



develop

# PSU test report

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## 1 Contents

- General information
- Point of operation
- Standby power consumption
- Load testing
- Turn on voltage
- Conducted EMI
- Overload testing

## 2 General information

Testing the following device

Manufacturer: MeanWell  
Device name: IRM30-12-ST  
Serial number: 1  
Nominal voltage: 12.000V  
Nominal current: 2.500A  
Tester: Bernhard Woerndl-Aichriedler <bwa@xdevelop.at>  
Start time: 13-Jul-2016 13:00:05

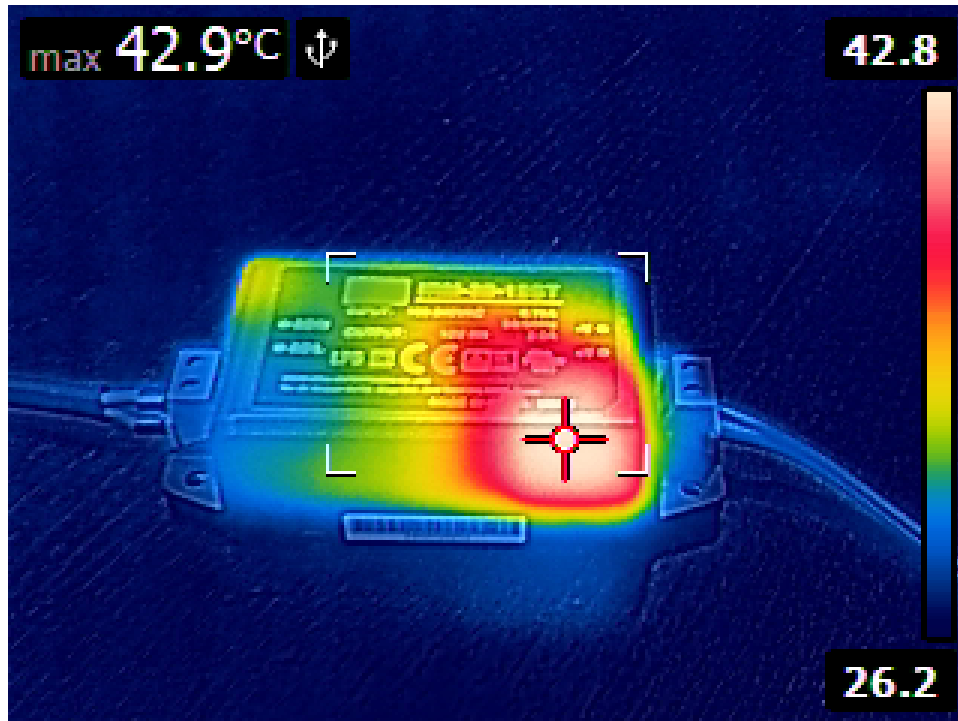


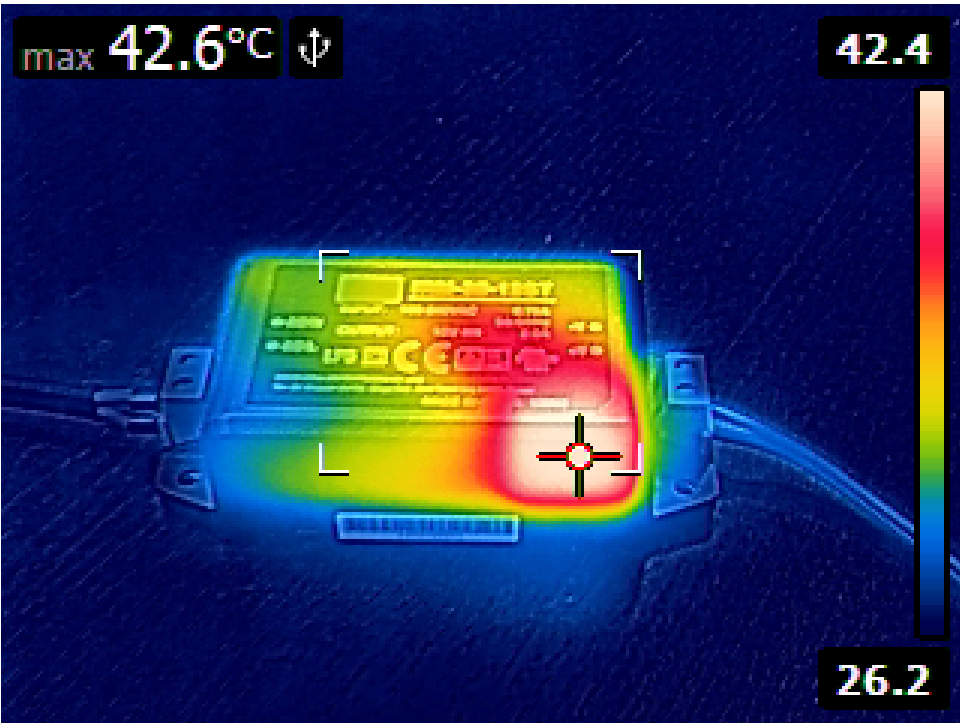
### 3 Point of operation

The test has been conducted with the following conditions

Voltage/Frequency: 230V-50Hz

Ambient Temperature: 29.41C





## 4 Standby power consumption

Voltage: 230.61V

Frequency: 50Hz

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Current: 0.009855A  
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P active: 0.038W

P apparent: 2.273VA

P reactive: 2.272VAR

P factor: 0.017  
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Output voltage: 12.001V



## 5 Load testing

Characteristics

Voltage: 230.62V

Frequency: 50Hz

Loads: 0.000A to 2.500A

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Minimum output voltage: 11.868V

