

REV	Δ	Description	Sheet Effected	Date	Drawn	Checked
A				07.09.05	D.Lanuel	S.Cohen
B		New Document		03.01.06	D.Lanuel	S.Cohen

EMC Laboratory

Ga-ofdm-900Q RSU

Manufactured by
WaveIP Ltd.

EMC Test Report

According FCC Part 15 Requirements

JAN 2006

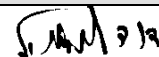
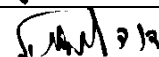
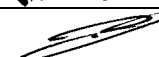
	Function/Title	Name	Signature	Date
Prepared b	Test Engineer	D.Lanuel		07.09.05
Checked by	Test Engineer	D.Lanuel		07.09.05
Approved by	EMC Lab. Manager	S.Cohen		07.09.05

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1 GENERAL Information

a. Description of equipment under test

Equipment Under Test:	Ga-ofdm-900Q RSU
FCCID:	QQ2-GAOFDM900QRSU
Manufacturer:	WaveIP.
Serial Numbers:	0050c21cce0
Mode of Operation:	TX MODE
Operating frequency:	902-928MHZ
Year of Manufacture:	2005

b. Applicant Information:

Applicant:	WaveIP Ltd.
Applicant Address	TAVOR Building YOKNEAM
Telephone:	+972-4-9937333
FAX:	+972-4-9592614
The testing was observed by:	Yoram Singer
Following applicant's personnel:	Yoram Singer

c. Test Performance:

Date of reception for testing:	29.08.05
Dates of testing	29.08.05 - 30.08.05
Test Laboratory Location	TADIRAN EMC LAB, Hashoftim 26 Holon 58102 ISRAEL Tel: 972-3-5574476 Fax: 972-3-5575320

Applicable EMC Specification:	Federal Communication Commission (FCC), Code of Federal Regulations 47, FCC Docket 89-103, Part 15: Radio Frequency Devices, Sections 15.109, 15.209 & 15.207, 15.205, 15.247.
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2 Test Summary and Signatures.

TADIRAN EMC Laboratory has completed testing of E.U.T in accordance with the requirements of the FCC 15.247

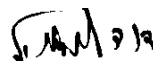
*The E.U.T was found to comply with the requirements of the FCC Part 15.247 Regulations given below

Test Description	Specification Reference	Date of Testing	Test Report Paragraph	Compliance PASS/FAIL
Occupied 6db bandwidth	15.247 (a) (2)	30/08/05	4	PASS
Max peak output power	15.247 (b) (3)	30/08/05	5	PASS
Out of band Conducted emission	15.247 (c)	30/08/05	6	PASS
Spurious emission radiated In Restricted band	15.209 15.205(a, c)	29/08/05	7	PASS
Peak power spectral density	15.247 (d)	30/08/05	8	PASS
Unintentional radiated emission	15.109	29/08/05	9	PASS
Conducted emission	15.207	29/08/05	10	pass

*The paragraph references to 15.247 contained in this document do not correspond with the latest version of the publication number 558074

a. **Test performed by:**

Mr. D. Lanuel Test Engineer



b. **Test Report prepared by:**

Mr. D. Lanuel Test Engineer



c. **Test Report Approved by:**

Mr. Samuel Cohen EMC Lab. Manager



3 EUT Description

a. General

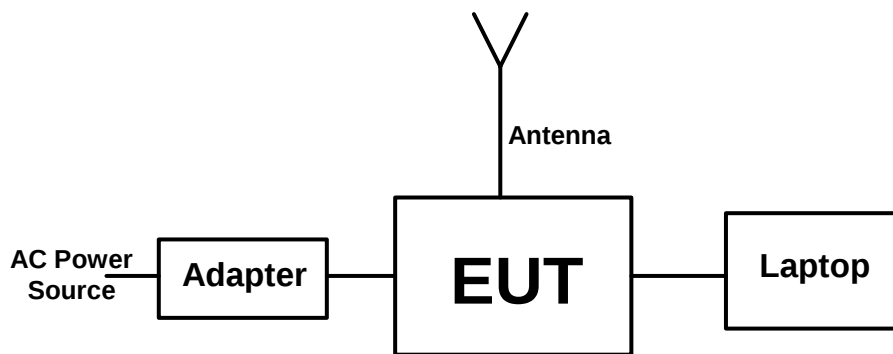
Model Number(s): Ga-ofdm-900Q RSU

Brief Description (Purpose of Device):

GigAccess™ 900Q RSU is WaveIP's wireless point-to-point and point-to-multipoint broadband communication system. The basic subsystem is composed of a single sector, which consists of an AU (Access Unit) and up to 128 SUs (Subscriber Units). Each with full-duplex communication SUs and the WAN via the AU.

b. E.U.T Test Configuration

EUT test configuration is shown in figure bellow



c. E.U.T Mode of Operation description

- (1) Transmit 30dbm-905MHz
- (2) Transmit 30dbm-915MHz
- (3) Transmit 30dbm-925MHz
- (4) Standby
- (5) Transmitter Power Source
Adapter 220VAC/12VDC

4 Occupied Bandwidth for DSSS System According to 15.247(a) (2)

E.U.T: Ga-ofdm-900Q RSU S/N: 0050C21CCEFO

Test Method: ANSI 63.4

Date: 03/01/06

Relative Humidity: 26%

Ambient Temperature: 22c

Air Pressure: 1047hpa

Testing Engineer: D.Lanuel



Date 03/01/06

a. Test Results Summary & Conclusions

The E.U.T was found in compliance with OCCUPIED BANDWIDTH

b. Limits of bandwidth

The test unit shall meet the limits of Table 4.b

Table 4.b Limits For Bandwidth

Operating Frequency (MHz)	Minimum allowed bandwidth
902 - 928	≥500KHz for 6dbc

c. Test Results

Table 4.c Bandwidth Test Result

Frequency (MHz)	Min Bandwidth (MHz)	Bandwidth Max Limit(KHz)	Plot Results	PASS/FAIL
905	4.08	≥500KHz	Plot-1	PASS
915	4.02		Plot-2	PASS
925	4.02		Plot-3	PASS

d. Test Instrumentation and Equipment

Table 4.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/06
Broadband Antenna	BTA-L	FRANKONIA	10.04.06
20db attenuator	2525-200	ATM	18.03.06

e. Test Procedure

The EUT output was connected to the spectrum analyzer through 40db attenuator,
The test set up are shown in figure 4e bellow

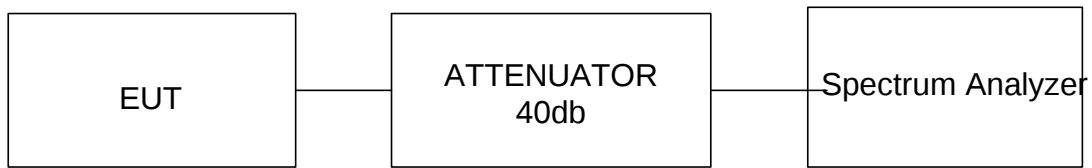
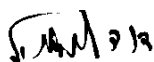


Figure 4e Test Setup for Occupied Bandwidth test

5 Maximum peak output power test according 15.247(b) (3)

E.U.T: Ga-ofdm-900Q RSU S/N: 0050C21CCEFO
Test Method: ANSI 63.4
Date: 03/01/06
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa
Test Setup: Figure 5e

Testing Engineer: D.Lanuel



Date 03/01/06

a. Test Results Summary & Conclusions

The E.U.T was found in compliance with peak output power requirement

b. Limits

The test unit shall meet the limits of Table 5.b.

Table 5.b Limits For Fundamental

Operating frequency range (MHz)	Peak Max Limits(dbm)
902 - 928	30 (1W)

c. Test Results

Table 5.c Peak output power Result

Frequency (MHz)	Peak Result	peak Limits	Margined (dB)	Plots Result	Pass/Fail
905MHz	28.04*	30dbm (1W)	1.96	Plot-4	PASS
915MHz	28.35*		1.65	Plot-5	PASS
928MHz	28.12*		1.88	Plot-6	PASS

*See calculation bellow-based on test procedure paragraph 5e

(1) 905MHz peak power calculation –based on plot-4

- a) *BW correction factor is: $10\log 26\text{db BW of emission/analyzer RBW}$*
- b) *$10\log 6.3/1=7.99$*
- c) *Output power: $20.049+7.99=28.04$*

(2) 915MHz peak power calculation –based on plot-8

- a) *BW correction factor is: $10\log 26\text{db BW of emission/analyzer RBW}$*
- b) *$10\log 6.26/1=7.96$*
- c) *Output power: $20.39+7.96=28.35$*

(3) 925MHz peak power calculation –based on plot-9

- a) *BW correction factor is: $10\log 26\text{db BW of emission/analyzer RBW}$*
- b) *$10\log 6.19/1=7.91$*
- c) *Output power: $20.209+7.91=28.12$*

d. Test Instrumentation and Equipment

Table 5.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/06
20db attenuator	2525-200	ATM	18.03.06

e. Test Procedure

- (1) Spectrum analyzer measured the transmitter peak output power while the RBW of analyzer is 3MHz and the RBW of transmitter is 20MHz.
- (2) When the analyzer RBW is not large enough as required. The peak output power procedure is as follows:
 - a) *Set the RBW and VBW to the maximum available.*
 - b) *Set the band limit to 6db*
 - c) *Set sweep to automatic*
 - d) *Set the span just enough to capture the emission*
 - e) *Use the peak detector on max hold*
 - f) *Set the analyzer on linear mode display*
 - g) *Let the emission stabilize before making a final reading*

BW correction factor is: $10\log 6\text{db BW of emission / analyzer RBW}$

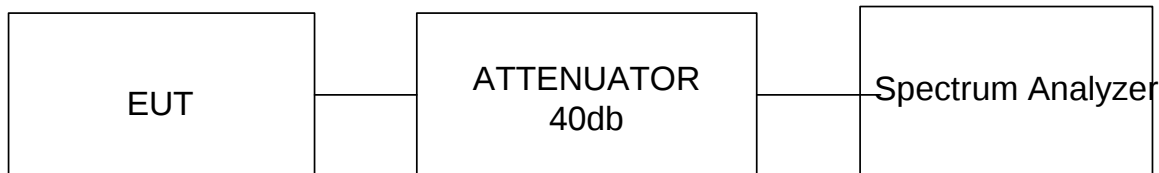
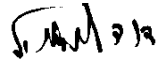


Figure 5e Test Setup for Peak output power

6 Out of band conducted emission test according to 15.247(c)

E.U.T: Ga-ofdm-900Q RSU S/N: 0050C21CCEFO
Test Method: ANSI 63.4
Date: 30/08/05
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa
Test Setup: Figure 6.e

Testing Engineer: D.Lanuel



Date 01/09/05

a. Test Results Summary & Conclusions

The E.U.T was found in compliance with Out of band conducted emission test according to 15.247(c)

b. Limits of out of band conducted emission according to 15.247 (c)

The test unit shall meet the limits of Table 6.b.

Table 6.b Limits For 15.247(c)

Frequency range(MHz)	Peak power at BW-100KHz	Limits dbm (20dbc)
0.009 – 9200	13.33 (see plots 7, 8)	-6.7

c. Test Results

Table 6.c Results For 15.247(c)

Operating Frequency (MHz)	Frequency range (MHz)	Results (dBμV / m)	Plots Result
915MHz	0.009 – 9200	All emission were found Min 30db below the specified limits	7 - 13

d. **Test Instrumentation and Equipment**

Table 6.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/06
20db attenuator	2525-200	ATM	18.03.06

e. **Test Procedure**

The EUT output was connected to the spectrum analyzer through 40db attenuator. The test set up is shown in figure 6e bellow.

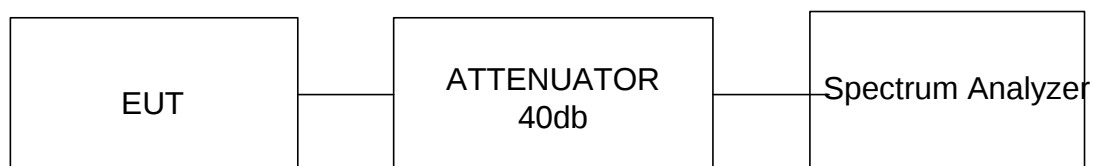
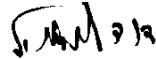


Figure 6e Test Setup for Conducted emission

7 Radiated emission in restricted bands test according 15.247(c), 15.205 and 15.209

E.U.T:	Ga-ofdm-900Q RSU S/N: 0050C21CCEFO
Test Method:	ANSI 63.4
Date:	30/08/05
Relative Humidity:	26%
Ambient Temperature:	22c
Air Pressure:	1047hpa
Test Setup:	Figure 7.e – 7.e.6

Testing Engineer: D.Lanuel



Date 01/09/05

a. Test Results Summary & Conclusions

The E.U.T was found in compliance with radiated emission restricted band test

- b. **Limit:** Radiated emission, which fall in the restricted bandwidth must comply with 15.209(a) Limits. See limits in table 7b bellow.

Table 7.b Limits For 15.209 Class B equipment

Frequency Range (MHz)	Quasi-peak Limits (dB μ V/m)	Peak Limit	Average Limit
0.009 – 0.49	128 – 93.8	NA	NA
0.49 – 1.705	73.8 – 63.0		
1.705 - 30	69.5		
30 - 88	40		
88 - 216	43.5		
216 - 960	46		
960 - 1000	54		
Above 1000	NA	74	54

c. Results

(1) Preliminary Results

Table 7.c1 Preliminary test results

Configuration	Transmitting Frequency	Frequency Range	Plots Results	PASS/FAIL
6dbi antenna Integrated	905MHz	9KHz-9.2GHz	14 - 26	PASS
	915MHz		27 - 39	PASS
	925MHz		40 - 52	PASS

(2) Final Test Results

Table 7c2 Six Highest

Freq. (MHz)	Antenna Pol.	Antenna Height(m)	Reading (dB μ V/m)	Limit dB μ V/m	Margin (dB)	Plot	Pass/Fail
38.1	V	1.3	31.4	40	8.6	18	PASS
38.2	V	1	3.32	40	7.7	31	PASS
38.25	V	1	31.8	40	8.2	44	PASS

d. Test Instrumentation and Equipment

Table 7.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/06
Double Ridge Guide Ant	3105	EMCO	24.04.06
Broadband Antenna	BTA-L	FRANKONIA	10.04.06
Low Noise Amplifier (0-1GHz)	AM-1300-N	MITEQ	14.01.06
Low Noise Amplifier (1-4GHz)	AMM 003N	AVANTEK	14.01.06
Low Noise Amplifier (2-6GHz)	MWA-02060	ELISRA	14.01.06
Low Noise Amplifier (6-18GHz)	MWA-06180	ELISRA	14.01.06
Low pass filter 100MHz	LD110	FSY	17.04.06
Low pass filter 700MHz	360A	HP	18.05.06
Band reject filter 902 – 928MHz	BRF 900Q RSU	TADIRAN	20.05.06
Attenuator 20db	2525-20	ATW	18.03.06
Attenuator 3db	AN9146	WEINSCHL	23.06.06
Attenuator 6db	AP2542	WEINSCHL	23.06.06

e. Test Procedure

(1) -General

- a) *The test was performed with transmitter operating 3-carrier frequency, F_{min} -905MHz, F_{center} -915MHz, and F_{max} -928 MHz.*
- b) *The test was performed according tests setup in paragraph 7e*

(2) Preliminary Test Procedure

- a) *The EUT was placed on the top of a rotating table 0.8 meters above the ground at a chamber shielded*
- b) *The E.U.T was set 3 meters away from the receiving antenna, which was mounted on the top of a variable-height antenna tower.*
- c) *The Antenna height varied from one meter above the ground over its full-allowed range of travel and the table was rotated 360°to determine the maximum value of the field strength*
- d) *The antenna was set both horizontal and vertical polarization.*

(3) Final Test Procedure

- a) *The EUT was tested at open area for each suspected emission*
- b) *The test procedure was performed according paragraph (2) and figure 7e*

f. Final Test Setup

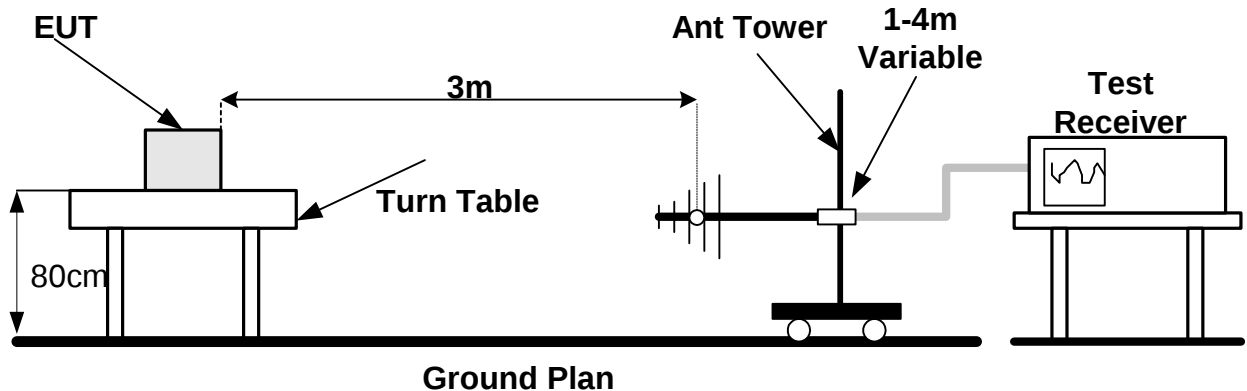


Figure 7e Radiated Emission Set up

(1) Tests Setup

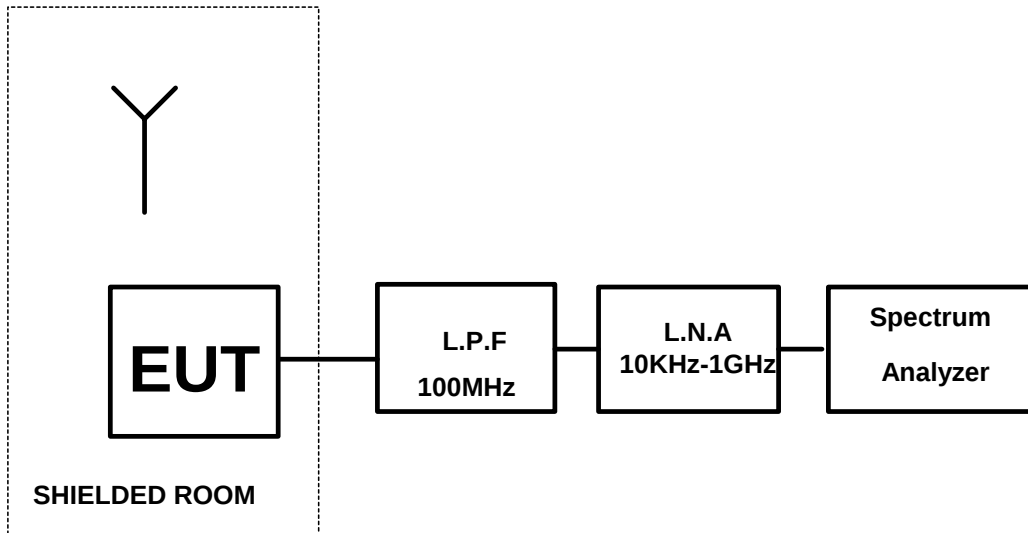


Figure 7.e.1 Radiated emission Test setup for freq range of 10 KHz – 100MHz

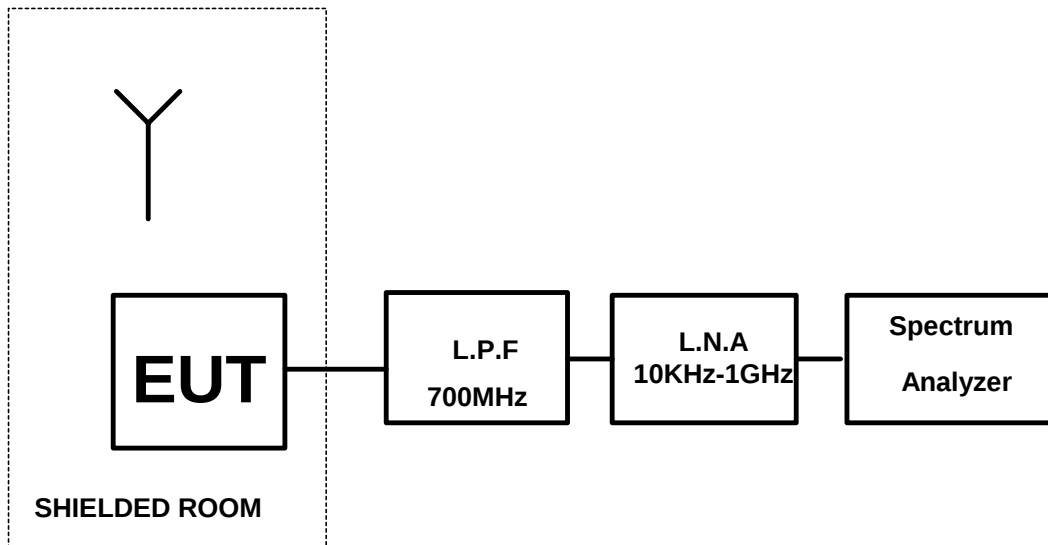


Figure 7.e.2 Radiated emission Test setup for freq range of 100MHz – 700MHz

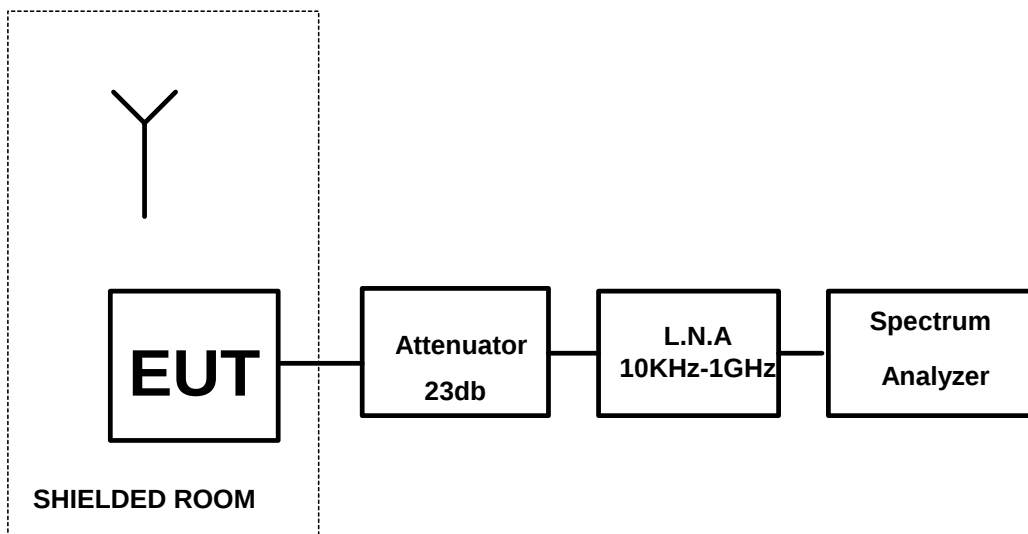


Figure 7.e.3 Radiated emission Test setup for freq range of 960MHz – 1GHz

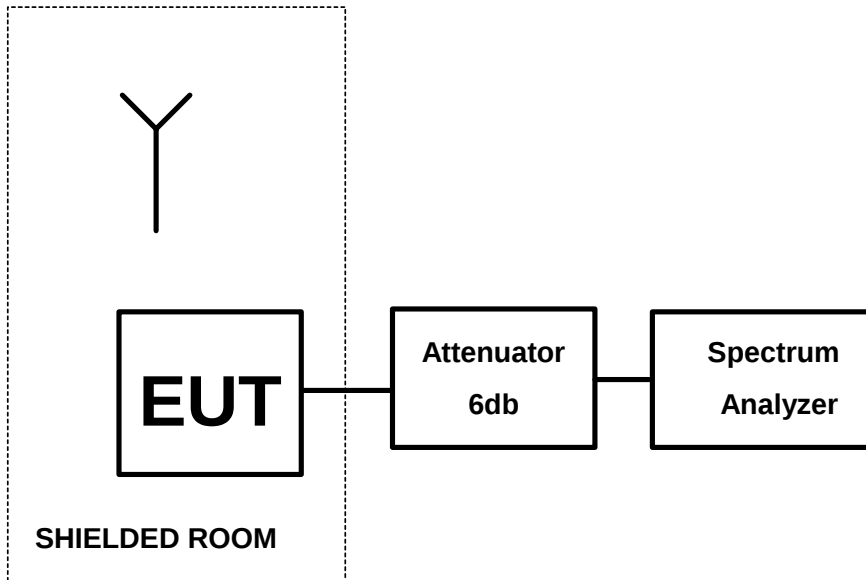


Figure 7.e.4 Radiated emission Test setup for freq range of 1GHz – 2GHz

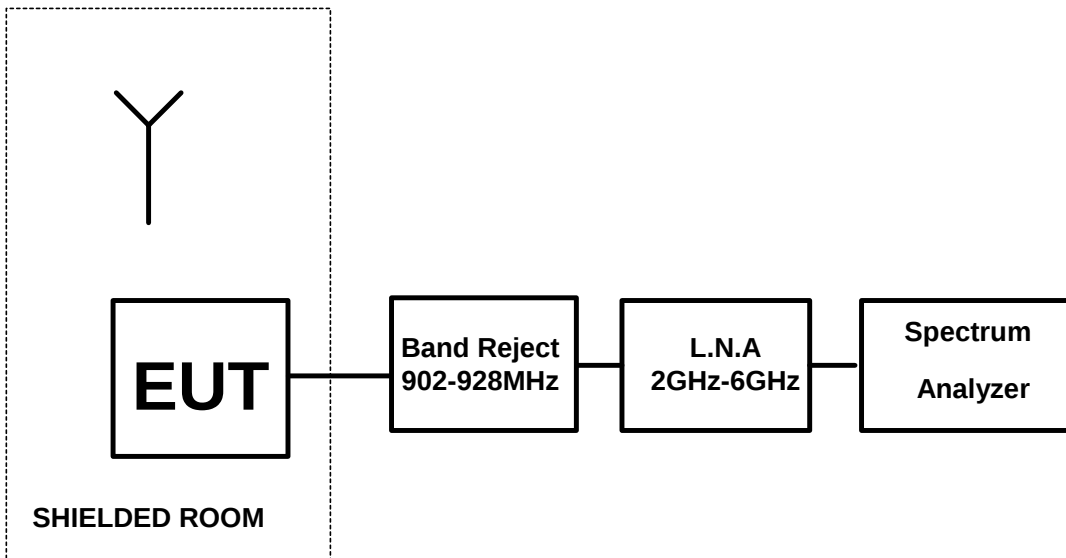


Figure 7.e.5 Radiated emission Test setup for freq range of 2GHz – 6GHz

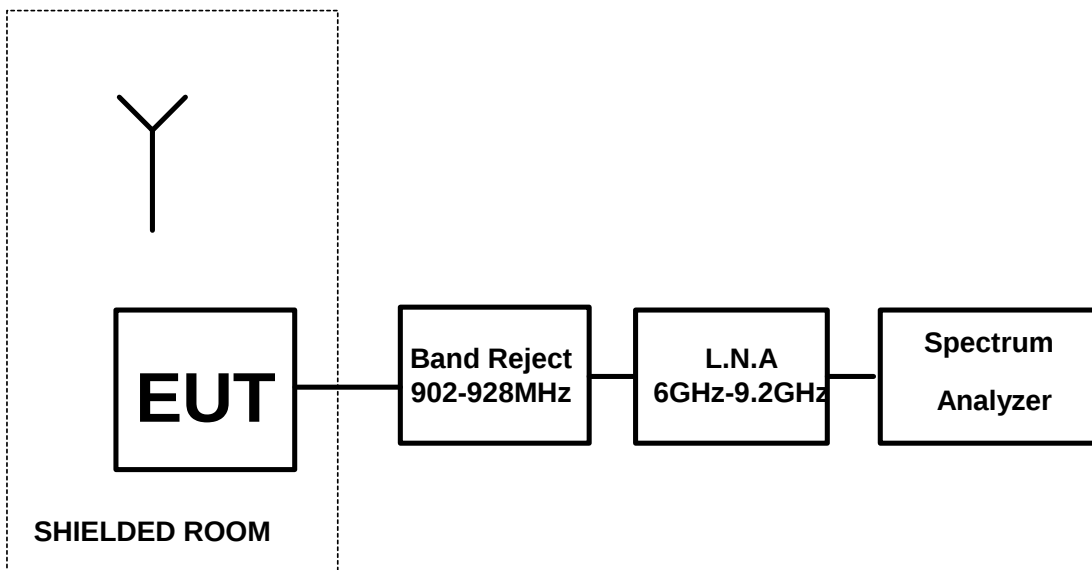
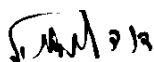


Figure 7.e.6 Radiated emission Test setup for freq range of 6Hz – 9.2GHz

8 Peak power spectral density of DSSS according 15.247d

E.U.T: Ga-ofdm-900Q RSU S/N: 0050C21CCEFO
Test Method: ANSI 63.4
Date: 30/08/05
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa
Test Setup: Figure 8.e

Testing Engineer: D.Lanuel



Date 01/09/05

a. Test Results Summary & Conclusions

The E.U.T was found in compliance peak power spectral density test

b. Limit

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dbm in any 3 KHz band during any time interval of continuous transmission

c. Test Results

Table 8.d Test Results

Carrier Frequency(MHz)	Measured peak power spectral density (dbm)	Plots
905	3.22	53, 54
915	3.93	55, 56
925	2.64	57, 58

d. Test Instrumentation and Equipment

Table 8.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/06
20db attenuator	2525-200	ATM	18.03.06

e. Procedure

The EUT RF output was connected to the spectrum analyzer through 40db attenuator according to test setup bellow.

