## DATA ACCEPTANCE PROGRAM



# **UL Client Test Data Program**

Investigations of products by UL typically involve the testing of product samples. While UL maintains extensive facilities for these purposes, customers can also utilize their own testing facilities through UL's Client Test Data Program. UL established the Client Test Data Program to assist customers wanting to use their own testing facilities.

With a few exceptions, the Client Test Data Program is offered to all qualified UL customers with previous experience in the Witnessed Test Data Program. The Client Test Data Program is not available for hazardous location product investigations, unless they are using ordinary location test methods, nor is it an alternative to any required Follow-Up Services testing.

To participate, a customer must have in place a laboratory quality program, physical resources, equipment, qualified personnel and procedures needed to conduct specified tests. UL will assess these elements before data can be accepted.

Initial and ongoing validation of testing methods must be performed. After the program is established, UL will reassess a test laboratory annually. All data submitted is thoroughly reviewed and audited by UL before being used for certification.

## Requirements

#### Assessment of laboratory operations

A customer's laboratory operations must have documented procedures and policies in place to assure accuracy and precision performing tests, obtaining data and reporting results.

A customer's laboratory quality system shall be based on ISO/IEC 17025:2005 and encompass test equipment, test environment, personnel qualifications, test standards and procedures, and data recording and reporting procedures. The applicable clauses of ISO/IEC 17025:2005 are summarized in the table below.

Additional UL requirements can be found at www.ul.com/dap > Resources > DAP Tools.

ISO/IEC 17025:2005 Requirement	Applicable Clause(s)
Document control (critical technical documents such as standards, methods, etc.)	4.3.1, 5.4.1, 5.4.2, 5.4.7
2. Purchasing services and supplies (test consumables such as cheesecloth, thermocouples, etc.)	4.6
3. Control of nonconforming tests or calibrations (test instrument trace-back system, etc.)	4.9
4. Corrective action (in relation to nonconforming tests)	4.11.1, 4.11.2, 4.11.3, 4.11.4
5. Technical records (data legibility and verification)	4.13
6. Personnel	5.2.1, 5.2.4
7. Accommodation and environmental conditions	5.3
8. Equipment	5.5
9. Measurement traceability (calibration)	5.6.2.2
10. Handling of test Items (test sample identification)	5.8
11. Reporting of test results	5.10

#### **Document control**

#### (ISO/IEC 17025:2005 clauses 4.3, 5.4.1, 5.4.2, 5.4.7)

A participating customer must have and maintain up-to-date copies of the standards or other documents describing test methods and procedures and containing information needed for conducting tests. Standards and documents are to be readily available to personnel in the conducting tests.

A participating laboratory shall have in place processes for systematic checks of data that are transferred or calculated. A laboratory must also have procedures to validate any custom software that is part of test and measurement equipment generating data to ensure the validity of the output. Whether custom or off the shelf, this software shall be controlled with test equipment and is part of the test equipment record.

# **Purchasing services and supplies**

## (ISO/IEC 17025:2005 clause 4.6)

A participating laboratory must maintain procedures to purchase, inspect and store critical consumables. Any consumables must meet technical specifications as noted in the test standard. Please see UL document 00-OP-C0033 Laboratory Consumables for Client Labs and 00-OP-C0037 Thermocouple Wire Validation for Clients Labs at www.ul.com/dap > Resources > DAP Tools for more information.

# Nonconforming tests or calibrations

## (ISO/IEC 17025:2005 clause 4.9)

A participating laboratory is to have procedures in place to stop, evaluate and, when appropriate, resume testing when nonconforming test methods have been used. When nonconforming testing takes place, remedial action shall be taken, as appropriate. Based on the severity of the nonconforming tests, corrective action procedures may also be required to prevent a recurrence. This also applies to test equipment found to be out of tolerance prior to calibration. UL shall be notified of any impact to test data accepted by UL.

#### Corrective action

## (ISO/IEC 17025:2005 clause 4.11)

A participating laboratory must have procedures in place to implement corrective actions when nonconforming testing, nonconforming calibrations or departures from the laboratory quality system policies and procedures are discovered. These corrective action procedures are to include root cause analysis, documentation of corrective actions and monitoring to assure that corrective actions have been effective. UL is to be notified if any test data is impacted.

