

ANNEX 4: Measurement Diagrams
to
TEST REPORT
No.: 3-0053-12-21-2c

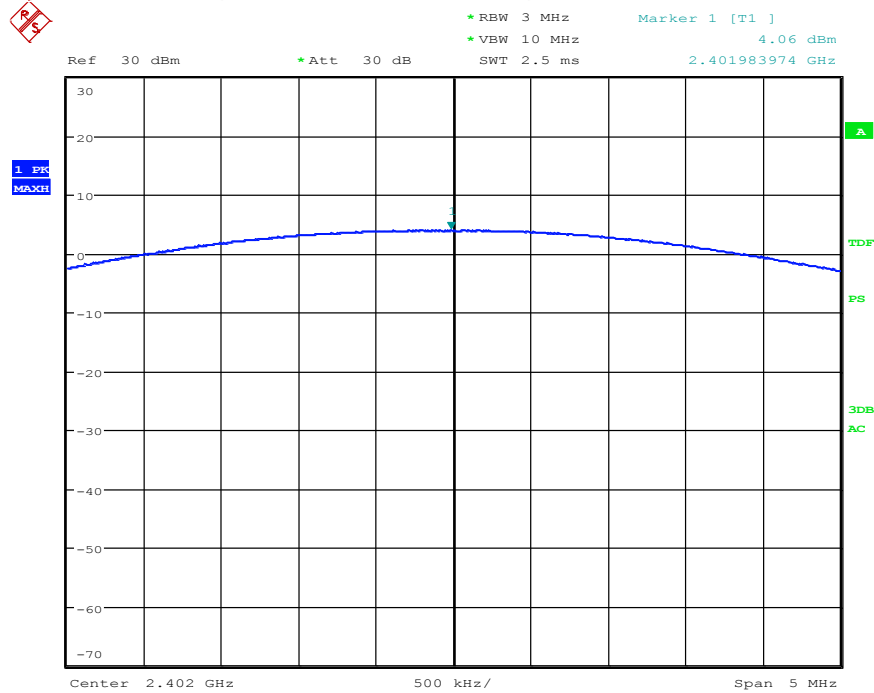
Laboratory Accreditation and Listings			
 Deutsche Akkreditierungsstelle D-PL-12047-01-01	 Reg. No.: 736496 MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2665, R-2666 C-2914, T-1967, G-301
 AUTHORIZED RF LABORATORY	 LAB CODE 20011130-00		
accredited according to DIN EN ISO/IEC 17025			
CETECOM GmbH Laboratory Radio Communications & Electromagnetic Compatibility Im Teelbruch 116 • 45219 Essen • Germany Registered in Essen, Germany, Reg. No.: HRB Essen 8984 Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964 E-mail: info@cetecom.com • Internet: www.cetecom.com			

Table of contents

1. TRANSMITTER PEAK OUTPUT POWER (CONDUCTED)	3
1.1. Channel 0 (DH5, 2-DH5 & 3-DH5)	3
1.2. Channel 38 (DH5, 2-DH5 & 3-DH5)	4
1.3. Channel 78 (DH5, 2-DH5 & 3-DH5)	6
2. 20 DB BANDWIDTH (CONDUCTED)	8
2.1. Channel 0 (DH5, 2-DH5 & 3-DH5)	8
2.2. Channel 38 (DH5, 2-DH5 & 3-DH5)	9
2.3. Channel 78 (DH5, 2-DH5 & 3-DH5)	11
3. 99% OCCUPIED BANDWIDTH (CONDUCTED)	13
2.1 Channels low and high (DH5)	13
2.2 Channels low and high (2-DH5)	14
2.3 Channels low and high (3-DH5)	15
3. OUT-OF-BAND RF- AND BAND-EDGE EMISSIONS (20dBC)	16
3.1 Inband Emissions, Channels 0/38/78 (DH-5, hopping off/on)	16
3.2 Out-of-Band Emissions, Channels 0/38/78 (DH-5)	19
3.3 Inband Emissions, Channels 0/38/78 (2DH-5, hopping off/on)	20
3.4 Out-of-Band Emissions, Channels 0/38/78 (2DH-5)	23
3.5 Inband Emissions, Channels 0/38/78 (3DH-5, hopping off/on)	24
3.6 Out-of-Band Emissions, Channels 0/38/78 (3DH-5)	27
4. CHANNEL CARRIER FREQUENCY SEPARATION (CONDUCTED)	29
4.1 Channels 38-39 (DH5, hopping-on)	29
5. NUMBER OF CHANNELS (CONDUCTED)	30
5.1 Channels 0 -38 (sweep 1), DH5 (hopping-on)	30
5.1 Channels 39 -78 (sweep 2), DH5 (hopping-on)	30
6. RADIATED FIELD STRENGTH MEASUREMENTS ACCORD. §15.209&15.205	31
6.1 Below 30 MHz	31
6.2 Frequency range 30 MHz - 1 GHz	34
6.3 Frequency range 1 GHz - 18 GHz	37
6.4 Frequency range 18 GHz - 25 GHz	40
7. RADIATED BAND-EDGE MEASUREMENTS ACCORD. §15.209 & §15.205	42

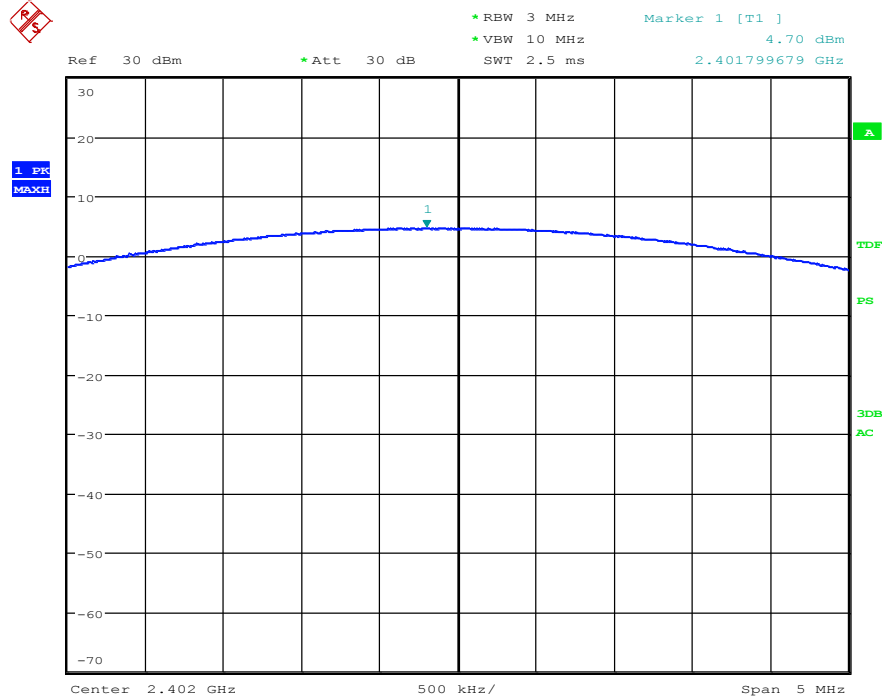
1. Transmitter Peak Output Power (conducted)

1.1. Channel 0 (DH5, 2-DH5 & 3-DH5)



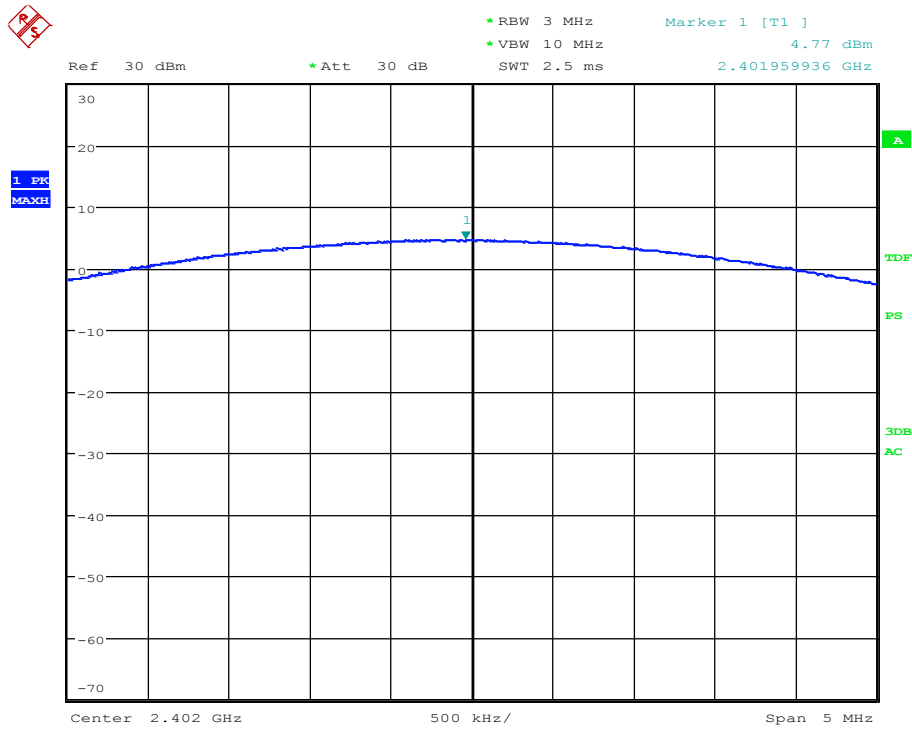
Date: 19.APR.2013 07:56:41

DH5



Date: 19.APR.2013 07:55:44

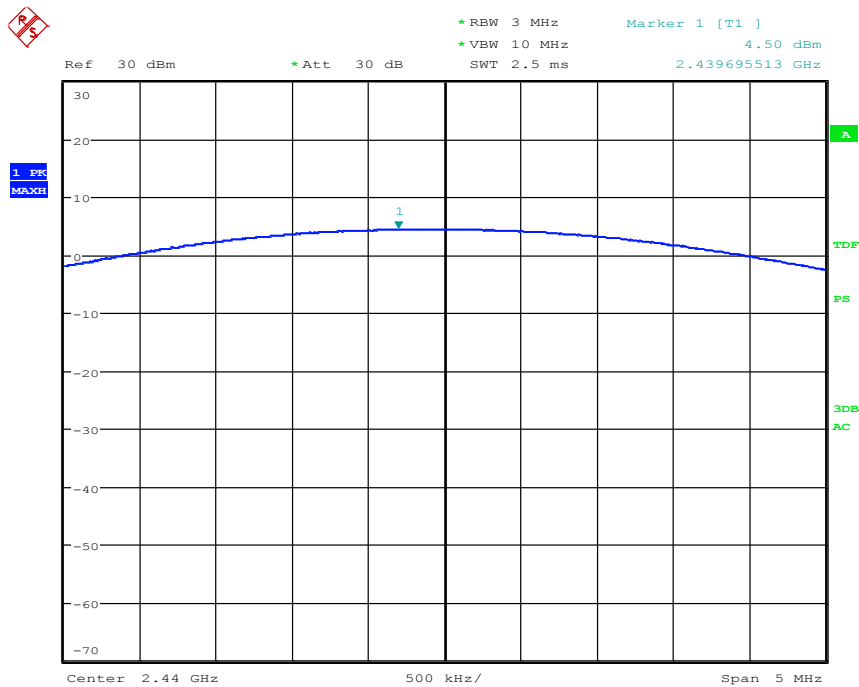
2-DH5



Date: 19.APR.2013 07:55:02

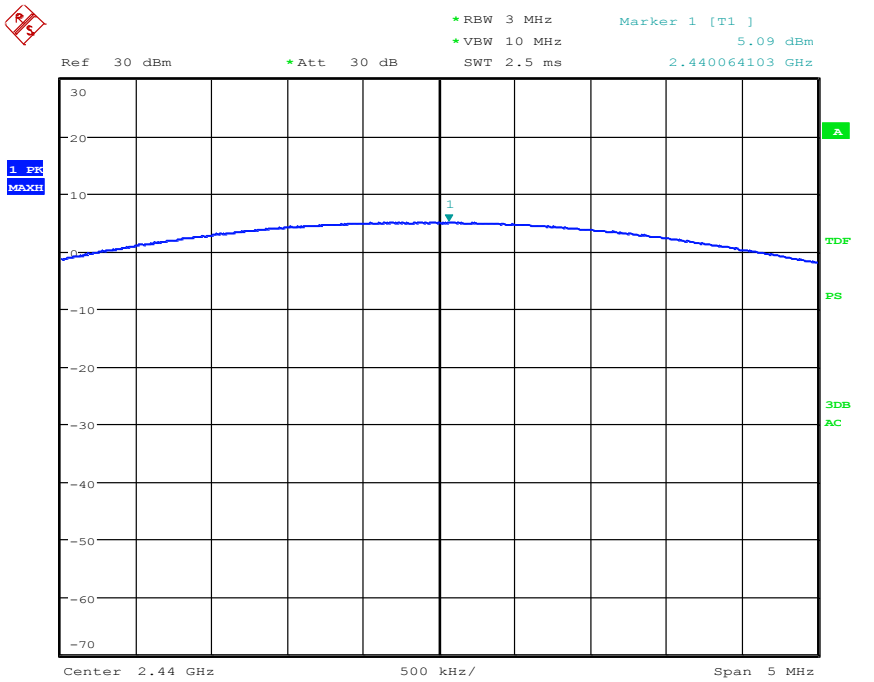
3-DH5

1.2. Channel 38 (DH5, 2-DH5 & 3-DH5)



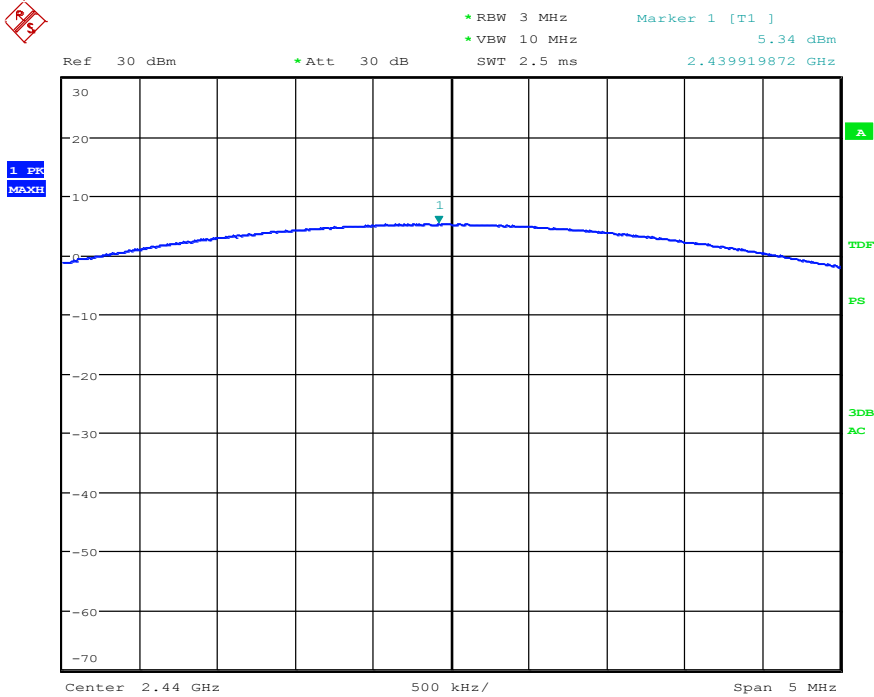
Date: 19.APR.2013 07:53:50

DH5



Date: 19.APR.2013 07:51:50

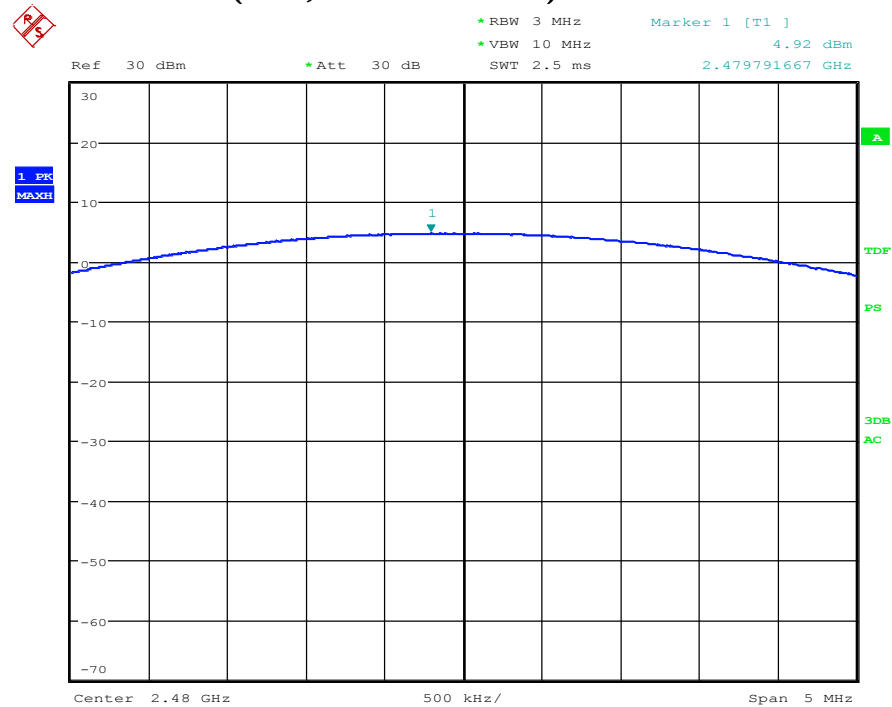
2DH-5



Date: 19.APR.2013 07:54:25

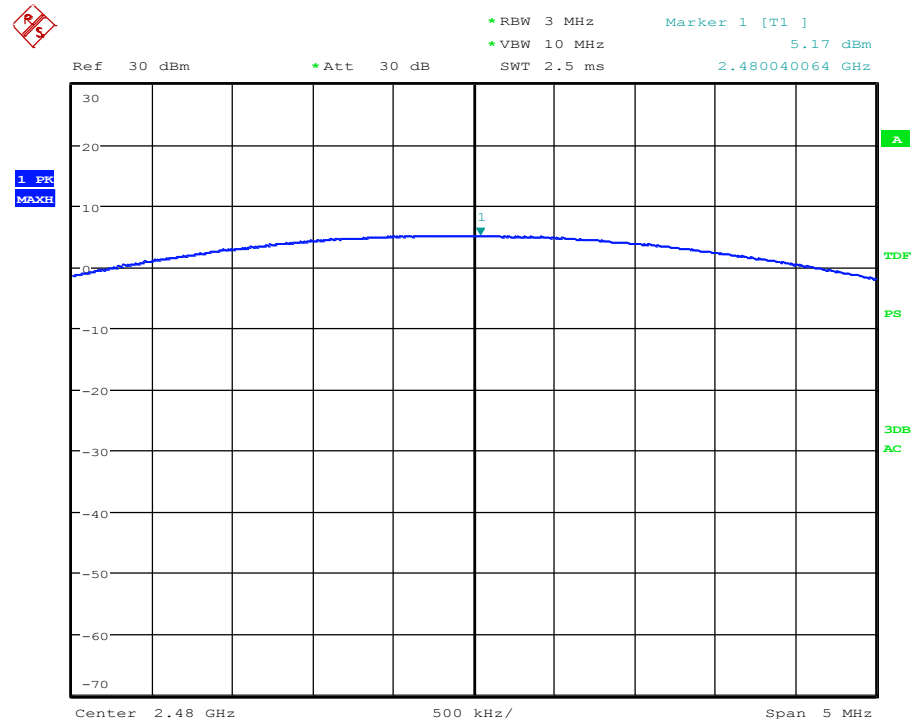
3DH-5

1.3. Channel 78 (DH5, 2-DH5 & 3-DH5)



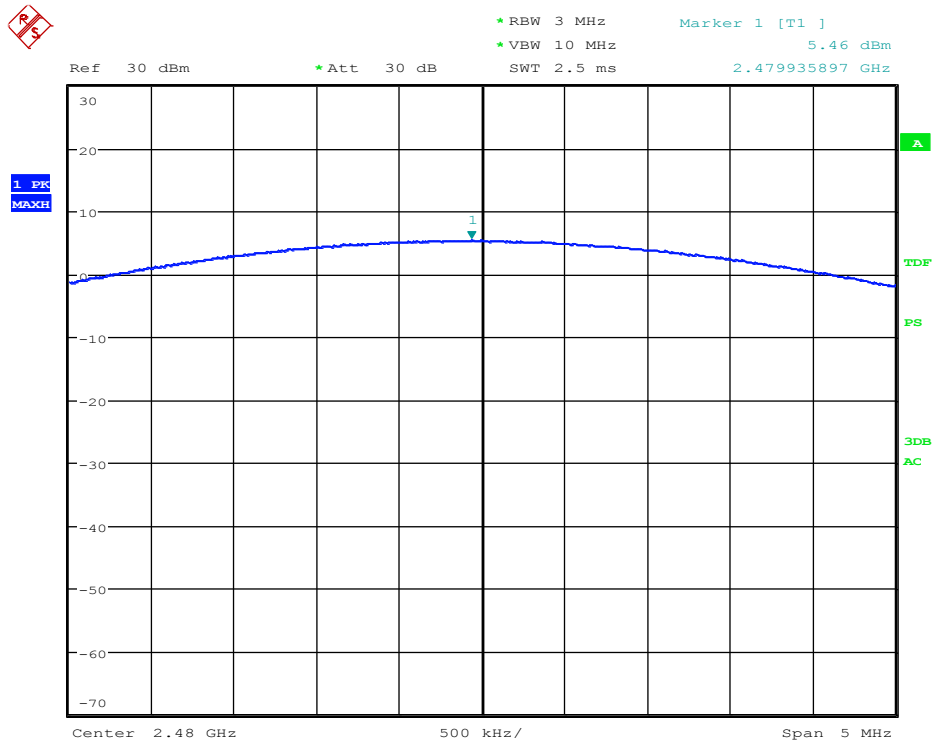
Date: 19.APR.2013 07:57:35

DH-5



Date: 19.APR.2013 07:58:23

2-DH5

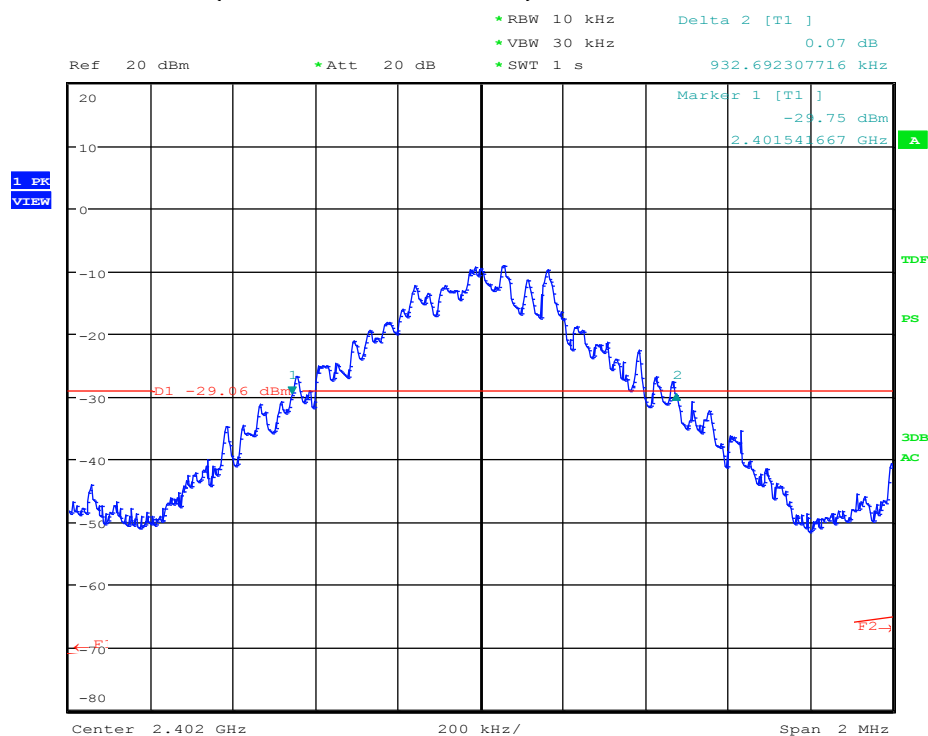


Date: 19.APR.2013 07:58:54

3-DH5

2. 20 dB bandwidth (conducted)

