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Reliability Test Report

for BFX-UA300 (K18X001.00)

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Revision Change History

Revision	Description of Change	Date
1.0	Initial Release	05/27/20022

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Purpose:

1. Provide a formal functional demonstration of the product design reliability.
2. Identify any design discrepancies.
3. Reliability assurance of trial samples which are designed and fabricated in accordance with the customer's product specifications.
4. Conduct robustness testing on early production samples in accordance to customer's product environmental testing specification.

Scope:

This document describes the performance requirements, validation criteria, and the validation tests which focus on BFX-UA300 (K18X001.00) product.

The DUT H/W version is V135 and S/W revision is 4.9.178.

Source:

AMP board change new power choke.

The summary of test items:

NO.	Item	Test Condition	Q'ty	Period	Pass Criteria	Test result
1	Operational Random Vibration Test	1. Acceleration: 10m /4.4G/2.5G 2. Sweep range: 5~15Hz/10mm P-P, 16~30Hz/4.4G, 30~300Hz/2.5G 3. Sweep rate: 0.25 octave/min 4. Duration: 60 min/ axis	2 units	2 days	1. No function failures both during and after the test 2. No performance degradation during the function test 3. No visual damage to the products after inspection, such as peeling, discoloration, etc.	PASS

Panel Drawing:

Front



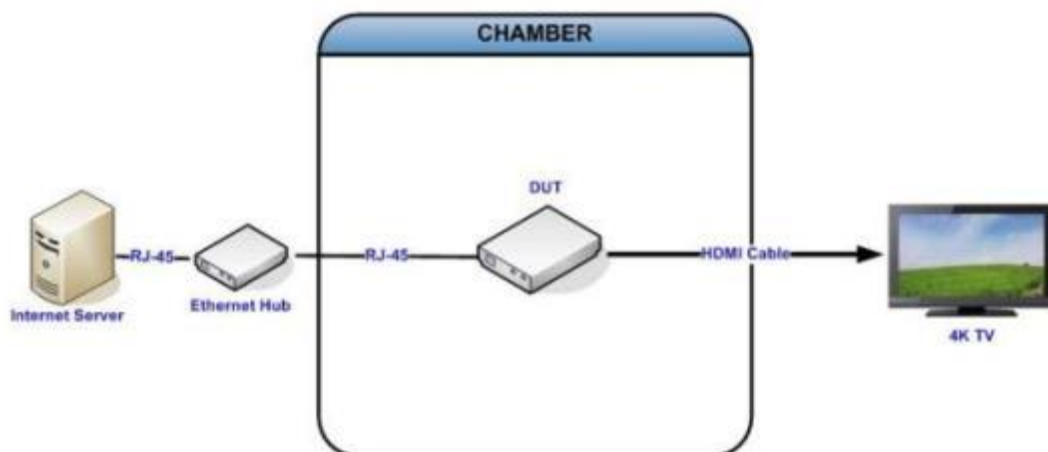
Rear



Adapter



Test setup and function test:



HDMI connects to 4K TV for playing local 4K video.
 Ethernet hub is for iperf 50Mbps.

1. Operational Random Vibration

Purpose:

To reveal the accumulated effects of stress induced by the random vibration and the resulting mechanical weakness and degradation in specified performance and to use this information, in conjunction with the relevant specification to assess the acceptability of specimens.

To demonstrate the mechanical robustness of specimens.

