Annex 1: Measurement diagrams
to
TEST REPORT
No.: 2-0023-11-1-6b

According to:
FCC-Regulations
Part 22 & Part 24 & Part 27
IC-Regulations
RSS-132 Issue 2 & RSS-133 Issue 5 & RSS-139 Issue 2
RSS-Gen, Issue 3

for

Research In Motion Limited

Smartphone REA71UW
FCC-ID: L6AREA70UW
IC: 2503A-REA70UW

Smartphone REB71UW
FCC-ID: L6AREB70UW
IC: 2503A-REB70UW

Laboratory Accreditation and Listings			
DAkkS 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
Wi Fi ALLIANCE AUTHORIZED RF LABORATORY	CTIA Authorized Test Lab LAB CODE 20011130-00		
accredited according to DIN EN ISO/IEC 17025			

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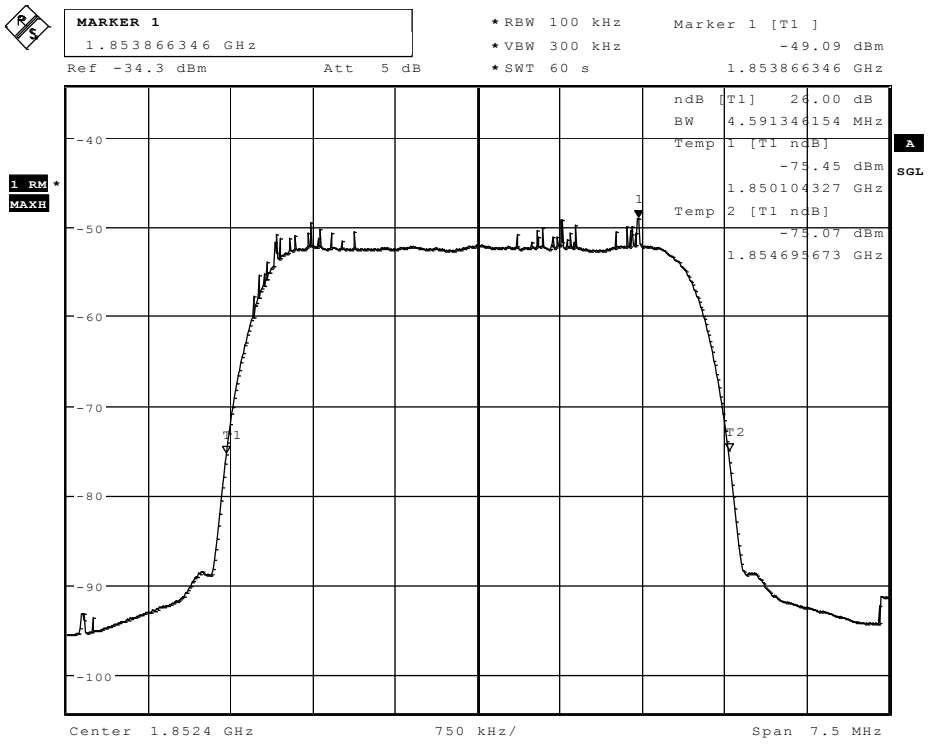
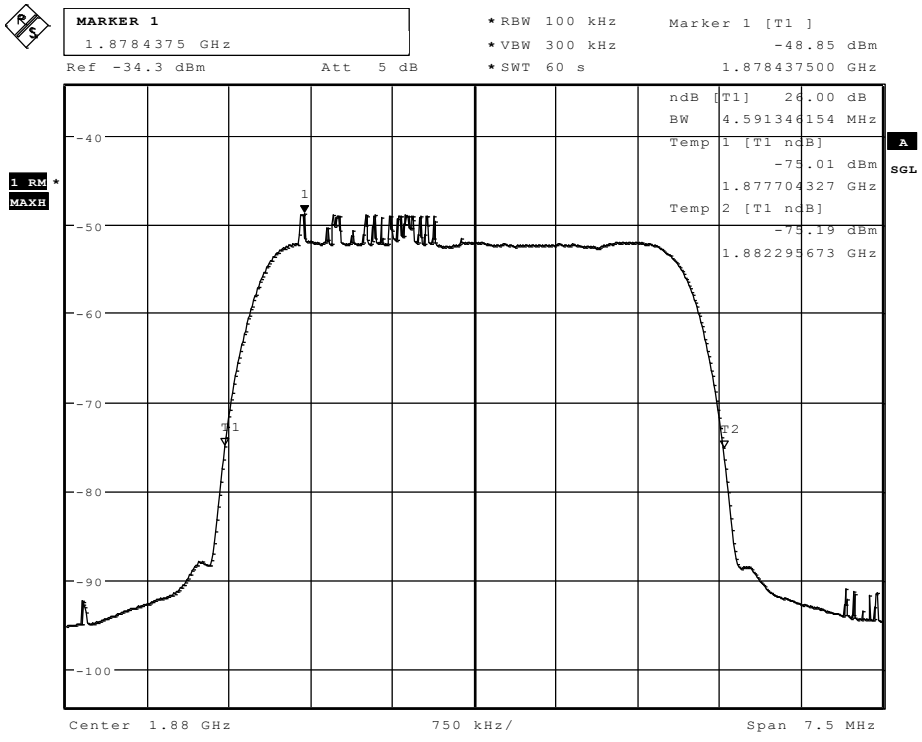
1. Measurement results

1.1. 26dBc Emission bandwidth

1.1.1. FDD Band II – Voice Mode



Channel 9262



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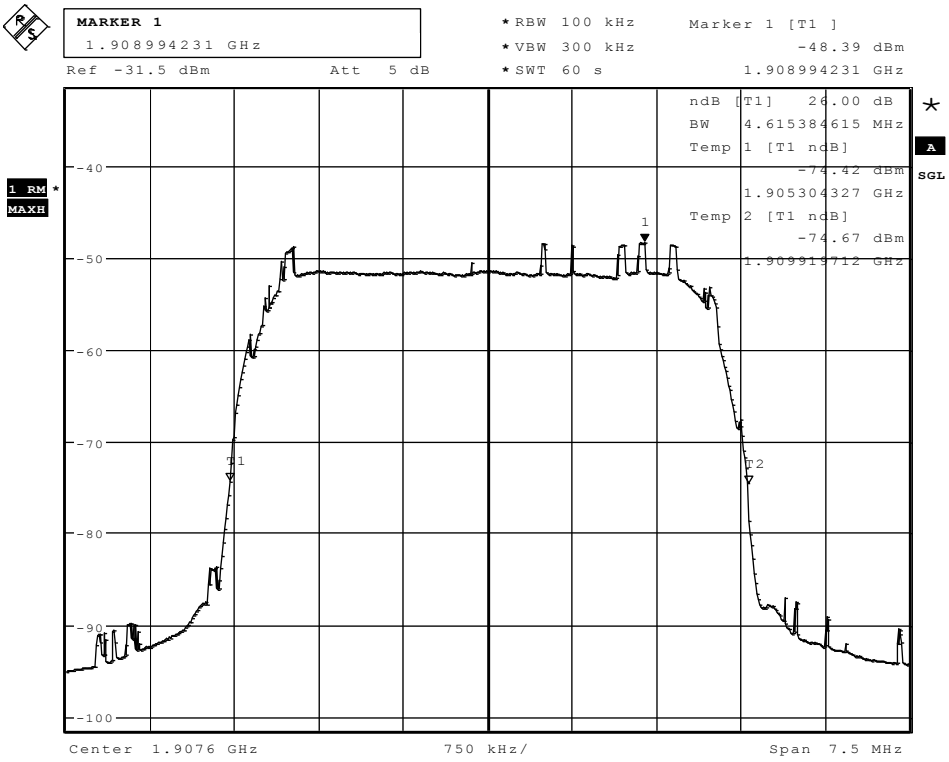
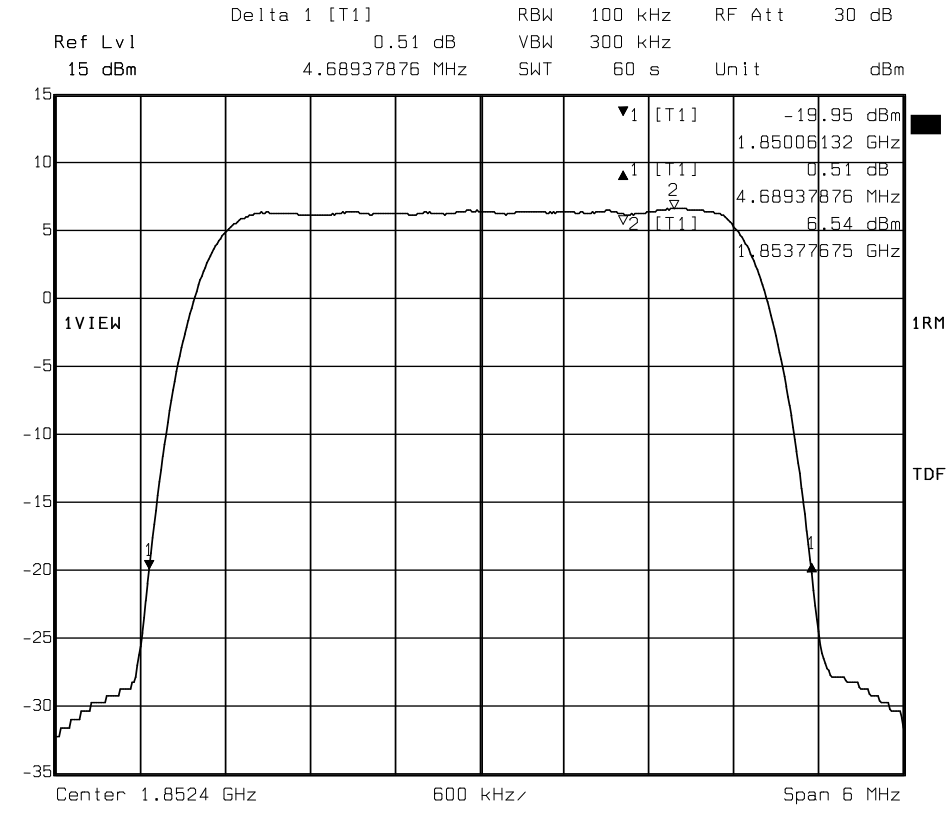


Channel 9538

1.1.2. FDD Band II – HSUPA Mode



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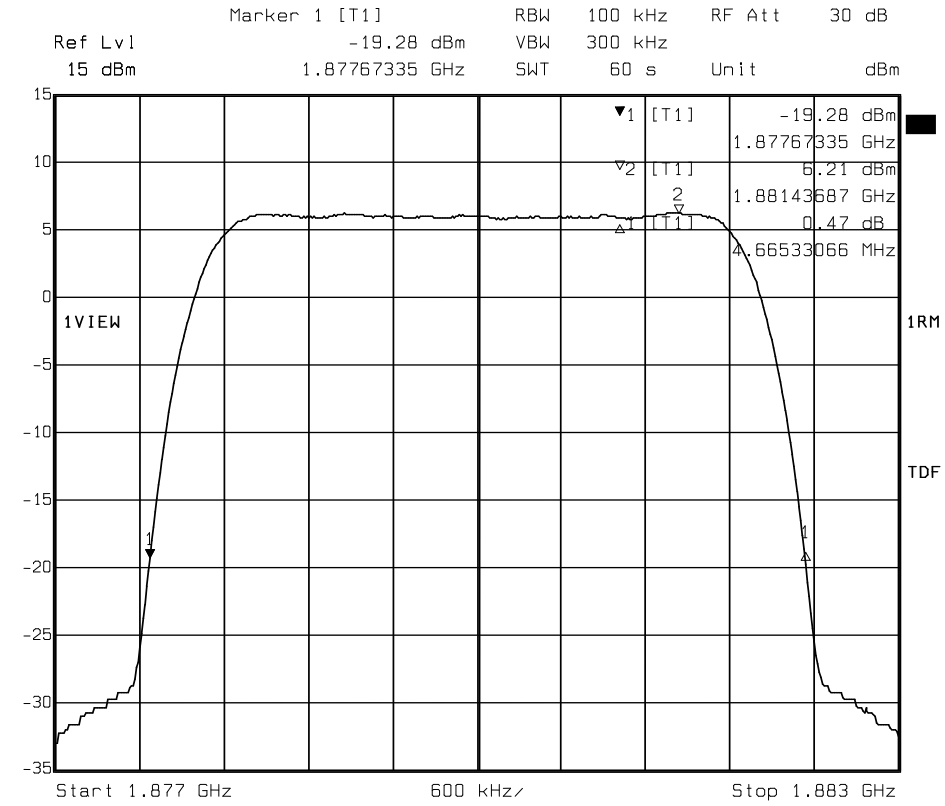

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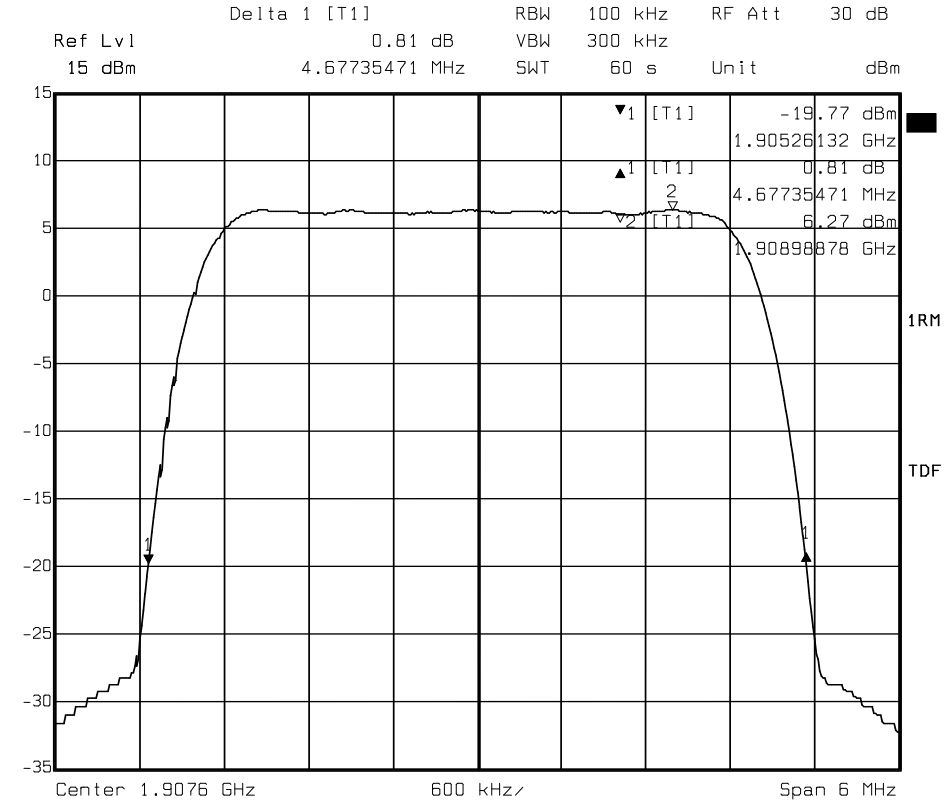

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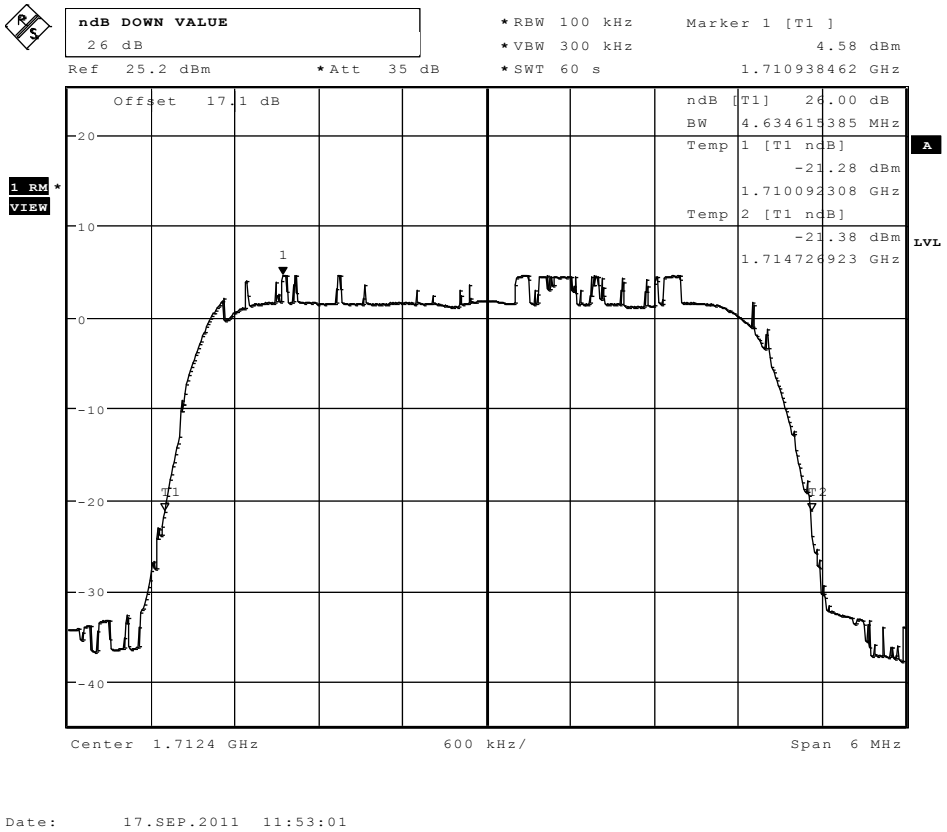

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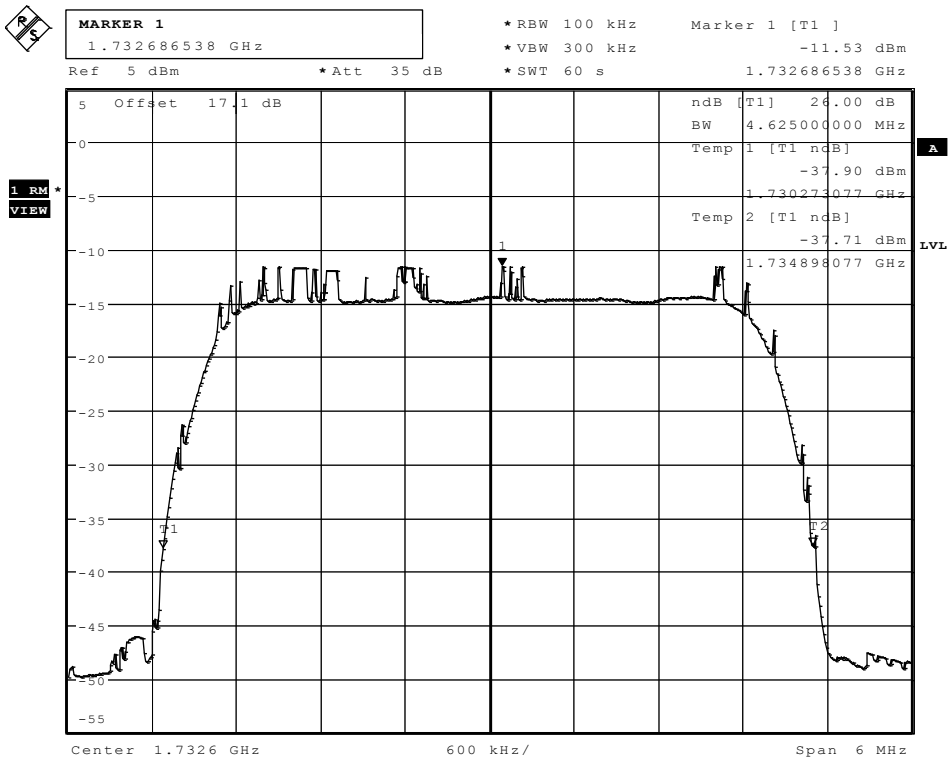

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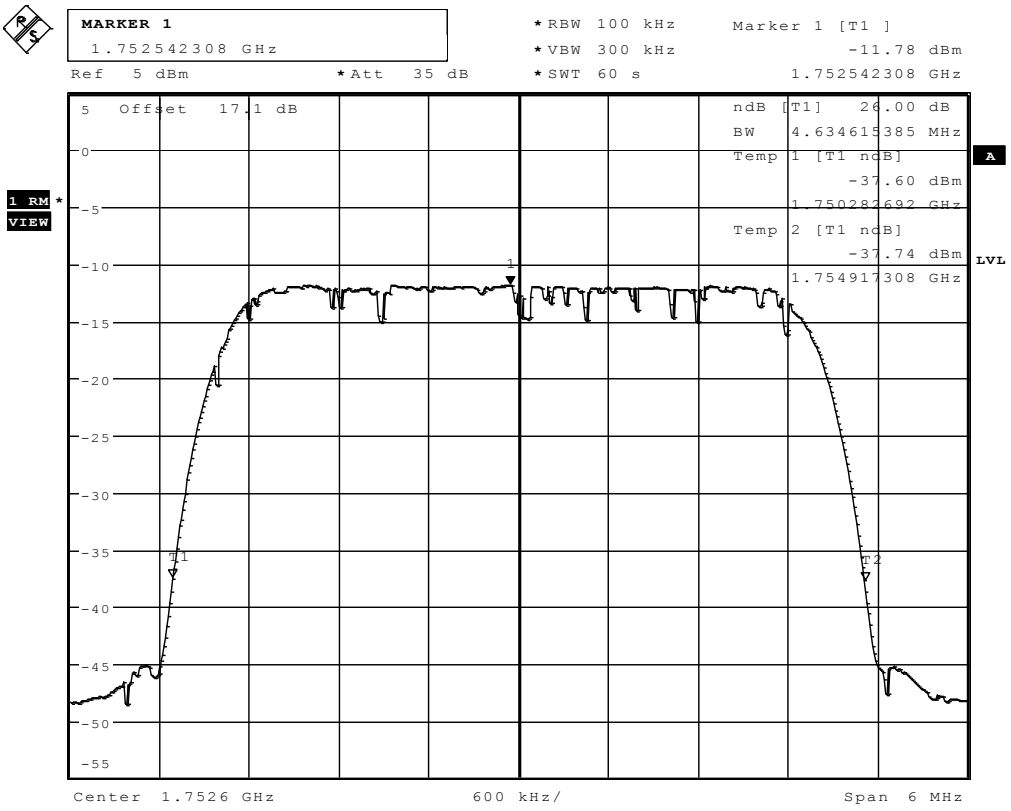

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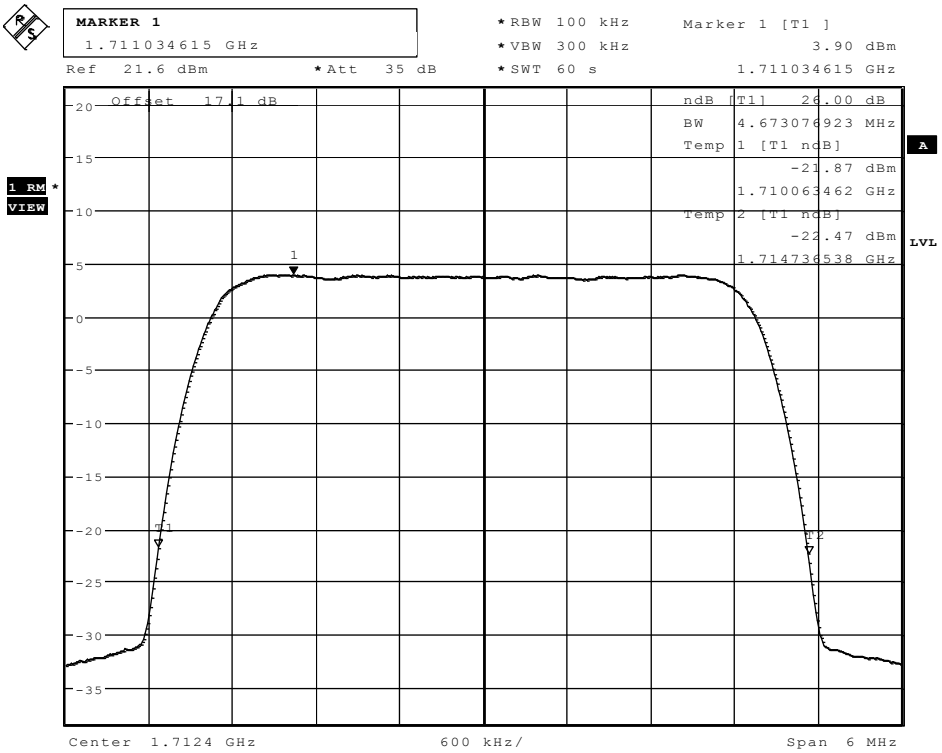
Channel 1513

1.1.4. FDD Band IV – HSUPA Mode



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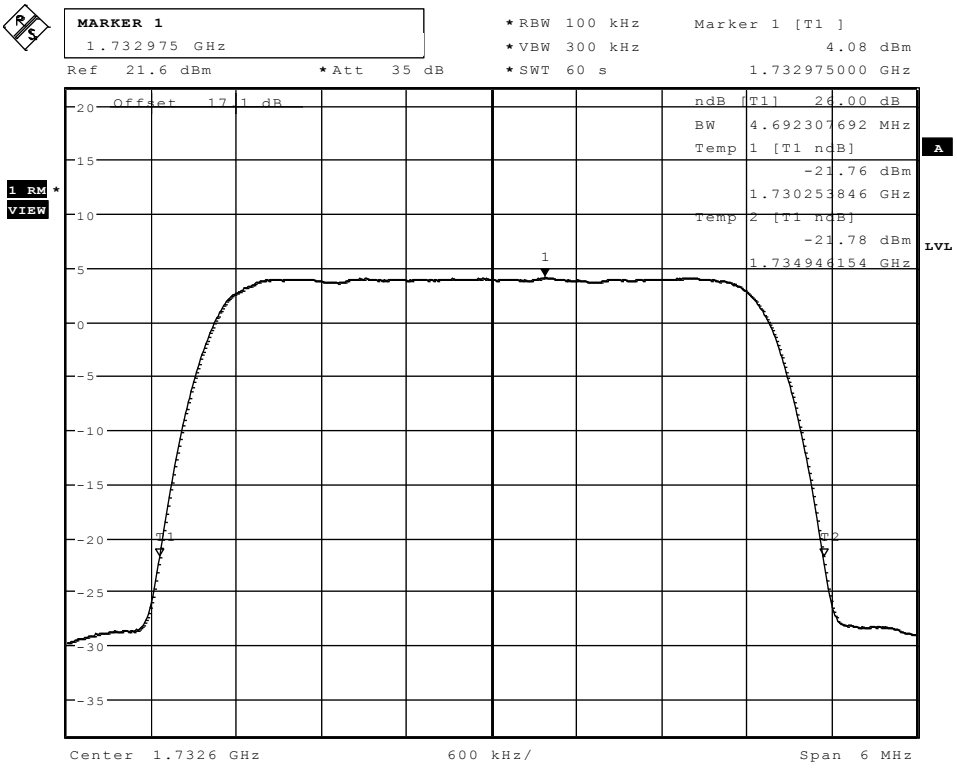

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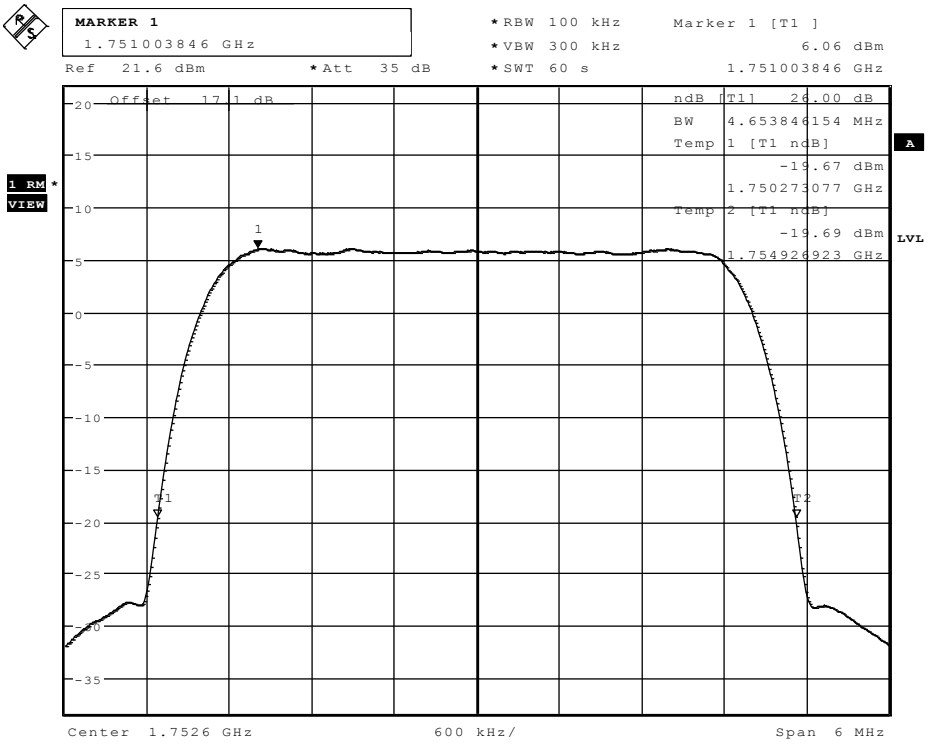

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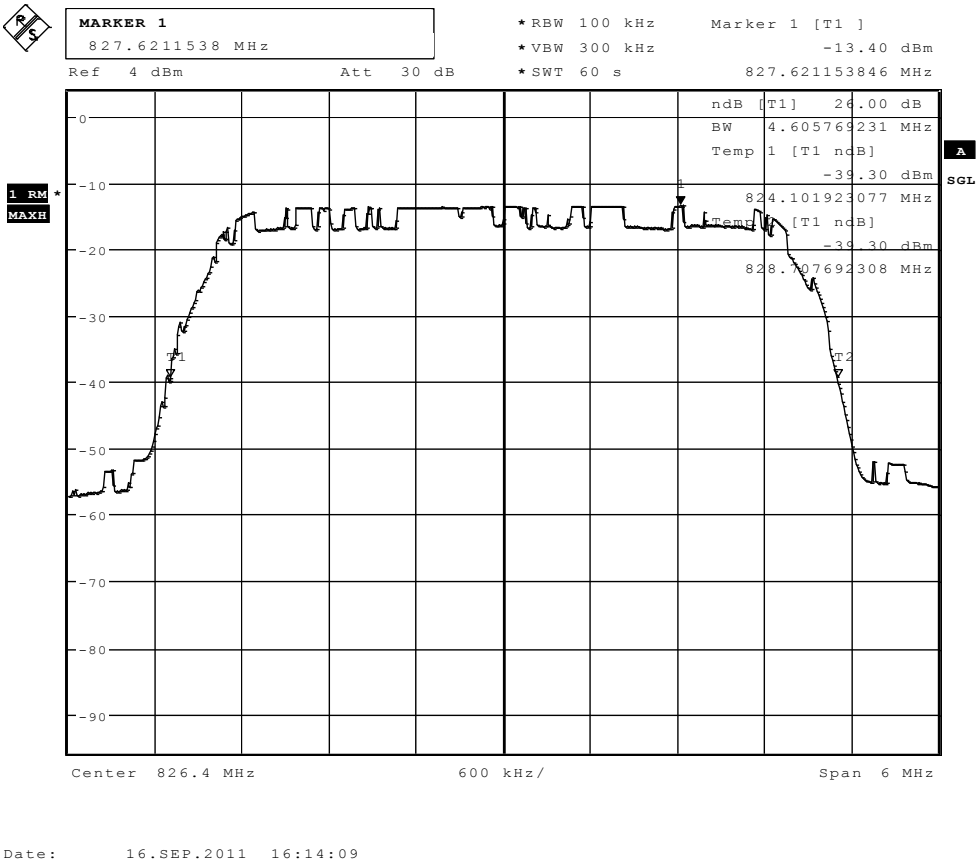
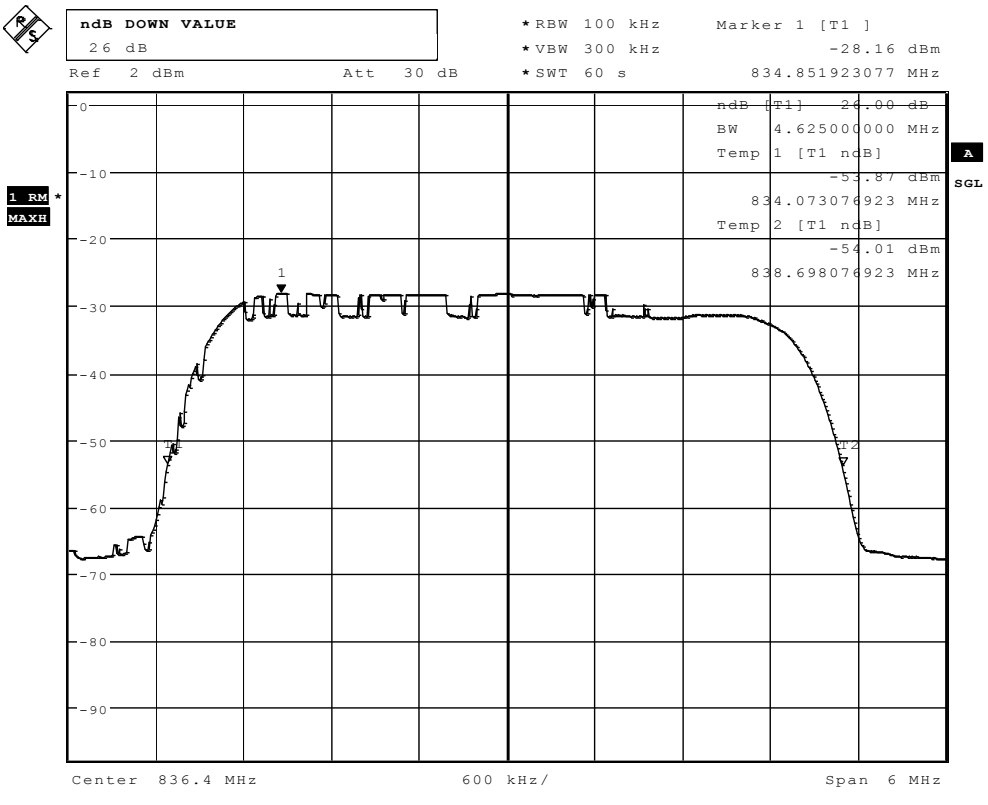
1.1.5. FDD Band V – Voice Mode



Channel 4132



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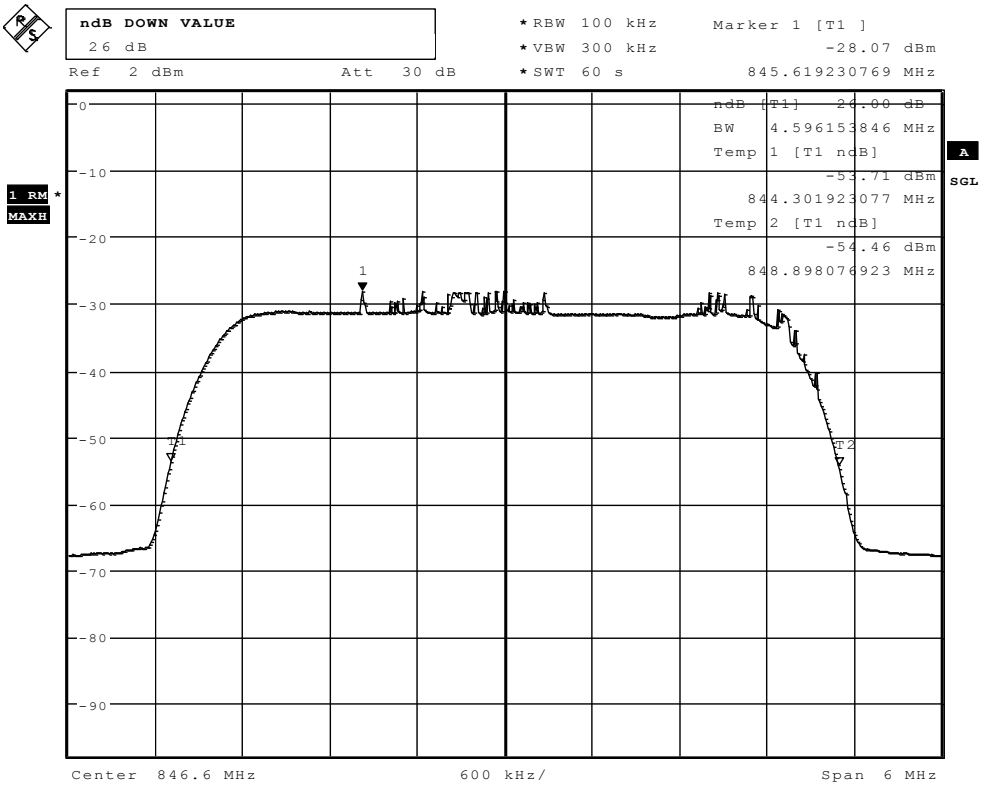
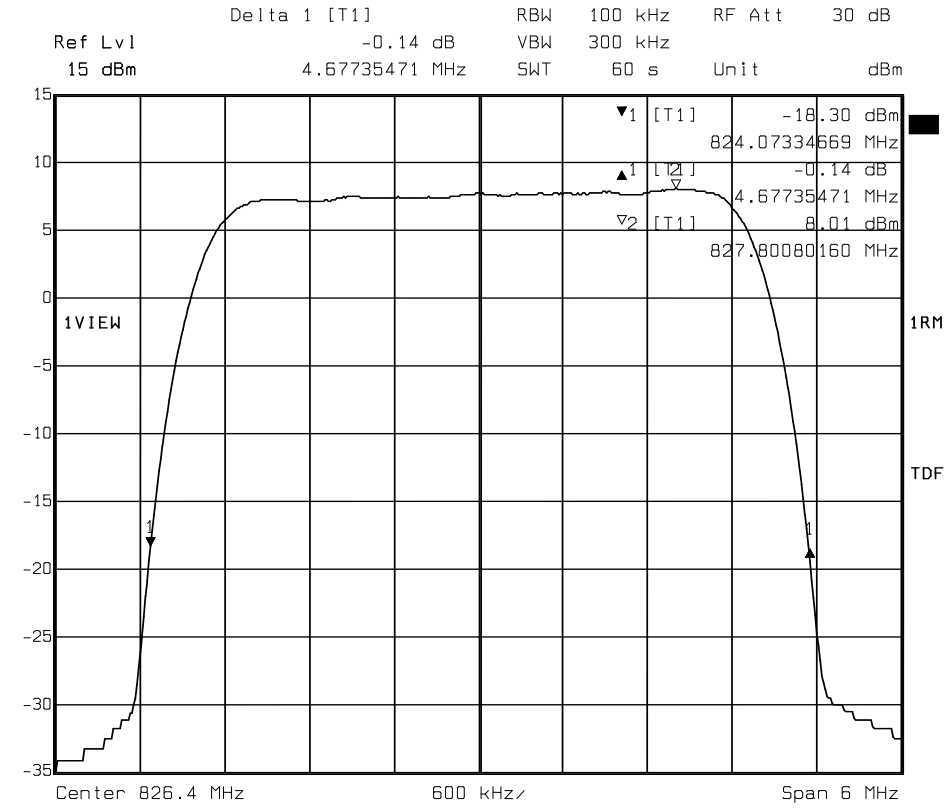


Channel 4233

1.1.6. FDD Band V – HSUPA Mode



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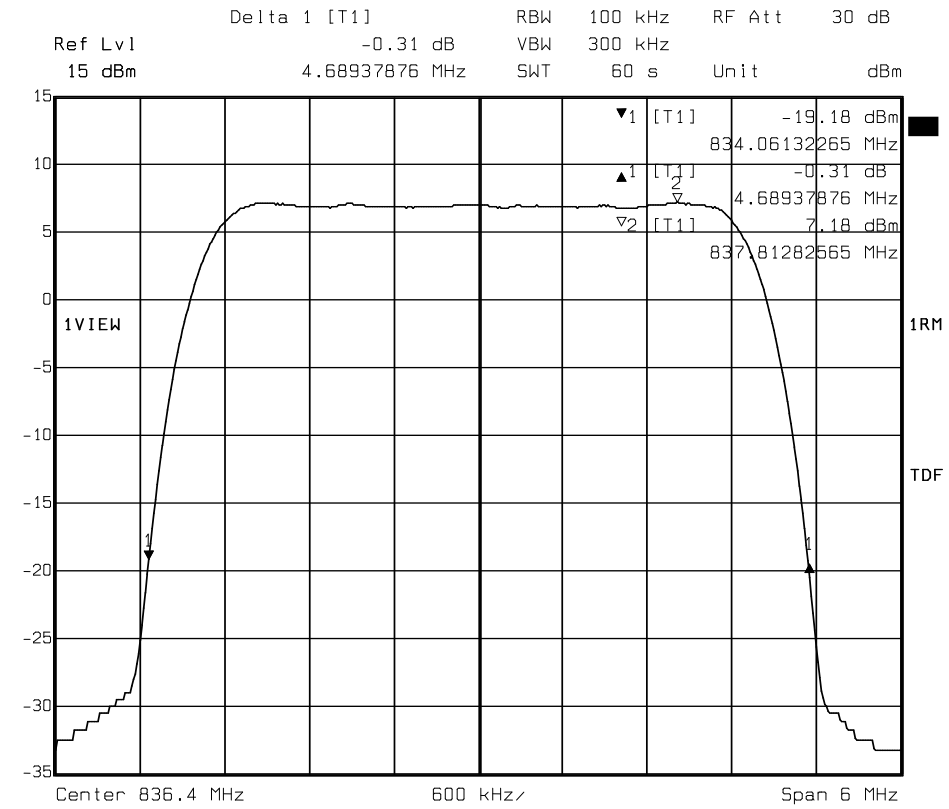

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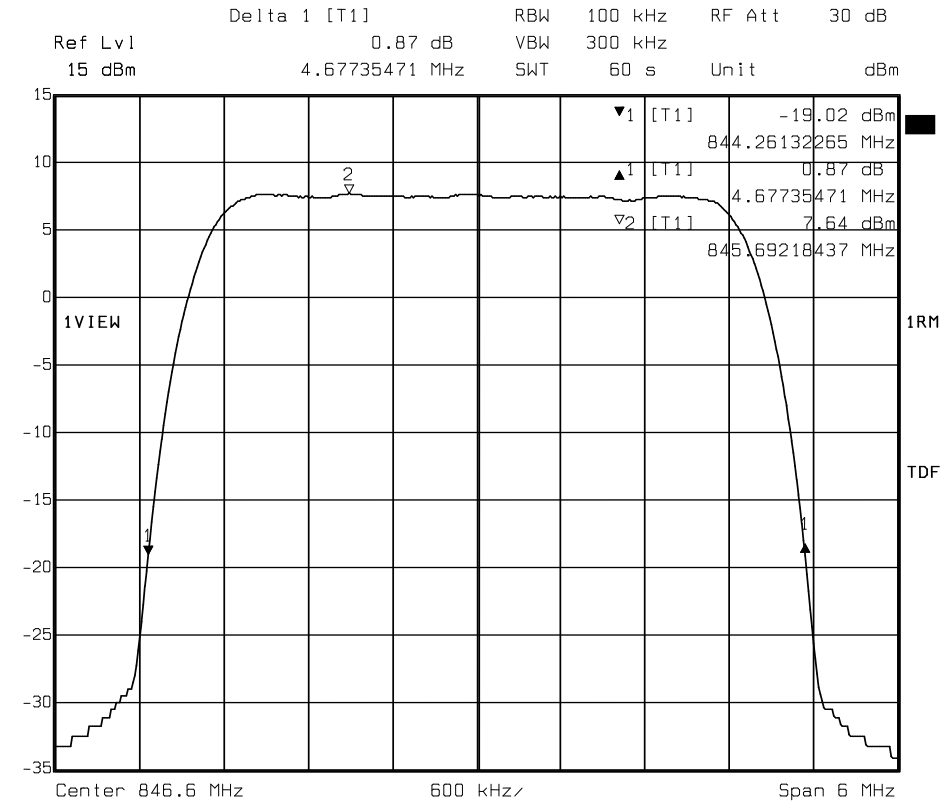
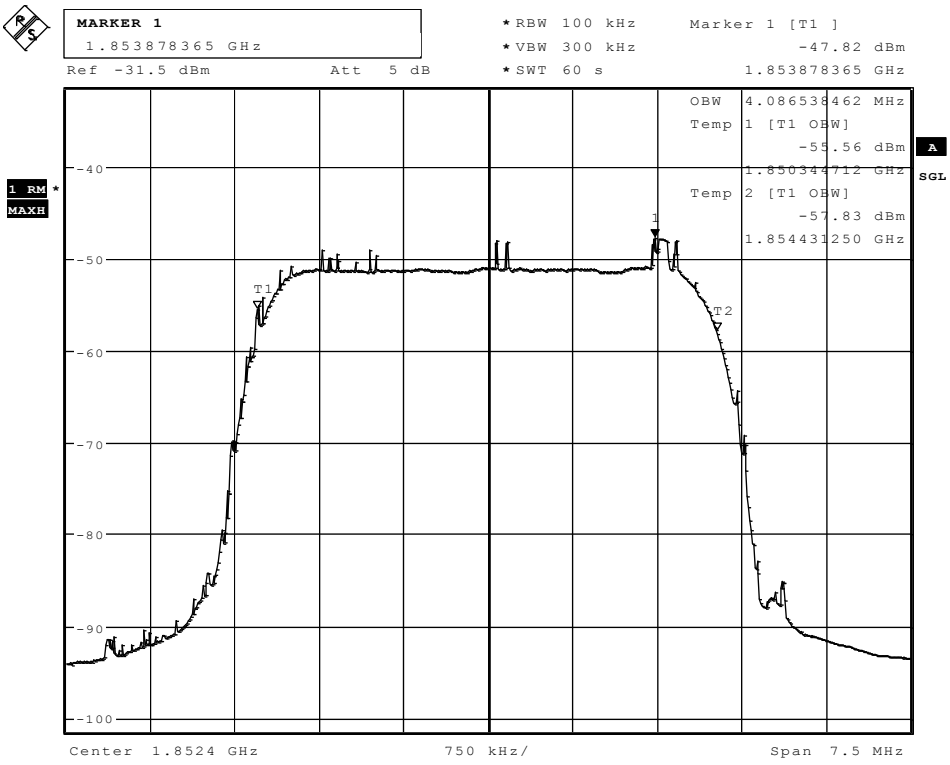


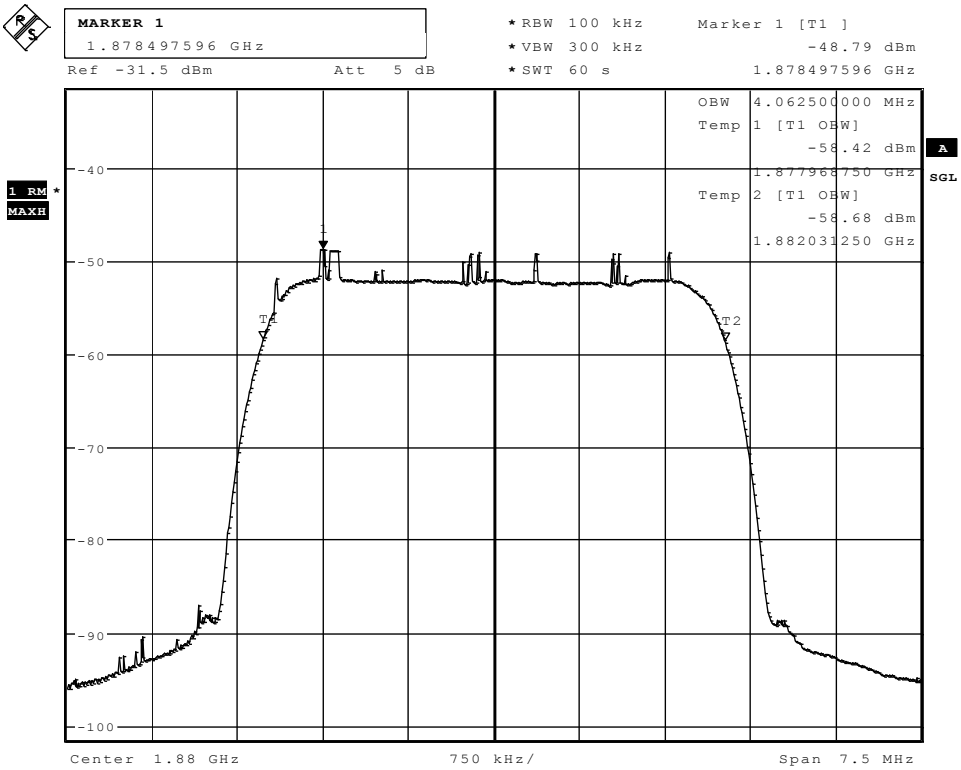
Channel 4233

1.2. 99% Occupied bandwidth

1.2.1. FDD Band II – Voice Mode



Channel 9262



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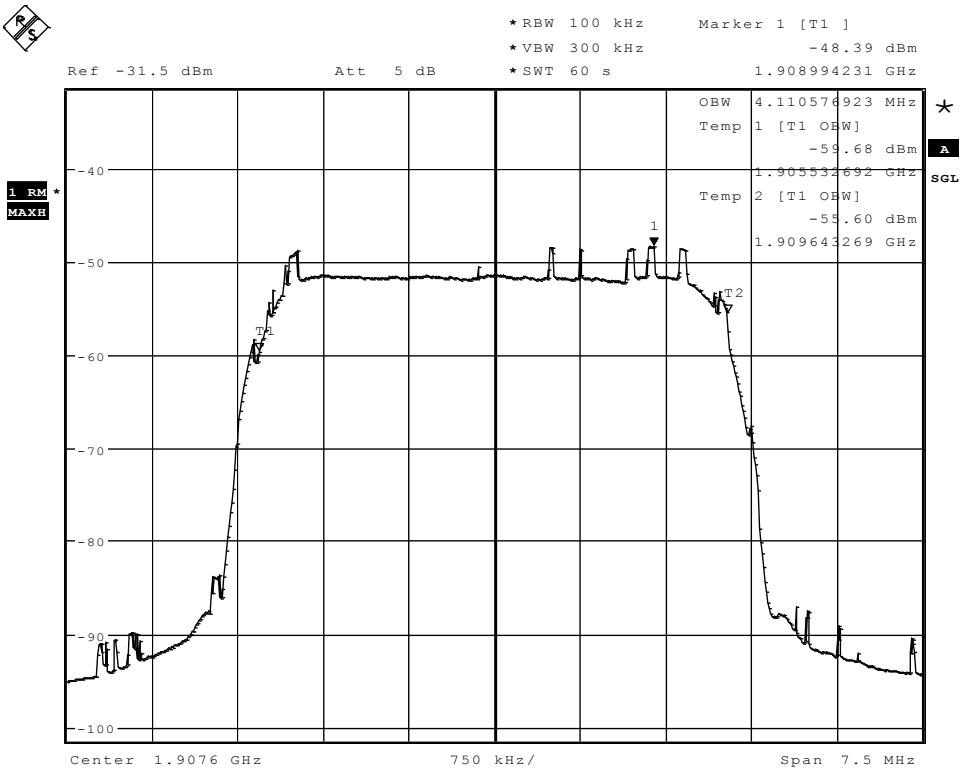
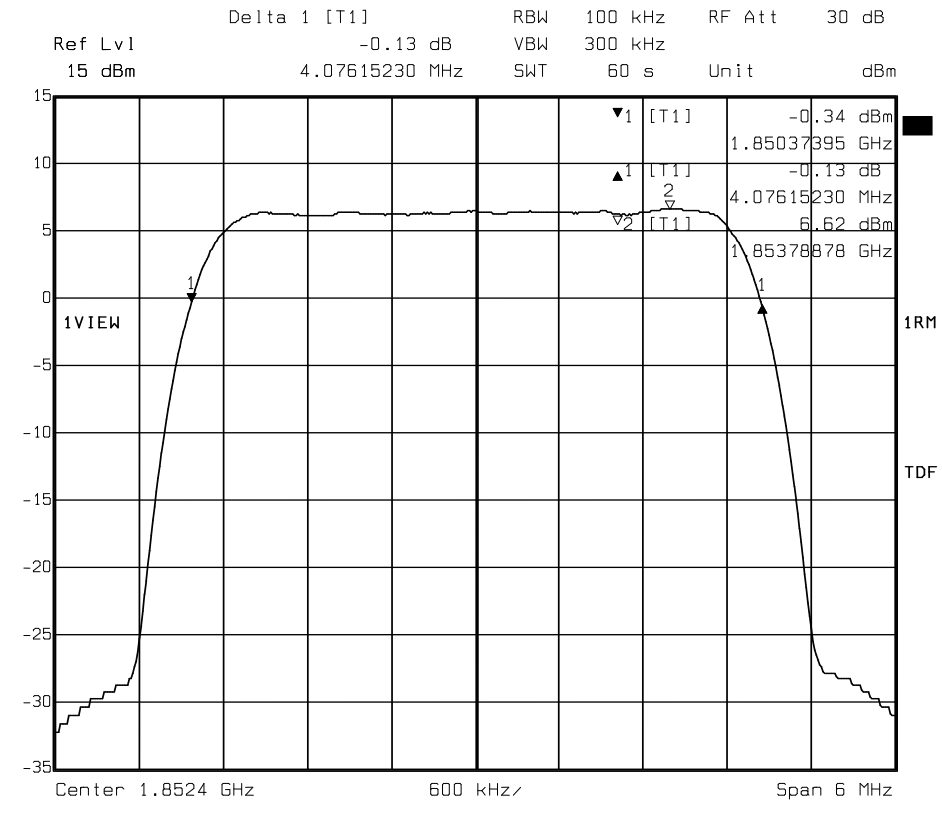


