

Annex 1: Measurement diagrams
to TEST REPORT
No.: 2-20797620b/11

According to:
FCC Regulations
Part 15.107 & 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-3880110-BV

FCC-ID: PY7A3880110
IC: 4170B-A3880110

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	 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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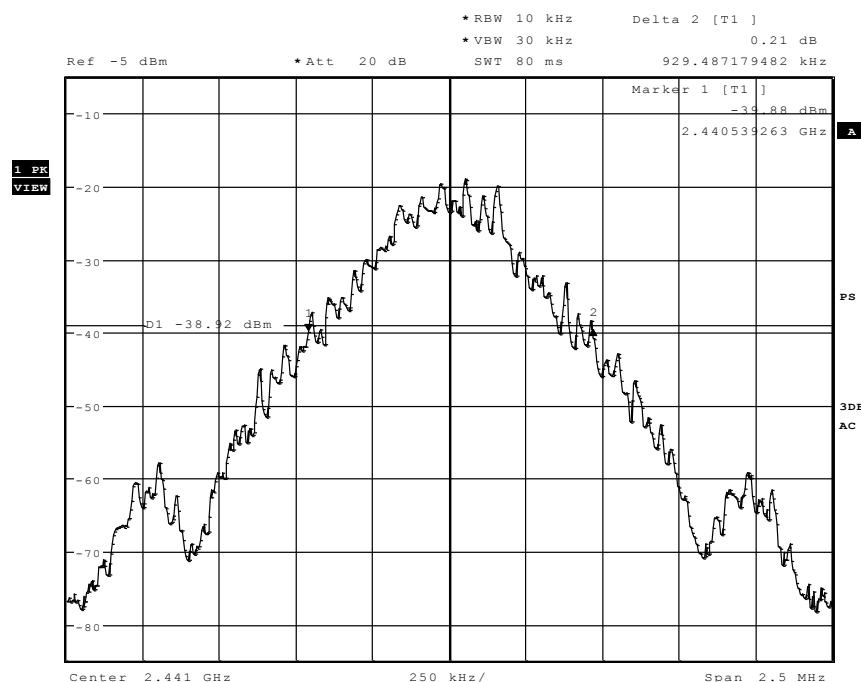
1. Measurement diagrams

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.

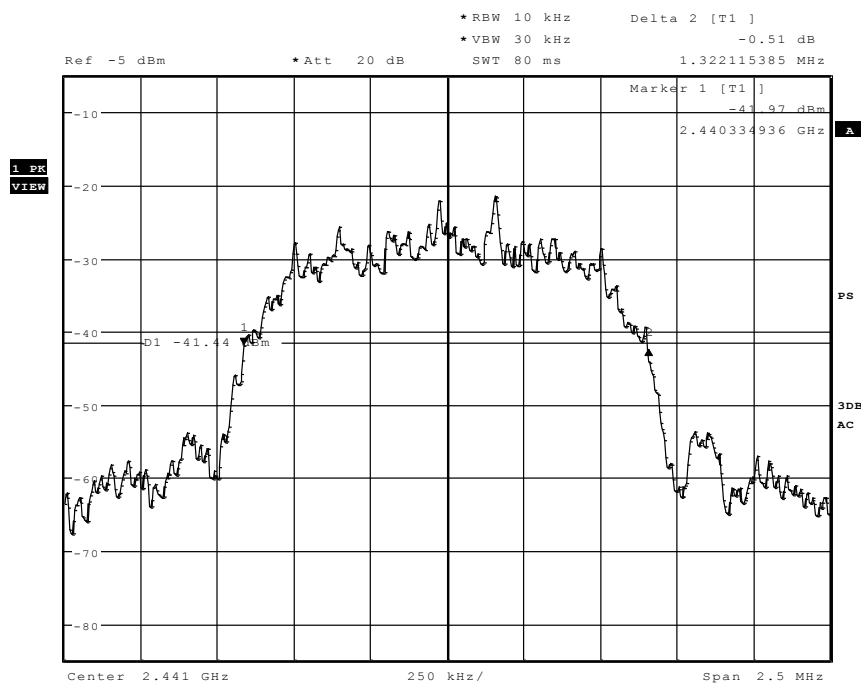
Modulation type	Nominal Ch 1 =2402 MHz	Nominal Ch 39 =2440MHz	Nominal Ch 78 =2480MHz	Max Value
DH1	925,4807	869,3910	917,4679	929,4871
DH3	925,4807	929,4871	925,4807	
DH5	929,4871	929,4871	921,4743	
2DH1	1278,0448	1282,0512	1270,0320	1322,1154
2DH3	1314,1020	1322,1154	1322,1153	
2DH5	1314,1025	1314,1025	1322,1153	
3DH1	1237,9807	1274,0380	1282,0512	1318,1089
3DH3	1290,0641	1310,0960	1314,1025	
3DH5	1298,0769	1318,1089	1318,1089	

Maximum value at 2DH5=1322.1154MHz

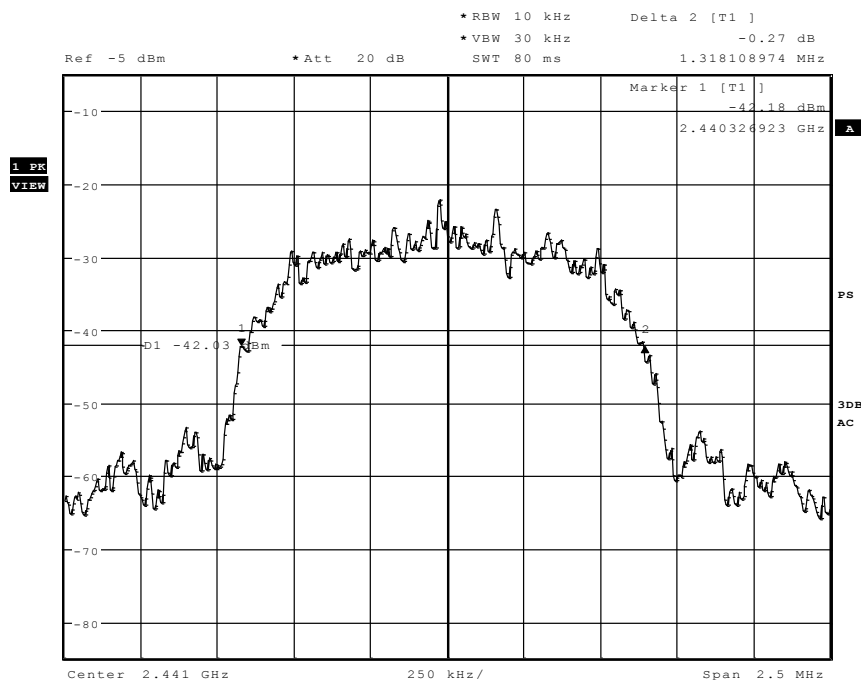


Date: 10.MAY.2011 14:48:23

Diagram DH3 modulation



Date: 10.MAY.2011 14:35:02

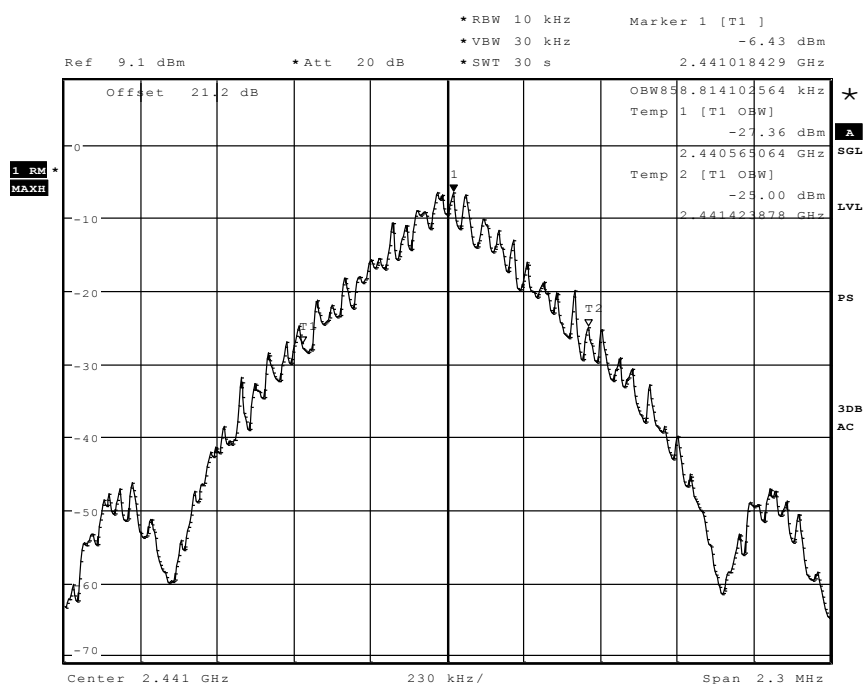
Diagram 2DH3 modulation -> maximum value

Date: 10.MAY.2011 14:25:36

Diagram 3DH5 modulation

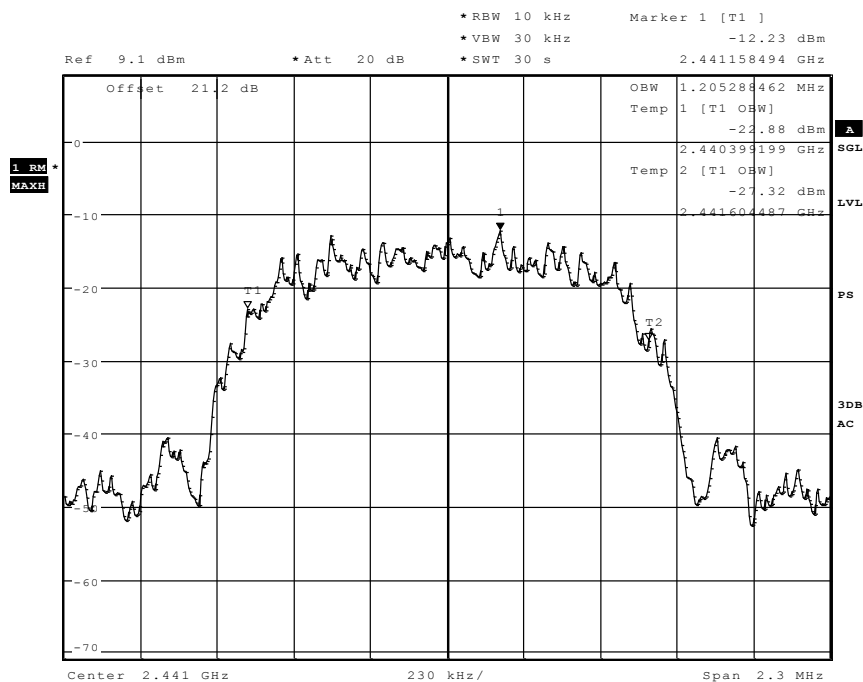
1.2. 99% Occupied bandwidth

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



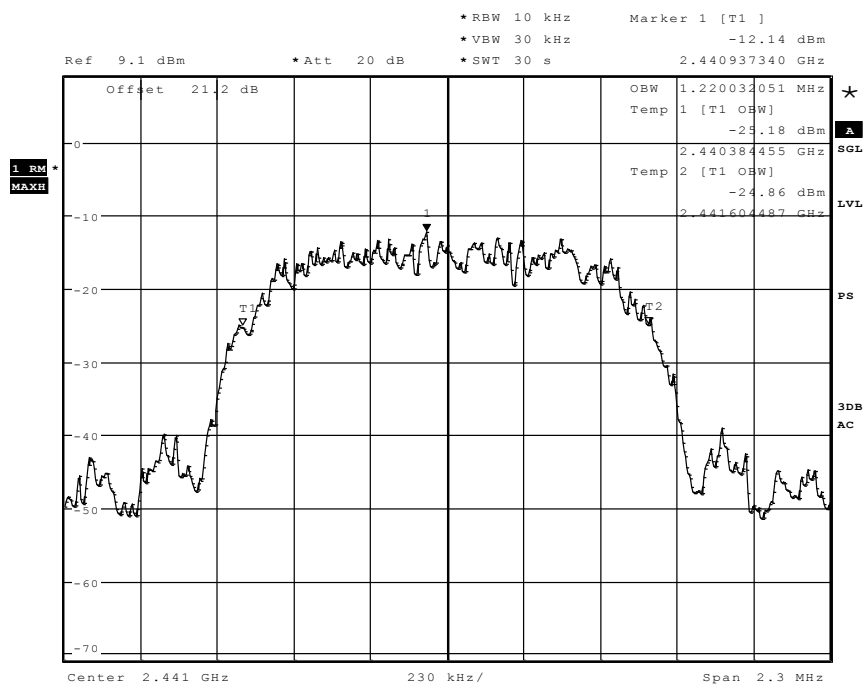
Date: 11.MAY.2011 10:49:01

DH3 modulation



Date: 11.MAY.2011 10:47:31

2DH3 modulation

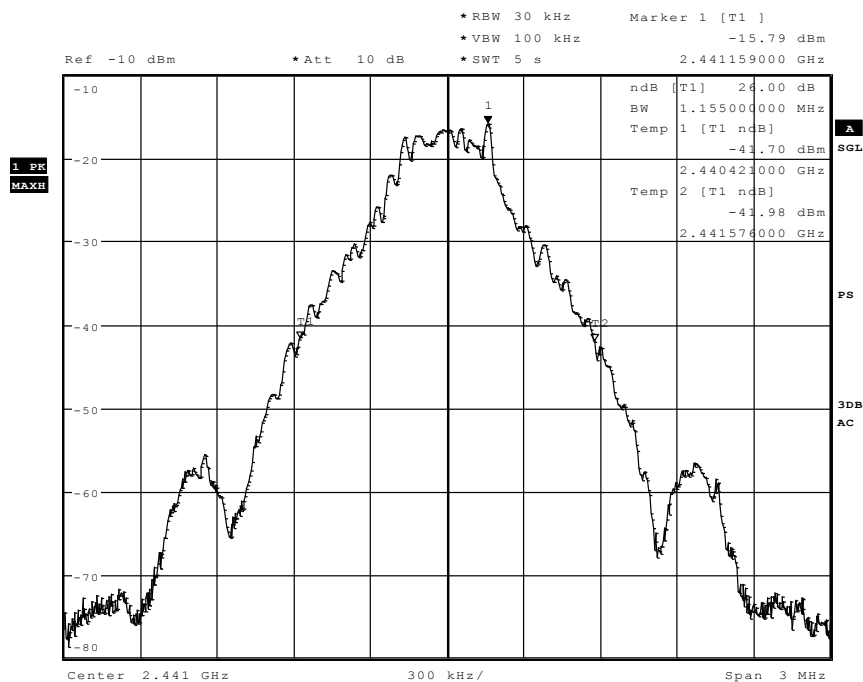


Date: 11.MAY.2011 10:45:30

3DH5 modulation

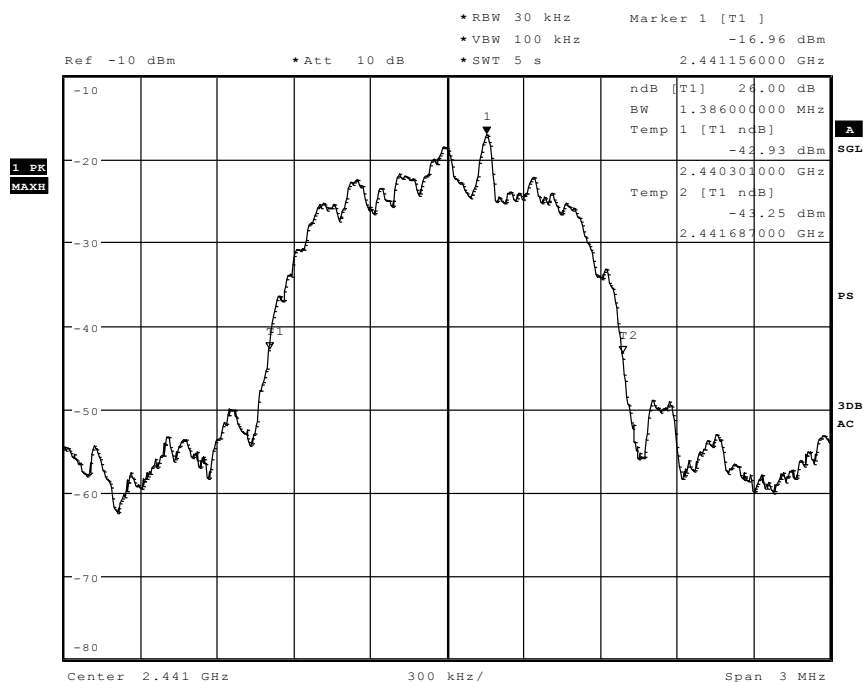
1.3. 26dB bandwidth

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

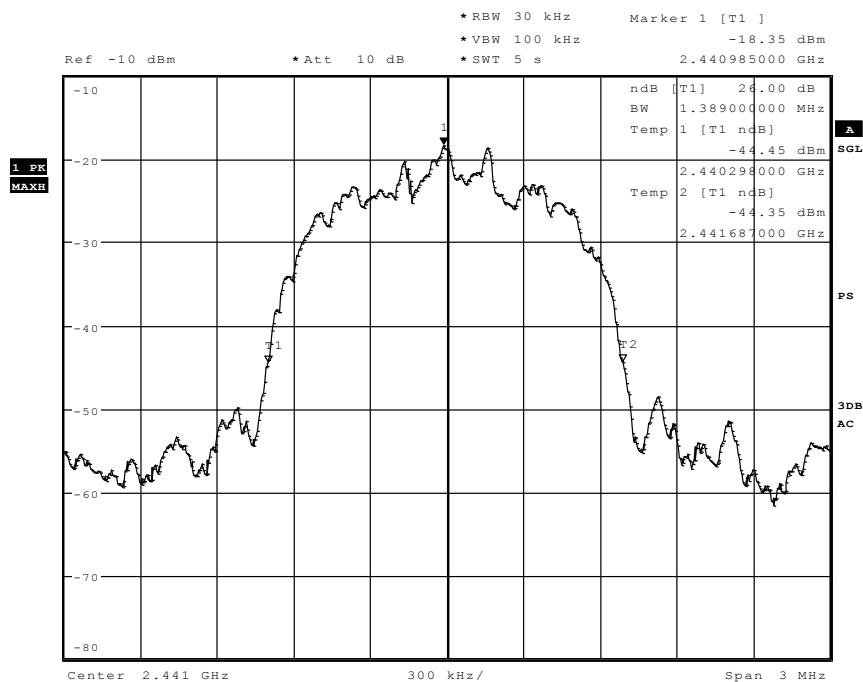


Date: 11.MAY.2011 12:57:55

DH3 modulation



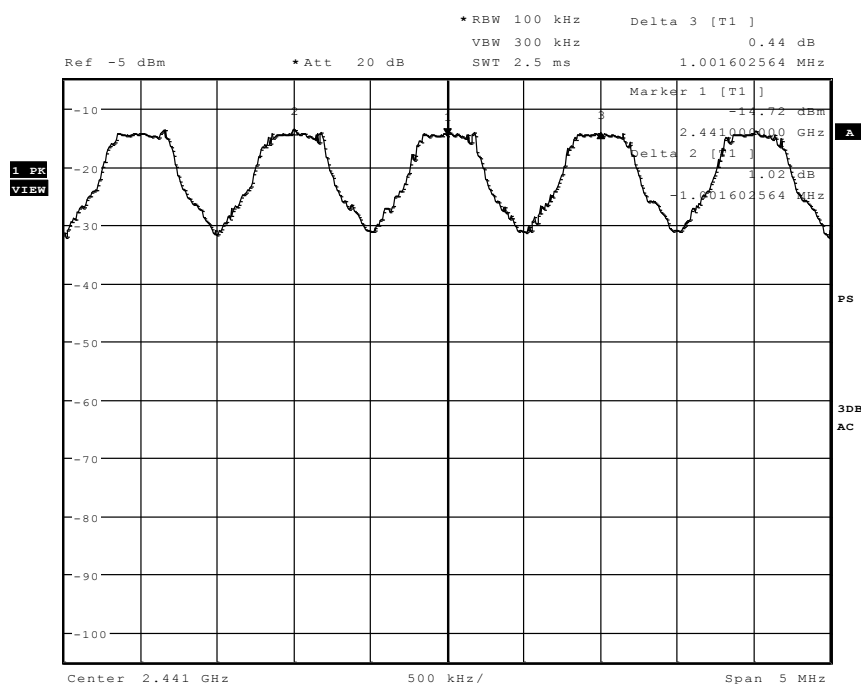
Date: 11.MAY.2011 12:57:04

2DH3 modulation

Date: 11.MAY.2011 12:56:01

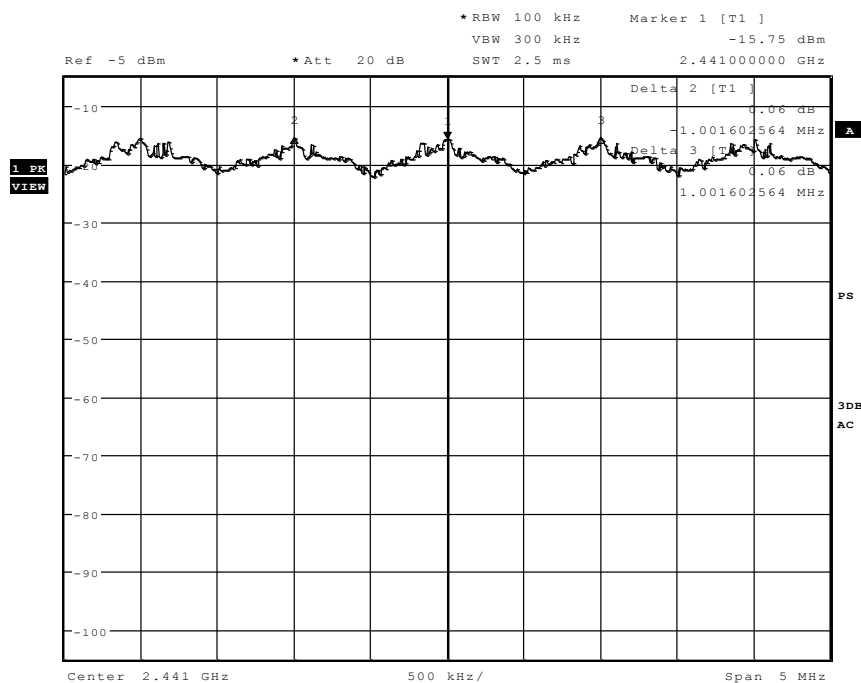
3DH5 modulation

1.4. Channel separations



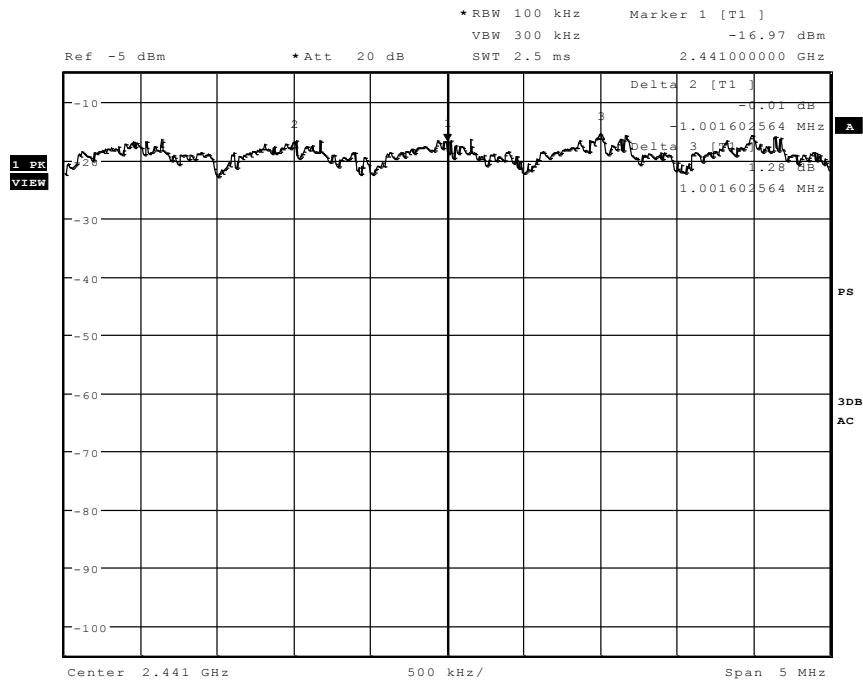
Date: 11.MAY.2011 10:57:20

DH3 modulation



Date: 11.MAY.2011 11:01:48

2DH3 modulation

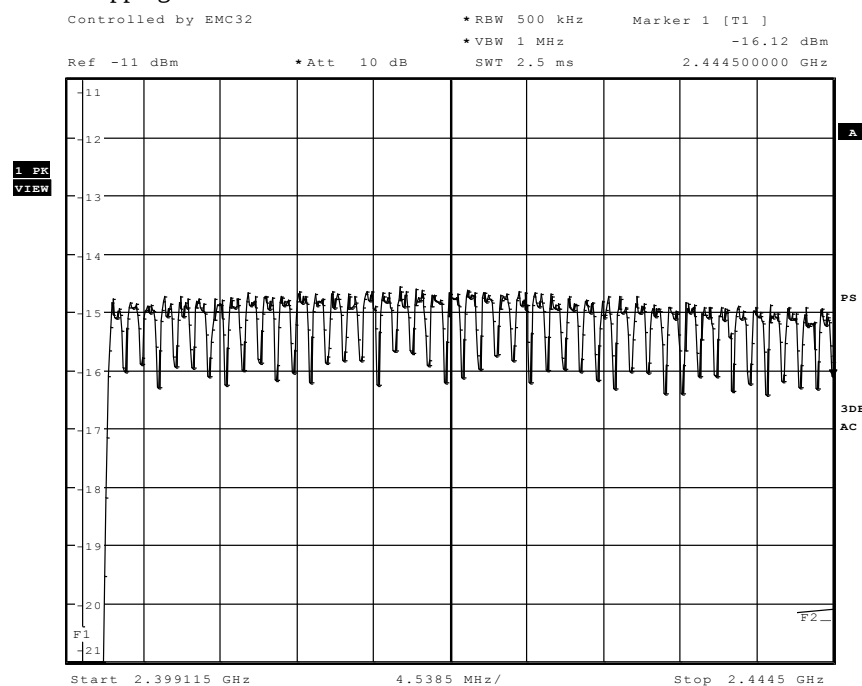


Date: 11.MAY.2011 11:05:14

3DH5 modulation

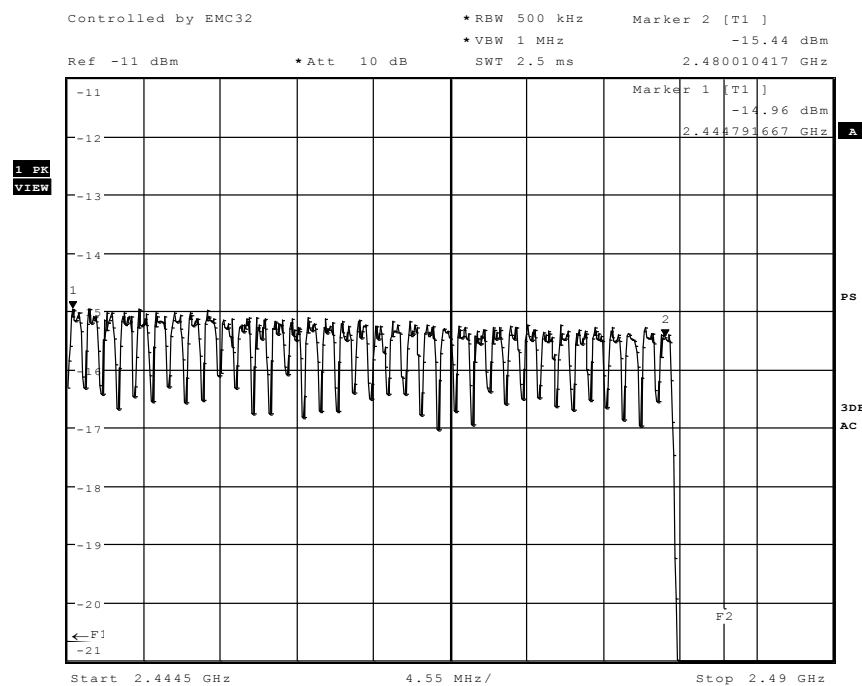
1.5. Hopping channel numbers and time of occupancy for FHSS systems

