

CETECOM Inc.



CETECOM Inc.

411 Dixon Landing Road, Milpitas, CA-95035, USA
Phone: +1 408 586 6200 Fax: +1 408 586 6299
www.cetecomusa.com

Issued test report consists of 52 Pages

Page 1 (52)

RECOGNIZED BY INDUSTRY CANADA

IC - 3925

Test report no.: 141FCC/2001
FCC Part 15.247
HP OmniBook 500

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 Inc. USA 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 Inc. USA.

1.2 Testing laboratory**CETECOM Inc.**

411 Dixon Landing Road, Milpitas, CA-95035, USA

Phone: +1 408 586 6200 Fax: +1 408 586 6299

E-mail: lothar.schmidt@cetecomusa.com

Internet: www.cetecomusa.com

1.3 Details of applicant

Name : Hewlett Packard Co.; Mobile Computing Division

Street : 1000 NE Circle Blvd.

City : Corvallis, OR 97330

Country : USA

Telephone : +1 541 715 2171

Telefax : +1 541 715 3607

Contact : Kathy Warnock

e-mail : Kathy_warnock@hp.com

1.4 Application details

Date of receipt of application : 2001-04-01

Date of receipt of test item : 2001-04-15

Date of test : 2001-04-18/19/20

1.5 Test item

Manufacturer : Hewlett Packard.

Address : See above

Model number : HP OmniBook 500 Series

Type Designation : HP OmniBook 500 Series

Additional informations:

Frequency : 2.412 – 2.484 GHz

Type of modulation : DBPSK at 1Mb/s; DQPSK at 2Mb/s; CCK at 5.5.and 11Mb/s

Number of channels : 11 Channels in US

Antenna : Integral

Power supply : 5.0V

Type of equipment : Temperature range : 0°C - +35°C

Tests were carried out at the maximum number of channels available (13) in the test software. The US version will set to 11 channels only.

1.6 Test standards

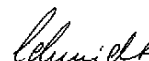
FCC Part 15 §15.247

The tests were done following the public notice DA 00-705 released March 30, 2000

2 Technical test**2.1 Summary of test results**

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

Technical responsibility for area of testing :

2001-05-10**EMC&
Radio****Lothar
Schmidt**

Date**Section****Name****Signature**

2.2 Testreport

TEST REPORT

**Testreport no. : 141FCC/2001
HP OmniBook 500**

TEST REPORT REFERENCE**LIST OF MEASUREMENTS**

Paragraph	PARAMETER TO BE MEASURED	PAGE
	Transmitter parameters	
§ 15.247 (a)(2)	Spectrum Bandwith of a DSSS System	7
§ 15.247 (b)(1)	Maximum peak output power	11
§ 15.247 (c)(1)	Emission limitations	16
§ 15.247 (d)	Power Spectral Density	33
§ 15.247 (e)	Processing Gain of DSSS System	37
	Receiver parameters	
§ 15.209	Spurious radiations - Radiated	39
	Test equipment listing	47
	Test Site	48
	Photographs of the equipment	50

NOTE: Conducted Emissions as per § 15.107 are not applicable for the EUT since it is a built in a laptop computer. The Laptop was measured in accordance with FCC part 15 B including the Wireless LAN.

SPECTRUM BANDWITH OF DSSS-SYSTEM**SUBCLAUSE § 15.247 (a)(2)**

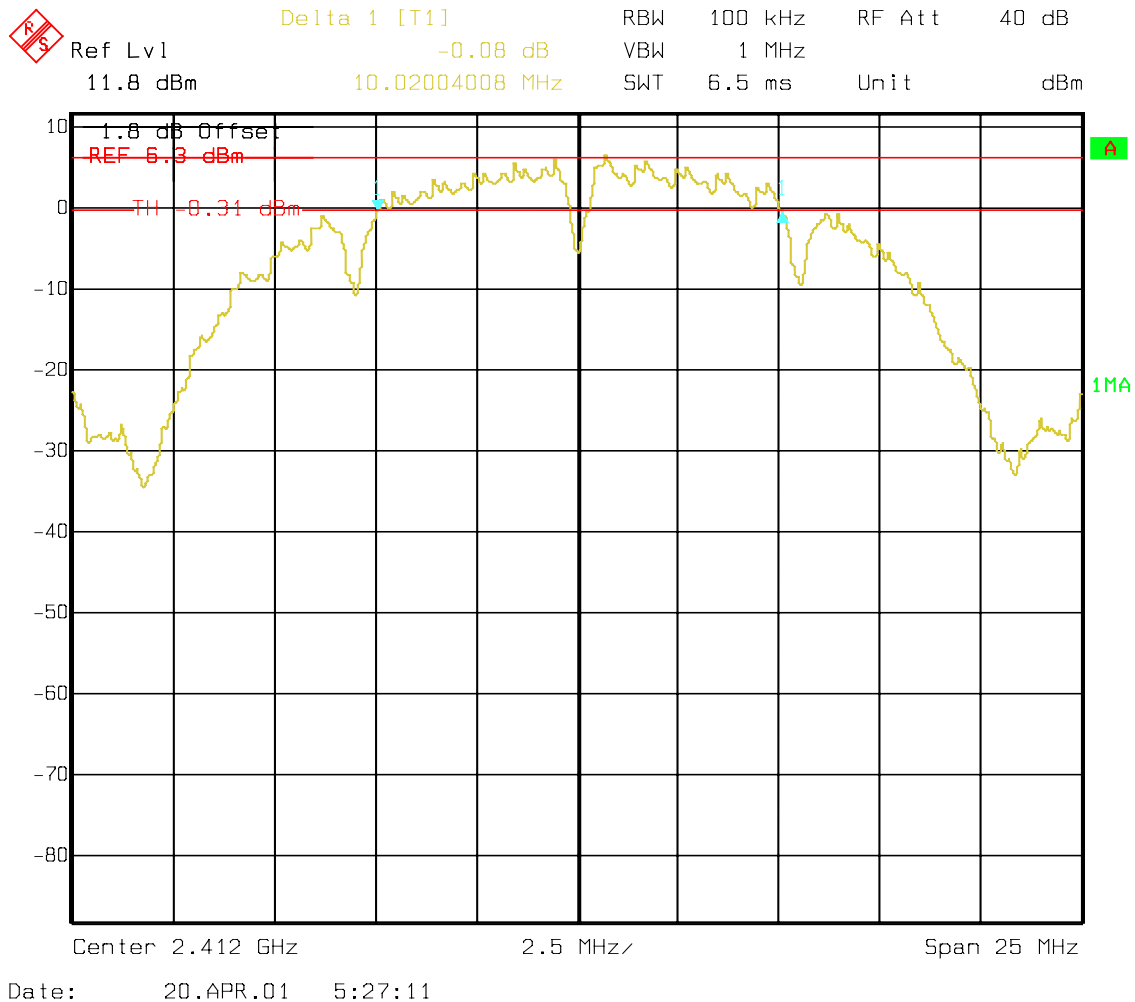
TEST CONDITIONS		6 dB BANDWIDTH (kHz)		
Frequency (MHz)		2412	2442	2472
$T_{nom}(20)^{\circ}C$	$V_{nom}(V)$	10020	11422	10020
Measurement uncertainty		$\pm 3dB$		

LIMIT**SUBCLAUSE §15.247(a) (2)**

The minimum 6dB bandwidth shall be at least 500 KHz

**SPECTRUM BANDWITH OF DSSS-SYSTEM
2412 MHz**

SUBCLAUSE § 15.247 (a)(2)



LIMIT

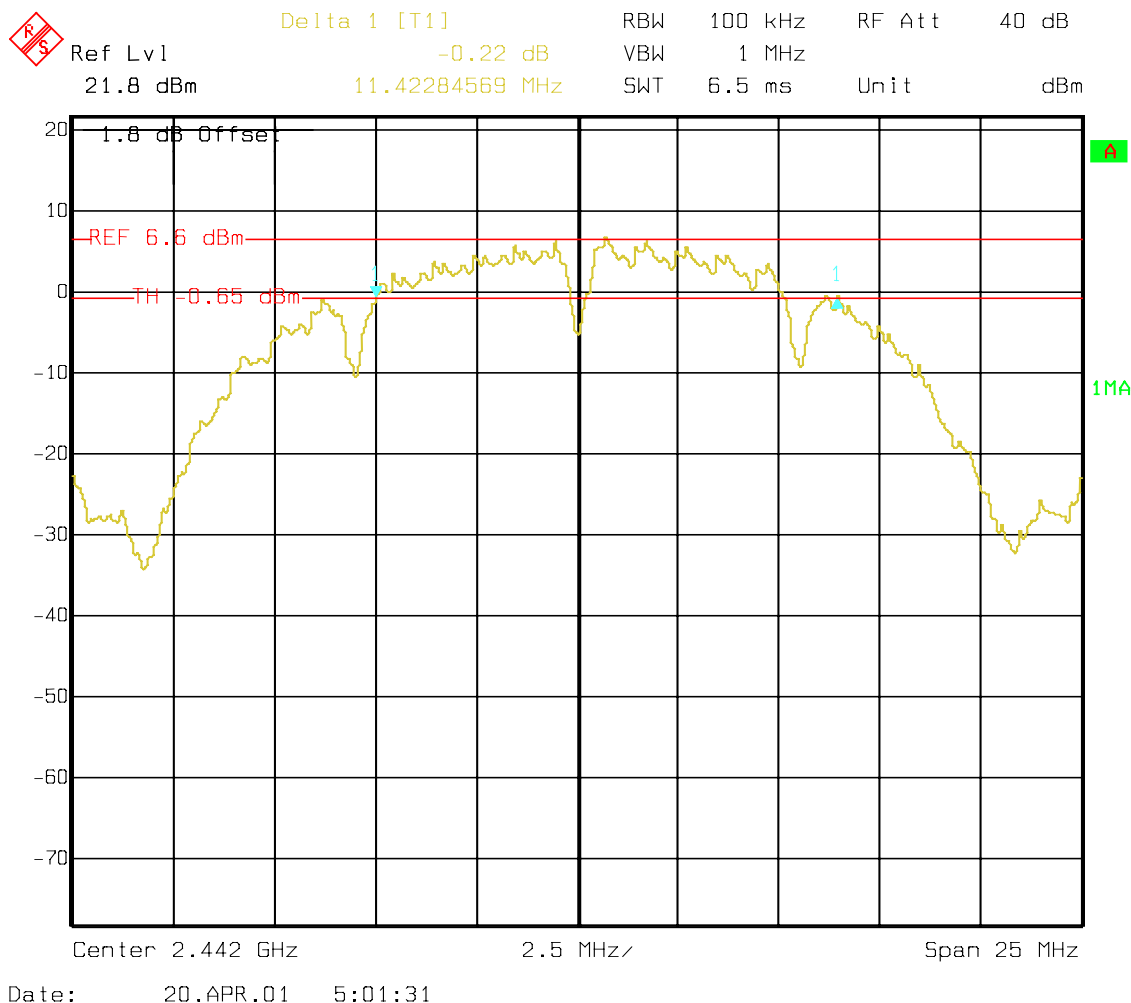
SUBCLAUSE §15.247(a) (2)

The minimum 6dB bandwidth shall be at least 500 KHz , here 10.02 MHz

ANALYZER SETTINGS: RBW=100KHz , VBW=1MHz

SPECTRUM BANDWITH OF DSSS-SYSTEM 2442 MHz

SUBCLAUSE § 15.247 (a)(2)



LIMIT

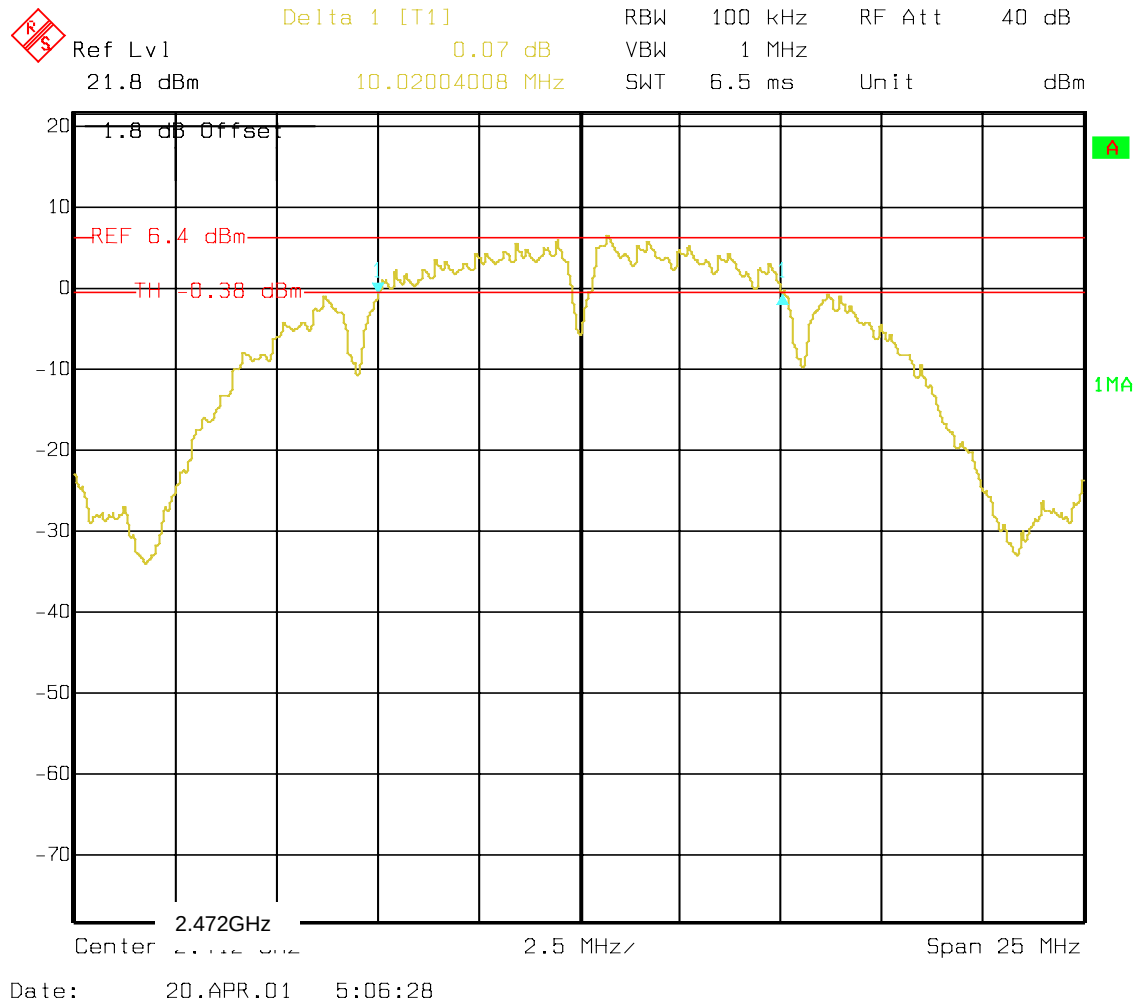
SUBCLAUSE §15.247(a) (2)

The minimum 6dB bandwidth shall be at least 500 KHz , here 11.42 MHz

ANALYZER SETTINGS: RBW=100KHz , VBW=1MHz

**SPECTRUM BANDWITH OF DSSS-SYSTEM
2472 MHz**

SUBCLAUSE § 15.247 (a)(2)



LIMIT

SUBCLAUSE §15.247(a) (2)

The minimum 6dB bandwidth shall be at least 500 KHz , here 10.02 MHz

ANALYZER SETTINGS: RBW=100KHz , VBW=1MHz

**MAXIMUM PEAK OUTPUT POWER
(CONDUCTED)**

SUBCLAUSE § 15.247 (b) (1)

TEST CONDITIONS		MAXIMUM PEAK OUTPUT POWER (dBm)					
		2412		2442		2472	
Frequency (MHz)		Pk	16.81	Pk	17.06	Pk	17.22
		Av	11.80	Av	12.05	Av	11.84
T _{nom} (23)°C	V _{nom} 0V	Pk	17.47	Pk	17.60	Pk	17.57
		Av	12.39	Av	12.70	Av	12.45
T _{nom} (0)°C	V _{nom} 0V	Pk	16.27	Pk	16.49	Pk	16.13
		Av	11.17	Av	11.45	Av	10.96
T _{nom} (35)°C		Pk	16.27	Pk	16.49	Pk	16.13
		Av	11.17	Av	11.45	Av	10.96
Measurement uncertainty		±3dB					

LIMIT

SUBCLAUSE § 15.247 (b) (1)

Frequency range	RF power output
2400-2483.5 MHz / 5725 – 5850 MHz	1.0 Watt

**MAXIMUM PEAK OUTPUT POWER (EIRP)
(RADIATED)**
SUBCLAUSE § 15.247 (b) (1)

TEST CONDITIONS		MAXIMUM PEAK OUTPUT POWER (dBm)					
Frequency (MHz)		2412		2442		2472	
T _{nom} (23)°C	V _{nom} (V)	Pk	17.67	Pk	18.43	Pk	18.85
		Av	12.57	Av	13.23	Av	13.75
Maximum deviation from output power under extreme test conditions (dBc)		not performed		not performed		not performed	
Measurement uncertainty		±3dB					

LIMIT
SUBCLAUSE § 15.247 (b) (1)

Frequency range	RF power output
2400-2483.5 MHz / 5725 – 5850 MHz	1.0 Watt

ANALYZER SETTINGS: RBW=3MHz, VBW=3MHz

Marker 1 [T1] RBW 3 MHz RF Att 30 dB
Ref Lvl 21.1 dBm 17.67 dBm VBW 3 MHz
2.41197495 GHz SWT 5 ms Unit dBm

