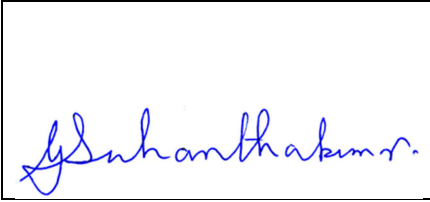


## Test Report

<b>Product</b>	Wireless Alarm Transceiver Module	
<b>Name and address of the applicant</b>	Ascom Sweden AB Grimbodalen 2, P.O. Box 8783, Goteborg, SE-40276, Sweden	
<b>Name and address of the manufacturer</b>	Ascom Sweden AB Grimbodalen 2, P.O. Box 8783, Goteborg, SE-40276, Sweden	
<b>Model</b>	NIRX-1AB	
<b>Rating</b>	5.0 Vdc	
<b>Trademark</b>	Ascom	
<b>Serial number</b>	/	
<b>Additional information</b>	900MHz Transceiver	
<b>Tested according to</b>	<b>FCC Part 15.249</b> Low Power Transmitter. 902 – 928MHz band <b>Industry Canada RSS-210, Issue 8</b> Low Power Licence-Exempt Radiocommunications Devices 902 – 928MHz band	
<b>Order number</b>	251949	
<b>Tested in period</b>	2014.02.18 – 2014.02.19	
<b>Issue date</b>	2014.05.16	
<b>Name and address of the testing laboratory</b>	  Instituttveien 6 Kjeller, Norway	FCC No: 994405 IC OATS: 2040D-1  TEL: (+47) 22 96 03 30 FAX: (+47) 22 96 05 50
	 Prepared by [G.Suhanthakumar]	 Approved by [Frode Sveinsen]
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## 1 TEST INFORMATION

### 1.1 Test item

Name :	Ascom
Model/version :	NIRX-1AB
FCC ID:	BXZNIRX
IC ID:	3724B-NIRX
Serial number :	-
Hardware identity and/or version:	-
Software identity and/or version :	-
Frequency Range :	916.2125 – 920.2125 MHz
Number of Channels :	11
Operating Modes :	TX and RX
Type of Modulation :	4-GFSK
Data rate:	19.2 kbit/s
User Frequency Adjustment :	None, Software controlled
Cal. Conducted Output Power :	0.374 mW
Type of Power Supply :	5Vdc
Antenna Connector :	N/A
Antenna type:	PCB antenna
Declared antenna gain dBd:	0
Antenna Diversity Supported :	None

#### Description of test item

The NIRX is a 900 MHz radio transceiver module that is intended to be mounted inside other products for wireless alarm handling. It has its own on-board microcontroller.

## 1.2 Test environment

### 1.2.1 Normal test condition

Temperature:	20.6 – 21.2 °C
Relative humidity:	40 - 42 %
Normal test voltage:	5.0 Vdc

The values are the limit registered during the test period.

## 1.3 Test period

Item received date:	2014-02-18
Test period :	from 2014-02-18 - 2014-02-19

## 2 TEST REPORT SUMMARY

### 2.1 General

Manufacturer: Ascom

Model No.: NIRX

All measurements are traceable to national standards.

The tests were conducted for the purpose of demonstrating compliance with FCC CFR 47 Part 15.249 and Industry Canada RSS-210, Issue 8 and RSS-GEN, Issue 3.

Radiated tests were conducted in accordance with ANSI C63.4-2003 and and KDB 558074 D01 DTS Measurement Guidance v03r01. The radiated tests were made in a semi-anechoic chamber at measuring distances of 3 and 10 meters.

New Submission

Production Unit

Class II Permissive Change

Pre-production Unit

**DXT** Equipment Code

Family Listing



#### **THIS TEST REPORT APPLIES ONLY TO THE ITEM(S) AND CONFIGURATIONS TESTED.**

Deviations from, additions to, or exclusions from the test specifications are described in "Summary of Test Data".

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## 2.2 Test summary

Name of test	FCC Part 15 reference	RSS-210 Issue 8 & RSS-GEN Issue 3	Result
Supply Voltage Variations	15.31(e)	N/A	Complies
Antenna Requirement	15.203	7.1.4 (RSS-GEN)	N/A <sup>1</sup>
Power-line Conducted Emission	15.207(c)	7.2.2 (RSS-GEN)	Complies
Occupied Bandwidth	N/A	4.6.1 (RSS-GEN)	-
Peak Power Output	15.249(a)(c)	A2.9	Complies
Band edge Emissions	15.249(d)	A.2.9	Complies
Spurious Emissions (Radiated)	15.249 (e) 15.209	A2.9 4.9 (RSS-GEN)	Complies

<sup>1</sup> PCB antenna only

RSS Gen issue 3 covers section 7 & 6

RSS 210 issue 8 covers section A2.9

## 2.3 Description of modification for modification filing

Not applicable.

## 2.4 Comments

The channels were selected with the use of dedicated test software from the manufacturer.

The radiated measurements are tested on three axis.

## 2.5 Family list rationale

Not Applicable.

### 3 TEST RESULTS

#### 3.1 Power Line Conducted Emissions

Para. No.: 15.207 (a)

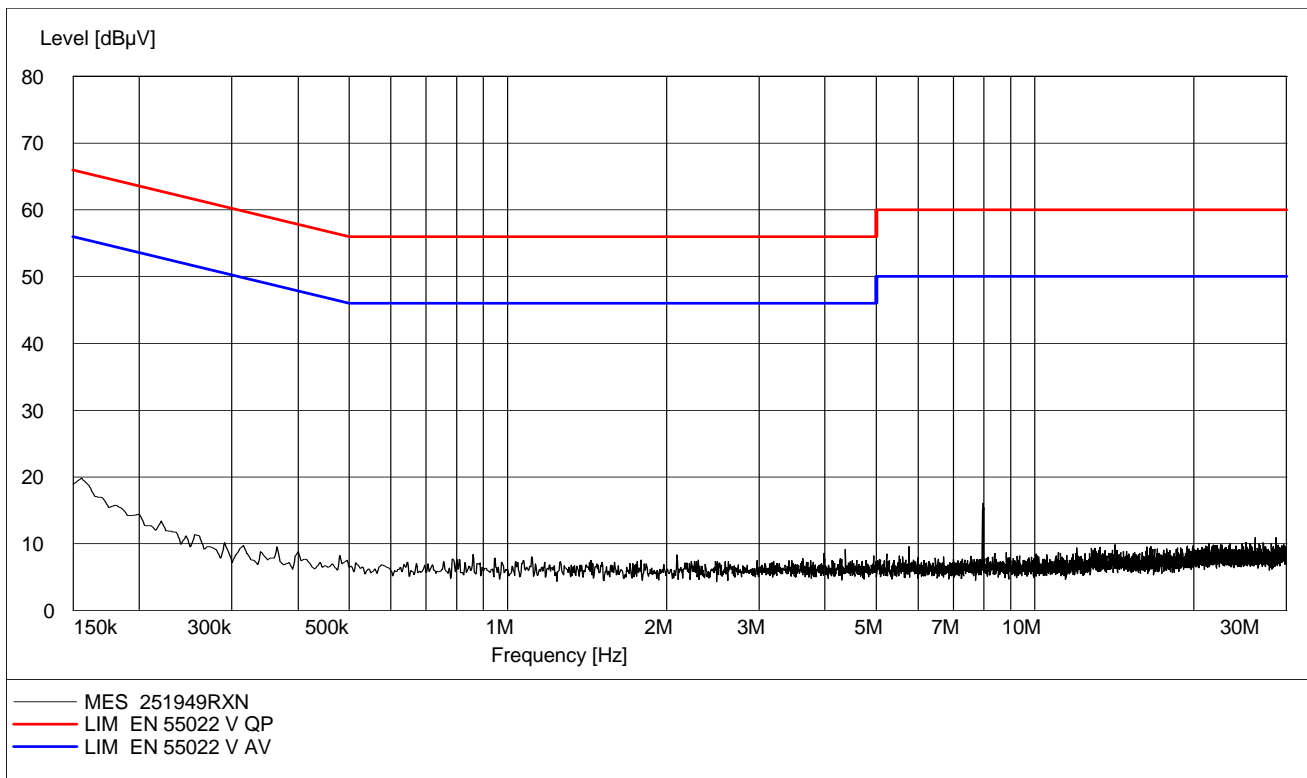
Test Performed By: G.Suhandhakumar	Date of Test: 2014.02.19
------------------------------------	--------------------------

Measurement procedure: ANSI C63.4-2003 using 50 µH/50 ohms LISN.

Test Results: Complies

Measurement Data: See attached graph, (Peak detector).

Measured with Oltronix power supply type B32-10R , 5Vdc



### 3.2 Transmitter Frequency Stability

Para. No.: 15.31(m)/7.2.4

Test Performed By: G.Suhandhakumar	Date of Test: 18.02.2014
------------------------------------	--------------------------

#### Measurement Data:

Temperature	Channel nr.	Given Frequency (MHz)	Measured value (MHz)	Deviation (Hz)
20 ° C	-	916.2125	916.212660	160
	-	918.2125	918.212740	240
	-	920.2125	920.212740	240

Comment: Reported for information only. There are no requirements to frequency tolerance for low power devices in the 902-928 MHz band certified to 15.249 or RSS 210



### 3.3 20 dB Bandwidth

Para. No.: RSS-Gen

Test Performed By: G.Suwanthakumar	Date of Test: 2014.02.18
------------------------------------	--------------------------

Test Results: Complies

Measurement Data:

Data Rate	20 dB Bandwidth (kHz)		
	916.2125MHz	918.2125MHz	920.2125MHz
19.2kbps	288.46	-	294.87

Requirements:

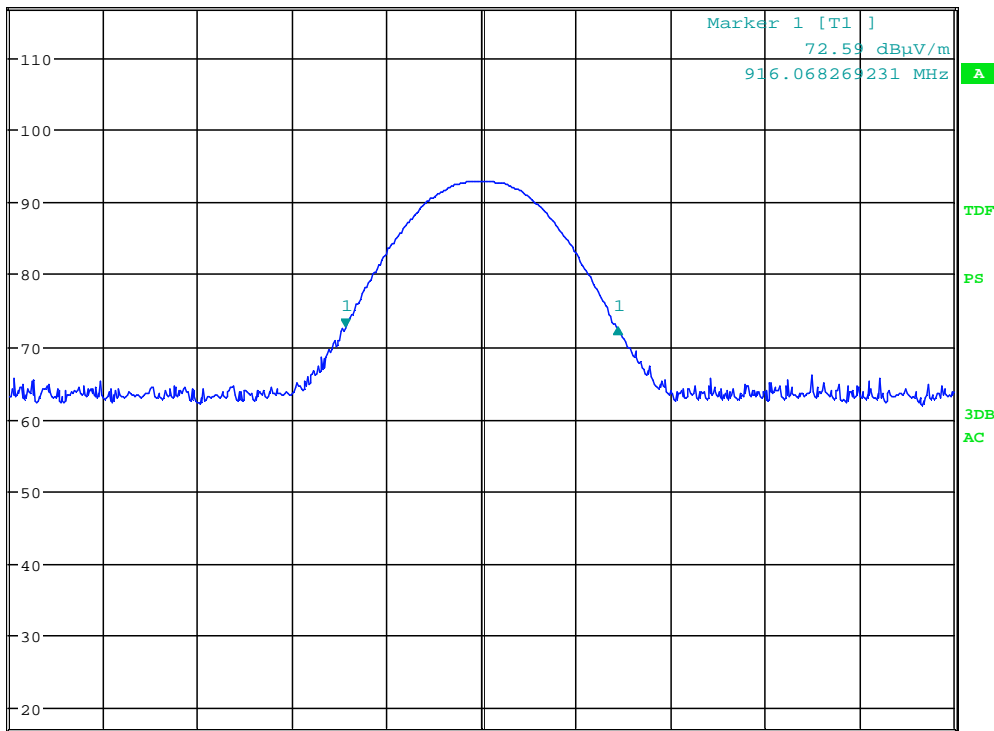
For information only



\*RBW 100 kHz      Delta 1 [T1 ]  
 VBW 300 kHz      -0.02 dB  
 SWT 2.5 ms      288.461538460 kHz

Ref 117 dBμV/m      \*Att 10 dB

1 PK  
 MAXH



Center 916.2125 MHz      100 kHz/      Span 1 MHz

Date: 18.FEB.2014 13:04:40

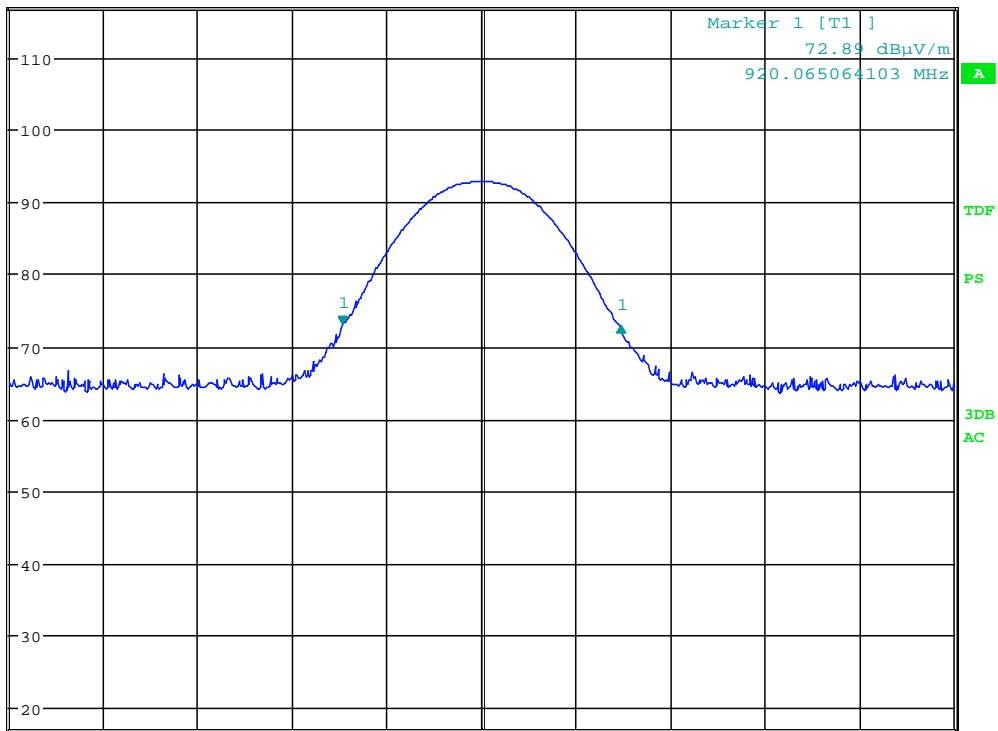
**916.2125MHz – 20 dB bandwidth**



\*RBW 100 kHz      Delta 1 [T1 ]  
 VBW 300 kHz      -0.10 dB  
 SWT 2.5 ms      294.871794869 kHz

Ref 117 dBµV/m      \*Att 10 dB

1 PK  
 MAXH



Center 920.2125 MHz      100 kHz/      Span 1 MHz

Date: 18.FEB.2014 12:59:58

**920.2125 MHz – 20 dB bandwidth**

### 3.4 Peak power output

Para. No.: 15.249 (a) / A2.9

Test Performed By: G.Suhanthakumar	Date of Test: 2014.02.18
------------------------------------	--------------------------

**Test Results: Complies**

**Measurement data:**

#### Maximum field strength

RF channel	916.2125MHz	918.2125MHz	920.2125MHz
VP: Measured value (dB $\mu$ V/m)	92.39	90.88	92.29
HP: Measured value (dB $\mu$ V/m)	93.11	91.68	92.99

#### Calculated erp

RF channel	916.2125MHz	918.2125MHz	920.2125MHz
Radiated power (mW)	0.374	0.269	0.363
Radiated e.r.p. (dBm)	-4.27	-5.69	-4.39
Declared antenna gain dBd	0	0	0
Calculated conducted power (mW)	0.374	0.269	0.363

Radiated measurements are performed at 3 m distance.

