

FCC ID: VNQ-0200201

## EMI -- TEST REPORT

**Test Report No. :** T31962-00-02HS

12. October 2007

Date of issue

**Type / Model Name** : jxp-HPS

**Product Description** : RFID reading and writing device

**Applicant** : INRO Elektrotechnik GmbH

Address : Leiderer Str. 12

D-63811 Stockstadt

**Manufacturer** : INRO Elektrotechnik GmbH

Address : Leiderer Str. 12

D-63811 Stockstadt

**Licence holder** : INRO Elektrotechnik GmbH

Address : Leiderer Str. 12

D-63811 Stockstadt

**Test Result** according to the  
standards listed in clause 1 test  
standards:

**POSITIVE**



The test report merely corresponds to the test sample.  
It is not permitted to copy extracts of these test  
results without the written permission of the test  
laboratory.

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## **1 TEST STANDARDS**

The tests were performed according to following standards:

FCC Rules and Regulations Part 15 Subpart C- Intentional Radiators (October 01, 2006)

Part 15, Subpart C, Section 15.209(a) Radiated emissions, general requirements

## **2 SUMMARY**

### **GENERAL REMARKS:**

### **FINAL ASSESSMENT:**

The equipment under test **fulfills** the EMI requirements cited in clause 1 test standards.

Date of receipt of test sample : 03 September 2007

Testing commenced on : 03 September 2007

Testing concluded on : 13 September 2007

Checked by: Tested by:

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Klaus Gegenfurtner  
Dipl.-Ing.(FH)  
Manager: Radio Group

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Hermann Smetana  
Dipl.-Ing.(FH)

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### **3 EQUIPMENT UNDER TEST**

#### **3.1 Photo documentation of the EuT**

External Views



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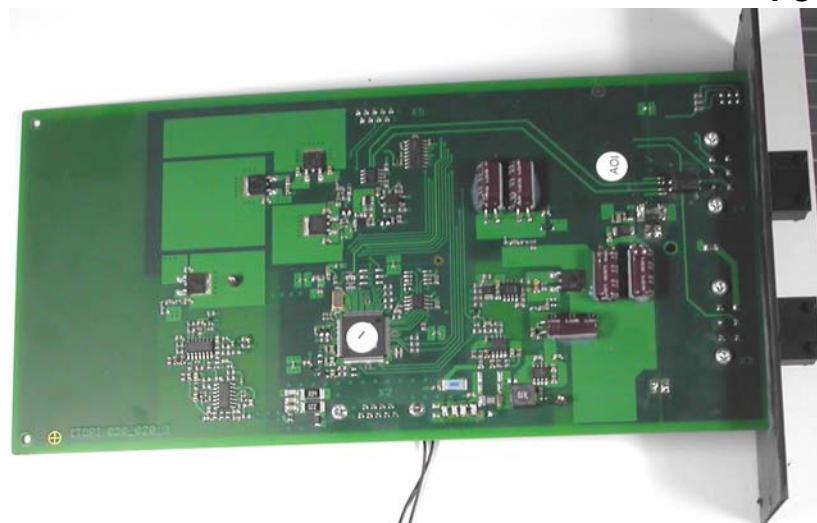
Back



Internal Views

Top View PCB

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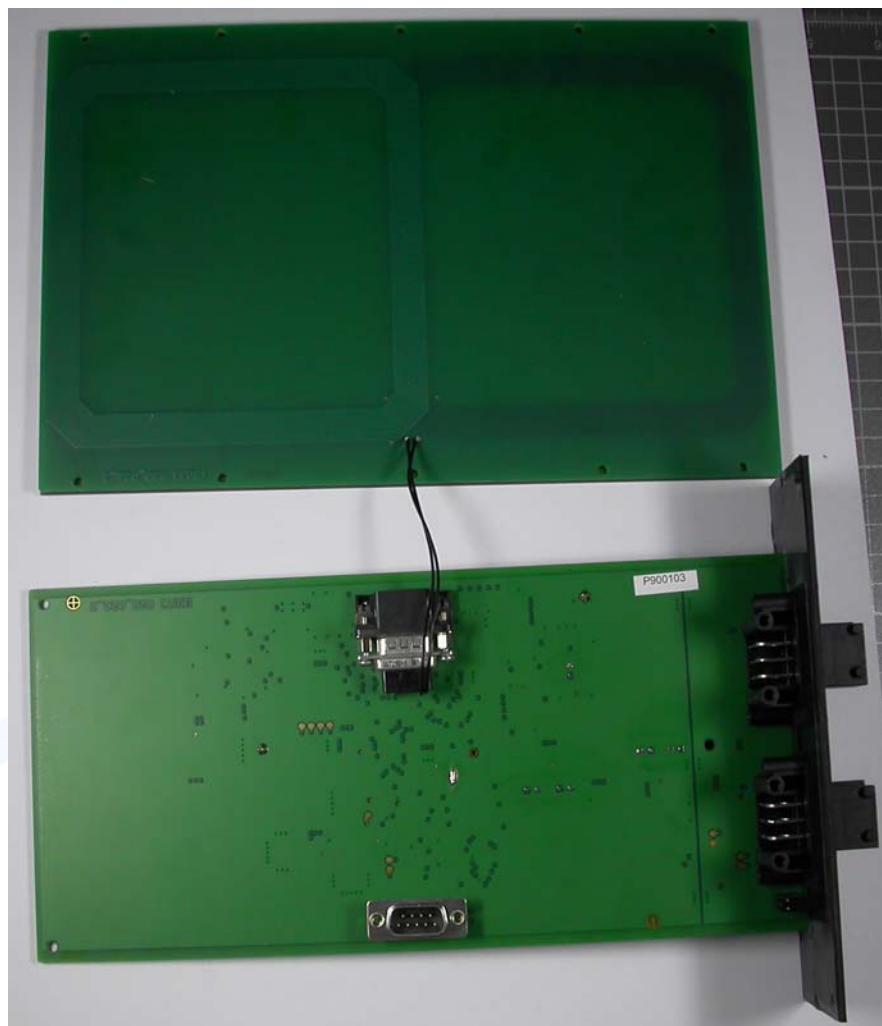


