

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: P402488

Luminaire Tested: **LD1MRT152D010TR509027SC1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1912-604-8)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 6/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD1MRT152D010TR509027SC1MW
Description: 1 INCH 50° OPTIC WITH SPECULAR CLEAR BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

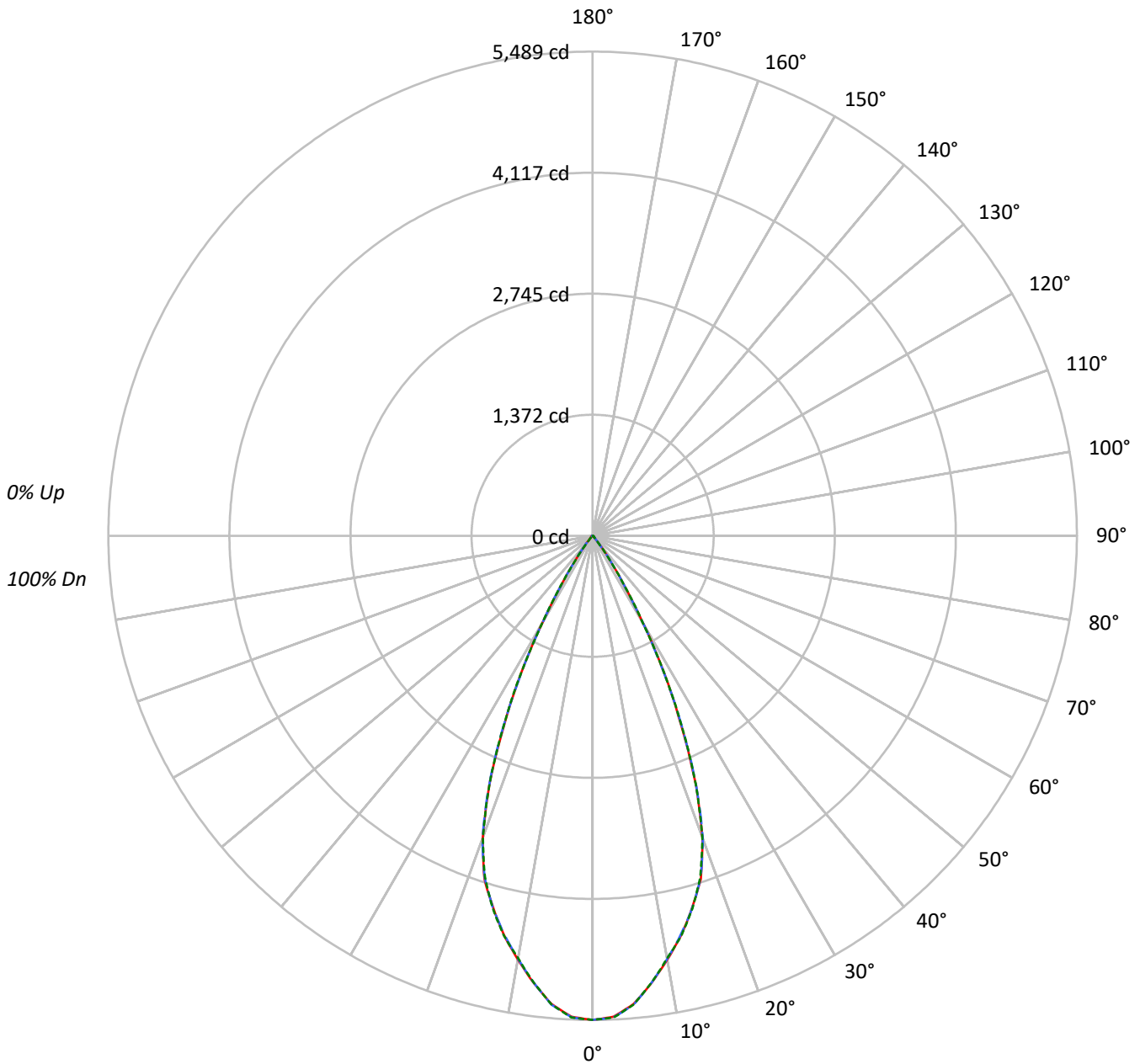
Lumens per Lamp: N/A
Luminaire Lumens: 3098.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')
CIE Type: Direct

