

Annex 1: Measurement diagrams  
to TEST REPORT  
No.: 2-0004-11-18-1i

According to:  
**FCC Regulations**  
Part 15.109  
Part 15.207 & 15.209 & Part 15.247  
**IC Regulations**  
RSS-Gen, Issue 3  
RSS-210: Issue 8

for

Sony Ericsson Mobile Communications AB

Mobile phone AAD-3880121-BV

FCC-ID: PY7A3880121  
IC: 4170B-A3880121

Laboratory Accreditation and Listings			
 Deutsche Akkreditierungsstelle D-PL-12047-01-01	 Reg. No.: 736496 MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2665, R-2666 C-2914, T-1967, G-301
 AUTHORIZED RF LABORATORY	 LAB CODE 20011130-00		
accredited according to DIN EN ISO/IEC 17025			
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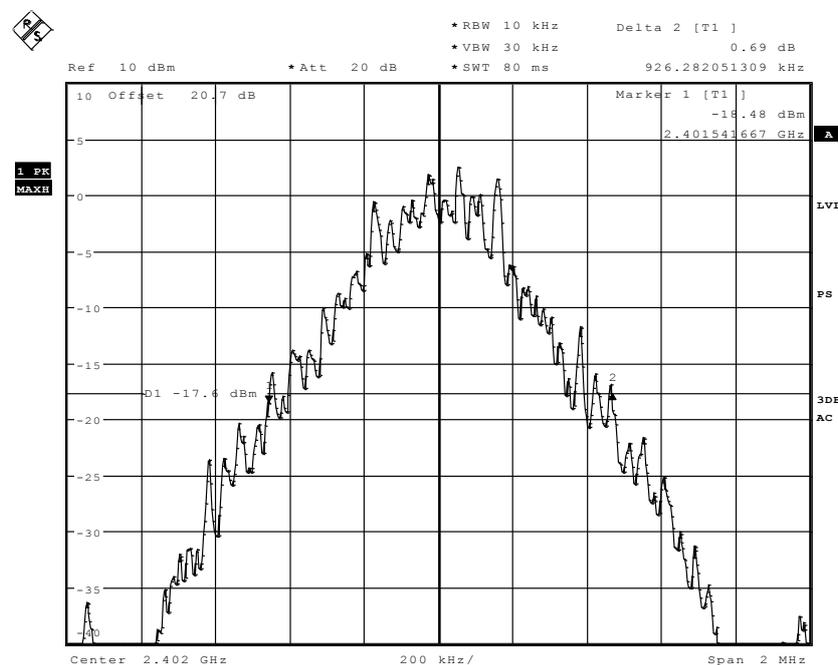
# 1. Measurement diagrams

## 1.1. 20dB bandwidth

Following table show measured values for the 20dB bandwidth for different modulation types and channels. Unit of values shown is kHz.

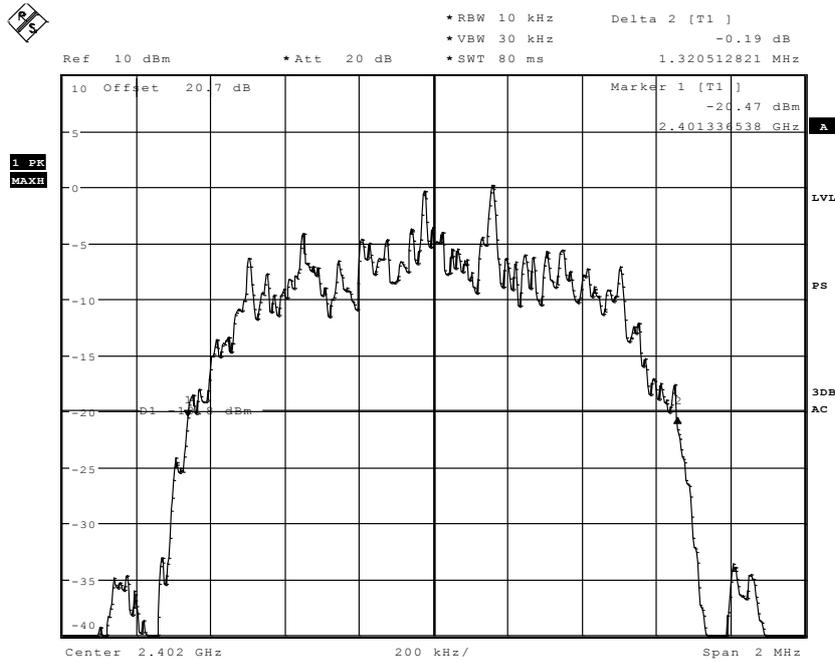
Packet type Modulation	Nominal Ch 0 =2402 MHz	Nominal Ch 39 =2441MHz	Nominal Ch 78 =2480MHz	Max Value	Abs. value
DH1	868,5890	856,3840	868,5890		
DH3	926,2820	926,2820	926,2820	926,2820	
DH5	926,2820	926,2820	926,2820		
2DH1	1272,4350	1246,7940	1275,6410		
2DH3	<b>1320,5120</b>	1182,6920	1310,8970	1320,5120	<b>1320,512</b>
2DH5	<b>1320,5120</b>	1217,9480	1310,8970		
3DH1	1269,2300	1189,1020	1205,1280		
3DH3	1291,6660	1233,9740	1262,8200	1291,6660	
3DH5	1278,8460	1233,9740	1259,6150		

Maximum value at 2DH3 & 2DH5=1320.512 kHz



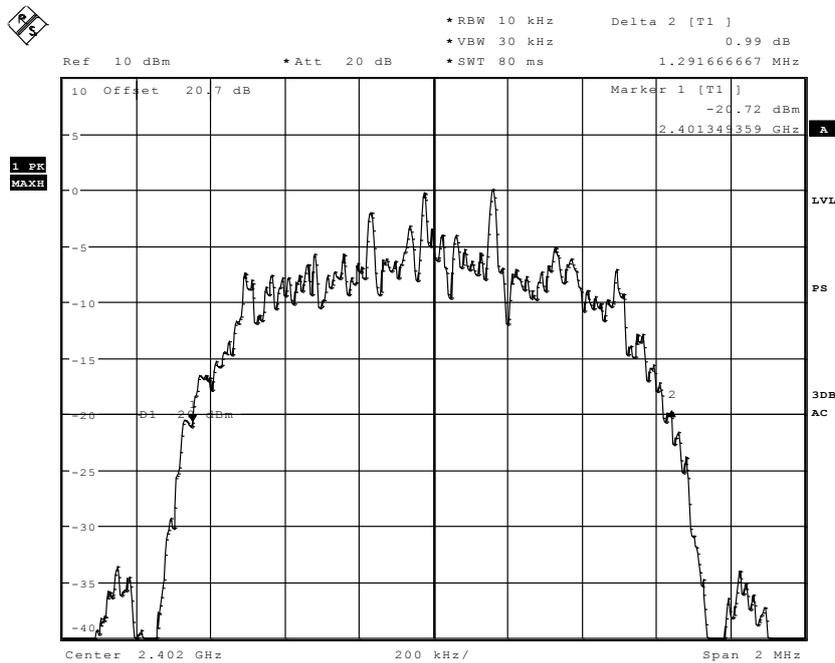
Date: 5.AUG.2011 11:56:11

### Diagram DH3 packet type (modulation)



Date: 5.AUG.2011 12:03:14

**Diagram 2DH3 & 2DH5 packet type (modulation) -> maximum 20dB BW value**

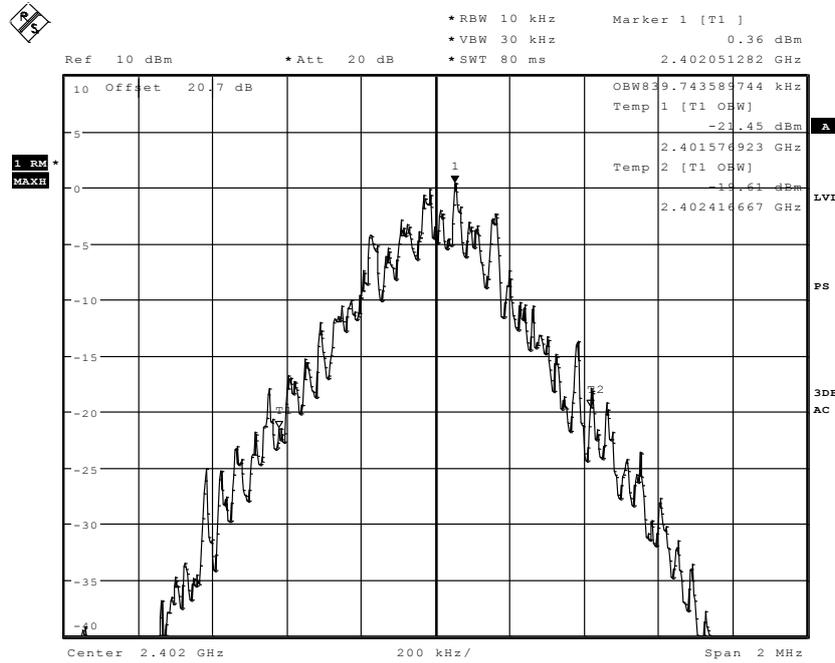


Date: 5.AUG.2011 12:09:12

**Diagram 3DH3 packet type (modulation)**

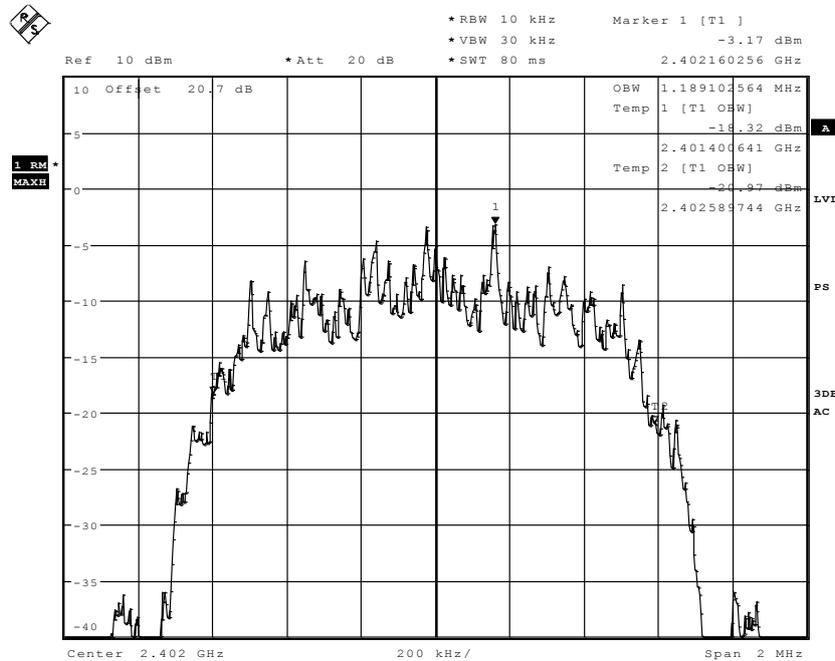
## 1.2. 99% Occupied bandwidth

Value was measured for each modulation of the maximum 20dB bandwidth.



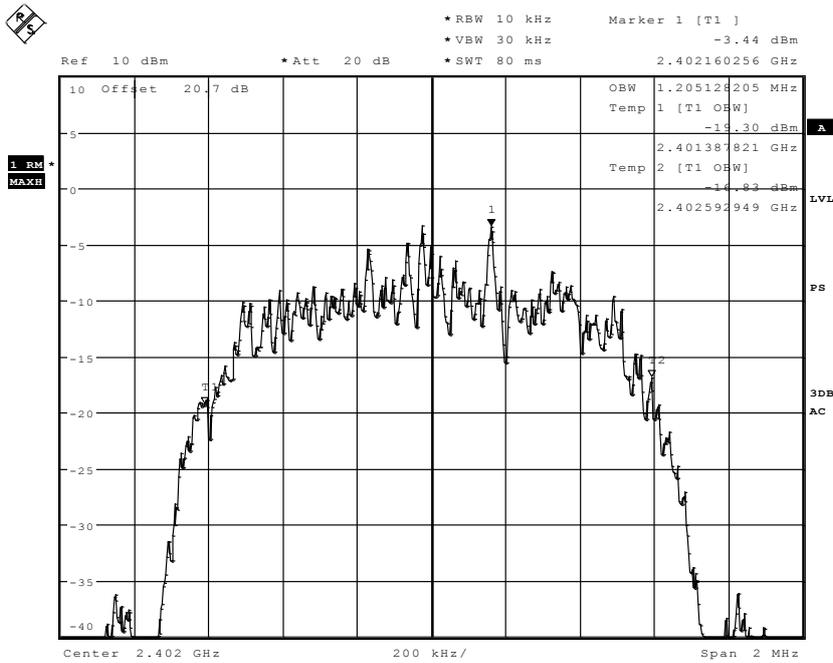
Date: 5.AUG.2011 12:29:32

## DH3 packet type (modulation)



Date: 5.AUG.2011 12:30:57

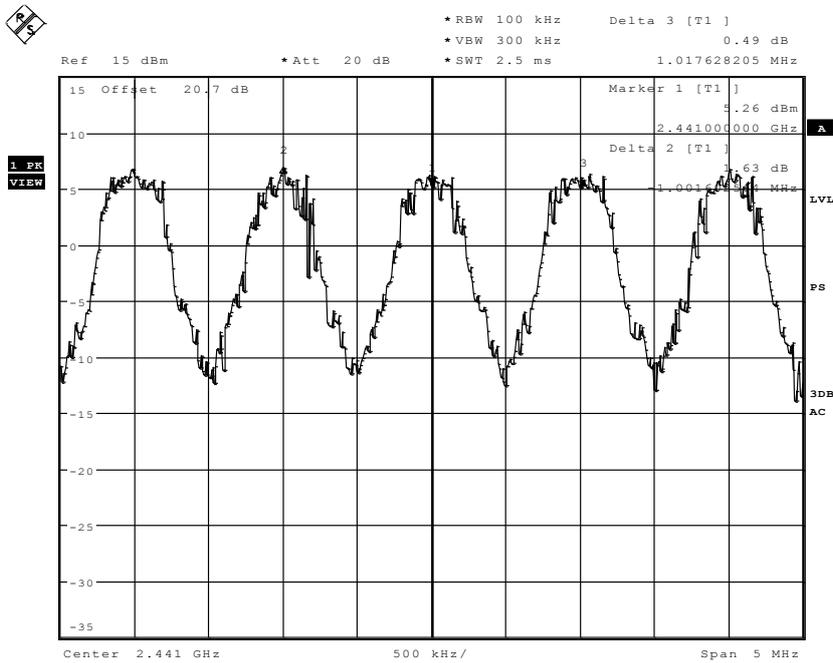
## 2DH5 packet type (modulation)



Date: 5.AUG.2011 12:31:52

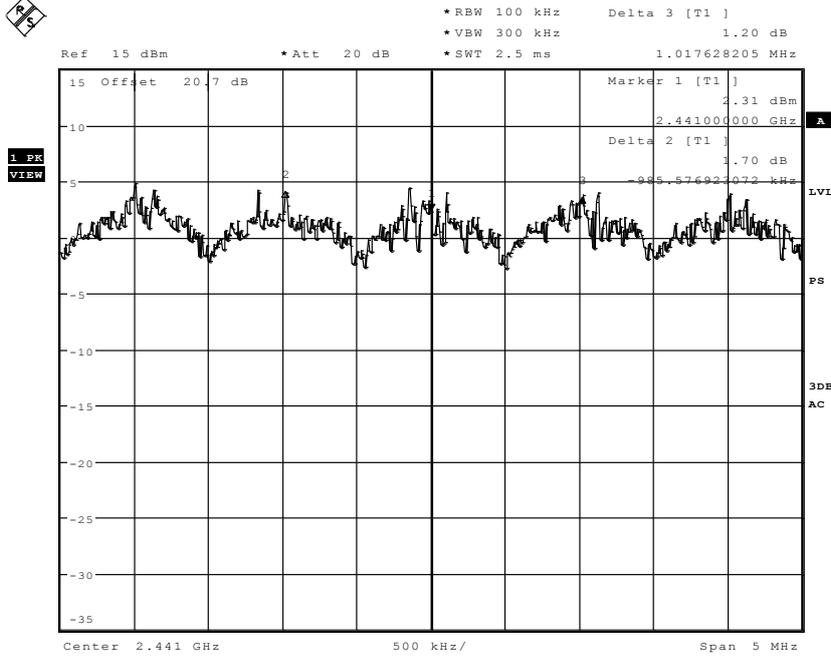
### 3DH3 packet type (modulation)

#### 1.3. Channel separations



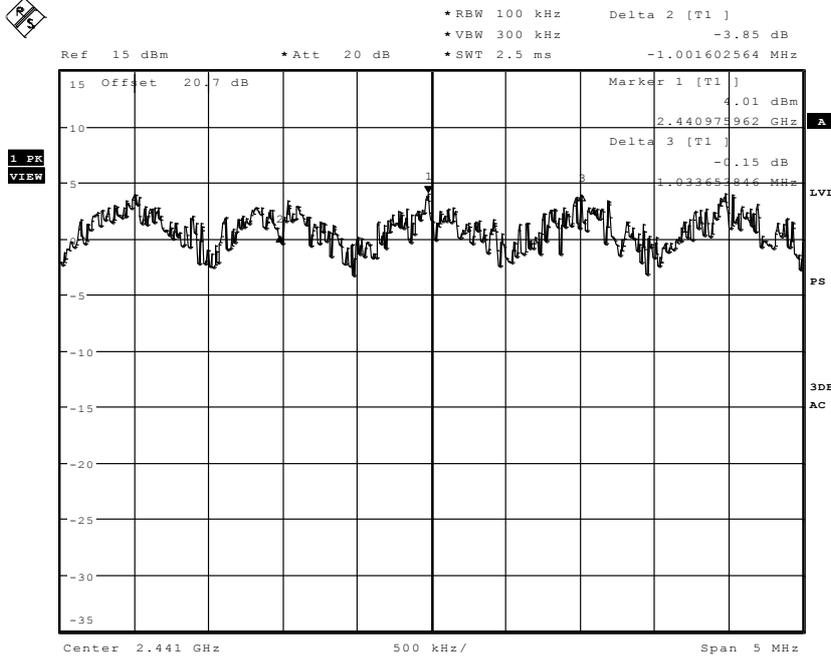
Date: 5.AUG.2011 12:52:23

### DH3 packet type (modulation)



Date: 5.AUG.2011 12:50:56

**2DH5 packet type (modulation)**

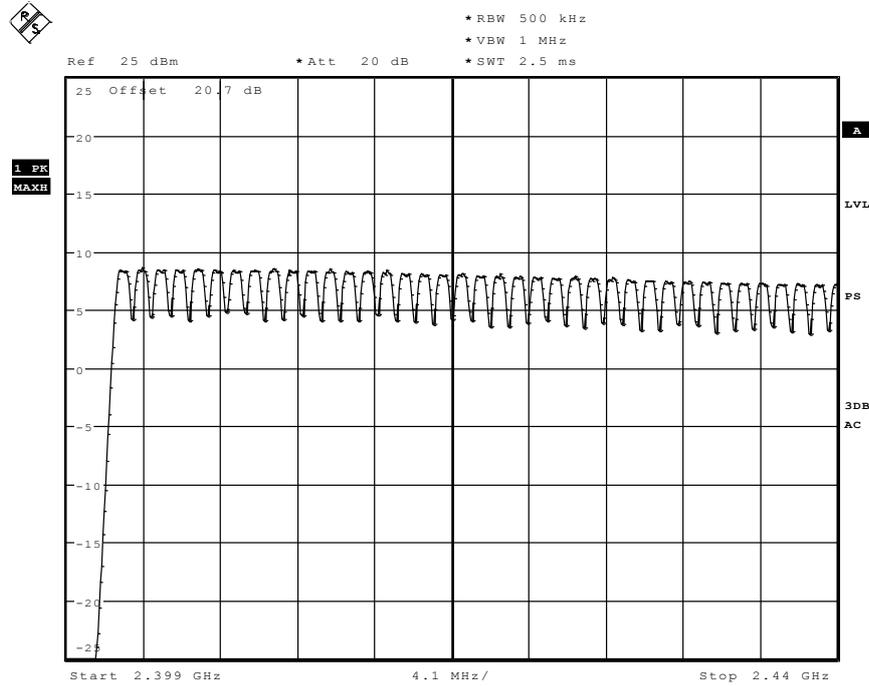


Date: 5.AUG.2011 12:46:46

**3DH3 packet type (modulation)**

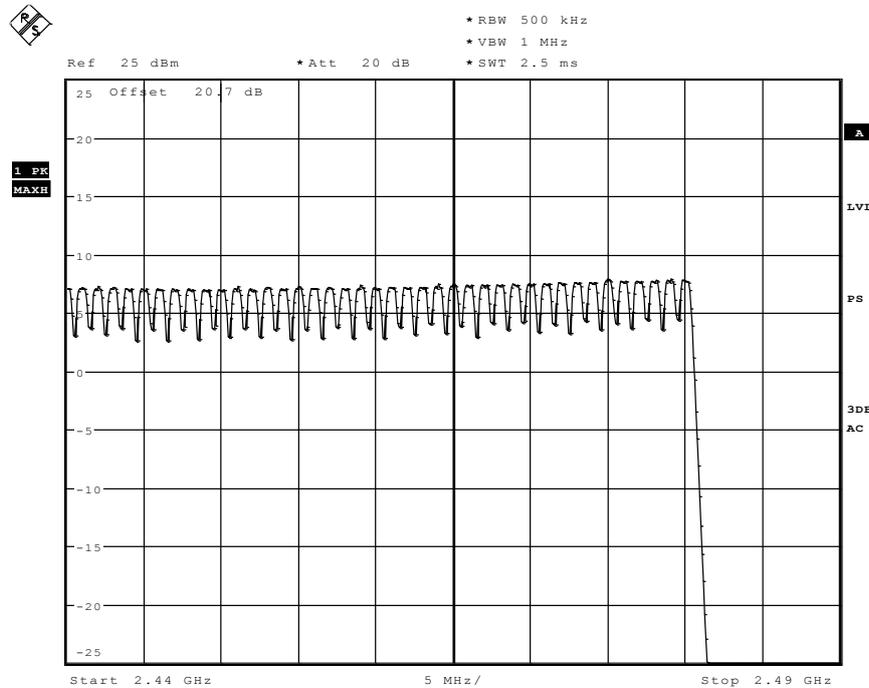
## 1.4. Hopping channel numbers and time of occupancy for FHSS systems

### 1.4.1. Hopping channel numbers



Date: 5.AUG.2011 13:50:37

#### Split Sweep 1: DH3 packet type (modulation)

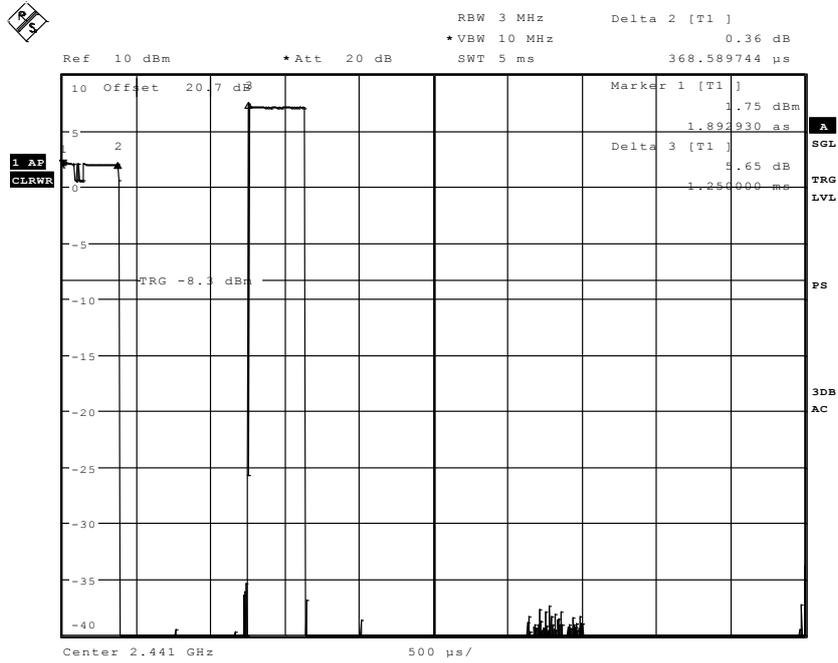


Date: 5.AUG.2011 13:52:15

#### Split Sweep 2: DH3 packet type (modulation)

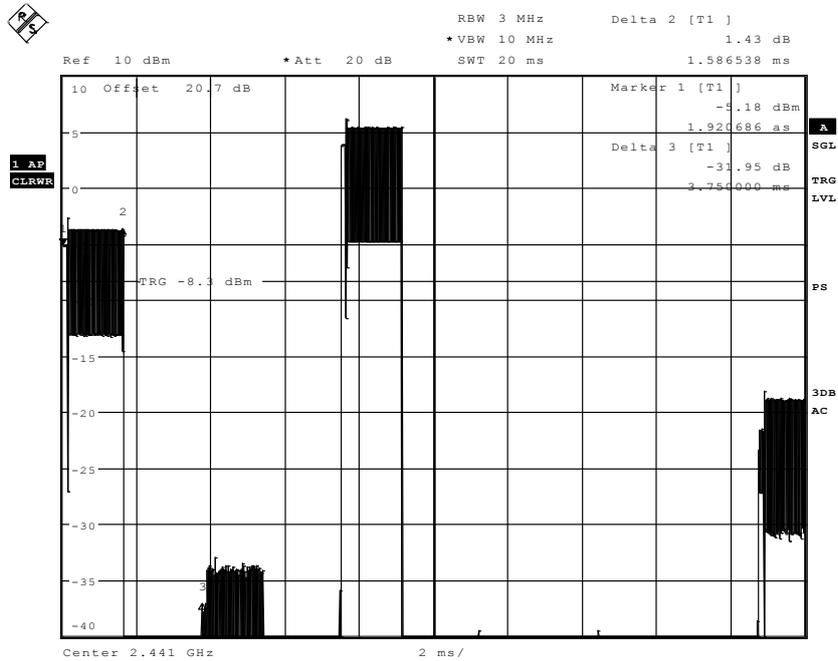
### 1.4.2. Time of occupancy for FHSS systems

Enclosed some diagrams showing the time of occupancy per frequency-hop.