The test was performed with transmitter operating 3-carrier frequency, F_{min} -905MHz, F_{center} -915MHz, and F_{max} -928 MHz.

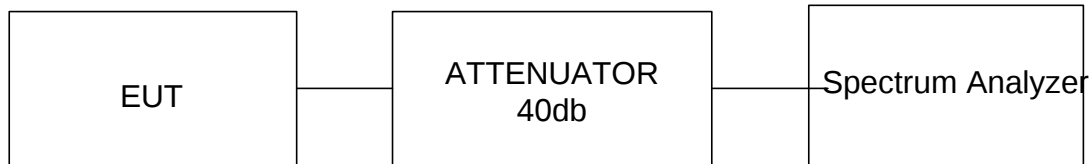


Figure 8e Test Setup for peak power spectral density

9 Unintentional radiated emission test according to 15.109

E.U.T: Ga-ofdm-900Q RSU S/N: 0050C21CCEFO
Test Method: ANSI 63.4
Date: 30/08/05
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa

Testing Engineer: D.Lanuel



Date 01/09/05

a. Test Results Summary & Conclusions

The E.U.T was found in compliance with unintentional radiated emission requirements.

b. Limit:

Unintentional radiated emission must comply with 15.109 Limits. See limits in table 9b bellow.

Table 9b Limits For 15.109 Class B equipment

Frequency Range (MHz)	Quasi-peak Limits (dB μ V/m)	Peak Limit	Average Limit
30 - 88	40	NA	NA
88 - 216	43.5		
216 - 960	46		
960 - 1000	54		
Above 1000	NA	74	54

c. Test Results

Table 9.c Preliminary test results

Configuration	Antenna Polarization	Frequency Range(MHz)	Plots Results	PASS/ FAIL
6dbi antenna Integrated	Both	30-1000	59	PASS
		1-2.8GHz	60	PASS
		2.8 – 6GHz	61	PASS
		6GHz – 6.5GHz	62	PASS
		6.5GHz – 9.2GHz	63	PASS

Table 9c1 Six Highest 15.109

Freq. (MHz)	QP Reading (dbμV/m)	QP Limit (dbμV/m)	Margin (db)	Compliance PASS/FAIL	Plots
34.114	32.4	40	-7.6	PASS	59
40.371	35.1	40	-4.9	PASS	
40.693	33.5	40	-6.5	PASS	

d. Test Instrumentation and Equipment

Table 9.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/06
Double Ridge Guide Antenna(1-18GHz)	3105	EMCO	24.04.06
Broadband Antenna(30-1000MHz)	BTA-L	FRANKONIA	10.04.06
Low Noise Amplifier (0-1GHz)	AM-1300-N	MITEQ	14.01.06
Low Noise Amplifier (1-4GHz)	SMC-09	MITEQ	14.01.06
Low Noise Amplifier (2-6GHz)	SMC-09	MITEQ	14.01.06
Low Noise Amplifier (6-10GHz)	SMC-09	MITEQ	14.01.06

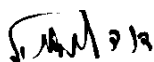
e. Procedure

The EUT output was connected to the spectrum analyzer through appropriate low noise amplifier while the EUT is in STBY mode.

10 Conducted emission test according to 15.207.15.107

E.U.T: Ga-ofdm-900Q RSU S/N: 0050C21CCEFO-
C3-3D
Test Method: ANSI 63.4
Date: 30/08/05
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa
Test Setup: Figure CE-2

Testing Engineer: D.Lanuel



Date 01/09/05

a. Test Results Summary & Conclusions

The E.U.T was found in compliance with conducted emission power leads requirements.

b. Limit:

Conducted emission must comply with 15.207 Limits. See limits in table 10b bellow.

Table 10.b Limits For 15.207 Class B equipment

Frequency (MHz)	Quasi-peak Limits (dB μ V/m)
0.15 – 0.5	66-56
0.5 - 5	56
5 - 30	60

c. Test Results –P LOTS 122,123

Table 10.c Test results

Frequency Range (MHz)	Tested Line	Plots Results	PASS/ FAIL
0.15 - 30	PHASE	65	PASS
0.15 - 30	NEUTRAL	64	PASS

Table 10.c1 Six Highest 15.207

Freq. MHz	QP Reading (db μ V/m)	Limit (db μ V/m)	Margin (db)	Plots
0.652	50.8	56	-5.2	64
1.456	51.5	56	-4.5	64
1.462	50.9	56	-5.1	66

d. Test Instrumentation and Equipment

Table 10.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/06
LISN	DC-AC-20A/01	TADIRAN	N.P.C.R
20DB attenuator	2525	ATM	18.03.06

e. Test Procedure

- The EUT was placed on the top of table 1m by 1.5m, raised 0.8 meters above the conducting ground plane
- The rear panel of the EUT was located 40cm to the vertical wall of the screen room
- Each EUT power leads were individually connected through an LISN to the input power source. Unused 50 ohm connector of the LISN was terminated in 50ohm and other was connected to the spectrum analyzer through 20db attenuator for maximum conducted interference

f. Test setup

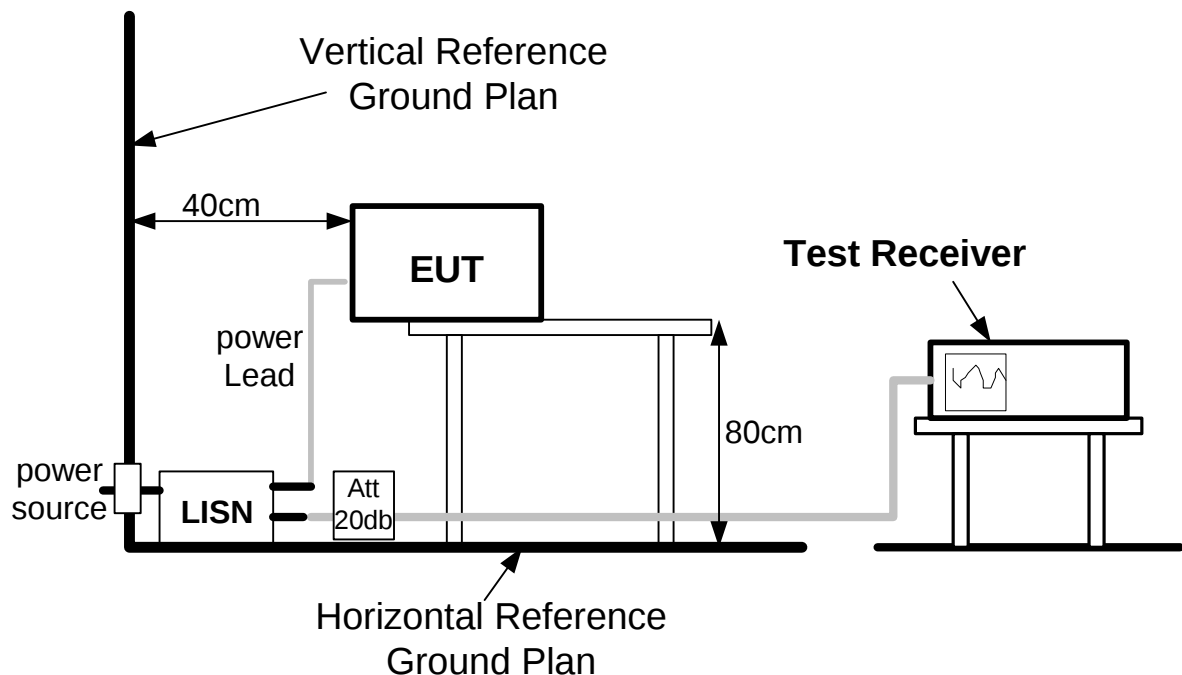


Figure- 1 Conducted emission Test Configuration

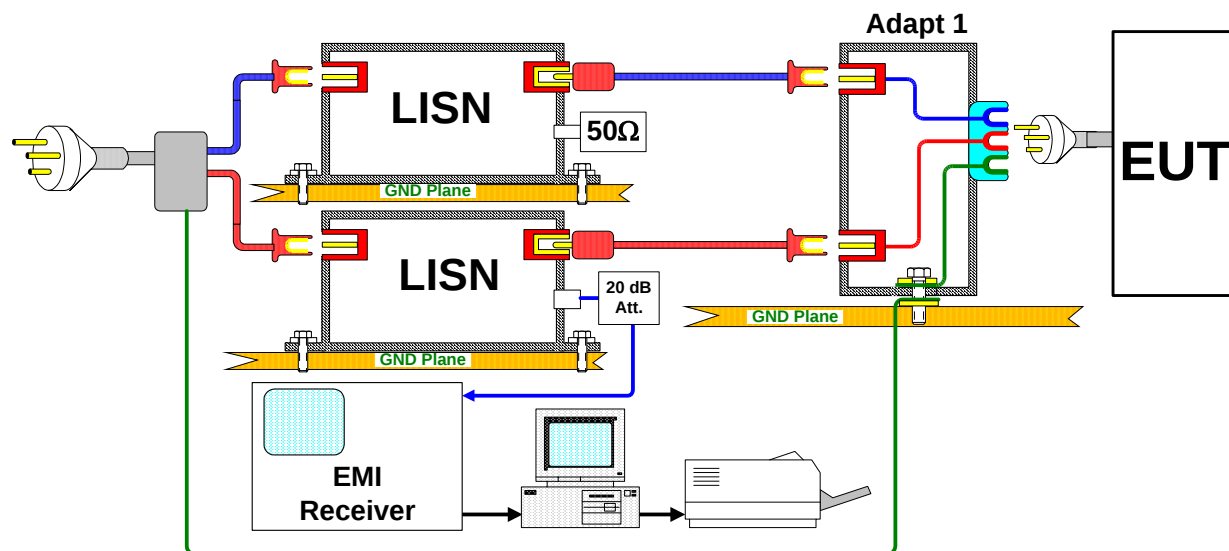


Figure- 2 Conducted emission Test setup

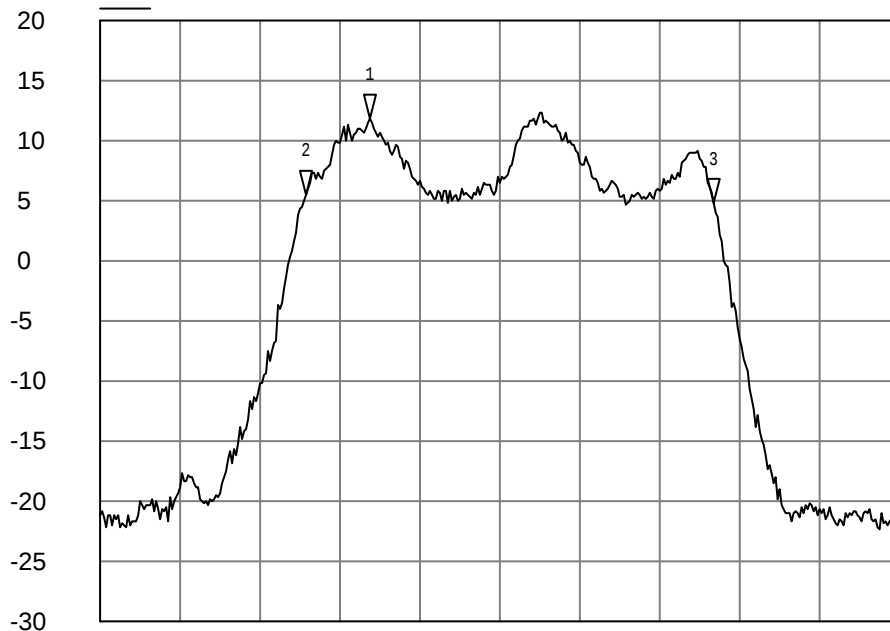
Plots

g. Occupied bandwidth plots 1-3

Test Results Plot No 1

SoftPlot Measurement Presentation

Trace A



Start: 901.000000 MHz

Stop: 909.000000 MHz

Res BW: 100 kHz

Vid BW: 3 MHz

Sweep: 5.00 ms

01/01/2006 14:25:43

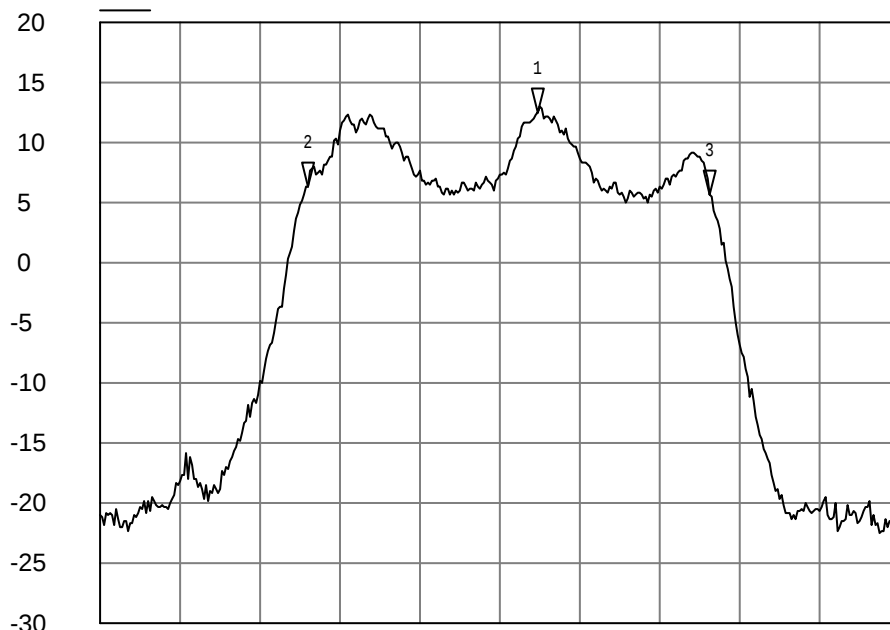
E7405A

- 1 Trace A
▽ 903.700000 MHz
11.7510 dBm
- 2 Trace A
▽ 903.060000 MHz
5.4690 dBm
- 3 Trace A
▽ 907.140000 MHz
4.7570 dBm

Test Results Plot No 2

SoftPlot Measurement Presentation

Trace A



Start: 911.000000 MHz

Stop: 919.000000 MHz

Res BW: 100 kHz

Vid BW: 3 MHz

Sweep: 5.00 ms

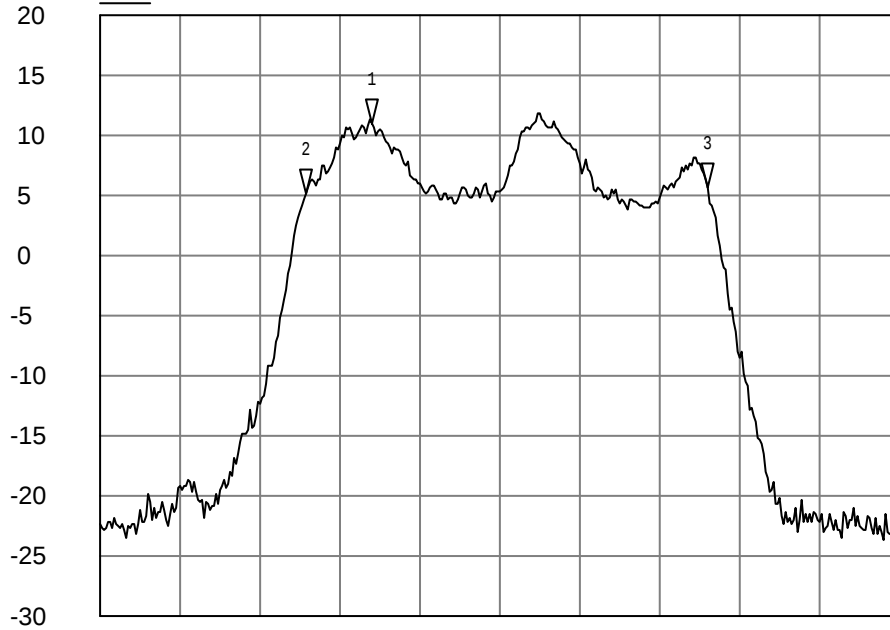
01/01/2006 14:22:55

E7405A

- 1 Trace A
▽ 915.380000 MHz
12.4350 dBm
- 2 Trace A
▽ 913.080000 MHz
6.3100 dBm
- 3 Trace A
▽ 917.100000 MHz
5.7390 dBm

Test Results Plot No 3

SoftPlot Measurement Presentation
Trace A



- 1 Trace A
▽ 923.720000 MHz
11.0610 dBm
- 2 Trace A
▽ 923.060000 MHz
5.0940 dBm
- 3 Trace A
▽ 927.080000 MHz
5.6590 dBm

Start: 921.000000 MHz

Stop: 929.000000 MHz

Res BW: 100 kHz

Vid BW: 3 MHz

Sweep: 5.00 ms

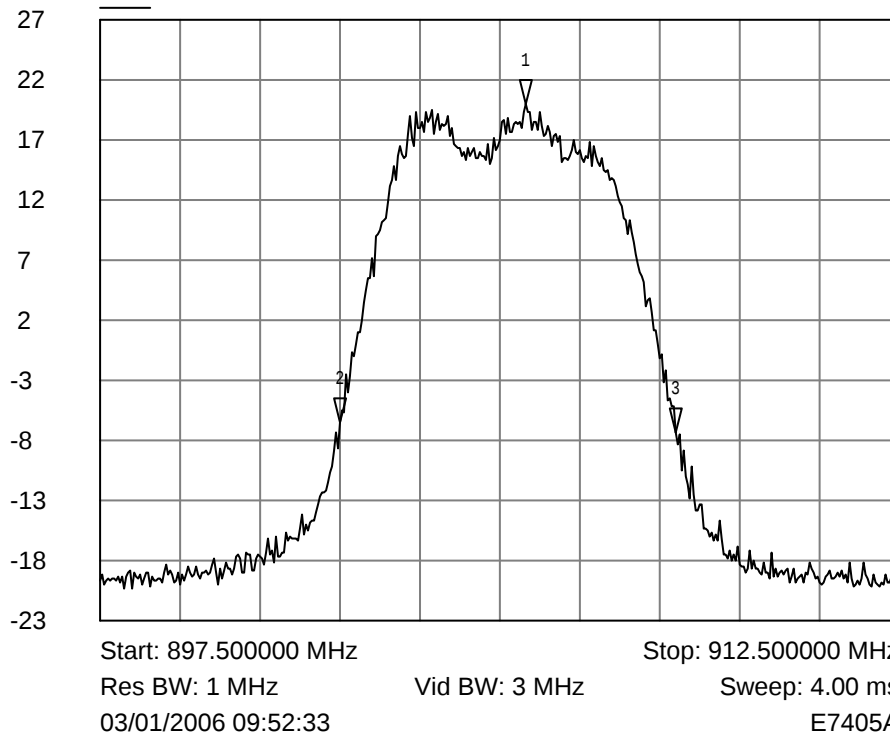
01/01/2006 14:17:46

E7405A

h. Maximum peak output power plots 4-6

Test Results Plot No 4

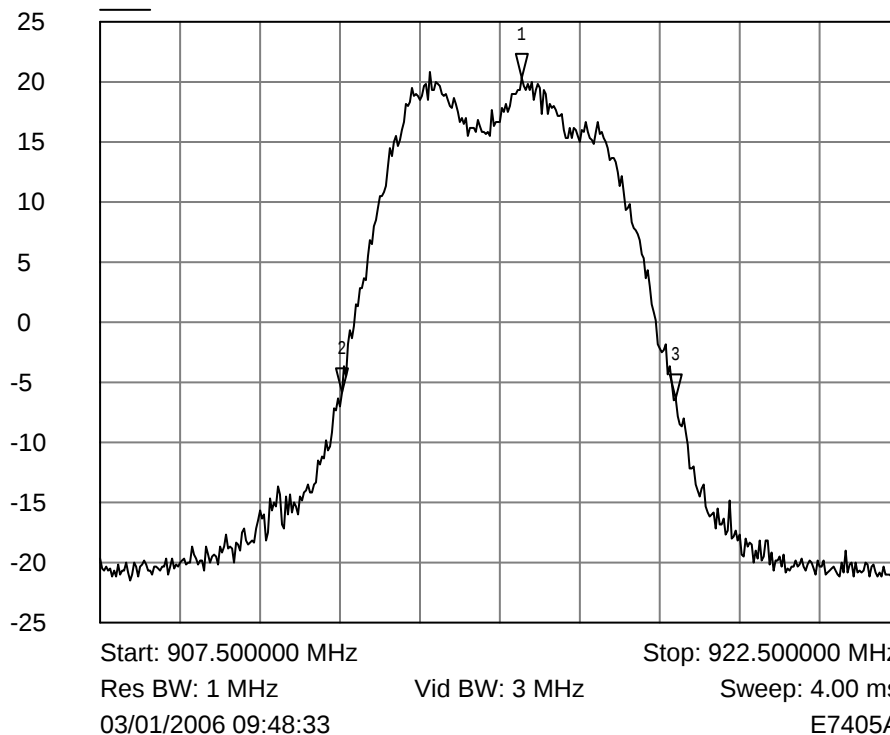
SoftPlot Measurement Presentation
Trace A



- 1 Trace A
▽ 905.487500 MHz
20.0490 dBm
- 2 Trace A
▽ 902.000000 MHz
-6.5030 dBm
- 3 Trace A
▽ 908.300000 MHz
-7.3920 dBm

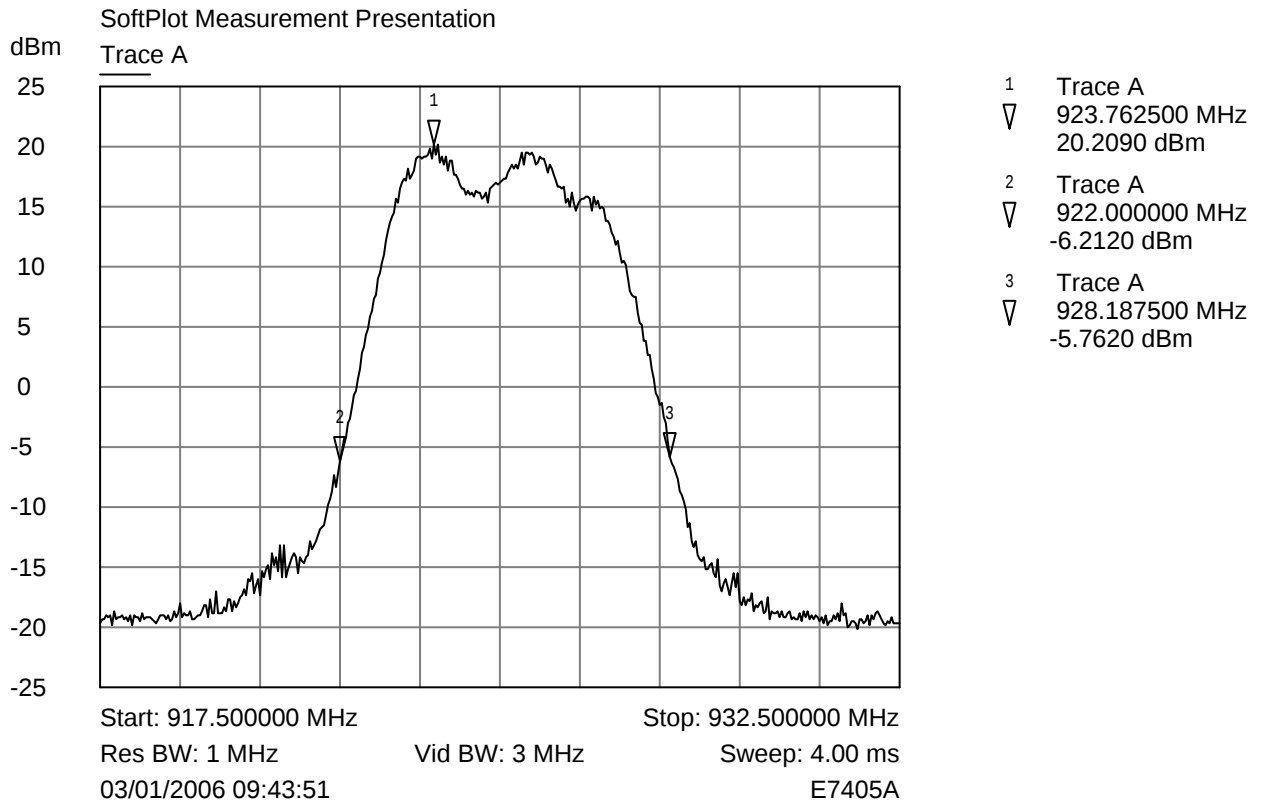
Test Results Plot No 5

SoftPlot Measurement Presentation
Trace A



- 1 Trace A
▽ 915.412500 MHz
20.3940 dBm
- 2 Trace A
▽ 912.037500 MHz
-5.7780 dBm
- 3 Trace A
▽ 918.300000 MHz
-6.2600 dBm

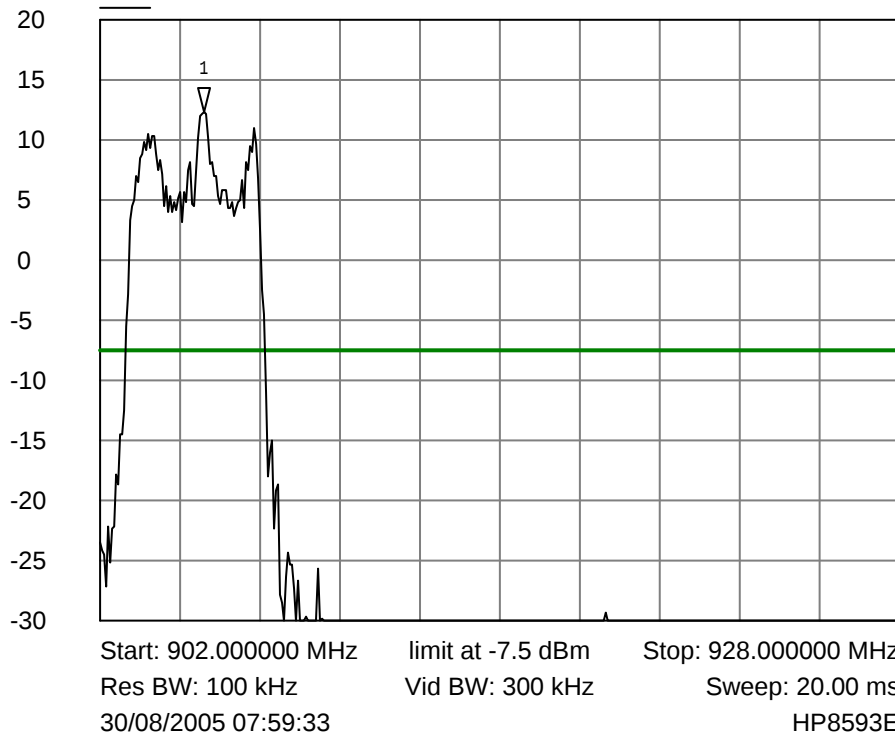
Test Results Plot No 6



i. Out of band emission 7 – 13

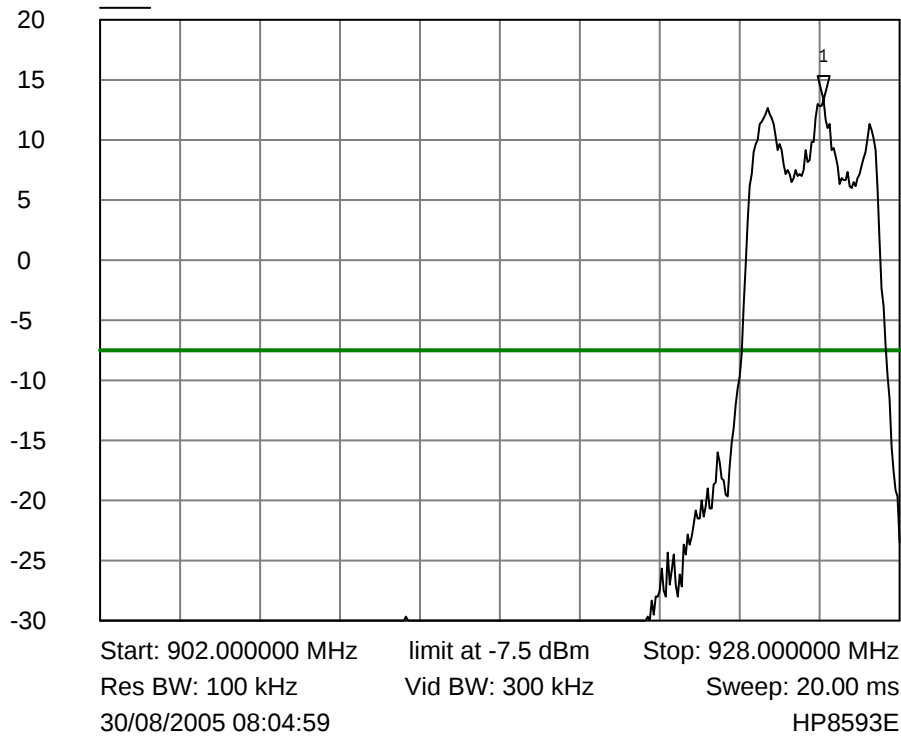
Test Results Plot No 7

SoftPlot Measurement Presentation
Trace A



Test Results Plot No 8

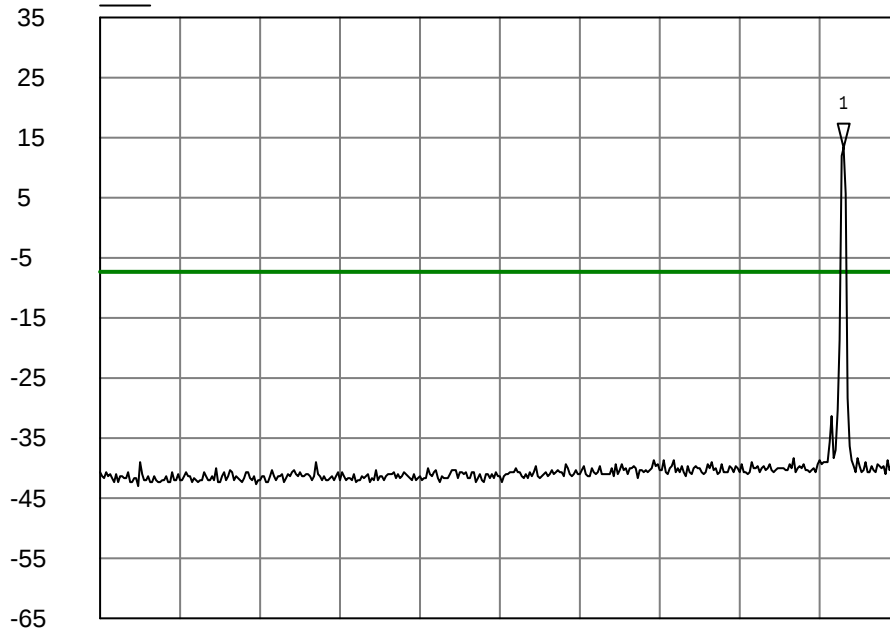
SoftPlot Measurement Presentation
Trace A