## **Technical records**

#### (ISO/IEC 17025:2005 clause 4.13)

Records are to be legible and stored and retained in such a way that they are readily retrievable. Storage must be in facilities that provide a suitable environment to prevent damage, deterioration or loss. Retained records are to include quality and calibration records and test data.

UL requires submittal of original data. If copies of data are submitted, a participating laboratory must retain records of original observations and derived data as well as sufficient information to establish an audit trail for each data sheet package sent to UL.

If an error is made in recording data, it is to be neatly lined out, the correct information recorded, the change initialed and a reason provided for the change. Erasures, correction tape or correction liquid are not acceptable. Please see UL document 00-OP-C0025 Data Recording and Reporting for Clients Labs at www.ul.com/dap > Resources > DAP Tools for more information.

Customers must maintain all records supporting testing, including equipment calibration records, for 5 years after withdrawal of any product certification utilizing the test.

# **Personnel qualifications**

(ISO/IEC 17025:2005 clause 5.2)

Testing personnel are to have the education, training, technical knowledge and experience to conduct tests. Testing personnel must be familiar with and have an in-depth understanding of the requirements pertaining to a test being conducted.

Personnel must be sufficiently independent and free from financial or other pressures that may affect testing and reporting of results.

## Accommodations and environmental conditions

(ISO/IEC 17025:2005 clause 5.3)

Test areas must have proper energy resources, lighting, temperature control, humidity control and other environmental conditions required to conduct tests. All participating laboratories shall effectively monitor and control those factors that affect testing. Please see UL documents 00-OP-C0035 Laboratory Ambient Conditions for Clients Labs and 00-OP-C0036 Laboratory Power Quality for Clients Labs at www.ul.com/dap > Resources > DAP Tools for more information.

# Test equipment

(ISO/IEC 17025:2005 clause 5.5)

A participating laboratory must be furnished with test equipment sufficient to correctly perform tests in accordance with the applicable test standard or procedure. The equipment is to be at least as accurate as specified or implied in the test standard, or procedure or meet UL's minimum accuracy requirements as specified in UL document oo-OP-Coo34 Equipment Accuracy Requirements for Clients Labs at www.ul.com/dap > Resources > DAP Tools.

All equipment shall be in good working order and calibrated appropriately. Each instrument shall bear a calibration sticker with both the latest calibration date and the calibration due date.

Records maintained for each instrument and any automated software are to include:

- Full identification of equipment and records of its acquisition
- Detailed history of damage, malfunction, modification, maintenance and repair
- Calibration certificates
- Records demonstrating that equipment complies with specified tolerances
- Current location of equipment
- When appropriate, maintenance plan and all maintenance carried out to date
- Current version of all software, regardless of source, and validation records for any software developed and maintained by the laboratory.

## Measurement traceability

(ISO/IEC 17025:2005 clause 5.6.2)

Measuring equipment must be calibrated to a nationally or internationally recognized standard of measurement or standard reference material. When traceability is not possible, other procedures must be used to assure traceability in accordance with ISO/IEC 17025:2005. The calibration frequency shall be determined to assure required accuracy between calibrations. Generally, equipment shall be calibrated at least annually. Any limitations of usage should be clearly indicated.

Note: Effective Jan. 1, 2009, test equipment calibration must be conducted by an accredited calibration laboratory. Calibration laboratories accredited by an ILAC, APLAC or EAC Mutual Recognition Agreement Signatory such as A2LA, NIST/NVLAP, UKAS, SCC, NATA, JCSS, JAB, DKD, JNLA and IAS. Please see UL document 00-OP-C0032 Calibration Certificate Analysis for Clients Labs at www.ul.com/dap > Resources > DAP Tools for more information.

For laboratories that conduct calibrations for their own purposes, UL will assess traceability for compliance with ISO/IEC 17025:2005. For details of UL's requirements for

in-house calibration laboratories, please see UL document oo-OP-Coo38 In-House Calibration Requirements for Clients Labs at www.ul.com/dap > Resources > DAP Tools for more information.

# Handling of test items

(ISO/IEC 17025:2005 clause 5.8)

Samples are to be clearly identified and correlated to the test conducted and data obtained. In the case of multiple samples of one model or type, unique identifiers must be used to distinguish between tested samples.

