



FCC Test Report

Test report no.: EMC_928FCC15.247_2005_rev1

FCC Part 15.247 for DSSS systems / CANADA RSS-210

EUT: WLAN Model: RSVLD-0506

FCC ID: B94RSVLD0506

IC ID: 466F-RSVLD506



TTI-P-G 081/94-A0

Accredited according to **ISO/IEC 17025**



**Bluetooth Qualification
Test Facility
(BQTF)**



FCC listed # 101450

IC recognized # 3925

CETECOM Inc.

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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 Inc. USA 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 Inc USA.

TEST REPORT PREPARED BY:**EMC Engineer: Harpreet Sidhu**

1.2 Testing laboratory
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Internet: www.cetecom.com

1.3 Details of applicant

Name : **Hewlett Packard Company**
Street : **3000 Hanover Street**
City / Zip Code : **Palo Alto, CA 94304**
Country : **USA**
Contact : **Jim Henry (Regulatory Engineer)**
Telephone : **916 785 5417**
Tele-fax :
e-mail : jhenry@hp.com

1.4 Application details

Date of receipt test item : 2005-05-17
Date of test : 2005-05-17/18/20/24, 2005-06-07

1.5 Test item

Manufacturer : Applicant
Model No. (EUT) : RSVLD-0506
Host : Dell Laptop
Description : 802.11b/g radio module
FCC ID : B94RSVLD0506
IC ID : 466F-RSVLD506

Additional information

Frequency : 2412MHz – 2472MHz for 2.4GHz band
Type of modulation : DSSS / OFDM (orthogonal frequency division multiplexing)
Number of channels : 11
Antenna : PCB antenna
Power supply : 5 VDC from Host
Output power : 27.16dBm (519.99mW) conducted avg. power for 2.4GHz band
Extreme temp. Tolerance : 0°C to +70°C

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

PROJECT OVERVIEW:

This test report carries all measurements required as per FCC 15.247 on 802.11b/g radio module model# RSVLD-0506 tested as per DA001407 requirements for modular transmitter approval.

Radio module was tested for spurious emissions in both DSSS & OFDM modes at different data rates (1, 2, 5.5, 6, 11, and 54) to ensure compliance of the whole device. Test report shows only worst-case test results.

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

Final Verdict:
(Only "passed" if all single measurements are "passed")

Passed

Technical responsibility for area of testing:

2005-06-08 EMC & Radio Lothar Schmidt
(Technical Manager)



Date

Section

Name

Signature

Responsible for test report and project leader:

2005-06-08 EMC & Radio Harpreet Sidhu (EMC Engineer)



Date

Section

Name

Signature

2.2 Test report

TEST REPORT

Test report no.: EMC_928FCC15.247_2005_rev1

FCC Part 15.247 for DSSS systems / CANADA RSS-210

2.3 Summary of test results

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 25 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 4.0m in order to search for maximum field strength emitted from EUT. The measurement distances between EUT and receiving antennas are indicated in the test setups 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 analyzers 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 conforming to ANSI C63.2-1996 item 15.

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

30 MHz – 1GHz: Quasi Peak measurement, 120 KHz Bandwidth, biconilog antenna

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

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

TEST REPORT REFERENCE**LIST OF MEASUREMENTS****PAGE**

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SPECTRUM BANDWIDTH OF DSSS SYSTEM**§15.247(a) (2)****6 dB bandwidth (Data rate – 54Mbps)**

TEST CONDITIONS		6 dB BANDWIDTH (MHz)		
Frequency (MHz)		2412	2437	2462
T _{nom} (23)°C	V _{nom} (5.0) VDC	16.38	16.43	16.43

LIMIT**SUBCLAUSE §15.247(a) (2)****The minimum 6dB bandwidth shall be at least 500 KHz**

SPECTRUM BANDWIDTH OF DSSS SYSTEM

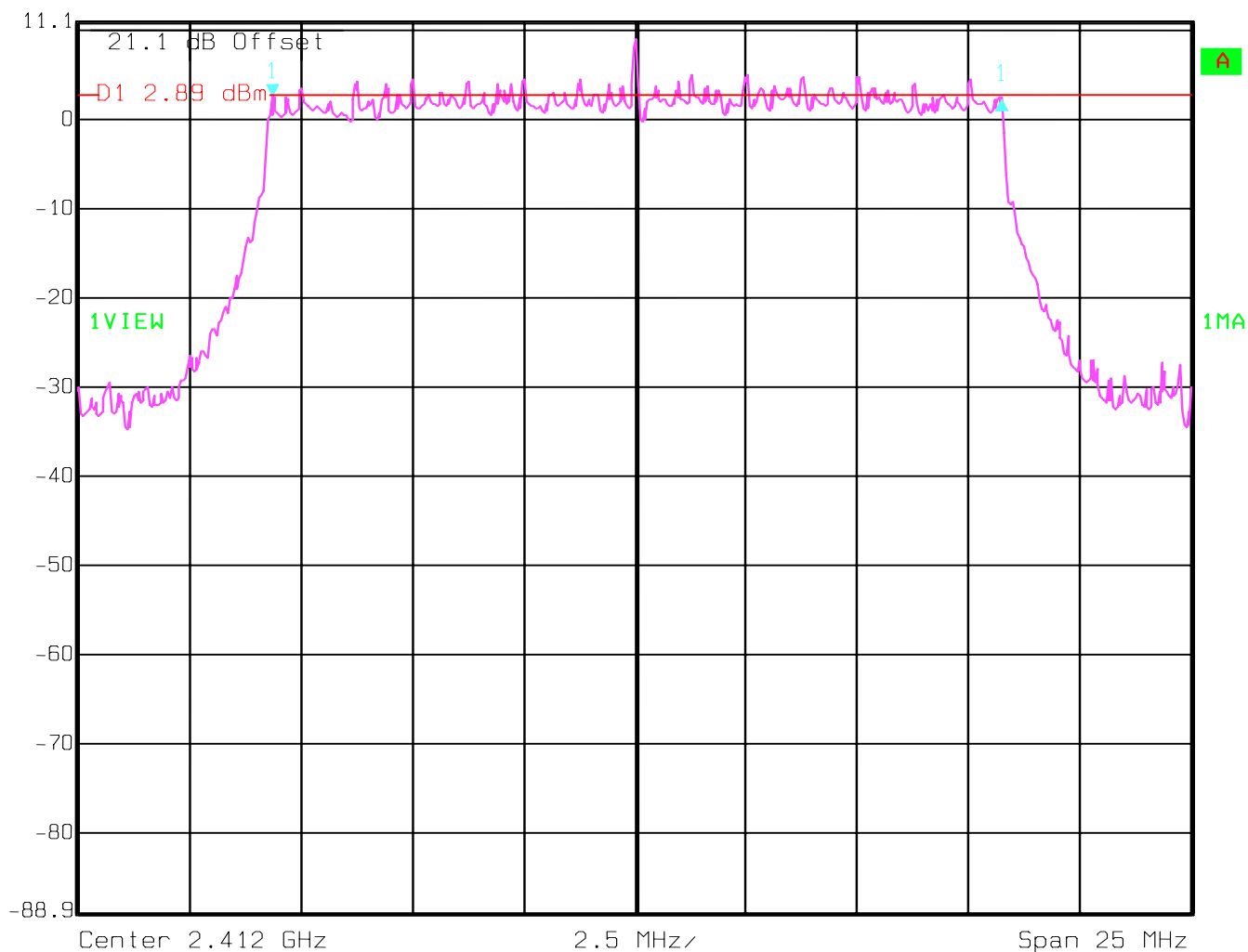
§15.247(a) (2)

6 dB bandwidth

(Data rate – 54Mbps)

Ch-1: 2412MHz

	Delta 1 [T1]	RBW	100 kHz	RF Att	20 dB
Ref Lvl	-0.26 dB	VBW	300 kHz		
11.1 dBm	16.38276553 MHz	SWT	6.5 ms	Unit	dBm



Date: 07.JUN.2005 13:46:15

SPECTRUM BANDWIDTH OF DSSS SYSTEM

§15.247(a) (2)

6 dB bandwidth

(Data rate – 54Mbps)

Ch-6: 2437MHz



Delta 1 [T1]

RBW 100 kHz RF Att 20 dB

Ref Lvl -1.74 dB

VBW 300 kHz

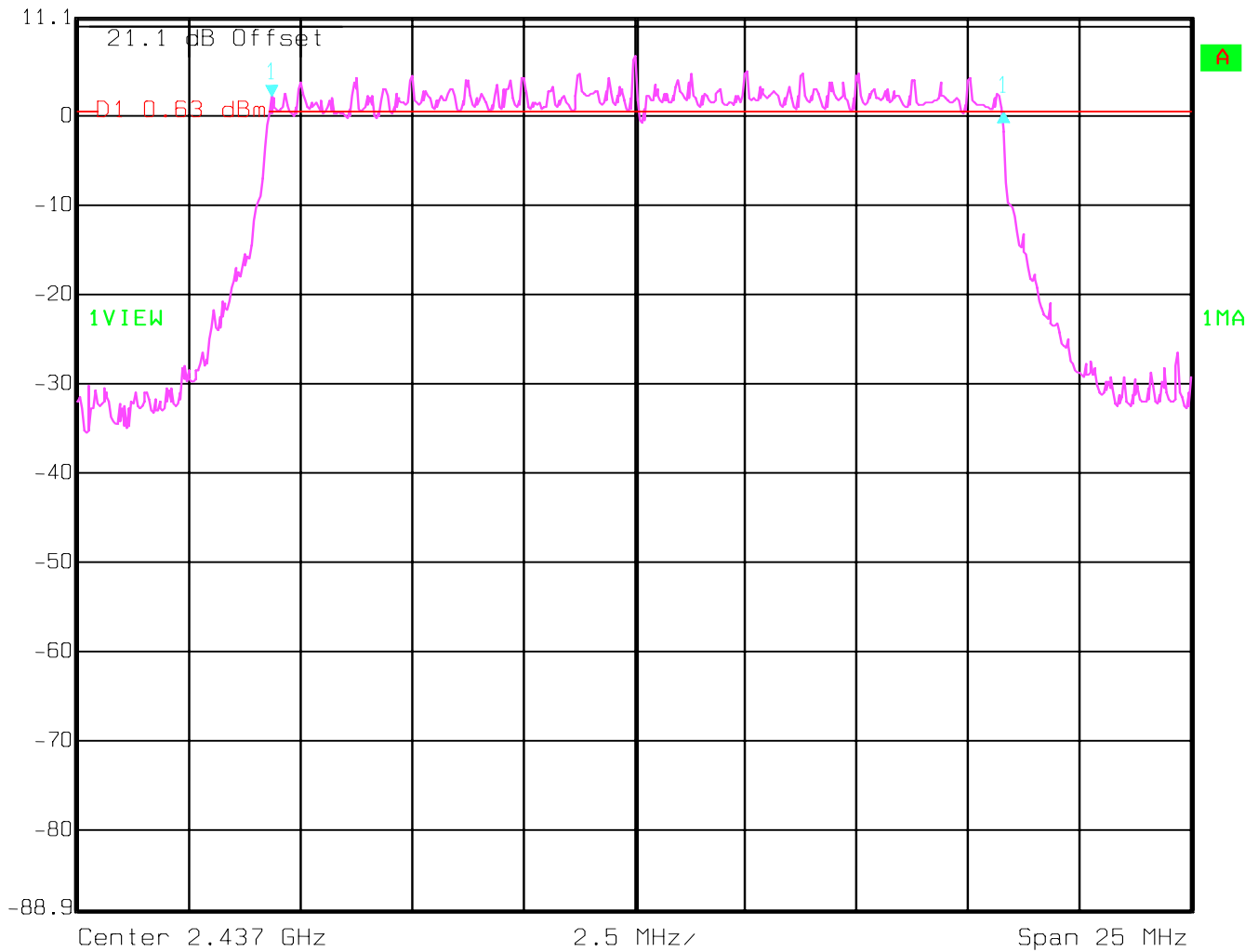
11.1 dBm

16.43286573 MHz

SWT 6.5 ms

Unit

dBm



Date: 07.JUN.2005 13:48:26

SPECTRUM BANDWIDTH OF DSSS SYSTEM

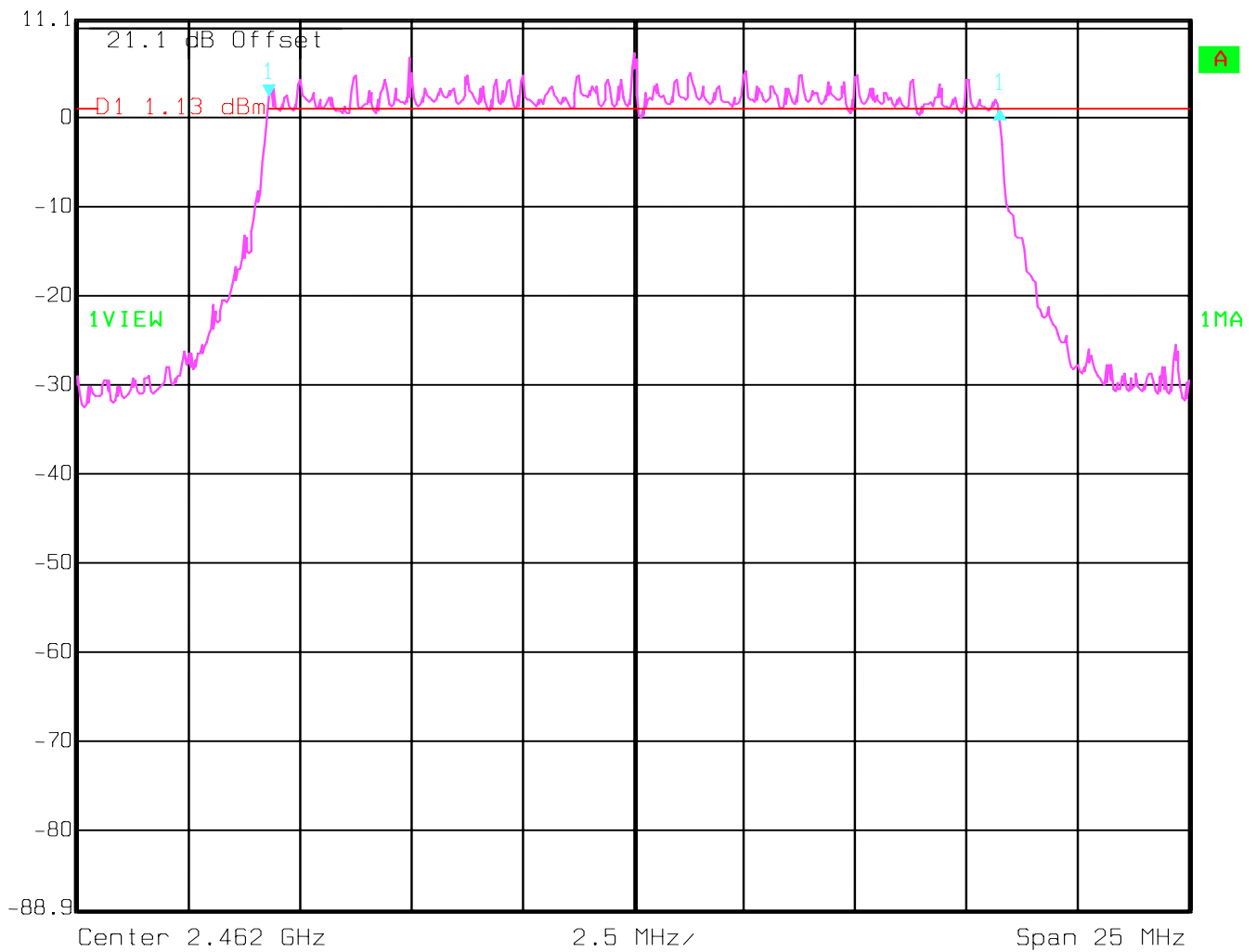
§15.247(a) (2)

