



FCC RF Test Report

APPLICANT : Akteena
EQUIPMENT : Akteena LumosX AI Dashcam
BRAND NAME : Akteena
MODEL NAME : A9-2299D
FCC ID : 2BL79-A922
STANDARD : 47 CFR Part 22(H), 24(E), 27(L)
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Mar. 19, 2025 ~ Apr. 21, 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.

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)

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China



TABLE OF CONTENTS

REVISION HISTORY	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Product Feature of Equipment Under Test	5
1.4 Product Specification of Equipment Under Test	5
1.5 Modification of EUT	6
1.6 Maximum ERP/EIRP Power and Emission Designator	6
1.7 Testing Location	8
1.8 Test Software	8
1.9 Applicable Standards	8
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	10
2.1 Test Mode	10
2.2 Connection Diagram of Test System	11
2.3 Support Unit used in test configuration and system	11
2.4 Measurement Results Explanation Example	11
2.5 Frequency List of Low/Middle/High Channels	12
3 CONDUCTED TEST ITEMS	15
3.1 Measuring Instruments	15
3.2 Test Setup	15
3.3 Test Result of Conducted Test	15
3.4 Conducted Output Power and ERP/EIRP	16
3.5 Peak-to-Average Ratio	17
3.6 Occupied Bandwidth	18
3.7 Conducted Band Edge	19
3.8 Conducted Spurious Emission	21
3.9 Frequency Stability	22
4 RADIATED TEST ITEMS	23
4.1 Measuring Instruments	23
4.2 Test Setup	23
4.3 Test Result of Radiated Test	24
4.4 Radiated Spurious Emission	25
5 LIST OF MEASURING EQUIPMENT	26
6 MEASUREMENT UNCERTAINTY	27
APPENDIX A. TEST RESULTS OF CONDUCTED TEST	
APPENDIX B. TEST RESULTS OF RADIATED TEST	
APPENDIX C. TEST SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG4O2401B	Rev. 01	Initial issue of report	May 08, 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	-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt		-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt		-
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) §24.238(a) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 26) (Band 66)	< 43+10log ₁₀ (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) §24.238(a) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 32.88 dB at 7485.00 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

Akteena

Akteena INC, 41369 Vincenti Ct., Novi Michigan 48375, U.S.A

1.2 Manufacturer

VVDN Technologies Pvt Ltd

Plot No: CP-07, Sector-8,IMT Manesar, Gurugram-122050,Haryana,INDIA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Akteena LumosX AI Dashcam
Brand Name	Akteena
Model Name	A9-2299D
FCC ID	2BL79-A922
IMEI Code	Conducted: 357750172665241 Radiation: 357750172665239
HW Version	C1
SW Version	Thermal-DCV2.7
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 device supports Powered by 12Vdc and 24Vdc, for RF testing, we evaluate is not affect RF performance, so we choice 12Vdc power source to test.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 26 : 824 MHz ~ 849 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 26 : 869 MHz ~ 894 MHz LTE Band 66 : 2110 MHz~ 2180 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz

	LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 23.53 dBm LTE Band 4 : 23.43 dBm LTE Band 5 : 23.24 dBm LTE Band 26 : 23.49 dBm LTE Band 66 : 23.54 dBm
Antenna Gain	LTE Band 2 : 1.6 dBi LTE Band 4 : 2.1 dBi LTE Band 5 : -2.2 dBi LTE Band 26 : -2.2 dBi LTE Band 66 : 2.1 dBi
Type of Modulation	QPSK / 16QAM

Note: There are Main Antenna (TX/RX) and Diversity Antenna (RX only), Main Antenna is provided antenna gain in the section 1.4. For Main antenna has four paths for each band, as below, we choice maximum conducted power of the path to test.

	Support Band	Ant. Type	Maximum power of the Path				Operating mode
			Path.1	Path.2	Path.3	Path.4	
Support Band	B2	FPC	-	-	-	v	SISO
	B4	FPC	-	-	-	v	SISO
	B5	FPC	-	v	-	-	SISO
	B26	FPC	-	-	-	v	SISO
	B66	FPC	-	v	-	-	SISO

Remark: “-” means, pre-test power. “v” means, the Maximum power

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP Power and Emission Designator

LTE Band 2		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1850.7 ~ 1909.3	0.3041	1M09G7D	0.2371	1M09W7D
3	1851.5 ~ 1908.5	0.3069	2M72G7D	0.2296	2M72W7D
5	1852.5 ~ 1907.5	0.3090	4M51G7D	0.2432	4M51W7D
10	1855.0 ~ 1905.0	0.3258	9M03G7D	0.2495	9M03W7D
15	1857.5 ~ 1902.5	0.3177	13M4G7D	0.2377	13M5W7D
20	1860.0 ~ 1900.0	0.3006	17M9G7D	0.2234	17M9W7D



LTE Band 4		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1754.3	0.3573	1M10G7D	0.2851	1M09W7D
3	1711.5 ~ 1753.5	0.3540	2M72G7D	0.2564	2M73W7D
5	1712.5 ~ 1752.5	0.3548	4M50G7D	0.2685	4M48W7D
10	1715.0 ~ 1750.0	0.3508	8M97G7D	0.3027	9M03W7D
15	1717.5 ~ 1747.5	0.3467	13M4G7D	0.2897	13M4W7D
20	1720.0 ~ 1745.0	0.3508	17M9G7D	0.2704	17M9W7D
LTE Band 5		QPSK		16QAM	
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	0.0774	1M09G7D	0.0625	1M10W7D
3	825.5 ~ 847.5	0.0764	2M73G7D	0.0628	2M73W7D
5	826.5 ~ 846.5	0.0769	4M50G7D	0.0640	4M51W7D
10	829.0 ~ 844.0	0.0764	8M95G7D	0.0625	8M99W7D
LTE Band 26		QPSK		16QAM	
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	0.0771	1M09G7D	0.0624	1M10W7D
3	825.5 ~ 847.5	0.0757	2M73G7D	0.0600	2M73W7D
5	826.5 ~ 846.5	0.0787	4M50G7D	0.0630	4M51W7D
10	829.0 ~ 844.0	0.0791	8M95G7D	0.0617	8M99W7D
15	831.5 ~ 841.5	0.0820	13M4G7D	0.0632	13M4W7D
CH26790	824.0	0.0794	13M4G7D	0.0625	13M4W7D
LTE Band 66		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1779.3	0.3467	1M10G7D	0.2871	1M09W7D
3	1711.5 ~ 1778.5	0.3491	2M72G7D	0.2661	2M73W7D
5	1712.5 ~ 1777.5	0.3540	4M50G7D	0.2891	4M48W7D
10	1715.0 ~ 1775.0	0.3597	8M97G7D	0.2761	9M03W7D
15	1717.5 ~ 1772.5	0.3664	13M4G7D	0.2761	13M4W7D
20	1720.0 ~ 1770.0	0.3622	17M9G7D	0.2735	17M9W7D

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 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
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.
	03CH04-KS TH01-KS	CN1257	314309

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	TH01-KS	SPORTON	Part2224_Ver5.0 200330	5.0
2.	03CH04-KS	AUDIX	E3	210616

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), 24(E), 27(L)
- ♦ 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.



2 Test Configuration of Equipment Under Test

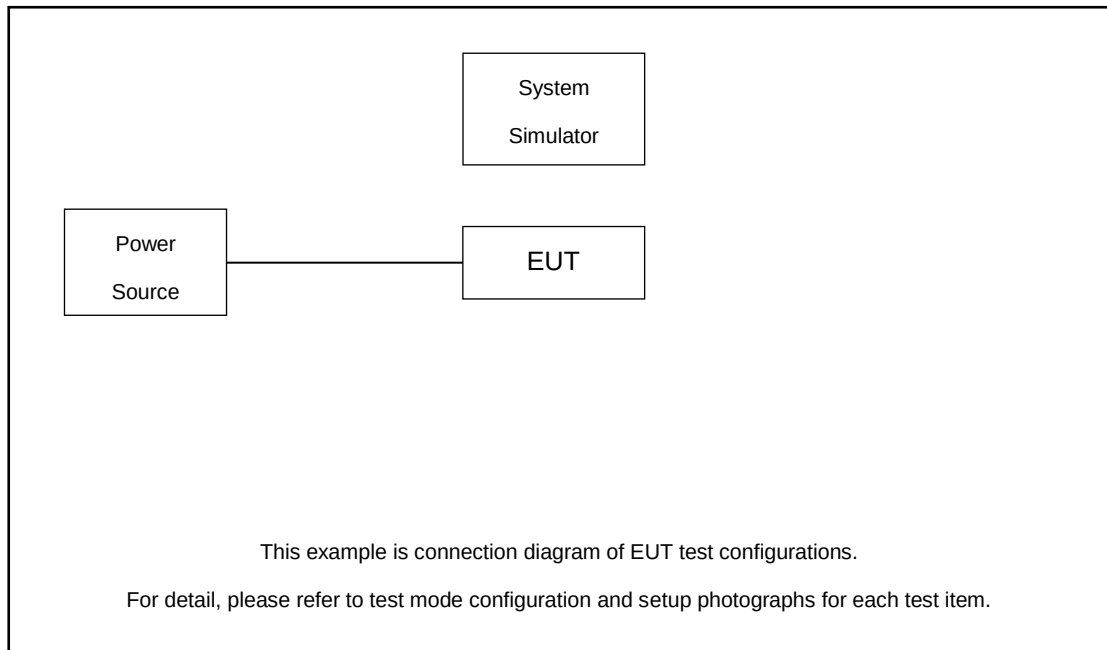
2.1 Test Mode

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.

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	-	-	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	-	-	v	v	v	v	v	v
	5	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
	66	v	v	v	v	v	v	v	v	-	-	v	v	v	v	v	v
Peak-to-Average Ratio	2						v	v	v	-	-			v		v	
	26					v	-	v	v	-	-			v		v	
	66						v	v	v	-	-			v		v	
26dB and 99% Bandwidth	2	v	v	v	v	v	v	v	v	-	-			v		v	
	26	v	v	v	v	v	-	v	v	-	-			v		v	
	66	v	v	v	v	v	v	v	v	-	-			v		v	
Conducted Band Edge	2	v	v	v	v	v	v	v	v	-	-	v		v	v		v
	26	v	v	v	v	v	-	v	v	-	-	v		v	v		v
	66	v	v	v	v	v	v	v	v	-	-	v		v	v		v
Conducted Spurious Emission	2	v	v	v	v	v	v	v		-	-	v			v	v	v
	26	v	v	v	v	v	-	v		-	-	v			v	v	v
	66	v	v	v	v	v	v	v		-	-	v			v	v	v
Frequency Stability	2				v			v		-	-			v		v	
	26				v		-	v		-	-			v		v	
	66				v			v		-	-			v		v	
E.R.P / E.I.R.P	2	v	v	v	v	v	v	v	v	-	-	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	-	-	v	v	v	v	v	v
	5	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
	66	v	v	v	v	v	v	v	v	-	-	v	v	v	v	v	v
Radiated Spurious Emission	2	Worst Case														v	
	26	Worst Case														v	
	66	Worst Case														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.																

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 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.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 5.8 dB.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 5.8(\text{dB}) \end{aligned}$$



2.5 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3

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 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 66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5
3	Channel	131987	132322	132657
	Frequency	1711.5	1745	1778.5
1.4	Channel	131979	132322	132665
	Frequency	1710.7	1745	1779.3

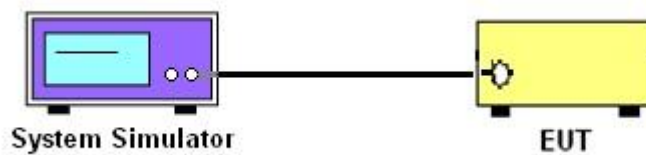
3 Conducted Test Items

3.1 Measuring Instruments

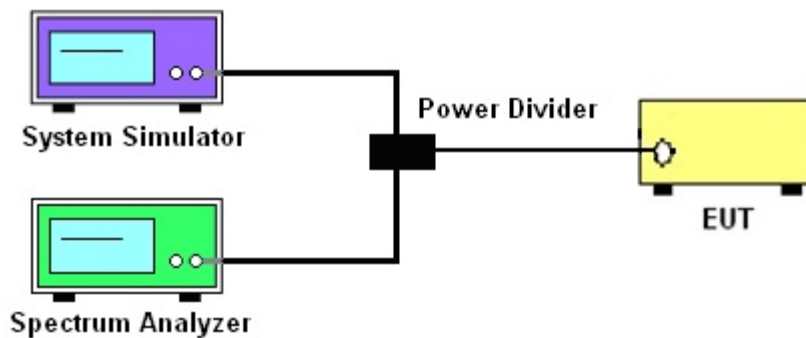
See list of measuring instruments of this test report.

3.2 Test Setup

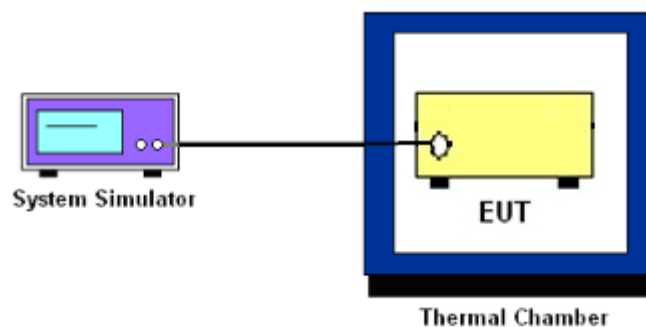
3.2.1 Conducted Output Power



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 EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4 and Band 66.

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.

3.5 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.

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the 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 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz 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.

3.7.2 Test Procedures

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

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

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

8. 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)
 $= -13\text{dBm}$.

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.

