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| **Customer:** |  | **Address:** |  | |
| **Description:** |  | | | |
| **Serial:** |  | **Model:** |  | |
| **Calibration**  **location:** |  | | **Calibration**  **date:** |  |

**400 GODIN AVENUE**

**QUEBEC CITY QC G1M 2K2**

**CANADA**

**CALIBRATION CERTIFICATE**

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| **As found** | | | | | |
| ( X ) Initial  calibration | ( ) Within  specifications | ( ) Within  Specifications\* | ( ) Outside  Specifications\* | ( ) Outside  specifications | ( ) Defective  operation |
| See results page of the calibration certificate of details on “As found” state | | | | | |

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| **Action taken** | | | |
| ( ) No adjustment was made | ( X ) Adjustments were made | | ( ) Repair was performed |
|  | | RMA report no.: |  |

|  |  |
| --- | --- |
| **As left** | |
| ( X ) Within specifications | ( ) Outside specifications |

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| **Calibration conditions** | |
| Temperature | 28 °C ± 2 °C |

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| **Standards used to establish traceability** | | | |
| Description | Inventory number | Calibration date | Calibration validity |
| Singlemode reference fiber |  | 2019 / 1 / 10 | Annual |
| N/A | N/A | N/A | N/A |

Optical ports are always cleaned before calibration.

EXFO certifies that the unit has been calibrated using standards traceable to a national metrology institute (NIST, NPL, NCR, METAS or other), natural physical constants or using ratio measurements. NIST is the National Institute of Standards and Technology in the USA, NPL is the National Physical Laboratory in the UK, NCR is the National Research Council in Canada and METAS is the Swiss Federal Office of Metrology. All uncertainties are reported with a level of confidence of 95 %. Calibration is based on the ISO/IEC 17025 standard. The certificate shall not be reproduced, except in full, without the written approval of EXFO.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_2019 / 1 / 10\_\_\_

Luis Cañas Date

Technician

**OPTICAL TIME DOMAIN REFLECTOMETER (OTDR)**

**Model no.:**

**Serial number:**

**Calibration date:**

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| **Dynamic range test (singlemode)** | | | | | | | | | **Linearity test (singlemode)** | | | | | | |
| Procedure: IETA-00141 (pulse: 20 µs. range: 240 km for 1310nm, 320 km for 1550nm, time: 180s) | | | | | | | | | Procedure IETA-00142 (wavelength: 1310nm pulse 10 µs, time: 45s, range: 26.5 dB) | | | | | | |
| Nominal  wavelength  (nm) | | Measured  dynamic range  (dB) | | Test limit  (dB) | | | Verification  (pass/fail) | | Measured  non linearity  (dB/dB) | | | Test limit  (dB/dB) | | Verification  (pass/fail) | |
| **As found** | | | | | | | | | **As found** | | | | | | |
| 1310 | | N/A | | 44.8 | | | N/A | | N/A | | | 0.03 | | N/A | |
| N/A | | N/A | | N/A | | | N/A | |
| N/A | | N/A | | N/A | | | N/A | |
| 1550 | | N/A | | 42.6 | | | N/A | |
| N/A | | N/A | | N/A | | | N/A | |
| N/A | | N/A | | N/A | | | N/A | |
| **As left** | | | | | | | | | **As left** | | | | | | |
| 1310 | | 46.3 | | 44.8 | | | pass | |  | | |  | |  | |
| N/A | |  | |  | | |  | |  | | |  | |  | |
| N/A | |  | |  | | |  | |  | | |  | |  | |
| 1550 | |  | |  | | |  | |  | | |  | |  | |
| N/A | |  | |  | | |  | |  | | |  | |  | |
| N/A | |  | |  | | |  | |  | | |  | |  | |
| **Distance calibration (singlemode)** | | | | | | | | | | | | | | | |
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| **Attenuation dead zone test (singlemode)** | | | | | | | | **Event dead zone test (singlemode)** | | | | | | | |
| Procedure IETA 0014 (pulse 10 s, time 15s, range 0.3 km, reflectance -45dB, high resolution mode) | | | | | | | | Procedure IETA 0014 (pulse 5 s, time 15s, range 0.3 km, reflectance -45dB, high resolution mode) | | | | | | | |
| Nominal wavelength  (nm) | Measured attenuation  dead zone  (m) | | | Test  Limit  (m) | | Verification  (Pass/Fail) | | Nominal wavelength  (nm) | | Measured event  dead zone  (m) | | | Test  Limit  (m) | | Verification  (Pass/Fail) |
| **As found** | | | | | | | | **As found** | | | | | | | |
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