Channel 9538

1.2.2. **FDD Band II – HSUPA Mode**



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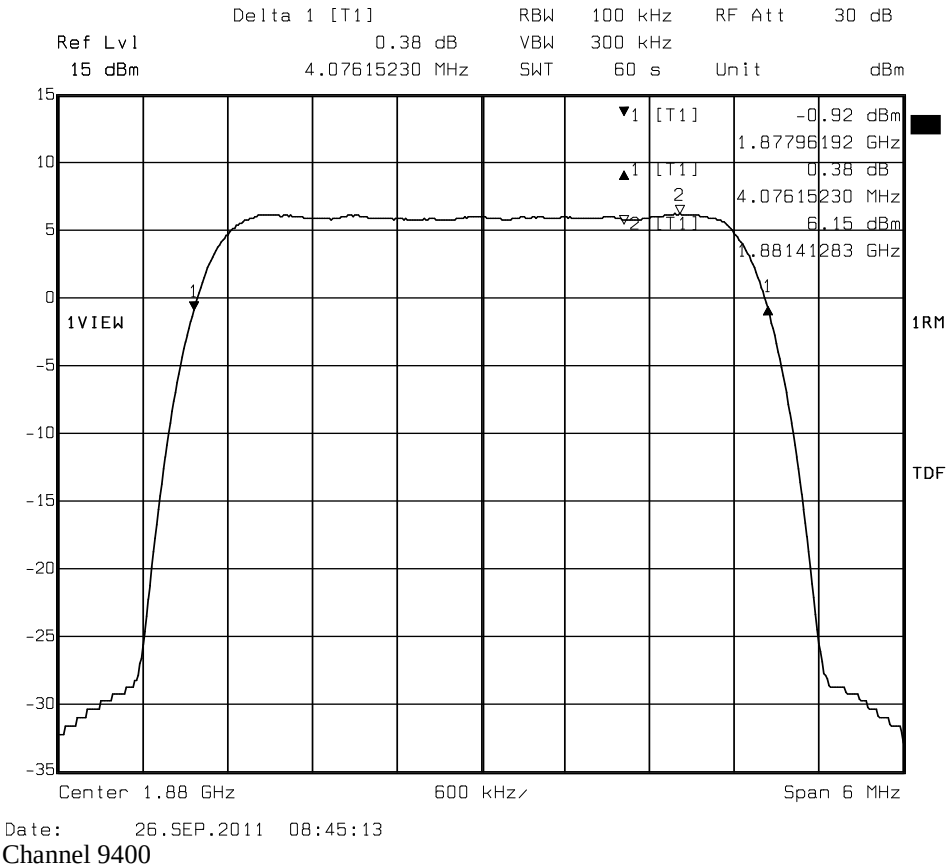

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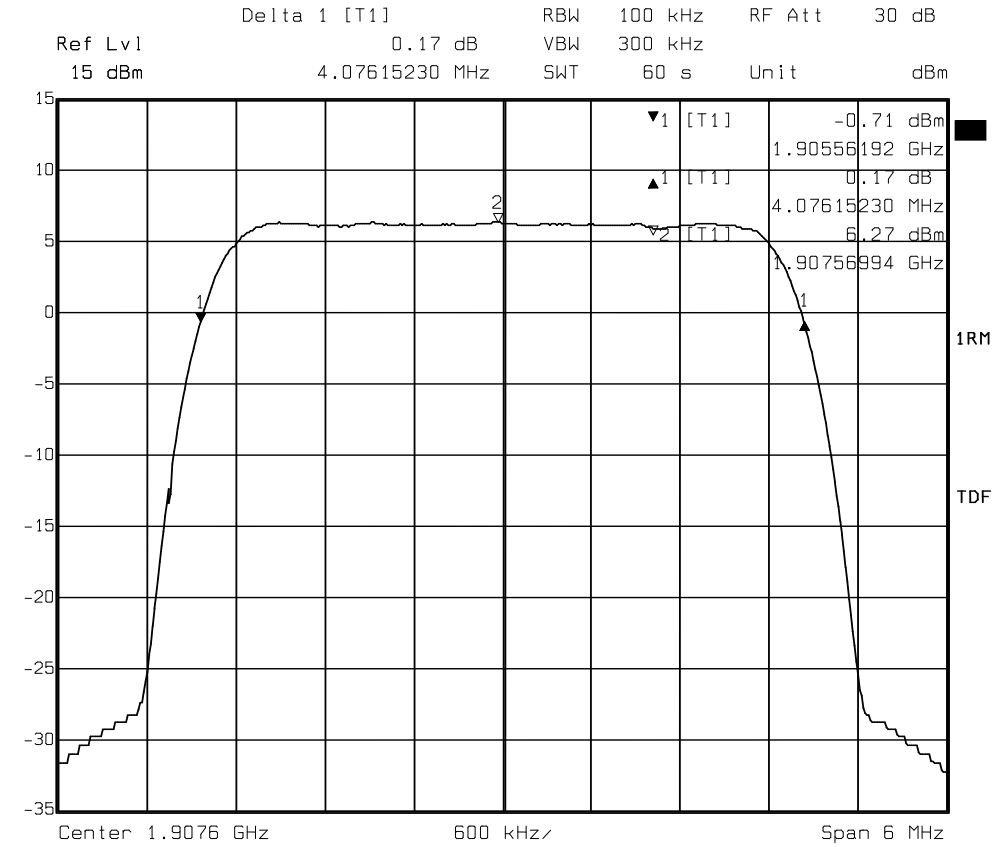
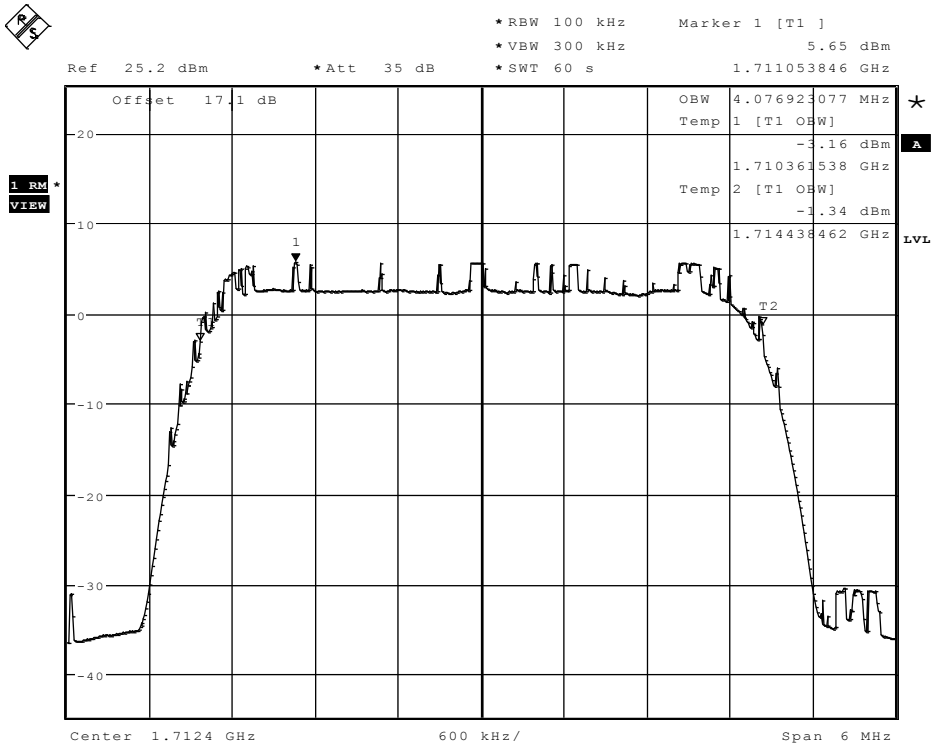


Channel 9538

1.2.3. FDD Band IV – Voice Mode



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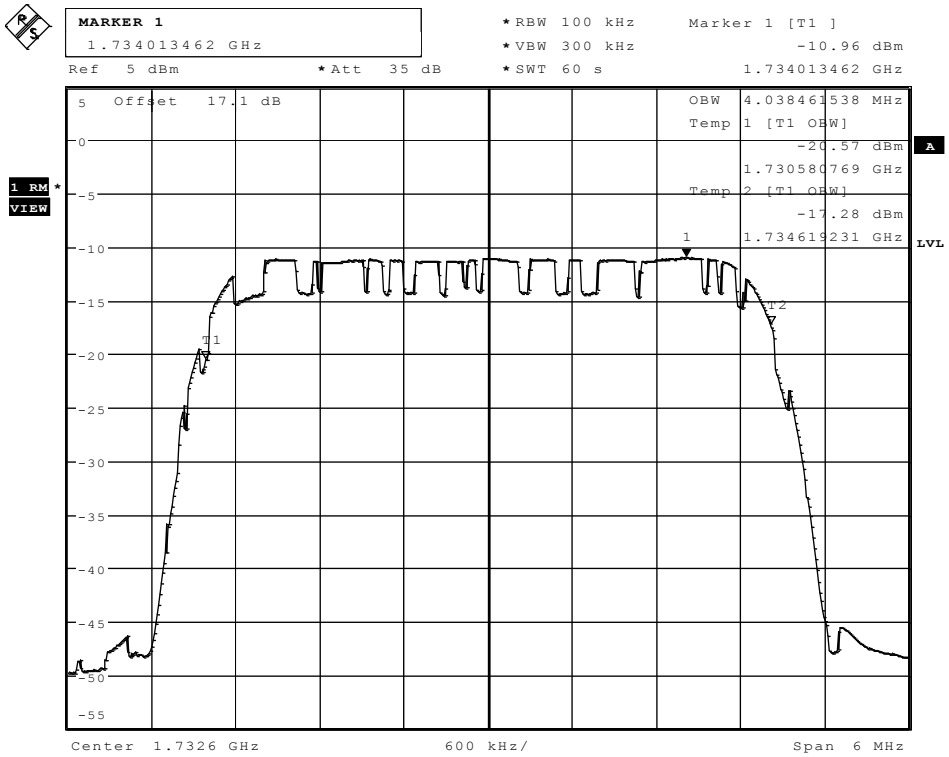

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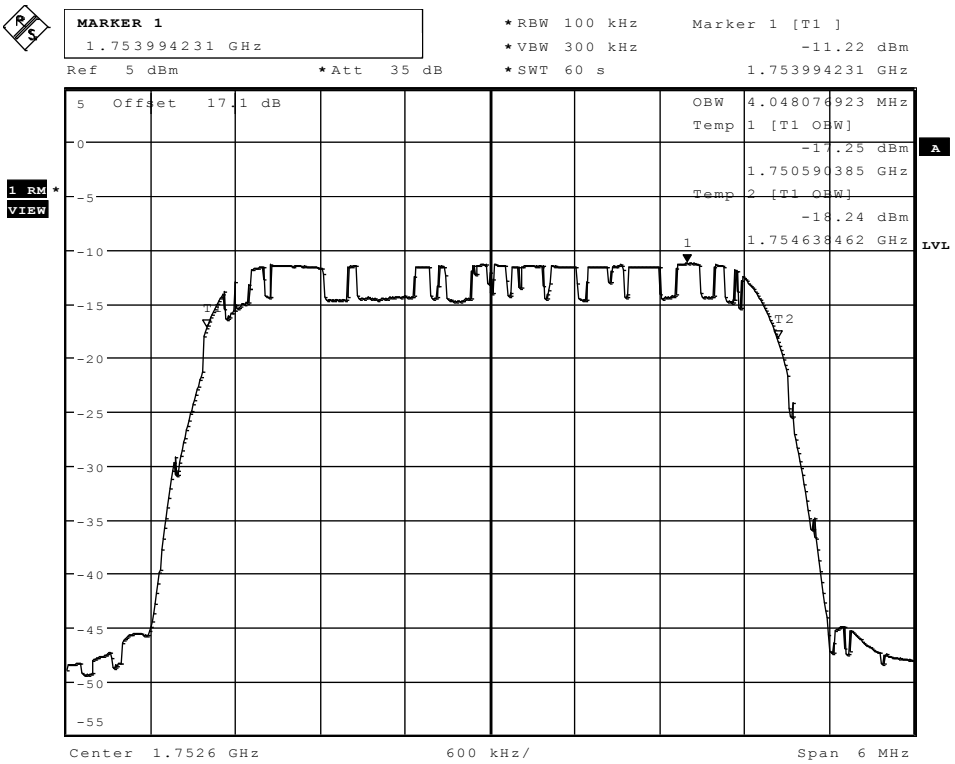

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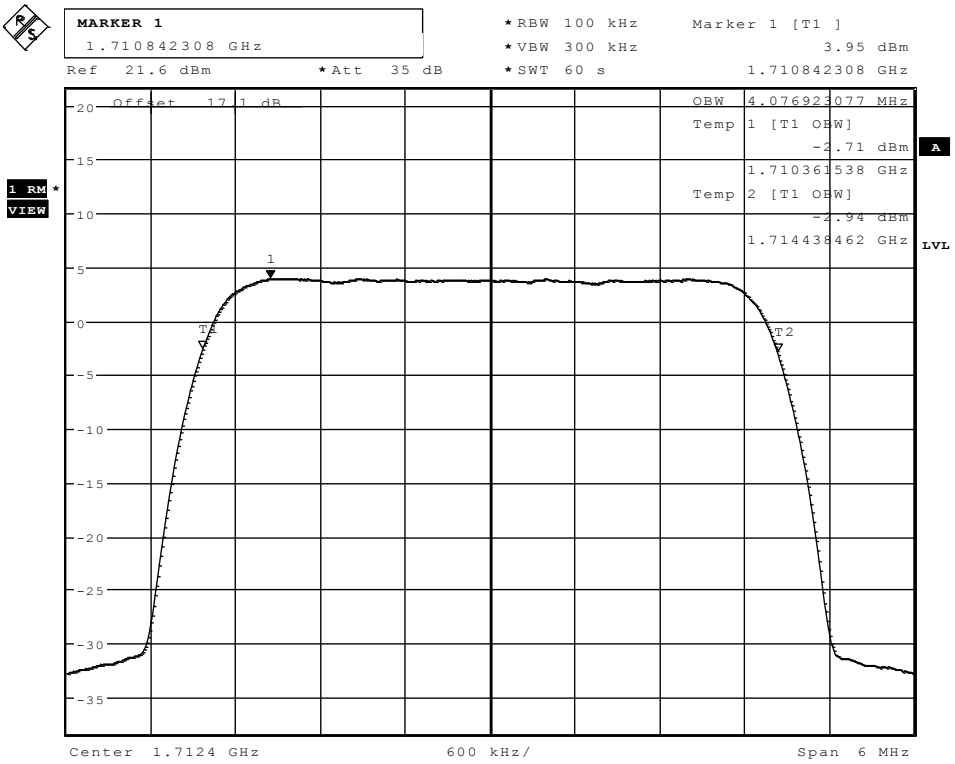
Channel 1513

1.2.4. FDD Band IV – HSUPA Mode



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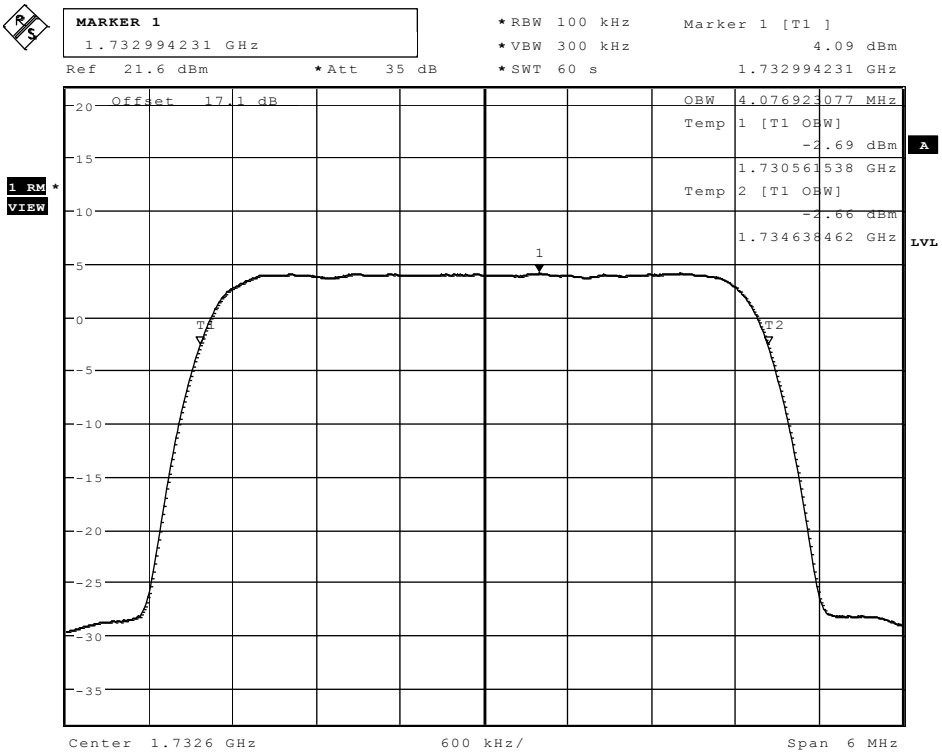

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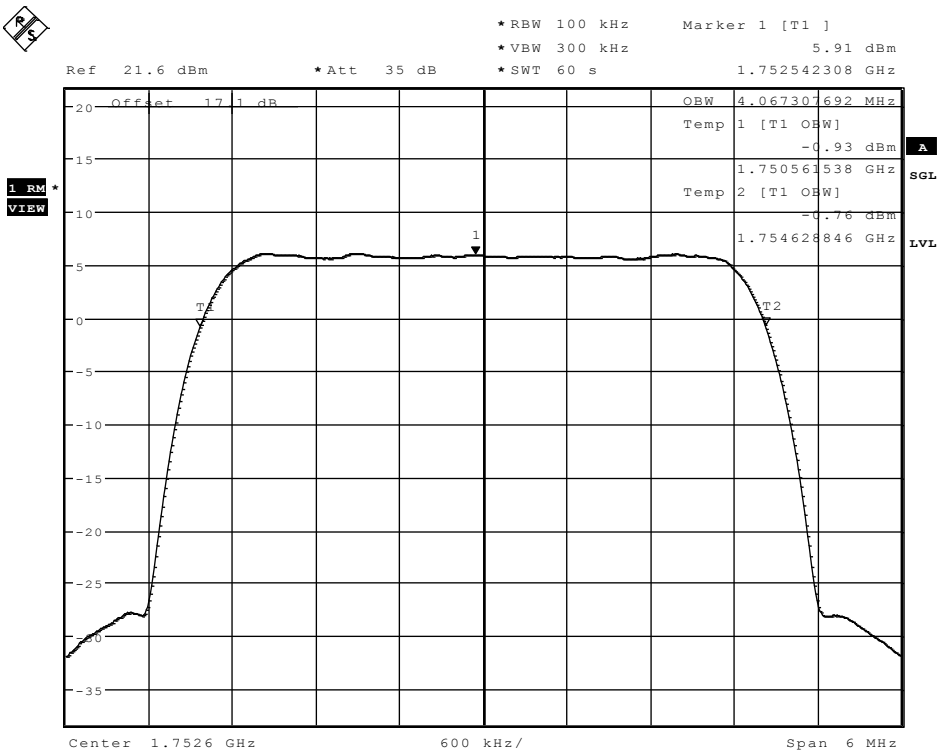
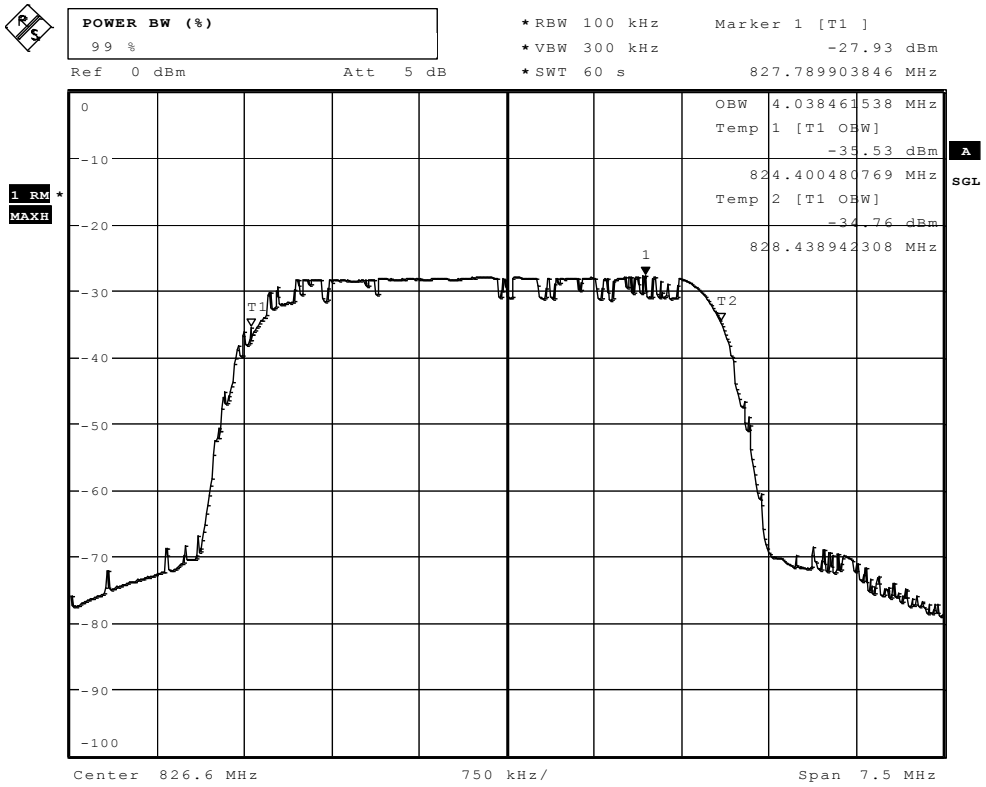


Channel 1513

1.2.5. FDD Band V – voice mode



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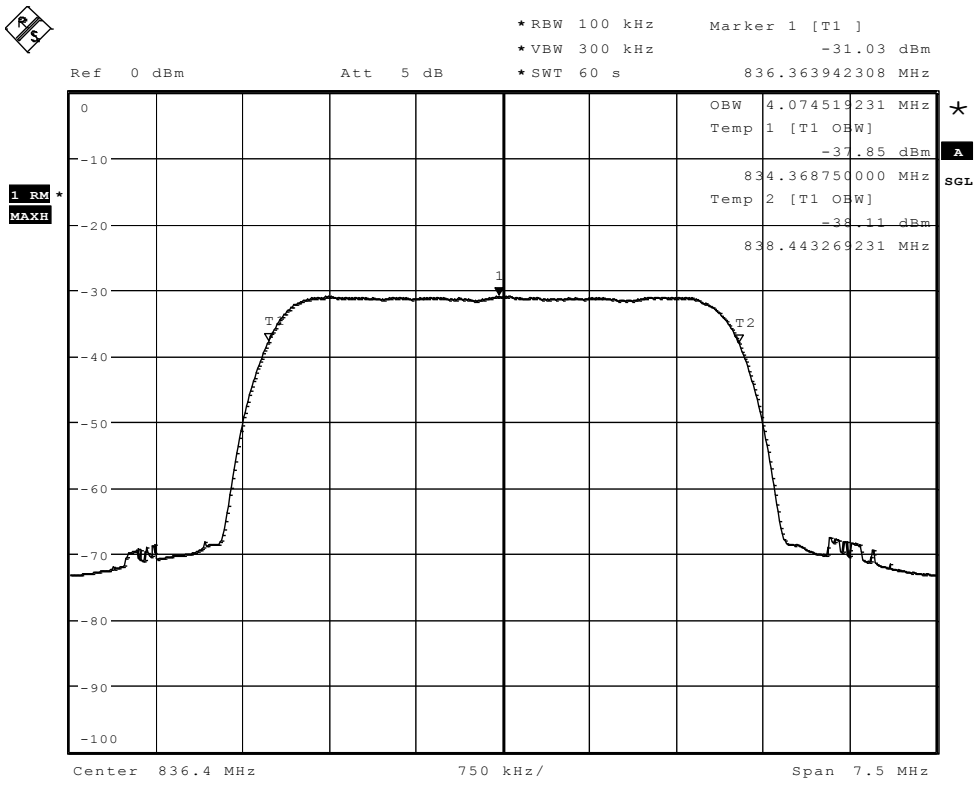
Channel 4132



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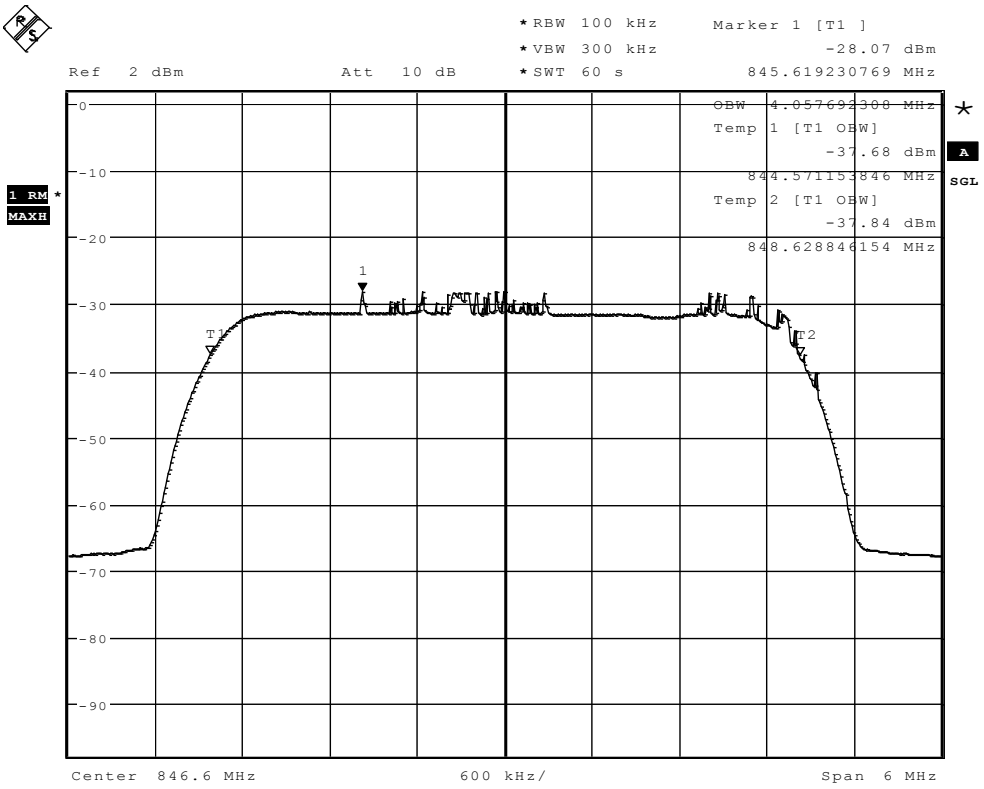
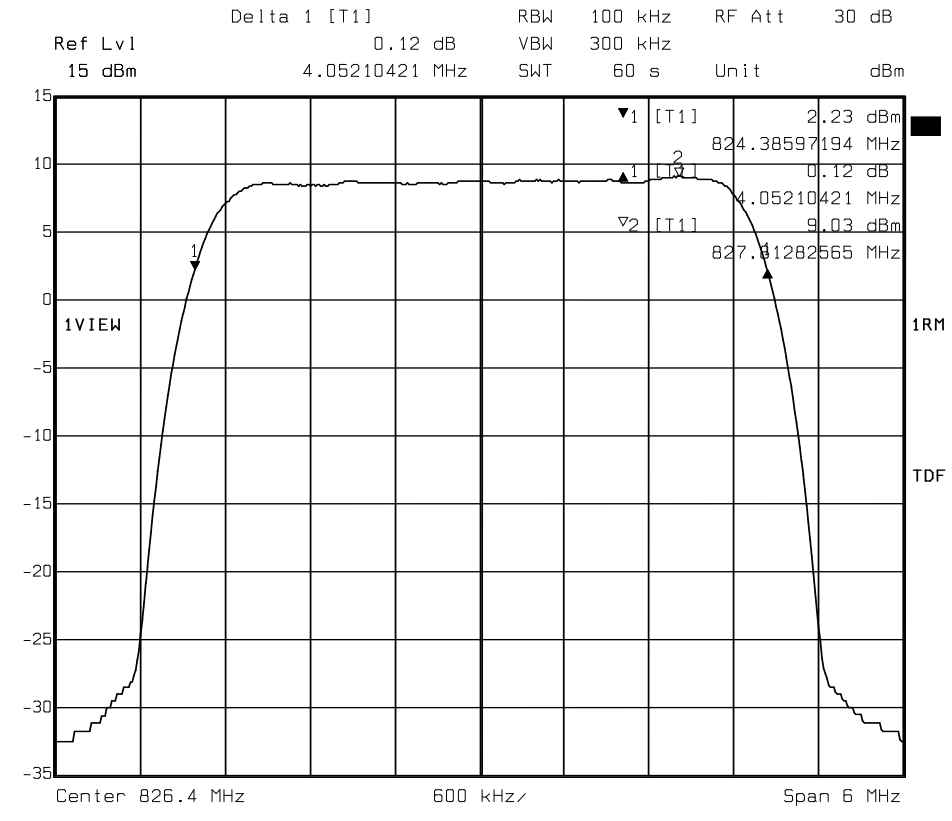


Channel 4233

1.2.6. FDD Band V – HSUPA Mode



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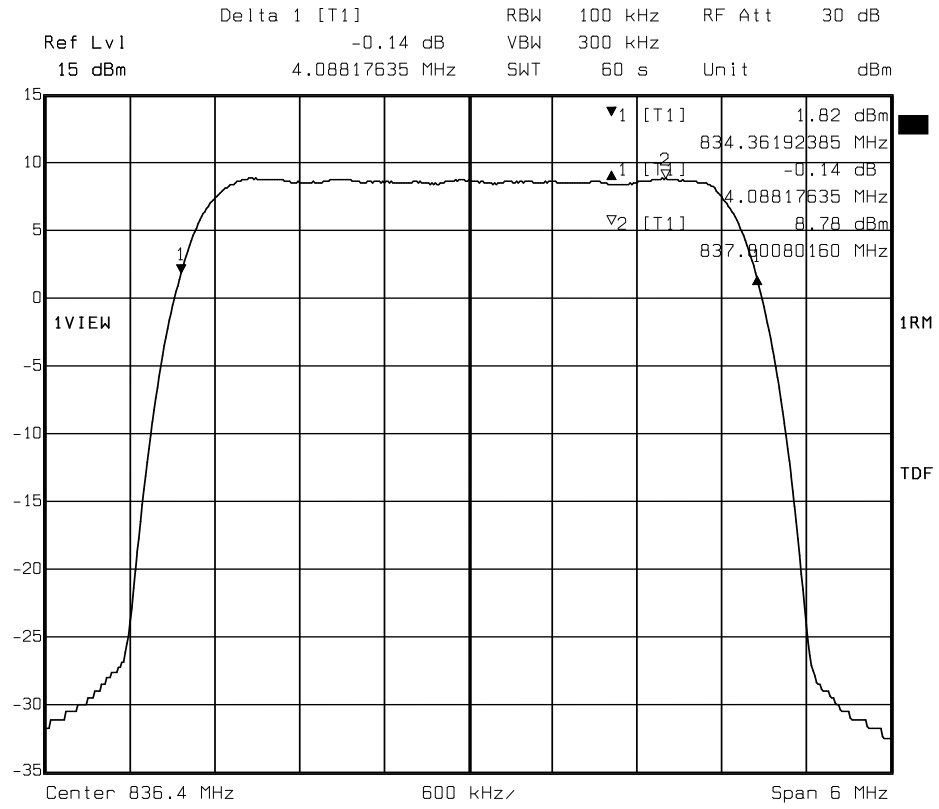

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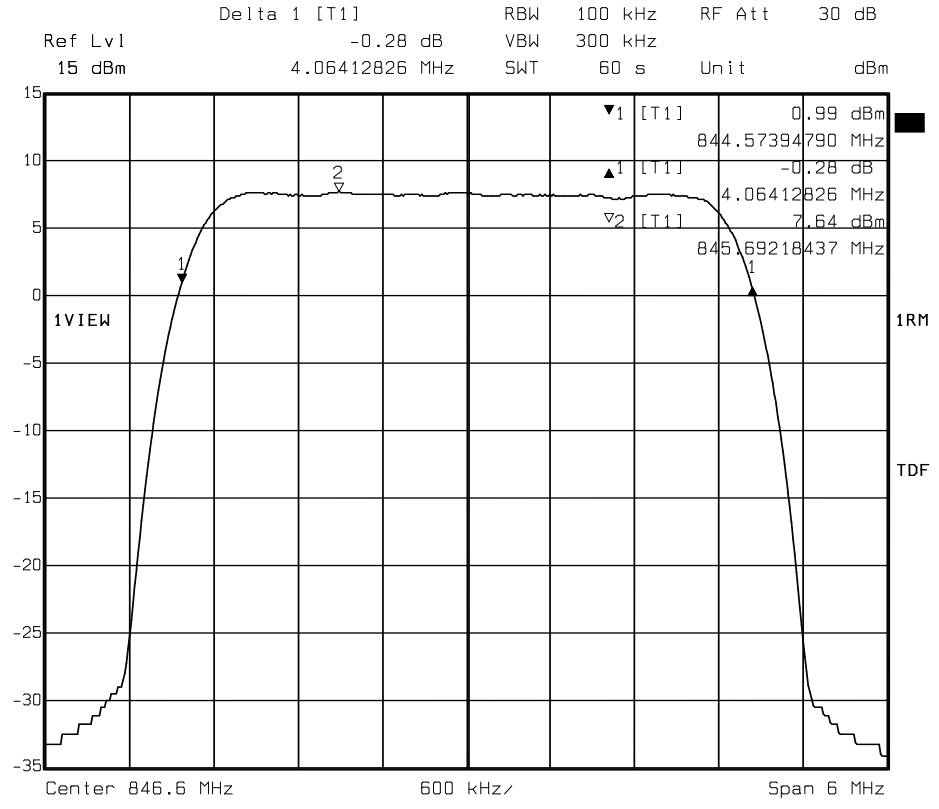


Channel 4233

1.3. Spurious emissions conducted – FDD Band V Mode

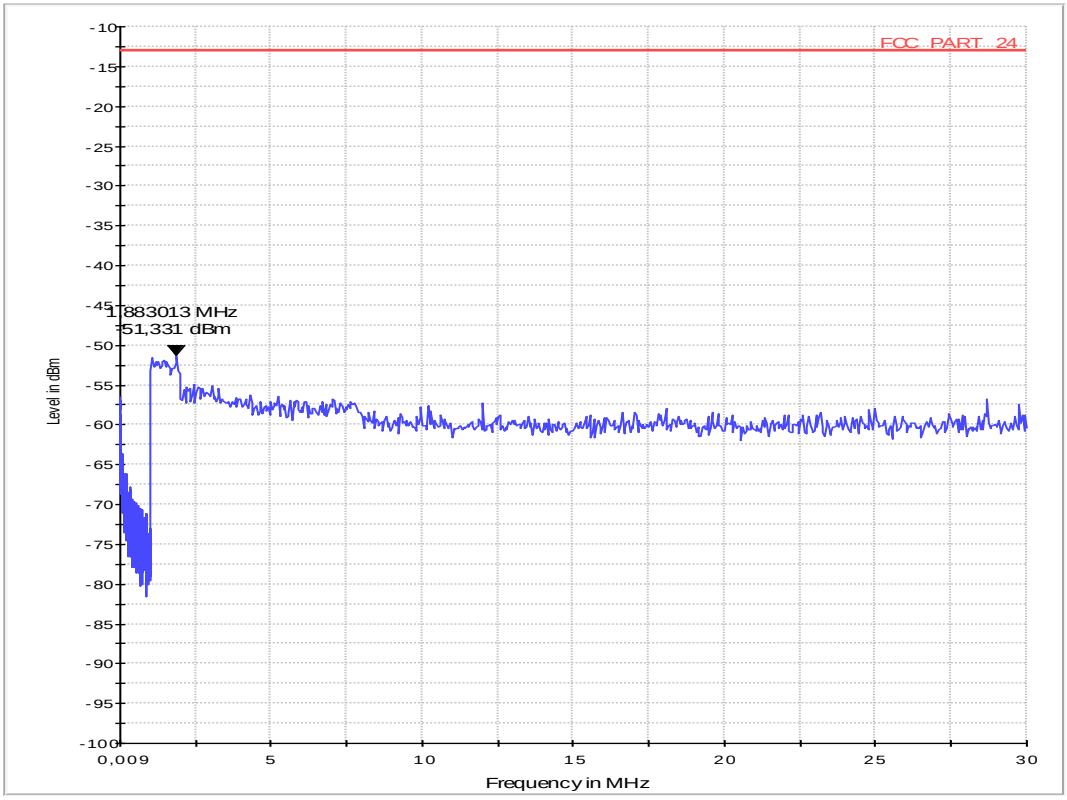
1.3.1. Spurious emissions voice mode

b_TX_FDD5_voice_sweep1_low

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC Part 22, RSS-132
EUT:	REA71UW, rev. 2 (CER-41251-001 09-01-11)
Manufacturer:	RIM
Operation mode:	TX, UARFCN 4132 low
Operator Name:	Tas
Comment:	Vnom: 3,8V

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

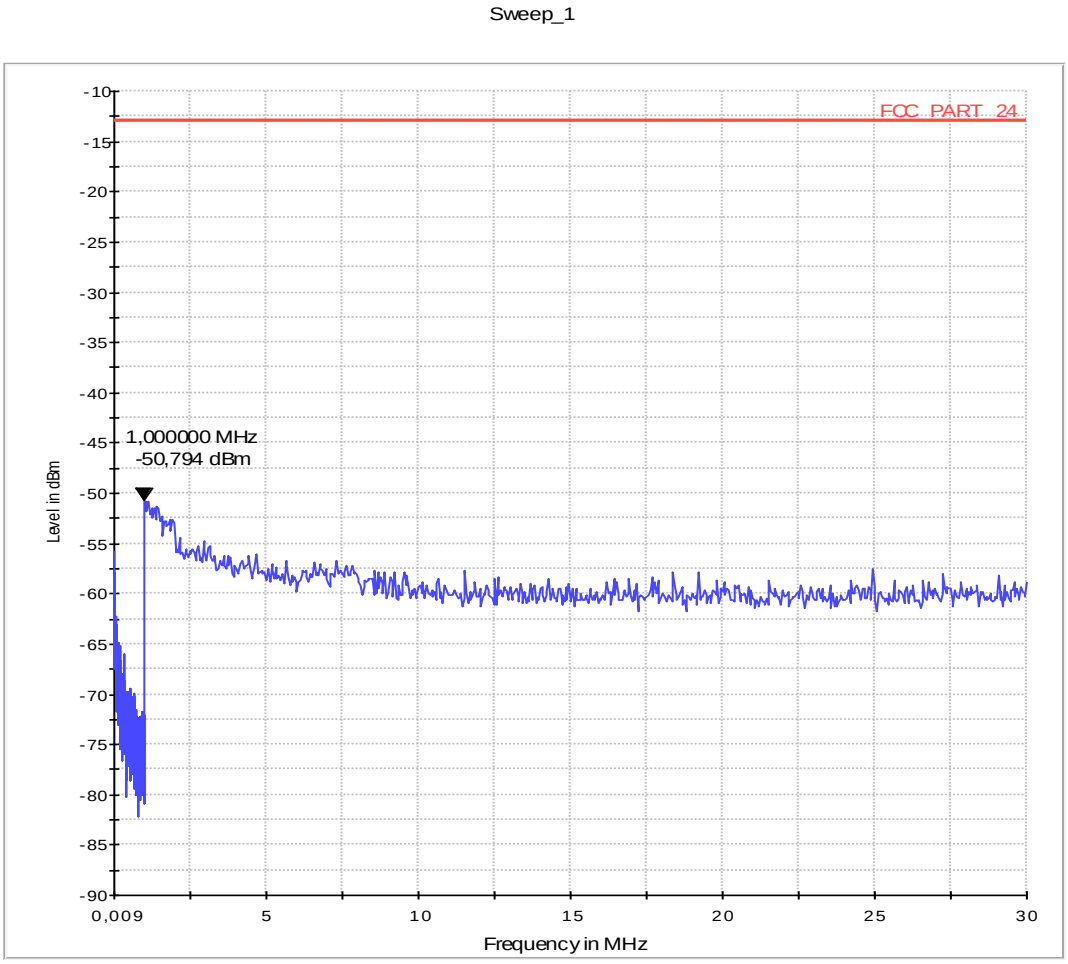
Diagram No.: 4.24

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22,RSS-132
Op. Mode:	FDDV TX Voice
UE Channel:	middle channel 4182
Environment Conditions:	23°C 47%

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N :	CER_41251_00109_01_11



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

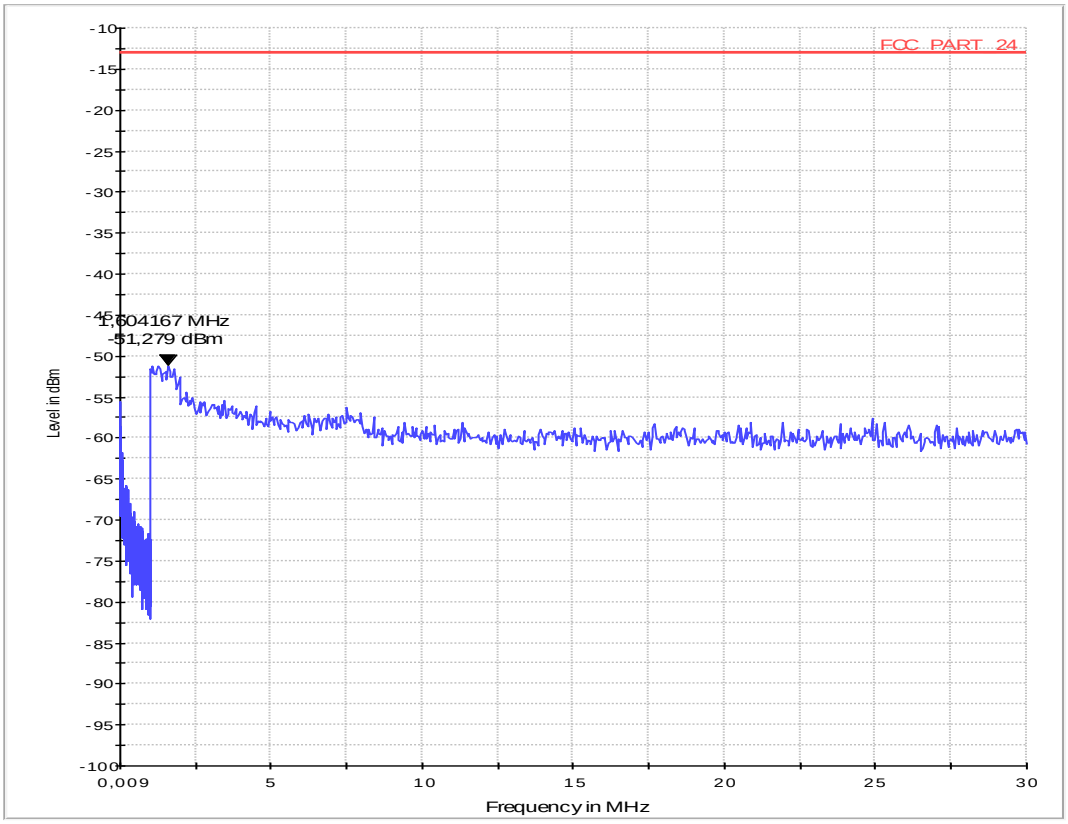
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

b_TX_FDD5_voice_sweep1_high

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC Part 22, RSS-132
EUT:	REA71UW, rev. 2 (CER-41251-001 09-01-11)
Manufacturer:	RIM
Operation mode:	TX, UARFCN 4233 high
Operator Name:	Tas
Comment:	Vnom: 3,8V

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.: 4.21

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22, RSS-132
Op. Mode:	FDDV TX Voice
UE Channel:	low channel 4132

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_2

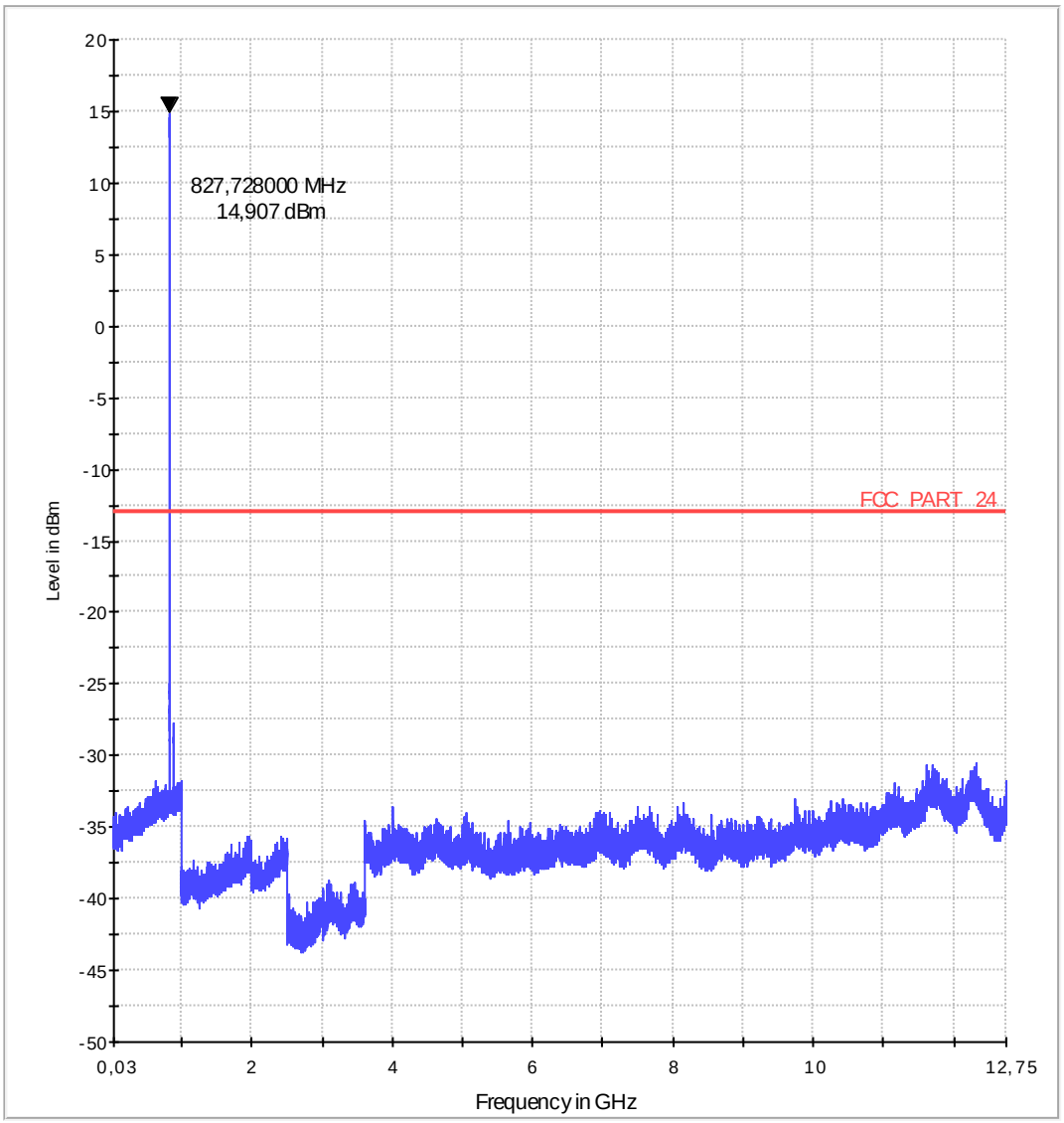


Diagram No.: 4.22

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22,RSS-132
Op. Mode:	FDDV TX Voice
UE Channel:	middle channel 4182
Environment Conditions:	23°C 47%

