FCC Part 22/24/27 Compliance Test Report

Test Report no.:	FCC_Cellular_RM-1128_11.docx	**Date of Report:**	09-Sep-2015
Number of pages:	111	**Customer's Contact person:**	Tero Huhtala
Testing laboratory:	TCC Microsoft Beijing Laboratory Beijing Economic and Technological Development Area No.5 Donghuan Zhonglu Beijing PRC China 100176 Tel. +86 10 8711 8888 Fax. +86 10 8711 4550	**Customer:**	Microsoft P.O. Box 403 Visiokatu 4 FIN-33720 TAMPERE, FINLAND Tel. +358 (0) 7180 46800 Fax. +358 (0) 7180 46880
FCC listing no.: **IC recognition no.:**	975940 661AH-1		
Tested devices/ accessories:	**Phone RM-1128 / Cover CC-3097 / Battery Samsung BL-T5A / AC-Charger AC-18U / Headset WH-108/ Dummy battery SD-133**		
FCC ID:	PYARM-1128	**IC:**	661X-RM1128
Supplement reports:	-		
Testing has been carried out in accordance with:	**CFR 47, FCC rules Parts 22/24/27, TIA-603-C-2004 and IC standards, RSS-GEN (Issue 4, November 2014), RSS-132 (Issue 3, January 2013), RSS-133 (Issue 6, January 2013), RSS-139 (Issue 2, February 2009), RSS-199 (Issue 2, October 2014), RSS-130 (Issue 1, October 2013). Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".**		
Documentation:	The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 15 years at TCC Microsoft.		
Test Results:	**The EUT complies with the requirements in respect of all parameters subject to the test.** The test results relate only to devices specified in this document		
Date and signature for the contents:	Sherina Gao Digitally signed by Sherina Gao DN: cn=Sherina Gao, o=Microsoft, ou=TCC,RCL, email=shuga@microsoft.com, c=CN Date: 2015.09.09 14:10:08 +08'00'		

Gao Sherina, System Manager, EMC

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1. Summary for FCC Part 22/24/27 Compliance Test Report

Date of receipt	02-Jun-2015
Testing completed	26s-Aug-2015
The customer's contact person	Tero Huhtala
Test Plan referred to	T:\Projects\RM-1128\TestPlan\RS_testplan_RM-1128.xlsm
Notes	-
Document name	FCC_Cellular_RM-1128_11.docx

1.1. EUT and Accessory Information

The EUT is a mobile phone with following features:
GSM/WCDMA/WLAN/Bluetooth
The EUT is tested with maximum rated TX power.

Devices under tests

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-1128	004402742351970	1510	-	01065.00000.15265.37000	500100
Cover	CC-3097	-	-	-	-	500127
Battery	Samsung BL-T5A	5241525213V10200063;0670778	PWB Ver.1.1	-	-	500101
AC-Charger	AC-18U	481871511510010066l;0675735	-	-	-	500124
Headset	WH-108	-	-	-	-	500121
Phone	RM-1128	004402742351913	1510	-	01065.00000.15265.37000	500110
Cover	CC-3097	-	-	-	-	500128
Battery	Samsung BL-T5A	5241525213V10205754;0670778	PWB Ver.1.1	-	-	500117
AC-Charger	AC-18U	418715115100100658;0675735	-	-	-	500122
Headset	WH-108	-	-	-	-	500121
Dummy battery	SD-133	03618	-	-	-	500120

1.2. Summary of Test Results

GSM 850:

Section in CFR 47	Section in RSS-GEN or RSS-132	Name of the test	Result
§2.1046(a), 22.913(a)	4.4	Conducted RF output power	NP
§22.913(a)	4.4	Radiated RF output power	NP
N/A	5.4	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§22.917(a)	4.5	Band edge compliance	PASSED
§22.917(a), §2.1051	4.5	Spurious emissions at antenna terminals	NP
§22.917(a), §2.1053	4.5	Spurious radiated emissions	PASSED
§2.1055(a)	4.3	Frequency stability, temperature variation	PASSED
§2.1055(d)	4.3	Frequency stability, voltage variation	PASSED

GSM 1900:

Section in CFR 47	Section in RSS-GEN or RSS-133	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§24.232(b)	6.4	Radiated RF output power	NP

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N/A	6.4	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§24.238(a)	6.5	Band edge compliance	PASSED
§24.238(a), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.5	Spurious radiated emissions	PASSED
§2.1055(a)	6.3	Frequency stability, temperature variation	PASSED
§2.1055(d)	6.3	Frequency stability, voltage variation	PASSED

WCDMA4:

Section in CFR 47	Section in RSS-GEN or RSS-139	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§27.50(d)(2)	6.4	Radiated RF output power	NP
N/A	6.4	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§27.53(g)	6.5	Band edge compliance	PASSED
§27.53(g), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.5	Spurious radiated emissions	PASSED
§2.1055(a)	6.3	Frequency stability, temperature variation	PASSED
§2.1055(d)	6.3	Frequency stability, voltage variation	PASSED

WCDMA5:

Section in CFR 47	Section in RSS-GEN or RSS-132	Name of the test	Result
§2.1046(a), 22.913(a)	4.4	Conducted RF output power	NP
§22.913(a)	4.4	Radiated RF output power	NP
N/A	5.4	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§22.917(a)	4.5	Band edge compliance	PASSED
§22.917(a), §2.1051	4.5	Spurious emissions at antenna terminals	NP
§22.917(a), §2.1053	4.5	Spurious radiated emissions	PASSED
§2.1055(a)	4.3	Frequency stability, temperature variation	NP
§2.1055(d)	4.3	Frequency stability, voltage variation	NP

WCDMA2:

Section in CFR 47	Section in RSS-GEN or RSS-133	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§24.232(b)	6.4	Radiated RF output power	NP
N/A	6.4	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§24.238(a)	6.5	Band edge compliance	PASSED
§24.238(a), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.5	Spurious radiated emissions	PASSED
§2.1055(a)	6.3	Frequency stability, temperature variation	NP
§2.1055(d)	6.3	Frequency stability, voltage variation	NP

LTE4:

Section in CFR 47	Section in RSS-GEN or RSS-139	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§27.50(d)(4)	6.4	Radiated RF output power	NP
N/A	6.4	Peak to average power ratio	NP
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED

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§27.53(h)	6.5	Band edge compliance	PASSED
§27.53(h), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§27.53(h), §2.1053	6.5	Spurious radiated emissions	PASSED
§2.1055(a)	6.3	Frequency stability, temperature variation	PASSED
§2.1055(d)	6.3	Frequency stability, voltage variation	PASSED

LTE5:

Section in CFR 47	Section in RSS-GEN or RSS-132	Name of the test	Result
§2.1046(a), 22.913(a)	4.4	Conducted RF output power	NP
§22.913(a)	4.4	Radiated RF output power	NP
N/A	5.4	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§22.917(a)	4.5	Band edge compliance	PASSED
§22.917(a), §2.1051	4.5	Spurious emissions at antenna terminals	NP
§22.917(a), §2.1053	4.5	Spurious radiated emissions	PASSED
§2.1055(a)	4.3	Frequency stability, temperature variation	NP
§2.1055(d)	4.3	Frequency stability, voltage variation	NP

LTE7:

Section in CFR 47	Section in RSS-GEN or RSS-199	Name of the test	Result
§2.1046(a)	4.4	Conducted RF output power	NP
§27.50(h)(2)	4.4	Radiated RF output power	NP
N/A	N/A	Peak to average power ratio	NP
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§27.53(l)	4.5(b)	Band edge compliance	PASSED
§2.1051	4.5(b)	Spurious emissions at antenna terminals	NP
§27.53(l), §2.1053	4.5(b)	Spurious radiated emissions	PASSED
§27.54	4.3	Frequency stability, temperature variation	PASSED
§27.54	4.3	Frequency stability, voltage variation	PASSED

LTE12:

Section in CFR 47	Section in RSS-GEN or RSS-130	Name of the test	Result
§2.1046(a)	4.4	Conducted RF output power	NP
§27.50(c)10	4.4	Radiated RF output power	NP
N/A	N/A	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§27.53(f)	4.6	Band edge compliance	PASSED
§27.53(f)	4.6	Spurious emissions at antenna terminals	NP
§27.53(f)	4.6	Spurious radiated emissions	PASSED
§27.54	4.3	Frequency stability, temperature variation	PASSED
§27.54	4.3	Frequency stability, voltage variation	PASSED

LTE17:

Section in CFR 47	Section in RSS-GEN or RSS-130	Name of the test	Result
§2.1046(a)	4.4	Conducted RF output power	NP
§27.50(c)(10)	4.4	Radiated RF output power	NP
N/A	N/A	Peak to average power ratio	PASSED
§2.1049(h)	6.6	99 % occupied bandwidth	PASSED
§27.53(g)	4.6	Band edge compliance	PASSED
§27.53(g), §2.1051	4.6	Spurious emissions at antenna terminals	NP

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§27.53(g), §2.1051	4.6	Spurious radiated emissions	PASSED
§2.1055(a)	4.3 (a)	Frequency stability, temperature variation	PASSED
§2.1055(d)	4.3 (a)	Frequency stability, voltage variation	PASSED

PASSED	The EUT complies with the essential requirements in the standard.
FAILED	The EUT does not comply with the essential requirements in the standard.
NP	The test was not performed by the TCC Microsoft Laboratory.

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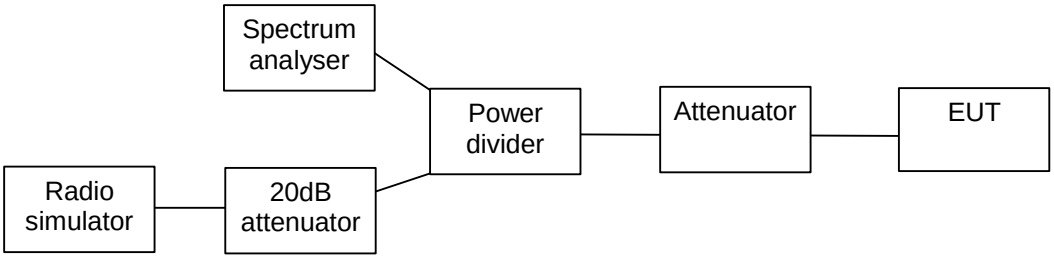
2. Peak to average power ratio

(FCC N/A, RSS-133 6.4, RSS-132 5.4, RSS-139 6.4, RSS-130 N/A)

EUT with DUT number	RM-1128, DUT 500110
Accessories with DUT numbers	CC-3097, DUT 500128; Samsung BL-T5A, DUT 500117; AC-18U, DUT 500122; WH-108, DUT 500103
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was in conducted RF2 system.
Temp [ºC] / Humidity [%RH] / Air Pressure [kPa]	21/59/100.5 to 23/51/100.1
Date of measurements	16-Jul-2015 to 20-Jul-2015
Measured by	Dou Rubo

2.1. Test Setup



2.2. Test method and limit

The measurement is made according to applicable FCC rule parts and IC standards.

Limits for Peak to average power ratio measurements

Peak to average power ratio [dB]
⩽ 13

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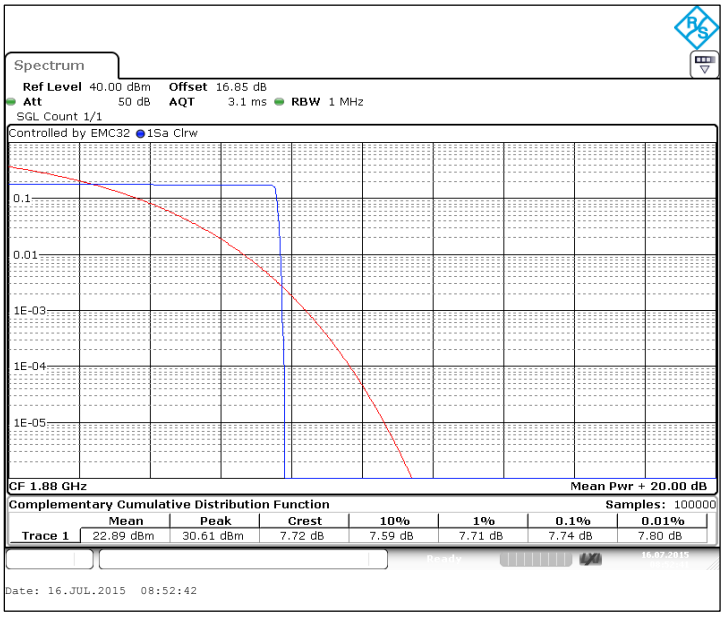
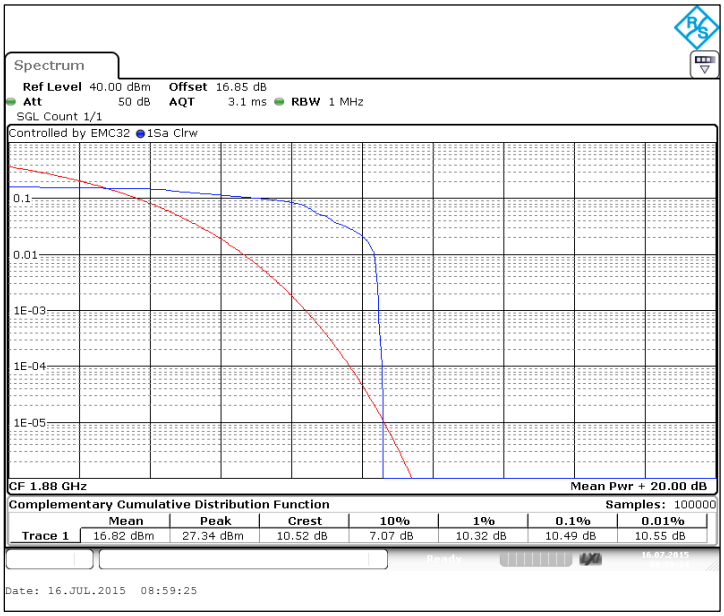
2.3. GSM 1900 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
GSM	661 / 1880.0	7.72	PASSED
EGPRS	661 / 1880.0	10.52	PASSED

GSM



EGPRS



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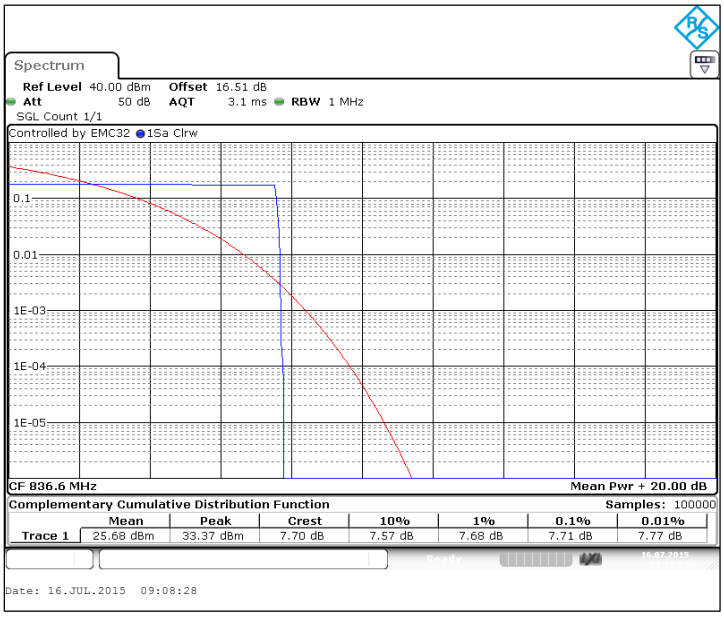
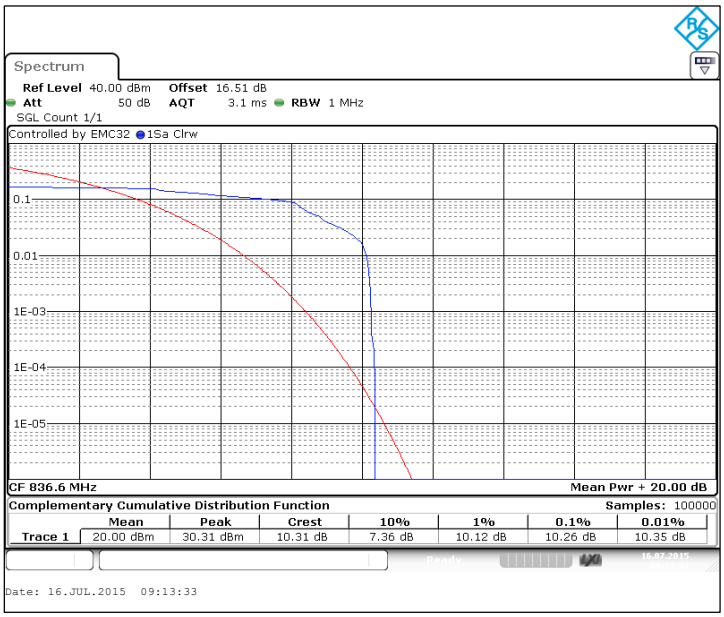
2.4. GSM 850 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
GSM	190 / 836.6	7.70	PASSED
EGPRS	190 / 836.6	10.31	PASSED

GSM



EGPRS



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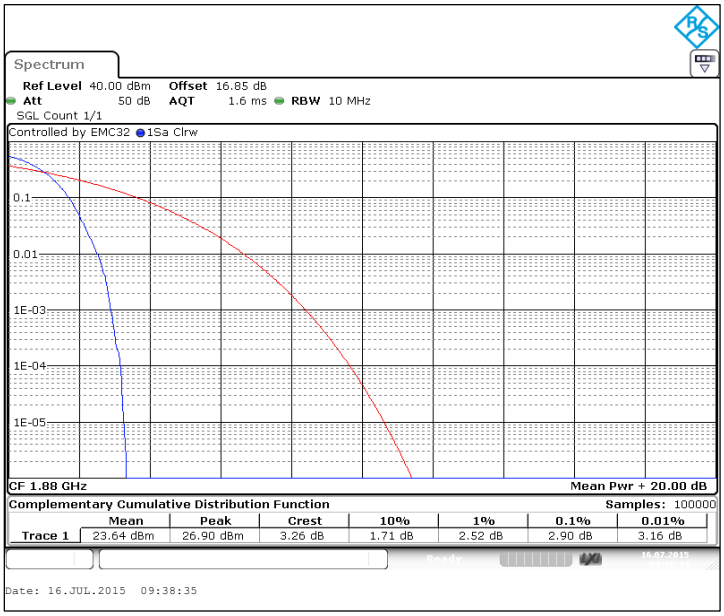
2.5. WCDMA2 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
FDD	9400 / 1880.0	3.26	PASSED

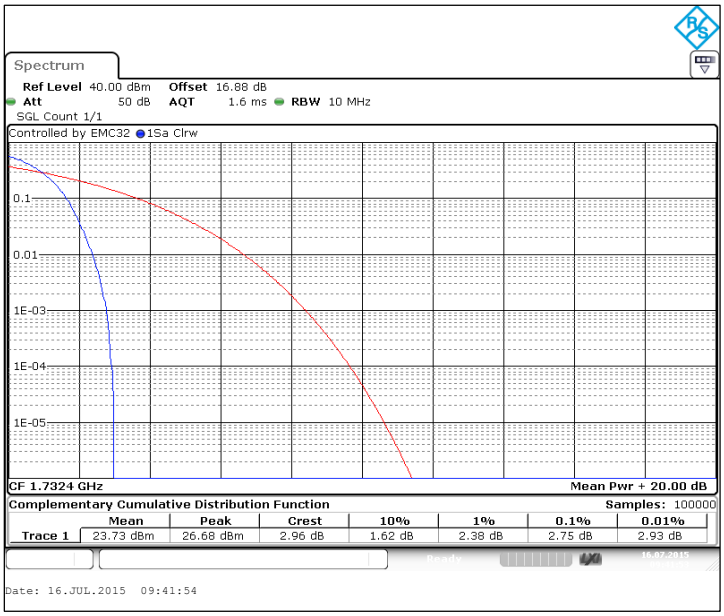
FDD



2.6. WCDMA4 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
FDD	1412 / 1732.4	2.96	PASSED

FDD



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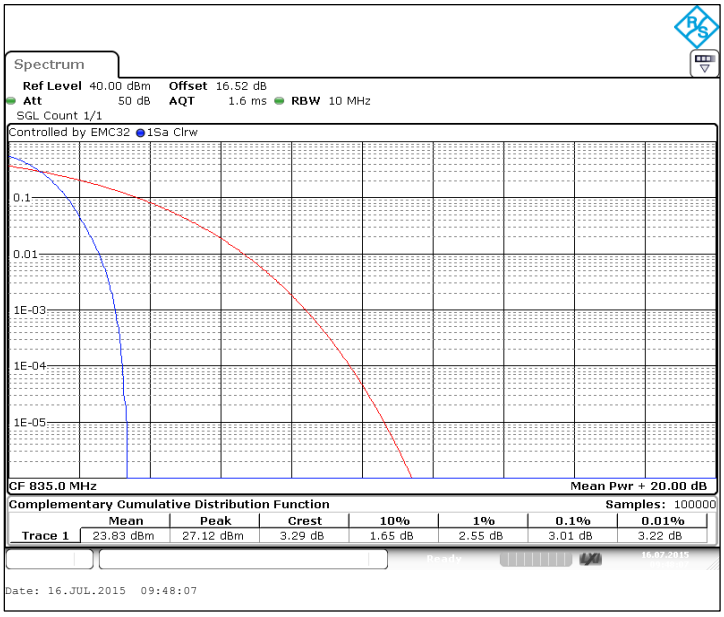
2.7. WCDMA5 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
FDD	4175 / 835.0	3.29	PASSED

FDD



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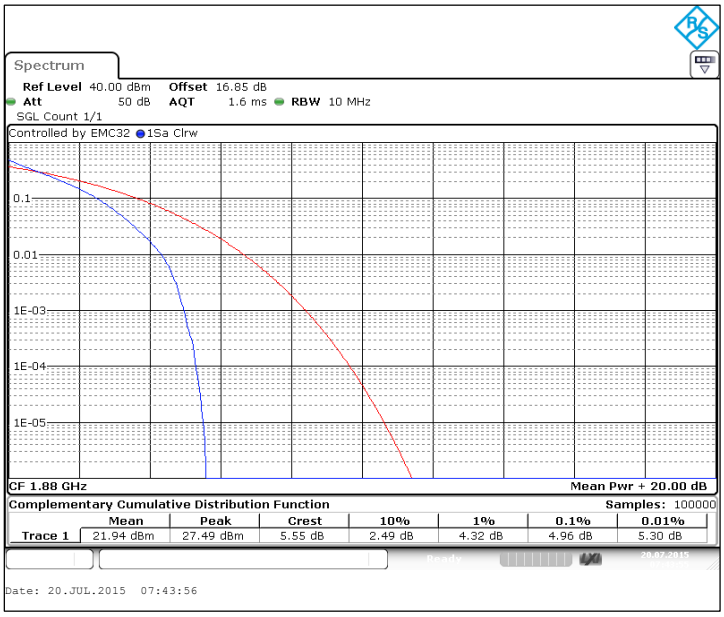
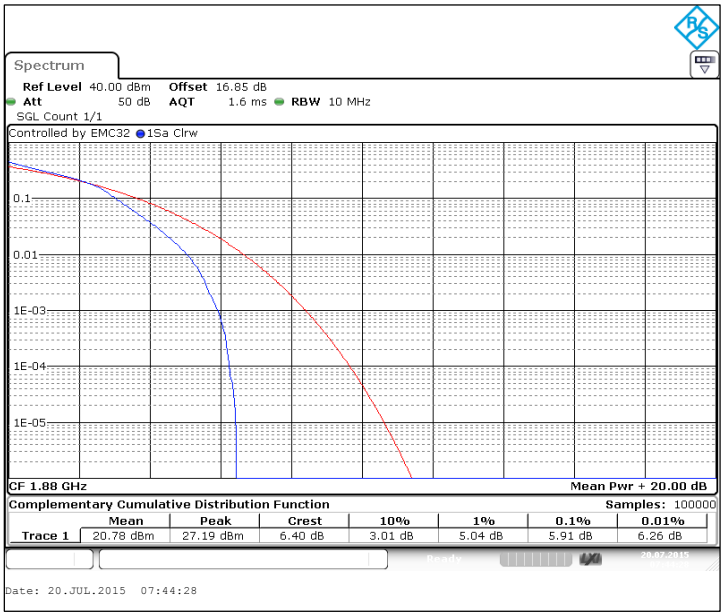
2.8. LTE2 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
FDD, CBW 5MHz, QPSK, 25 RB	18900 / 1880.0	5.55	PASSED
FDD, CBW 5MHz, 16QAM, 25 RB	18900 / 1880.0	6.40	PASSED

FDD, CBW 5MHz, QPSK, 25 RB



FDD, CBW 5MHz, 16QAM, 25 RB



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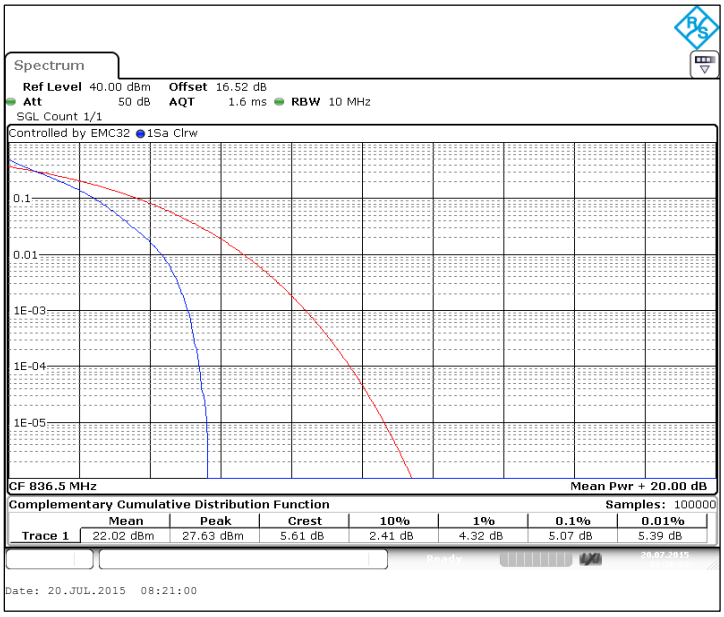
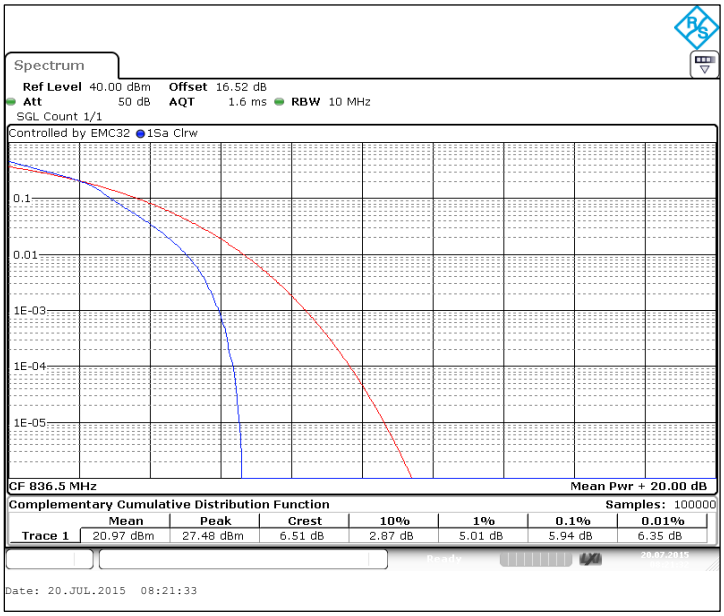
2.9. LTE5 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
FDD, CBW 5MHz, QPSK, 25 RB	20525 / 836.5	5.61	PASSED
FDD, CBW 5MHz, 16QAM, 25 RB	20525 / 836.5	6.51	PASSED

FDD, CBW 5MHz, QPSK, 25 RB



FDD, CBW 5MHz, 16QAM, 25 RB



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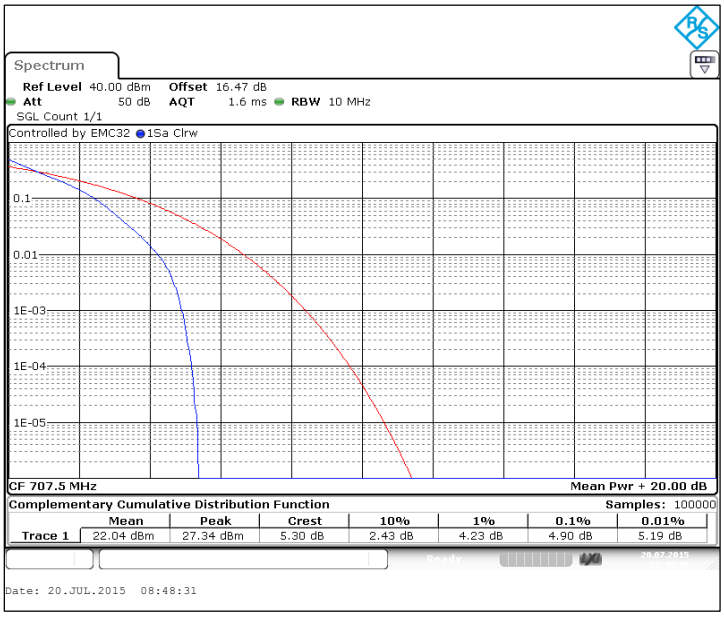
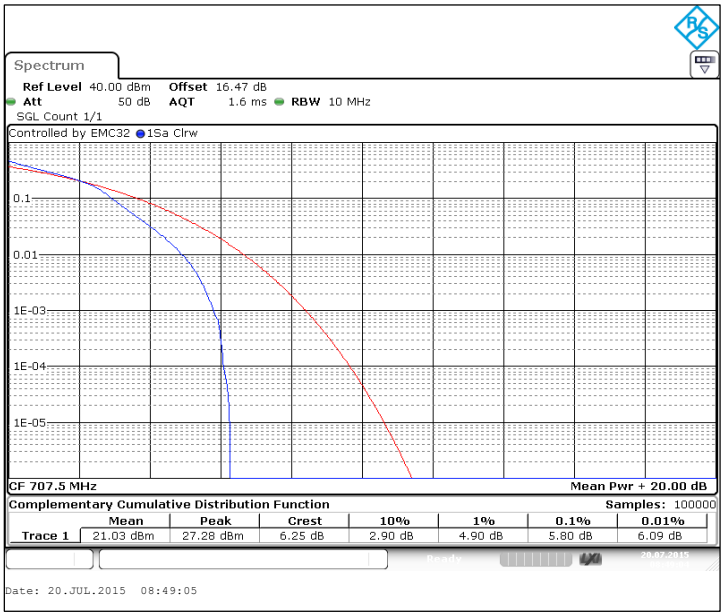
2.10. LTE12 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
FDD, CBW 5MHz, QPSK, 25 RB	23095 / 707.5	5.30	PASSED
FDD, CBW 5MHz, 16QAM, 25 RB	23095 / 707.5	6.25	PASSED

FDD, CBW 5MHz, QPSK, 25 RB



FDD, CBW 5MHz, 16QAM, 25 RB



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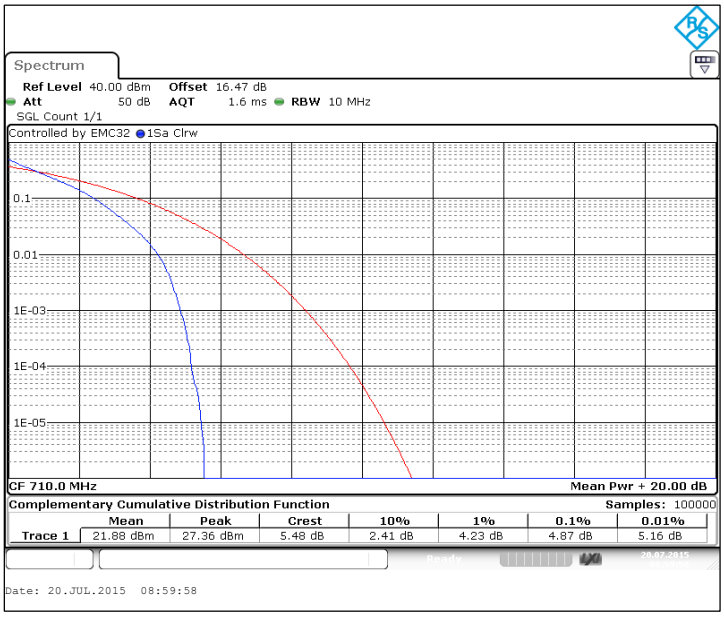
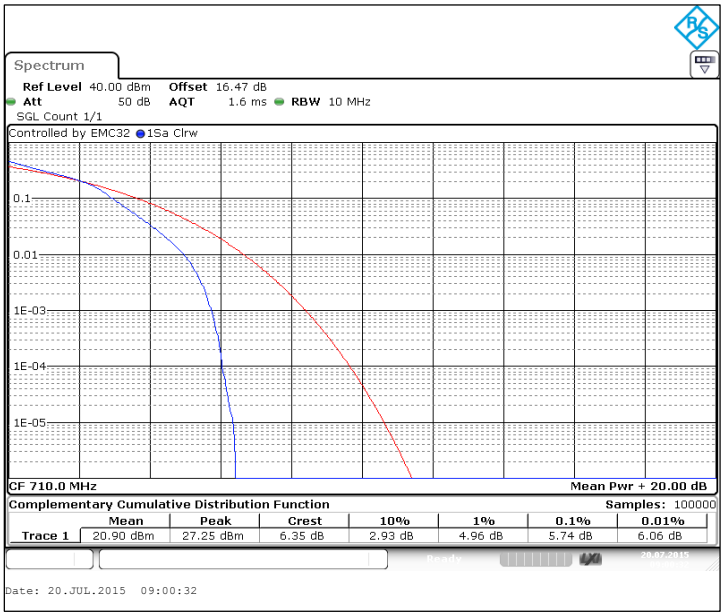
2.11. LTE17 Test results

Operation mode (TX on)	Channel / f_C [MHz]	Peak to average power ratio [dB]	Result
FDD, CBW 5MHz, QPSK, 25 RB	23790 / 710.0	5.48	PASSED
FDD, CBW 5MHz, 16QAM, 25 RB	23790 / 710.0	6.35	PASSED

FDD, CBW 5MHz, QPSK, 25 RB



FDD, CBW 5MHz, 16QAM, 25 RB



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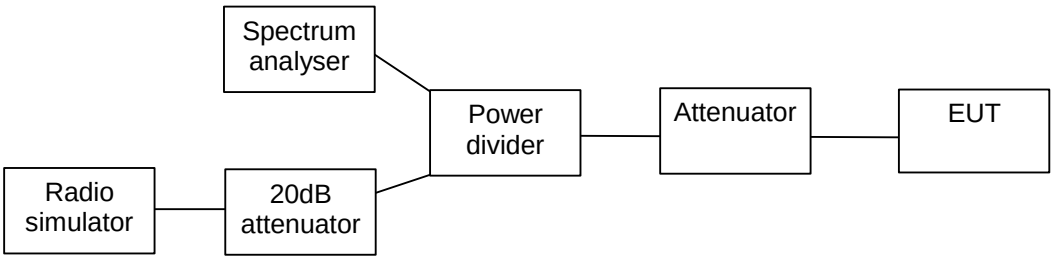
3. 99 % occupied bandwidth

(FCC §2.1049(h), RSS-133 6.6, RSS-132 6.6, RSS-139 6.6, RSS-199 6.6, RSS-130 6.6)

EUT with DUT number	RM-1128, DUT 500110
Accessories with DUT numbers	CC-3097, DUT 500128; Samsung BL-T5A, DUT 500117; AC-18U, DUT 500122; WH-108, DUT 500103
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was in conducted RF2 system.
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21/59/100.5 to 23/51/100.1
Date of measurements	16-Jul-2015 to 20-Jul-2015
Measured by	Dou Rubo

3.1. Test Setup



3.2. Test method and limit

The measurement is made according to applicable FCC rule parts and IC standards.

