

ELEXON TESTING

TECHNICAL REQUIREMENTS

PERSONNEL

All staff involved in the Elexon testing process for INDO products must be technically competent. Technical competence levels of staff members are recorded in the company skills matrix. The defined competence levels are:

- E: Experienced – Able to train others
- C: Competent – Able to work independently
- T: Under Training – Work supervised and checked by Experienced staff

Task	Minimum Competence Level
Planning of products for Elexon Testing	C, T*
Set up and Performing Elexon Test	C, T*
Recording Test Results	C, T*
Validation and Error Analysis	E, C*
Completion of Elexon Test Forms	E, C*
Submission of forms to Elexon	E

* Task can be performed if checked by 'Experienced' level personnel

Competence levels of staff are assessed and documented by Experienced level staff and recorded as per the requirements of the company Quality Management System (QMS).

ACCOMMODATION AND ENVIRONMENTAL CONDITIONS

The Elexon testing is carried out in a stable environment where external factors cannot affect the test results and there are minimal fluctuations in temperature, humidity and electrical supply. In all tests; the temperature, humidity and electrical supply parameters are to be recorded. Tests will be stopped in the unlikely event of ambient conditions falling outside acceptable limits and jeopardising the test results. The operating limits for the temperature and humidity will match the conditions stated on the calibration certificate.

The test equipment is located in a controlled area where the quality of the tests can be maintained. There is effective separation of between neighbouring areas of incompatible activities and cross-contamination of stock is not possible.

TEST AND CALIBRATION METHODS AND METHOD VALIDATION

There is a clearly defined test process for the Elexon testing of INDO products and there should under no circumstances be any deviation from this process.

The test method is clearly defined in test procedure:

'Elexon Test Procedure for the Unmetered Supply Charge Code Process.docx'

EQUIPMENT

The equipment as described in the test procedure consists of the following items which are used to conduct the test:

<p>AC Power Source Manufacturer: Lisun Group Model: LSP-1KVA Serial #: 90011162 Calibration Required? : No</p>	 A photograph of a white AC Power Source unit. The front panel features a digital display with red LEDs showing '0000 0000 0000 0000'. Below the display are several control knobs and buttons labeled 'POWER SW', 'VOLTAGE ADJ.', 'FREQUENCY ADJ.', 'STOP', 'ON/OFF', and 'PUSH TO RESET'. The unit is placed on a wooden surface.
<p>Programmable Power Meter Manufacturer: Hameg Instruments Model: HM8115-2 Serial #: 061080009 Calibration Required? : Yes</p>	 A photograph of a white Programmable Power Meter unit. The front panel has a large black digital display. Below the display are several control buttons and a rotary switch. The unit is supported by two blue plastic feet. On the right side, there are several input and output ports with colored cables connected.

MEASUREMENT TRACEABILITY

Accuracy during the test process is achieved by using the readings taken from the Power Meter.

This apparatus is calibrated by a certified calibration house and records/certificate of calibration are stored centrally. Before each test, the unit is checked to confirm the calibration is still within date and the unit has not been tampered with by checking the void stickers on the side of the unit. The calibration schedule is detailed below.

Equipment To Be Calibrated: Hameg HM8115-2 Programmable Power Meter

Serial #: 061080009

Calibration Schedule: Annual

<p>Calibration sticker on top of the unit shown the validity period of the calibration</p>	
<p>Void stickers on the side of the unit</p>	
<p>Void stickers on the side of the unit</p>	

SAMPLING

The sample quantities will be 1% of the expected first year's production subject to a minimum of five and a maximum of fifty which are as per the requirements of the Elexon test procedure.

HANDLING OF TEST AND CALIBRATION ITEMS

All equipment requiring calibration is logged in the 'Calibration Register' in the QMS folder. Calibration is carried out as per the register. Any sensitive equipment is stored in a safe and secure area where there is no risk of deterioration to the equipment.

REPORTING

The results of the test are reported on the standard form which contains all the necessary fields to satisfy the criteria for the Elexon testing.

The report master template 'Elexon Testing Template' is stored in the folder:
\QMS\Standard Forms\Product testing\Elexon

The use of the report is clearly defined in the test procedure:
'Elexon Test Procedure for the Unmetered Supply Charge Code Process.docx'