



develop

PSU test report

Bernhard Woerndl-Aichriedler
bwa@xdevelop.at

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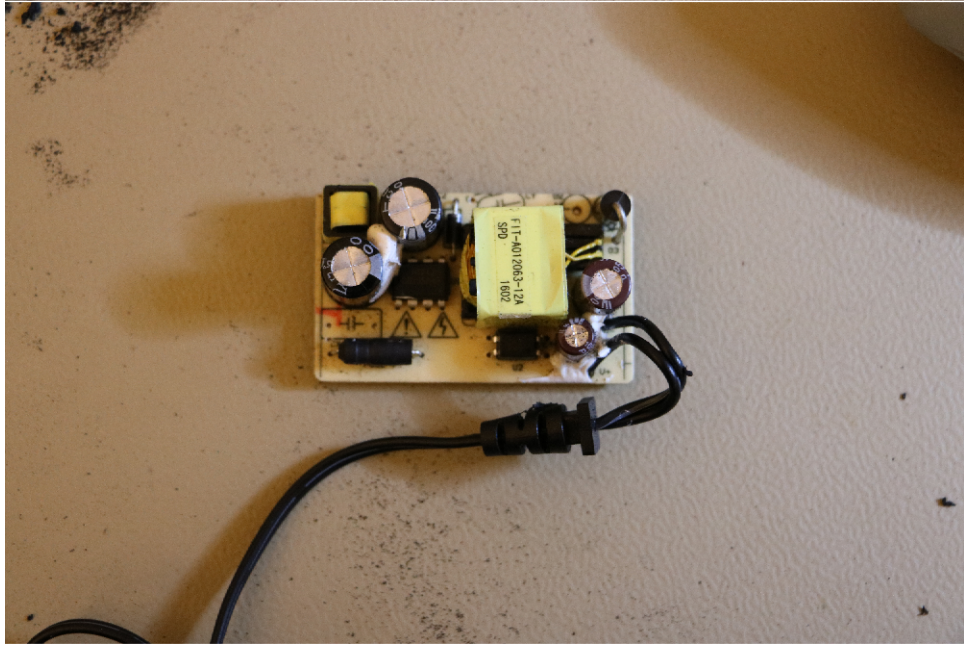
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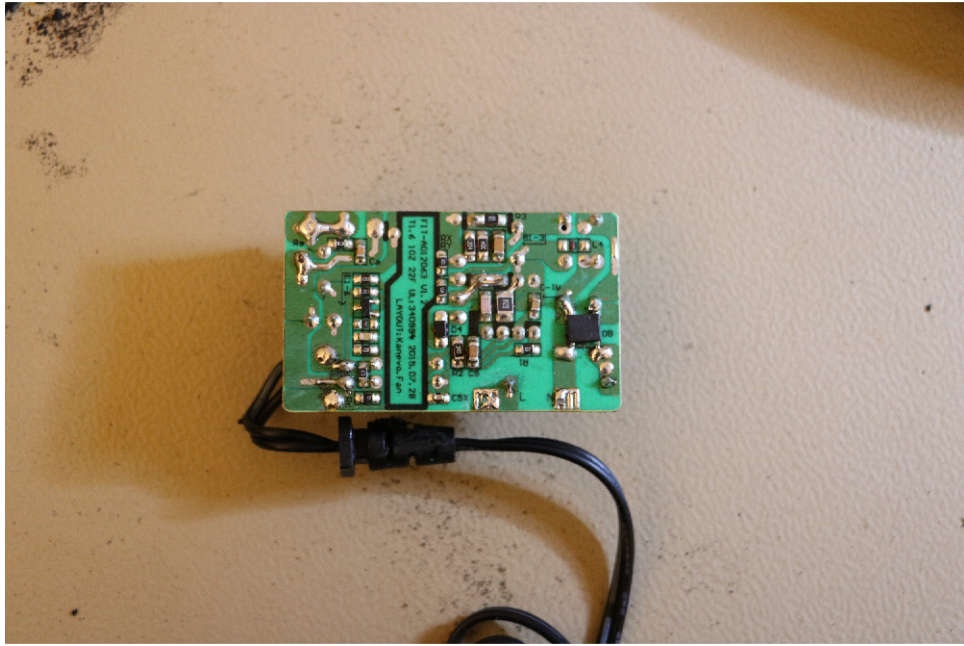
2 General information

Testing the following device

Manufacturer: DRAGINO
Device name: TP12-120100E
Serial number: 1
Nominal voltage: 12.000V
Nominal current: 1.000A
Tester: Bernhard Woerndl-Aichriedler <bwa@xdevelop.at>
Start time: 12-Jul-2016 16:52:29





