

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P436667

Luminaire Tested: **LSR1B08209030D010TExxSL**

Issue Date: 12/2/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P436667  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-014-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 12/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR1B08209030D010TExxSL  
Description: PORTFOLIO 1INCH CYLINDER, 20 DEG REFLECTOR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1002.0 lumens  
Efficiency: N/A  
Efficacy: 60.7 lumens/watt  
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

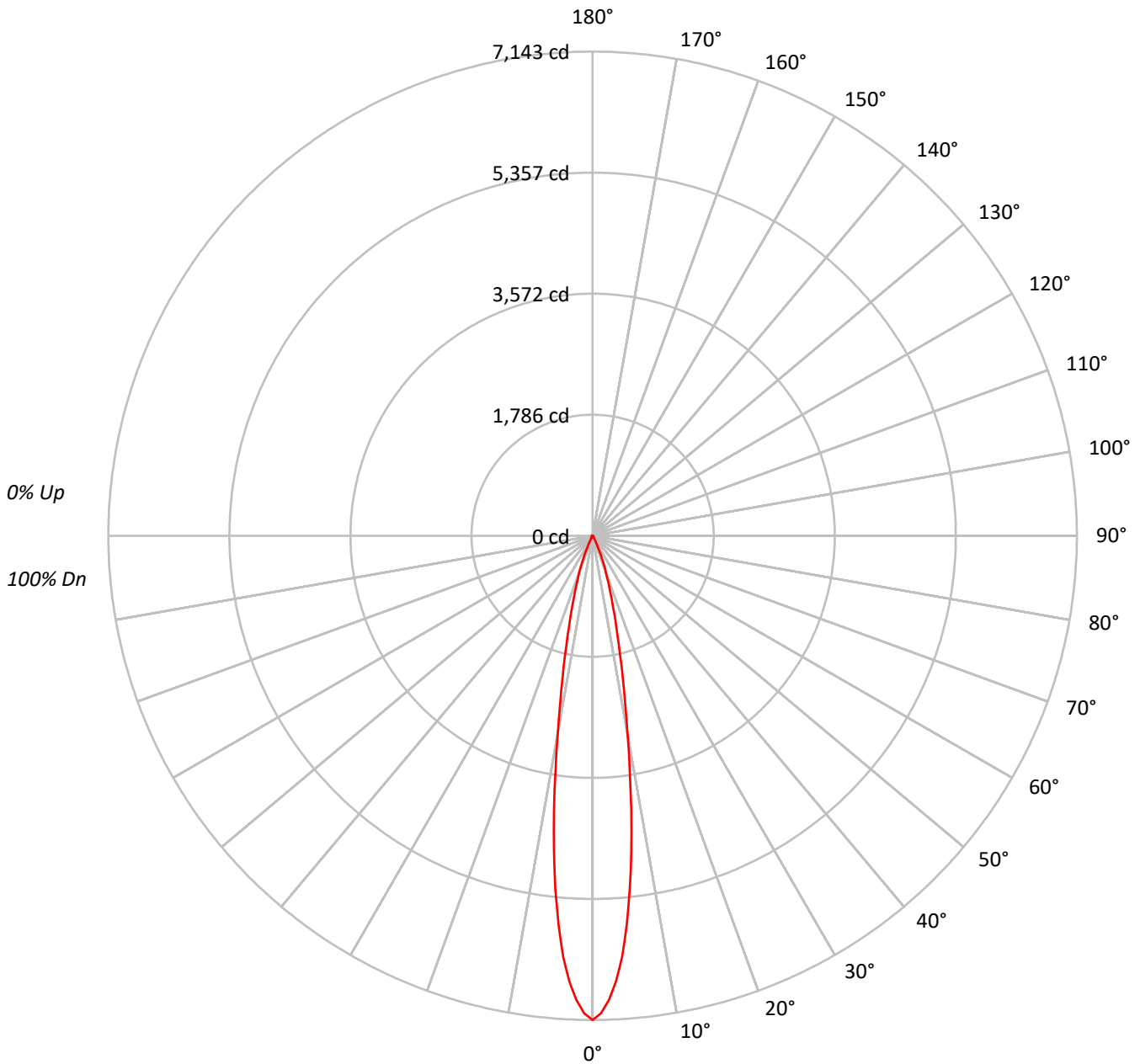
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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CATALOG NUMBER: LSR1B08209030D010TExxSL