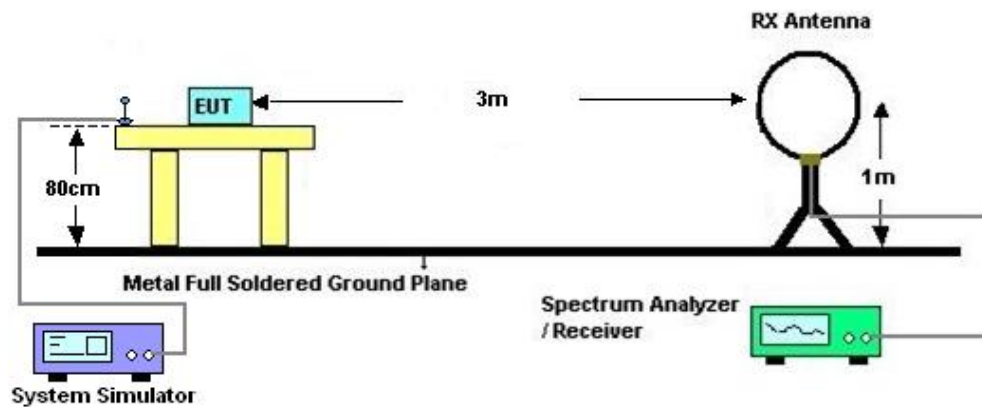
4 Radiated Test Items

4.1 Measuring Instruments

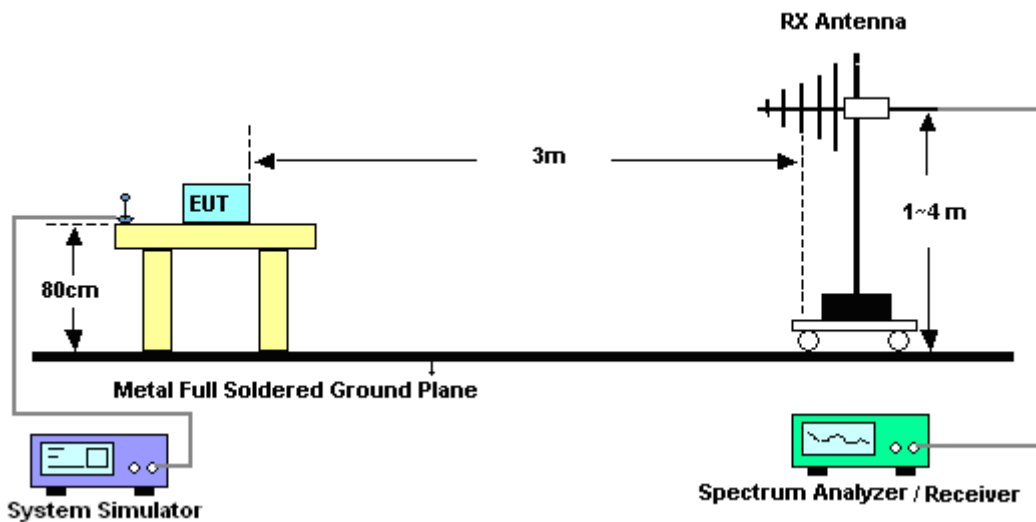
See list of measuring instruments of this test report.

4.2 Test Setup

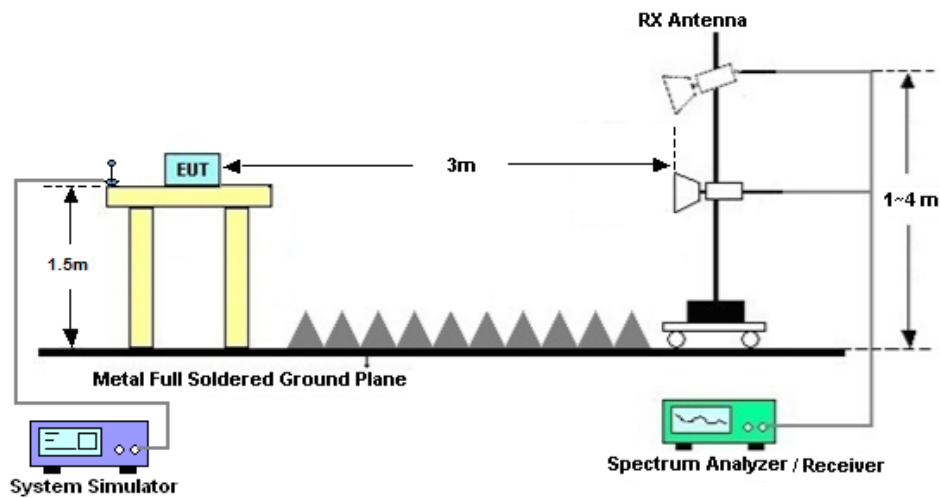
4.2.1 For radiated test below 30MHz



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.

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. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
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	Apr. 18, 2025~ Apr. 21, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Apr. 18, 2025~ Apr. 21, 2025	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Apr. 18, 2025~ Apr. 21, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz~44G,MAX 30dB	Oct. 11, 2024	Mar. 19, 2025	Oct. 10, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Mar. 19, 2025	Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz~1GHz	Nov. 23, 2024	Mar. 19, 2025	Nov. 22, 2025	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Mar. 19, 2025	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Mar. 19, 2025	Oct. 21, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380826	9KHz~1GHz	Jul. 03, 2024	Mar. 19, 2025	Jul. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40G A	060852	18~40GHz	Jan. 03, 2025	Mar. 19, 2025	Jan. 02, 2026	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060840	1Ghz~18Ghz	Oct. 09, 2024	Mar. 19, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18G A	060892	1Ghz~18Ghz	Oct. 09, 2024	Mar. 19, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Mar. 19, 2025	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 19, 2025	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 19, 2025	NCR	Radiation (03CH04-KS)

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	± 0.46 dB
Frequency Stability	± 0.4 Hz

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.30dB
---	--------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.83dB
---	--------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.83dB
---	--------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.82dB
---	--------

----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Smile Wang	Temperature :	22~23°C
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and ERP/EIRP

LTE Band 2:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP		
Channel				18700	18900	19100	18700	18900	19100
Frequency (MHz)				1860	1880	1900	1860	1880	1900
20	QPSK	1	0	22.50	23.03	22.64	0.2570	0.2904	0.2655
20	QPSK	1	49	22.47	23.18	22.78	0.2553	0.3006	0.2742
20	QPSK	1	99	22.26	22.72	22.47	0.2432	0.2704	0.2553
20	QPSK	50	0	21.14	21.86	21.36	0.1879	0.2218	0.1977
20	QPSK	50	24	21.01	21.73	21.22	0.1824	0.2153	0.1914
20	QPSK	50	50	21.04	21.77	21.13	0.1837	0.2173	0.1875
20	QPSK	100	0	21.09	21.83	21.30	0.1858	0.2203	0.1950
20	16QAM	1	0	21.13	21.69	21.22	0.1875	0.2133	0.1914
20	16QAM	1	49	21.32	21.89	21.30	0.1959	0.2234	0.1950
20	16QAM	1	99	21.23	21.51	21.17	0.1919	0.2046	0.1892
20	16QAM	50	0	20.16	20.73	20.32	0.1500	0.1710	0.1556
20	16QAM	50	24	20.11	20.70	20.20	0.1483	0.1698	0.1514
20	16QAM	50	50	20.05	20.75	20.11	0.1462	0.1718	0.1483
20	16QAM	100	0	20.22	20.77	20.30	0.1521	0.1726	0.1549
Channel				18675	18900	19125	18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5	1857.5	1880	1902.5
15	QPSK	1	0	22.84	23.11	22.73	0.2780	0.2958	0.2710
15	QPSK	1	37	23.11	23.42	23.36	0.2958	0.3177	0.3133
15	QPSK	1	74	22.88	22.79	22.90	0.2805	0.2748	0.2818
15	QPSK	36	0	21.63	21.81	21.66	0.2104	0.2193	0.2118
15	QPSK	36	20	21.60	21.88	21.53	0.2089	0.2228	0.2056
15	QPSK	36	39	21.51	21.79	21.53	0.2046	0.2183	0.2056
15	QPSK	75	0	21.53	21.78	21.56	0.2056	0.2178	0.2070
15	16QAM	1	0	21.56	21.75	21.77	0.2070	0.2163	0.2173
15	16QAM	1	37	21.70	22.16	21.78	0.2138	0.2377	0.2178
15	16QAM	1	74	21.48	21.82	21.69	0.2032	0.2198	0.2133
15	16QAM	36	0	20.67	20.73	20.62	0.1687	0.1710	0.1667
15	16QAM	36	20	20.63	20.79	20.47	0.1671	0.1734	0.1611
15	16QAM	36	39	20.53	20.74	20.58	0.1633	0.1714	0.1652
15	16QAM	75	0	20.54	20.81	20.58	0.1637	0.1742	0.1652
Channel				18650	18900	19150	18650	18900	19150
Frequency (MHz)				1855	1880	1905	1855	1880	1905
10	QPSK	1	0	23.21	23.12	22.86	0.3027	0.2965	0.2793
10	QPSK	1	25	23.53	23.46	22.67	0.3258	0.3206	0.2673
10	QPSK	1	49	23.18	22.93	22.84	0.3006	0.2838	0.2780



10	QPSK	25	0	22.05	21.79	21.59	0.2317	0.2183	0.2084
10	QPSK	25	12	22.05	21.80	21.62	0.2317	0.2188	0.2099
10	QPSK	25	25	22.12	21.76	21.67	0.2355	0.2168	0.2123
10	QPSK	50	0	22.09	21.84	21.55	0.2339	0.2208	0.2065
10	16QAM	1	0	22.06	21.96	21.62	0.2323	0.2270	0.2099
10	16QAM	1	25	22.10	22.10	22.37	0.2344	0.2344	0.2495
10	16QAM	1	49	21.90	21.77	21.65	0.2239	0.2173	0.2113
10	16QAM	25	0	21.05	20.76	20.50	0.1841	0.1722	0.1622
10	16QAM	25	12	21.01	20.75	20.54	0.1824	0.1718	0.1637
10	16QAM	25	25	20.99	20.72	20.59	0.1816	0.1706	0.1656
10	16QAM	50	0	21.05	20.69	20.60	0.1841	0.1694	0.1660
Channel				18625	18900	19175	18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5	1852.5	1880	1907.5
5	QPSK	1	0	23.04	22.99	22.53	0.2911	0.2877	0.2588
5	QPSK	1	12	23.30	23.12	22.73	0.3090	0.2965	0.2710
5	QPSK	1	24	23.10	22.96	22.57	0.2951	0.2858	0.2612
5	QPSK	12	0	22.01	21.84	21.56	0.2296	0.2208	0.2070
5	QPSK	12	7	22.07	21.82	21.64	0.2328	0.2198	0.2109
5	QPSK	12	13	22.12	21.75	21.60	0.2355	0.2163	0.2089
5	QPSK	25	0	22.02	21.75	21.57	0.2301	0.2163	0.2075
5	16QAM	1	0	22.05	21.75	21.45	0.2317	0.2163	0.2018
5	16QAM	1	12	22.26	22.20	21.86	0.2432	0.2399	0.2218
5	16QAM	1	24	22.15	22.01	21.61	0.2371	0.2296	0.2094
5	16QAM	12	0	21.09	20.66	20.47	0.1858	0.1683	0.1611
5	16QAM	12	7	21.17	20.80	20.67	0.1892	0.1738	0.1687
5	16QAM	12	13	21.12	20.84	20.55	0.1871	0.1754	0.1641
5	16QAM	25	0	20.99	20.71	20.62	0.1816	0.1702	0.1667
Channel				18615	18900	19185	18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5	1851.5	1880	1908.5
3	QPSK	1	0	23.19	22.83	22.86	0.3013	0.2773	0.2793
3	QPSK	1	8	23.27	22.83	22.74	0.3069	0.2773	0.2716
3	QPSK	1	14	23.21	22.94	22.91	0.3027	0.2844	0.2825
3	QPSK	8	0	22.10	21.76	21.61	0.2344	0.2168	0.2094
3	QPSK	8	4	22.13	21.82	21.74	0.2360	0.2198	0.2158
3	QPSK	8	7	22.06	21.78	21.64	0.2323	0.2178	0.2109
3	QPSK	15	0	22.10	21.75	21.62	0.2344	0.2163	0.2099
3	16QAM	1	0	21.93	21.64	21.57	0.2254	0.2109	0.2075
3	16QAM	1	8	21.91	21.75	21.56	0.2244	0.2163	0.2070
3	16QAM	1	14	22.01	21.95	21.61	0.2296	0.2265	0.2094
3	16QAM	8	0	21.03	20.75	20.57	0.1832	0.1718	0.1648
3	16QAM	8	4	21.02	20.85	20.63	0.1828	0.1758	0.1671
3	16QAM	8	7	20.94	20.85	20.60	0.1795	0.1758	0.1660
3	16QAM	15	0	20.96	20.79	20.53	0.1803	0.1734	0.1633
Channel				18607	18900	19193	18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3	1850.7	1880	1909.3
1.4	QPSK	1	0	23.15	22.58	22.76	0.2985	0.2618	0.2729
1.4	QPSK	1	3	23.23	22.81	22.54	0.3041	0.2761	0.2594
1.4	QPSK	1	5	23.11	22.86	22.59	0.2958	0.2793	0.2624
1.4	QPSK	3	0	23.06	22.73	22.54	0.2924	0.2710	0.2594
1.4	QPSK	3	1	23.21	22.77	22.69	0.3027	0.2735	0.2685



1.4	QPSK	3	3	23.15	22.73	22.58	0.2985	0.2710	0.2618
1.4	QPSK	6	0	22.10	21.73	21.74	0.2344	0.2153	0.2158
1.4	16QAM	1	0	22.13	21.78	21.80	0.2360	0.2178	0.2188
1.4	16QAM	1	3	22.15	22.03	21.89	0.2371	0.2307	0.2234
1.4	16QAM	1	5	22.02	21.96	21.62	0.2301	0.2270	0.2099
1.4	16QAM	3	0	22.06	21.73	21.58	0.2323	0.2153	0.2080
1.4	16QAM	3	1	22.08	21.80	21.62	0.2333	0.2188	0.2099
1.4	16QAM	3	3	22.07	21.89	21.51	0.2328	0.2234	0.2046
1.4	16QAM	6	0	21.02	20.74	20.51	0.1828	0.1714	0.1626

LTE Band 4:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP		
Channel				20050	20175	20300	20050	20175	20300
Frequency (MHz)				1720	1732.5	1745	1720	1732.5	1745
20	QPSK	1	0	22.91	22.89	23.35	0.3170	0.3155	0.3508
20	QPSK	1	49	23.15	23.08	23.23	0.3350	0.3296	0.3412
20	QPSK	1	99	23.18	23.14	23.23	0.3373	0.3342	0.3412
20	QPSK	50	0	22.18	21.97	22.21	0.2679	0.2553	0.2698
20	QPSK	50	24	22.11	21.94	22.28	0.2636	0.2535	0.2742
20	QPSK	50	50	22.09	21.96	22.18	0.2624	0.2547	0.2679
20	QPSK	100	0	22.11	21.96	22.16	0.2636	0.2547	0.2667
20	16QAM	1	0	21.85	21.65	21.98	0.2483	0.2371	0.2559
20	16QAM	1	49	22.22	22.14	21.95	0.2704	0.2655	0.2541
20	16QAM	1	99	22.05	21.89	21.98	0.2600	0.2506	0.2559
20	16QAM	50	0	21.21	21.04	21.12	0.2143	0.2061	0.2099
20	16QAM	50	24	21.18	20.95	21.21	0.2128	0.2018	0.2143
20	16QAM	50	50	21.11	21.08	21.13	0.2094	0.2080	0.2104
20	16QAM	100	0	21.05	21.01	21.11	0.2065	0.2046	0.2094
Channel				20025	20175	20325	20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5	1717.5	1732.5	1747.5
15	QPSK	1	0	23.07	22.94	23.27	0.3289	0.3192	0.3443
15	QPSK	1	37	23.23	22.82	23.30	0.3412	0.3105	0.3467
15	QPSK	1	74	23.01	22.94	23.28	0.3243	0.3192	0.3451
15	QPSK	36	0	21.77	22.05	22.27	0.2438	0.2600	0.2735
15	QPSK	36	20	21.93	21.99	22.16	0.2529	0.2564	0.2667
15	QPSK	36	39	21.83	21.98	22.11	0.2472	0.2559	0.2636
15	QPSK	75	0	21.93	22.02	22.27	0.2529	0.2582	0.2735
15	16QAM	1	0	21.64	21.93	22.15	0.2366	0.2529	0.2661
15	16QAM	1	37	22.38	22.32	22.45	0.2805	0.2767	0.2851
15	16QAM	1	74	22.44	22.31	22.52	0.2844	0.2761	0.2897
15	16QAM	36	0	21.23	21.15	21.25	0.2153	0.2113	0.2163
15	16QAM	36	20	21.14	21.02	21.17	0.2109	0.2051	0.2123
15	16QAM	36	39	21.20	21.10	21.24	0.2138	0.2089	0.2158
15	16QAM	75	0	21.22	21.10	21.18	0.2148	0.2089	0.2128
Channel				20000	20175	20350	20000	20175	20350
Frequency (MHz)				1715	1732.5	1750	1715	1732.5	1750
10	QPSK	1	0	23.20	23.01	23.18	0.3388	0.3243	0.3373
10	QPSK	1	25	23.22	23.32	23.35	0.3404	0.3483	0.3508