Tested according to KDB 558074 D01 DTS Meas Guidance v03r01, Section 9.1.1.

EIRP is calculated according to KDB 558074 D01 DTS Meas Guidance v03r01, Section 12.2.2. (e)

The maximum field strength is obtained in XY plane and Vertical polarization.

Detachable antenna?

Yes  No

If detachable, is the antenna connector non-standard?

Yes  No

New batteries were used.

#### Requirements:

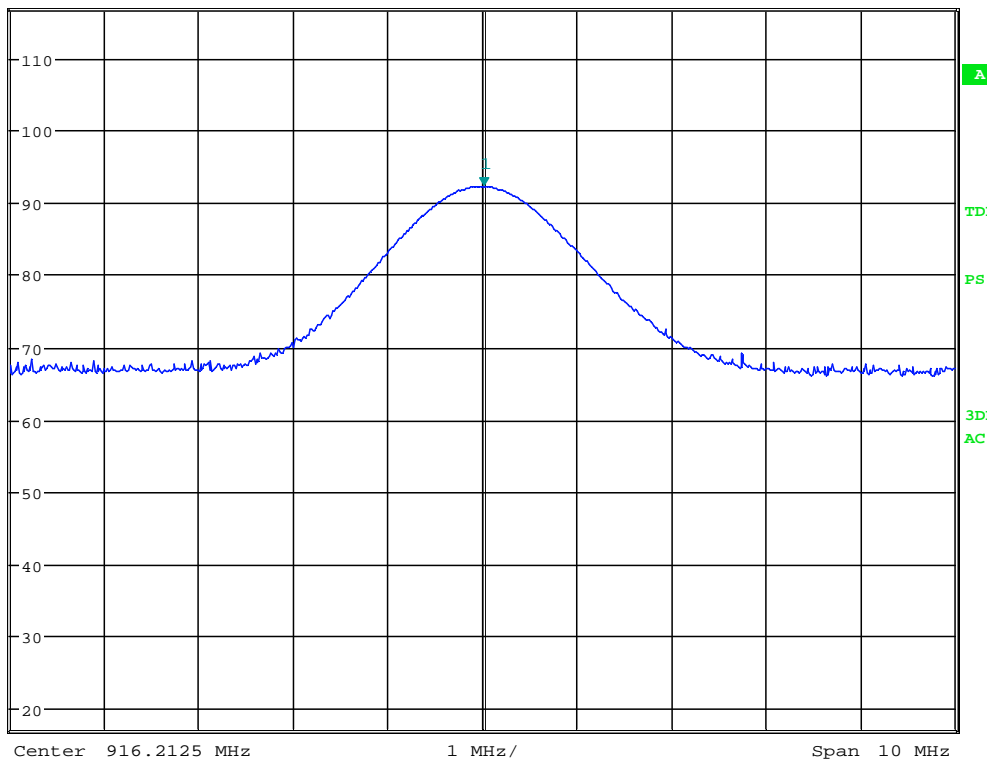
The maximum peak output power shall be  $\leq 94$ dB $\mu$ V/m



**MARKER 1**  
 916.2285256 MHz  
 Ref 117 dB $\mu$ V/m \* Att 10 dB

\* RBW 1 MHz  
 VBW 3 MHz  
 SWT 2.5 ms  
 Marker 1 [T1 ]  
 92.39 dB $\mu$ V/m  
 916.228525641 MHz

1 PK  
 MAXH



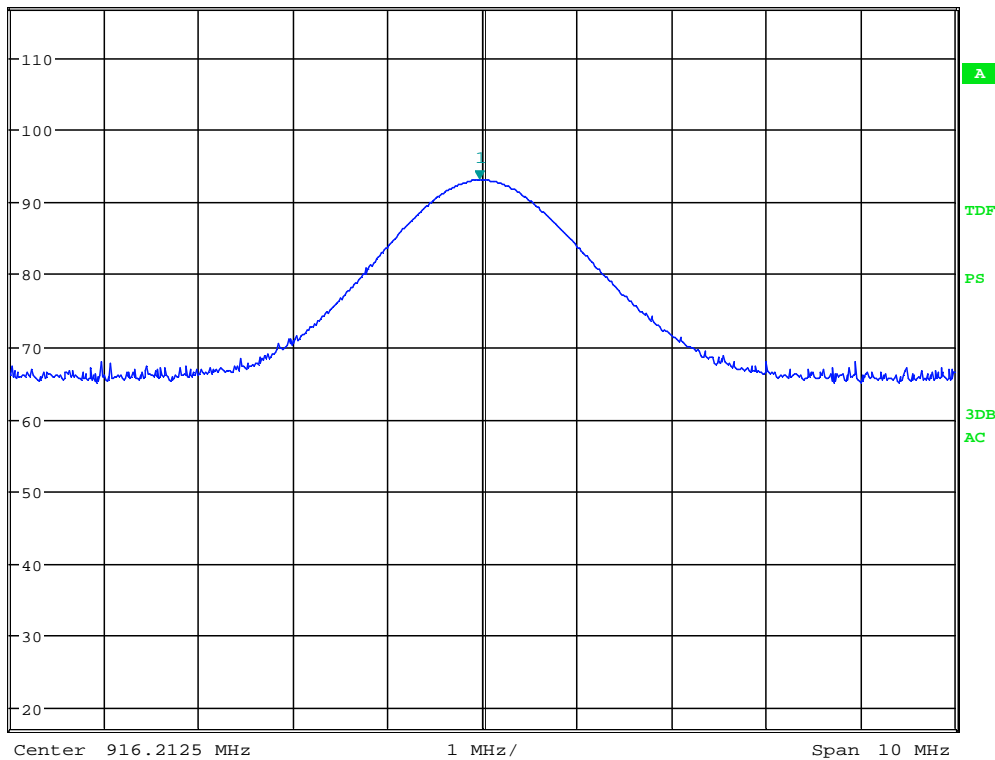
Date: 18.FEB.2014 13:08:42

VP: 916.2125MHz – Field strength



<b>MARKER 1</b>	* RBW 1 MHz	Marker 1 [T1 ]
916.1804487 MHz	VBW 3 MHz	93.11 dBµV/m
Ref 117 dBµV/m	* Att 10 dB	SWT 2.5 ms
		916.180448718 MHz

1 PK  
MAXH



Date: 18.FEB.2014 13:02:27

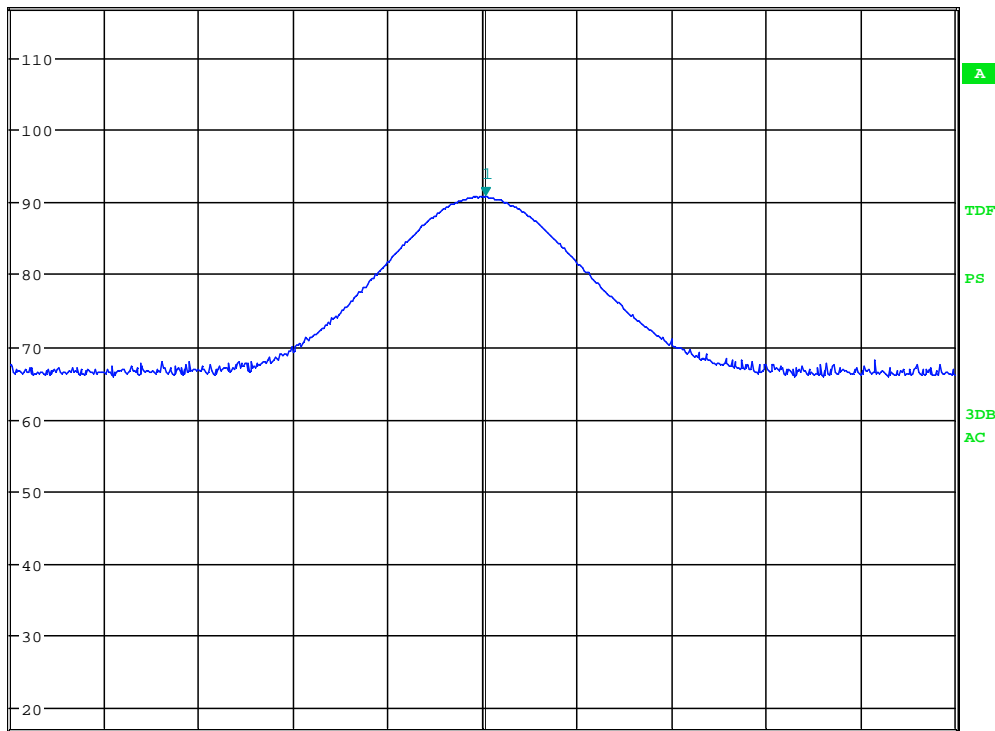
HP: 916.2125MHz – Field strength



**MARKER 1**  
 918.2445513 MHz  
 Ref 117 dBµV/m \* Att 10 dB

\* RBW 1 MHz  
 VBW 3 MHz  
 SWT 2.5 ms  
 Marker 1 [T1 ]  
 90.88 dBµV/m  
 918.244551282 MHz

1 PK  
 MAXH



Center 918.2125 MHz 1 MHz/ Span 10 MHz

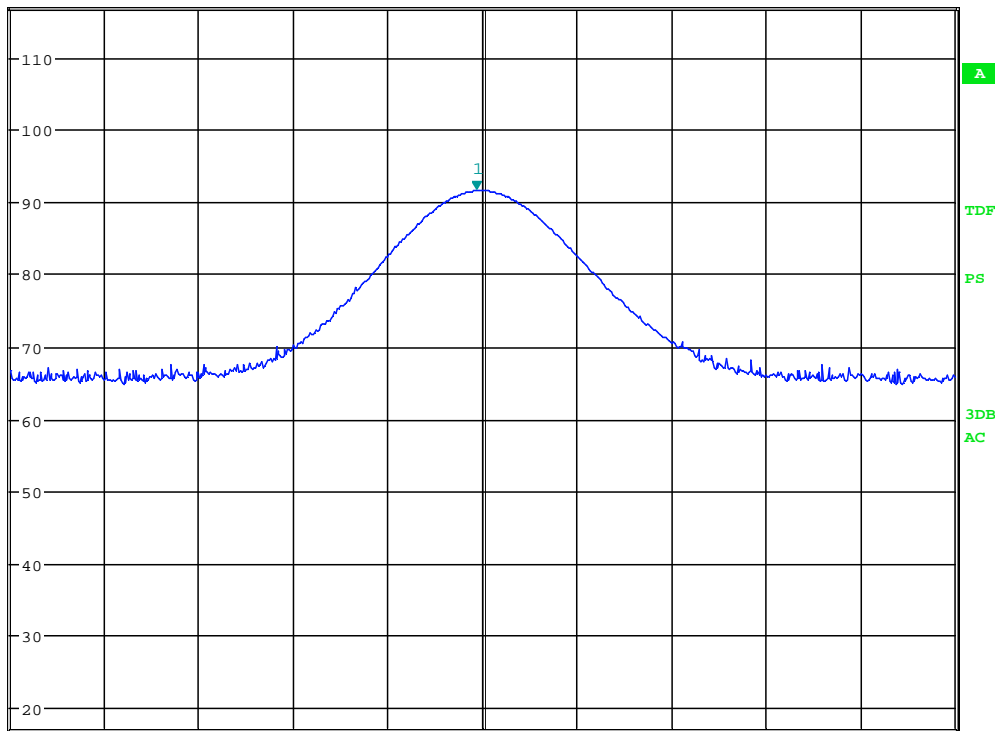
Date: 18.FEB.2014 13:16:26

VP: 918.2125MHz – Field strength



<b>MARKER 1</b>	* RBW 1 MHz	Marker 1 [T1 ]
918.1483974 MHz	VBW 3 MHz	91.68 dBµV/m
Ref 117 dBµV/m	* Att 10 dB	SWT 2.5 ms
		918.148397436 MHz