Quantity: 2 units

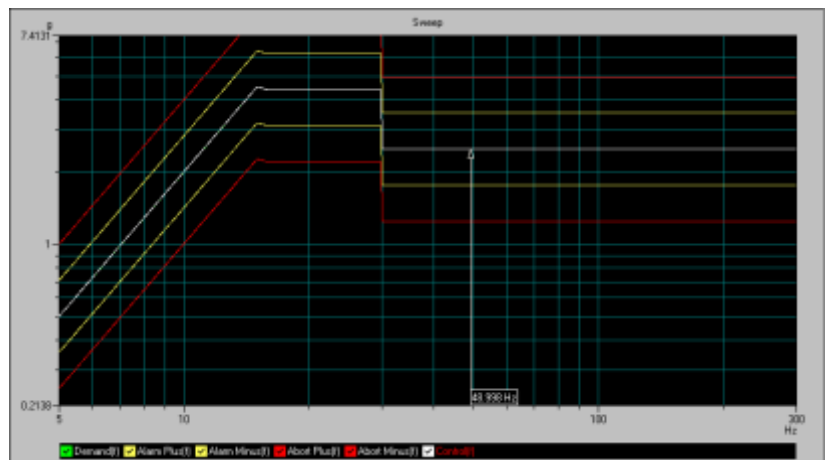
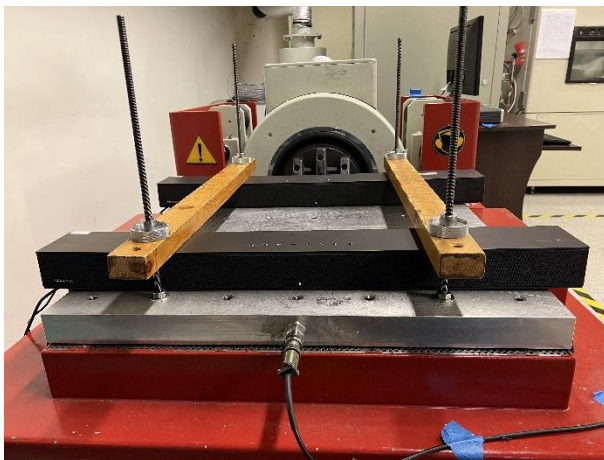
Test Objective: 1. Acceleration: 10mm /4.4G/2.5G