1.1 dB Offset

Center 2.412 GHz 2.5 MHz Span 25 MHz

1MA
TDS

Marker 1 [T1] RBW 3 MHz RF Att 30 dB
Ref Lvl 18.43 dBm VBW 3 MHz
21.1 dBm 2.44202505 GHz SWT 5 ms Unit dBm

1.1 dB Offset

Center 2.442 GHz 2.5 MHz Span 25 MHz

Date: 20.APR.01 8:12:48

Ref Lvl 21.1 dBm

Marker 1 [T1] 18.85 dBm

2.47197495 GHz

RBW 3 MHz

VBW 3 MHz

SWT 5 ms

RF Att 30 dB

Unit dBm

1.1 dB Offset

Center 2.472 GHz

2.5 MHz

Span 25 MHz

1MA

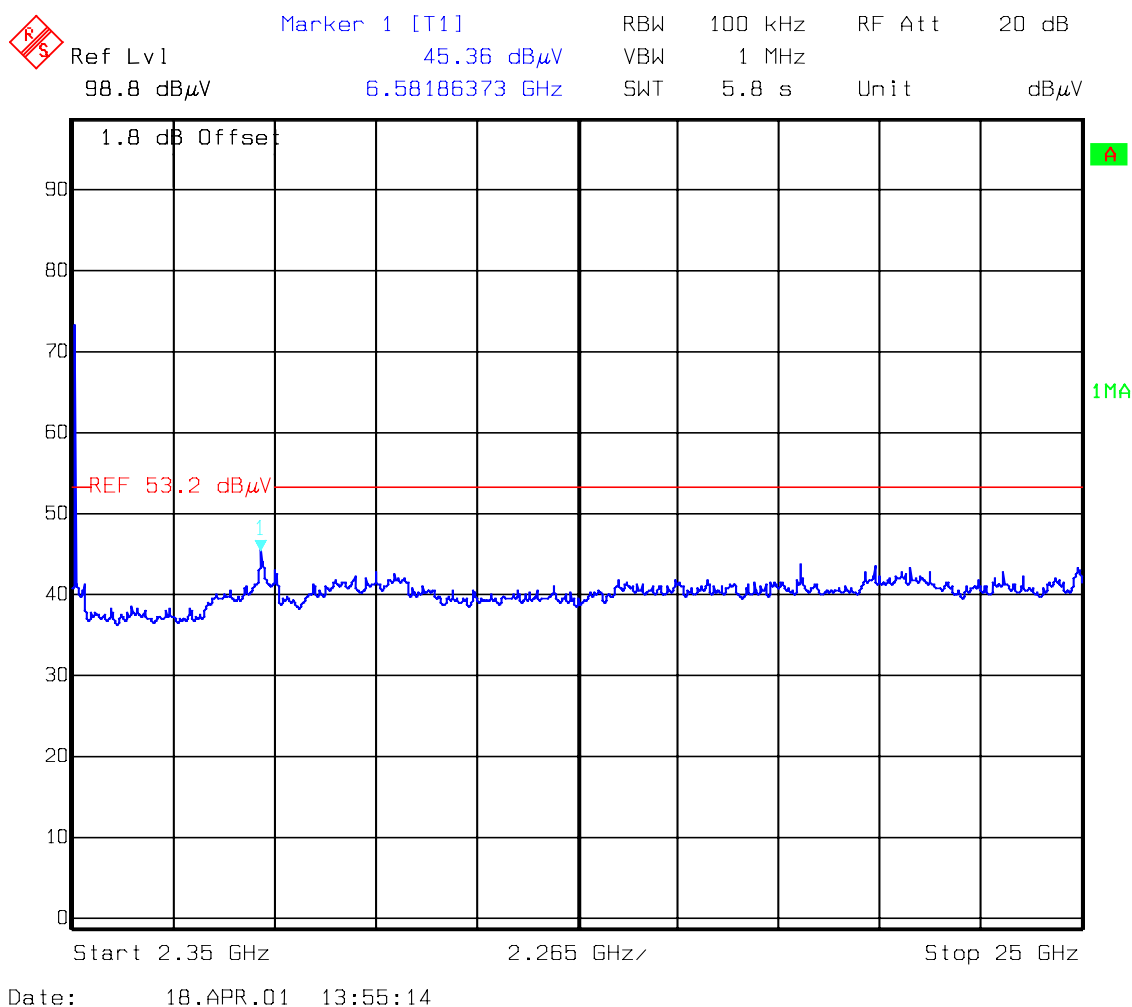
TDS

EMISSION LIMITATIONS (Transmitter)

SUBCLAUSE § 15.247 (c) (1)

conducted

2412 MHz up to 25 GHz



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)).

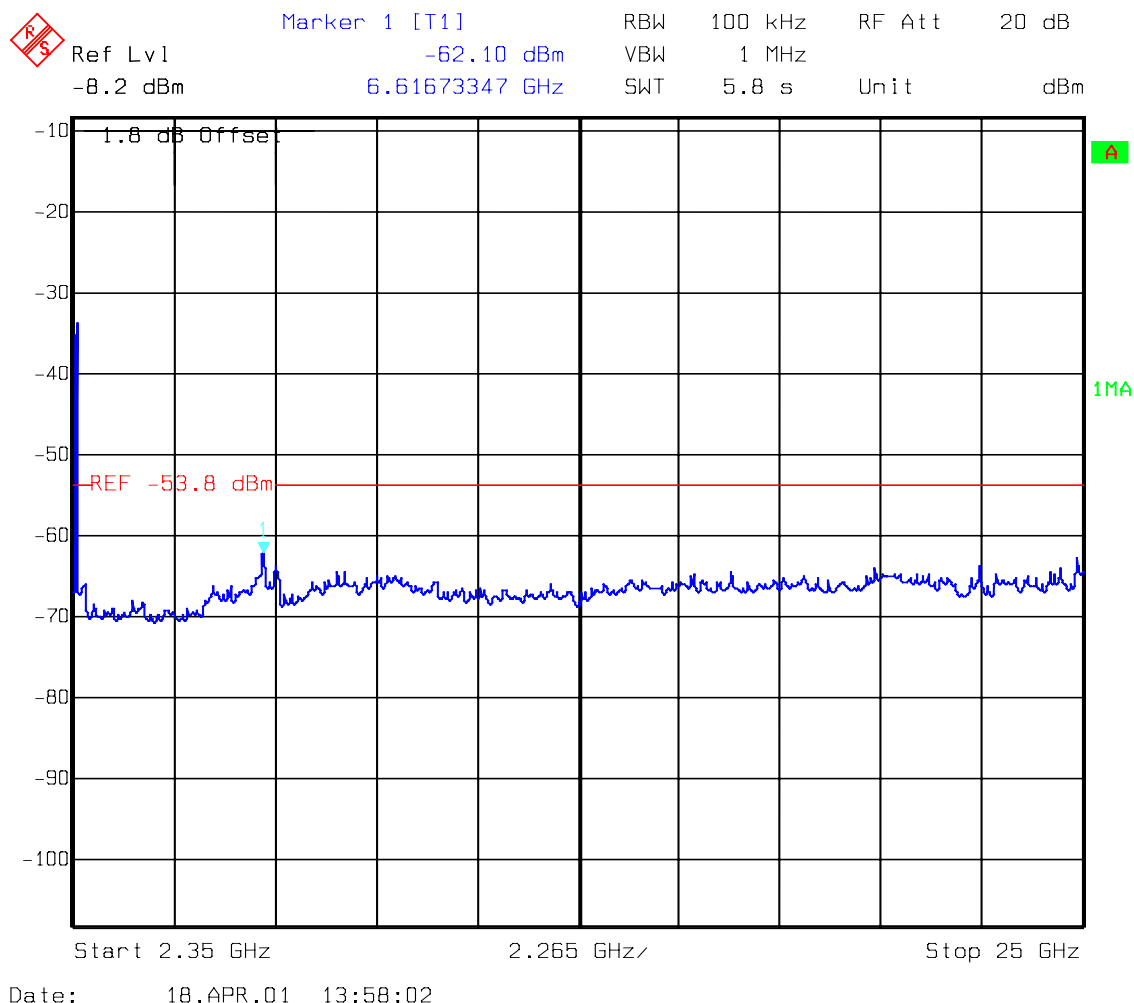
ANALYZER SETTINGS: RBW=100KHz, VBW=1MHz

EMISSION LIMITATIONS (Transmitter)

SUBCLAUSE § 15.247 (c) (1)

conducted

2442 MHz up to 25 GHz



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)).

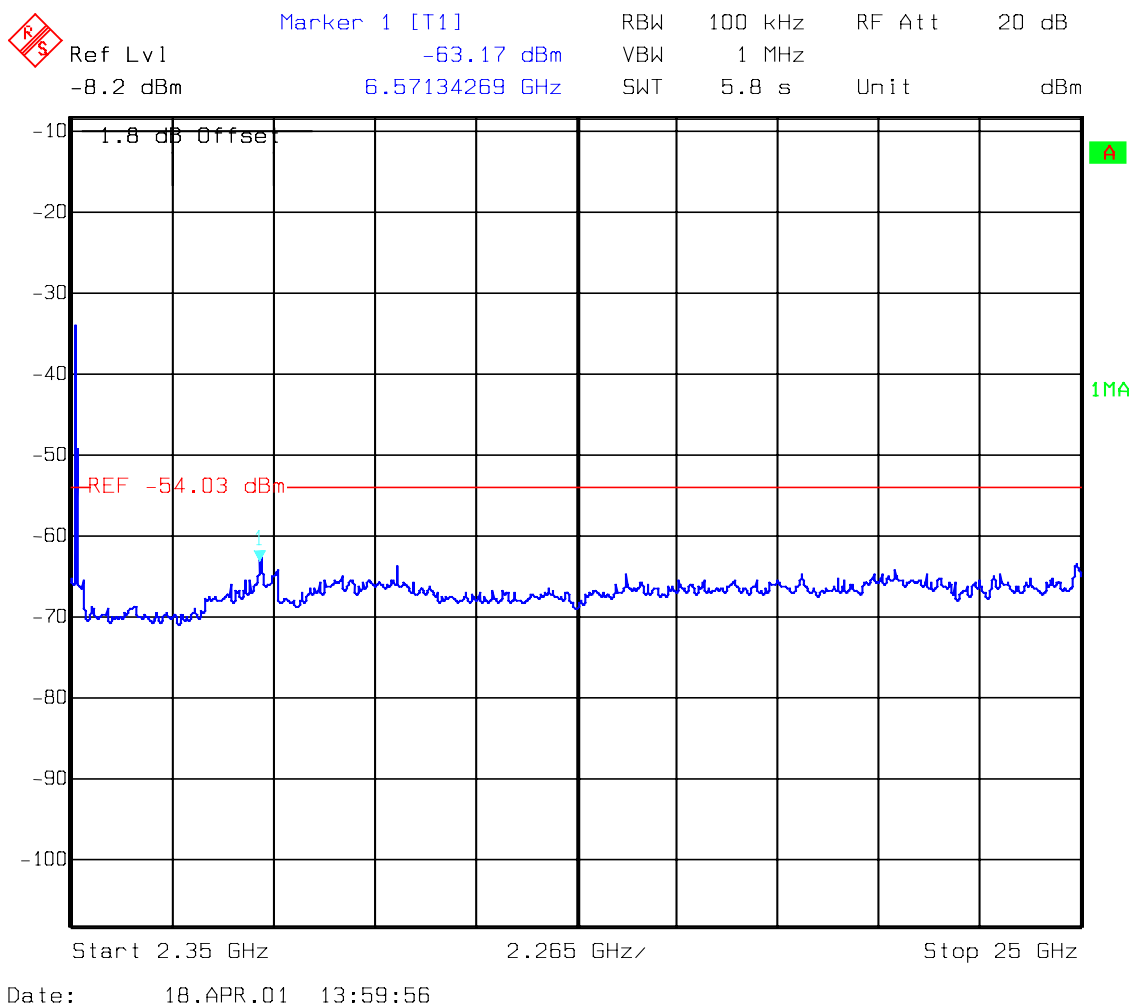
ANALYZER SETTINGS: RBW=100KHz , VBW=1MHz

EMISSION LIMITATIONS (Transmitter)

SUBCLAUSE § 15.247 (c) (1)

conducted

2472 MHz up to 25 GHz



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)).

ANALYZER SETTINGS: RBW=100KHz , VBW=1MHz

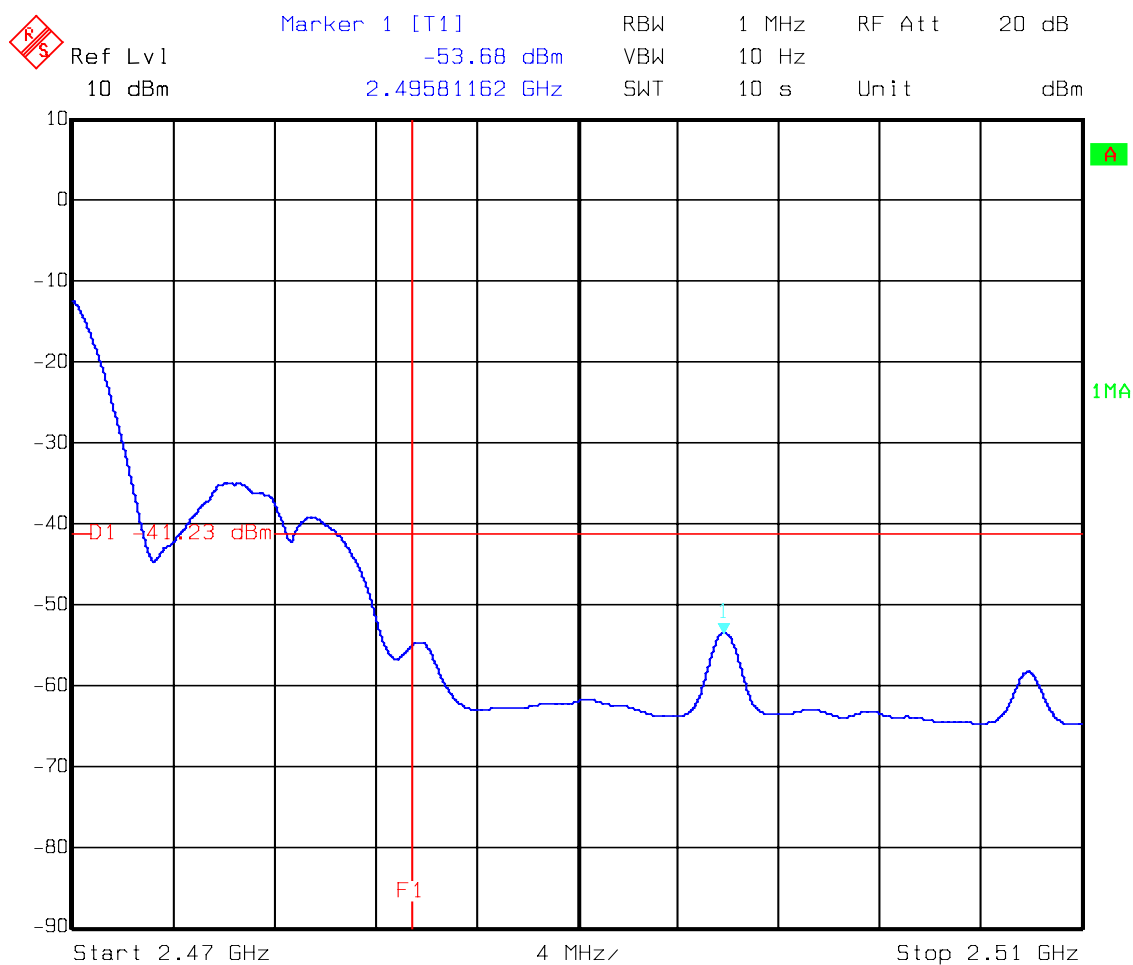
EMISSION LIMITATIONS (Transmitter)

SUBCLAUSE § 15.247 (c) (2)

conducted

spurious in the restricted band 2483.5 – 2500 MHz

(Higher Band Edge)