10	QPSK	1	49	23.09	23.08	23.27	0.3304	0.3296	0.3443
10	QPSK	25	0	22.08	21.93	22.11	0.2618	0.2529	0.2636
10	QPSK	25	12	22.05	21.94	22.13	0.2600	0.2535	0.2649
10	QPSK	25	25	22.17	22.06	22.14	0.2673	0.2606	0.2655
10	QPSK	50	0	22.11	21.99	22.02	0.2636	0.2564	0.2582
10	16QAM	1	0	21.64	21.57	21.64	0.2366	0.2328	0.2366
10	16QAM	1	25	22.71	22.62	22.67	0.3027	0.2965	0.2999
10	16QAM	1	49	22.41	22.23	22.34	0.2825	0.2710	0.2780
10	16QAM	25	0	21.19	21.07	21.23	0.2133	0.2075	0.2153
10	16QAM	25	12	21.26	21.13	21.24	0.2168	0.2104	0.2158
10	16QAM	25	25	21.31	21.14	21.23	0.2193	0.2109	0.2153
10	16QAM	50	0	21.24	21.17	21.22	0.2158	0.2123	0.2148
Channel				19975	20175	20375	19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5	1712.5	1732.5	1752.5
5	QPSK	1	0	23.16	22.97	23.11	0.3357	0.3214	0.3319
5	QPSK	1	12	23.18	23.40	23.34	0.3373	0.3548	0.3499
5	QPSK	1	24	23.07	23.36	23.08	0.3289	0.3516	0.3296
5	QPSK	12	0	22.31	22.25	22.34	0.2761	0.2723	0.2780
5	QPSK	12	7	22.24	22.19	22.26	0.2716	0.2685	0.2729
5	QPSK	12	13	22.32	22.26	22.31	0.2767	0.2729	0.2761
5	QPSK	25	0	22.28	22.22	22.14	0.2742	0.2704	0.2655
5	16QAM	1	0	22.14	22.08	22.11	0.2655	0.2618	0.2636
5	16QAM	1	12	22.15	22.08	22.19	0.2661	0.2618	0.2685
5	16QAM	1	24	22.07	22.01	22.19	0.2612	0.2576	0.2685
5	16QAM	12	0	21.11	20.94	21.05	0.2094	0.2014	0.2065
5	16QAM	12	7	21.08	21.15	21.26	0.2080	0.2113	0.2168
5	16QAM	12	13	21.14	21.06	21.14	0.2109	0.2070	0.2109
5	16QAM	25	0	21.13	21.09	21.17	0.2104	0.2084	0.2123
Channel				19965	20175	20385	19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5	1711.5	1732.5	1753.5
3	QPSK	1	0	23.36	23.11	23.27	0.3516	0.3319	0.3443
3	QPSK	1	8	23.39	23.18	22.97	0.3540	0.3373	0.3214
3	QPSK	1	14	23.21	23.07	22.96	0.3396	0.3289	0.3206
3	QPSK	8	0	22.11	22.02	22.18	0.2636	0.2582	0.2679
3	QPSK	8	4	22.14	22.02	22.06	0.2655	0.2582	0.2606
3	QPSK	8	7	22.16	22.02	22.11	0.2667	0.2582	0.2636
3	QPSK	15	0	21.95	21.91	21.90	0.2541	0.2518	0.2512
3	16QAM	1	0	21.94	21.87	21.99	0.2535	0.2495	0.2564
3	16QAM	1	8	21.99	21.93	21.95	0.2564	0.2529	0.2541
3	16QAM	1	14	21.95	21.92	21.90	0.2541	0.2523	0.2512
3	16QAM	8	0	21.14	21.03	21.05	0.2109	0.2056	0.2065
3	16QAM	8	4	21.13	21.06	21.14	0.2104	0.2070	0.2109
3	16QAM	8	7	21.02	21.09	21.12	0.2051	0.2084	0.2099
3	16QAM	15	0	21.11	21.03	21.05	0.2094	0.2056	0.2065
Channel				19957	20175	20393	19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3	1710.7	1732.5	1754.3
1.4	QPSK	1	0	23.26	23.15	23.28	0.3436	0.3350	0.3451
1.4	QPSK	1	3	23.43	23.41	23.37	0.3573	0.3556	0.3524
1.4	QPSK	1	5	23.31	23.40	23.20	0.3475	0.3548	0.3388
1.4	QPSK	3	0	23.24	23.21	23.24	0.3420	0.3396	0.3420



1.4	QPSK	3	1	23.26	23.25	23.31	0.3436	0.3428	0.3475
1.4	QPSK	3	3	23.14	23.27	23.24	0.3342	0.3443	0.3420
1.4	QPSK	6	0	22.26	22.19	22.15	0.2729	0.2685	0.2661
1.4	16QAM	1	0	22.11	22.06	22.11	0.2636	0.2606	0.2636
1.4	16QAM	1	3	22.34	22.27	22.31	0.2780	0.2735	0.2761
1.4	16QAM	1	5	22.24	22.15	22.23	0.2716	0.2661	0.2710
1.4	16QAM	3	0	22.45	22.32	22.22	0.2851	0.2767	0.2704
1.4	16QAM	3	1	22.15	22.21	22.15	0.2661	0.2698	0.2661
1.4	16QAM	3	3	22.23	22.18	22.11	0.2710	0.2679	0.2636
1.4	16QAM	6	0	21.33	21.26	21.19	0.2203	0.2168	0.2133

LTE Band 5:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP		
Channel				20450	20525	20600	20450	20525	20600
Frequency (MHz)				829	836.5	844	829	836.5	844
10	QPSK	1	0	23.05	23.11	23.07	0.0741	0.0752	0.0745
10	QPSK	1	25	23.14	23.12	23.17	0.0757	0.0753	0.0762
10	QPSK	1	49	23.16	23.18	23.17	0.0760	0.0764	0.0762
10	QPSK	25	0	22.21	22.16	22.36	0.0611	0.0604	0.0632
10	QPSK	25	12	22.24	22.21	22.31	0.0615	0.0611	0.0625
10	QPSK	25	25	22.21	22.19	22.32	0.0611	0.0608	0.0627
10	QPSK	50	0	22.31	22.26	22.34	0.0625	0.0618	0.0630
10	16QAM	1	0	22.15	22.08	22.14	0.0603	0.0593	0.0601
10	16QAM	1	25	22.31	22.23	22.31	0.0625	0.0614	0.0625
10	16QAM	1	49	22.13	22.05	22.16	0.0600	0.0589	0.0604
10	16QAM	25	0	21.24	21.19	22.25	0.0489	0.0483	0.0617
10	16QAM	25	12	21.13	21.12	21.17	0.0476	0.0475	0.0481
10	16QAM	25	25	21.14	21.10	21.11	0.0478	0.0473	0.0474
10	16QAM	50	0	21.15	21.14	21.16	0.0479	0.0478	0.0480
Channel				20425	20525	20625	20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5	826.5	836.5	846.5
5	QPSK	1	0	23.12	22.93	23.12	0.0753	0.0721	0.0753
5	QPSK	1	12	23.20	23.12	23.19	0.0767	0.0753	0.0766
5	QPSK	1	24	23.21	23.21	23.16	0.0769	0.0769	0.0760
5	QPSK	12	0	22.27	22.10	22.23	0.0619	0.0596	0.0614
5	QPSK	12	7	22.29	22.22	22.31	0.0622	0.0612	0.0625
5	QPSK	12	13	22.31	22.20	22.24	0.0625	0.0610	0.0615
5	QPSK	25	0	22.15	22.12	22.16	0.0603	0.0598	0.0604
5	16QAM	1	0	22.31	22.24	22.31	0.0625	0.0615	0.0625
5	16QAM	1	12	22.33	22.34	22.41	0.0628	0.0630	0.0640
5	16QAM	1	24	22.10	22.04	22.11	0.0596	0.0587	0.0597
5	16QAM	12	0	21.14	21.13	21.15	0.0478	0.0476	0.0479
5	16QAM	12	7	21.16	21.13	21.16	0.0480	0.0476	0.0480
5	16QAM	12	13	21.05	21.01	21.05	0.0468	0.0463	0.0468
5	16QAM	25	0	21.16	21.14	21.17	0.0480	0.0478	0.0481
Channel				20415	20525	20635	20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5	825.5	836.5	847.5
3	QPSK	1	0	23.11	23.16	23.14	0.0752	0.0760	0.0757



3	QPSK	1	8	23.10	23.18	23.15	0.0750	0.0764	0.0759
3	QPSK	1	14	23.17	23.12	23.12	0.0762	0.0753	0.0753
3	QPSK	8	0	22.15	22.16	22.19	0.0603	0.0604	0.0608
3	QPSK	8	4	22.31	22.24	22.31	0.0625	0.0615	0.0625
3	QPSK	8	7	22.26	22.23	22.31	0.0618	0.0614	0.0625
3	QPSK	15	0	22.15	22.10	22.15	0.0603	0.0596	0.0603
3	16QAM	1	0	21.88	21.81	21.92	0.0566	0.0557	0.0571
3	16QAM	1	8	22.33	22.29	22.32	0.0628	0.0622	0.0627
3	16QAM	1	14	22.11	22.02	22.11	0.0597	0.0585	0.0597
3	16QAM	8	0	21.16	21.13	21.20	0.0480	0.0476	0.0484
3	16QAM	8	4	21.17	21.14	21.16	0.0481	0.0478	0.0480
3	16QAM	8	7	21.10	21.06	21.13	0.0473	0.0469	0.0476
3	16QAM	15	0	21.13	21.10	21.16	0.0476	0.0473	0.0480
Channel				20407	20525	20643	20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3	824.7	836.5	848.3
1.4	QPSK	1	0	23.11	23.09	23.15	0.0752	0.0748	0.0759
1.4	QPSK	1	3	23.17	23.20	23.11	0.0762	0.0767	0.0752
1.4	QPSK	1	5	23.20	23.24	23.20	0.0767	0.0774	0.0767
1.4	QPSK	3	0	23.11	23.15	23.14	0.0752	0.0759	0.0757
1.4	QPSK	3	1	23.10	23.17	23.21	0.0750	0.0762	0.0769
1.4	QPSK	3	3	23.22	23.20	23.13	0.0771	0.0767	0.0755
1.4	QPSK	6	0	22.15	22.19	22.24	0.0603	0.0608	0.0615
1.4	16QAM	1	0	22.15	22.30	22.25	0.0603	0.0624	0.0617
1.4	16QAM	1	3	22.16	22.30	22.15	0.0604	0.0624	0.0603
1.4	16QAM	1	5	22.20	22.19	22.31	0.0610	0.0608	0.0625
1.4	16QAM	3	0	22.11	22.21	22.30	0.0597	0.0611	0.0624
1.4	16QAM	3	1	22.18	22.16	22.25	0.0607	0.0604	0.0617
1.4	16QAM	3	3	22.14	22.07	22.11	0.0601	0.0592	0.0597
1.4	16QAM	6	0	21.16	21.14	21.15	0.0480	0.0478	0.0479



