  | 76  | 72  | 69  | 68  |
| 8   | 84  | 76  | 71  | 67  | 83  | 75  | 70  | 67  | 74  | 70  | 67  | 73  | 69  | 66  | 72  | 69  | 66  | 65  |
| 9   | 81  | 72  | 67  | 64  | 80  | 72  | 67  | 64  | 71  | 66  | 63  | 70  | 66  | 63  | 69  | 66  | 63  | 62  |
| 10  | 78  | 69  | 64  | 61  | 77  | 69  | 64  | 61  | 68  | 63  | 60  | 67  | 63  | 60  | 67  | 63  | 60  | 59  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 483572 |
| 5°  | 467639 |
| 10° | 397700 |
| 15° | 303541 |
| 20° | 231981 |
| 25° | 179766 |
| 30° | 122608 |
| 35° | 72036  |
| 40° | 22027  |
| 45° | 8665   |
| 50° | 130    |
| 55° | 145    |
| 60° | 167    |
| 65° | 401    |
| 70° | 739    |
| 75° | 655    |
| 80° | 479    |
| 85° | 2901   |



TEST NUMBER: P250093

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBN0WH

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1369.6 | 17.6      |
| 10°-20°   | 2653.9 | 34.0      |
| 20°-30°   | 2389.4 | 30.6      |
| 30°-40°   | 1182.2 | 15.2      |
| 40°-50°   | 179.8  | 2.3       |
| 50°-60°   | 7.4    | 0.1       |
| 60°-70°   | 9.5    | 0.1       |
| 70°-80°   | 3.6    | 0.0       |
| 80°-90°   | 5.6    | 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°    | 6412.9 | 82.2      |
| 0°-40°    | 7595.1 | 97.4      |
| 0°-60°    | 7782.3 | 99.8      |
| 0°-90°    | 7801.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7801.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 15682 |      |
| 5°  | 15108 | ###  |
| 15° | 9508  | 2654 |
| 25° | 5284  | 2389 |
| 35° | 1914  | 1182 |
| 45° | 199   | 180  |
| 55° | 3     | 7    |
| 65° | 6     | 10   |
| 75° | 6     | 4    |
| 85° | 8     | 6    |
| 90° | 0     |      |



TEST NUMBER: P250093

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBN0WH

**CANDELA DISTRIBUTION (FULL):**

| 0°    |         |
|-------|---------|
| 0°    | 15681.9 |
| 1°    | 15649.3 |
| 2°    | 15657.3 |
| 3°    | 15578.4 |
| 4°    | 15434.2 |
| 5°    | 15107.5 |
| 6°    | 14857.1 |
| 7°    | 14459.7 |
| 8°    | 13926.2 |
| 9°    | 13370.8 |
| 10°   | 12701.2 |
| 11°   | 12102.3 |
| 12°   | 11460.0 |
| 13°   | 10749.5 |
| 14°   | 10137.0 |
| 15°   | 9508.2  |
| 16°   | 8971.9  |
| 17°   | 8498.3  |
| 18°   | 7915.8  |
| 19°   | 7488.4  |
| 20°   | 7069.3  |
| 21°   | 6633.7  |
| 22°   | 6315.2  |
| 23°   | 5945.0  |
| 24°   | 5604.7  |
| 25°   | 5283.5  |
| 26°   | 4905.1  |
| 27°   | 4565.0  |
| 28°   | 4260.0  |
| 29°   | 3925.2  |
| 30°   | 3443.4  |
| 31°   | 3171.3  |
| 32°   | 2828.2  |
| 33°   | 2452.6  |
| 34°   | 2166.7  |
| 35°   | 1913.6  |
| 37.5° | 1211.3  |
| 40°   | 547.2   |
| 42.5° | 372.9   |
| 45°   | 198.7   |
| 47.5° | 111.6   |
| 50°   | 2.7     |
| 52.5° | 10.9    |
| 55°   | 2.7     |
| 57.5° | 16.4    |



TEST NUMBER: P250093

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBN0WH

**CANDELA DISTRIBUTION (continued):**

|       | 0°   |
|-------|------|
| 60°   | 2.7  |
| 62.5° | 13.7 |
| 65°   | 5.5  |
| 67.5° | 13.7 |
| 70°   | 8.2  |
| 72.5° | 2.7  |
| 75°   | 5.5  |
| 77.5° | 0.0  |
| 80°   | 2.7  |
| 82.5° | 10.9 |
| 85°   | 8.2  |
| 87.5° | 0.0  |
| 90°   | 0.0  |

(END OF REPORT)