



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2519-1, XT2519-2, XT2519V
FCC ID : IHDT56AU6
STANDARD : 47 CFR Part 22(H), 27(H), 27(F) , 27(N)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Jan. 14, 2025 ~ Feb. 17, 2025

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

This report contains data that were produced under subcontract by Sporton International Inc. (ShenZhen)

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG510740D	Rev. 01	Initial issue of report	Mar. 07, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§22.913(a)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt	PASS	-
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17) (Band 71)	ERP < 3 Watt		-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§2.1051 §22.917(a) §27.53(c)(2)(4) §27.53(g)	Conducted Band Edge Measurement (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 71)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §27.53(c)(2) §27.53(g)	Conducted Spurious Emission (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 71)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §27.53(c)(2) §27.53(f) §27.53(g)	Radiated Spurious Emission (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 71)	< 43+10log10(P[Watts])	PASS	Under limit 25.01 dB at 1559.50 MHz

Conformity Assessment Condition:

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Motorola Mobility LLC

222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC

222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2519-1, XT2519-2, XT2519V
FCC ID	IHDT56AU6
IMEI Code	Conducted: 355782390039091/355782390039109 Radiation: 355782390037798/355782390037806
HW Version	DVT2
SW Version	V2VD35.27
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The different model name is different for market purpose.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 12 : 699 MHz ~ 716 MHz LTE Band 13 : 777 MHz ~ 787 MHz LTE Band 17 : 704 MHz ~ 716 MHz LTE Band 26 : 824 MHz ~ 849 MHz LTE Band 71: 663 MHz ~ 698 MHz
Rx Frequency	LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 12 : 729 MHz ~ 746 MHz LTE Band 13 : 746 MHz ~ 756 MHz LTE Band 17 : 734 MHz ~ 746 MHz LTE Band 26 : 869 MHz ~ 894 MHz LTE Band 71: 617 MHz ~ 652 MHz
Bandwidth	LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 71 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<ANT0>: LTE Band 5 : 22.54 dBm LTE CA 5B : 22.54 dBm LTE Band 12 : 23.09 dBm LTE Band 13 : 22.96 dBm LTE Band 17 : 22.83 dBm LTE Band 26 : 22.64 dBm LTE Band 71 : 23.60 dBm <ANT1>: LTE Band 5 : 22.52 dBm LTE CA 5B : 22.82 dBm LTE Band 12 : 22.88 dBm LTE Band 13 : 22.85 dBm LTE Band 17 : 22.65 dBm LTE Band 26 : 22.62 dBm LTE Band 71 : 22.61 dBm
Antenna Gain	<ANT0>: LTE Band 5/26 : -5.77 dBi LTE Band 12/17 : -5.20 dBi LTE Band 13 : -5.05 dBi LTE Band 71 : -5.74 dBi <ANT1>: LTE Band 5/26 : -6.10 dBi LTE Band 12/17 : -6.00 dBi LTE Band 13 : -5.20 dBi LTE Band 71 : -5.7 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note: The maximum ERP is calculated from max output power and max antenna gain, so only the maximum ERP of Antenna 0 for LTE Band5/5B/12/13/17/71 are shown in the report.



1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum ERP Power and Emission Designator

LTE Band 5		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	824.7 ~ 848.3	0.0286	1M09G7D	0.0243	1M09W7D
3	825.5 ~ 847.5	0.0288	2M72G7D	0.0244	2M70W7D
5	826.5 ~ 846.5	0.0287	4M48G7D	0.0243	4M47W7D
10	829.0 ~ 844.0	0.0290	9M03G7D	0.0246	8M97W7D
LTE Band 12		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	699.7 ~ 715.3	0.0370	1M10G7D	0.0310	1M09W7D
3	700.5 ~ 714.5	0.0366	2M71G7D	0.0314	2M72W7D
5	701.5 ~ 713.5	0.0371	4M50G7D	0.0314	4M50W7D
10	704.0 ~ 711.0	0.0375	9M03G7D	0.0321	9M01W7D
LTE Band 13		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	779.5 ~ 784.5	0.0373	4M49G7D	0.0318	4M50W7D
10	782.0	0.0377	9M01G7D	0.0322	9M05W7D
LTE Band 17		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	706.5 ~ 713.5	0.0342	4M50G7D	0.0295	4M50W7D
10	709.0 ~ 711.0	0.0353	9M03G7D	0.0304	9M01W7D



LTE Band 26		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	824.7 ~ 848.3	0.0288	1M09G7D	0.0248	1M09W7D
3	825.5 ~ 847.5	0.0289	2M72G7D	0.0247	2M70W7D
5	826.5 ~ 846.5	0.0292	4M48G7D	0.0250	4M47W7D
10	829.0 ~ 844.0	0.0290	9M03G7D	0.0246	8M97W7D
15	831.5 ~ 841.5	0.0296	13M4G7D	0.0252	13M4W7D
CH26790	824.0	0.0290	13M5G7D	0.0245	13M4W7D
LTE Band 71		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	665.5 ~ 695.5	0.0368	4M50G7D	0.0314	4M48W7D
10	668.0 ~ 693.0	0.0362	9M01G7D	0.0316	9M05W7D
15	670.5 ~ 690.5	0.0361	13M4G7D	0.0314	13M4W7D
20	673.0 ~ 688.0	0.0372	17M8G7D	0.0319	17M9W7D
LTE Band CA_5B		QPSK		16QAM/64QAM	
BW (MHz)		Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
3MHz+5MHz		0.0285	7M54G7D	0.0234	7M62W7D
5MHz+3MHz		0.0281	7M40G7D	0.0234	7M53W7D
5MHz+10MHz		0.0278	13M7G7D	0.0233	13M7W7D
10MHz+5MHz		0.0277	13M6G7D	0.0233	13M8W7D
10MHz+10MHz		0.0290	18M8G7D	0.0243	18M7W7D

Note:

1. LTE Band 26 overlaps the entire frequency range of LTE Band 5. Therefore, the test results provided in this report covers Band 5 and the portion of Band 26 subject to Part 22.
2. LTE Band 12 overlaps the entire frequency range of LTE Band 17. Therefore, the test results provided in this report covers Band 12 as well as Band 17.
3. All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-KS	CN1257	314309

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH03-SZ	CN1256	421272

Test data subcontracted: Radiated Spurious Emission test case in section 4 of this report

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24

1.9 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 22(H), 27(H), 27(F) , 27(N)
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.10 Specification of Accessory

Accessories Information				
Battery	Brand Name	Motorola(ATL)	Model Name	RM52
USB Cable 1	Brand Name	Motorola(saibao)	Model Name	SC18D86731
USB Cable 2	Brand Name	Motorola(Luxshare)	Model Name	SC18E08103



2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (Z Plane)

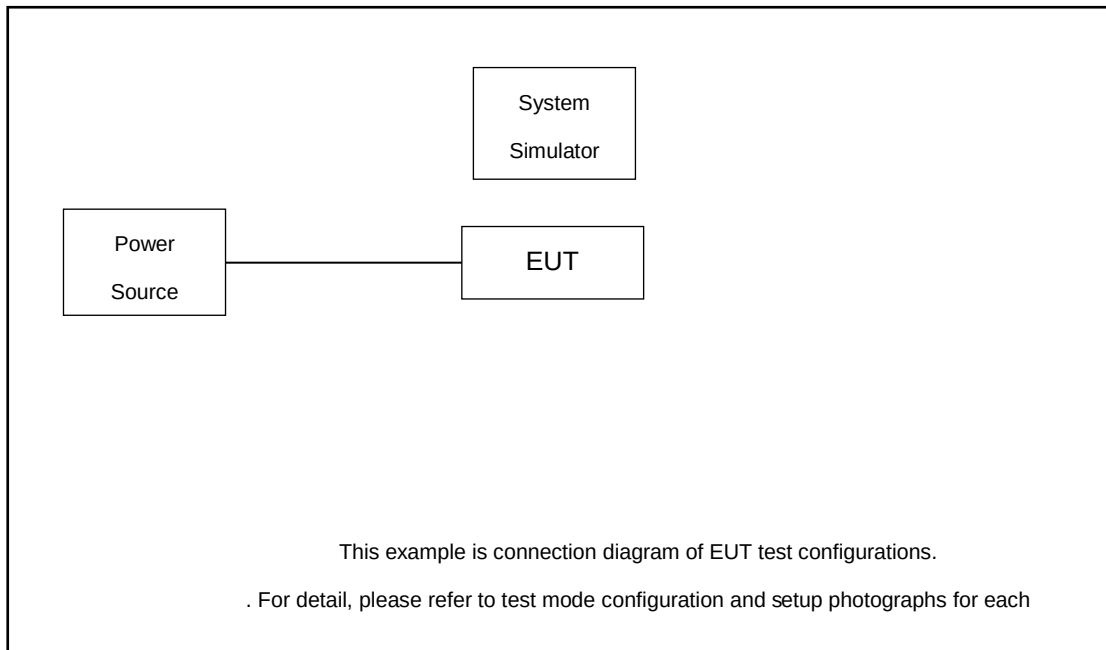
Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	26	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v
	71	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	12				v	-	-	v	v	v				v		v	
	13	-	-		v	-	-	v	v	v				v		v	
	26				v		-	v	v	v				v		v	
	71	-	-				v	v	v	v				v		v	
26dB and 99% Bandwidth	12	v	v	v	v	-	-	v	v					v		v	
	13	-	-	v	v	-	-	v	v					v		v	
	26	v	v	v	v	v	-	v	v					v		v	
	71	-	-	v	v	v	v	v	v					v		v	
Conducted Band Edge	12	v	v	v	v	-	-	v	v	v		v		v	v		v
	13	-	-	v	v	-	-	v	v	v		v		v	v		v
	26	v	v	v	v	v	-	v	v	v		v		v	v		v
	71	-	-	v	v	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	12	v	v	v	v	-	-	v				v			v	v	v
	13	-	-	v	v	-	-	v				v			v	v	v
	26	v	v	v	v	v	-	v				v			v	v	v
	71	-	-	v	v	v	v	v				v			v	v	v
Frequency Stability	12	v				-	-	v						v		v	
	13	-	-	v		-	-	v						v		v	
	26				v		-	v						v		v	
	71	-	-	v				v						v		v	



Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256 QAM	1	Half	Full	L	M	H
E.R.P.	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	26	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v
	71	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	12	Worst Case													v	v	v
	13	Worst Case													v	v	v
	26	Worst Case													v	v	v
	71	Worst Case													v	v	v
Note	1. The mark “v “ means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																

Test Items	Band	Bandwidth (MHz)								Modulation				RB #			Test Channel		
		10+10	15+5	5+15	10+5	5+10	5+5	5+3	3+5	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	5B_CA	v	-	-	v	v	-	v	v	v	v	v	v	v		v	v	v	v
26dB and 99% Bandwidth	5B_CA	v	-	-	v	v	-	v	v	v	v					v		v	
Conducted Band Edge	5B_CA	v	-	-	v	v	-	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	5B_CA	v	-	-	v	v	-	v	v	v				v			v	v	v
E.I.R.P.	5B_CA	v	-	-	v	v	-	v	v	v	v	v	v	v		v	v	v	v
Radiated Spurious Emission	5B_CA	Worst Case															v	v	v
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-” means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. All test items are based on engineering evaluation. 5. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM/256QAM mode by referring to the higher conducted power																		

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.0 dB and 10dB attenuator.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 4.0 + 10 = 14.0 \text{ (dB)} \end{aligned}$$

2.5 Frequency List of Low/Middle/High Channels

LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 13 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5



LTE Band 17 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23780	23790	23800
	Frequency	709	710	711
5	Channel	23755	23790	23825
	Frequency	706.5	710	713.5

LTE Band 26 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829	836.5	844
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3

LTE Band 71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	133222	133322	133372
	Frequency	673.0	680.5	688.0
15	Channel	133197	133297	133397
	Frequency	670.5	680.5	690.5
10	Channel	133172	133272	133422
	Frequency	668.0	678.0	693.0
5	Channel	133147	133247	133447
	Frequency	665.5	675.5	695.5



LTE Band 5B_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
3 + 5	PCC	Channel	20416	20501	20586
		Frequency	825.6	834.1	842.6
	SCC	Channel	20455	20540	20625
		Frequency	829.5	838.0	846.5
5 + 3	PCC	Channel	20425	20510	20595
		Frequency	826.5	835.0	843.5
	SCC	Channel	20464	20549	20634
		Frequency	830.4	838.9	847.4
5 + 10	PCC	Channel	20428	20478	20528
		Frequency	826.8	831.8	836.8
	SCC	Channel	20500	20550	20600
		Frequency	834	839	844
10 + 5	PCC	Channel	20450	20500	20550
		Frequency	829	834	839
	SCC	Channel	20522	20572	20622
		Frequency	836.2	841.2	846.2
10 + 10	PCC	Channel	20450	20476	20501
		Frequency	829	831.6	834.1
	SCC	Channel	20549	20575	20600
		Frequency	838.9	841.5	844

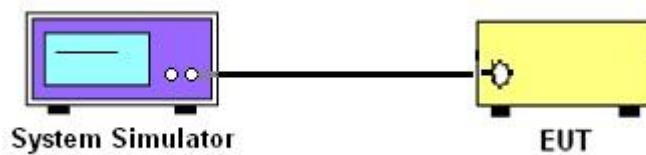
3 Conducted Test Items

3.1 Measuring Instruments

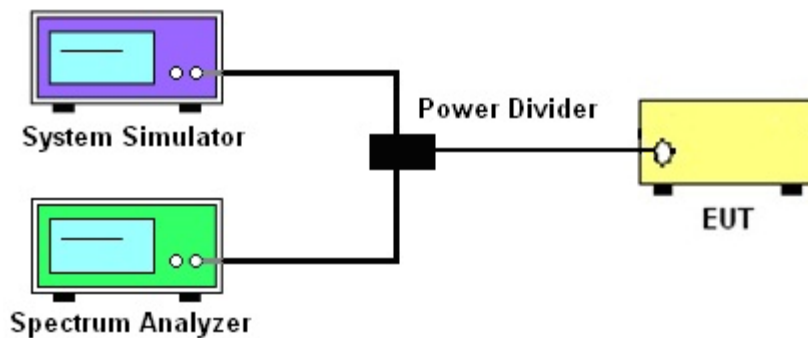
See list of measuring instruments of this test report.

3.2 Test Setup

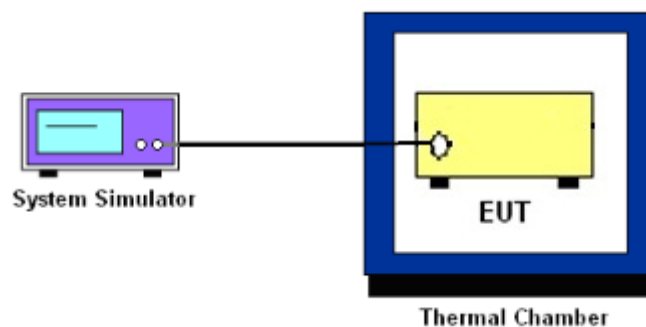
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5 and Band 26.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12, Band 13 and Band 17 and Band 71.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

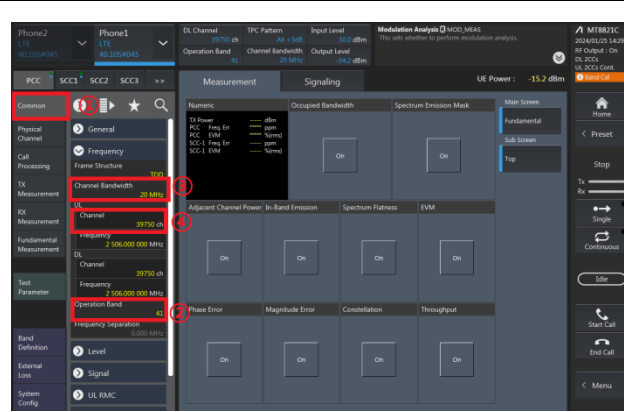
3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

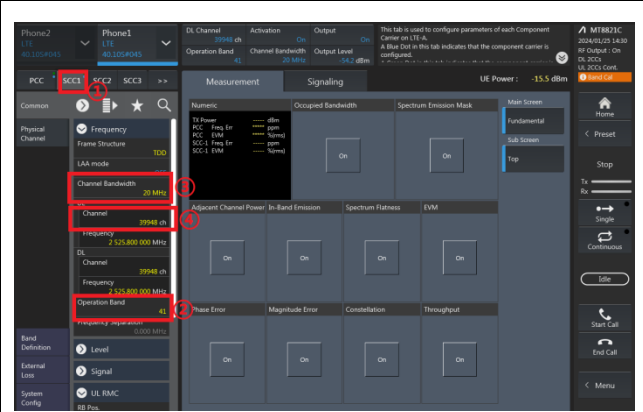
3.4.3 Test Procedures for LTE ULCA

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter PCC & SCC output ports were connected to the system simulator.
3. Set EUT at maximum power, set the PCC/SCC CA band, channel, bandwidth and RB config.

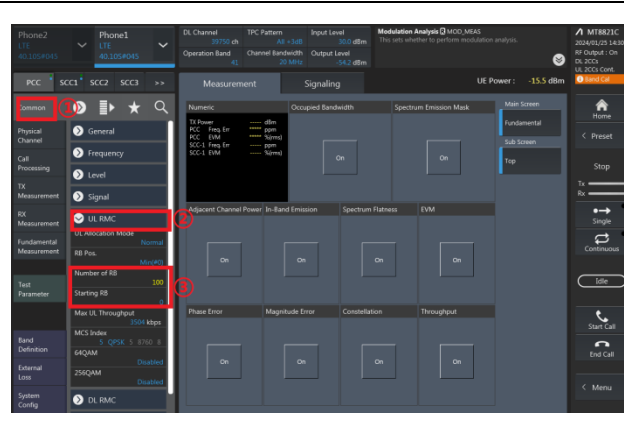
PCC config_ (Channel Bandwidth / Channel / Band)



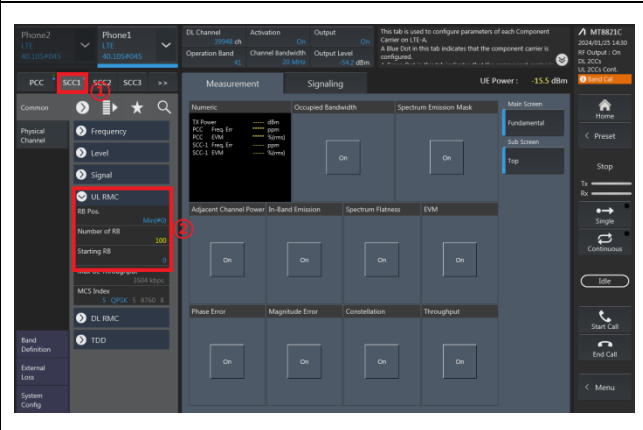
SCC config_ (Channel Bandwidth / Channel / Band)



PCC config_ (Number of RB / Starting RB)

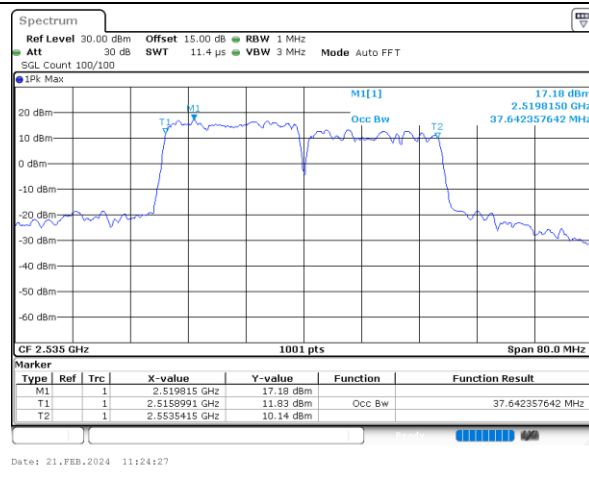


SCC config_ (Number of RB / Starting RB)

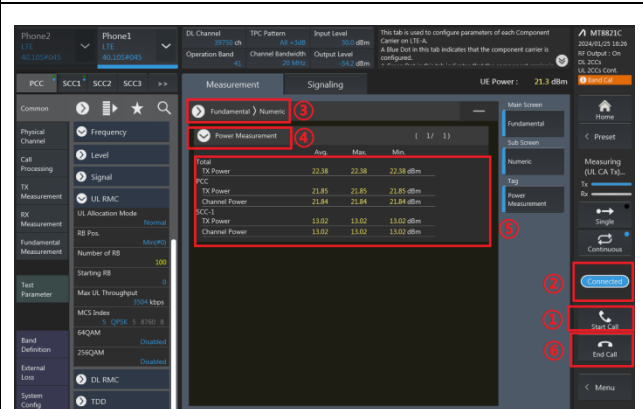


4. Select lowest, middle, and highest channels for each ULCA band and different modulation.
5. Check the ULCA spectrum and record the total power from the system simulator.

Check the ULCA spectrum (eg. 20M+20M)



Read the Total UL CA output power (PCC+SCC)



3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
(this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (c)

For operations in the 776-788 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least $65 + 10 \log_{10} p(\text{watts})$, dB, for mobile and portable equipment.

27.53 (g)

For operations in the 600MHz band and 698 -746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used and the measured power was integrated over the full required measurement bandwidth of 1 MHz.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

Example:

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)} = -13\text{dBm}.$$

9. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at $20\pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

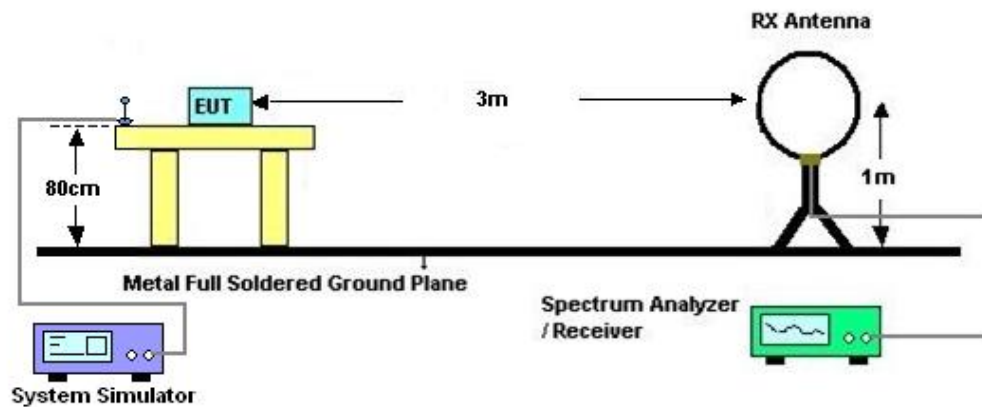
4 Radiated Test Items

4.1 Measuring Instruments

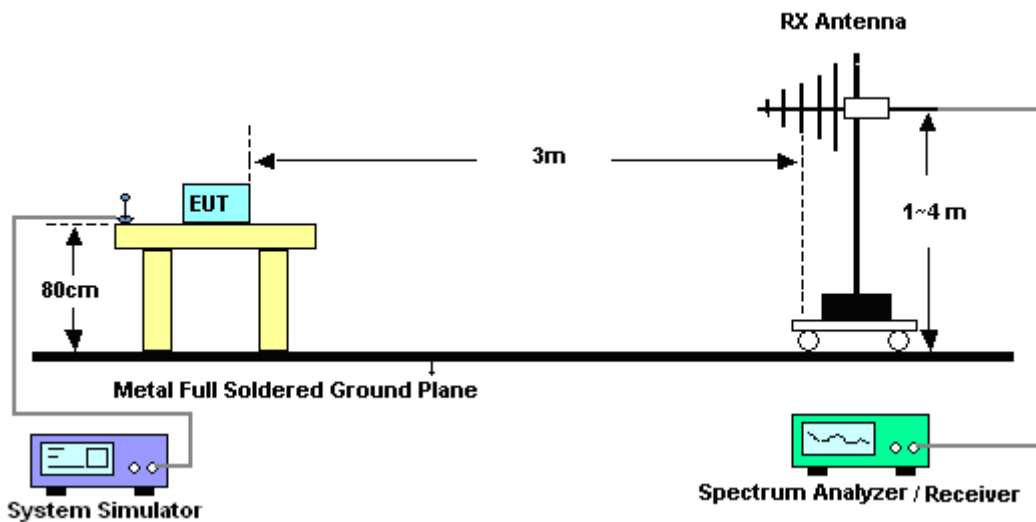
See list of measuring instruments of this test report.