LTE Band 26:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP			
Channel				26790	26865	26915	26965	26790	26865	26915	26965
Frequency (MHz)				824	831.5	836.5	841.5	824	831.5	836.5	841.5
15	QPSK	1	0	23.15	22.96	22.91	23.02	0.0759	0.0726	0.0718	0.0736
15	QPSK	1	37	23.35	23.23	23.49	23.40	0.0794	0.0773	0.0820	0.0804
15	QPSK	1	74	22.93	23.02	22.88	23.02	0.0721	0.0736	0.0713	0.0736
15	QPSK	36	0	22.24	22.21	22.17	22.03	0.0615	0.0611	0.0605	0.0586
15	QPSK	36	20	22.13	22.11	22.06	22.05	0.0600	0.0597	0.0590	0.0589
15	QPSK	36	39	22.15	22.12	22.08	22.01	0.0603	0.0598	0.0593	0.0583
15	QPSK	75	0	22.21	22.13	22.08	22.06	0.0611	0.0600	0.0593	0.0590
15	16QAM	1	0	22.02	21.95	21.99	22.03	0.0585	0.0575	0.0581	0.0586
15	16QAM	1	37	22.31	22.32	22.36	22.14	0.0625	0.0627	0.0632	0.0601
15	16QAM	1	74	21.84	21.80	21.77	21.72	0.0561	0.0556	0.0552	0.0546
15	16QAM	36	0	21.23	21.15	21.12	21.05	0.0488	0.0479	0.0475	0.0468
15	16QAM	36	20	21.15	21.13	21.11	20.86	0.0479	0.0476	0.0474	0.0448
15	16QAM	36	39	21.02	20.99	21.05	20.98	0.0465	0.0461	0.0468	0.0460
15	16QAM	75	0	21.13	21.11	21.04	21.03	0.0476	0.0474	0.0467	0.0466
Channel				26790	26840	26915	26990	26790	26840	26915	26990
Frequency (MHz)				824	829	836.5	844	824	829	836.5	844
10	QPSK	1	0	23.08	23.04	22.81	22.94	0.0746	0.0740	0.0701	0.0723
10	QPSK	1	25	23.13	23.26	23.33	23.17	0.0755	0.0778	0.0791	0.0762
10	QPSK	1	49	23.11	23.01	23.04	23.02	0.0752	0.0735	0.0740	0.0736
10	QPSK	25	0	22.14	22.10	22.10	22.02	0.0601	0.0596	0.0596	0.0585
10	QPSK	25	12	22.11	22.07	22.04	22.17	0.0597	0.0592	0.0587	0.0605
10	QPSK	25	25	22.06	22.13	22.03	22.14	0.0590	0.0600	0.0586	0.0601
10	QPSK	50	0	22.08	22.11	22.07	22.13	0.0593	0.0597	0.0592	0.0600
10	16QAM	1	0	22.25	22.20	22.16	22.25	0.0617	0.0610	0.0604	0.0617
10	16QAM	1	25	21.95	22.02	21.92	21.98	0.0575	0.0585	0.0571	0.0579
10	16QAM	1	49	22.17	22.25	22.16	22.21	0.0605	0.0617	0.0604	0.0611
10	16QAM	25	0	21.20	21.15	21.03	21.14	0.0484	0.0479	0.0466	0.0478
10	16QAM	25	12	21.20	21.25	21.23	21.31	0.0484	0.0490	0.0488	0.0497
10	16QAM	25	25	21.15	21.11	21.01	21.06	0.0479	0.0474	0.0463	0.0469
10	16QAM	50	0	21.11	21.09	21.02	21.11	0.0474	0.0472	0.0465	0.0474
Channel				26790	26815	26915	27015	26790	26815	26915	27015
Frequency (MHz)				824	826.5	836.5	846.5	824	826.5	836.5	846.5
5	QPSK	1	0	22.89	23.05	22.83	22.91	0.0714	0.0741	0.0705	0.0718
5	QPSK	1	12	23.10	23.31	23.06	23.11	0.0750	0.0787	0.0743	0.0752
5	QPSK	1	24	23.05	23.23	22.97	23.02	0.0741	0.0773	0.0728	0.0736
5	QPSK	12	0	22.14	22.20	22.10	22.15	0.0601	0.0610	0.0596	0.0603
5	QPSK	12	7	22.10	22.16	22.06	22.11	0.0596	0.0604	0.0590	0.0597
5	QPSK	12	13	22.11	22.15	22.09	22.13	0.0597	0.0603	0.0594	0.0600
5	QPSK	25	0	22.15	22.17	22.11	22.06	0.0603	0.0605	0.0597	0.0590
5	16QAM	1	0	21.83	21.91	21.72	21.83	0.0560	0.0570	0.0546	0.0560
5	16QAM	1	12	22.15	22.34	22.30	22.16	0.0603	0.0630	0.0624	0.0604
5	16QAM	1	24	21.86	21.85	21.78	21.83	0.0564	0.0562	0.0553	0.0560
5	16QAM	12	0	21.06	21.11	21.08	21.11	0.0469	0.0474	0.0471	0.0474
5	16QAM	12	7	21.13	21.16	21.09	21.14	0.0476	0.0480	0.0472	0.0478



5	16QAM	12	13	21.10	21.05	20.94	20.99	0.0473	0.0468	0.0456	0.0461
5	16QAM	25	0	21.13	21.11	20.97	21.03	0.0476	0.0474	0.0459	0.0466
Channel				26790	26815	26915	27025	26790	26815	26915	27025
Frequency (MHz)				824	825.5	836.5	847.5	824	825.5	836.5	847.5
3	QPSK	1	0	23.13	23.09	23.13	23.07	0.0755	0.0748	0.0755	0.0745
3	QPSK	1	8	23.14	23.14	23.05	23.05	0.0757	0.0757	0.0741	0.0741
3	QPSK	1	14	22.96	22.95	23.13	22.98	0.0726	0.0724	0.0755	0.0729
3	QPSK	8	0	22.10	22.07	22.11	22.11	0.0596	0.0592	0.0597	0.0597
3	QPSK	8	4	22.06	22.01	22.06	22.04	0.0590	0.0583	0.0590	0.0587
3	QPSK	8	7	22.13	22.09	22.04	22.09	0.0600	0.0594	0.0587	0.0594
3	QPSK	15	0	22.00	21.98	22.02	22.09	0.0582	0.0579	0.0585	0.0594
3	16QAM	1	0	21.86	21.95	21.99	22.03	0.0564	0.0575	0.0581	0.0586
3	16QAM	1	8	21.86	21.95	21.89	21.94	0.0564	0.0575	0.0568	0.0574
3	16QAM	1	14	21.86	21.96	22.02	22.13	0.0564	0.0577	0.0585	0.0600
3	16QAM	8	0	21.04	20.95	21.03	21.01	0.0467	0.0457	0.0466	0.0463
3	16QAM	8	4	21.03	21.05	21.10	21.13	0.0466	0.0468	0.0473	0.0476
3	16QAM	8	7	21.11	21.06	21.03	21.05	0.0474	0.0469	0.0466	0.0468
3	16QAM	15	0	21.03	21.08	21.02	21.09	0.0466	0.0471	0.0465	0.0472
Channel				26790	26797	26915	27033	26790	26797	26915	27033
Frequency (MHz)				824	824.7	836.5	848.3	824	824.7	836.5	848.3
1.4	QPSK	1	0	23.11	23.00	23.15	23.00	0.0752	0.0733	0.0759	0.0733
1.4	QPSK	1	3	23.10	23.09	23.13	23.11	0.0750	0.0748	0.0755	0.0752
1.4	QPSK	1	5	23.10	23.12	23.14	23.20	0.0750	0.0753	0.0757	0.0767
1.4	QPSK	3	0	23.13	23.15	23.22	23.14	0.0755	0.0759	0.0771	0.0757
1.4	QPSK	3	1	23.08	23.14	23.15	23.22	0.0746	0.0757	0.0759	0.0771
1.4	QPSK	3	3	22.98	23.05	23.11	23.09	0.0729	0.0741	0.0752	0.0748
1.4	QPSK	6	0	22.10	22.11	22.15	22.11	0.0596	0.0597	0.0603	0.0597
1.4	16QAM	1	0	21.78	21.85	21.95	22.05	0.0553	0.0562	0.0575	0.0589
1.4	16QAM	1	3	21.93	21.96	21.99	20.15	0.0573	0.0577	0.0581	0.0380
1.4	16QAM	1	5	21.72	21.88	21.93	20.11	0.0546	0.0566	0.0573	0.0377
1.4	16QAM	3	0	22.22	22.11	22.16	22.21	0.0612	0.0597	0.0604	0.0611
1.4	16QAM	3	1	22.08	22.05	22.11	22.23	0.0593	0.0589	0.0597	0.0614
1.4	16QAM	3	3	22.12	22.14	22.27	22.30	0.0598	0.0601	0.0619	0.0624
1.4	16QAM	6	0	21.09	21.13	21.20	21.25	0.0472	0.0476	0.0484	0.0490

LTE Band 66:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP		
Channel				132072	132322	132572	132072	132322	132572
Frequency (MHz)				1720	1745	1770	1720	1745	1770
20	QPSK	1	0	23.17	23.22	23.12	0.3365	0.3404	0.3327
20	QPSK	1	49	23.35	23.34	23.49	0.3508	0.3499	0.3622
20	QPSK	1	99	23.11	23.12	23.28	0.3319	0.3327	0.3451
20	QPSK	50	0	23.14	22.18	22.10	0.3342	0.2679	0.2630
20	QPSK	50	24	22.11	22.16	22.08	0.2636	0.2667	0.2618
20	QPSK	50	50	22.10	22.14	22.08	0.2630	0.2655	0.2618
20	QPSK	100	0	22.20	22.25	22.32	0.2692	0.2723	0.2767
20	16QAM	1	0	22.03	22.05	21.95	0.2588	0.2600	0.2541
20	16QAM	1	49	22.18	22.16	22.27	0.2679	0.2667	0.2735



20	16QAM	1	99	21.88	21.83	21.94	0.2500	0.2472	0.2535
20	16QAM	50	0	21.14	21.06	21.14	0.2109	0.2070	0.2109
20	16QAM	50	24	21.23	21.21	21.31	0.2153	0.2143	0.2193
20	16QAM	50	50	21.24	21.16	21.25	0.2158	0.2118	0.2163
20	16QAM	100	0	21.11	21.24	21.31	0.2094	0.2158	0.2193
Channel				132047	132322	132597	132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5	1717.5	1745	1772.5
15	QPSK	1	0	23.13	23.20	23.15	0.3334	0.3388	0.3350
15	QPSK	1	37	23.42	23.54	23.35	0.3565	0.3664	0.3508
15	QPSK	1	74	23.34	23.16	23.31	0.3499	0.3357	0.3475
15	QPSK	36	0	22.12	22.19	22.07	0.2642	0.2685	0.2612
15	QPSK	36	20	22.10	22.07	22.14	0.2630	0.2612	0.2655
15	QPSK	36	39	22.16	22.15	22.23	0.2667	0.2661	0.2710
15	QPSK	75	0	22.31	22.23	22.31	0.2761	0.2710	0.2761
15	16QAM	1	0	22.14	21.97	22.01	0.2655	0.2553	0.2576
15	16QAM	1	37	22.31	22.24	22.31	0.2761	0.2716	0.2761
15	16QAM	1	74	21.95	21.88	21.92	0.2541	0.2500	0.2523
15	16QAM	36	0	21.22	21.11	21.23	0.2148	0.2094	0.2153
15	16QAM	36	20	21.16	21.15	21.19	0.2118	0.2113	0.2133
15	16QAM	36	39	21.22	21.16	21.21	0.2148	0.2118	0.2143
15	16QAM	75	0	21.19	21.18	21.23	0.2133	0.2128	0.2153
Channel				132022	132322	132622	132022	132322	132622
Frequency (MHz)				1715	1745	1775	1715	1745	1775
10	QPSK	1	0	23.10	23.35	23.39	0.3311	0.3508	0.3540
10	QPSK	1	25	23.38	23.46	23.18	0.3532	0.3597	0.3373
10	QPSK	1	49	23.03	23.23	23.21	0.3258	0.3412	0.3396
10	QPSK	25	0	22.10	22.12	22.15	0.2630	0.2642	0.2661
10	QPSK	25	12	22.25	22.16	22.31	0.2723	0.2667	0.2761
10	QPSK	25	25	22.31	22.20	22.24	0.2761	0.2692	0.2716
10	QPSK	50	0	22.24	22.16	22.26	0.2716	0.2667	0.2729
10	16QAM	1	0	22.10	21.98	22.05	0.2630	0.2559	0.2600
10	16QAM	1	25	22.14	21.92	22.11	0.2655	0.2523	0.2636
10	16QAM	1	49	22.31	22.25	22.31	0.2761	0.2723	0.2761
10	16QAM	25	0	21.15	21.04	21.10	0.2113	0.2061	0.2089
10	16QAM	25	12	21.16	21.04	21.15	0.2118	0.2061	0.2113
10	16QAM	25	25	21.31	21.24	21.32	0.2193	0.2158	0.2198
10	16QAM	50	0	21.24	21.18	21.24	0.2158	0.2128	0.2158
Channel				131997	132322	132647	131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5	1712.5	1745	1777.5
5	QPSK	1	0	22.93	23.33	23.32	0.3184	0.3491	0.3483
5	QPSK	1	12	23.20	23.39	23.29	0.3388	0.3540	0.3459
5	QPSK	1	24	23.16	23.21	23.05	0.3357	0.3396	0.3273
5	QPSK	12	0	22.06	22.17	22.31	0.2606	0.2673	0.2761
5	QPSK	12	7	22.14	22.16	22.15	0.2655	0.2667	0.2661
5	QPSK	12	13	22.21	22.24	22.31	0.2698	0.2716	0.2761
5	QPSK	25	0	22.34	22.32	22.41	0.2780	0.2767	0.2825
5	16QAM	1	0	21.88	21.95	22.01	0.2500	0.2541	0.2576
5	16QAM	1	12	22.49	22.43	22.51	0.2877	0.2838	0.2891
5	16QAM	1	24	22.11	22.06	22.16	0.2636	0.2606	0.2667
5	16QAM	12	0	21.33	21.31	21.34	0.2203	0.2193	0.2208