Test Results Plot No 9

SoftPlot Measurement Presentation

Trace A



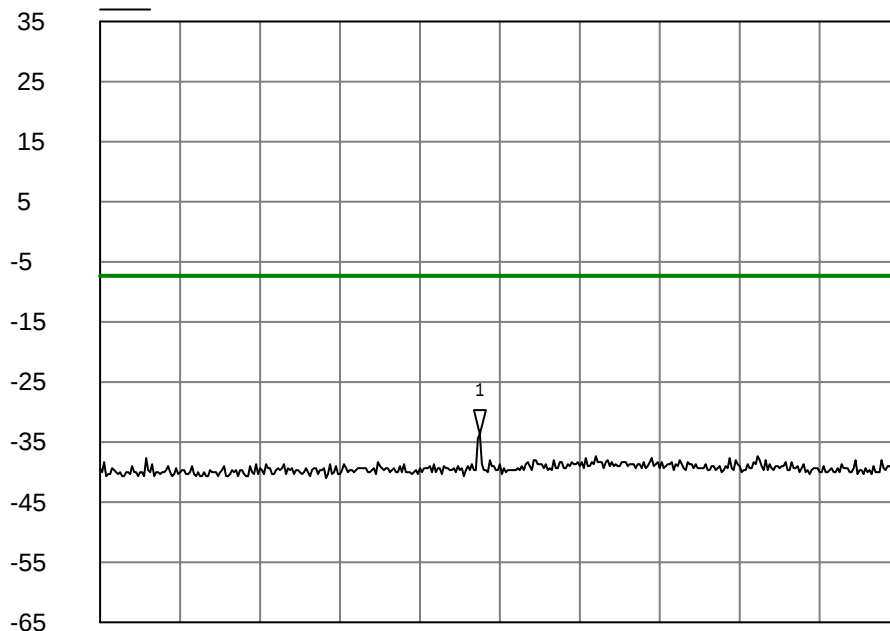
1 Trace A
932.100000 MHz
13.4400 dBm

Start: 30.000000 MHz limit at -7.5 dBm Stop: 1.000000 GHz
Res BW: 100 kHz Vid BW: 300 kHz Sweep: 291.00 ms
30/08/2005 08:06:21 HP8593E

Test Results Plot No 10

SoftPlot Measurement Presentation

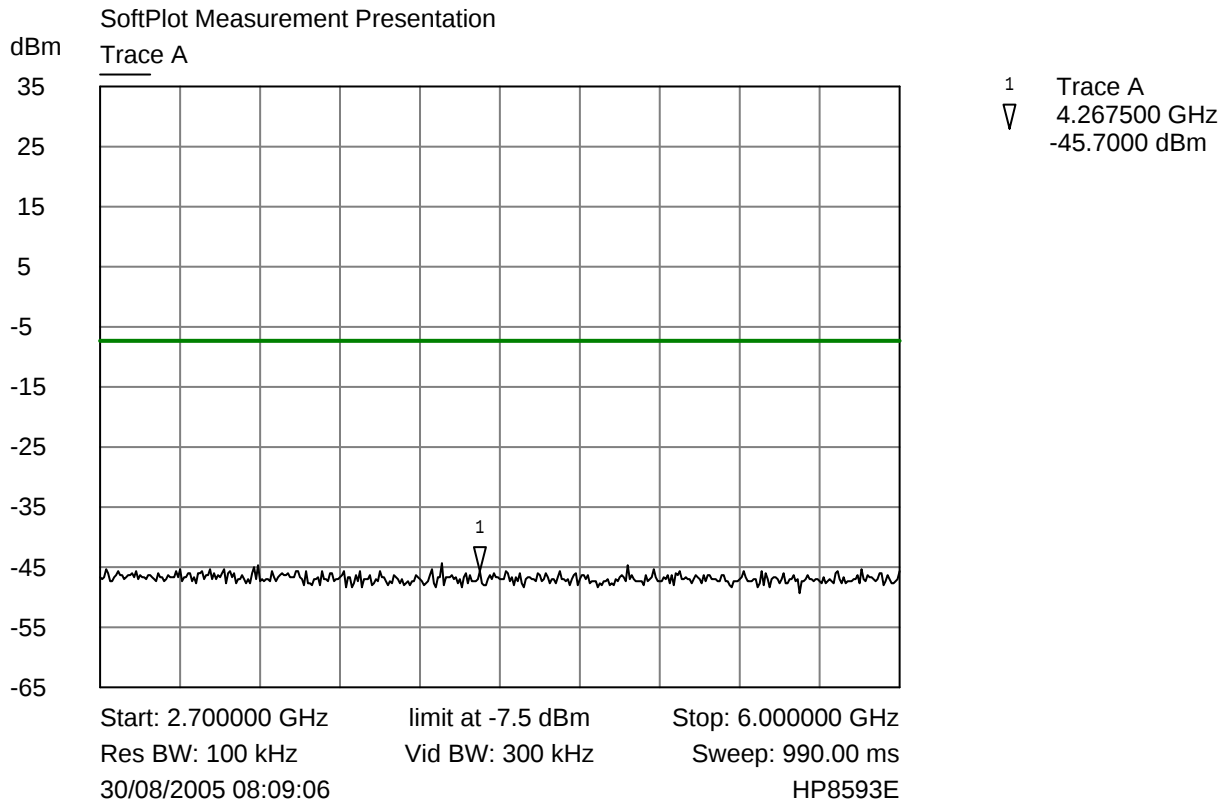
Trace A



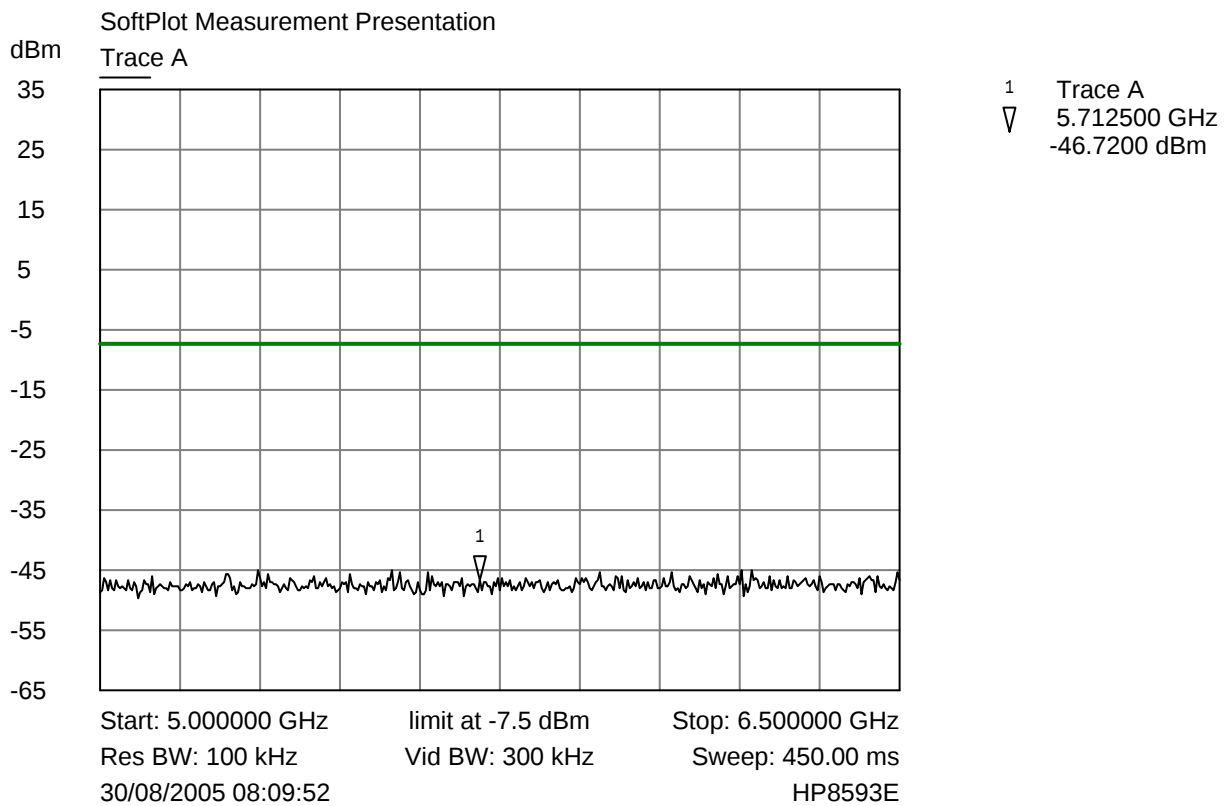
1 Trace A
1.855000 GHz
-33.6100 dBm

Start: 1.000000 GHz limit at -7.5 dBm Stop: 2.800000 GHz
Res BW: 100 kHz Vid BW: 300 kHz Sweep: 540.00 ms
30/08/2005 08:08:01 HP8593E

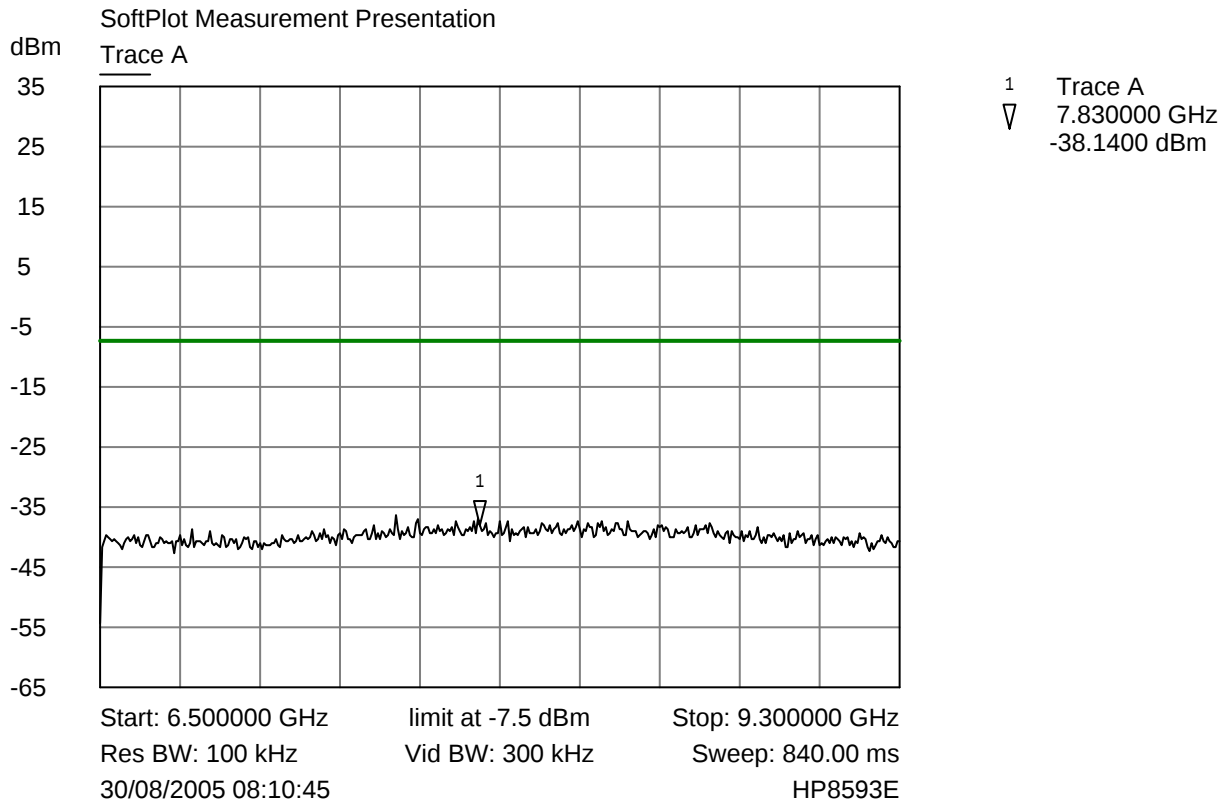
Test Results Plot No 11



Test Results Plot No 12



Test Results Plot No 13



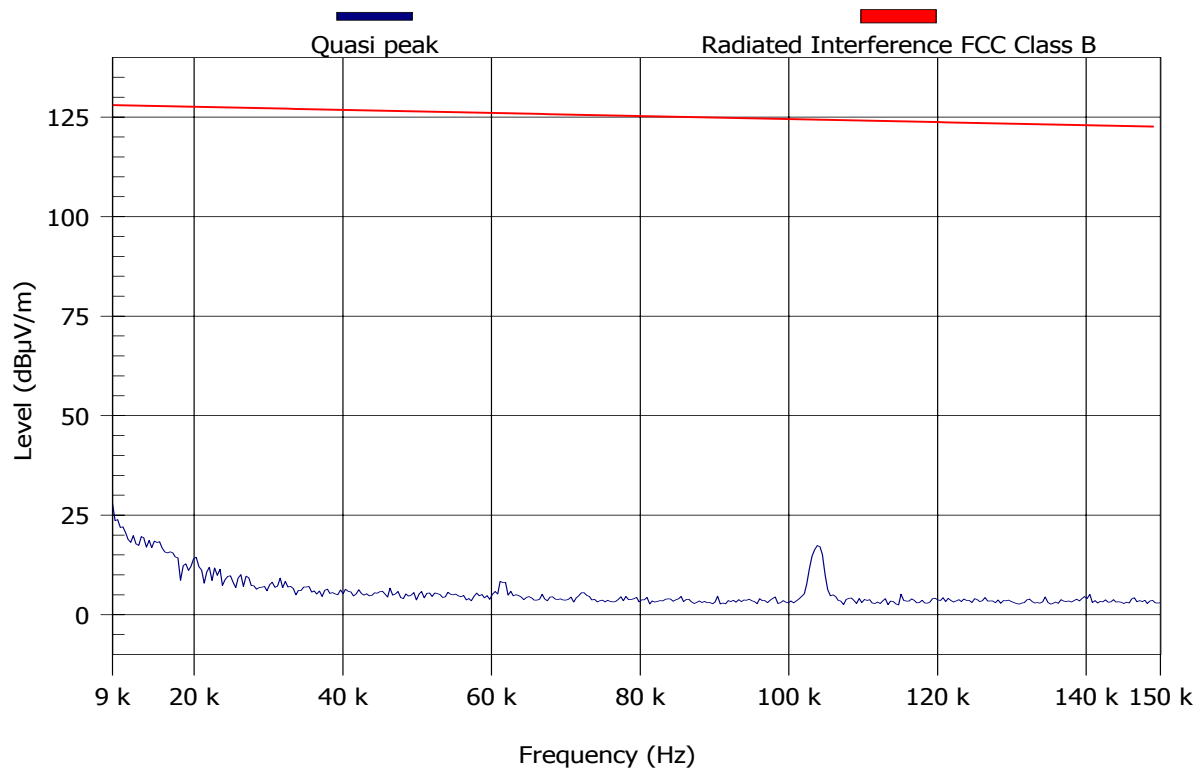
j. Radiated spurious Emission in restricted band 14-52

Test Results Plot No 14

**FCC 15.205 RESTRICTED 0.009-0.15MHz 905 6dbi integral
VER**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 Hz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 423 ms
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

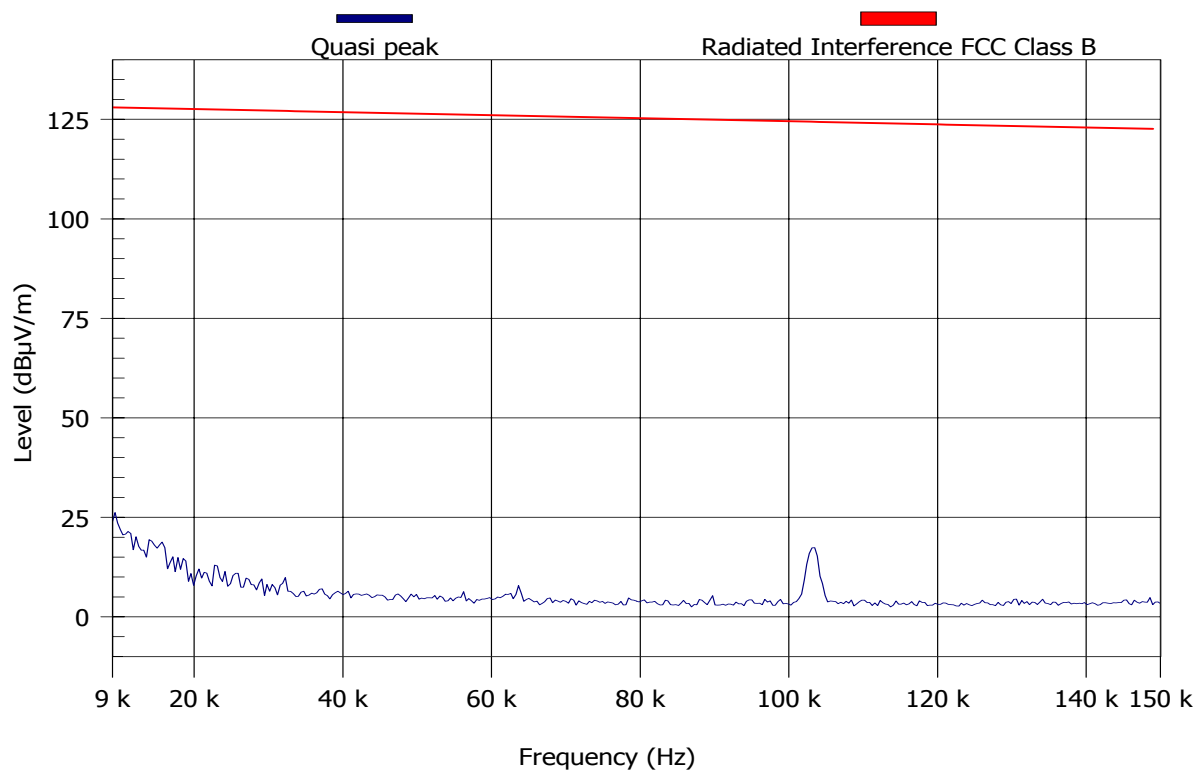
None

Test Results Plot No 15

**FCC 15.205 RESTRICTED 0.009-0.15MHz 905 6dbi integral
HOR**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 Hz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 423 ms
Polarization:	Horizontal	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

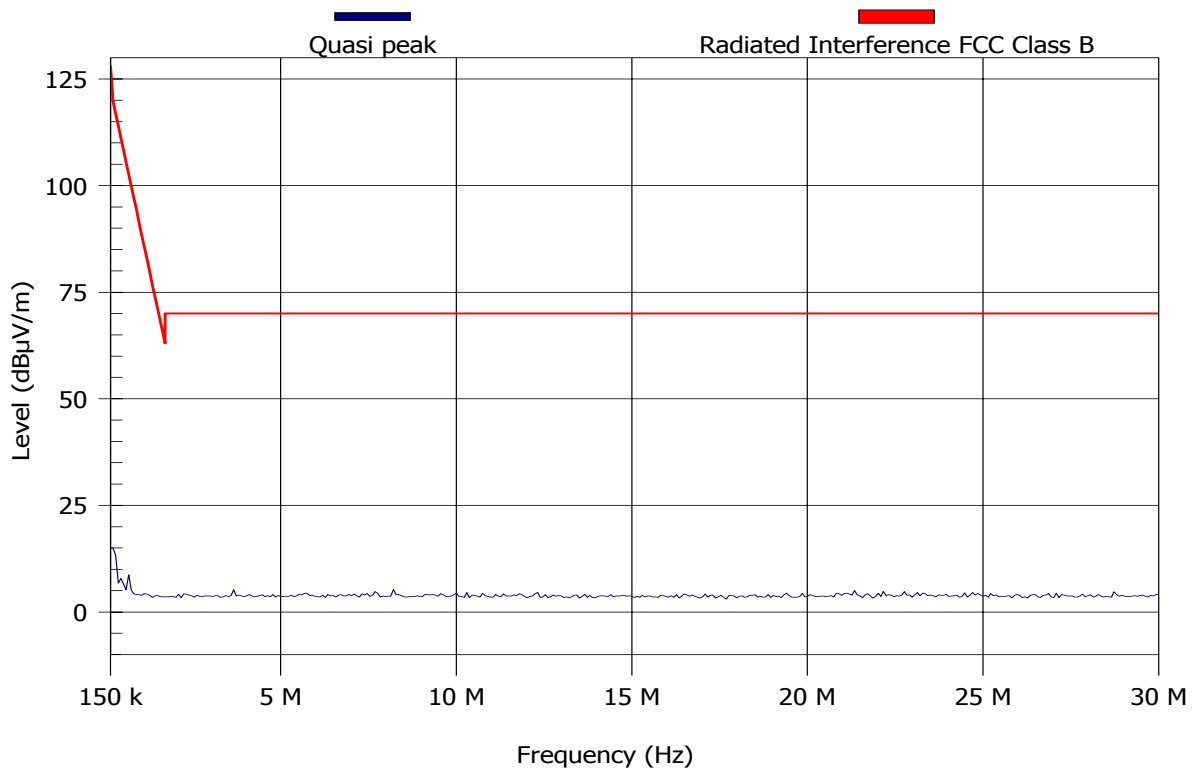
None

Test Results Plot No 16

FCC 15.205 RESTRICTED 0.15-30MHz 905 6dbi integral VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 1.11 s
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

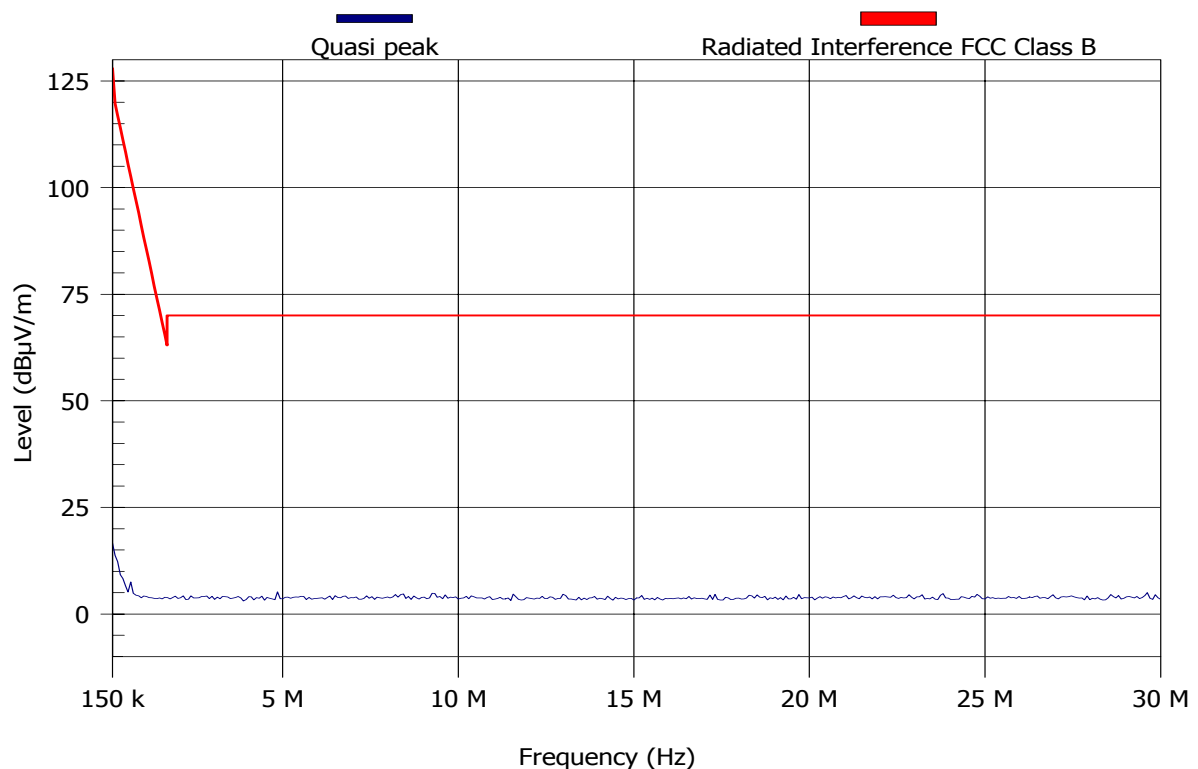
None

Test Results Plot No 17

FCC 15.205 RESTRICTED 0.15-30MHz 905 6dbi integral HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 1.11 s
Polarization:	Horizontal	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

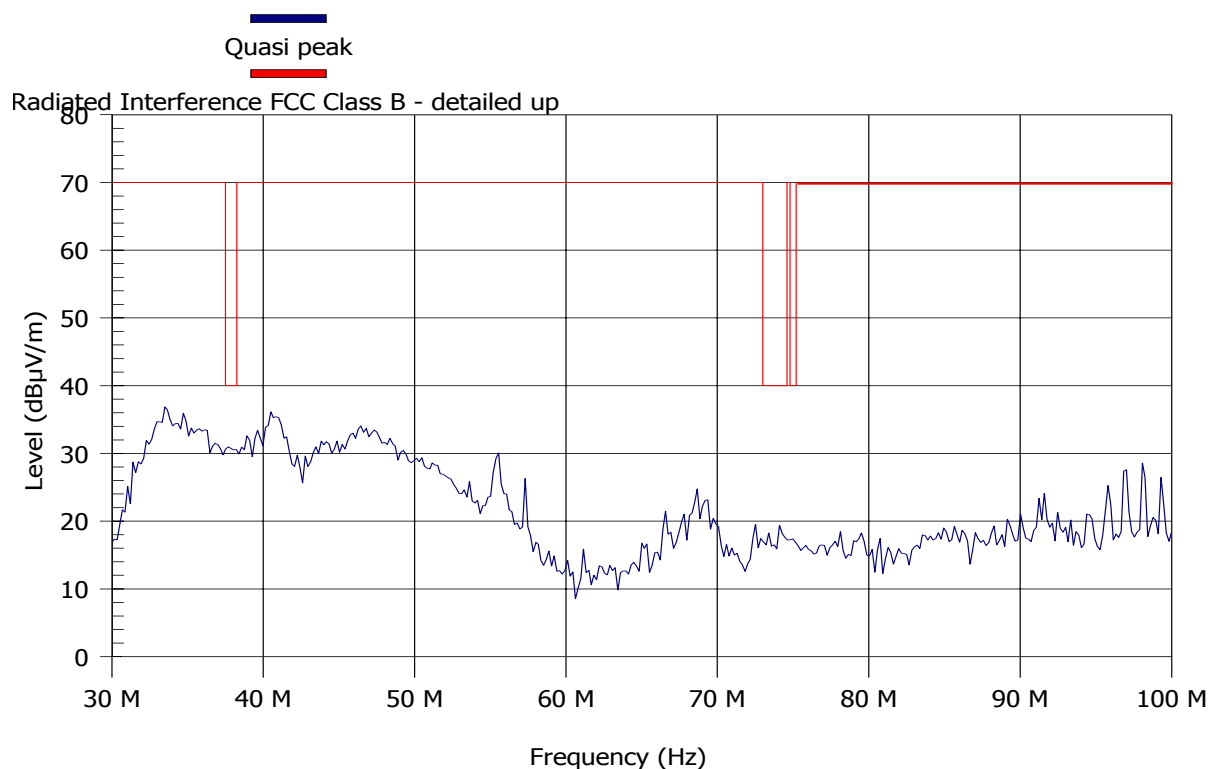
None

Test Results Plot No 18

FCC 15.205 RESTRICTED 30-100MHz 905 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 20 ms
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