4.2 Test Setup

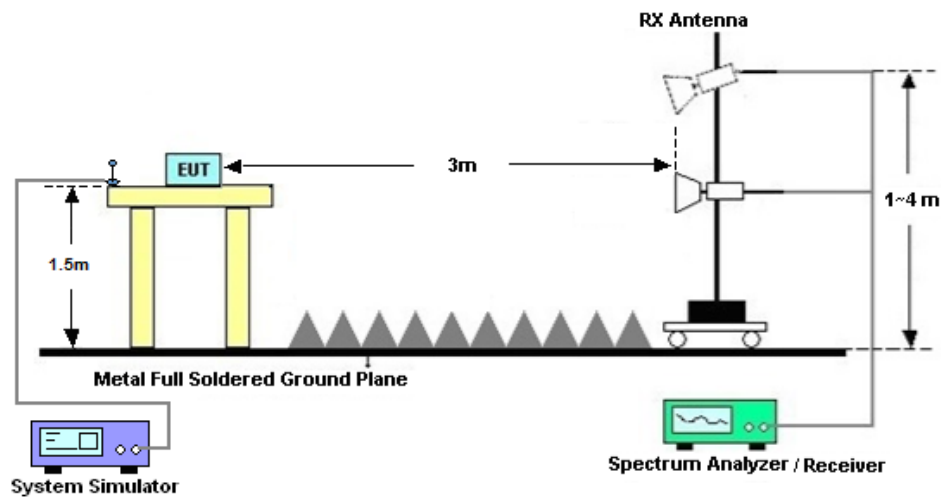
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
11. $\text{ERP (dBm)} = \text{EIRP} - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Jan. 14, 2025~ Jan. 24, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Jan. 14, 2025~ Jan. 24, 2025	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Jan. 14, 2025~ Jan. 24, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 09, 2024	Feb. 16, 2025~ Feb. 17, 2025	Apr. 08, 2025	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Feb. 16, 2025~ Feb. 17, 2025	Dec. 27, 2025	Radiation (03CH03-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 09, 2024	Feb. 16, 2025~ Feb. 17, 2025	Apr. 08, 2025	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Aug. 20, 2023	Feb. 16, 2025~ Feb. 17, 2025	Aug. 19, 2025	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 09, 2024	Feb. 16, 2025~ Feb. 17, 2025	Apr. 08, 2025	Radiation (03CH03-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 09, 2024	Feb. 16, 2025~ Feb. 17, 2025	Apr. 08, 2025	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 03, 2024	Feb. 16, 2025~ Feb. 17, 2025	Jul. 02, 2025	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Feb. 16, 2025~ Feb. 17, 2025	Apr. 08, 2025	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010002729	N/A	Oct. 18, 2024	Feb. 16, 2025~ Feb. 17, 2025	Oct. 17, 2025	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Feb. 16, 2025~ Feb. 17, 2025	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Feb. 16, 2025~ Feb. 17, 2025	NCR	Radiation (03CH03-SZ)

NCR: No Calibration Required



6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	± 2.22 dB
Occupied Channel Bandwidth	$\pm 0.1\%$
Conducted Power	± 0.50 dB
Peak to Average Ratio	± 0.90 dB
Frequency Stability	± 0.04 ppm

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.0 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.6 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.8 dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Fly	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and ERP

LTE Band 5_ANT0:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				20450	20525	20600			
Frequency (MHz)				829	836.5	844	L	M	H
10	QPSK	1	0	22.52	22.54	22.44	0.0288	0.0290	0.0283
10	QPSK	1	25	22.37	22.39	22.31	0.0279	0.0280	0.0275
10	QPSK	1	49	22.23	22.36	22.26	0.0270	0.0278	0.0272
10	QPSK	25	0	21.50	21.58	21.50	0.0228	0.0232	0.0228
10	QPSK	25	12	21.32	21.43	21.34	0.0219	0.0224	0.0220
10	QPSK	25	25	21.30	21.36	21.28	0.0218	0.0221	0.0217
10	QPSK	50	0	21.44	21.54	21.42	0.0225	0.0230	0.0224
10	16QAM	1	0	21.70	21.83	21.75	0.0239	0.0246	0.0242
10	16QAM	1	25	21.67	21.78	21.66	0.0237	0.0243	0.0237
10	16QAM	1	49	21.64	21.80	21.68	0.0236	0.0244	0.0238
10	16QAM	25	0	20.37	20.45	20.33	0.0176	0.0179	0.0174
10	16QAM	25	12	20.31	20.43	20.29	0.0173	0.0178	0.0173
10	16QAM	25	25	20.23	20.33	20.31	0.0170	0.0174	0.0173
10	16QAM	50	0	20.34	20.37	20.32	0.0175	0.0176	0.0174
10	64QAM	1	0	20.61	20.71	20.68	0.0186	0.0190	0.0189
10	64QAM	1	25	20.53	20.67	20.63	0.0182	0.0188	0.0187
10	64QAM	1	49	20.50	20.59	20.62	0.0181	0.0185	0.0186
10	64QAM	25	0	19.37	19.41	19.31	0.0140	0.0141	0.0138
10	64QAM	25	12	19.28	19.34	19.23	0.0137	0.0139	0.0135
10	64QAM	25	25	19.32	19.28	19.25	0.0138	0.0137	0.0136
10	64QAM	50	0	19.28	19.36	19.23	0.0137	0.0139	0.0135
10	256QAM	1	0	17.56	17.61	17.59	0.0092	0.0093	0.0093
10	256QAM	1	25	17.52	17.56	17.45	0.0091	0.0092	0.0090
10	256QAM	1	49	17.53	17.52	17.57	0.0091	0.0091	0.0092
10	256QAM	25	0	17.30	17.42	17.30	0.0087	0.0089	0.0087
10	256QAM	25	12	17.26	17.29	17.17	0.0086	0.0086	0.0084
10	256QAM	25	25	17.27	17.33	17.23	0.0086	0.0087	0.0085
10	256QAM	50	0	17.35	17.37	17.31	0.0088	0.0088	0.0087
Channel				20425	20525	20625	ERP(W)		
Frequency (MHz)				826.5	836.5	846.5	L	M	H



5	QPSK	1	0	22.43	22.50	22.37	0.0282	0.0287	0.0279
5	QPSK	1	12	22.34	22.34	22.24	0.0277	0.0277	0.0270
5	QPSK	1	24	22.11	22.33	22.21	0.0262	0.0276	0.0269
5	QPSK	12	0	21.47	21.54	21.42	0.0226	0.0230	0.0224
5	QPSK	12	7	21.24	21.35	21.23	0.0215	0.0220	0.0214
5	QPSK	12	13	21.24	21.31	21.24	0.0215	0.0218	0.0215
5	QPSK	25	0	21.33	21.46	21.29	0.0219	0.0226	0.0217
5	16QAM	1	0	21.64	21.75	21.66	0.0236	0.0242	0.0237
5	16QAM	1	12	21.54	21.67	21.61	0.0230	0.0237	0.0234
5	16QAM	1	24	21.54	21.78	21.57	0.0230	0.0243	0.0232
5	16QAM	12	0	20.24	20.33	20.23	0.0171	0.0174	0.0170
5	16QAM	12	7	20.27	20.39	20.16	0.0172	0.0177	0.0167
5	16QAM	12	13	20.14	20.28	20.18	0.0167	0.0172	0.0168
5	16QAM	25	0	20.32	20.33	20.29	0.0174	0.0174	0.0173
5	64QAM	1	0	20.58	20.67	20.65	0.0185	0.0188	0.0187
5	64QAM	1	12	20.50	20.61	20.58	0.0181	0.0186	0.0185
5	64QAM	1	24	20.47	20.46	20.55	0.0180	0.0179	0.0183
5	64QAM	12	0	19.29	19.33	19.27	0.0137	0.0138	0.0136
5	64QAM	12	7	19.19	19.30	19.13	0.0134	0.0137	0.0132
5	64QAM	12	13	19.24	19.24	19.19	0.0136	0.0136	0.0134
5	64QAM	25	0	19.24	19.27	19.10	0.0136	0.0136	0.0131
5	256QAM	1	0	17.51	17.56	17.47	0.0091	0.0092	0.0090
5	256QAM	1	12	17.38	17.46	17.31	0.0088	0.0090	0.0087
5	256QAM	1	24	17.47	17.48	17.51	0.0090	0.0090	0.0091
5	256QAM	12	0	17.23	17.28	17.20	0.0085	0.0086	0.0085
5	256QAM	12	7	17.12	17.23	17.05	0.0083	0.0085	0.0082
5	256QAM	12	13	17.16	17.19	17.13	0.0084	0.0085	0.0083
5	256QAM	25	0	17.27	17.26	17.19	0.0086	0.0086	0.0085
Channel				20415	20525	20635	ERP(W)		
Frequency (MHz)				825.5	836.5	847.5	L	M	H
3	QPSK	1	0	22.40	22.51	22.37	0.0281	0.0288	0.0279
3	QPSK	1	8	22.30	22.33	22.18	0.0274	0.0276	0.0267
3	QPSK	1	14	22.16	22.32	22.21	0.0265	0.0275	0.0269
3	QPSK	8	0	21.42	21.50	21.44	0.0224	0.0228	0.0225
3	QPSK	8	4	21.29	21.35	21.31	0.0217	0.0220	0.0218
3	QPSK	8	7	21.19	21.28	21.15	0.0212	0.0217	0.0210
3	QPSK	15	0	21.38	21.49	21.31	0.0222	0.0228	0.0218
3	16QAM	1	0	21.68	21.80	21.71	0.0238	0.0244	0.0239
3	16QAM	1	8	21.62	21.74	21.59	0.0234	0.0241	0.0233
3	16QAM	1	14	21.50	21.76	21.55	0.0228	0.0242	0.0231
3	16QAM	8	0	20.24	20.37	20.23	0.0171	0.0176	0.0170
3	16QAM	8	4	20.18	20.41	20.16	0.0168	0.0177	0.0167
3	16QAM	8	7	20.17	20.21	20.22	0.0168	0.0169	0.0170
3	16QAM	15	0	20.26	20.24	20.22	0.0171	0.0171	0.0170
3	64QAM	1	0	20.51	20.59	20.63	0.0182	0.0185	0.0187
3	64QAM	1	8	20.45	20.59	20.59	0.0179	0.0185	0.0185
3	64QAM	1	14	20.41	20.52	20.49	0.0177	0.0182	0.0181



3	64QAM	8	0	19.34	19.36	19.18	0.0139	0.0139	0.0134
3	64QAM	8	4	19.15	19.26	19.11	0.0133	0.0136	0.0132
3	64QAM	8	7	19.26	19.23	19.16	0.0136	0.0135	0.0133
3	64QAM	15	0	19.16	19.25	19.16	0.0133	0.0136	0.0133
3	256QAM	1	0	17.52	17.48	17.49	0.0091	0.0090	0.0091
3	256QAM	1	8	17.48	17.52	17.35	0.0090	0.0091	0.0088
3	256QAM	1	14	17.42	17.48	17.54	0.0089	0.0090	0.0092
3	256QAM	8	0	17.23	17.38	17.25	0.0085	0.0088	0.0086
3	256QAM	8	4	17.24	17.18	17.15	0.0086	0.0084	0.0084
3	256QAM	8	7	17.22	17.25	17.16	0.0085	0.0086	0.0084
3	256QAM	15	0	17.23	17.29	17.17	0.0085	0.0086	0.0084
Channel				20407	20525	20643	ERP(W)		
Frequency (MHz)				824.7	836.5	848.3	L	M	H
1.4	QPSK	1	0	22.48	22.40	22.38	0.0286	0.0281	0.0279
1.4	QPSK	1	3	22.26	22.37	22.21	0.0272	0.0279	0.0269
1.4	QPSK	1	5	22.09	22.28	22.21	0.0261	0.0273	0.0269
1.4	QPSK	3	0	22.44	22.48	22.35	0.0283	0.0286	0.0277
1.4	QPSK	3	1	22.24	22.31	22.21	0.0270	0.0275	0.0269
1.4	QPSK	3	3	22.10	22.24	22.15	0.0262	0.0270	0.0265
1.4	QPSK	6	0	21.45	21.47	21.38	0.0225	0.0226	0.0222
1.4	16QAM	1	0	21.29	21.34	21.23	0.0217	0.0220	0.0214
1.4	16QAM	1	3	21.28	21.29	21.16	0.0217	0.0217	0.0211
1.4	16QAM	1	5	21.32	21.44	21.32	0.0219	0.0225	0.0219
1.4	16QAM	3	0	21.65	21.69	21.71	0.0236	0.0238	0.0239
1.4	16QAM	3	1	21.56	21.66	21.61	0.0231	0.0237	0.0234
1.4	16QAM	3	3	21.57	21.77	21.58	0.0232	0.0243	0.0232
1.4	16QAM	6	0	20.29	20.28	20.25	0.0173	0.0172	0.0171
1.4	64QAM	1	0	20.54	20.61	20.61	0.0183	0.0186	0.0186
1.4	64QAM	1	3	20.40	20.55	20.59	0.0177	0.0183	0.0185
1.4	64QAM	1	5	20.37	20.48	20.56	0.0176	0.0180	0.0184
1.4	64QAM	3	0	20.43	20.52	20.57	0.0178	0.0182	0.0184
1.4	64QAM	3	1	20.27	20.53	20.48	0.0172	0.0182	0.0180
1.4	64QAM	3	3	20.30	20.40	20.50	0.0173	0.0177	0.0181
1.4	64QAM	6	0	19.15	19.24	19.11	0.0133	0.0136	0.0132
1.4	256QAM	1	0	17.46	17.48	17.47	0.0090	0.0090	0.0090
1.4	256QAM	1	3	17.46	17.53	17.36	0.0090	0.0091	0.0088
1.4	256QAM	1	5	17.50	17.43	17.46	0.0091	0.0089	0.0090
1.4	256QAM	3	0	17.27	17.38	17.17	0.0086	0.0088	0.0084
1.4	256QAM	3	1	17.23	17.16	17.10	0.0085	0.0084	0.0083
1.4	256QAM	3	3	17.22	17.20	17.21	0.0085	0.0085	0.0085
1.4	256QAM	6	0	17.25	17.30	17.22	0.0086	0.0087	0.0085



LTE CA 5B_ANT0:

Combination 10MHz+10MHz (50RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)
		RB Size	RB offset	RB Size	RB offset		
L 20450_20549	QPSK	Max	0	Max	0	22.54	0.0290
	QPSK	1	0	1	Max	22.39	0.0280
	QPSK	1	Max	1	0	22.36	0.0278
M 20476_20575	QPSK	Max	0	Max	0	22.44	0.0283
	QPSK	1	0	1	Max	22.31	0.0275
	QPSK	1	Max	1	0	22.26	0.0272
H 20501_20600	QPSK	Max	0	Max	0	22.51	0.0288
	QPSK	1	0	1	Max	22.37	0.0279
	QPSK	1	Max	1	0	22.24	0.0270
L 20450_20549	16QAM	Max	0	Max	0	21.75	0.0242
	16QAM	1	0	1	Max	21.67	0.0237
	16QAM	1	Max	1	0	21.78	0.0243
M 20476_20575	16QAM	Max	0	Max	0	21.50	0.0228
	16QAM	1	0	1	Max	21.32	0.0219
	16QAM	1	Max	1	0	21.30	0.0218
H 20501_20600	16QAM	Max	0	Max	0	21.50	0.0228
	16QAM	1	0	1	Max	21.34	0.0220
	16QAM	1	Max	1	0	21.28	0.0217
L 20450_20549	64QAM	Max	0	Max	0	20.68	0.0189
	64QAM	1	0	1	Max	20.63	0.0187
	64QAM	1	Max	1	0	20.62	0.0186
M 20476_20575	64QAM	Max	0	Max	0	20.71	0.0190
	64QAM	1	0	1	Max	20.67	0.0188
	64QAM	1	Max	1	0	20.59	0.0185
H 20501_20600	64QAM	Max	0	Max	0	20.61	0.0186
	64QAM	1	0	1	Max	20.53	0.0182
	64QAM	1	Max	1	0	20.50	0.0181
L 20450_20549	256QAM	Max	0	Max	0	17.61	0.0093
	256QAM	1	0	1	Max	17.56	0.0092
	256QAM	1	Max	1	0	17.52	0.0091
M 20476_20575	256QAM	Max	0	Max	0	17.51	0.0091
	256QAM	1	0	1	Max	17.38	0.0088
	256QAM	1	Max	1	0	17.47	0.0090
H 20501_20600	256QAM	Max	0	Max	0	17.47	0.0090
	256QAM	1	0	1	Max	17.31	0.0087
	256QAM	1	Max	1	0	17.51	0.0091
Combination 10MHz+5MHz (50RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)
		RB Size	RB offset	RB Size	RB offset		
L 20450_20522	QPSK	Max	0	Max	0	22.34	0.0277
	QPSK	1	0	1	Max	22.22	0.0269
	QPSK	1	Max	1	0	22.28	0.0273
M	QPSK	Max	0	Max	0	22.35	0.0277



20500_20572	QPSK	1	0	1	Max	22.21	0.0269
	QPSK	1	Max	1	0	22.15	0.0265
H 20550_20622	QPSK	Max	0	Max	0	22.35	0.0277
	QPSK	1	0	1	Max	22.13	0.0264
	QPSK	1	Max	1	0	22.09	0.0261
L 20450_20522	16QAM	Max	0	Max	0	21.59	0.0233
	16QAM	1	0	1	Max	21.55	0.0231
	16QAM	1	Max	1	0	21.58	0.0232
M 20500_20572	16QAM	Max	0	Max	0	21.39	0.0222
	16QAM	1	0	1	Max	21.07	0.0207
	16QAM	1	Max	1	0	21.10	0.0208
H 20550_20622	16QAM	Max	0	Max	0	21.44	0.0225
	16QAM	1	0	1	Max	21.13	0.0209
	16QAM	1	Max	1	0	21.23	0.0214
L 20450_20522	64QAM	Max	0	Max	0	20.50	0.0181
	64QAM	1	0	1	Max	20.57	0.0184
	64QAM	1	Max	1	0	20.57	0.0184
M 20500_20572	64QAM	Max	0	Max	0	20.58	0.0185
	64QAM	1	0	1	Max	20.56	0.0184
	64QAM	1	Max	1	0	20.49	0.0181
H 20550_20622	64QAM	Max	0	Max	0	20.55	0.0183
	64QAM	1	0	1	Max	20.33	0.0174
	64QAM	1	Max	1	0	20.41	0.0177
L 20450_20522	256QAM	Max	0	Max	0	17.53	0.0091
	256QAM	1	0	1	Max	17.34	0.0087
	256QAM	1	Max	1	0	17.32	0.0087
M 20500_20572	256QAM	Max	0	Max	0	17.36	0.0088
	256QAM	1	0	1	Max	17.27	0.0086
	256QAM	1	Max	1	0	17.30	0.0087
H 20550_20622	256QAM	Max	0	Max	0	17.35	0.0088
	256QAM	1	0	1	Max	17.15	0.0084
	256QAM	1	Max	1	0	17.39	0.0089
Combination 5MHz+10MHz (25RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)
		RB Size	RB offset	RB Size	RB offset		
L 20428_20500	QPSK	Max	0	Max	0	22.34	0.0277
	QPSK	1	0	1	Max	22.24	0.0270
	QPSK	1	Max	1	0	22.22	0.0269
M 20478_20550	QPSK	Max	0	Max	0	22.24	0.0270
	QPSK	1	0	1	Max	22.24	0.0270
	QPSK	1	Max	1	0	22.20	0.0268
H 20528_20600	QPSK	Max	0	Max	0	22.36	0.0278
	QPSK	1	0	1	Max	22.17	0.0266
	QPSK	1	Max	1	0	22.12	0.0263
L 20428_20500	16QAM	Max	0	Max	0	21.50	0.0228
	16QAM	1	0	1	Max	21.55	0.0231
	16QAM	1	Max	1	0	21.60	0.0233
M	16QAM	Max	0	Max	0	21.30	0.0218



20478_20550	16QAM	1	0	1	Max	21.15	0.0210
	16QAM	1	Max	1	0	21.23	0.0214
H 20528_20600	16QAM	Max	0	Max	0	21.30	0.0218
	16QAM	1	0	1	Max	21.28	0.0217
	16QAM	1	Max	1	0	21.04	0.0205
L 20428_20500	64QAM	Max	0	Max	0	20.51	0.0182
	64QAM	1	0	1	Max	20.50	0.0181
	64QAM	1	Max	1	0	20.37	0.0176
M 20478_20550	64QAM	Max	0	Max	0	20.48	0.0180
	64QAM	1	0	1	Max	20.62	0.0186
	64QAM	1	Max	1	0	20.48	0.0180
H 20528_20600	64QAM	Max	0	Max	0	20.48	0.0180
	64QAM	1	0	1	Max	20.34	0.0175
	64QAM	1	Max	1	0	20.40	0.0177
L 20428_20500	256QAM	Max	0	Max	0	17.43	0.0089
	256QAM	1	0	1	Max	17.43	0.0089
	256QAM	1	Max	1	0	17.36	0.0088
M 20478_20550	256QAM	Max	0	Max	0	17.46	0.0090
	256QAM	1	0	1	Max	17.33	0.0087
	256QAM	1	Max	1	0	17.26	0.0086
H 20528_20600	256QAM	Max	0	Max	0	17.41	0.0089
	256QAM	1	0	1	Max	17.21	0.0085
	256QAM	1	Max	1	0	17.35	0.0088
Combination 5MHz+3MHz (25RB+15RB)							
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)
		RB Size	RB offset	RB Size	RB offset		
L 20425_20464	QPSK	Max	0	Max	0	22.40	0.0281
	QPSK	1	0	1	Max	22.31	0.0275
	QPSK	1	Max	1	0	22.15	0.0265
M 20510_20549	QPSK	Max	0	Max	0	22.32	0.0275
	QPSK	1	0	1	Max	22.23	0.0270
	QPSK	1	Max	1	0	22.19	0.0267
H 20595_20634	QPSK	Max	0	Max	0	22.41	0.0281
	QPSK	1	0	1	Max	22.14	0.0264
	QPSK	1	Max	1	0	22.00	0.0256
L 20425_20464	16QAM	Max	0	Max	0	21.56	0.0231
	16QAM	1	0	1	Max	21.49	0.0228
	16QAM	1	Max	1	0	21.62	0.0234
M 20510_20549	16QAM	Max	0	Max	0	21.38	0.0222
	16QAM	1	0	1	Max	21.24	0.0215
	16QAM	1	Max	1	0	21.06	0.0206
H 20595_20634	16QAM	Max	0	Max	0	21.37	0.0221
	16QAM	1	0	1	Max	21.13	0.0209
	16QAM	1	Max	1	0	21.03	0.0205
L 20425_20464	64QAM	Max	0	Max	0	20.59	0.0185
	64QAM	1	0	1	Max	20.48	0.0180
	64QAM	1	Max	1	0	20.47	0.0180
M 20510_20549	64QAM	Max	0	Max	0	20.50	0.0181
	64QAM	1	0	1	Max	20.60	0.0185
	64QAM	1	Max	1	0	20.39	0.0177
H 20595_20634	64QAM	Max	0	Max	0	20.49	0.0181
	64QAM	1	0	1	Max	20.42	0.0178
	64QAM	1	Max	1	0	20.28	0.0172
L 20425_20464	256QAM	Max	0	Max	0	17.53	0.0091
	256QAM	1	0	1	Max	17.33	0.0087