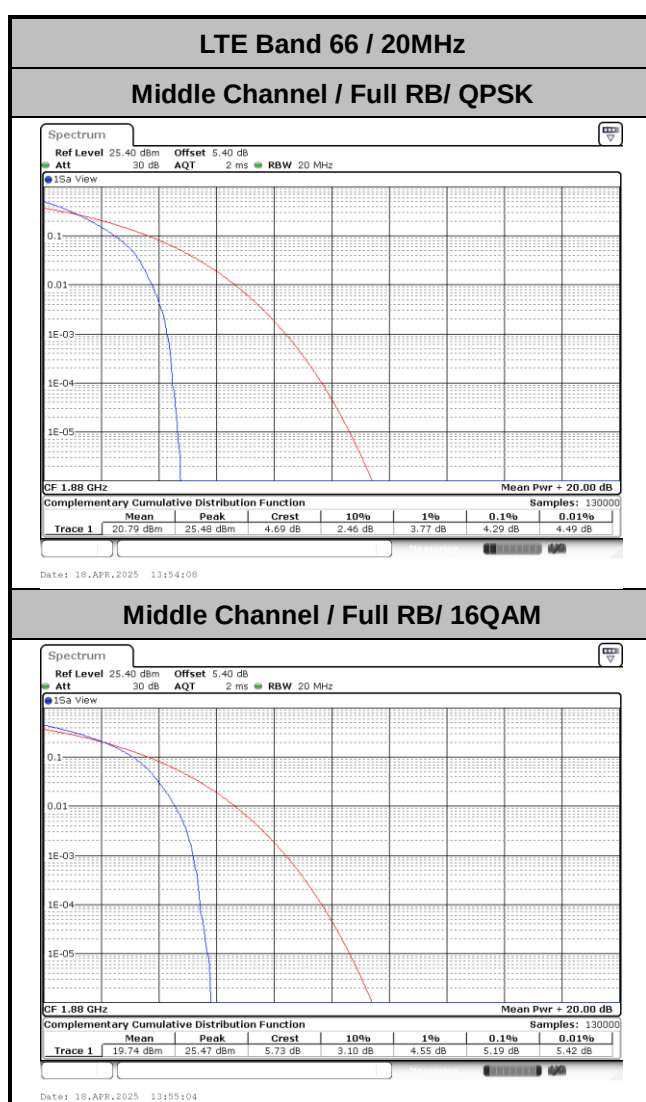


5	16QAM	12	7	21.25	21.19	21.23	0.2163	0.2133	0.2153
5	16QAM	12	13	21.33	21.27	21.44	0.2203	0.2173	0.2259
5	16QAM	25	0	21.23	21.13	21.23	0.2153	0.2104	0.2153
Channel				131987	132322	132657	131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5	1711.5	1745	1778.5
3	QPSK	1	0	23.23	23.15	23.32	0.3412	0.3350	0.3483
3	QPSK	1	8	23.29	23.15	23.24	0.3459	0.3350	0.3420
3	QPSK	1	14	23.33	23.08	23.29	0.3491	0.3296	0.3459
3	QPSK	8	0	22.26	22.21	22.22	0.2729	0.2698	0.2704
3	QPSK	8	4	22.20	22.20	22.17	0.2692	0.2692	0.2673
3	QPSK	8	7	22.16	22.22	22.26	0.2667	0.2704	0.2729
3	QPSK	15	0	22.17	22.27	22.23	0.2673	0.2735	0.2710
3	16QAM	1	0	22.00	22.11	22.03	0.2570	0.2636	0.2588
3	16QAM	1	8	22.15	22.10	21.96	0.2661	0.2630	0.2547
3	16QAM	1	14	21.98	21.91	21.95	0.2559	0.2518	0.2541
3	16QAM	8	0	21.31	21.20	21.21	0.2193	0.2138	0.2143
3	16QAM	8	4	21.14	21.09	21.17	0.2109	0.2084	0.2123
3	16QAM	8	7	21.23	21.18	21.04	0.2153	0.2128	0.2061
3	16QAM	15	0	21.11	21.08	21.12	0.2094	0.2080	0.2099
Channel				131979	132322	132665	131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3	1710.7	1745	1779.3
1.4	QPSK	1	0	23.17	23.00	23.25	0.3365	0.3236	0.3428
1.4	QPSK	1	3	23.30	23.24	23.18	0.3467	0.3420	0.3373
1.4	QPSK	1	5	23.24	23.19	23.16	0.3420	0.3381	0.3357
1.4	QPSK	3	0	23.09	23.07	23.17	0.3304	0.3289	0.3365
1.4	QPSK	3	1	23.14	23.10	23.17	0.3342	0.3311	0.3365
1.4	QPSK	3	3	23.09	23.12	23.16	0.3304	0.3327	0.3357
1.4	QPSK	6	0	22.18	22.19	22.19	0.2679	0.2685	0.2685
1.4	16QAM	1	0	22.20	21.98	21.95	0.2692	0.2559	0.2541
1.4	16QAM	1	3	22.12	22.48	22.06	0.2642	0.2871	0.2606
1.4	16QAM	1	5	21.96	21.92	21.86	0.2547	0.2523	0.2489
1.4	16QAM	3	0	22.26	22.04	22.04	0.2729	0.2594	0.2594
1.4	16QAM	3	1	22.18	22.23	22.24	0.2679	0.2710	0.2716
1.4	16QAM	3	3	22.06	22.26	22.37	0.2606	0.2729	0.2799
1.4	16QAM	6	0	20.97	21.12	21.09	0.2028	0.2099	0.2084

LTE Band 2

Peak-to-Average Ratio

Mode	LTE Band 2 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.29	5.19	PASS



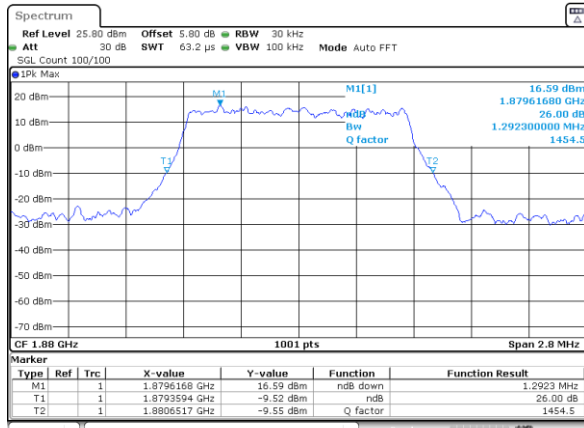
26dB Bandwidth

Mode	LTE Band 2 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.29	1.26
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.03	3.01
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.82	4.89
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.67	9.95
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.33	14.45
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.90	18.98



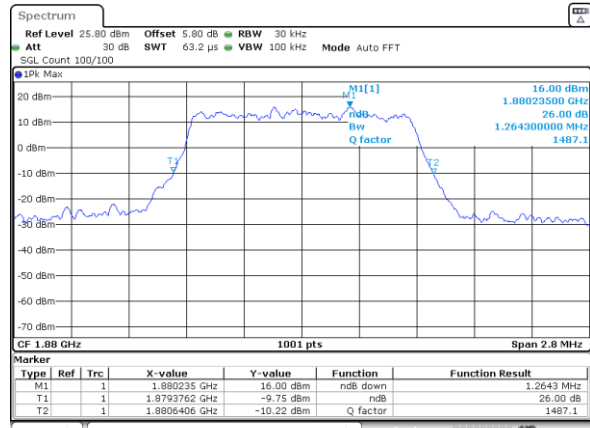
LTE Band 2

Middle Channel / 1.4MHz / QPSK



Date: 21.APR.2025 11:32:11

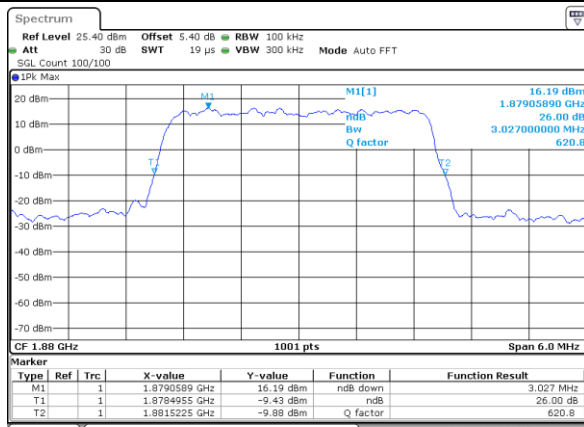
Middle Channel / 1.4MHz / 16QAM



Date: 21.APR.2025 11:33:27

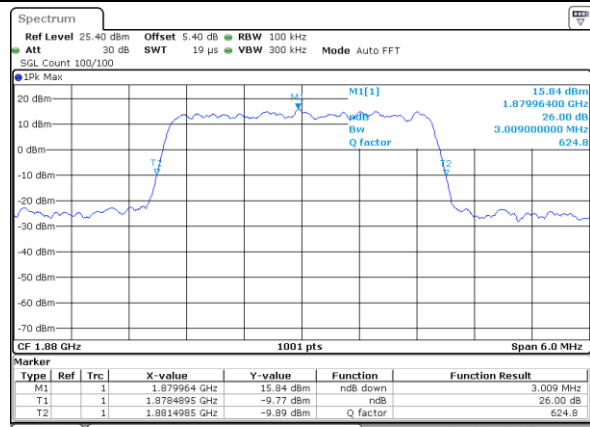
LTE Band 2

Middle Channel / 3MHz / QPSK



Date: 21.APR.2025 13:04:29

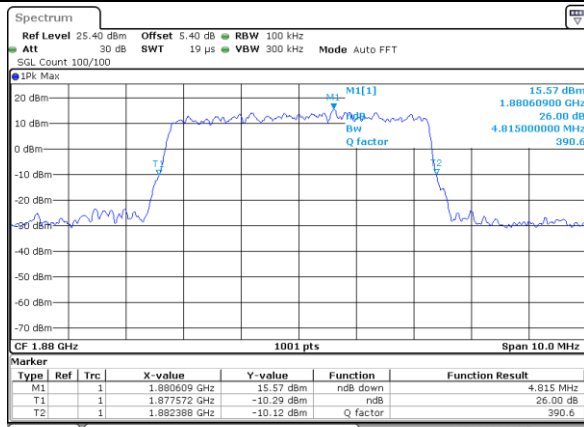
Middle Channel / 3MHz / 16QAM



Date: 21.APR.2025 13:05:26

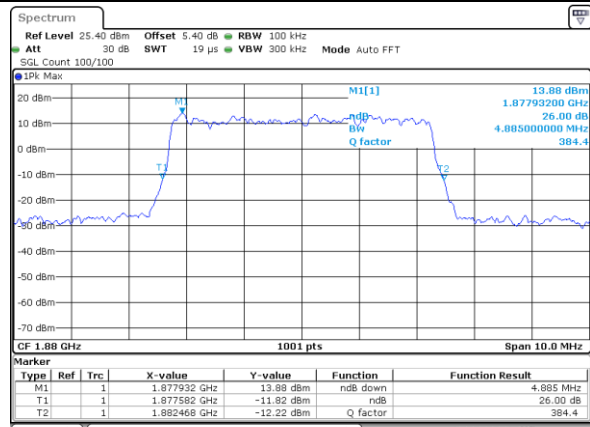
LTE Band 2

Middle Channel / 5MHz / QPSK



Date: 18.APR.2025 14:11:15

Middle Channel / 5MHz / 16QAM

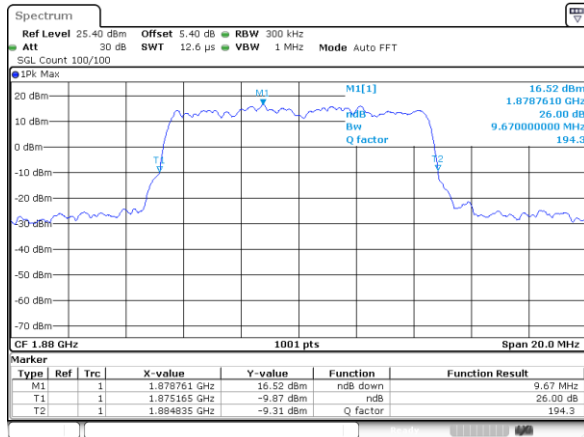


Date: 18.APR.2025 14:12:09



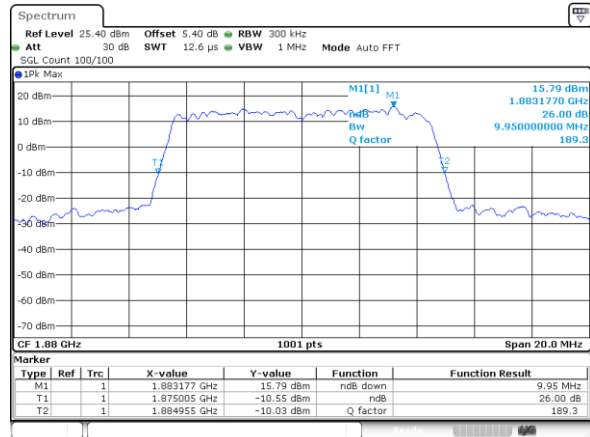
LTE Band 2

Middle Channel / 10MHz / QPSK



Date: 18.APR.2025 14:09:11

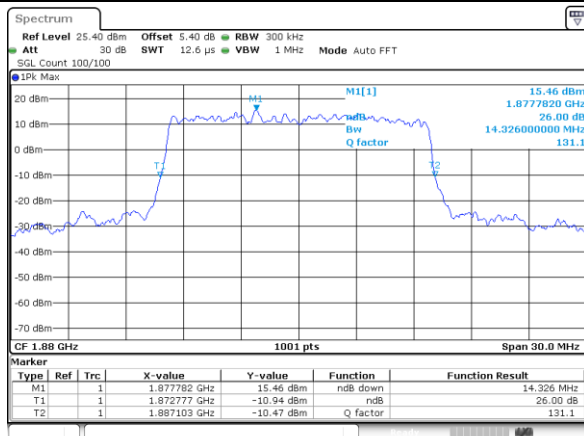
Middle Channel / 10MHz / 16QAM



Date: 18.APR.2025 14:10:06

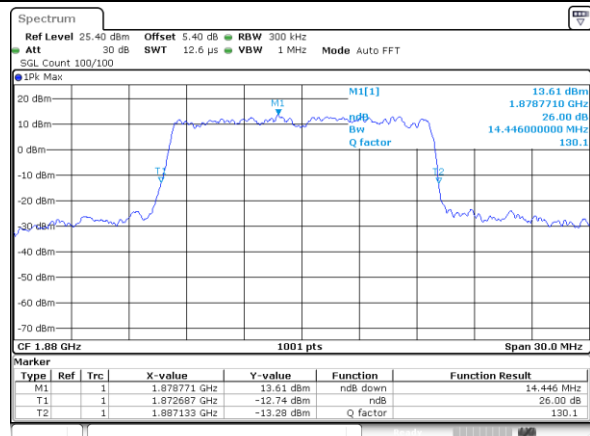
LTE Band 2

Middle Channel / 15MHz / QPSK



Date: 18.APR.2025 14:07:00

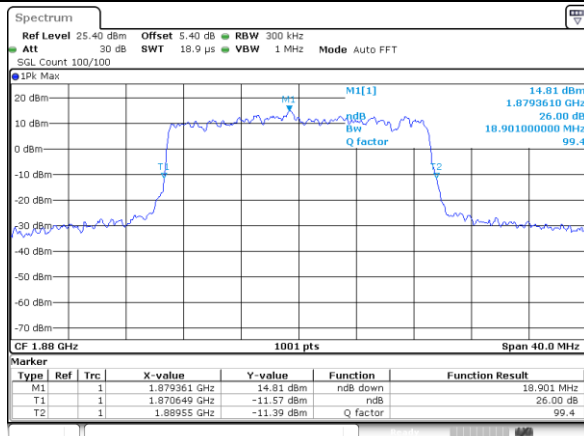
Middle Channel / 15MHz / 16QAM



Date: 18.APR.2025 14:07:57

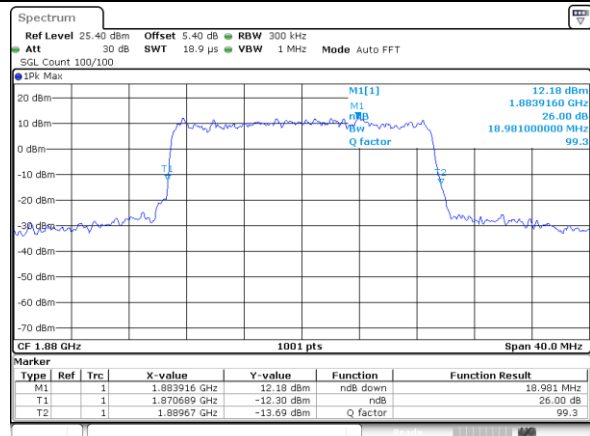
LTE Band 2

Middle Channel / 20MHz / QPSK



Date: 18.APR.2025 13:53:39

Middle Channel / 20MHz / 16QAM



Date: 18.APR.2025 13:54:34

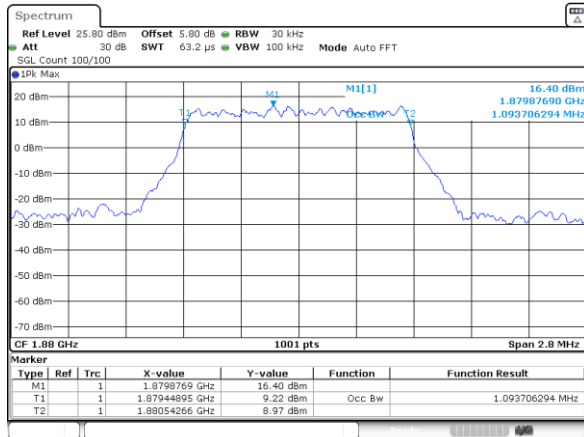
Occupied Bandwidth

Mode	LTE Band 2 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.72	2.72
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.51	4.51
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.03
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.46
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.86	17.94

