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Recognized by the Federal Communications Commission

Anechoic chamber registration no.: 90462 (FCC)

Anechoic chamber registration no.: IC 3463A-1



Accredited by the German Accreditation Council DAR–Registration Number DAT-P-176/94-D1



Accredited Bluetooth® Test Facility (BQTF)

Test report no. : 2-4937/08-1-3

Applicant : Fuji Film Corporation
Type : AT88CRF-USB232
Test Standard : FCC Part 15.225
RSS210 Issue 7

FCC ID : F5G4KN

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1 General information

1.1. Administrative data of the test facility

1.1.1 Identification of the testing laboratory

Company name: Cetecom ICT Services GmbH Address: Untertürkheimerstr. 6-10

Untertürkheimerstr. 6-10 D-66117 Saarbruecken

Germany

Laboratory accreditation: DAR-Registration No. DAT-P-176/94-D1

Bluetooth Qualification Test Facility (BQTF)

Federal Communications Commission (FCC)

Identification/Registration No: 90462

Responsible for testing laboratory: Daniel K. Muyunga

Phone: +49 681 598 0 Fax: +49 681 598 9075 email: info@ict.cetecom.de

1.2. 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 generalizations 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.

Responsible for testing laboratory (Daniel K. Muyunga)

Responsible for test report (Michael Berg)

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1.3 Details of Applicant

Name : Fuji Film Corporation

Address: 798 Miyanodai

Kaisei-machi, Ashigarakami-gun

City : **258-8538 Kanagawa**

Country: Japan

Phone : +81-465-85-2997
Fax : +81-465-85-2043
CONTACT : Mr. Fukazawa
Phone : +81-465-85-2997

Fax : e-mail :

1.4 Application Details

Date of receipt of application : 2008-10-17
Date of receipt of test item : 2008-10-17

Date(s) of test : **2008-10-20 to 2008-10-27**

Date of report : 2008-10-27

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1.5 Test Item

Type of equipment : RFID Module

Model name : AT88CRF-USB232

Details of Manufacturer

Company : Beijing Brio Technology Co., Ltd.

Address

Jinyanlong Beijing Bldg.
East Road Xisanqui

City : Beijing
Country : China
Sample ID : #2

Tested to Radio Standards Specification(RSS) No. : 210 Issue 7

Open Area Test Site Industry Canada Number : IC 3463A-1

Temperature Range : -20 °C to +50 °C

Frequency Range (or fixed frequency) : 13.56 MHz

Field Strength (at what distance) : $50.09 \, dB\mu V/m \, at \, 30m$

Occupied Bandwidth (99% BW) : 12.36 kHz
Type of Modulation : N0N

Antenna Information : Integrated antenna

Emission Designator : 12K36N0N

Transmitter Spurious (worst case) : 22.9 dBμV/m at 10 m

FCC ID : F5G4KN

ATTESTATION:

DECLARATION OF COMPLIANCE: I declare that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned Industry Canada standard(s); and that the equipment identified in this application has been subjected to all the applicable test conditions specified in the Industry Canada standards and all of the requirements of the standard have been met.

Laboratory Manager:

2008-10-27 Daniel K. Muyunga

Date Name Signature

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1.5.1 Test conditions testing

Description	Shortcut	Unit	Value	
Nominal Temperature / humidity	T_{nom}	°C / %	+20 / 56	
Low Temperature	T_{low}	°C	-20	
High Temperature	Thigh	°C	+50	
Nominal Power Source	V_{nom}	V	5.00	
	V_{low}		4.25	
	V_{hi}		5.75	

Type of powersource: V DC

1.6 Test Setup

Hardware :	-/-
Software :	RFID_USB_Test_v1.2
Serial number :	-/-

1.7 Test Specifications

FCC:	CFR Part 15 – Radio Frequency Devices				
	CFR Part 15.209 – Radiated emission limits.				
	CFR Part 15.207 – Conducted limits				
	CFR Part 15.225				
IC:	RSS 210, Issue 7				
	Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands):				
	Category I Equipment				