6 dB bandwidth

(Data rate – 54Mbps)

Ch-11: 2462MHz

	Delta 1 [T1]	RBW	100 kHz	RF Att	20 dB
Ref Lvl	-1.17 dB	VBW	300 kHz		
11.1 dBm	16.43286573 MHz	SWT	6.5 ms	Unit	dBm



Date: 07.JUN.2005 13:49:58

MAXIMUM PEAK OUTPUT POWER
(Conducted)
(Data rate – 54Mbps)

§ 15.247 (b) (3)

TEST CONDITIONS		OUTPUT POWER (dBm)		
Frequency (MHz)		2412	2437	2462
T _{nom} (23)°C	V _{nom} (3.3) VDC	26.96	27.06	27.16
Measurement uncertainty		±0.5dBm		

LIMIT

SUBCLAUSE § 15.247 (b) (3)

Frequency range	RF power output
2400-2483.5 MHz & 5725-5850 MHz	1.0 Watt / 30dBm

**MAXIMUM PEAK OUTPUT POWER
(RADIATED)
(Data rate – 54Mbps)****§ 15.247 (b) (3)****EIRP:**

TEST CONDITIONS		MAXIMUM PEAK OUTPUT POWER (dBm)		
Frequency (MHz)		2412	2437	2462
T _{nom} (23)°C	V _{nom} (3.3) VDC	25.77	25.63	25.58
Measurement uncertainty		±0.5dBm		

LIMIT**SUBCLAUSE § 15.247 (b) (3)**

Frequency range	RF power output
2400-2483.5 MHz & 5725-5850 MHz	30dBm on Conducted

POWER SPECTRAL DENSITY
(Data rate – 6Mbps b-mode)

§15.247 (e)

TEST CONDITIONS		POWER SPECTRAL DENSITY (dBm)		
Frequency (MHz)		2412	2437	2462
T _{nom} (23)°C	V _{nom} (3.3) VDC	6.39	4.11	4.69

LIMIT

SUBCLAUSE §15.247(e)

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

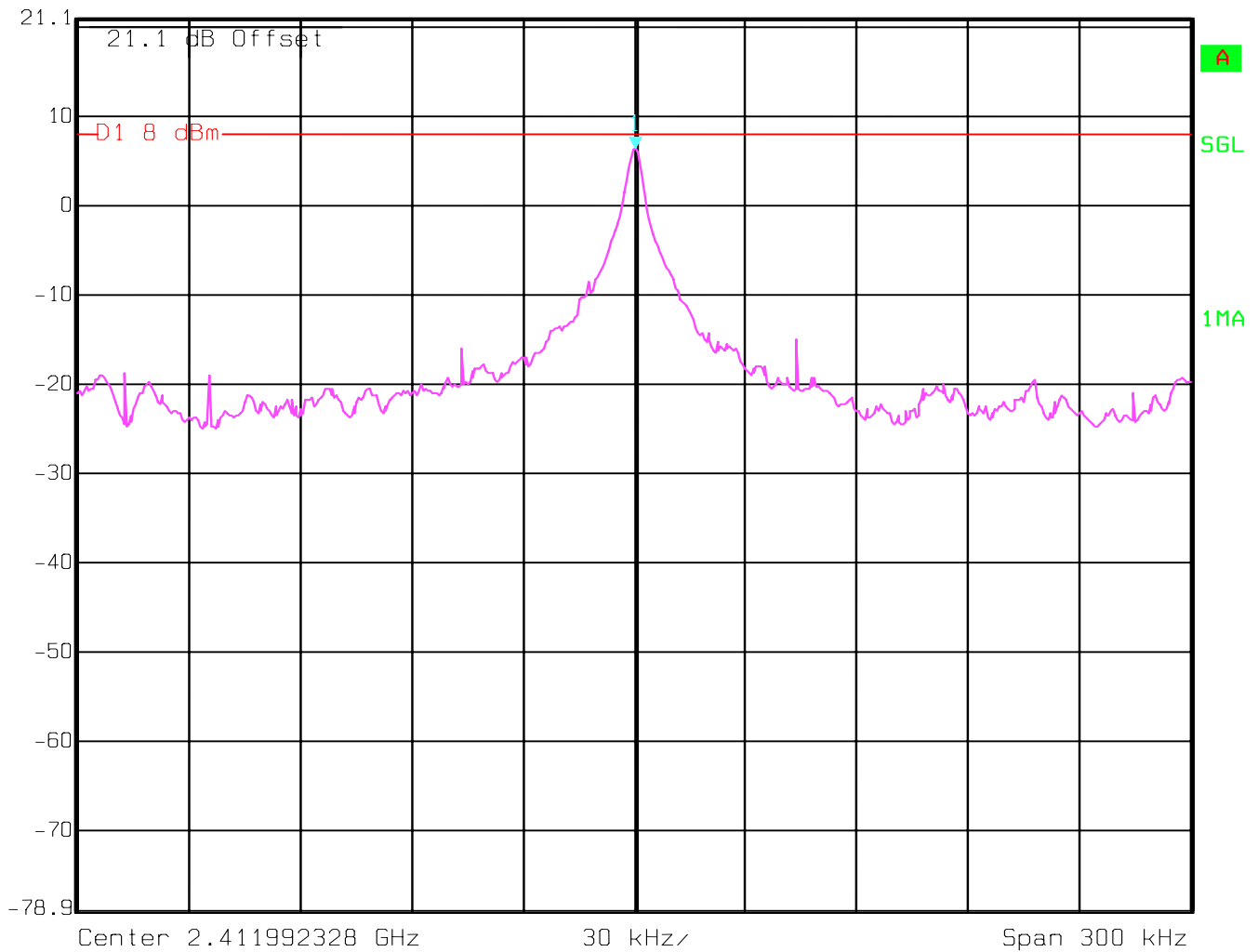
ANALYZER SETTINGS: RBW=3KHz, VBW=3KHz

POWER SPECTRAL DENSITY (Data rate – 6Mbps, DSSS)

§15.247(e)

Ch-1: 2412MHz

	Marker 1 [T1]	RBW	3 kHz	RF Att	30 dB
Ref Lvl	6.39 dBm	VBW	10 kHz		
21.1 dBm	2.41199263 GHz	SWT	100 s	Unit	dBm

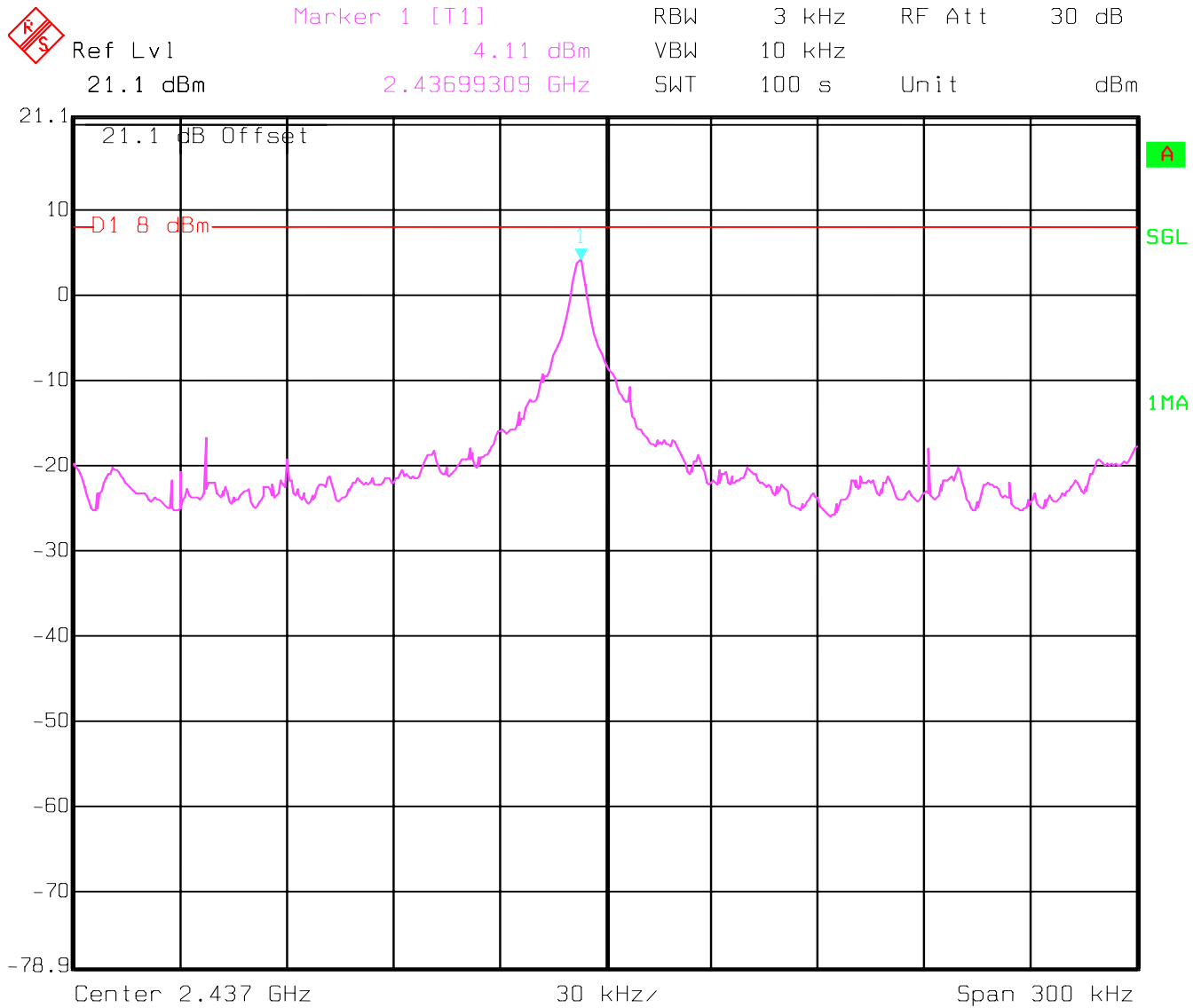


Date: 07.JUN.2005 13:33:15

POWER SPECTRAL DENSITY (Data rate – 6Mbps, DSSS)

§15.247(e)

Ch-6: 2437MHz



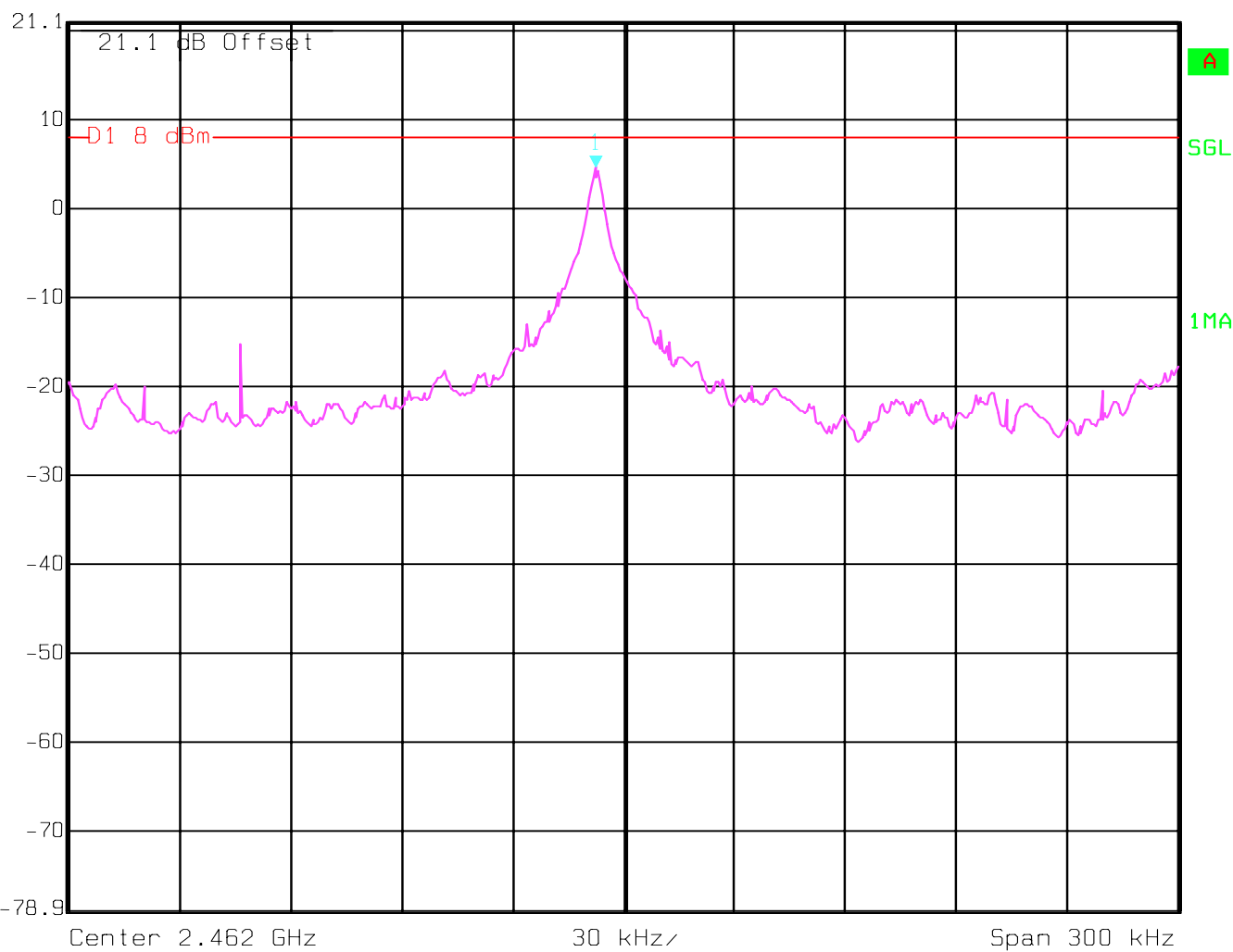
Date: 07.JUN.2005 13:35:41

POWER SPECTRAL DENSITY
(Data rate – 6Mbps, DSSS)