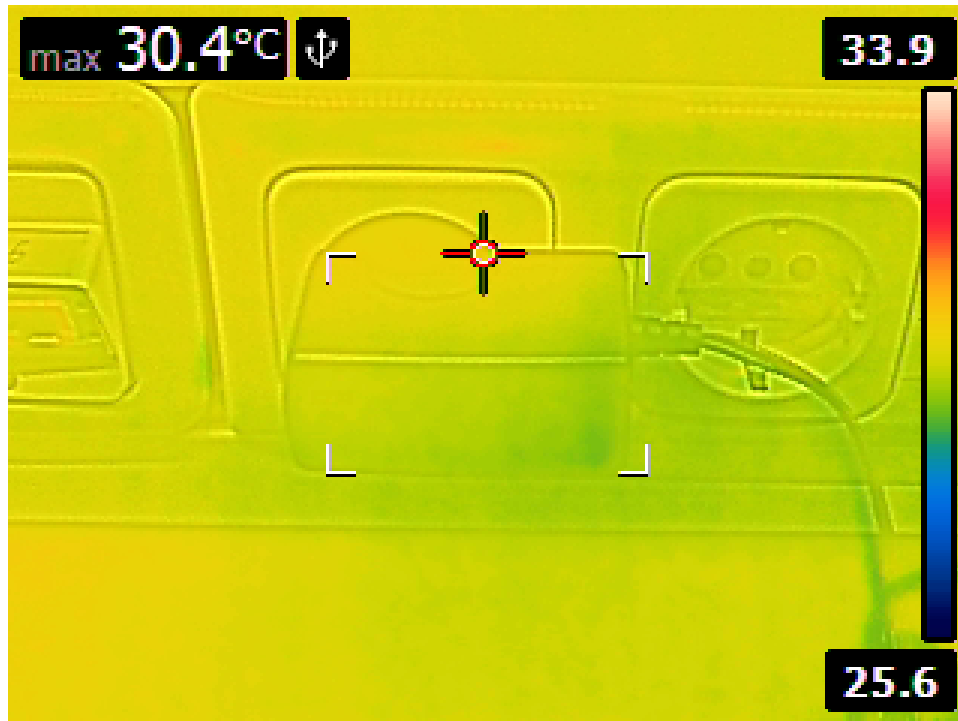


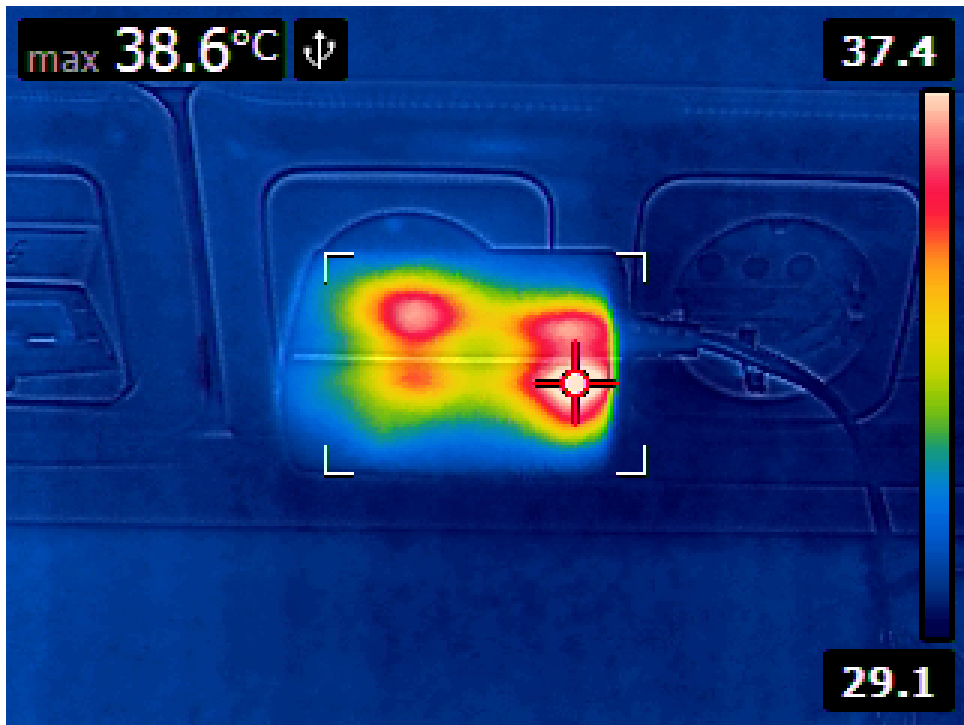
3 Point of operation

The test has been conducted with the following conditions

Voltage/Frequency: 230V-50Hz

Ambient Temperature: 32.17C





4 Standby power consumption

Voltage: 230.61V

Frequency: 50Hz

Current: 0.003638A

P active: 0.136W

P apparent: 0.839VA

P reactive: 0.828VAR

P factor: 0.162

Output voltage: 12.299V



