CETECOM ICT Services GmbH
Untertürkheimer Str. 6-10, 66117 Saarbruecken Phone: +49 (0) 681 598-0 Fax: -9075
RSC-Laboratory

Recognized by the
Federal Communications Commission
Anechoic chamber registration no.: 90462 (FCC)
Anechoic chamber registration no.: IC 3463A-1
TCB ID: DE 0001

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

Accredited Bluetooth® Test Facility (BQTF)

Test report no.	**:**	**2-4885-01-03/08**
Applicant	**:**	**Sennheiser electronic GmbH & Co. KG**
Type	**:**	**guidePORT SK 3202**
Test Standard	**:**	**FCC Part 15 RSS210 Issue 7**
FCC ID	**:**	**DMOSK3202**
Certification No. IC	**:**	**2099A-SK3202**

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1 General information

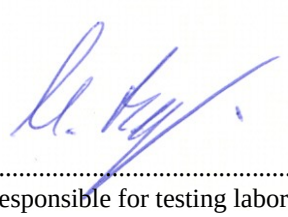
1.1. Administrative data of the test facility

1.1.1 Identification of the testing laboratory

Company name:	Cetecom ICT Services GmbH
Address:	Untertürkheimerstr. 6-10 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:	Michael Berg 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
(Michael Berg)

.....
Responsible for test report
(Harro Ames)

1.3 Details of Applicant

Name	:	Sennheiser electronic GmbH & Co. KG
Address	:	Am Labor 1
City	:	D-30900 Wedemark
Country	:	Germany
Phone	:	+49 (0) 5130 600 465
Fax	:	+49 (0) 5130 600 330
Contact	:	Mr.Volker Bartsch
Phone	:	+49 (0) 5130 600 465
Fax	:	+49 (0) 5130 600 330
e-mail	:	bartschv@sennheiser.com

1.4 Application Details

Date of receipt of application	:	2008-01-16
Date of receipt of test item	:	2008-03-27
Date(s) of test	:	2008-03-27 to 2008-03-31
Date of report	:	2008-03-31

1.5 Test Item

Type of equipment	:	audio transmitter
Model name	:	GP SK3202
Manufacturer	:	Sennheiser electronic GmbH & Co. KG
Address	:	Am Labor 1
City	:	D-30900 Wedemark
Country	:	Germany
Tested to Radio Standards Specification(RSS) No.	:	210 Issue 7
Open Area Test Site Industry Canada Number	:	IC 3463A-1
Frequency Range (or fixed frequency)	:	2.401920 bis 2.481408 GHz (2.4 – 2.4835 GHz)
R F: Power in Watts	:	0.00003
Field Strength (at what distance)	:	13030 µV/m (82.3dBµV/m) in 3m
Occupied Bandwidth (99% BW)	:	1244.49 kHz
Type of Modulation	:	F1D
Antenna Information	:	1 x 1-pin coaxial Lemo socket
Emission Designator (TRC-43)	:	1M24F1D
Transmitter Spurious (worst case)	:	1047 µV/m in 3m
Receiver Spurious (worst case)	:	197µV/m in 3m (noise floor)
IC no.	:	2099A-SK3202
FCC ID	:	DMOSK3202

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 :

2008-02-13	RSC	Michael Berg	
Date	Section	Name	Signature

1.6 Test Setup

Hardware	:	SK 3200
Software	:	0.0.6.0

1.7 Test Specifications

FCC:	**CFR Part 15.249**
IC:	**RSS 210, Issue 7**

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 Issue 7	Measurement applicable	Verdict
4.1	§ 15.35 (c) Timing of the transmitter (Duty cycle correction factor)	6.5 Pulsed Operation	NO	
4.2	§ 15.249 (a) FIELDSTRENGTH OF FUNDAMENTAL	6.2.2 (m2)(1) 902-928, 2400-2483.5 and 5725-5875 MHz	YES	pass
4.3	§ 15.249 (a) (d) FIELDSTRENGTH OF HARMONICS and SPURIOUS	6.2.2 (m2)(1)(3) 902-928, 2400-2483.5 and 5725-5875 MHz	YES	pass
4.4	§ 15.109 Receiver spurious emissions (radiated)	7.3 Receiver Spurious Emissions (Radiated)	NO	
4.5	§ 15.107 / 15.207 Conducted Limits	Section 6.6 , 7.4	NO	

3 Measurements and results

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 20 GHz in semi-anechoic chambers. 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 15.109 and 15.107

4 FCC Part 15 Subpart C

4.1 Timing of the transmitter

Reference

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

Measurement not applicable, transmitter is continous FSK modulated

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.

4.2 Field Strength of the Fundamental

Reference

FCC:	CFR Part SUBCLAUSE § 15.249 (a)
IC:	RSS 210, Issue 7, 6.2.2 (m2)(1) 902-928, 2400-2483.5 and 5725-5875 MHz

MAXIMUM OUTPUT POWER (AVERAGE)
(RADIATED)

TEST CONDITIONS		**MAXIMUM POWER (mV/m)**		
Frequency		**CH 1**	**CH 50**	**CH 93**
T_{nom} 23 °C	**V_{nom} 2.4 V DC**	**12.30**	**11.10**	**13.03**
Maximum deviation from output power under extreme test conditions (dBc)		**not applicable**		
Measurement uncertainty		**±3dB**		

RBW/VBW : 3 MHz

Limits **SUBCLAUSE § 15.249 (a)**

Fundamental Frequency (MHz)	Field strength of Fundamental (mV/m)	Field strength of Harmonics (V/m)
902-928	50 (94 dBµV/m)	500 (54 dBµV/m)
2400-2483.5	50 (94 dBµV/m)	500 (54 dBµV/m)
5725-5875	50 (94 dBµV/m)	500 (54 dBµV/m)
24.0-24.25 GHz	250 (108 dBµV/m)	2500 (68 dBµV/m)

4.3 Field Strength of the Harmonics and Spurious

Reference

FCC:	CFR Part SUBCLAUSE § 15.249 (a)(d)
IC:	RSS 210, Issue 7, 6.2.2 (m2)(1)(3) 902-928, 2400-2483.5 and 5725-5875 MHz

EMISSION LIMITATIONS					
f (MHz)		**amplitude of emission (dBµV/m) Average/QP**	**limit max. allowed emmision power**	**actual attenuation below frequency of operation (dB)**	**results**
Channel 1					
2401.92		**80.2 / AV**	**94BµV/m**		**Operating frequency**
30-1000		**34.0 /PK**	**20 dBc or 46 dBµV/m**	**46.2**	**Complies**
6168.1		**60.2 / AV**	**20dBc or 54 dBµV/m**	**20.0**	**Complies**
8570.3		**58.5 /AV**		**21.7**	**Complies**
					Complies
Channel 50					
2440.8		**79.3 / AV**	**94BµV/m**		**Operating frequency**
30-1000		**31.3 /PK**	**20 dBc or 46 dBµV/m**	**48.0**	**Complies**
6168.1		**57.5 / AV**	**20dBc or 54 dBµV/m**	**21.8**	**Complies**
8608.1		**50.8 / AV**		**28.5**	**Complies**
Measurement uncertainty		**± 3dB**			

Limits **SUBCLAUSE § 15.249 (a)**

Fundamental Frequency (MHz)	Field strength of Fundamental (mV/m)	Field strength of Fundamental (µV/m)
902-928	**50 (94 dBµV/m)**	**500 (54 dBµV/m)**
2400-2483.5	**50 (94 dBµV/m)**	**500 (54 dBµV/m)**
5725-5875	**50 (94 dBµV/m)**	**500 (54 dBµV/m)**
24.0-24.25 GHz	**250 (108 dBµV/m)**	**2500 (68 dBµV/m)**

Limits **SUBCLAUSE § 15.249 (d**

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Reference

FCC:	CFR Part SUBCLAUSE § 15.249 (a)(d)
IC:	RSS 210, Issue 7, 6.2.2 (m2)(1)(3) 902-928, 2400-2483.5 and 5725-5875 MHz

EMISSION LIMITATIONS					
f (MHz)		**amplitude of emission (dBµV/m) Average/QP**	**limit max. allowed emmision power**	**actual attenuation below frequency of operation (dB)**	**results**
Channel 93					
2481.408		**80.7 / AV**	**94BµV/m**		**Operating frequency**
30-1000		**30.6 /PK**	**20 dBc or 46 dBµV/m**	**50.1**	**Complies**
4966.4		**35.2 / AV**	**20dBc or 54 dBµV/m**	**45.5**	**Complies**
6168.1		**60.4 / AV**		**20.3**	**Complies**
8646		**47.1 / AV**		**33.6**	**Complies**
Measurement uncertainty		**± 3dB**			