1.5.1. Hopping channel numbers



Date: 11.MAY.2011 11:22:21

Split Sweep 1: 3DH5-Modulation

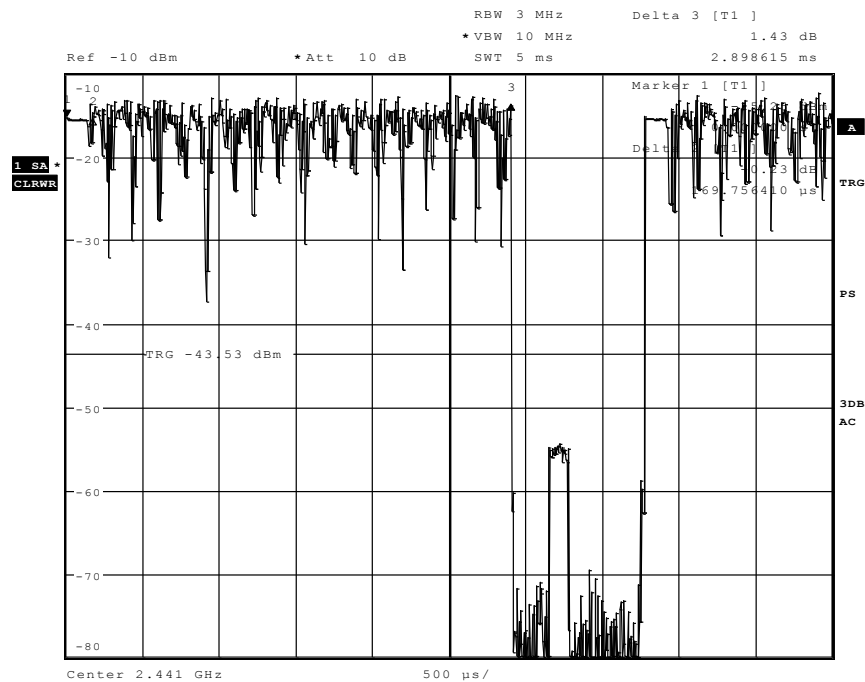


Date: 11.MAY.2011 11:35:15

Split Sweep 2: 3DH5-Modulation

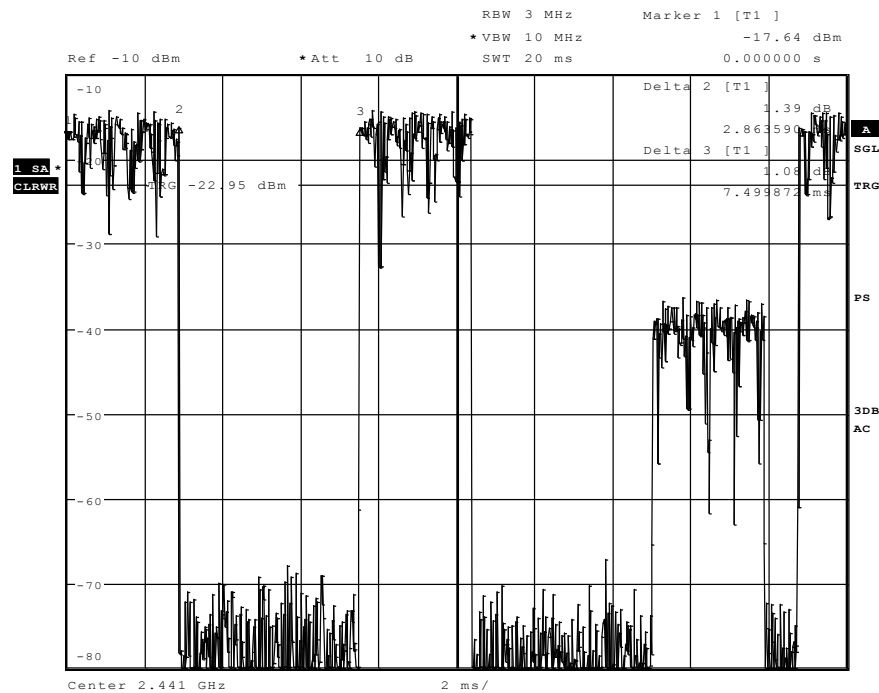
1.5.2. Time of occupancy for FHHS systems

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



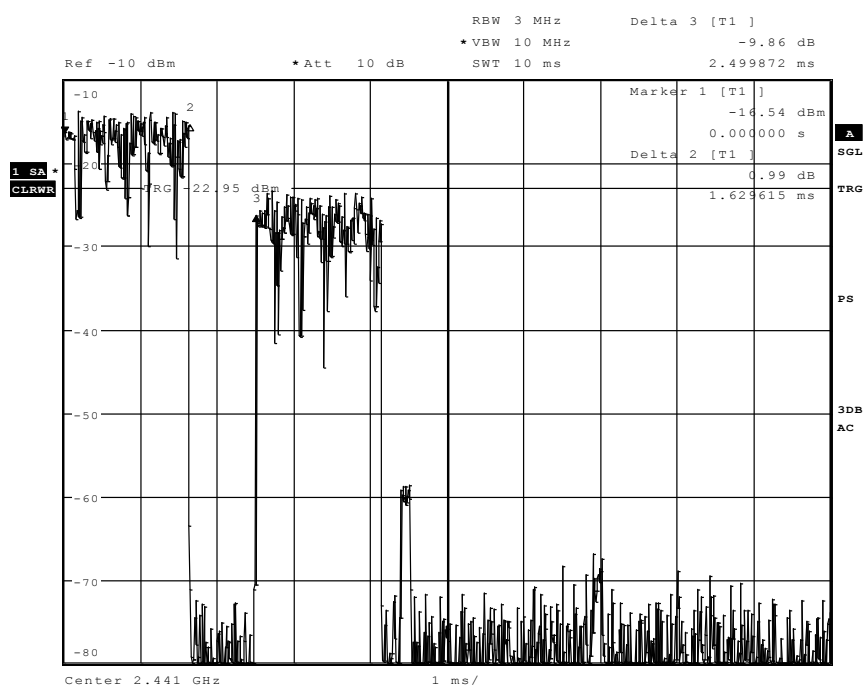
Date: 11.MAY.2011 12:52:24

3DH5 modulation

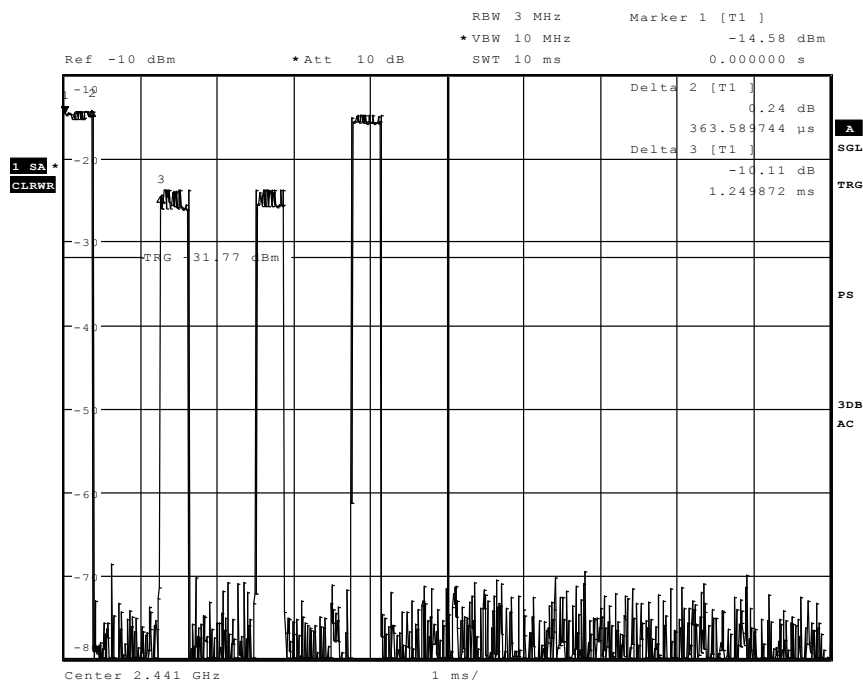


Date: 11.MAY.2011 12:38:41

2DH5 modulation



Date: 11.MAY.2011 12:39:43

2DH3 modulation

Date: 11.MAY.2011 12:42:39

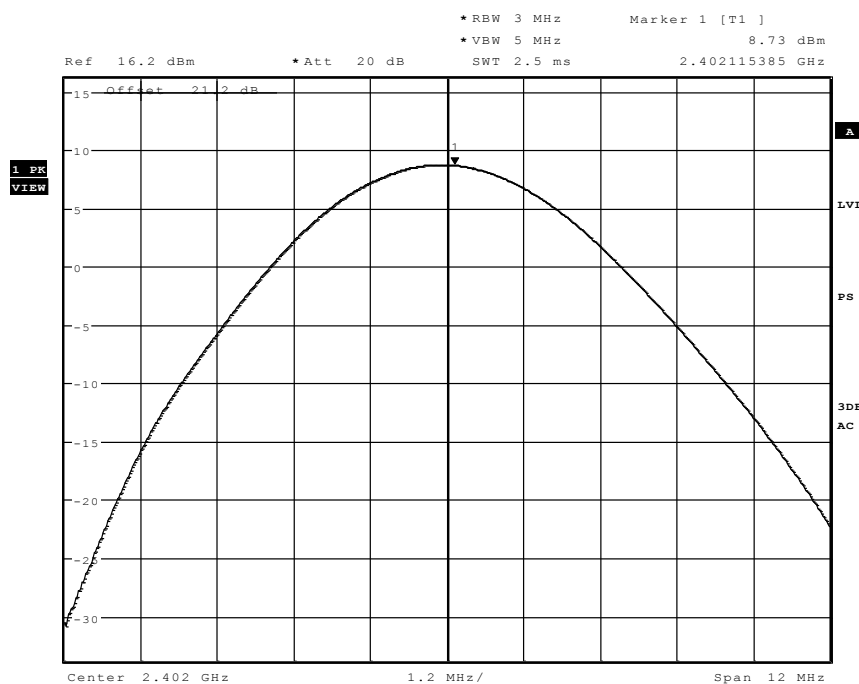
DH1 modulation

1.6. 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.

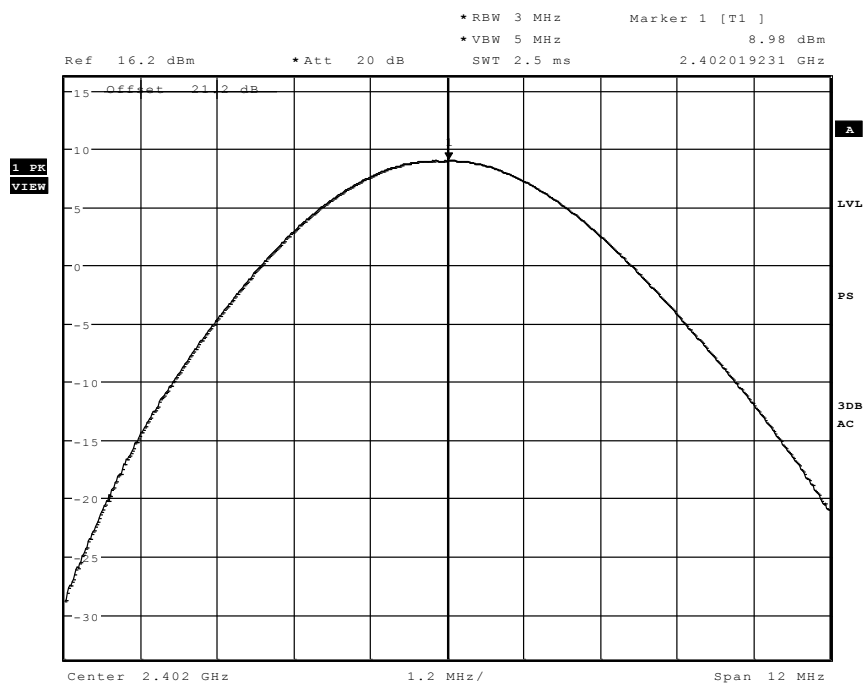
Modulation type	Nominal Ch 0 =2402 MHz	Nominal Ch 39 =2440MHz	Nominal Ch 78 =2480MHz	Maximum value	Max Value
DH1	8,73	8,58	8,21	8,73	
DH3	8,69	8,55	8,17		
DH5	8,68	8,54	8,12		
2DH1	8,98	8,83	8,44	8,98	9,82
2DH3	8,96	8,87	8,50		
2DH5	8,98	8,86	8,49		
3DH1	9,82	9,69	9,35	9,82	
3DH3	9,76	9,65	9,27		
3DH5	9,78	9,67	9,35		

Maximum Value: 9.82dBm at Channel 0, 3DH1 modulation

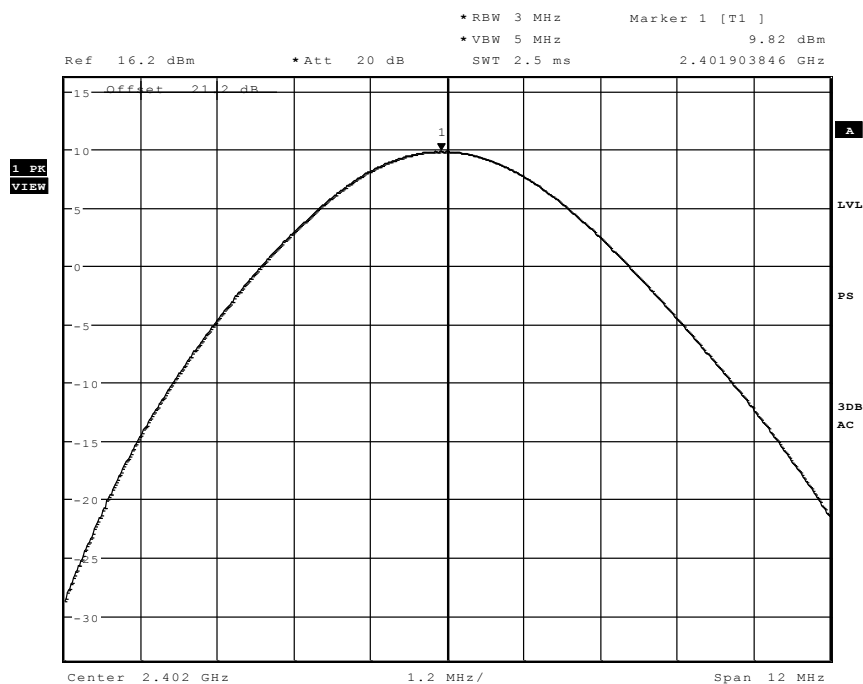


Date: 10.MAY.2011 16:08:16

DH1 Modulation



Date: 10.MAY.2011 16:05:21

2DH1 modulation

Date: 10.MAY.2011 16:03:23

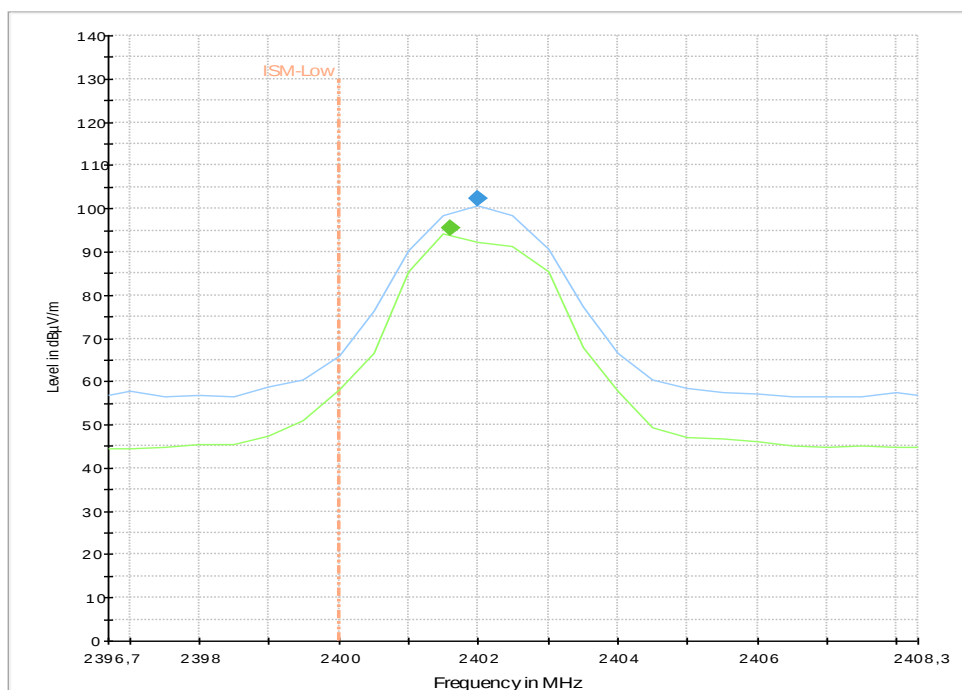
3DH1 modulation

1.7. Maximum e.i.r.p power

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

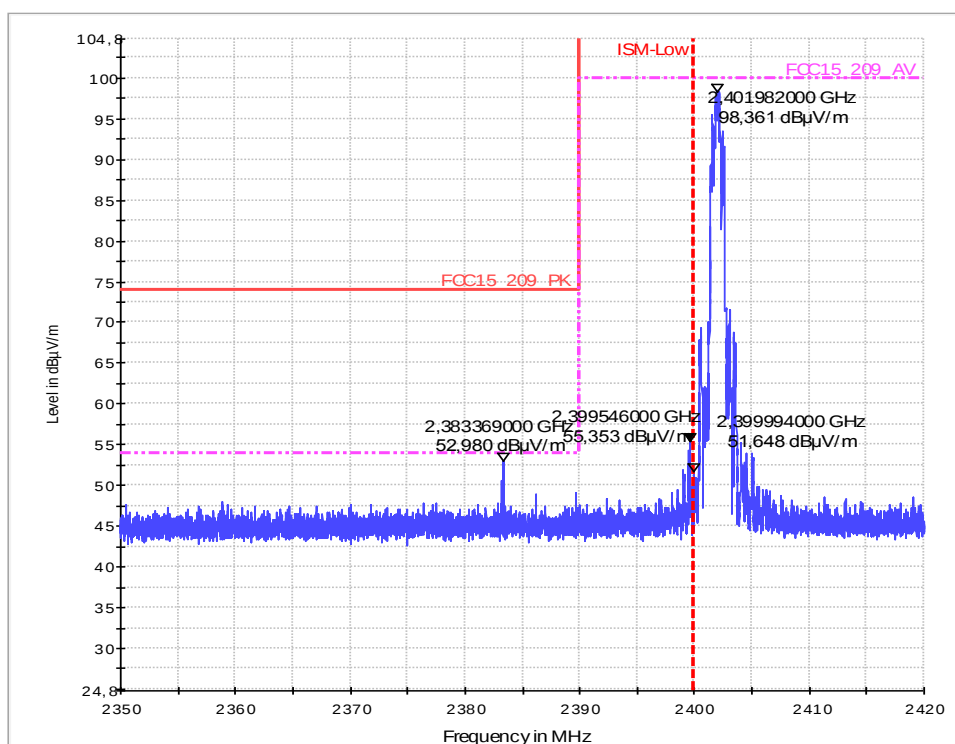
1.7.1. Maximum e.i.r.p power channel 0

Sweep0_SM1_PA0_KP1_BT



Maximum field strength, channel 0

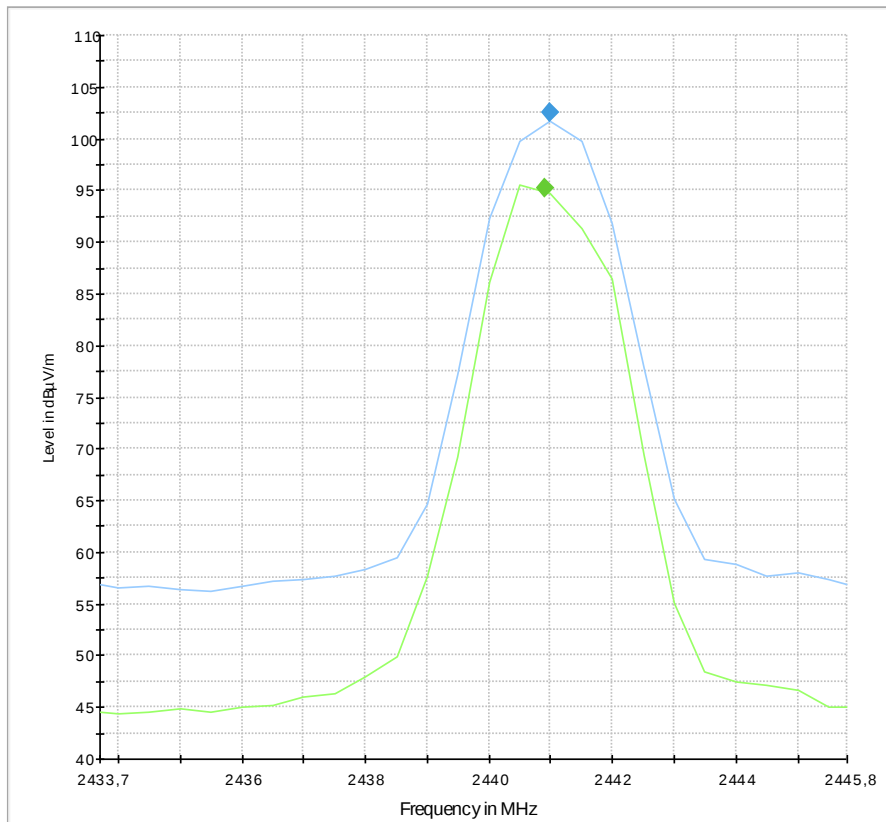
08_ESU_2.4GHz_Low_Band_Edge_PA0



Band-Edge left

1.7.2. Maximum e.i.r.p power channel 39

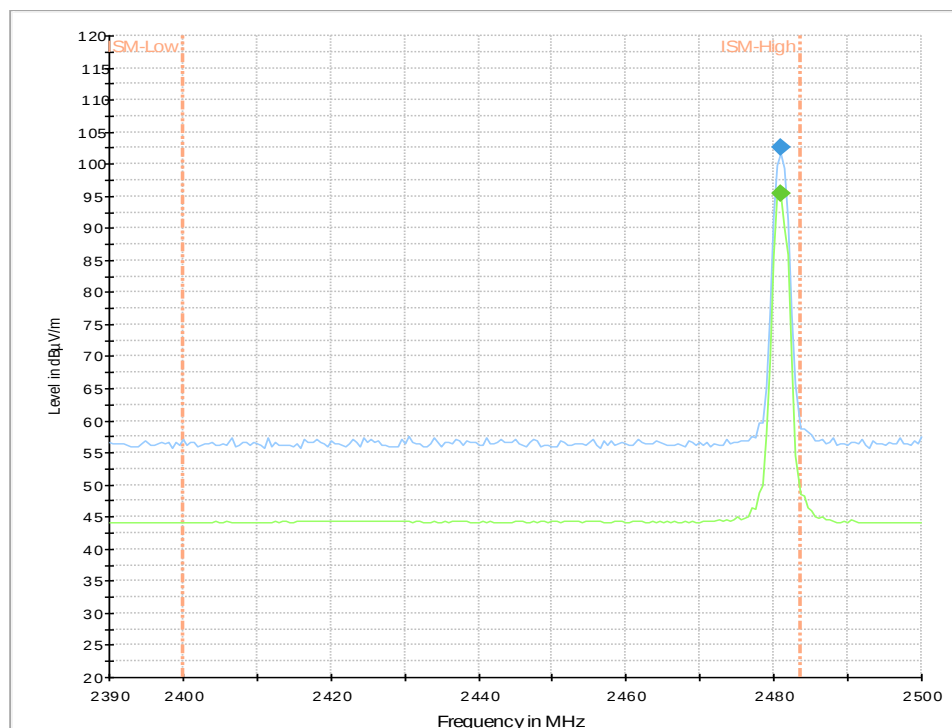
Sweep0_SM1_PA0_KP1_BT



Maximum field strength, channel 39

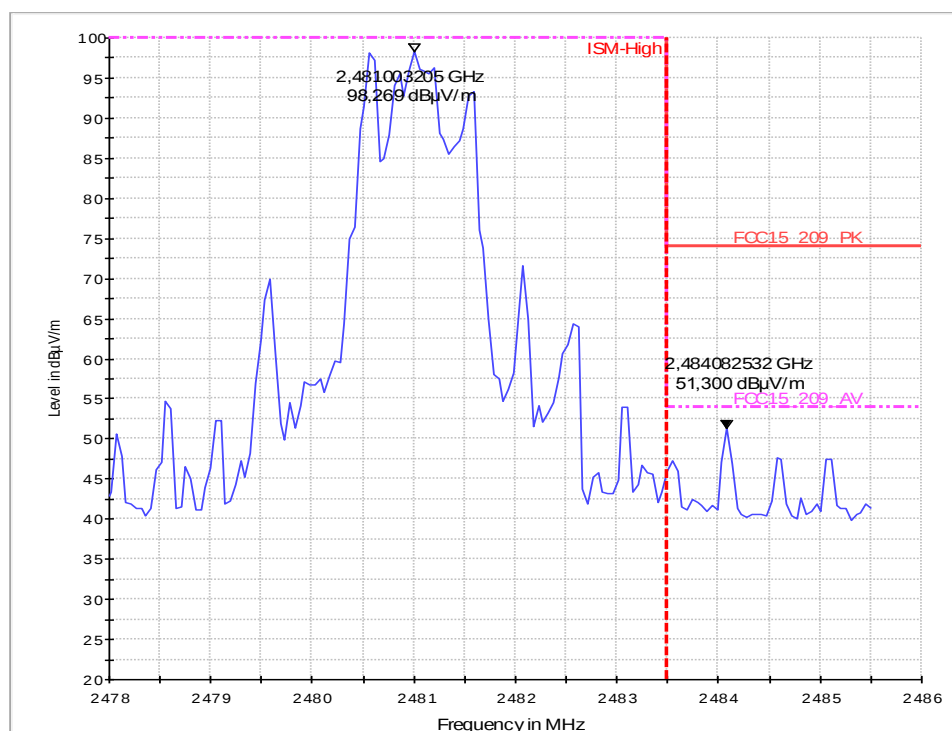
1.7.3. Maximum e.i.r.p power channel 78

Sweep0_SM1_PA0_KP1_BT



Maximum field strength, channel 78

09_ESU_2.4GHz_High_Band_Edge_PA0

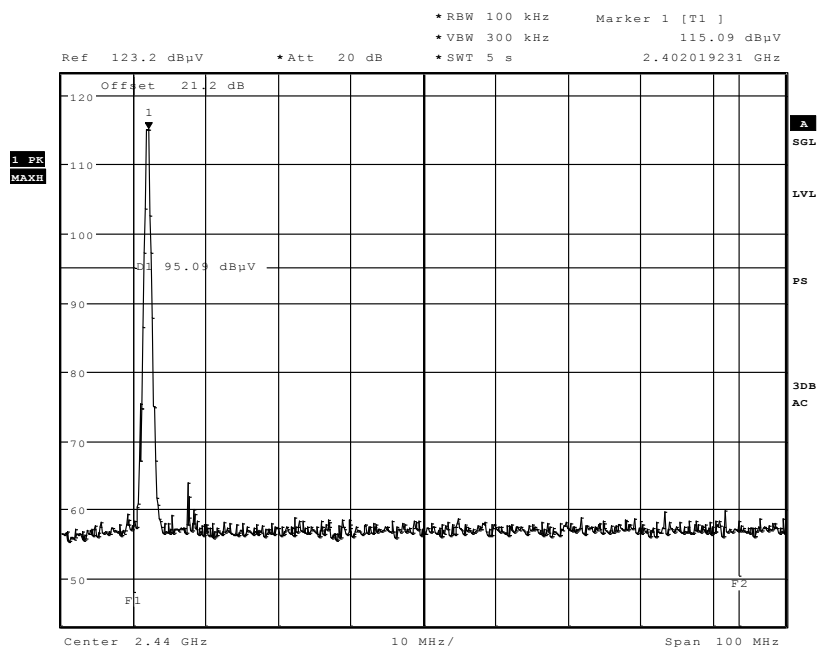


Band-Edge right, Channel 78

1.8. 20dBc conducted emissions

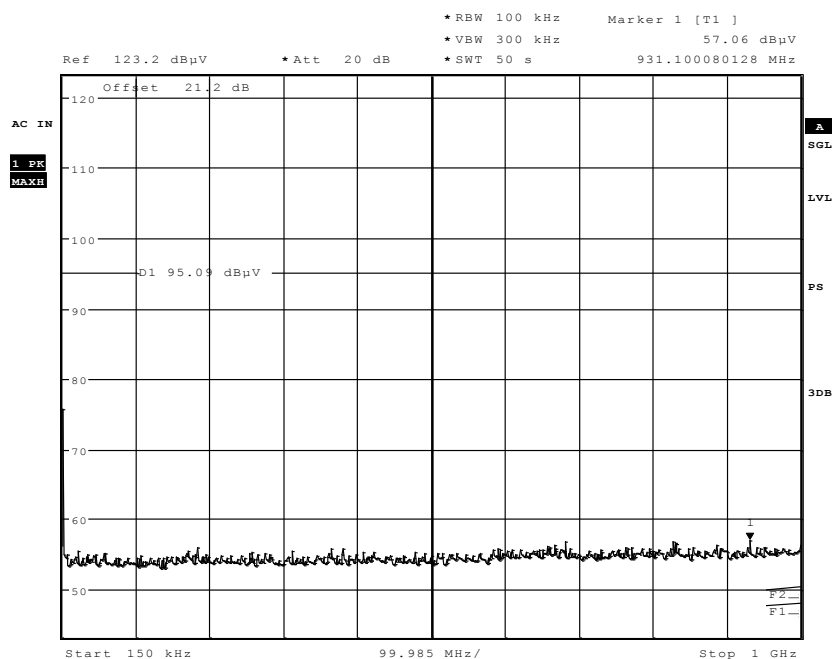
Tests have been performed at maximum measured power level of each modulation type. Pls. compare chapter conducted power for each worst-case. In addition the lowest and highest channel was checked against 20dBc compliance at the relevant band-edge.