5 Load testing

Characteristics

Voltage: 230.60V

Frequency: 50Hz

Loads: 0.000A to 1.100A

Minimum output voltage: 11.833V

Maximum output voltage: 12.259V

Regulation error absolute: -0.167V/+0.259V

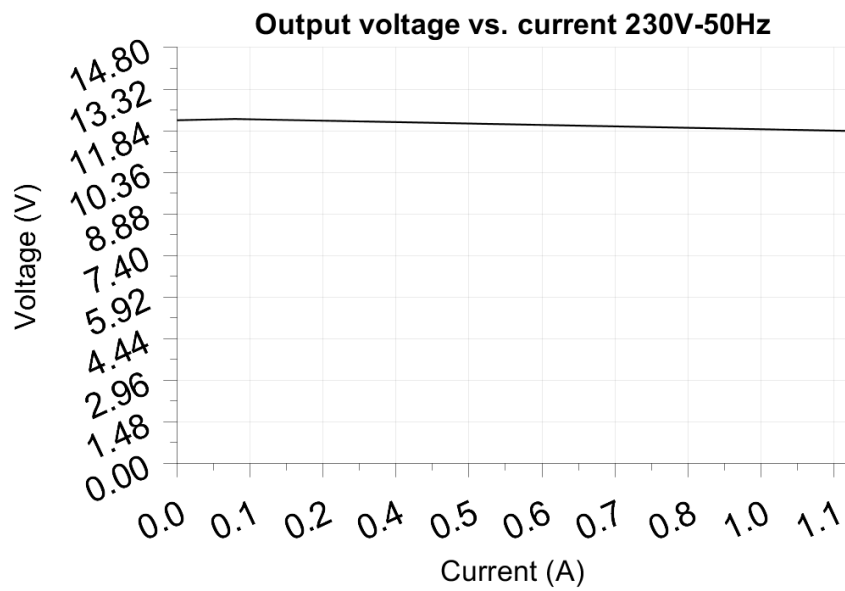
Regulation error relative: -1.4%/+2.2%

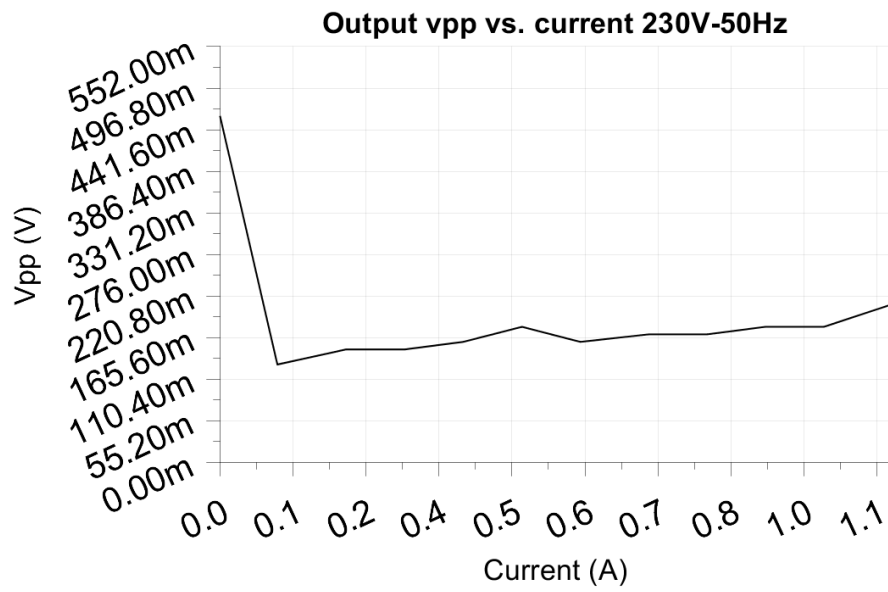
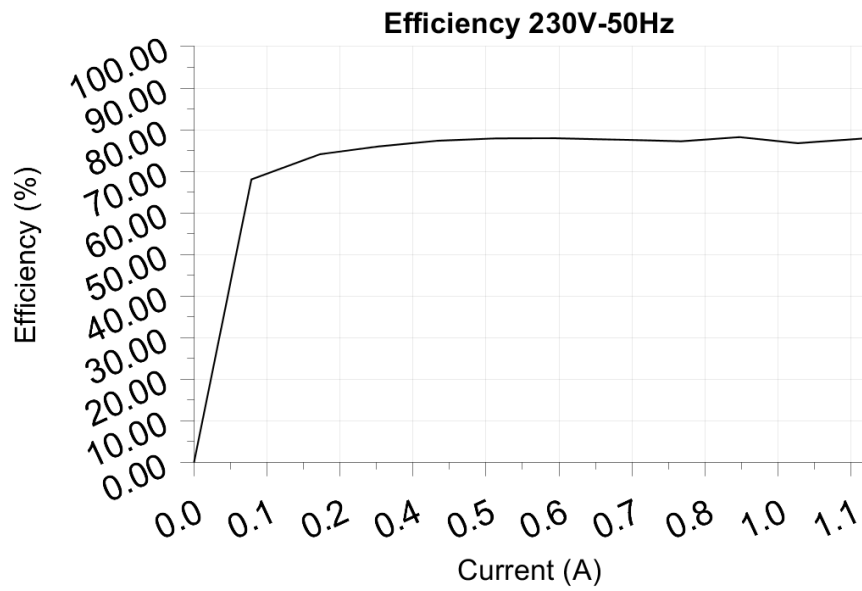
Vpp ripple&noise absolute: 0.460V