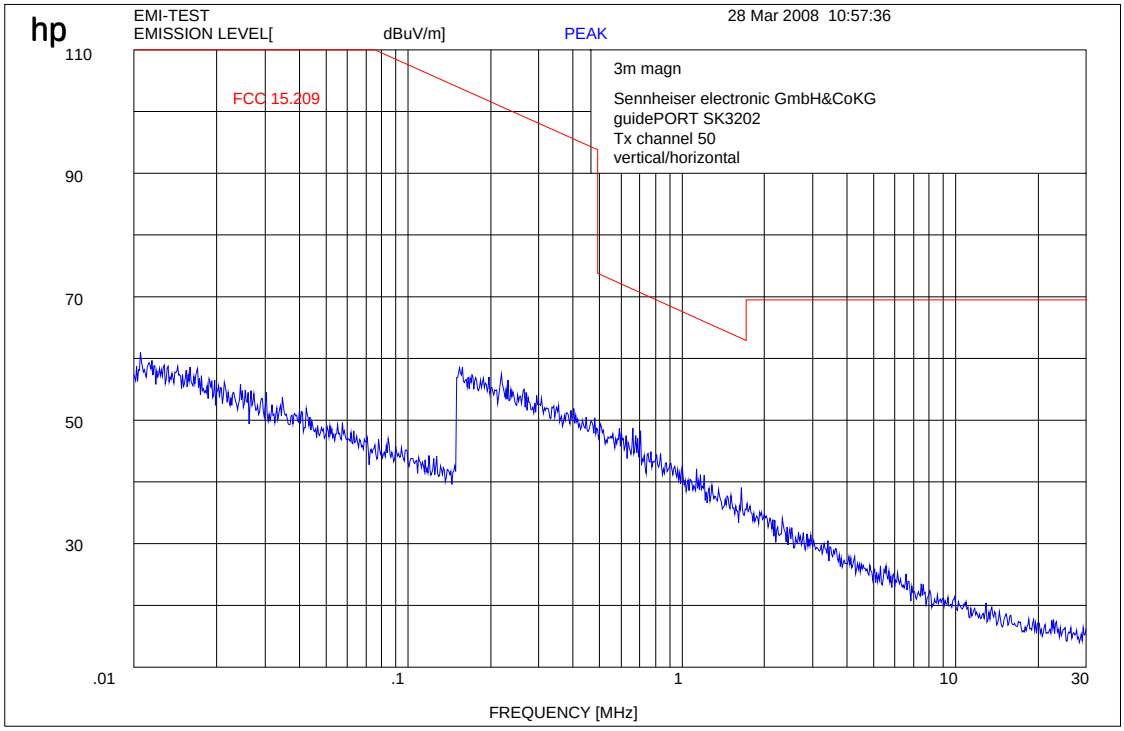
Limits **SUBCLAUSE § 15.249 (a)**

Fundamental Frequency (MHz)	Field strength of Fundamental (mV/m)	Field strength of Fundamental (µV/m)
902-928	**50 (94 dBµV/m)**	**500 (54 dBµV/m)**
2400-2483.5	**50 (94 dBµV/m)**	**500 (54 dBµV/m)**
5725-5875	**50 (94 dBµV/m)**	**500 (54 dBµV/m)**
24.0-24.25 GHz	**250 (108 dBµV/m)**	**2500 (68 dBµV/m)**

Limits **SUBCLAUSE § 15.249 (d**

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Part 15.109 Magnetics
This measurement is valid for all channels



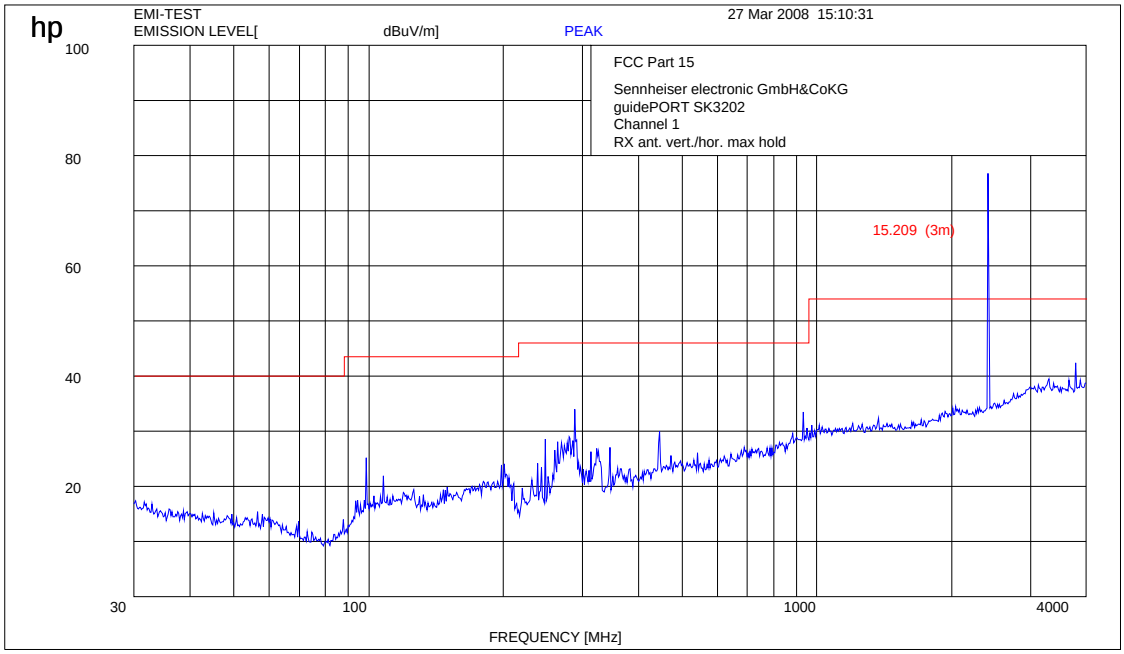
(to convert the measuring distance from 3m to 30m and 30 to 300m a correction factor from 40 dB/decade was used.)

Measurement distance 3m
This measurement was done in 3 polarisation's, the plot shows the worst case

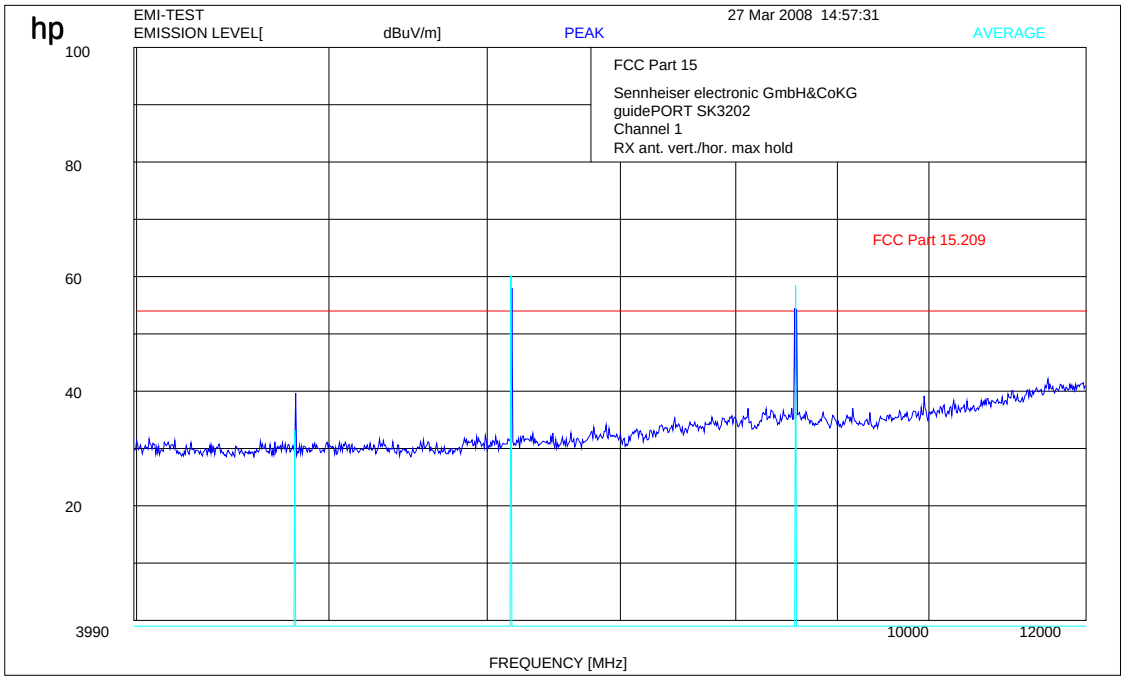
Limits **SUBCLAUSE § 15.209**

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	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