§15.247(e)

Ch-11: 2462MHz

 Ref Lvl 21.1 dBm Marker 1 [T1] 4.69 dBm RBW 3 kHz RF Att 30 dB
2.46199248 GHz VBW 10 kHz Unit dBm
SWT 100 s



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BAND EDGE COMPLIANCE

§15.247 (c)

(Data rate – 6Mbps g-mode)

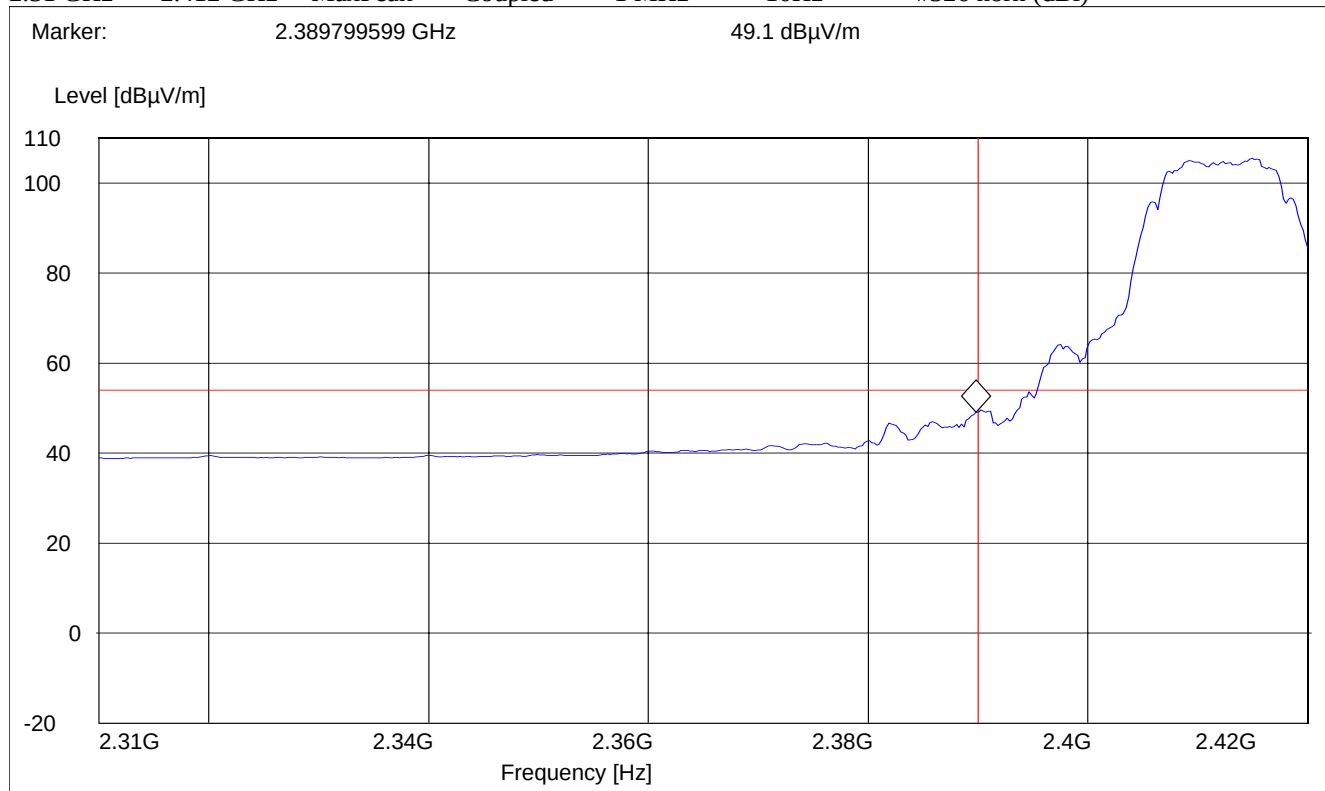
Low frequency section (spurious in the restricted band 2310 – 2390 MHz)

(Average measurement)

Antenna: Horizontal
EUT plane: Horizontal with screen vertical @ 90°

Operating condition : Tx at 2412MHz
SWEEP TABLE : "FCC15.247 LBE_AVG"
Limit Line : 54dBμV

Start Frequency	Stop Frequency	Detector Time	Meas. Bandw.	RBW	VBW	Transducer
2.31 GHz	2.412 GHz	MaxPeak	Coupled	1 MHz	10Hz	#326 horn (dBi)



BAND EDGE COMPLIANCE

§15.247 (c)

(Data rate – 54Mbps g-mode)

Low frequency section (spurious in the restricted band 2310 – 2390 MHz)

(Peak measurement)

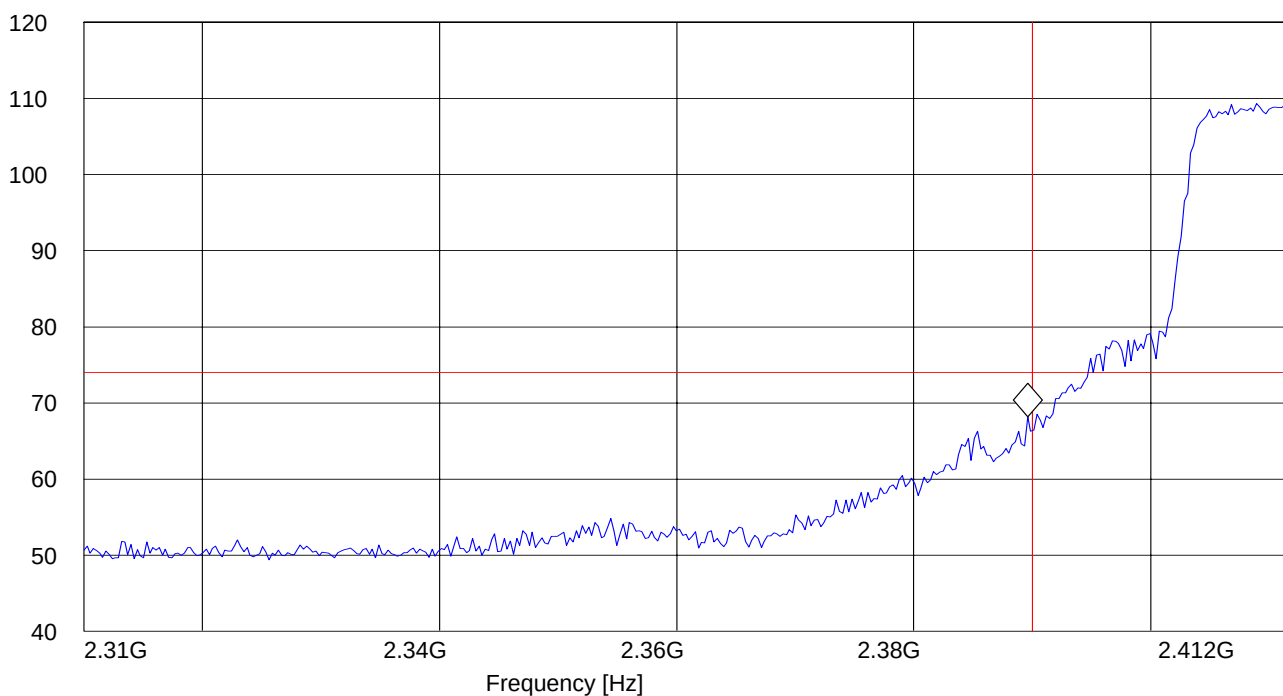
Antenna: Horizontal
EUT plane: Horizontal with screen vertical @ 90°

Operating condition : Tx at 2412MHz
SWEEP TABLE : "FCC15.247 LBE_Pk"
Limit Line : 74dBμV

Start Frequency	Stop Frequency	Detector	Meas. Bandw.	RBW	VBW	Transducer
2.31 GHz	2.412 GHz	MaxPeak	Coupled	1 MHz	1MHz	#326 horn (dBi)

Marker: 2.389623246 GHz 68.16 dBμV/m

Level [dBμV/m]



BAND EDGE COMPLIANCE

§15.247 (c)

(Data rate – 6Mbps g-mode)

High frequency section (spurious in the restricted band 2483.5 – 2500MHz)

(Average measurement)

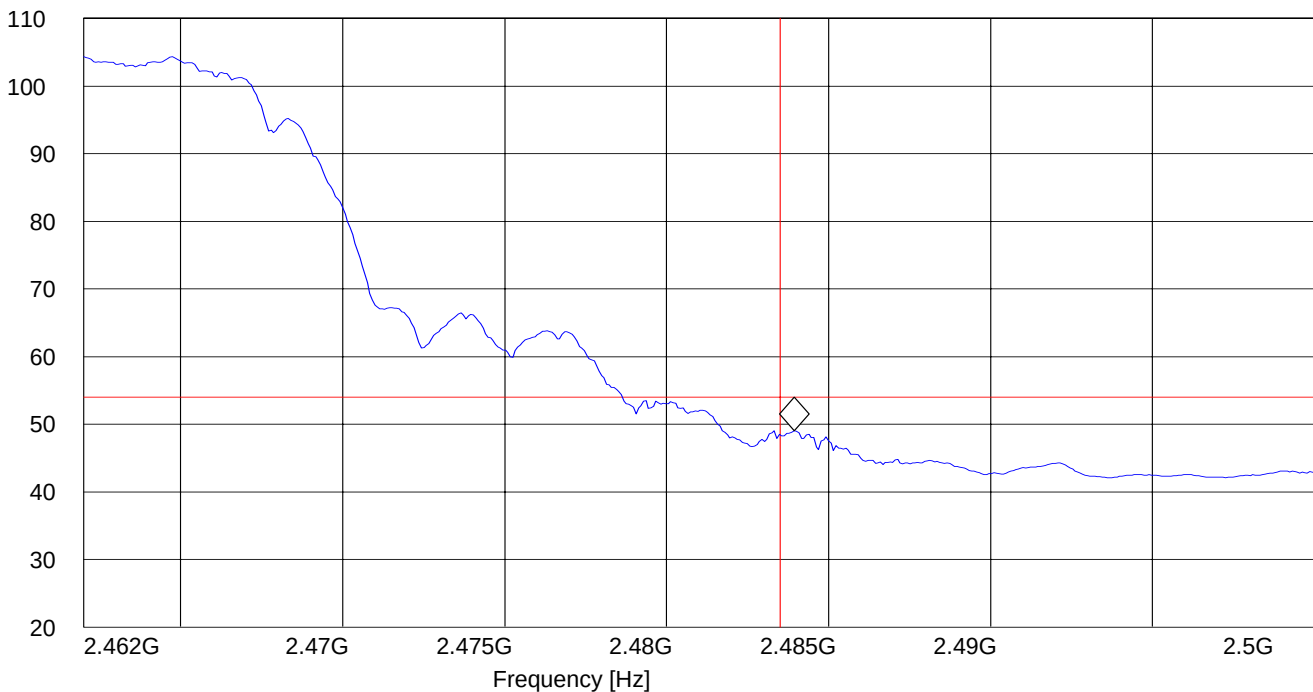
Antenna: Horizontal
EUT plane: Horizontal with screen vertical @ 90°

Operating condition : Tx at 2462MHz
SWEEP TABLE : "FCC15.247 HBE_AVG"
Limit Line : 54dBμV

Start Frequency	Stop Frequency	Detector Time	Meas. Bandw.	RBW	VBW	Transducer
2.462 GHz	2.5 GHz	MaxPeak	Coupled	1 MHz	10Hz	#326 horn (dBi)

Marker: 2.483931864 GHz 49.06 dBμV/m

Level [dBμV/m]



BAND EDGE COMPLIANCE

§15.247 (c)

(Data rate – 54Mbps g-mode)

High frequency section (spurious in the restricted band 2483.5 – 2500 MHz)

(Peak measurement)

