

## **Accredited Testing Laboratory**

**DAR-Registration number:  
TTI-P-G 166/98-00**

**Addendum to  
Test report no.: 4-0304-A/00  
FCC Part 15.247  
Siemens Gigaset B427data**

## Table of Contents

### **1 General information**

#### **1.1 Notes**

#### **1.2 Testing laboratory**

#### **1.3 Details of applicant**

#### **1.4 Application details**

#### **1.5 Test item**

#### **1.6 Test standards**

### **2 Technical test**

#### **2.1 Summary of test results**

#### **2.2 Test report**

### **1 General information**

#### **1.1 Notes**

**The test results of this test report relate exclusively to the test item specified in 1.5. The CETECOM ICT Services GmbH does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM ICT Services GmbH.**

#### **1.2 Testing laboratory**

CETECOM ICT Services GmbH

Untertürkheimer Straße 6 - 10

66117 Saarbrücken

Germany

Telefone : + 49 681 598 - 9100

Telefax : + 49 681 598 - 9075

E-mail : Harro.Ames@ict.cetecom.de

Internet : www.cetecom.de

**Accredited testing laboratory**

**DAR-registration number : TTI-P-G 166/98-00**

## 1.3 Details of applicant

**Name** : Siemens AG / ICP CD DP PSI  
**Street** : Frankenstrasse 2  
**City** : D-46395 Bocholt  
**Country** : Germany  
**Telephone** : +49-2871 91 28 57  
**Telefax** : +49-2871 91 24 95  
**Contact** : Mr. Uwe Alt  
**Telephone** : +49-2871 91 28 57

## 1.4 Application details

Date of receipt of application : 24.01.01  
Date of receipt of test item : 24.01.01  
Date of test : 24.01.01

## 1.5 Test item

Type of equipment : **Bluetooth transceiver with USB**  
Type designation : **Gigaset B427data**  
Manufacturer : applicant  
Street :  
City :  
Country :  
Serial number :

### Additional informations: :

Frequency : 2400 – 2483.5 MHz  
Type of modulation : 1M00FXD / 79M8FXD (FHSS)  
Number of channels : 79  
Antenna : integral antenna  
Power supply : 5 V DC according to USB convention  
Output power : 100 mW EIRP  
Type of equipment : Temperature range : 0°C - +45°C

## 1.6 Test standards: FCC Part 15 §15.247

## 2 Technical test

### 2.1 Summary of test results

This additional measurements was performed to show that the Gigaset fullfills the requirements for hybrid systems according to FCC 15.247 d.

As in the two related modes (page and inquiry) required RBW 3kHz the spectrum lines are smaller than RBW, we have to use another procedure.

We use the noise density function of the analyzer R&S FSIQ26. This gives directly the noise power density related to 1 Hz noise power BW. As required for 3kHz BW we add 34.8 dB for the correction to 3kHz RBW.

No deviations from the technical specification(s) were ascertained in the course of the tests performed.

This addendum is valid only with the original testreport 4-0304-A/00 from our house.

Technical responsibility for area of testing :

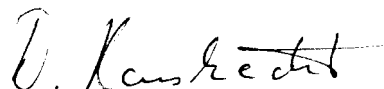
04.04.01 RSC 8414 Ames H.



| Date | Section | Name | Signature |
|------|---------|------|-----------|
|------|---------|------|-----------|

Technical responsibility for area of testing :

04.04.01 RSC8412 Hausknecht D.



| Date | Section | Name | Signature |
|------|---------|------|-----------|
|------|---------|------|-----------|

## **2.2 Testreport**

### **TEST REPORT**

**Addendum to  
Testreport no. : 4-0304-A/00**

## TEST REPORT REFERENCE

## LIST OF MEASUREMENTS

| Paragraph    | PARAMETER TO BE MEASURED | PAGE |
|--------------|--------------------------|------|
|              | Transmitter parameters   |      |
| § 15.247 (d) | Power density            | 7    |