	256QAM	1	Max	1	0	17.45	0.0090
M 20510_20549	256QAM	Max	0	Max	0	17.40	0.0089
	256QAM	1	0	1	Max	17.30	0.0087
	256QAM	1	Max	1	0	17.26	0.0086
H 20595_20634	256QAM	Max	0	Max	0	17.33	0.0087
	256QAM	1	0	1	Max	17.19	0.0085
	256QAM	1	Max	1	0	17.36	0.0088
Combination 3MHz+5MHz (15RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)
		RB Size	RB offset	RB Size	RB offset		
L 20416_20455	QPSK	Max	0	Max	0	22.47	0.0285
	QPSK	1	0	1	Max	22.27	0.0272
	QPSK	1	Max	1	0	22.11	0.0262
M 20501_20540	QPSK	Max	0	Max	0	22.29	0.0274
	QPSK	1	0	1	Max	22.08	0.0261
	QPSK	1	Max	1	0	22.07	0.0260
H 20586_20625	QPSK	Max	0	Max	0	22.39	0.0280
	QPSK	1	0	1	Max	22.30	0.0274
	QPSK	1	Max	1	0	22.13	0.0264
L 20416_20455	16QAM	Max	0	Max	0	21.55	0.0231
	16QAM	1	0	1	Max	21.55	0.0231
	16QAM	1	Max	1	0	21.61	0.0234
M 20501_20540	16QAM	Max	0	Max	0	21.28	0.0217
	16QAM	1	0	1	Max	21.25	0.0215
	16QAM	1	Max	1	0	21.11	0.0208
H 20586_20625	16QAM	Max	0	Max	0	21.43	0.0224
	16QAM	1	0	1	Max	21.19	0.0212
	16QAM	1	Max	1	0	21.10	0.0208
L 20416_20455	64QAM	Max	0	Max	0	20.49	0.0181
	64QAM	1	0	1	Max	20.43	0.0178
	64QAM	1	Max	1	0	20.48	0.0180
M 20501_20540	64QAM	Max	0	Max	0	20.50	0.0181
	64QAM	1	0	1	Max	20.58	0.0185
	64QAM	1	Max	1	0	20.49	0.0181
H 20586_20625	64QAM	Max	0	Max	0	20.47	0.0180
	64QAM	1	0	1	Max	20.29	0.0173
	64QAM	1	Max	1	0	20.39	0.0177
L 20416_20455	256QAM	Max	0	Max	0	17.42	0.0089
	256QAM	1	0	1	Max	17.48	0.0090
	256QAM	1	Max	1	0	17.37	0.0088
M 20501_20540	256QAM	Max	0	Max	0	17.42	0.0089
	256QAM	1	0	1	Max	17.18	0.0084
	256QAM	1	Max	1	0	17.38	0.0088
H 20586_20625	256QAM	Max	0	Max	0	17.35	0.0088
	256QAM	1	0	1	Max	17.09	0.0083
	256QAM	1	Max	1	0	17.34	0.0087



LTE Band 12_ANT0:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711	L	M	H
10	QPSK	1	0	23.03	23.09	23.01	0.0370	0.0375	0.0368
10	QPSK	1	25	22.88	22.93	22.83	0.0357	0.0361	0.0353
10	QPSK	1	49	22.78	22.87	22.76	0.0349	0.0356	0.0348
10	QPSK	25	0	22.04	22.10	22.04	0.0294	0.0299	0.0294
10	QPSK	25	12	21.87	21.94	21.90	0.0283	0.0288	0.0285
10	QPSK	25	25	21.89	21.86	21.86	0.0284	0.0282	0.0282
10	QPSK	50	0	22.03	22.12	22.00	0.0294	0.0300	0.0292
10	16QAM	1	0	22.23	22.42	22.24	0.0308	0.0321	0.0308
10	16QAM	1	25	22.27	22.30	22.20	0.0310	0.0313	0.0305
10	16QAM	1	49	22.22	22.33	22.25	0.0307	0.0315	0.0309
10	16QAM	25	0	20.95	21.00	20.84	0.0229	0.0232	0.0223
10	16QAM	25	12	20.88	20.95	20.82	0.0225	0.0229	0.0222
10	16QAM	25	25	20.80	20.91	20.83	0.0221	0.0227	0.0223
10	16QAM	50	0	20.83	20.87	20.89	0.0223	0.0225	0.0226
10	64QAM	1	0	21.16	21.28	21.21	0.0240	0.0247	0.0243
10	64QAM	1	25	21.02	21.24	21.13	0.0233	0.0245	0.0239
10	64QAM	1	49	21.06	21.10	21.20	0.0235	0.0237	0.0243
10	64QAM	25	0	19.96	20.01	19.80	0.0182	0.0185	0.0176
10	64QAM	25	12	19.78	19.92	19.74	0.0175	0.0181	0.0173
10	64QAM	25	25	19.90	19.84	19.83	0.0180	0.0177	0.0177
10	64QAM	50	0	19.78	19.90	19.78	0.0175	0.0180	0.0175
10	256QAM	1	0	18.09	18.19	18.19	0.0119	0.0121	0.0121
10	256QAM	1	25	18.02	18.10	18.04	0.0117	0.0119	0.0117
10	256QAM	1	49	18.09	18.07	18.16	0.0119	0.0118	0.0121
10	256QAM	25	0	17.81	18.01	17.81	0.0111	0.0116	0.0111
10	256QAM	25	12	17.76	17.79	17.73	0.0110	0.0111	0.0109
10	256QAM	25	25	17.84	17.87	17.72	0.0112	0.0113	0.0109
10	256QAM	50	0	17.96	17.93	17.83	0.0115	0.0114	0.0112
Channel				23035	23095	23155	ERP(W)		
Frequency (MHz)				701.5	707.5	713.5	L	M	H
5	QPSK	1	0	22.94	23.04	22.90	0.0362	0.0371	0.0359
5	QPSK	1	12	22.78	22.80	22.70	0.0349	0.0351	0.0343
5	QPSK	1	24	22.71	22.79	22.71	0.0344	0.0350	0.0344
5	QPSK	12	0	21.96	22.04	21.92	0.0289	0.0294	0.0286
5	QPSK	12	7	21.78	21.85	21.81	0.0277	0.0282	0.0279
5	QPSK	12	13	21.83	21.70	21.74	0.0281	0.0272	0.0275
5	QPSK	25	0	21.91	21.98	21.89	0.0286	0.0290	0.0284
5	16QAM	1	0	22.11	22.32	22.10	0.0299	0.0314	0.0299
5	16QAM	1	12	22.16	22.25	22.06	0.0303	0.0309	0.0296
5	16QAM	1	24	22.07	22.19	22.11	0.0296	0.0305	0.0299



5	16QAM	12	0	20.83	20.91	20.73	0.0223	0.0227	0.0218
5	16QAM	12	7	20.84	20.82	20.72	0.0223	0.0222	0.0217
5	16QAM	12	13	20.76	20.83	20.73	0.0219	0.0223	0.0218
5	16QAM	25	0	20.73	20.78	20.84	0.0218	0.0220	0.0223
5	64QAM	1	0	21.06	21.13	21.07	0.0235	0.0239	0.0236
5	64QAM	1	12	20.94	21.18	21.02	0.0229	0.0242	0.0233
5	64QAM	1	24	21.01	20.97	21.07	0.0232	0.0230	0.0236
5	64QAM	12	0	19.89	19.87	19.66	0.0179	0.0179	0.0170
5	64QAM	12	7	19.72	19.85	19.65	0.0173	0.0178	0.0170
5	64QAM	12	13	19.80	19.77	19.69	0.0176	0.0175	0.0171
5	64QAM	25	0	19.66	19.83	19.67	0.0170	0.0177	0.0171
5	256QAM	1	0	18.00	18.10	18.04	0.0116	0.0119	0.0117
5	256QAM	1	12	17.92	18.05	17.92	0.0114	0.0117	0.0114
5	256QAM	1	24	17.93	18.00	18.00	0.0114	0.0116	0.0116
5	256QAM	12	0	17.69	17.89	17.76	0.0108	0.0113	0.0110
5	256QAM	12	7	17.65	17.72	17.57	0.0107	0.0109	0.0105
5	256QAM	12	13	17.79	17.78	17.64	0.0111	0.0110	0.0107
5	256QAM	25	0	17.88	17.86	17.79	0.0113	0.0112	0.0111
Channel				23025	23095	23165	ERP(W)		
Frequency (MHz)				700.5	707.5	714.5	L	M	H
3	QPSK	1	0	22.88	22.99	22.87	0.0357	0.0366	0.0356
3	QPSK	1	8	22.80	22.81	22.79	0.0351	0.0352	0.0350
3	QPSK	1	14	22.73	22.82	22.63	0.0345	0.0352	0.0337
3	QPSK	8	0	21.92	21.99	21.94	0.0286	0.0291	0.0288
3	QPSK	8	4	21.74	21.89	21.75	0.0275	0.0284	0.0275
3	QPSK	8	7	21.78	21.81	21.73	0.0277	0.0279	0.0274
3	QPSK	15	0	21.89	21.98	21.89	0.0284	0.0290	0.0284
3	16QAM	1	0	22.08	22.32	22.08	0.0297	0.0314	0.0297
3	16QAM	1	8	22.16	22.14	22.15	0.0303	0.0301	0.0302
3	16QAM	1	14	22.14	22.29	22.19	0.0301	0.0312	0.0305
3	16QAM	8	0	20.90	20.92	20.71	0.0226	0.0228	0.0217
3	16QAM	8	4	20.81	20.82	20.75	0.0222	0.0222	0.0219
3	16QAM	8	7	20.69	20.85	20.69	0.0216	0.0224	0.0216
3	16QAM	15	0	20.76	20.78	20.77	0.0219	0.0220	0.0220
3	64QAM	1	0	21.08	21.20	21.07	0.0236	0.0243	0.0236
3	64QAM	1	8	20.94	21.16	21.04	0.0229	0.0240	0.0234
3	64QAM	1	14	21.00	20.96	21.16	0.0232	0.0230	0.0240
3	64QAM	8	0	19.91	19.94	19.65	0.0180	0.0182	0.0170
3	64QAM	8	4	19.73	19.79	19.62	0.0173	0.0175	0.0169
3	64QAM	8	7	19.77	19.68	19.69	0.0175	0.0171	0.0171
3	64QAM	15	0	19.68	19.78	19.69	0.0171	0.0175	0.0171
3	256QAM	1	0	18.04	18.13	18.08	0.0117	0.0120	0.0118
3	256QAM	1	8	17.88	18.01	17.92	0.0113	0.0116	0.0114
3	256QAM	1	14	18.01	17.93	18.11	0.0116	0.0114	0.0119
3	256QAM	8	0	17.66	17.94	17.70	0.0107	0.0115	0.0108
3	256QAM	8	4	17.65	17.65	17.63	0.0107	0.0107	0.0107
3	256QAM	8	7	17.71	17.79	17.63	0.0109	0.0111	0.0107



3	256QAM	15	0	17.84	17.83	17.72	0.0112	0.0112	0.0109
Channel				23017	23095	23173	ERP(W)		
Frequency (MHz)				699.7	707.5	715.3	L	M	H
1.4	QPSK	1	0	22.94	23.03	22.97	0.0362	0.0370	0.0365
1.4	QPSK	1	3	22.73	22.88	22.67	0.0345	0.0357	0.0340
1.4	QPSK	1	5	22.67	22.77	22.70	0.0340	0.0348	0.0343
1.4	QPSK	3	0	22.84	22.99	22.88	0.0354	0.0366	0.0357
1.4	QPSK	3	1	22.60	22.75	22.53	0.0335	0.0347	0.0330
1.4	QPSK	3	3	22.52	22.63	22.65	0.0329	0.0337	0.0339
1.4	QPSK	6	0	21.96	21.99	21.84	0.0289	0.0291	0.0281
1.4	16QAM	1	0	22.14	22.27	22.19	0.0301	0.0310	0.0305
1.4	16QAM	1	3	22.13	22.21	22.06	0.0301	0.0306	0.0296
1.4	16QAM	1	5	22.08	22.26	22.16	0.0297	0.0310	0.0303
1.4	16QAM	3	0	22.07	22.19	22.06	0.0296	0.0305	0.0296
1.4	16QAM	3	1	21.99	22.17	21.91	0.0291	0.0303	0.0286
1.4	16QAM	3	3	21.94	22.16	22.02	0.0288	0.0303	0.0293
1.4	16QAM	6	0	20.75	20.82	20.76	0.0219	0.0222	0.0219
1.4	64QAM	1	0	21.03	21.19	21.10	0.0233	0.0242	0.0237
1.4	64QAM	1	3	20.96	21.11	21.08	0.0230	0.0238	0.0236
1.4	64QAM	1	5	20.98	20.99	21.13	0.0231	0.0231	0.0239
1.4	64QAM	3	0	20.90	21.12	21.04	0.0226	0.0238	0.0234
1.4	64QAM	3	1	20.82	20.97	20.99	0.0222	0.0230	0.0231
1.4	64QAM	3	3	20.92	20.87	21.08	0.0228	0.0225	0.0236
1.4	64QAM	6	0	19.70	19.76	19.71	0.0172	0.0174	0.0172
1.4	256QAM	1	0	18.04	18.06	18.07	0.0117	0.0118	0.0118
1.4	256QAM	1	3	17.92	18.00	17.96	0.0114	0.0116	0.0115
1.4	256QAM	1	5	17.94	17.95	18.07	0.0115	0.0115	0.0118
1.4	256QAM	3	0	17.71	17.96	17.72	0.0109	0.0115	0.0109
1.4	256QAM	3	1	17.70	17.65	17.60	0.0108	0.0107	0.0106
1.4	256QAM	3	3	17.71	17.78	17.63	0.0109	0.0110	0.0107
1.4	256QAM	6	0	17.85	17.79	17.79	0.0112	0.0111	0.0111



LTE Band 13_ANT0:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23230					
Frequency (MHz)				782				M	
10	QPSK	1	0		22.96			0.0377	
10	QPSK	1	25		22.81			0.0364	
10	QPSK	1	49		22.85			0.0367	
10	QPSK	25	0		22.00			0.0302	
10	QPSK	25	12		21.84			0.0291	
10	QPSK	25	25		21.81			0.0289	
10	QPSK	50	0		21.93			0.0297	
10	16QAM	1	0		22.28			0.0322	
10	16QAM	1	25		22.24			0.0319	
10	16QAM	1	49		22.28			0.0322	
10	16QAM	25	0		20.94			0.0237	
10	16QAM	25	12		20.90			0.0234	
10	16QAM	25	25		20.78			0.0228	
10	16QAM	50	0		20.79			0.0229	
10	64QAM	1	0		21.14			0.0248	
10	64QAM	1	25		21.09			0.0245	
10	64QAM	1	49		21.04			0.0242	
10	64QAM	25	0		19.83			0.0183	
10	64QAM	25	12		19.78			0.0181	
10	64QAM	25	25		19.71			0.0178	
10	64QAM	50	0		19.83			0.0183	
10	256QAM	1	0		18.06			0.0122	
10	256QAM	1	25		18.04			0.0121	
10	256QAM	1	49		17.99			0.0120	
10	256QAM	25	0		17.86			0.0116	
10	256QAM	25	12		17.78			0.0114	
10	256QAM	25	25		17.79			0.0115	
10	256QAM	50	0		17.76			0.0114	
Channel				23205	23230	23255	ERP(W)		
Frequency (MHz)				779.5	782	784.5	L	M	H
5	QPSK	1	0	22.92	22.80	22.88	0.0373	0.0363	0.0370
5	QPSK	1	12	22.68	22.76	22.74	0.0353	0.0360	0.0358
5	QPSK	1	24	22.70	22.74	22.78	0.0355	0.0358	0.0361
5	QPSK	12	0	21.96	21.87	21.94	0.0299	0.0293	0.0298
5	QPSK	12	7	21.79	21.72	21.75	0.0288	0.0283	0.0285
5	QPSK	12	13	21.70	21.67	21.65	0.0282	0.0280	0.0279
5	QPSK	25	0	21.82	21.82	21.88	0.0290	0.0290	0.0294
5	16QAM	1	0	22.12	22.14	22.20	0.0310	0.0312	0.0316
5	16QAM	1	12	22.19	22.10	22.10	0.0316	0.0309	0.0309
5	16QAM	1	24	22.22	22.23	22.15	0.0318	0.0318	0.0313



5	16QAM	12	0	20.85	20.82	20.80	0.0232	0.0230	0.0229
5	16QAM	12	7	20.76	20.83	20.74	0.0227	0.0231	0.0226
5	16QAM	12	13	20.70	20.71	20.71	0.0224	0.0224	0.0224
5	16QAM	25	0	20.64	20.67	20.72	0.0221	0.0222	0.0225
5	64QAM	1	0	21.06	20.98	20.99	0.0243	0.0239	0.0239
5	64QAM	1	12	20.97	21.02	20.94	0.0238	0.0241	0.0237
5	64QAM	1	24	20.97	20.94	20.98	0.0238	0.0237	0.0239
5	64QAM	12	0	19.72	19.75	19.70	0.0179	0.0180	0.0178
5	64QAM	12	7	19.71	19.63	19.62	0.0178	0.0175	0.0175
5	64QAM	12	13	19.60	19.58	19.66	0.0174	0.0173	0.0176
5	64QAM	25	0	19.78	19.72	19.67	0.0181	0.0179	0.0177
5	256QAM	1	0	17.90	17.92	17.97	0.0117	0.0118	0.0119
5	256QAM	1	12	17.89	17.91	17.94	0.0117	0.0118	0.0119
5	256QAM	1	24	17.87	17.93	17.91	0.0117	0.0118	0.0118
5	256QAM	12	0	17.76	17.71	17.76	0.0114	0.0112	0.0114
5	256QAM	12	7	17.63	17.72	17.68	0.0110	0.0113	0.0112
5	256QAM	12	13	17.65	17.66	17.67	0.0111	0.0111	0.0111
5	256QAM	25	0	17.62	17.64	17.66	0.0110	0.0111	0.0111

LTE Band 17_ANT0:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23780	23790	23800			
Frequency (MHz)				709	710	711	L	M	H
10	QPSK	1	0	22.79	22.83	22.70	0.0350	0.0353	0.0343
10	QPSK	1	25	22.63	22.67	22.68	0.0337	0.0340	0.0341
10	QPSK	1	49	22.49	22.65	22.60	0.0327	0.0339	0.0335
10	QPSK	25	0	21.84	21.85	21.81	0.0281	0.0282	0.0279
10	QPSK	25	12	21.66	21.74	21.70	0.0270	0.0275	0.0272
10	QPSK	25	25	21.60	21.72	21.59	0.0266	0.0274	0.0265
10	QPSK	50	0	21.80	21.81	21.70	0.0279	0.0279	0.0272
10	16QAM	1	0	22.03	22.18	22.03	0.0294	0.0304	0.0294
10	16QAM	1	25	22.03	22.13	22.01	0.0294	0.0301	0.0292
10	16QAM	1	49	21.92	22.09	21.94	0.0286	0.0298	0.0288
10	16QAM	25	0	20.73	20.81	20.64	0.0218	0.0222	0.0213
10	16QAM	25	12	20.67	20.79	20.65	0.0215	0.0221	0.0214
10	16QAM	25	25	20.56	20.64	20.62	0.0209	0.0213	0.0212
10	16QAM	50	0	20.63	20.65	20.66	0.0213	0.0214	0.0214
10	64QAM	1	0	20.94	20.99	21.00	0.0229	0.0231	0.0232
10	64QAM	1	25	20.86	21.04	20.97	0.0224	0.0234	0.0230
10	64QAM	1	49	20.85	20.88	20.93	0.0224	0.0225	0.0228
10	64QAM	25	0	19.72	19.73	19.59	0.0173	0.0173	0.0167
10	64QAM	25	12	19.63	19.67	19.59	0.0169	0.0171	0.0167
10	64QAM	25	25	19.62	19.56	19.61	0.0169	0.0166	0.0168
10	64QAM	50	0	19.58	19.62	19.54	0.0167	0.0169	0.0166



10	256QAM	1	0	17.81	17.97	17.93	0.0111	0.0115	0.0114
10	256QAM	1	25	17.82	17.91	17.71	0.0111	0.0114	0.0109
10	256QAM	1	49	17.80	17.78	17.89	0.0111	0.0110	0.0113
10	256QAM	25	0	17.66	17.71	17.61	0.0107	0.0109	0.0106
10	256QAM	25	12	17.59	17.59	17.45	0.0106	0.0106	0.0102
10	256QAM	25	25	17.53	17.70	17.50	0.0104	0.0108	0.0104
10	256QAM	50	0	17.66	17.73	17.57	0.0107	0.0109	0.0105
Channel				23755	23790	23825	ERP(W)		
Frequency (MHz)				706.5	710	713.5	L	M	H
5	QPSK	1	0	22.66	22.69	22.63	0.0340	0.0342	0.0337
5	QPSK	1	12	22.54	22.57	22.63	0.0330	0.0333	0.0337
5	QPSK	1	24	22.34	22.55	22.52	0.0316	0.0331	0.0329
5	QPSK	12	0	21.72	21.80	21.70	0.0274	0.0279	0.0272
5	QPSK	12	7	21.61	21.69	21.58	0.0267	0.0272	0.0265
5	QPSK	12	13	21.52	21.57	21.48	0.0261	0.0264	0.0259
5	QPSK	25	0	21.67	21.67	21.56	0.0270	0.0270	0.0264
5	16QAM	1	0	21.90	22.04	21.97	0.0285	0.0294	0.0290
5	16QAM	1	12	21.95	22.05	21.86	0.0288	0.0295	0.0282
5	16QAM	1	24	21.85	22.00	21.85	0.0282	0.0292	0.0282
5	16QAM	12	0	20.67	20.68	20.54	0.0215	0.0215	0.0208
5	16QAM	12	7	20.52	20.67	20.59	0.0207	0.0215	0.0211
5	16QAM	12	13	20.41	20.56	20.54	0.0202	0.0209	0.0208
5	16QAM	25	0	20.59	20.51	20.53	0.0211	0.0207	0.0208
5	64QAM	1	0	20.83	20.87	20.93	0.0223	0.0225	0.0228
5	64QAM	1	12	20.72	20.99	20.87	0.0217	0.0231	0.0225
5	64QAM	1	24	20.74	20.75	20.81	0.0218	0.0219	0.0222
5	64QAM	12	0	19.67	19.59	19.50	0.0171	0.0167	0.0164
5	64QAM	12	7	19.53	19.61	19.53	0.0165	0.0168	0.0165
5	64QAM	12	13	19.55	19.48	19.48	0.0166	0.0163	0.0163
5	64QAM	25	0	19.45	19.51	19.39	0.0162	0.0164	0.0160
5	256QAM	1	0	17.71	17.92	17.85	0.0109	0.0114	0.0112
5	256QAM	1	12	17.69	17.82	17.66	0.0108	0.0111	0.0107
5	256QAM	1	24	17.74	17.68	17.85	0.0109	0.0108	0.0112
5	256QAM	12	0	17.58	17.62	17.54	0.0105	0.0106	0.0104
5	256QAM	12	7	17.46	17.46	17.37	0.0103	0.0103	0.0100
5	256QAM	12	13	17.48	17.58	17.38	0.0103	0.0105	0.0101
5	256QAM	25	0	17.51	17.65	17.51	0.0104	0.0107	0.0104