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_2

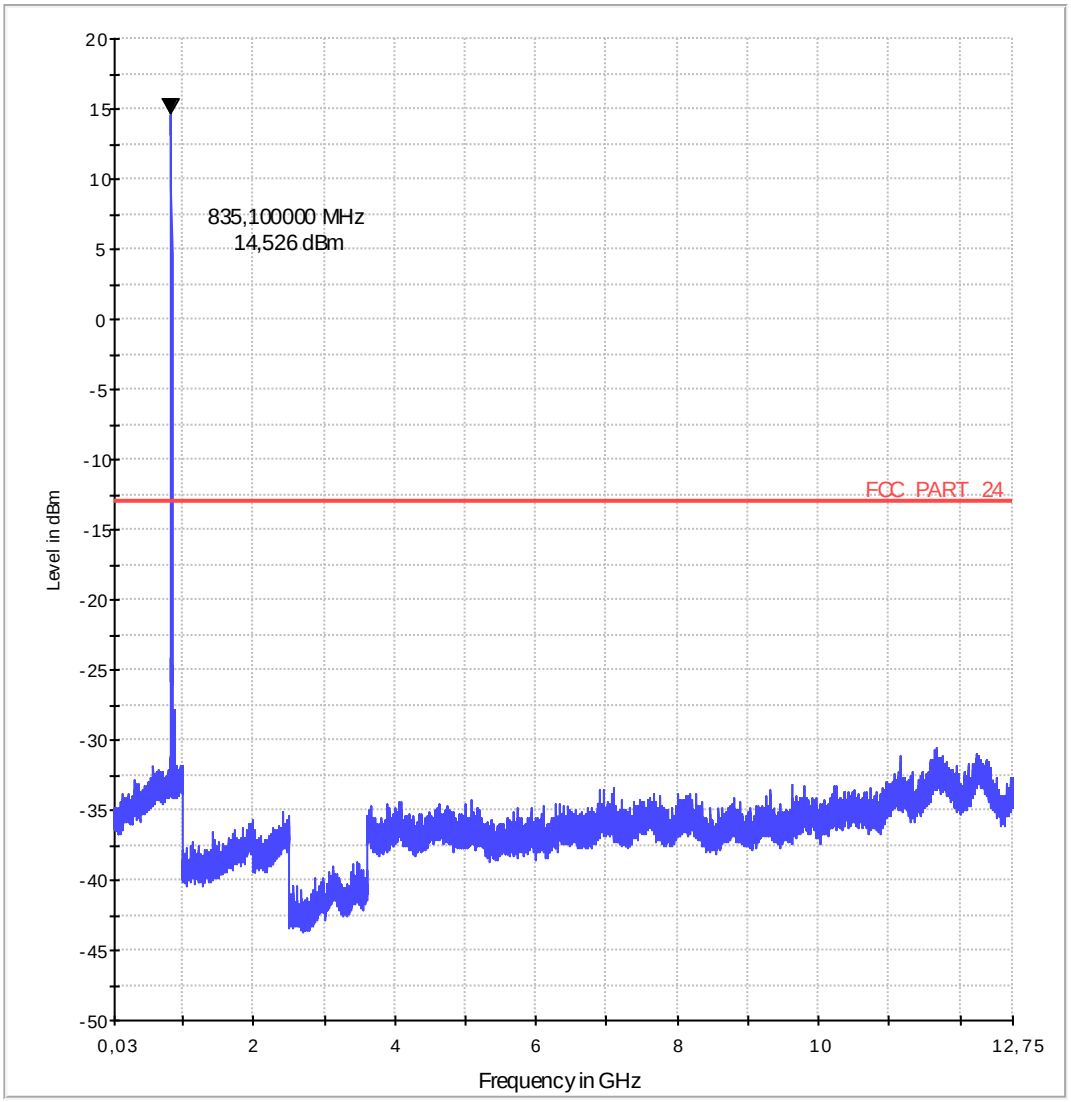


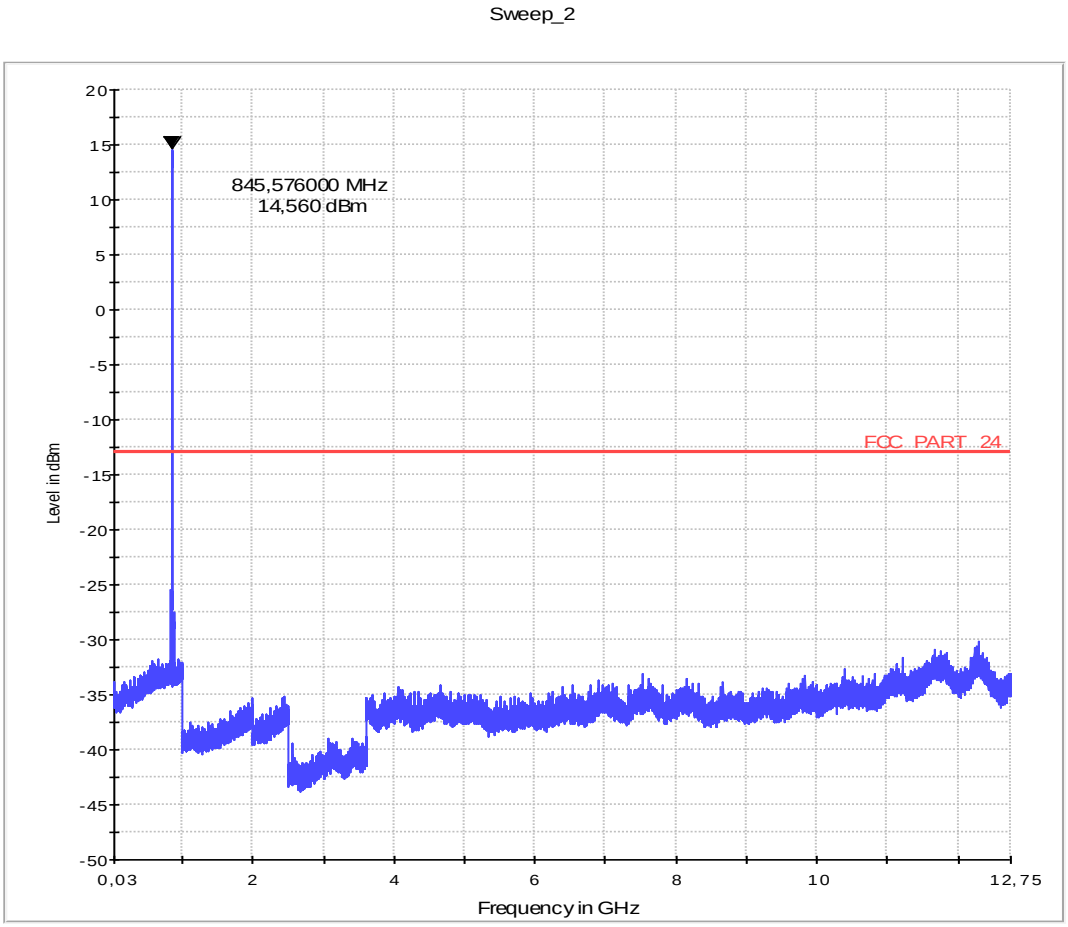
Diagram No.: 4.23

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22,RSS-132
Op Mode:	FDDV TX Voice
UE Channel:	high 4233
Environment Conditions:	23°C 47%
Operator:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11



Sweep Setup: Sweep_2 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 12,75 GHz	512,5 kHz	PK+	1 MHz	100 s	0 dB

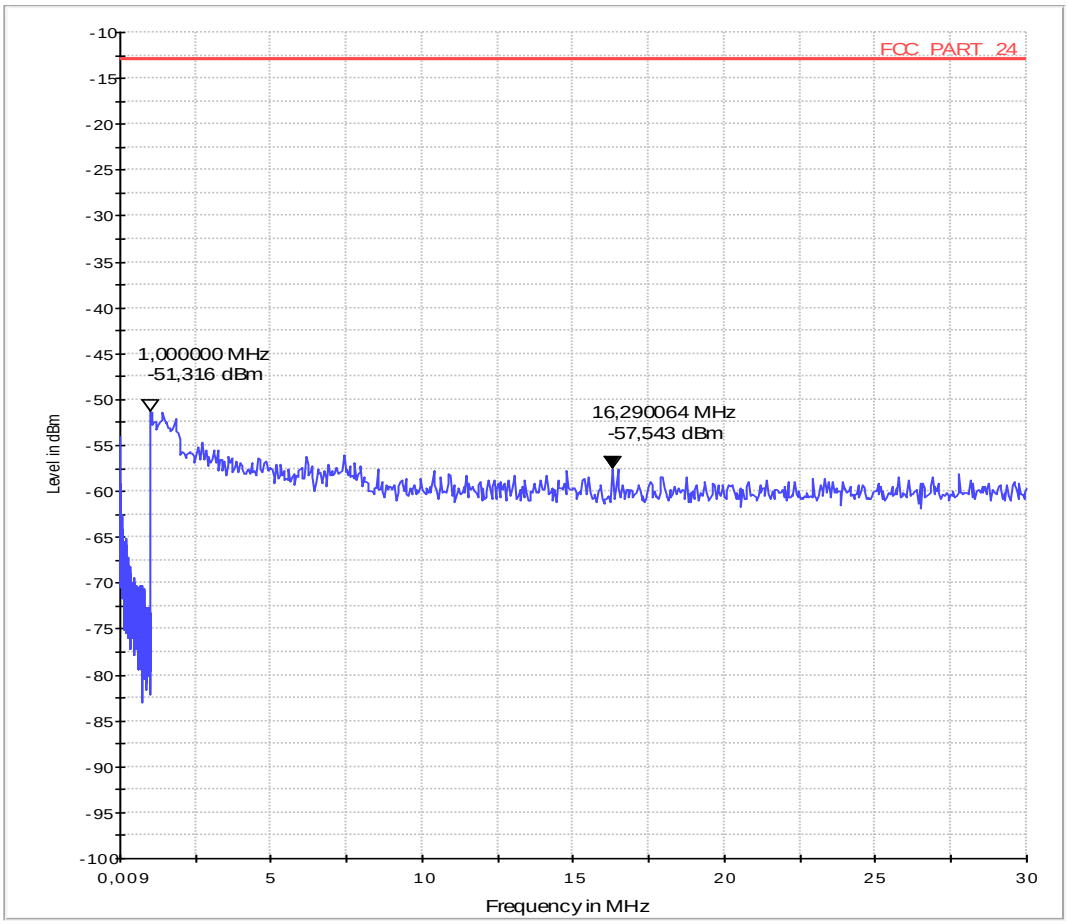
1.3.2. Spurious emissions HSUPA mode

Diagram No.: b_47

Common Information

Test Description:	TX Spurious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC 2.1051 , RSS 132
EUT:	REA71UW rev 2
Manufacturer:	RIM
S/N	CER_41251_00109_01_11
Operation mode:	TX, UARFCN 4132 low
Operator Name:	HLA
Comment:	HSUPA, Vnom = 3,8 V

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

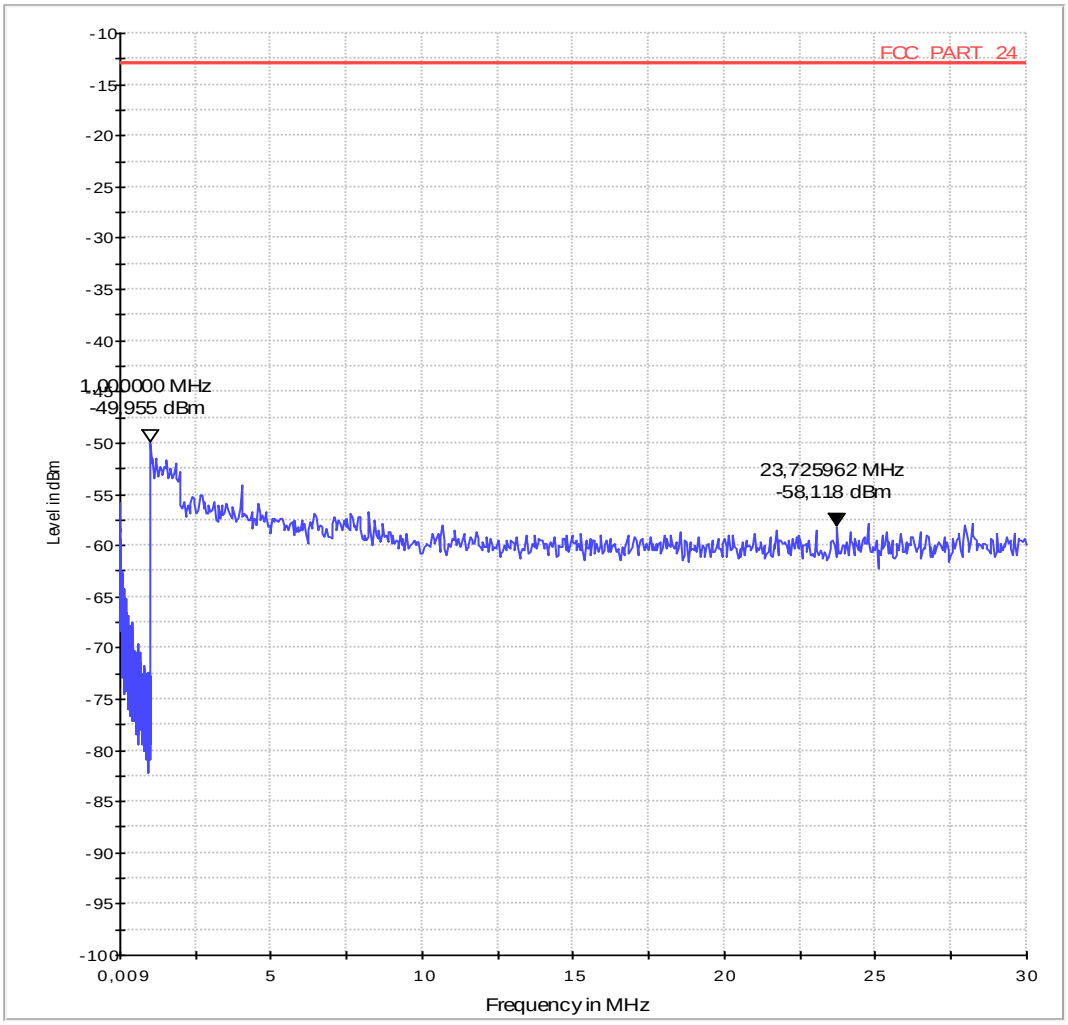
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.: b_14.17

Common Information

Test Description:	TX Spurious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC 22 RSS-132
Operator Name:	HLa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
Operation mode:	TX, UARFCN 4182 middle
Comment:	HSUPA, Vnom: 3,8V
S/N	CER- 41251-00109-01-11

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

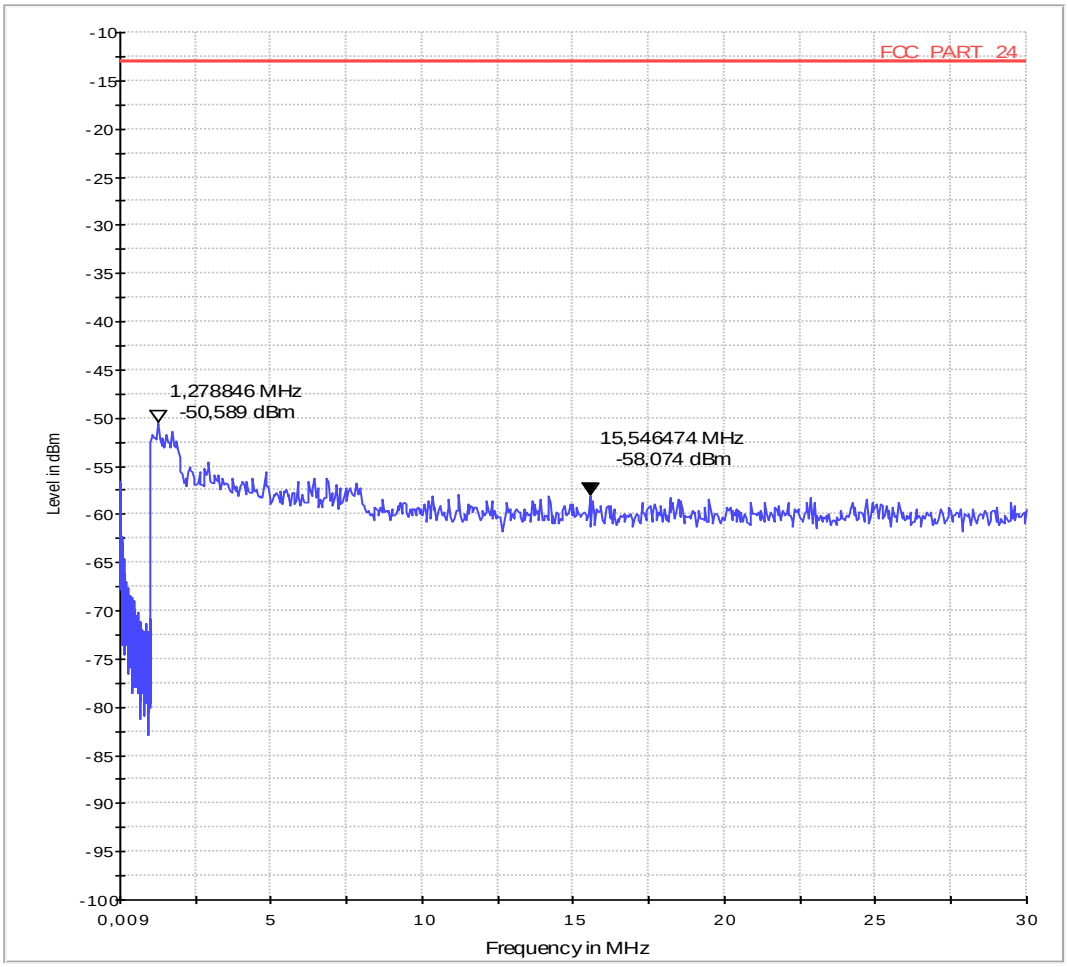
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.: b_4.48

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC 2.1051 , RSS 132
EUT:	REA71UW rev 2
Manufacturer:	RIM
Operation mode:	TX, UARFCN 4233 high
Operator Name:	HLA
Comment:	HSUPA, Vnom: 3,8V

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No. : b_14.15

Common Information

Test Description:	TX Spurious Conducted Emission
Test Site:	Radio laboratory
Test Standard:	FCC 22 RSS-132
Environment Conditions:	23°C 47%
Operator Name:	HLa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
op mode:	TX, UARFCN 4132 low
Comment:	HSUPA, Vnom: 3,8V

Sweep_2

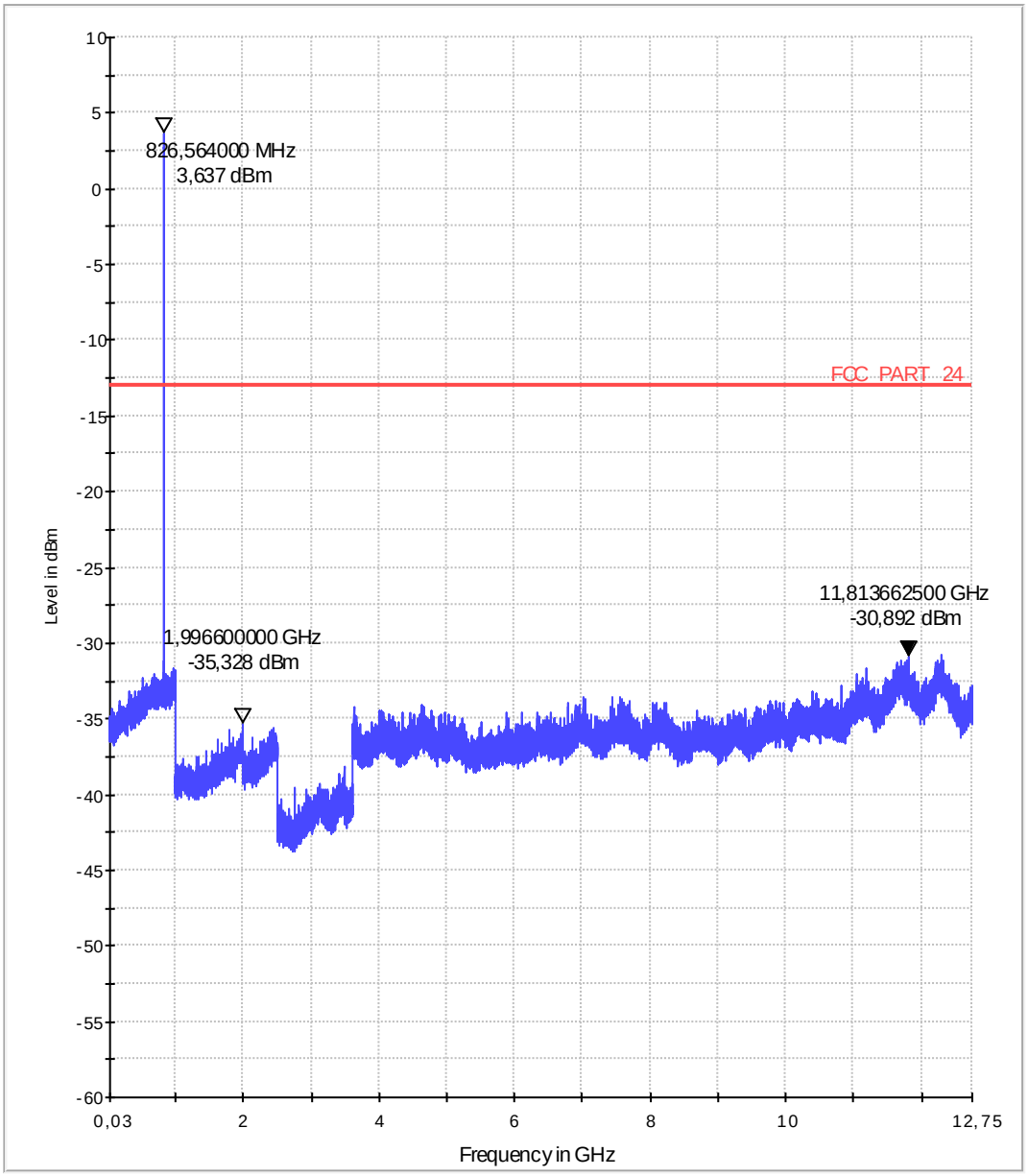


Diagram No b_14.16

Common Information

Test Description:	TX Spurious Conducted Emission
Test Site:	Radio laboratory
Test Standard:	FCC 22, RSS-132
Environment Conditions:	23°C 47%
Operator Name:	HLa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
op mode:	TX, UARFCN 4182 middle
Comment:	HSUPA, Vnom: 3,8V

Sweep_2

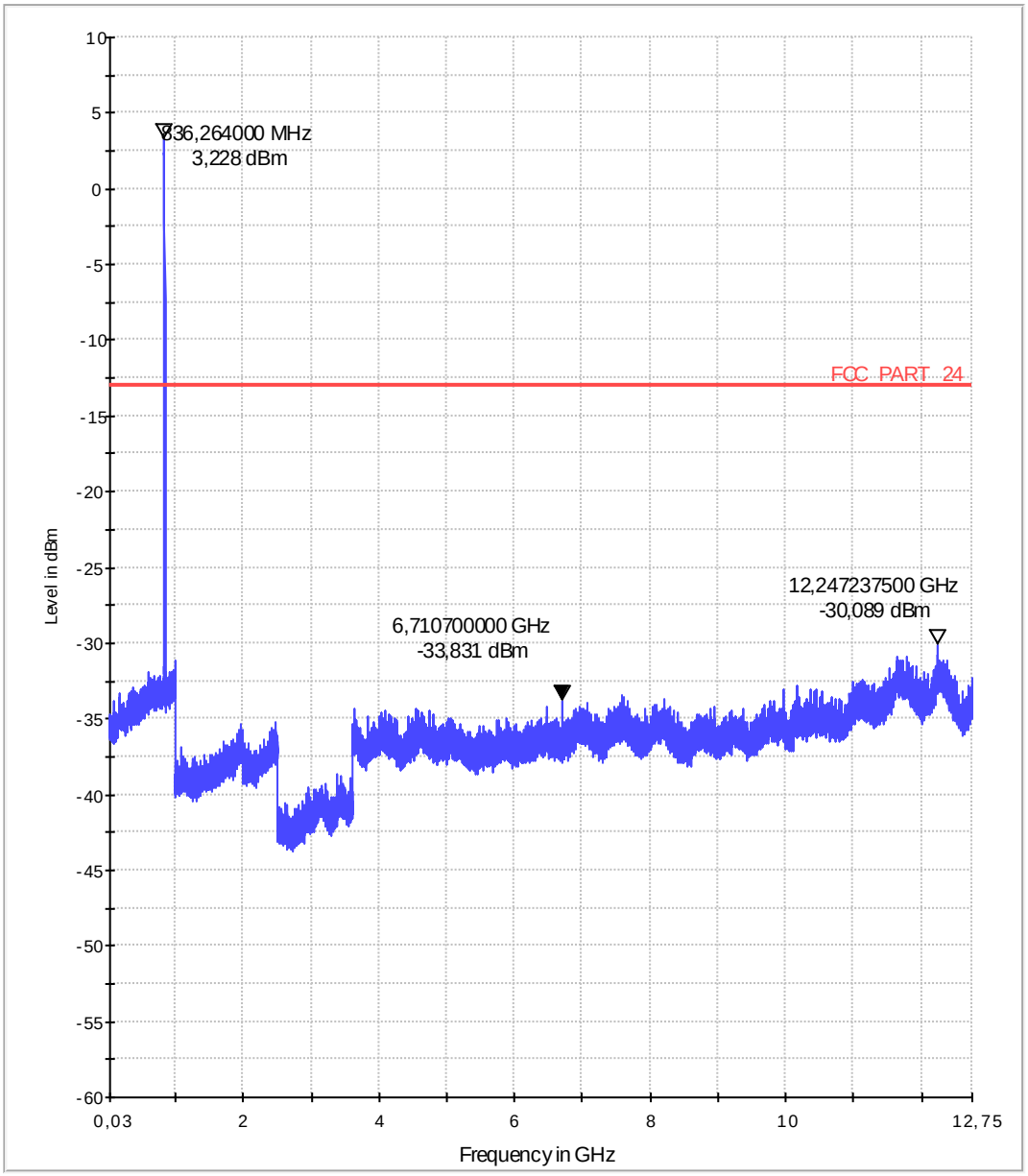
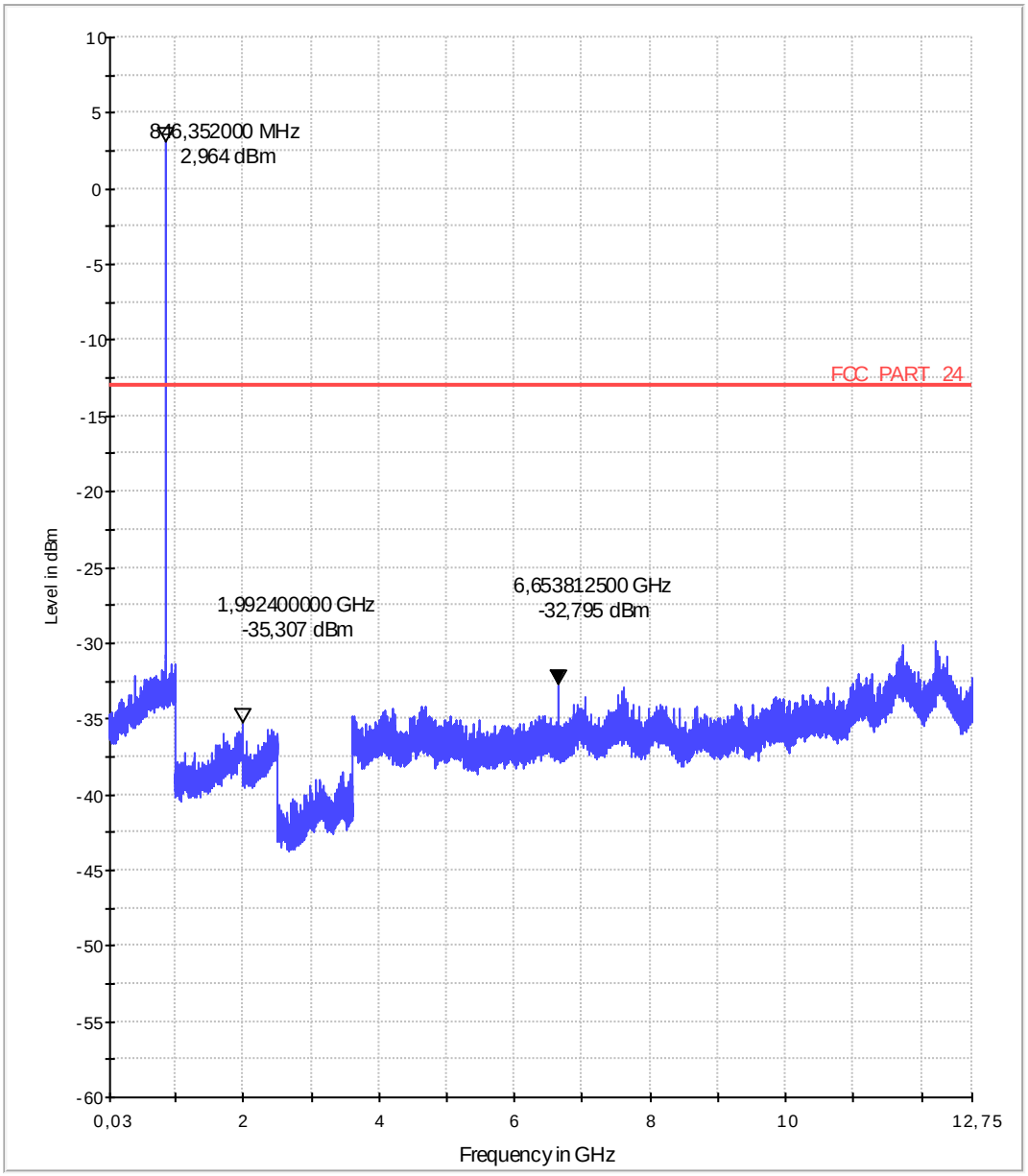


Diagram No b_14.18

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio laboratory
Test Standard:	FCC 22; RSS-132
Environment Conditions:	23°C 47%
Operator Name:	HLa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
op mode:	TX, UARFCN 4233 high
Comment:	HSUPA, Vnom: 3,8V

Sweep_2



1.3.3. Band-Edge compliance conducted – voice mode

Diagram No.: 4.19

Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22.917, RSS-132
Environment Conditions:	23°C 47%
Operator Name:	dpa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
Manufacturer:	RIM
Voltage	3.8V DC
Op.Mode:	HSUPA, TX UMTS V, Ch 4132(Low)

Sweep_3a_Band_Edge_Channel_4132_PK

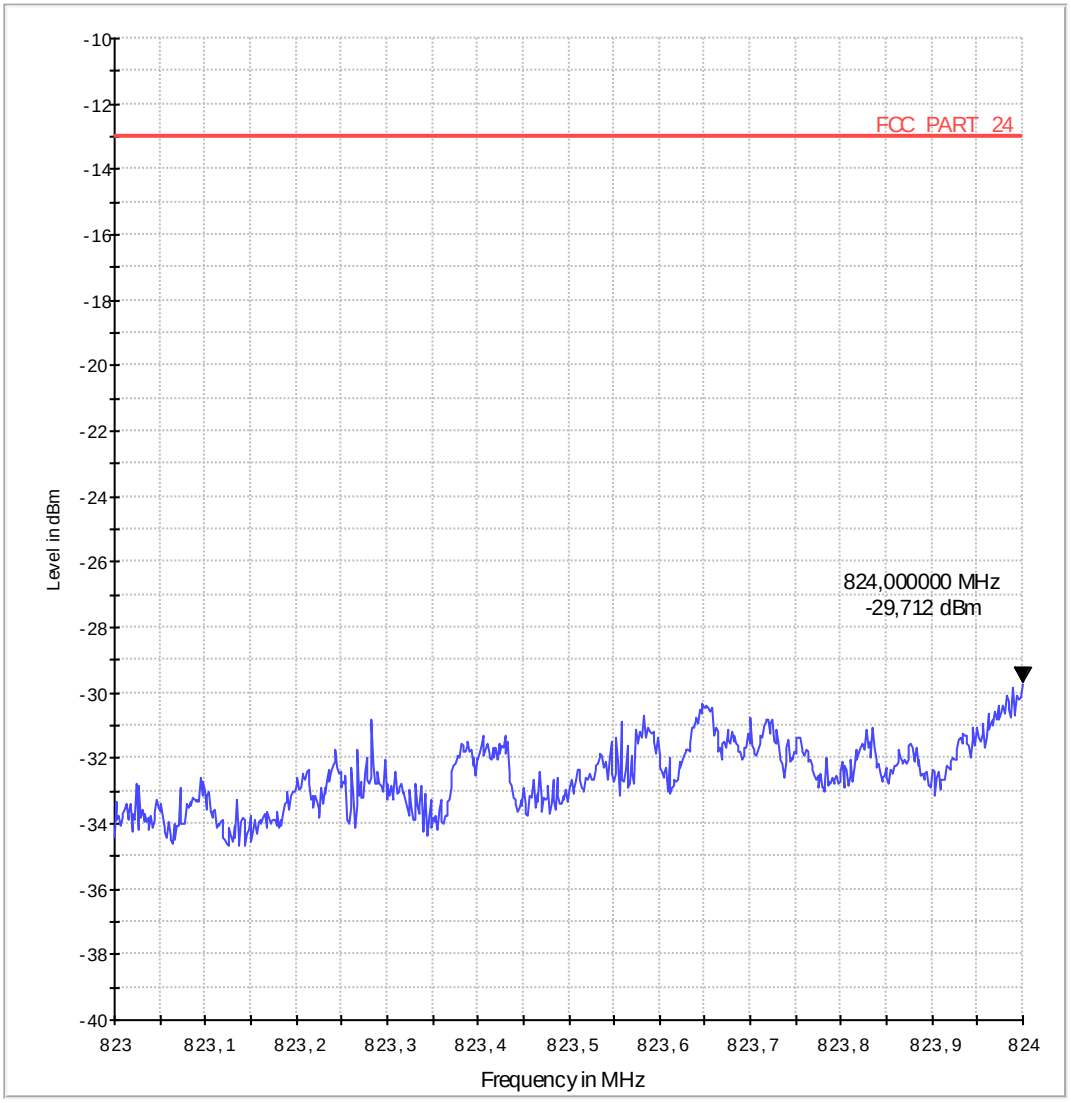


Diagram No.: 4.20

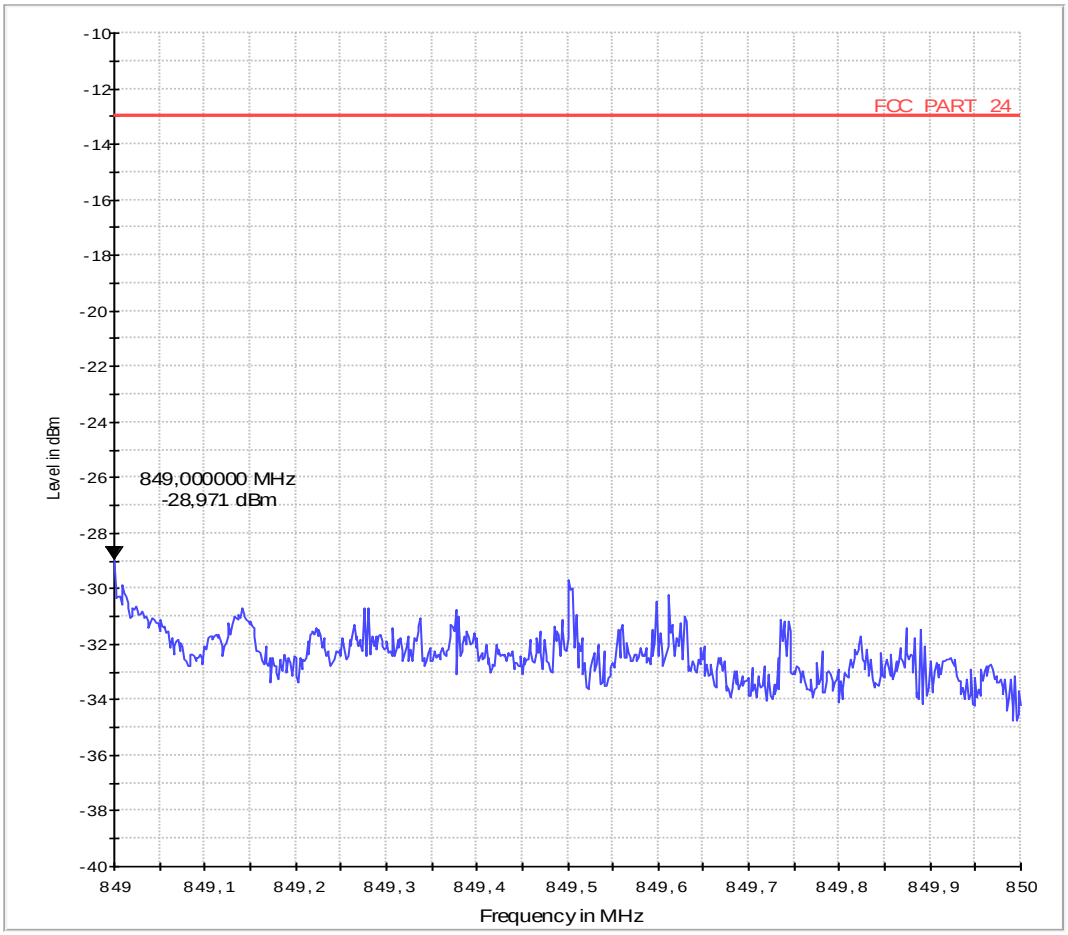
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22.917; RSS-132
Environment Conditions:	23°C 47%
Operator Name:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER-41251_00109_01_11
Op.Mode:	HSUPA, TX UMTS V; Ch 4233 (High)

Sweep_3a_Band_Edge_Channel_4233_PK



Sweep Setup: Sweep_3a_Band_Edge_Channel_4233_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
849 MHz - 850 MHz	1,603 kHz	PK+	30 kHz	30 s	0 dB

1.3.4. Band-Edge compliance conducted – HSUPA mode

Diagram No.: 4.43

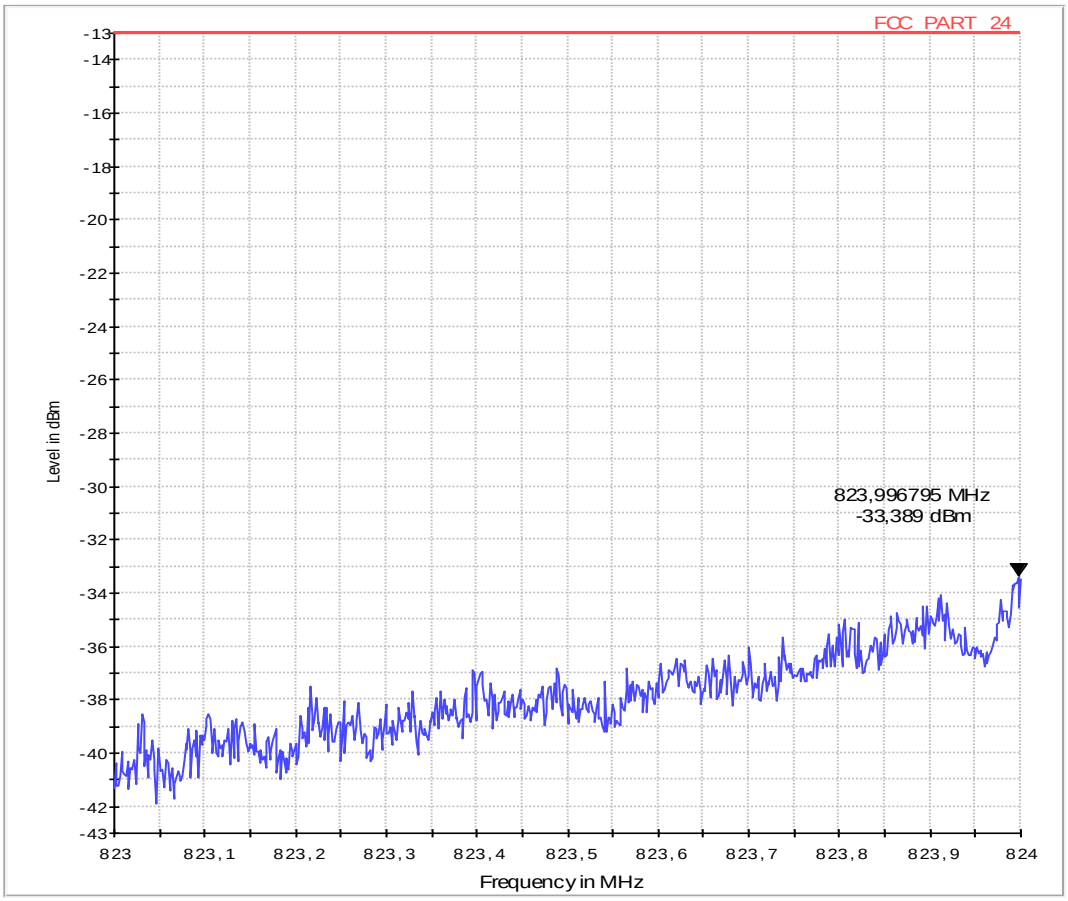
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22; RSS-132
Op. Mode:	FDDV TX HSUPA; Ch 4132 (Low)
Environment Conditions:	23°C 47%
Operator:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_3a_Band_Edge_Channel_4132_PK



Sweep Setup: Sweep_3a_Band_Edge_Channel_4132_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
823 MHz - 824 MHz	1,603 kHz	PK+	30 kHz	30 s	0 dB

Diagram No.: 4.44

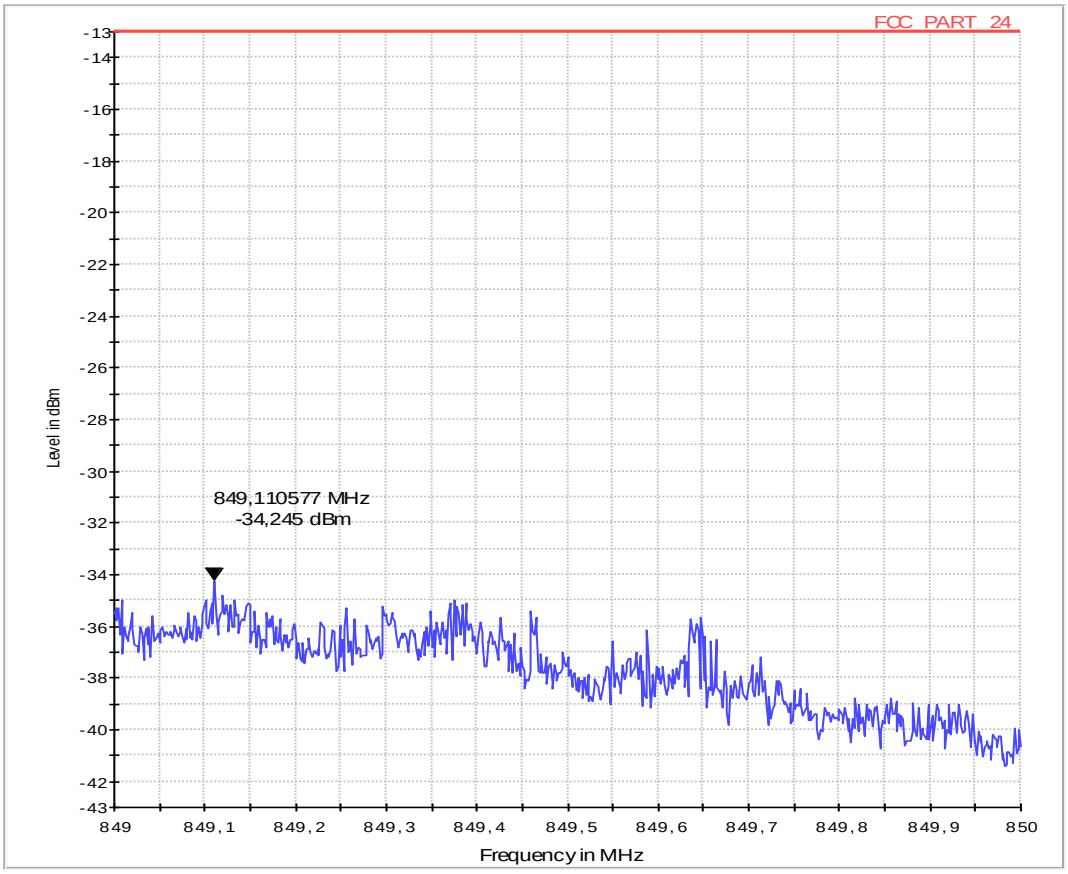
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22_RSS-132
Op. Mode:	FDDV TX HSUPA, Ch 4233(High)
Environment Conditions:	23°C 47%
Operator:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_3a_Band_Edge_Channel_4233_PK



Sweep Setup: Sweep_3a_Band_Edge_Channel_4233_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
849 MHz - 850 MHz	1,603 kHz	PK+	30 kHz	30 s	0 dB

1.4. Spurious emissions conducted – FDD Band II Mode

1.4.1. Spurious emissions voice mode

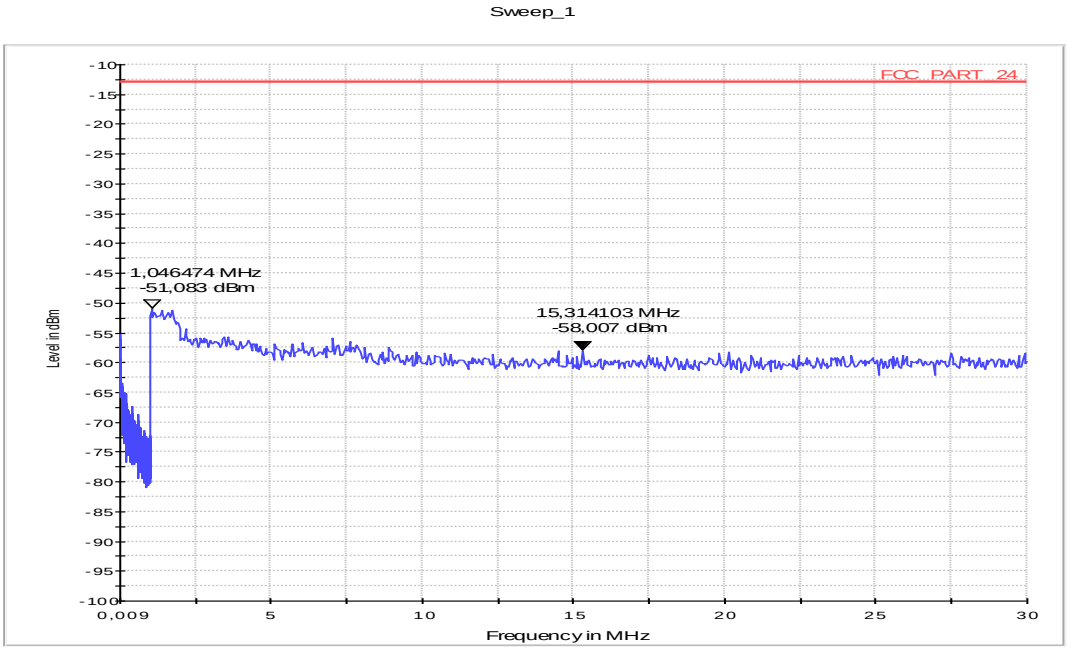
b_TX_FDD2_Voice_sweep_1_channel_low

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC 2.1051 , RSS 133
Operation mode:	TX, UARFCN 9262 Low
Operator Name:	HLA
Comment:	Vnom: 3,8V