Antenna



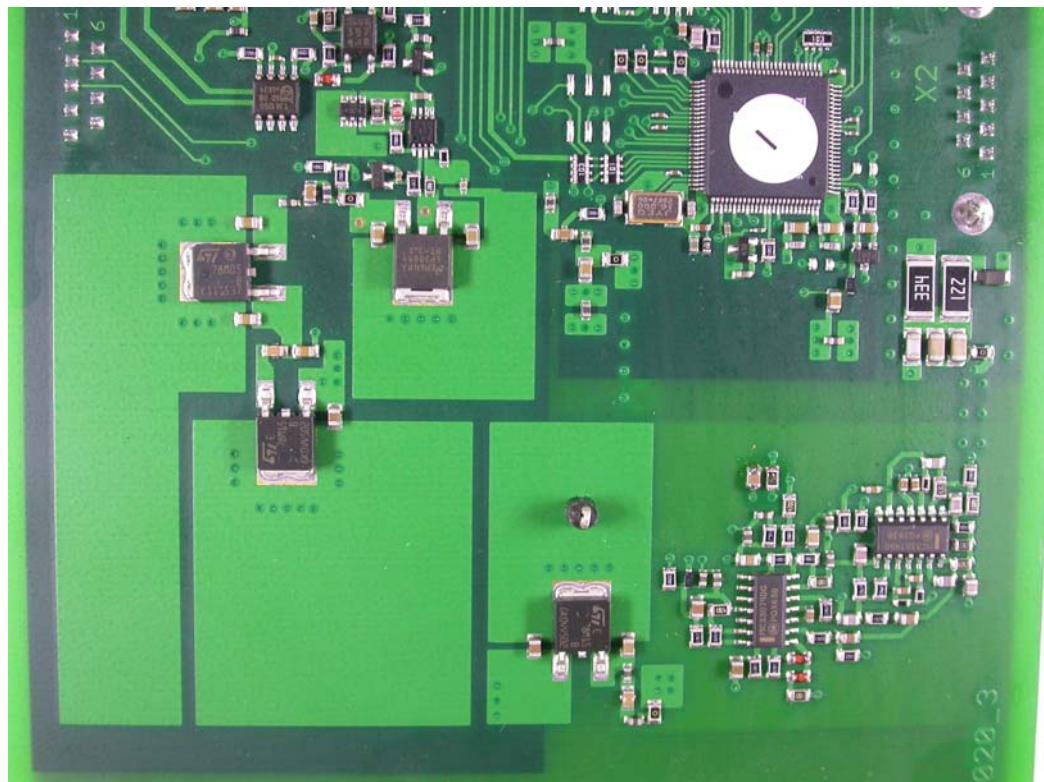
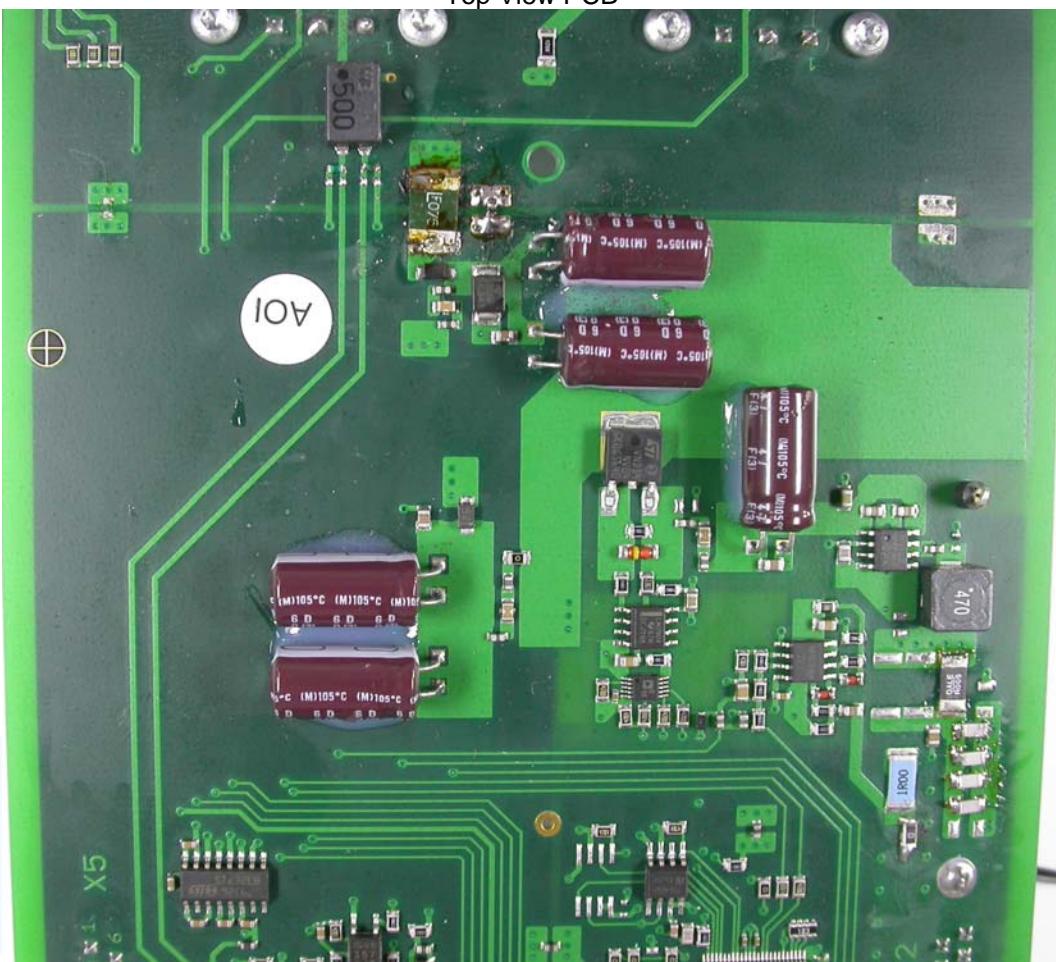
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Back View PCB + Antenna



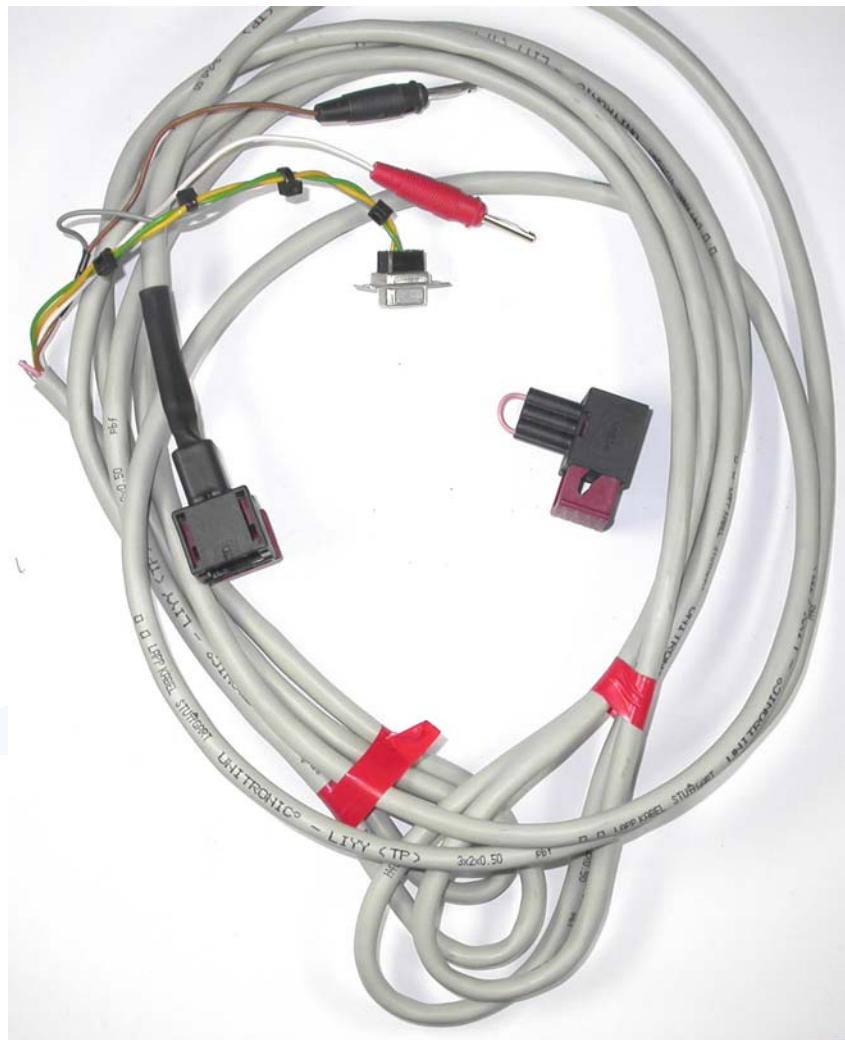
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Top View PCB