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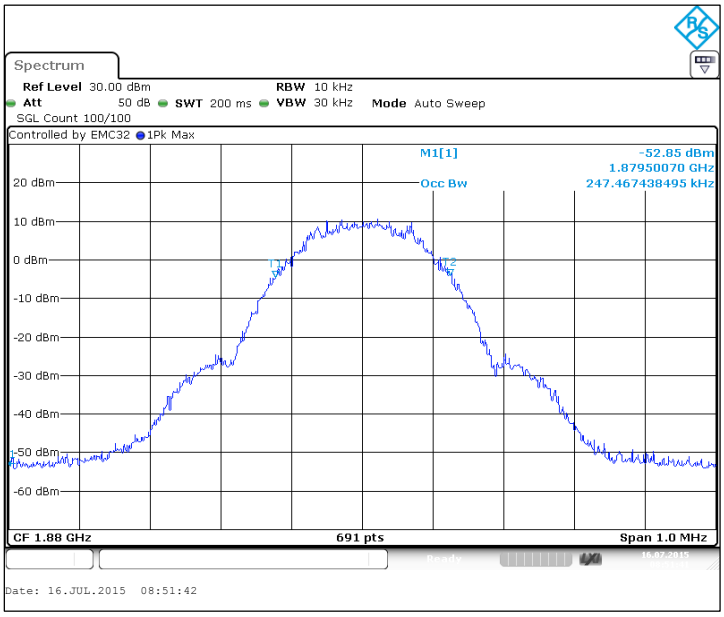
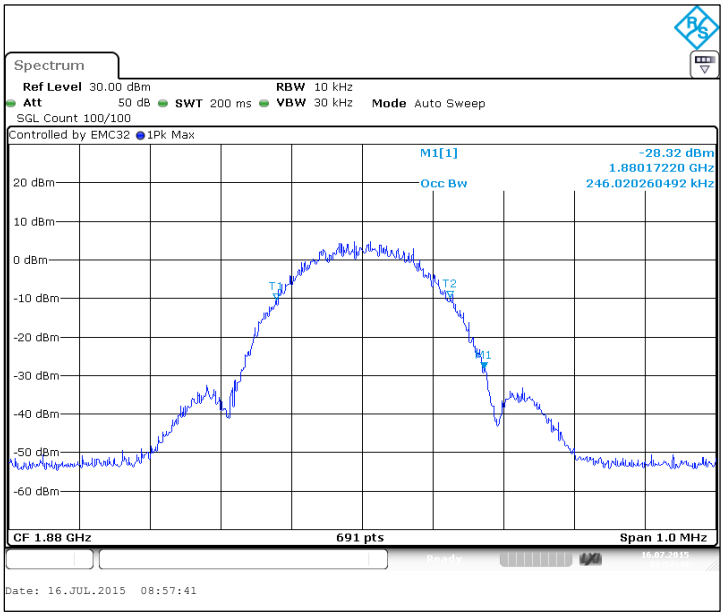
3.3. GSM 1900 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
GSM	247.5
EGPRS	246

GSM, Channel 661 / 1880.0 MHz



EGPRS, Channel 661 / 1880.0 MHz



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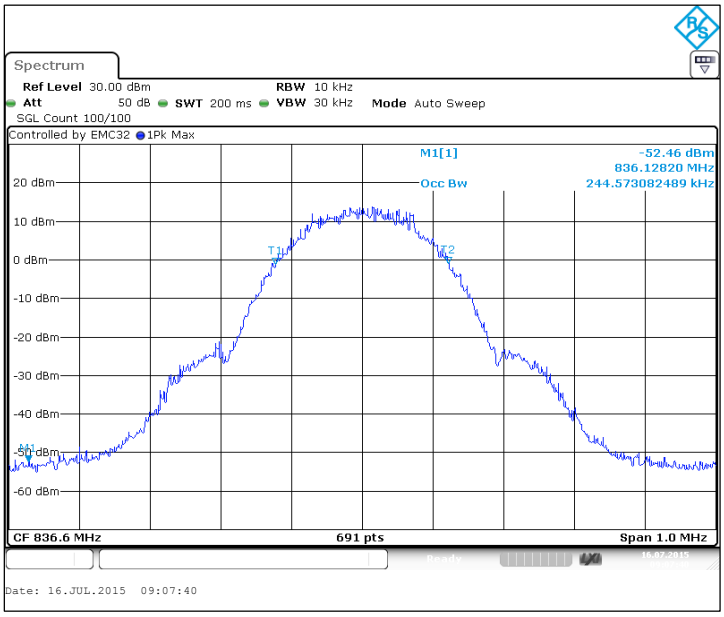
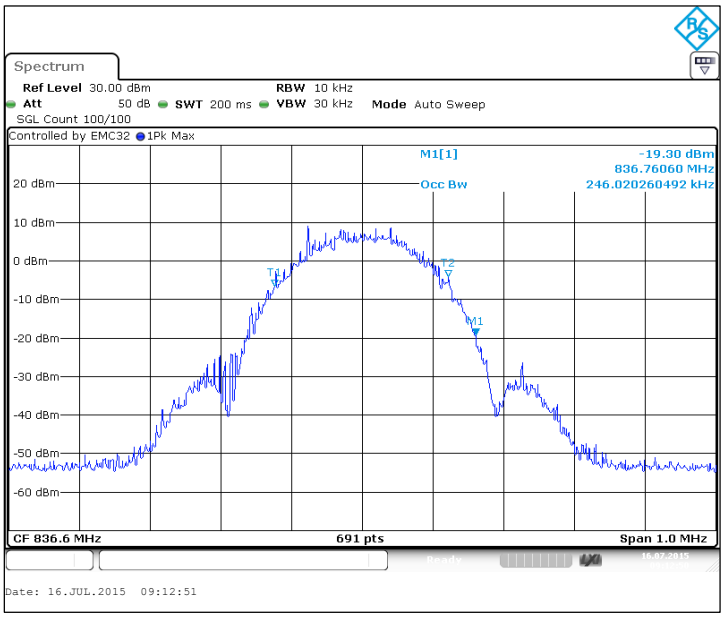
3.4. GSM 850 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
GSM	244.6
EGPRS	246

GSM, Channel 190 / 836.6 MHz



EGPRS, Channel 190 / 836.6 MHz



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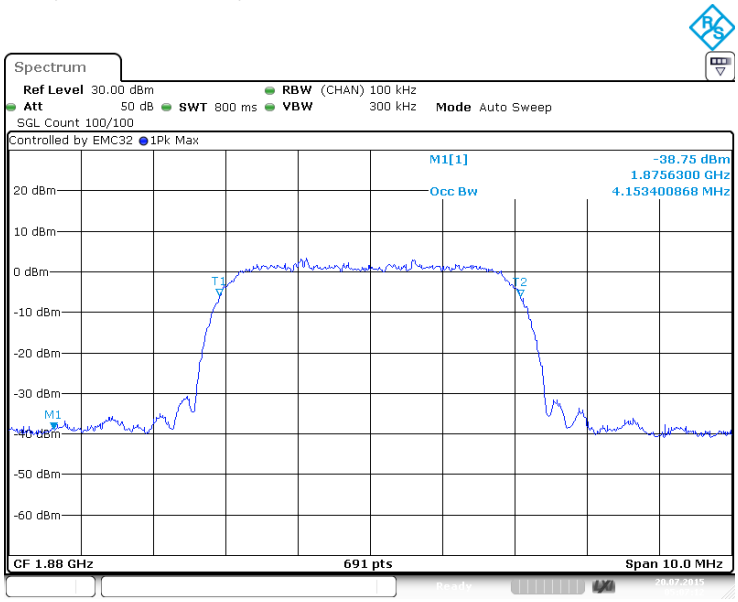
3.5. WCDMA2 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD	4153.4

FDD, Channel 9400 / 1880.0 MHz



Date: 20.JUL.2015 05:07:13

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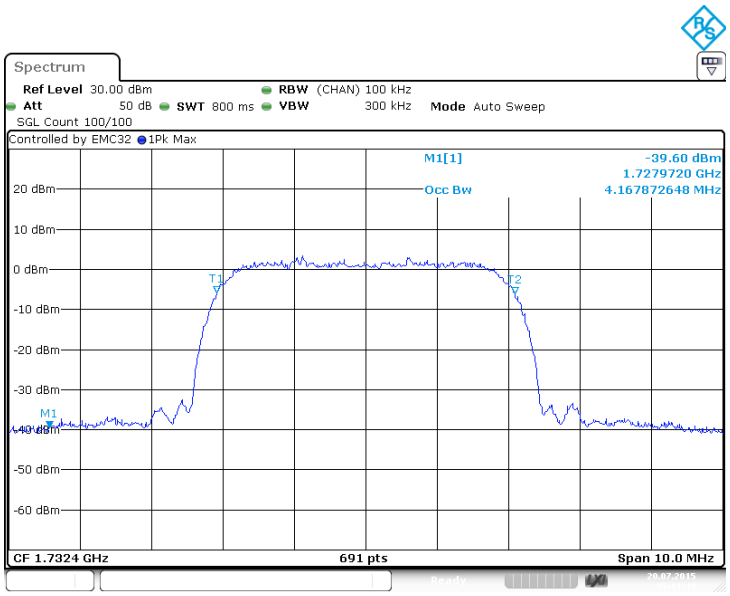
3.6. WCDMA4 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD	4167.9

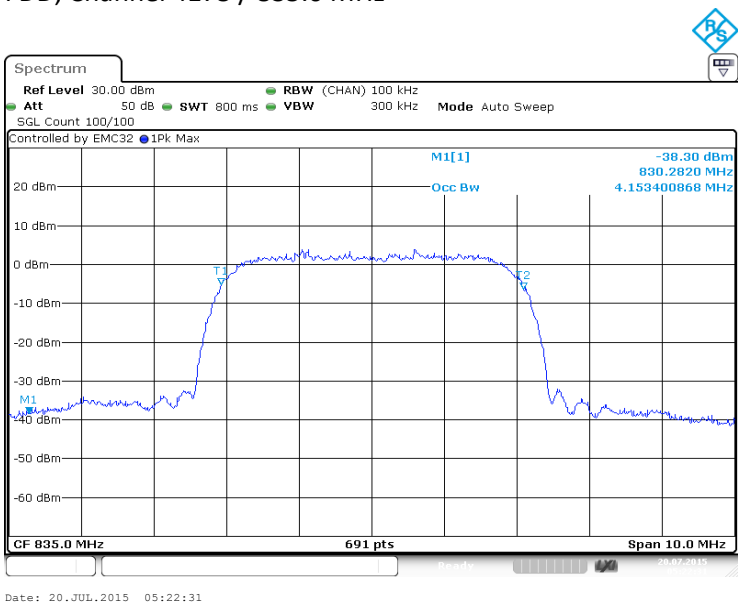
FDD, Channel 1412 / 1732.4 MHz



3.7. WCDMA5 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD	4153.4

FDD, Channel 4175 / 835.0 MHz



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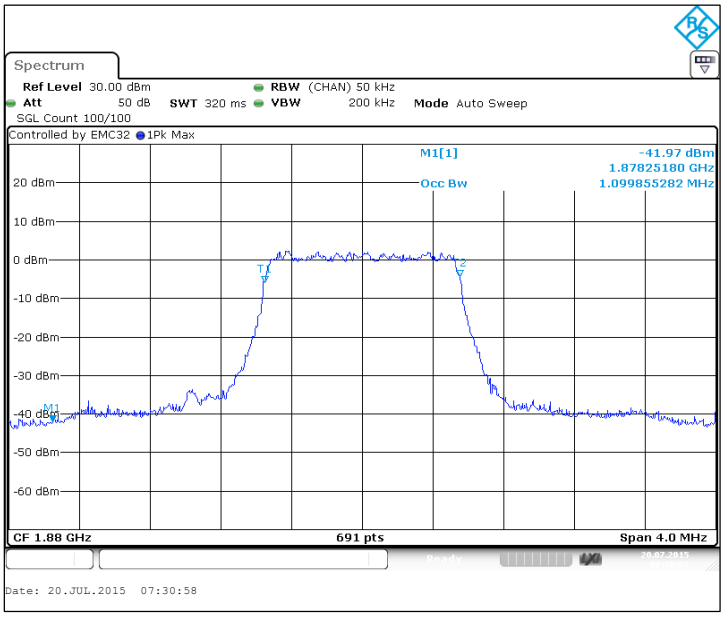
3.8. LTE2 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD, CBW 1.4MHz, QPSK, 6 RB	1099.9
FDD, CBW 3MHz, QPSK, 15 RB	2691.8
FDD, CBW 5MHz, QPSK, 25 RB	4497.8
FDD, CBW 10MHz, QPSK, 50 RB	8943.6
FDD, CBW 15MHz, QPSK, 75 RB	13429.8
FDD, CBW 20MHz, QPSK, 100 RB	17872.6
FDD, CBW 1.4MHz, 16QAM, 6 RB	1105.6
FDD, CBW 3MHz, 16QAM, 15 RB	2680.2
FDD, CBW 5MHz, 16QAM, 25 RB	4477.6
FDD, CBW 10MHz, 16QAM, 50 RB	8943.6
FDD, CBW 15MHz, 16QAM, 75 RB	13371.9
FDD, CBW 20MHz, 16QAM, 100 RB	17872.6

FDD, CBW 1.4MHz, QPSK, 6 RB, Channel 18900 / 1880.0 MHz



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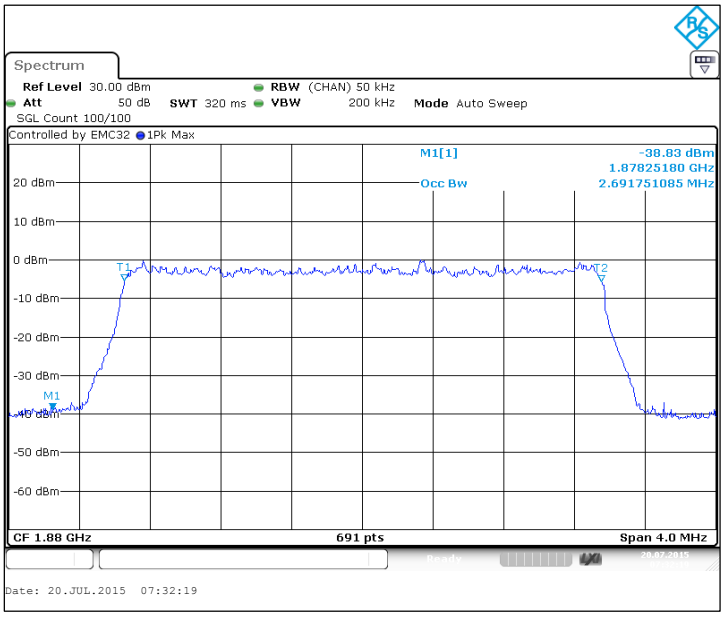
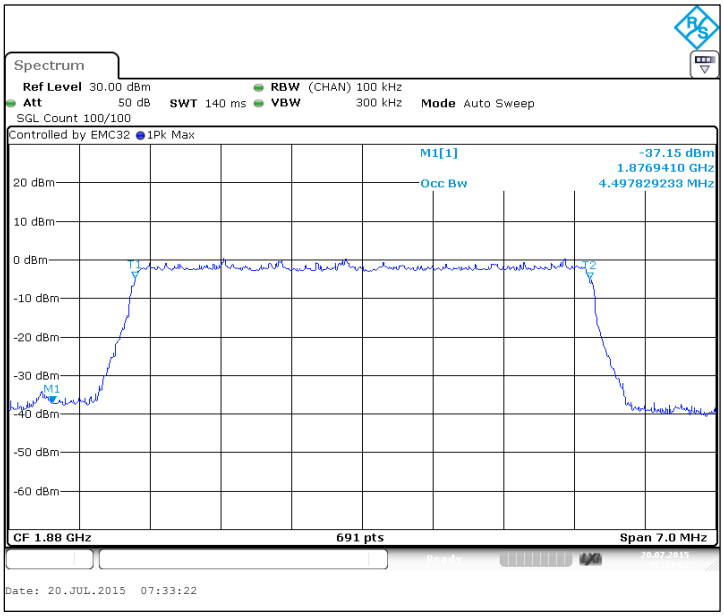
FDD, CBW 3MHz, QPSK, 15 RB, Channel 18900 / 1880.0 MHz



FDD, CBW 5MHz, QPSK, 25 RB, Channel 18900 / 1880.0 MHz



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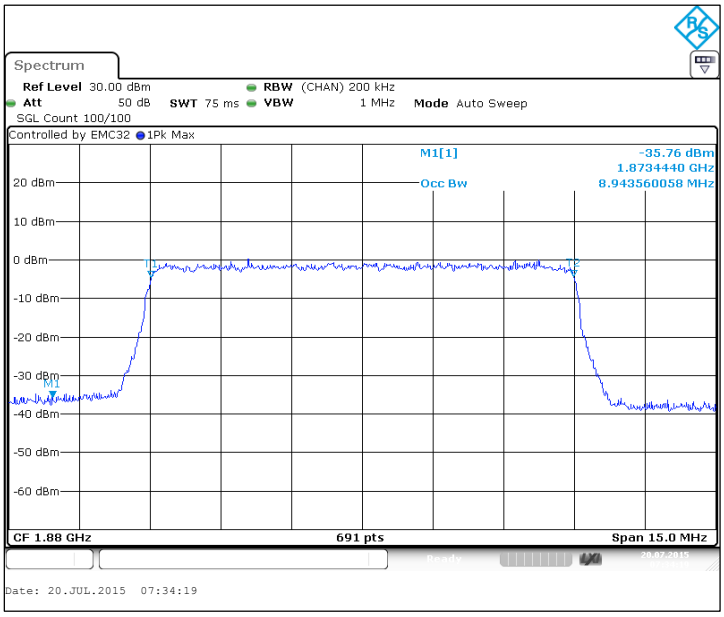
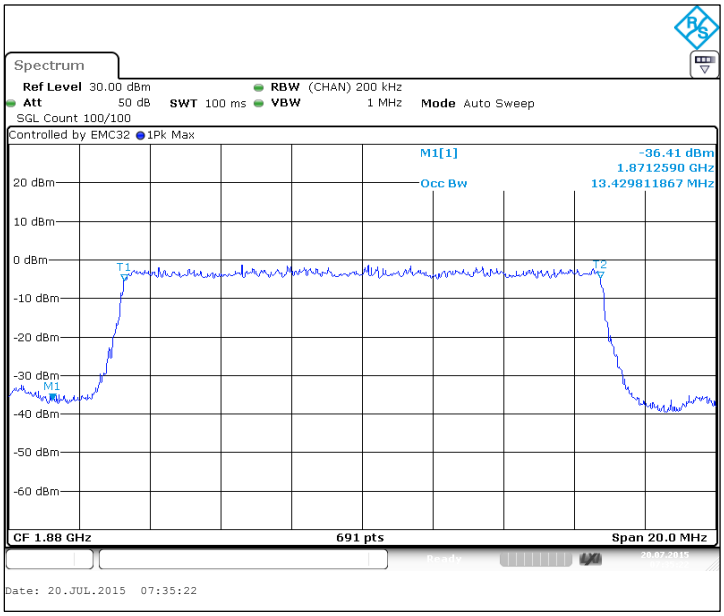
FDD, CBW 10MHz, QPSK, 50 RB, Channel 18900 / 1880.0 MHz



FDD, CBW 15MHz, QPSK, 75 RB, Channel 18900 / 1880.0 MHz



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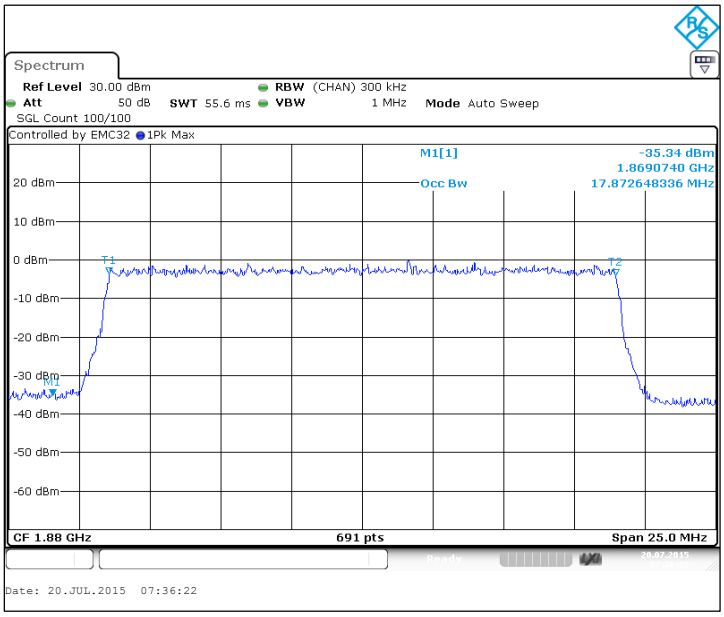
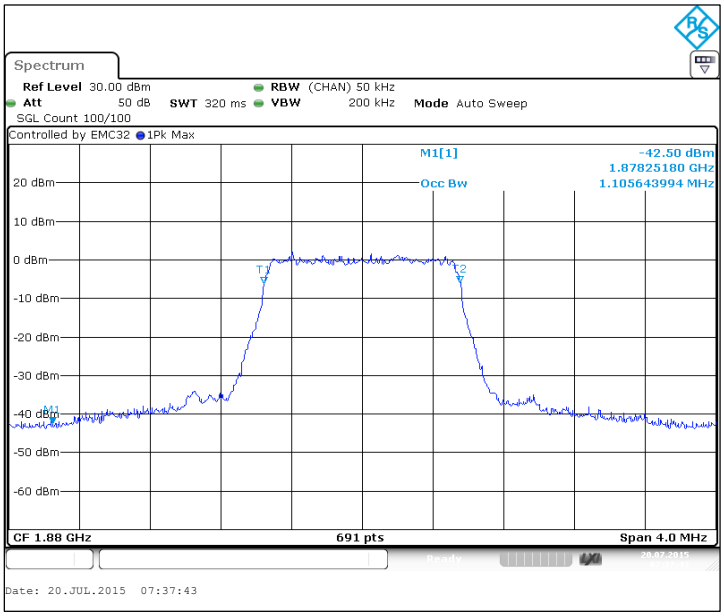
FDD, CBW 20MHz, QPSK, 100 RB, Channel 18900 / 1880.0 MHz



FDD, CBW 1.4MHz, 16QAM, 6 RB, Channel 18900 / 1880.0 MHz



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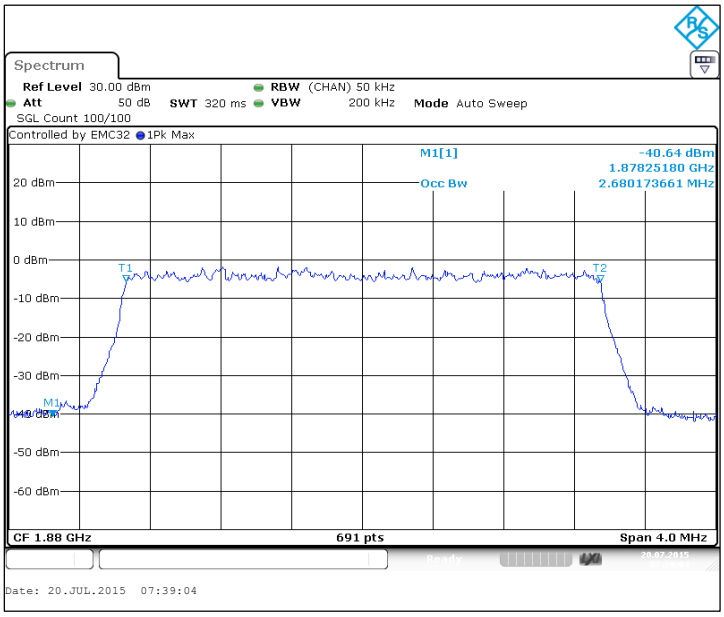
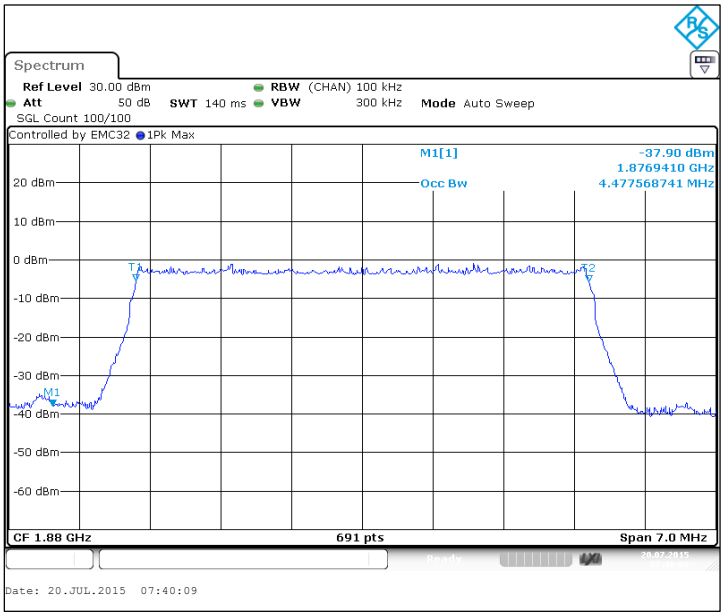
FDD, CBW 3MHz, 16QAM, 15 RB, Channel 18900 / 1880.0 MHz



FDD, CBW 5MHz, 16QAM, 25 RB, Channel 18900 / 1880.0 MHz



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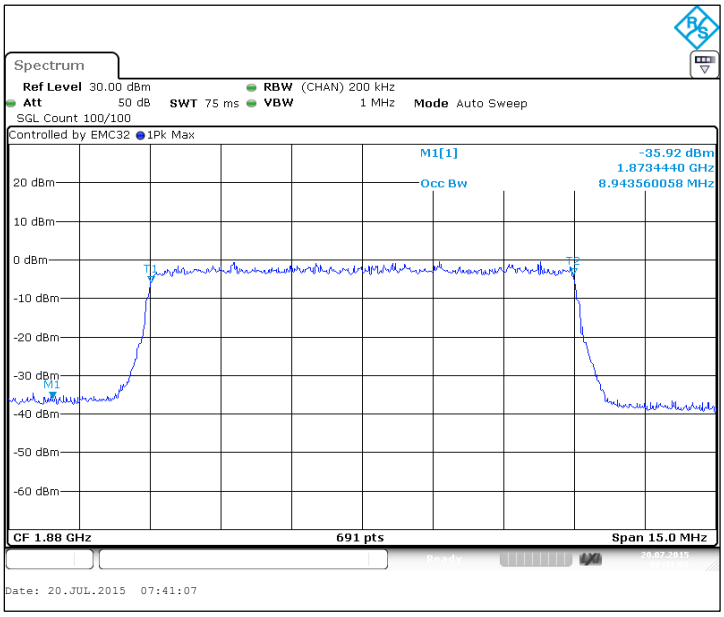
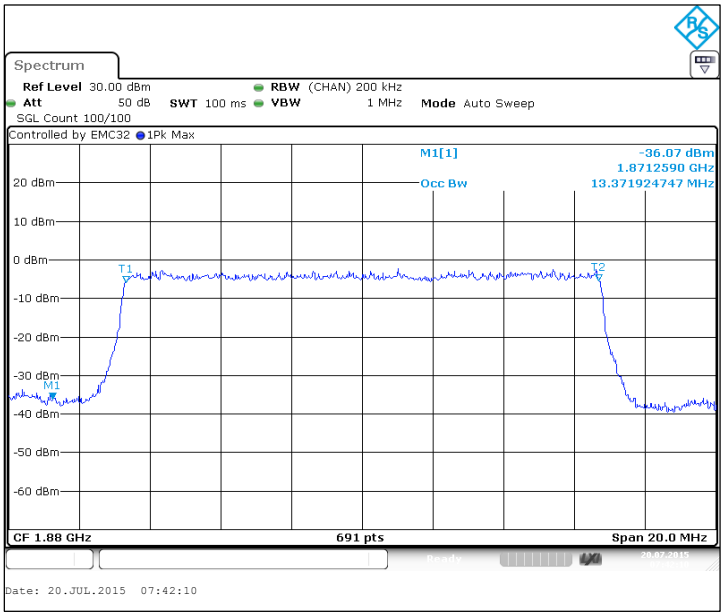
FDD, CBW 10MHz, 16QAM, 50 RB, Channel 18900 / 1880.0 MHz



FDD, CBW 15MHz, 16QAM, 75 RB, Channel 18900 / 1880.0 MHz



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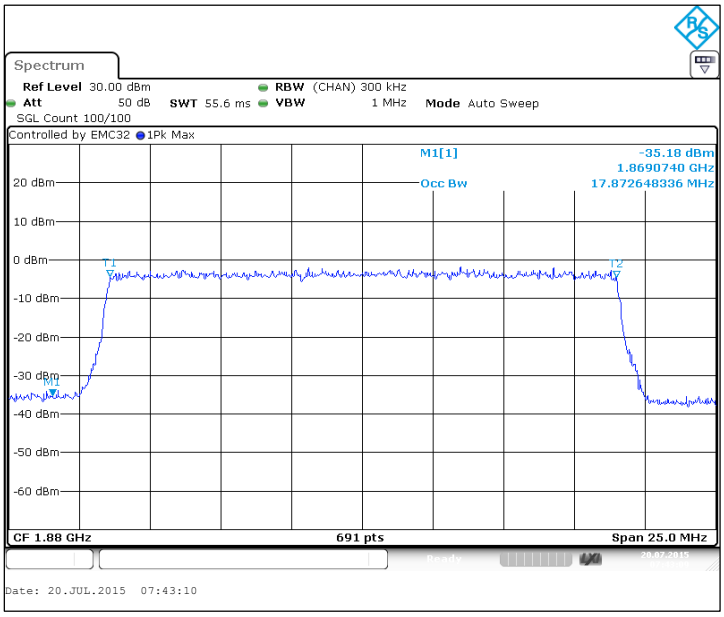
FDD, CBW 20MHz, 16QAM, 100 RB, Channel 18900 / 1880.0 MHz



3.9. LTE4 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD, CBW 1.4MHz, QPSK, 6 RB	1099.9
FDD, CBW 3MHz, QPSK, 15 RB	2686
FDD, CBW 5MHz, QPSK, 25 RB	4497.8
FDD, CBW 10MHz, QPSK, 50 RB	8943.6
FDD, CBW 15MHz, QPSK, 75 RB	13429.8
FDD, CBW 20MHz, QPSK, 100 RB	17836.5
FDD, CBW 1.4MHz, 16QAM, 6 RB	1105.6
FDD, CBW 3MHz, 16QAM, 15 RB	2680.2
FDD, CBW 5MHz, 16QAM, 25 RB	4477.6
FDD, CBW 10MHz, 16QAM, 50 RB	8943.6
FDD, CBW 15MHz, 16QAM, 75 RB	13400.9
FDD, CBW 20MHz, 16QAM, 100 RB	17836.5

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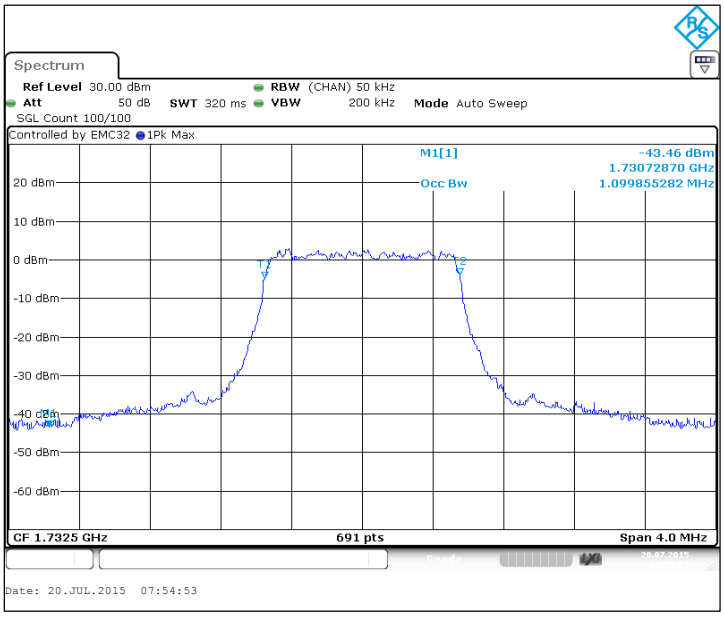
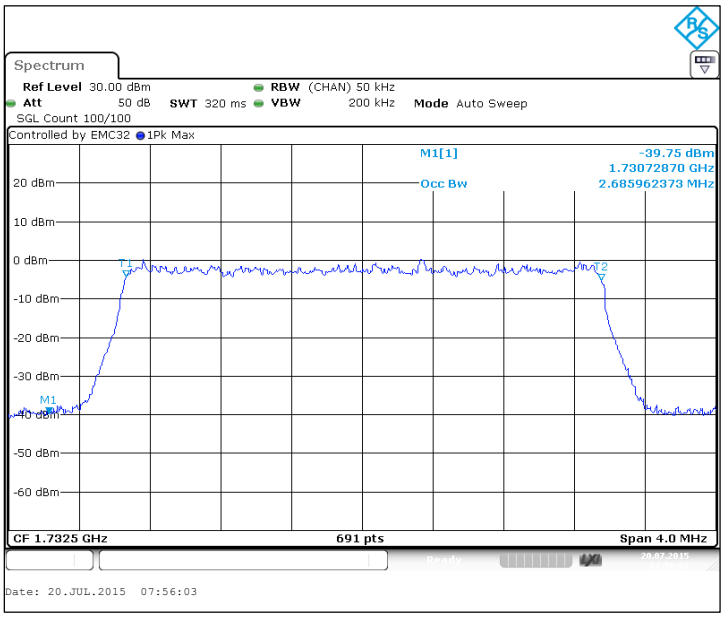
FDD, CBW 1.4MHz, QPSK, 6 RB, Channel 20175 / 1732.5 MHz



FDD, CBW 3MHz, QPSK, 15 RB, Channel 20175 / 1732.5 MHz



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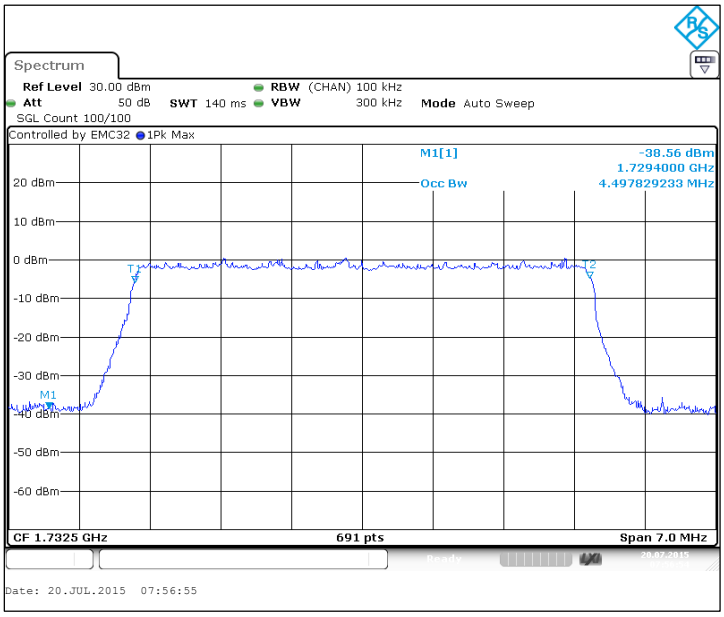
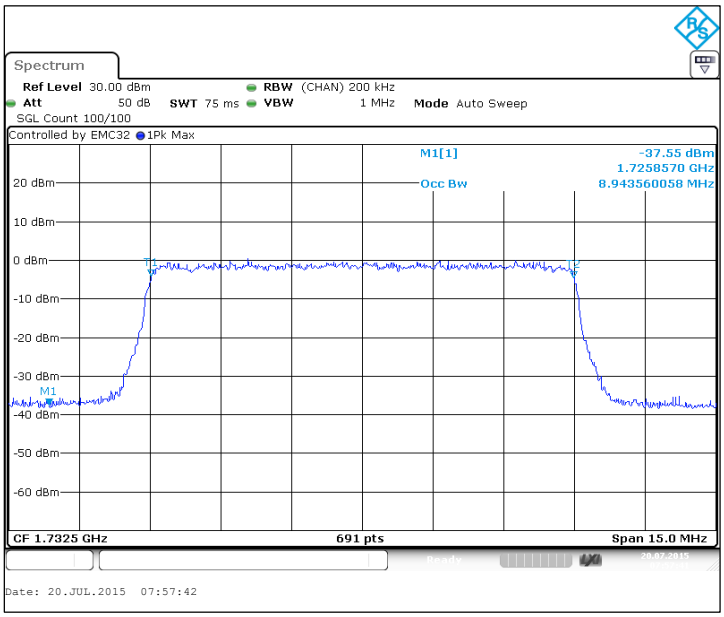
FDD, CBW 5MHz, QPSK, 25 RB, Channel 20175 / 1732.5 MHz



FDD, CBW 10MHz, QPSK, 50 RB, Channel 20175 / 1732.5 MHz



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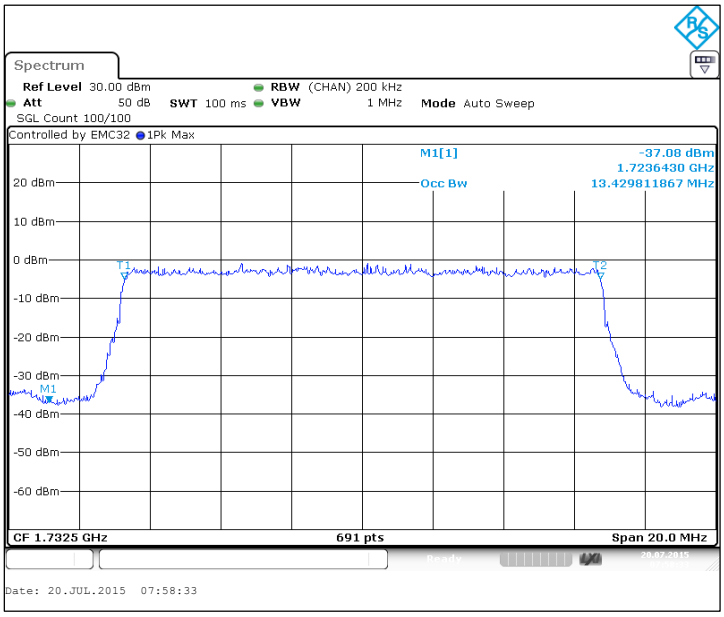
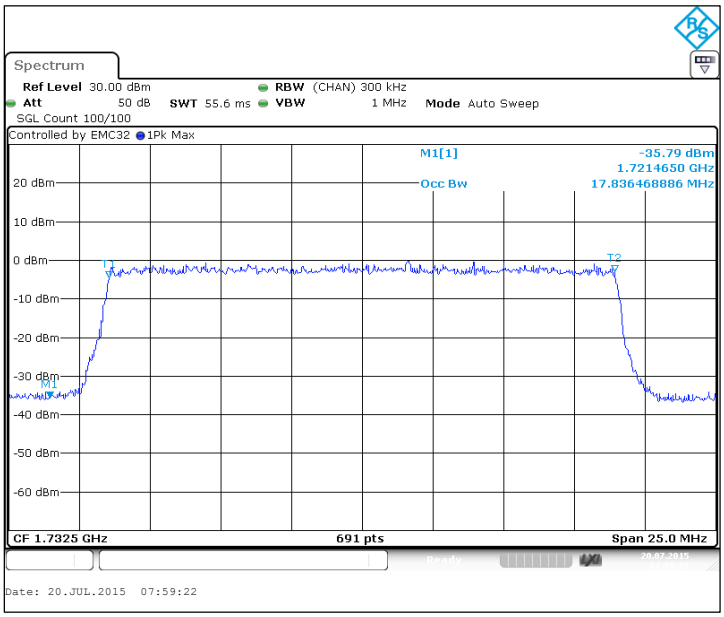
FDD, CBW 15MHz, QPSK, 75 RB, Channel 20175 / 1732.5 MHz