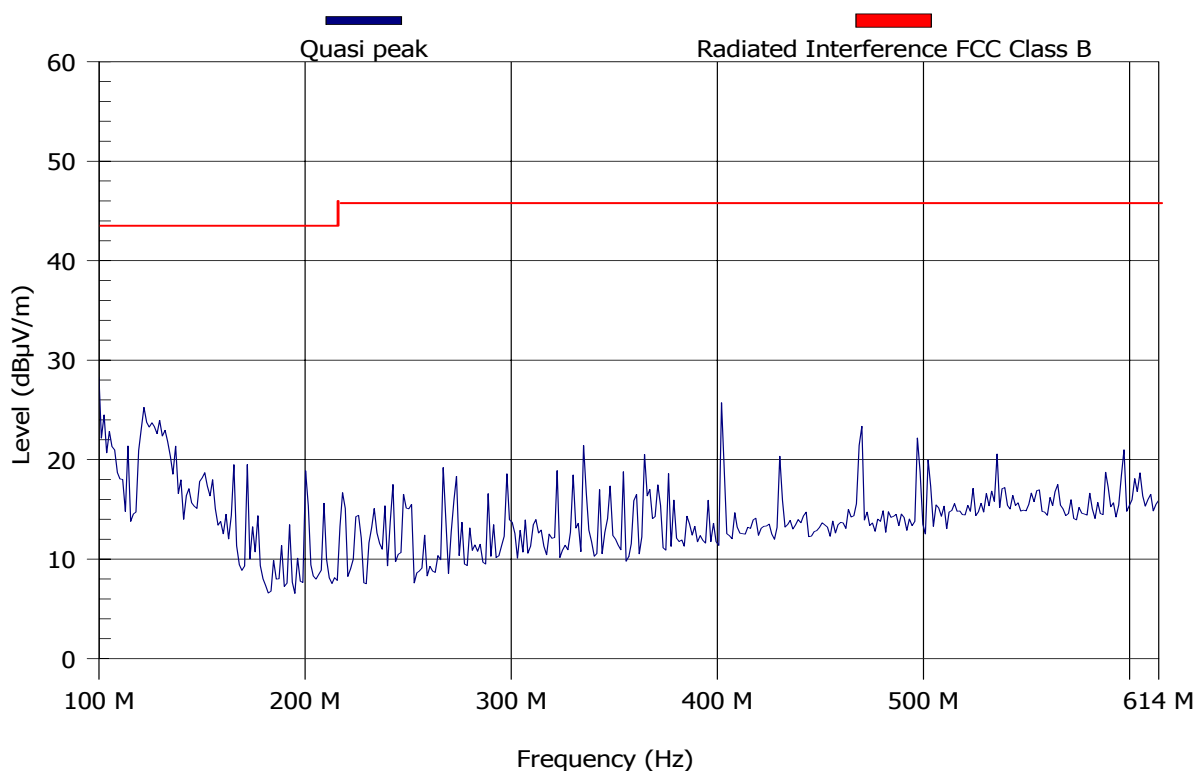
None

Test Results Plot No 19

FCC 15.205 RESTRICTED 100-600MHz 905 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 107.08 ms
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



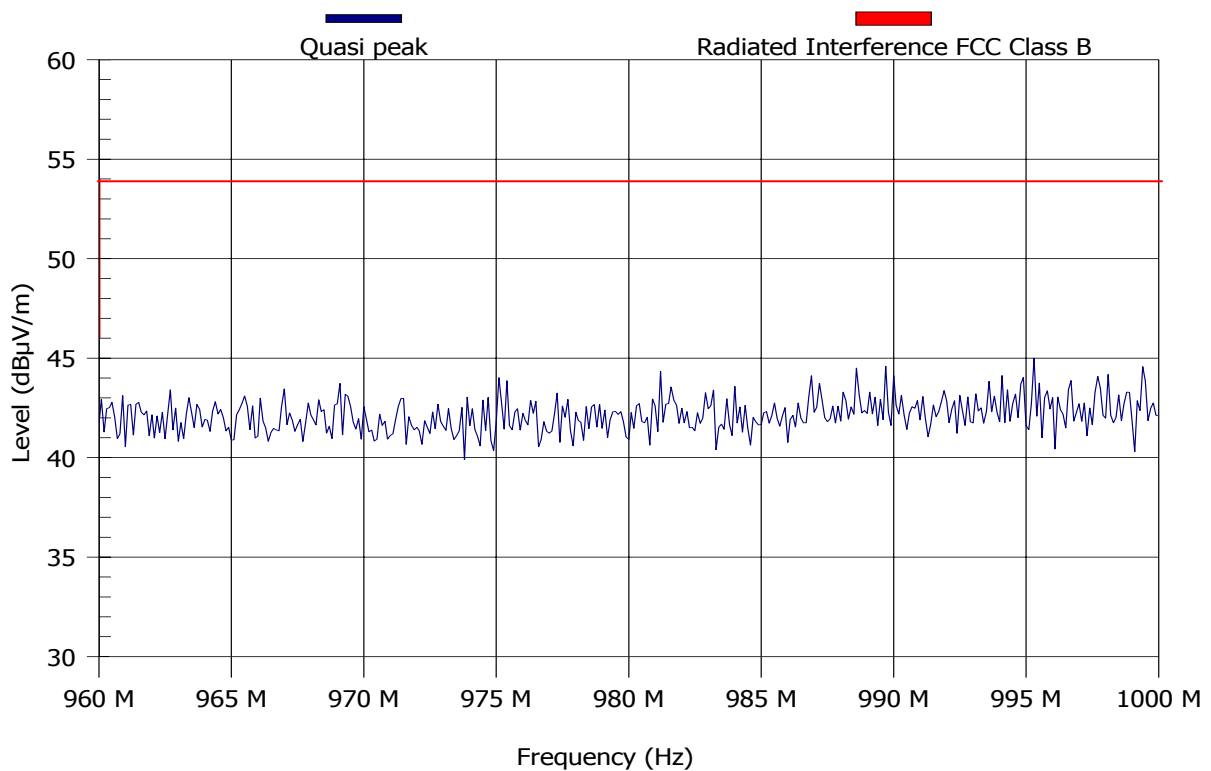
MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 20
FCC 15.205 RESTRICTED 900-1GHz 905 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 20 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



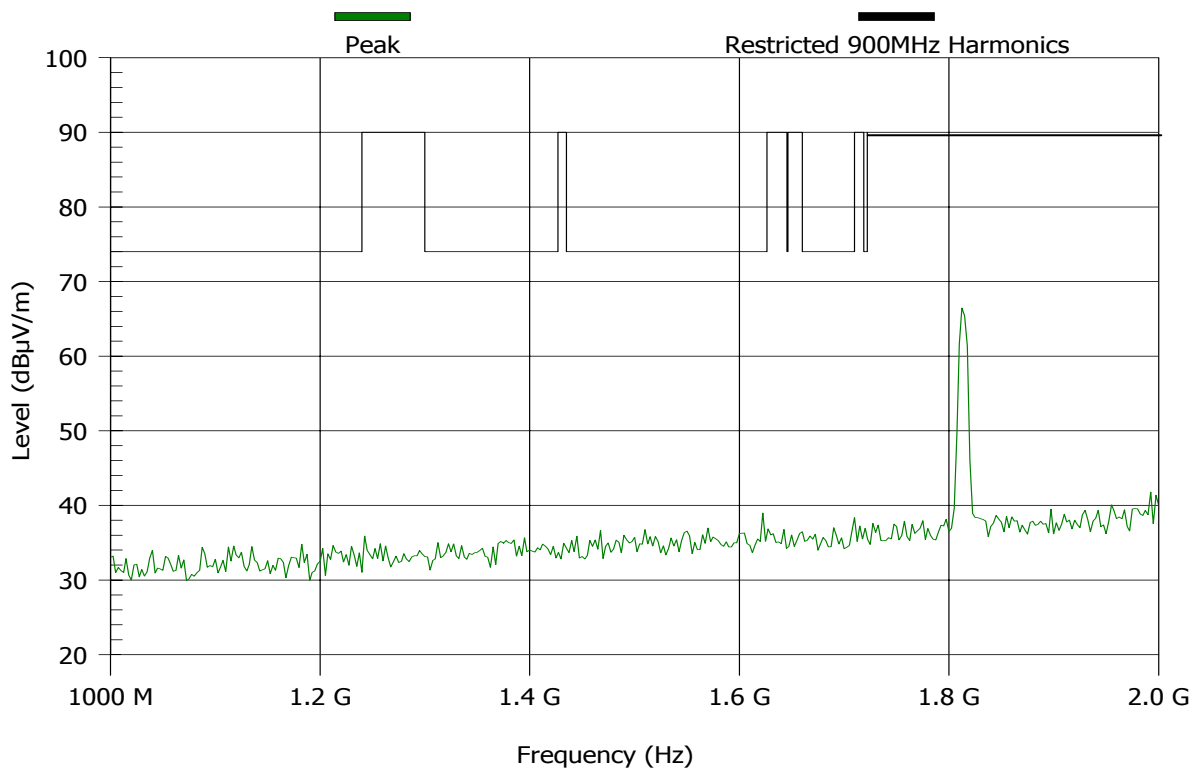
MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Test Results Plot No 21
FCC 15.205 RESTRICTED 1-2GHz 905 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 20 ms
Polarization:	Vertical	Pre Amplifier	pre amp 1GHz-4GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

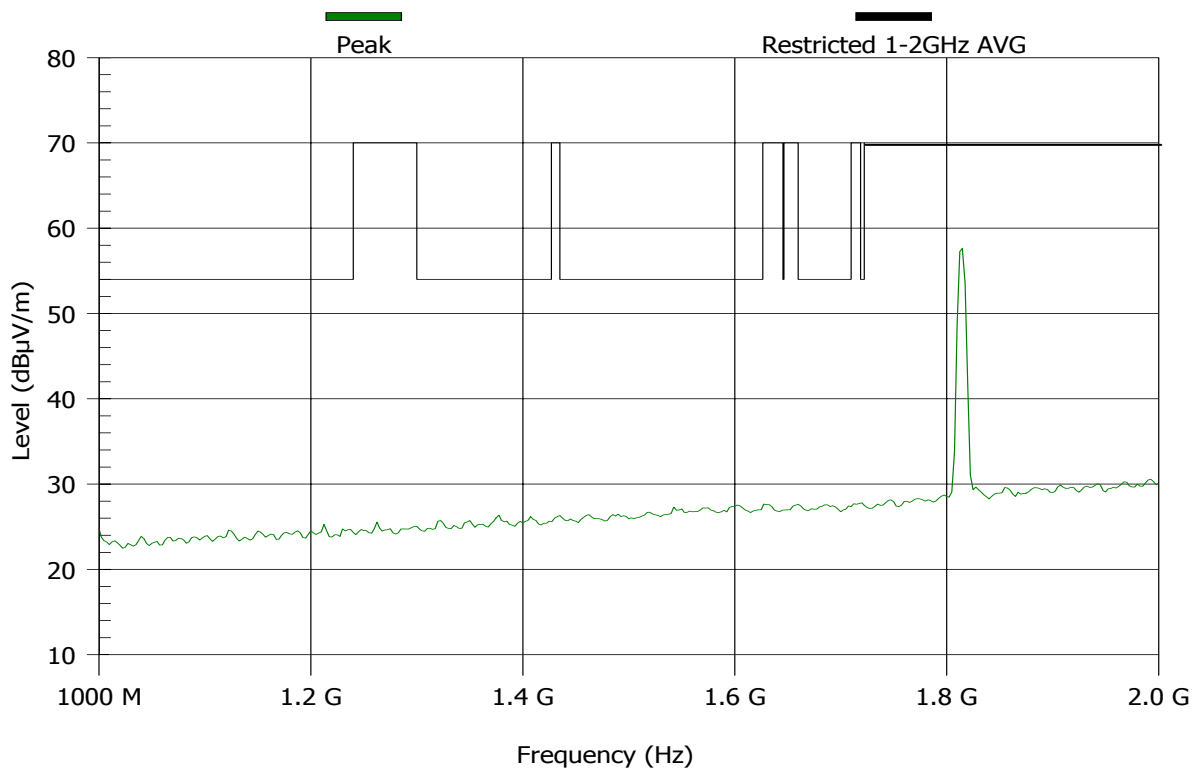
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 22

FCC 15.205 RESTRICTED 1-2GHz 905 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 3 s
Polarization:	Vertical	Pre Amplifier	pre amp 1GHz-4GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

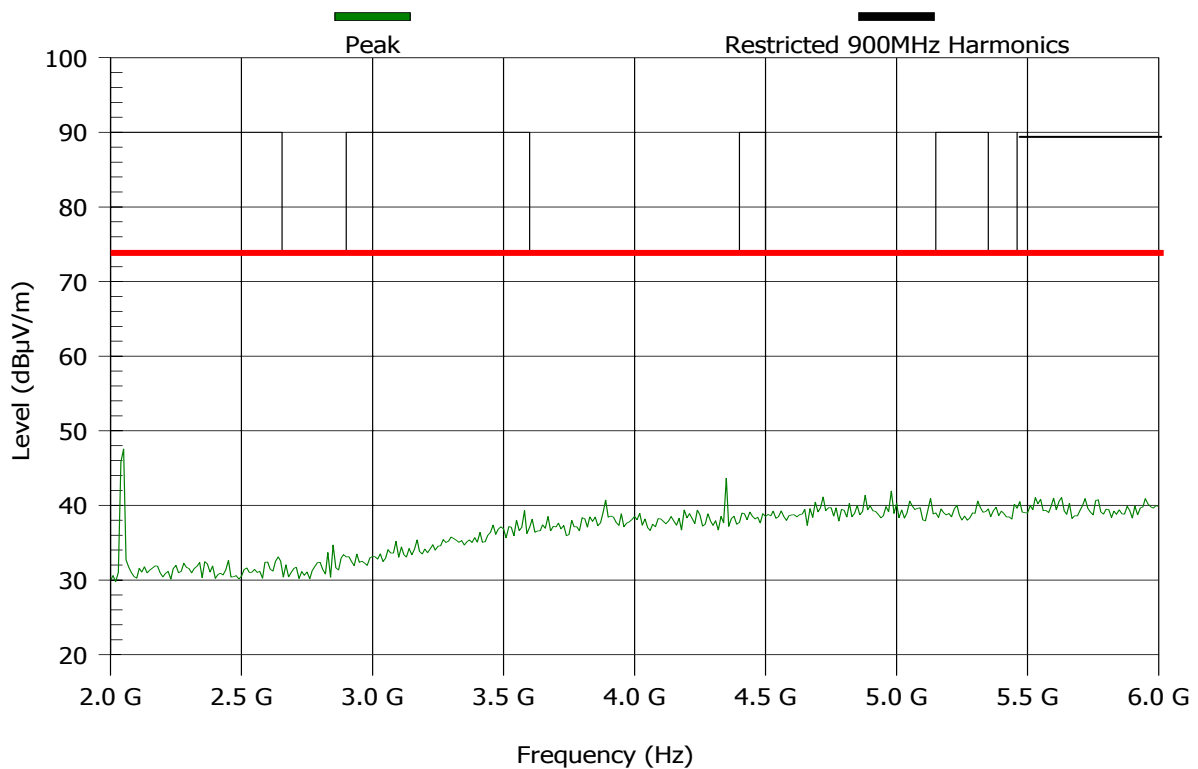
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

Test Results Plot No 23
FCC 15.205 RESTRICTED 2-6GHz 905 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 66.43 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 2-6 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

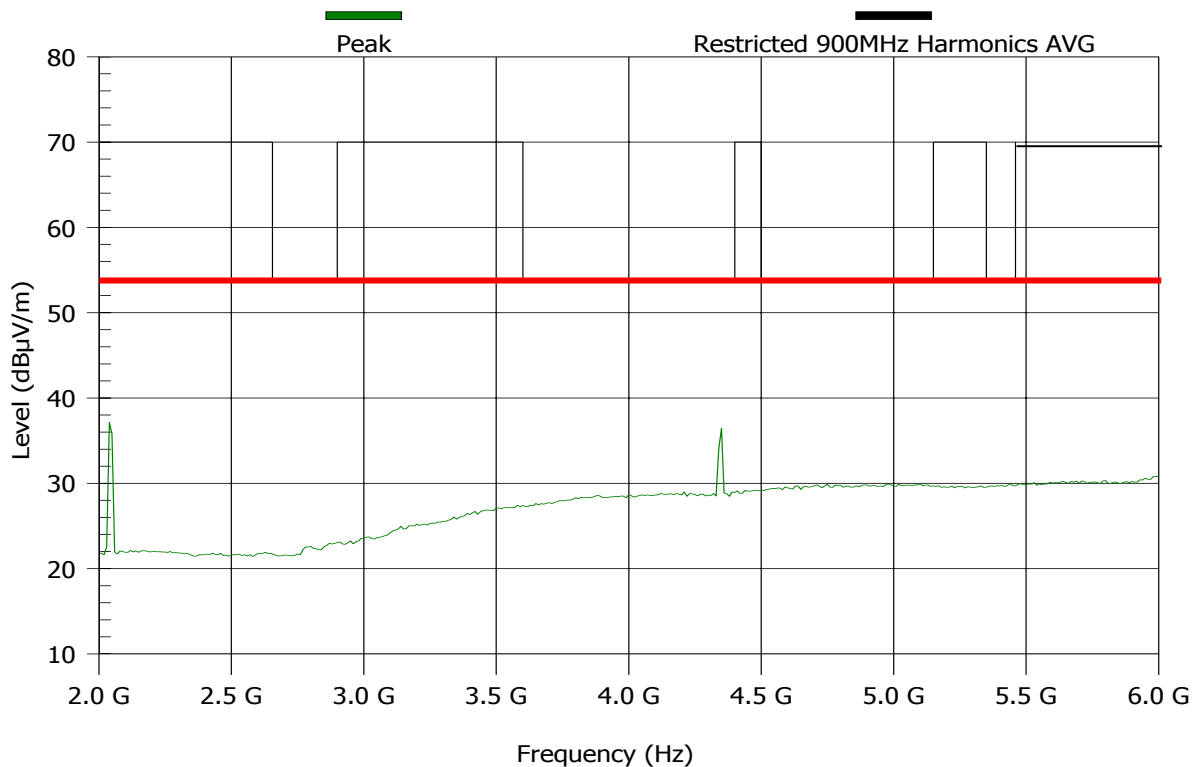
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 24

FCC 15.205 RESTRICTED 2-6GHz 905 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccefc0	Ref. Level:	90 dBμV
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	5 s
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 2-6 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

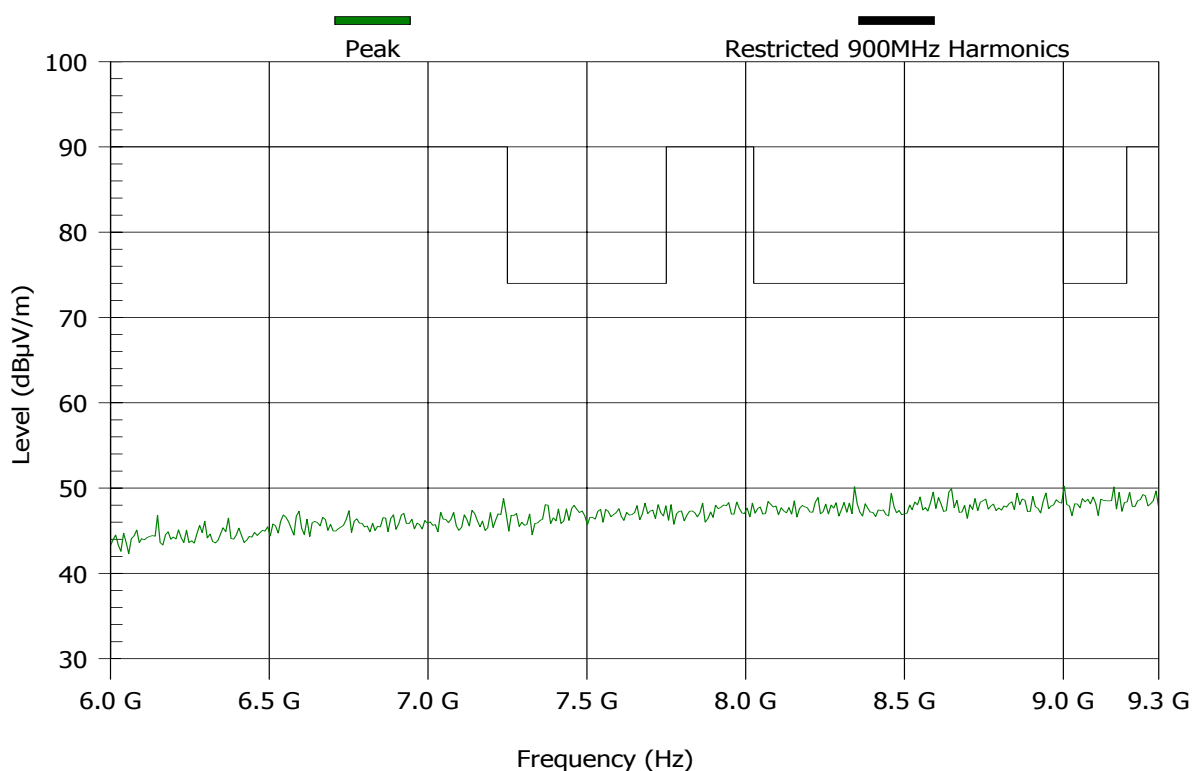
None

Test Results Plot No 25

FCC 15.205 RESTRICTED 6-9.2GHz 905 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 75.83 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

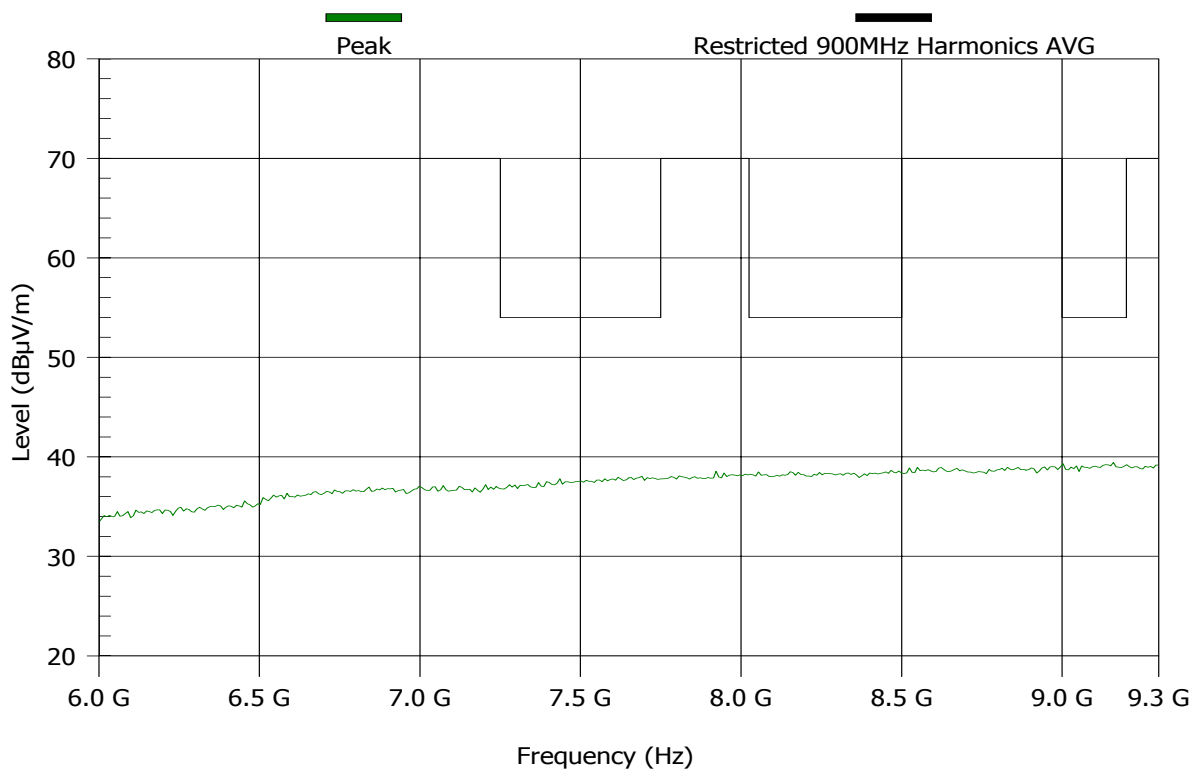
None

Test Results Plot No 26

FCC 15.205 RESTRICTED 6-9.3GHz 905 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccefc0	Ref. Level:	90 dBμV
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	3 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 3.3 s
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

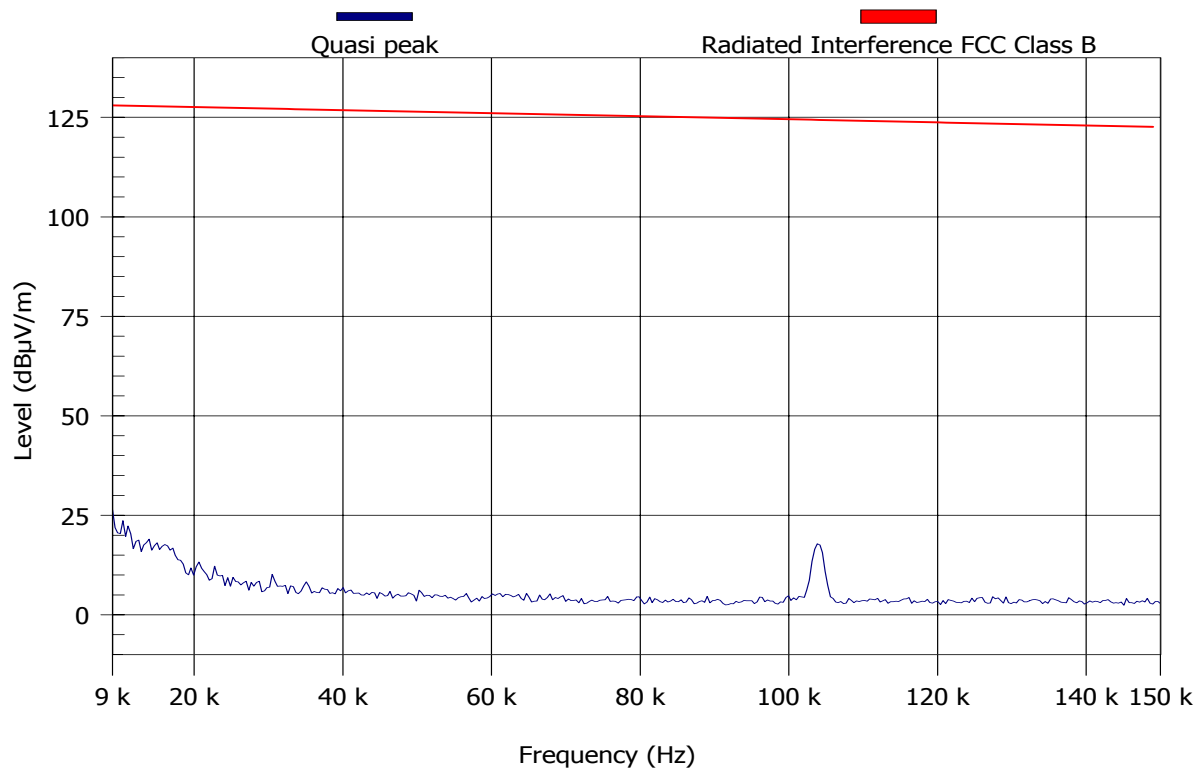
None

Test Results Plot No 27

**FCC 15.205 RESTRICTED 0.009-0.15MHz 915 6dbi integral
VER**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 Hz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 423 ms
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