LTE Band 26_ANT0:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)			
Channel				26790	26865	26915	26965				
Frequency (MHz)				824	831.5	836.5	841.5	Straddle Ch	L	M	H
15	QPSK	1	0	22.55	22.64	22.55	22.61	0.0290	0.0296	0.0290	0.0294
15	QPSK	1	37	22.45	22.54	22.45	22.48	0.0284	0.0290	0.0284	0.0286
15	QPSK	1	74	22.40	22.43	22.40	22.32	0.0281	0.0282	0.0281	0.0275
15	QPSK	36	0	21.63	21.73	21.63	21.54	0.0235	0.0240	0.0235	0.0230
15	QPSK	36	20	21.46	21.56	21.46	21.41	0.0226	0.0231	0.0226	0.0223
15	QPSK	36	39	21.34	21.43	21.34	21.47	0.0220	0.0224	0.0220	0.0226
15	QPSK	75	0	21.56	21.62	21.56	21.60	0.0231	0.0234	0.0231	0.0233
15	16QAM	1	0	21.82	21.94	21.82	21.85	0.0245	0.0252	0.0245	0.0247
15	16QAM	1	37	21.74	21.88	21.74	21.81	0.0241	0.0249	0.0241	0.0245
15	16QAM	1	74	21.79	21.94	21.79	21.69	0.0244	0.0252	0.0244	0.0238
15	16QAM	36	0	20.41	20.52	20.41	20.52	0.0177	0.0182	0.0177	0.0182
15	16QAM	36	20	20.44	20.53	20.44	20.47	0.0179	0.0182	0.0179	0.0180
15	16QAM	36	39	20.39	20.49	20.39	20.36	0.0177	0.0181	0.0177	0.0175
15	16QAM	75	0	20.37	20.51	20.37	20.49	0.0176	0.0182	0.0176	0.0181
15	64QAM	1	0	20.77	20.84	20.77	20.77	0.0193	0.0196	0.0193	0.0193
15	64QAM	1	37	20.70	20.76	20.70	20.62	0.0190	0.0192	0.0190	0.0186
15	64QAM	1	74	20.68	20.71	20.68	20.65	0.0189	0.0190	0.0189	0.0187
15	64QAM	36	0	19.45	19.56	19.45	19.42	0.0142	0.0146	0.0142	0.0141
15	64QAM	36	20	19.35	19.47	19.35	19.34	0.0139	0.0143	0.0139	0.0139
15	64QAM	36	39	19.31	19.36	19.31	19.40	0.0138	0.0139	0.0138	0.0141
15	64QAM	75	0	19.38	19.50	19.38	19.42	0.0140	0.0144	0.0140	0.0141
15	256QAM	1	0	17.71	17.74	17.71	17.70	0.0095	0.0096	0.0095	0.0095
15	256QAM	1	37	17.57	17.67	17.57	17.63	0.0092	0.0094	0.0092	0.0094
15	256QAM	1	74	17.63	17.66	17.63	17.58	0.0094	0.0094	0.0094	0.0092
15	256QAM	36	0	17.43	17.56	17.43	17.38	0.0089	0.0092	0.0089	0.0088
15	256QAM	36	20	17.33	17.41	17.33	17.34	0.0087	0.0089	0.0087	0.0087
15	256QAM	36	39	17.36	17.48	17.36	17.39	0.0088	0.0090	0.0088	0.0089
15	256QAM	75	0	17.38	17.45	17.38	17.42	0.0088	0.0090	0.0088	0.0089
Channel					26840	26915	26990	ERP(W)			
Frequency (MHz)					829	836.5	844		L	M	H
10	QPSK	1	0		22.55	22.42	22.49		0.0290	0.0282	0.0286
10	QPSK	1	25		22.48	22.40	22.33		0.0286	0.0281	0.0276
10	QPSK	1	49		22.32	22.33	22.22		0.0275	0.0276	0.0269
10	QPSK	25	0		21.62	21.49	21.47		0.0234	0.0228	0.0226
10	QPSK	25	12		21.45	21.41	21.33		0.0225	0.0223	0.0219
10	QPSK	25	25		21.32	21.22	21.33		0.0219	0.0214	0.0219
10	QPSK	50	0		21.55	21.50	21.56		0.0231	0.0228	0.0231
10	16QAM	1	0		21.82	21.67	21.70		0.0245	0.0237	0.0239
10	16QAM	1	25		21.83	21.64	21.75		0.0246	0.0236	0.0242
10	16QAM	1	49		21.79	21.65	21.58		0.0244	0.0236	0.0232



10	16QAM	25	0		20.40	20.34	20.46		0.0177	0.0175	0.0179
10	16QAM	25	12		20.46	20.34	20.37		0.0179	0.0175	0.0176
10	16QAM	25	25		20.39	20.30	20.20		0.0177	0.0173	0.0169
10	16QAM	50	0		20.35	20.29	20.34		0.0175	0.0173	0.0175
10	64QAM	1	0		20.68	20.63	20.66		0.0189	0.0187	0.0188
10	64QAM	1	25		20.63	20.54	20.53		0.0187	0.0183	0.0182
10	64QAM	1	49		20.58	20.57	20.53		0.0185	0.0184	0.0182
10	64QAM	25	0		19.42	19.30	19.37		0.0141	0.0137	0.0140
10	64QAM	25	12		19.34	19.21	19.28		0.0139	0.0135	0.0137
10	64QAM	25	25		19.20	19.23	19.33		0.0134	0.0135	0.0138
10	64QAM	50	0		19.35	19.31	19.28		0.0139	0.0138	0.0137
10	256QAM	1	0		17.63	17.60	17.63		0.0094	0.0093	0.0094
10	256QAM	1	25		17.59	17.44	17.56		0.0093	0.0090	0.0092
10	256QAM	1	49		17.58	17.56	17.49		0.0092	0.0092	0.0091
10	256QAM	25	0		17.52	17.36	17.31		0.0091	0.0088	0.0087
10	256QAM	25	12		17.29	17.28	17.28		0.0086	0.0086	0.0086
10	256QAM	25	25		17.34	17.21	17.24		0.0087	0.0085	0.0086
10	256QAM	50	0		17.39	17.24	17.32		0.0089	0.0086	0.0087
Channel					26815	26915	27015	ERP(W)			
Frequency (MHz)					826.5	836.5	846.5		L	M	H
5	QPSK	1	0		22.58	22.45	22.47		0.0292	0.0284	0.0285
5	QPSK	1	12		22.43	22.29	22.40		0.0282	0.0274	0.0281
5	QPSK	1	24		22.34	22.25	22.21		0.0277	0.0271	0.0269
5	QPSK	12	0		21.68	21.50	21.47		0.0238	0.0228	0.0226
5	QPSK	12	7		21.51	21.42	21.29		0.0229	0.0224	0.0217
5	QPSK	12	13		21.33	21.20	21.37		0.0219	0.0213	0.0221
5	QPSK	25	0		21.56	21.41	21.46		0.0231	0.0223	0.0226
5	16QAM	1	0		21.85	21.68	21.71		0.0247	0.0238	0.0239
5	16QAM	1	12		21.80	21.68	21.72		0.0244	0.0238	0.0240
5	16QAM	1	24		21.90	21.75	21.58		0.0250	0.0242	0.0232
5	16QAM	12	0		20.47	20.32	20.47		0.0180	0.0174	0.0180
5	16QAM	12	7		20.47	20.39	20.34		0.0180	0.0177	0.0175
5	16QAM	12	13		20.45	20.28	20.21		0.0179	0.0172	0.0169
5	16QAM	25	0		20.40	20.29	20.39		0.0177	0.0173	0.0177
5	64QAM	1	0		20.69	20.63	20.71		0.0189	0.0187	0.0190
5	64QAM	1	12		20.61	20.65	20.48		0.0186	0.0187	0.0180
5	64QAM	1	24		20.64	20.62	20.53		0.0187	0.0186	0.0182
5	64QAM	12	0		19.42	19.29	19.27		0.0141	0.0137	0.0136
5	64QAM	12	7		19.37	19.22	19.26		0.0140	0.0135	0.0136
5	64QAM	12	13		19.23	19.23	19.31		0.0135	0.0135	0.0138
5	64QAM	25	0		19.42	19.25	19.33		0.0141	0.0136	0.0138
5	256QAM	1	0		17.67	17.58	17.57		0.0094	0.0092	0.0092
5	256QAM	1	12		17.58	17.47	17.52		0.0092	0.0090	0.0091
5	256QAM	1	24		17.58	17.54	17.53		0.0092	0.0092	0.0091
5	256QAM	12	0		17.49	17.34	17.24		0.0091	0.0087	0.0086
5	256QAM	12	7		17.30	17.29	17.22		0.0087	0.0086	0.0085
5	256QAM	12	13		17.41	17.27	17.32		0.0089	0.0086	0.0087



5	256QAM	25	0		17.37	17.27	17.28		0.0088	0.0086	0.0086
Channel					26815	26915	27025	ERP(W)			
Frequency (MHz)					825.5	836.5	847.5		L	M	H
3	QPSK	1	0		22.53	22.40	22.47		0.0289	0.0281	0.0285
3	QPSK	1	8		22.47	22.34	22.33		0.0285	0.0277	0.0276
3	QPSK	1	14		22.34	22.30	22.22		0.0277	0.0274	0.0269
3	QPSK	8	0		21.63	21.57	21.41		0.0235	0.0232	0.0223
3	QPSK	8	4		21.43	21.36	21.28		0.0224	0.0221	0.0217
3	QPSK	8	7		21.29	21.18	21.32		0.0217	0.0212	0.0219
3	QPSK	15	0		21.55	21.45	21.46		0.0231	0.0225	0.0226
3	16QAM	1	0		21.80	21.72	21.75		0.0244	0.0240	0.0242
3	16QAM	1	8		21.74	21.63	21.75		0.0241	0.0235	0.0242
3	16QAM	1	14		21.85	21.75	21.57		0.0247	0.0242	0.0232
3	16QAM	8	0		20.46	20.35	20.39		0.0179	0.0175	0.0177
3	16QAM	8	4		20.44	20.39	20.35		0.0179	0.0177	0.0175
3	16QAM	8	7		20.35	20.29	20.25		0.0175	0.0173	0.0171
3	16QAM	15	0		20.36	20.32	20.33		0.0175	0.0174	0.0174
3	64QAM	1	0		20.75	20.70	20.73		0.0192	0.0190	0.0191
3	64QAM	1	8		20.67	20.62	20.53		0.0188	0.0186	0.0182
3	64QAM	1	14		20.58	20.58	20.54		0.0185	0.0185	0.0183
3	64QAM	8	0		19.45	19.31	19.29		0.0142	0.0138	0.0137
3	64QAM	8	4		19.36	19.23	19.20		0.0139	0.0135	0.0134
3	64QAM	8	7		19.25	19.18	19.31		0.0136	0.0134	0.0138
3	64QAM	15	0		19.40	19.25	19.38		0.0141	0.0136	0.0140
3	256QAM	1	0		17.61	17.56	17.56		0.0093	0.0092	0.0092
3	256QAM	1	8		17.60	17.42	17.53		0.0093	0.0089	0.0091
3	256QAM	1	14		17.56	17.48	17.53		0.0092	0.0090	0.0091
3	256QAM	8	0		17.46	17.33	17.26		0.0090	0.0087	0.0086
3	256QAM	8	4		17.25	17.28	17.23		0.0086	0.0086	0.0085
3	256QAM	8	7		17.39	17.31	17.33		0.0089	0.0087	0.0087
3	256QAM	15	0		17.40	17.34	17.36		0.0089	0.0087	0.0088
Channel					26797	26915	27033	ERP(W)			
Frequency (MHz)					824.7	836.5	848.3		L	M	H
1.4	QPSK	1	0		22.52	22.46	22.46		0.0288	0.0284	0.0284
1.4	QPSK	1	3		22.47	22.31	22.35		0.0285	0.0275	0.0277
1.4	QPSK	1	5		22.29	22.31	22.16		0.0274	0.0275	0.0265
1.4	QPSK	3	0		22.47	22.37	22.41		0.0285	0.0279	0.0281
1.4	QPSK	3	1		22.35	22.19	22.27		0.0277	0.0267	0.0272
1.4	QPSK	3	3		22.20	22.19	22.05		0.0268	0.0267	0.0259
1.4	QPSK	6	0		21.57	21.43	21.49		0.0232	0.0224	0.0228
1.4	16QAM	1	0		21.87	21.72	21.72		0.0248	0.0240	0.0240
1.4	16QAM	1	3		21.79	21.61	21.66		0.0244	0.0234	0.0237
1.4	16QAM	1	5		21.79	21.65	21.61		0.0244	0.0236	0.0234
1.4	16QAM	3	0		21.77	21.60	21.68		0.0243	0.0233	0.0238
1.4	16QAM	3	1		21.74	21.53	21.61		0.0241	0.0230	0.0234
1.4	16QAM	3	3		21.67	21.61	21.48		0.0237	0.0234	0.0227
1.4	16QAM	6	0		20.46	20.23	20.40		0.0179	0.0170	0.0177



1.4	64QAM	1	0	20.80	20.66	20.73	0.0194	0.0188	0.0191
1.4	64QAM	1	3	20.64	20.61	20.50	0.0187	0.0186	0.0181
1.4	64QAM	1	5	20.66	20.53	20.59	0.0188	0.0182	0.0185
1.4	64QAM	3	0	20.71	20.50	20.62	0.0190	0.0181	0.0186
1.4	64QAM	3	1	20.57	20.52	20.35	0.0184	0.0182	0.0175
1.4	64QAM	3	3	20.58	20.41	20.55	0.0185	0.0177	0.0183
1.4	64QAM	6	0	19.45	19.25	19.26	0.0142	0.0136	0.0136
1.4	256QAM	1	0	17.59	17.56	17.55	0.0093	0.0092	0.0092
1.4	256QAM	1	3	17.58	17.51	17.55	0.0092	0.0091	0.0092
1.4	256QAM	1	5	17.57	17.50	17.44	0.0092	0.0091	0.0090
1.4	256QAM	3	0	17.51	17.38	17.33	0.0091	0.0088	0.0087
1.4	256QAM	3	1	17.31	17.26	17.30	0.0087	0.0086	0.0087
1.4	256QAM	3	3	17.33	17.25	17.28	0.0087	0.0086	0.0086
1.4	256QAM	6	0	17.34	17.24	17.28	0.0087	0.0086	0.0086

LTE Band 71_ANT0:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				133222	133322	133372			
Frequency (MHz)				673	683	688	L	M	H
20	QPSK	1	0	23.52	23.60	23.54	0.0366	0.0372	0.0367
20	QPSK	1	49	23.46	23.47	23.34	0.0361	0.0361	0.0351
20	QPSK	1	99	23.32	23.41	23.28	0.0349	0.0356	0.0346
20	QPSK	50	0	22.51	22.68	22.61	0.0290	0.0301	0.0296
20	QPSK	50	24	22.33	22.52	22.42	0.0278	0.0290	0.0284
20	QPSK	50	50	22.37	22.47	22.41	0.0281	0.0287	0.0283
20	QPSK	100	0	22.53	22.66	22.55	0.0291	0.0300	0.0292
20	16QAM	1	0	22.72	22.93	22.88	0.0304	0.0319	0.0316
20	16QAM	1	49	22.77	22.86	22.75	0.0308	0.0314	0.0306
20	16QAM	1	99	22.67	22.91	22.76	0.0301	0.0318	0.0307
20	16QAM	50	0	21.49	21.52	21.38	0.0229	0.0231	0.0223
20	16QAM	50	24	21.39	21.52	21.36	0.0224	0.0231	0.0222
20	16QAM	50	50	21.34	21.36	21.34	0.0221	0.0222	0.0221
20	16QAM	100	0	21.39	21.50	21.37	0.0224	0.0230	0.0223
20	64QAM	1	0	21.72	21.80	21.70	0.0242	0.0246	0.0240
20	64QAM	1	49	21.62	21.76	21.73	0.0236	0.0244	0.0242
20	64QAM	1	99	21.60	21.69	21.68	0.0235	0.0240	0.0239
20	64QAM	50	0	20.48	20.45	20.35	0.0182	0.0180	0.0176
20	64QAM	50	24	20.31	20.40	20.28	0.0175	0.0178	0.0173
20	64QAM	50	50	20.39	20.36	20.33	0.0178	0.0177	0.0175
20	64QAM	100	0	20.39	20.44	20.30	0.0178	0.0180	0.0174
20	256QAM	1	0	18.68	18.69	18.61	0.0120	0.0120	0.0118
20	256QAM	1	49	18.59	18.64	18.57	0.0117	0.0119	0.0117
20	256QAM	1	99	18.58	18.57	18.68	0.0117	0.0117	0.0120
20	256QAM	50	0	18.42	18.51	18.39	0.0113	0.0115	0.0112



20	256QAM	50	24	18.36	18.34	18.23	0.0111	0.0111	0.0108
20	256QAM	50	50	18.37	18.44	18.36	0.0112	0.0114	0.0111
20	256QAM	100	0	18.44	18.48	18.33	0.0114	0.0115	0.0111
Channel				133197	133297	133397	ERP(W)		
Frequency (MHz)				670.5	680.5	690.5	L	M	H
15	QPSK	1	0	23.47	23.46	23.39	0.0361	0.0361	0.0355
15	QPSK	1	37	23.35	23.33	23.29	0.0352	0.0350	0.0347
15	QPSK	1	74	23.16	23.28	23.18	0.0337	0.0346	0.0338
15	QPSK	36	0	22.43	22.53	22.49	0.0284	0.0291	0.0288
15	QPSK	36	20	22.26	22.46	22.29	0.0274	0.0286	0.0275
15	QPSK	36	39	22.23	22.31	22.36	0.0272	0.0277	0.0280
15	QPSK	75	0	22.42	22.55	22.45	0.0284	0.0292	0.0286
15	16QAM	1	0	22.64	22.86	22.74	0.0299	0.0314	0.0305
15	16QAM	1	37	22.71	22.73	22.67	0.0303	0.0305	0.0301
15	16QAM	1	74	22.52	22.84	22.64	0.0290	0.0313	0.0299
15	16QAM	36	0	21.40	21.40	21.28	0.0224	0.0224	0.0218
15	16QAM	36	20	21.35	21.45	21.29	0.0222	0.0227	0.0219
15	16QAM	36	39	21.28	21.27	21.23	0.0218	0.0218	0.0216
15	16QAM	75	0	21.25	21.44	21.26	0.0217	0.0226	0.0217
15	64QAM	1	0	21.65	21.66	21.56	0.0238	0.0238	0.0233
15	64QAM	1	37	21.50	21.62	21.67	0.0230	0.0236	0.0239
15	64QAM	1	74	21.46	21.62	21.56	0.0228	0.0236	0.0233
15	64QAM	36	0	20.35	20.38	20.22	0.0176	0.0177	0.0171
15	64QAM	36	20	20.22	20.25	20.14	0.0171	0.0172	0.0168
15	64QAM	36	39	20.33	20.22	20.17	0.0175	0.0171	0.0169
15	64QAM	75	0	20.27	20.35	20.20	0.0173	0.0176	0.0170
15	256QAM	1	0	18.53	18.57	18.46	0.0116	0.0117	0.0114
15	256QAM	1	37	18.47	18.48	18.51	0.0114	0.0115	0.0115
15	256QAM	1	74	18.48	18.52	18.64	0.0115	0.0116	0.0119
15	256QAM	36	0	18.38	18.35	18.24	0.0112	0.0111	0.0108
15	256QAM	36	20	18.28	18.28	18.14	0.0109	0.0109	0.0106
15	256QAM	36	39	18.24	18.39	18.27	0.0108	0.0112	0.0109
15	256QAM	75	0	18.39	18.41	18.18	0.0112	0.0113	0.0107
Channel				133172	133272	133422	ERP(W)		
Frequency (MHz)				668	678	693	L	M	H
10	QPSK	1	0	23.39	23.48	23.40	0.0355	0.0362	0.0356
10	QPSK	1	25	23.31	23.41	23.27	0.0348	0.0356	0.0345
10	QPSK	1	49	23.20	23.33	23.14	0.0340	0.0350	0.0335
10	QPSK	25	0	22.46	22.59	22.47	0.0286	0.0295	0.0287
10	QPSK	25	12	22.25	22.42	22.32	0.0273	0.0284	0.0277
10	QPSK	25	25	22.22	22.41	22.26	0.0271	0.0283	0.0274
10	QPSK	50	0	22.46	22.51	22.40	0.0286	0.0290	0.0282
10	16QAM	1	0	22.62	22.88	22.72	0.0297	0.0316	0.0304
10	16QAM	1	25	22.73	22.71	22.59	0.0305	0.0303	0.0295
10	16QAM	1	49	22.54	22.87	22.71	0.0292	0.0315	0.0303
10	16QAM	25	0	21.44	21.45	21.31	0.0226	0.0227	0.0220
10	16QAM	25	12	21.26	21.47	21.28	0.0217	0.0228	0.0218