1 PK  
MAXH



Date: 18.FEB.2014 13:13:04

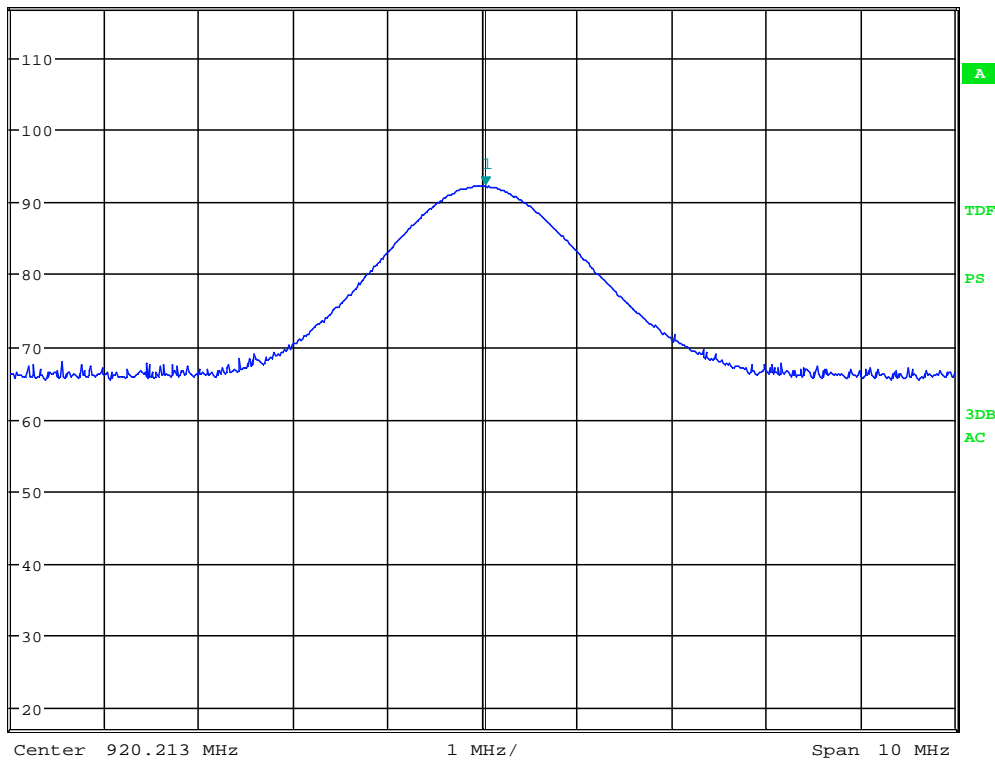
HP: 918.2125MHz – Field strength





<b>MARKER 1</b>	* RBW 1 MHz	Marker 1 [T1 ]
920.2450513 MHz	VBW 3 MHz	92.29 dBµV/m
Ref 117 dBµV/m	* Att 10 dB	SWT 2.5 ms
		920.245051282 MHz

1 PK  
MAXH



Date: 18.FEB.2014 12:55:38

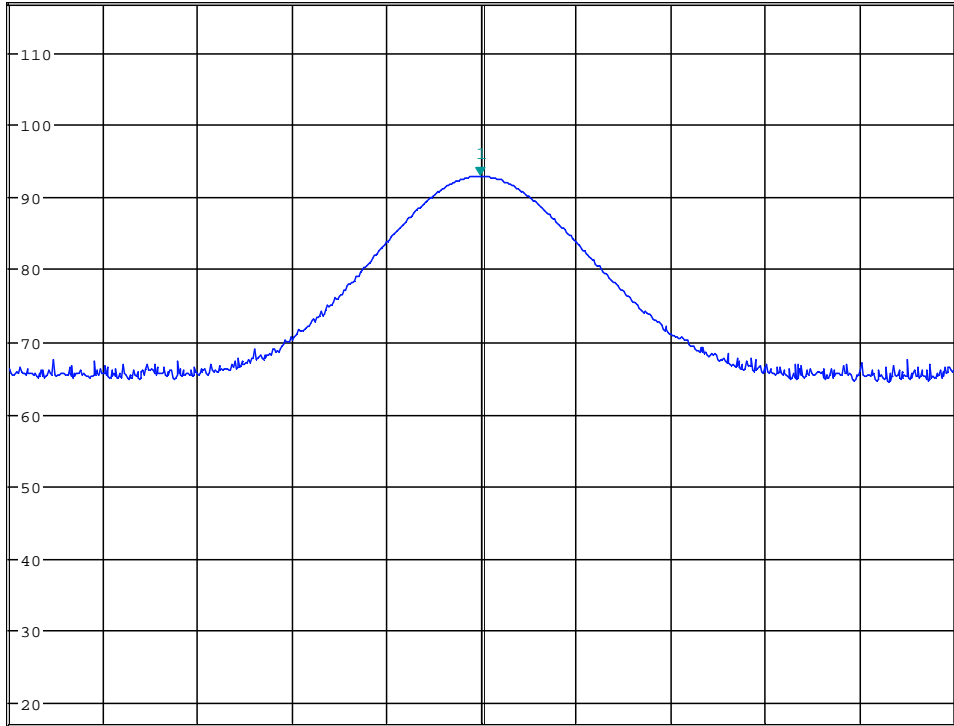
VP: 920.2125MHz – Field strength



\* RBW 1 MHz      Marker 1 [T1 ]  
 VBW 3 MHz      92.99 dBµV/m  
 SWT 2.5 ms      920.196974359 MHz

Ref 117 dBµV/m      \* Att 10 dB

1 PK  
 MAXH



Center 920.213 MHz      1 MHz/      Span 10 MHz

Date: 18.FEB.2014 12:53:40

HP: 920.2125MHz – Field strength

### 3.5 Spurious emissions (radiated)

Para. No.: 15.209 / 15.249 (e) / A2.9 / 4.9

Test Performed By: G.Suwanthakumar	Date of Test: 2014.02.18 – 2014.02.19
------------------------------------	---------------------------------------

**Test Results: Complies**

#### Measurement Data:

#### Radiated Emissions with antenna, 1-10 GHz

1-10 GHz measured at a distance of 3m.

#### Measured with Peak Detector:

Frequency	Channel	Field strength, Peak	Duty cycle corr. factor	Limit	Margin
GHz	MHz	dB $\mu$ V/m	dB	dB $\mu$ V/m	dB
1.832	916.2125	49.58	-	74	24.42
1.836	918.2125	50.73	-	74	23.27
1.840	920.2125	50.82	-	74	23.18
2.748	916.2125	50.07	-	74	23.93
2.754	918.2125	47.84	-	74	26.16
2.760	920.2125	47.37	-	74	26.63
3.664	916.2125	48.86	-	74	25.14
3.672	918.2125	48.90	-	74	25.1
3.680	920.2125	48.84	-	74	25.16
4 - 10	All channels	None detected	-	-	-

**Average Detector:**

Frequency	Channel	Field strength, Peak	Duty cycle corr. factor	Limit	Margin
GHz	MHz	dB $\mu$ V/m	dB	dB $\mu$ V/m	dB
1.832	916.2125	46.65	-	54	7.35
1.836	918.2125	48.27	-	54	5.73
1.840	920.2125	48.49	-	54	5.51
2.748	916.2125	45.71	-	54	8.29
2.754	918.2125	42.79	-	54	11.21
2.760	920.2125	42.37	-	54	11.63
3.664	916.2125	42.99	-	54	11.01
3.672	918.2125	42.79	-	54	11.21
3.680	920.2125	43.16	-	54	10.84
4 - 10	All channels	None detected	-	-	-

Tested according to KDB 558074 D01 DTS Measurement Guidance v03r01, Section 13.1 & 13.3.2.

The maximum is observed in Vertical polarization for 2<sup>nd</sup> harmonic & Horizontal polarization for 3<sup>rd</sup> & 4<sup>th</sup> Harmonic.

The test sample was transmitting with 100% duty cycle for all tests.

Antenna factor, amplifier gain and cable loss are included in spectrum analyzer "Transducer factor".

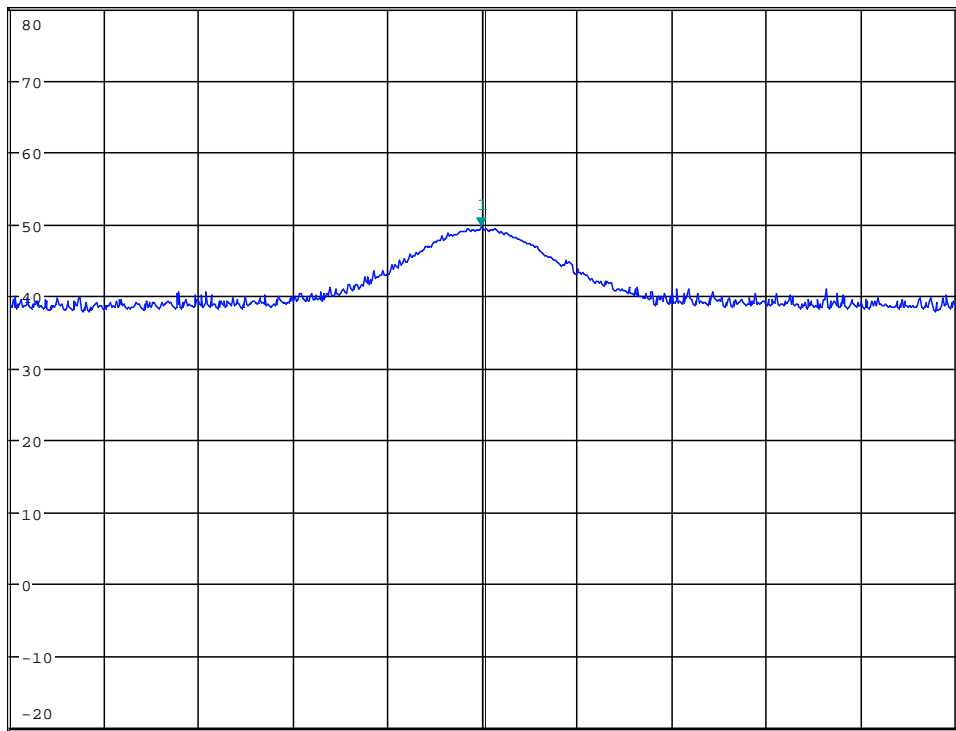
**Requirement:**

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.



**MARKER 1**  
 1.832408974 GHz  
 Ref 80 dB $\mu$ V/m \* Att 10 dB \* RBW 1 MHz \* VBW 3 MHz \* SWT 100 ms  
 Marker 1 [T1 ]  
 49.58 dB $\mu$ V/m  
 1.832408974 GHz

1 PK  
 MAXH



Center 1.832425 GHz 1 MHz/ Span 10 MHz

Date: 18.FEB.2014 14:15:51

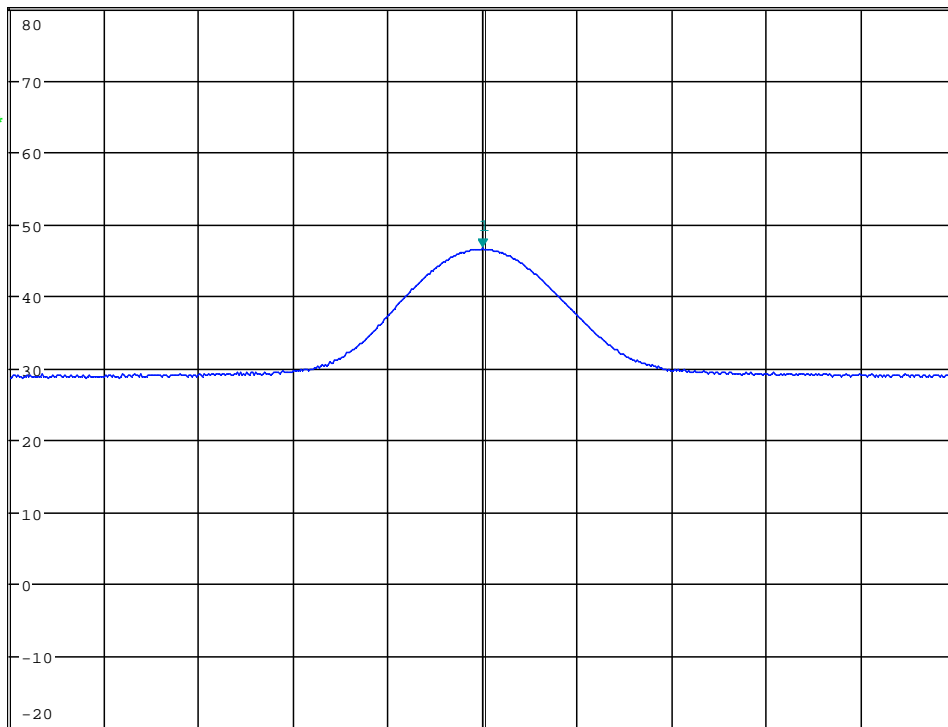
**VP: 2<sup>nd</sup> Harmonic -Pk with HP-filter - ch 916.2125MHz**



**MARKER 1**  
 1.832425 GHz  
 Ref 80 dB $\mu$ V/m \* Att 10 dB

\* RBW 1 MHz  
 VBW 10 MHz  
 \* SWT 100 ms  
 Marker 1 [T1 ]  
 46.65 dB $\mu$ V/m  
 1.832425000 GHz

