

TEST REPORT

Report Number: 100991982MPK-008A

Project Numbers: G100991982

August 02, 2013

**Testing performed on the
Personal activity recorder
Model Numbers: 363, 366 and 369**

FCC ID: QYUSE13

IC: 4571A-SE13

to

**FCC Part 15 Subpart C (15.247)
Industry Canada RSS-210 Issue 8, Annex 8
NCC Low Power 0002 (LP0002)
OFTA HKTA 1039**

**for
Nike, Inc.**

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Date: August 02, 2013

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Date: August 02, 2013

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Report No. 100991982MPK-008A

Equipment Under Test: Personal activity recorder
Trade Name: NIKE+ FUELBAND^{SE}
Model Numbers: 363, 366 and 369
Serial Numbers: 07070707 0707 (369)
01070703 0300 (366)
01020304 0506 (363)
Part Numbers: WM0XXX-YYY-ZZ
(where X= 0-9 for Country code, Y = 0-9 for Color code, Z = S, M/L or XL for Band size)

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Applicable Regulation: FCC Part 15 Subpart C (15.247)
Industry Canada RSS-210 Issue 8, Annex 8
NCC Low Power 0002 (LP0002)
OFTA HKTA 1039

Date of Test: April 01 – June 12, 2013

We attest to the accuracy of this report:



Anderson Soungpanya
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TABLE OF CONTENTS

1.0	Summary of Tests	4
2.0	General Information.....	5
2.1	Product Description	5
2.2	Related Submittal(s) Grants.....	6
2.3	Test Facility	6
2.4	Test Methodology	6
2.5	Measurement Uncertainty.....	6
3.0	System Test Configuration.....	7
3.1	Support Equipment	7
3.2	Block Diagram of Test Setup.....	7
3.3	Justification.....	8
3.4	Mode of Operation during Test.....	8
3.5	Modifications Required for Compliance	8
3.6	Additions, Deviations and Exclusions from Standards.....	8
4.0	Measurement Results.....	9
4.1	6-dB Bandwidth and Occupied Bandwidth	9
4.2	Maximum Conducted Output Power at Antenna Terminals.....	19
4.3	Maximum Power Spectral Density	29
4.4	Unwanted Conducted Emissions	33
4.5	Transmitter Radiated Emissions	34
4.6	AC Line Conducted Emission	39
5.0	List of Test Equipment	46
6.0	Document History	47
Annex A - Unwanted Conducted Emissions Plots. F=2402 MHz		48
Annex B - Unwanted Conducted Emissions Plots. F=2442 MHz.....		66
Annex C - Unwanted Conducted Emissions Plots. F=2480 MHz		84
Annex D - Unwanted Radiated Emissions, NIKE+ FUEL BAND^{SE} (S).....		103
Annex E - Unwanted Radiated Emissions, NIKE+ FUEL BAND^{SE} (M/L).....		109
Annex F - Unwanted Radiated Emissions, NIKE+ FUEL BAND^{SE} (XL).....		115
Annex G - Duty Cycle Measurement.....		121

1.0 Summary of Tests

Test	Reference FCC	Reference Industry Canada	Result
RF Output Power	15.247(b)(3)	RSS-210, A8.4	Complies
6 dB Bandwidth	15.247(a)(2)	RSS-210, A8.2	Complies
Power Density	15.247(e)	RSS-210, A8.2b	Complies
Out of Band Antenna Conducted Emission	15.247(d)	RSS-210, A8.5	Complies
Transmitter Radiated Emissions	15.247(d), 15.209, 15.205	RSS-210, A8.5	Complies
AC Line Conducted Emission	15.207	RSS-GEN	Complies
Antenna Requirement	15.203	RSS-GEN	Complies.
RF Exposure*	15.247(i), 15. 2.1093(d)	RSS-102	Complies

*Please see SAR Report

Test	Reference FCC	Reference LP0002	Reference HKTA 1039	Result
RF Output Power	15.247(b)(3)	3.10.1(2.3)	2.2(b)(ii)	Complies
6 dB Bandwidth	15.247(a)(2)	3.10.1(6.2.1)	2.2(b)	Complies
Power Density	15.247(e)	3.10.1(6.2.2)	2.2(b)(ii)	Complies
Out of Band Antenna Conducted Emission	15.247(d)	3.10.1(5)	2.2(b)	Complies
Transmitter Radiated Emissions	15.247(d), 15.209, 15.205	3.10.1(5), 2.7, 2.8	2.2(b) (ii)	Complies
AC Line Conducted Emission	15.207	2.3	2.2(b)	Complies
Antenna Requirement	15.203	2.2	2.2(b) (ii)	Complies.
RF Exposure*	15.247(i), 2.1093(d)	ANSI/IEEE C95.1	2.2(b) (ii)	Complies

*Please See SAR Report

EUT receive date: April 01, 2013

EUT receive condition: The pre-production version of the EUT was received in good condition with no apparent damage. As declared by the Applicant, it is identical to the production units.

Test start date: April 01, 2013

Test completion date: June 12, 2013

The test results in this report pertain only to the item tested.

2.0 General Information

2.1 Product Description

The Equipment under Test (EUT), models: 363, 366 and 369 are Personal activity recorders, used in sports, fitness and health care applications. It is marketed in 3 sizes: small (S), medium/large (M/L) and extra-large (XL), as shown below in part numbers. The EUT consist of the frequency spread spectrum radio operating in 2.4 GHz frequency band.

Specification of the NIKE+FUELBAND^{SE} radio device:

	Specification	Comments
Model Numbers	363 = Small (S) 366 = Medium Large (M/L) 369 = Extra Large (XL)	All 3 Models have identical RF circuitry in terms of PCB layout, components, BOM, except antenna and passive antenna matching components
Part Numbers	WM0XXX-YYY-ZZ (where X= 0-9 for Country code, Y = 0-9 for Color code, Z = S, M/L or XL for Band size)	
FCC ID	QYUSE13	All 3 Models are certified under one FCC ID and one IC
IC:	4571A-SE13	
IEEE Reference standard	802.15.1 Bluetooth Low Energy (BLE)	
Type of transmission	Direct Sequence Spread Spectrum (DSSS)	
Operating Frequency Range	2402 – 2480 MHz	
Maximum Conducted Output Power	6 dBm (peak)	
Modes	Single mode	Classic Bluetooth mode is not supported
Modulation	GFSK	
Duty Cycle	62%	
Number of channels	40 (from 0 to 39)	
Antennas	On-board antenna: 0.35 dBi – for small size band antenna 0.70 dBi – for medium size band antenna 0.58 dBi – for large size band antenna	

2.2 Related Submittal(s) Grants

None.

2.3 Test Facility

The test site used to collect the radiated data is site 1 (10-m semi-anechoic chamber). This test facility and site measurement data have been fully placed on file with the FCC, IC and A2LA accredited.

2.4 Test Methodology

Antenna conducted measurements were performed according to the FCC documents “Guidance for Performing Compliance Measurement on Digital Transmission Systems (DTS) Operating under §15.247” (KDB 558074), and RSS-210, RSS-GEN, and LP0002.

Radiated emissions and AC mains conducted emissions measurements were performed according to the procedures in ANSI C63.10. Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "Data Sheet" of this report.

2.5 Measurement Uncertainty

Compliance with the limits was based on the results of the measurements and doesn't take into account the measurement uncertainty.

Estimated Measurement Uncertainty

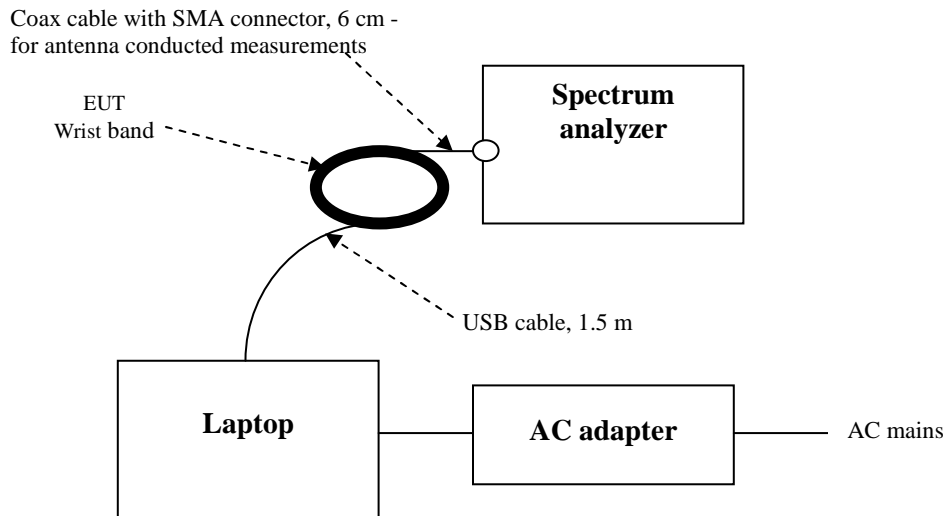
Measurement	Expanded Uncertainty (k=2)		
	0.15 MHz – 1 GHz	1 GHz – 2.5 GHz	> 2.5 GHz
RF Power and Power Density – antenna conducted	-	0.7 dB	-
Unwanted emissions - antenna conducted	1.1 dB	1.3 dB	1.9 dB
Bandwidth – antenna conducted	-	30 Hz	-
Radiated emissions	4.2 dB	3.4 dB	3.6 dB
AC mains conducted emissions	2.4 dB	-	-

3.0 System Test Configuration

3.1 Support Equipment

Item #	Description	Model No./ Part No.	Serial No.
1	HP Laptop	EliteBook 8460p	CNU14429SL
2	AC Adapter	PPP012H-S	F12941120020993

3.2 Block Diagram of Test Setup



To perform conducted measurements the antenna and matching components (passive) were disconnected from the transmitter output and a coax cable with SMA connector was connected to the transmitter output. For radiated measurements unmodified units were used.

S = Shielded	F = With Ferrite
U = Unshielded	m = Length in Meters

3.3 Justification

Since all three part numbers of the EUT have identical RF circuitry (PCB layout, components, BOM), except antenna and passive matching components, full tests were performed on only on Model 366 which is the medium /large size wrist band. On other Models: 363 and 369 (small and extra-large size), the only limited tests were performed; in particular, maximum conducted output power and unwanted radiated emissions.

3.4 Mode of Operation during Test

During transmitter testing, the transmitter was setup to transmit at maximum RF power on low, middle and high frequencies/channels.

3.5 Modifications Required for Compliance

Intertek installed no modifications during compliance testing in order to bring the product into compliance.

3.6 Additions, Deviations and Exclusions from Standards

No additions, deviations or exclusions from the standard were made.

4.0 Measurement Results

4.1 6-dB Bandwidth and Occupied Bandwidth

FCC Rule: 15.247(a)(2); RSS-210 A8.2 and RSS-GEN; LP0002: 3.10.1(6.2.1);

4.1.1 Requirement

The minimum 6-dB bandwidth shall be at least 500 kHz

4.1.2 Procedure

The Procedure described in the FCC Publication 558074 was used.

The antenna port of the EUT was connected to the input of a spectrum analyzer (SA). For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6-dB bandwidth was determined from where the channel output spectrum intersected the display line.

The occupied bandwidth was measured using the built-in spectrum analyzer function for 99% power bandwidth measurement.

4.1.3 Test Result

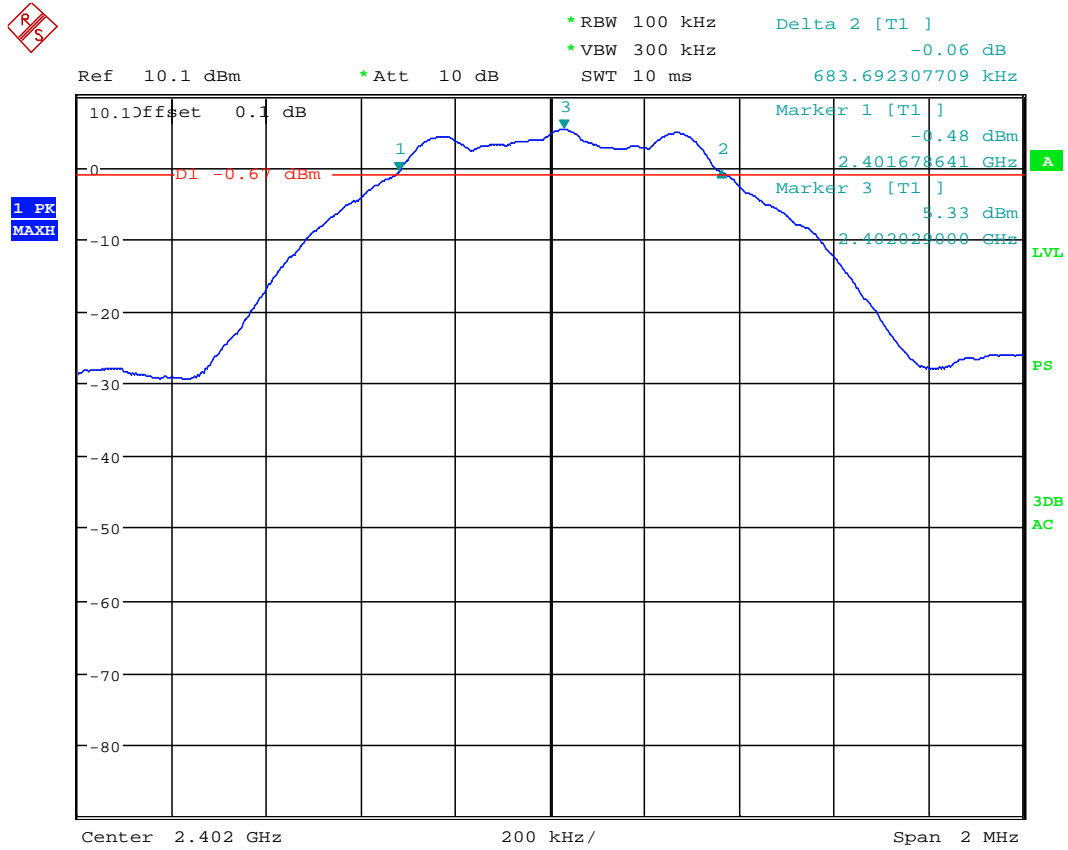
Frequency (MHz)	6-dB bandwidth * FCC 15.247, kHz	6-dB bandwidth ** RSS-GEN, kHz	Occupied bandwidth, RSS-GEN, kHz	Plot
2402	683.7			1.1
		621.8	1017.0	1.4, 1.7
2442	689.1			1.2
		610.4	1016.0	1.5, 1.8
2480	679.5			1.3
		583.3	1012.0	1.6, 1.9

* Measurements were performed with spectrum analyzer's resolution bandwidth of 100 kHz

** Measurements were performed with spectrum analyzer's resolution bandwidth of 20 kHz

Results	Complies
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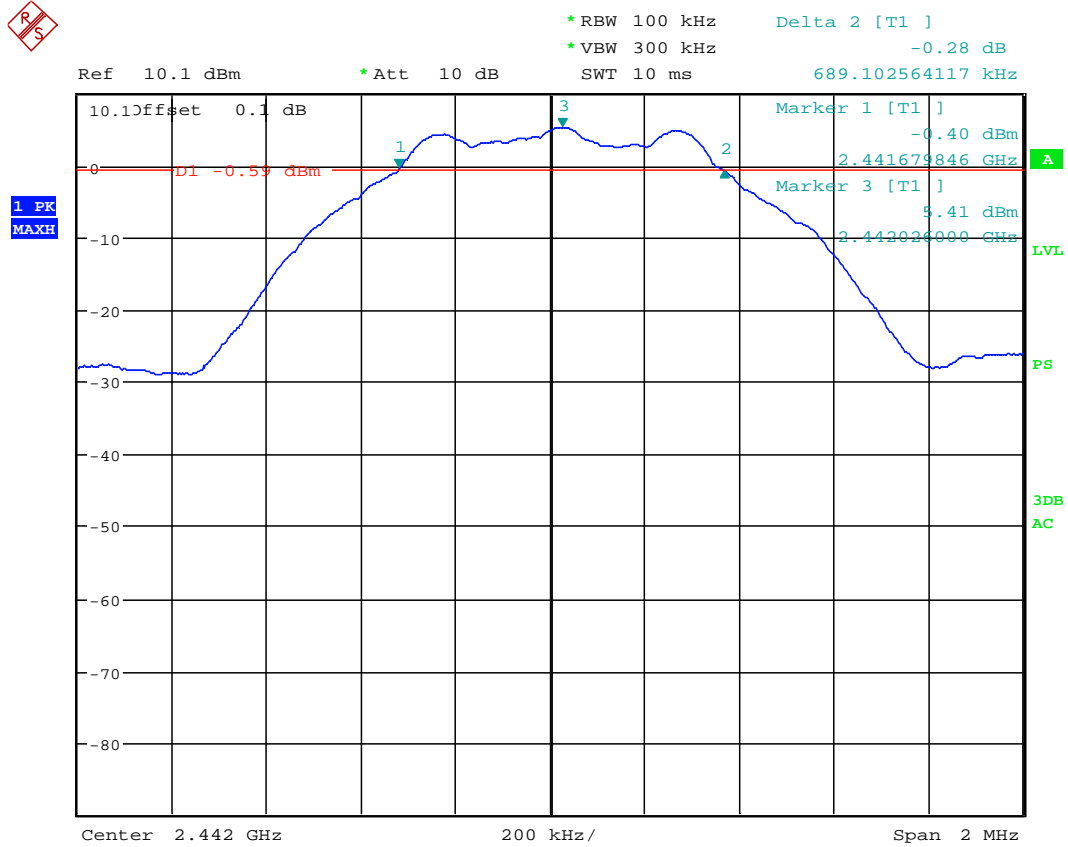
Plot 1. 1



6-dB bandwidth

Date: 7.MAY.2013 11:42:45

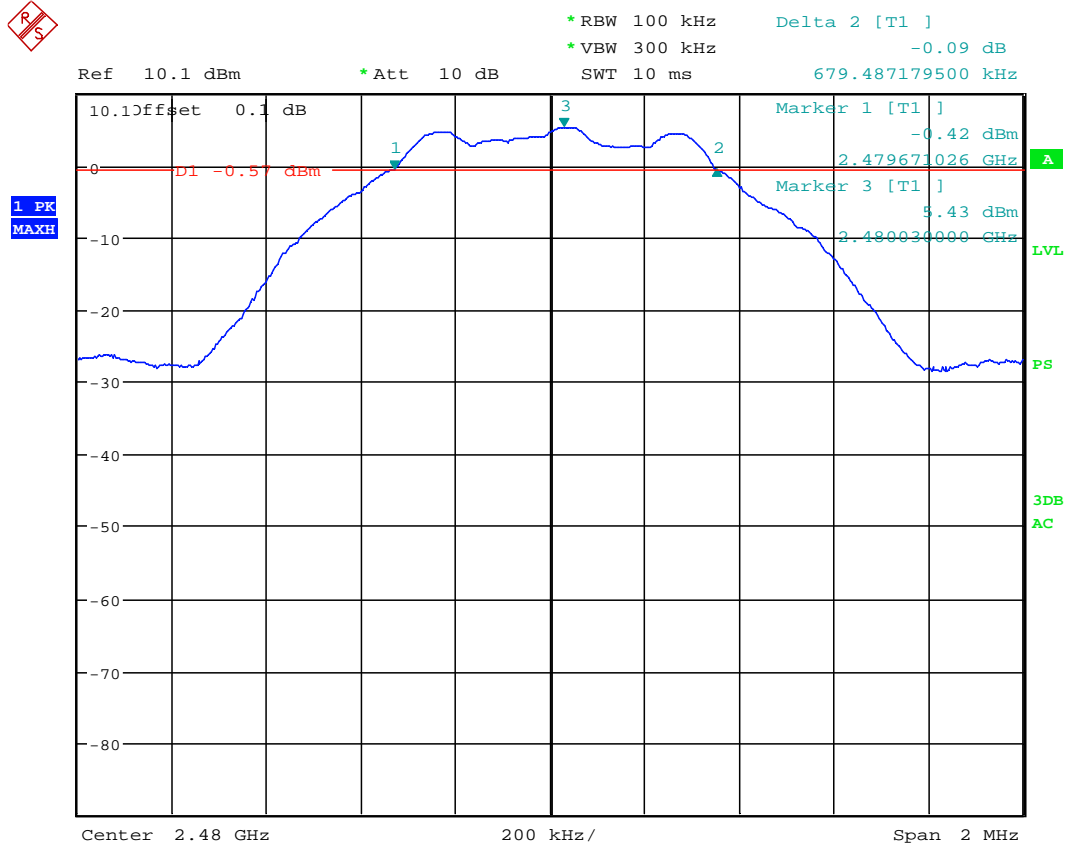
Plot 1.2



6-dB bandwidth

Date: 7.MAY.2013 11:47:41

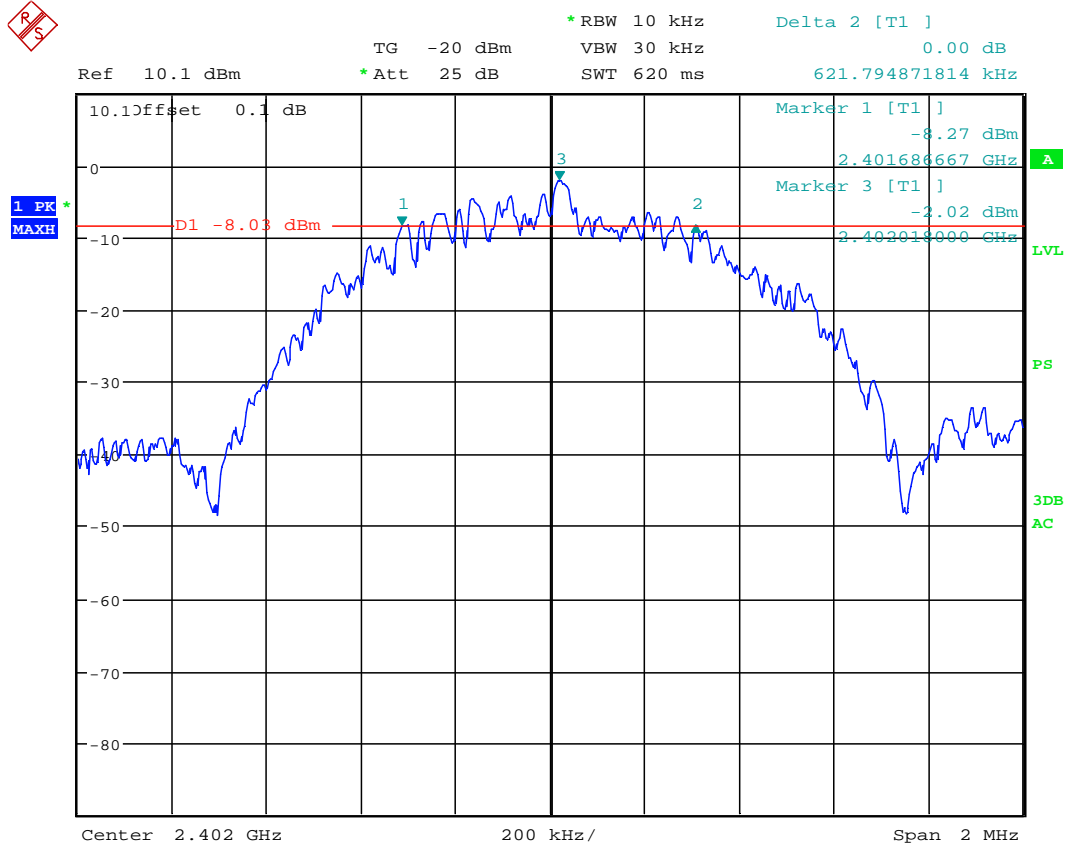
Plot 1.3



6-dB bandwidth

Date: 7.MAY.2013 11:50:08

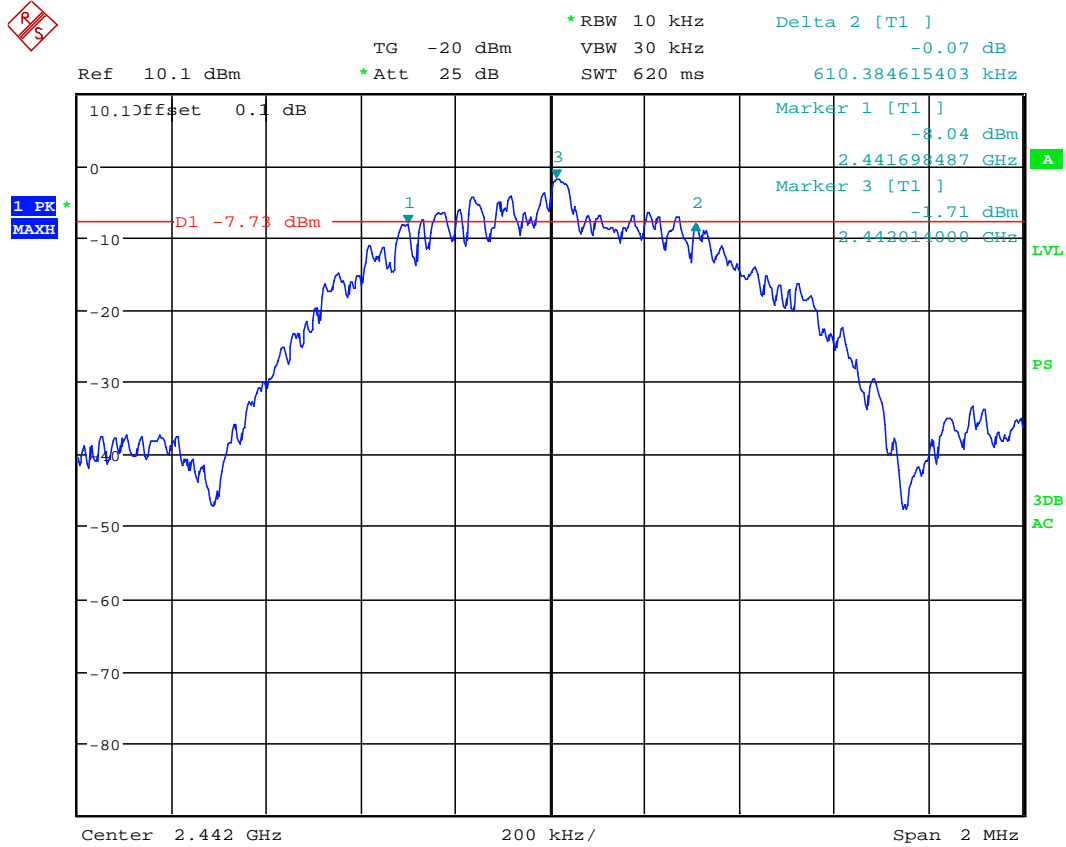
Plot 1.4



6-dB bandwidth

Date: 1.MAY.2013 14:35:53

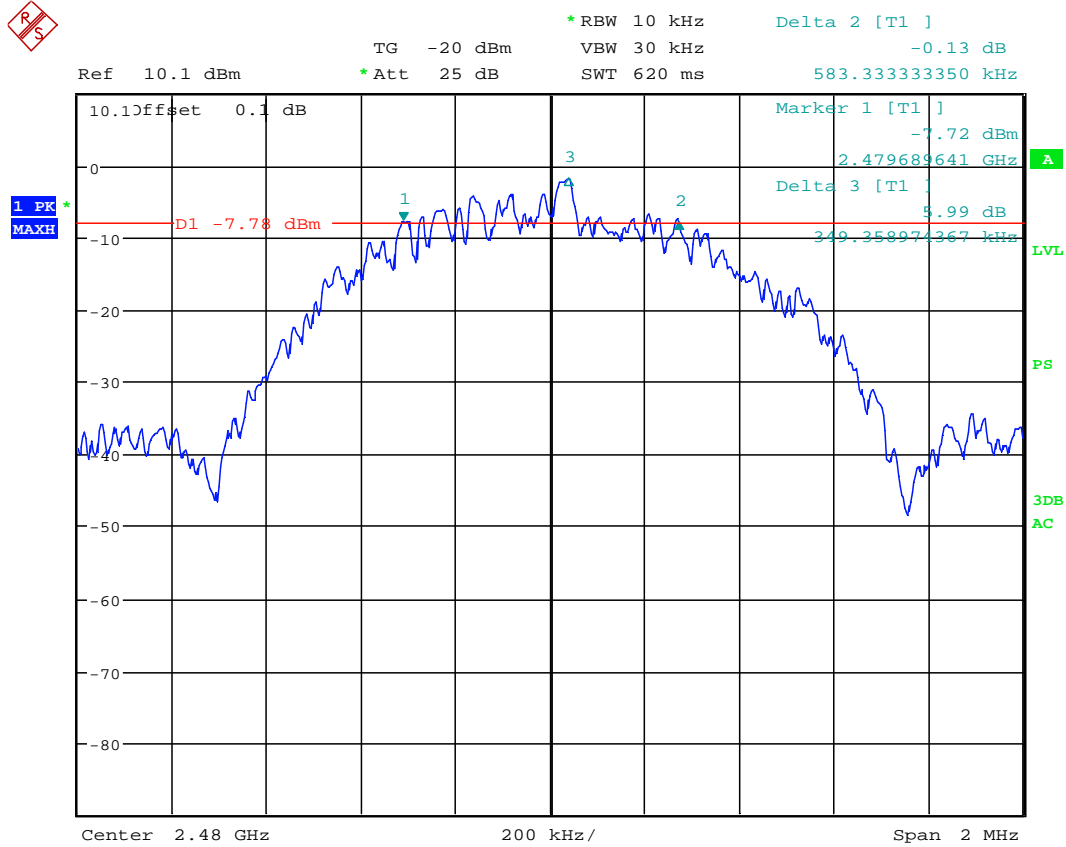
Plot 1.5



6-dB bandwidth

Date: 1.MAY.2013 15:00:49

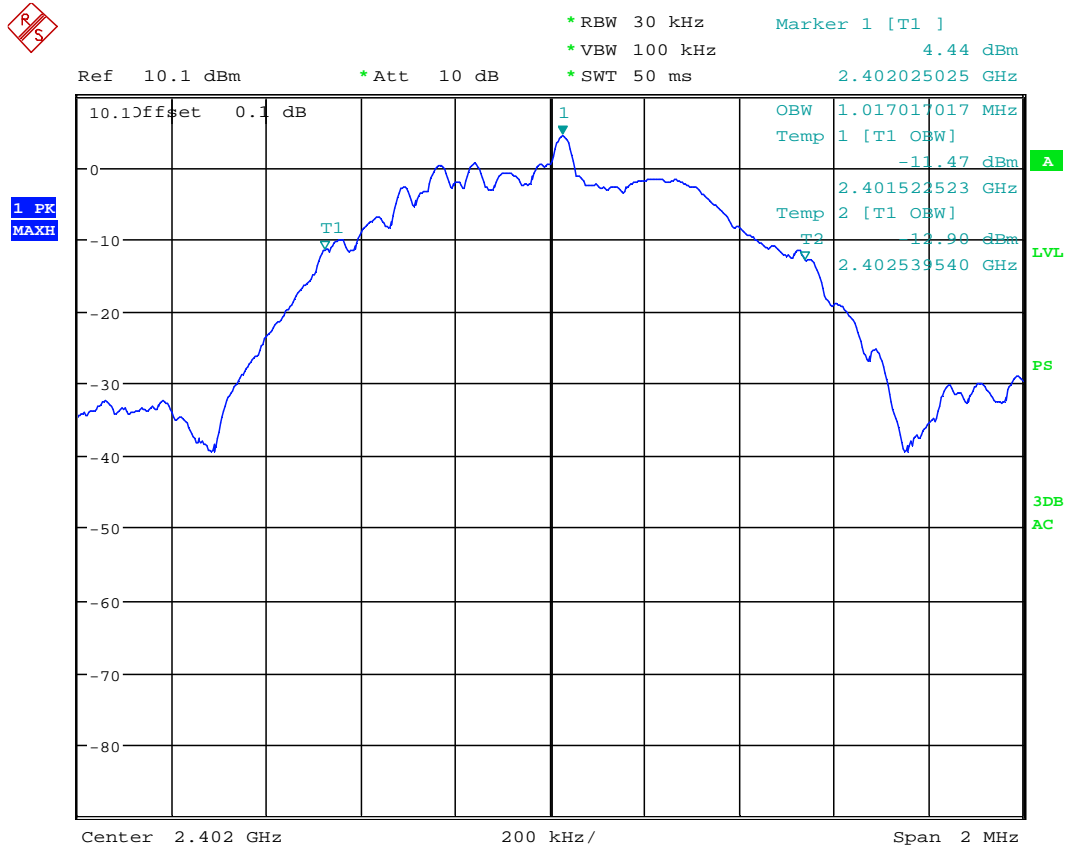
Plot 1.6



6-dB bandwidth

Date: 1.MAY.2013 15:04:38

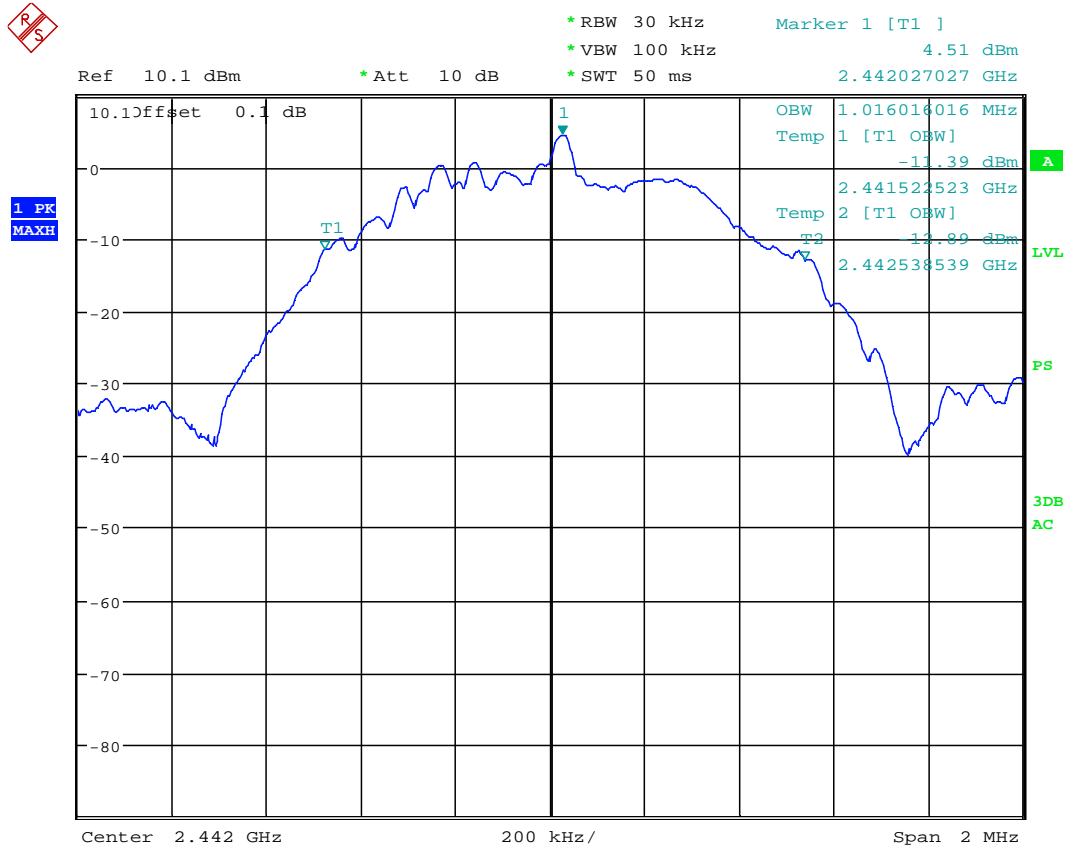
Plot 1.7



Occupied bandwidth, F=2402 MHz

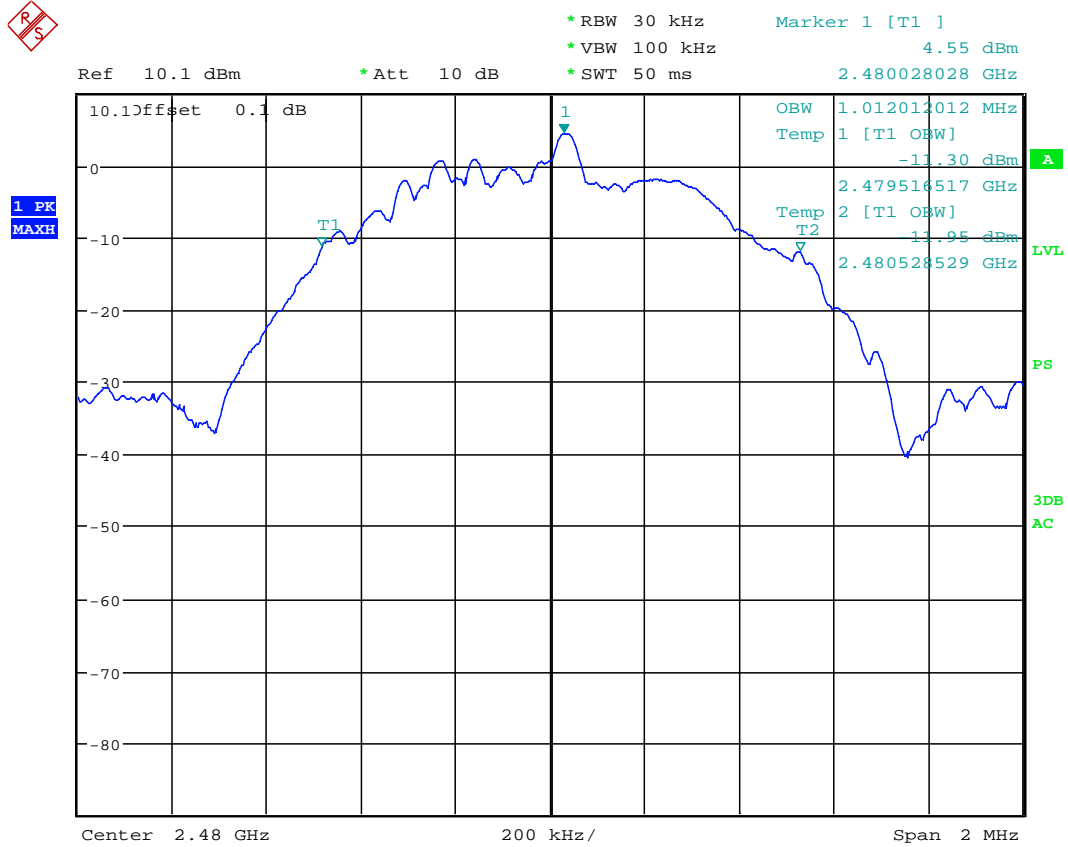
Date: 6.MAY.2013 14:50:49

Plot 1.8



Occupied bandwidth, F=2442 MHz
 Date: 6.MAY.2013 14:54:06

Plot 1.9



Occupied bandwidth, F=2480 MHz

Date: 6.MAY.2013 14:56:13

4.2 Maximum Conducted Output Power at Antenna Terminals
 FCC Rule: 15.247(b)(3); RSS-210 A8.4; LP0002: 3.10.1(2.3)

4.2.1 Requirement

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt or 30 dBm. For antennas with gains greater than 6 dBi, transmitter output level must be decreased appropriately, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.2.2 Procedure

The antenna port of the EUT was connected to the input of a spectrum analyzer/power meter to measure the Maximum Conducted Transmitter Output Power.

The procedure described in FCC Publication 558074, was used. Specifically, section 9.1.1 for Maximum Peak Conducted Output Power, with the spectrum analyzer’s peak detector and Resolution Bandwidth RBW > DTS Bandwidth.

4.3.3 Test Result

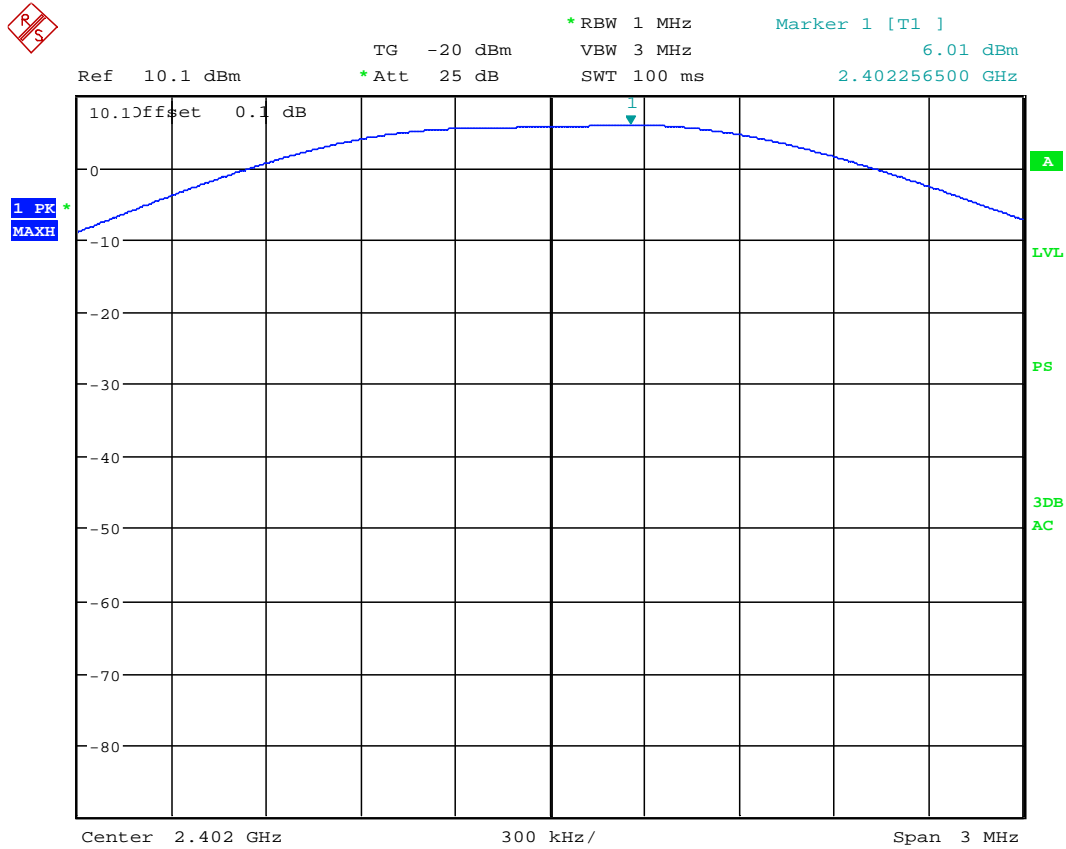
Refer to the following plots 2.1 – 2.9 for the test details.