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2 Statement of Compliance

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

2.1 Summary of Measurement Results

2.1.1 CFR 47 Part 15 Radio frequency devices

Section in this Report	Test Name / Section FCC Part 15	Test Name / Section RSS 210	applicable	Verdict
4.1	§ 15.35 (c) Timing of the transmitter (Duty cycle correction factor)	6.5 Pulsed Operation	NO	
4.2	§ 15.225 (a) FIELDSTRENGTH OF FUNDAMENTAL	Annex 2.6	YES	pass
4.3	§ 15.225 (b,c,d) FIELDSTRENGTH OF HARMONICS and SPURIOUS	Annex 2.6	YES	pass
4.4	§ 15.225 (e) Frequency tolerance	Annex 2.6	YES	pass
4.5	§ 15.107 / 15.207 Conducted Limits	Section 6.6 , 7.4	YES	pass

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3 Measurements and results

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 1 GHz in semi-anechoic chambers or free field. The EUT is positioned on a non-conductive support with a height of 0.80 m above a conductive ground plane that covers the whole chamber.

The receiving antennas are conform with specifications ANSI C63.2-1996 clause 15 and ANSI C63.4-2003 clause 4.1.5. These antennas can be moved over the height range between 1.0 m and 4.0 m in order to search for maximum field strength emitted from EUT. The measurement distances between EUT and receiving antennas are indicated in the test set-ups for the various frequency ranges. For each measurement, the EUT is rotated in all three axes until the maximum field strength is received.

The wanted and unwanted emissions are received by spectrum analysers where the detector modes and resolution bandwidths over various frequency ranges are set according to requirement ANSI C63.4-2003 clause 4.2. Antennas are conform with ANSI C63.2-1996 item 15.

150 kHz - 30 MHz: Quasi Peak measurement, 9kHz Bandwidth, passive loop antenna.

30 MHz - 200 MHz: Quasi Peak measurement, 120KHz Bandwidth, biconical antenna 200MHz - 1GHz: Quasi Peak measurement, 120KHz Bandwidth, log periodic antenna

>1GHz: Average, RBW 1MHz, VBW 10 Hz, wave guide horn

All measurement settings are according to FCC 15.209 and 15.207

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4 FCC Part 15 Subpart C

4.1 Timing of the transmitter

Not applicable

Reference

FCC: CFR Part SUBCLAUSE § 15.35 (c)
IC: RSS 210, ISSUE 7 6.5 Pulsed operation

Limits: § 15.35 (c)

(c) Unless otherwise specified, e.g. Section 15.255(b), when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

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4.2 Field strength of the fundamental

Reference

FCC: CFR Part SUBCLAUSE § 15.225 (a)
IC: RSS 210, Annex 2.6

Maximum output power (quasi peak) - (radiated)

Measured at 10m distance, recalculated to 30m according to FCC part15.31 (f2)

TEST CON	NDITIONS	MAXIMUM POWER (dBμV/m)		
Frequ	iency	13.56 MHz		
		In 10 m	In 30 m	
T _{nom} +20 °C V _{nom} 5.0 V		59.09	39.09	
Measuremen	t uncertainty	±3	BdB	

RBW/VBW: 200 Hz up to 150 kHz, 9 kHz up to 30 MHz, 120 kHz up to 1 GHz

Limits

SUBCLAUSE § 15.225 (a)

Fundamental Frequency	Field strength of Fundamental	Measurement Distance
(MHz)	(µV/m)	(meters)
13.553 to 13.567	15848 μV/m (84 dBμV/m)	30
		Recalculated acc. to FCC
		part15.31 (f2)

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4.3 Field strength of the harmonics and the spurious

Reference

FCC: CFR Part SUBCLAUSE § 15.209 (a)

