

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: P436719

Luminaire Tested: **LSSQ1B08209040D010TExxMB**

Issue Date: 12/2/2020

Test Information

Test Method: LM-41-14
Report Number: P436719
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: LSSQ1B08209040D010TExxMB
Description: PORTFOLIO 1INCH CYLINDER, 20 DEG REFLECTOR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1080.0 lumens
Efficiency: N/A
Efficacy: 65.5 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

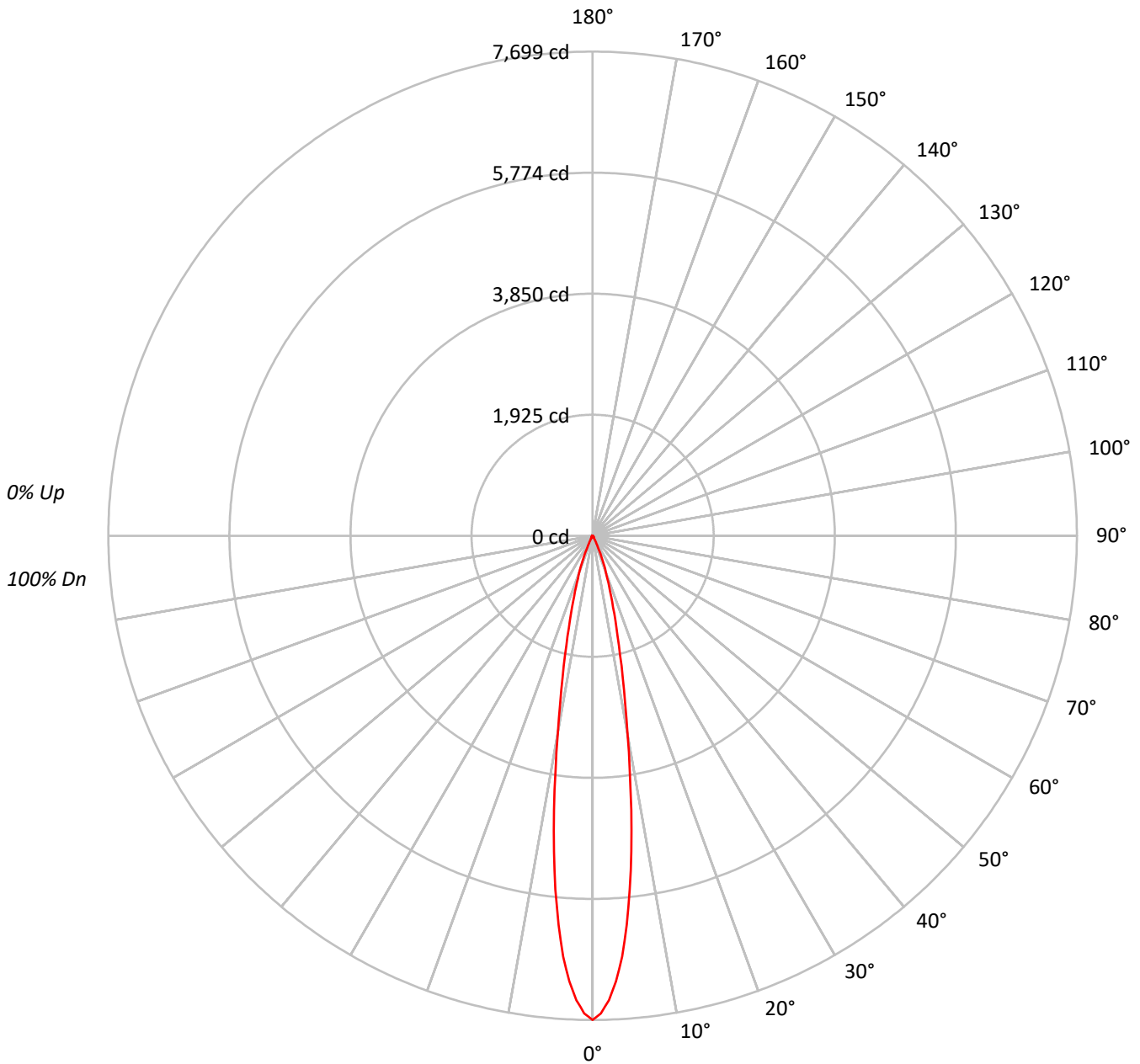
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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° | 1202991 |
| 5° | 9742722 |
| 10° | 5079919 |
| 15° | 2257195 |
| 20° | 1020433 |
| 25° | 327044 |
| 30° | 92014 |
| 35° | 61992 |
| 40° | 48748 |
| 45° | 45519 |
| 50° | 47400 |
| 55° | 47127 |
| 60° | 50937 |
| 65° | 48063 |
| 70° | 49339 |
| 75° | 52521 |
| 80° | 48589 |
| 85° | 59161 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 491.1 | 45.5 |
| 10°-20° | 406.0 | 37.6 |
| 20°-30° | 105.0 | 9.7 |
| 30°-40° | 21.1 | 1.9 |
| 40°-50° | 16.3 | 1.5 |
| 50°-60° | 15.6 | 1.4 |
| 60°-70° | 13.0 | 1.2 |
| 70°-80° | 8.7 | 0.8 |
| 80°-90° | 3.1 | 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° | 1002.1 | 92.8 |
| 0°-40° | 1023.2 | 94.7 |
| 0°-60° | 1055.1 | 97.7 |
| 0°-90° | 1080.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1080.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 7699 | |
| 5° | 6212 | 491 |
| 15° | 1395 | 406 |
| 25° | 190 | 105 |
| 35° | 32 | 21 |
| 45° | 21 | 16 |
| 55° | 17 | 16 |
| 65° | 13 | 13 |
| 75° | 9 | 9 |
| 85° | 3 | 3 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 7699.3 |
| 1° | 7597.4 |
| 2° | 7388.1 |
| 3° | 7097.5 |
| 4° | 6709.4 |
| 5° | 6211.7 |
| 6° | 5656.6 |
| 7° | 5057.0 |
| 8° | 4405.3 |
| 9° | 3763.5 |
| 10° | 3201.8 |
| 11° | 2712.8 |
| 12° | 2298.6 |
| 13° | 1944.1 |
| 14° | 1645.9 |
| 15° | 1395.4 |
| 16° | 1179.7 |
| 17° | 1002.9 |
| 18° | 851.1 |
| 19° | 722.1 |
| 20° | 613.7 |
| 21° | 517.2 |
| 22° | 431.5 |
| 23° | 345.9 |
| 24° | 261.3 |
| 25° | 189.7 |
| 26° | 135.5 |
| 27° | 98.7 |
| 28° | 74.8 |
| 29° | 60.7 |
| 30° | 51.0 |
| 32.5° | 39.0 |
| 35° | 32.5 |
| 37.5° | 27.1 |
| 40° | 23.9 |
| 42.5° | 22.8 |
| 45° | 20.6 |
| 47.5° | 19.5 |
| 50° | 19.5 |
| 52.5° | 18.4 |
| 55° | 17.3 |
| 57.5° | 16.3 |
| 60° | 16.3 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|------|
| 67.5° | 11.9 |
| 70° | 10.8 |
| 72.5° | 9.8 |
| 75° | 8.7 |
| 77.5° | 6.5 |
| 80° | 5.4 |
| 82.5° | 4.3 |
| 85° | 3.3 |
| 87.5° | 1.1 |
| 90° | 0.0 |



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— 0°-180°







| | | |
|-------|--|-------------|
| 62.5° | | <i>14.1</i> |
| 65° | | <i>13.0</i> |



(END OF REPORT)