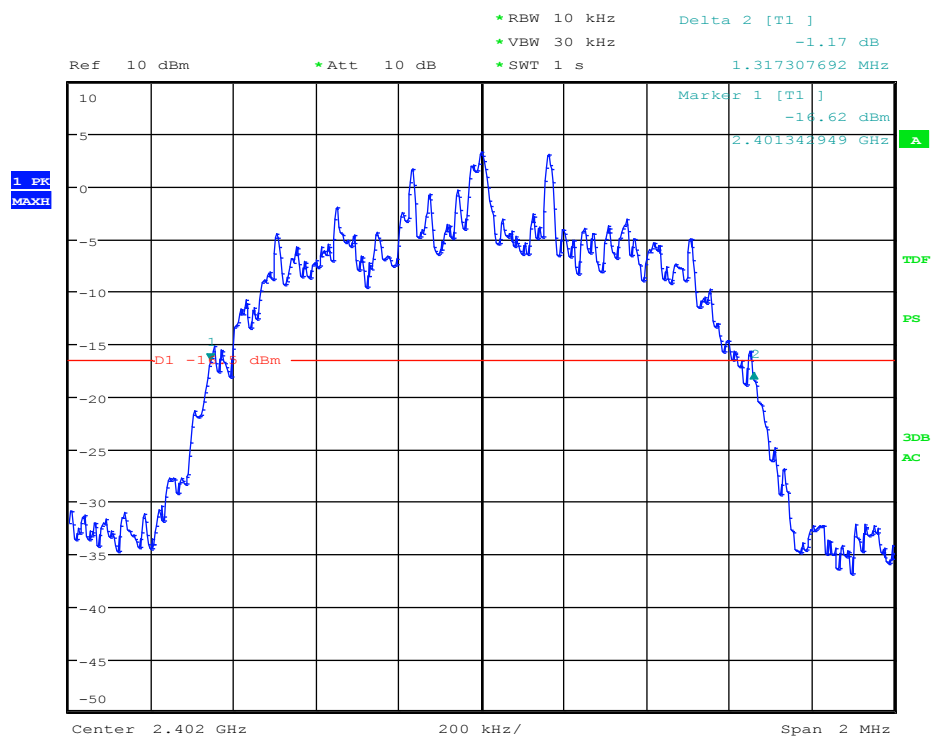
2.1. Channel 0 (DH5, 2-DH5 & 3-DH5)



Date: 12.MAR.2013 16:00:07

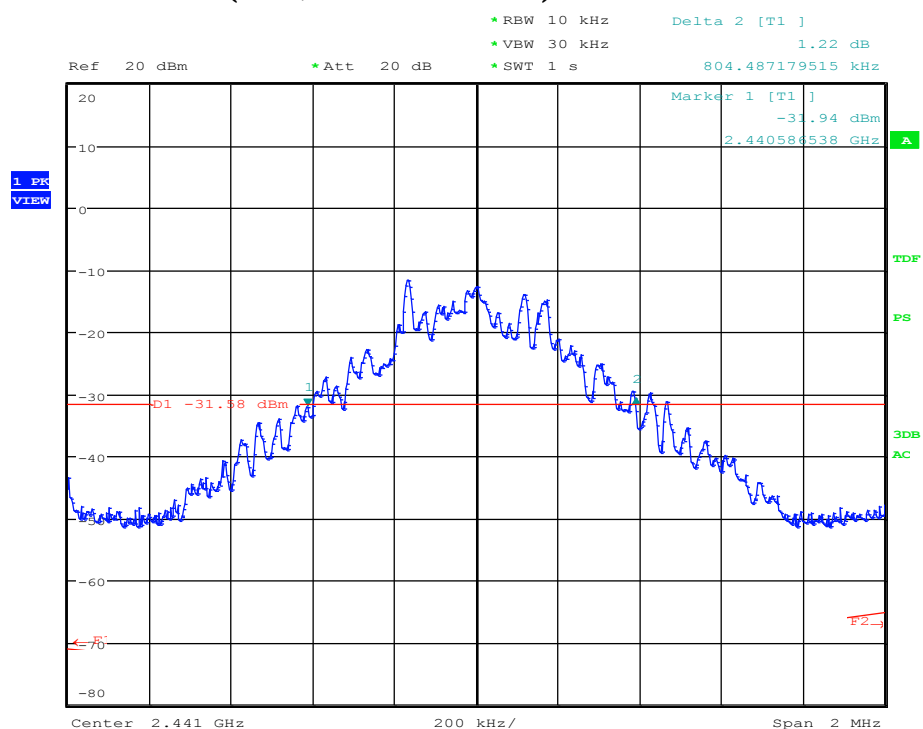


Date: 9.APR.2013 14:13:22

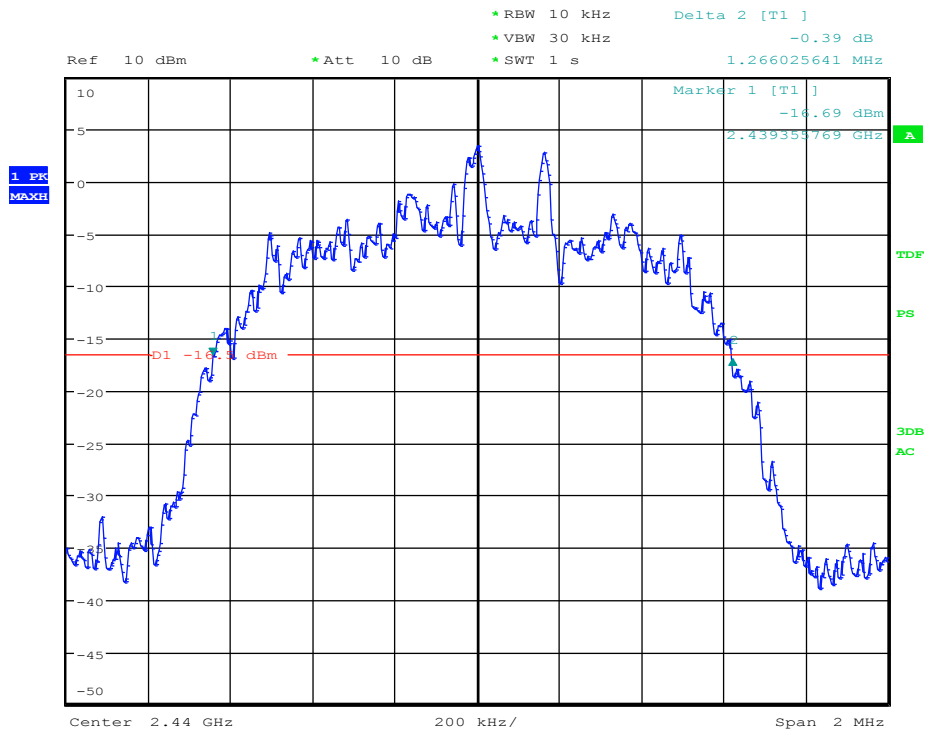


Date: 9.APR.2013 14:16:29

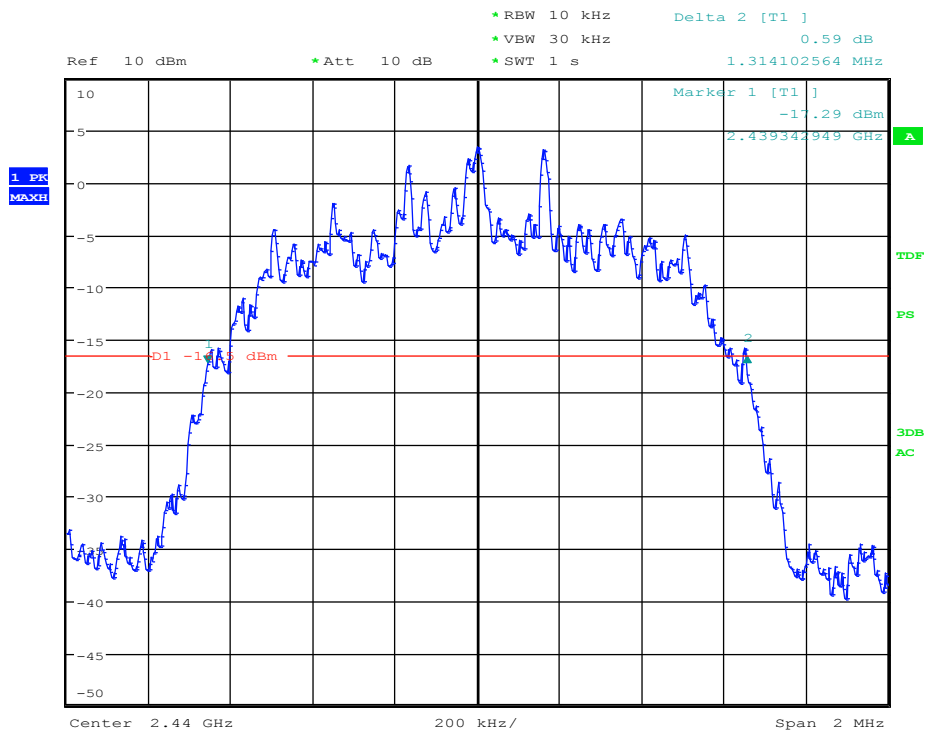
2.2. Channel 38 (DH5, 2-DH5 & 3-DH5)



Date: 12.MAR.2013 16:27:07

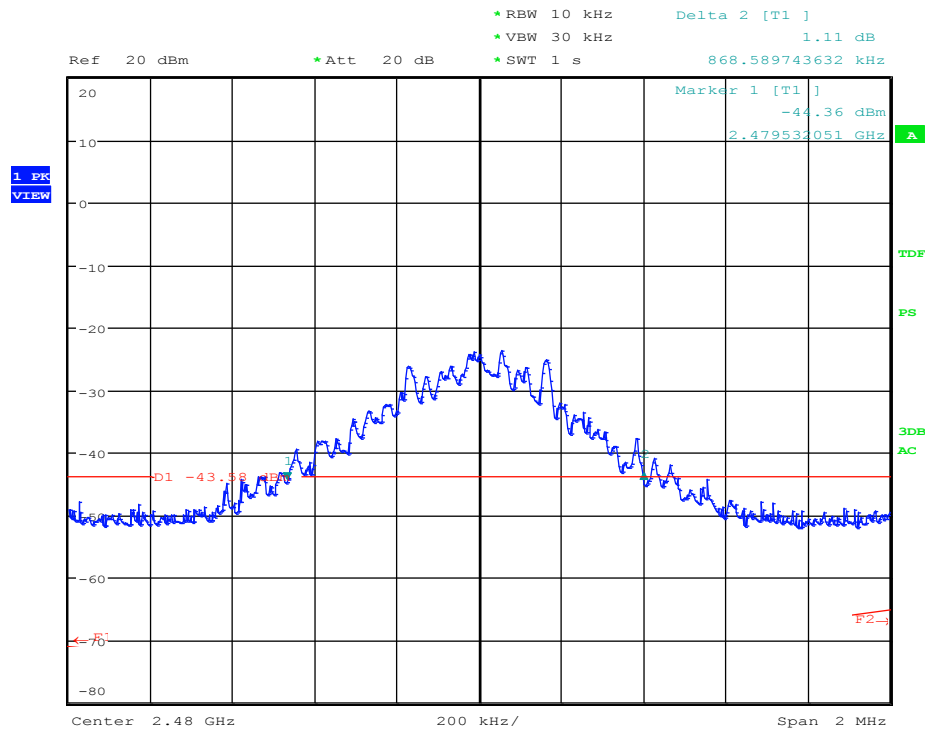


Date: 9.APR.2013 15:17:11

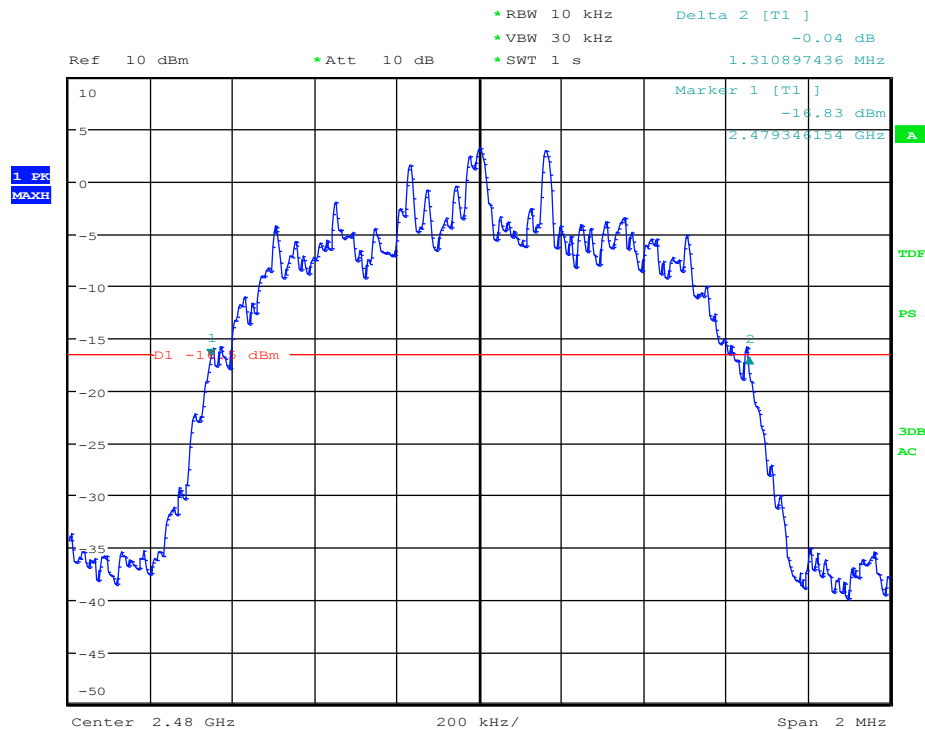


Date: 9.APR.2013 15:18:21

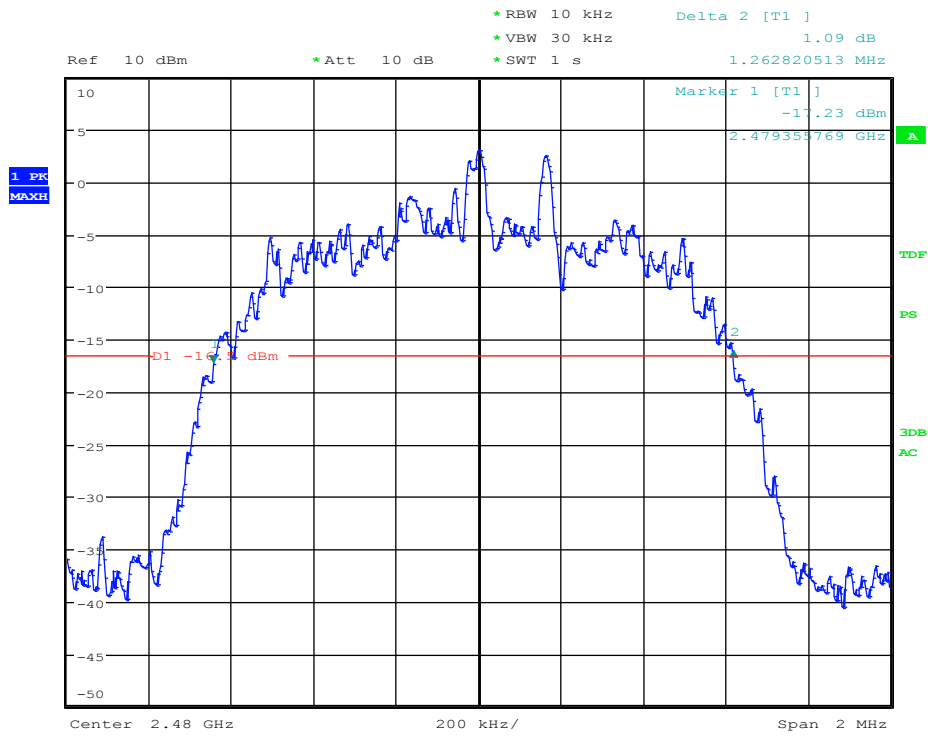
2.3. Channel 78 (DH5, 2-DH5 & 3-DH5)



Date: 12.MAR.2013 16:32:19



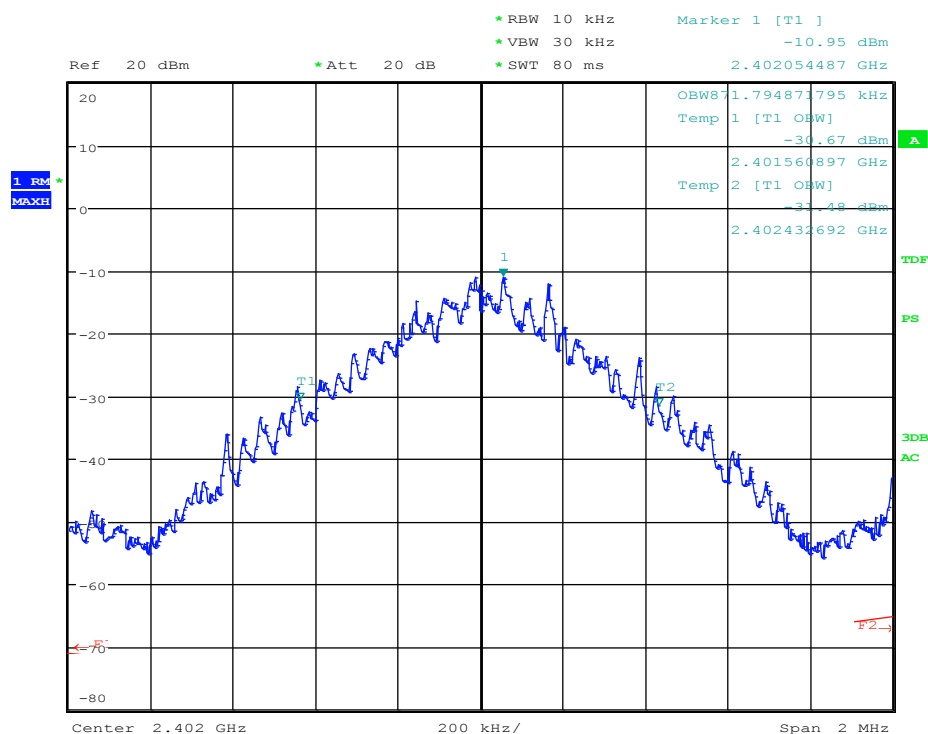
Date: 9.APR.2013 15:13:27



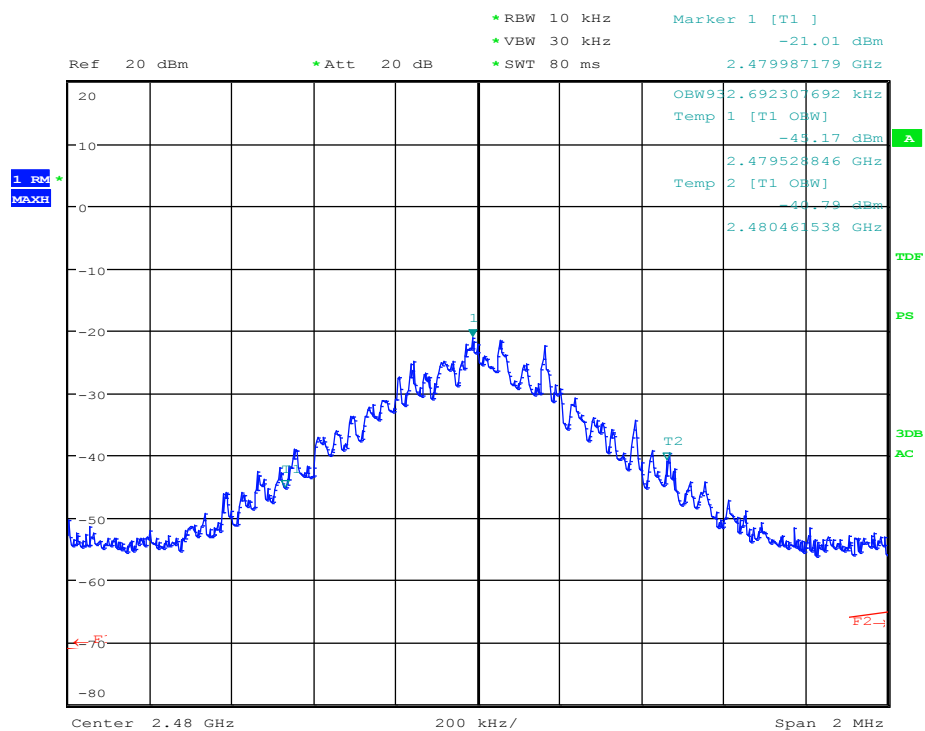
Date: 9.APR.2013 15:15:26

3. 99% occupied bandwidth (conducted)