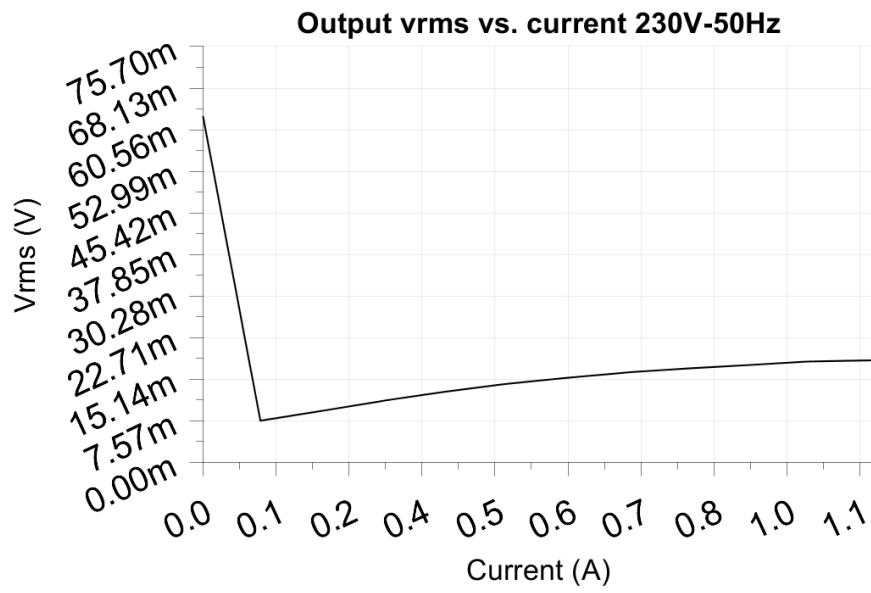
Vpp ripple&noise relative: 3.8%

RMS ripple&noise absolute: 0.063V

RMS ripple&noise relative: 0.5%







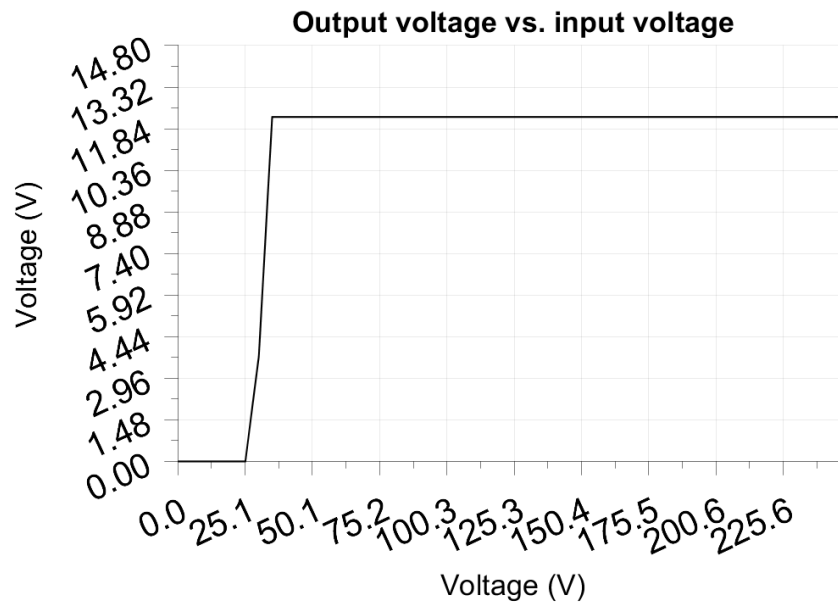
6 Turn on voltage

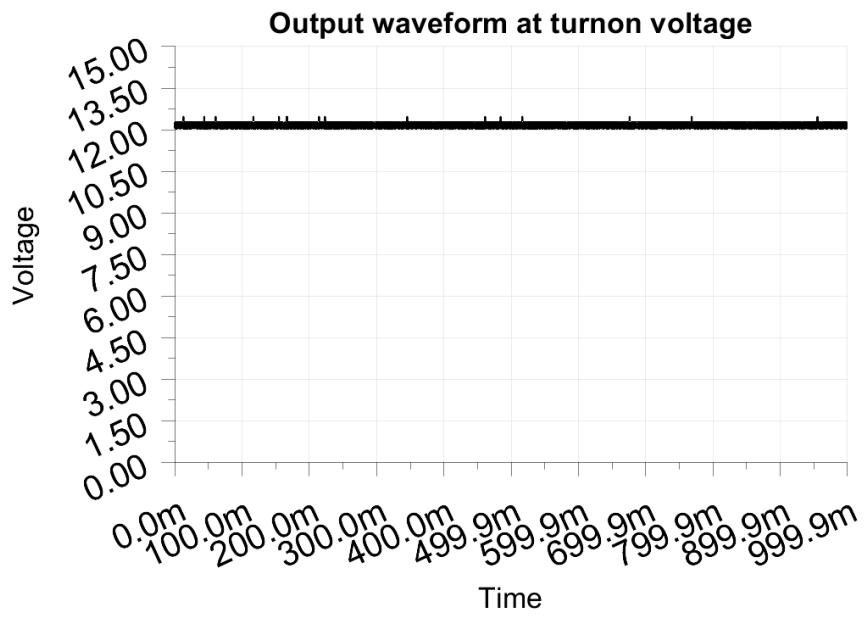
Testing when the PSU enables it's output

Test load: 0.100A
Test Frequency: 50Hz
Threshold: 9.000V

Turn-on voltage: 35.00V

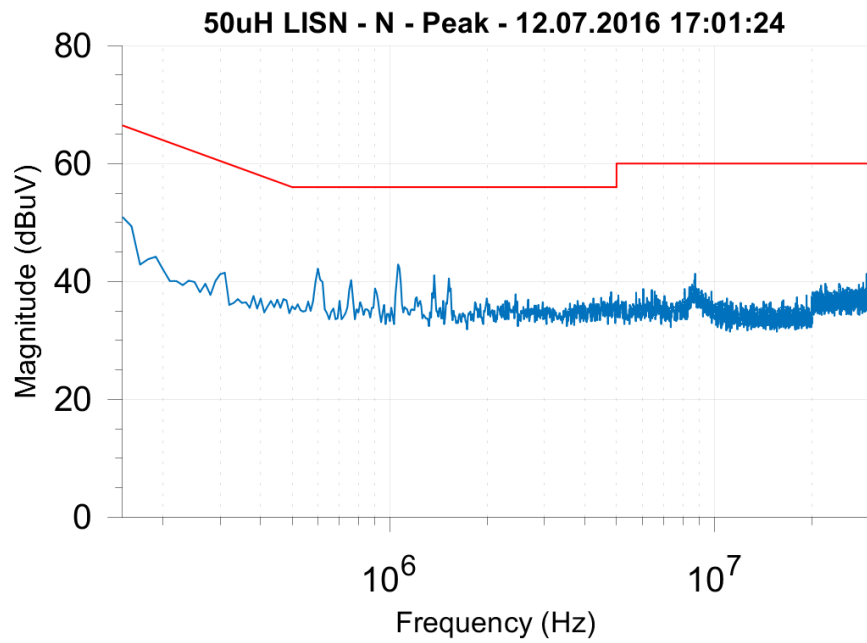
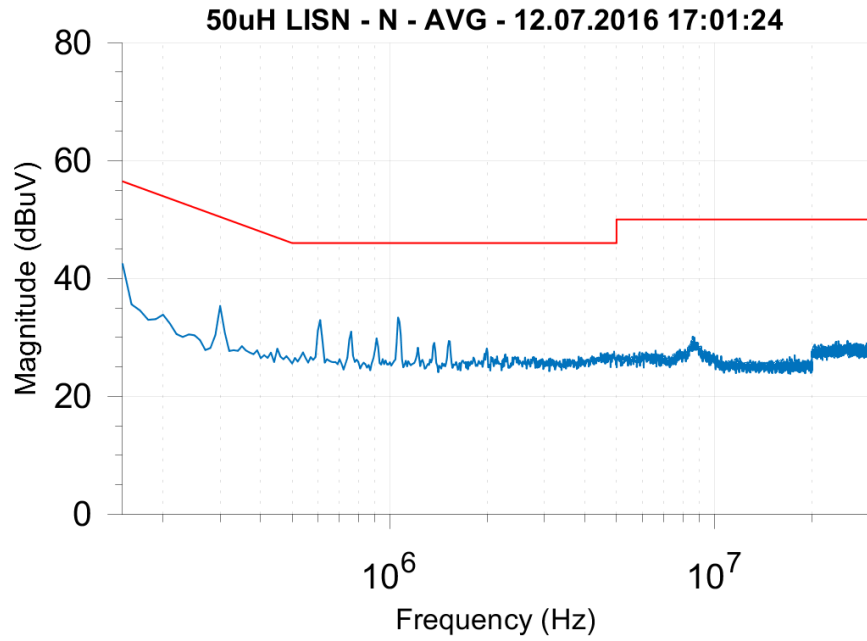
Output voltage: 12.258V