Equipment under test : Gigaset B427data

Ambient temperature : 20°C

Relative humidity : 31%

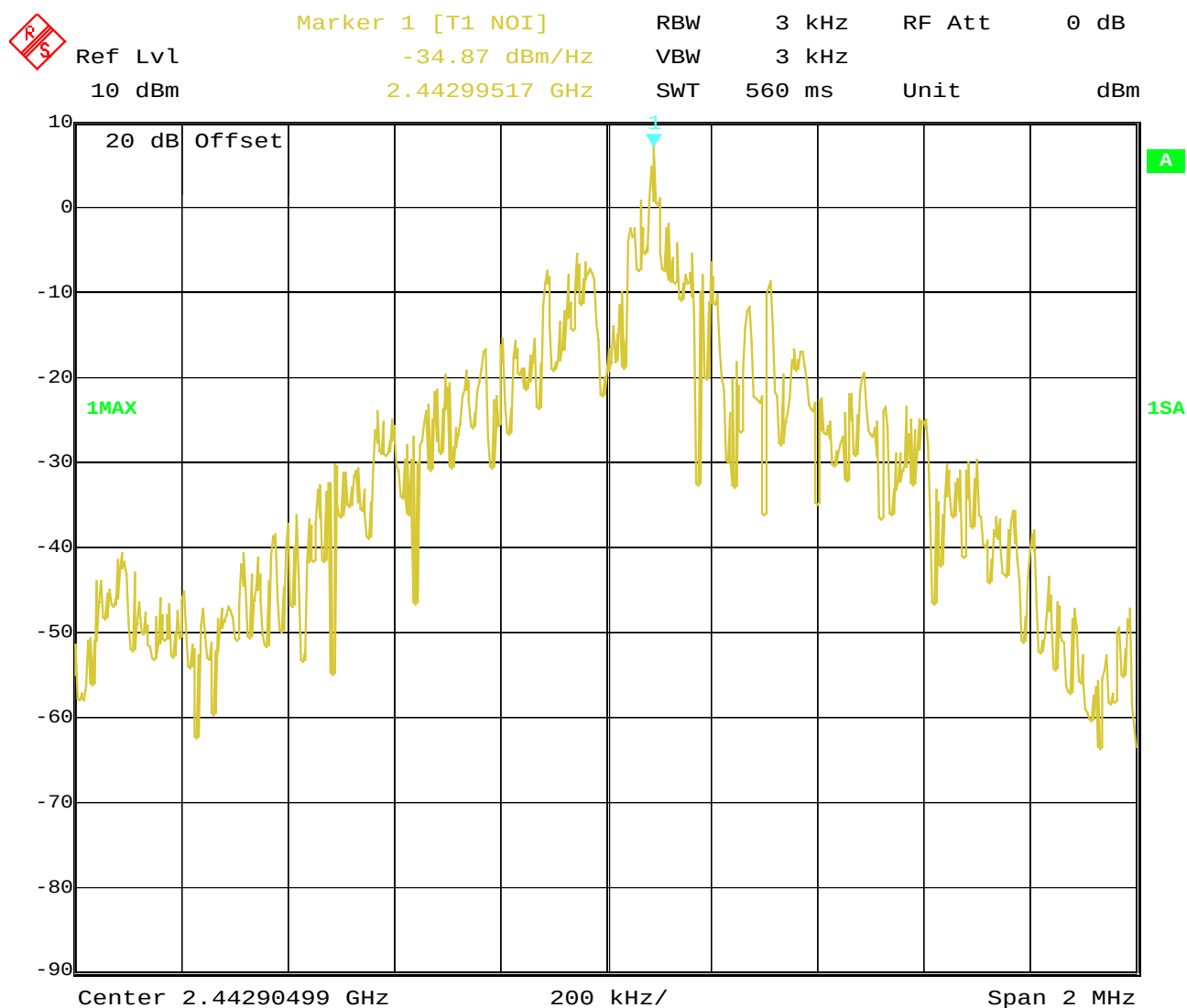
## Power density

SUBCLAUSE § 15.247

## Inquiry mode

The measured value is related to 1 Hz. So we have to add 34.8 dB for 3 kHz BW.