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DC Power Line and CAN Communication Interface



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### 3.2 Power supply system utilised

Power supply voltage : 24 V / DC

### 3.3 Short description of the Equipment under Test (EuT)

RFID reading and writing device for vehicular use especially for fork-lift trucks.

Number of tested samples: 1  
Serial number: Prototype

## **EuT operation mode:**

The equipment under test was operated during the measurement under the following conditions:

- Continuous mode at 125 kHz

—

## EUT configuration:

**Lab Configuration**  
(The CDF filled by the applicant can be viewed at the test laboratory.)

The following peripheral devices and interface cables were connected during the measurements:

- DC-Power Line
- DC-Power Supply
- 
- 
- 
- 
-

Supplied by the Customer

Agilent E3641A

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## **4 TEST ENVIRONMENT**

### **4.1 Address of the test laboratory**

**mikes-testingpartners gmbh**  
**Ohmstrasse 2-4**  
**94342 Strasskirchen**  
**Germany**

### **4.2 Environmental conditions**

During the measurement the environmental conditions were within the listed ranges:

Temperature: 15-35 ° C

Humidity: 30-60 %

Atmospheric pressure: 86-106 kPa

### **4.3 Statement of the measurement uncertainty**

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16-4-2 /11.2003 „Uncertainties, statistics and limit modelling – Uncertainty in EMC measurements“ and is documented in the quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

## **4.4 Measurement Protocol for FCC, VCCI and AUSTEL**

### **4.4.1 GENERAL INFORMATION**

#### **4.4.1.1 Test Methodology**

Conducted and radiated disturbance testing is performed according to the procedures in International Special Committee on Radio Interference (CISPR) Publication 22, European Standard EN 55022 as shown under section 1 of this report.

In compliance with 47 CFR Part 15 Subpart A Section 15.38 testing for FCC compliance may be done following the ANSI C63.4-2003 procedures and using the CISPR 22 Limits.

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## Justification

The Equipment Under Test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions. A cable is connected to each available port and either terminated with a peripheral using the appropriate impedance characteristic or left unterminated. Where appropriate, cables are manually manipulated with respect to each other thus obtaining maximum disturbances from the unit.

### 4.4.2 DETAILS OF TEST PROCEDURES

#### General Standard Information

The test methods used comply with CISPR Publication 22, EN 55022 - "Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement" and with ANSI C63.4-2003 - "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz."

## 5 TEST CONDITIONS AND RESULTS

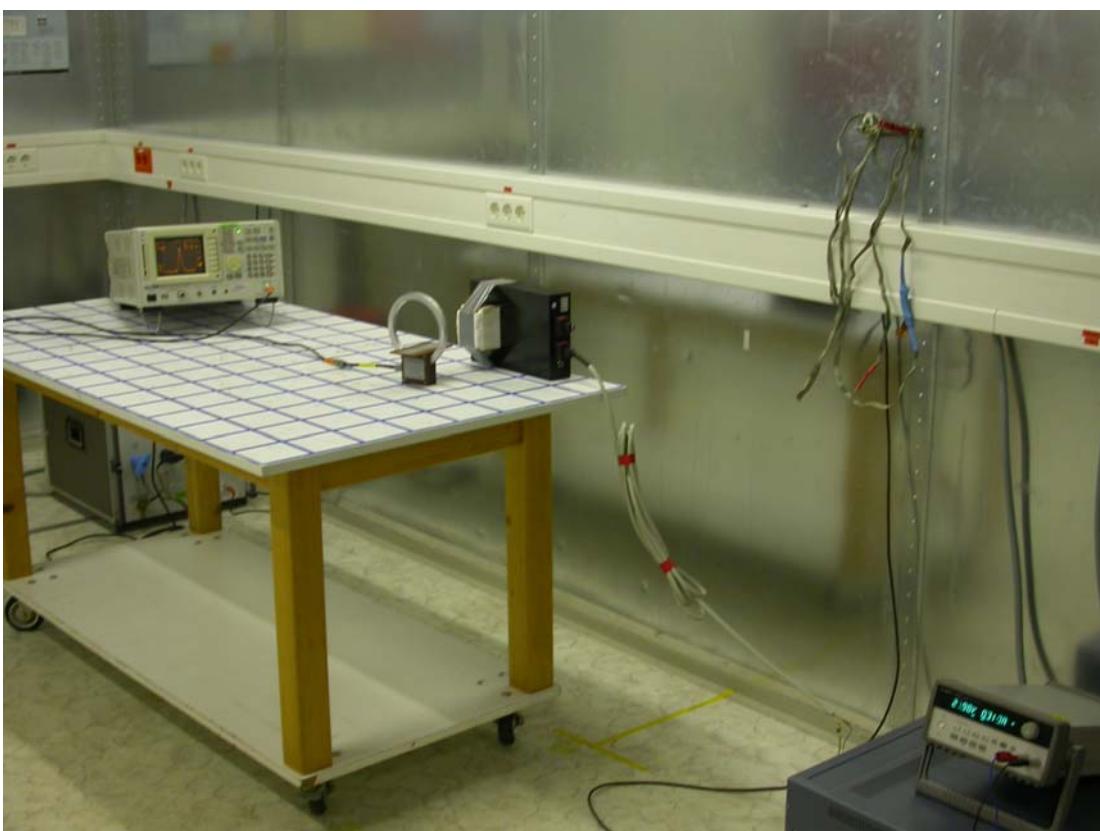
### 5.1 Conducted emissions

For test instruments and accessories used see section 6 Part A 4.

#### 5.1.1 Description of the test location

Test location: Shielded Room S2

#### 5.1.2 Photo documentation of the test set-up



#### 5.1.3 Description of Measurement

The final level, expressed in dB $\mu$ V, is arrived at by taking the reading directly from the EMI receiver. This level is compared directly to the FCC Limit or to the CISPR limit.