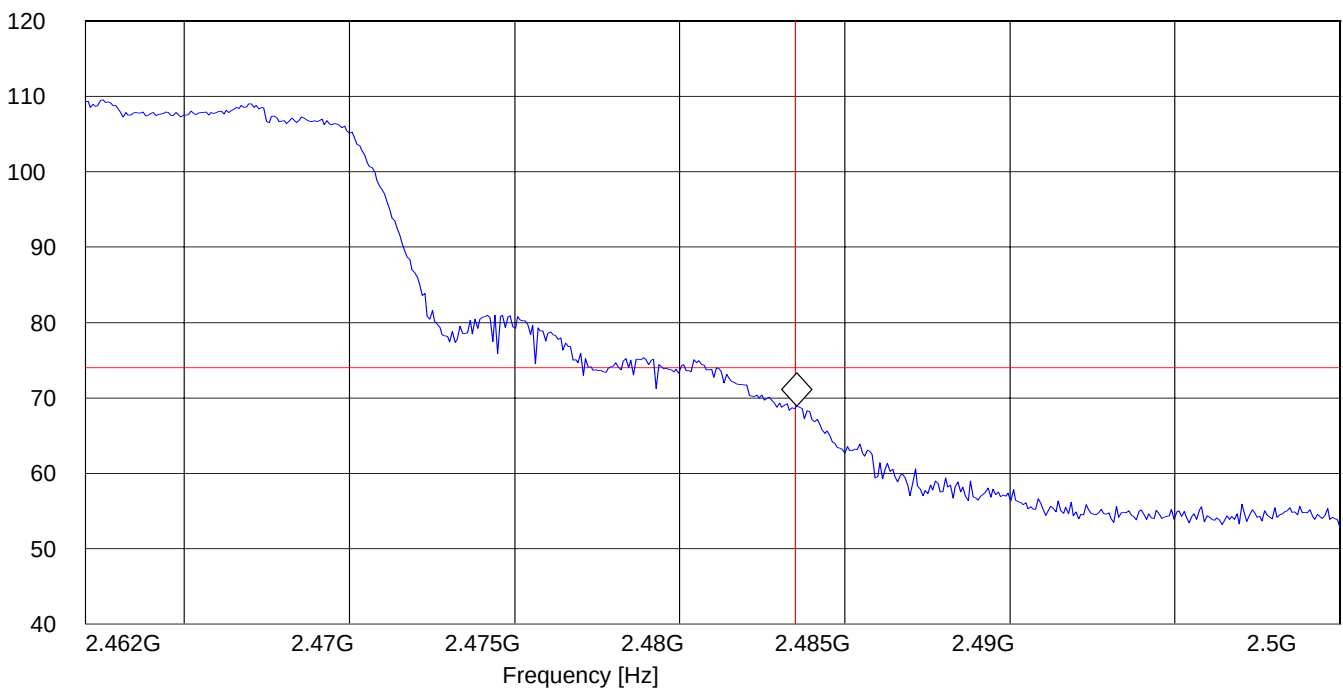
Antenna: Horizontal
EUT plane: Horizontal with screen vertical @ 90°

Operating condition : Tx at 2462MHz
SWEEP TABLE : "FCC15.247 HBE_PK"
Limit Line : 74dBμV

Start Frequency	Stop Frequency	Detector Time	Meas. Bandw.	RBW	VBW	Transducer
2.462 GHz	2.5 GHz	MaxPeak	Coupled	1 MHz	1MHz	#326 horn (dBi)

Marker: 2.483551102 GHz 68.92 dBμV/m

Level [dBμV/m]



EMISSION LIMITATIONS
Transmitter (Radiated)

§ 15.247 (c) (1)

LIMITS

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)).

NOTE:

1. The radiated 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 3 and 25 GHz very short cable connections to the antenna was used to minimize the noise level.
2. All measurements are done in peak mode unless specified with the plots.

Results for the radiated measurements below 30MHz according § 15.33

Frequency	Measured values	Remarks
9KHz – 30MHz	No emissions found, caused by the EUT	This is valid for all the tested channels

EMISSION LIMITATIONS - Radiated (Transmitter)**§ 15.247 (c) (1)**

Transmit at Lowest channel Frequency 2412MHz			
Frequency (MHz)	Level (dBµV/m)		
	Peak	Quasi-Peak	Average
SEE PLOTS			
Transmit at Middle channel Frequency 2437MHz			
Frequency (MHz)	Level (dBµV/m)		
	Peak	Quasi-Peak	Average
SEE PLOTS			
Transmit at Highest channel Frequency 2462MHz			
Frequency (MHz)	Level (dBµV/m)		
	Peak	Quasi-Peak	Average
SEE PLOTS			

EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

30MHz – 1GHz

(Data rate – 54Mbps)

Antenna: vertical

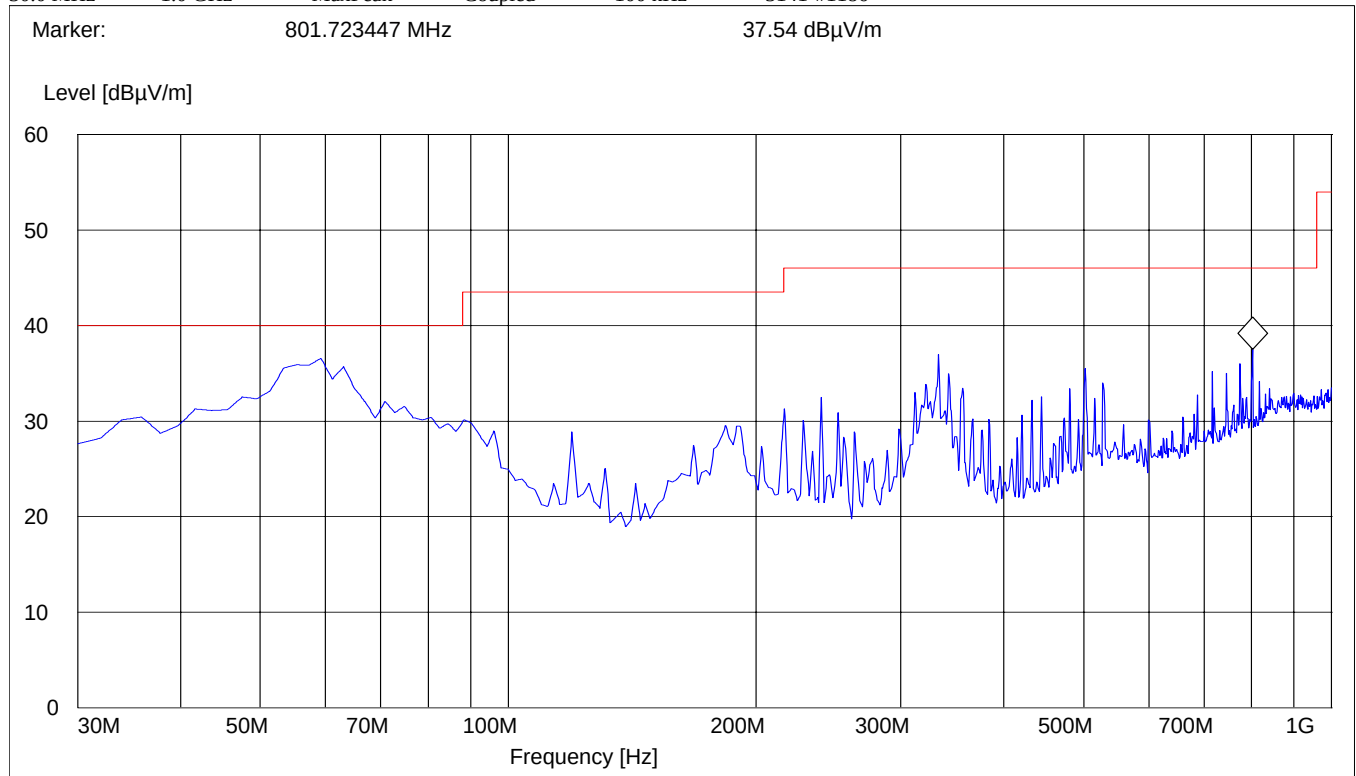
EUT plane: Horizontal with screen vertical @ 90°

Note:

1. This plot is valid for low, mid, high channels (worst-case plot)
2. EUT connected to host laptop via USB 1.1

SWEEP TABLE: "WLAN Spuri hi 30-1G"

Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency		Time	VBW	
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

30MHz – 1GHz

(Data rate – 54Mbps)

Antenna: Horizontal

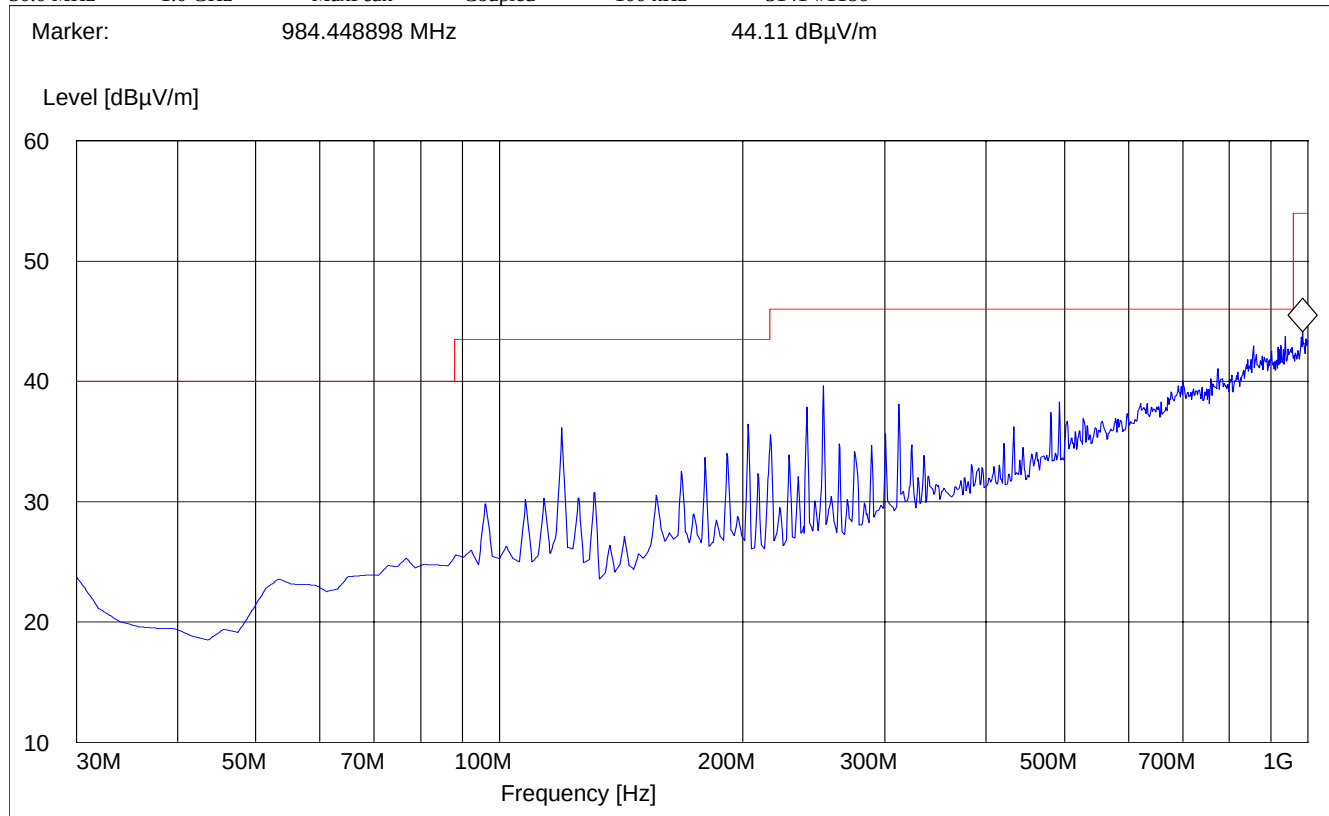
EUT plane: Horizontal with screen vertical @ 90°

Note:

1. This plot is valid for low, mid, high channels (worst-case plot)
2. EUT connected to host laptop via USB 1.1

SWEEP TABLE: "WLAN Spuri hi 30-1G"

Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency		Time	VBW	
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

30MHz – 1GHz

(Data rate – 54Mbps)

Antenna: vertical

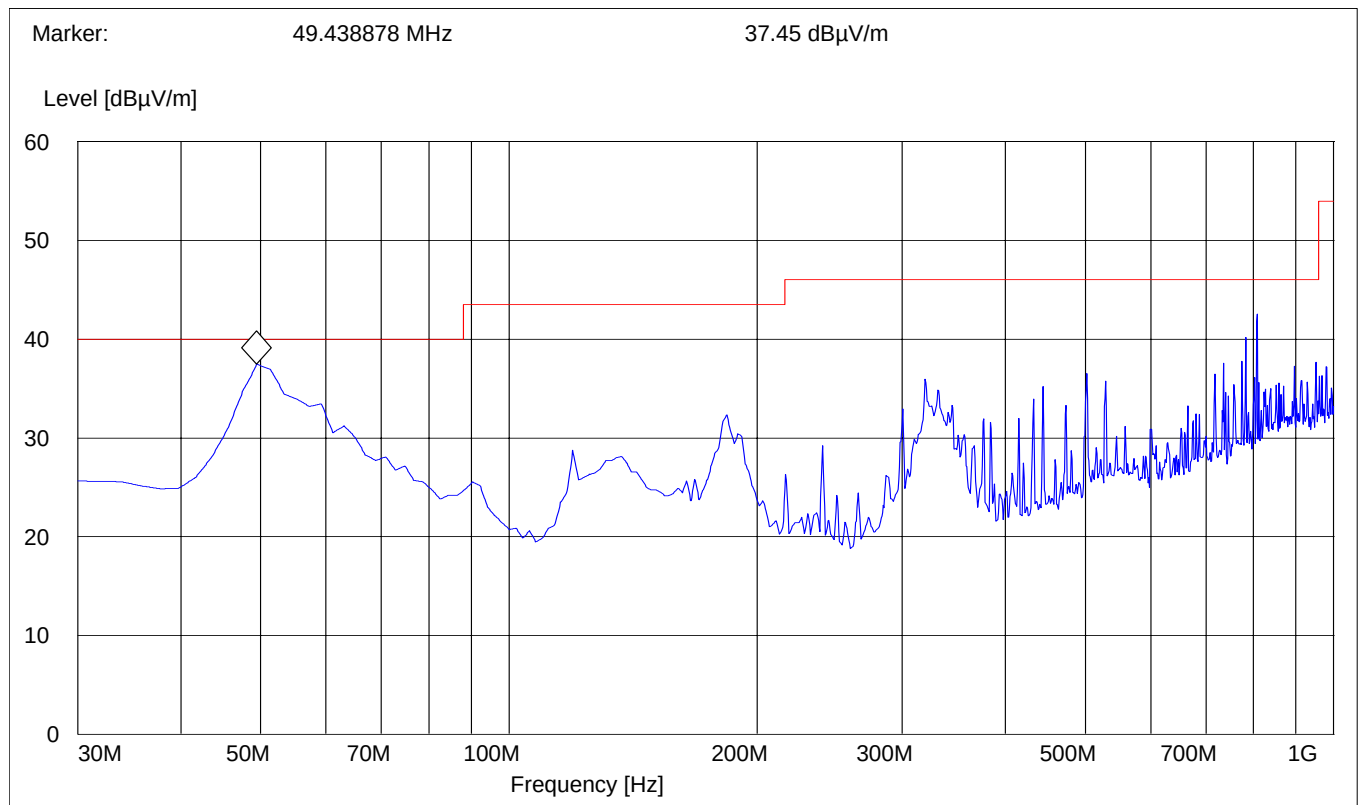
EUT plane: Horizontal with screen vertical @ 90°