EUT Information

EUT:	REB71UW Rev2
S/N:	CER_41251_00109_01_11
Manufacturer:	RIM
Voltage	3.8V DC



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

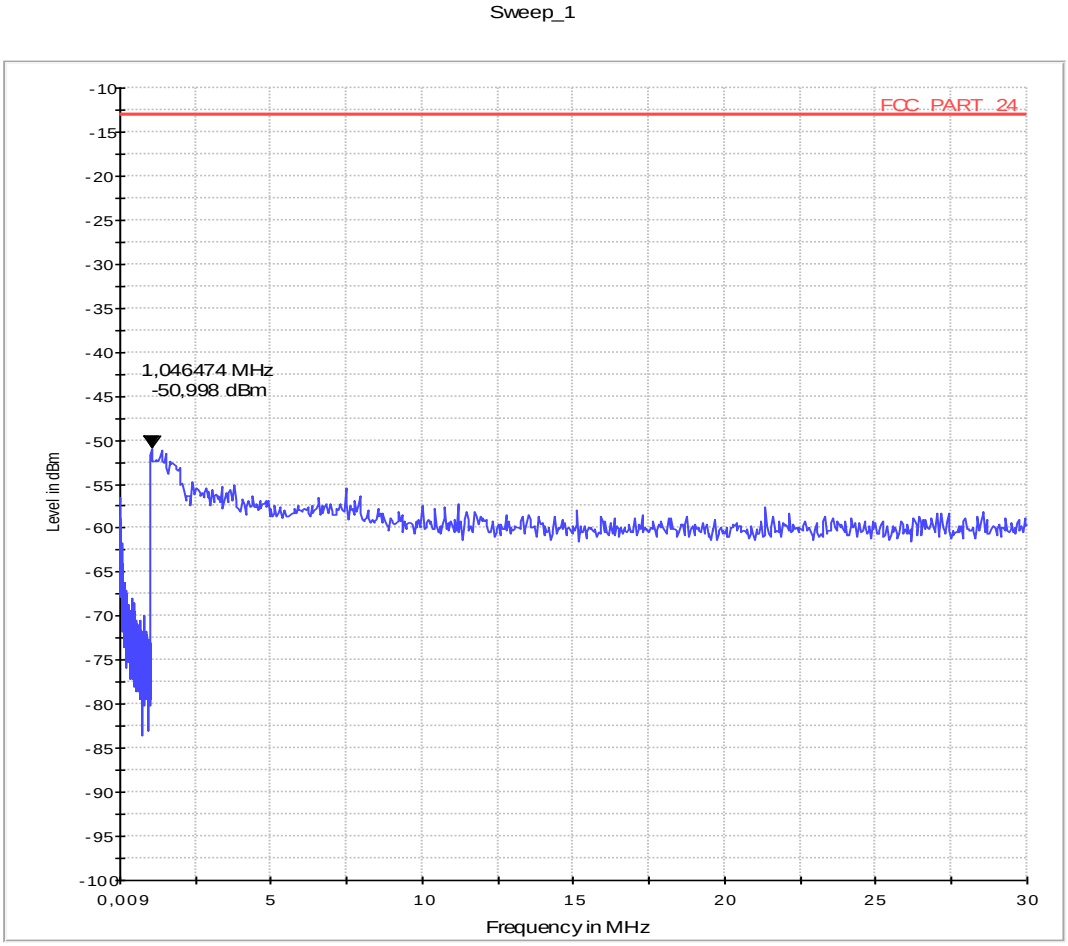
Diagram No.: 4.28

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238, RSS-133
Op. Mode:	FDDII TX Voice
UE Channel:	middle channel 9400

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

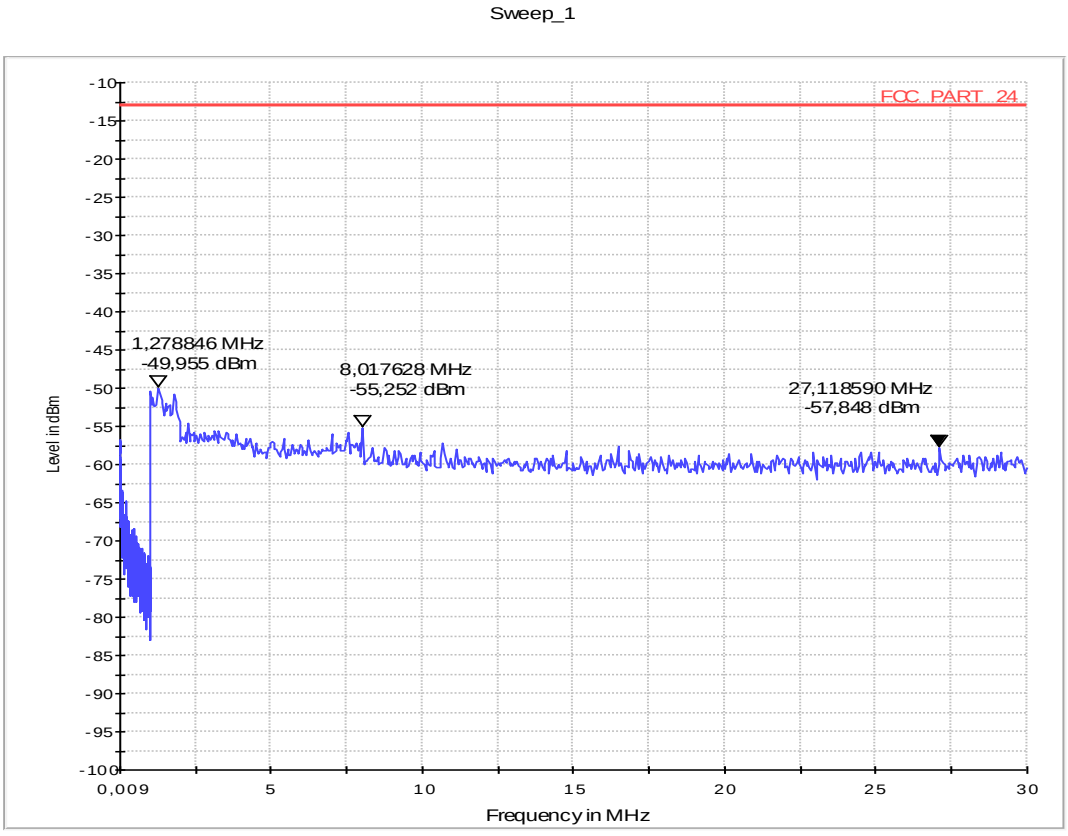
b_TX_FDD2_Voice_sweep1_channel_high

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC 2.1051 , RSS 133
Antenna polarisation:	vertical / horizontal
Operation mode:	TX, UARFCN 9538 high
Operator Name:	HLa
Comment:	Vnom: 3,8V

EUT Information

EUT:	REB71UW Rev2
S/N:	CER_41251_00109_01_11
Manufacturer:	RIM
Voltage	3.8V DC



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.: 4.25

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238; RSS-133
Op. Mode:	FDDII TX Voice
UE Channel:	low channel 9262

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

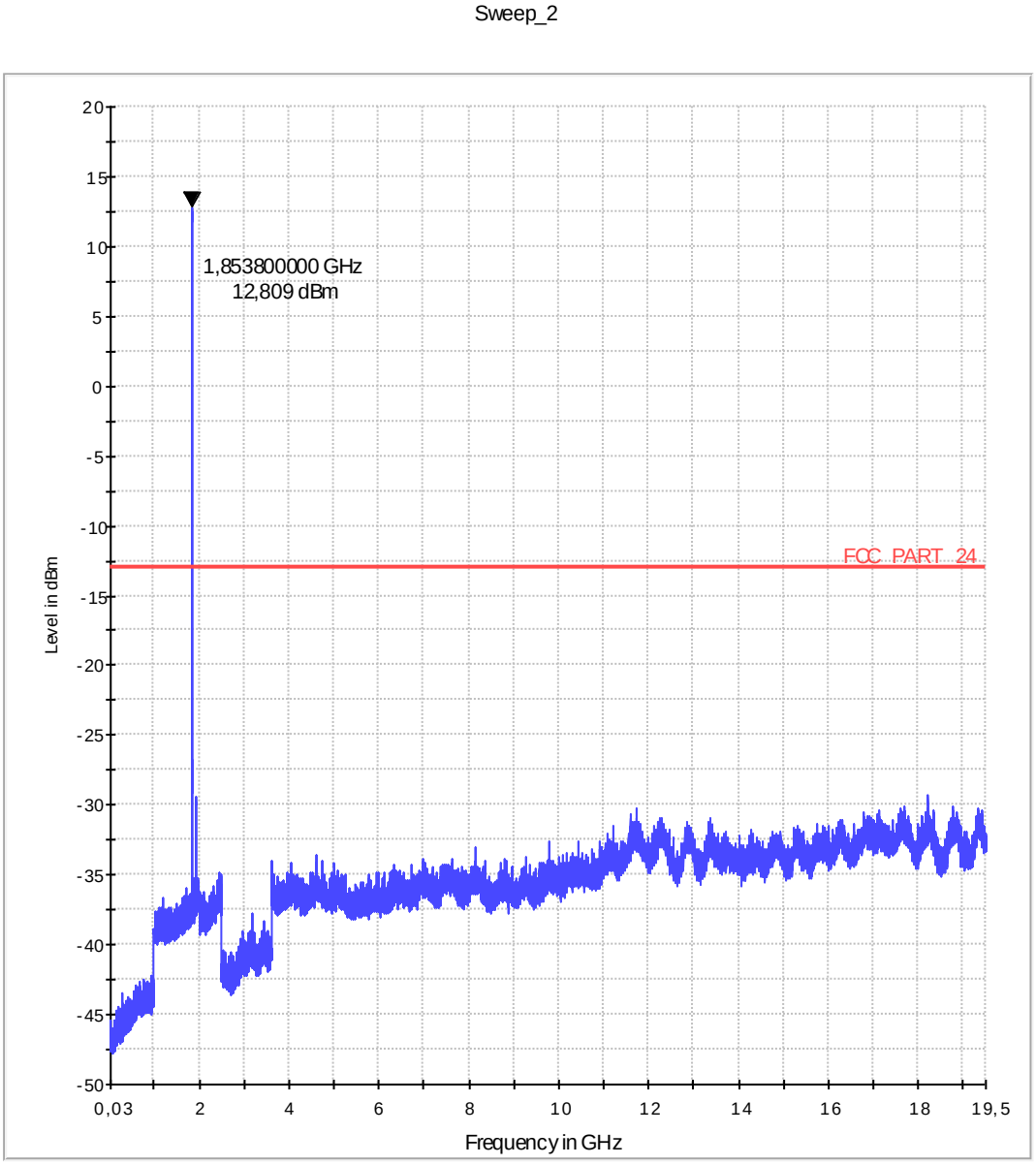


Diagram No.: 4.26

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238; RSS-133
Op. Mode:	FDDII TX Voice
UE Channel:	middle channel 9400

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N :	CER_41251_00109_01_11

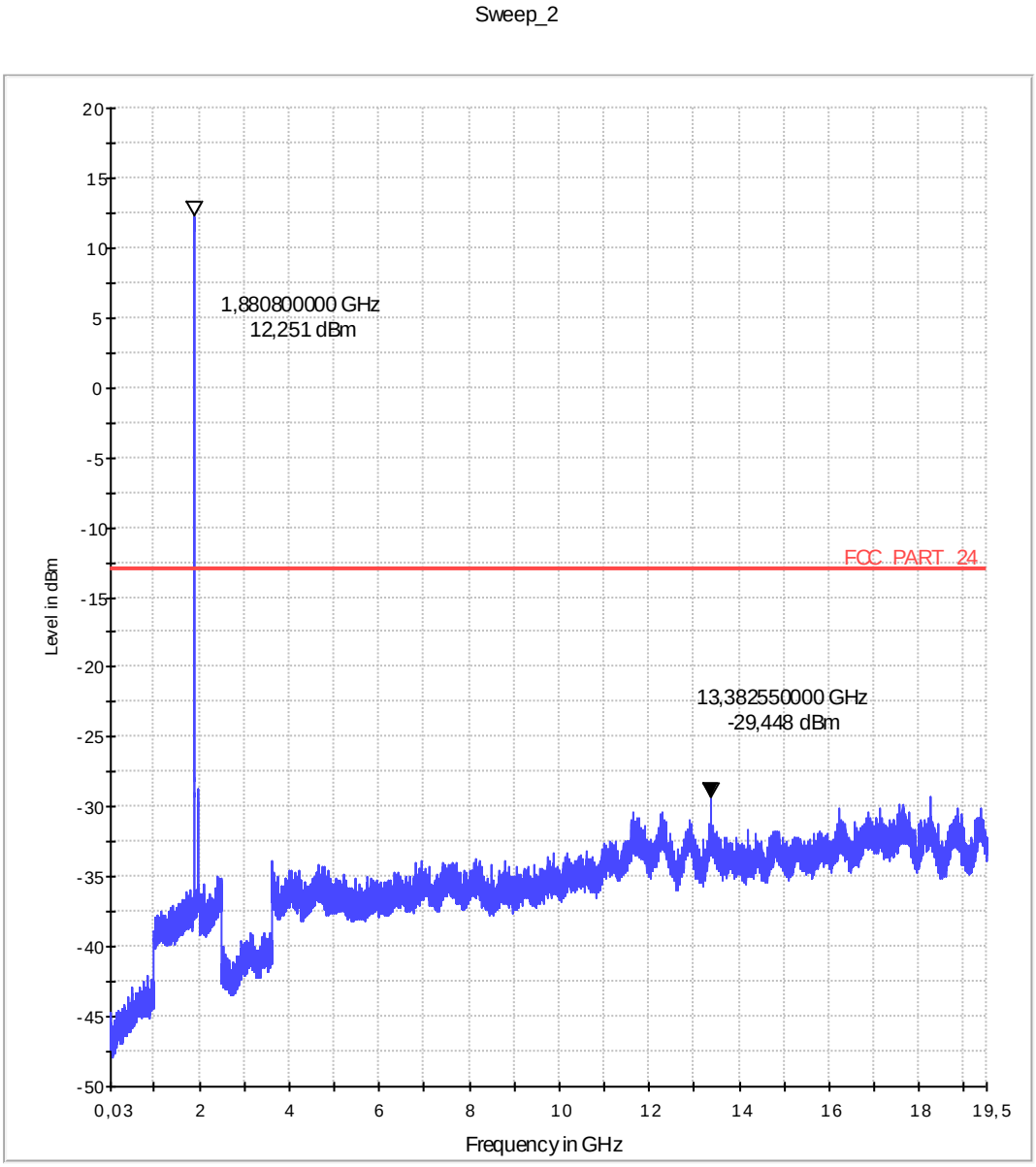


Diagram No.: 4.27

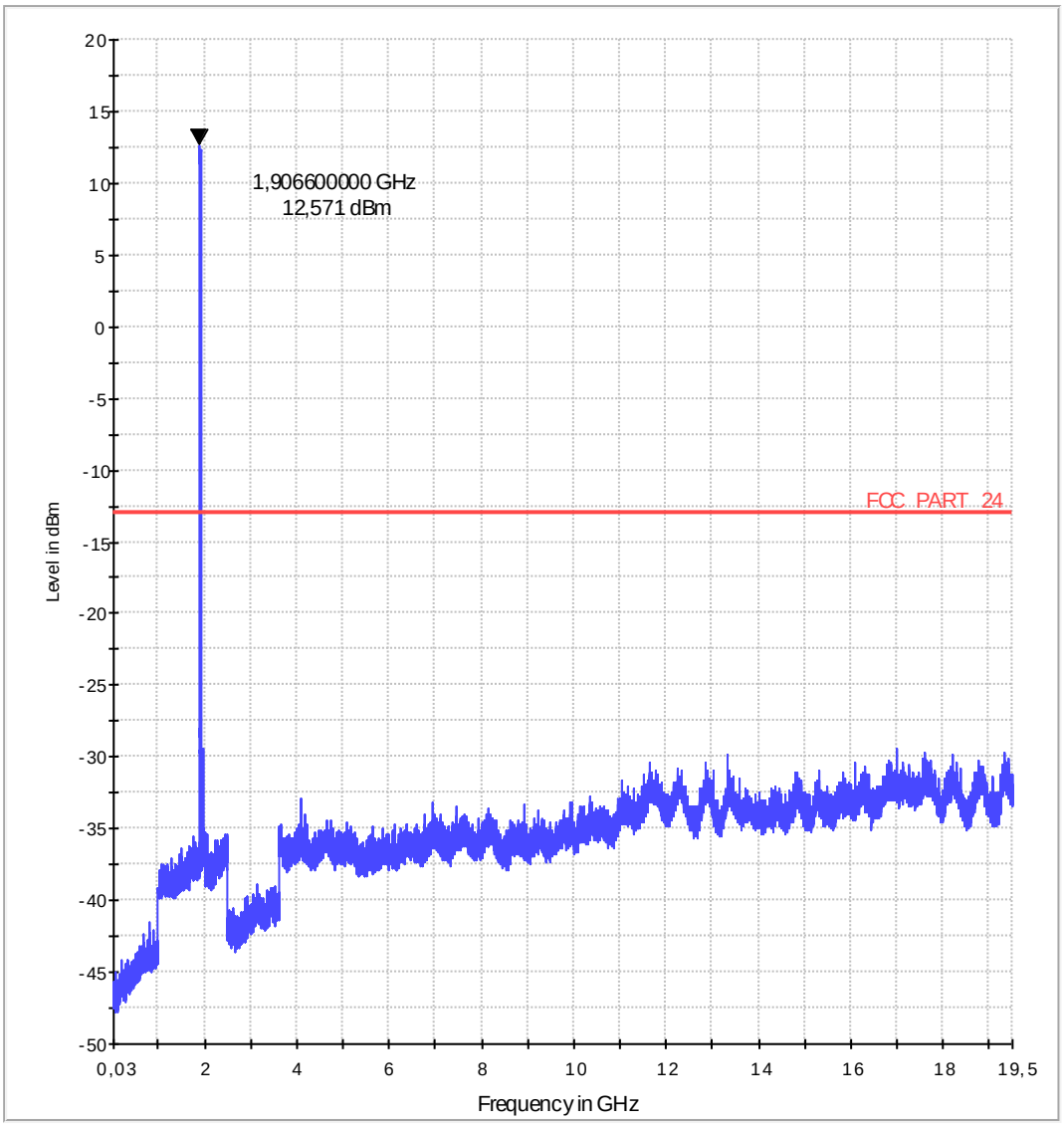
Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238; RSS-133
Op. Mode:	FDDII TX Voice
UE Channel:	high channel 9538

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_2



1.4.2. Spurious emissions – HSUPA mode

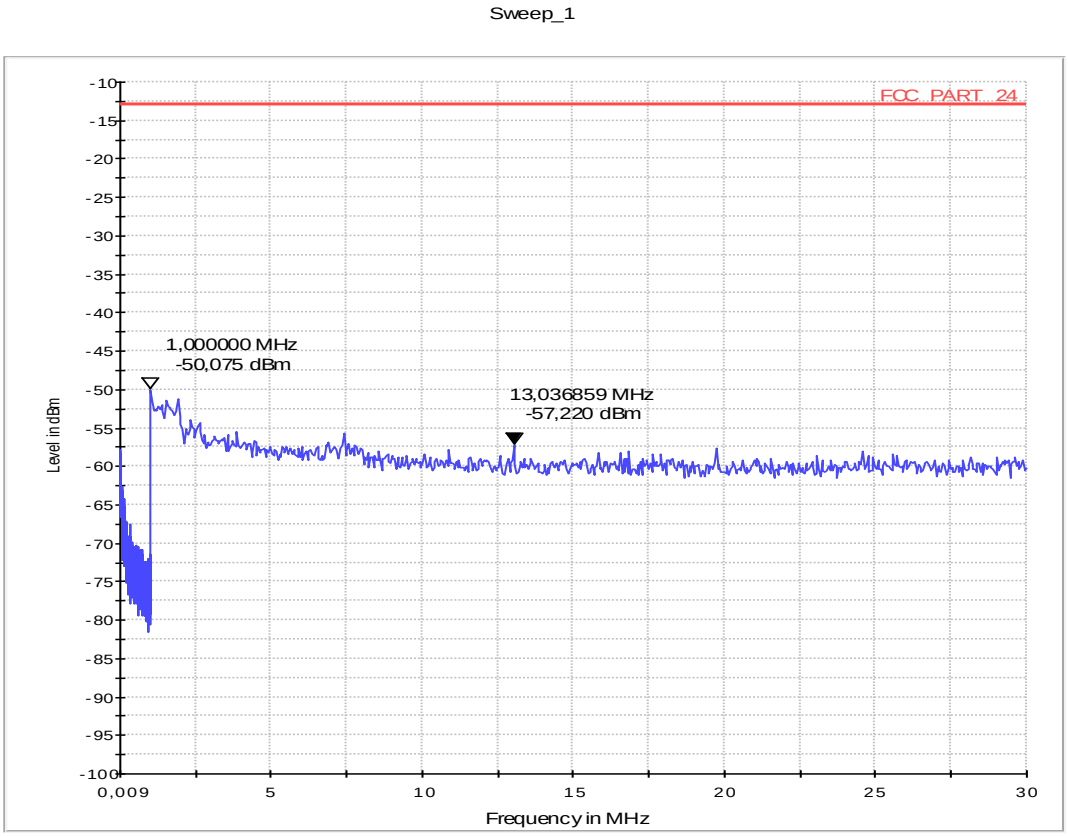
b_TX_FDD2_HSUPA_sweep1_low

Common Information

Test Description:	Radiated emission related to 1m
Test Site:	FAR
Test Standard:	FCC FCC Part 24.238 Broadband PCS
Antenna polarisation:	vertical / horizontal
Operation mode:	TX, UARFCN 9262 low
Operator Name:	HLa

EUT Information

EUT:	REB71UW Rev2
S/N:	CER_41251_00109_01_11
Manufacturer:	RIM
Voltage	3.8V DC



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

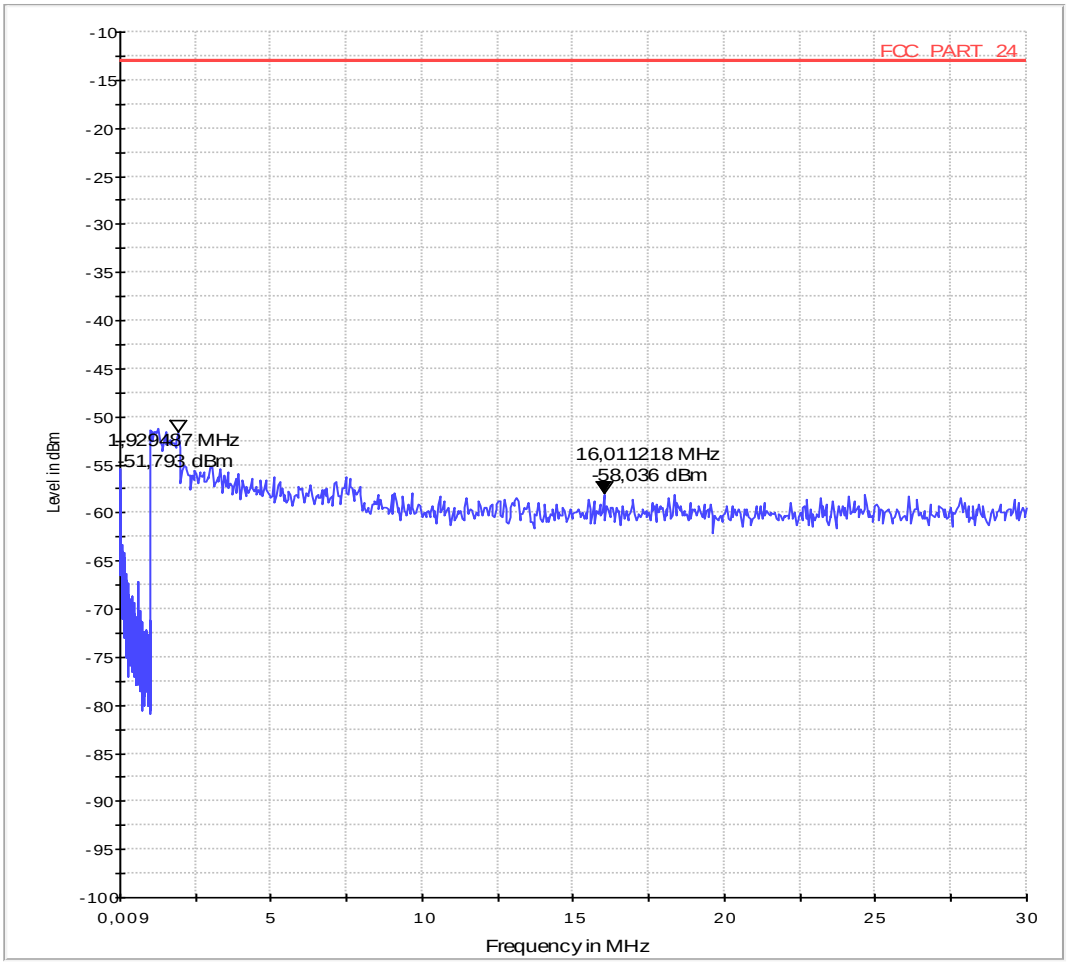
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.:b_14.13

Common Information

Test Description:	TX Spurious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC 24.238; RSS 133
Condition:	23°C 47%
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
Operation mode:	TX, UARFCN 9400 middle
Comment::	Vnom: 3,8V
Operator Name:	HLa

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

b_TX_FDD2_HSUPA_sweep 1_channel_High

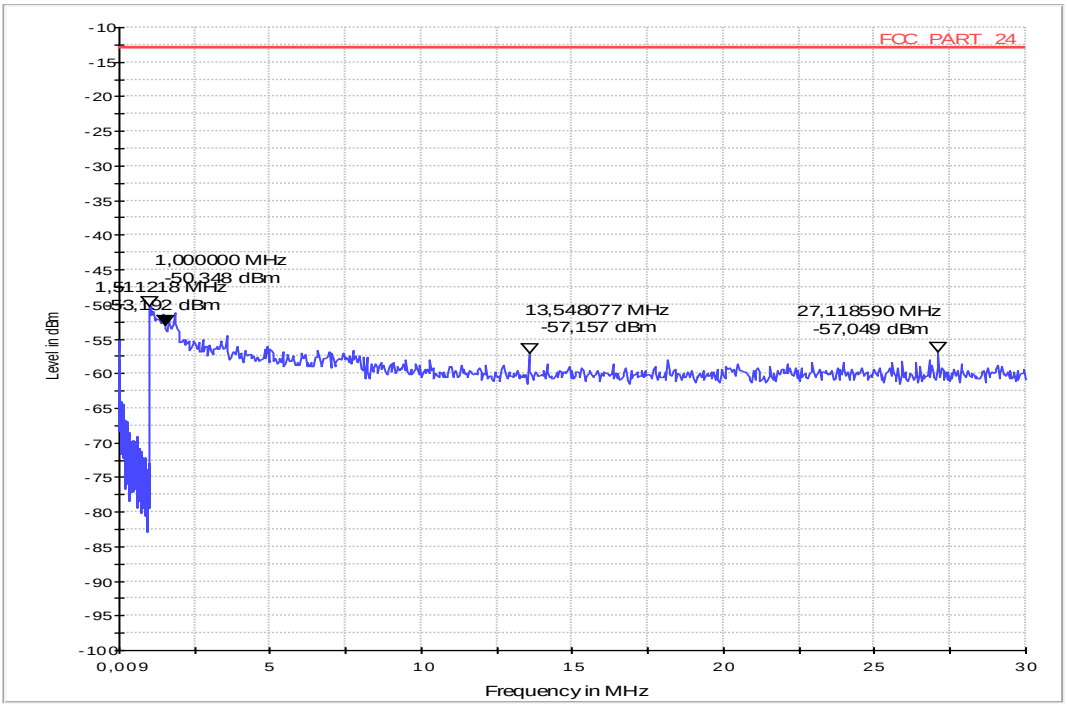
Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC Part 24.238, RSS-133
Operation mode:	TX, UARFCN 9538 high
Operator Name:	HLA
Comment:	Vnom: 3,8V

EUT Information

EUT:	REB71UW Rev2
S/N:	CER_41251_00109_01_11
Manufacturer:	RIM
Voltage	3.8V DC

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.: b_5.01

Common Information

Test Description:	TX Spurious Conducted Emission
Test Site:	Radio laboratory
Test Standard:	FCC 24.238 , RSS 133
Environment Conditions:	23°C 47%
Operator Name:	HLa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
op mod:	TX, UARFCN 9262 low
comment:	HSUPA, Vnom: 3,8V

Sweep_2

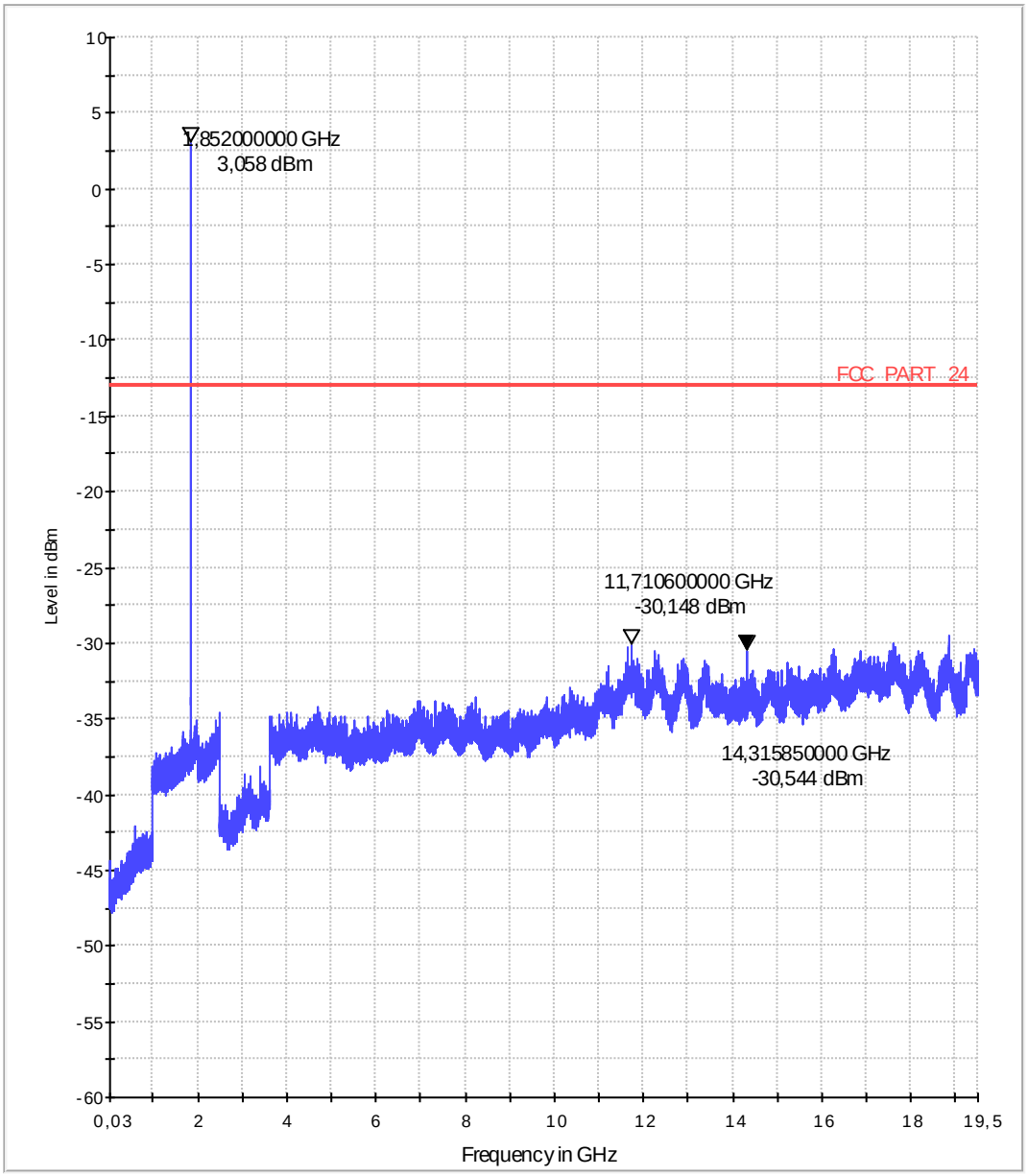


Diagram No.: b_5.02

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC 24.238 , RSS 133
Environment Conditions:	23°C 47%
Operator Name:	HLa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
op mod:	TX, UARFCN 9400 Middle
Comment:	HSUPA, Vnom: 3,8V

Sweep_2

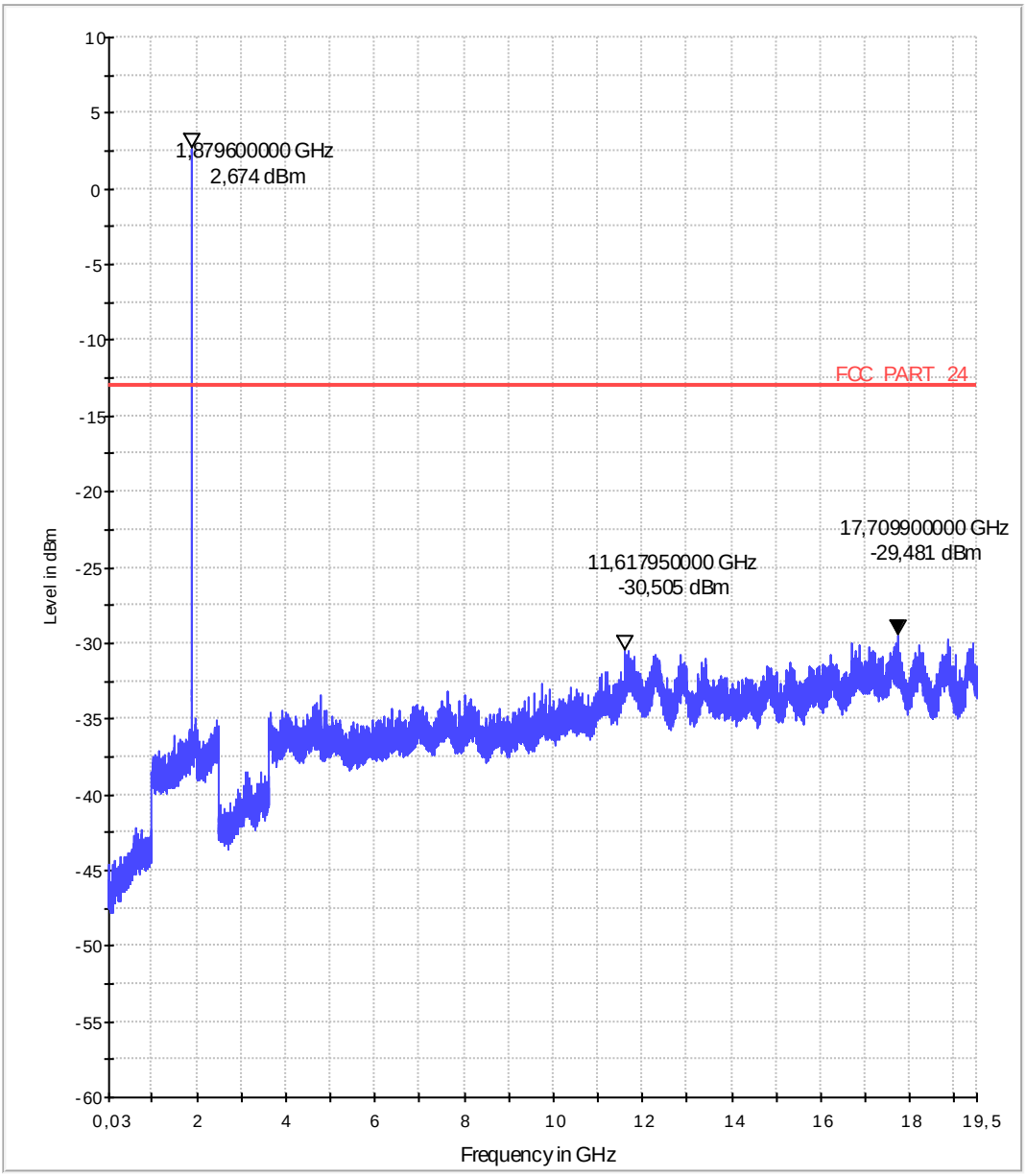
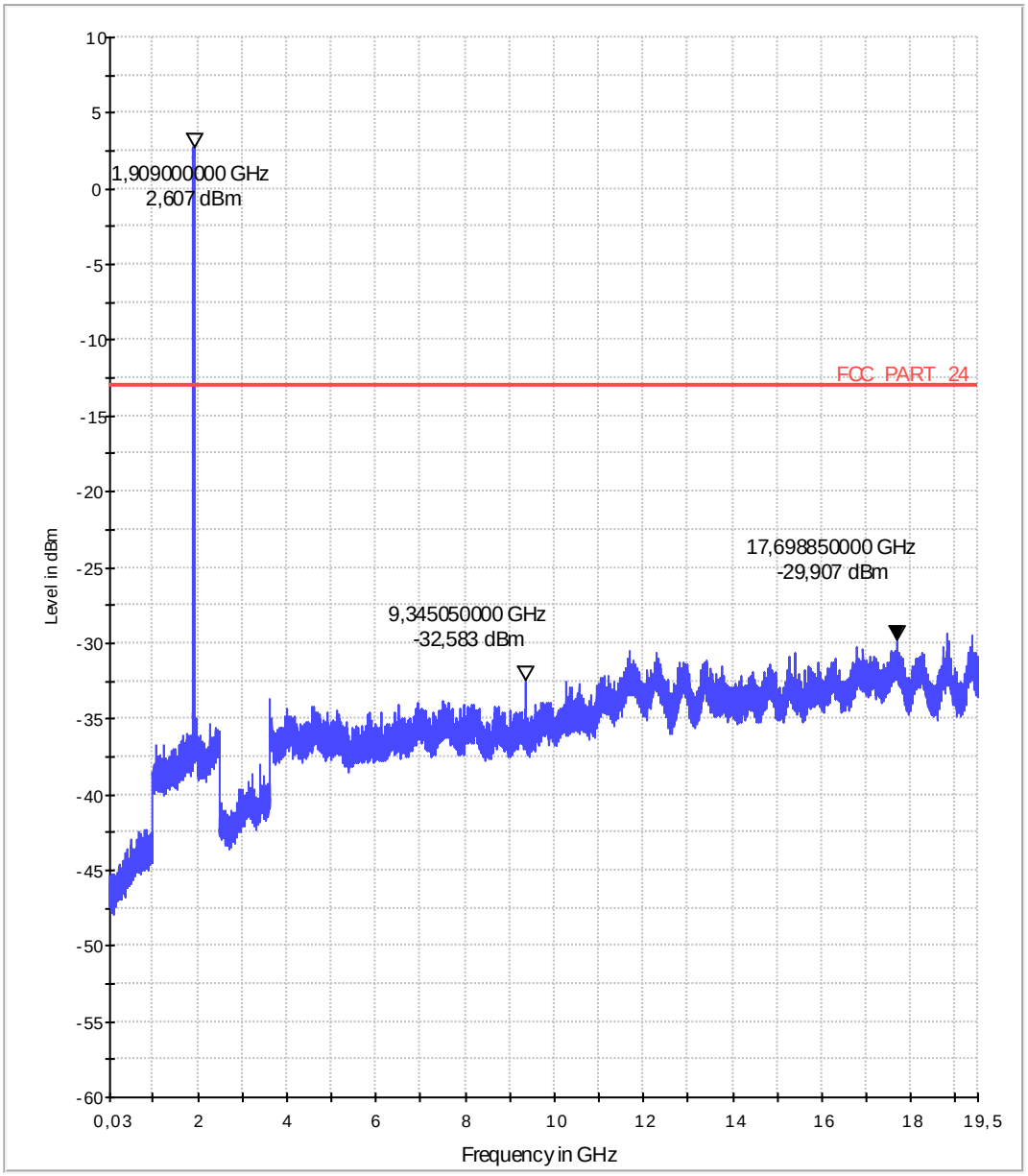


Diagram No.: b_14.14

Common Information

Test Description:	TX Spurious Conducted Emissions
Test Site:	Radio Laboratory
Test Standard:	FCC 24.238 , RSS 133
Environment Conditions:	23°C 47%
Operator Name:	HLa
EUT:	REA71UW Rev2, CER-41251-001- 09-01-11
op mod:	TX, UARFCN 9538 High
Comment:	HSUPA, Vnom: 3,8V

Sweep_2



1.4.3. Band-Edge compliance conducted - voice

Diagram No.: 4.29

Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238; RSS- 133
Environment Conditions:	23°C 47%
Operator Name:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11
Op.Mod:	TX UMTS II, Ch 9262 (Low)

Sweep_3a_Band_Edge_Channel_9262_PK

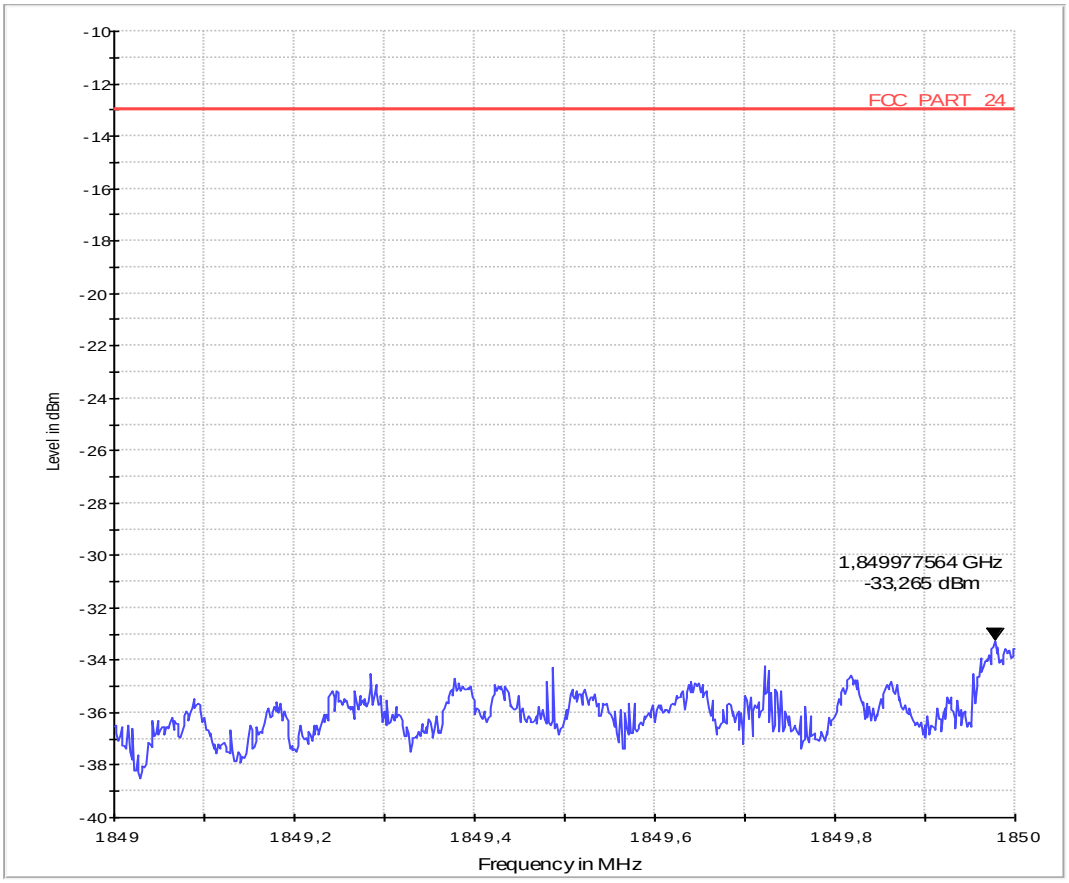


Diagram No.:4.30

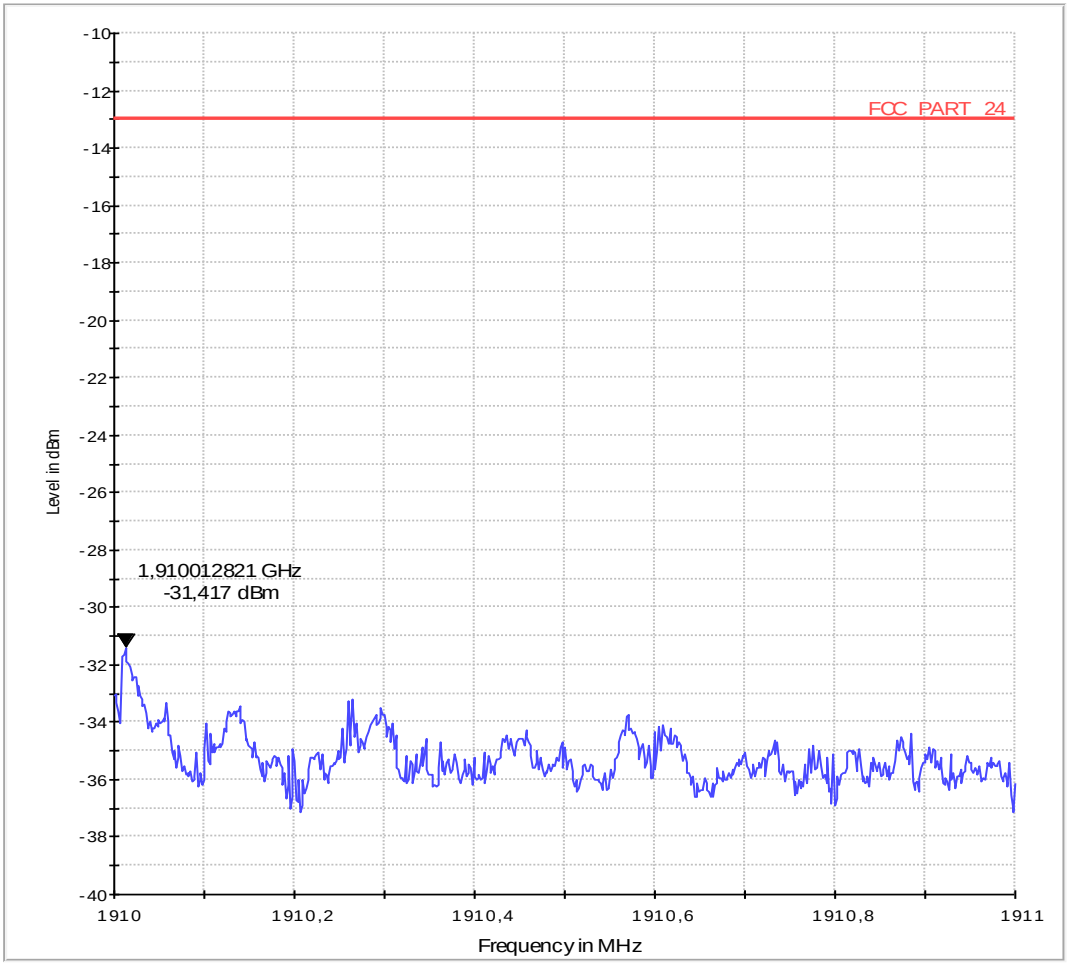
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238; RSS-133
Environment Conditions:	23°C 47%
Operator Name:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11
Op.Mod:	TX UMTS II, Ch 9538(High)

Sweep_3a_Band_Edge_Channel_9538_PK



1.4.4. Band-Edge compliance conducted – HSUPA Mode

Diagram No.: 4.45

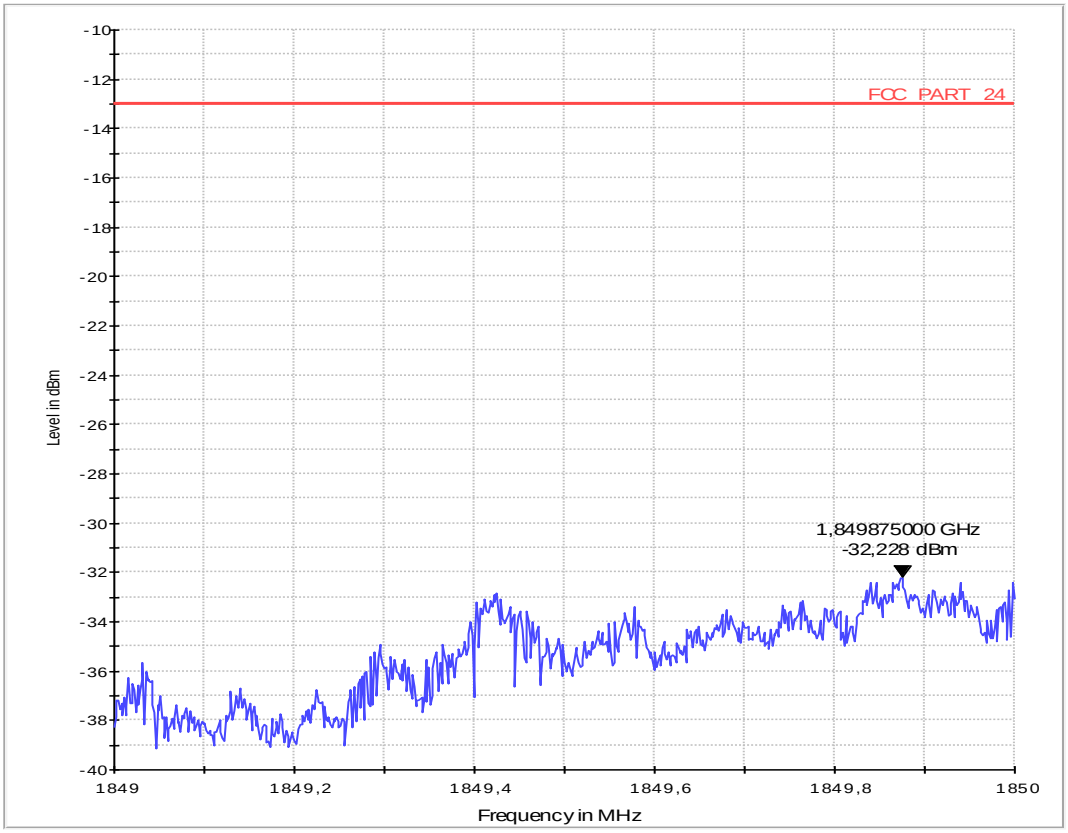
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238; RSS-133
Op. Mode:	FDDII TX HSUPA, Ch 9262
Environment Conditions:	23°C 47%
Operator:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_3a_Band_Edge_Channel_9262_PK



Sweep Setup: Sweep_3a_Band_Edge_Channel_9262_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.849 GHz - 1,85 GHz	1,603 kHz	PK+	30 kHz	30 s	0 dB