IC: RSS 210, Annex 2.6

	EMISSION LIMITATIONS							
f (MHz)		amplitude of emission (dBµV/m) Average/QP	limit max. allowed field strength	Distance (Meter)	results			
13.560	PK	40.5	29.5	30	Operating frequency			
40.680	QP	26.2	30	10	pass			
54.240	QP	22.9	30	10	pass			
67.800	QP	24.1	30	10	pass			
352.56	QP	27.0	36	10	pass			
366.12	QP	26.7	36	10	pass			
406.80	QP	27.0	36	10	pass			
433.92	QP	26.6	36	10	pass			
501.72	QP	26.5	36	10	pass			
759.36	QP	27.9	36	10	pass			
Measurement uncertainty			± 3dB					

RBW/VBW: 200 Hz up to 150 kHz, 9 kHz up to 30 MHz, 120 kHz up to 1 GHz

Limits SUBCLAUSE § 15.209 (a)

Fundamental Frequency	Field strength of	Measurement Distance
(MHz)	Fundamental (µV/m)	(meters)
0.009 - 0.490	2400 / F (kHz)	300
0.490 - 1.705	24000 / F (kHz)	30
1.705 - 30.0	30 (29.5 dBμV/m)	30
30.0 - 88.0	100 (40 dBμv/m)	3
88 – 216	150 (43.5 dBµV/m)	3
216 – 960	200 (46 dBµV/m)	3

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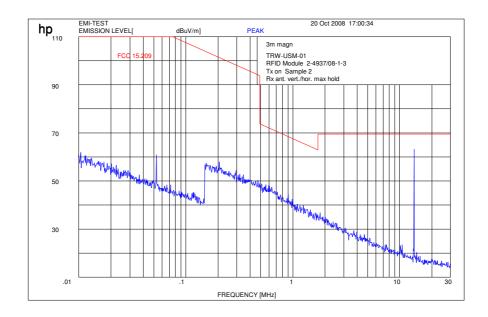
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Plots of measurements

Plot 1:

Part 15.209 Magnetics



RBW/VBW: 200 Hz up to 150 kHz, 9 kHz up to 30 MHz, 120 kHz up to 1 GHz

(to convert the measuring distance from 10m to 30m and 30 to 300m a correction factor from 40 dB/decade was used. Here we use 60 dB to recalculate from 10m to 300m)

Measurement distance 10 m

This measurement was done in 3 planes, the plot shows the worst case

Limits SUBCLAUSE § 15.209

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.0009 - 0.490	2400 / F (kHz)	300
0.490 - 1.705	24000 / F (kHz)	30
1.705 - 30	$30 (29.5 \text{ dB}\mu\text{V/m})$	30
30 - 88	$100 (40 \text{ dB}\mu\text{v/m})$	3
88 - 216	$150 (43.5 dB\mu V/m)$	3
216 - 960	200 (46 dBµV/m)	3

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED : (see test equipment listing)

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Plot 3:

TX (30 MHz to 1 GHz)

Information

EUT: TRW-USM-01

Serial Number: -/-

Test Description: FCC Part 15 class B @ 10 m

Operating Conditions: RFID TX-Mode

Operator Name: WAL

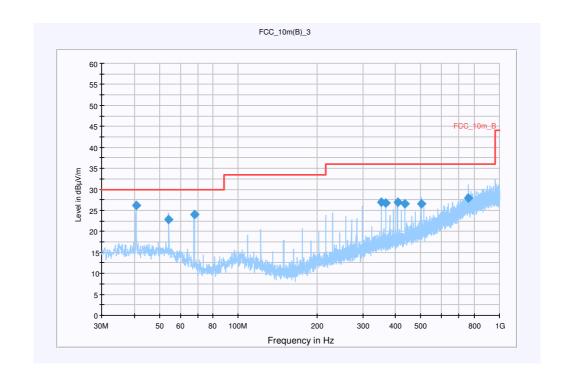
Comment: Connect to Samsung Notebook

Scan Setup: FCC_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)