To convert between dB $\mu$ V and  $\mu$ V, the following conversions apply:

$$\begin{aligned} \text{dB}\mu\text{V} &= 20(\log \mu\text{V}) \\ \mu\text{V} &= \text{Inverse log(dB}\mu\text{V}/20) \end{aligned}$$

Conducted emissions on the 50 Hz and/or 60 Hz power interface of the EuT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasi-peak detection and a Line Impedance Stabilization Network (LISN) with 50 $\Omega$ /50  $\mu$ H (CISPR 16) characteristics. Table top equipment is placed on a non-conducting table 80 centimeters above the floor and is positioned 40 centimeters from the vertical ground plane (wall) of the screen room. If the minimum limit margin appears to be less than 20 dB with a peak mode measurement, the emissions are remeasured using a tuned receiver with quasi-peak and average detection and recorded on the data sheets.

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**5.1.4 Test result**

Frequency range: 0.15 MHz - 30 MHz

Min. limit margin -3.9 dB at 0.375 MHz

The requirements are **FULFILLED**.

**Remarks:**

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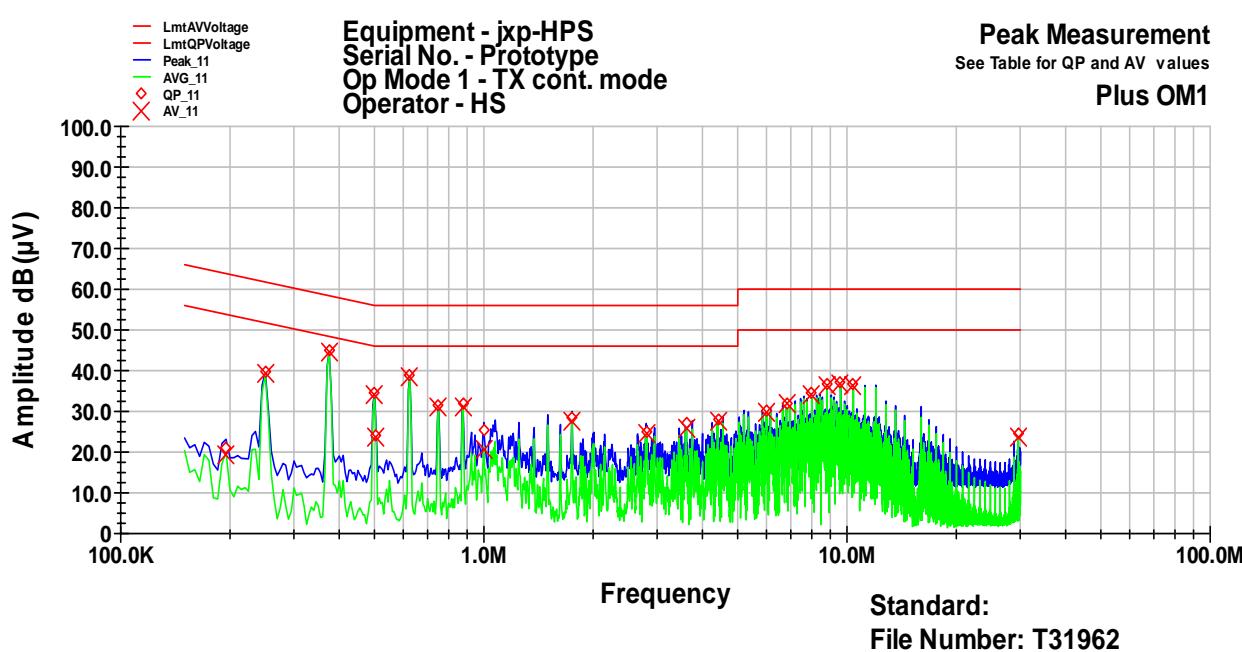
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mikes

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### 5.1.5 Test protocol

Test point: Positive Line  
 Operation mode: Continuous mode at 125 kHz  
 Remarks:  
 Date: 11.9.2007  
 Operator: HS