Diagram No.: 4.46

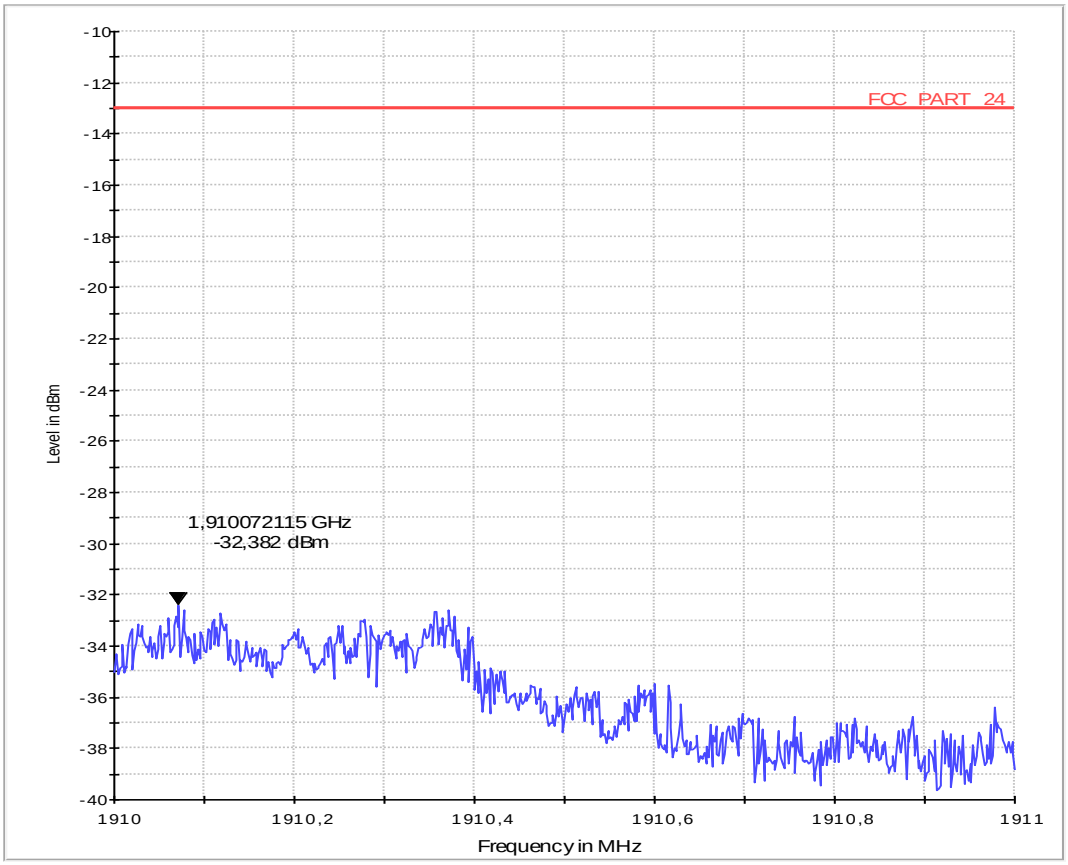
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 24.238; RSS-133
Op. Mode:	FDDII TX HSUPA, Ch 9538
Environment Conditions:	23°C 47%
Operator:	dpa

EUT Information

EUT:	REA71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_3a_Band_Edge_Channel_9538_PK



Sweep Setup: Sweep_3a_Band_Edge_Channel_9538_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.91 GHz - 1,911 GHz	1,603 kHz	PK+	30 kHz	30 s	0 dB

1.5. Spurious emissions conducted – FDD BAND IV

1.5.1. Spurious emissions voice mode

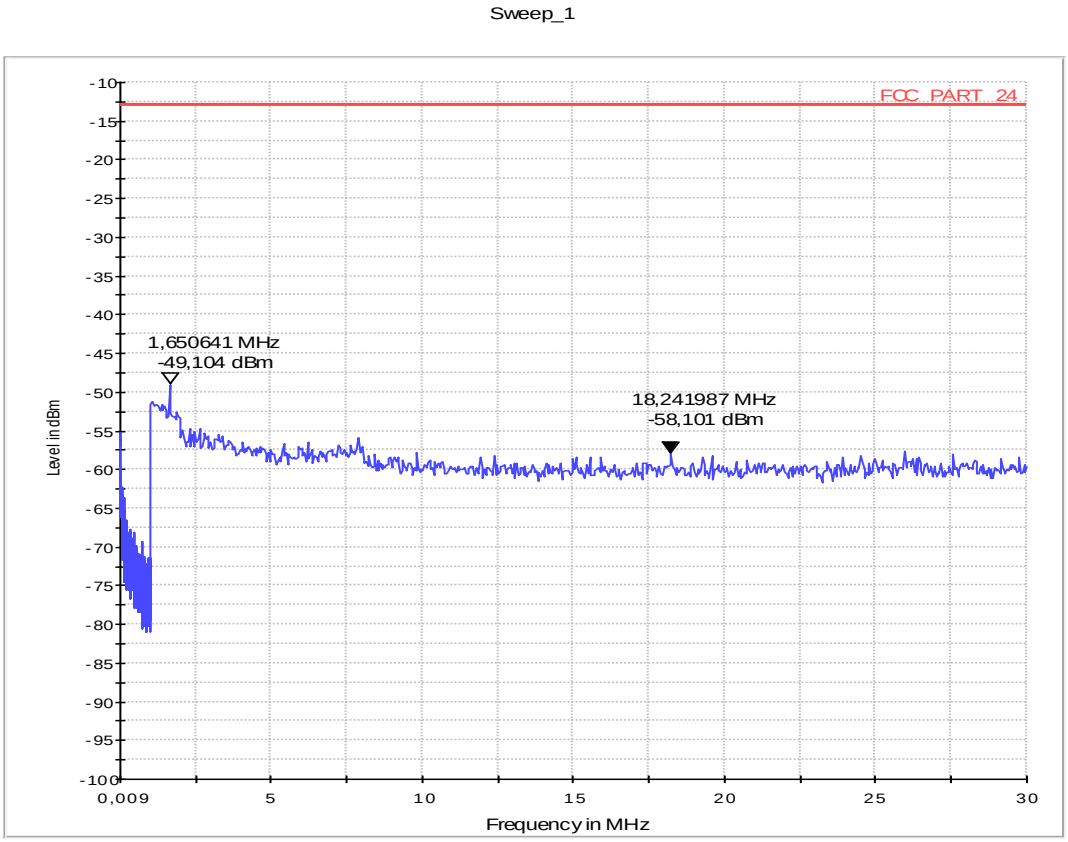
b_TX_FDD4_Voice_sweep1_channel_low

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC Part 2.202, RSS-139
Operation mode:	TX, UARFCN low
Operator Name:	HLA
Comment:	Vnom: 3,8V

EUT Information

EUT:	REB71UW Rev2
S/N:	CER_41251_00109_01_11
Manufacturer:	RIM
Voltage	3.8V DC



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

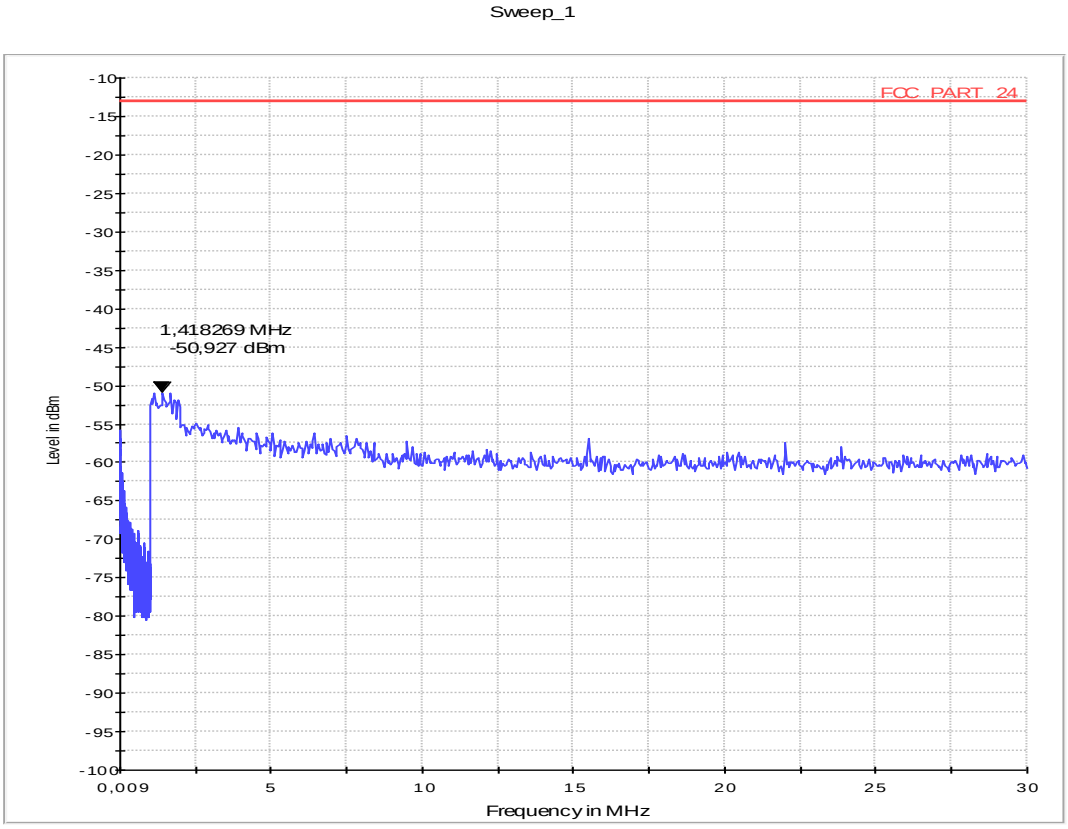
Diagram No.: 4.34 – Middle channel

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 27. RSS-132
Op. Mode:	FDDIV TX Voice
UE Channel:	middle channel 1413

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

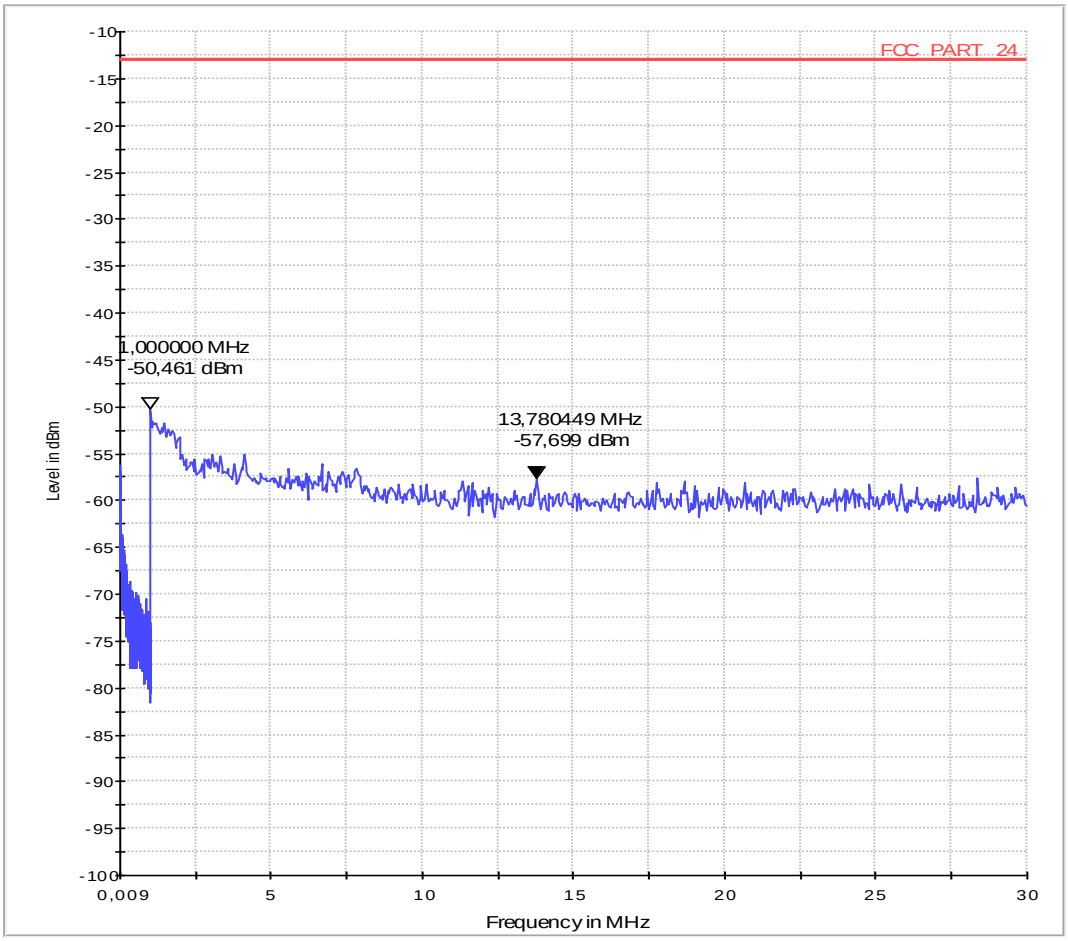
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

b_TX_FDD4_Voice_sweep1_h

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC Part 27, RSS-139
EUT:	REA71UW, rev. 2 (CER-41251-001 09-01-11)
Manufacturer:	RIM
Operation mode:	TX, UARFCN 1513_high
Operator Name:	Tas
Comment:	Vnom: 3,8V

Sweep_1



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.: 4.31

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 27 RSS-139
Op. Mode:	FDDIV TX Voice
UE Channel:	low channel 1312

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_2

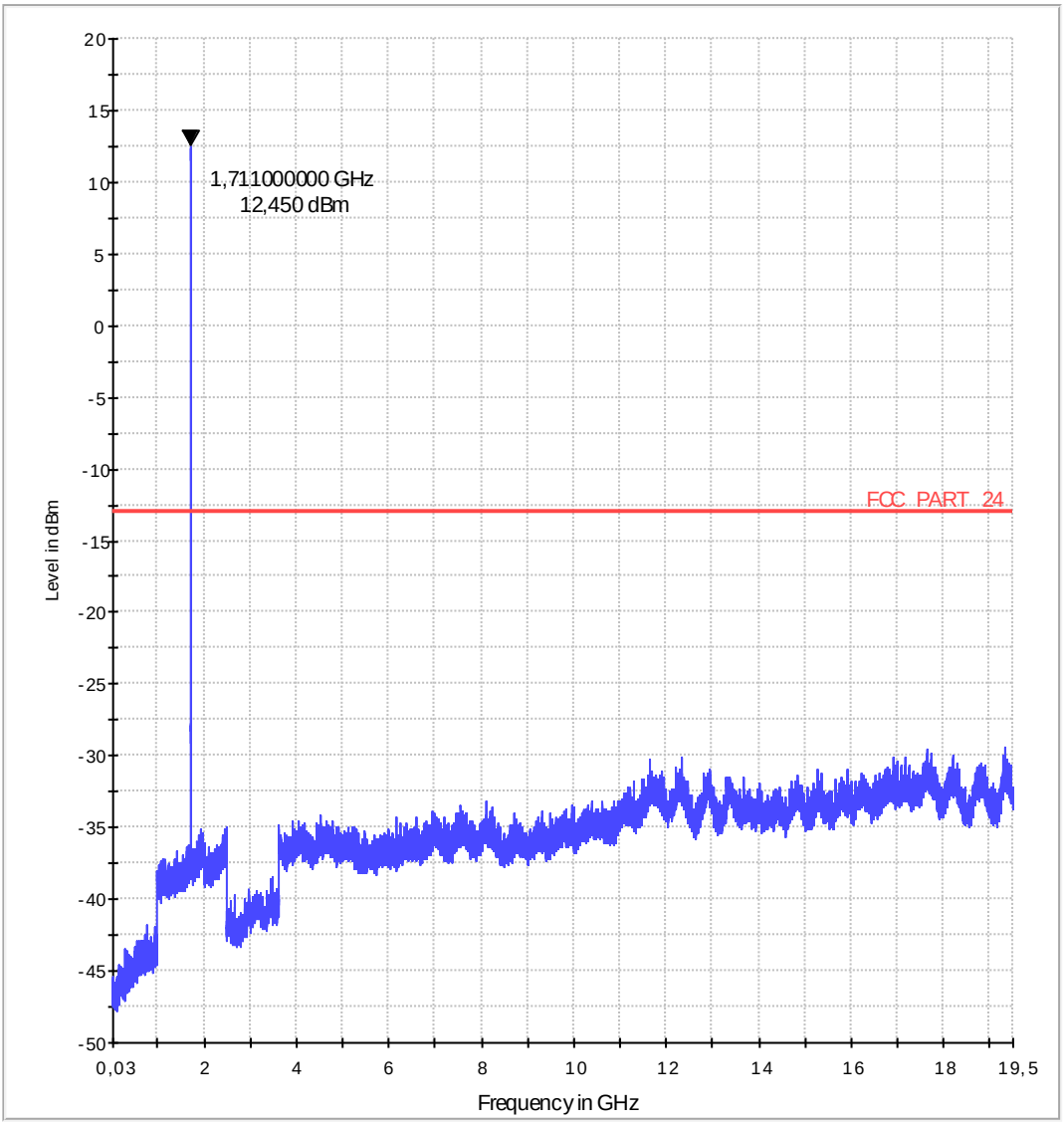


Diagram No.: 4.32

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 27 RSS-139
Op. Mode:	FDDIV TX Voice
UE Channel:	middle channel 1413

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

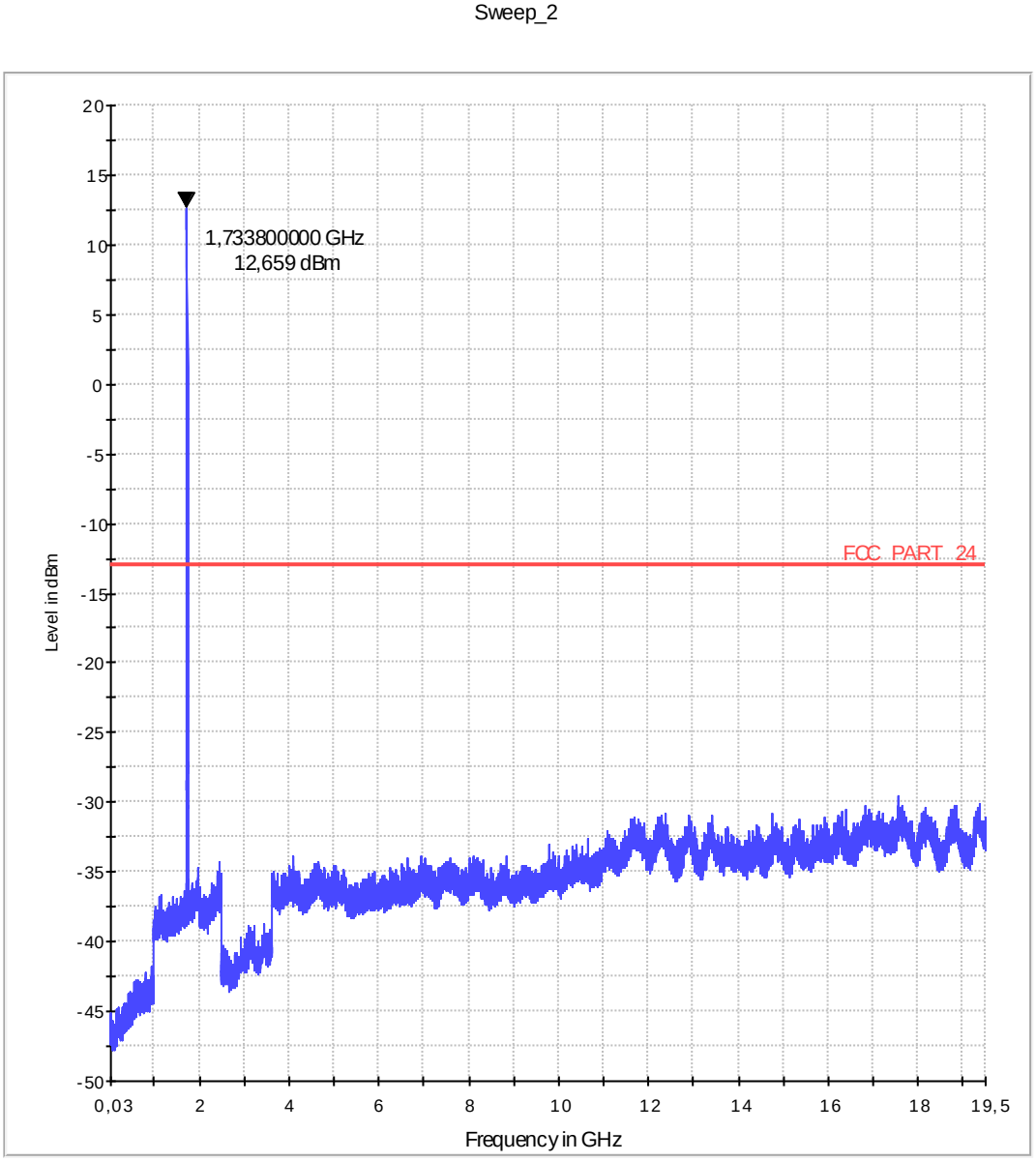


Diagram No.: 4.33

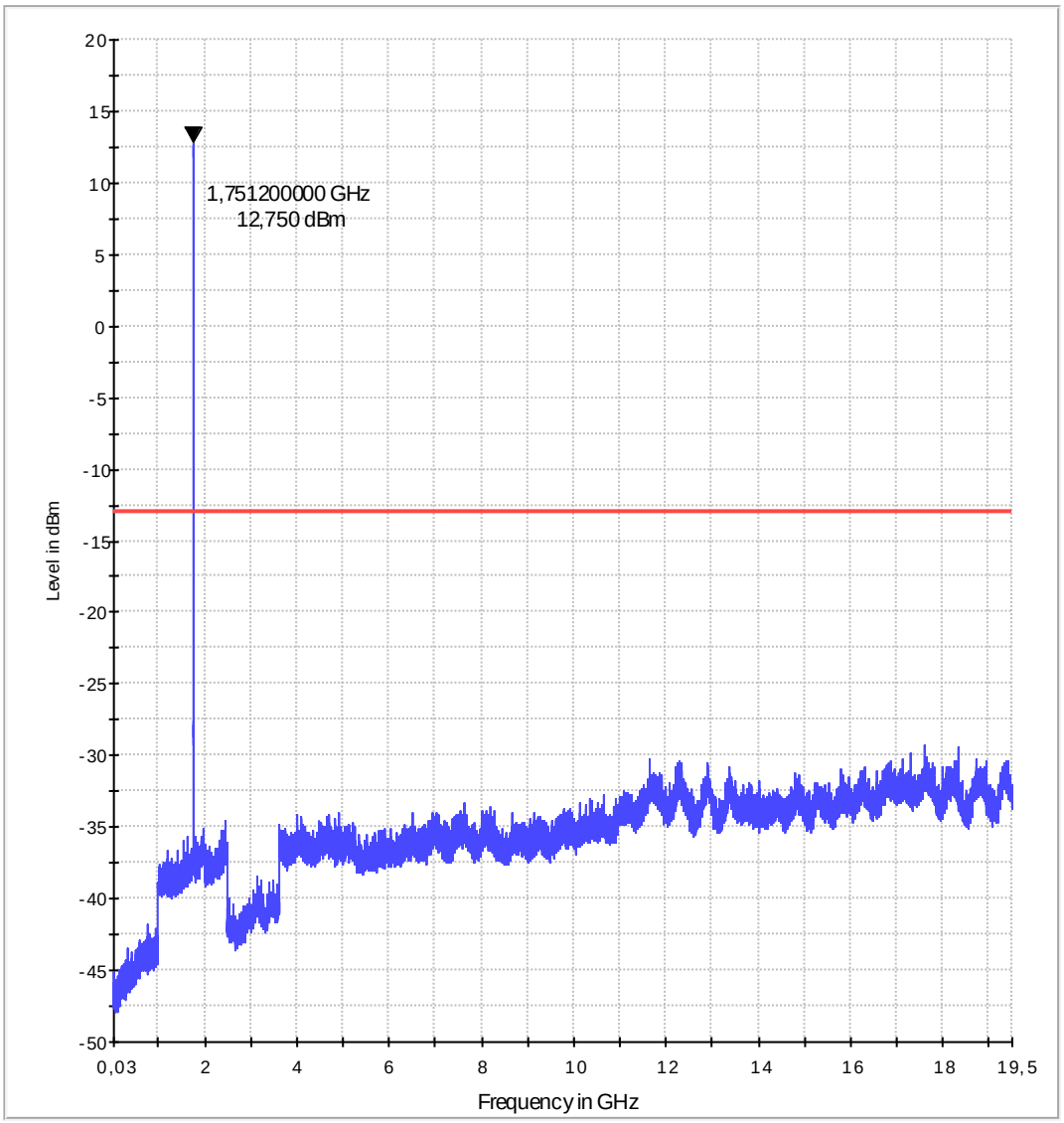
Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 27:RSS-139
Op. Mode:	FDDIV TX Voice
UE Channel:	high channel 1513(High)

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_2



1.5.2. Spurious emissions HSUPA mode

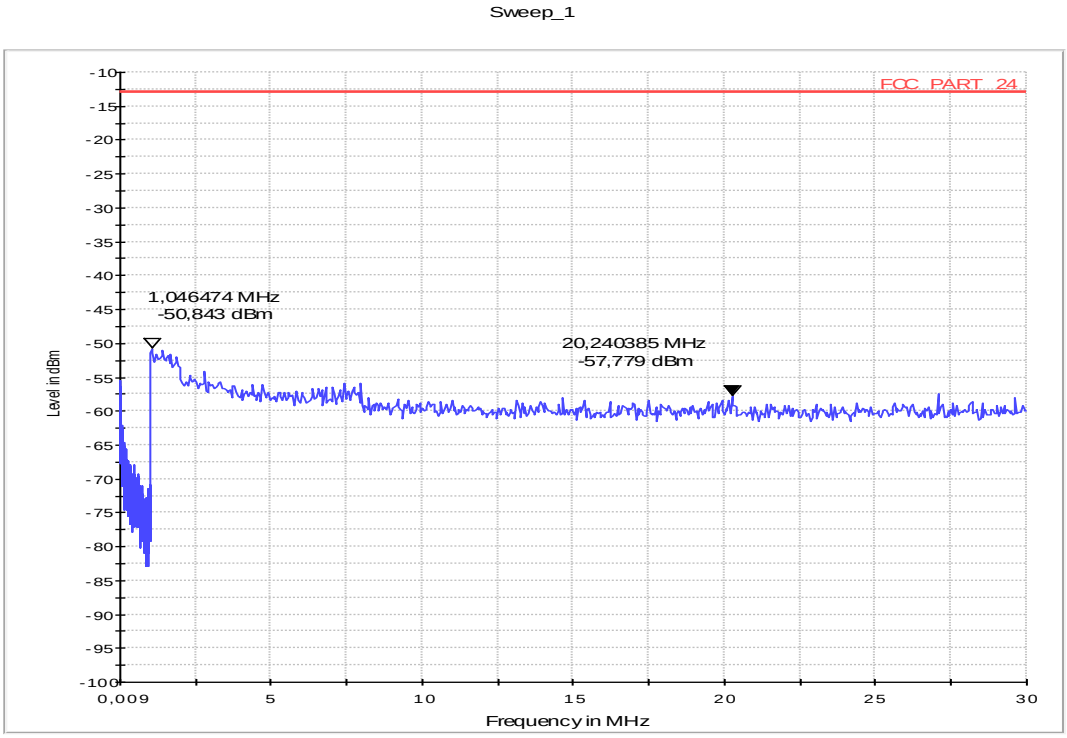
b_TX_FDD4_HSUPA_sweep1_channel_low

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC Part 27, RSS-139
Operation mode:	TX, UARFCN 1312 low
Operator Name:	HLA
Comment:	Vnom: 3,8V

EUT Information

EUT:	REB71UW Rev2
S/N:	CER_41251_00109_01_11
Manufacturer:	RIM
Voltage	3.8V DC



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

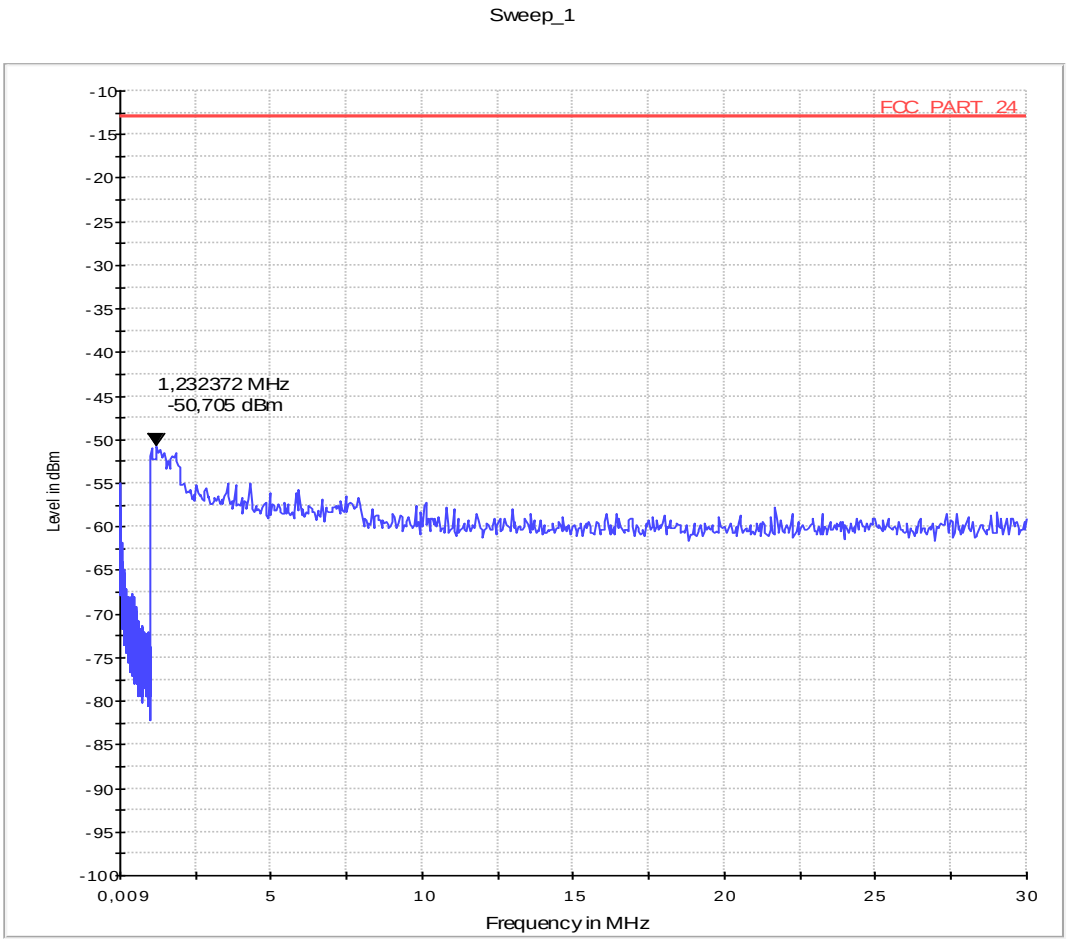
Diagram No.: 4.40

Common Information

Test Description:	TX Spourious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC 27; RSS-139
Op. Mode:	FDDIV TX HSUPA middle channel 1413
Operator:	dpa

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

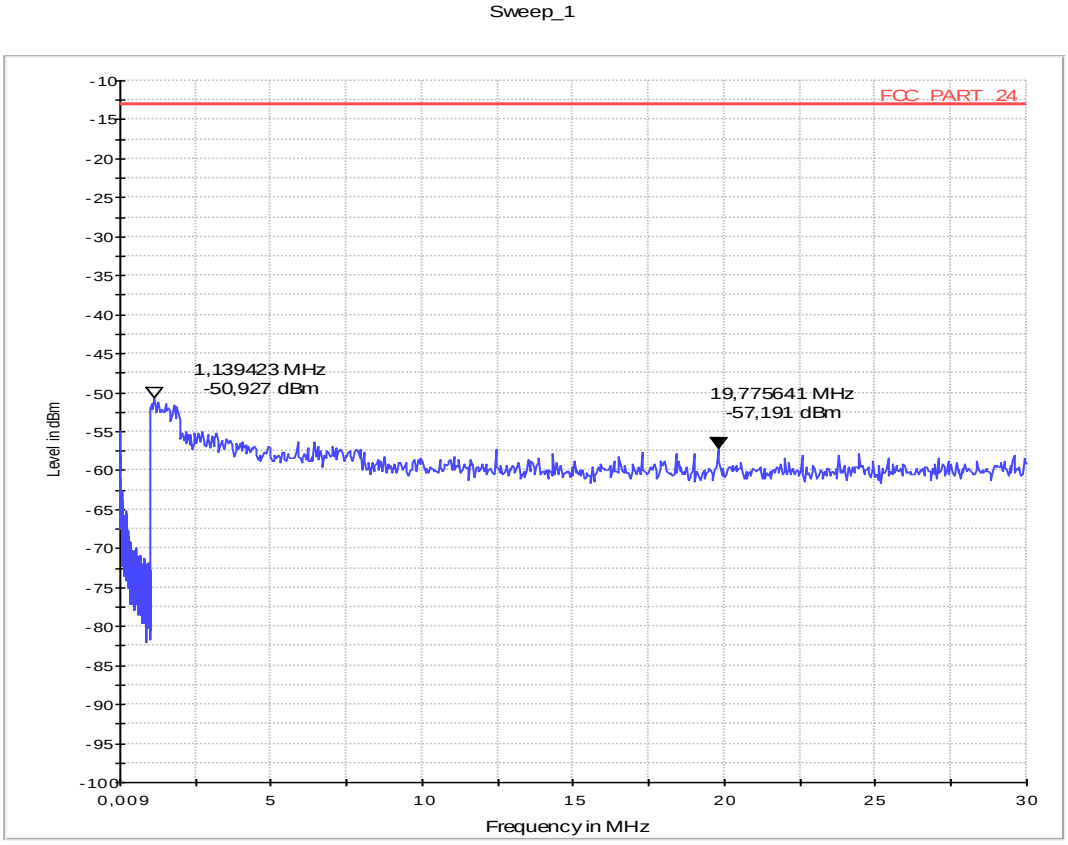
b_TX_FDD4_HSUPA_sweep1_channel_High

Common Information

Test Description:	TX Spourious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC Part 27, RSS-139
Operation mode:	TX, UARFCN 1513 High
Operator Name:	HLa
Comment:	3.8VDC

EUT Information

EUT:	REB71UW Rev2
S/N:	CER_41251_00109_01_11
Manufacturer:	RIM
Voltage	3.8V DC



Sweep Setup: Sweep_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

Diagram No.: 4.37

Common Information

Test Description:	TX Spurious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22. RSS-132
Op. Mode:	FDDIV TX HSUPA low channel 1312
Operator:	dpa

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

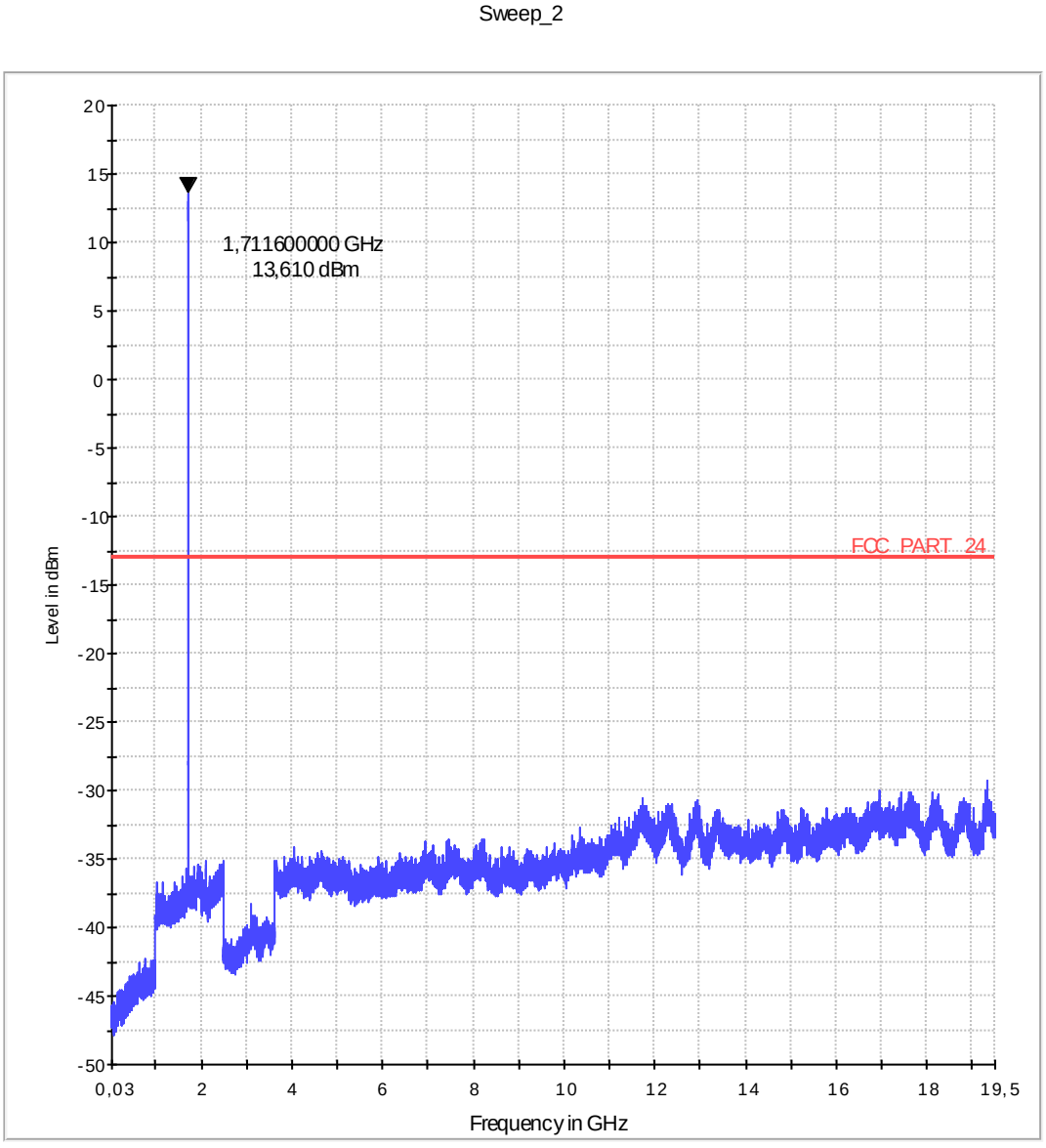


Diagram No.: 4.38

Common Information

Test Description:	TX Spurious Conducted Emission conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22 RSS-132
Op. Mode:	FDDIV TX HSUPA middle channel 1413
Operator:	dpa

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_2

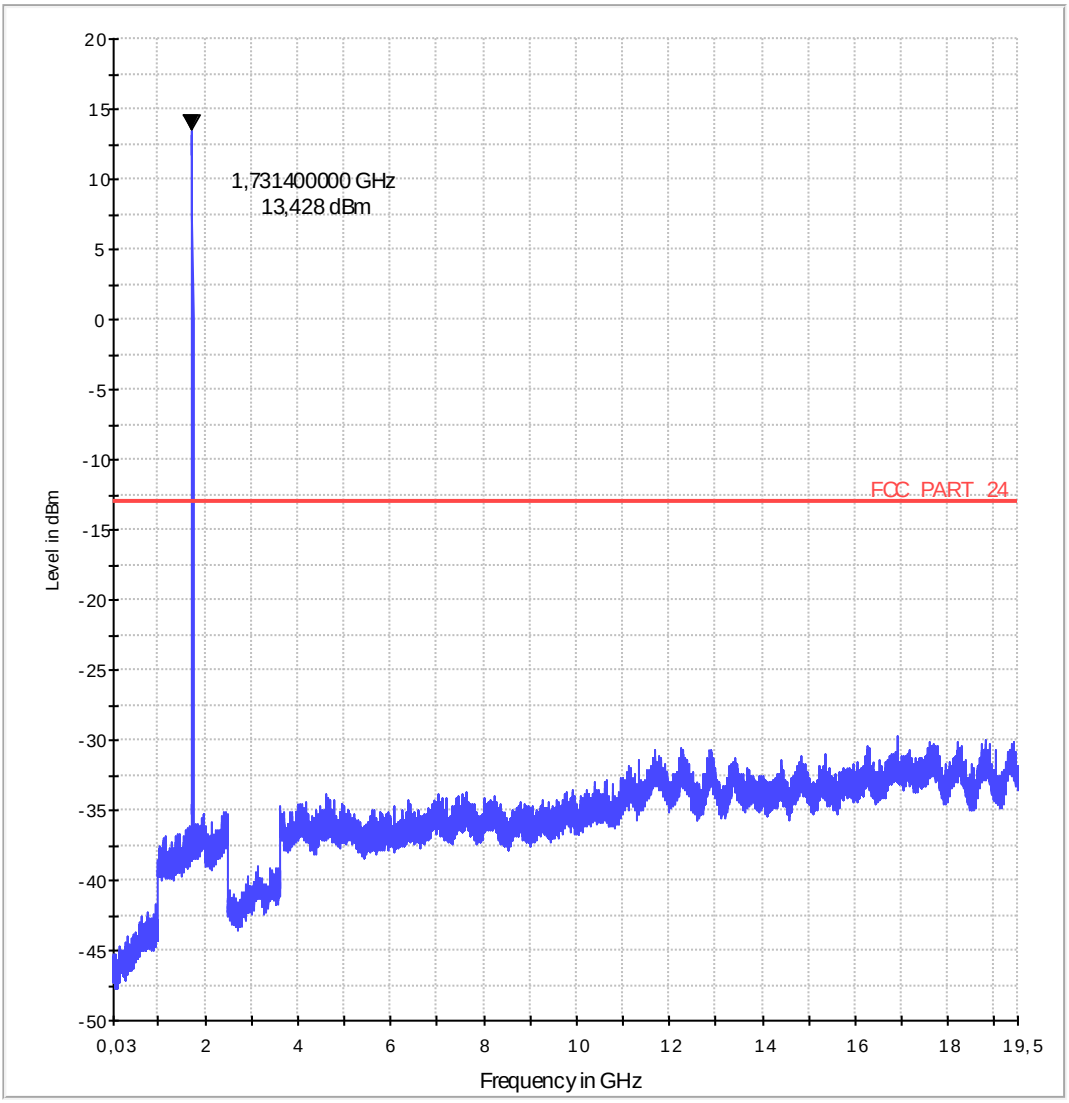


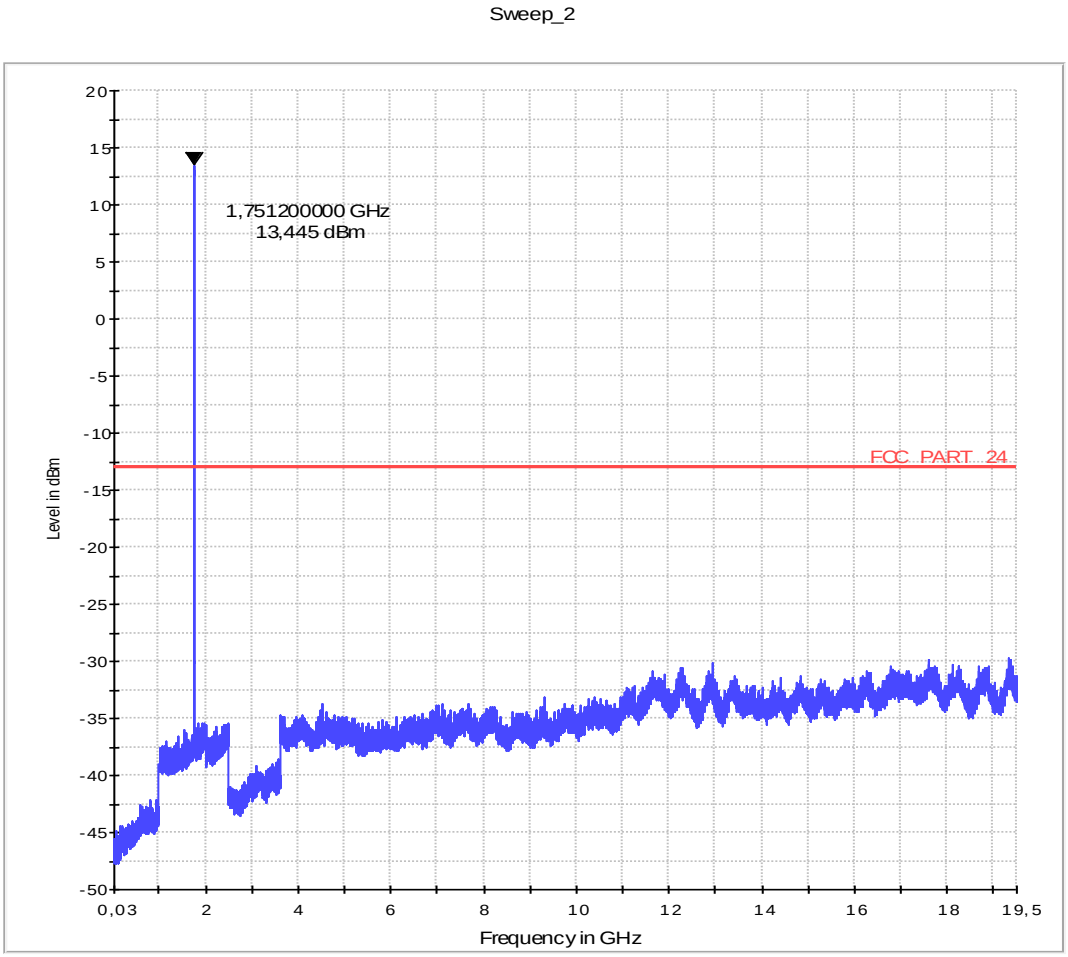
Diagram No.: 4.39

Common Information

Test Description:	TX Spurious Conducted Emission
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22 RSS-132
Op. Mode:	FDDIV TX HSUPA high channel 1513
Operator:	dpa

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11



Sweep Setup: Sweep_2 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 19,5 GHz	850 kHz	PK+	1 MHz	150 s	0 dB

1.5.3. Band-Edge compliance conducted – voice mode

Diagram No.: 4.35

Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 27, RSS-139
Op. Mode:	FDDIV TX, Ch 1312 (Low)

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_3a_Band_Edge_Channel_1312_PK

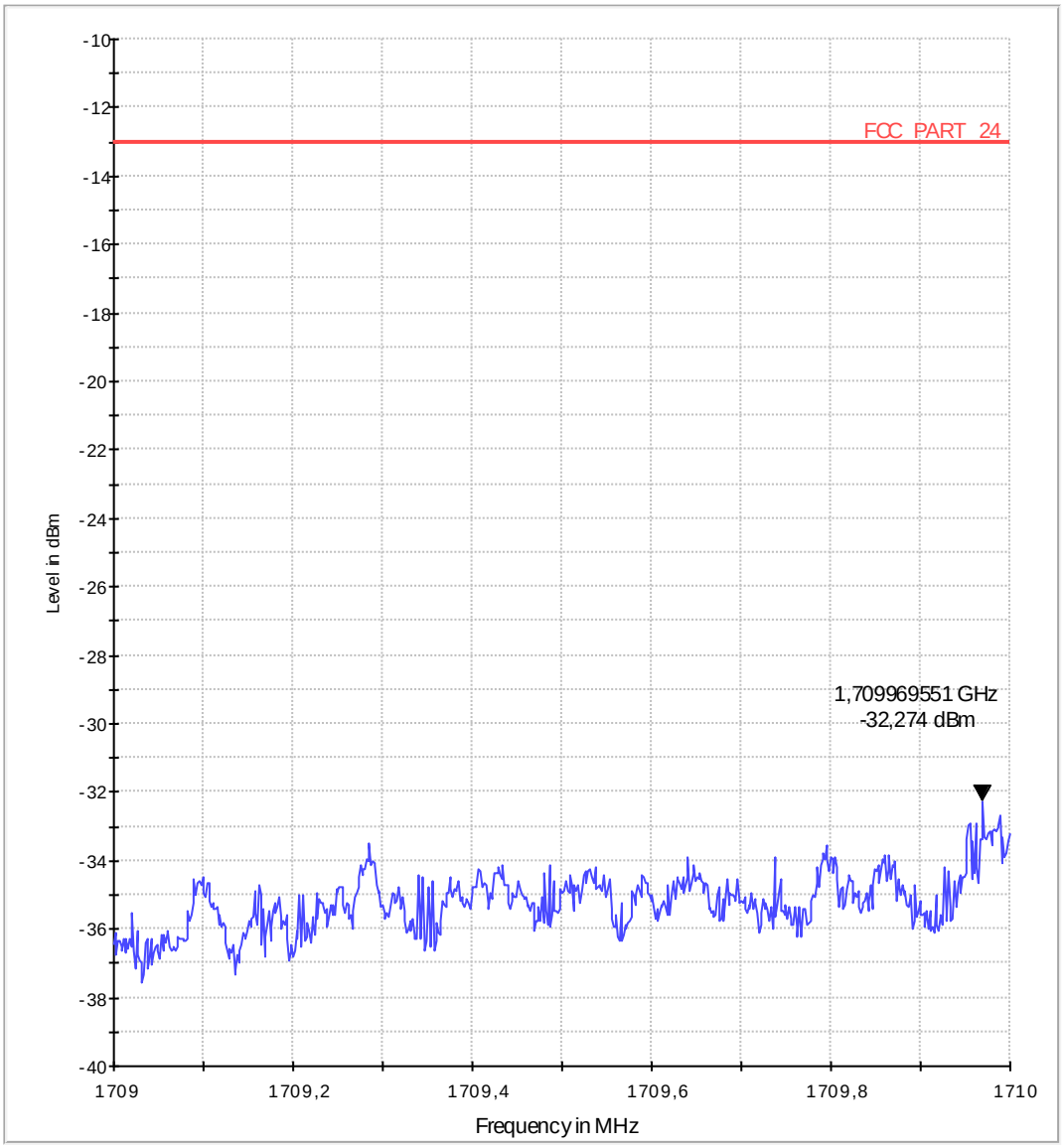


Diagram No.: 4.36

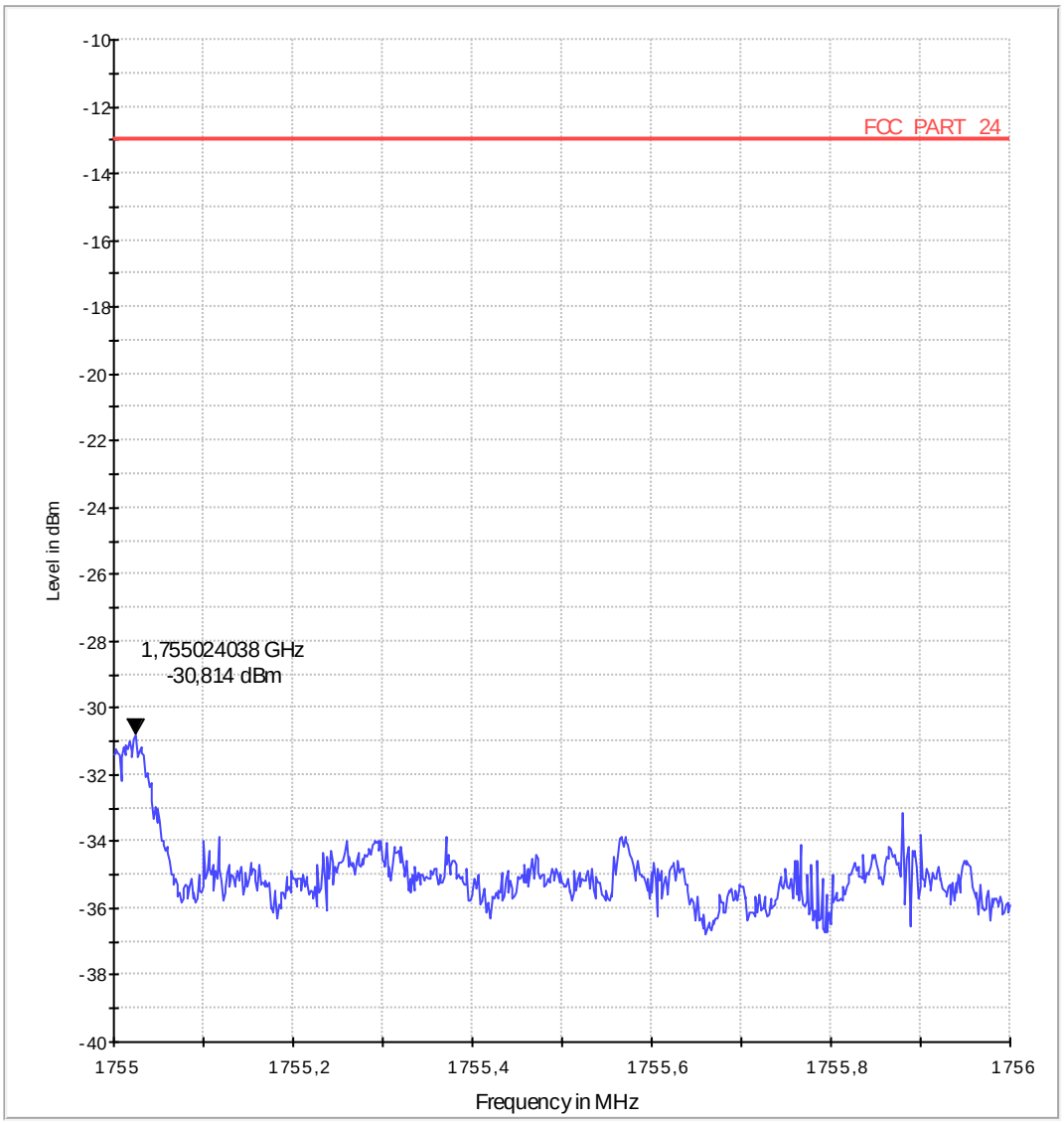
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 27, RSS-139
Op. Mode:	FDDIV TX Ch 1513 (High)
Environment Conditions:	23°C 47%