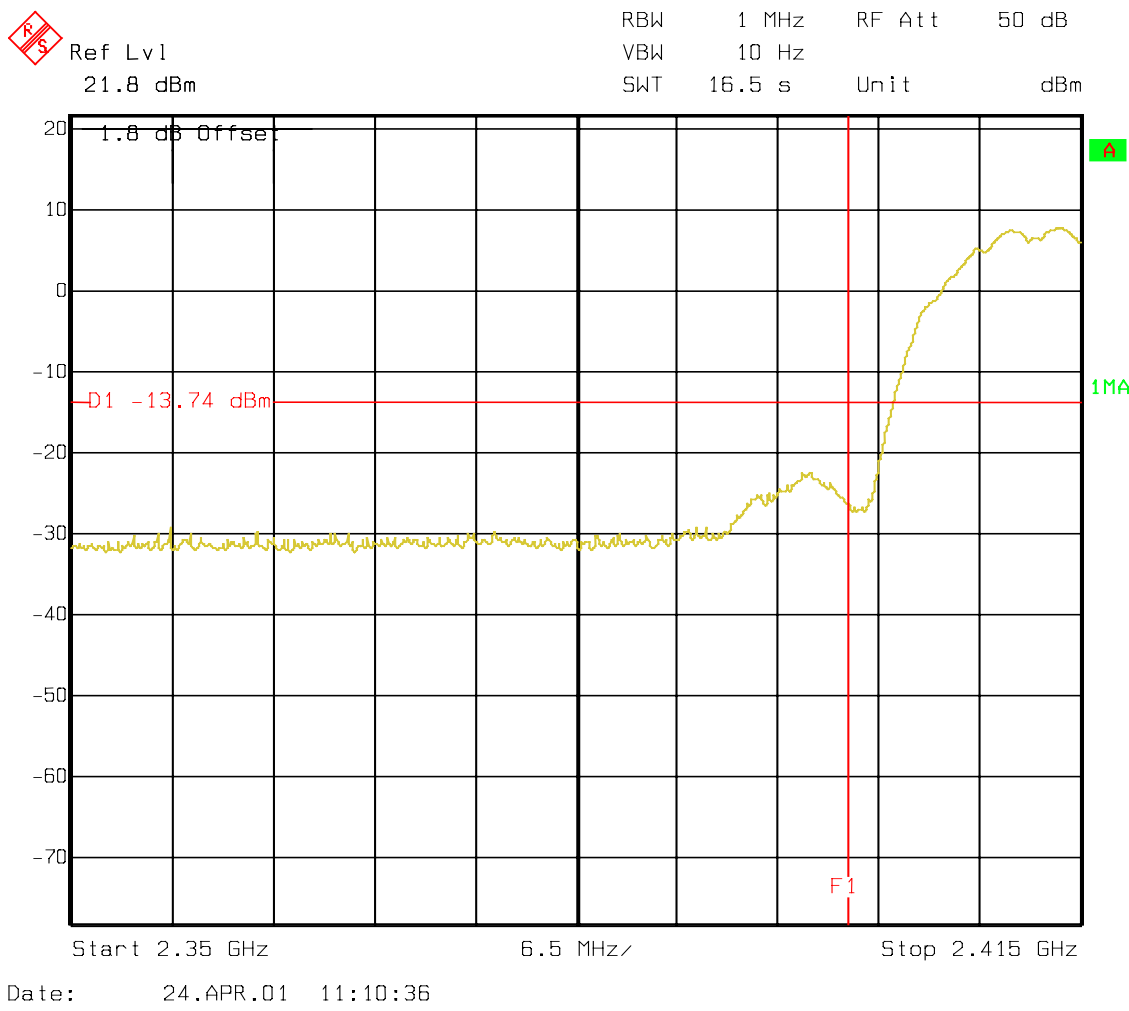


Date: 26.APR.01 13:22:37

ANALYZER SETTINGS: RBW=1MHz, VBW=10Hz

Lower Band Edge

conducted

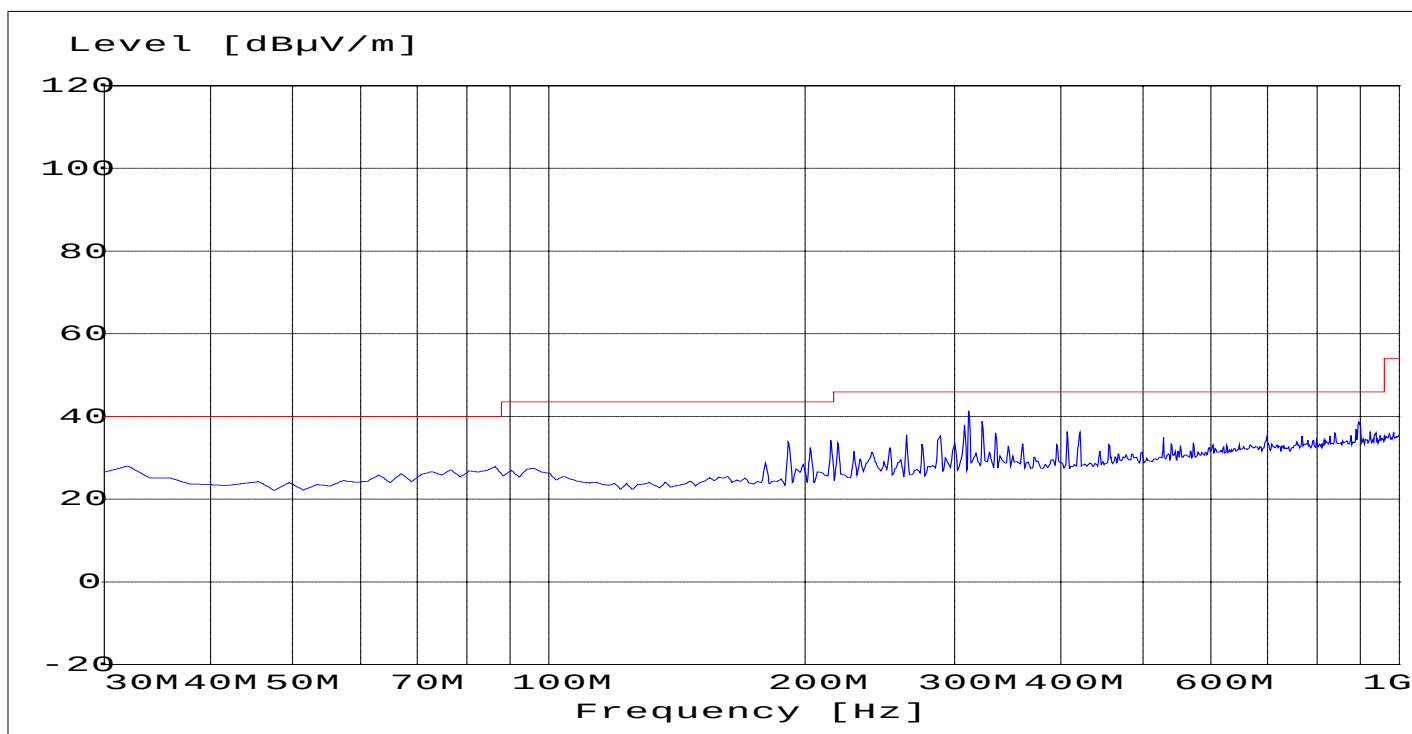


ANALYZER SETTINGS: RBW=1MHz , VBW=10Hz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

The spurious emissions were done with different settings, using the relevant pre-amplifiers for the relevant frequency ranges. This is the reason that the graphs show different noise levels. In the range between 18 and 26 GHz very short cable connections to the antenna was used to minimize the noise level. Channel 1: 2412 MHz; Channel 2: 2442 MHz; Channel 3: 2472 MHz

All emission measurements were done in Peak mode to reduce measurement time. In case limits are exceeded the measurements will be repeated and documented in the test report either with Quasi Peak or average detector depending on the frequency range specified in FCC 15 and/or DA00-705. Bandwidth, sweep time etc. Were set according DA00-705 and recorded

Channel 1: 30MHz-1GHz**LIMITS****SUBCLAUSE § 15.247 (c)**

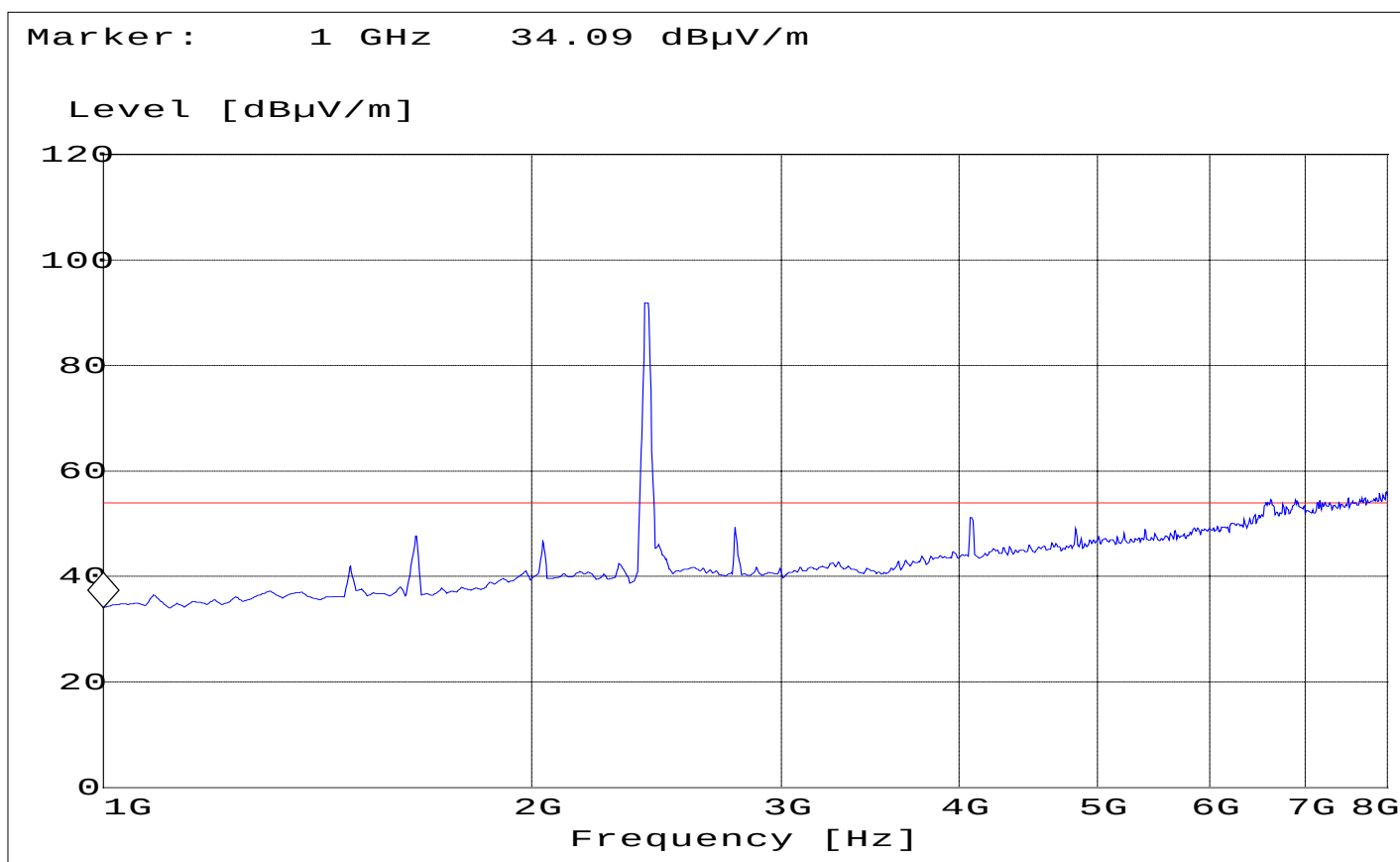
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 1: 1GHz-8GHz



NOTE: This measurement was repeated with High Pass Filter to eliminate the carrier frequency & harmonics were found lowered by minimum 4dB.

The peak above the limit is the carrier frequency. This is related to all the spurious emissions measurements.

LIMITS

SUBCLAUSE § 15.247 (c)

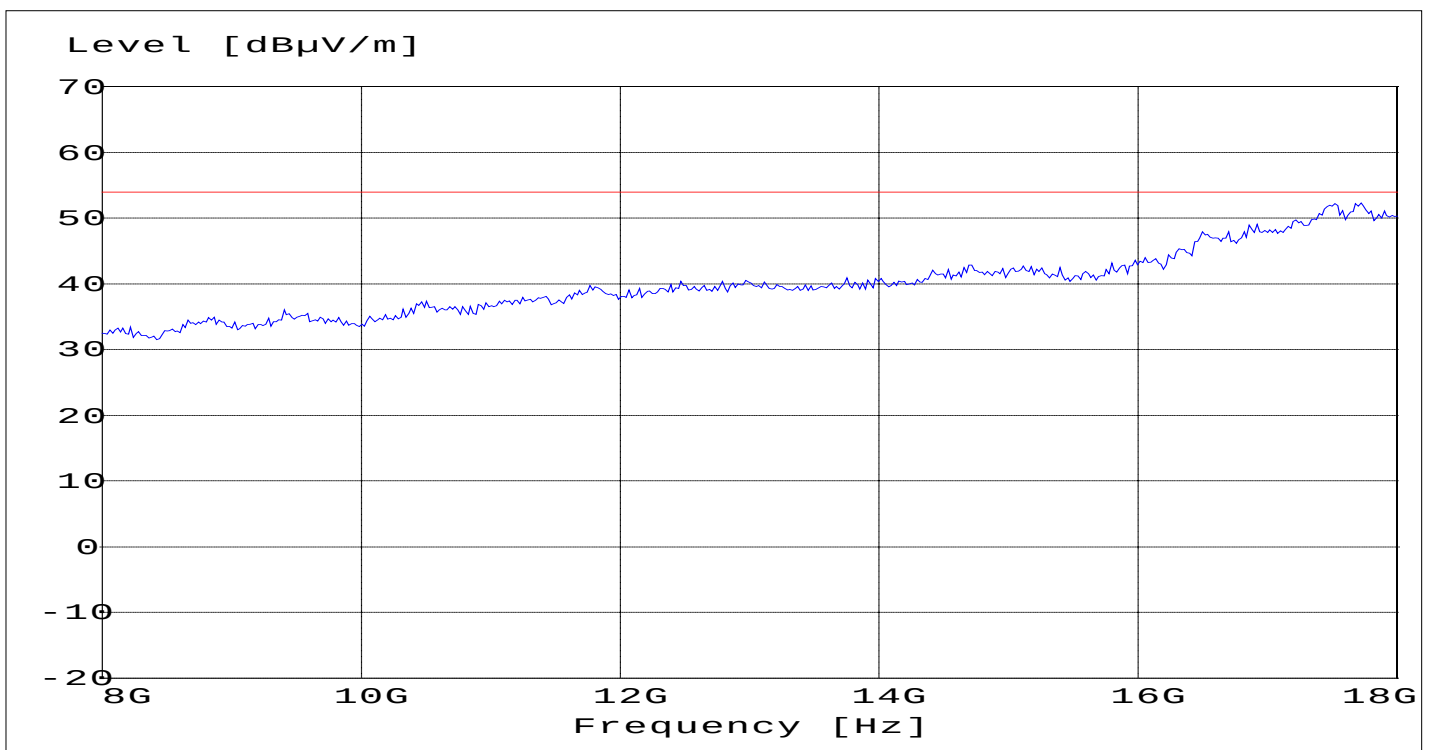
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 1: 8GHz -18GHz



LIMITS

SUBCLAUSE § 15.247 (c)

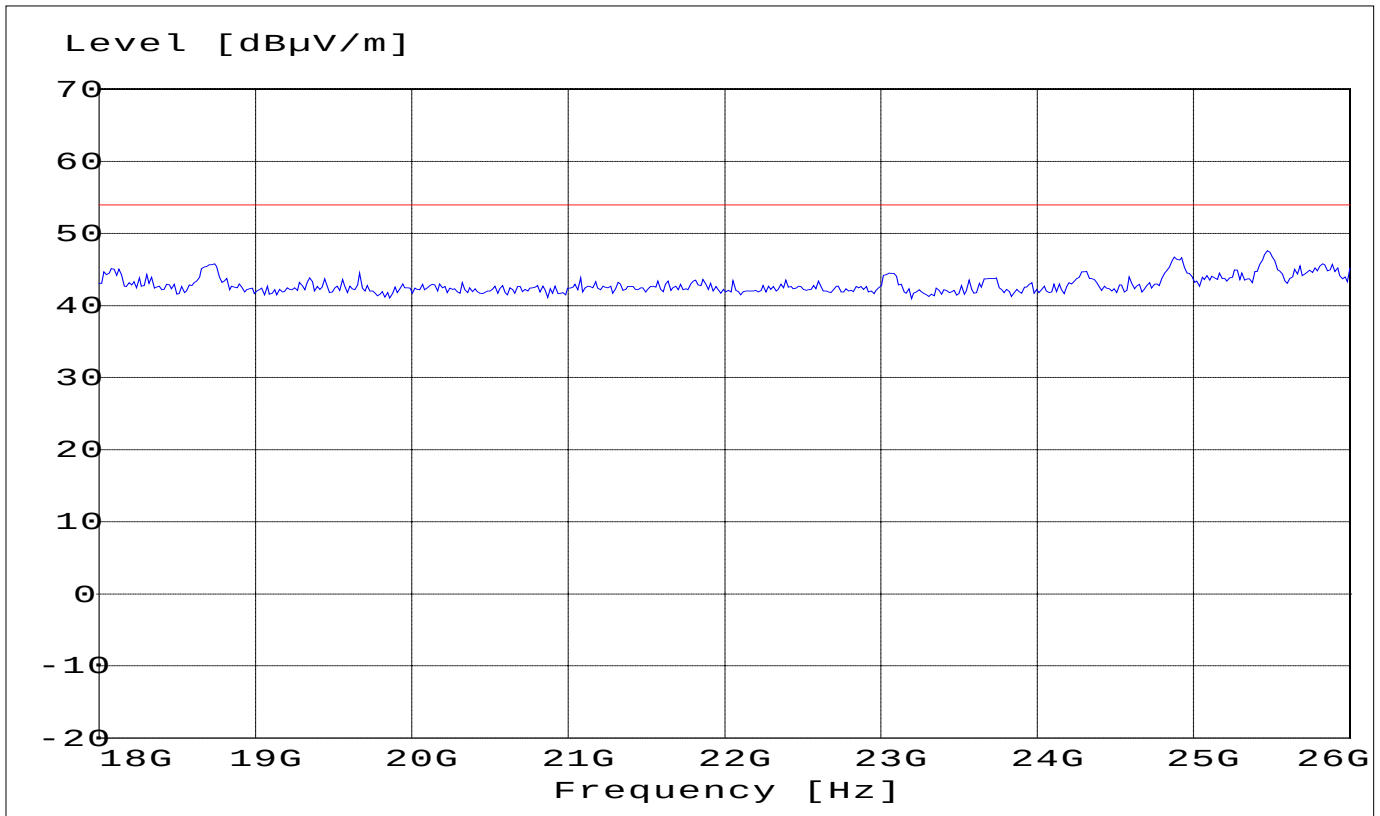
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 1: 18GHz -26GHz



LIMITS

SUBCLAUSE § 15.247 (c)