1 RM \*  
 MAXH



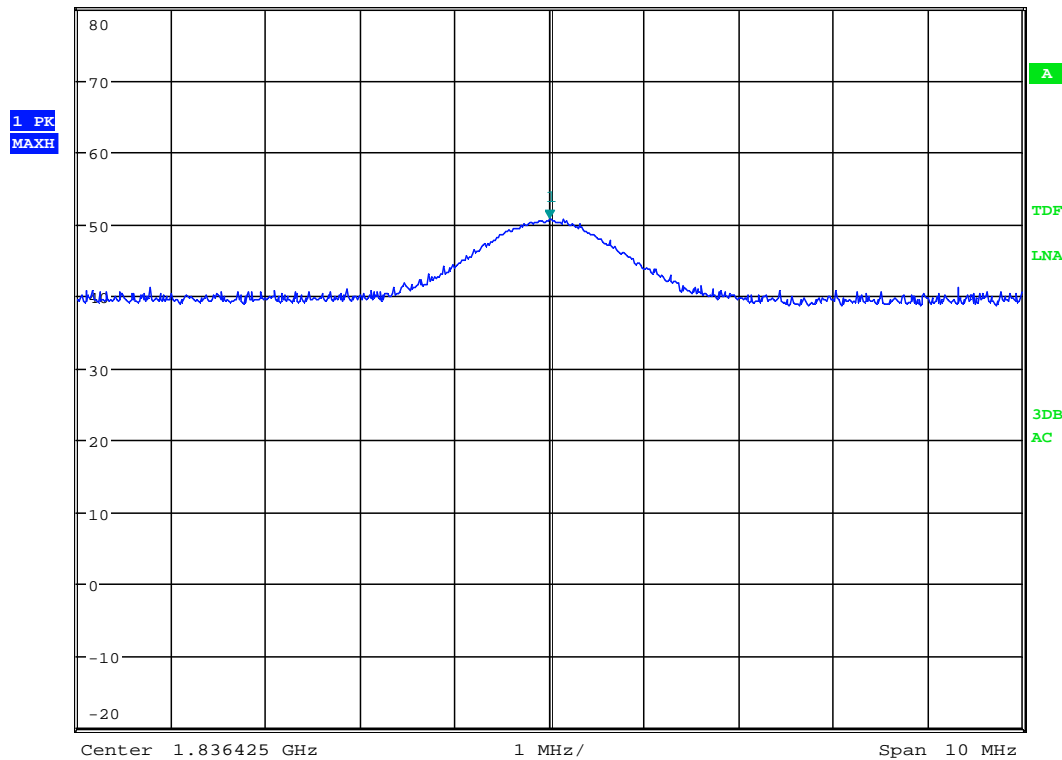
Center 1.832425 GHz 1 MHz/ Span 10 MHz

Date: 18.FEB.2014 14:15:18

**VP: 2<sup>nd</sup> Harmonic -Av with HP-filter - ch 916.2125MHz**



<b>MARKER 1</b>		* RBW 1 MHz	Marker 1 [T1 ]
1.836425 GHz		VBW 3 MHz	50.73 dBμV/m
Ref 80 dBμV/m	* Att 10 dB	* SWT 100 ms	1.836425000 GHz

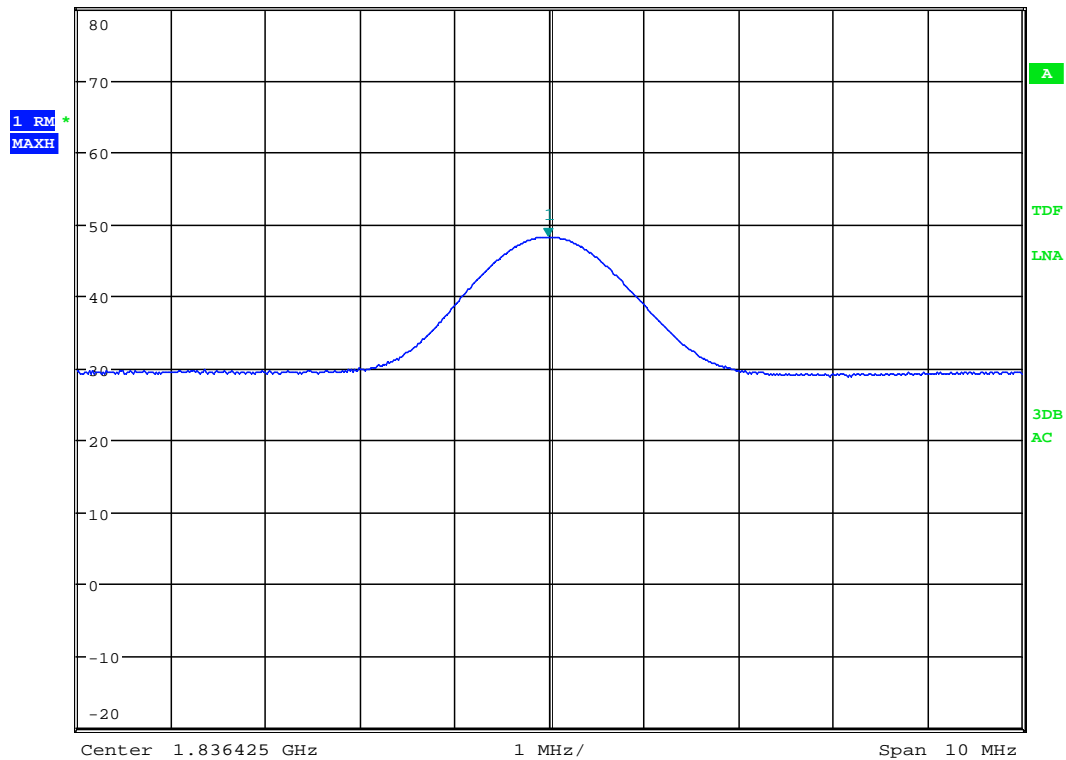


Date: 18.FEB.2014 14:10:39

**VP: 2<sup>nd</sup> Harmonic -Pk with HP-filter - ch 918.2125MHz**



<b>MARKER 1</b>	* RBW 1 MHz	Marker 1 [T1 ]
1.836408974 GHz	VBW 10 MHz	48.27 dBµV/m
Ref 80 dBµV/m	* Att 10 dB	* SWT 100 ms
		1.836408974 GHz



Date: 18.FEB.2014 14:11:07

**VP: 2<sup>nd</sup> Harmonic -Av with HP-filter - ch 918.2125MHz**



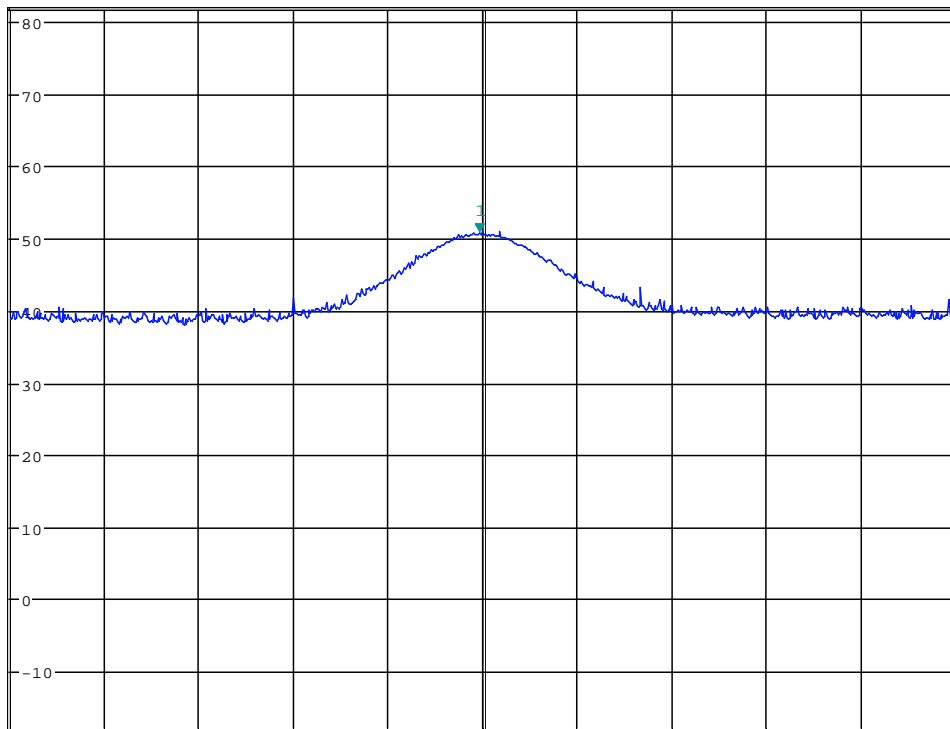


**MARKER 1**  
 1.840392949 GHz

\* RBW 1 MHz      Marker 1 [T1 ]  
 VBW 3 MHz      50.82 dBμV/m  
 \* SWT 100 ms    1.840392949 GHz

Ref 82 dBμV/m      \* Att 10 dB

1 PK  
 MAXH



Center 1.840425 GHz      1 MHz/      Span 10 MHz

Date: 18.FEB.2014 13:49:09

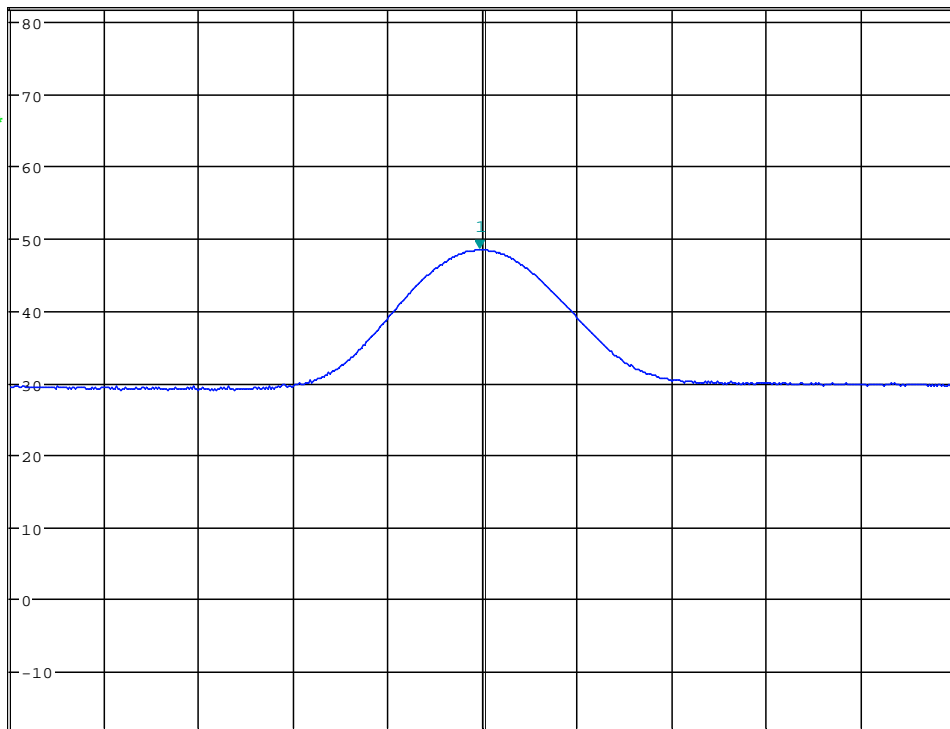
**VP: 2<sup>nd</sup> Harmonic -Pk with HP-filter - ch 920.2125MHz**



**MARKER 1**  
 1.840392949 GHz  
 Ref 82 dB $\mu$ V/m \* Att 10 dB

\* RBW 1 MHz      Marker 1 [T1 ]  
 VBW 10 MHz      48.49 dB $\mu$ V/m  
 \* SWT 100 ms      1.840392949 GHz

1 RM \*  
 MAXH



Center 1.840425 GHz      1 MHz/      Span 10 MHz

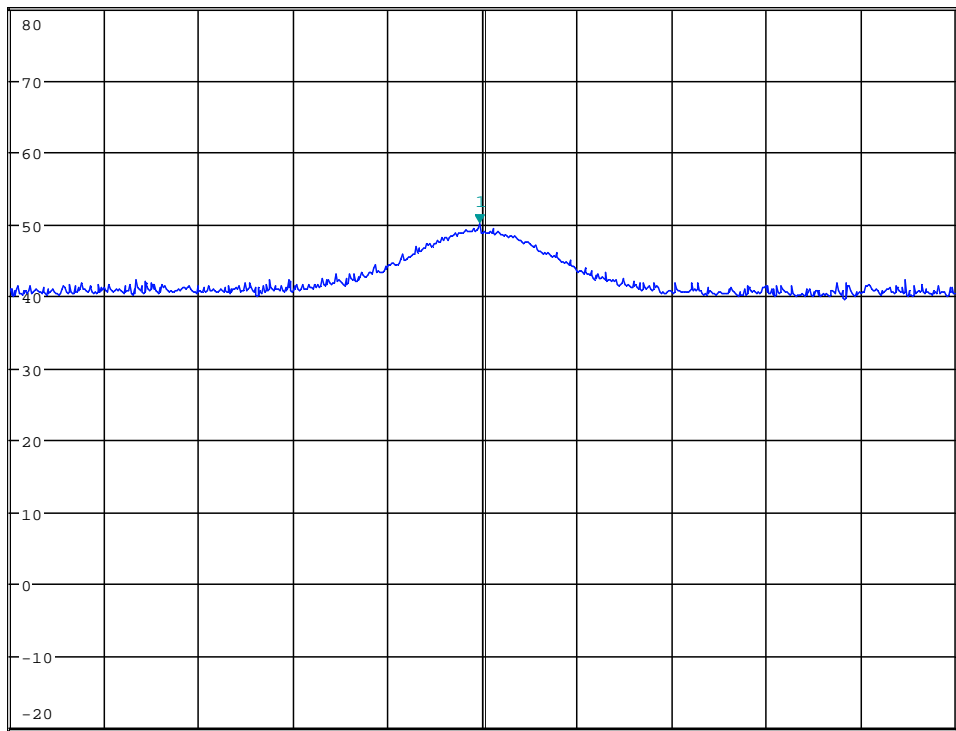
Date: 18.FEB.2014 13:51:29

**VP: 2<sup>nd</sup> Harmonic -Av with HP-filter - ch 920.2125MHz**



**MARKER 1**  
 2.748605449 GHz  
 Ref 80 dB $\mu$ V/m \* Att 10 dB \* RBW 1 MHz VBW 3 MHz \* SWT 100 ms  
 Marker 1 [T1 ]  
 50.07 dB $\mu$ V/m  
 2.748605449 GHz