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |     | 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 | 0 |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 115 | 113 | 111 | 109 | 112 | 111 | 109 | 107 | 107 | 105 | 104 | 103 | 102 | 101 | 99  | 99  | 98  | 96  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 111 | 107 | 104 | 102 | 109 | 106 | 103 | 101 | 103 | 100 | 98  | 100 | 98  | 96  | 97  | 96  | 94  | 93  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 108 | 103 | 99  | 96  | 106 | 102 | 98  | 96  | 99  | 96  | 94  | 97  | 95  | 93  | 95  | 93  | 91  | 90  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 104 | 99  | 95  | 92  | 103 | 98  | 94  | 92  | 96  | 93  | 91  | 94  | 92  | 90  | 93  | 90  | 89  | 87  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 102 | 96  | 92  | 89  | 100 | 95  | 91  | 88  | 93  | 90  | 88  | 92  | 89  | 87  | 90  | 88  | 86  | 85  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 99  | 93  | 89  | 86  | 98  | 92  | 88  | 86  | 91  | 88  | 85  | 90  | 87  | 85  | 89  | 86  | 84  | 83  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 96  | 90  | 86  | 83  | 95  | 90  | 86  | 83  | 89  | 85  | 83  | 88  | 85  | 82  | 87  | 84  | 82  | 81  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 94  | 88  | 84  | 81  | 93  | 87  | 84  | 81  | 87  | 83  | 81  | 86  | 83  | 81  | 85  | 82  | 80  | 79  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 92  | 86  | 82  | 79  | 91  | 85  | 82  | 79  | 85  | 81  | 79  | 84  | 81  | 79  | 83  | 81  | 79  | 78  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 90  | 84  | 80  | 78  | 89  | 84  | 80  | 77  | 83  | 80  | 77  | 82  | 79  | 77  | 82  | 79  | 77  | 76  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |          |
|-----|----------|
|     | 0°       |
| 0°  | 14097404 |
| 5°  | 11417165 |
| 10° | 5953044  |
| 15° | 2645280  |
| 20° | 1195854  |
| 25° | 383251   |
| 30° | 107790   |
| 35° | 72759    |
| 40° | 56936    |
| 45° | 53308    |
| 50° | 55572    |
| 55° | 55396    |
| 60° | 59601    |
| 65° | 56505    |
| 70° | 58280    |
| 75° | 61001    |
| 80° | 56826    |
| 85° | 67932    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 455.6  | 45.5      |
| 10°-20°   | 376.7  | 37.6      |
| 20°-30°   | 97.4   | 9.7       |
| 30°-40°   | 19.5   | 1.9       |
| 40°-50°   | 15.1   | 1.5       |
| 50°-60°   | 14.5   | 1.4       |
| 60°-70°   | 12.1   | 1.2       |
| 70°-80°   | 8.1    | 0.8       |
| 80°-90°   | 2.9    | 0.3       |
| 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°    | 929.8  | 92.8      |
| 0°-40°    | 949.3  | 94.7      |
| 0°-60°    | 978.9  | 97.7      |
| 0°-90°    | 1002.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1002.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 7143 |      |
| 5°  | 5763 | 456  |
| 15° | 1295 | 377  |
| 25° | 176  | 97   |
| 35° | 30   | 20   |
| 45° | 19   | 15   |
| 55° | 16   | 15   |
| 65° | 12   | 12   |
| 75° | 8    | 8    |
| 85° | 3    | 3    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 7143.2 |
| 1°    | 7048.7 |
| 2°    | 6854.5 |
| 3°    | 6584.9 |
| 4°    | 6224.8 |
| 5°    | 5763.1 |
| 6°    | 5248.0 |
| 7°    | 4691.7 |
| 8°    | 4087.2 |
| 9°    | 3491.7 |
| 10°   | 2970.6 |
| 11°   | 2516.9 |
| 12°   | 2132.6 |
| 13°   | 1803.7 |
| 14°   | 1527.0 |
| 15°   | 1294.7 |
| 16°   | 1094.5 |
| 17°   | 930.5  |
| 18°   | 789.7  |
| 19°   | 670.0  |
| 20°   | 569.4  |
| 21°   | 479.8  |
| 22°   | 400.4  |
| 23°   | 320.9  |
| 24°   | 242.4  |
| 25°   | 176.0  |
| 26°   | 125.7  |
| 27°   | 91.5   |
| 28°   | 69.4   |
| 29°   | 56.3   |
| 30°   | 47.3   |
| 32.5° | 36.2   |
| 35°   | 30.2   |
| 37.5° | 25.1   |
| 40°   | 22.1   |
| 42.5° | 21.1   |
| 45°   | 19.1   |
| 47.5° | 18.1   |
| 50°   | 18.1   |
| 52.5° | 17.1   |
| 55°   | 16.1   |
| 57.5° | 15.1   |
| 60°   | 15.1   |



TEST NUMBER: P436667

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**CANDELA DISTRIBUTION (continued):**

|       | 0°   |
|-------|------|
| 67.5° | 11.1 |
| 70°   | 10.1 |
| 72.5° | 9.1  |
| 75°   | 8.0  |
| 77.5° | 6.0  |
| 80°   | 5.0  |
| 82.5° | 4.0  |
| 85°   | 3.0  |
| 87.5° | 1.0  |
| 90°   | 0.0  |



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— 0°-180°







|       |  |      |
|-------|--|------|
| 62.5° |  | 13.1 |
| 65°   |  | 12.1 |



(END OF REPORT)