

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: P402379

Luminaire Tested: **LA1MRT152D010TR509030SB1MW**

Issue Date: 6/3/2020

Test Information

Test Method: LM-41-14
Report Number: P402379
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: LA1MRT152D010TR509030SB1MW
Description: 1 INCH 50° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

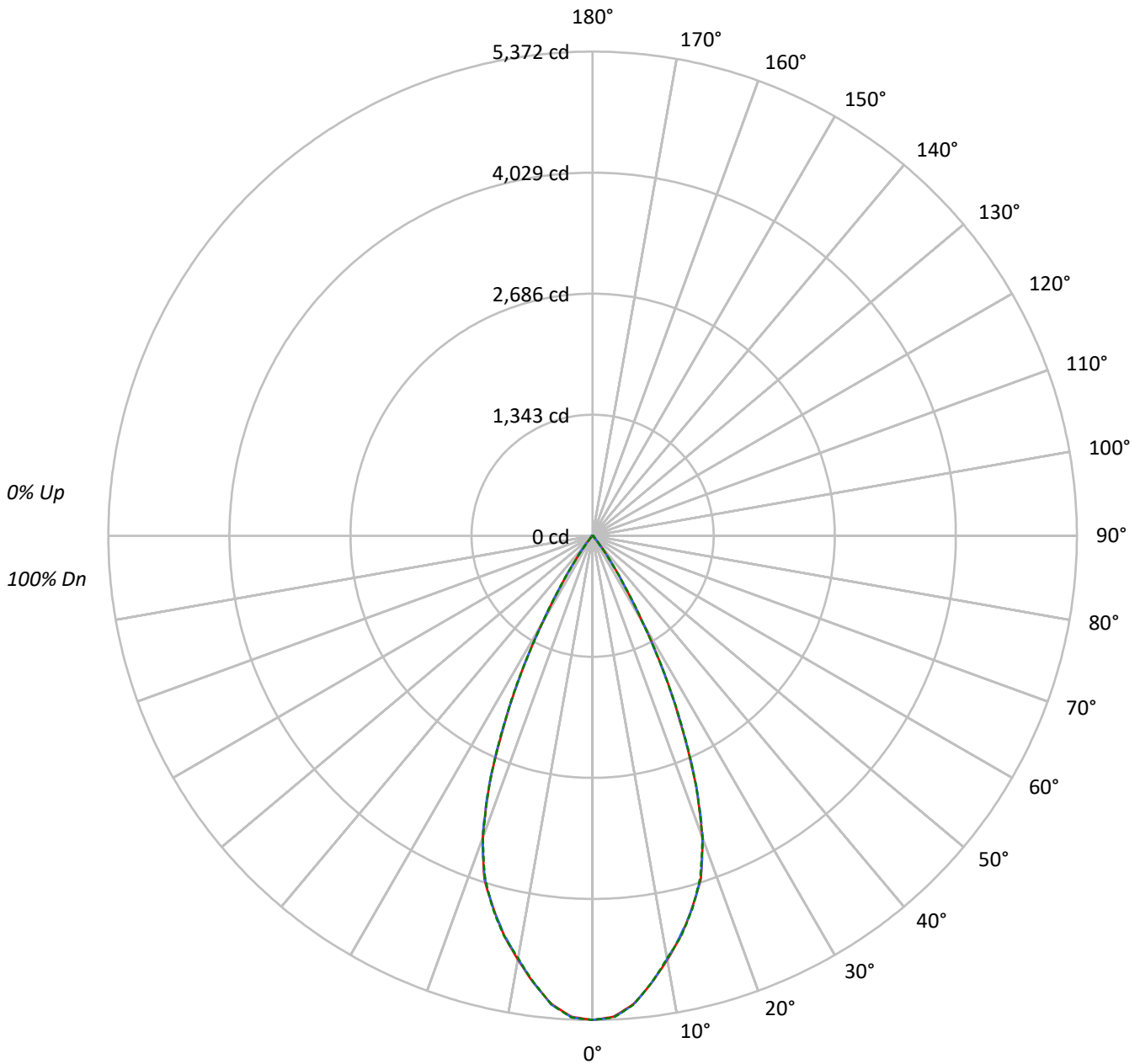
Lumens per Lamp: N/A
Luminaire Lumens: 3032.0 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P402379