Level Unit: dBµV/m

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	15 s	Receiver



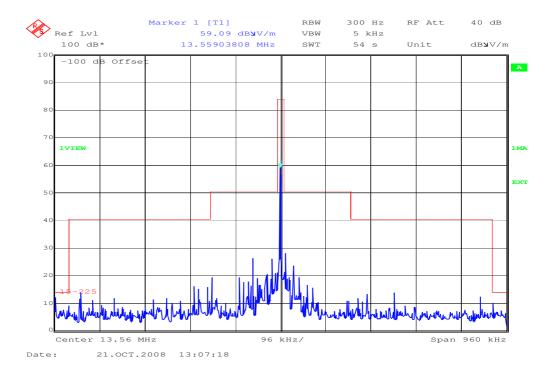
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Plot 4:

Spectrum mask part15.225 (a,b,c,d)



Limits recalculated from 30m to 3m with 40 dB/decade according to FCC 15.31 (f2)

The transmitter holds the requirements of FCC 15.225 (a,b,c and d)

Limits

SUBCLAUSE § 15.2225

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

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4.4 Frequency tolerance

Reference

FCC: CFR Part SUBCLAUSE § 15.225 (e)

IC: RSS 210, Annex 2.6

			Fre	quency toleran	ice			
Over	temperature va	ariation		r voltage variat				
Li	mit is +/- 1.356	kHz	Lim	it is +/- 1.356 k	:Hz			
T (°C)]	Frequency	result	Power voltage	Frequency	result			
-20°	13.559954	Pass	4.25	13.559654	Pass			
-10°	13.559972	Pass	4.50	13.559714	Pass			
0°	13.559954	Pass	4.75	13.559721	Pass			
10°	13.559863	Pass	5.00	13.559774	Pass			
20°	13.559836	Pass	5.25	13.559752	Pass			
30°	13.559809	Pass	5.50	13.559782	Pass			
40°	13.559774	Pass	5.75	13.559797	Pass			
50°	13.559744	Pass						
Measurement uncertainty ±100 Hz						1	1	1

Limit: 13.558644 to 13.561356 MHz

Limits

SUBCLAUSE § 15.225

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The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

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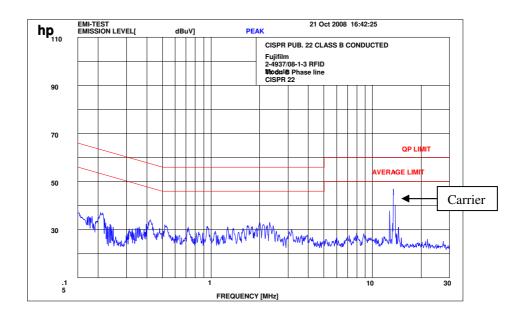
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4.5 Conducted Limits

Reference

FCC:	CFR Part 15.207, 15.107
IC:	RSS 210, Issue 7, Section 6.6, 7.4

Plot 1:



Limits: § 15.107 / 15.207

Frequency of Emission (MHz)	Conducted Limit (dBµV)		
	Quasi-peak	Average	
0.15 - 0.5	66 to 56 *	56 to 46 *	
0.5 - 5	56	46	
5 - 30	60	50	