Maximum output voltage: 12.003V

Regulation error absolute: -0.132V/+0.003V

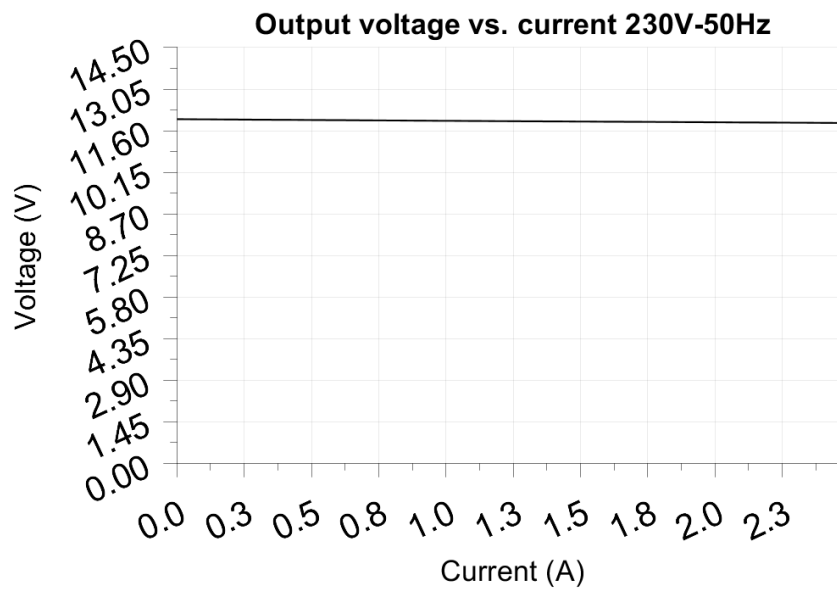
Regulation error relative: -1.1%/+0.0%

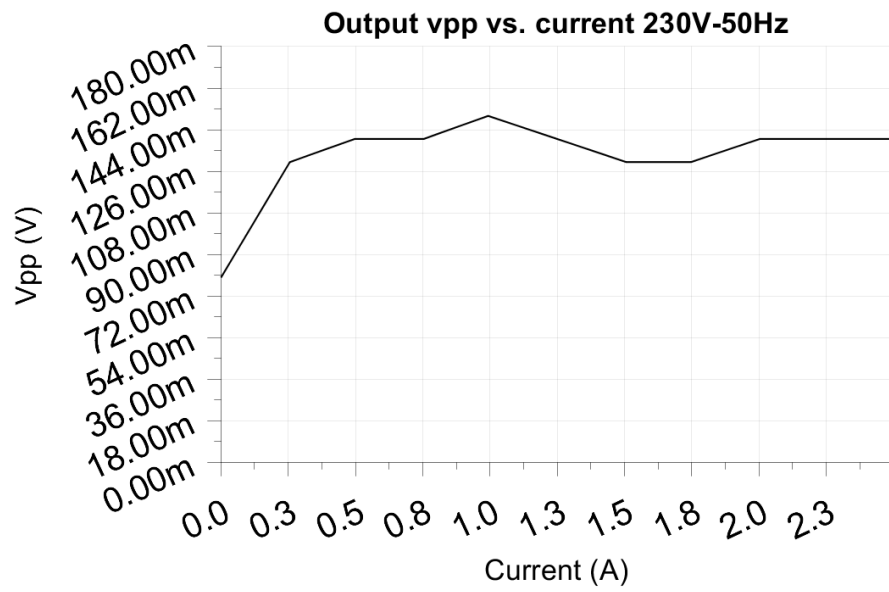
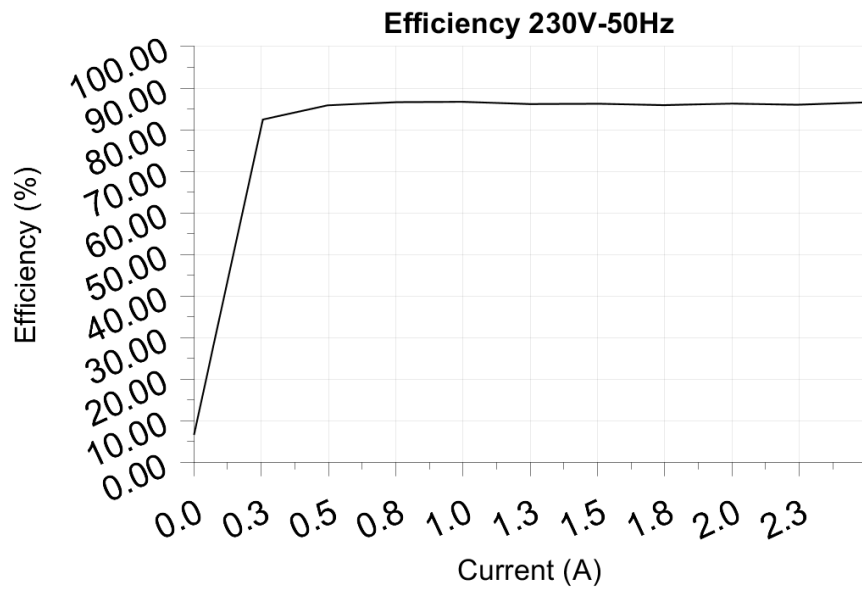
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Vpp ripple&noise absolute: 0.150V

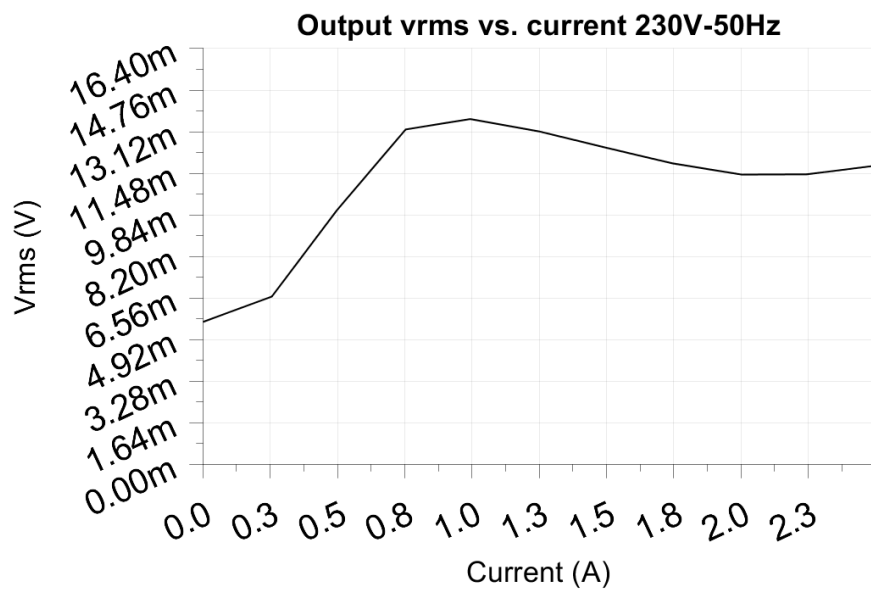
Vpp ripple&noise relative: 1.3%

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RMS ripple&noise absolute: 0.014V