1.8.1. DH1 modulation



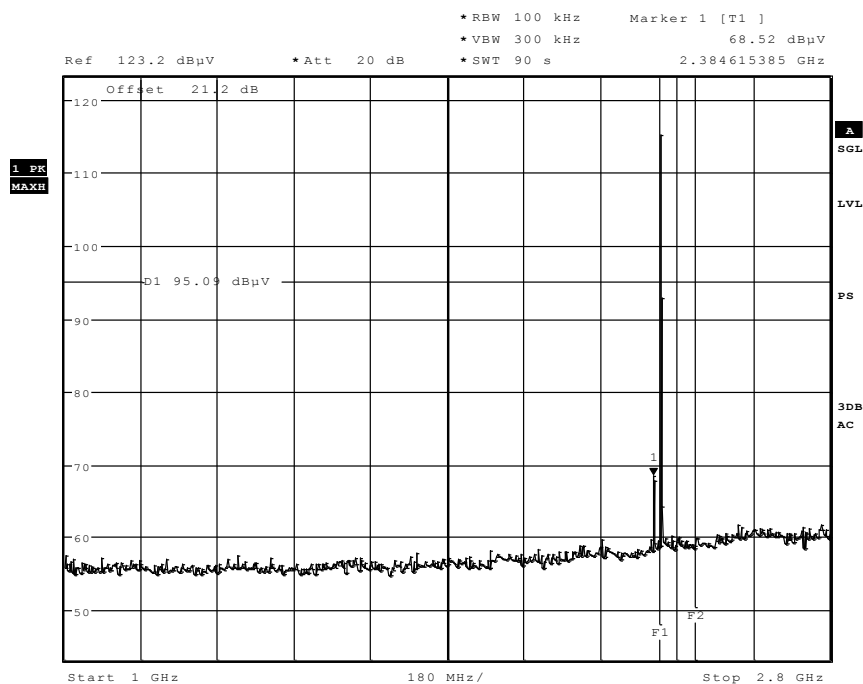
Date: 10.MAY.2011 18:47:42

In-BAND reference value for channel 0

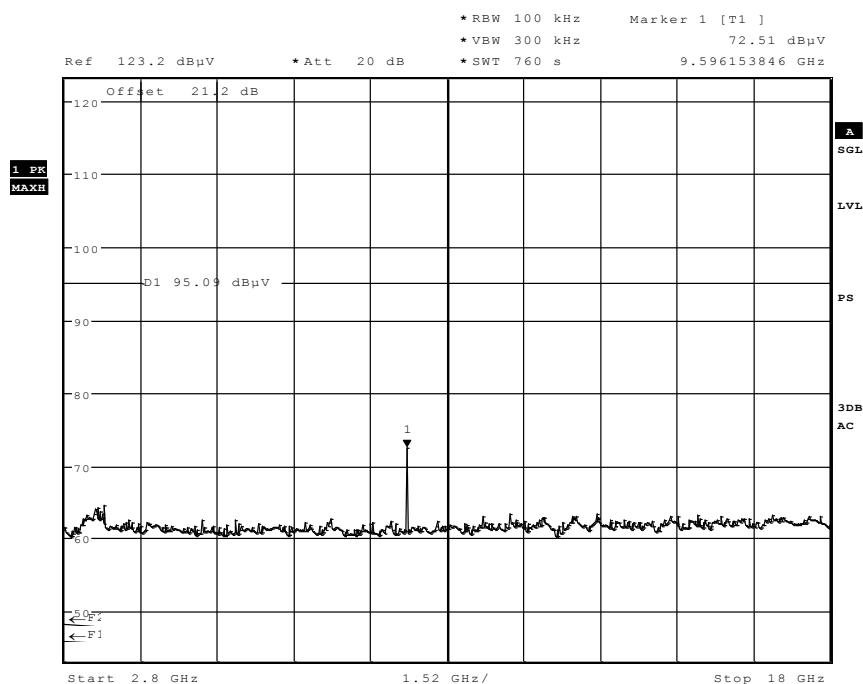


Date: 10.MAY.2011 18:50:19

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

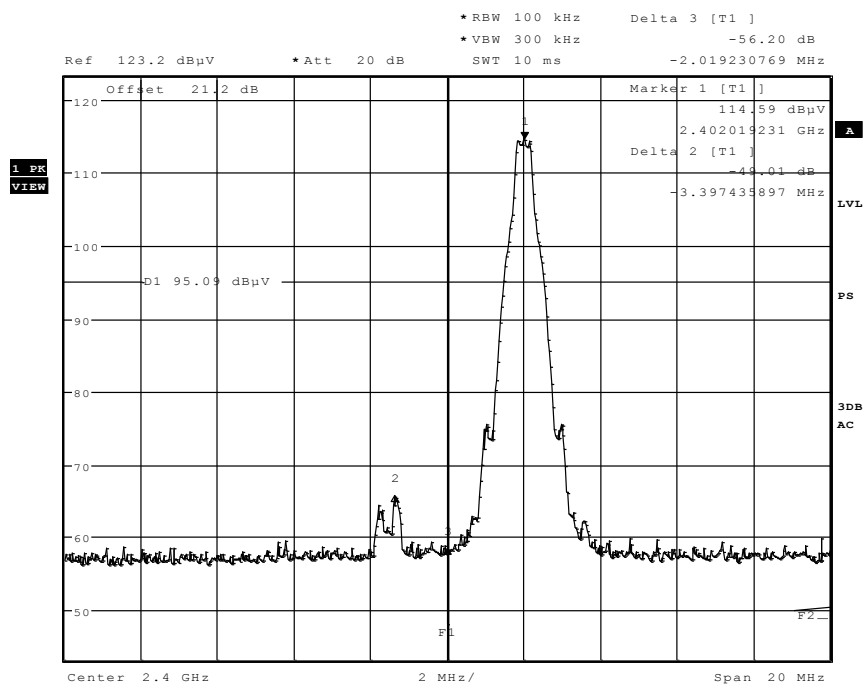


Date: 10.MAY.2011 18:52:02

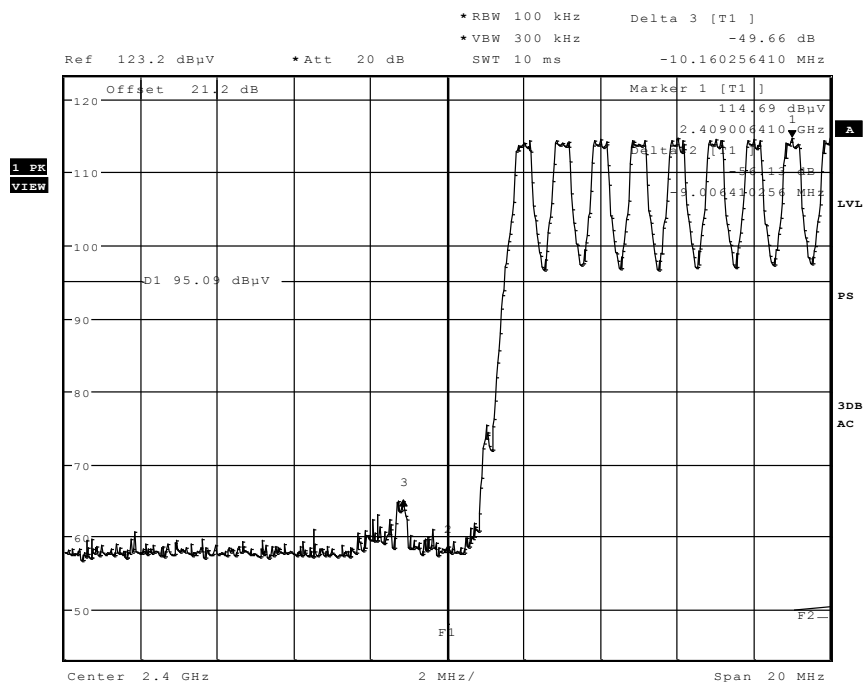
Sweep 2: Channel 0 (1GHz to 2.8GHz)

Date: 10.MAY.2011 19:05:32

Sweep 3: Channel 0 (2.8GHz to 8GHz)

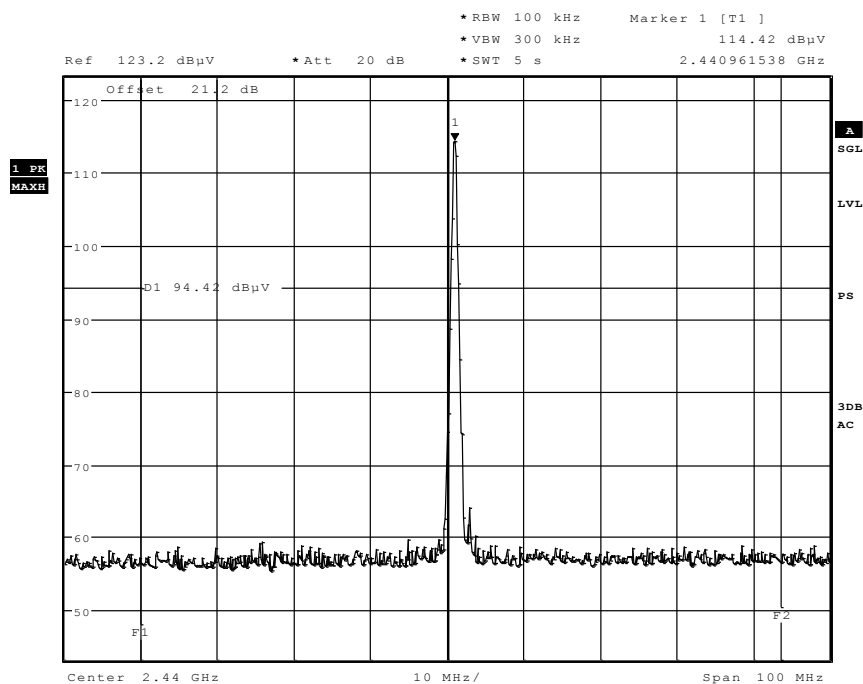


Date: 11.MAY.2011 10:14:48

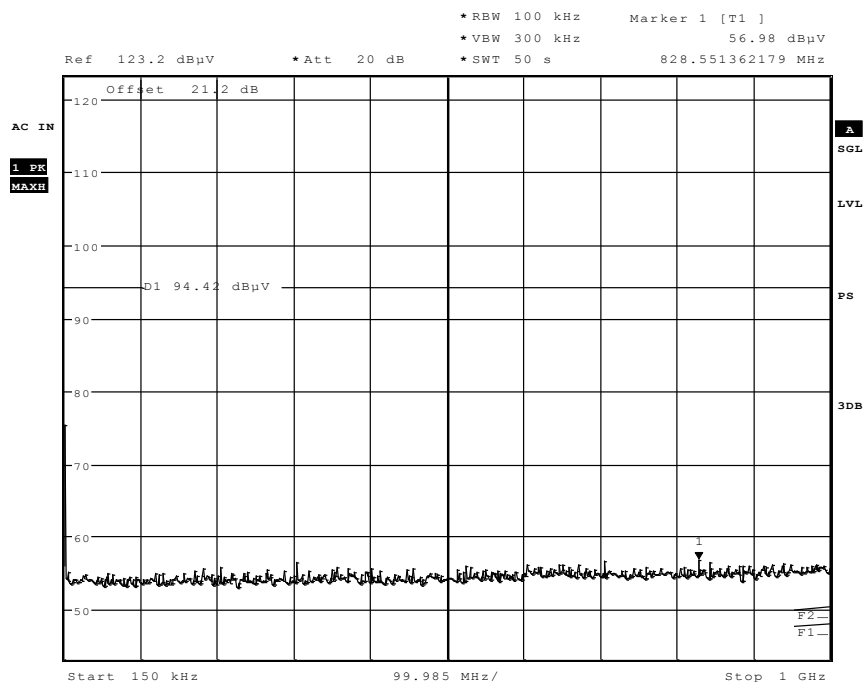
Band-Edge left (no hopping)

Date: 11.MAY.2011 10:11:30

Band-Edge left (no hopping)

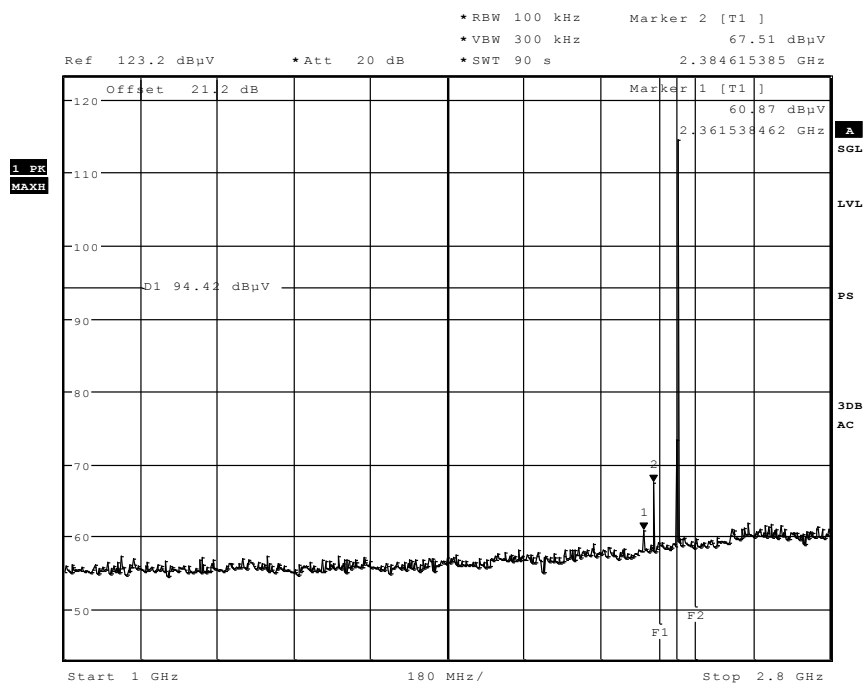


Date: 11.MAY.2011 09:20:21

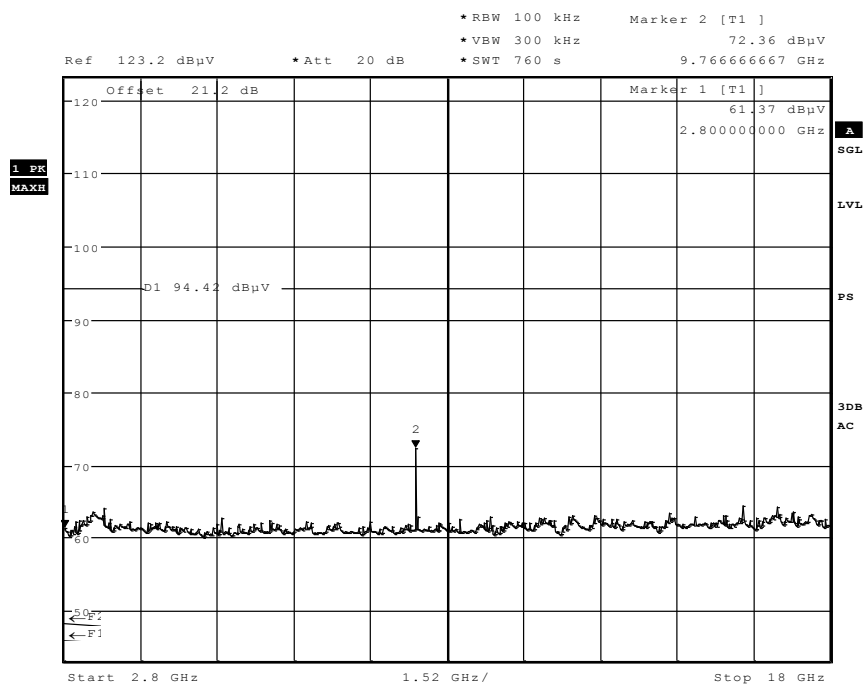
In-BAND reference value for channel 39

Date: 11.MAY.2011 09:22:10

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

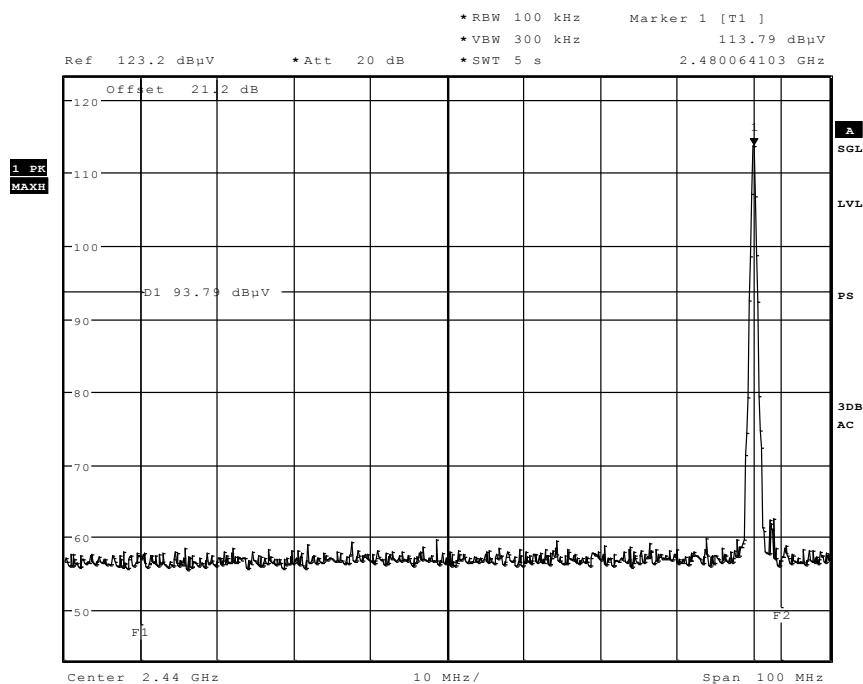


Date: 11.MAY.2011 09:24:26

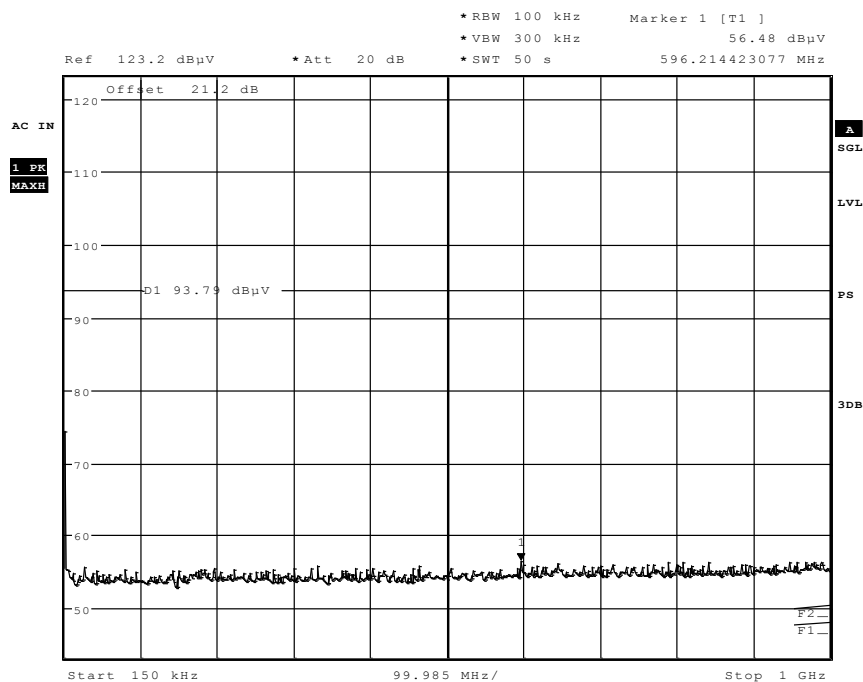
Sweep 2: Channel 39 (1GHz to 2.8GHz)

Date: 11.MAY.2011 09:38:46

Sweep 3: Channel 39 (2.8GHz to 8GHz)

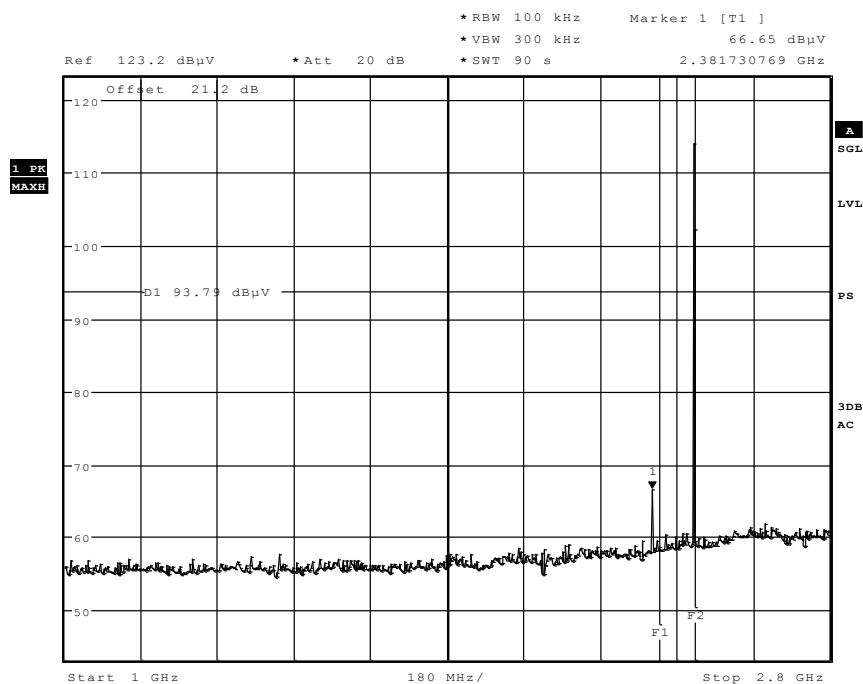


Date: 11.MAY.2011 09:40:04

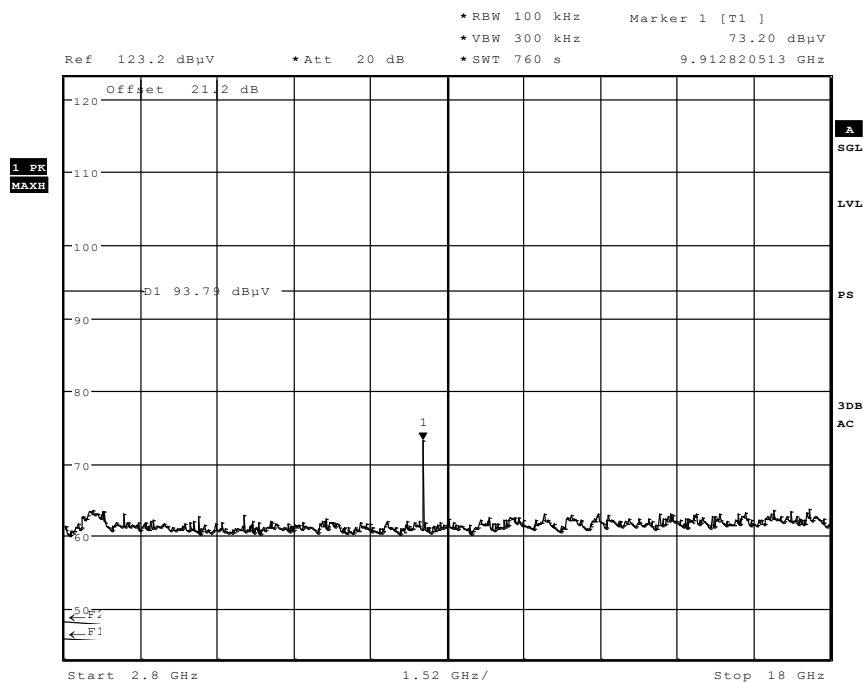
In-BAND reference value for channel 78

Date: 11.MAY.2011 09:41:23

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

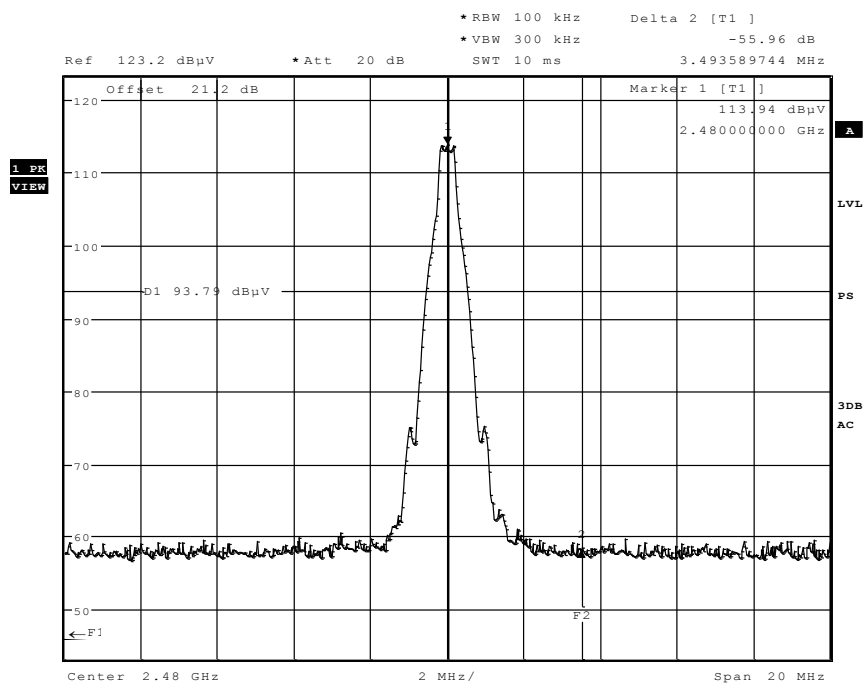


Date: 11.MAY.2011 09:43:51

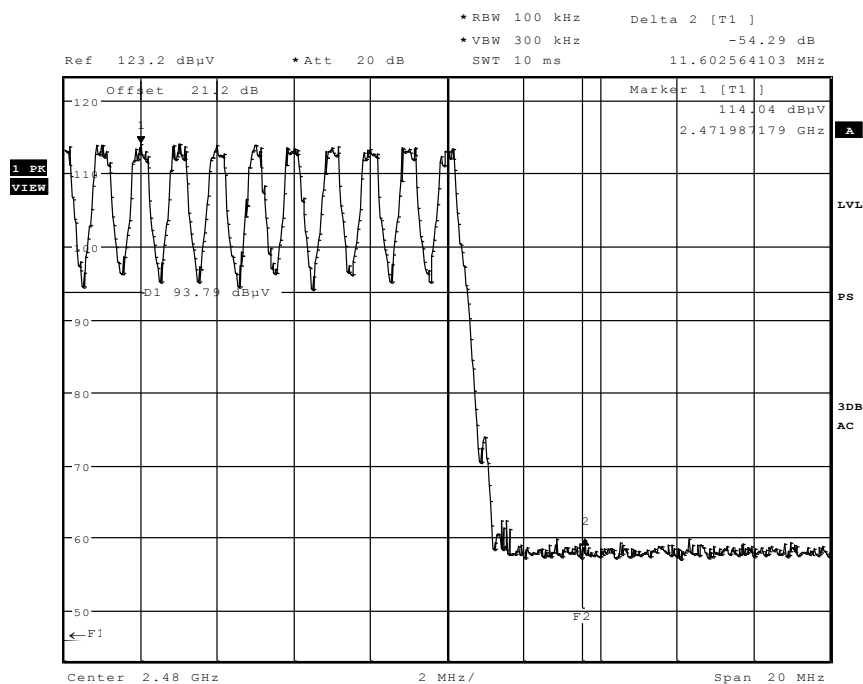
Sweep 2: Channel 78 (1GHz to 2.8GHz)

Date: 11.MAY.2011 09:57:08

Sweep 3: Channel 78 (2.8GHz to 8GHz)