Note:

1. This plot is valid for low, mid, high channels (worst-case plot)
2. EUT connected to host laptop via USB 2.0

SWEEP TABLE: "WLAN Spuri hi 30-1G"

Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency		Time	VBW	
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

30MHz – 1GHz

(Data rate – 54Mbps)

Antenna: Horizontal

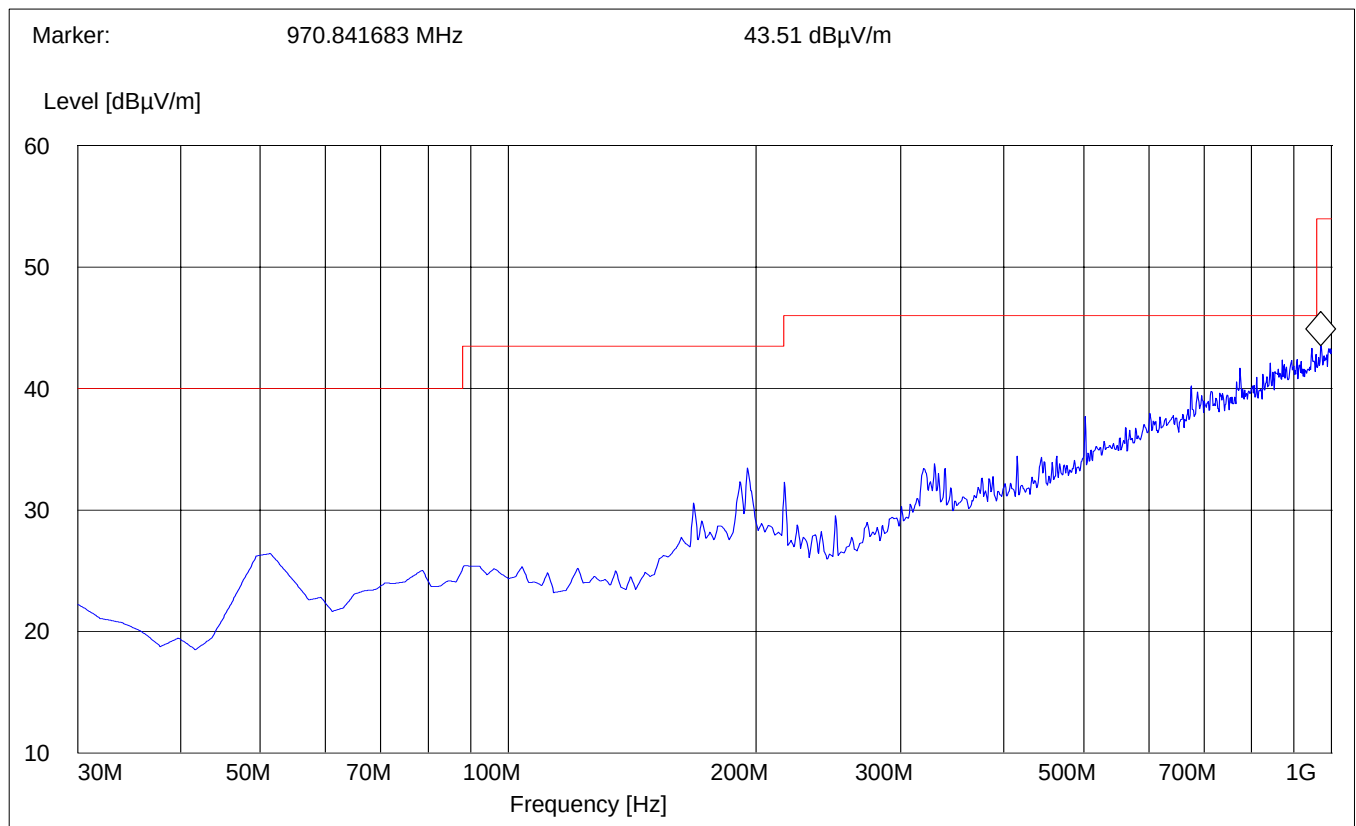
EUT plane: Horizontal with screen vertical @ 90°

Note:

1. This plot is valid for low, mid, high channels (worst-case plot)
2. EUT connected to host laptop via USB 2.0

SWEEP TABLE: "WLAN Spuri hi 30-1G"

Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency		Time	VBW	
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

Channel-1 (2412MHz): 1GHz – 3GHz

(Data rate – 54Mbps)

Antenna: Horizontal

EUT plane: Horizontal with screen vertical @ 90°

Average measurement

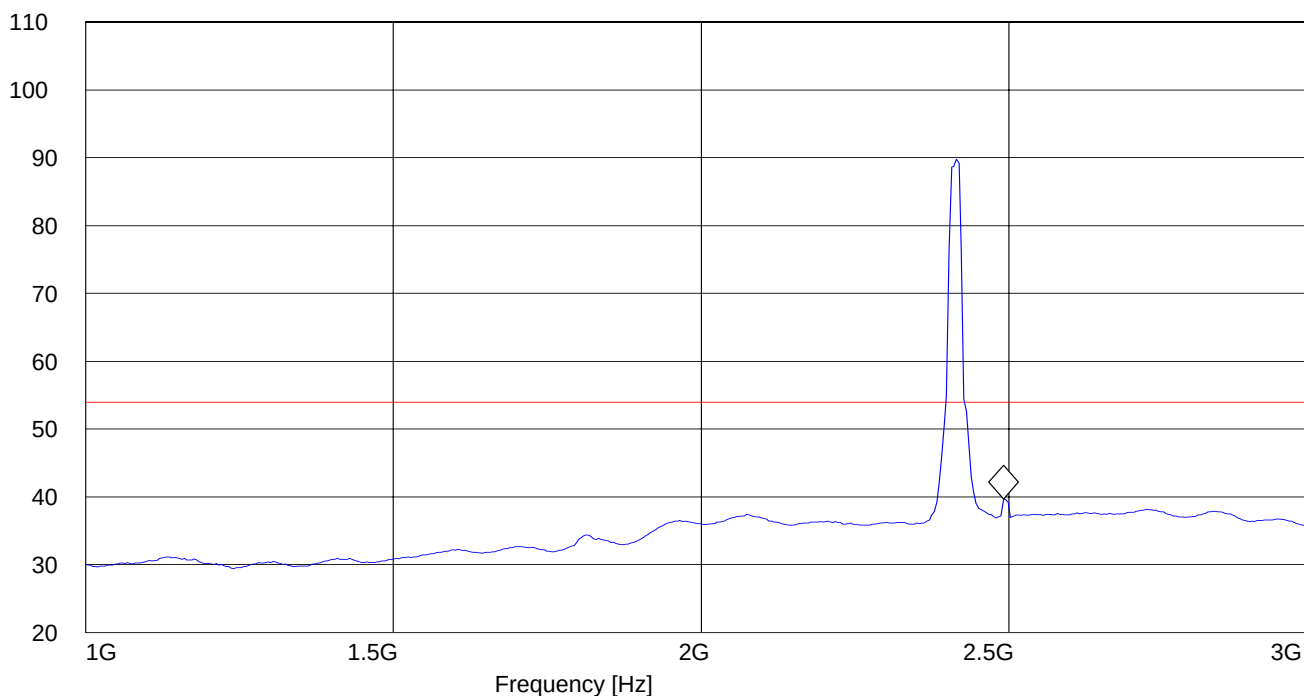
Note: The peak above the limit line is the carrier freq.

SWEEP TABLE: "WLAN Spuri hi 1-3G"

Start	Stop	Detector	Meas.	RBW	VBW	Transducer
Frequency	Frequency	Time	Bandw.			
1.0 GHz	3.0 GHz	MaxPeak	Coupled	1 MHz	10Hz	#326 horn (dBi)

Marker: 2.490981964 GHz 39.71 dBμV/m

Level [dBμV/m]



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

Channel-1 (2412MHz): 3GHz – 18GHz

(Data rate – 54Mbps)

(Average measurement)

Antenna: Horizontal

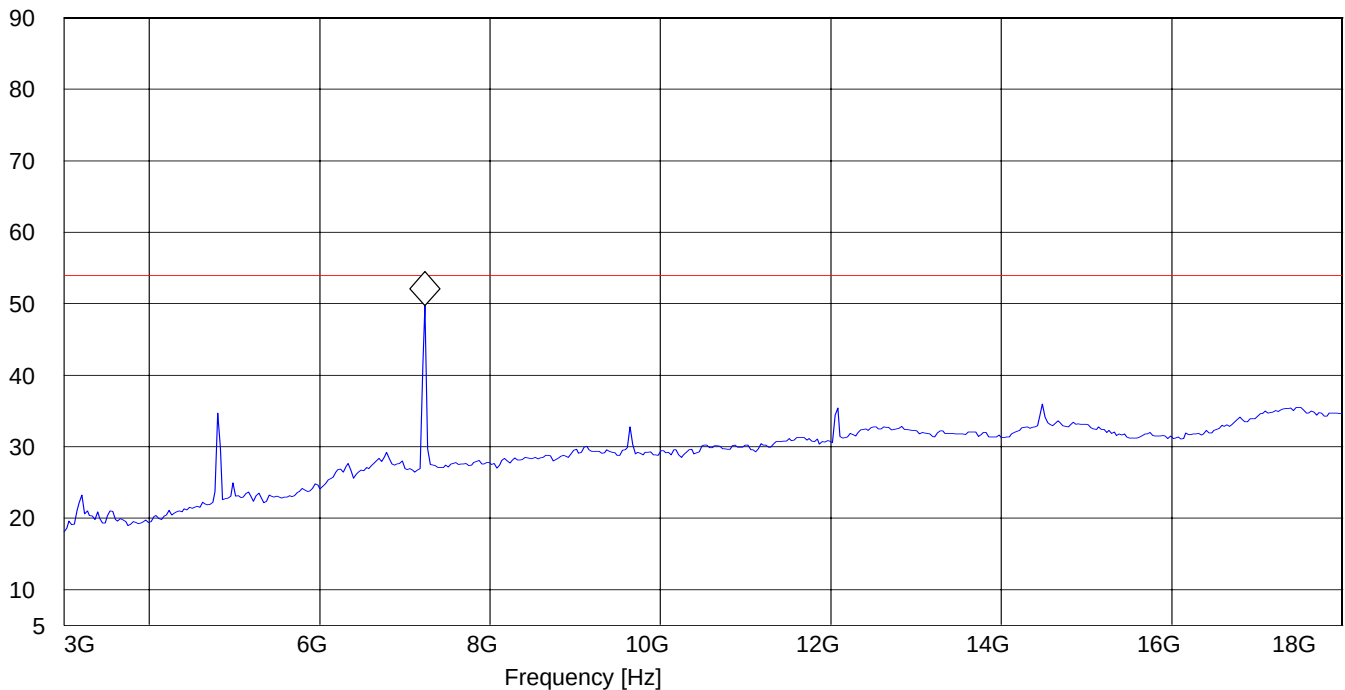
EUT plane: Horizontal with screen vertical @ 90°

SWEEP TABLE: " WLAN Spuri hi 3-18G"

Start	Stop	Detector	Meas.	RBW	VBW	Transducer
Frequency	Frequency	Time	Bandw.			
3.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	10Hz	#326 horn (dBi)

Marker: 7.238476954 GHz 49.76 dBμV/m

Level [dBμV/m]



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

Channel-6 (2437MHz): 1GHz – 3GHz

(Data rate – 54Mbps)

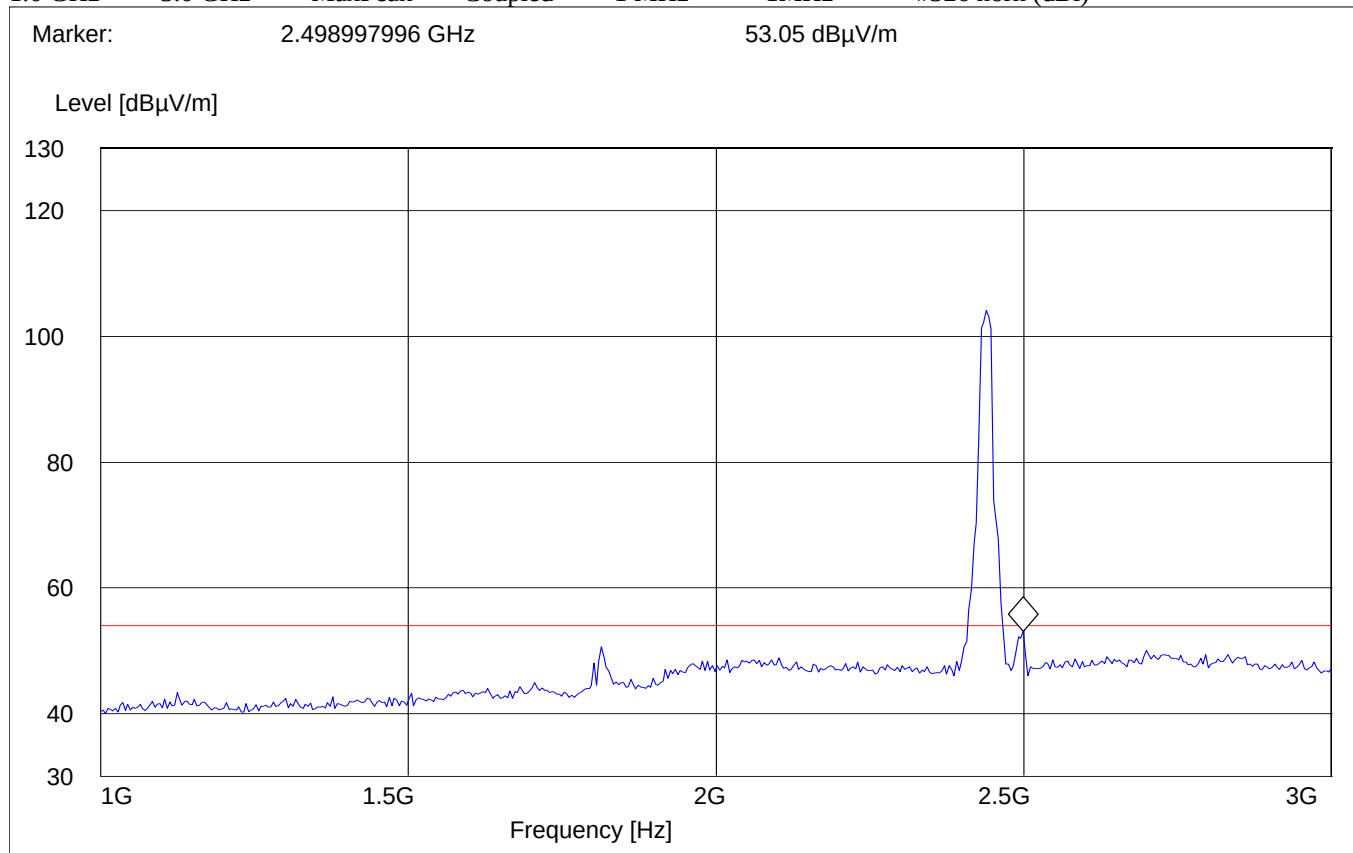
Antenna: Horizontal

EUT plane: Horizontal with screen vertical @ 90°

Note: The peak above the limit line is the carrier freq.