1 PK  
 MAXH



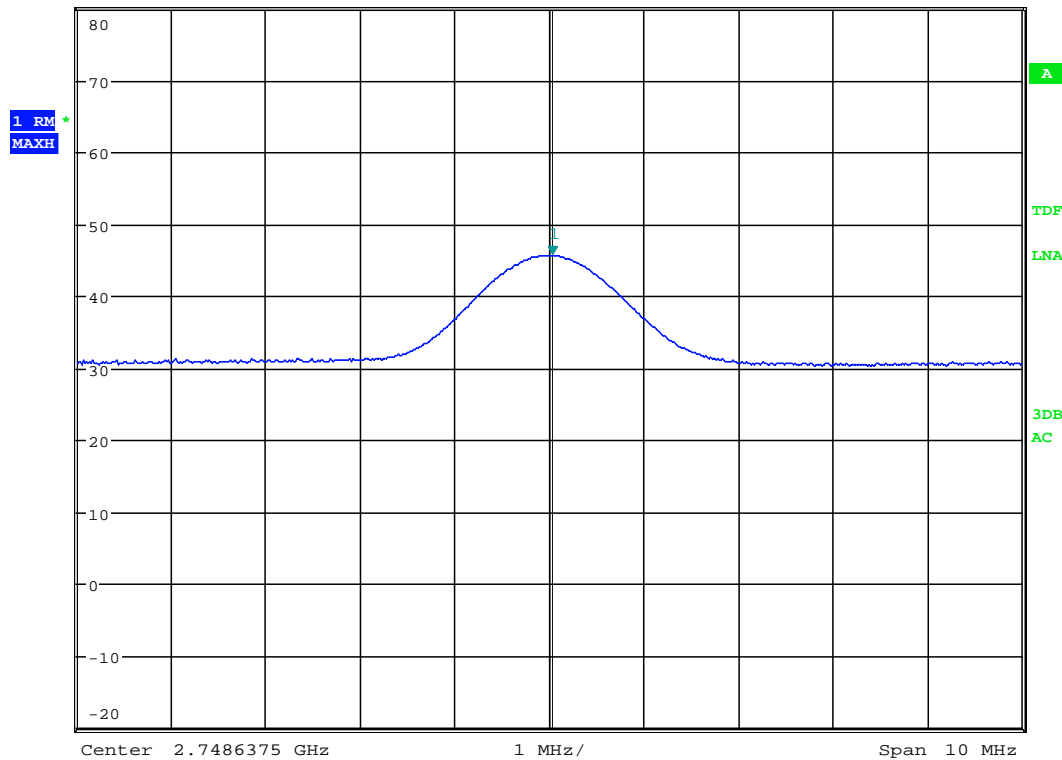
Center 2.7486375 GHz 1 MHz/ Span 10 MHz

Date: 18.FEB.2014 14:14:08

**HP: 3rd Harmonic -Pk with HP-filter - ch 916.2125MHz**



**MARKER 1**  
 2.748669551 GHz  
 Ref 80 dB $\mu$ V/m \* Att 10 dB \* RBW 1 MHz \* VBW 10 MHz \* SWT 100 ms  
 Marker 1 [T1 ]  
 45.71 dB $\mu$ V/m  
 2.748669551 GHz



Date: 18.FEB.2014 14:14:29

**HP: 3<sup>rd</sup> Harmonic -Av with HP-filter - ch 916.2125MHz**

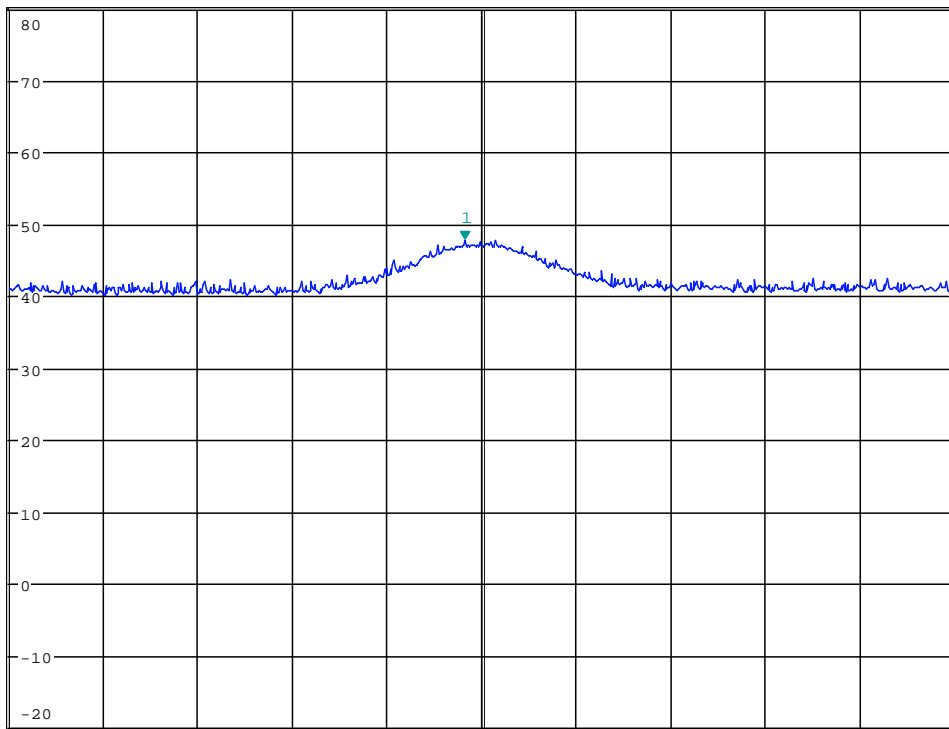


**MARKER 1**  
 2.754461218 GHz

\* RBW 1 MHz      Marker 1 [T1 ]  
 VBW 3 MHz      47.84 dBμV/m  
 \* SWT 100 ms    2.754461218 GHz

Ref 80 dBμV/m      \* Att 10 dB

1 PK  
 MAXH



Center 2.7546375 GHz      1 MHz/      Span 10 MHz

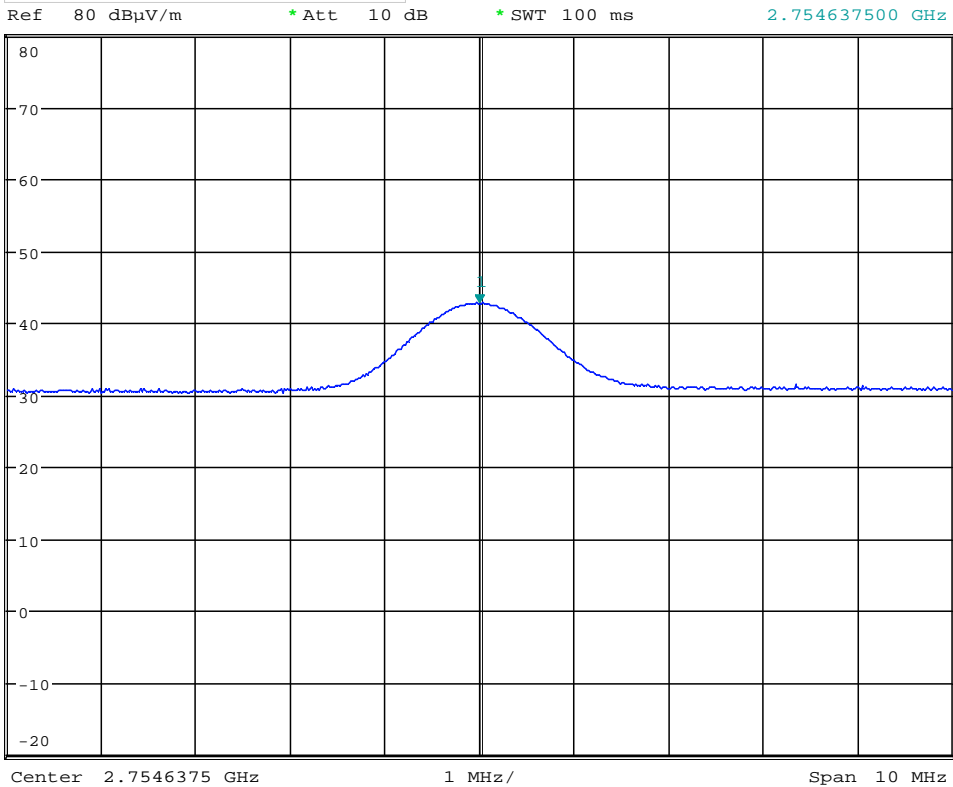
Date: 18.FEB.2014 14:13:00

**HP: 3<sup>rd</sup> Harmonic -Pk with HP-filter - ch 918.2125MHz**



**MARKER 1**  
 2.7546375 GHz

\* RBW 1 MHz  
 \* Att 10 dB  
 \* RBW 1 MHz  
 \* VBW 10 MHz  
 \* SWT 100 ms  
 Marker 1 [T1 ]  
 42.79 dB $\mu$ V/m  
 2.754637500 GHz



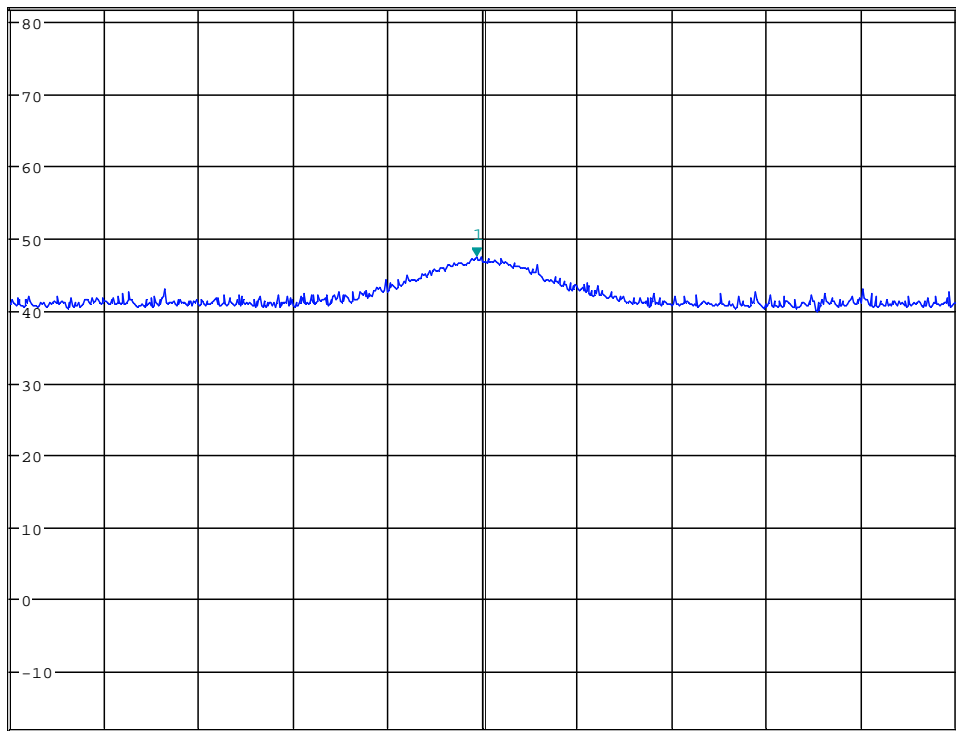
Date: 18.FEB.2014 14:11:57

**HP: 3<sup>rd</sup> Harmonic -Av with HP-filter - ch 918.2125MHz**



**MARKER 1**  
 2.760573897 GHz  
 Ref 82 dB $\mu$ V/m \* Att 10 dB \* RBW 1 MHz \* VBW 3 MHz \* SWT 100 ms  
 Marker 1 [T1 ]  
 47.37 dB $\mu$ V/m  
 2.760573897 GHz

1 PK  
 MAXH



Center 2.760638 GHz 1 MHz/ Span 10 MHz

Date: 18.FEB.2014 14:02:58

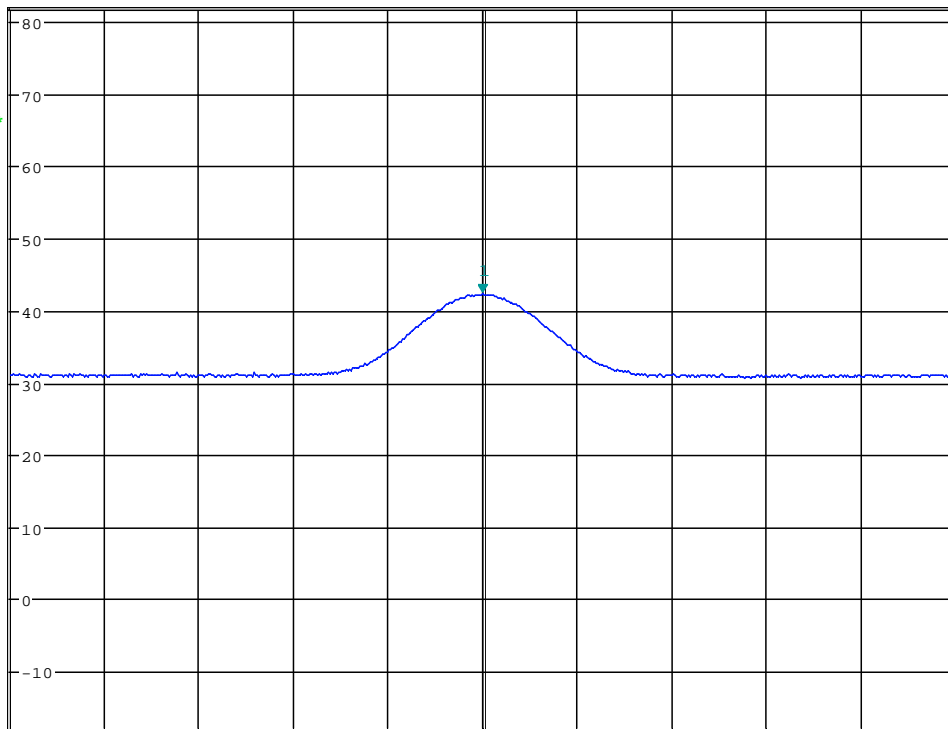
**HP: 3<sup>rd</sup> Harmonic -Pk with HP-filter - ch 920.2125MHz**



**MARKER 1**  
 2.760638 GHz  
 Ref 82 dB $\mu$ V/m \* Att 10 dB

\* RBW 1 MHz  
 VBW 10 MHz  
 \* SWT 100 ms  
 Marker 1 [T1 ]  
 42.37 dB $\mu$ V/m  
 2.760638000 GHz