Model	Frequency, MHz	Conducted Power (peak), dBm	Conducted Power (peak), W	Plot
366 - M/L	2402	6.0	0.004	2.1
	2442	6.0	0.004	2.2
	2480	6.0	0.004	2.3
363 - S	2402	6.0	0.004	2.4
	2442	6.0	0.004	2.5
	2480	5.8	0.004	2.6
369 - XL	2402	6.1	0.004	2.7
	2442	6.0	0.004	2.8
	2480	6.1	0.004	2.9

Results	Complies
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Plot 2. 1



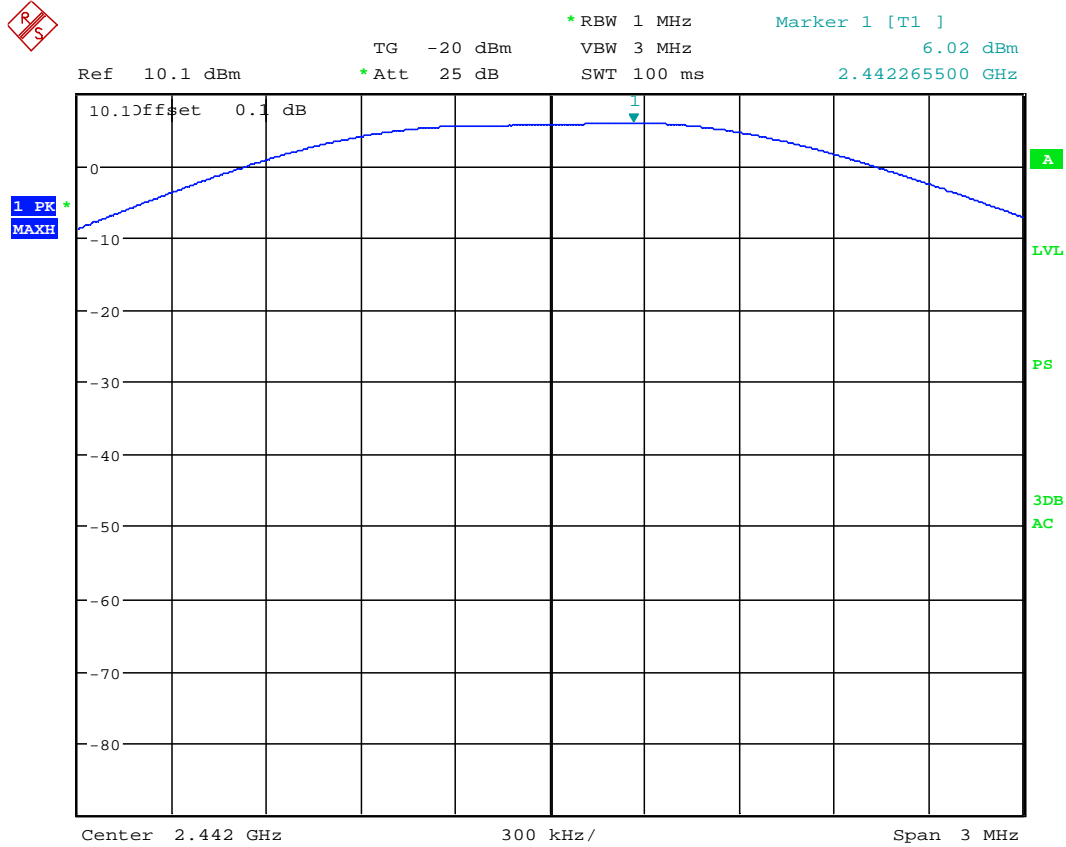
Maximum Peak Conducted Output Power

Date: 1.MAY.2013 15:15:04

Maximum Peak conducted Output Power of 366-M/L Size Wrist Band



Plot 2. 2

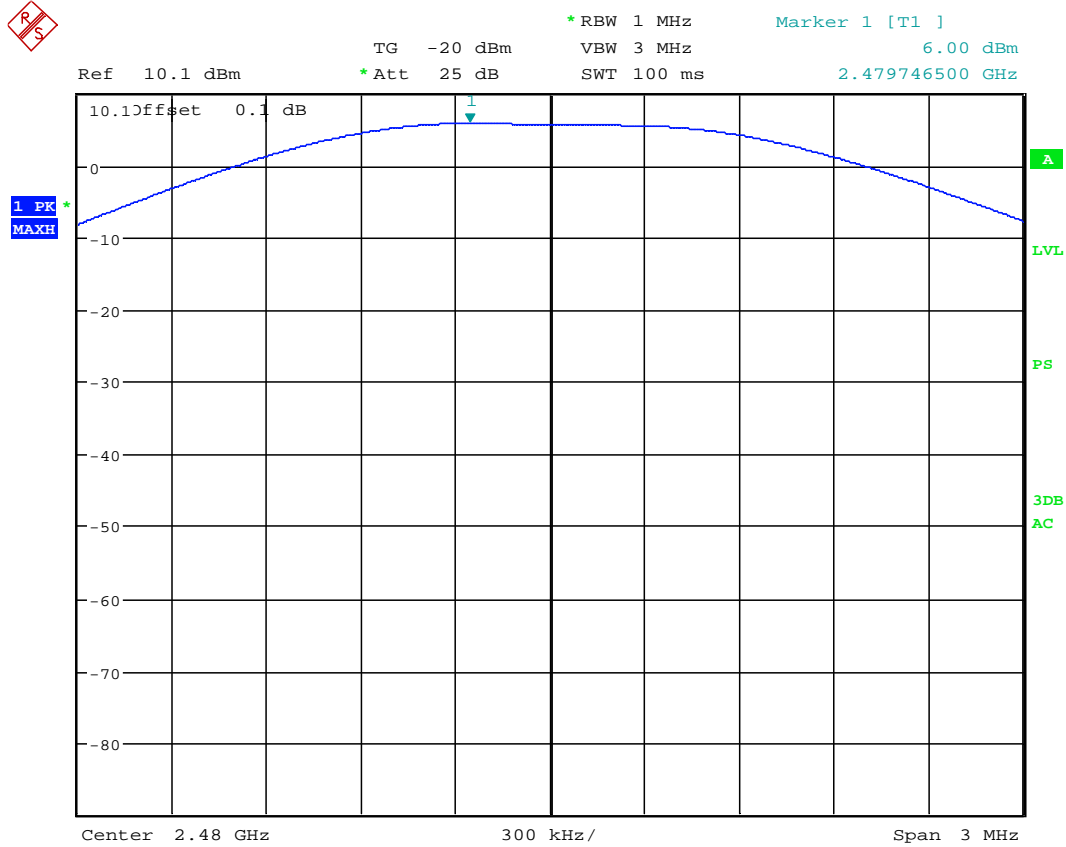


Maximum Peak Conducted Output Power

Date: 1.MAY.2013 15:13:23

Maximum Peak conducted Output Power of 366-M/L Size Wrist Band

Plot 2.3

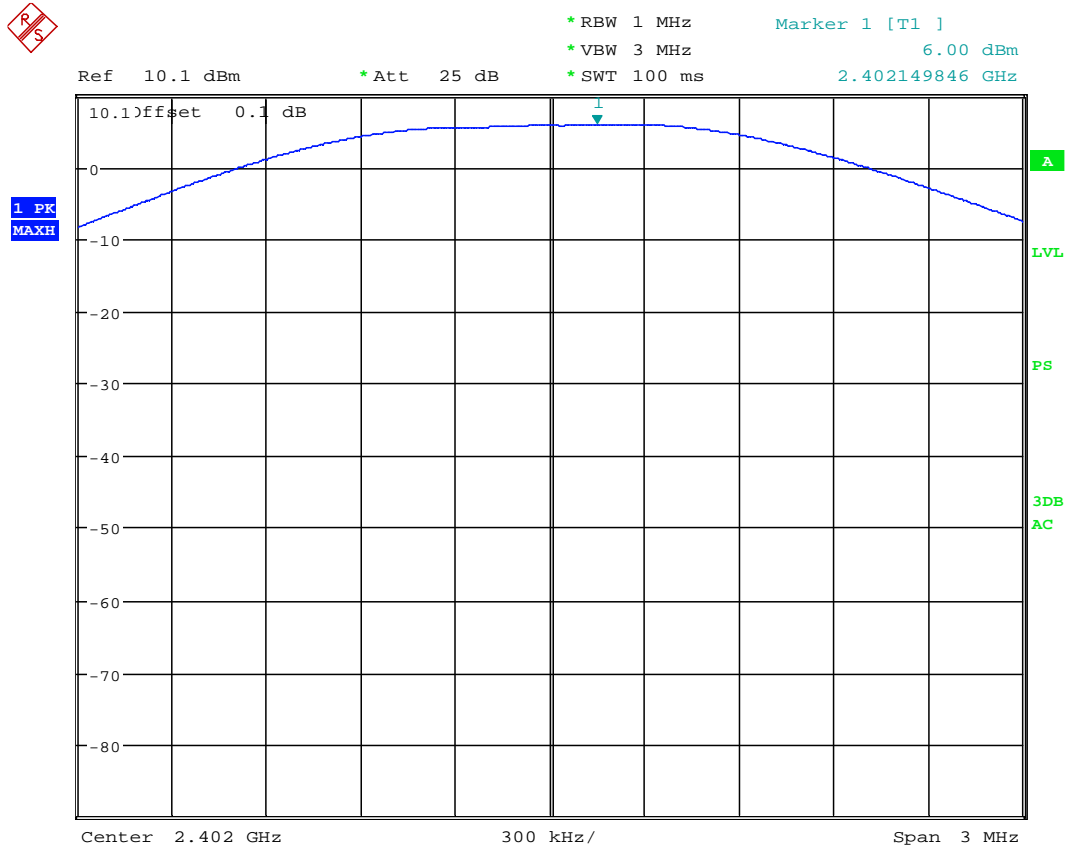


Maximum Peak Conducted Output Power

Date: 1.MAY.2013 15:09:33

Maximum Peak conducted Output Power of 366-M/L Size Wrist Band

Plot 2. 4

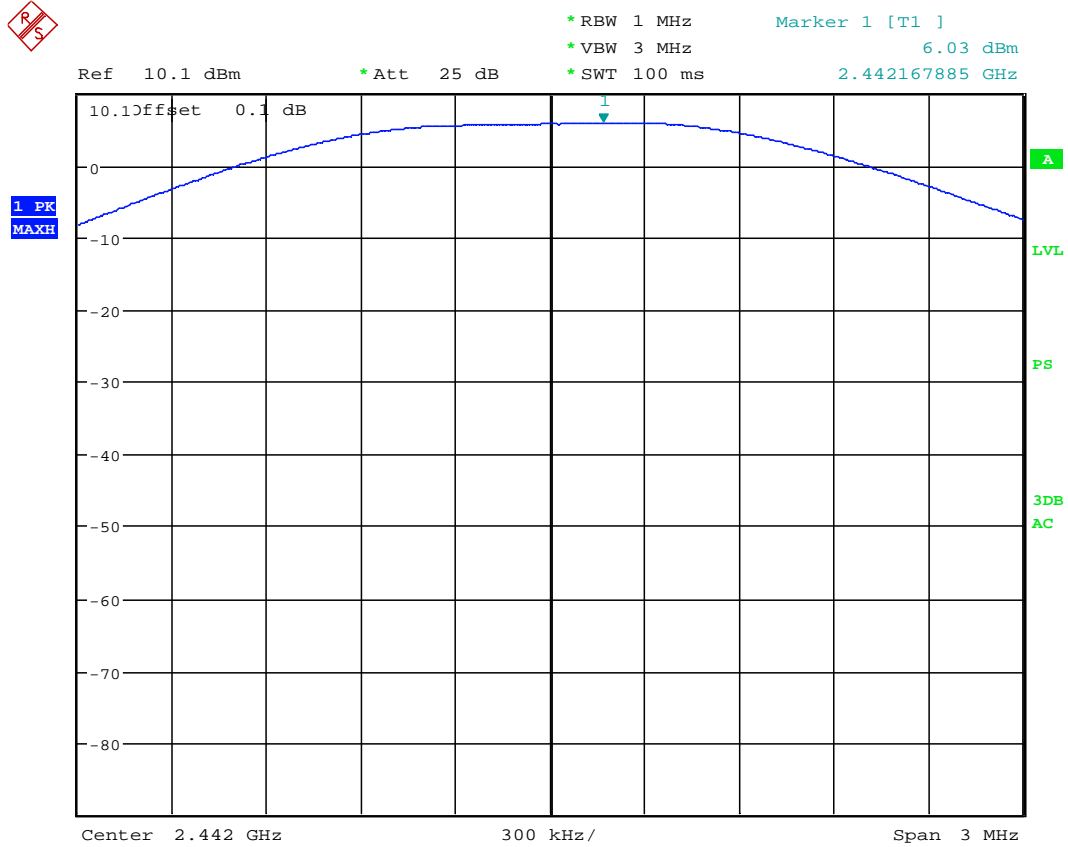


Maximum Peak Conducted Output Power

Date: 13.MAY.2013 13:57:27

Maximum Peak conducted Output Power of 363-S Size Wrist Band

Plot 2.5

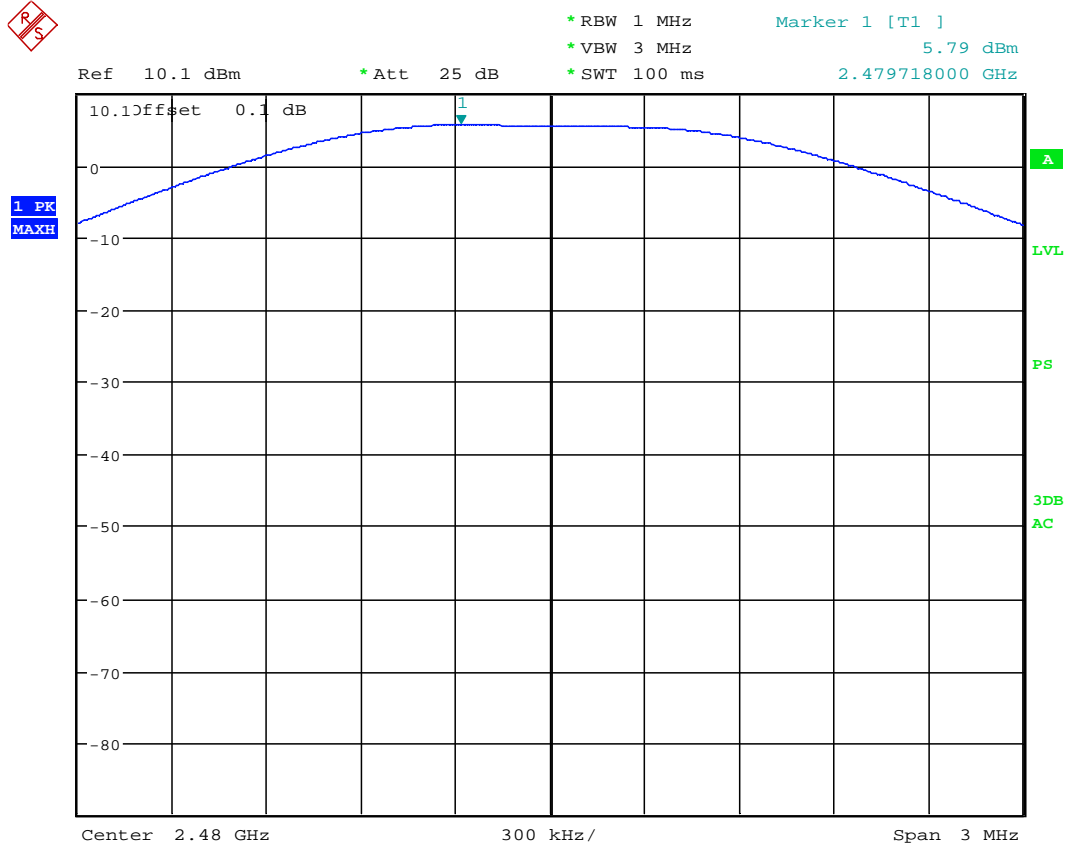


Maximum Peak Conducted Output Power

Date: 13.MAY.2013 13:59:05

Maximum Peak conducted Output Power of 363-S Size Wrist Band

Plot 2.6

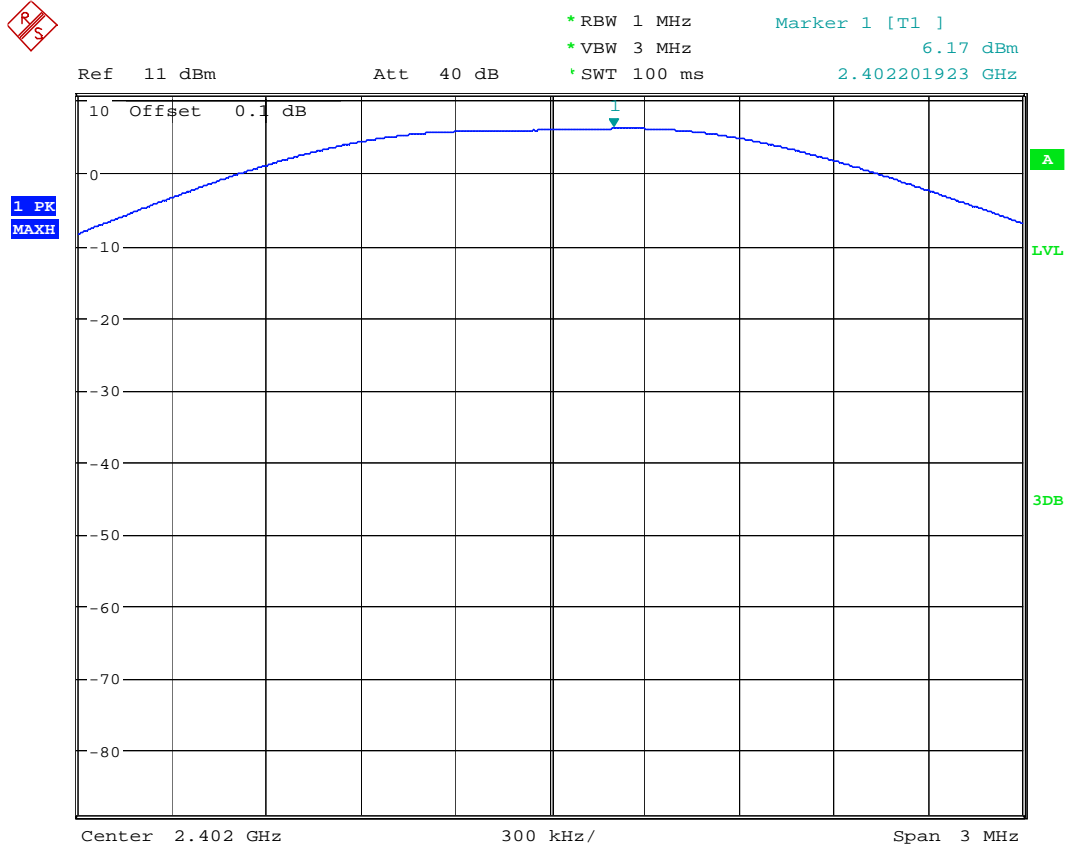


Maximum Peak Conducted Output Power

Date: 13.MAY.2013 13:59:48

Maximum Peak conducted Output Power of 363-S Size Wrist Band

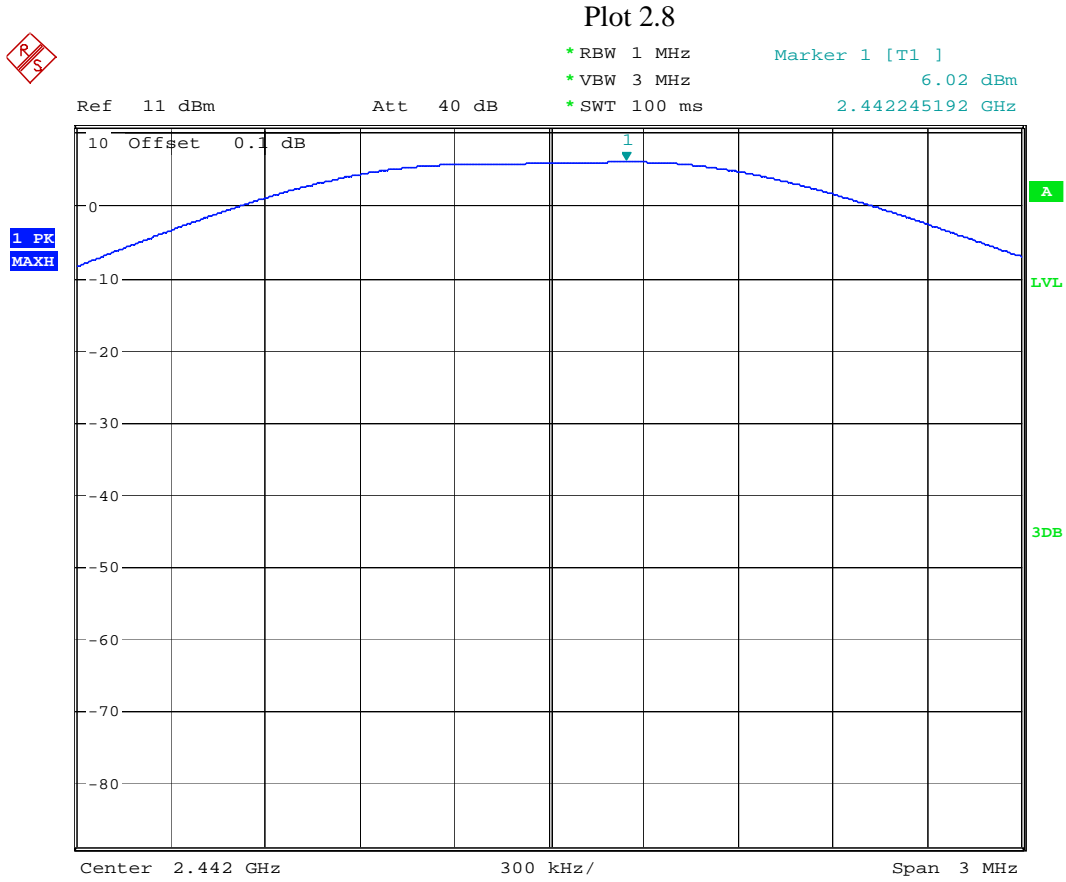
Plot 2.7



Maximum Peak Conducted Output Power

Date: 18.JUN.2013 02:21:59

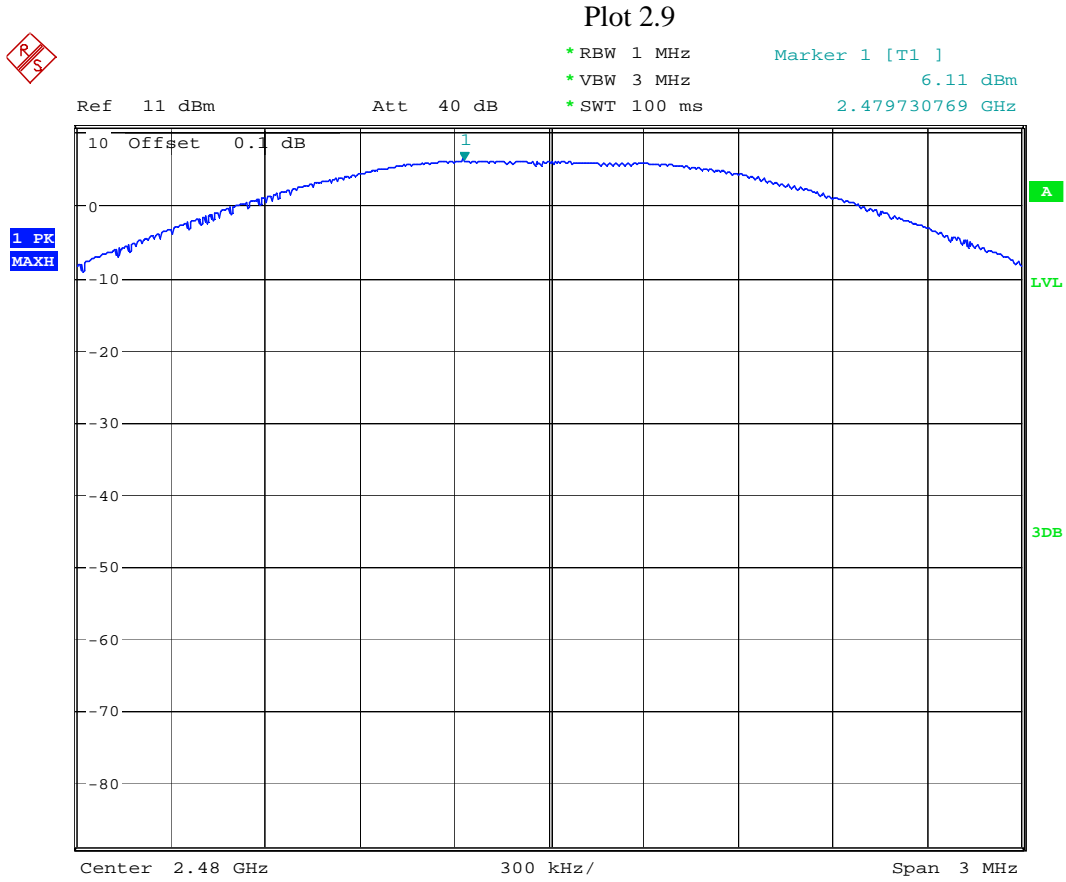
Maximum Peak conducted Output Power of 369-XL Size Wrist Band



Maximum Peak Conducted Output Power

Date: 18.JUN.2013 02:27:48

Maximum Peak conducted Output Power of 369-XL Size Wrist Band



Maximum Peak Conducted Output Power

Date: 18.JUN.2013 02:32:09

Maximum Peak conducted Output Power of 369-XL Size Wrist Band

4.3 Maximum Power Spectral Density
 FCC: 15.247 (e); RSS-210 A8.2b; LP0002: 3.10.1(6.2.2)

4.3.1 Requirement

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna should not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

4.3.2 Procedure

The antenna port of the EUT was connected to the input of a spectrum analyzer to measure the Transmitter Power Density (PSD).

The procedure described in FCC Publication 558074 was used. Specifically, section 10.2, Peak PSD, with peak detector and max hold trace mode. Spectrum analyzer resolution bandwidth was set to 3 kHz and span to at least 1.5 times the DTS (6 dB) channel bandwidth.

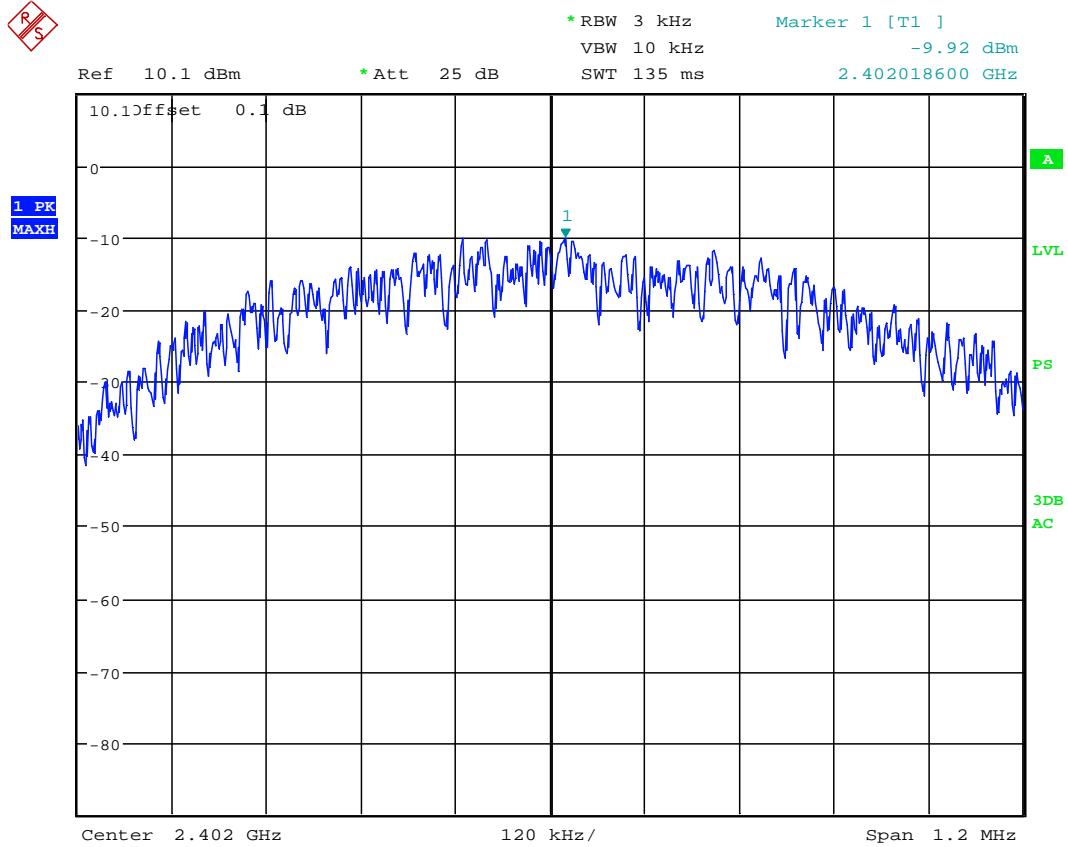
4.3.3 Test Result

Refer to the following plots for the test result

Frequency, MHz	Maximum Power Spectral Density, dBm	Maximum Power Spectral Density Limit, dBm	Margin, dB	Plot
2402	- 9.9	8.0	-17.9	3.1
2442	- 9.8	8.0	-17.8	3.2
2480	- 9.7	8.0	-17.7	3.3

Results	Complies
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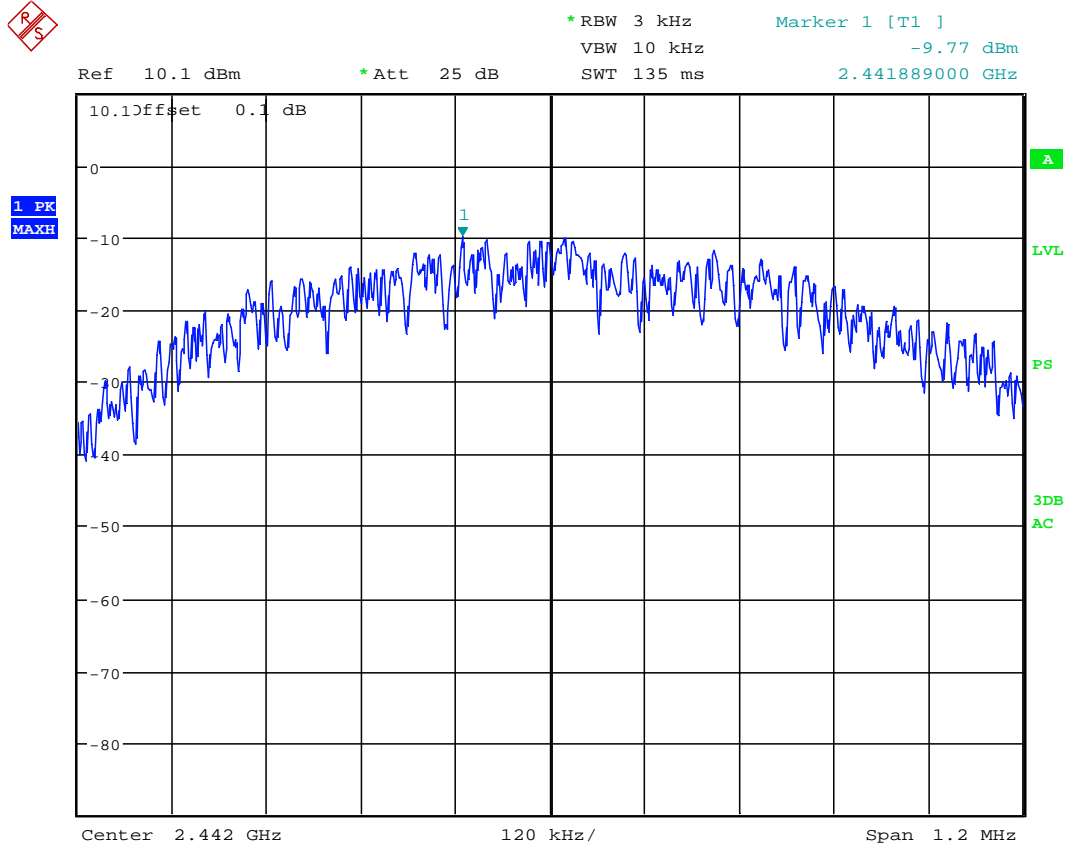
Plot 3. 1



Maximum Power Spectral Density

Date: 1.MAY.2013 15:24:33

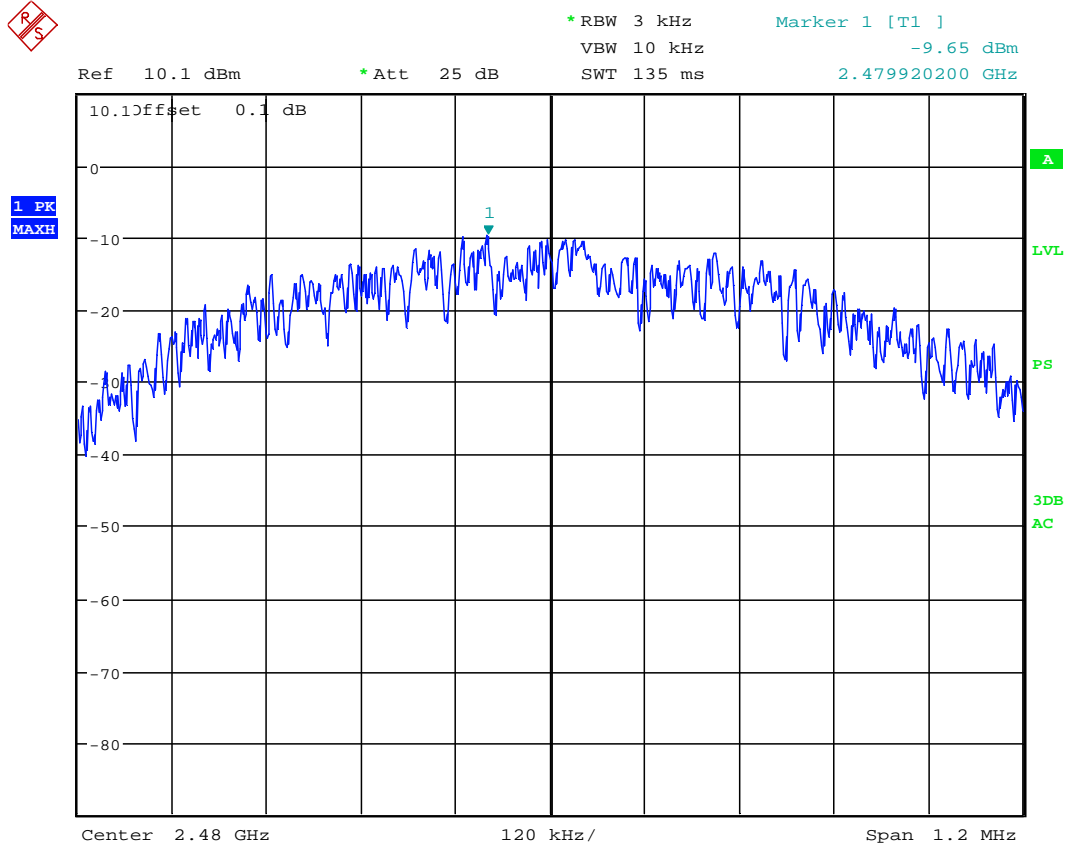
Plot 3.2



Maximum Power Spectral Density

Date: 1.MAY.2013 15:30:31

Plot 3.3



Maximum Power Spectral Density

Date: 1.MAY.2013 15:32:36

4.4 Unwanted Conducted Emissions
 FCC: 15.247(d); RSS-210 A8.5; LP0002: 3.10.1(5), 2.7, 2.8

4.4.1 Requirement

In any 100 kHz bandwidth outside the EUT pass-band, the RF power shall be below the maximum in-band 100 kHz emissions by at least 20 dB (if peak power of in-band emission is measured) or 30 dB (if average power of in-band emission is measured).

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)

4.4.2 Procedure

A spectrum analyzer was connected to the antenna port of the transmitter. Analyzer Resolution Bandwidth was set to 100 kHz. For each channel investigated, the in-band and unwanted peak emission measurements (with max hold) were performed. For the wideband scan, Spectrum Analyzer setting of number of points 30000 was used.

The unwanted emissions were measured from 30 MHz to 25 GHz.

4.4.3 Test Result

The test results are summarized in The Table 4.1.

Table 4.1
 Unwanted Conducted Emissions

Frequency, MHz	In-band Emissions * dBm	Worst case Unwanted Emissions, dBm	Unwanted Emissions Attenuation, dB	Margin to 20 dB Attenuation Limit, dB
2402	5.4	-53.1	58.5	-38.5
2442	5.4	-54.3	59.7	-39.7
2480	5.4	-54.5	59.9	-39.9

See plots in Annexes: A, B, C for details.

* See plots A.1, B.1 and C.1

Results	Complies
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4.5 Transmitter Radiated Emissions

FCC Rules: 15.247(d), 15.209, 15.205; RSS-210; LP0002: 3.10.1(5), 2.7, 2.8

4.5.1 Requirement

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

In any 100 kHz bandwidth outside the EUT pass-band, the RF power shall be below the maximum in-band 100 kHz emissions by at least 20 dB (if peak power of in-band emission is measured) or 30 dB (if average power of in-band emission is measured).

4.5.2 Procedure

Radiated emission measurements were performed from 30 MHz to 25 GHz according to the procedure described in ANSI C64.10. Spectrum Analyzer Resolution Bandwidth is 100 kHz or greater for frequencies 30 MHz to 1000 MHz, 1 MHz for frequencies above 1000 MHz. Above 1000 MHz Peak and Average measurements were performed.

The EUT is placed on a plastic turntable that is 80 cm in height. If the EUT attaches to peripherals, they are connected and operational (as typical as possible). During testing, all cables were manipulated to produce worst-case emissions. The signal is maximized through rotation. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters.

Guidance for Performing Compliance Measurements on DTS Operating under §15.247 refers to ANSI C63.10. In sec. 7.5 of ANSI C63.10 the procedure for determining the average value of pulsed emissions is described.

Following this procedure, the Peak Field Strength (FS_{peak}) is measured and the Duty Cycle Correction Factor (δ) is applied. The Duty Cycle is defined as transmitter time-on (t) in T=100 ms interval.

$$\delta = t/T \text{ or in decibels } \delta(\text{dB}) = 20 \text{ Log } \delta$$
$$FS_{\text{average}} [\text{in dB}(\mu\text{V/m})] = FS_{\text{peak}} [\text{in dB}(\mu\text{V/m})] + \delta(\text{dB})$$

Radiated emissions are taken at 10 meters for frequencies below 1 GHz and at 3 meters for frequencies above 1 GHz, except measurement at 1 meter for frequency 2390 MHz.

Radiated emissions at 2483.5 MHz were made by delta-marker method. The Field Strength at the band-edge frequency $\{FS_{\text{be}}$ in dB(uV/m) $\}$ is calculated as:

$$FS_{\text{be}} = FS_0 - \Delta ,$$

where FS_0 is Field Strength at the fundamental frequency; Δ is delta-marker in dB.

Data included is representative of the worst-case configuration (the configuration which resulted in the highest emission levels).

4.5.3 Field Strength Calculation

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$FS = RA + AF + CF - AG$; if measurement is performed at a distance other than specified in the rule, a Distance Correction Factor (DCF) shall be added.

Where FS = Field Strength in dB(μ V/m)

RA = Receiver Amplitude (including preamplifier) in dB(μ V); AF = Antenna Factor in dB(1/m)

CF = Cable Attenuation Factor in dB; AG = Amplifier Gain in dB

Assume a receiver reading of 52.0 dB(μ V) is obtained. The antennas factor of 7.4 dB(1/m) and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving field strength of 32 dB(μ V/m). This value in dB(μ V/m) was converted to its corresponding level in μ V/m.

RA = 52.0 dB(μ V)

AF = 7.4 dB(1/m)

CF = 1.6 dB

AG = 29.0 dB

$FS = 52.0 + 7.4 + 1.6 - 29.0 = 32$ dB(μ V/m).

Level in μ V/m = Common Antilogarithm [(32 dB μ V/m)/20] = 39.8 μ V/m.

4.5.4 Test Results

The radiated emission graphs from 30 MHz to 25 GHz for all 3 Nike's P/Ns are presented in Annexes D, E and F.

In addition, on the following pages the results of worst case Field Strength harmonics measurements in the restricted bands as well as at band-edge frequencies are shown.

Results	Complies by 4.7dB
----------------	--------------------------

**Transmitter Radiated Emissions
Model Number: 363-S**

Frequency	Antenna Polarity	Detector	Raw Amplitude @ 3 m	Preamp	Antenna Factor	Cable Loss	δ (dB)*	FS @ 3 m	FS Limit @ 3 m	Margin
GHz	H/V	Peak / Avg	dB(uV)	dB	dB(1/m)	dB	dB	dB(uV/m)	dB(uV/m)	dB
Tx @ 2402 MHz										
2.390	V	Peak	31.7 **	--	27.7	3.3	--	53.2***	74.0	-20.8
4.804	V	Peak	38.3	34.4	32.7	5.9	--	42.5	74.0	-31.5
12.0100	V	Peak	35.1	34.3	38.6	9.9	--	49.3	74.0	-24.7
2.390	V	Avg	31.7 **	--	27.7	3.3	-4.1	49.1***	54.0	-4.9
4.804	V	Avg	38.3	34.4	32.7	5.9	-4.1	38.4	54.0	-15.6
12.0100	V	Avg	35.1	34.3	38.6	9.9	-4.1	45.2	54.0	-8.8
Tx @ 2442 MHz										
4.884	V	Peak	37.9	34.3	32.7	5.9	--	42.2	74.0	-31.8
7.326	V	Peak	38.2	32.7	37.4	7.4	--	50.3	74.0	-23.7
12.210	V	Peak	35.5	34.4	38.3	10.0	--	49.4	74.0	-24.6
4.884	V	Avg	37.9	34.3	32.7	5.9	-4.1	38.1	54.0	-15.9
7.326	V	Avg	38.2	32.7	37.4	7.4	-4.1	46.2	54.0	-7.8
12.210	V	Avg	35.5	34.4	38.3	10.0	-4.1	45.3	54.0	-8.7
Tx @ 2480 MHz										
4.960	V	Peak	38.9	34.2	32.8	5.9	--	43.4	74.0	-30.6
7.440	V	Peak	39.1	32.7	37.4	7.5	--	51.3	74.0	-22.7
12.400	V	Peak	35.5	34.4	38.4	10.1	--	49.6	74.0	-24.4
4.960	V	Avg	38.9	34.2	32.8	5.9	-4.1	39.3	54.0	-14.7
7.440	V	Avg	39.1	32.7	37.4	7.5	-4.1	47.2	54.0	-6.8
12.400	V	Avg	35.5	34.4	38.4	10.1	-4.1	45.5	54.0	-8.5

* δ (dB) - Duty Cycle Correction Factor. See Appendix G for Duty Cycle measurement and calculation. Duty cycle Correction Factor was applied for Average Field Strength (FS).

** SA Reading obtained at 1 m distance

*** with distance correction factor of 9.5 dB

- RBW = 1 MHz, VBW = 3 MHz - for peak measurements
- Peak FS at 3m = SA reading + Cable loss + High Pass Filter loss - Pre-amplifier gain + Antenna factor.
- Average FS at 3m = Peak FS + δ (dB)
- Measurements made at 3 meters distance. Radiated emission measurements were performed up to 25 GHz. No other emissions were detected above the noise floor which is at least 10 dB below the limit.

**Transmitter Radiated Emissions at band-edge frequency at 2483.5 MHz,
Measured by marker-delta method, Tx @ 2480 MHz, Model Number: 363-S**

Frequency	Measur. Type	SA ₁ @ 2480 MHz	Delta *	SA ₂ @ 2483.5 MHz	δ (dB)	AF	Cable loss	FS @ 2483.5 MHz	Limit	Margin
MHz		dB(uV/m)	dB	dB(uV/m)	dB	dB(1/m)	dB	dB(uV/m)	dB(uV/m)	dB
2483.5	Peak	70.0	51.7	18.3 **	--	28.1	3.4	49.8	74.0	-24.2
2483.5	Average	--	--	18.3	-4.1	28.1	3.4	45.7	54.0	-8.3

* Delta (Δ) measured between SA readings at Fundamental frequency and band-edge frequency with 300kHz/1MHz (RBW/VBW).

** SA₂ = SA₁ - Δ

δ (dB) - Duty Cycle Correction Factor. See Appendix G for Duty Cycle measurement and calculation. Measurements made at 3 meters distance

**Transmitter Radiated Emissions
Model Number: 366-M/L**

Frequency	Antenna Polarity	Detector	Raw Amplitude @ 3 m	Preamp	Antenna Factor	Cable Loss	δ (dB)*	FS @ 3 m	FS Limit @ 3 m	Margin
GHz	H/V	Peak / Avg	dB(uV)	dB	dB(1/m)	dB	dB	dB(uV/m)	dB(uV/m)	dB
Tx @ 2402 MHz										
2.390	V	Peak	31.9 **	--	27.7	3.3	--	53.4***	74.0	-20.6
4.804	V	Peak	38.60	34.4	32.7	5.9	--	42.8	74.0	-31.2
12.0100	V	Peak	35.20	34.3	38.6	9.9	--	49.4	74.0	-24.6
2.390	V	Avg	31.9 **	--	27.7	3.3	-4.1	49.3***	54.0	-4.7
4.804	V	Avg	38.60	34.4	32.7	5.9	-4.1	38.7	54.0	-15.3
12.0100	V	Avg	35.20	34.3	38.6	9.9	-4.1	45.3	54.0	-8.7
Tx @ 2442 MHz										
4.884	V	Peak	38.25	34.3	32.7	5.9	--	42.6	74.0	-31.5
7.326	V	Peak	36.20	32.7	37.4	7.4	--	48.3	74.0	-25.7
12.210	V	Peak	35.50	34.4	38.3	10.0	--	49.4	74.0	-24.6
4.884	V	Avg	38.25	34.3	32.7	5.9	-4.1	38.5	54.0	-15.6
7.326	V	Avg	36.20	32.7	37.4	7.4	-4.1	44.2	54.0	-9.8
12.210	V	Avg	35.50	34.4	38.3	10.0	-4.1	45.3	54.0	-8.7
Tx @ 2480 MHz										
4.960	V	Peak	38.0	34.2	32.8	5.9	--	42.5	74.0	-31.5
7.440	V	Peak	38.2	32.7	37.4	7.5	--	50.4	74.0	-23.6
12.400	V	Peak	35.2	34.4	38.4	10.1	--	49.3	74.0	-24.7
4.960	V	Avg	38.0	34.2	32.8	5.9	-4.1	38.4	54.0	-15.6
7.440	V	Avg	38.2	32.7	37.4	7.5	-4.1	46.3	54.0	-7.7
12.400	V	Avg	35.2	34.4	38.4	10.1	-4.1	45.2	54.0	-8.8

* δ (dB) - Duty Cycle Correction Factor. See Appendix G for Duty Cycle measurement and calculation. Duty cycle Correction Factor was applied for Average Field Strength (FS).

** SA Reading obtained at 1 m distance

*** with distance correction factor of 9.5 dB

- RBW = 1 MHz, VBW = 3 MHz - for peak measurements
- Peak FS at 3m = SA reading + Cable loss + High Pass Filter loss - Pre-amplifier gain + Antenna factor.
- Average FS at 3m = Peak FS + δ (dB)
- Measurements made at 3 meters distance. Radiated emission measurements were performed up to 25 GHz. No other emissions were detected above the noise floor which is at least 10 dB below the limit.

**Transmitter Radiated Emissions at band-edge frequency at 2483.5 MHz,
Measured by marker-delta method, Tx @ 2480 MHz, Model Number: 366-M/L**

Frequency	Measur. Type	SA ₁ @ 2480 MHz	Delta *	SA ₂ @ 2483.5 MHz	δ (dB)	AF	Cable loss	FS @ 2483.5 MHz	Limit	Margin
MHz		dB(uV/m)	dB	dB(uV/m)	dB	dB(1/m)	dB	dB(uV/m)	dB(uV/m)	dB
2483.5	Peak	71.2	50.1	21.1 **	--	28.1	3.4	52.6	74.0	-21.4
2483.5	Average	--	--	21.1	-4.1	28.1	3.4	48.5	54.0	-5.5

* Delta (Δ) measured between SA readings at Fundamental frequency and band-edge frequency with 300kHz/1MHz (RBW/VBW).

** SA₂ = SA₁ - Δ

δ (dB) - Duty Cycle Correction Factor. See Appendix G for Duty Cycle measurement and calculation. Measurements made at 3 meters distance

**Transmitter Radiated Emissions
Model Number: 369-XL**

Frequency	Antenna Polarity	Detector	Raw Amplitude @ 3 m	Preamp	Antenna Factor	Cable Loss	δ (dB)*	FS @ 3 m	FS Limit @ 3 m	Margin
GHz	H/V	Peak / Avg	dB(uV)	dB	dB(1/m)	dB	dB	dB(uV/m)	dB(uV/m)	dB
Tx @ 2402 MHz										
2.390	V	Peak	31.7 **	--	27.7	3.3	--	53.2***	74.0	-20.8
4.804	V	Peak	40.5	34.4	32.7	5.9	--	44.7	74.0	-29.3
12.0100	V	Peak	35.3	34.3	38.6	9.9	--	49.5	74.0	-24.5
2.390	V	Avg	31.7 **	--	27.7	3.3	-4.1	49.1***	54.0	-4.9
4.804	V	Avg	40.5	34.4	32.7	5.9	-4.1	40.6	54.0	-13.4
12.0100	V	Avg	35.3	34.3	38.6	9.9	-4.1	45.4	54.0	-8.6
Tx @ 2442 MHz										
4.884	V	Peak	40.1	34.3	32.7	5.9	--	44.4	74.0	-29.6
7.326	V	Peak	35.5	32.7	37.4	7.4	--	47.6	74.0	-26.4
12.210	V	Peak	34.7	34.4	38.3	10.0	--	48.6	74.0	-25.4
4.884	V	Avg	40.1	34.3	32.7	5.9	-4.1	40.3	54.0	-13.7
7.326	V	Avg	35.5	32.7	37.4	7.4	-4.1	43.5	54.0	-10.5
12.210	V	Avg	34.7	34.4	38.3	10.0	-4.1	44.5	54.0	-9.5
Tx @ 2480 MHz										
4.960	V	Peak	40.7	34.2	32.8	5.9	--	45.2	74.0	-28.8
7.440	V	Peak	35.1	32.7	37.4	7.5	--	47.3	74.0	-26.7
12.400	V	Peak	34.4	34.4	38.4	10.1	--	48.5	74.0	-25.5
4.960	V	Avg	40.7	34.2	32.8	5.9	-4.1	41.1	54.0	-12.9
7.440	V	Avg	35.1	32.7	37.4	7.5	-4.1	43.2	54.0	-10.8
12.400	V	Avg	34.4	34.4	38.4	10.1	-4.1	44.4	54.0	-9.6

* δ (dB) - Duty Cycle Correction Factor. See Appendix G for Duty Cycle measurement and calculation. Duty cycle Correction Factor was applied for Average Field Strength (FS).