^{*} Decreases with the logarithm of the frequency

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Used Testequipment

Device	Manufacturer	Type	S/N Number	Inv. No. Cetecom
Spektrum Analyser	HP	8566B	2747A05306	300001000
Spektrum Analyser Display	HP	85662A	2816A16541	300002297
Quasi-Peak-Adapter	HP	85650A	2811A01131	300000999
Power Dupply	HP	6032A	2818A03450	300001040
Power Attenuator	Byrd	8325	1530	300001595
Bikonical Antenna	EMCO	3104	3758	300001602
Log. Period. Antenna	EMCO	3146	2130	300001603
Double Ridged Antenna	EMCO	HP 3115P	3088	300001032
Active Loop Antenna	EMCO	6502	2210	300001015
Antenna VDE/FCC		HP11965B		300002298
SRM-Drive	HP	9144A	2823e46556	300001044
Software	HP	EMI		300000983
Busisolator	Kontron			300001056
Absorberhalle	MWB		87400/02	300000996
Salzsäule	Kontron			300001055
Antenna	R&S	HMO20	832211/003	300002243
Indukt.Tast Antenna	R&S	HFH 2 Z4	881468/026	300001464
System-Rack	HP I.V.	85900	*	300000222
Spectrum Analyzer	HP	8566B	2747A05275	300000219
Quasi-Peak-Adapter	HP	85650A	2811A01135	300000216
RF-Preselector	HP	85685A	2837A00779	300000218
Rahmen Antenne	R&S	HFH2-Z2	891847-35	300001169
Leitungsteiler	HP	11850C		300000997
Breitband-Hornantenne EMI	HP	35155P		300002300
PC	HP	Vectra VL		300001688
VHF Meßantenne	Schwarzbeck	VHA 9103		300001778
Spectrum Analyzer Display	HP	85662A	2816A16497	300001690
VHF Meßantenna	Schwarzbeck	VHA 9103		300001780
Biconical Antenna	EMCO	3104 C	9909-4868	300002590

SRD Laboratory:

	300001207	Type	S/N Number	Inv. No. Cetecom
Device				
Spectrum Analyzer	300001208	494AP	B010241	300000863
Spectrum Analyzer	HP	71210A (70000)	2731A02347	300000321
Spectrum Analyzer Display	HP	70206A	2840A01553	300002017
Reference Frequency	HP	70310A	2736A00707	300002018
Local Oscillator	HP	70900A	2842A02221	300002019
ZF-Modul 10Hz-300 kHz	HP	70902A	2840A02145	300002020
ZF-Modul 100 kHz-3 MHz	HP	70903A	2835A01069	300002021
HF-Teil für 71210A 100Hz- 22GHz	HP	70908A		300002022
Spectrum Analyzer 2	HP	85660B	3138A07614	
Spectrum Analyzer Display 2	HP	85662A	3144A20627	

(see test equipment listing)