RMS ripple&noise relative: 0.1%









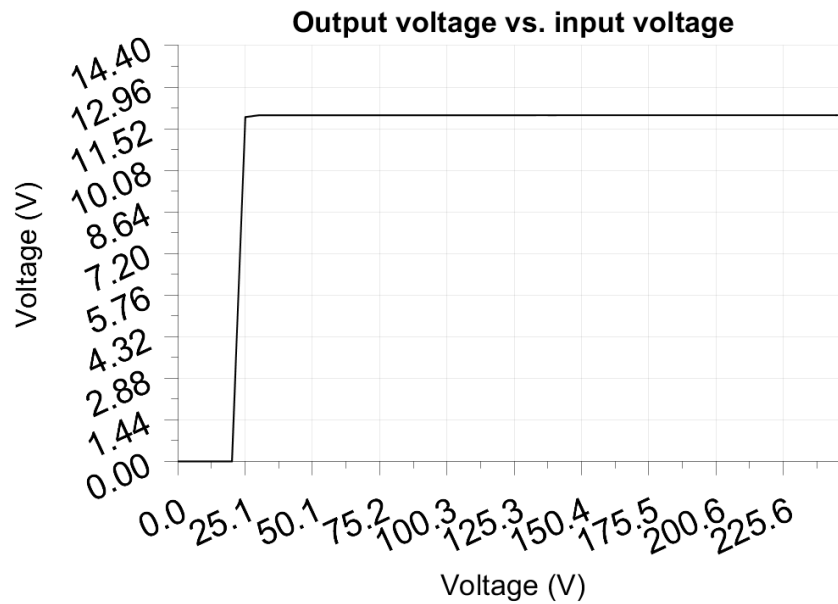
## 6 Turn on voltage

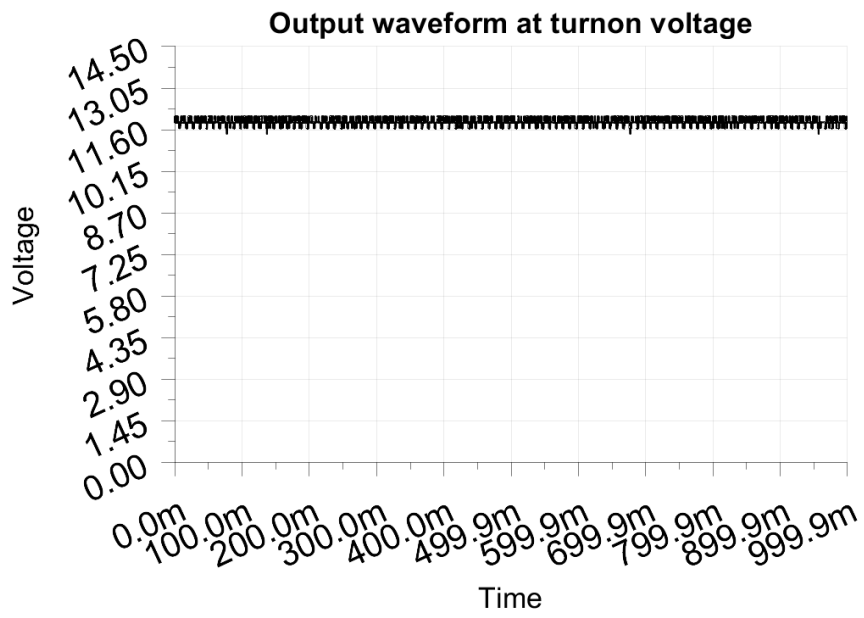
Testing when the PSU enables it's output

