

REV	Δ	Description	Sheet Effected	Date	Drawn	Checked
A				09.02.06	D.Lanuel	S.Cohen

EMC Laboratory

Ga-ofdm-58

Manufactured by
WaveIP Ltd.

EMC Test Report

According FCC Part 15 Requirements

FEB 2006

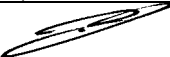
	Function/Title	Name	Signature	Date
Prepared b	Test Engineer	D.Lanuel		09.02.06
Checked by	Test Engineer	D.Lanuel		09.02.06
Approved by	EMC Lab. Manager	S.Cohen		09.02.06

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1 GENERAL Information

a. Description of equipment under test

Equipment Under Test:	Ga-ofdm-58
FCCID:	QQ2-GAOFDM58
Manufacturer:	WaveIP.
Serial Numbers:	00-50C21CCf24
Mode of Operation:	TX MODE
Operating frequency:	5.725 – 5.850MHZ
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:	AMIT ARAZI
Following applicant's personnel:	AMIT ARAZI

c. Test Performance:

Date of reception for testing:	31.08.05
Dates of testing	31.08.05 – 08.01.06
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.

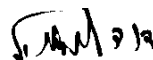
TADIRAN EMC Laboratory has completed testing of E.U.T in accordance with the requirements of the FCC 15.247

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)	31/01/06	4	PASS
Max peak output power	15.247 (b) (3)	31/01/06	5	PASS
Out of band Conducted emission	15.247 (c)	31/01/06	6	PASS
Spurious emission radiated In Restricted band	15.209 15.205(a, c)	31/01/06	7	PASS
Peak power spectral density	15.247 (d)	31/01/06	8	PASS
Unintentional radiated emission	15.109	31/01/06	9	PASS
Conducted emission	15.207	31/01/06	10	pass

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

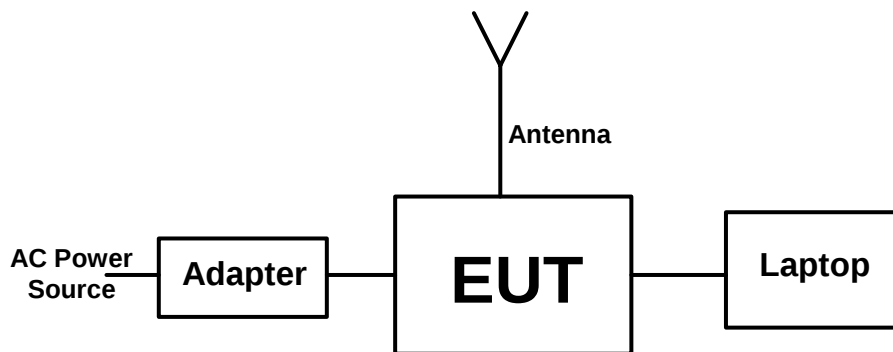
Model Number(s): Ga-ofdm-58

Brief Description (Purpose of Device):

GigAccess™ 58 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 sector is a stand-alone communication network operating on a star topology with a gateway to the WAN, which allows two-way communication between the SUs and the WAN via the AU. A Sector may be divided into sub sectors, which are consecutive to the SUs within the sector.

b. E.U.T Test Configuration

EUT test configuration is shown in figure bellow



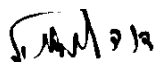
c. E.U.T Mode of Operation description

- (1) Transmit 30dbm-5737MHz
- (2) Transmit 30dbm-5787MHz
- (3) Transmit 30dbm-5837MHz
- (4) Standby

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

E.U.T: Ga-ofdm-58 S/N: 050C21CCF24
Test Method: ANSI 63.4
Date: 31/01/06
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa

Testing Engineer: D.Lanuel



Date 07/02/06

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
5725 - 5850	≥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
5737	16.5	≥500KHz	Plot-1	PASS
5787	16.5		Plot-2	PASS
5837	16.2		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	31/01/07
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

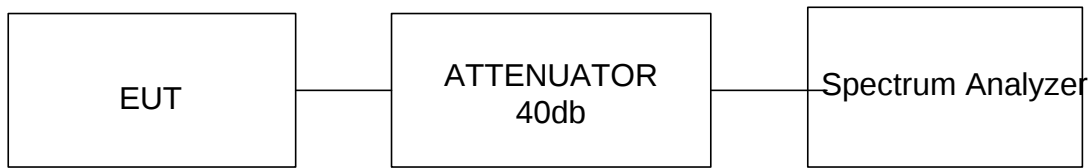
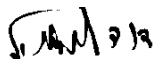


Figure 4e Test Setup for Occupied Bandwidth test

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

E.U.T: Ga-ofdm-58 S/N: 050C21CCF24
Test Method: ANSI 63.4
Date: 31/01/06
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa
Test Setup: Figure 5e

Testing Engineer: D.Lanuel



Date 07/02/06

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)
5725 - 5850	30 (1W)

c. Test Results

Table 5.c Peak output power Result

Frequency (MHz)	Peak Result	peak Limits	Margined (dB)	Plots Result	Pass/Fail
5.737	24.92*	30dbm (1W)	5.08	Plot-4	PASS
5.787	25.36*		4.64	Plot-5	PASS
5.837	25.32*		4.68	Plot-6	PASS

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

(1) 5737MHz peak power calculation –based on plot-4

- a) *BW correction factor is: $10\log 26\text{db BW of emission/analyzer RBW}$*
- b) *$10\log 28/1=14.47$*
- c) *Output power: $10.45+14.47=24.92$*

(2) 5787MHz peak power calculation –based on plot-8

- a) *BW correction factor is: $10\log 26\text{db BW of emission/analyzer RBW}$*
- b) *$10\log 26.8/1=14.28$*
- c) *Output power: $11.08+14.28=25.36$*

(3) 5837MHz peak power calculation –based on plot-9

- a) *BW correction factor is: $10\log 26\text{db BW of emission/analyzer RBW}$*
- b) *$10\log 26/1=14.15$*
- c) *Output power: $11.17+.14.15=25.32$*

d. Test Instrumentation and Equipment

Table 5.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/07
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 1MHz and the RBW of transmitter is 16MHz.
- (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 26db*
 - 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: $10\log 26\text{db BW of emission} / \text{analyzer RBW}$

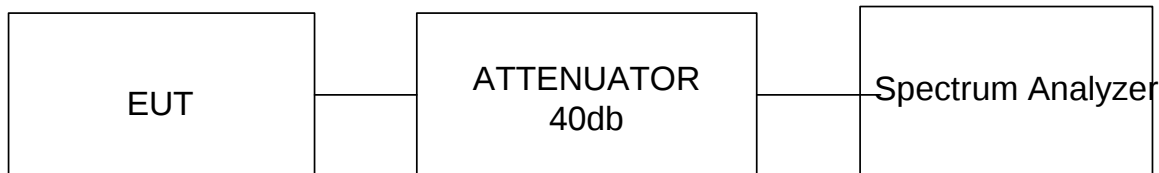


Figure 5e Test Setup for Peak output power

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

E.U.T: Ga-ofdm-58 S/N: 050C21CCF24
 Test Method: ANSI 63.4
 Date: 31/08/05
 Relative Humidity: 26%
 Ambient Temperature: 22c
 Air Pressure: 1047hpa
 Test Setup: Figure 6.e

Testing Engineer: D.Lanuel



Date 07/02/06

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 – 40000	4dbm (see plots 7, 8)	-16dbm

c. Test Results

Table 6.c Results For 15.247(c)

Operating Frequency (MHz)	Frequency range (MHz)	Results (dBμV / m)	Plots Result
5787MHz	0.009 – 40000	All emission were found background emission	7 - 15

d. **Test Instrumentation and Equipment**

Table 6.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/07
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.

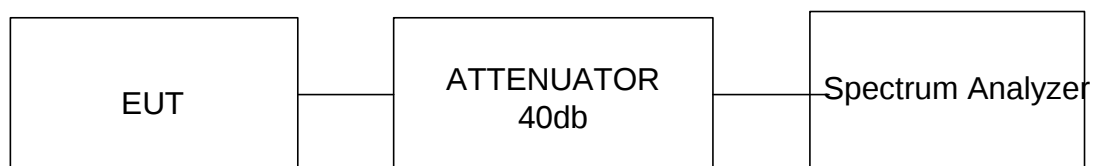


Figure 6e Test Setup for Conducted emission

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

E.U.T: Ga-ofdm-58 S/N: 050C21CCF24
Test Method: ANSI 63.4
Date: 03/01/06
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa
Test Setup: Figure 7.e – 7.e.6

Testing Engineer: D.Lanuel



Date 10/01/06

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
22dbi antenna Integrated	5737MHz	9KHz-40GHz	16 - 33	PASS
	5787MHz		34 - 51	PASS
	5837MHz		52 - 69	PASS

(2) Final Test Results

Table 7c2 Six Highest

Freq. (MHz)	QP Reading (dbμV/m)	QP Limit (dbμV/m)	Margin (db)	Compliance PASS/FAIL	Plots
37.537	33	40	-7	PASS	20
124.999	40.1	43.5	-3.4	PASS	21
37.801	36.2	40	-3.8	PASS	38
125.027	42.1	43.5	-1.4	PASS	39
37.519	31.4	40	-8.6	PASS	56
125.027	42.6	43.5	-0.9	PASS	57

d. Test Instrumentation and Equipment

Table 7.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/07
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	14.01.07
Low Noise Amplifier (1-4GHz)	AMM 003N	AVANTEK	14.01.07
Low Noise Amplifier (2-6GHz)	MWA-02060	ELISRA	14.01.07
Low Noise Amplifier (6-18GHz)	MWA-06180	ELISRA	14.01.07
Low pass filter 100MHz	LD110	FSY	17.04.06
Low pass filter 700MHz	360A	HP	18.05.06
Band reject filter 902 – 928MHz	BRF 900	TADIRAN	20.05.06
Attenuator 20db	2525-20	ATW	18.03.06
Attenuator 3db	AN9146	WEINSCHTEL	23.06.06
Attenuator 6db	AP2542	WEINSCHTEL	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

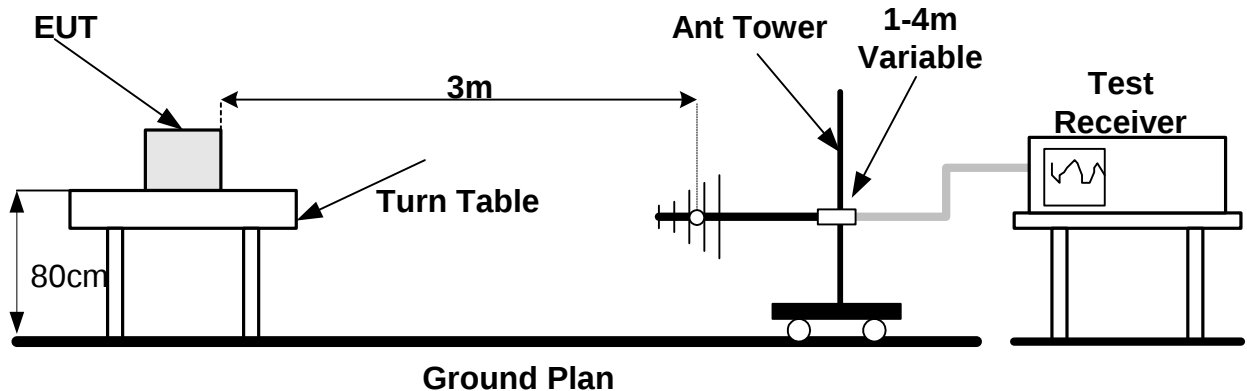


Figure 7e Radiated Emission Set up

8 Peak power spectral density of DSSS according 15.247d

E.U.T: Ga-ofdm-58 S/N: 050C21CCF24
Test Method: ANSI 63.4
Date: 31/01/06
Relative Humidity: 26%
Ambient Temperature: 22c
Air Pressure: 1047hpa
Test Setup: Figure 8.e

Testing Engineer: D.Lanuel



Date 07/02/06

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
5737	-8.62	70, 71
5787	-7.57	72, 73
5837	-8.51	74, 75

d. Test Instrumentation and Equipment

Table 8.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/07
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.

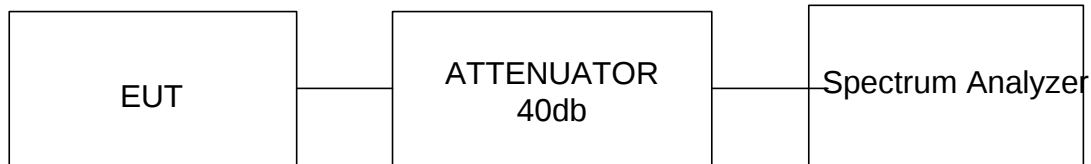


Figure 8e Test Setup for peak power spectral density

9 Unintentional radiated emission test according to 15.109

E.U.T: Ga-ofdm-58 S/N: 050C21CCF24
 Test Method: ANSI 63.4
 Date: 31/08/05
 Relative Humidity: 26%
 Ambient Temperature: 22c
 Air Pressure: 1047hpa

Testing Engineer: D.Lanuel



Date 07/02/06

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 below.

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
22dbi antenna Integrated	Both	30-1000	76	PASS
		1-2.8GHz	77	PASS
		2.8 – 6GHz	78	PASS
		6GHz – 10GHz	79	PASS
		10GHz – 18GHz	80	PASS
		18GHz – 40GHz	-	PASS

Table 9c1 Six Highest 15.109

Freq. (MHz)	QP Reading (db μ V/m)	QP Limit (db μ V/m)	Margin (db)	Compliance PASS/FAIL	Plots
30	28.8	40	-11.2	PASS	76
44.55	27.4	40	-12.6	PASS	

d. Test Instrumentation and Equipment

Table 9.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/07
Double Ridge Guide Antenna(1-18GHz)	3105	EMCO	24.04.06
Broadband Antenna(30-1000MHz)	BTA-L	FRANKONIA	10.04.07
Low Noise Amplifier (0-1GHz)	AM-1300-N	MITEQ	14.01.07
Low Noise Amplifier (1-4GHz)	SMC-09	MITEQ	14.01.07
Low Noise Amplifier (2-6GHz)	SMC-09	MITEQ	14.01.07
Low Noise Amplifier (6-10GHz)	SMC-09	MITEQ	14.01.07

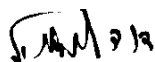
e. Procedure

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-58 S/N: 050C21CCF24-C3-3D
 Test Method: ANSI 63.4
 Date: 31/01/06
 Relative Humidity: 26%
 Ambient Temperature: 22c
 Air Pressure: 1047hpa
 Test Setup: Figure CE-2

Testing Engineer: D.Lanuel



Date 07/02/06

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 73,74

Table 10.c Test results

Frequency Range (MHz)	Tested Line	Plots Results	PASS/ FAIL
0.15 - 30	PHASE	81	PASS
0.15 - 30	NEUTRAL	82	PASS

d. **Test Instrumentation and Equipment**

Table 10.d Test Instrumentation and Equipment

Item	Model	Manufacturer	Next Date Calibration
Spectrum Analyzer	8593E	HP	31/01/07
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**

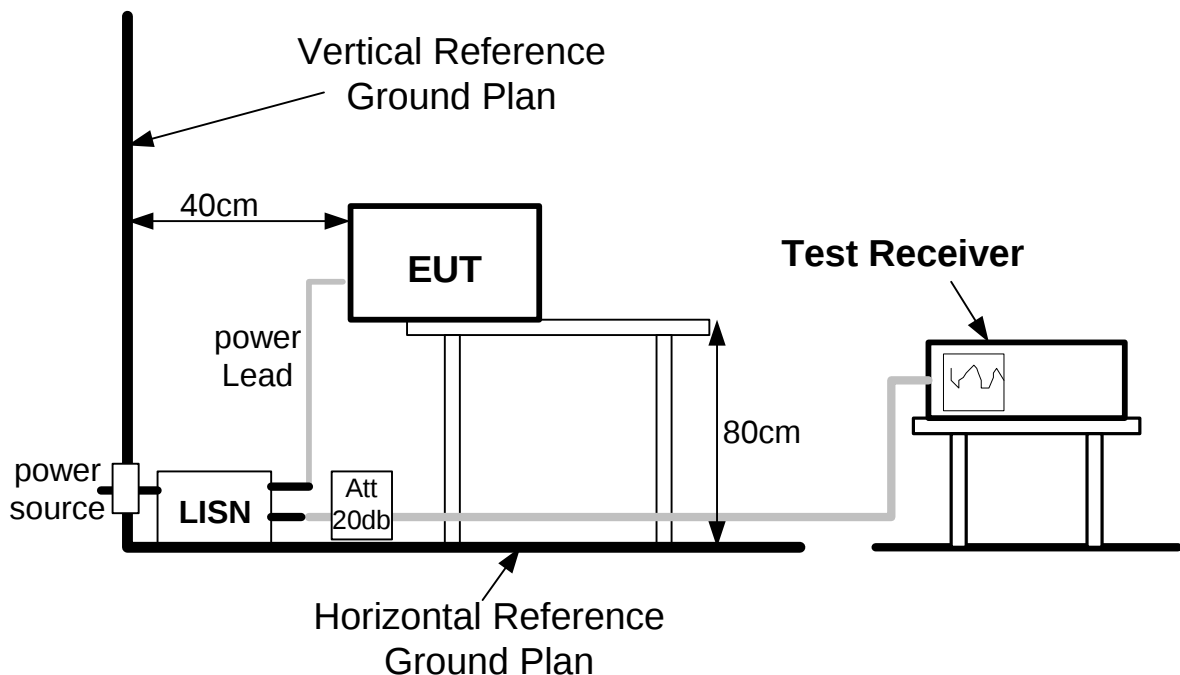


Figure- 1 Conducted emission Test Configuration

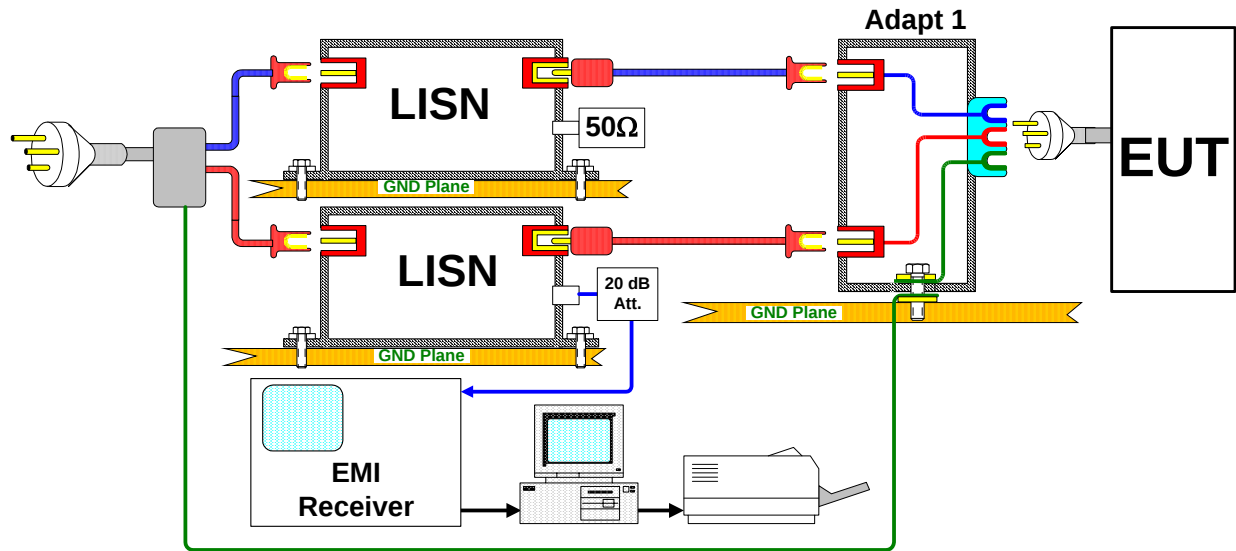
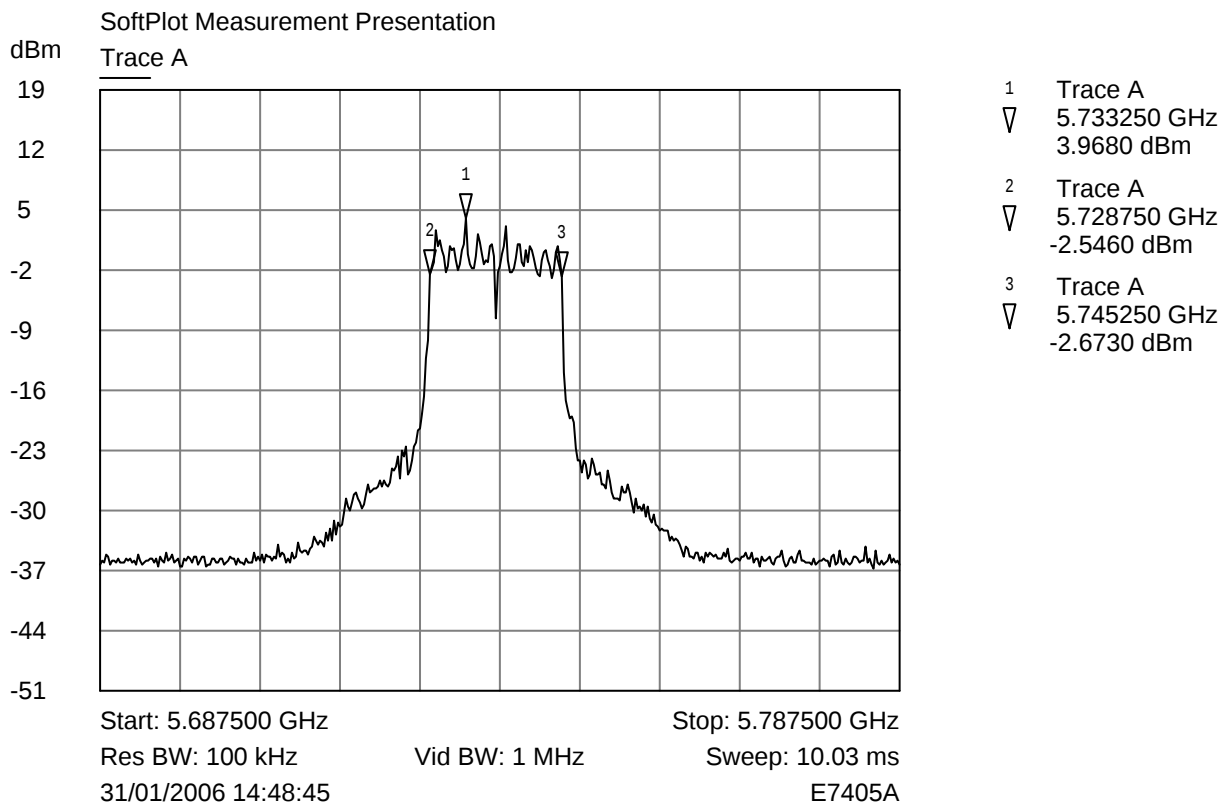


Figure- 2 Conducted emission Test setup

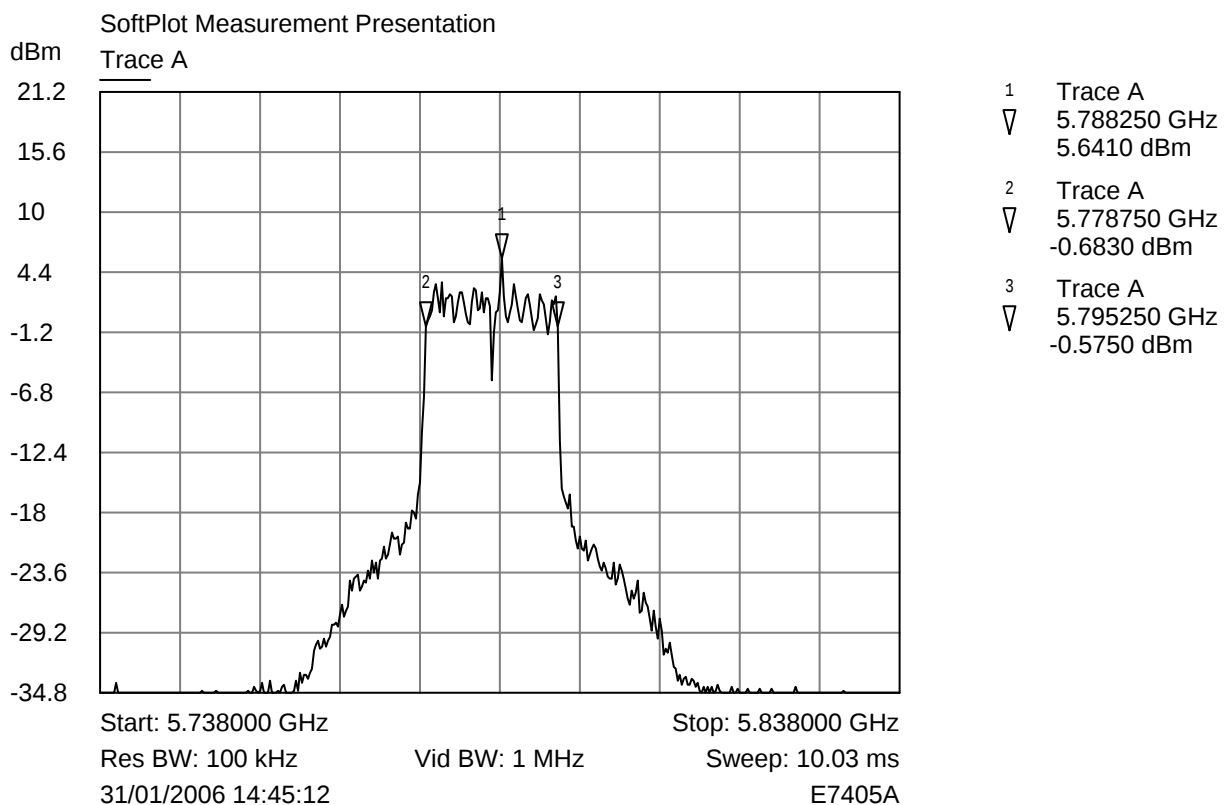
11 Plots

a. Occupied bandwidth plots 1-3

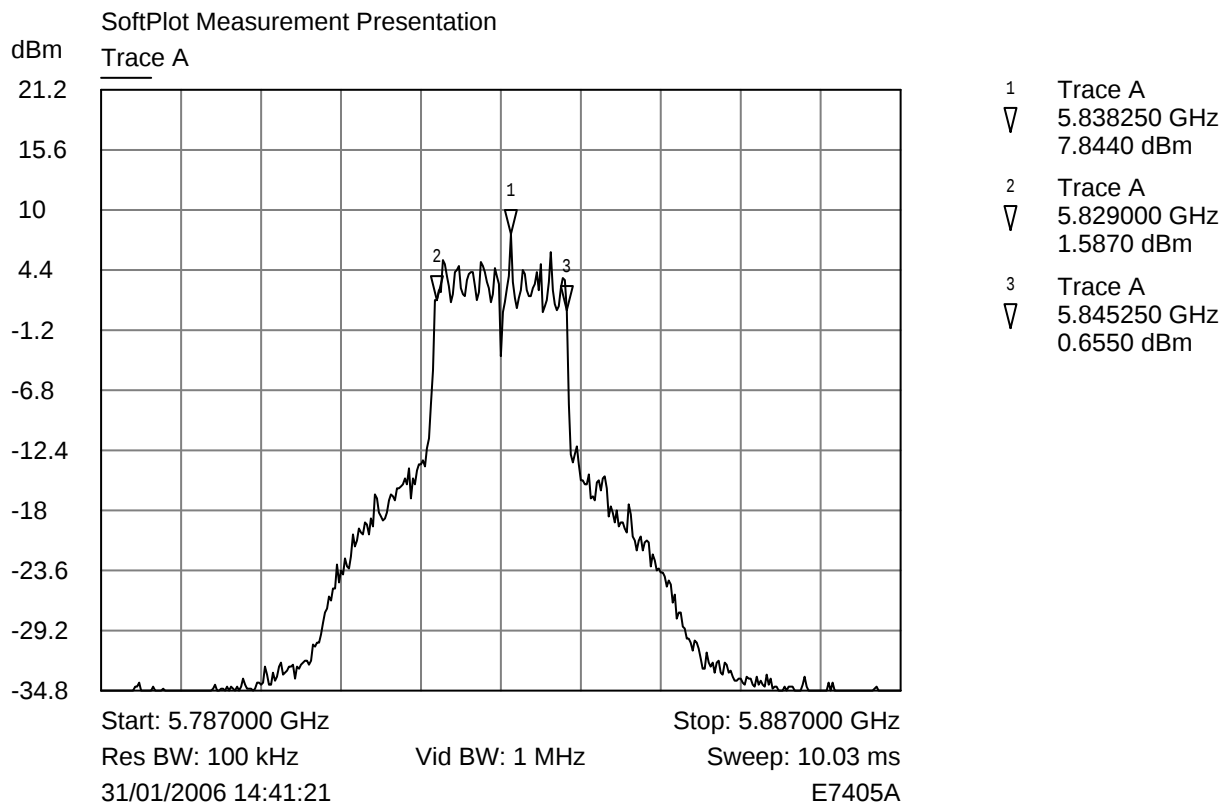
Test Results Plot No 1



Test Results Plot No 2



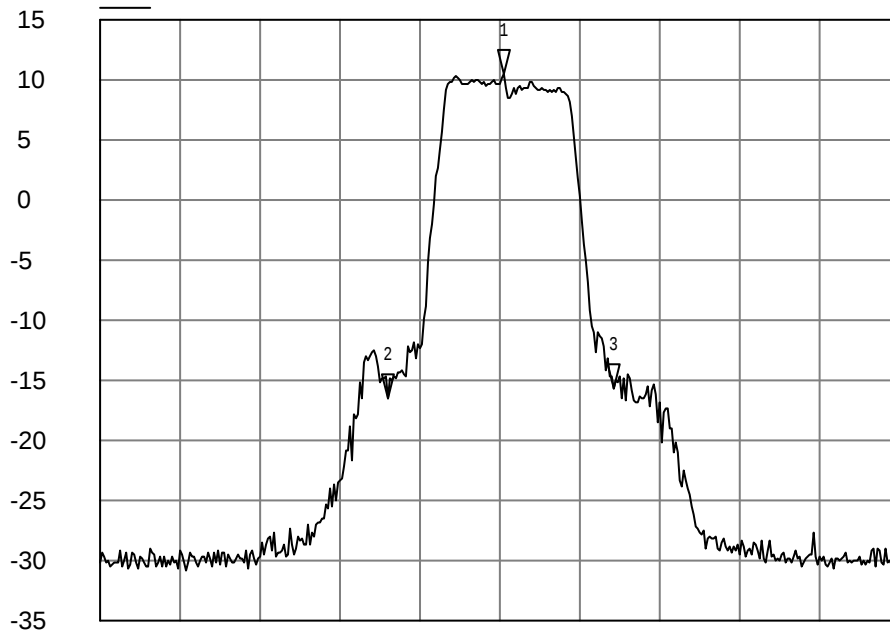
Test Results Plot No 3



b. Maximum peak output power plots 4-6

Test Results Plot No 4

SoftPlot Measurement Presentation
Trace A

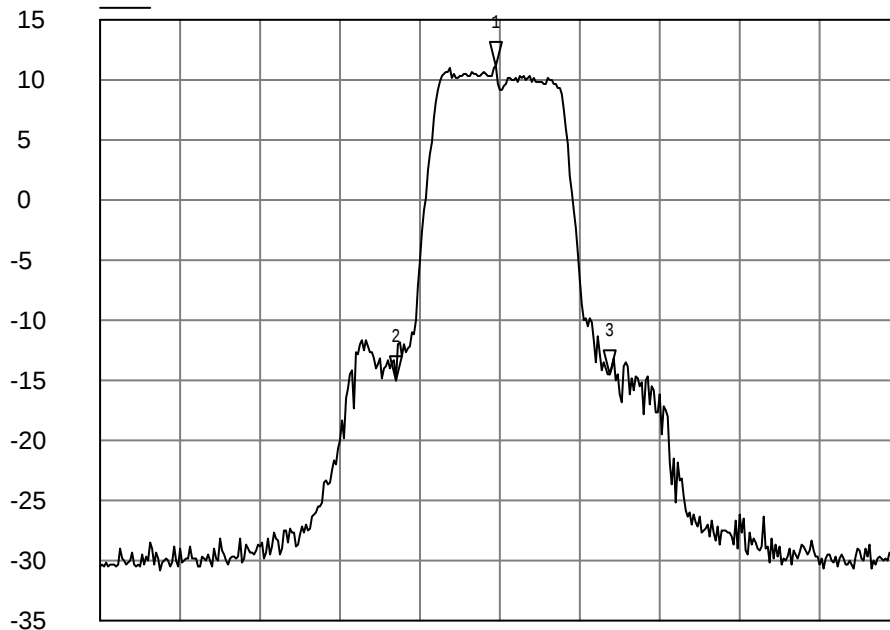


- 1 Trace A
▽ 5.736550 GHz
10.4520 dBm
- 2 Trace A
▽ 5.722050 GHz
-16.4930 dBm
- 3 Trace A
▽ 5.750300 GHz
-15.6470 dBm