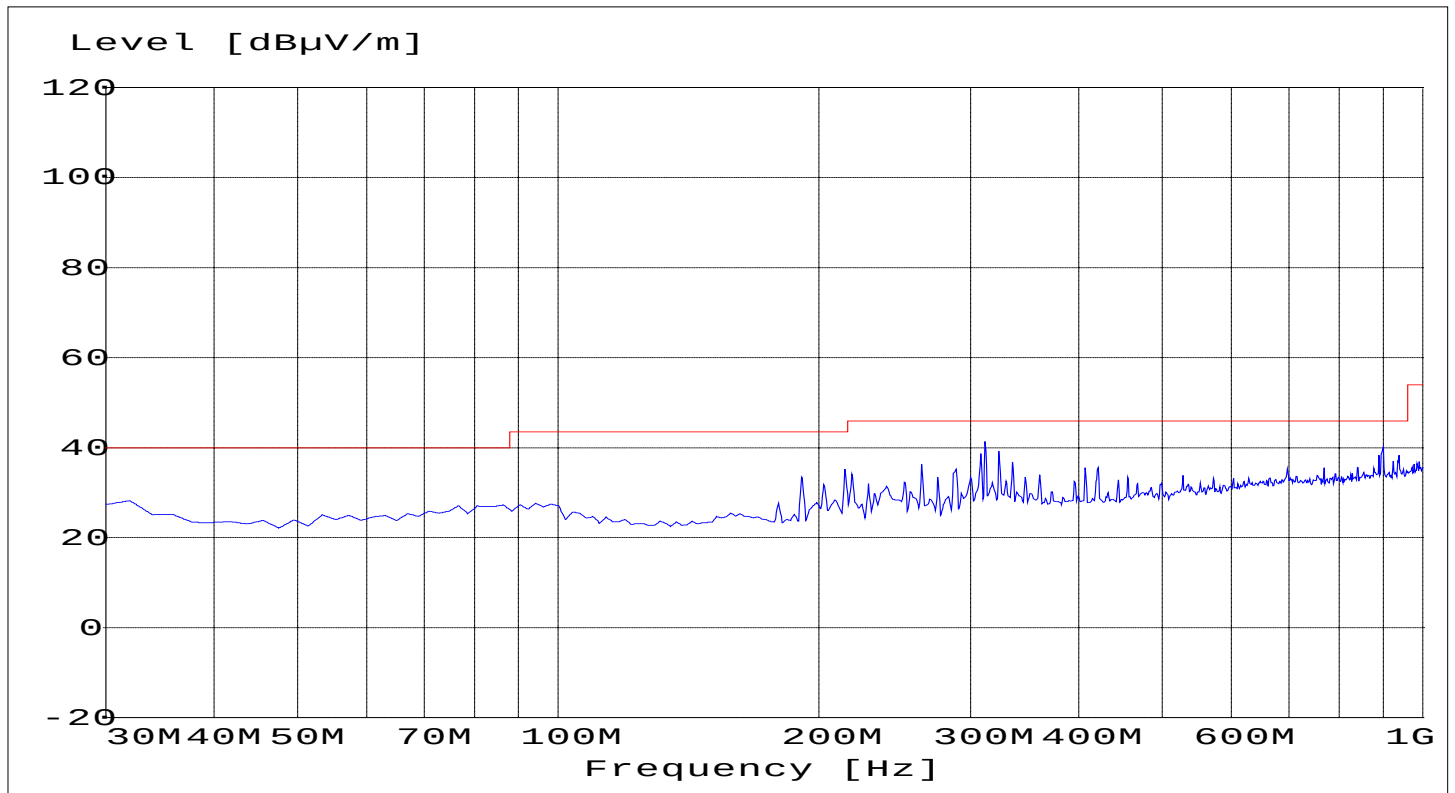
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 2: 30MHz -1GHz



LIMITS

SUBCLAUSE § 15.247 (c)

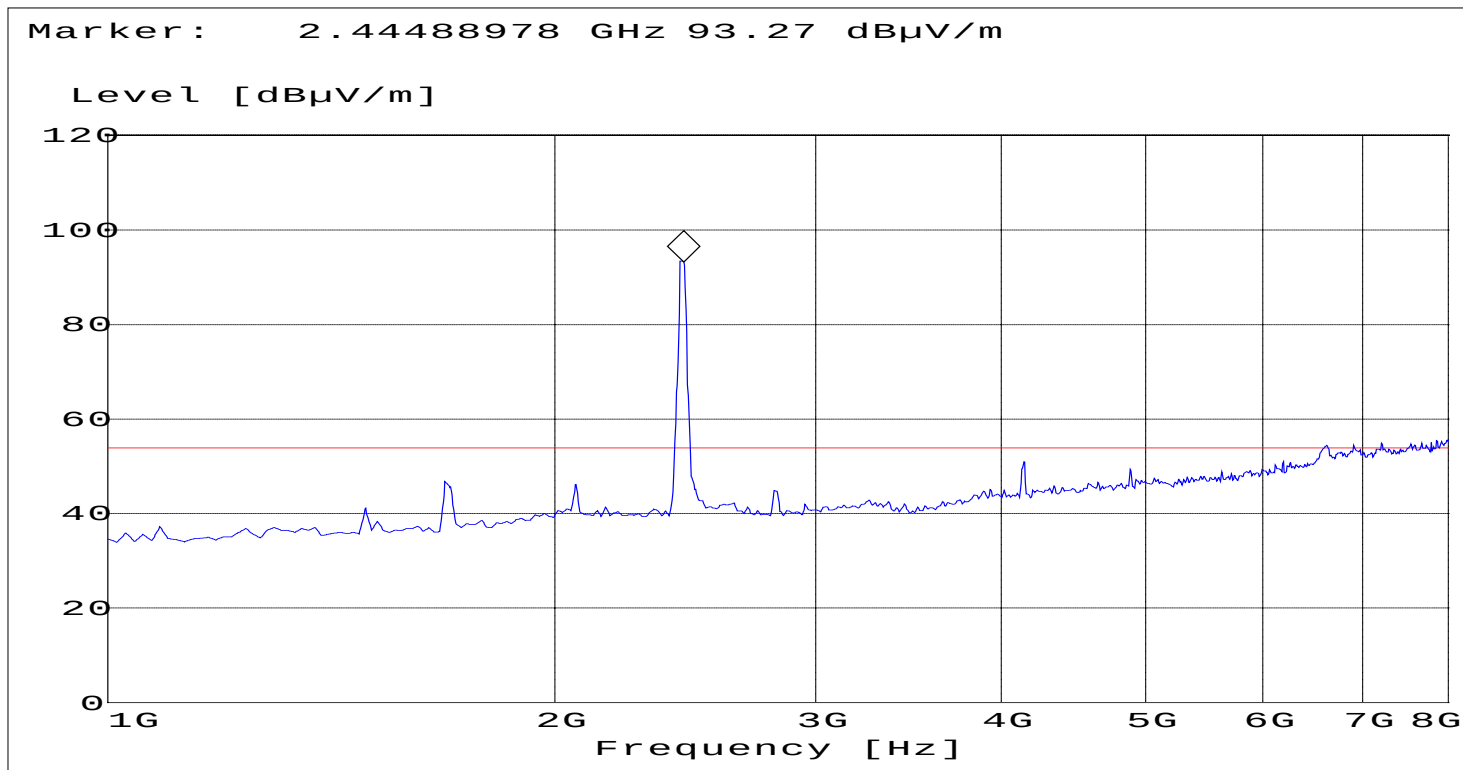
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 2: 1GHz -8GHz



NOTE: This measurement was repeated with High Pass Filter to eliminate the carrier frequency & harmonics were found lowered by minimum 4dB.

LIMITS

SUBCLAUSE § 15.247 (c)

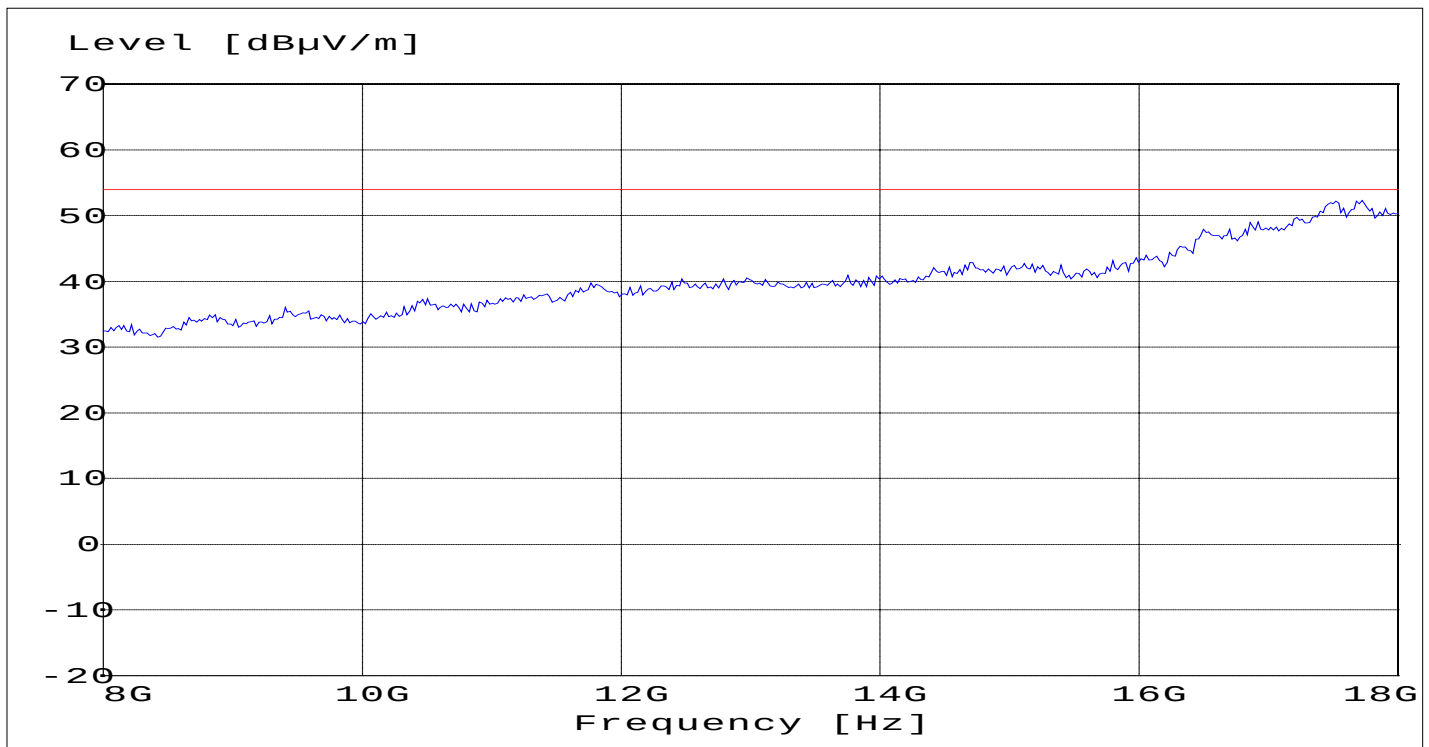
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 2: 8GHz -18GHz



LIMITS

SUBCLAUSE § 15.247 (c)

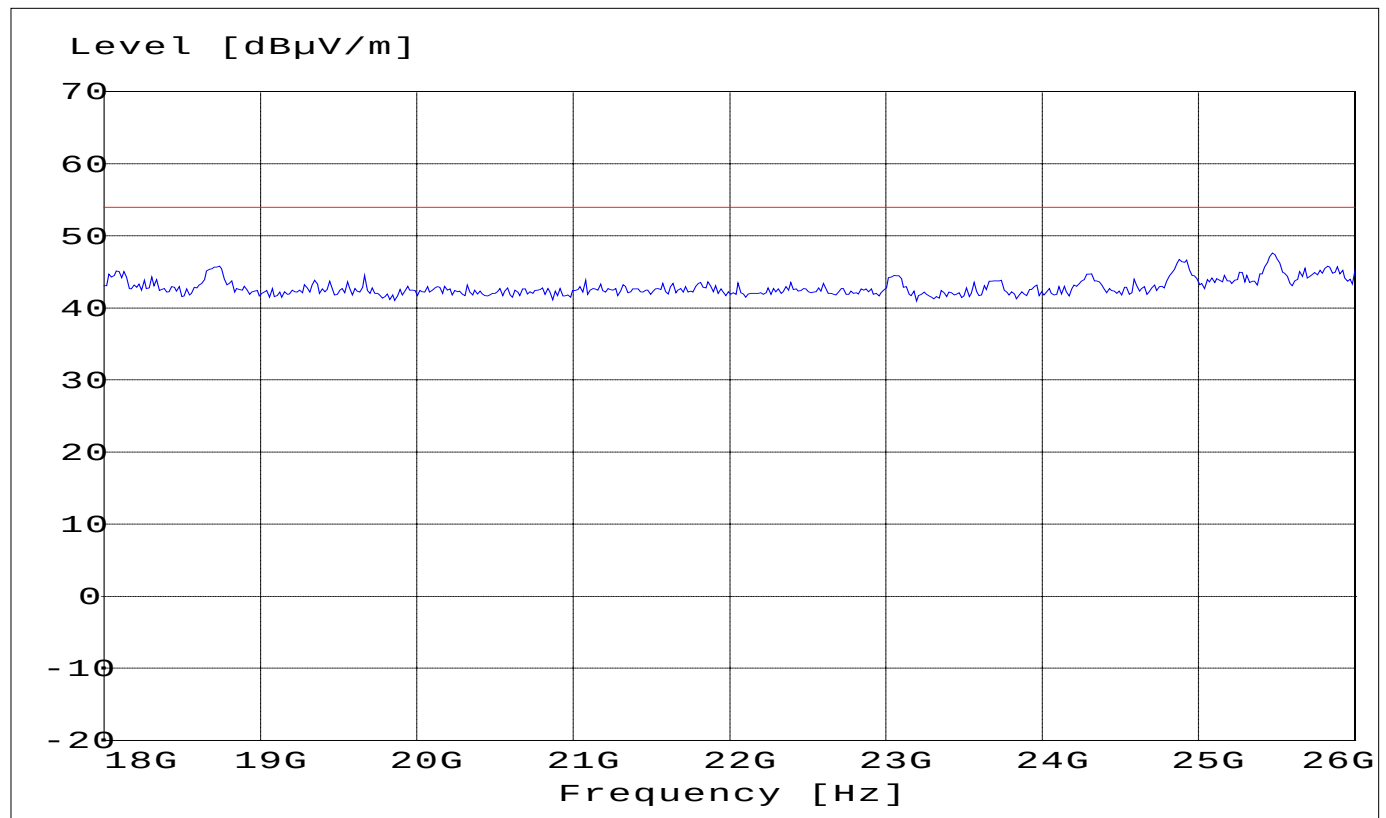
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 2: 18GHz -26GHz



LIMITS

SUBCLAUSE § 15.247 (c)

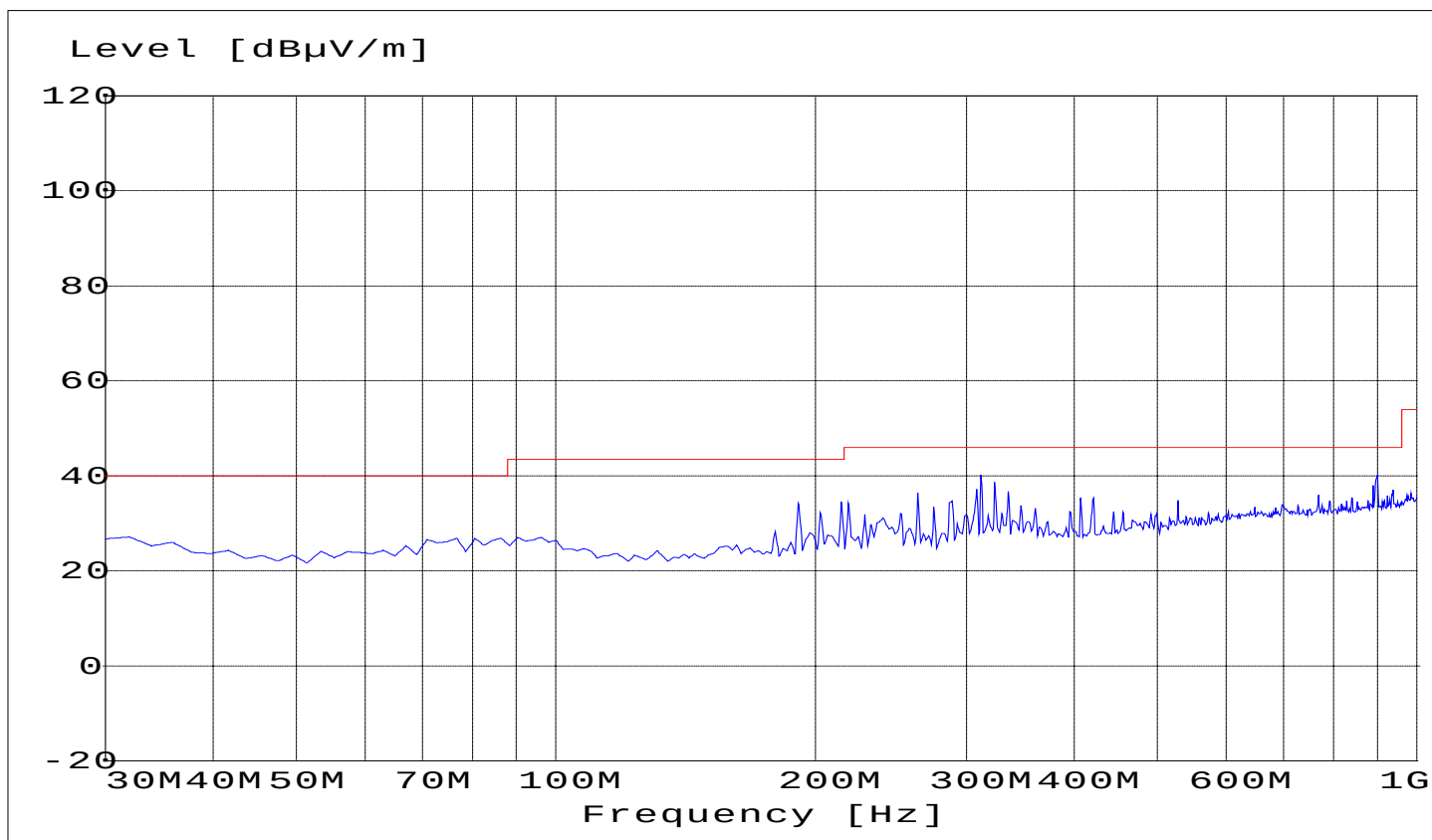
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 3: 30MHz -1GHz