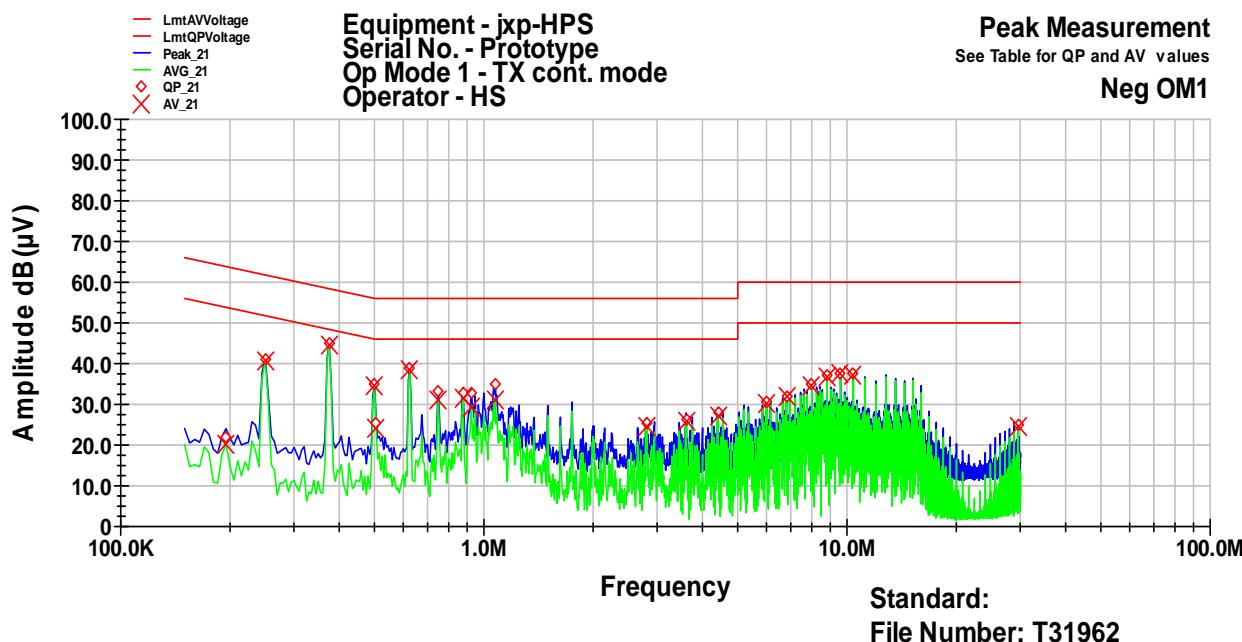


| Frequency | QP Level | QP Margin | QP Limit | AV Level | AV Margin | AV Limit |
|-----------|----------|-----------|----------|----------|-----------|----------|
| MHz       | dB(μV)   | dB        | dB       | dB(μV)   | dB        | dB       |
| 0.195     | 20.9     | -42.9     | 63.8     | 19.4     | -34.5     | 53.8     |
| 0.25      | 39.9     | -21.9     | 61.8     | 39.1     | -12.6     | 51.8     |
| 0.375     | 44.8     | -13.6     | 58.4     | 44.5     | -3.9      | 48.4     |
| 0.5       | 34.4     | -21.6     | 56.0     | 34.0     | -12.0     | 46.0     |
| 0.505     | 24.3     | -31.8     | 56.0     | 23.6     | -22.4     | 46.0     |
| 0.625     | 38.8     | -17.2     | 56.0     | 38.4     | -7.6      | 46.0     |
| 0.75      | 31.7     | -24.3     | 56.0     | 30.9     | -15.1     | 46.0     |
| 0.875     | 31.8     | -24.2     | 56.0     | 31.2     | -14.8     | 46.0     |
| 1         | 25.4     | -30.6     | 56.0     | 20.8     | -25.2     | 46.0     |
| 1.75      | 28.5     | -27.5     | 56.0     | 27.5     | -18.5     | 46.0     |
| 2.81      | 25.1     | -30.9     | 56.0     | 24.4     | -21.6     | 46.0     |
| 3.61      | 27.3     | -28.7     | 56.0     | 26.0     | -20.0     | 46.0     |
| 4.41      | 28.0     | -28.0     | 56.0     | 27.5     | -18.5     | 46.0     |
| 6         | 30.0     | -30.0     | 60.0     | 29.6     | -20.4     | 50.0     |
| 6.81      | 32.1     | -27.9     | 60.0     | 31.7     | -18.3     | 50.0     |
| 8         | 34.8     | -25.3     | 60.0     | 34.3     | -15.8     | 50.0     |
| 8.8       | 36.5     | -23.5     | 60.0     | 36.2     | -13.8     | 50.0     |
| 9.6       | 37.2     | -22.8     | 60.0     | 36.8     | -13.2     | 50.0     |
| 10.4      | 36.7     | -23.3     | 60.0     | 36.3     | -13.7     | 50.0     |
| 29.595    | 24.7     | -35.3     | 60.0     | 23.8     | -26.2     | 50.0     |

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Test point: L2  
 Operation mode: Continuous mode at 125 kHz  
 Remarks:  
 Date: 11.9.2007  
 Operator: HS

Result: passed



| Frequency | QP Level | QP Margin | QP Limit | AV Level | AV Margin | AV Limit |
|-----------|----------|-----------|----------|----------|-----------|----------|
| MHz       | dB(μV)   | dB        | dB       | dB(μV)   | dB        | dB       |
| 0.195     | 21.9     | -41.9     | 63.8     | 20.1     | -33.7     | 53.8     |
| 0.25      | 41.3     | -20.5     | 61.8     | 40.6     | -11.2     | 51.8     |
| 0.375     | 45.0     | -13.3     | 58.4     | 44.5     | -3.9      | 48.4     |
| 0.5       | 34.8     | -21.2     | 56.0     | 34.4     | -11.6     | 46.0     |
| 0.505     | 25.2     | -30.8     | 56.0     | 24.0     | -22.0     | 46.0     |
| 0.625     | 39.0     | -17.0     | 56.0     | 38.6     | -7.4      | 46.0     |
| 0.75      | 33.2     | -22.8     | 56.0     | 31.1     | -14.9     | 46.0     |
| 0.875     | 32.8     | -23.2     | 56.0     | 31.6     | -14.4     | 46.0     |
| 0.925     | 32.8     | -23.2     | 56.0     | 29.5     | -16.5     | 46.0     |
| 1.075     | 35.0     | -21.0     | 56.0     | 31.3     | -14.7     | 46.0     |
| 2.8       | 25.3     | -30.7     | 56.0     | 24.4     | -21.6     | 46.0     |
| 3.61      | 26.5     | -29.5     | 56.0     | 25.8     | -20.2     | 46.0     |
| 4.41      | 28.1     | -27.9     | 56.0     | 27.2     | -18.8     | 46.0     |
| 6         | 30.5     | -29.5     | 60.0     | 30.1     | -19.9     | 50.0     |
| 6.81      | 32.1     | -27.9     | 60.0     | 31.8     | -18.2     | 50.0     |
| 8         | 35.0     | -25.0     | 60.0     | 34.5     | -15.5     | 50.0     |
| 8.8       | 37.0     | -23.0     | 60.0     | 36.6     | -13.4     | 50.0     |
| 9.6       | 37.8     | -22.3     | 60.0     | 37.4     | -12.6     | 50.0     |
| 10.4      | 37.4     | -22.6     | 60.0     | 37.1     | -12.9     | 50.0     |
| 29.595    | 25.2     | -34.8     | 60.0     | 24.4     | -25.6     | 50.0     |

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## 5.2 Field strength of the fundamental wave

For test instruments and accessories used see section 6 Part **CPR 1**.

### 5.2.1 Description of the test location

Test location: OATS1

Test distance: 3 metres

### 5.2.2 Photo documentation of the test set-up



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### 5.2.3 Description of Measurement

The magnetic field strength from the EuT will be measured on an open area test site in the frequency range of 9 kHz to 30 MHz using a tuned receiver and a shielded loop antenna. The set up of the Equipment under test will be in accordance to ANSI C63.4-2003. The antenna was positioned 3, 10 or 30 meters horizontally from the EuT. Measurements have been made in all three orthogonal axes and the shielded loop antenna was rotated to locate the maximum of the emissions. In the case where larger measuring distances are required the results will extrapolated based on the values measured on the closer distances according to Section 15.31 (f) (2) [2]. The final measurement will be performed with an EMI Receiver set to Quasi Peak detector except for the frequency bands 9 kHz to 90 kHz and 110 to 490 kHz where an average detector will be used according to Section 15.209 (d) [2].

The final level, expressed in dB $\mu$ V/m, is arrived at by taking the reading from the EMI receiver (Level dB $\mu$ V) and adding the antenna correction factor and cable loss factor (Factor dB) to it. This result then has to be compared with the relevant FCC limit.