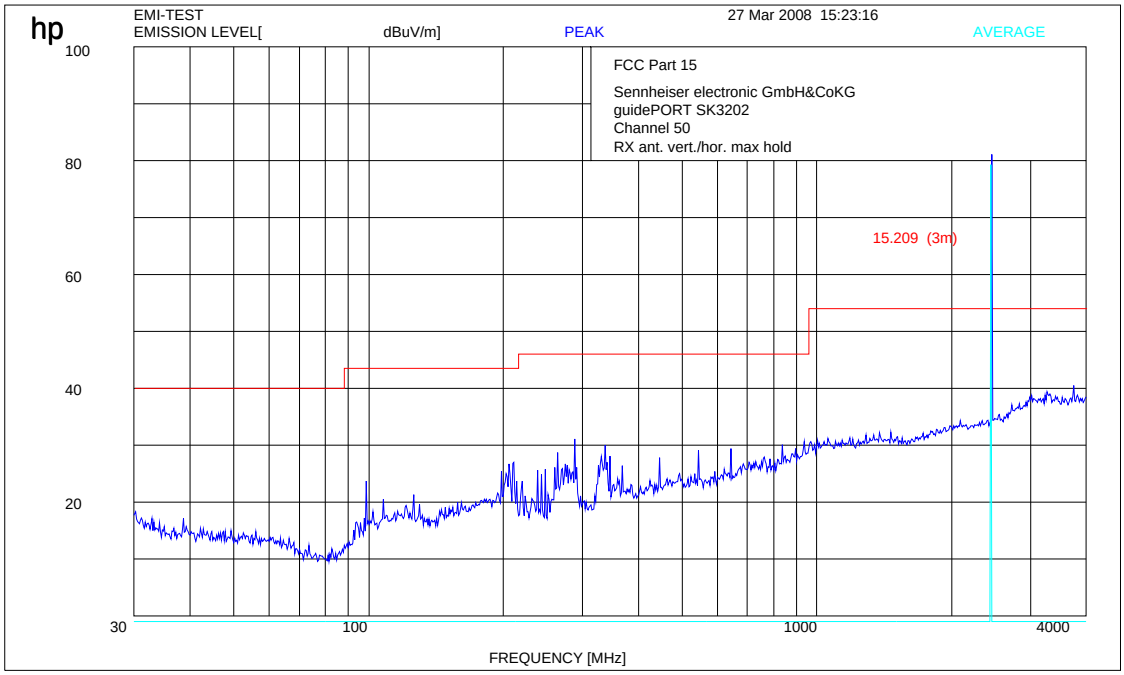
Channel 1
Tx : 30 MHz1- 4 GHZ



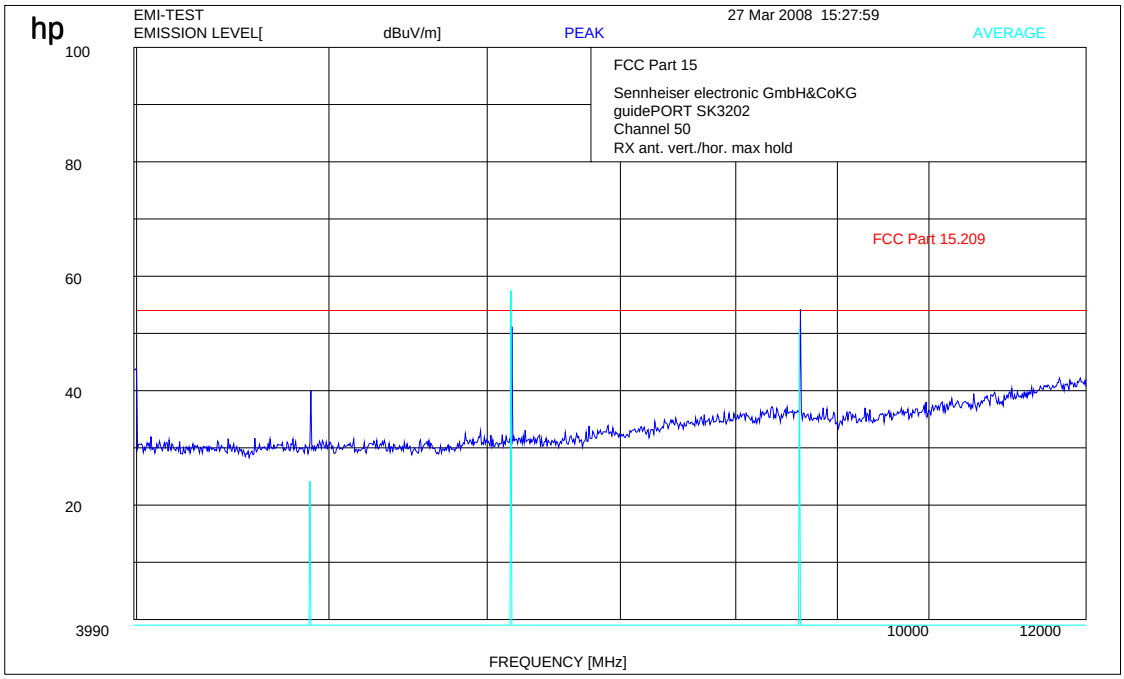
Tx : 4 GHz – 12 GHz



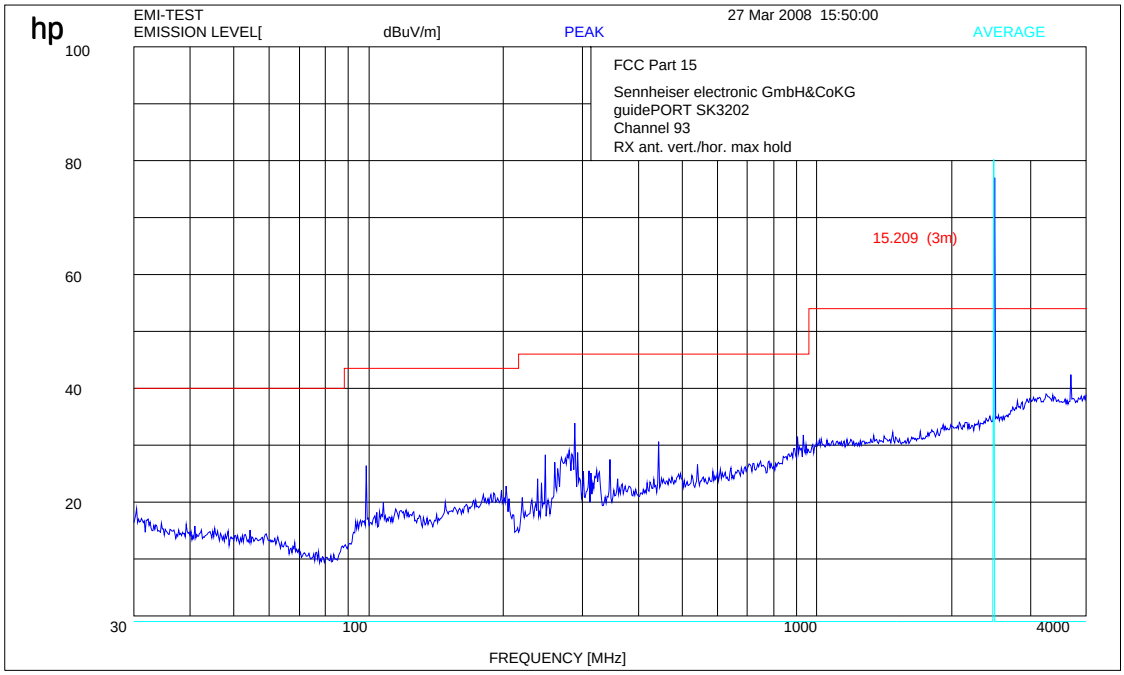
Channel 50
Tx : 30 MHz1- 4 GHZ



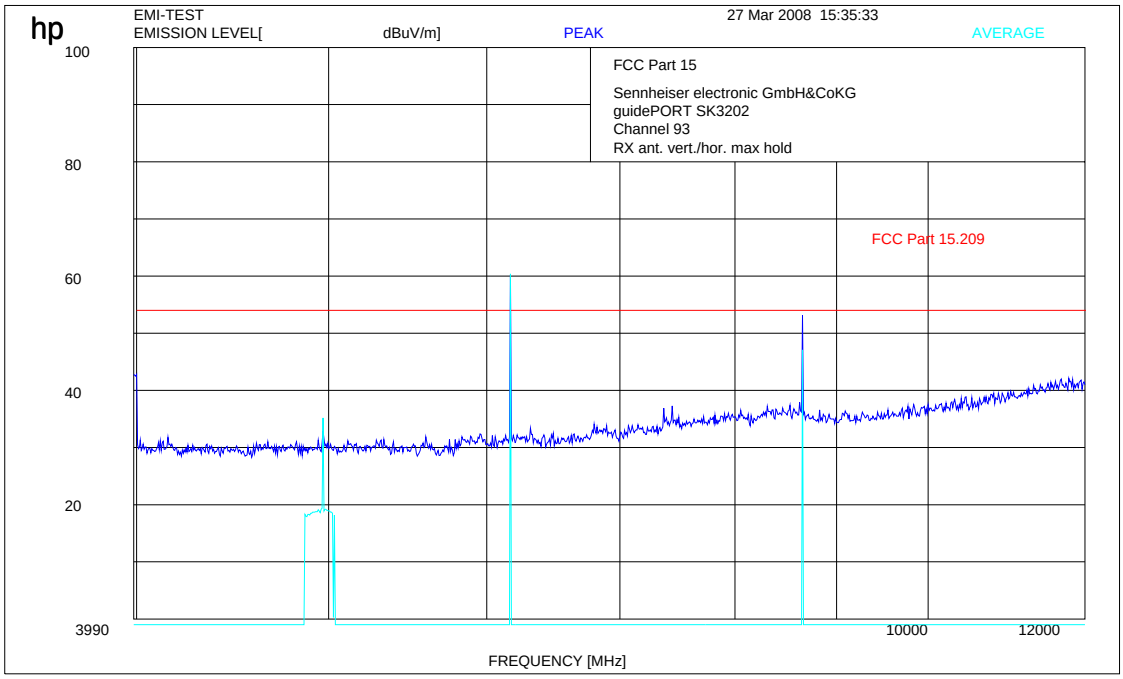
Tx : 4 GHz – 12 GHz



Channel 93
Tx : 30 MHz1- 4 GHZ

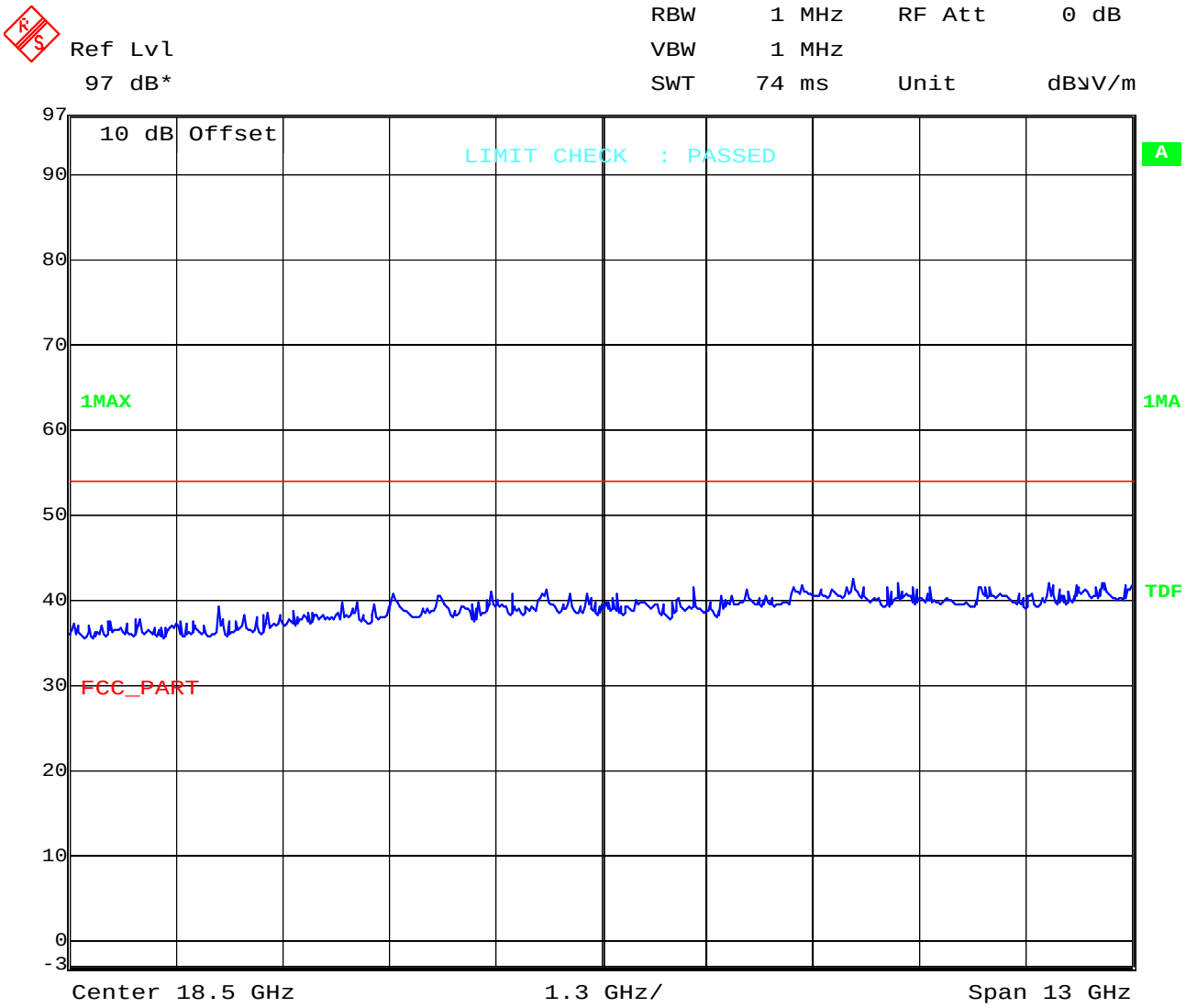


Tx : 4 GHz – 12 GHz