** SA Reading obtained at 1 m distance

*** with distance correction factor of 9.5 dB

- RBW = 1 MHz, VBW = 3 MHz - for peak measurements
- Peak FS at 3m = SA reading + Cable loss + High Pass Filter loss - Pre-amplifier gain + Antenna factor.
- Average FS at 3m = Peak FS + δ (dB)
- Measurements made at 3 meters distance. Radiated emission measurements were performed up to 25 GHz. No other emissions were detected above the noise floor which is at least 10 dB below the limit.

**Transmitter Radiated Emissions at band-edge frequency at 2483.5 MHz,
Measured by marker-delta method, Tx @ 2480 MHz, Model Number: 369-XL**

Frequency	Measur. Type	SA ₁ @ 2480 MHz	Delta *	SA ₂ @ 2483.5 MHz	δ (dB)	AF	Cable loss	FS @ 2483.5 MHz	Limit	Margin
MHz		dB(uV/m)	dB	dB(uV/m)	dB	dB(1/m)	dB	dB(uV/m)	dB(uV/m)	dB
2483.5	Peak	70.0	51.0	19.0 **	--	28.1	3.4	50.5	74.0	-23.5
2483.5	Average	--	--	19.0	-4.1	28.1	3.4	46.4	54.0	-7.6

* Delta (Δ) measured between SA readings at Fundamental frequency and band-edge frequency with 300kHz/1MHz (RBW/VBW).

** SA₂ = SA₁ - Δ

δ (dB) - Duty Cycle Correction Factor. See Appendix G for Duty Cycle measurement and calculation. Measurements made at 3 meters distance

4.6 AC Line Conducted Emission
FCC: 15.207, 15.107; RSS-GEN; LP0002: 2.3

4.6.1 Requirement

Frequency Band MHz	Class B Limit dB(μ V)		Class A Limit dB(μ V)	
	Quasi-Peak	Average	Quasi-Peak	Average
0.15-0.50	66 to 56 *	56 to 46 *	79	66
0.50-5.00	56	46	73	60
5.00-30.00	60	50	73	60

*Note: *Decreases linearly with the logarithm of the frequency
At the transition frequency the lower limit applies.*

4.6.2 Procedure

Measurements are carried out using quasi-peak and average detector receivers in accordance with CISPR 16. An AMN is required to provide a defined impedance at high frequencies across the power feed at the point of measurement of terminal voltage and also to provide isolation of the circuit under test from the ambient noise on the power lines. An AMN as defined in CISPR 16 shall be used.

The EUT is located so that the distance between the boundary of the EUT and the closest surface of the AMN is 0.8m.

Where a flexible mains cord is provided by the manufacturer, this shall be 1m long or if in excess of 1m, the excess cable is folded back and forth as far as possible so as to form a bundle not exceeding 0.4m in length.

The EUT is arranged and connected with cables terminated in accordance with the product specification.

Conducted disturbance is measured between the phase lead and the reference ground, and between the neutral lead and the reference ground. Both measured values are reported.

The EUT, where intended for tabletop use, is placed on a table whose top is 0.8m above the ground plane. A vertical, metal reference plane is placed 0.4m from the EUT. The vertical metal reference-plane is at least 2m by 2m. The EUT shall be kept at least 0.8m from any other metal surface or other ground plane not being part of the EUT. The table is constructed of non-conductive materials. Its dimensions are 1m by 1.5m, but may be extended for larger EUT.

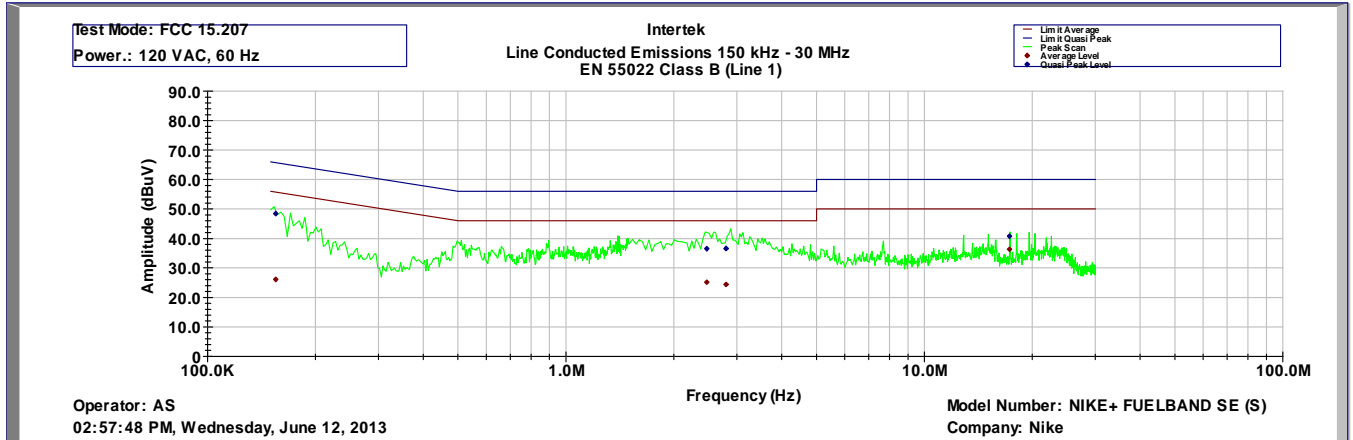
Floor standing EUT are placed on a horizontal metal ground plane and isolated from the ground plane by resting on an insulating material. The metal ground plane extends at least 0.5m beyond the boundaries of the EUT and has minimum dimensions of 2m by 2m.

Equipment setup for conducted disturbance tests followed the guidelines of ANSI C63.4.



4.6.3 Test Result

AC Line Conducted Emission Data, NIKE+ FUELBAND SE (S) in transmitting mode



Intertek Testing Services

Line Conducted Emissions 150 kHz - 30 MHz

EN 55022 Class B (Line 1)

Operator: AS

June 12, 2013

Model Number: NIKE+ FUELBAND SE (S)

Company: Nike

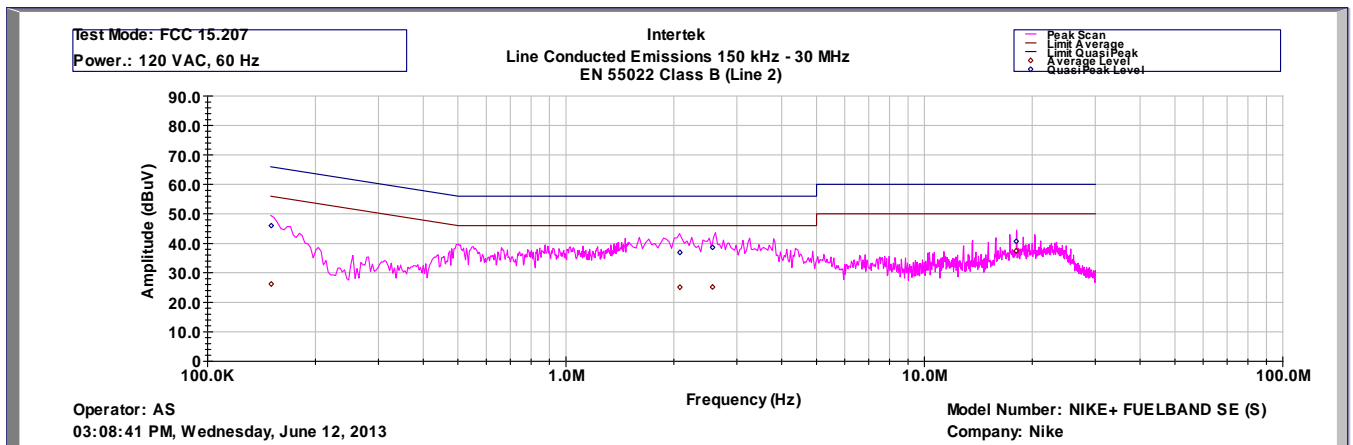
Frequency	Av Level	QP Level	Av Limit	QP Limit	Av Margin	QP Margin
Hz	dBuV	dBuV	dBuV	dBuV	dB	dB
155129	26.1	48.4	55.9	65.9	-29.8	-17.4
2.47E+06	25.2	36.5	46	56	-20.8	-19.5
2.80E+06	24.4	36.6	46	56	-21.6	-19.4
1.73E+07	36.3	40.8	50	60	-13.7	-19.2

Test Mode: FCC 15.207

Power.: 120 VAC, 60 Hz



AC Line Conducted Emission Data, NIKE+ FUELBAND SE (S) in transmitting mode



Intertek
 Line Conducted Emissions 150 kHz - 30 MHz
 EN 55022 Class B (Line 2)

Operator: AS
 June 12, 2013

Model Number: NIKE+ FUELBAND SE (S)
 Company: Nike

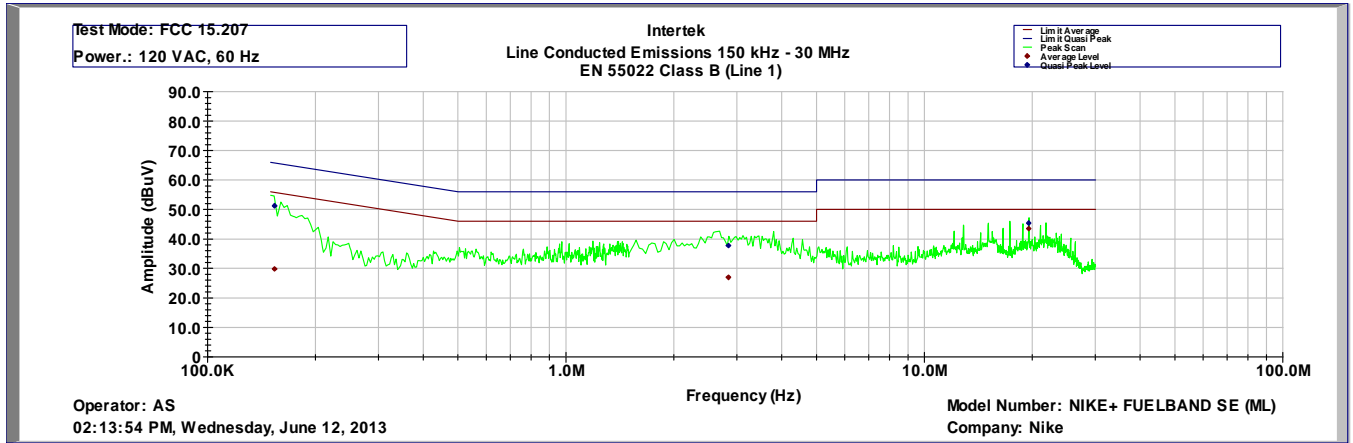
Frequency	Av Level	QP Level	Av Limit	QP Limit	Av Margin	QP Margin
Hz	dBuV	dBuV	dBuV	dBuV	dB	dB
150554	26.2	46	56	66	-29.8	-20
2.08E+06	25.1	36.9	46	56	-20.9	-19.1
2.56E+06	25.2	38.6	46	56	-20.8	-17.4
1.80E+07	37.4	40.7	50	60	-12.6	-19.3

Test Mode: FCC 15.207
 Power.: 120 VAC, 60 Hz

Results **Complies by 5.1 dB**



AC Line Conducted Emission Data, NIKE+ FUELBAND SE (ML) in transmitting mode



Intertek Testing Services

Line Conducted Emissions 150 kHz - 30 MHz

EN 55022 Class B (Line 1)

Operator: AS

June 12, 2013

Model Number: NIKE+ FUELBAND SE (M/L)

Company: Nike

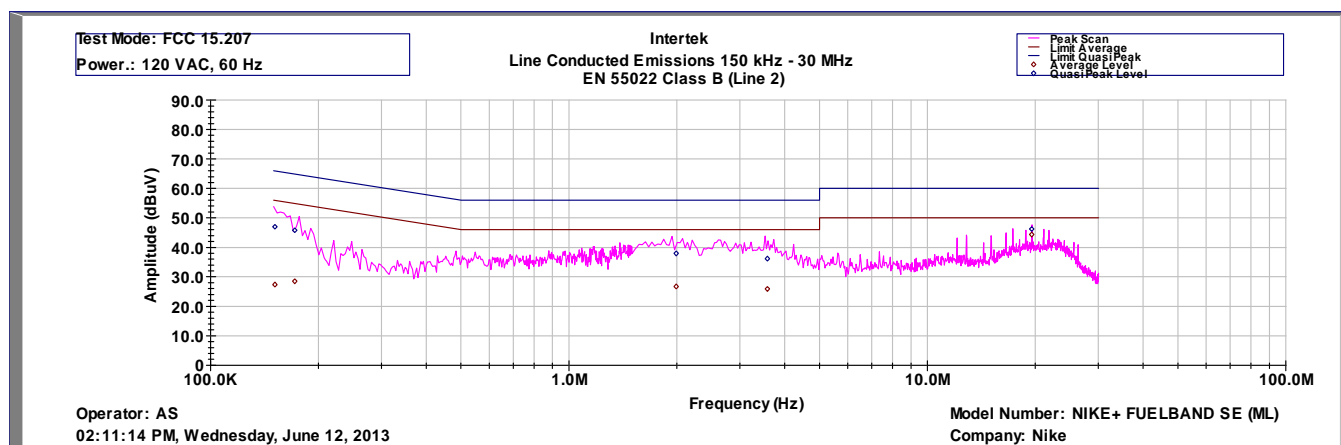
Frequency	Av Level	QP Level	Av Limit	QP Limit	Av Margin	QP Margin
Hz	dBuV	dBuV	dBuV	dBuV	dB	dB
153987	29.8	51.2	55.9	65.9	-26.1	-14.7
2.84E+06	26.9	37.7	46	56	-19.1	-18.3
1.95E+07	43.5	45.4	50	60	-6.5	-14.6

Test Mode: FCC 15.207

Power.: 120 VAC, 60 Hz



AC Line Conducted Emission Data, NIKE+ FUELBAND SE (ML) in transmitting mode



Intertek
 Line Conducted Emissions 150 kHz - 30 MHz
 EN 55022 Class B (Line 2)

Operator: AS
 June 12, 2013

Model Number: NIKE+ FUELBAND SE (M/L)
 Company: Nike

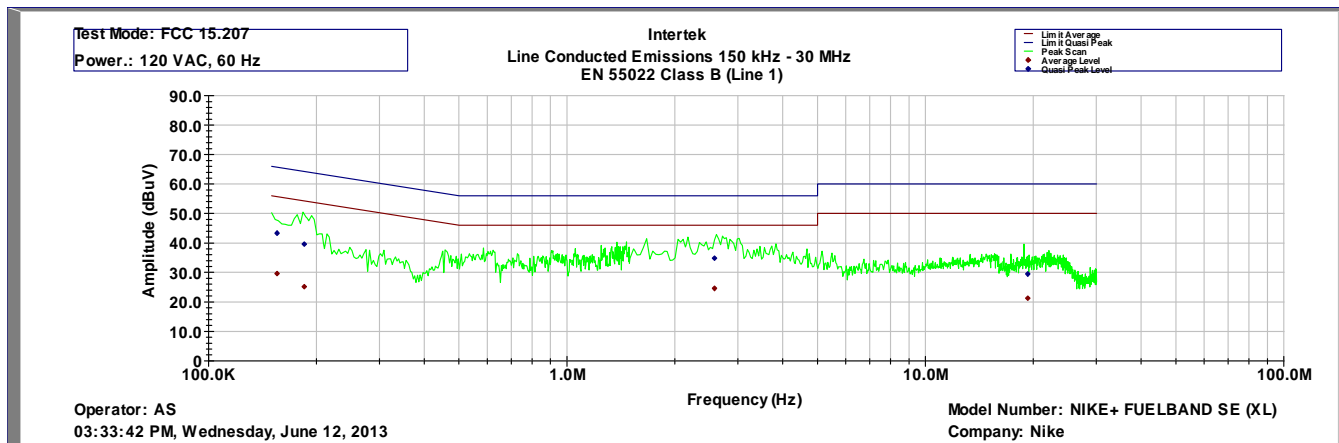
Frequency	Av Level	QP Level	Av Limit	QP Limit	Av Margin	QP Margin
Hz	dBuV	dBuV	dBuV	dBuV	dB	dB
151187	27.3	47	56	66	-28.6	-19
1.72E+05	28.5	45.8	55.4	65.4	-26.9	-19.6
1.99E+06	26.7	37.9	46	56	-19.3	-18.1
3.57E+06	25.9	36.1	46	56	-20.1	-19.9
1.95E+07	44.3	46.2	50	60	-5.7	-13.8

Test Mode: FCC 15.207
 Power.: 120 VAC, 60 Hz

Results Complies by 5.7 dB



AC Line Conducted Emission Data, NIKE+ FUELBAND SE (XL) in transmitting mode



Intertek Testing Services

Line Conducted Emissions 150 kHz - 30 MHz

EN 55022 Class B (Line 1)

Operator: AS

June 12, 2013

Model Number: NIKE+ FUELBAND SE (XL)

Company: Nike

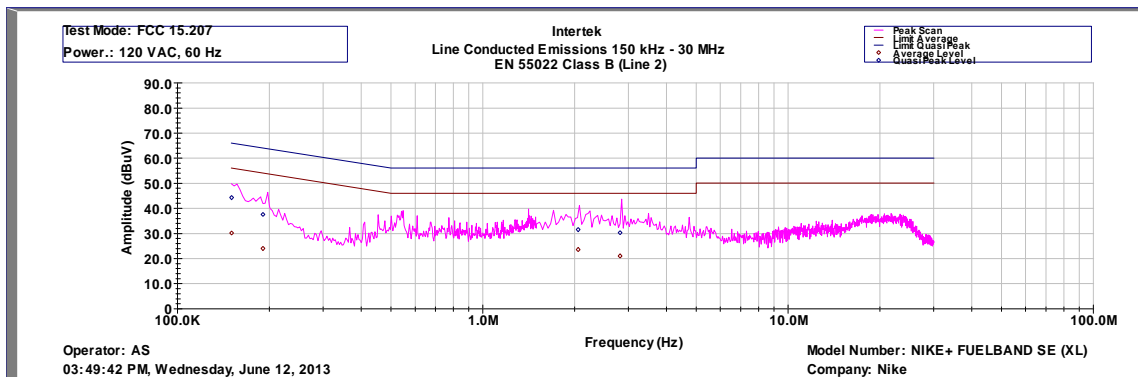
Frequency	Av Level	QP Level	Av Limit	QP Limit	Av Margin	QP Margin
Hz	dBuV	dBuV	dBuV	dBuV	dB	dB
155432	29.6	43.3	55.8	65.8	-26.3	-22.5
185216	25.1	39.6	55	65	-29.8	-25.4
2.58E+06	24.5	34.8	46	56	-21.5	-21.2
1.93E+07	21.2	29.4	50	60	-28.8	-30.6

Test Mode: FCC 15.207

Power.: 120 VAC, 60 Hz



AC Line Conducted Emission Data, NIKE+ FUELBAND SE (XL) in transmitting mode



Intertek

Line Conducted Emissions 150 kHz - 30 MHz

EN 55022 Class B (Line 2)

Operator: AS

Model Number: NIKE+ FUELBAND SE (XL)

June 12, 2013

Company: Nike

Frequency	Av Level	QP Level	Av Limit	QP Limit	Av Margin	QP Margin
Hz	dBuV	dBuV	dBuV	dBuV	dB	dB
150159	30.2	44.3	56	66	-25.8	-21.7
190353	24	37.5	54.8	64.8	-30.9	-27.3
2.05E+06	23.6	31.5	46	56	-22.4	-24.5
2.81E+06	21	30.3	46	56	-25	-25.7

Test Mode: FCC 15.207

Power.: 120 VAC, 60 Hz

Results Complies by 5.5 dB

5.0 List of Test Equipment

Measurement equipment used for emission compliance testing utilized the equipment on the following list:

Equipment	Manufacturer	Model/Type	Serial #	Cal Int	Cal Due
RF Filter Section	Hewlett Packard	85460A	3448A00267	12	03/12/14
EMI Receiver	Hewlett Packard	8546A	3710A00373	12	03/12/14
Spectrum Analyzer	Rohde&Schwarz	FSU	200482	12	04/05/14
Spectrum Analyzer	Rohde&Schwarz	FSP-40	100030	12	11/19/13
Spectrum Analyzer	Rohde and Schwartz	ESU	100172	12	10/05/13
BI-Log Antenna	ARA	LPB-2513/A	1154	12	07/12/13
Horn Antenna	EMCO	3115	9107-3712	12	12/06/13
Horn Antenna	EMCO	3115	00126795	12	11/15/13
Pyramidal Horn Antenna	EMCO	3160-09	Not Labeled	#	#
Pyramidal Horn Antenna	EMCO	3160-10	Not Labeled	#	#
Pre-Amplifier	Sonoma	310N	293620	12	11/20/13
Pre-Amplifier	Miteq	AMF-4D-001180-24-10P	799159	12	09/10/13
Pre-Amplifier	Miteq	JSD44-18004000-30-5P	1071636	12	05/03/14
Signal Generator	Hewlett Packard	SMR40	100445	12	09/06/13
LISN	FCC	FCC-LISN-50-50-M-H	2012	12	06/28/13

No Calibration required

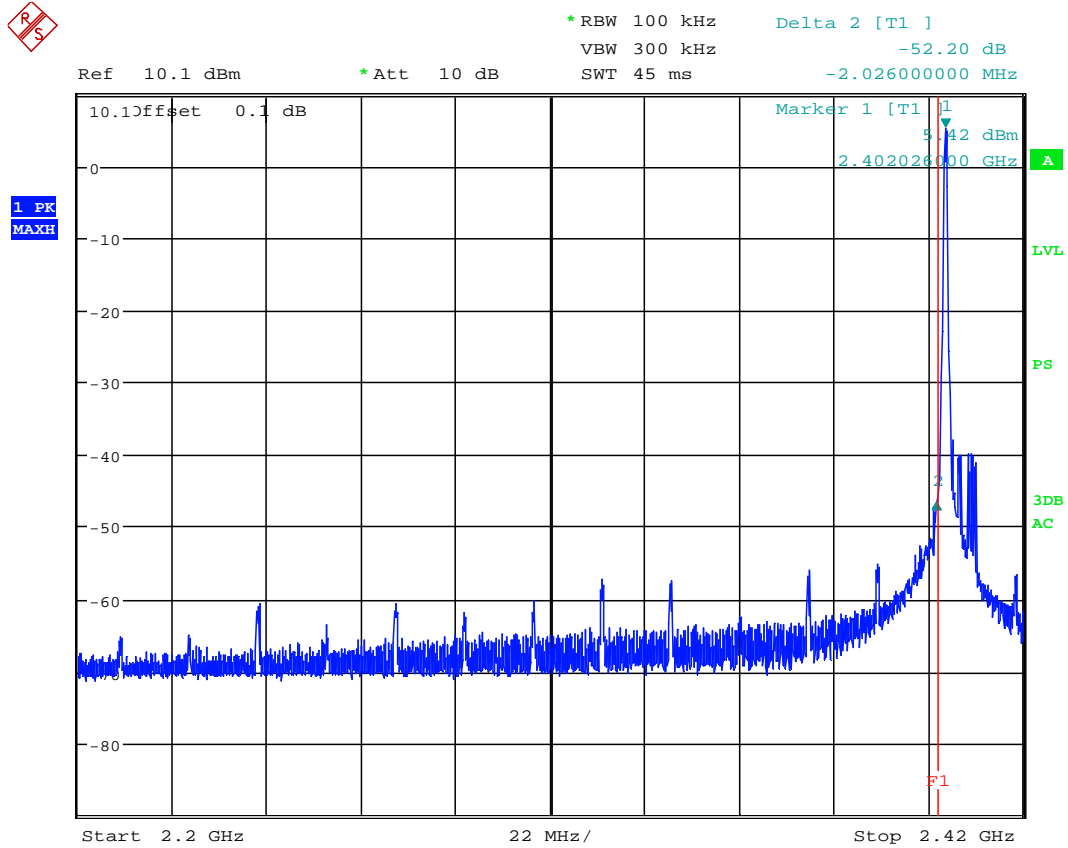


6.0 Document History

Revision/ Job Number	Writer Initials	Date	Change
1.0 / G100991982	AS	August 02, 2013	Original document

Annex A - Unwanted Conducted Emissions Plots. F=2402 MHz

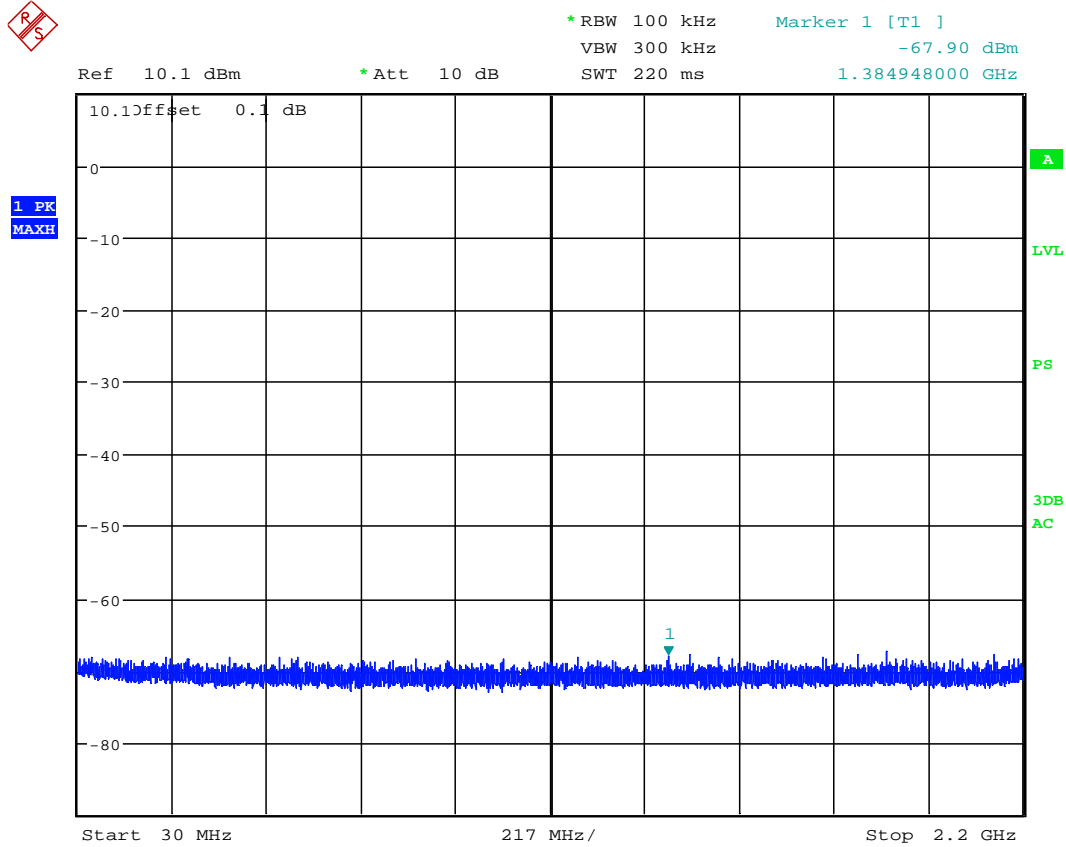
Plot A.1



Unwanted Conducted Emissions, F=2402 MHz

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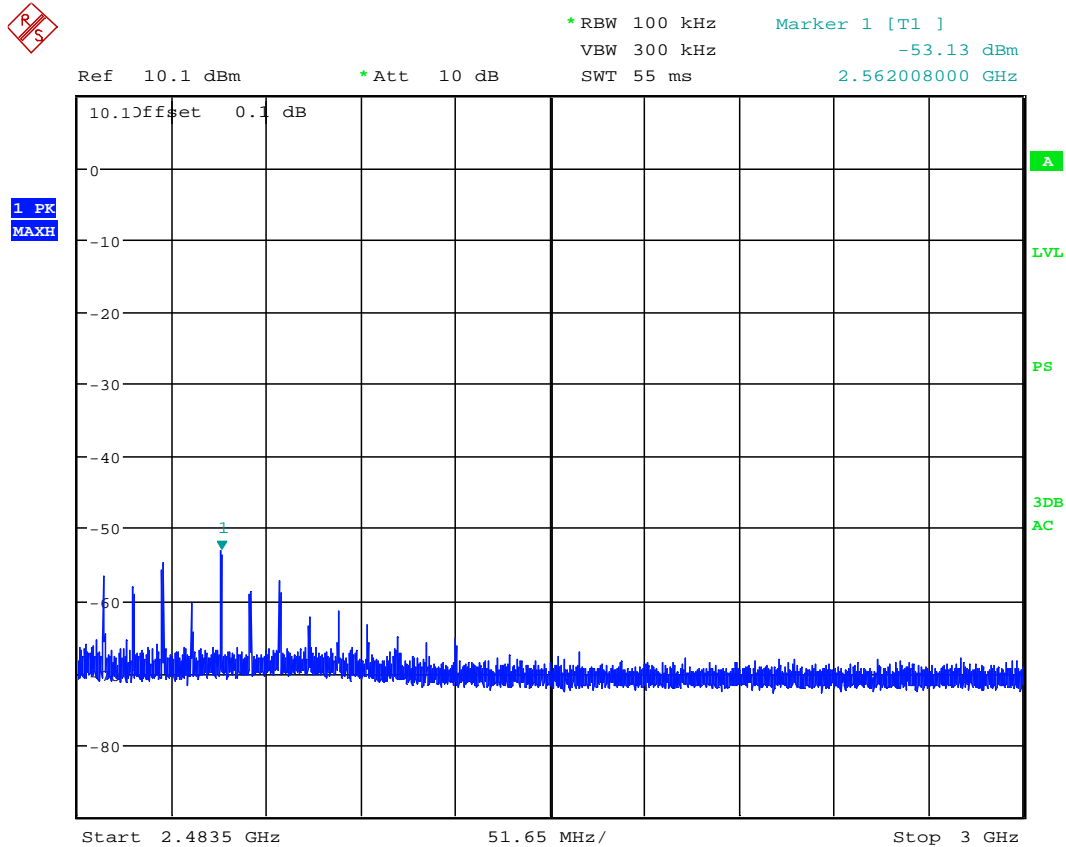
Plot A.2



Unwanted Conducted Emissions, F=2402 MHz

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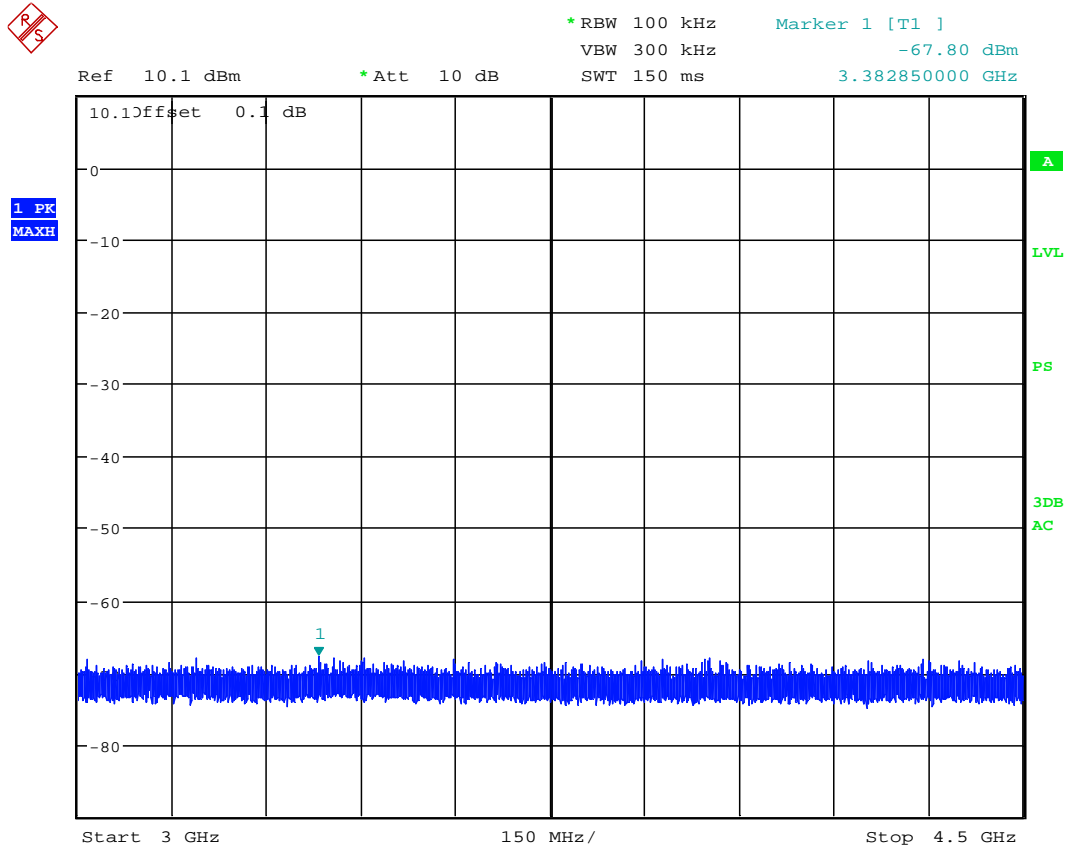
Plot A.3