Test load: 0.250A  
Test Frequency: 50Hz  
Threshold: 9.000V

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Turn-on voltage: 25.00V  
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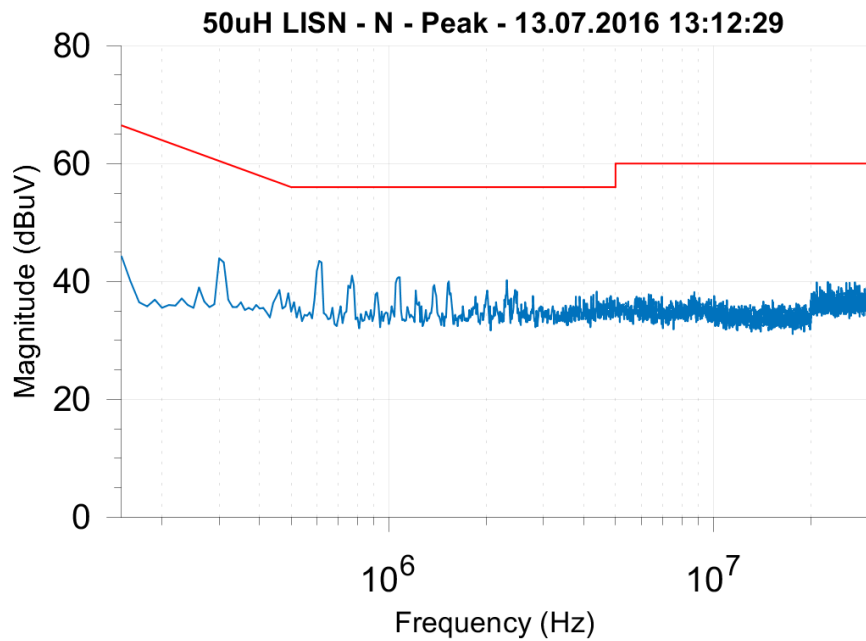
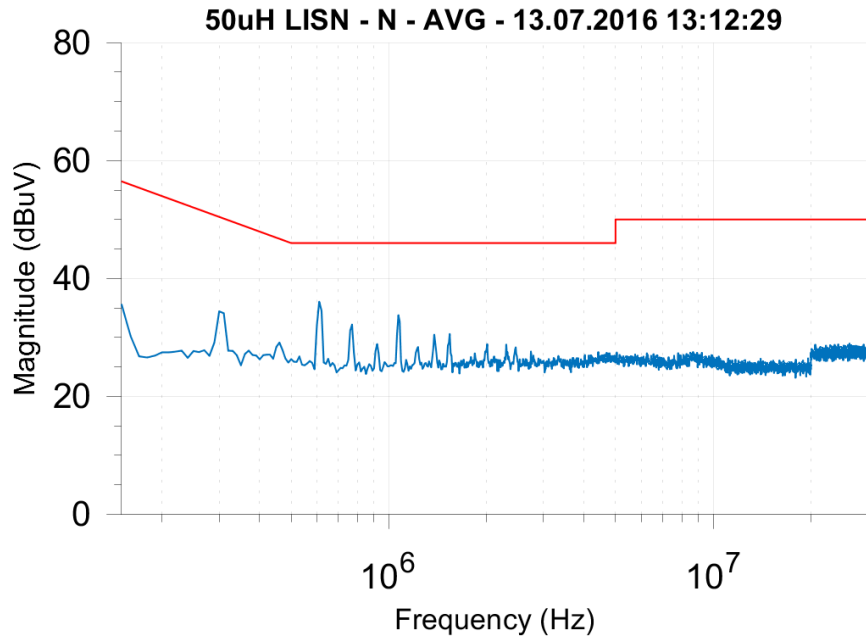
Output voltage: 11.925V

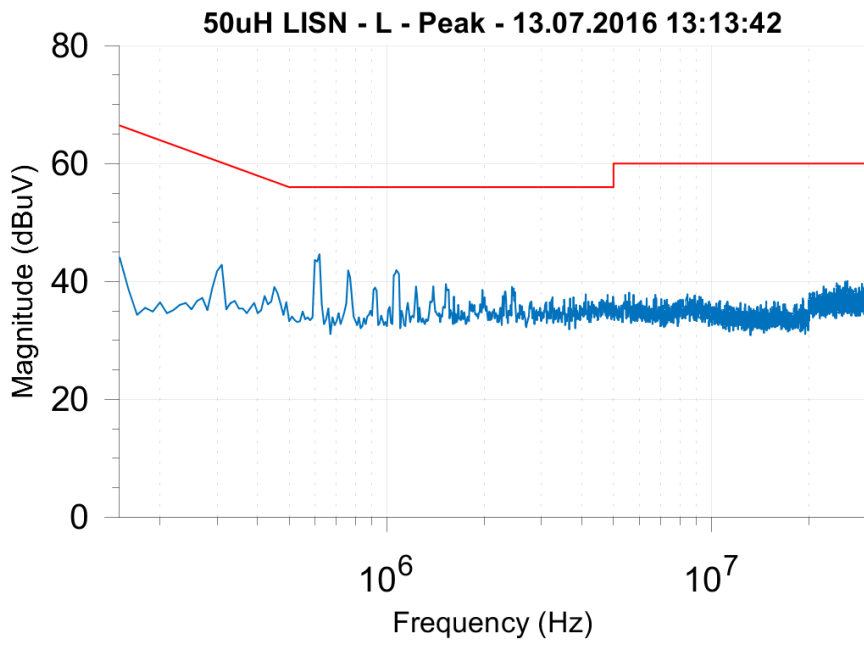
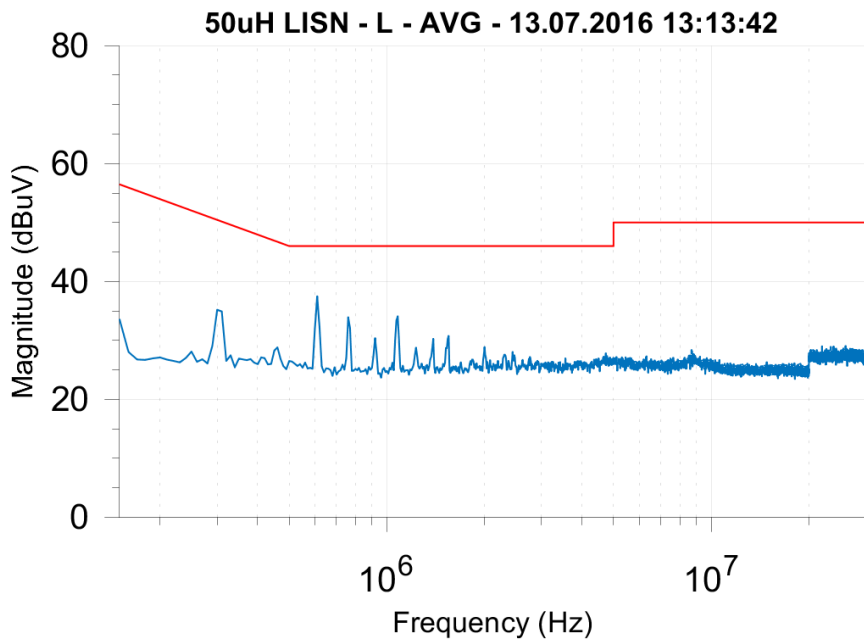