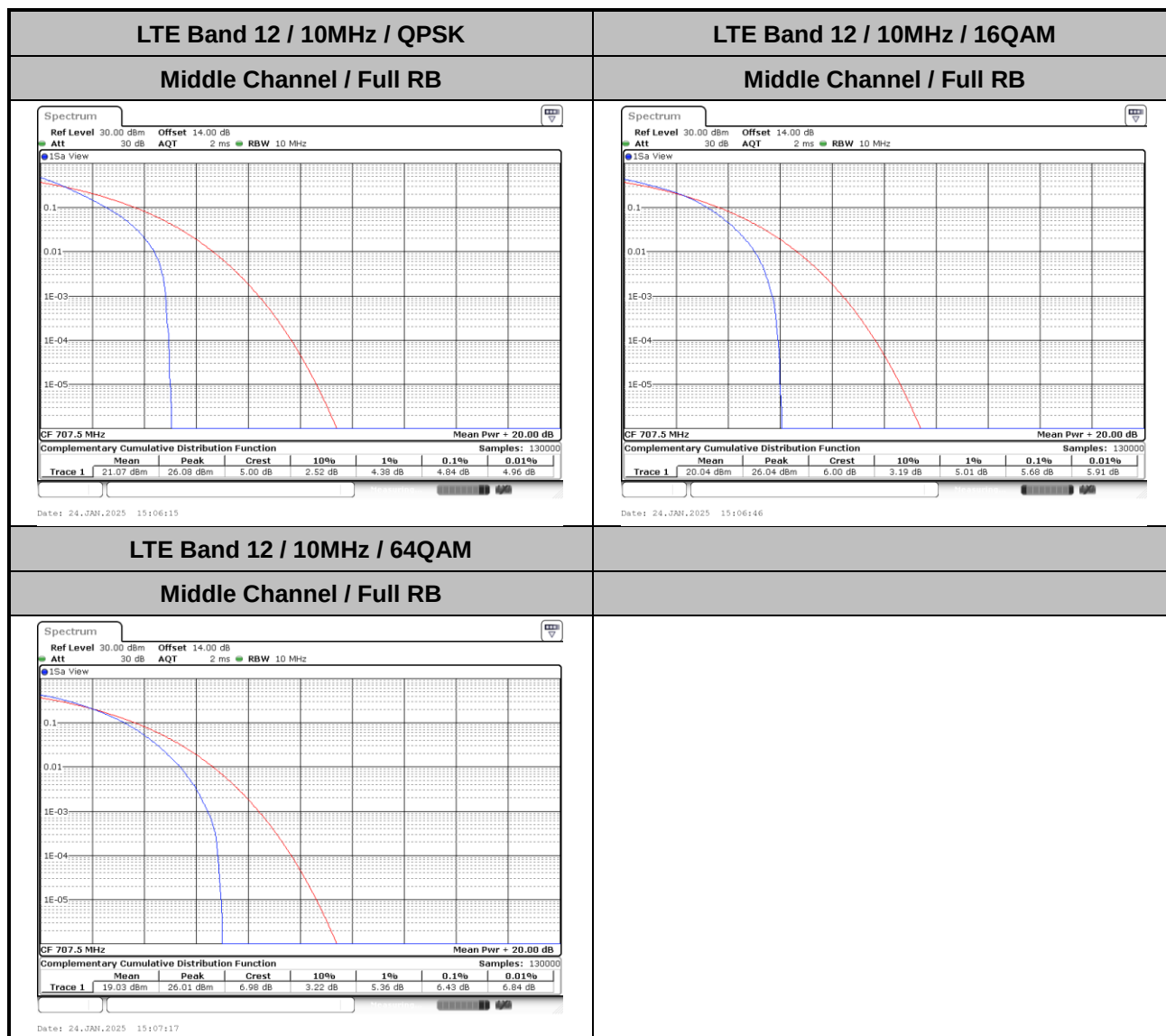
10	16QAM	25	25	21.23	21.24	21.28	0.0216	0.0216	0.0218
10	16QAM	50	0	21.32	21.36	21.25	0.0220	0.0222	0.0217
10	64QAM	1	0	21.58	21.72	21.61	0.0234	0.0242	0.0236
10	64QAM	1	25	21.51	21.60	21.62	0.0230	0.0235	0.0236
10	64QAM	1	49	21.53	21.65	21.57	0.0231	0.0238	0.0233
10	64QAM	25	0	20.39	20.35	20.28	0.0178	0.0176	0.0173
10	64QAM	25	12	20.18	20.25	20.17	0.0169	0.0172	0.0169
10	64QAM	25	25	20.25	20.32	20.23	0.0172	0.0175	0.0171
10	64QAM	50	0	20.34	20.31	20.23	0.0176	0.0175	0.0171
10	256QAM	1	0	18.60	18.63	18.53	0.0118	0.0119	0.0116
10	256QAM	1	25	18.51	18.49	18.42	0.0115	0.0115	0.0113
10	256QAM	1	49	18.46	18.49	18.63	0.0114	0.0115	0.0119
10	256QAM	25	0	18.26	18.44	18.27	0.0109	0.0114	0.0109
10	256QAM	25	12	18.23	18.24	18.08	0.0108	0.0108	0.0104
10	256QAM	25	25	18.26	18.37	18.23	0.0109	0.0112	0.0108
10	256QAM	50	0	18.32	18.39	18.27	0.0110	0.0112	0.0109
Channel				133147	133247	133447	ERP(W)		
Frequency (MHz)				665.5	675.5	695.5	L	M	H
5	QPSK	1	0	23.46	23.55	23.39	0.0361	0.0368	0.0355
5	QPSK	1	12	23.32	23.40	23.21	0.0349	0.0356	0.0340
5	QPSK	1	24	23.22	23.29	23.14	0.0341	0.0347	0.0335
5	QPSK	12	0	22.45	22.56	22.48	0.0286	0.0293	0.0288
5	QPSK	12	7	22.20	22.40	22.38	0.0270	0.0282	0.0281
5	QPSK	12	13	22.23	22.42	22.34	0.0272	0.0284	0.0279
5	QPSK	25	0	22.39	22.57	22.49	0.0282	0.0294	0.0288
5	16QAM	1	0	22.59	22.82	22.81	0.0295	0.0311	0.0310
5	16QAM	1	12	22.64	22.73	22.68	0.0299	0.0305	0.0301
5	16QAM	1	24	22.57	22.86	22.62	0.0294	0.0314	0.0297
5	16QAM	12	0	21.41	21.46	21.31	0.0225	0.0228	0.0220
5	16QAM	12	7	21.24	21.46	21.31	0.0216	0.0228	0.0220
5	16QAM	12	13	21.19	21.21	21.26	0.0214	0.0215	0.0217
5	16QAM	25	0	21.33	21.34	21.25	0.0221	0.0221	0.0217
5	64QAM	1	0	21.62	21.73	21.64	0.0236	0.0242	0.0237
5	64QAM	1	12	21.56	21.68	21.65	0.0233	0.0239	0.0238
5	64QAM	1	24	21.55	21.54	21.58	0.0232	0.0232	0.0234
5	64QAM	12	0	20.39	20.40	20.31	0.0178	0.0178	0.0175
5	64QAM	12	7	20.15	20.26	20.13	0.0168	0.0173	0.0167
5	64QAM	12	13	20.27	20.27	20.20	0.0173	0.0173	0.0170
5	64QAM	25	0	20.28	20.32	20.25	0.0173	0.0175	0.0172
5	256QAM	1	0	18.56	18.54	18.56	0.0117	0.0116	0.0117
5	256QAM	1	12	18.54	18.55	18.49	0.0116	0.0116	0.0115
5	256QAM	1	24	18.48	18.41	18.56	0.0115	0.0113	0.0117
5	256QAM	12	0	18.34	18.46	18.34	0.0111	0.0114	0.0111
5	256QAM	12	7	18.29	18.26	18.19	0.0110	0.0109	0.0107
5	256QAM	12	13	18.28	18.30	18.27	0.0109	0.0110	0.0109
5	256QAM	25	0	18.34	18.36	18.18	0.0111	0.0111	0.0107



LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.84	5.68	6.43	PASS





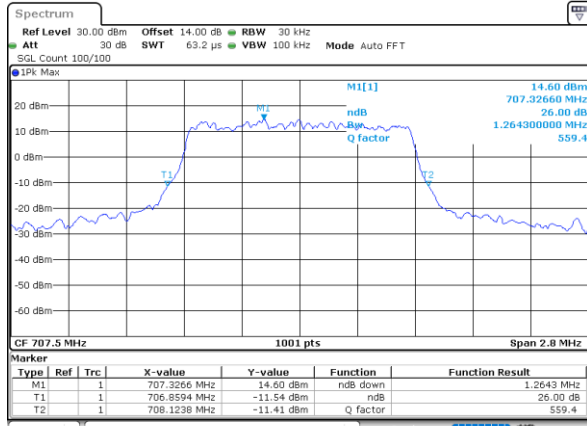
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.26	1.30	2.98	3.01	4.80	4.84	9.87	9.75	-	-	-	-



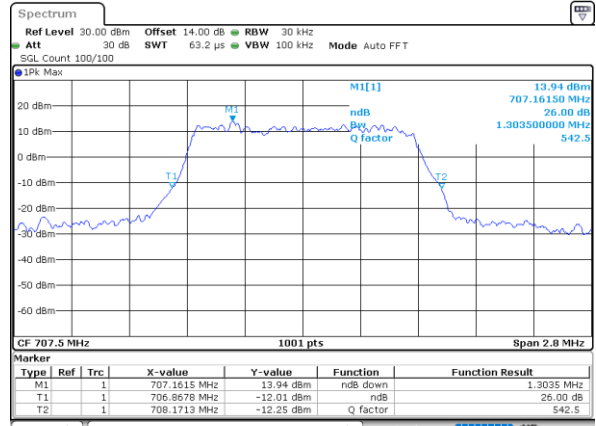
LTE Band 12

Middle Channel / 1.4MHz / QPSK



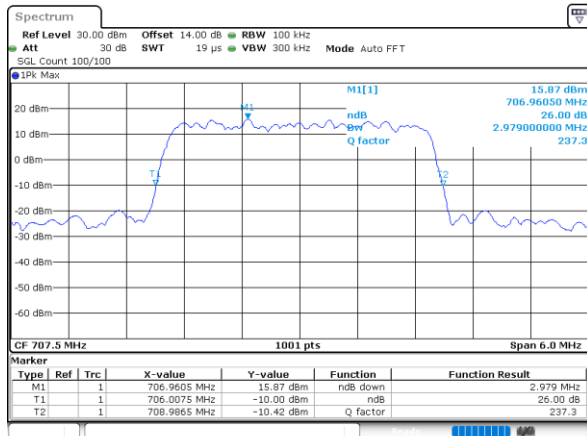
Date: 15.JAN.2025 00:08:45

Middle Channel / 1.4MHz / 16QAM



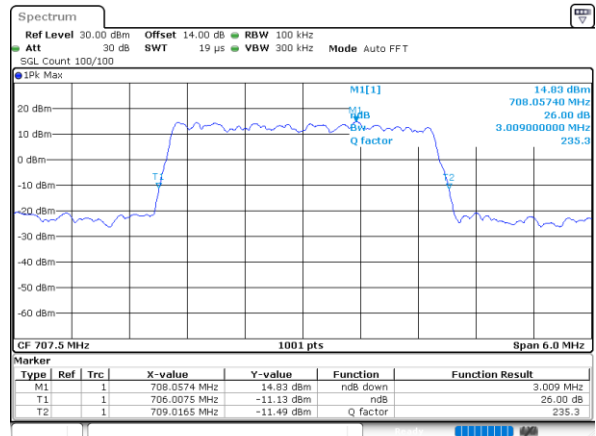
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Middle Channel / 3MHz / QPSK



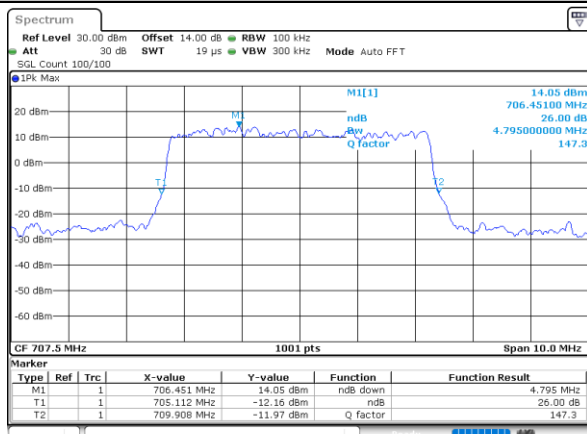
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Middle Channel / 3MHz / 16QAM



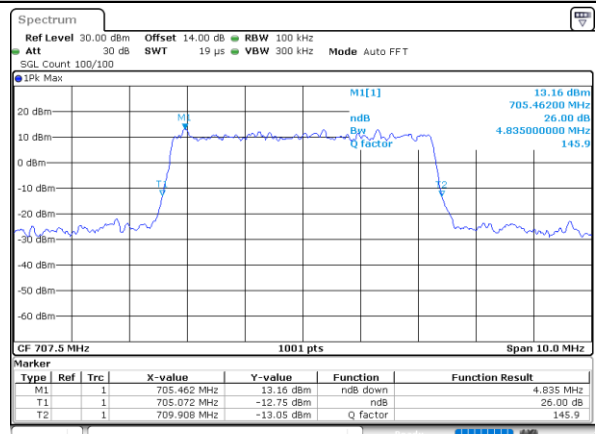
Date: 15.JAN.2025 00:27:10

Middle Channel / 5MHz / QPSK



Date: 15.JAN.2025 00:44:19

Middle Channel / 5MHz / 16QAM

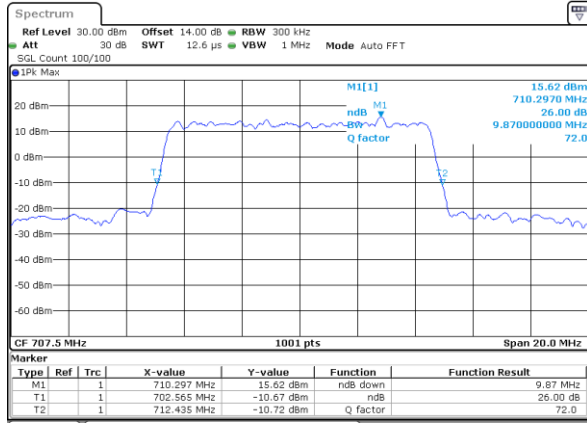


Date: 15.JAN.2025 00:44:59



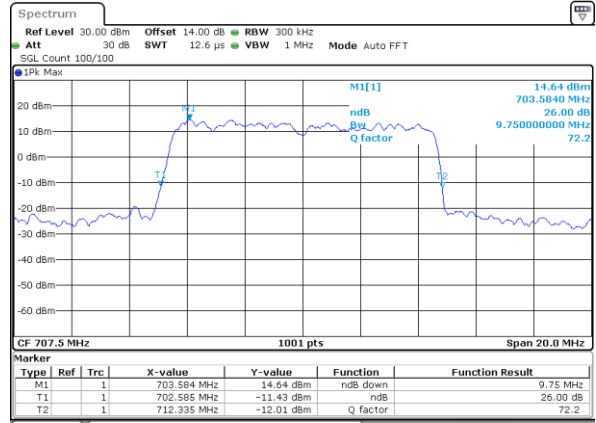
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 15.JAN.2025 01:02:02

Middle Channel / 10MHz / 16QAM



Date: 15.JAN.2025 01:02:41



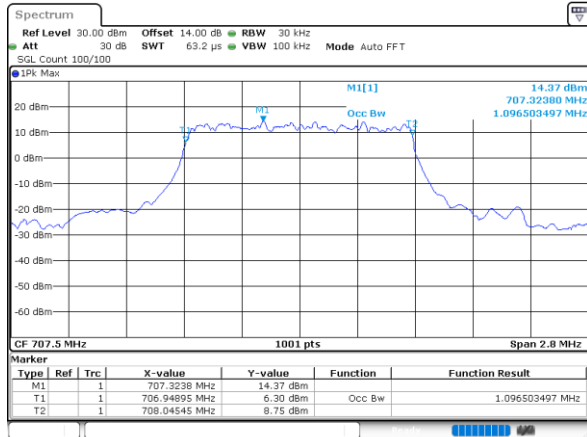
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.10	1.09	2.71	2.72	4.50	4.50	9.03	9.01	-	-	-	-

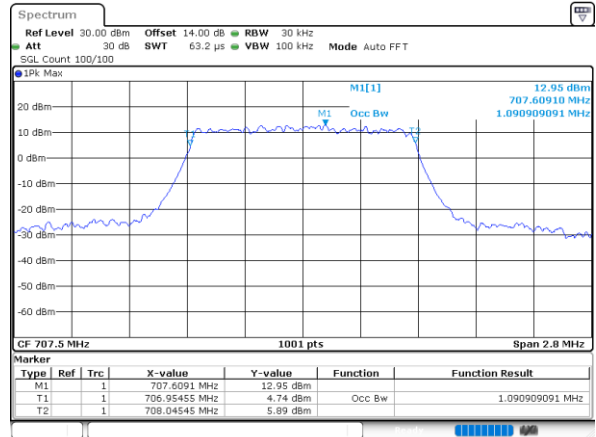


LTE Band 12

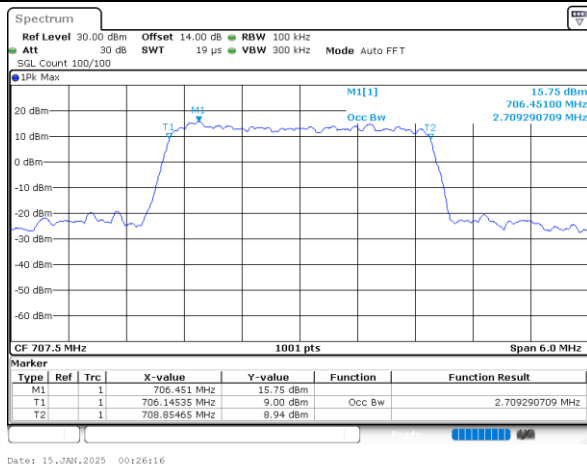
Middle Channel / 1.4MHz / QPSK



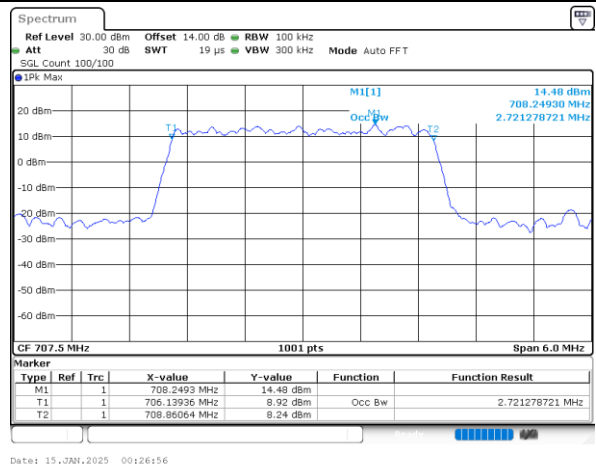
Middle Channel / 1.4MHz / 16QAM



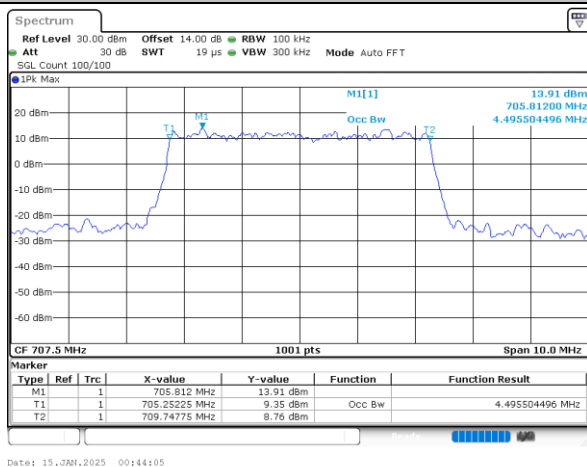
Middle Channel / 3MHz / QPSK



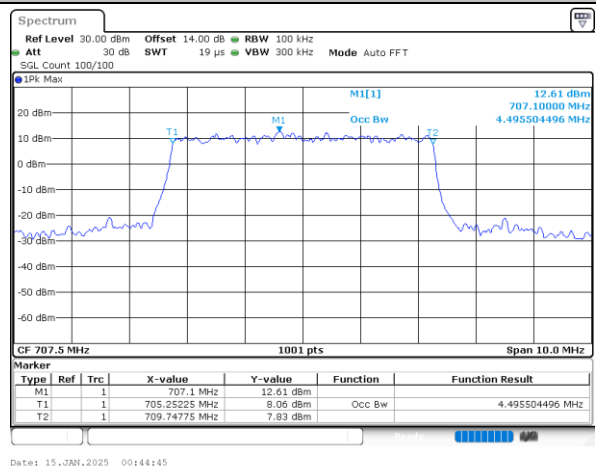
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



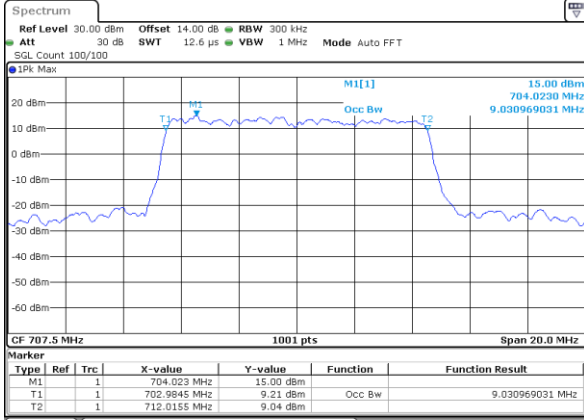
Middle Channel / 5MHz / 16QAM





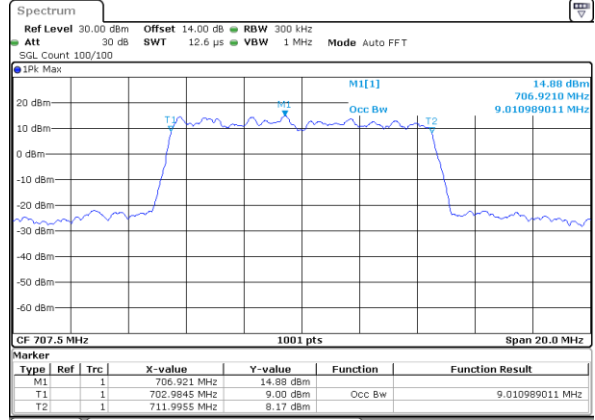
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 15.JAN.2025 01:01:40

Middle Channel / 10MHz / 16QAM



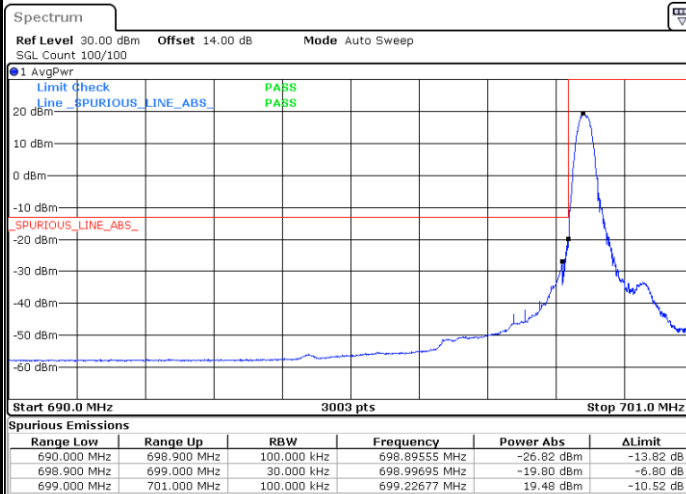
Date: 15.JAN.2025 01:02:27



Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

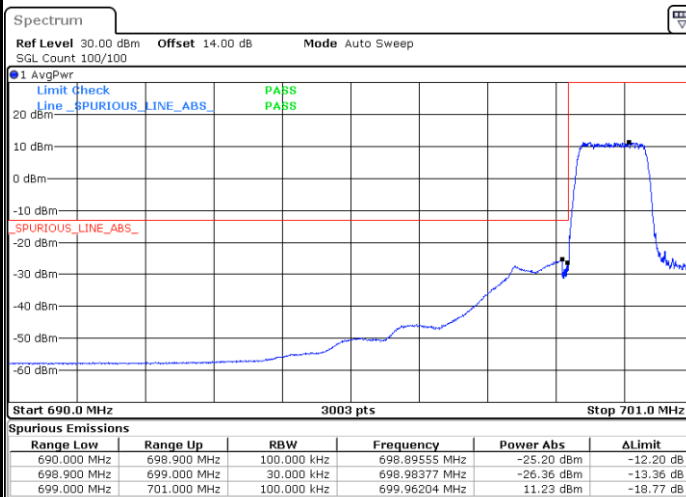
Lowest Band Edge / 1RB



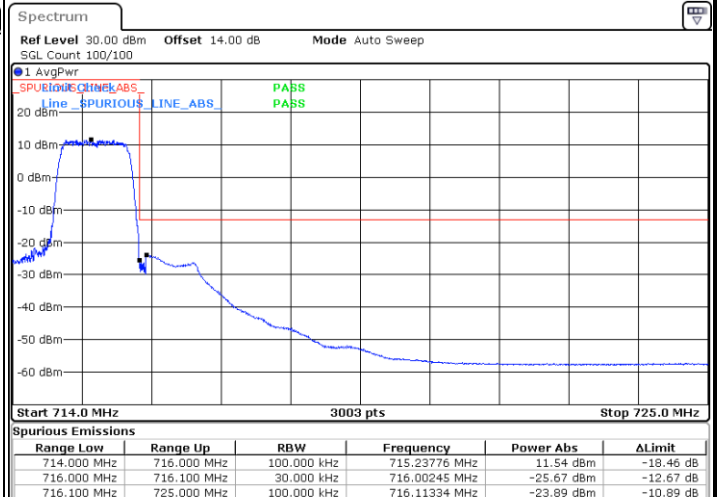
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