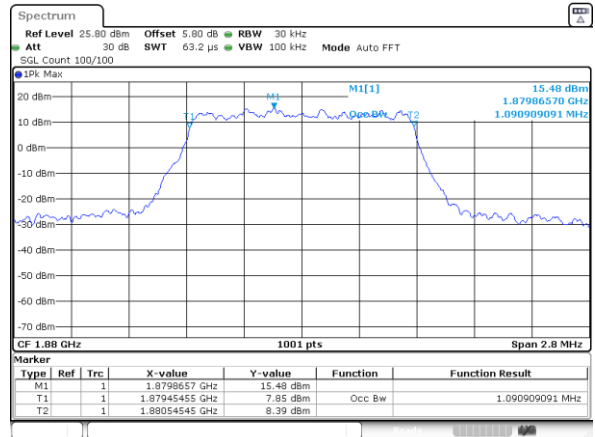


LTE Band 2

Middle Channel / 1.4MHz / QPSK

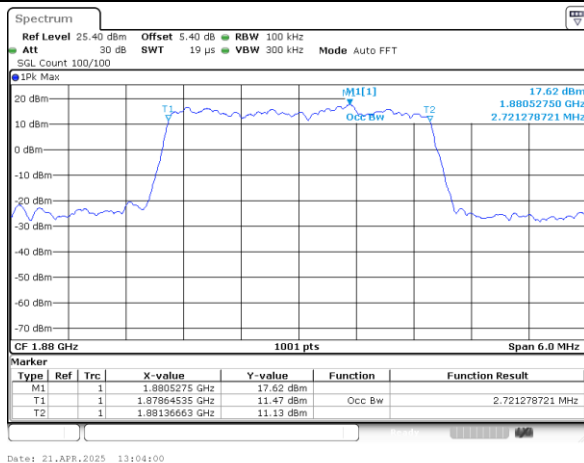


Middle Channel / 1.4MHz / 16QAM

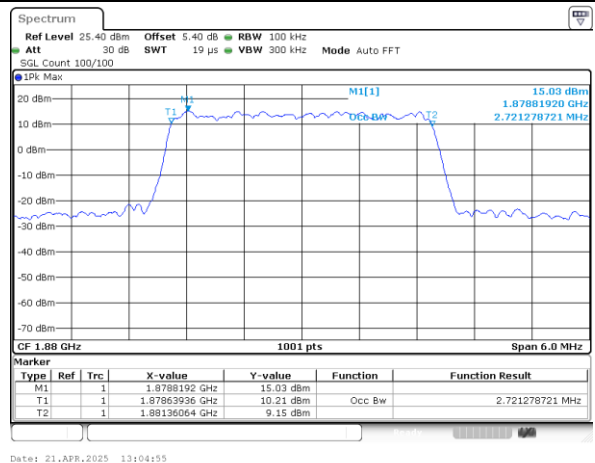


LTE Band 2

Middle Channel / 3MHz / QPSK

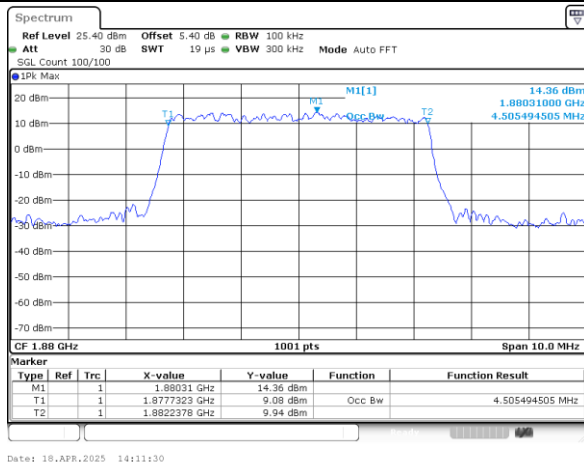


Middle Channel / 3MHz / 16QAM

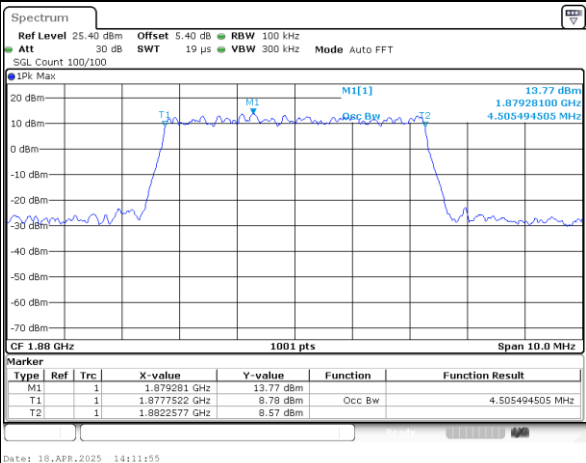


LTE Band 2

Middle Channel / 5MHz / QPSK



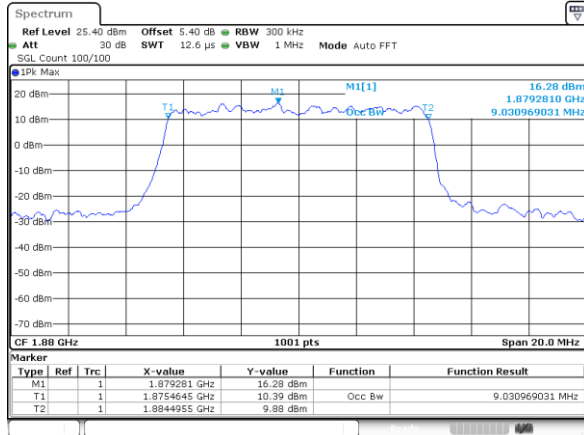
Middle Channel / 5MHz / 16QAM



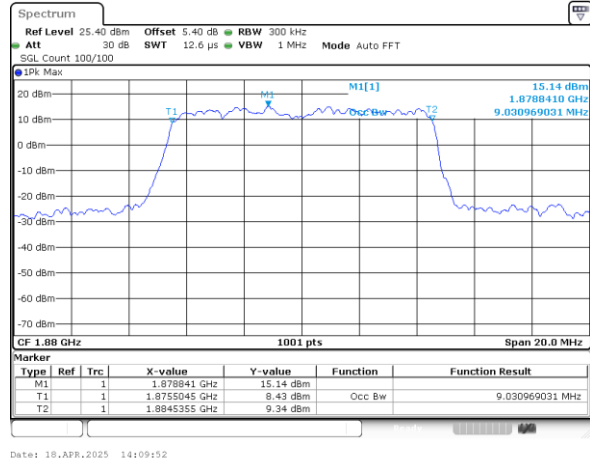


LTE Band 2

Middle Channel / 10MHz / QPSK

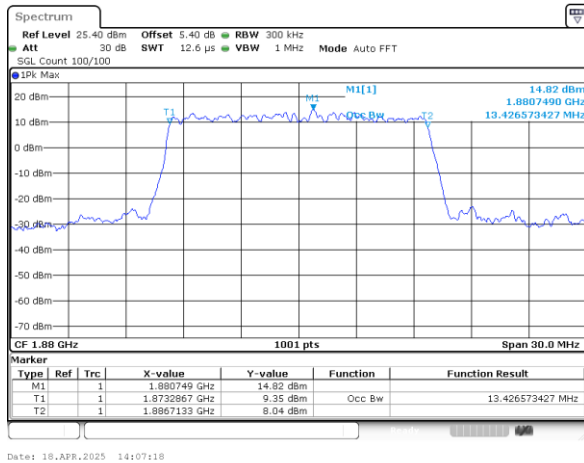


Middle Channel / 10MHz / 16QAM

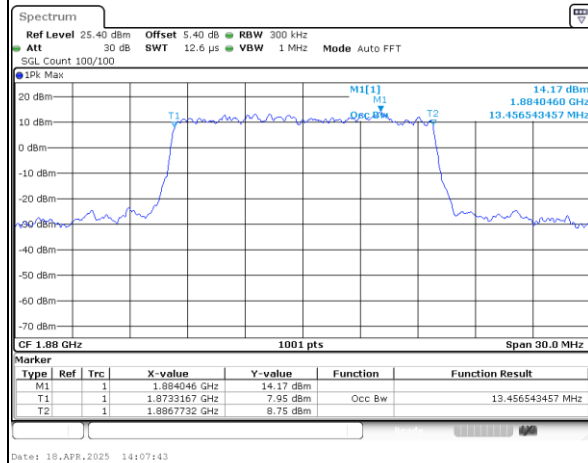


LTE Band 2

Middle Channel / 15MHz / QPSK

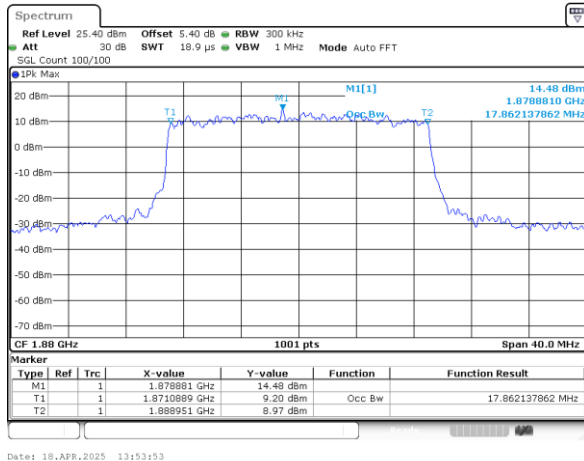


Middle Channel /15MHz / 16QAM

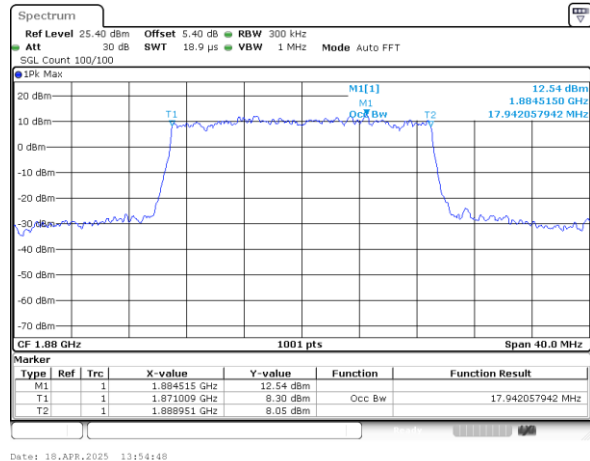


LTE Band 2

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

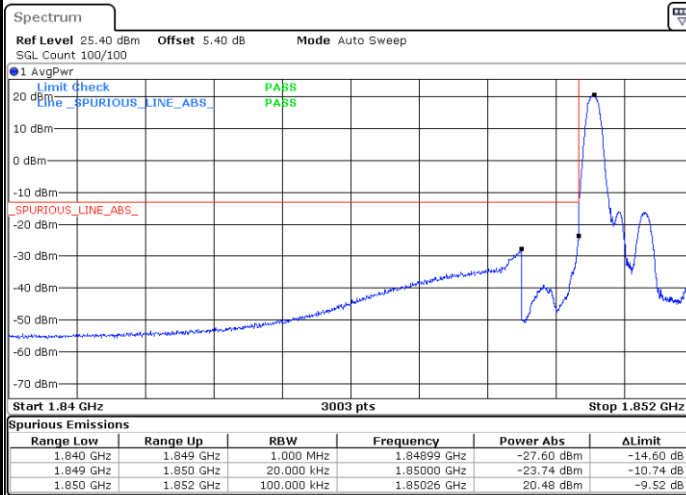




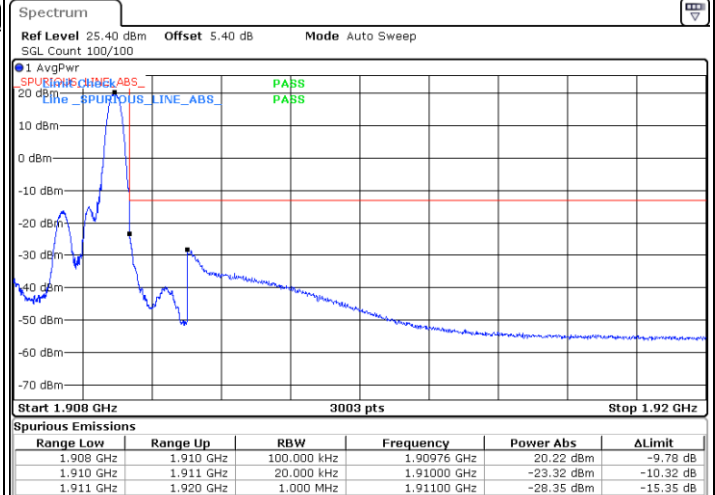
Conducted Band Edge

LTE Band 2 / 1.4MHz / QPSK

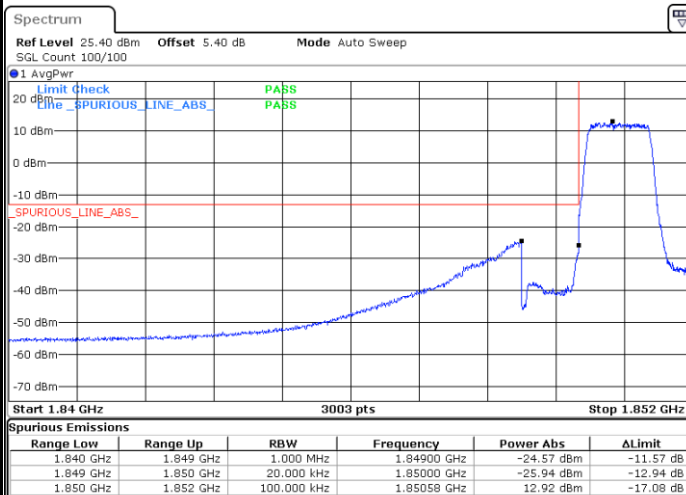
Lowest Band Edge / 1RB



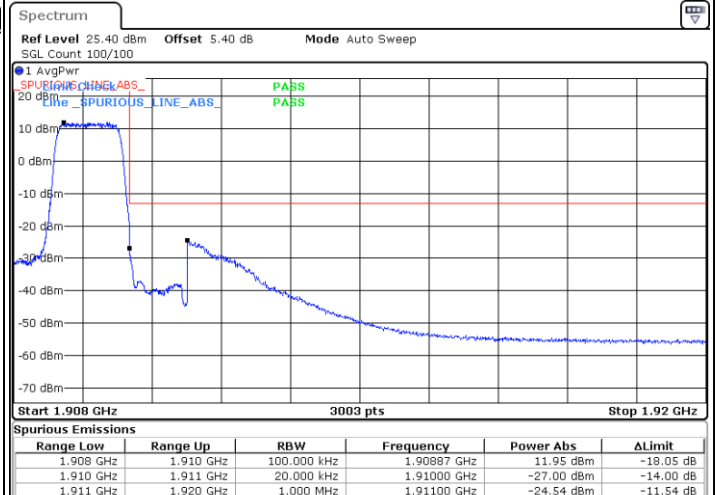
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