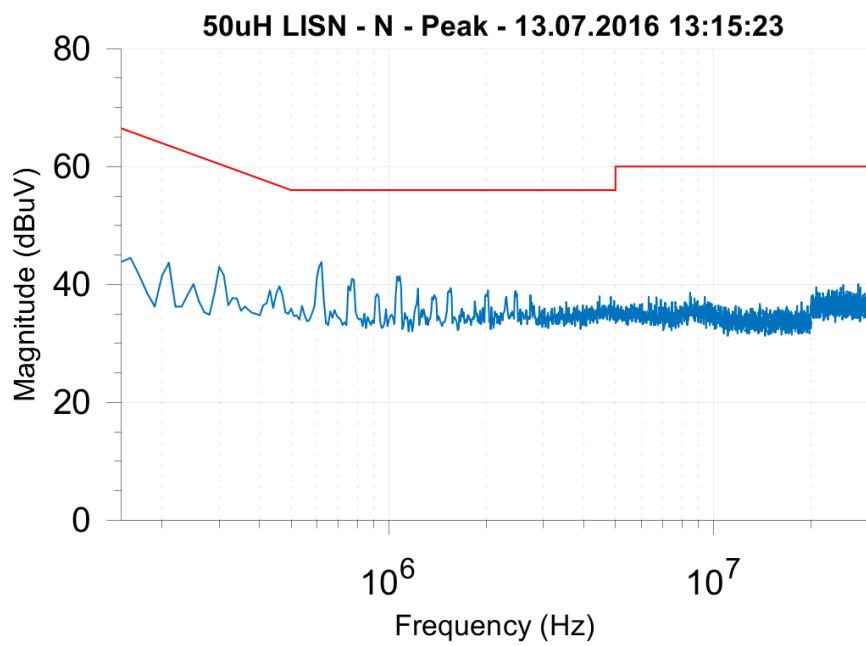
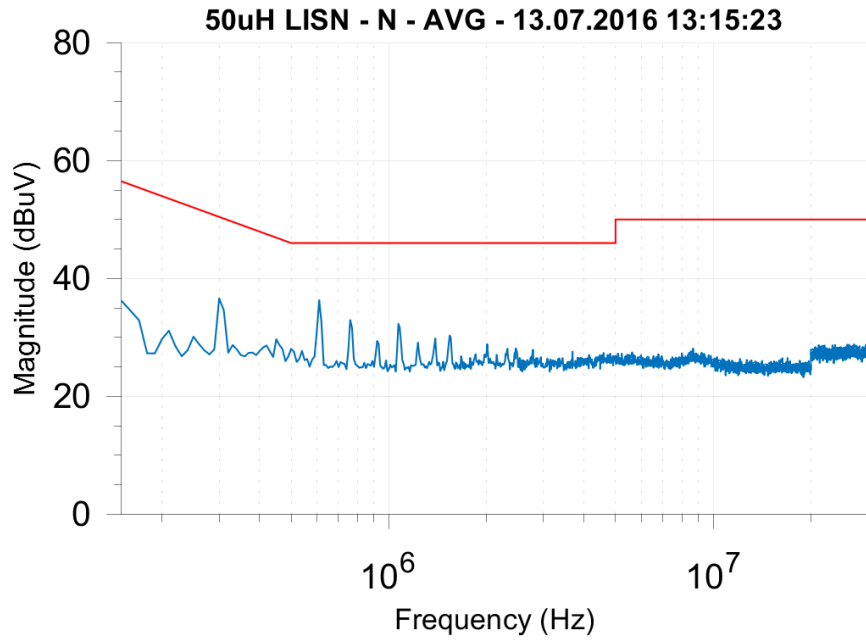
## 7 Conducted EMI

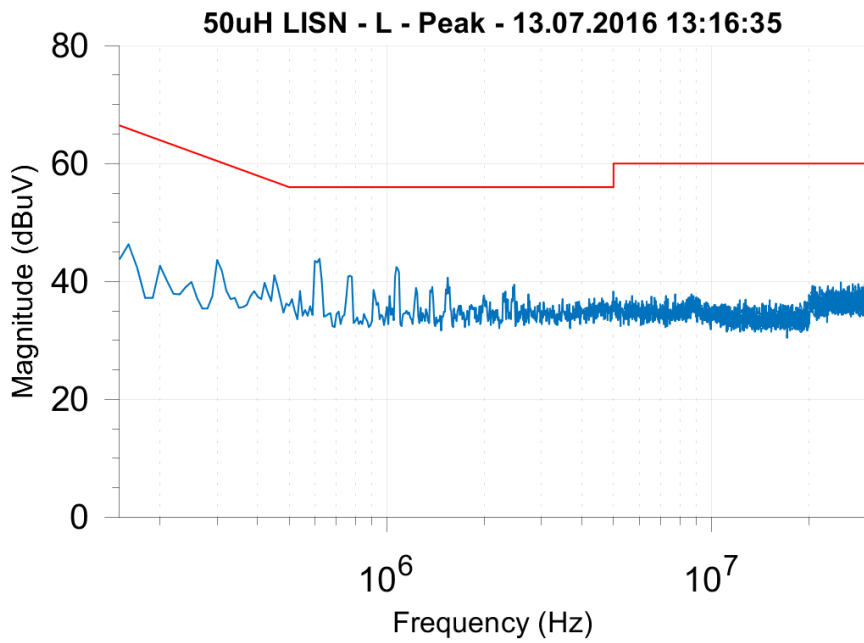
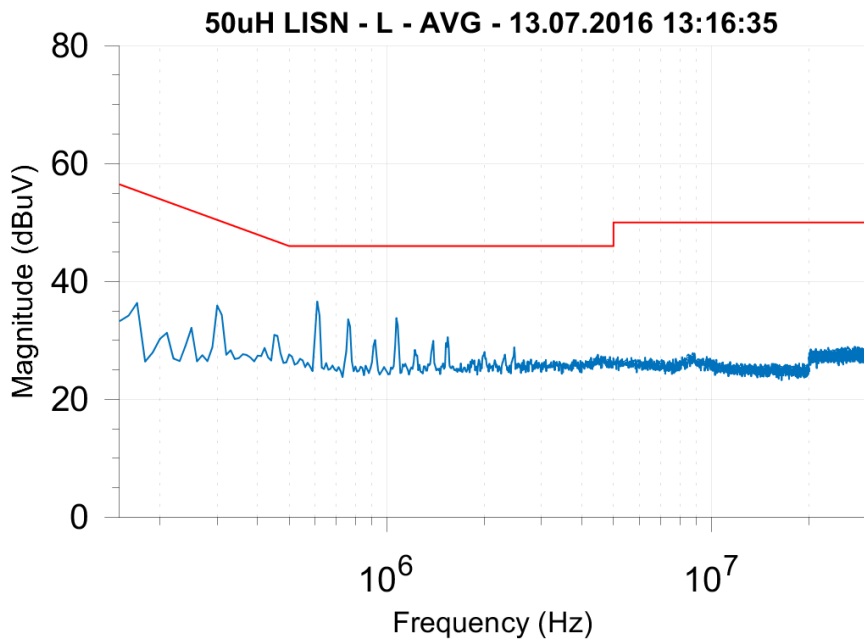
### 7.1 Output load 0.000A



