



TTI-P-G166/98

Accredited Bluetooth Test Facility (BQTF)

Test report no.: 2-2883-01-02/02
FCC Part15.247/CANADA RSS-210
WLAN USB card AWL-1100U

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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

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Accredited testing laboratory

DAR-registration number : TTI-P-G-166/98-30

Accredited Bluetooth™ Test Facility (BQTF)

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1.3 Details of applicant

Name : ACROWAVE System Co., Ltd.
Street : 6F Maru Bldg, #86-6 Nonhyun-dong Kangnam Gu
City : Seoul 135-818
Country : Korea
Telephone : +82 2 547 8778
Telefax : +82 2 547 4779
Contact : Mr. Sanghee Song
Telephone: +82 2 539 9666

1.4 Application details

Date of receipt of application : 2002-06-02
Date of receipt of test item : 2002-06-02
Date of test : 2002-06-04 to 2002-06-06

1.5 Test item

Type of equipment : **DSSS RLAN IEEE802.11b USB card**
Type designation : **AWL-1100U**
Manufacturer : applicant
Street :
City :
Country :
Serial number : M040091CA001500
Additional information :
Frequency : 2400 – 2483.5 MHz
Power Output : 83,18 mW (EIRP)
Type of modulation : 22M0P7D (DSSS)
Number of channels : 13
Antenna : print antenna
Power supply : 5.0 V DC from PC
Type of equipment : Plug-in radio device
Temperature range : $\pm 0^{\circ}\text{C}$ - $+55^{\circ}\text{C}$

1.6 Test standards: FCC Part 15 §15.247 / CANADA RSS-210

The detector function and selection of bandwidth are according ANSI C63.2-1996 item 8.2.1 and ANSI C63.4-1992 Item 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 1 MHz, waveguide horns.

2 Technical test

2.1 Summary of test results

The radiated measurements were performed with the build-in antenna and a measuring system including turntable and antenna lift to cover all three antenna planes.

The radiated measurements were performed vertical and horizontal, horizontal results are about 6 dB lower over the complete frequency range.

The antenna gain measurement was performed by the difference between conducted and radiated output measurement.

1. In an anechoic antenna test chamber, a half-wave dipole antenna for the frequency band of interest is placed at the reference center of the chamber. An RF Signal source for the frequency band of interest is connected to the dipole with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A known (measured) power (Pin) is applied to the input of the dipole, and the power received (Pr) at the chamber's probe antenna is recorded.
2. A "reference path loss" is established as $Pin + 2.1 - Pr$.
3. The EUT is substituted for the dipole at the reference center of the chamber. The EUT is put into TX mode and a scan is performed to obtain the radiation pattern.
4. From the radiation pattern, the coordinates where the maximum radiated power occurs is identified.
5. Power measurements are performed with the receiving antenna placed at the coordinates determined in Step 3 to determine the output power. The "reference path loss" from Step 1 is added to this result.
6. This value is EIRP since the measurement is calibrated using a half-wave dipole antenna of known gain (2.1 dBi) and known input power (Pin).
7. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.1dBi$.

The conducted power measurement was performed by a temporary added coax adapter.


All measurement settings are according to FCC 15.35, 15.205, 15.209, 15.247 and the „Measurement guidelines for DSSS systems“.

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

The product fulfils also the requirements for CANADA RSS-210.

FINAL VERDICT : PASS

Technical responsibility for area of testing :

2002-07-26	RSC 8414	Ames H.	
Date	Section	Name	Signature

Technical responsibility for area of testing :

2002-07-26	RSC8412	Hausknecht D.	
Date	Section	Name	Signature

2.2 Test report

TEST REPORT

Test report no. : 2-2883-01-02/02

TEST REPORT REFERENCE

LIST OF MEASUREMENTS

Paragraph	PARAMETER TO BE MEASURED	PAGE
	Transmitter parameters	
§ 15.204	Antenna gain	7
§ 15.247 (a)(2)	Spectrum bandwidth of a DSSS System	8
§ 15.247 (b)(1)	Maximum peak output power	12
§ 15.247 (d)	Power spectral density	20
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Antenna Gain**SUBCLAUSE § 15.204**

The antenna gain of the complete system is calculated by the difference of conducted power of the module and the radiated power in EIRP.

	low channel	mid channel	high channel
Conducted power	19.59 dBm	18.72 dBm	17.99 dBm
Radiated power	19.20 dBm	18.20 dBm	17.60 dBm
Gain	-0.39 dBi	-0.52 dB	-0.39 dB

The calculated antenna gain is between -0.39 and -0.52 dB for the build-in antenna.

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

17 – 24, 64

Spectrum Bandwith of a DSSS System

§15.247(a)

6 dB bandwidth

TEST CONDITIONS		6 dB BANDWIDTH (kHz)		
		2412	2437	2472
Frequency (MHz)				
T _{nom} (22.4)°C	V _{nom} (5.0)V	11222	11172	11172
Measurement uncertainty		±1kHz		

RBW / VBW as provided in the „Measurement Guidelines“ (DA 00-705, March 30, 2000)

LIMIT

SUBCLAUSE §15.247(a) (2)

The minimum 6dB bandwith shall be at least 500 KHz

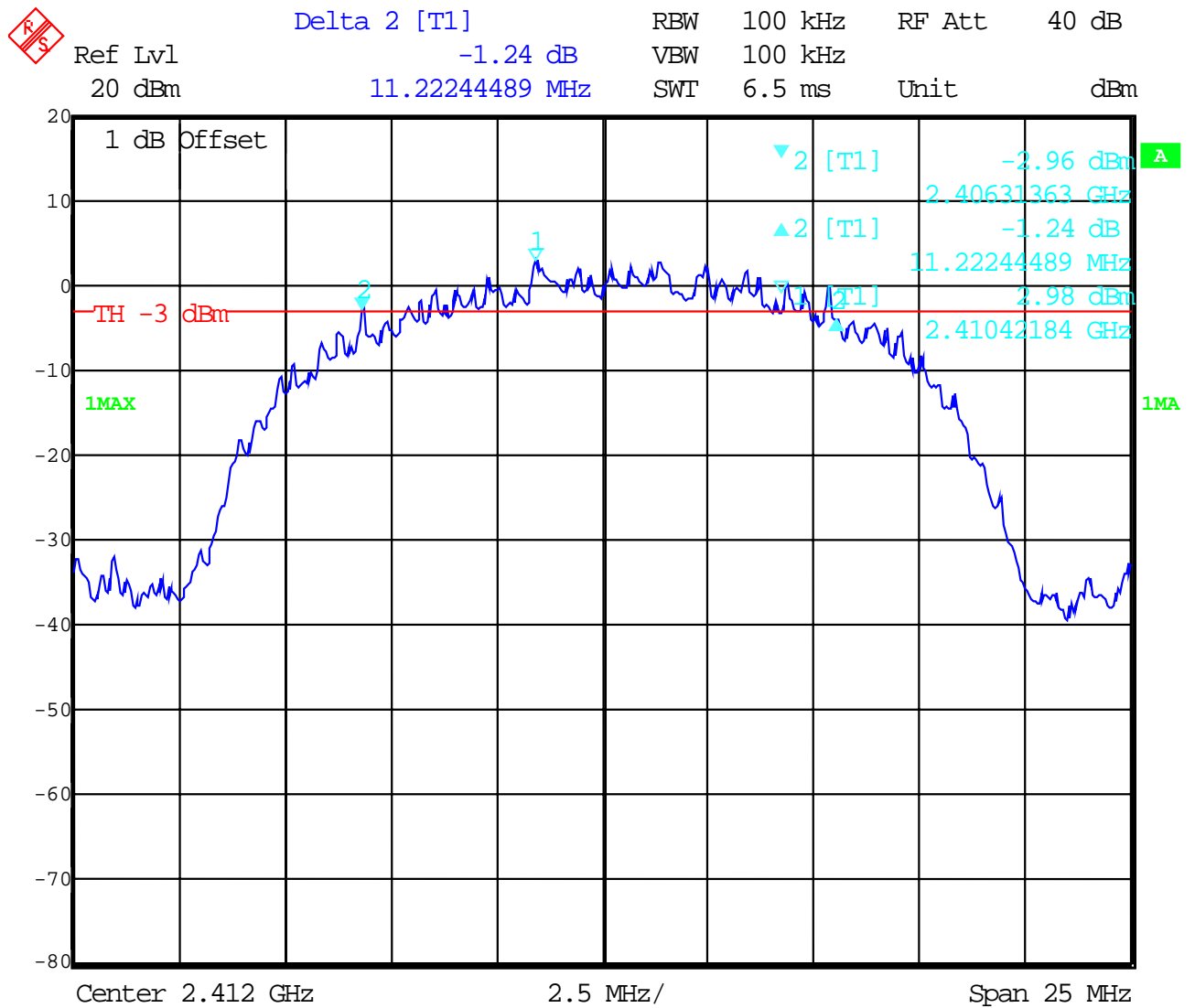
REFERENCE NUMBER(S) OF TEST EQUIPMENT USED
(for reference numbers see test equipment listing)

Spectrum Bandwidth of a DSSS System

§15.247(a)

6 dB bandwidth

Channel 1

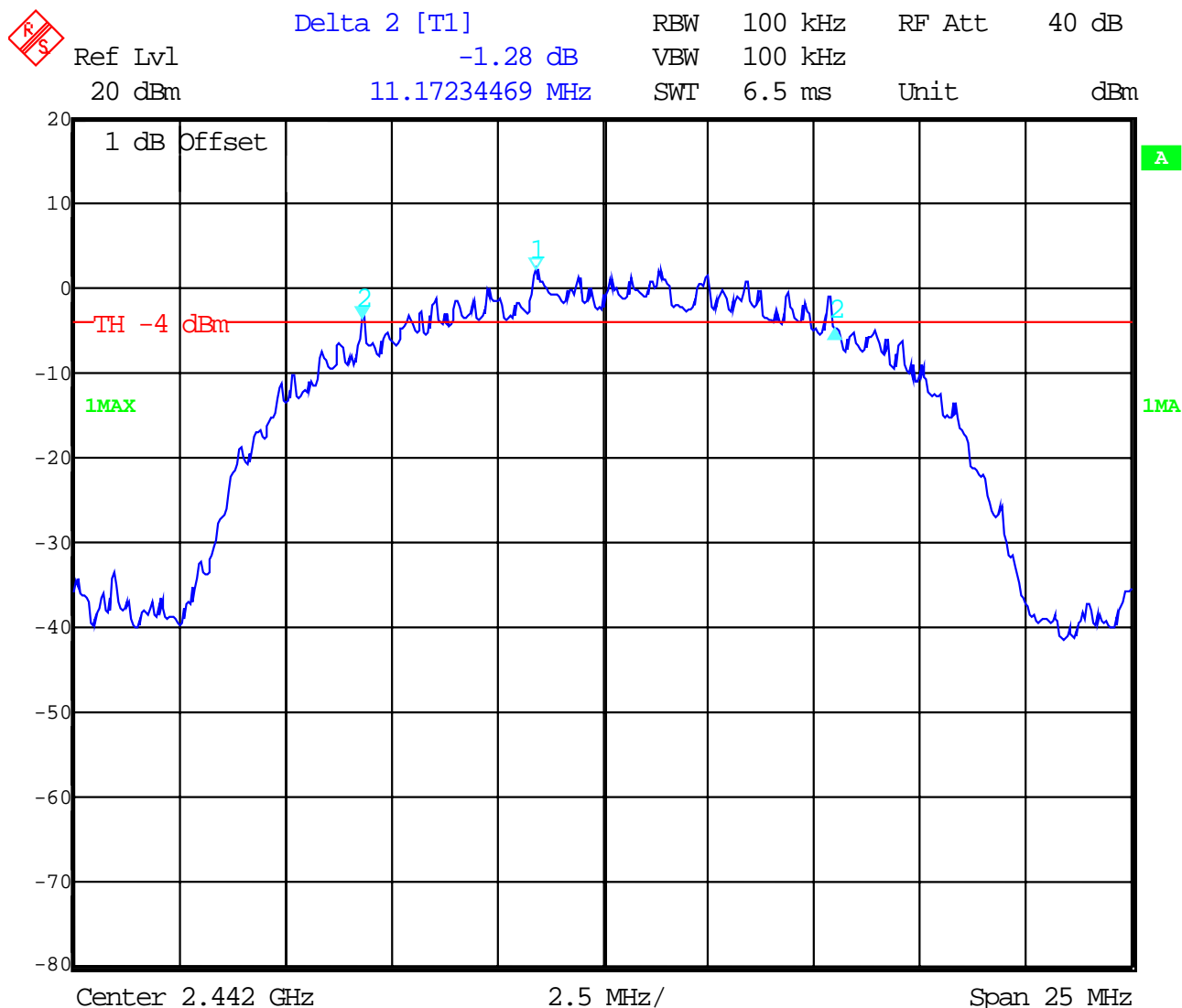


Spectrum Bandwidth of a DSSS System

§15.247(a)

6 dB bandwidth

Channel 7



Spectrum Bandwith of a DSSS System

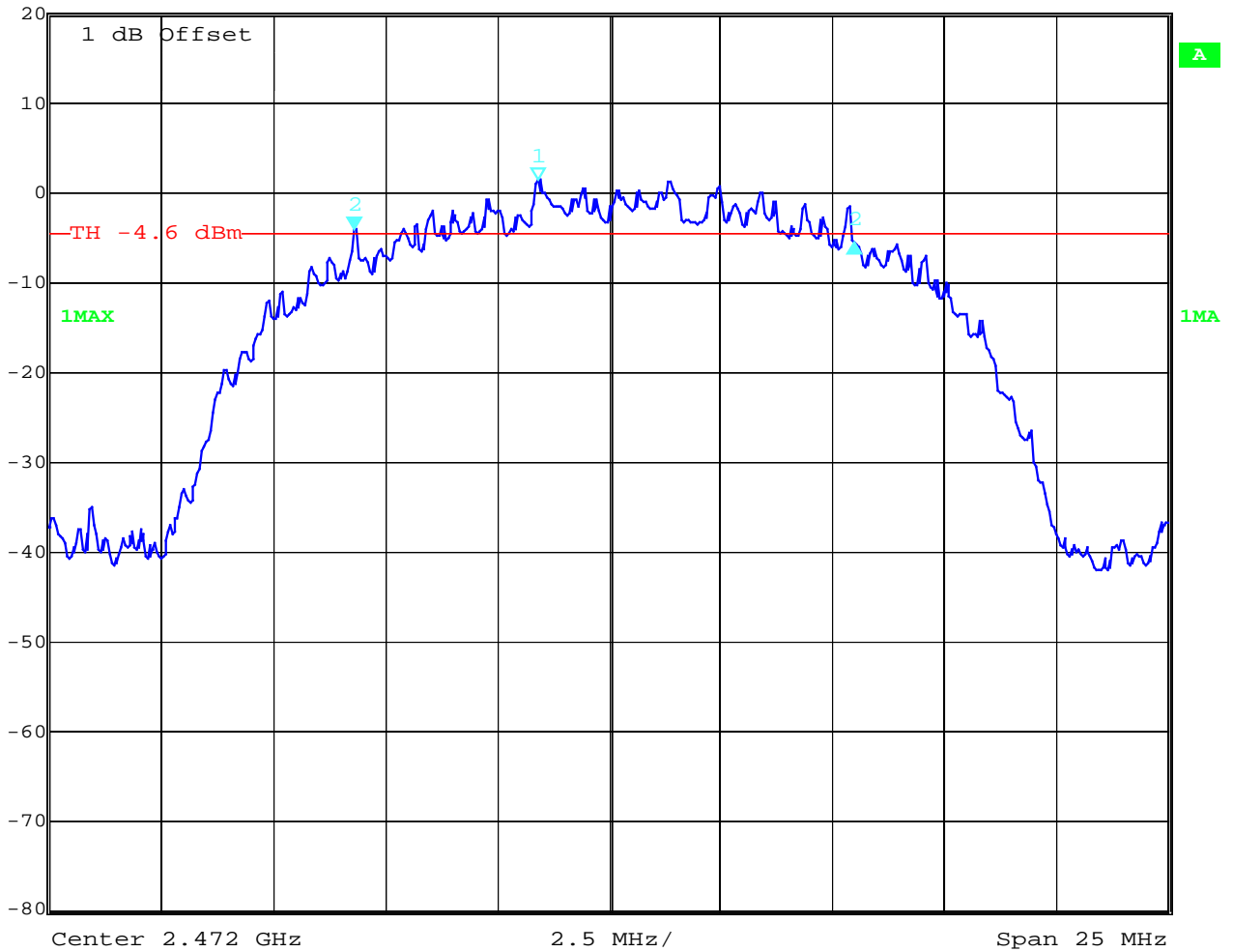
§15.247(a)

6 dB bandwidth

Channel 13:



	Delta 2 [T1]	RBW	100 kHz	RF Att	40 dB
Ref Lvl	-1.47 dB	VBW	100 kHz		
20 dBm	11.17234469 MHz	SWT	6.5 ms	Unit	dBm



Date: 6.JUN.2002 13:17:28

**MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)**

SUBCLAUSE § 15.247 (b) (1)

TEST CONDITIONS		MAXIMUM PEAK OUTPUT POWER (mW)		
		2412	2442	2472
Frequency (MHz)				
T _{nom} (22.4)°C	V _{nom} (5.0)V	Peak : 90.99 AV : 16.37	Peak : 74.47 AV : 13.58	Peak : 62.96 AV : 11.51
Maximum deviation from output power under extreme test conditions (dBc)		0.5	0.5	0.5
Measurement uncertainty		±3dB		

RBW/VBW : 10 MHz

LIMIT

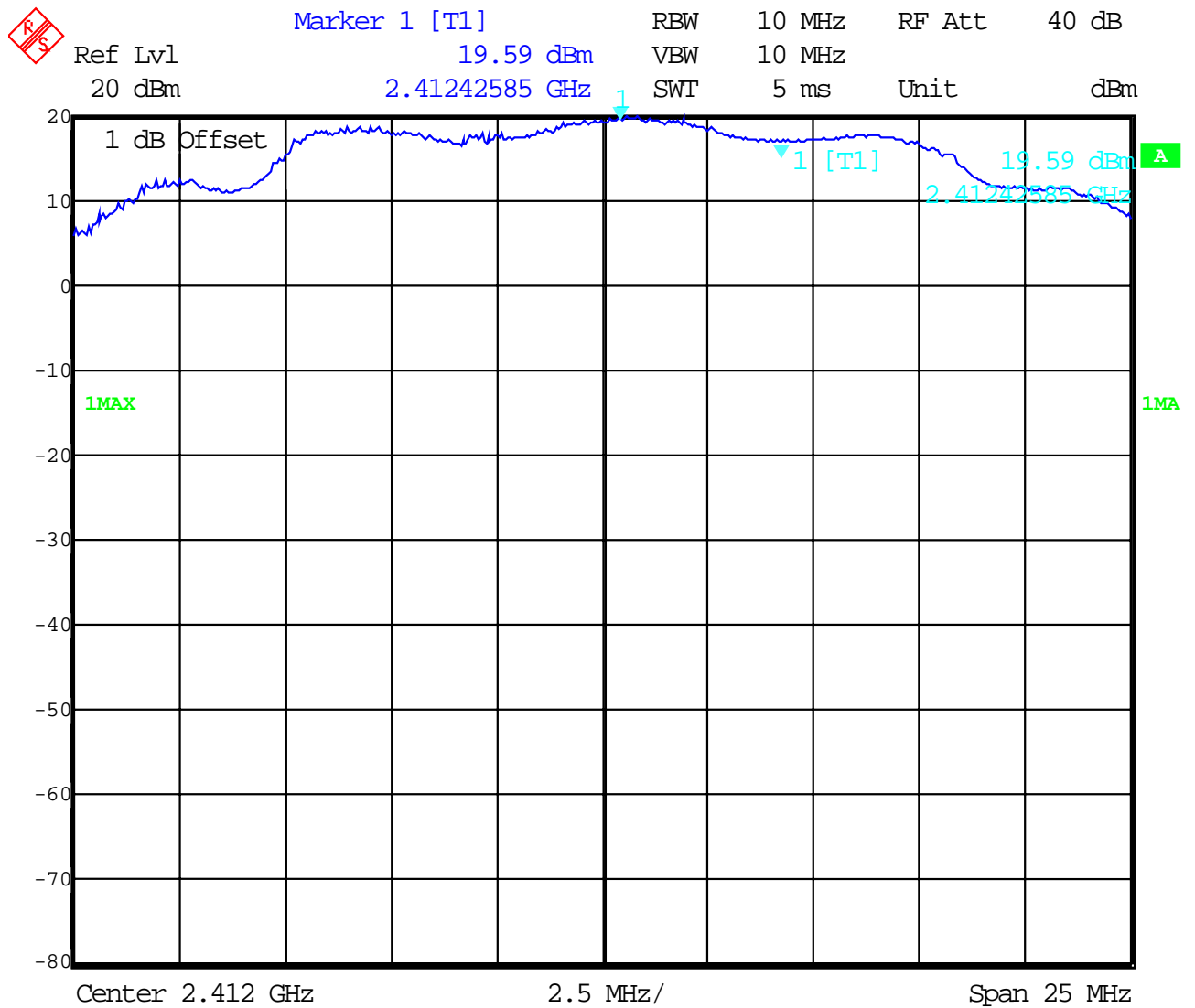
SUBCLAUSE § 15.247 (b) (1)

Frequency range	RF power output
2400-2483.5 MHz	1.0 Watt/ 30dBm

**MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)**

SUBCLAUSE § 15.247 (b) (1)