FDD, CBW 20MHz, QPSK, 100 RB, Channel 20175 / 1732.5 MHz



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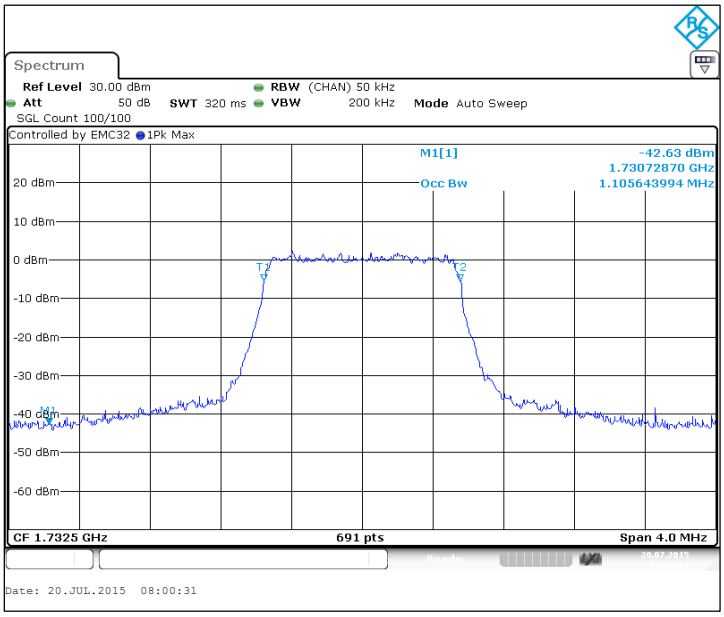
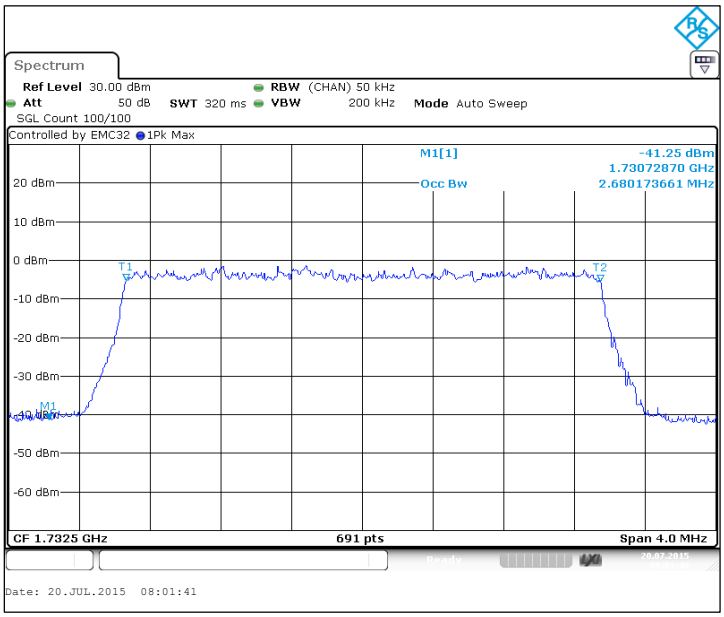
FDD, CBW 1.4MHz, 16QAM, 6 RB, Channel 20175 / 1732.5 MHz



FDD, CBW 3MHz, 16QAM, 15 RB, Channel 20175 / 1732.5 MHz



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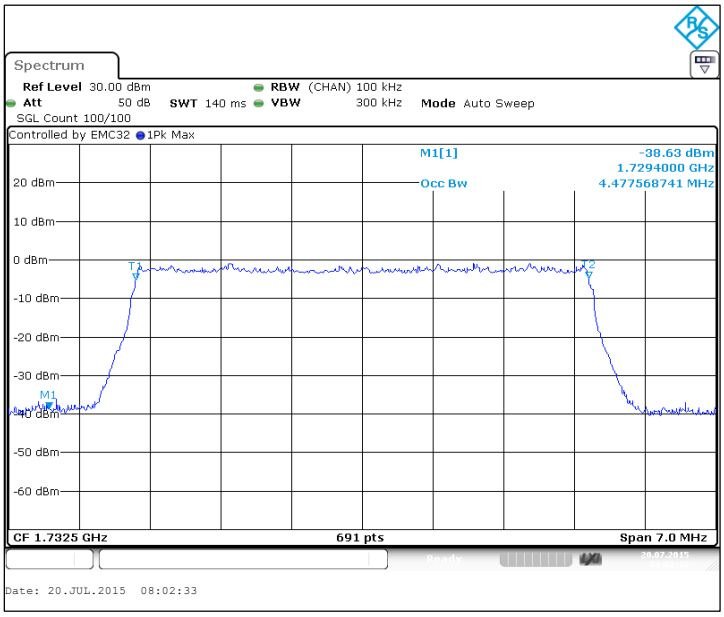
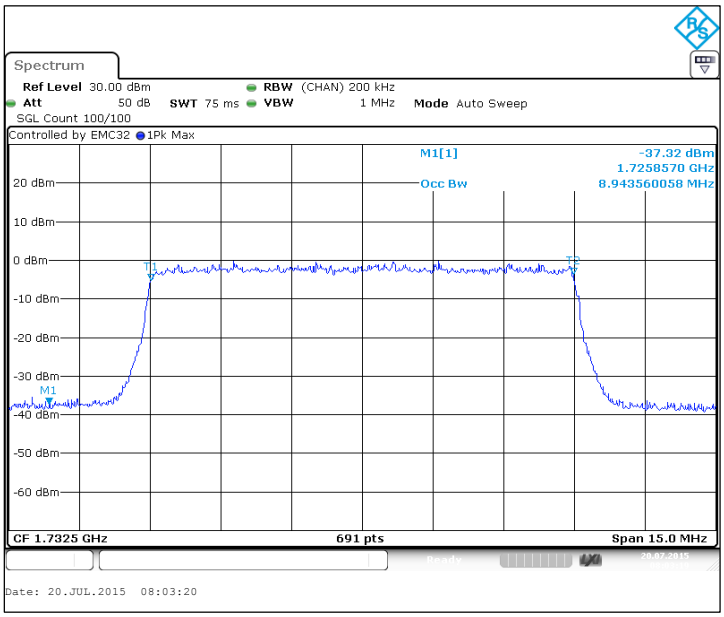
FDD, CBW 5MHz, 16QAM, 25 RB, Channel 20175 / 1732.5 MHz



FDD, CBW 10MHz, 16QAM, 50 RB, Channel 20175 / 1732.5 MHz



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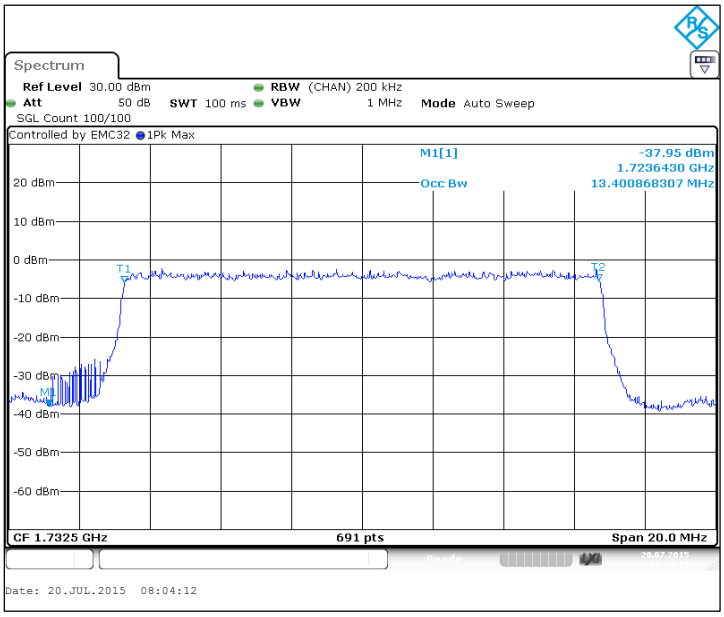
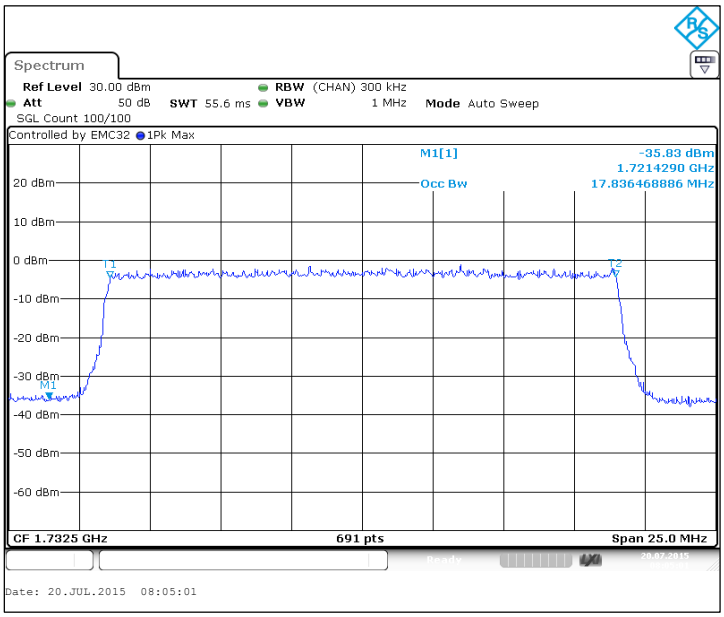
FDD, CBW 15MHz, 16QAM, 75 RB, Channel 20175 / 1732.5 MHz



FDD, CBW 20MHz, 16QAM, 100 RB, Channel 20175 / 1732.5 MHz



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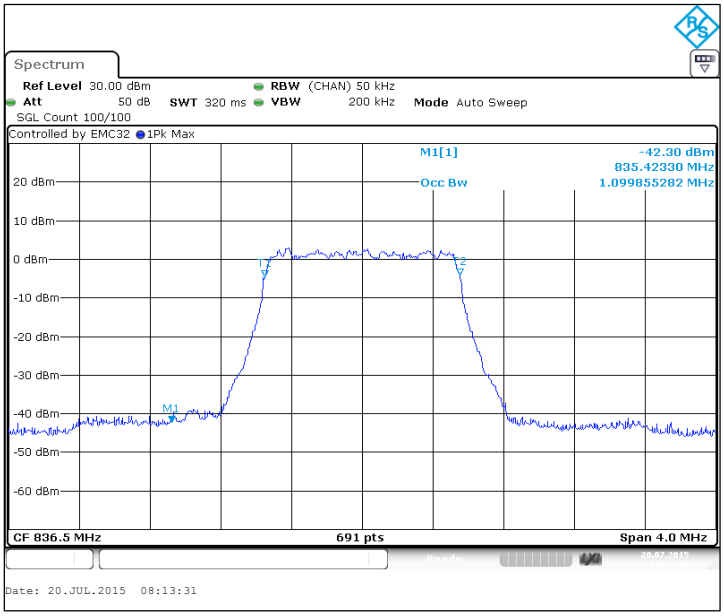
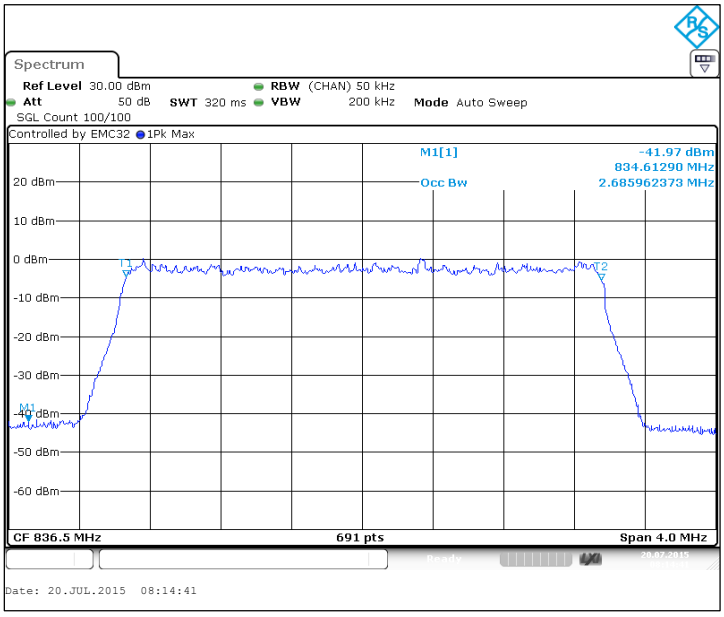
3.10. LTE5 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD, CBW 1.4MHz, QPSK, 6 RB	1099.9
FDD, CBW 3MHz, QPSK, 15 RB	2686
FDD, CBW 5MHz, QPSK, 25 RB	4497.8
FDD, CBW 10MHz, QPSK, 50 RB	8943.6
FDD, CBW 1.4MHz, 16QAM, 6 RB	1105.6
FDD, CBW 3MHz, 16QAM, 15 RB	2680.2
FDD, CBW 5MHz, 16QAM, 25 RB	4477.6
FDD, CBW 10MHz, 16QAM, 50 RB	8943.6

FDD, CBW 1.4MHz, QPSK, 6 RB, Channel 20525 / 836.5 MHz



FDD, CBW 3MHz, QPSK, 15 RB, Channel 20525 / 836.5 MHz



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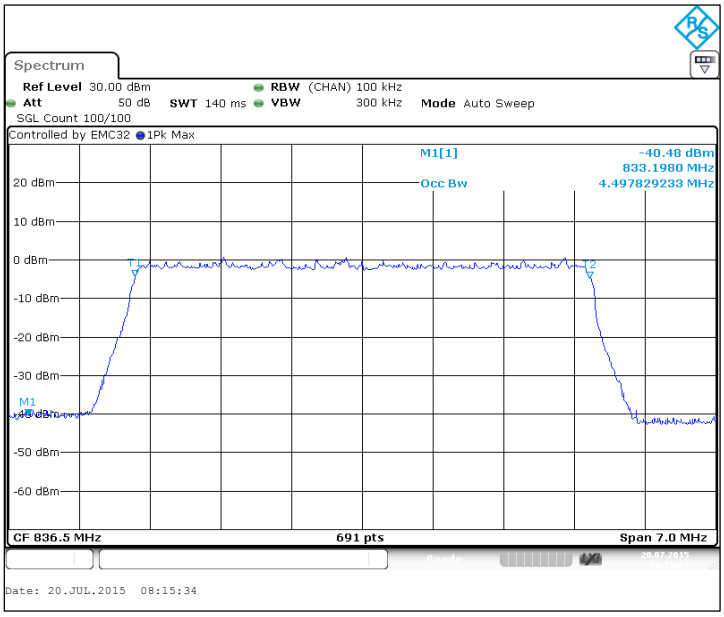
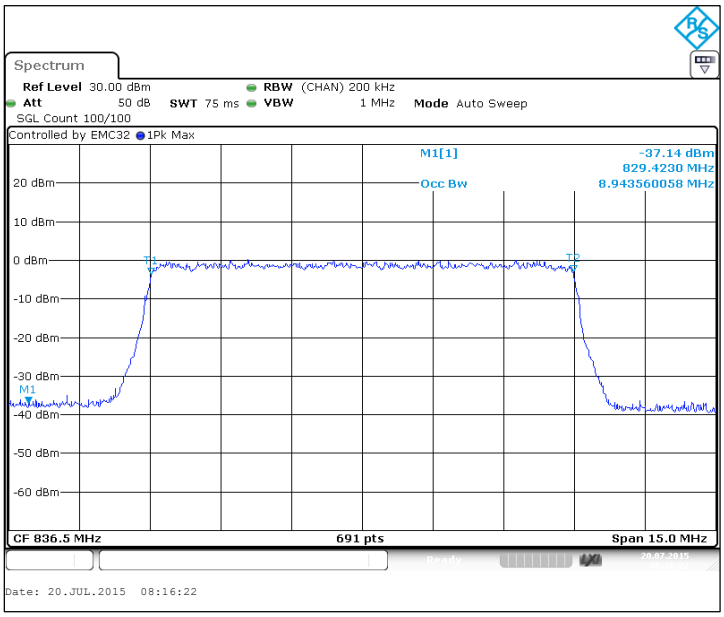
FDD, CBW 5MHz, QPSK, 25 RB, Channel 20525 / 836.5 MHz



FDD, CBW 10MHz, QPSK, 50 RB, Channel 20525 / 836.5 MHz



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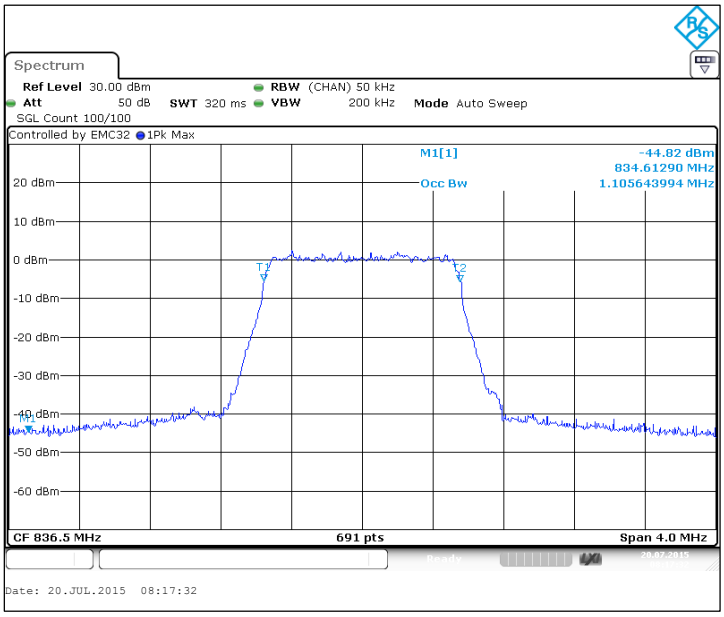
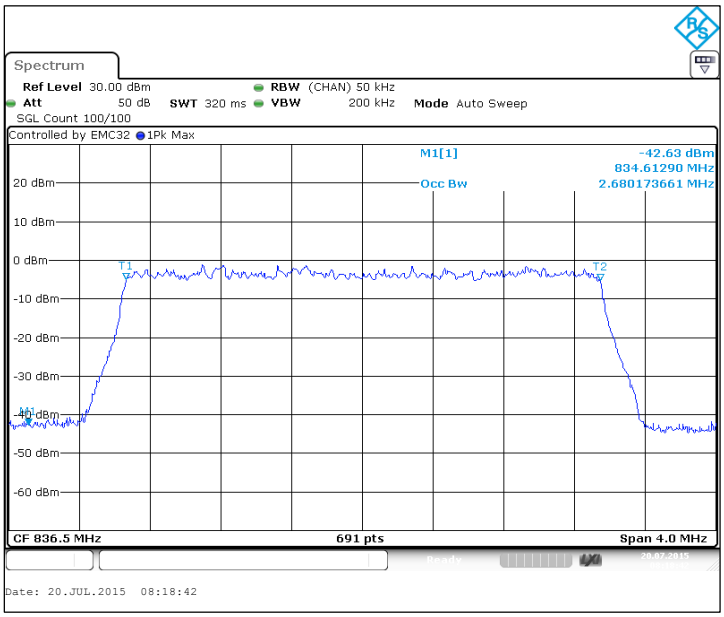
FDD, CBW 1.4MHz, 16QAM, 6 RB, Channel 20525 / 836.5 MHz



FDD, CBW 3MHz, 16QAM, 15 RB, Channel 20525 / 836.5 MHz



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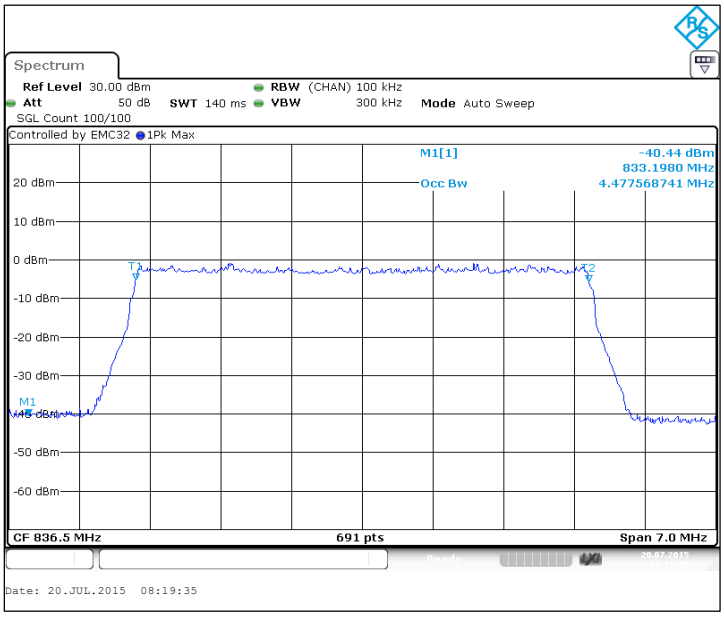
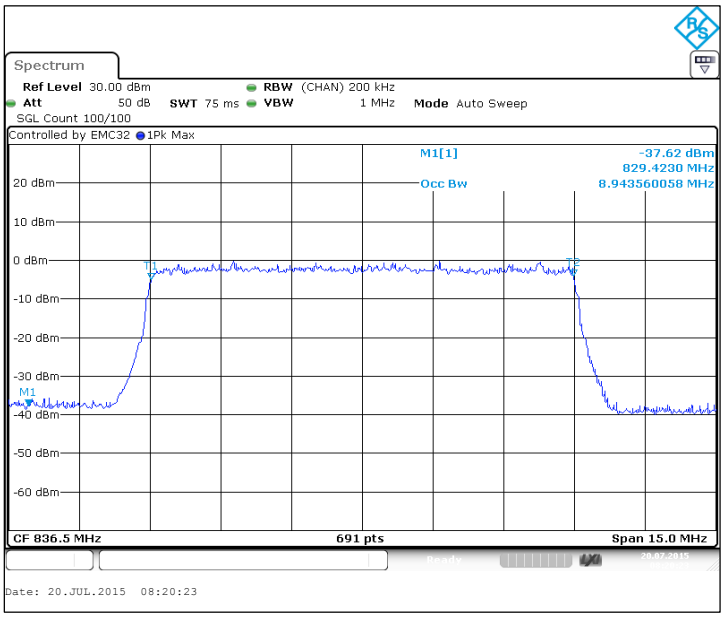
FDD, CBW 5MHz, 16QAM, 25 RB, Channel 20525 / 836.5 MHz



FDD, CBW 10MHz, 16QAM, 50 RB, Channel 20525 / 836.5 MHz



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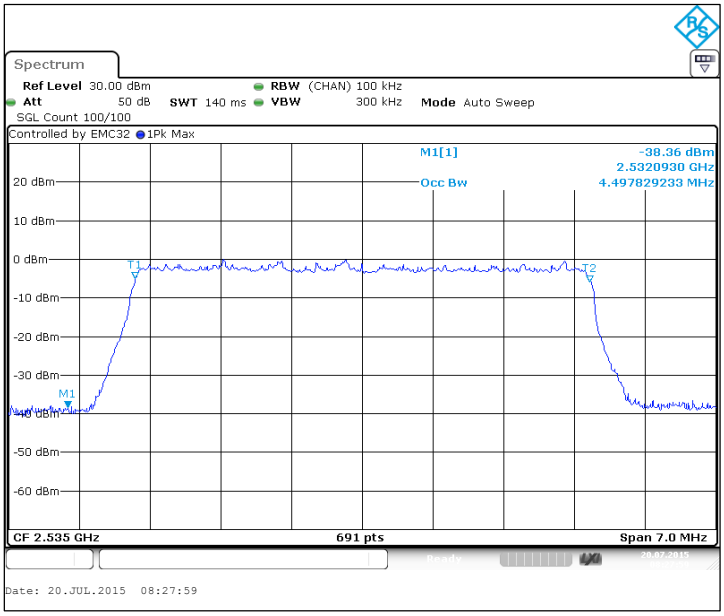
3.11. LTE7 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD, CBW 5MHz, QPSK, 25 RB	4497.8
FDD, CBW 10MHz, QPSK, 50 RB	8965.3
FDD, CBW 15MHz, QPSK, 75 RB	13429.8
FDD, CBW 20MHz, QPSK, 100 RB	17836.5
FDD, CBW 5MHz, 16QAM, 25 RB	4477.6
FDD, CBW 10MHz, 16QAM, 50 RB	8943.6
FDD, CBW 15MHz, 16QAM, 75 RB	13400.9
FDD, CBW 20MHz, 16QAM, 100 RB	17872.6

FDD, CBW 5MHz, QPSK, 25 RB, Channel 21100 / 2535.0 MHz



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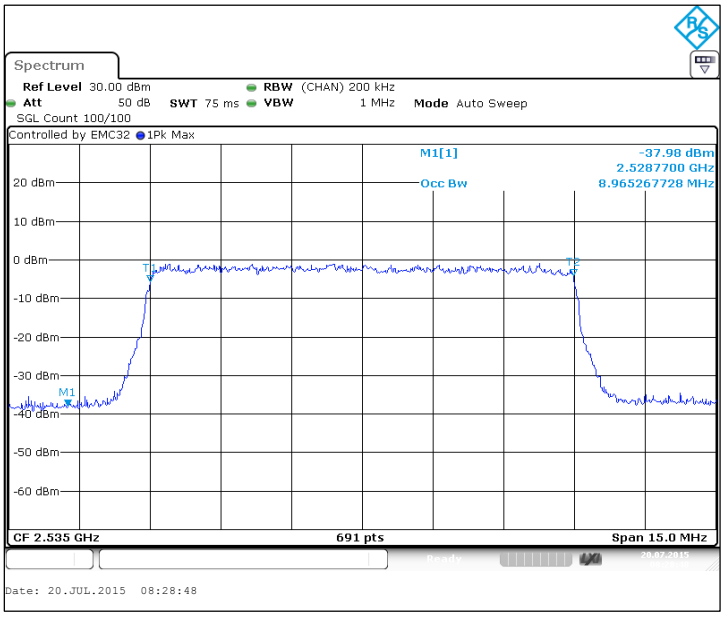
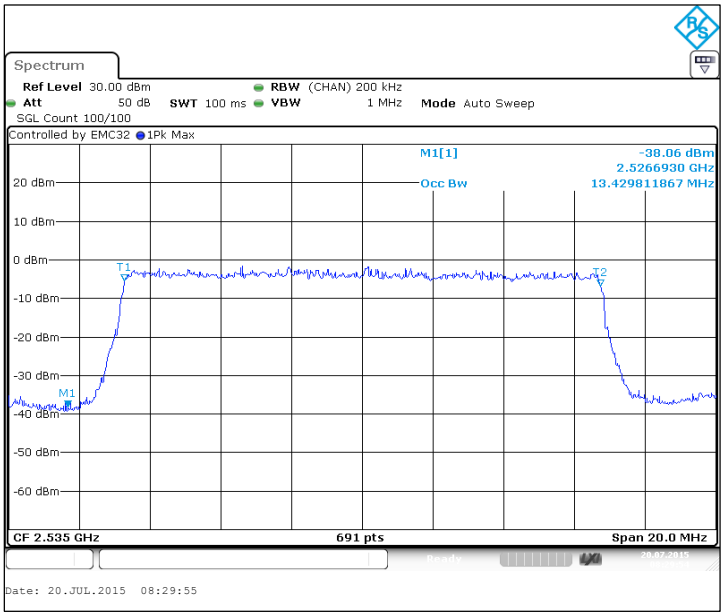
FDD, CBW 10MHz, QPSK, 50 RB, Channel 21100 / 2535.0 MHz



FDD, CBW 15MHz, QPSK, 75 RB, Channel 21100 / 2535.0 MHz



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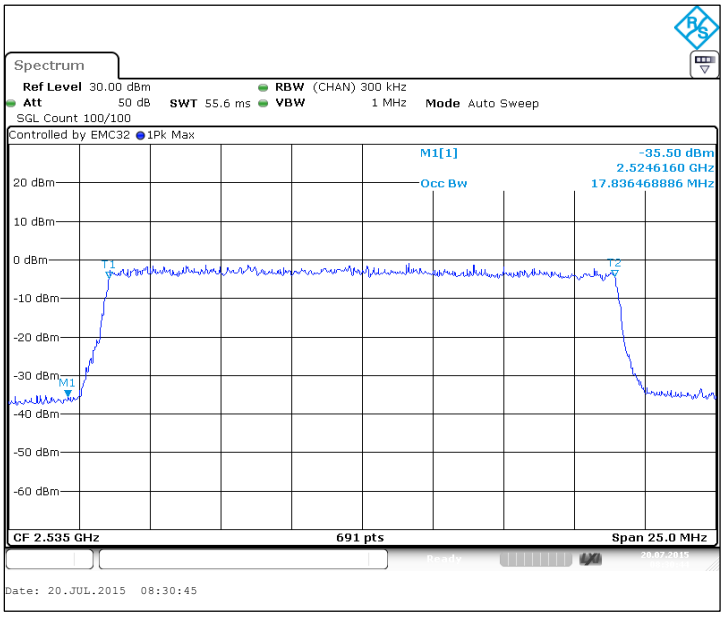
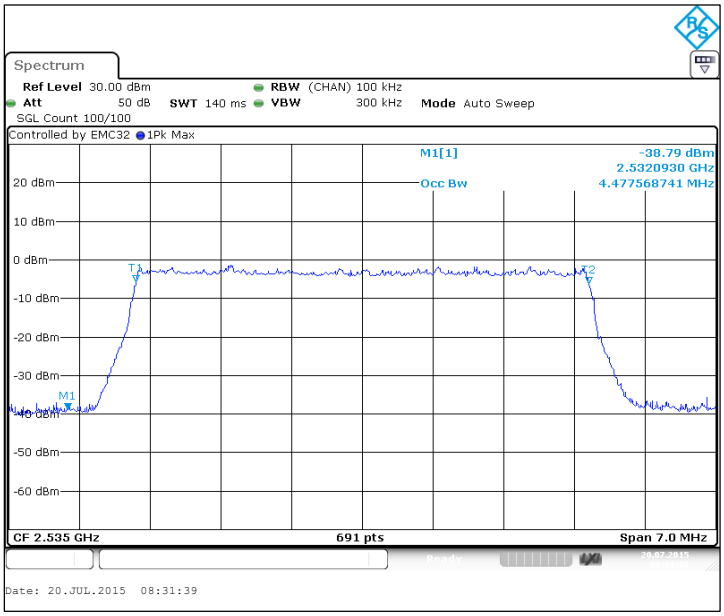
FDD, CBW 20MHz, QPSK, 100 RB, Channel 21100 / 2535.0 MHz



FDD, CBW 5MHz, 16QAM, 25 RB, Channel 21100 / 2535.0 MHz



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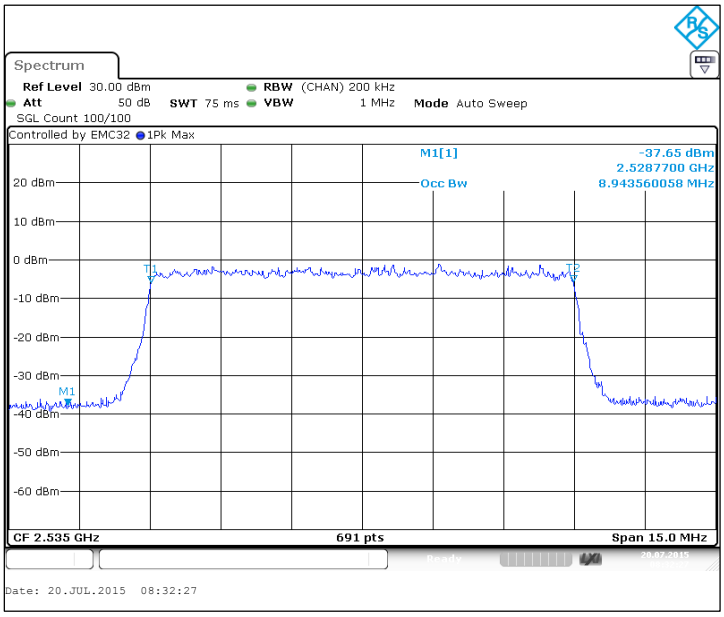
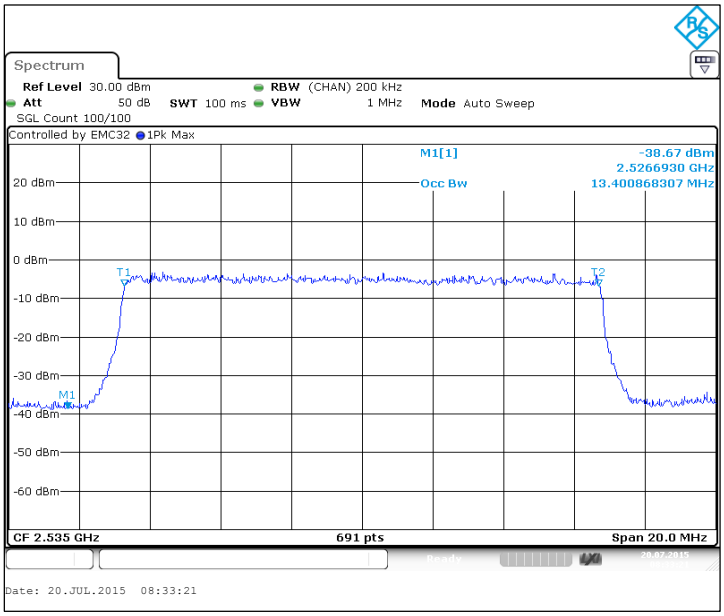
FDD, CBW 10MHz, 16QAM, 50 RB, Channel 21100 / 2535.0 MHz



FDD, CBW 15MHz, 16QAM, 75 RB, Channel 21100 / 2535.0 MHz



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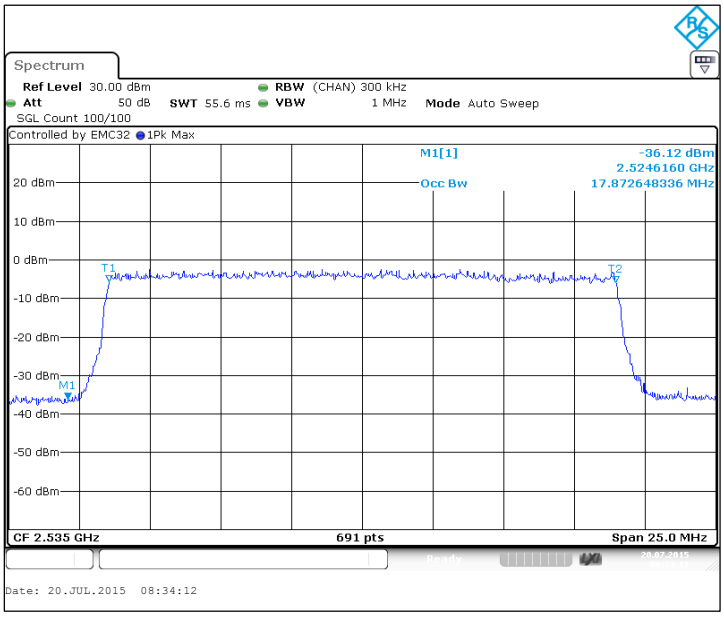
FDD, CBW 20MHz, 16QAM, 100 RB, Channel 21100 / 2535.0 MHz



3.12. LTE12 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD, CBW 1.4MHz, QPSK, 6 RB	1099.9
FDD, CBW 3MHz, QPSK, 15 RB	2691.8
FDD, CBW 5MHz, QPSK, 25 RB	4497.8
FDD, CBW 10MHz, QPSK, 50 RB	8943.6
FDD, CBW 1.4MHz, 16QAM, 6 RB	1105.6
FDD, CBW 3MHz, 16QAM, 15 RB	2680.2
FDD, CBW 5MHz, 16QAM, 25 RB	4477.6
FDD, CBW 10MHz, 16QAM, 50 RB	8943.6

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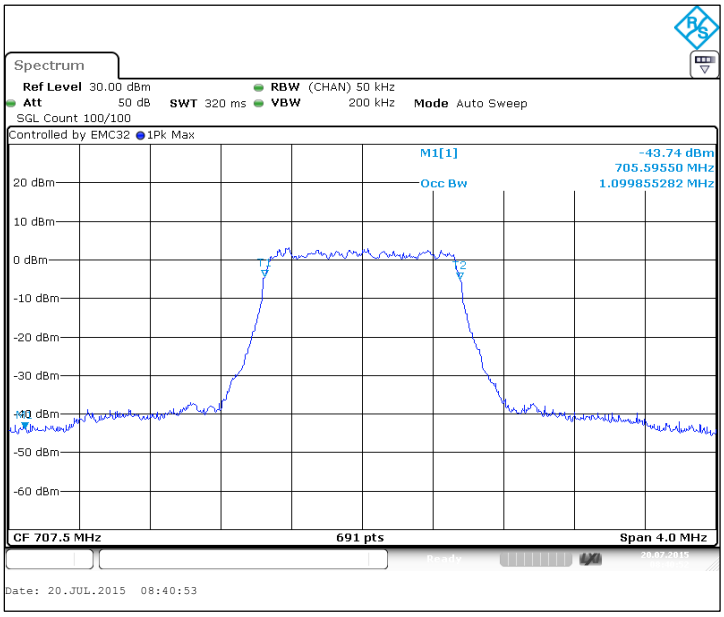
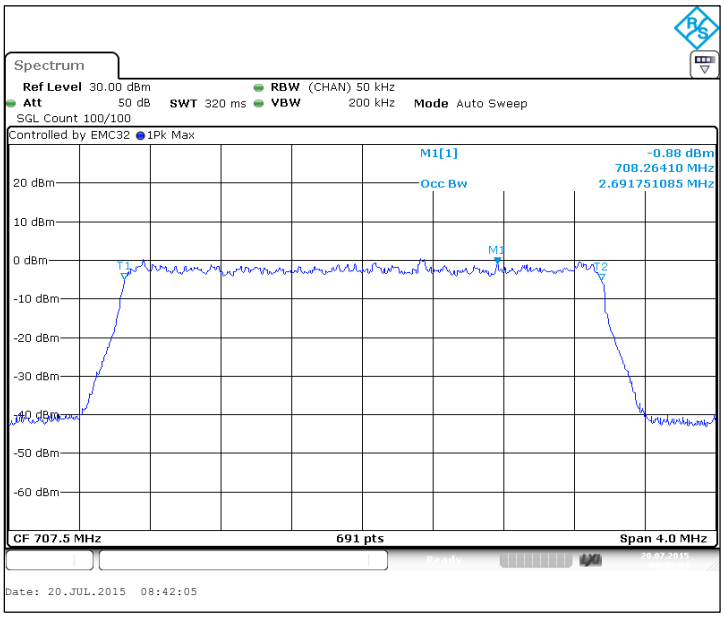
FDD, CBW 1.4MHz, QPSK, 6 RB, Channel 23095 / 707.5 MHz



FDD, CBW 3MHz, QPSK, 15 RB, Channel 23095 / 707.5 MHz



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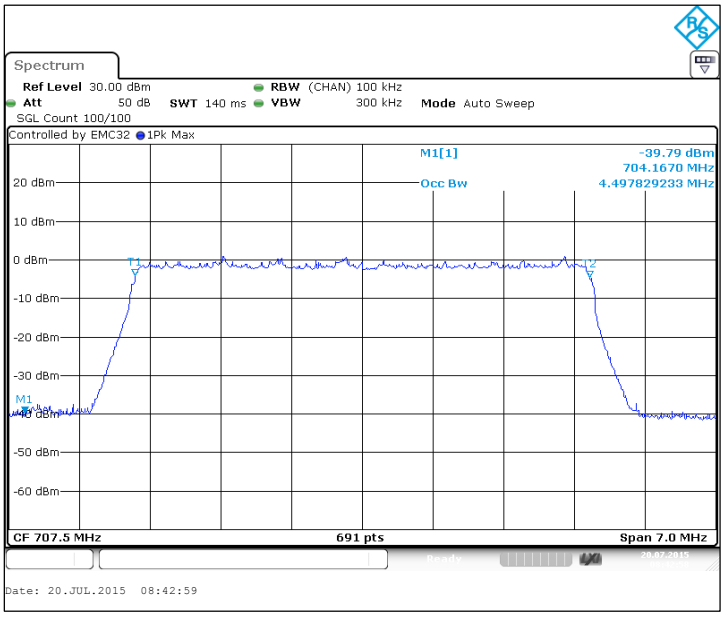
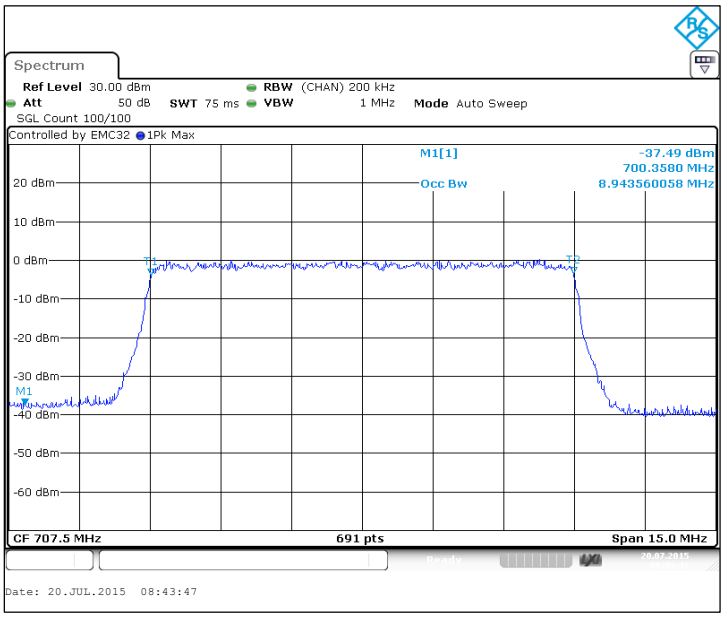
FDD, CBW 5MHz, QPSK, 25 RB, Channel 23095 / 707.5 MHz