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Signal Generator DC-600 KHz	HP	8904A	2822A01213	300001157
Signal Generator DC-600 KHz	HP	8904A	2822A01213	300001157
Powersupply	HP	6038A	3122A11097	300001138
Netznachbildung	R&S	ESH3-Z5	828576/020	300001204
Amplituden Controller	R&S	SMDU-Z2	871829/051	300001210
			8/1829/031	1
Trenntrafo	Erfi	913501	00.40	300001205
Trenntrafo	Grundig	RT5A	9242	300001627
Relais Matrix	HP	3488A	2719A15013	300001156
Multimeter	Siemens	Multizet		300001102
Peak Power Calibrator	HP	8900B		300001084
Schallgeber	Schomandl	SG 1	10159	300001209
Schallgeber	Schomandl	SG 2	10176	300002473
Filter	FSY Microwave			300001206
Attenuatorer	Pro Nova			300002476
Klimaschrank	Heraeus Voetsch	VUK04/500		300001012
Spectrum Analyzer 3	HP	8566A	1925A00257	300001098
Spectrum Analyzer Display 3	HP	85662	1925A00860	300002306
Oszilloscope	Tektronix	2432	110261	300001165
Radiocom. Analyzer	R&S	CMTA 54	894043/010	300001175
Powersupply	HP	6038A	2848A07027	300001174
Signal Generator 0.01-1280 MHz	HP	8662A	2224A01012	300001110
Signal Generator (Funktions)	R&S	AFGU	862490/032	300001201
Trenntrafo	Erfi	MPL	91350	300001155
Relais Matrix	R&S	PSU	893285/020	300001173
Power Meter	HP	436A	2101A12378	300001136
Powersensor	HP	8484A	2237A10156	300001140
Powersensor	HP	8482A	2237A06016	300001139
Relais Matrix	R&S	PSU	282628/004	300001214
Powersupply	Zentro		2007	300001109
Oszilloscope	Tektronix	7633	2007	300001111
Klimaschrank	Heraeus Voetsch	VUK04/500	32926	300001111
Quasi-Peak Adapter	HP	85650A	2811A01204	300002308
Radiocom. Analyzer	R&S	CMTA 84	894199/012	300001176
Oszilloscope	HP	54510A	3022A02062	300001170
Funkmeßplatz	Schomandl	FD1000	34982	300001202
Signal Generator	R&S	SMPC	882416/019	300001113
	HP	5340A	2116A08138	300001102
Frequency counter Power Meter	HP	436A	2031U01461	300001104
Powersensor	HP	8482A	2031001401	300001103
	I .			
Powersensor	HP	8484A		300001107
Powersensor	HP	8485A	0750 404066	300001161
Powersupply	HP	6038A	2752A04866	300001161
Reflectionsmeter	R&S	NAP	879191	300001132
Signal Generator NF	R&S	SPN	880139/068	300001142
Trenntrafo	Erfi	MPL	91350	300001151
Attenuator	JFW	30 db	1350h/104	300001703
Attenuator	JFW	10 db	1350h/103	300001704
Attenuator	JFW	20 db	1350h/106	300001705
Attenuator	JFW	20 db	1350h/105	300001766
Filter	Spinner	153755		300001791

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Powersensor	HP	8484A	2237A10494	300001666
Powersupply	HP	6038A	3122A11097	300001204
Netznachbildung	R&S	ESH3-Z5	828576/020	300001210
Amplituden Controller	R&S	SMDU-Z2	871829/051	300002309
Trenntrafo	Erfi	913501		300001205
Trenntrafo	Grundig	RT5A	9242	300001627
Relais Matrix	HP	3488A	2719A15013	300001156
Multimeter	Siemens	Multizet		300001102
Peak Power Calibrator	HP	8900B		300001084
Schallgeber	Schomandl	SG 1	10159	300001209
Schallgeber	Schomandl	SG 2	10176	300002473
Filter	FSY Microwave			300001206
Attenuatorer	Pro Nova			300002476
Klimaschrank	Heraeus Voetsch	VUK04/500		300001012
Spectrum Analyzer 3	HP	8566A	1925A00257	300001098
Spectrum Analyzer Display 3	HP	85662	1925A00860	300001096
Oszilloscope	Tektronix	2432	110261	300002300
Radiocom. Analyzer	R&S	CMTA 54	894043/010	300001103
Powersupply	HP	6038A	2848A07027	300001173
Signal Generator 0.01-1280 MHz	HP	8662A	2224A01012	300001174
Signal Generator (Funktions)	R&S	AFGU	862490/032	300001110
Trenntrafo	Erfi	MPL	91350	300001201
Relais Matrix	R&S	PSU	893285/020	300001133
Power Meter	HP	436A		
		8484A	2101A12378	300001136
Powersensor	HP		2237A10156	300001140
Powersensor	HP	8482A	2237A06016	300001139
Relais Matrix	R&S	PSU	282628/004	300001214
Powersupply	Zentro	7.622	2007	300001109
Oszilloscope	Tektronix	7633	2222	300001111
Klimaschrank	Heraeus Voetsch	VUK04/500	32926	300001500
Quasi-Peak Adapter	HP	85650A	2811A01204	300002308
Radiocom. Analyzer	R&S	CMTA 84	894199/012	300001176
Oszilloscope	HP	54510A	3022A02062	300001202
Funkmeßplatz	Schomandl	FD1000	34982	300001115
Signal Generator	R&S	SMPC	882416/019	300001162
Frequency counter	HP	5340A	2116A08138	300001104
Power Meter	HP	436A	2031U01461	300001105
Powersensor	HP	8482A		300001106
Powersensor	HP	8484A		300001107
Powersensor	HP	8485A		300001108
Powersupply	HP	6038A	2752A04866	300001161
Reflectionsmeter	R&S	NAP	879191	300001132
Signal Generator NF	R&S	SPN	880139/068	300001142
Trenntrafo	Erfi	MPL	91350	300001151
Attenuator	JFW	30 db	1350h/104	300001703
Attenuator	JFW	10 db	1350h/103	300001704
Attenuator	JFW	20 db	1350h/106	300001705
Attenuator	JFW	20 db	1350h/105	300001766
Filter	Spinner	153755		300001791
Powersensor	HP	8484A	2237A10494	300001666