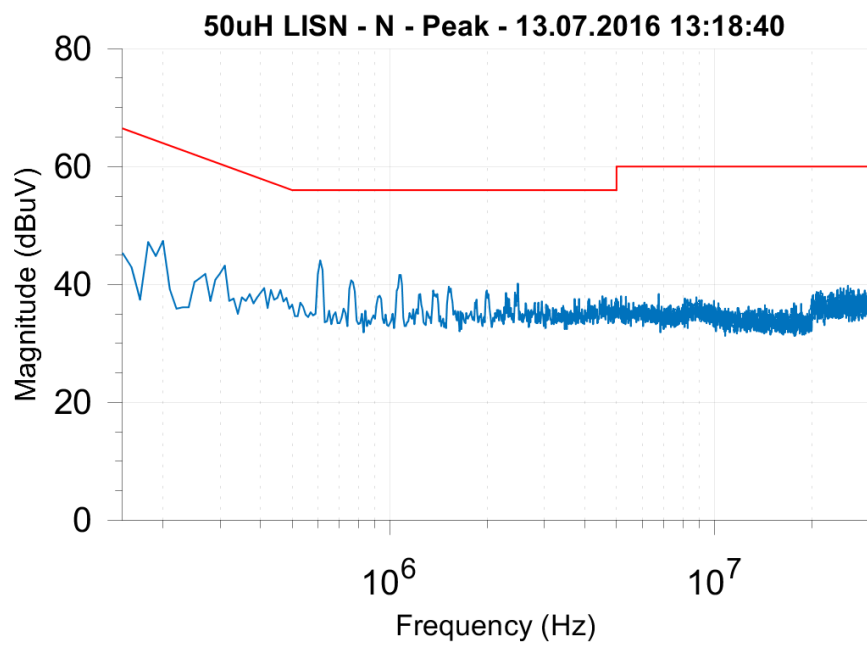
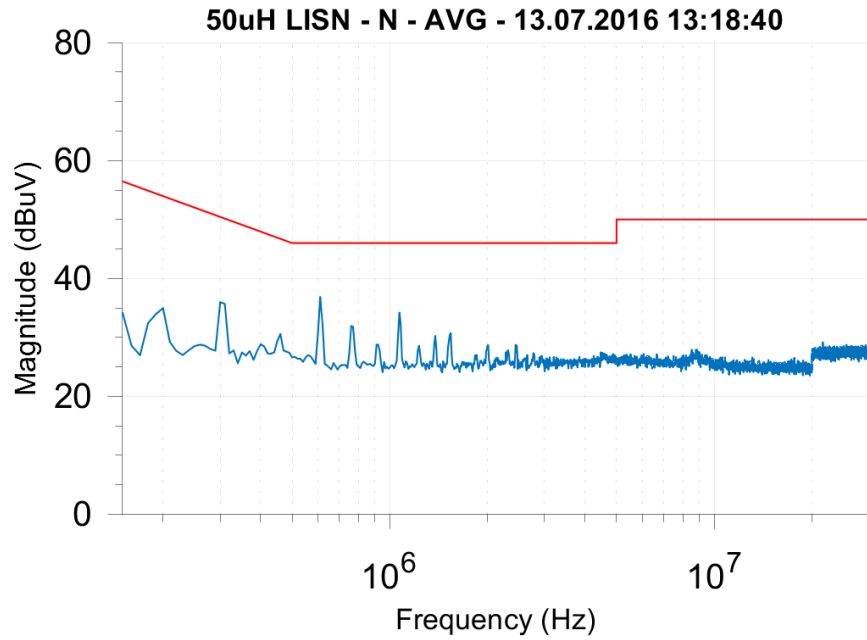