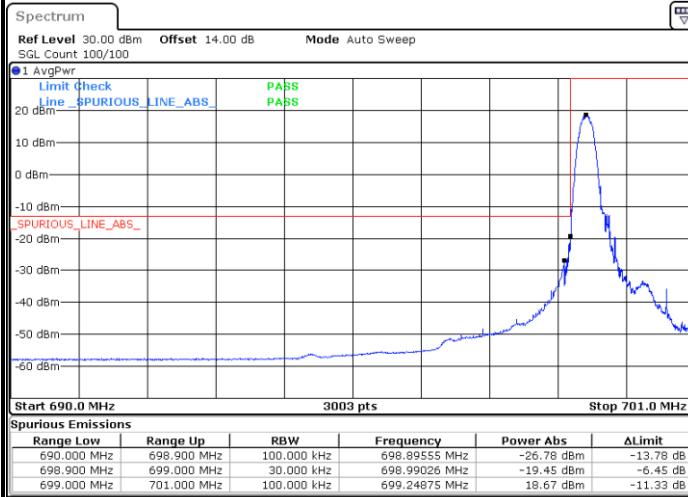
Highest Band Edge / Full RB



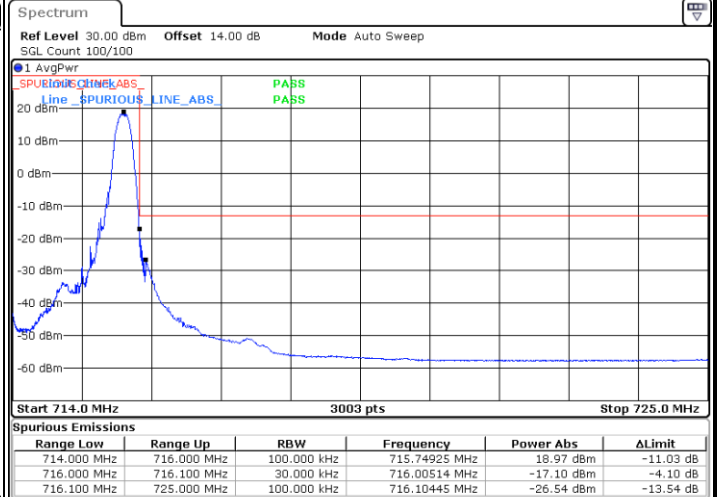


LTE Band 12 / 1.4MHz / 16QAM

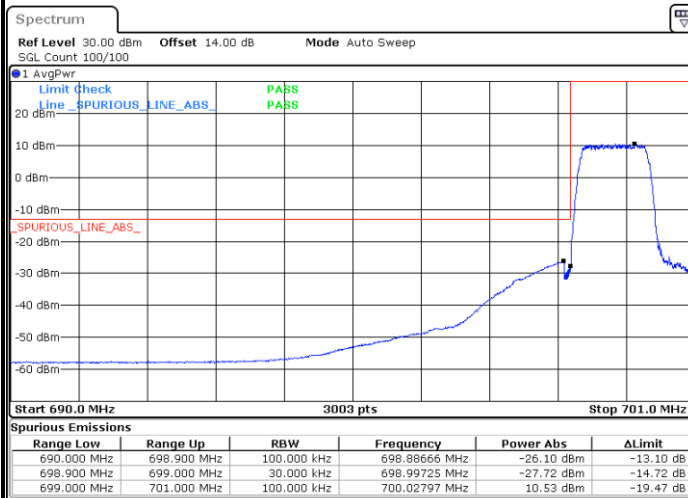
Lowest Band Edge / 1 RB



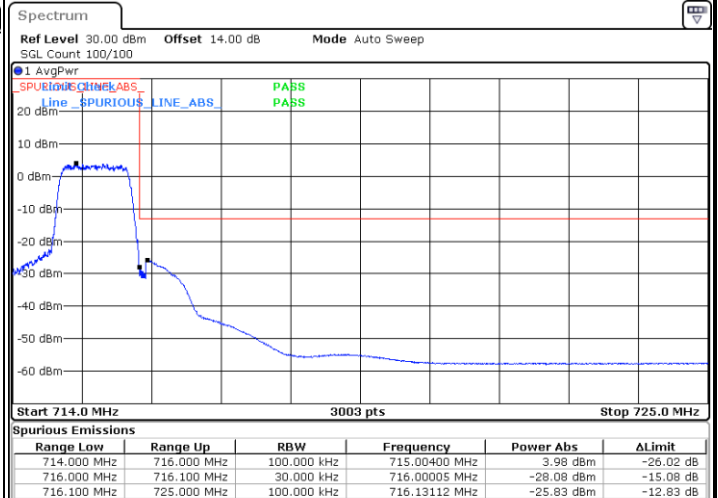
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



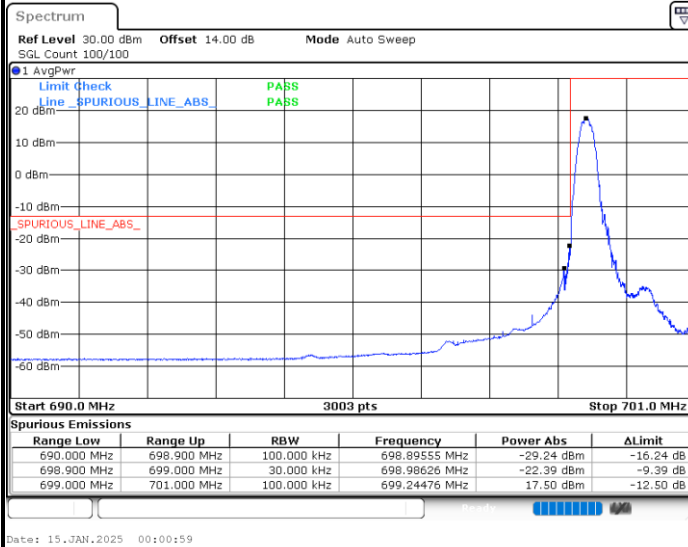
Highest Band Edge / Full RB



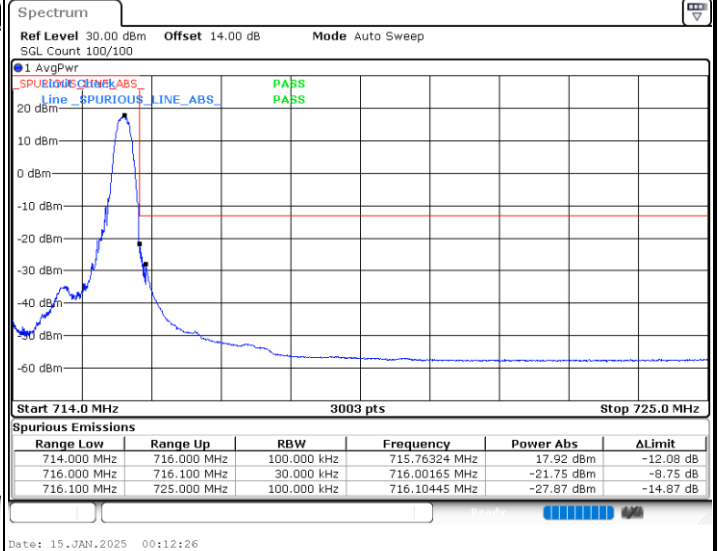


LTE Band 12 / 1.4MHz / 64QAM

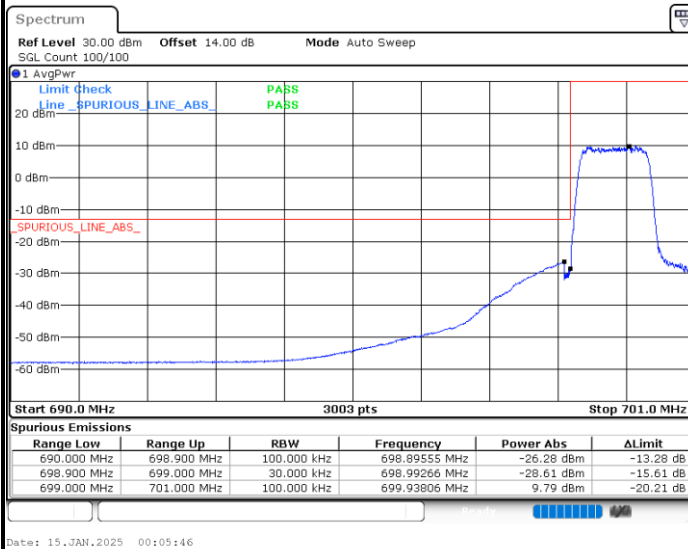
Lowest Band Edge / 1 RB



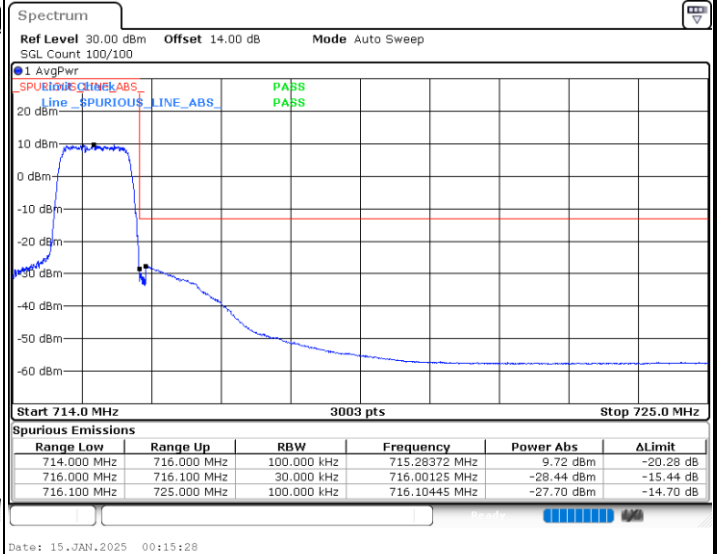
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



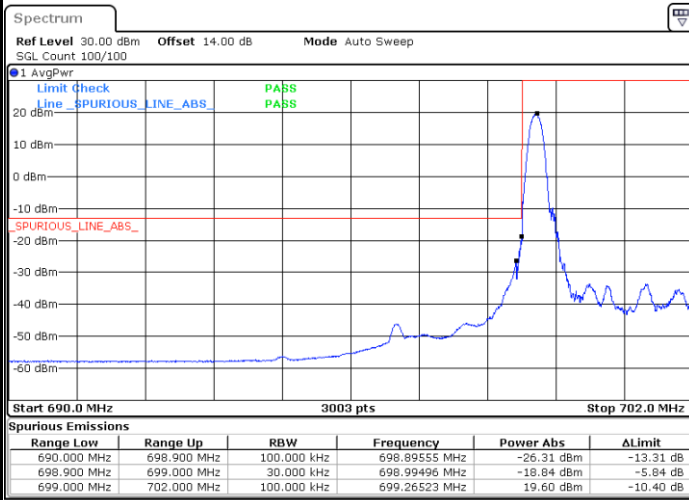
Highest Band Edge / Full RB



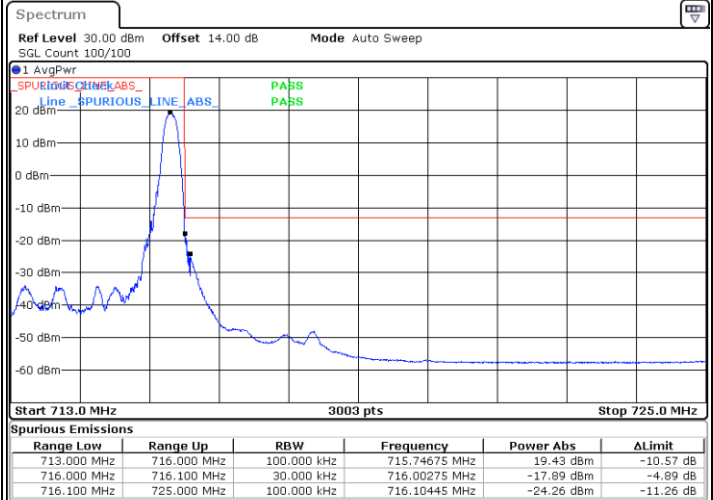


LTE Band 12 / 3MHz / QPSK

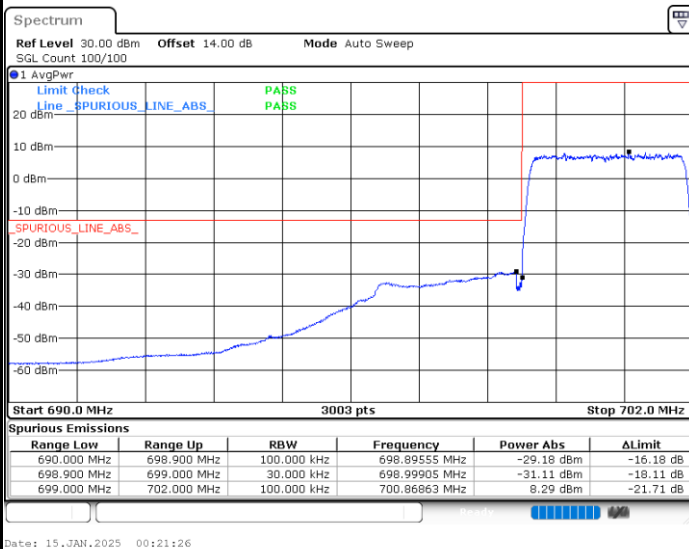
Lowest Band Edge / 1RB



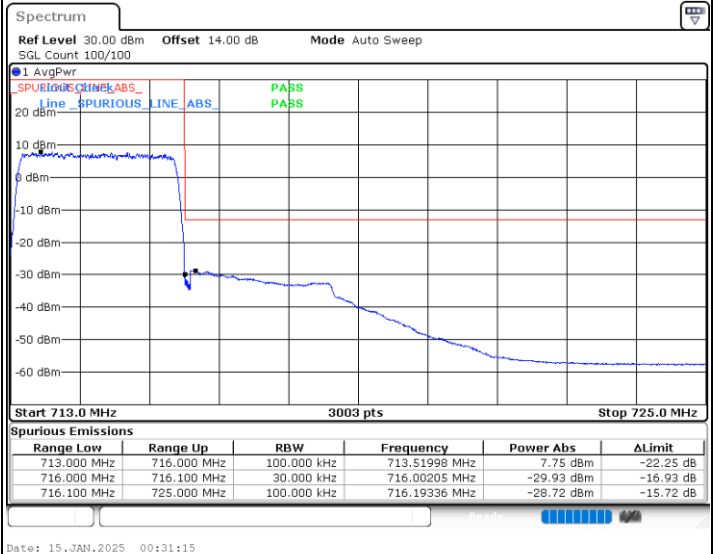
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



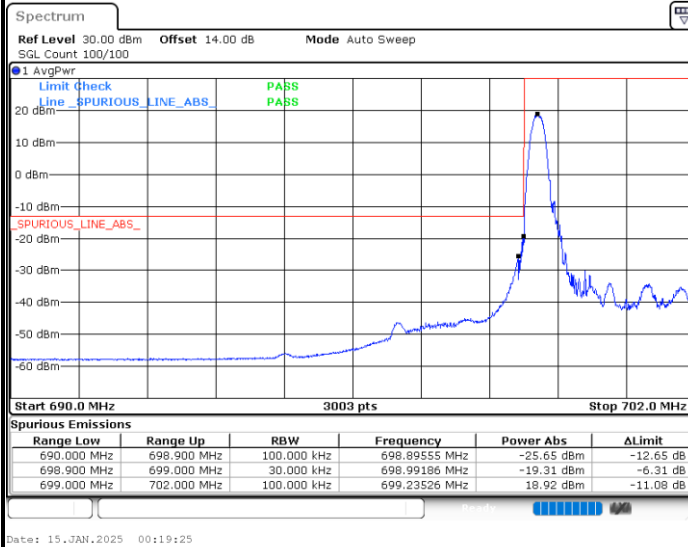
Highest Band Edge / Full RB



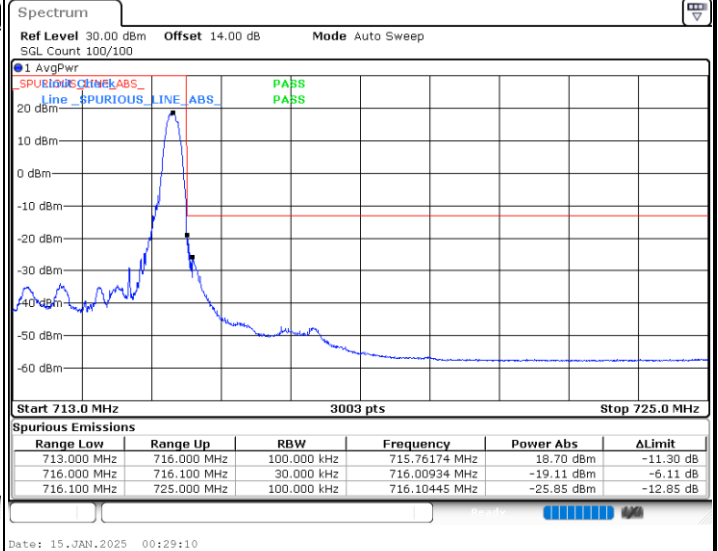


LTE Band 12 / 3MHz / 16QAM

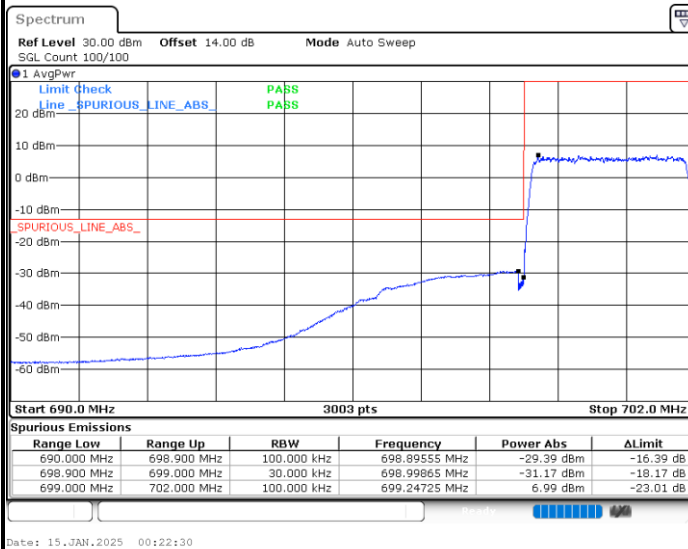
Lowest Band Edge / 1 RB



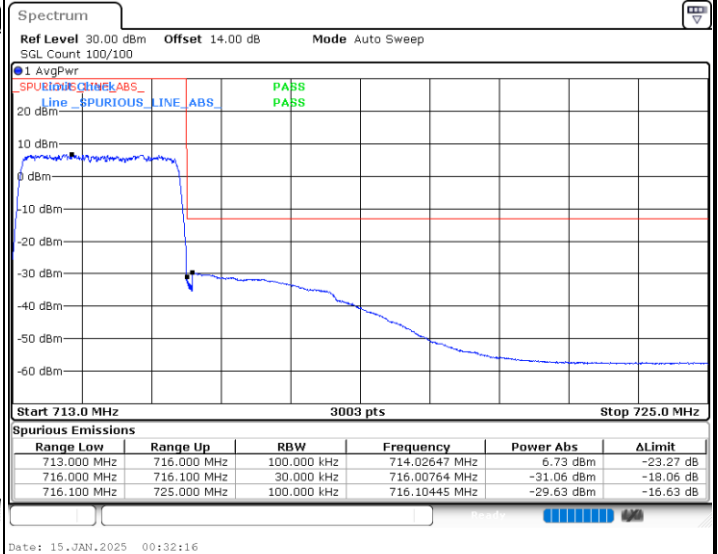
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



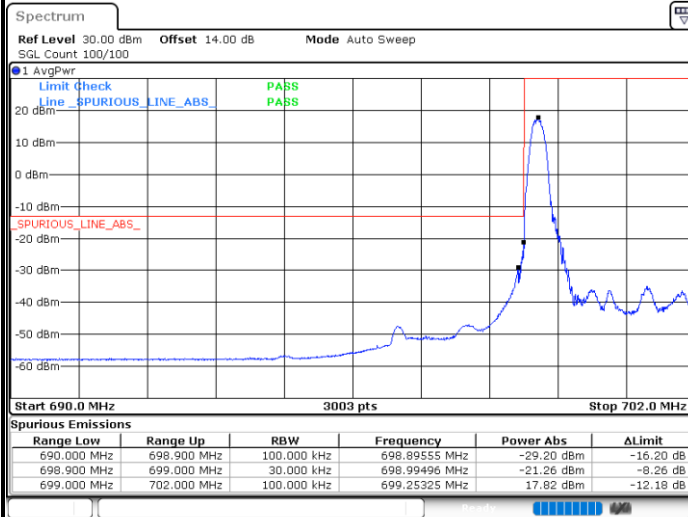
Highest Band Edge / Full RB



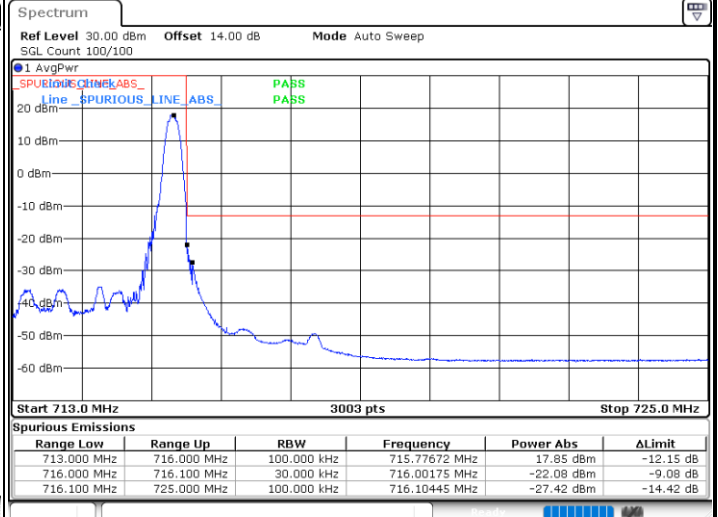


LTE Band 12 / 3MHz / 64QAM

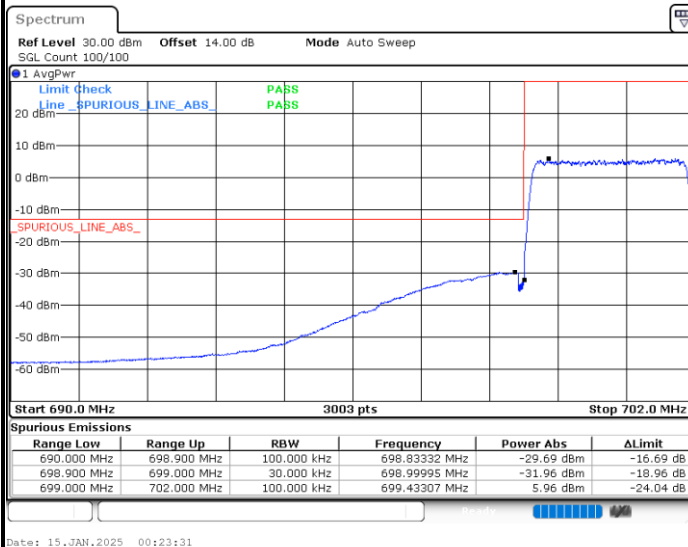
Lowest Band Edge / 1 RB



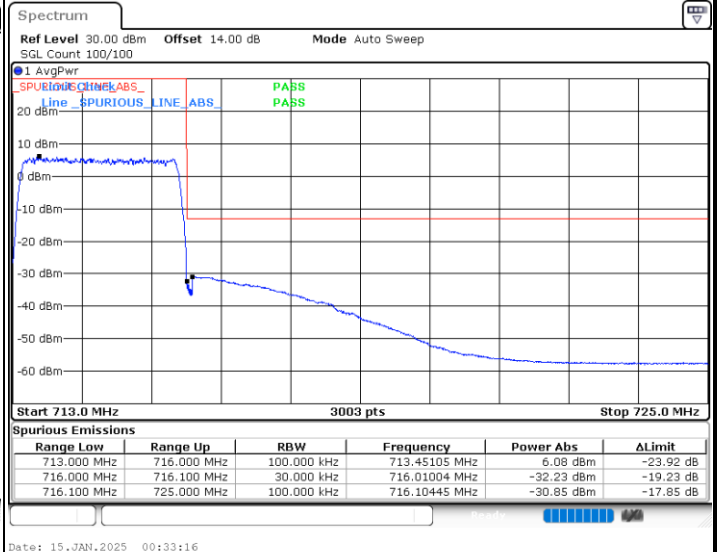
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