Start: 5.686050 GHz Stop: 5.786050 GHz
Res BW: 1 MHz Vid BW: 3 MHz Sweep: 4.00 ms
31/01/2006 12:19:51 E7405A

Test Results Plot No 5

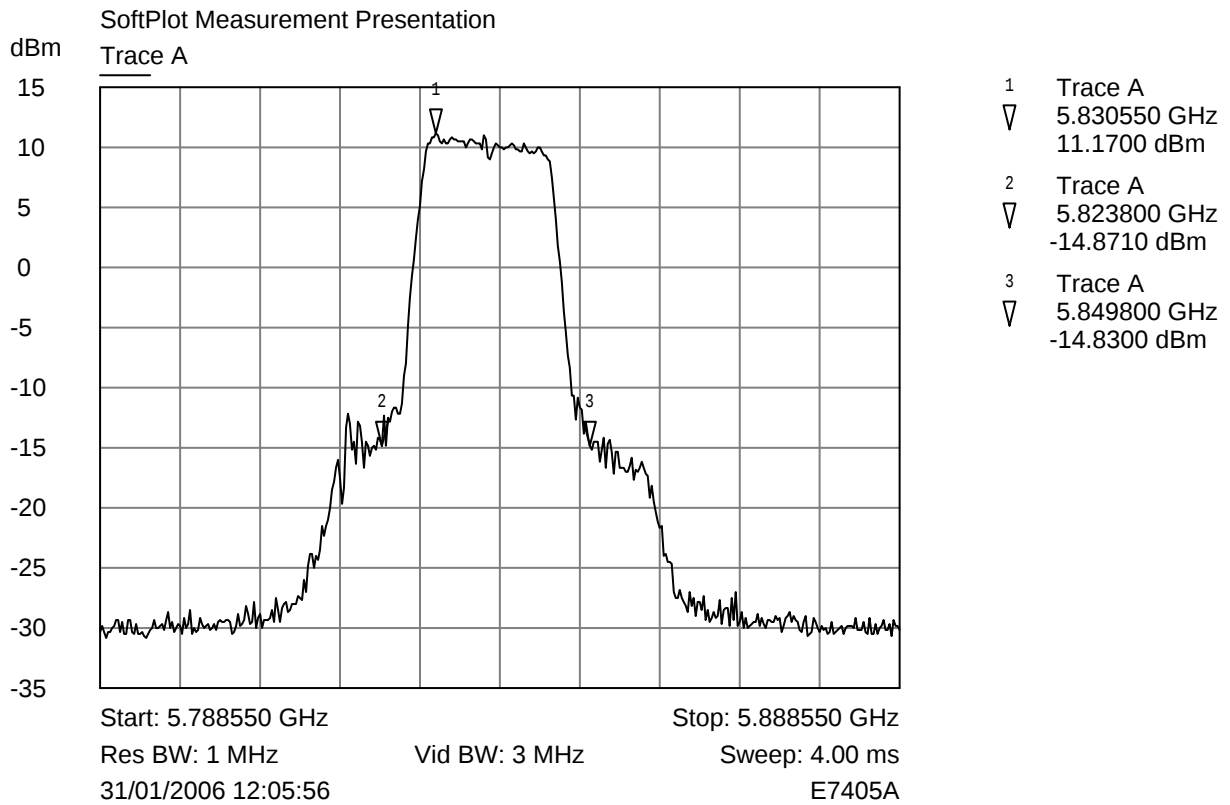
SoftPlot Measurement Presentation
Trace A



- 1 Trace A
▽ 5.786550 GHz
11.0890 dBm
- 2 Trace A
▽ 5.774050 GHz
-14.9790 dBm
- 3 Trace A
▽ 5.800800 GHz
-14.4660 dBm

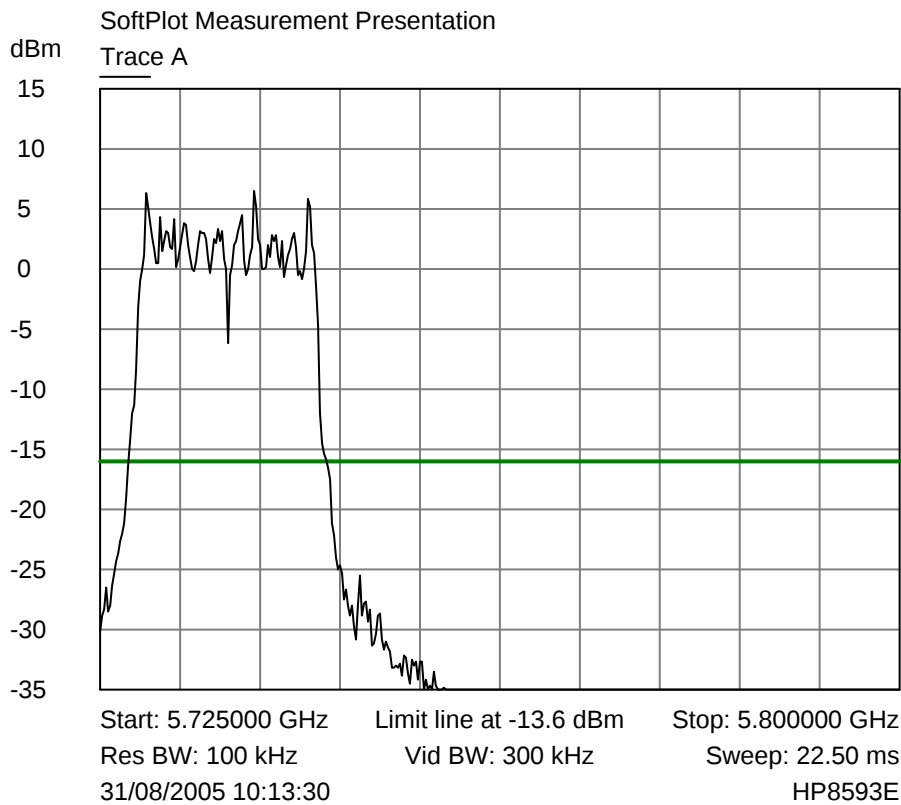
Start: 5.737050 GHz Stop: 5.837050 GHz
Res BW: 1 MHz Vid BW: 3 MHz Sweep: 4.00 ms
31/01/2006 12:14:18 E7405A

Test Results Plot No 6

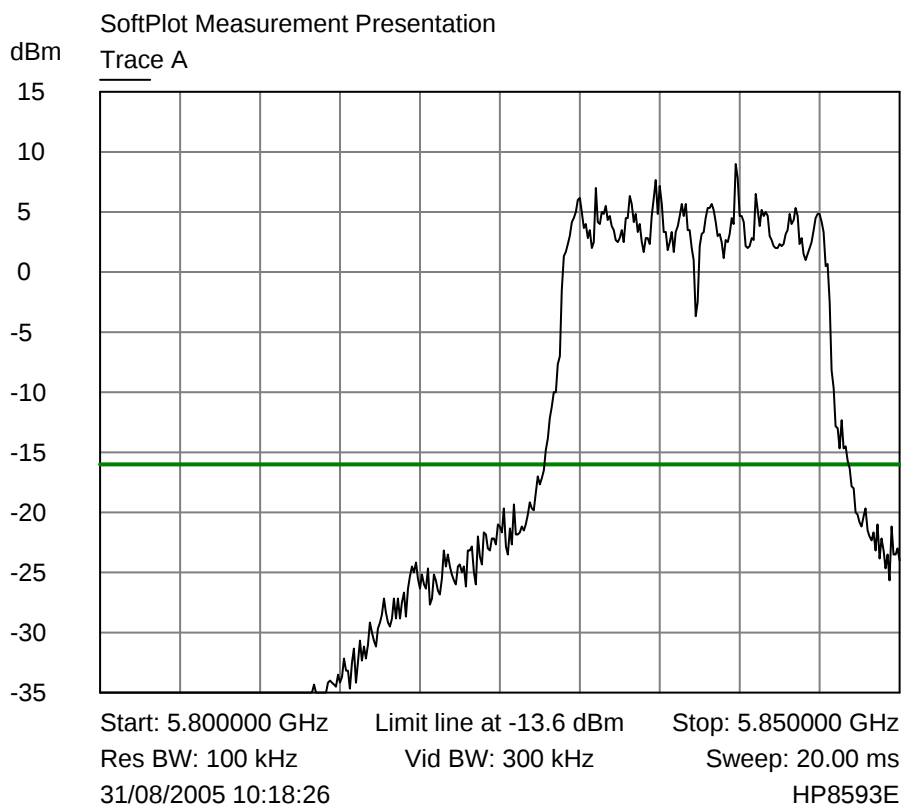


c. Out of band emission 7 – 15

Test Results Plot No 7



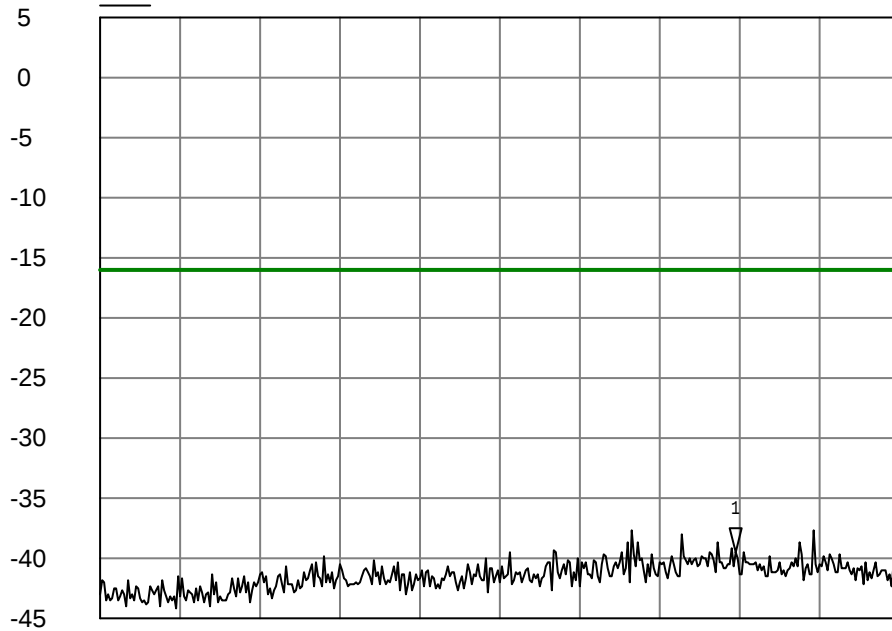
Test Results Plot No 8



Test Results Plot No 9

SoftPlot Measurement Presentation

Trace A



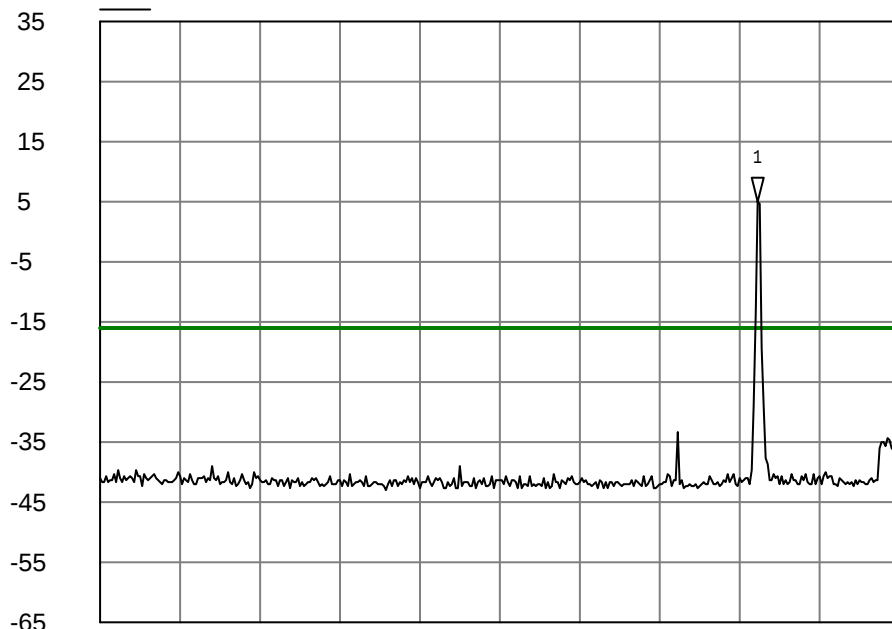
1 Trace A
2.232150 GHz
-39.5500 dBm

Start: 30.000000 MHz Limit line at -13.6 dBm Stop: 2.800000 GHz
Res BW: 100 kHz Vid BW: 300 kHz Sweep: 831.00 ms
31/08/2005 10:22:08 HP8593E

Test Results Plot No 10

SoftPlot Measurement Presentation

Trace A



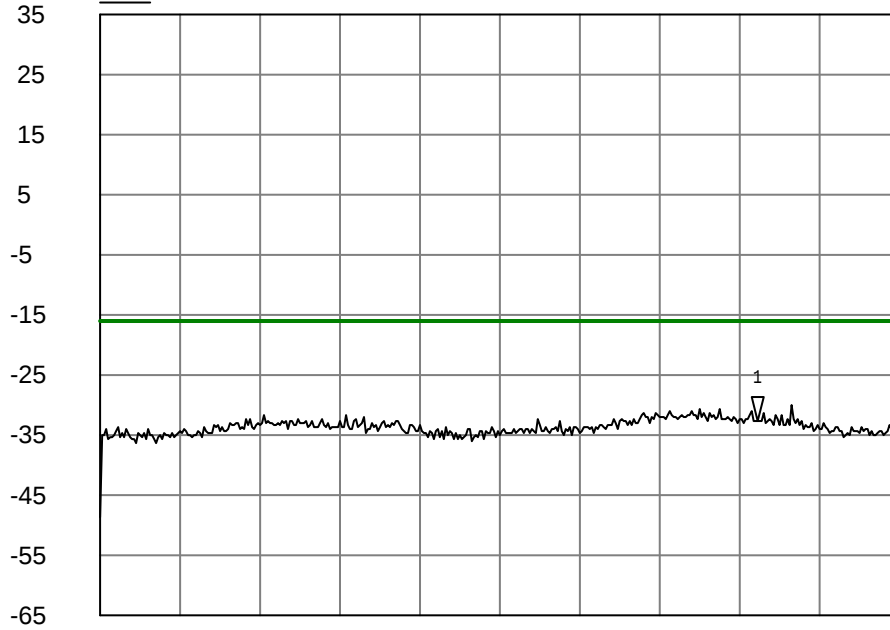
1 Trace A
5.843250 GHz
4.8700 dBm

Start: 2.800000 GHz Limit line at -13.6 dBm Stop: 6.500000 GHz
Res BW: 100 kHz Vid BW: 300 kHz Sweep: 1.11 s
31/08/2005 10:29:35 HP8593E

Test Results Plot No 11

SoftPlot Measurement Presentation

Trace A



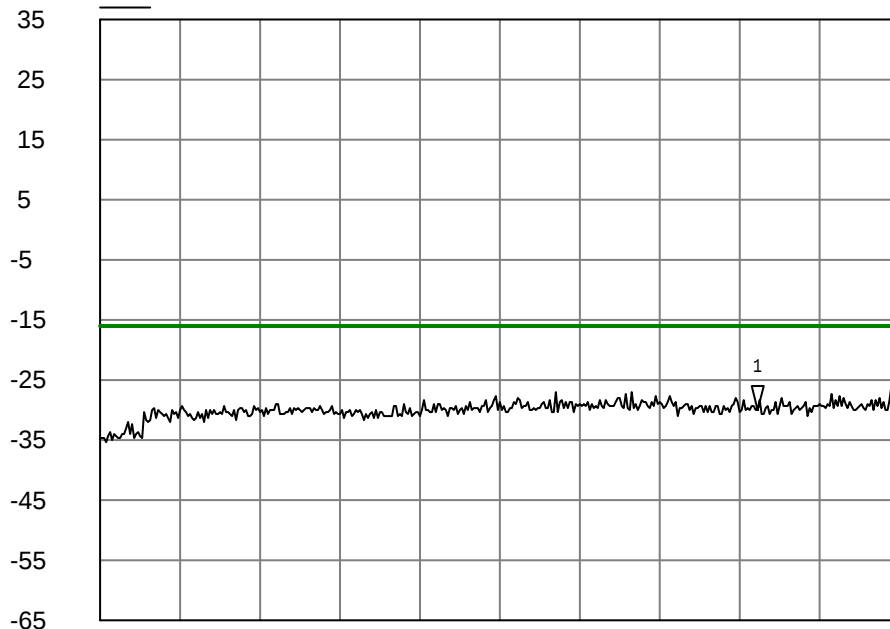
1 Trace A
11.435000 GHz
-32.7600 dBm

Start: 6.500000 GHz Limit line at -13.6 dBm Stop: 12.500000 GHz
Res BW: 100 kHz Vid BW: 300 kHz Sweep: 1.80 s
31/08/2005 10:30:23 HP8593E

Test Results Plot No 12

SoftPlot Measurement Presentation

Trace A



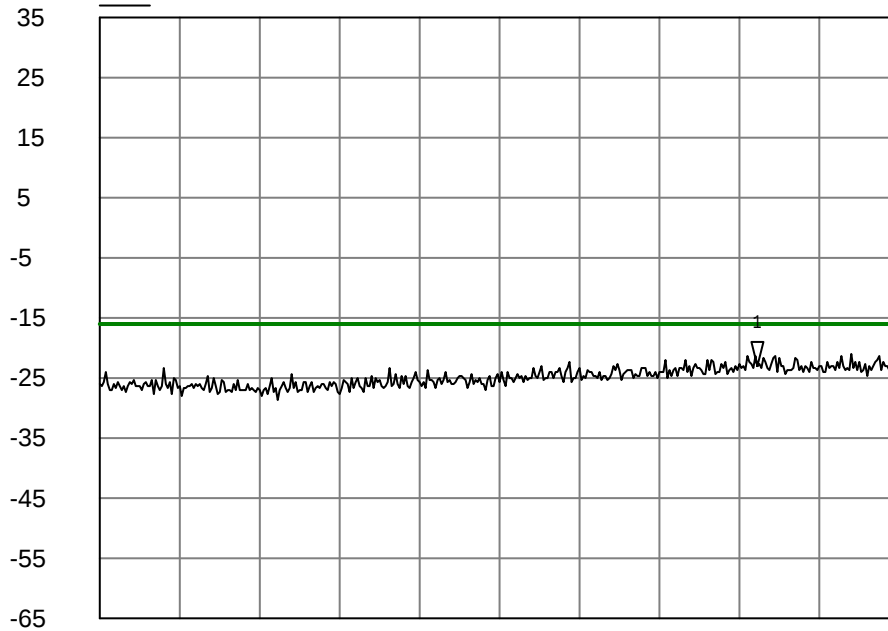
1 Trace A
18.257500 GHz
-29.9400 dBm

Start: 12.500000 GHz Limit line at -13.6 dBm Stop: 19.500000 GHz
Res BW: 100 kHz Vid BW: 300 kHz Sweep: 2.10 s
31/08/2005 10:31:30 HP8593E

Test Results Plot No 13

SoftPlot Measurement Presentation

Trace A



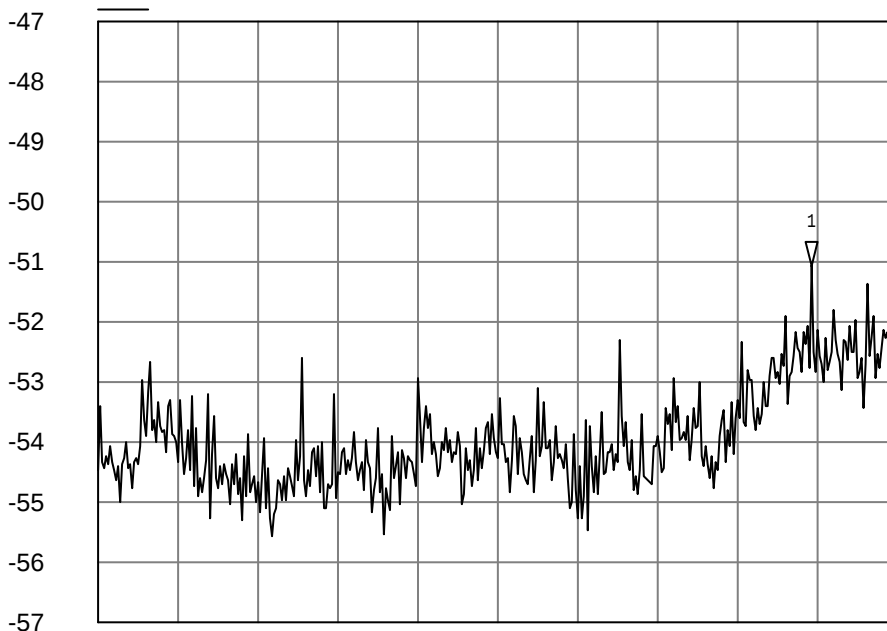
1 Trace A
21.556250 GHz
-22.9900 dBm

Start: 19.500000 GHz Limit line at -13.6 dBm Stop: 22.000000 GHz
Res BW: 100 kHz Vid BW: 300 kHz Sweep: 750.00 ms
31/08/2005 10:32:32 HP8593E

Test Results Plot No 14

SoftPlot Measurement Presentation

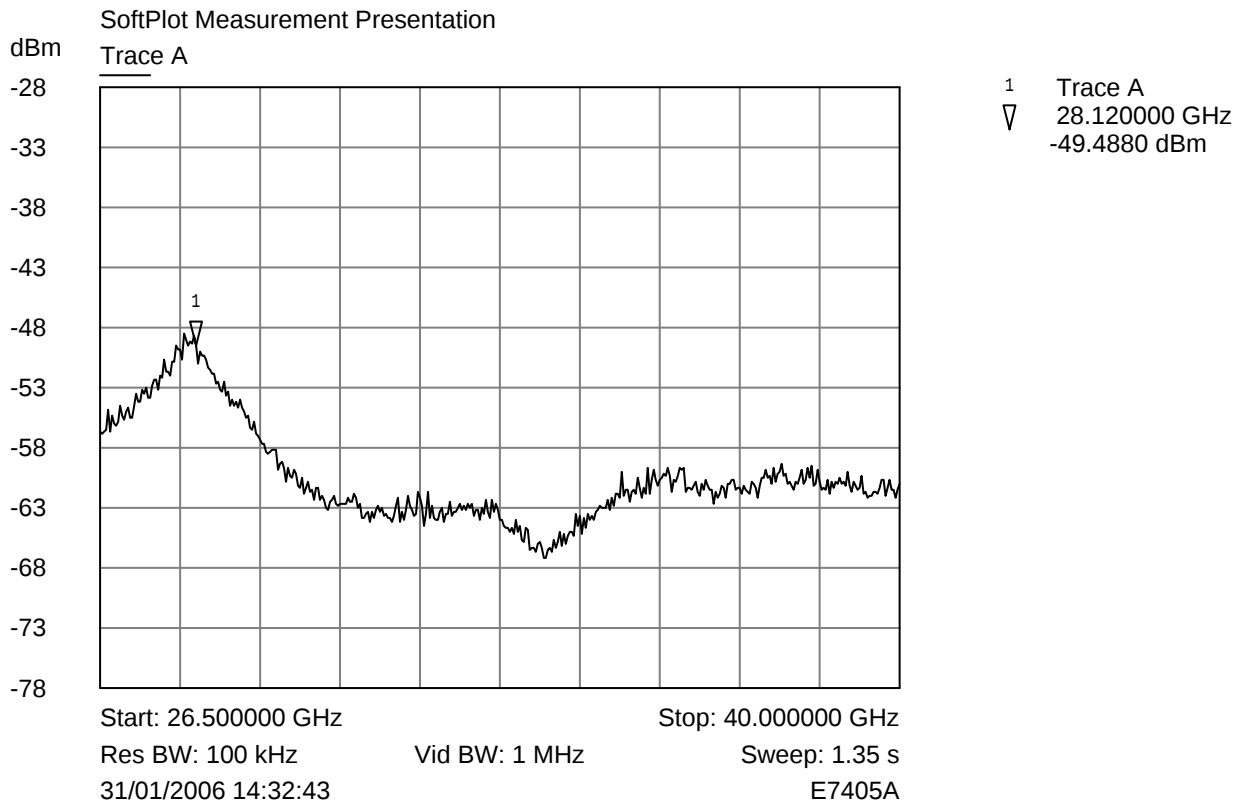
Trace A



1 Trace A
25.586250 GHz
-51.0610 dBm

Start: 18.000000 GHz Stop: 26.500000 GHz
Res BW: 100 kHz Vid BW: 1 MHz Sweep: 852.80 ms
31/01/2006 16:02:31 E7405A

Test Results Plot No 15

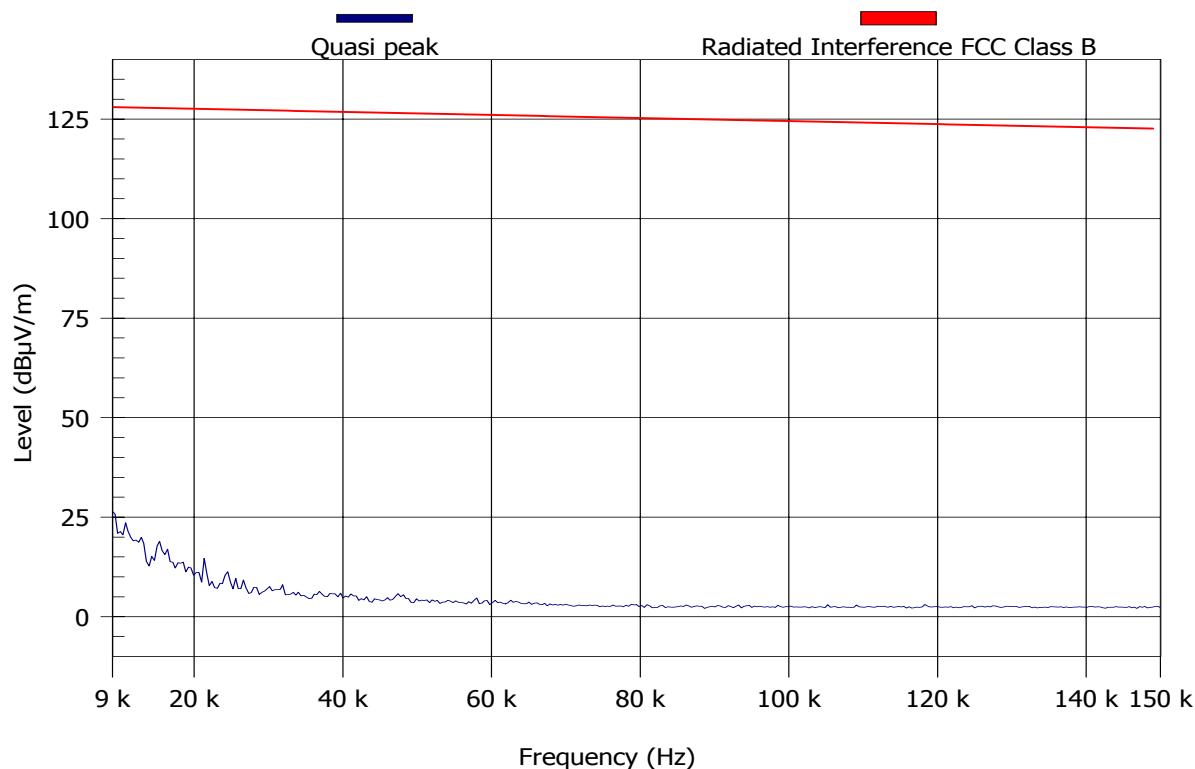


d. Radiated emission in restricted band 16 – 69

Test Results Plot No 16
FCC 15.205 RESTRICTED 0.009-0.15MHz 5737 22dbi sq VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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:

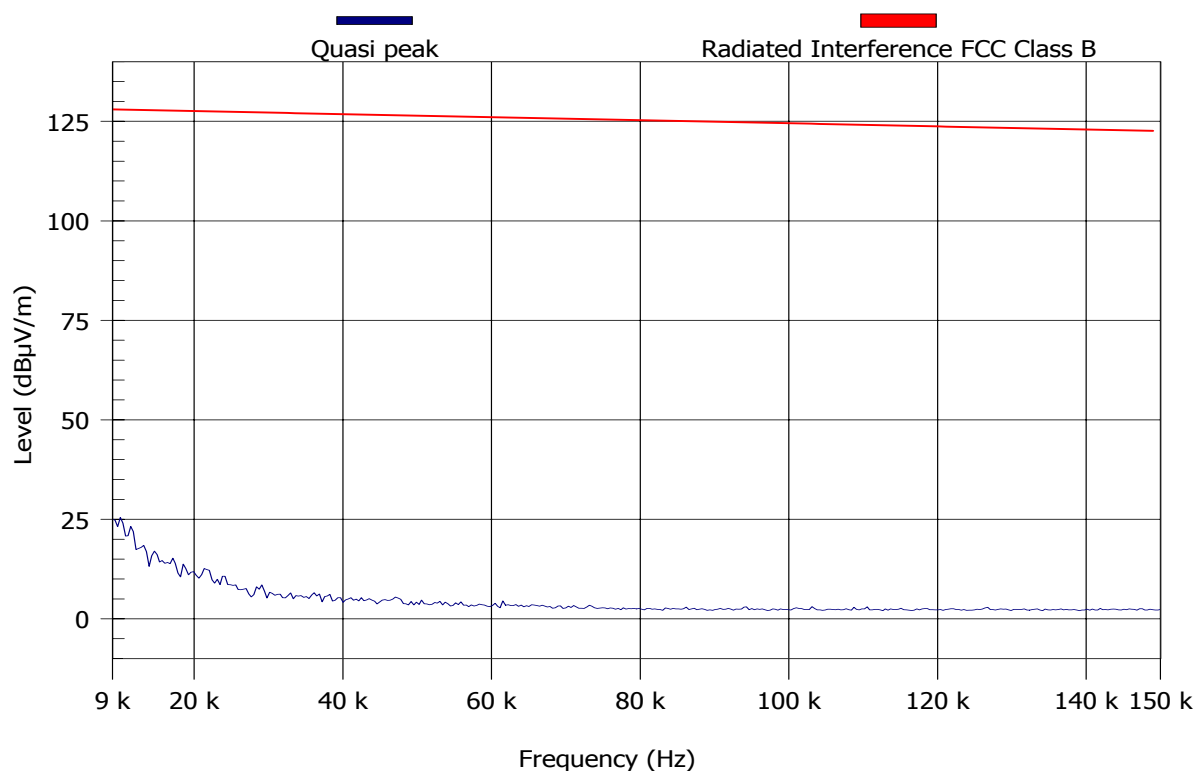
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

Test Results Plot No 17
FCC 15.205 RESTRICTED 0.009-0.15MHz 5737 22dbi sq HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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:



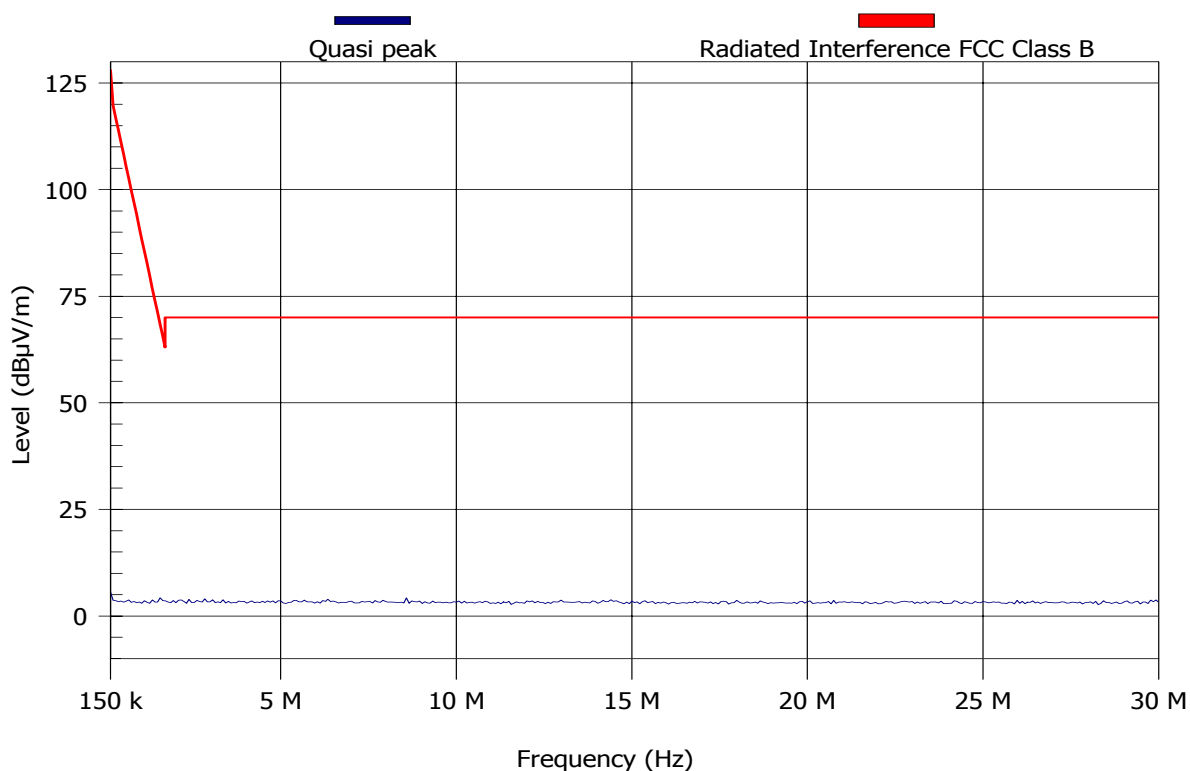
MAXIMUM RESULT DEVIATION:

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

Test Results Plot No 18
FCC 15.205 RESTRICTED 0.15-30MHz 5737 22dbi sq VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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:



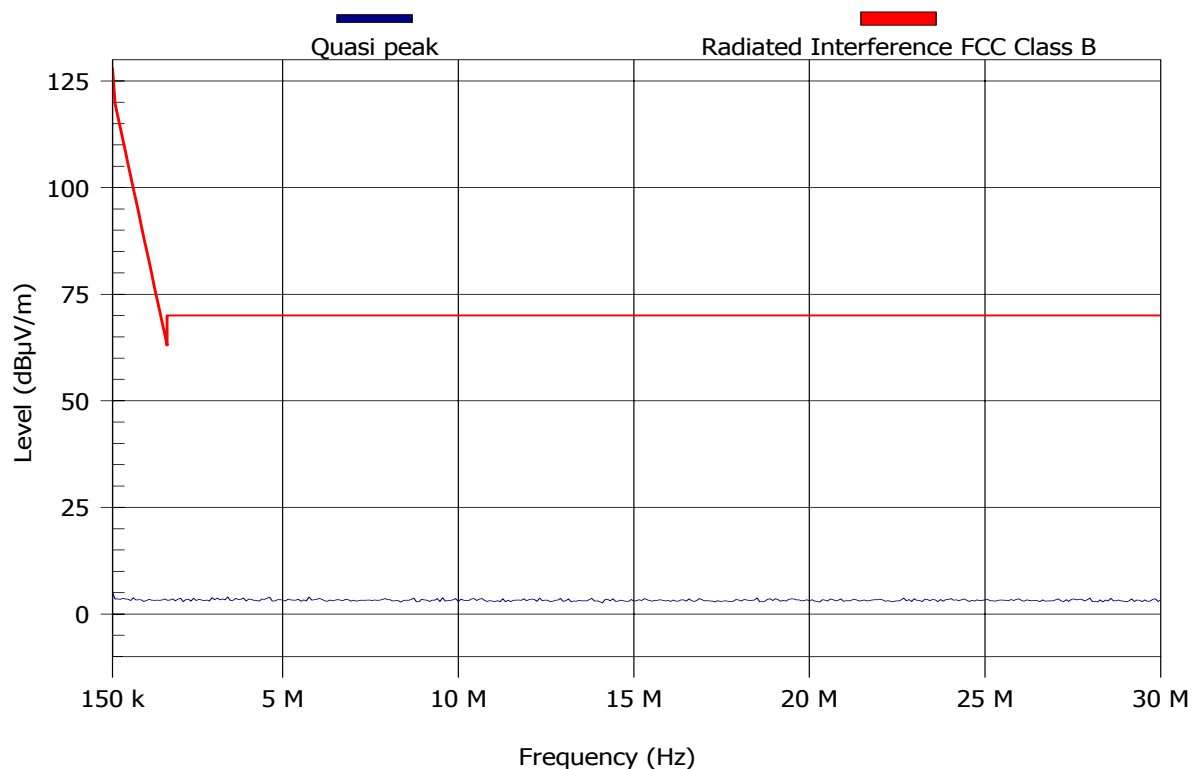
MAXIMUM RESULT DEVIATION:

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

Test Results Plot No 19
FCC 15.205 RESTRICTED 0.15-30MHz 5737 22dbi sq HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	Ref. Level:	90 dBμV
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:



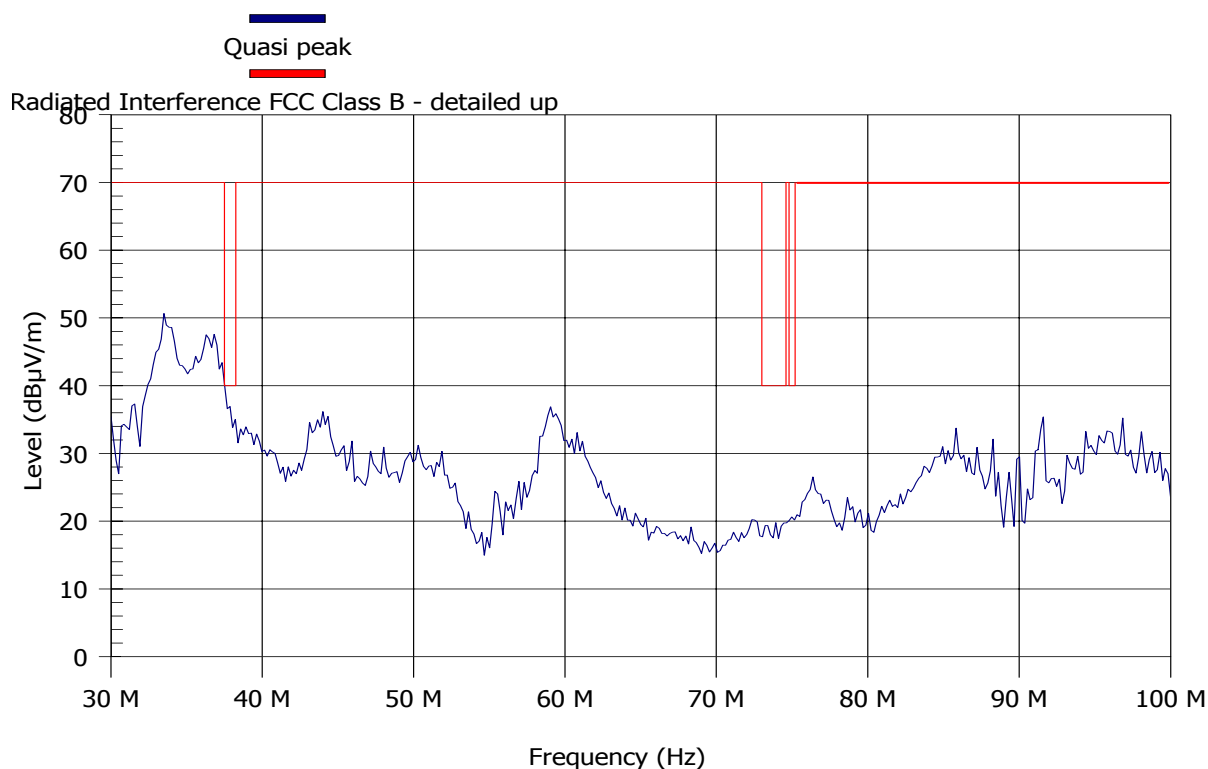
MAXIMUM RESULT DEVIATION:

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

Test Results Plot No 20
FCC 15.205 RESTRICTED 30-100MHz 5737 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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-3

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

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

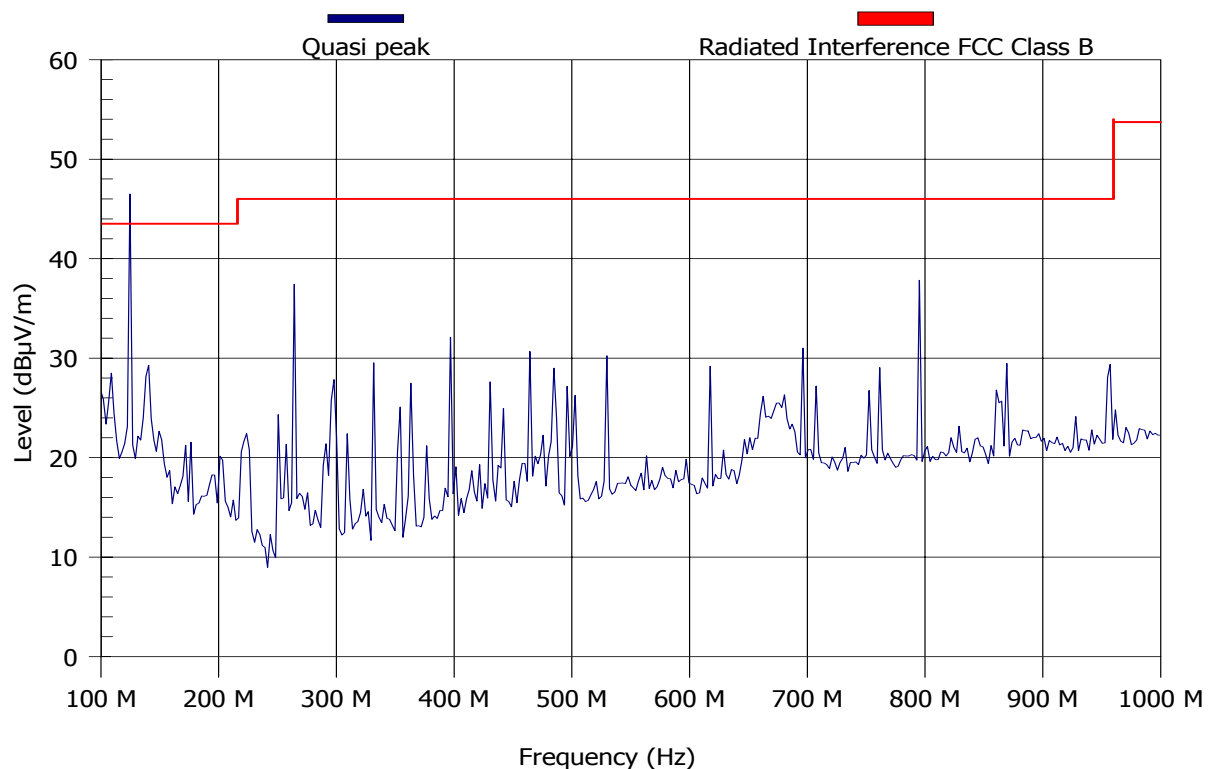
Frequency (MHz)	QP (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
37.537	33	40	Pass	175	1.6	V
37.765	27.8	40	Pass	240	1	V
38.056	26.1	40	Pass	240	1	V

Test Results Plot No 21

FCC 15.205 RESTRICTED 100-1000MHz 5737 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 187.5 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-3

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

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

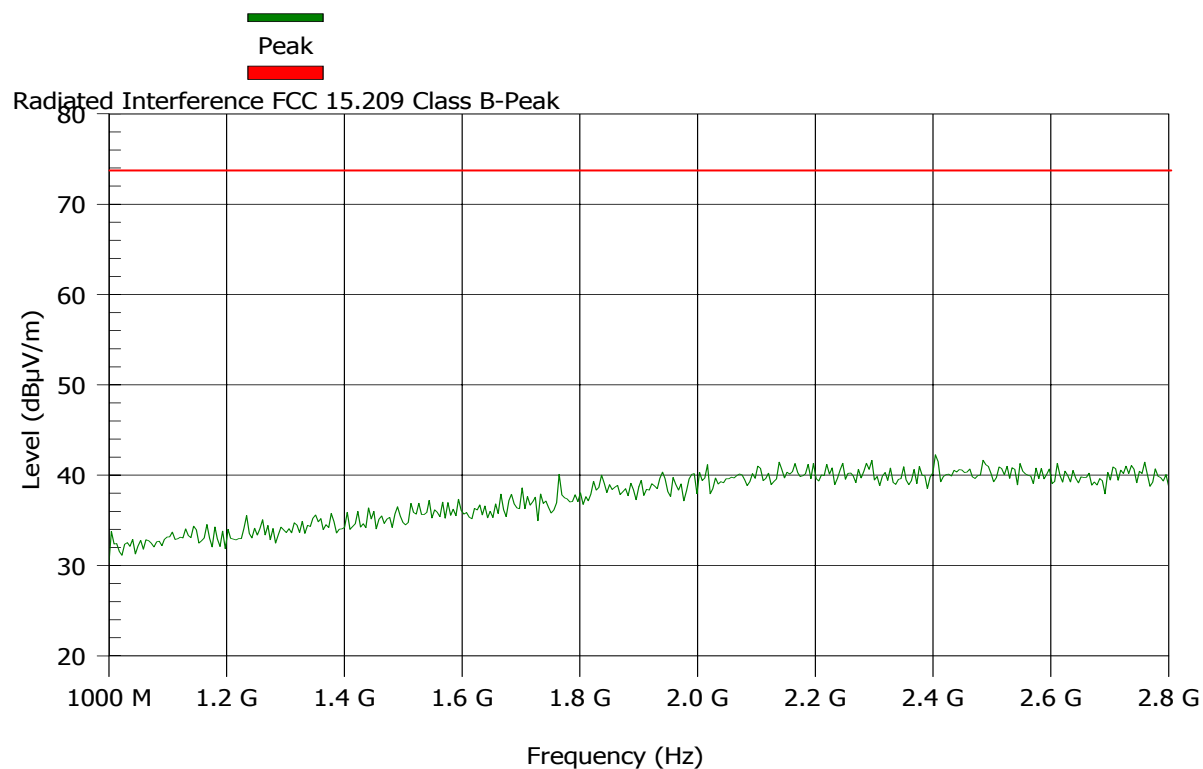
Frequency (MHz)	QP (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
124.999	40.1	43.5	Pass	240	1.6	H

Test Results Plot No 22

FCC 15.205 RESTRICTED 1-2.8GHz 5737 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 36 ms
Polarization:	Horizontal and 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.

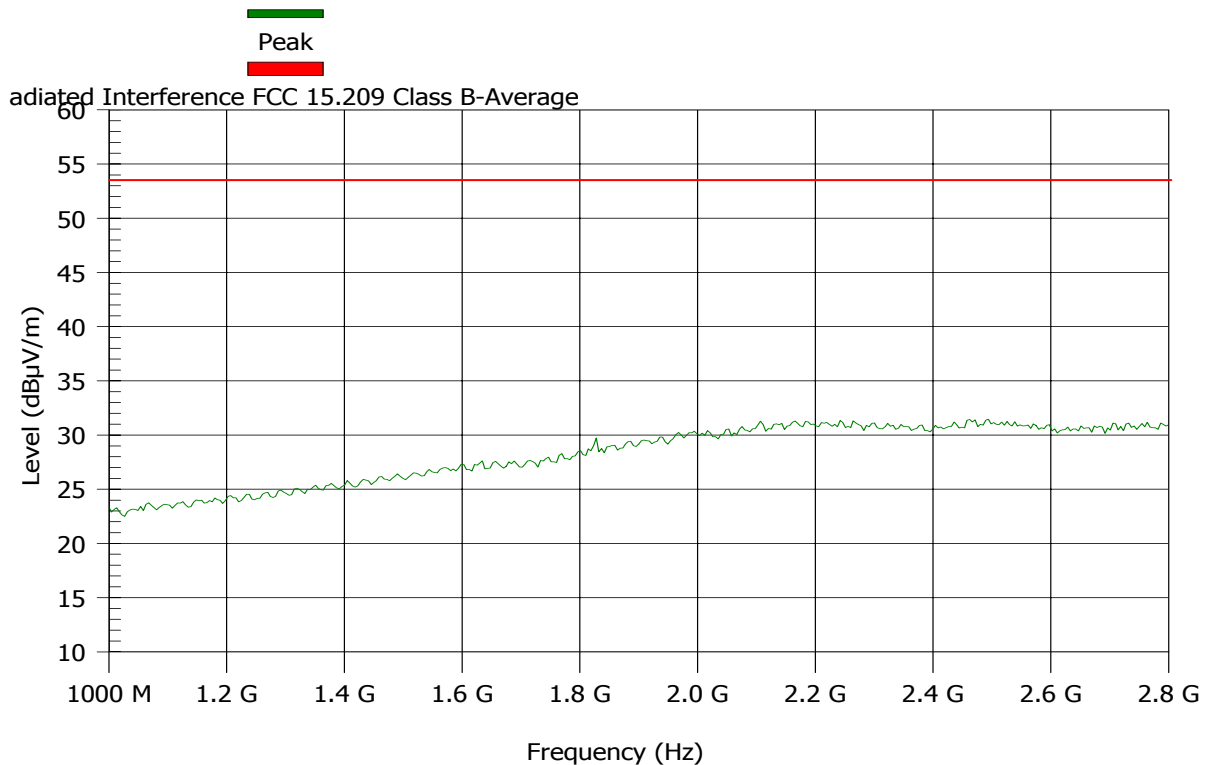
None

Test Results Plot No 23

FCC 15.205 RESTRICTED 1-2.8GHz 5737 22dbi sq AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 5.4 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.

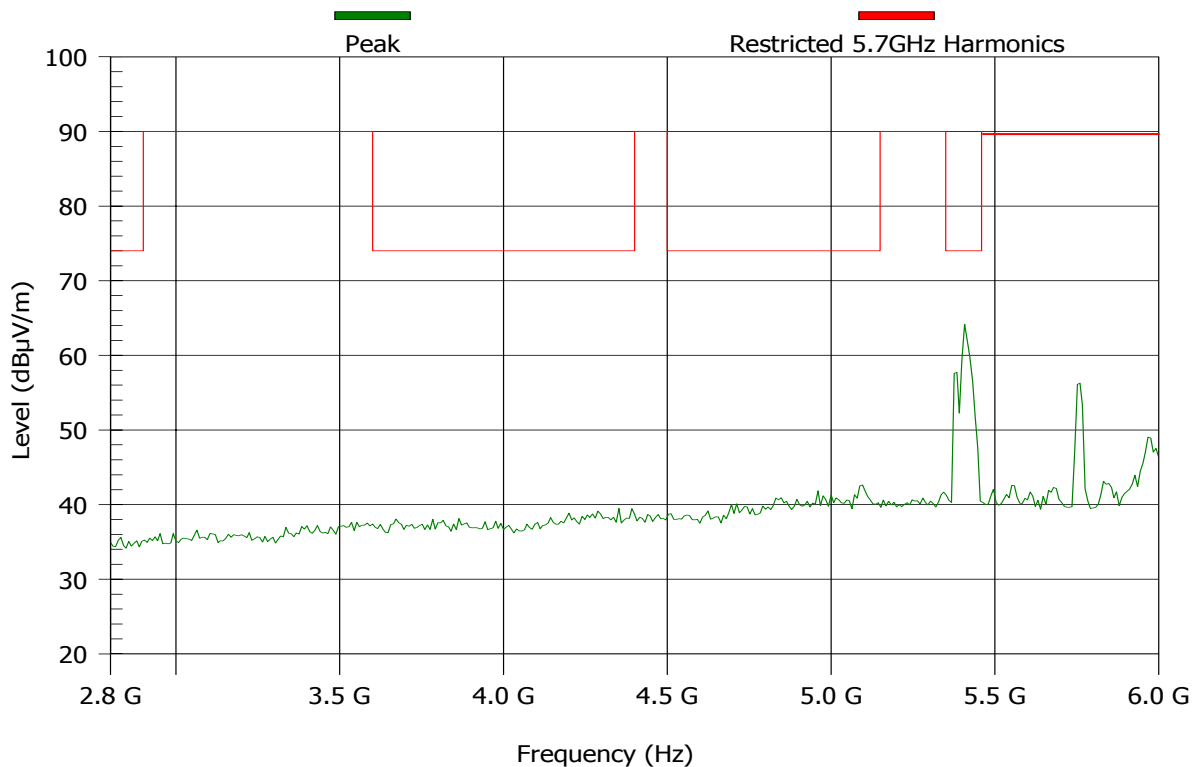
None

Test Results Plot No 24

RE102 FCC-15.205 RESTRICTED 2.8-6GHz 5737 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	70 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 64 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

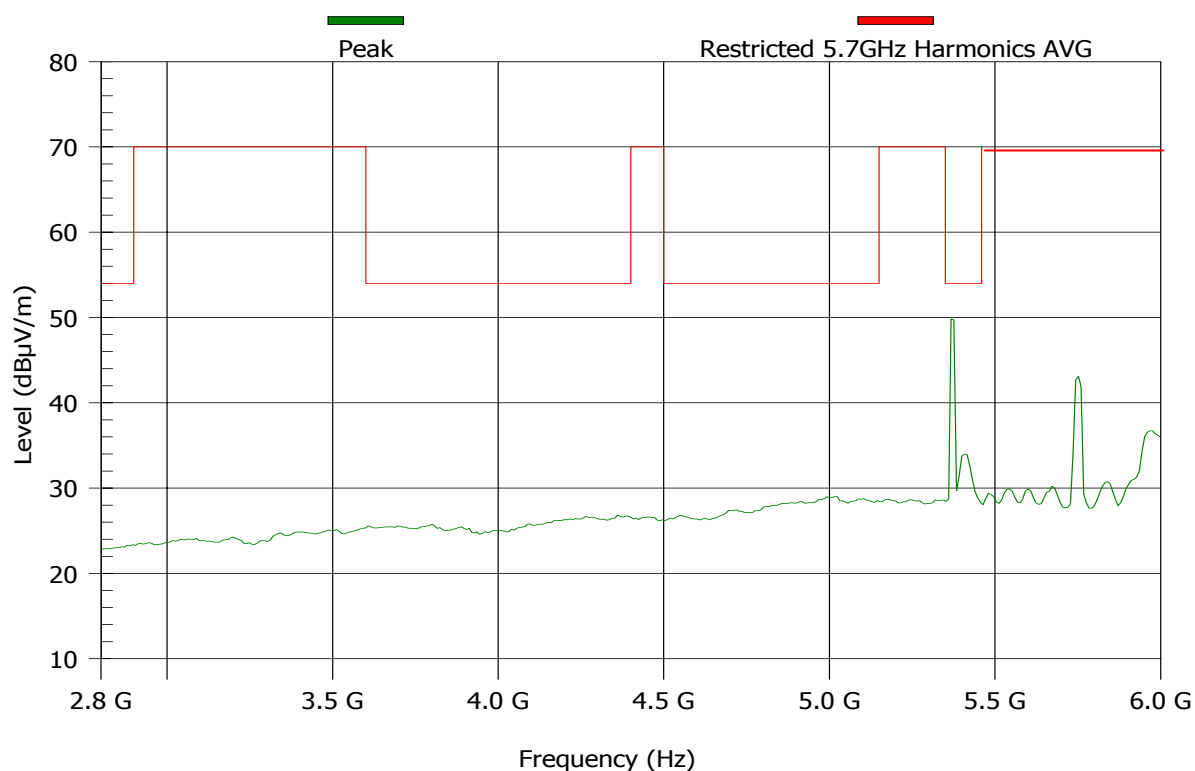
None

Test Results Plot No 25

**RE102 FCC-15.205 RESTRICTED 2.8-6GHz 5737 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 9.6 s
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 2-6 GHz

TEST REMARKS:04/01/2006


MAXIMUM RESULT DEVIATION:

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

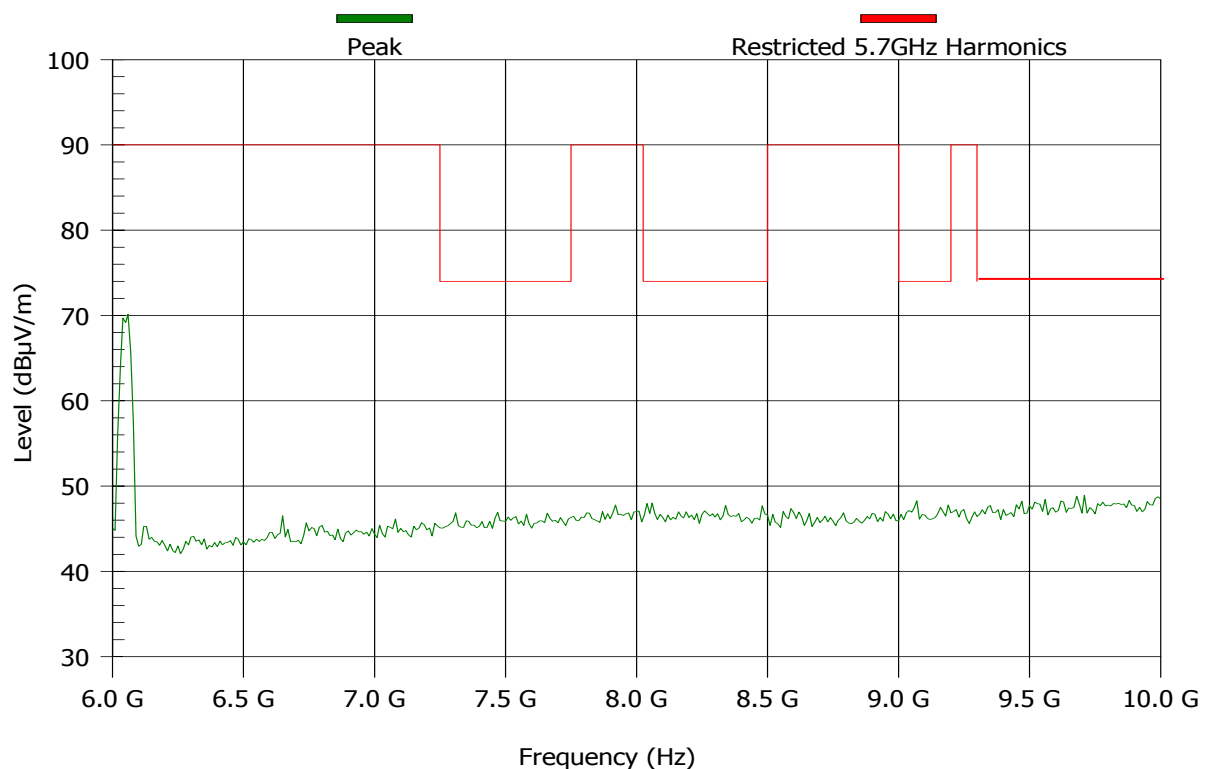
Frequency (MHz)	PK MaxHold (dB μ V/m)	PK Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
5368	49.8	54	Pass	0	1	V
5376	49.5	54	Pass	0	1.3	V

Test Results Plot No 26

RE102 FCC-15.205 RESTRICTED 6-10GHz 5737 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 89.83 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

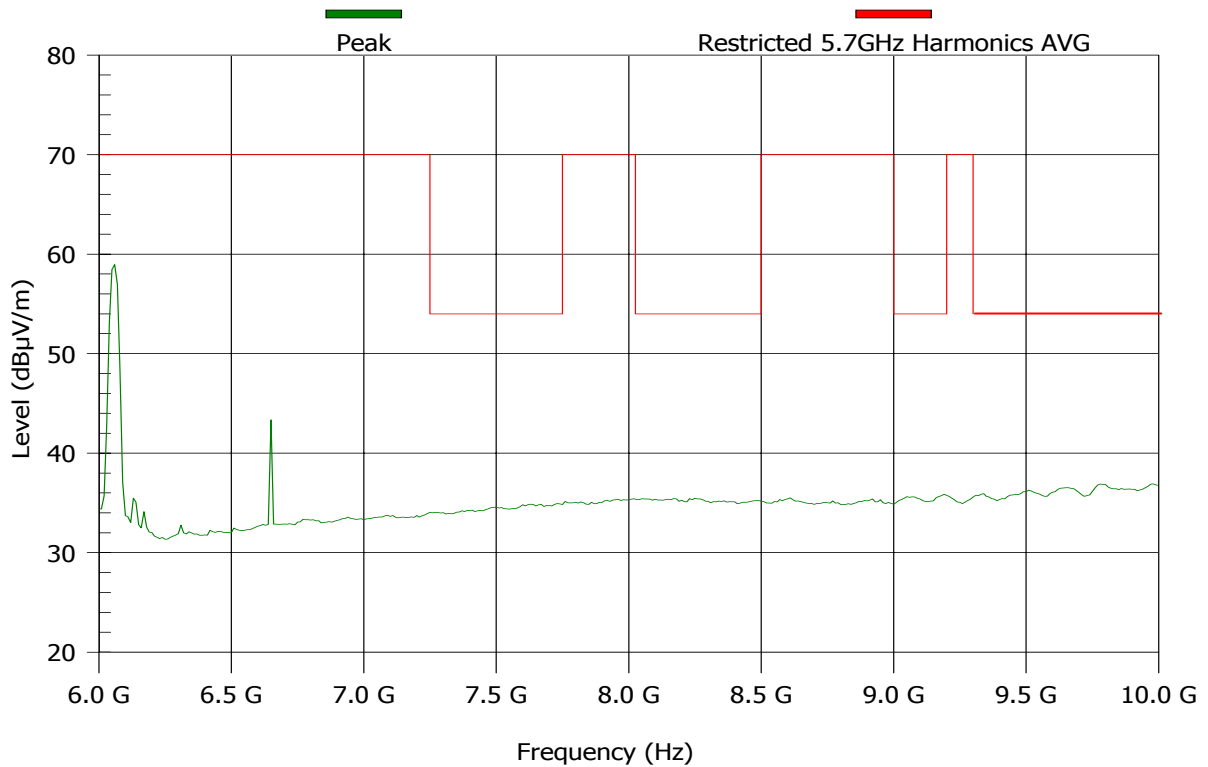
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 27

**RE102 FCC-15.205 RESTRICTED 6-10GHz 5737 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 12 s
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

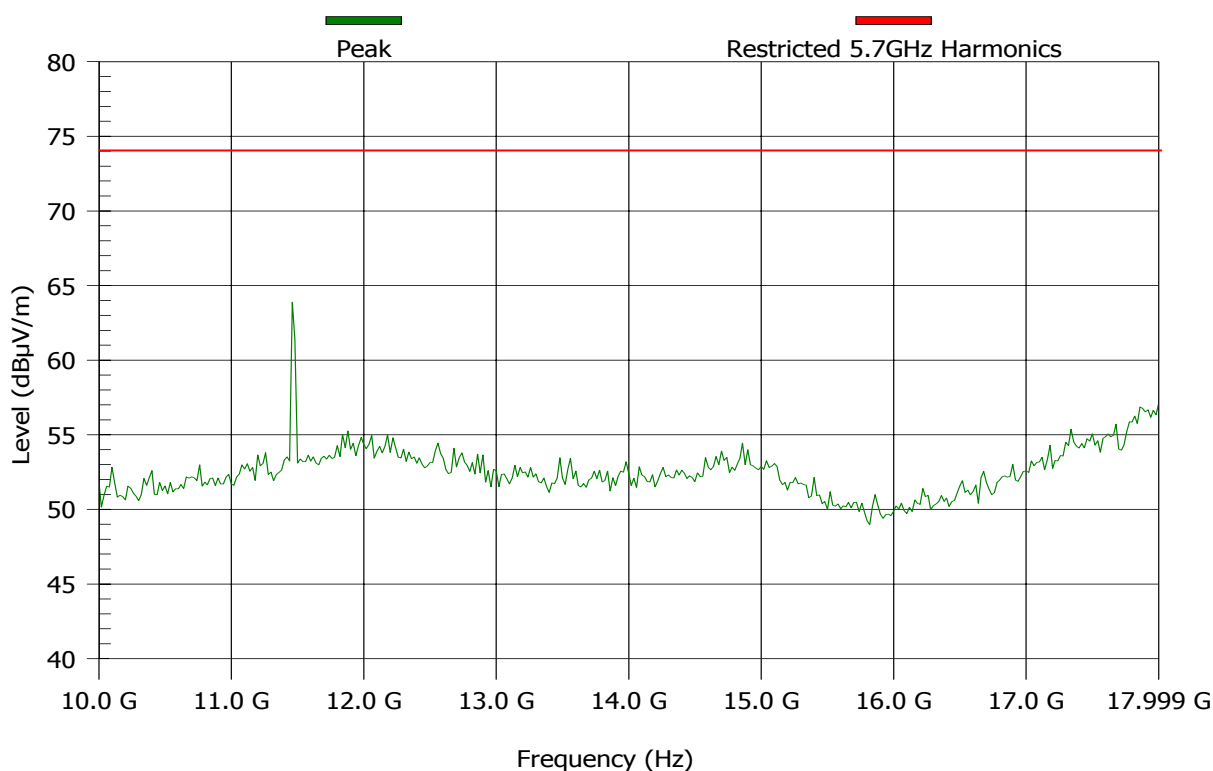
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 28