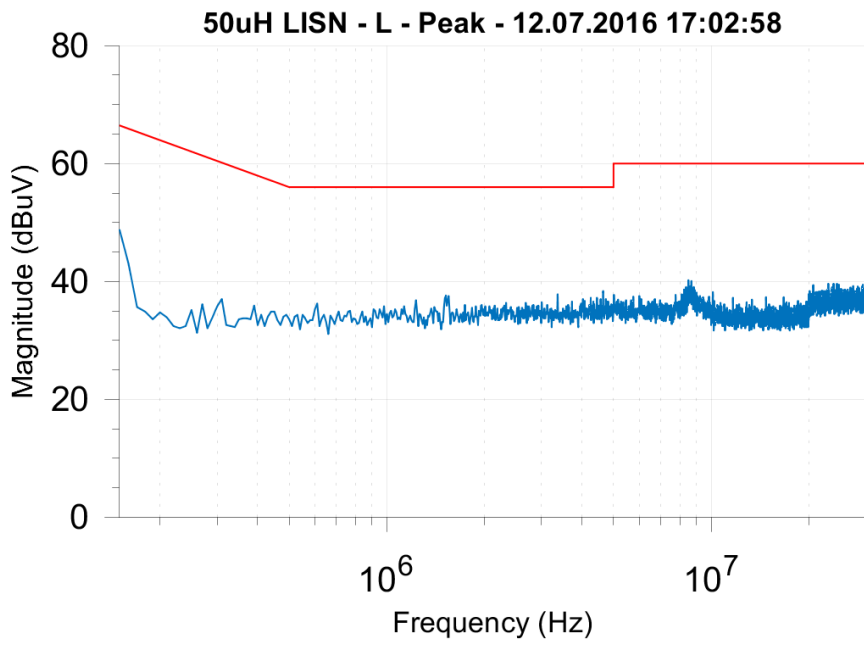
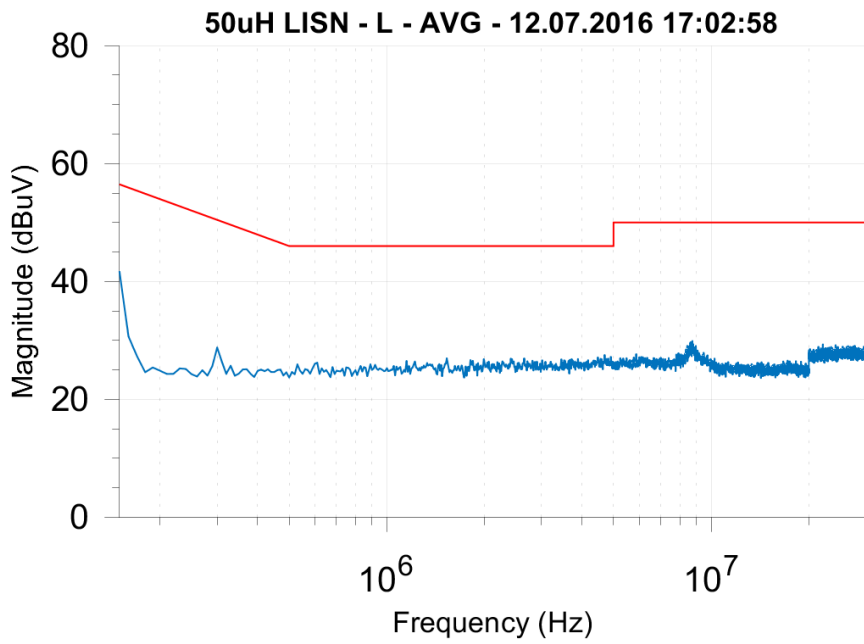




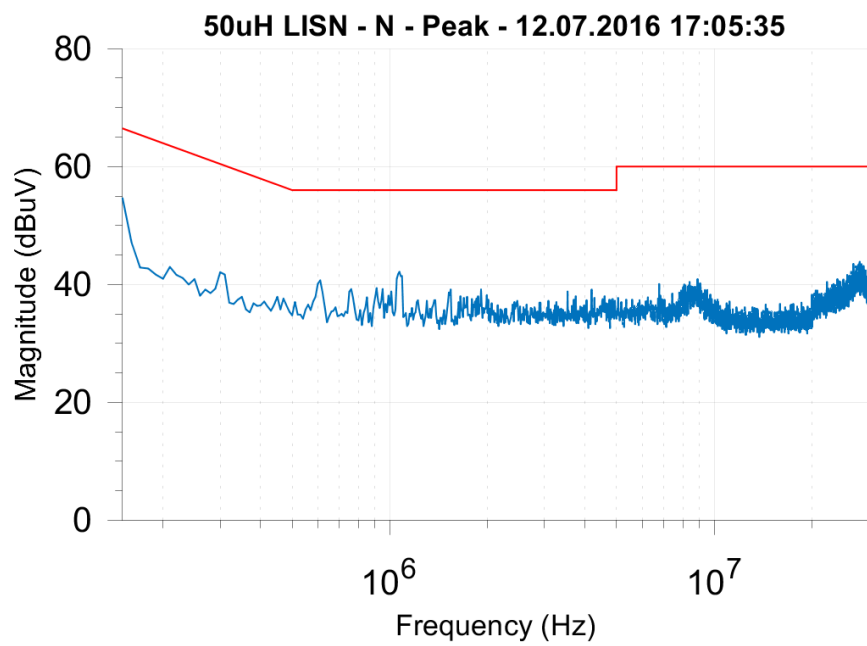
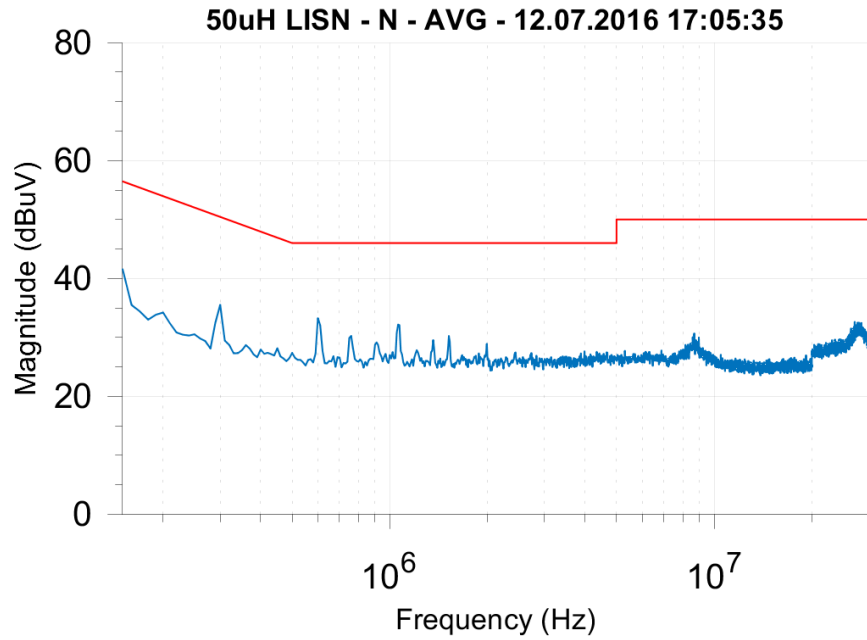
7 Conducted EMI