2.1 Channels low and high (DH5)

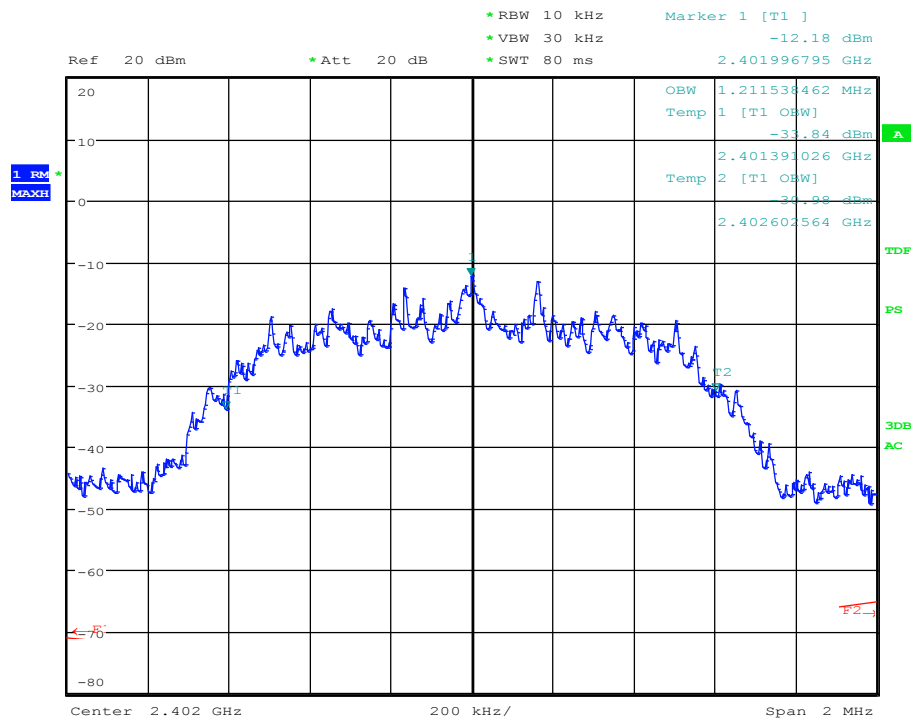


Date: 12.MAR.2013 19:57:48

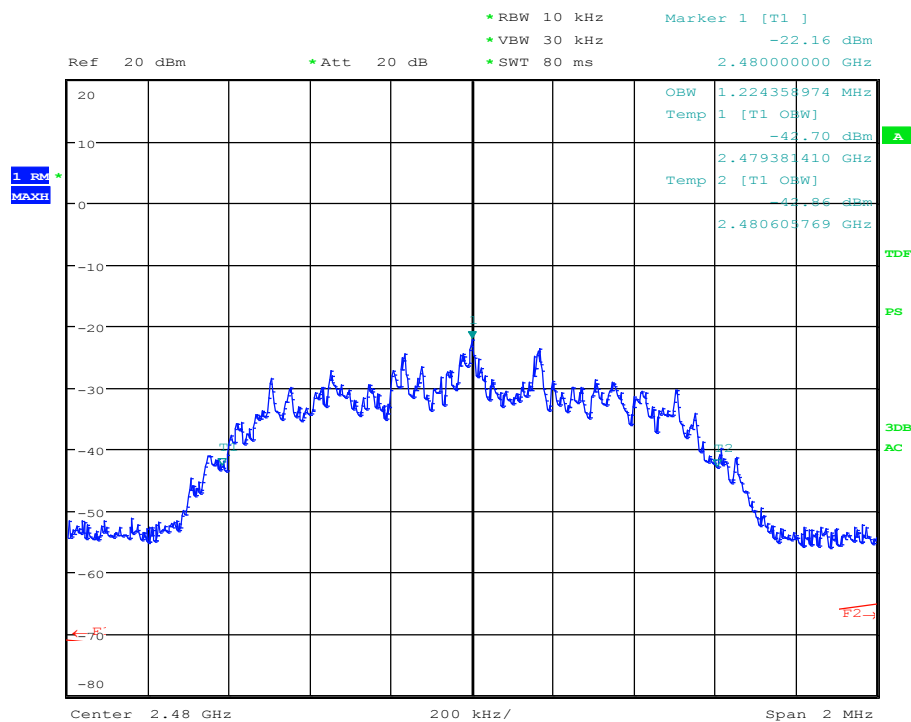


Date: 12.MAR.2013 20:17:37

2.2 Channels low and high (2-DH5)

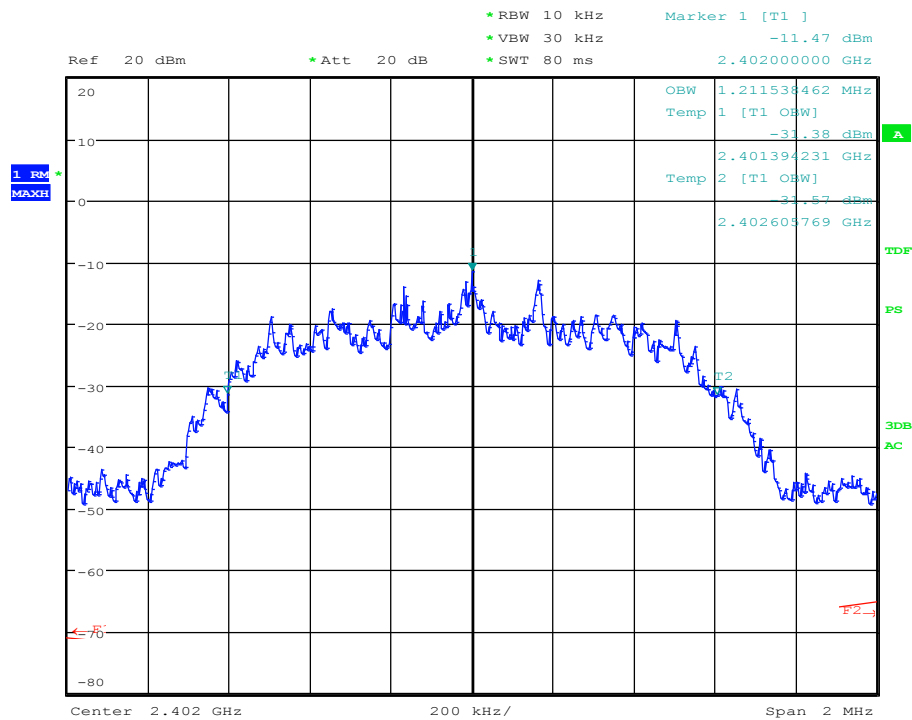


Date: 12.MAR.2013 20:10:17

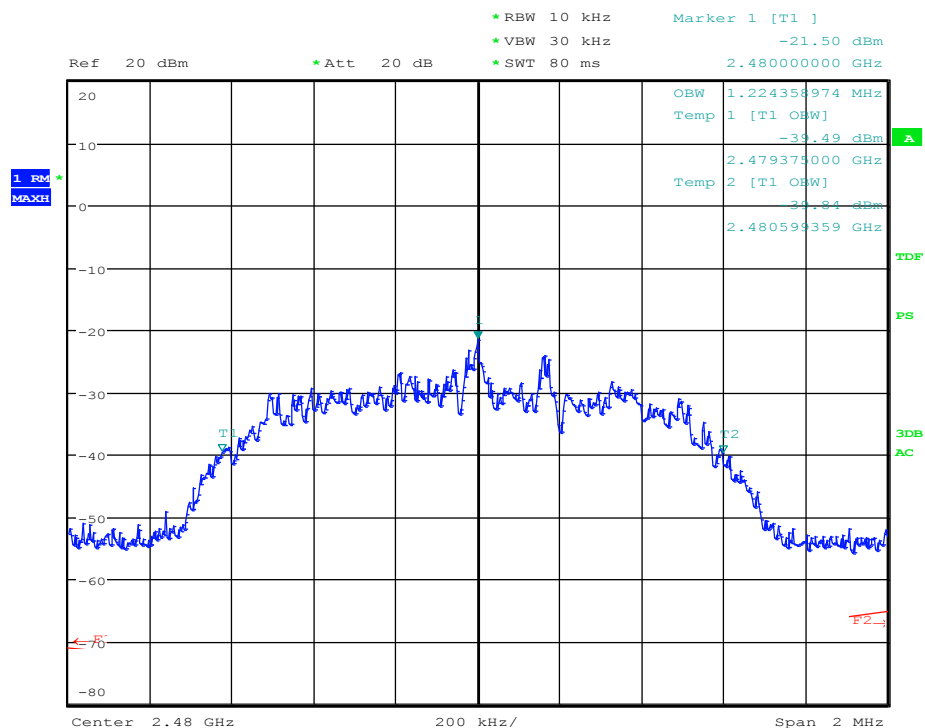


Date: 12.MAR.2013 20:21:15

2.3 Channels low and high (3-DH5)



Date: 12.MAR.2013 20:02:40

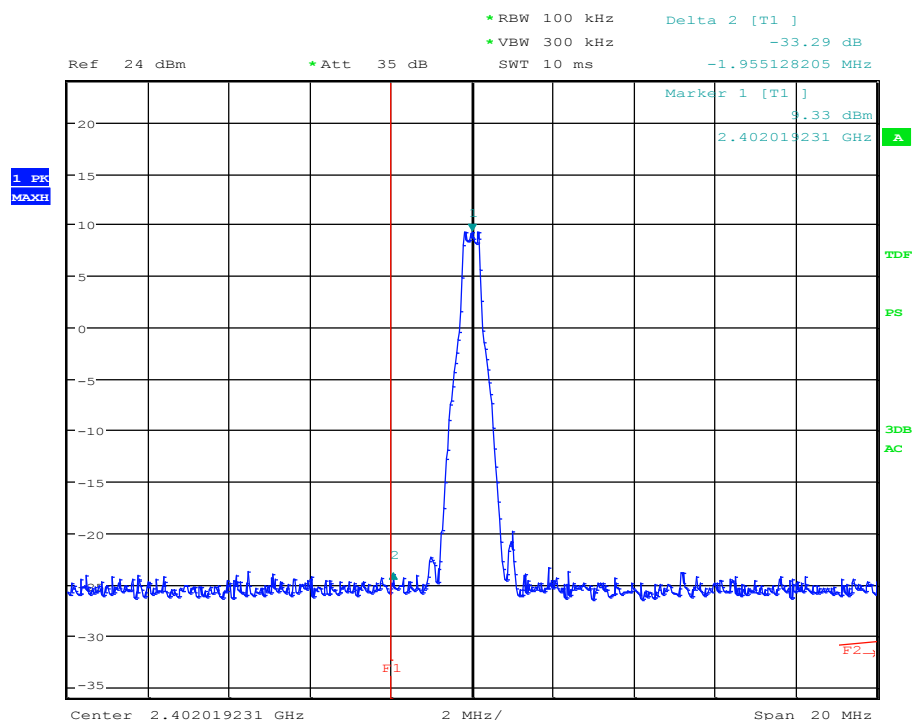


Date: 12.MAR.2013 20:20:13

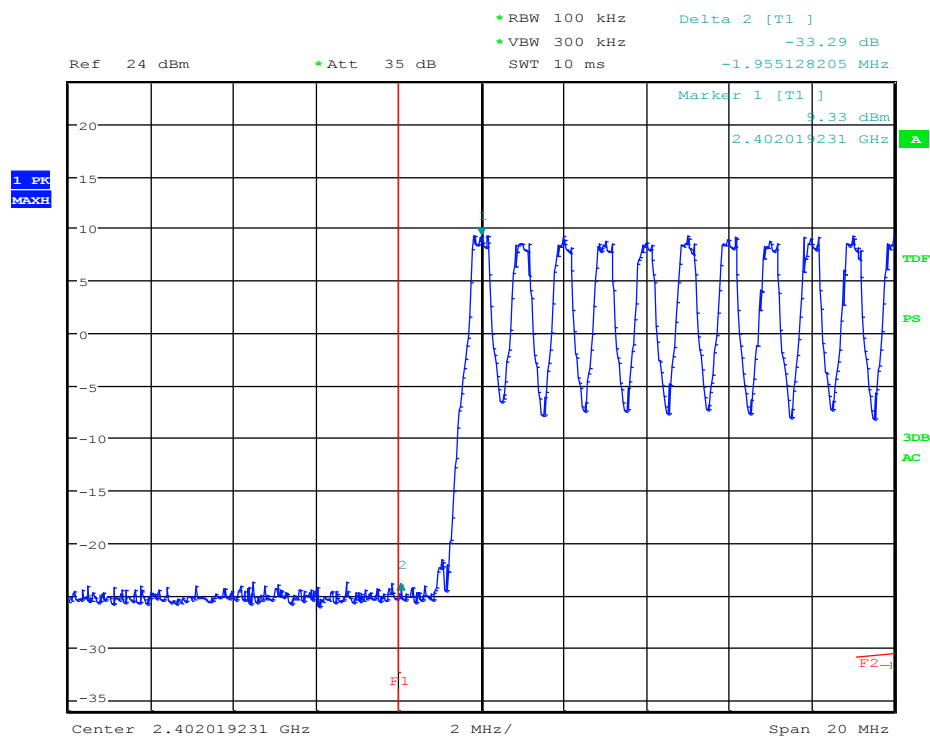
3. Out-Of-Band RF- and Band-Edge emissions (20dBc)