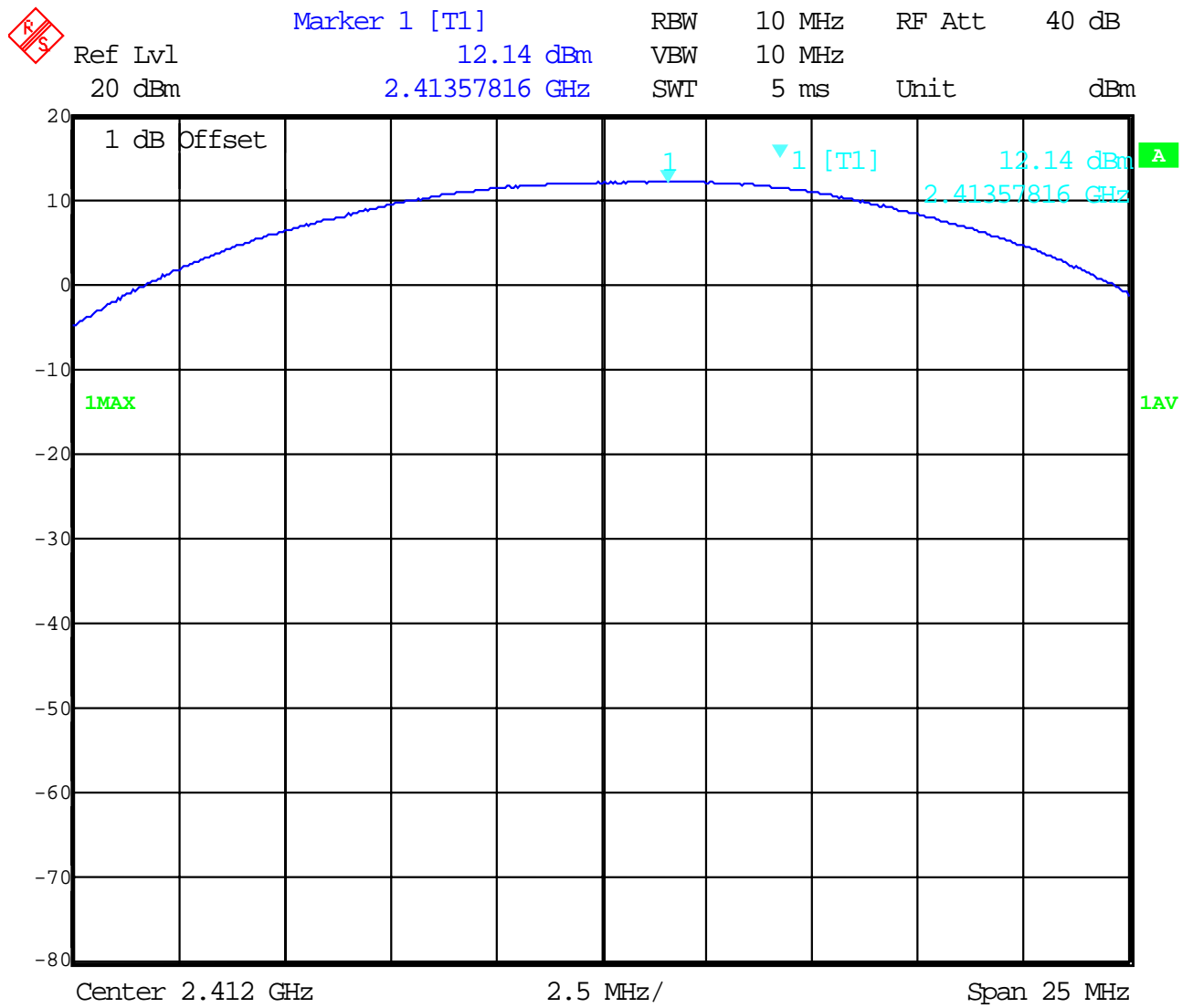
low channel peak



**MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)**

SUBCLAUSE § 15.247 (b) (1)

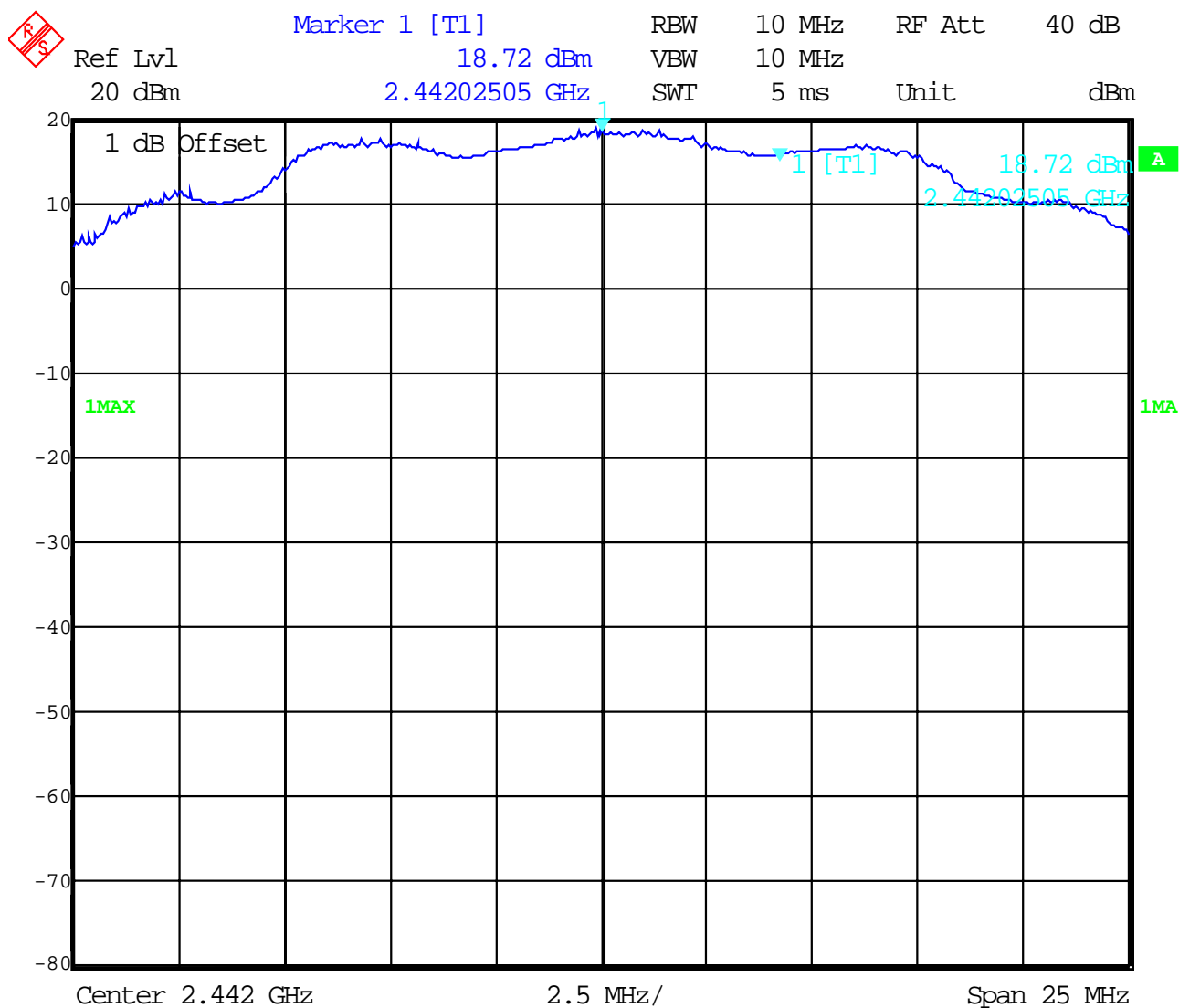
low channel average



**MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)**

SUBCLAUSE § 15.247 (b) (1)

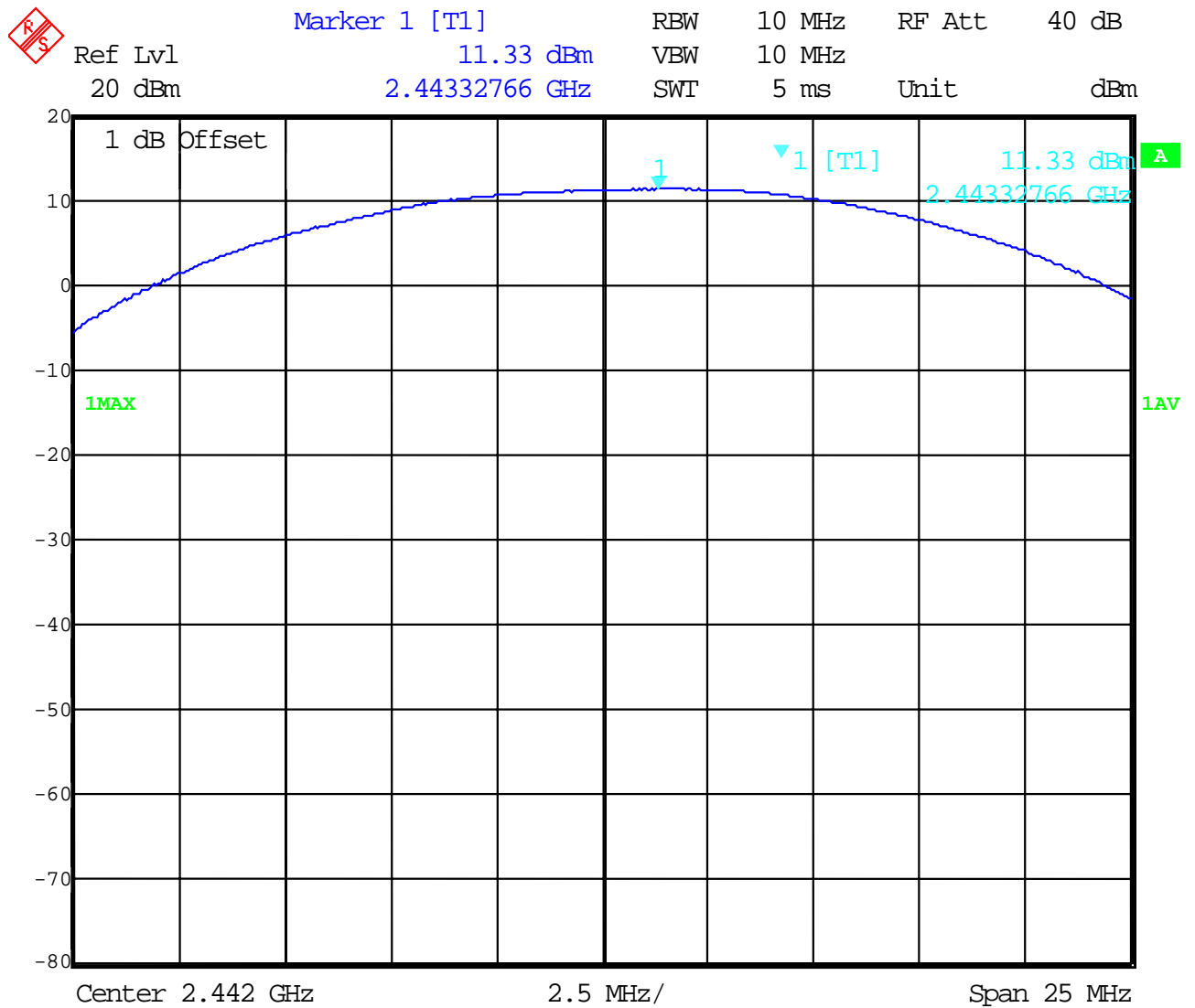
mid channel peak



MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)

SUBCLAUSE § 15.247 (b) (1)

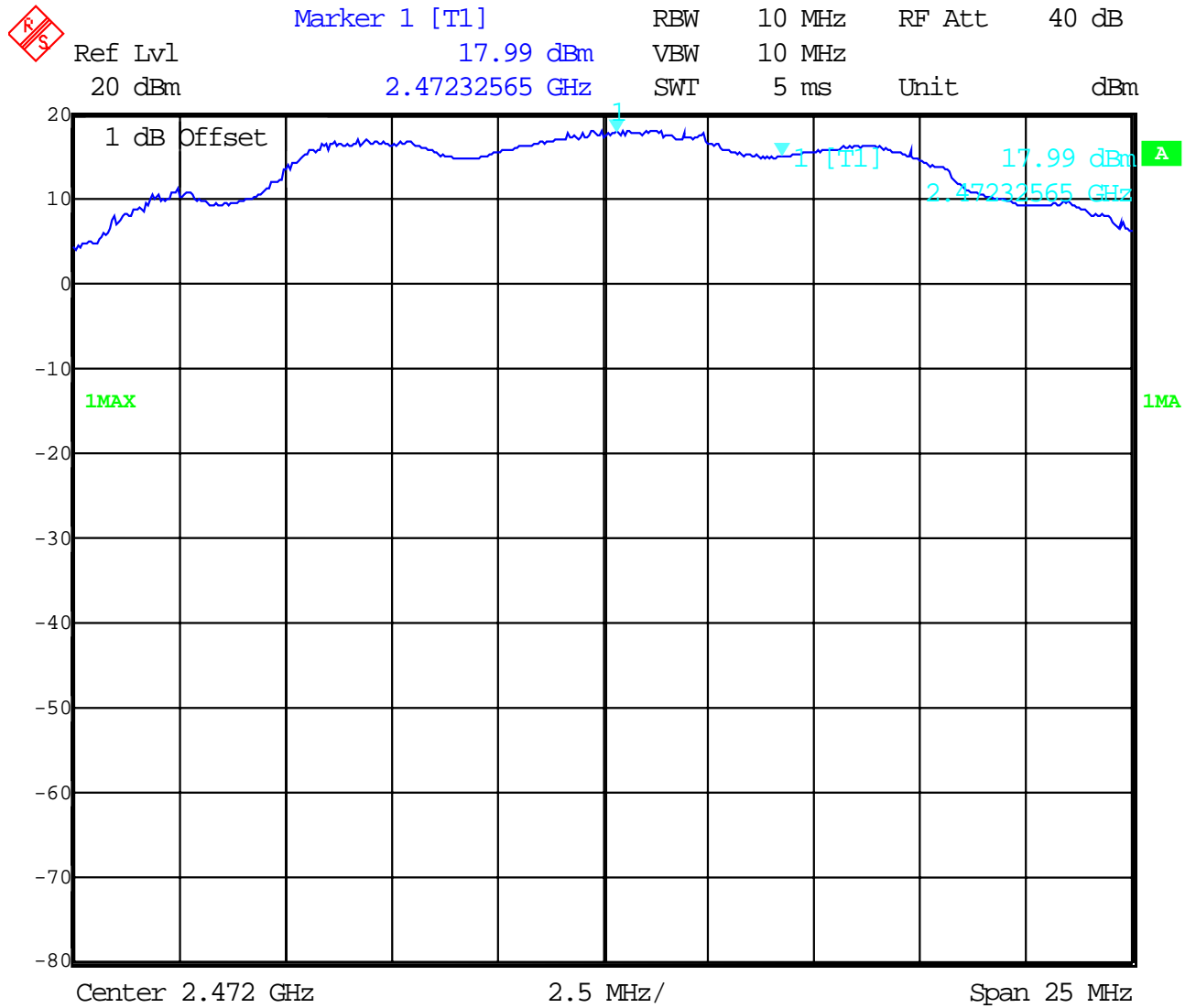
mid channel average



MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)

SUBCLAUSE § 15.247 (b) (1)

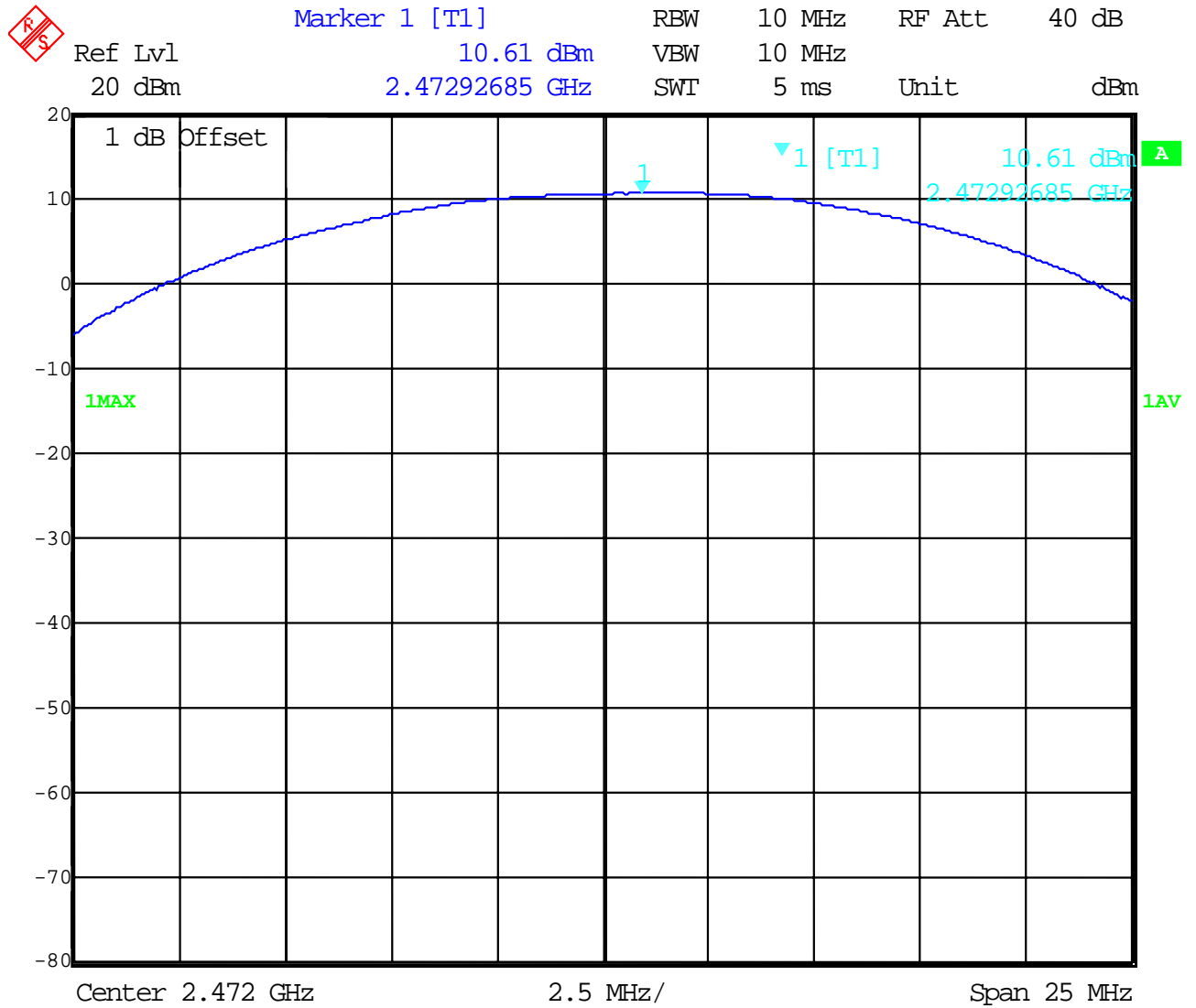
high channel peak



MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)

SUBCLAUSE § 15.247 (b) (1)

high channel average



**MAXIMUM PEAK OUTPUT POWER
(RADIATED)**

SUBCLAUSE § 15.247 (b) (1)

TEST CONDITIONS		MAXIMUM PEAK OUTPUT POWER (mW)		
		2412	2442	2472
Frequency (MHz)				
T _{nom} (22.4)°C	V _{nom} (5.0)V	19.20 dBm 83.18 mW	18.20 dBm 66.07 mW	17.60 dBm 57.54 mW
Maximum deviation from output power under extreme test conditions (dBc)		-	-	-
Measurement uncertainty		±3dB		

RBW/VBW : 10 MHz

Measured at a distance of 3m

LIMIT

SUBCLAUSE § 15.247 (b) (1)

Frequency range	RF power output
2400-2483.5 MHz	1.0 Watt

RF EXPOSURE CALCULATION

SUBCLAUSE § 15.247 (B) (4)

The maximal power density at 20cm distance is calculated as: $P_d = (P_{out} * G)/(4\pi * r^2)$

$$83.18 \text{ mW} / 4\pi 400\text{cm}^2 = 0.01655\text{mW/cm}^2$$

The limit for general population/uncontrolled exposures according §1.1307(b) is 1mW/cm²

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED
(for reference numbers see test equipment listing)

Power spectral density

§15.247 (d)

TEST CONDITIONS		RF POWER LEVEL IN 3 kHz BW		
		2412	2442	2472
Frequency (MHz)				
T _{nom} (22.4)°C	V _{nom} (5.0)V	-18.45 dBm	-16.18 dBm	-16.92 dBm
Maximum deviation from output power under extreme test conditions (dBc)				
Measurement uncertainty		±3dB		

The measurement was performed with the power density funktion of the analyzer.
The readout is related to 1 Hz BW. For 3 kHz BW we have to add 34.8 dB.