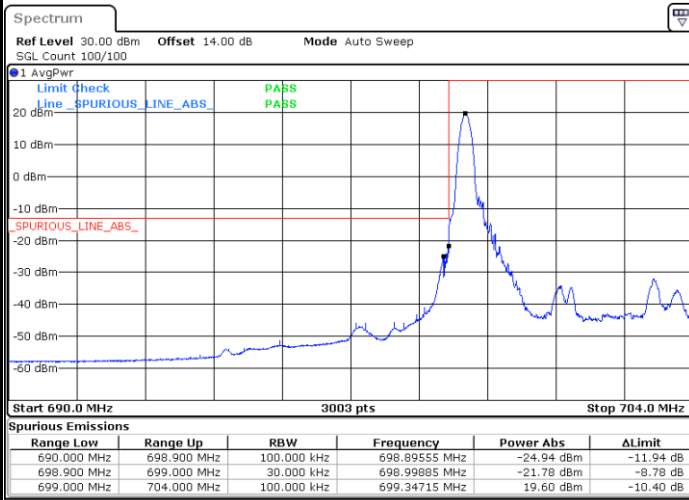
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / QPSK

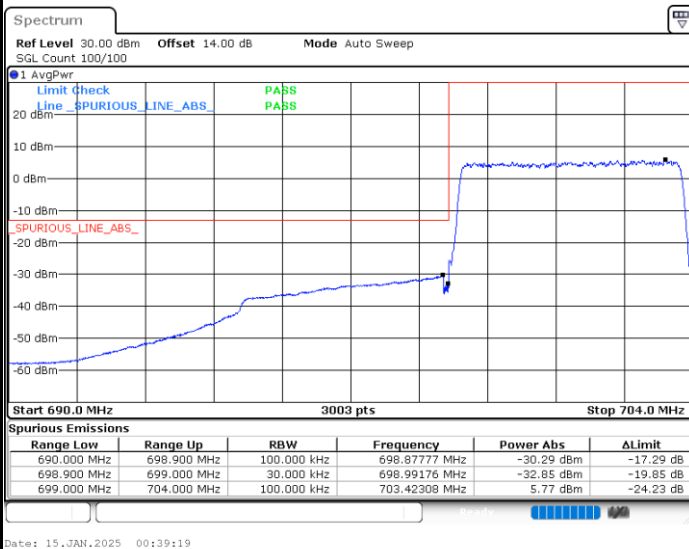
Lowest Band Edge / 1RB



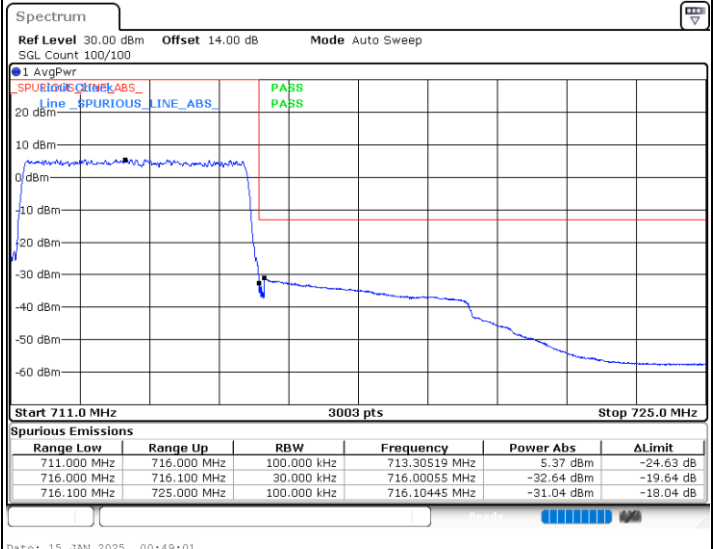
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



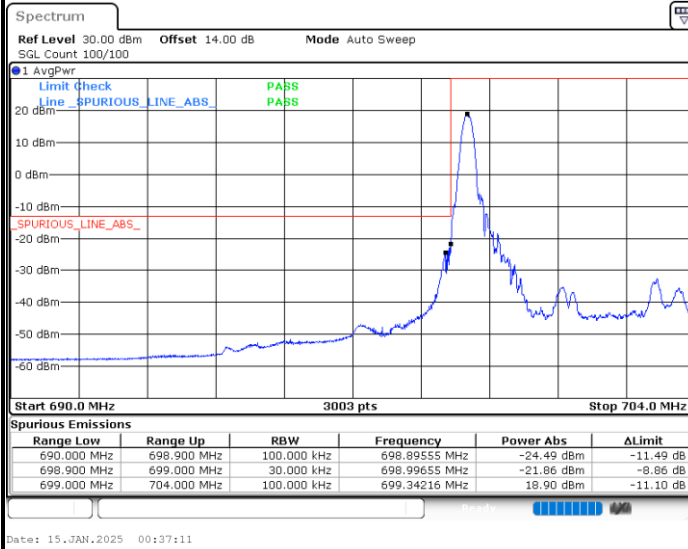
Highest Band Edge / Full RB



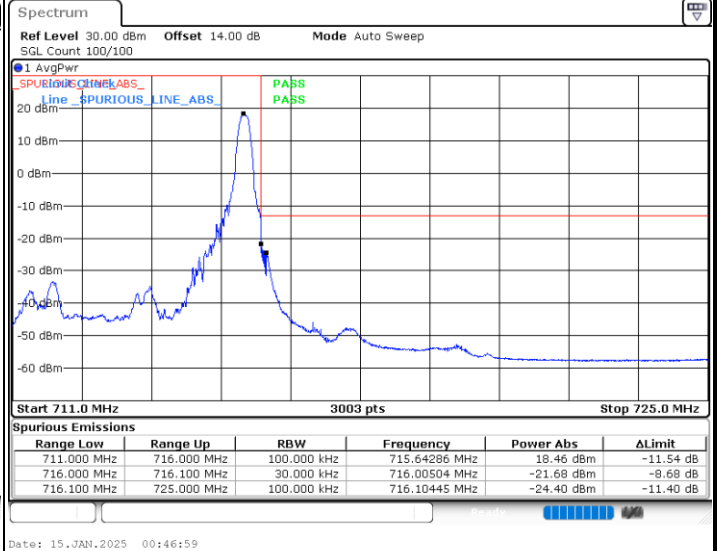


LTE Band 12 / 5MHz / 16QAM

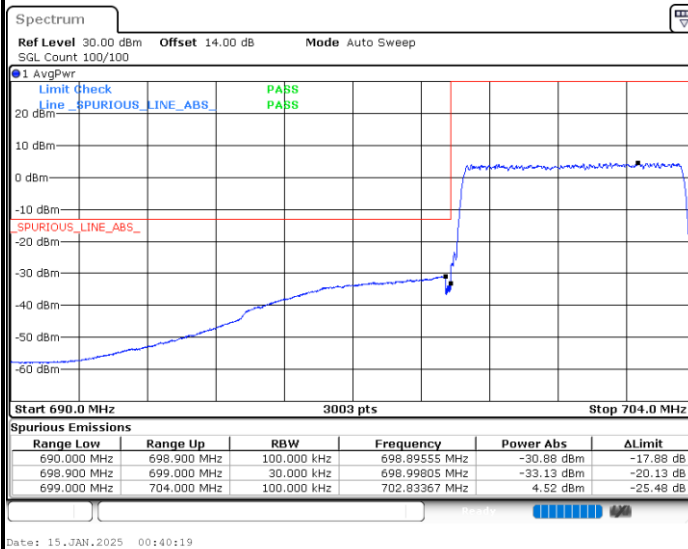
Lowest Band Edge / 1 RB



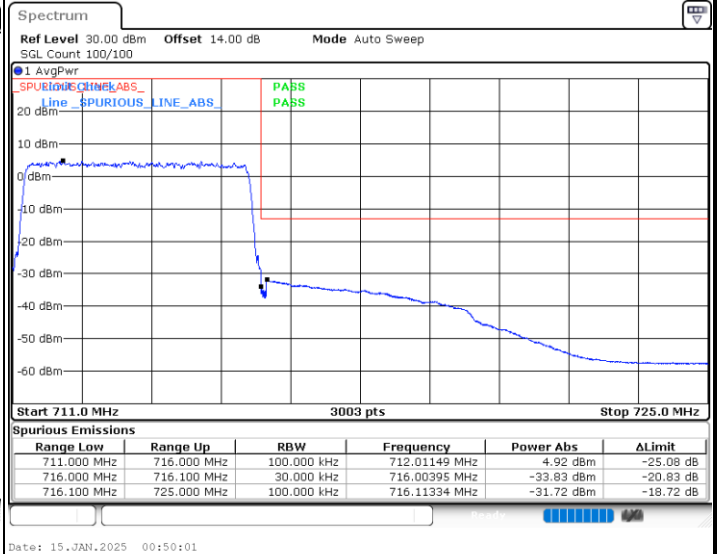
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



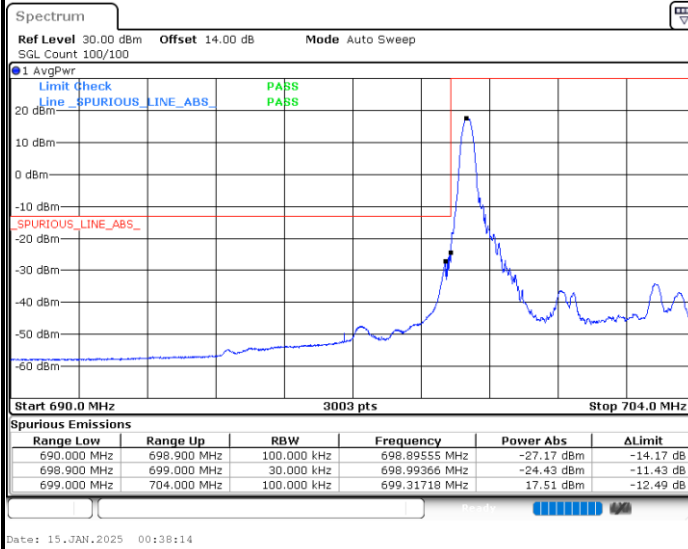
Highest Band Edge / Full RB



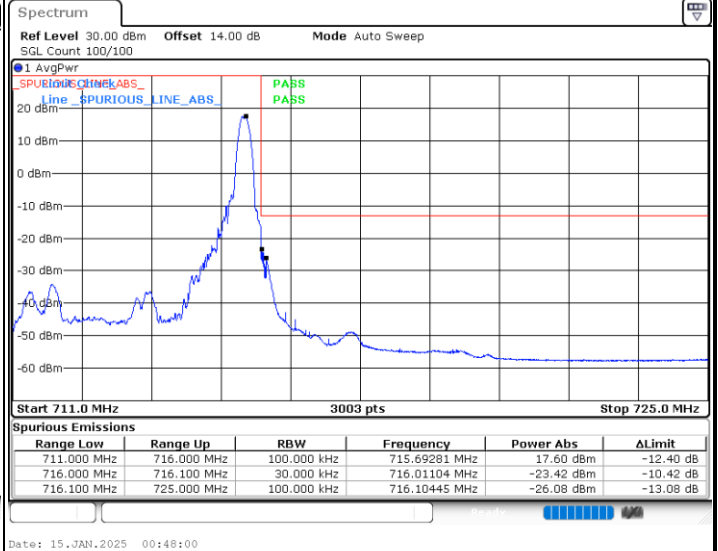


LTE Band 12 / 5MHz / 64QAM

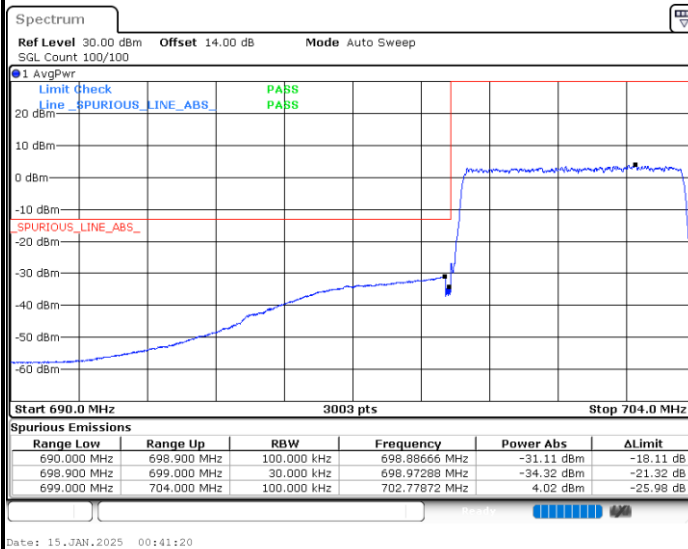
Lowest Band Edge / 1 RB



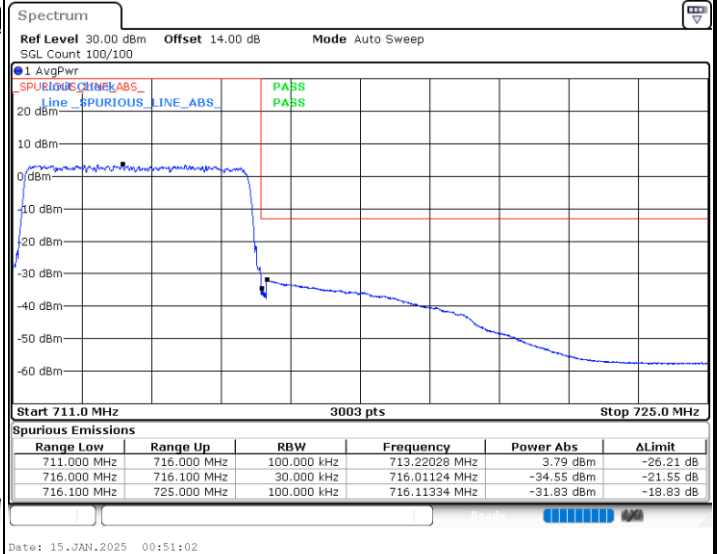
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



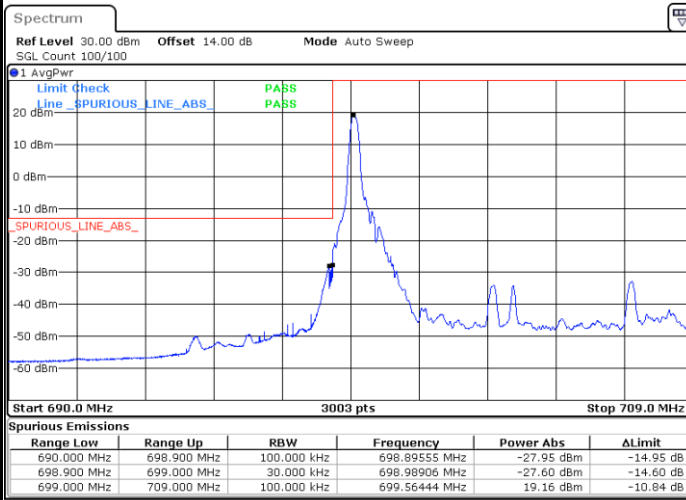
Highest Band Edge / Full RB



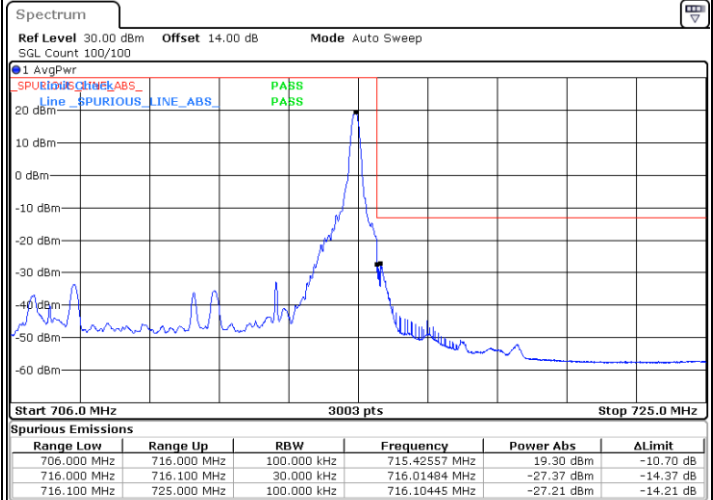


LTE Band 12 / 10MHz / QPSK

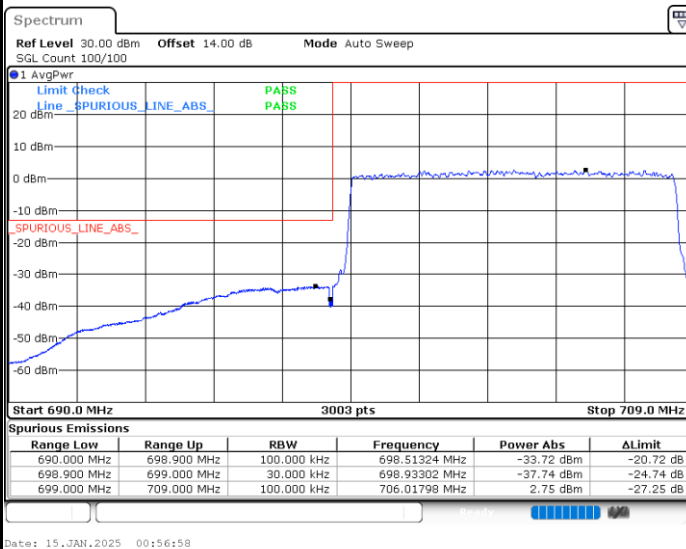
Lowest Band Edge / 1RB



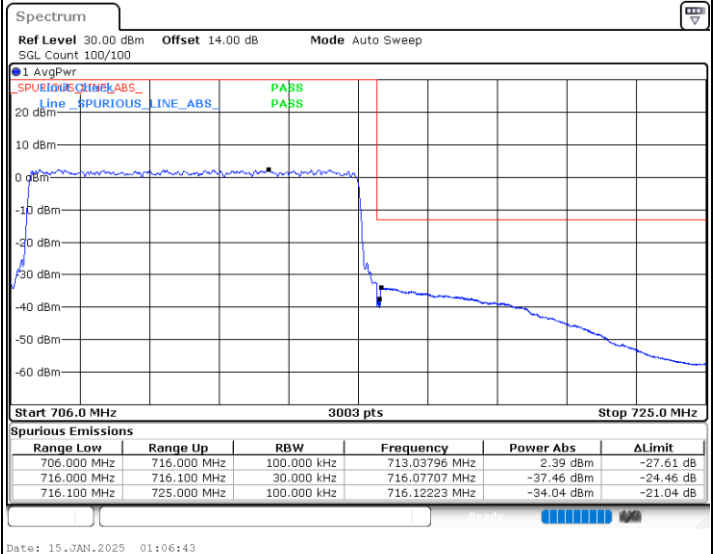
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



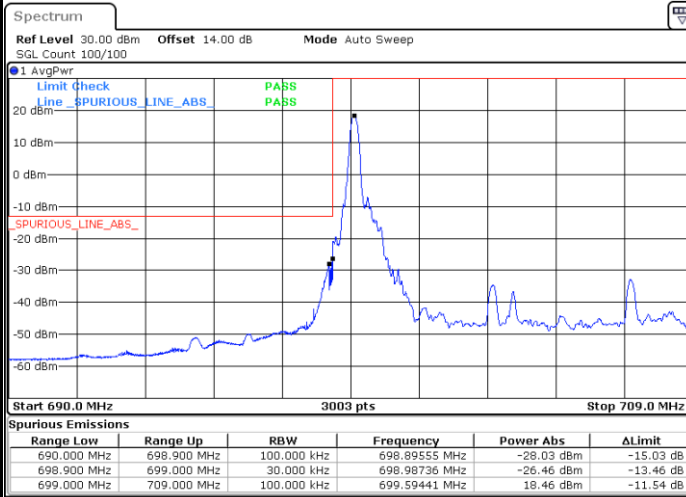
Highest Band Edge / Full RB



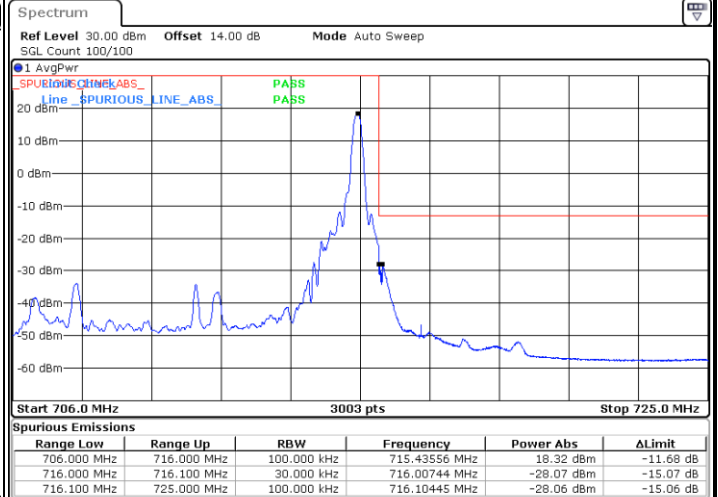


LTE Band 12 / 10MHz / 16QAM

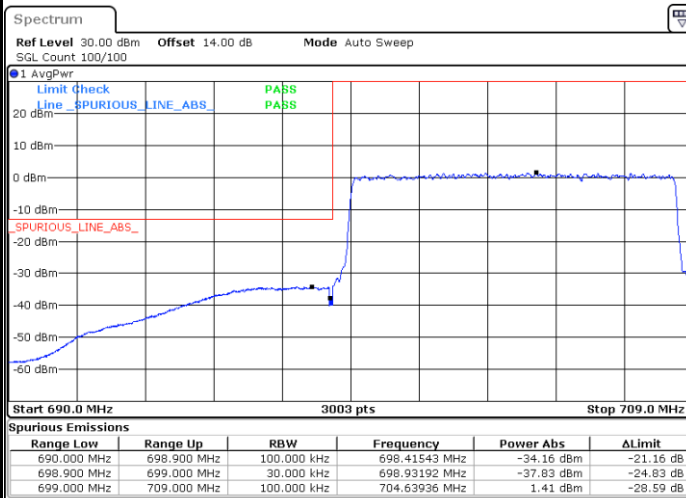
Lowest Band Edge / 1 RB



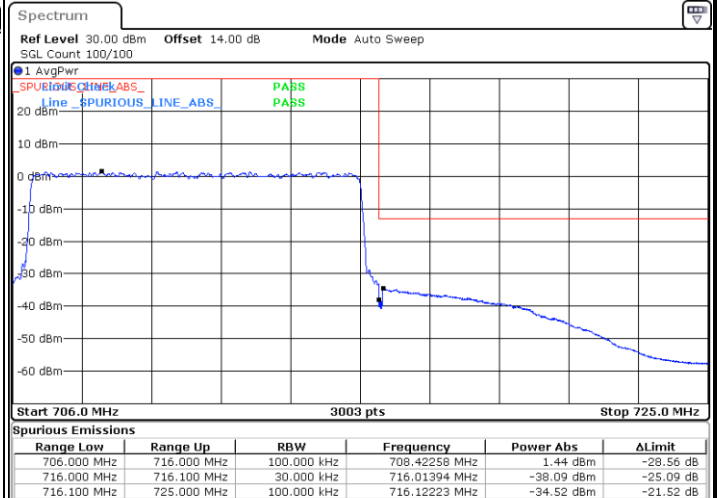
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