3.1 Inband Emissions, Channels 0/38/78 (DH-5, hopping off/on)

Low channel

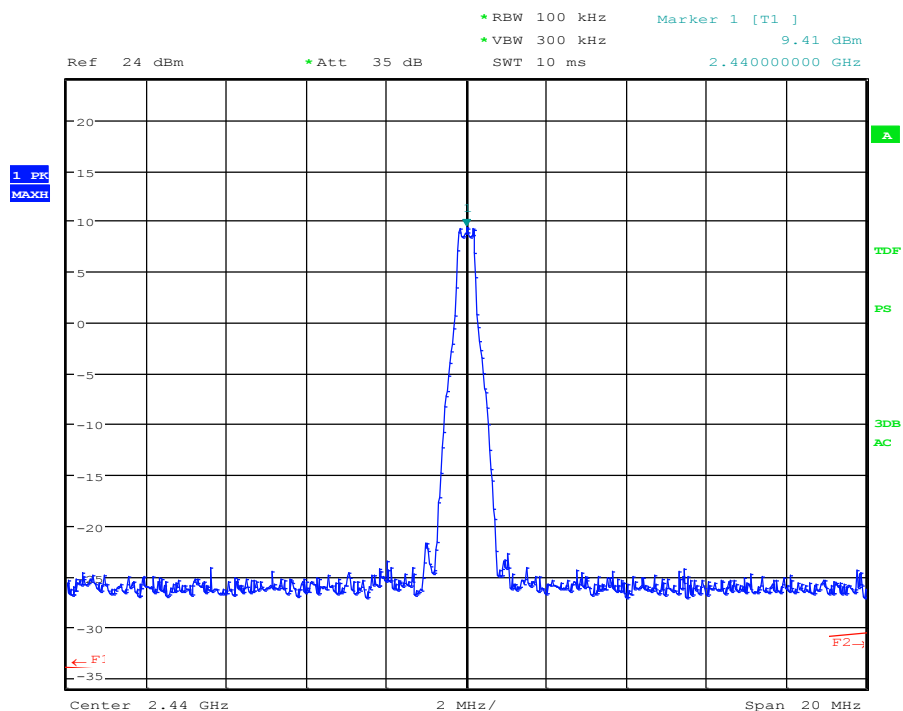


Date: 10.APR.2013 07:40:39



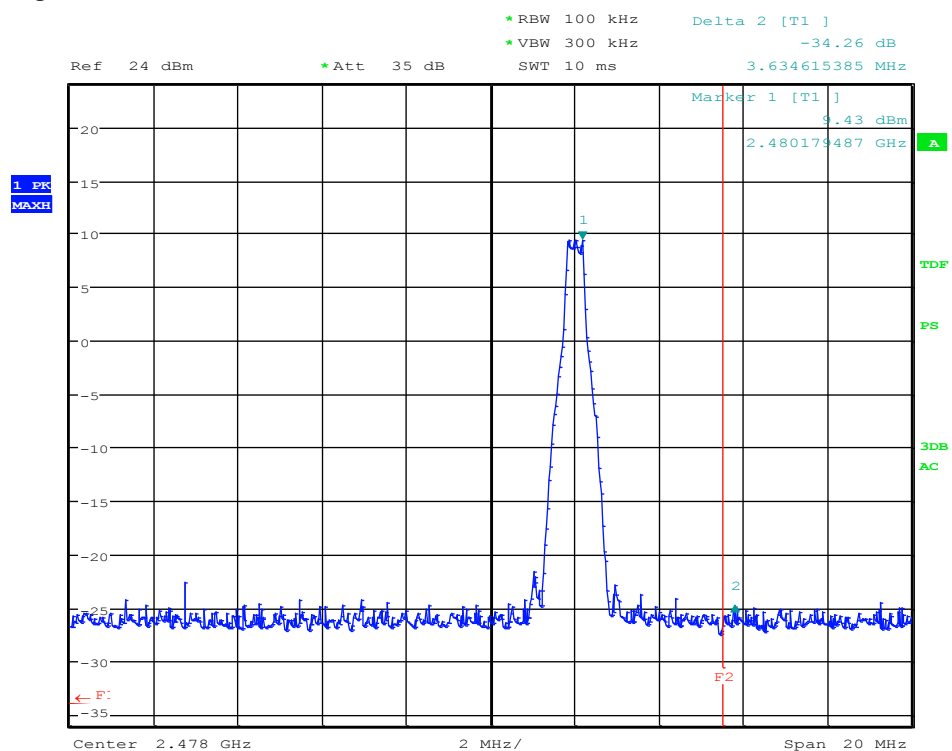
Date: 10.APR.2013 07:45:22

Middle channel

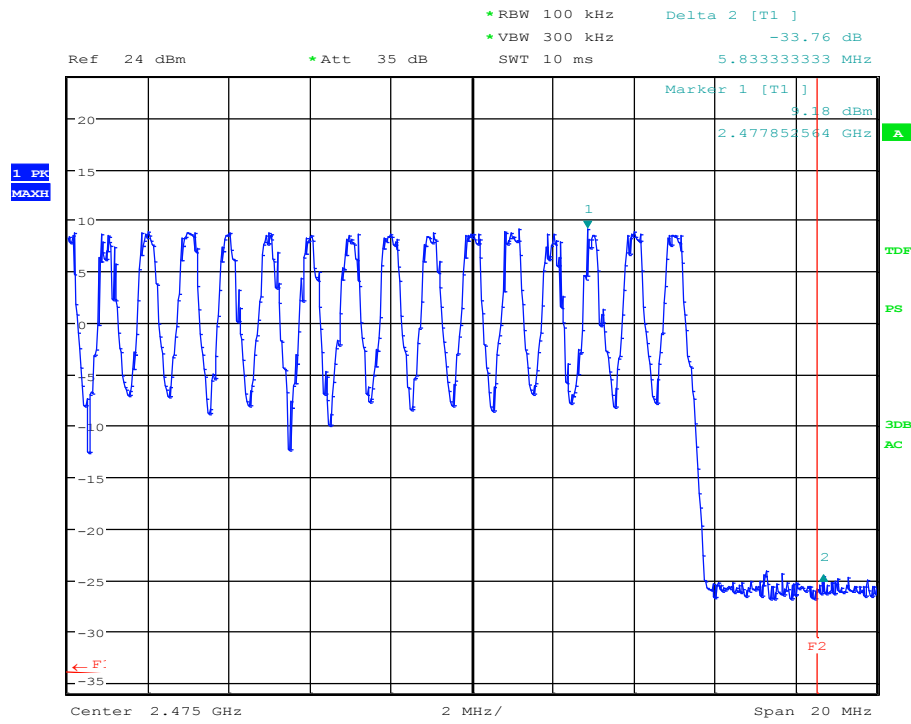


Date: 10.APR.2013 08:20:36

High channel

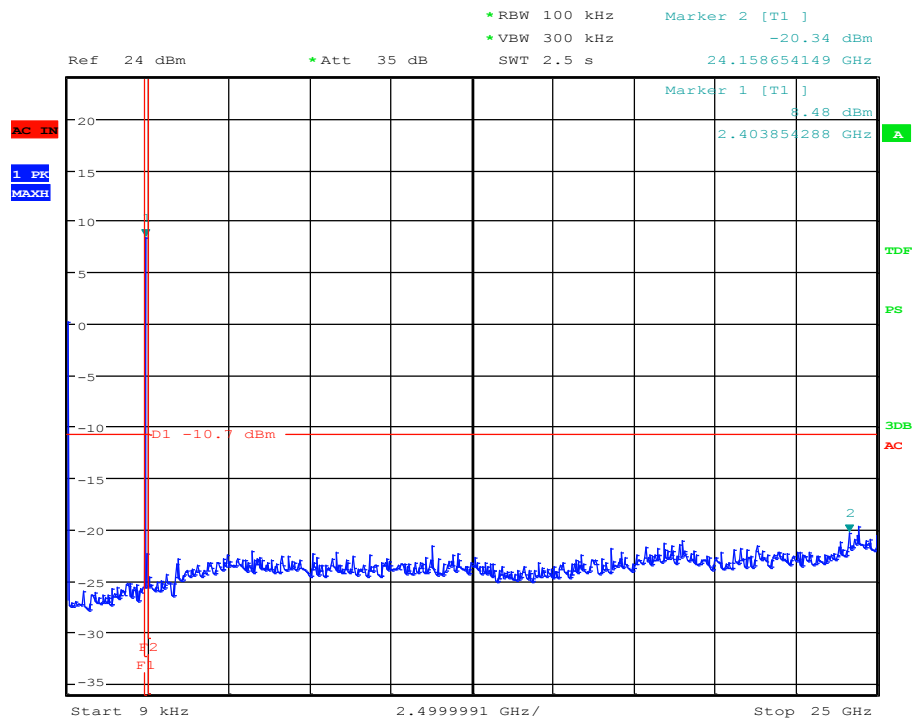


Date: 10.APR.2013 07:52:32

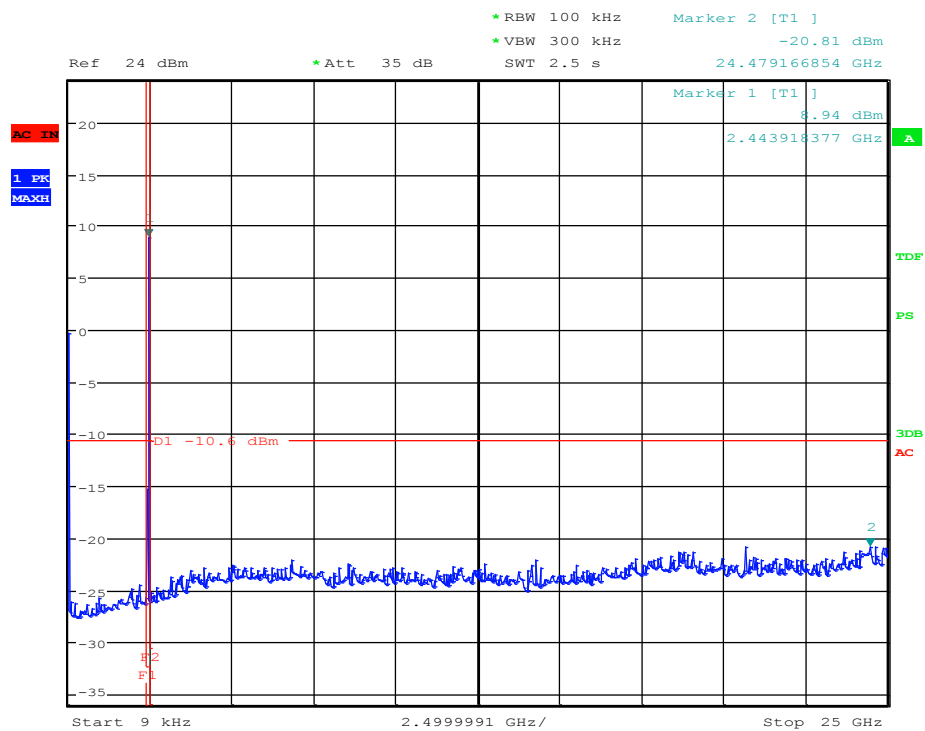


Date: 10.APR.2013 07:49:54

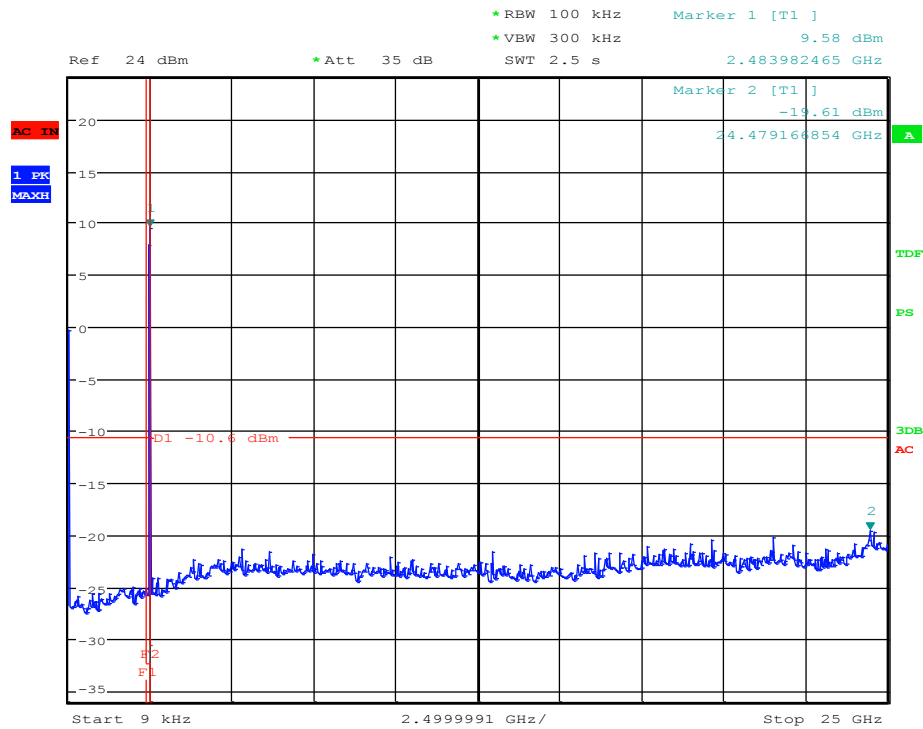
3.2 Out-of-Band Emissions, Channels 0/38/78 (DH-5)