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Powersensor	HP	8485A	2238A00849	300001668
Bandfilter	Telonic	TTF7255EE	20293-11	300001300
Bandfilter	Telonic	TTF12555EE	20292-6	300001302
Bandfilter	Telonic	TTF25055EE	20291-8	300001304
Bandfilter	Telonic	TTF50055EE	20290-7	300001305
Bandfilter	Telonic	TTF100055EE	20289-7	300001307
Bandfilter	Telonic	TTA300055EESN	20370-2	300001312
Bandstop	Telonic	TTR3753EE1	30013-1	300001312
Bandstop	Telonic	TTR723EE	20417-2	300001311
Bandstop	Telonic	TTR95-3EE	20372-4	300001318
Bandstop	Telonic	TTR1903EE	30036-4	300001310
Bandstop	Telonic	TTR3753EE	20369-5	300001321
Bandstop	Telonic	TTR750-3EE1	90177-1	300001321
Highpass	Pro Nova	HDP120-6GG	ohne	300002387
Highpass	Pro Nova	HMC500-6AA	HJ67-01?	300001340
Highpass	Narda	NHP 9000	0004	300001362
Highpass	Narda	HDP16-6GH	JV70-01	300001364
Highpass	RSD	HDP50-6GH,	3 7 / U U I	300001304
Tiighpass	KSD	HDP200-6GG		300001371
Highpass	RSD	2099-02-01		300000370
Signal Generator 0.1-2060 MHz	HP	8657A	2838U00736	300001009
Radio Code Analyzer	Schlumberger	SL4922	2030000730	300001038
Signal Analyzer	B&K	2033		300001036
Frequency counter	HP	5386A	2704A01243	300001047
Laufzeitelement	WR-Elektronik	3300A	2704701243	300001036
Powersupply Stromversorgung	Systron Systron	M5P 40/15A	828233	300001030
Powersupply	Heiden	1108-32	1701	300001291
Powersupply	Heiden	1108-32	1802	300001392
Powersupply	Heiden	1108-32	003202	300001383
Powersupply	Zentro	LA 2x30/5GB1	2011	300001187
Powersupply	Zentro	LA 2x30/5GB2	2011	300001276
Powersupply	Zentro	LA 30/5GA	2012	300001273
Trenntrafo	Grundig	RT5A	8781	300001287
Trenntrafo	Grundig	RT5A	9242	300001277
Multimeter	Grundig Goerz Elektro	Unigor 6e P	911 355	300001203
Multimeter	Goerz Elektro	Unigor 6e P	911 333	300001023
Climatic Box	Heraeus Voetsch	VUK04/500	32679	300000299
Powersensor + Att.	HP HP	8482B 8498A	2703A02586	300001492
Attenuator 30 dB		8498A	1801A02445	300001475
Signal Generator NF	HP Spinner	DN 524171 D	2822A01203	300001004
Attenuator	Spinner	BN 534171 D	51881	300001516
Attenuator coaxial	Bird	8325	2429	300001513
Impulsbegrenzer	R&S	ESH 3 Z2	0604571005	300001460
4Port Box	R&S	4Port Box	860457/005	300001472
Signal Generator 0.1-4200 MHz	HP	8665A	2833A0011	300002299
NF-Spektrumanalyzer	B&K	2033A		300002301
Swissphone Freifeld-Messbox	Swissphone Schweiz	DECH	02.42	300002302
Trenntrafo regelbar	Grundig	RT5H	9242	300001628
Signal Generator	HP	8111A	2215G00867	300001117