RE102 FCC-15.205 RESTRICTED 10-18GHz 5737 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 159.98 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



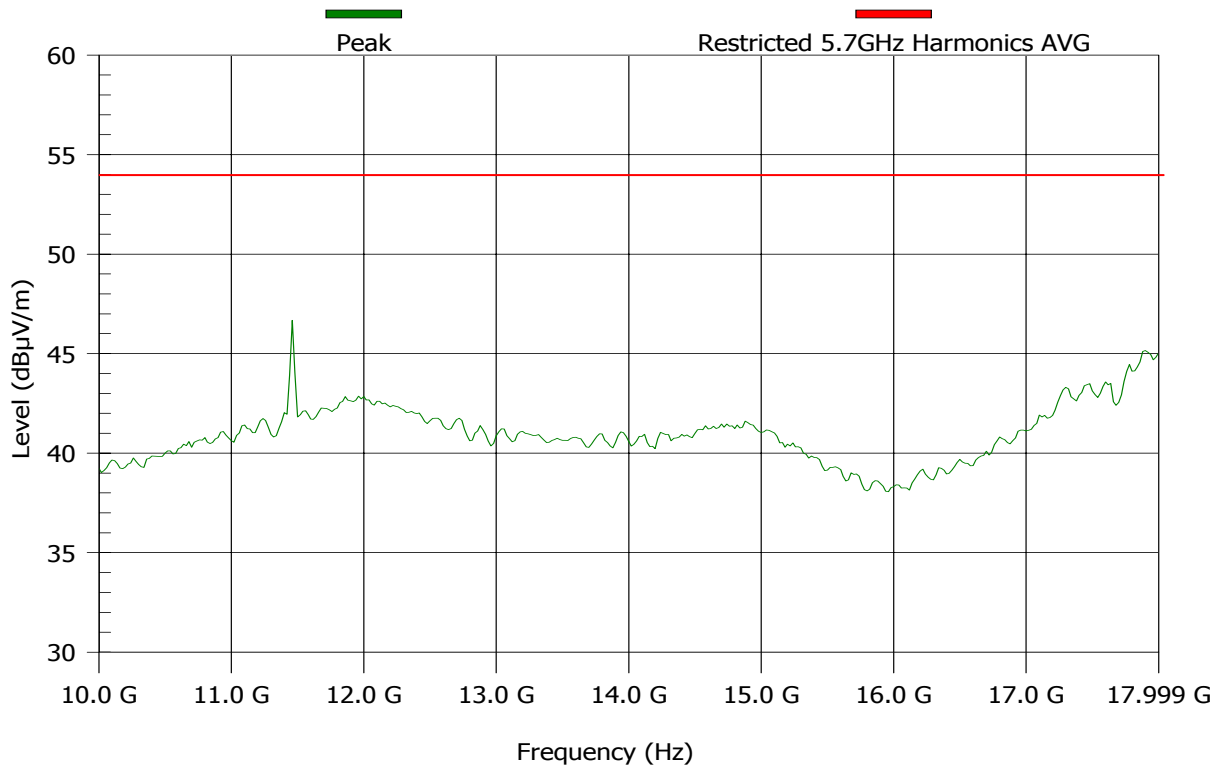
MAXIMUM RESULT DEVIATION:

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

Test Results Plot No 29
**RE102 FCC-15.205 RESTRICTED 10-18GHz 5737 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 24 s
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

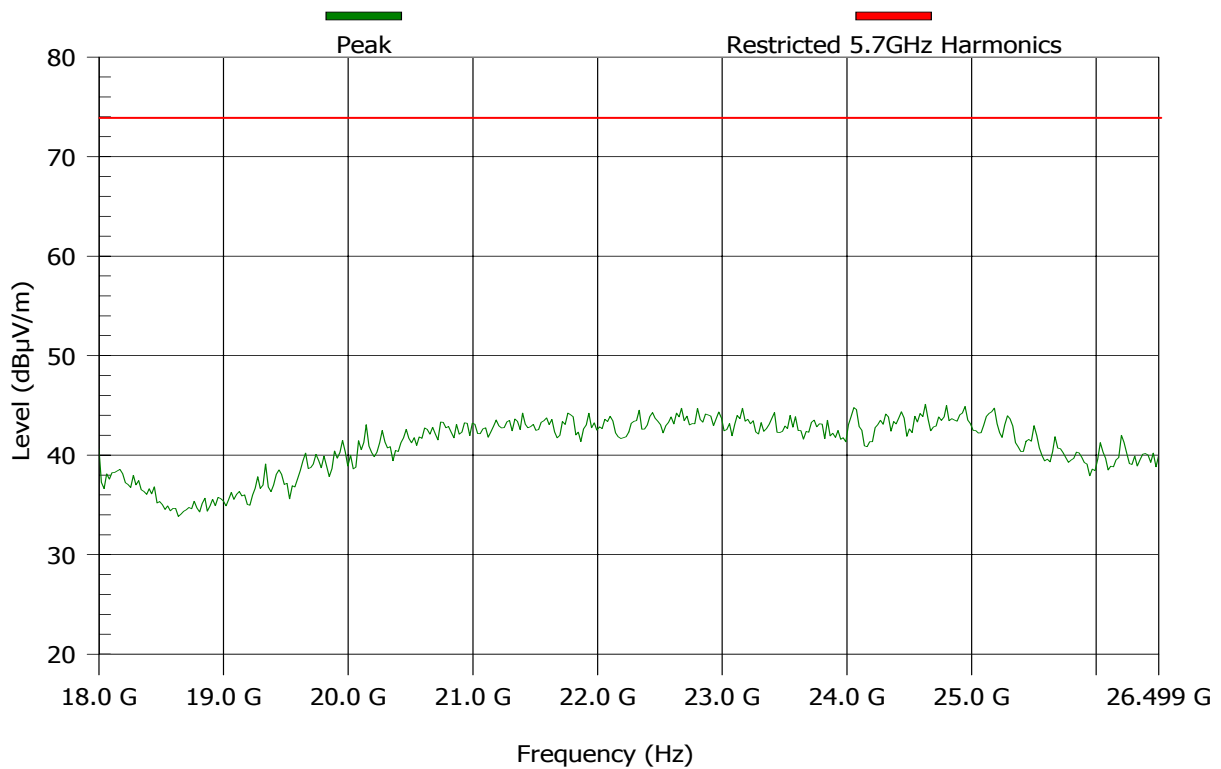
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 30

RE102 FCC-15.205 RESTRICTED 18-26.5GHz 5737 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	Hewlett Packard 7405A
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto: 84.99 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 18-26.5GHz SLK-35-3

TEST REMARKS:05/01/2006



MAXIMUM RESULT DEVIATION:

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

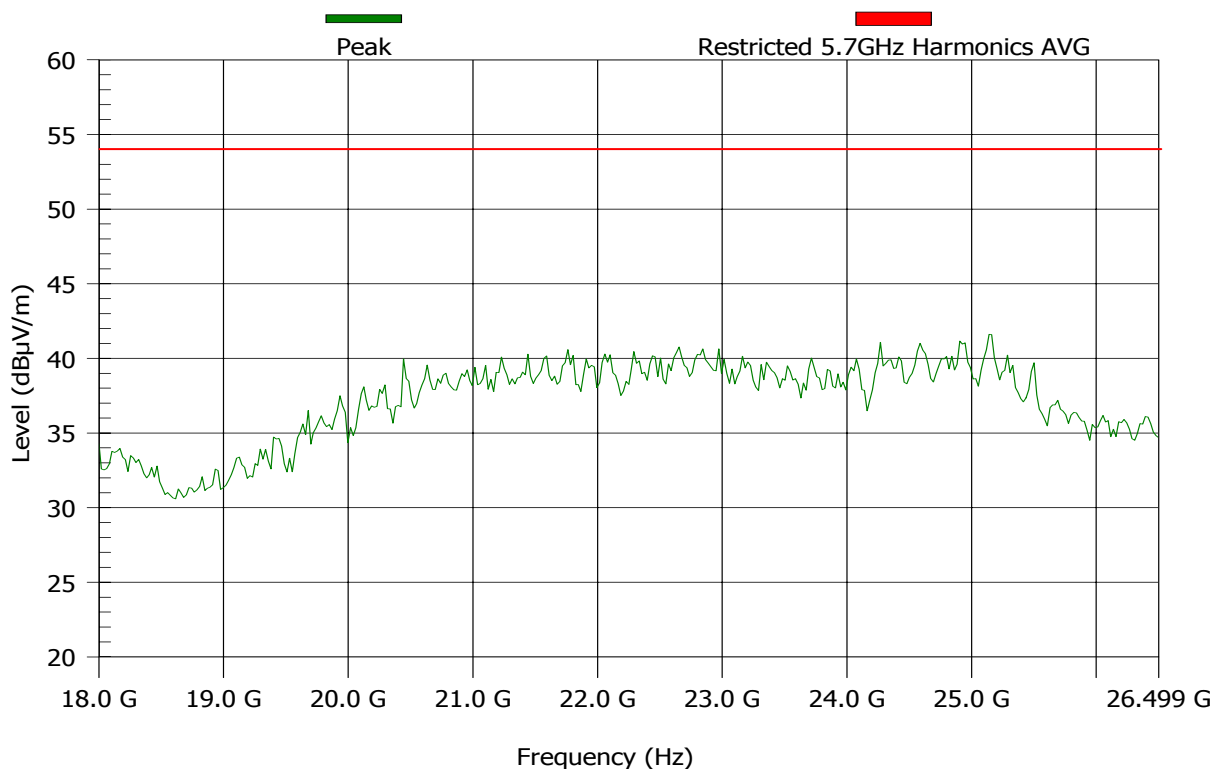
None

Test Results Plot No 31

**RE102 FCC-15.205 RESTRICTED 18-26.5GHz 5737 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	Hewlett Packard 7405A
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	100 kHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto: 113.16 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 18-26.5GHz SLK-35-3

TEST REMARKS:05/01/2006



MAXIMUM RESULT DEVIATION:

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

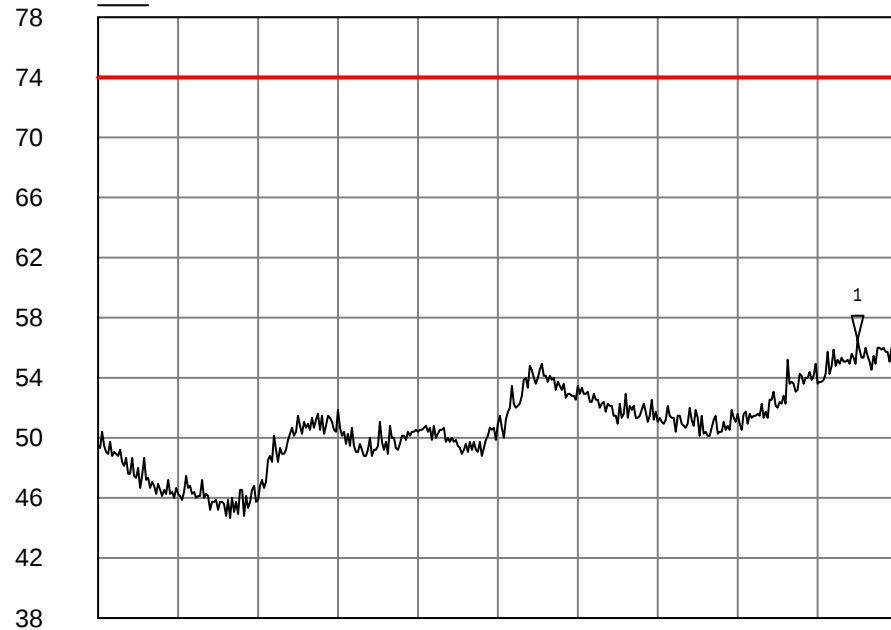
None

Test Results Plot No 32

RE102 FCC-15.205 RESTRICTED 26.5-40GHz 5737 22dbi Sq

SoftPlot Measurement Presentation

Trace A



1 Trace A
▽ 39.325000 GHz
56.5137 dBuV

Start: 26.500000 GHz

Stop: 40.000000 GHz

Res BW: 1 MHz

Vid BW: 1 MHz

Sweep: 337.50 ms

01/02/2006 11:46:52

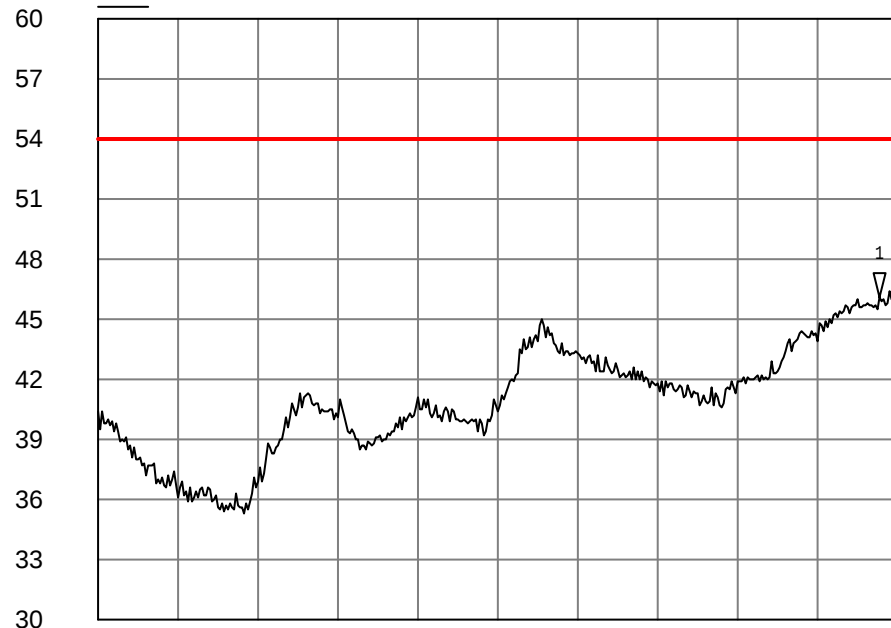
E7405A

Test Results Plot No 33

**RE102 FCC-15.205 RESTRICTED 26.5-40GHz 5737 22dbi Sq
AVG**

SoftPlot Measurement Presentation

Trace A



1 Trace A
▽ 39.696250 GHz
46.1117 dBuV

Start: 26.500000 GHz

Stop: 40.000000 GHz

Res BW: 1 MHz

Vid BW: 1 MHz

Sweep: 337.50 ms

01/02/2006 11:39:07

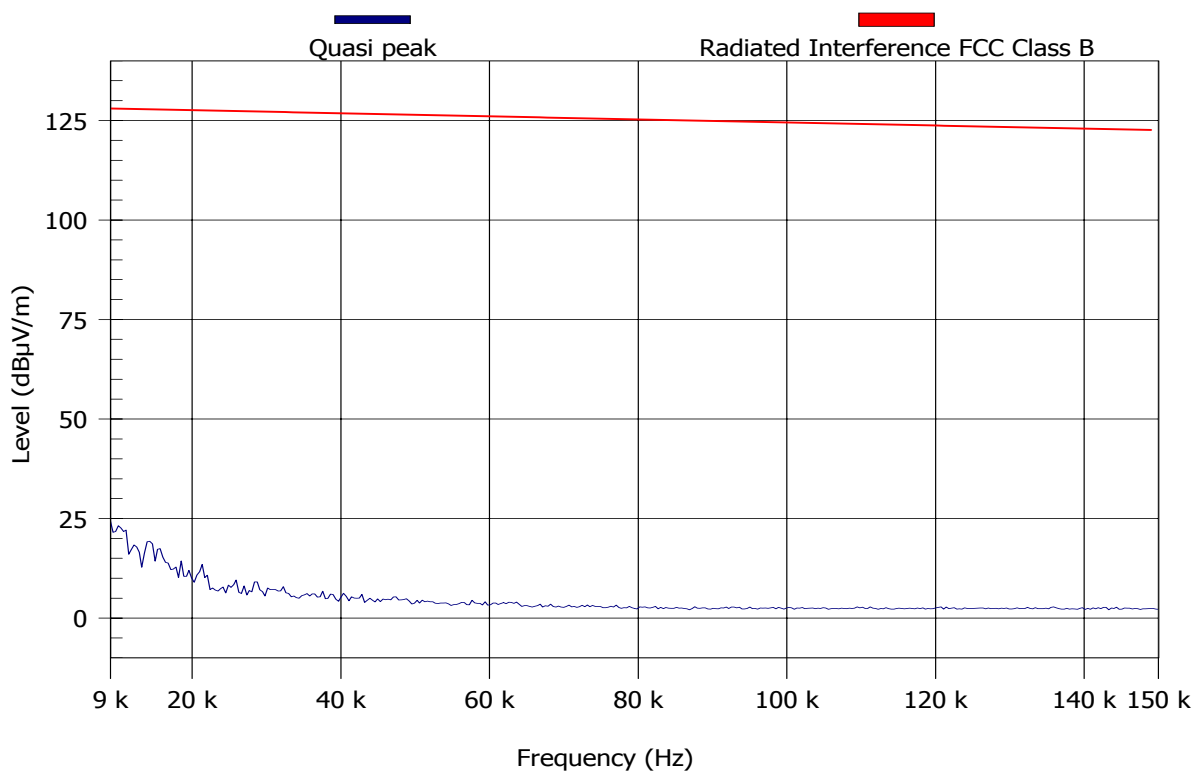
E7405A

Test Results Plot No 34

FCC 15.205 RESTRICTED 0.009-0.15MHz 5787 22dbi sq VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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.

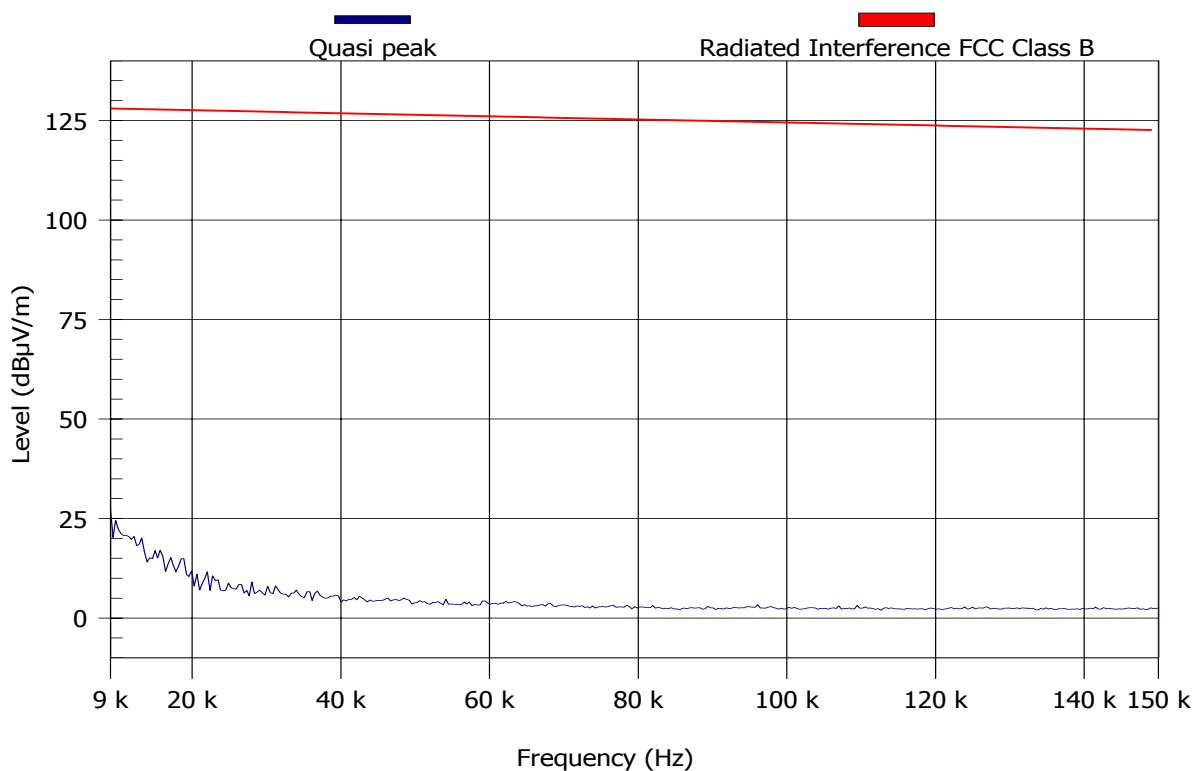
None

Test Results Plot No 35

FCC 15.205 RESTRICTED 0.009-0.15MHz 5787 22dbi sq HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	120 kHz
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.

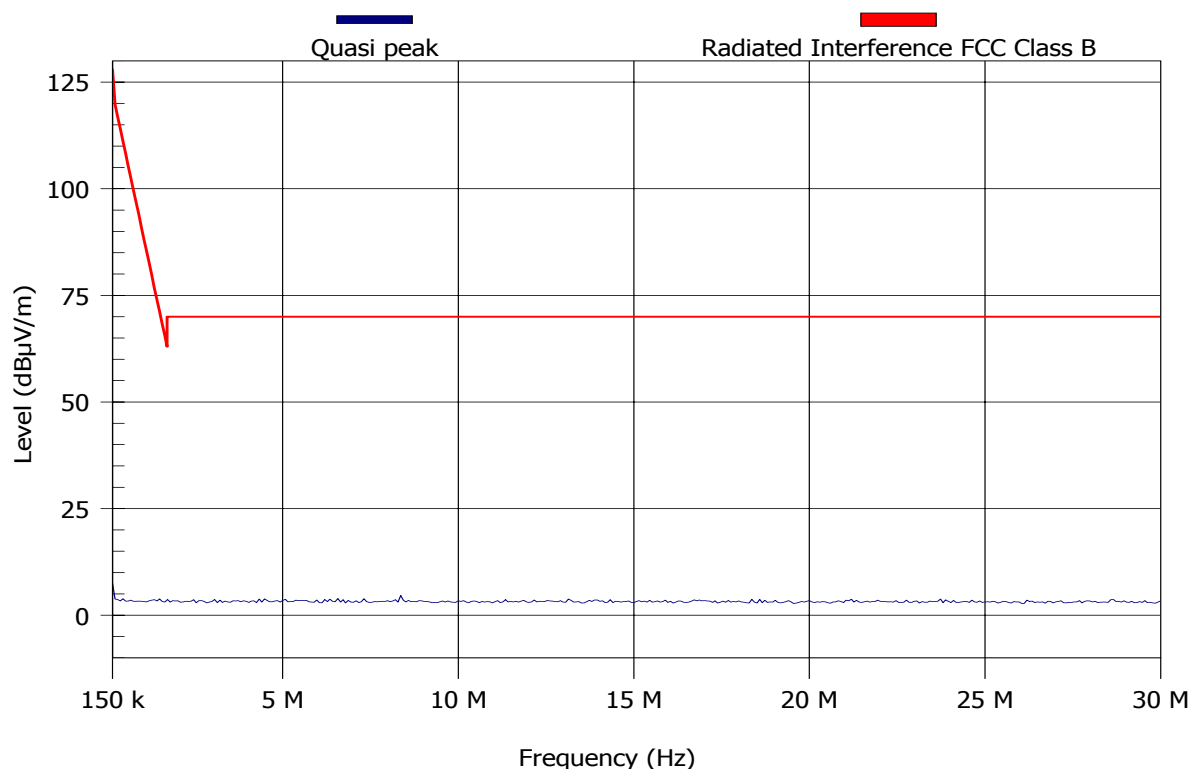
None

Test Results Plot No 36

FCC 15.205 RESTRICTED 0.15-30MHz 5787 22dbi sq VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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.

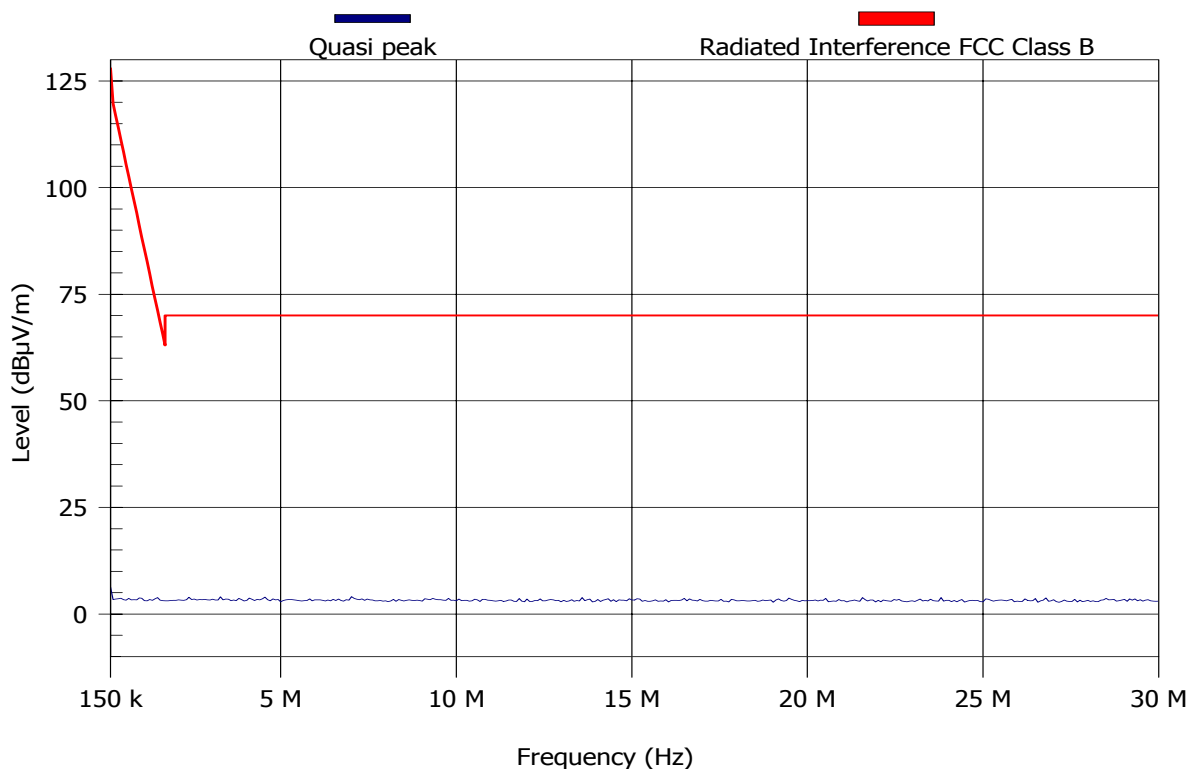
None

Test Results Plot No 37

FCC 15.205 RESTRICTED 0.15-30MHz 5787 22dbi sq HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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.

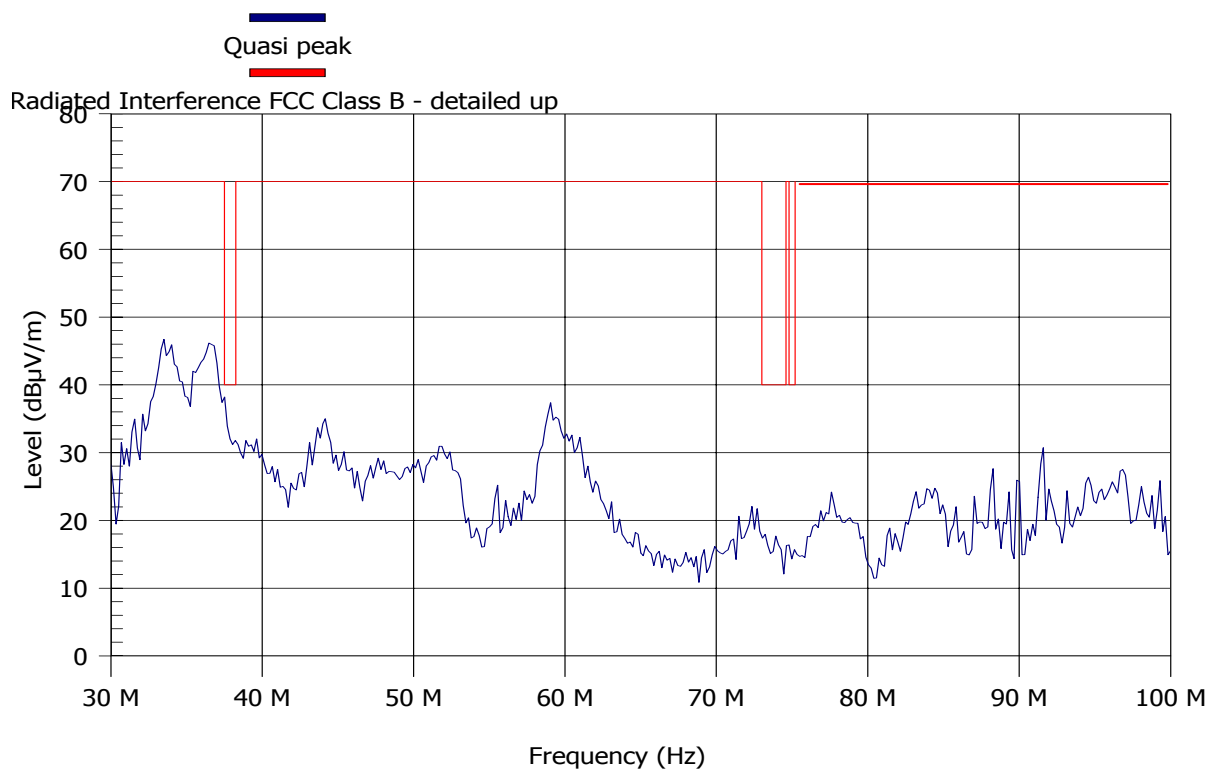
None

Test Results Plot No 38

FCC 15.205 RESTRICTED 30-100MHz 5787 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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-3

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

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

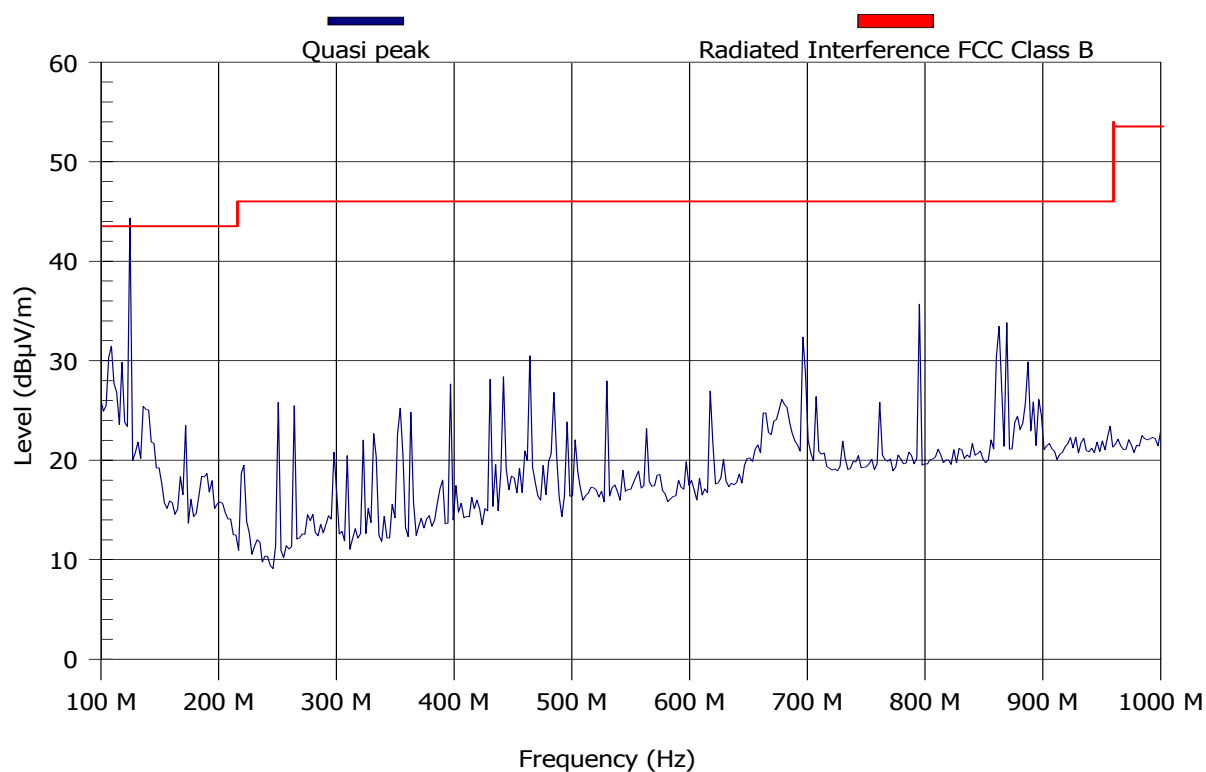
Frequency (MHz)	QP (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
37.801	36.2	40	Pass	0	1	V

Test Results Plot No 39

FCC 15.205 RESTRICTED 100-1000MHz 5787 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 187.5 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-3

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

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

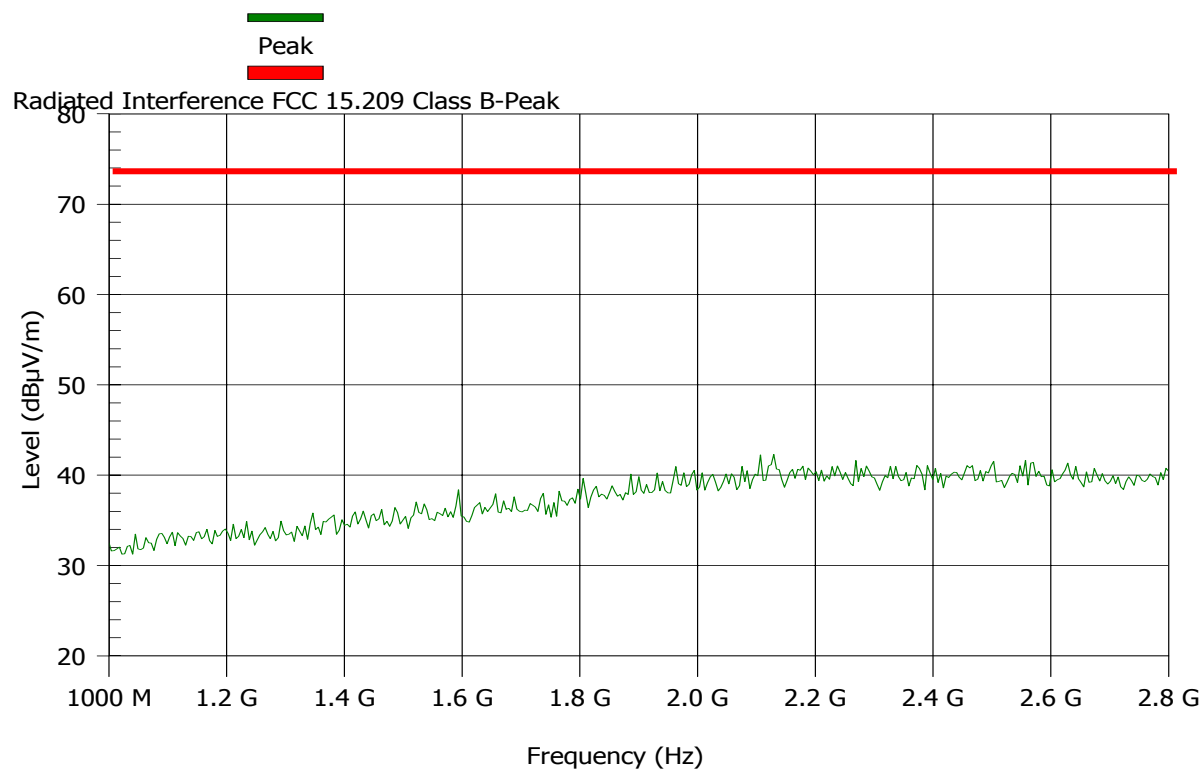
Frequency (MHz)	QP (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
125.027	42.1	43.5	Pass	120	1	V

Test Results Plot No 40

FCC 15.205 RESTRICTED 1-2.8GHz 5787 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 36 ms
Polarization:	Horizontal and 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.