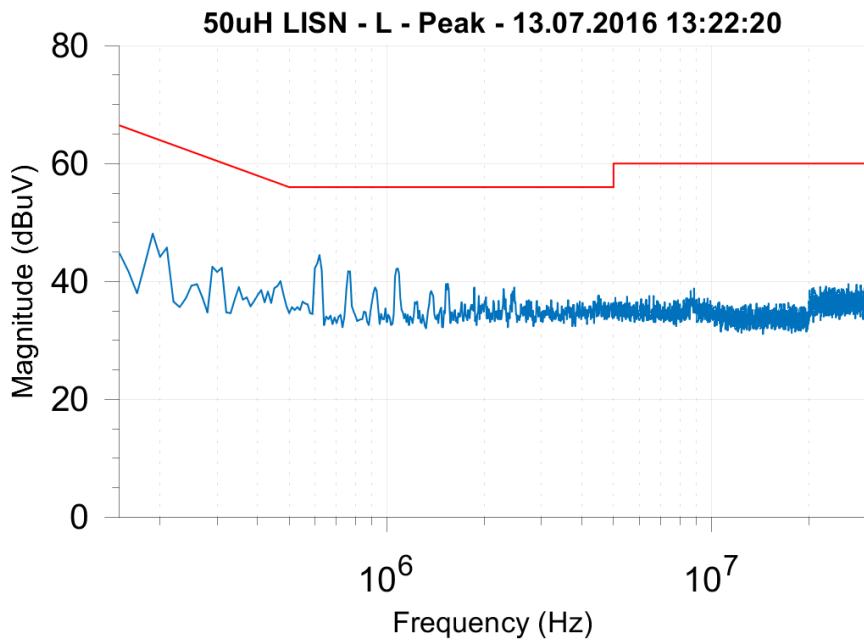
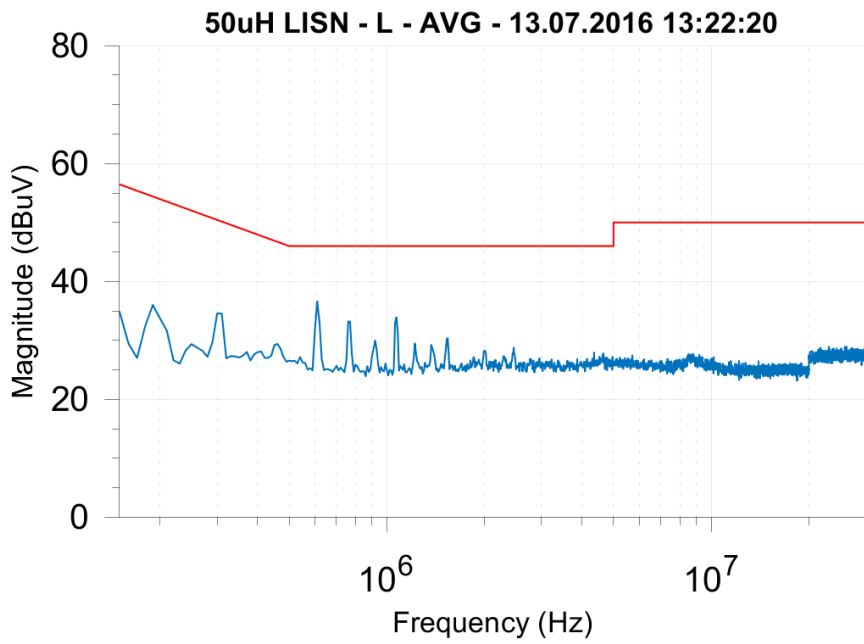
## 7.2 Output load 1.250A





### 7.3 Output load 2.500A







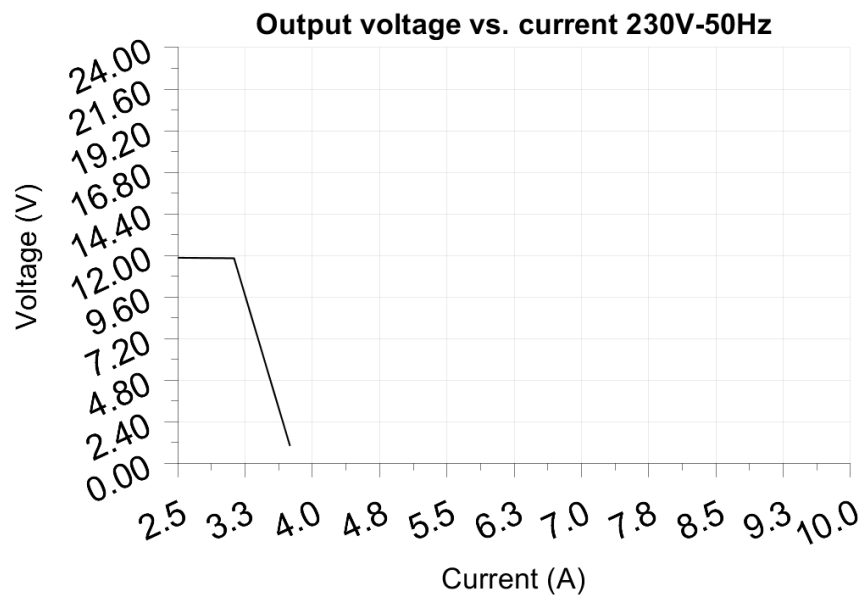
## 8 Overload testing

Test voltage: 230.00V

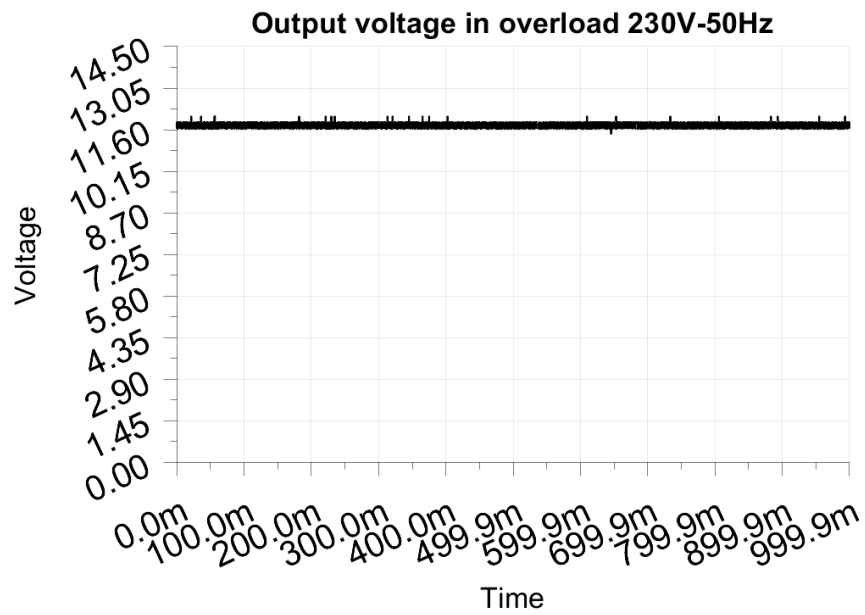
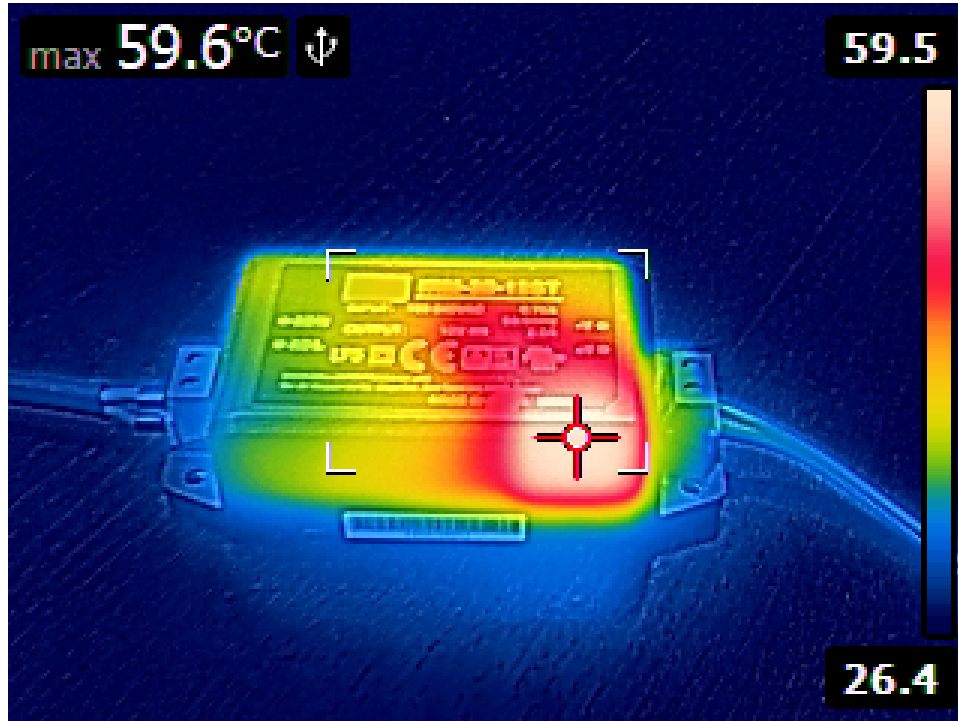
Test Frequency: 50Hz