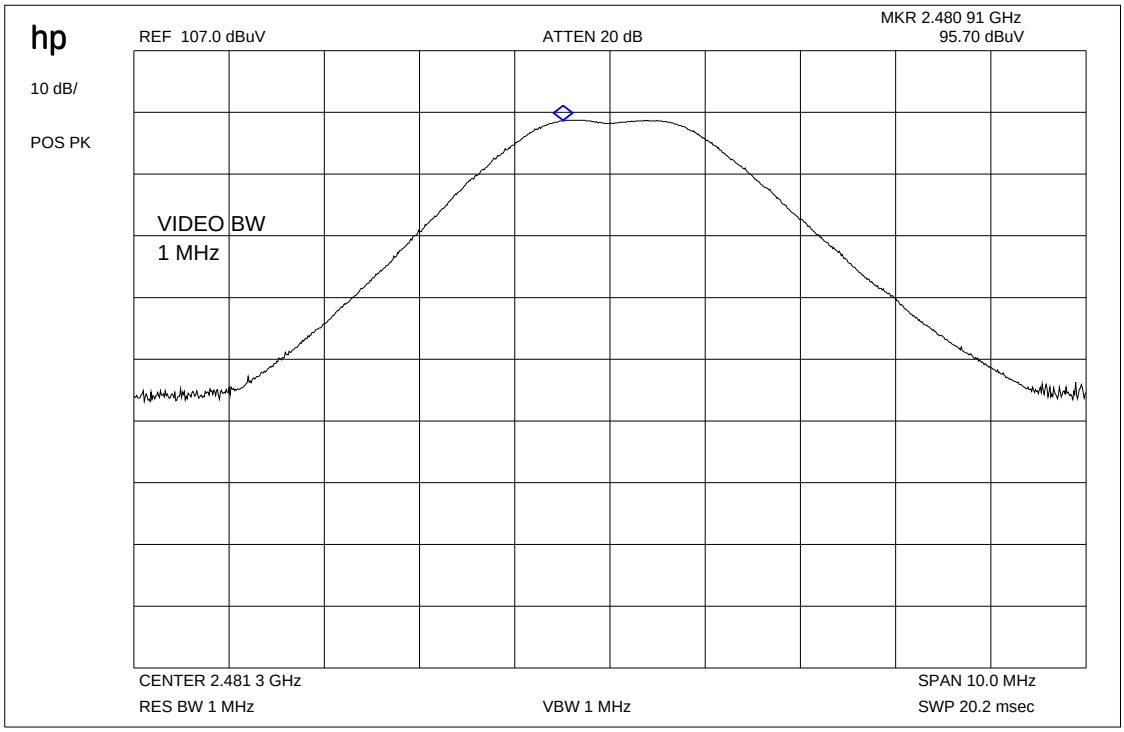
Spurious up to 25 GHz

This measurement is valid for all channels



4.4 Band-edge compliance of radiated emissions

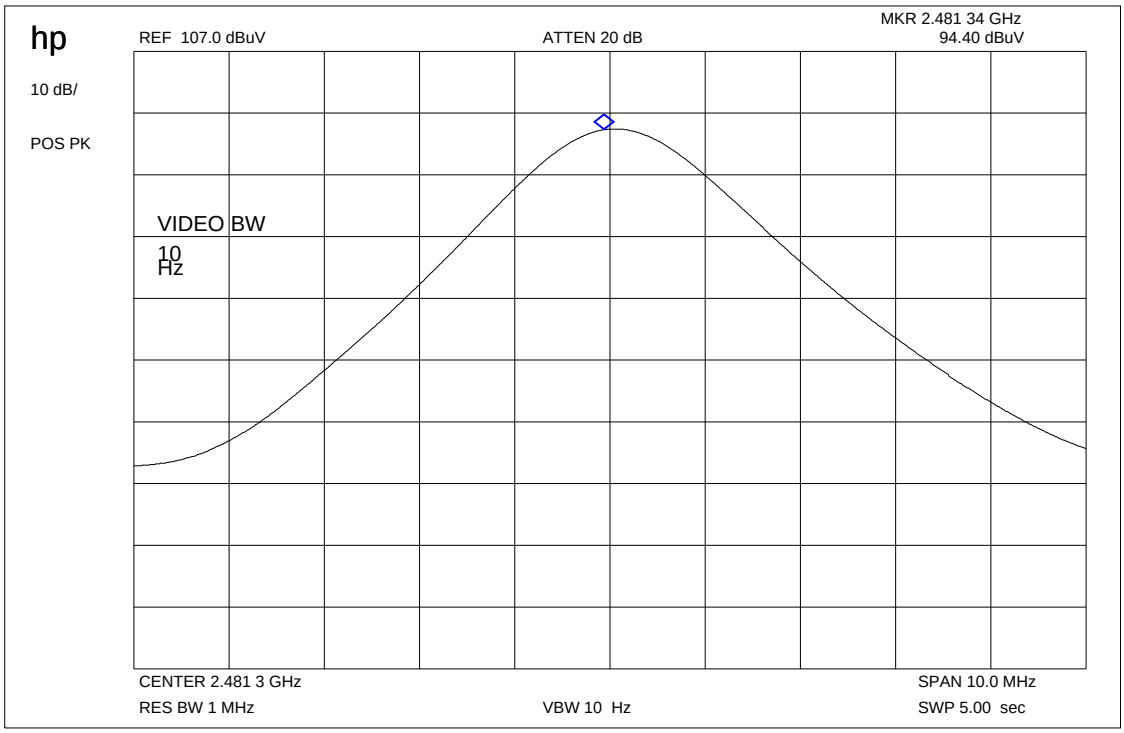
Plot 1 : Max field strength in 3m distance (single frequency) peak



Result:

Frequency		Cable loss, Amp gain, Antenna factor	Results
2481 MHz	96.7 dBµV/m	-13.7 dB	83.0 dBµV/m at 3m