# Reporting of results

(ISO/IEC 17025:2005 clause 5.10)

Participating laboratories are to record all observed data as well as a description of the test method or reference to the test method used, e.g., standard name, standard number, edition or issue date, latest revision date, clause and test name. Data are to be recorded in ink on form or standard laboratory data sheets. Personnel at participating laboratories should use form UL data sheets when available.

Use of non-UL form data sheets will require further review by UL to assure compliance with UL data recording procedures. UL may apply additional fees for review of non-UL datasheets. Data sheets must be reviewed for content prior to use by the laboratory.

- All instruments used to record test data or environmental conditions must be recorded and correlated to tests performed
- Customer identification, including location where tests were performed
- Signature of the laboratory signatory
- Sequentially numbered pages with the total number of pages recorded on the first page
- Typed or printed name of staff member performing the test on each data sheet where results are recorded. For test data collected electronically, only the typed name of the technician is required

- Any chart paper, computer paper, printouts and similar resources must include the same information as specified above.
- Clear identification of which samples were used for testing.
  When multiple samples are used for one test, data sheet
  must clearly indicate result for each sample. When multiple
  samples are used for a test program of one model or type,
  unique identifiers must be used to distinguish between
  tested samples tested. These unique identifiers are to be
  noted on the test datasheet.
- Rationale for not performing a test. The rational should be provided as part of the datasheet package submittal or as a cover to the completed datasheet package.

Complete details can be found in UL document 00-OP-C0025
Data Recording and Reporting for Clients Labs at www.ul.com/
dap > Resources > DAP Tools.

#### Test method validation

Prior to participating in the Client Test Data Program, a testing laboratory should have established a history of testing under the Witnessed Test Data Program. Each test covered by the Client Test Data Program will be verified through direct assessment of the facilities, equipment, and personnel. Demonstrating proper testing methods includes items such as placement and securement of thermocouples, use of instrumentation, use of appropriate environments including placement of the product in test jigs as described in standards, knowledge of situations that may produce erroneous data, etc.

Annually each test method is to be validated through direct demonstration during the annual assessment. At any time, UL can require repeat of testing at UL test laboratories or through the Witness Test Data Program at the participating client testing laboratory. Some specific categories may require repeat testing or participation in a proficiency test program.

# Oversight and audit

## Customer responsibilities

It is a customer's responsibility to notify UL of any changes in equipment, personnel, etc., material to the program that take

place between annual reassessments. Based on the changes, UL may decide to reassess the facility to reevaluate conformance with the program.

Each laboratory shall name at least one signatory. The laboratory signatory shall sign to each data package submitted to UL attesting that only qualified staff have been assigned to conduct tests, and that consumables, equipment, environment, and data recording and reporting meet UL's minimum requirements as specified above and in the documents located at www.ul.com/dap > Resources > DAP Tools.

Under the Client Test Data Program further subcontracting of tests is not permitted. If a laboratory finds that they cannot conduct a test, they should return the work to UL. UL will make appropriate arrangements for the testing.

#### Assessments

UL conducts annual assessments to the requirements detailed above. These assessments include validating test methods covered by UL's scope of recognition. Assessments and participation in the Client Test Data Program are test- and standard specific. Participation is scoped by specific tests for specific standards. Customers not submitting test data under the Client Test Data Program for more than one year will be reassessed prior to further acceptance of test data.

## Test data submitted

All test data will be thoroughly reviewed and conformance with requirements determined by UL. Reviews include:

- Accuracy of sample(s) tested
- Accuracy of test method used
- Test results
- Test equipment used
- Data recording procedures
- Completeness of required testing
- Appropriateness of justification for tests not conducted

UL retains the right to countercheck test data at any time.
Submittal of data does not mandate UL acceptance. Data can be counterchecked at UL or through the Witnessed Test Data Program.

# Agreements

To formalize the relationship with UL, each participant must sign and return the Client Test Data and Total Certification Program Agreement that covers all of a participant's test facilities for the Client Test Data Program. This agreement will need to be on file at UL by July 1, 2008.

# Advertising and promotional activities

Please go to www.ul.com/dap > Downloads for the latest in how you can promote your participation in the Client Test Data Program.

# How to apply

Customers interested in participating in the Client Test Data Program should contact UL Data Acceptance Program Customer Service team for further assistance.