The result is -0.07 dBm related to 3kHz.



Date: 3.APR.2001 07:34:35

## REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

Equipment under test : Gigaset B427data

Ambient temperature : 20°C

Relative humidity : 31%

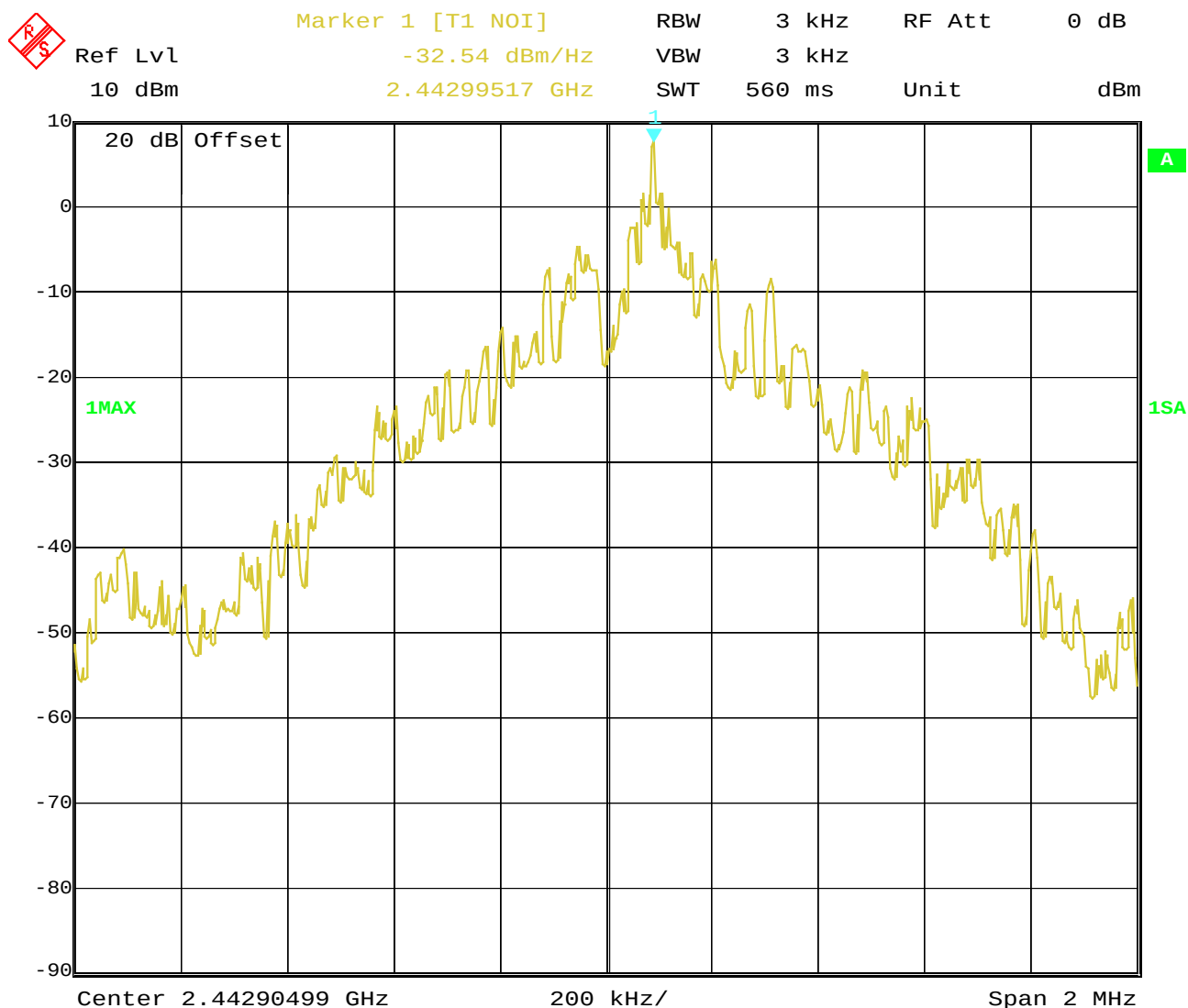
## Power density

SUBCLAUSE § 15.247

## Page mode

The measured value is related to 1 Hz. So we have to add 34.8 dB for 3 kHz BW.