1 RM  
 MAXH



Center 2.760638 GHz 1 MHz/ Span 10 MHz

Date: 18.FEB.2014 14:03:29

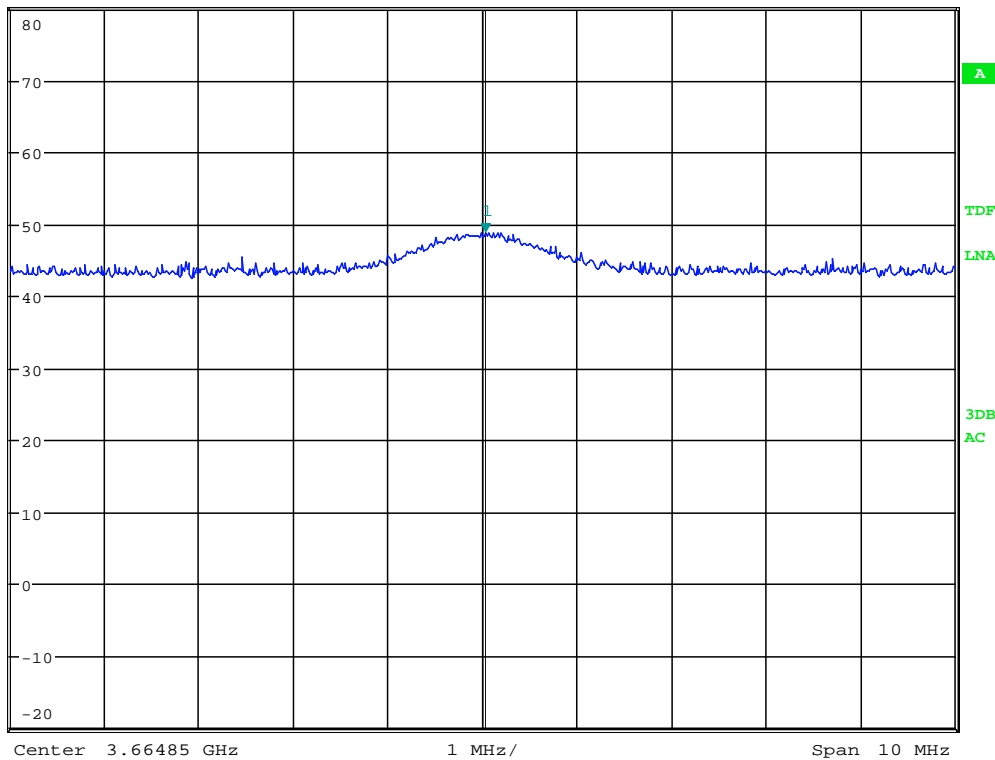
**HP: 3<sup>rd</sup> Harmonic -Av with HP-filter - ch 920.2125MHz**





**MARKER 1**  
 3.664882051 GHz  
 Ref 80 dB $\mu$ V/m \* Att 10 dB \* RBW 1 MHz \* VBW 3 MHz \* SWT 100 ms  
 Marker 1 [T1 ]  
 48.86 dB $\mu$ V/m  
 3.664882051 GHz

1 PK  
 MAXH

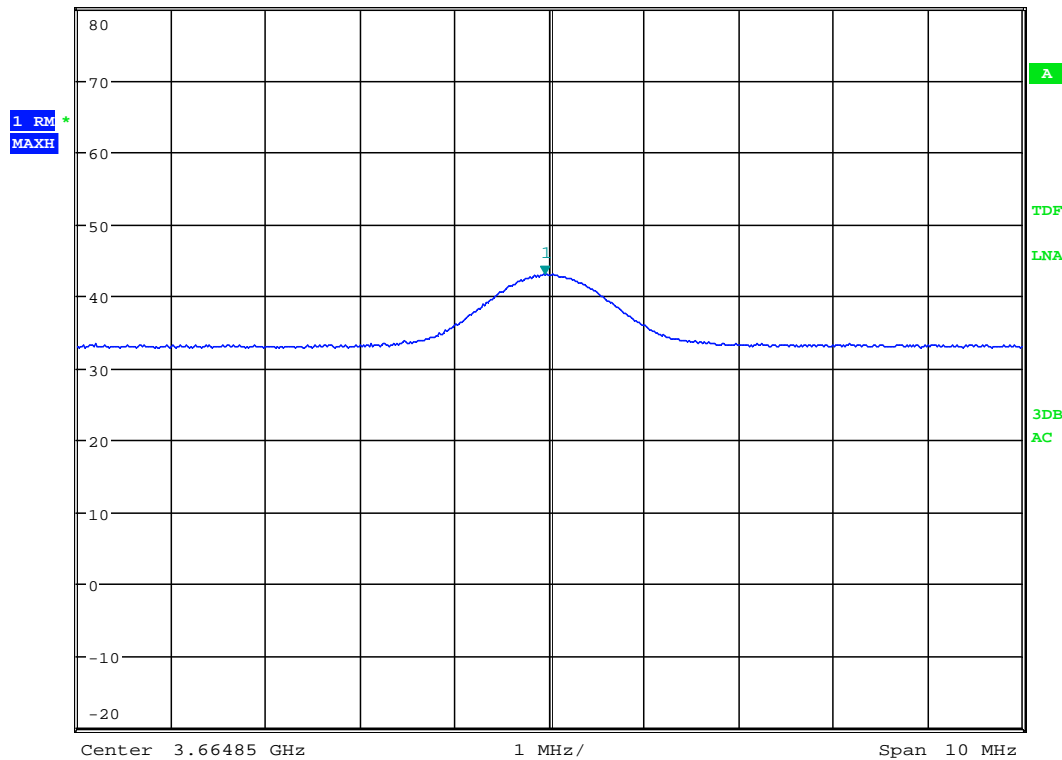


Date: 18.FEB.2014 14:19:48

**HP: 4<sup>th</sup> Harmonic -Pk with HP-filter - ch 916.2125MHz**



<b>MARKER 1</b>	* RBW 1 MHz	Marker 1 [T1 ]
3.664801923 GHz	VBW 10 MHz	42.99 dB $\mu$ V/m
Ref 80 dB $\mu$ V/m	* Att 10 dB	* SWT 100 ms
		3.664801923 GHz



Date: 18.FEB.2014 14:20:26

**HP: 4<sup>th</sup> Harmonic -Av with HP-filter - ch 916.2125MHz**

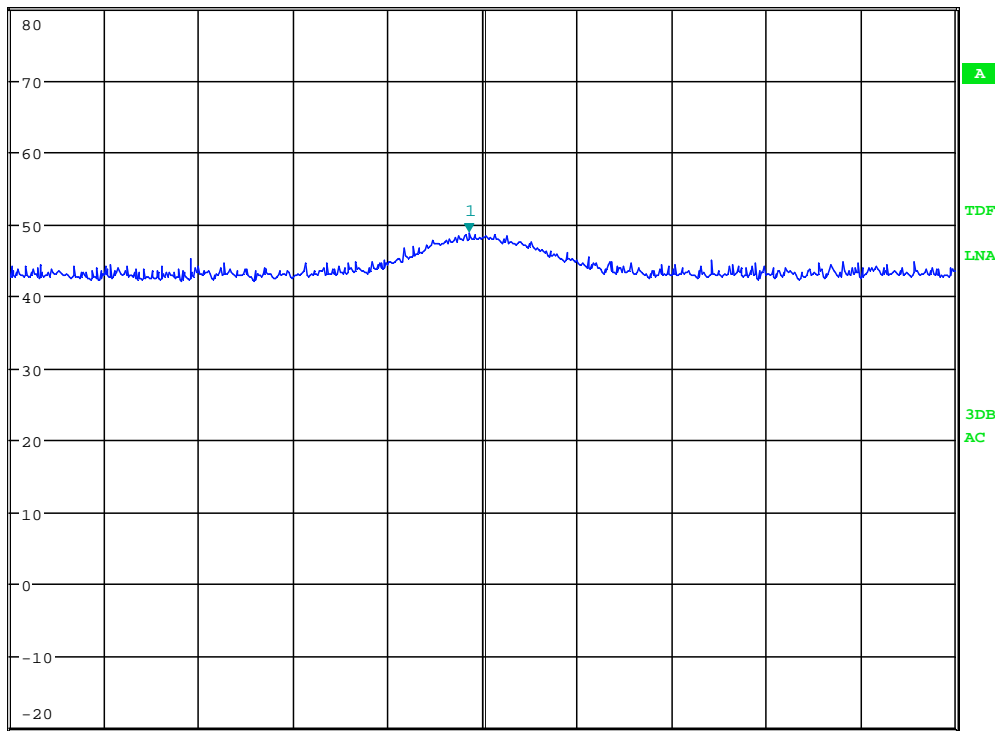


**MARKER 1**  
 3.672705769 GHz

\* RBW 1 MHz  
 VBW 3 MHz  
 \* SWT 100 ms  
 Marker 1 [T1 ]  
 48.90 dB $\mu$ V/m  
 3.672705769 GHz

Ref 80 dB $\mu$ V/m \* Att 10 dB

1 PK  
 MAXH



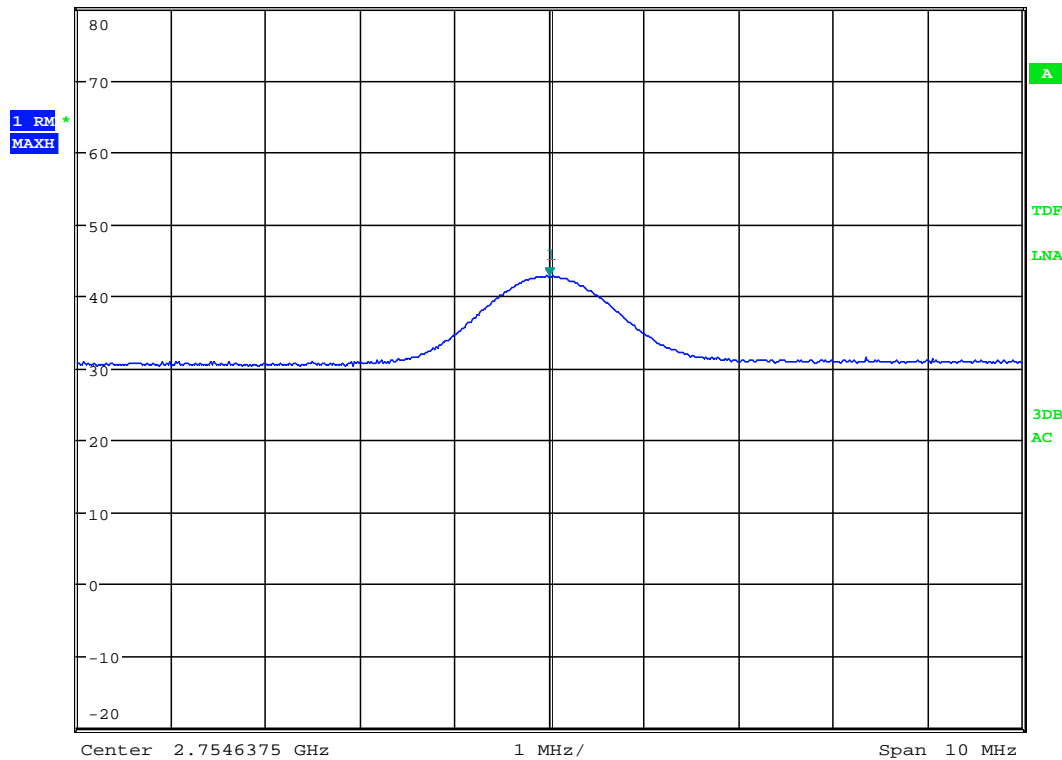
Center 3.67285 GHz 1 MHz/ Span 10 MHz

Date: 18.FEB.2014 14:23:50

**HP: 4<sup>th</sup> Harmonic -Pk with HP-filter - ch 918.2125MHz**



**MARKER 1**  
 2.7546375 GHz  
 Ref 80 dB $\mu$ V/m \* Att 10 dB \* RBW 1 MHz \* VBW 10 MHz \* SWT 100 ms  
 Marker 1 [T1 ]  
 42.79 dB $\mu$ V/m  
 2.754637500 GHz



Date: 18.FEB.2014 14:11:57

**HP: 4<sup>th</sup> Harmonic -Av with HP-filter - ch 918.2125MHz**

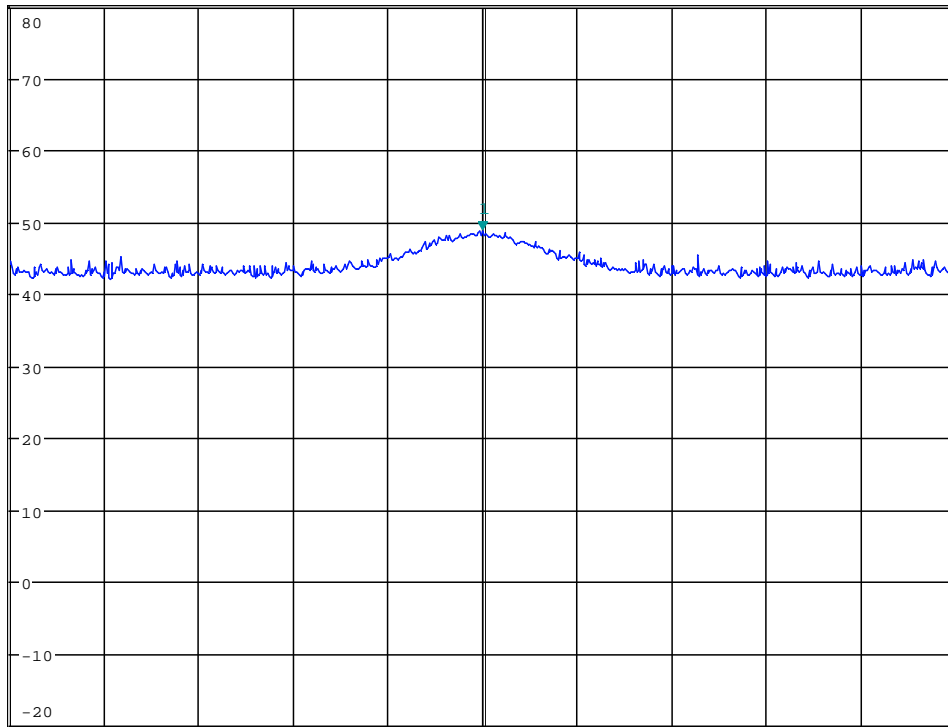


**MARKER 1**  
 3.68085 GHz

\* RBW 1 MHz  
 VBW 3 MHz  
 \* SWT 100 ms  
 Marker 1 [T1 ]  
 48.84 dB $\mu$ V/m  
 3.680850000 GHz