The resolution bandwidth during the measurement is as follows:

9 kHz – 150 kHz: ResBW: 200 Hz

150 kHz – 30 MHz: ResBW: 9 kHz

Example:

| Frequency<br>(MHz) | Level<br>(dB $\mu$ V) | + | Factor<br>(dB) | = | Level<br>(dB $\mu$ V/m) | Limit<br>(dB $\mu$ V/m) | = | Delta<br>(dB) |
|--------------------|-----------------------|---|----------------|---|-------------------------|-------------------------|---|---------------|
| 1.705              | 5                     | + | 20             | = | 25                      | 30                      | = | 5             |

### 5.2.4 Test result

Measurement Distance: 3 m

| Frequency<br>[MHz] | L: PK<br>[dB $\mu$ V] | L: AV<br>[dB $\mu$ V] | L: QP<br>[dB $\mu$ V] | Correct.<br>[dB] | L: PK<br>[dB $\mu$ V/m] | L: AV<br>[dB $\mu$ V/m] | L: QP<br>[dB $\mu$ V/m] | Limit<br>[dB $\mu$ V/m] | Delta<br>[dB] |
|--------------------|-----------------------|-----------------------|-----------------------|------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------|
| 0.125              |                       |                       | 78.8                  | 20               |                         |                         | 98.8                    | 105.0                   | 6.2           |

Calculated value at distance: 30 m

| Frequency<br>[MHz] | L: PK<br>[dB $\mu$ V] | L: AV<br>[dB $\mu$ V] | L: QP<br>[dB $\mu$ V] | Correct.<br>[dB] | L: PK<br>[dB $\mu$ V/m] | L: AV<br>[dB $\mu$ V/m] | L: QP<br>[dB $\mu$ V/m] | Limit<br>[dB $\mu$ V/m] | Delta<br>[dB] |
|--------------------|-----------------------|-----------------------|-----------------------|------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------|
| 0.125              |                       |                       | 38.8                  | 20               |                         |                         | 58.8                    | 65.0                    | 6.2           |

Calculated value at distance: 300 m

| Frequency<br>[MHz] | L: PK<br>[dB $\mu$ V] | L: AV<br>[dB $\mu$ V] | L: QP<br>[dB $\mu$ V] | Correct.<br>[dB] | L: PK<br>[dB $\mu$ V/m] | L: AV<br>[dB $\mu$ V/m] | L: QP<br>[dB $\mu$ V/m] | Limit<br>[dB $\mu$ V/m] | Delta<br>[dB] |
|--------------------|-----------------------|-----------------------|-----------------------|------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------|
| 0.125              |                       |                       | -1.2                  | 20               |                         |                         | 18.8                    | 25.0                    | 6.2           |

Limit according to FCC Part 15 Subpart 15.209(a)

| Frequency<br>(MHz) | Field strength of fundamental wave |                 | Measurement distance<br>(meters) |
|--------------------|------------------------------------|-----------------|----------------------------------|
|                    | ( $\mu$ V/m)                       | dB ( $\mu$ V/m) |                                  |
| 0.009-0.490        | 2400/F(kHz)                        | --              | 300                              |
| 0.490-1.705        | 24000/F (kHz)                      | --              | 30                               |
| 1.705-30.0         | 30                                 | 29.5            | 30                               |

The requirements are **FULFILLED**.

Remarks: \_\_\_\_\_

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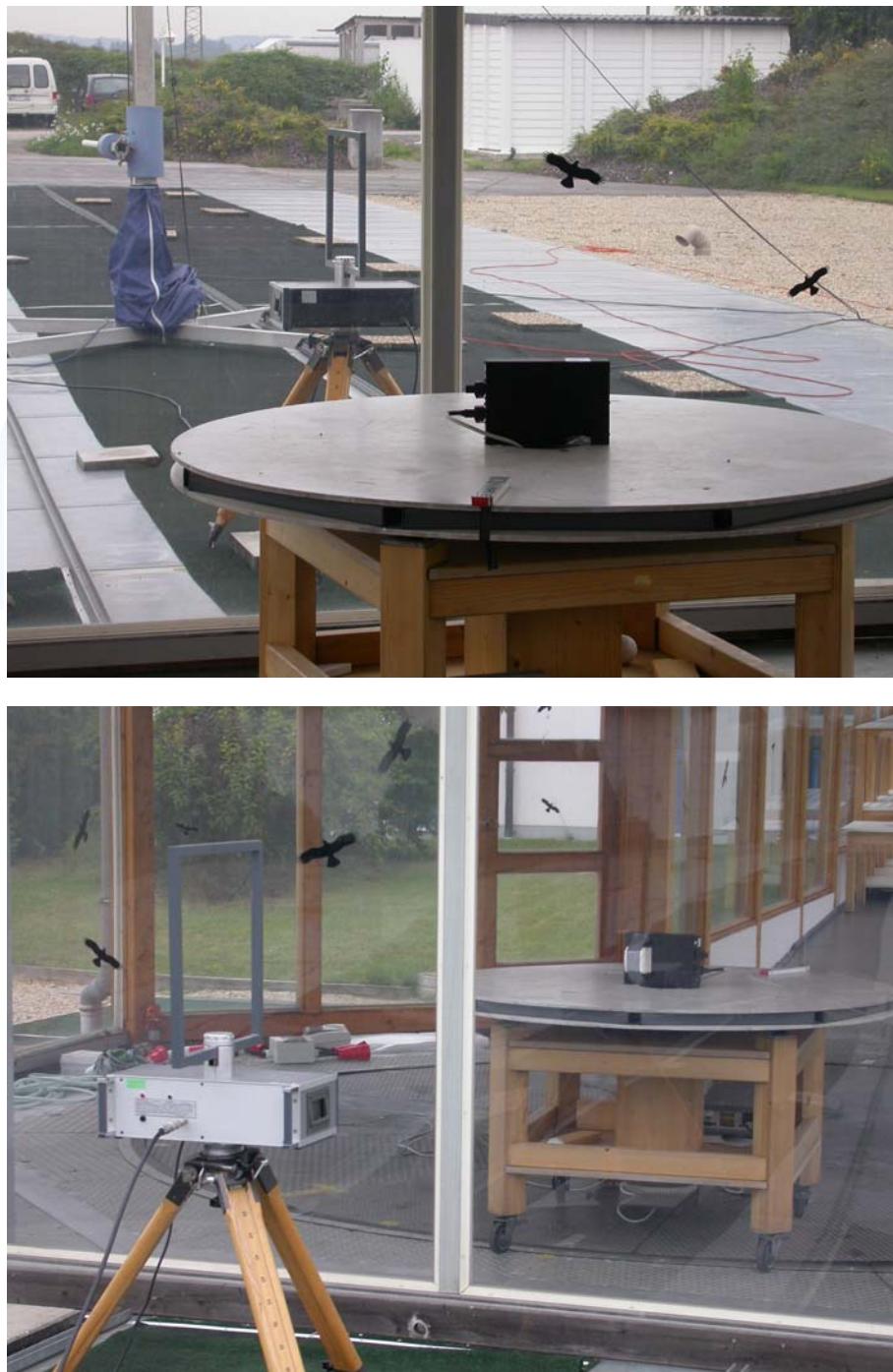
### 5.3 Spurious emissions (Magnetic field) 9 kHz – 30 MHz

For test instruments and accessories used see section 6 Part **SER 1**.

#### 5.3.1 Description of the test location

Test location: OATS1  
Test distance: 3 metres

#### 5.3.2 Photo documentation of the test set-up



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### 5.3.3 Description of Measurement

The spurious emissions from the EuT will be measured on an open area test site in the frequency range of 9 kHz to 30 MHz using a tuned receiver and a shielded loop antenna. The antenna was positioned 3, 10 or 30 meters horizontally from the EuT. Measurements have been made in all three orthogonal axes and the shielded loop antenna was rotated to locate the maximum of the emissions. In the case where larger measuring distances are required the results will be extrapolated based on the values measured on the closer distances according to Section 15.31 (f) (2) [2]. The final measurement will be performed with an EMI Receiver set to Quasi Peak detector except for the frequency bands 9 kHz to 90 kHz and 110 to 490 kHz where an average detector will be used according to Section 15.209 (d) [2].