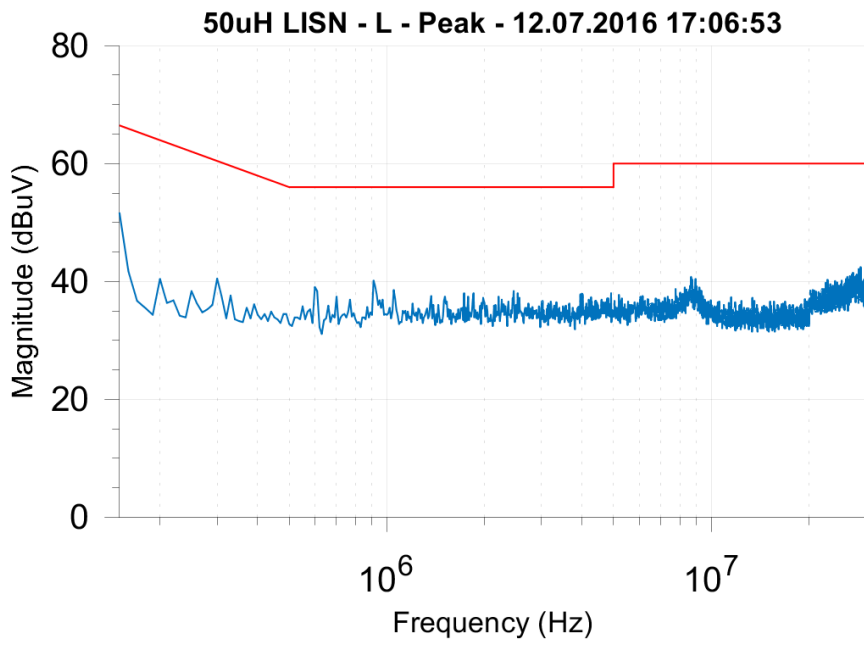
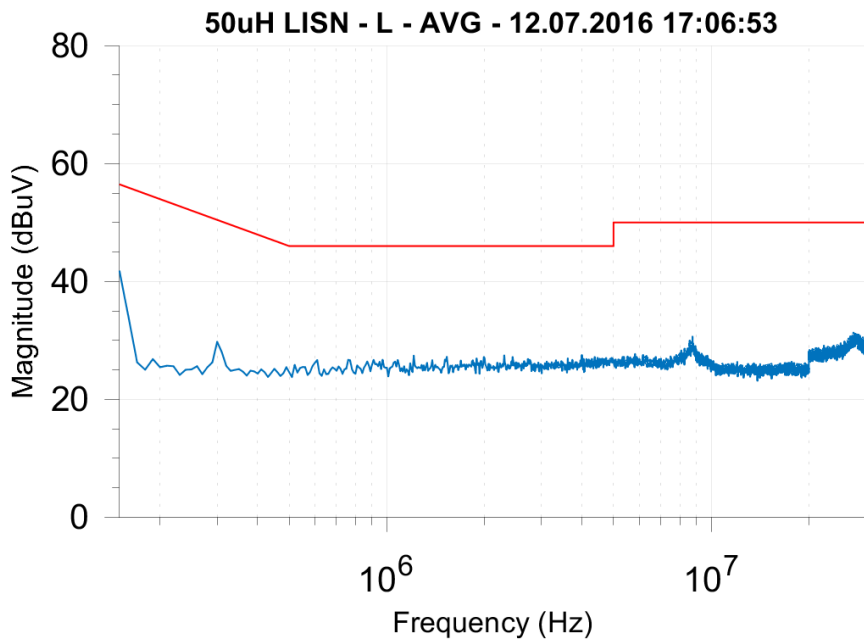
7.1 Output load 0.000A