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:24:00

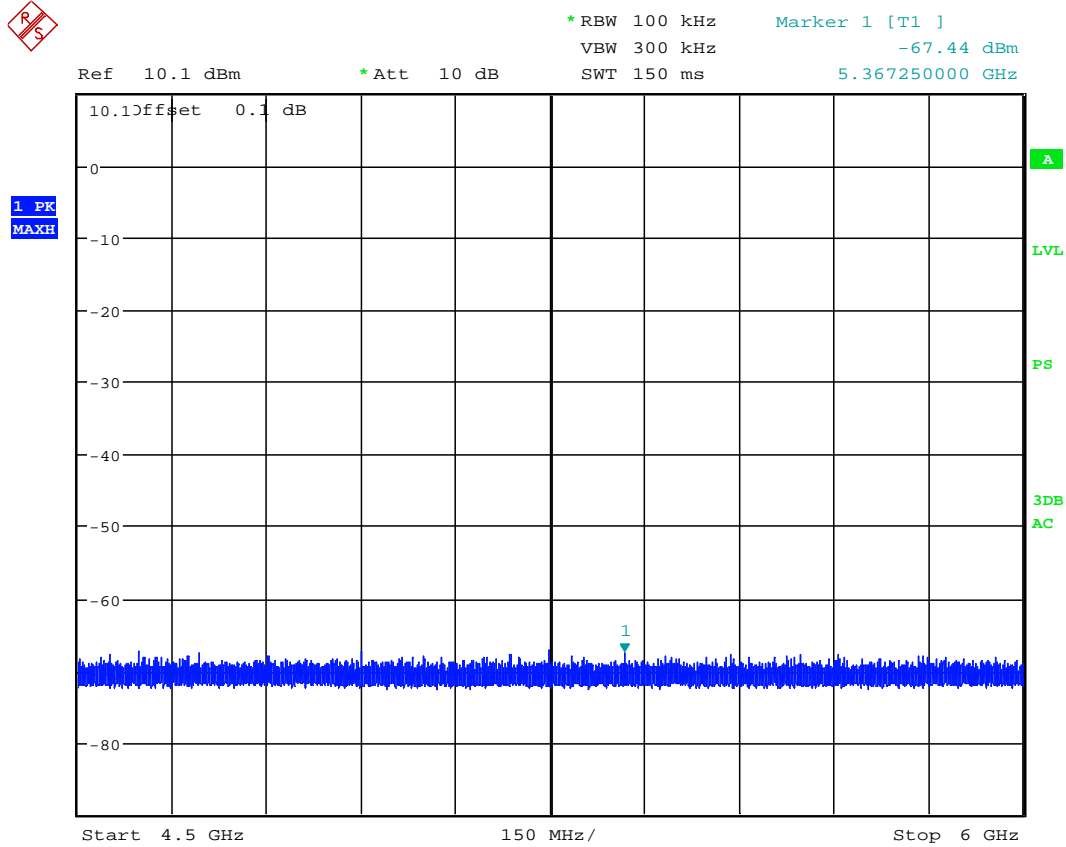
Plot A.4



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:26:13

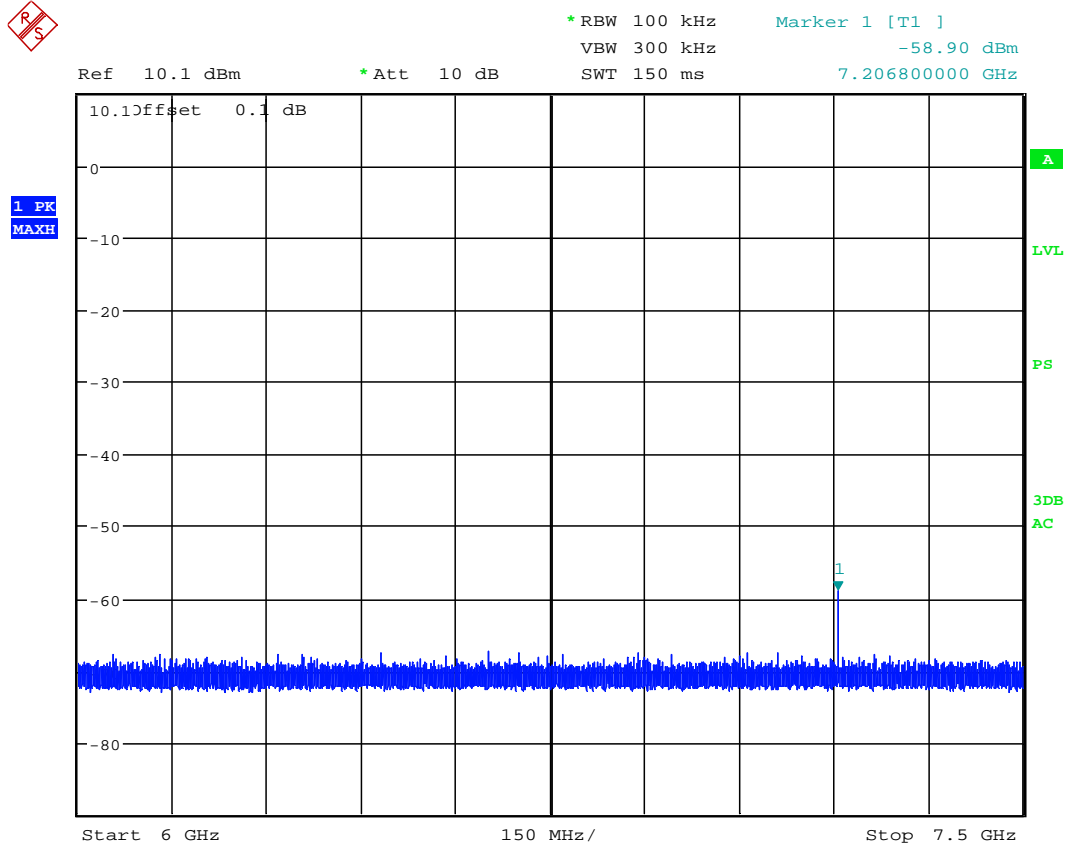
Plot A.5



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:36:33

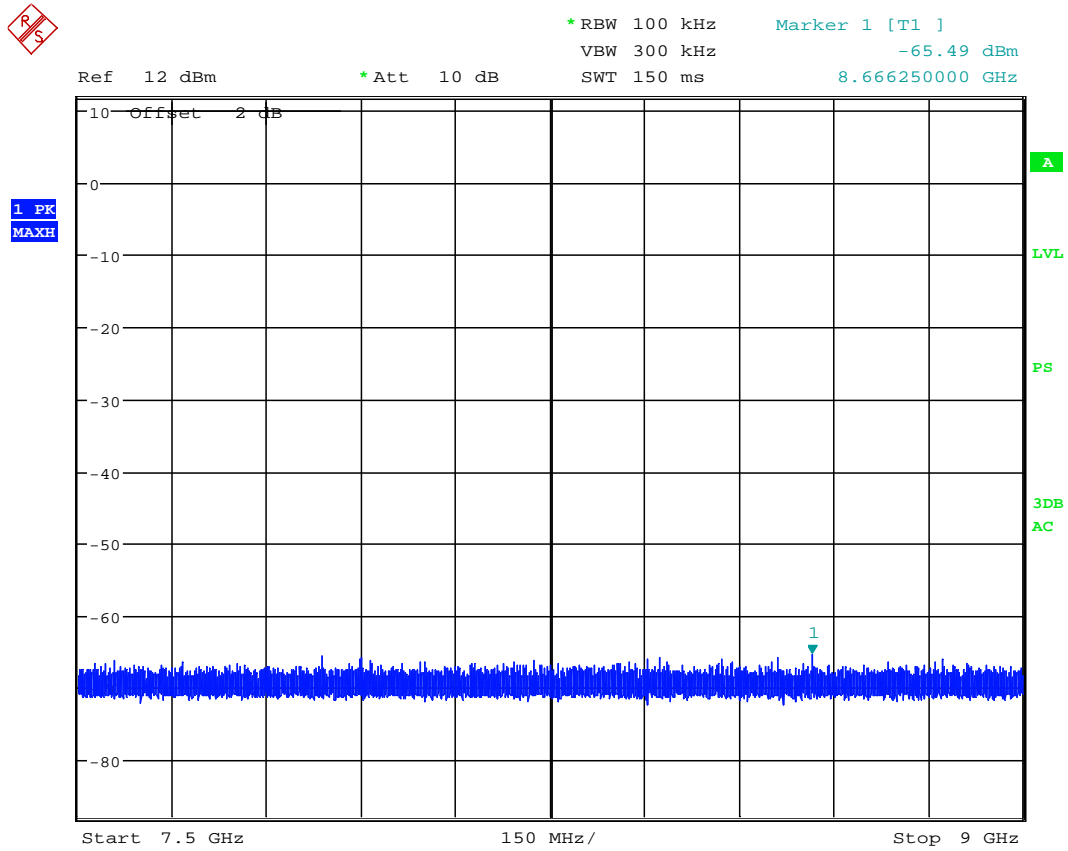
Plot A.6



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:46:18

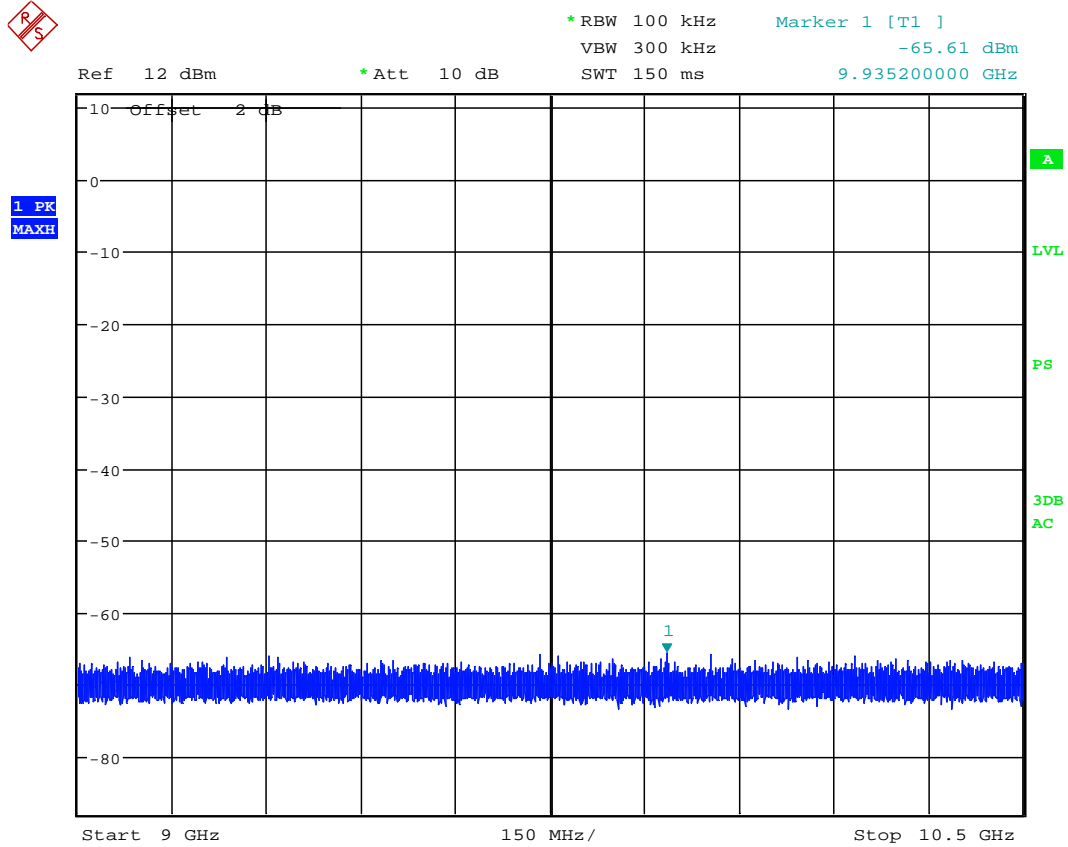
Plot A.7



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:50:48

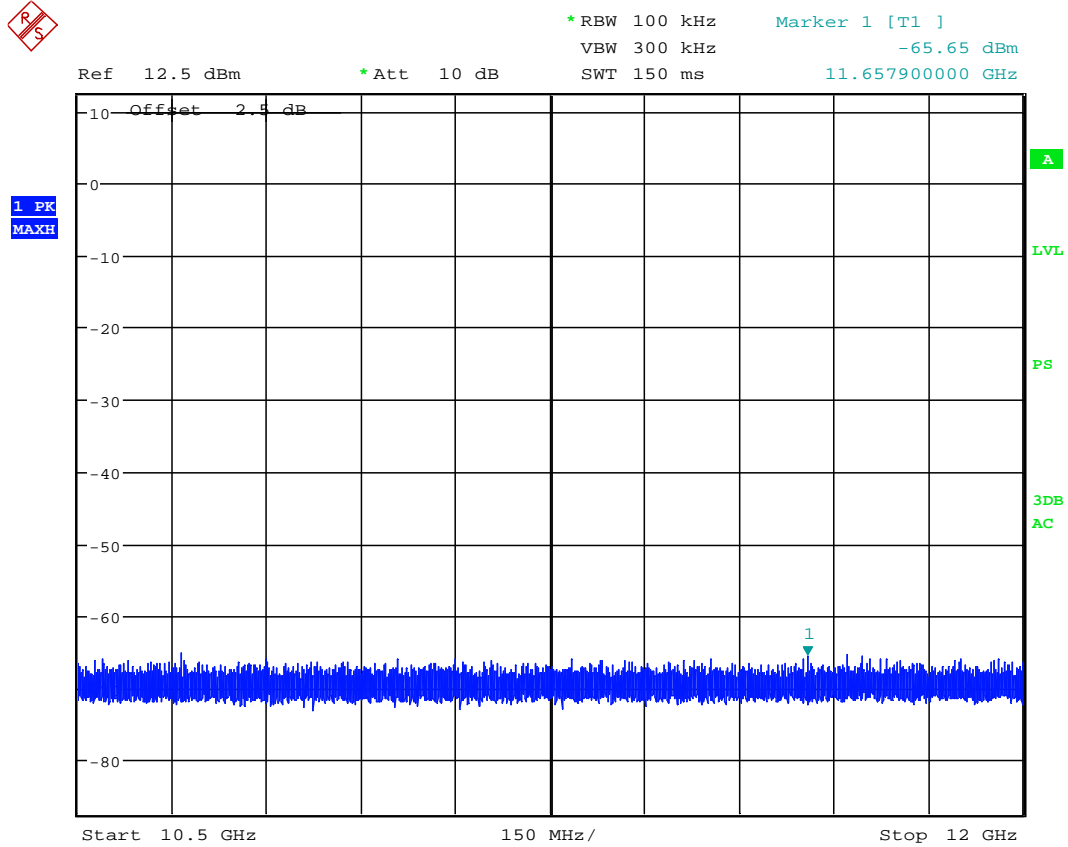
Plot A.8



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:52:16

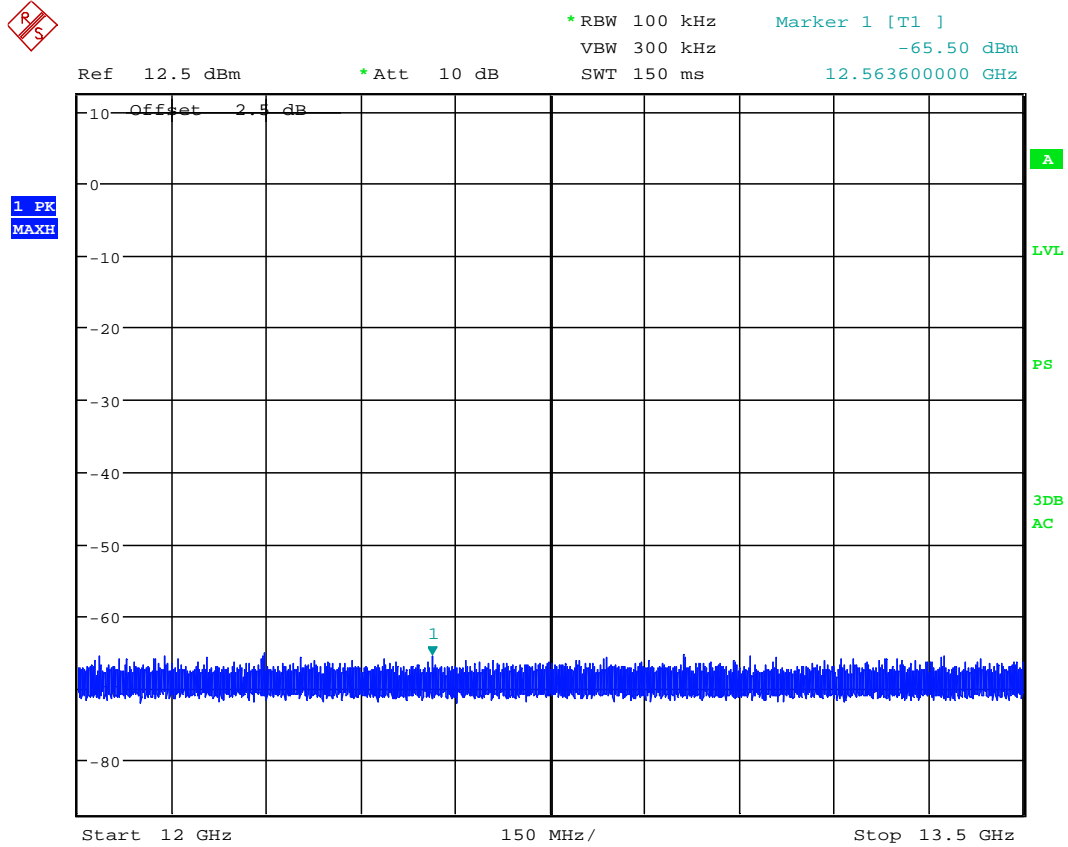
Plot A.9



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:53:59

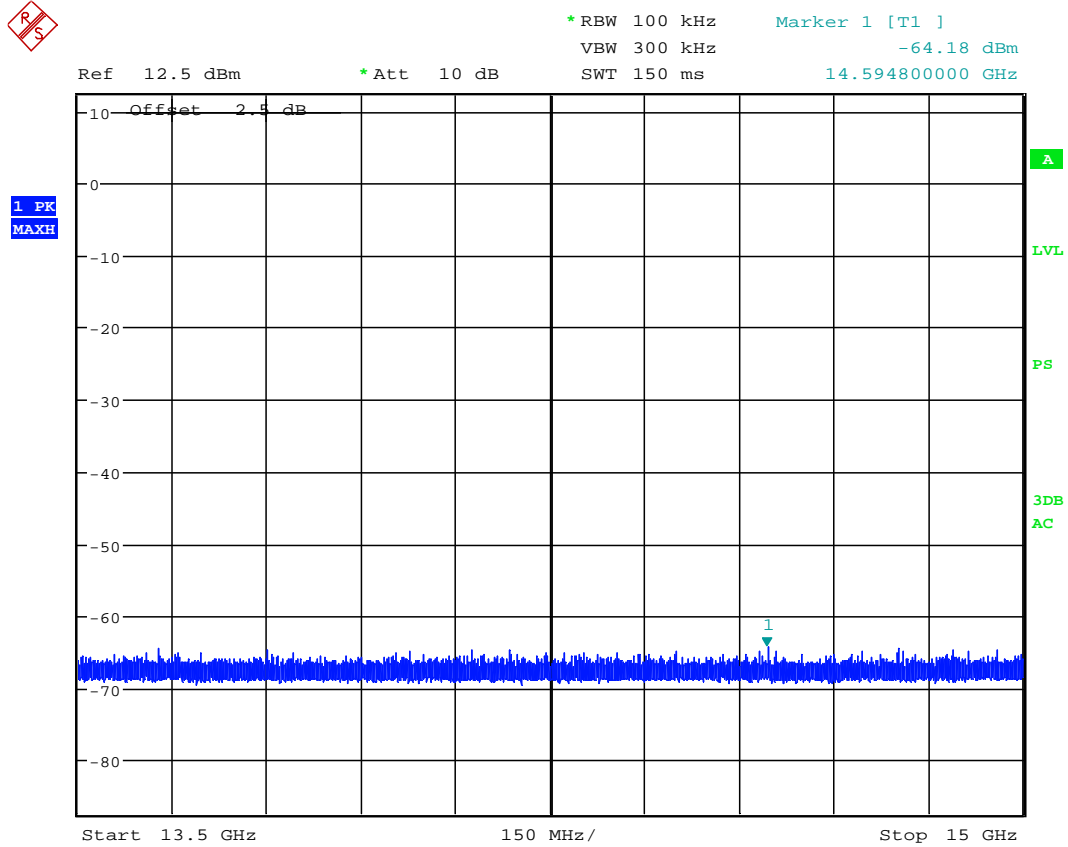
Plot A.10



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 11:55:53

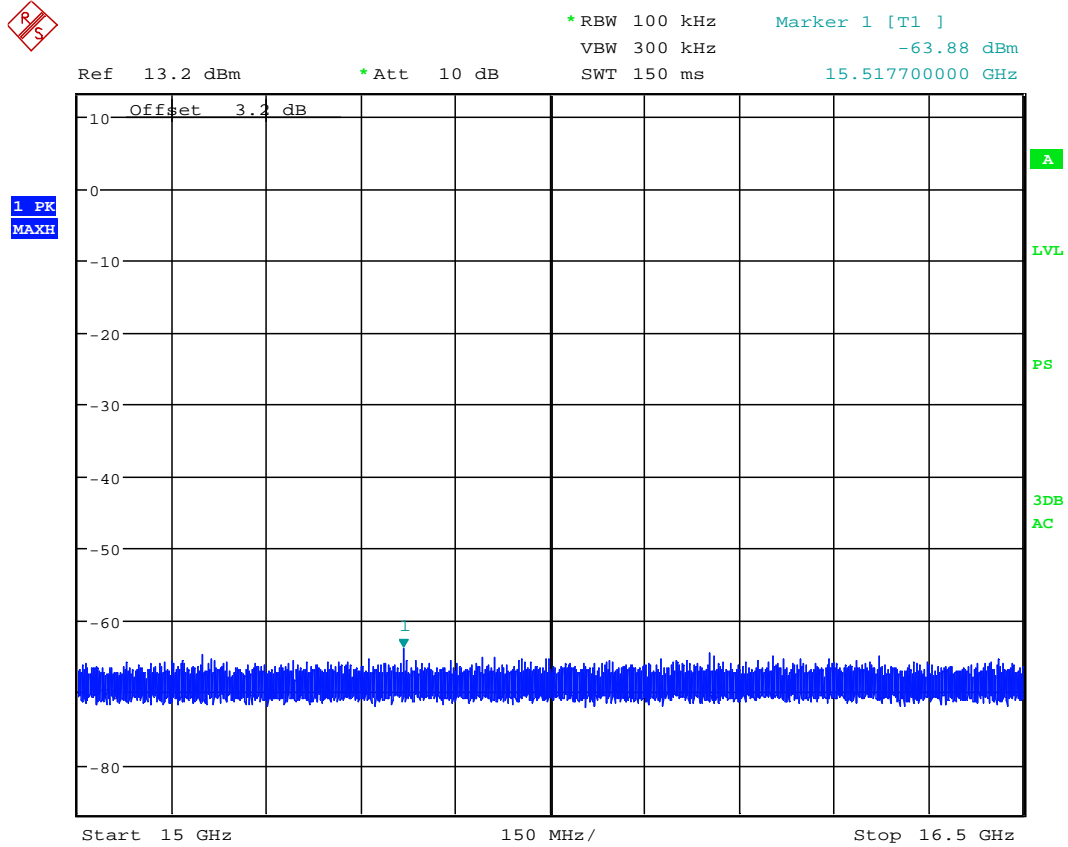
Plot A.11



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:17:05

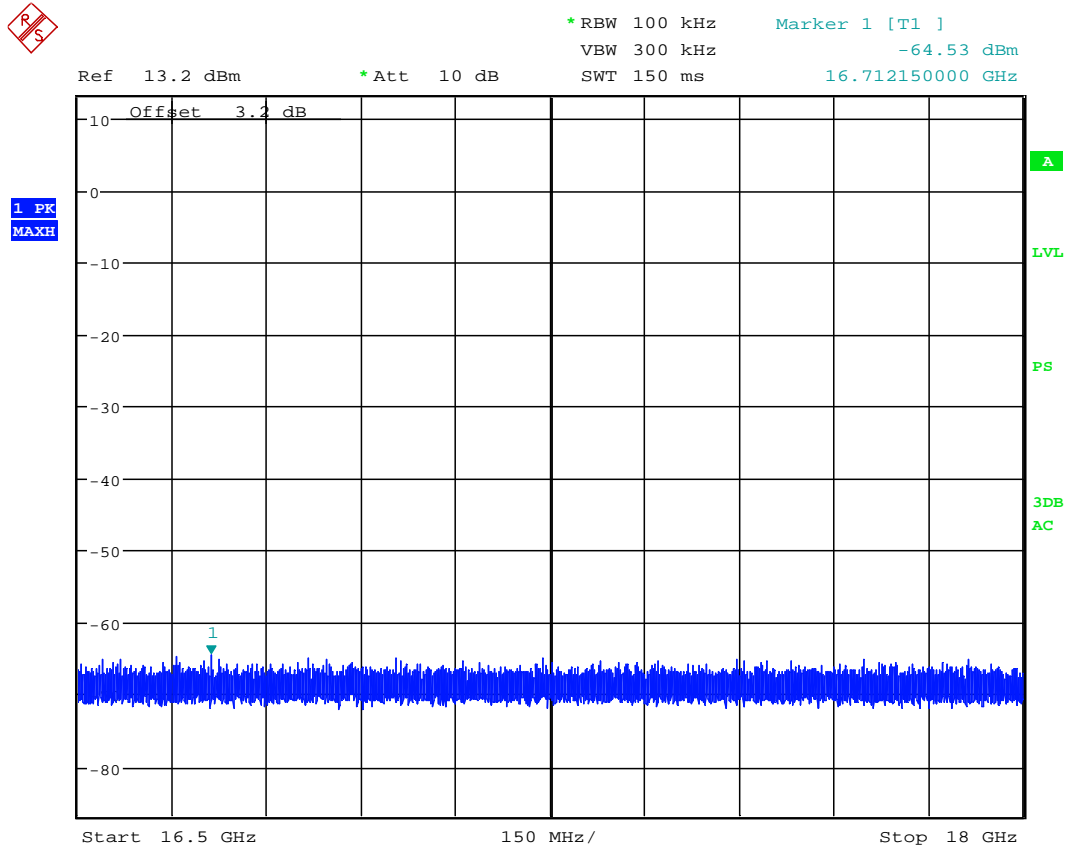
Plot A.12



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:18:38

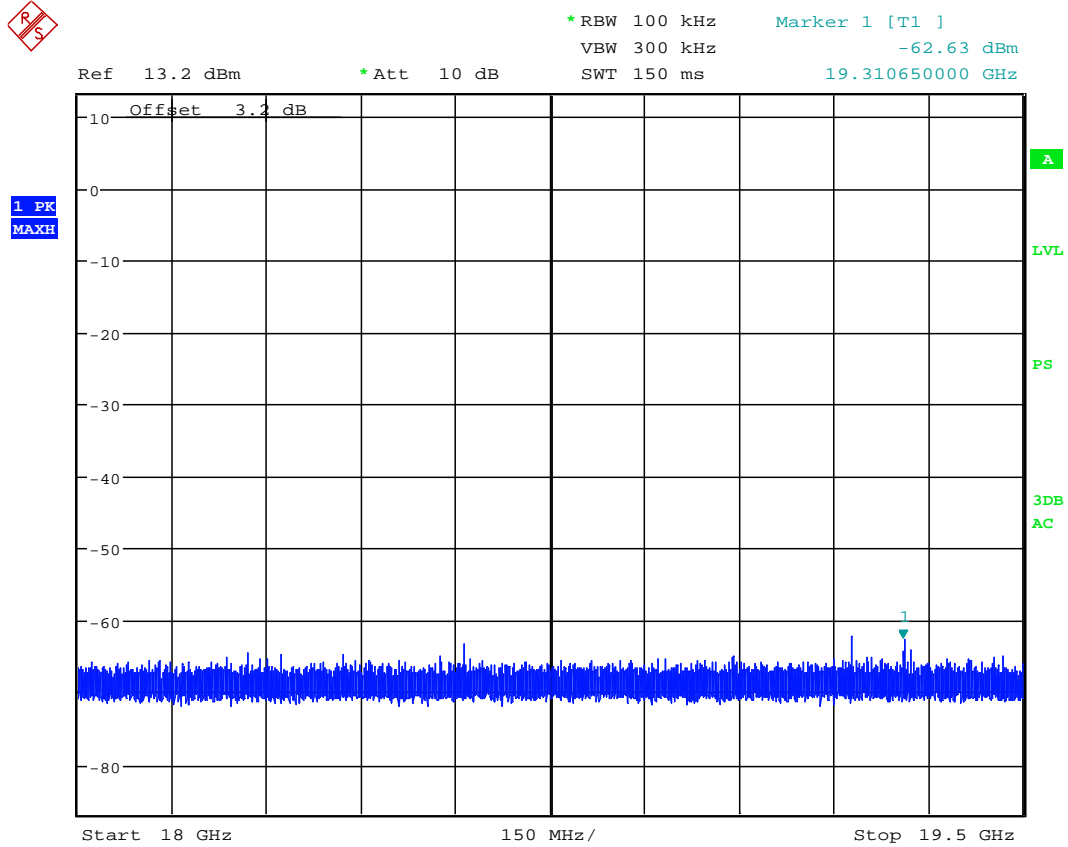
Plot A.13



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:19:59

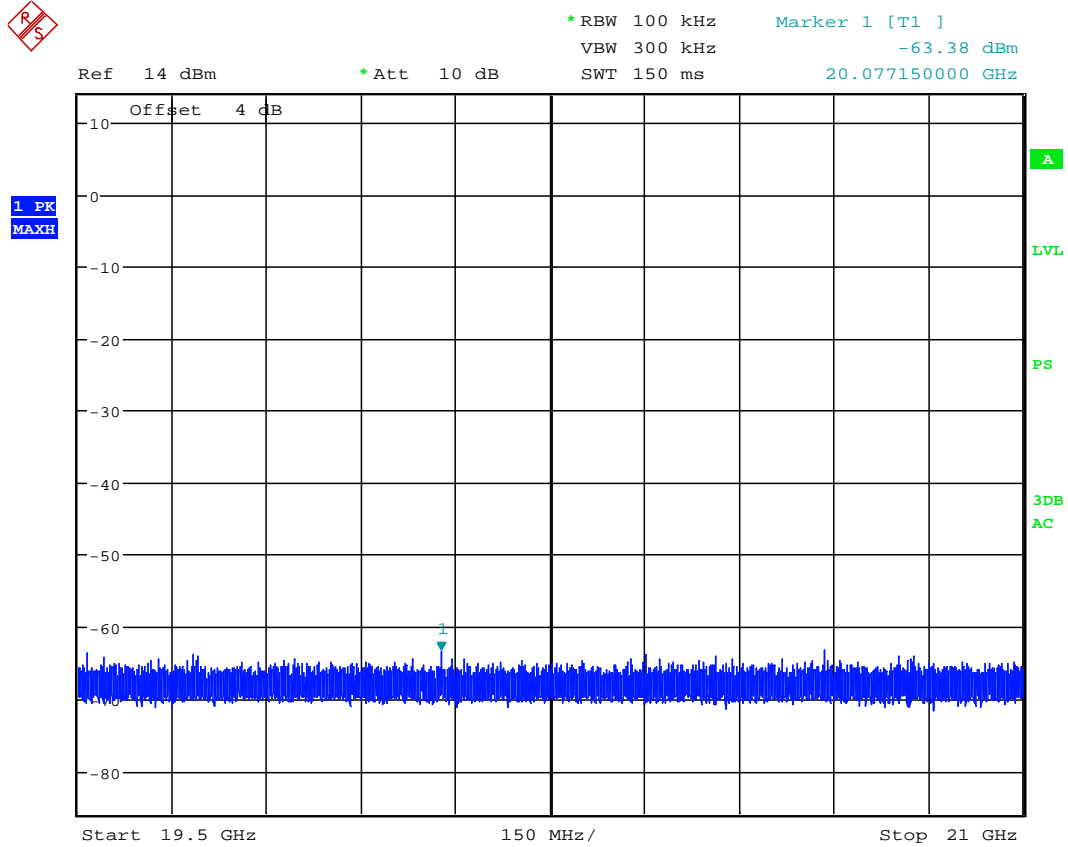
Plot A.14



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:21:19

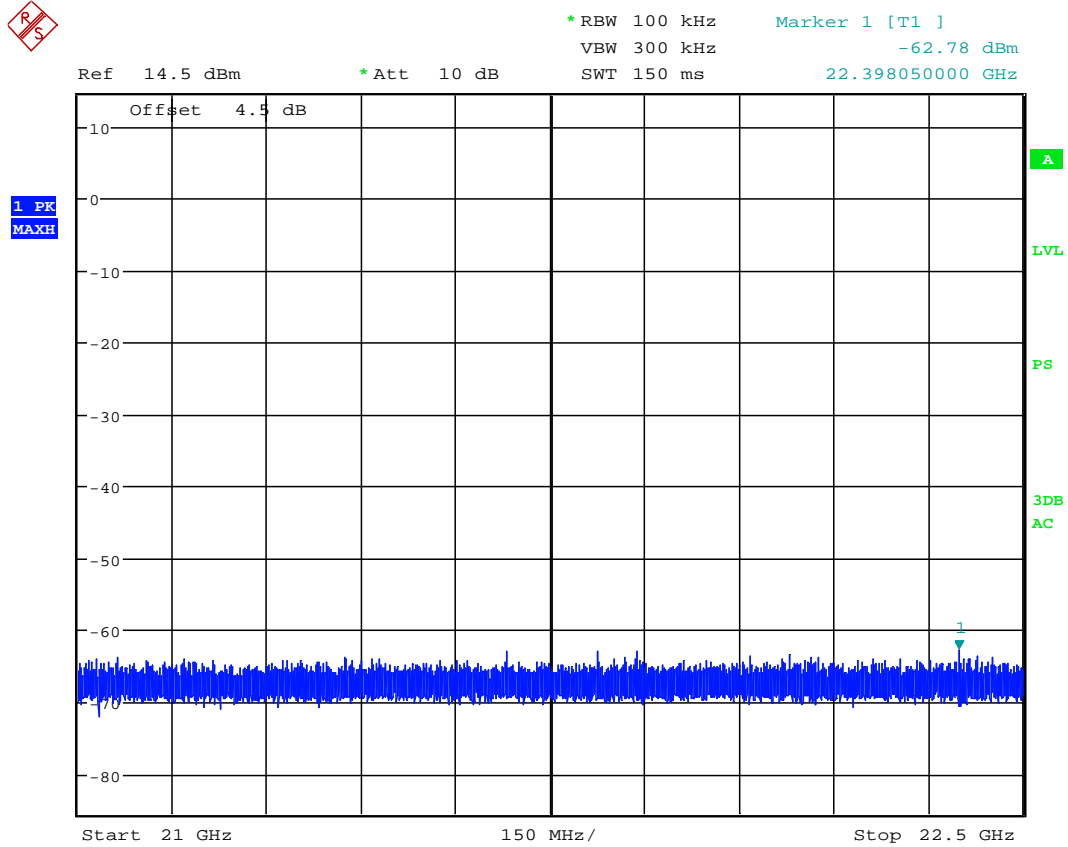
Plot A.15



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:23:11

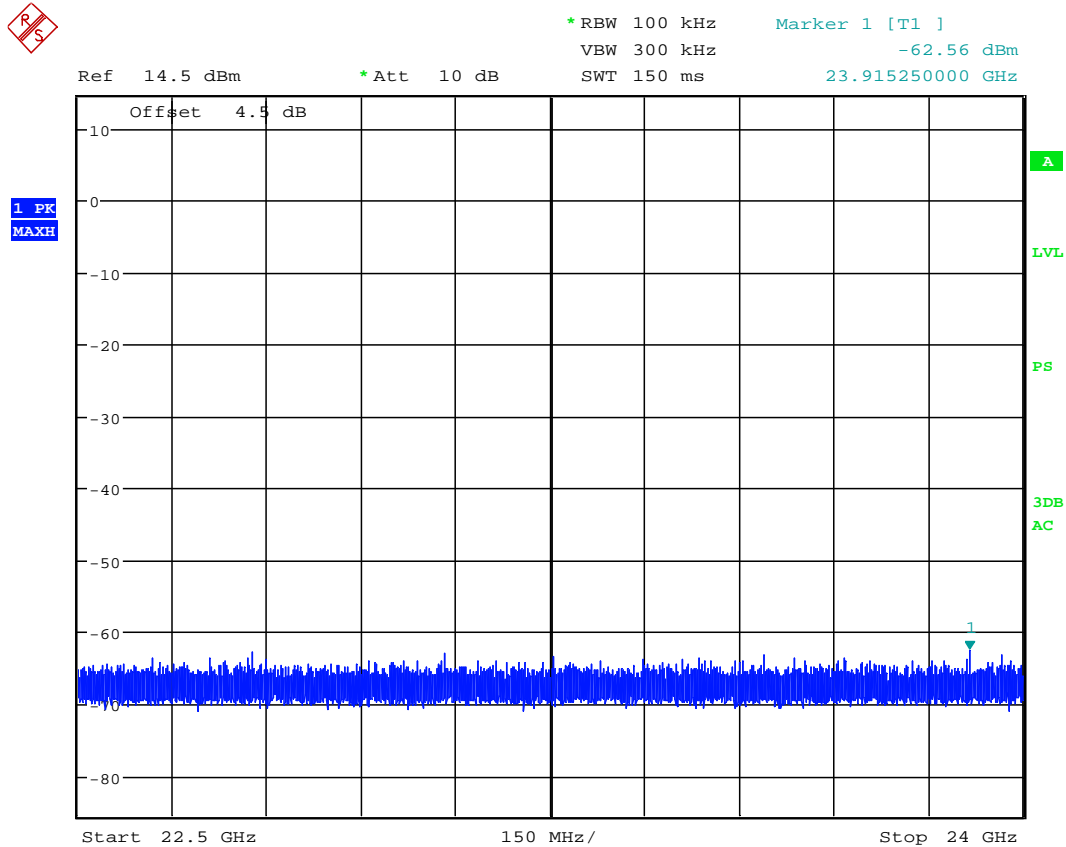
Plot A.16



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:26:53

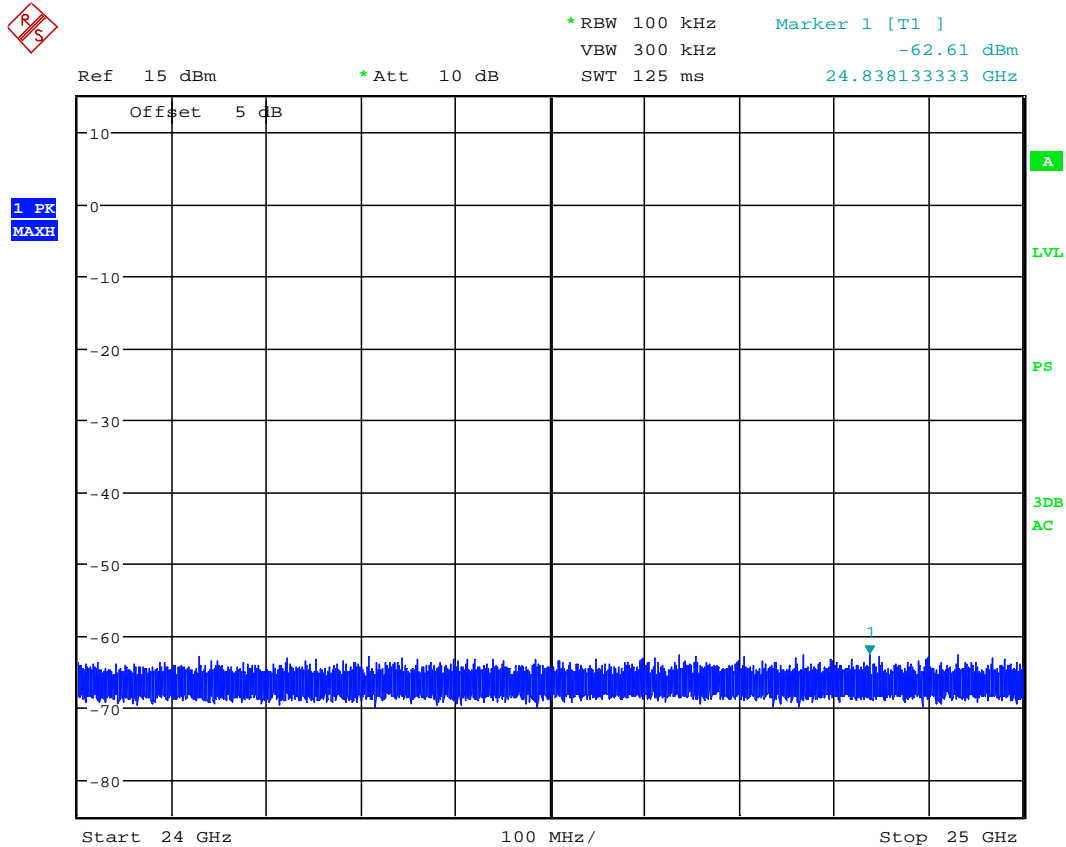
Plot A.17



Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:28:13

Plot A.18

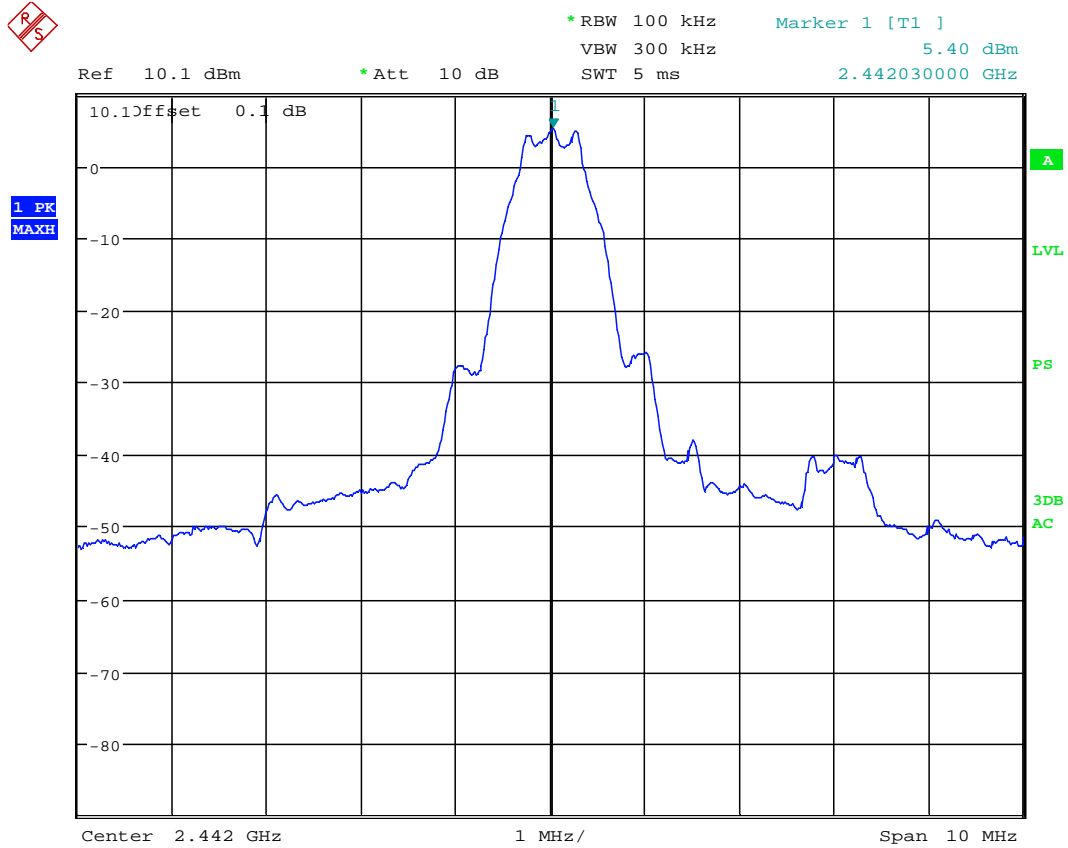