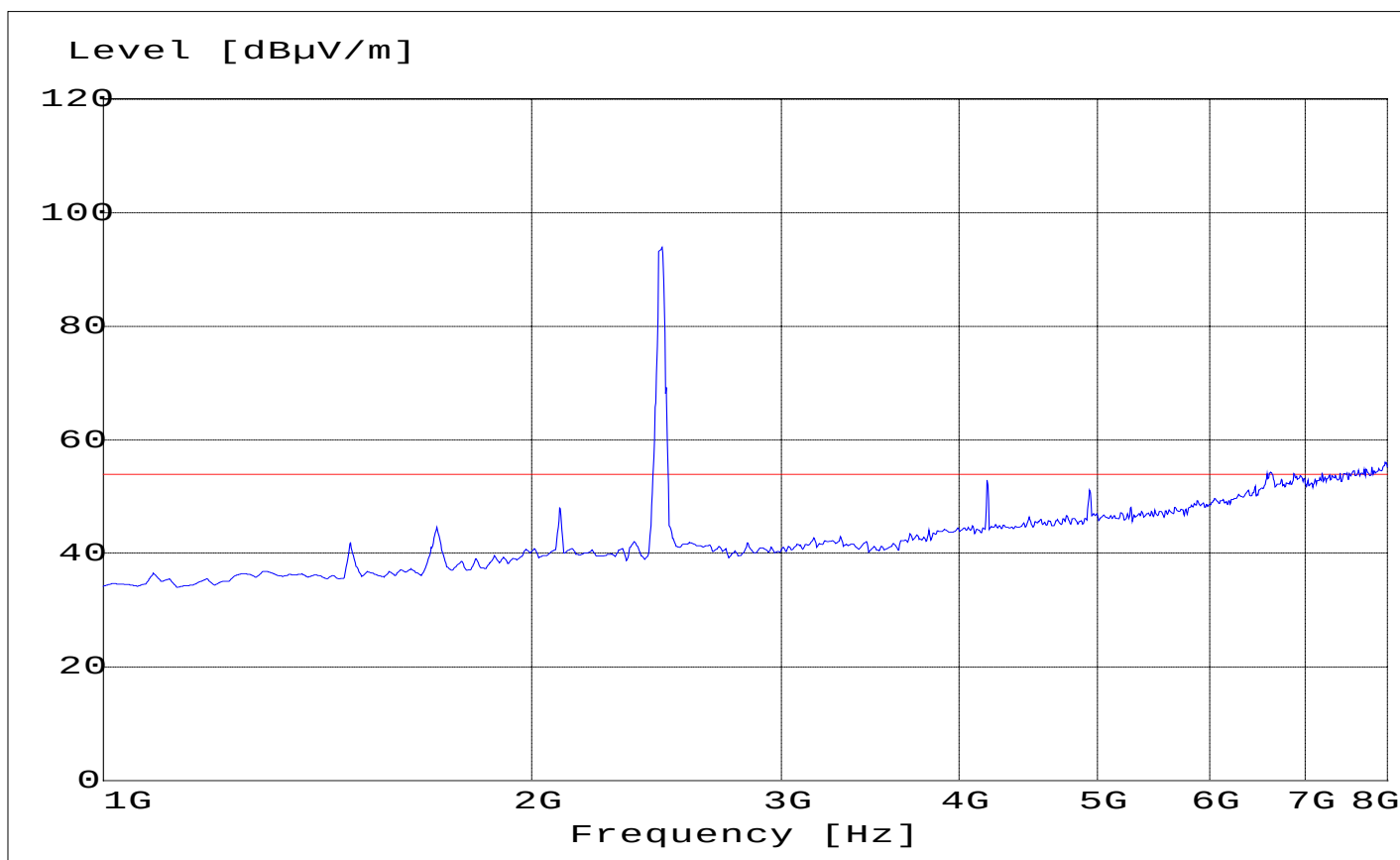
LIMITS

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)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)**Channel 3: 1GHz -8GHz**

NOTE: This measurement was repeated with High Pass Filter to eliminate the carrier frequency. This lowered the harmonics values by minimum 4dB.

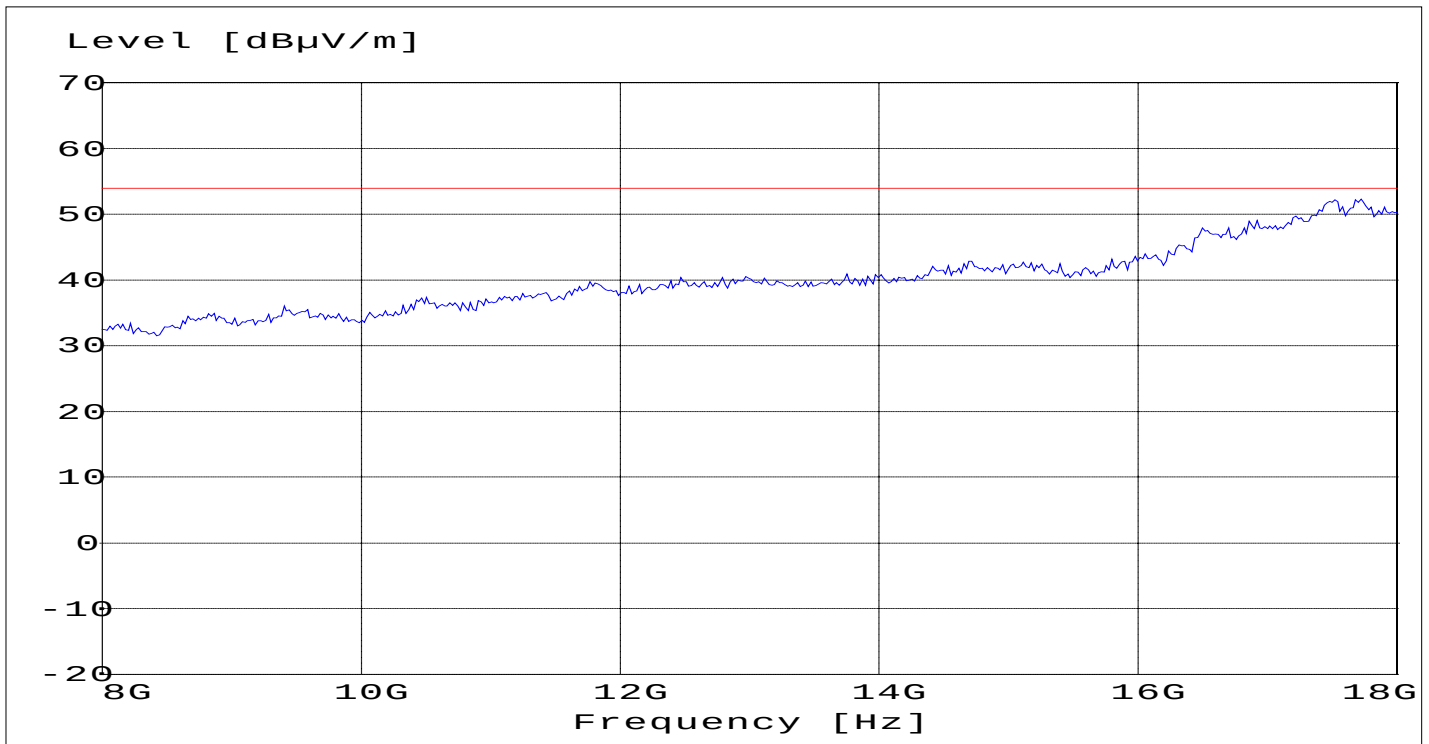
LIMITS**SUBCLAUSE § 15.247 (c)**

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)).

ANALYZER SETTINGS: $f < 1\text{ GHz}$: RBW/VBW: 100 kHz $f \geq 1\text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 3: 8GHz -18GHz



LIMITS

SUBCLAUSE § 15.247 (c)

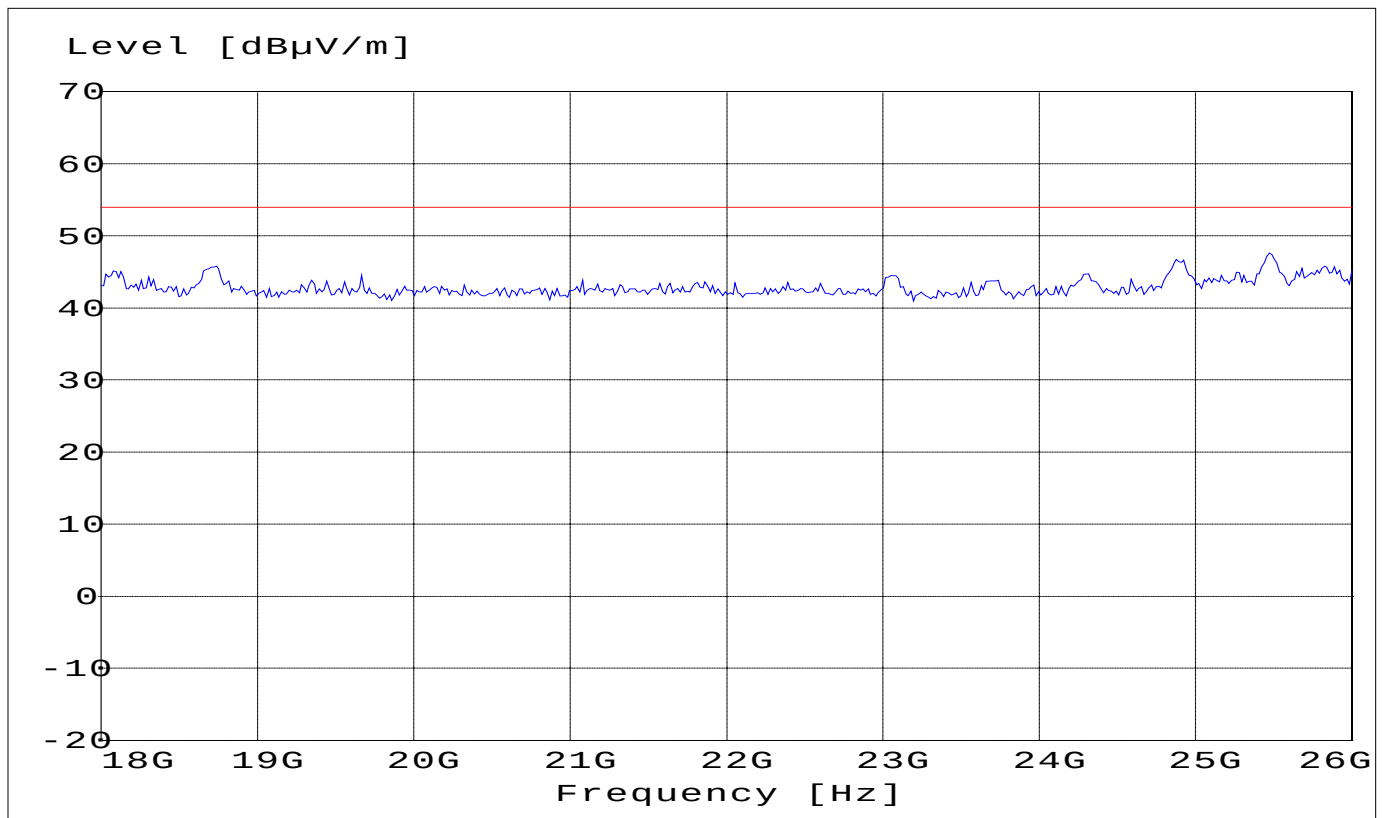
In any 100 kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

EMISSION LIMITATIONS (Transmitter) SUBCLAUSE § 15.247 (c) (1)

Channel 3: 18GHz -26GHz



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)).

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

POWER SPECTRAL DENSITY

SUBCLAUSE § 15.247 (d)

TEST CONDITIONS		RF POWER LEVEL IN 3 kHz BW		
Frequency (MHz)		2412	2442	2472
$T_{nom}(23)^{\circ}C$	$V_{nom}(V)$	-5.55 dBm	-5.30dBm	-5.54 dBm
Maximum deviation from output power under extreme test conditions (dBc)		not performed	not performed	not performed
Measurement uncertainty		$\pm 3dB$		

LIMIT

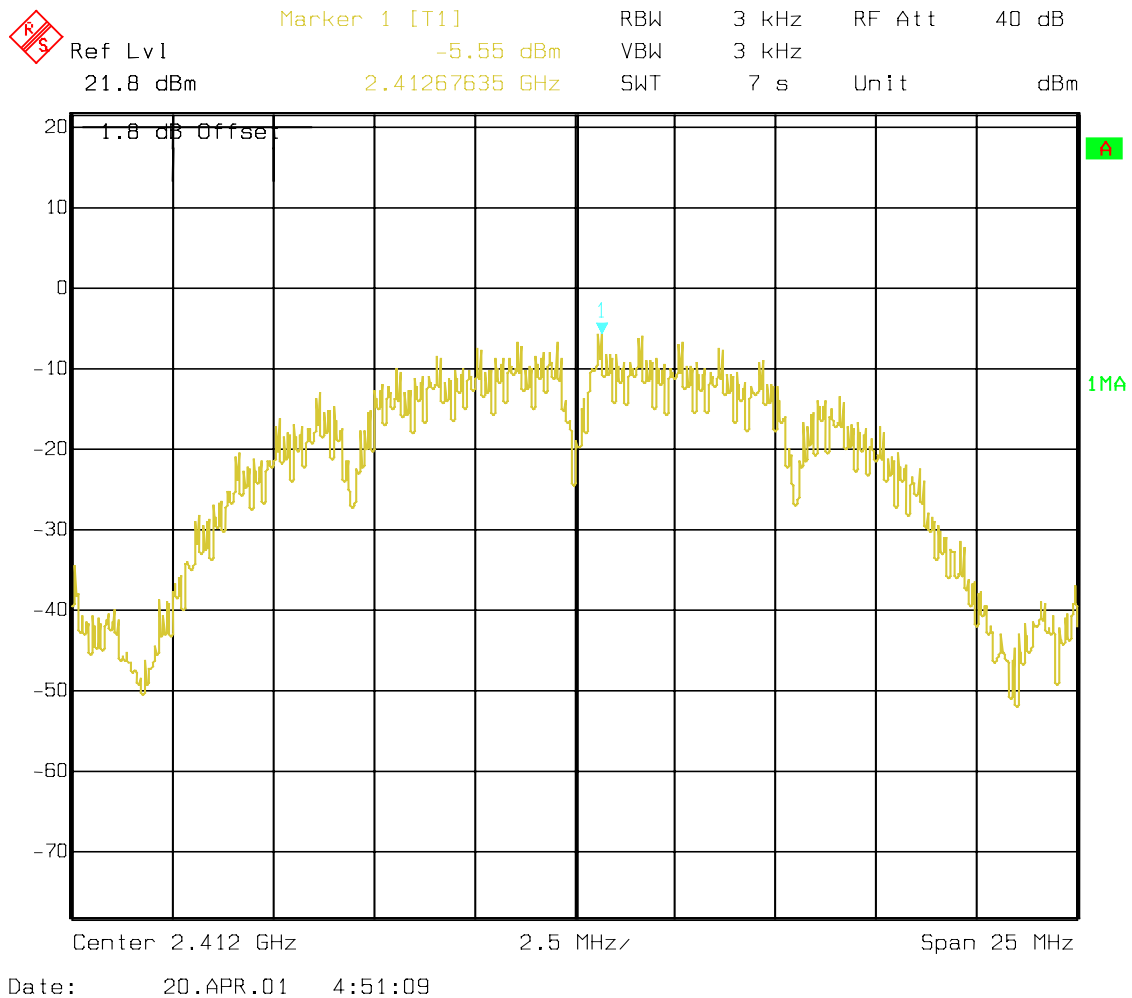
SUBCLAUSE §15.247(d)

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

ANALYZER SETTINGS: RBW=3KHz , VBW=3KHz

POWER SPECTRAL DENSITY 2412 MHz

SUBCLAUSE § 15.247 (d)