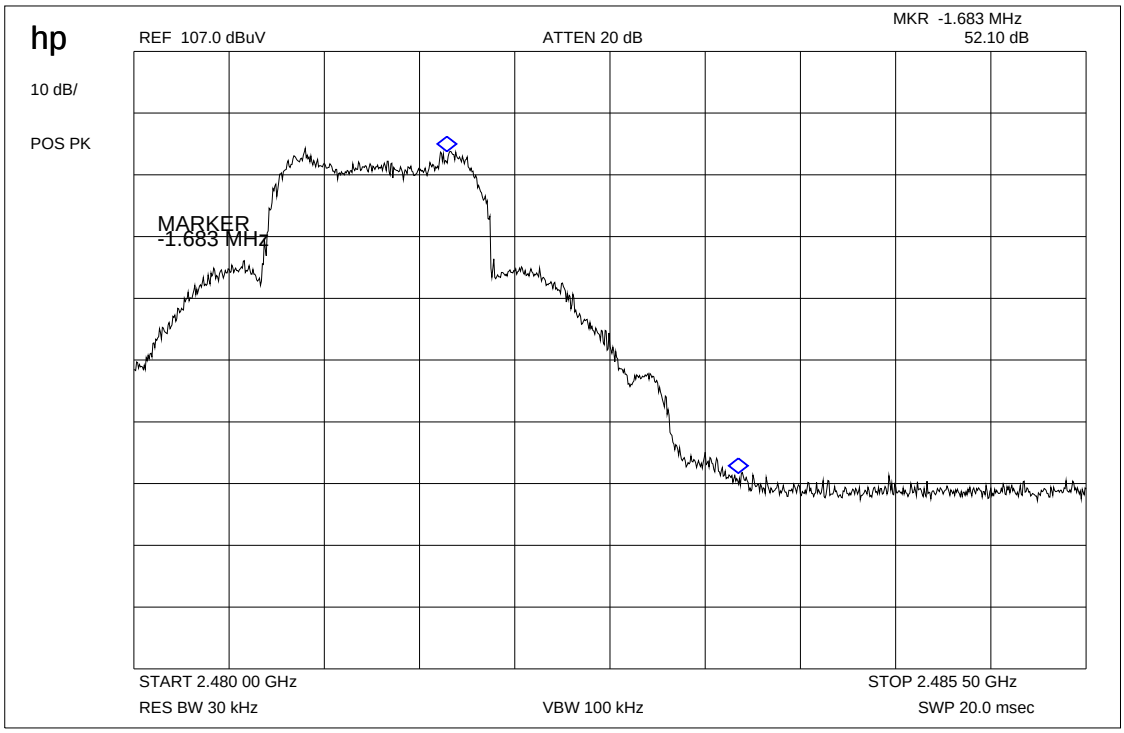
Plot 3 : Max field strength in 3m distance (single frequency) average



Result:

Frequency	Meter reading	Cable loss, Amp gain, Antenna factor	Results
2462 MHz	94.4 dBµV/m	-13.7 dB	80.7 dBµV/m at 3m

Plot 4: Marker-Delta Method RBW/VBW = 1% of span, measured with antenna 2

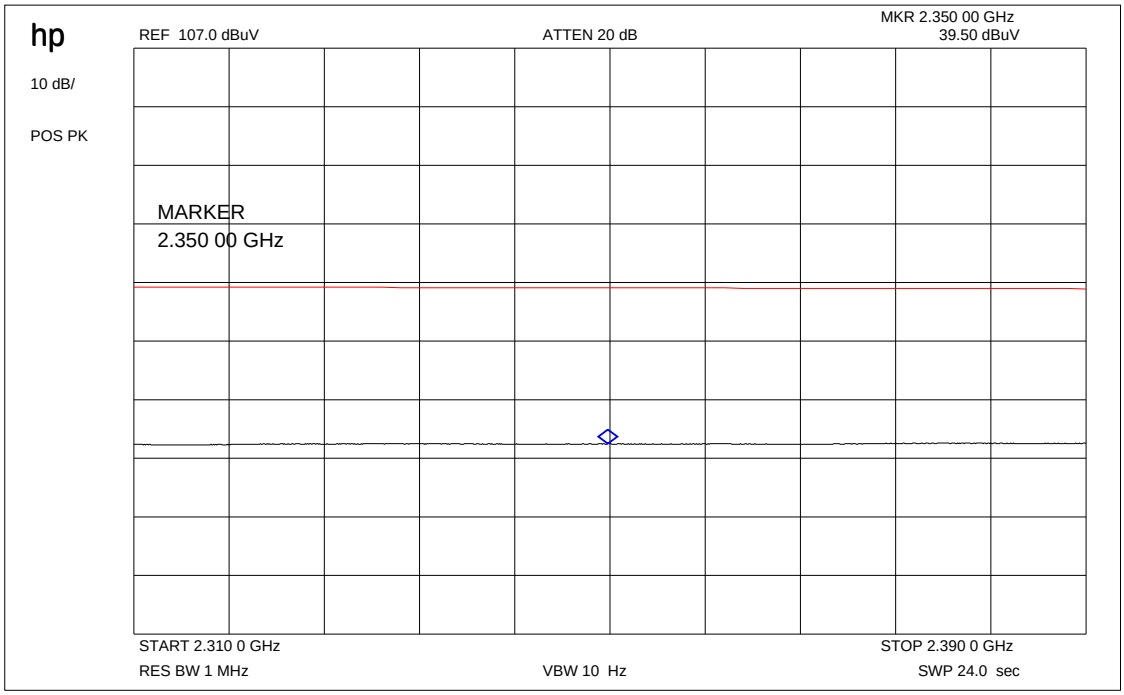


Result:

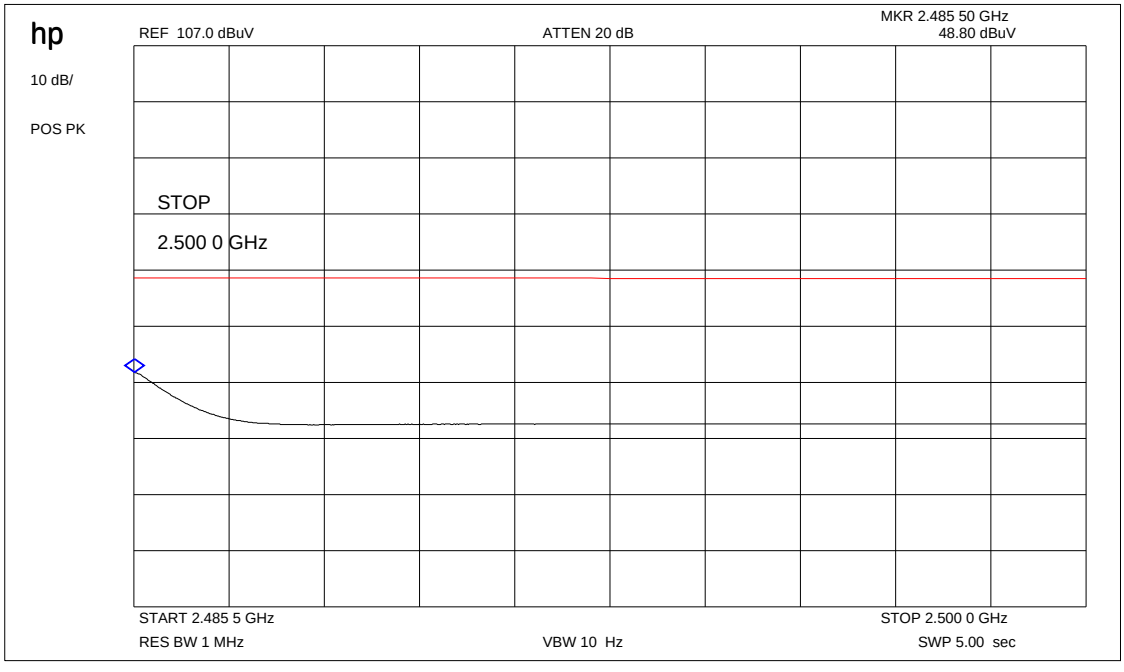
Marker-Delta-Value : 52.1 dB

This measurement was made to show that the behavior of the system is conform to FCC 15.205 (restricted bands)