Unwanted Conducted Emissions, F=2402 MHz

Date: 2.MAY.2013 12:29:37

Annex B - Unwanted Conducted Emissions Plots. F=2442 MHz

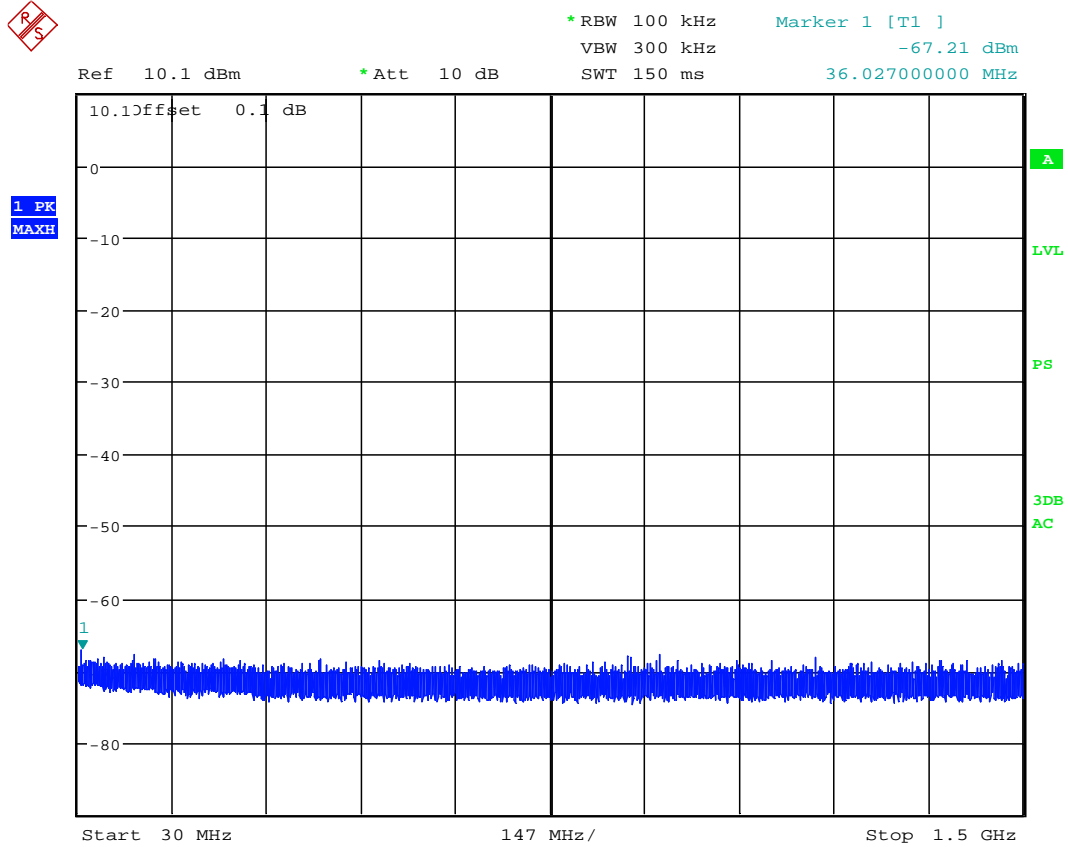
Plot B.1



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 12:49:56

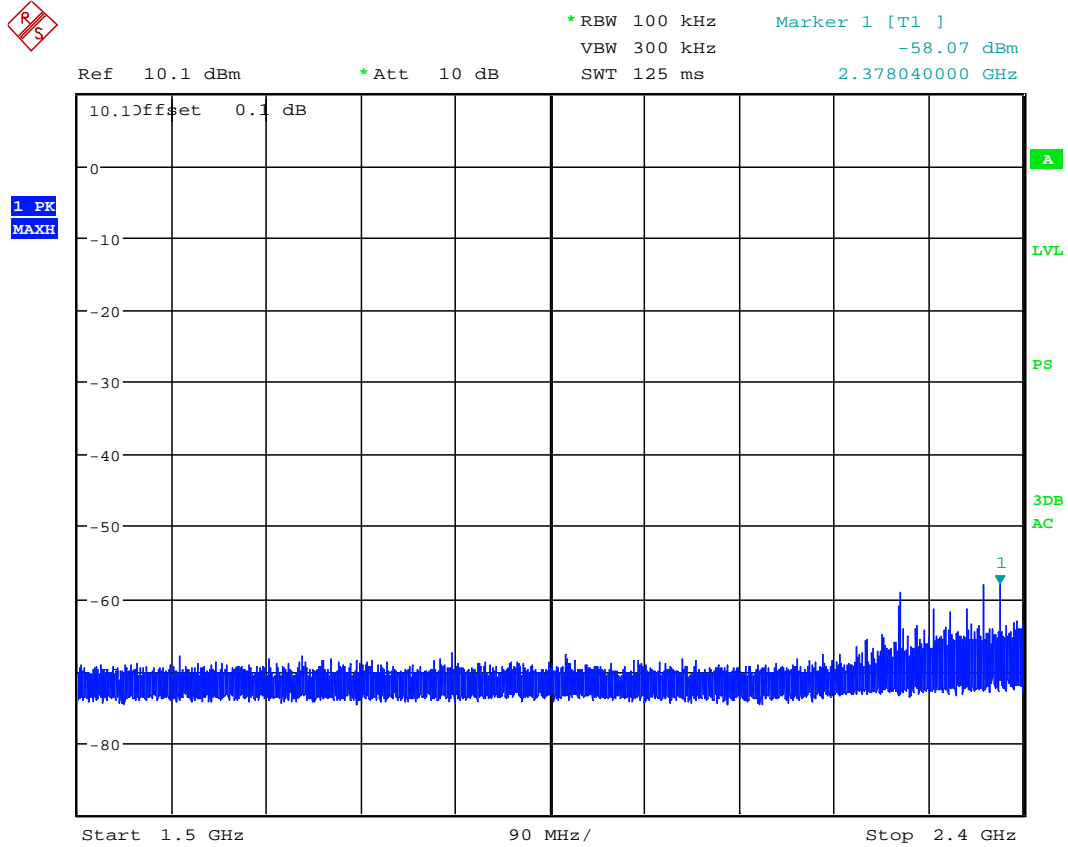
Plot B.2



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 12:52:19

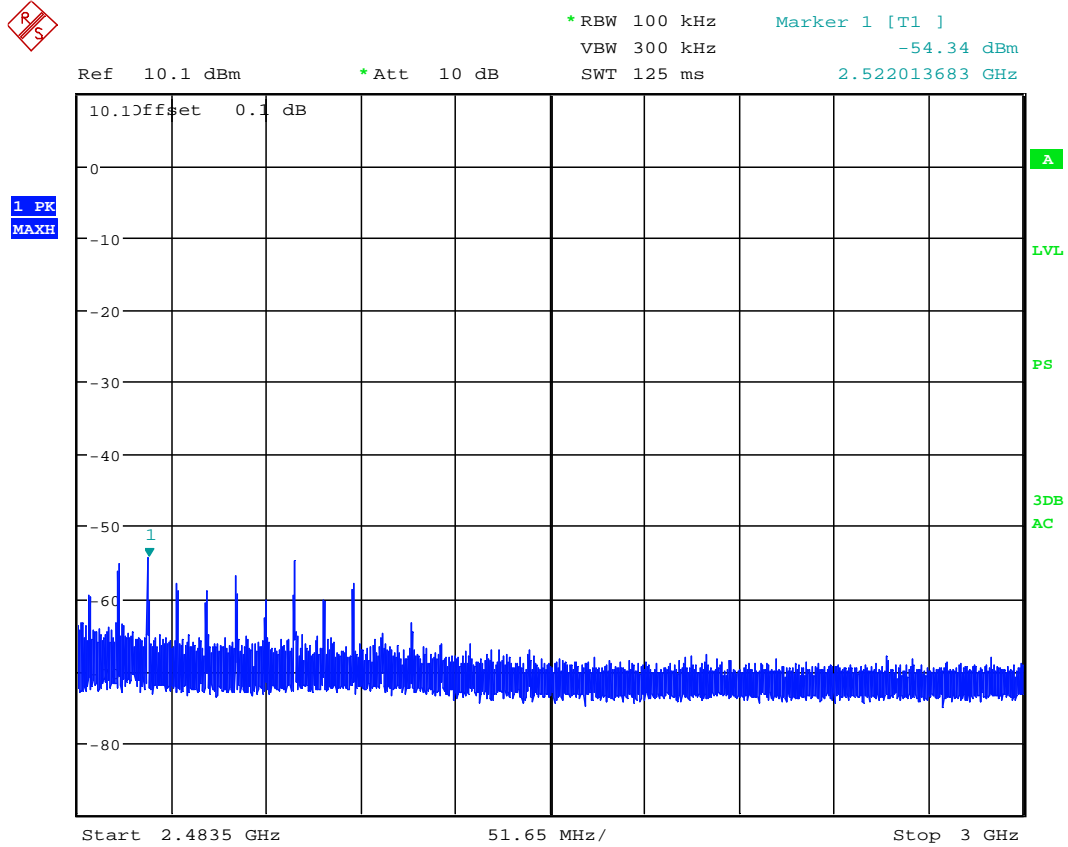
Plot B.3



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 12:53:48

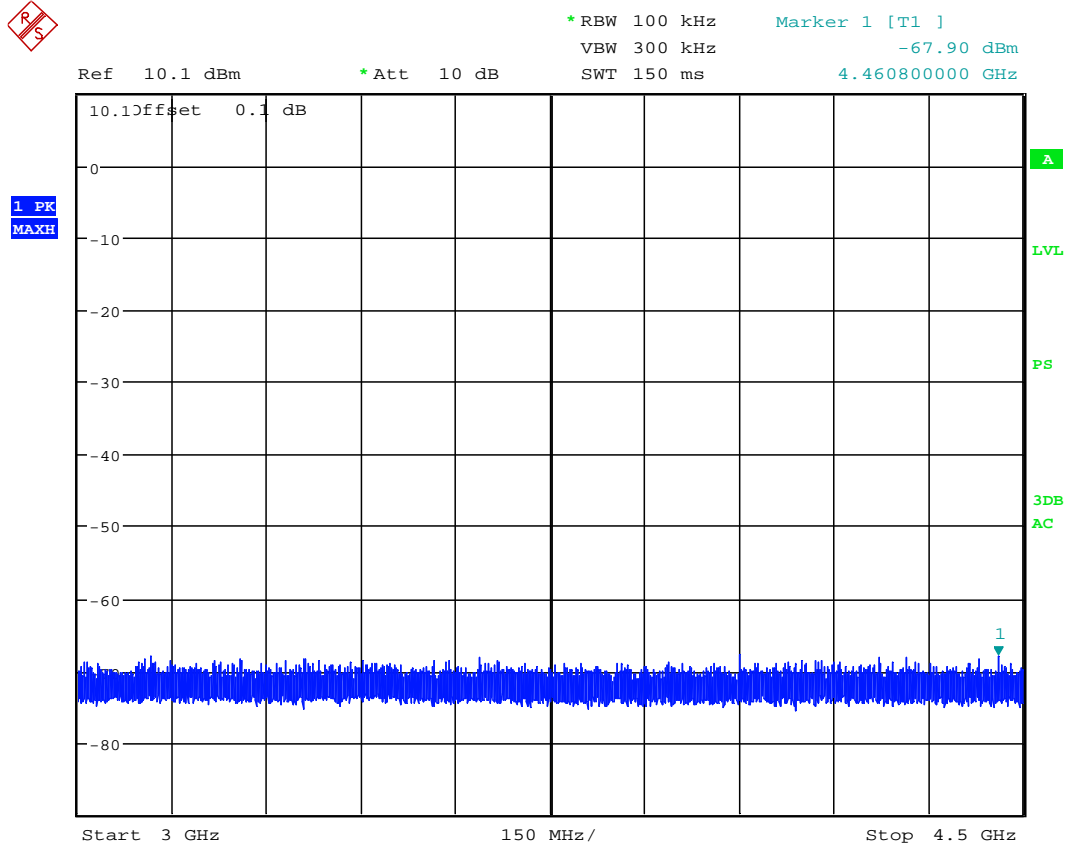
Plot B.4



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 12:56:52

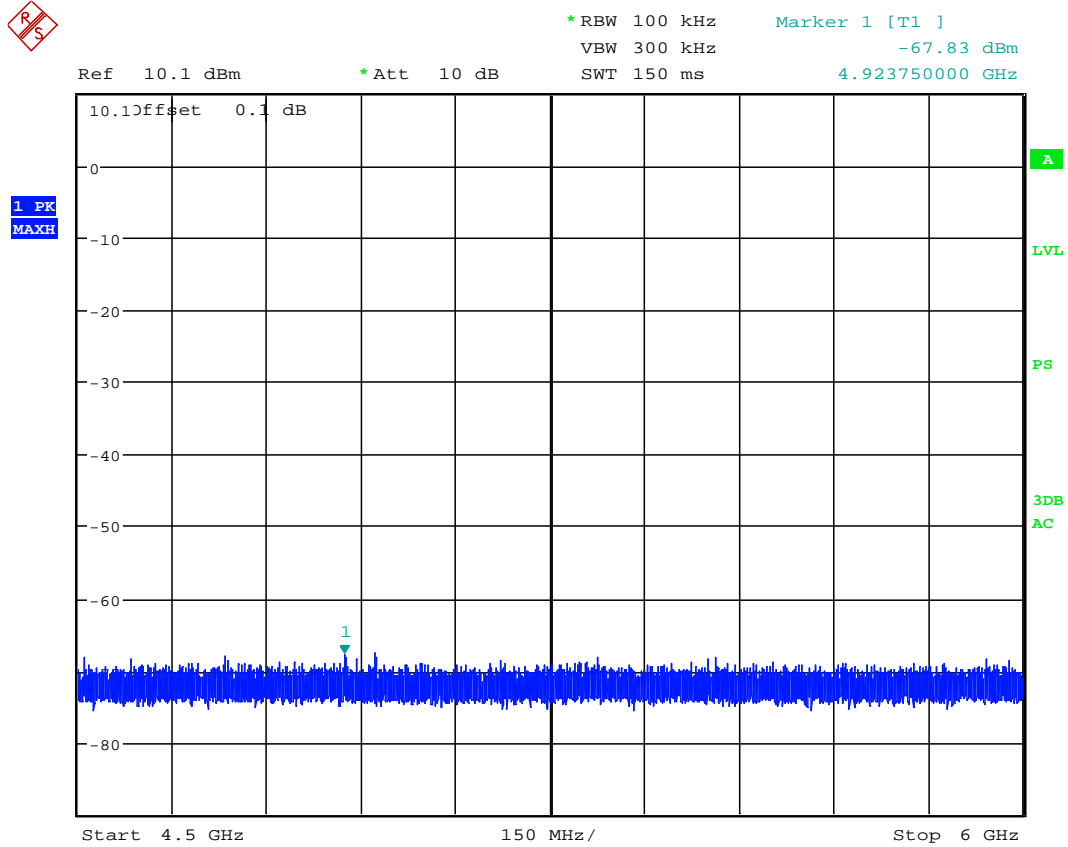
Plot B.5



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 12:58:08

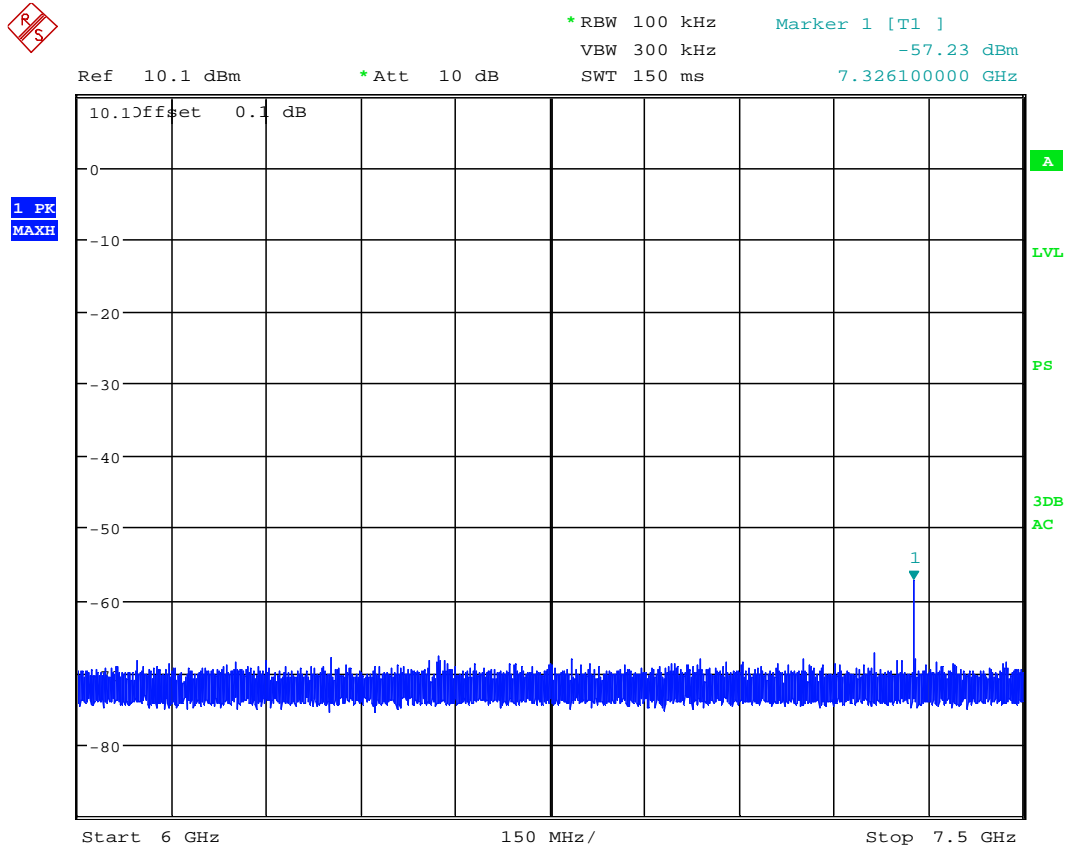
Plot B.6



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 12:59:26

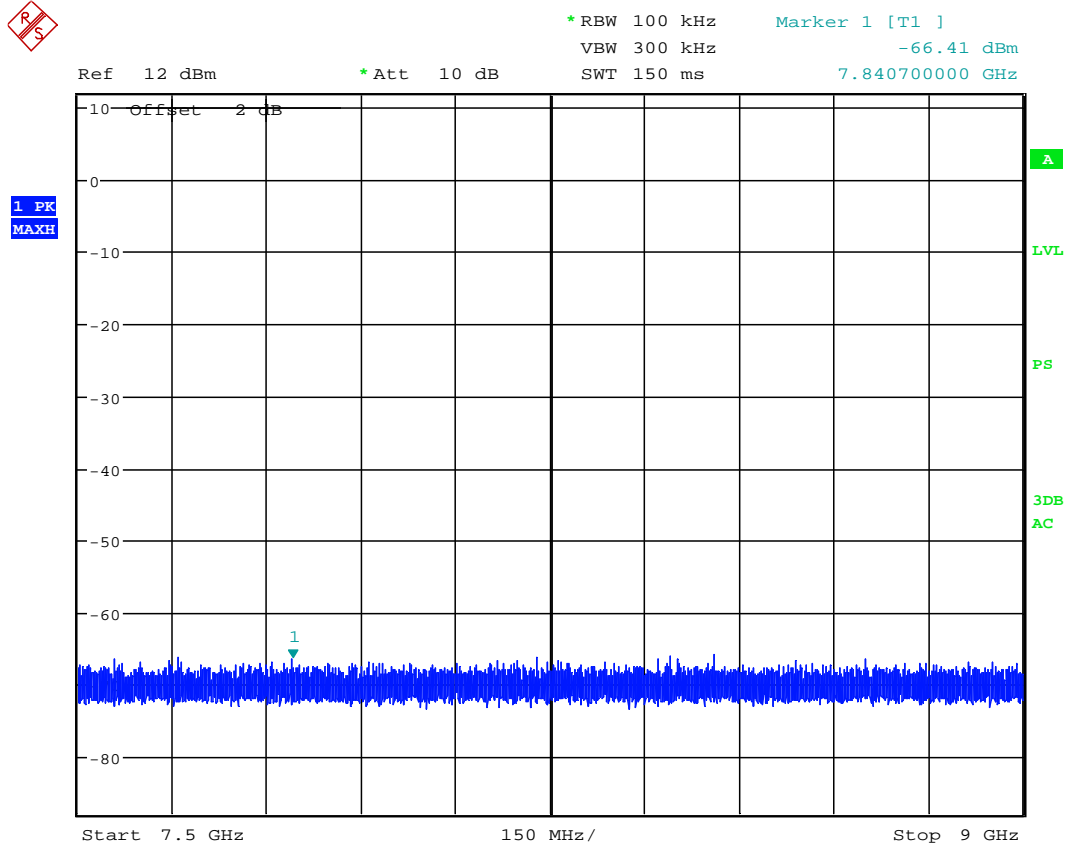
Plot B.7



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 13:00:39

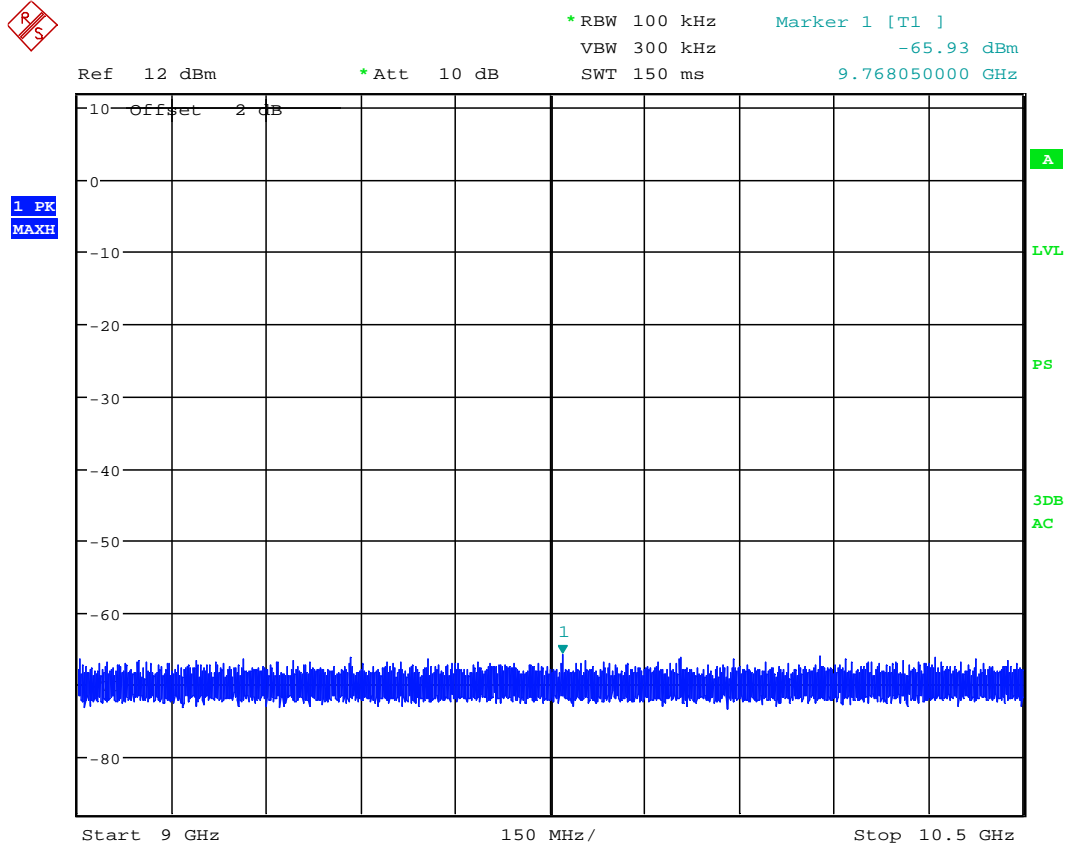
Plot B.8



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 13:56:28

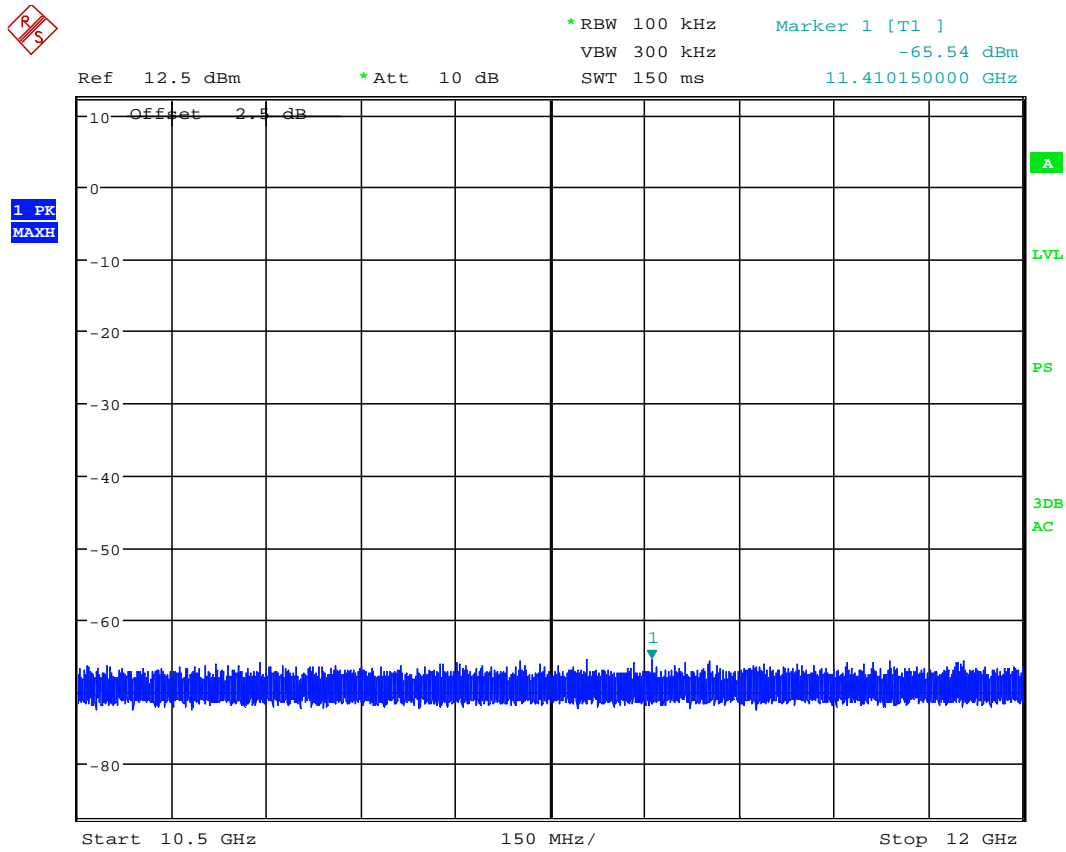
Plot B.9



Unwanted Conducted Emissions, F=2442 MHz

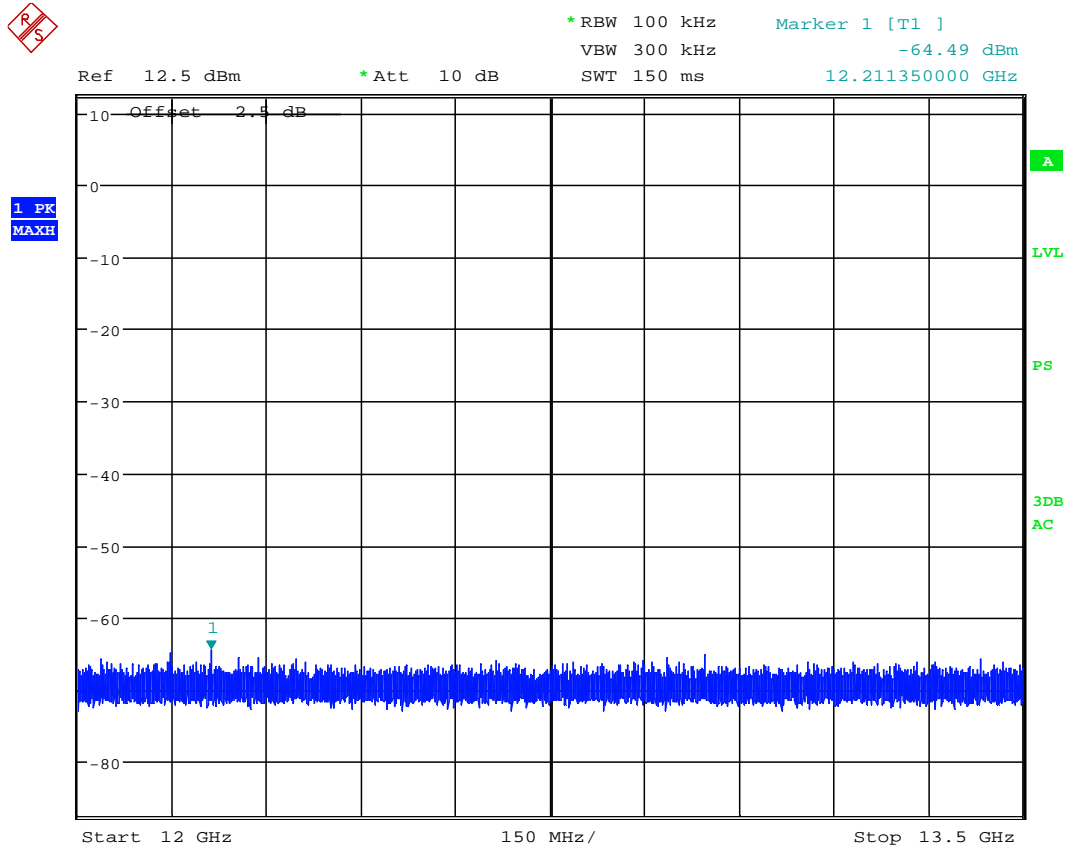
Date: 2.MAY.2013 13:03:49

Plot B.10



Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:05:30

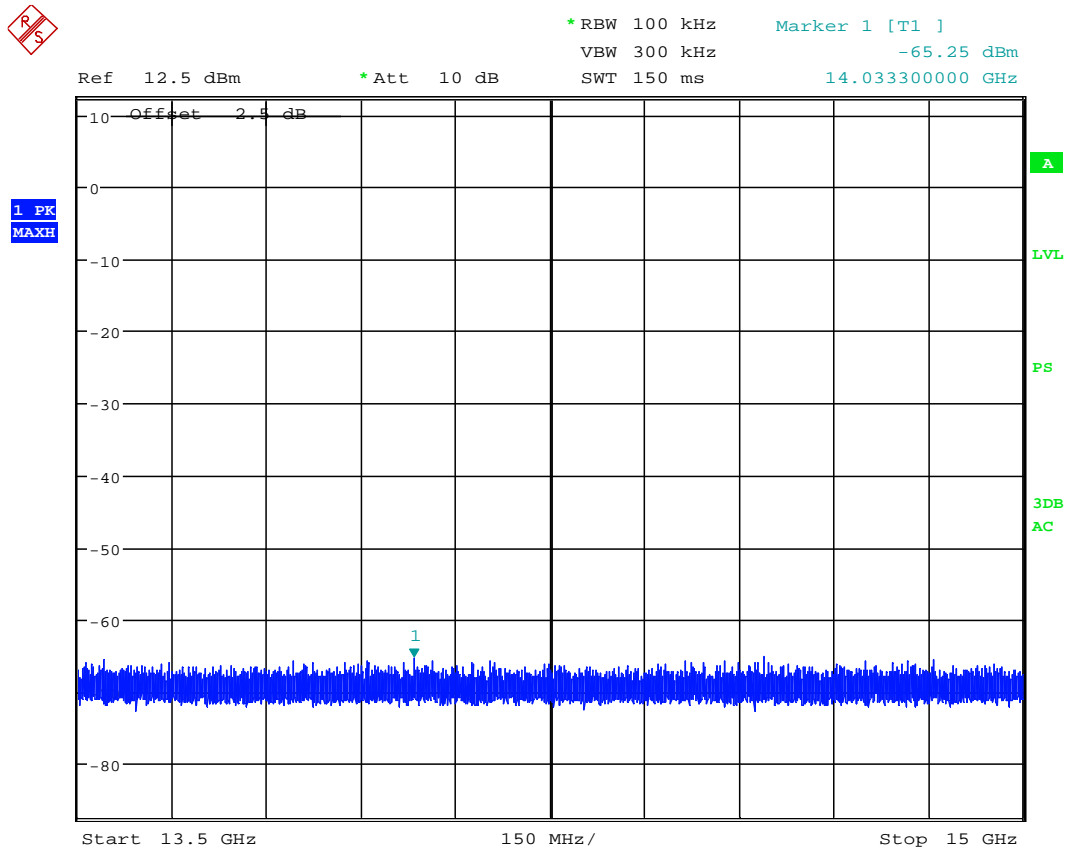
Plot B.11



Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:06:46

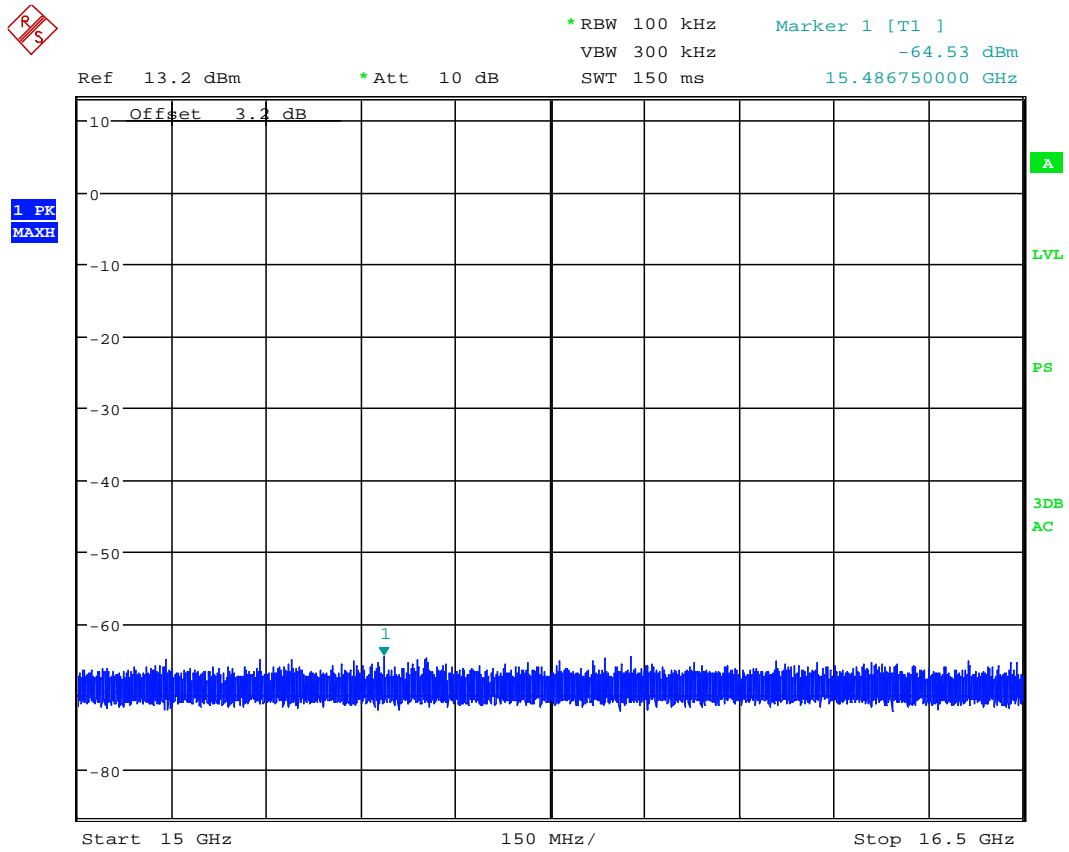


Plot B.12



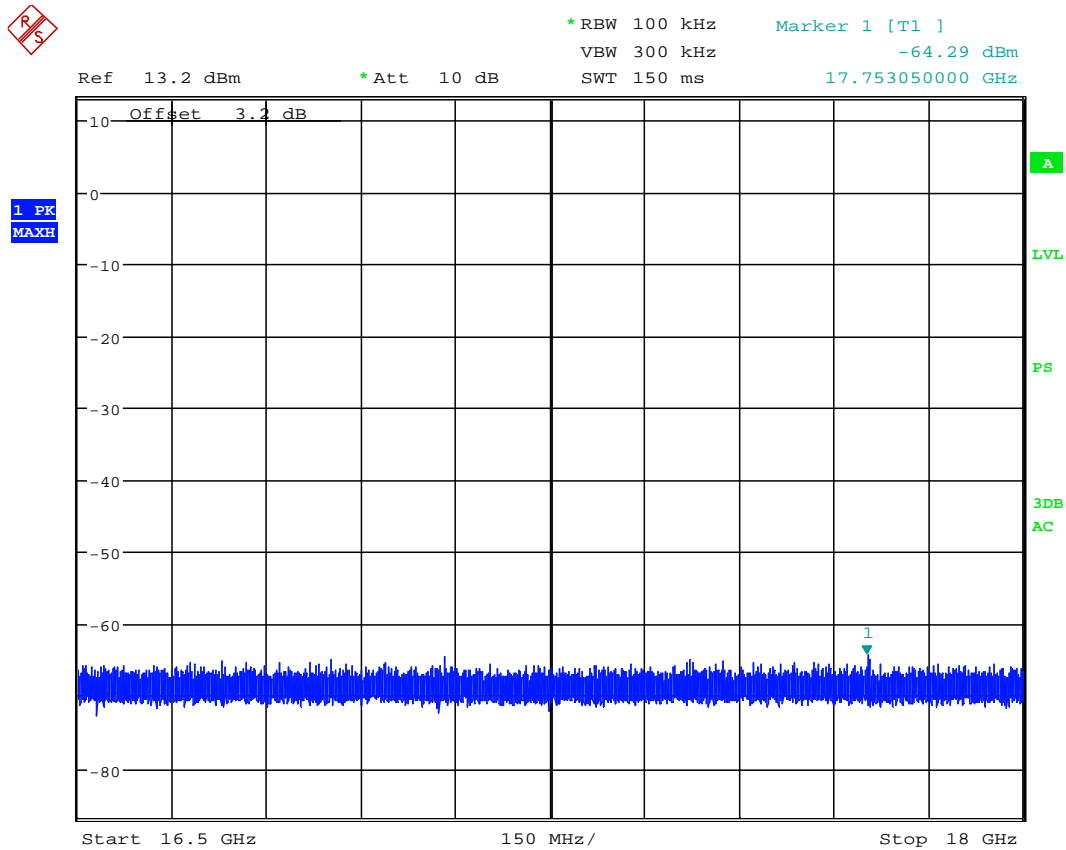
Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:08:18

Plot B.13



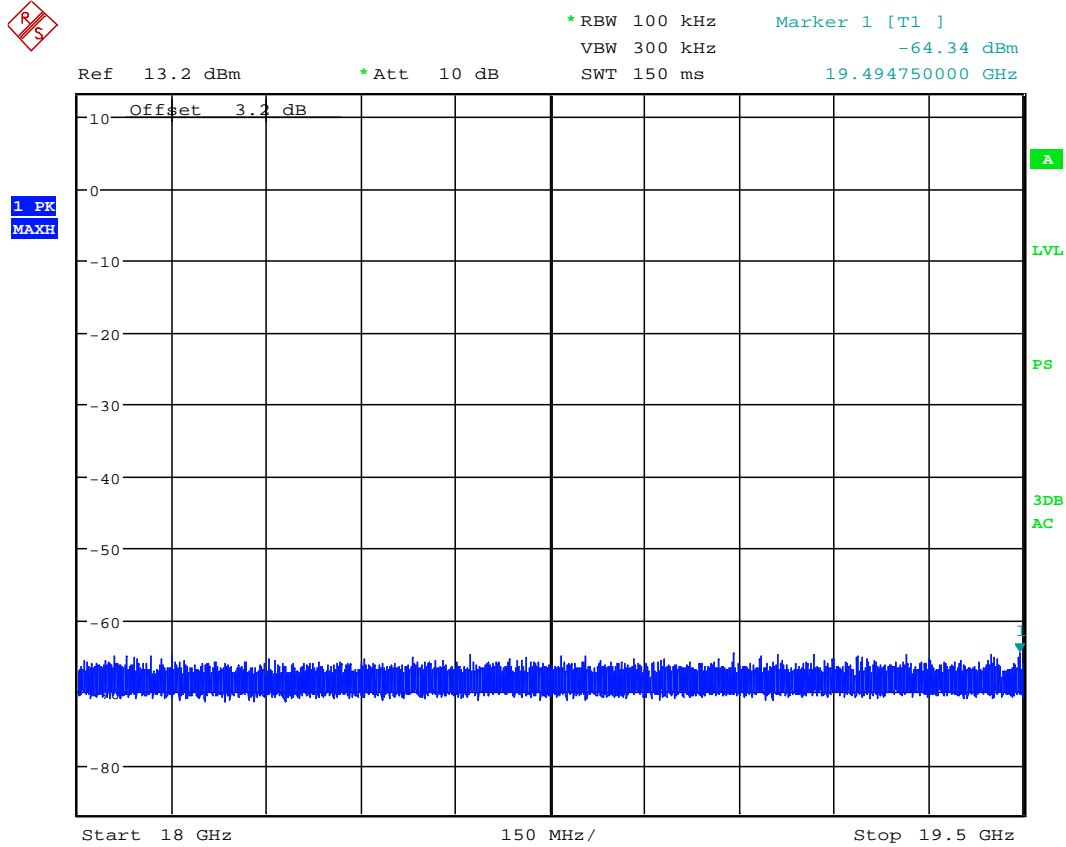
Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:09:49