LIMIT

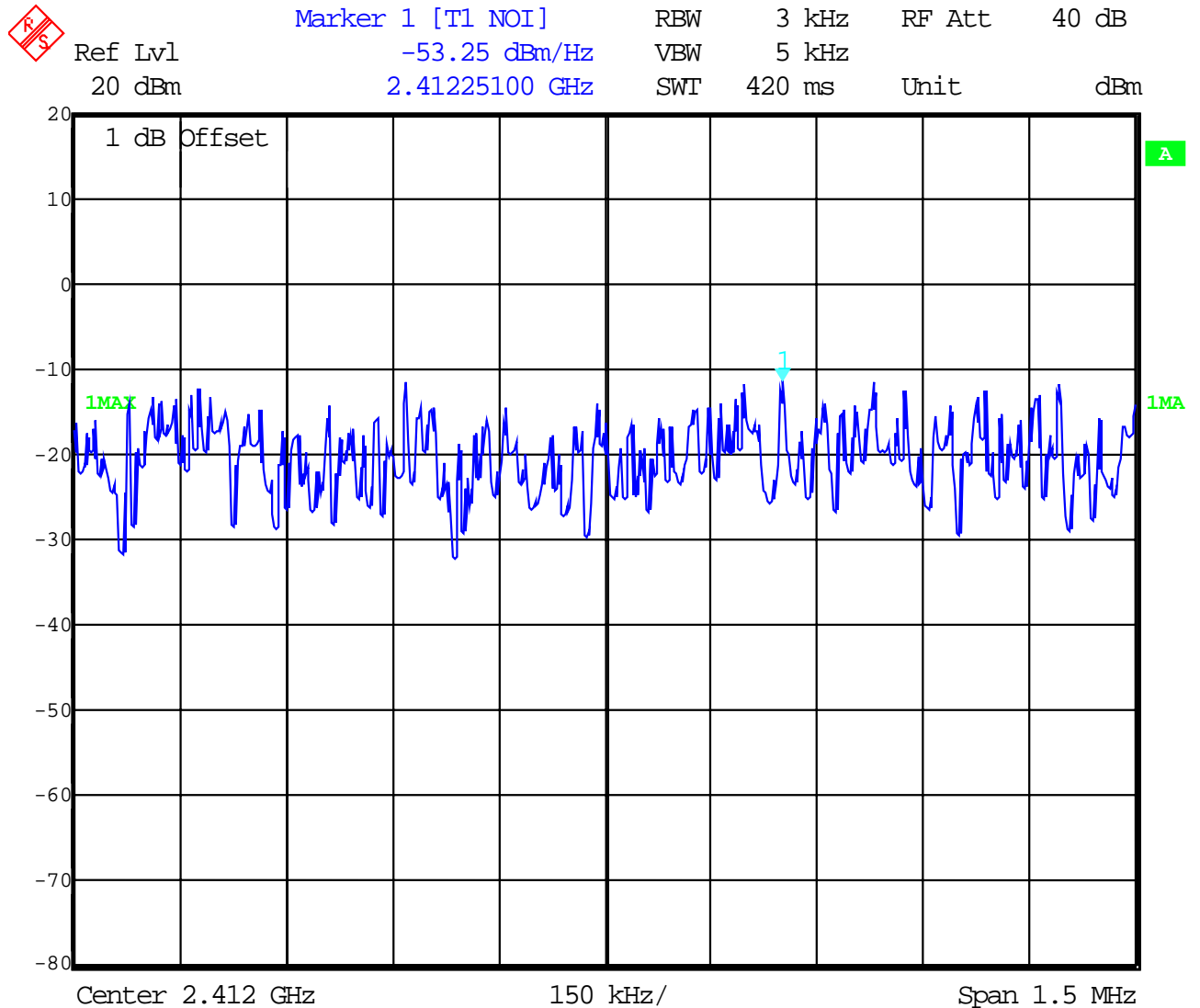
SUBCLAUSE §15.247(d)

<p>The peak power spectral density shall not be greater than 8 dBm in any 3 kHz band</p>
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REFERENCE NUMBER(S) OF TEST EQUIPMENT USED
(for reference numbers see test equipment listing)

POWER SPECTRAL DENSITY
2412 MHz

SUBCLAUSE § 15.247 (d)



LIMIT

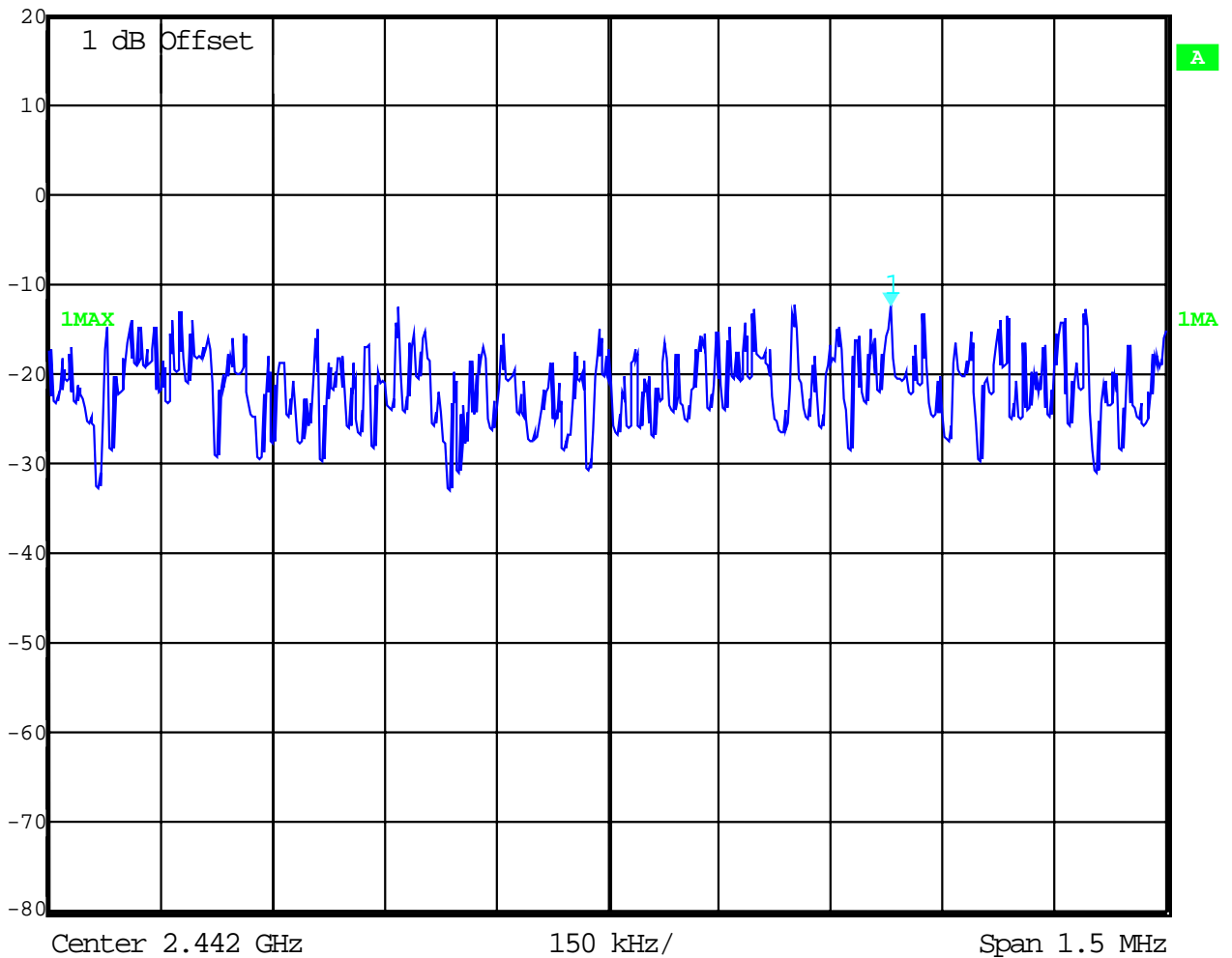
SUBCLAUSE §15.247(d)

The peak power spectral density shall not be greater than 8 dBm in any 3 kHz band

POWER SPECTRAL DENSITY
2442 MHz

SUBCLAUSE § 15.247 (d)

	Marker 1 [T1 NOI]	RBW	3 kHz	RF Att	40 dB
	Ref Lvl	-50.98 dBm/Hz	VBW	5 kHz	
	20 dBm	2.44238026 GHz	SWT	420 ms	Unit dBm



LIMIT

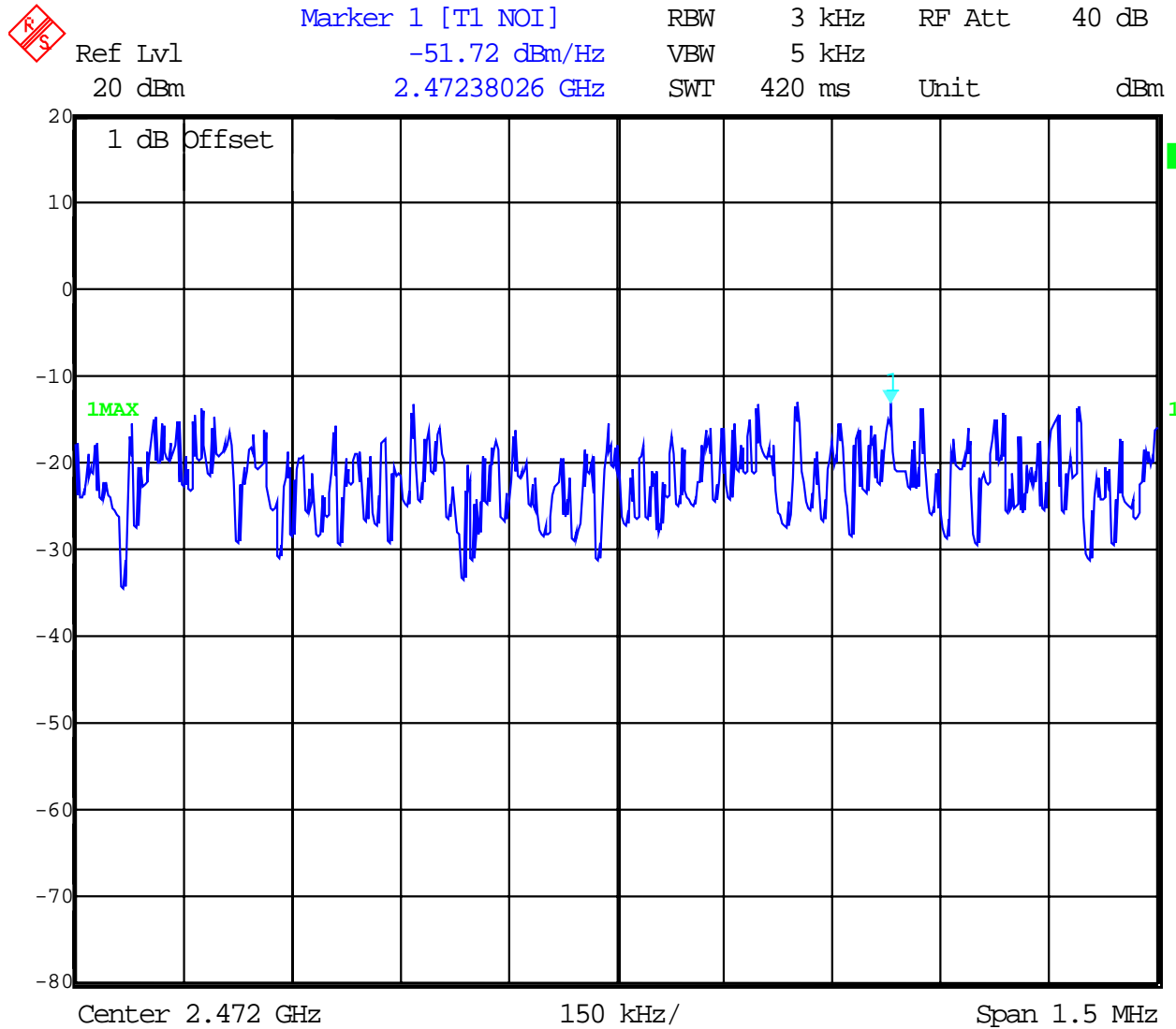
SUBCLAUSE §15.247(d)

The peak power spectral density shall not be greater than 8 dBm in any 3 kHz band

POWER SPECTRAL DENSITY

SUBCLAUSE § 15.247 (d)

2472 MHz



LIMIT

SUBCLAUSE §15.247(d)

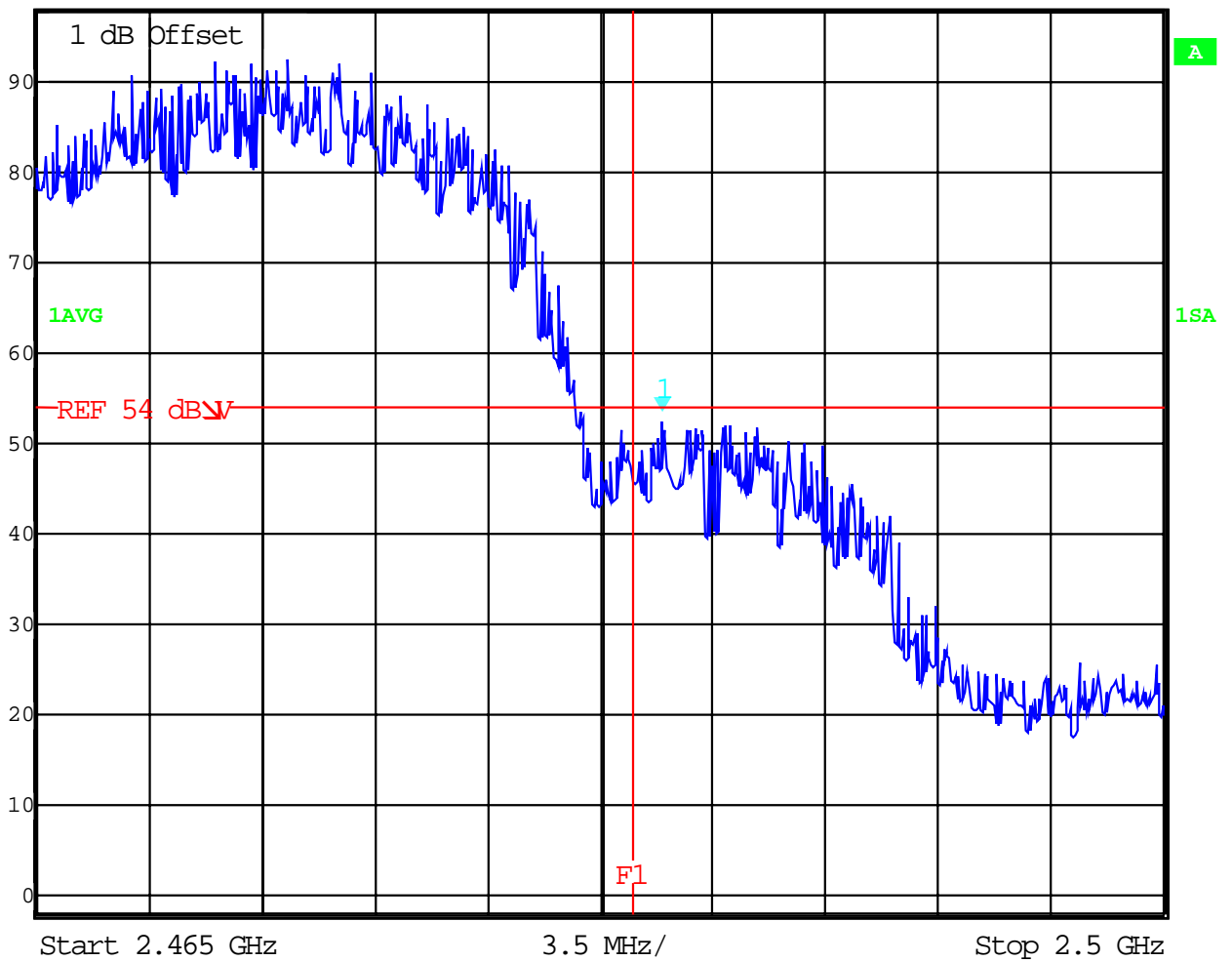
The peak power spectral density shall not be greater than 8 dBm in any 3 kHz band

Band-edge compliance of conducted emissions

§15.247 (c)

high channel

	Ref Lvl	Marker 1 [T1]	RBW	10 kHz	RF Att	10 dB
	98 dB μ V	52.66 dB μ V	VBW	1 MHz		
		2.48444439 GHz	SWT	420 ms	Unit	dB μ V



**SPURIOUS EMISSION LIMITATION
CONDUCTED**

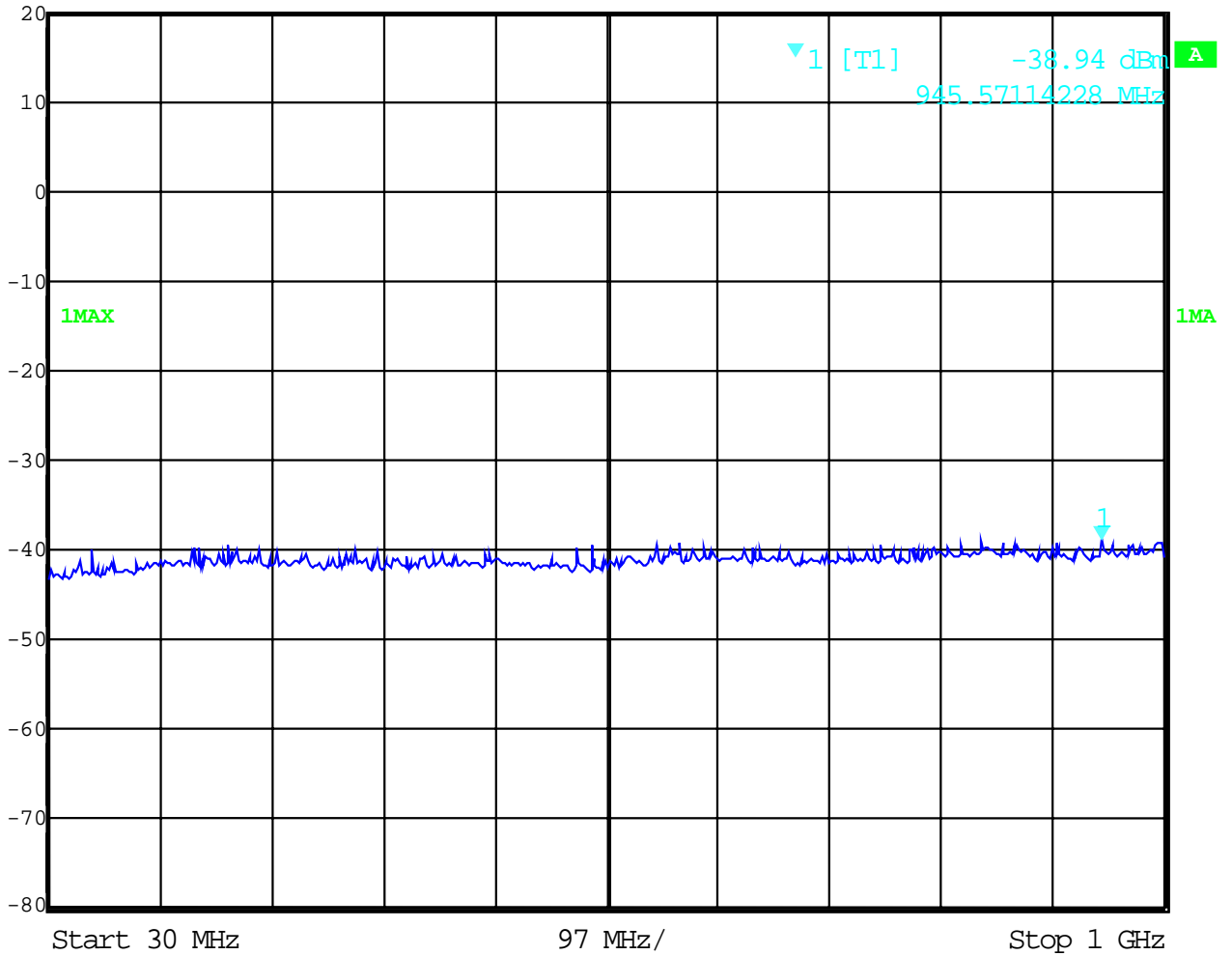
§ 15.247 (c) (1)

No peak found < 20 dB below Limit (20dBc)

Low channel

30 MHz to 1 GHz

	Marker 1 [T1]	RBW	100 kHz	RF Att	50 dB
	Ref Lvl	-38.94 dBm	VBW	100 kHz	
	20 dBm	945.57114228 MHz	SWT	245 ms	Unit dBm