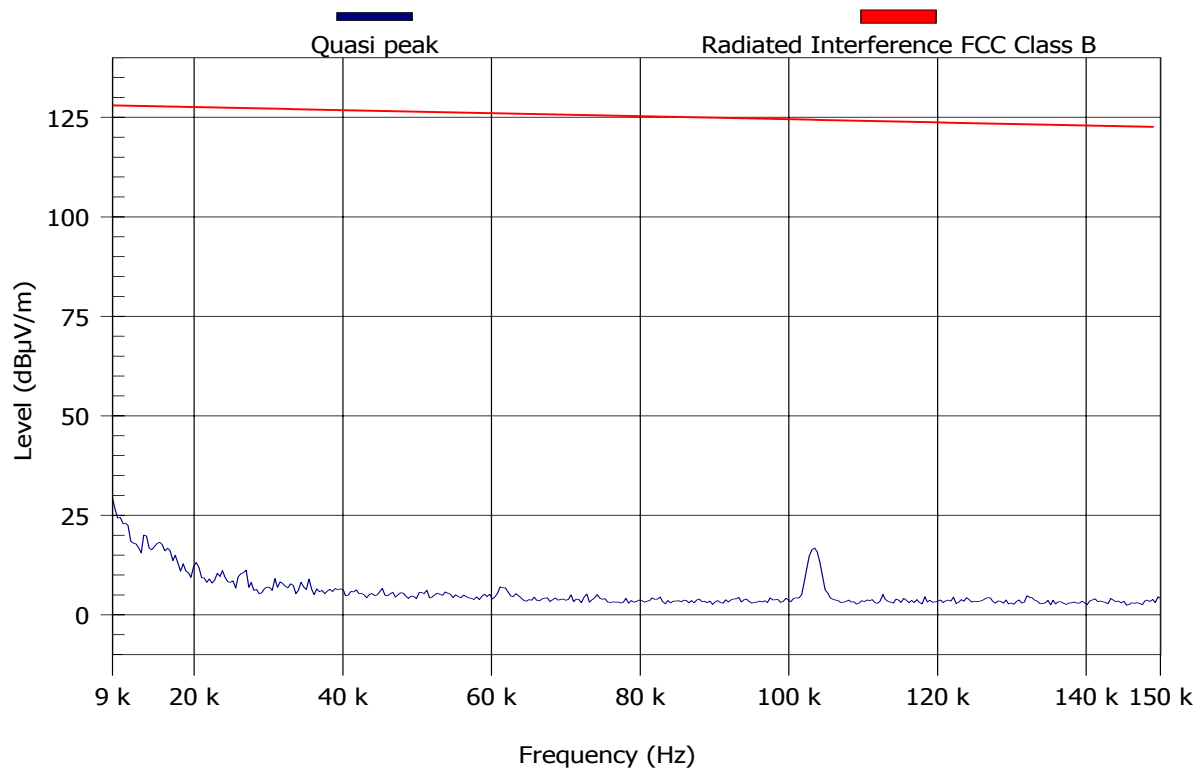
None

Test Results Plot No 28

**FCC 15.205 RESTRICTED 0.009-0.15MHz 915 6dbi integral
HOR**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dBμV
Date of Test:		RBW:	1000 Hz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 423 ms
Polarization:	Horizontal	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

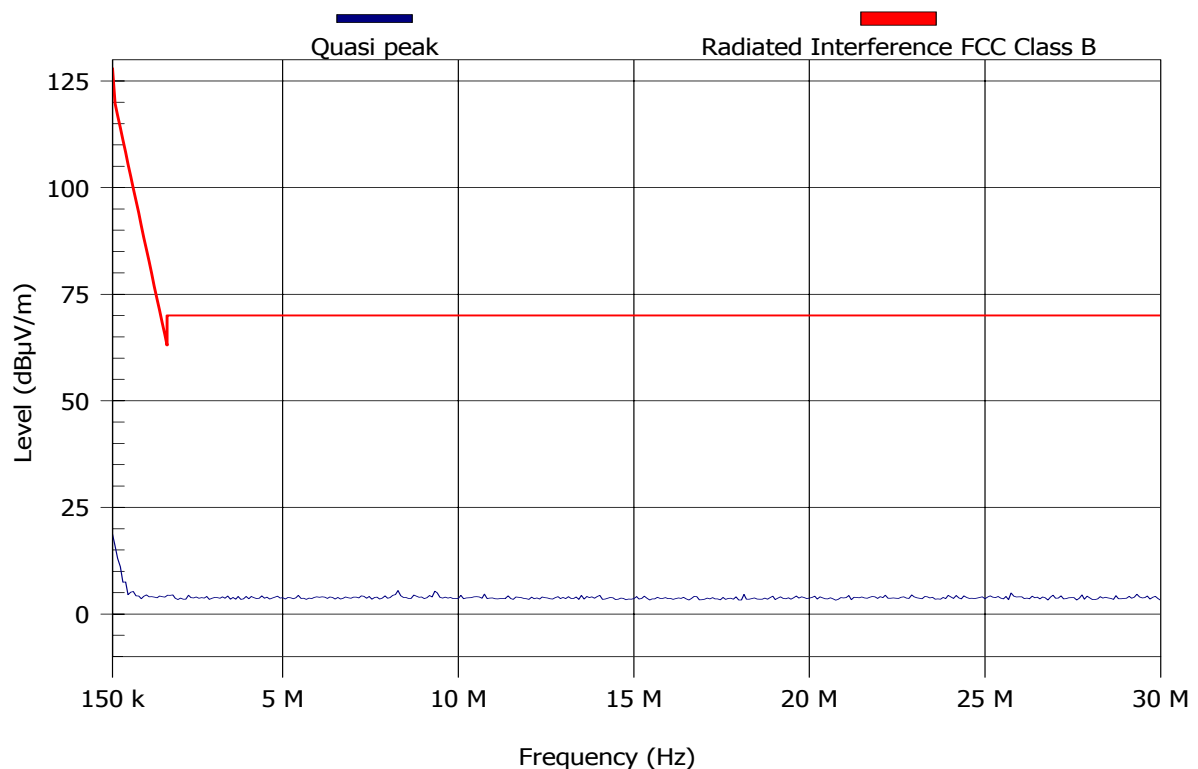
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 29

FCC 15.205 RESTRICTED 0.15-30MHz 915 6dbi integral VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 1.11 s
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

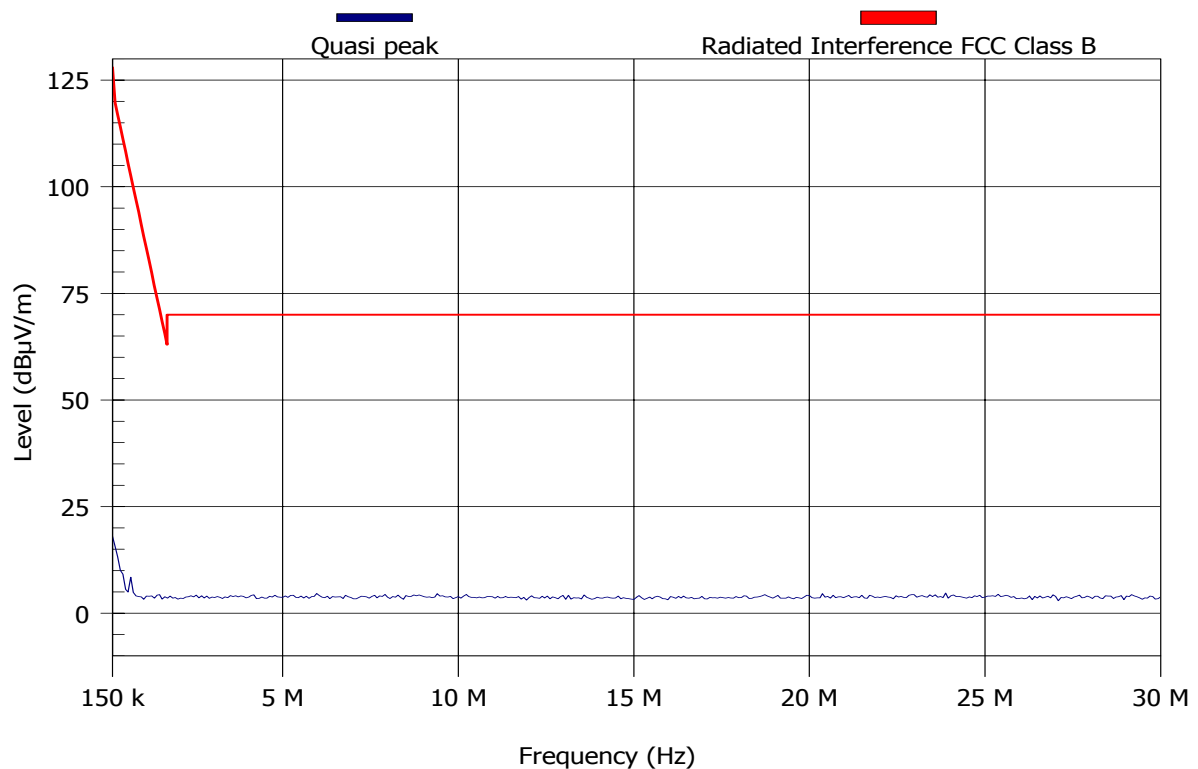
None

Test Results Plot No 30

FCC 15.205 RESTRICTED 0.15-30MHz 915 6dbi integral HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 1.11 s
Polarization:	Horizontal	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

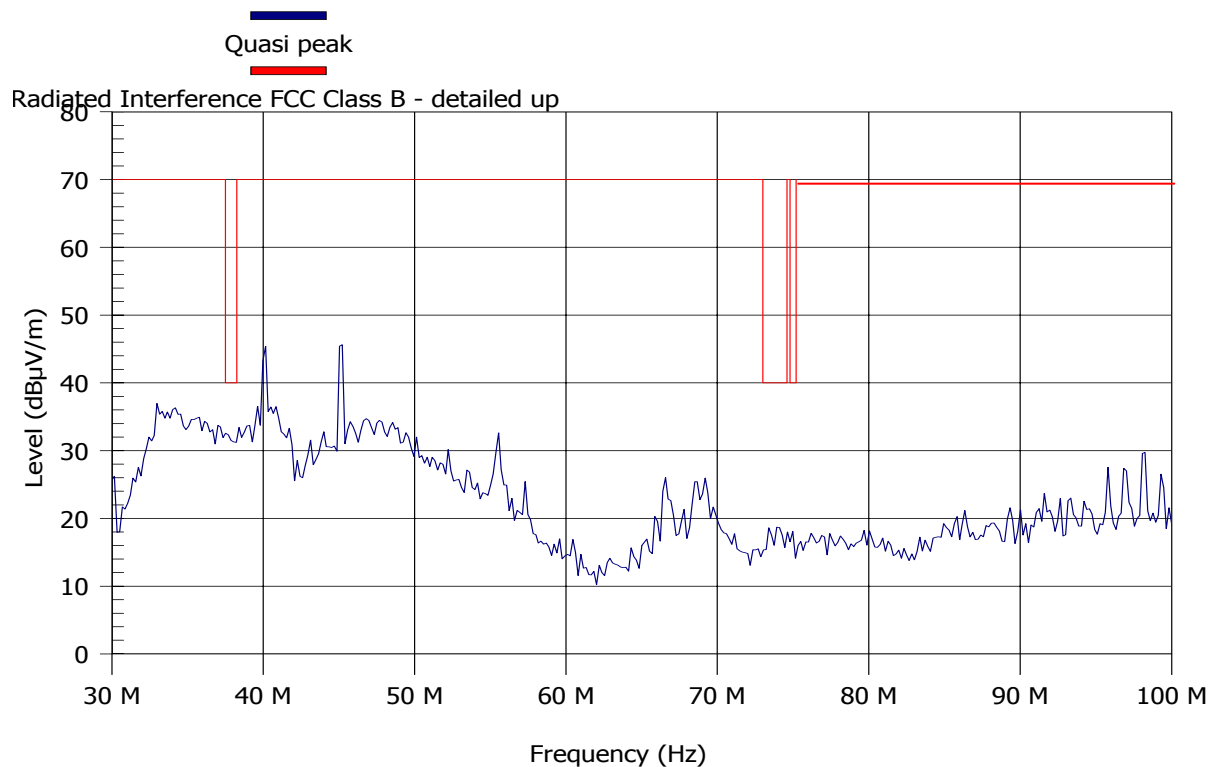
None

Test Results Plot No 31

FCC 15.205 RESTRICTED 30-100MHz 915 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccefc0	Ref. Level:	90 dBμV
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 20 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

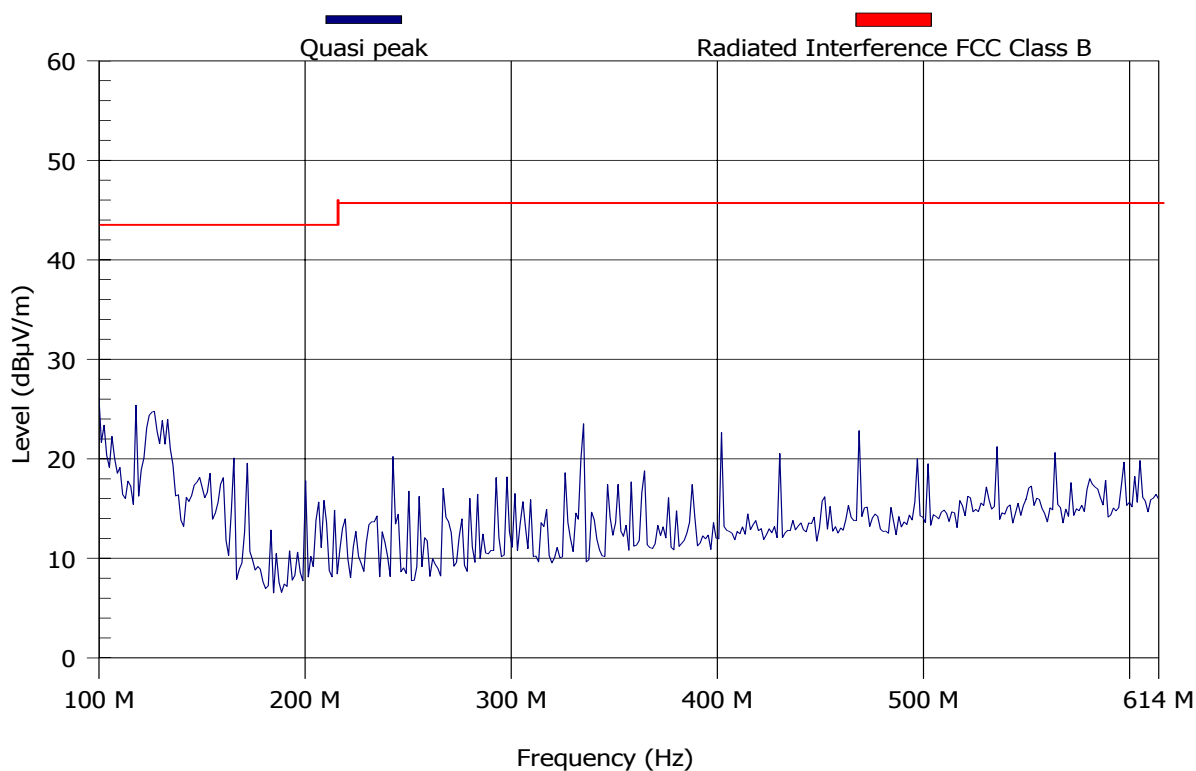
None

Test Results Plot No 32

FCC 15.205 RESTRICTED 100-600MHz 915 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 107.08 ms
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

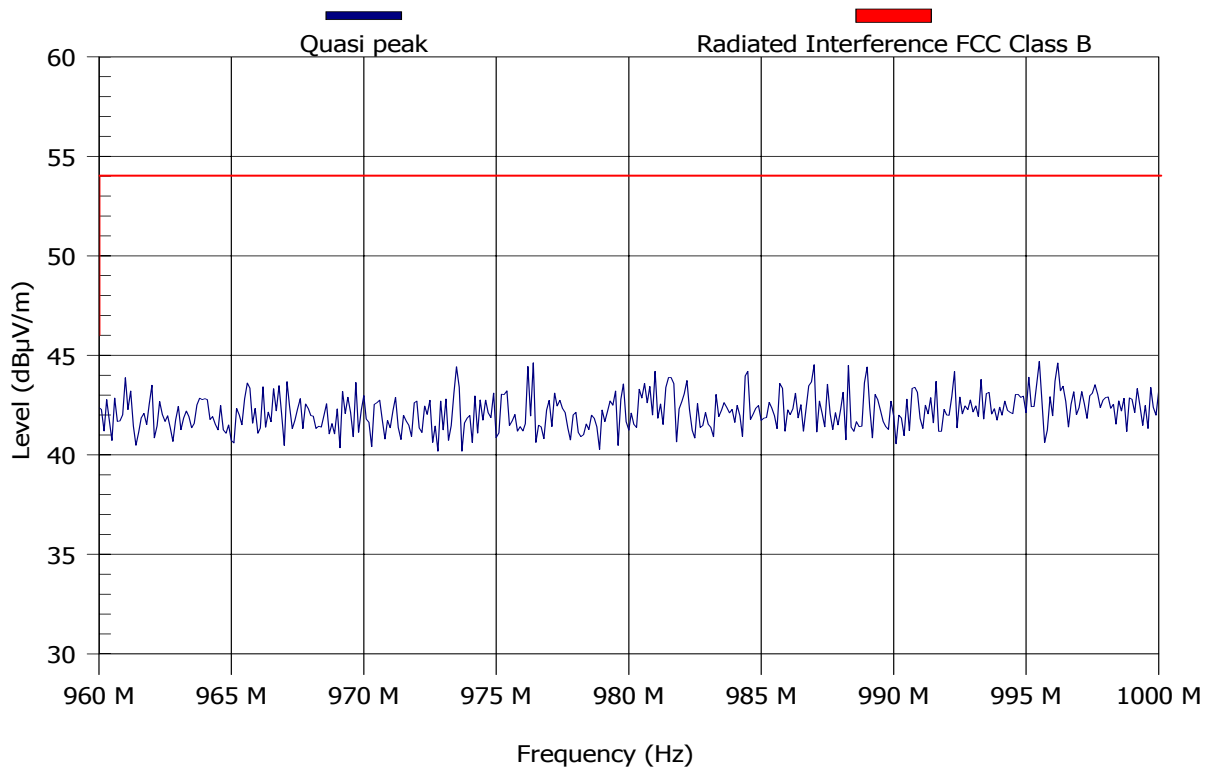
None

Test Results Plot No 33

FCC 15.205 RESTRICTED 900-1GHz 915 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dBμV
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 20 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

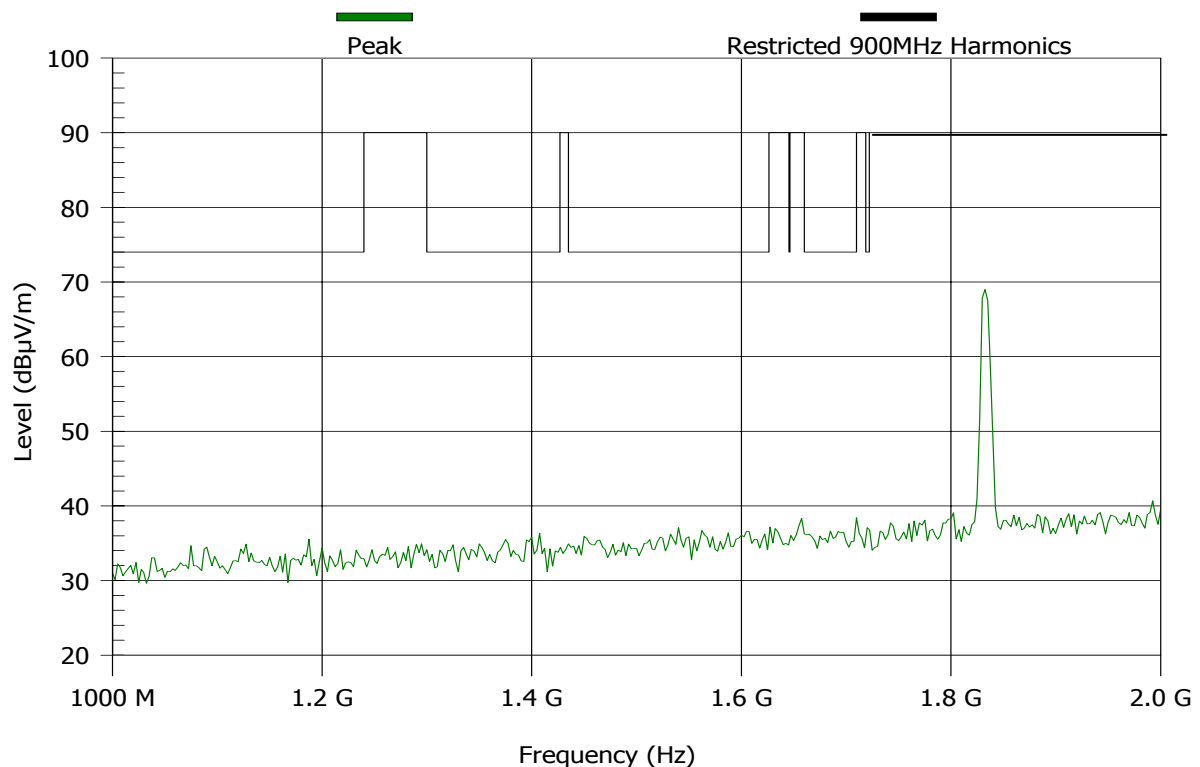
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Test Results Plot No 34

FCC 15.205 RESTRICTED 1-2GHz 915 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 20 ms
Polarization:	Vertical	Pre Amplifier	pre amp 1GHz-4GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

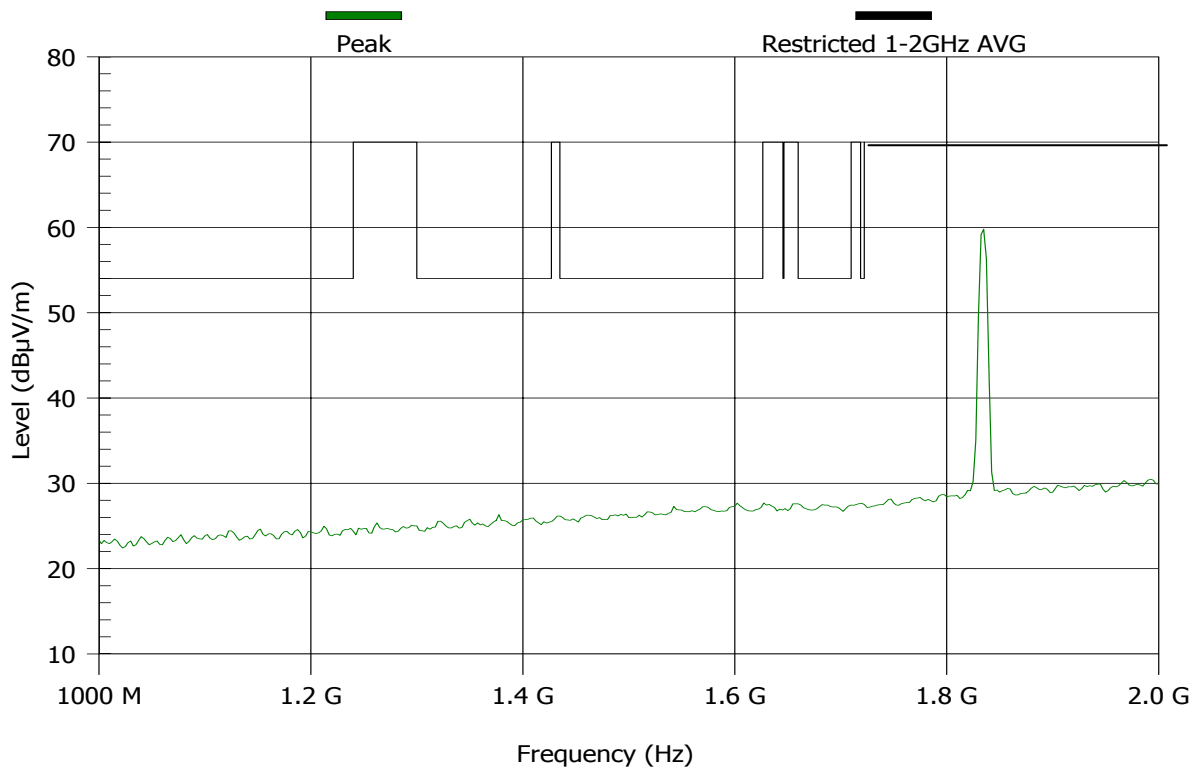
None

Test Results Plot No 35

FCC 15.205 RESTRICTED 1-2GHz 915 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 3 s
Polarization:	Vertical	Pre Amplifier	pre amp 1GHz-4GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

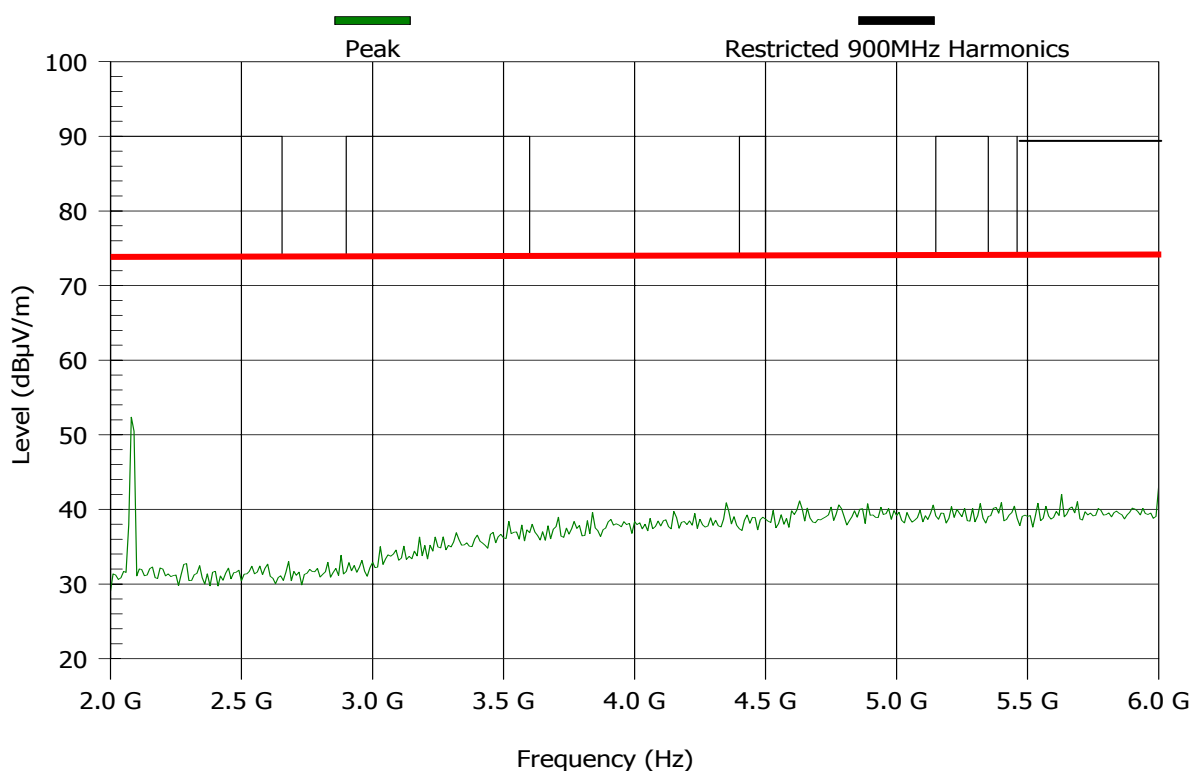
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

Test Results Plot No 36
FCC 15.205 RESTRICTED 2-6GHz 915 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 66.43 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 2-6 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