Date: 10.APR.2013 08:28:31



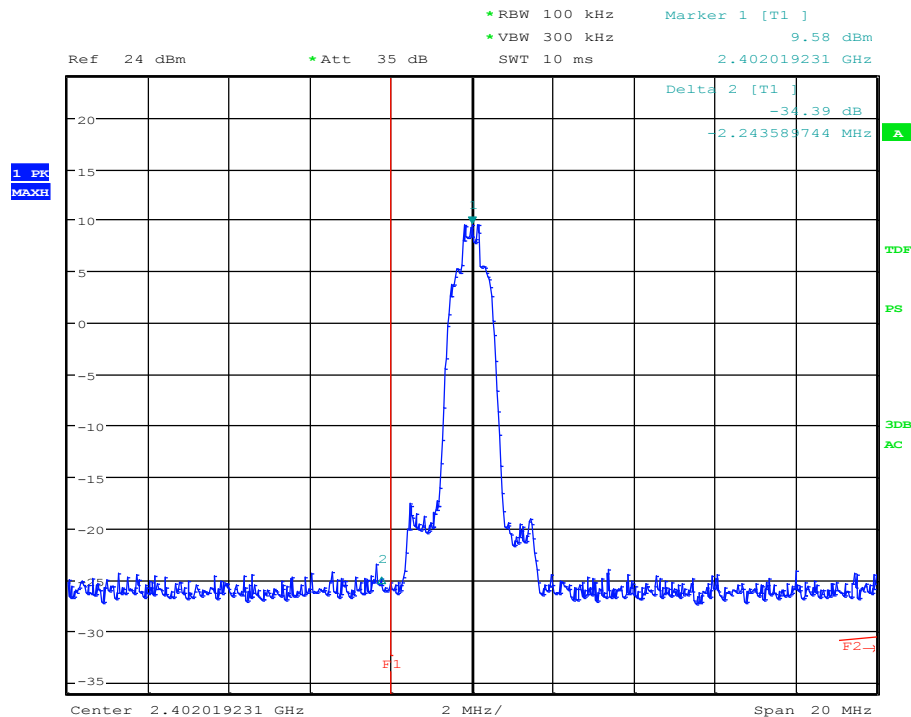
Date: 10.APR.2013 08:40:47



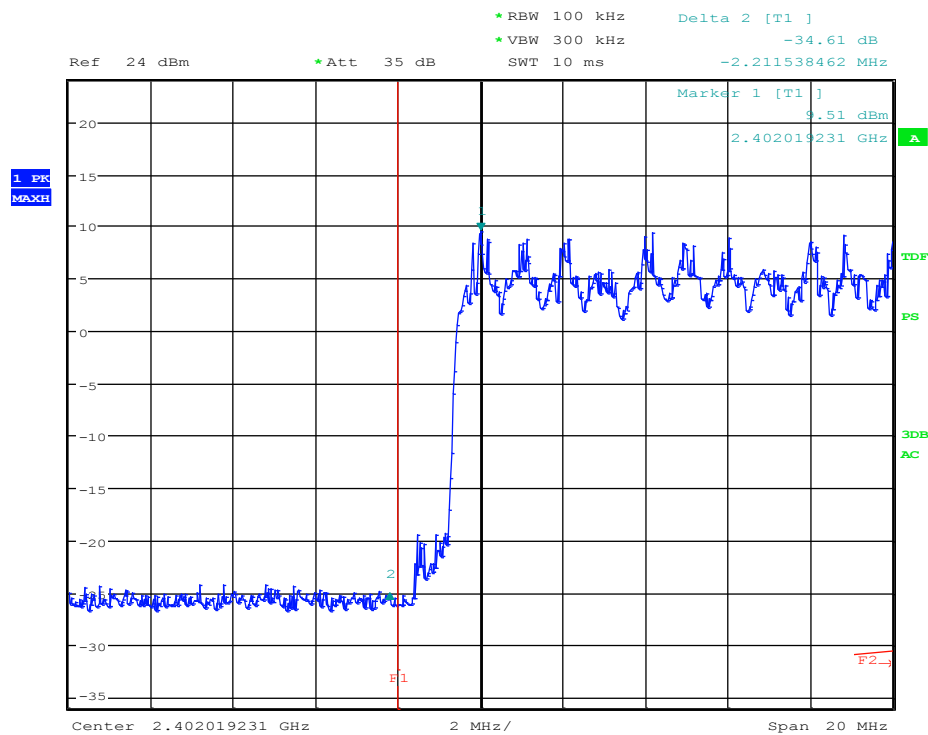
Date: 10.APR.2013 08:47:12

3.3 Inband Emissions, Channels 0/38/78 (2DH-5, hopping off/on)

Channel low

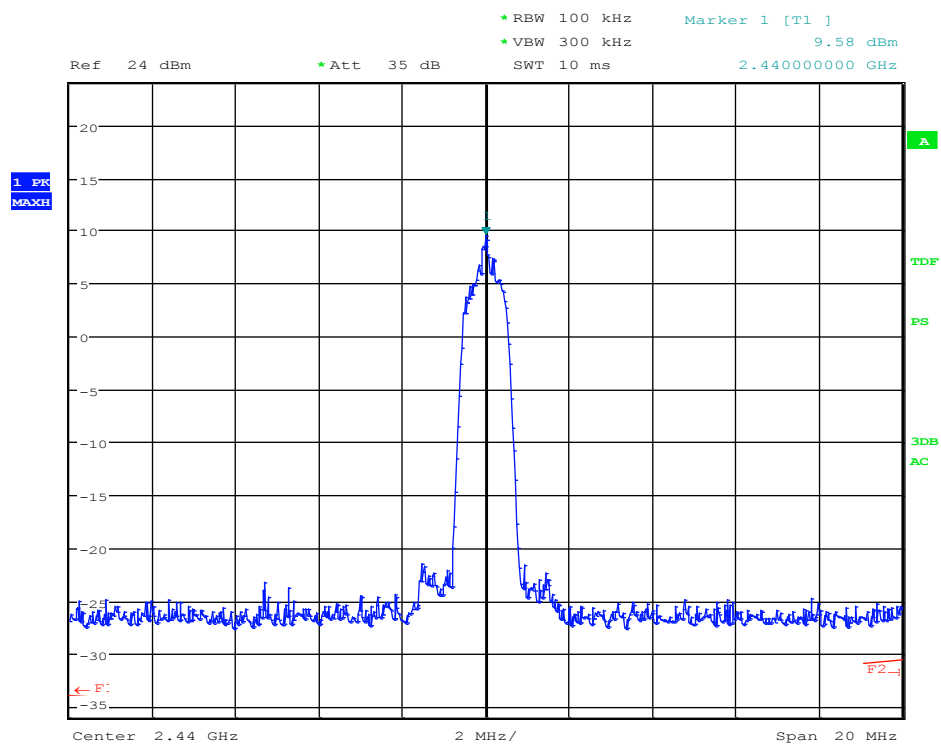


Date: 10.APR.2013 08:15:44



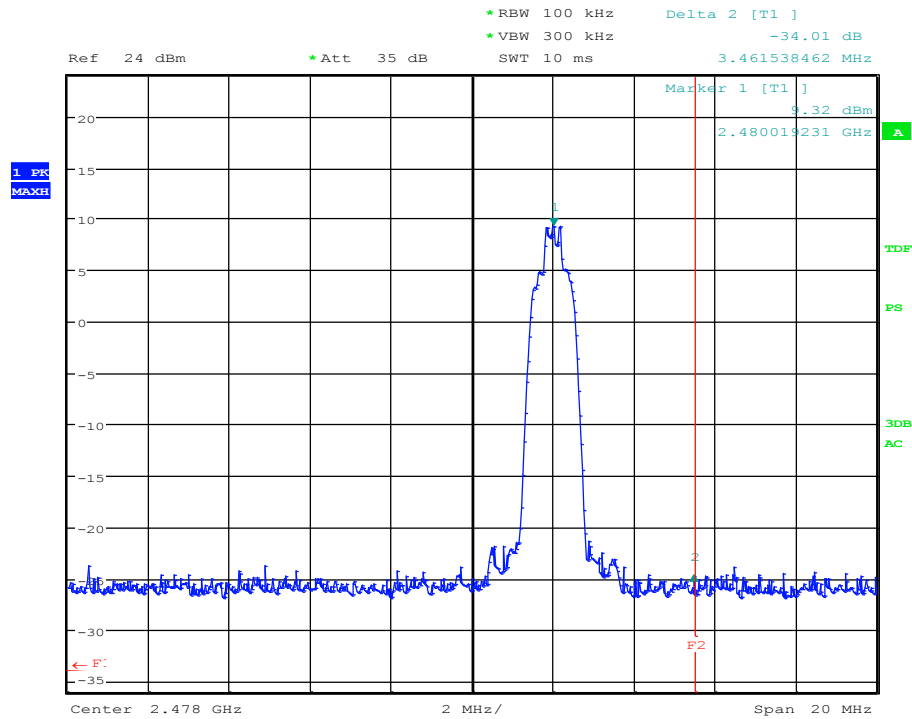
Date: 10.APR.2013 08:09:37

Channel middle

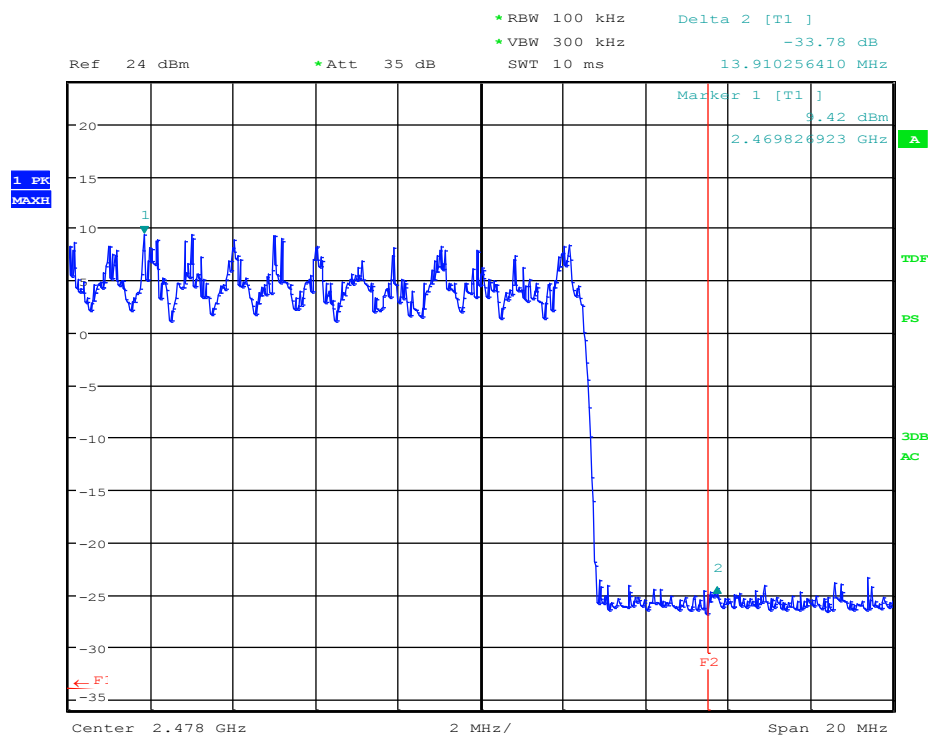


Date: 10.APR.2013 08:22:28

Channel high

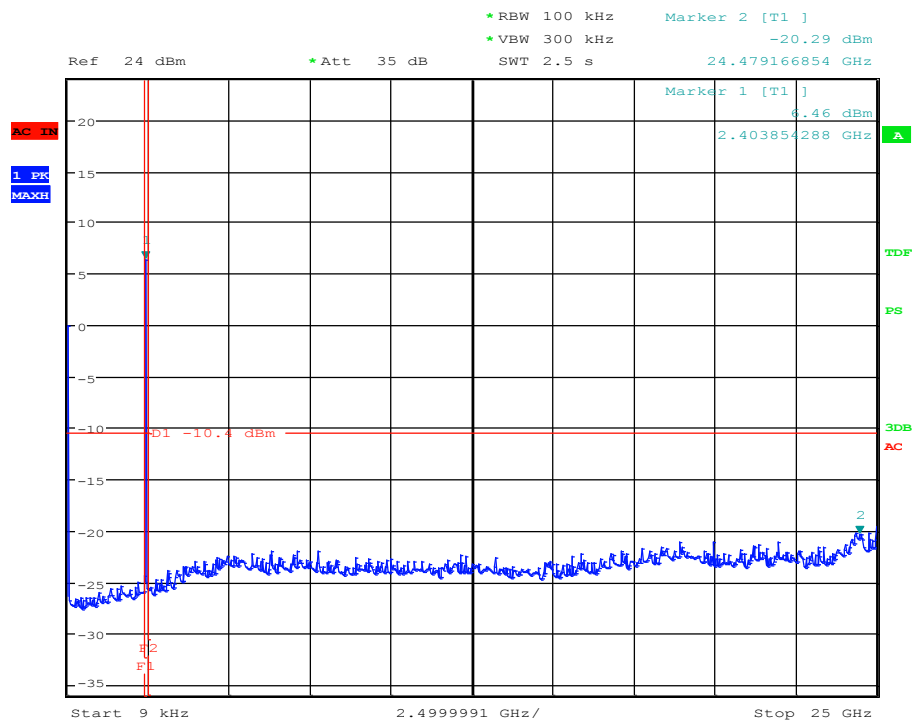


Date: 10.APR.2013 07:57:11

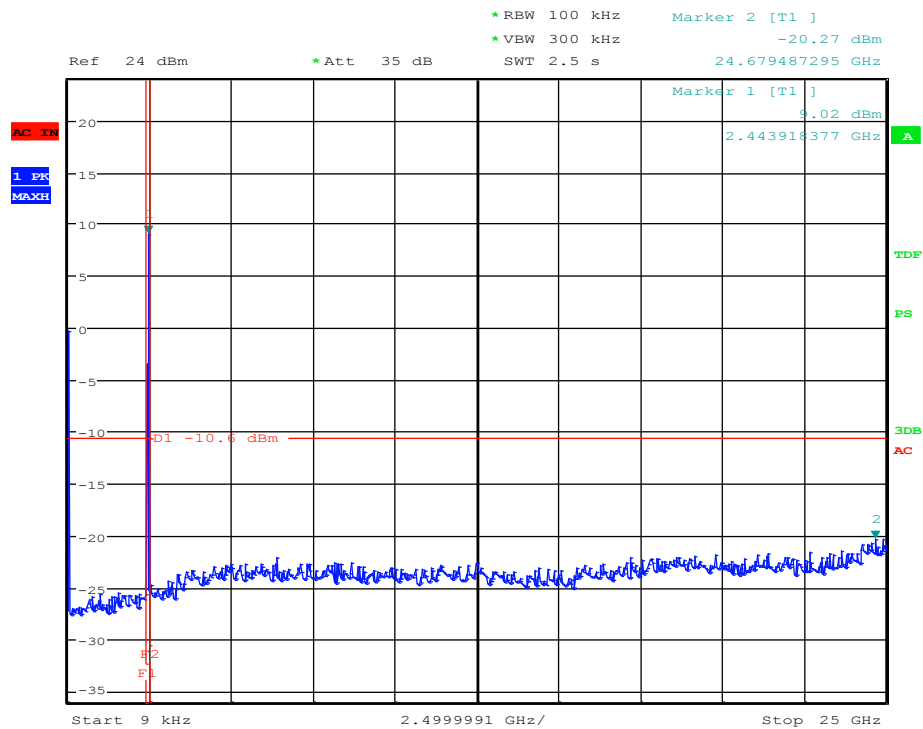


Date: 10.APR.2013 08:06:34

3.4 Out-of-Band Emissions, Channels 0/38/78 (2DH-5)



Date: 10.APR.2013 08:33:32

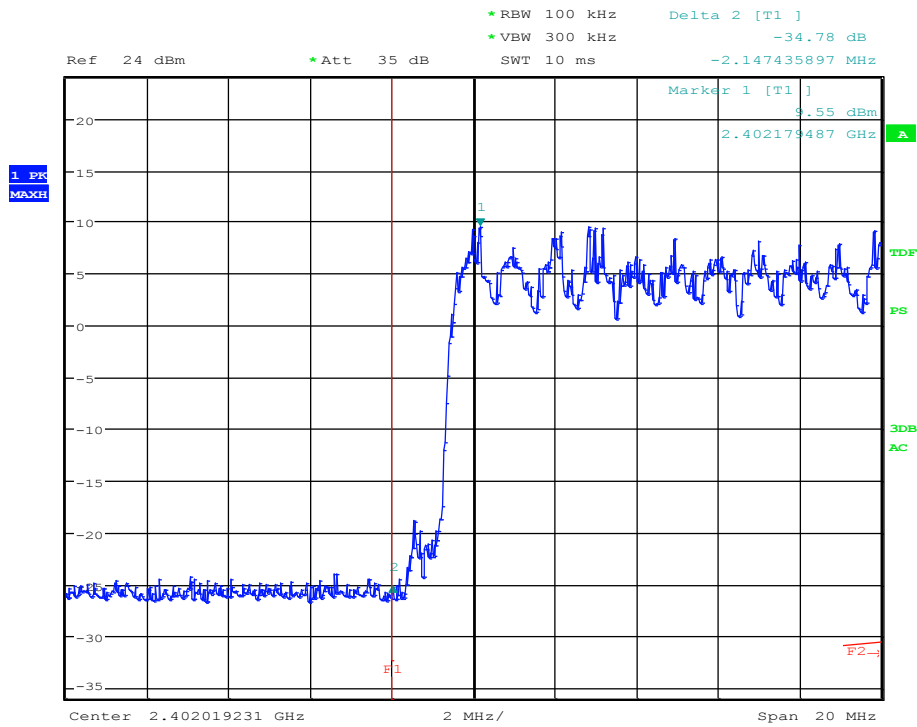


Date: 10.APR.2013 08:42:37



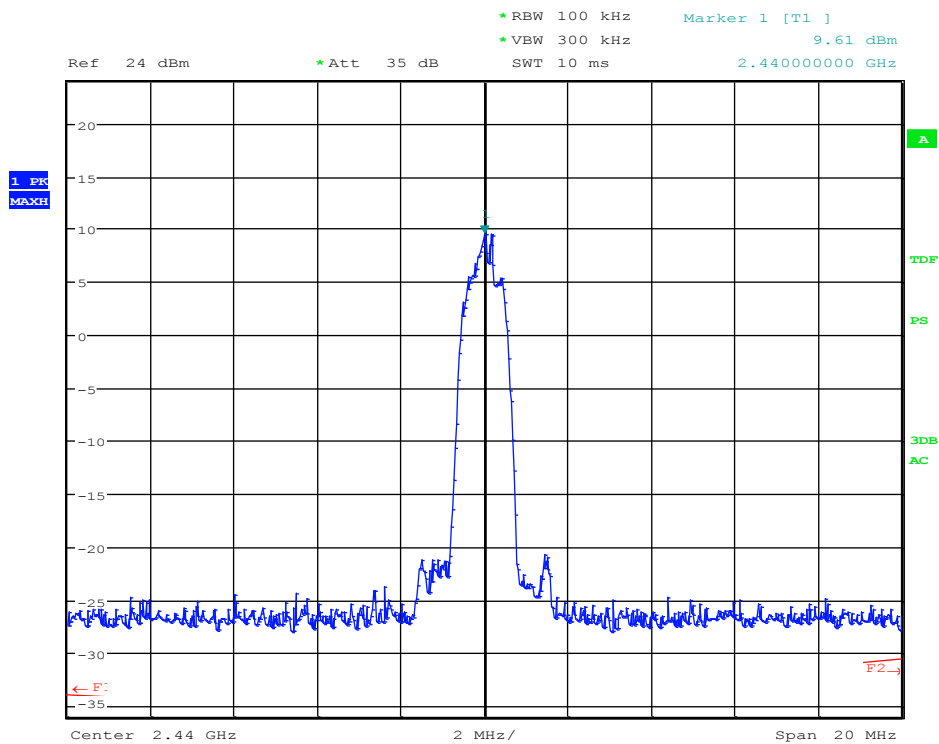
Channel low





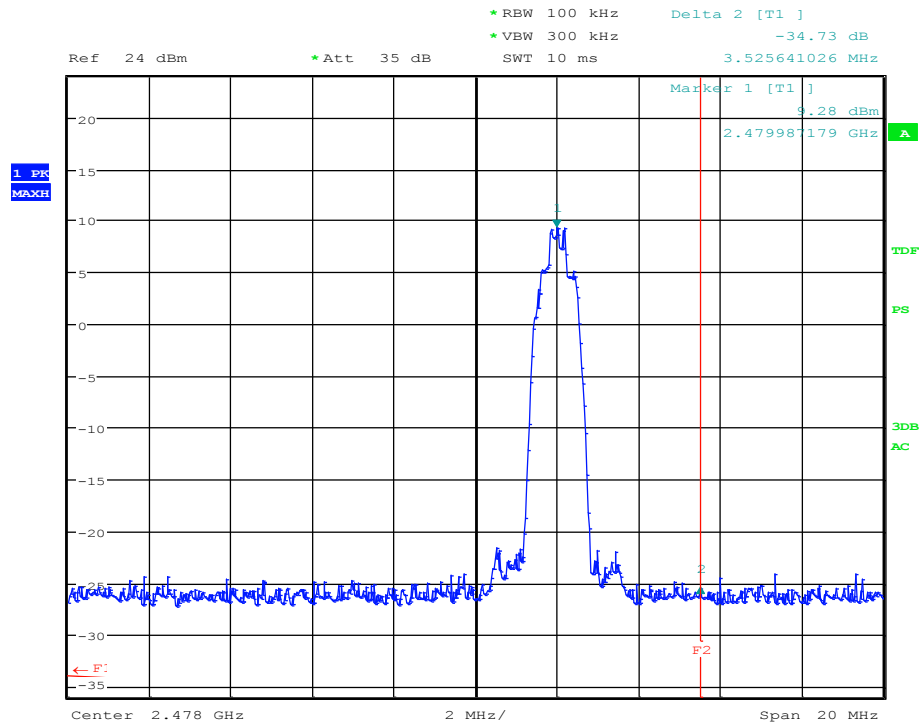
Date: 10.APR.2013 08:12:11

Channel middle

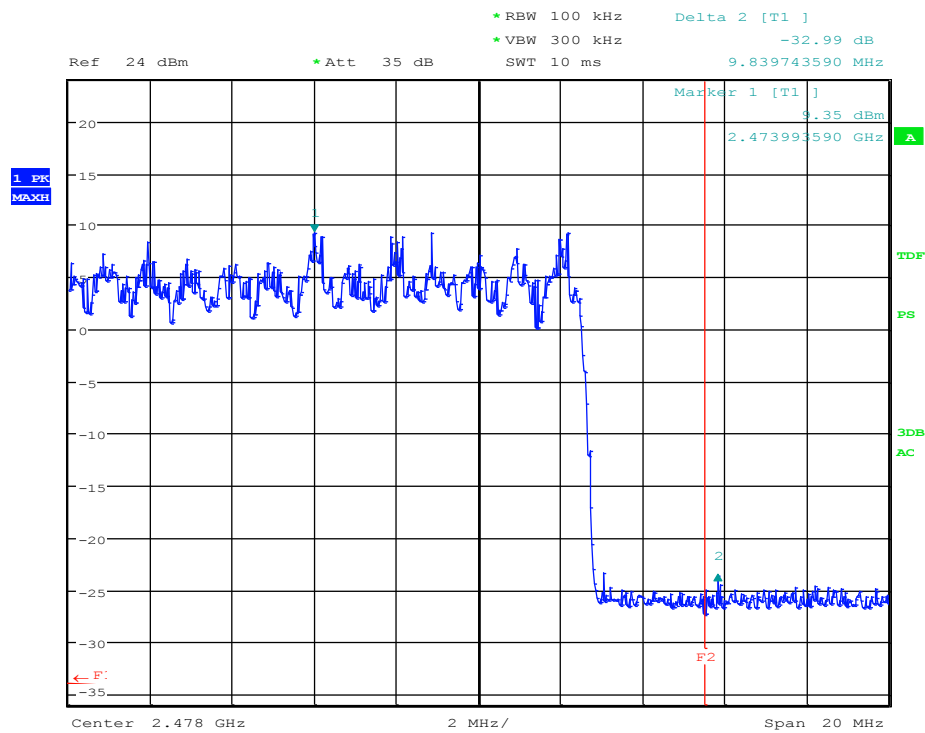


Date: 10.APR.2013 08:23:21

Channel high

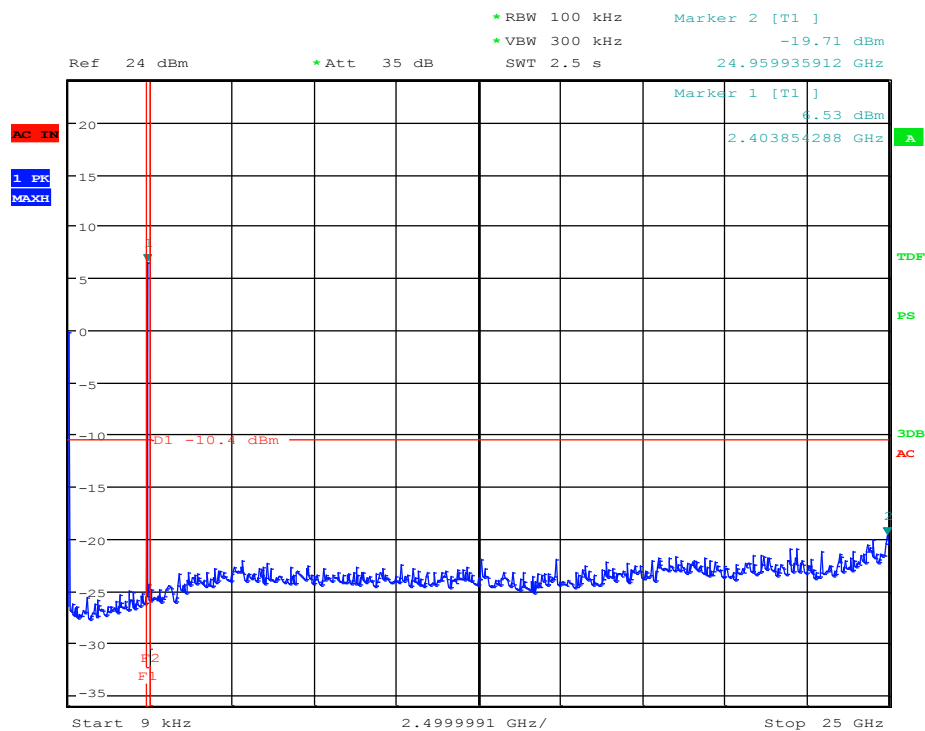


Date: 10.APR.2013 08:00:23

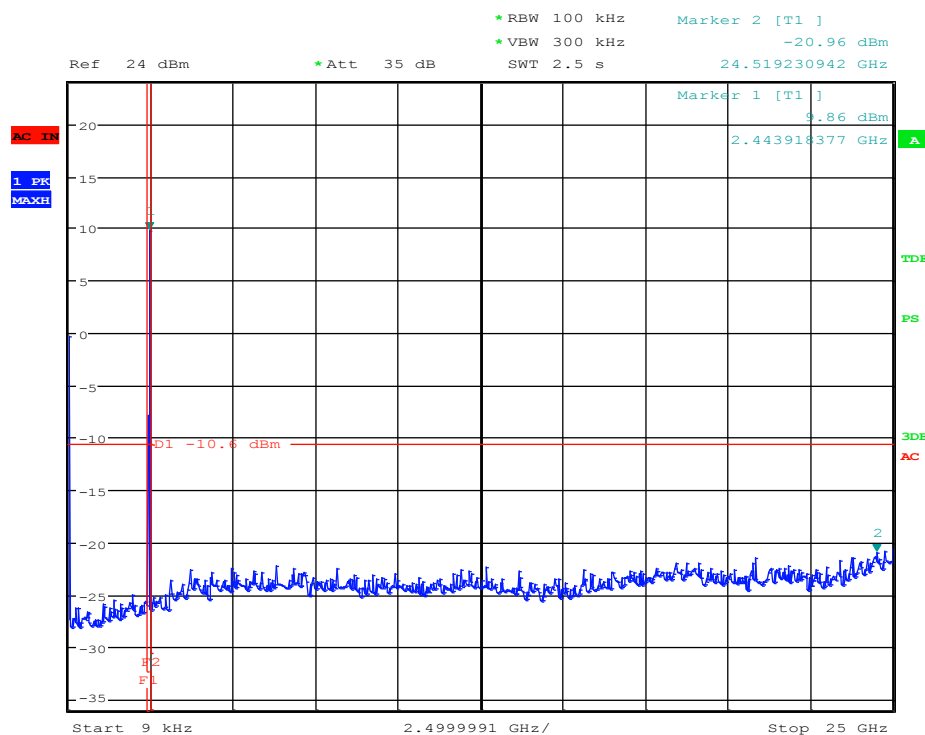


Date: 10.APR.2013 08:03:55

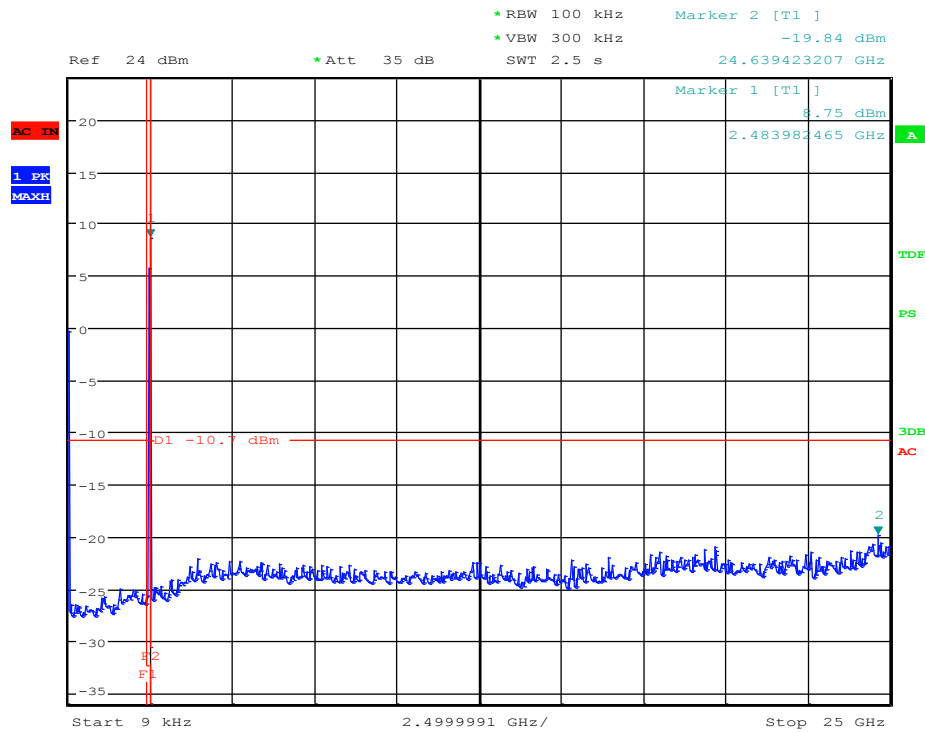
3.6 Out-of-Band Emissions, Channels 0/38/78 (3DH-5)



Date: 10.APR.2013 08:35:05



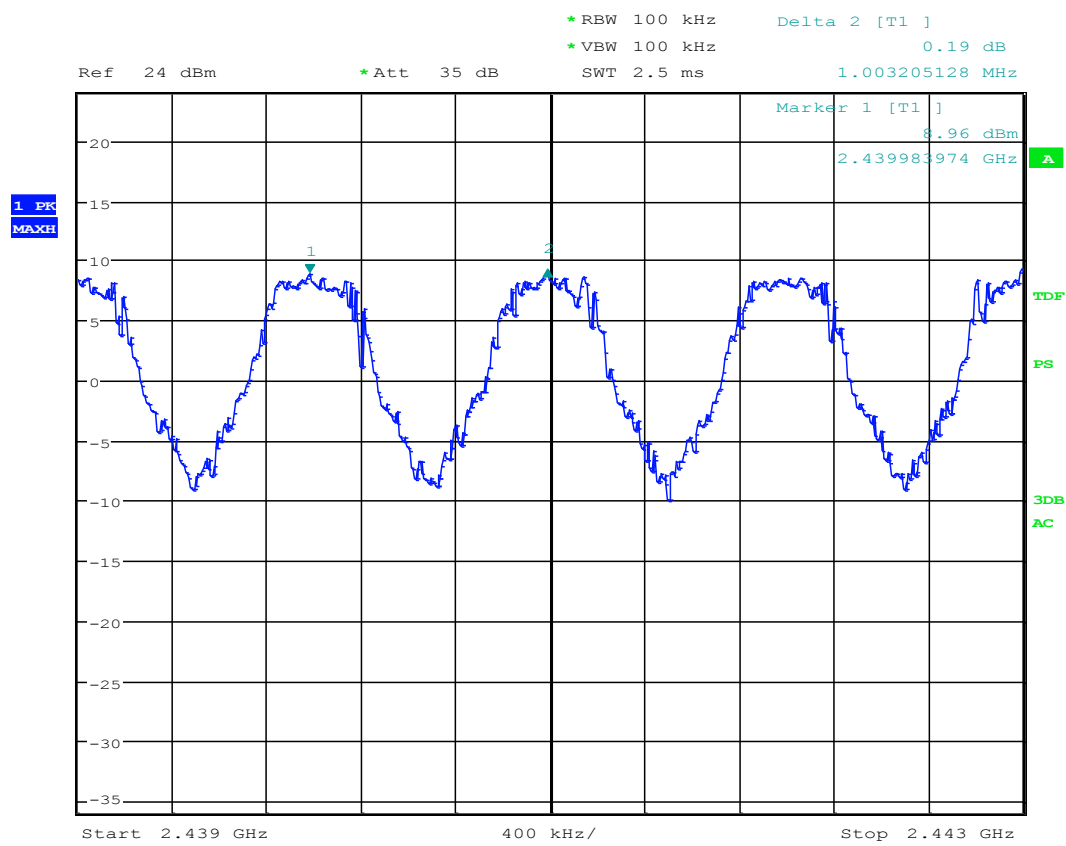
Date: 10.APR.2013 08:43:32



Date: 10.APR.2013 08:50:08

4. Channel carrier frequency separation (conducted)

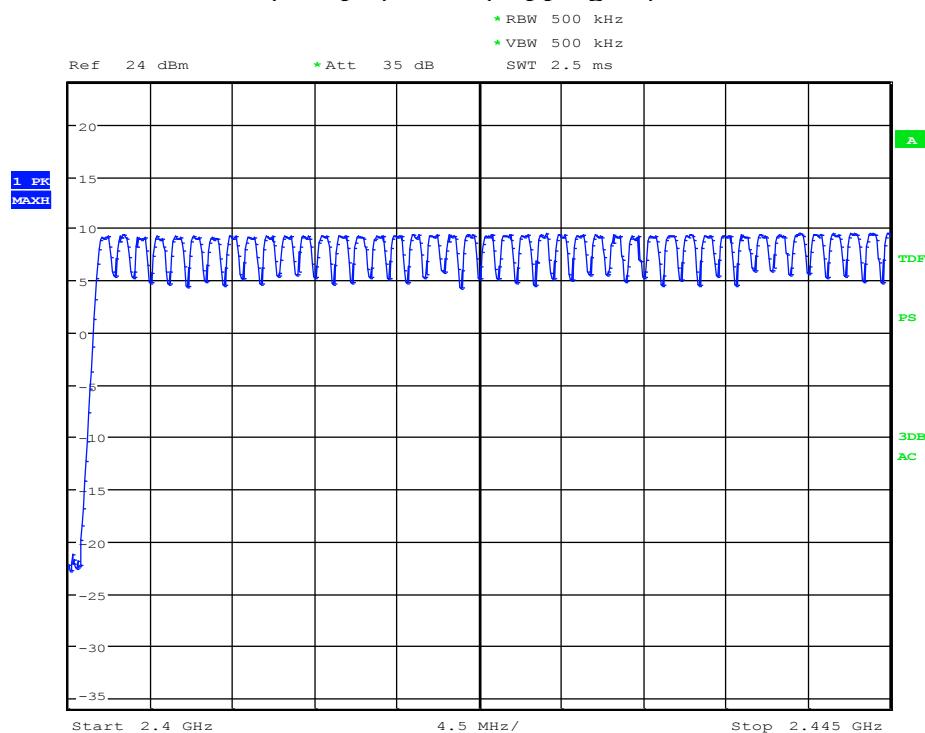
4.1 Channels 38-39 (DH5, hopping-on)