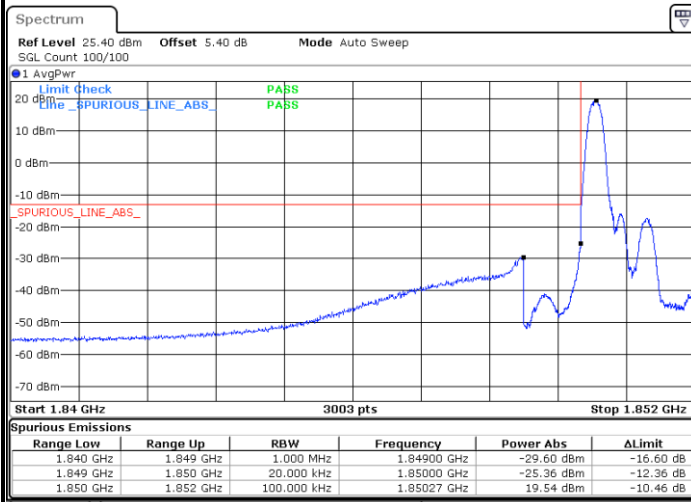
Highest Band Edge / Full RB



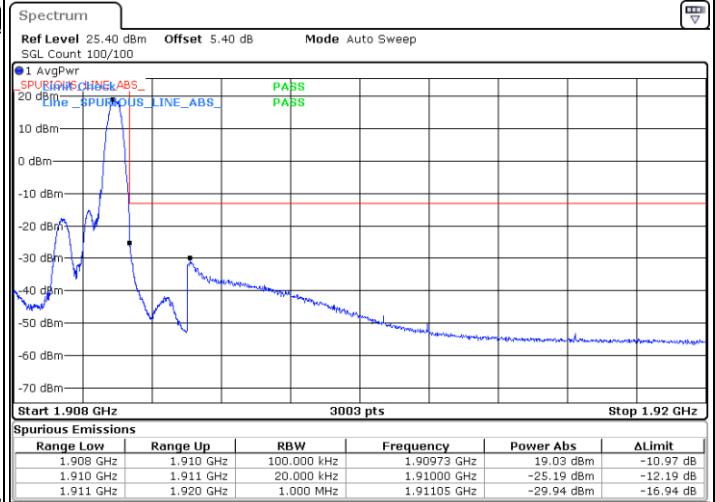


LTE Band 2 / 1.4MHz / 16QAM

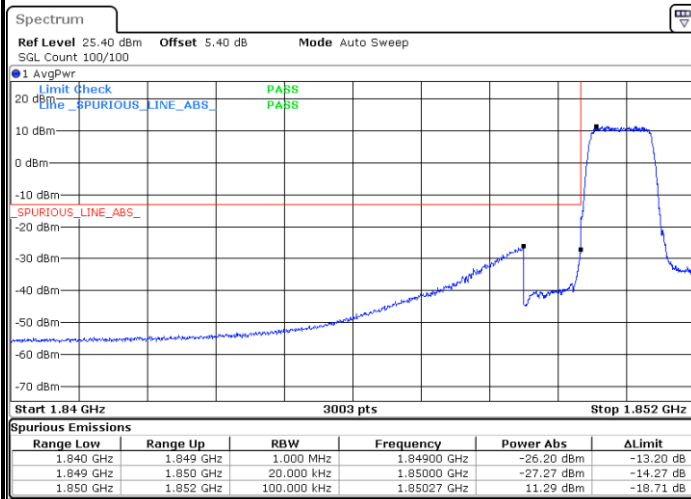
Lowest Band Edge / 1 RB



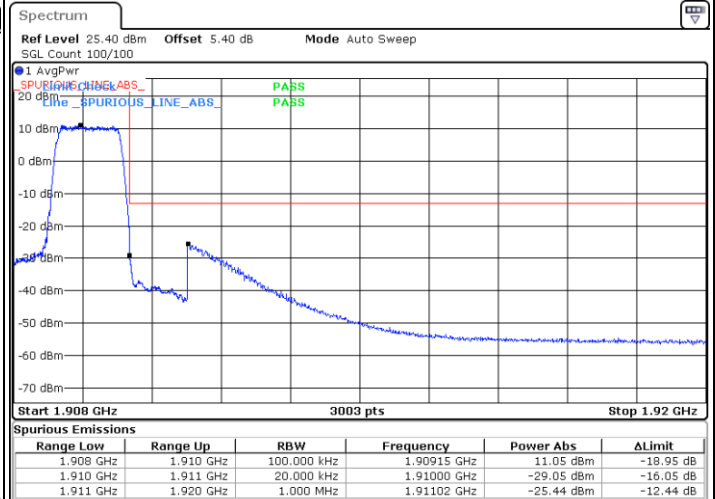
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



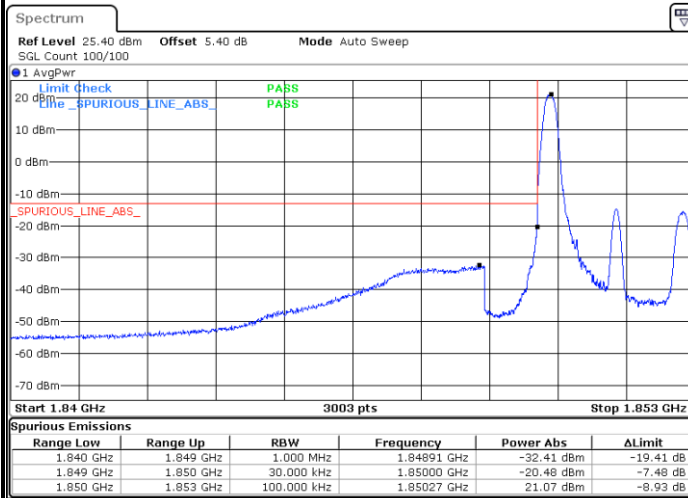
Highest Band Edge / Full RB



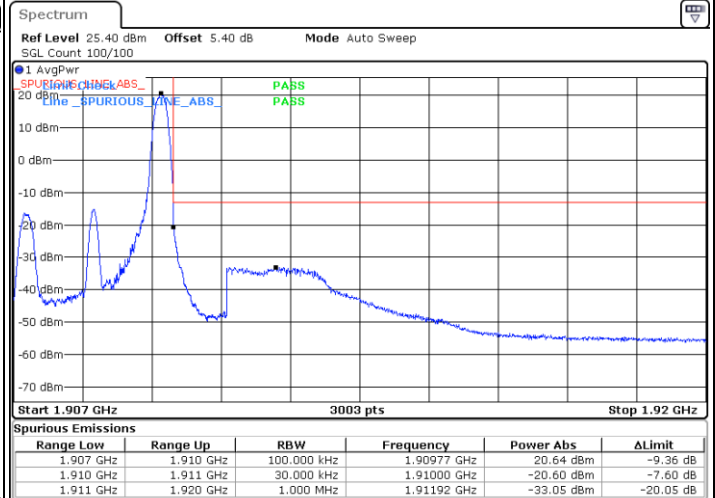


LTE Band 2 / 3MHz / QPSK

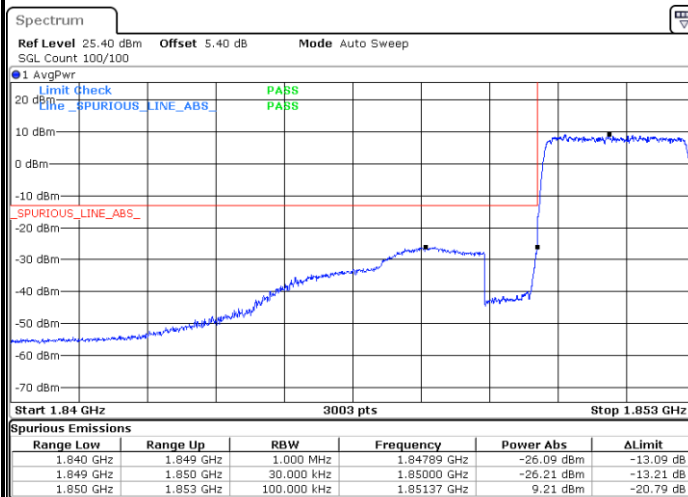
Lowest Band Edge / 1RB



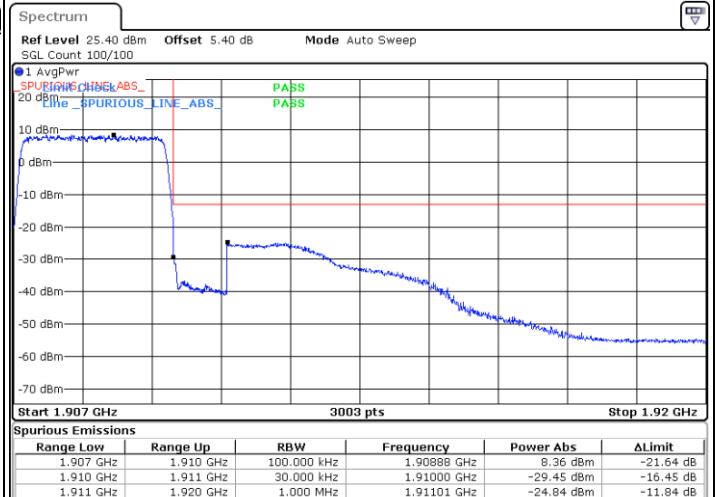
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



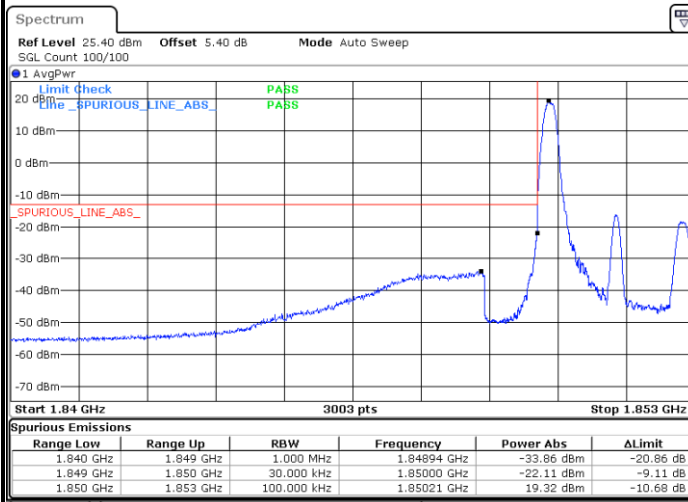
Highest Band Edge / Full RB



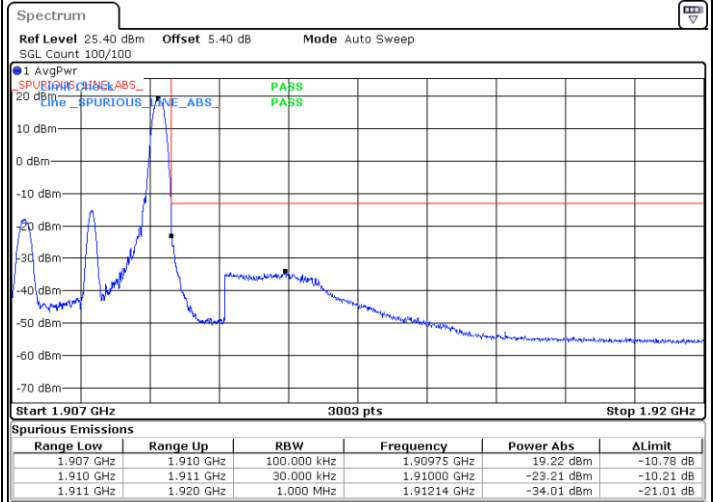


LTE Band 2 / 3MHz / 16QAM

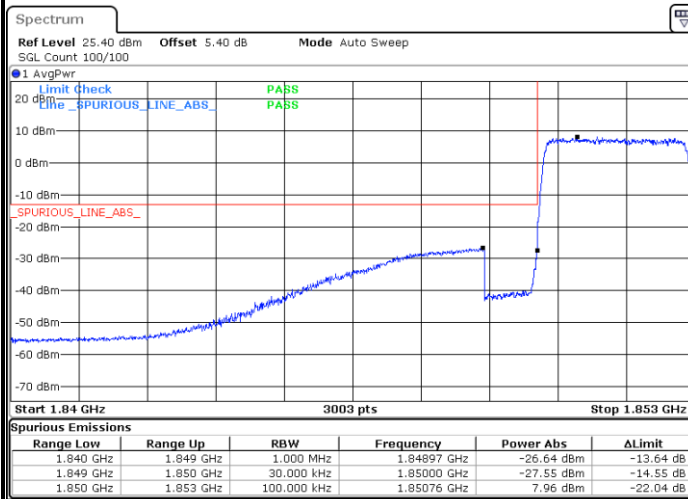
Lowest Band Edge / 1 RB



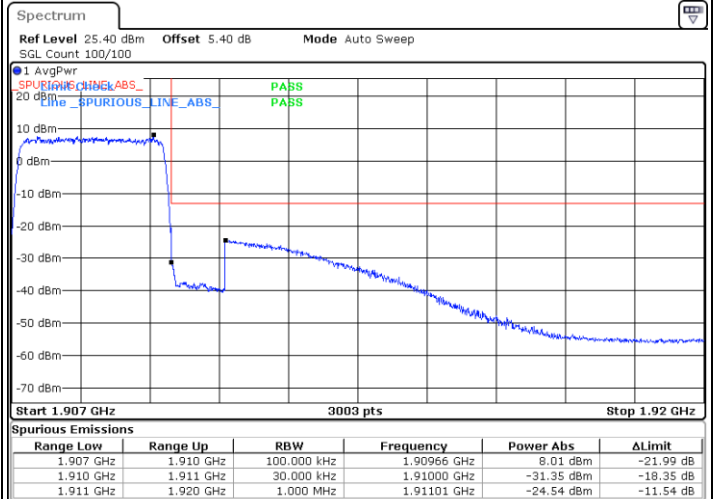
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