FDD, CBW 10MHz, QPSK, 50 RB, Channel 23095 / 707.5 MHz



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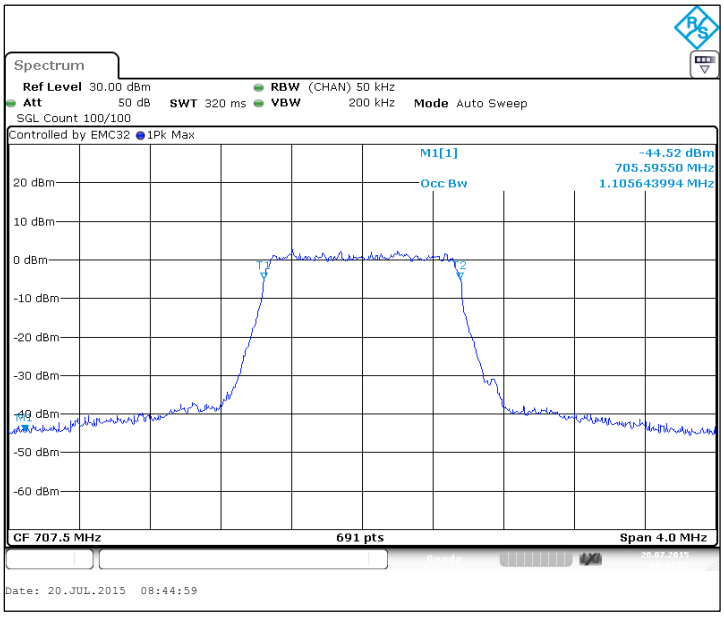
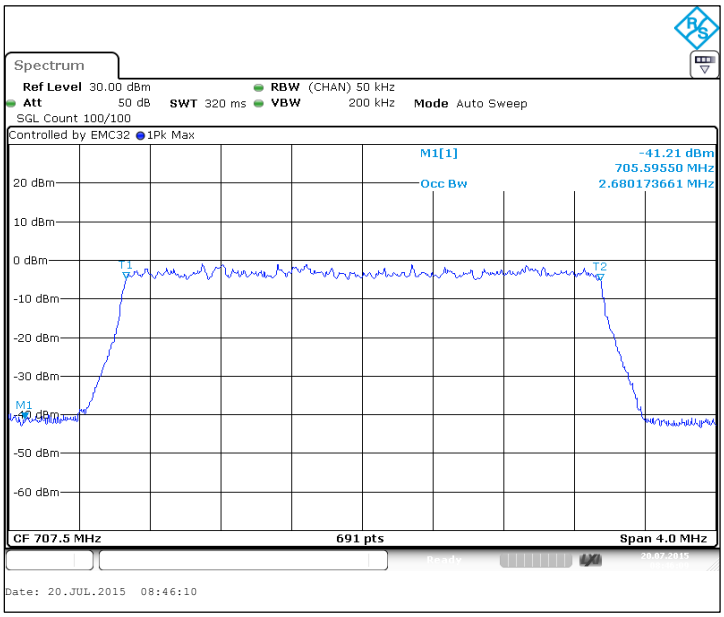
FDD, CBW 1.4MHz, 16QAM, 6 RB, Channel 23095 / 707.5 MHz



FDD, CBW 3MHz, 16QAM, 15 RB, Channel 23095 / 707.5 MHz



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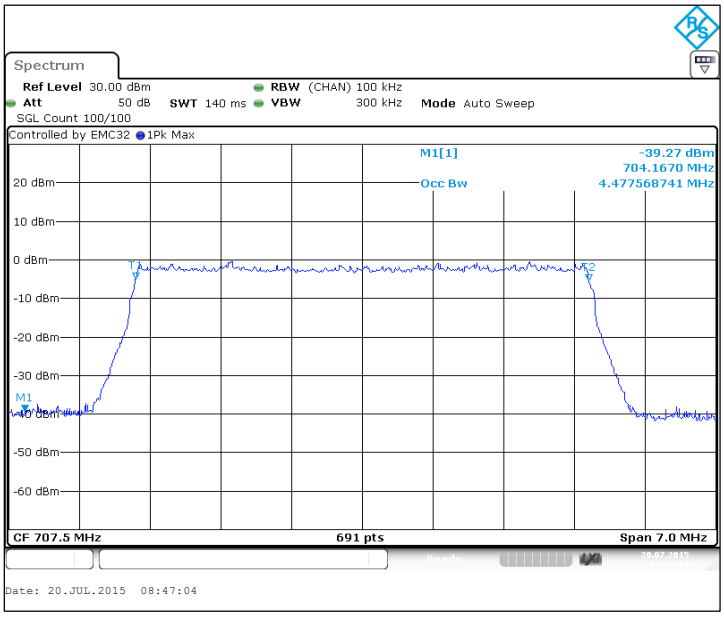
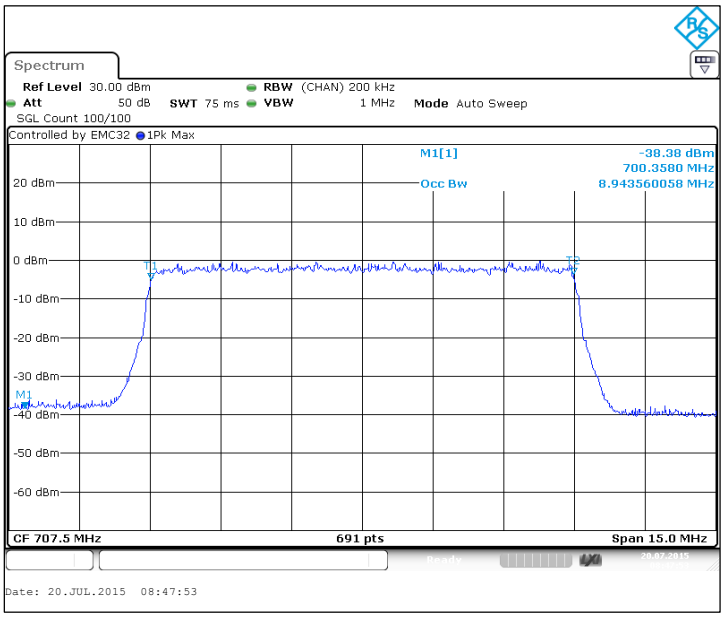
FDD, CBW 5MHz, 16QAM, 25 RB, Channel 23095 / 707.5 MHz



FDD, CBW 10MHz, 16QAM, 50 RB, Channel 23095 / 707.5 MHz



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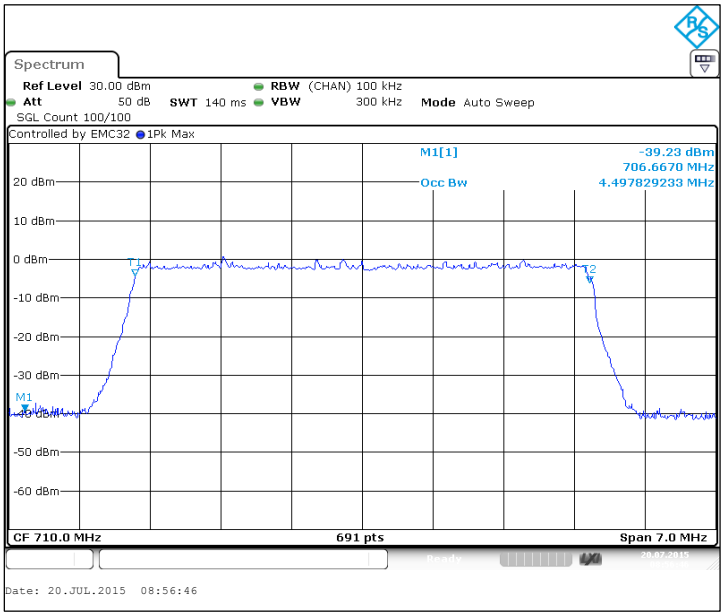
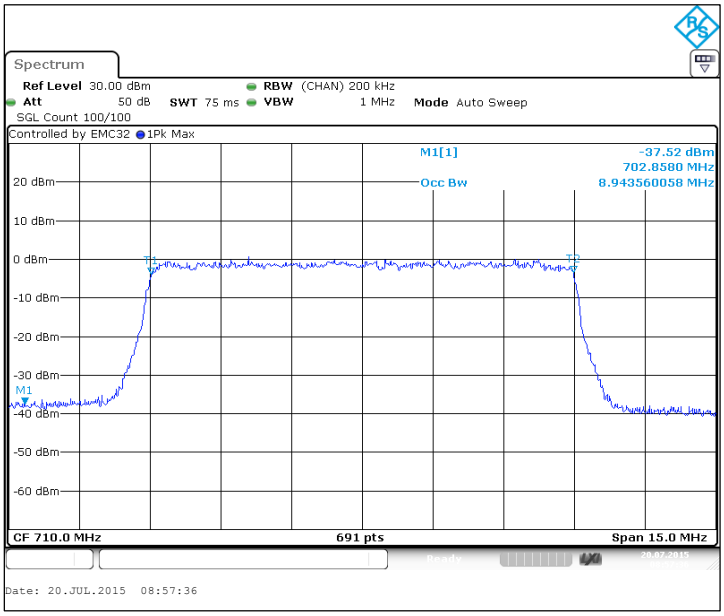
3.13. LTE17 Test results

Operation mode (TX on)	99% Occupied bandwidth [kHz]
FDD, CBW 5MHz, QPSK, 25 RB	4497.8
FDD, CBW 10MHz, QPSK, 50 RB	8943.6
FDD, CBW 5MHz, 16QAM, 25 RB	4477.6
FDD, CBW 10MHz, 16QAM, 50 RB	8943.6

FDD, CBW 5MHz, QPSK, 25 RB, Channel 23790 / 710.0 MHz



FDD, CBW 10MHz, QPSK, 50 RB, Channel 23790 / 710.0 MHz



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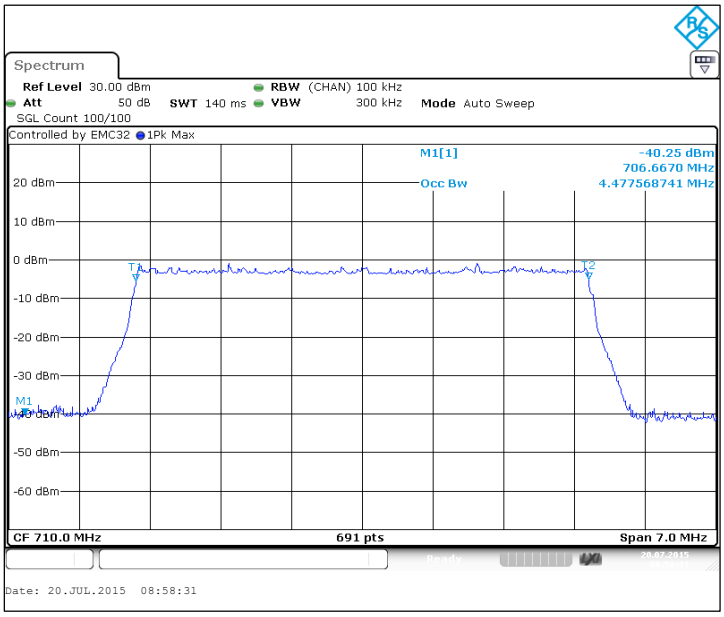
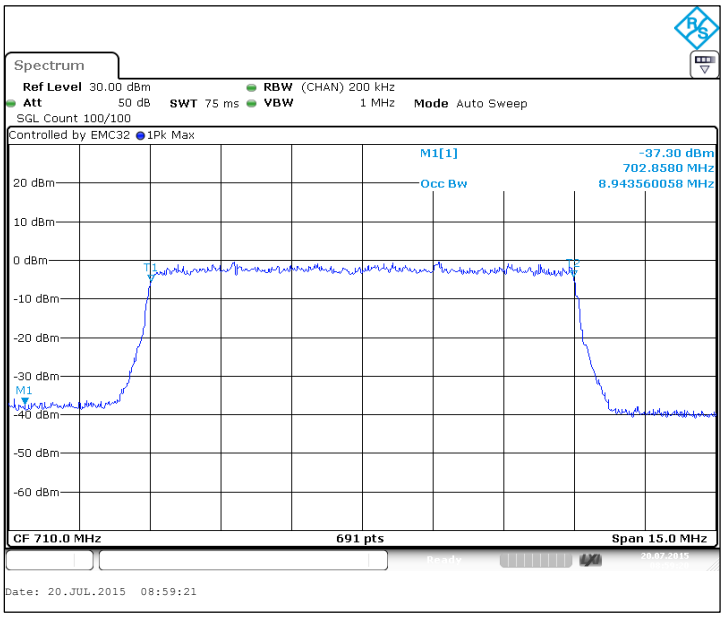
FDD, CBW 5MHz, 16QAM, 25 RB, Channel 23790 / 710.0 MHz



FDD, CBW 10MHz, 16QAM, 50 RB, Channel 23790 / 710.0 MHz



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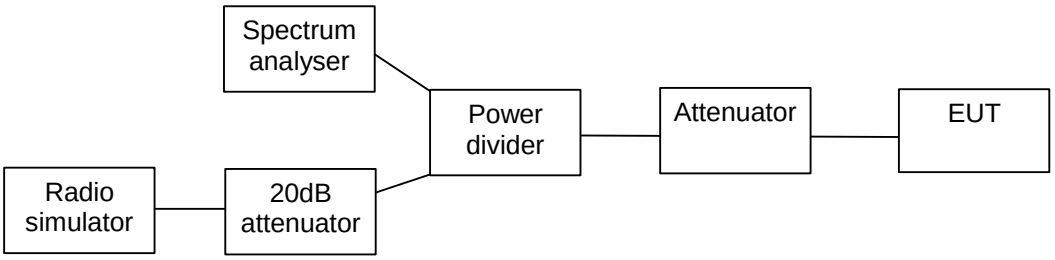
4. Band edge compliance

(FCC §24.238(a), §27.53(f), §27.53(l), §27.53(h), §27.53(g), §22.917(a), RSS-133 6.5, RSS-132 4.5, RSS-139 6.5, RSS-199 4.5(b), RSS-130 4.6)

EUT with DUT number	RM-1128, DUT 500110
Accessories with DUT numbers	CC-3097, DUT 500128; Samsung BL-T5A, DUT 500117; AC-18U, DUT 500122; WH-108, DUT 500103
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was in conducted RF2 system.
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21/59/100.5
Date of measurements	16-Jul-2015
Measured by	Dou Rubo

4.1. Test Setup



4.2. Test method and limit

The measurement is made according to applicable FCC rule parts and IC standards.

Limits for band edge compliance measurements

Operation band	Frequency range [MHz]	Limit [dBm]
GSM 1900	Below 1850 and above 1910	-13
GSM 850	Below 824 and above 849	-13
WCDMA2	Below 1850 and above 1910	-13
WCDMA4	Below 1710 and above 1755	-13
WCDMA5	Below 824 and above 849	-13
LTE2	Below 1850 and above 1910	-13
LTE4	Below 1710 and above 1755	-13
LTE5	Below 824 and above 849	-13
LTE7	2496 - 2499 2499 – 2500 2570 – 2571 2571 – 2575	-10 (RBW = 1 MHz, VBW = 3 MHz) -10 (RBW = 500 kHz, VBW = 2 MHz) -10 (RBW = 500 kHz, VBW = 2 MHz) -10 (RBW = 1 MHz, VBW = 3 MHz)
LTE12	698.9 – 699.0 and 716.0 – 716.1 Below 698.9 and above 716.1	-13 (RBW = 30 kHz, VBW = 100 kHz) -13 (RBW = 100 kHz, VBW = 300 kHz)
LTE17	703.9 – 704 and 716 – 716.1 Below 703.9 and above 716.1	-13 (RBW = 30 kHz, VBW = 100 kHz) -13 (RBW = 100 kHz, VBW = 300 kHz)

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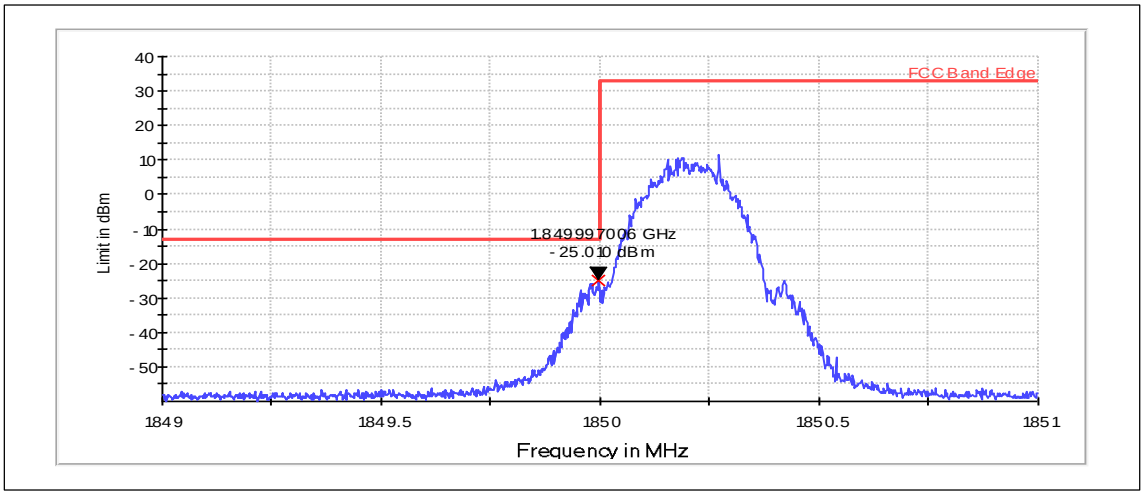
4.3. GSM 1900 Test results

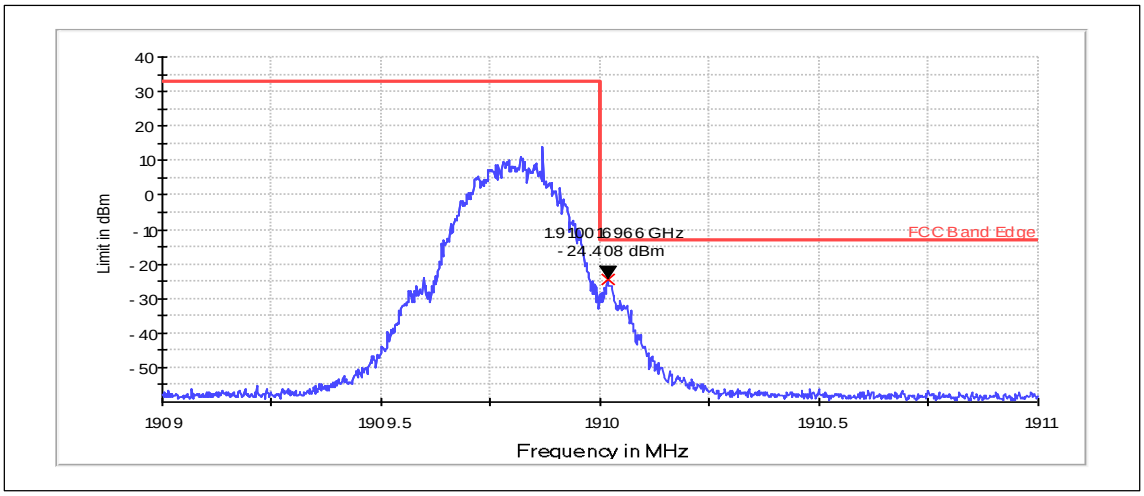
Channel 512 / 1850.2 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
GSM	1849.997	-25.01	PASSED

Channel 810 / 1909.8 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
GSM	1910.017	-24.41	PASSED

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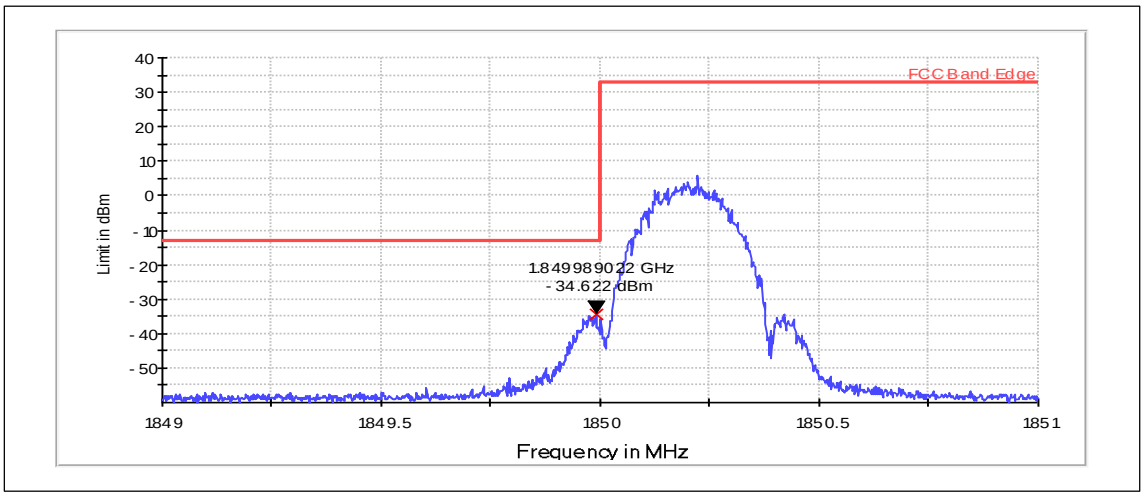
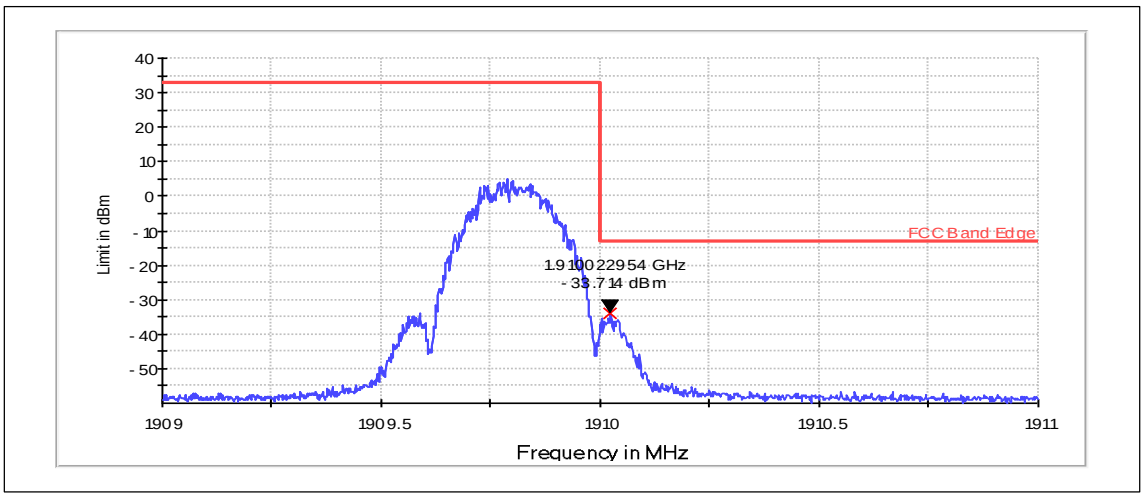
Channel 512 / 1850.2 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
EGPRS	1849.989	-34.62	PASSED

Channel 810 / 1909.8 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
EGPRS	1910.023	-33.71	PASSED

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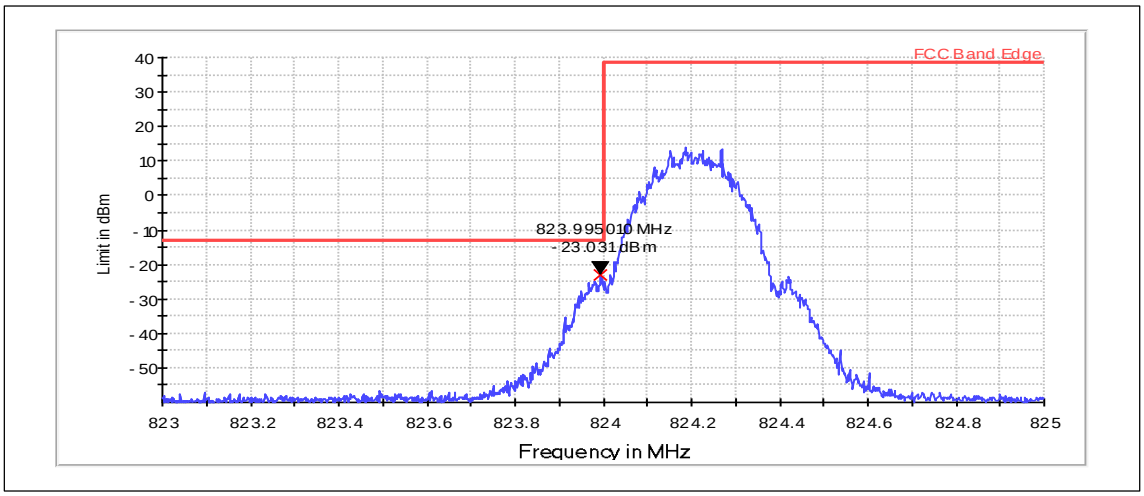
4.4. GSM 850 Test results

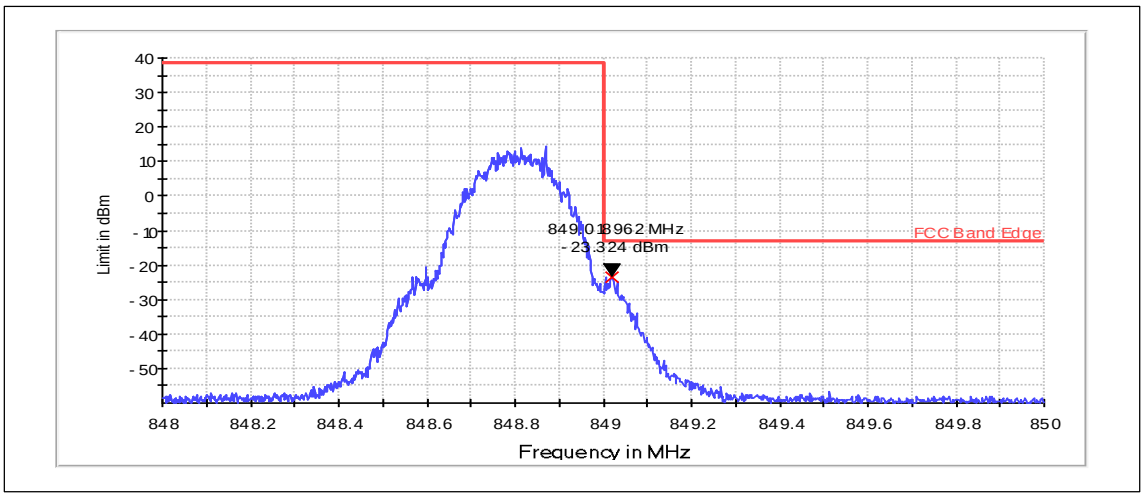
Channel 128 / 824.2 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
GSM	823.995	-23.03	PASSED

Channel 251 / 848.8 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
GSM	849.019	-23.32	PASSED

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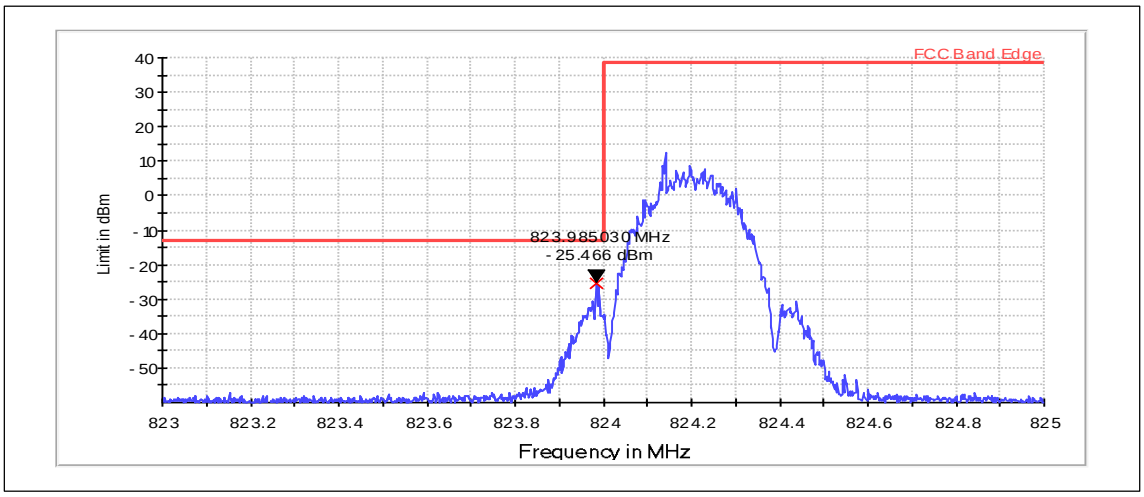
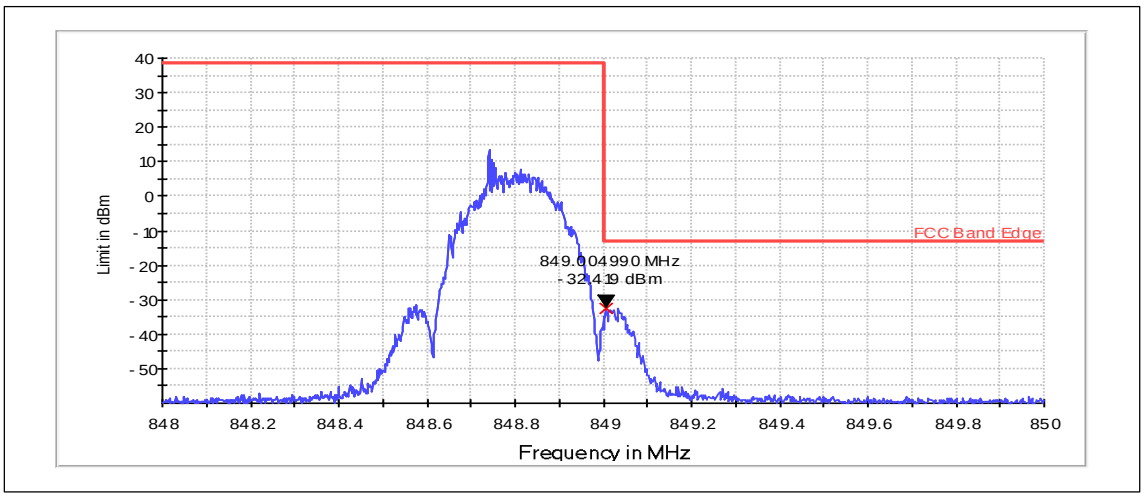
Channel 128 / 824.2 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
EGPRS	823.985	-25.47	PASSED

Channel 251 / 848.8 MHz



RMS (RBW: 3 kHz, VBW: 3 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
EGPRS	849.005	-32.42	PASSED

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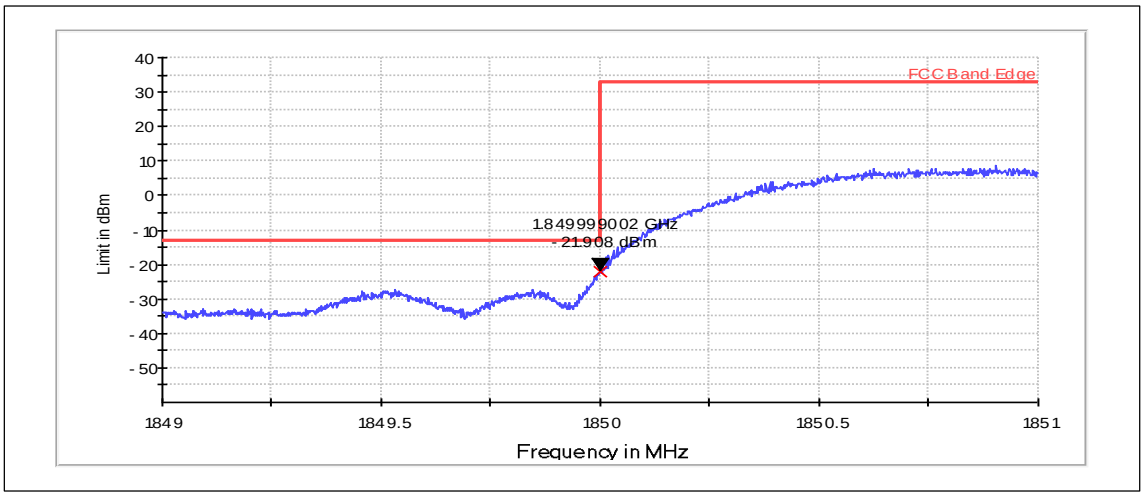
4.5. WCDMA2 Test results

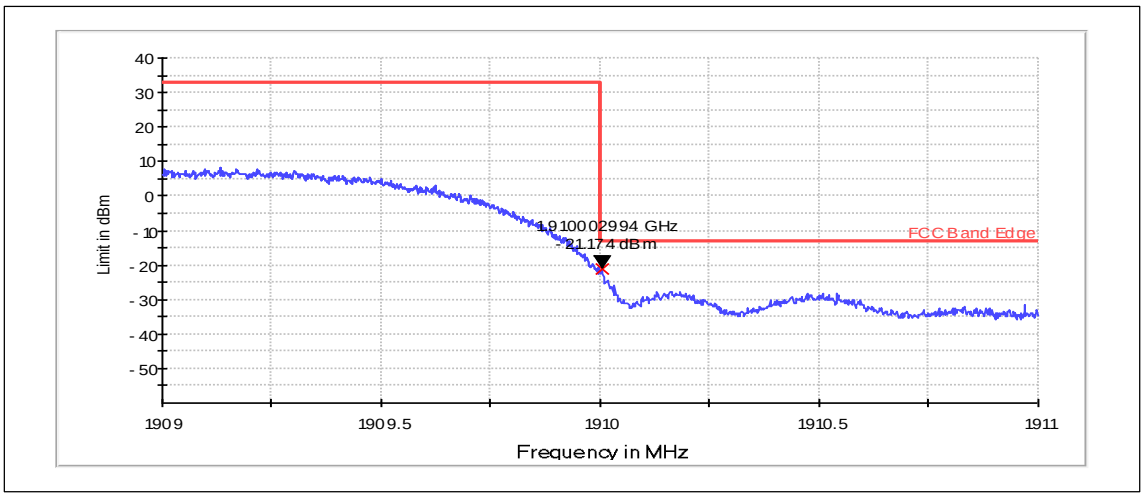
Channel 9262 / 1852.4 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD	1849.999	-21.91	PASSED

Channel 9538 / 1907.6 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD	1910.003	-21.17	PASSED

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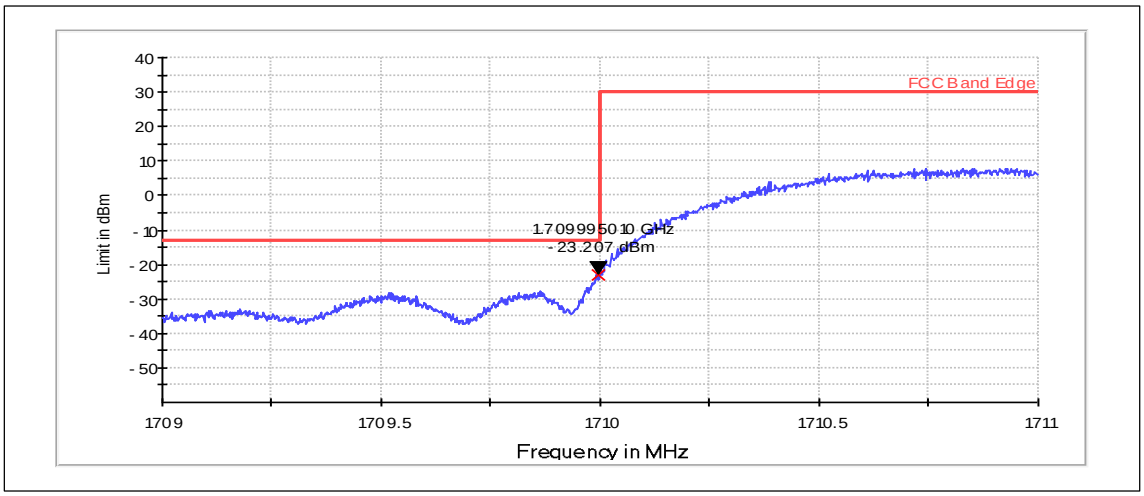
4.6. WCDMA4 Test results