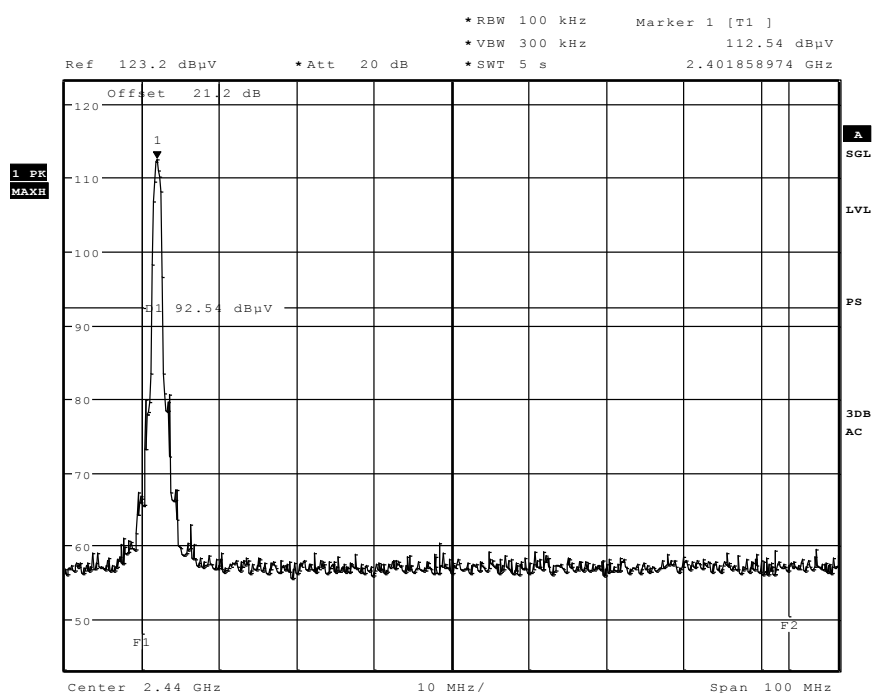
Date: 11.MAY.2011 10:00:14

Band-Edge right (no hopping)

Date: 11.MAY.2011 10:02:50

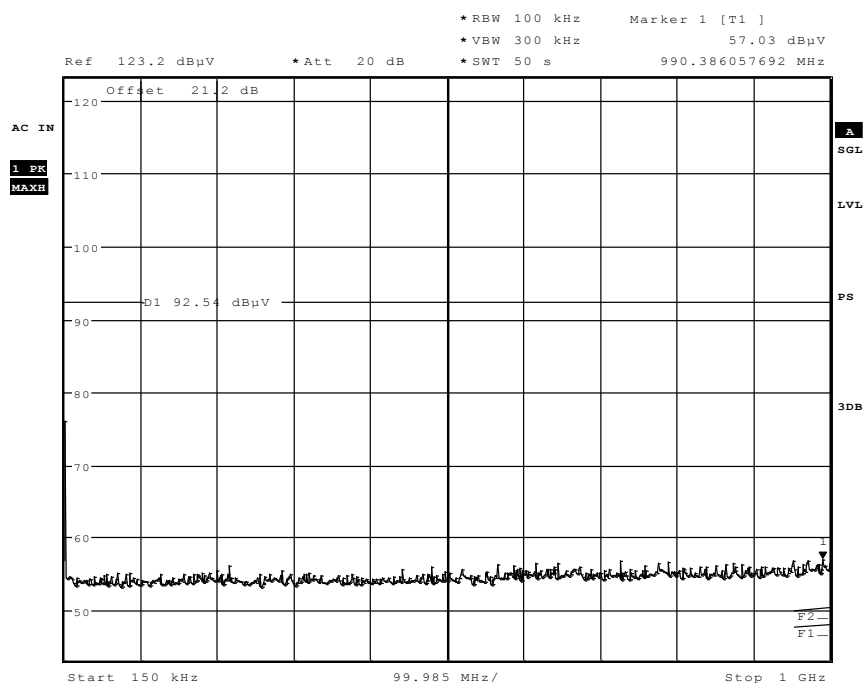
Band-Edge right (hopping mode)

1.8.2. 2DH5 modulation



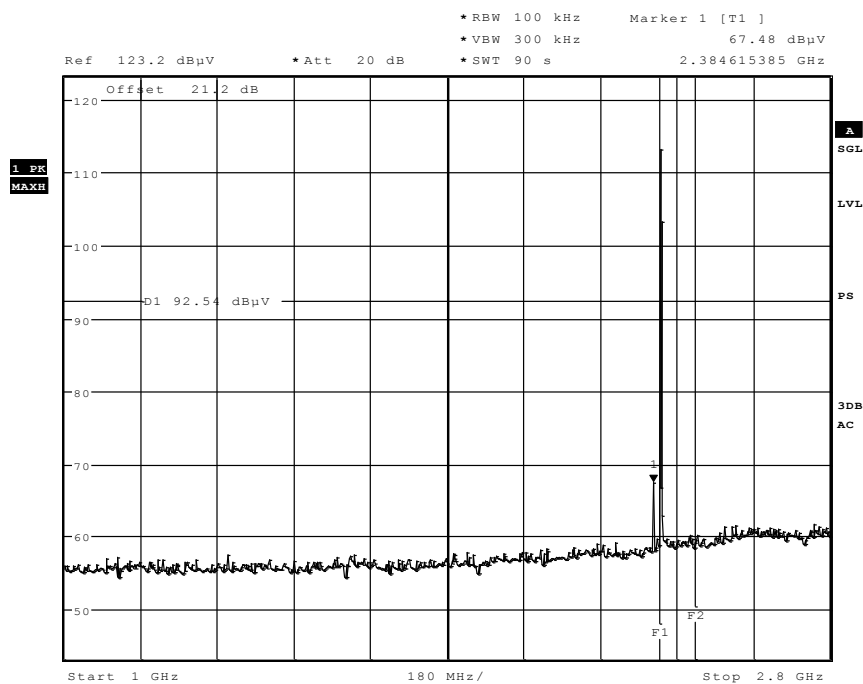
Date: 10.MAY.2011 18:28:45

In-BAND reference value for channel 0

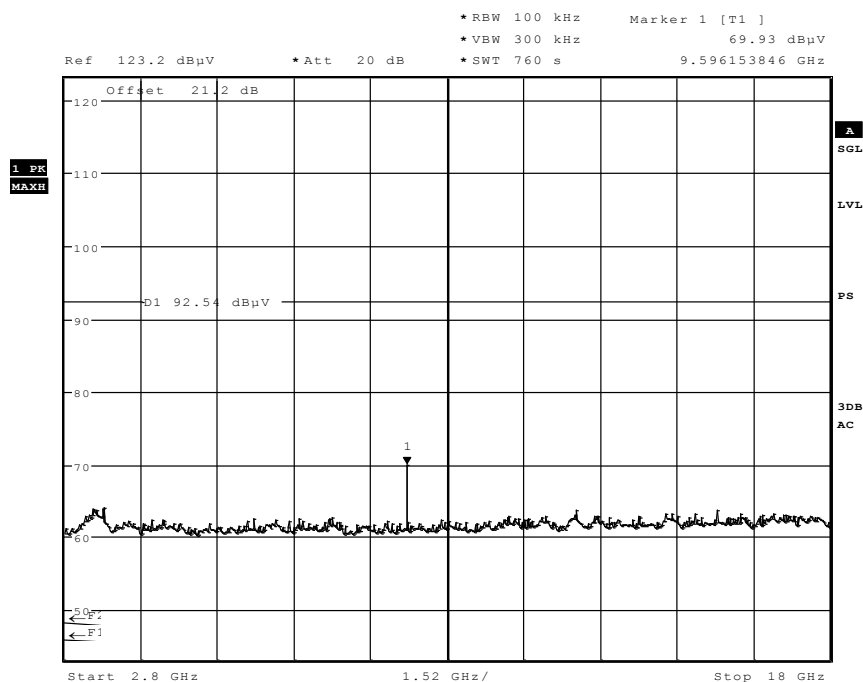


Date: 10.MAY.2011 18:30:21

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

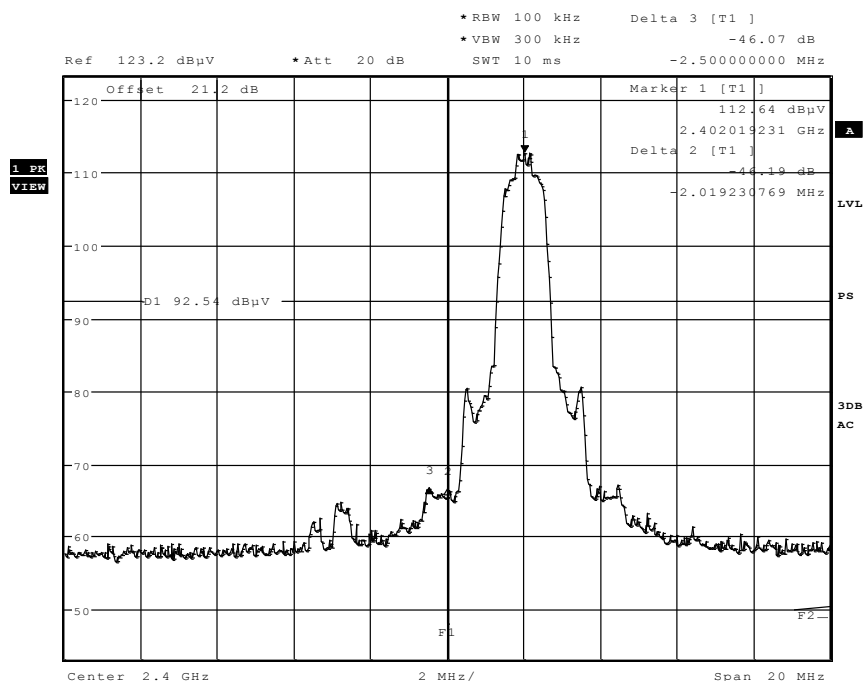


Date: 10.MAY.2011 18:32:25

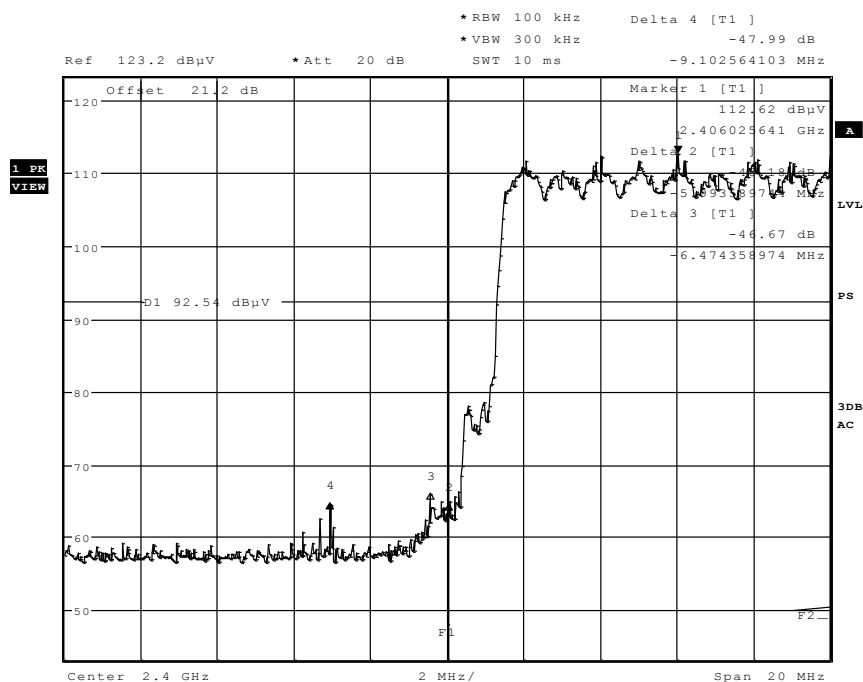
Sweep 2: Channel 0 (1GHz to 2.8GHz)

Date: 10.MAY.2011 18:46:06

Sweep 3: Channel 0 (2.8GHz to 8GHz)

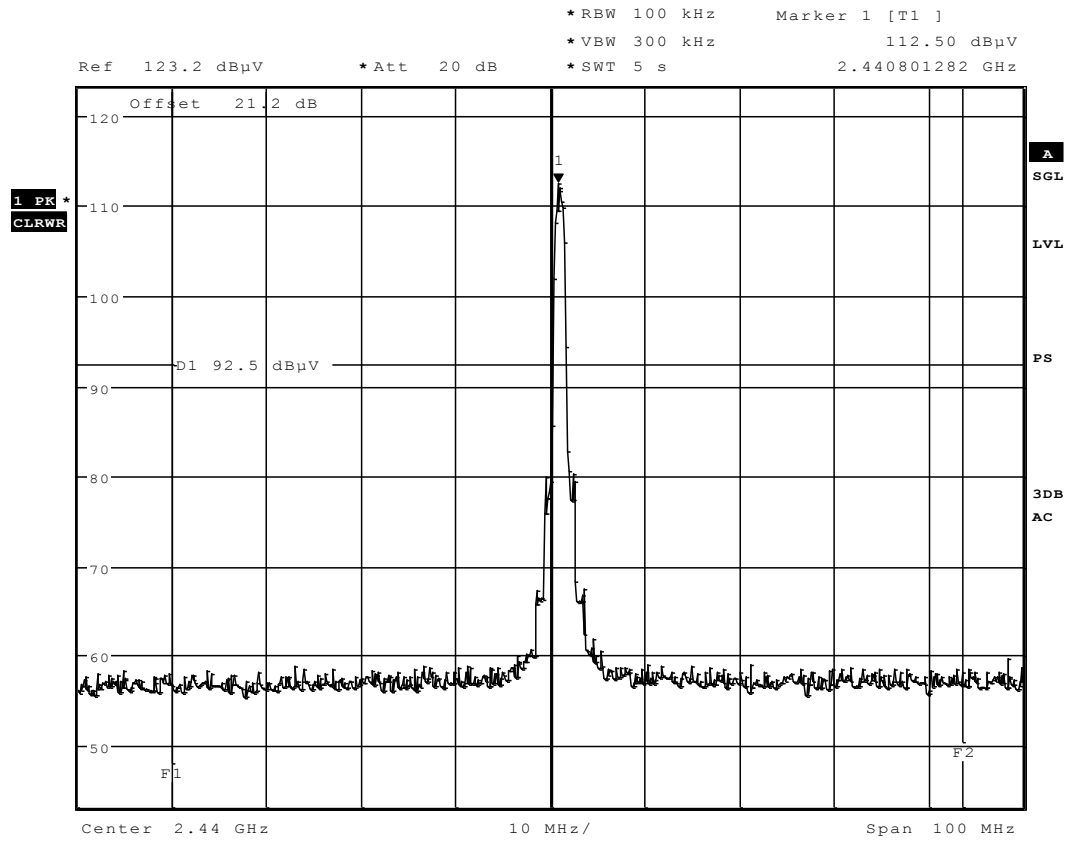


Date: 11.MAY.2011 10:18:36

Band-Edge left (no hopping)

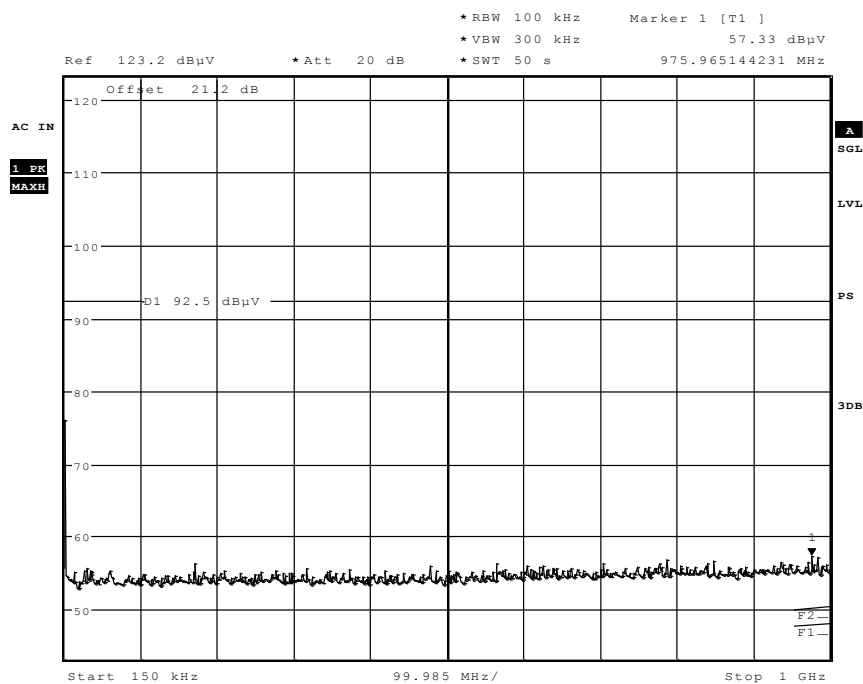
Date: 11.MAY.2011 10:23:25

Band-Edge left (hopping mode)

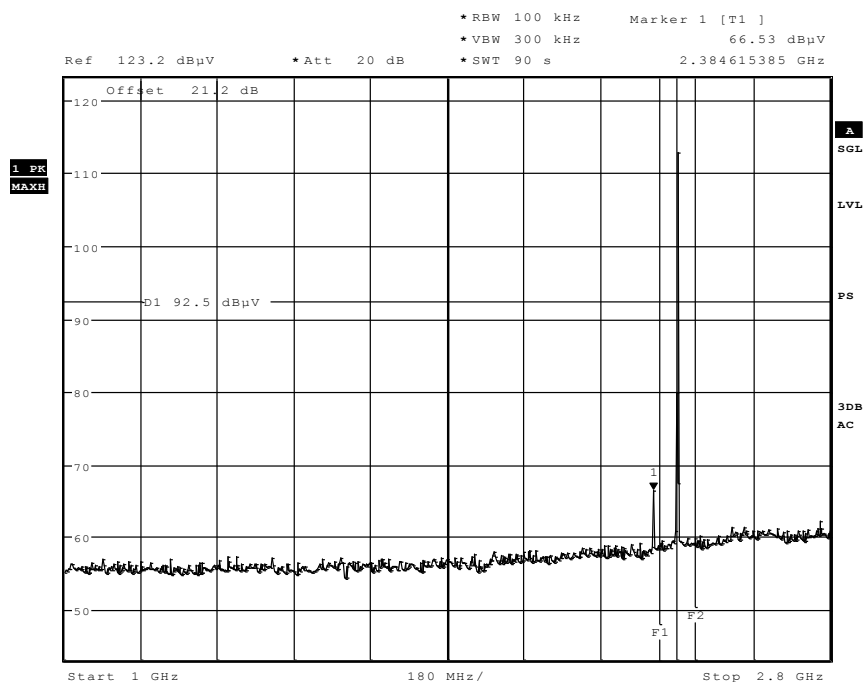


Date: 10.MAY.2011 18:11:03

In-BAND reference value for channel 39

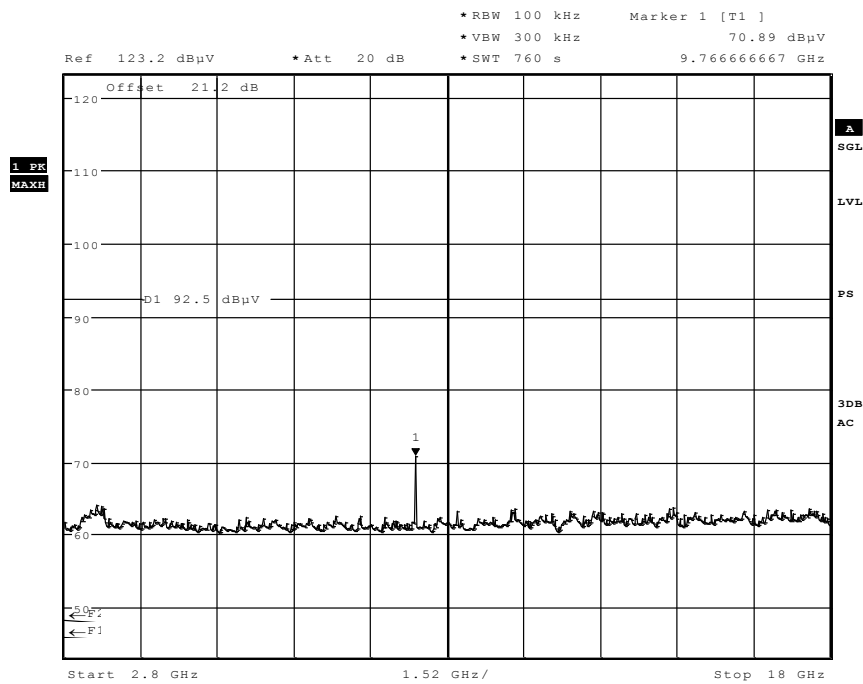


Date: 10.MAY.2011 18:12:39

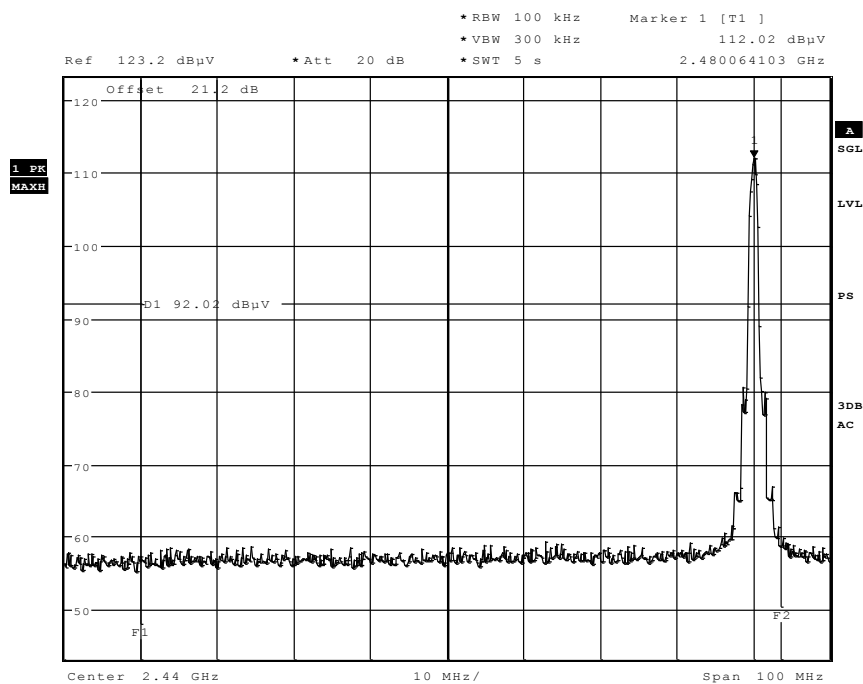
Sweep 1: Channel 39 (150kHz to 1GHz)

Date: 10.MAY.2011 18:14:35

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

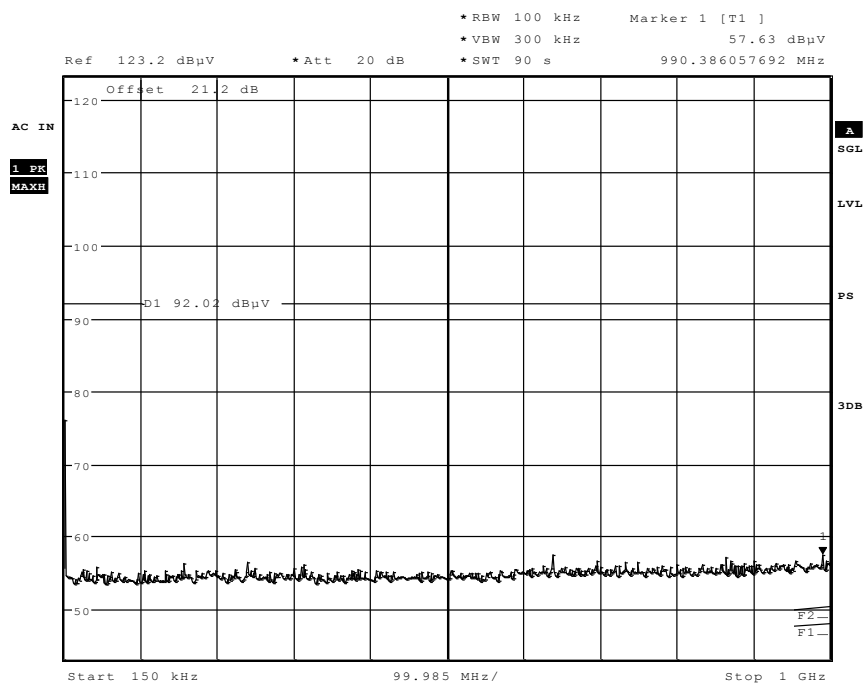


Date: 10.MAY.2011 18:27:51

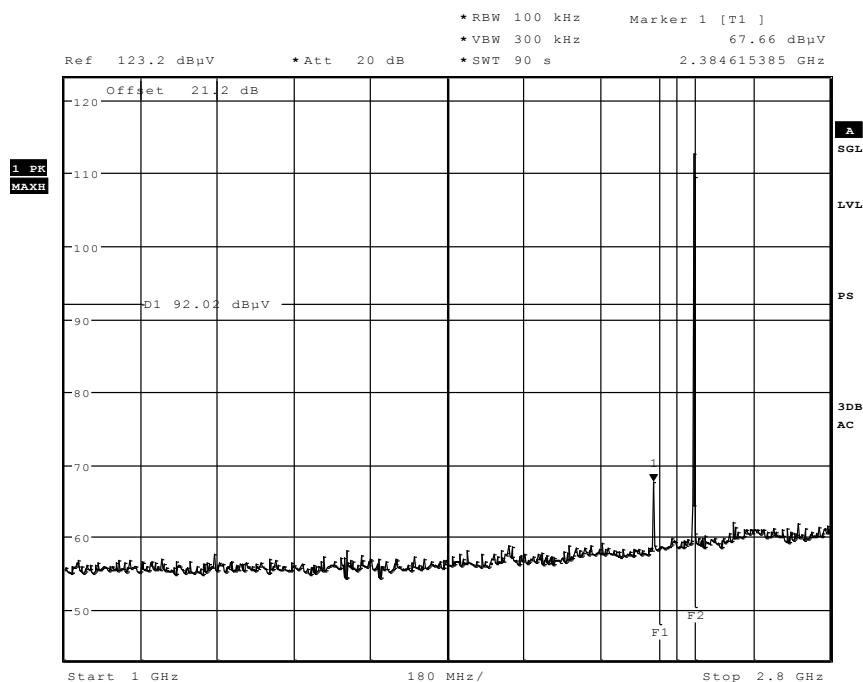
Sweep 3: Channel 39 (2.8GHz to 8GHz)

Date: 10.MAY.2011 17:50:20

In-BAND reference value for channel 78

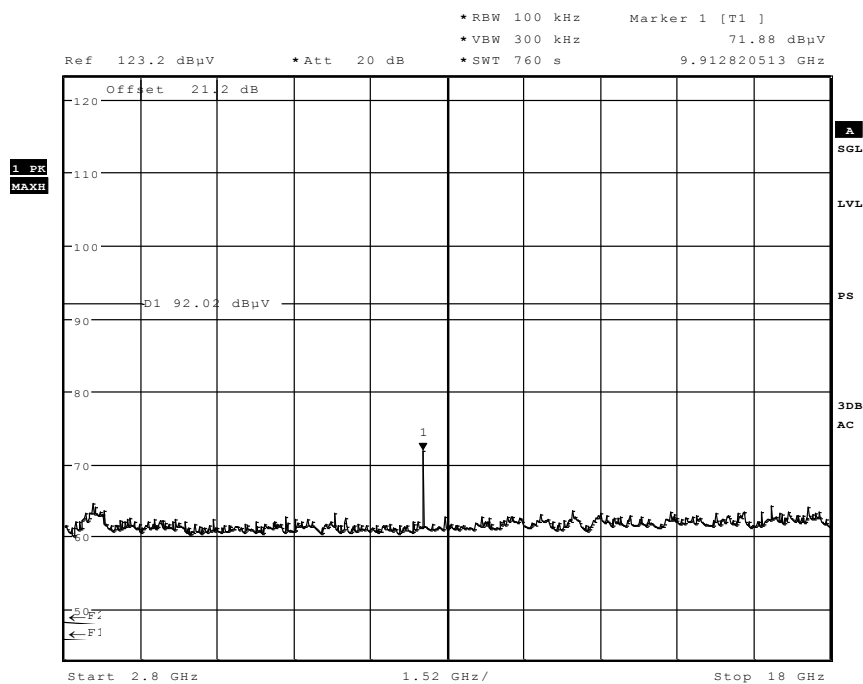


Date: 10.MAY.2011 18:09:57

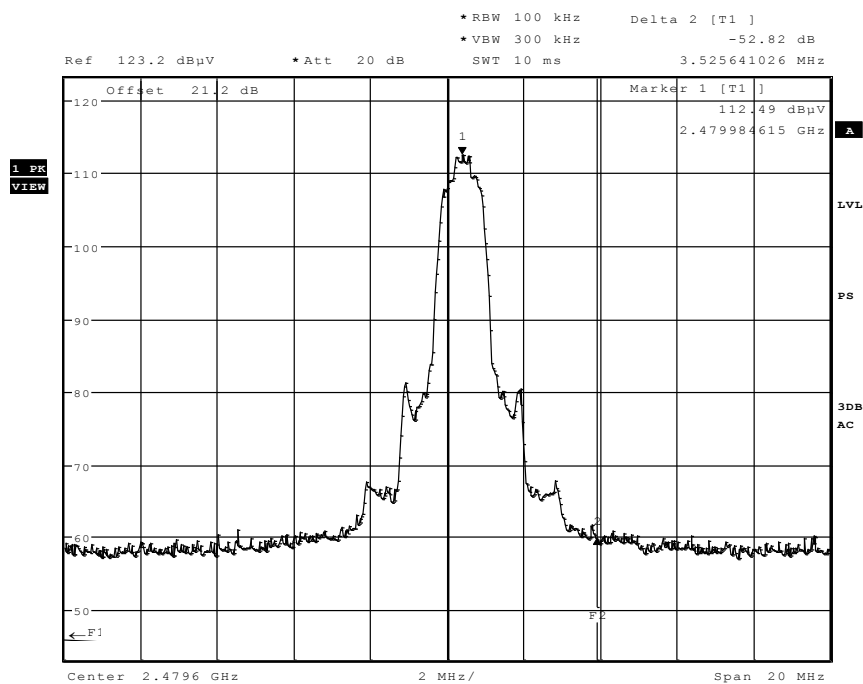
Sweep 1: Channel 78 (150kHz to 1GHz)