SWEEP TABLE: " WLAN Spuri hi 1-3G"

Start	Stop	Detector	Meas.	RBW	VBW	Transducer
Frequency	Frequency	Time	Bandw.			
1.0 GHz	3.0 GHz	MaxPeak	Coupled	1 MHz	1MHz	#326 horn (dBi)



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

Channel-6 (2437MHz): 3GHz – 18GHz

(Data rate – 54Mbps)

(Average Measurement)

Antenna: Horizontal

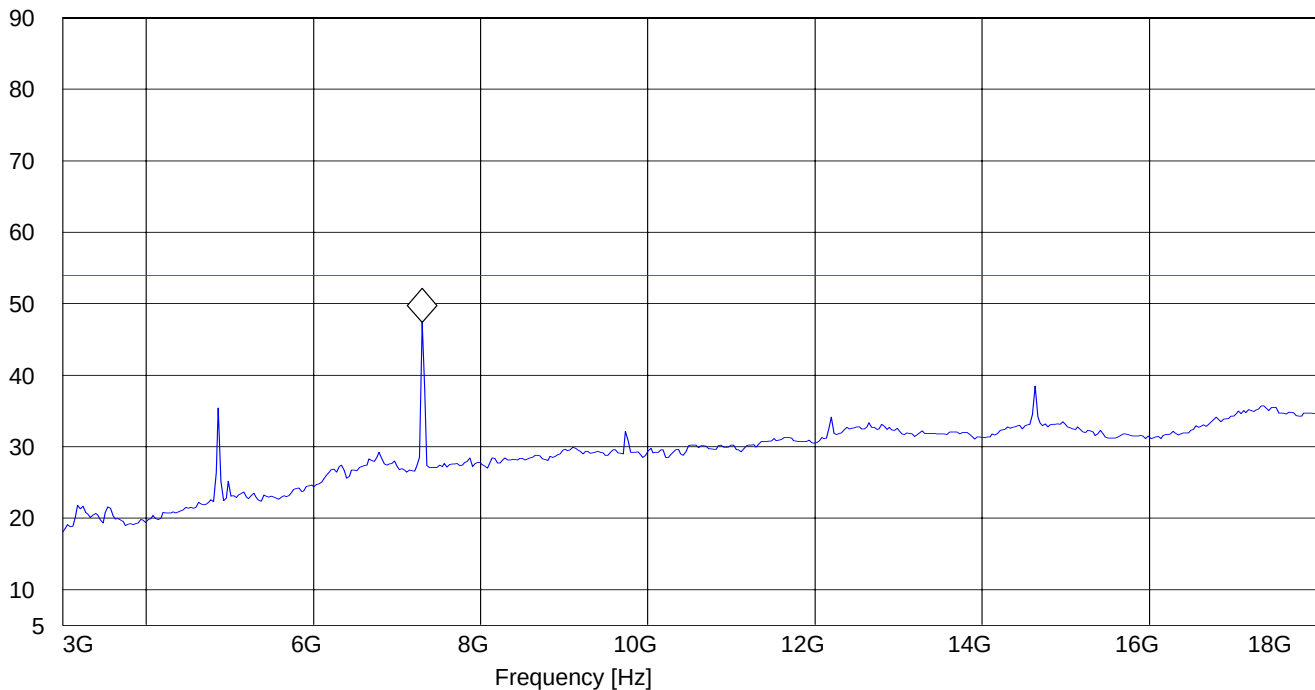
EUT plane: Horizontal with screen vertical @ 90°

SWEEP TABLE: " WLAN Spuri hi 3-18G"

Start	Stop	Detector	Meas.	RBW	VBW	Transducer
Frequency	Frequency	Time	Bandw.			
3.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	10Hz	#326 horn (dBi)

Marker: 7.298597194 GHz 47.43 dBμV/m

Level [dBμV/m]



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

Channel-11 (2462MHz): 1GHz – 3GHz

(Data rate – 54Mbps)

Average measurement

Antenna: Horizontal

EUT plane: Horizontal with screen vertical @ 90°

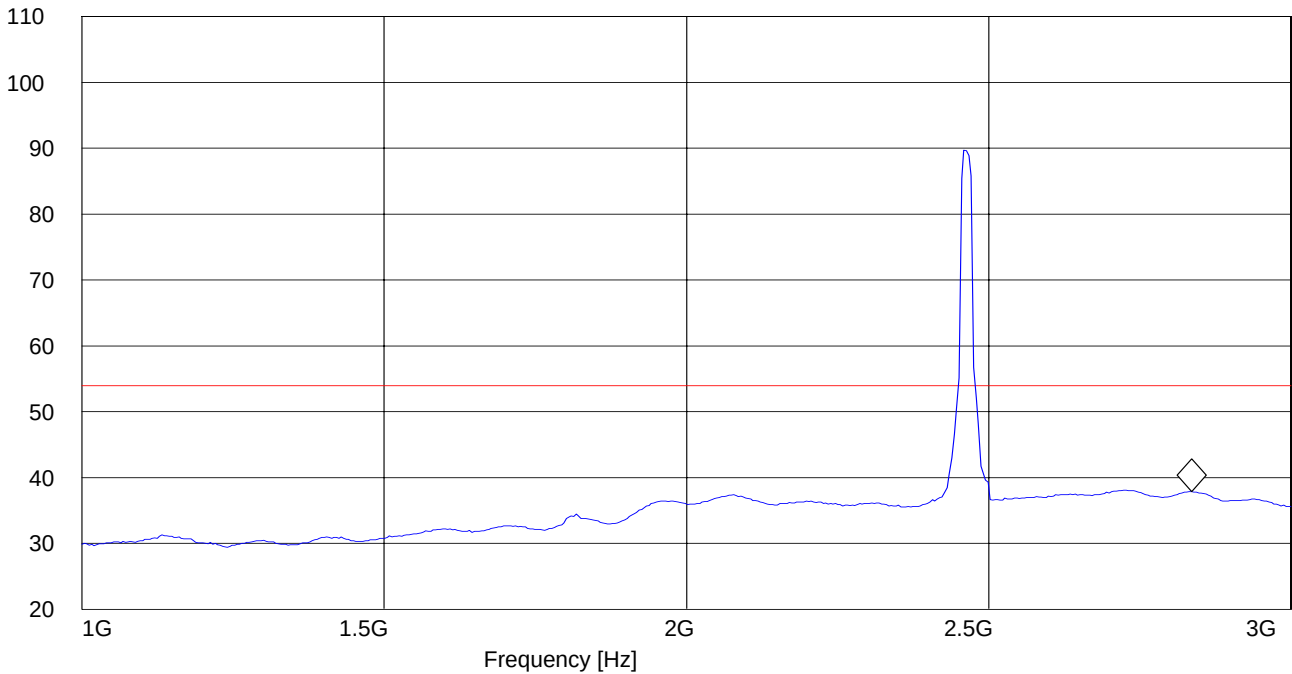
Note: The peak above the limit line is the carrier freq.

SWEEP TABLE: " WLAN Spuri hi 1-3G"

Start	Stop	Detector	Meas.	RBW	VBW	Transducer
Frequency	Frequency	Time	Bandw.			
1.0 GHz	3.0 GHz	MaxPeak	Coupled	1 MHz	10Hz	#326 horn (dBi)

Marker: 2.835671343 GHz 37.87 dBμV/m

Level [dBμV/m]



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

Channel-11 (2462MHz): 3GHz – 18GHz

(Data rate – 54Mbps)

(Average Measurement)

Antenna: Horizontal

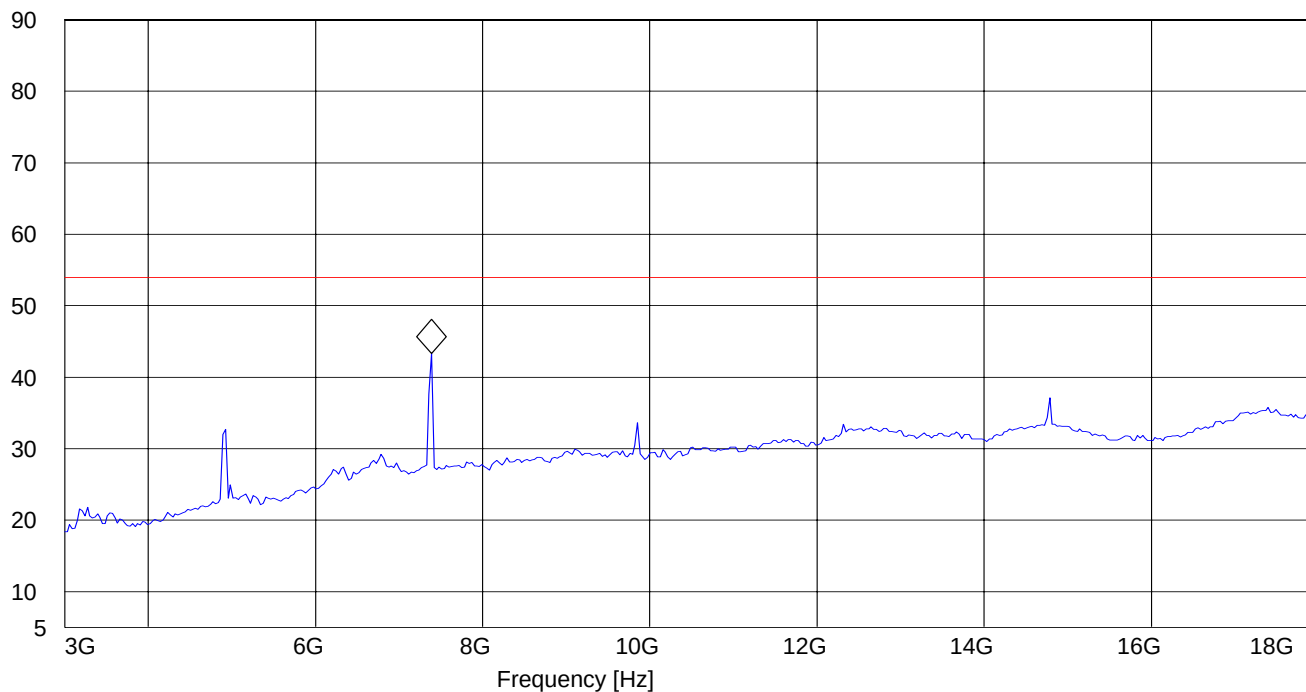
EUT plane: Horizontal with screen vertical @ 90°

SWEEP TABLE: " WLAN Spuri hi 3-18G"

Start	Stop	Detector	Meas.	RBW	VBW	Transducer
Frequency	Frequency	Time	Bandw.			
3.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	10Hz	#326 horn (dBi)

Marker: 7.388777555 GHz 43.32 dBμV/m

Level [dBμV/m]



EMISSION LIMITATIONS - Radiated (Transmitter)

§ 15.247 (c) (1)

18GHz – 25GHz

(Data rate – 54Mbps)