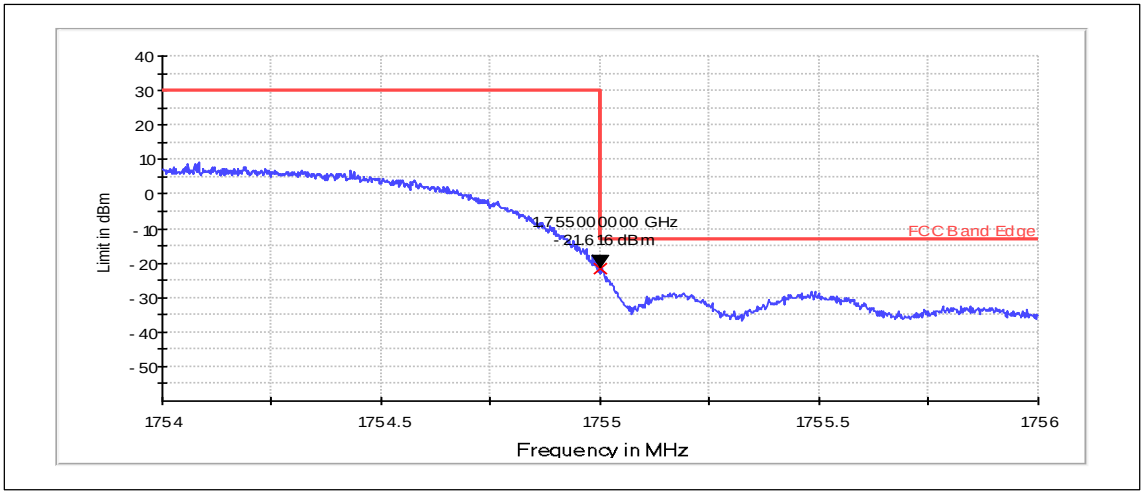
Channel 1312 / 1712.4 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD	1709.995	-23.21	PASSED

Channel 1513 / 1752.6 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD	1755.000	-21.62	PASSED

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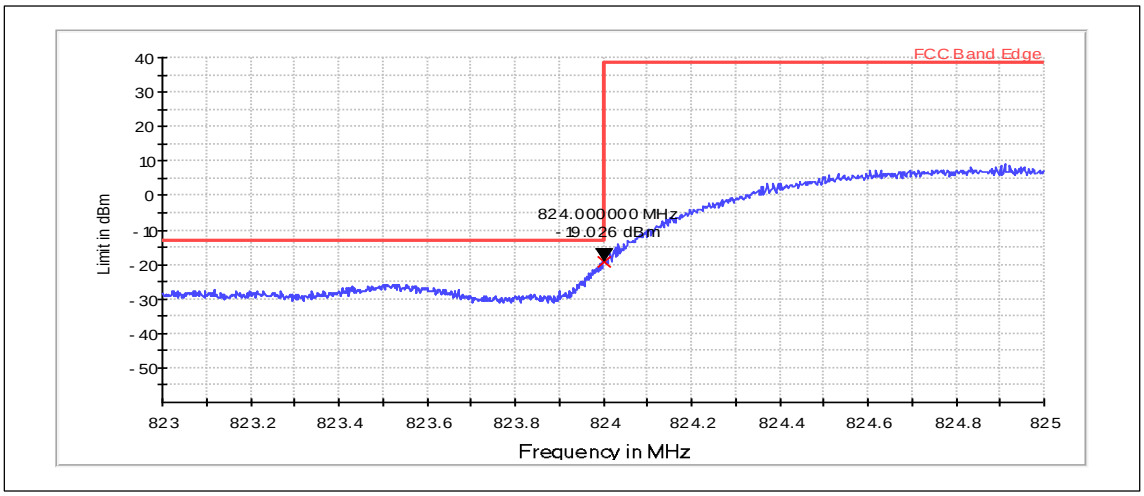
4.7. WCDMA5 Test results

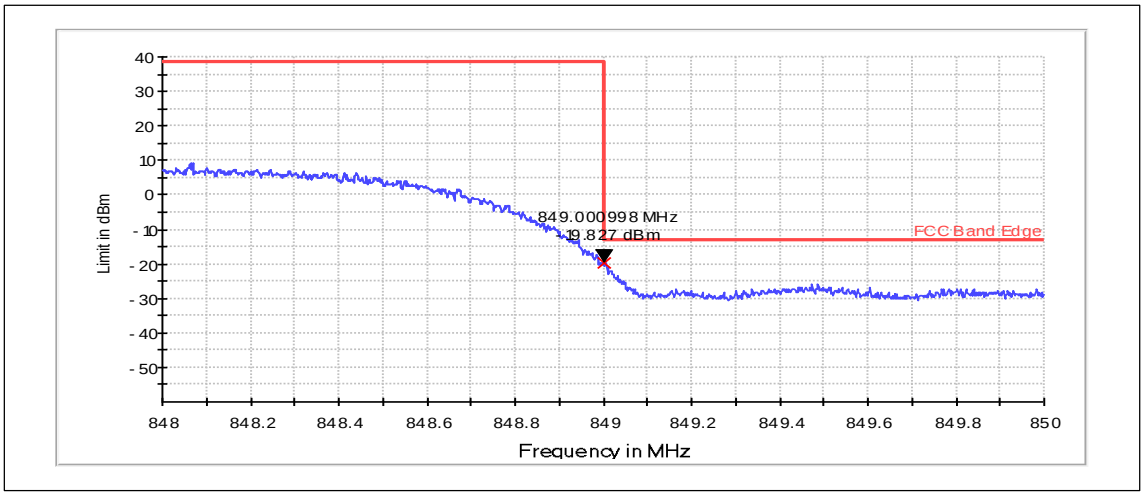
Channel 4132 / 826.4 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD	824.000	-19.03	PASSED

Channel 4233 / 846.6 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD	849.001	-19.83	PASSED

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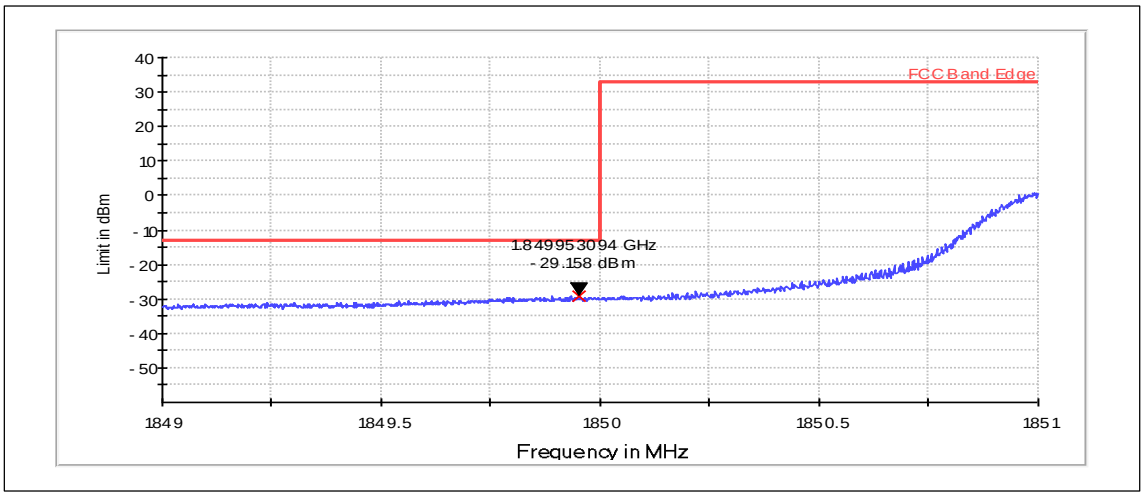
4.8. LTE2 Test results

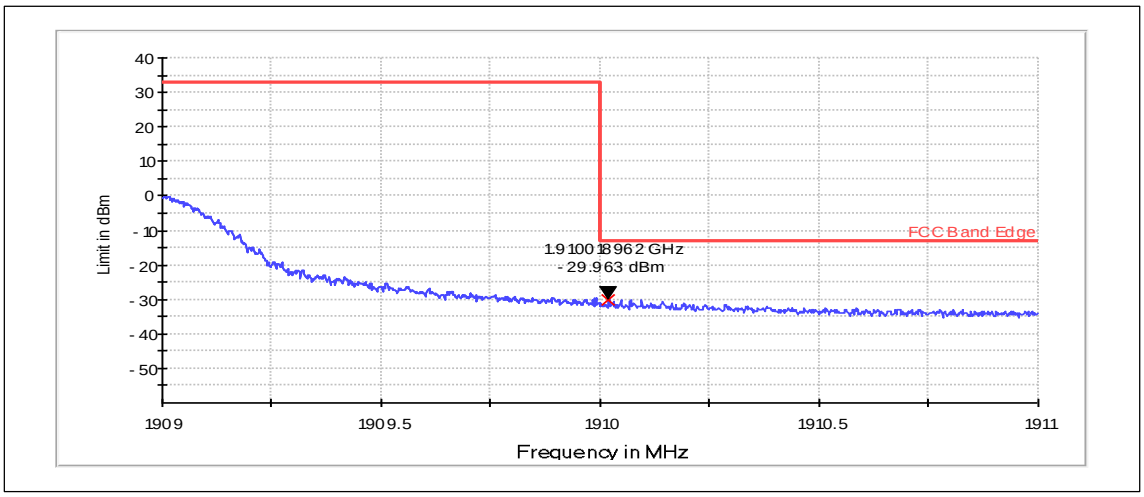
Channel 18700 / 1860 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, QPSK, 100 RB	1849.953	-29.16	PASSED

Channel 19100 / 1900 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, QPSK, 100 RB	1910.019	-29.96	PASSED

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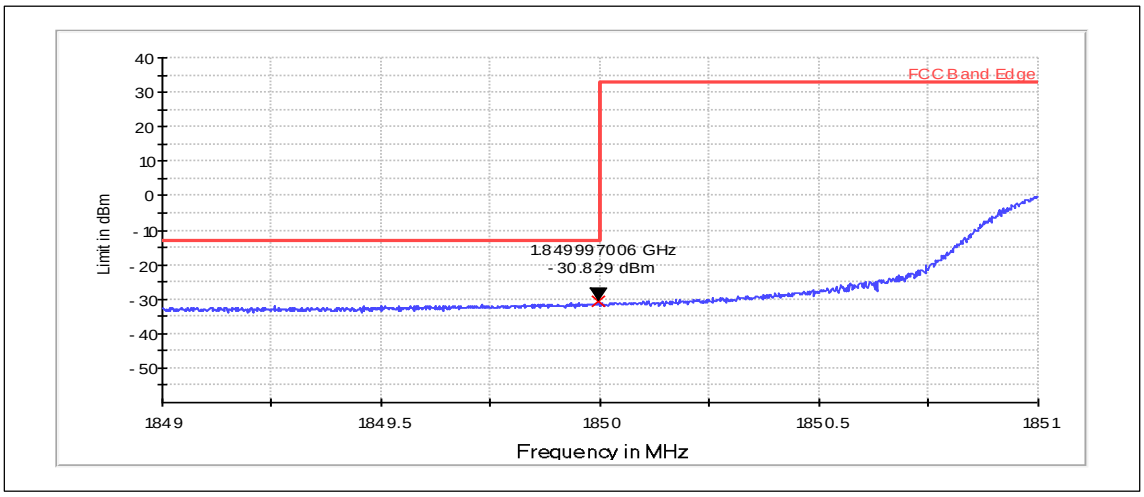
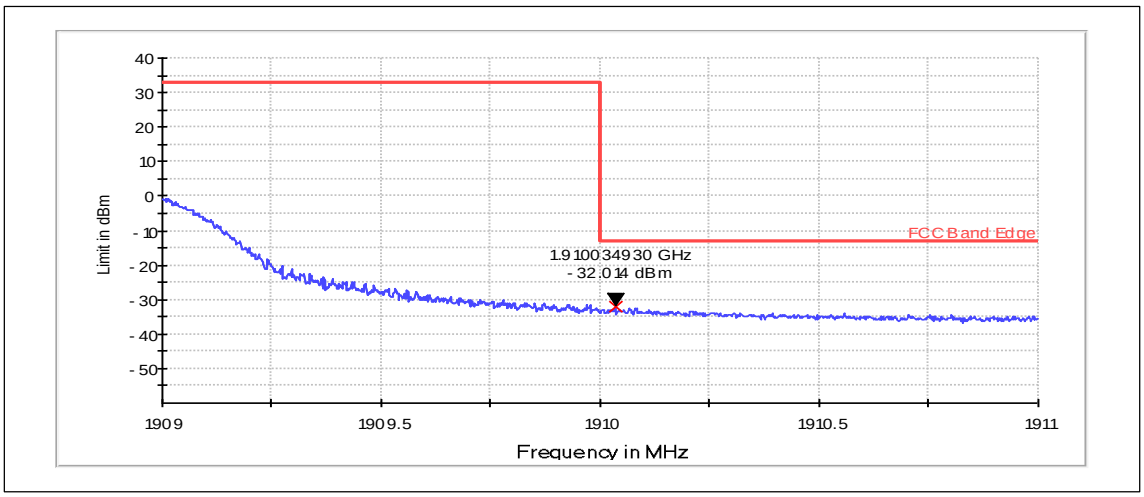
Channel 18700 / 1860 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, 16QAM, 100 RB	1849.997	-30.83	PASSED

Channel 19100 / 1900 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, 16QAM, 100 RB	1910.035	-32.01	PASSED

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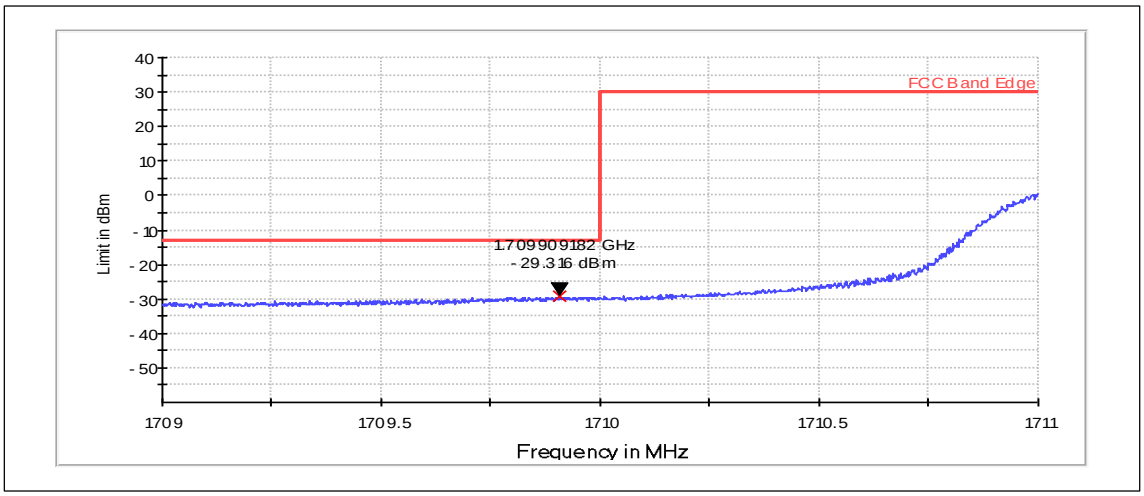
4.9. LTE4 Test results

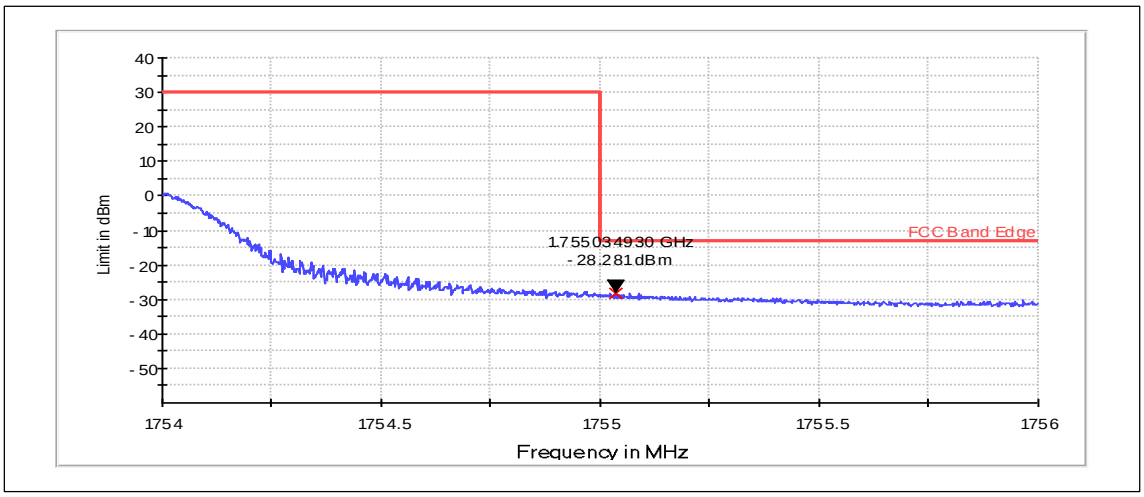
Channel 20050 / 1720 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, QPSK, 100 RB	1709.909	-29.32	PASSED

Channel 20300 / 1745 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, QPSK, 100 RB	1755.035	-28.28	PASSED

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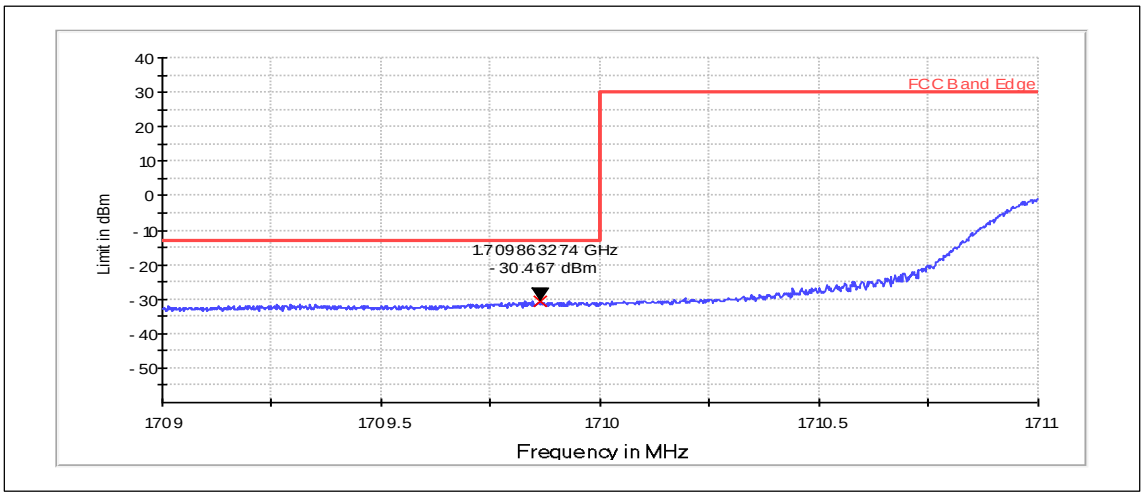
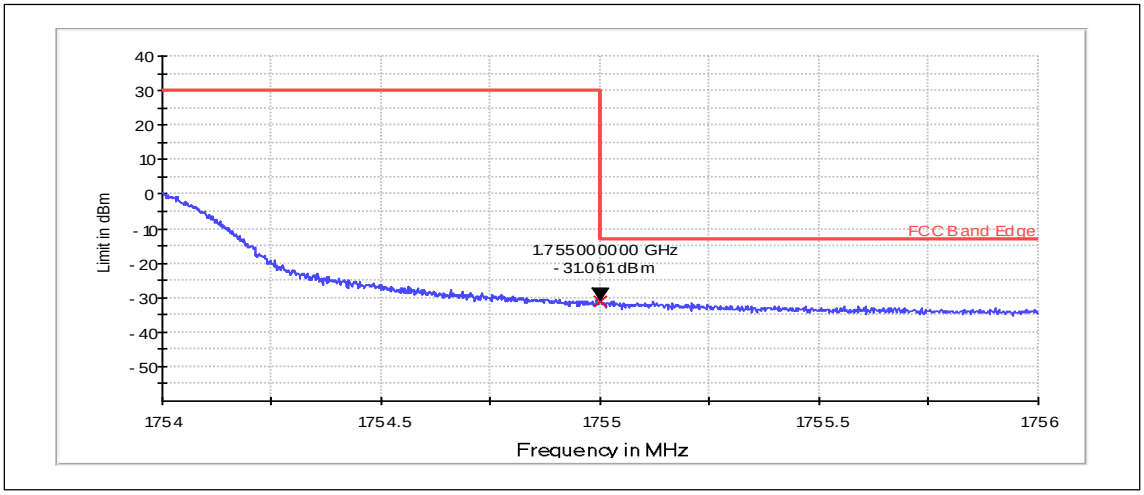
Channel 20050 / 1720 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, 16QAM, 100 RB	1709.863	-30.47	PASSED

Channel 20300 / 1745 MHz



RMS (RBW: 200 kHz, VBW: 1 MHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, 16QAM, 100 RB	1755.000	-31.06	PASSED

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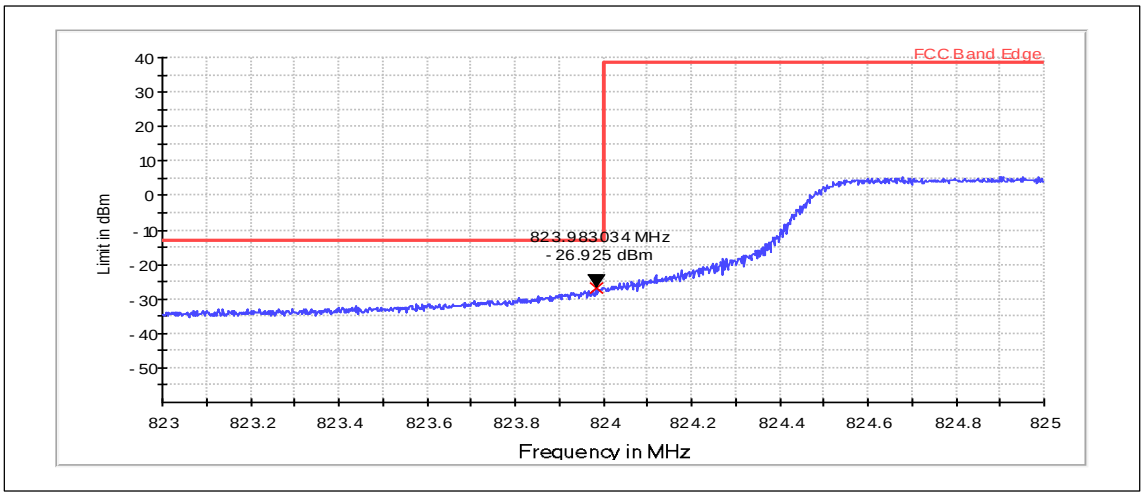
4.10. LTE5 Test results

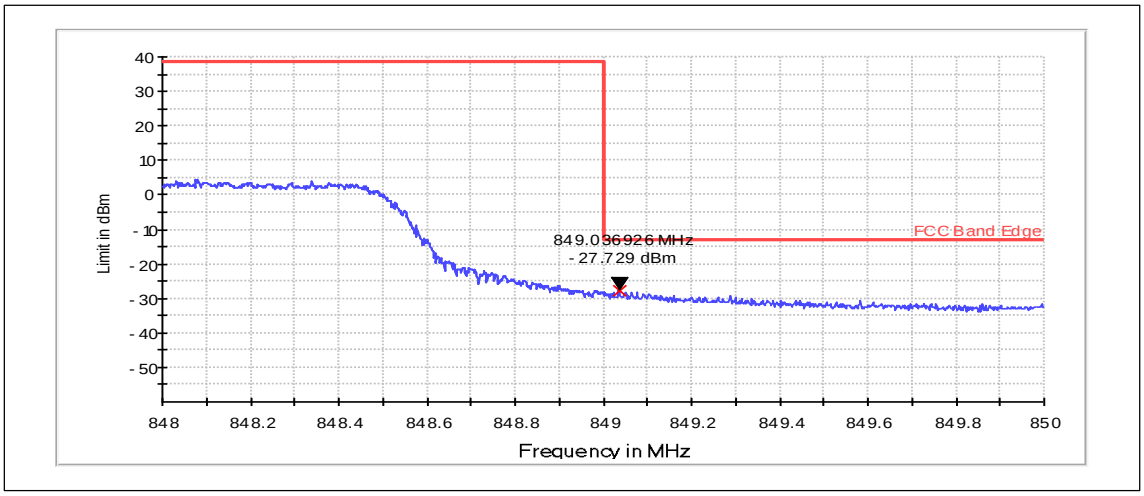
Channel 20450 / 829 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, QPSK, 50 RB	823.983	-26.93	PASSED

Channel 20600 / 844 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, QPSK, 50 RB	849.037	-27.73	PASSED

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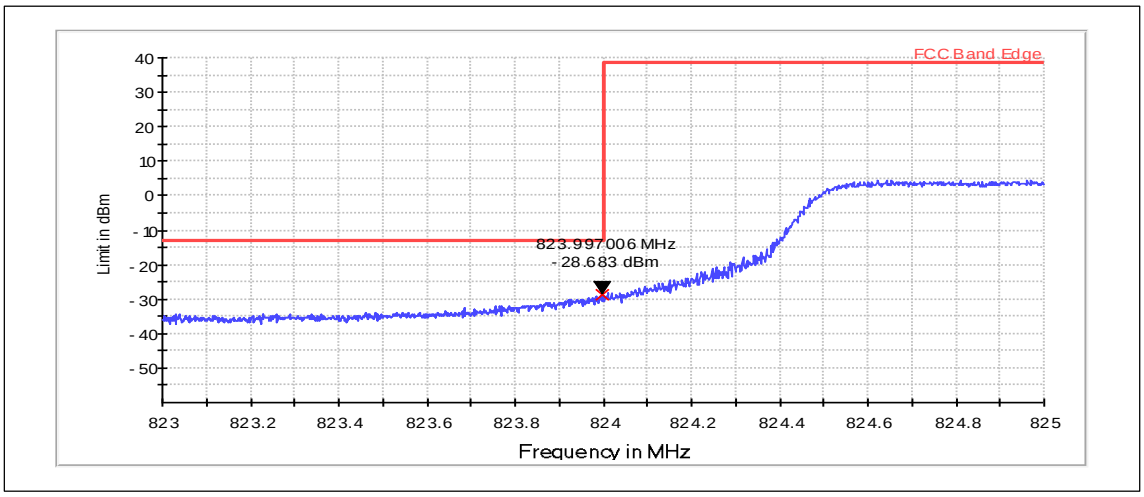
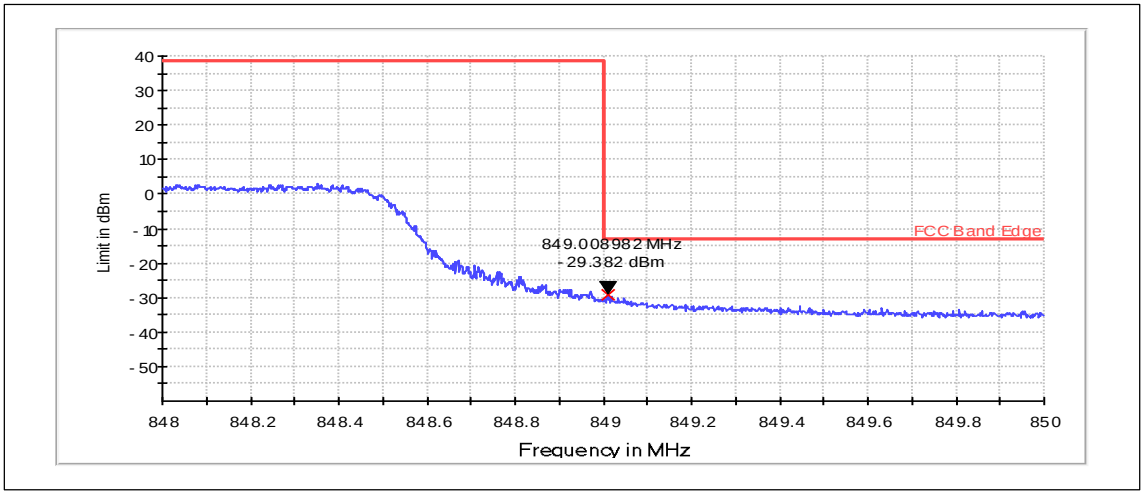
Channel 20450 / 829 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, 16QAM, 50 RB	823.997	-28.68	PASSED

Channel 20600 / 844 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz, Max hold)

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, 16QAM, 50 RB	849.009	-29.38	PASSED

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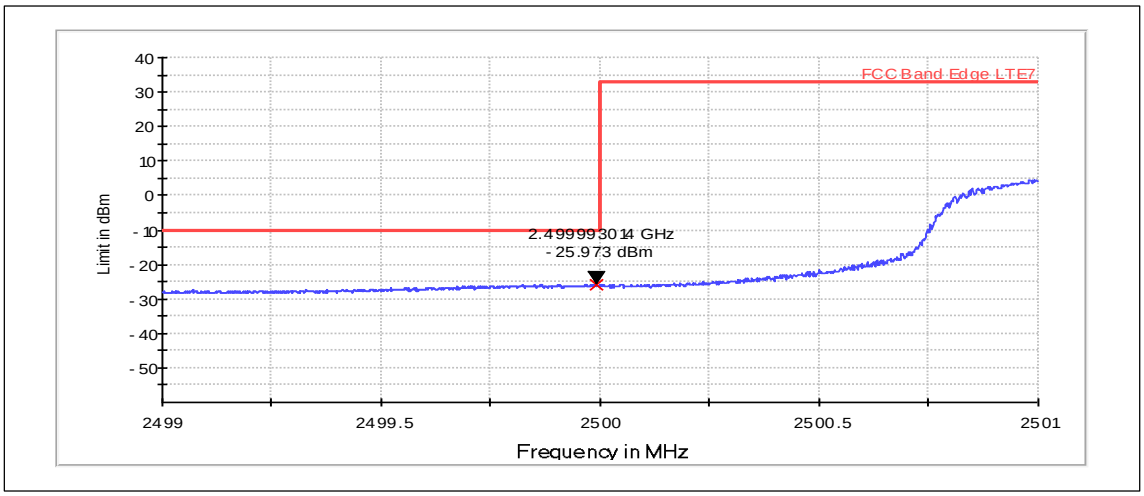
4.11. LTE7 Test results

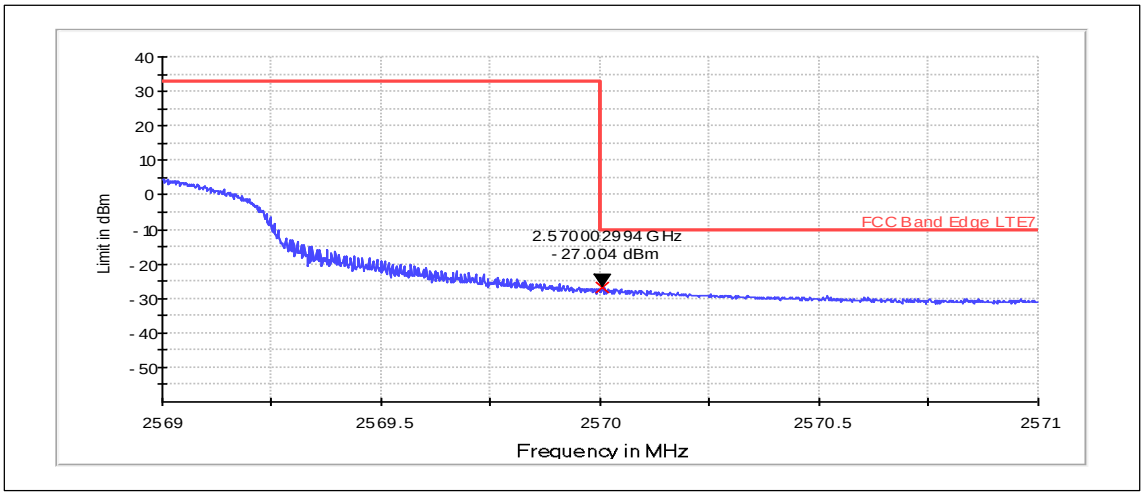
Channel 20850 / 2510 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, QPSK, 100 RB	2499.993	-25.97	PASSED

Channel 21350 / 2560 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, QPSK, 100 RB	2570.003	-27.00	PASSED

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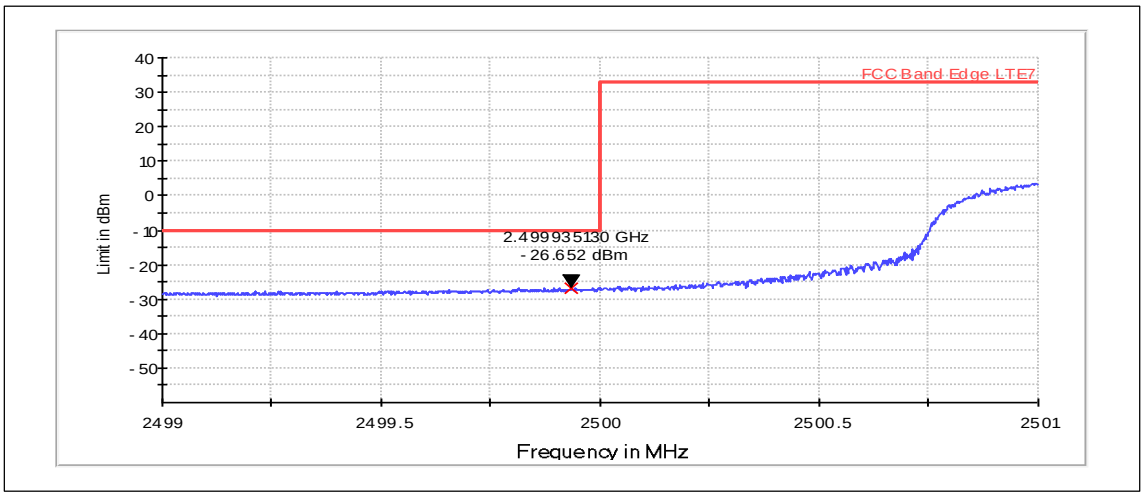
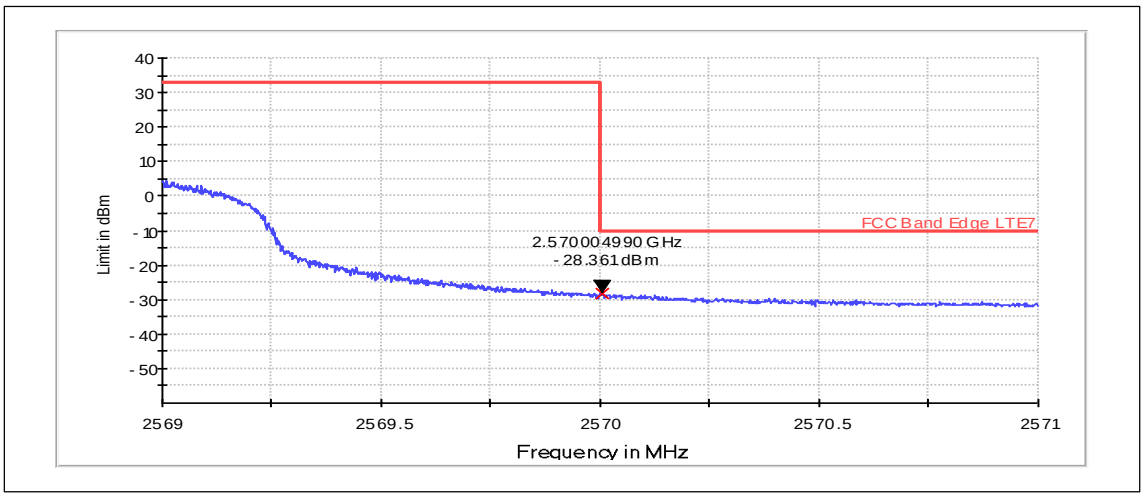
Channel 20850 / 2510 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, 16QAM, 100 RB	2499.935	-26.65	PASSED

Channel 21350 / 2560 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 20MHz, 16QAM, 100 RB	2570.005	-28.36	PASSED

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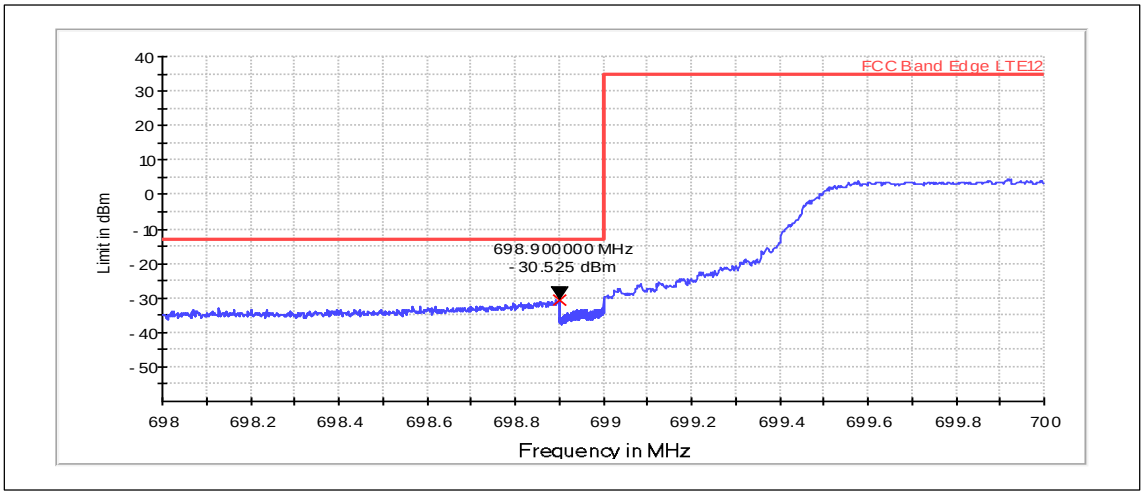
4.12. LTE12 Test results

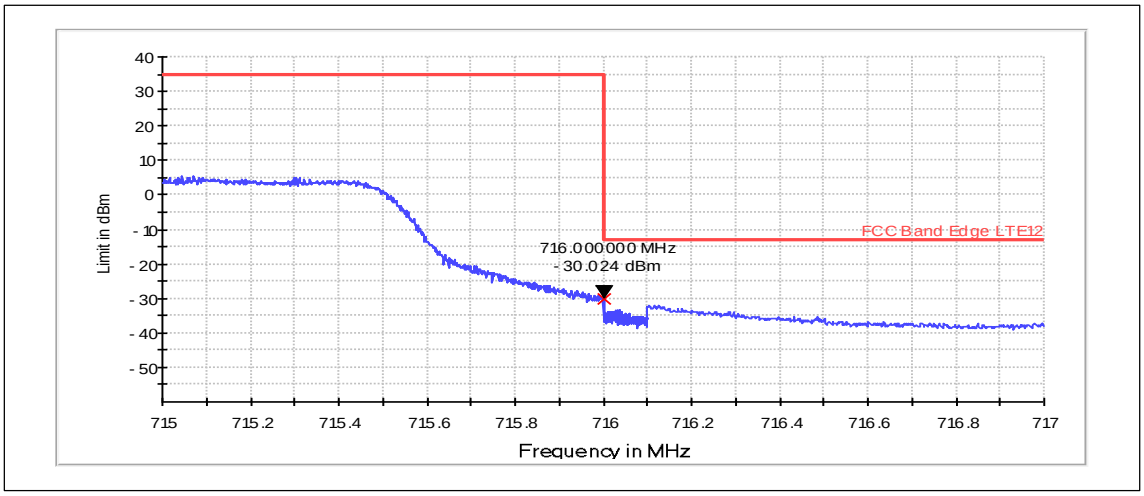
Channel 23060 / 704 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, QPSK, 50 RB	698.900	-30.52	PASSED