The result is +2.26 dBm related to 3kHz.



Date: 3.APR.2001 07:57:16

## REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

**TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS**

To simplify the identification on each page of the test equipment used, on each page of the test report, each item of test equipment and ancillaries such as cables are identified (numbered) by the Test Laboratory, below.

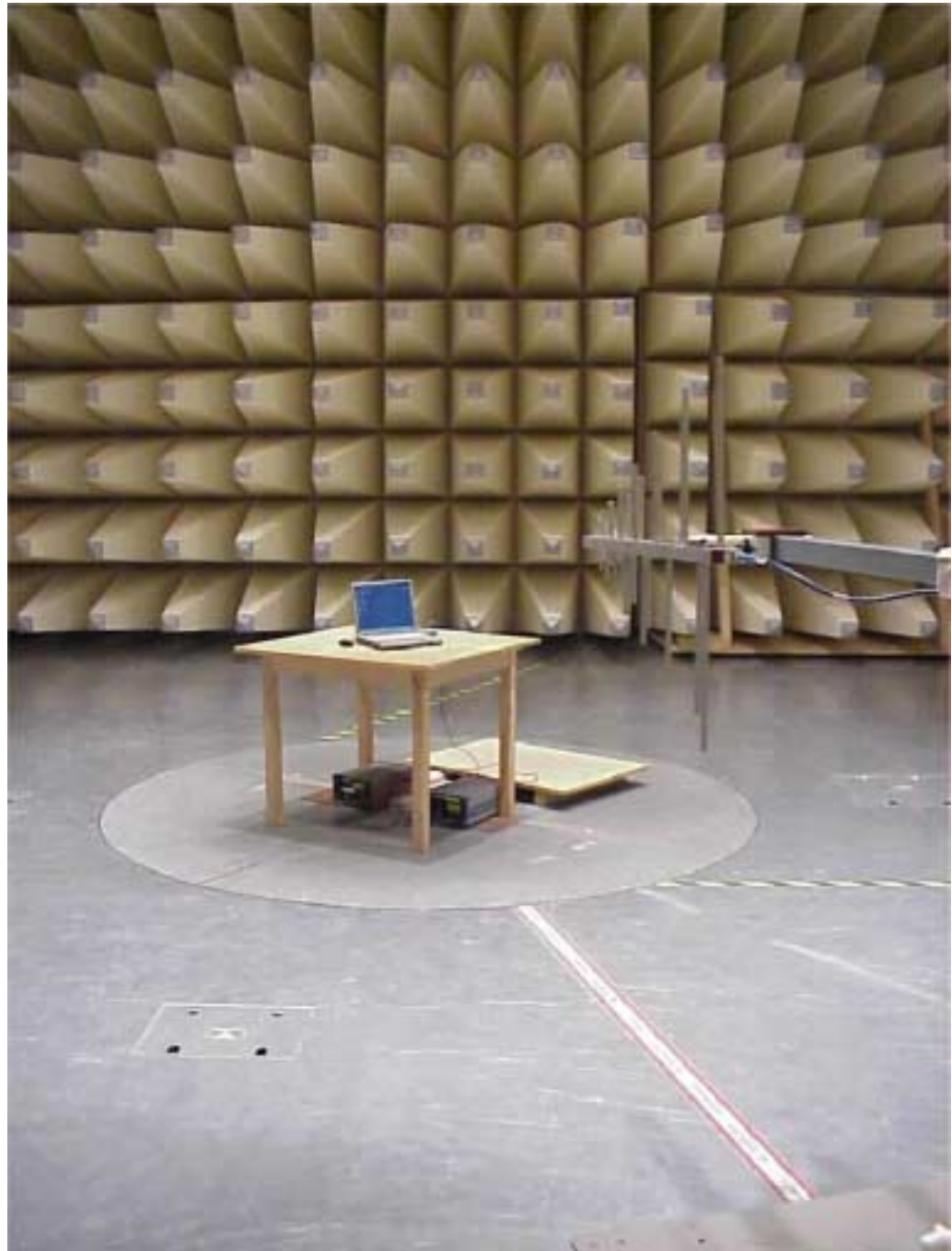
| No | Instrument/Ancillary  | Type      | Manufacturer    | Serial No.  |
|----|-----------------------|-----------|-----------------|-------------|
| 01 | Spectrum Analyzer     | 8566 A    | Hewlett-Packard | 1925A00257  |
| 02 | Analyzer Display      | 8566 A    | Hewlett-Packard | 1925A00860  |
| 03 | Oscilloscope          | 7633      | Tektronix       | 230054      |
| 04 | Radio Analyzer        | CMTA 54   | Rohde & Schwarz | 894 043/010 |
| 05 | System Power Supply   | 6038 A    | Hewlett-Packard | 2848A07027  |
| 06 | Signal Generator      | 8111 A    | Hewlett-Packard | 2215G00867  |
| 07 | Signal Generator      | 8662 A    | Hewlett-Packard | 2224A01012  |
| 08 | Funktionsgenerator    | AFGU      | Rohde & Schwarz | 862 480/032 |
| 09 | Regeltrenntrafo       | MPL       | Erfi            | 91350       |
| 10 | Netznachbildung       | NNLA 8120 | Schwarzbeck     | 8120331     |
| 11 | Relais-Matrix         | PSU       | Rohde & Schwarz | 893 285/020 |
| 12 | Power-Meter           | 436 A     | Hewlett-Packard | 2101A12378  |
| 13 | Power-Sensor          | 8484 A    | Hewlett-Packard | 2237A10156  |
| 14 | Power-Sensor          | 8482 A    | Hewlett-Packard | 2237A00616  |
| 15 | Modulationsmeter      | 9008      | Racal-Dana      | 2647        |