Date: 10.MAY.2011 18:08:03

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

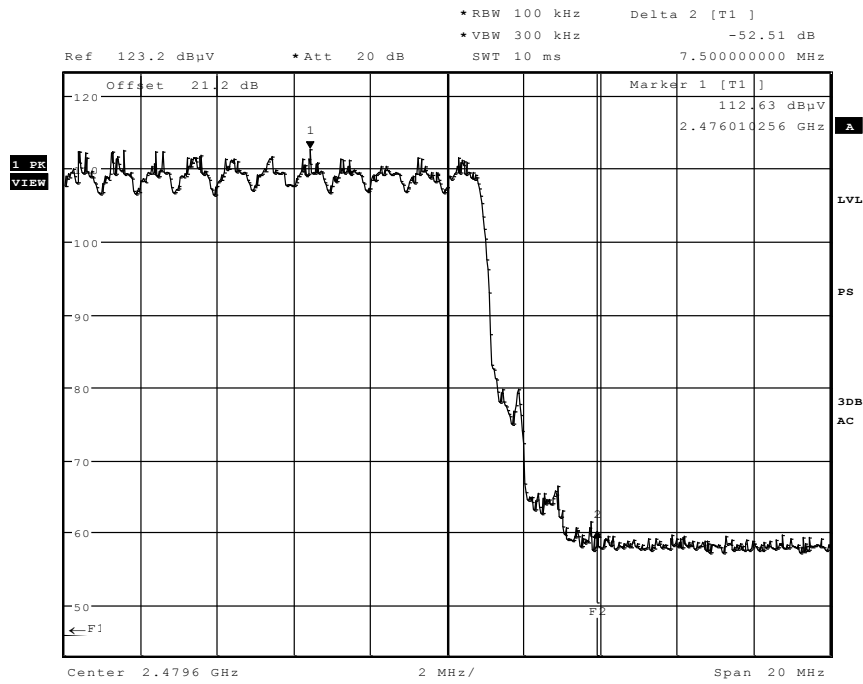


Date: 10.MAY.2011 18:05:54

Sweep 3: Channel 78 (2.8GHz to 8GHz)

Date: 10.MAY.2011 17:44:58

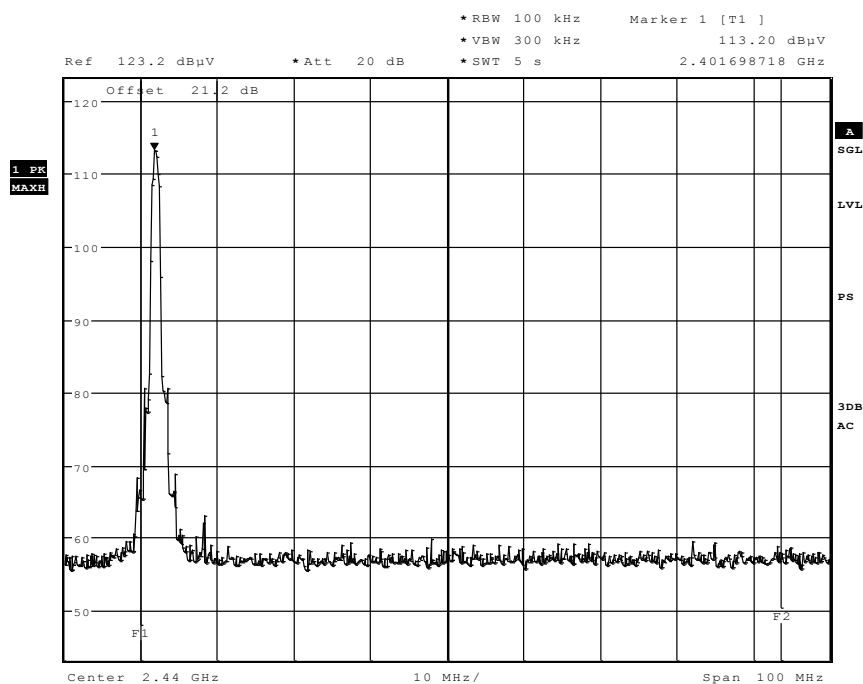
Band-Edge right (no hopping)



Date: 10.MAY.2011 17:48:09

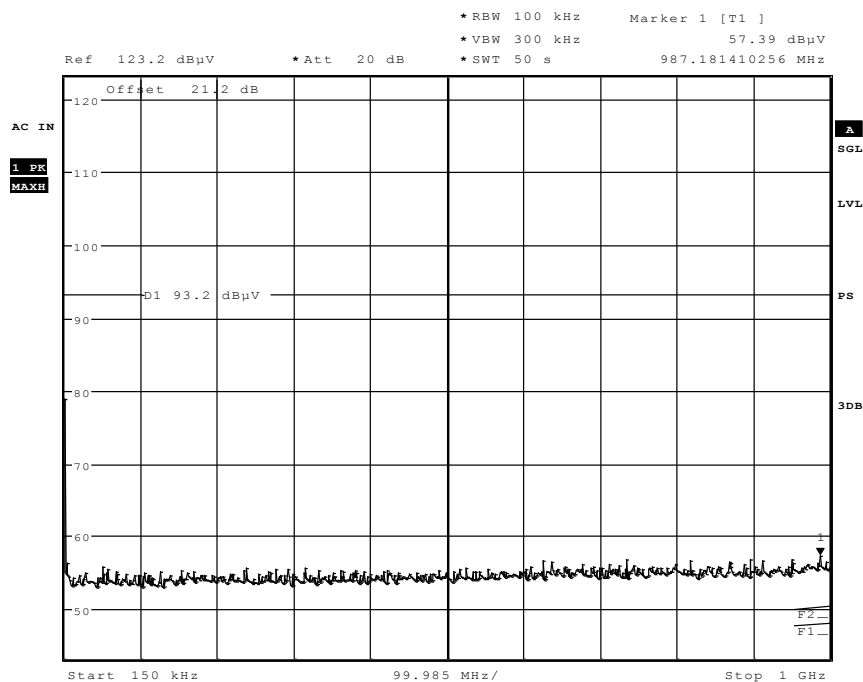
Band-Edge right (hopping mode)

1.8.3. 3DH1 modulation



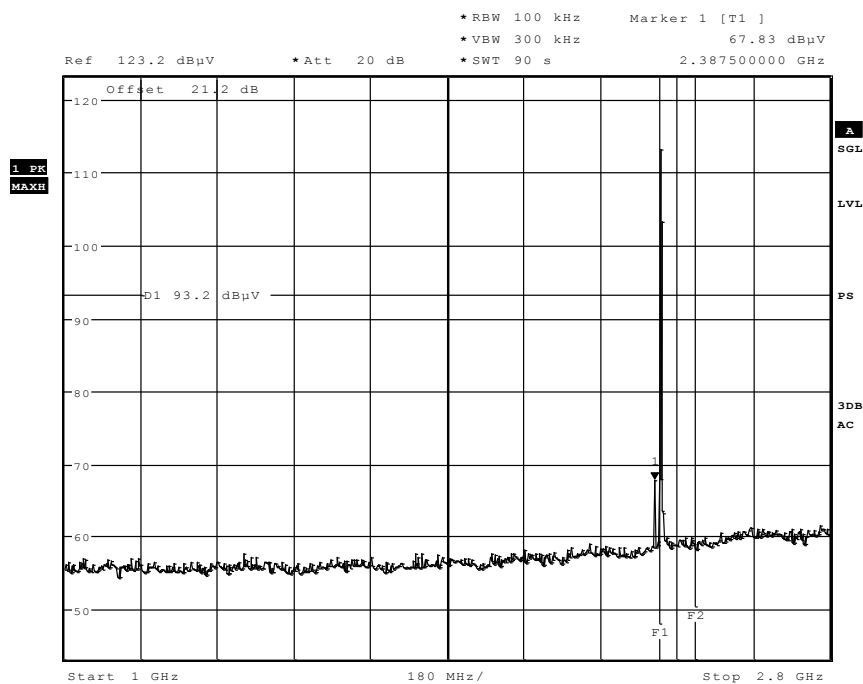
Date: 10.MAY.2011 16:16:29

In-BAND reference value for channel 0

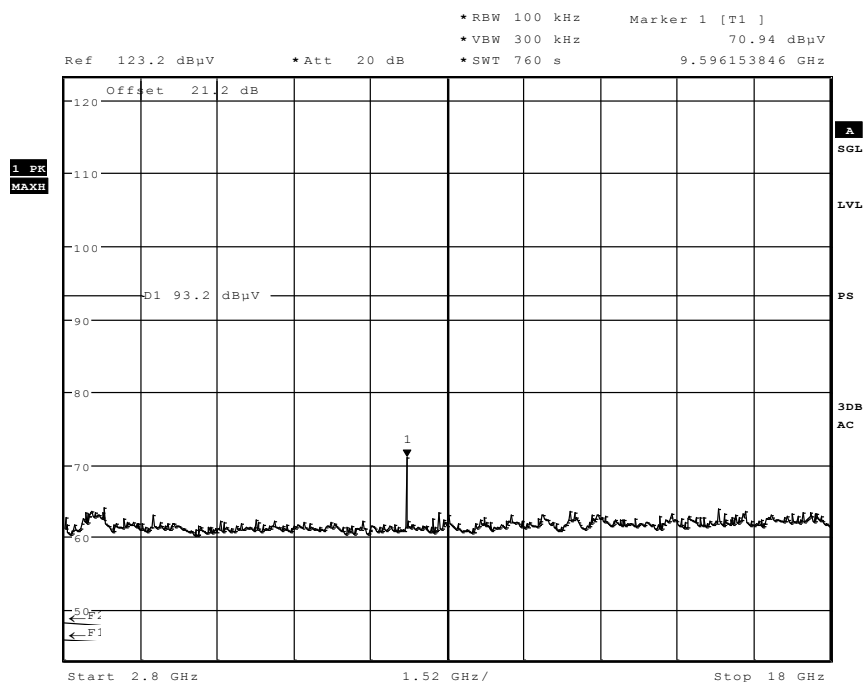


Date: 10.MAY.2011 16:19:50

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

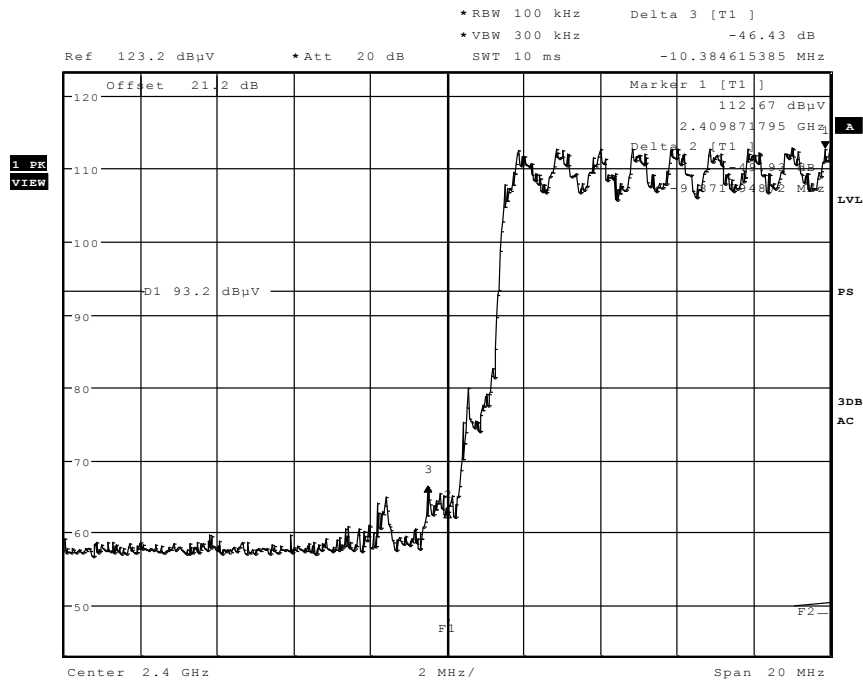


Date: 10.MAY.2011 16:22:59

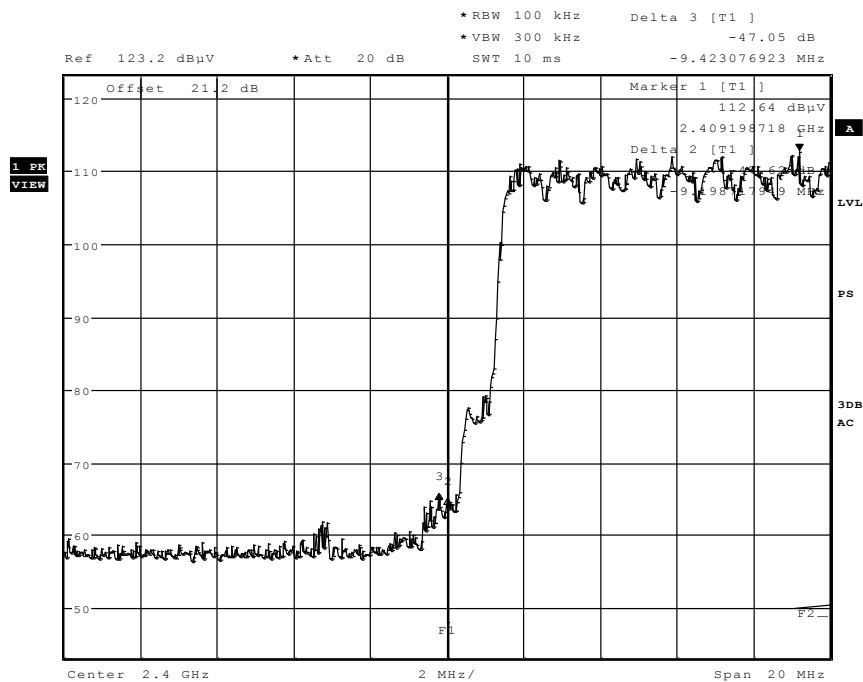
Sweep 2: Channel 0 (1GHz to 2.8GHz)

Date: 10.MAY.2011 16:36:56

Sweep 3: Channel 0 (2.8GHz to 8GHz)

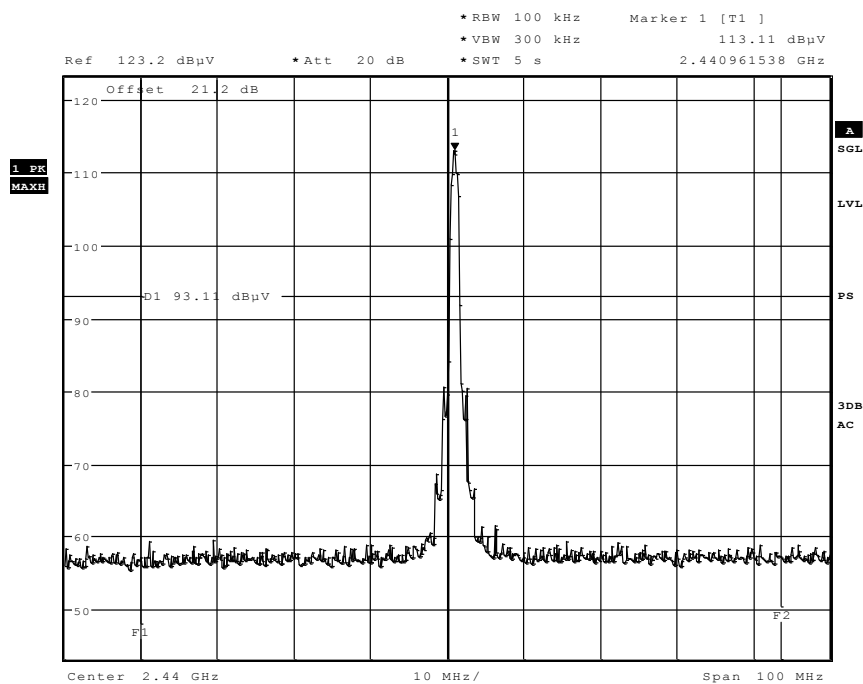


Date: 11.MAY.2011 10:31:06

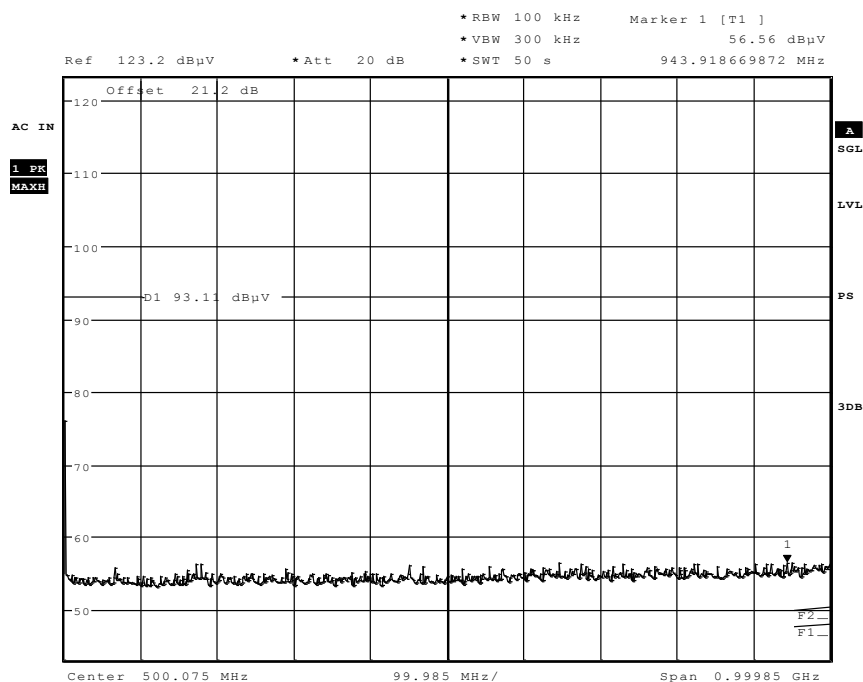
Band-Edge left (no hopping)

Date: 11.MAY.2011 10:40:57

Band-Edge left (hopping mode)

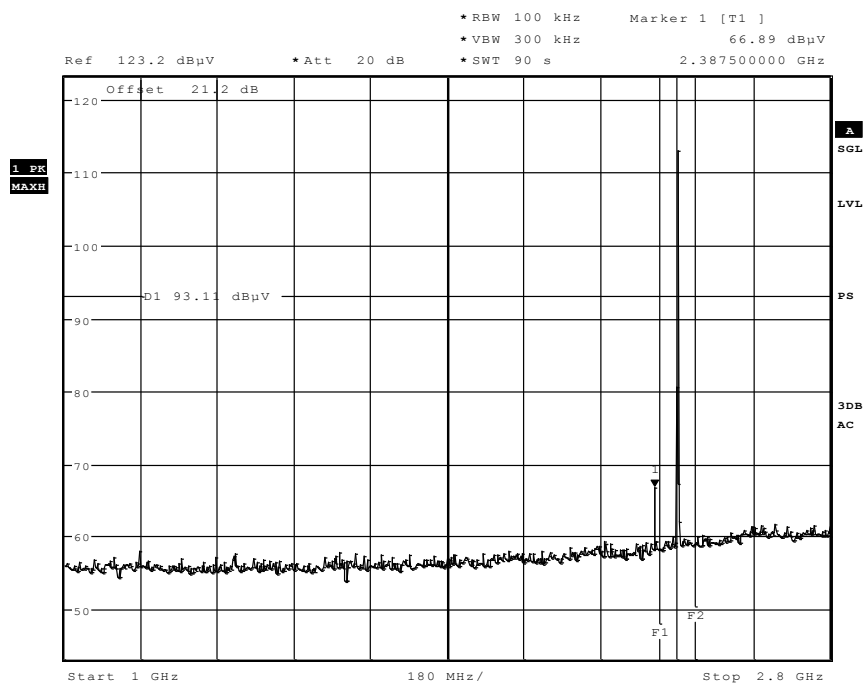


Date: 10.MAY.2011 16:38:48

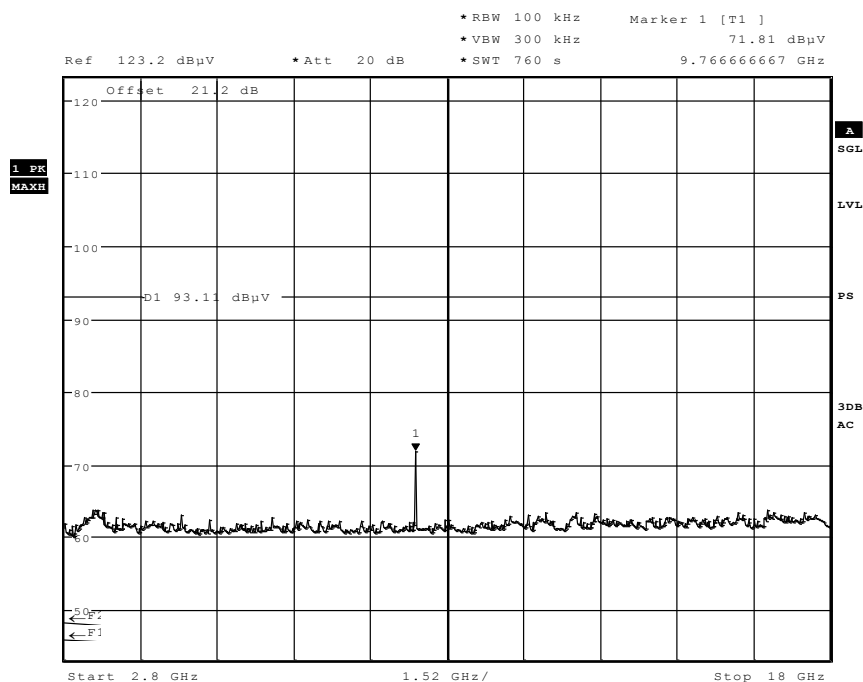
In-BAND reference value for channel 39

Date: 10.MAY.2011 16:57:18

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

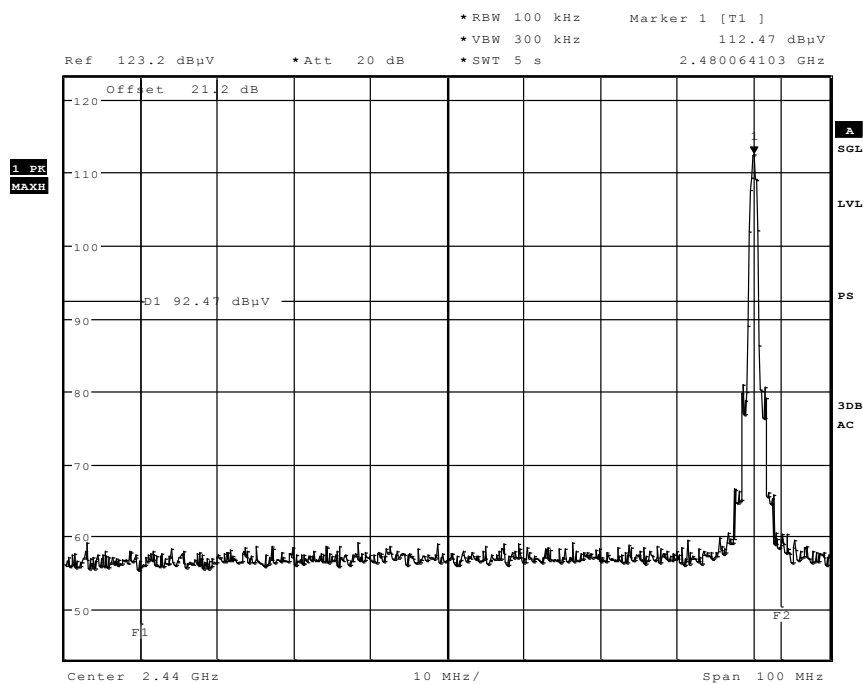


Date: 10.MAY.2011 16:55:33

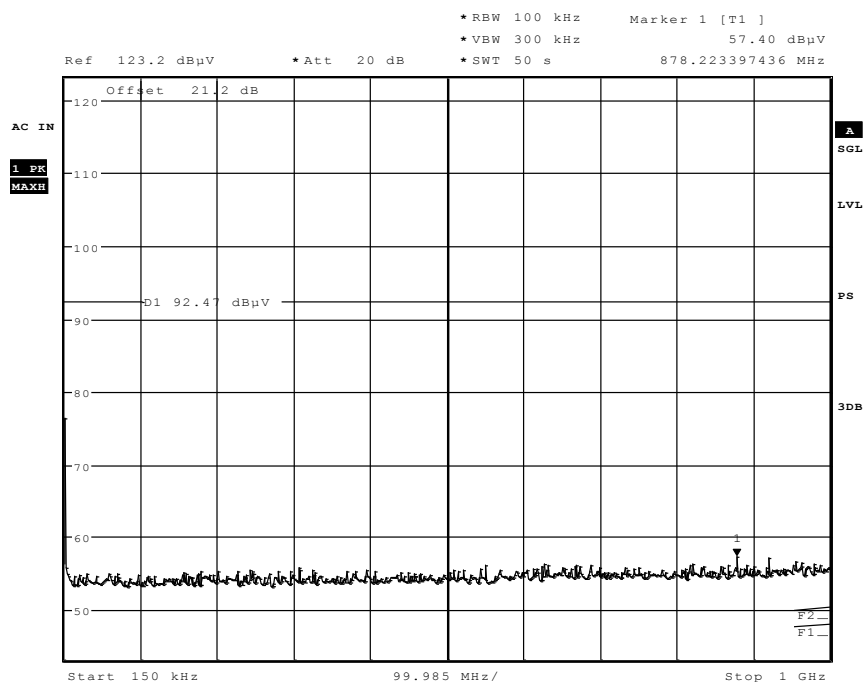
Sweep 2: Channel 39 (1GHz to 2.8GHz)

Date: 10.MAY.2011 16:52:40

Sweep 3: Channel 39 (2.8GHz to 8GHz)