Channel 23130 / 711 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, QPSK, 50 RB	716.000	-30.02	PASSED

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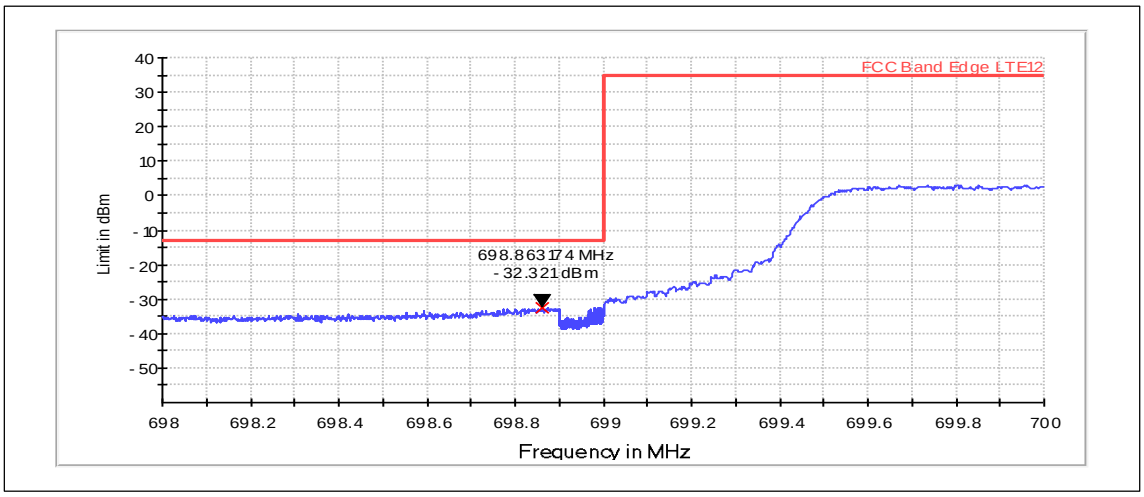
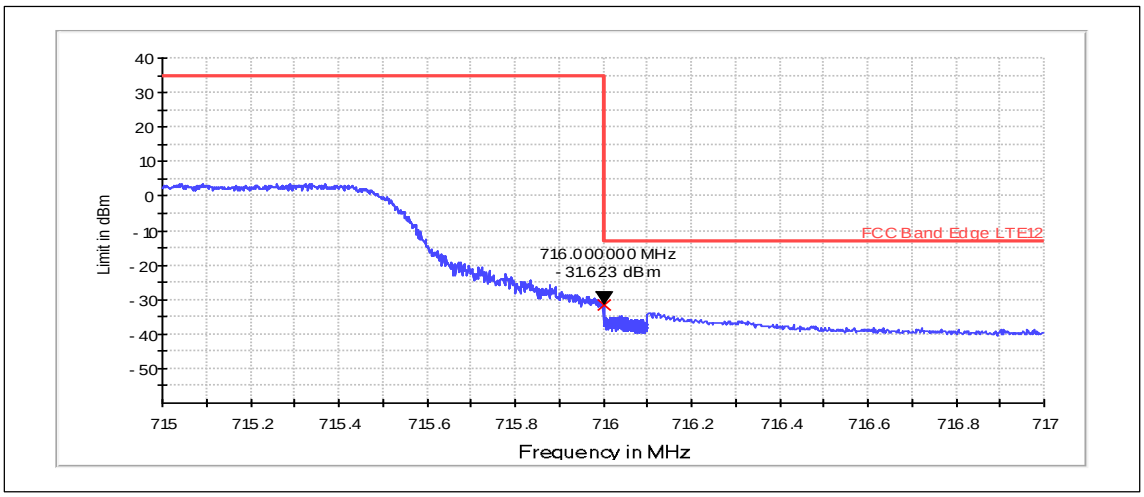
Channel 23060 / 704 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, 16QAM, 50 RB	698.863	-32.32	PASSED

Channel 23130 / 711 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, 16QAM, 50 RB	716.000	-31.62	PASSED

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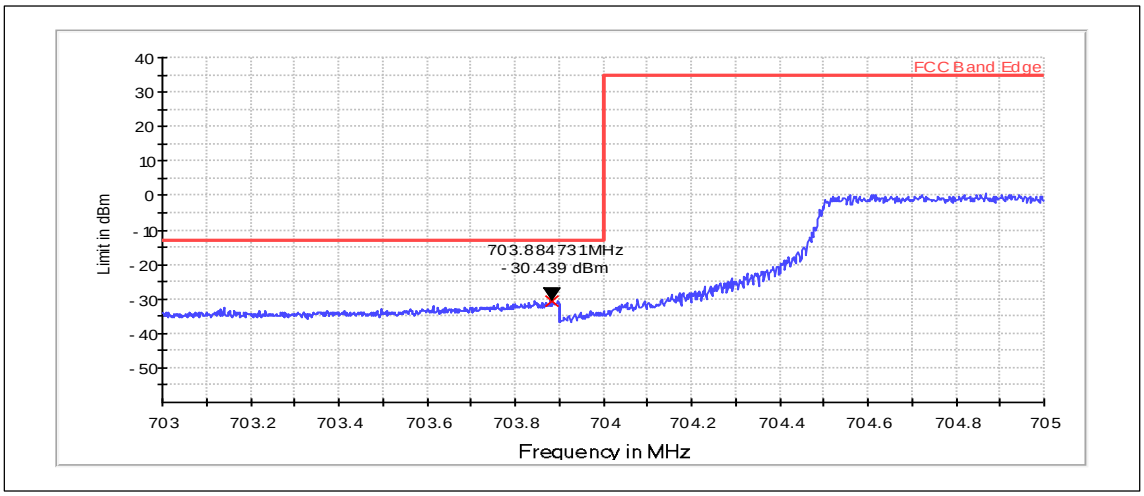
4.13. LTE17 Test results

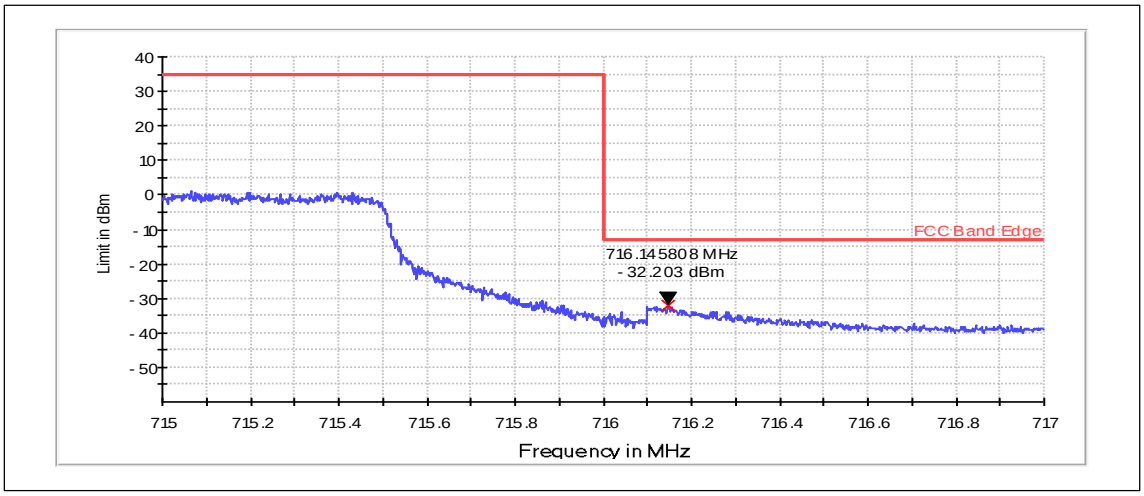
Channel 23780 / 709 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, QPSK, 50 RB	703.885	-30.44	PASSED

Channel 23800 / 711 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, QPSK, 50 RB	716.146	-32.20	PASSED

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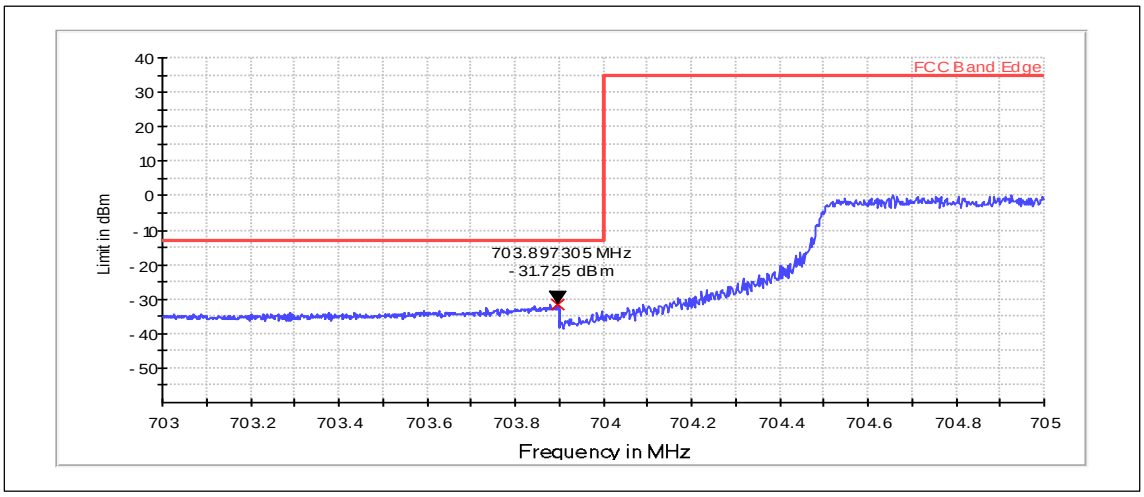
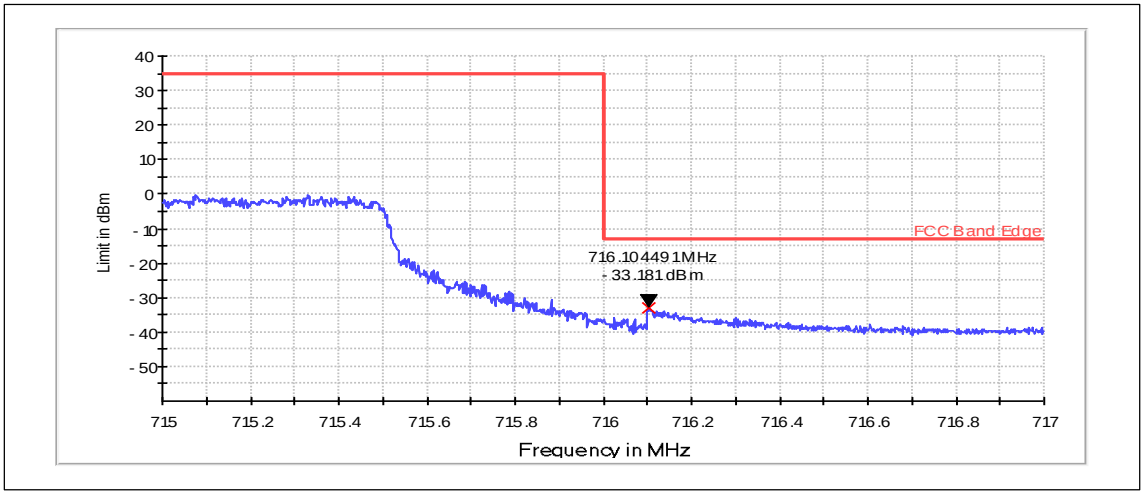
Channel 23780 / 709 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, 16QAM, 50 RB	703.897	-31.73	PASSED

Channel 23800 / 711 MHz



RMS detector, Max hold

Operation mode (TX on)	Frequency [MHz]	Level [dBm]	Result
FDD, CBW 10MHz, 16QAM, 50 RB	716.104	-33.18	PASSED

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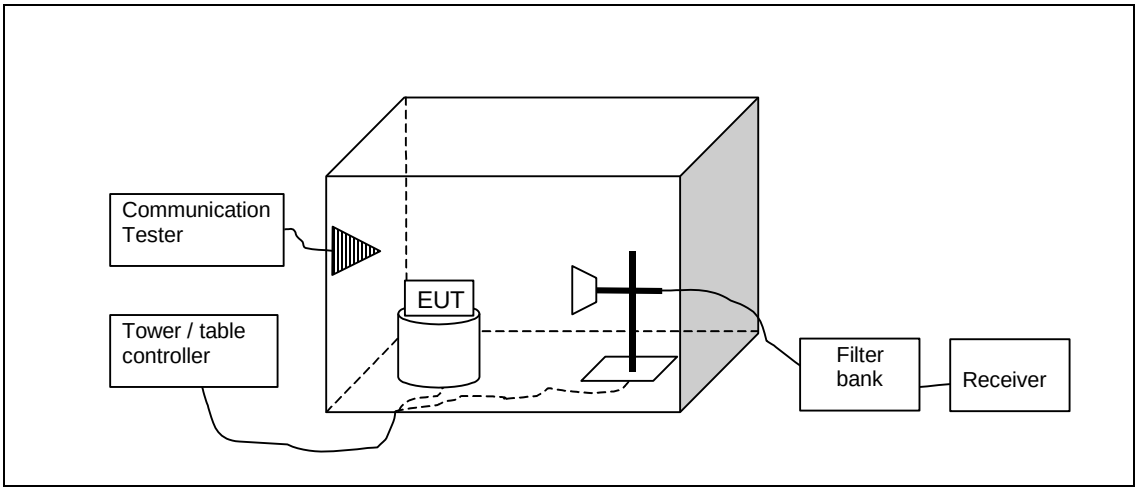
5. Spurious radiated emissions

(FCC §22.917(a), §27.53(f), §27.53(l), §2.1053, §27.53(h), §2.1053, §22.917(a), §2.1053, §24.238(a), §2.1053, §2.1053, RSS-132 4.5, RSS-133 6.5, RSS-139 6.5, RSS-199 4.5(b), RSS-130 4.6)

EUT with DUT number	RM-1128, DUT 500100
Accessories with DUT numbers	CC-3097, DUT 500127 ; Samsung BL-T5A, DUT 500101; AC-18U, DUT 500124; WH-108, DUT 500121
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was done in lab1.
Temp [ºC] / Humidity [%RH] / Air Pressure [kPa]	23/52/100.5 to 21/59/100.5
Date of measurements	10-Jul-2015 to 16-Jul-2015
Measured by	Gao Sherina

5.1.1 Test setup



5.2. Test method and limit

The measurement is made according to TIA-603-C-2004 as follows:

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with absorbers on the floor and measuring antenna at fixed height using 2-axis EUT position system.

The Final Measurement is performed in the Semi-Anechoic Chamber with conducting metal floor, if the Preliminary Measurement results are closer than 20 dB to the permissible value.

The EUT is placed at nonconductive plate at the turntable center.

For each suspected frequency, the turntable is rotated 360 degrees and antenna is scanned from 1 to 4 m. This is repeated for both horizontal and vertical receive antenna polarizations.

The emissions less than 20 dB below the permissible value are reported.
The substitution method is used. Substitution values at each frequencies are measured beforehand and saved to the test software.

The substitution corrections are obtained as described below:

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ASUBST = PSUBST_TX - PSUBST_RX - LSUBST_CABLES + GSUBST_TX_ANT

Where ASUBST is the final substitution correction including receive antenna gain. PSUBST_TX is signal generator level, PSUBST_RX is receiver level, LSUBST_CABLES is cable losses including both TX and RX cables and GSUBST_TX_ANT is substitution antenna gain.

The measurement results are obtained as described below:

P [dBm] = PMEAS + ATOT

Where PMEAS is receiver reading in dBm and ATOT is total correction factor including cable loss, preamplifier gain and substitution correction (ATOT = LCABLES - GPREAMP + ASUBST).

Limits for spurious radiated emissions measurements

Operation band	Frequency range [MHz]	Limit [dBm]
GSM 850	30 - 8500	-13
GSM 1900	30 - 19100	-13
WCDMA2	30 - 19100	-13
WCDMA4	30 - 17500	-13
WCDMA5	30 - 8500	-13
LTE2	30 - 19100	-13
LTE4	30 - 17500	-13
LTE5	30 - 8500	-13
LTE7	30 - 25700	-13
LTE12	30 - 7200	-13
LTE17	30 - 7200	-13 (RBW = 100 kHz, ERP)

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5.3. GSM 850 test results

Antenna1; Channel 190 / 836.6 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
849.001	-72.58	6E-05	-70.98	-1.6	HORIZONTAL	PASSED
1673.066	-47.54	0.01762	-52.74	5.2	VERTICAL	PASSED
1673.387	-48.86	0.013	-54.06	5.2	VERTICAL	PASSED
2497.275	-52.42	0.00573	-64.02	11.6	HORIZONTAL	PASSED
2539.76	-52.31	0.00587	-64.31	12	VERTICAL	PASSED
3346.212	-53.37	0.0046	-60.97	7.6	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 190 / 836.6 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
848.62	-70.86	8E-05	-69.26	-1.6	HORIZONTAL	PASSED
1695.631	-56.62	0.00218	-62.82	6.2	HORIZONTAL	PASSED
2542.124	-52.35	0.00582	-64.35	12	VERTICAL	PASSED
2559.399	-51.89	0.00647	-63.79	11.9	HORIZONTAL	PASSED
3290.942	-56.84	0.00207	-64.34	7.5	HORIZONTAL	PASSED
3397.555	-56.4	0.00229	-64.2	7.8	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

5.4. GSM 850 E-GPRS (MSC9) test results

Antenna1; Channel 190 / 836.6 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1673.34	-54.9	0.00324	-60.3	5.4	HORIZONTAL	PASSED
2509.78	-48.38	0.01452	-60.38	12	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 190 / 836.6 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1682.398	-56.77	0.0021	-62.47	5.7	HORIZONTAL	PASSED
2518.878	-51.38	0.00728	-63.68	12.3	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.5. GSM 1900 test results

Antenna1; Channel 661 / 1880.0 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
8809.499	-42.78	0.05272	-66.48	23.7	VERTICAL	PASSED
9272.465	-41.58	0.0695	-66.68	25.1	HORIZONTAL	PASSED
9464.649	-42.14	0.06109	-66.64	24.5	VERTICAL	PASSED
9664.008	-41.93	0.06412	-67.53	25.6	VERTICAL	PASSED
9929.058	-40.72	0.08472	-66.52	25.8	HORIZONTAL	PASSED
10004.162	-41.49	0.07096	-67.39	25.9	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 661 / 1880.0 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
2405.813	-49.25	0.01189	-63.55	14.3	HORIZONTAL	PASSED
6983.037	-39.37	0.11561	-59.97	20.6	VERTICAL	PASSED
9663.407	-42.49	0.05636	-68.09	25.6	HORIZONTAL	PASSED
9812.705	-41.16	0.07656	-66.66	25.5	HORIZONTAL	PASSED
9876.513	-42.11	0.06152	-67.91	25.8	VERTICAL	PASSED
9913.026	-41.82	0.06577	-67.52	25.7	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

5.6. GSM 1900 E-GPRS (MSC9) test results

Antenna1; Channel 661 / 1880.0 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
3759.9	-47.28	0.01871	-58.18	10.9	VERTICAL	PASSED
5640.461	-48.22	0.01507	-62.52	14.3	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 661 / 1880.0 MHz

Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
3760.14	-46.95	0.02018	-57.85	10.9	VERTICAL	PASSED
5640.18	-48.37	0.01455	-62.67	14.3	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.7. WCDMA2 test results

Antenna1; Channel 9400 / 1880.0 MHz

FDD mode, Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
3758.577	-49.14	0.01219	-60.24	11.1	HORIZONTAL	PASSED
5638.737	-47.69	0.01702	-61.99	14.3	HORIZONTAL	PASSED
7522.385	-44.09	0.03899	-66.19	22.1	VERTICAL	PASSED
9267.715	-41.52	0.07047	-66.62	25.1	HORIZONTAL	PASSED
9406.874	-41.59	0.06934	-66.29	24.7	VERTICAL	PASSED
9424.349	-42.98	0.05035	-67.68	24.7	HORIZONTAL	PASSED
9791.202	-41.67	0.06808	-67.17	25.5	VERTICAL	PASSED
9928.116	-41.61	0.06902	-67.41	25.8	HORIZONTAL	PASSED
9955.812	-41.91	0.06442	-67.41	25.5	VERTICAL	PASSED
11273.527	-39.16	0.12134	-67.36	28.2	HORIZONTAL	PASSED
13167.515	-50.69	0.00853	-73.09	22.4	VERTICAL	PASSED
15047.796	-48.19	0.01517	-72.89	24.7	HORIZONTAL	PASSED
16911.283	-50.16	0.00964	-73.36	23.2	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 9400 / 1880.0 MHz
FDD mode, Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
3757.255	-52.33	0.00585	-63.43	11.1	HORIZONTAL	PASSED
5640.741	-47.51	0.01774	-61.81	14.3	VERTICAL	PASSED
6940.621	-36.05	0.24831	-56.55	20.5	VERTICAL	PASSED
7529.92	-43.45	0.04519	-65.85	22.4	HORIZONTAL	PASSED
9255.451	-40.87	0.08185	-65.77	24.9	VERTICAL	PASSED
9285.351	-41.53	0.07031	-66.53	25	VERTICAL	PASSED
9394.449	-41.94	0.06397	-66.64	24.7	VERTICAL	PASSED
9875.411	-41.21	0.07568	-67.11	25.9	HORIZONTAL	PASSED
9908.717	-41.95	0.06383	-67.65	25.7	HORIZONTAL	PASSED
9964.068	-40.76	0.08395	-66.46	25.7	HORIZONTAL	PASSED
11274.048	-37.95	0.16032	-66.15	28.2	HORIZONTAL	PASSED
13153.447	-50.03	0.00993	-72.33	22.3	VERTICAL	PASSED
15041.703	-47.7	0.01698	-72	24.3	VERTICAL	PASSED
16929.88	-50.18	0.00959	-73.38	23.2	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.8. WCDMA4 test results

Antenna1; Channel 1412 / 1732.4 MHz

FDD mode, Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1755.661	-43.54	0.04426	-52.34	8.8	VERTICAL	PASSED
1757.515	-46.84	0.0207	-55.64	8.8	VERTICAL	PASSED
3462.255	-49.71	0.01069	-60.11	10.4	VERTICAL	PASSED
5190.446	-47.98	0.01592	-61.98	14	HORIZONTAL	PASSED
6931.464	-37.25	0.18836	-57.55	20.3	VERTICAL	PASSED
8663.904	-43.19	0.04797	-66.39	23.2	HORIZONTAL	PASSED
9427.515	-41.7	0.06761	-66.4	24.7	HORIZONTAL	PASSED
9856.613	-40.89	0.08147	-66.59	25.7	HORIZONTAL	PASSED
9985.11	-41.07	0.07816	-66.77	25.7	HORIZONTAL	PASSED
10393.218	-39.72	0.10666	-66.52	26.8	HORIZONTAL	PASSED
12130.347	-38.31	0.14757	-66.41	28.1	VERTICAL	PASSED
13864.39	-49.51	0.01119	-73.81	24.3	VERTICAL	PASSED
15590.378	-48.7	0.01349	-72.7	24	HORIZONTAL	PASSED
17320.854	-49.21	0.01199	-73.01	23.8	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 1412 / 1732.4 MHz
FDD mode, Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1714.82	-38.73	0.13397	-46.73	8	VERTICAL	PASSED
1755.782	-39.93	0.10162	-48.73	8.8	VERTICAL	PASSED
3466.944	-49.62	0.01091	-60.12	10.5	VERTICAL	PASSED
5191.929	-47.95	0.01603	-61.95	14	HORIZONTAL	PASSED
6938.518	-37.61	0.17338	-58.01	20.4	VERTICAL	PASSED
8654.164	-43.04	0.04966	-66.14	23.1	HORIZONTAL	PASSED
9258.457	-41.29	0.0743	-66.29	25	HORIZONTAL	PASSED
9270.24	-41.29	0.0743	-66.39	25.1	VERTICAL	PASSED
9763.347	-41.23	0.07534	-66.73	25.5	VERTICAL	PASSED
9987.133	-41.54	0.07015	-67.24	25.7	HORIZONTAL	PASSED
10386.885	-39.71	0.10691	-66.51	26.8	VERTICAL	PASSED
12135.357	-38.96	0.12706	-67.06	28.1	HORIZONTAL	PASSED
13850.923	-49.98	0.01005	-74.18	24.2	VERTICAL	PASSED
15586.69	-49.91	0.01021	-73.11	23.2	VERTICAL	PASSED
17332.717	-49.19	0.01205	-73.09	23.9	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.9. WCDMA5 test results

Antenna1; Channel 4175 / 835.0 MHz

FDD mode, Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
816.268	-46.64	0.02168	-80.94	34.3	HORIZONTAL	PASSED
848.47	-47.82	0.01652	-80.82	33	HORIZONTAL	PASSED
852.109	-48.45	0.01429	-81.45	33	HORIZONTAL	PASSED
934.354	-43.61	0.04355	-80.41	36.8	HORIZONTAL	PASSED
997.462	-42.17	0.06067	-79.67	37.5	HORIZONTAL	PASSED
1000.16	-59.37	0.00116	-63.77	4.4	HORIZONTAL	PASSED
1672.184	-55.7	0.00269	-61.1	5.4	HORIZONTAL	PASSED
2512.234	-51.49	0.0071	-63.29	11.8	HORIZONTAL	PASSED
3349.238	-55.41	0.00288	-63.21	7.8	HORIZONTAL	PASSED
4183.677	-54.98	0.00318	-65.08	10.1	HORIZONTAL	PASSED
5018.236	-50.9	0.00813	-62.7	11.8	HORIZONTAL	PASSED
5836.523	-49.37	0.01156	-62.27	12.9	VERTICAL	PASSED
6674.168	-44.17	0.03828	-61.27	17.1	VERTICAL	PASSED
7514.9	-46.24	0.02377	-66.24	20	HORIZONTAL	PASSED
8344.208	-47.2	0.01905	-67.2	20	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 4175 / 835.0 MHz
FDD mode, Peak detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
814.083	-45.53	0.02799	-79.83	34.3	HORIZONTAL	PASSED
850.225	-47.75	0.01679	-80.75	33	HORIZONTAL	PASSED
855.979	-47.73	0.01687	-80.73	33	HORIZONTAL	PASSED
921.167	-42.85	0.05188	-79.95	37.1	VERTICAL	PASSED
997.671	-41.68	0.06792	-79.18	37.5	HORIZONTAL	PASSED
1000.441	-59.39	0.00115	-63.69	4.3	HORIZONTAL	PASSED
1671.062	-56.85	0.00207	-62.25	5.4	HORIZONTAL	PASSED
2508.146	-51.78	0.00664	-63.38	11.6	HORIZONTAL	PASSED
3334.529	-55.28	0.00296	-62.78	7.5	VERTICAL	PASSED
4170.21	-55.79	0.00264	-65.49	9.7	VERTICAL	PASSED
5019.279	-49.99	0.01002	-61.79	11.8	HORIZONTAL	PASSED
5846.784	-49.78	0.01052	-62.78	13	HORIZONTAL	PASSED
6670.12	-43.63	0.04335	-60.63	17	VERTICAL	PASSED
7505.04	-45.99	0.02518	-65.99	20	VERTICAL	PASSED
8355.23	-46.94	0.02023	-67.04	20.1	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.10. LTE2 test results

Antenna 1; Channel 18900 / 1880.0 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1958.196	-41.19	0.07603	-50.59	9.4	HORIZONTAL	PASSED
3760.341	-57.29	0.00187	-68.39	11.1	HORIZONTAL	PASSED
5631.283	-58.35	0.00146	-72.75	14.4	HORIZONTAL	PASSED
7524.87	-55.12	0.00308	-77.42	22.3	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna 1; Channel 18900 / 1880.0 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1958.702	-40.59	0.0873	-49.99	9.4	HORIZONTAL	PASSED
3760.461	-56.79	0.00209	-67.89	11.1	HORIZONTAL	PASSED
5636.774	-58.38	0.00145	-72.78	14.4	HORIZONTAL	PASSED
7528.597	-55.08	0.0031	-77.48	22.4	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 18900 / 1880.0 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1961.027	-41.3	0.07413	-50.8	9.5	HORIZONTAL	PASSED
3760.581	-59.84	0.00104	-70.94	11.1	HORIZONTAL	PASSED
5634.449	-58.65	0.00136	-73.05	14.4	HORIZONTAL	PASSED
7510.762	-55.28	0.00296	-77.48	22.2	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 18900 / 1880.0 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1960.947	-41.39	0.07261	-50.89	9.5	HORIZONTAL	PASSED
3760.18	-59.85	0.00104	-70.95	11.1	HORIZONTAL	PASSED
5638.016	-58.67	0.00136	-72.97	14.3	HORIZONTAL	PASSED
7525.271	-55.12	0.00308	-77.42	22.3	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.11. LTE4 test results

Antenna 1; Channel 20175 / 1732.5 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
854.792	-59.99	0.001	-92.99	33	HORIZONTAL	PASSED
881.056	-51.6	0.00692	-85.7	34.1	HORIZONTAL	PASSED
994.182	-52.95	0.00507	-90.55	37.6	HORIZONTAL	PASSED
1673.381	-64.68	0.00034	-70.08	5.4	HORIZONTAL	PASSED
2518.498	-70.52	9E-05	-82.52	12	HORIZONTAL	PASSED
3346.501	-74.08	4E-05	-81.78	7.7	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna 1; Channel 20175 / 1732.5 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
3465.381	-53.97	0.00401	-64.37	10.4	VERTICAL	PASSED
5187.861	-59.2	0.0012	-73.3	14.1	HORIZONTAL	PASSED
6940	-48.13	0.01538	-68.63	20.5	VERTICAL	PASSED
8672.5	-54.23	0.00378	-77.43	23.2	VERTICAL	PASSED
10405	-51.08	0.0078	-77.98	26.9	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 20175 / 1732.5 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
3465.381	-56.59	0.00219	-66.69	10.1	HORIZONTAL	PASSED
5187.5	-58.61	0.00138	-72.71	14.1	HORIZONTAL	PASSED
6925.01	-49.45	0.01135	-69.65	20.2	HORIZONTAL	PASSED
8672.5	-54.25	0.00376	-77.45	23.2	HORIZONTAL	PASSED
10385	-51.12	0.00773	-77.92	26.8	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 20175 / 1732.5 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
3465.421	-57.47	0.00179	-67.57	10.1	HORIZONTAL	PASSED
5197.761	-58.35	0.00146	-72.15	13.8	HORIZONTAL	PASSED
6940	-47.79	0.01663	-68.29	20.5	VERTICAL	PASSED
8672.5	-54.25	0.00376	-77.45	23.2	HORIZONTAL	PASSED
10385	-51.12	0.00773	-77.92	26.8	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.12. LTE5 test results

Antenna 1; Channel 20525 / 836.5 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
851.104	-60.03	0.00099	-93.03	33	HORIZONTAL	PASSED
880.261	-50.42	0.00908	-84.52	34.1	HORIZONTAL	PASSED
881.505	-50.38	0.00916	-84.48	34.1	HORIZONTAL	PASSED
1673.381	-67.05	0.0002	-72.45	5.4	HORIZONTAL	PASSED
2513.288	-70.66	9E-05	-82.56	11.9	HORIZONTAL	PASSED
3350.028	-73.95	4E-05	-81.75	7.8	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna 1; Channel 20525 / 836.5 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
849.822	-57.55	0.00176	-90.55	33	HORIZONTAL	PASSED
881.024	-50.45	0.00902	-84.55	34.1	HORIZONTAL	PASSED
882.898	-50.43	0.00906	-84.53	34.1	HORIZONTAL	PASSED
997.889	-53	0.00501	-90.5	37.5	HORIZONTAL	PASSED
1673.301	-68.21	0.00015	-73.61	5.4	HORIZONTAL	PASSED
2518.899	-70.52	9E-05	-82.52	12	HORIZONTAL	PASSED
3347.182	-74.05	4E-05	-81.75	7.7	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 20525 / 836.5 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
851.966	-60.02	0.001	-93.02	33	HORIZONTAL	PASSED
880.774	-48.5	0.01413	-82.6	34.1	HORIZONTAL	PASSED
880.886	-49.42	0.01143	-83.52	34.1	HORIZONTAL	PASSED
1680.515	-76.1	2E-05	-81.7	5.6	HORIZONTAL	PASSED
2515.332	-70.5	9E-05	-82.6	12.1	HORIZONTAL	PASSED
3348.505	-74	4E-05	-81.7	7.7	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 20525 / 836.5 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
857.236	-59.95	0.00101	-93.05	33.1	HORIZONTAL	PASSED
879.689	-49.42	0.01143	-83.52	34.1	HORIZONTAL	PASSED
880.182	-49.4	0.01148	-83.5	34.1	HORIZONTAL	PASSED
1677.749	-76.2	2E-05	-81.7	5.5	HORIZONTAL	PASSED
2514.049	-69.76	0.00011	-81.76	12	HORIZONTAL	PASSED
3347.743	-74.86	3E-05	-82.56	7.7	HORIZONTAL	PASSED

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*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

5.13. LTE7 test results

Antenna1, Channel 21100 / 2535.0 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
2556.759	-61.25	0.00075	-73.65	12.4	HORIZONTAL	PASSED
2654.314	-42.67	0.05408	-55.77	13.1	HORIZONTAL	PASSED
5077.475	-57.64	0.00172	-71.94	14.3	HORIZONTAL	PASSED
7612.876	-55.64	0.00273	-77.94	22.3	HORIZONTAL	PASSED
10134.93	-52.35	0.00582	-77.95	25.6	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna1, Channel 21100 / 2535.0 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
2553.833	-61.22	0.00076	-73.62	12.4	HORIZONTAL	PASSED
2654.91	-42.6	0.05495	-55.7	13.1	HORIZONTAL	PASSED
5077.154	-57.64	0.00172	-71.94	14.3	HORIZONTAL	PASSED
7604.98	-56.13	0.00244	-78.53	22.4	HORIZONTAL	PASSED
10140.741	-52.31	0.00587	-77.91	25.6	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 21100 / 2535.0 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
2553.412	-61.23	0.00075	-73.63	12.4	HORIZONTAL	PASSED
2655.967	-45.44	0.02858	-58.44	13	HORIZONTAL	PASSED
5079.719	-58.21	0.00151	-72.51	14.3	HORIZONTAL	PASSED
7605.621	-55.61	0.00275	-78.01	22.4	HORIZONTAL	PASSED
10130.441	-52.38	0.00578	-77.98	25.6	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 21100 / 2535.0 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
2555.155	-61.53	0.0007	-73.93	12.4	HORIZONTAL	PASSED
2655.366	-45.42	0.02871	-58.52	13.1	HORIZONTAL	PASSED
5072.064	-58.36	0.00146	-72.76	14.4	HORIZONTAL	PASSED
7607.585	-55.61	0.00275	-77.91	22.3	HORIZONTAL	PASSED
10145.752	-52.27	0.00593	-77.97	25.7	HORIZONTAL	PASSED

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*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

5.14. LTE12 test results

Antenna 1; Channel 23095 / 707.5 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1415.421	-69.64	0.00011	-73.94	4.3	VERTICAL	PASSED
2116.107	-72.75	5E-05	-81.75	9	VERTICAL	PASSED
2827.094	-66.7	0.00021	-81.7	15	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna 1; Channel 23095 / 707.5 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1415.381	-69.65	0.00011	-73.95	4.3	VERTICAL	PASSED
2113.422	-72.08	6E-05	-80.98	8.9	VERTICAL	PASSED
2823.527	-66.8	0.00021	-81.7	14.9	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 23095 / 707.5 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1415.581	-74.74	3E-05	-79.04	4.3	VERTICAL	PASSED
2115.706	-72.75	5E-05	-81.75	9	VERTICAL	PASSED
2825.01	-66.6	0.00022	-81	14.4	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 23095 / 707.5 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1415.461	-67.14	0.00019	-71.44	4.3	VERTICAL	PASSED
2113.262	-72.08	6E-05	-80.98	8.9	VERTICAL	PASSED
2825.05	-66.6	0.00022	-81	14.4	HORIZONTAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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5.15. LTE17 test results

Antenna 1; Channel 23790 / 710 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1420.381	-64.93	0.00032	-69.53	4.6	VERTICAL	PASSED
2138.076	-71.6	7E-05	-80.3	8.7	VERTICAL	PASSED
2830.04	-66.69	0.00021	-81.79	15.1	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna 1; Channel 23790 / 710 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1420.421	-72.38	6E-05	-76.58	4.2	HORIZONTAL	PASSED
2136.553	-72.27	6E-05	-80.97	8.7	VERTICAL	PASSED
2830.16	-66.69	0.00021	-81.69	15	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 23790 / 710 MHz
FDD, CBW 5MHz, QPSK, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1420.341	-69.7	0.00011	-74.3	4.6	VERTICAL	PASSED
2136.633	-72.27	6E-05	-80.97	8.7	VERTICAL	PASSED
2830	-65.23	0.0003	-80.33	15.1	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

Antenna2; Channel 23790 / 710 MHz
FDD, CBW 5MHz, 16QAM, 1 RB, RMS detector

Frequency [MHz]	P [dBm]	P [µW]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Results
1420.541	-74.47	4E-05	-79.07	4.6	VERTICAL	PASSED
2139.639	-72.63	5E-05	-81.03	8.4	HORIZONTAL	PASSED
2830	-65.93	0.00026	-81.03	15.1	VERTICAL	PASSED

*Substitution method could not be utilized as no emissions above noise floor were found during measurements.