| 16 | Frequenzzähler        | 5340 A    | Hewlett-Packard | 1532A03899  |
| 17 | Absorber Schirmkabine | ---       | MWB             | 87400/002   |
| 18 | Spectrum Analyzer     | 85660 B   | Hewlett-Packard | 2747A05306  |
| 19 | Analyzer Display      | 85662 A   | Hewlett-Packard | 2816A16541  |
| 20 | Quasi Peak Adapter    | 85650 A   | Hewlett-Packard | 2811A01131  |
| 21 | RF-Preselector        | 85685 A   | Hewlett-Packard | 2833A00768  |
| 22 | Biconical Antenne     | 3104      | Emco            | 3758        |
| 23 | Log. Per. Antenne     | 3146      | Emco            | 2130        |
| 24 | Double Ridge Horn     | 3115      | Emco            | 3088        |
| 25 | EMI-Testreceiver      | ESAI      | Rohde & Schwarz | 863 180/013 |
| 26 | EMI-Analyzer-Display  | ESAI-D    | Rohde & Schwarz | 862 771/008 |
| 27 | Biconical Antenne     | HK 116    | Rohde & Schwarz | 888 945/013 |
| 28 | Log. Per. Antenne     | HL 223    | Rohde & Schwarz | 825 584/002 |
| 29 | Relais-Switch-Unit    | RSU       | Rohde & Schwarz | 375 339/002 |
| 30 | Highpass              | HM985955  | FSY Microwave   | 001         |
| 31 | Amplifier             | P42-GA29  | Tron-Tech       | B 23602     |
| 32 | Absorber Schirmkabine |           | Frankonia       |             |
| 33 | Steuerrechner         | PSM 7     | Rohde & Schwarz | 834 621/004 |
| 34 | EMI Test Reciever     | ESMI      | Rohde & Schwarz | 827 063/010 |
| 35 | EMI Test Receiver     | Display   | Rohde & Schwarz | 829 808/010 |

**TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS**

To simplify the identification on each page of the test equipment used, on each page of the test report, each item of test equipment and ancillaries such as cables are identified (numbered) by the Test Laboratory, below.