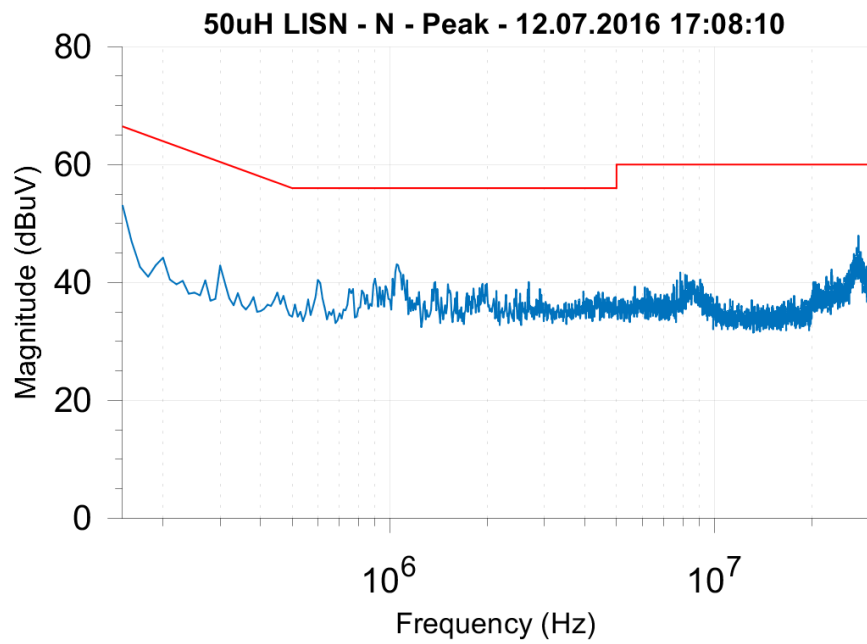
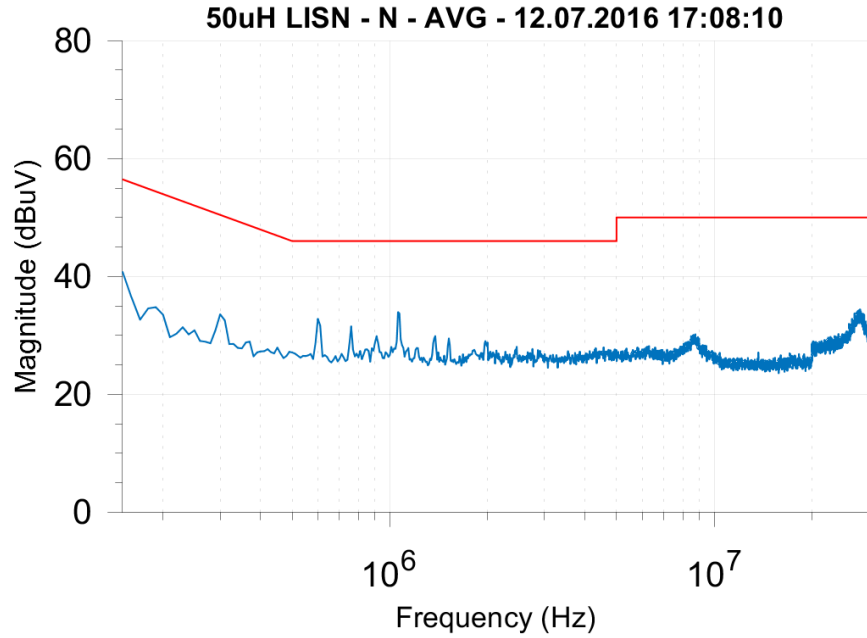


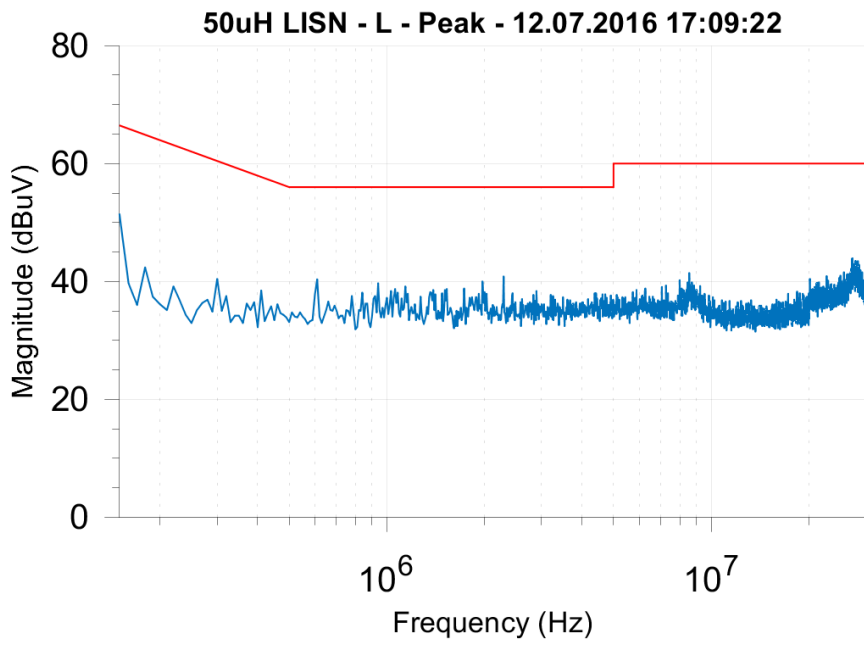
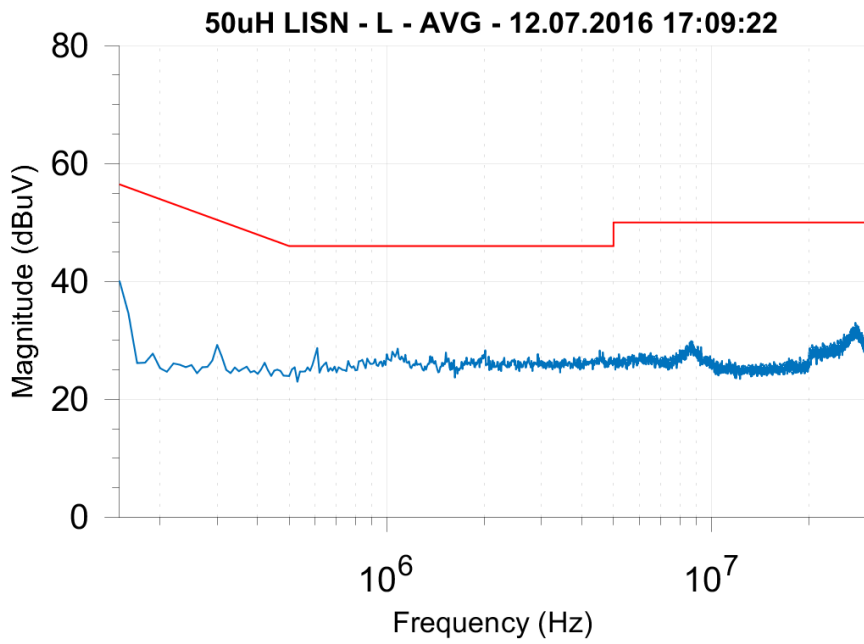
7.2 Output load 0.500A