Restriceted Band 2310 to 2390 MHz



Restriceted Band 2485.5 to 2500 MHz



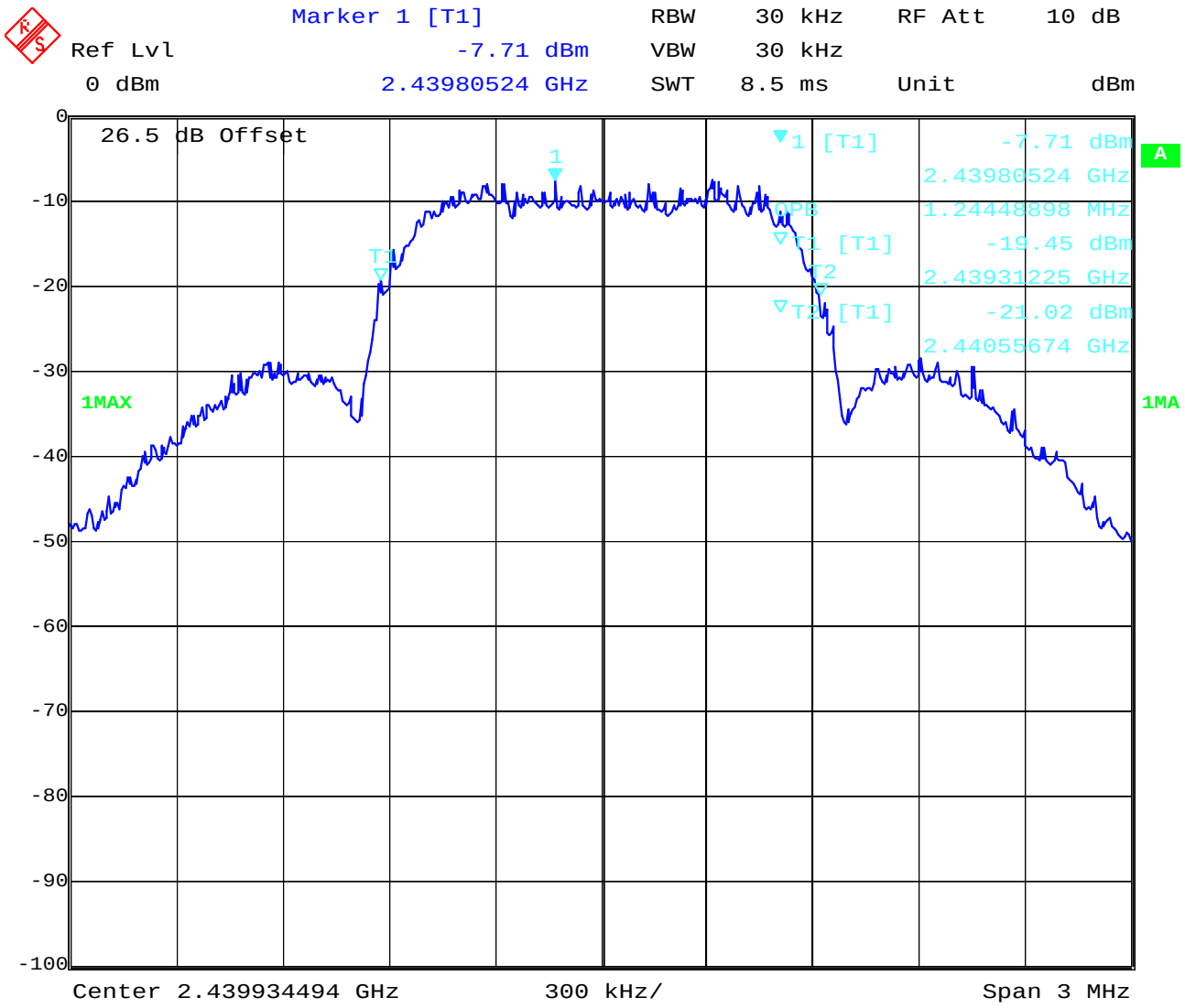
Results & Limits:

Radiated field strength

The field strength was measured with an EMI measuring receiver and 1 MHz RBW / VBW for peak and with 1MHz RBW / 10Hz VBW for average at a distance of 3m.

high channel	setup	measured value (3m)	correction factor (3m)	calculated value (3m)
Max. peak value	1 MHz RBW 1 MHz VBW	96.7 dBµV/m	-13.7 dB	83.0 dBµV/m
Max. average value	1 MHz RBW 10 Hz VBW	94.4 dBµV/m	-13.7 dB	80.7 dBµV/m
Delta value	Peak 300 kHz RBW/VBW	52.1 dB		
Value at band edge	limit 54 dBµV/m			28.6 dBµV/m
Statement:				Complies

Occupied Bandwidth 20dB



OBW: 1244.49 kHz

Used Testequipment

Anechoic chamber C:

No	Equipment/Type	Manuf.	Serial Nr.	Inv. No. Cetecom	Last Calibration	Frequency (months)	Next Calibration
1	Anechoic chamber	MWB	87400/02	300000996	Monthly verification		
2	System-Rack 85900	HP I.V.	*	300000222	n.a.		
3	Measurement System 1						
4	Spektrum Analyzer 8566B	HP	2747A05306	300001000	05.10.2006	24	05.10.2008
5	Spektrum Analyzer Display 85662A	HP	2816A16541	300002297	05.10.2006	24	05.10.2008
6	Quasi-Peak-Adapter 85650A	HP	2811A01131	300000999	05.10.2006	24	05.10.2008
7	RF-Preselector 85685A	HP	2837A00779	300000218	08.11.2006	24	08.11.2008
8	PC Vectra VL	HP		300001688	n.a.		
9	Software EMI	HP		300000983	n.a.		
10	Measurement System 2						
11	FSP 30	R&S	100623	ICT 300003464	05.10.2007	24	15.10.2009
12	PC	F+W			n.a.		
13	TILE	TILE			n.a.		
14	Biconical antenna	EMCO	S/N: 860 942/003		Monthly verification (System cal.)		
15	Log. Period. Antenna 3146	EMCO	2130	300001603	Monthly verification (System cal.)		
16	Double Ridged Antenna HP 3115P	EMCO	3088	300001032	Monthly verification (System cal.)		
17	Active Loop Antenna 6502	EMCO	2210	300001015	Monthly verification (System cal.)		
18	Power Supply 6032A	HP	2818A03450	300001040	12.05.2007	36	12.05.2010
19	Busisolator	Kontron		300001056	n.a.		
20	Leitungsteiler 11850C	HP		300000997	Monthly verification (System cal.)		
21	Power attenuator 8325	Byrd	1530	300001595	Monthly verification (System cal.)		
22	Band reject filter WRCG1855/1910	Wainwright	7	300003350	Monthly verification (System cal.)		
23	Band reject filter WRCG2400/2483	Wainwright	11	300003351	Monthly verification (System cal.)		

Sytstem Rack Room 005 :

No	Equipment/Type	Manuf.	Serial Nr.	Inv. No. Cetecom	Last Calibration	Frequency (months)	Next Calibration
1	FSP 30	R&S		300003575	02.04.2007	24	02.04.2009
2	CBT	R&S	100313	300003516	24.10.2006	24	24.10.2008
3	Switch Matrix	HP		300000929	n.a.		
4	Power Supply	HP	3041A00544	300002270	13.05.2007	36	13.05.2010
5	Signal Generator	R&S	836206/0092	300002680	30.05.2007	36	30.05.2010

Signalling Units:

No	Equipment/Type	Manuf.	Serial Nr.	Inv. No. Cetecom	Last Calibration	Frequency (months)	Next Calibration
1	CBT	R&S	100313	300003516	24.10.2006	24	24.10.2008
2	CBT	R&S	100185	300003416	21.02.2006	24	21.02.2008
3	CMU-200	R&S	103992	300003231	27.04.2007	12	27.04.2008
4	CMU-200	R&S	106240	300003321	02.05.2006	24	02.05.2008

SRD Laboratory Room 002:

No	Equipment/Type	Manuf.	Serial Nr.	Inv. No. Cetecom	Last Calibration	Frequency (months)	Next Calibration
1	System Controller PSM 12	R&S	835259/007	3000002681-00xx	n.a.		
2	Memory Extension PSM-K10	R&S	To 1	3000002681	n.a.		
3	Operating Software PSM-B2	R&S	To 1	3000002681	n.a.		
4	19'' Monitor		22759020-ED	3000002681	n.a.		
5	Mouse		LZE 0095/6639	3000002681	n.a.		
6	Keyboard		G00013834L461	3000002681	n.a.		
7	Spectrum Analyser FSIQ 26	R&S	835540/018	3000002681-0005	01.08.2006	24	01.08.2008
8	Tracking Generator FSIQ-B10	R&S	835107/015	3000002681	s.No.7		
10	RF-Generator SMIQ03 (B1 Signal)	R&S	835541/056	3000002681-0002	01.08.2006	36	01.08.2009
11	Modulation Coder SMIQ-B20	R&S	To 10	3000002681	s.No.10		
12	Data Generator SMIQ-B11	R&S	To 10	3000002681	s.No.10		
13	RF Rear Connection SMIQ-B19	R&S	To 10	3000002681	s.No.10		
14	Fast CPU SM-B50	R&S	To 10	3000002681	s.No.10		
15	FM Modulator SM-B5	R&S	835676/033	3000002681	s.No.10		
16	RF-Generator SMIQ03 (B2 Signal)	R&S	835541/055	3000002681-0001	01.08.2006	36	01.08.2009
17	Modulation Coder SMIQ-B20	R&S	To 16	3000002681	s.No.16		
18	Data Generator SMIQ-B11	R&S	To 16	3000002681	s.No.16		
19	RF Rear Connection SMIQ-B19	R&S	To 16	3000002681	s.No.16		

20	Fast CPU SM-B50	R&S	To 16	3000002681	s.No.16		
21	FM Modulator SM-B5	R&S	836061/022	3000002681	s.No.16		
22	RF-Generator SMP03 (B3 Signal)	R&S	835133/011	3000002681-0003	01.08.2006	36	01.08.2009
23	Attenuator SMP-B15	R&S	835136/014	3000002681	S.No.22		
24	RF Rear Connection SMP-B19	R&S	834745/007	3000002681	S.No.22		
25	Power Meter NRVD	R&S	835430/044	3000002681-0004	01.08.2006	24	01.08.2008
26	Power Sensor NRVD-Z1	R&S	833894/012	3000002681-0013	01.08.2006	24	01.08.2008
27	Power Sensor NRVD-Z1	R&S	833894/011	3000002681-0010	01.08.2006	24	01.08.2008
28	Rubidium Standard RUB	R&S		3000002681-0009	01.08.2006	24	01.08.2008
29	Switching and Signal Conditioning Unit SSCU	R&S	338864/003	3000002681-0006	01.08.2006	24	01.08.2008
30	Laser Printer HP Deskjet 2100	HP	N/A	3000002681-0011	n.a.		
31	19'' Rack	R&S	11138363000004	3000002681	n.a.		
32	RF-cable set	R&S	N/A	3000002681	n.a.		
33	IEEE-cables	R&S	N/A	3000002681	n.a.		
34	Sampling System FSIQ-B70	R&S	835355/009	3000002681	s.No.7		
35	RSP programmable attenuator	R&S	834500/010	3000002681-0007	01.08.2006	24	01.08.2008
36	Signalling Unit	R&S	838312/011	3000002681	n.a.		
37	NGPE programmable Power Supply for EUT	R&S	192.033.41	3000002681			
38	Climatic box VT 4002	Heraeus Vötsch	58566046820010	300003019	11.05.2007	24	11.05.2009
39	Signaling Unit CMU200	R&S	832221/0055	300002862	12.01.2006	24	12.01.2008
40	Power Splitter 6005-3	Inmet Corp.	none	300002841	23.12.2006	24	23.12.2008
41	SMA Cables SPS-1151-985-SPS	Insulated Wire	different	different	n.a.		
42	CBT32 with EDR Signaling Unit	R&S					
43	Coupling unit	Narda	N/A	--	n.a.		
44	2xSwitch Matrix PSU	R&S	872584/021	300001329	n.a.		
45	RF-cable set	R&S	N/A	different	n.a.		
46	IEEE-cables	R&S	N/A	--	n.a.		