The final level, expressed in  $\text{dB}\mu\text{V}/\text{m}$ , is arrived at by taking the reading from the EMI receiver (Level  $\text{dB}\mu\text{V}$ ) and adding the antenna correction factor and cable loss factor (Factor dB) to it. This result then has to be compared with the relevant FCC limit.

The resolution bandwidth during the measurement is as follows:

9 kHz – 150 kHz: ResBW: 200 Hz

150 kHz – 30 MHz: ResBW: 9 kHz

Example:

| Frequency<br>(MHz) | Level<br>(dB $\mu\text{V}$ ) | + | Factor<br>(dB) | = | Level<br>(dB $\mu\text{V}/\text{m}$ ) | Limit<br>(dB $\mu\text{V}/\text{m}$ ) | = | Delta<br>(dB) |
|--------------------|------------------------------|---|----------------|---|---------------------------------------|---------------------------------------|---|---------------|
| 1.705              | 5                            | + | 20             | = | 25                                    | 30                                    | = | 5             |

### 5.3.4 Test result

Measurement Distance: 3 m

| Frequency<br>[MHz] | L: PK<br>[dB $\mu\text{V}$ ] | L: AV<br>[dB $\mu\text{V}$ ] | L: QP<br>[dB $\mu\text{V}$ ] | Correct.<br>[dB] | L: PK<br>[dB $\mu\text{V}/\text{m}$ ] | L: AV<br>[dB $\mu\text{V}/\text{m}$ ] | L: QP<br>[dB $\mu\text{V}/\text{m}$ ] | Limit<br>[dB $\mu\text{V}/\text{m}$ ] | Delta<br>[dB] |
|--------------------|------------------------------|------------------------------|------------------------------|------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------|
| 0.250              |                              | 33.5                         |                              | 20               |                                       | 53.5                                  |                                       | 99.6                                  | 46.1          |
| 0.375              |                              | 31.0                         |                              | 20               |                                       | 51.0                                  |                                       | 96.0                                  | 45.0          |
| 0.500              |                              |                              | 21.2                         | 20               |                                       |                                       | 41.2                                  | 73                                    | 31.8          |
| 0.625              |                              |                              | 16.8                         | 20               |                                       |                                       | 36.8                                  | 71                                    | 34.3          |
| 0.750              |                              |                              | 18.1                         | 20               |                                       |                                       | 38.1                                  | 70                                    | 31.9          |
| 0.875              |                              |                              | 9.0                          | 20               |                                       |                                       | 29.0                                  | 68                                    | 39.0          |

Calculated value at distance: 300 m

| Frequency<br>[MHz] | L: PK<br>[dB $\mu\text{V}$ ] | L: AV<br>[dB $\mu\text{V}$ ] | L: QP<br>[dB $\mu\text{V}$ ] | Correct.<br>[dB] | L: PK<br>[dB $\mu\text{V}/\text{m}$ ] | L: AV<br>[dB $\mu\text{V}/\text{m}$ ] | L: QP<br>[dB $\mu\text{V}/\text{m}$ ] | Limit<br>[dB $\mu\text{V}/\text{m}$ ] | Delta<br>[dB] |
|--------------------|------------------------------|------------------------------|------------------------------|------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------|
| 0.250              |                              | -46.5                        |                              | 20               |                                       | -26.5                                 |                                       | 19.6                                  | 46.1          |
| 0.375              |                              | -49.0                        |                              | 20               |                                       | -29.0                                 |                                       | 16                                    | 45.0          |

Calculated value at distance: 30 m

| Frequency<br>[MHz] | L: PK<br>[dB $\mu\text{V}$ ] | L: AV<br>[dB $\mu\text{V}$ ] | L: QP<br>[dB $\mu\text{V}$ ] | Correct.<br>[dB] | L: PK<br>[dB $\mu\text{V}/\text{m}$ ] | L: AV<br>[dB $\mu\text{V}/\text{m}$ ] | L: QP<br>[dB $\mu\text{V}/\text{m}$ ] | Limit<br>[dB $\mu\text{V}/\text{m}$ ] | Delta<br>[dB] |
|--------------------|------------------------------|------------------------------|------------------------------|------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------|
| 0.500              |                              |                              | -18.8                        | 20               |                                       |                                       | 1.2                                   | 33                                    | 31.8          |
| 0.625              |                              |                              | -23.2                        | 20               |                                       |                                       | -3.2                                  | 31                                    | 34.3          |
| 0.750              |                              |                              | -21.9                        | 20               |                                       |                                       | -1.9                                  | 30                                    | 31.9          |
| 0.875              |                              |                              | -31.0                        | 20               |                                       |                                       | -11.0                                 | 28                                    | 39.0          |

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Limit according to FCC Part 15 Subpart 15.209(a)

| Frequency<br>(MHz) | Field strength of spurious<br>emissions |                 | Measurement distance<br>(meters) |
|--------------------|---|-----------------|----------------------------------|
|                    | ( $\mu$ V/m)                            | dB ( $\mu$ V/m) |                                  |
| 0.009-0.490        | 2400/F(kHz)                             | --              | 300                              |
| 0.490-1.705        | 24000/F (kHz)                           | --              |                                  |
| 1.705-30.0         | 30                                      | 29.5            |                                  |

The requirements are **FULFILLED**.

**Remarks:** Measurement has been performed up to the 10<sup>th</sup> harmonic of the highest fundamental frequency  
designed to be emitted by the intentional radiator.

## 5.4 Radiated emissions (electric field) 30 MHz – 1 GHz

For test instruments and accessories used see section 6 Part **SER 2**.

### 5.4.1 Description of the test location

Test location: **NONE**

**Remarks:** The measurement is not applicable.

FCC ID: VNQ-0200201

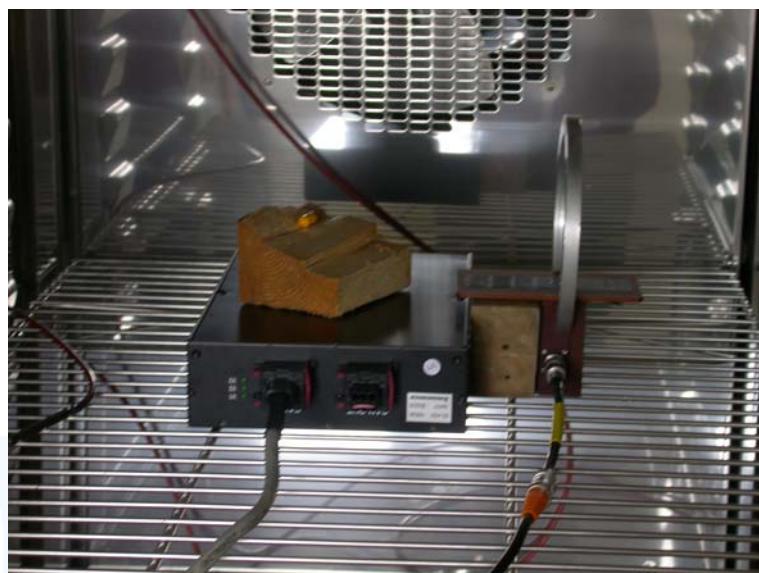
## 5.5 Emission Bandwidth

For test instruments and accessories used see section 6 Part **MB**.