Ref 80 dB $\mu$ V/m \* Att 10 dB

1 PK  
 MAXH



Center 3.68085 GHz 1 MHz/ Span 10 MHz

Date: 18.FEB.2014 14:23:11

**HP: 4<sup>th</sup> Harmonic -Pk with HP-filter - ch 920.2125MHz**

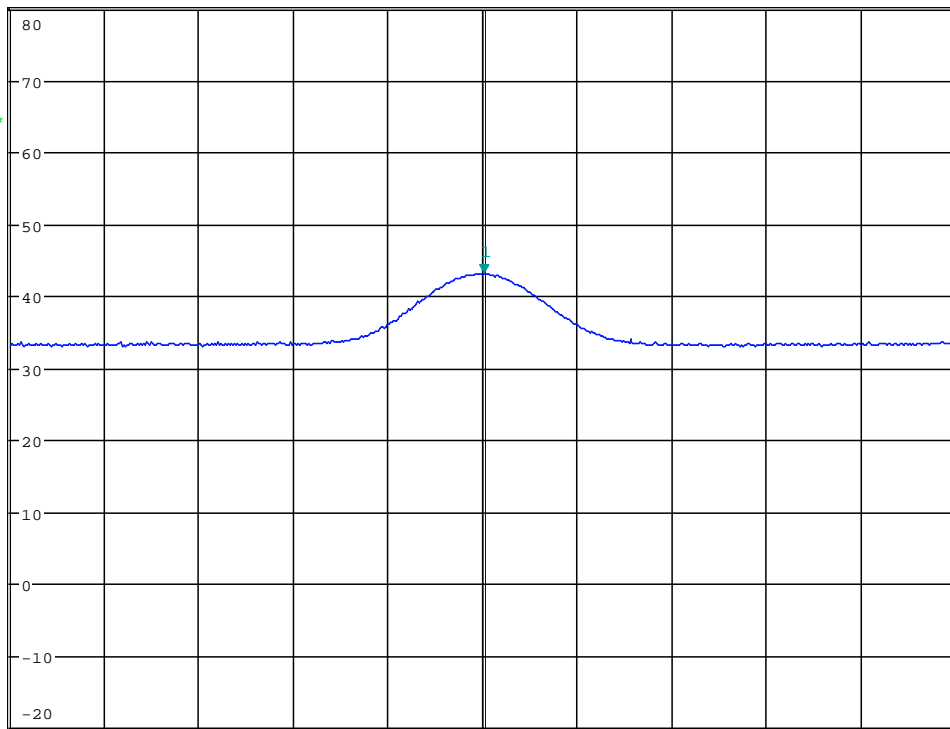


**MARKER 1**  
 3.680866026 GHz

\* RBW 1 MHz      Marker 1 [T1 ]  
 VBW 10 MHz      43.16 dBμV/m  
 \* SWT 100 ms      3.680866026 GHz

Ref 80 dBμV/m      \* Att 10 dB

1 RM \*  
 MAXH



Center 3.68085 GHz      1 MHz/      Span 10 MHz

Date: 18.FEB.2014 14:22:48

**HP: 4<sup>th</sup> Harmonic -Av with HP-filter - ch 920.2125MHz**

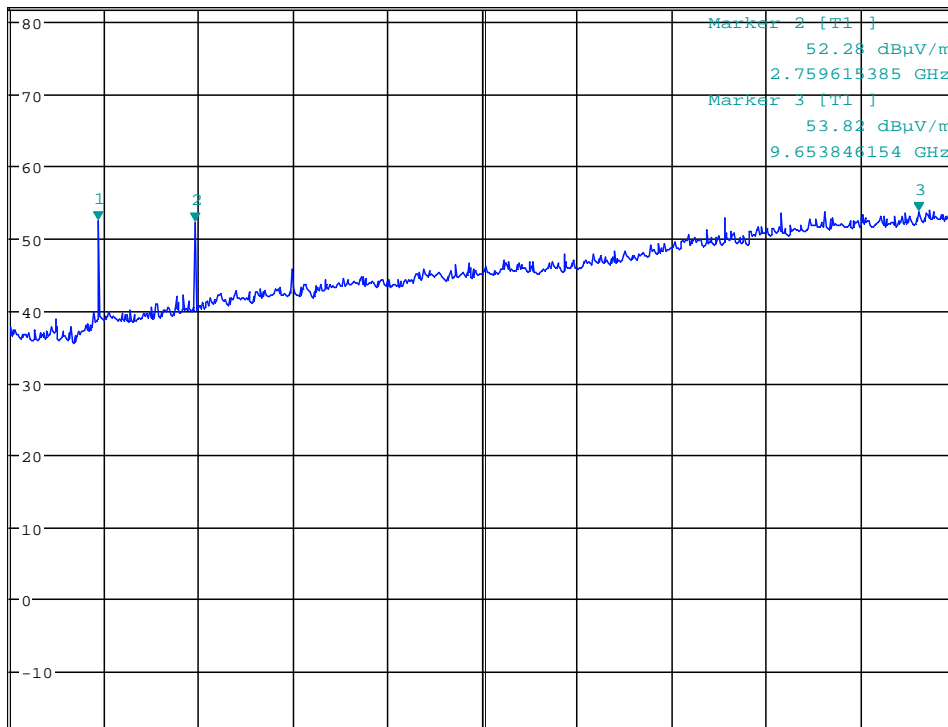


**MARKER 1**  
 1.836538462 GHz  
 Ref 82 dBμV/m \* Att 5 dB

\* RBW 1 MHz  
 VBW 3 MHz  
 \* SWT 100 ms

Marker 1 [T1 ]  
 52.44 dBμV/m  
 1.836538462 GHz

1 PK  
 MAXH



Start 1 GHz 900 MHz/ Stop 10 GHz

Date: 18.FEB.2014 14:06:01

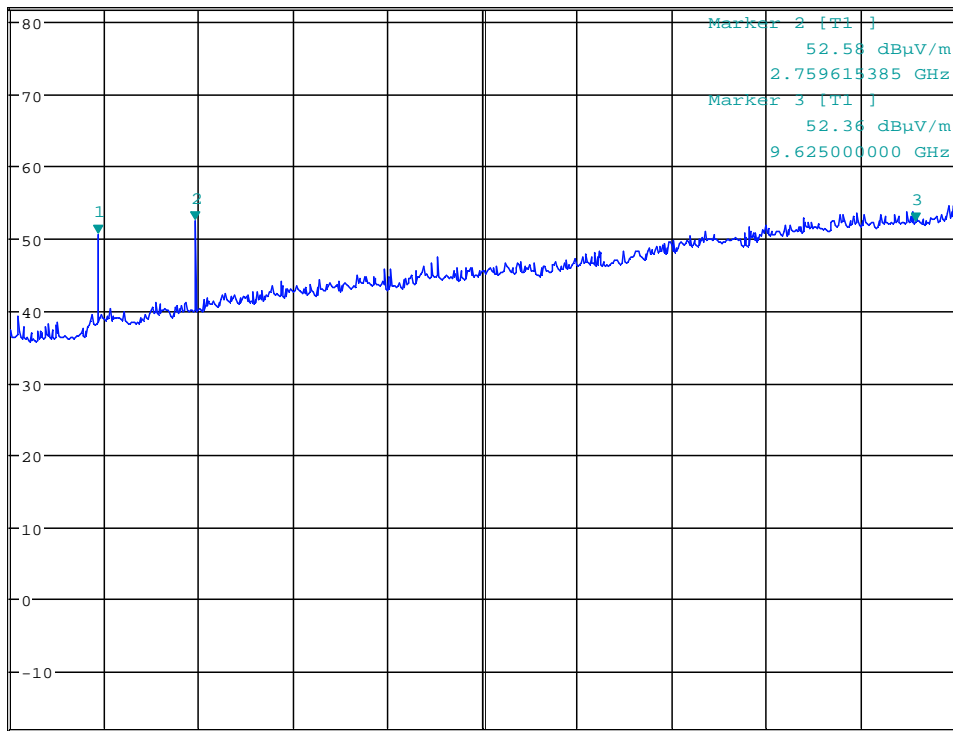
VP: pre-view scan 1 - 10 GHz -Peak scan with HP-filter - ch 920.2125MHz



**MARKER 1**  
 1.836538462 GHz  
 Ref 82 dB $\mu$ V/m \* Att 5 dB

\* RBW 1 MHz Marker 1 [T1 ]  
 VBW 3 MHz 50.66 dB $\mu$ V/m  
 \* SWT 100 ms 1.836538462 GHz

1 PK  
 MAXH



Start 1 GHz 900 MHz/ Stop 10 GHz

Date: 18.FEB.2014 14:04:53

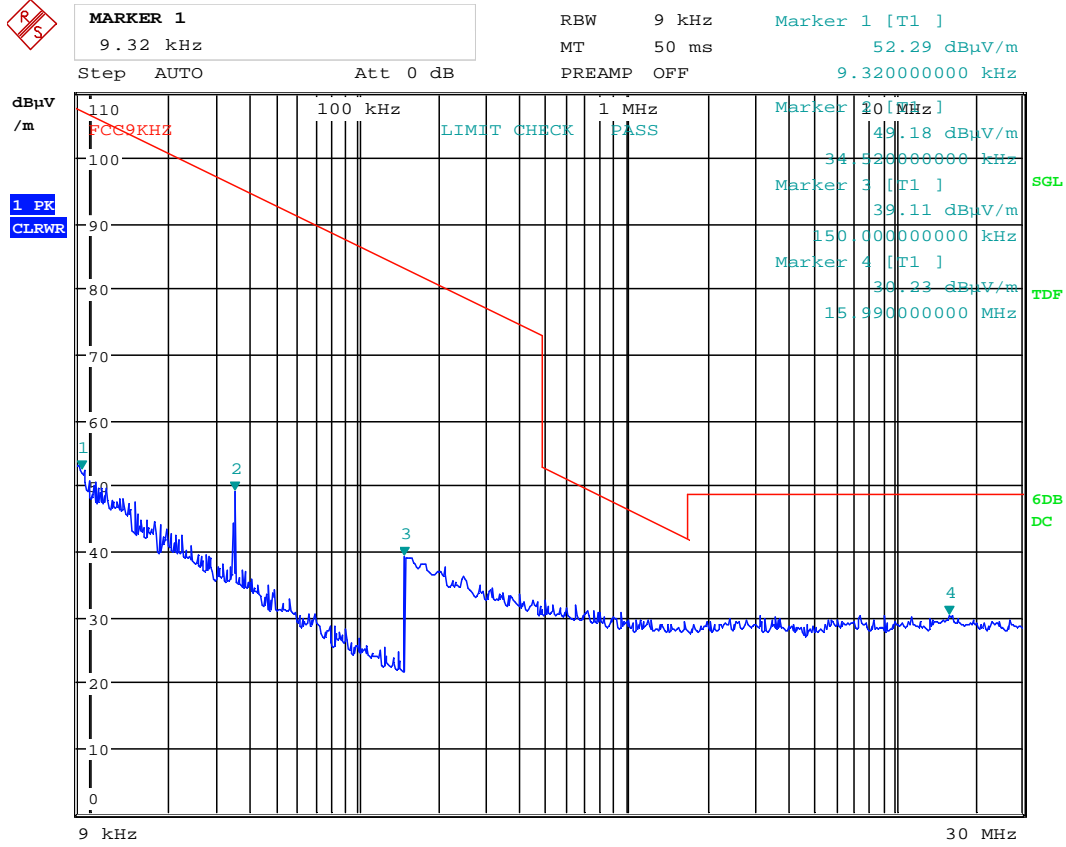
HP: pre-view scan 1 - 10 GHz -Peak scan with HP-filter - ch 920.2125MHz



**Radiated emissions 9kHz – 30 MHz.**

Detector: Peak

Measuring distance 10 m.



Date: 18.FEB.2014 10:35:24

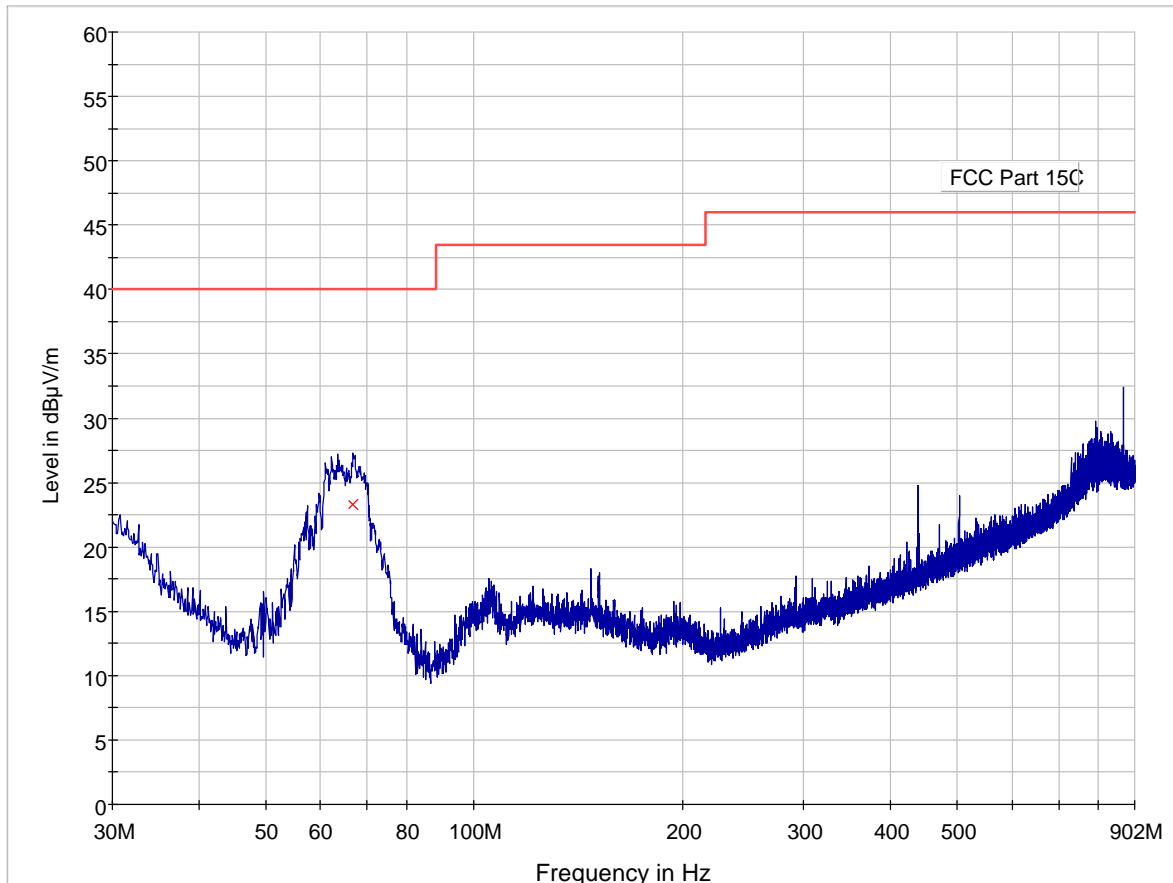
**Radiated emissions 30 – 1000 MHz.**

Detector: Peak

Measuring distance 3 m.