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Threshold: <6.000V  
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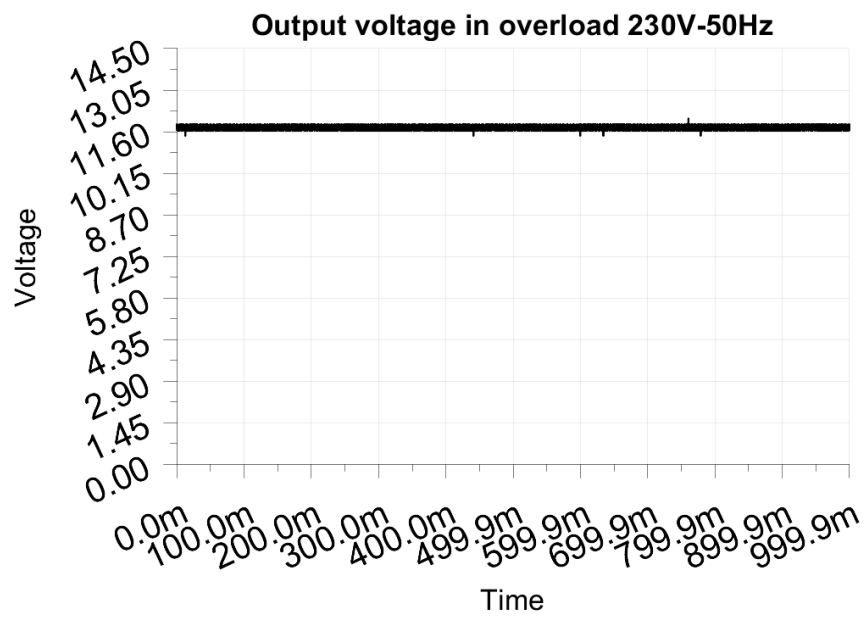
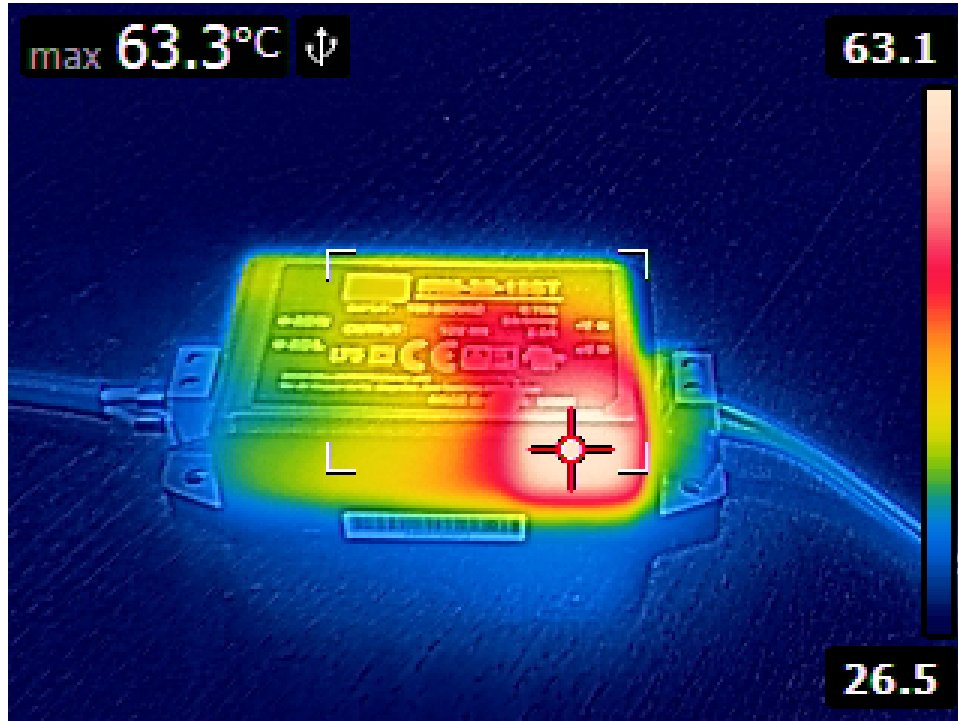
Maximum output current before shutdown: 3.750A



### 8.1 Output load 2.500A or 100%



## 8.2 Output load 3.125A or 125%



### 8.3 Output load 3.750A or 150%

