

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: P436693

Luminaire Tested: **LSSQ1B08209027D010TExxMW**

Issue Date: 12/2/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P436693  
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: LSSQ1B08209027D010TExxMW  
Description: PORTFOLIO 1INCH CYLINDER, 20 DEG REFLECTOR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 996.0 lumens  
Efficiency: N/A  
Efficacy: 60.4 lumens/watt  
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.32  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')  
CIE Type: Direct

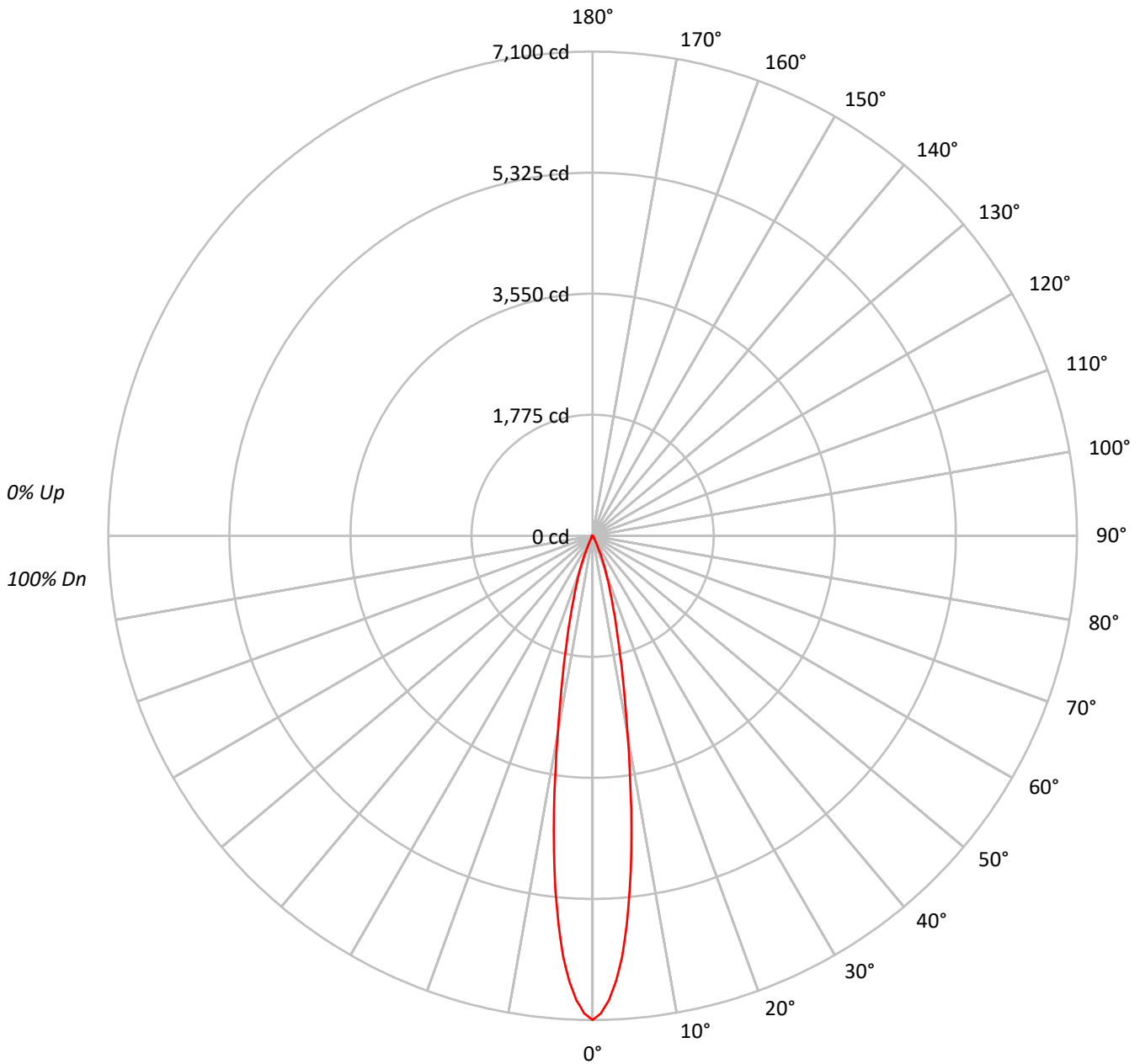
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### 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 | 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  | 83  | 80  | 77  | 83  | 80  | 77  | 82  | 79  | 77  | 82  | 79  | 77  | 76  |    |    |   |

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

|     | 0°       |
|-----|----------|
| 0°  | 11094379 |
| 5°  | 8985006  |
| 10° | 4684860  |
| 15° | 2081685  |
| 20° | 941119   |
| 25° | 301701   |
| 30° | 84797    |
| 35° | 57223    |
| 40° | 44873    |
| 45° | 41984    |
| 50° | 43754    |
| 55° | 43586    |
| 60° | 46874    |
| 65° | 44366    |
| 70° | 45684    |
| 75° | 48296    |
| 80° | 44990    |
| 85° | 53782    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 452.9  | 45.5      |
| 10°-20°   | 374.5  | 37.6      |
| 20°-30°   | 96.8   | 9.7       |
| 30°-40°   | 19.4   | 1.9       |
| 40°-50°   | 15.1   | 1.5       |
| 50°-60°   | 14.4   | 1.4       |
| 60°-70°   | 12.0   | 1.2       |
| 70°-80°   | 8.0    | 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°    | 924.2  | 92.8      |
| 0°-40°    | 943.6  | 94.7      |
| 0°-60°    | 973.1  | 97.7      |
| 0°-90°    | 996.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 996.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 7100 |      |
| 5°  | 5729 | 453  |
| 15° | 1287 | 374  |
| 25° | 175  | 97   |
| 35° | 30   | 19   |
| 45° | 19   | 15   |
| 55° | 16   | 14   |
| 65° | 12   | 12   |
| 75° | 8    | 8    |
| 85° | 3    | 3    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 7100.5 |
| 1°    | 7006.5 |
| 2°    | 6813.5 |
| 3°    | 6545.5 |
| 4°    | 6187.5 |
| 5°    | 5728.6 |
| 6°    | 5216.6 |
| 7°    | 4663.7 |
| 8°    | 4062.7 |
| 9°    | 3470.7 |
| 10°   | 2952.8 |
| 11°   | 2501.8 |
| 12°   | 2119.8 |
| 13°   | 1792.9 |
| 14°   | 1517.9 |
| 15°   | 1286.9 |
| 16°   | 1087.9 |
| 17°   | 924.9  |
| 18°   | 784.9  |
| 19°   | 666.0  |
| 20°   | 566.0  |
| 21°   | 477.0  |
| 22°   | 398.0  |
| 23°   | 319.0  |
| 24°   | 241.0  |
| 25°   | 175.0  |
| 26°   | 125.0  |
| 27°   | 91.0   |
| 28°   | 69.0   |
| 29°   | 56.0   |
| 30°   | 47.0   |
| 32.5° | 36.0   |
| 35°   | 30.0   |
| 37.5° | 25.0   |
| 40°   | 22.0   |
| 42.5° | 21.0   |
| 45°   | 19.0   |
| 47.5° | 18.0   |
| 50°   | 18.0   |
| 52.5° | 17.0   |
| 55°   | 16.0   |
| 57.5° | 15.0   |
| 60°   | 15.0   |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°   |
|-------|------|
| 67.5° | 11.0 |
| 70°   | 10.0 |
| 72.5° | 9.0  |
| 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° |  | 13.0 |
| 65°   |  | 12.0 |



(END OF REPORT)