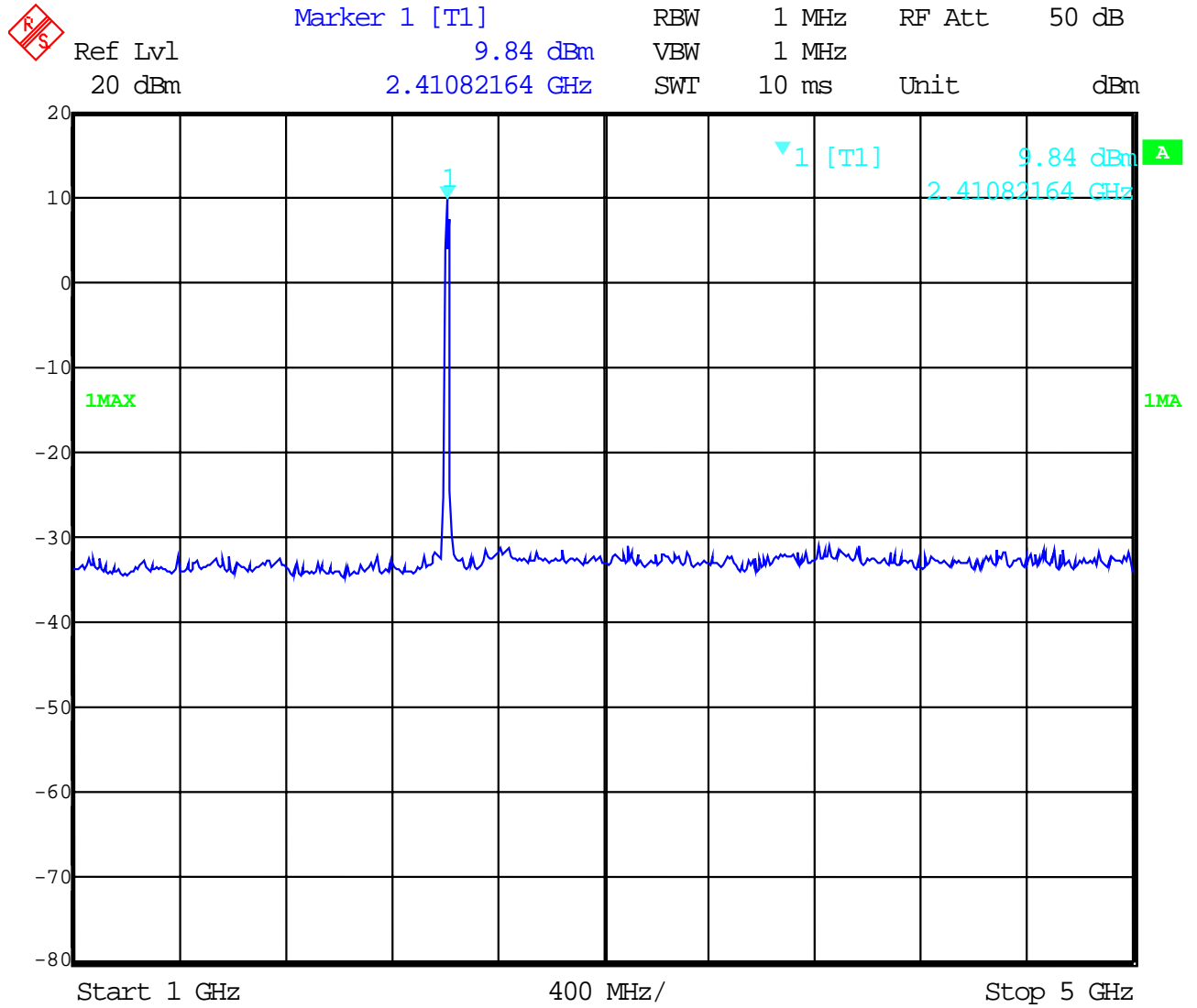


**SPURIOUS EMISSION
CONDUCTED**

§ 15.247 (c) (1)

Low channel

1 GHz to 5 GHz peak

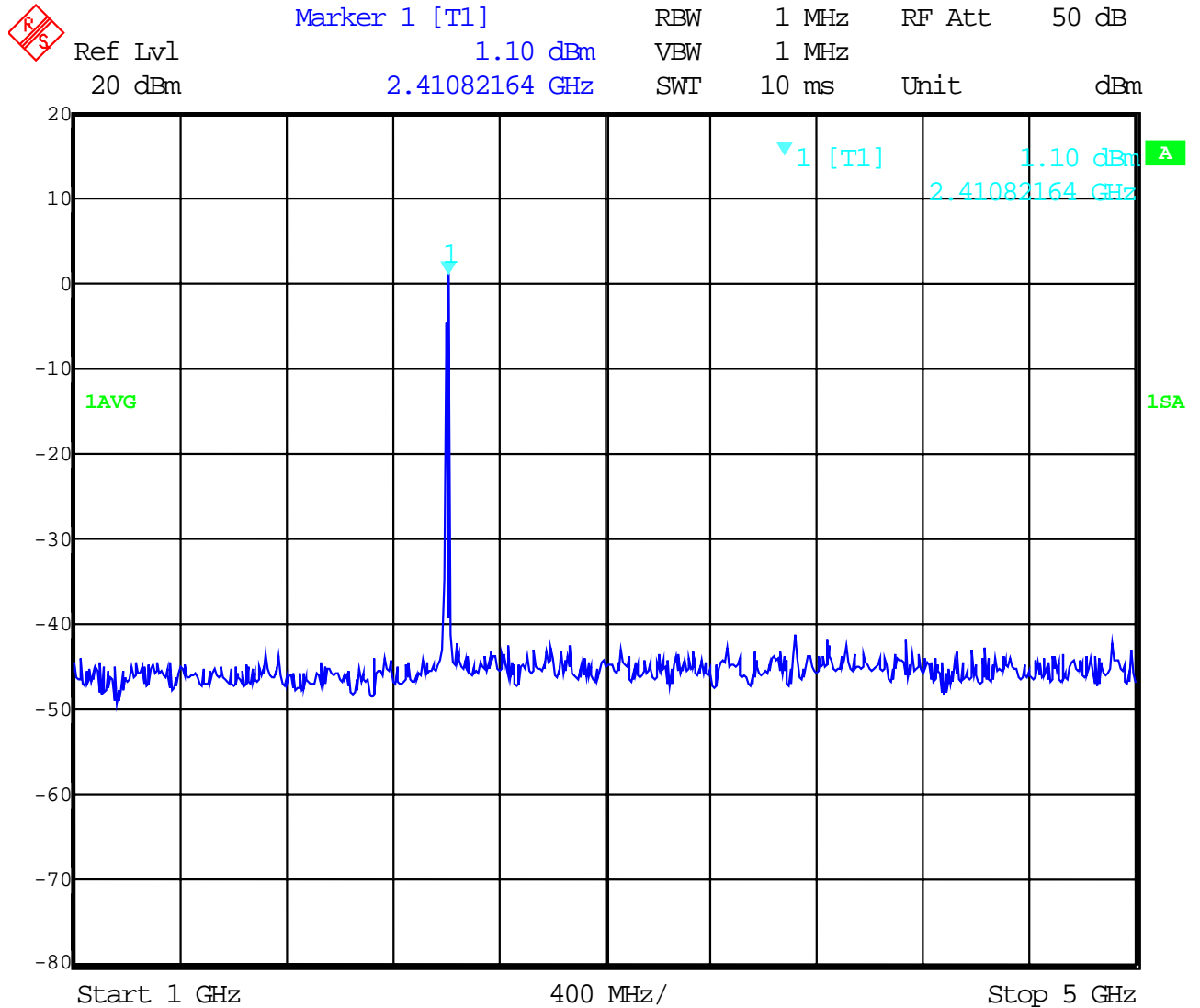


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

Low channel

1 GHz to 5 GHz average

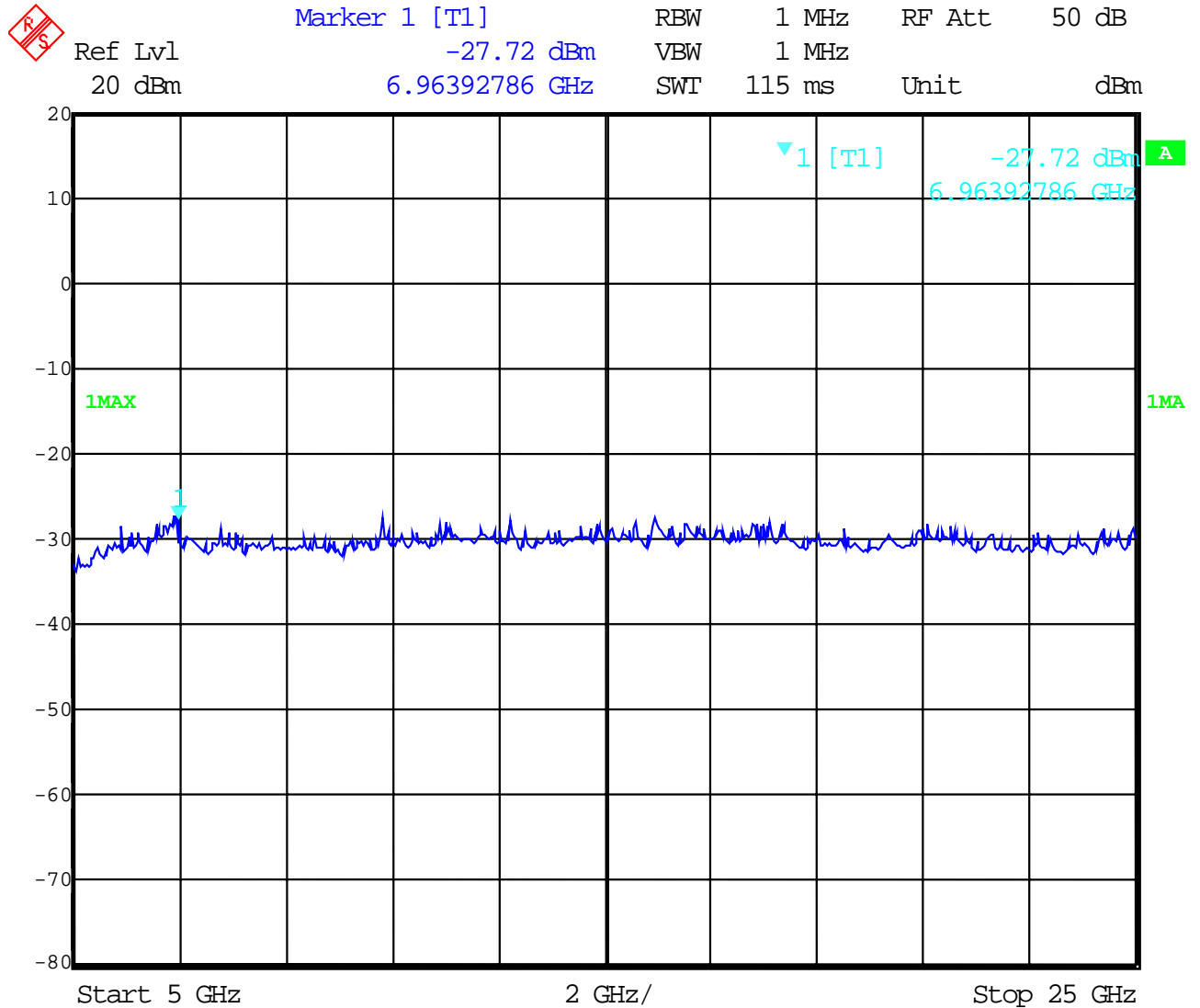


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

Low channel

5 GHz to 25 GHz peak

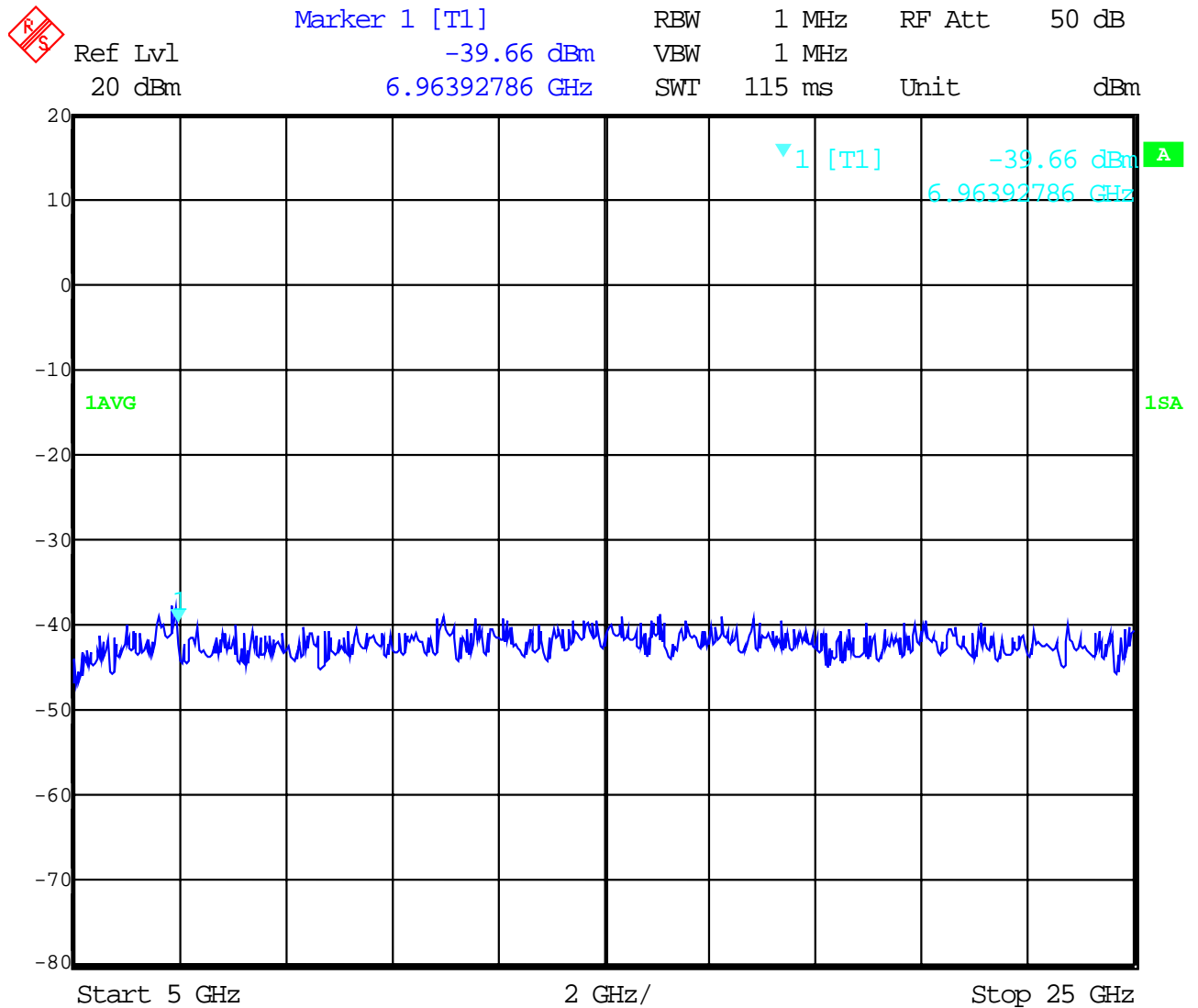


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

Low channel

5 GHz to 25 GHz average



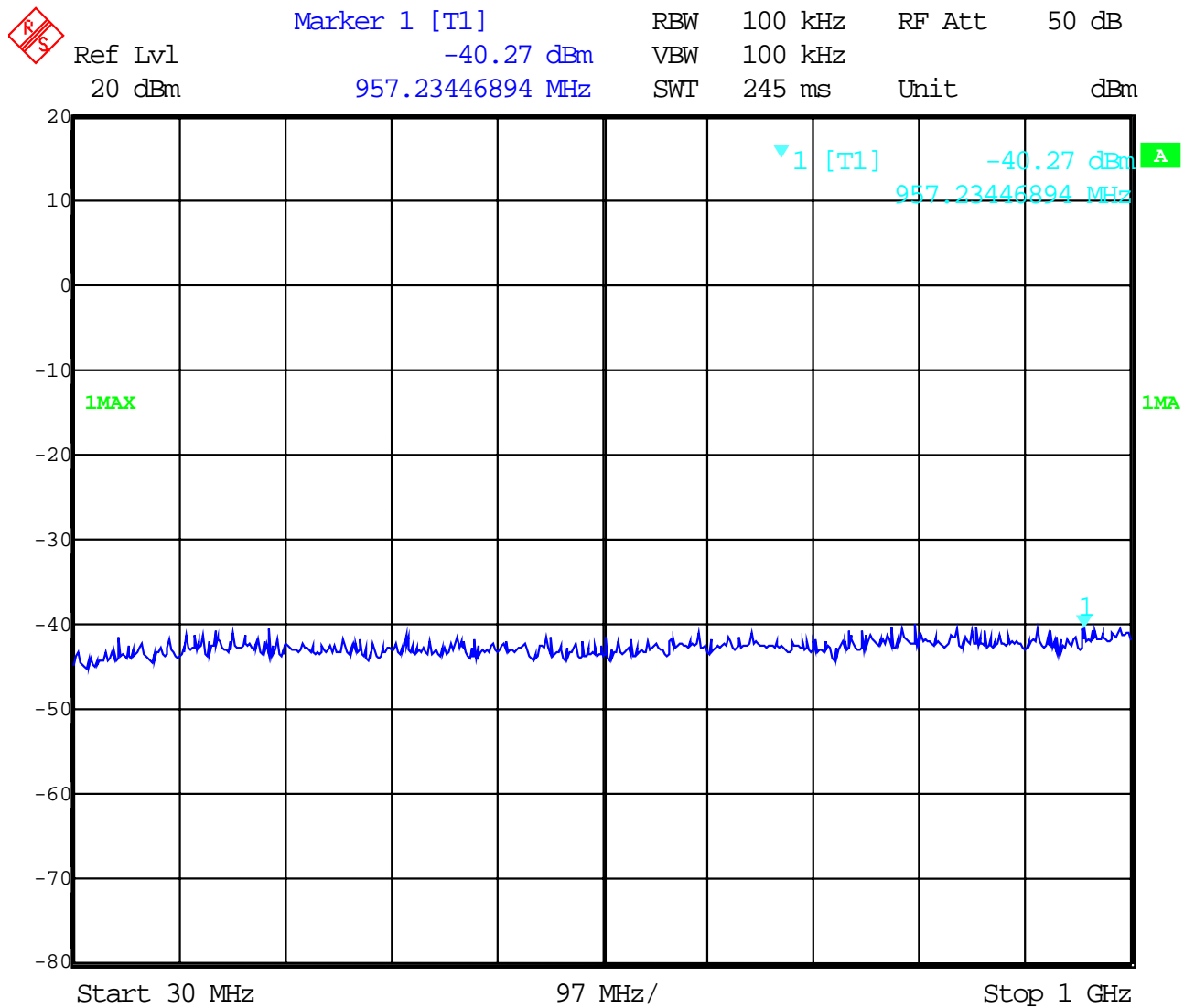
**SPURIOUS EMISSION LIMITATION
CONDUCTED**

§ 15.247 (c) (1)

No peak found < 20 dB below Limit (20dBc)