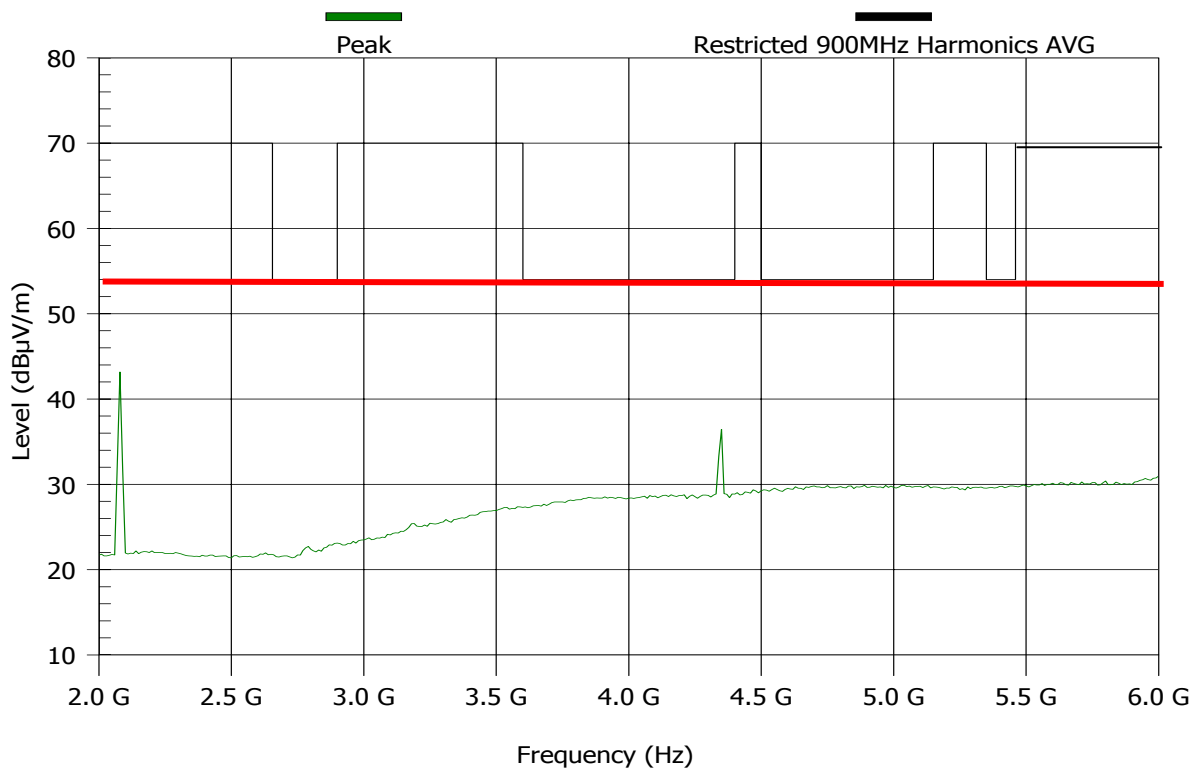
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 37

FCC 15.205 RESTRICTED 2-6GHz 915 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	5 s
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 2-6 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

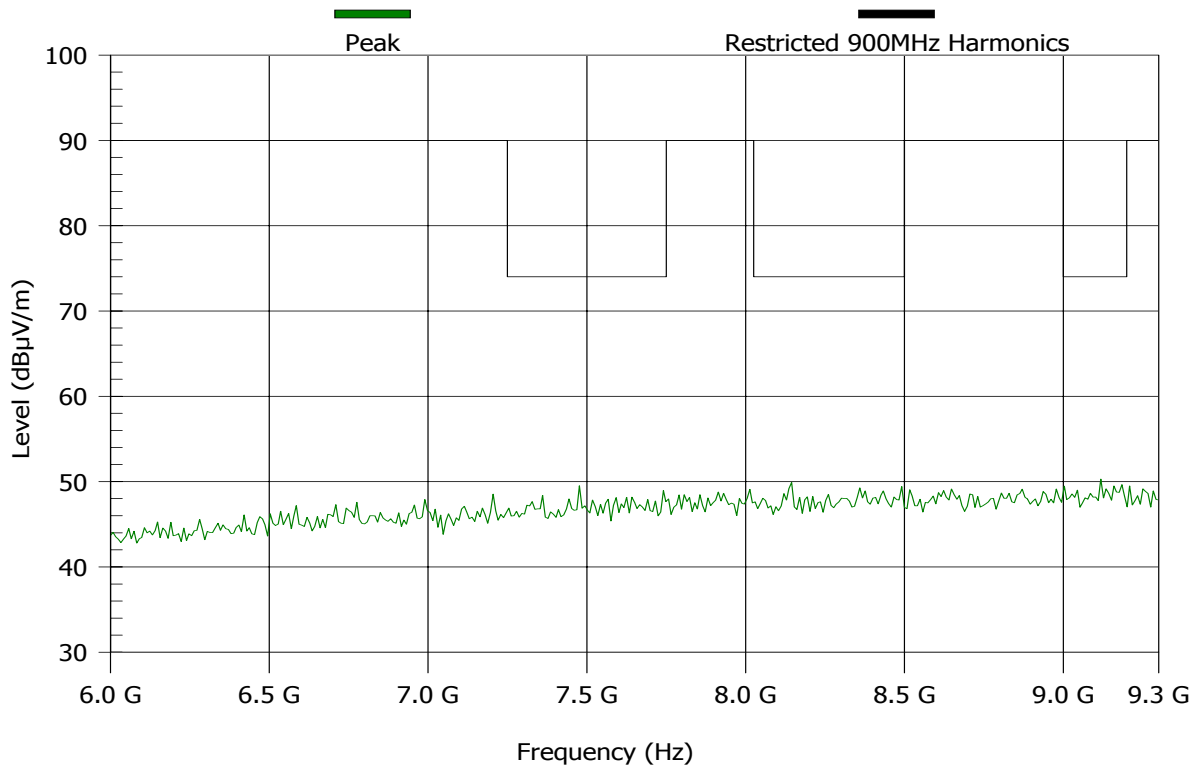
None

Test Results Plot No 38

FCC 15.205 RESTRICTED 6-9.3GHz 915 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 75.83 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

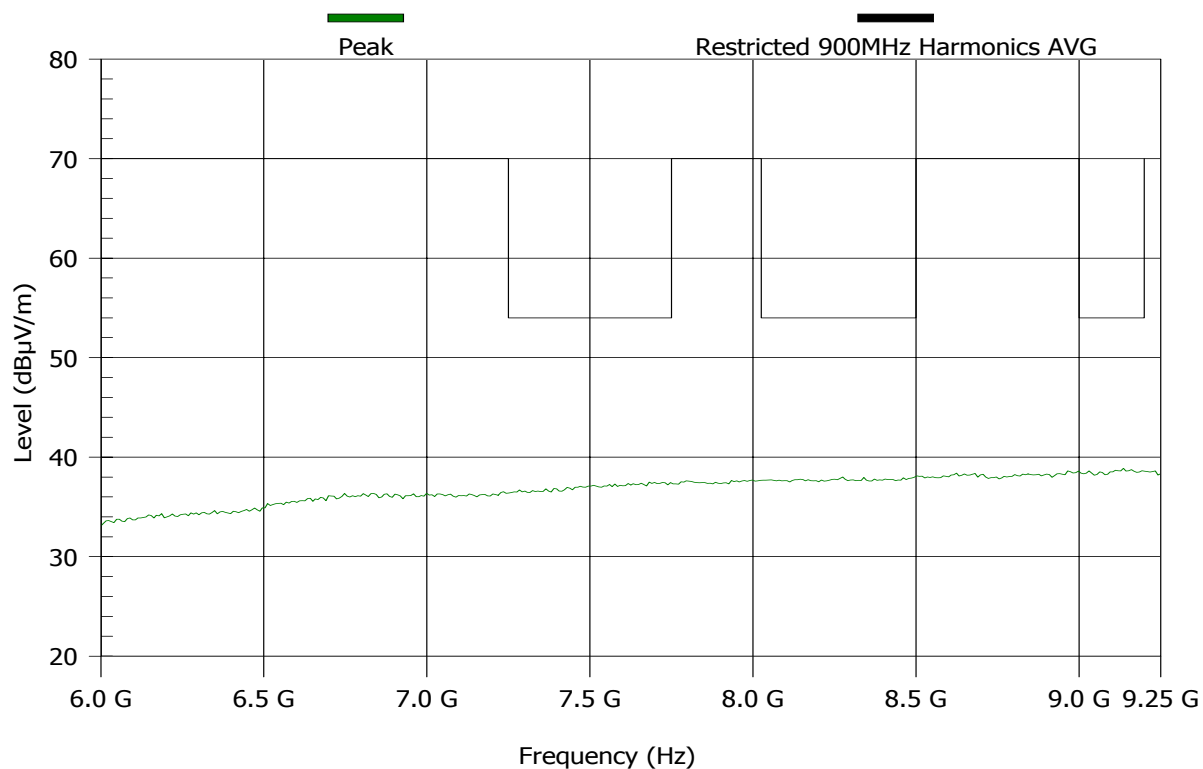
None

Test Results Plot No 39

FCC 15.205 RESTRICTED 6-9.2GHz 915 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 9.75 s
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

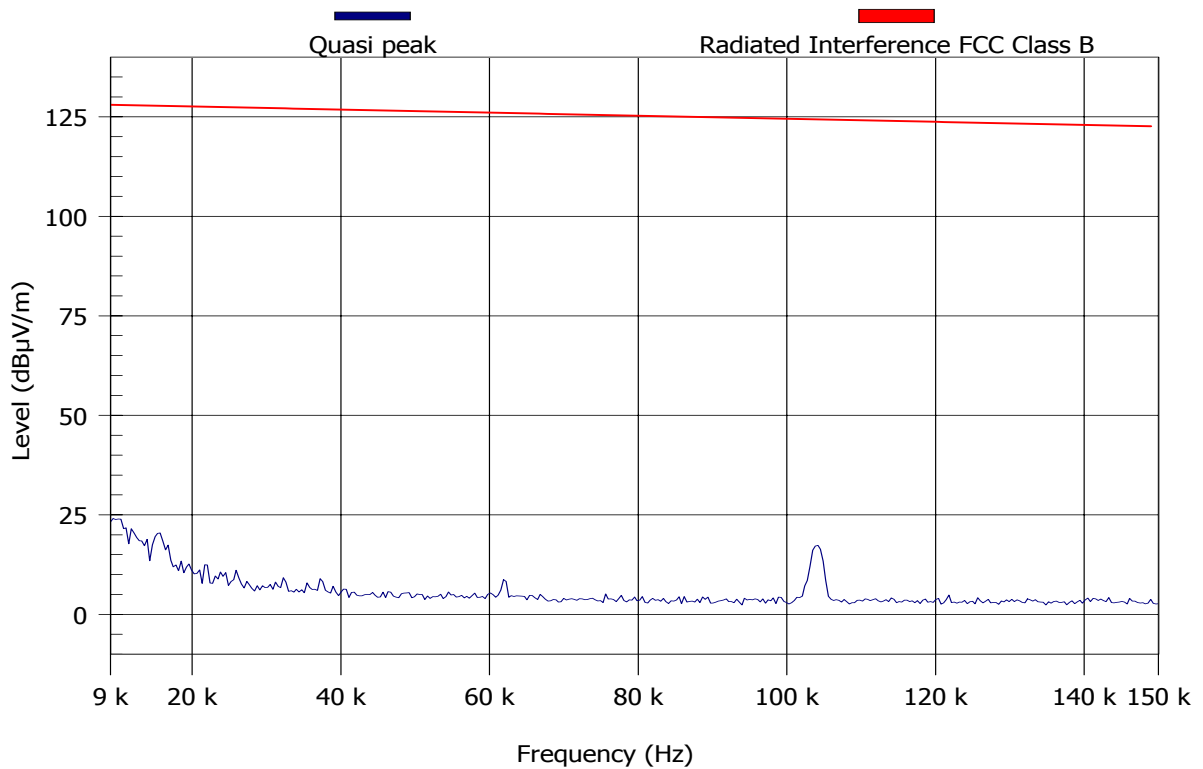
None

Test Results Plot No 40

**FCC 15.205 RESTRICTED 0.009-0.15MHz 925 6dbi integral
VER**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 Hz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 423 ms
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

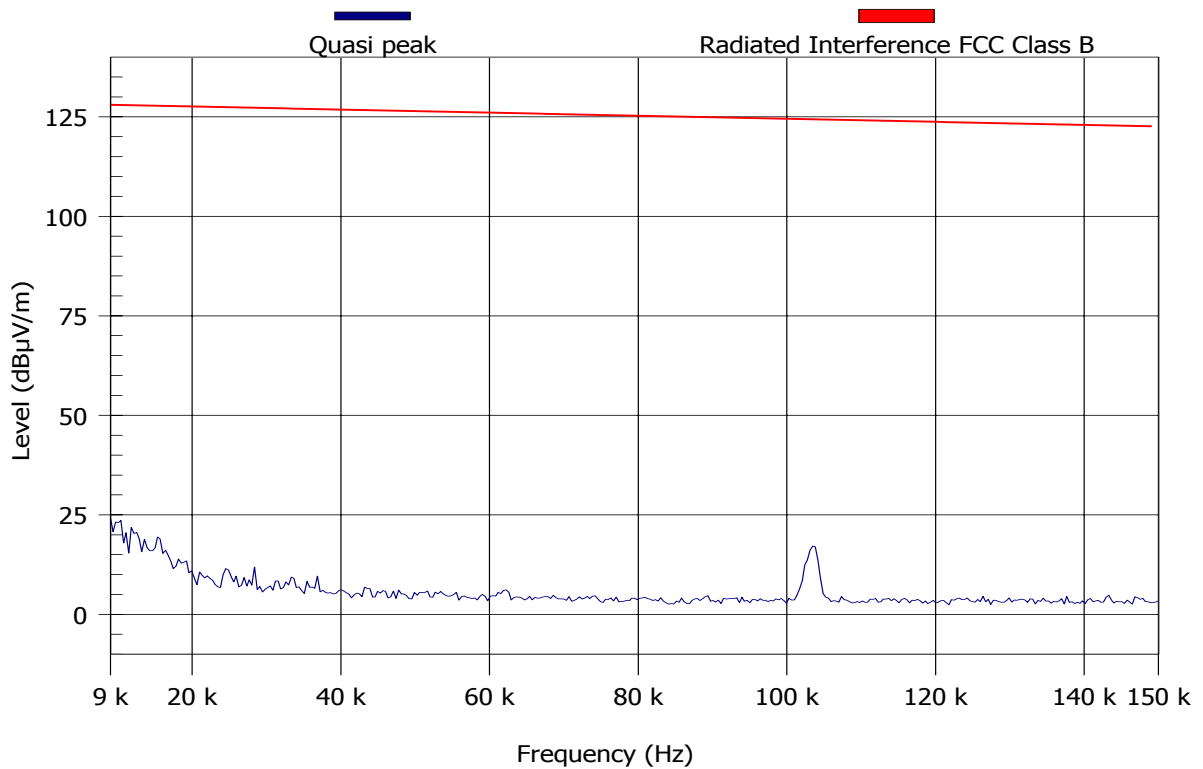
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 41

**FCC 15.205 RESTRICTED 0.009-0.15MHz 925 6dbi integral
HOR**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 Hz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 423 ms
Polarization:	Horizontal	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

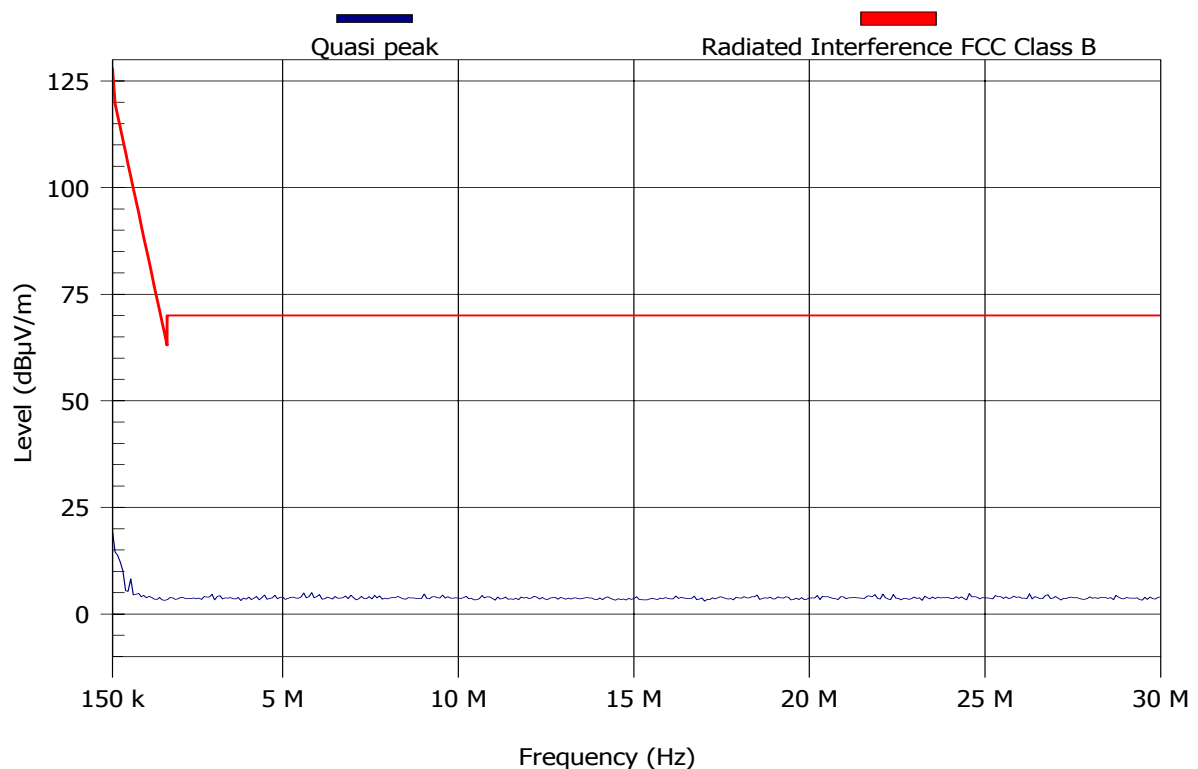
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 42

FCC 15.205 RESTRICTED 0.15-30MHz 925 6dbi integral VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 1.11 s
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

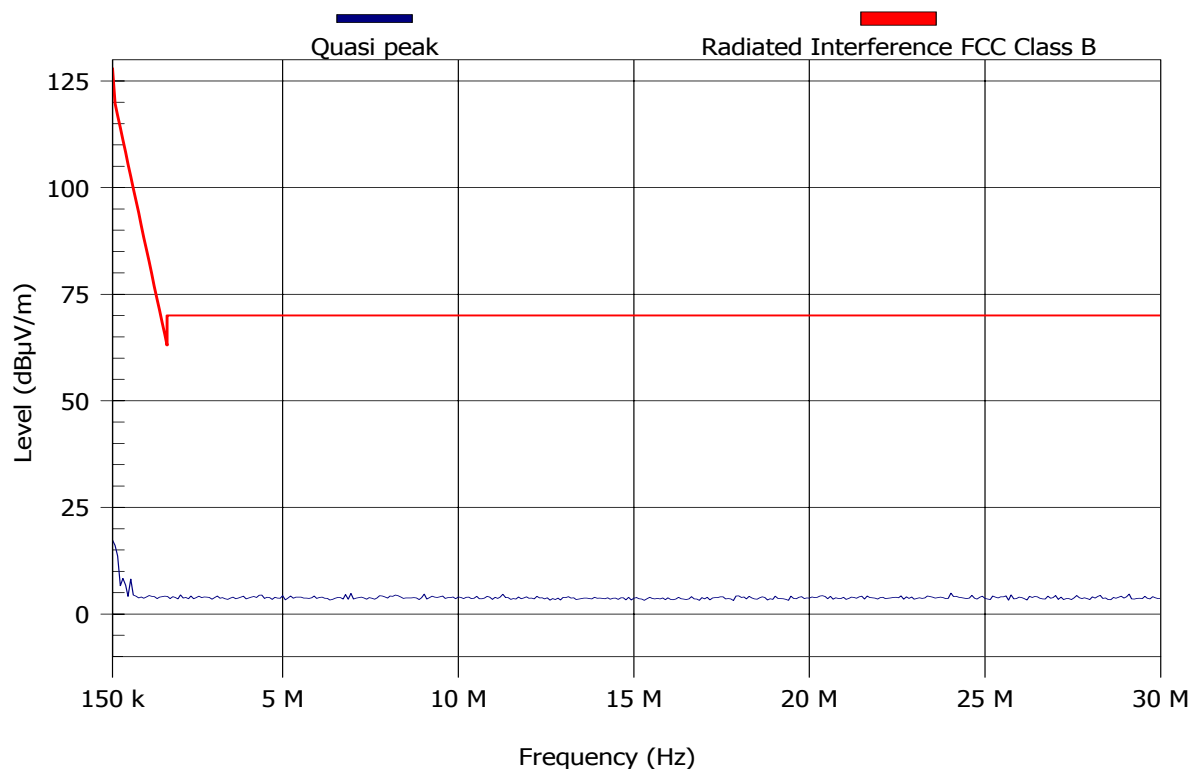
None

Test Results Plot No 43

FCC 15.205 RESTRICTED 0.15-30MHz 925 6dbi integral HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	LOOP ANT.HFH 2 Z2	Sweep Time:	Auto: 1.11 s
Polarization:	Horizontal	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

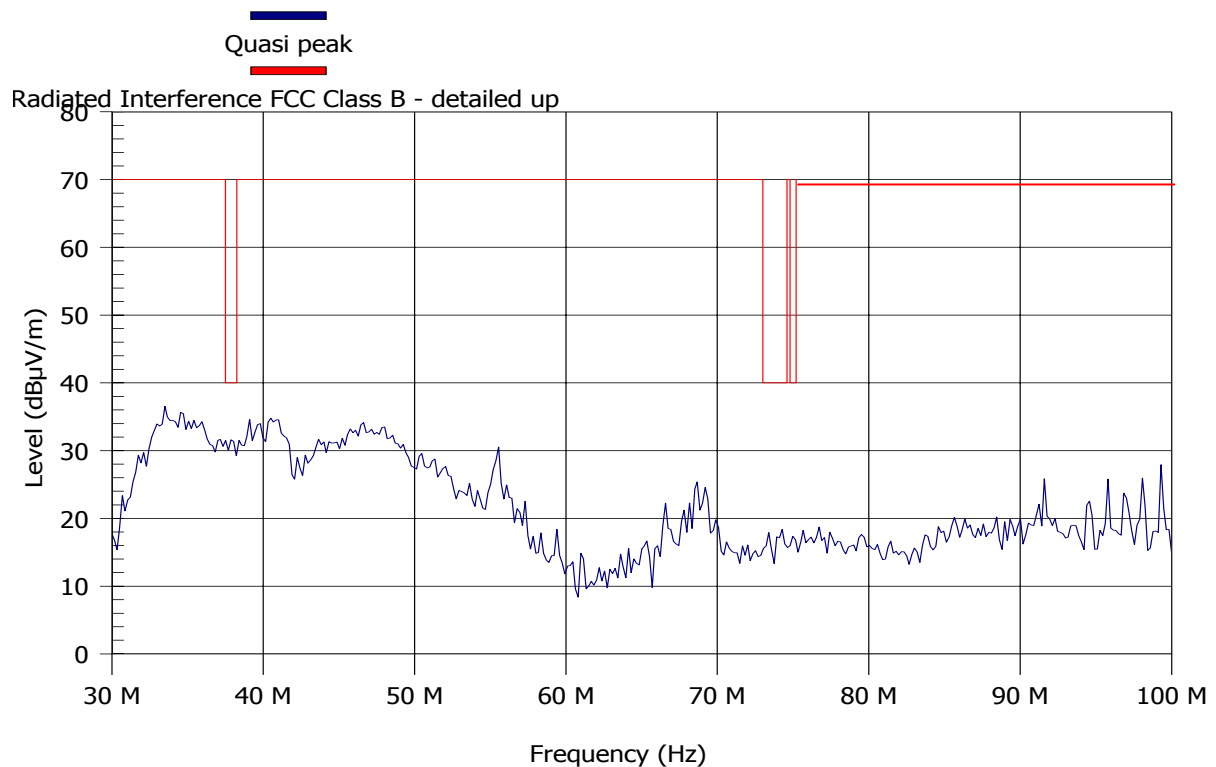
None

Test Results Plot No 44

FCC 15.205 RESTRICTED 30-100MHz 925 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccefc0	Ref. Level:	90 dBμV
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 20 ms
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

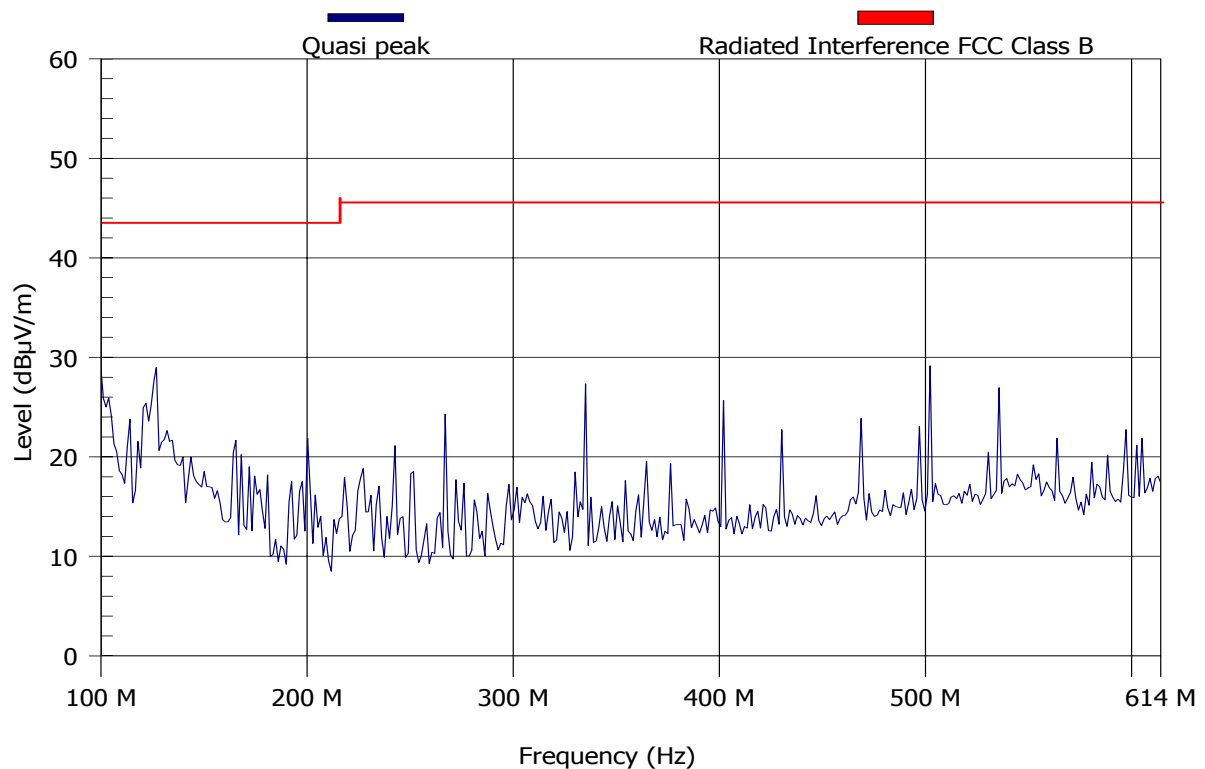
None

Test Results Plot No 45

FCC 15.205 RESTRICTED 100-600MHz 925 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 107.08 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:


MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

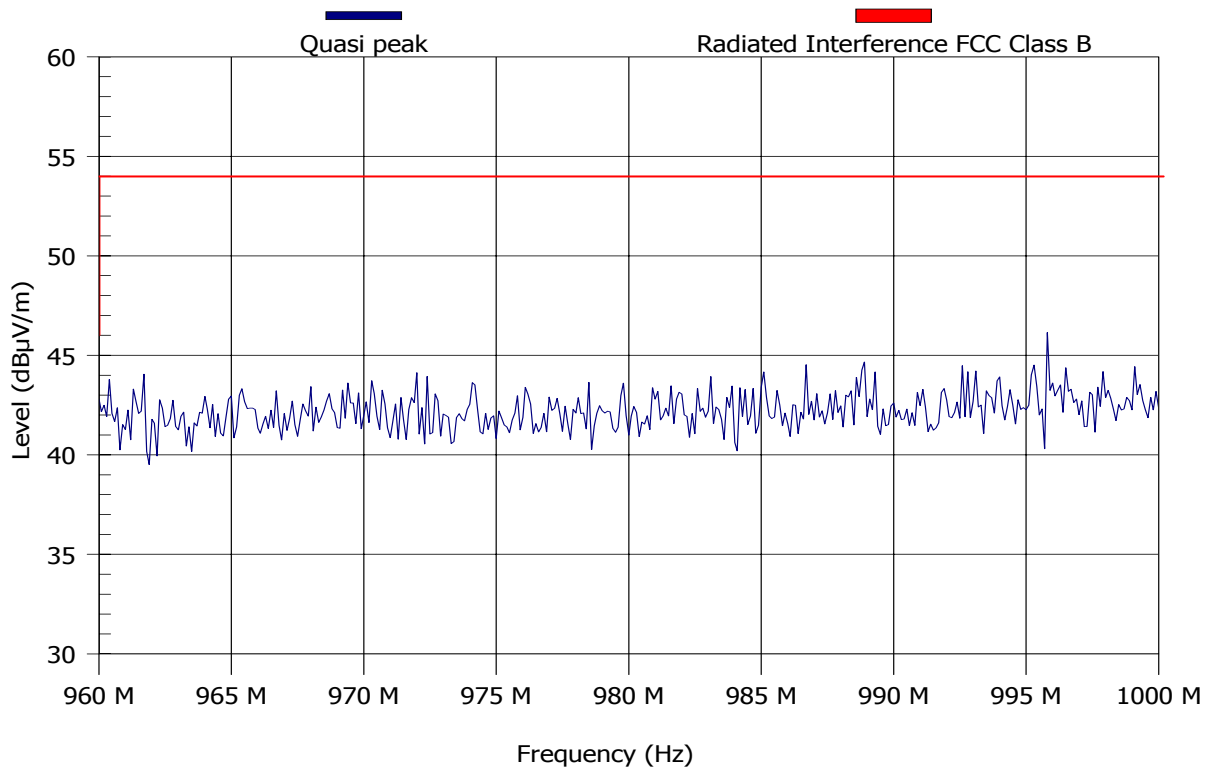
None

Test Results Plot No 46

FCC 15.205 RESTRICTED 900-1GHz 925 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 20 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