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_3a_Band_Edge_Channel_1513_PK



1.5.4. Band-Edge compliance conducted – HSUPA mode

Diagram No.: 4.41

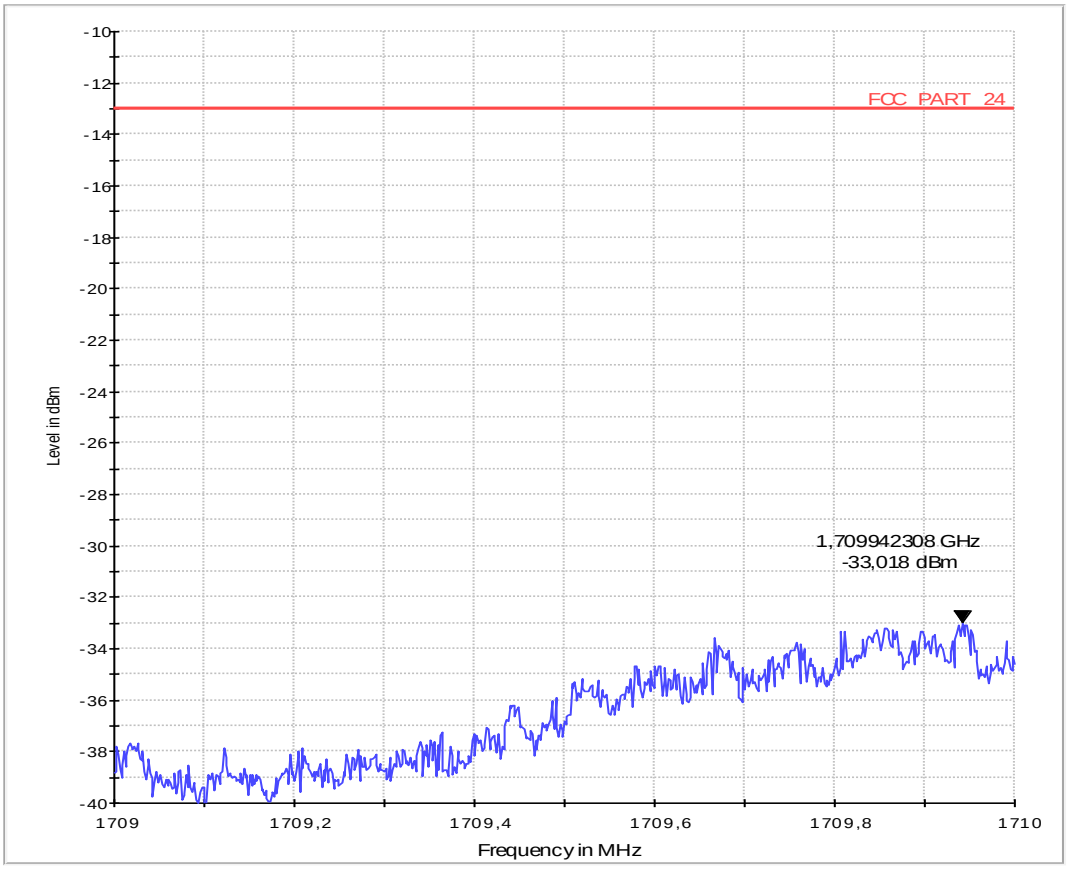
Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22; RSS132
Op. Mode:	FDDIV TX HSUPA, Ch 1312
Environment Conditions:	23°C 47%
Operator:	dpa

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11

Sweep_3a_Band_Edge_Channel_1312_PK



Sweep Setup: Sweep_3a_Band_Edge_Channel_1312_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.709 GHz - 1,71 GHz	1,603 kHz	PK+	30 kHz	30 s	0 dB

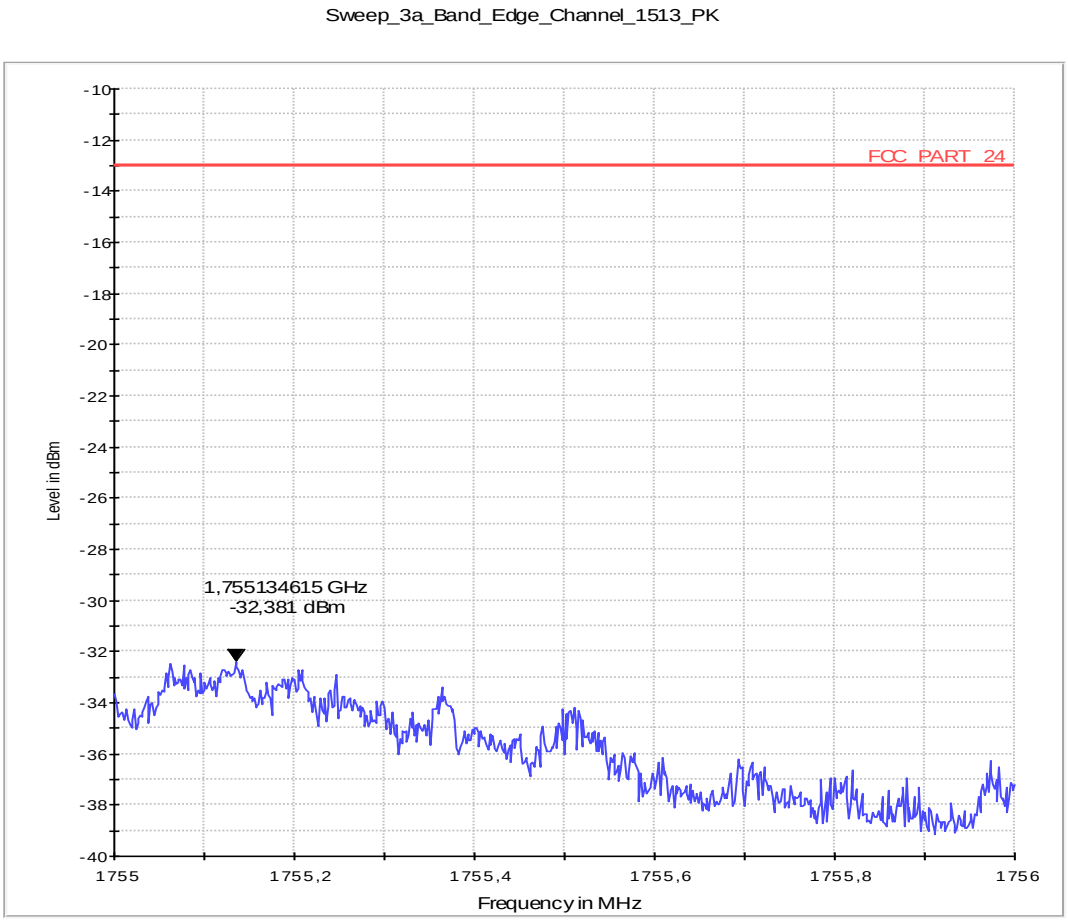
Diagram No.: 4.42

Common Information

Test Description:	Band Edge Conducted
Test Site:	Radio Laboratory
Test Standard:	FCC Part 22.917,RSS-132
Op. Mode:	FDDIV TX HSUPA Ch 1513
Environment Conditions:	23°C 47%
Operator:	dpa

EUT Information

EUT:	REB71UW Rev2
Manufacturer:	RIM
Voltage	3.8V DC
S/N:	CER_41251_00109_01_11



Sweep Setup: Sweep_3a_Band_Edge_Channel_1513_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.755 GHz - 1,756 GHz	1,603 kHz	PK+	30 kHz	30 s	0 dB

1.6. Spurious emissions radiated – FDD Band II

1.6.1. Spurious emissions voice mode

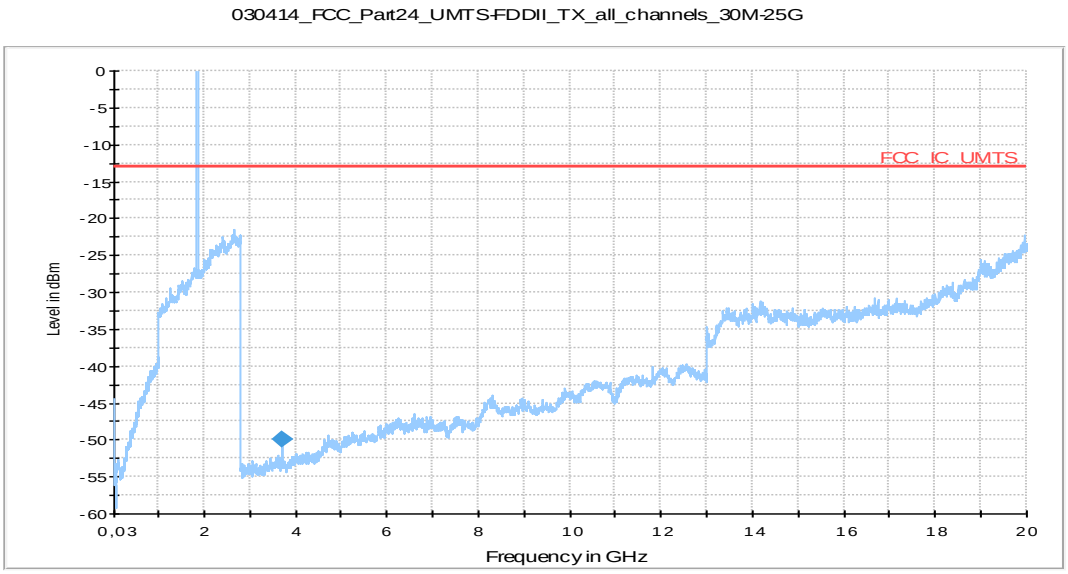
8.01_FCC _Part24_UMTS-FDDII_TX_Ch9262_Rev2

Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH, Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Operating Mode:	MS allocated UL channel 9262
Operating Conditions:	Humidity: 60%; Temperature: 19°
Operator Name:	dpa

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS3 (HDW-24529-001) AAC
Power Supply:	Real battery, fully charged before test
Comments:	



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Comment
1853.597195	24.9	10000.0	1000.000	155.0	V	108.0	90.0	-62.6	
3702.855711	-49.9	10000.0	1000.000	155.0	H	142.0	0.0	-94.9	

8.02_FCC _Part24_UMTS-FDDII_TX_Ch9400_Rev2

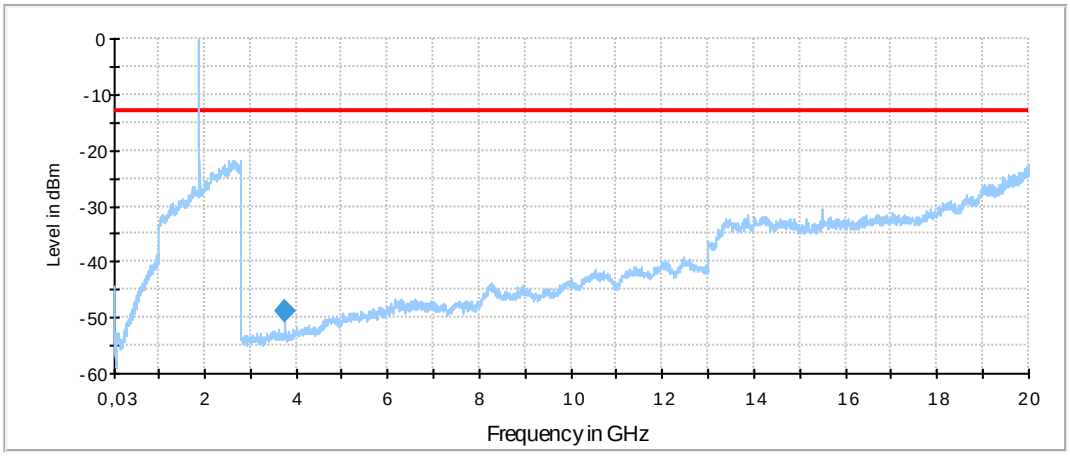
Common Information

Test Description:	Radiated Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24
Test Case:	-
Operating Mode:	UE allocated UL channel 9400
Environmental Conditions:	Humidity: 73%rH; Temperature: 19°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS3 (HDW-24529-001) AAC
Power Supply:	Real battery, fully charged before test
Comments:	

030414_FCC_Part24_UMTS-FDDII_TX_all_channels_30M-25G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBm)
3762.394790	-48.9	10000.0	1000.000	H	121.0	0.0	-95.1	35.9	-13.0

8.03_FCC _Part24_UMTS-FDDII_TX_Ch9538_Rev2

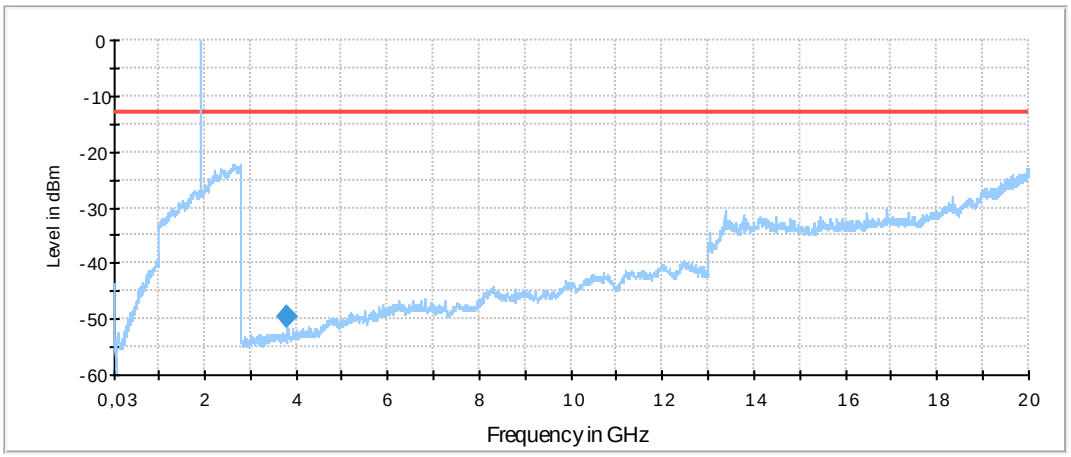
Common Information

Test Description:	Radiated Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Test Case:	-
Operating Mode:	UE allocated UL channel 9538; Voice
Environmental Conditions:	Humidity: 73%rH; Temperature: 19°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS3 (HDW-24529-001) AAC
Power Supply:	Real battery, fully charged before test
Comments:	

030414_FCC_Part24_UMTS-FDDII_TX_all_channels_30M-25G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3813.617235	-49.6	10000.0	1000.000	H	225.0	90.0	-95.2	36.6	-13.0

1.6.2. Spurious emissions HSUPA mode

8.04_FCC _Part24_UMTS-FDDII_TX_Ch9262_HSUPA_Rev2

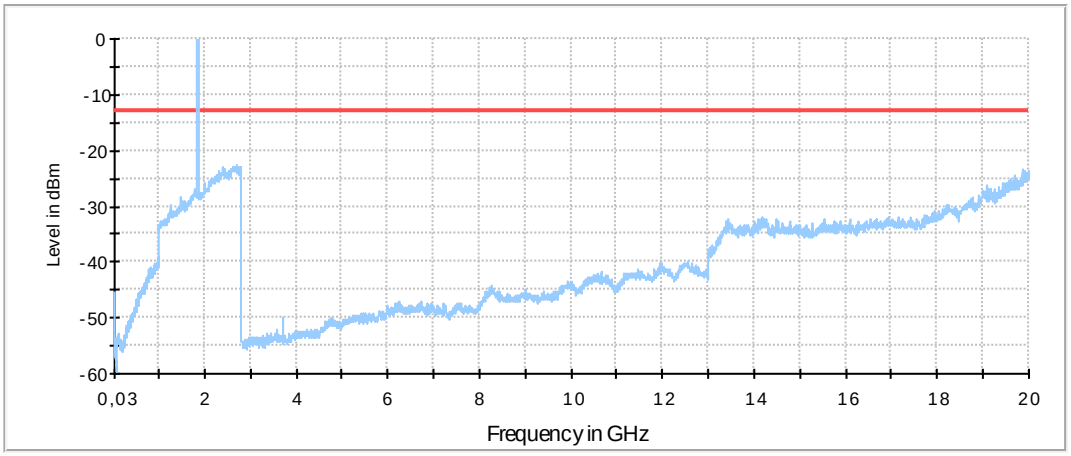
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Comm. Link:	UMTS FDDII
Operating Mode:	MS allocated channel 9262, HSUPA
Exclusionband:	
Environmental Conditions:	Humidity: 61%rH; Temperature: 19°C

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030414_FCC_Part24_UMTS-FDDII_TX_all_channels_30M-25G



8.05_FCC _Part24_UMTS-FDDII_TX_Ch9400_HSUPA_Rev2

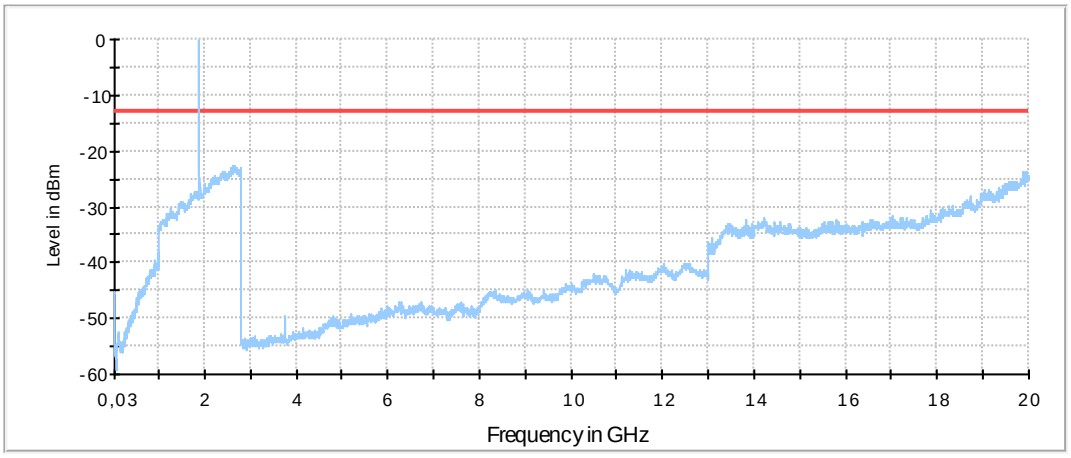
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Comm. Link:	UMTS FDDII
Operating Mode:	MS allocated channel 9400, HSUPA
Exclusionband:	
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030414_FCC_Part24_UMTS-FDDII_TX_all_channels_30M-25G



8.06_FCC _Part24_UMTS-FDDII_TX_Ch9538_HSUPA_Rev2

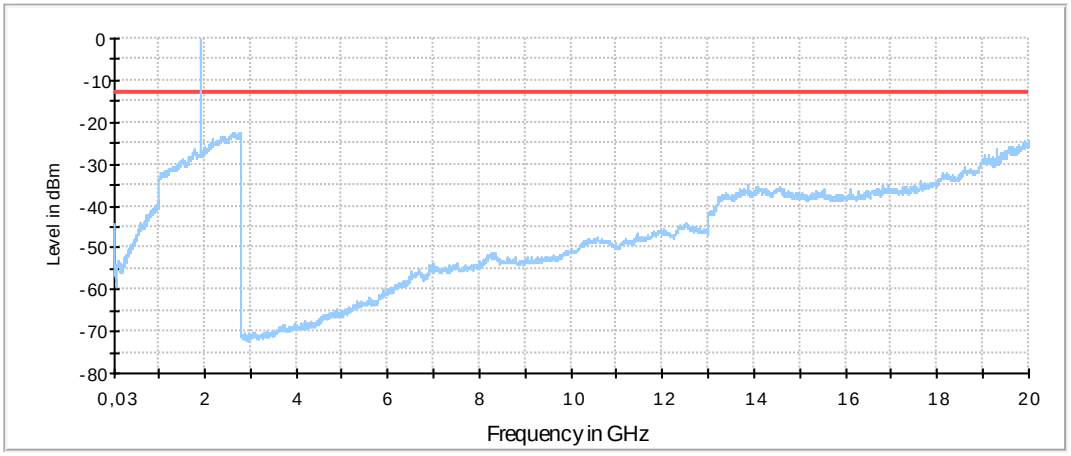
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Comm. Link:	UMTS FDDII
Operating Mode:	MS allocated channel 9538, HSUPA
Exclusionband:	
Environmental Conditions:	Humidity: 61%rH; Temperature: 19°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030414_FCC_Part24_UMTS-FDDII_TX_all_channels_30M-25G



1.6.3. Band-Edge compliance – voice mode

8.01a_FCC _Part24_UMTS-FDDII_TX_Ch9262_band_edge_Rev2

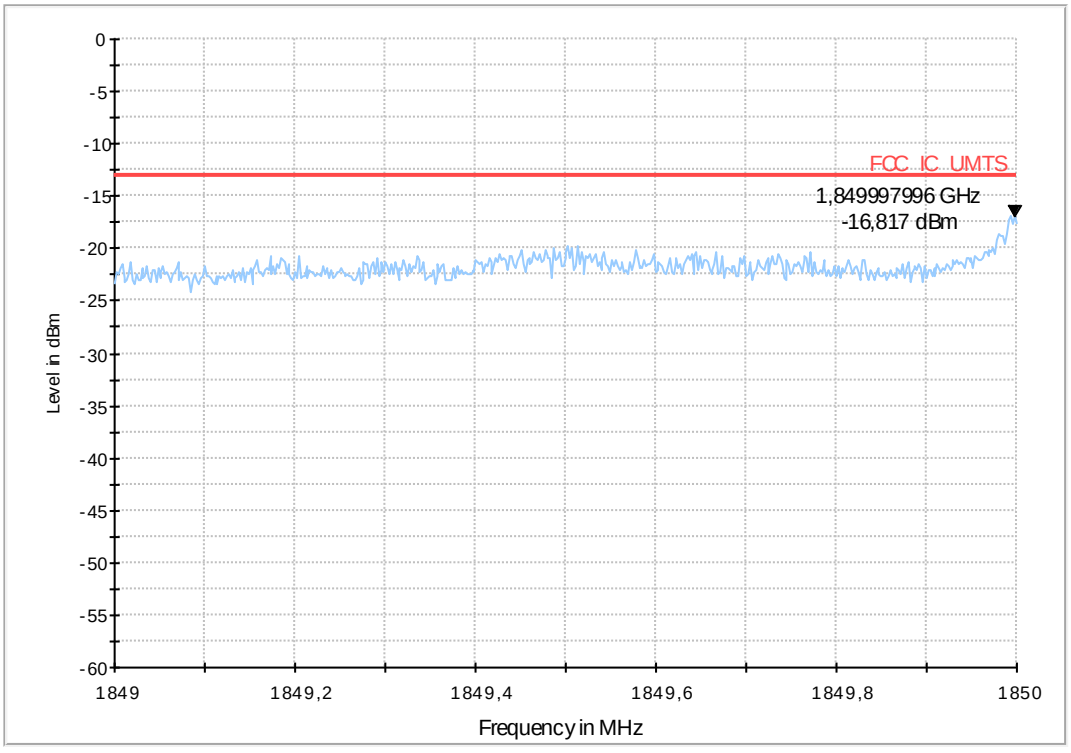
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Operating Mode:	MS allocated UL channel 9262
Environmental Conditions:	Humidity: 60%; Temperature: 19°
Operator Name:	dpa

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS3 (HDW-24529-001) AAC
Power Supply:	Real battery, fully charged before test
Comments:	

030415_FCC_Part24_UMTS-FDDII_TX_low_channel_band_edge



8.03a_FCC _Part24_UMTS-FDDII_TX_Ch9538_band_edge_Rev2

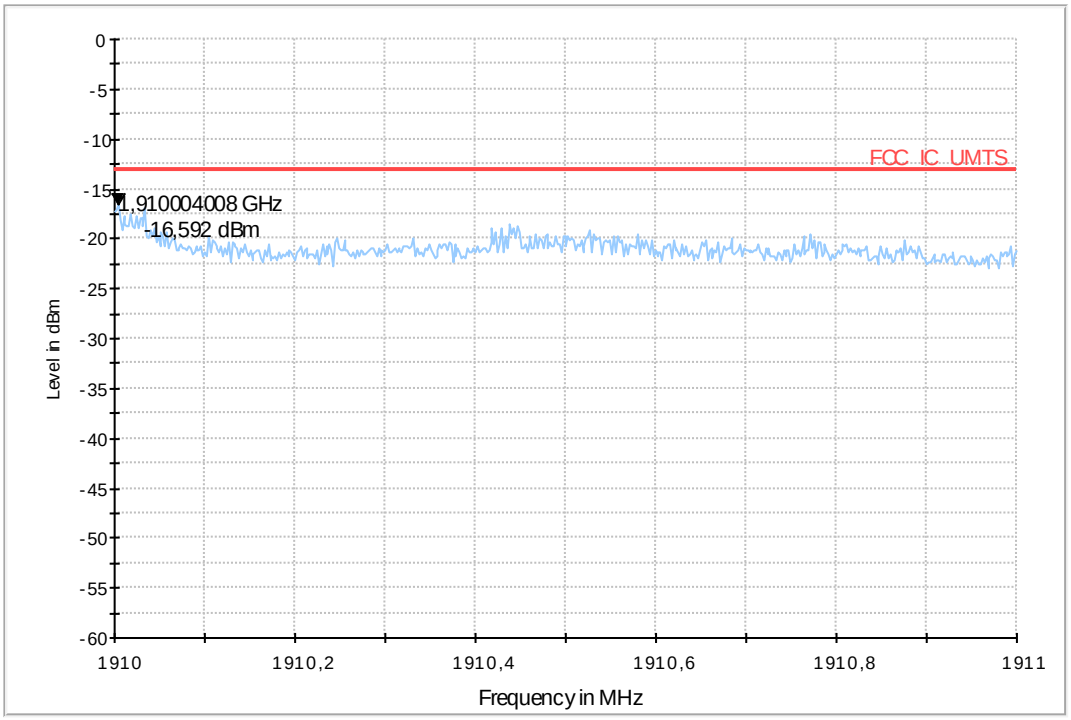
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Operating Mode:	MS allocated UL channel 9538
Environmental Conditions:	Humidity: 60%; Temperature: 19°
Operator Name:	dpa
Comment:	

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS3 (HDW-24529-001) AAC
Power Supply:	Real battery, fully charged before test
Comments:	

030416_FCC_Part24_UMTS-FDDII_TX_high_channel_band_edge



1.6.4. Band-Edge compliance – HSUPA mode

8.04a_FCC _Part24_UMTS-FDDII_TX_Ch9262_band_edge_HSUPA_Rev2

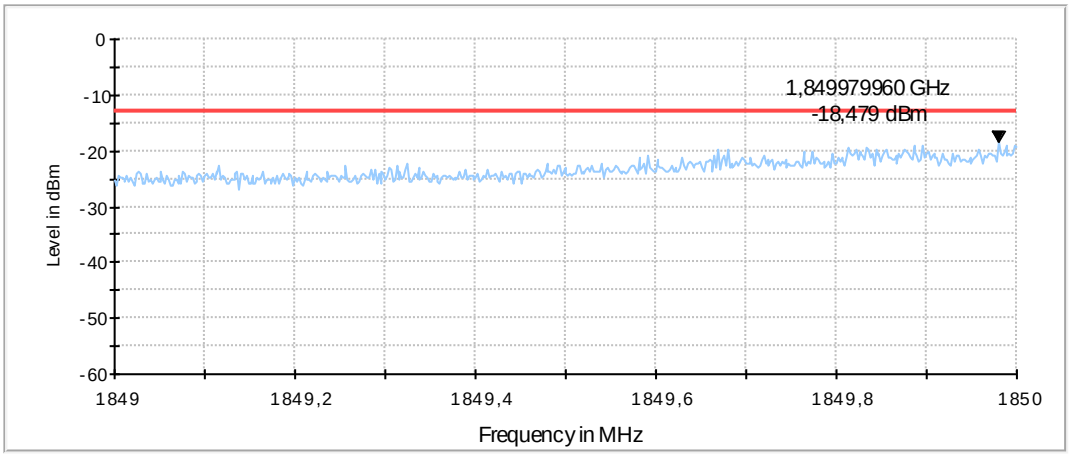
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Comm. Link:	UMTS FDDII
Operating Mode:	MS allocated channel 9262, HSUPA
Exclusionband:	
Environmental Conditions:	Humidity: 61%rH; Temperature: 19°C

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030415_FCC_Part24_UMTS-FDDII_TX_low_channel_band_edge



8.06a_FCC _Part24_UMTS-FDDII_TX_Ch9538_band_edge_HSUPA_Rev2

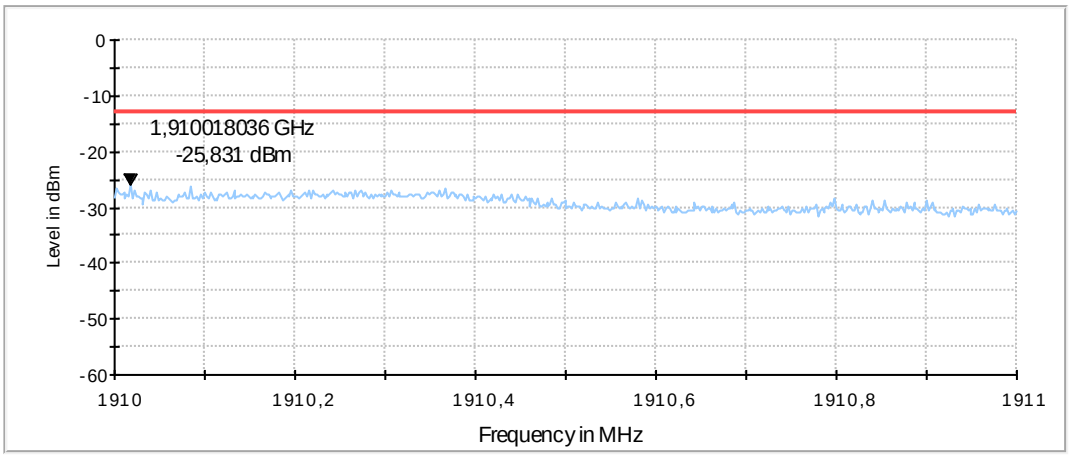
Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GSM1900, Voice/EDGE
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz),661(UL = 1880.0MHz),810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: __%rH; Temperature: __°C
Operator:	

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030416_FCC_Part24_UMTS-FDDII_TX_high_channel_band_edge



1.7. Spurious emissions radiated – FDD Band V

1.7.1. Spurious emissions voice mode

8.07_FCC _Part24_UMTS-FDDV_TX_Ch4132_Rev2

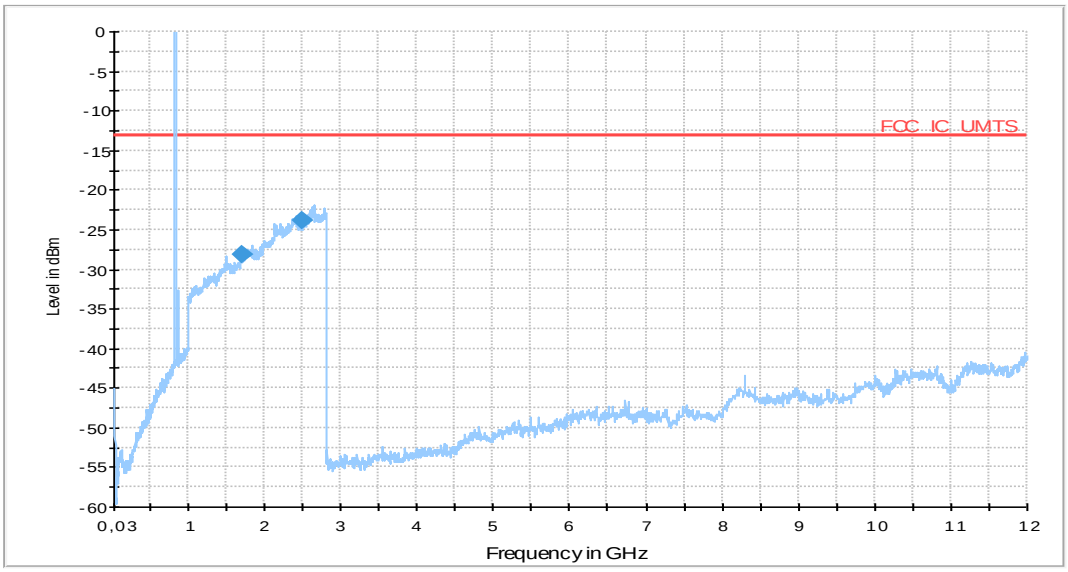
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Test Case:	-
Operation mode:	UE allocated channel 4132
Environmental Conditions:	Humidity: 77%rH; Temperature: 21°C
Operator Name:	dpa
Comment:	

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	

030411_FCC_Part22_UMTS-FDDV_TX_all_channels_30M-12G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1697.565130	-28.1	10000.0	1000.000	155.0	V	-23.0	0.0	-64.0	15.1	-13.0
2495.100200	-23.9	10000.0	1000.000	155.0	V	168.0	0.0	-59.7	10.9	-13.0

8.08_FCC _Part24_UMTS-FDDV_TX_Ch4183_Rev2

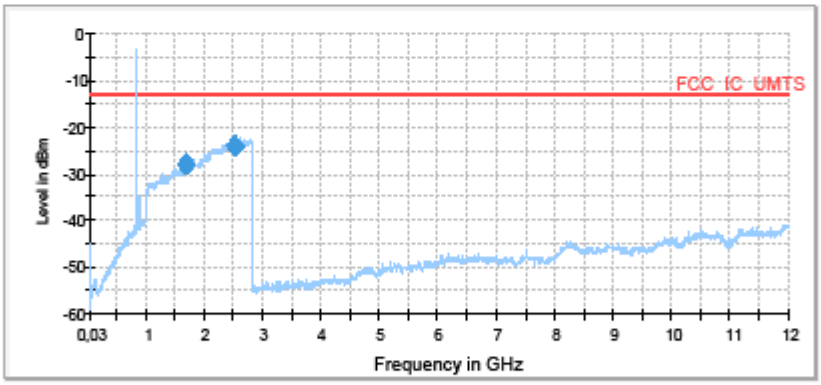
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Test Case:	-
Operating Mode:	UE allocated UL channel 4183; Voice
Environmental Conditions:	Humidity: 77%rH; Temperature: 21°C
Operator:	dpa

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	

030411_FCC_Part22_UMTS-FDDV_TX_all_channels_30M-12G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1676.042084	-28.2	10000.0	1000.000	H	37.0	0.0	-64.1	15.2	-13.0
2515.761523	-24.0	10000.0	1000.000	V	25.0	0.0	-59.6	11.0	-13.0

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8.09_FCC _Part24_UMTS-FDDV_TX_Ch4233_Rev2

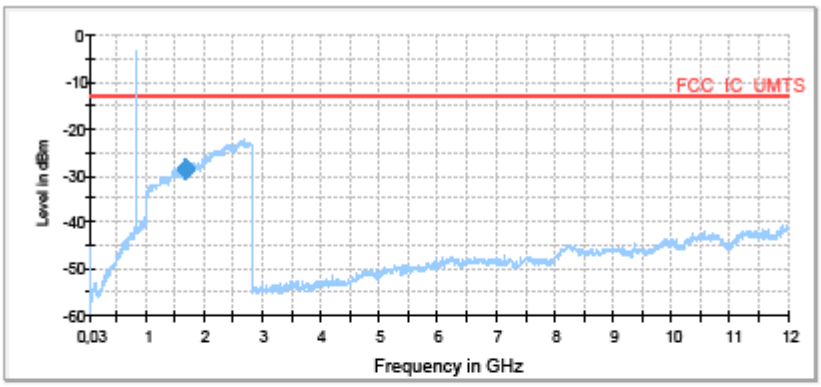
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Test Case:	-
Operating Mode:	UE allocated UL channel 4233; Voice
Environmental Conditions:	Humidity: 77%rH; Temperature: 21°C
Operator:	dpa

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	

030411_FCC_Part22_UMTS-FDDV_TX_all_channels_30M-12G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1678.947896	-28.8	10000.0	1000.000	H	232.0	0.0	-64.1	15.8	-13.0

10.09.2011 18:56:13

1.7.2. Spurious emissions HSUPA mode

8.10_FCC _Part24_UMTS-FDDV_TX_Ch4132_HSUPA_Rev2

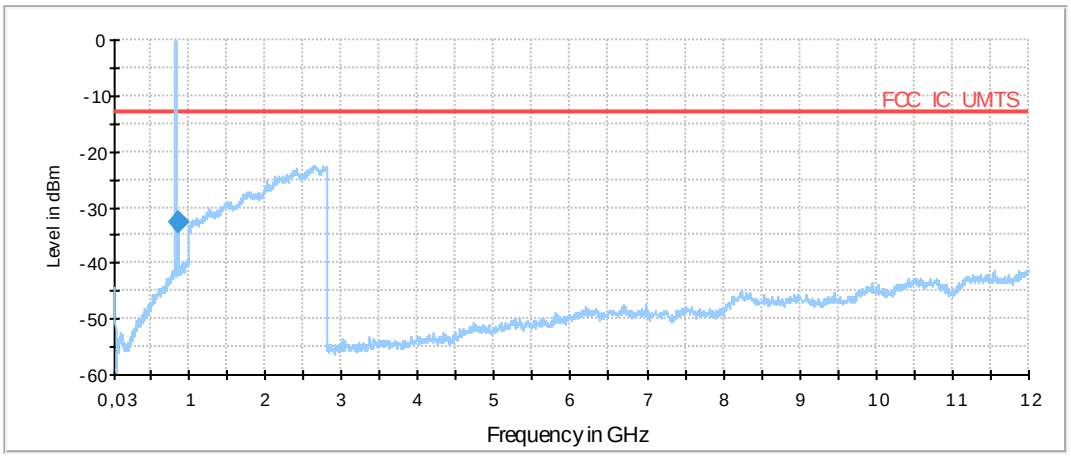
Common Information

Test Description:	Radiated Spurious Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917
Comm. Link:	UMTS FDD5, HSUPA
Operating Mode:	channel 4132
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 59%rH; Temperature: 18°C
Operator:	kta

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030411_FCC_Part22_UMTS-FDDV_TX_all_channels_30M-12G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
871.332666	-32.8	10000.0	1000.000	H	330.0	90.0	-75.7	19.8	-13.0

8.11_FCC _Part24_UMTS-FDDV_TX_Ch4183_HSUPA_Rev2

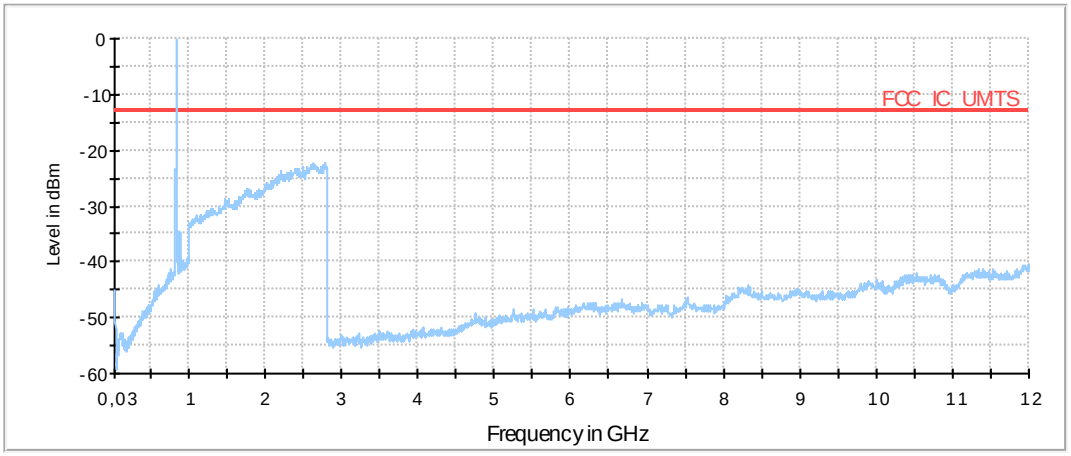
Common Information

Test Description:	Radiated Spurious Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917
Comm. Link:	UMTS FDD5, HSUPA
Operating Mode:	channel 4183
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 59%rH; Temperature: 18°C
Operator:	kta

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030411_FCC_Part22_UMTS-FDDV_TX_all_channels_30M-12G



8.12_FCC _Part24_UMTS-FDDV_TX_Ch4233_HSUPA_Rev2

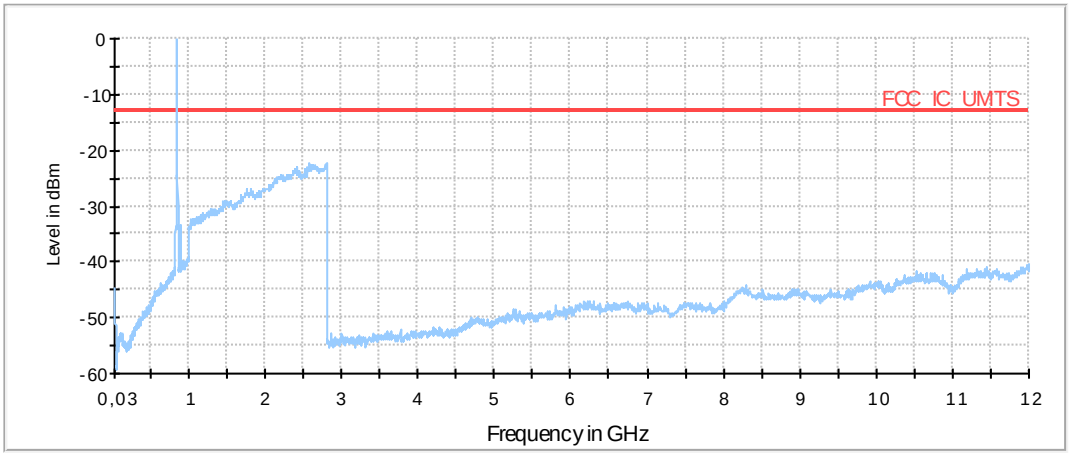
Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	UMTS FDD5, HSUPA
Operating Mode:	channel 4233
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 58%rH; Temperature: 18°C
Operator:	kta

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030411_FCC_Part22_UMTS-FDDV_TX_all_channels_30M-12G