LIMIT

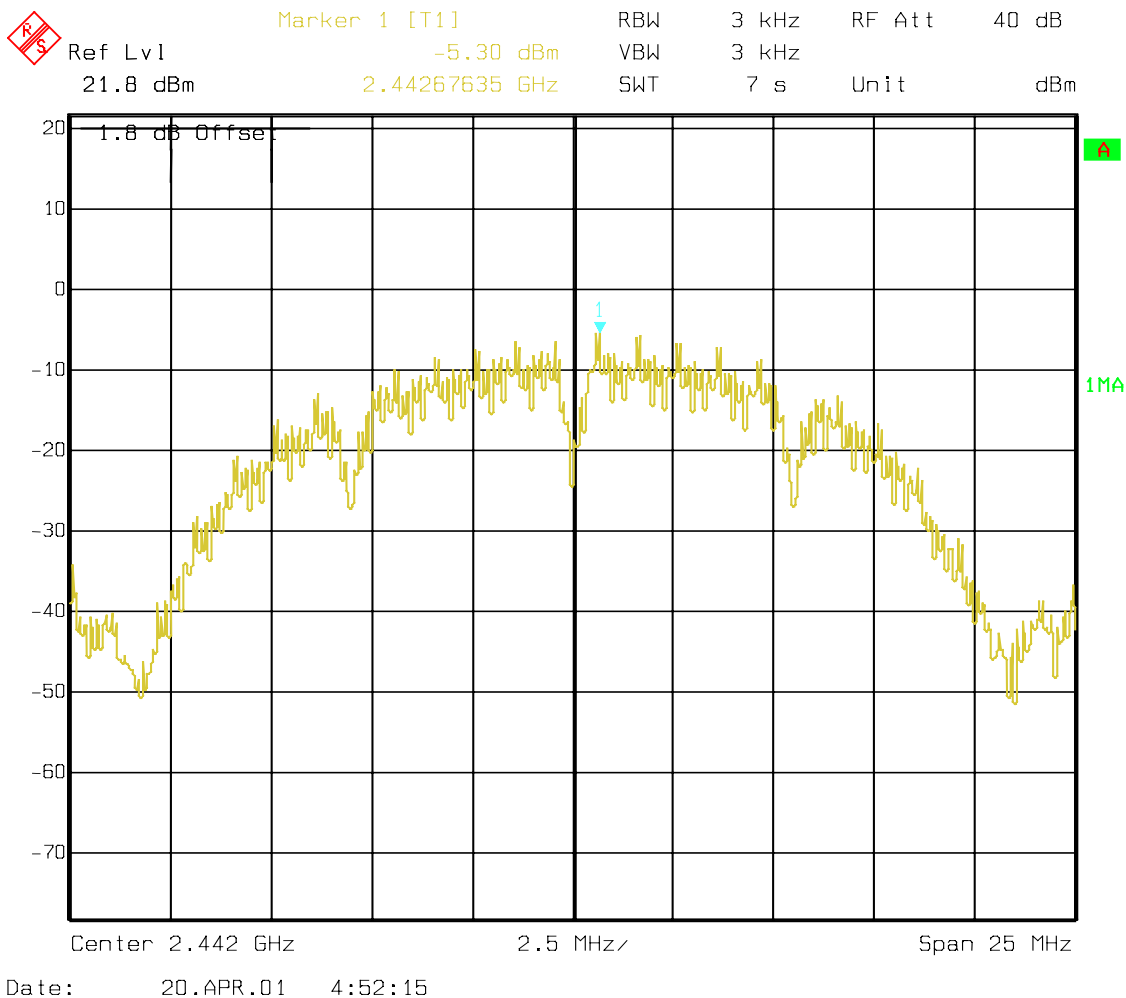
SUBCLAUSE §15.247(d)

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

POWER SPECTRAL DENSITY

SUBCLAUSE § 15.247 (d)

2442 MHz



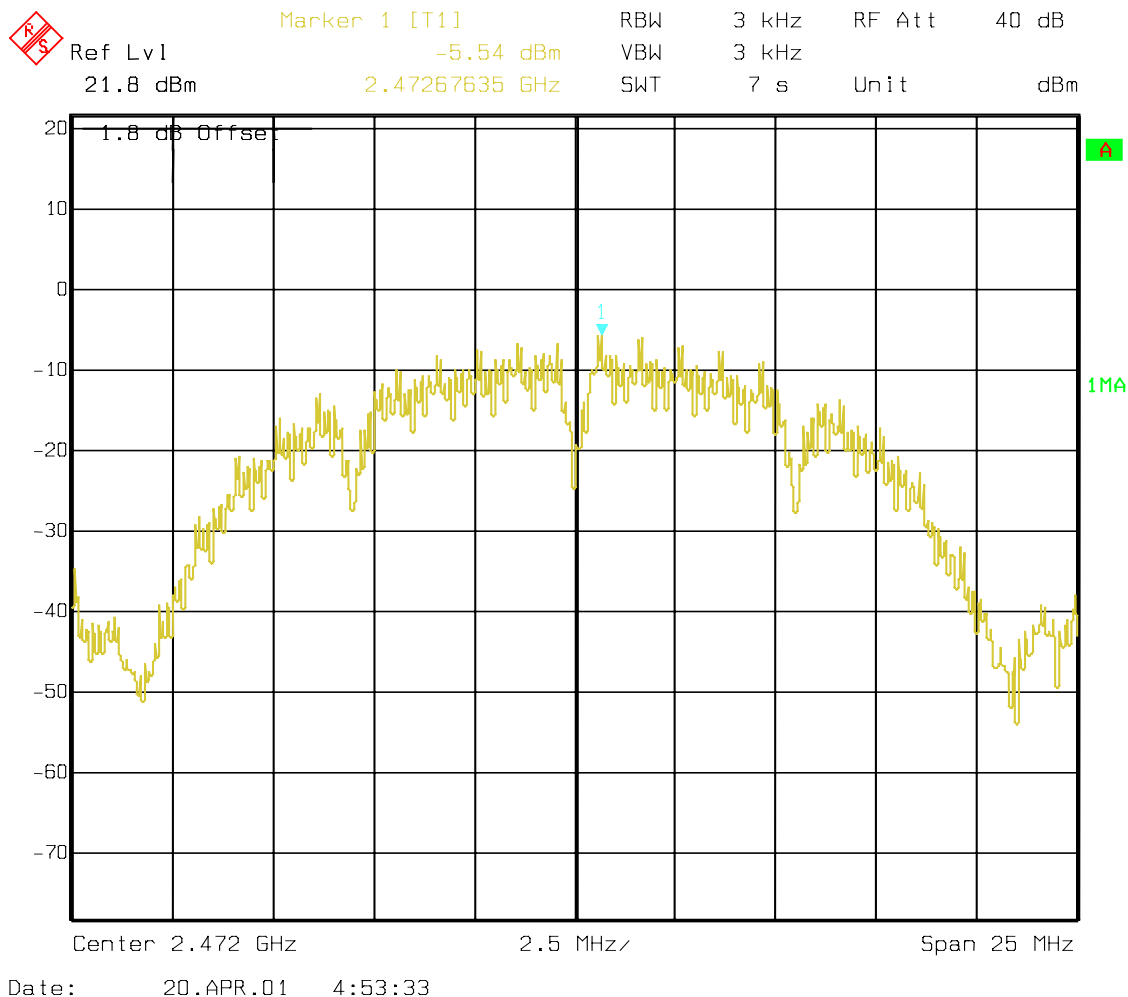
LIMIT

SUBCLAUSE §15.247(d)

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

POWER SPECTRAL DENSITY
2472 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

PROCESSING GAIN OF DSSS SYSTEMSSUBCLAUSE §15.247 (e)

(NOTE:The processing gain data is provided by Chip Set Manufacturer)

Chip/symbol rate, the symbol/bit rate and the Chip/bit

Bit rate	Chip/symbol rate	Bit/symbol rate	Chip/bit rate	Gp (dB)	Spec (dB)
1 Mbit/sec	11	1, DBPSK	11	13.2	10
2 Mbit/sec	11	2, DQPSK	5.5	12.6	10
5.5 Mbit/sec	8	4, CCK	2	13.4	10
11 Mbit/sec	8	8, CCK	1	12.9	10

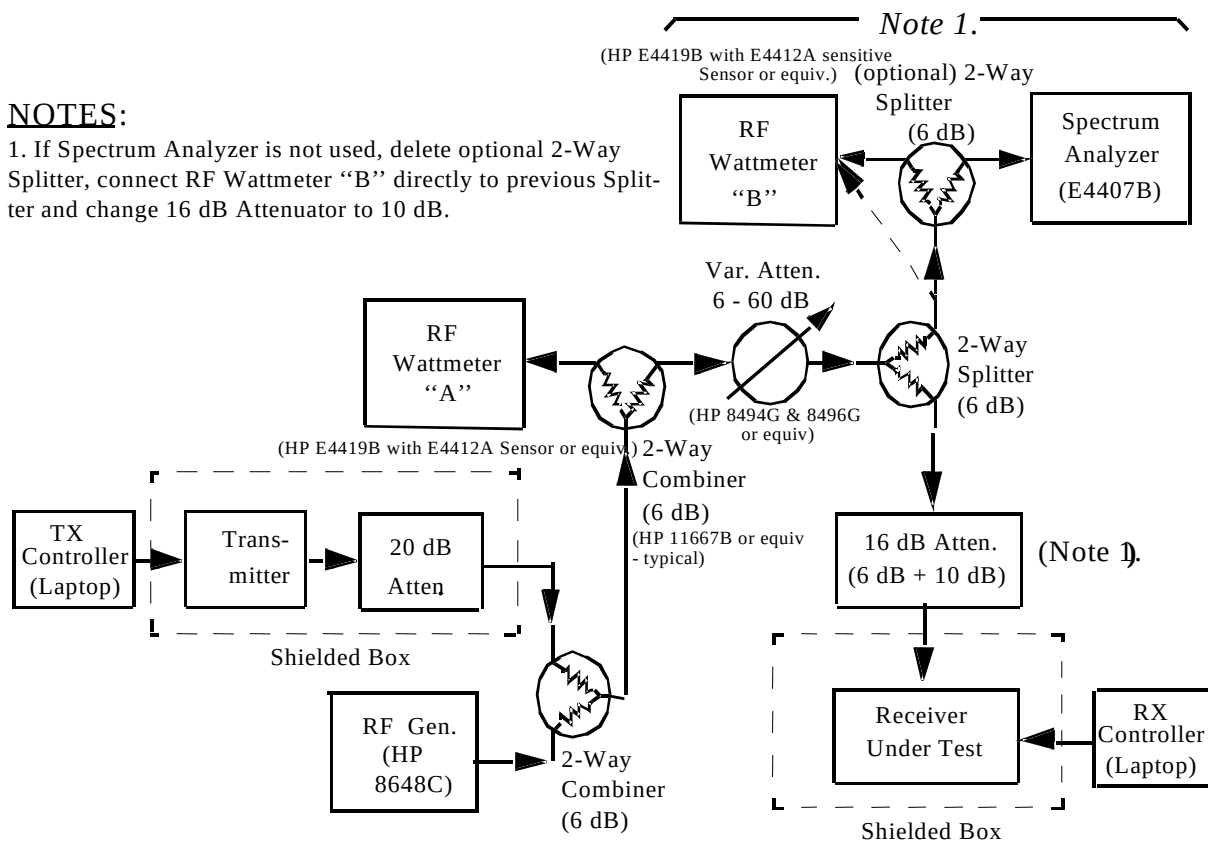
Note: 1. Gp is Processing Gain;

2. Spec is Processing Gain specifications defined by FCC for DSSS systems

Test Set-up - Processing Gain

NOTES:

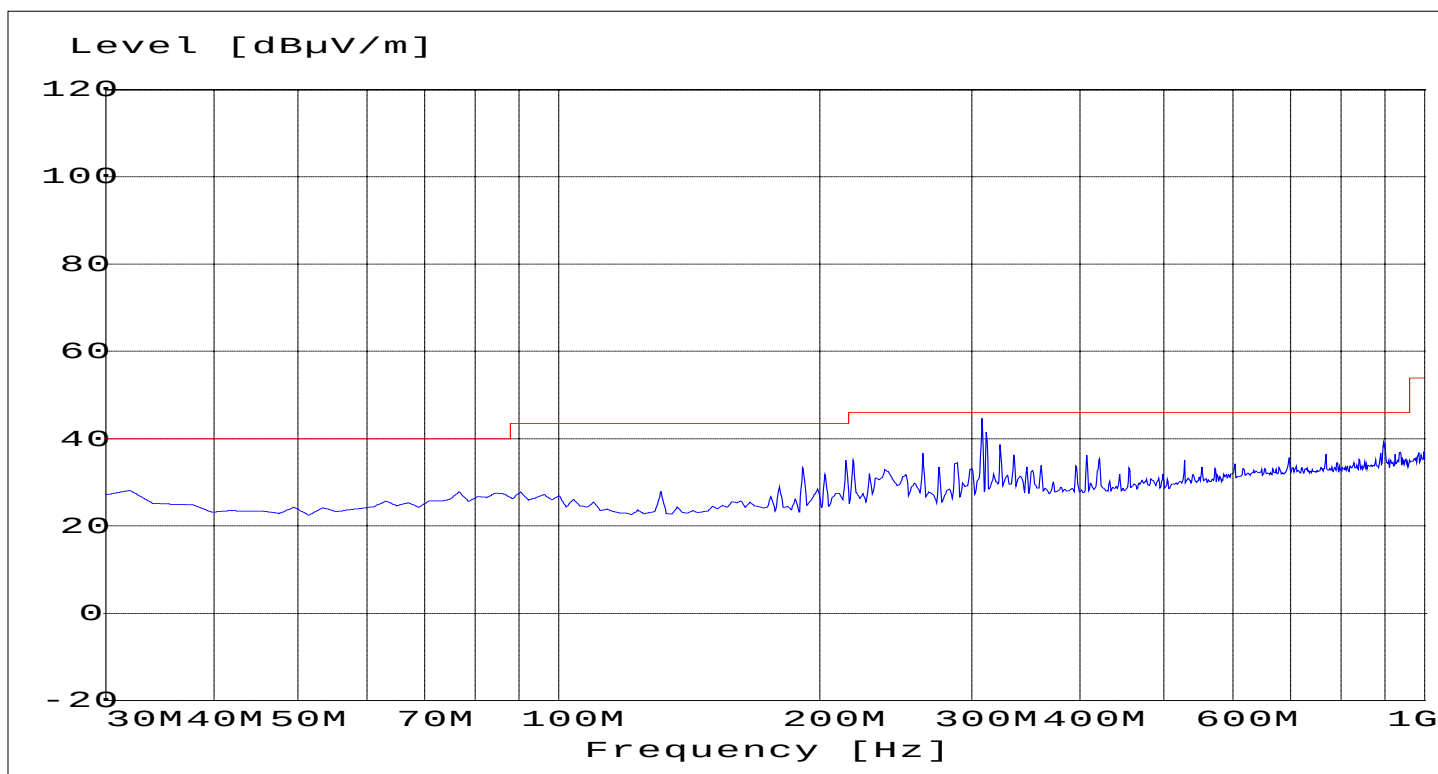
1. If Spectrum Analyzer is not used, delete optional 2-Way Splitter, connect RF Wattmeter "B" directly to previous Splitter and change 16 dB Attenuator to 10 dB.



RECEIVER SPURIOUS RADIATION

§ 15.209

Channel 1: 30MHz – 1GHz



Limits

SUBCLAUSE § 15.209

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

(NOTE: All measurements were done in peak mode)

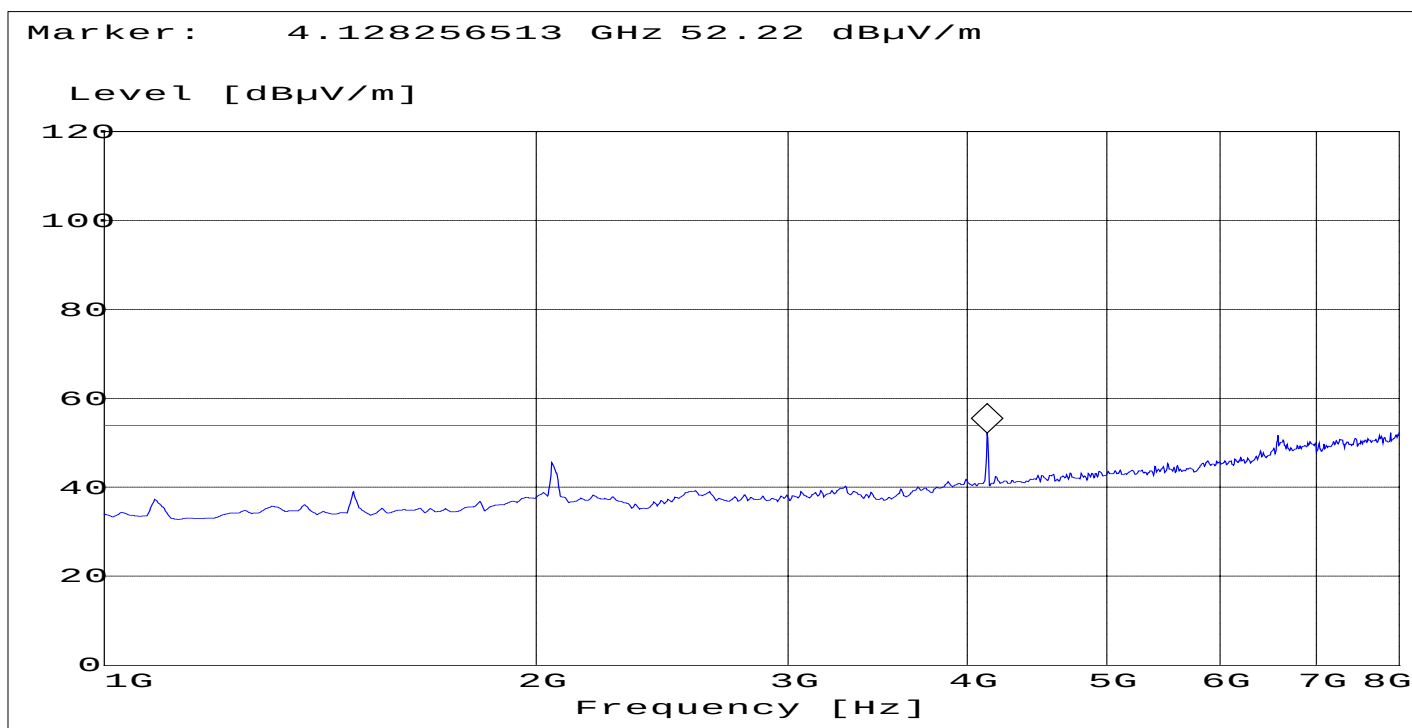
ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