Input Watts (W): 34.2
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 | | | | | | | | | |
| 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 | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 95 | | | | | | | | | | | | | | | | | | | |
| 2 | 110 | 105 | 102 | 99 | 107 | 104 | 100 | 98 | 100 | 98 | 96 | 98 | 95 | 94 | 95 | 93 | 92 | 90 | | | | | | | | | | | | | | | | | | | |
| 3 | 105 | 99 | 95 | 92 | 103 | 98 | 94 | 91 | 96 | 92 | 90 | 93 | 90 | 88 | 91 | 89 | 87 | 85 | | | | | | | | | | | | | | | | | | | |
| 4 | 101 | 94 | 89 | 86 | 99 | 93 | 89 | 85 | 91 | 87 | 84 | 89 | 86 | 83 | 87 | 85 | 82 | 81 | | | | | | | | | | | | | | | | | | | |
| 5 | 97 | 89 | 84 | 81 | 95 | 89 | 84 | 80 | 87 | 83 | 80 | 85 | 82 | 79 | 84 | 81 | 78 | 77 | | | | | | | | | | | | | | | | | | | |
| 6 | 93 | 85 | 80 | 76 | 91 | 84 | 79 | 76 | 83 | 79 | 75 | 82 | 78 | 75 | 80 | 77 | 75 | 73 | | | | | | | | | | | | | | | | | | | |
| 7 | 89 | 81 | 76 | 72 | 88 | 80 | 76 | 72 | 79 | 75 | 72 | 78 | 74 | 71 | 77 | 74 | 71 | 70 | | | | | | | | | | | | | | | | | | | |
| 8 | 85 | 77 | 72 | 69 | 84 | 77 | 72 | 69 | 76 | 71 | 68 | 75 | 71 | 68 | 74 | 70 | 68 | 67 | | | | | | | | | | | | | | | | | | | |
| 9 | 82 | 74 | 69 | 65 | 81 | 73 | 69 | 65 | 73 | 68 | 65 | 72 | 68 | 65 | 71 | 67 | 65 | 64 | | | | | | | | | | | | | | | | | | | |
| 10 | 79 | 71 | 66 | 62 | 78 | 70 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 62 | 68 | 64 | 62 | 61 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 439088 | 439088 | 439088 |
| 5° | 427980 | 428550 | 428309 |
| 10° | 396284 | 395707 | 395049 |
| 15° | 361203 | 361626 | 362131 |
| 20° | 309837 | 310791 | 309582 |
| 25° | 210021 | 212616 | 212263 |
| 30° | 104043 | 104699 | 104320 |
| 35° | 34748 | 34953 | 32873 |
| 40° | 7937 | 7728 | 6673 |
| 45° | 3100 | 3439 | 2862 |
| 50° | 2526 | 2651 | 2265 |
| 55° | 2260 | 2260 | 1981 |
| 60° | 1792 | 1952 | 1616 |
| 65° | 1155 | 1344 | 965 |
| 70° | 0 | 234 | 0 |
| 75° | 0 | 0 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 494.1 | 15.9 |
| 10°-20° | 1211.2 | 39.1 |
| 20°-30° | 1078.3 | 34.8 |
| 30°-40° | 269.2 | 8.7 |
| 40°-50° | 25.7 | 0.8 |
| 50°-60° | 14.0 | 0.5 |
| 60°-70° | 5.6 | 0.2 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 2783.5 | 89.8 |
| 0°-40° | 3052.7 | 98.5 |
| 0°-60° | 3092.4 | 99.8 |
| 0°-90° | 3098.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3098.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 5489 | 5489 | 5489 | 5489 | 5489 | |
| 5° | 5329 | 5349 | 5336 | 5332 | 5334 | 494 |
| 15° | 4361 | 4384 | 4366 | 4358 | 4372 | 1212 |
| 25° | 2379 | 2406 | 2409 | 2425 | 2405 | 1075 |
| 35° | 356 | 369 | 358 | 353 | 337 | 268 |
| 45° | 27 | 27 | 30 | 26 | 25 | 26 |
| 55° | 16 | 16 | 16 | 15 | 14 | 14 |
| 65° | 6 | 6 | 7 | 6 | 5 | 5 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5488.6 | 5488.6 | 5488.6 | 5488.6 | 5488.6 |
| 2.5° | 5457.1 | 5481.5 | 5464.2 | 5465.2 | 5466.3 |
| 5° | 5329.4 | 5348.7 | 5336.5 | 5332.4 | 5333.5 |
| 7.5° | 5113.5 | 5130.7 | 5111.4 | 5118.5 | 5110.4 |
| 10° | 4878.3 | 4895.5 | 4871.2 | 4871.2 | 4863.1 |
| 12.5° | 4639.0 | 4657.3 | 4627.9 | 4624.8 | 4644.1 |
| 15° | 4361.2 | 4383.5 | 4366.3 | 4358.2 | 4372.4 |
| 17.5° | 4080.4 | 4077.4 | 4067.3 | 4062.2 | 4057.1 |
| 20° | 3639.4 | 3657.7 | 3650.6 | 3620.2 | 3636.4 |
| 22.5° | 3059.6 | 3060.6 | 3070.7 | 3075.8 | 3062.6 |
| 25° | 2379.3 | 2405.7 | 2408.7 | 2424.9 | 2404.7 |
| 27.5° | 1762.9 | 1768.0 | 1740.6 | 1742.7 | 1761.9 |
| 30° | 1126.3 | 1141.5 | 1133.4 | 1141.5 | 1129.3 |
| 32.5° | 649.8 | 663.0 | 657.9 | 664.0 | 665.0 |
| 35° | 355.8 | 369.0 | 357.9 | 352.8 | 336.6 |
| 37.5° | 176.4 | 176.4 | 180.5 | 166.3 | 158.1 |
| 40° | 76.0 | 78.1 | 74.0 | 70.0 | 63.9 |
| 42.5° | 38.5 | 38.5 | 40.6 | 34.5 | 33.5 |
| 45° | 27.4 | 27.4 | 30.4 | 26.4 | 25.3 |
| 47.5° | 23.3 | 23.3 | 25.3 | 22.3 | 21.3 |
| 50° | 20.3 | 20.3 | 21.3 | 19.3 | 18.2 |
| 52.5° | 18.2 | 18.2 | 19.3 | 17.2 | 16.2 |
| 55° | 16.2 | 16.2 | 16.2 | 15.2 | 14.2 |
| 57.5° | 13.2 | 14.2 | 14.2 | 13.2 | 12.2 |
| 60° | 11.2 | 11.2 | 12.2 | 11.2 | 10.1 |
| 62.5° | 9.1 | 9.1 | 9.1 | 9.1 | 8.1 |
| 65° | 6.1 | 6.1 | 7.1 | 6.1 | 5.1 |
| 67.5° | 1.0 | 2.0 | 5.1 | 0.0 | 0.0 |
| 70° | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 |
| 72.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)