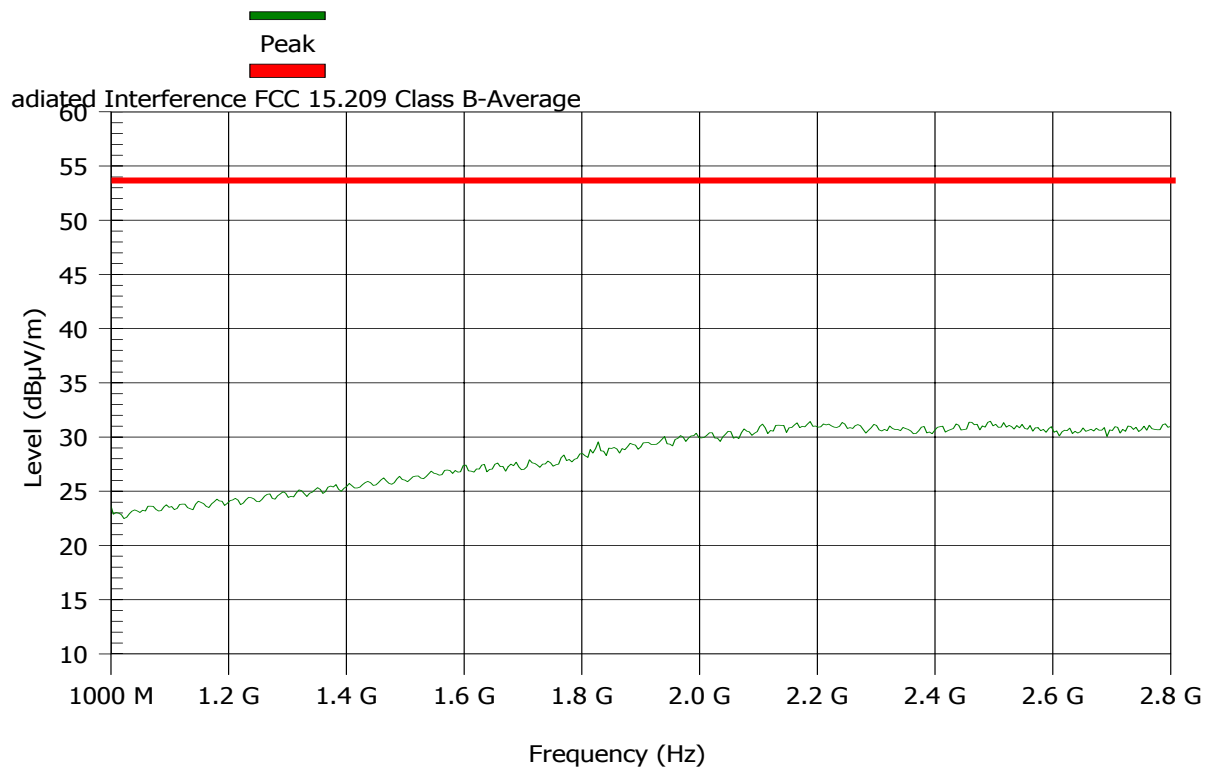
None

Test Results Plot No 41

FCC 15.205 RESTRICTED 1-2.8GHz 5787 22dbi sq AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	Ref. Level:	90 dBμV
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto: 5.4 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.

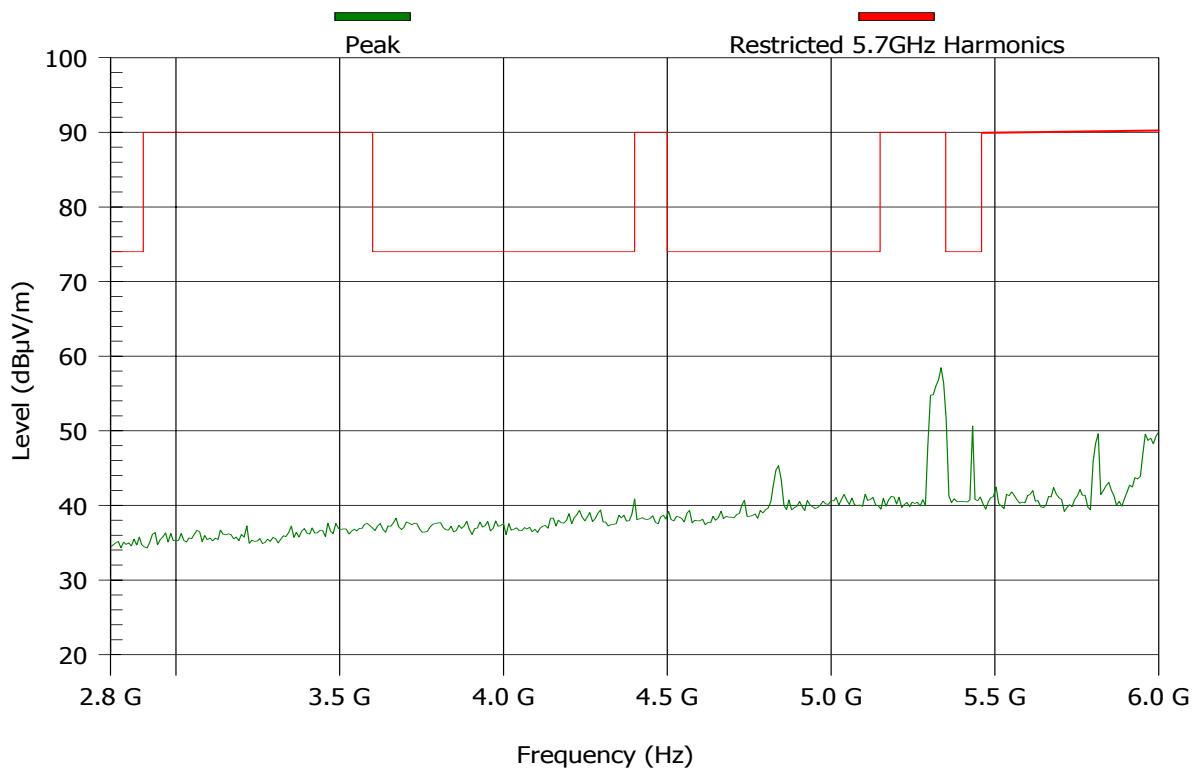
None

Test Results Plot No 42

RE102 FCC-15.205 RESTRICTED 2.8-6GHz 5787 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	70 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 64 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

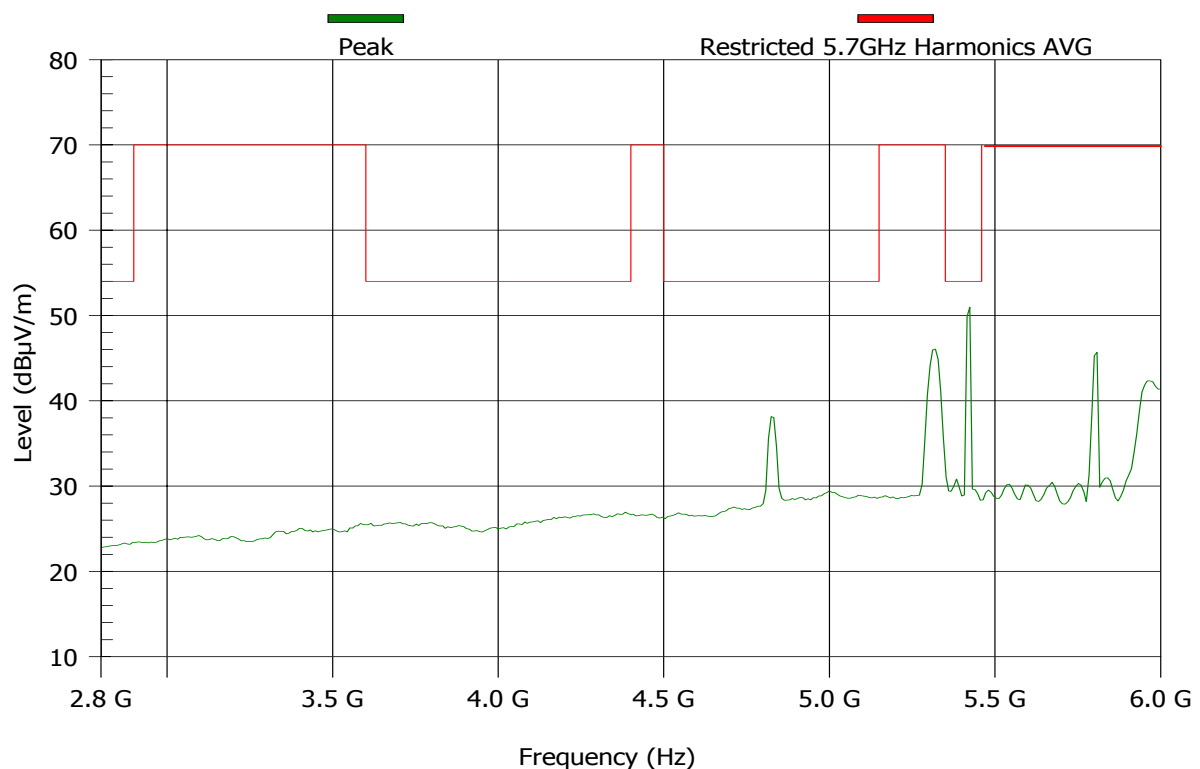
None

Test Results Plot No 43

**RE102 FCC-15.205 RESTRICTED 2.8-6GHz 5787 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 9.6 s
Polarization:	Horizontal and Vertical	Pre Amplifier	

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

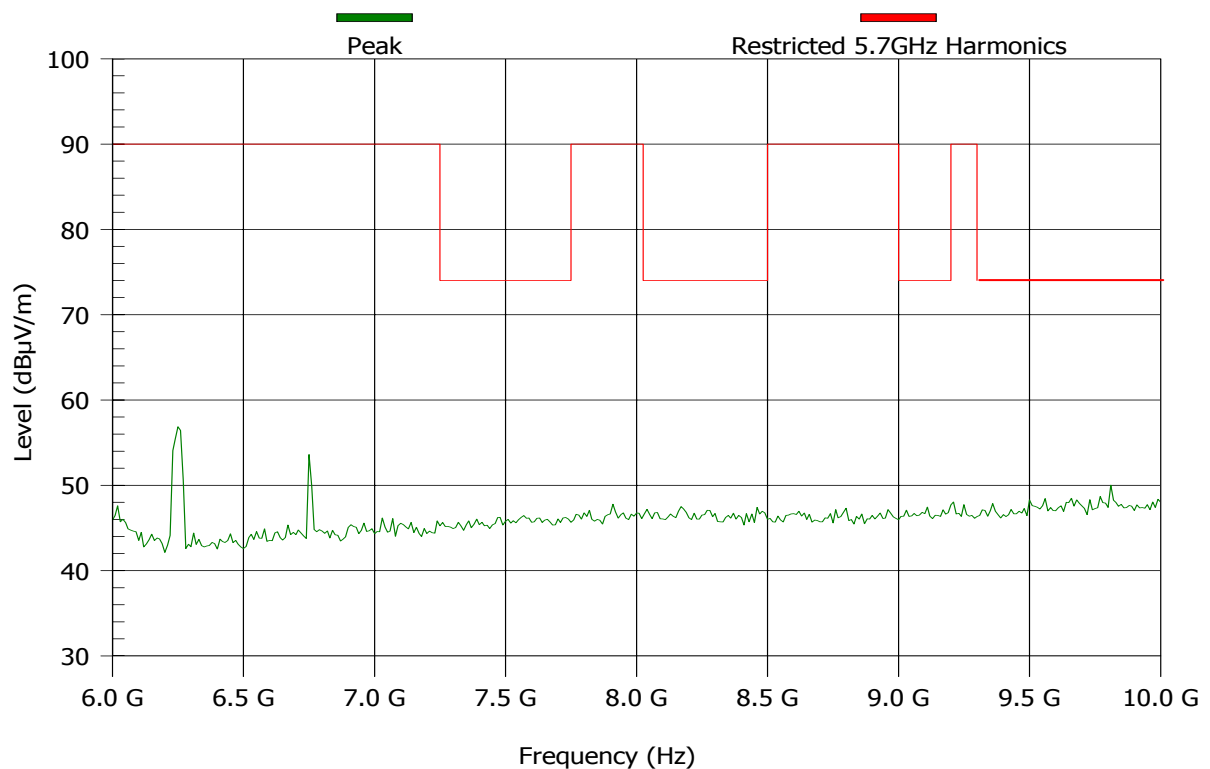
Frequency (MHz)	PK MaxHold (dB μ V/m)	PK Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H / V
5424	51	54	Pass	0	1	V

Test Results Plot No 44

RE102 FCC-15.205 RESTRICTED 6-10GHz 5787 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 89.83 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

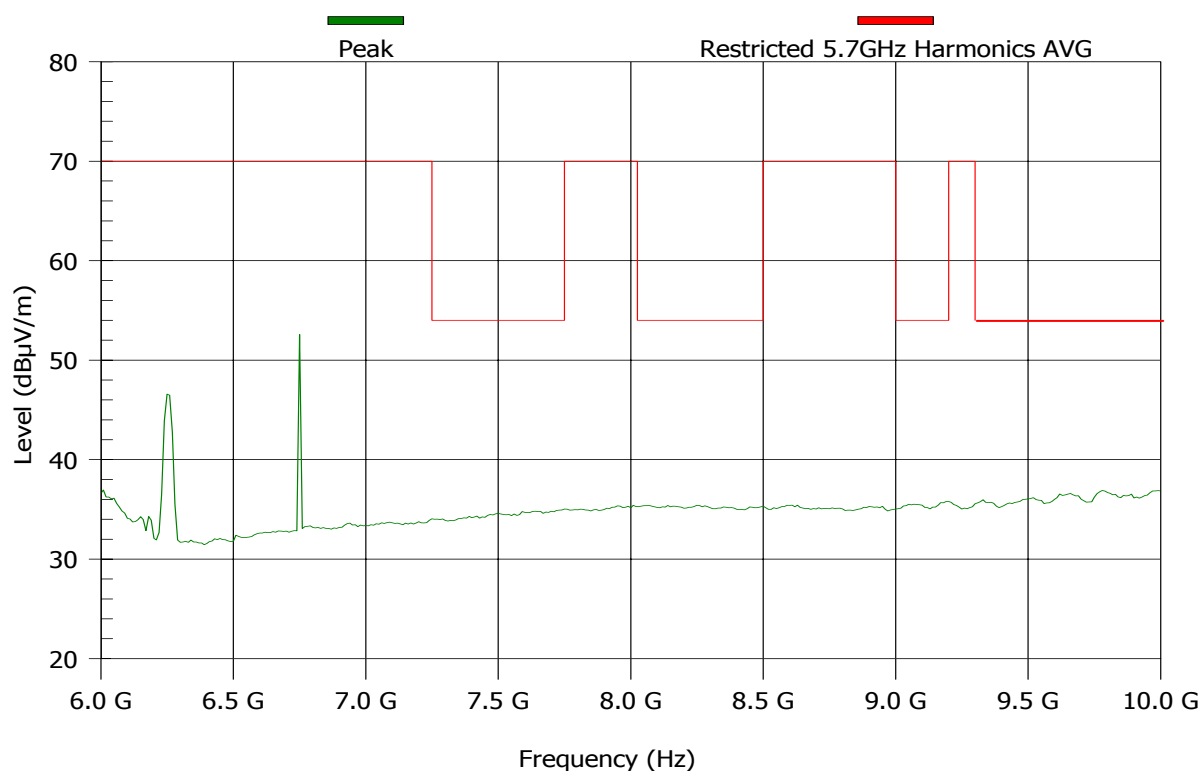
None

Test Results Plot No 45

**RE102 FCC-15.205 RESTRICTED 6-10GHz 5787 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 12 s
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

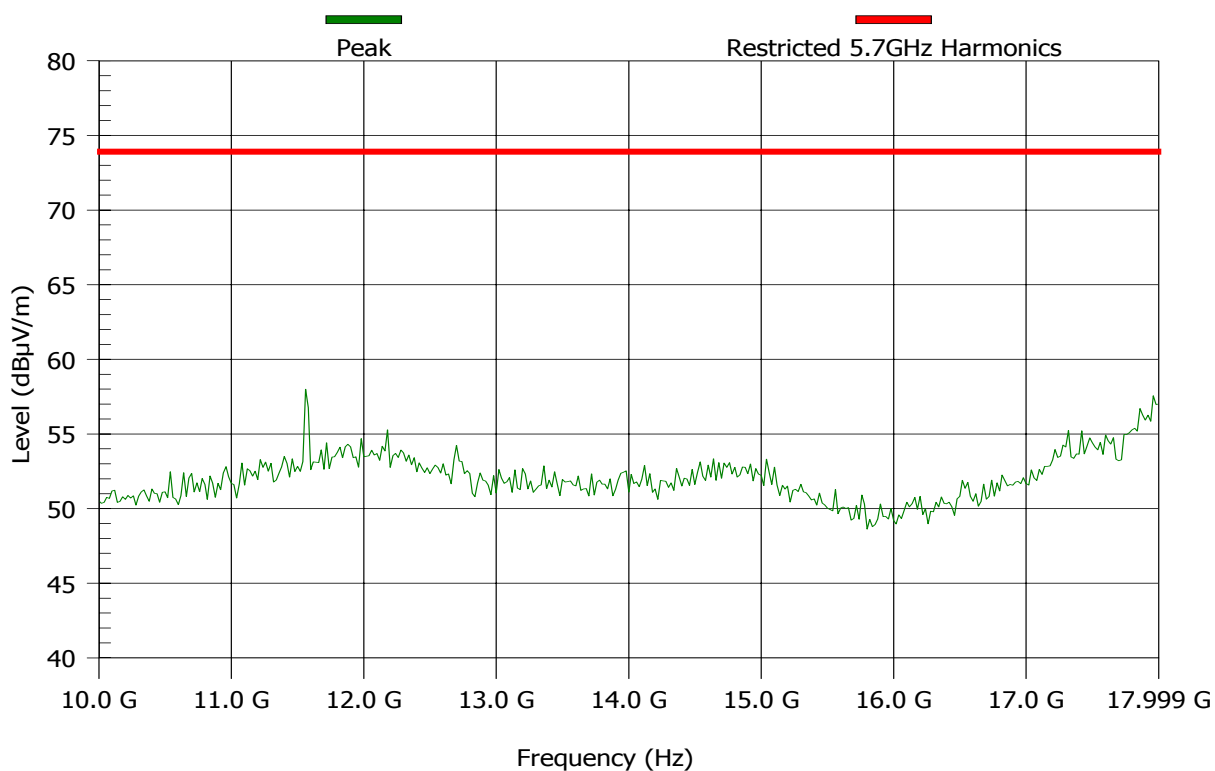
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 46

RE102 FCC-15.205 RESTRICTED 10-18GHz 5787 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 159.98 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

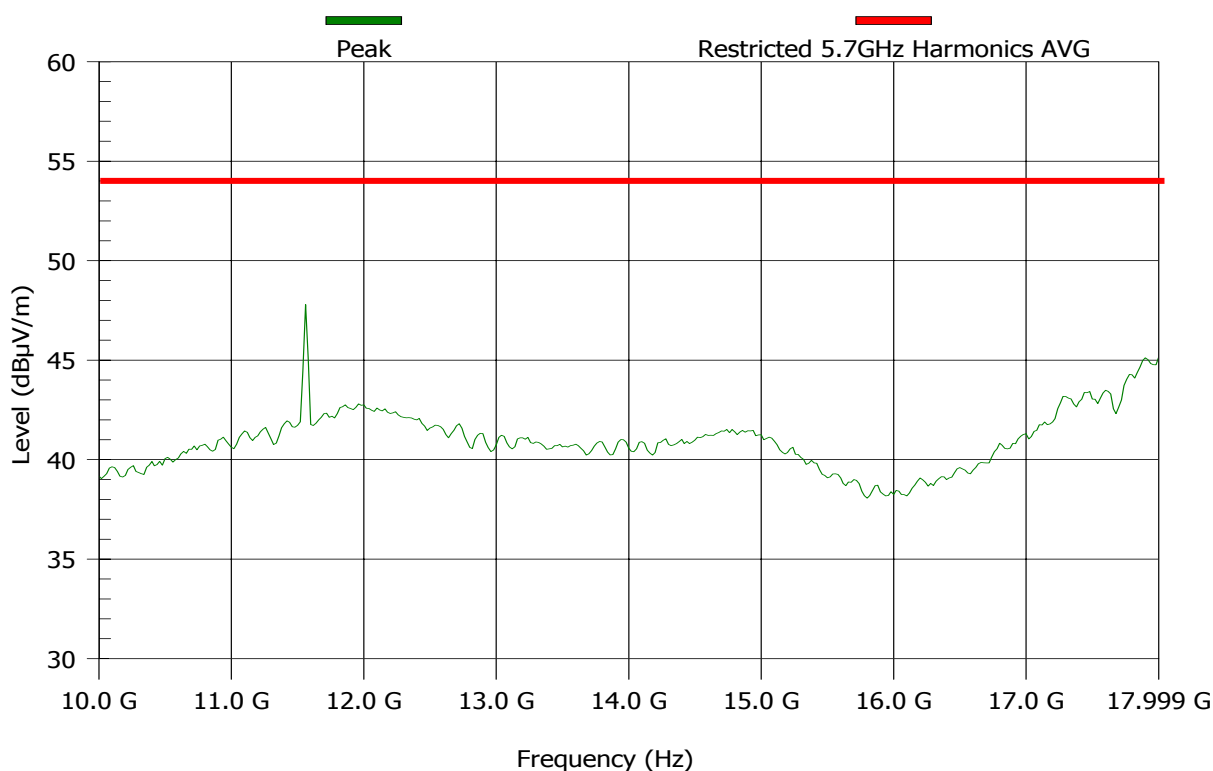
None

Test Results Plot No 47

**RE102 FCC-15.205 RESTRICTED 10-18GHz 5787 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 24 s
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

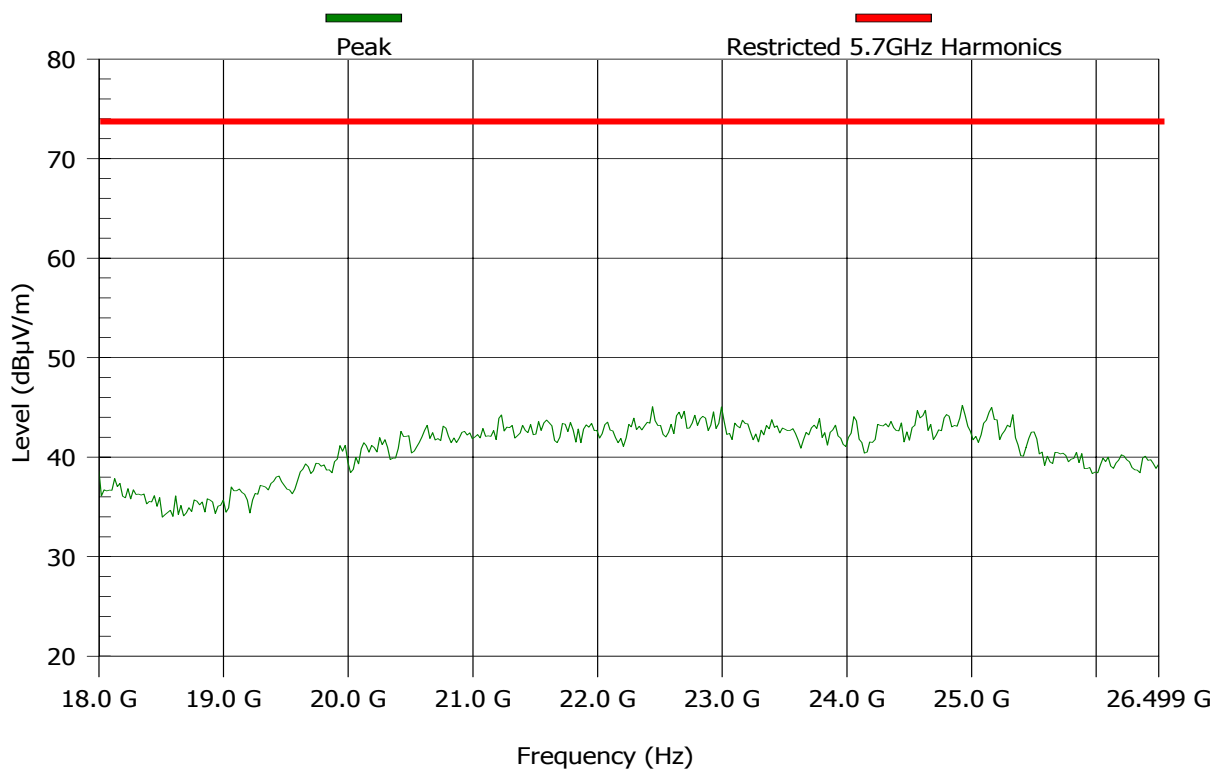
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 48

RE102 FCC-15.205 RESTRICTED 18-26.5GHz 5787 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	Hewlett Packard 7405A
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto: 84.99 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 18-26.5GHz SLK-35-3

TEST REMARKS:05/01/2006



MAXIMUM RESULT DEVIATION:

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

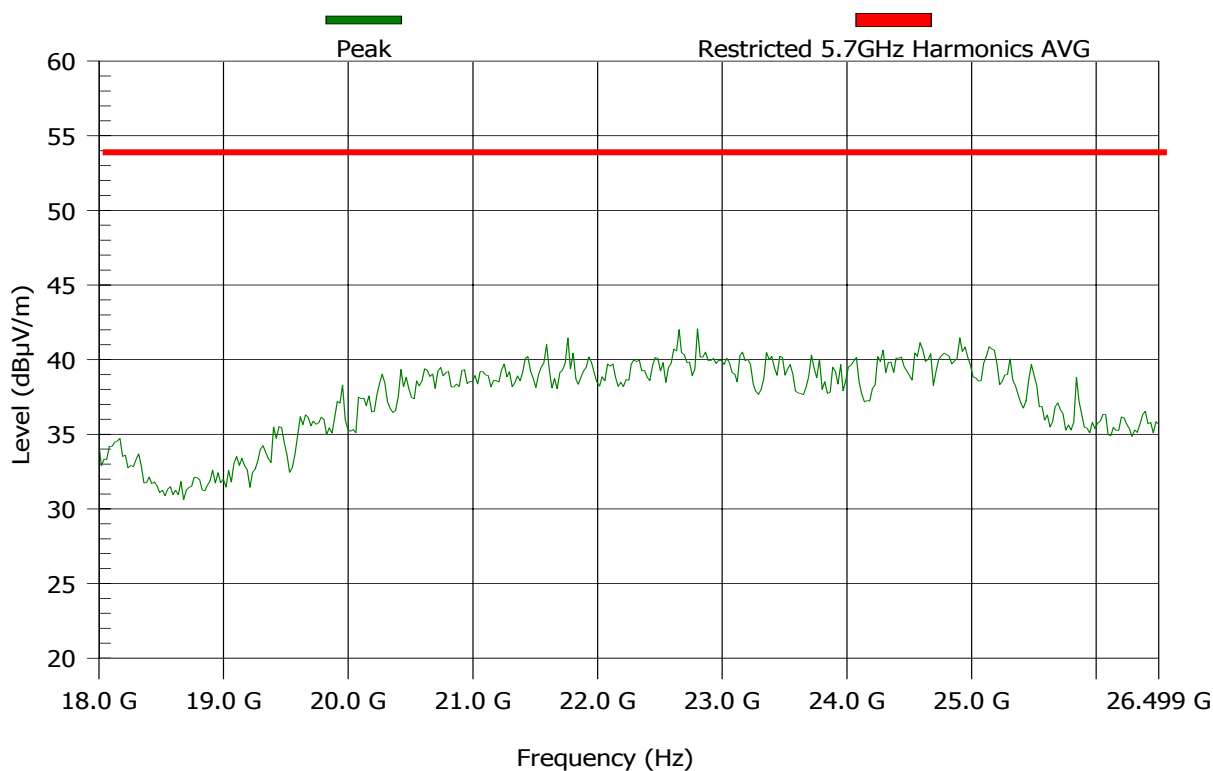
None

Test Results Plot No 49

**RE102 FCC-15.205 RESTRICTED 18-26.5GHz 5787 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	Hewlett Packard 7405A
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	100 kHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto: 113.16 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 18-26.5GHz SLK-35-3

TEST REMARKS:05/01/2006



MAXIMUM RESULT DEVIATION:

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

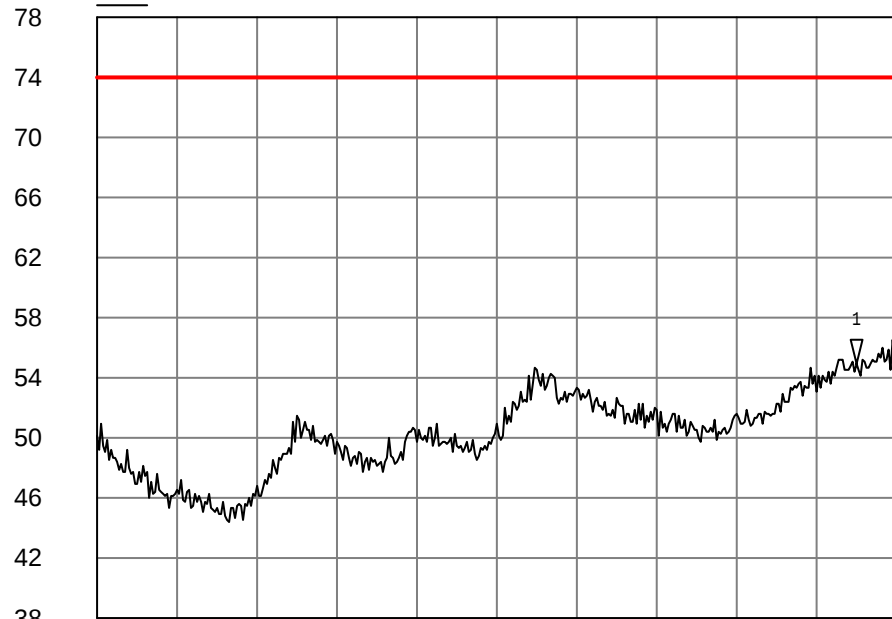
None

Test Results Plot No 50

RE102 FCC-15.205 RESTRICTED 26.5-40GHz 5787 22dbi Sq

SoftPlot Measurement Presentation

Trace A



1 Trace A
▽ 39.325000 GHz
54.8897 dBuV

Start: 26.500000 GHz

Stop: 40.000000 GHz

Res BW: 1 MHz

Vid BW: 1 MHz

Sweep: 337.50 ms

01/02/2006 11:49:00

E7405A

Test Results Plot No 51

**RE102 FCC-15.205 RESTRICTED 26.5-40GHz 5787 22dbi Sq
AVG**

SoftPlot Measurement Presentation

Trace A



1 Trace A
▽ 39.325000 GHz
45.1207 dBuV

Start: 26.500000 GHz

Stop: 40.000000 GHz

Res BW: 1 MHz

Vid BW: 1 MHz

Sweep: 337.50 ms

01/02/2006 11:50:25

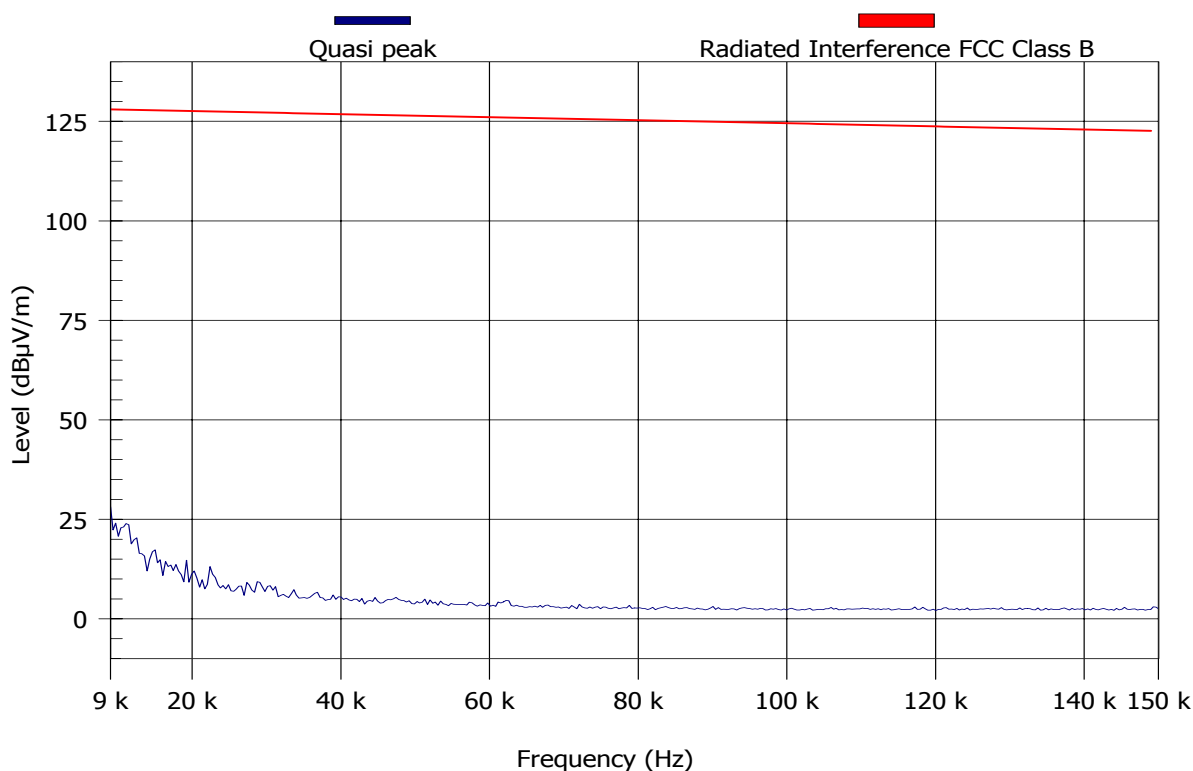
E7405A

Test Results Plot No 52

FCC 15.205 RESTRICTED 0.009-0.15MHz 5837 22dbi sq VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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:

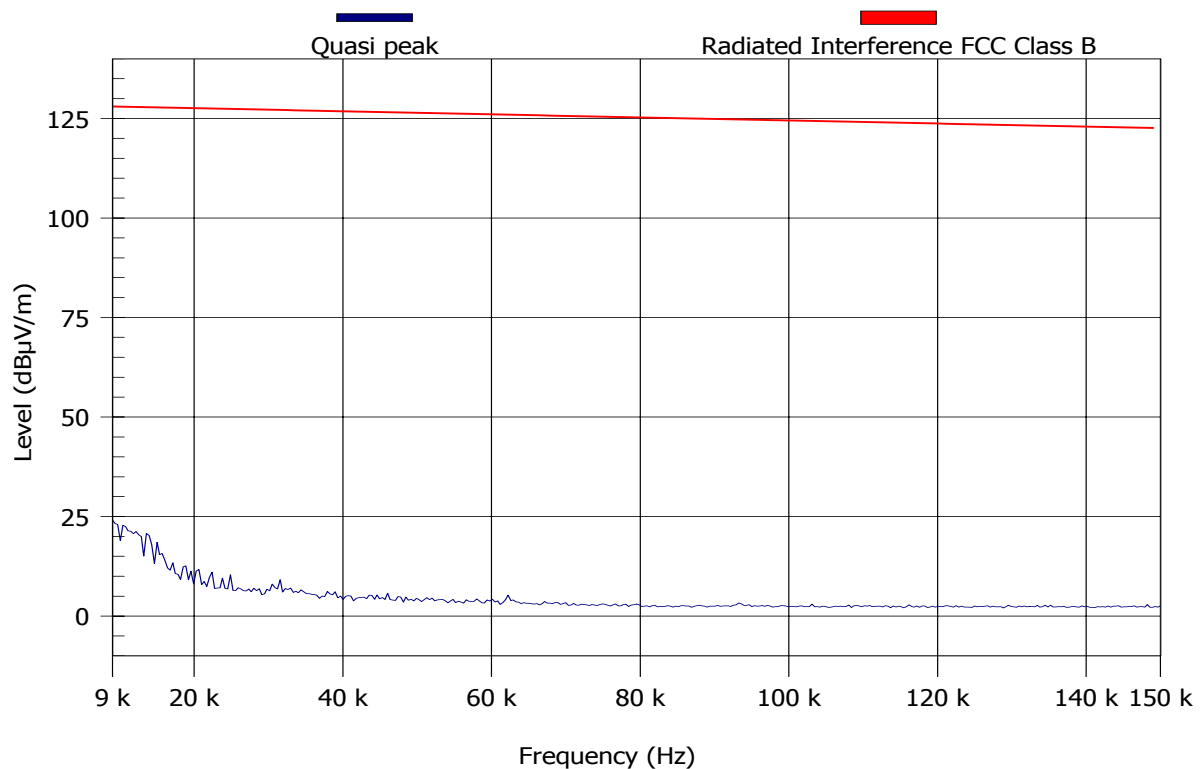
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 53

FCC 15.205 RESTRICTED 0.009-0.15MHz 5837 22dbi sq HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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.

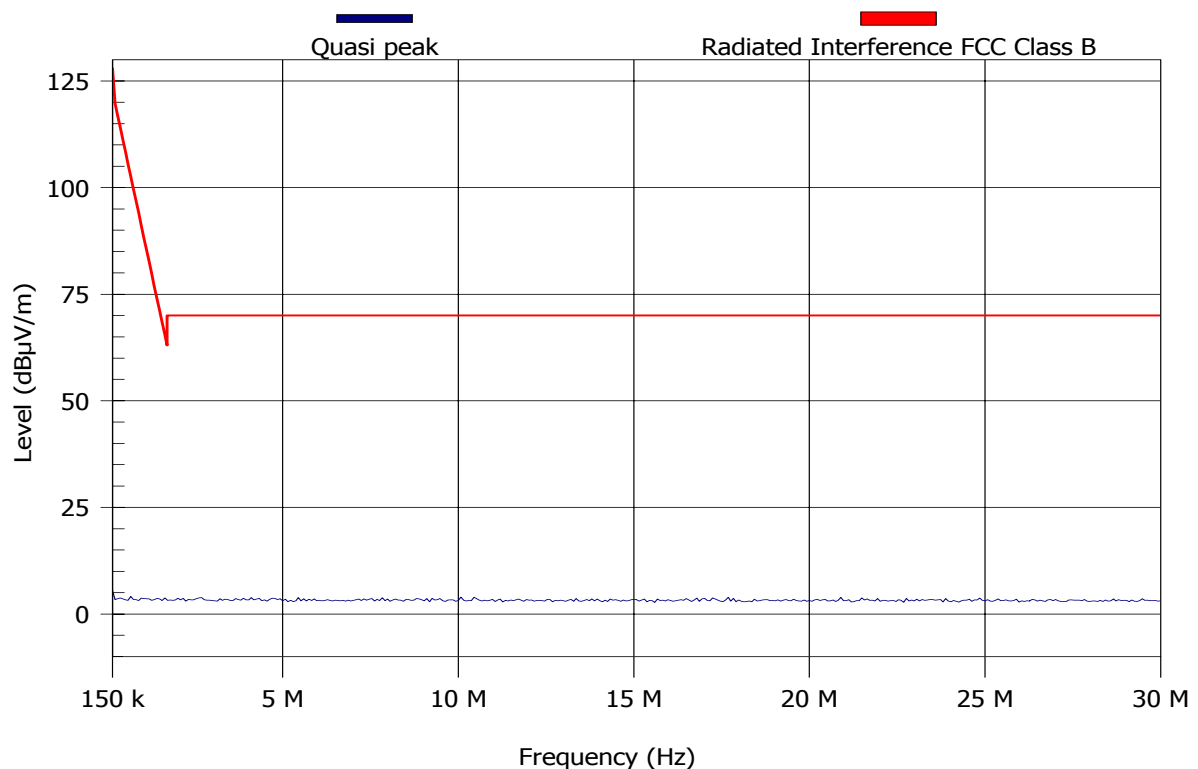
None

Test Results Plot No 54

FCC 15.205 RESTRICTED 0.15-30MHz 5837 22dbi sq VER

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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:

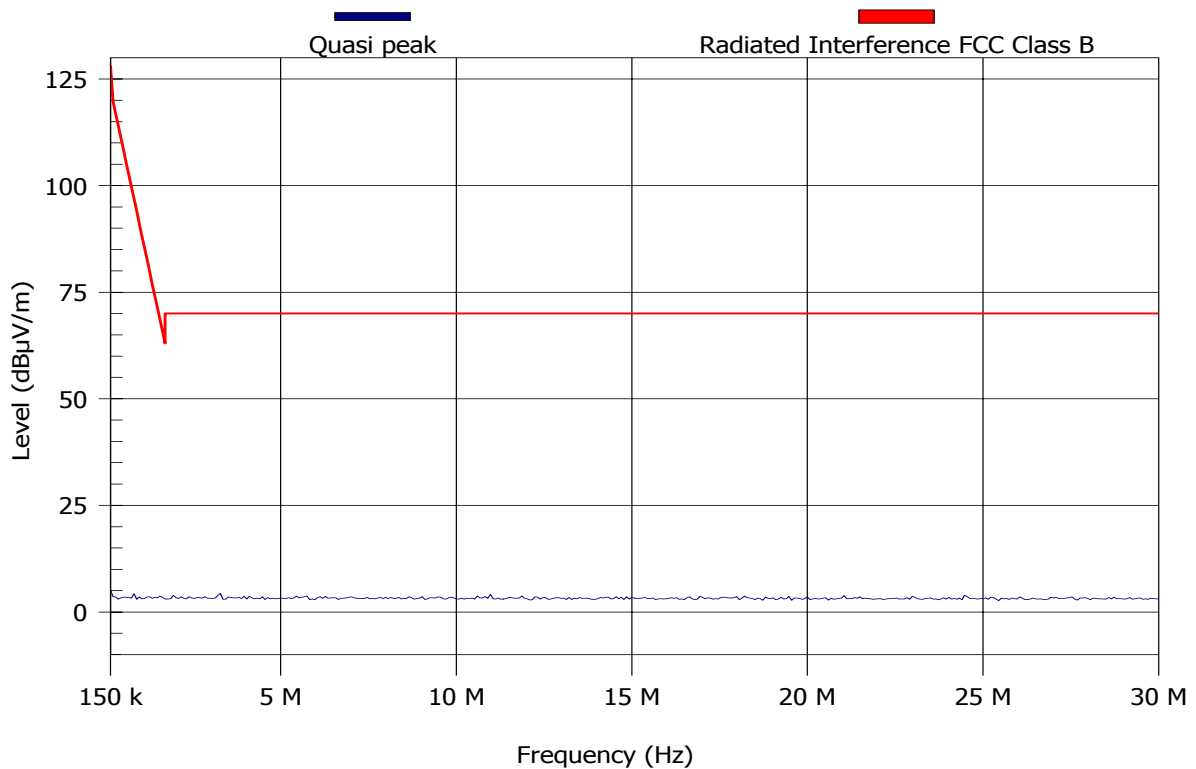
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

Test Results Plot No 55
FCC 15.205 RESTRICTED 0.15-30MHz 5837 22dbi sq HOR

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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.

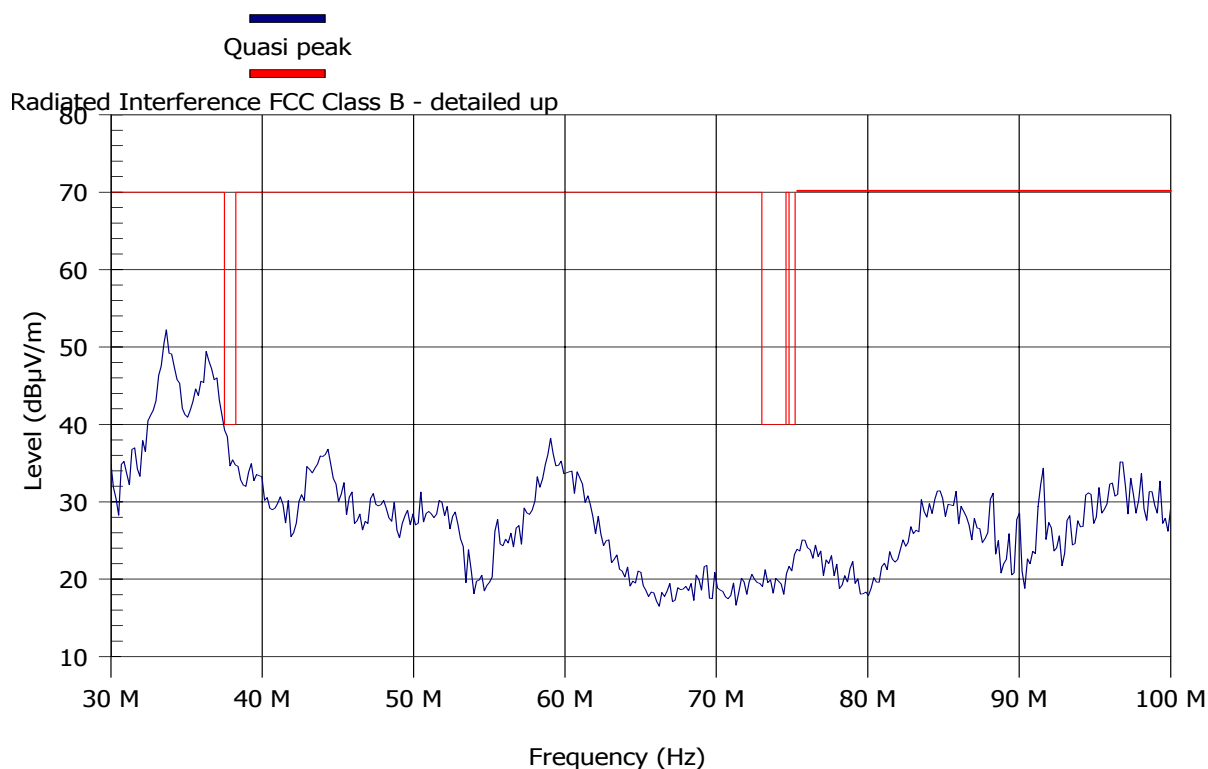
None

Test Results Plot No 56

FCC 15.205 RESTRICTED 30-100MHz 5837 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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-3

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

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

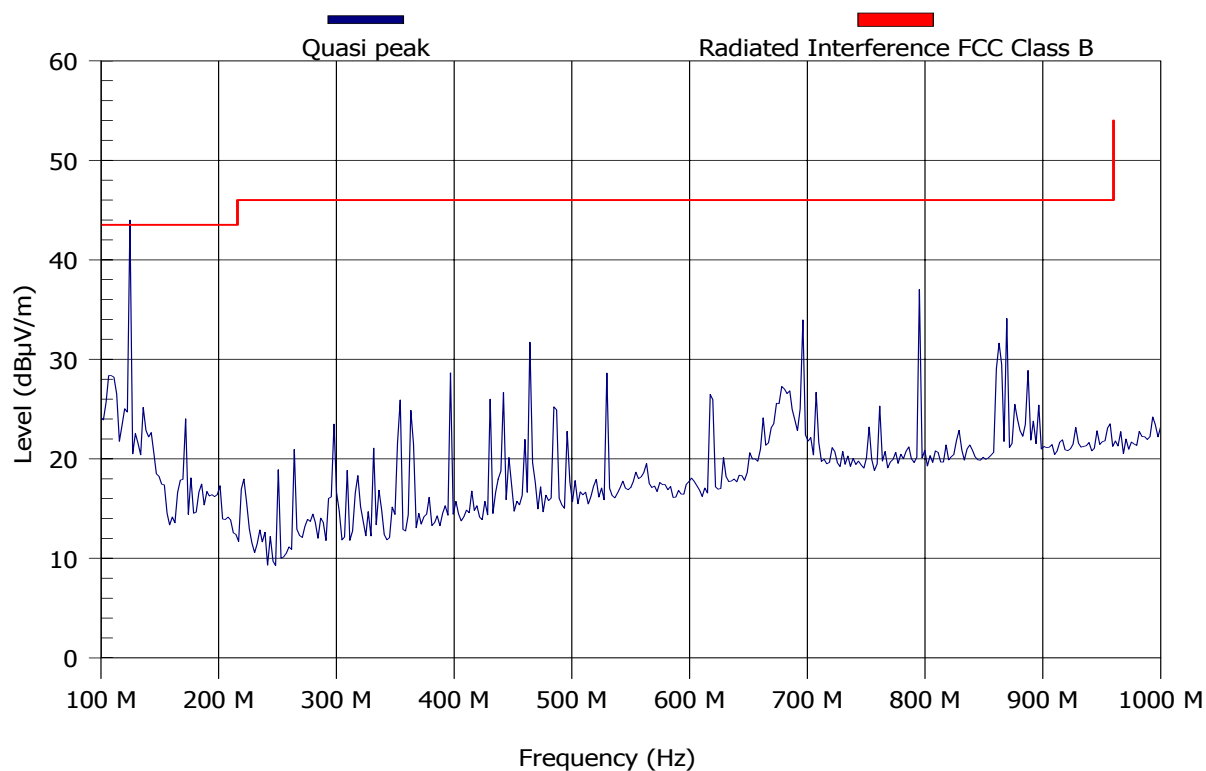
Frequency (MHz)	QP (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
37.519	31.4	40	Pass	245	1	V
38.108	25.5	40	Pass	240	1	V

Test Results Plot No 57

FCC 15.205 RESTRICTED 100-1000MHz 5837 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 187.5 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-3

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

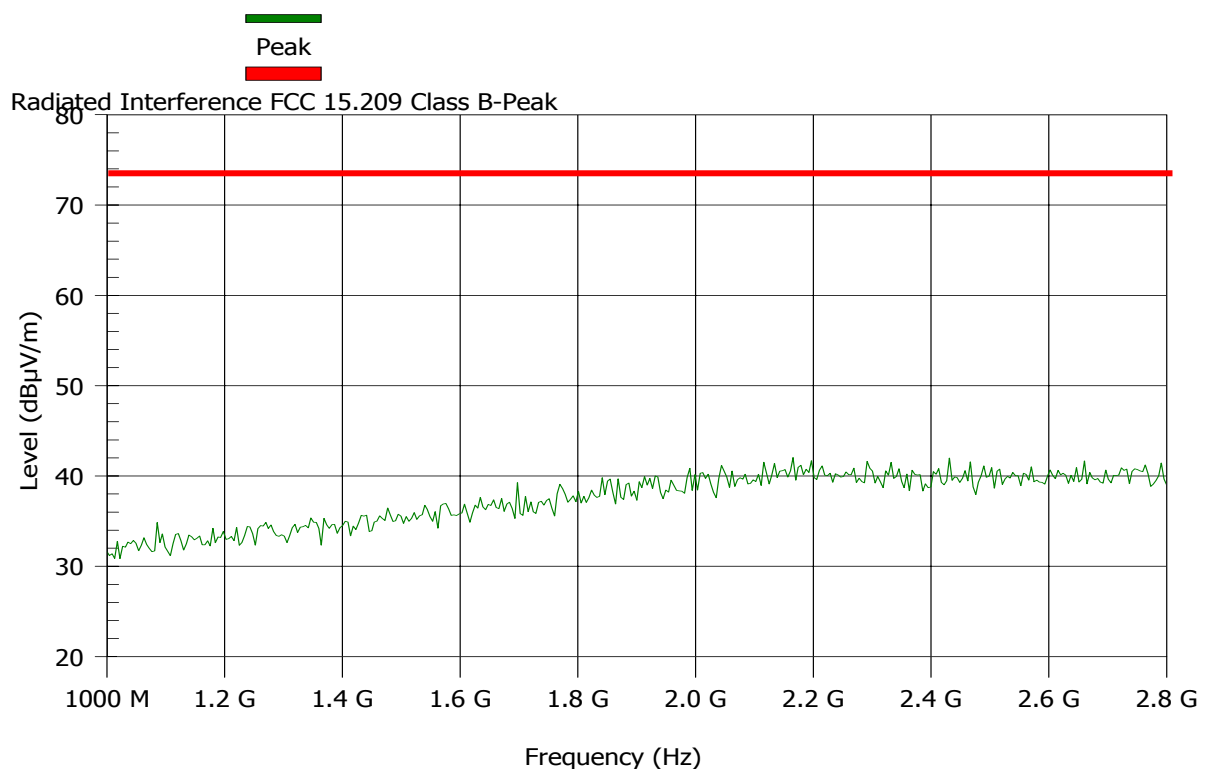
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Frequency (MHz)	QP (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
125.024	37.2	43.5	Pass	120	1.3	V

Test Results Plot No 58
FCC 15.205 RESTRICTED 1-2.8GHz 5837 22dbi sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 36 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1GHz-4GHz

TEST REMARKS:



MAXIMUM RESULT DEVIATION:

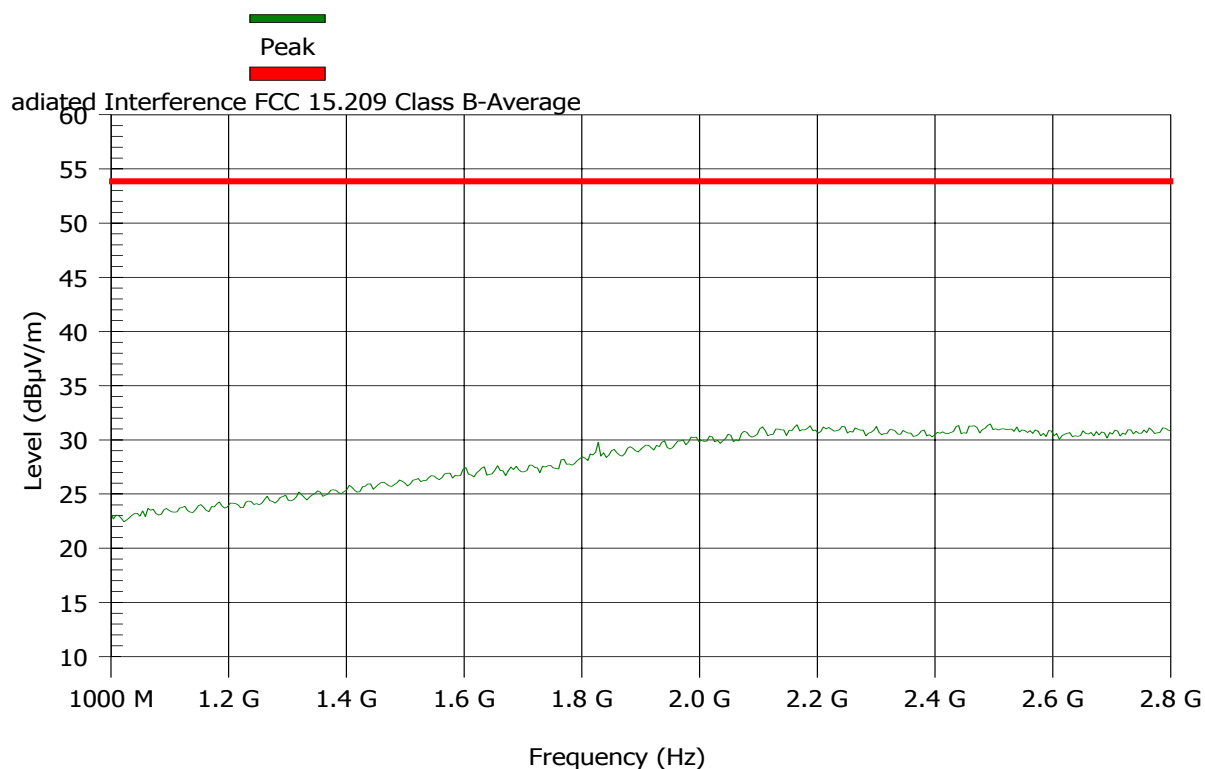
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 59

FCC 15.205 RESTRICTED 1-2.8GHz 5837 22dbi sq AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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: 5.4 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.

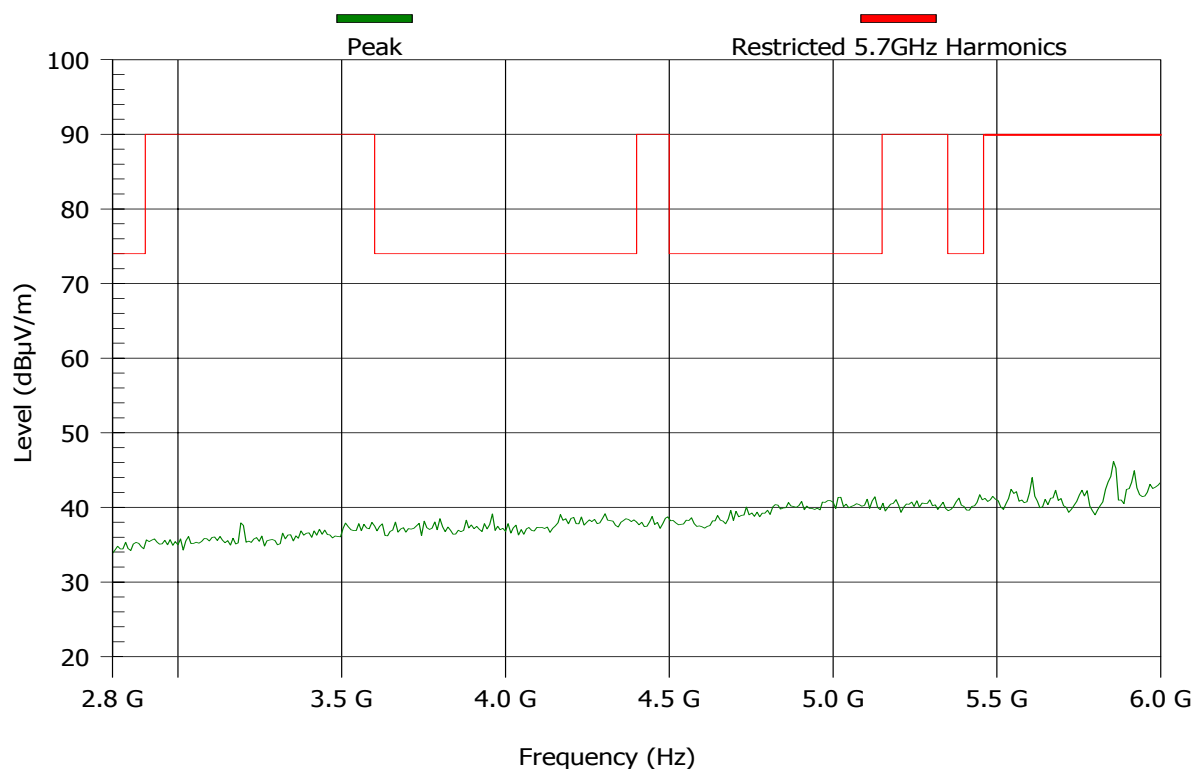
None

Test Results Plot No 60

RE102 FCC-15.205 RESTRICTED 2.8-6GHz 5837 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	70 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 64 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

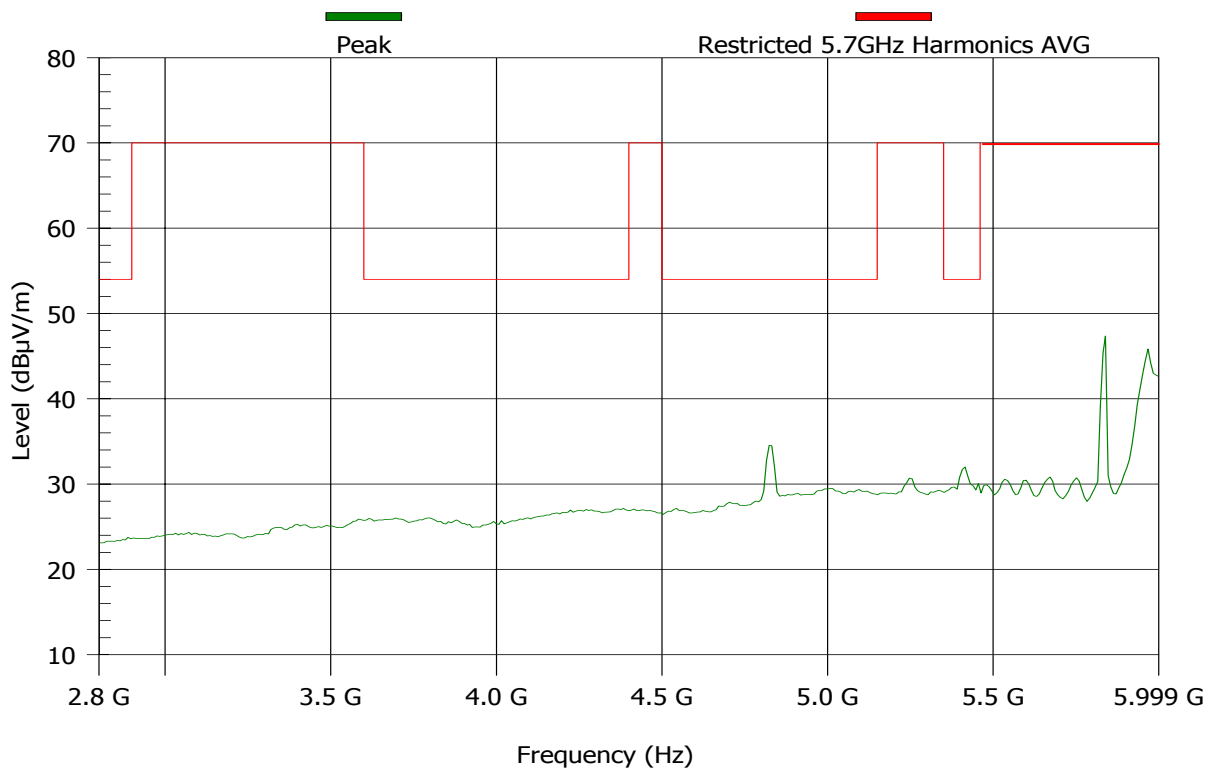
None

Test Results Plot No 61

**RE102 FCC-15.205 RESTRICTED 2.8-6GHz 5837 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 9.6 s
Polarization:	Horizontal and Vertical	Pre Amplifier	