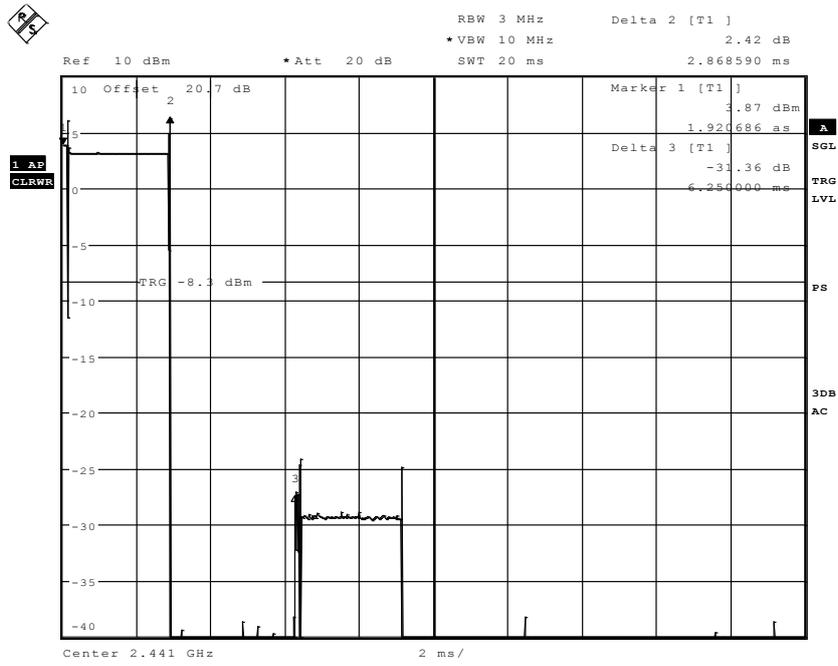
Date: 5.AUG.2011 14:19:58

### DH1 packet type (modulation)



Date: 5.AUG.2011 14:26:58

### 2DH3 packet type (modulation)



Date: 5.AUG.2011 14:25:08

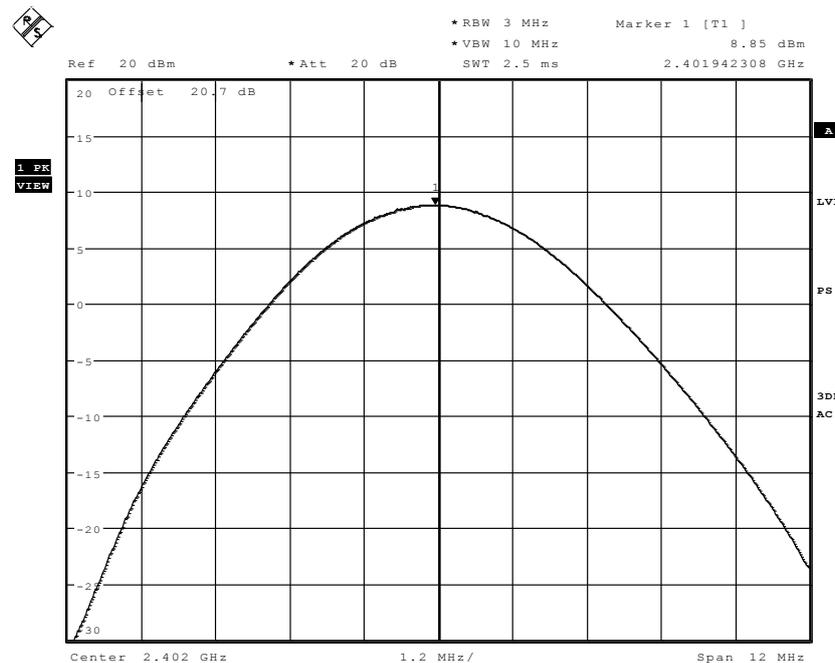
3DH5 packet type (modulation)

### 1.5. Power conducted

Following table show measured values for the maximum peak conducted power for different modulation types and channels. Power values are given in unit dBm.

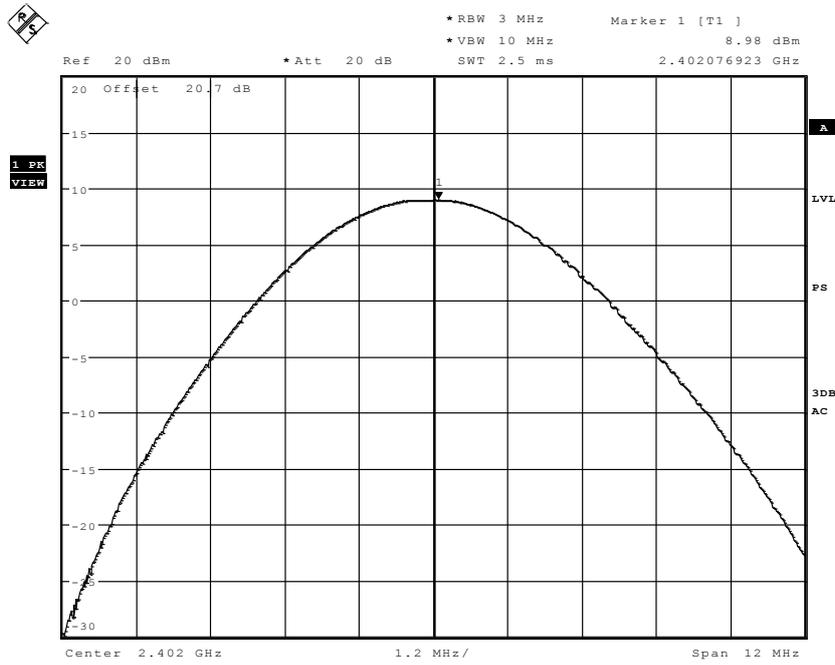
Modulation type	Nominal Ch 0 =2402 MHz	Nominal Ch 39 =2441MHz	Nominal Ch 78 =2480MHz	Maximum Power value	Abs. Maximum Value
DH1	8.85	7.48	8.17	8.85	
DH3	8.63	7.44	8.11		
DH5	8.76	7.42	8.11		
2DH1	8.98	7.79	8.30	8.98	9.65
2DH3	8.98	7.75	8.33		
2DH5	8.97	7.76	8.34		
3DH1	<b>9.65</b>	8.75	9.07	<b>9.65</b>	
3DH3	9.63	8.53	9.03		
3DH5	<b>9.65</b>	8.56	9.05		

Maximum Value: 9.65 dBm at Channel 1, 3DH1&3DH5 modulation



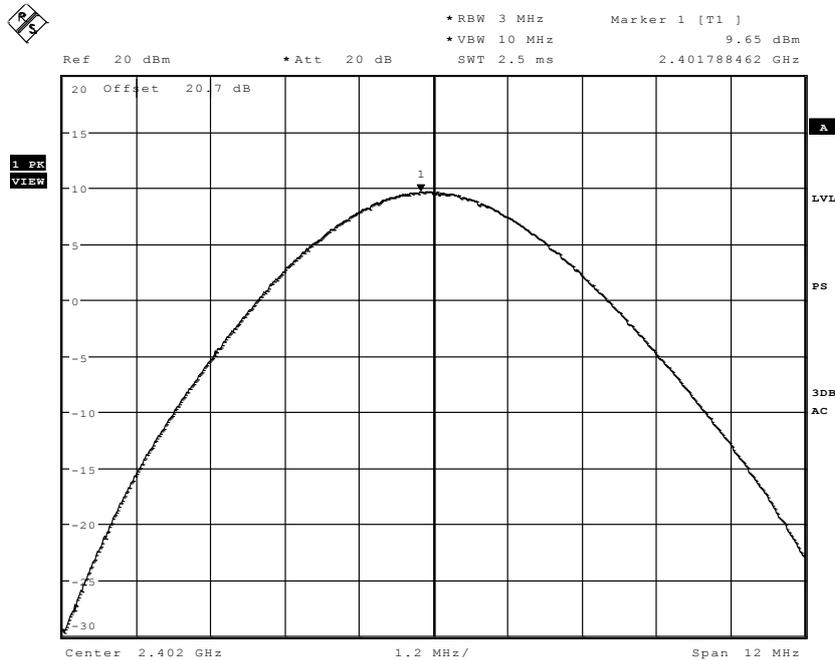
Date: 4.AUG.2011 17:49:26

#### Power at DH1 Packet type (Modulation)



Date: 4.AUG.2011 17:57:32

### Power at 2DH1 packet type (modulation)



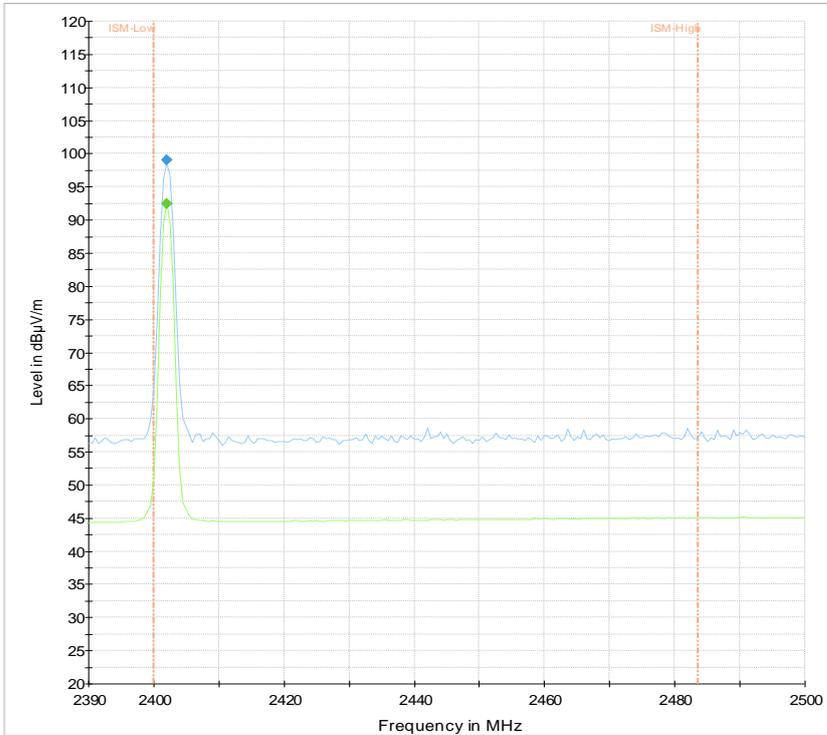
Date: 4.AUG.2011 18:01:27

### Power at 3DH1&3DH5 packet type (modulation)

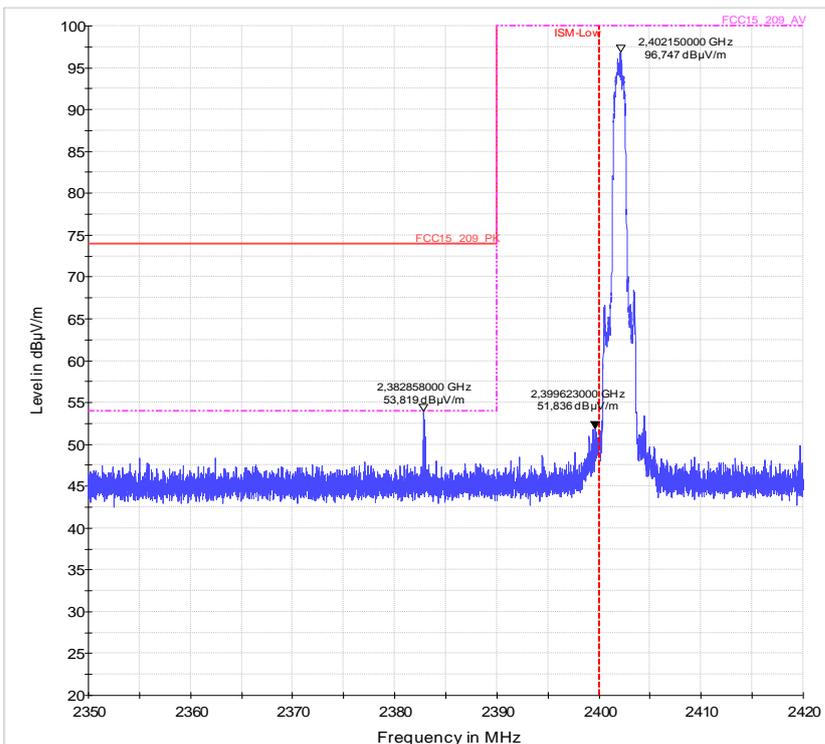
## 1.6. Maximum e.i.r.p power

Following table show measured values for the maximum peak conducted power for 3DH5 modulation and 3 channels.

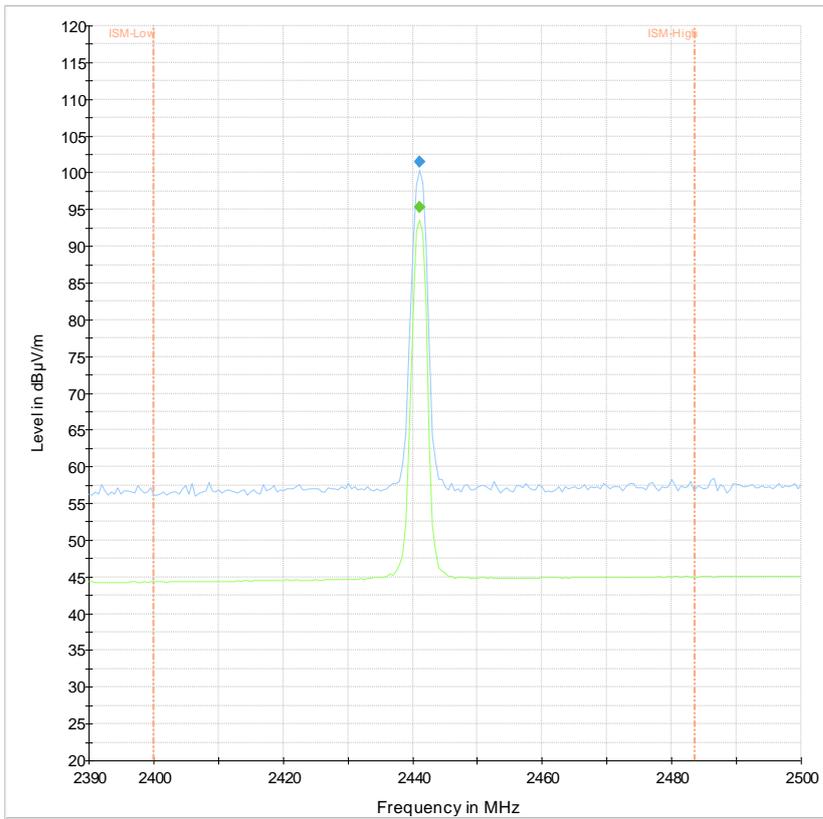
### 1.6.1. Maximum e.i.r.p power and band-edge radiated, 3DH5 packet type (modulation)



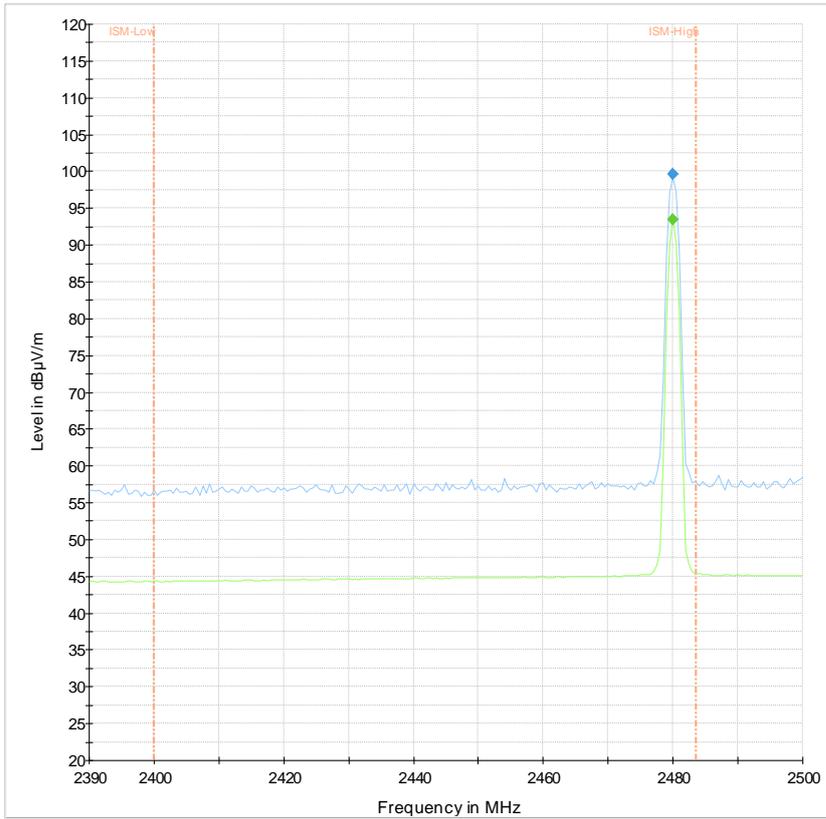
Maximum field strength, channel 0



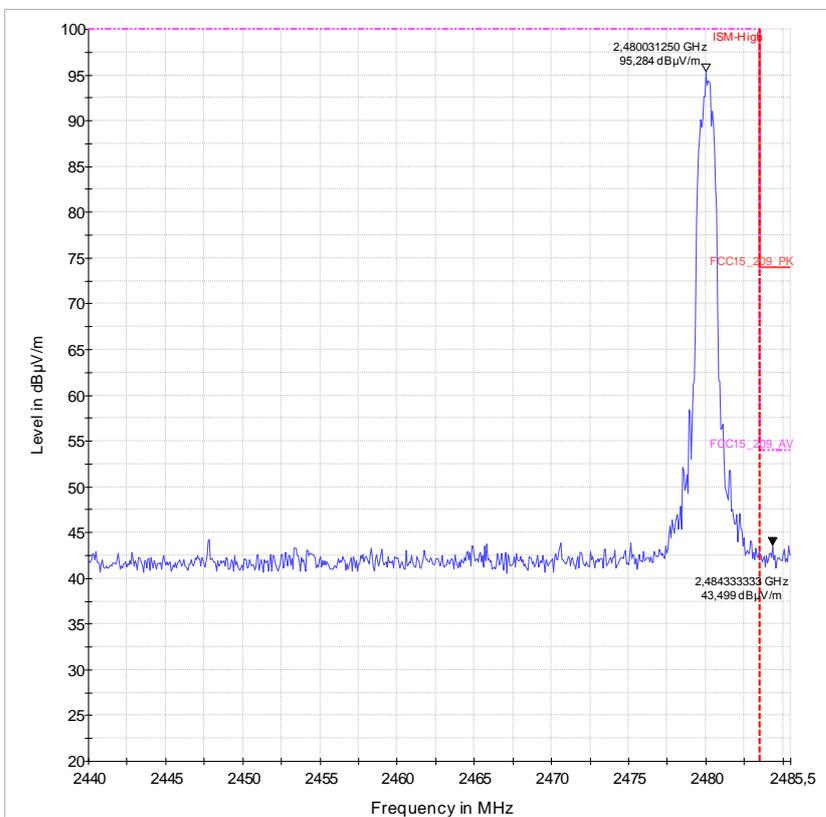
Band-Edge left



Maximum field strength, channel 39

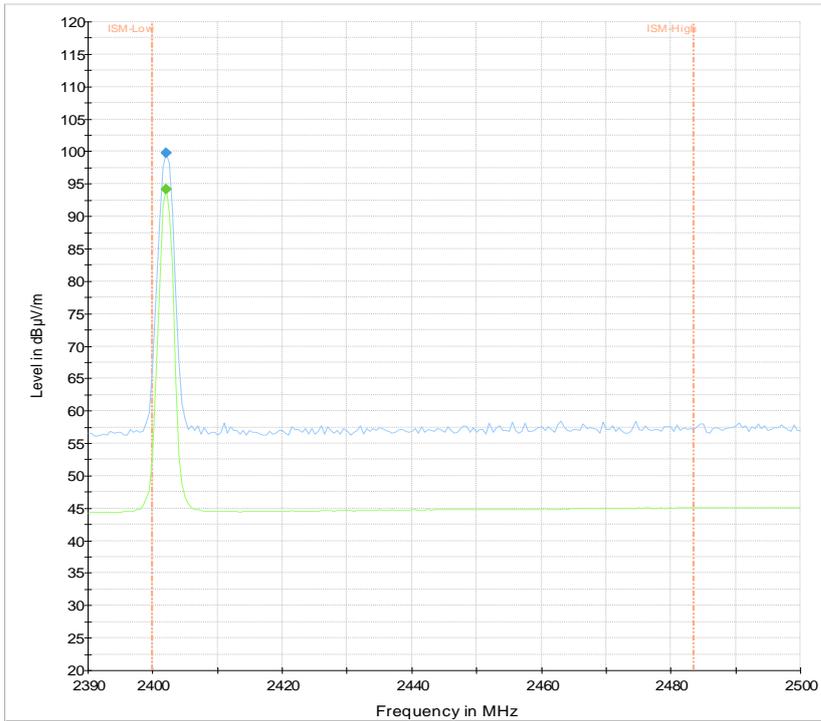


Maximum field strength, channel 78

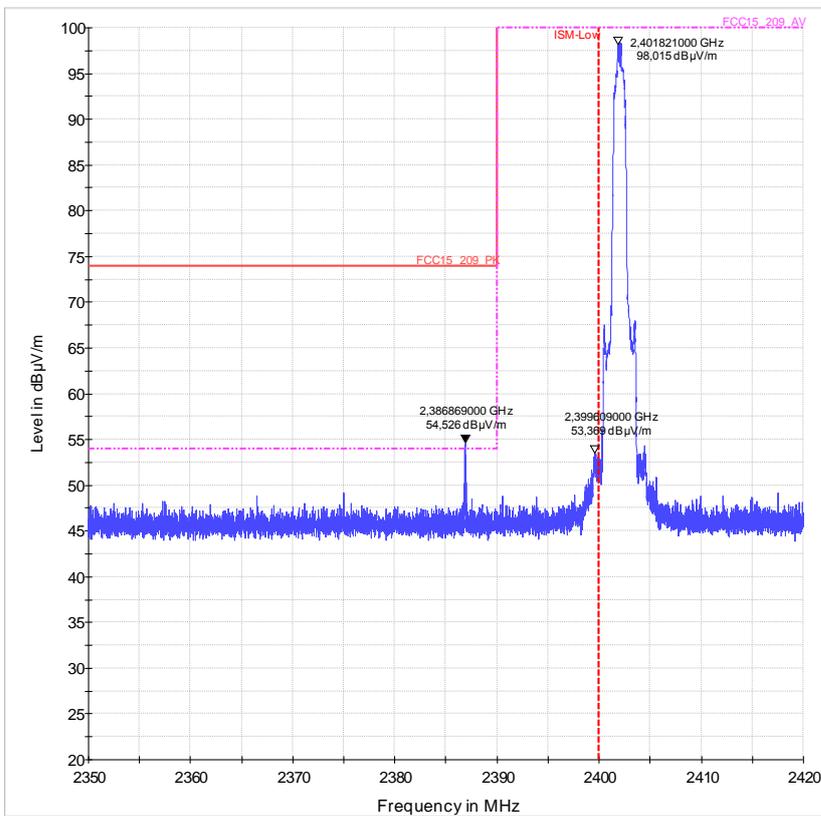


Band-Edge right, Channel 78

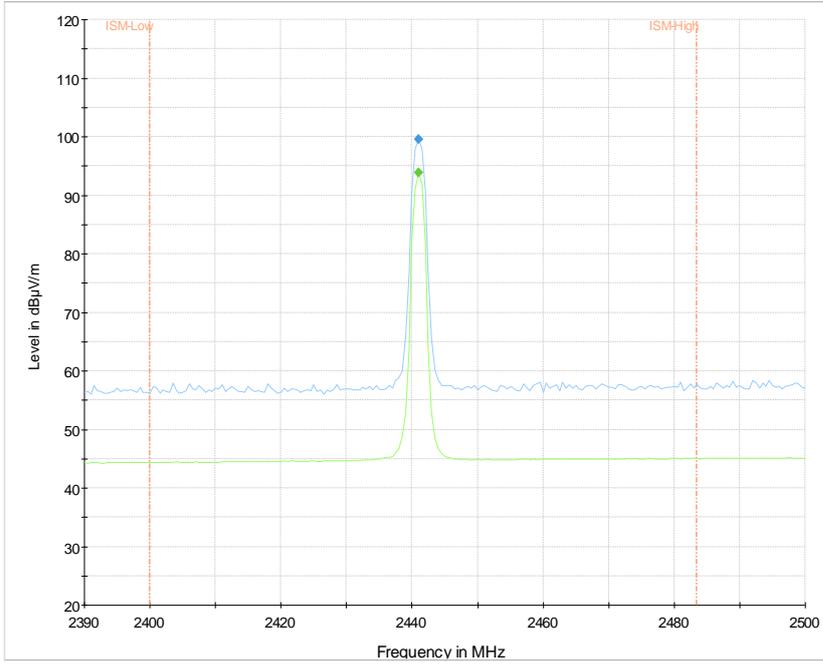
**1.6.2. Maximum e.i.r.p power and band-edge radiated, 2DH5 packet type (modulation)**