RECEIVER SPURIOUS RADIATION

§ 15.209

Channel 1: 1GHz – 8GHz



Limits

SUBCLAUSE § 15.209

Frequency (MHz)	Field strength (μ V/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

(NOTE: All measurements were done in peak mode)

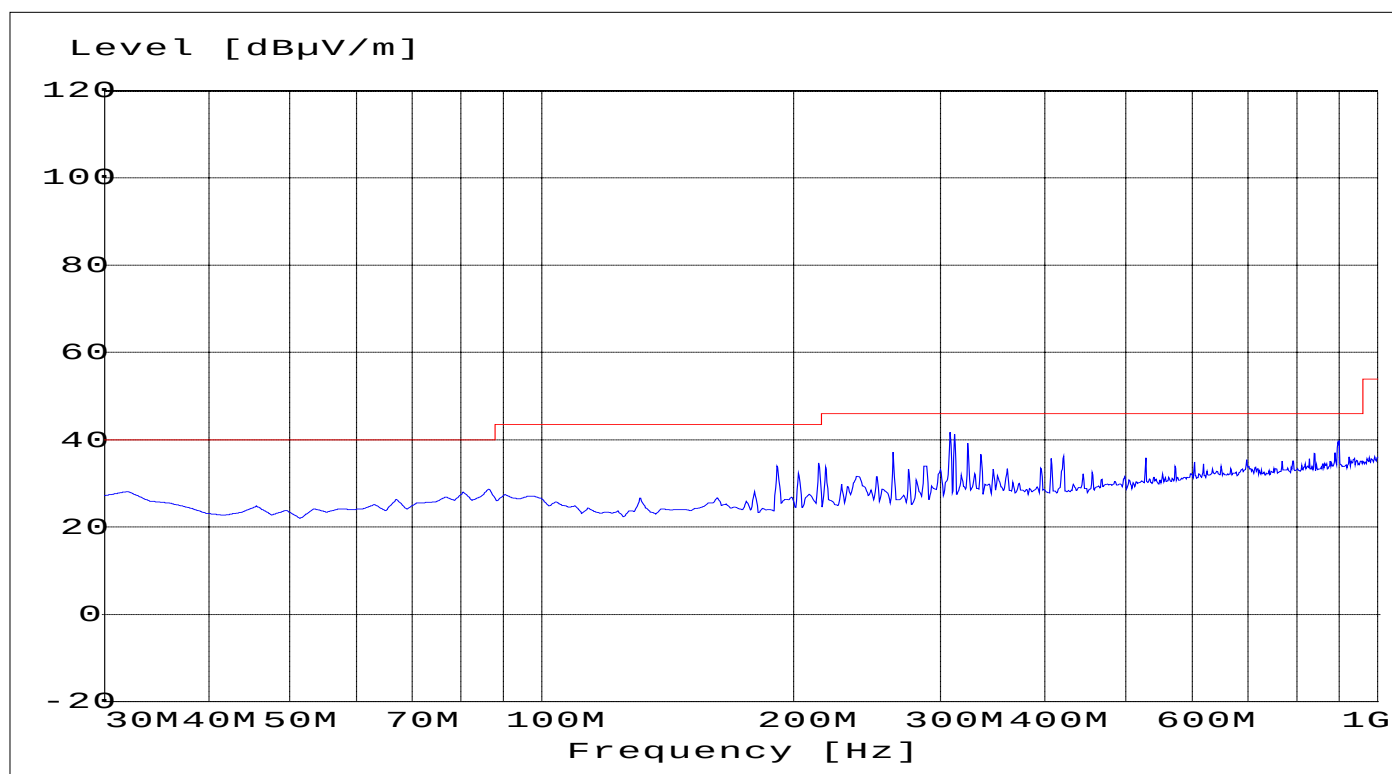
ANALYZER SETTINGS: $f < 1$ GHz : RBW/VBW: 100 kHz

$f \geq 1$ GHz : RBW/VBW: 1 MHz

RECEIVER SPURIOUS RADIATION

§ 15.209

Channel 2: 30MHz – 1GHz



Limits

SUBCLAUSE § 15.209

Frequency (MHz)	Field strength ($\mu\text{V/m}$)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

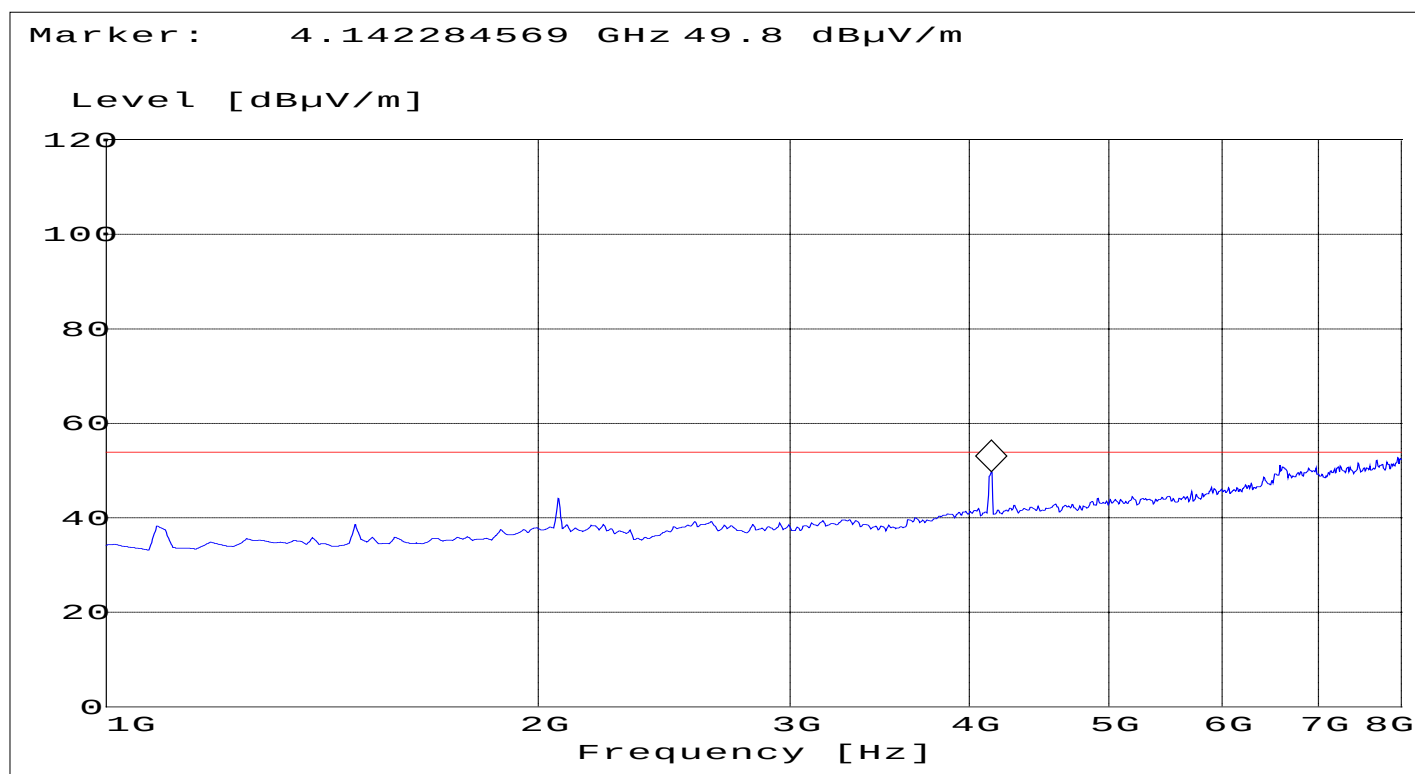
(NOTE: All measurements were done in peak mode)

ANALYZER SETTINGS: $f < 1\text{ GHz}$: RBW/VBW: 100 kHz $f \geq 1\text{ GHz}$: RBW/VBW: 1 MHz

RECEIVER SPURIOUS RADIATION

§ 15.209

Channel 2: 1GHz – 8GHz



Limits

SUBCLAUSE § 15.209

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

(NOTE: All measurements were done in peak mode)

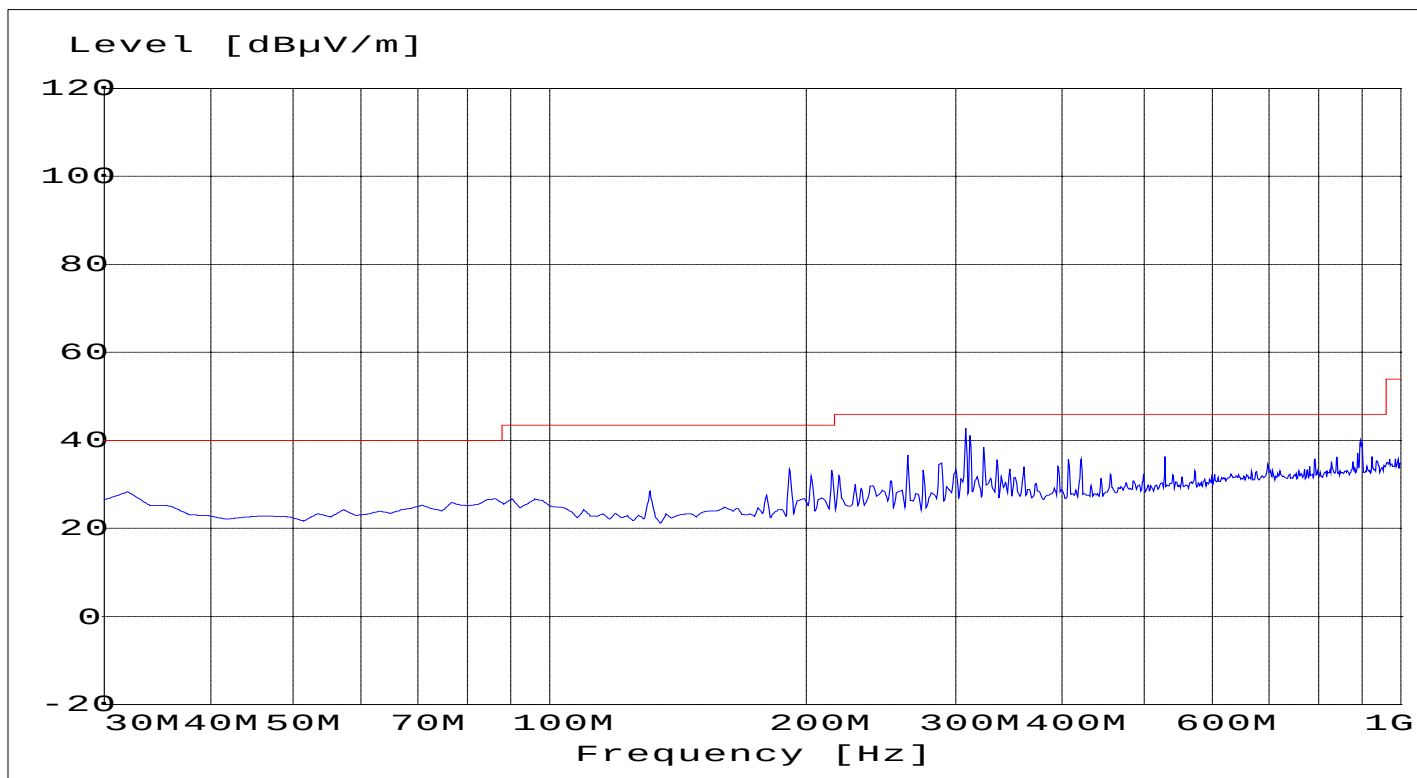
ANALYZER SETTINGS: $f < 1\text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1\text{ GHz}$: RBW/VBW: 1 MHz

RECEIVER SPURIOUS RADIATION

§ 15.209

Channel 3: 30MHz – 1GHz



Limits

SUBCLAUSE § 15.209

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

(NOTE: All measurements were done in peak mode)

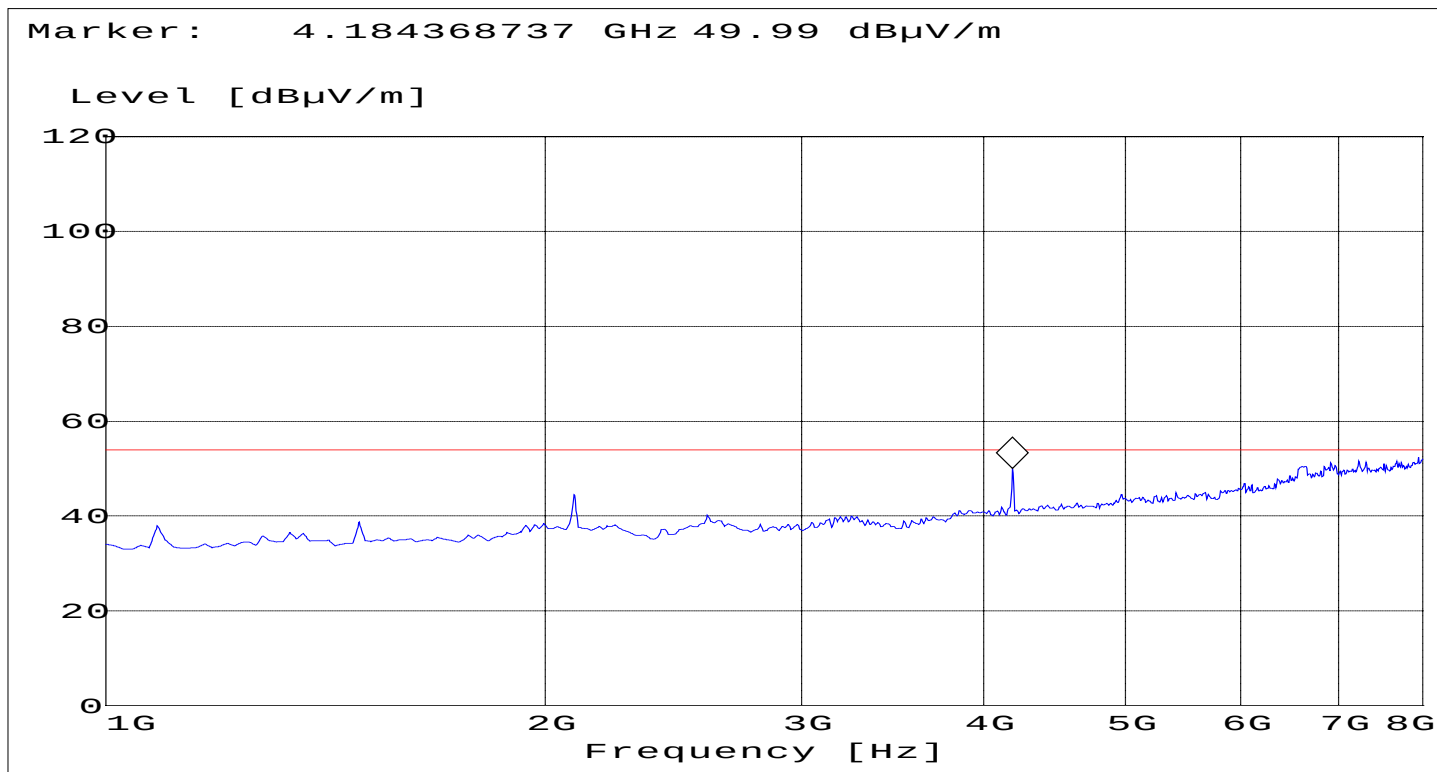
ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

RECEIVER SPURIOUS RADIATION

§ 15.209

Channel 3: 1GHz – 8GHz



Limits

SUBCLAUSE § 15.209

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

(NOTE: All measurements were done in peak mode)

ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz

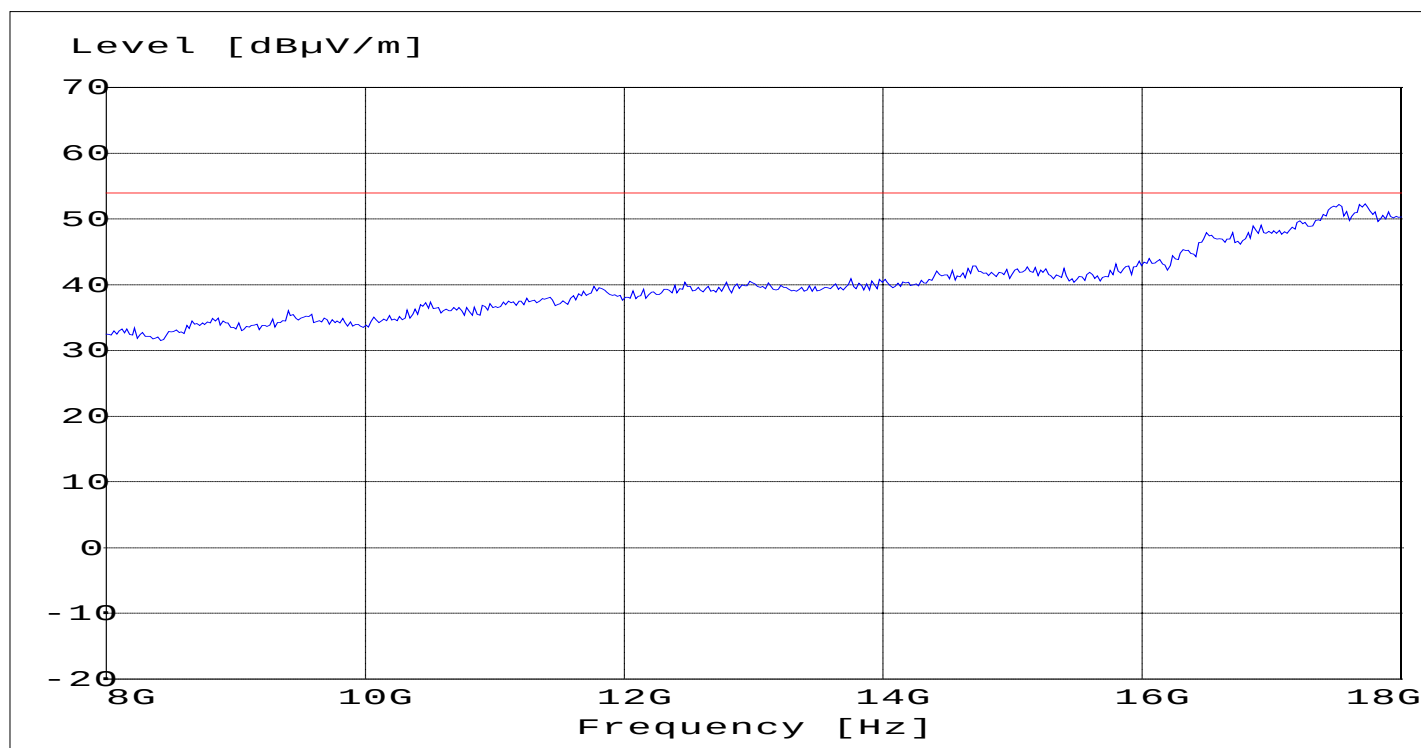
$f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