Plot B.14



Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:11:13

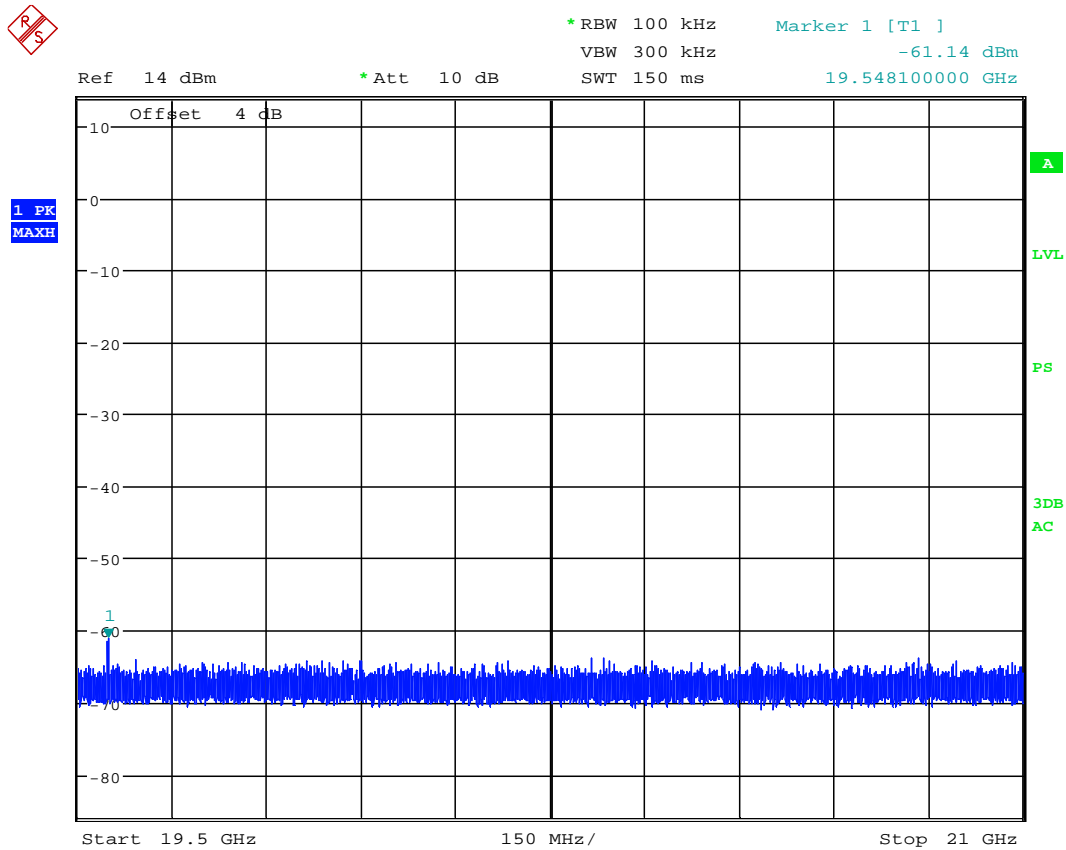
Plot B.15



Unwanted Conducted Emissions, F=2442 MHz

Date: 2.MAY.2013 13:13:06

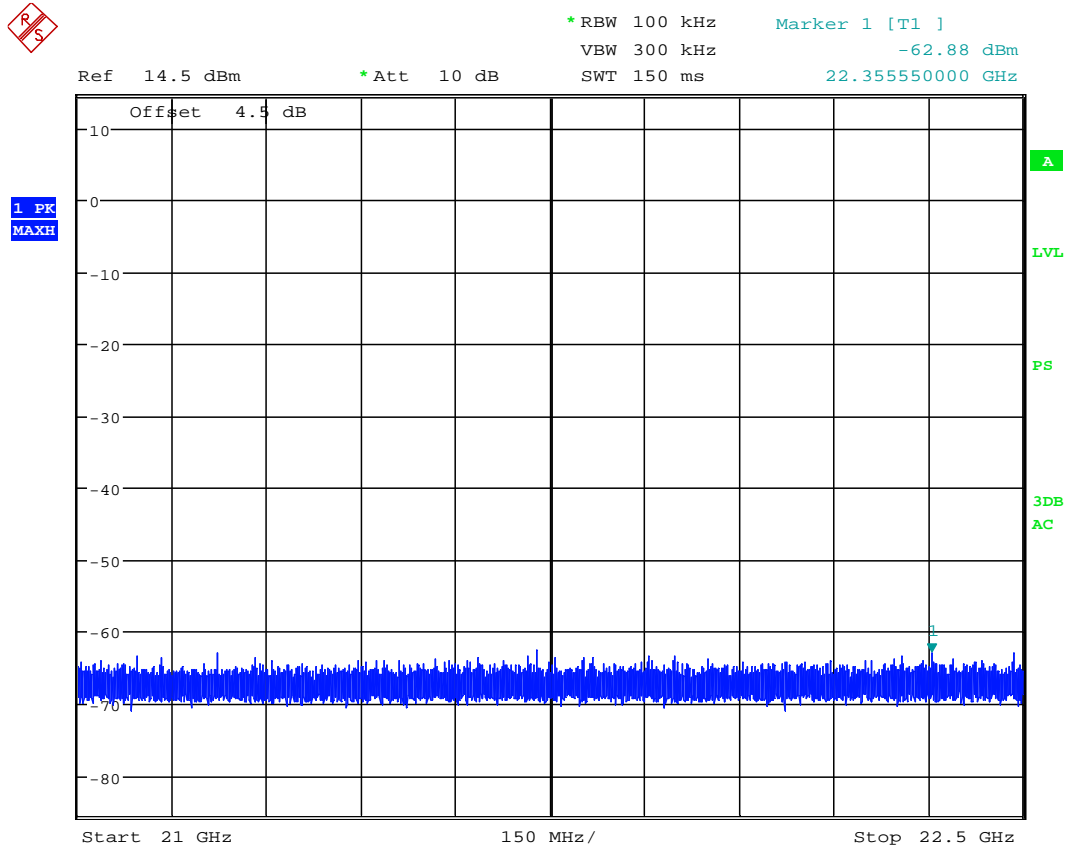
Plot B.16



Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:15:06

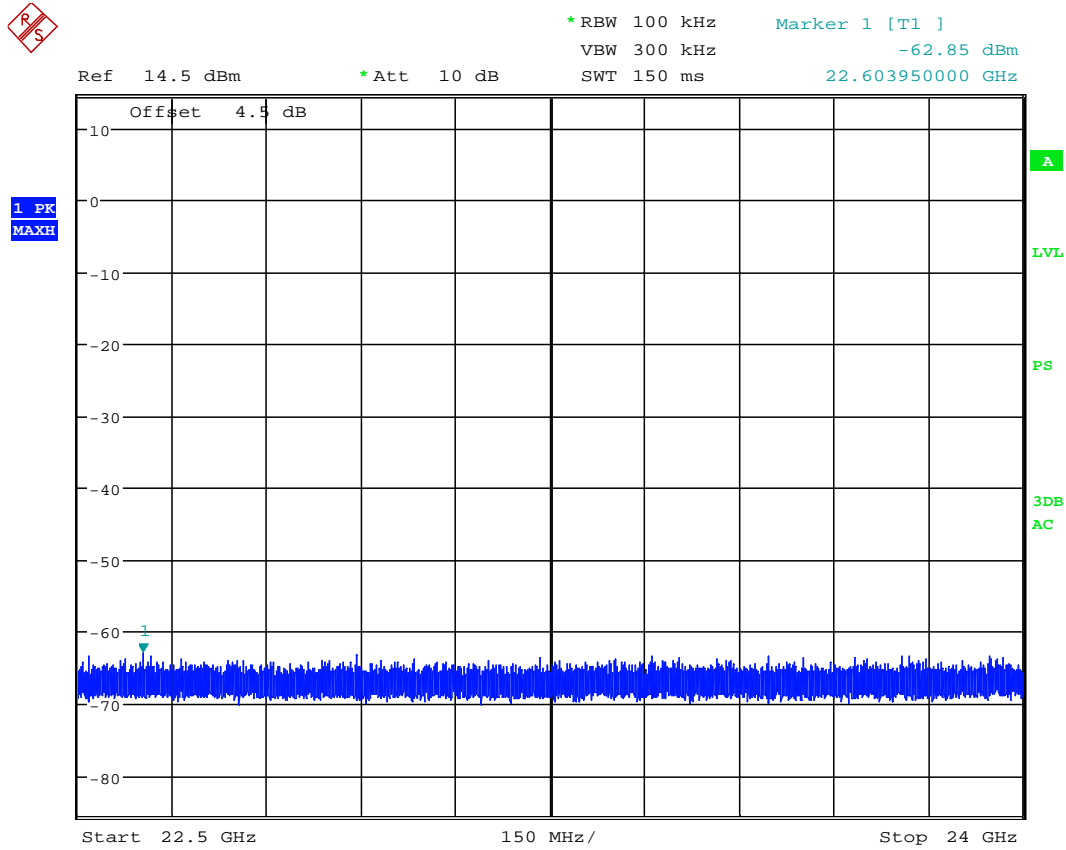


Plot B.17



Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:16:35

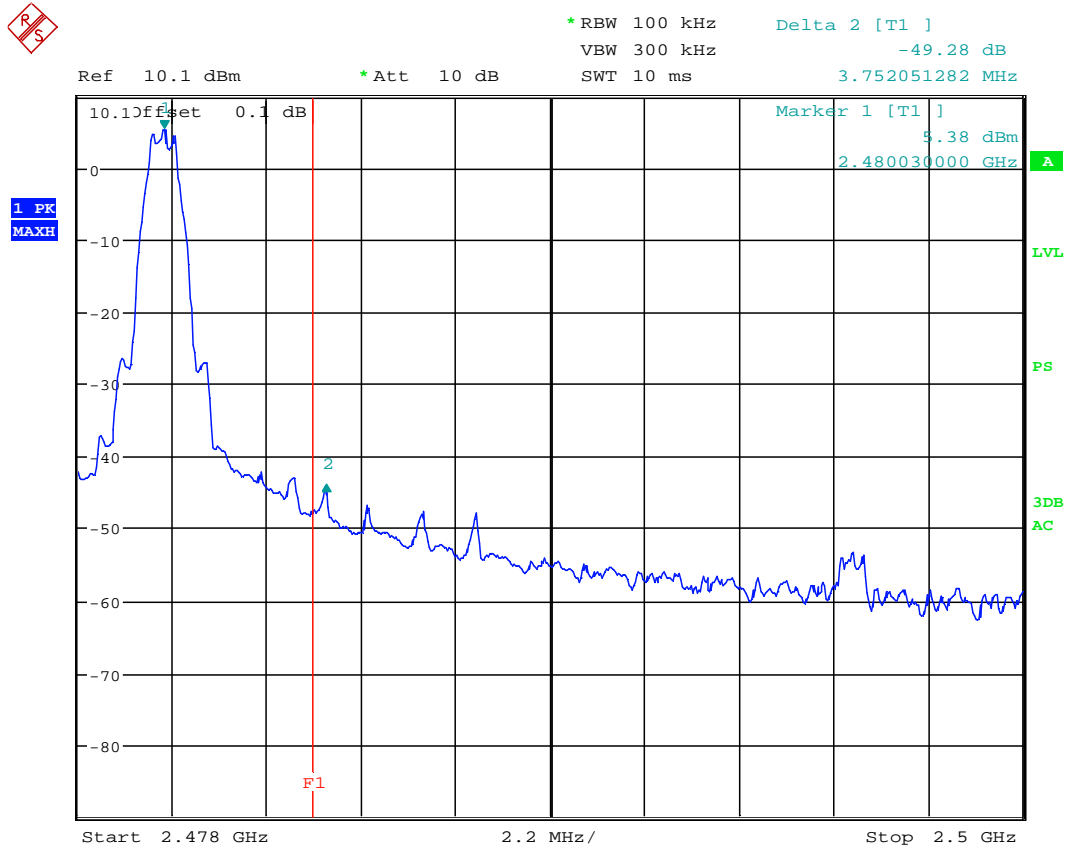
Plot B.18



Unwanted Conducted Emissions, F=2442 MHz
 Date: 2.MAY.2013 13:18:12

Annex C - Unwanted Conducted Emissions Plots. F=2480 MHz

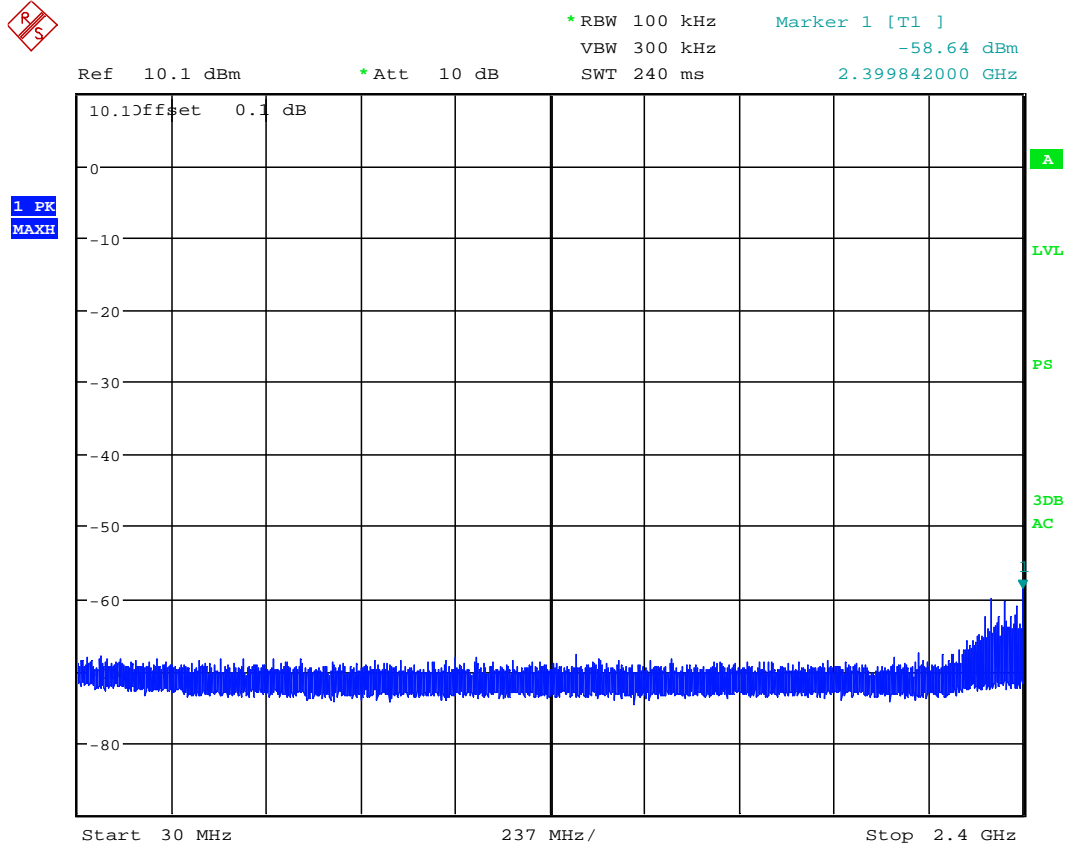
Plot C1



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 13:46:15

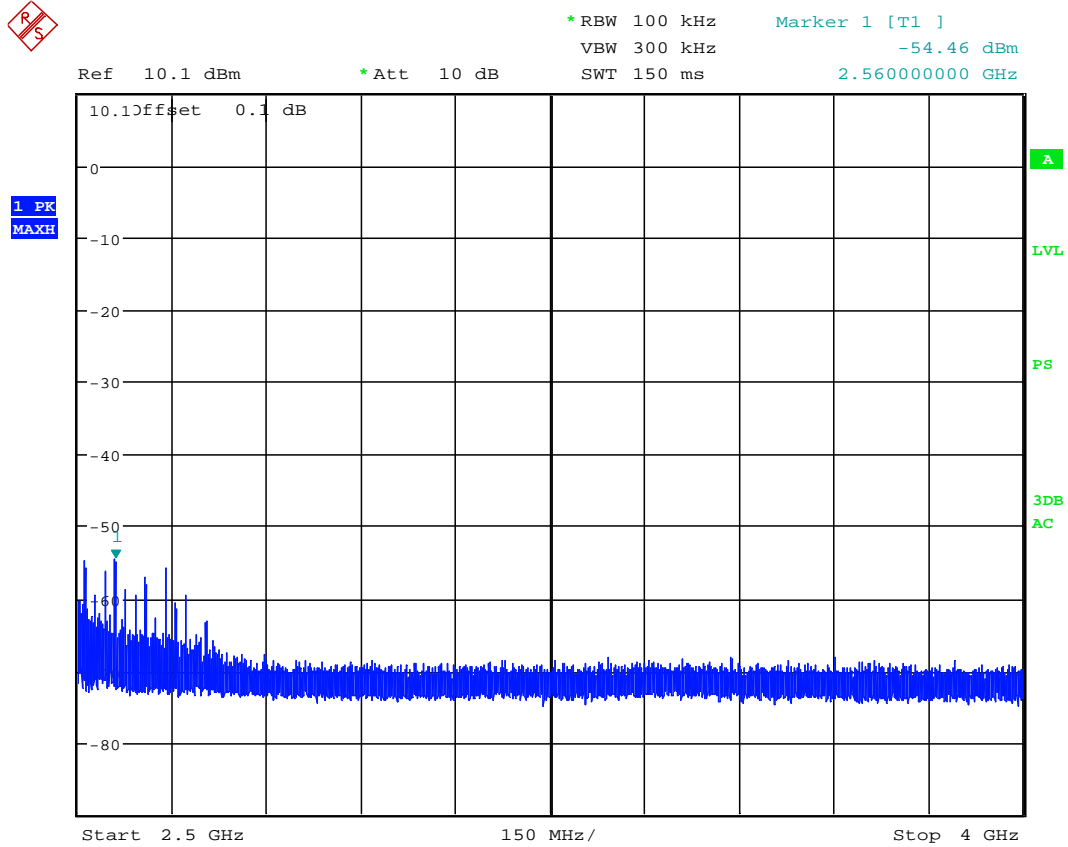
Plot C2



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 13:48:45

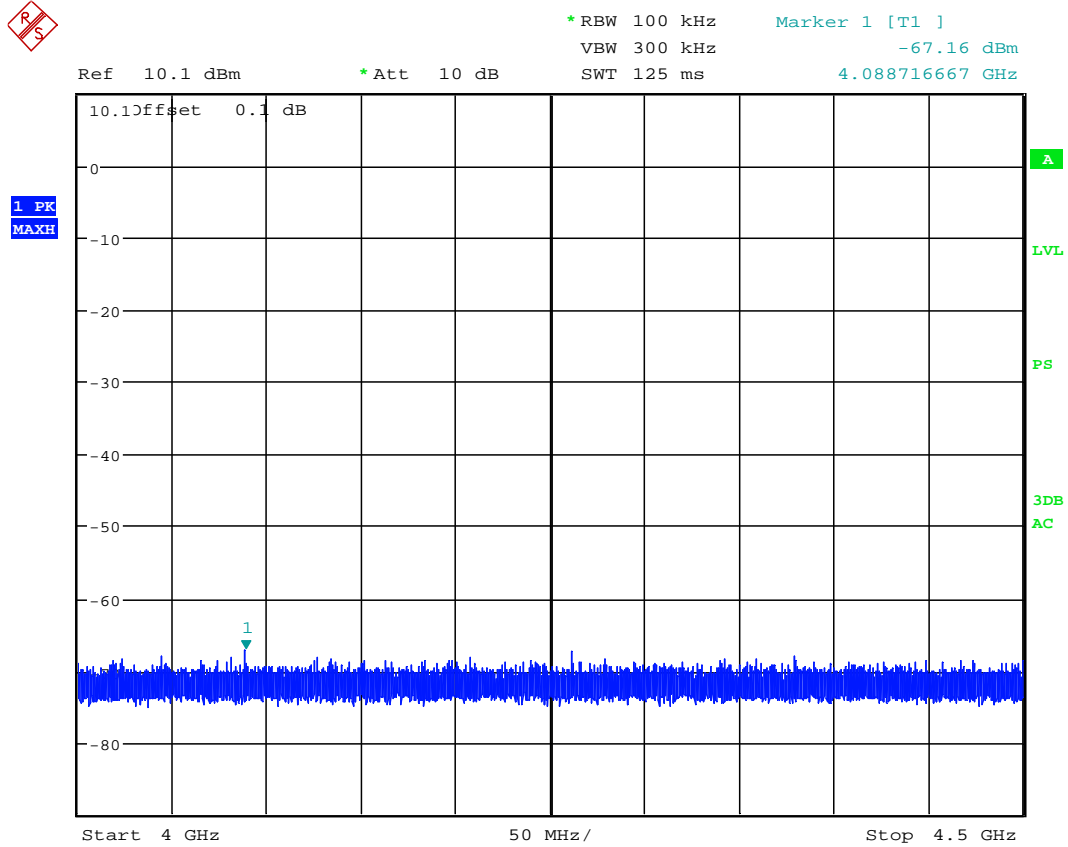
Plot C3



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 13:50:26

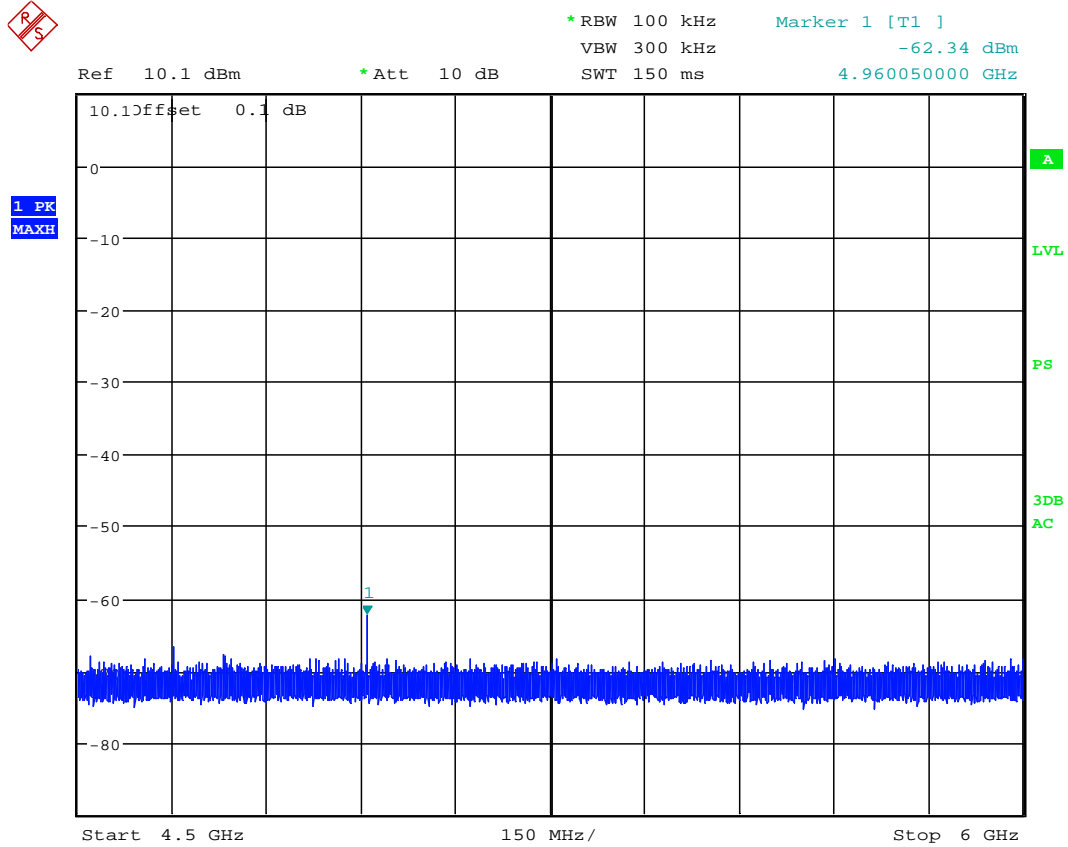
Plot C4



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 13:51:55

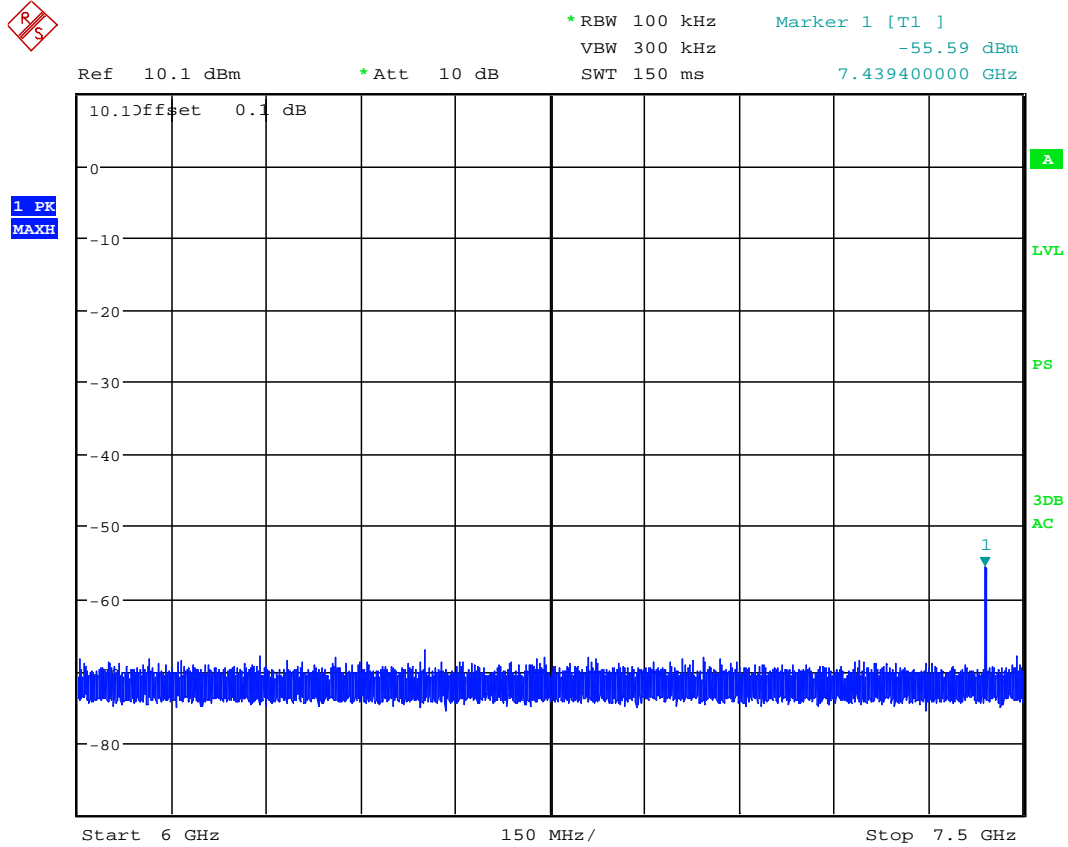
Plot C5



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 13:53:27

Plot C6

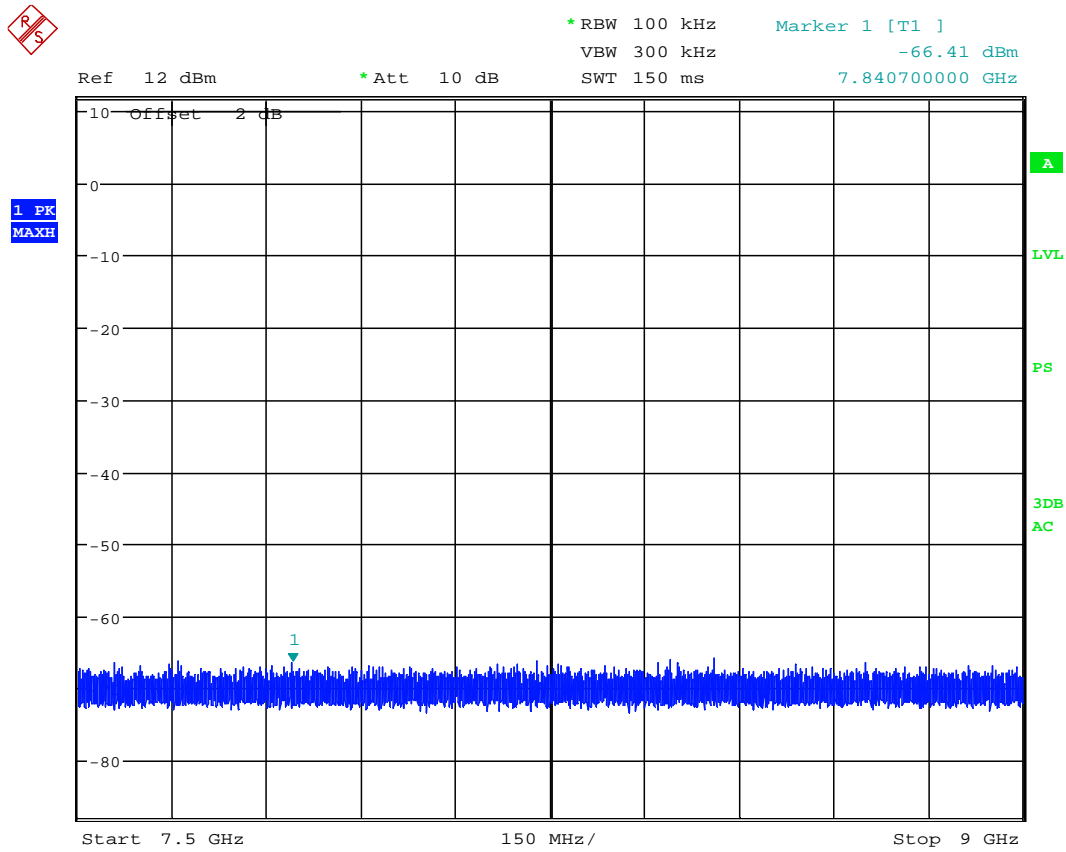


Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 13:54:49

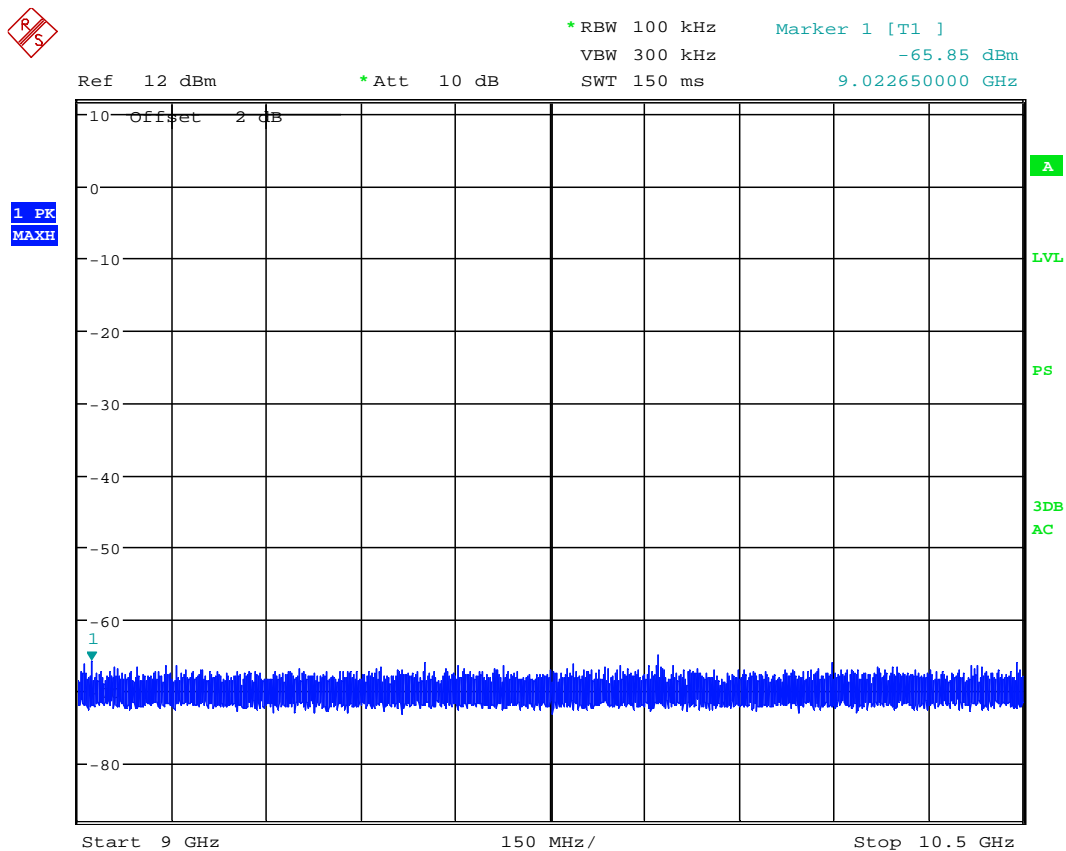


Plot C7



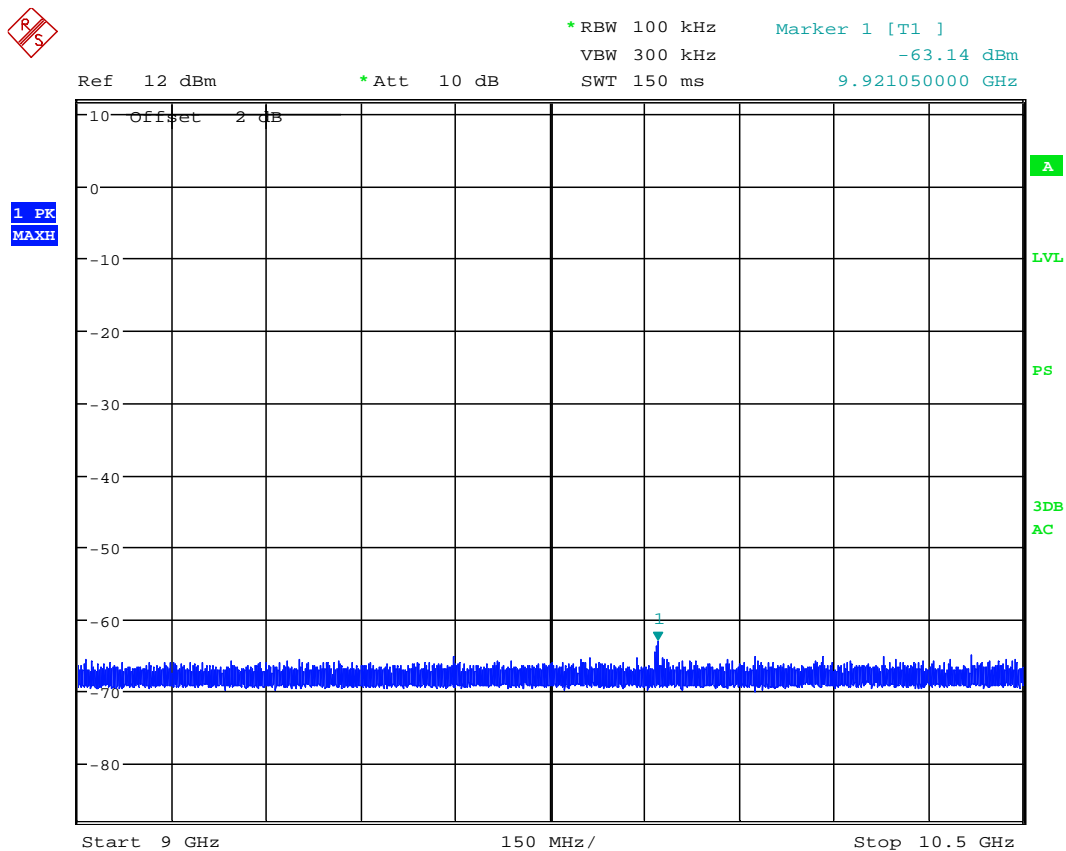
Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 13:56:28

Plot C8



Unwanted Conducted Emissions, F=2480 MHz
 Date: 2.MAY.2013 13:58:00

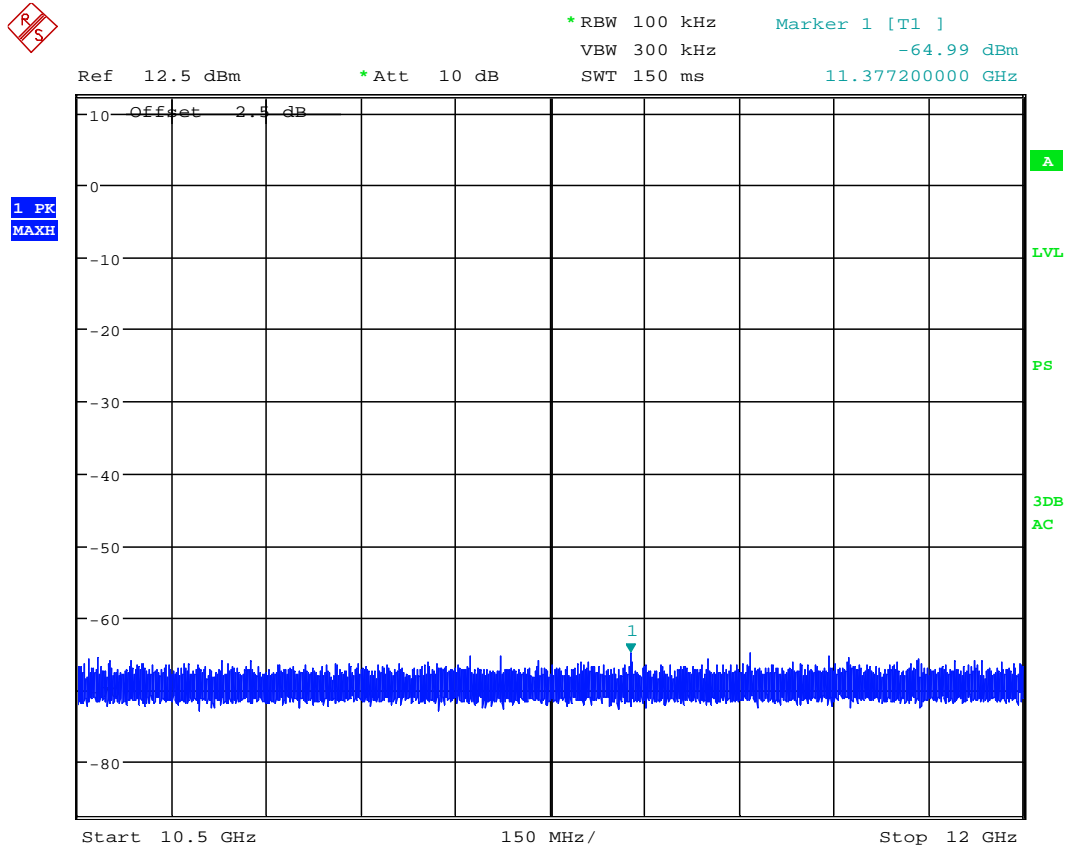
Plot C9



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 14:25:37

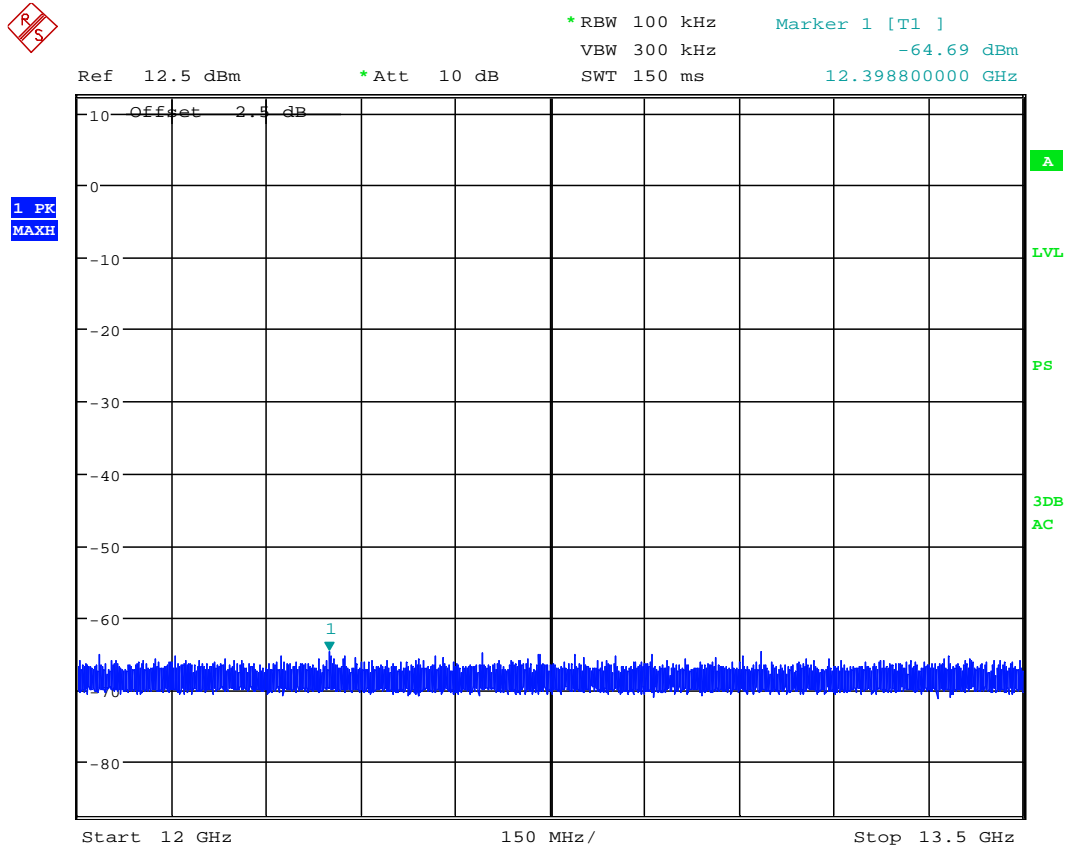
Plot C10



Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 14:27:23

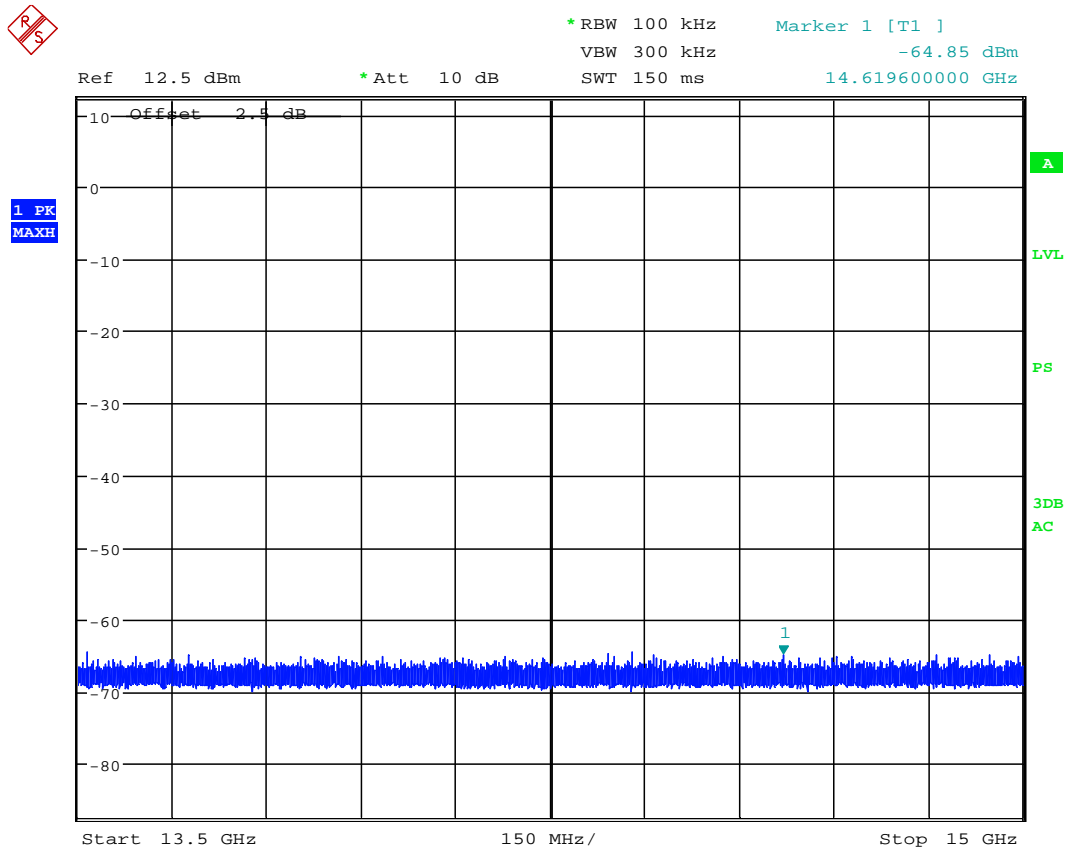


Plot C11



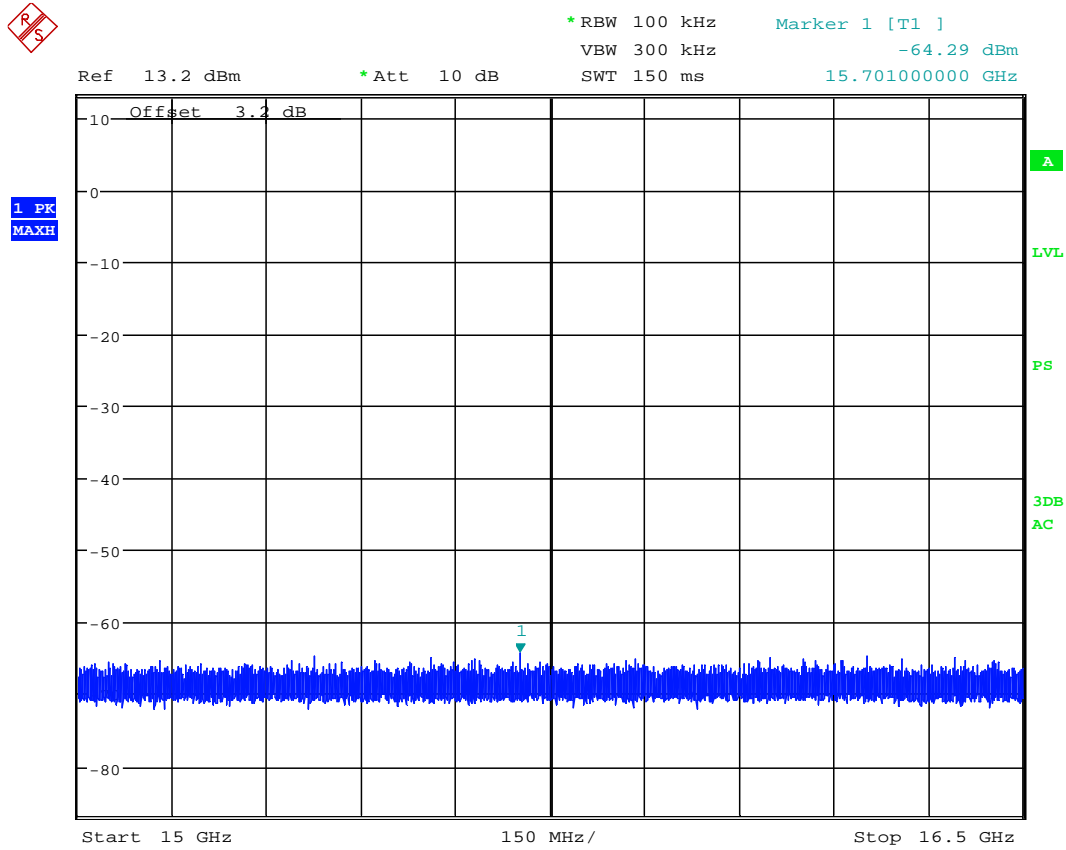
Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 14:31:35

Plot C12



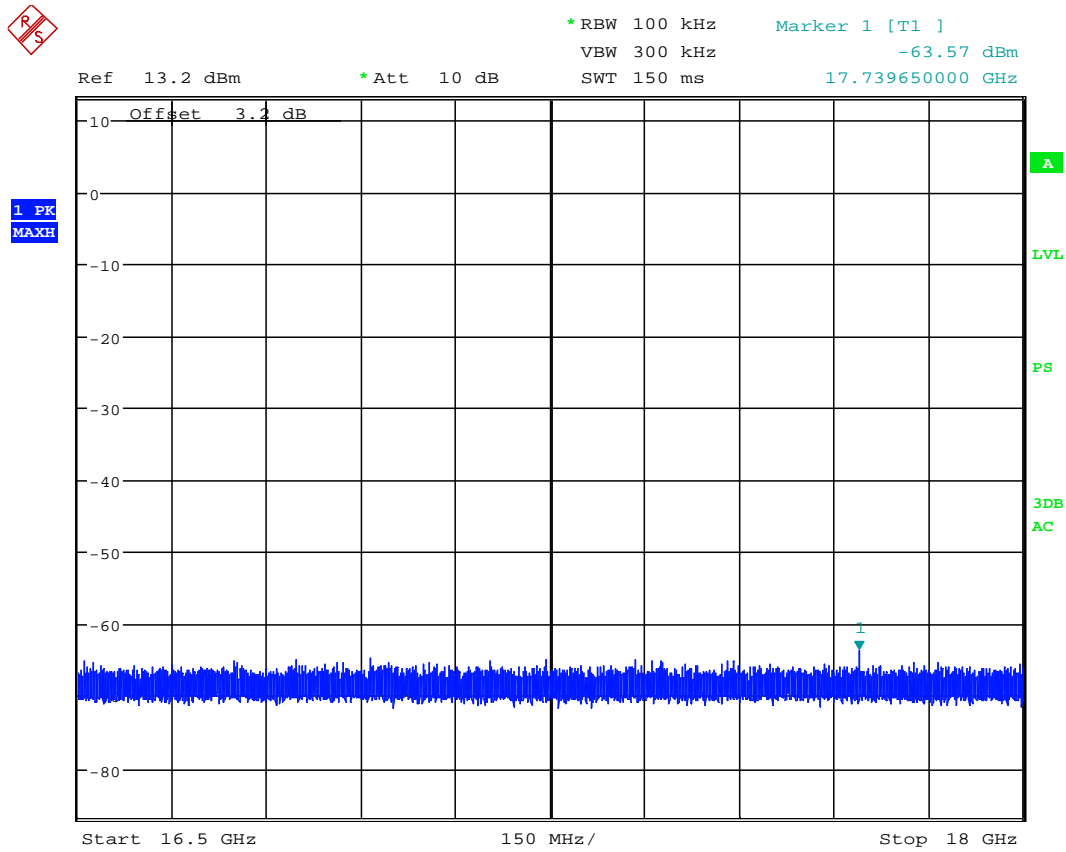
Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 14:45:22

Plot C13



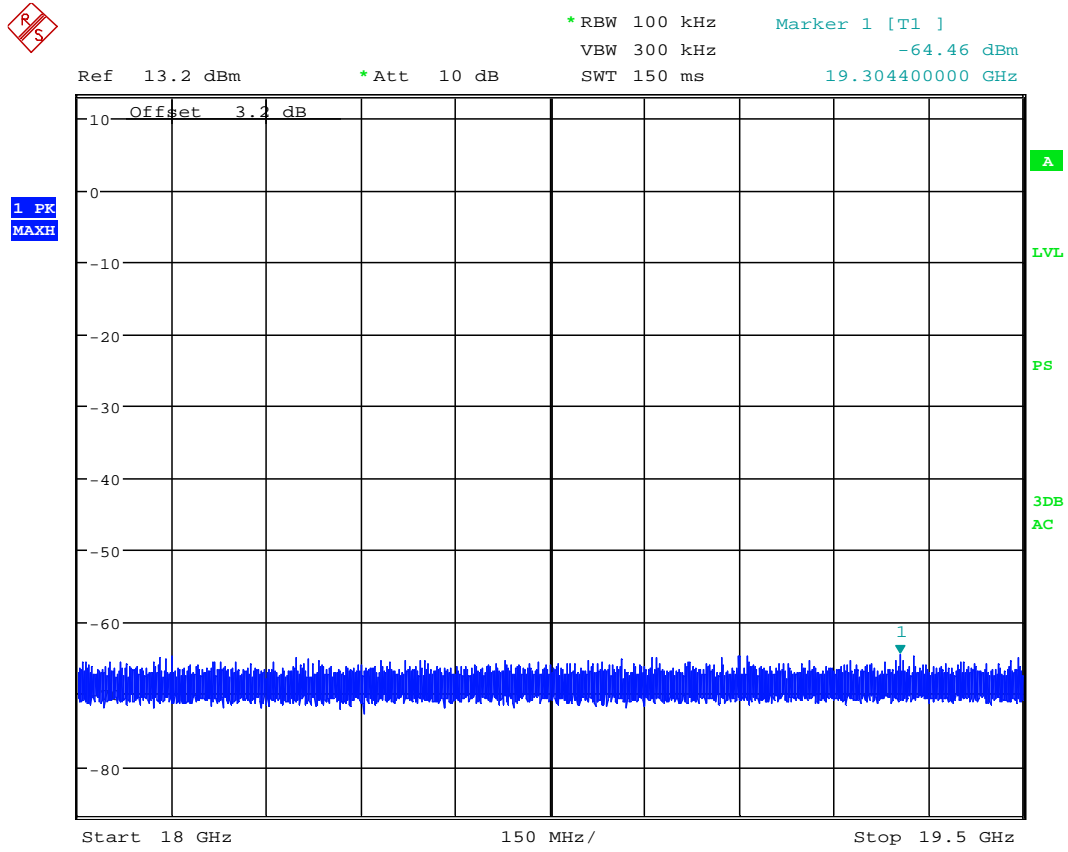
Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 14:48:57

Plot C14



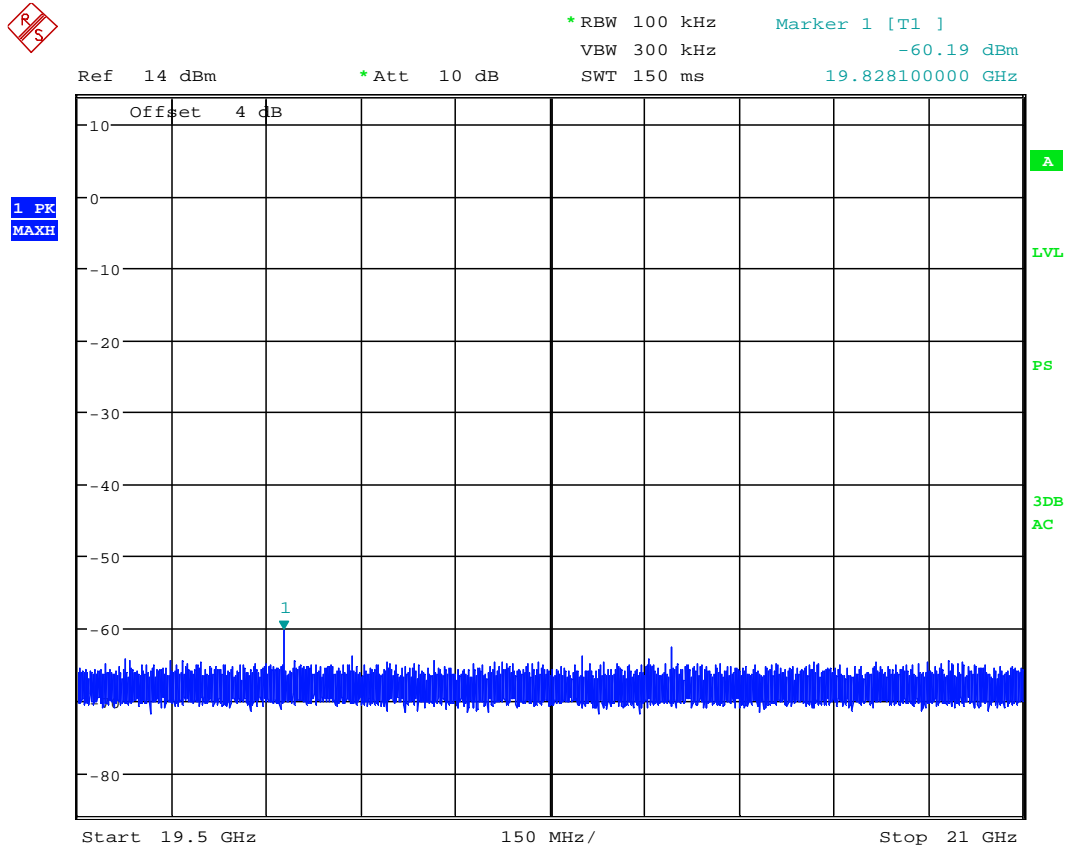
Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 14:50:47

Plot C15



Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 14:52:24

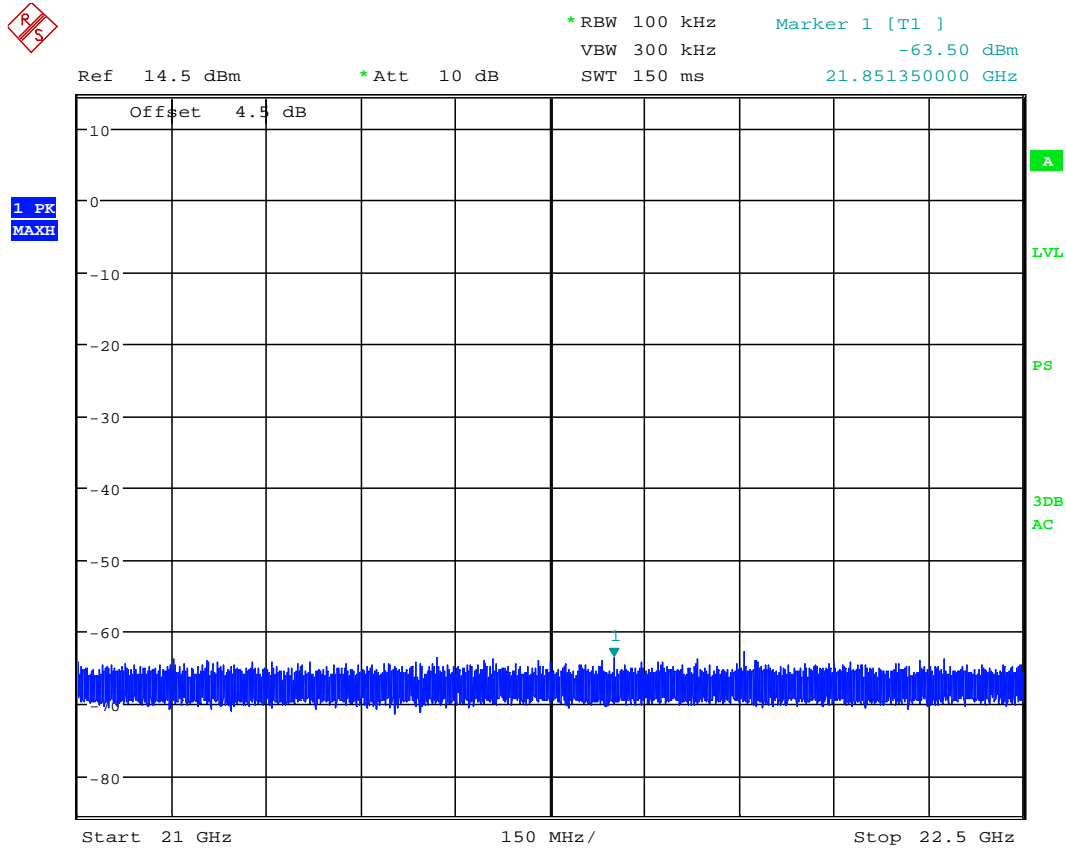
Plot C16



Unwanted Conducted Emissions, F=2480 MHz

Date: 2.MAY.2013 14:53:48

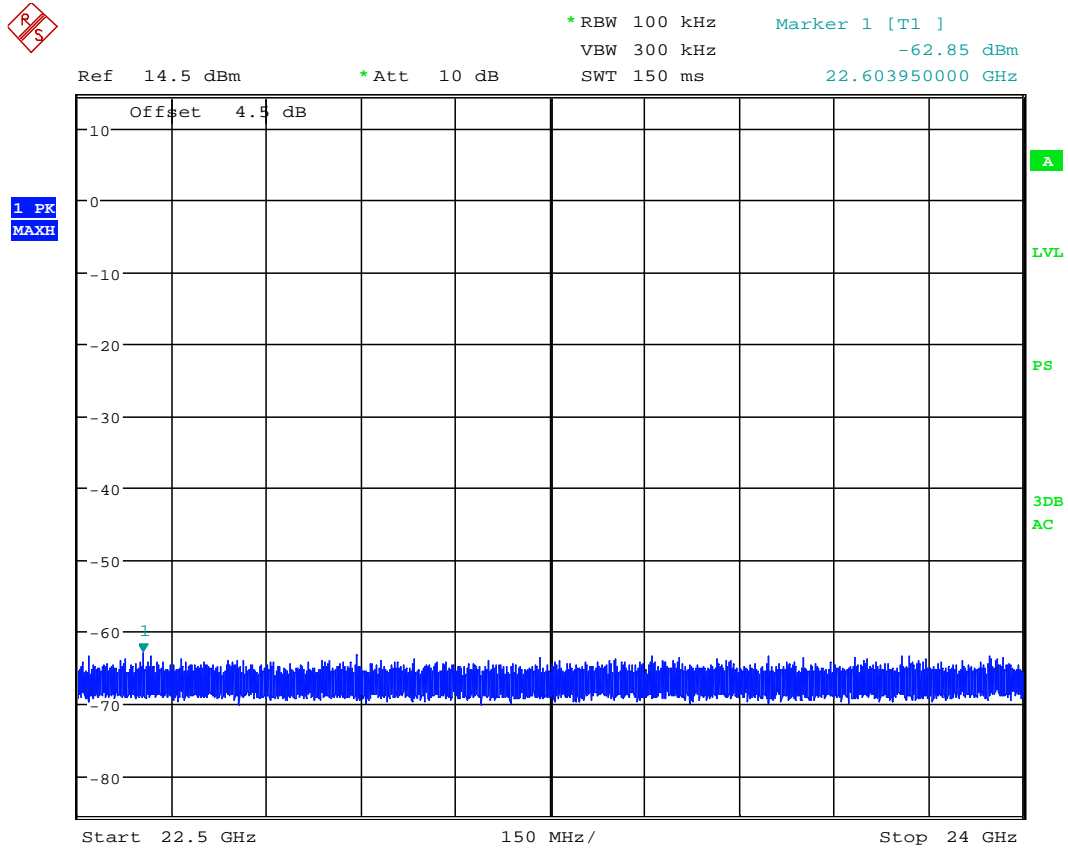
Plot C17



Unwanted Conducted Emissions, F=2480 MHz
 Date: 2.MAY.2013 14:55:06



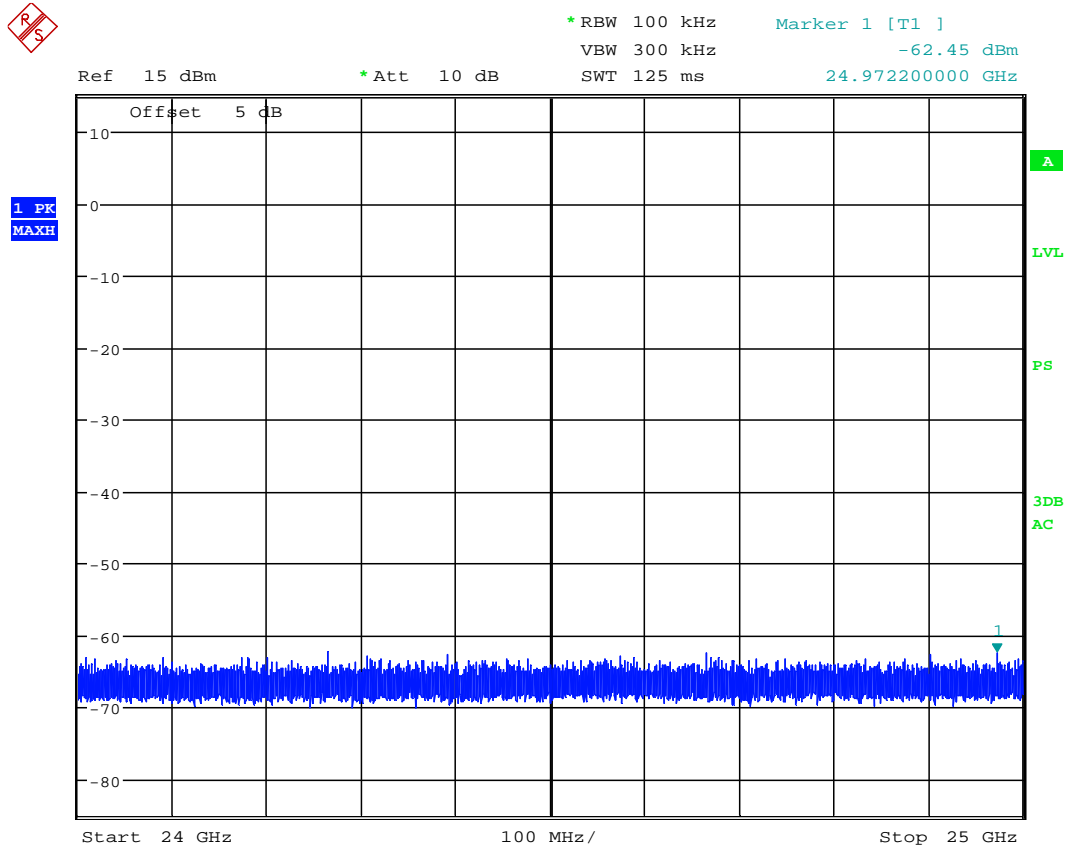
Plot C18



Unwanted Conducted Emissions, F=2442 MHz
Date: 2.MAY.2013 13:18:12



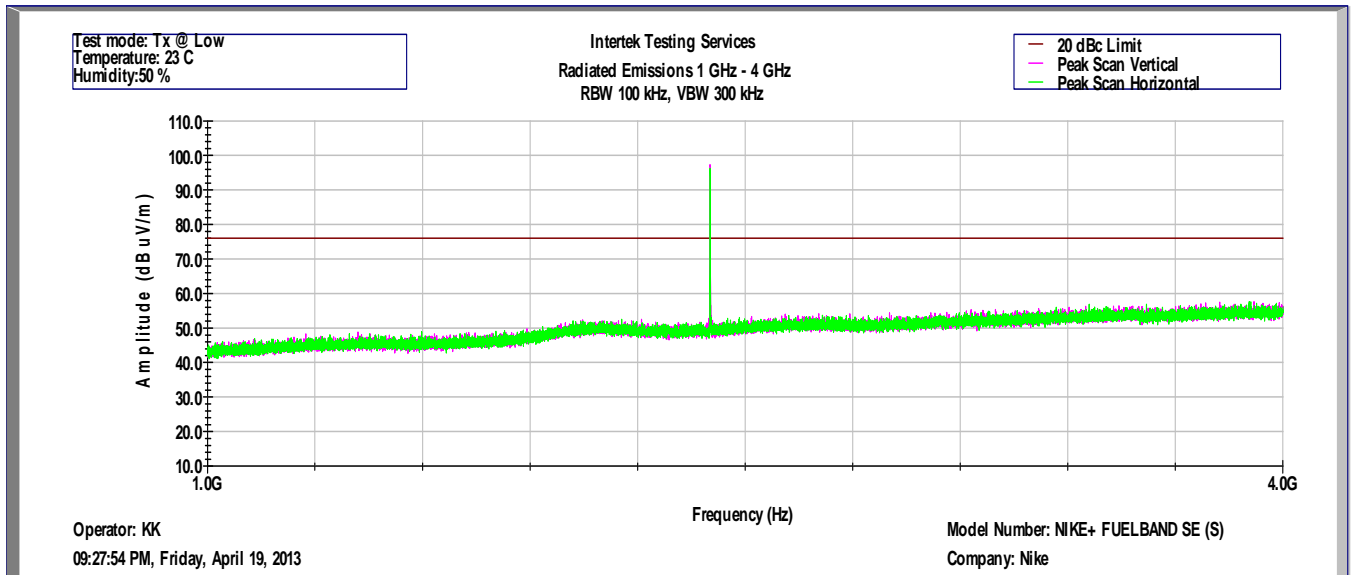
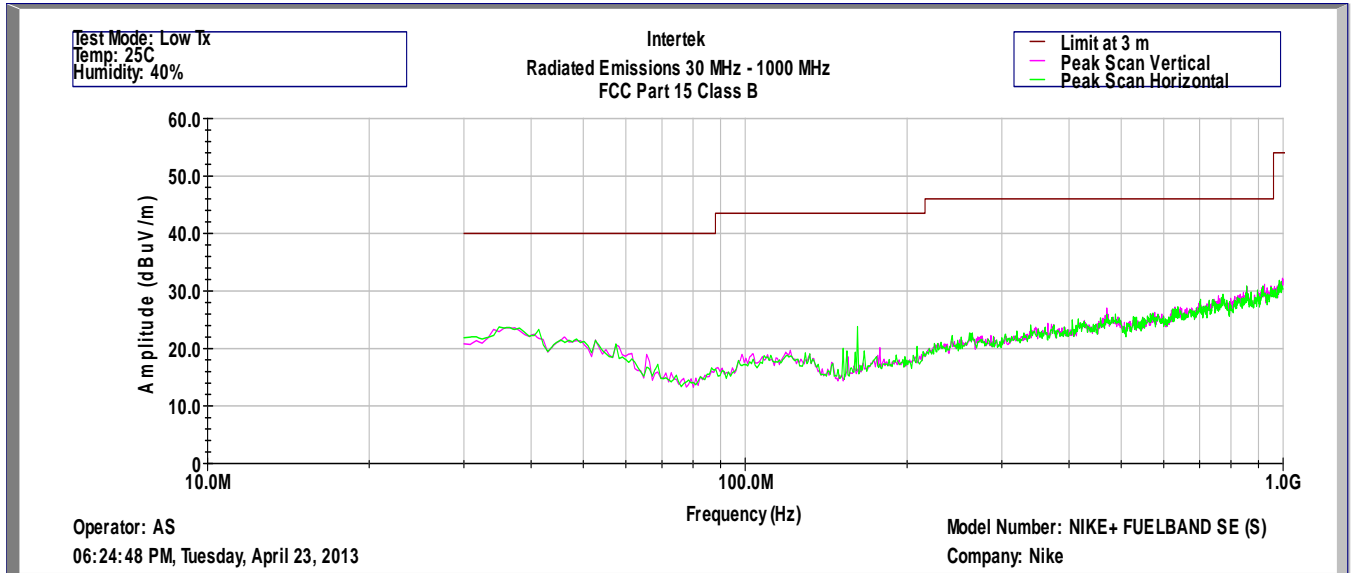
Plot C19