Date: 9.APR.2013 15:37:26

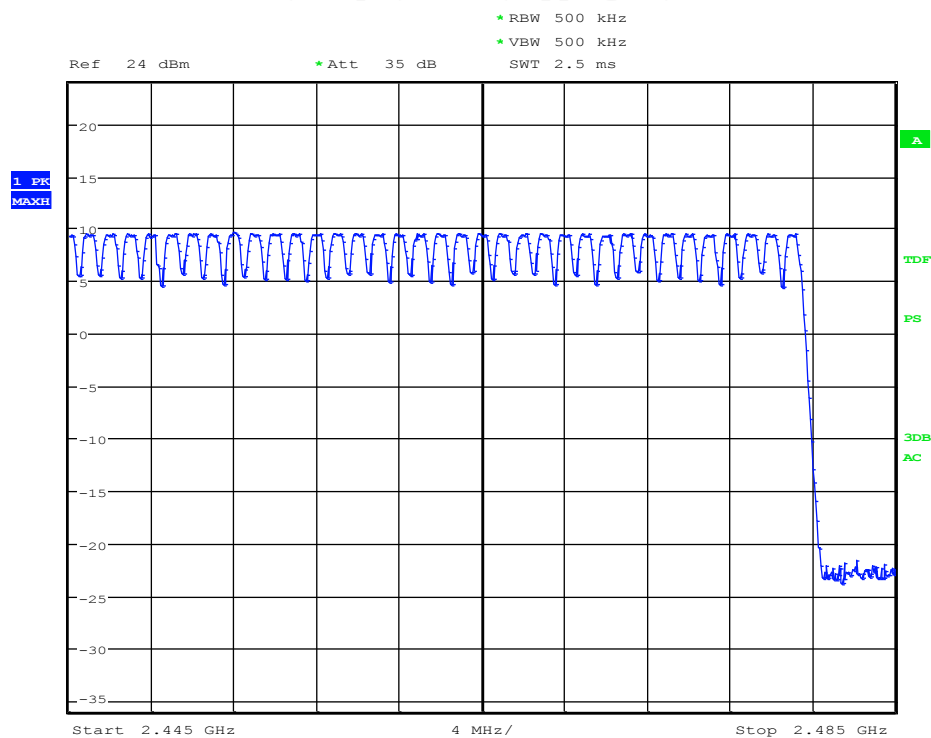
5. Number of channels (conducted)

5.1 Channels 0 -38 (sweep 1), DH5 (hopping-on)



Date: 9.APR.2013 15:39:27

5.1 Channels 39 -78 (sweep 2), DH5 (hopping-on)



Date: 9.APR.2013 15:40:22

6. Radiated field strength measurements accord. §15.209&15.205

6.1 Below 30 MHz

Diagram No. 2.01_RSE_BT_3DH5_Ch0

Test description:
Test site and distance:
Version of Testsoftware:
Distance correction:
Rec. antenna (pre-scan):
Used filter:
Test specification:

Date: 28.02.2013 Page 1 of 1
Magnetic Fieldstrength Measurement related to 30/300 m distance
Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
EMC32 v8.51.0
--
height 1.00 m, parallel and 90° to EUT polarisation
bypass
FCC 15.205 § 15.209; RSS-Gen: Issue 3

Operator:
Operating conditions:
Comment 2:

HLa
BT v2.0/v2.1+EDR; Ch 0+ 3DH5
3-0053-12-21-2c

EUT Information

EUT Name:
Manufacturer:
Serial Number:
Hardware Rev:
Software Rev:
Comment:

Navigation and Conenctivity Box
Harman International Industries (Automotive Division)
Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Power supply during the test is nominal 13,2 V DC

FCC15.209_magn hor+vert

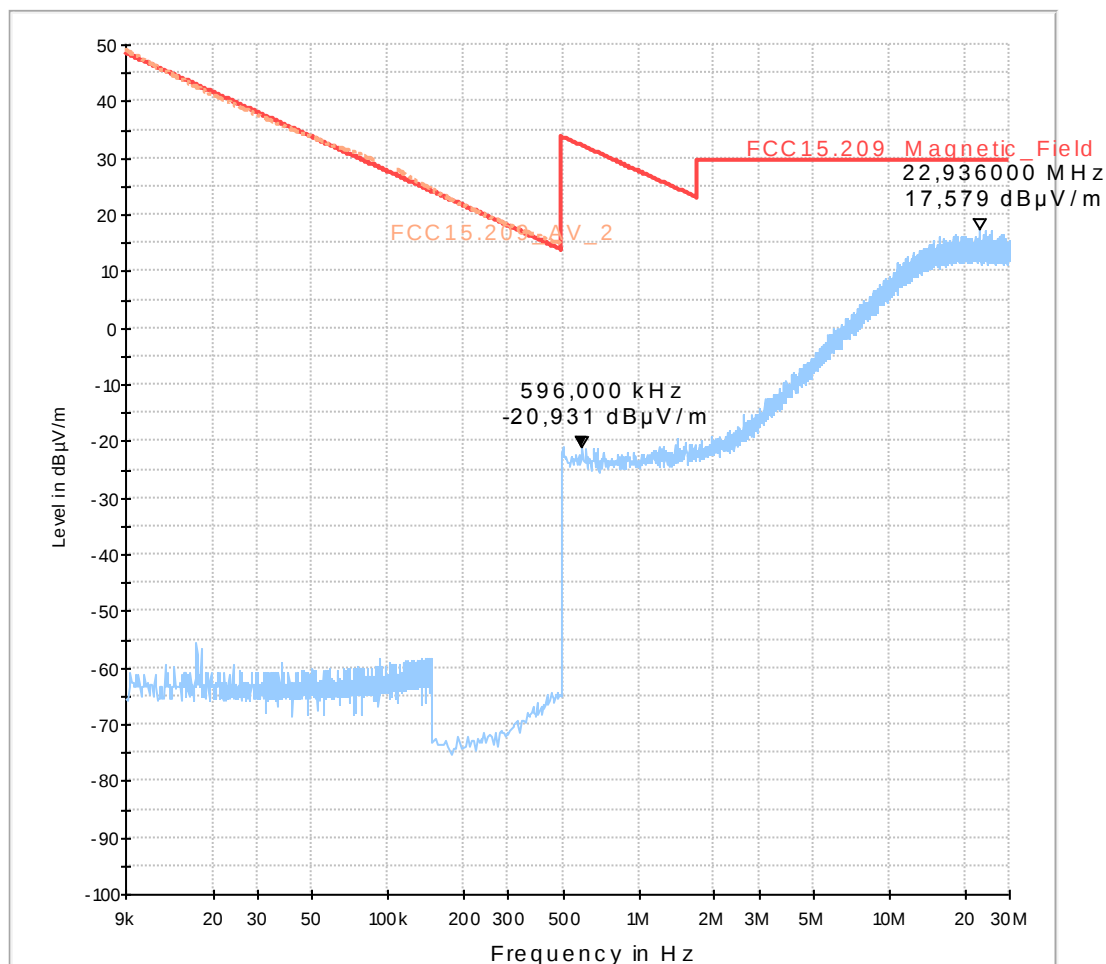


Diagram No. 2.02_RSE_BT_3DH1_Ch39

Date:	28.02.2013	Page 1 of 1
Test description:	Magnetic Fieldstrength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 v8.51.0	
Distance correction:	--	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 3	
Operator:	HLa	
Operating conditions:	BT v2.0/v2.1+EDR; Ch 39+ 3DH1	
Comment 2:	3-0053-12-21-2c	

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

FCC15.209_magn hor+vert

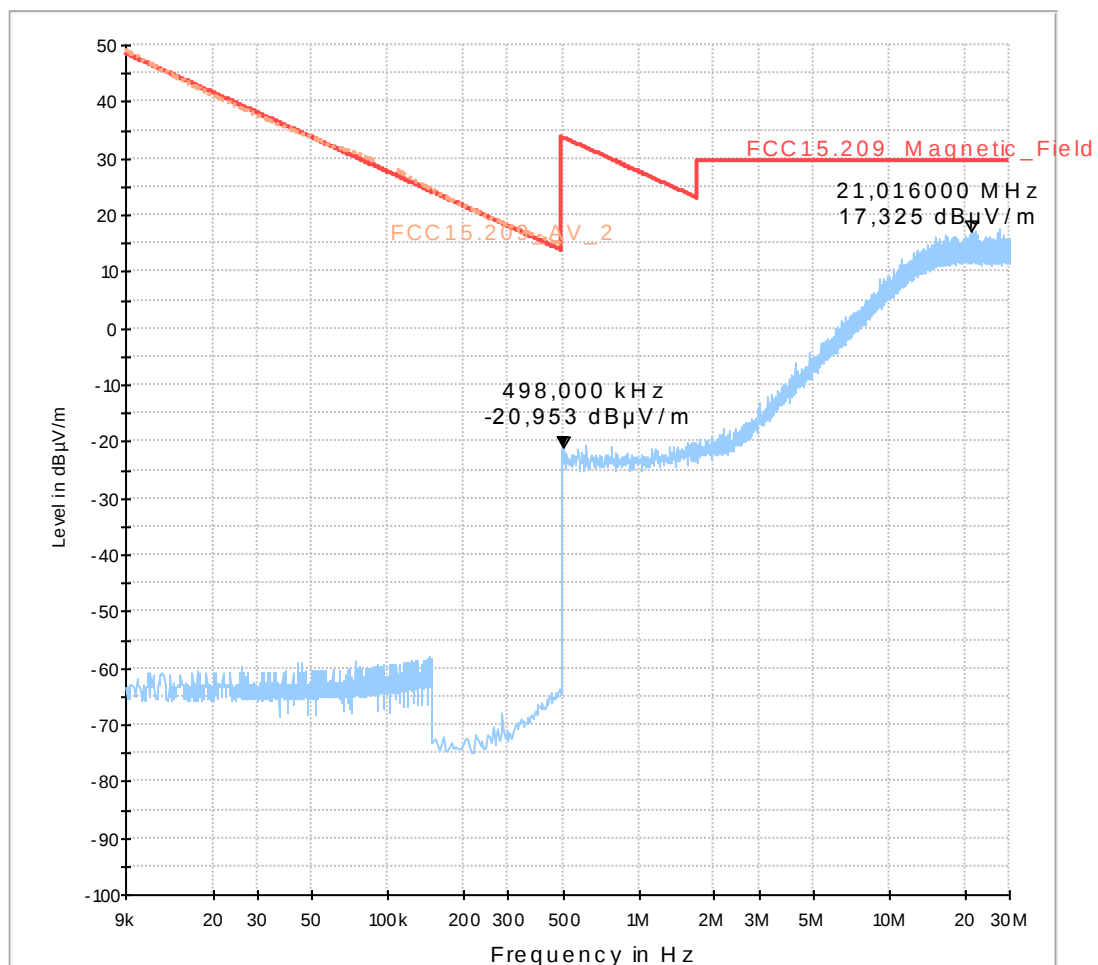


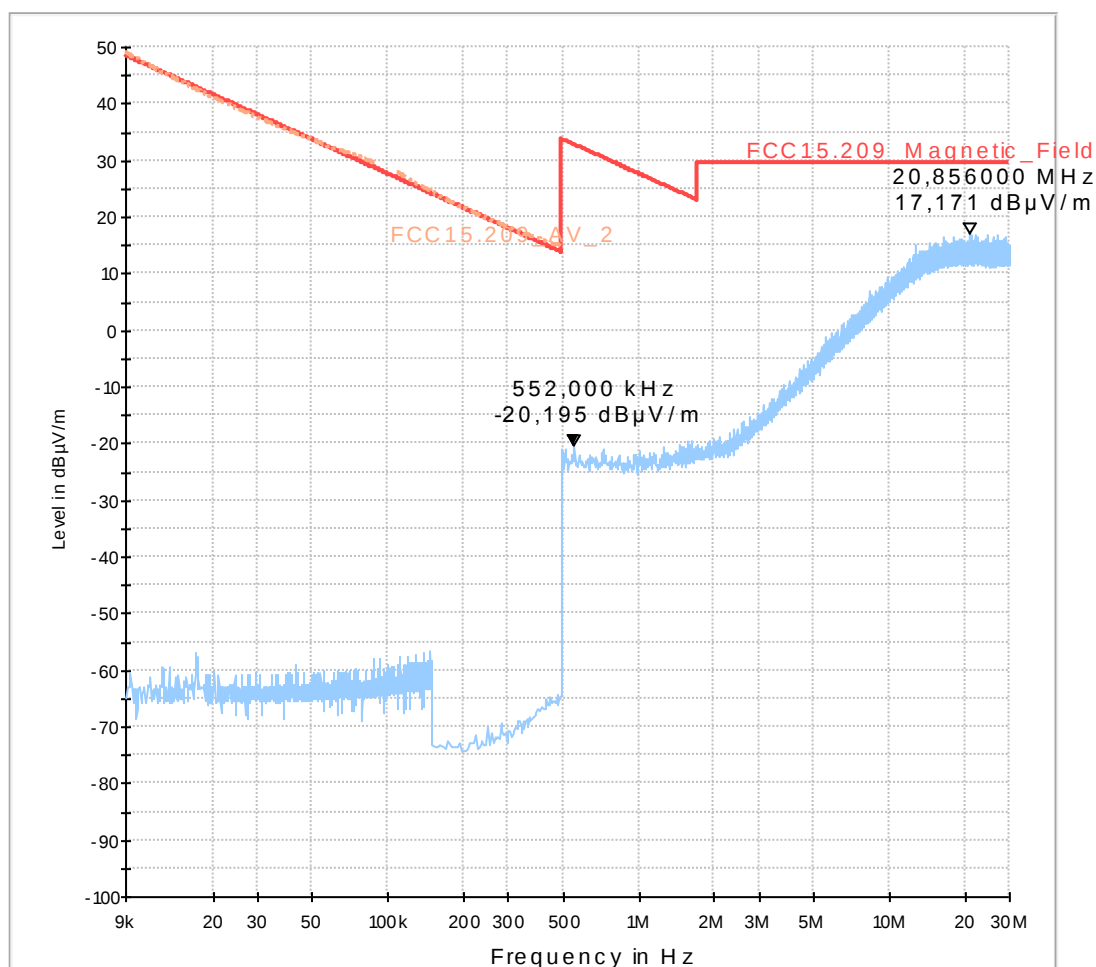
Diagram No. 2.03_RSE_BT_3DH3_Ch78

Date:	28.02.2013	Page 1 of 1
Test description:	Magnetic Fieldstrength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 v8.51.0	
Distance correction:	--	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 3	
Operator:	HLa	
Operating conditions:	BT v2.0/v2.1+EDR; Ch 78+ 3DH3	
Comment 2:	3-0053-12-21-2c	

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

FCC15.209_magn hor+vert



6.2 Frequency range 30 MHz - 1 GHz

Diagram No. 3.01a_RSE_BT_3DH1_Ch0

28.02.2013 Page 1 of 1
 Test description: Electric Fieldstrength Measurement
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: EMC32 v8.51.0
 Distance correction: --
 Used filter: lowpass 1200 MHz
 Test specification.: FCC 15.209; RSS-Gen: Issue 3

 Operator: Tas
 Operating conditions: BT v2.1+EDR; Ch 0 + 3DH1
 Comment 1: 3-0053-12-21-2c

EUT Information

EUT Name: Navigation and Conenctivity Box
 Manufacturer: Harman International Industries (Automotive Division)
 Serial Number: Automotive radio ID #25; Ext. Connectivity Box TEB CY13
 Hardware Rev: Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
 Software Rev: Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
 Comment: Power supply during the test is nominal 13,2 V DC

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
91.350000	21.4	1000.0	120.000	100.0	V	0.0	8.2	22.10	43.50
665.970000	40.2	1000.0	120.000	122.0	H	95.0	23.1	5.80	46.00

01_FCC15.209_hor+vert_KP0

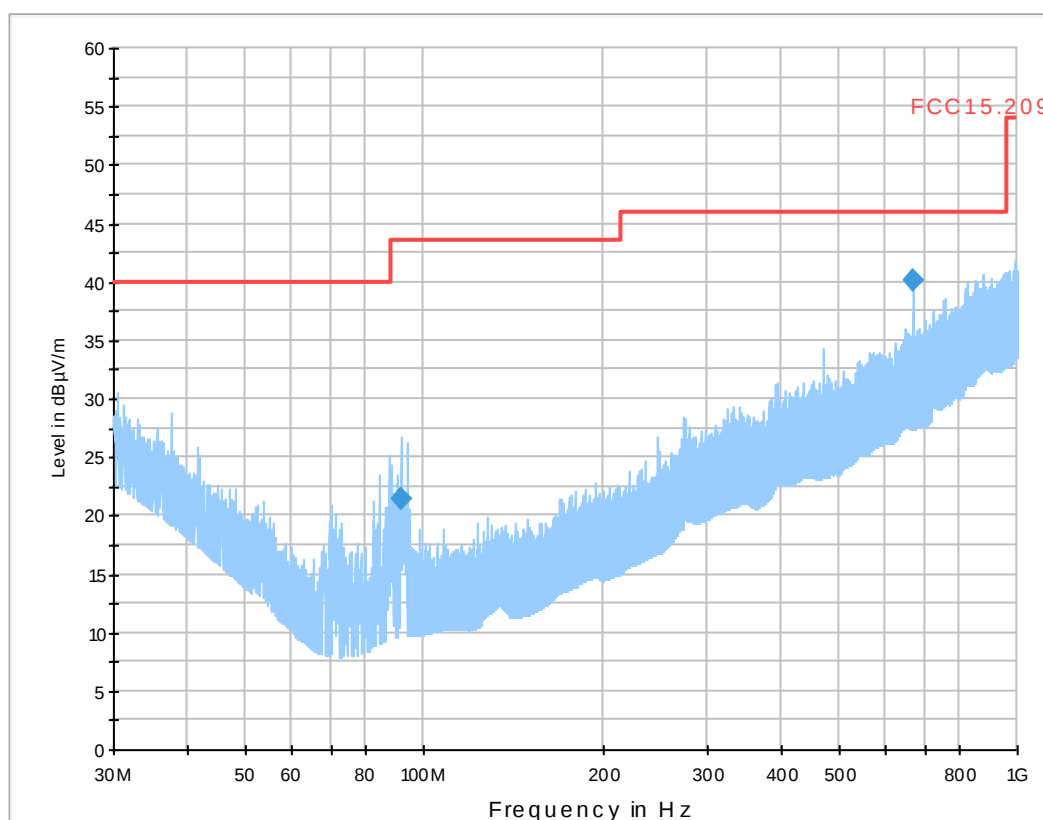


Diagram No. 3.02a_RSE_BT_3DH3_Ch39

Test description:	28.02.2013 Page 1 of 1
Test site and distance:	Electric Fieldstrength Measurement
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 v8.51.0
Used filter:	--
Test specification.:	lowpass 1200 MHz
	FCC 15.209; RSS-Gen: Issue 3
Operator:	Tas
Operating conditions:	BT v2.1+EDR; Ch 39 + 3DH3
Comment 1:	3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