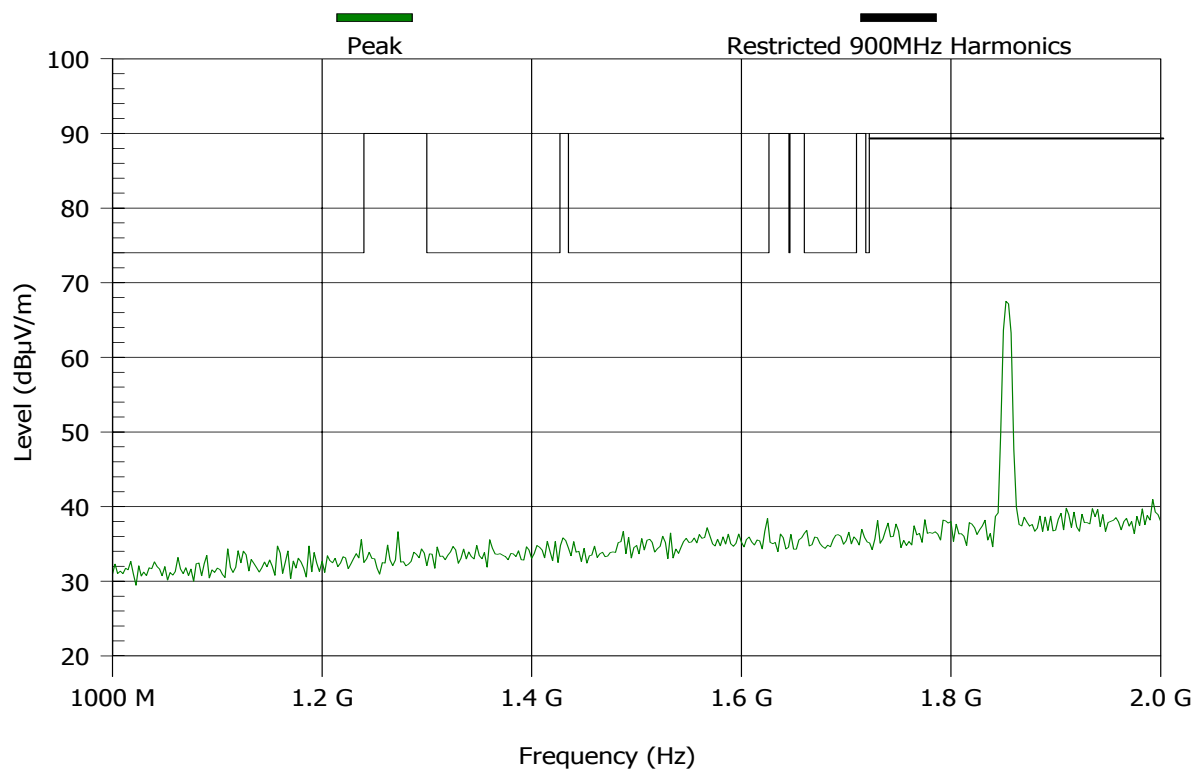
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Test Results Plot No 47

FCC 15.205 RESTRICTED 1-2GHz 925 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dBμV
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 20 ms
Polarization:	Vertical	Pre Amplifier	pre amp 1GHz-4GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

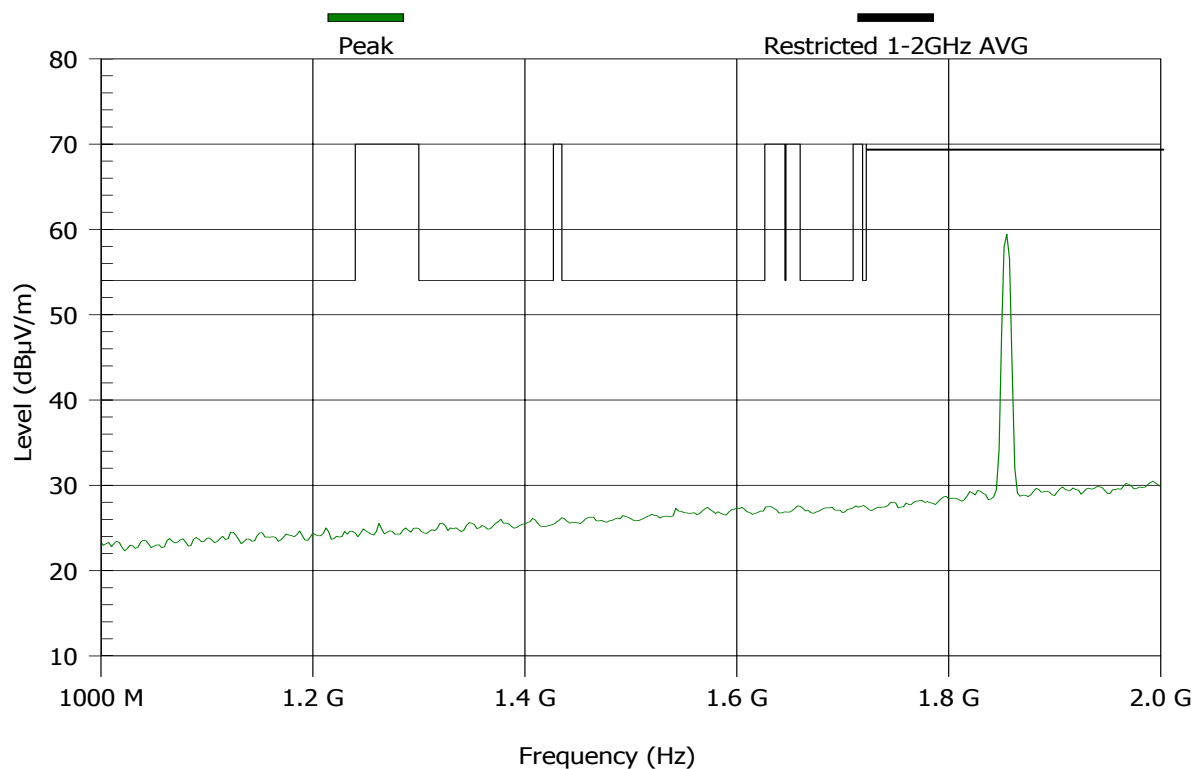
None

Test Results Plot No 48

FCC 15.205 RESTRICTED 1-2GHz 925 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 3 s
Polarization:	Vertical	Pre Amplifier	pre amp 1GHz-4GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

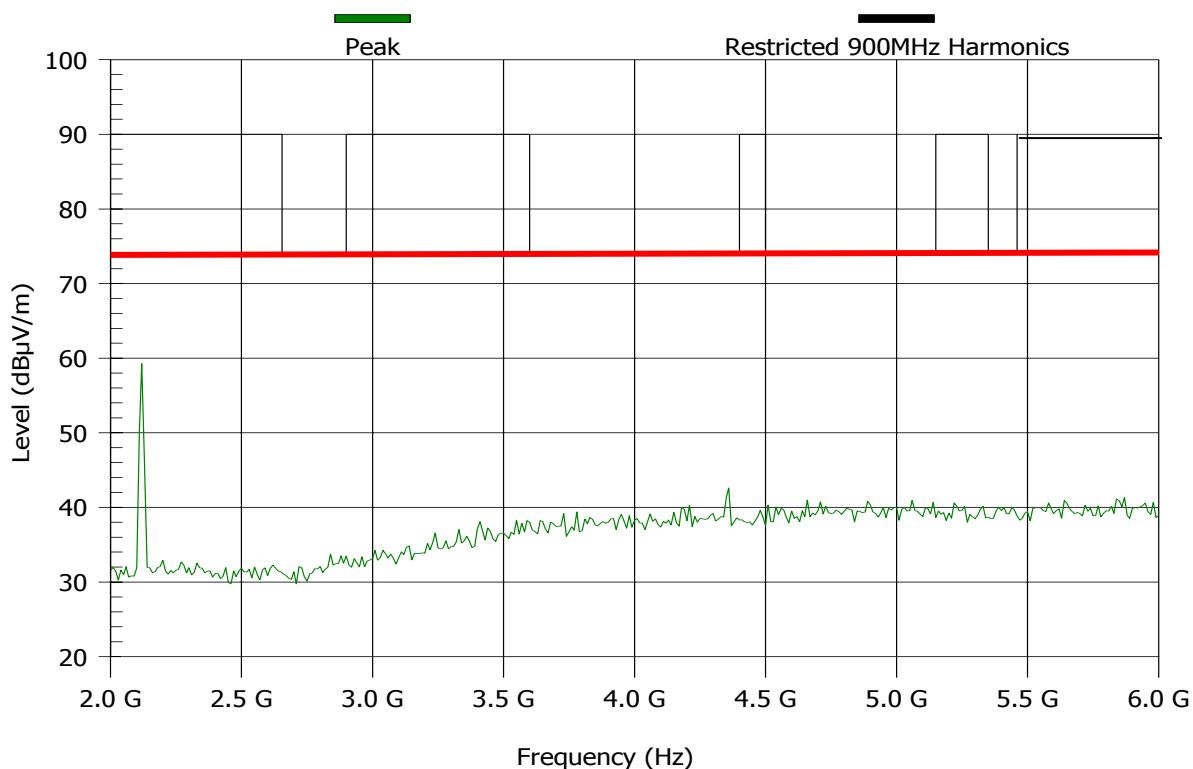
None

Test Results Plot No 49

FCC 15.205 RESTRICTED 2-6GHz 925 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 66.43 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 2-6 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

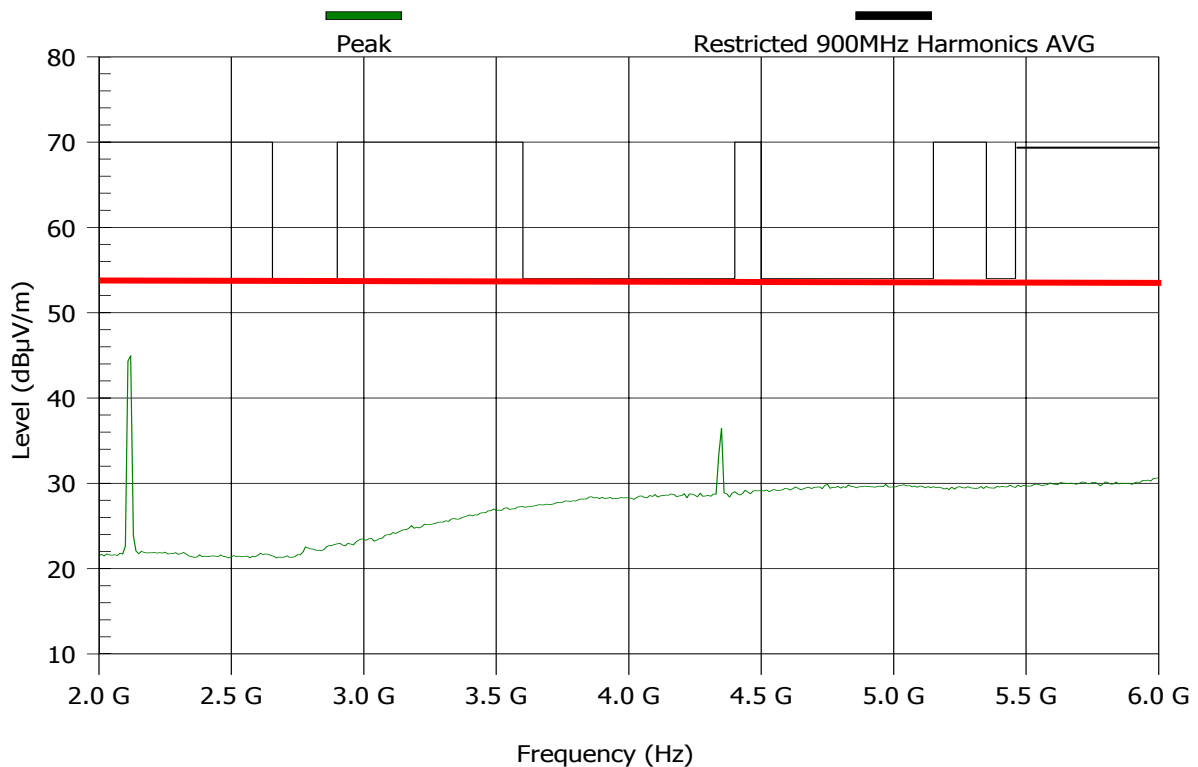
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 50

FCC 15.205 RESTRICTED 2-6GHz 925 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccefc0	Ref. Level:	90 dBμV
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	5 s
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 2-6 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

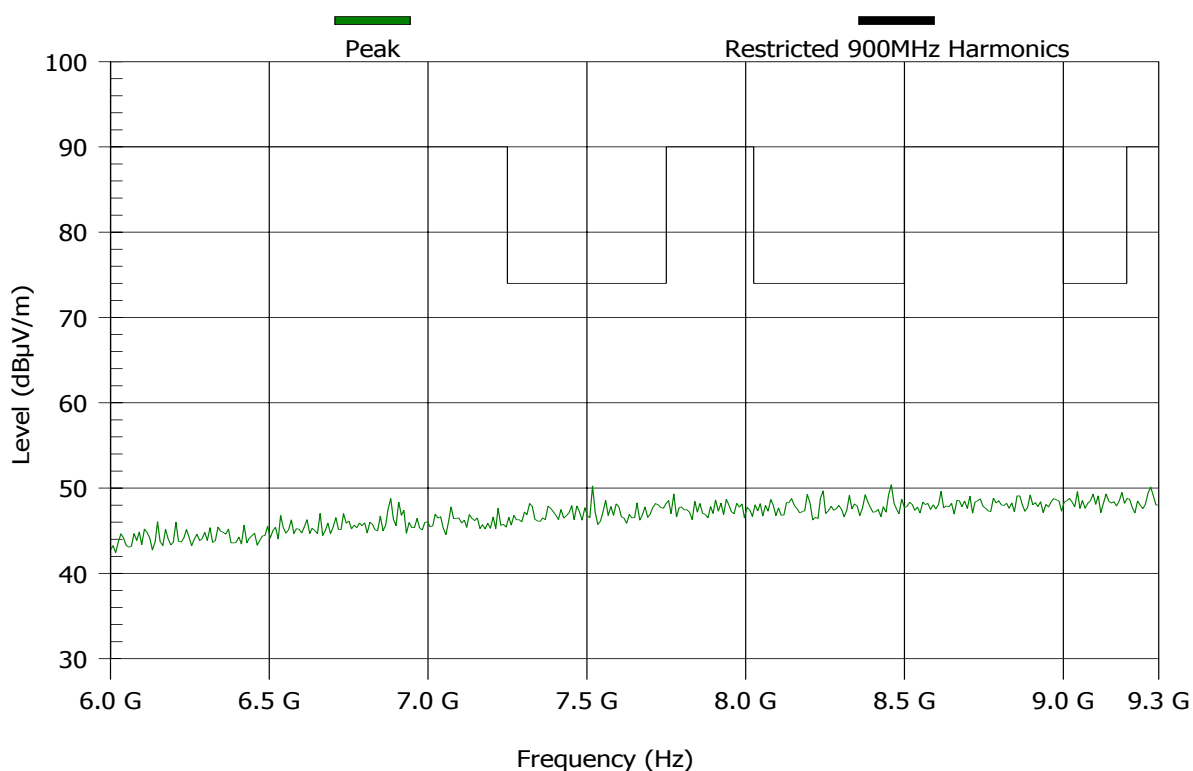
None

Test Results Plot No 51

FCC 15.205 RESTRICTED 6-9.2GHz 925 6dbi integral

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 75.83 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:


MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

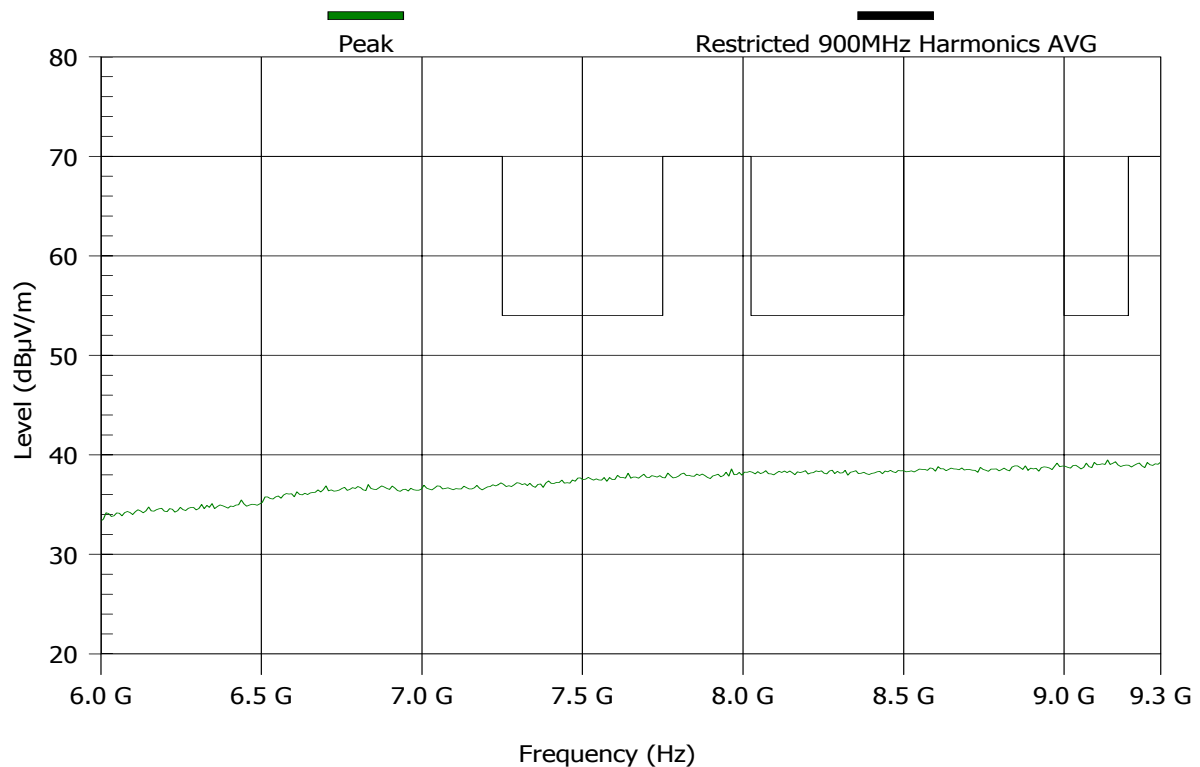
None

Test Results Plot No 52

FCC 15.205 RESTRICTED 6-9.3GHz 925 6dbi integral AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	3 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 3.3 s
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:



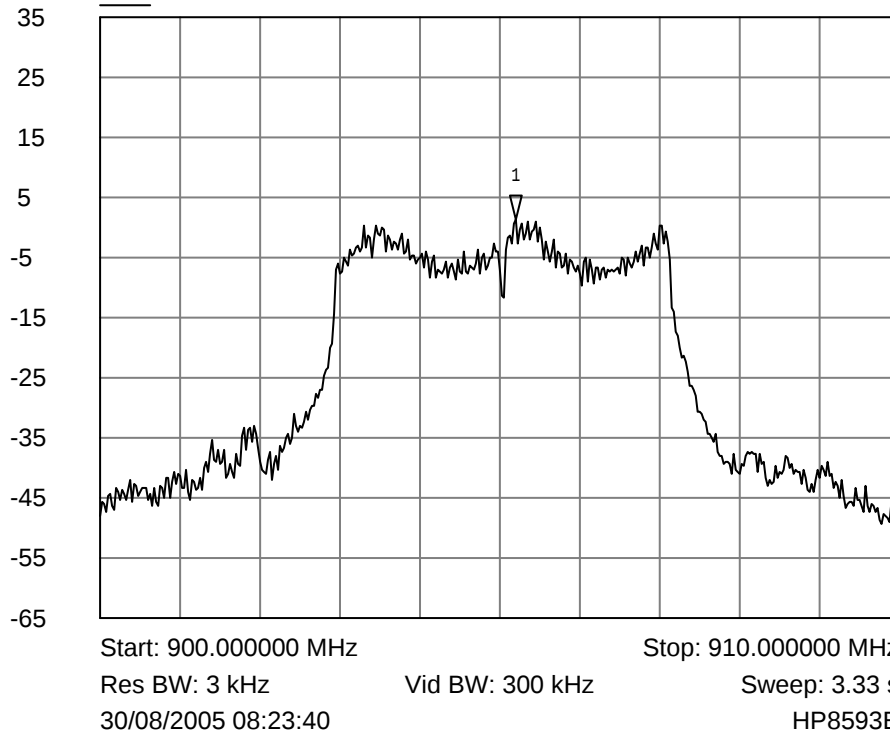
MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

Test Results Plot No 53
FCC 15.247d Power density TX-905MHz

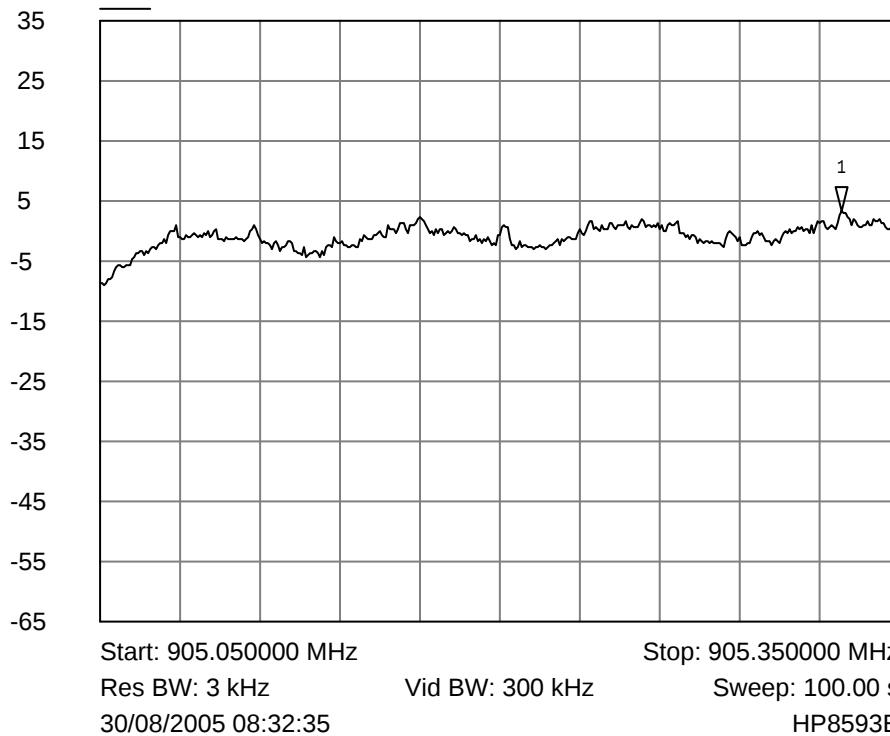
SoftPlot Measurement Presentation
Trace A



1 Trace A
▽ 905.200000 MHz
1.4900 dBm

Test Results Plot No 54
FCC 15.247d Power density TX-905MHz

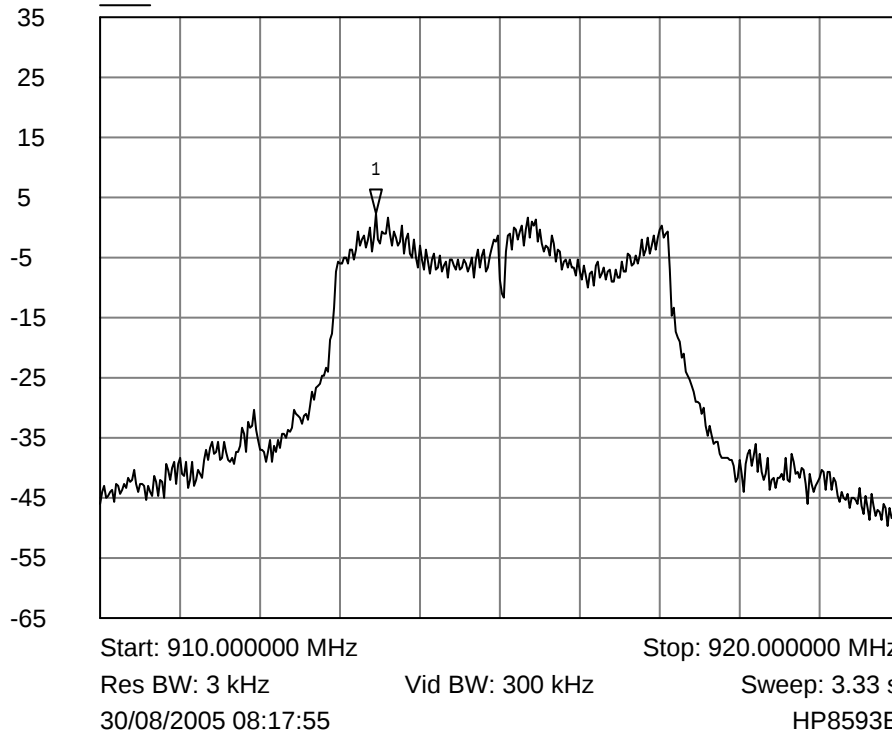
SoftPlot Measurement Presentation
Trace A



1 Trace A
▽ 905.328250 MHz
3.2200 dBm

Test Results Plot No 55
FCC 15.247d Power density TX-915MHz

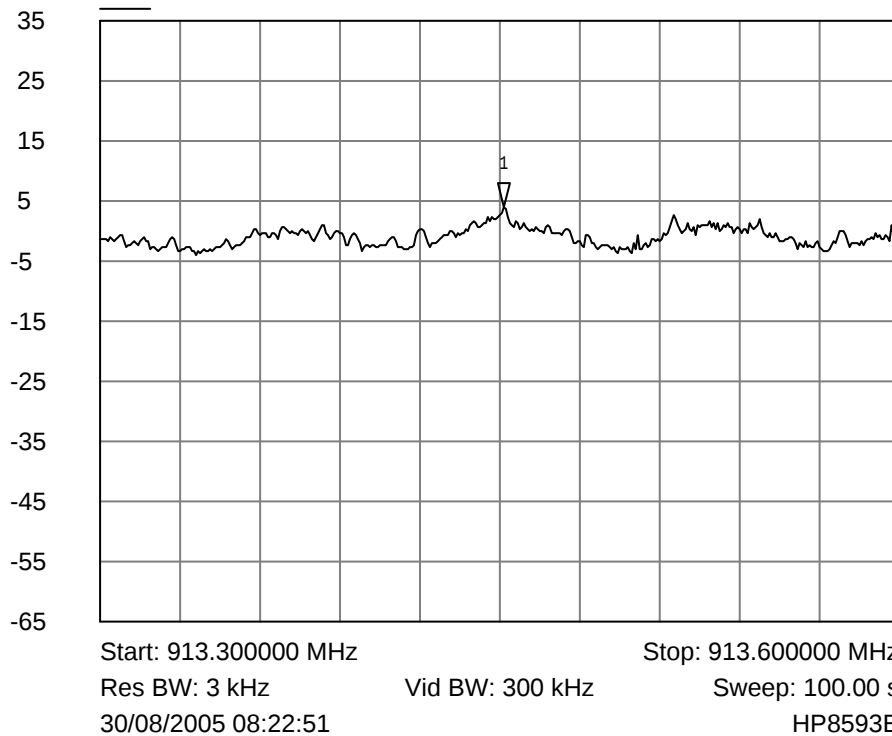
SoftPlot Measurement Presentation
Trace A