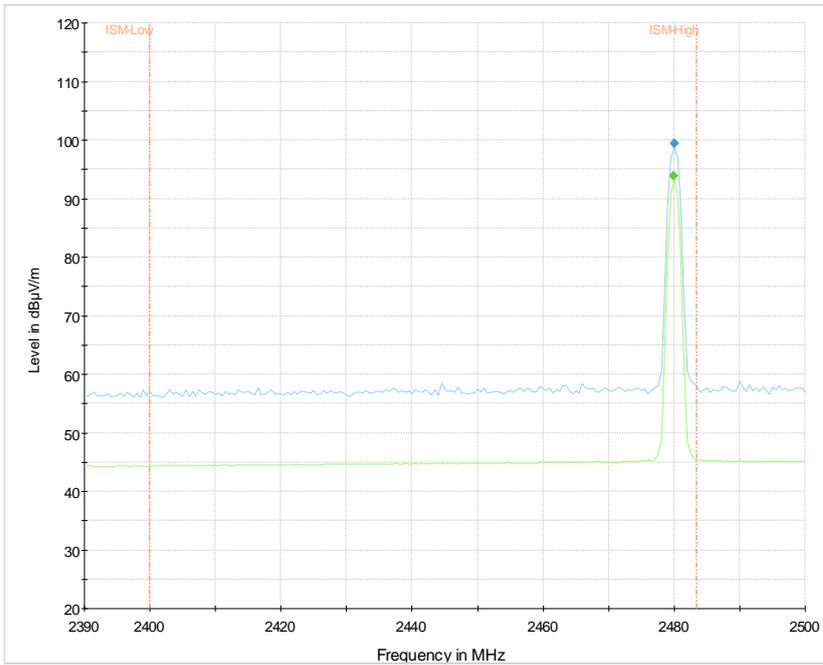
Maximum field strength, channel 0



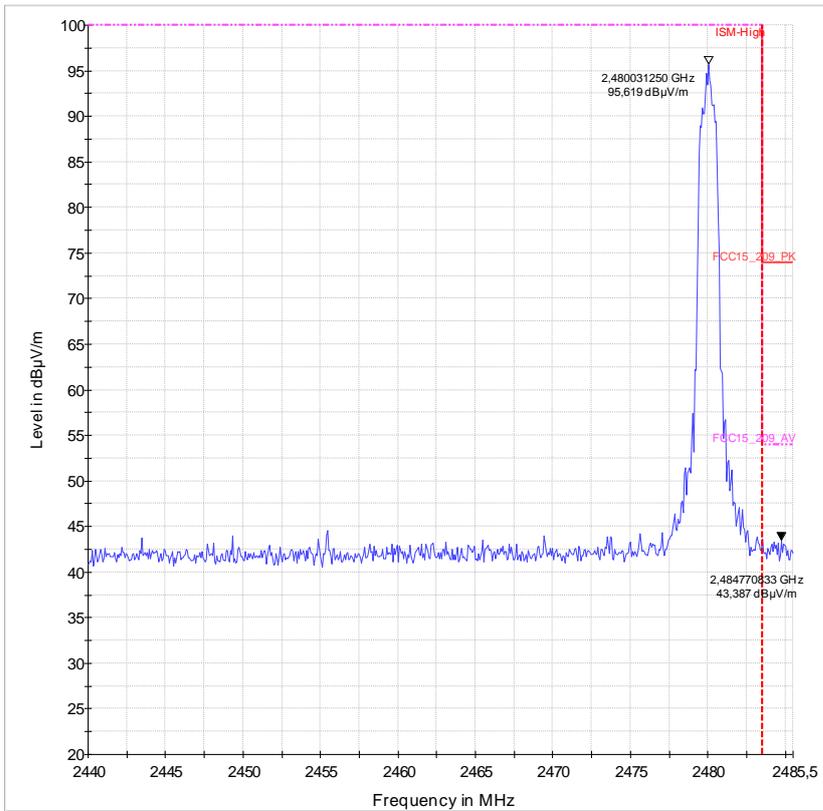
Band-Edge left



Maximum field strength, channel 39

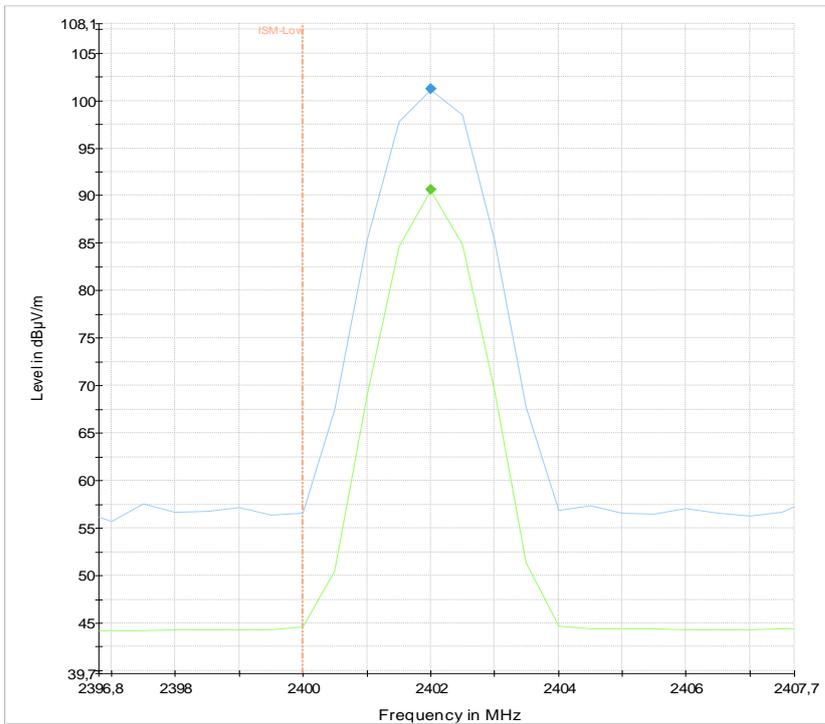


Maximum field strength, channel 78

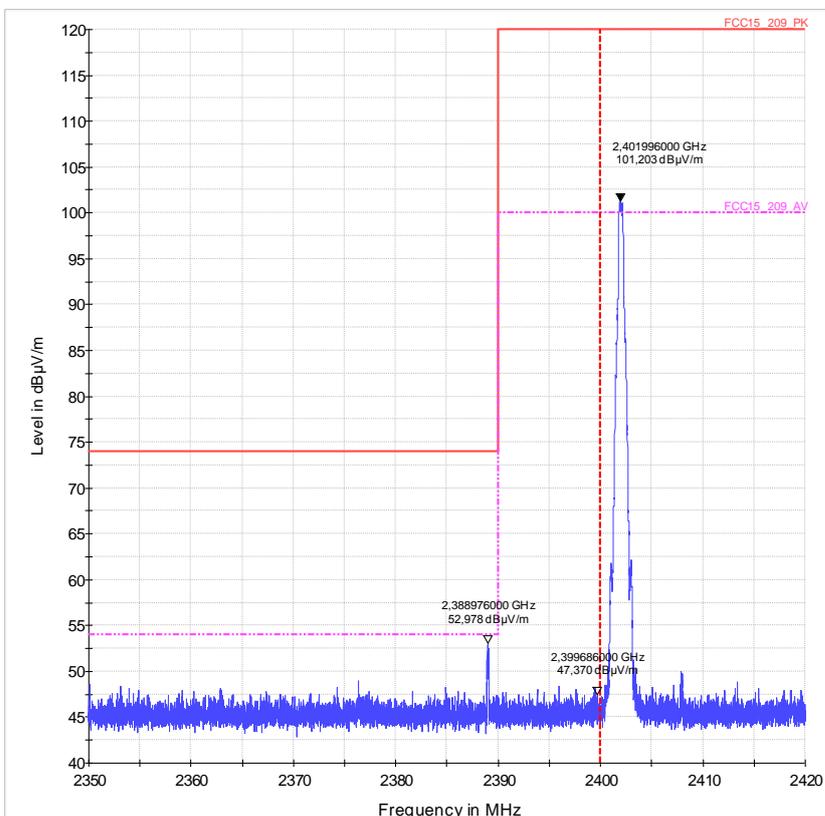


Band-Edge right, Channel 78

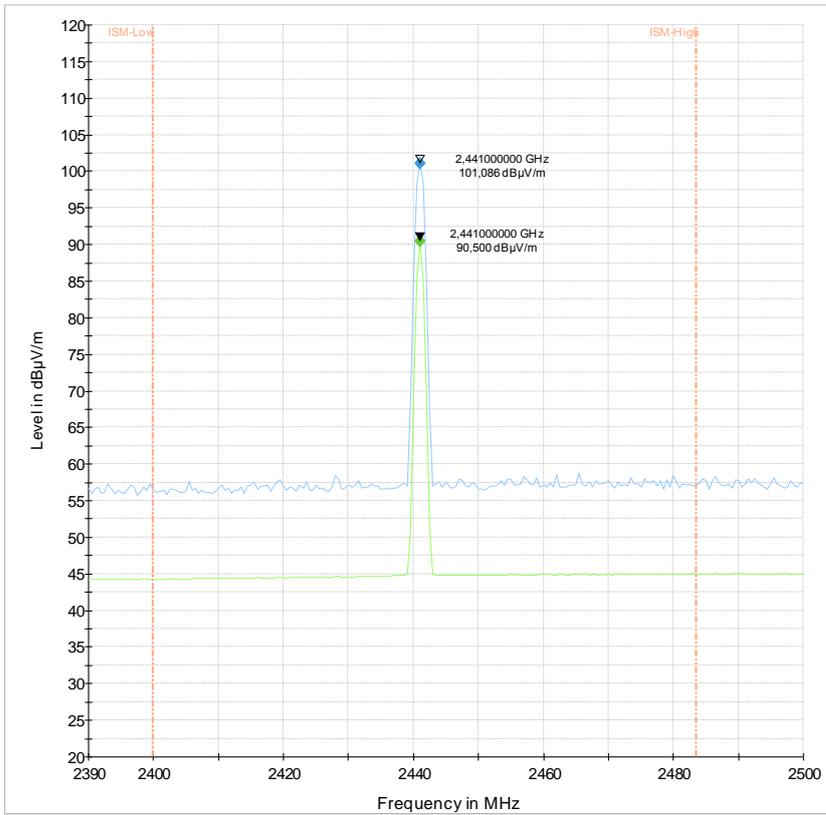
**1.6.3. Maximum e.i.r.p power and band-edge radiated, DH1 packet type (modulation)**



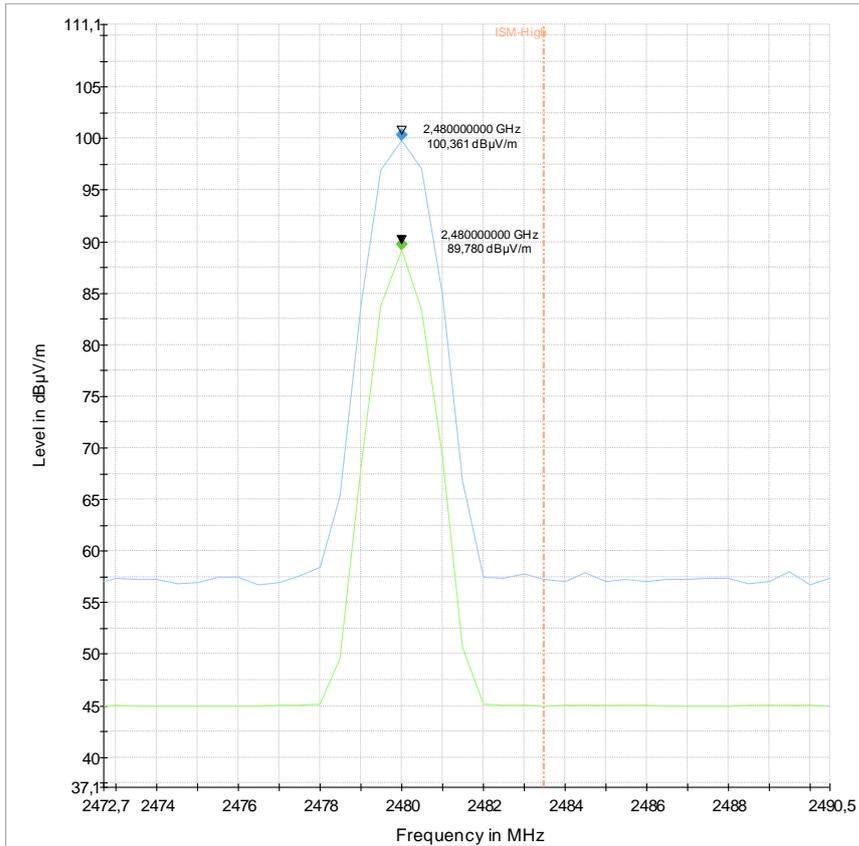
Maximum field strength, channel 0



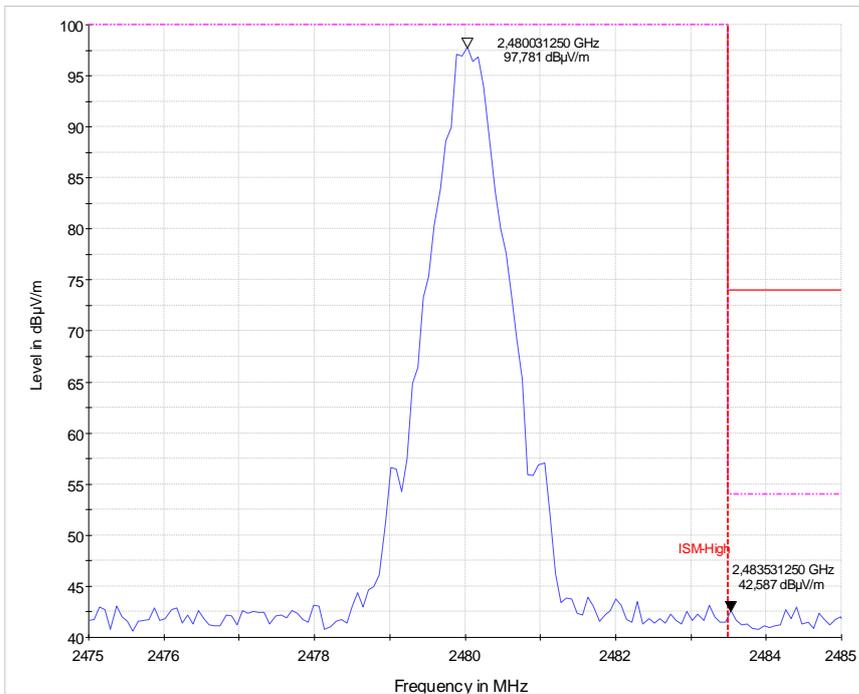
Band-Edge left



Maximum field strength, channel 39



Maximum field strength, channel 78

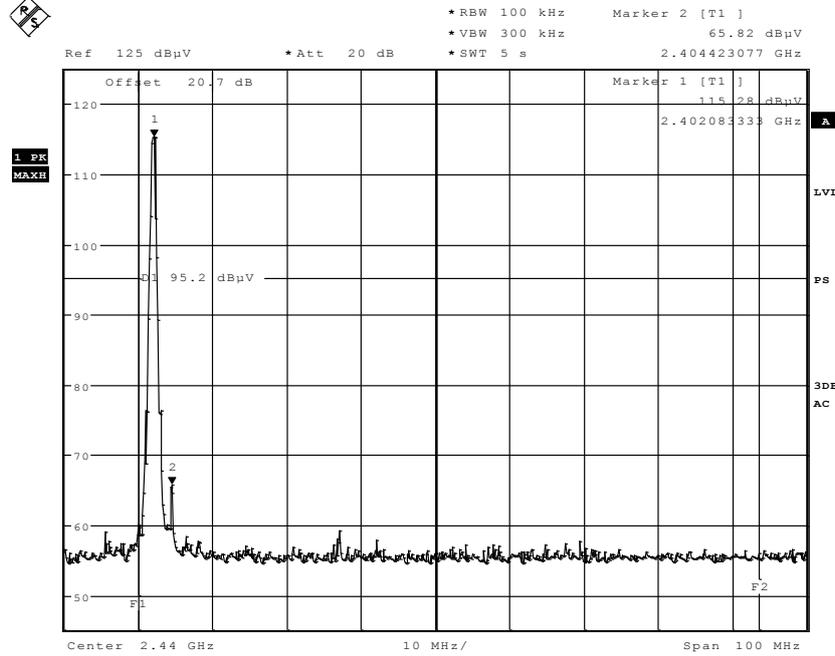


Band-Edge right, Channel 78

### 1.7. 20dBc conducted emissions

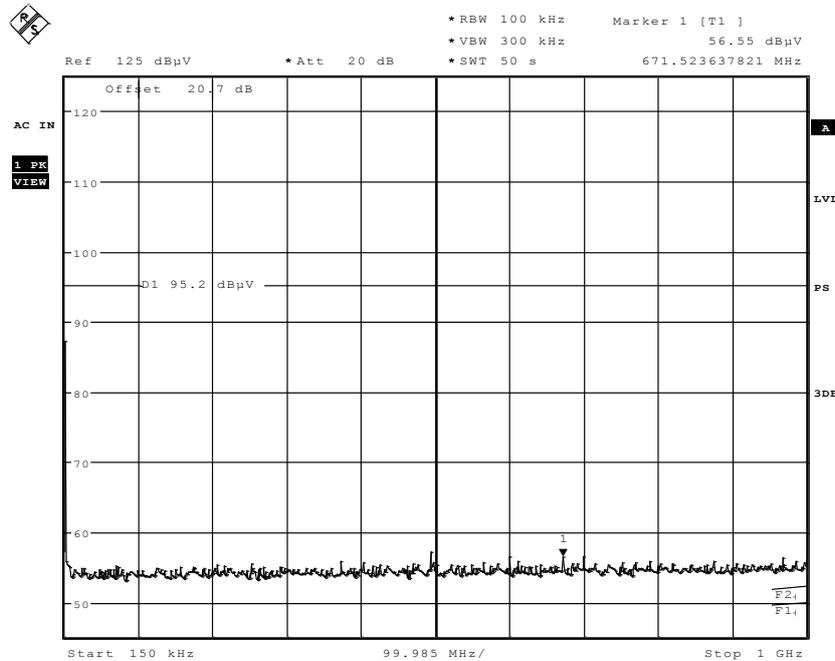
Tests have been performed at maximum measured power level of each modulation type. Pls. compare chapter conducted power for each worst-case. In addition the lowest and highest channel was checked against 20dBc compliance at the relevant band-edge.

#### 1.7.1. DH1 modulation



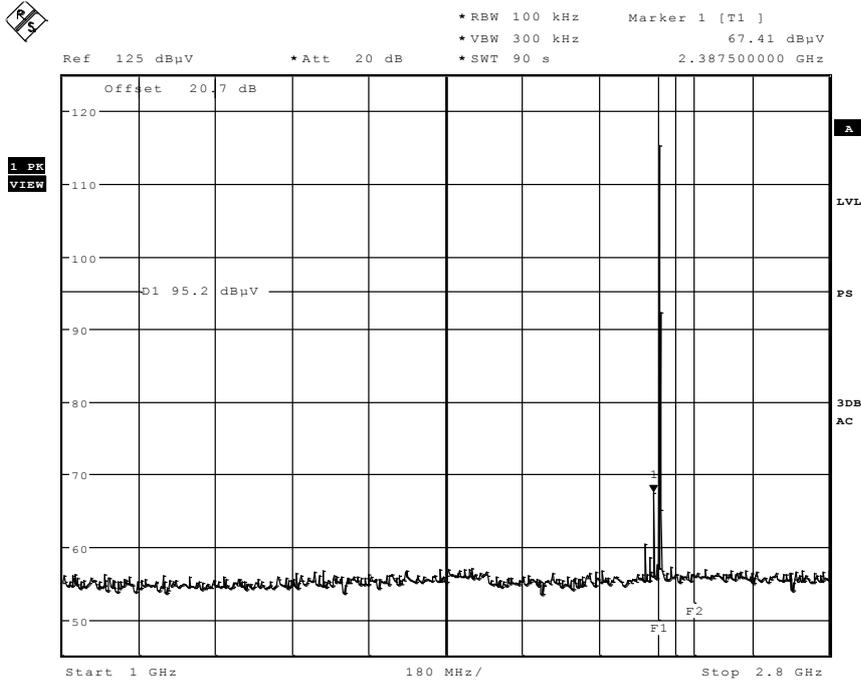
Date: 5.AUG.2011 15:29:57

#### In-BAND reference value for channel 0



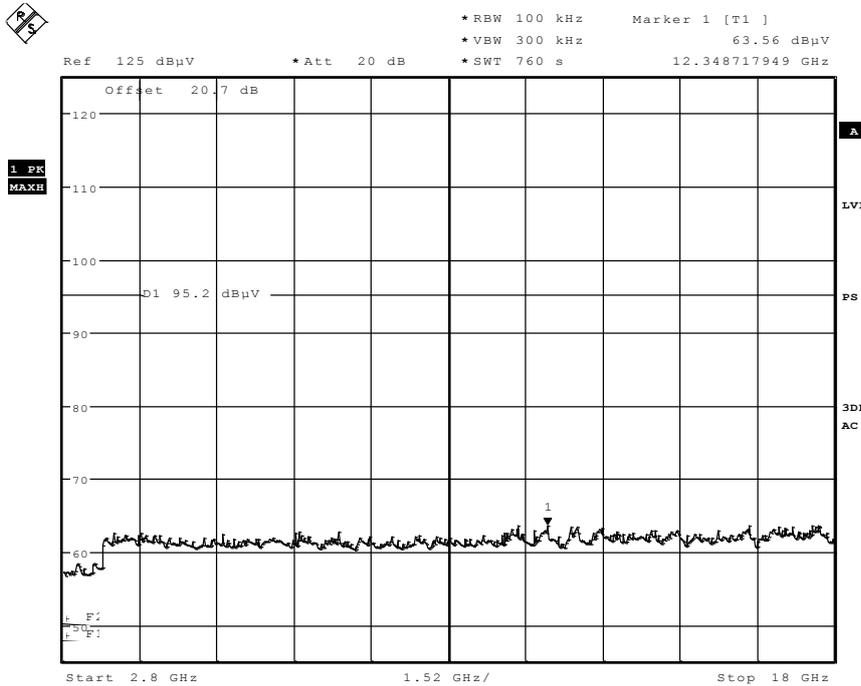
Date: 5.AUG.2011 15:33:29

#### Sweep 1: Channel 0 (150kHz to 1GHz)



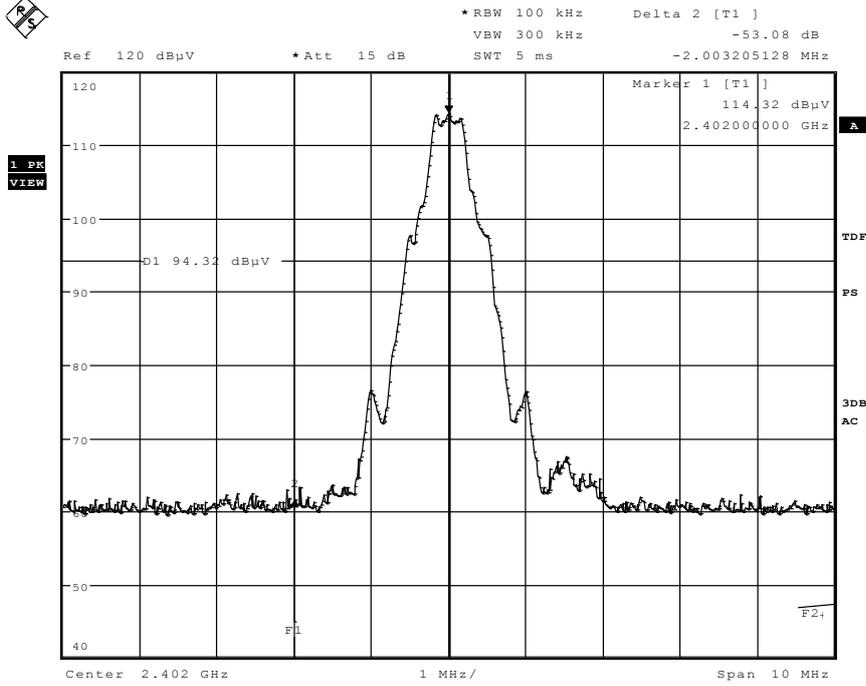
Date: 5.AUG.2011 15:48:07

**Sweep 2: Channel 0 (1GHz to 2.8GHz)**



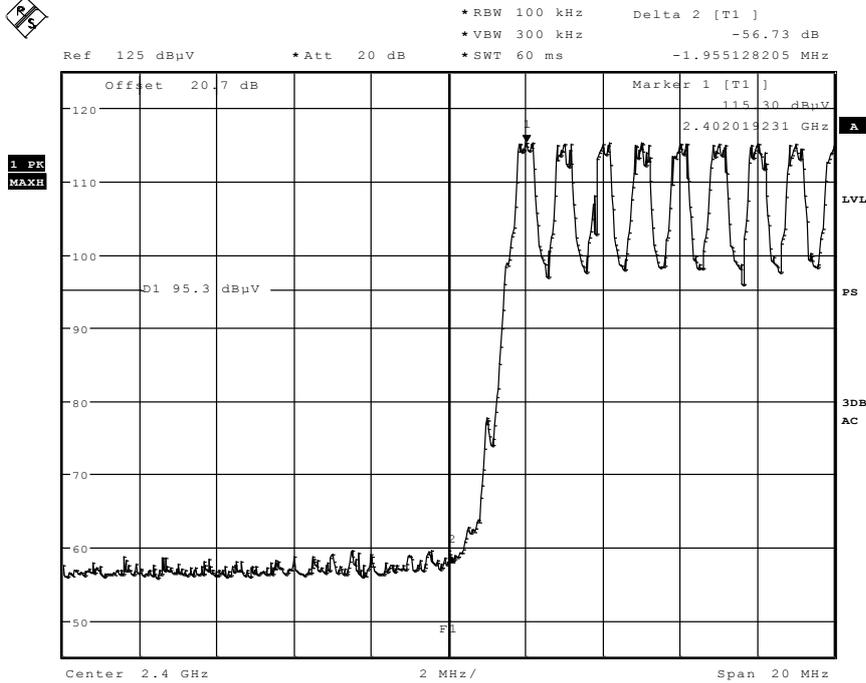
Date: 5.AUG.2011 16:08:00

**Sweep 3: Channel 0 (2.8GHz to 18GHz)**



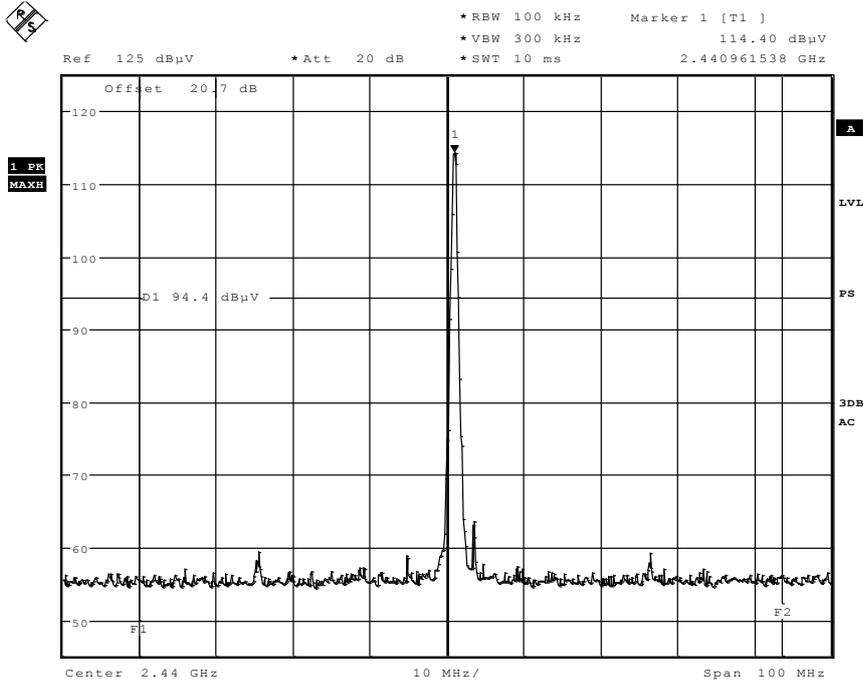
Date: 27.AUG.2011 14:12:03

**Band-Edge left (no hopping)**



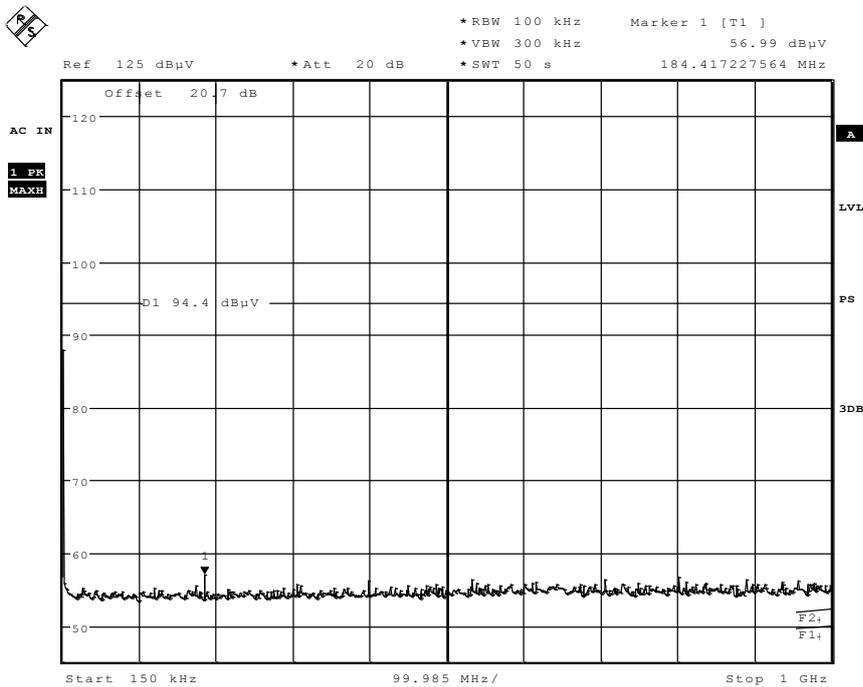
Date: 5.AUG.2011 15:10:13

**Band-Edge left (hopping)**



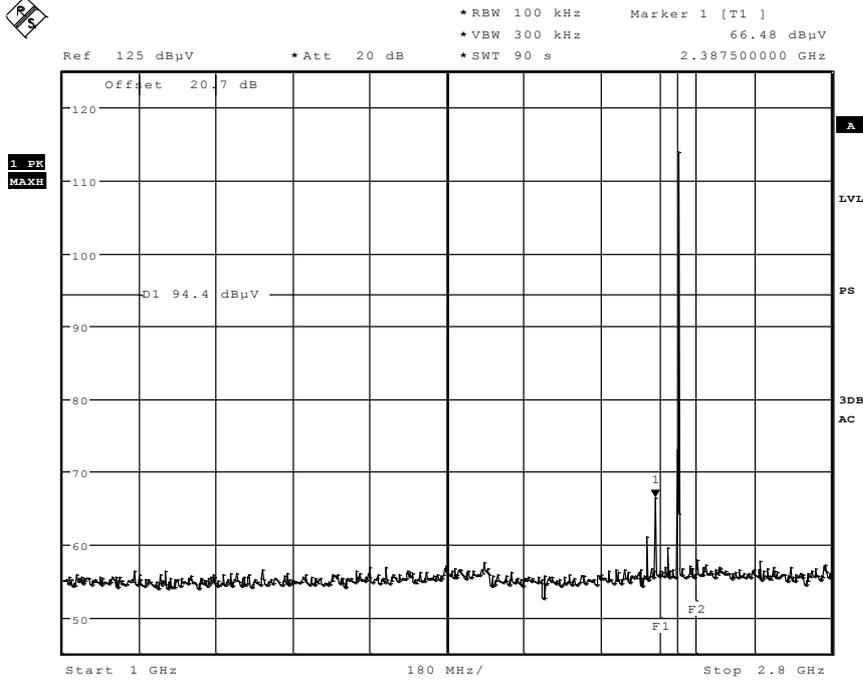
Date: 5.AUG.2011 16:13:04

**In-BAND reference value for channel 39**



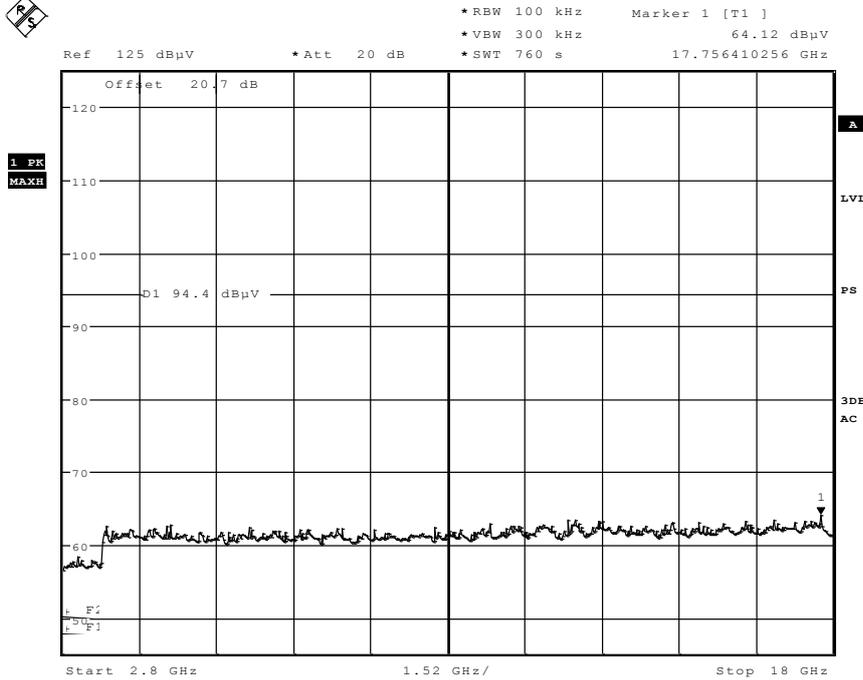
Date: 5.AUG.2011 16:17:35

**Sweep 1: Channel 39 (150kHz to 1GHz)**



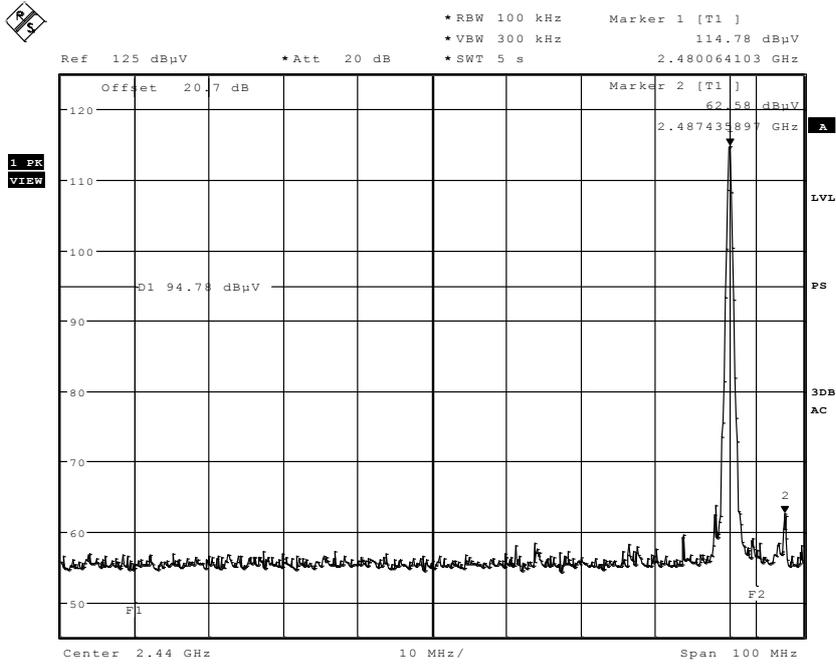
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**Sweep 2: Channel 39 (1GHz to 2.8GHz)**