CATALOG NUMBER: LA1MRT152D010TR509030SB1MW

Luminous Intensity Polar Plot





TEST NUMBER: P402379

CATALOG NUMBER: LA1MRT152D010TR509030SB1MW

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° | 429728 | 429728 | 429728 |
| 5° | 418865 | 419420 | 419179 |
| 10° | 387836 | 387275 | 386633 |
| 15° | 353509 | 353923 | 354412 |
| 20° | 303239 | 304167 | 302984 |
| 25° | 205546 | 208088 | 207735 |
| 30° | 101826 | 102473 | 102103 |
| 35° | 34016 | 34201 | 32170 |
| 40° | 7770 | 7561 | 6527 |
| 45° | 3032 | 3371 | 2806 |
| 50° | 2464 | 2589 | 2228 |
| 55° | 2218 | 2218 | 1939 |
| 60° | 1744 | 1904 | 1584 |
| 65° | 1136 | 1306 | 946 |
| 70° | 0 | 234 | 0 |
| 75° | 0 | 0 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P402379

CATALOG NUMBER: LA1MRT152D010TR509030SB1MW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 483.5 | 15.9 |
| 10°-20° | 1185.4 | 39.1 |
| 20°-30° | 1055.3 | 34.8 |
| 30°-40° | 263.4 | 8.7 |
| 40°-50° | 25.1 | 0.8 |
| 50°-60° | 13.7 | 0.5 |
| 60°-70° | 5.5 | 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° | 2724.2 | 89.8 |
| 0°-40° | 2987.7 | 98.5 |
| 0°-60° | 3026.5 | 99.8 |
| 0°-90° | 3032.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3032.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 5372 | 5372 | 5372 | 5372 | 5372 | |
| 5° | 5216 | 5235 | 5223 | 5219 | 5220 | 483 |
| 15° | 4268 | 4290 | 4273 | 4265 | 4279 | 1186 |
| 25° | 2329 | 2354 | 2357 | 2373 | 2353 | 1052 |
| 35° | 348 | 361 | 350 | 345 | 329 | 262 |
| 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 |



TEST NUMBER: P402379

CATALOG NUMBER: LA1MRT152D010TR509030SB1MW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5371.6 | 5371.6 | 5371.6 | 5371.6 | 5371.6 |
| 2.5° | 5340.9 | 5364.7 | 5347.8 | 5348.8 | 5349.8 |
| 5° | 5215.9 | 5234.7 | 5222.8 | 5218.8 | 5219.8 |
| 7.5° | 5004.5 | 5021.4 | 5002.5 | 5009.5 | 5001.5 |
| 10° | 4774.3 | 4791.2 | 4767.4 | 4767.4 | 4759.5 |
| 12.5° | 4540.2 | 4558.0 | 4529.3 | 4526.3 | 4545.1 |
| 15° | 4268.3 | 4290.2 | 4273.3 | 4265.4 | 4279.2 |
| 17.5° | 3993.5 | 3990.5 | 3980.6 | 3975.6 | 3970.7 |
| 20° | 3561.9 | 3579.8 | 3572.8 | 3543.1 | 3558.9 |
| 22.5° | 2994.4 | 2995.4 | 3005.3 | 3010.3 | 2997.4 |
| 25° | 2328.6 | 2354.4 | 2357.4 | 2373.3 | 2353.4 |
| 27.5° | 1725.4 | 1730.4 | 1703.6 | 1705.5 | 1724.4 |
| 30° | 1102.3 | 1117.2 | 1109.3 | 1117.2 | 1105.3 |
| 32.5° | 636.0 | 648.9 | 643.9 | 649.9 | 650.9 |
| 35° | 348.3 | 361.2 | 350.2 | 345.3 | 329.4 |
| 37.5° | 172.6 | 172.6 | 176.6 | 162.7 | 154.8 |
| 40° | 74.4 | 76.4 | 72.4 | 68.5 | 62.5 |
| 42.5° | 37.7 | 37.7 | 39.7 | 33.7 | 32.7 |
| 45° | 26.8 | 26.8 | 29.8 | 25.8 | 24.8 |
| 47.5° | 22.8 | 22.8 | 24.8 | 21.8 | 20.8 |
| 50° | 19.8 | 19.8 | 20.8 | 18.9 | 17.9 |
| 52.5° | 17.9 | 17.9 | 18.9 | 16.9 | 15.9 |
| 55° | 15.9 | 15.9 | 15.9 | 14.9 | 13.9 |
| 57.5° | 12.9 | 13.9 | 13.9 | 12.9 | 11.9 |
| 60° | 10.9 | 10.9 | 11.9 | 10.9 | 9.9 |
| 62.5° | 8.9 | 8.9 | 8.9 | 8.9 | 7.9 |
| 65° | 6.0 | 6.0 | 6.9 | 6.0 | 5.0 |
| 67.5° | 1.0 | 2.0 | 5.0 | 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 |



Report Generated By E9808895 / USPTCWHP6082093





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







(END OF REPORT)