2. Sweep range: 5~15Hz/10mm P-P, 16~30Hz/4.4G, 30~300Hz/2.5G

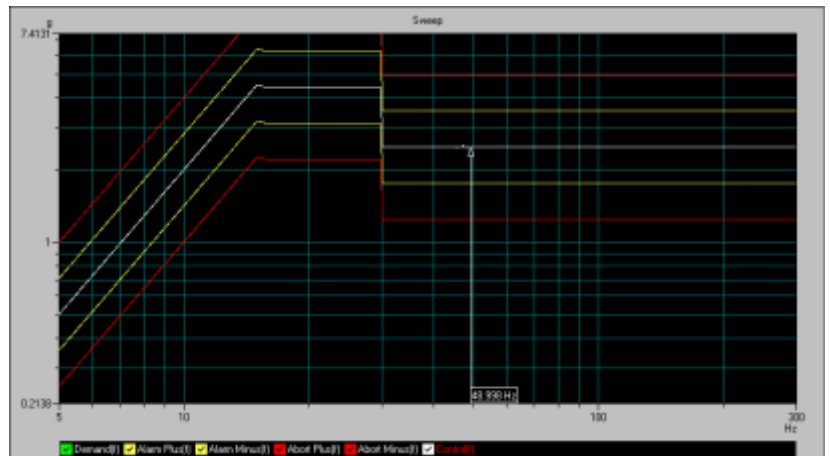
3. Sweep rate: 0.25 octave/min

4. Duration: 60 min/ axis

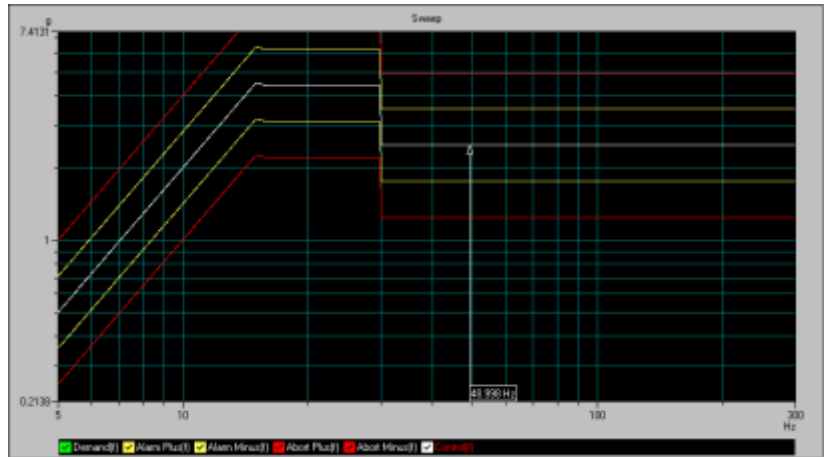
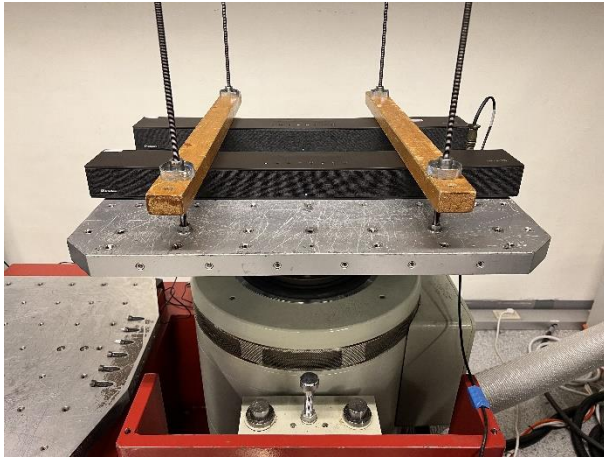
Test Profile:



X axis



Y axis



Z axis

Test Procedure:

Set the product fully function operating.

1. Fix the product on vibration mechanism.
2. Set the test program as above condition:

Acceleration: 10mm /4.4G/2.5G,

Sweep range: 5~15Hz/10mm P-P, 16~30Hz/4.4G, 30~300Hz/2.5G

Sweep rate: 0.25 octave/min, Axes: 3.

3. Check the mechanical and function during the test.

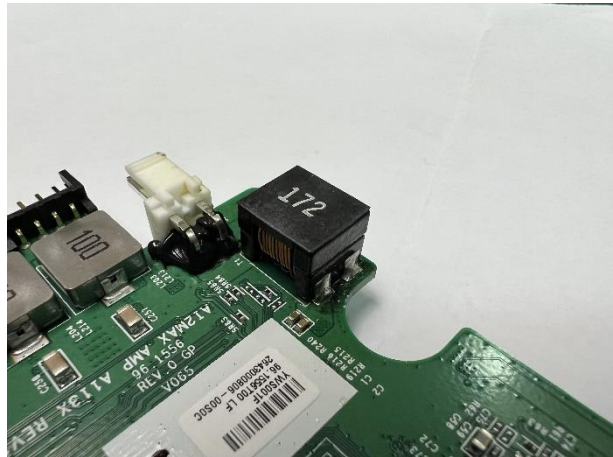
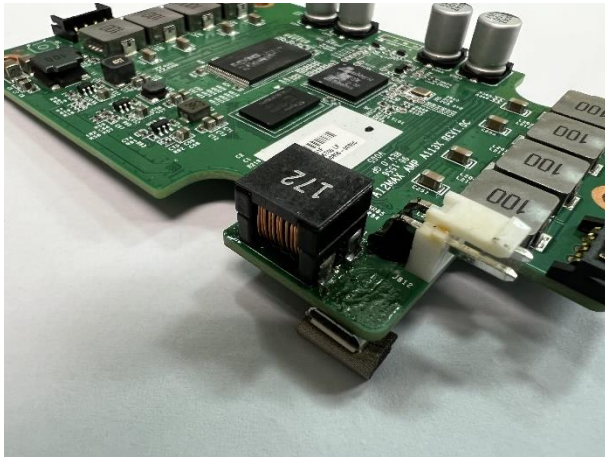
Pass Criteria:

1. No functional failures both during and after the test.
2. No performance degradation after the functional test.
3. No visual damage to the products during inspection, such as peeling, crack, missing pixels, discoloration, etc.

Basis for Profile: IEC 60068-2-64.

Test Result: **PASS**

Sample 1



Sample 2