7.3 Output load 1.000A





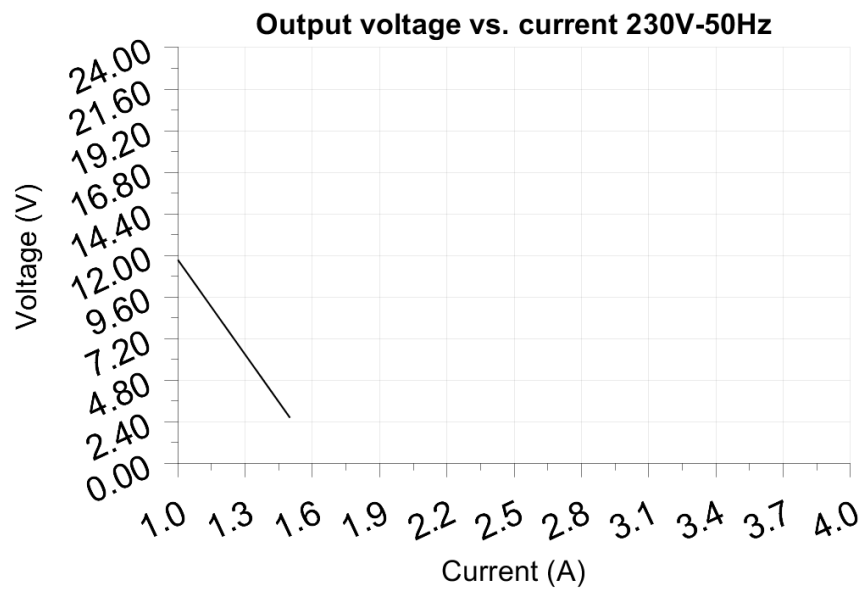
8 Overload testing

Test voltage: 230.00V

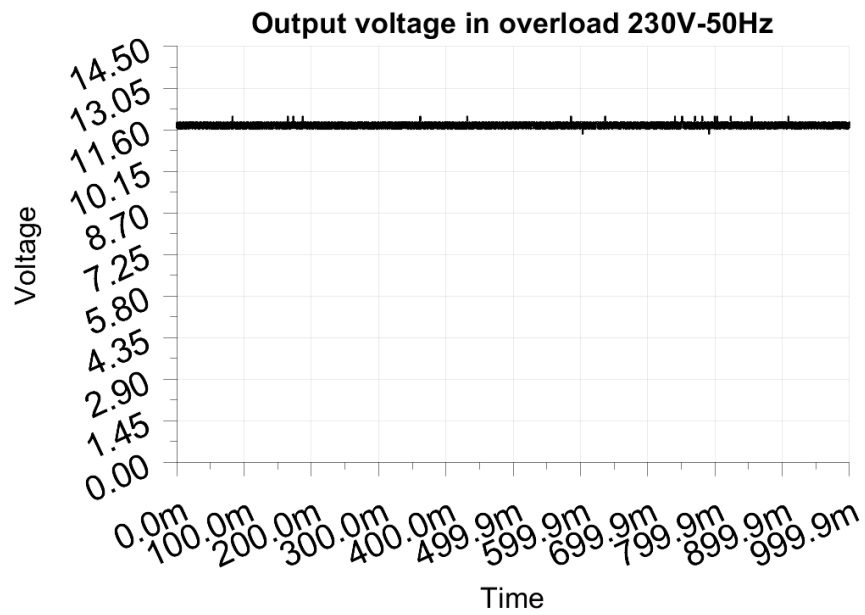
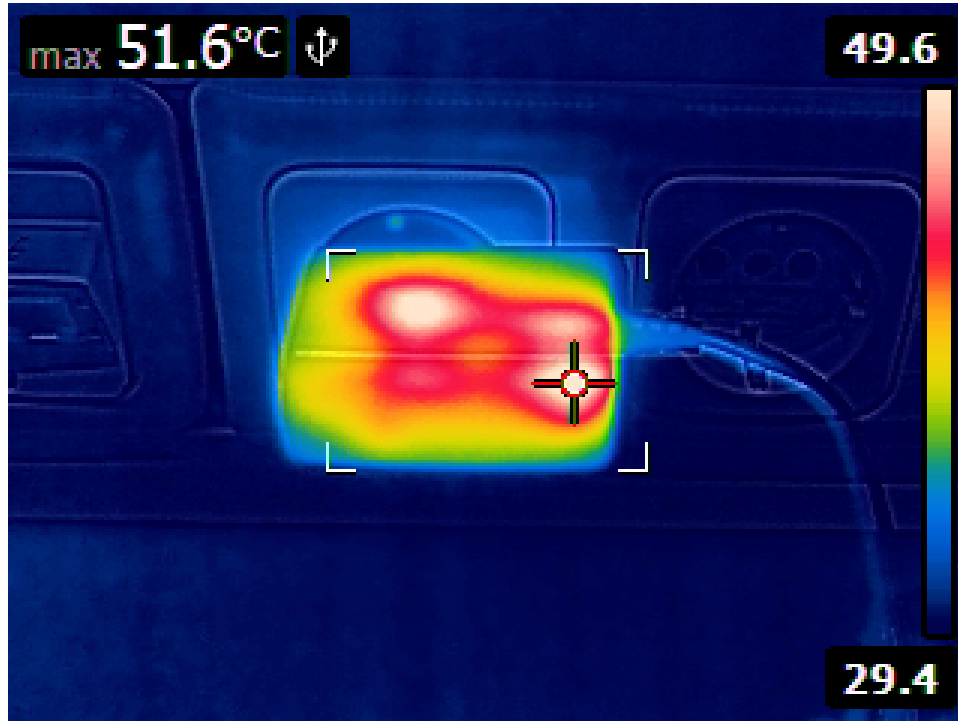
Test Frequency: 50Hz

Threshold: <6.000V

Maximum output current before shutdown: 1.500A



8.1 Output load 1.000A or 100%



8.2 Output load 1.500A or 150%