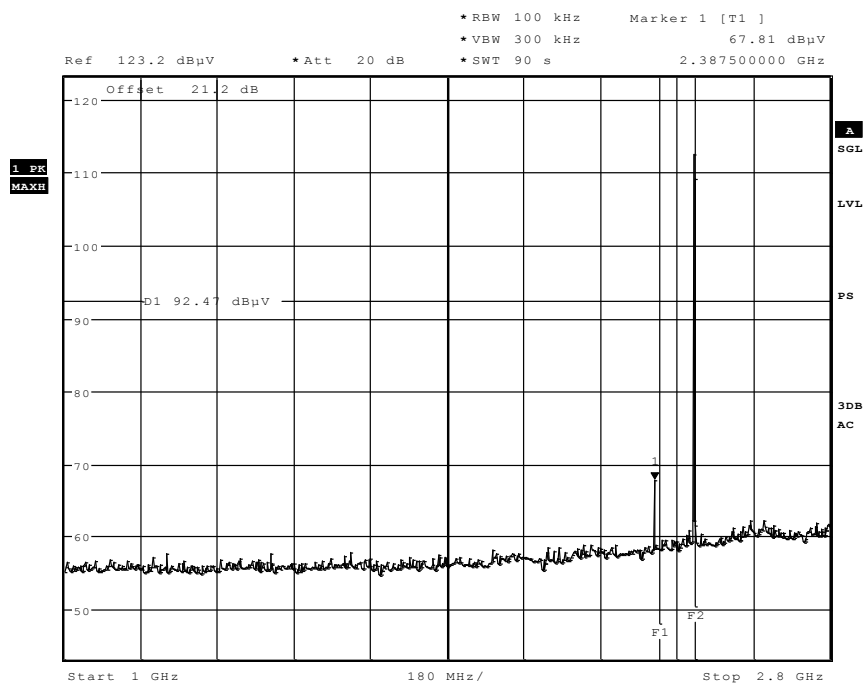


Date: 10.MAY.2011 16:58:56

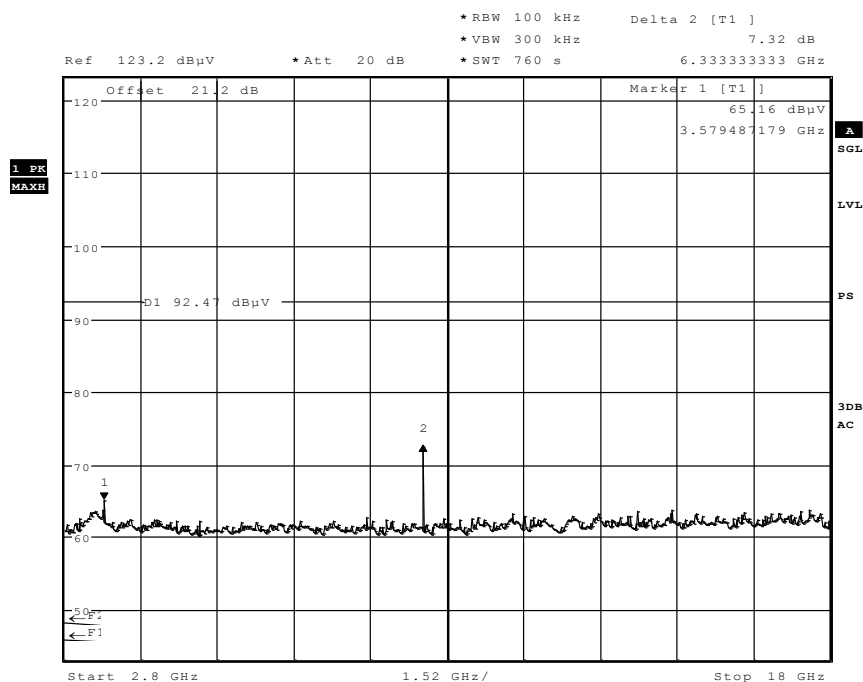
In-BAND reference value for channel 78

Date: 10.MAY.2011 17:18:07

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

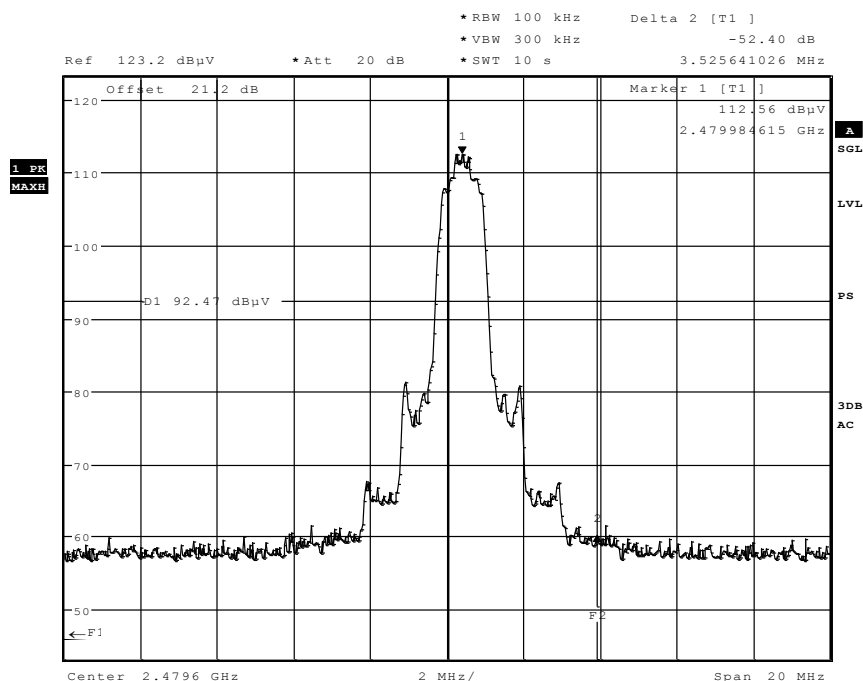


Date: 10.MAY.2011 17:16:33

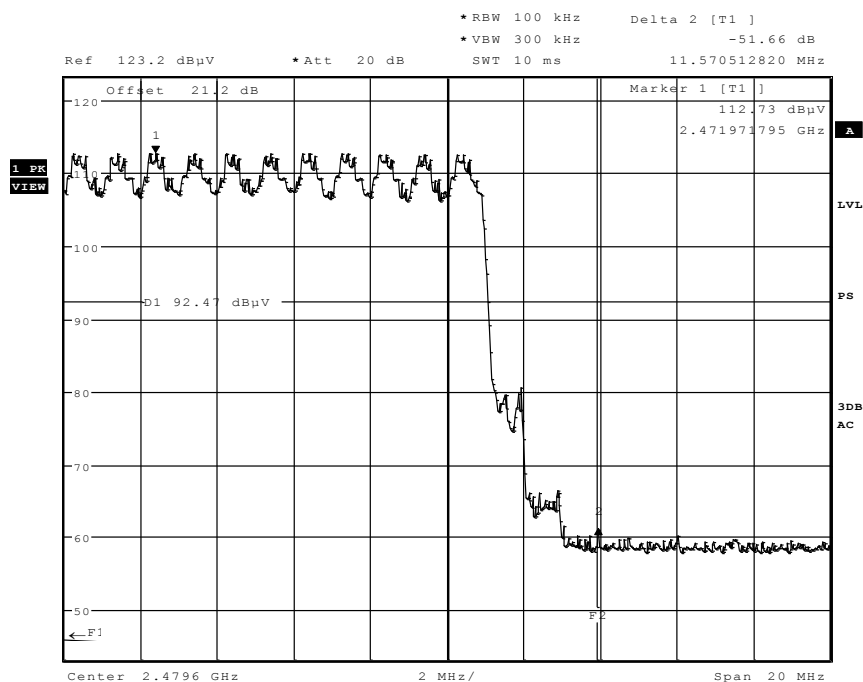
Sweep 2: Channel 78 (1GHz to 2.8GHz)

Date: 10.MAY.2011 17:14:09

Sweep 3: Channel 78 (2.8GHz to 8GHz)



Date: 10.MAY.2011 17:23:12

Band-Edge right (no hopping)

Date: 10.MAY.2011 17:32:12

Band-Edge right (hopping mode)

1.9. Conducted emissions on AC-mains

1.9.1. TX-Mode (§15.207/RSS-Gen.)

Diagram No. 1.1

Test Description:
 Testspezifikation:
 Technical Data:
 Diagram:
 Operator name:
 Report.- Nr.

Date: 17.05.2011 Page 1 of 2
 Conducted Voltage Measurement Class B
 EN 55011, EN 55022, FCC 15.107, VCCI TR (see Report for more details)
 Please see next page for detailed information
 Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
 Tas
 2-20797620/11

Operating mode:
 Measured on line:
 Power during test:

TX (BT mode activated with HS)
 Mains AC L1 and N
 110 V AC 60 Hz

EUT Information

EUT Name:

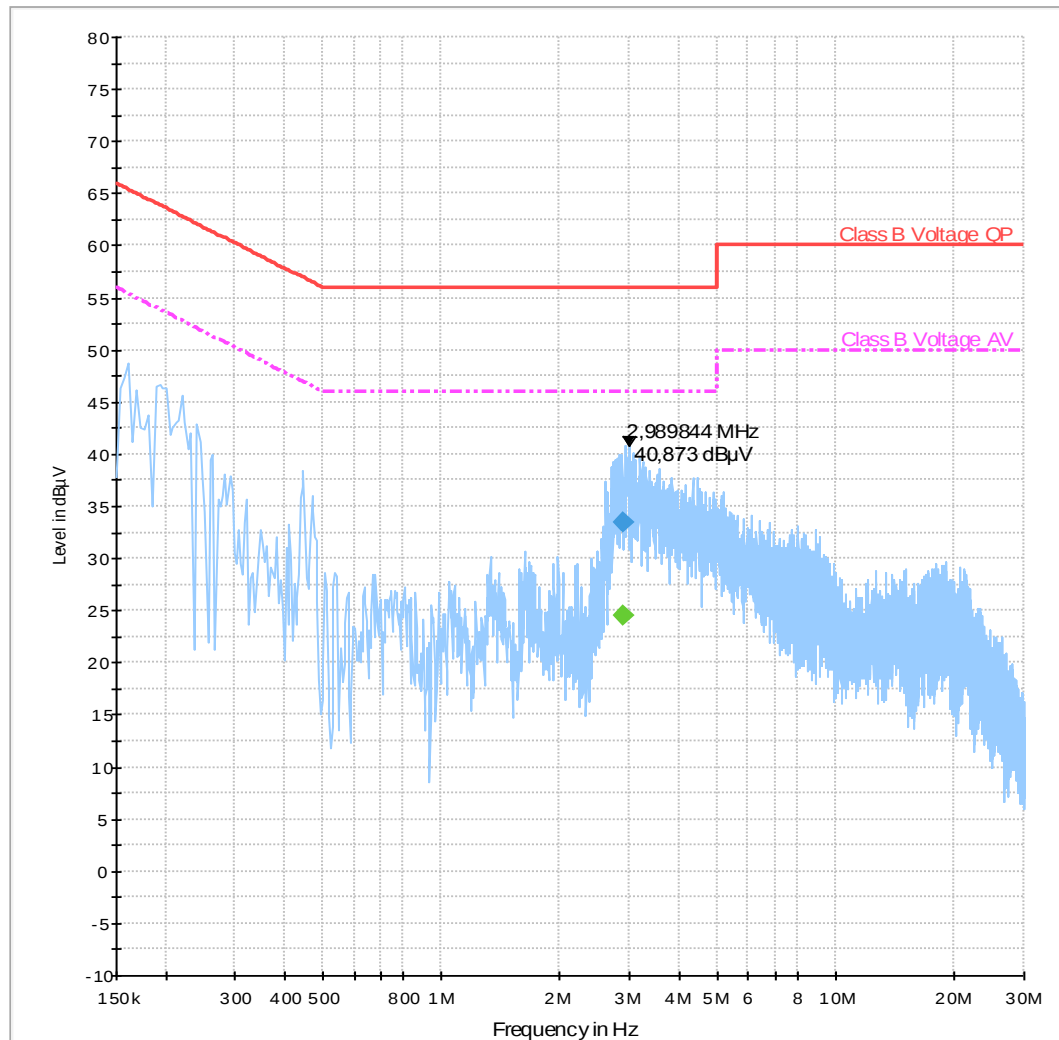
AAD-3880110-BV+ AC/DC Charger CAA-0002016-BV(#19318)+USB cable EC700(#19321)+ BT-HS

DDA-0002005

Manufacturer:

SEM

01_Class B_Voltage_PK_QPAV_N_L1



Date: 17.05.2011 Page 2 of 2

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
2.897031	33.5	15000.0	9.000	GND	L1	0.1	22.5	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
2.897031	24.4	15000.0	9.000	GND	L1	0.1	21.6	46.0

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"

1.9.2. RX-Mode (§15.107/RSS-Gen.)

Diagram No. 1.2

Test Description:

Testspecification:

Technical Data:

Diagram:

Operator name:

Report.- Nr.

Operating mode:

Measured on line:

Power during test:

Date: 17.05.2011 Page 1 of 2

Conducted Voltage Measurement Class B

EN 55011, EN 55022, FCC 15.107, VCCI TR (see Report for more details)

Please see next page for detailed information

Shows the peak values as a sum of measured ports (N+L1) in maxhold mode

Tas

2-20797620/11

RX (only BT mode active on the phone)

Mains AC L1 and N

110 V AC 60 Hz

EUT Information

EUT Name:

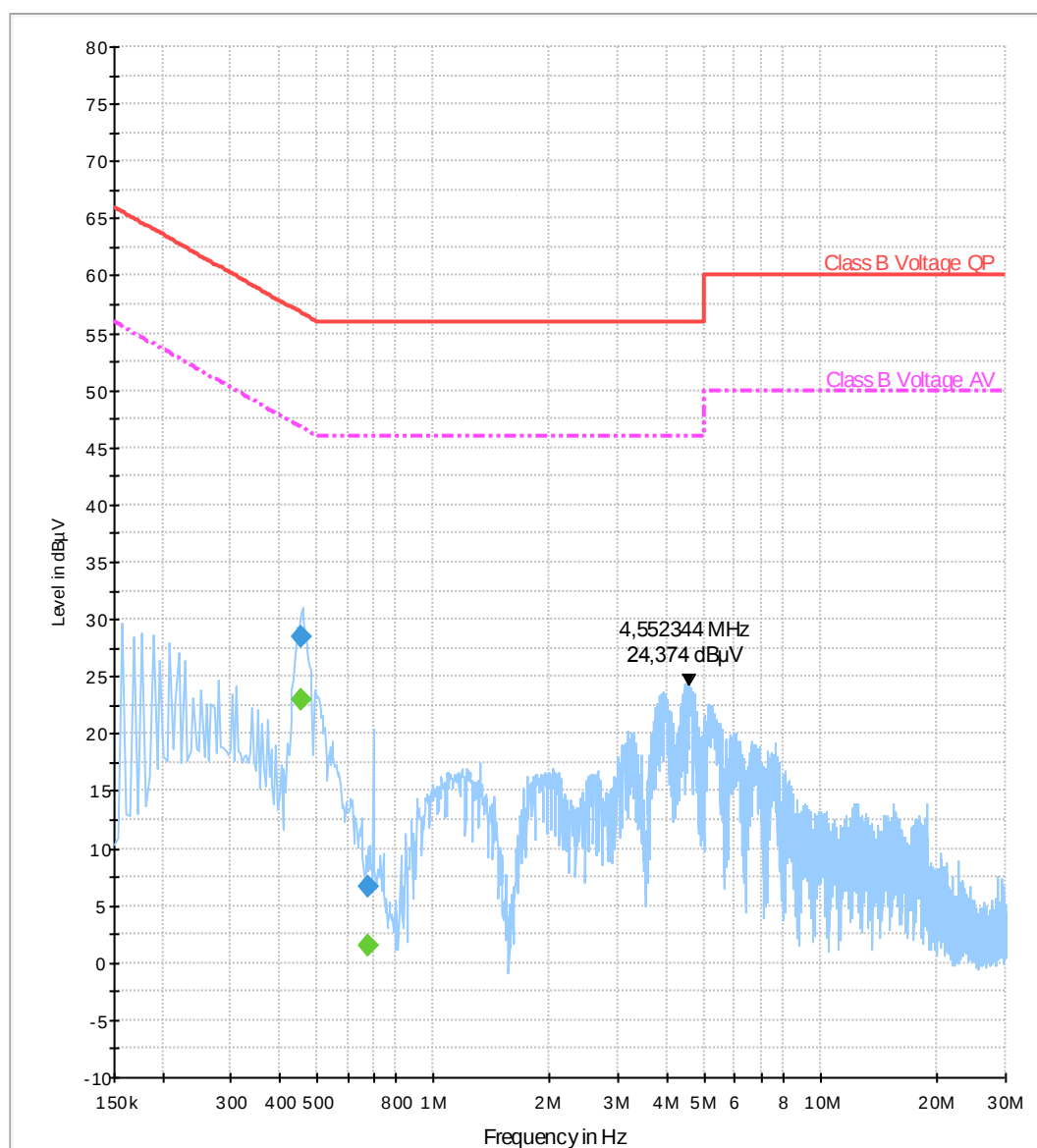
Manufacturer:

AAD-3880110-BV(#CB5A1CHY8R)+ AC/DC Charger CAA-0002016-BV(#19318)+USB cable

EC700(#19321)+ BT-HS DDA-0002005

SEM

01_Class B_Voltage_PK_QPAV_N_L1



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.455000	28.5	15000.0	9.000	GND	L1	0.0	28.3	56.8
0.678281	6.6	15000.0	9.000	GND	L1	0.1	49.4	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.455000	23.0	15000.0	9.000	GND	L1	0.0	23.8	46.8
0.678281	1.5	15000.0	9.000	GND	L1	0.1	44.5	46.0

Date: 17.05.2011 Page 2 of 2

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"

1.10. Radiated field strength (15.209/RSS-Gen.)

1.10.1. Radiated magnetic field strength measurements ($f < 30\text{ MHz}$)

Diagram No. 3.03_BT

Common Information

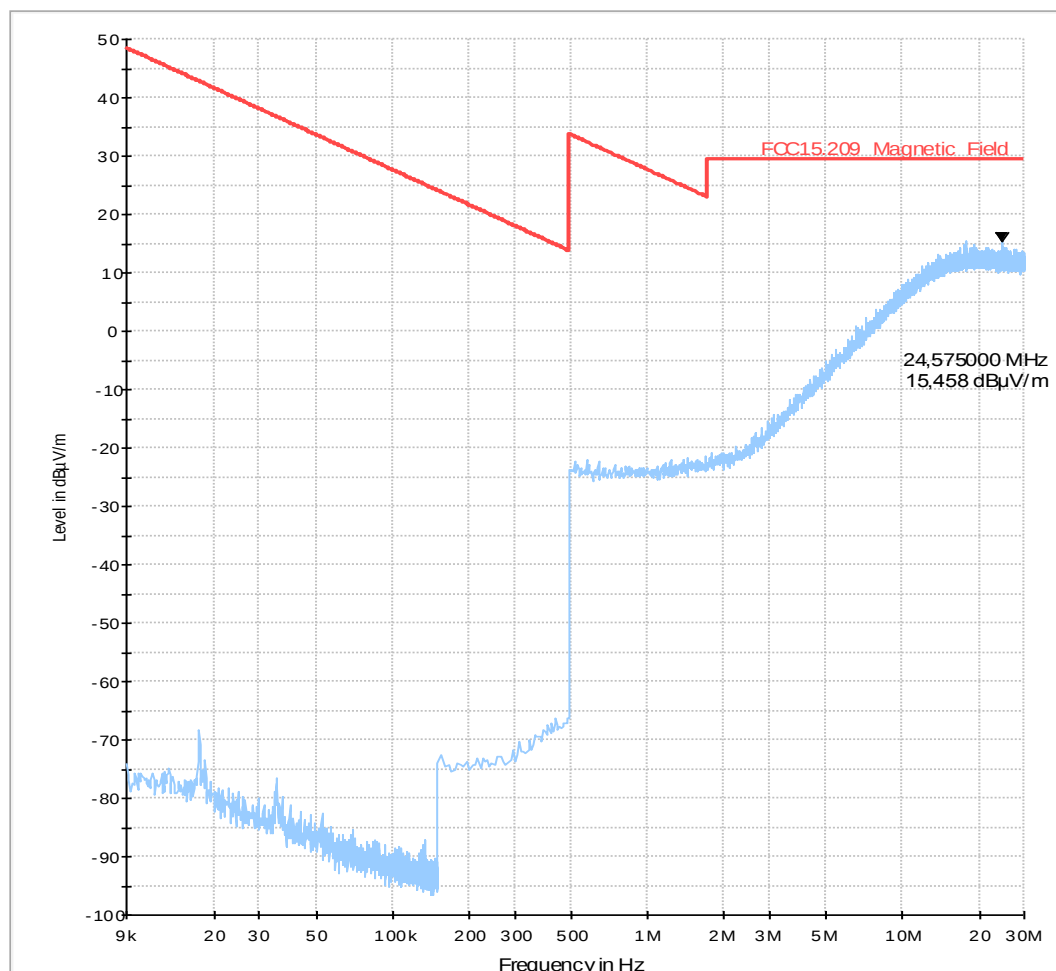
Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room covered with absorbers (SAR)
Measured sides of EUT:	front, right, rear, left
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Turntable step:	90° during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

Operator:	TAS
Operating conditions:	TX-on (BT+, Ch 39)
Power during tests:	full loaded batteries

EUT Information

EUT type	AAD-3880110-BV
Manufacturer	Sony Ericsson
S/N	CB5A1CHV81

FCC15.209_magn hor+vert



EMI Auto Test Template: FCC15.209_magn hor+vert

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX

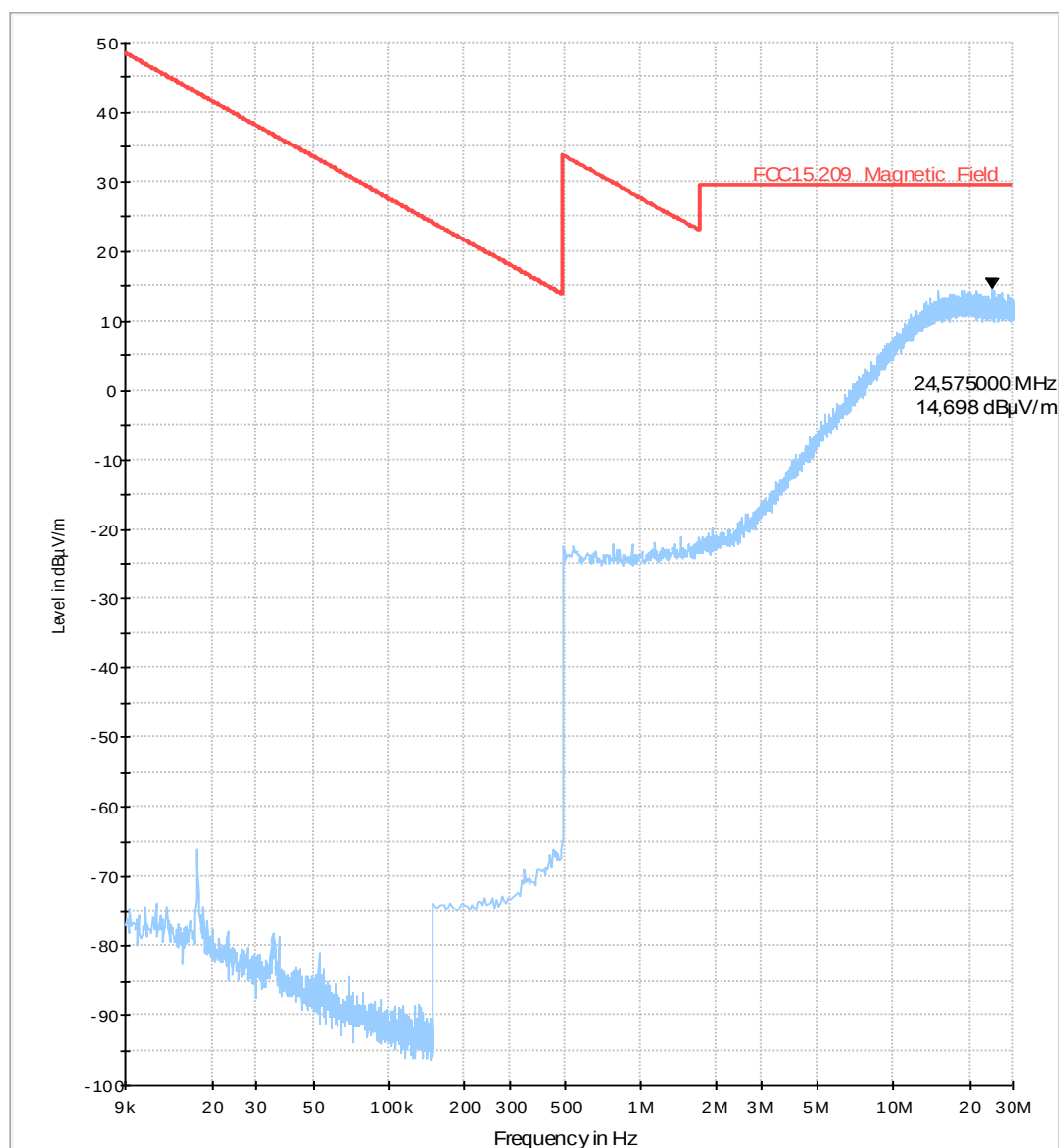
Diagram No. 3.04

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room covered with absorbers (SAR)
Measured sides of EUT:	front, right, rear, left
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:	TAS
Operating conditions:	TX-on (BT+, Ch 0)
Power during tests:	full loaded batteries

FCC15.209_magn hor+vert



EMI Auto Test Template: FCC15.209_magn hor+vert

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX

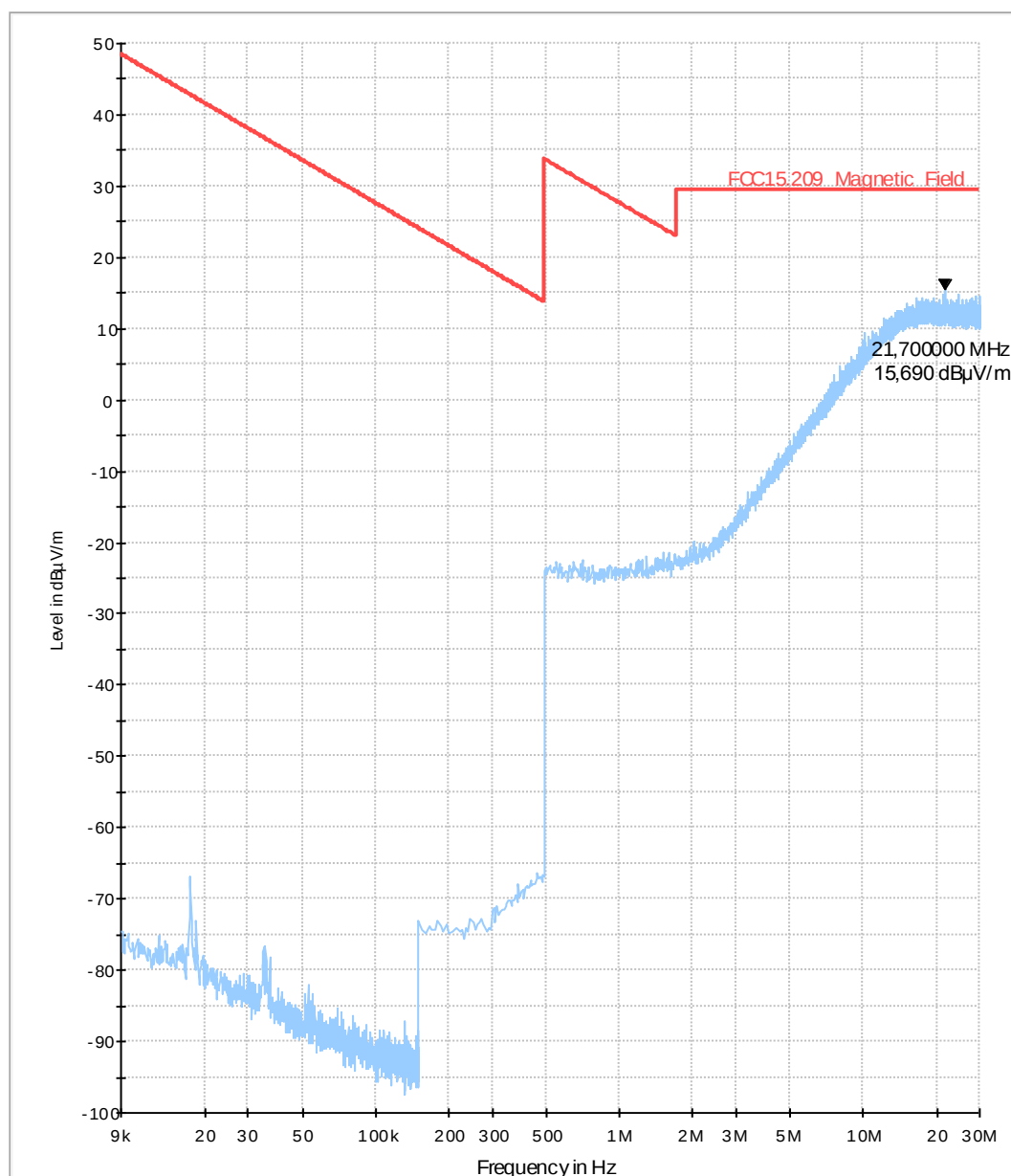
Diagram No. 3.05

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room covered with absorbers (SAR)
Measured sides of EUT:	front, right, rear, left
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:	TAS
Operating conditions:	TX-on (BT+, Ch 78)
Power during tests:	full loaded batteries