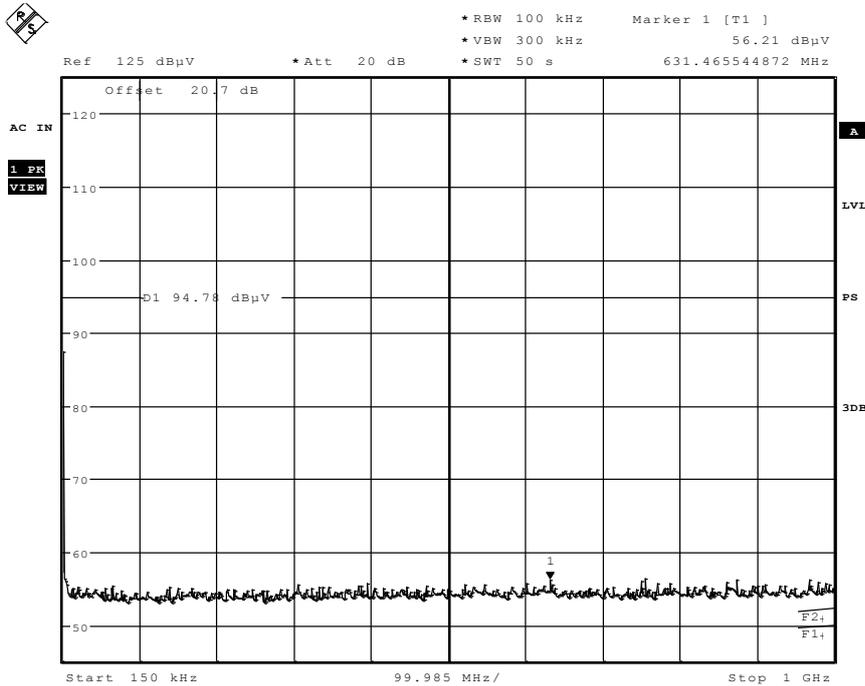
Date: 5.AUG.2011 16:44:18

**Sweep 3: Channel 39 (2.8GHz to 18GHz)**



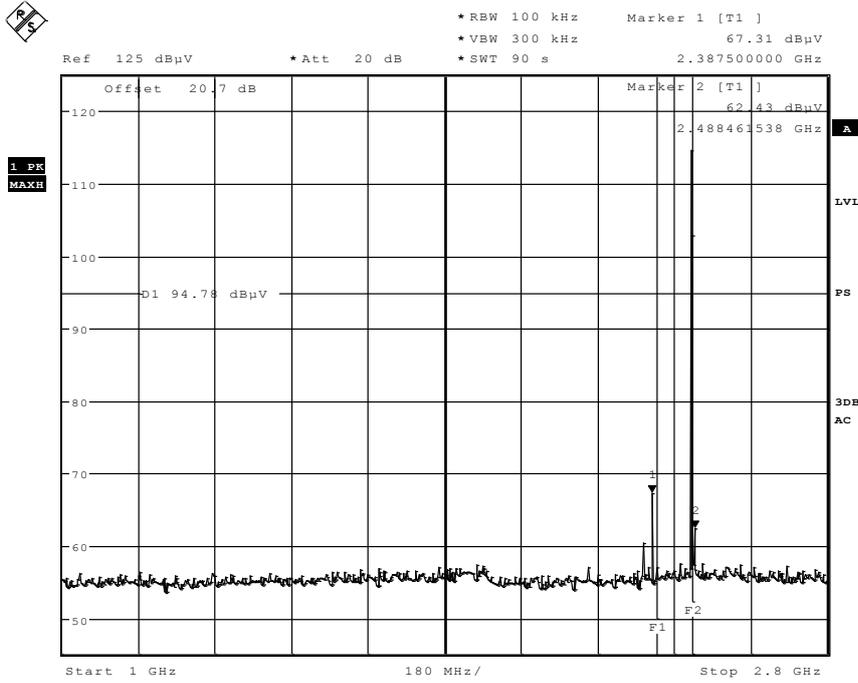
Date: 5.AUG.2011 16:47:18

**In-BAND reference value for channel 78**



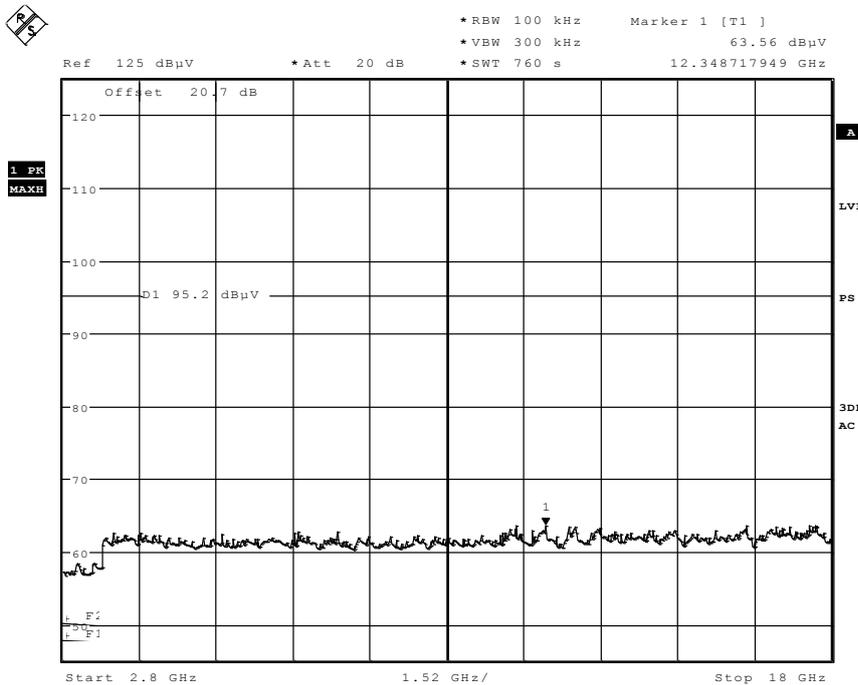
Date: 5.AUG.2011 16:57:59

**Sweep 1: Channel 78 (150kHz to 1GHz)**



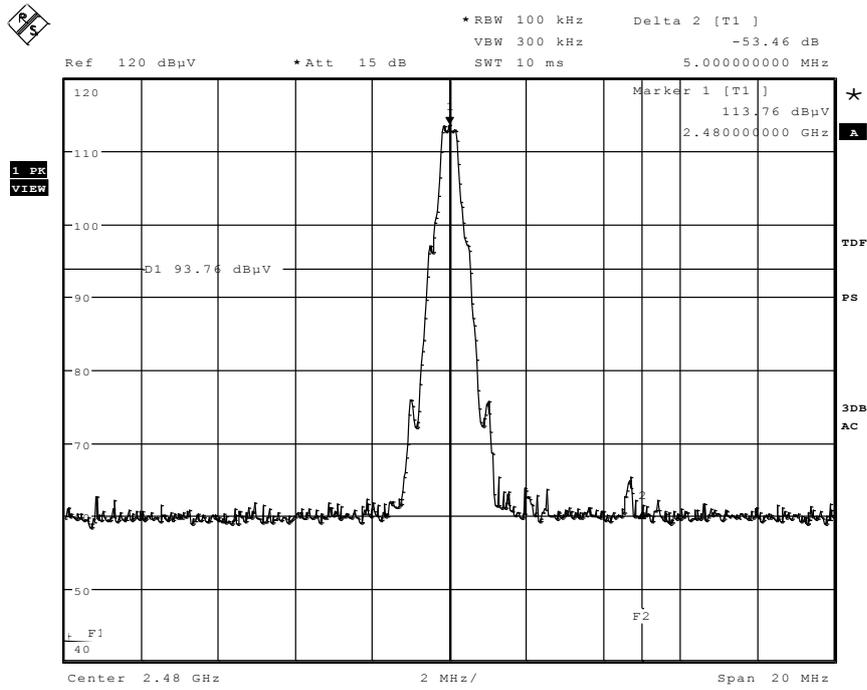
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**Sweep 2: Channel 78 (1GHz to 2.8GHz)**