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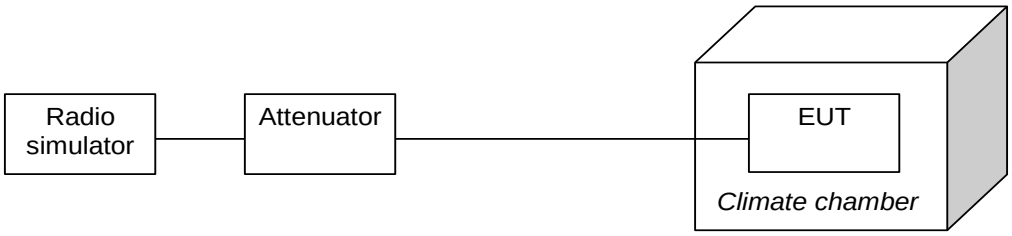
6. Frequency stability, temperature variation

(FCC §2.1055(a), §27.54, RSS-133 6.3, RSS-132 4.3, RSS-139 6.3, RSS-199 4.3, RSS-130 4.3, RSS-130 4.3 (a))

EUT with DUT number	RM-1128, DUT 500110
Accessories with DUT numbers	CC-3097, DUT 500128; SD-133, DUT 500120
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was in conducted RF2 system.
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21/59/100.5
Date of measurements	16-Jul-2015
Measured by	Dou Rubo

6.1. Test Setup



6.2. Test method and limit

The measurement is made according to applicable FCC rule parts and IC standards as follows:

The climate chamber temperature is set to the maximum value and the temperature is allowed to stabilize.
The EUT is placed in the chamber.
The EUT is set in idle mode for 15 minutes.
The EUT is set to transmit.
The transmit frequency error was measured immediately.
The steps c - e were repeated for each temperature.Limits for frequency stability, temperature variation measurements

Frequency deviation [ppm]
+\- 2.5

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6.3. GSM 1900 Test results

GSM, Channel 661 / 1880.0 MHz

Temperature [ºC]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
50	1880.00	-7.17000	-0.0038	PASSED
40	1880.00	-7.30000	-0.0039	PASSED
30	1880.00	5.04000	0.0027	PASSED
20	1880.00	-7.36000	-0.0039	PASSED
10	1880.00	-0.65000	-0.0003	PASSED
0	1880.00	2.65000	0.0014	PASSED
-10	1880.00	4.20000	0.0022	PASSED
-20	1880.00	12.66000	0.0067	PASSED
-30	1880.00	14.66000	0.0078	PASSED

6.4. GSM 850 Test results

GSM, Channel 190 / 836.6 MHz

Temperature [ºC]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
50	836.60	1.03000	0.0012	PASSED
40	836.60	2.26000	0.0027	PASSED
30	836.60	-0.58000	-0.0007	PASSED
20	836.60	-0.58000	-0.0007	PASSED
10	836.60	0.52000	0.0006	PASSED
0	836.60	4.58000	0.0055	PASSED
-11	836.60	5.68000	0.0068	PASSED
-20	836.60	6.78000	0.0081	PASSED
-30	836.60	12.14000	0.0145	PASSED

6.5. WCDMA4 Test results

FDD, Channel 1412 / 1732.4 MHz

Temperature [ºC]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
50	1732.40	-1.44959	-0.0008	PASSED
40	1732.40	-2.85339	-0.0016	PASSED
30	1732.40	-2.48718	-0.0014	PASSED
20	1732.40	-4.66919	-0.0027	PASSED
10	1732.40	-5.37109	-0.0031	PASSED
0	1732.40	-1.69373	-0.001	PASSED
-10	1732.40	-0.96130	-0.0006	PASSED
-20	1732.40	1.90735	0.0011	PASSED
-30	1732.40	3.12805	0.0018	PASSED

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6.6. LTE7 Test results

FDD, CBW 20MHz, QPSK, 100 RB, Channel 21100 / 2535.0 MHz

Temperature [ºC]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
50	2535.00	-0.48637	-0.0002	PASSED
40	2535.00	1.97411	0.0008	PASSED
30	2535.00	0.51498	0.0002	PASSED
20	2535.00	1.61648	0.0006	PASSED
10	2535.00	0.04292	0	PASSED
0	2535.00	0.97275	0.0004	PASSED
-10	2535.00	0.30041	0.0001	PASSED
-20	2535.00	0.97275	0.0004	PASSED
-30	2535.00	-1.00000	-0.0004	PASSED

6.7. LTE12 Test results

FDD, CBW 10MHz, QPSK, 50 RB, Channel 23095 / 707.5 MHz

Temperature [ºC]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
50	707.50	-0.82970	-0.0012	PASSED
40	707.50	-0.74387	-0.001	PASSED
30	707.50	-0.37193	-0.0005	PASSED
20	707.50	-0.64373	-0.0009	PASSED
10	707.50	-0.95844	-0.0014	PASSED
0	707.50	-0.10014	-0.0001	PASSED
-10	707.50	-0.10014	-0.0001	PASSED
-20	707.50	-1.40190	-0.002	PASSED
-30	707.50	1.15871	0.0016	PASSED

6.8. LTE17 Test results

FDD, CBW 10MHz, QPSK, 50 RB, Channel 23790 / 710.0 MHz

Temperature [ºC]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
50	710.00	-0.25749	-0.0004	PASSED
40	710.00	-0.74387	-0.001	PASSED
30	710.00	-0.61512	-0.0009	PASSED
20	710.00	-0.42915	-0.0006	PASSED
10	710.00	0.24319	0.0003	PASSED
0	710.00	-0.25749	-0.0004	PASSED
-10	710.00	0.77248	0.0011	PASSED
-20	710.00	0.45776	0.0006	PASSED
-30	710.00	0.84400	0.0012	PASSED

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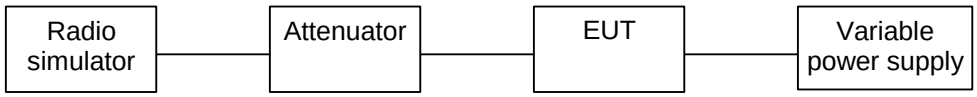
7. Frequency stability, voltage variation

(FCC §2.1055(d), §27.54, RSS-133 6.3, RSS-132 4.3, RSS-139 6.3, RSS-199 4.3, RSS-130 4.3, RSS-130 4.3 (a))

EUT with DUT number	RM-1128, DUT 500110
Accessories with DUT numbers	CC-3097, DUT 500128; SD-133, DUT 500120
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was in conducted RF2 system.
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	23/50/100.1
Date of measurements	21-Jul-2015
Measured by	Dou Rubo

7.1. Test Setup



7.2. Test method and limit

The measurement is made according to applicable FCC rule parts and IC standards as follows:

The EUT battery was replaced with an adjustable power supply. The frequency stability was measured at nominal voltage and at the battery cut-off point.

Limits for frequency stability, voltage variation measurements

Frequency deviation [ppm]
+\- 2.5

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7.3. GSM 1900 Test results

GSM, Channel 661 / 1880.0 MHz

Voltage level [V]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
Max / 4.2	1880.00	-7.49000	-0.004	PASSED
Battery cut-off point / 3.4	1880.00	-2.39000	-0.0013	PASSED
Nominal / 3.7	1880.00	-6.65000	-0.0035	PASSED

7.4. GSM 850 Test results

GSM, Channel 190 / 836.6 MHz

Voltage level [V]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
Max / 4.2	836.60	-2.32000	-0.0028	PASSED
Battery cut-off point / 3.4	836.60	-1.16000	-0.0014	PASSED
Nominal / 3.7	836.60	0.90000	0.0011	PASSED

7.5. WCDMA4 Test results

FDD, Channel 1412 / 1732.4 MHz

Voltage level [V]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
Max / 4.2	1732.40	-4.04358	-0.0023	PASSED
Battery cut-off point / 3.4	1732.40	-3.96729	-0.0023	PASSED
Nominal / 3.7	1732.40	-6.62231	-0.0038	PASSED

7.6. LTE7 Test results

FDD, CBW 20MHz, QPSK, 100 RB, Channel 21100 / 2535.0 MHz

Voltage level [V]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
Max / 4.2	2535.00	0.30041	0.0001	PASSED
Battery cut-off point / 3.4	2535.00	-0.87261	-0.0003	PASSED
Nominal / 3.7	2535.00	0.51498	0.0002	PASSED

7.7. LTE12 Test results

FDD, CBW 10MHz, QPSK, 50 RB, Channel 23095 / 707.5 MHz

Voltage level [V]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
Max / 4.2	707.50	-1.95980	-0.0028	PASSED
Battery cut-off point / 3.4	707.50	-0.40054	-0.0006	PASSED
Nominal / 3.7	707.50	-0.42915	-0.0006	PASSED

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7.8. LTE17 Test results

FDD, CBW 10MHz, QPSK, 50 RB, Channel 23790 / 710.0 MHz

Voltage level [V]	Frequency [MHz]	Deviation [Hz]	Deviation [ppm]	Result
Max / 4.2	710.00	-0.14305	-0.0002	PASSED
Battery cut-off point / 3.4	710.00	-1.18733	-0.0017	PASSED
Nominal / 3.7	710.00	0.01431	0	PASSED

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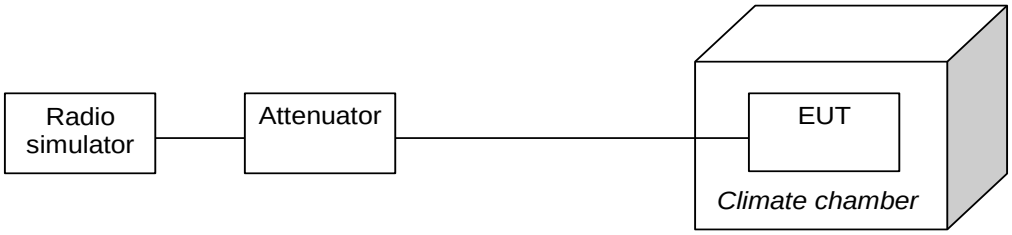
8. Frequency stability, temperature variation, (Band edge method)

(RSS-139 6.3, RSS-199 4.3, RSS-130 4.3, RSS-130 4.3 (a))

EUT with DUT number	RM-1128, DUT 500110
Accessories with DUT numbers	CC-3097, DUT 500128; SD-133, DUT 500120
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was in conducted RF2 system.
Temp [ºC] / Humidity [%RH] / Air Pressure [kPa]	21/59/100.5
Date of measurements	16-Jul-2015
Measured by	Dou Rubo

8.1. Test Setup



8.2. Test method and limit

The measurement is made according to applicable FCC rule parts and IC standards as follows:

The climate chamber temperature is set to the maximum value and the temperature is allowed to stabilize.
The EUT is placed in the chamber.
The EUT is set in idle mode for 15 minutes.
The EUT is set to transmit.
The transmit frequency error was measured immediately.
The steps c - e were repeated for each temperature.
The results were then calculated as per section 4.3 of RSS-130.

Limits for frequency stability, temperature variation measurements

Limit
The results must be within the operating band.

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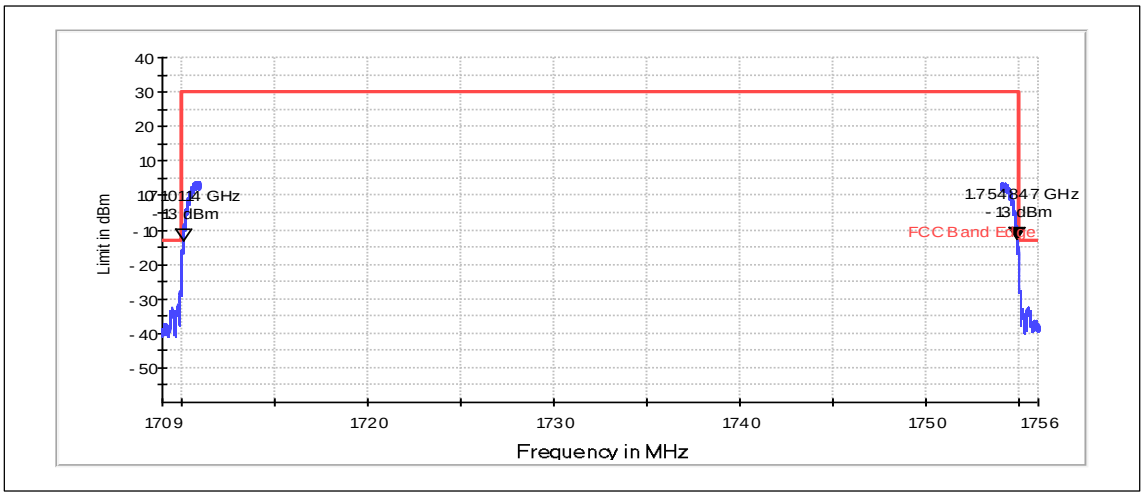
8.3. WCDMA4 Test results

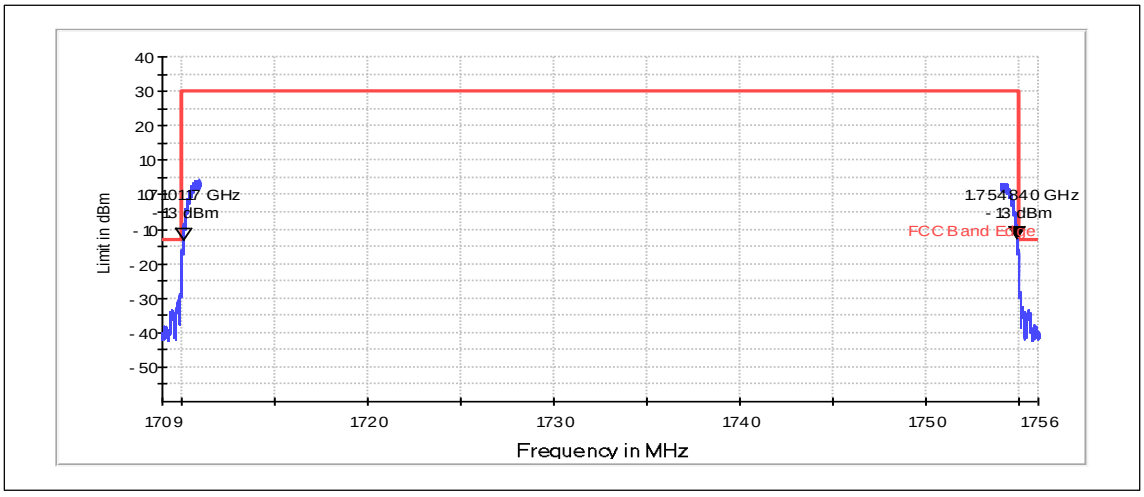
Channel 1412 / 1732.4 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
50	14.11438	1710.113988	1710.113974	1754.847415	1754.847429	PASSED

Channel 1412 / 1732.4 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
20	15.38086	1710.117188	1710.117172	1754.840216	1754.840231	PASSED

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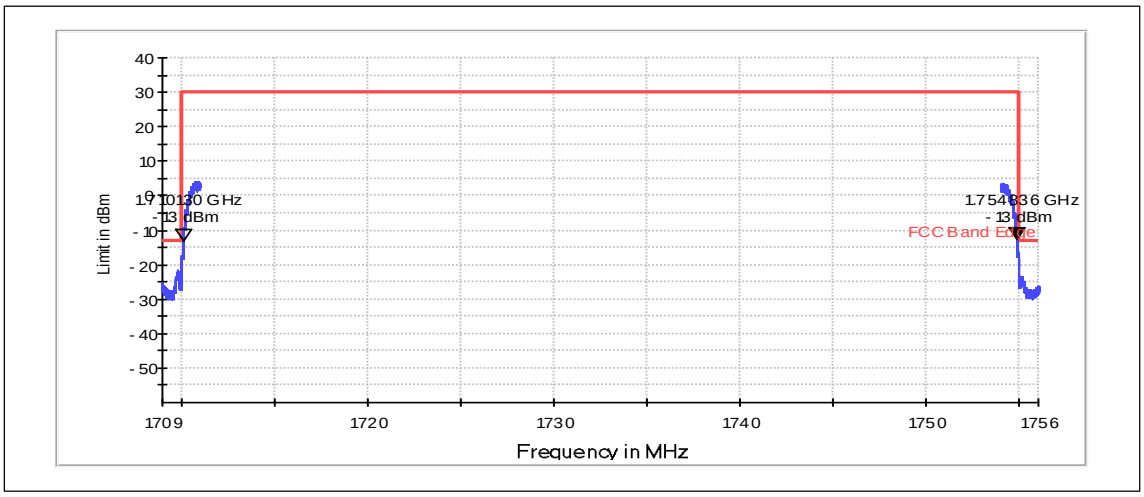
Channel 1412 / 1732.4 MHz



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
-30	-1.78528	1710.130387	1710.130385	1754.836416	1754.836418	PASSED

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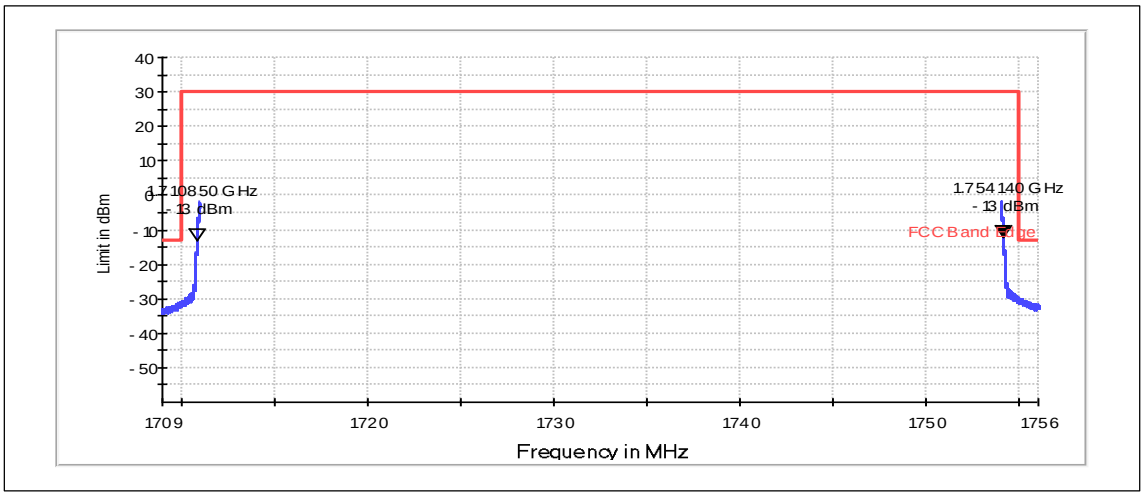
8.4. LTE4 Test results

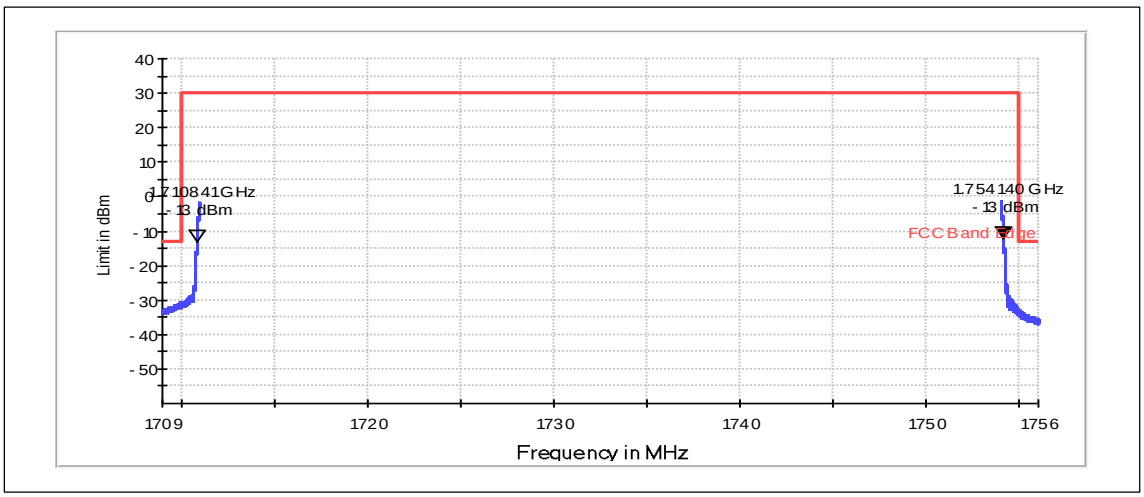
Channel 20175 / 1732.5 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
50	0.71526	1710.849715	1710.849714	1754.140086	1754.140086	PASSED

Channel 20175 / 1732.5 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
20	0.47207	1710.841315	1710.841315	1754.139886	1754.139886	PASSED

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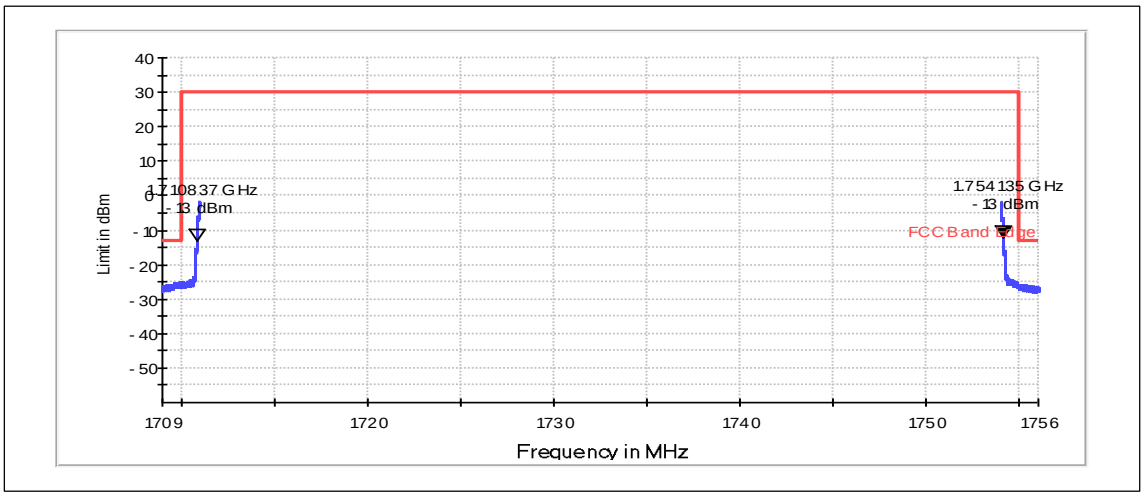
Channel 20175 / 1732.5 MHz

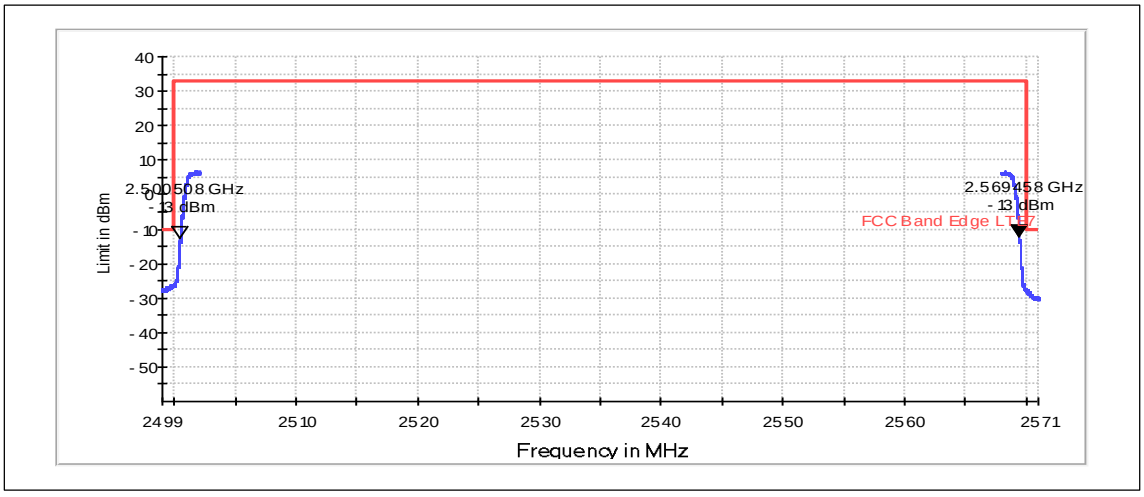


RMS (RBW: 500 kHz, VBW: 2 MHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
-30	1.43051	1710.836916	1710.836914	1754.135286	1754.135287	PASSED

8.5. LTE7 Test results

Channel 21100 / 2535.0 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
50	2.87533	2500.508399	2500.508396	2569.458004	2569.458007	PASSED

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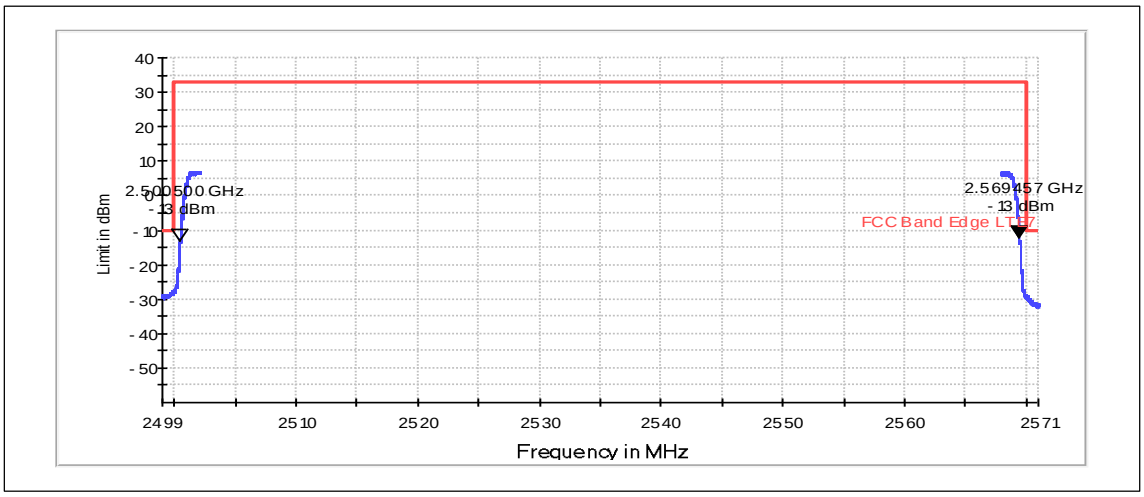
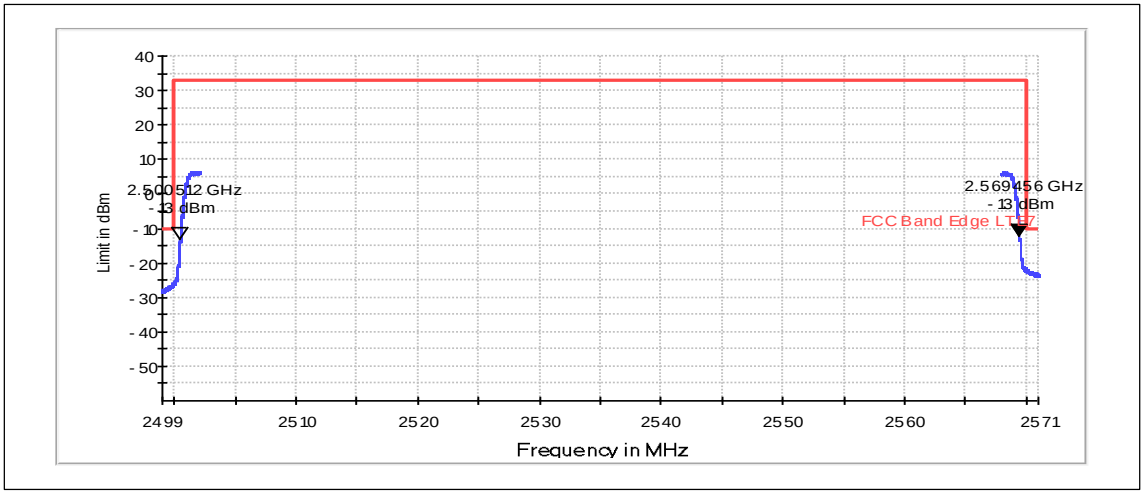
Channel 21100 / 2535.0 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
20	1.98841	2500.500000	2500.499998	2569.457404	2569.457406	PASSED

Channel 21100 / 2535.0 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
-30	4.94957	2500.512298	2500.512293	2569.455904	2569.455909	PASSED

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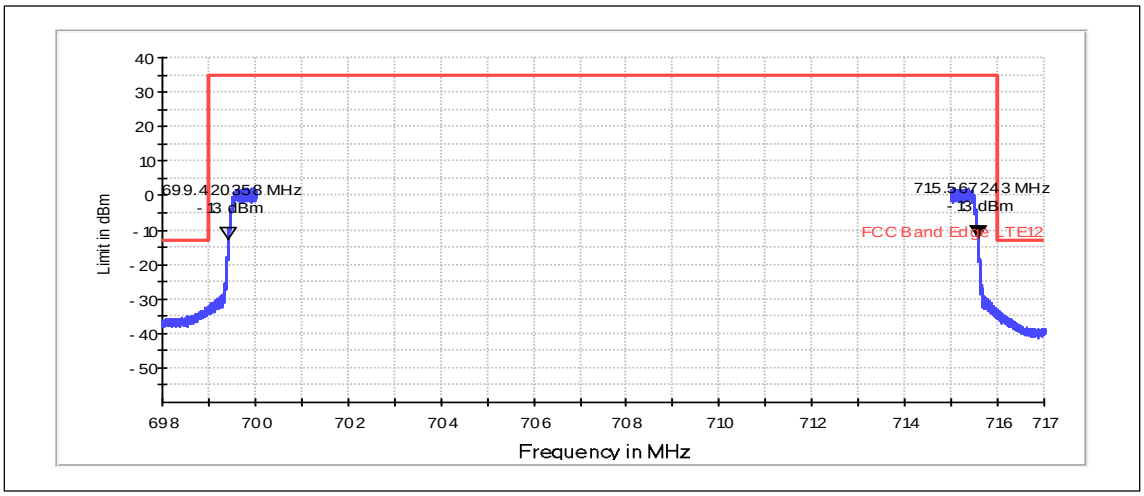
8.6. LTE12 Test results

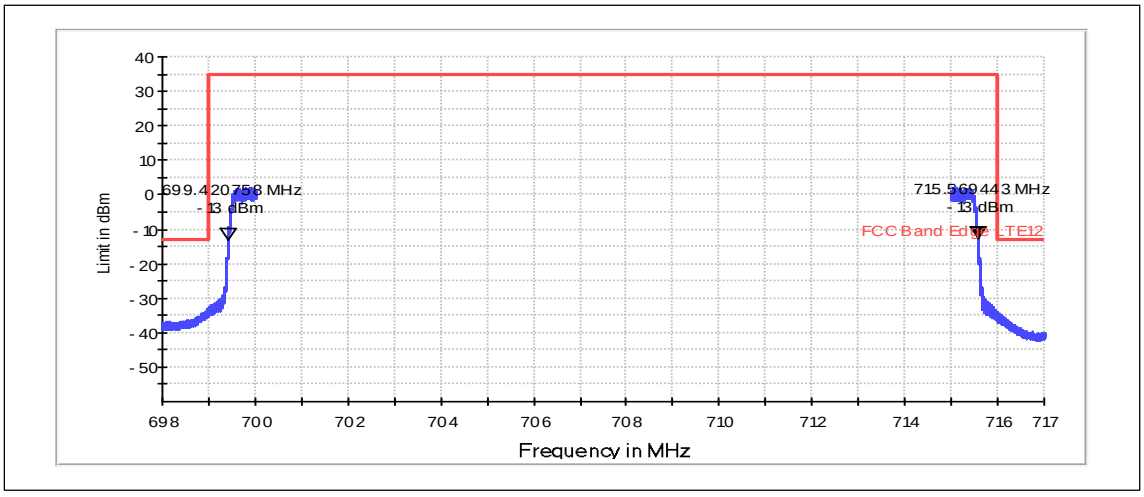
Channel 23095 / 707.5 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
50	-0.04292	699.420358	699.420357	715.567243	715.567243	PASSED

Channel 23095 / 707.5 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
20	-0.75817	699.420757	699.420757	715.569443	715.569443	PASSED

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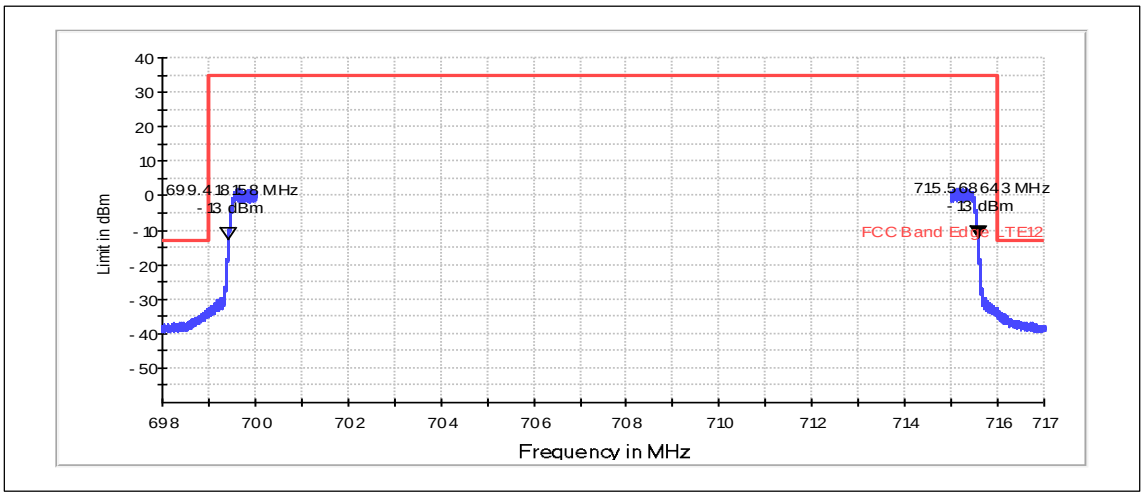
Channel 23095 / 707.5 MHz

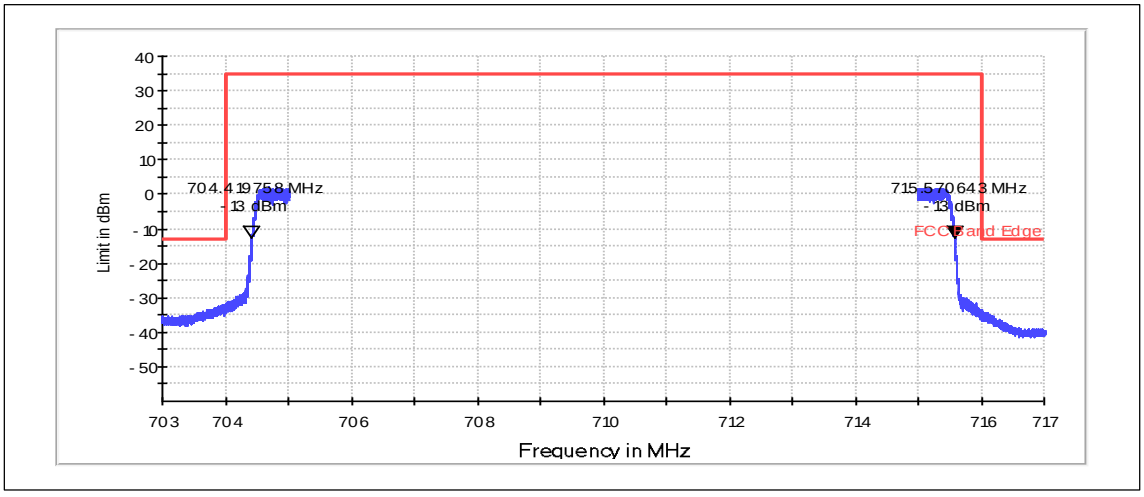


RMS (RBW: 100 kHz, VBW: 300 kHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
-30	0.71526	699.418158	699.418157	715.568643	715.568643	PASSED

8.7. LTE17 Test results

Channel 23790 / 710.0 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
50	-1.20163	704.419758	704.419756	715.570642	715.570644	PASSED

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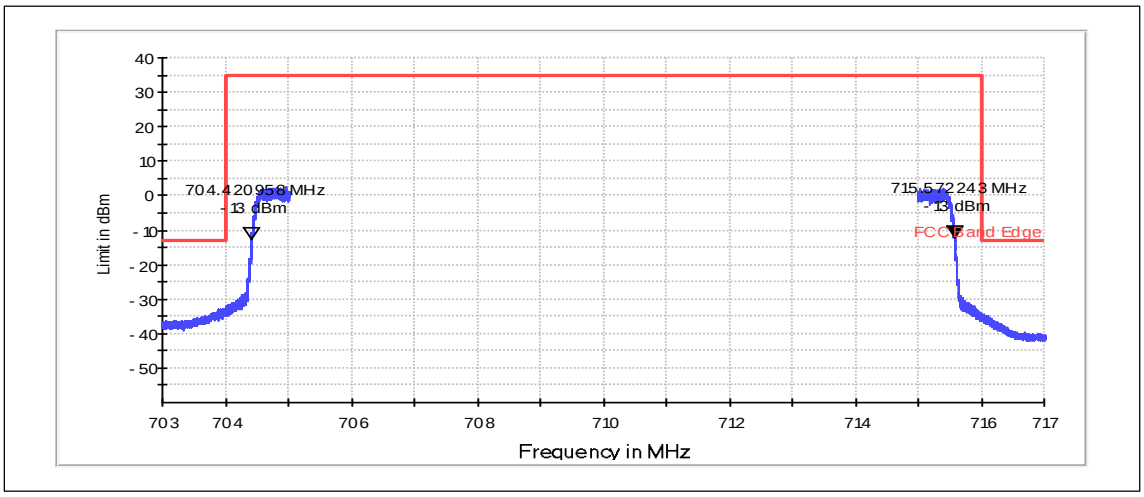
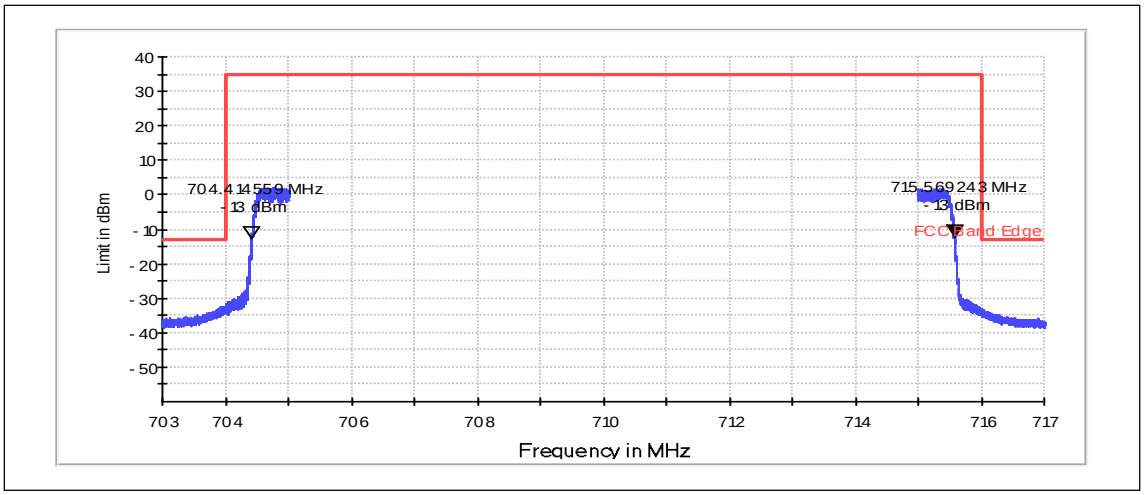
SChannel 23790 / 710.0 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
20	-0.12875	704.420957	704.420957	715.572242	715.572242	PASSED

Channel 23790 / 710.0 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Temperature [ºC]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
-30	-0.04292	704.414558	704.414558	715.569243	715.569243	PASSED

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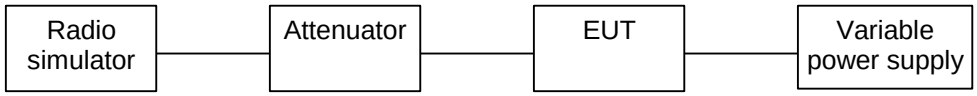
9. Frequency stability, voltage variation, (Band edge method)
(RSS-139 6.3)

EUT with DUT number	RM-1128, DUT 500110
Accessories with DUT numbers	CC-3097, DUT 500128; SD-133, DUT 500120
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	Test was in conducted RF2 system.
Temp [ºC] / Humidity [%RH] / Air Pressure [kPa]	23/50/100.1
Date of measurements	21-Jul-2015
Measured by	Dou Rubo

9.1. Test Setup



9.2. Test method and limit

The measurement is made according to applicable FCC rule parts and IC standards as follows:

The EUT battery was replaced with an adjustable power supply. The frequency stability was measured at nominal voltage and at the battery cut-off point.
The results were then calculated as per section 4.3 of RSS-130.

