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<td>LAT-TD-03951-02</td>
<td>23 June 04</td>
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<tr>
<td>Author(s)</td>
<td>Gunther Haller</td>
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<tr>
<td>Subsystem/Office</td>
<td>Electronics &amp; DAQ Subsystem</td>
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**Document Title**

Limitations and Deviations for CAL AFEE Test-stand #2

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### CHANGE HISTORY LOG

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<td>02</td>
<td>23 June 2004</td>
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LAT-TD-03951-02
1. **SCOPE**

This document lists

- the environmental limitations and
- the differences of the test-stand shipped compared to the released test-stand drawings

2. **ENVIRONMENTAL CONDITION**

- The test-stand temperature must be held between 18C and 38C, so no thermal cycling is allowed.
- The test-stand was only tested at room-temperature.
- No vibration tests are allowed.
- The test-stand can not be operated in a vacuum chamber.

3. **DIFFERENCES TO RELEASE DRAWINGS**

3.1 **Tower Power Supply**

- LAT-DS-02388-01, CCA: No staking was applied, Item 17, 18 omitted.
- LAT-DS-02389-01, PWB, complete
- LAT-DS-02390-04, Schematic: Sheet 1 - R1,R2,R11,R12 not loaded; Sheet 2, ZVR4 not loaded. Other sheets: Capacitors added across TRK Power Switch changed from 0.1microF to 1.0microF. Changed D500 to 1N4489.
- LAT-DS-02391-04, Material list, complete
- LAT-DS-00995-06, LAT-DS-00995-04, TPS enclosure: Entire unit is electroless nickel plated. No hard anodized was used.
- LAT-DS-01482-03, TPS ASSEMBLY: NO component staking was applied (item 15 omitted); NO cable harness support was installed (item 16 omitted); Screw heads were not staked
Limitations and Deviations for CAL AFEE Test-stand #2

- Assembly number was not marked on chassis

### 3.2 Tower Electronics Module

- LAT-DS-01650-02 - Schematic Diagram, TEM CCA
- LAT-TD-02230-01 - Bill of Materials, TEM CCA
  - For resistors R648, R649, R650, R651 instead of single 50 Ohm value, two 100 Ohm resistors in parallel are used. They are loaded with one soldered on top of the second resistor.
- LAT-DS-01646-04 - Circuit Card Assembly, TEM DAQ
  - Conformal coating not used
  - Component staking/potting not used
  - Screw heads not staked
- LAT-DS-01649-05 - Printed Wire Board, TEM
- LAT-DS-02583-01 - PWB Fab, Loading and Assembly
- LAT-DS-02588-02 - Connector and Cable Assembly, TEM CCA
- LAT-DS-00554-06 - TEM Box Base
  - Part is fully electroless nickel plated, no hard anodize was used
- LAT-DS-00555-06 - TEM Box Lid
  - Part is fully electroless nickel plated, no hard anodize was used
- LAT-DS-01481-04 - Assembly, Tower Electronics Module
  - Assy number not marked on chassis
- LAT-DS-01026-02 - TEM Connector Plate
- LAT-DS-01031-02 - TEM Connector Pin
- LAT-TD-01880-01 - VHDL, LAT TEM GTIC FPGA
- LAT-TD-01881-01 - VHDL, LAT TEM GTIU FPGA
- LAT-DS-03582-01 - Spacer, TEM Connector

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LAT-TD-03951-02
FPGA version numbers:

- U45 – GTIC – version 1
- U62 – COMMCTRL version 1 (Preprogrammed firmware version 9)

4. **CHANGES FROM TEST-PROCEDURE**

The test-procedure was in the process of official LAT-DOC release while the tests were performed. No changes to the procedure were done between the executing the tests and official release of the procedure.

4.1 **Data Sheets and Cover Sheet**

The sheets used for recording all measurements were from the original draft document before it was approved and released.