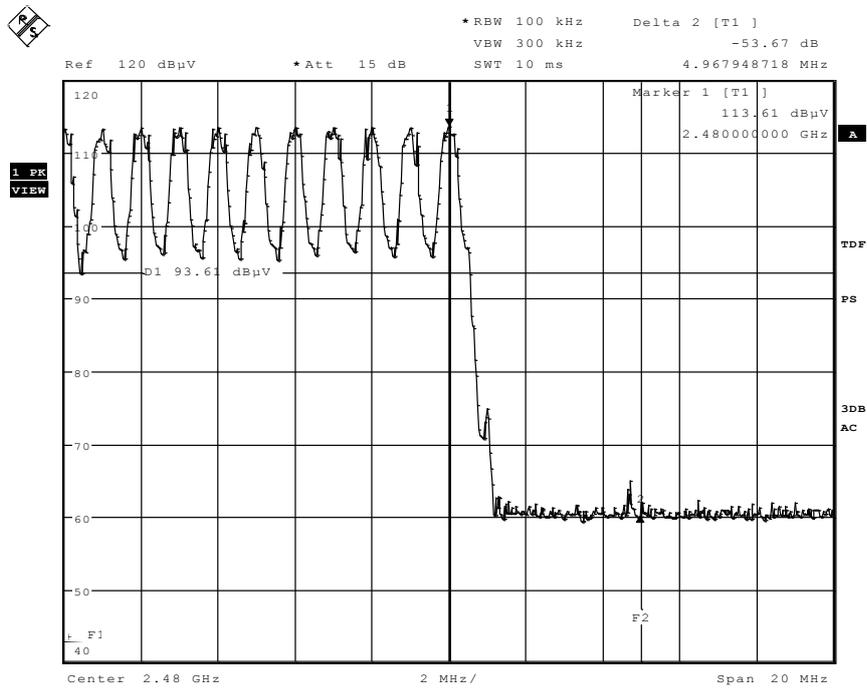
Date: 5.AUG.2011 16:08:00

**Sweep 3: Channel 78 (2.8GHz to 18GHz)**



Date: 27.AUG.2011 13:53:17

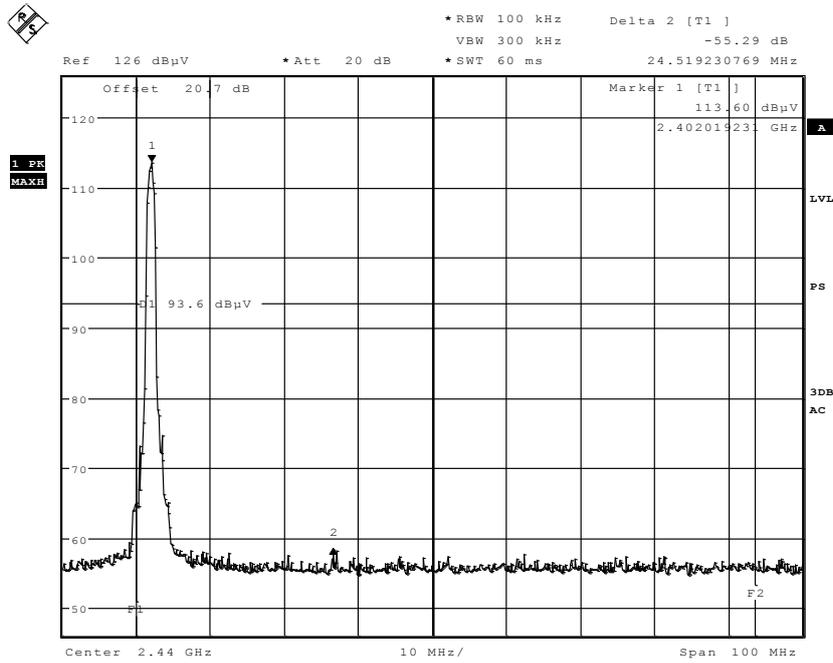
**Band-Edge right (no hopping)**



Date: 27.AUG.2011 13:57:49

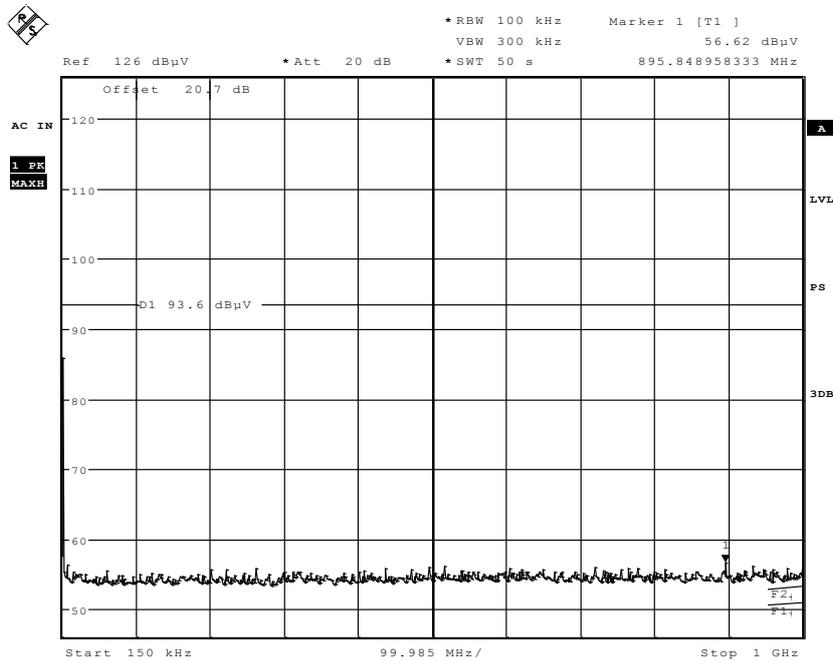
**Band-Edge right (hopping mode)**

### 1.7.2. 2DH3 modulation



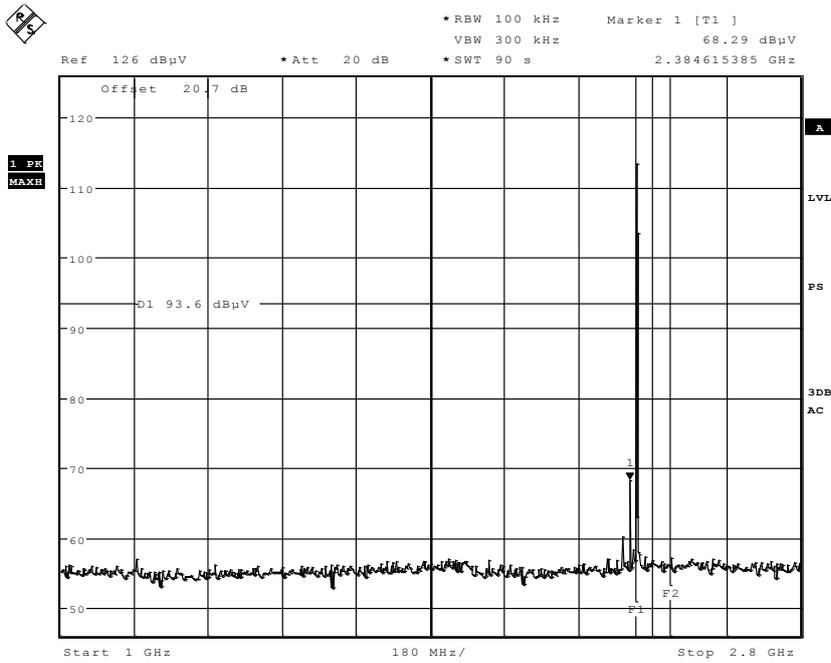
Date: 9.AUG.2011 15:52:59

### In-BAND reference value for channel 0



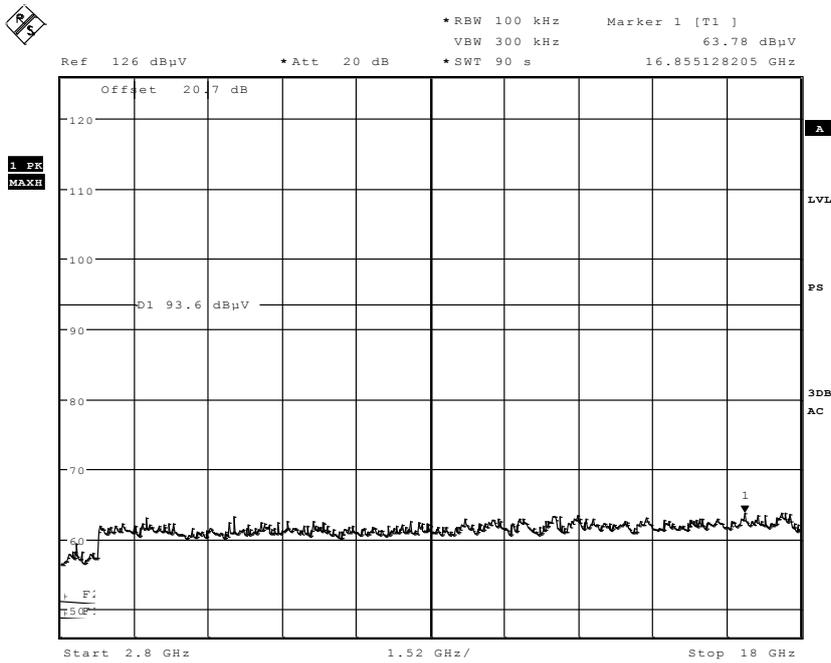
Date: 9.AUG.2011 15:54:49

### Sweep 1: Channel 0 (150kHz to 1GHz)



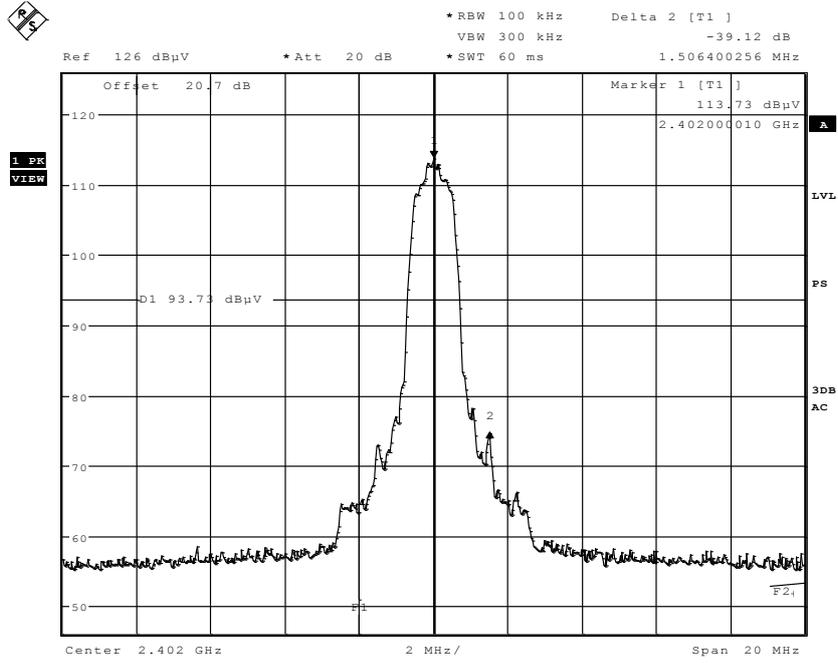
Date: 9.AUG.2011 15:56:46

**Sweep 2: Channel 0 (1GHz to 2.8GHz)**



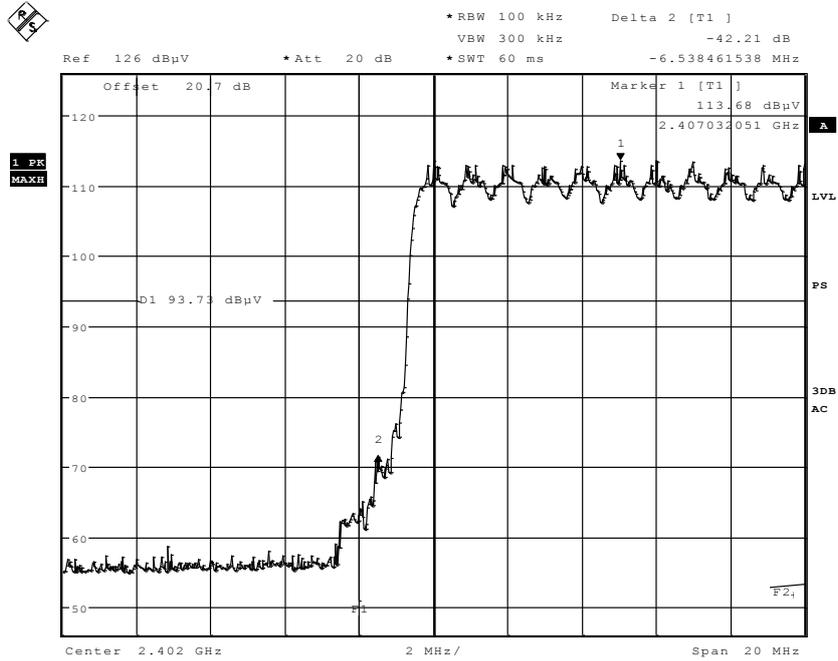
Date: 9.AUG.2011 16:08:16

**Sweep 3: Channel 0 (2.8GHz to 18GHz)**



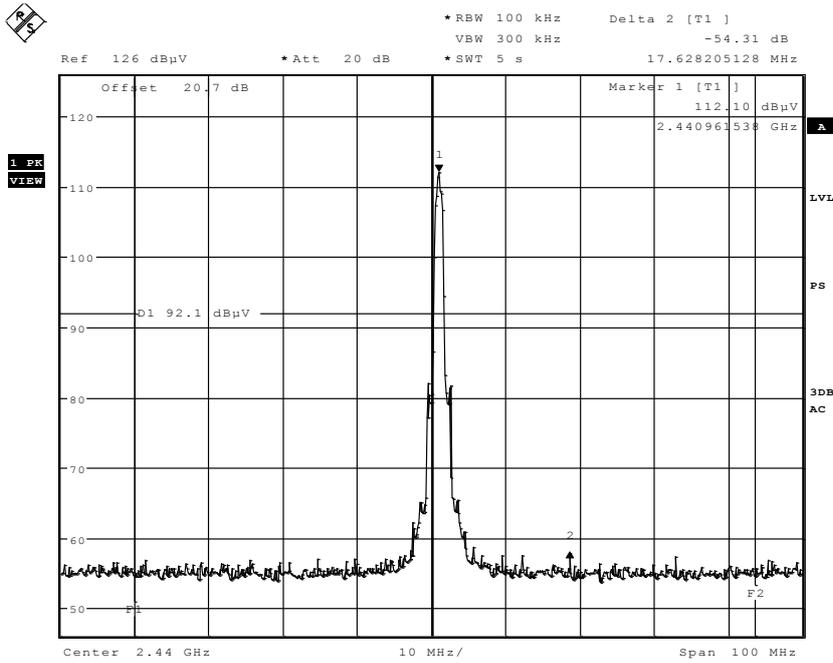
Date: 9.AUG.2011 15:45:36

**Band-Edge left (no hopping)**



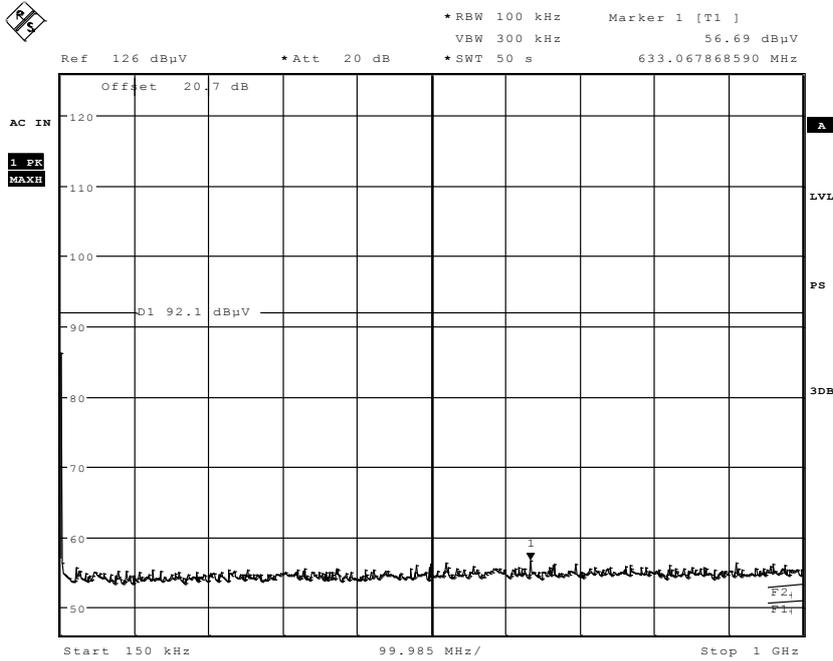
Date: 9.AUG.2011 15:51:03

**Band-Edge left (hopping mode)**



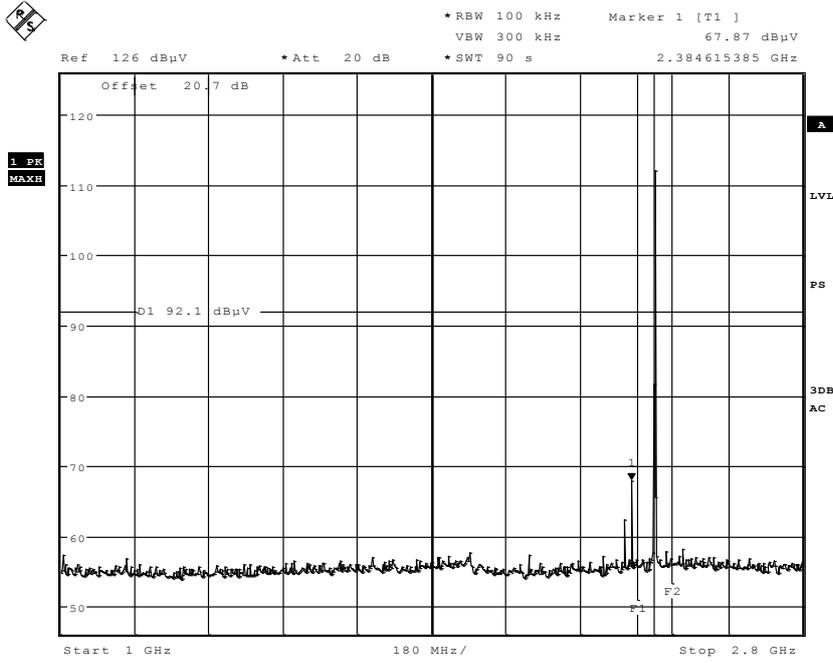
Date: 9.AUG.2011 15:17:58

**In-BAND reference value for channel 39**



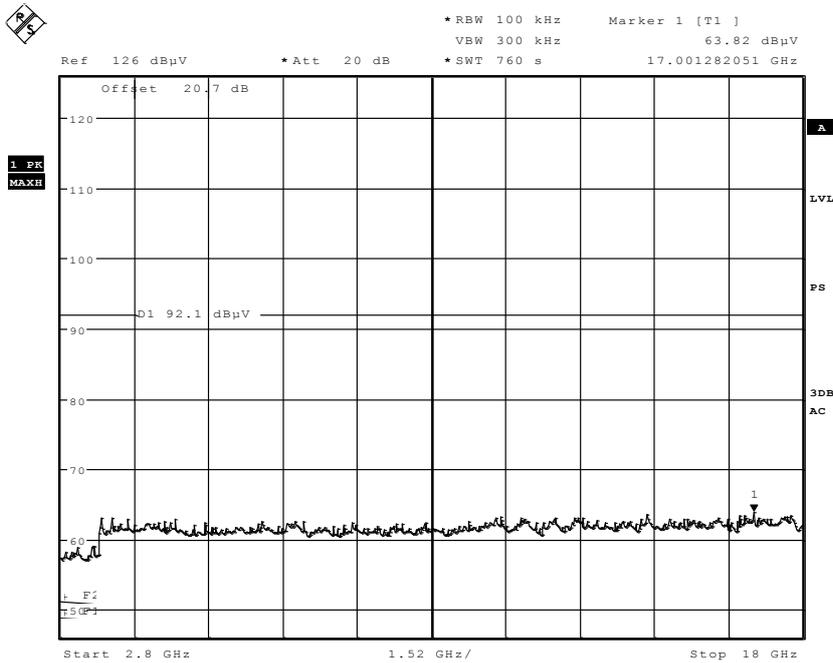
Date: 9.AUG.2011 15:21:03

**Sweep 1: Channel 39 (150kHz to 1GHz)**



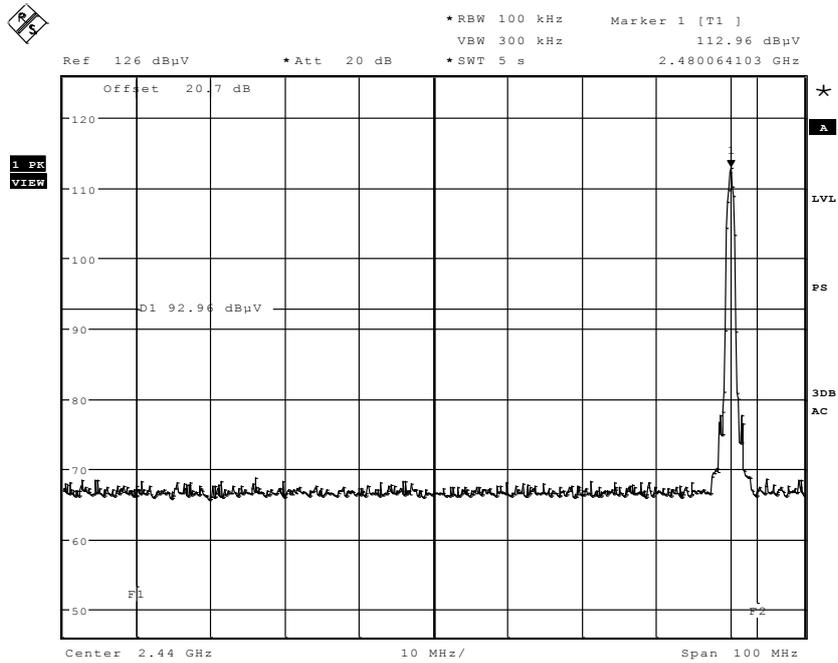
Date: 9.AUG.2011 15:24:19

**Sweep 2: Channel 39 (1GHz to 2.8GHz)**



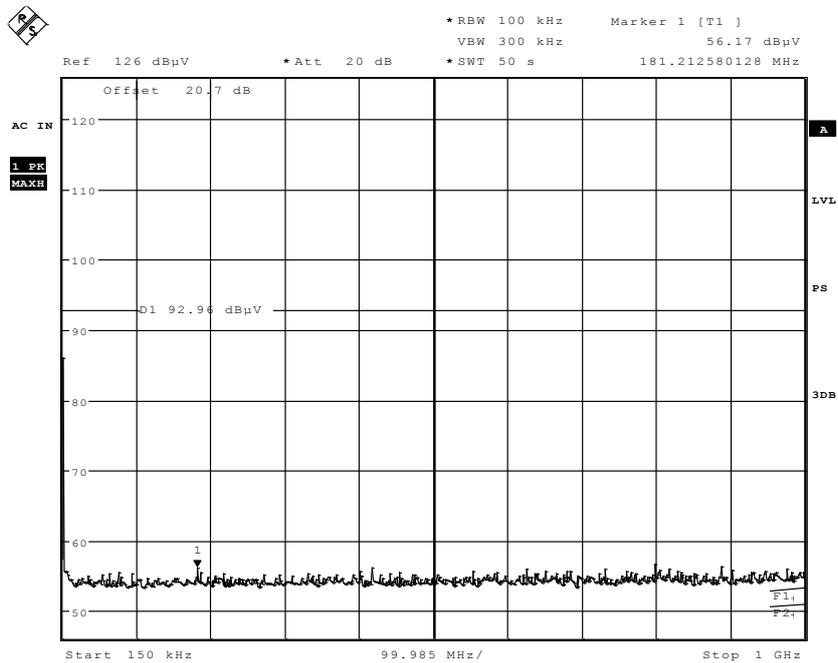
Date: 9.AUG.2011 15:42:03

**Sweep 3: Channel 39 (2.8GHz to 18GHz)**



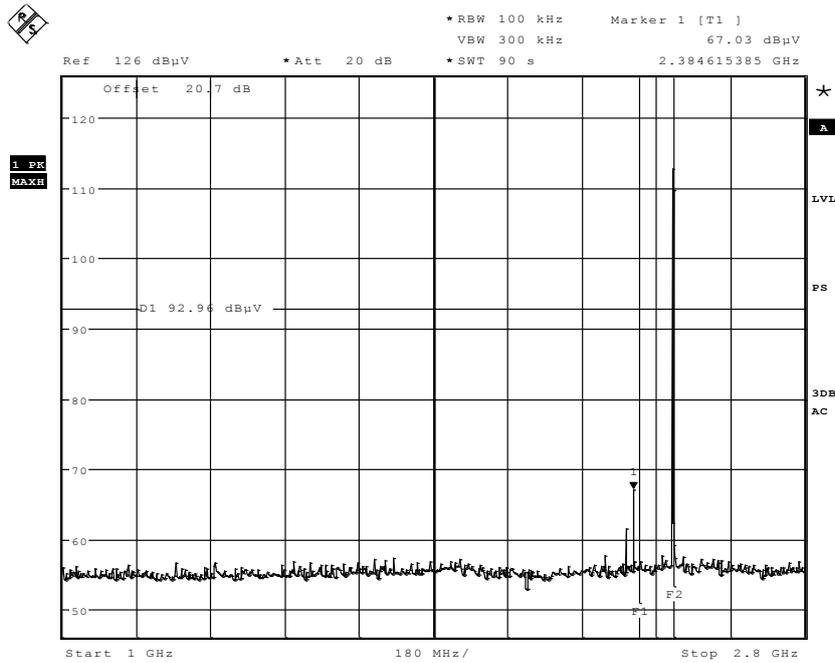
Date: 9.AUG.2011 14:41:12

**In-BAND reference value for channel 78**



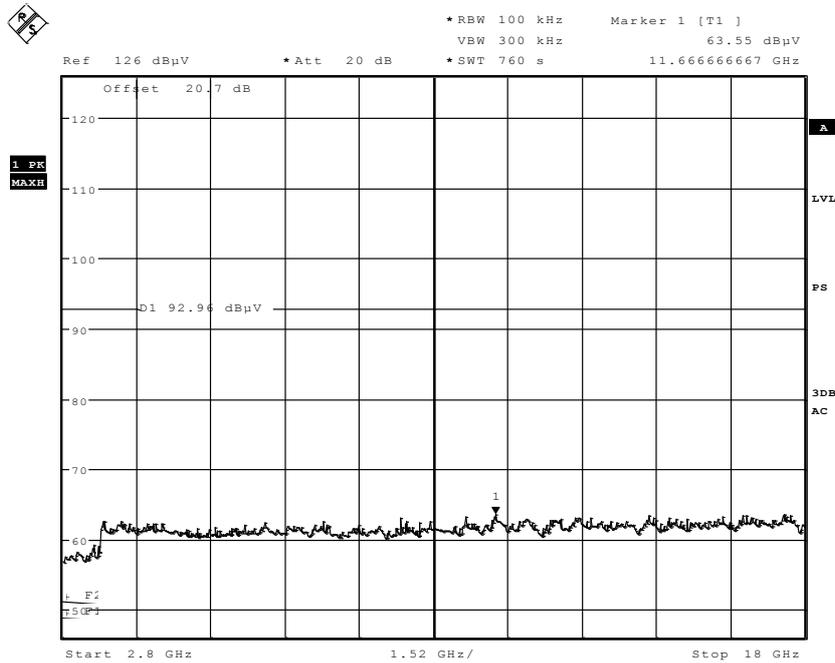
Date: 9.AUG.2011 14:55:56

**Sweep 1: Channel 78 (150kHz to 1GHz)**



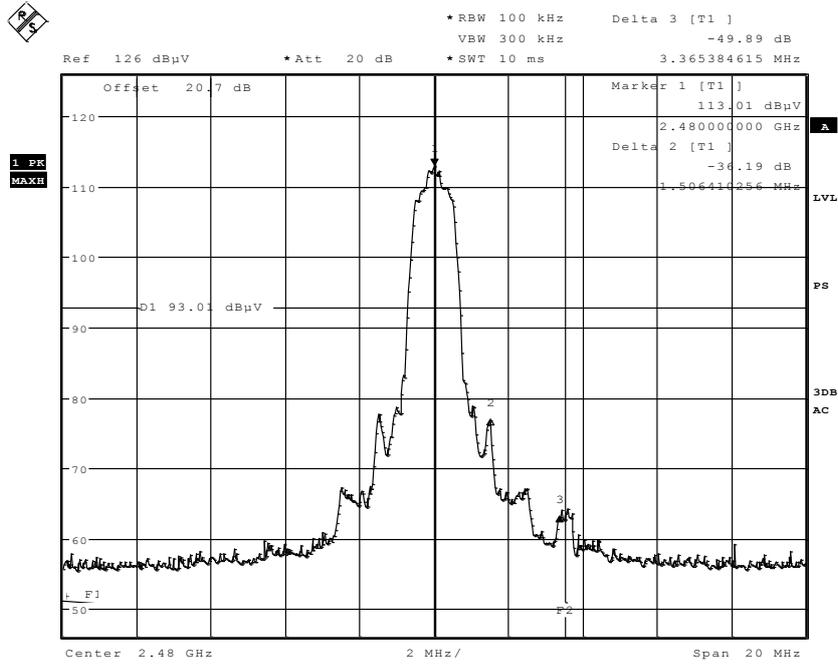
Date: 9.AUG.2011 14:59:14

**Sweep 2: Channel 78 (1GHz to 2.8GHz)**



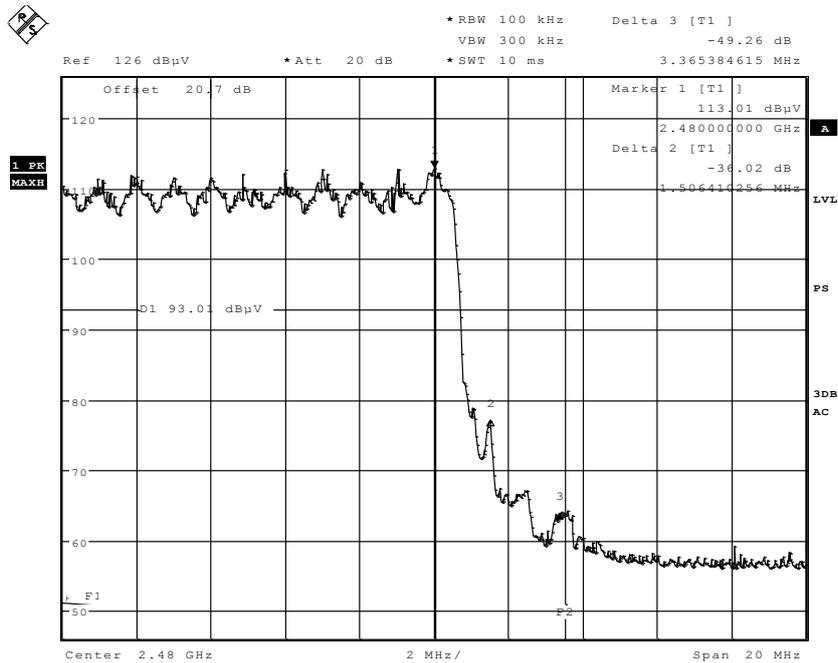
Date: 9.AUG.2011 15:14:27

**Sweep 3: Channel 78 (2.8GHz to 18GHz)**



Date: 9.AUG.2011 14:47:24

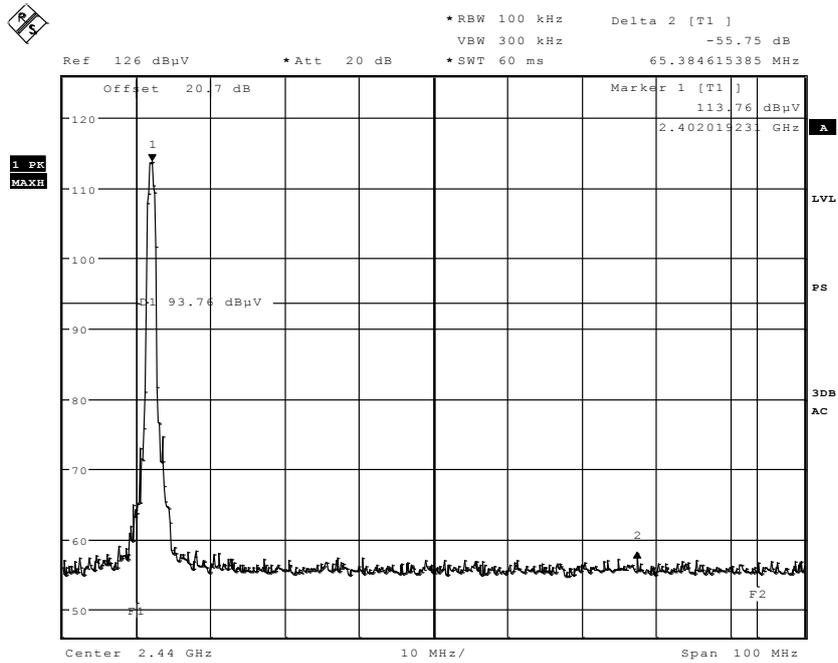
**Band-Edge right (no hopping)**



Date: 9.AUG.2011 14:51:21

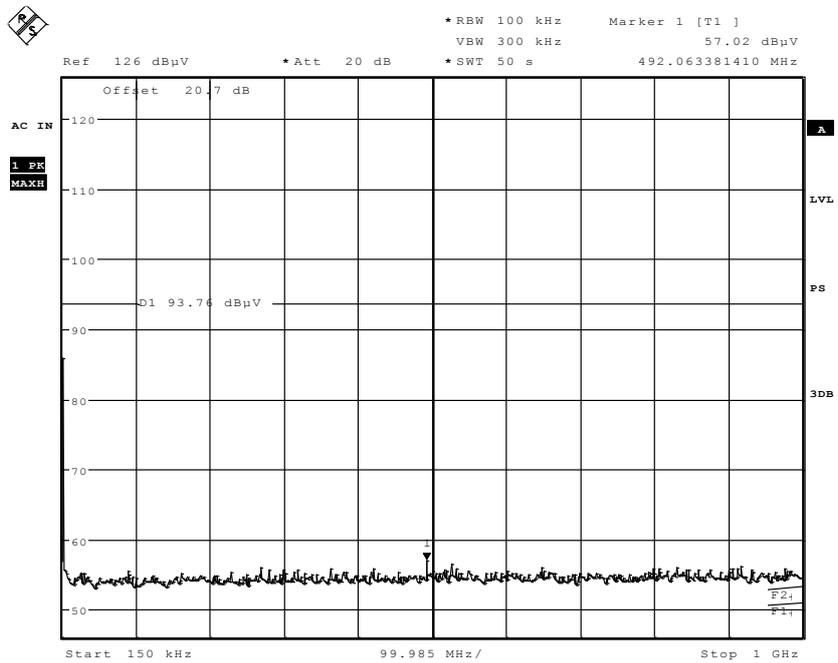
**Band-Edge right (hopping mode)**

### 1.7.3. 3DH1 modulation



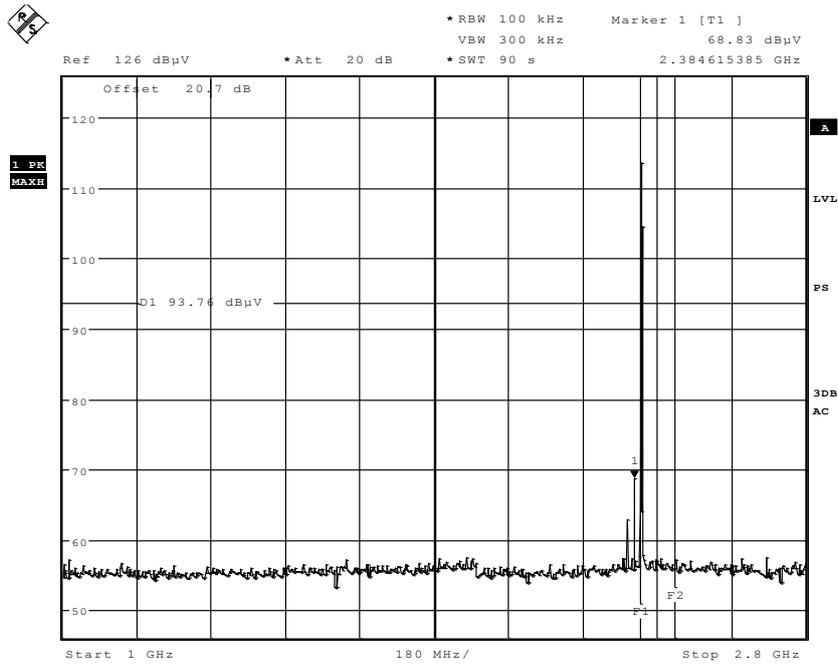
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### In-BAND reference value for channel 0