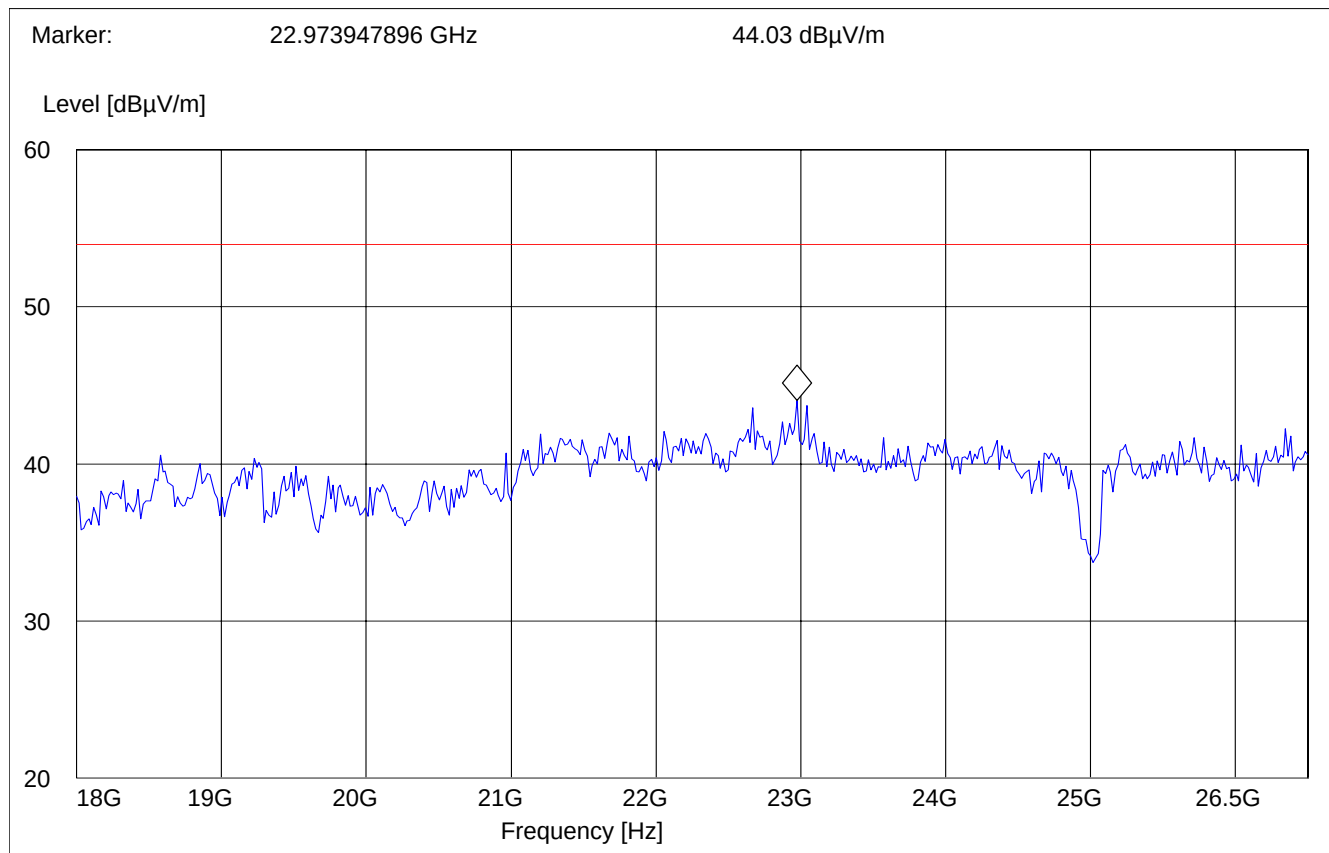
Antenna: Horizontal

EUT plane: Horizontal with screen vertical @ 90°

Note: This plot is valid for low, mid, high channels (worst-case plot)

SWEEP TABLE: "WLAN Spuri hi 18-25G"

Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency	Time	Bandw.	VBW	
18 GHz	25 GHz	MaxPeak	Coupled	1 MHz	#326 horn (dBi)



CONDUCTED EMISSIONS

§ 15.107/207

Measured with AC/DC power adapter and **USB 1.1**

SWEEP TABLE: "55022 cond"

Short Description:		EN 55022 for 150KHz-30MHz			
Start	Stop	Detector	Meas	IF	Transducer
Frequency	Frequency		Time	Bandw.	
150.0 kHz	30.0 MHz	MaxPeak	Coupled	10 kHz	None

Technical specification: 15.107 / 15.207 (Revised as of August 20, 2002)

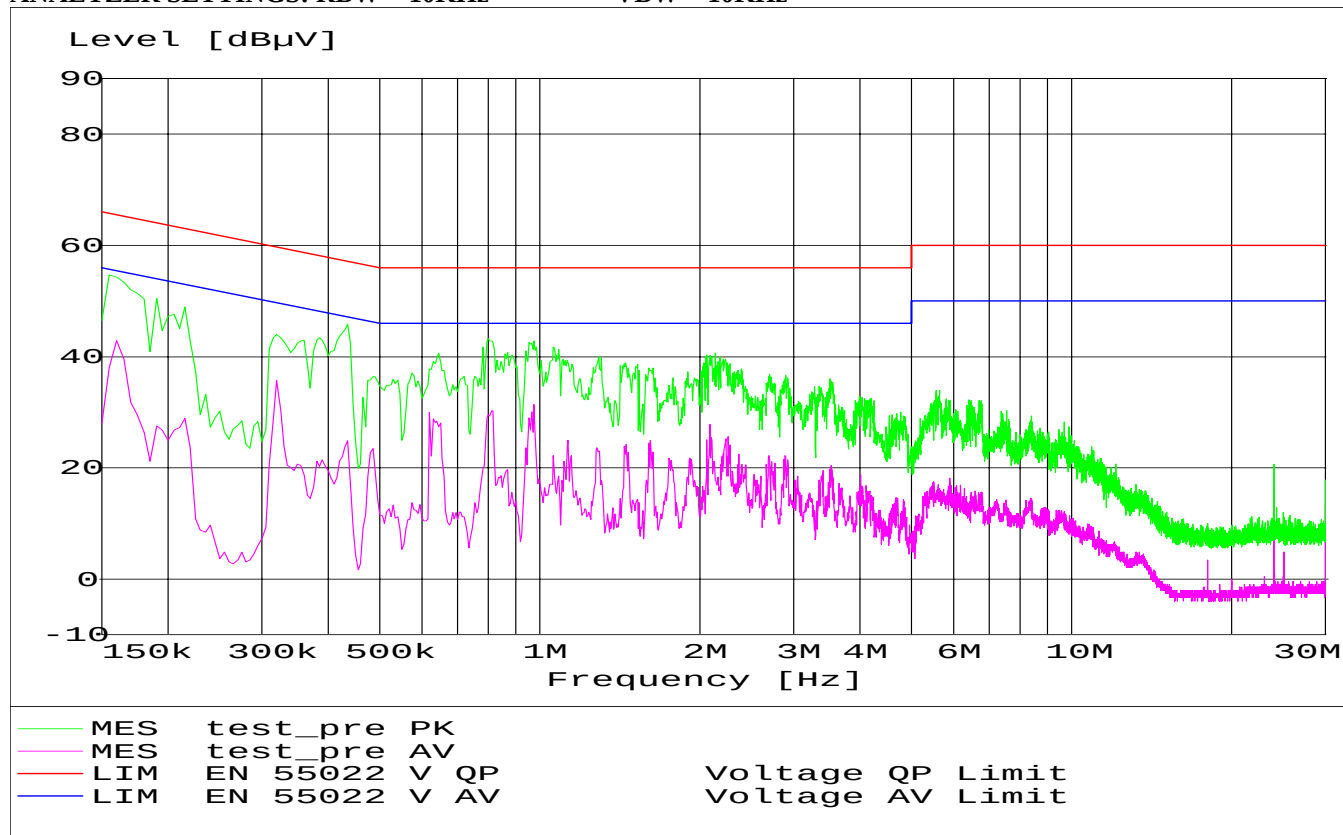
Limit

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 logarithm of the frequency

ANALYZER SETTINGS: RBW = 10KHz

VBW = 10KHz



Measured with AC/DC power adapter and USB 2.0

SWEEP TABLE: "55022 cond"

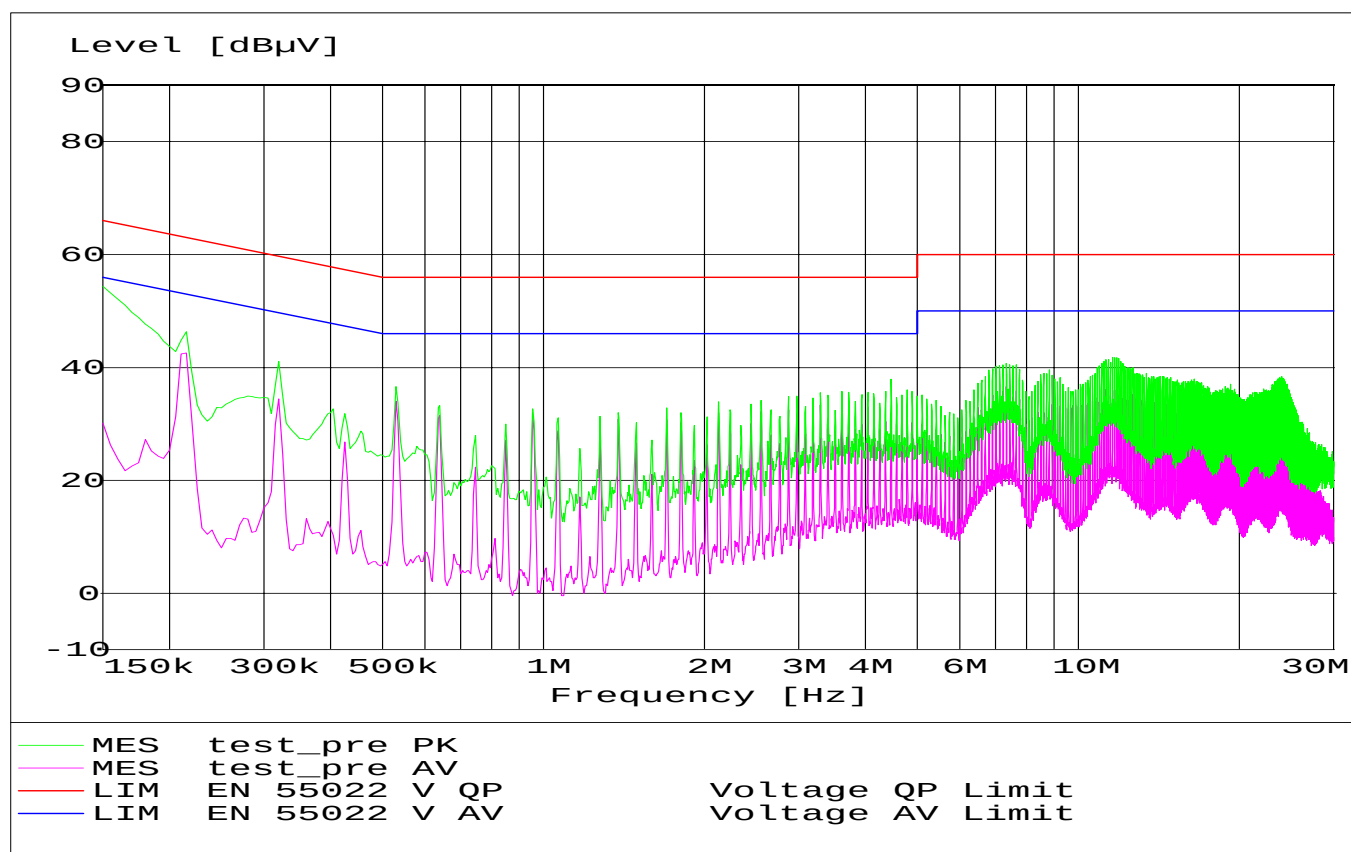
Short Description:		EN 55022 for 150KHz-30MHz			
Start	Stop	Detector	Meas	IF	Transducer
Frequency	Frequency		Time	Bandw.	
150.0 kHz	30.0 MHz	MaxPeak	Coupled	10 kHz	None

Technical specification: 15.107 / 15.207 (Revised as of August 20, 2002)

Limit

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 logarithm of the frequency



RECEIVER SPURIOUS RADIATION**§ 15.209****Limits**

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:

The radiated 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 3 and 25 GHz very short cable connections to the antenna was used to minimize the noise level.

RECEIVER SPURIOUS RADIATION

§ 15.209

Data rate – 54Mbps)

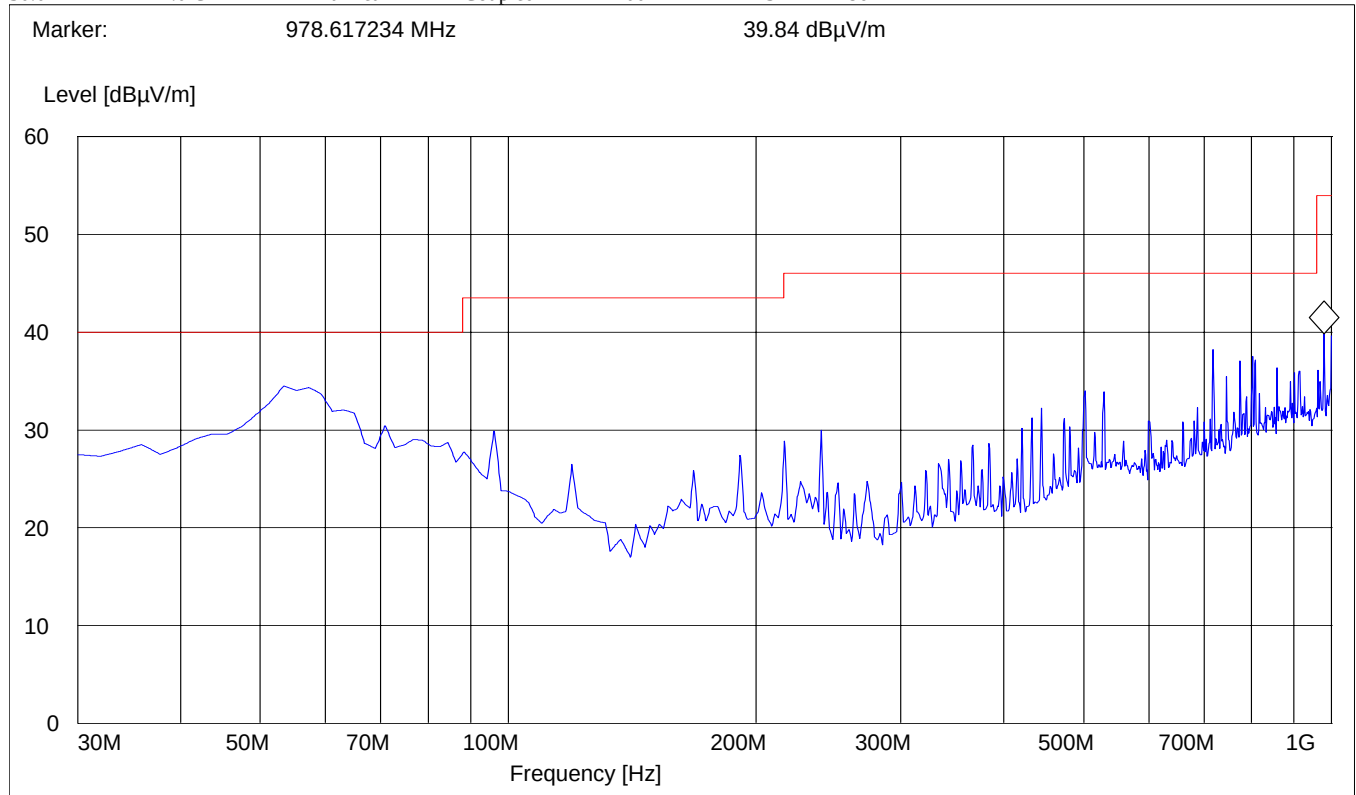
Antenna: vertical

EUT plane: Horizontal with screen vertical @ 90°

Note: This plot is valid for all antenna polarities (worst-case plot)