RECEIVER SPURIOUS RADIATION

§ 15.209

8GHz – 18GHz

(NOTE: This plot is applicable for all three channels)



Limits

SUBCLAUSE § 15.209

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

(NOTE: All measurements were done in peak mode)

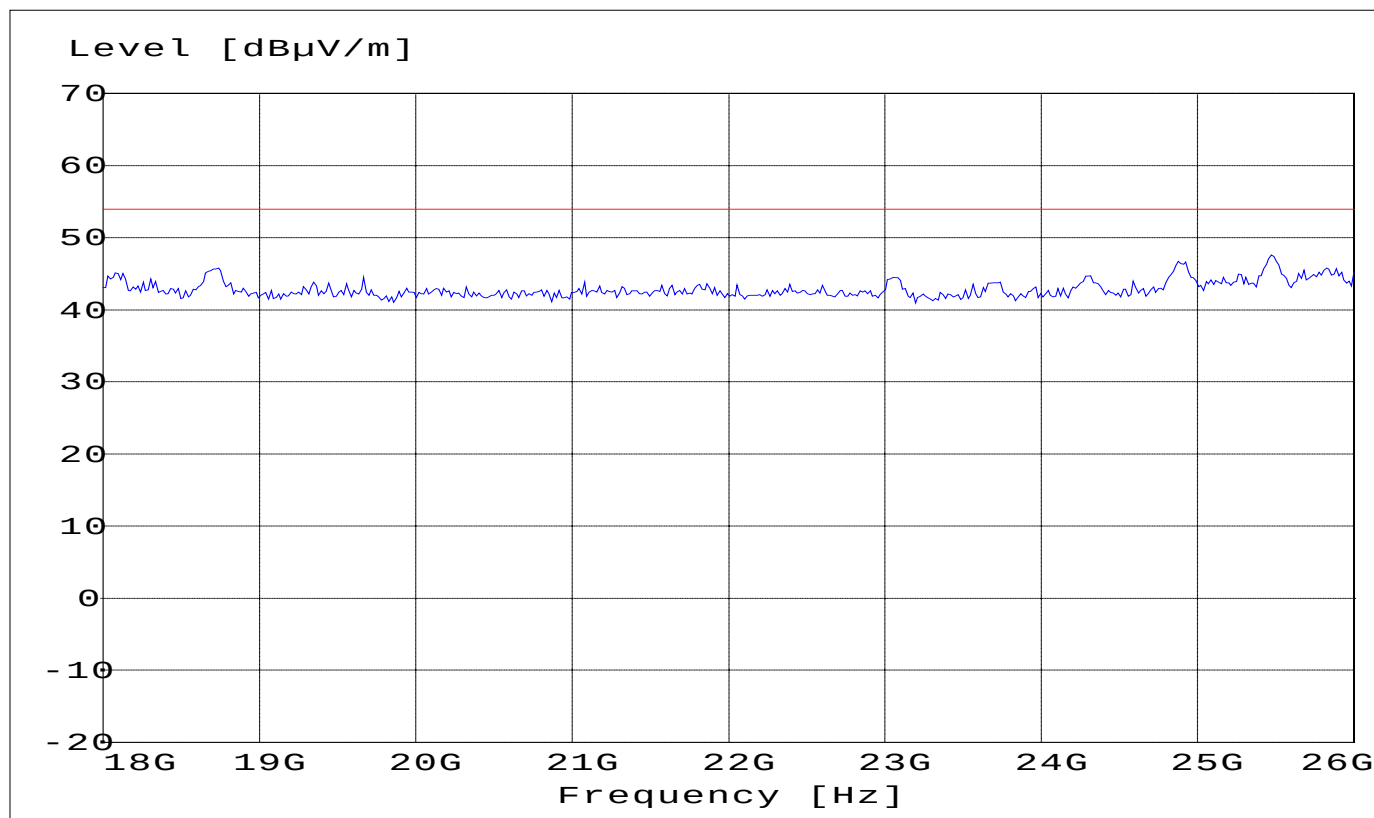
ANALYZER SETTINGS: $f < 1 \text{ GHz}$: RBW/VBW: 100 kHz $f \geq 1 \text{ GHz}$: RBW/VBW: 1 MHz

RECEIVER SPURIOUS RADIATION

§ 15.209

18GHz – 26GHz

(NOTE: This plot is applicable for all three channels)



Limits

SUBCLAUSE § 15.209

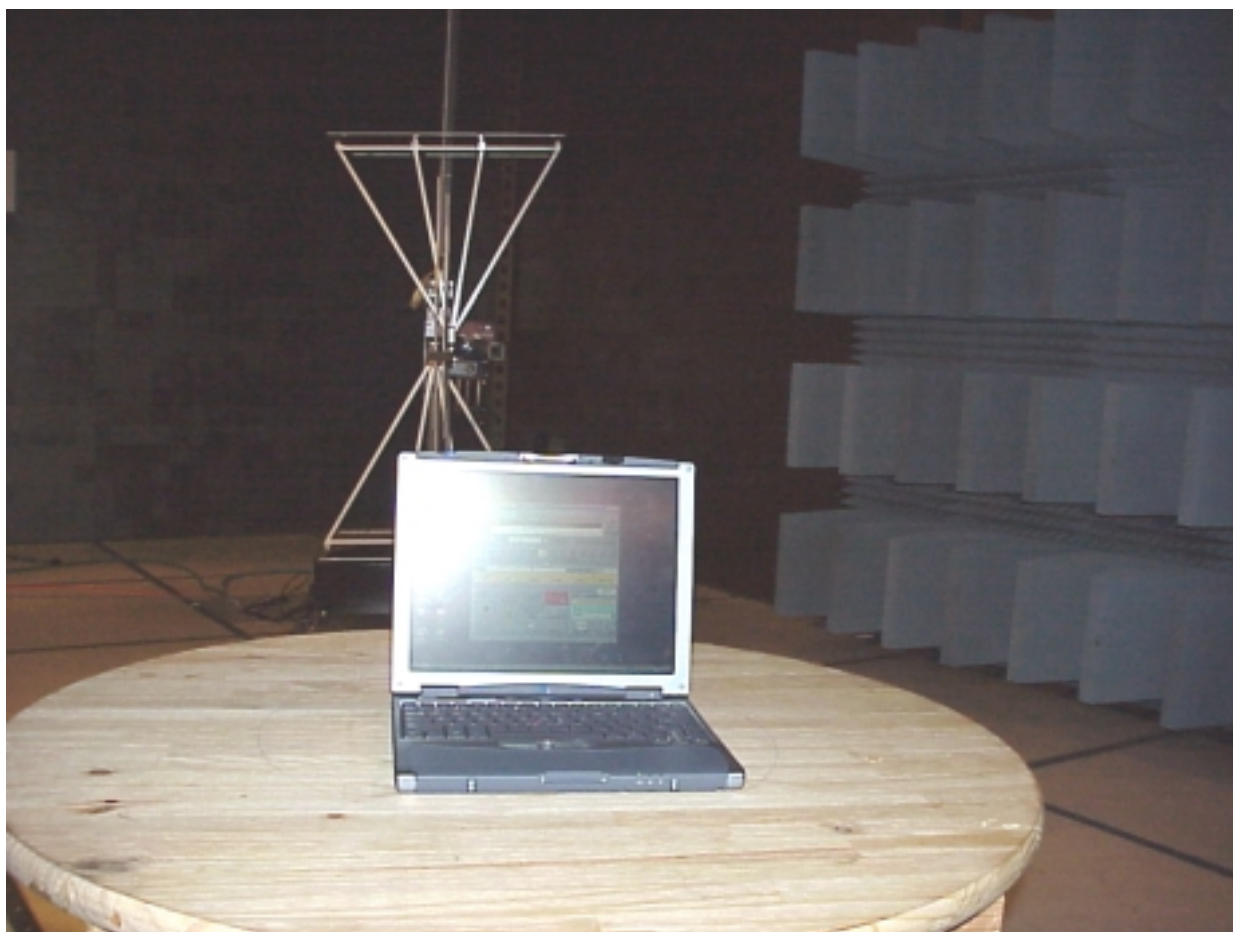
Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

(NOTE: All measurements were done in peak mode)

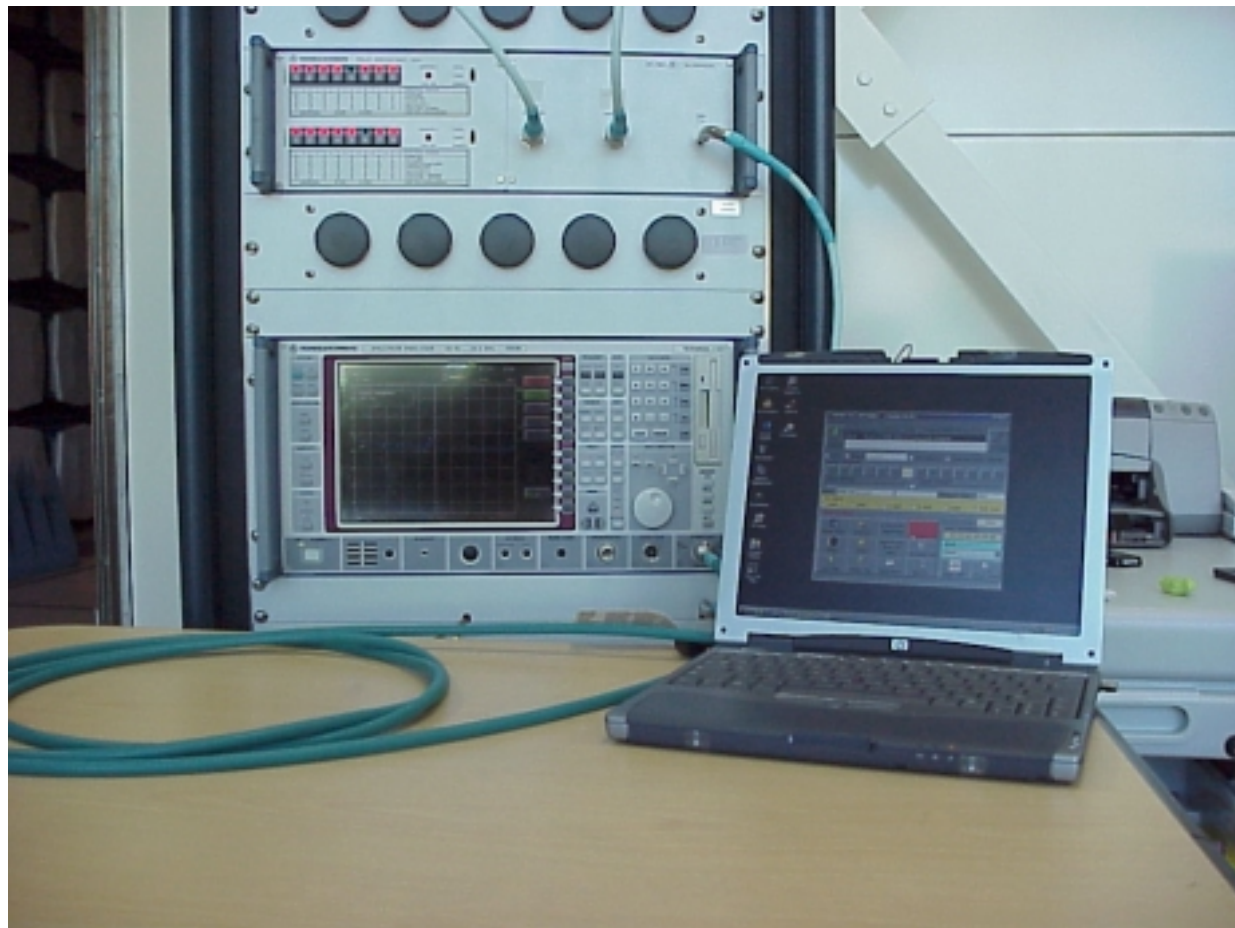
ANALYZER SETTINGS: $f < 1\text{ GHz}$: RBW/VBW: 100 kHz $f \geq 1\text{ GHz}$: RBW/VBW: 1 MHz

[illegible]

TEST SITE
Radiated Emissions



Conducted Emissions

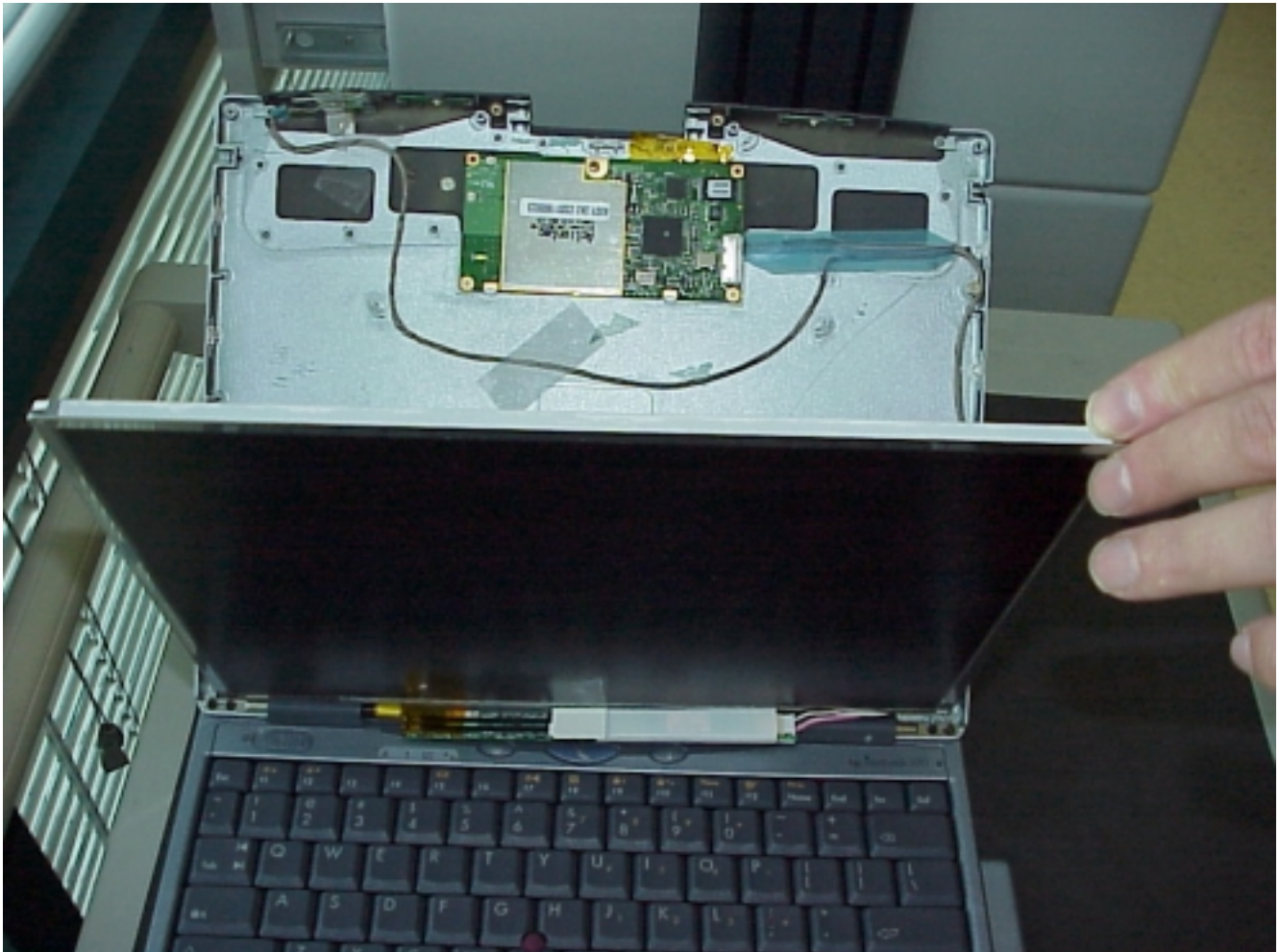


PHOTOGRAPHS OF THE EQUIPMENT

Photograph No.1



Photograph No.2



Photograph No.3

Antennas: one transmit /receive and

one diversity receive antenna
(not connected in this picture)