01_FCC15.209_hor+vert_KP0

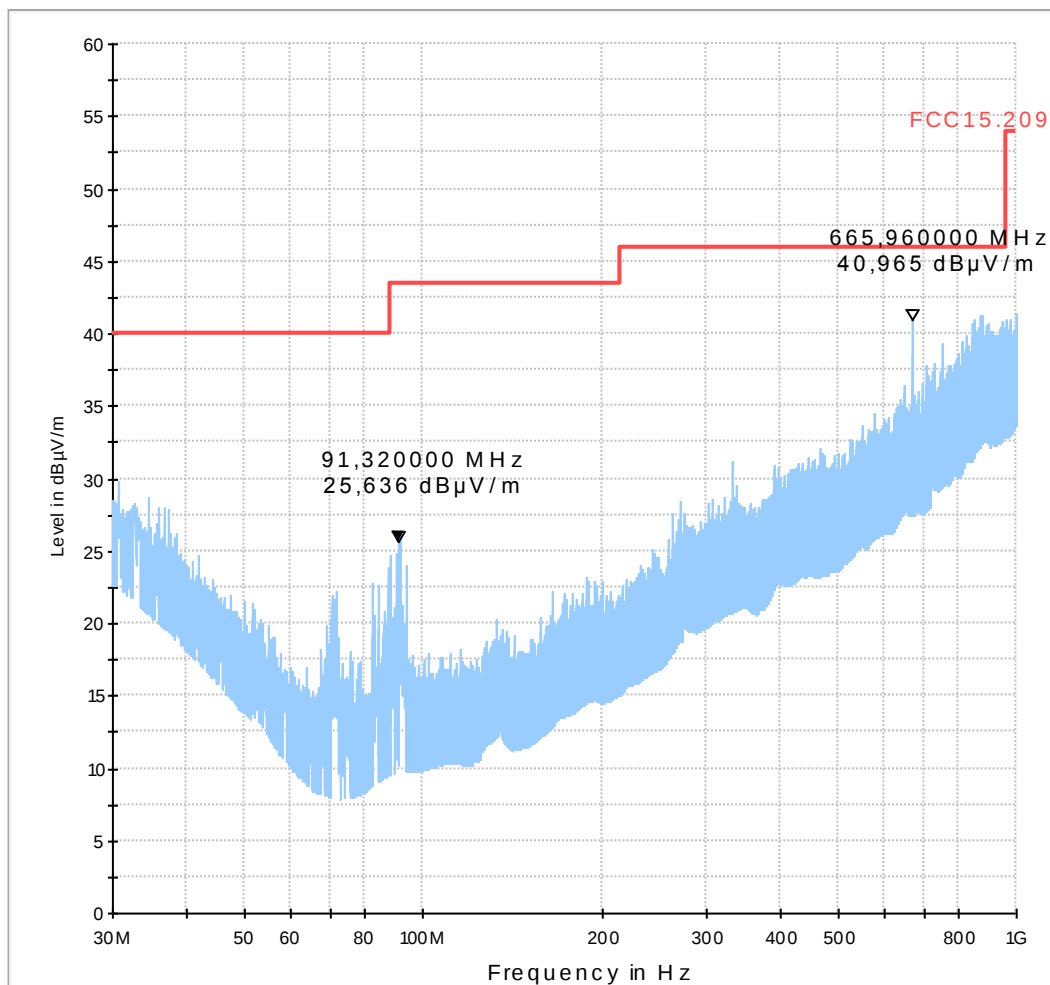


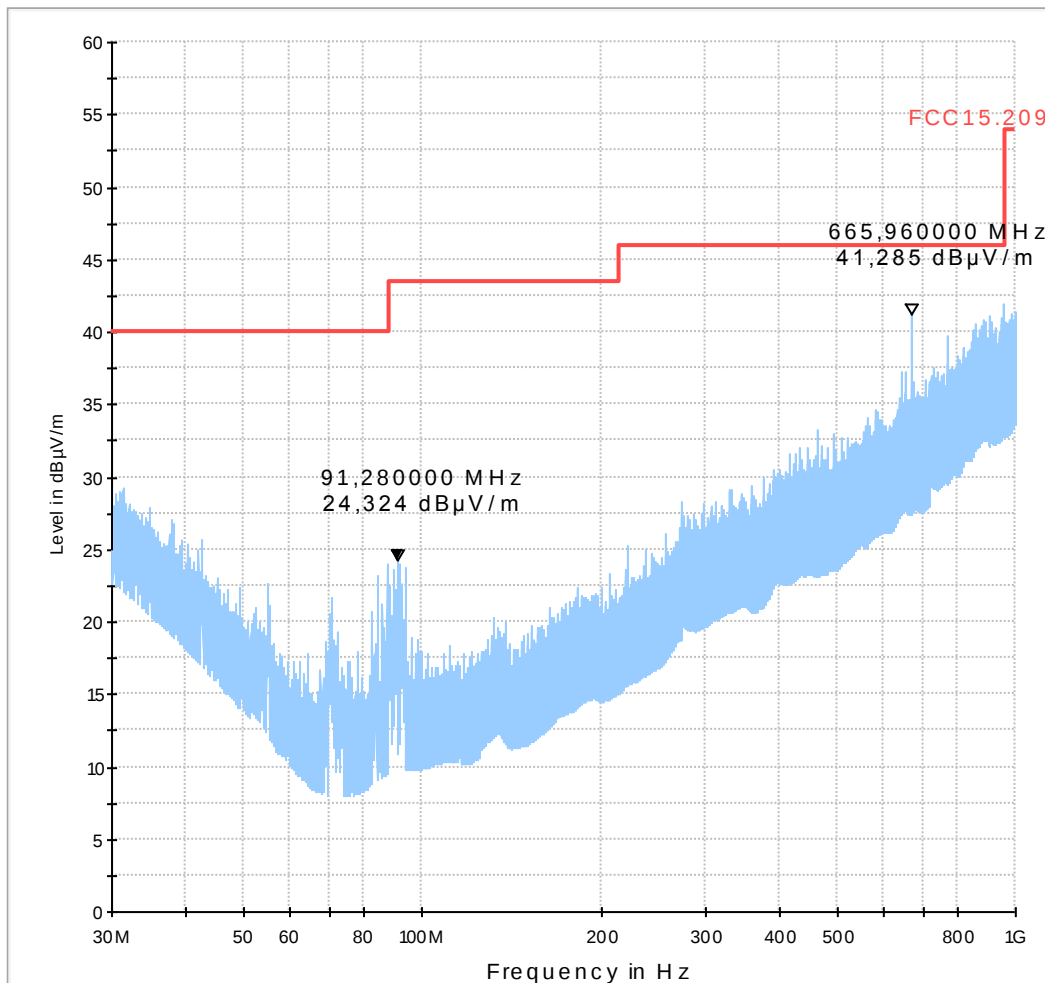
Diagram No. 3.03a_RSE_BT_3DH5_Ch78

Test description:	28.02.2013 Page 1 of 1
Test site and distance:	Electric Fieldstrength Measurement
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 v8.51.0
Used filter:	--
Test specification.:	lowpass 1200 MHz
	FCC 15.209; RSS-Gen: Issue 3
Operator:	HLA
Operating conditions:	BT v2.0/v2.1+EDR; Ch 78+ 3DH5
Comment 1:	3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

01_FCC15.209_hor+vert_KP0



6.3 Frequency range 1 GHz - 18 GHz

Diagram No.: 8.01_RSE_CH0_3DH3

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
Test-SW	EMC32v8.53.0
Operator Name:	Tas/KRe
Comment:	Humidity: 26%rH; Temperature: 20°C
Op. Mode:	Bluetooth v2.01/2.1+EDR, Ch0, 3-DH3
	3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

Final Result 2

Frequency (MHz)	Average (dBµV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
4804.100000	44.5	100.0	1000.000	155.0	H	4.0	90.0	4.9	9.5

Frequency (MHz)	Limit (dBµV/m)	Comment
4804.100000	54.0	

00431_SM1_KP1_BT_5ms

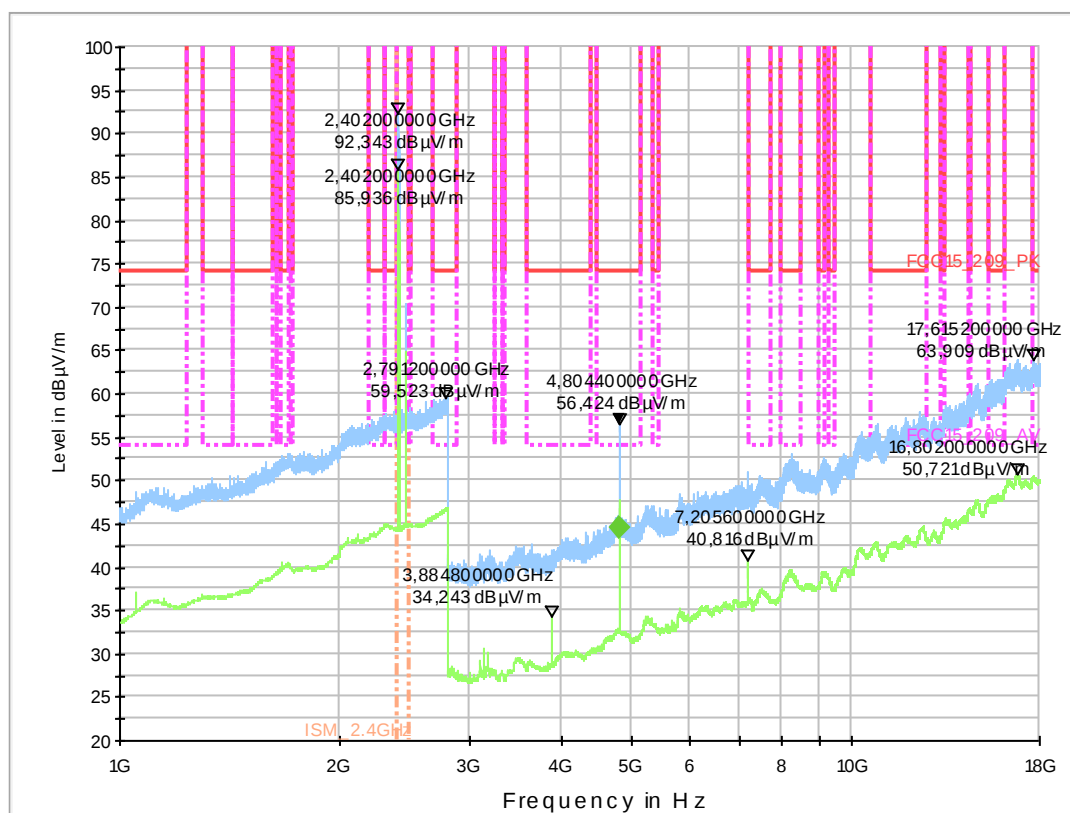


Diagram No.: 8.02_RSE_CH39_3DH1

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
 Test-SW: EMC32 v8.53.0
 Operator Name: Tas/KRe
 Comment: Humidity: 26%rH; Temperature: 20°C
 Op. Mode: Bluetooth v2.01/2.1+EDR, Ch39, 3-DH1
 3-0053-12-21-2c

EUT Information

EUT Name: Navigation and Conenctivity Box
 Manufacturer: Harman International Industries (Automotive Division)
 Serial Number: Automotive radio ID #25; Ext. Connectivity Box TEB CY13
 Hardware Rev: Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
 Software Rev: Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
 Comment: Power supply during the test is nominal 13,2 V DC

Final Result 1

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time	Bandwidth h (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margi n (dB)
17764.900000	61.4	100.0	1000.000	155.0	H	-38.0	0.0	25.8	12.6

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

Frequency (MHz)	Limit (dBµV/m)	Comment
17764.900000	74.0	

00431_SM1_KP1_BT_5ms

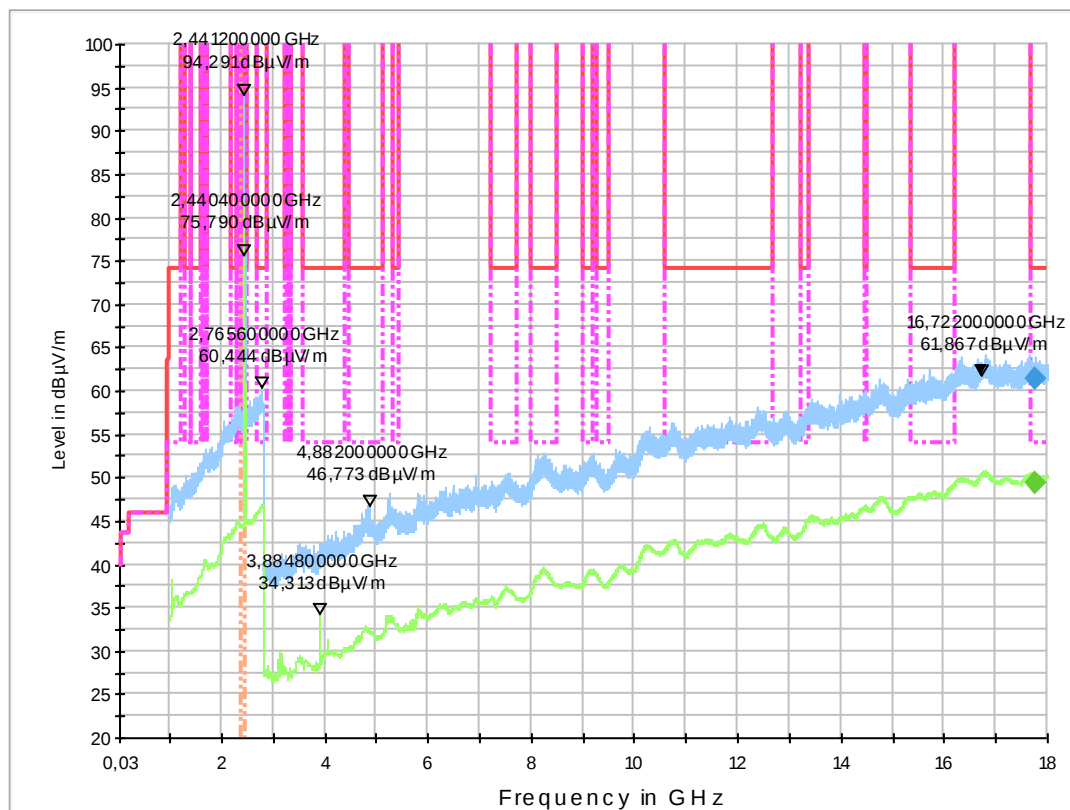


Diagram No.: 8.03_RSE_CH39_3DH5

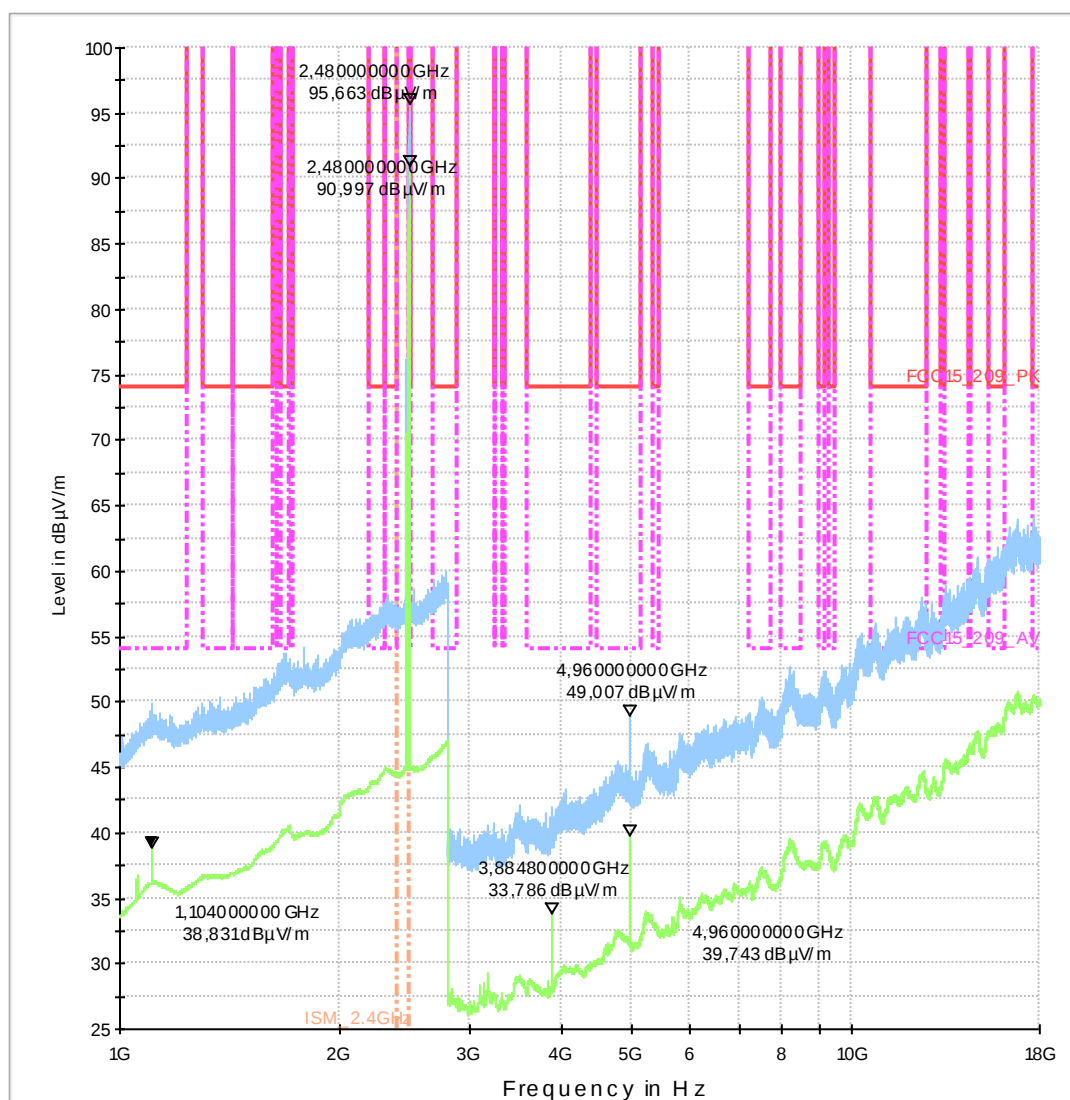
Common Information

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
Test-SW	EMC32 v8.53.0
Operator Name:	HLA
Comment:	Humidity: 26%rH; Temperature: 20°C
Op. Mode:	Bluetooth v2.01/2.1+EDR, Ch78, 3-DH5
	3-0053-12-21-2c

EUT Information

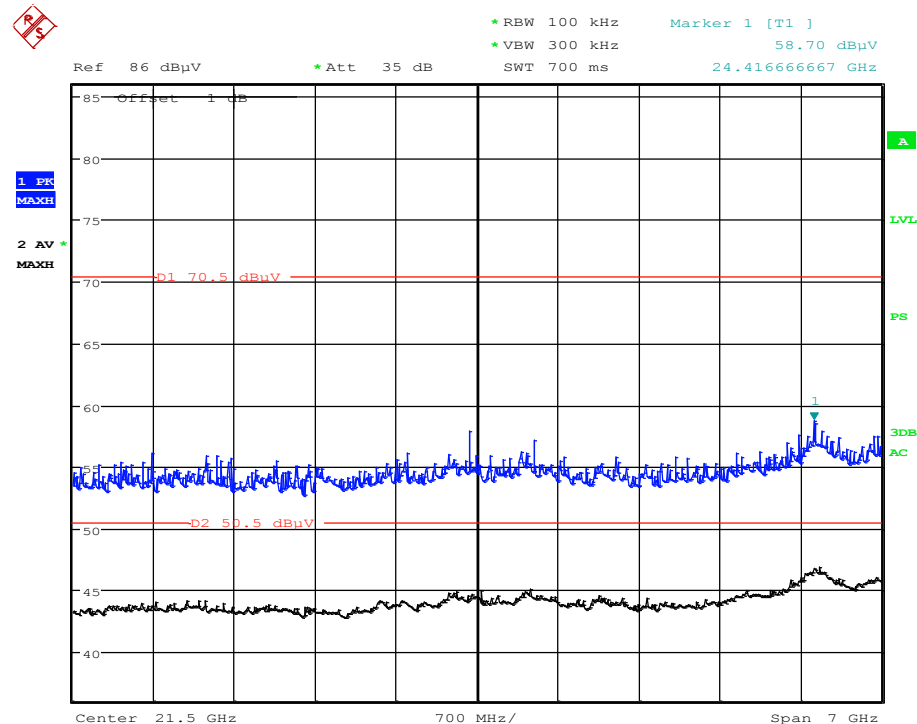
EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

00431_SM1_KP1_BT_5ms



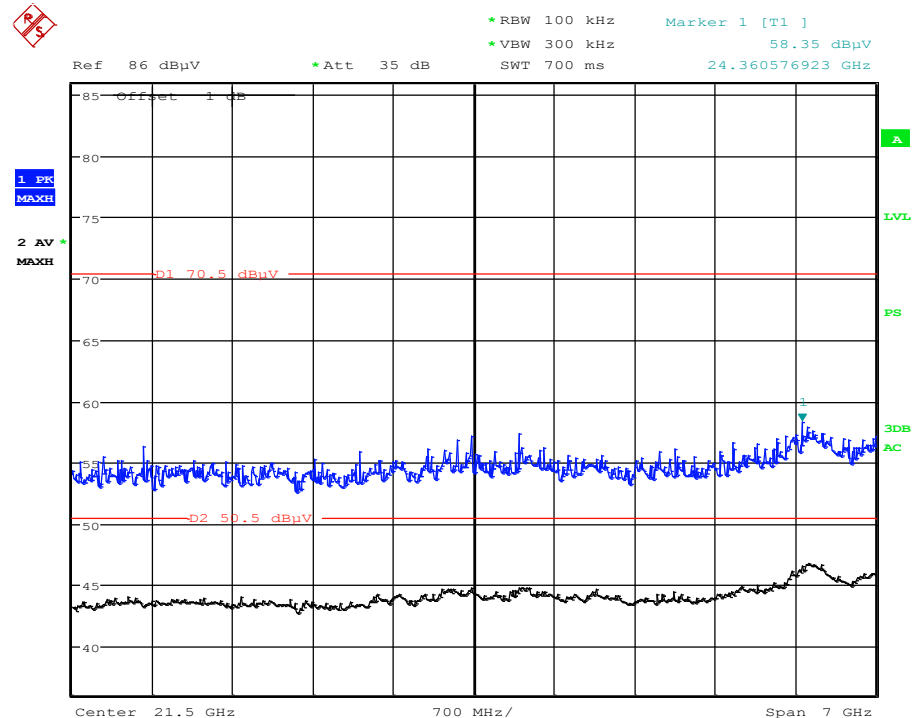
6.4 Frequency range 18 GHz - 25 GHz

3-DH3



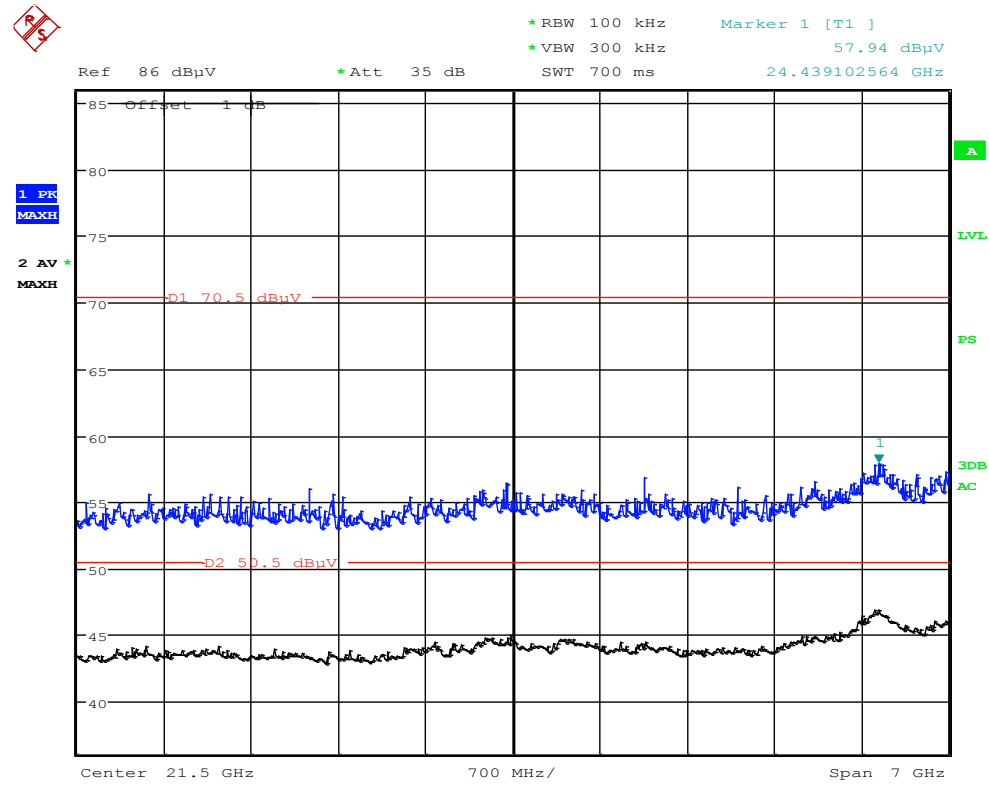
Date: 19.APR.2013 08:20:28

3-DH1



Date: 19.APR.2013 08:22:24

3-DH5



Date: 19.APR.2013 08:18:31

7. Radiated band-edge measurements accord. §15.209 & §15.205

Diagram No.: 9.01_BE_R_Ch0_3DH5

Common Information

Test Description:	Band-Edge 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
Test-SW:	EMC32 v8.53.0
Operator Name:	Tas/Kre
Comment:	Humidity: 40%rH; Temperature: 20°C
Op. Mode:	Bluetoothv 2.01/2.1+EDR, Ch0, 3-DH5 3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