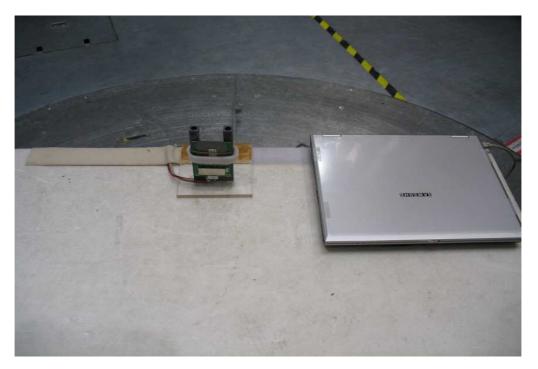
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5 **Annex B: Photographs of Test site**

Photo 1 (Radiated Emissions):



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Photo 2 (Radiated Emissions):



Photo 3 (Conducted Emissions):



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6 Annex C: Photographs of the Equipment

Photo 1:

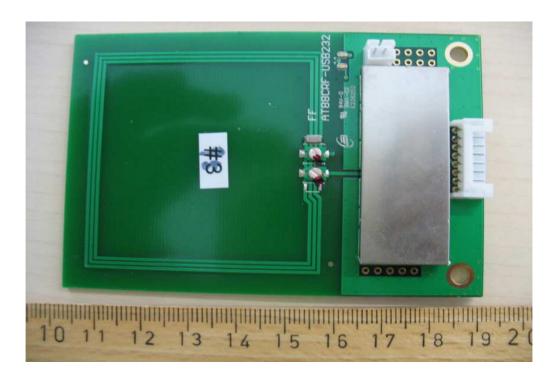
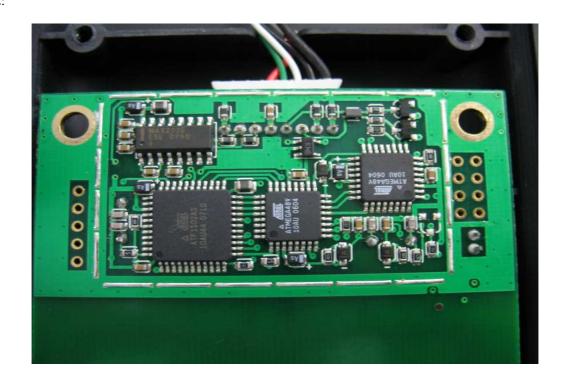


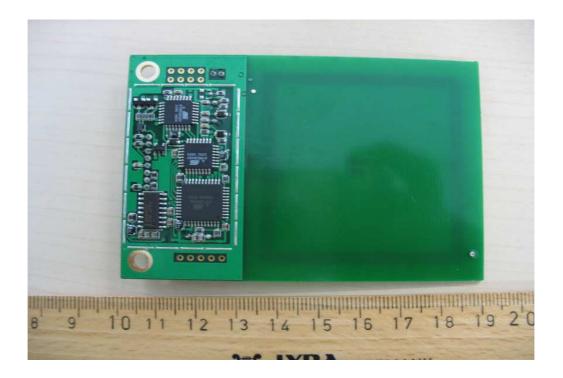
Photo 2:



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Photo 3:



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Photo 4:



REFERENCE NUMBER(S) OF TEST EQUIPMENT USED : (see test equipment listing)