Mid channel

30 MHz to 1 GHz

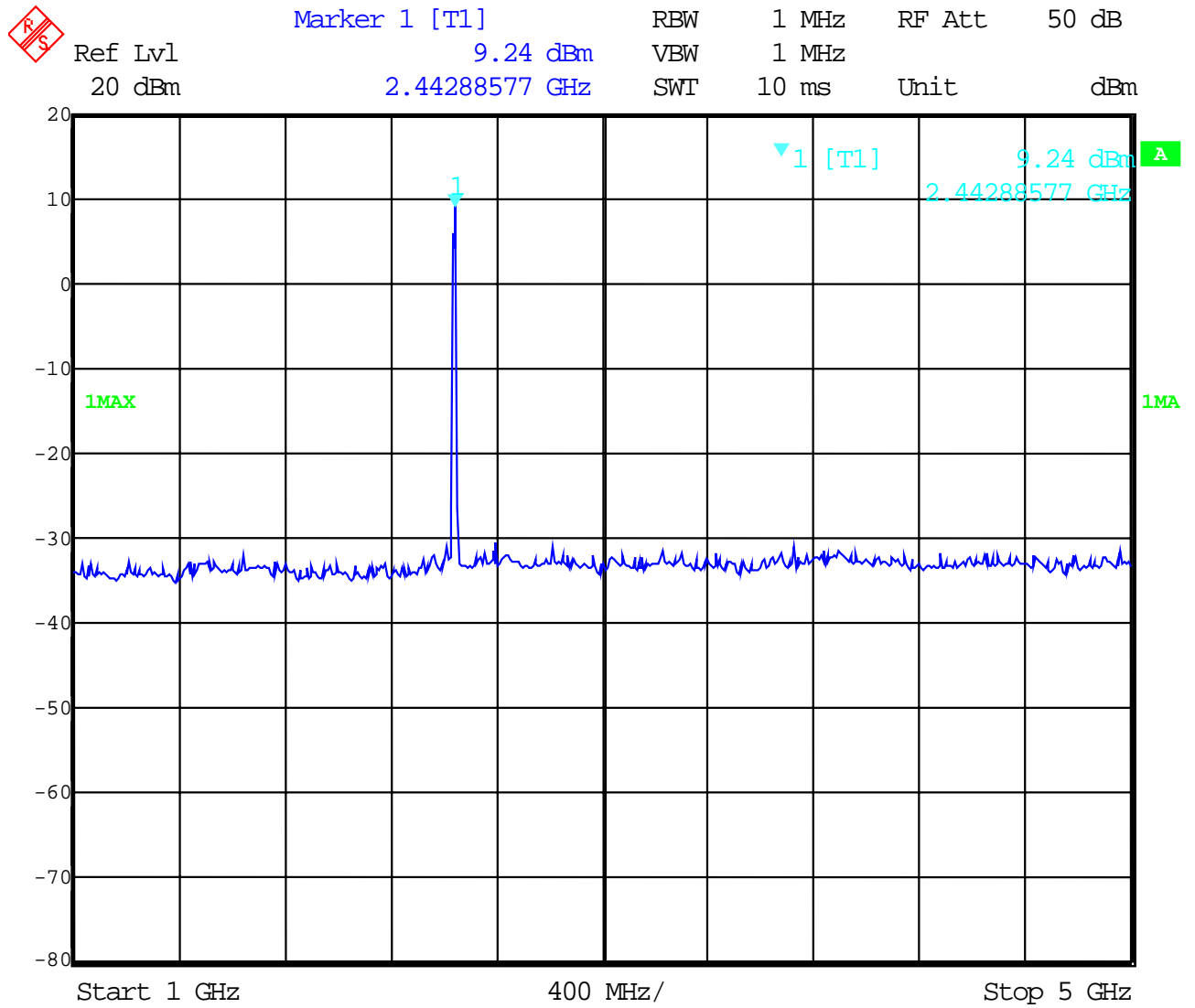


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

Mid channel

1 GHz to 5 GHz peak

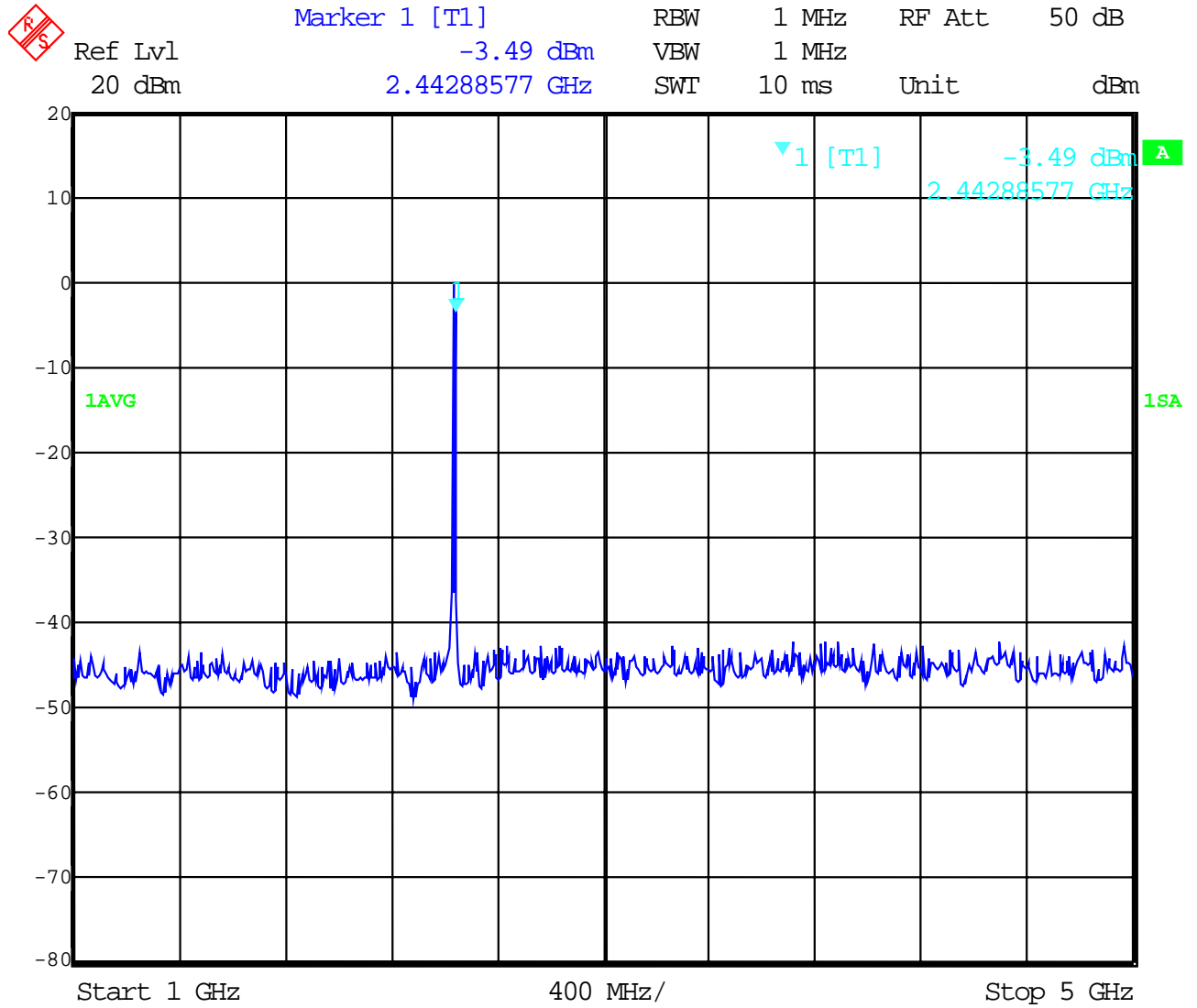


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

Mid channel

1 GHz to 5 GHz average

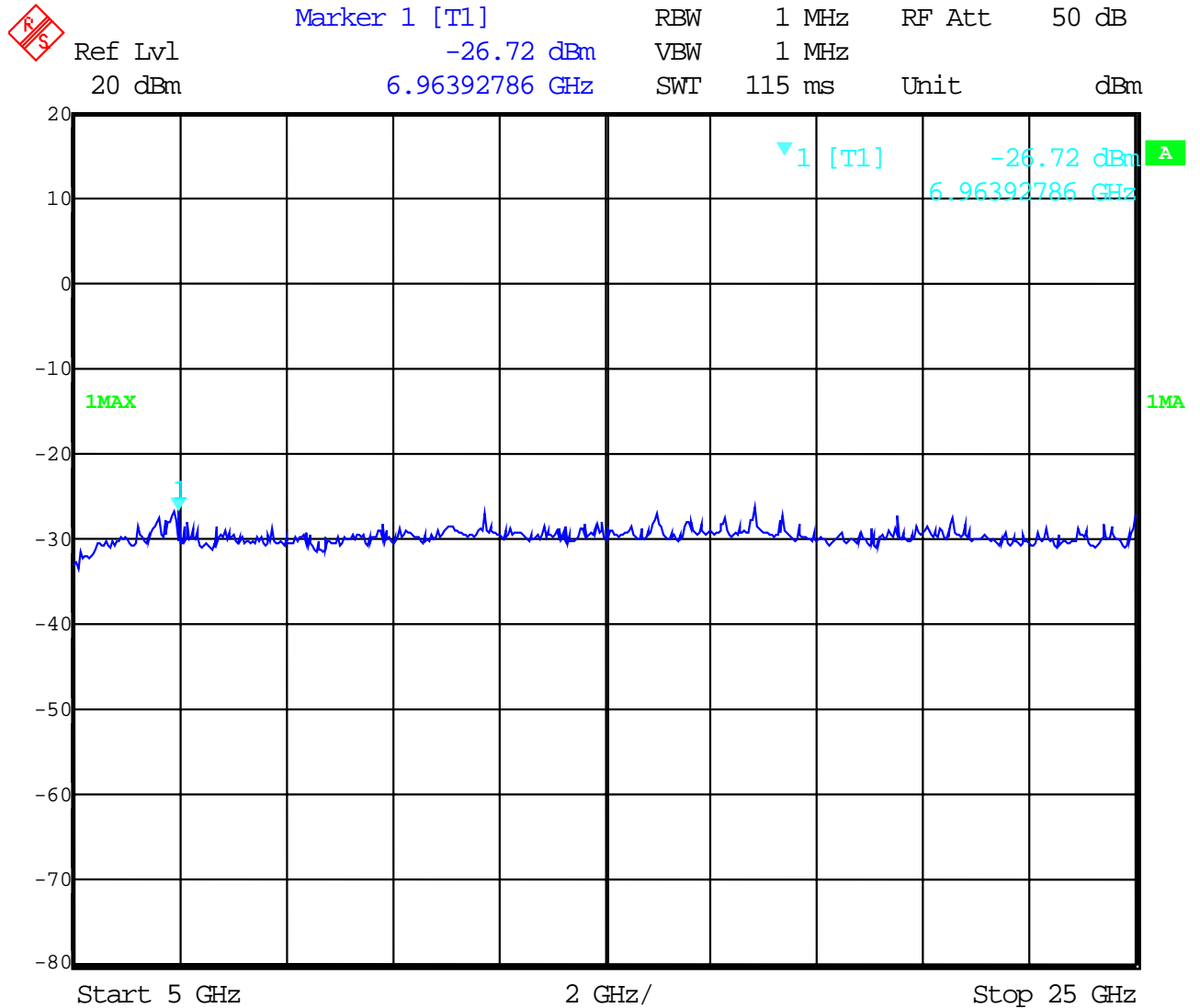


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

Mid channel

5 GHz to 25 GHz peak

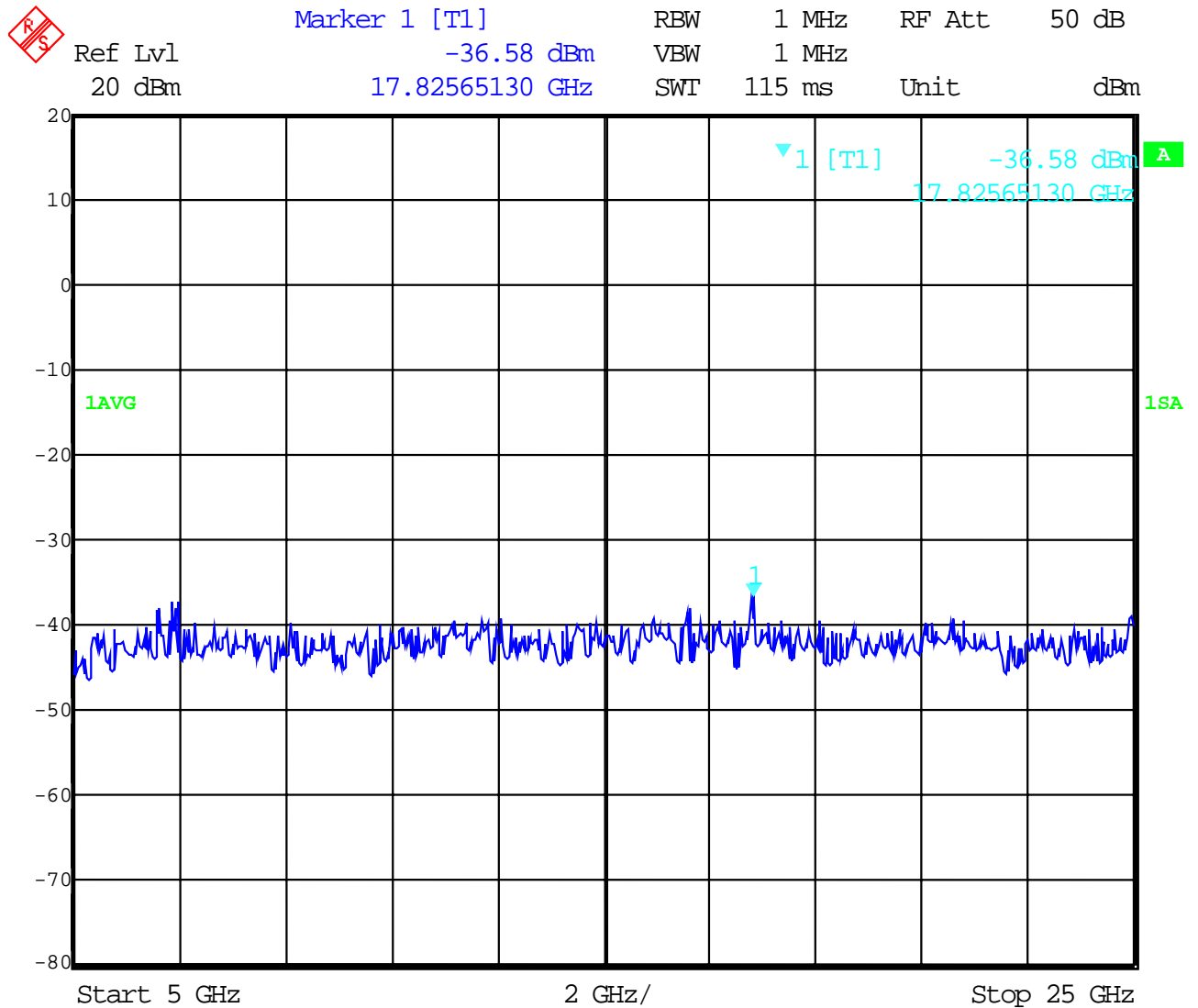


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

Mid channel

5 GHz to 25 GHz average



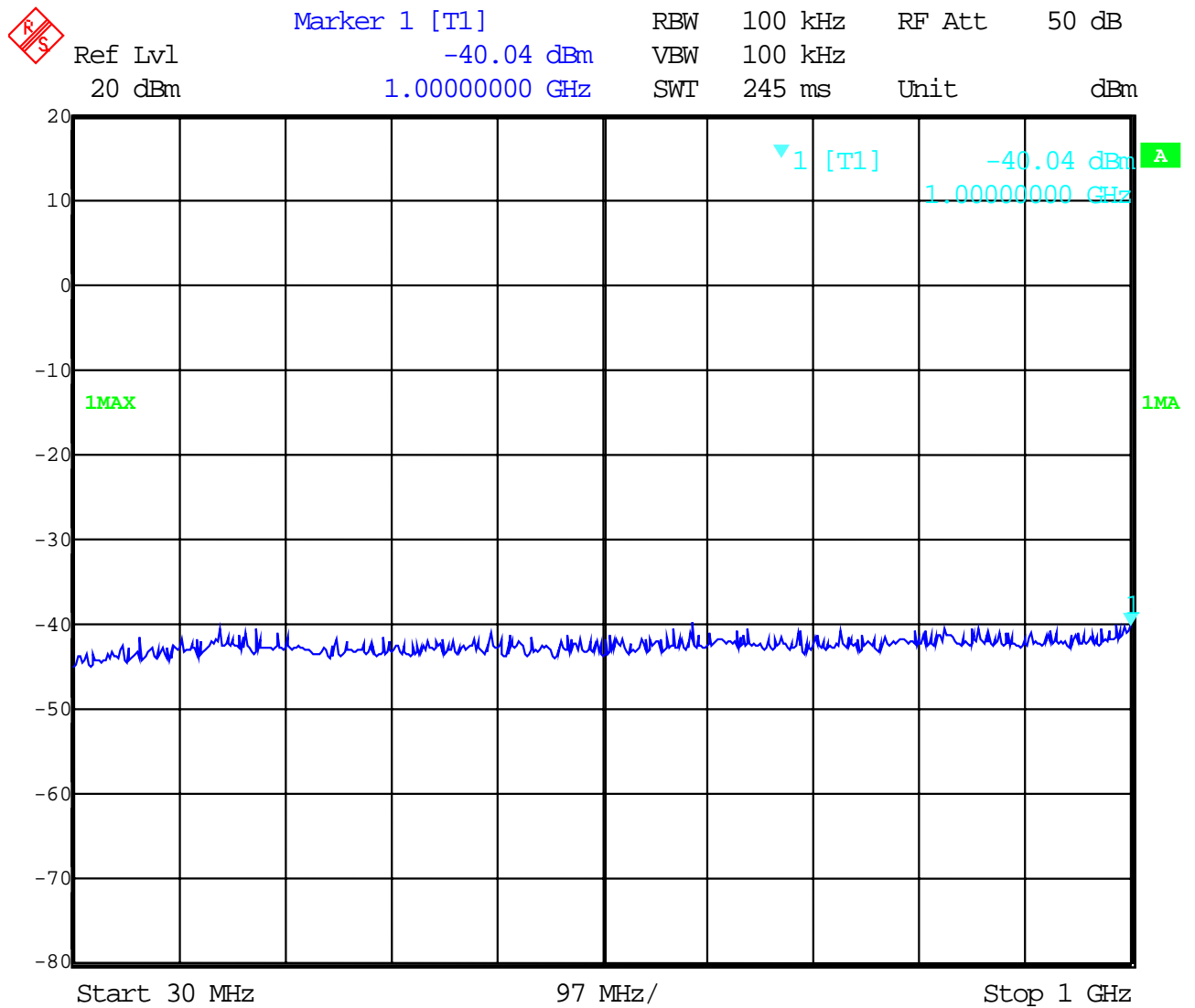
**SPURIOUS EMISSION LIMITATION
CONDUCTED**

§ 15.247 (c) (1)

No peak found < 20 dB below Limit (20dBc)

High channel

30 MHz to 1 GHz

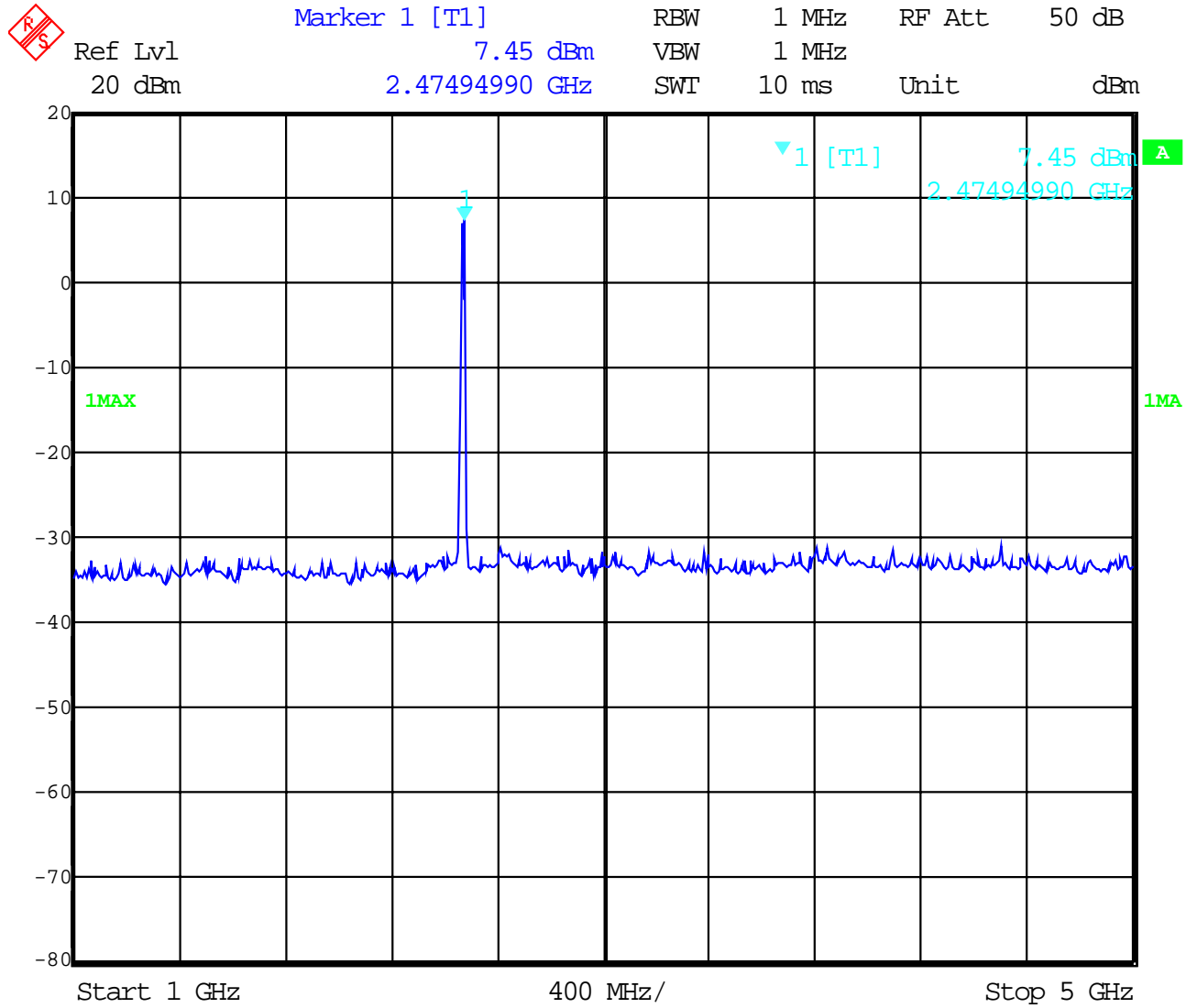


**SPURIOUS EMISSION
CONDUCTED**

§ 15.247 (c) (1)