FCC15.209_magn hor+vert



EMI Auto Test Template: FCC15.209_magn hor+vert

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX

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

Diagram No. 3.07

Common Information

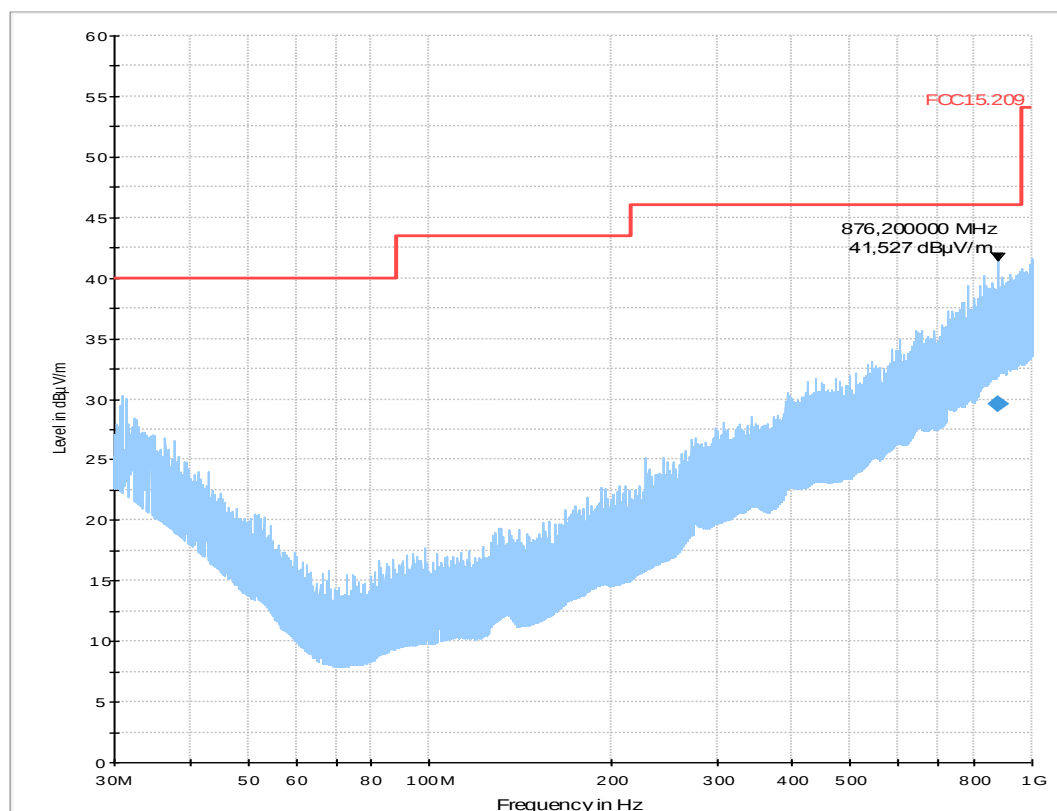
Test description: Electric Fieldstrength Measurement related to 3 m distance
 Test site and distance: Semi Anechoic Room
 Measured sides of EUT: front, right, rear, left
 Rec. antenna (pre-scan): height 1.00 m and 1.82 m, horizontal and vertical polarisation
 Rec. antenna (final): height between 1 m 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: dpa
 Operating conditions: TX-on (BT+ Ch 0 / Freq 2402 MHz) DH5
 Power during tests: full battery

EUT Information

EUT type: AAD-3880110-BV
 Manufacturer: Sony Ericsson
 S/N: CB5A1CHV81

01_FCC15.209_hor+vert_kipp



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
875.040000	29.6	1000.0	120.000	192.0	V	320.0	0.0	26.1	16.40

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Limit (dBµV/m)	Comment
875.040000	46.00	

EMI Auto Test Template: 01_FCC15.209_hor+vert_kipp

Hardware Setup: HW11_FCC_ESCS30_TP1200_EUTkipp

Diagram No. 3.08

Common Information

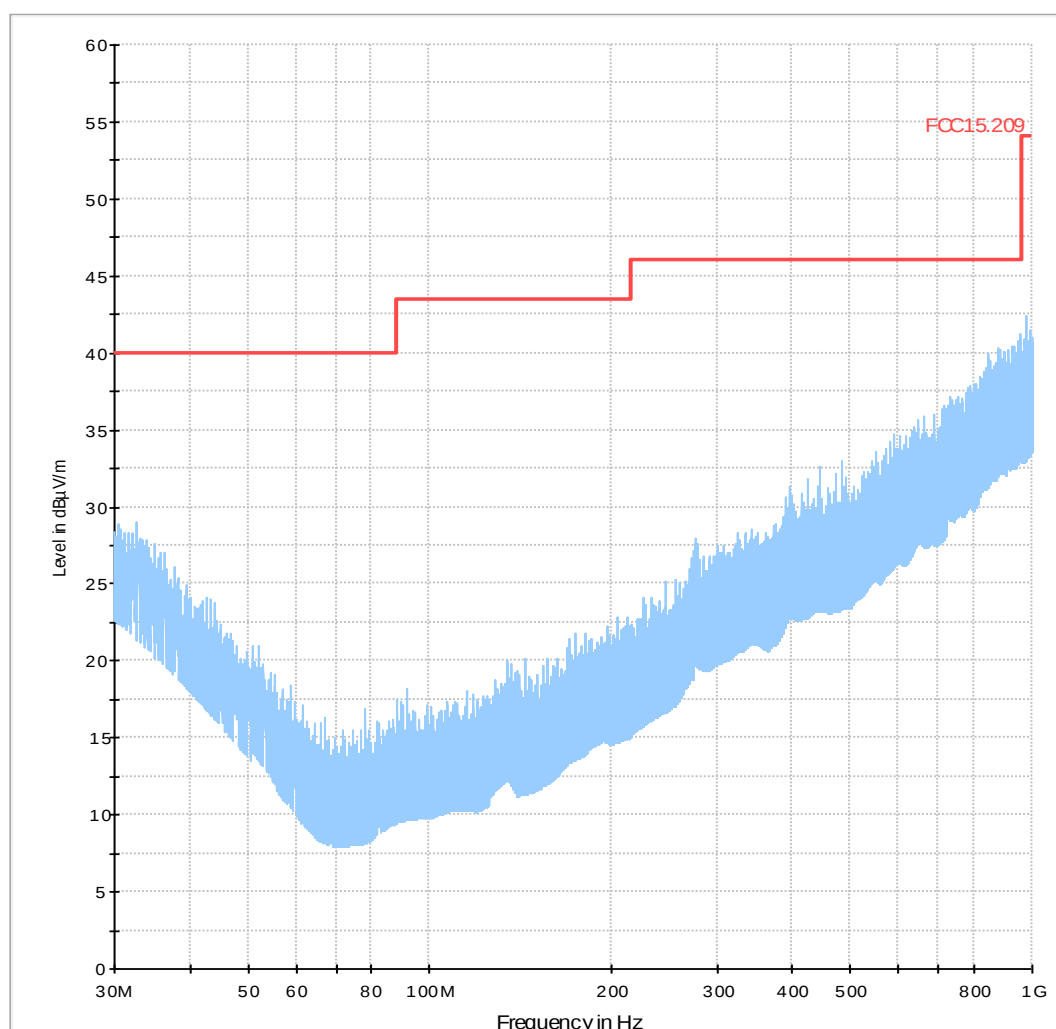
Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room
Measured sides of EUT:	front, right, rear, left
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 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:	dpa
Operating conditions:	TX-on (BT+ Ch 39 / Freq 2441 MHz) DH5
Power during tests:	full battery

EUT Information

EUT type	AAD-3880110-BV
Manufacturer	Sony Ericsson
S/N	CB5A1CHV81

01_FCC15.209_hor+vert_kipp



EMI Auto Test Template: 01_FCC15.209_hor+vert_kipp

Hardware Setup:	HW11_FCC_ESCS30_TP1200_EUTkipp
-----------------	--------------------------------

Diagram No. 3.09

Common Information

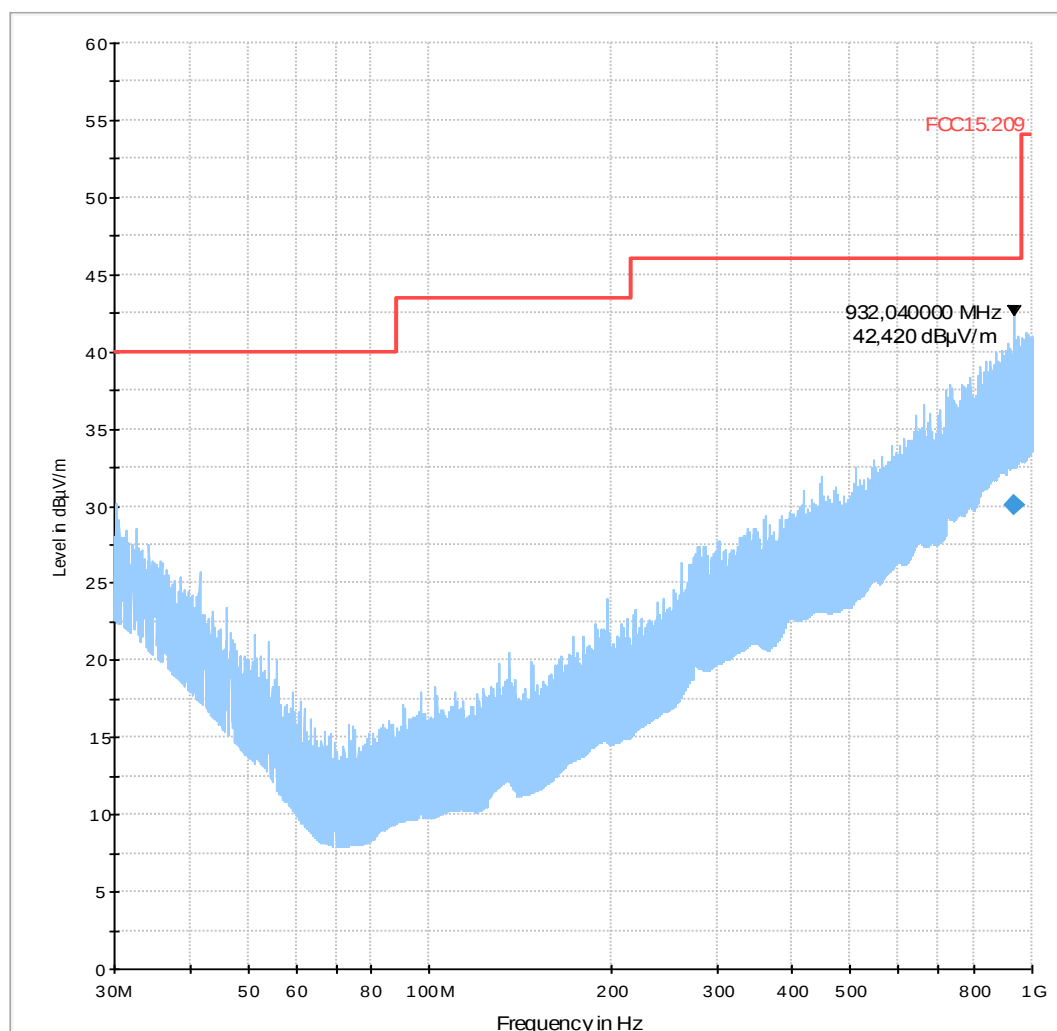
Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room
Measured sides of EUT:	front, right, rear, left
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 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:	dpa
Operating conditions:	TX-on (BT+ Ch 78 / Freq 2481 MHz) DH5
Power during tests:	full battery

EUT Information

EUT type	AAD-3880110-BV
Manufacturer	Sony Ericsson
S/N	CB5A1CHV81

01_FCC15.209_hor+vert_kipp



EMI Auto Test Template: 01_FCC15.209_hor+vert_kipp

Hardware Setup: HW11_FCC_ESCS30_TP1200_EUTkipp

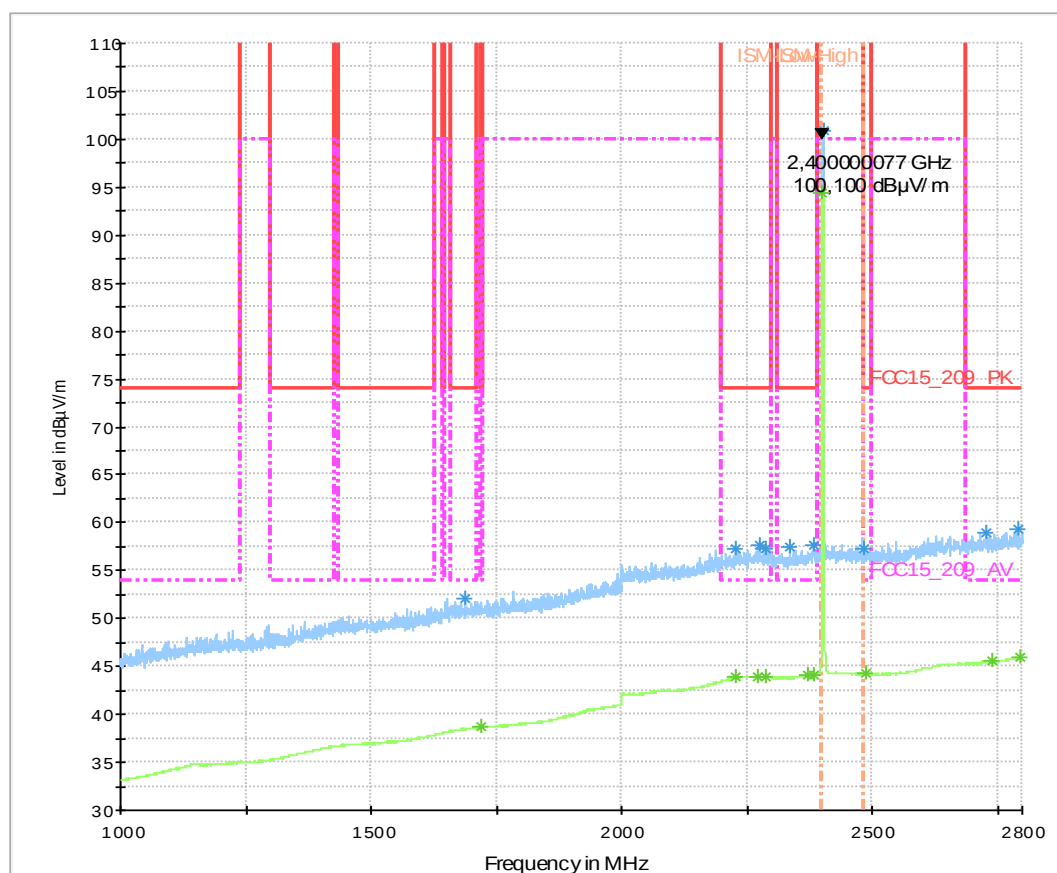
1.10.3. Radiated field strength (1GHz < f < 18GHz)

Diagram No.: b_2.01

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
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Channel no. low=0
Op. Mode:	BT-Mode, 3DH5

Sweep1_SM1_KP1_BT



EMI Auto Test Template: Sweep1_SM1_KP1_BT

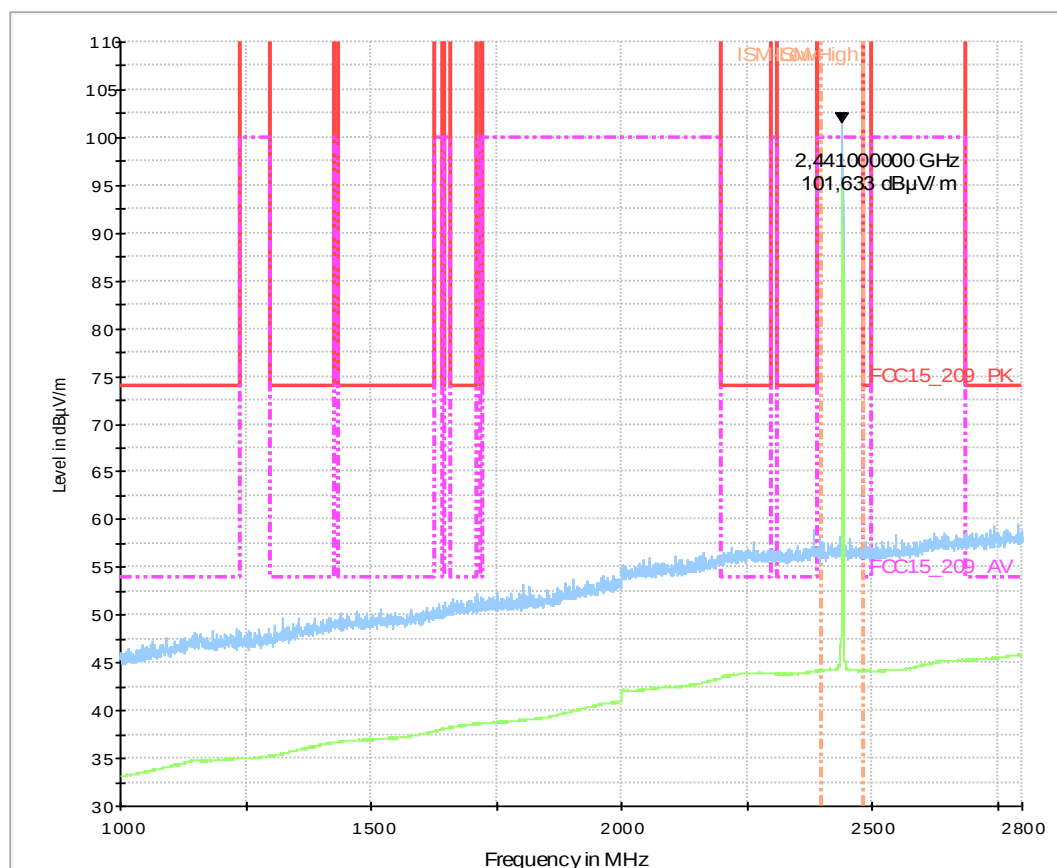
Hardware Setup: 549_dBuVm_PA0_TH3_KP1_ESU

Diagram No.: b_2.02

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
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Channel no. middle=39
Op. Mode:	BT-Mode, 3DH5

Sweep1_SM1_KP1_BT



EMI Auto Test Template: Sweep1_SM1_KP1_BT

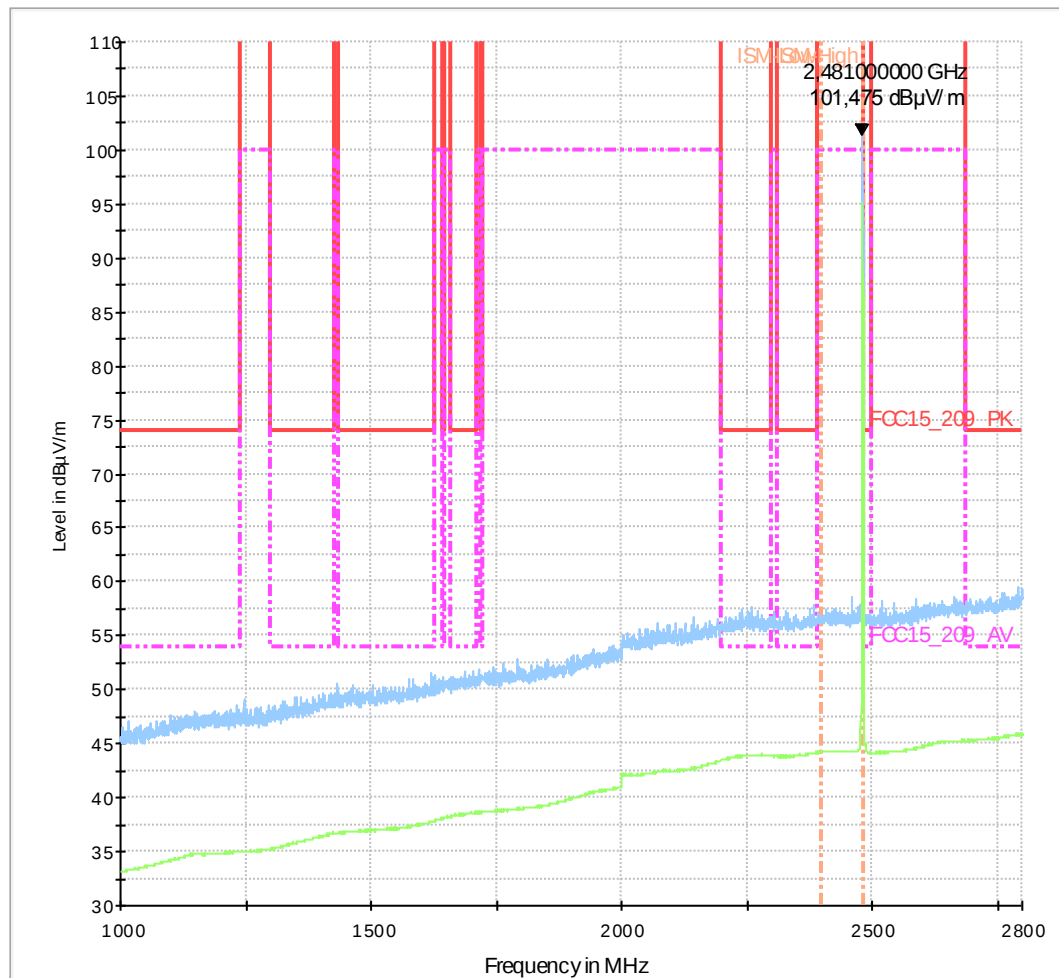
Hardware Setup: 549_dBuVm_PA0_TH3_KP1_ESU

Diagram No.: b_2.03

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
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Channel no. high=78
Op. Mode:	BT-Mode, 3DH5

Sweep1_SM1_KP1_BT



EMI Auto Test Template: Sweep1_SM1_KP1_BT

Hardware Setup: 549_dBuVm_PA0_TH3_KP1_ESU

Diagram No.: b_2.04

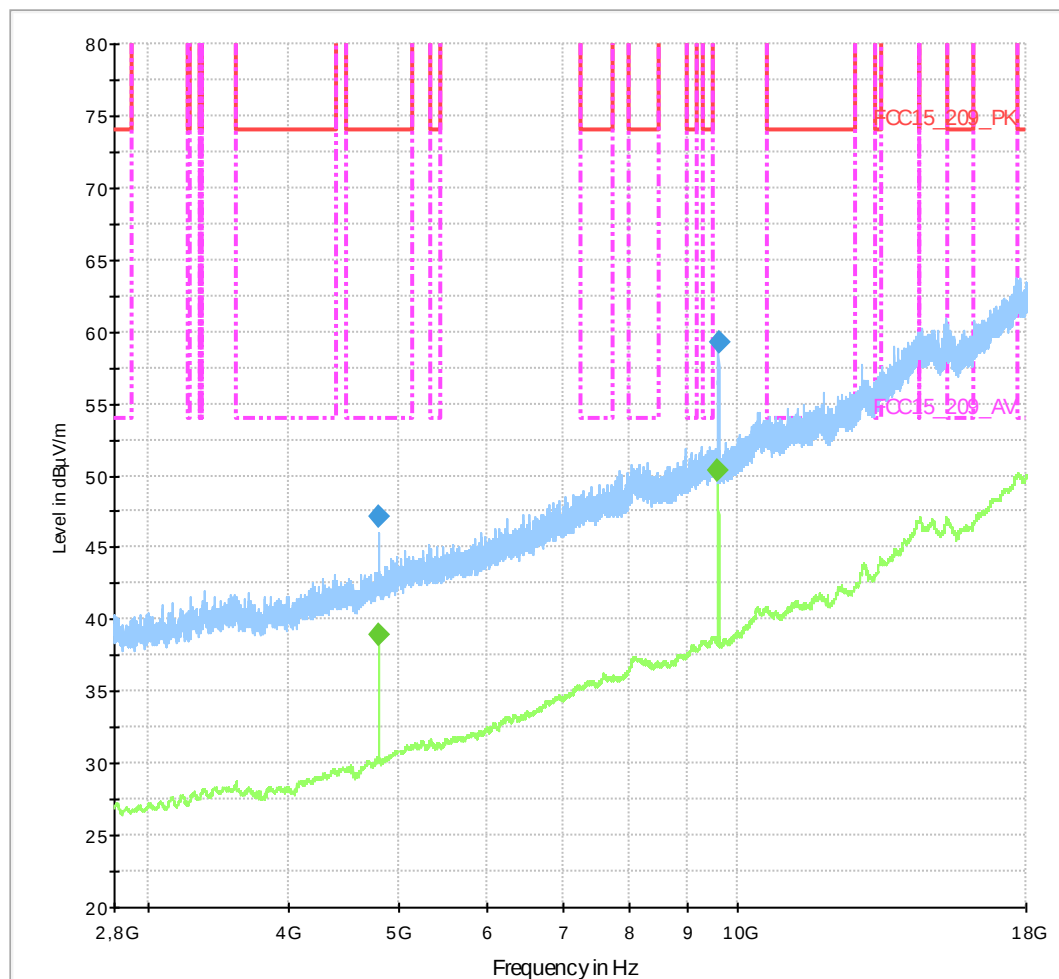
Common Information

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
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Channel no. low=0
Op. Mode:	BT-Mode, 3DH5

EUT Information

EUT Name:	AAD-3880110-BV
Manufacturer:	SEM
Serial Number:	FCC-BT-RAD#2
Hardware Rev:	--
Software Rev:	--
Comment:	--

Sweep2_SM1_KP0_BT



Final Result 1

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
4803.400000	47.2	100.0	1000.000	155.0	V	99.0	2.6	26.8	74.0
9608.500000	59.3	100.0	1000.000	155.0	V	93.0	13.6	60.8	120.0

Final Result 2

Frequency (MHz)	Average (dBμV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
4803.700000	39.0	100.0	1000.000	155.0	V	103.0	2.6	15.0	54.0
9607.800000	50.3	100.0	1000.000	155.0	V	92.0	13.6	49.7	100.0

EMI Auto Test Template: Sweep2_SM1_KP0_BT

Hardware Setup: 549_dBuVm_PA484_TH3_KP1_ESU

Diagram No.: b_2.04a

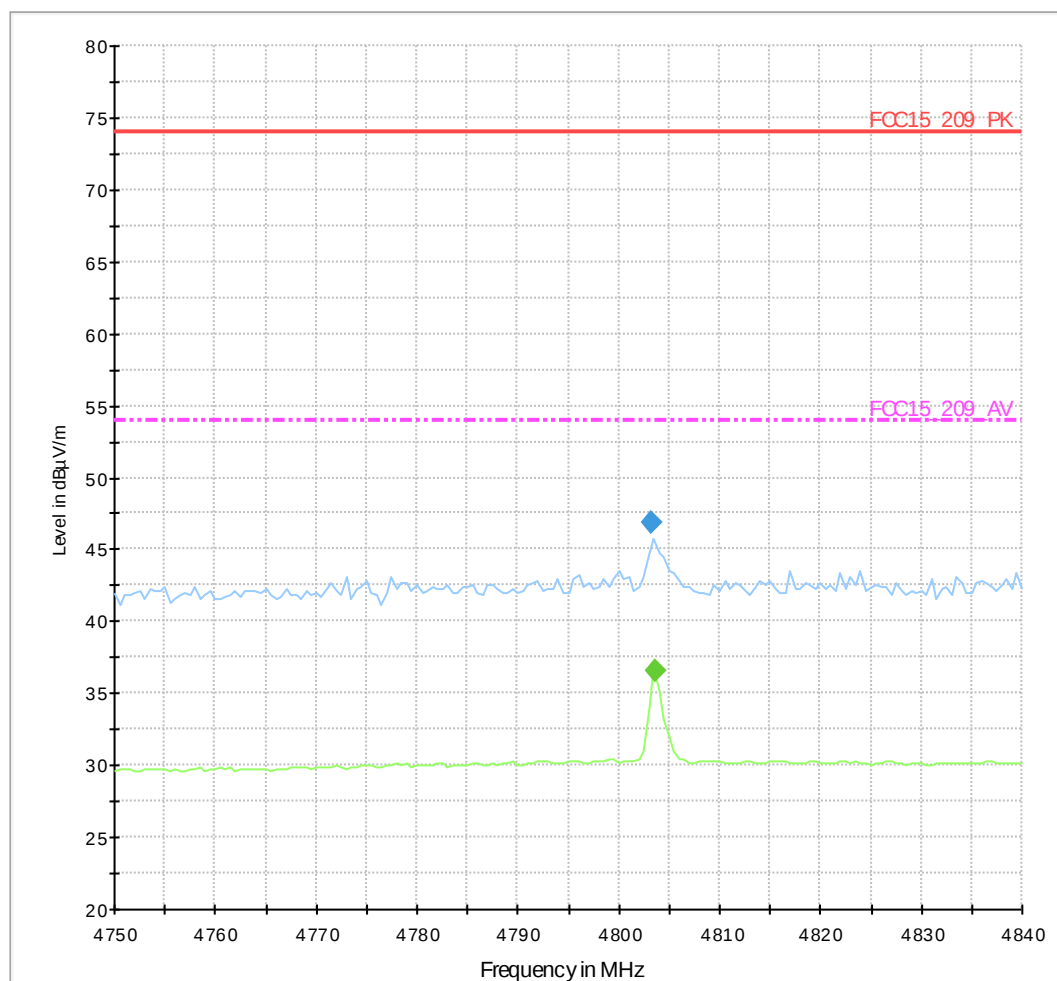
Common Information

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
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Channel no. low=0
Op. Mode:	Bluetooth, 3DH5