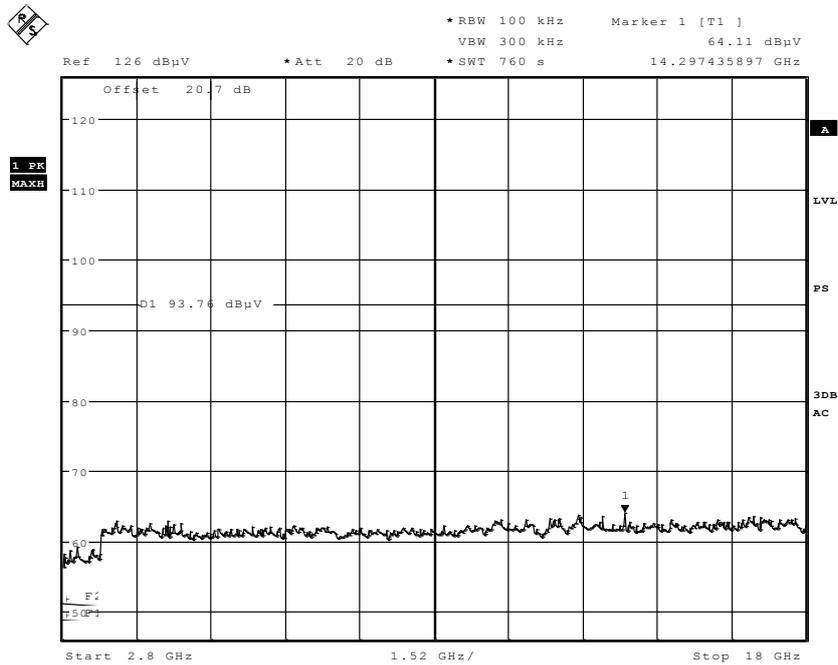
Date: 9.AUG.2011 16:20:34

### Sweep 1: Channel 0 (150kHz to 1GHz)



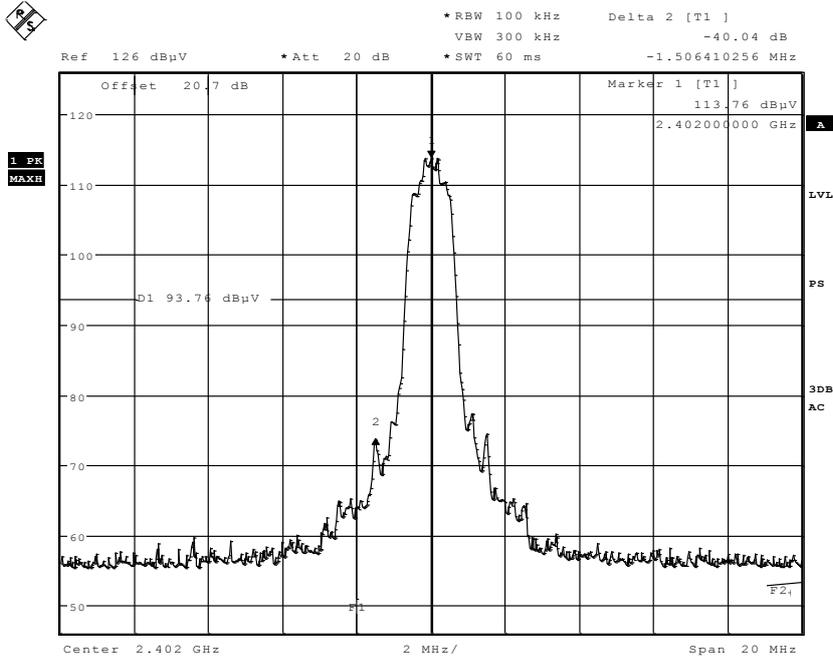
Date: 9.AUG.2011 16:23:34

**Sweep 2: Channel 0 (1GHz to 2.8GHz)**



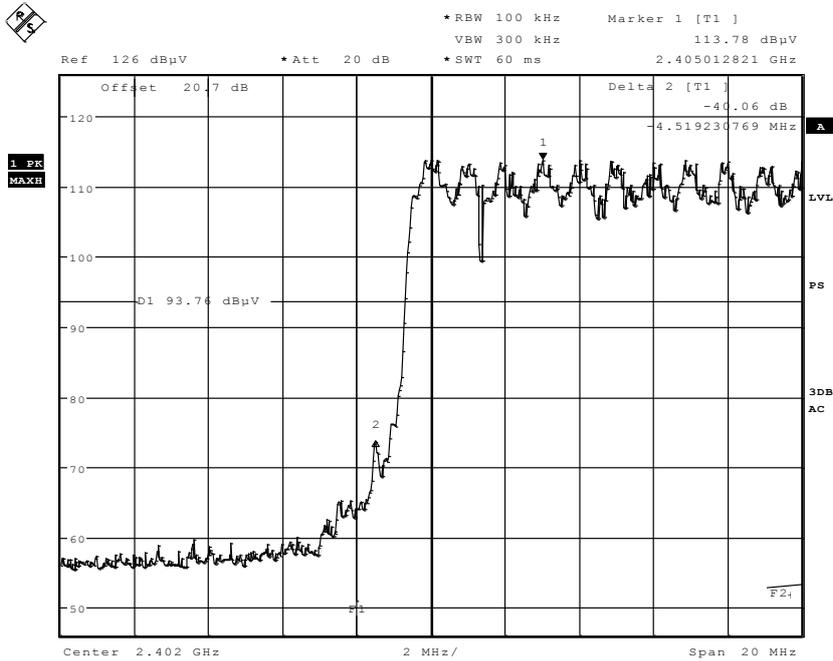
Date: 9.AUG.2011 16:38:00

**Sweep 3: Channel 0 (2.8GHz to 18GHz)**



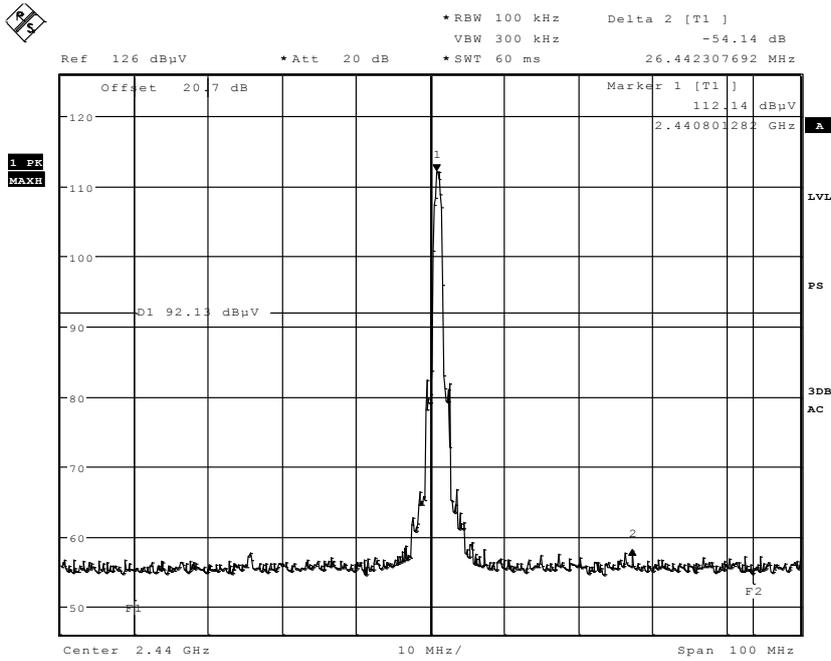
Date: 9.AUG.2011 16:13:44

**Band-Edge left (no hopping)**



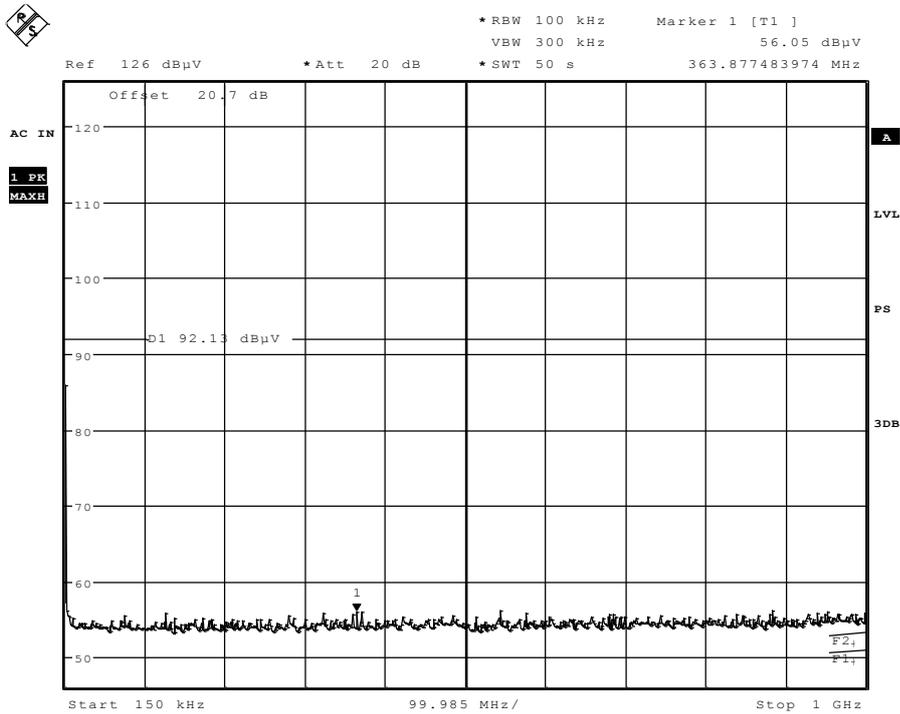
Date: 9.AUG.2011 16:15:58

**Band-Edge left (hopping mode)**



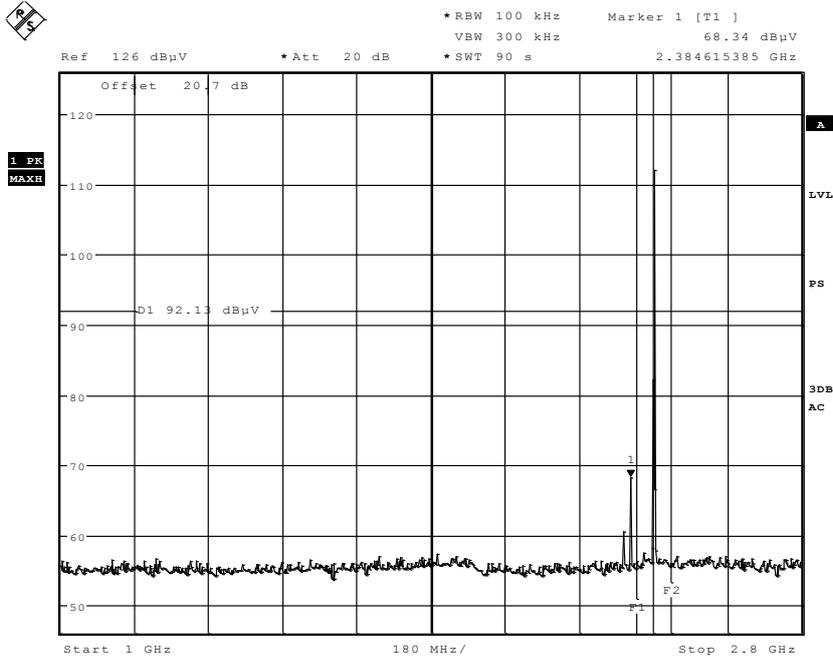
Date: 9.AUG.2011 16:41:15

**In-BAND reference value for channel 39**



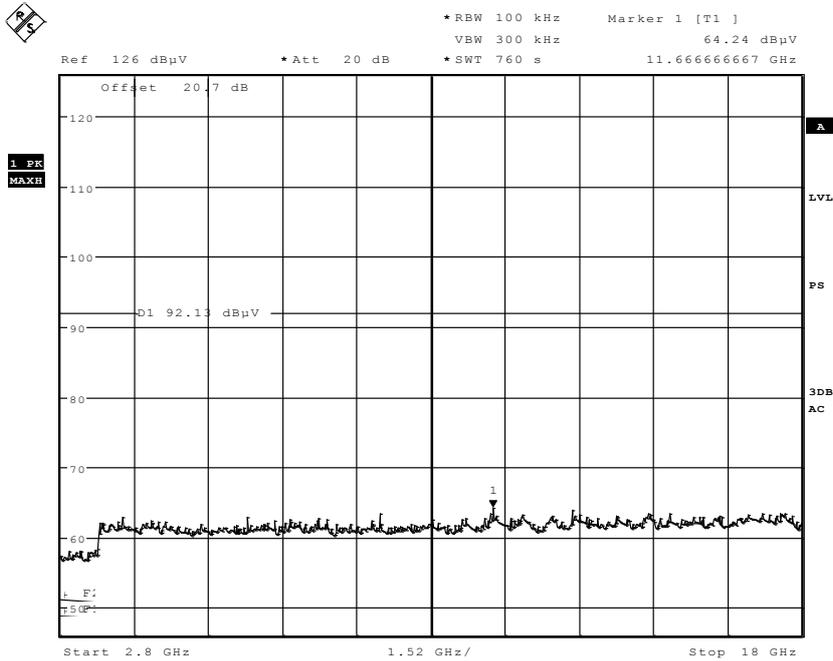
Date: 9.AUG.2011 16:43:01

**Sweep 1: Channel 39 (150kHz to 1GHz)**



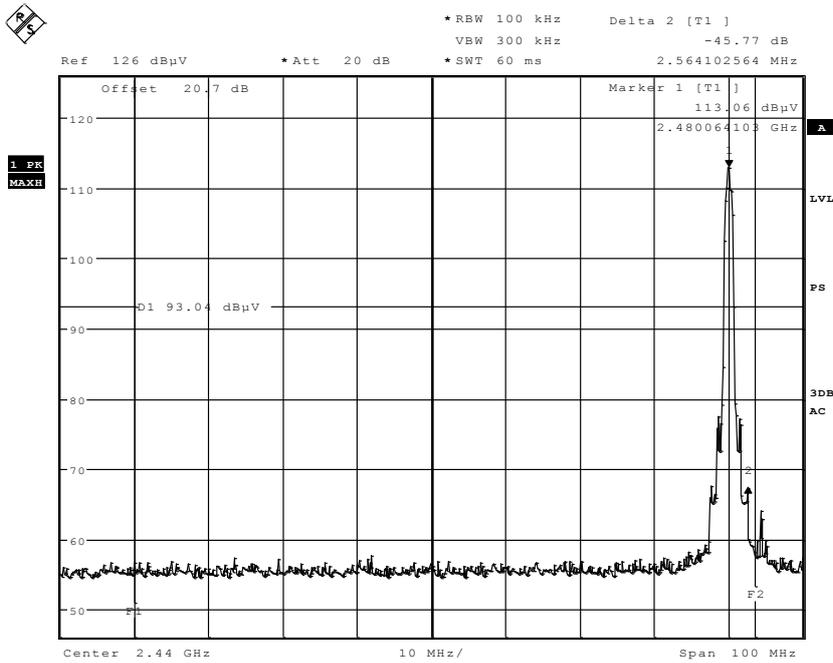
Date: 9.AUG.2011 16:45:05

**Sweep 2: Channel 39 (1GHz to 2.8GHz)**



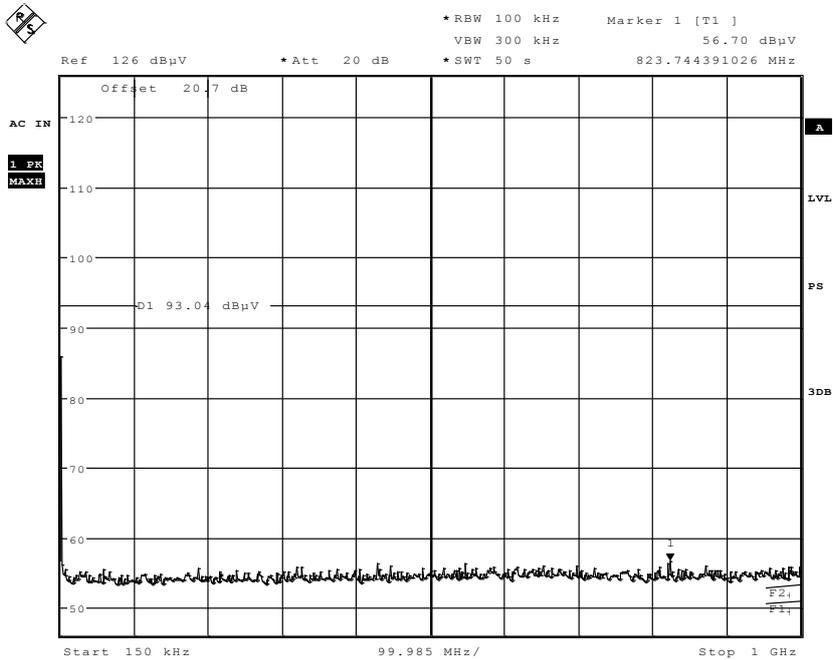
Date: 9.AUG.2011 16:58:28

**Sweep 3: Channel 39 (2.8GHz to 18GHz)**



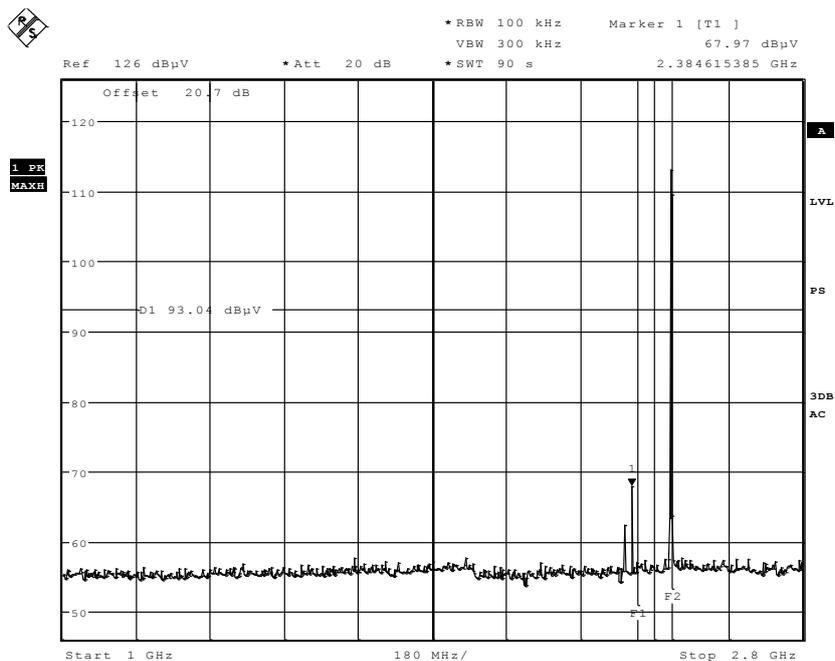
Date: 9.AUG.2011 17:07:22

**In-BAND reference value for channel 78**



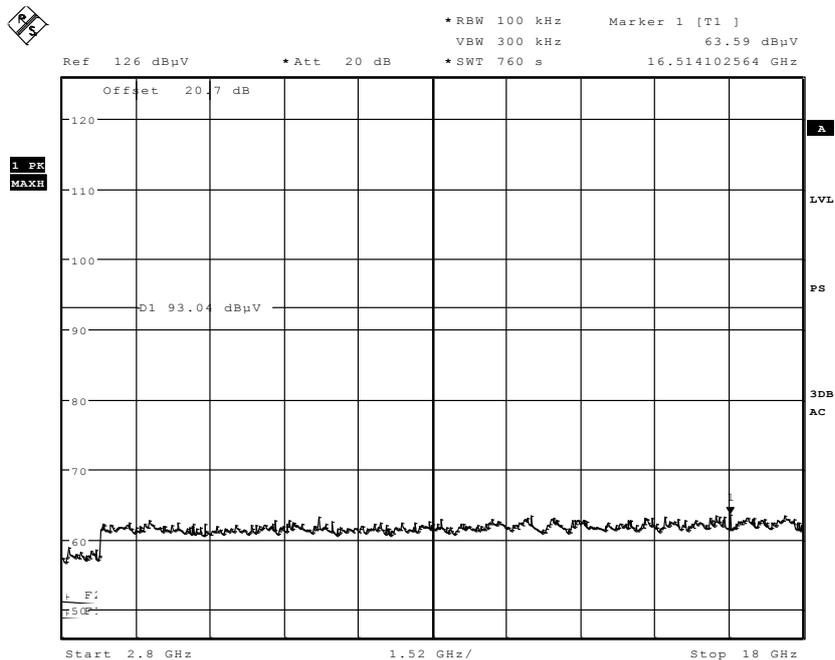
Date: 9.AUG.2011 17:09:14

**Sweep 1: Channel 78 (150kHz to 1GHz)**



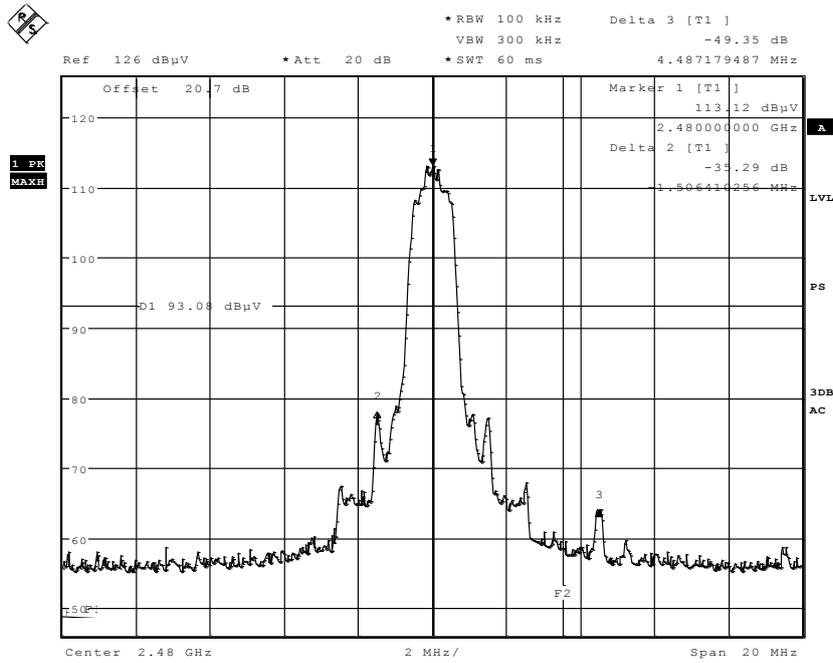
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**Sweep 2: Channel 78 (1GHz to 2.8GHz)**



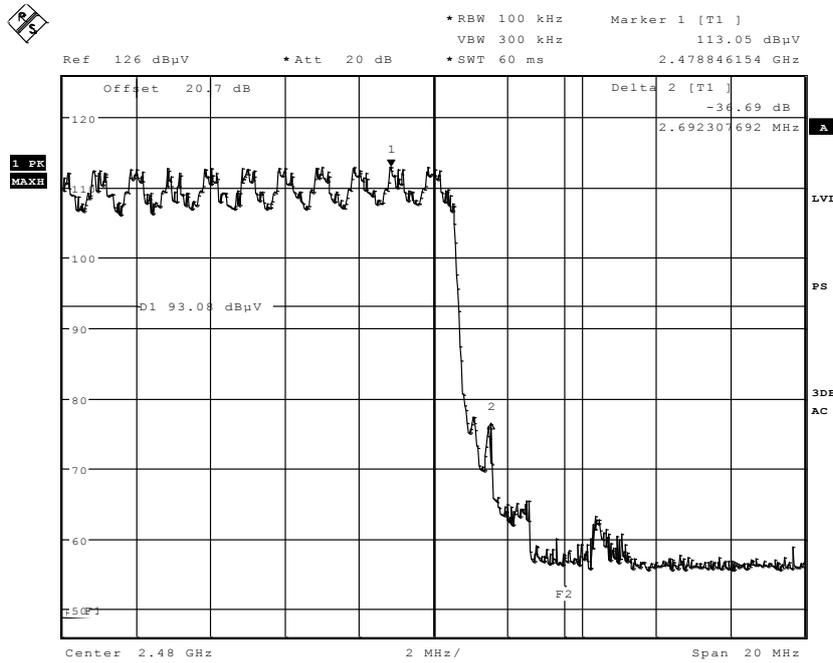
Date: 9.AUG.2011 17:37:13

**Sweep 3: Channel 78 (2.8GHz to 18GHz)**



Date: 9.AUG.2011 17:01:25

**Band-Edge right (no hopping)**



Date: 9.AUG.2011 17:04:45

**Band-Edge right (hopping mode)**

## 1.8. Conducted emissions on AC-mains

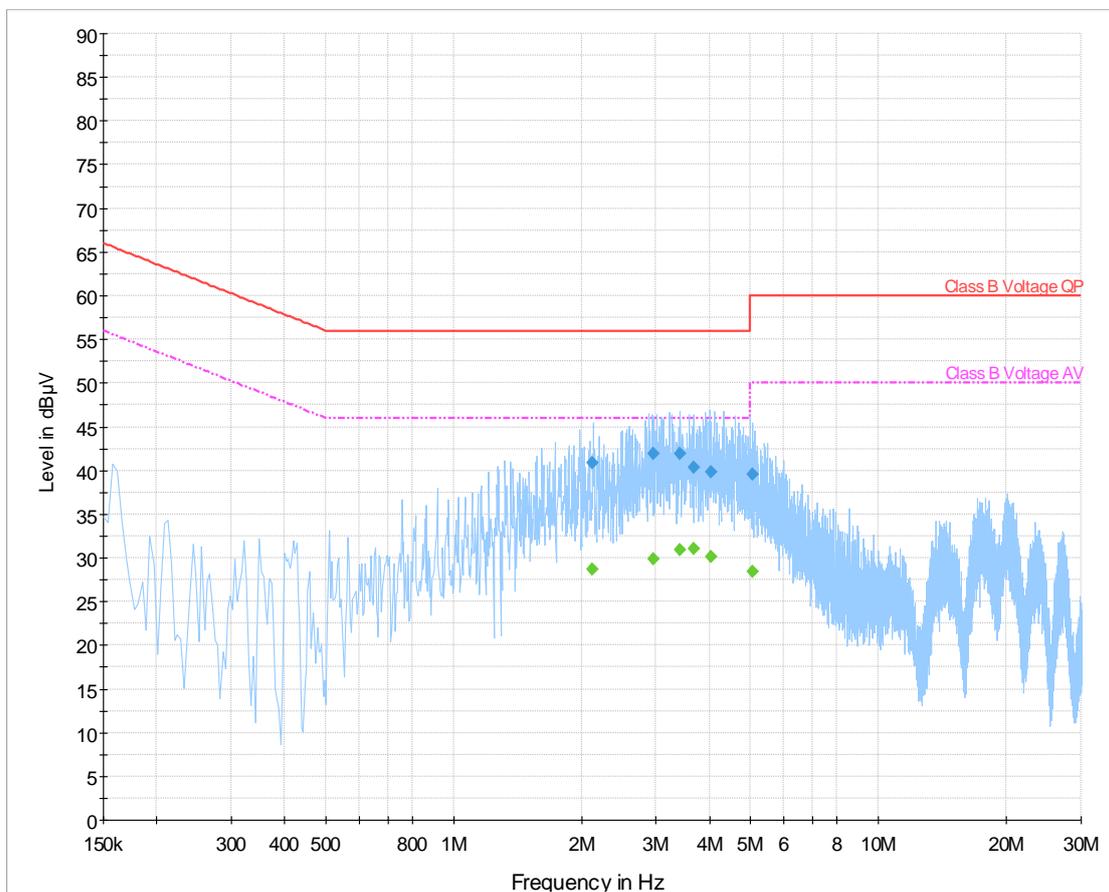
### 1.8.1. TX-Mode (§15.207/RSS-Gen.)

#### Diagram No. I\_1.03

Test Description:	Conducted Voltage Measurement
Testspezifikation:	FCC 15.207, RSS-Gen
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	Lor
Operating mode:	TX (BT mode activated with HS)
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz

#### EUT Information

EUT Name:	AAD-3880121BV+ AC/DC Charger CAA-0002016-BV(#1)+USB cable EC700(#1)+ BT-HS DDA-0002005
Manufacturer:	SEM



#### Final Result 1 (QP)

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.126875	40.86	15000	9.000	GND	L1	0.1	15.1	56
2.946563	41.932						14.1	56
3.406406	41.909						14.1	56
3.68375	40.403						15.6	56
4.039688	39.805						16.2	56
5.048125	39.57						20.4	60

**Final Result 2**

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.126875	28.670	1500	9.000	GND	L1	0.1	17.30	46.0
2.946563	29.922						16.10	46.0
3.406406	30.859						15.10	46.0
3.683750	31.063						14.90	46.0
4.039688	30.195						15.80	46.0
5.048125	28.460						21.50	50.0

**Technical Data of Measurements with R&S EMC32 V8.50.0****EMI Auto Test Template: 01\_Class B\_Voltage\_PK\_QPAV\_N\_L1**

Hardware Setup: ESH2-Z5  
 Measurement Type: 4 Line LISN  
 Frequency Range: 150 kHz - 30 MHz  
 Graphics Level Range: -10 dBµV - 80 dBµV

Preview Measurements:  
 Scan Test Template: 02\_Class B pre\_PK\_fast

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	61.035 Hz	PK+	200 Hz	0,00005 s	0 dB
150 kHz - 30 MHz	3.906 kHz	PK+	9 kHz	0,00005 s	0 dB

Receiver: [ESCS 30]

Data Reduction:  
 Limit Line #1: Class B Voltage QP  
 Limit Line #2: Class B Voltage AV  
 Peak Search: 6 dB , Maximum Results: 10  
 Subrange Maxima: 50 Subranges , Maxima per Subrange: 2  
 Acceptance Offset: -13 dB  
 Maximum Number of Results: 30  
 After Data Reduction: Interactive data reduction

Frequency Zoom:  
 Zoom Scan Template: 08\_Class B maxZoom\_PK100mS

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	5 kHz	PK+	200 Hz	0,1 s	0 dB
150 kHz - 30 MHz	5 kHz	PK+	9 kHz	0,1 s	0 dB

Receiver: [ESCS 30]

Final Measurements:  
 Template for Single Meas.: 07\_Class B fin AV QP

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	4.5 kHz	QPK; CAV	200 Hz	15 s	0 dB
150 kHz - 30 MHz	4.5 kHz	QPK; CAV	9 kHz	15 s	0 dB

Receiver: [ESCS 30]

Report Settings:  
 Report Template: Ctc\_Standard\_class\_B  
 Create Electronic Report: RTF PDF  
 Document Name: EMI Report

Actions:  
 Test stop  
 Notify: "End of Test"

## 1.9. Radiated field strength (15.209/RSS-Gen.)

### 1.9.1. Radiated magnetic field strength measurements (f<30MHz)

#### Common Information

Test description:	Magnetic Fieldstrength Measurement in 3 m distance
Test site and distance:	Semi Anechoic Room covered with absorbers (SAR)
Measured sides of EUT:	front, right, rear, left, top, under
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Turntable step:	90° during pre-scan
Used filter:	bypass
Test specification.:	FCC 15.205 § 15.209; RSS-Gen: Issue 3
Operator:	Lor
Power during tests:	full loaded batteries