High channel

1 GHz to 5 GHz peak

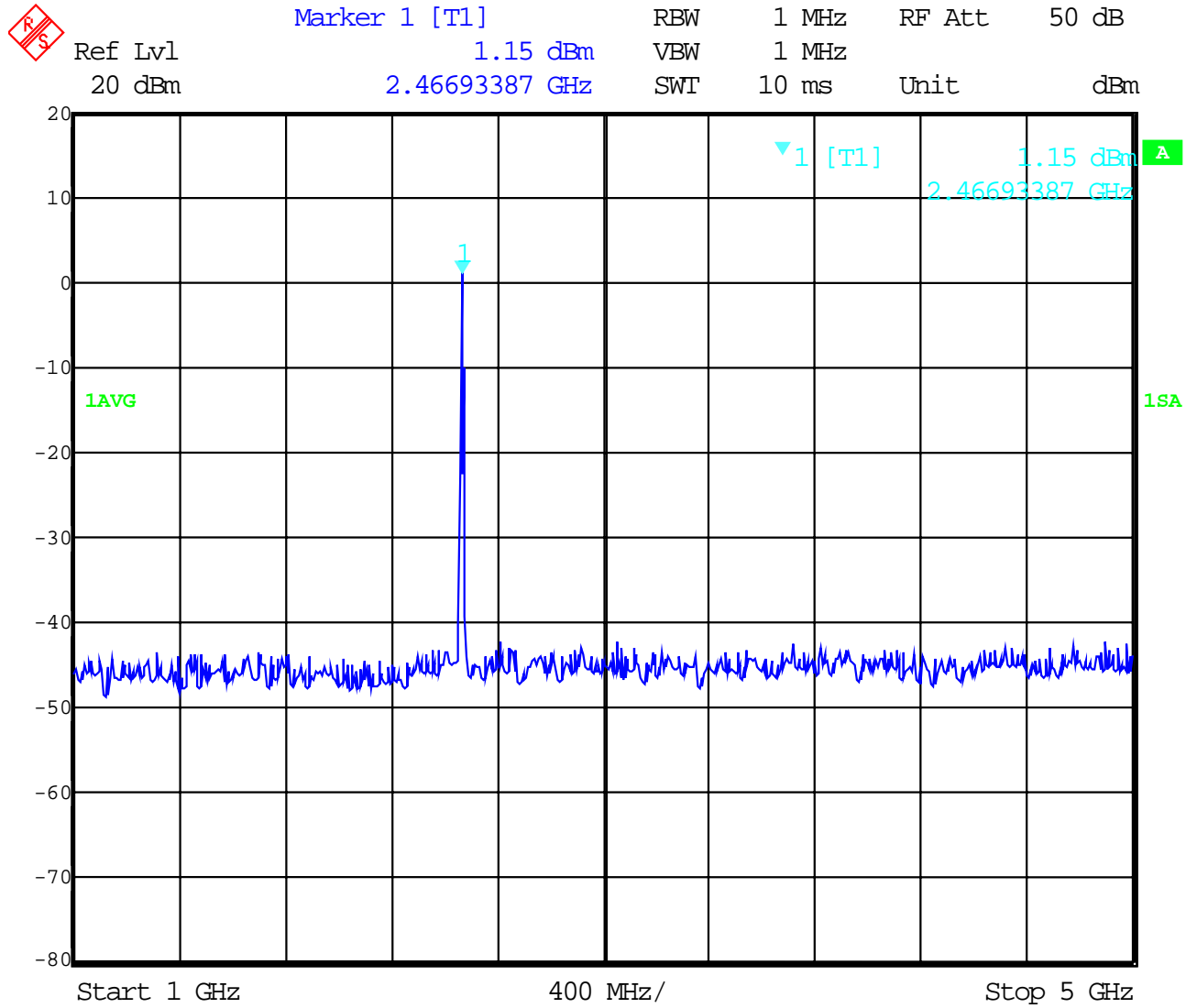


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

High channel

1 GHz to 5 GHz average

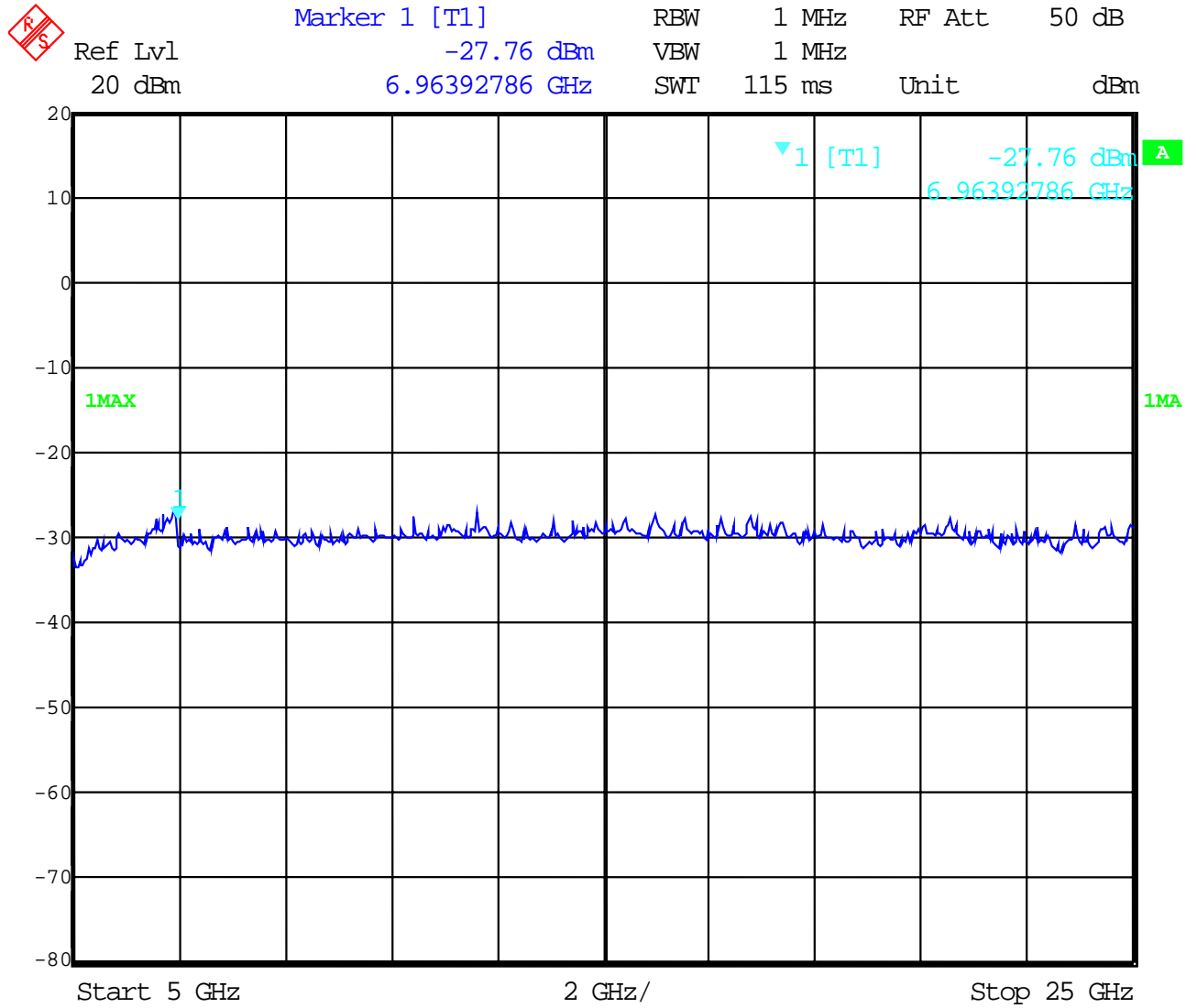


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

High channel

5 GHz to 25 GHz peak

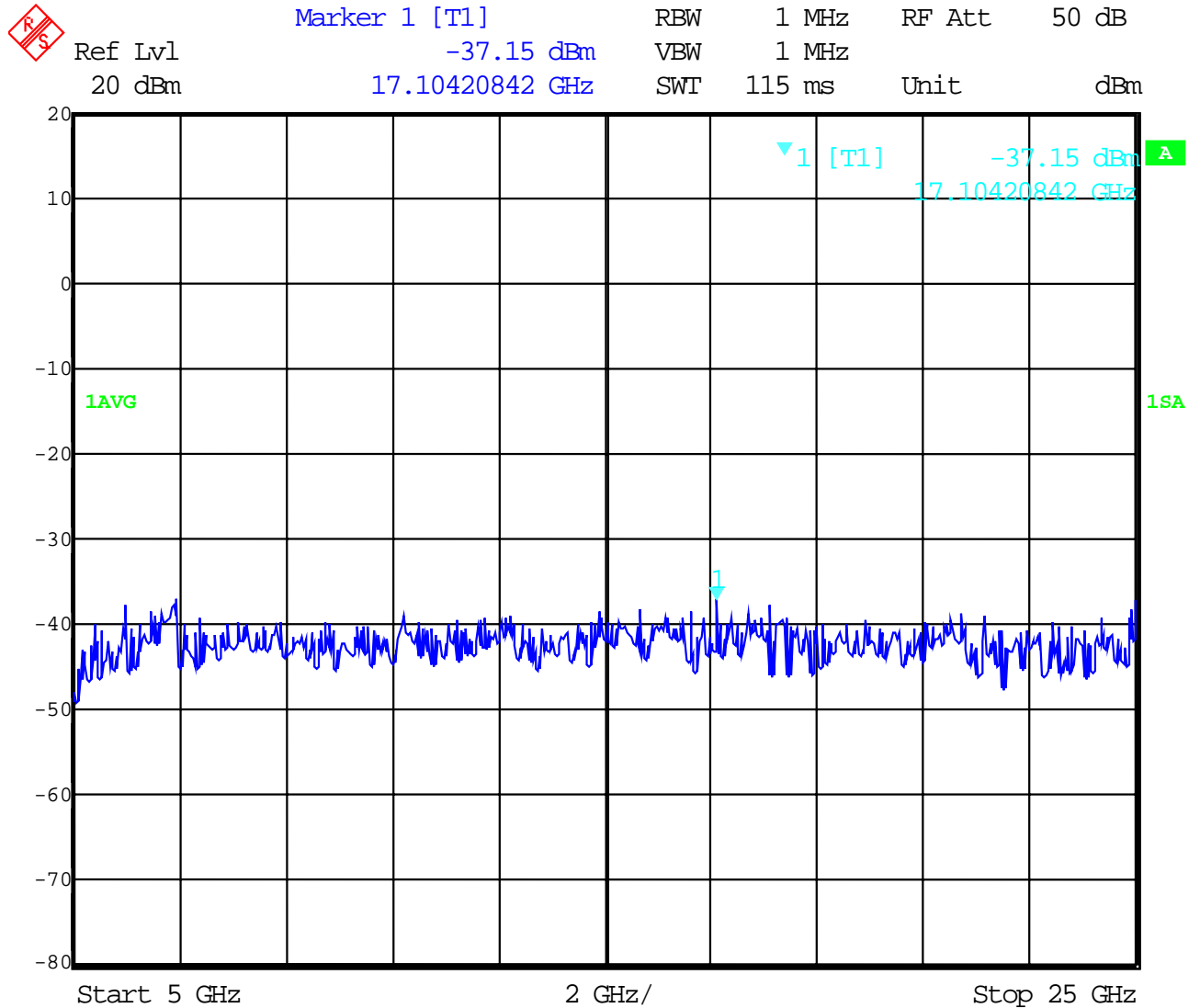


SPURIOUS EMISSION
CONDUCTED

§ 15.247 (c) (1)

High channel

5 GHz to 25 GHz average



SPURIOUS EMISSION (radiated)

§ 15.247 (c) (1)

Low Channel

150.34 MHz	CISPR QP	38.8 dBµV/m	limit: 43 dBµV/m
246.64 MHz	CISPR QP	32.9 dBµV/m	limit: 46 dBµV/m
2037.6 MHz	Average	41.1 dBµV/m	limit: 54 dBµV/m
4824 MHz	Average	15.9 dBµV/m	limit: 54 dBµV/m
6110 MHz	Average	22.2 dBµV/m	limit: 54 dBµV/m
8146 MHz	Average	26.2 dBµV/m	limit: 54 dBµV/m

Mid Channel

150.34 MHz	CISPR QP	38.8 dBµV/m	limit: 43 dBµV/m
246.64 MHz	CISPR QP	32.9 dBµV/m	limit: 46 dBµV/m
2067.7 MHz	Average	44.3 dBµV/m	limit: 54 dBµV/m
4123 MHz	Average	13.2 dBµV/m	limit: 54 dBµV/m
4884 MHz	Average	16.2 dBµV/m	limit: 54 dBµV/m
6120 MHz	Average	22.4 dBµV/m	limit: 54 dBµV/m

High Channel

150.34 MHz	CISPR QP	38.8 dBµV/m	limit: 43 dBµV/m
246.64 MHz	CISPR QP	32.9 dBµV/m	limit: 46 dBµV/m
2088.2 MHz	Average	45.6 dBµV/m	limit: 54 dBµV/m
4175 MHz	Average	13.4 dBµV/m	limit: 54 dBµV/m
4944 MHz	Average	14.2 dBµV/m	limit: 54 dBµV/m
6264 MHz	Average	21.8 dBµV/m	limit: 54 dBµV/m

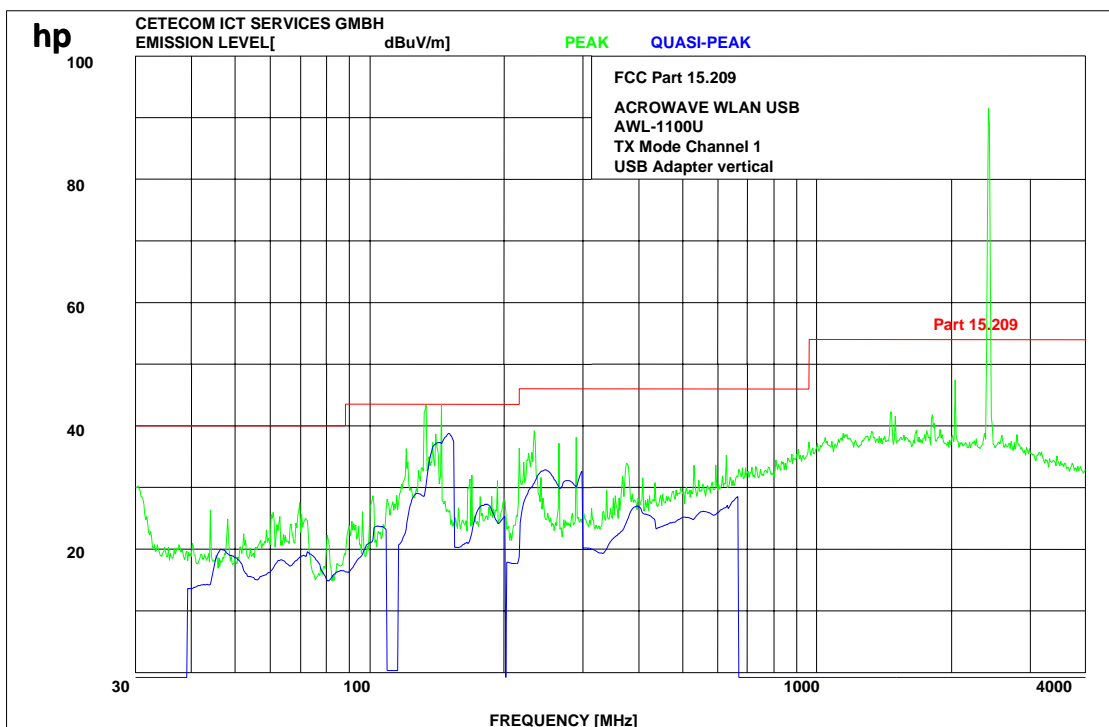
LIMITS

SUBCLAUSE § 15.247 (c)

In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

EMISSION LIMITATIONS- Radiated low channel up to 4 GHz (vertical)

§ 15.247 (c) (1)



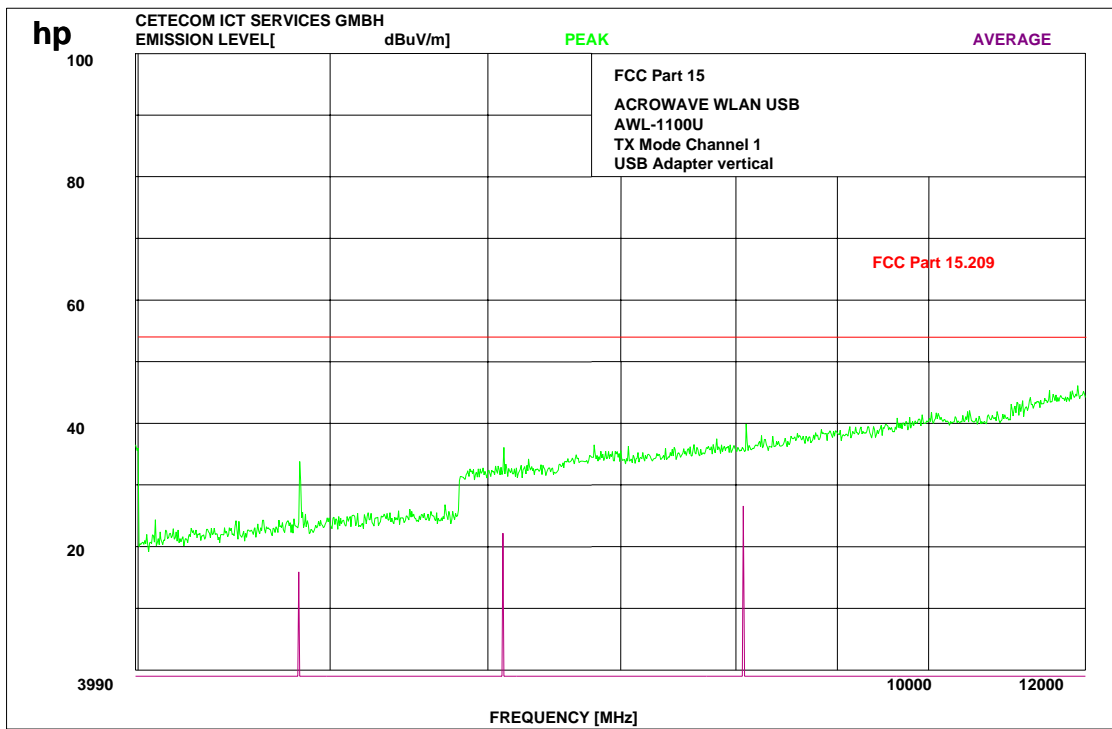
REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

low channel up to 12 GHz (vertical)

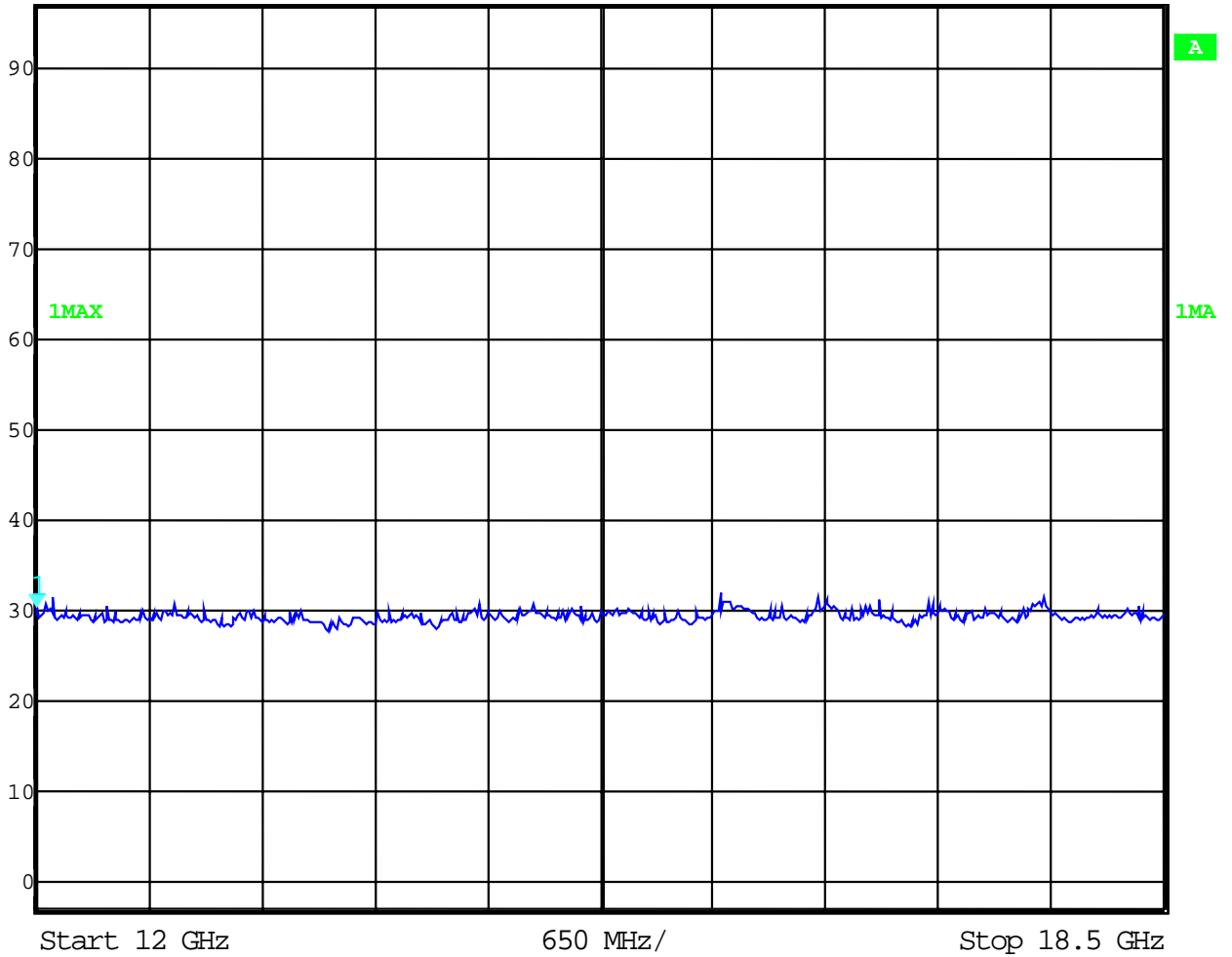


EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

12 GHz to 18 GHz peak (valid for all three channels)

	Ref Lvl	Marker 1 [T1]	RBW	1 MHz	RF Att	0 dB
	97 dB μ V	30.33 dB μ V	VBW	1 MHz		
		12.00000000 GHz	SWT	37 ms	Unit	dB μ V



EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

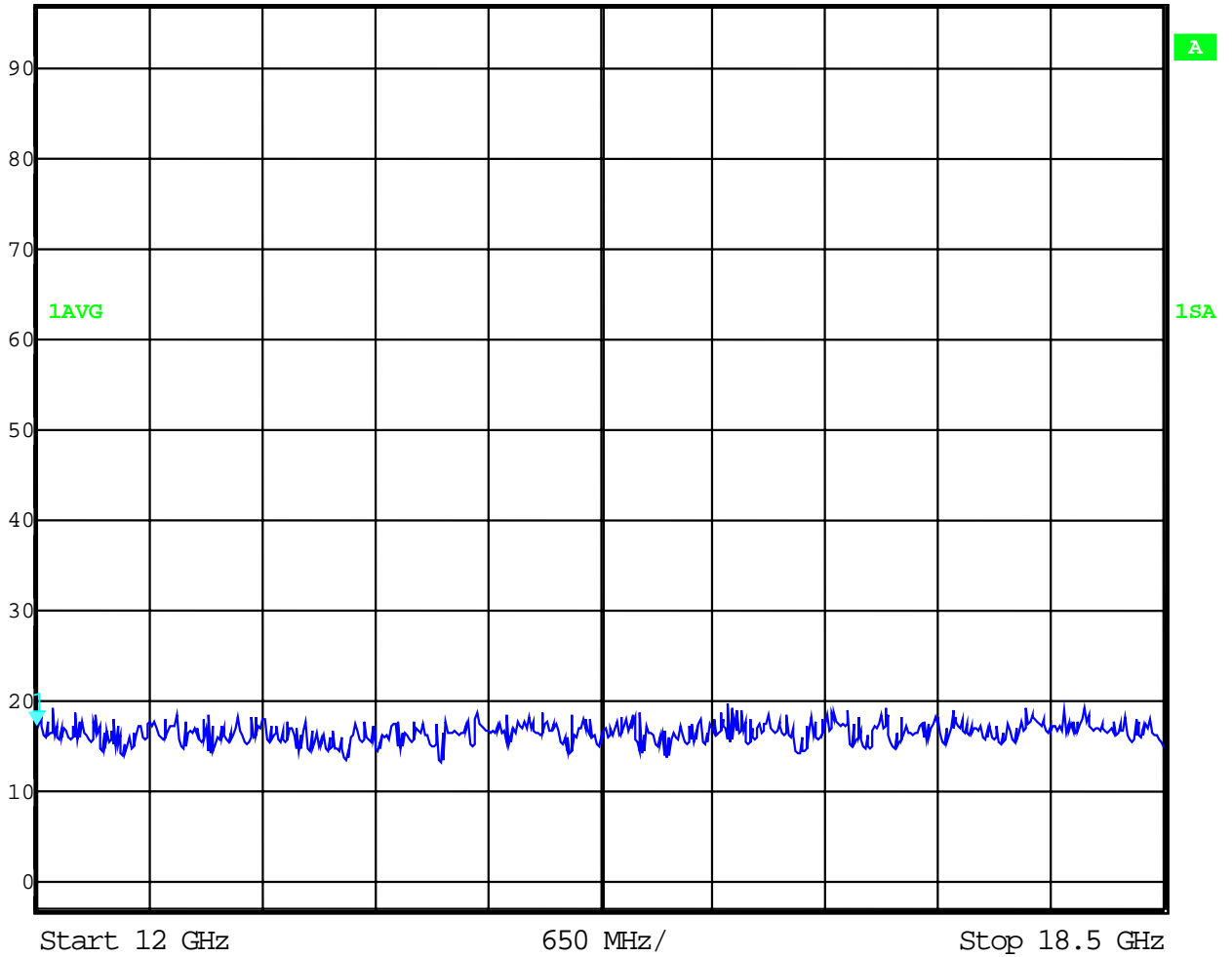
12 GHz to 18 GHz average (valid for all three channels)



Ref Lvl
97 dB μ V

Marker 1 [T1]
17.41 dB μ V
12.00000000 GHz

RBW	1 MHz	RF Att	0 dB
VBW	1 MHz		
SWT	37 ms	Unit	dB μ V

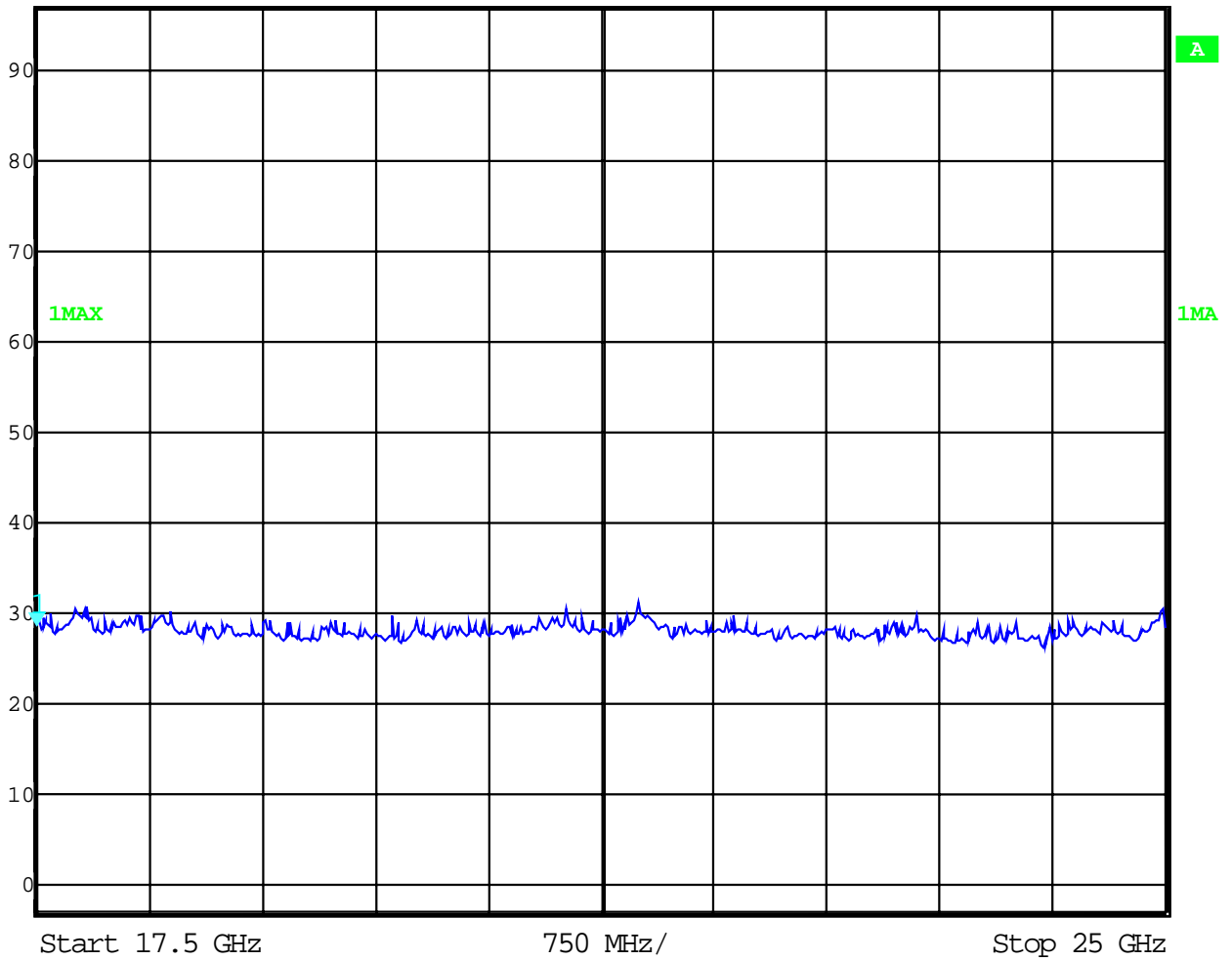


EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

18 GHz to 25 GHz peak (valid for all three channels)

	Marker 1 [T1]	RBW	1 MHz	RF Att	0 dB
	Ref Lvl	28.53 dB μ V	VBW	1 MHz	
	97 dB μ V	17.50000000 GHz	SWT	43 ms	Unit



EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

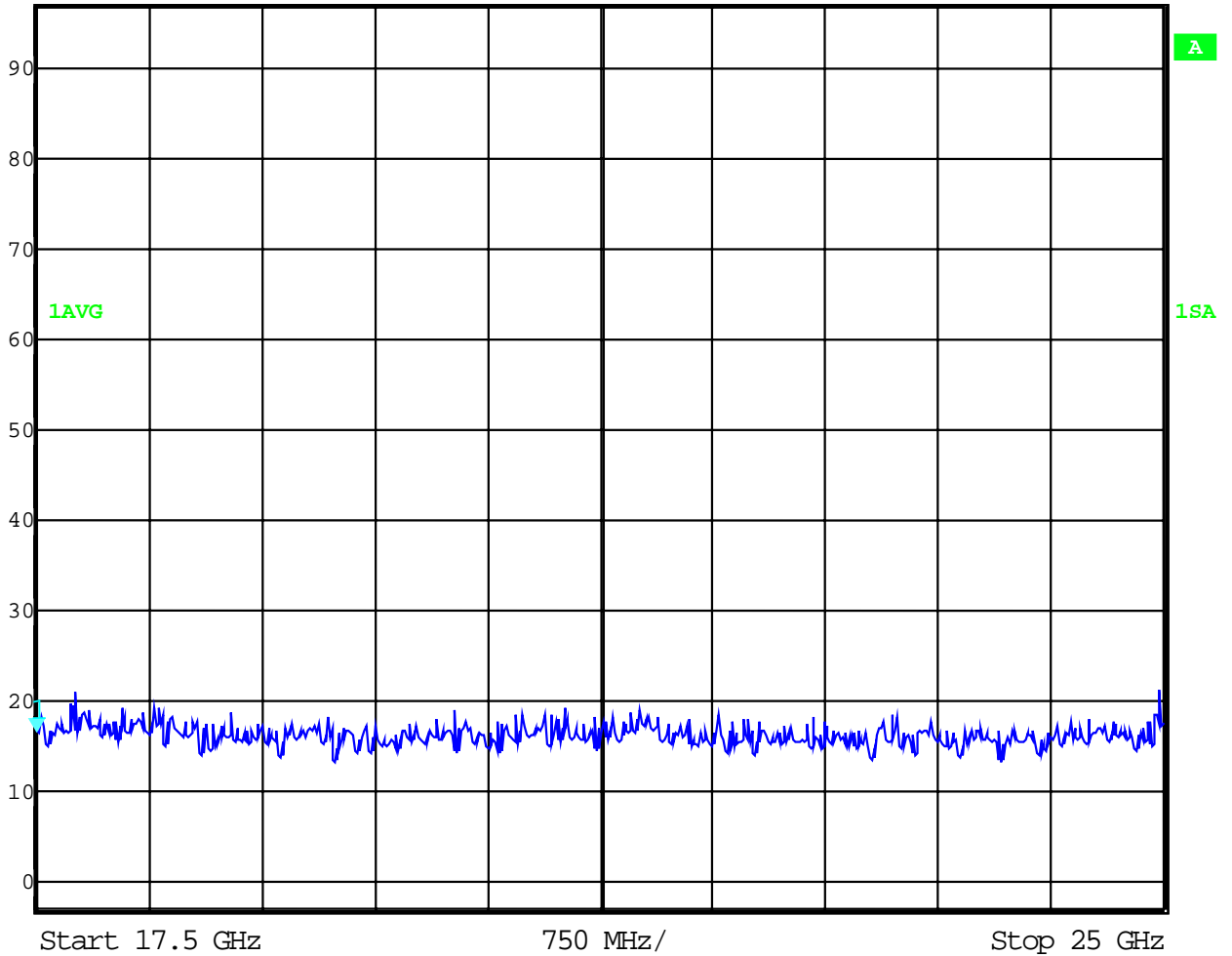
18 GHz to 25 GHz average (valid for all three channels)



Ref Lvl
97 dB μ V

Marker 1 [T1]
16.58 dB μ V
17.5000000 GHz

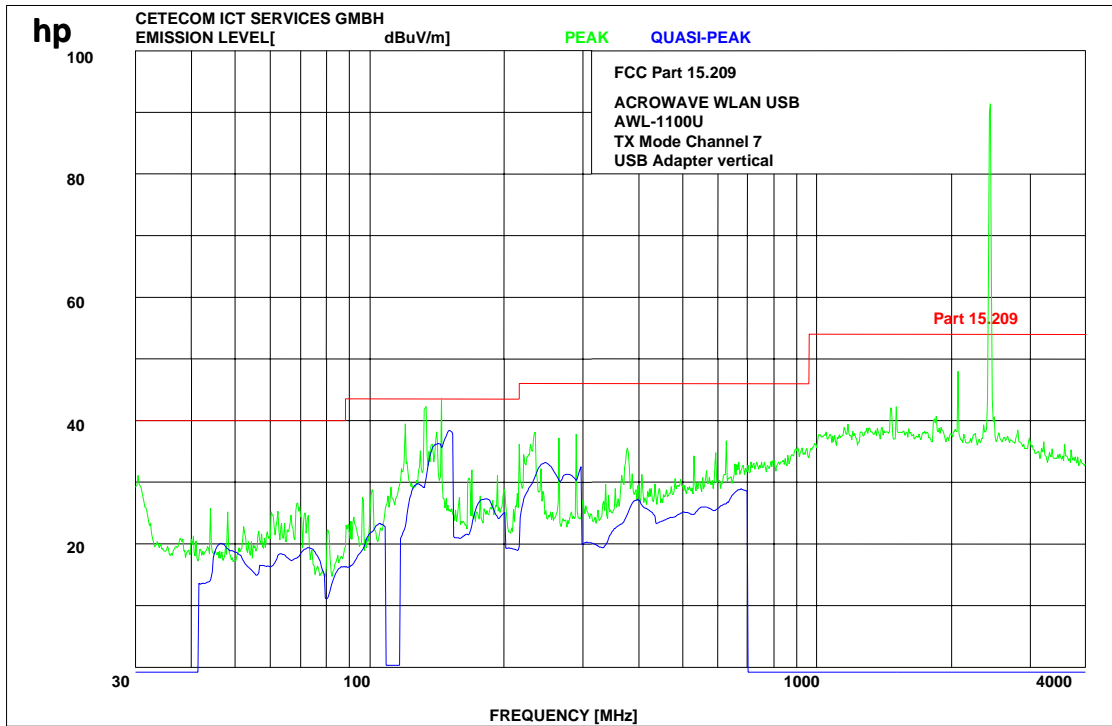
RBW 1 MHz RF Att 0 dB
VBW 1 MHz
SWT 43 ms Unit dB μ V



EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

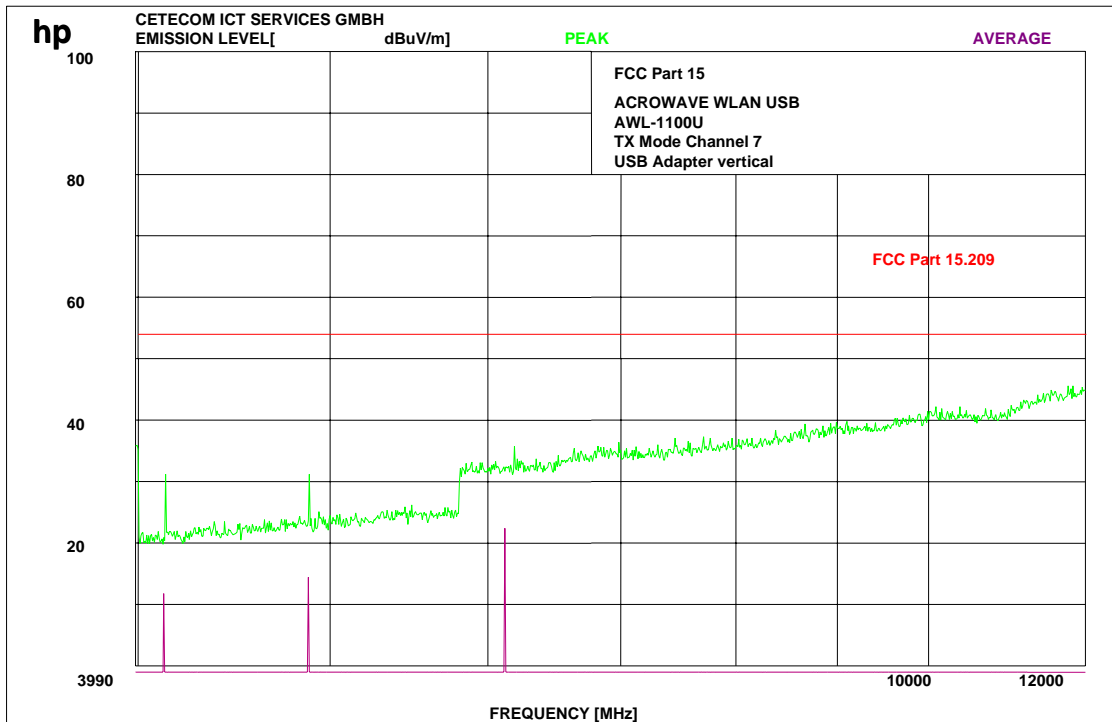
mid channel up to 4 GHz (vertical)



EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

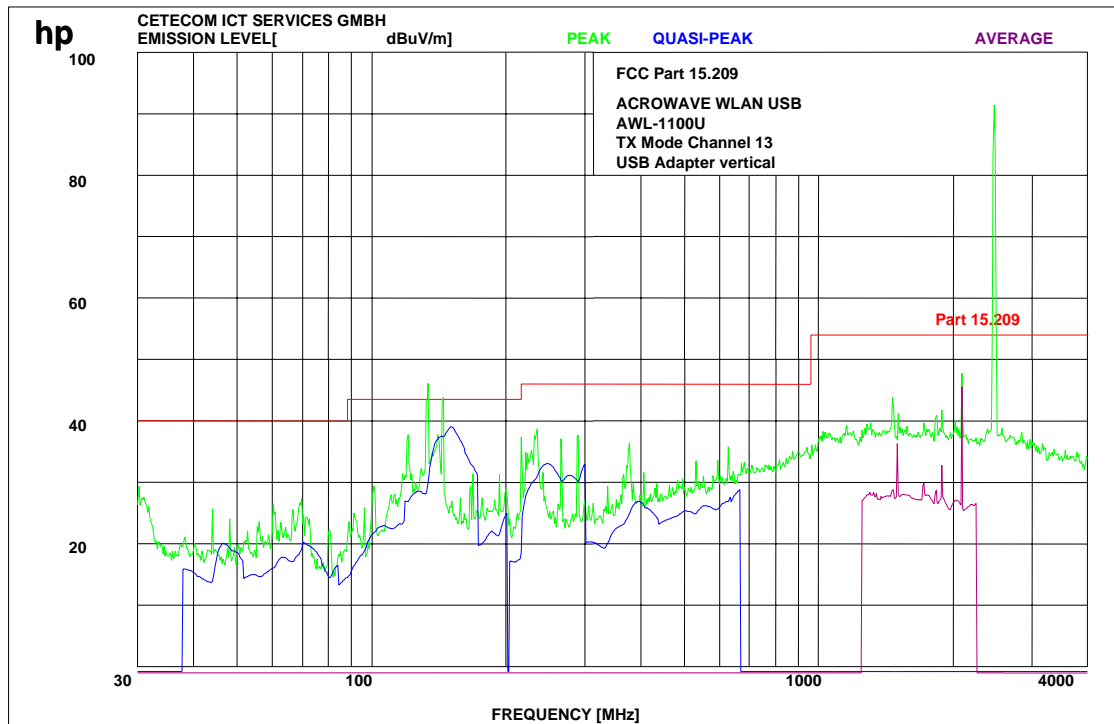
mid channel up to 12 GHz (vertical)



EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

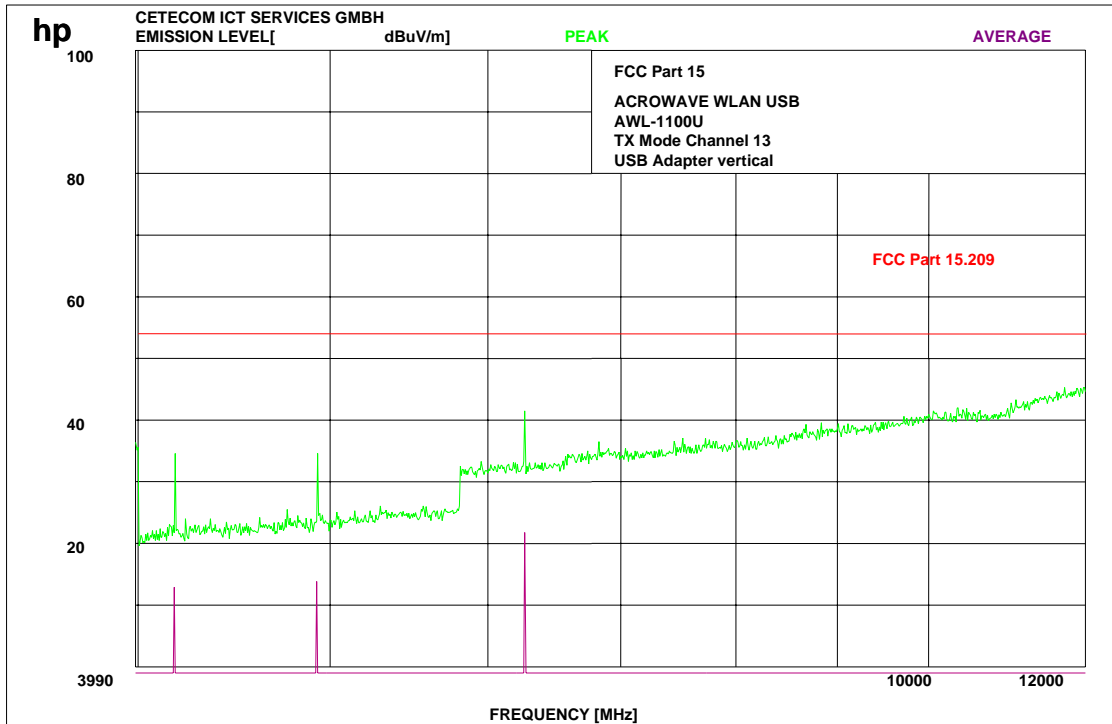
high channel up to 4 GHz (vertical)



EMISSION LIMITATIONS- Radiated

§ 15.247 (c) (1)

high channel up to 12 GHz (vertical)



EMISSION LIMITATIONS- Radiated Receiver

§ 15.209

64.31 MHz	CISPR QP: 26.3 dB μ V/m	limit: 40 dB μ V/m
141.3 MHz	CISPR QP: 41.3 dB μ V/m	limit: 43 dB μ V/m
241.9 MHz	CISPR QP: 33.5 dB μ V/m	limit: 46 dB μ V/m
1497.5 MHz	Average: 36.0 dB μ V/m	limit: 54 dB μ V/m
2037.6 MHz	Average: 42.5 dB μ V/m	limit: 54 dB μ V/m
4074.3 MHz	Average: 13.6 dB μ V/m	limit: 54 dB μ V/m

All peaks found in Receiving mode are < limit.