### 5.5.1 Description of the test location

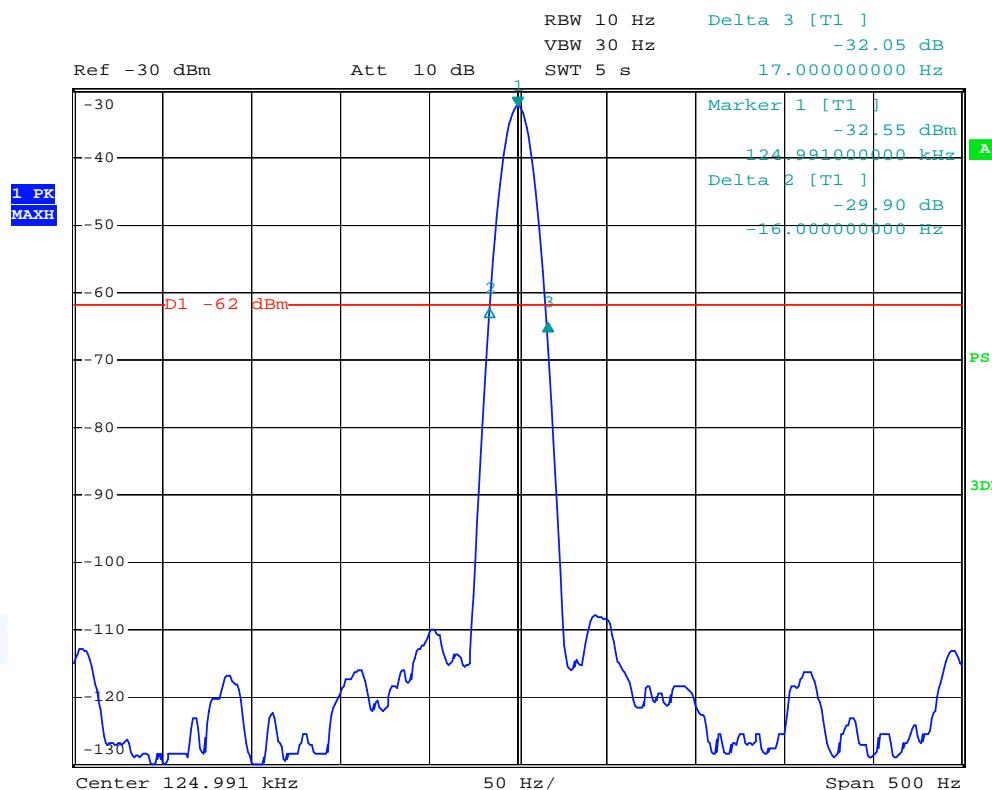
Test location: AREA4

### 5.5.2 Photo documentation of the test set-up



### 5.5.3 Test protocol

#### Emission Bandwidth plots



Date: 12.SEP.2007 10:22:18

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## 6 USED TEST EQUIPMENT AND ACCESSORIES

All test instruments used, in addition to the test accessories, are calibrated and verified regularly.

The calibration intervals and the calibration history will be given out on request.

| Test ID         | Model / Type          | Kind of Equipment      | Manufacturer                | Equipment No.   |
|-----------------|-----------------------|------------------------|-----------------------------|-----------------|
| CPR 1           | FMZB 1516             | Magnetic Field Antenna | Schwarzbeck Mess-Elektronik | 01-02/24-01-018 |
|                 | ESHS 30               | EMI Test Receiver      | Rohde & Schwarz München     | 02-02/03-05-002 |
|                 | S10162-B/+11N-50-10-5 | RF Cable 33m           | Huber + Suhner              | 02-02/50-05-031 |
|                 | KK-EF393-21N-16       | RF Cable 20m           | Huber + Suhner              | 02-02/50-05-033 |
|                 | NW-2000-NB            | RF Cable               | Huber + Suhner              | 02-02/50-05-113 |
| MB              | ESCI                  | EMI Test Receiver      | Rohde & Schwarz München     | 02-02/03-05-004 |
|                 | THS730A               | Handheld Scope         | Tektronix GmbH              | 02-02/13-05-001 |
|                 | HZ-10                 | Magnetic Field Antenna | Rohde & Schwarz München     | 02-02/24-05-012 |
|                 | WK-340/40             | Climatic Chamber       | Weiss Umwelttechnik GmbH    | 02-02/45-05-001 |
|                 | 6543A                 | Power Supply           | HP Hewlett-Packard          | 02-02/50-05-157 |
| SER 1           | FMZB 1516             | Magnetic Field Antenna | Schwarzbeck Mess-Elektronik | 01-02/24-01-018 |
|                 | ESHS 30               | EMI Test Receiver      | Rohde & Schwarz München     | 02-02/03-05-002 |
|                 | S10162-B/+11N-50-10-5 | RF Cable 33m           | Huber + Suhner              | 02-02/50-05-031 |
|                 | KK-EF393-21N-16       | RF Cable 20m           | Huber + Suhner              | 02-02/50-05-033 |
|                 | NW-2000-NB            | RF Cable               | Huber + Suhner              | 02-02/50-05-113 |
| Equipment No.   | Next Calib.           | Last Calib.            | Next Verif.                 | Last Verif.     |
| 01-02/24-01-018 | 12/04/2007            | 12/04/2006             |                             |                 |
| 02-02/03-05-002 | 04/20/2008            | 04/20/2007             |                             |                 |
| 02-02/50-05-031 |                       |                        |                             |                 |
| 02-02/50-05-033 |                       |                        |                             |                 |
| 02-02/50-05-113 |                       |                        |                             |                 |
| 02-02/03-05-004 | 11/30/2007            | 11/30/2006             |                             |                 |
| 02-02/13-05-001 | 09/03/2008            | 09/03/2007             |                             |                 |
| 02-02/24-05-012 |                       |                        |                             |                 |
| 02-02/45-05-001 | 09/01/2008            | 09/01/2005             | 12/06/2007                  | 06/06/2007      |
| 02-02/50-05-157 |                       |                        |                             |                 |
| 01-02/24-01-018 | 12/04/2007            | 12/04/2006             |                             |                 |
| 02-02/03-05-002 | 04/20/2008            | 04/20/2007             |                             |                 |
| 02-02/50-05-031 |                       |                        |                             |                 |
| 02-02/50-05-033 |                       |                        |                             |                 |
| 02-02/50-05-113 |                       |                        |                             |                 |