#### EUT Information

EUT type	AAD-3880121-BV
Manufacturer	Sony Ericsson

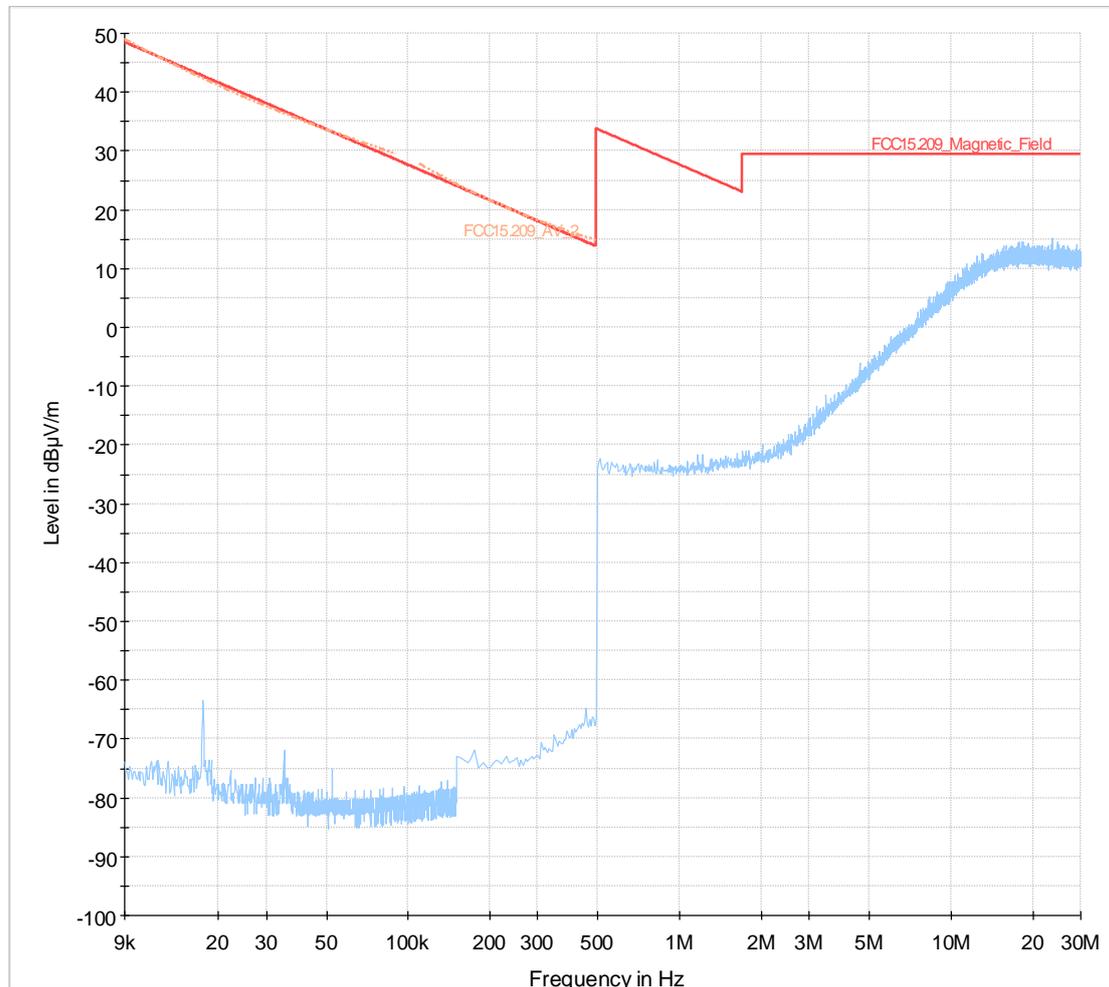


Diagram No.: I\_3.01-Channel 0

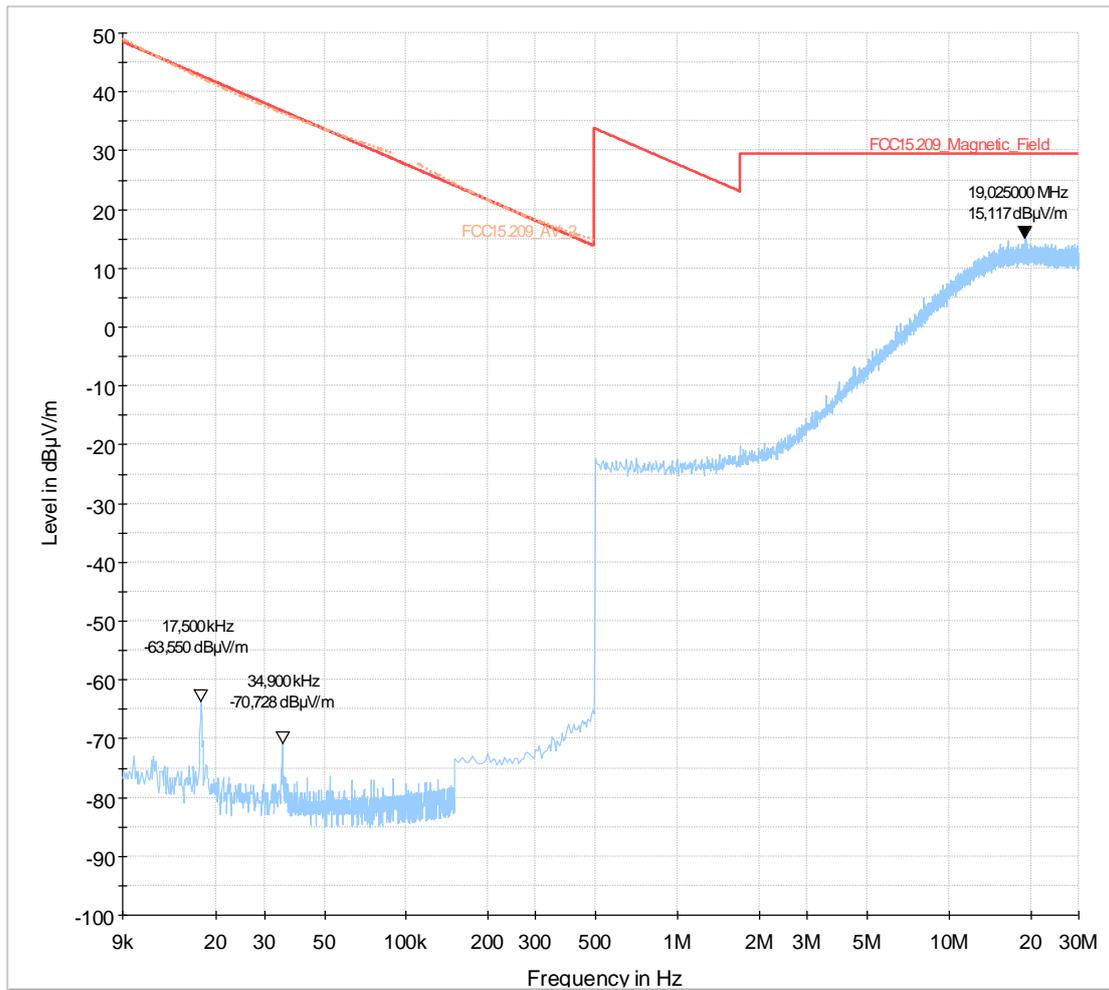


Diagram No.: I\_3.02-Channel 39

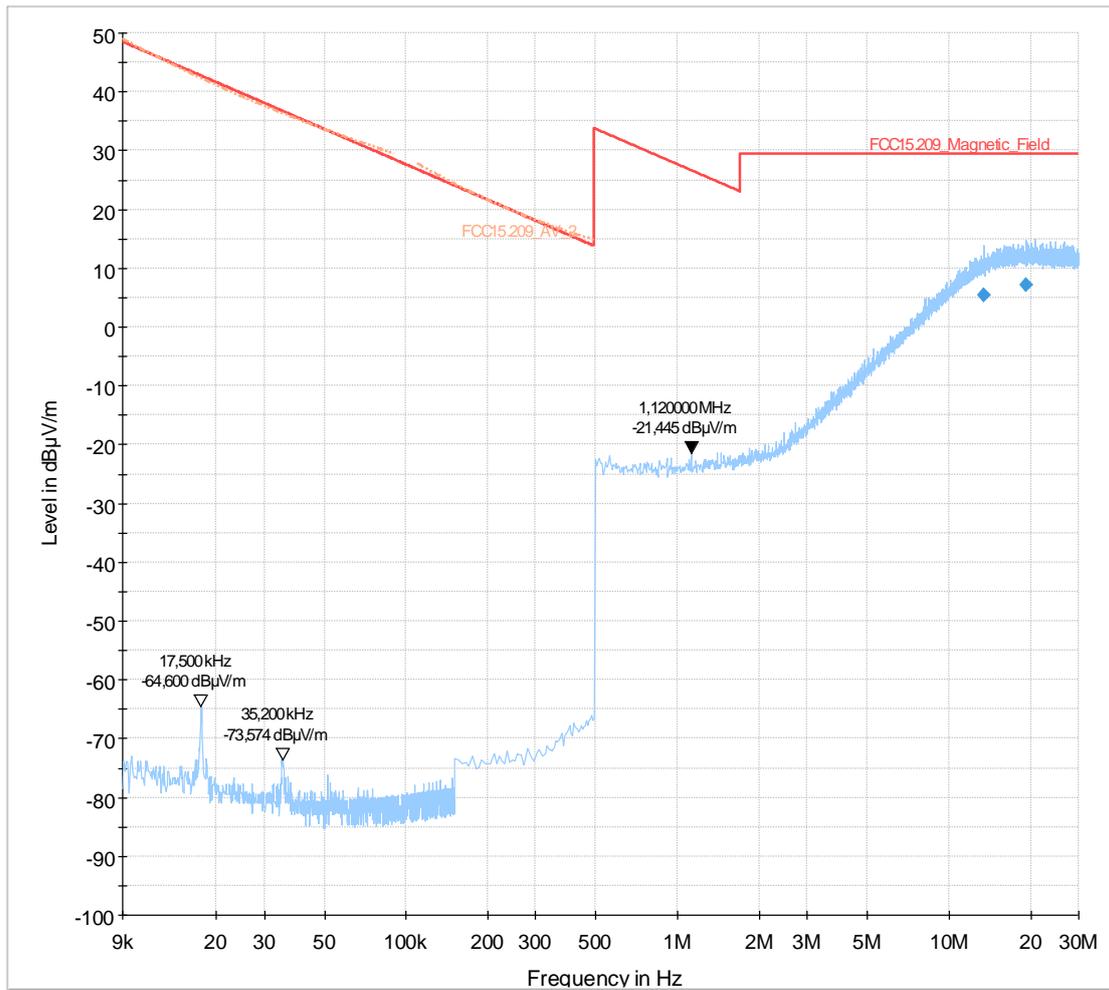


Diagram No.: I\_3.03-Channel 78

### 1.9.2. Radiated field strength (30MHz < f < 1GHz)

#### Common Information

Test description: Electric Fieldstrength Measurement related to 3 m distance  
 Test site and distance: Semi Anechoic Room  
 Measured sides of EUT: front, right, rear, left, top, under  
 Rec. antenna (pre-scan): height 1.00 m and 1.82 m, horizontal and vertical polarisation  
 Rec. antenna (final): height between 1 m to 4 m, polarisation according to pre-scan results  
 Turntable step: 90° during pre-scan, continuously turning during final measurement  
 Used filter: lowpass 1200 MHz  
 Test specification.: FCC 15.205 § 15.209; RSS-Gen: Issue 3

Operator: Oou  
 Operating conditions: TX-on (BT+ Ch 0 / Freq 2402 MHz) 3DH5  
 Power during tests: full battery

#### EUT Information

EUT type: AAD-3880121-BV  
 Manufacturer: Sony Ericsson

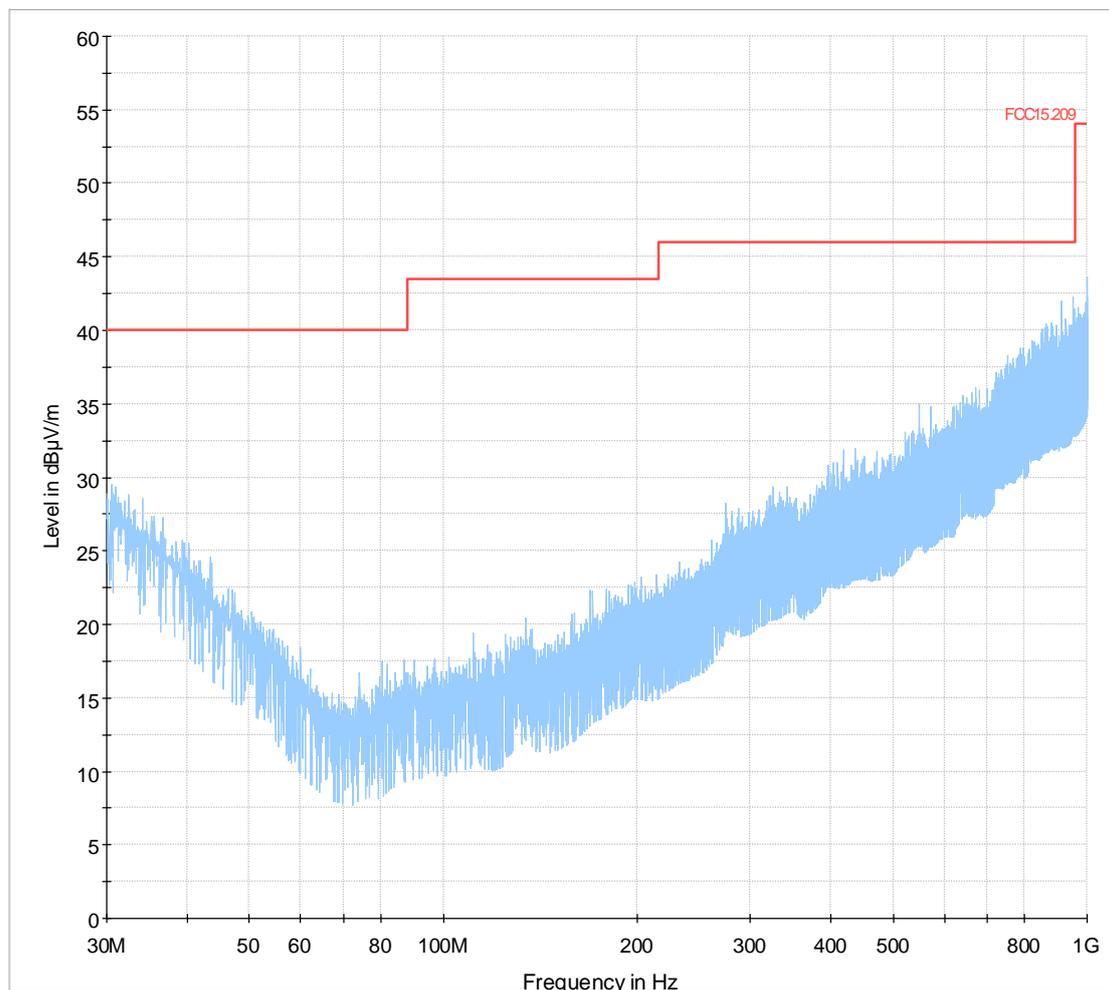


Diagram No.: I\_2.12-Channel 0

#### Result for Channel 0

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
30..1000	< 42.5	0.1	120.0	1..4m	H&V	0..360°	0&90	--	>6dB (PK)

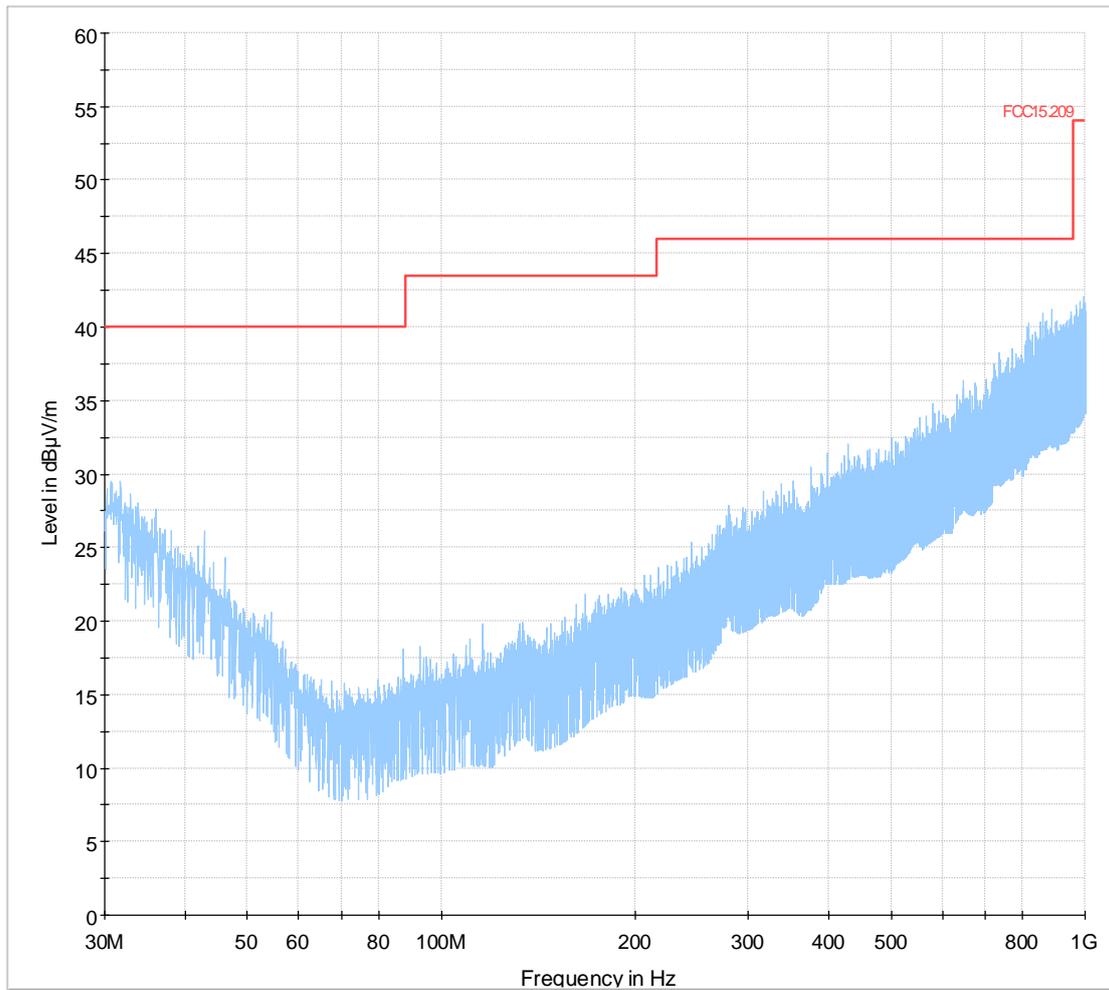


Diagram No.: I\_2.13-Channel 39

**Result for Channel 39**

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
30..1000	< 42.5	0.1	120.0	1.4m	H&V	0..360°	0&90	--	>6dB (PK)

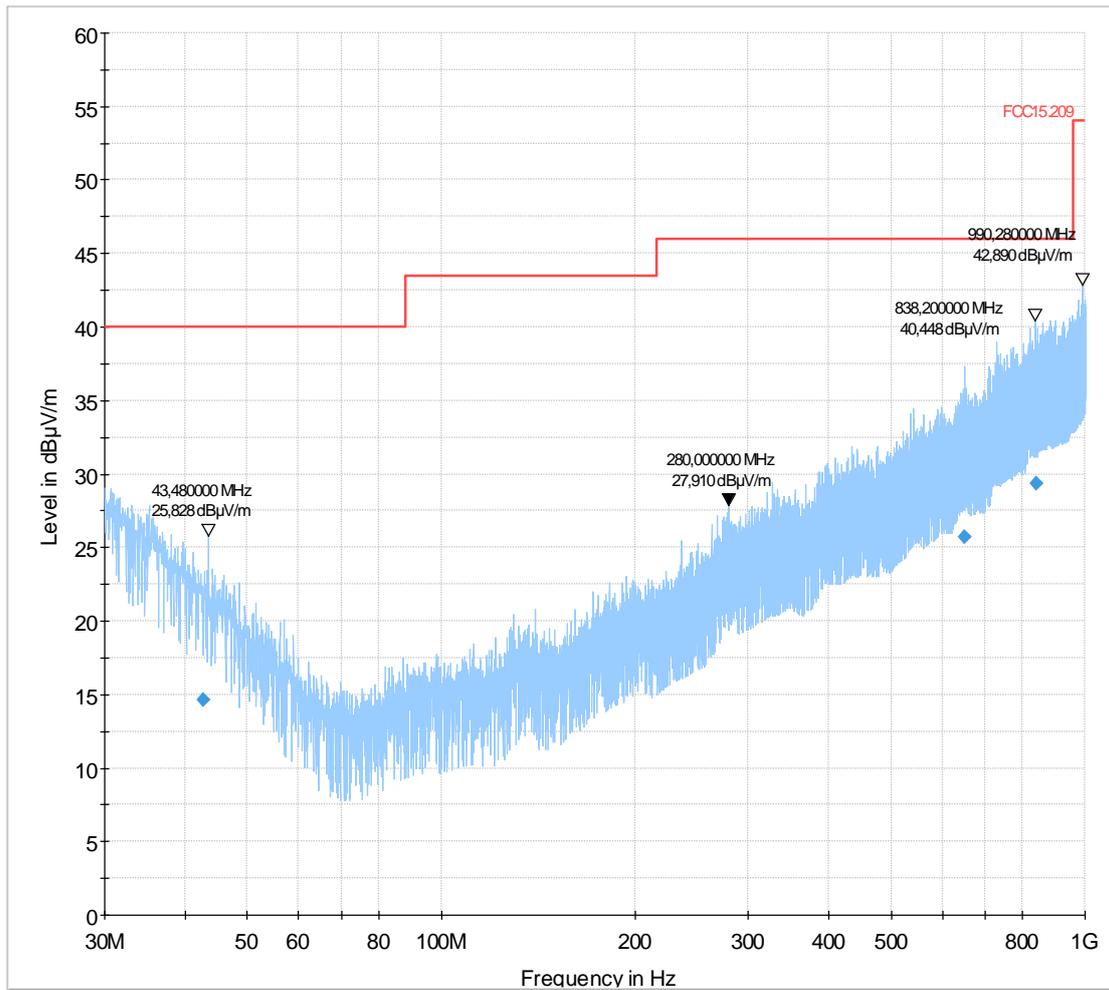


Diagram No.: I\_2.14-Channel 78

**Final Result for channel 78**

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
42.67	14.61	1000.0	120.0	360	V	36°	90°	16.16	25.40	40.0
649.27	25.68	1000.0	120.0	113	V	39°	90°	23.47	20.30	46.0
838.68	29.36	1000.0	12.0	119	V	106°	90°	25.32	16.60	46.0

### 1.9.3. Radiated field strength (1GHz < f < 18GHz)

#### Common Information

Test Description: Radiated field strength emission accord. §15.247 in 3m distance  
 Test Site: CETECOM GmbH Essen  
 Test Standard: §15.205 & 15.209 Intentional Radiator/RSS-210  
 Antenna polarisation: horizontal/vertical

Operator Name: Lor  
 Comment: Channel no. low=0  
 Op. Mode: BT-Mode, 3DH5

#### EUT Information

EUT Name: AAD-3880121-BV  
 Manufacturer: SEM

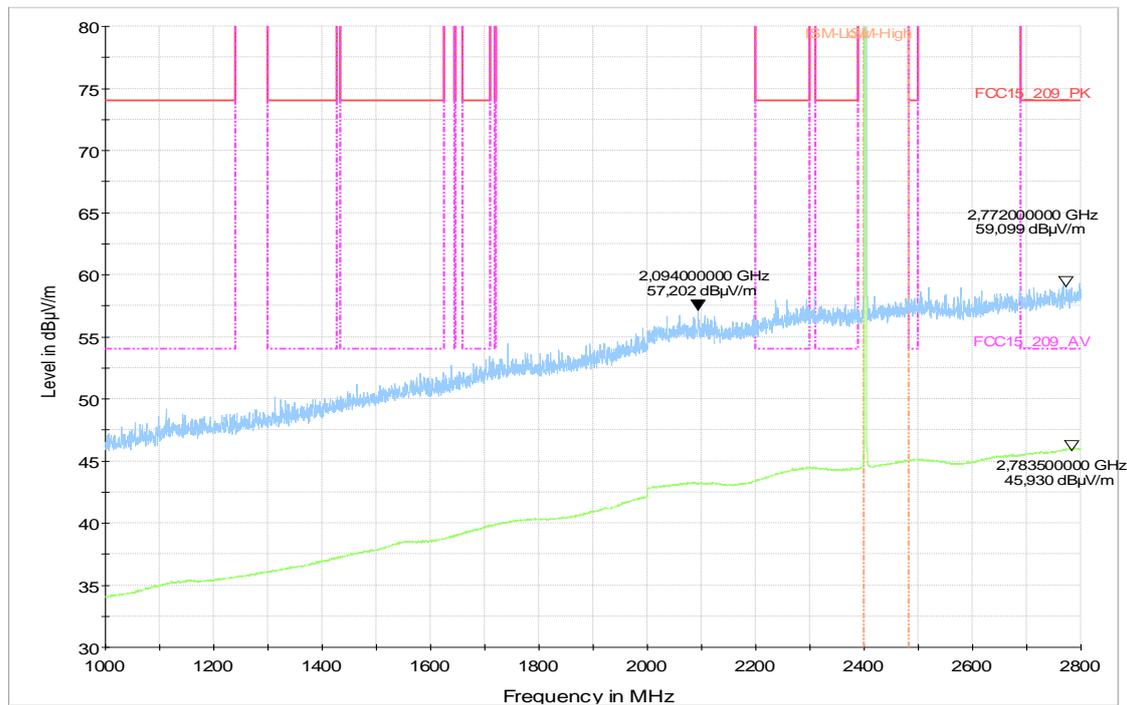


Diagram No.: I\_2.04-Channel 0 (Sweep 1: 1GHz to 2.8GHz)

#### Final Result 1 (PK)

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2094.0	57.20	100.0	1000.000	155.0	H&V	0°..360°	--	> 16.80	74.0
2772.0	59.09	100.0	1000.000	155.0	H&V	0°..360°	--	> 14.91	74.0

#### Final Result 2 (AV)

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2783.5	45.93	100.0	1000.000	155.0	H&V	0°..360°	--	> 8.07	54.0

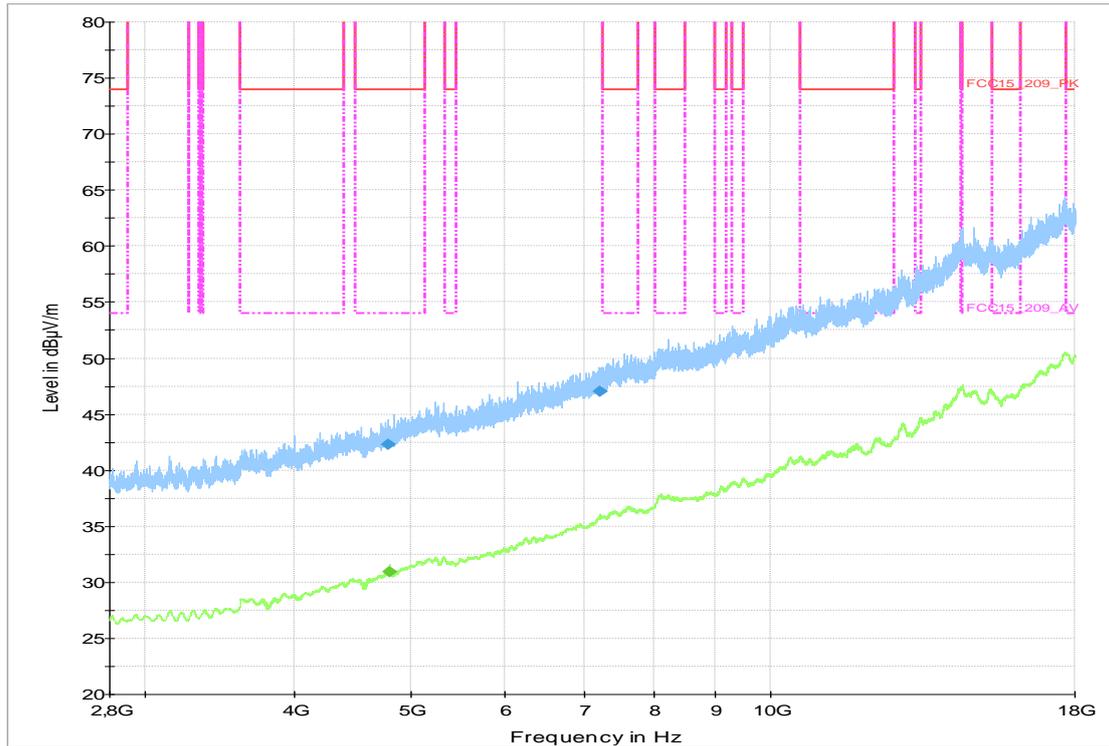


Diagram No.: I\_2.05-Channel 0 (Sweep 2: 2.8GHz to 18GHz)

**Final Result 1 (PK)**

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
4797.0	42.31	100.0	1000.000	155.0	V	37.0	2.61	>20	74.0 (PK)
7204.7	47.02	100.0	1000.000	155.0	V	90	10.0	> 20dBc	General limit not applicable

**Final Result 2 (AV)**

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
4804.1	30.95	100.0	1000.000	155.0	H	129	2.64	> 8.07	54.0 (AV)

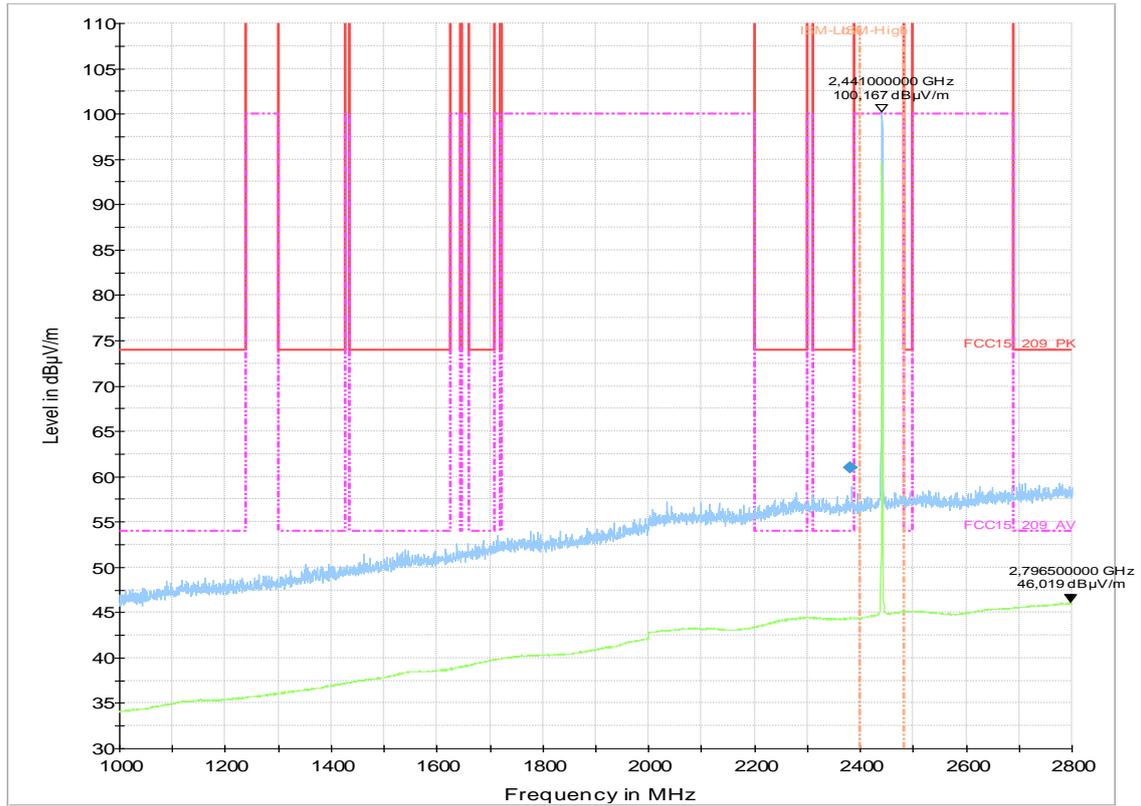


Diagram No.: I\_2.06-Channel 39 (Sweep 1: 1GHz to 2.8GHz)

**Final Result 1 (PK)**

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2381.1	60.94	100.0	1000.000	155.0	H	168°	--	> 13.10	74.0

**Final Result 2 (AV)**

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2796.5	46.09	100.0	1000.000	155.0	H&V	0°..360°	--	> 7.91	54.0