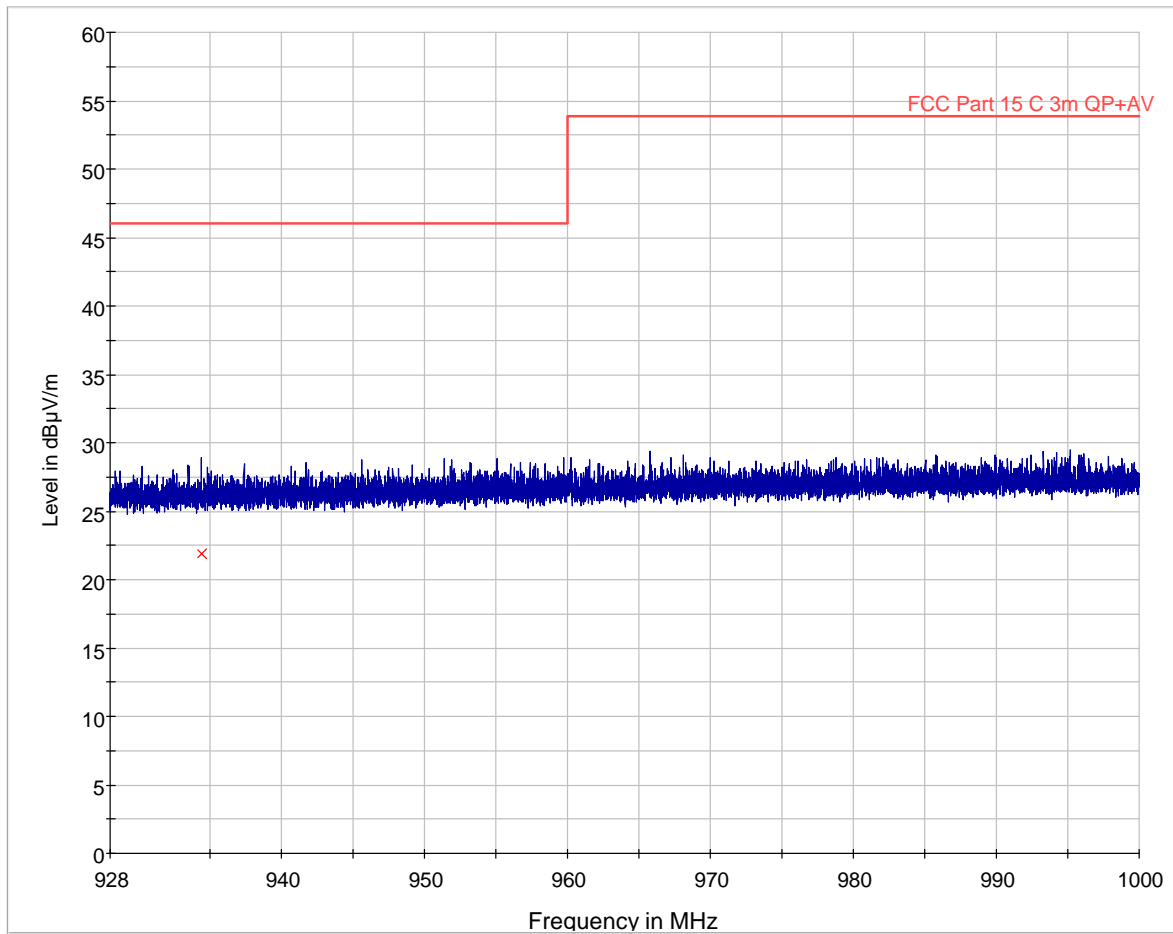
The graph shows peak scan and highest values. Since there is no spurious found no QP values are measured.

**FCC Pt15 C 30-1000 MHz 3m**



**30 - 902MHz - channel 916.2125MHz**

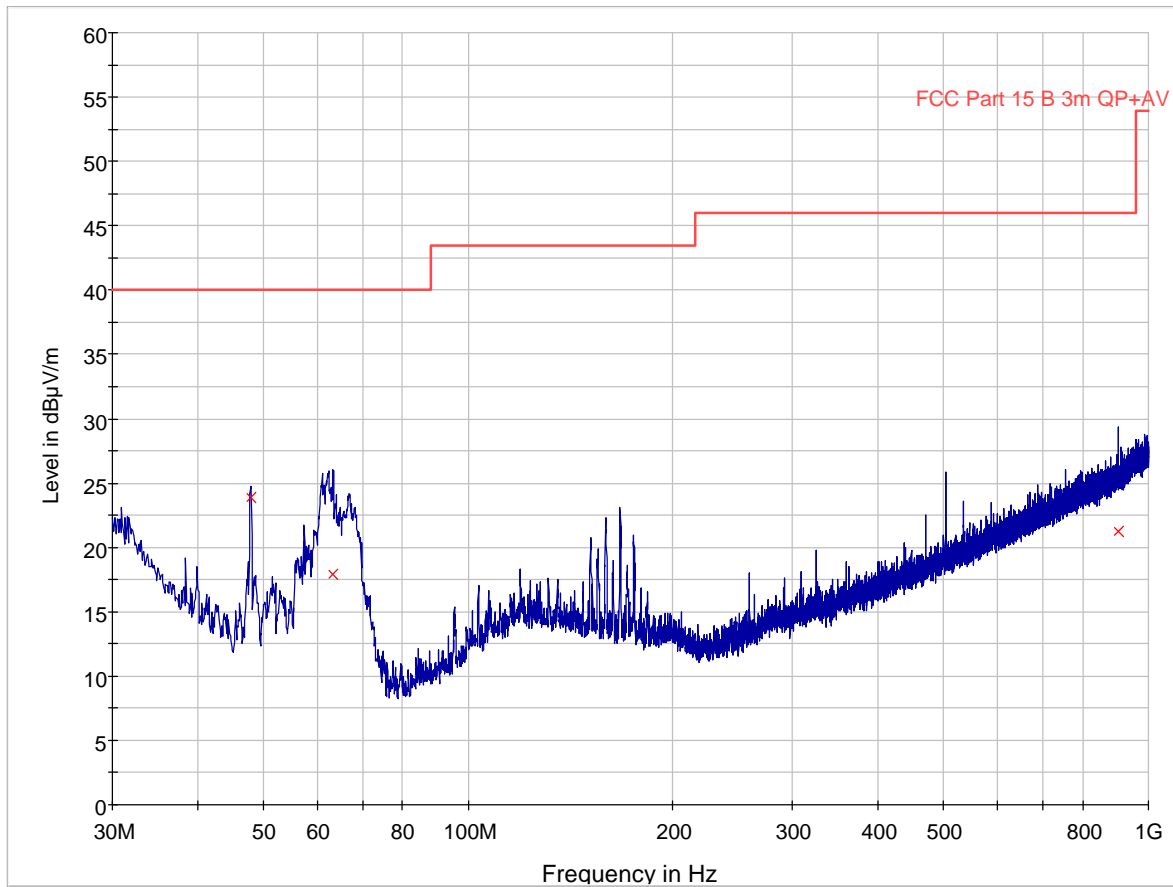
Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Margin (dB)	Limit (dBµV/m)	Comment
66.927585	23.3	120.000	16.7	40.0	



**928 - 1000MHz – Channel 920.2125MHz**

Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Margin (dB)	Limit (dBµV/m)	Comment
934.416118	21.9	120.000	24.1	46.0	

Part 15B in RX mode



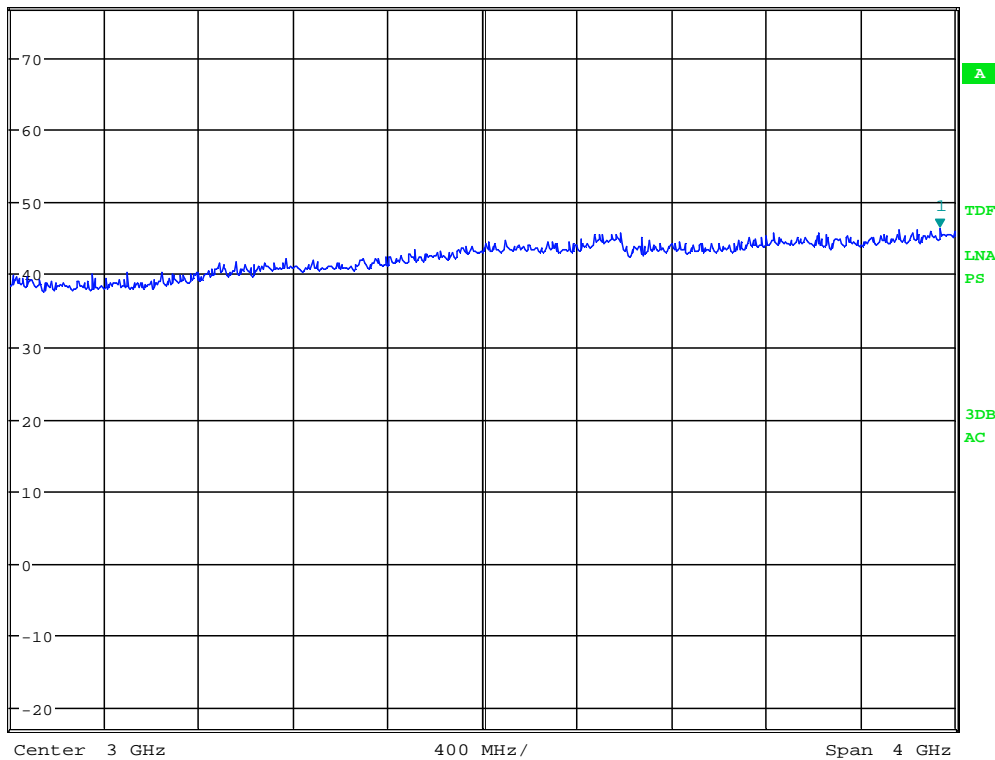
30 - 1000MHz @3m

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
47.910989	23.9	1000.0	120.000	100.0	V	243.0	-12.2	16.1	40.0	
63.313273	17.9	1000.0	120.000	126.0	V	36.0	-15.6	22.1	40.0	
902.618759	21.2	1000.0	120.000	314.0	V	5.0	1.4	24.8	46.0	



<b>MARKER 1</b>	* RBW 1 MHz	Marker 1 [T1 ]
4.935897436 GHz	VBW 3 MHz	46.41 dBµV/m
Ref 77 dBµV/m	* Att 5 dB	SWT 25 ms
		4.935897436 GHz

1 PK  
MAXH



Date: 19.FEB.2014 10:50:06

**VP/HP in Rx mode: 1 - 5GHz**

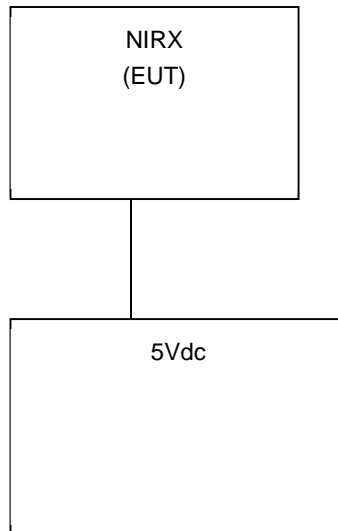
## 4 LIST OF TEST EQUIPMENT

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment and ancillaries are identified (numbered) by the Test Laboratory.

No.	Instrument/ ancillary	Type of instrument/ ancillary	Manufacturer	Ref. no.	Cal. Date	Cal. Due
1	ESU40	EMI Receiver	Rohde & Schwarz	LR1639	2013.06	2014.06
2	3115	Antenna horn	EMCO	LR 1330	2014.01.05	2015.01.05
3	JB3	Antenna bilog	Sunol Sceiences Inc.	N-4525	2013.12	2014.12
4	8449B	Pre-amplifier	Hewlett Packard	LR 1322	2013.09.27	2014.09.27
5	LNA6900	Pre-amplifier	Teseq	LR 1593	2013.11	2014.11
6	6812B	Power Supply	Agilent	LR 1515	2013.10.28	2014.10.28
7	ESH3-Z2	Pulse Limiter	Rohde & Schwarz	N-3821	2013.11	2015.11
8	ESCS 30	Measuring Receiver	Rohde & Schwarz	N-3529	2013.08	2014.08
9	ESH3-Z5	Two Line V-Network	Rohde & Schwarz	N-3558	2013.02	2015.02
10	Model 87 V	Multimeter	Fluke	LR 1598	2012.12.14	2014.12.14
11	6810.17A	10 attenuator	Suhner	LR 1143	2012.09.15	2014.09.15
12	FA210A1010003030	Microwave cable	Rosenberger	LR1566	Cal b4 use	
13	6HC 1000-18000	HP Filter	Trithlic	-	Cal b4 use	
14	6HC 2500-18000	HP Filter	Trithlic	LR1615	Cal b4 use	
15	B32-10R	Power Supply	Oltronix	LR1021	Cal b4 use	

## 5 BLOCK DIAGRAM

### 5.1 System set up for radiated measurements



*Test equipment: 1- 12*

## 5.2 Test site radiated emission