1 Trace A
▽ 913.450000 MHz
2.3300 dBm

Test Results Plot No 56
FCC 15.247d Power density TX-915MHz

SoftPlot Measurement Presentation
Trace A



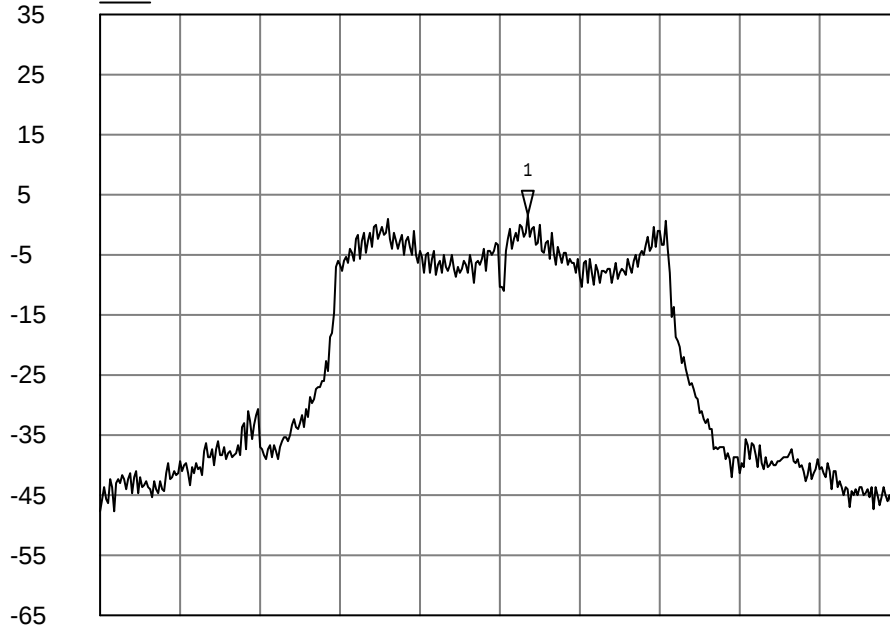
1 Trace A
▽ 913.451500 MHz
3.9300 dBm

Test Results Plot No 57

FCC 15.247d Power density TX-925MHz

SoftPlot Measurement Presentation

Trace A



1 Trace A
▽ 925.350000 MHz
1.8000 dBm

Start: 920.000000 MHz

Stop: 930.000000 MHz

Res BW: 3 kHz

Vid BW: 300 kHz

Sweep: 3.33 s

30/08/2005 08:12:26

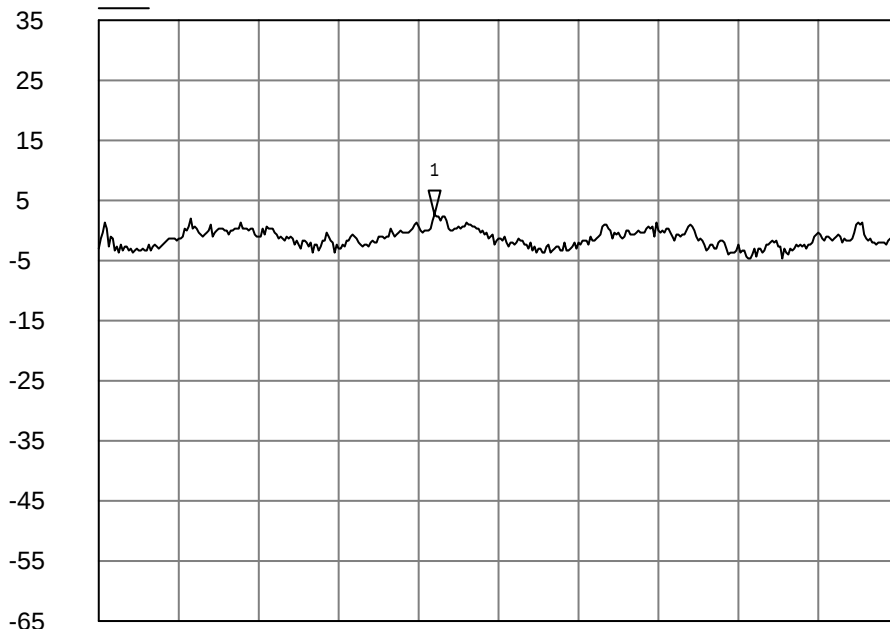
HP8593E

Test Results Plot No 58

FCC 15.247d Power density TX-925MHz

SoftPlot Measurement Presentation

Trace A



1 Trace A
▽ 925.326000 MHz
2.6400 dBm

Start: 925.200000 MHz

Stop: 925.500000 MHz

Res BW: 3 kHz

Vid BW: 300 kHz

Sweep: 100.00 s

30/08/2005 08:17:00

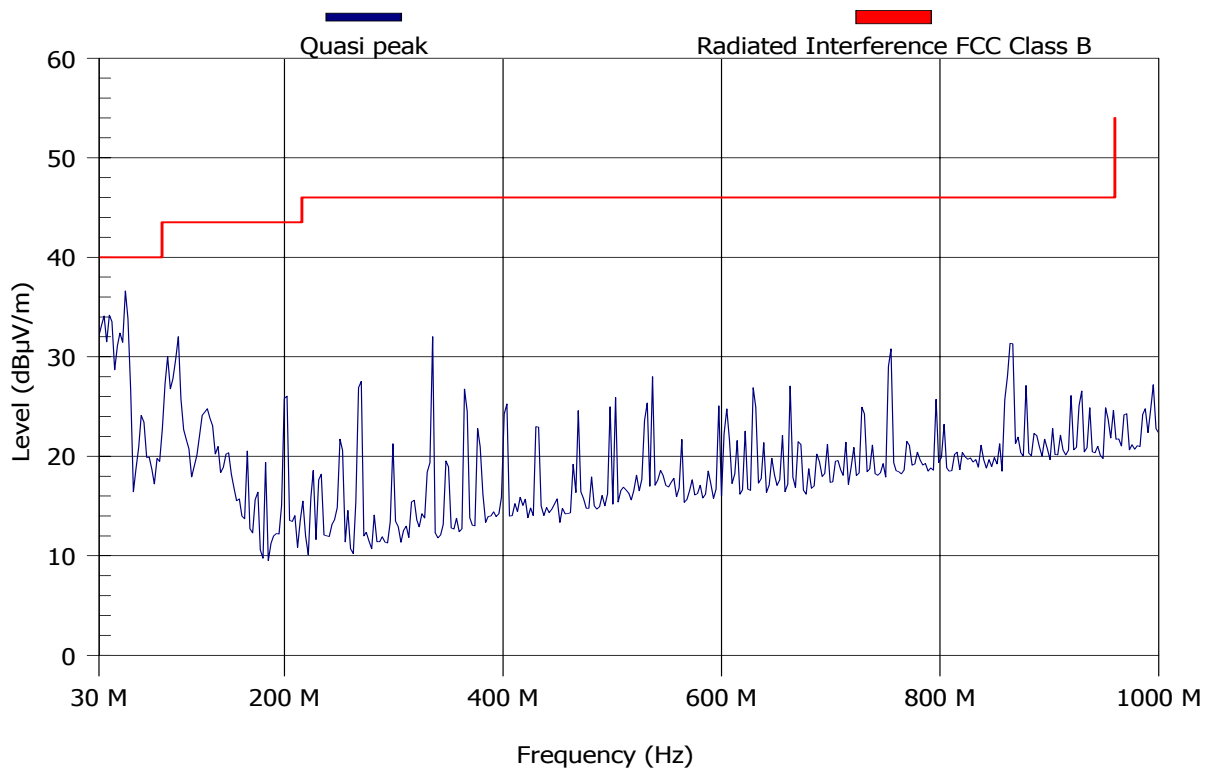
HP8593E

Test Results Plot No 59

FCC 30-1000MHz STBY

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	70 dB μ V
Date of Test:		RBW:	120 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	Frankonia BTA-L_A 3m	Sweep Time:	Auto: 202.08 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-5

TEST REMARKS:


MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

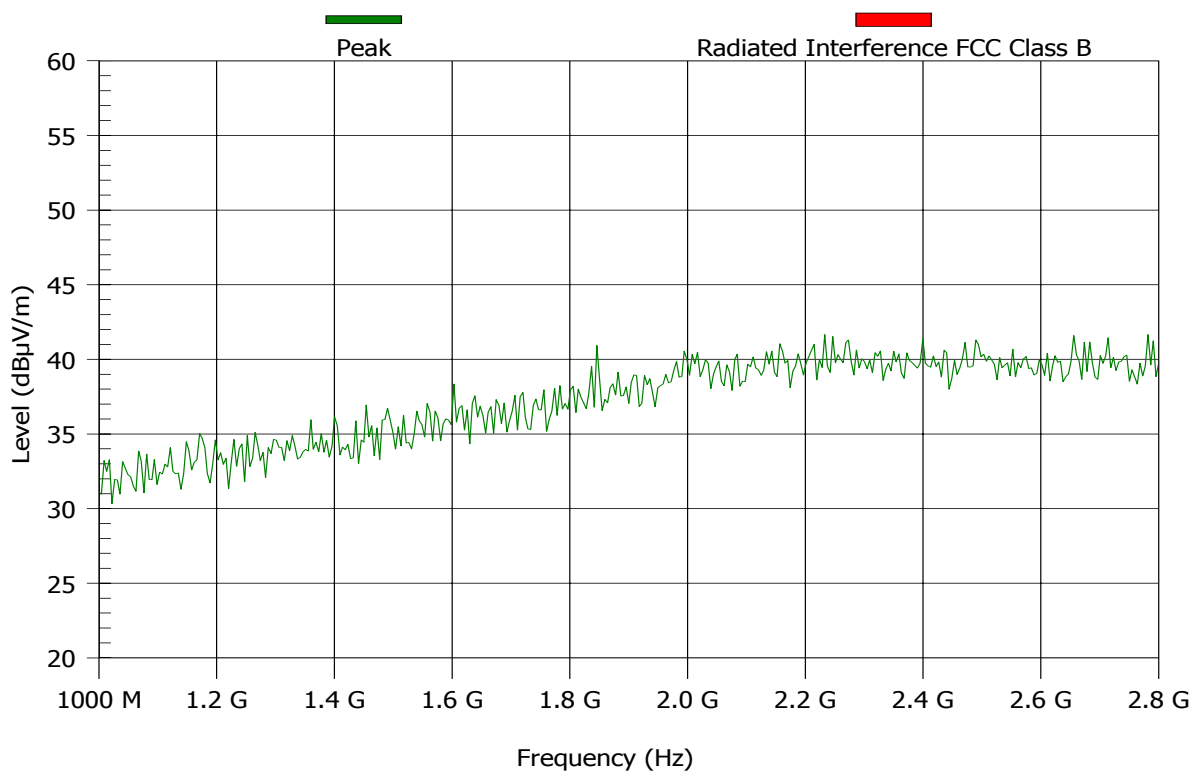
Frequency (MHz)	PK MaxHold (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V	
34.114	34.3	32.4	40	Pass	300	1.6	V
40.371	39.2	35.1	40	Pass	300	1.6	V
40.693	36	33.5	40	Pass	120	1.3	V

Test Results Plot No 60

FCC 1-2.8GHz stby

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 36 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:


MAXIMUM RESULT DEVIATION:

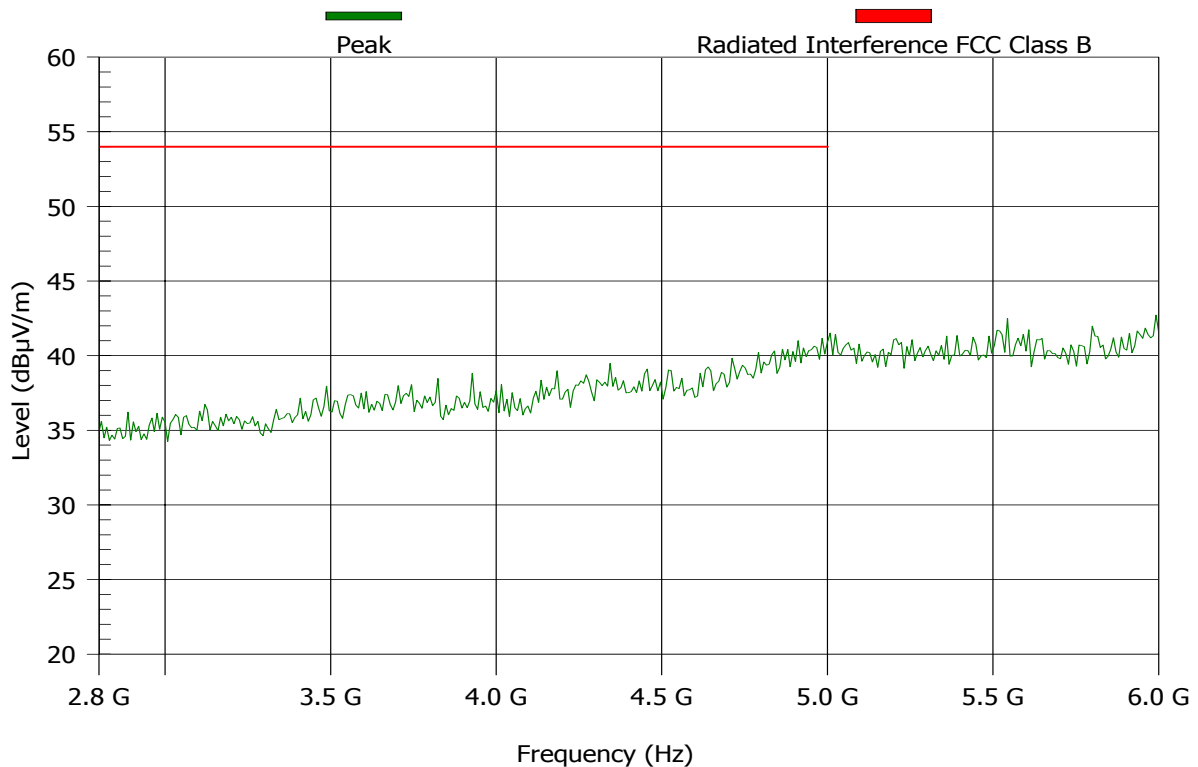
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

Test Results Plot No 61
FCC 2.8-6GHz stby

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 64 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	ELISRA AMP 2-6 GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

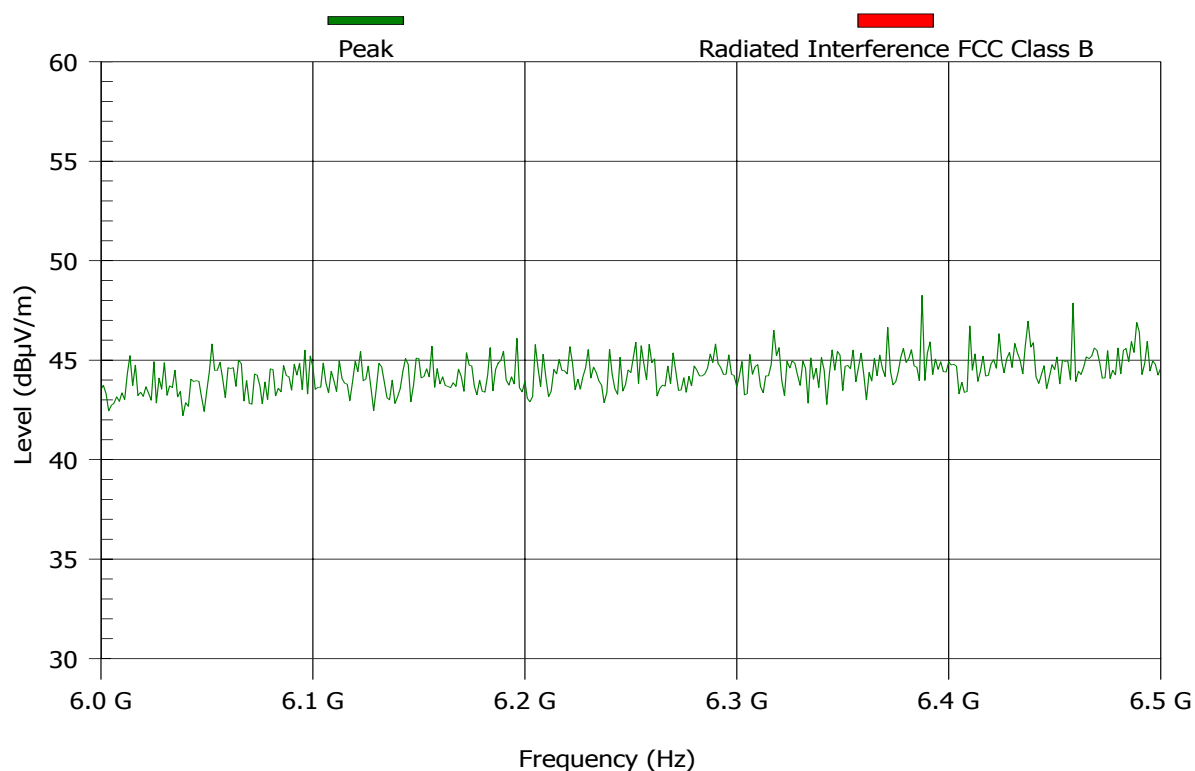
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 62

FCC 6-6.5GHz stby

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 20 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:


MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

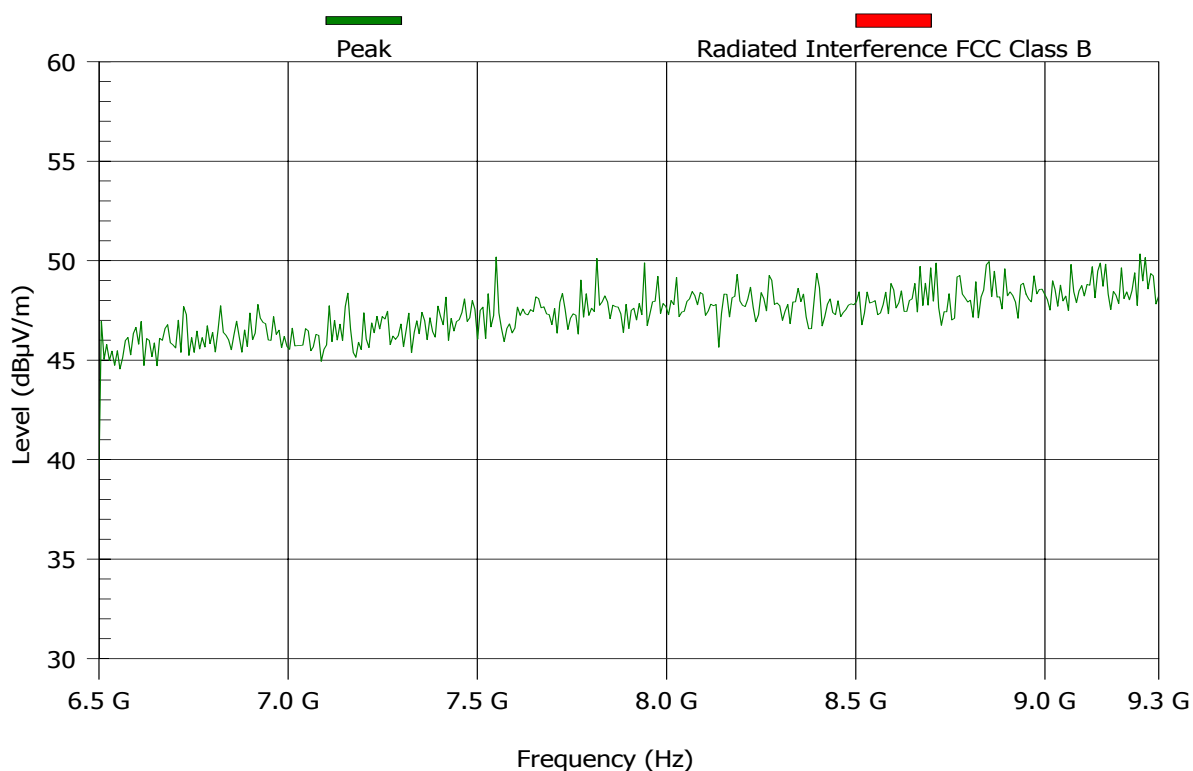
Nr	Frequency (MHz)	PK MaxHold (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
1	6387.5	46.7		0	1	V

Test Results Plot No 63

FCC 6.5-9.3GHz stby

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	90 dBμV
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	EMCO 3105 1-18GHz	Sweep Time:	Auto: 75.83 ms
Polarization:	Vertical	Pre Amplifier	ELISRA AMP 6-18 GHz

TEST REMARKS:


MAXIMUM RESULT DEVIATION:

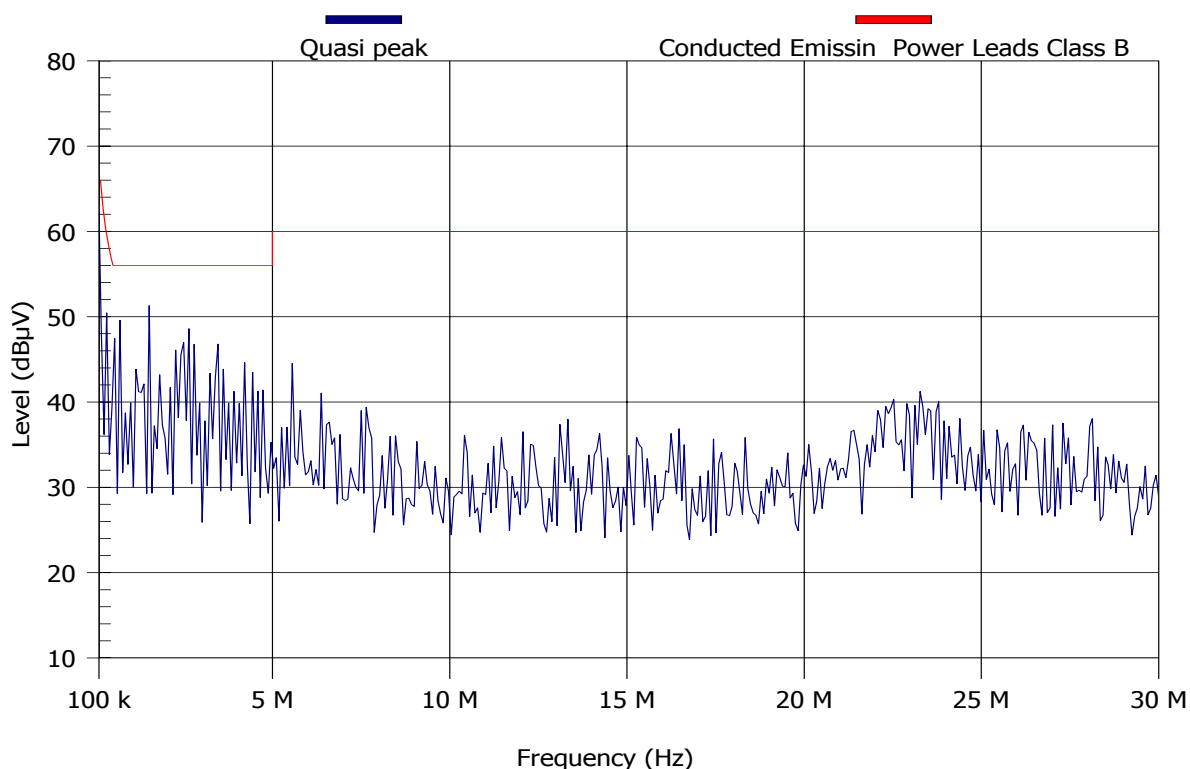
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Frequency (MHz)	PK MaxHold (dBμV/m)	Result	Angle (degrees)	Height (m)	H/V
7587.333	49.3		0	1	V
7628.556	49.2		355	1	V
7785.926	49.9		5	1	V
7796.296	49.4		355	1	V
7934.222	50.1		355	1	V
7988.667	49.9		0	1	V

Test Results Plot No 64
CE FCC 15.207 150K-30MHz NEUTRAL

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21cccf0	Ref. Level:	80 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	No Description Available	Sweep Time:	Auto: 1.11 s
Polarization:	6 polarization	Pre Amplifier	Attenuator 20db

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

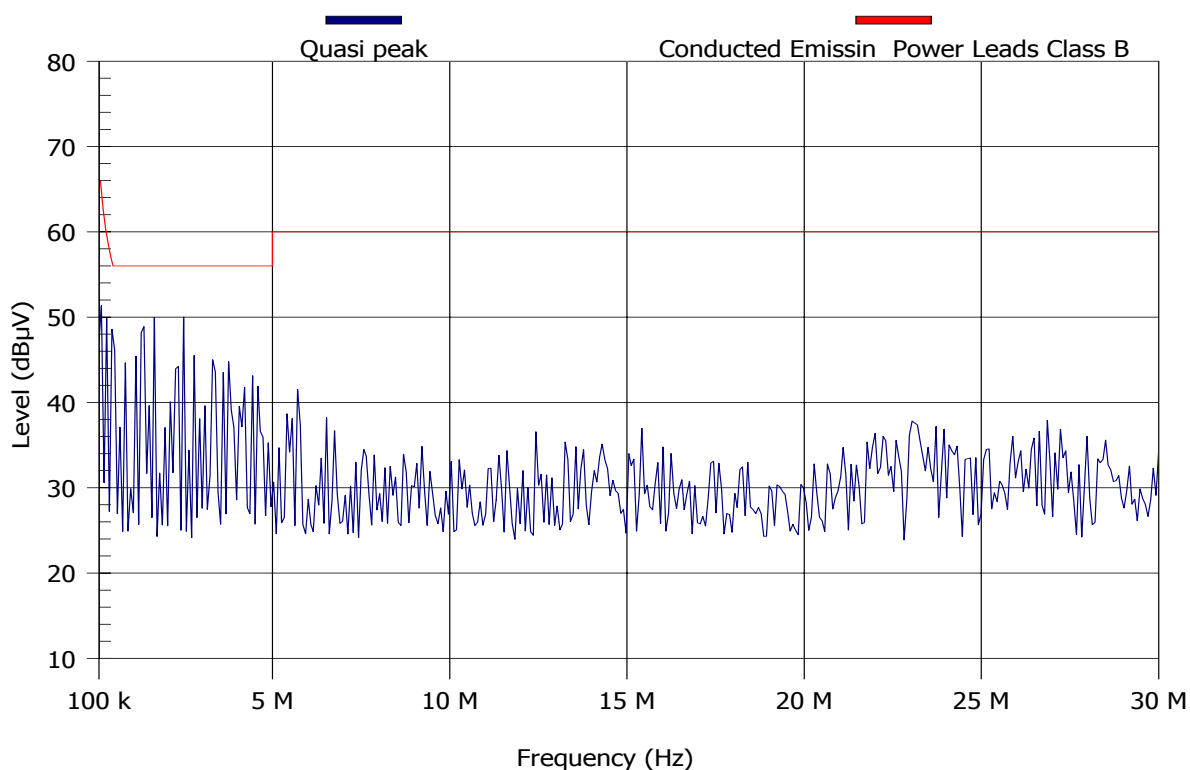
Frequency (MHz)	PK MaxHold (dB μ V)	QP Limit (dB μ V)	Result	Line
0.652	50.5	50.8	56	Pass Line 1
1.456	52.6	51.5	56	Pass Line 1

Test Results Plot No 65

CE FCC 15.207 150K-30MHz PHASE

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 900Q RSU	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccef0	Ref. Level:	80 dB μ V
Date of Test:		RBW:	9 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	No Description Available	Sweep Time:	Auto: 1.11 s
Polarization:	1 polarization	Pre Amplifier	Attenuator 20db

TEST REMARKS:


MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Frequency (MHz)	PK MaxHold (dB μ V)	QP Limit (dB μ V)	Result	Line
1.462	51.2	50.9	56	Pass Line 1

11 CORRECTION FACTORS

Correction Factor for **line impedance stabilization network** model DC-AC-20A-01

Frequency (KHz)	Correction Factor (db)
10	4.4
20	1.6
30	0.8
40	0.4
50	0.3
60	0.25
70	0.15
100	0.1
200	0

DOUBLE RIDGE HORN Model 3105 S/N:0050C21CCEFO-C3-3D 2052 Antenna Factor

Frequency (MHz)	Ant. Factor (db / m)
1000	24.4
2000	26.2
3000	30
4000	32.6
5000	33.8
6000	34.9
7000	36.2
8000	36.9
900Q RSU0	37.8
10000	38.4
11000	39.1
12000	40.1
13000	42
14000	40.6
15000	39.3
16000	40.3

Antenna Factor for broadband antenna model BTA-L S/N:0050C21CCEFO-C3-3D
980045L

Frequency (KHz)	Ant. Factor (db / m)	Frequency (KHz)	Ant. Factor (db / m)
30	19.05	300	14.35
32	19.13	310	14.28
34	18.74	320	14.43
36	18.03	330	14.13
38	16.61	340	14.48
40	15.44	350	14.89
45	13.66	360	15.12
50	11.52	370	15.70
55	10.04	380	15.78
60	7.68	390	16.22
65	6.11	400	16,45
70	5.47	425	16.99
75	5.98	450	17.59
80	6.86	475	17.28
85	7.20	500	17.69
90	7.47	525	18.91
95	7.23	550	19.06
100	7.20	575	18.20
105	7.30	600	18.87
110	7.37	625	18.81
115	7.02	650	19.64
120	6.82	675	19.92
125	7.05	700	20.66
130	7.83	725	21.08
135	9.61	750	21.53
140	7.93	775	22.39
145	8.03	800	22.66
150	8.29	825	22.87
160	8.72	850	22.65
170	9.18	875	23.12
180	9.05	900Q RSU	23.70
190	9.80	925	23.40
200	10.61	950	23.43
210	10.34	975	23.30
220	11.21	1000	24.02
230	11.69		
240	11.62		
250	11.85		
260	12.45		
270	13.16		
280	13.48		
290	13.74		

12 Abbreviations and Acronyms

The following abbreviations and acronyms are applicable in this document

BW	Bandwidth
Db	Decibel
EMI	Electromagnetic interference
E.U.T	Equipment under test
LISN	Line impedance stabilization network
RBW	Resolution band width
S/N	Serial number
VBW	Video bandwidth

a.