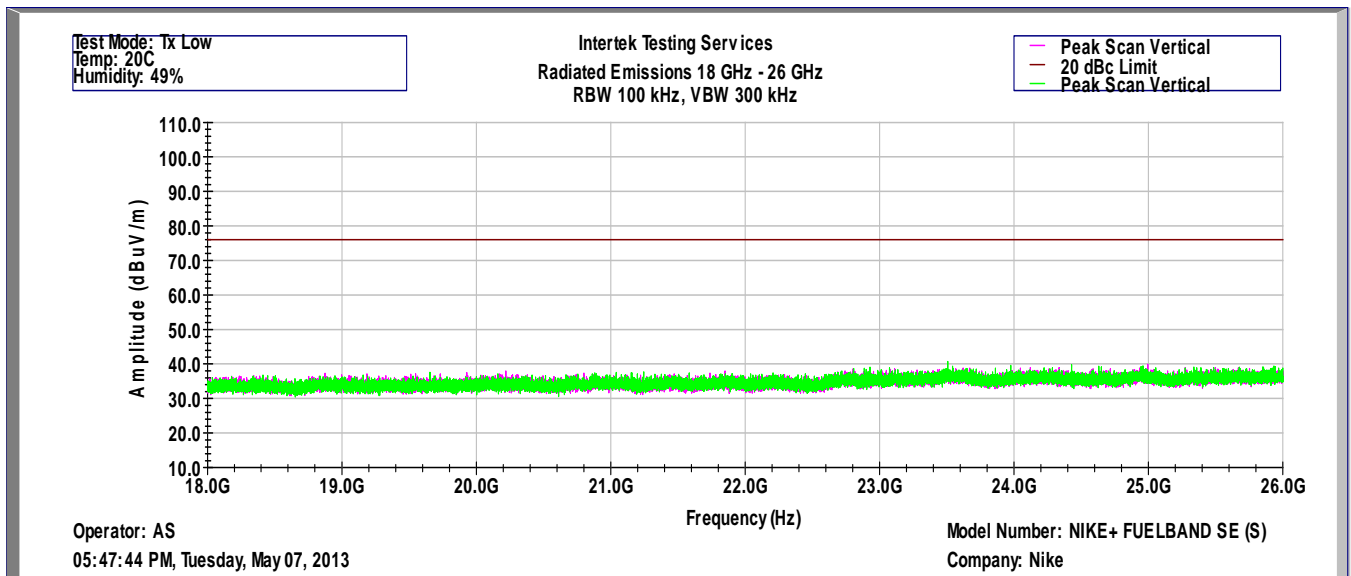
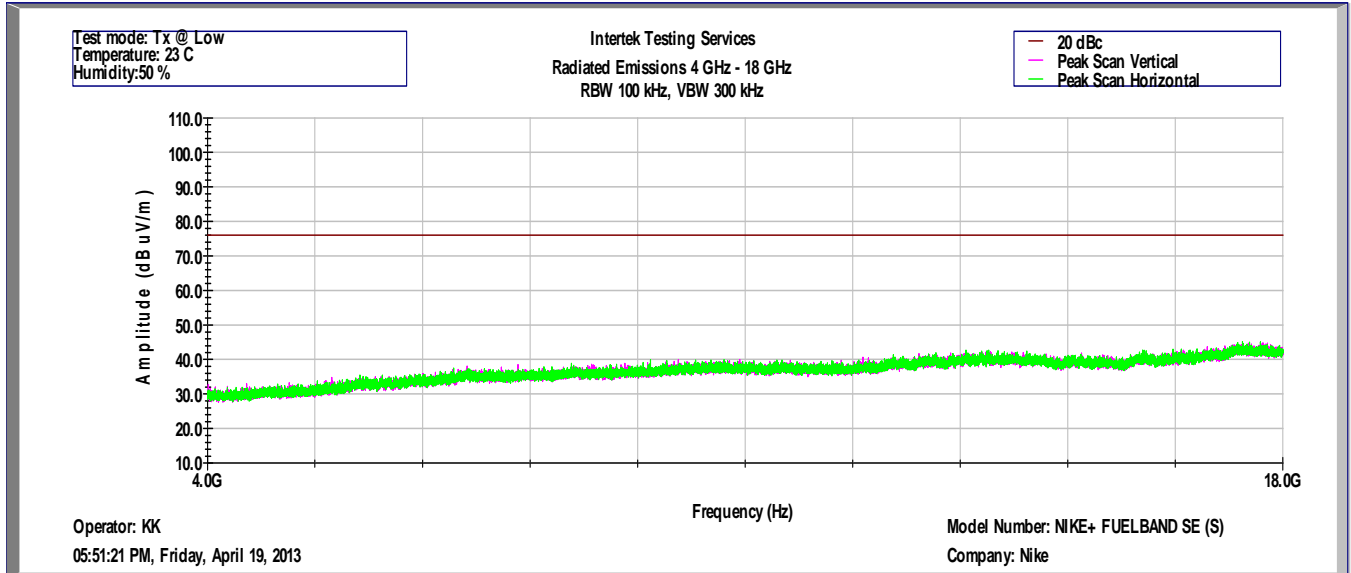
Unwanted Conducted Emissions, F=2480 MHz
Date: 2.MAY.2013 14:57:31

Annex D - Unwanted Radiated Emissions, NIKE+ FUELBAND^{SE} (S)

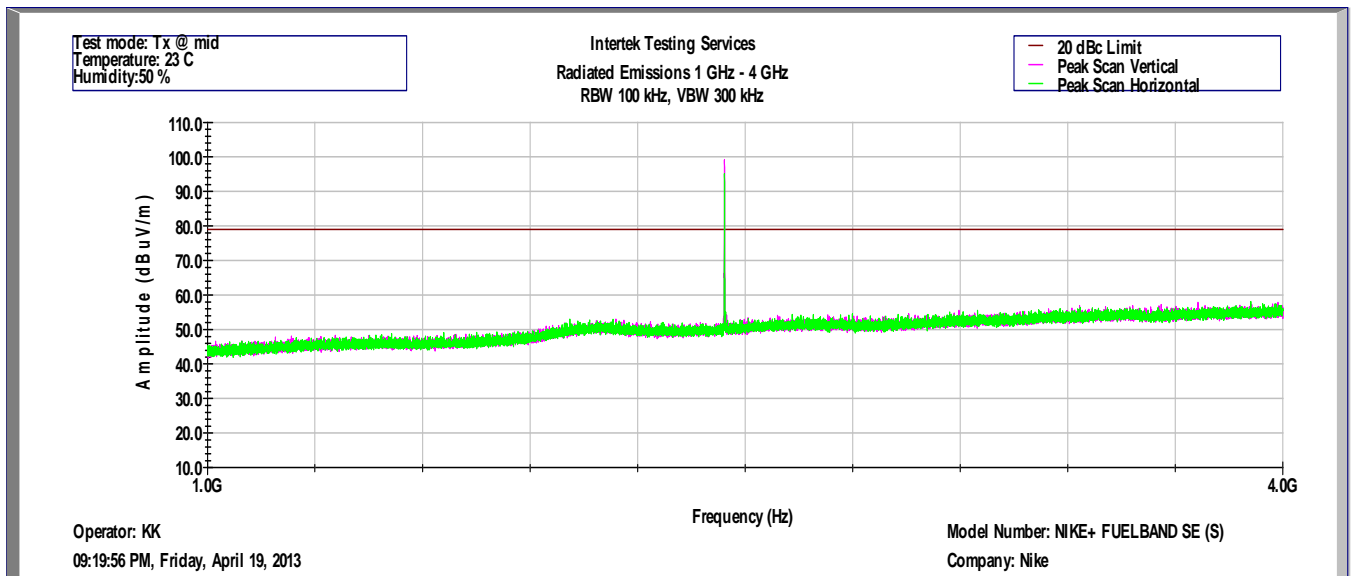
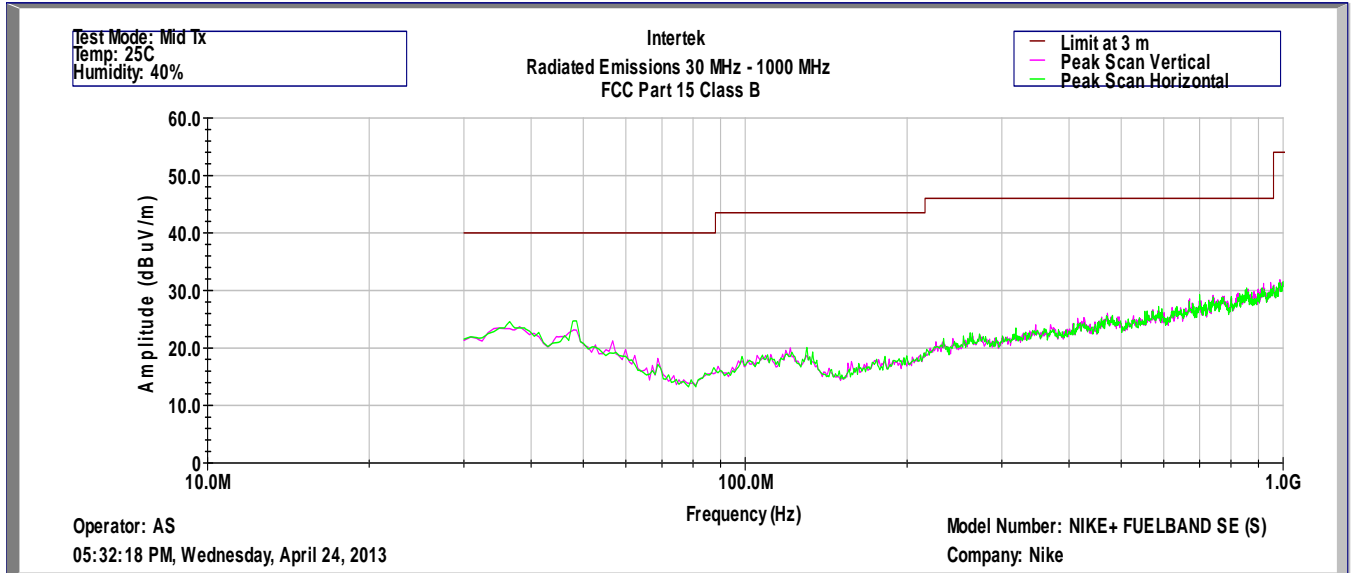
Tx @ Low Channel, 2402 MHz



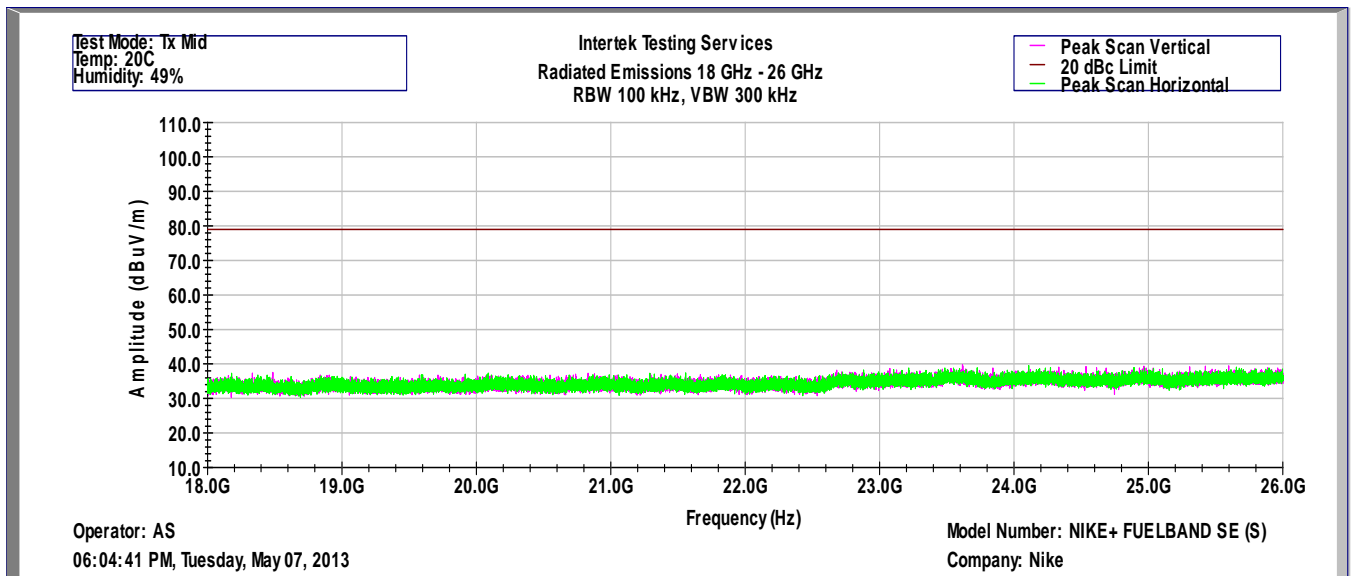
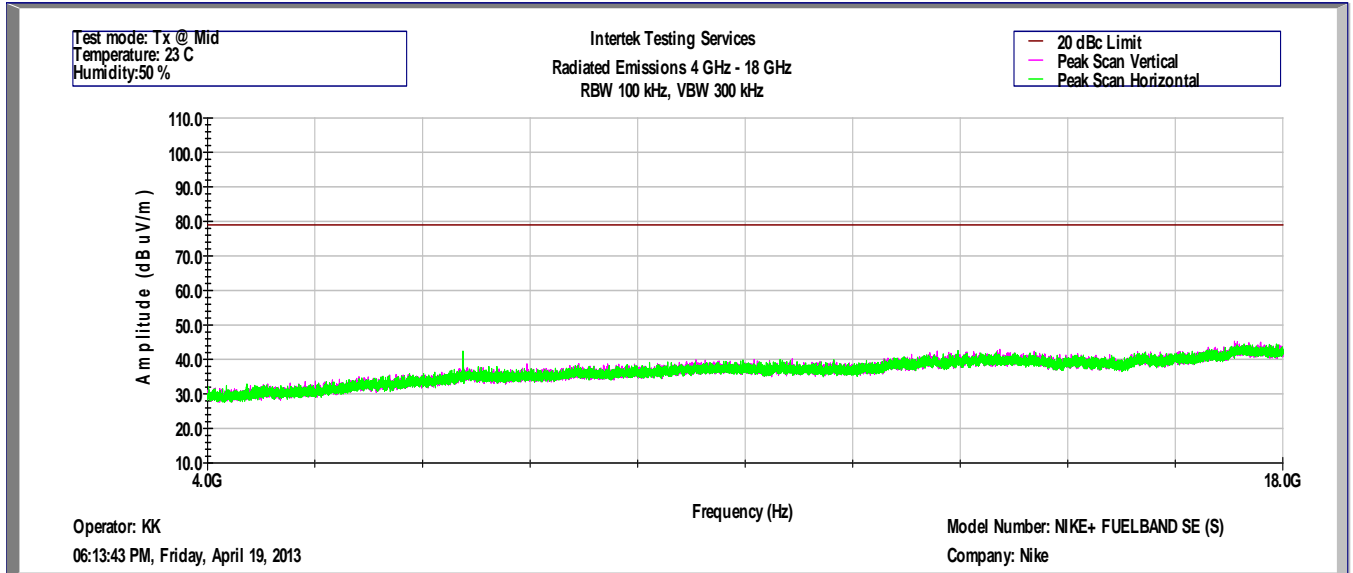
Tx @ Low Channel, 2402 MHz



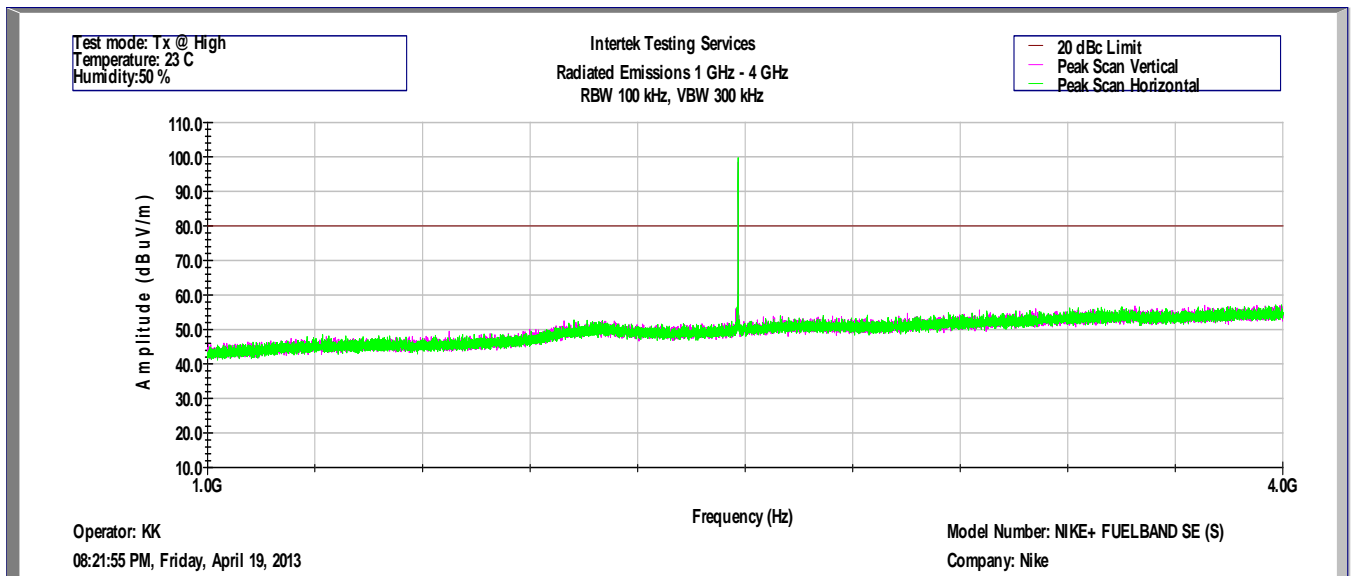
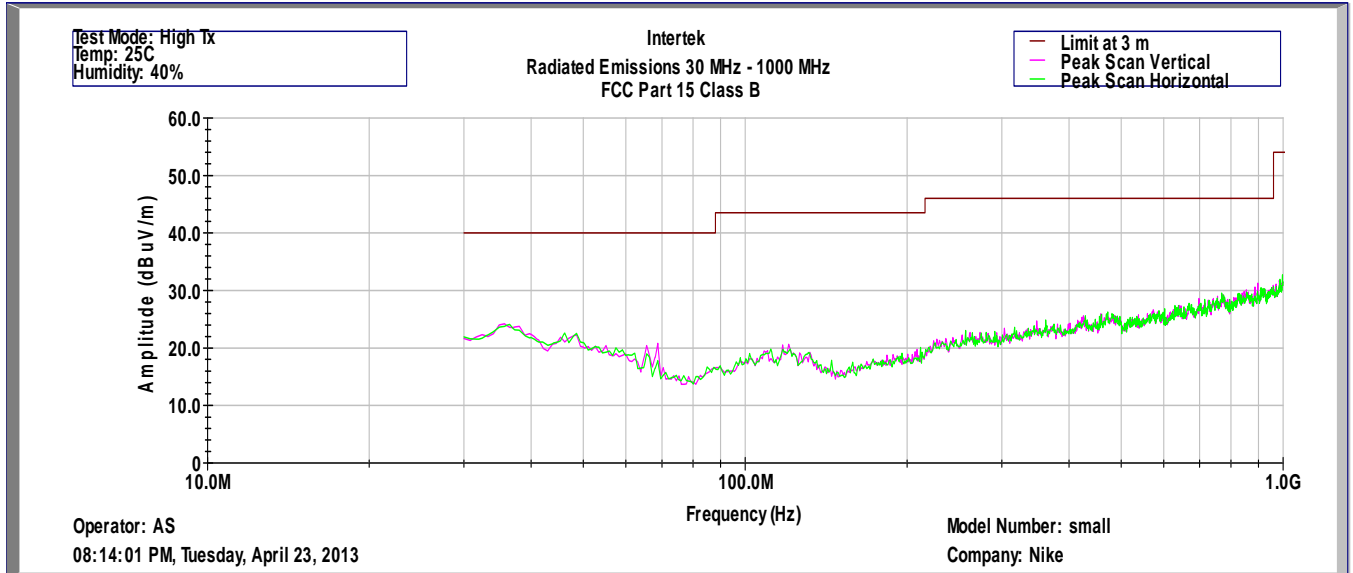
Tx @ Middle Channel, 2442 MHz



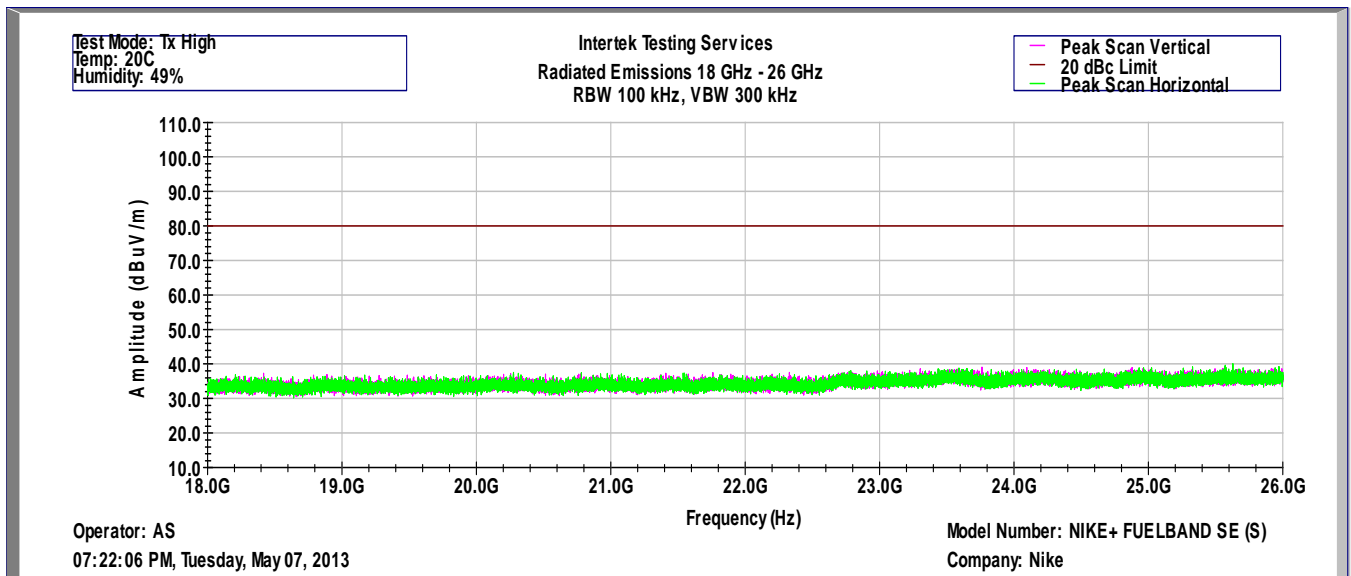
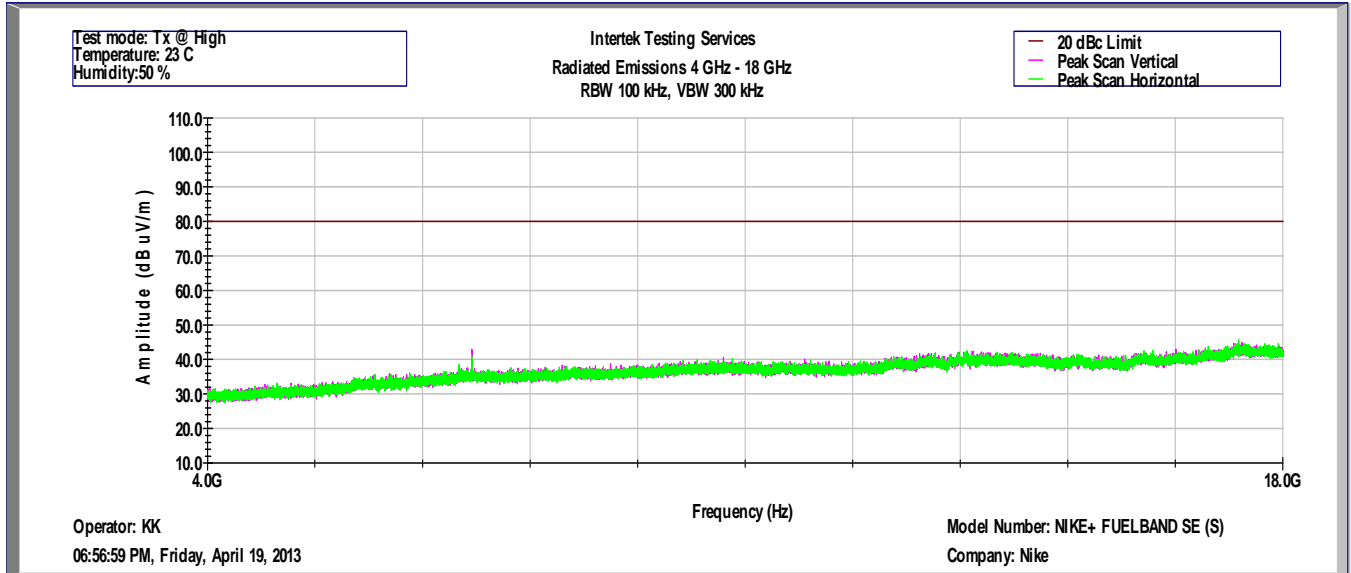
Tx @ Middle Channel, 2442 MHz



Tx @ High Channel, 2480 MHz

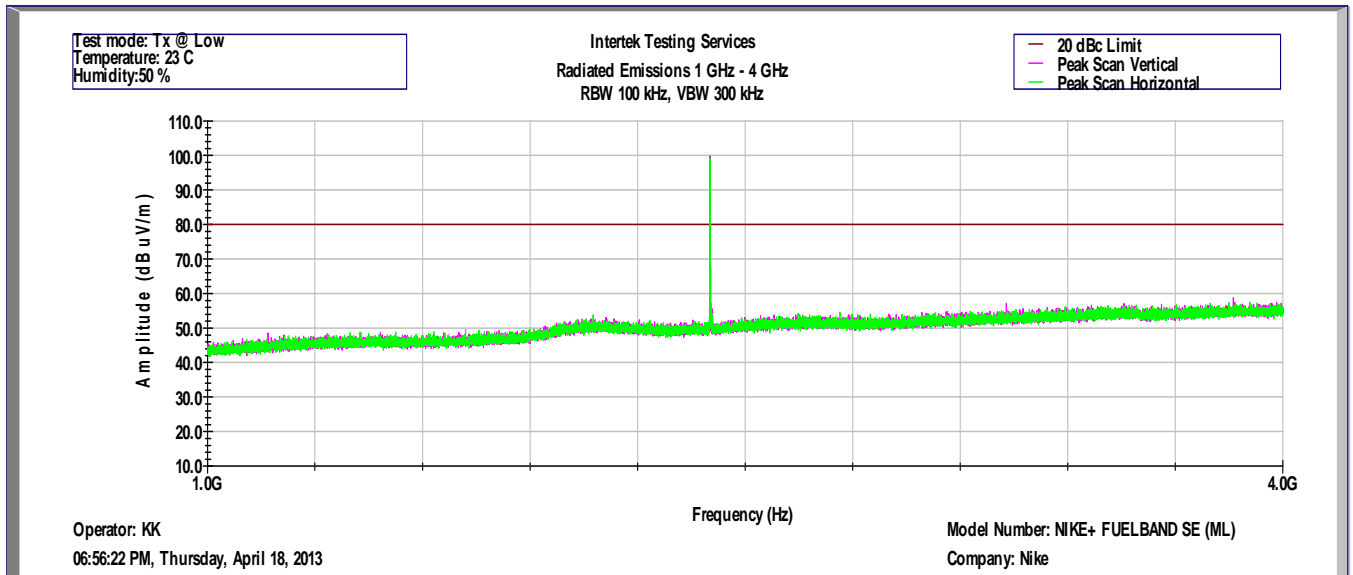
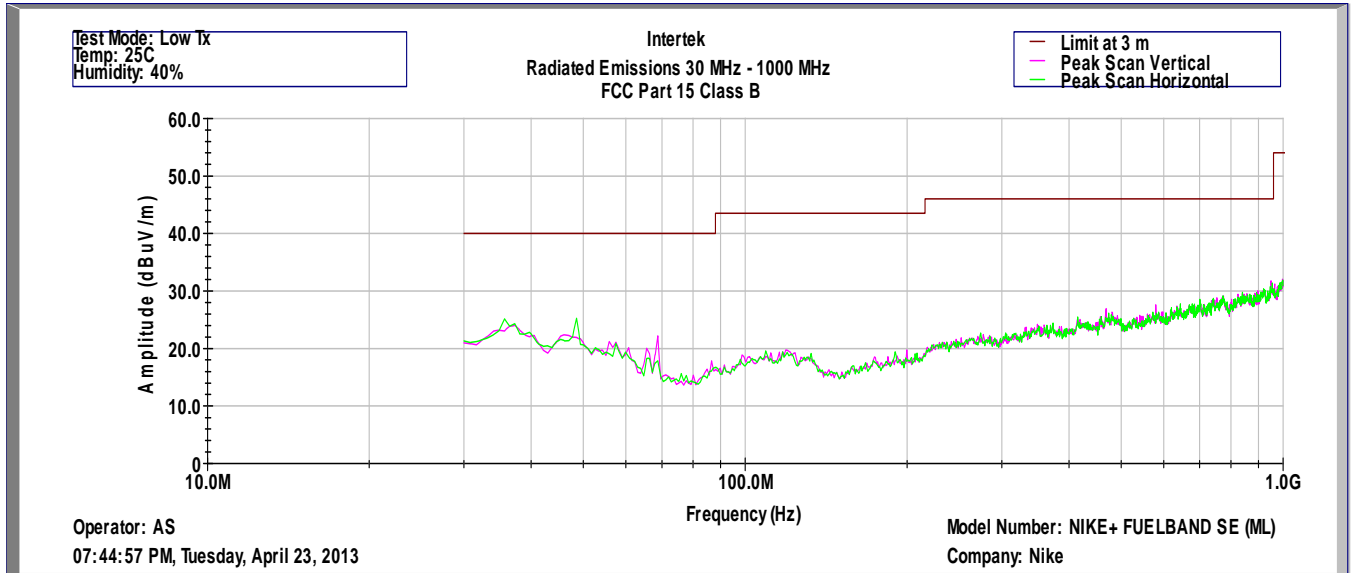


Tx @ High Channel, 2480 MHz

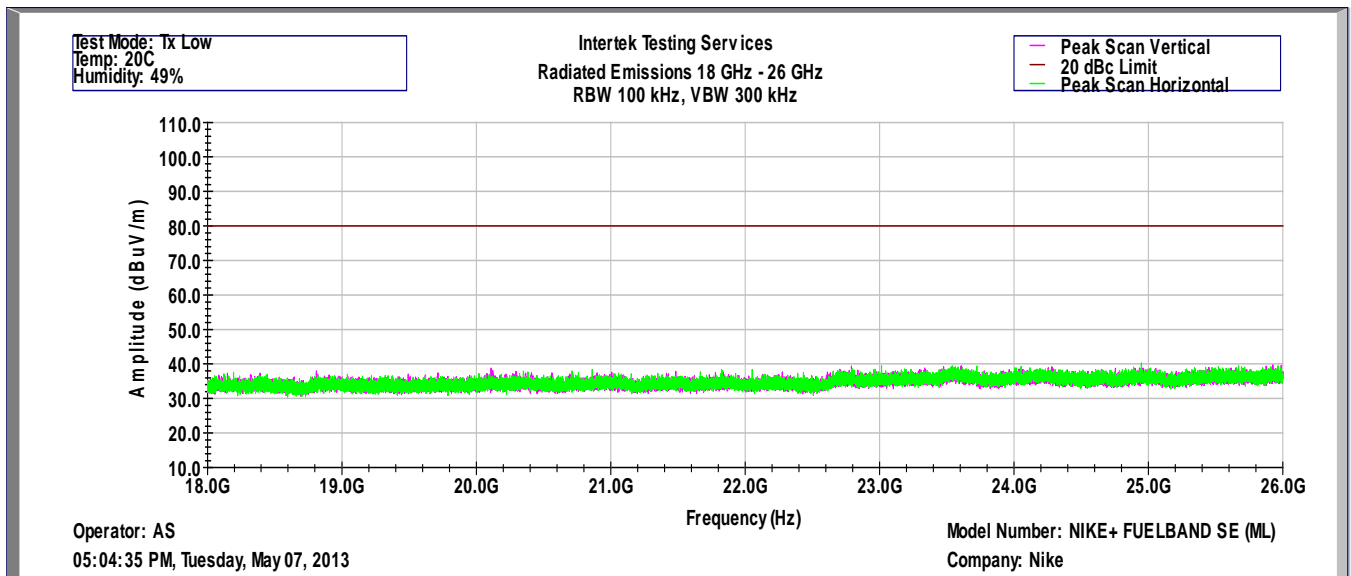
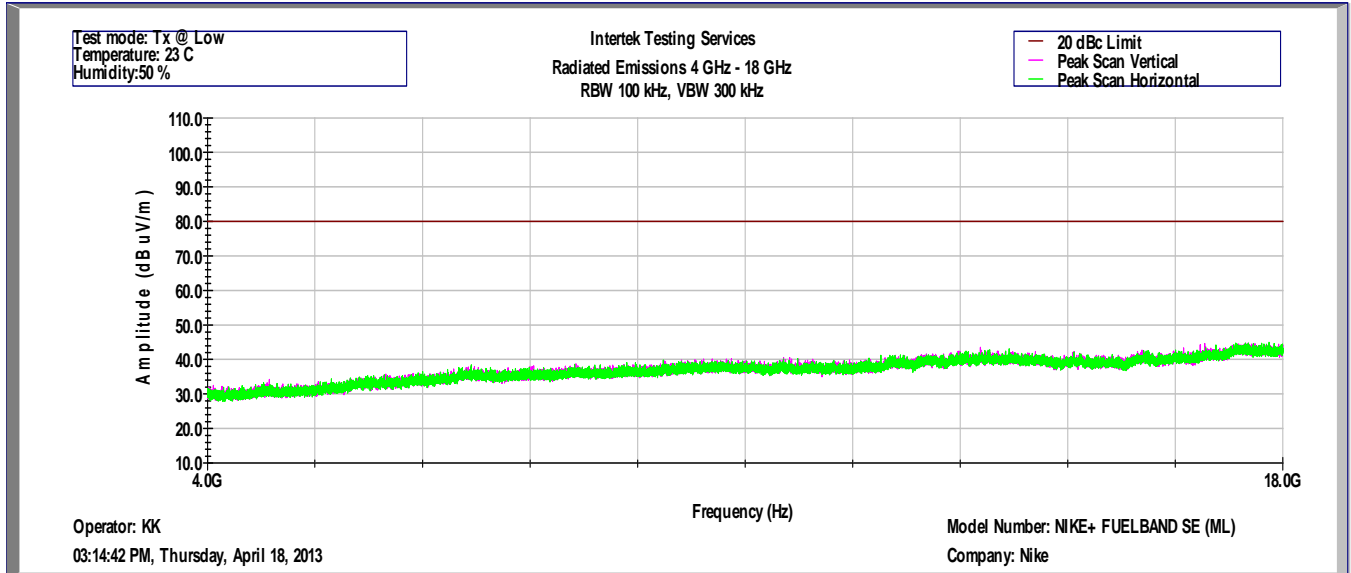


Annex E - Unwanted Radiated Emissions, NIKE+ FUELBAND^{SE} (M/L)

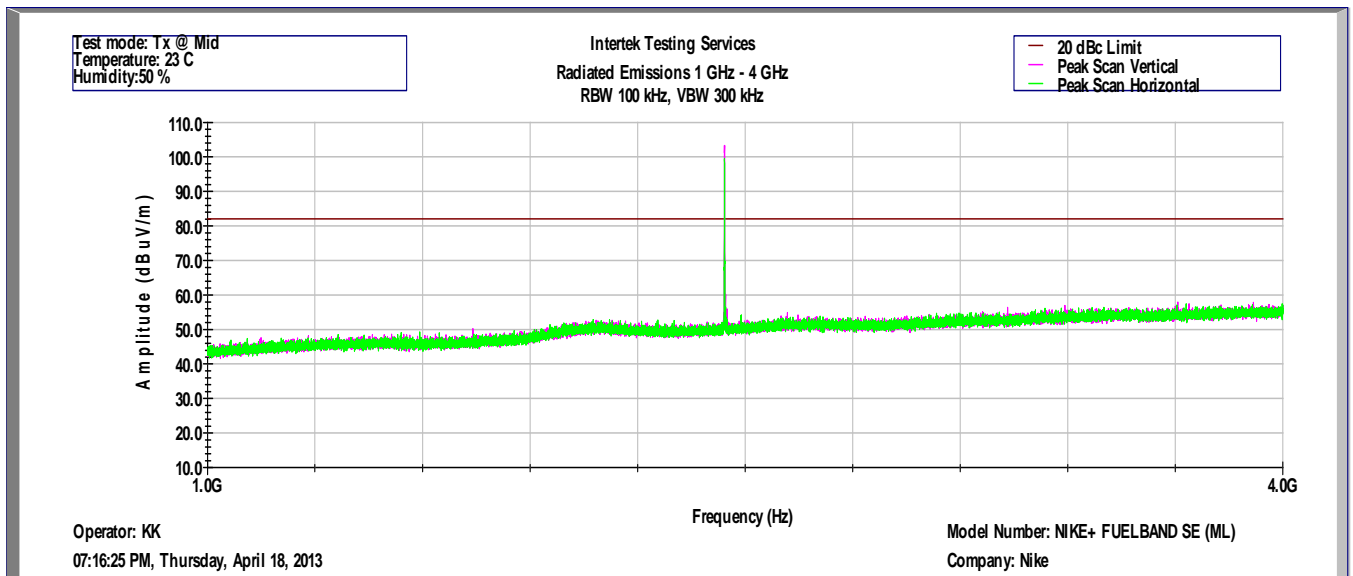
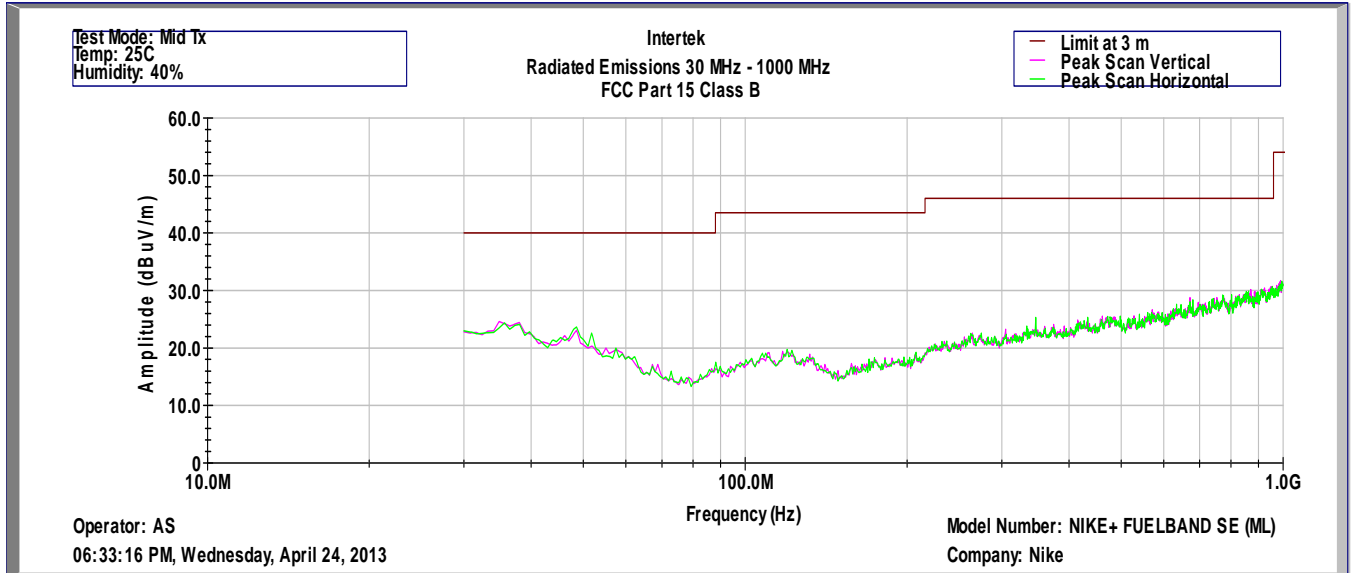
Tx @ Low Channel, 2402 MHz