08_ESU_2.4GHz_Low_Band_Edge_PA0

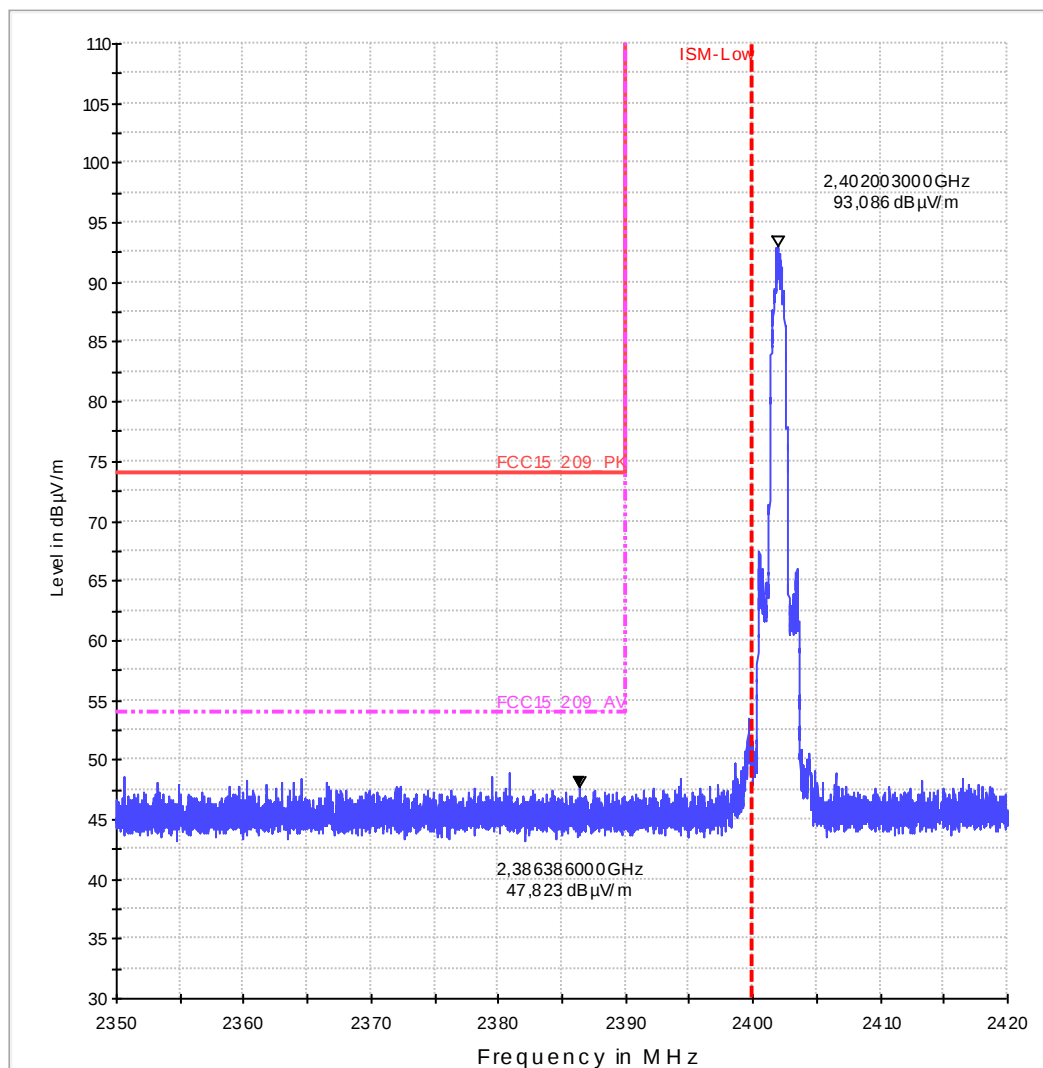


Diagram No.: 9.02_BE_R_Ch78_3DH5

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
Test-SW:	EMC32 v8.53.0
Operator Name:	KRe
Comment:	Humidity: 26%rH; Temperature: 20°C
Op. Mode:	Bluetooth v2.01/2.1+EDR, Ch78, 3-DH5

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

09_ESU_2.4GHz_High_Band_Edge_PA0

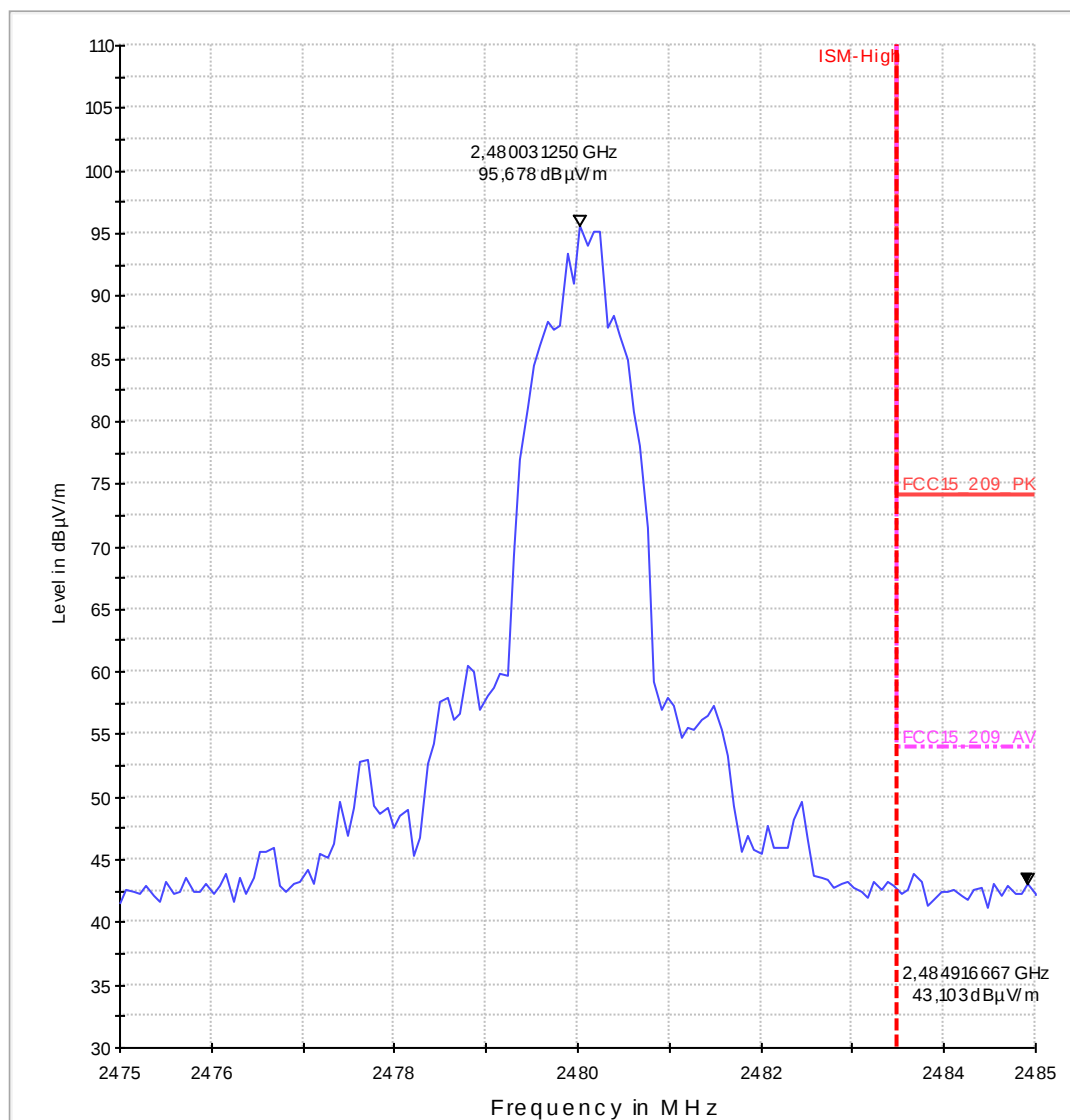


Diagram No.: 9.04_Ch0_DH5

Common Information

Test Description:	Band-Edge 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:	Tas/Kre
Comment:	Humidity: 30%rH; Temperature: 22°C
Op. Mode:	Bluetooth v1.1/1.2, Ch 0, DH5 (GFSK) 3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

08_ESU_2.4GHz_Low_Band_Edge_PA0

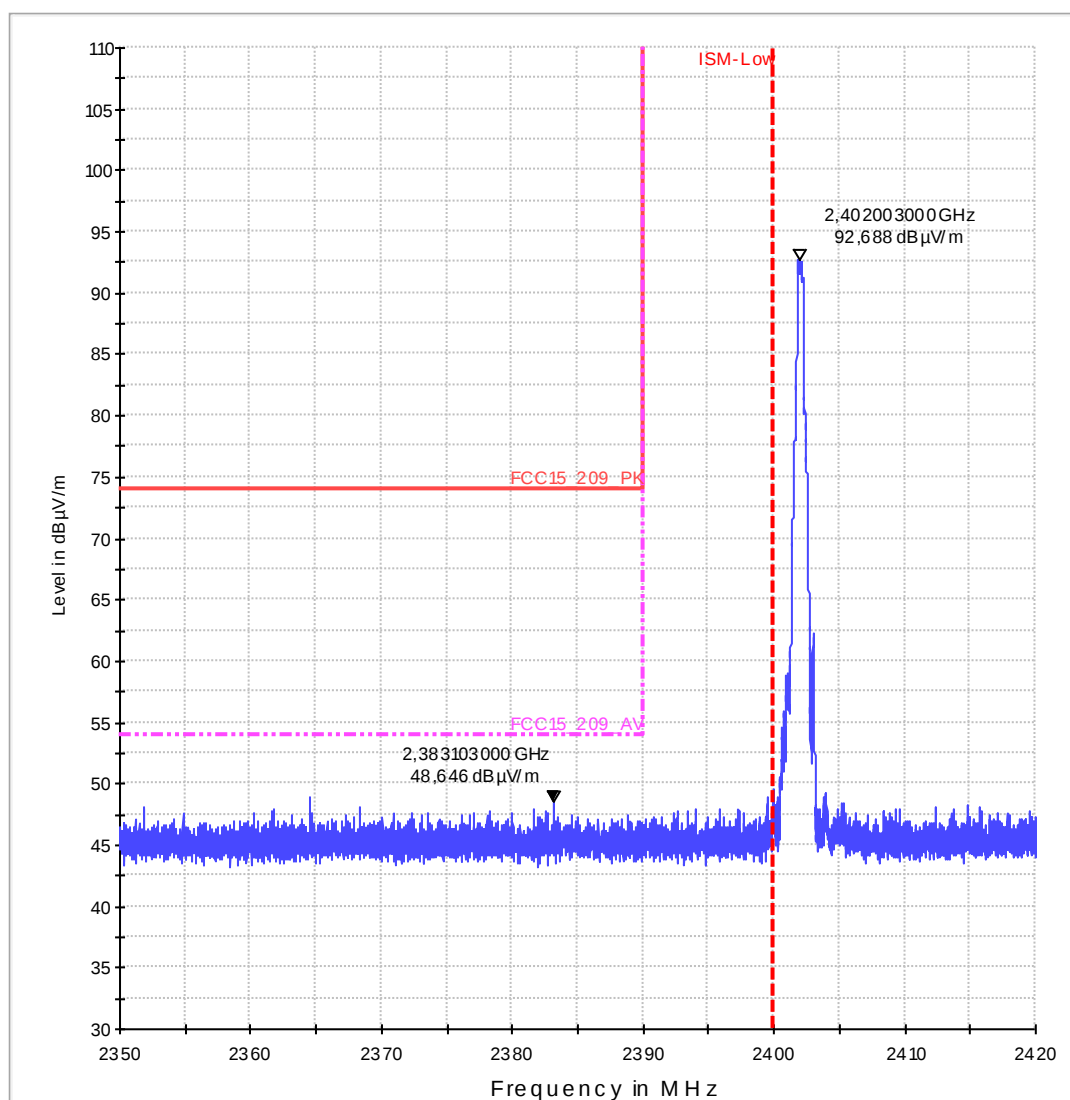


Diagram No.: 9.05_Ch78_DH5

Common Information

Test Description:	Band-Edge 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:	Tas/Kre
Comment:	Humidity: 30%rH; Temperature: 22°C
Op. Mode:	Bluetooth v1.1/1.2, Ch 78, DH5 (GFSK)
	3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

09_ESU_2.4GHz_High_Band_Edge_PA0

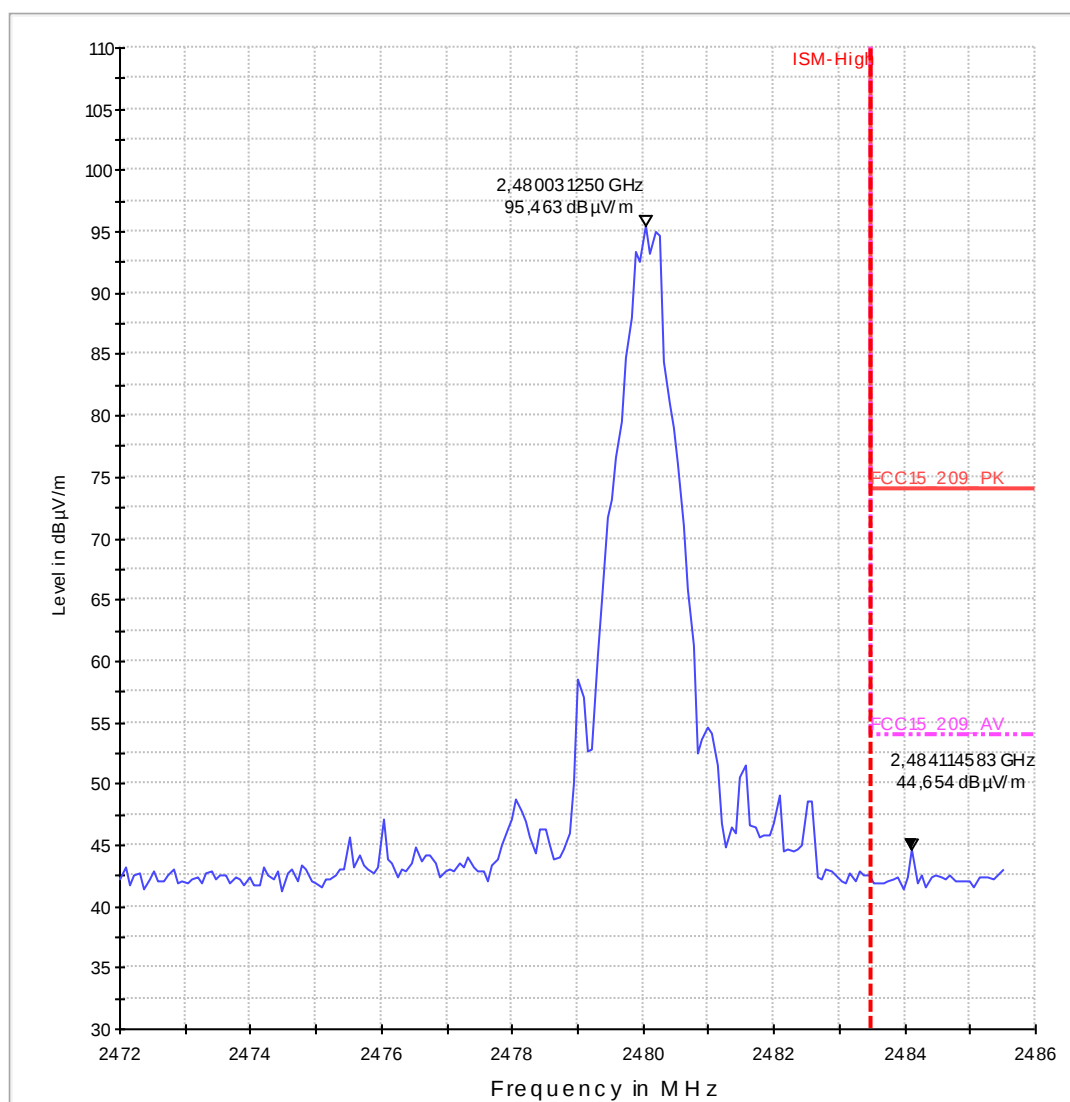


Diagram No.: 9.06_Ch0_2DH5

Common Information

Test Description:	Band-Edge 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:	Tas/Kre
Comment:	Humidity: 30%rH; Temperature: 22°C
Op. Mode:	Bluetooth v1.1/1.2, Ch 0, 2DH5
	3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

08_ESU_2.4GHz_Low_Band_Edge_PA0

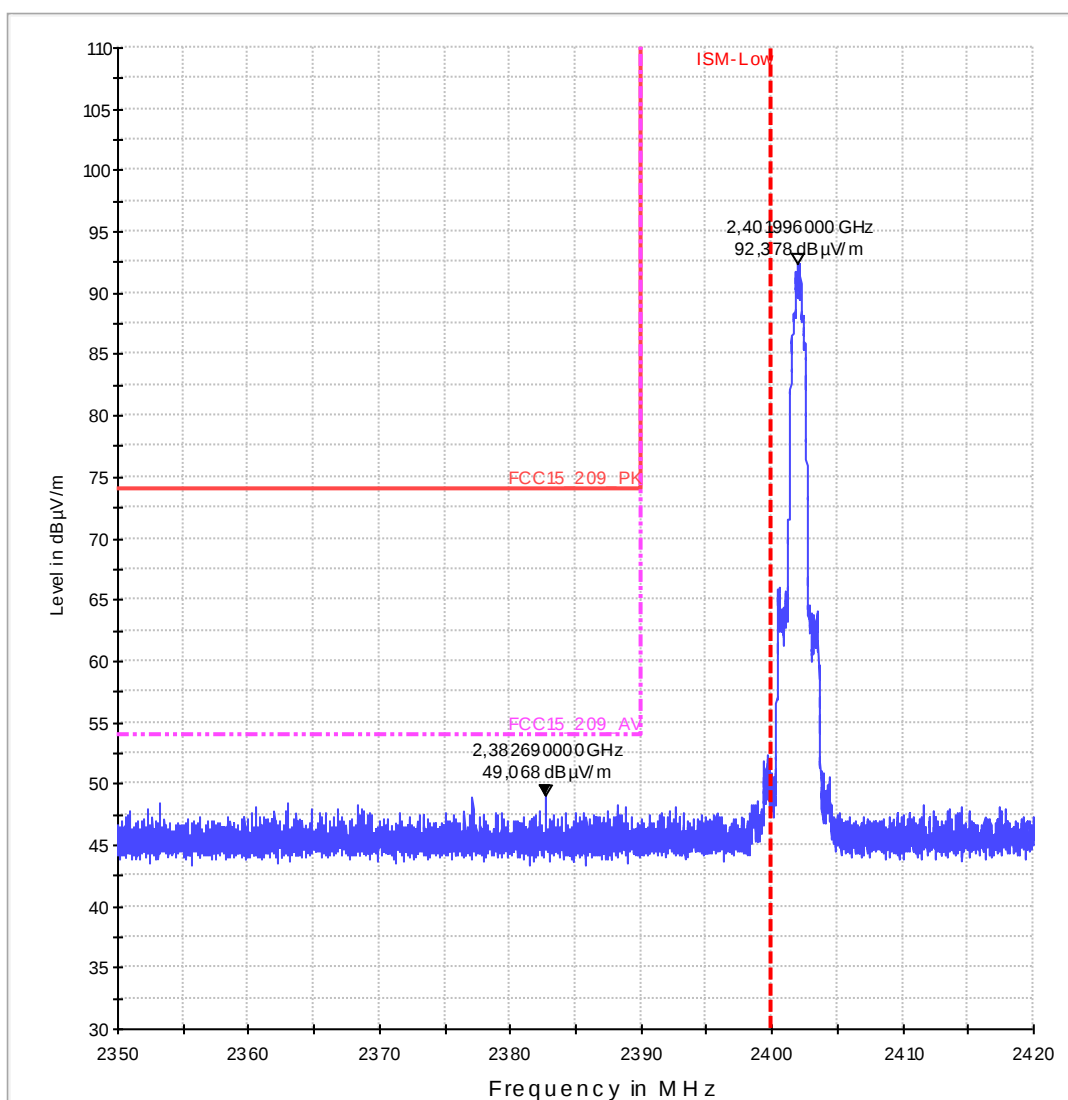


Diagram No.:9.07_Ch78_2DH5

Common Information

Test Description:	Band-Edge 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:	Tas/Kre
Comment:	Humidity: 30%rH; Temperature: 22°C
Op. Mode:	Bluetooth v2.0/2.1, Ch 78, 2DH5 (Pi/4-DQPSK)
	3-0053-12-21-2c

EUT Information

EUT Name:	Navigation and Conenctivity Box
Manufacturer:	Harman International Industries (Automotive Division)
Serial Number:	Automotive radio ID #25; Ext. Connectivity Box TEB CY13
Hardware Rev:	Ext. connectivity box Type 7728/EU_TURKEY #416 (BT)
Software Rev:	Automotive radio 120980-1 (2012/10/2), ext. Con. Box 1.4.6 L
Comment:	Power supply during the test is nominal 13,2 V DC

09_ESU_2.4GHz_High_Band_Edge_PA0