1.7.3. Band-Edge compliance – voice mode

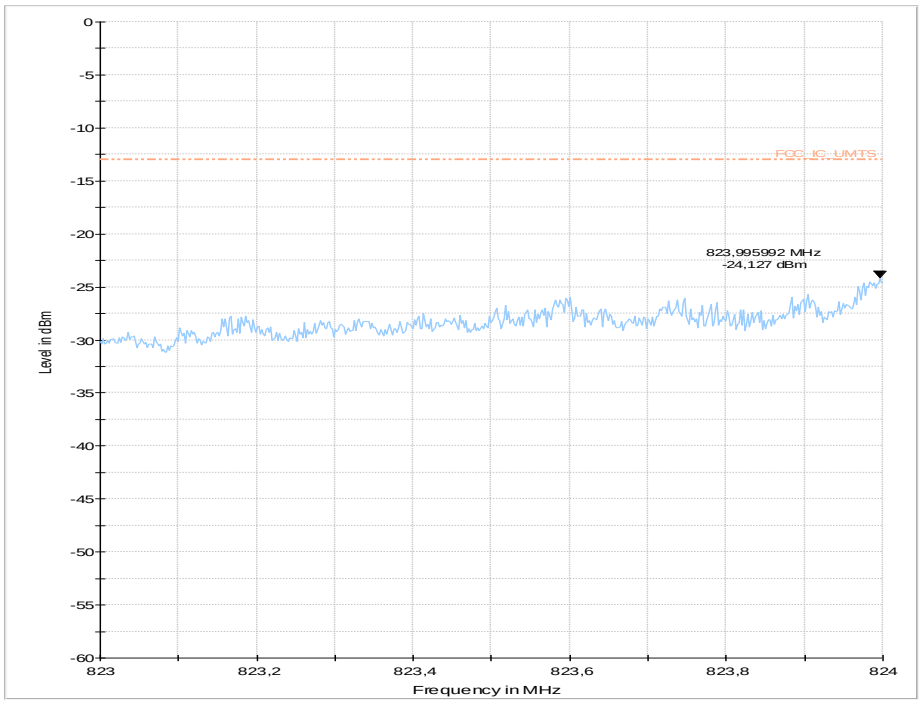


Diagram 8.07aa, Band-Edge, channel 4132

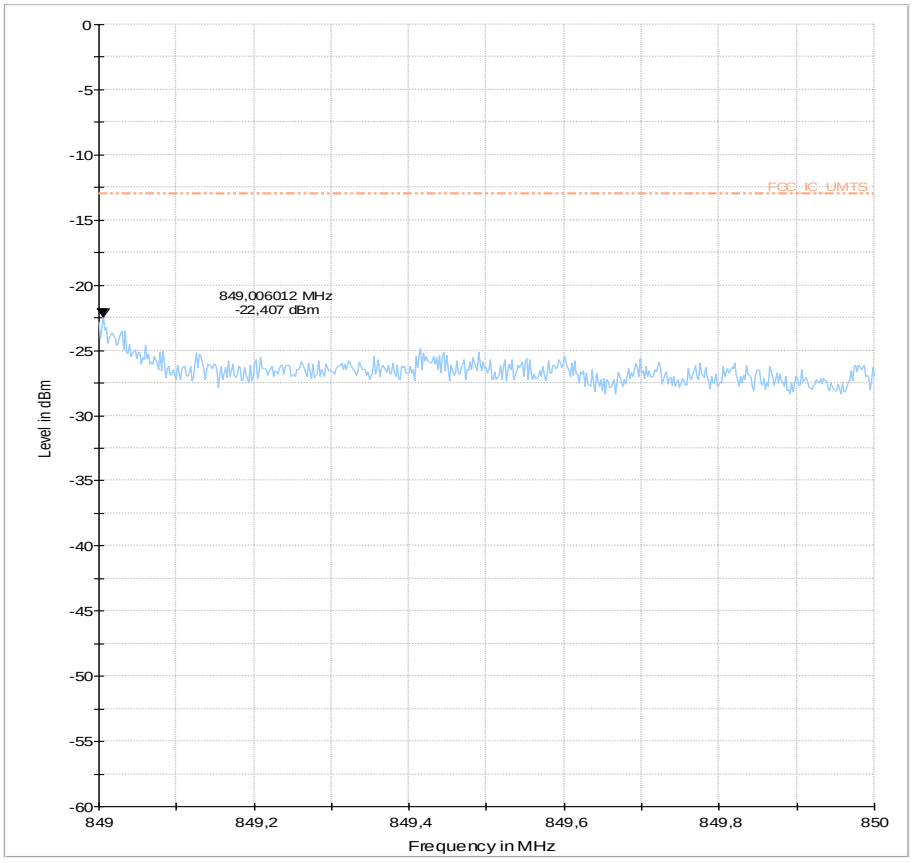


Diagram 8.09aa, Band-Edge, channel 4233

1.7.4. Band-Edge compliance – HSUPA mode

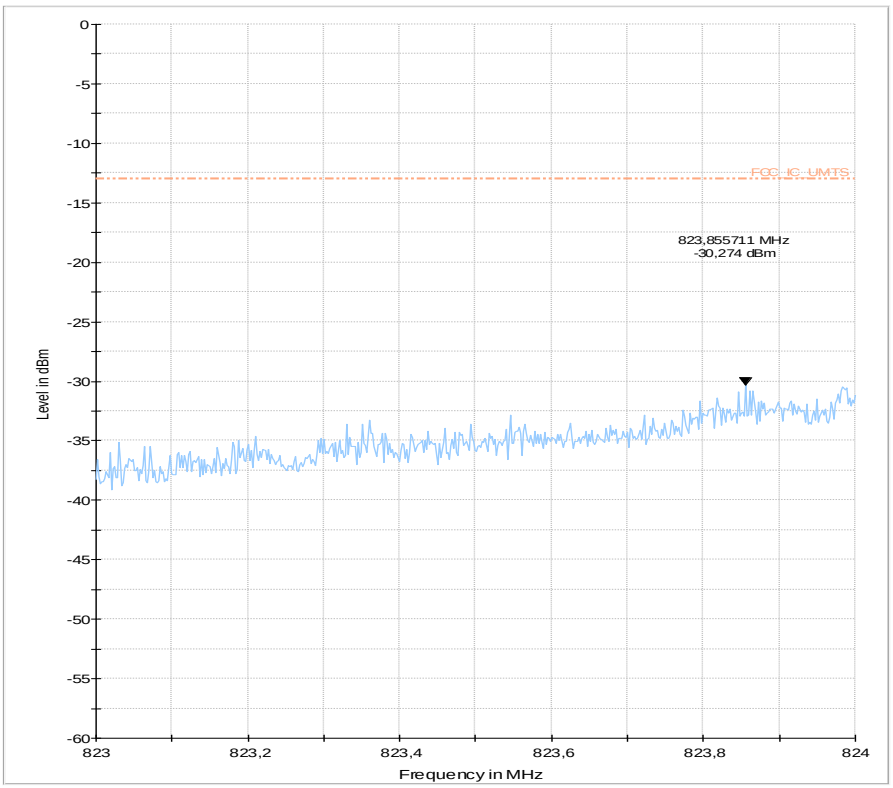


Diagram 8.10aa, Band-Edge, channel 4132

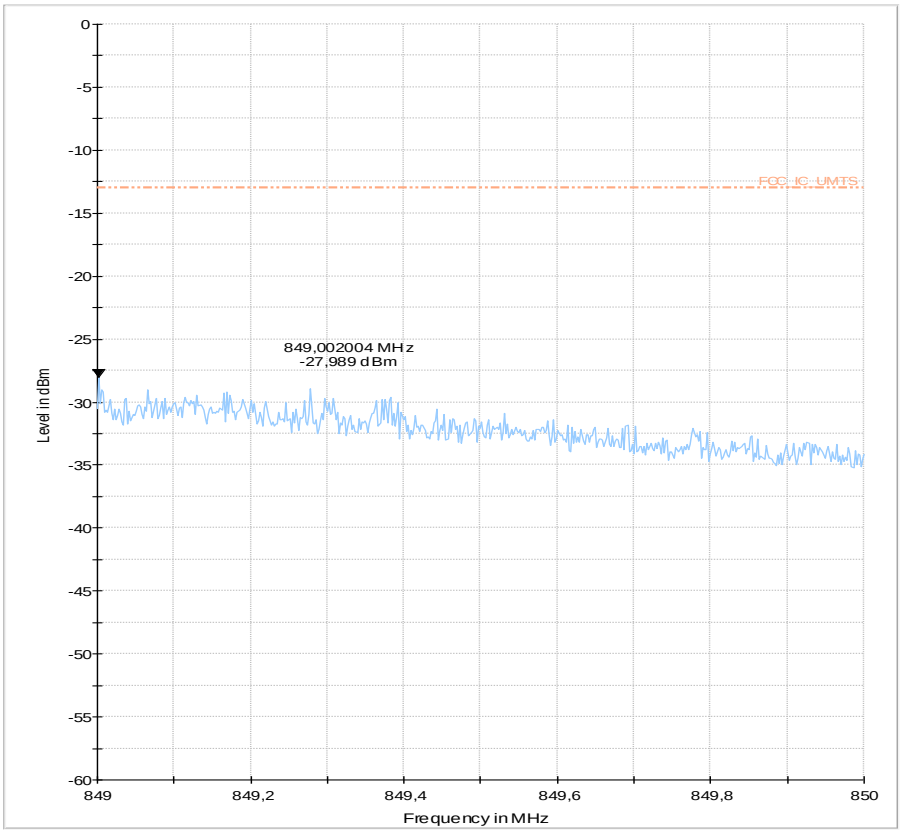


Diagram 8.12aa, Band-Edge, channel 4233

1.8. Spurious emissions radiated – FDD Band IV

1.8.1. Spurious emissions voice mode

8.01_FCC_Part27_UMTS-FDDIV_TX_Ch1312_Rev2

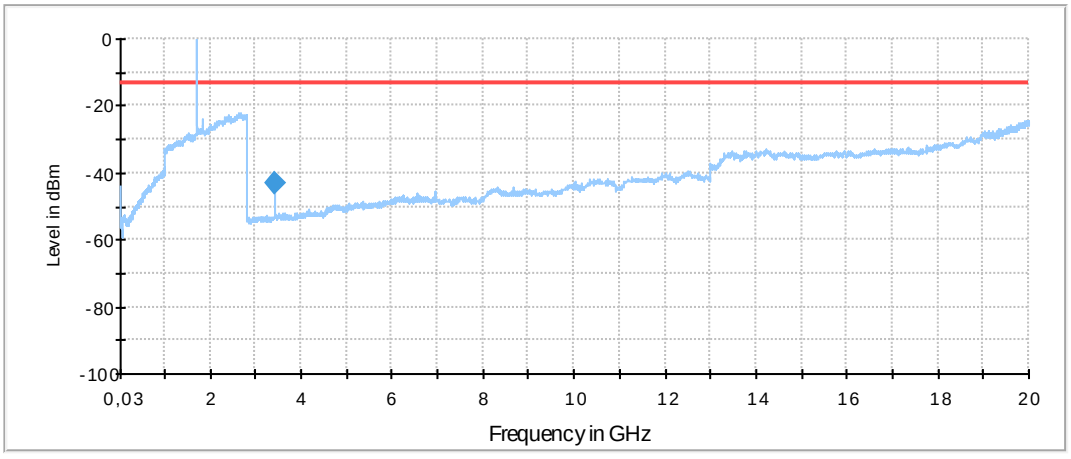
Common Information

Test Description:	Radiated Spurious Emissions UMTS-FDDIV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Comm. Link:	UMTS-FDDIV (Voice)
Operating Mode:	UE allocated channel 1312
Exclusionband:	1710 - 17559MHz
Environmental Conditions:	Humidity: 66%rH; Temperature: 19°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REB71UW 148 Rev2
EUT additional information:	-
HW version:	CPR 18125 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138460254
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	None

030417_FCC_Part27_UMTS-FDDIV_TX_all_channels_30M-20G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3426.753507	-43.1	10000.0	1000.000	H	267.0	0.0	-95.5	30.1	-13.0

8.02_FCC_Part27_UMTS-FDDIV_TX_Ch1412_Rev2

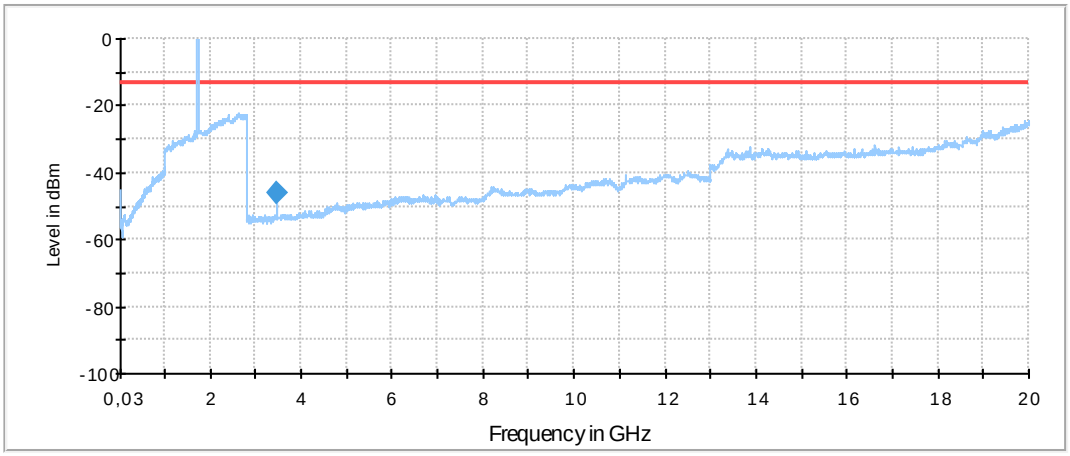
Common Information

Test Description:	Radiated Spurious Emissions UMTS-FDDIV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Comm. Link:	UMTS-FDDIV (Voice)
Operating Mode:	UE allocated channel 1413
Exclusionband:	1710 - 17559MHz
Environmental Conditions:	Humidity: 66%rH; Temperature: 19°C

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REB71UW 148 Rev2
EUT additional information:	-
HW version:	CPR 18125 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138460254
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	None

030417_FCC_Part27_UMTS-FDDIV_TX_all_channels_30M-20G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3463.667335	-46.4	10000.0	1000.000	V	-1.0	90.0	-95.4	33.4	-13.0

8.03_FCC_Part27_UMTS-FDDIV_TX_Ch1513_Rev2

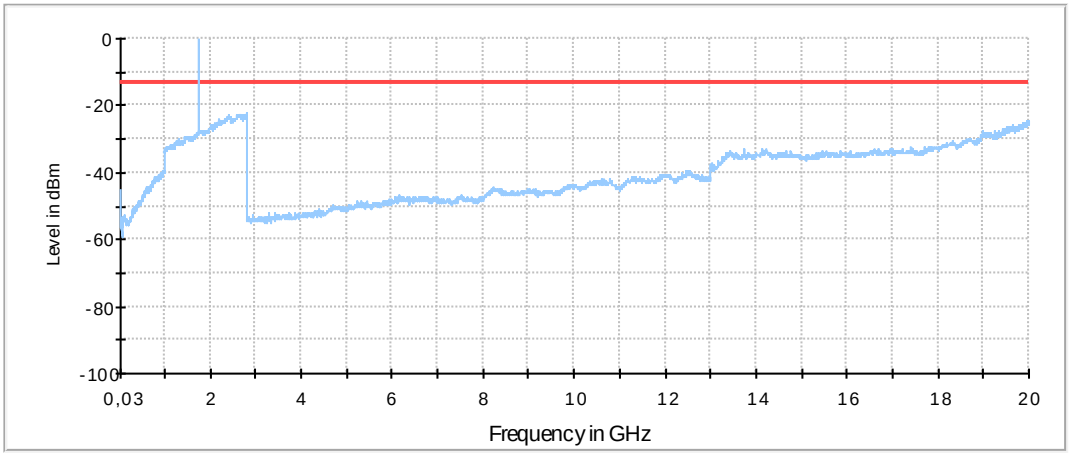
Common Information

Test Description:	Radiated Spurious Emissions UMTS-FDDIV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Comm. Link:	UMTS-FDDIV (Voice)
Operating Mode:	UE allocated channel 1513
Exclusionband:	1710 - 17559MHz
Environmental Conditions:	Humidity: 66%rH; Temperature: 19°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry Curve
Type:	GSM/WCDMA Mobile Phone (Stick)
---	---
EUT:	REB71UW 148 Rev2
EUT additional information:	-
HW version:	CPR 18125 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138460254
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	None

030417_FCC_Part27_UMTS-FDDIV_TX_all_channels_30M-20G



1.8.2. Spurious emissions HSUPA mode

8.04_FCC_Part27_UMTS-FDDIV_HSUPA_Ch1312_Rev2

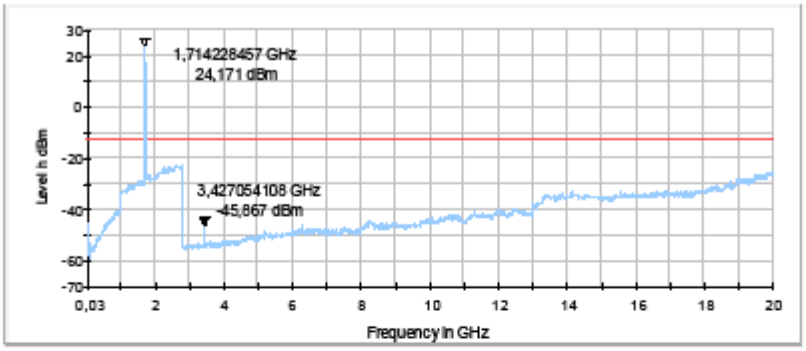
Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Operator:	Yzh

EUT Information

Manufacturer:	Research In Motion
Model:	Blackberry
Type:	
EUT:	REB71UW Rev2
EUT additional Information:	-
HW version:	CPR 18125 R032
SW version:	ASY-39629-001
Additional SW:	-
Config:	-
Serial number:	004401138460254
Connected Interfaces:	--
Power Supply:	Real battery, fully charged before test
Comments:	None

030417_FCC_Part27_UMTS-FDDIV_TX_all_channels_30M-20G



8.05_FCC_Part27_UMTS-FDDIV_HSUPA_Ch1413_Rev2 1 / 1

EMC32 Report

Common Information

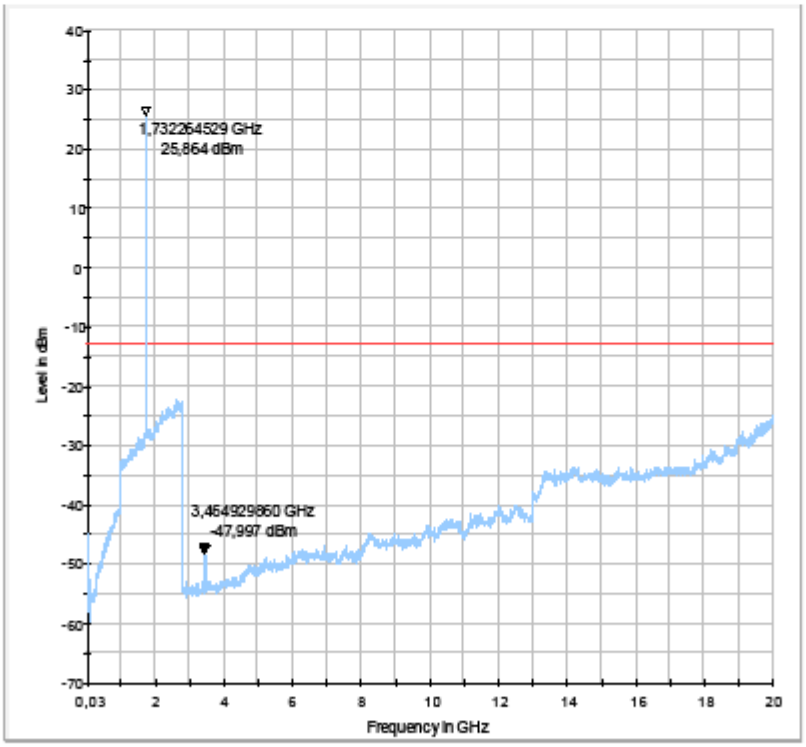
Test Description:	Radiated Spurious Emissions UMTS FDDIV
Operating Conditions:	Humidity: 60%; Temperature: 19°
Operator Name:	Yzh

EUT Information

Manufacturer:	Research In Motion
Model:	Blackberry
Type:	
---	---
EUT:	REB71UW 148 Rev2
EUT additional Information:	-
HW version:	CPR 18125 R032
SW version:	
Additional SW:	-
Config:	-
Serial number:	004401138460254
Connected Interfaces:	
Power Supply:	full battery,
Comments:	

030417_FCC_Part27_UMTS-FDDIV_TX_all_channels_30M-20G

030417_FCC_Part27_UMTS-FDDIV_TX_all_channels_30M-20G



23.09.2011 EMC32 V8.51.1 13:54:43

8.06_FCC_Part27_UMTS-FDDIV_HSUPA_Ch1513_Rev2 1 / 1

EMC32 Report

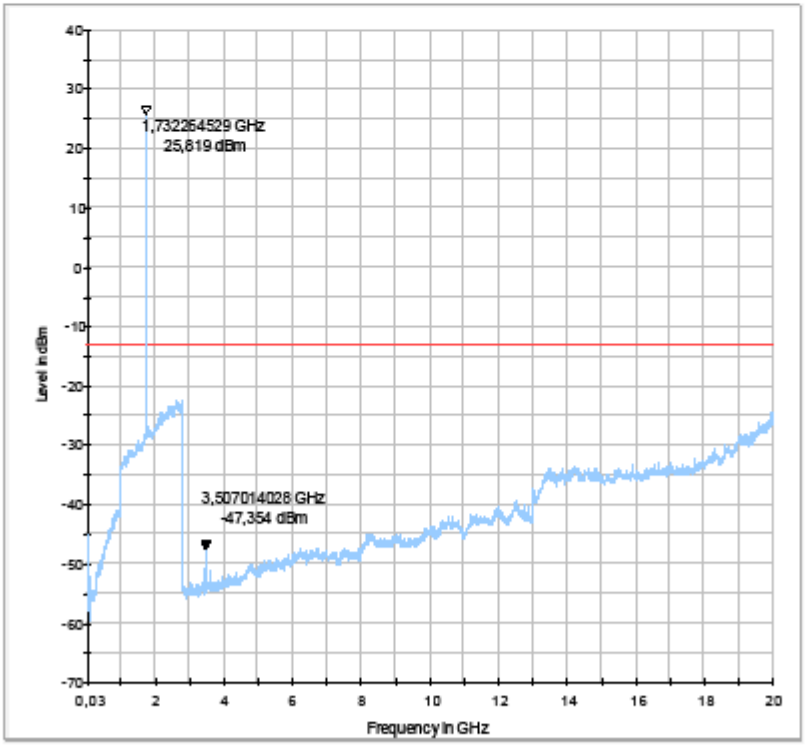
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDIv
Operating Conditions:	Humidity: 60%; Temperature: 19°
Operator Name:	Yzh

EUT Information

Manufacturer:	Research In Motion
Model:	Blackberry
Type:	
---	---
EUT:	REB71UW 148 Rev2
EUT additional Information:	-
HW version:	CPR 18125 R032
SW version:	
Additional SW:	-
Config:	-
Serial number:	004401138460254
Connected Interfaces:	
Power Supply:	Full battery
Comments:	

030417_FCC_Part27_UMTS-FDDIV_TX_all_channels_30M-20G



23.09.2011 EMC32 V8.51.1 14:39:17

1.8.3. Band-Edge compliance – voice mode

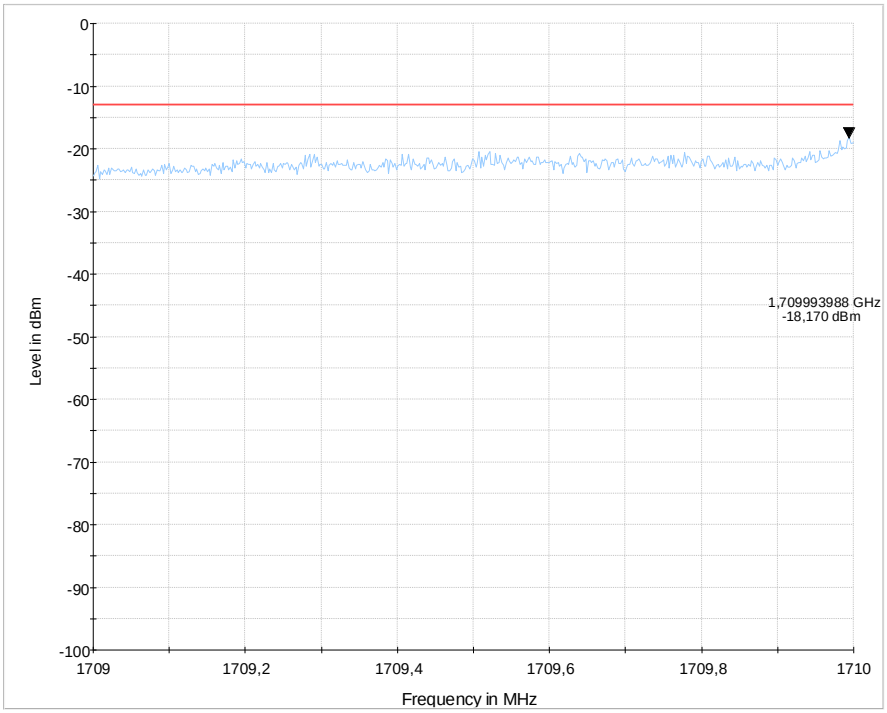


Diagram 8.01aa, Band-Edge Channel 1312

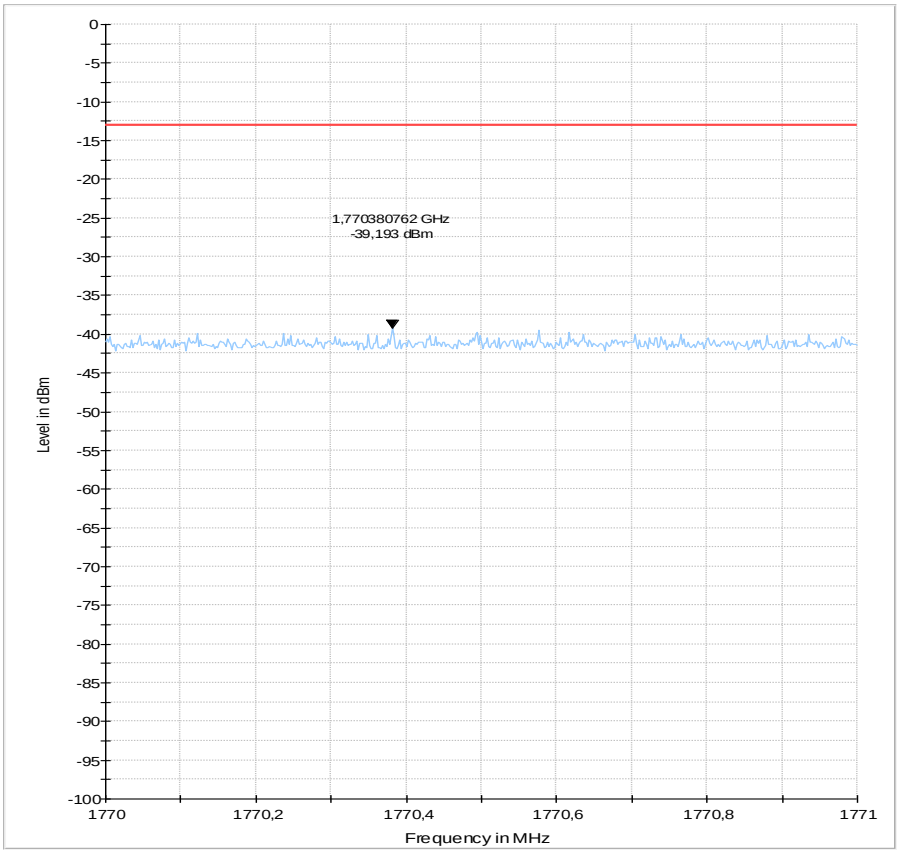


Diagram 8.03aa, Band-Edge Channel 1513

1.8.4. Band-Edge compliance – HSUPA mode

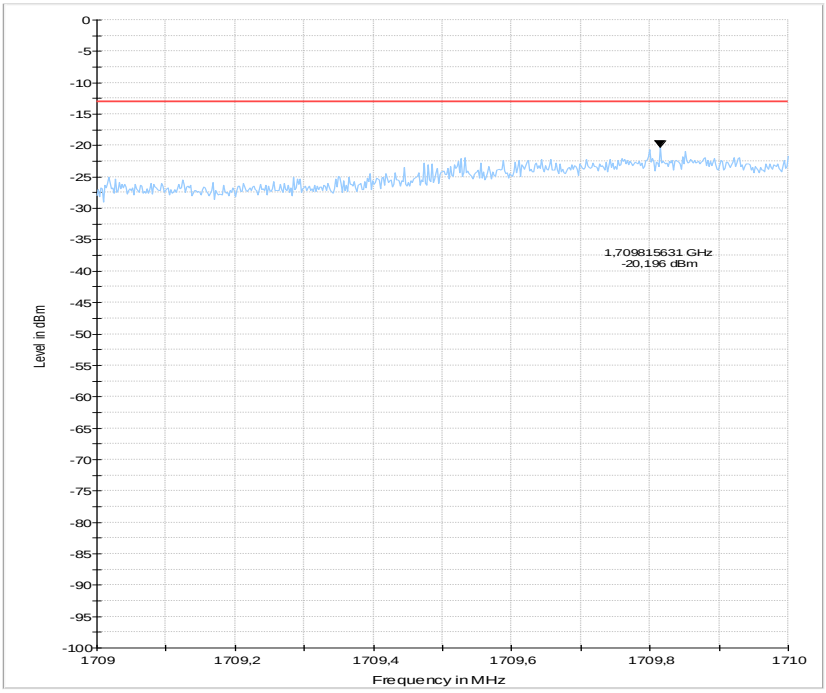


Diagram 8.04aa, Band-Edge Channel 1312

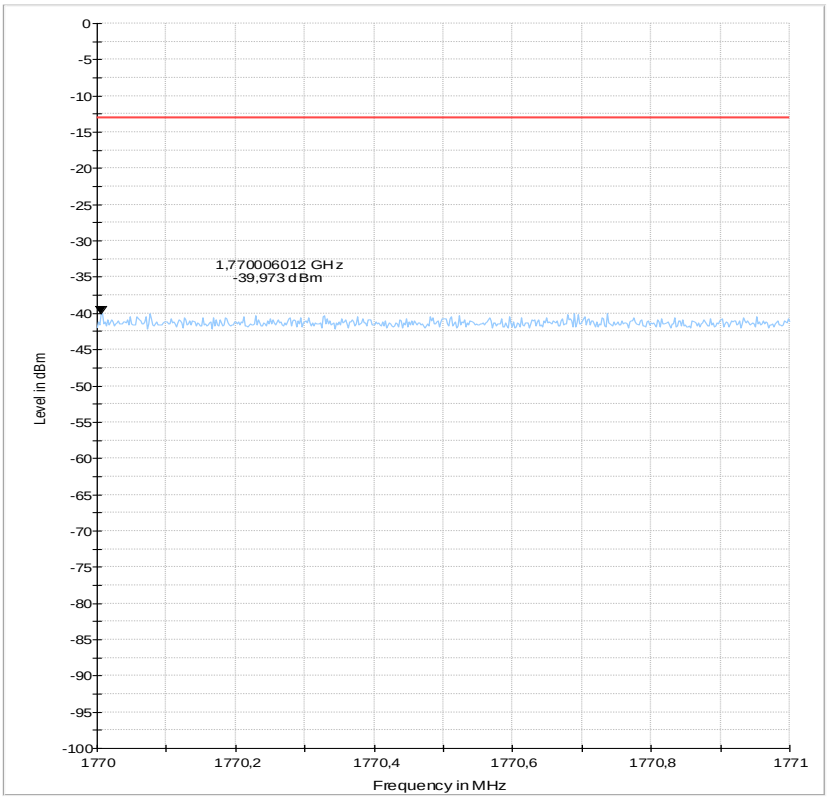


Diagram 8.06aa, Band-Edge Channel 1312

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

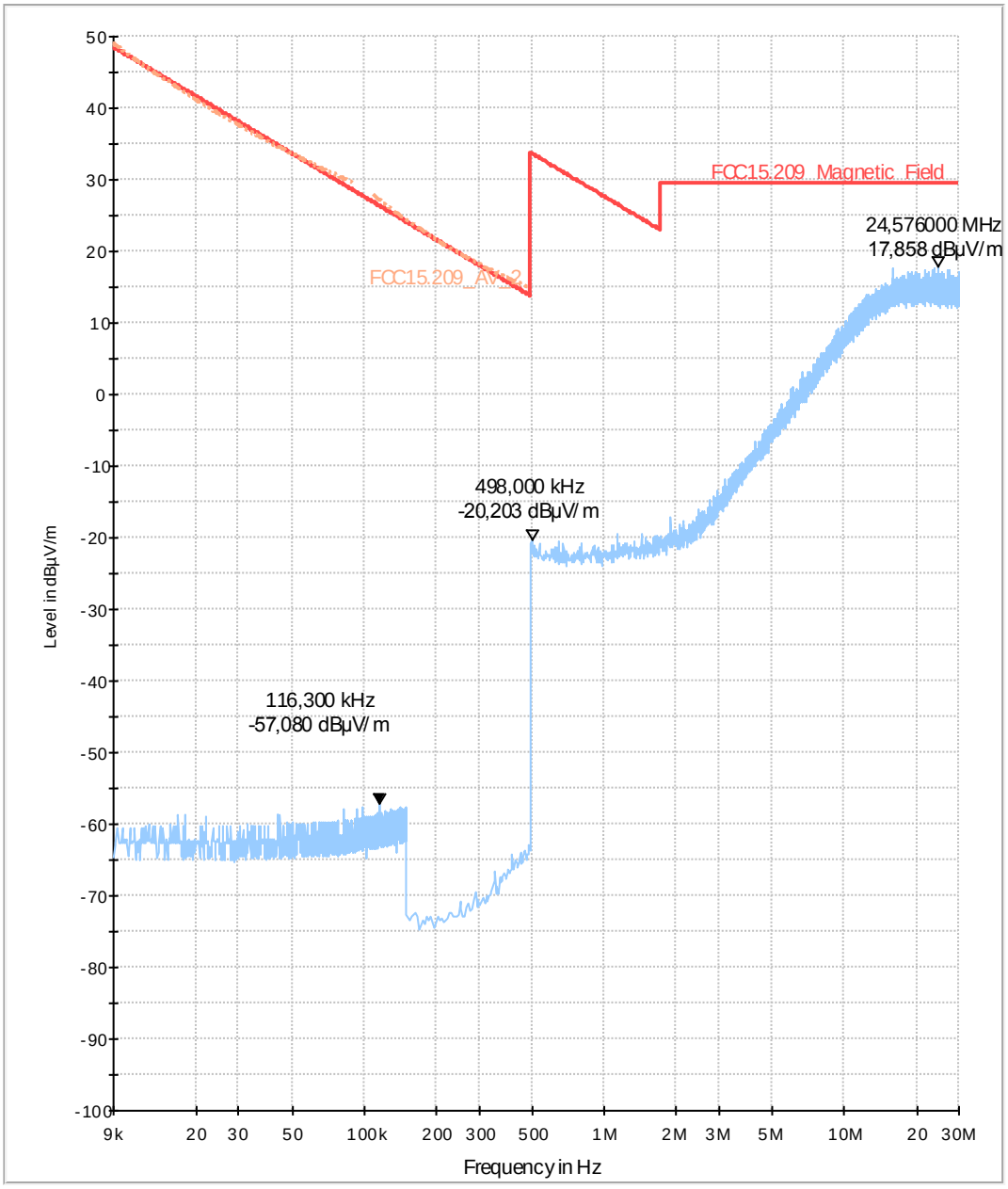
1.9.1. Spurious emissions radiated – FDD Band II Voice Mode

Diagram No. b_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) with 3 m measurement distance
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
EUT:	REA71UW rev 2
Operator:	HLa
Operating conditions:	UMTS FDD 2 (voice) TX-on
Power during tests:	full loaded batteries
Comment 1:	Channel 9262

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

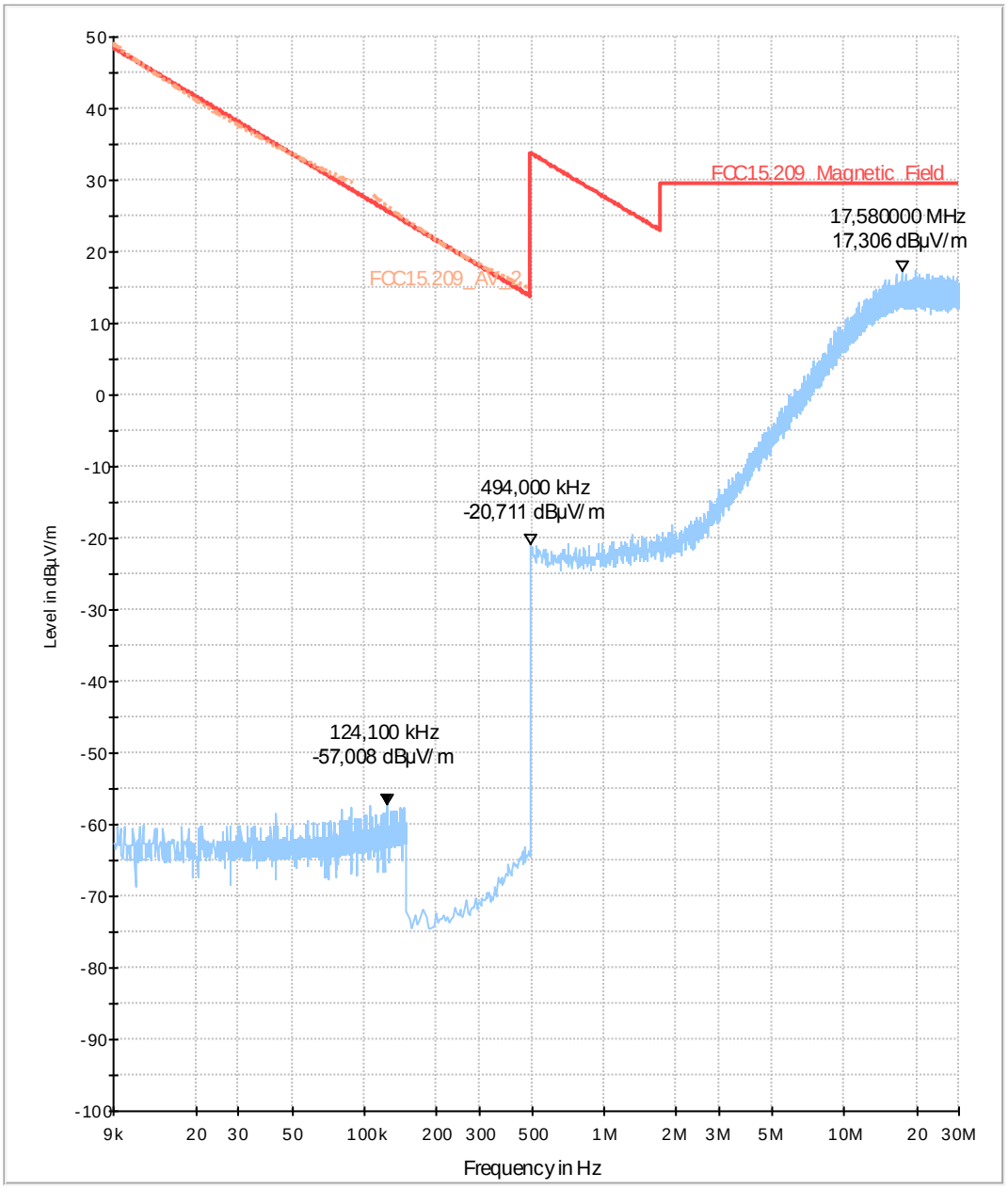
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_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) with 3 m measurement distance
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
EUT:	REA71UW rev 2
Operator:	HLa
Operating conditions:	UMTS FDD 2 (voice) TX-on
Power during tests:	full loaded batteries
Comment 1:	Channel 9400

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

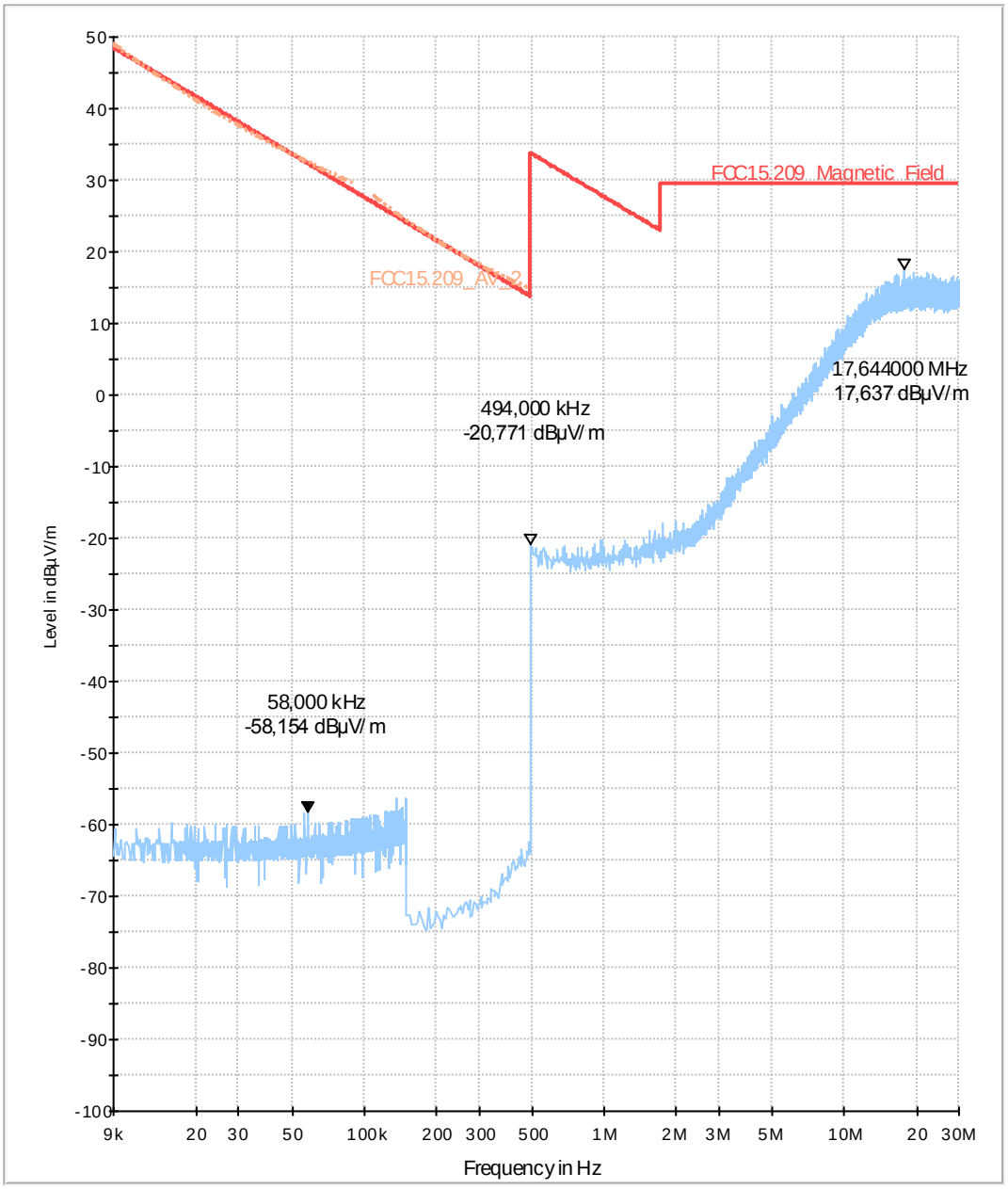
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_3.06

Common Information

Test description:	Magnetic 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
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
EUT:	REA71UW rev 2
Operator:	HLa
Operating conditions:	UMTS FDD 2 (voice) TX-on
Power during tests:	full loaded batteries
Comment 1:	Channel 9538

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'

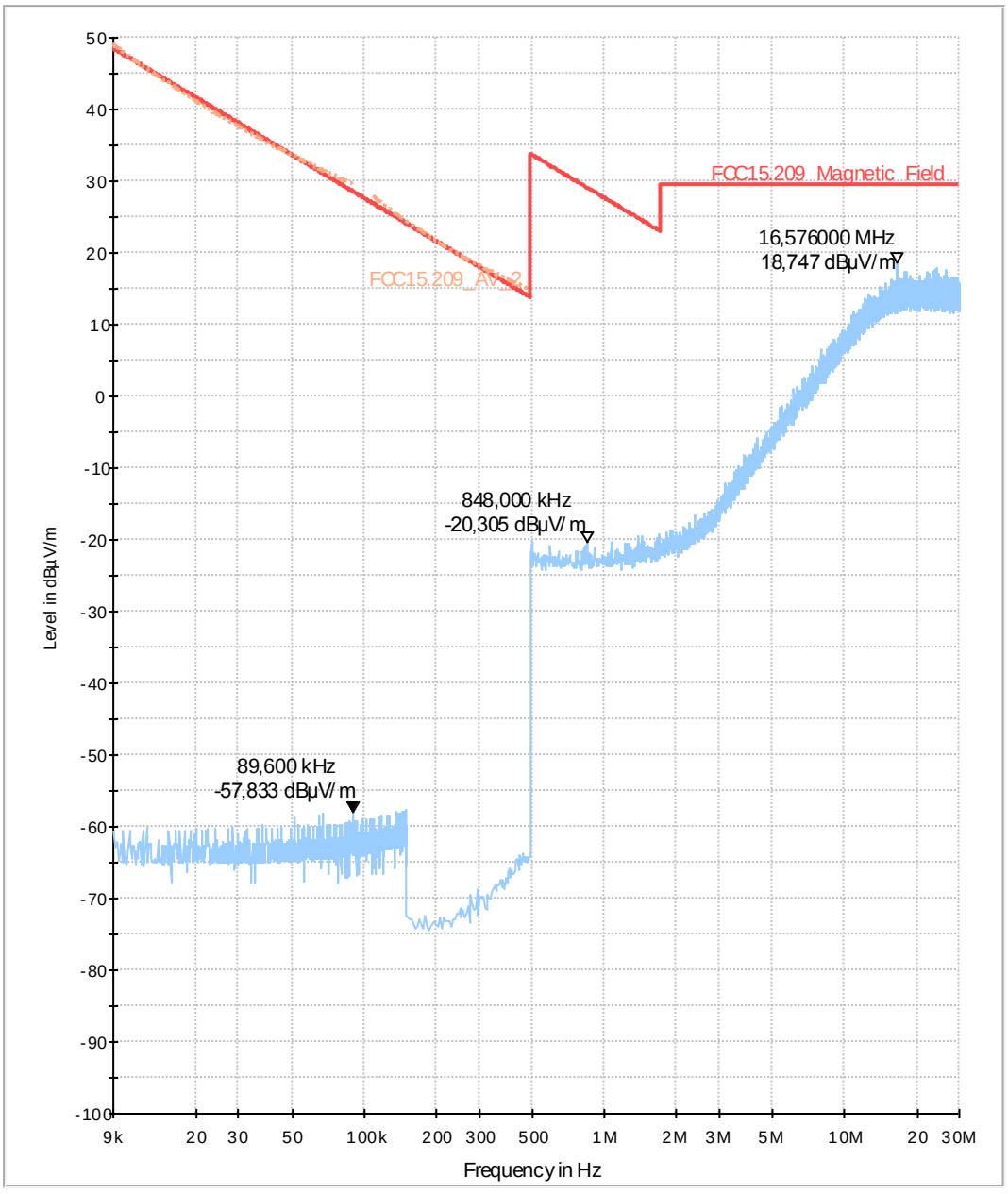
1.9.2. Spurious emissions radiated – FDD Band II HSUPA Mode

Diagram No. b_3.11

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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
Power during tests:	full loaded batteries
Comment 1:	FDD II (low channel= 9262); REA71 UW (CER-41251-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

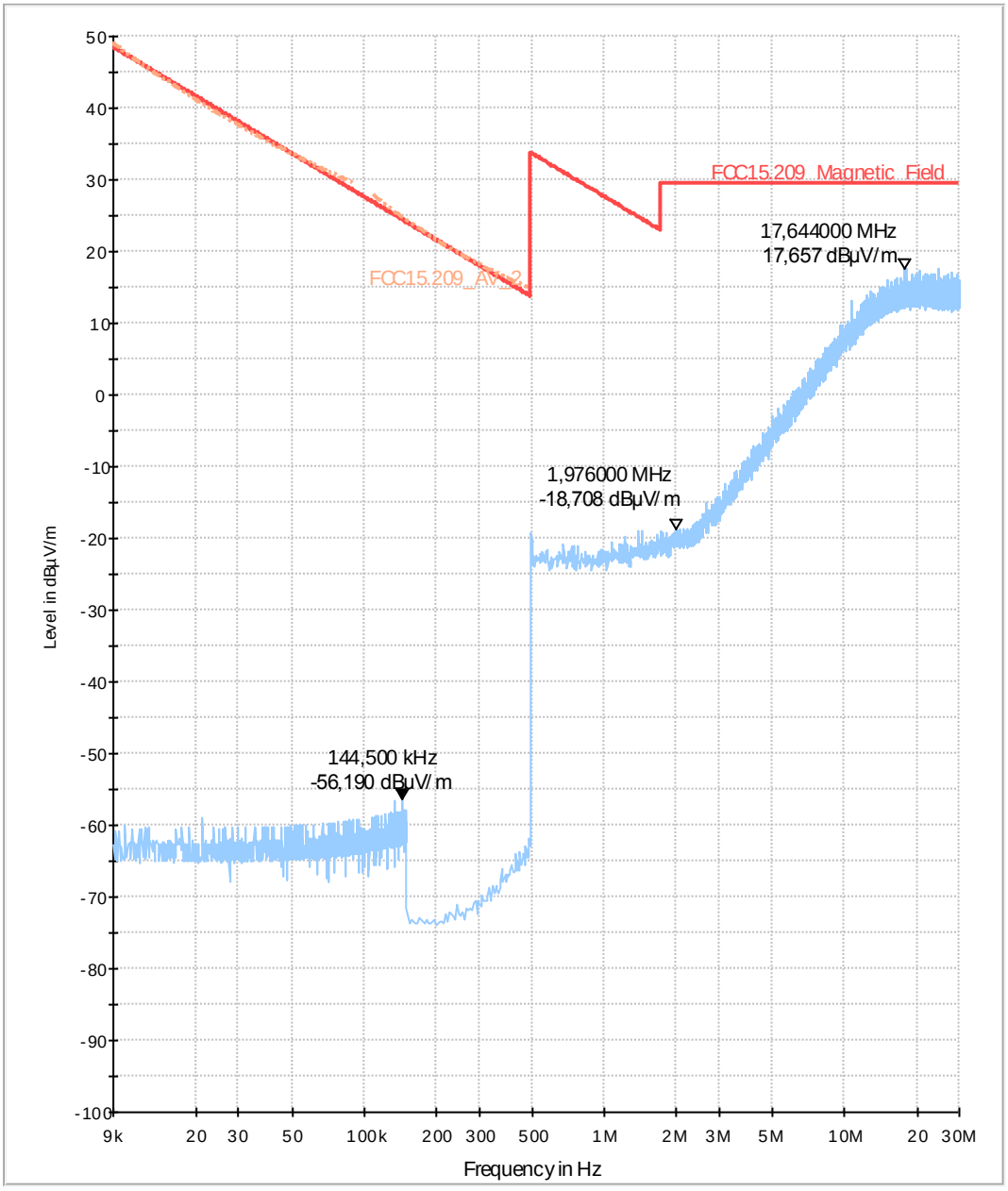
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_3.12

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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
Power during tests:	full loaded batteries
Comment 1:	FDD II (middle channel= 9400), REA71 UW (CER-41251-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

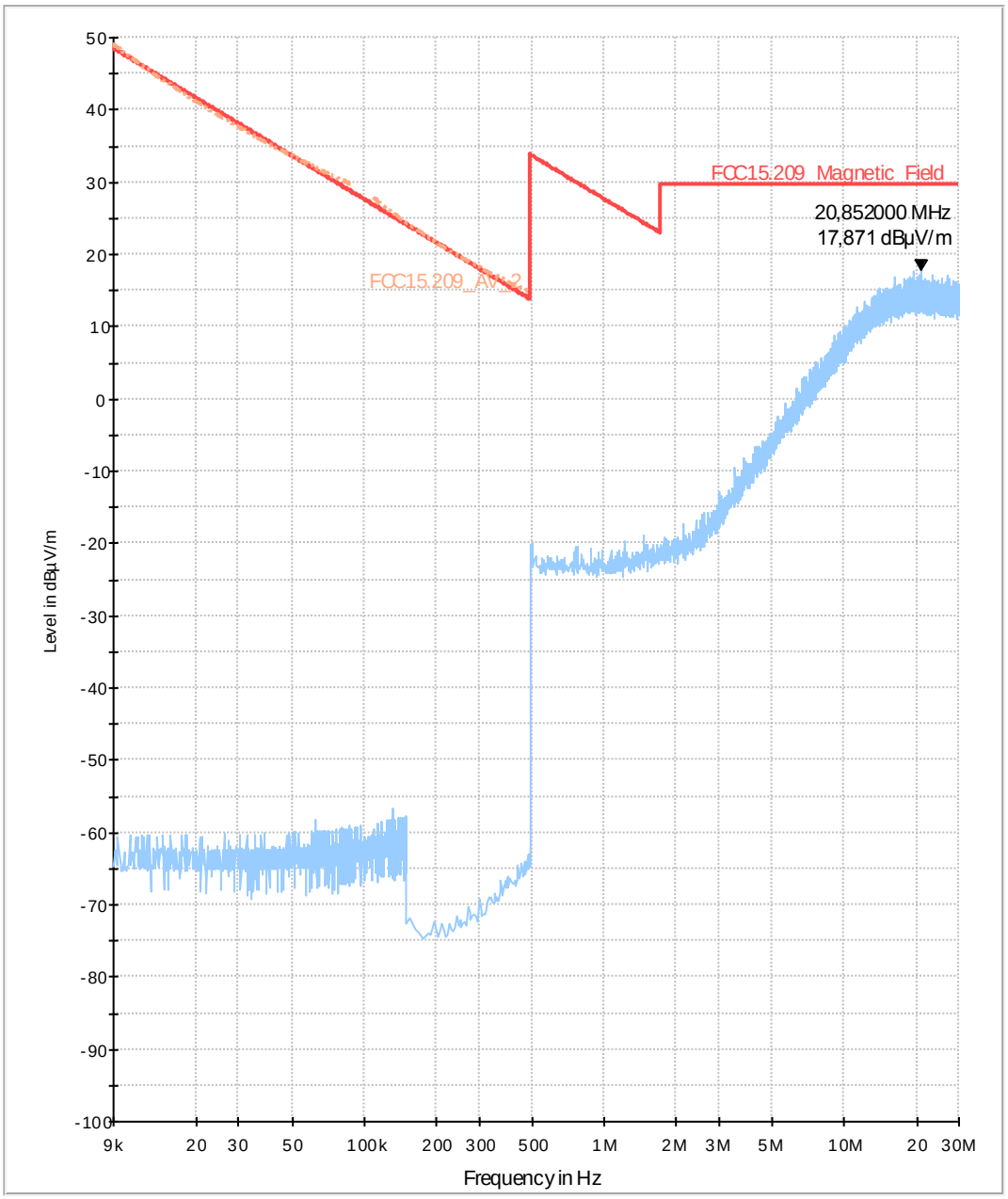
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_3.13