Anmerkung: 3000002681-00xx als Systeme inventarisiert

SRD Laboratory Room 005:

No	Equipment/Type	Manuf.	Serial Nr.	Inv. No. Cetecom	Last Calibration	Frequency (months)	Next Calibration
1	Spektrum Analyzer 8566B	HP	2747A05275	300000219	08.11.2006	24	08.11.2008
2	Spektrum Analyzer Display 85662A	HP	2816A16497	300001690	08.11.2006	24	08.11.2008
3	Quasi-Peak-Adapter 85650A	HP	2811A01135	300000216	08.11.2006	24	08.11.2008
4	Power Supply	Heiden	003202	300001187	12.05.2007	36	12.05.2010
5	Power Supply	Heiden	1701	300001392	12.05.2007	36	12.05.2010

C.BER Bluetooth Rack Room AC2:

No	Equipment/Type	Manufact.	Inv. No. Cetecom	Last Calibration	Frequency (months)	Next Calibration
1	System Controller with XP Prof. & C.BER Control Software	F&W	300003580	na		
2	GPIB to USB Converter	Agilent	300003426	na		
3	Spectrum Analyser FSIQ26	R&S	300002681-005	1.08.2006	24	1.08.2008
	Sampling System FSIQ-B70	R&S	300002681-005	1.08.2006	24	1.08.2008
	Tracking Generator FSIQ-B10 for FSIQ26	R&S	300002681-005	1.08.2006	24	1.08.2008
4	RF-Generator SMIQ03 (Interferer Signal)	R&S	300002681-001	1.08.2006	24	1.08.2008
	Modulation Coder SMIQ-B20	R&S	300002681-001	1.08.2006	24	1.08.2008
	Data Generator SMIQ-B11	R&S	300002681-001	1.08.2006	24	1.08.2008
	RF Rear Connection SMIQ-B19	R&S	300002681-001	1.08.2006	24	1.08.2008
	Fast CPU SM-B50	R&S	300002681-001	1.08.2006	24	1.08.2008
	FM Modulator SM-B5	R&S	300002681-001	1.08.2006	24	1.08.2008
5	Rubidium Standard RUB	R&S	300002681-009	1.08.2006	24	1.08.2008
6	Switching Unit 3488A including 2 44476A cards	HP	300000926	Verified with path compensation		
	44472A VHF switch	HP	300000926	Verified with path compensation		
7	Signalling Unit: CBT with EDR	R&S	300003416	24.06.2006	24	24.06.2008
8	RF-cable set	different	no	Verified with path compensation		
9	IEEE-cables	R&S	no	na		
10	NGPE programmable Power Supply for EUT	R&S	400000078	1.08.2006	24	1.08.2008
11	Coupling Unit 4324-2	Narda	no	Verified with path compensation		
12	Climatic Chamber VT4002	Voetch	300003019	11.05.2207	24	11.05.2009
13	6 dB Attenuator 1W	Narda	no	Verified with path compensation		
14	DCBlocker 30 MHz to 12.75 GHz 1W	Narda	no	Verified with path compensation		

Anechoic chamber F:

No.	Instrument/Ancillary	Manufacturer	Type	Serial-No.	Internal identification
	Radiated emission in chamber F				
F-1	Control Computer	F+W		FW0502032	300003303
F-2	Bilog antenna	Chase	CBL 6112A	2110	300000573
F-3a	Amplifier	Veritech Microwave Inc.	0518C-138	- / -	- / -
F-4b	Switch	HP	3488A	- / -	300000368
F-5	EMI Test receiver	R&S	ESCI	100083	300003312
F-6	Turntable Controller	EMCO	1061 3M	1218	300000661
F-7	Tower Controller	EMCO	1051 Controller	1262	300000625
F-8	Tower	EMCO	1051 Tower	1262	300000625
F-9	Ultra Notch-Filter Rejected band Ch. 62	WRCD		9	
	Radiated immunity in chamber F				
F-10	Control Computer	F+W		FW0502032	300003303
F-11	Signal Generator	R&S	SML 03	102519	300003407
F-12	RF-Amplifier	ar	50W1000	12932	300001438
F-13	Directional Coupler	ar	DC 3010	12708	300001428
F-14	Logper Antenna	R&S	HL023A1	323704/016	300001476
F-15	RF-Amplifier	ar	60S1G3	313649	300003410
F-16	Directional Coupler	ar	DC7144A	312786	300003411
F-17	Horn Antenna	ar	AT 4002	19739	300000633
F-18	Power Meter	R&S	NRV	860327/024	F033
F-19	Power sensor	R&S	URV5-Z2	839080/005	300002844.02
F-20	Power sensor	R&S	URV5-Z2	830755/057	F032
	Harmonics and flicker in front of chamber F				
F-21	Flicker and Harmonics Test System	Spitzenberger & Spies	PHE4500/B I PHE4500/B II	B5983 B5984	300000210
F-22	Control Unit	Spitzenberger & Spies	STE	B5980	300000210
F-23	Power Amplifier	Spitzenberger & Spies	EP 4500/B	B5976	300000210
F-24	Conect Panel	Spitzenberger & Spies	Conect panel	B5982	300000210
F-25	Power Supply	Spitzenberger & Spies	NT-EP 4500	B3977	300000210
F-26	Additional transformer	Spitzenberger & Spies	UT-EP 4500	B5978	300000210
F-27	Analyzer Reference System	Spitzenberger & Spies	ARS 16/1	A3509 07/0 0205	300003314
F-26	Power Supply	Hewlett Packard	6032 A	2920 A 04466	300000580

5 Annex A: Photographs of Test site

Photo 1 (Radiated Emissions):

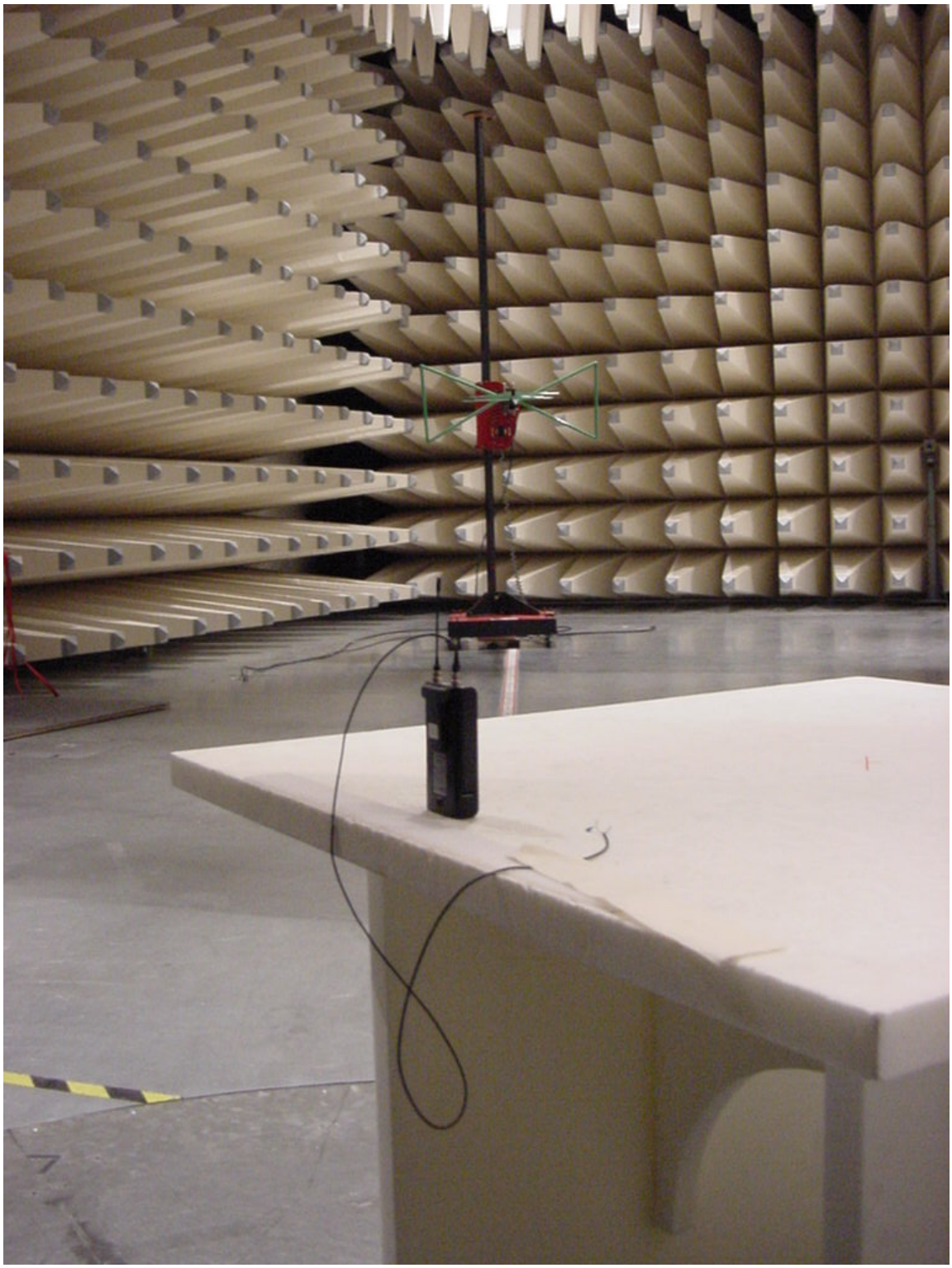


Photo 2 (Radiated Emissions):