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

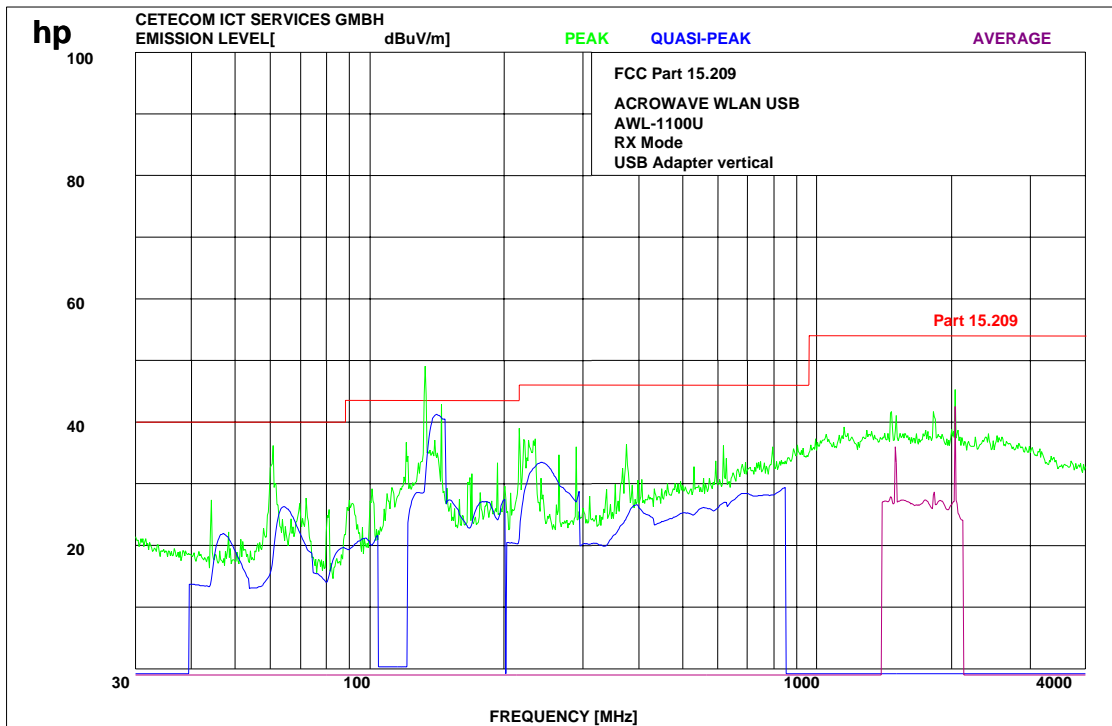
(for reference numbers see test equipment listing)

17 – 24, 64

EMISSION LIMITATIONS- Radiated

§ 15.209

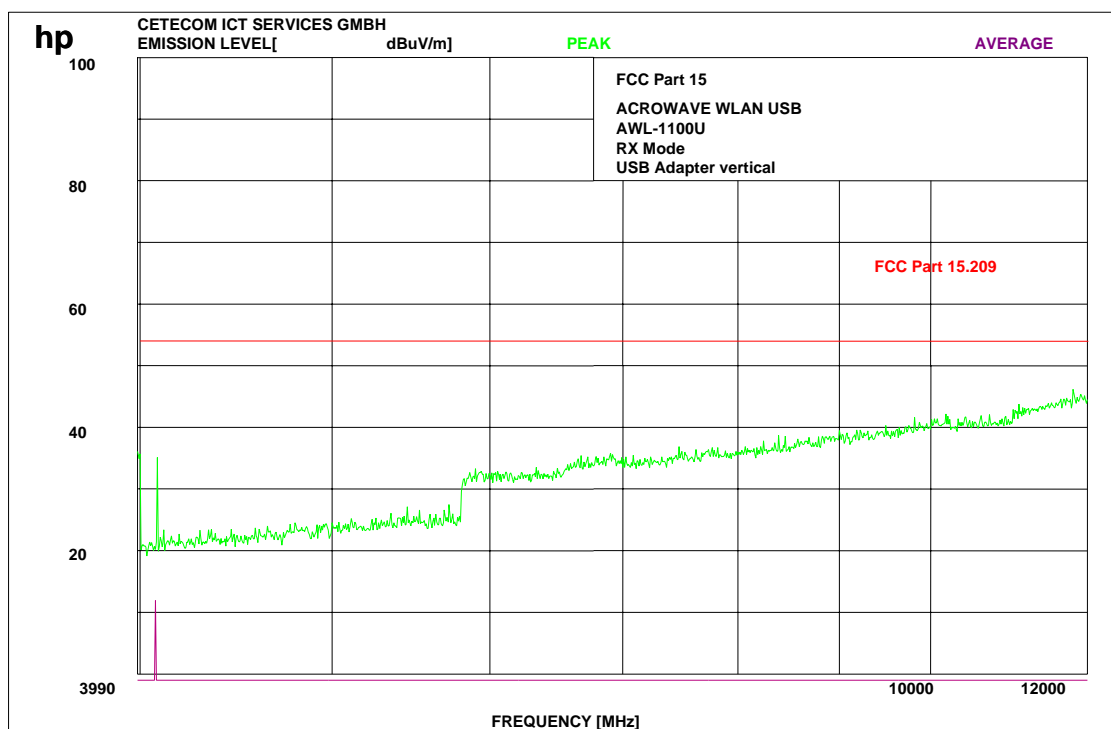
Receiver up to 4 GHz (vertical)



EMISSION LIMITATIONS- Radiated

§ 15.209

Receiver up to 12 GHz (vertical)



The measurements were performed up to 25 GHz.
There were no peaks found.

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

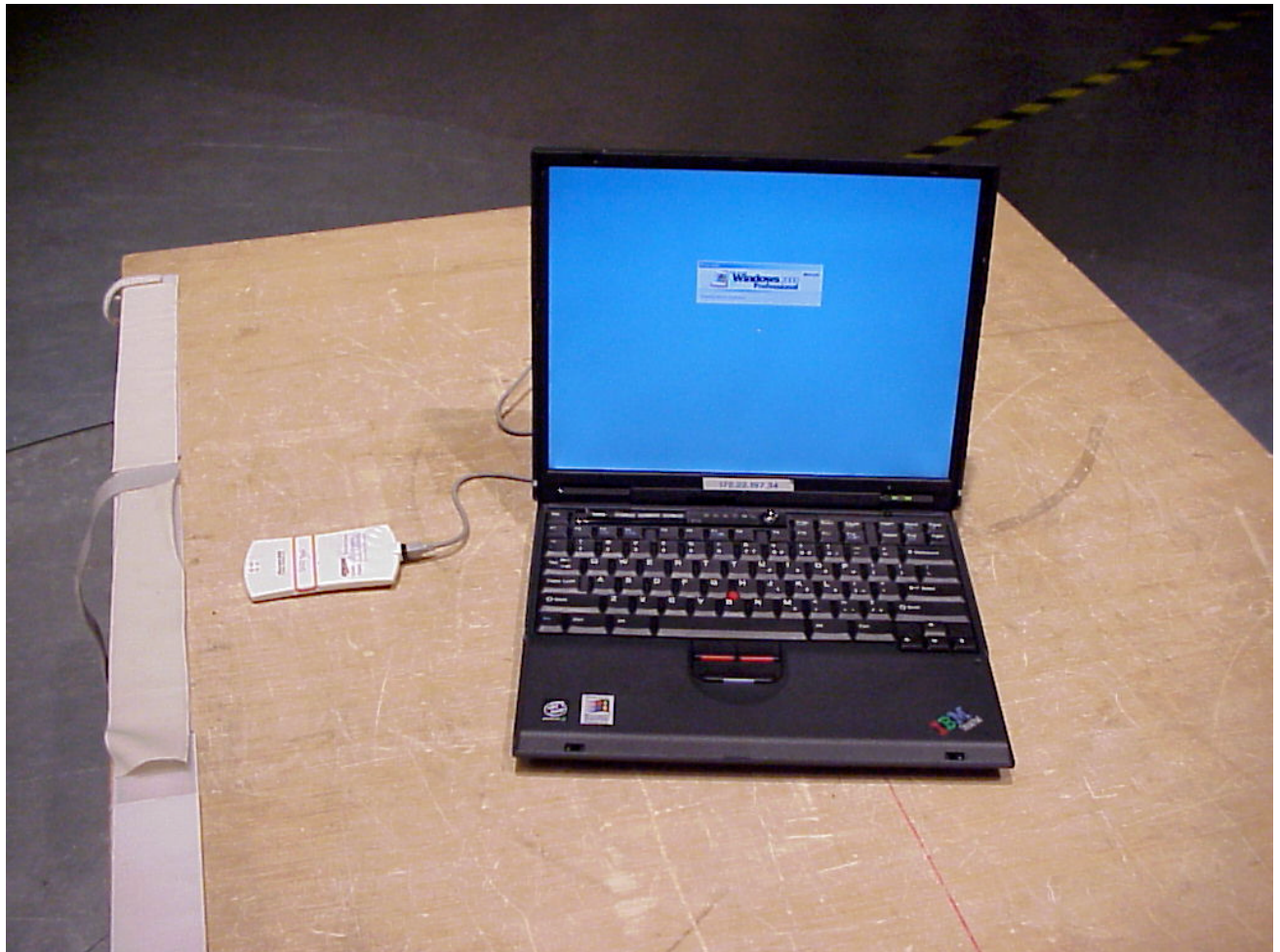
TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

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				
66				
67				

Test site

RADIATED EMISSIONS



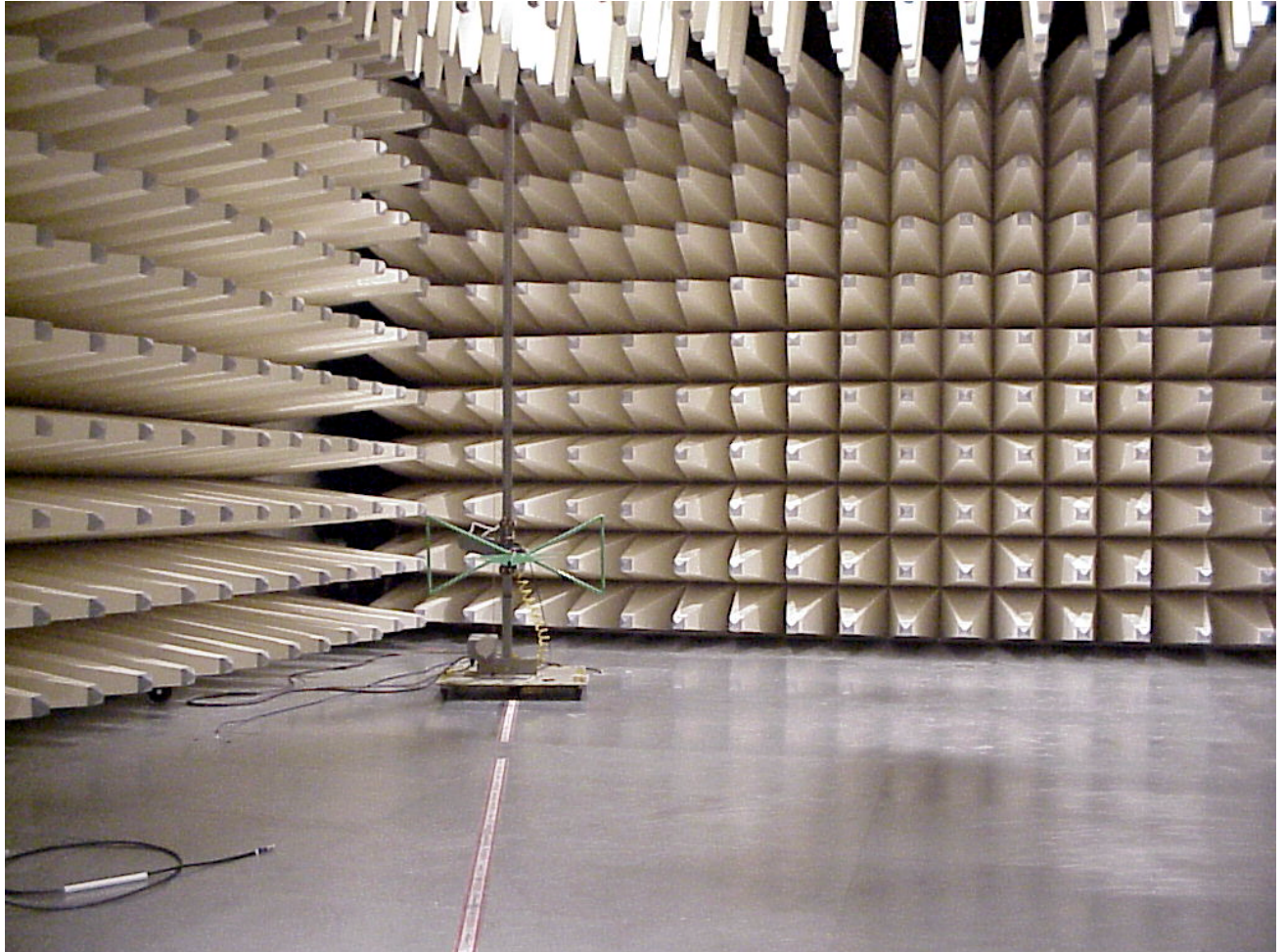
Test site

RADIATED EMISSIONS



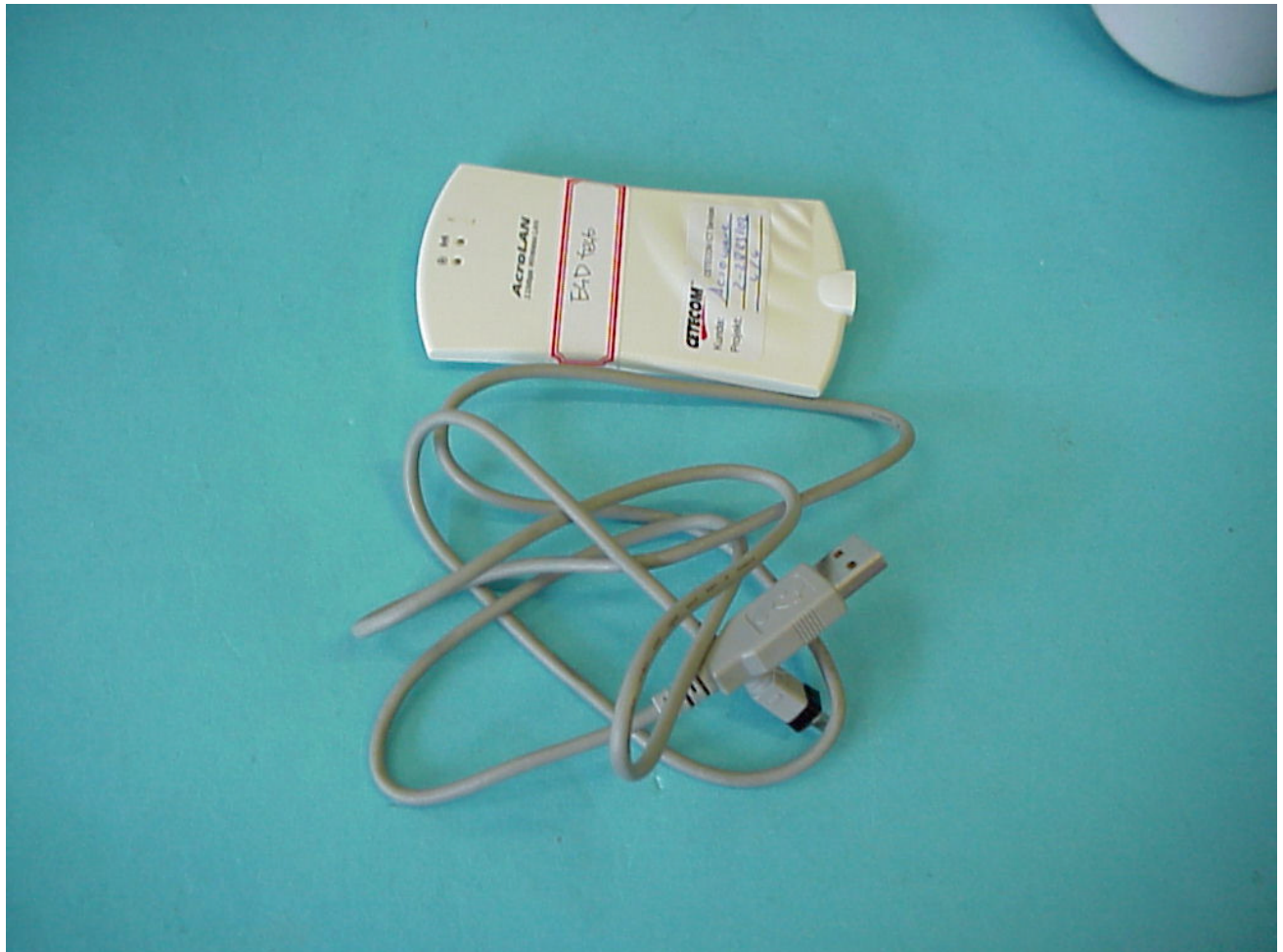
Test site

Radiated Emissions



Photographs of the equipment

Photograph no.: 1



Photographs of the equipment

Photograph no.: 2



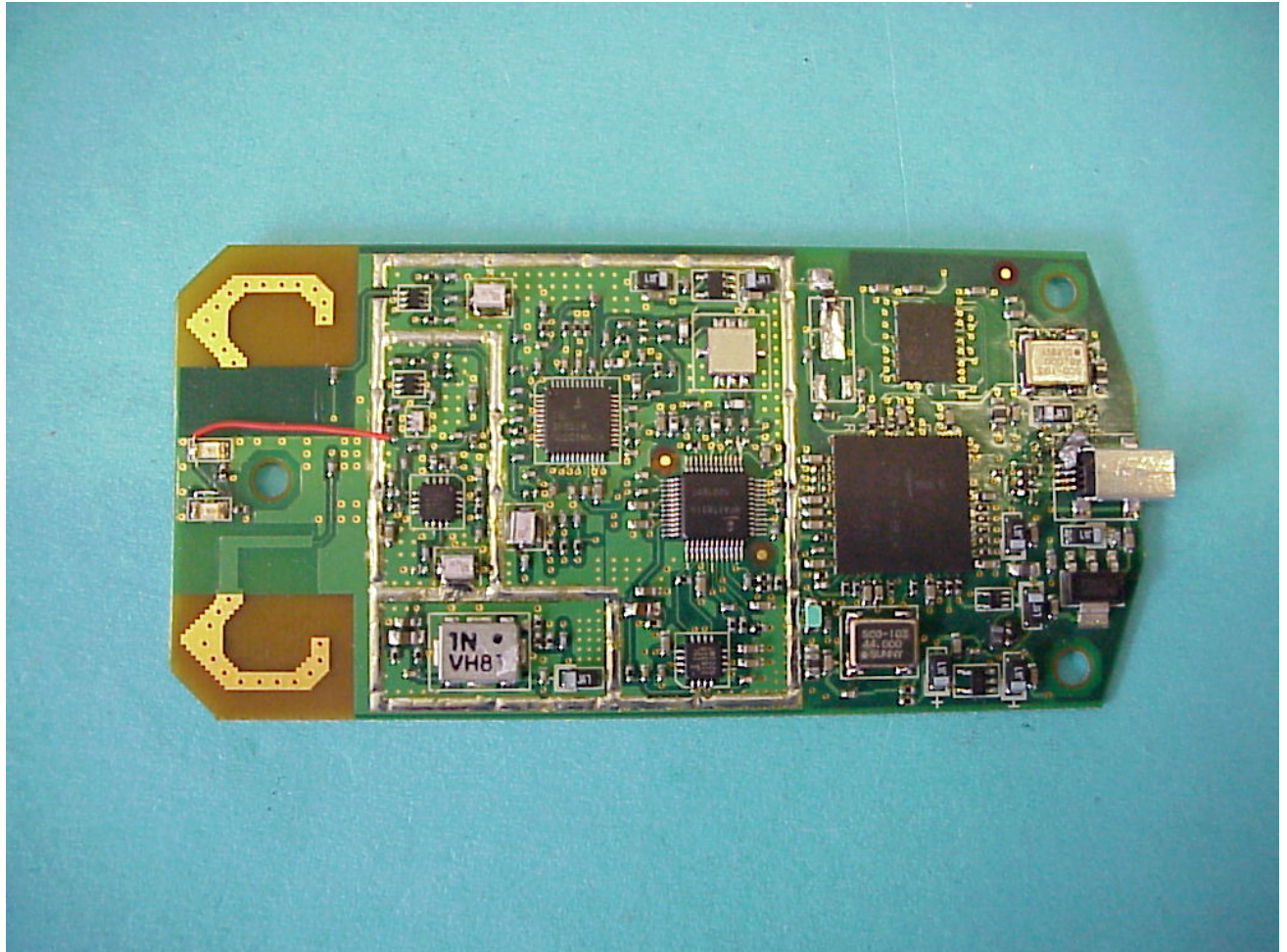
Photographs of the equipment

Photograph no.: 3



Photographs of the equipment

Photograph no.: 4



Photographs of the equipment

Photograph no.: 5



Photographs of the equipment

Photograph no.: 6