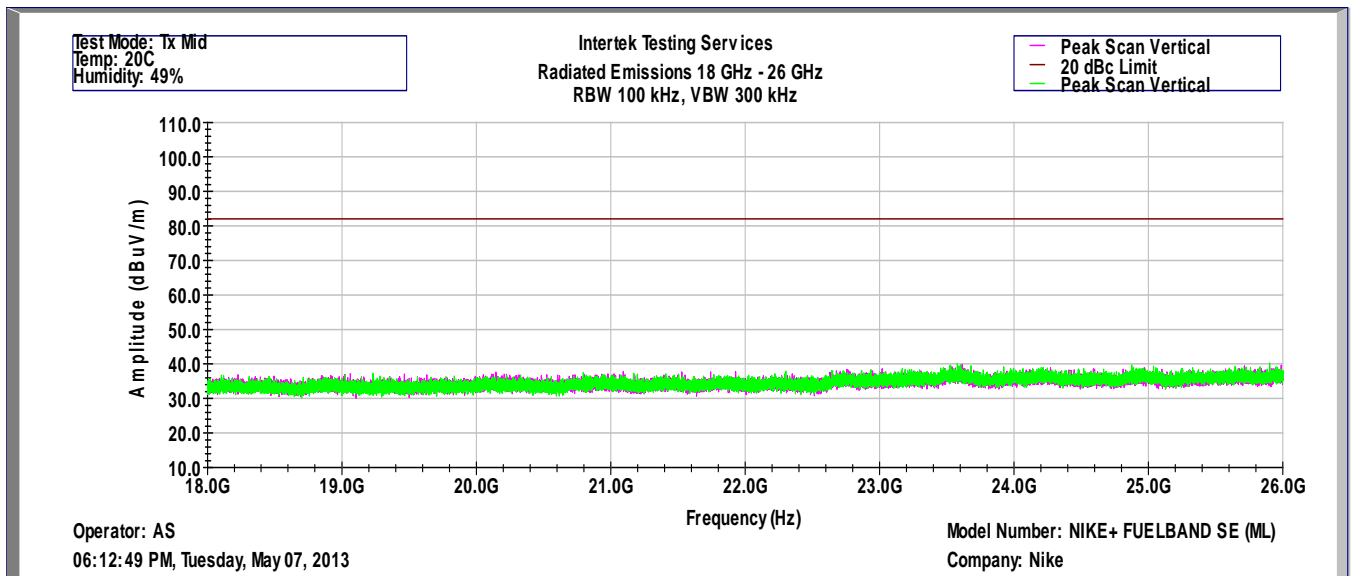
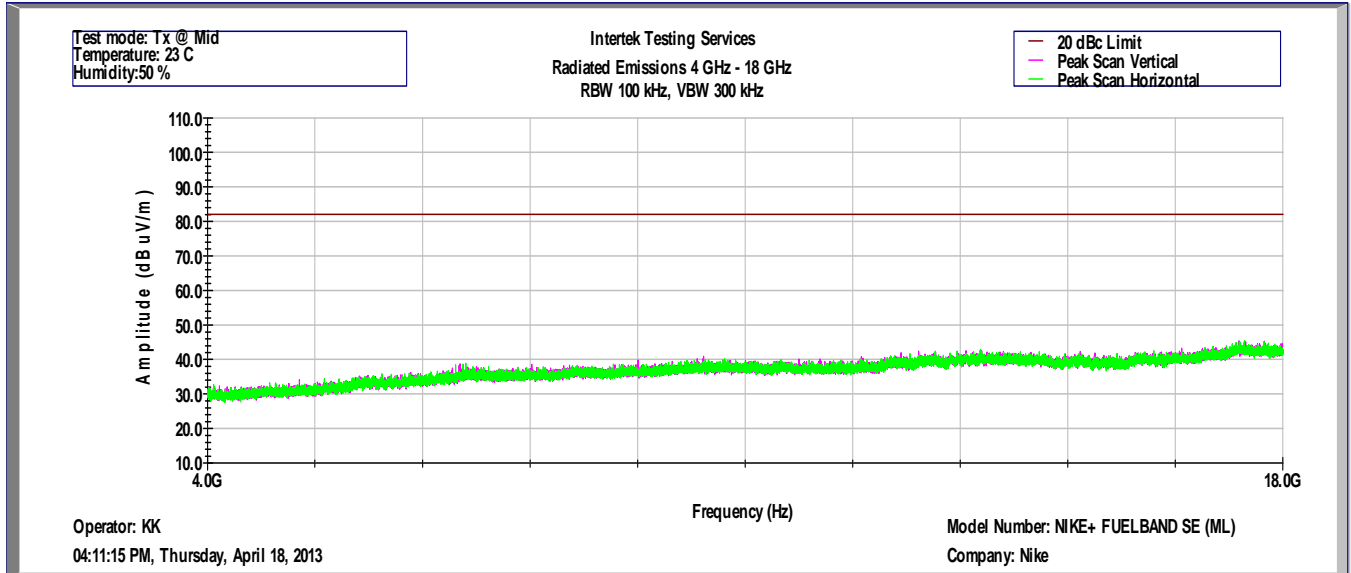
Tx @ Low Channel, 2402 MHz



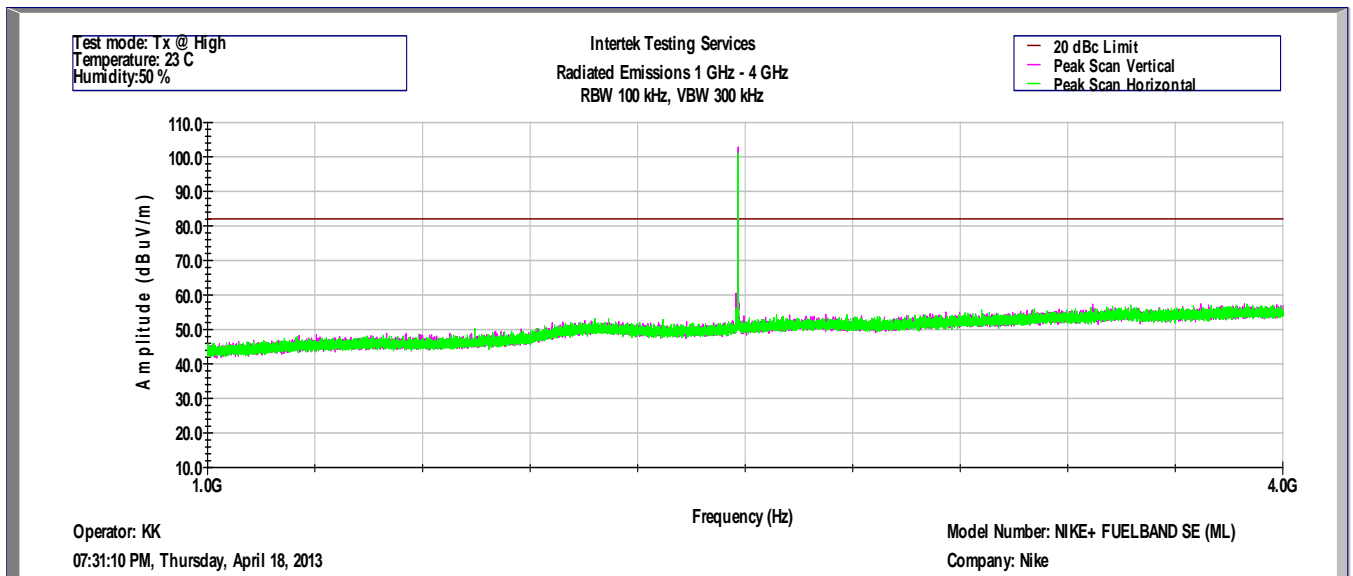
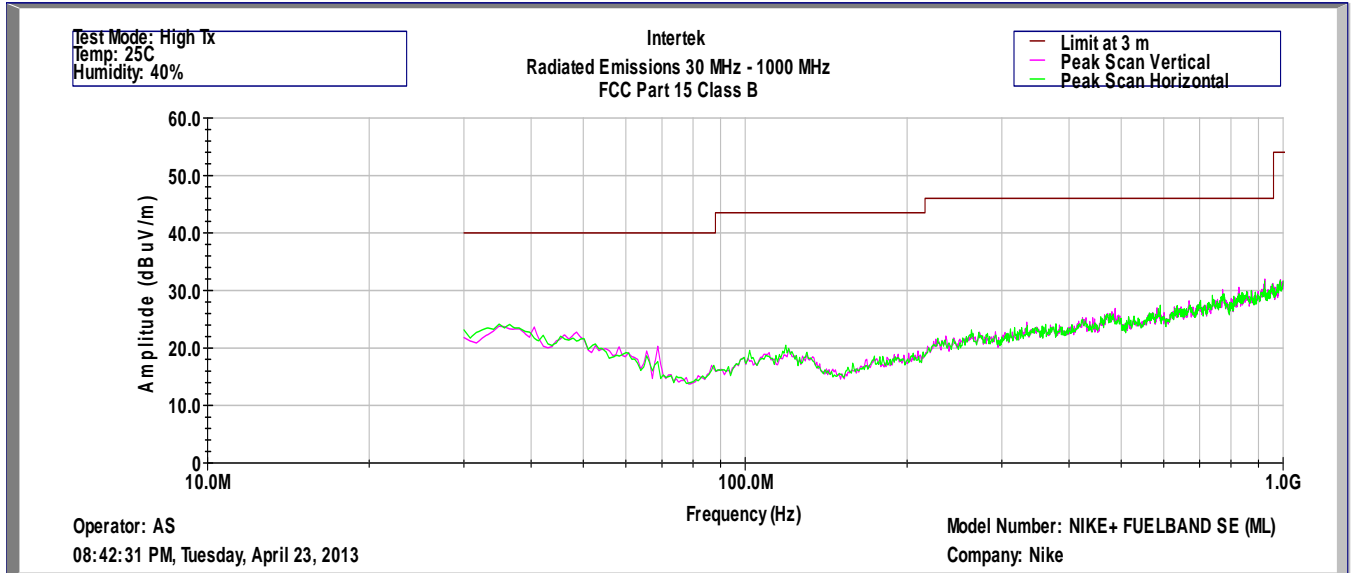
Tx @ Middle Channel, 2442 MHz



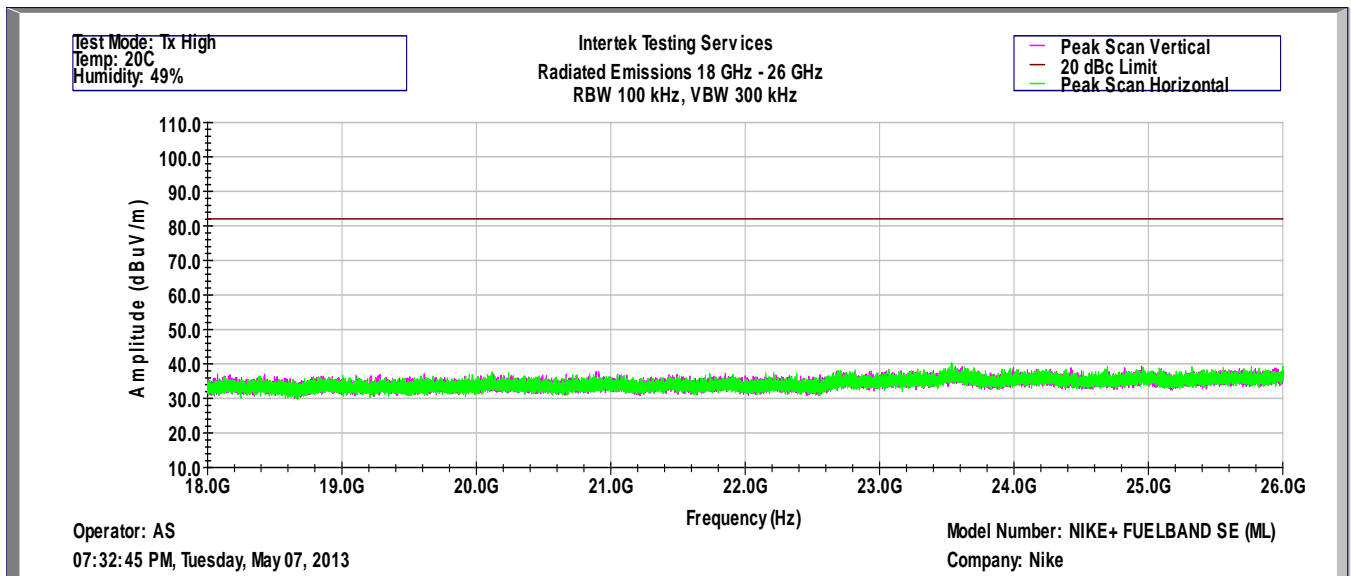
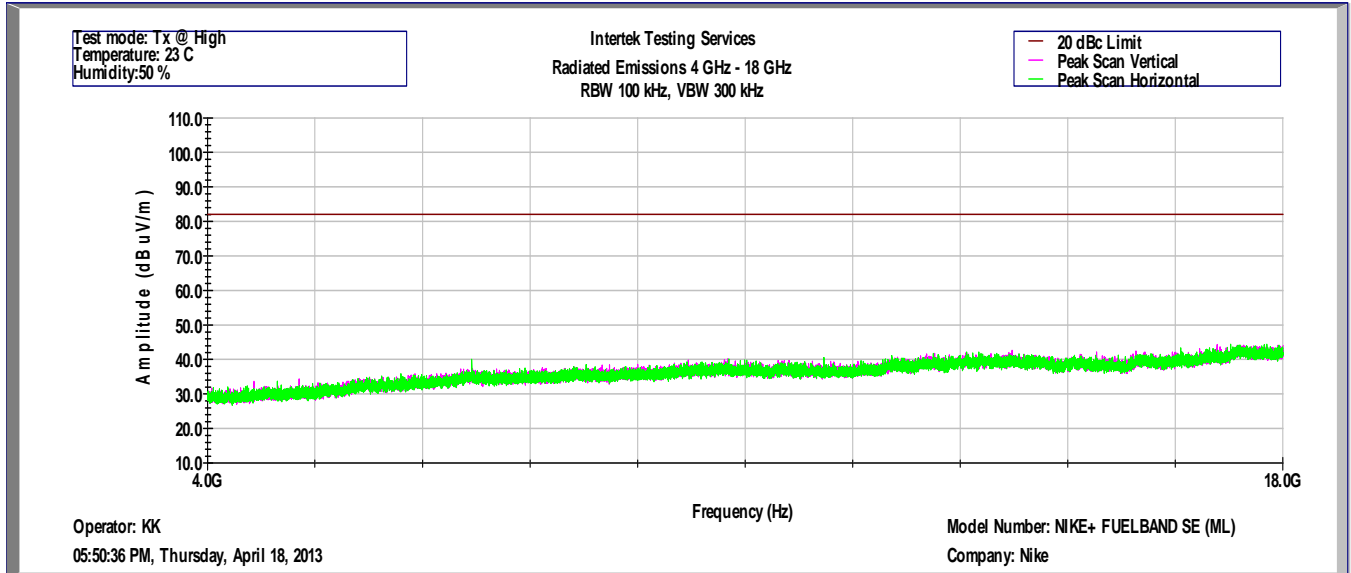
Tx @ Middle Channel, 2442 MHz



Tx @ High Channel, 2480 MHz

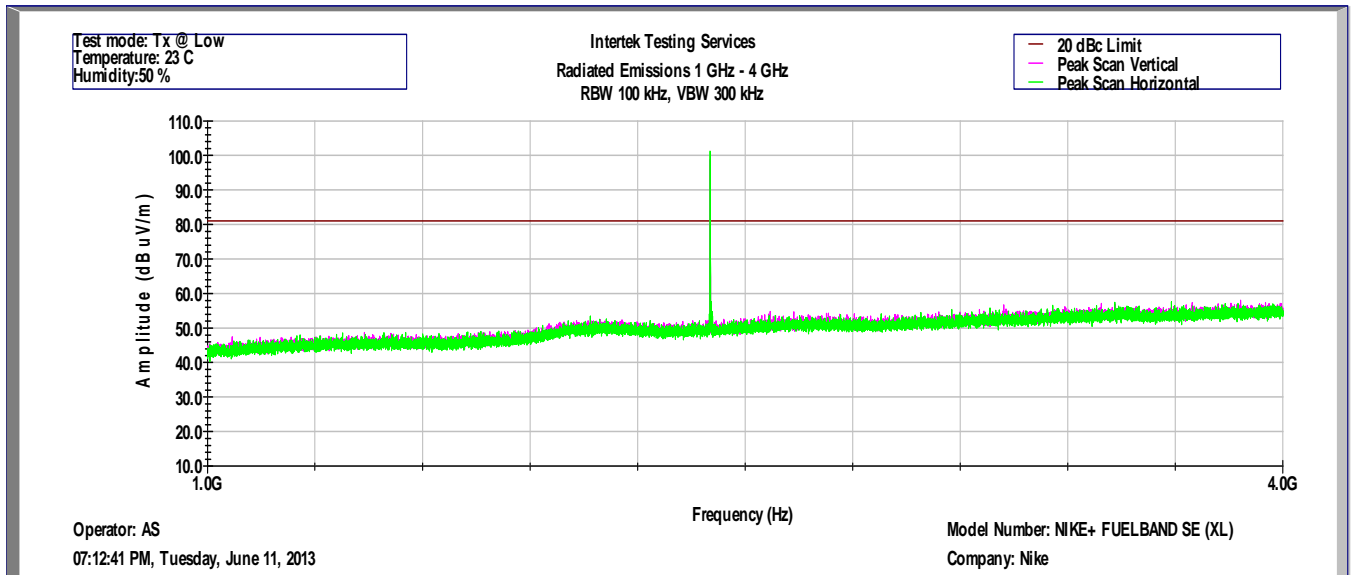
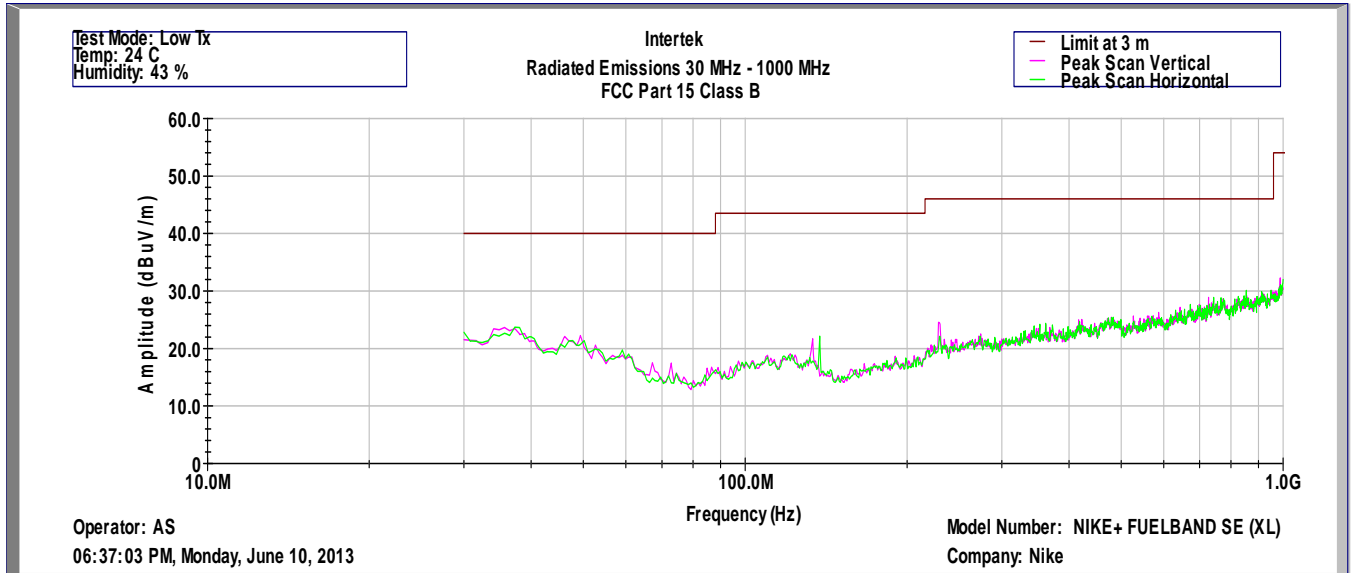


Tx @ High Channel, 2480 MHz

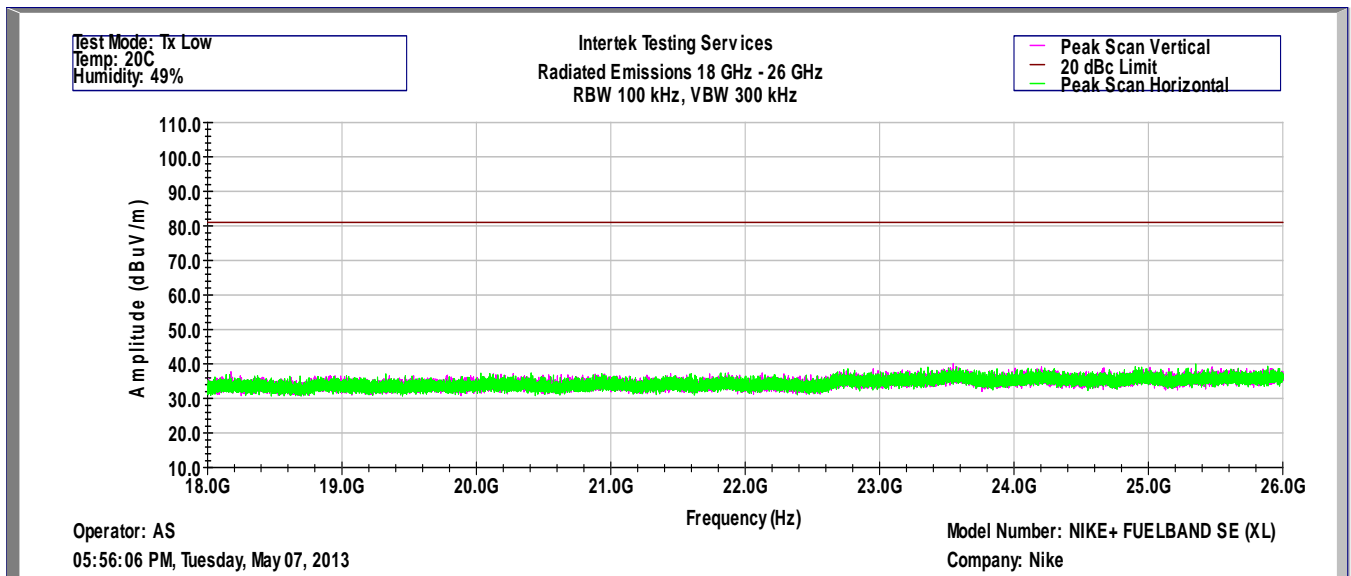
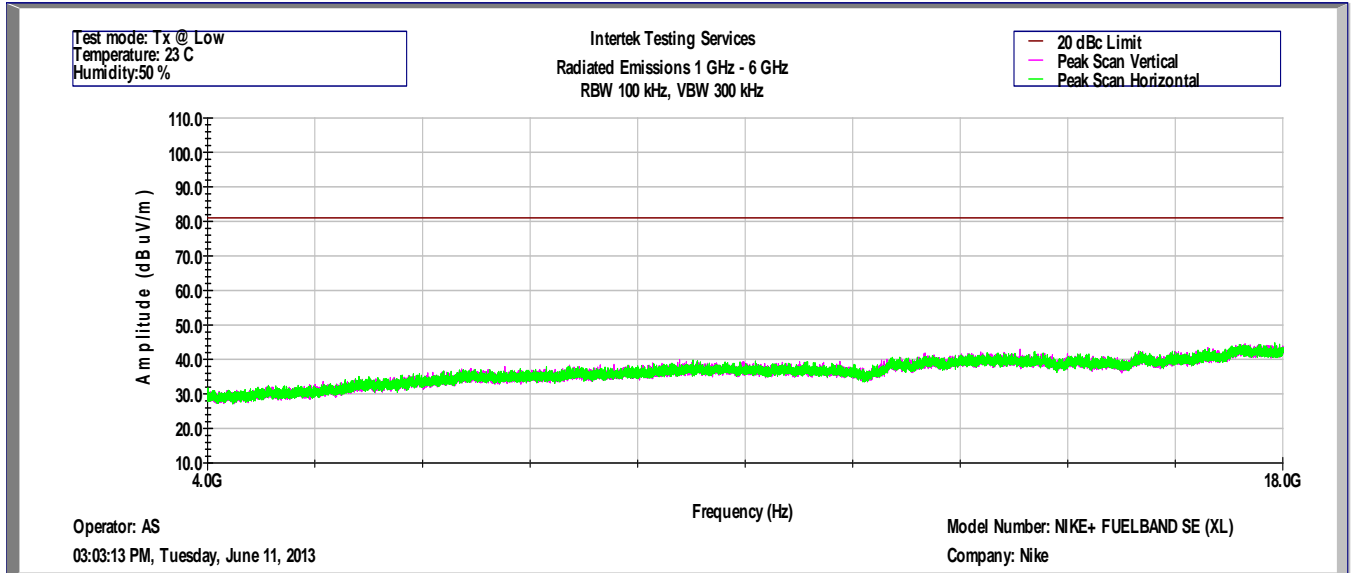


Annex F - Unwanted Radiated Emissions, NIKE+ FUEL BAND^{SE} (XL)

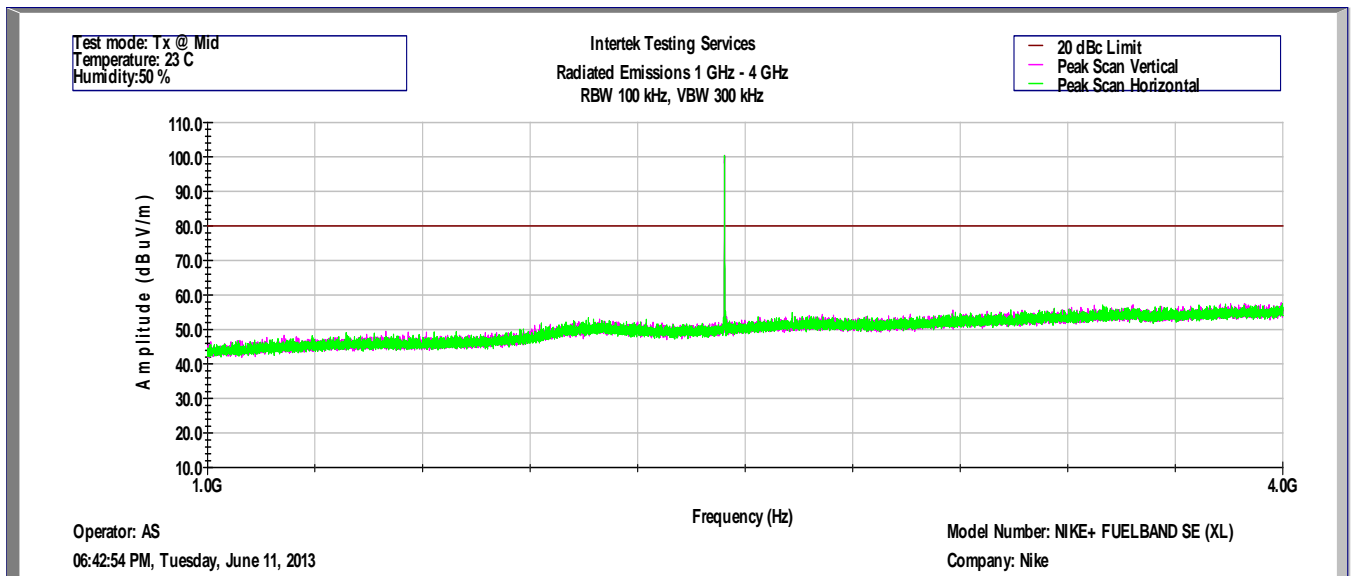
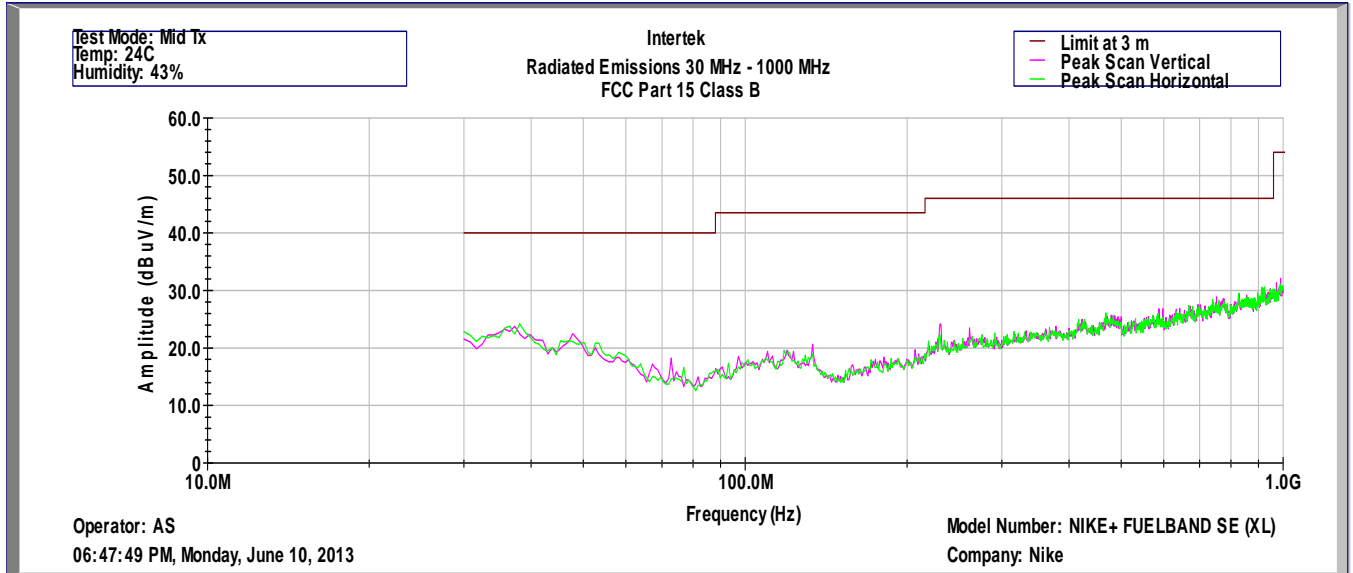
Tx @ Low Channel, 2402 MHz



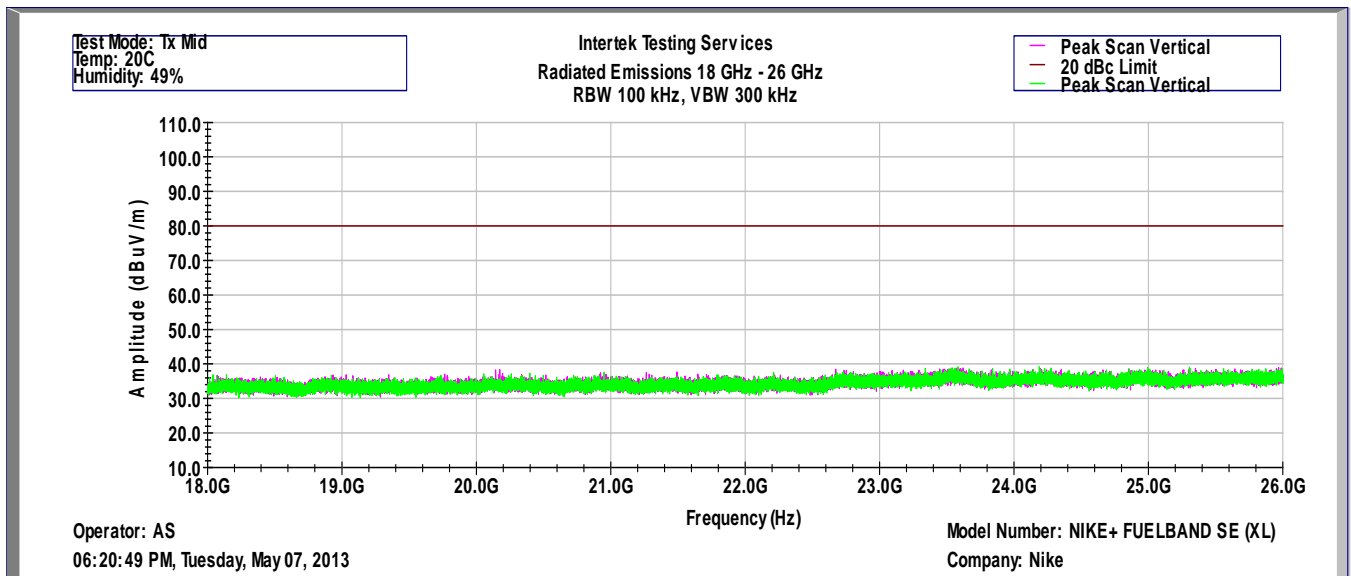
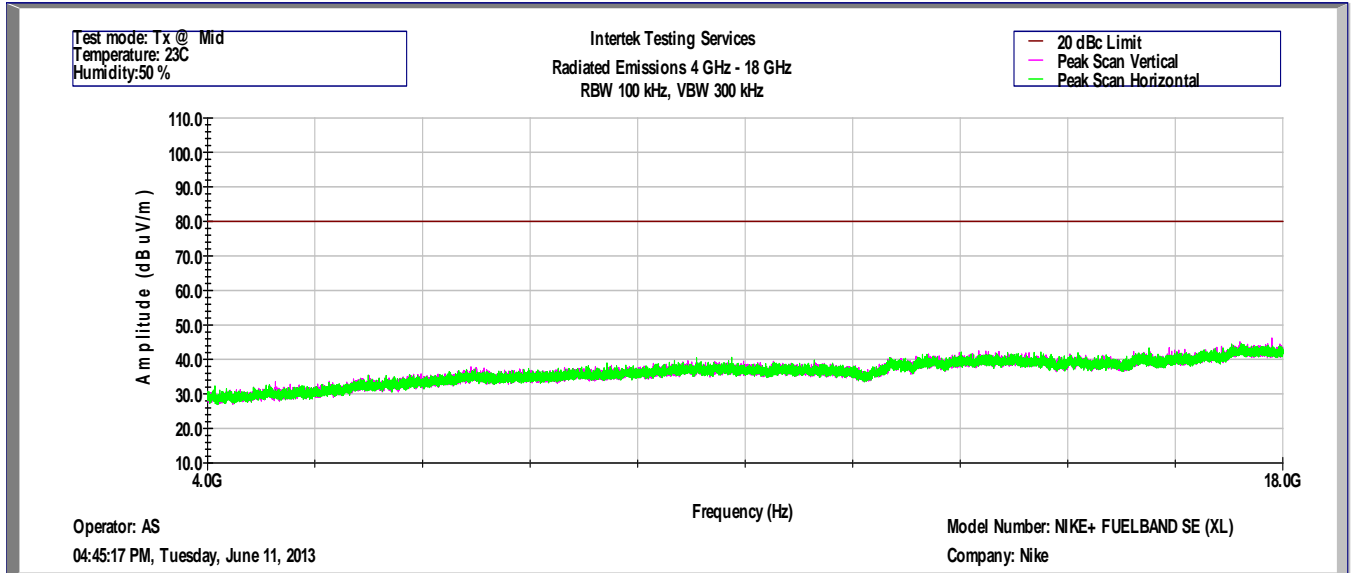
Tx @ Low Channel, 2402 MHz



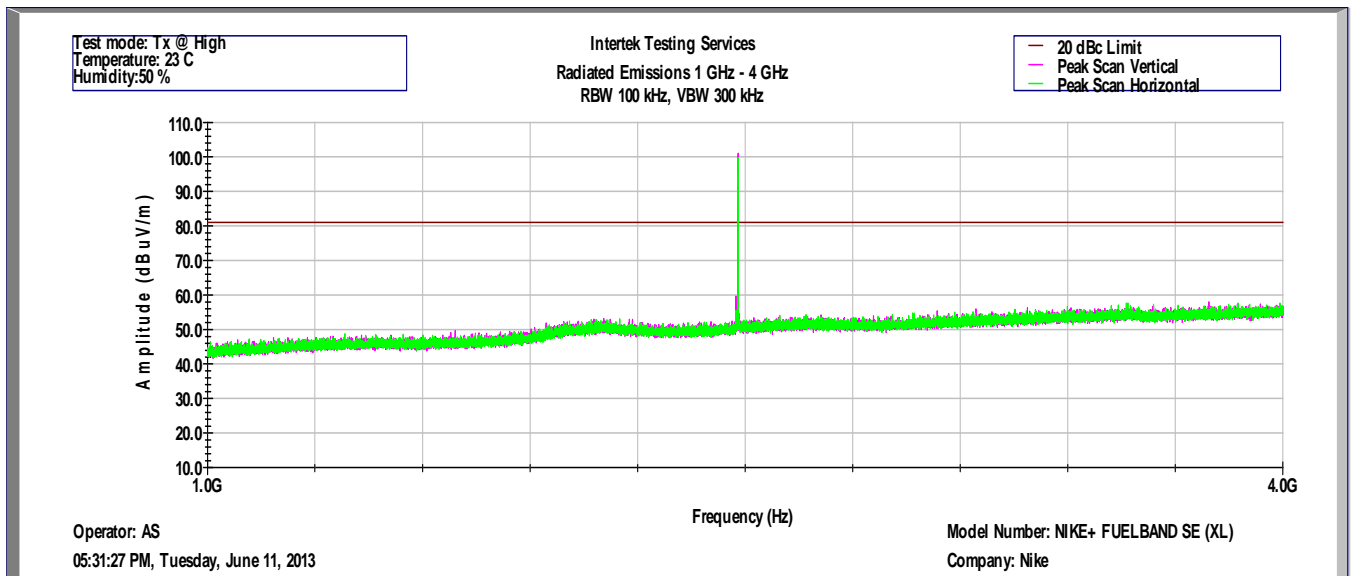
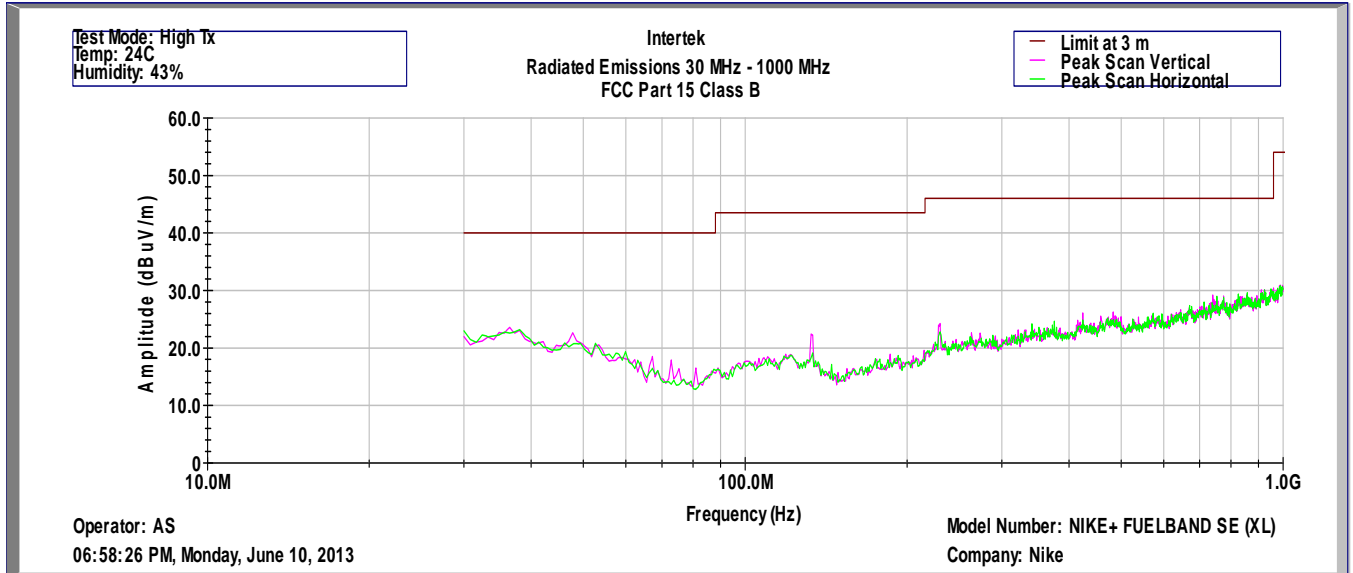
Tx @ Middle Channel, 2442 MHz



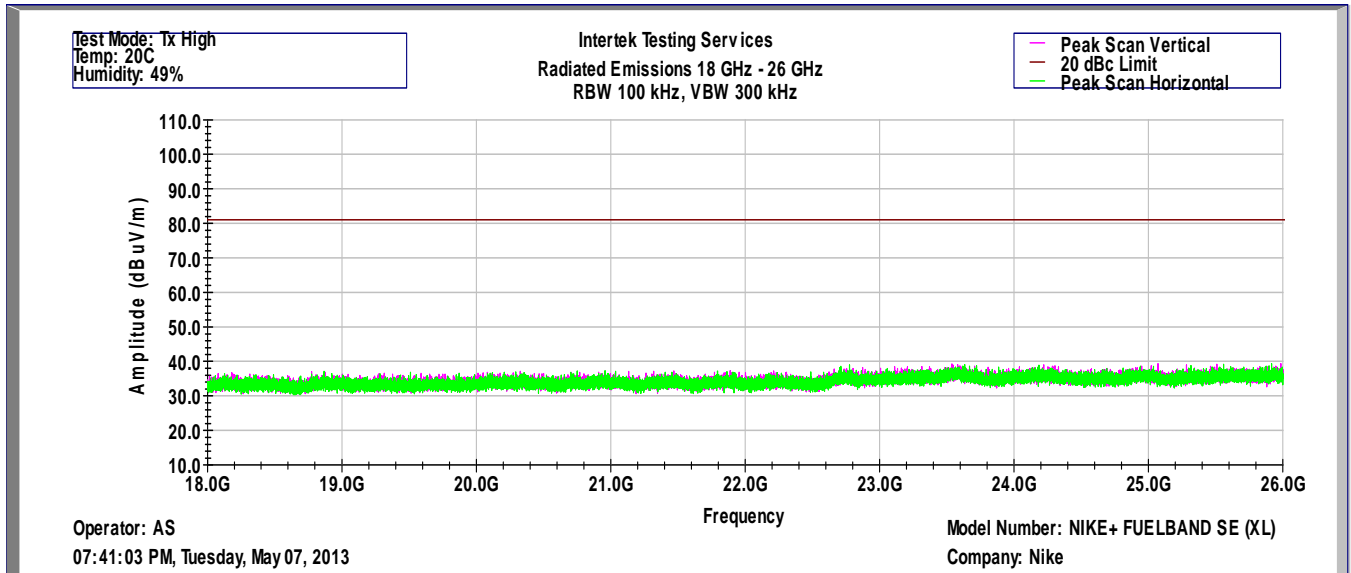
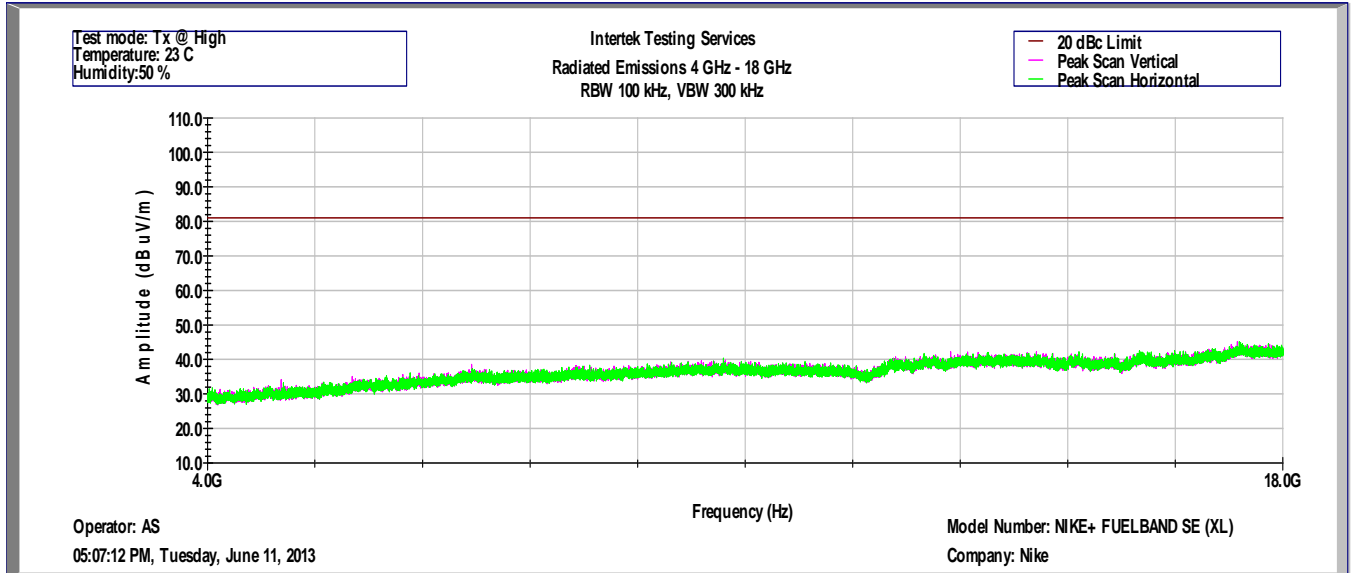
Tx @ Middle Channel, 2442 MHz



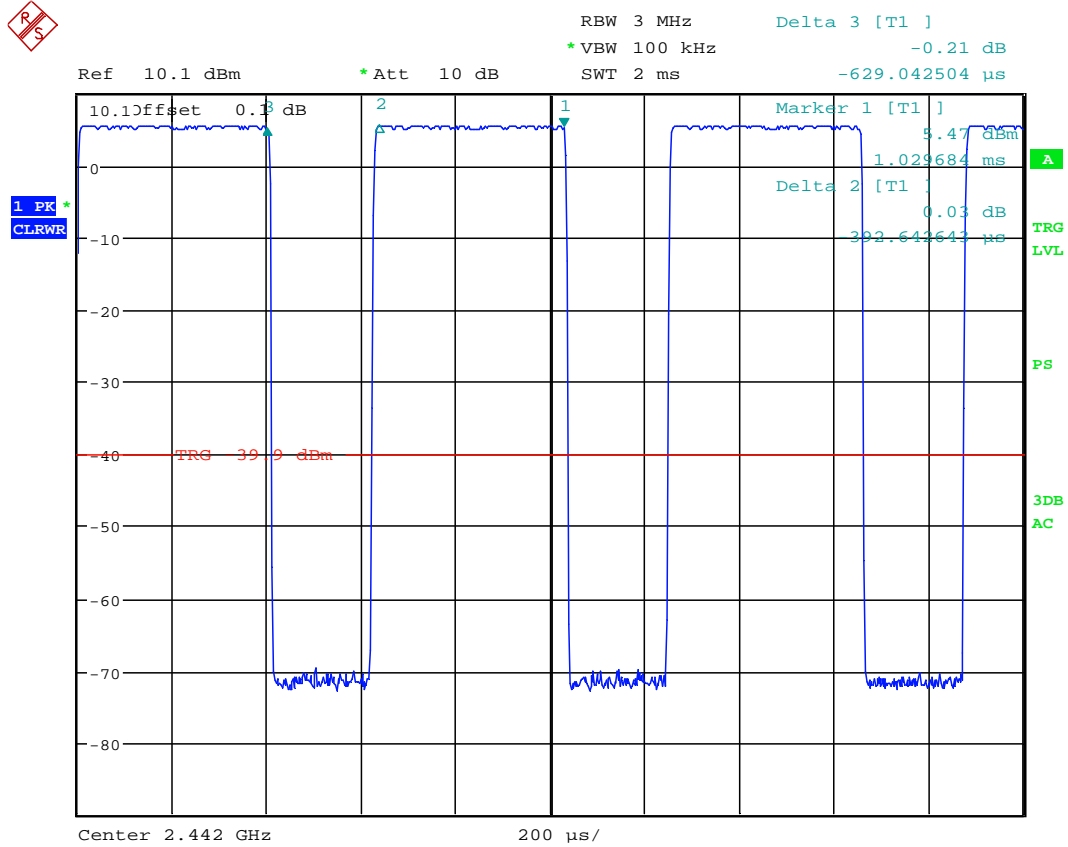
Tx @ High Channel, 2480 MHz



Tx @ High Channel, 2480 MHz



Annex G - Duty Cycle Measurement



Duty Cycle

Date: 6.MAY.2013 15:06:27

Duty Cycle: $DC = 392.6 / 629.0 = 0.624$ or 62.4%

Duty Cycle Correction Factor $\delta(\text{dB}) = 20 \log (392.6 / 629.0) = -4.1\text{dB}$