Limits for frequency stability, voltage variation measurements

Limit
The results must be within the operating band.

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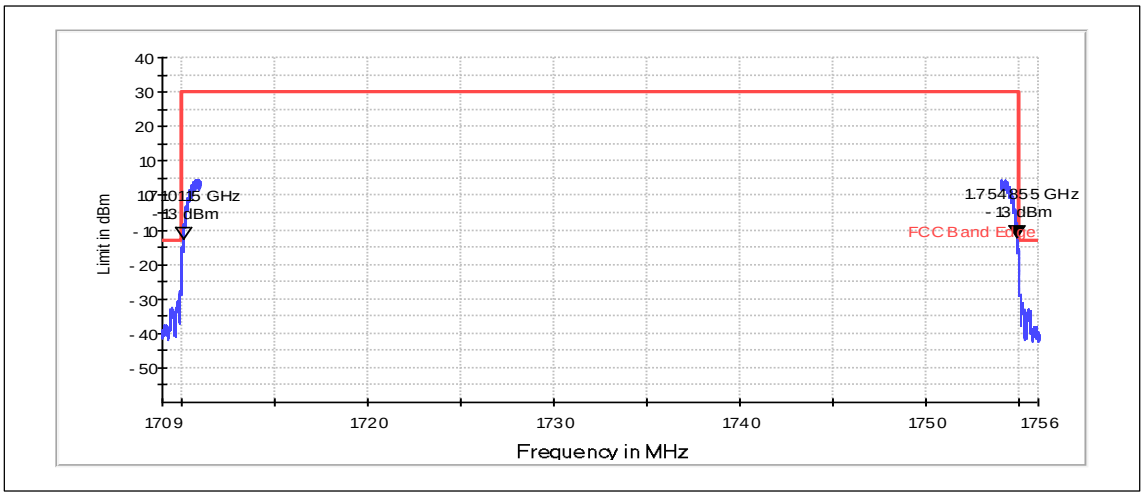
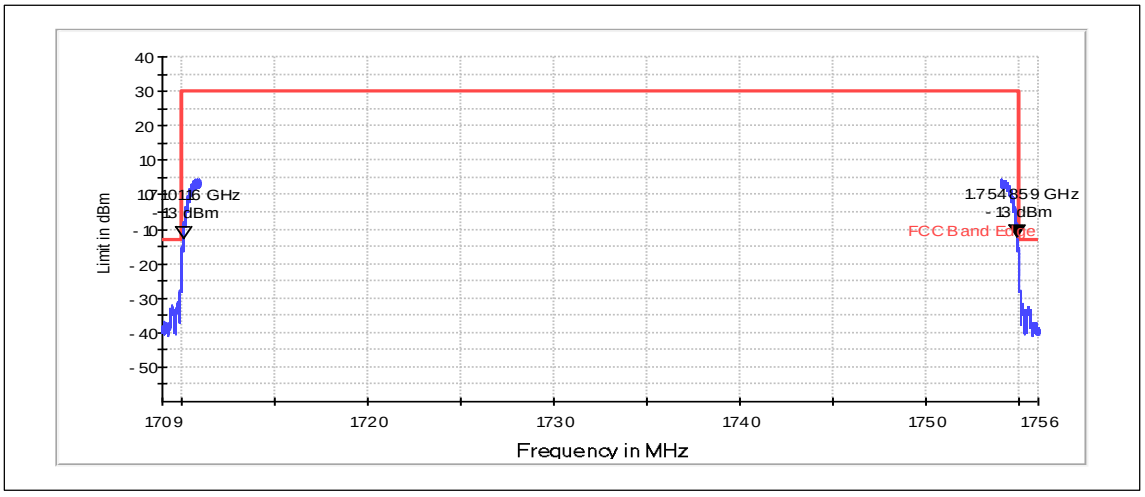
9.3. WCDMA4 Test results



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Max / 4.2	-3.60107	1710.114588	1710.114584	1754.855414	1754.855418	PASSED



RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Battery cut-off point / 3.4	12.72583	1710.115988	1710.115975	1754.858614	1754.858626	PASSED

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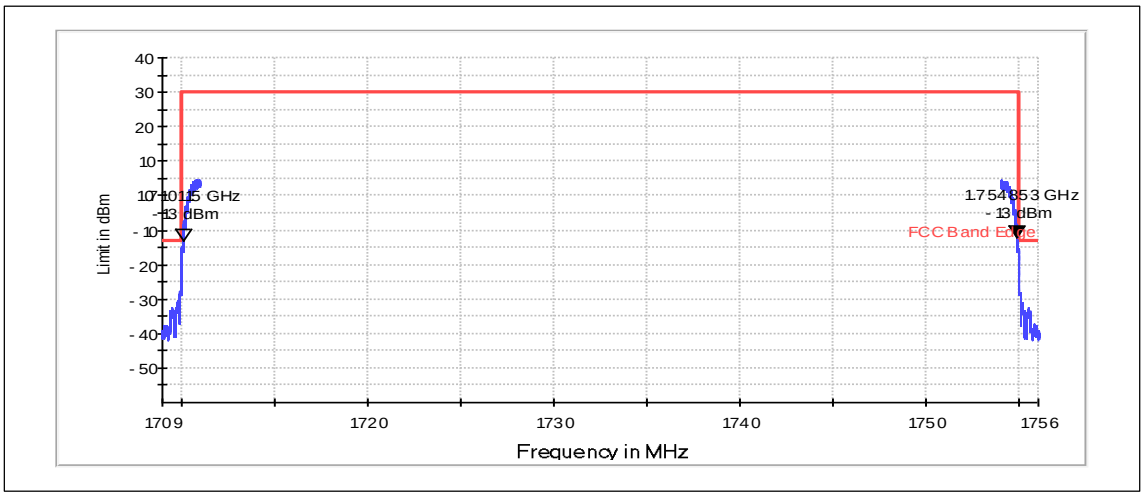

RMS (RBW: 50 kHz, VBW: 50 kHz, Max hold)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Nominal / 3.7	9.36890	1710.114788	1710.114779	1754.853414	1754.853424	PASSED

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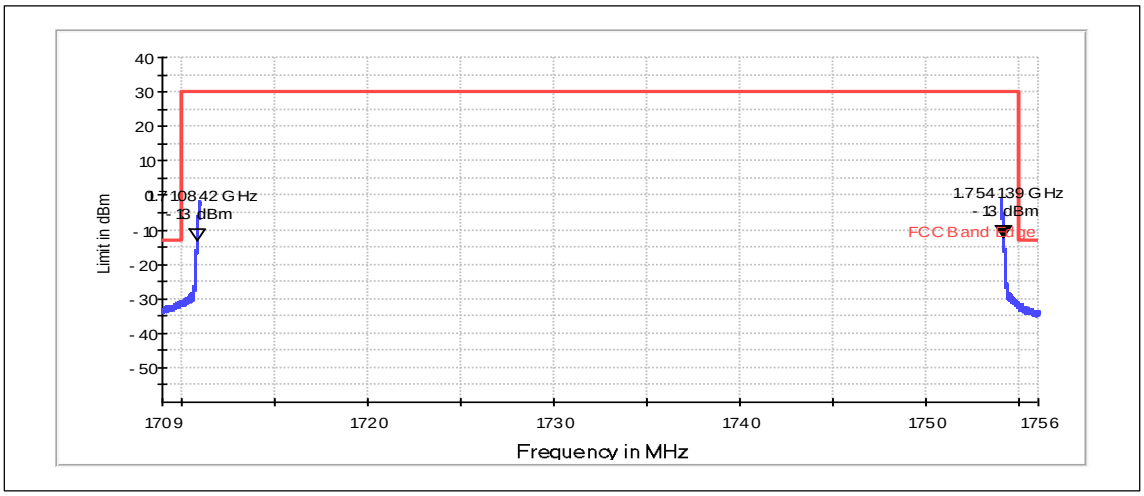
9.4. LTE4 Test results

Channel 20175 / 1732.5 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Max / 4.2	1.54495	1710.841515	1710.841514	1754.139086	1754.139087	PASSED

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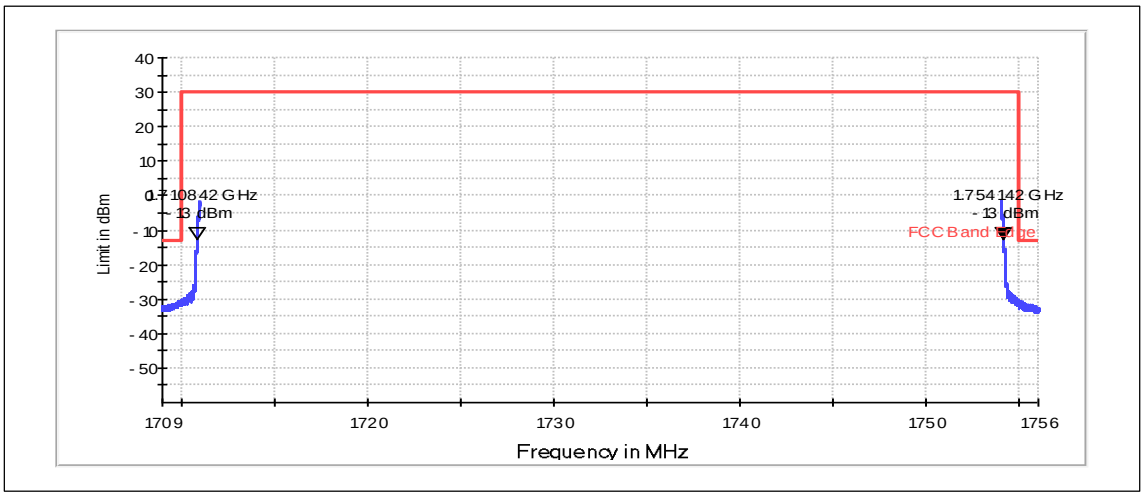
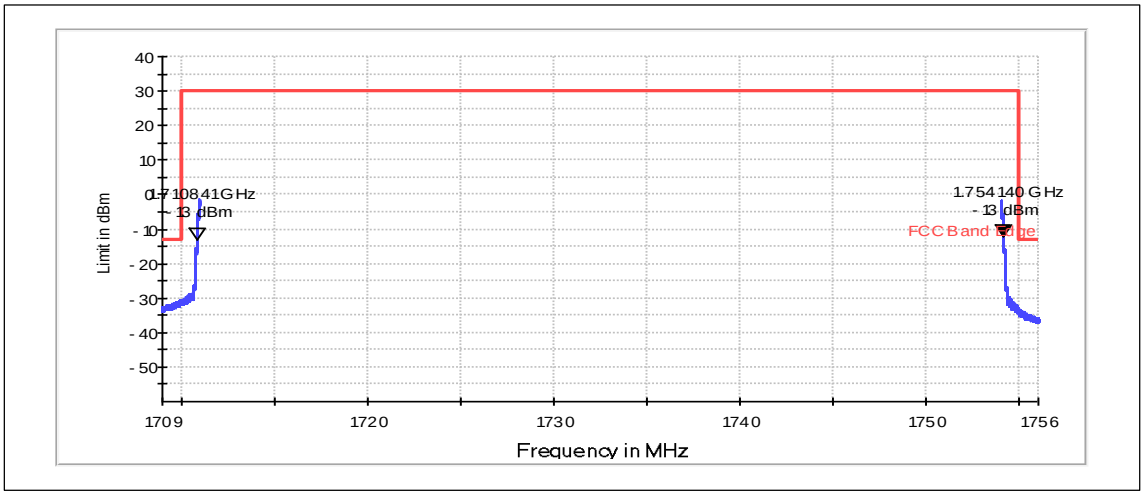
Channel 20175 / 1732.5 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Battery cut-off point / 3.4	0.10014	1710.841515	1710.841515	1754.142285	1754.142285	PASSED

Channel 20175 / 1732.5 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Nominal / 3.7	999.00000	1710.840515	1710.839516	1754.139686	1754.140685	PASSED

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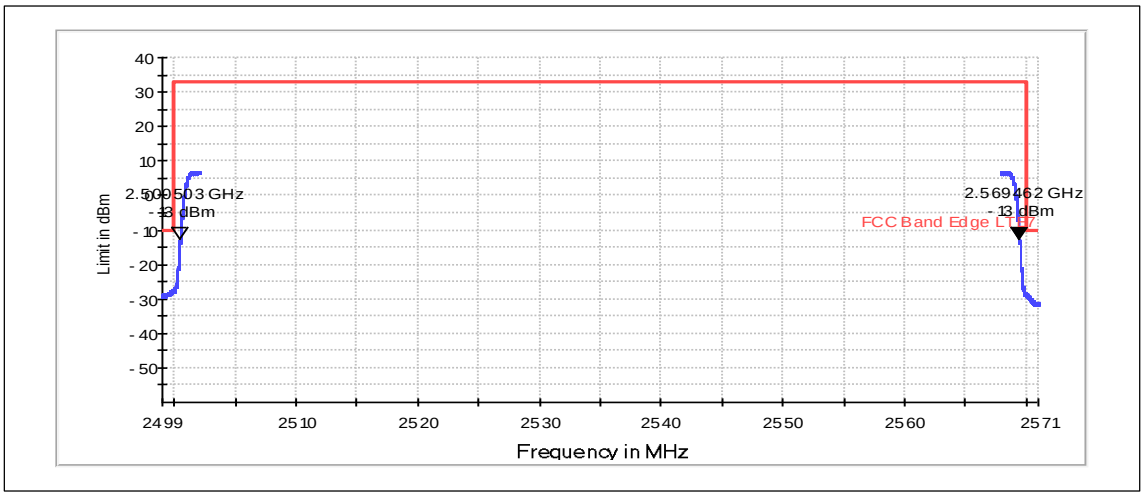
9.5. LTE7 Test results

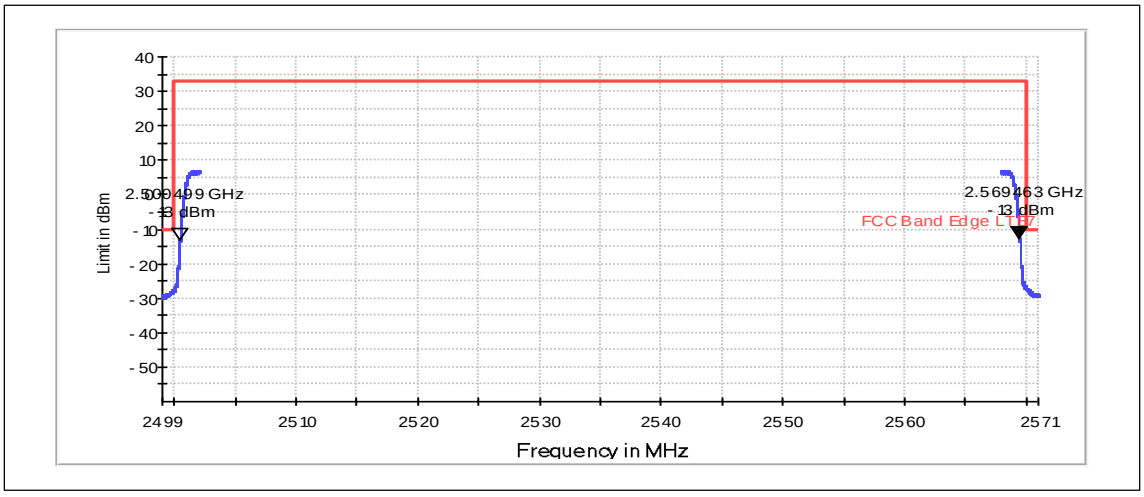
Channel 21100 / 2535.0 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Max / 4.2	1.60217	2500.503299	2500.503298	2569.462203	2569.462205	PASSED

Channel 21100 / 2535.0 MHz



RMS (RBW: 500 kHz, VBW: 2 MHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Battery cut-off point / 3.4	3.01838	2500.498500	2500.498497	2569.463103	2569.463106	PASSED

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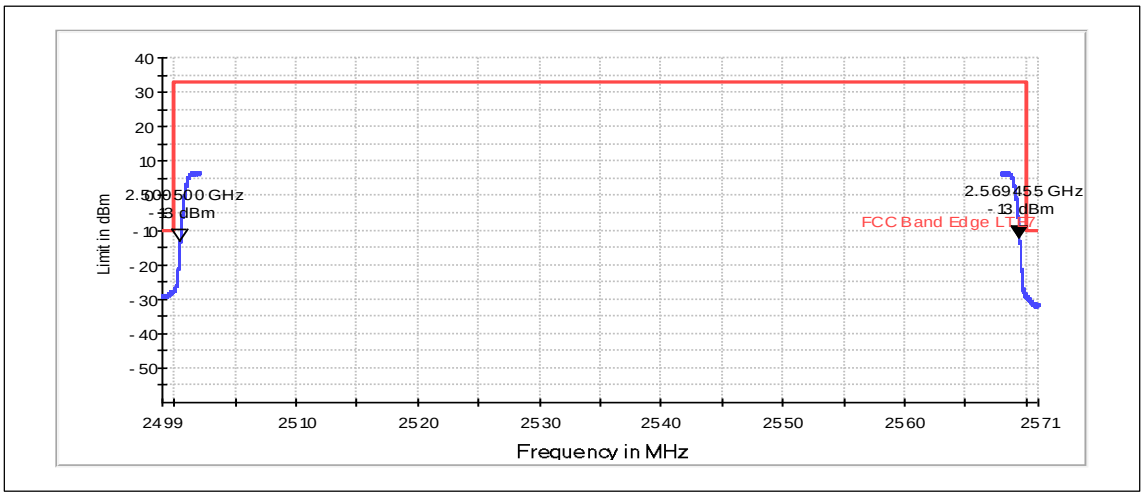
Channel 21100 / 2535.0 MHz

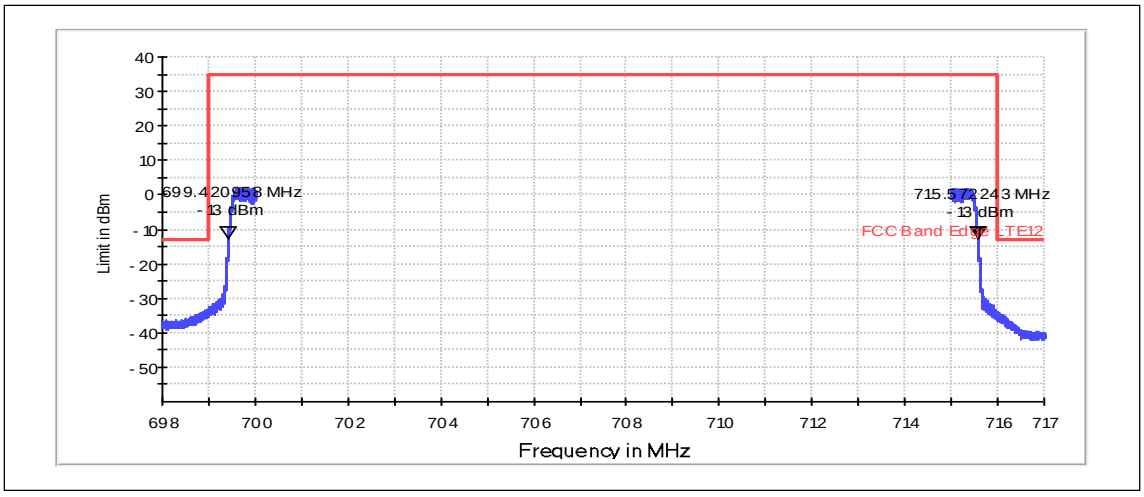


RMS (RBW: 500 kHz, VBW: 2 MHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Nominal / 3.7	-0.21458	2500.500300	2500.500299	2569.455304	2569.455304	PASSED

9.6. LTE12 Test results

Channel 23095 / 707.5 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Max / 4.2	-0.05722	699.420957	699.420957	715.572242	715.572242	PASSED

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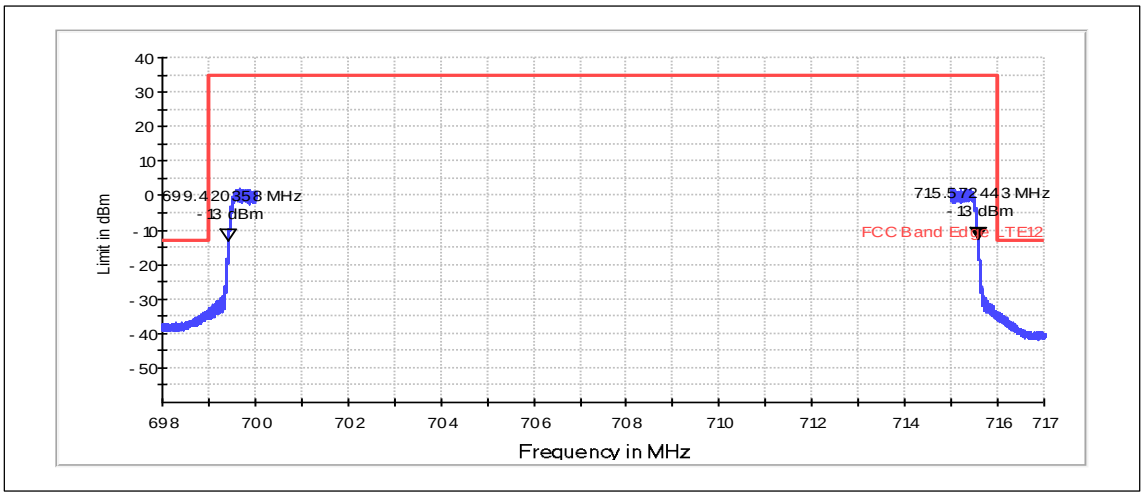
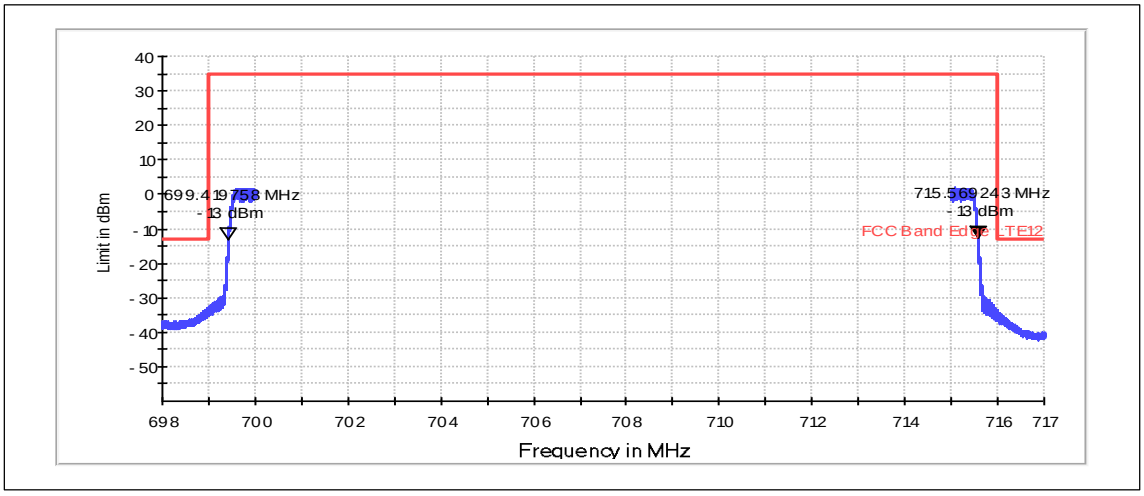
Channel 23095 / 707.5 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Battery cut-off point / 3.4	-0.21458	699.420358	699.420357	715.572442	715.572443	PASSED

Channel 23095 / 707.5 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Nominal / 3.7	-0.82970	699.419758	699.419757	715.569243	715.569243	PASSED

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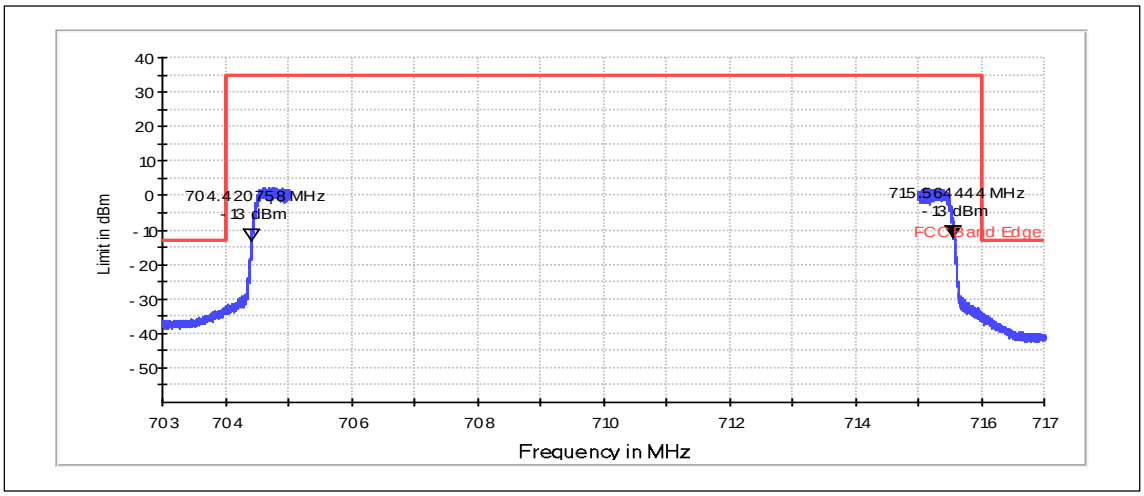
9.7. LTE17 Test results

Channel 23790 / 710.0 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Max / 4.2	-0.90122	704.420757	704.420756	715.564443	715.564444	PASSED

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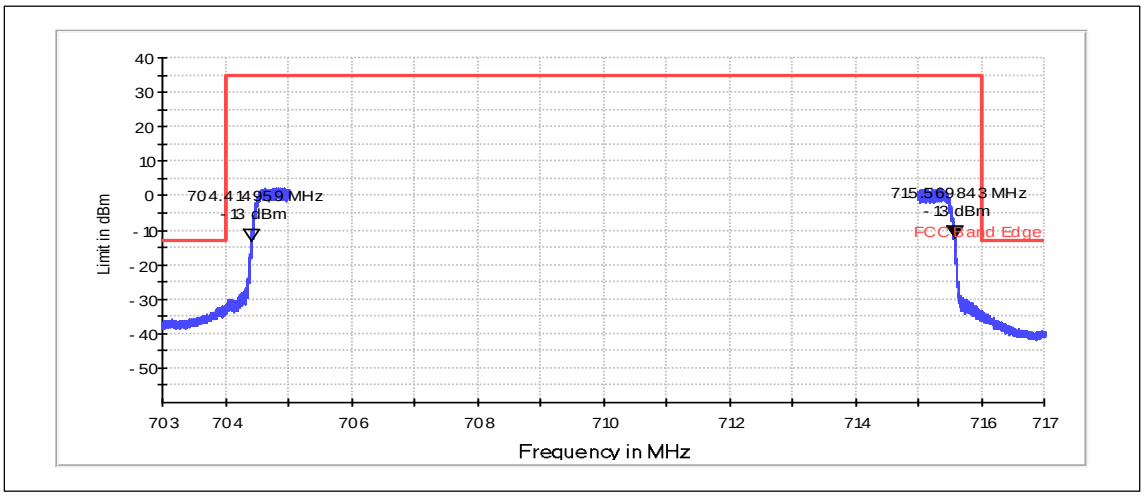
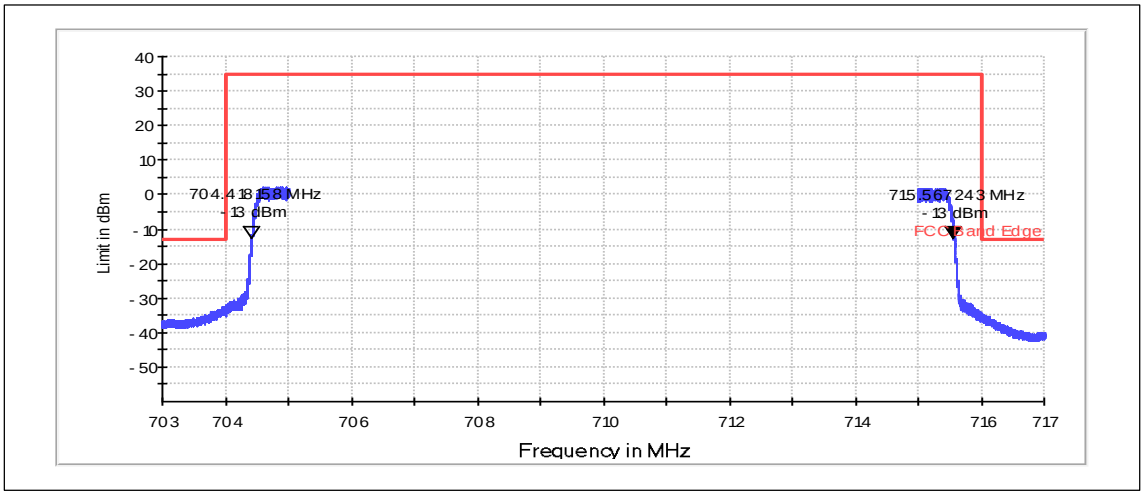
Channel 23790 / 710.0 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Battery cut-off point / 3.4	-0.72956	704.414958	704.414957	715.569843	715.569843	PASSED

Channel 23790 / 710.0 MHz



RMS (RBW: 100 kHz, VBW: 300 kHz)

Voltage level [V]	Deviation [Hz]	Low marker [MHz]	Marker – Dev [MHz]	High marker [MHz]	Marker + Dev [MHz]	Result
Nominal / 3.7	-0.21458	704.418158	704.418157	715.567243	715.567243	PASSED

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10. Test Equipment

10.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	RF Emission Software	EMC32 Test Software	R&S	22/24/27, 15C, 15B
BJPCHW0020	DC Power supply	Hp6632B	HP	22/24/27, 15C
BJPCPT0040	Receiver	ESCS30	R&S	15C,15B
BJPCPT0069	LISN 50 µH	ESH3-Z5	R&S	15C,15B
BJPCTC0323	Signal Generator	SMR 27	R&S	22/24/27, 15C, 15B
BJPCPT0073	Signal Generator	SMR 20	R&S	22/24/27, 15C, 15B
BJPCPT0191	Pulse Limiter	ESH3-Z2	R&S	15C,15B
BJPCPT0208	UPS	PULSAR RX10	Merlin gerin	15C.15B
BJPCTC0001	DIGITAL CAMERA	PC1015	CANON	15C.15R
BJPCTC0017	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
BJPCTC0062	AC Power source	6812B	Hp	15C.15B
BJPCTC0067	Bluetooth Tester	CBT	R&S	22/24/27, 15C
BJPCTC0082	Humidity and Temperature Sensor	175-H2	Testo	15B,15C
BJPCTC0088	Absolut pressure meter	testo 511	Testo	22/24/27, 15B,15C
BJPCTC0089	Tempreture Test chamber	VT4002	Votsch industrietechnik	22/24/27, 15C
BJPCTC0090	FSP spectrum analyzer	FSP30	R&S	22/24/27, 15C
BJPCTC0094	GPIB-RS232 convertor	GPIB-RS232	NI	22/24/27, 15C
BJPCTC0112	Power Splitter	11667B	Agilent	22/24/27, 15C
BJPCTC0127	AC Power source	SOYI-500VA	SOYI	15B 15C
BJPCTC0128	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0129	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0131	Communication tester	CMW500	R&S	22/24/27 15B 15C
BJPCTC0136	Communication antenna	JXTXLB-880-NF	A-INFOMW	15B 15C
BJPCTC0306	Power Splitter	11667B	Agilent	22/24/27, 15C
BJPCTC0305	GPIB converter	GPIB-RS232	NI	22/24/27, 15C
BJPCTC0304	Spectrum Analyser	FSV30	R&S	22/24/27, 15C
BJPCTC0309	GPIB-RS232 convertor	RS232	NI	22/24/27, 15C
BJPCTC0307	Dual channel battery/charger simulator	2306	KEITHLEY	22/24/27, 15C
BJPCTC0308	Dual channel battery/charger simulator	2306	KEITHLEY	22/24/27, 15C
BJPCTC0352	Signal Generator 20GHz	MG3692B	Anritsu	22/24/27, 15C
BJBDATC0169	Tempreture Test chamber	VT4002	Votsch	22/24/27, 15C
BJPCTC0334	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
BJPCTC0342	Communication Tester	CMU200	R&S	15B, 15C
BJPCTC0343	Power Spliter	1167A	Agilent	EN300328
BJPCTC0344	Power Spliter	1167A	Agilent	EN300328
BJPCTC0345	Power Spliter	1167A	Agilent	EN300328
BJPCTC0346	Attenuator	8496A	Agilent	EN300328
BJPCTC0347	Directional Coupler	4226-20	Narda	EN300328
BJPCTC0348	Signal generator	E4438C	Agilent	EN300328
BJPCTC0336	Signal Generator	SMP22	R&S	22/24/27, 15C
BJPCTC0357	Signal Generator	SMB100A	R&S	-

10.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	RF Emission Software	EMC32 Test Software	R&S	22/24/27, 15C, 15B
BJPCPT0072	Receiver	ESIB26	R&S	22/24/27, 15C, 15B

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Eq. No	Equipment	Type	Manufacturer	Used in
BJPCPT0150	High Pass Filter	WHKS1200-10SS	Wainwright	22/24/27, 15C, 15B
BJPCPT0151	Band Reject Filter	WRCD1880/2000-0.2/40-5SSK	Wainwright	24, 15B
BJPCPT0154	Band Reject Filter	WRCT2402/2480-2400/2483.5-30-20SS	Wainwright	15C, 15B
BJPCPT0166	Antenna	VUBA 9117	Swarzbeck	22/24/27
BJPCPT0208	UPS	PULSAR RX10	Merlin gerin	15C.15B
BJPCTC0001	DIGITAL CAMERA	PC1015	CANON	15C.15R
BJPCTC0007	Antenna	HL562	R&S	22/24/27, 15C, 15B
BJPCTC0029	Antenna	HF906	R&S	22/24/27, 15C, 15B
BJPCTC0034	Band Reject Filter	WRCT 800/880-0.2/40-5SSK	Wainwright	22, 15B
BJPCTC0049	Preamplifier	Blma 0118-1A-Bt	Bonn	22/24/27, 15C, 15B
BJPCTC0055	Communication Tester	CMU200	R&S	22/24/27,15C,15B
BJPCTC0058	Bluetooth Tester	CBT	R&S	15C, 15B
BJPCTC0062	AC Power source	6812B	Hp	15C.15B
BJPCTC0064	Band Reject Filter	WRCG1877/1883-1870/1890-40/6SS	Wainwright	24, 15B
BJPCTC0071	Multi-Device Controller	2090	EMCO	22/24/27, 15C, 15B
BJPCTC0072	Anechoic Chamber	3 m Semi / Full Anechoic Chamber	ETS	22/24/27, 15C, 15B
BJPCTC0073	MAST	Model-TR/POL	ETS	22/24/27, 15C, 15B
BJPCTC0074	MAST	Model 2070-2	ETS	22/24/27, 15C, 15B
BJPCTC0075	Turntable	Model 2188	ETS-EMCO	22/24/27, 15C, 15B
BJPCTC0081	Humidity and Temperature Sensor	175-H2	Testo	15B, 15C
BJPCTC0088	Absolut pressure meter	testo 511	Testo	22/24/27, 15B,15C
BJPCTC0124	Attenuator	SA18N200W-40	Fairview Microwave	-
BJPCTC0125	Loop Antenna	HFH2-Z2	R&S	15C
BJPCTC0126	Tripod	FHU-Z	R&S	15C
BJPCTC0128	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0129	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0131	Communication tester	CMW500	R&S	22/24/27 15B 15C
BJPCTC0133	Open Swith and contril unit	OSP 150	R&S	15B,15C
BJPCTC0134	Open Swith and contril unit	OSP 150	R&S	15B,15C
BJPCTC0135	Open Swith and contril unit	OSP 130	R&S	15B,15C
BJPCTC0136	Communication antenna	JXTXLB-880-NF	A-INFOMW	15B 15C
BJPCTC0171	Broad-band Horn Antenna	BBHA9120 D	SCHWARZBECK MESS - ELEKTRONIK	22/24/27, 15C, 15B
BJPCTC0310	Horn Antenna	QSH20SMA	Q-par	22/24/27, 15C, 15B
BJPCTC0311	Horn Antenna	QSH18SMA	Q-par	22/24/27, 15C, 15B
BJPCTC0312	Relay Switch Unit	-	-	22/24/27, 15C, 15B
BJPCTC0313	High Pass Filter	WHKX1.0/15G-12SS	Wainwright	22/24/27, 15C, 15B
BJPCTC0314	High Pass Filter	WHKX8.0/18G-88SS	Wainwright	22/24/27, 15C, 15B
BJPCTC0315	High Pass Filter	WHKX3.0/18G-12SS	Wainwright	22/24/27, 15C, 15B
BJPCTC0316	Preamplifier	AMT-5F-18002550-25-108	-	22/24/27, 15C, 15B
BJPCTC0317	Preamplifier	AMF-6D-02001800-29-20P	-	22/24/27, 15C, 15B
BJPCTC0350	Preamplifier	AMF-4D-01000800-30-29P	Miteq	22/24/27, 15C, 15B
BJPCTC0324	Preamplifier	AFS4-00100300-20-23P-6	Miteq	22/24/27, 15C, 15B
BJPCTC0329	Relay Switch Unit	-	-	22/24/27, 15C, 15B
BJPCTC0334	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
BJPCTC0342	Communication Tester	CMU200	R&S	15B, 15C
BJPCTC0349	Preamplifier	AMF-4D-01000800-30-79P	Miteg	22/24/27, 15C, 15B

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Eq. No	Equipment	Type	Manufacturer	Used in
BJPCTC0350	Preamplifier	AMF-4D-01000800-30-29P	Miteg	22/24/27, 15C, 15B
BJPCTC0351	Preamplifier	AFS4-00101800	-	22/24/27, 15C, 15B
BJPCTC0113	Receiver	ESI B26	R&S	22/24/27, 15B, 15C

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