| No | Instrument/Ancillary                   | Type      | Manufacturer    | Serial No.   |
|----|----------------------------------------|-----------|-----------------|--------------|
| 36 | Controler                              | HD 100    | Deisel          | 100/322/93   |
| 37 | Relais Matrix                          | PSN       | Rohde & Schwarz | 829 065/003  |
| 38 | Control Unit                           | GB 016 A2 | Rohde & Schwarz | 344 122/008  |
| 39 | Relais Switch Unit                     | RSU       | Rohde & Schwarz | 316 790/001  |
| 40 | Power Supply                           | 6032A     | Hewlett Packard | 2846A04063   |
| 41 | Spektrum Monitor                       | EZM       | Rohde & Schwarz | 883 720/006  |
| 42 | Meßempfänger                           | ESH 3     | Rohde & Schwarz | 890 174/002  |
| 43 | Meßempfänger                           | ESVP      | Rohde & Schwarz | 891 752/005  |
| 44 | Biconi Ant. 20-300MHz                  | HK 116    | Rohde & Schwarz | 833 162/011  |
| 45 | Logper Ant. 0.3-1 GHz                  | HL 223    | Rohde & Schwarz | 832 914/010  |
| 46 | Amplifier 0.1-4 GHz                    | AFS4      | Miteq Inc.      | 206461       |
| 47 | Logper Ant. 1-18 GHz                   | HL 024 A2 | Rohde & Schwarz | 342 662/002  |
| 48 | Polarisationsnetzwerk                  | HL 024 Z1 | Rohde & Schwarz | 341 570/002  |
| 49 | Double Ridge G Horn Antenne 1-26.5 GHz | 3115      | EMCO            | 9107-3696    |
| 50 | Microw. Sys. Amplifier 0.5- 26.5 GHz   | 8317A     | Hewlett Packard | 3123A00105   |
| 51 | Audio Analyzer                         | UPD       | Rohde & Schwarz | 1030.7500.04 |
| 52 | Steuerrechner                          | PSM 7     | Rohde & Schwarz | 883 086/026  |
| 53 | DC V-Netzwerk                          | ESH3-Z6   | Rohde & Schwarz | 861 406/005  |
| 54 | DC V-Netzwerk                          | ESH3-Z6   | Rohde & Schwarz | 893 689/012  |
| 55 | AC 2 Phasen V-Netzwerk                 | ESH3-Z5   | Rohde & Schwarz | 861 189/014  |
| 56 | AC 2 Phasen V-Netzwerk                 | ESH3-Z5   | Rohde & Schwarz | 894 981/019  |
| 57 | AC-3 Phasen V-Netzwerk                 | ESH2-Z5   | Rohde & Schwarz | 882 394/007  |
| 58 | Stromversorgung                        | 6032A     | Rohde & Schwarz | 2933A05441   |
| 59 | HF-Test Empfänger                      | ESVP.52   | Rohde & Schwarz | 881 487/021  |
| 60 | Spectrum Monitor                       | EZM       | Rohde & Schwarz | 883 086/026  |
| 61 | HF-Test Empfänger                      | ESH3      | Rohde & Schwarz | 881 515/002  |
| 62 | Relais Matrix                          | PSU       | Rohde & Schwarz | 882 943/029  |
| 63 | Relais Matrix                          | PSU       | Rohde & Schwarz | 828 628/007  |
| 64 | Spectrum Analyzer                      | FSIQ 26   | Rohde & Schwarz | 119.6001.27  |
| 65 | Spectrum Analyzer                      | HP 8565E  | Hewlett Packard | 3473A00773   |
| 66 |                                        |           |                 |              |

Test site  
RADIATED EMISSIONS



Test site

RADIATED EMISSIONS



Test site

RADIATED EMISSIONS



Test site

CONDUCTED EMISSIONS



## Photographs of the equipment

Photograph no.: 1



## Photographs of the equipment

Photograph no.: 2



## Photographs of the equipment

Photograph no.: 3



## Photographs of the equipment

Photograph no.: 4



## Photographs of the equipment

Photograph no.: 5



## Photographs of the equipment

Photograph no.: 6