SWEEP TABLE: "WLAN Spuri hi 30-1G"

Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency		Time	VBW	
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186



RECEIVER SPURIOUS RADIATION

§ 15.209

1GHz – 3GHz

Peak Measurement

worst-case plot valid for all antennas

Antenna: Horizontal

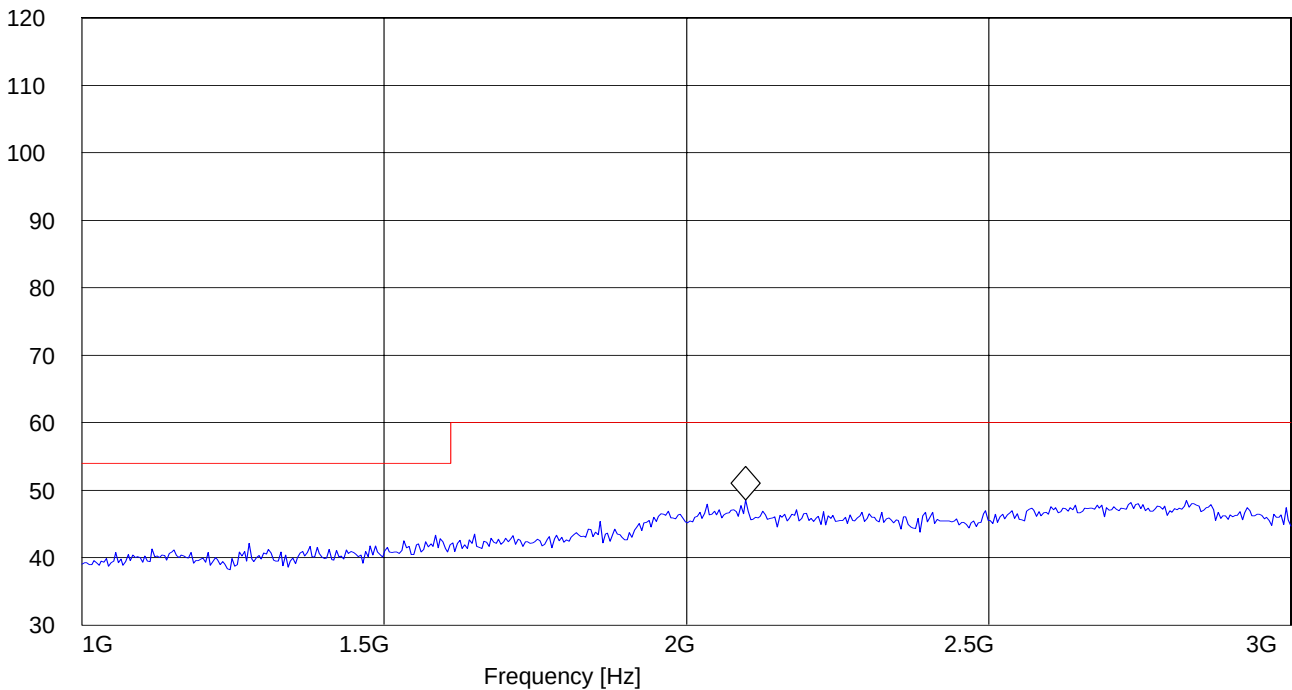
EUT plane: Horizontal with screen vertical @ 90°

SWEEP TABLE: "WLAN Spuri hi 1-3G"

Start	Stop	Detector	Meas.	RBW	VBW	Transducer
Frequency	Frequency	Time	Bandw.			
1.0 GHz	3.0 GHz	MaxPeak	Coupled	1 MHz	1MHz	#326 horn (dBi)

Marker: 2.098196393 GHz 48.58 dBμV/m

Level [dBμV/m]



RECEIVER SPURIOUS RADIATION 3GHz – 18GHz

§ 15.209

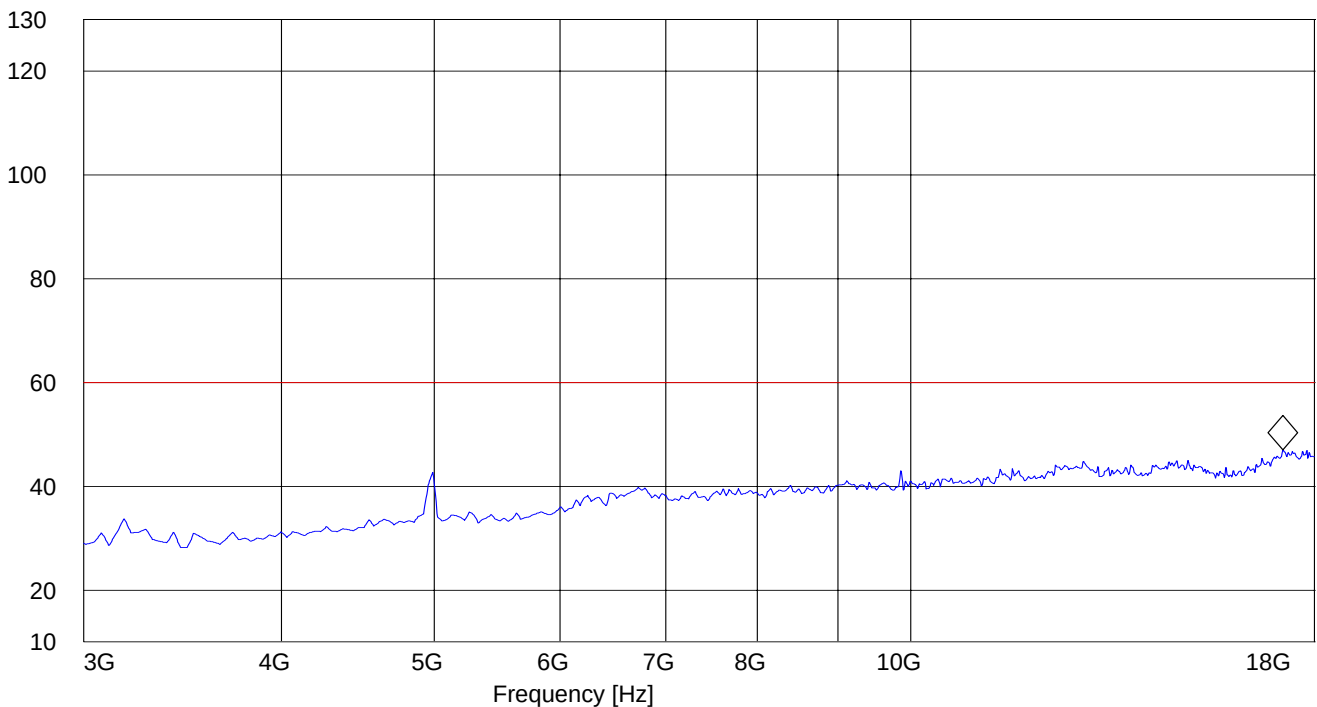
Antenna: Horizontal
EUT plane: Horizontal with screen vertical @ 90°

SWEEP TABLE: "WLAN Spuri hi 3-18G"

Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency	Time	Bandw.	VBW	
3.0 GHz	18 GHz	MaxPeak	Coupled	1 MHz	#326 horn (dBi)

Marker: 17.182364729 GHz 47.02 dBμV/m

Level [dBμV/m]



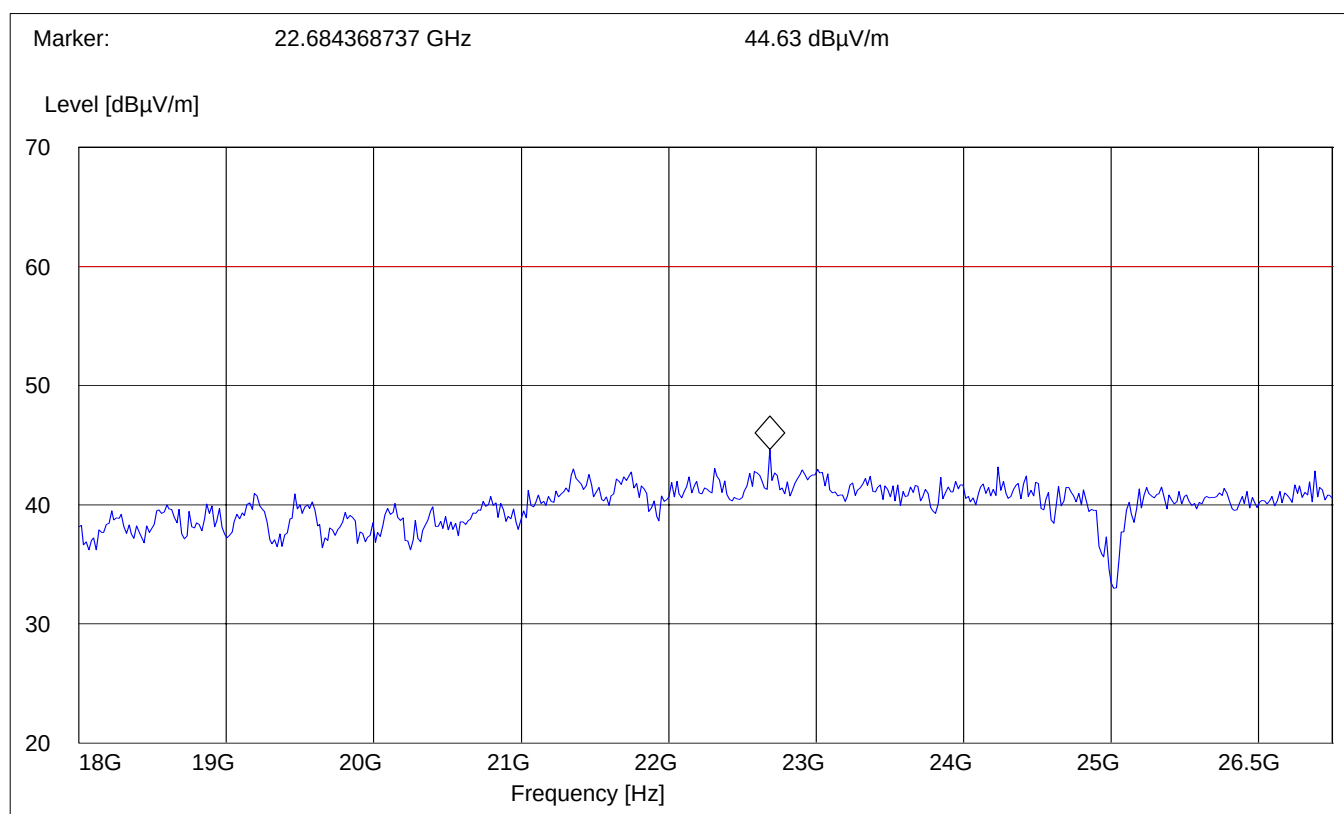
RECEIVER SPURIOUS RADIATION 18GHz – 26.5GHz

§ 15.209

Antenna: Horizontal
EUT plane: Horizontal with screen vertical @ 90°

SWEEP TABLE: "WLAN Spuri hi 18-26.5G"

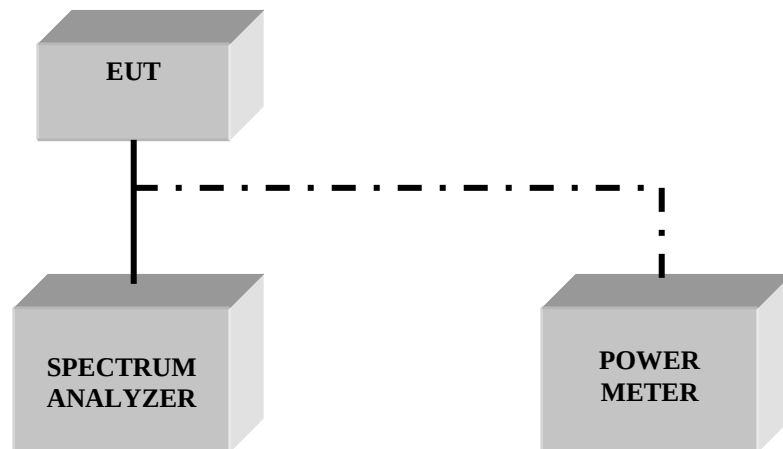
Start	Stop	Detector	Meas.	RBW	Transducer
Frequency	Frequency	Time	Bandw.	VBW	
18 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	#141 horn (dBi)



TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

No	Instrument/Ancillary	Type	Manufacturer	Serial No.	Calibration Due
01	Spectrum Analyzer	ESIB 40	Rohde & Schwarz	100107	May 06
02	Spectrum Analyzer	FSEM 30	Rohde & Schwarz	826880/ 010	May 06
03	Loop Antenna	6512	ETS Lindgren	1120	May 06
04	Biconilog Antenna	3141	EMCO	0005- 1186	May 06
05	Horn Antenna (700M-18GHz)	SAS-200/571	AH Systems	325	May 06
06	Horn Antenna (18-26.5GHz)	3160-09	EMCO	1240	May 06
07	2-3GHz Band reject filter	BRM50701	Microtronics	6	n/a
08	Power-Meter	NRVD	Rohde & Schwarz	0857.80 08.02	May 06
09	Pre-Amplifier	TS-ANA	Rohde & Schwarz	--	June 06
10	Pre-Amplifier	JS4-00102600	Miteq	00616	June 06

BLOCK DIAGRAMS
Conducted Testing



Radiated Testing