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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
Power during tests:	full loaded batteries
Comment 1:	FDD II (high channel= 9538); REA71 UW (CER-41251-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'

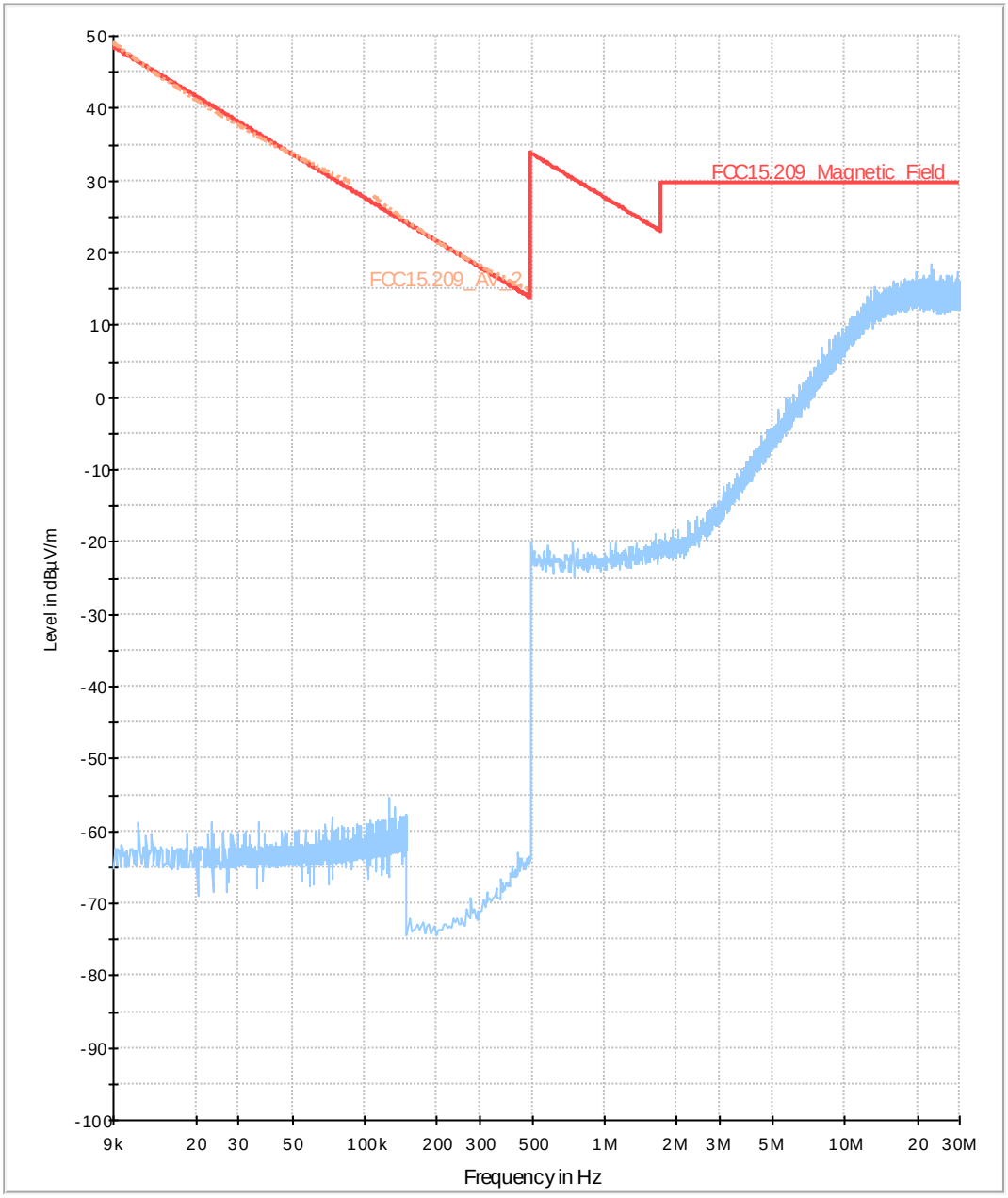
1.9.3. Spurious emissions radiated – FDD Band IV HSUPA Mode

Diagram No. c_3.08

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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 HSUPA
Power during tests:	full loaded batteries
Comment 1:	FDD IV low 1312; REB71 UW (CER-41250-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

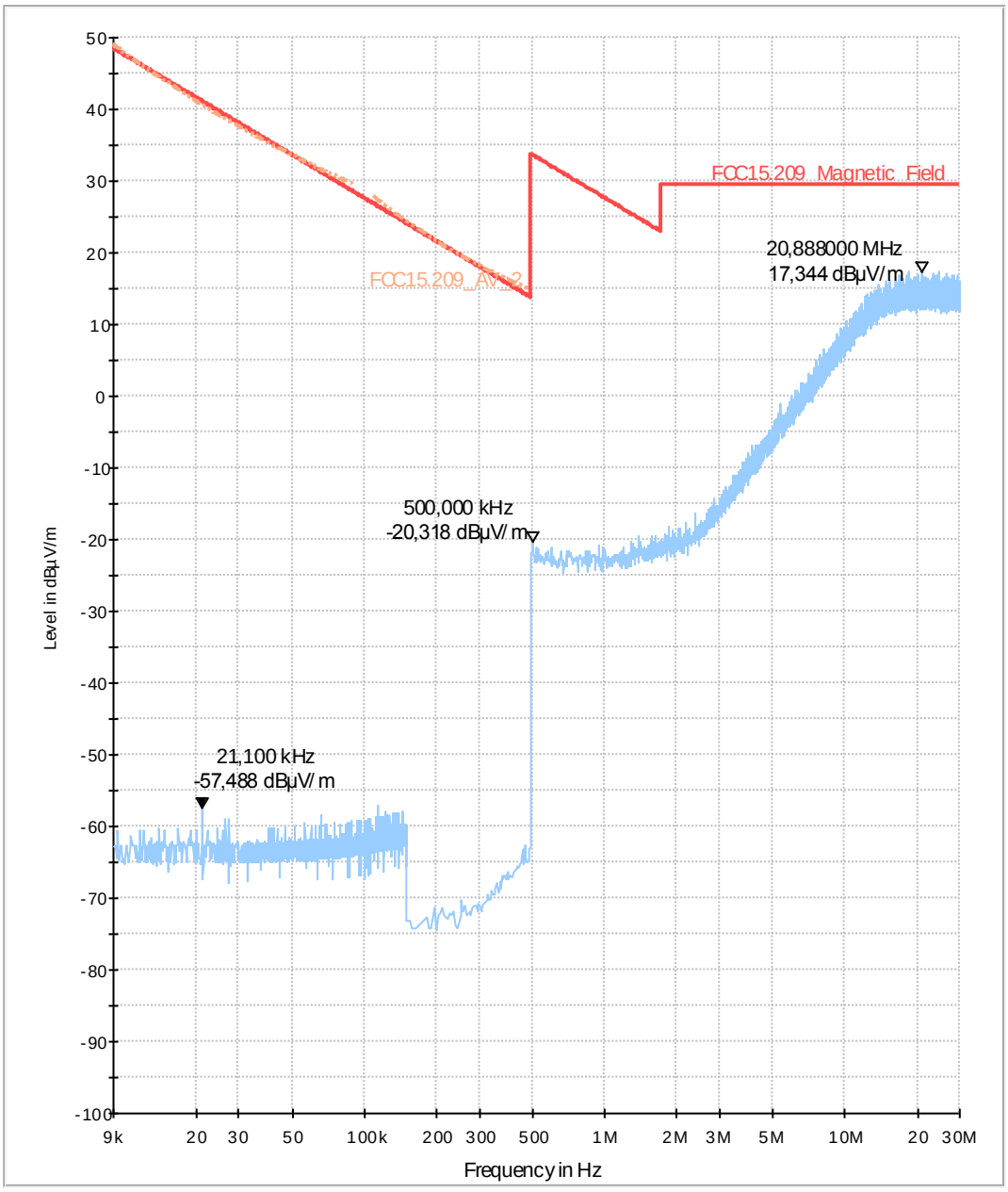
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. c_3.09

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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, HSUPA
Power during tests:	full loaded batteries
Comment 1:	FDD IV middle 1413; REB71 UW (CER-41250-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

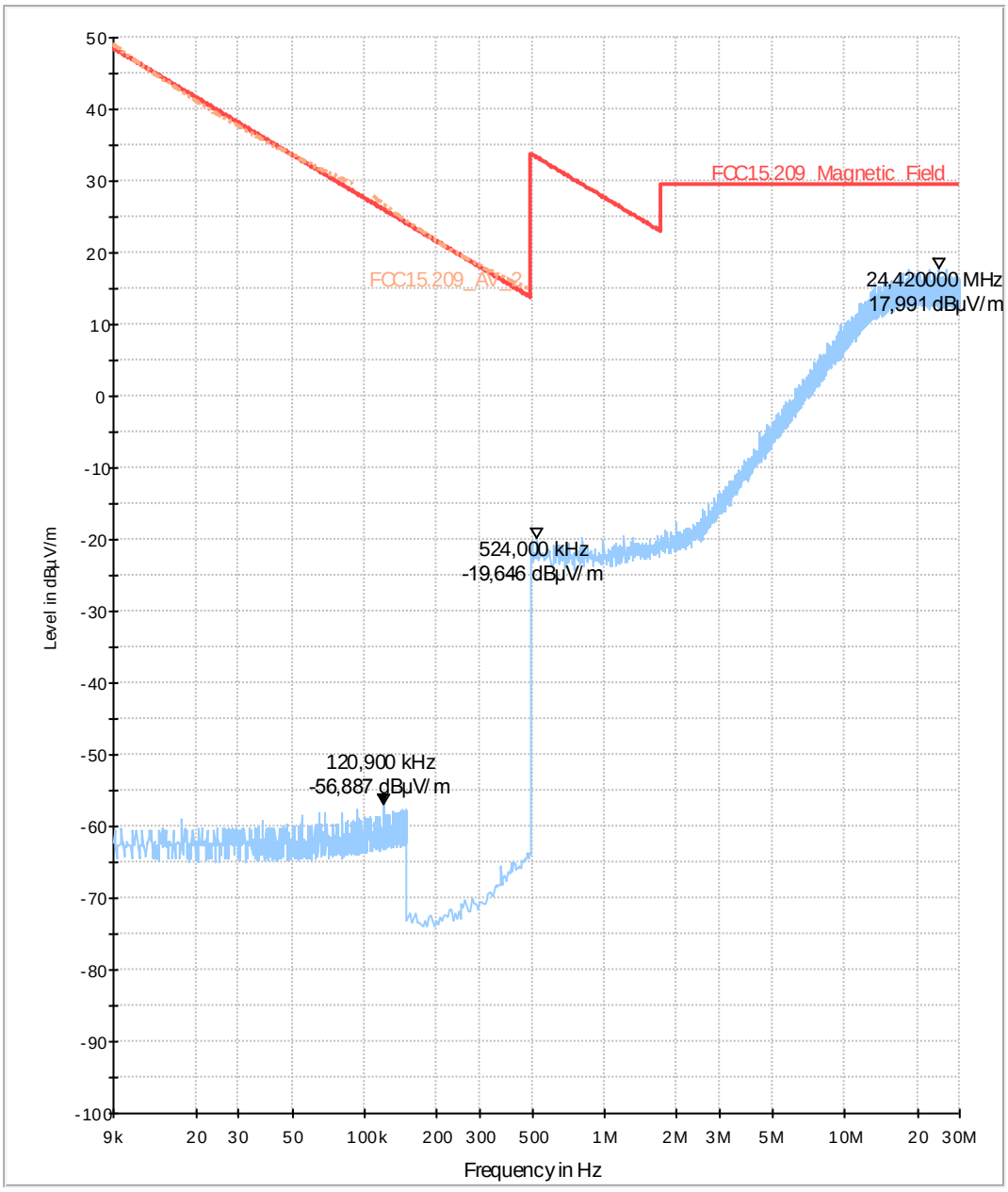
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. c_3.10

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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, HSUPA
Power during tests:	full loaded batteries
Comment 1:	FDD IV high 1513; REB71 UW (CER-41250-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'

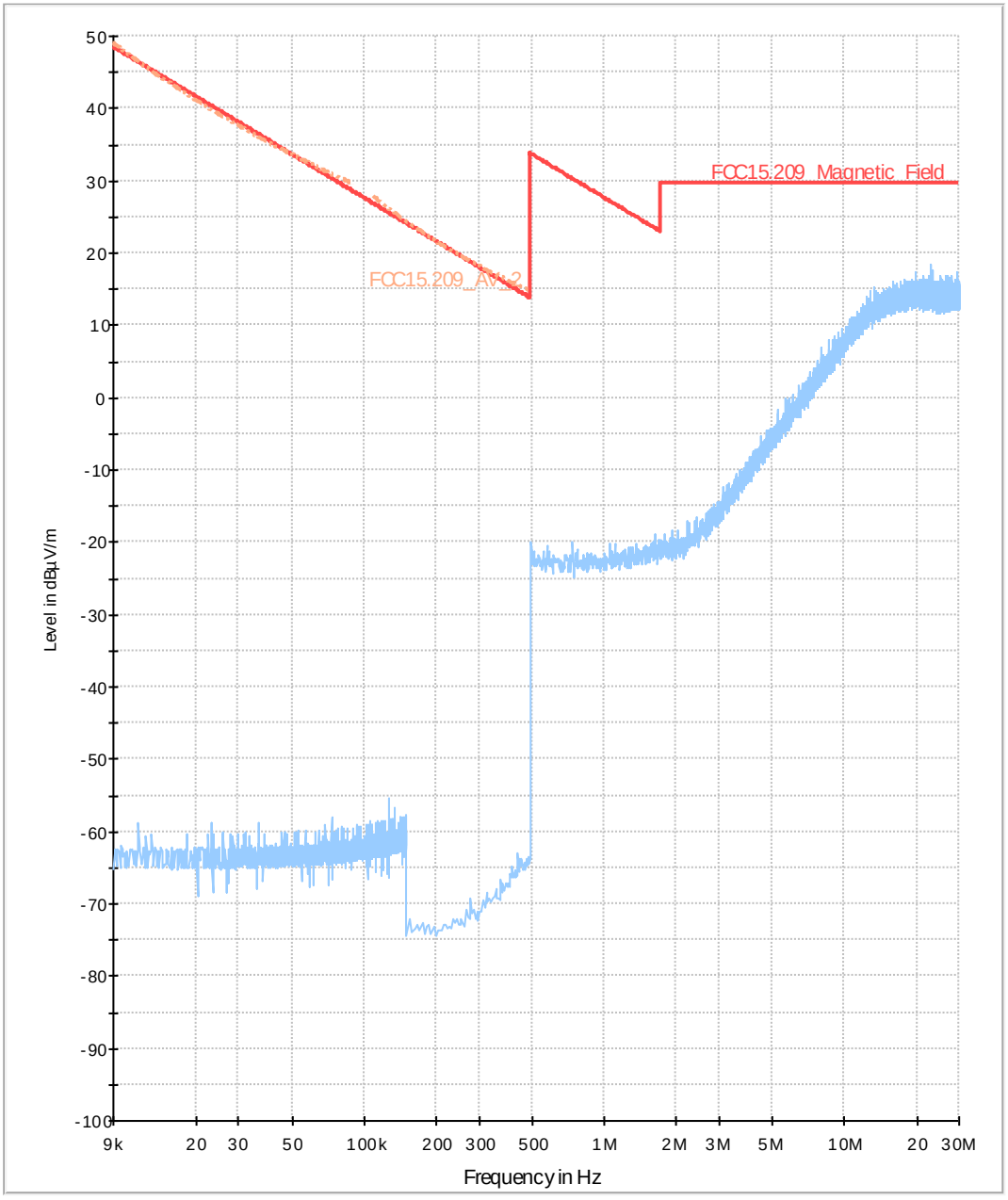
1.9.4. Spurious emissions radiated – FDD Band IV Voice Mode

Diagram No. c_3.17

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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:	Sha
Operating conditions:	TX-on
Power during tests:	full loaded batteries
Comment 1:	FDD IV low 1312; REB71 UW (CER-41250-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

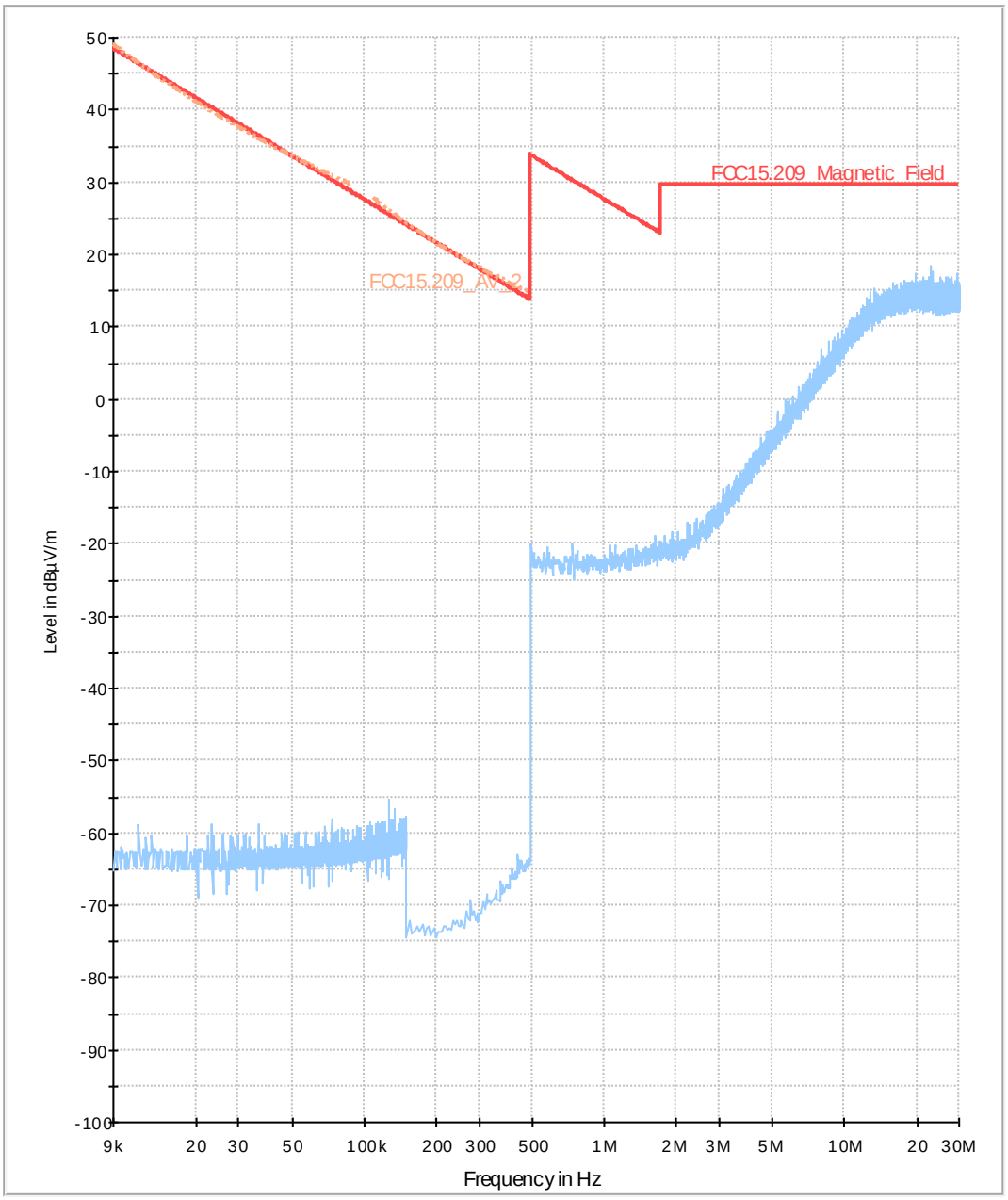
Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'

Diagram No. c_3.18

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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:	Sha
Operating conditions:	TX-on
Power during tests:	full loaded batteries
Comment 1:	FDD IV 1413; REB71 UW (CER-41250-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

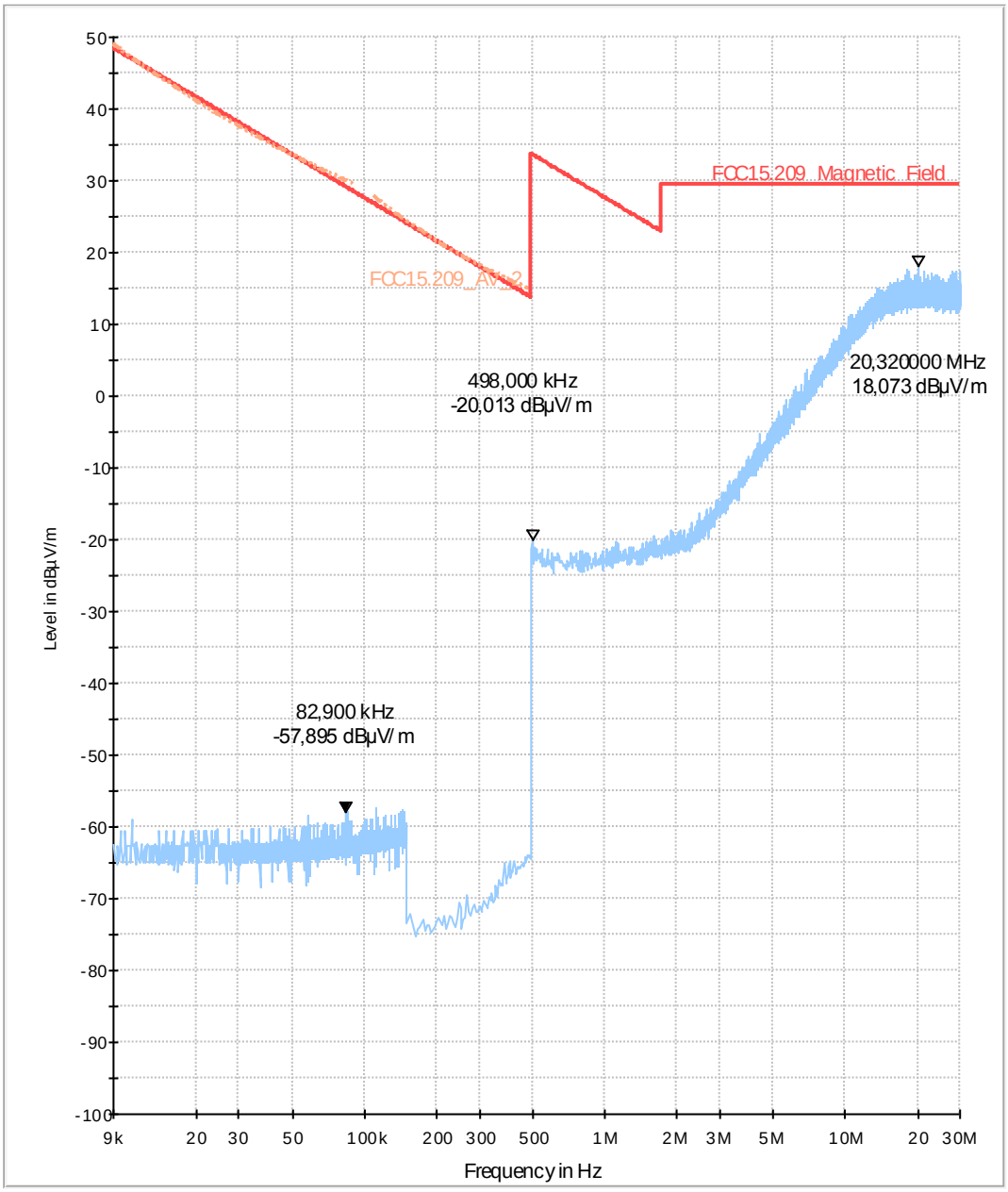
Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'

Diagram No. c_3.19

Common Information

Test description:	Magnetic 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
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
Operator:	Sha
Operating conditions:	TX
Power during tests:	full loaded batteries
Comment 1:	FDD IV 1513; REB71 UW (CER-41250-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

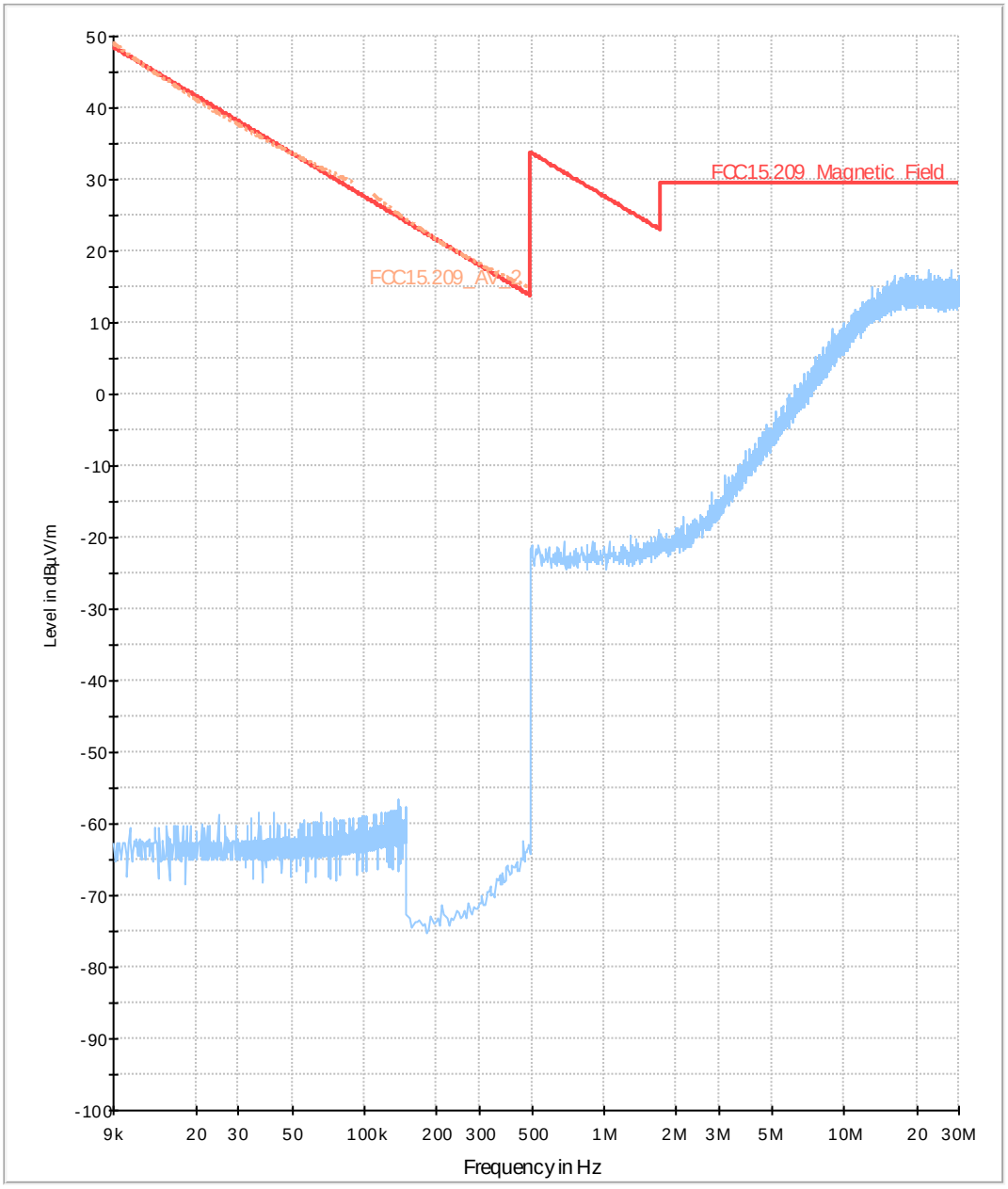
1.9.5. Spurious emissions radiated – FDD Band V Voice Mode

Diagram No. b_3.01

Common Information

Test description:	Magnetic 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
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
EUT:	REA71UW rev 2
Operator:	HLa
Operating conditions:	UMTS FDD 5 (voice) TX-on
Power during tests:	full loaded batteries
Comment 1:	Channel 4132

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

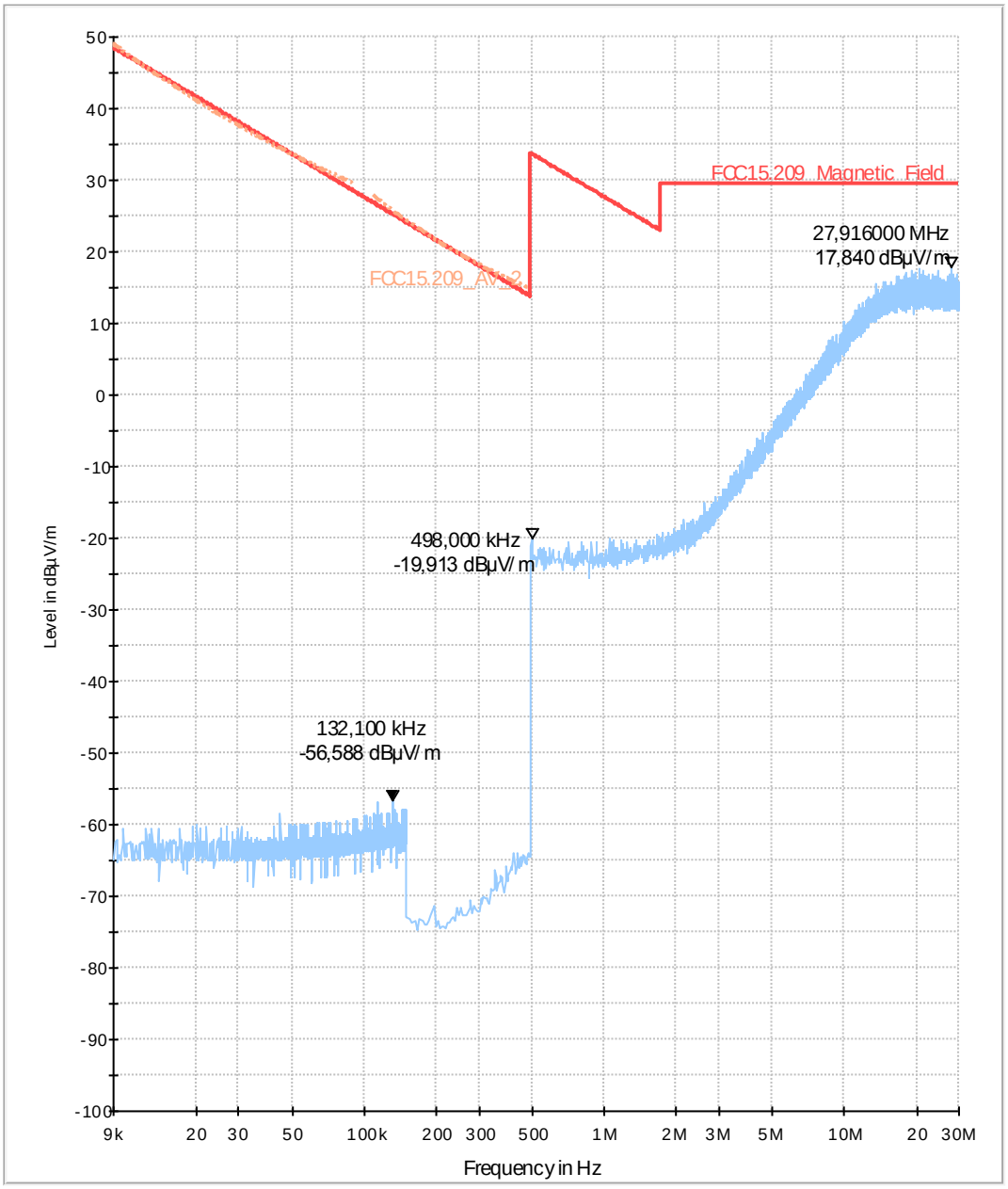
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_3.02

Common Information

Test description:	Magnetic 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
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
EUT:	REA71UW rev 2
Operator:	HLa
Operating conditions:	UMTS FDD 5 (voice) TX-on
Power during tests:	full loaded batteries
Comment 1:	Channel 4182

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

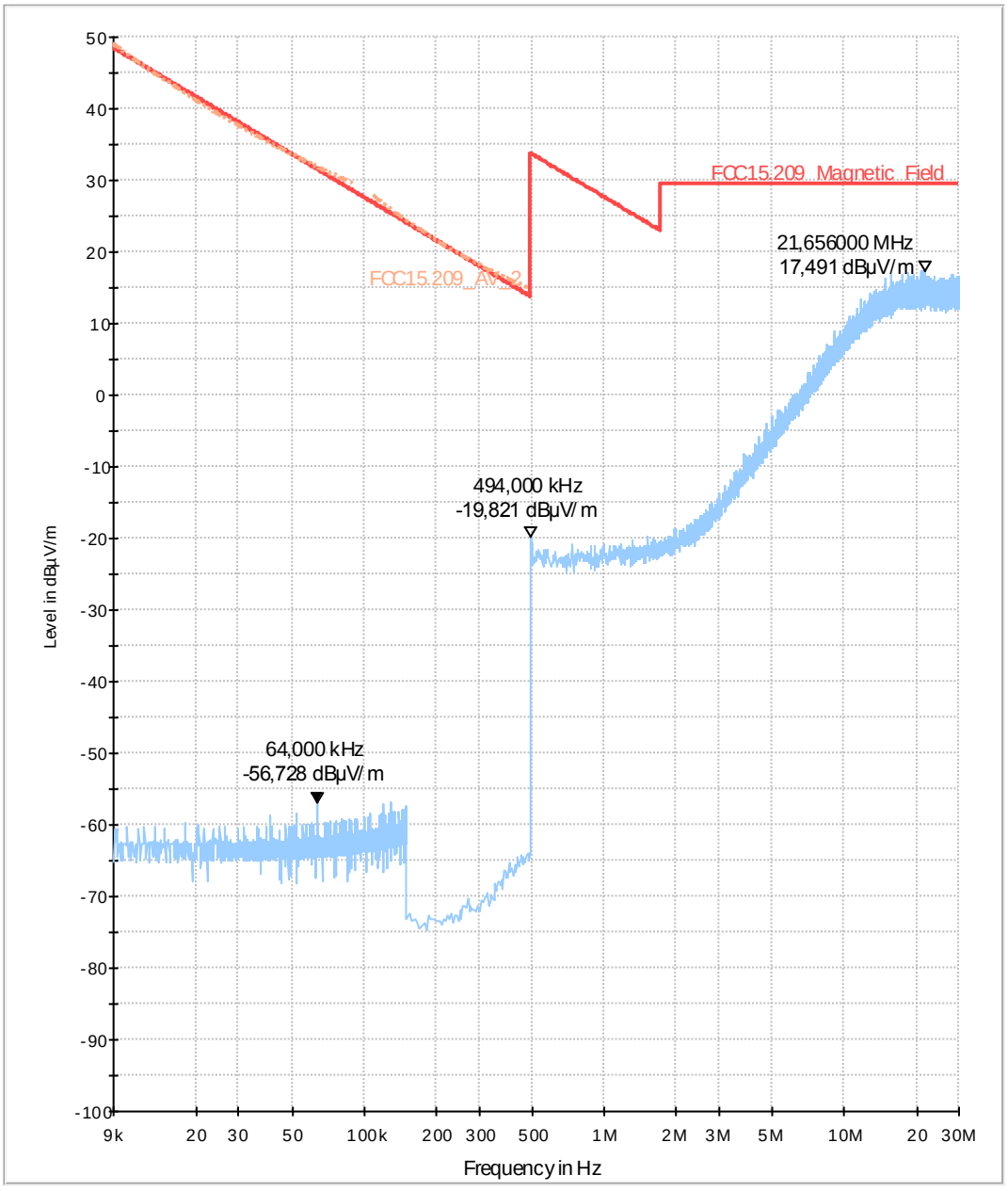
Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_3.03

Common Information

Test description:	Magnetic 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
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
EUT:	REA71UW rev 2
Operator:	HLa
Operating conditions:	UMTS FDD 5 (voice) TX-on
Power during tests:	full loaded batteries
Comment 1:	Channel 4233

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
Polarization: H + V
Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.209_Magnetic_Field
Limit Line #2: FCC15.209_AV_2
Peak Search: 20 dB , Maximum Results: 10
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -10 dB
Maximum Number of Results: 10
After Data Reduction: Interactive data reduction

Adjustment:
Antenna height: Adjustment with full Range , Measuring Speed = 1
Turntable position: Adjustment with full Range , Measuring Speed = 3
Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_magn_vert_hor
Create Electronic Report: PDF
Document Name: EMI Report

Actions:
Preview Measurements: Before
Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Frequency Zoom 1: Before
Notify: "EUT funktioniert noch ?"
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

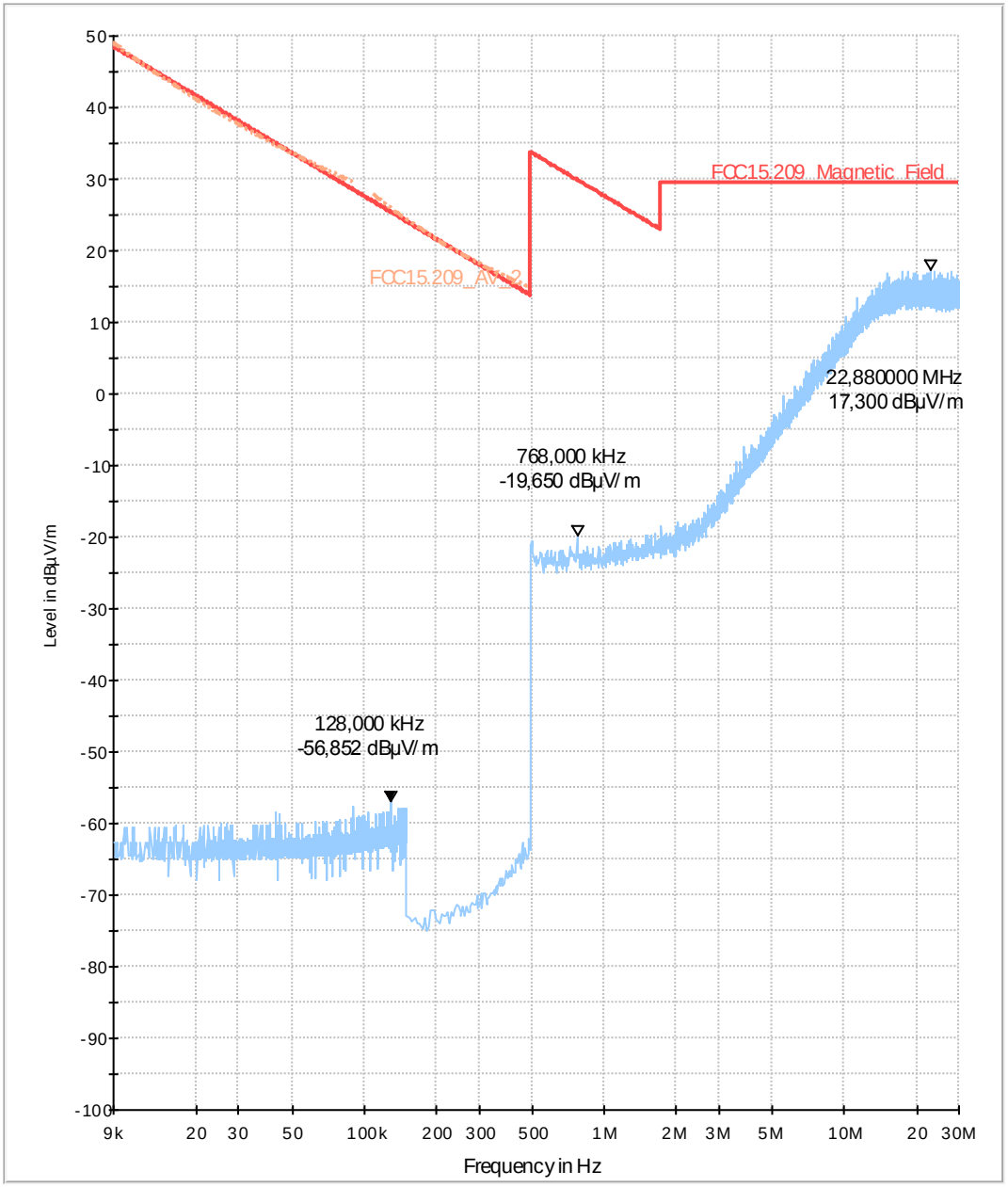
1.9.6. Spurious emissions radiated – FDD Band V HSUPA

Diagram No. b_3.14

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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
Power during tests:	full loaded batteries
Comment 1:	FDD V (low channel= 4132); REA71 UW (CER-41251-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

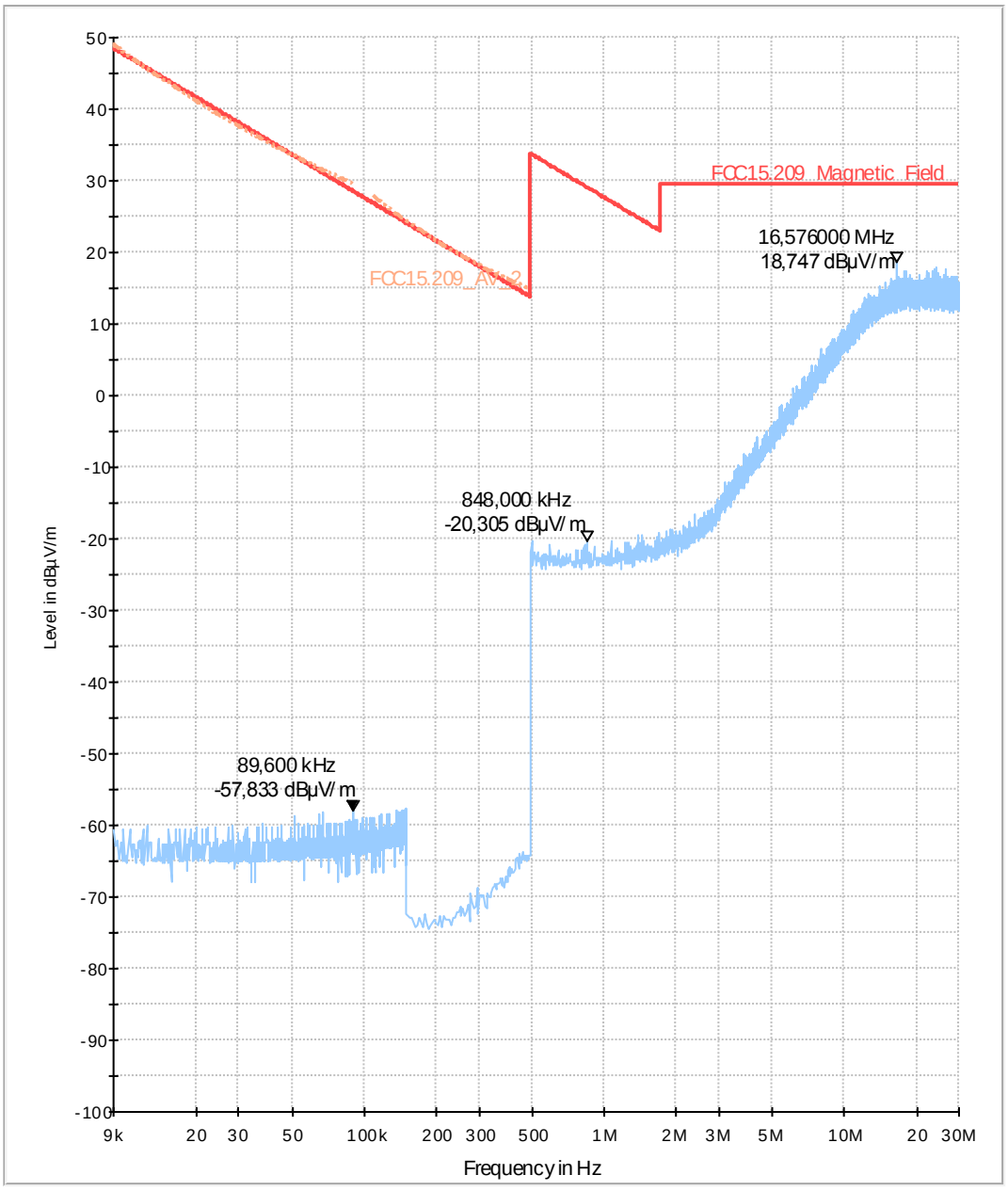
Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_3.15

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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
Power during tests:	full loaded batteries
Comment 1:	FDD V (middle channel= 4182); REA71 UW (CER-41251-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

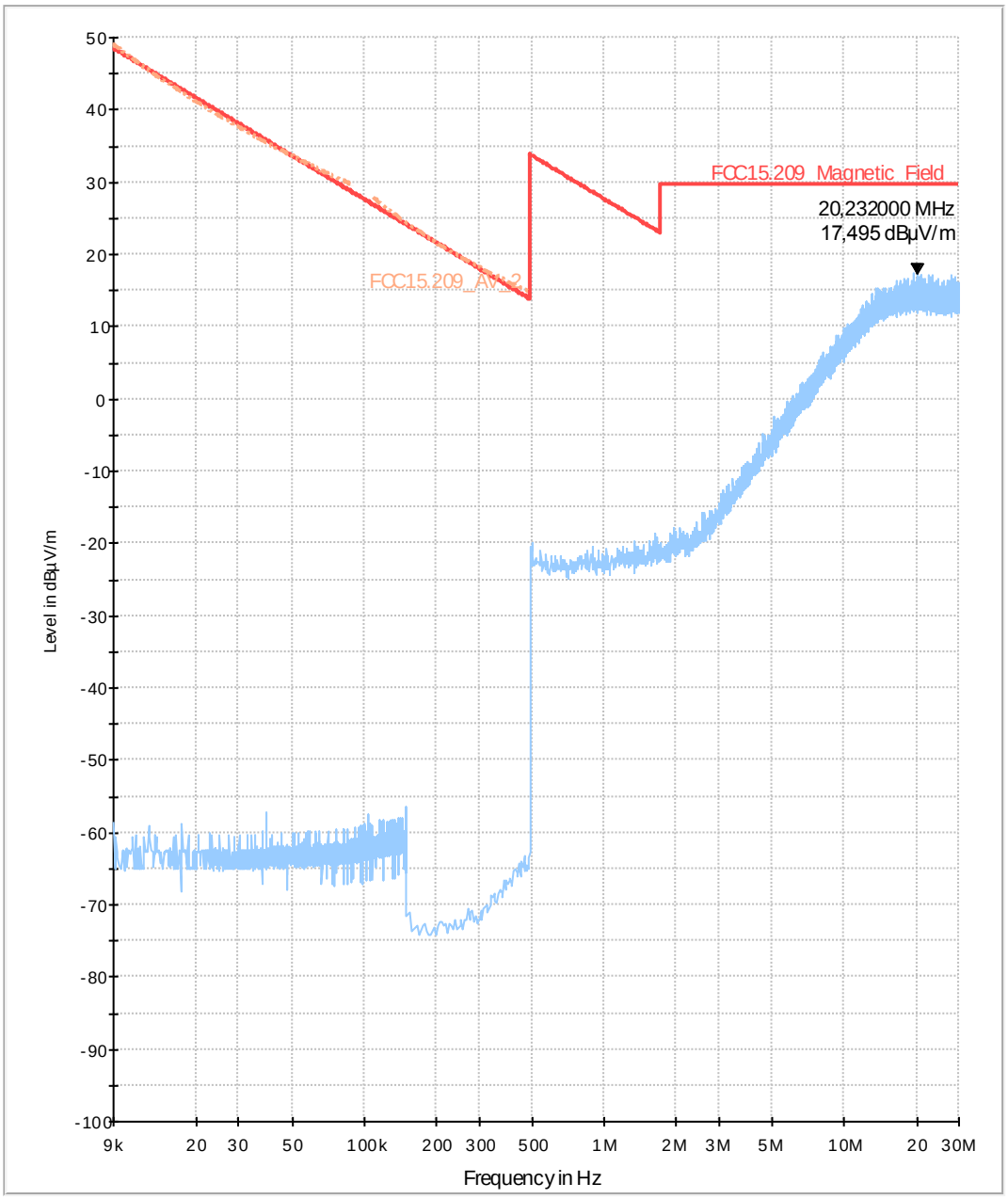
Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'

Diagram No. b_3.16

Common Information

Test description:	Magnetic Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) + mobile floor absorbers and 3m measurement distance
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
Power during tests:	full loaded batteries
Comment 1:	FDD V (high channel= 4233); REA71 UW (CER-41251-..)

FCC15.209_magn hor+vert



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

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
Measurement Type: Open-Area-Test-Site
Frequency Range: 9 kHz - 30 MHz
Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
- Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Positioning Speed = 1
- Polarization: H + V
- Turntable position: 35 - 305 deg , Step Size = 90 deg , Positioning Speed = 8
- Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Data Reduction:
- Limit Line #1: FCC15.209_Magnetic_Field
- Limit Line #2: FCC15.209_AV_2
- Peak Search: 20 dB , Maximum Results: 10
- Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
- Acceptance Offset: -10 dB
- Maximum Number of Results: 10
- After Data Reduction: Interactive data reduction

Adjustment:
- Antenna height: Adjustment with full Range , Measuring Speed = 1
- Turntable position: Adjustment with full Range , Measuring Speed = 3
- Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0,01 s	0 dB
150 kHz - 500 kHz	4 kHz	PK+	10 kHz	0,01 s	0 dB
500 kHz - 30 MHz	4 kHz	PK+	10 kHz	0,01 s	0 dB

Receiver: [ESS]

Final Measurements:
- Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	100 Hz	QPK	200 Hz	1 s	0 dB
150 kHz - 30 MHz	5 kHz	QPK	10 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
- Report Template: FCC15_209_magn_vert_hor
- Create Electronic Report: PDF
- Document Name: EMI Report

Actions:
- Preview Measurements: Before
  - Notify: "Achtung: es gibt Frequenzbereich mit AVERAGE detector als Ergebniss..."
- Data Reduction: Before
  - Notify: Sound (WAV file) 'tada.wav'
- Frequency Zoom 1: Before
  - Notify: "EUT funktioniert noch ?"
- Final Measurements: After
  - Notify: Sound (WAV file) 'tada.wav'