6 Annex B: External Photographs of the Equipment

Photo 1:

Photo 2:


US
SENNHEISER
guidePORT
SK 3202-0-1
FREQ RANGE 2.4-2.4823 GHz
ART NO 502372
SER NO 2507100009
FCC ID XXXXXXXXX
IC 2099XXXXXXXXX
MADE IN GERMANY
CE 0682

7 Annex C: INTERNAL PHOTOGRAPHS OF THE EQUIPMENT

Photo 3:

Photo 4:

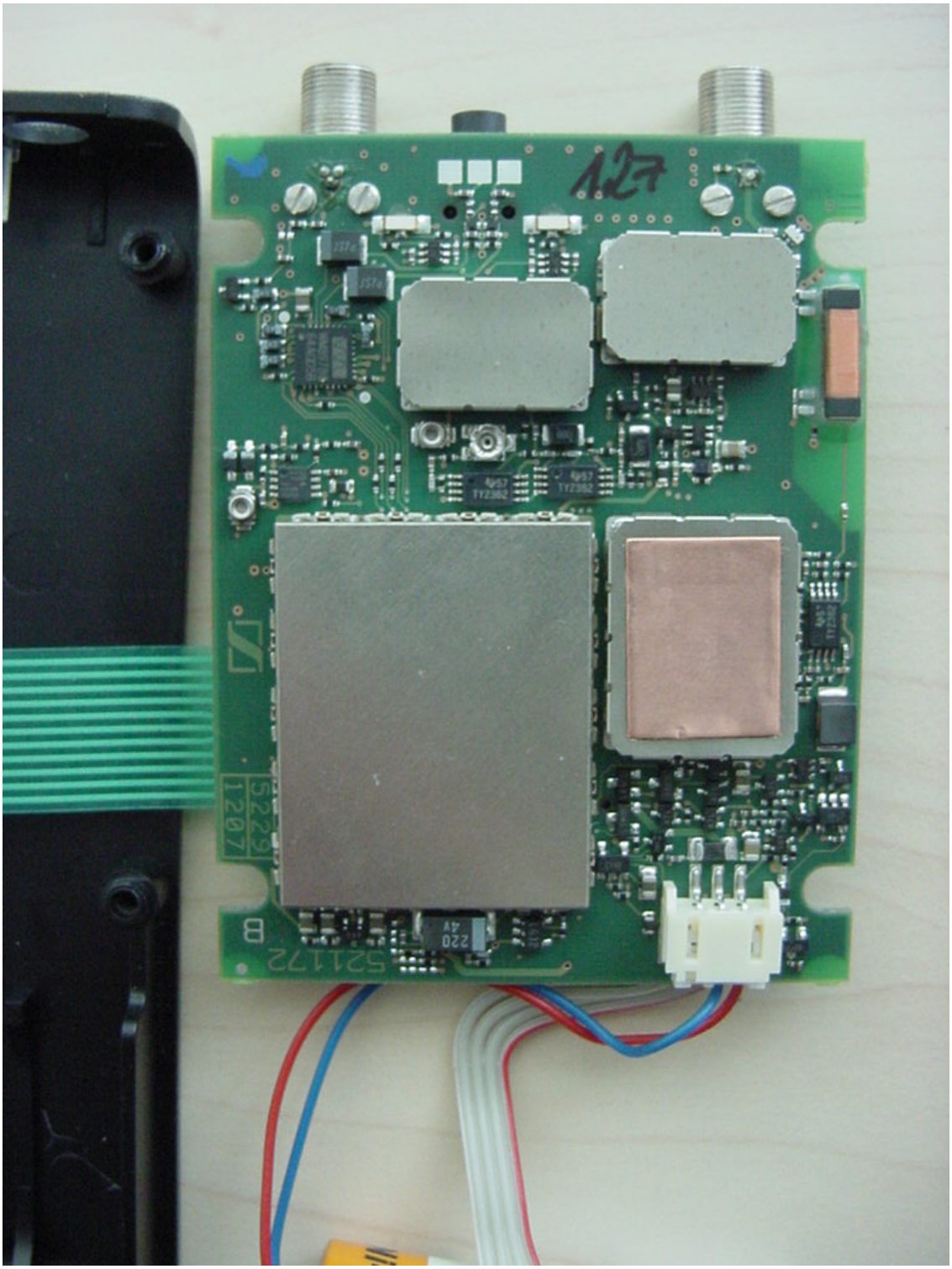
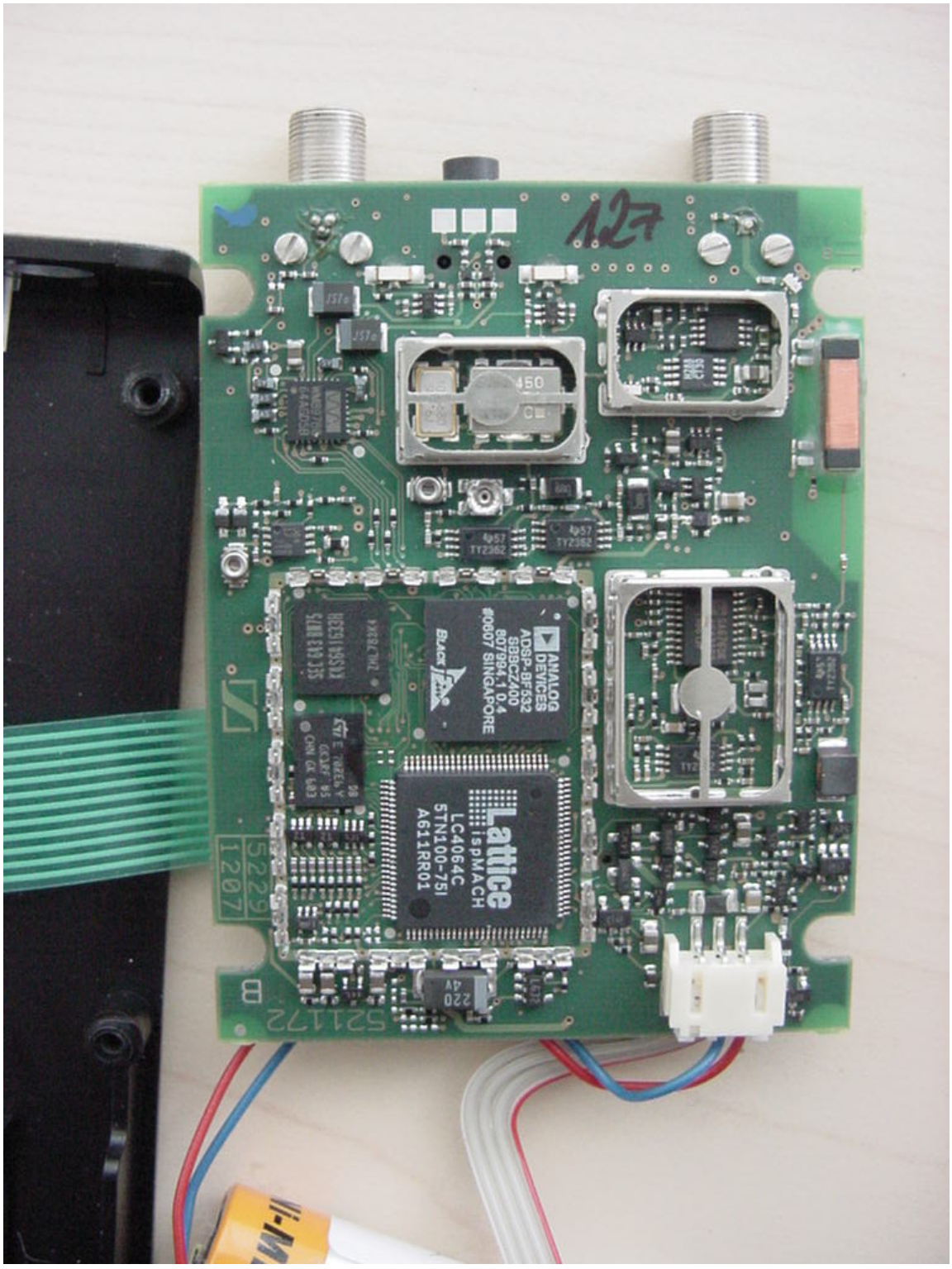


Photo 5: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ANALOG DEVICES
ADSP-BF532
Lattice
ispMACH
LC4064C
5TN100-75I
A611RR01