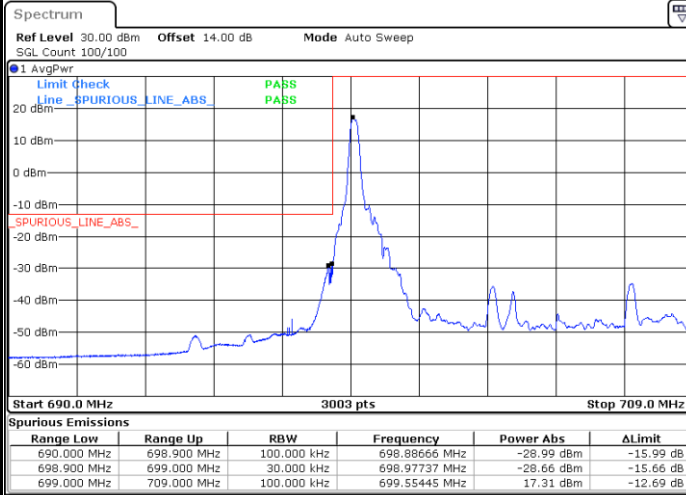
Highest Band Edge / Full RB



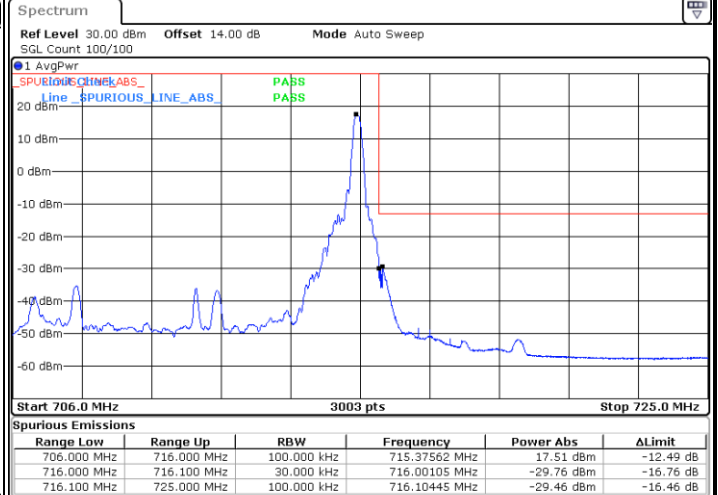


LTE Band 12 / 10MHz / 64QAM

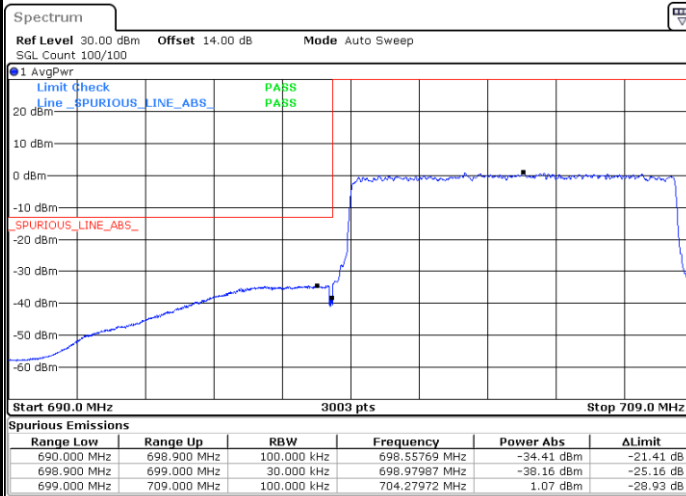
Lowest Band Edge / 1 RB



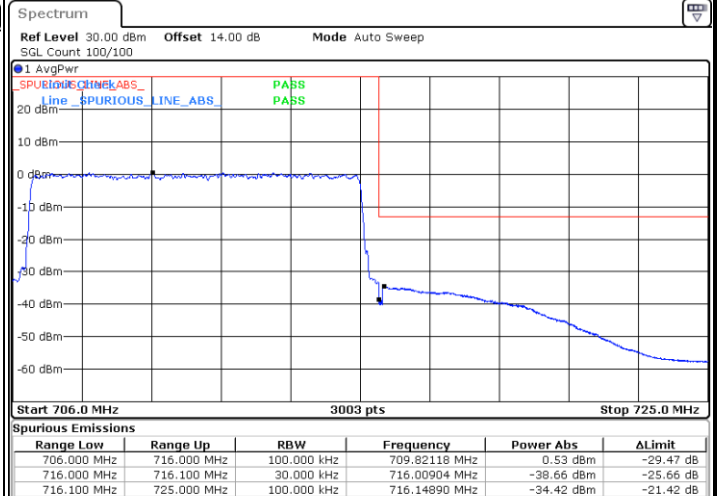
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

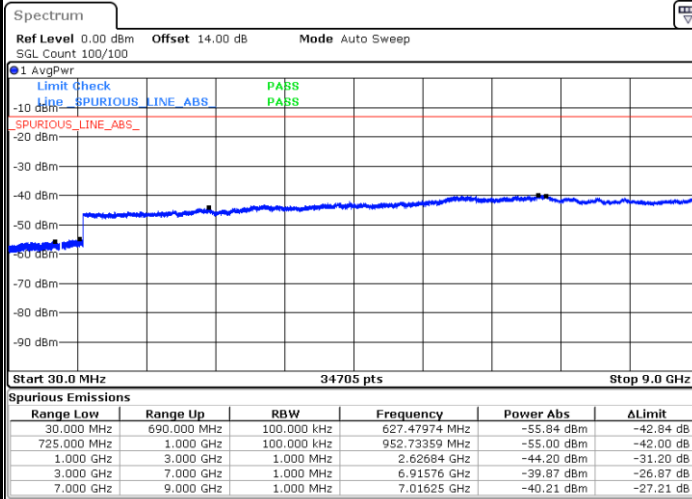




Conducted Spurious Emission

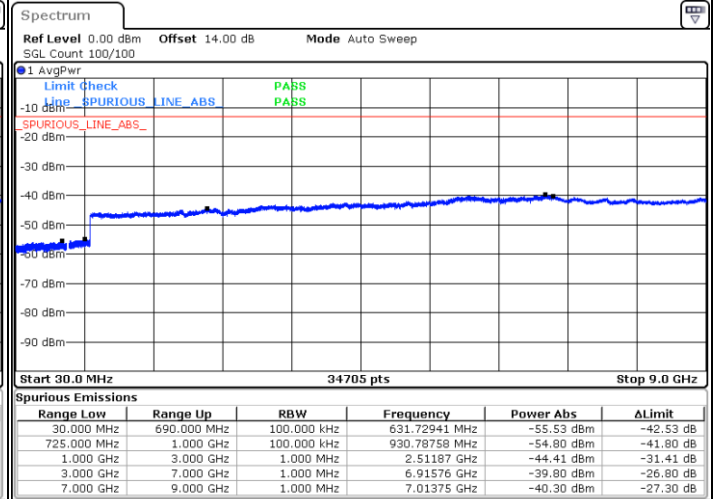
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



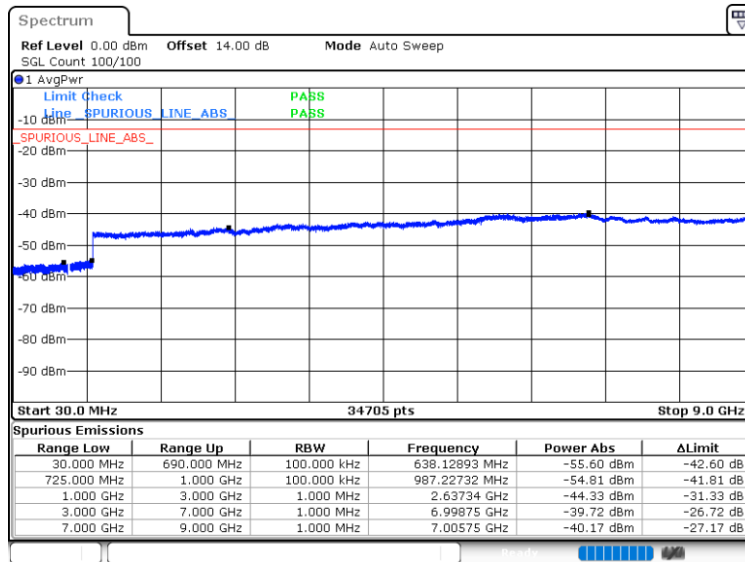
Date: 15.JAN.2025 00:06:56

Middle Channel / QPSK



Date: 15.JAN.2025 00:08:06

Highest Channel / QPSK

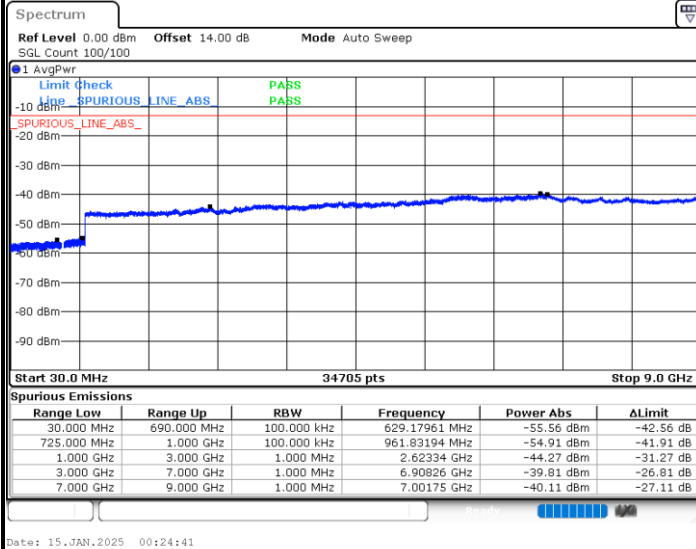


Date: 15.JAN.2025 00:16:41

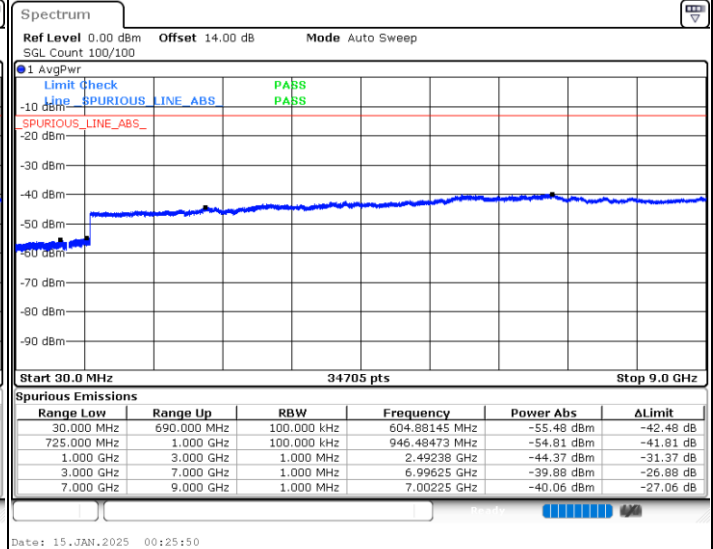


LTE Band 12 / 3MHz

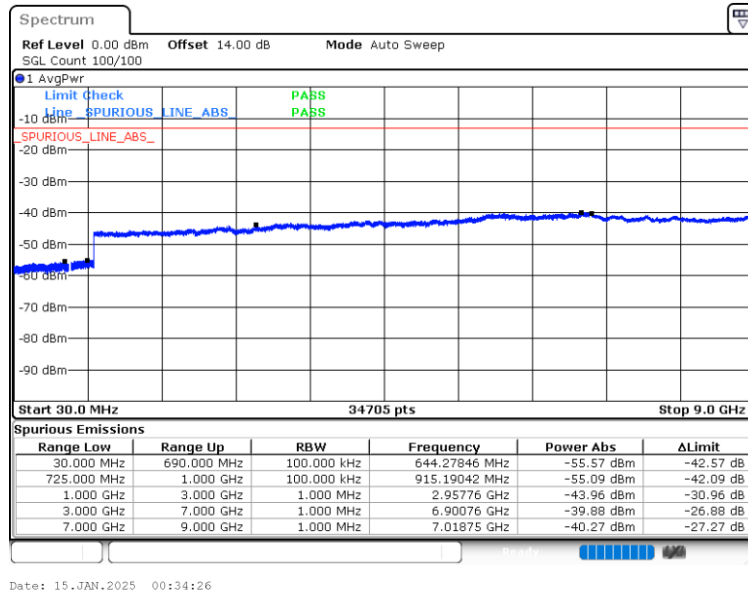
Lowest Channel / QPSK



Middle Channel / QPSK



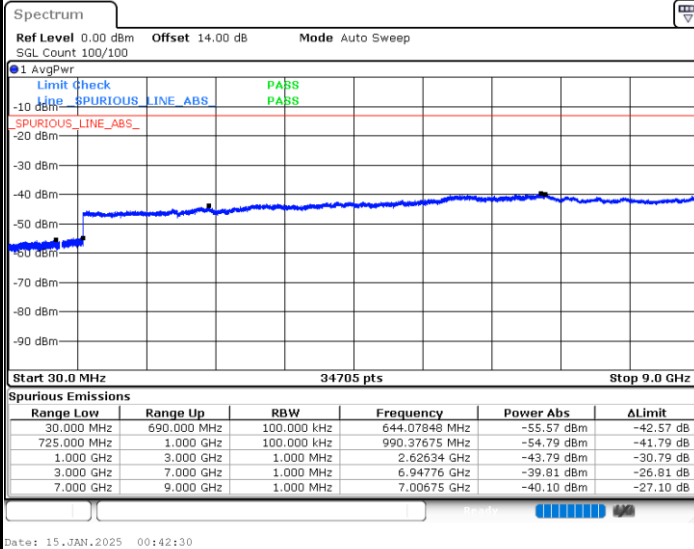
Highest Channel / QPSK



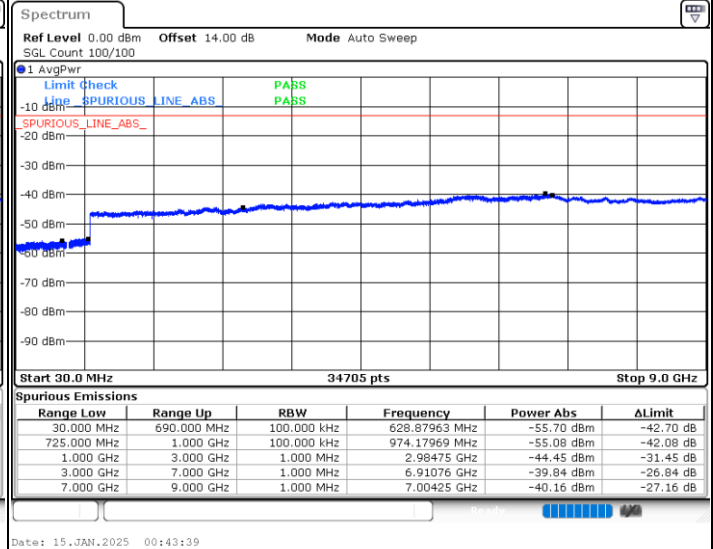


LTE Band 12 / 5MHz

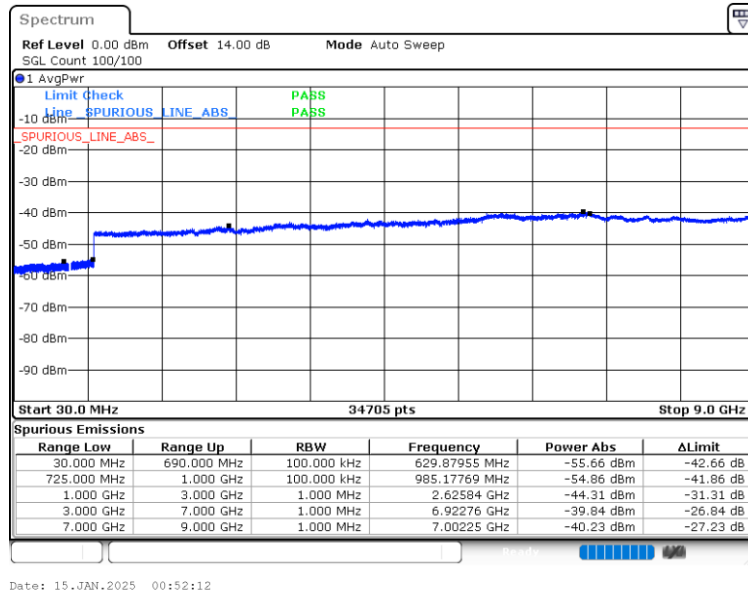
Lowest Channel / QPSK



Middle Channel / QPSK



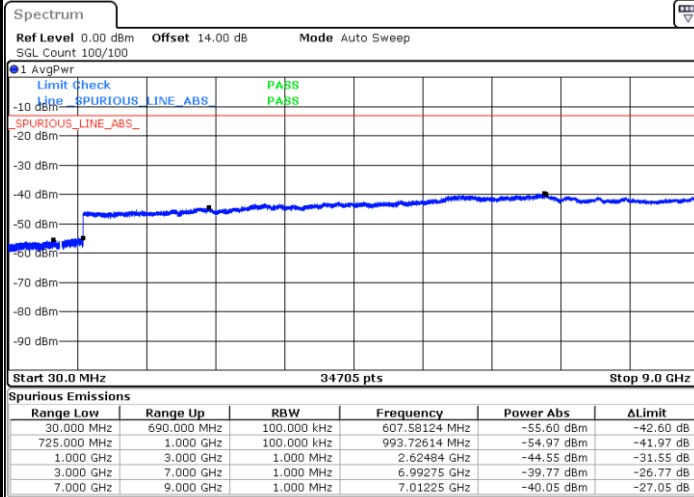
Highest Channel / QPSK





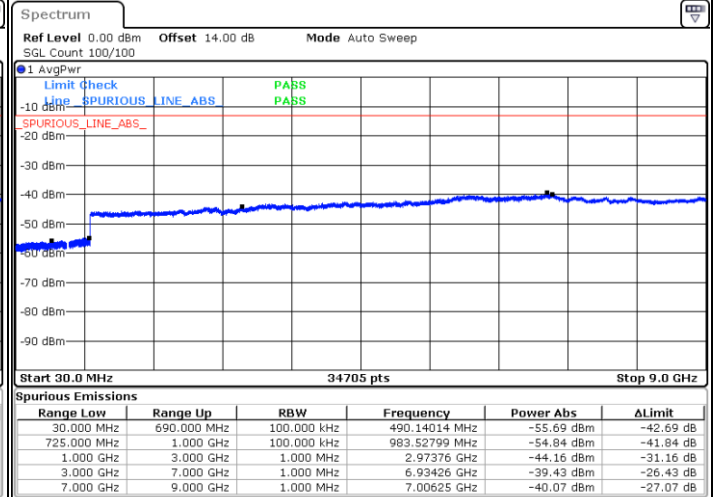
LTE Band 12 / 10MHz

Lowest Channel / QPSK



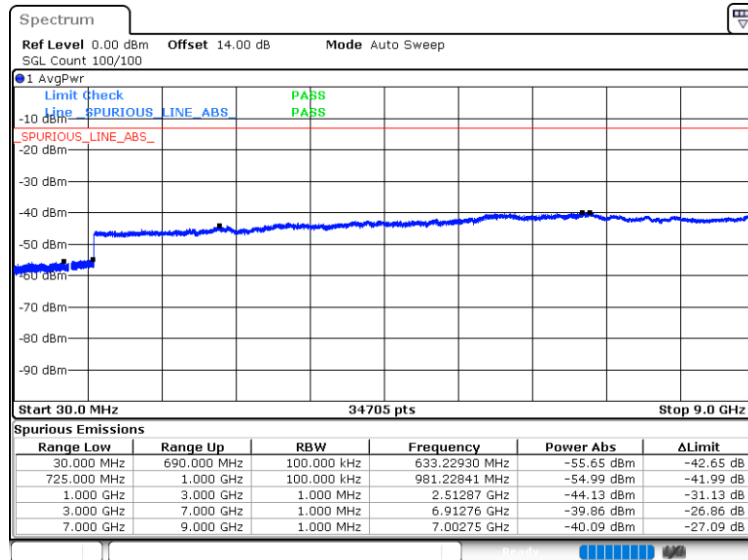
Date: 15.JAN.2025 01:00:13

Middle Channel / QPSK



Date: 15.JAN.2025 01:01:22

Highest Channel / QPSK



Date: 15.JAN.2025 01:09:55

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 1.4MHz	Note 2.
		Frequency Offset (Δf) (Hz)	Result
50	Normal Voltage	3.2	PASS
40	Normal Voltage	2.2	
30	Normal Voltage	1.8	
20(Ref.)	Normal Voltage	2.3	
10	Normal Voltage	1.1	
0	Normal Voltage	2.8	
-10	Normal Voltage	2.8	
-20	Normal Voltage	1.9	
-30	Normal Voltage	2.6	
20	Maximum Voltage	3.1	
20	Normal Voltage	2.3	
20	Battery End Point	2.9	

Note:

1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

$$\text{MAX}(\Delta f) = 3.2\text{Hz}$$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	699.1517468	$\geq 699 \text{ MHz}$	PASS
$f_H + \text{MAX}(\Delta f) $	715.8482532	$\leq 716 \text{ MHz}$	



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.96	5.77	6.23	PASS