EUT Information

EUT Name:	AAD-3880110-BV
Manufacturer:	SEM
Serial Number:	FCC-BT-RAD#2
Hardware Rev:	--
Software Rev:	--
Comment:	--

Sweep2_SM1_KP1_BT



Final Result 1

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Correction (dB)	Margin (dB)
4803.300000	46.9	100.0	1000.000	155.0	V	105.0	0.0	2.6	27.1

Final Result 2

Frequency (MHz)	Average (dBμV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Correction (dB)	Margin (dB)
4803.600000	36.6	100.0	1000.000	155.0	H	184.0	0.0	2.6	17.4

EMI Auto Test Template: Sweep2_SM1_KP1_BT

Hardware Setup: 549_dBuVm_PA484_TH3_KP1_ESU

Diagram No.: b_2.05

Common Information

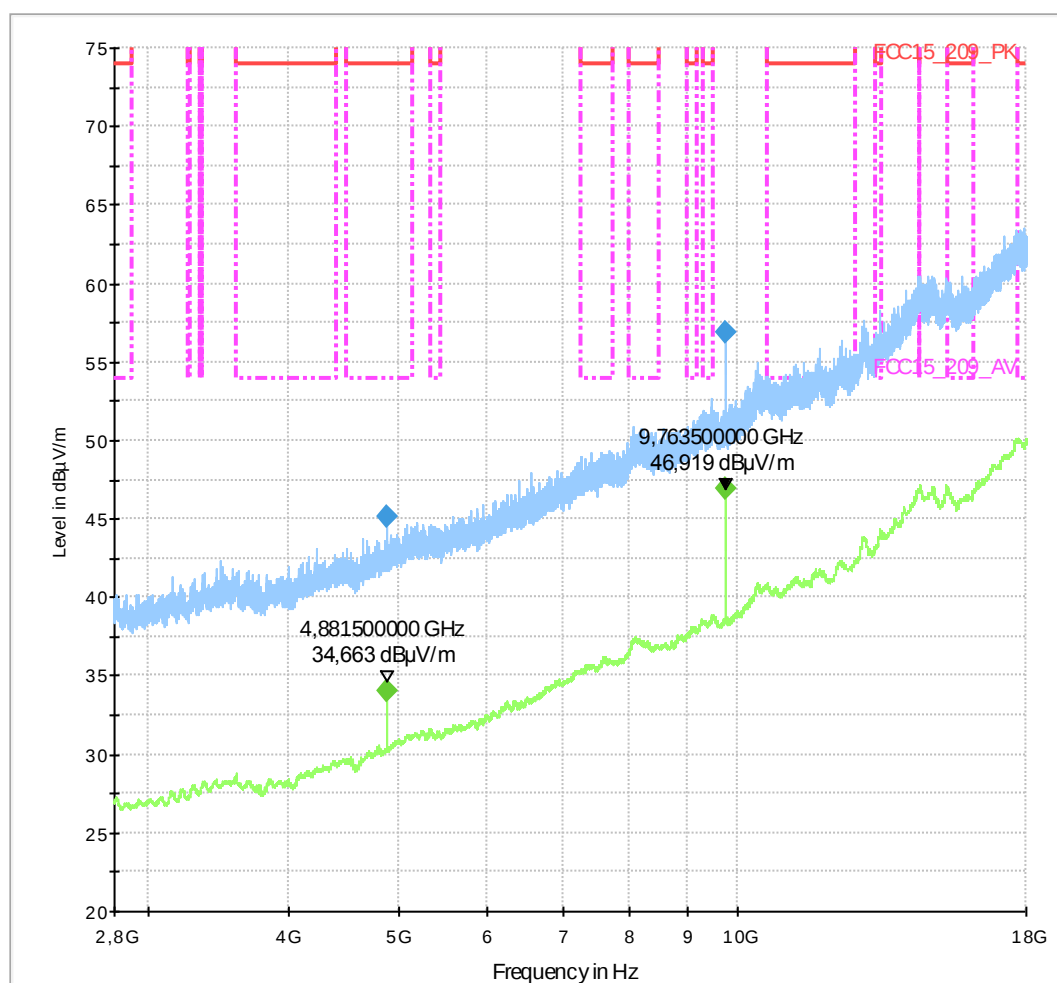
Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & §15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical

Operator Name:	Lor
Comment:	Channel no. middle=39
Op. Mode:	BT-Mode, 3DH5

EUT Information

EUT Name:	AAD-3880110-BV
Manufacturer:	SEM
Serial Number:	FCC-BT-RAD#2
Hardware Rev:	--
Software Rev:	--
Comment:	--

Sweep2_SM1_KP0_BT



Final Result 1

Frequency (MHz)	MaxPeak (dB μ V/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
4881.600000	45.2	100.0	1000.000	155.0	V	102.0	2.9	28.8	74.0
9763.300000	56.8	100.0	1000.000	155.0	V	88.0	13.8	63.2	120.0

Final Result 2

Frequency (MHz)	Average (dB μ V/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
4881.600000	34.0	100.0	1000.000	155.0	V	202.0	2.9	20.0	54.0
9763.800000	46.9	100.0	1000.000	155.0	V	89.0	13.8	53.1	100.0

EMI Auto Test Template: Sweep2_SM1_KP0_BT

Hardware Setup: 549_dBuVm_PA484_TH3_KP1_ESU

Diagram No.: b_2.06

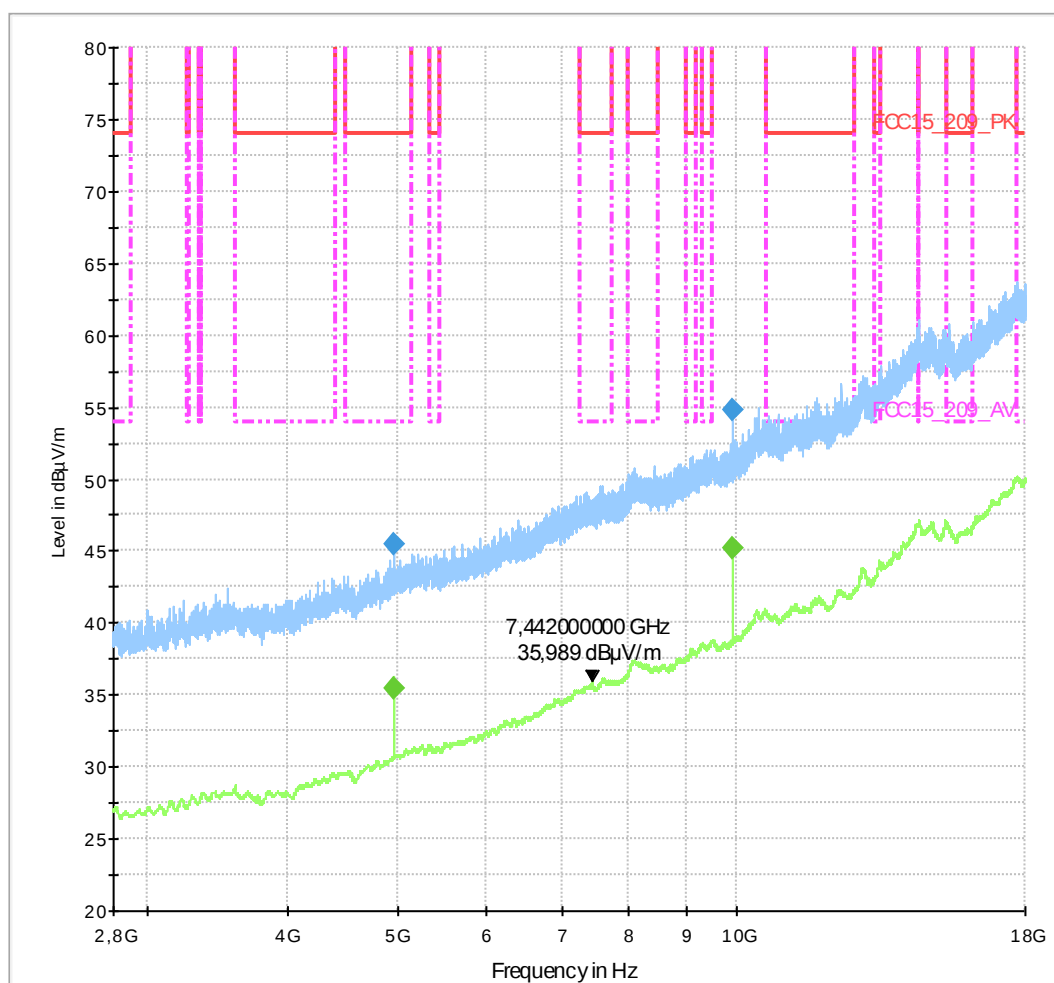
Common Information

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
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Channel no. high=78
Op. Mode:	BT-Mode, 3DH5

EUT Information

EUT Name:	AAD-3880110-BV
Manufacturer:	SEM
Serial Number:	FCC-BT-RAD#2
Hardware Rev:	--
Software Rev:	--
Comment:	--

Sweep2_SM1_KP0_BT



Final Result 1

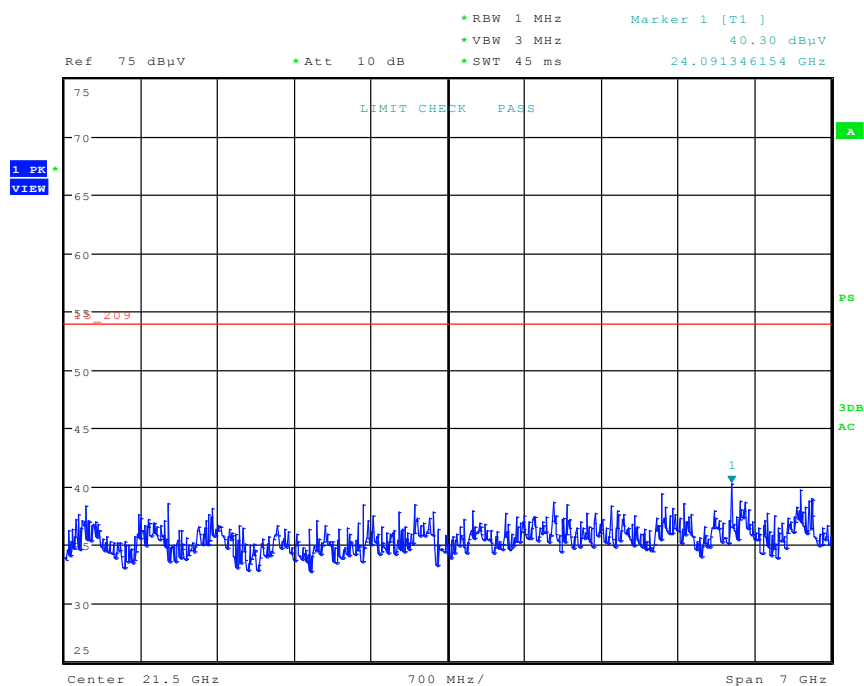
Frequency (MHz)	MaxPeak (dB μ V/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
4961.700000	45.5	100.0	1000.000	155.0	H	269.0	3.3	28.5	74.0
9924.100000	54.8	100.0	1000.000	155.0	V	92.0	14.3	65.2	120.0

Final Result 2

Frequency (MHz)	Average (dB μ V/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
4961.500000	35.5	100.0	1000.000	155.0	H	268.0	3.3	18.5	54.0
9923.700000	45.2	100.0	1000.000	155.0	V	91.0	14.3	54.8	100.0

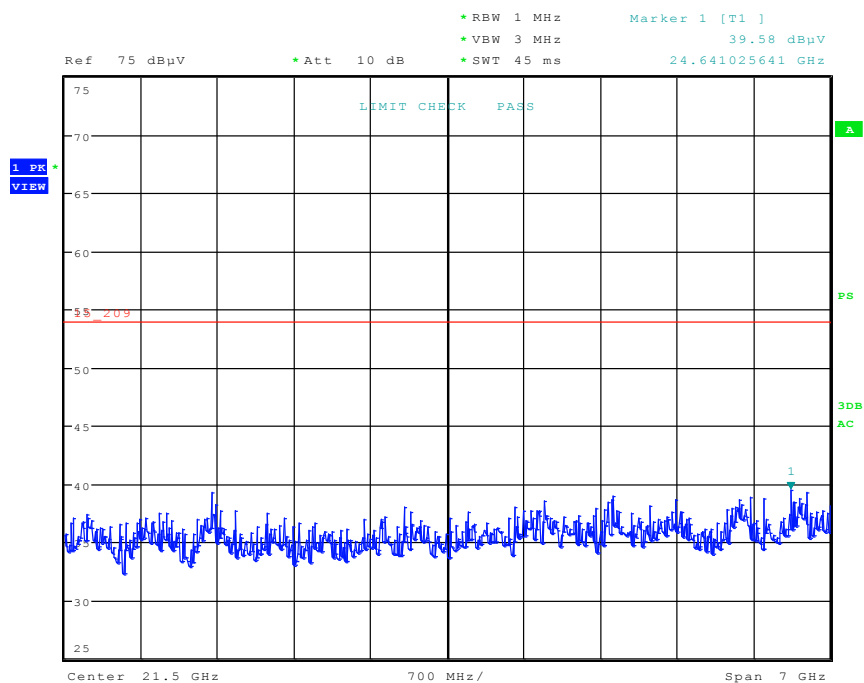
EMI Auto Test Template: Sweep2_SM1_KP0_BT

Hardware Setup: 549_dBuVm_PA484_TH3_KP1_ESU

1.10.4. Radiated emissions in the frequency range above 18GHz

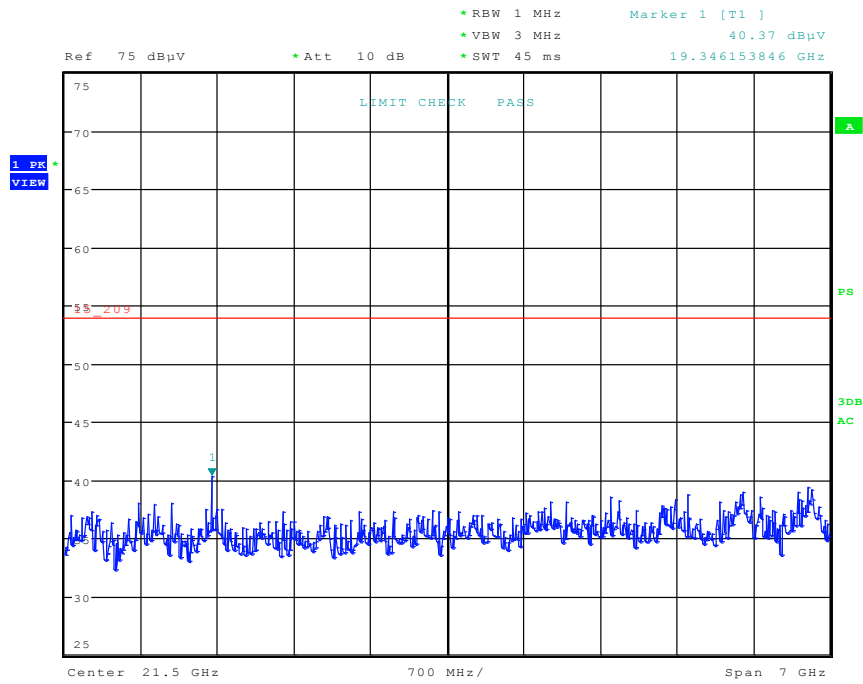
Date: 18.MAY.2011 10:03:23

Channel 0 (overview measurement only)



Date: 18.MAY.2011 10:05:23

Channel 39 (overview measurement only)



Date: 18.MAY.2011 10:07:40

Channel 78 (overview measurement only)

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

1.11.1. Radiated field strength ($30\text{MHz} < f < 1\text{GHz}$)

Diagram No. 3.10

Common Information

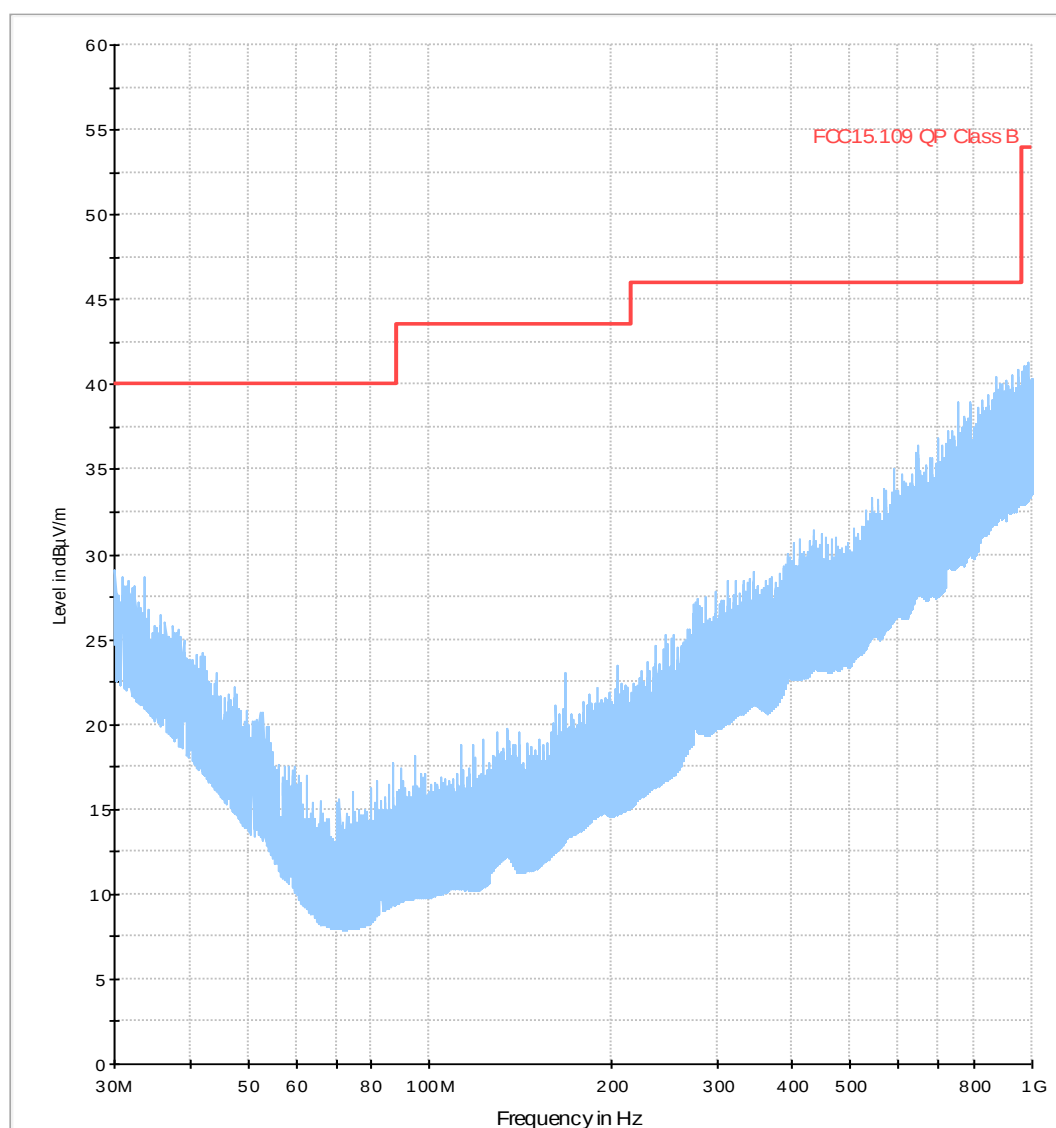
Test description:
Test site and distance:
Measured sides of EUT:
Rec. antenna (pre-scan):
Rec. antenna (final):
Turntable step:
Used filter:
Test specification.:

Electric Fieldstrength Measurement related to 3 m distance
Semi Anechoic Room covered with absorbers (SAR) with 3 m measurement distance
front, right, rear, left
height 1.00 m and 1.82 m, horizontal and vertical polarisation
height between 1 m to 4 m, polarisation according to pre-scan results
90° during pre-scan, continuously turning during final measurement
lowpass 1200 MHz
FCC 15.205 § 15.209; RSS-Gen: Issue 3

Operator:
Operating conditions:
Power during tests:
Comment 1:

dpa
RX-on (BT)
full loaded batteries

05_FCC15.109_hor+vert_kipp



EMI Auto Test Template: 05_FCC15.109_hor+vert_kipp

Hardware Setup:

HW11_FCC_ESCS30_TP1200_EUTkipp

1.11.2. Radiated field strength (1GHz < f < 18GHz)

Diagram No.: 2.09

Common Information

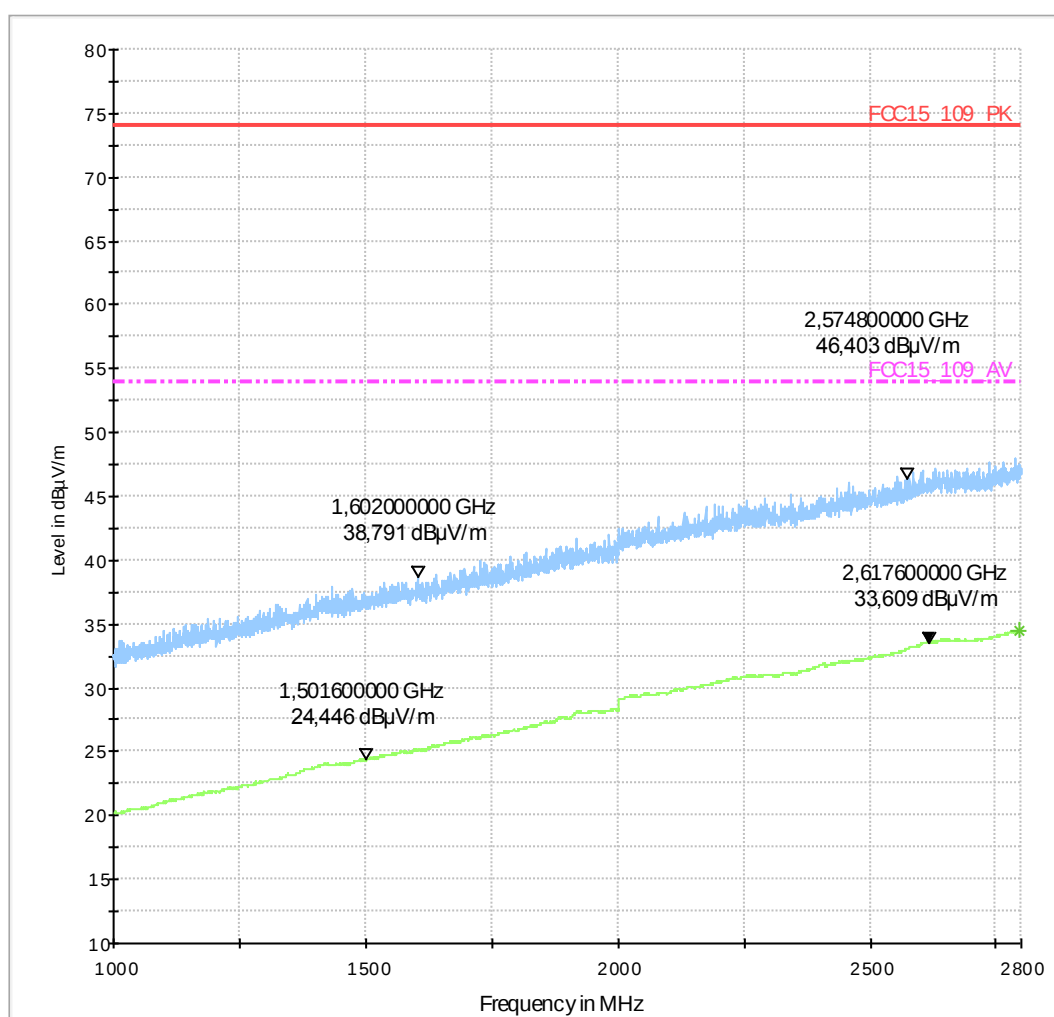
Test Description: Radiated field strength emission in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.109 Unintentional Radiator
 Antenna polarisation: horizontal/vertical

Operation mode: RX - DH5; Channel 39
 Operator Name: lor

EUT Information

EUT Name: AAD-3880110-BV
 Manufacturer: SEM
 Serial Number: FCC-BT-RAD#2
 Hardware Rev: --
 Software Rev: --
 Comment: --

Sweep1_SM1_K0



EMI Auto Test Template: Sweep1_SM1_K0

Hardware Setup: 549_dBuVm_PA287_TH1_KP1_ESU

Diagram No.: 2.10

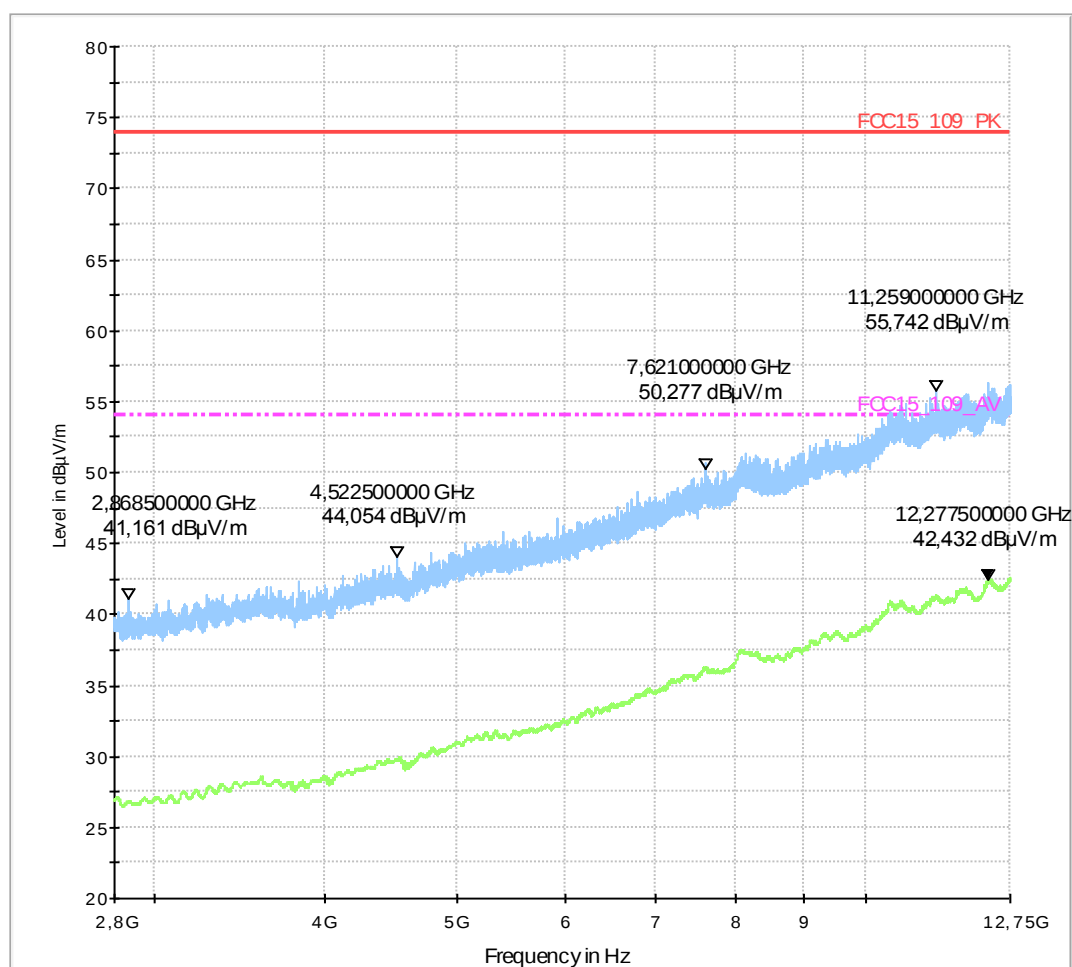
Common Information

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

EUT Information

EUT Name:	AAD-3880110-BV
Manufacturer:	SEM
Serial Number:	FCC-BT-RAD#2
Hardware Rev:	--
Software Rev:	--
Comment:	--

Sweep2_SM1_K0



EMI Auto Test Template: Sweep2_SM1_K0

Hardware Setup: 549_dBuVm_PA484_TH3_KP1_ESU