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

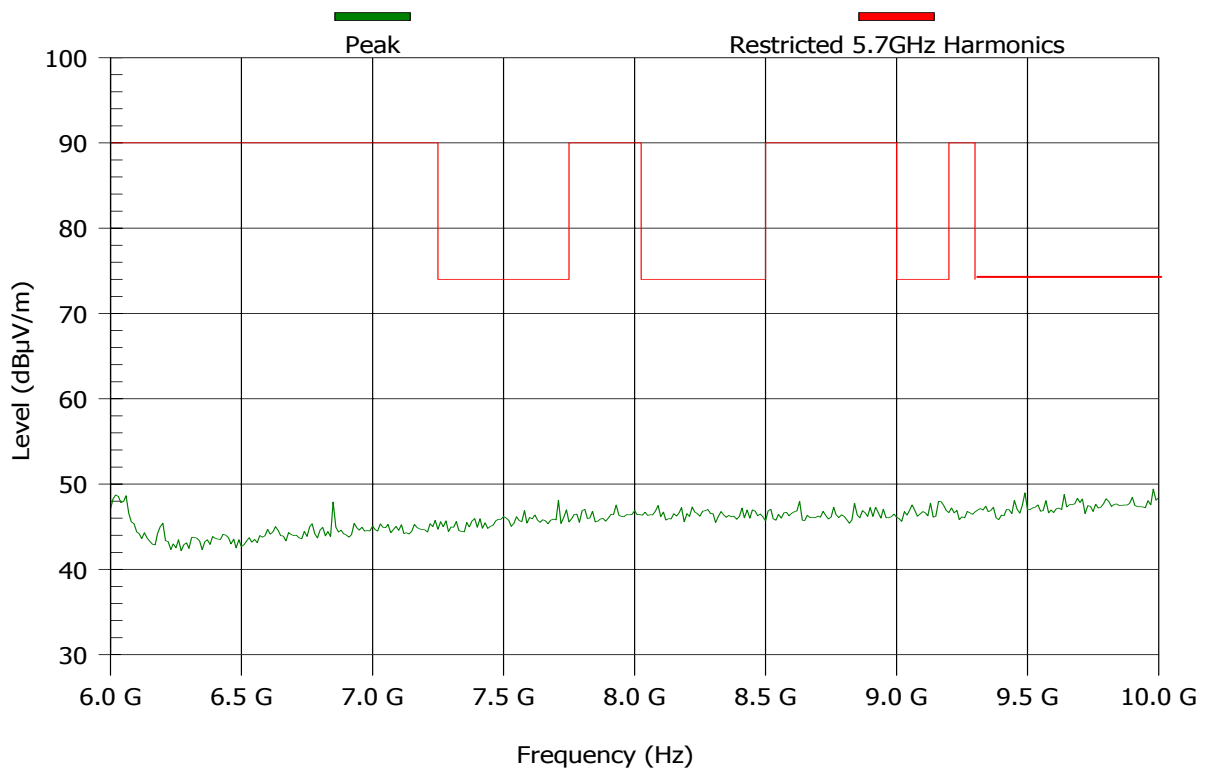
None

Test Results Plot No 62

RE102 FCC-15.205 RESTRICTED 6-10GHz 5837 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 89.83 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

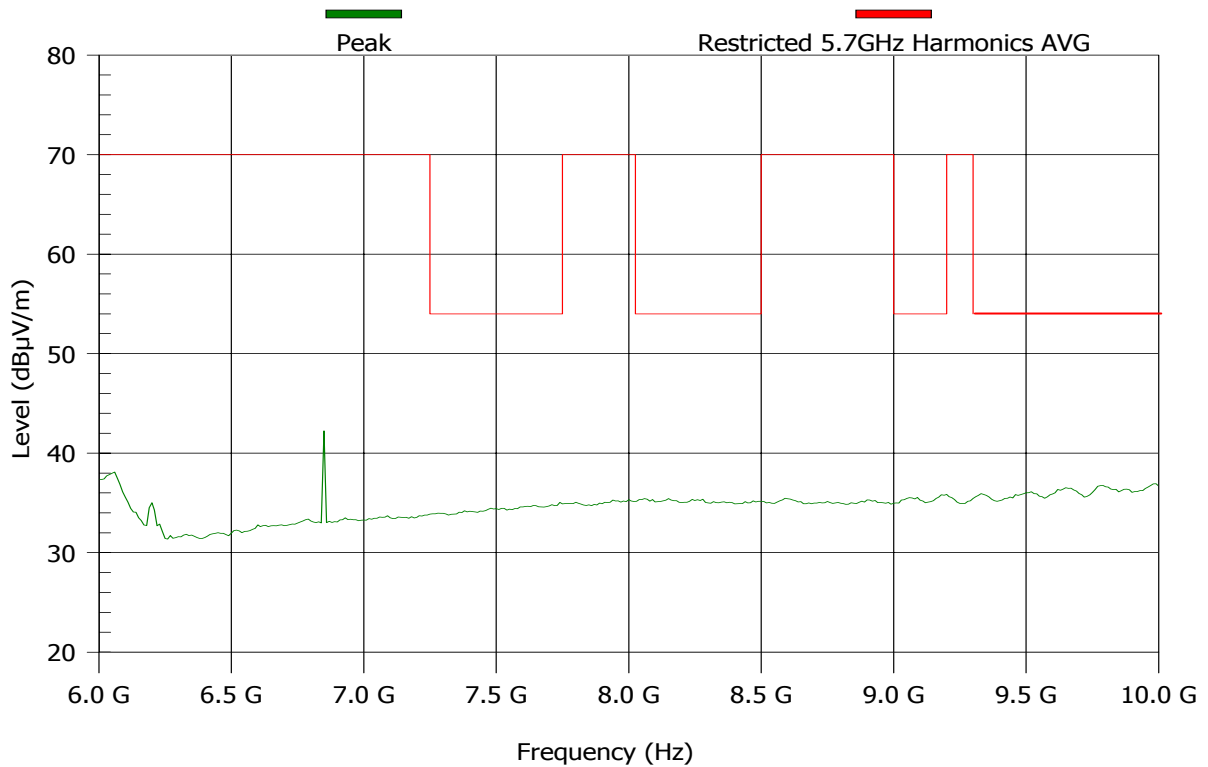
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

Test Results Plot No 63
RE102 FCC-15.205 RESTRICTED 6-10GHz 5837 22dbi Sq
AVG

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 12 s
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

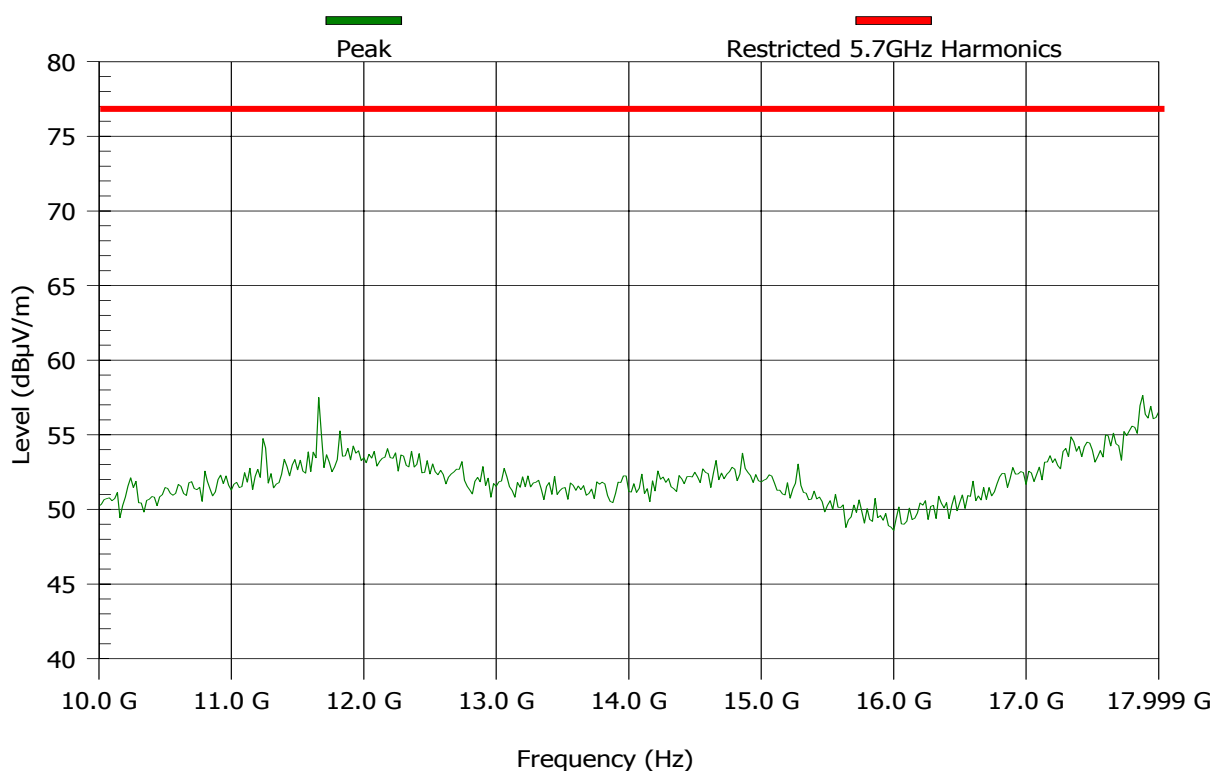
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.
None

Test Results Plot No 64

RE102 FCC-15.205 RESTRICTED 10-18GHz 5837 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 159.98 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

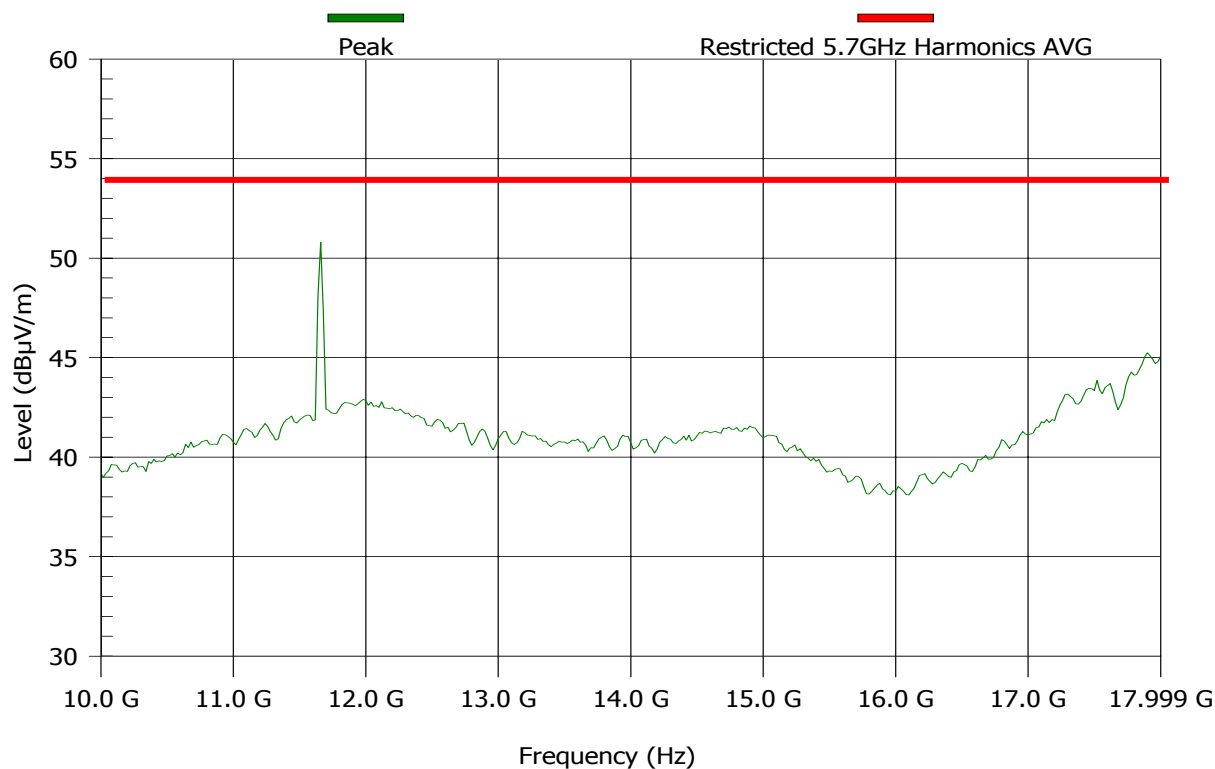
None

Test Results Plot No 65

**RE102 FCC-15.205 RESTRICTED 10-18GHz 5837 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 Hz
Antenna:	ARA DRG-118/A 1-18 GHz 1317	Sweep Time:	Auto: 24 s
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 6-18 GHz

TEST REMARKS:03/01/2006



MAXIMUM RESULT DEVIATION:

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

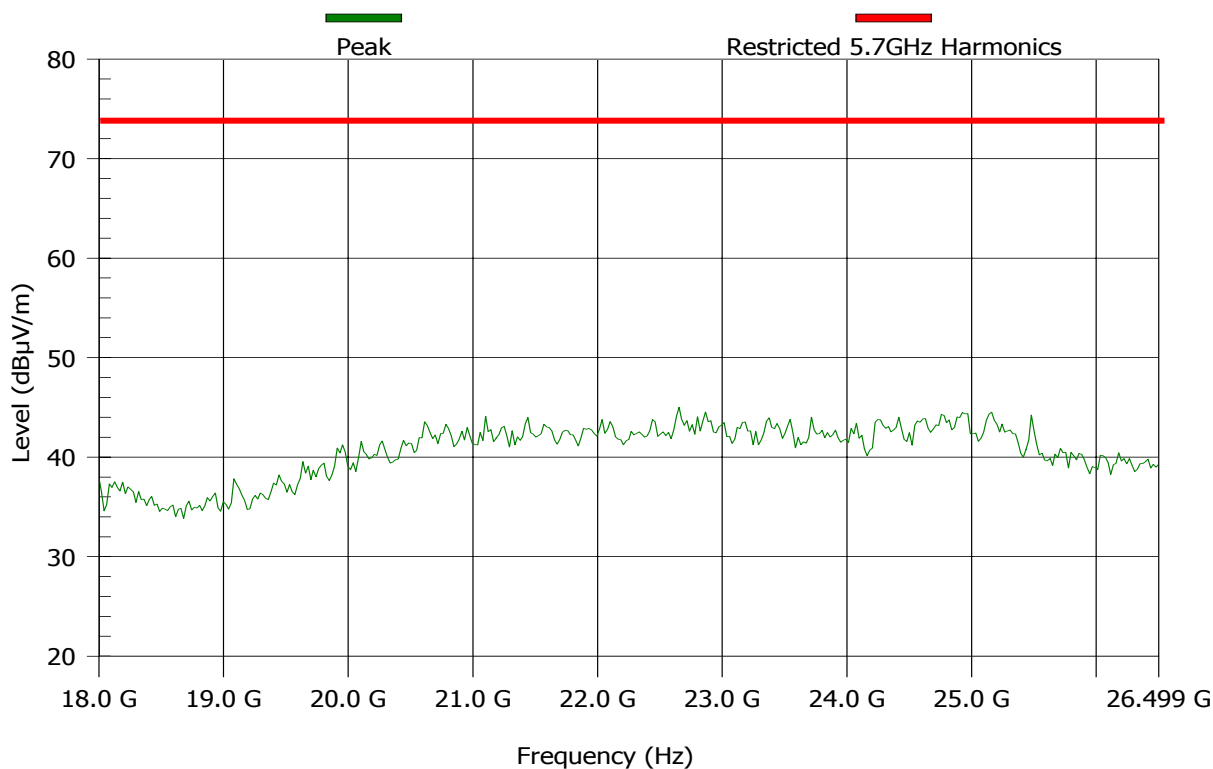
Frequency (MHz)	PK MaxHold (dB μ V/m)	PK Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
11659.792	50.8	54	Pass	60	1	H

Test Results Plot No 66

RE102 FCC-15.205 RESTRICTED 18-26.5GHz 5837 22dbi Sq

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	Hewlett Packard 7405A
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	1000 kHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto: 84.99 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 18-26.5GHz SLK-35-3

TEST REMARKS:05/01/2006



MAXIMUM RESULT DEVIATION:

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

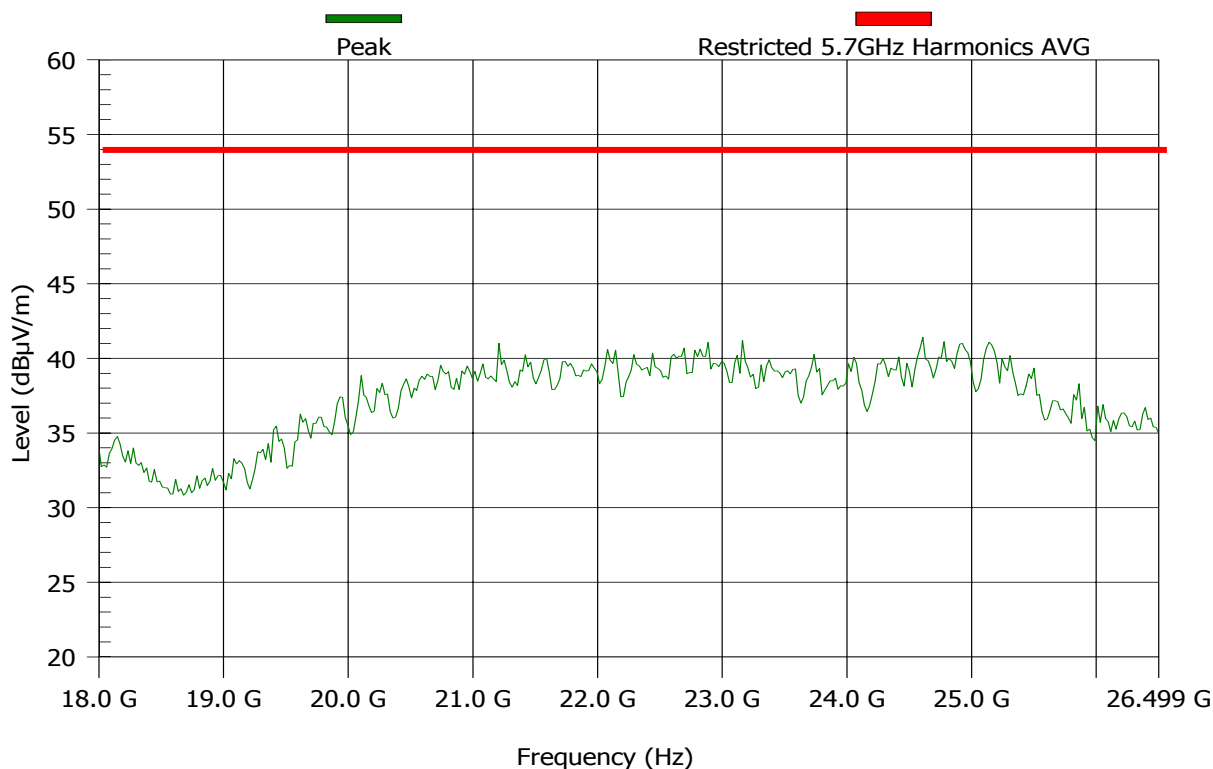
None

Test Results Plot No 67

**RE102 FCC-15.205 RESTRICTED 18-26.5GHz 5837 22dbi Sq
AVG**

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	Hewlett Packard 7405A
S/N:	0050C21CCF24	Ref. Level:	90 dB μ V
Date of Test:		RBW:	1000 kHz
Test Engineer:		VBW:	100 kHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto: 113.16 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 18-26.5GHz SLK-35-3

TEST REMARKS:05/01/2006



MAXIMUM RESULT DEVIATION:

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

None

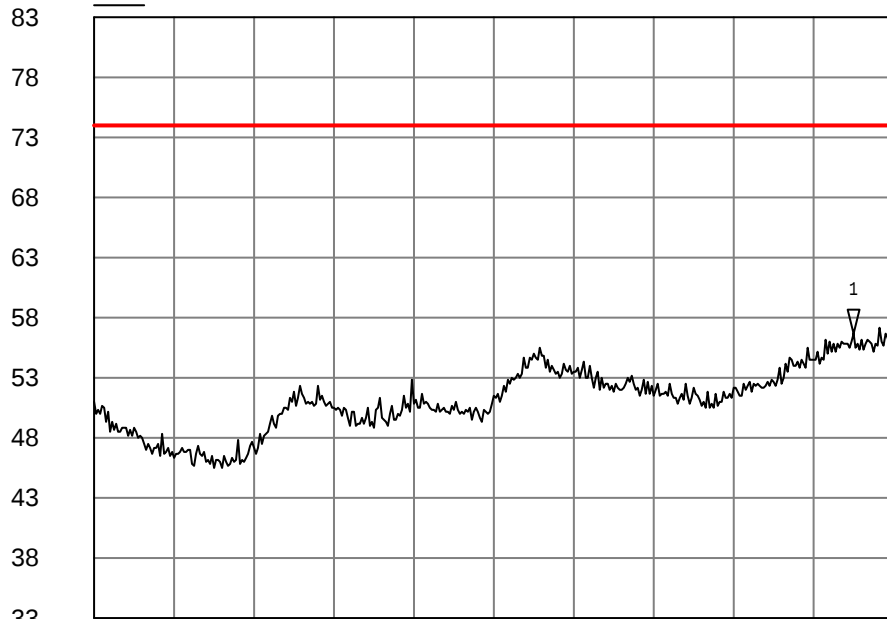
Test Results Plot No 68

RE102 FCC-15.205 RESTRICTED 26.5-40GHz 5837 22dbi Sq

SoftPlot Measurement Presentation

Trace A

dBuV



1 Trace A
▽ 39.325000 GHz
56.6487 dBuV

Start: 26.500000 GHz

Stop: 40.000000 GHz

Res BW: 1 MHz

Vid BW: 1 MHz

Sweep: 337.50 ms

01/02/2006 11:53:39

E7405A

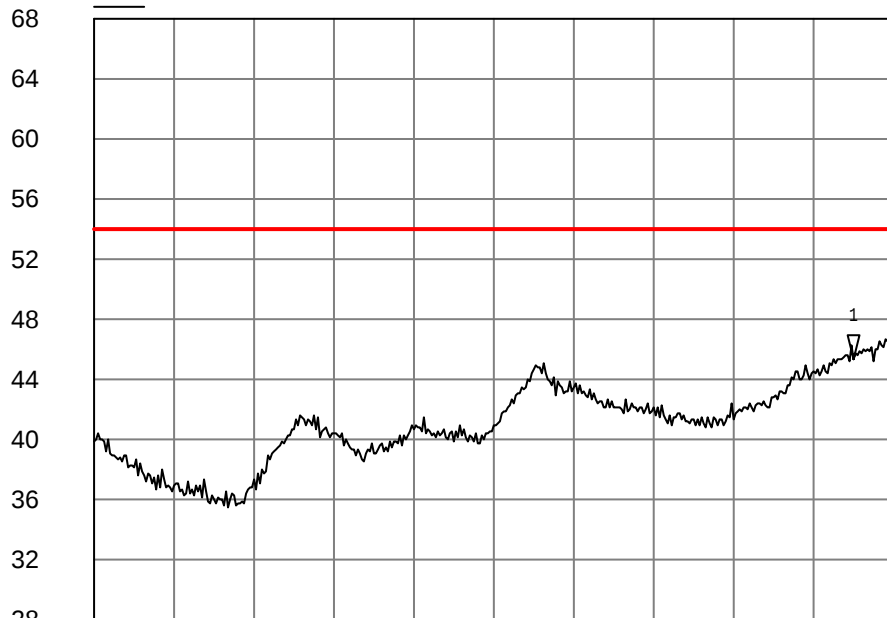
Test Results Plot No 69

**RE102 FCC-15.205 RESTRICTED 26.5-40GHz 5837 22dbi Sq
AVG**

SoftPlot Measurement Presentation

Trace A

dBuV



1 Trace A
▽ 39.325000 GHz
45.3517 dBuV

Start: 26.500000 GHz

Stop: 40.000000 GHz

Res BW: 1 MHz

Vid BW: 1 MHz

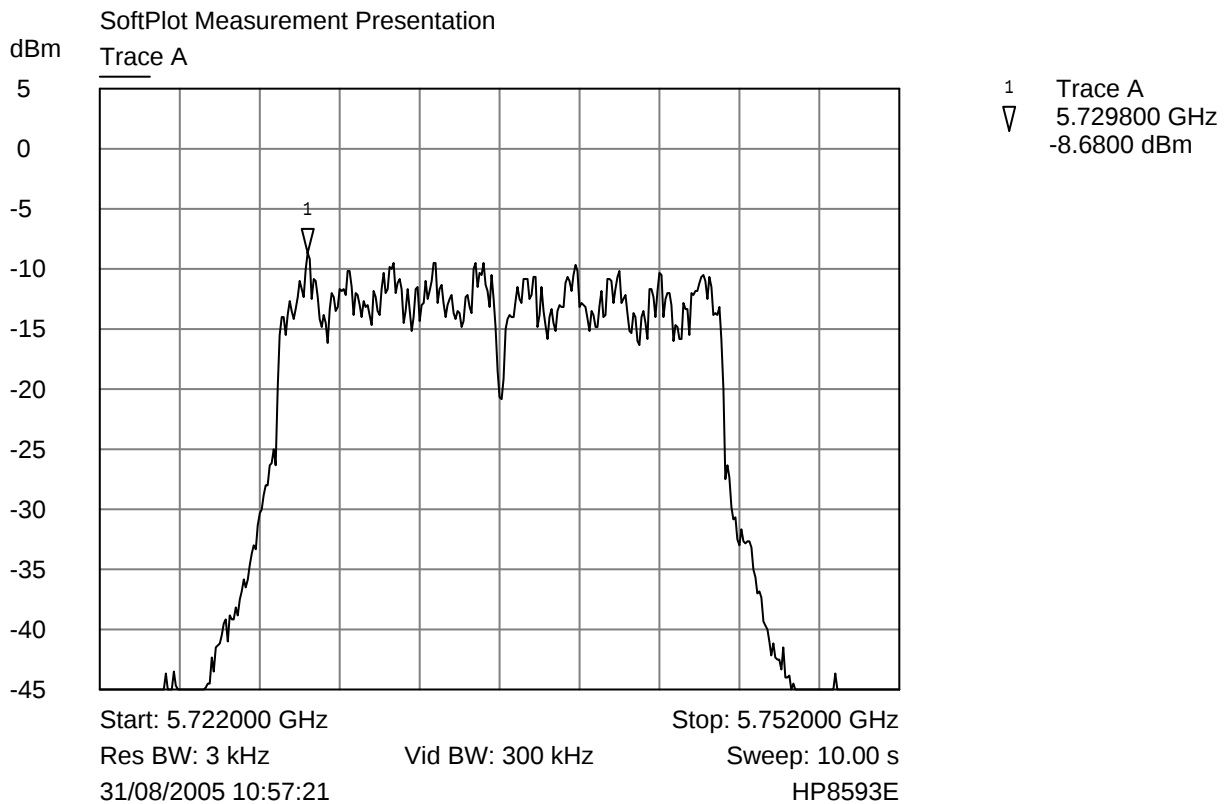
Sweep: 337.50 ms

01/02/2006 11:51:46

E7405A

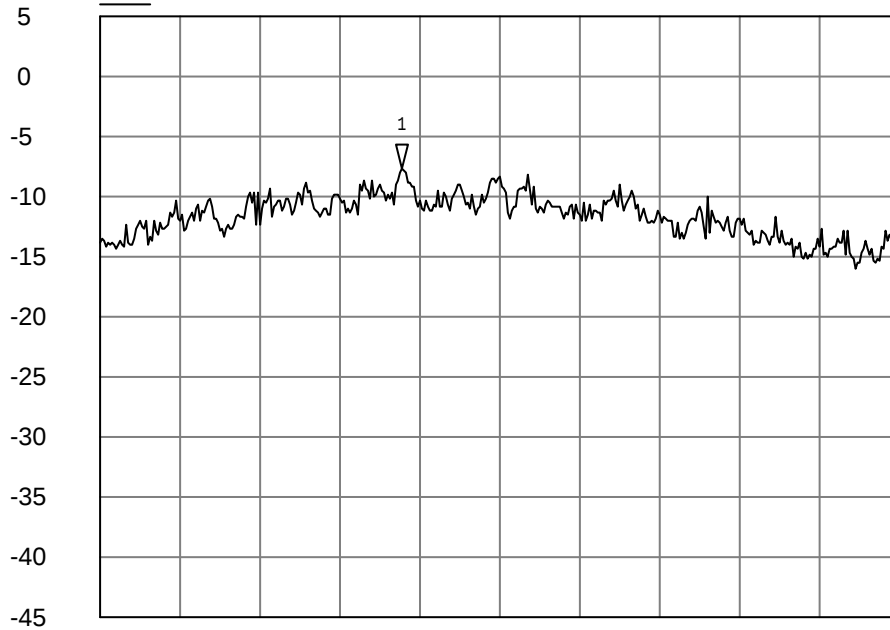
e. Power density 70 – 75

Test Results Plot No 70
FCC 15.247d Power density TX-905MHz



Test Results Plot No 71
FCC 15.247d Power density TX-905MHz

SoftPlot Measurement Presentation
Trace A

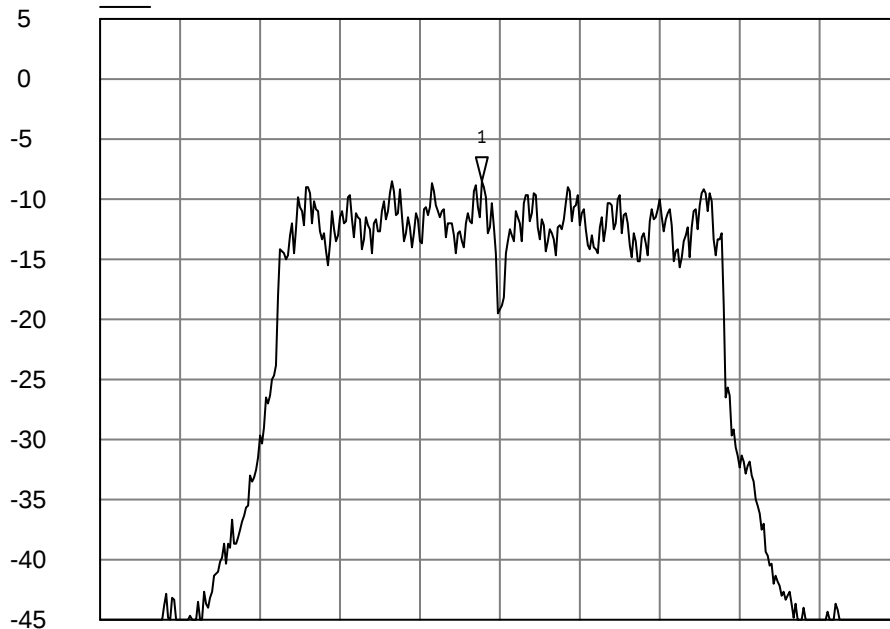


1 Trace A
▽ 5.729762 GHz
-7.6500 dBm

Start: 5.729649 GHz Stop: 5.729949 GHz
Res BW: 3 kHz Vid BW: 300 kHz Sweep: 100.00 s
31/08/2005 11:04:45 HP8593E