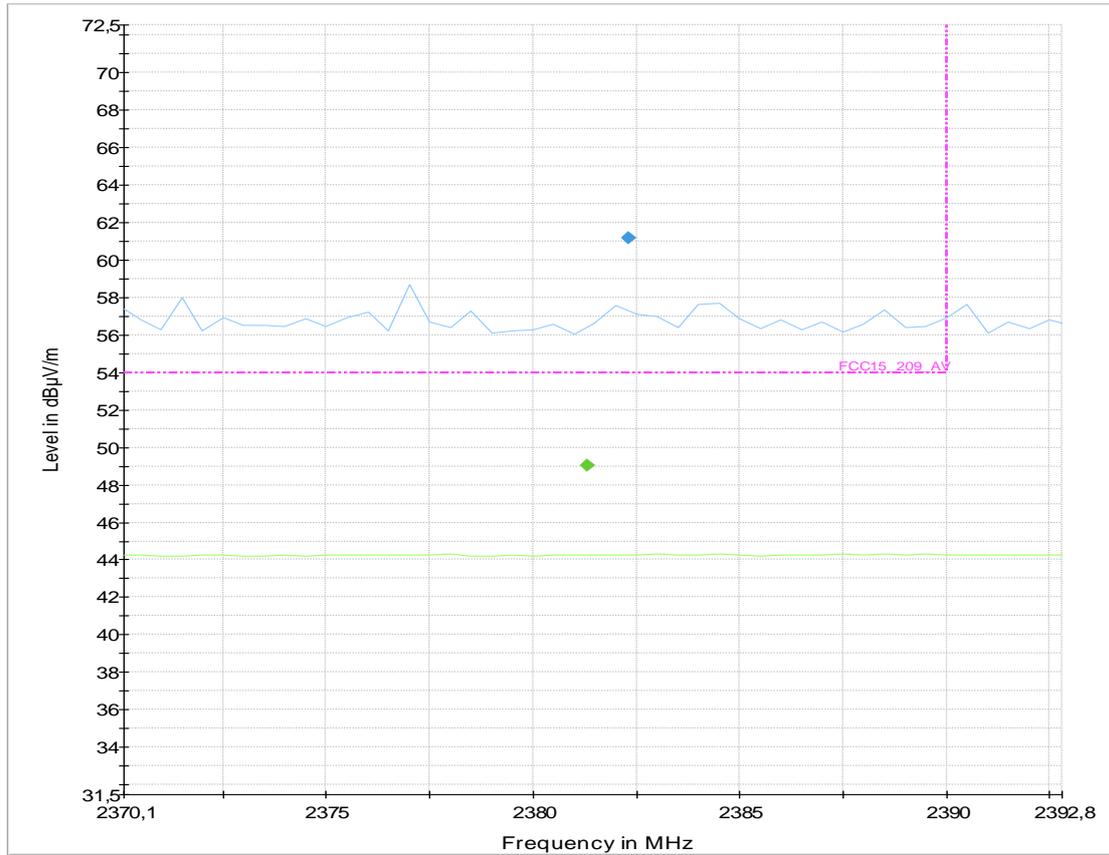


Diagram No.: I\_2.06a-Channel 39 (Sweep 1: 1GHz to 2.8GHz)

**Final Result 1 (PK)**

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2382.3	61.16	100.0	1000.000	155.0	H	270°	35.4	> 12.8	74.0

**Final Result 2 (AV)**

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2381.3	49.05	100.0	1000.000	155.0	H	143°	35.4	> 4.9	54.0

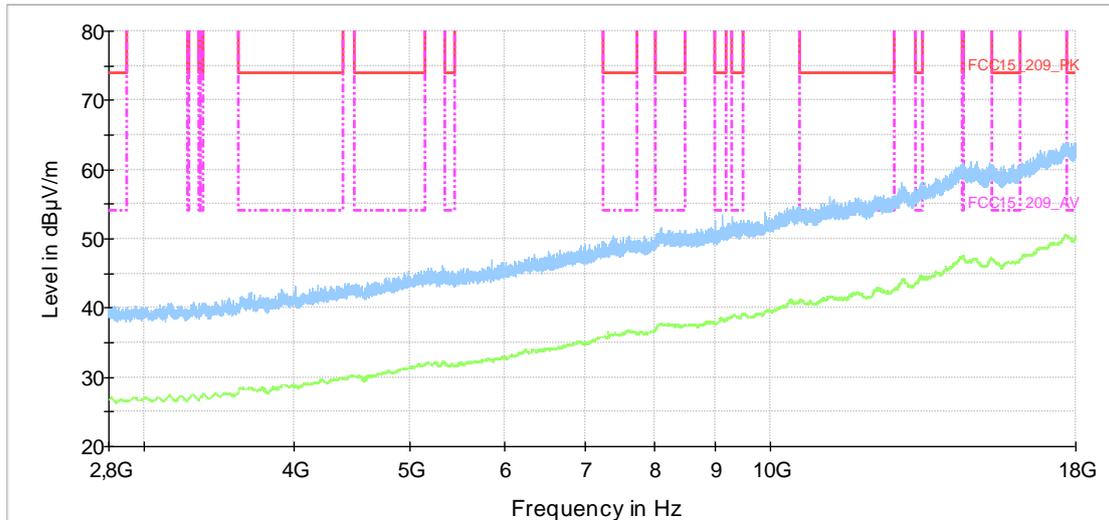


Diagram No.: I\_2.07-Channel 39 (Sweep 2: 2.8GHz to 18GHz)

**Final Result 1 (PK)**

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2800 .. 18000	< 64.0	10.0	1000.000	155.0	H&V	0..360°	--	> 10.0	74.0

**Final Result 2 (AV)**

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2800 .. 18000	< 51.0	10.0	1000.000	155.0	H&V	0..360°	--	> 4.0	54.0

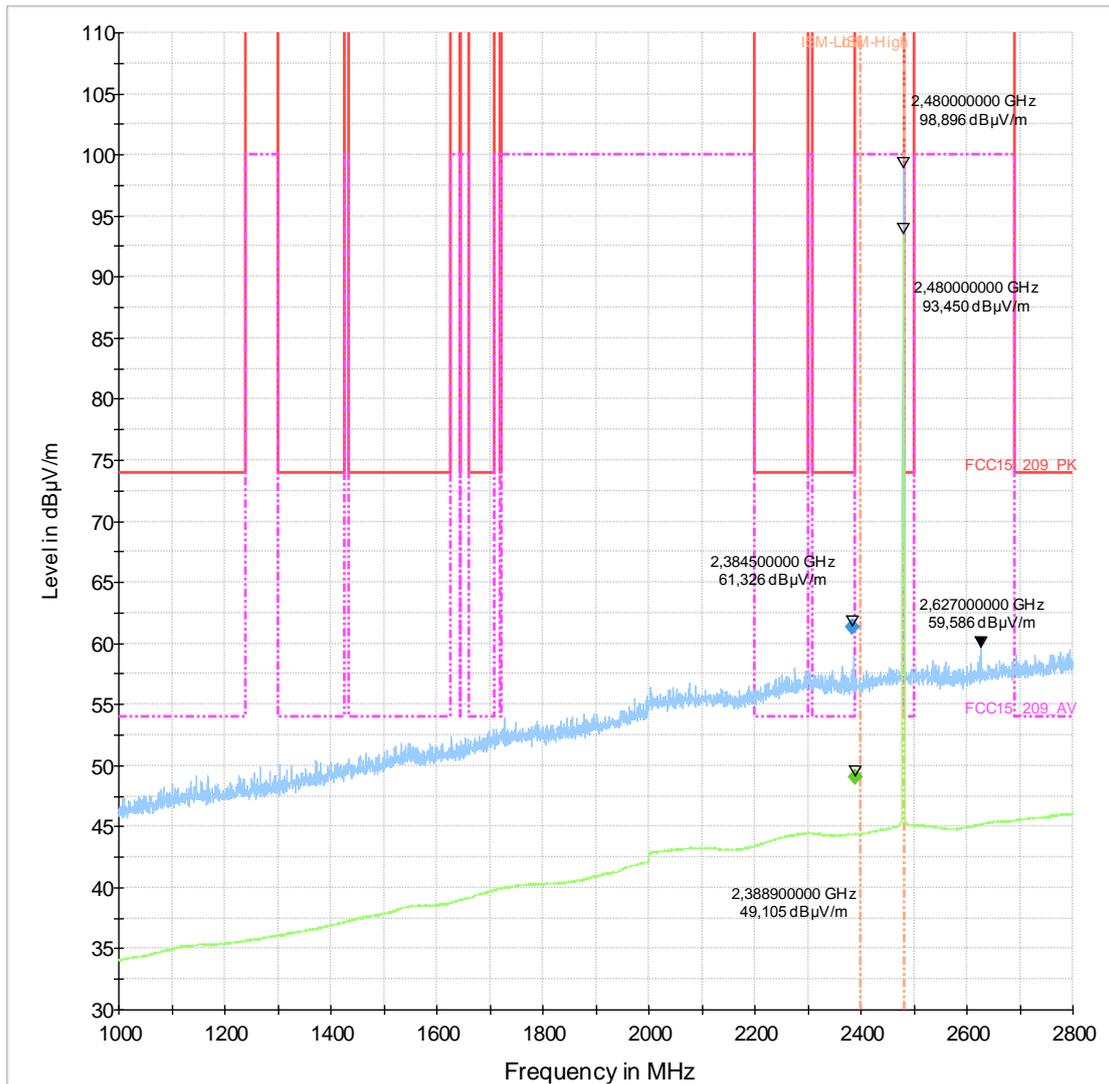


Diagram No.: I\_2.08-Channel 78 (Sweep 1: 1GHz to 2.8GHz)

**Final Result 1 (PK)**

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2384.5	61.32	100.0	1000.0	155.0	V	96°	35.4	> 12.68	74.0
2627.0	59.58	10	1000.0	155	H&V	0..360°	--	> 20dBc	General limit not applicable

**Final Result 2 (AV)**

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2388.9	49.10	100.0	1000.000	155.0	H	2°	35.4	> 4.9	54.0

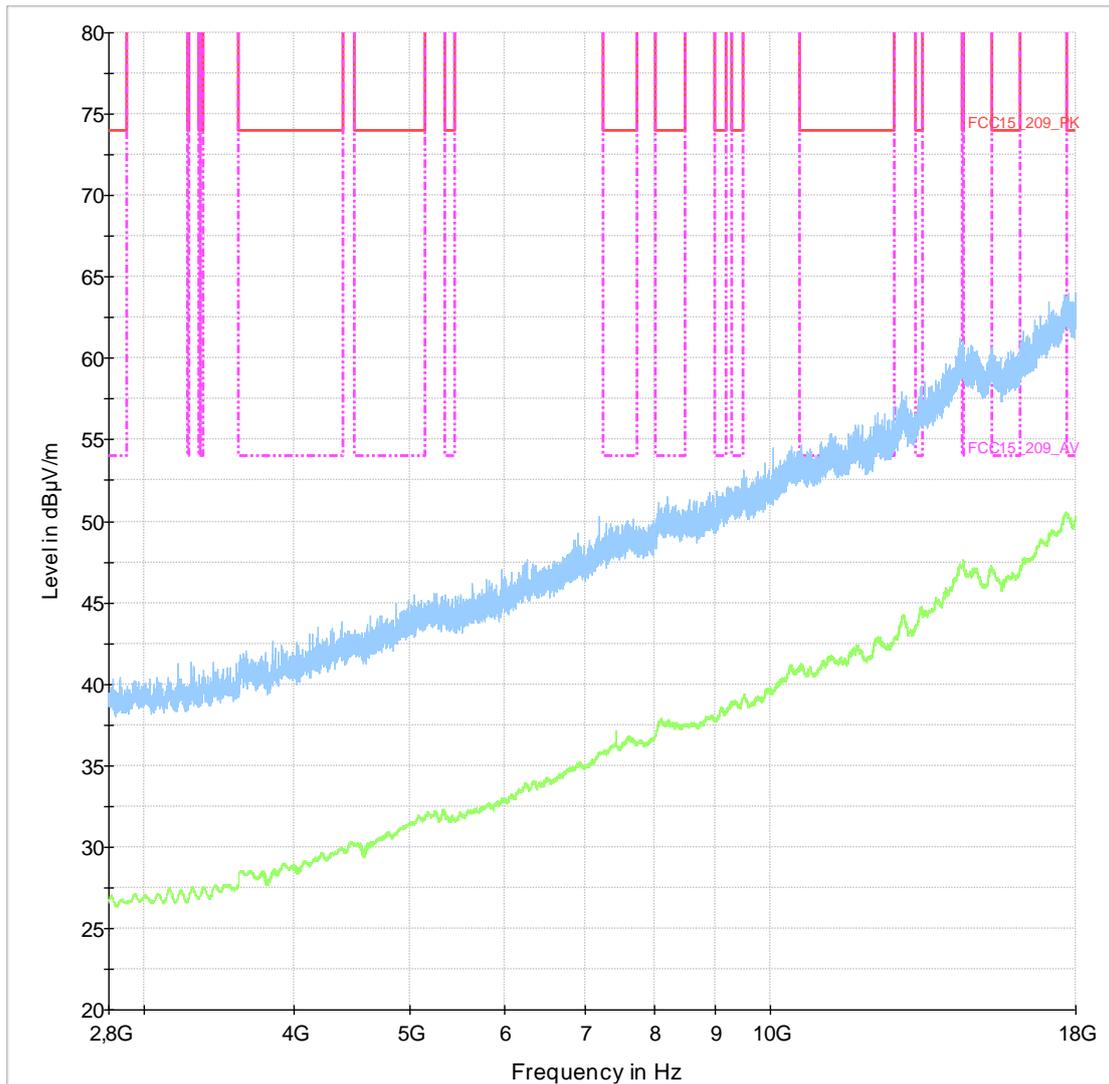


Diagram No.: I\_2.09-Channel 78 (Sweep 2: 2.8GHz to 18GHz)

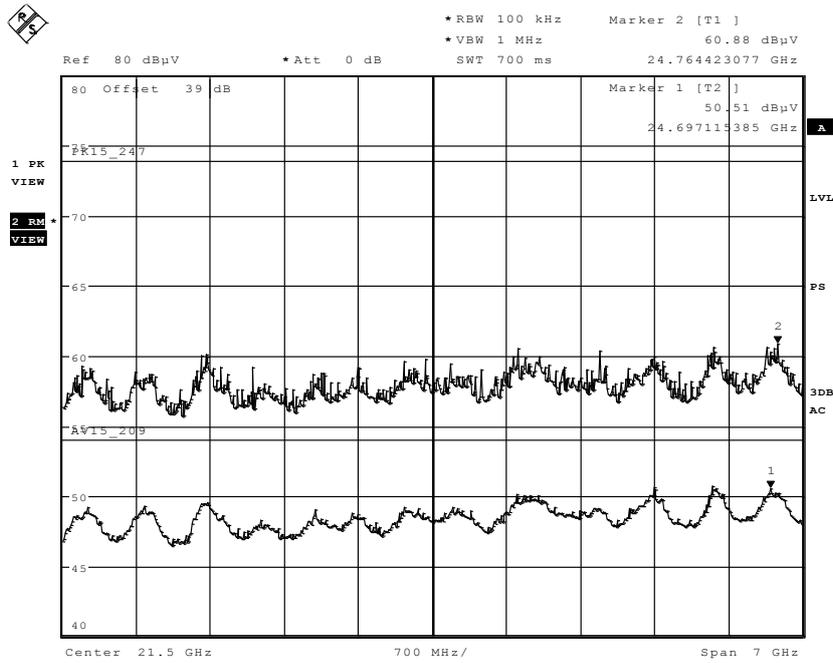
**Final Result 1 (PK)**

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2800 .. 18000	< 64.0	10.0	1000.000	155.0	H&V	0..360°	--	> 10.0	74.0

**Final Result 2 (AV)**

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2800 .. 18000	< 51.0	10.0	1000.000	155.0	H&V	0..360°	--	> 4.0	54.0





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Channel 78 (overview measurement only)

## 1.10. Radiated field strength (§15.109, Class B/RSS-Gen)

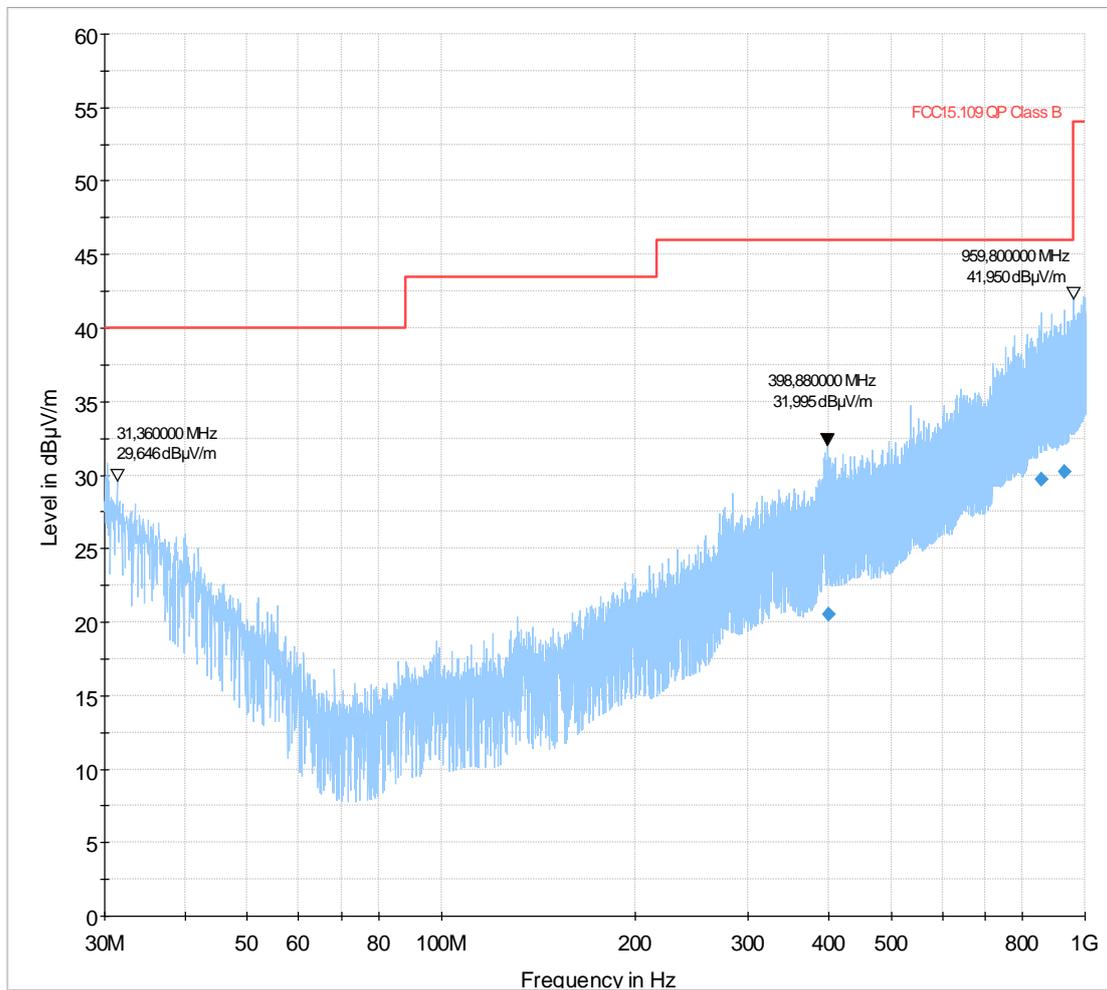
### 1.10.1. Radiated field strength (30MHz < f < 1GHz)

#### Diagram No. I\_2.15

##### Common Information

Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room covered with absorbers (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left, top, under
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 m, polarisation according to pre-scan results
Turntable step:	90° during pre-scan, continuously turning during final measurement
Used filter:	lowpass 1200 MHz
Test specification.:	FCC 15.205 § 15.209; RSS-Gen: Issue 3

Operator:	YZH
Operating conditions:	RX-on (BT)
Power during tests:	full loaded batteries
Comment 1:	



#### Final Result for channel 39 (RX-Mode)

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
399.00	20.47	1000.0	120.0	202	V	296	90	18.53	25.50	46.0
855.46	29.73	1000.0	120.0	179	V	313	90	25.68	16.30	46.0
929.00	30.20	1000.0	12.0	319	V	336	0	26.51	15.80	46.0

### 1.10.2. Radiated field strength (1GHz < f < 18GHz)

#### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Unintentional Radiator class B/ RSS-Gen
Antenna polarisation:	horizontal/vertical
Operation mode:	RX - 3DH5; Channel 39
Operator Name:	Lor

#### EUT Information

EUT Name:	AAD-3880121-BV
Manufacturer:	SEM

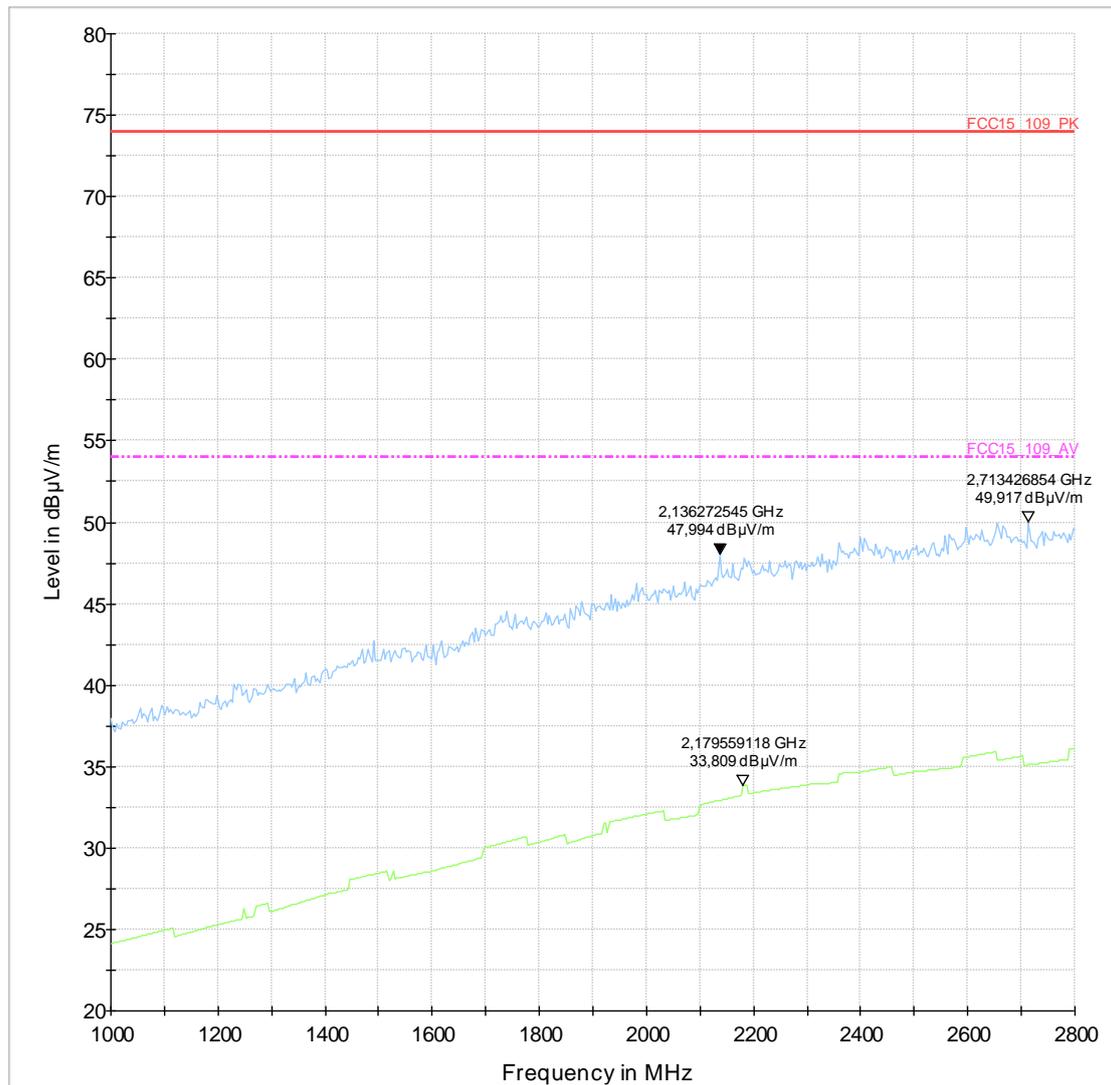


Diagram No.: I\_2.11

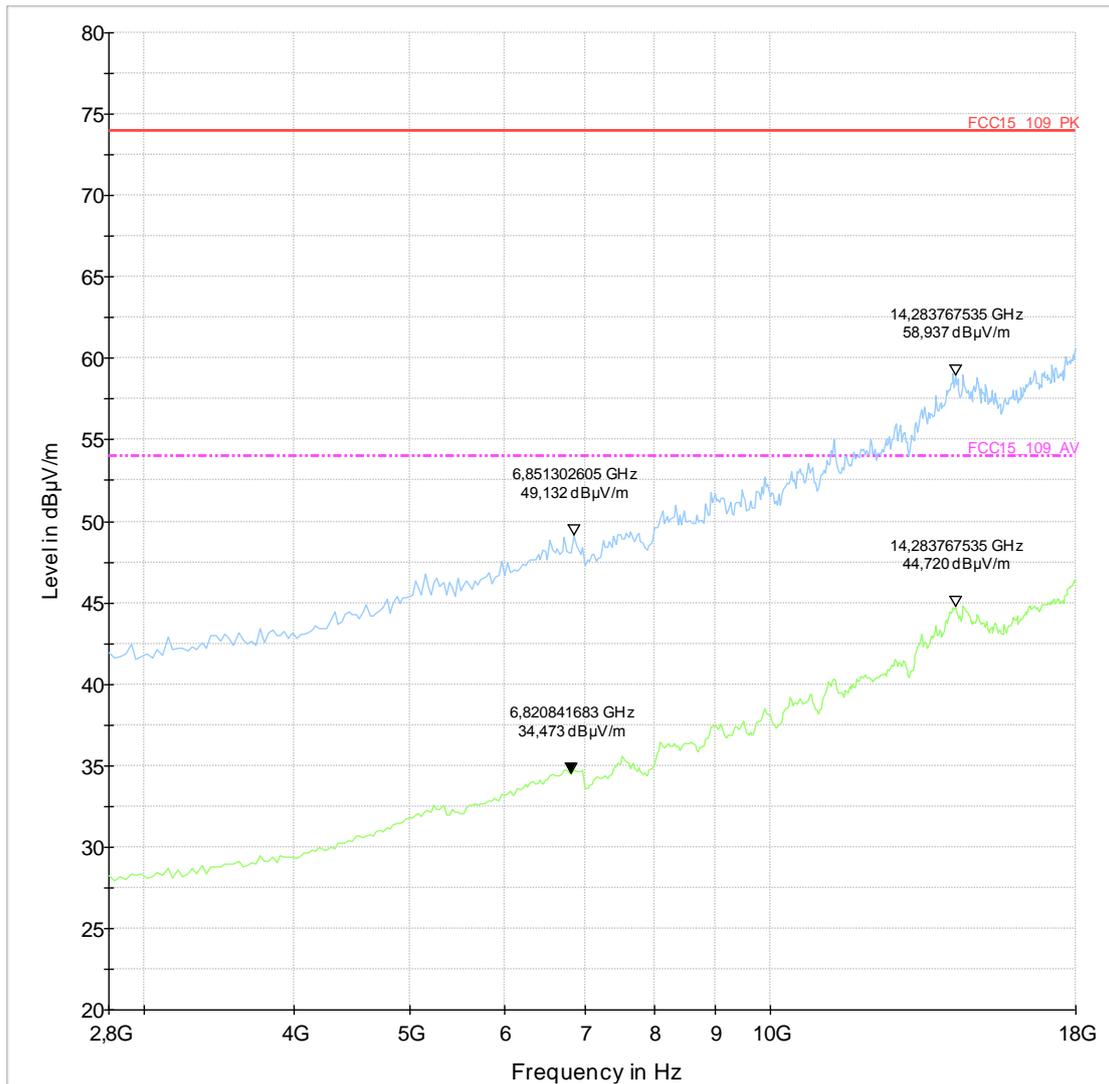


Diagram No.: I\_2.12

**Final Result 1 (PK-Detector)**

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
6851.3	49.13	10.0	1000.000	155.0	H&V	0..360°	--	>24.87	74.0
14283.7	58.93	10.0	1000.000	155.0	H&V	0..360°	--	>15.07	74.0

**Final Result 2 (AV-Detector)**

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
6820.8	34.47	10.0	1000.000	155.0	H&V	0..360°	--	>19.5	54.0
14283	44.72	10.0	1000.000	155.0	H&V	0..360°	--	>9.28	54.0