Test Results Plot No 72 FCC 15.247d Power density TX-915MHz

SoftPlot Measurement Presentation
Trace A

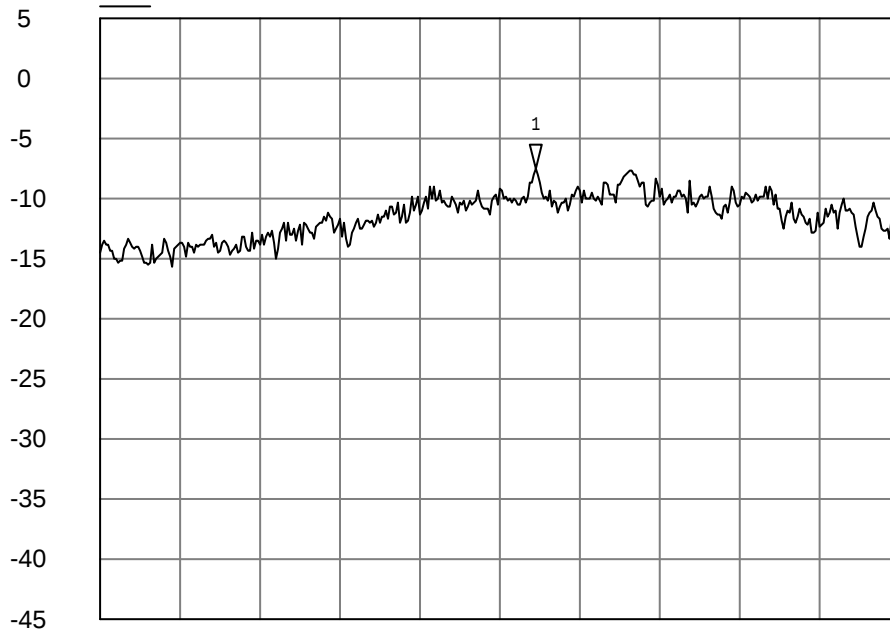


1 Trace A
▽ 5.786325 GHz
-8.5200 dBm

Start: 5.772000 GHz Stop: 5.802000 GHz
Res BW: 3 kHz Vid BW: 300 kHz Sweep: 10.00 s
31/08/2005 10:51:10 HP8593E

Test Results Plot No 73 FCC 15.247d Power density TX-915MHz

SoftPlot Measurement Presentation
Trace A



1 Trace A
▽ 5.786014 GHz
-7.5700 dBm

Start: 5.785850 GHz

Stop: 5.786150 GHz

Res BW: 3 kHz

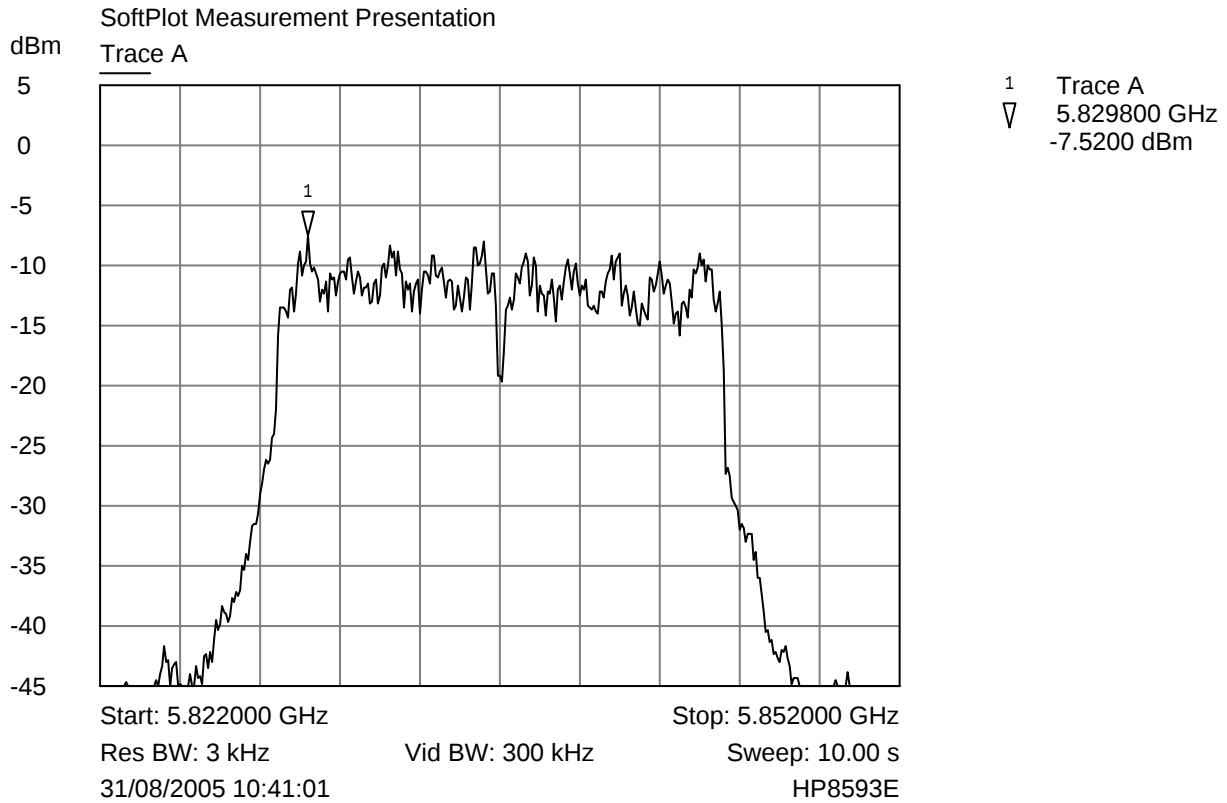
Vid BW: 300 kHz

Sweep: 100.00 s

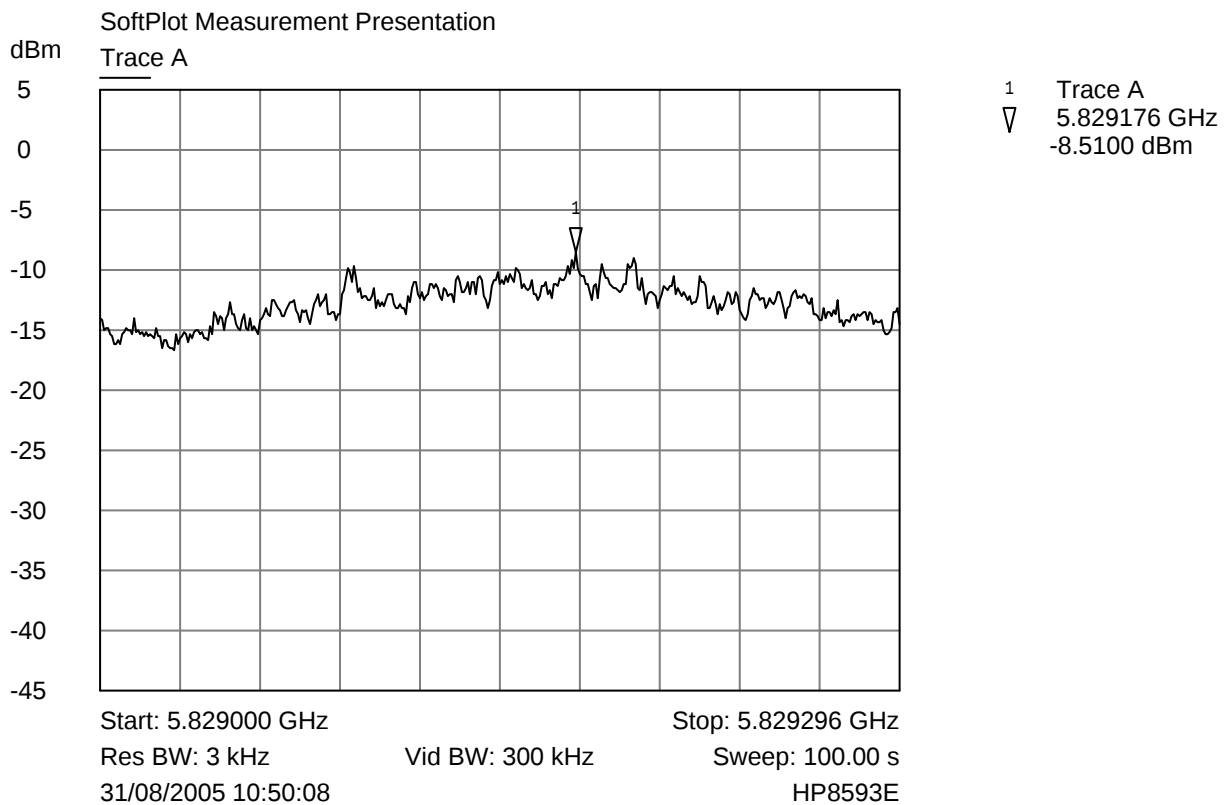
31/08/2005 10:56:08

HP8593E

Test Results Plot No 74
FCC 15.247d Power density TX-925MHz



Test Results Plot No 75
FCC 15.247d Power density TX-925MHz

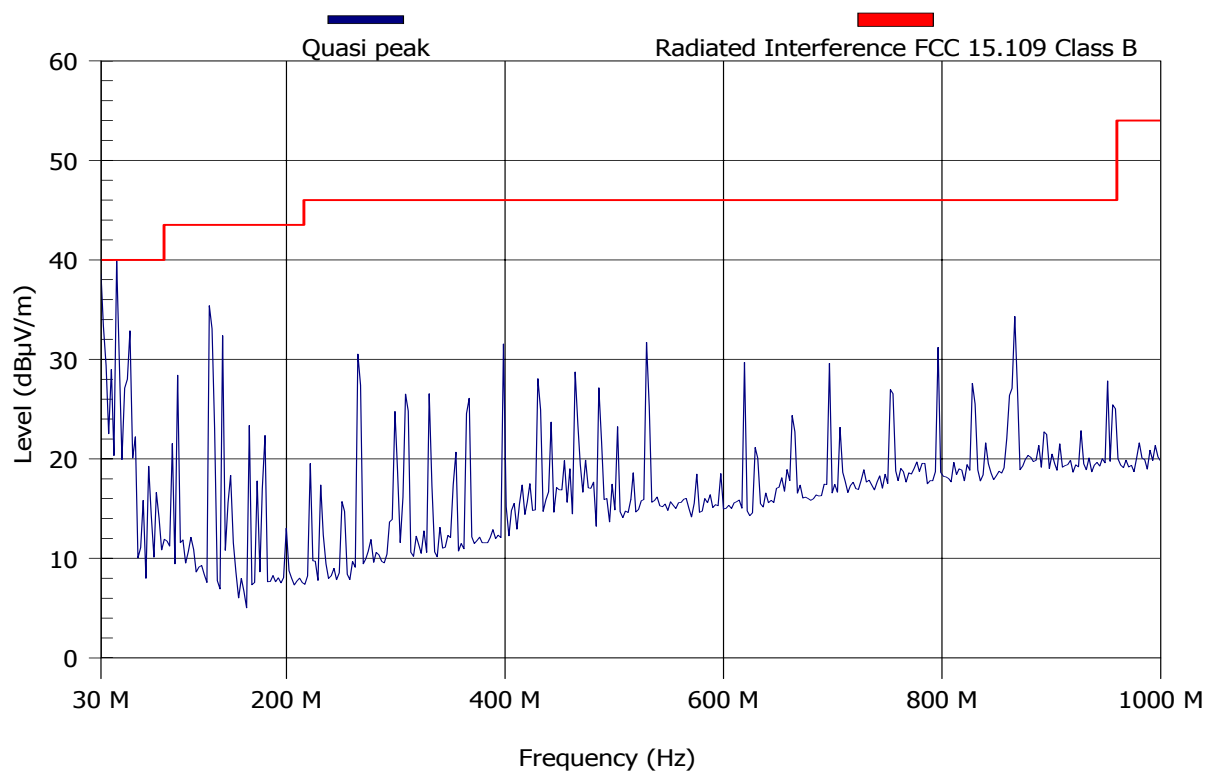


f. Radiated emission unintentional 76– 80

Test Results Plot No 76
RE102 FCC-15.109 30-1000MHz RCV

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	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 29db 0.01-1GHz No-3

TEST REMARKS:08/01/2006



MAXIMUM RESULT DEVIATION:

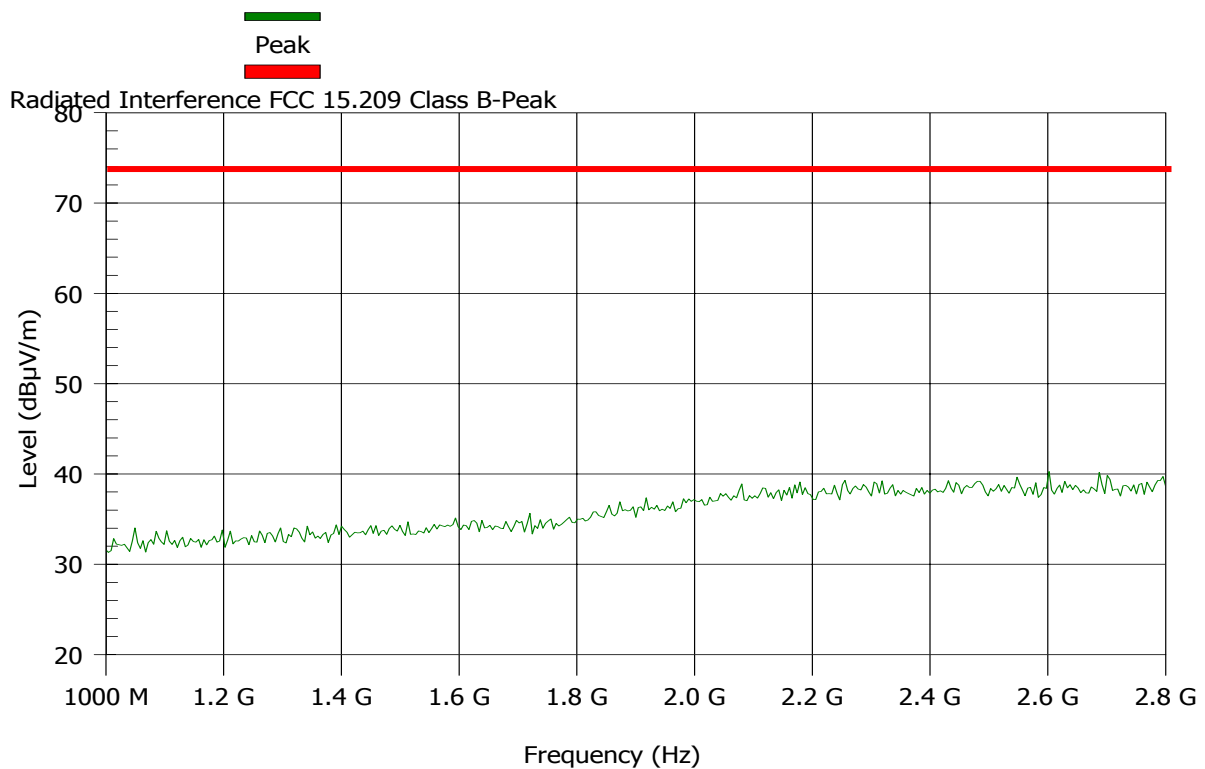
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Frequency (MHz)	QP (dB μ V/m)	QP Limit (dB μ V/m)	Result	Angle (degrees)	Height (m)	H/V
30	28.8	40	Pass	60	1.6	V
44.55	27.4	40	Pass	300	1	V

Test Results Plot No 77
RE102 FCC-15.109 RESTRICTED 1-2.8GHz RCV

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	70 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: 36 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 27db 1-4GHz

TEST REMARKS:08/01/2006



MAXIMUM RESULT DEVIATION:

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

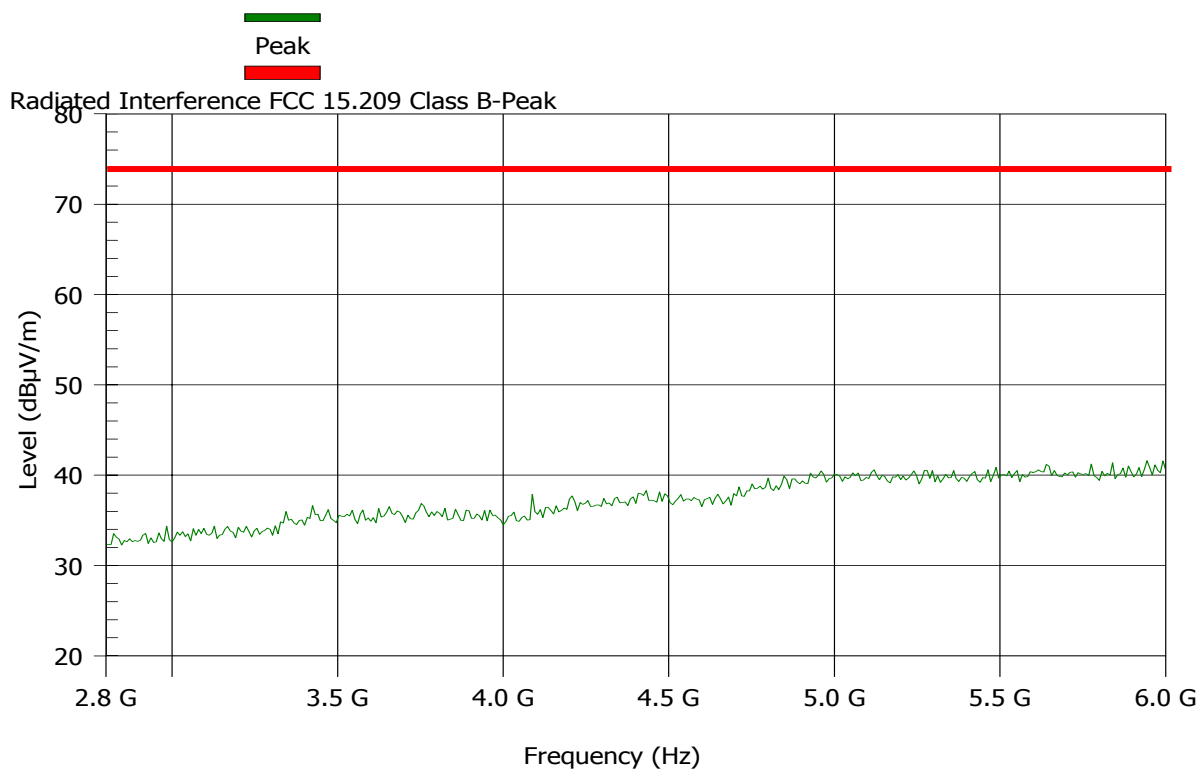
None

Test Results Plot No 78

RE102 FCC-15.109 RESTRICTED 2.8-6GHz RCV

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	70 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	LNA 44db 2-6 GHz

TEST REMARKS:08/01/2006



MAXIMUM RESULT DEVIATION:

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

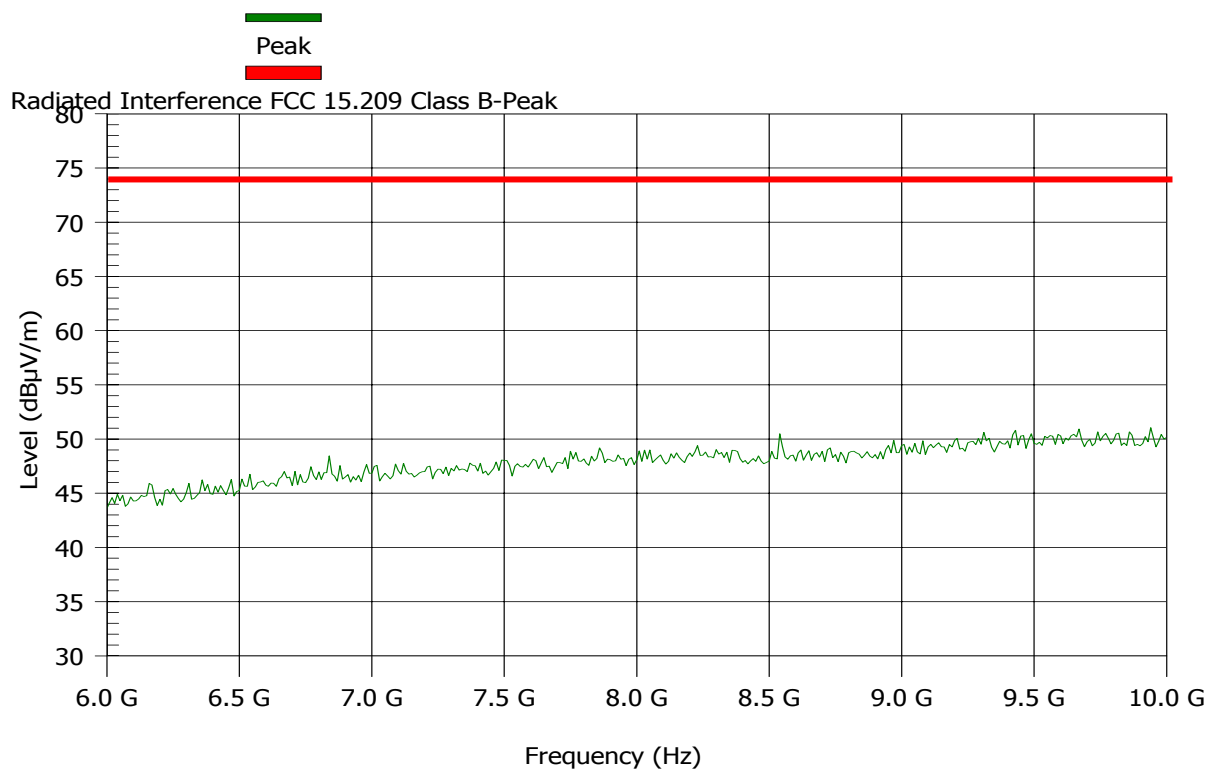
None

Test Results Plot No 79

RE102 FCC-15.109 RESTRICTED 6-10GHz RCV

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	70 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: 89.83 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 2-6 GHz

TEST REMARKS:08/01/2006



MAXIMUM RESULT DEVIATION:

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

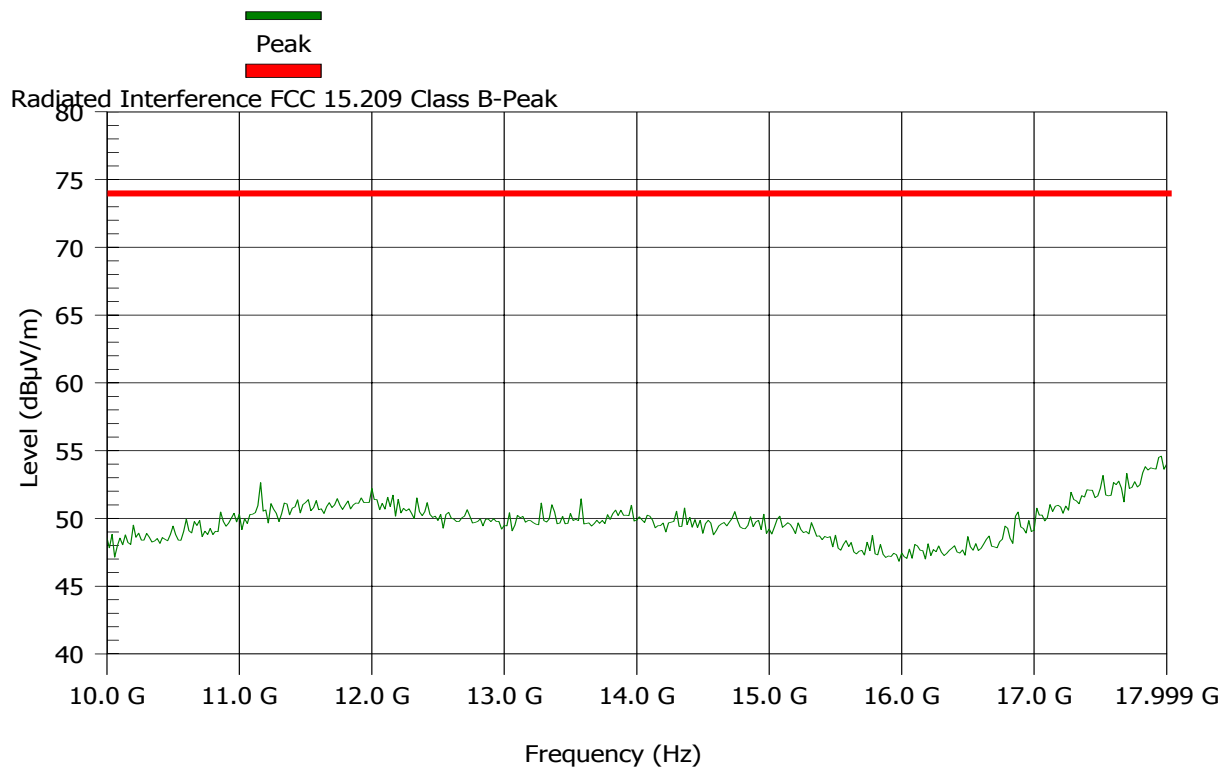
None

Test Results Plot No 80

RE102 FCC-15.109 RESTRICTED 10-18GHz RCV

Test & EUT General Information		Receiver Setting	
EUT Name:	GA-OFDM-58	Spect Analyzer	S.A HP 8593E
S/N:	0050C21CCF24	Ref. Level:	70 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: 159.98 ms
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 44db 2-6 GHz

TEST REMARKS:08/01/2006



MAXIMUM RESULT DEVIATION:

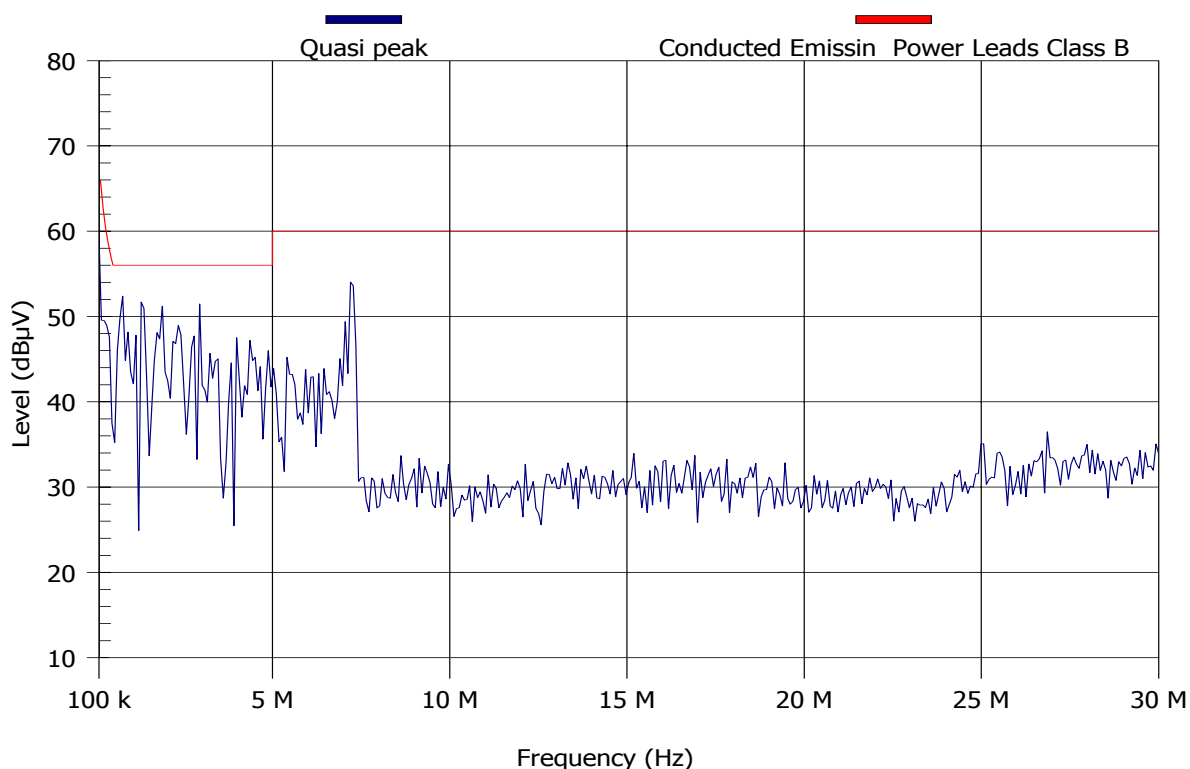
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

g. Conducted emission 81– 82

Test Results Plot No 81
CE FCC 15.207 150K-30MHz PHASE

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	S.A HP 8593E
S/N:	0050c21ccf24	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:

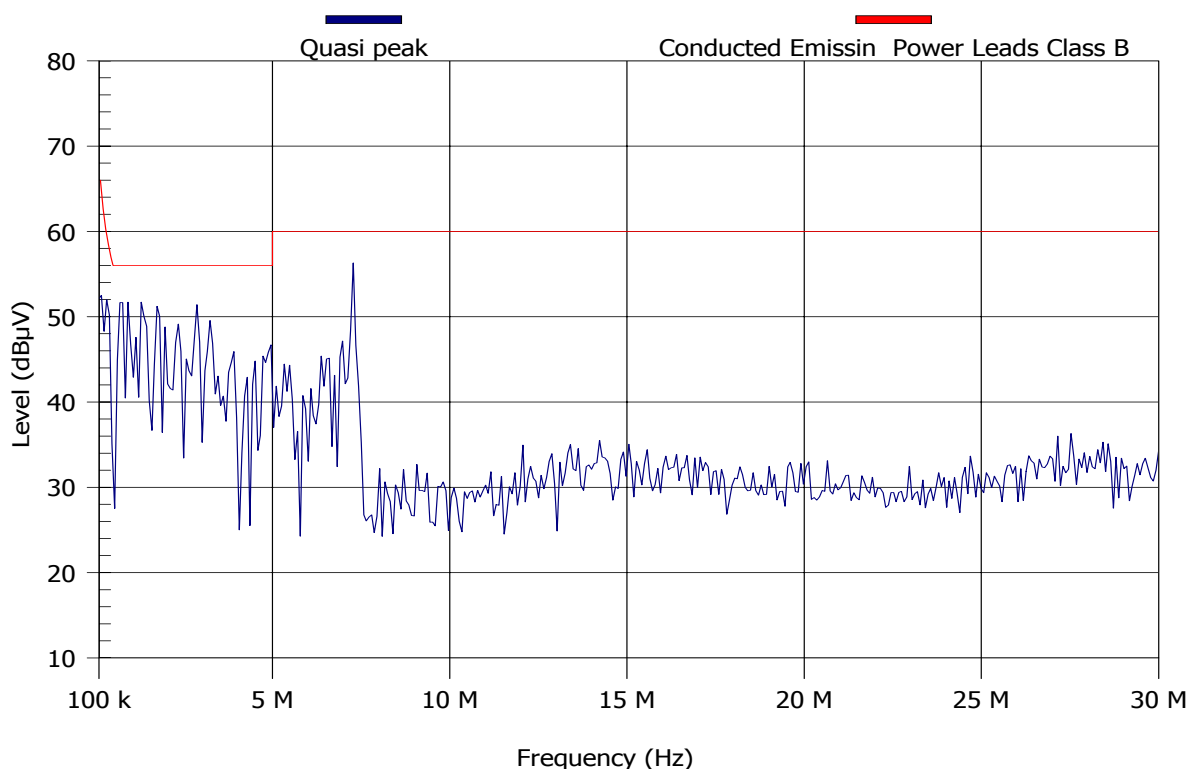
Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Frequency (MHz)	PK MaxHold (dB μ V)	QP Limit (dB μ V)	Result	Line
0.765	53.1	56	Pass	Line 1
1.342	52.3	56	Pass	Line 1
1.717	51.3	56	Pass	Line 1
2.776	51.3	56	Pass	Line 1
7.218	56	60	Pass	Line 1

Test Results Plot No 82
CE FCC 15.207 150K-30MHz NEUTRAL

Test & EUT General Information		Receiver Setting	
EUT Name:	GA OFDM 58	Spect Analyzer	3 spectrum analyzer description
S/N:	0050c21ccf24	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:	2 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.

Nr	Frequency (MHz)	PK MaxHold (dB μ V)	QP Limit (dB μ V)	Result	Line
1	0.662	52	56	Pass	Line 1
2	0.76	53.2	56	Pass	Line 1
3	1.233	53	56	Pass	Line 1
4	1.335	53.1	56	Pass	Line 1
5	1.819	52.4	56	Pass	Line 1
6	7.199	56.2	60	Pass	Line 1

12 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:050C21CCF24-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
9000	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:050C21CCF24-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	900	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		

13 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.