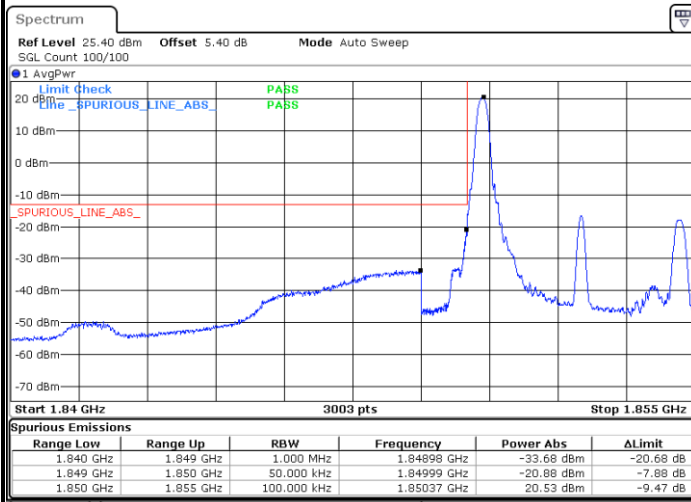
Highest Band Edge / Full RB



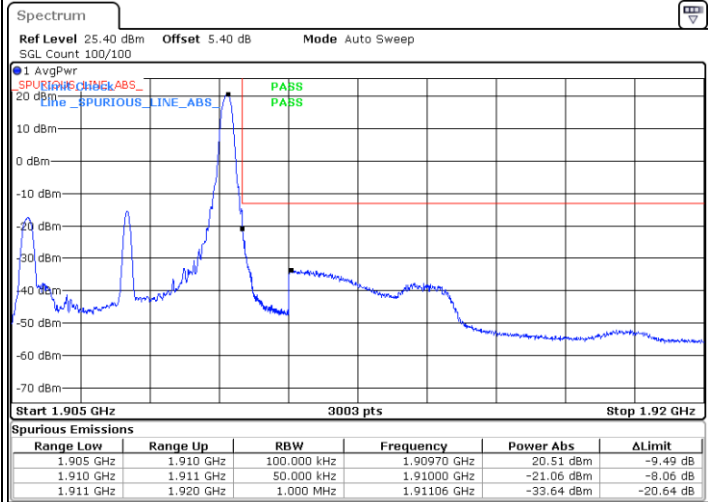


LTE Band 2 / 5MHz / QPSK

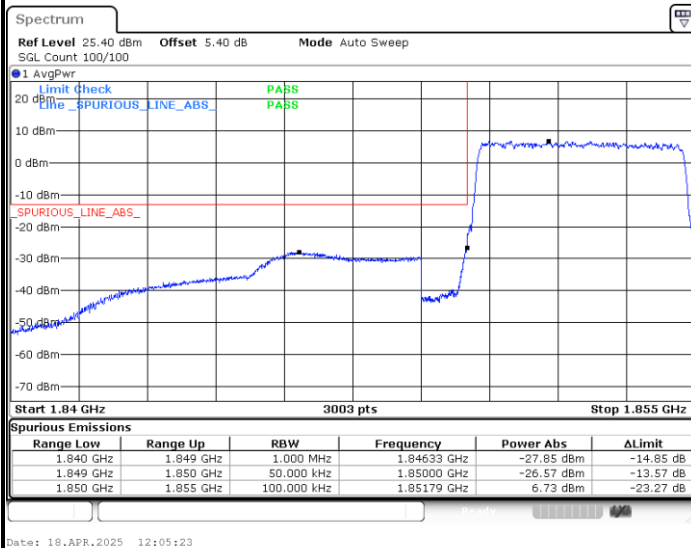
Lowest Band Edge / 1 RB



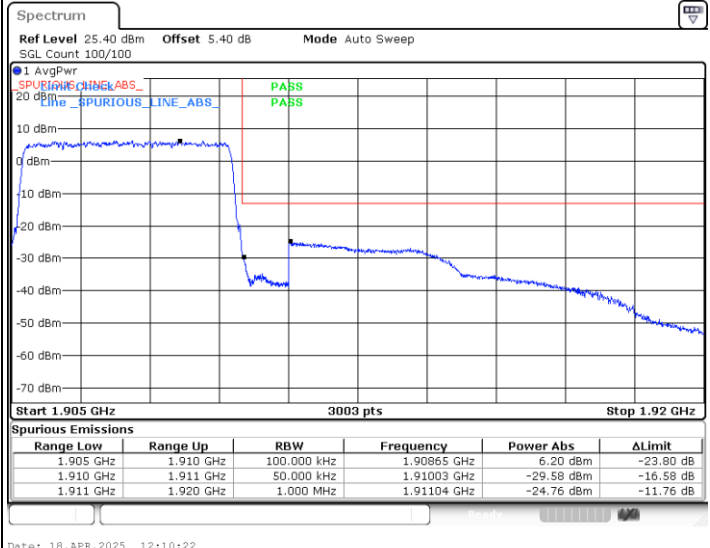
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



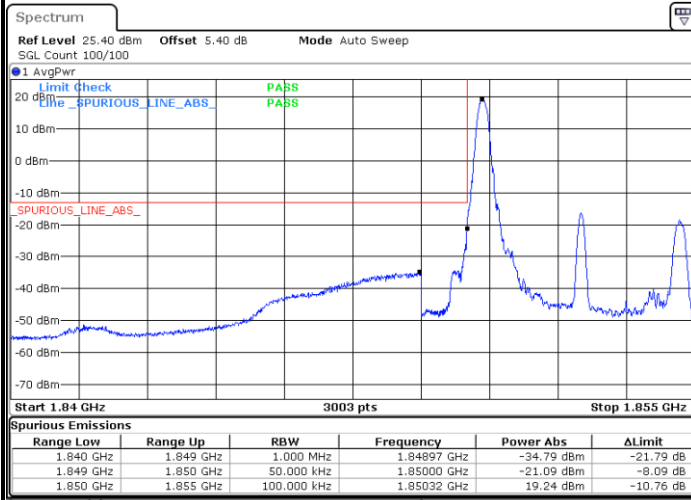
Highest Band Edge / Full RB



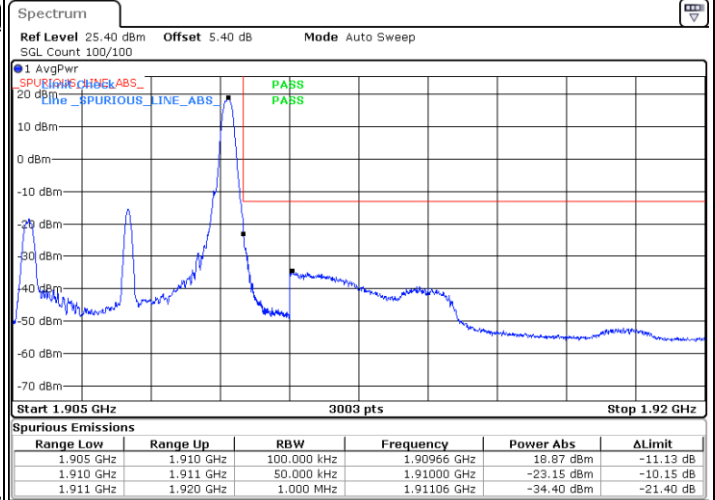


LTE Band 2 / 5MHz / 16QAM

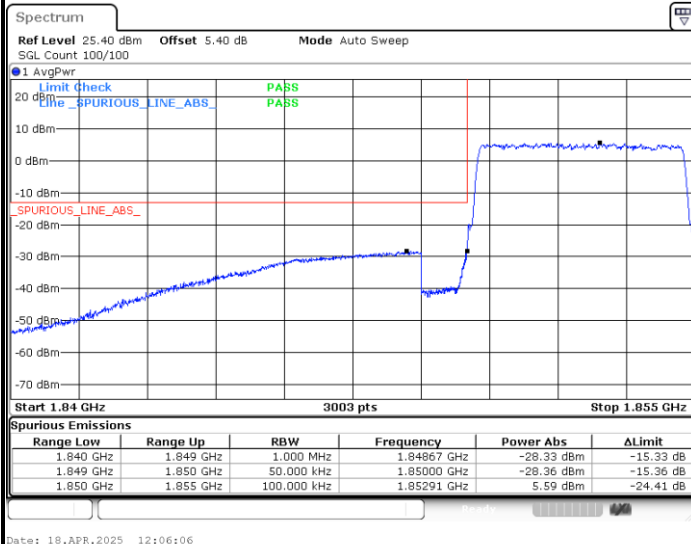
Lowest Band Edge / 1RB



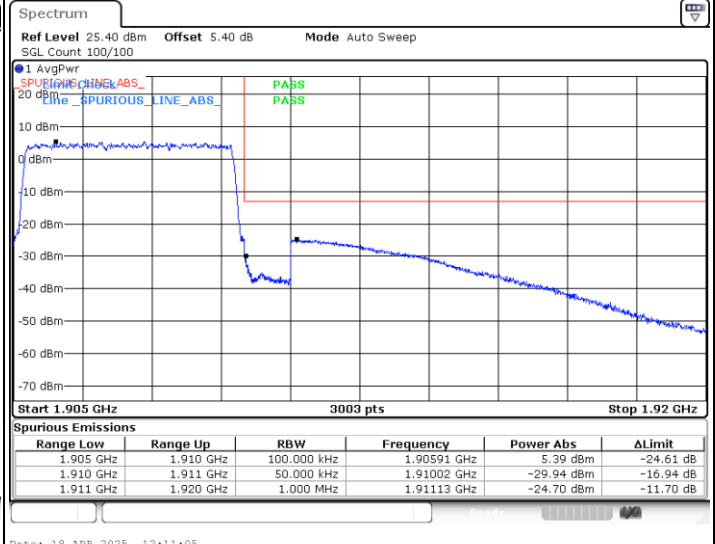
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



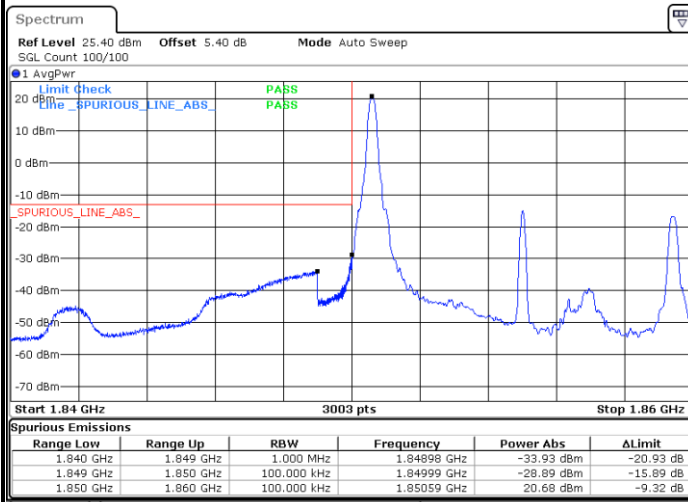
Highest Band Edge / Full RB



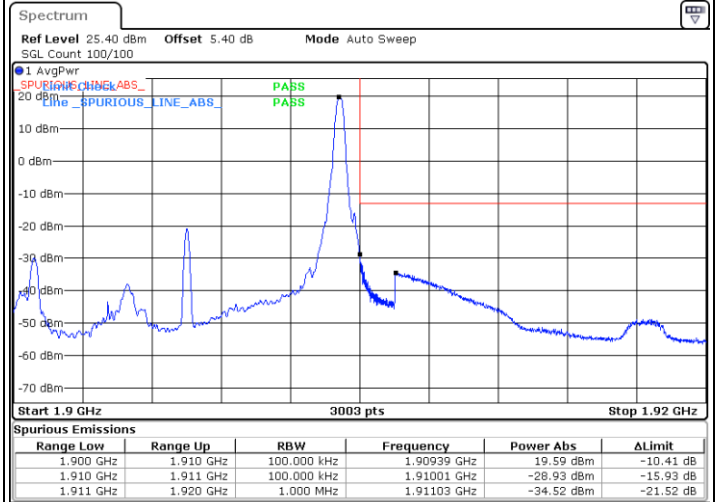


LTE Band 2 / 10MHz / QPSK

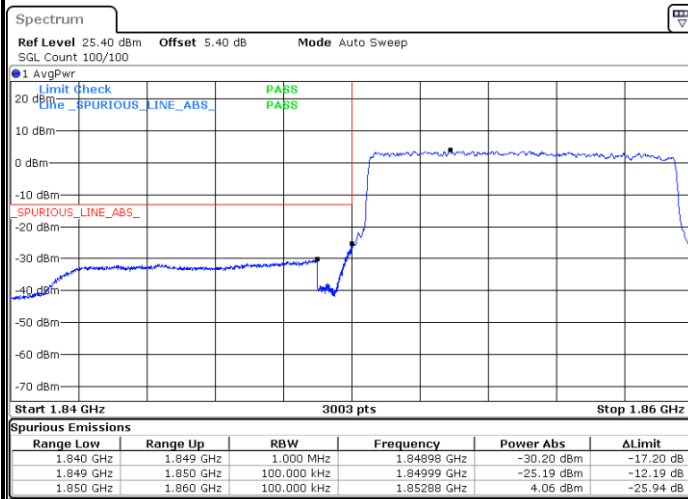
Lowest Band Edge / 1 RB



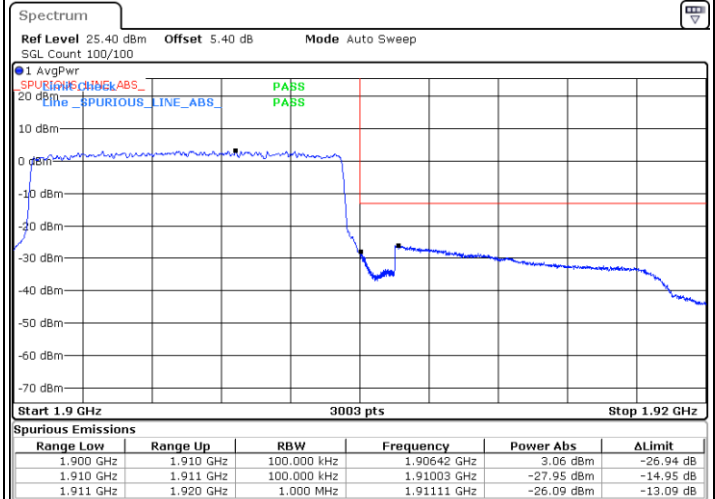
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



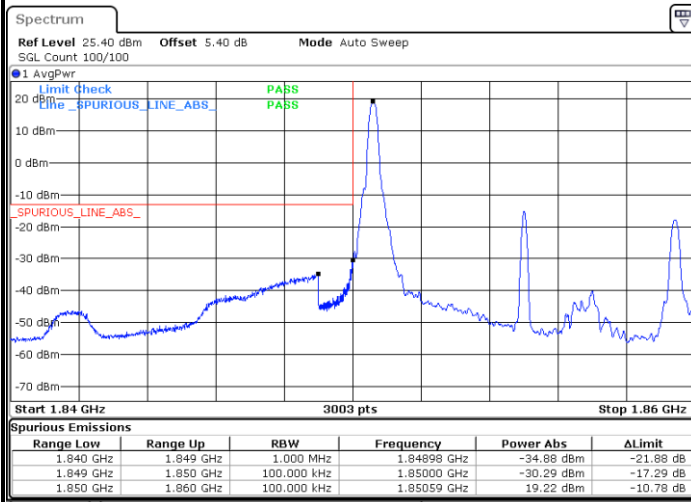
Highest Band Edge / Full RB



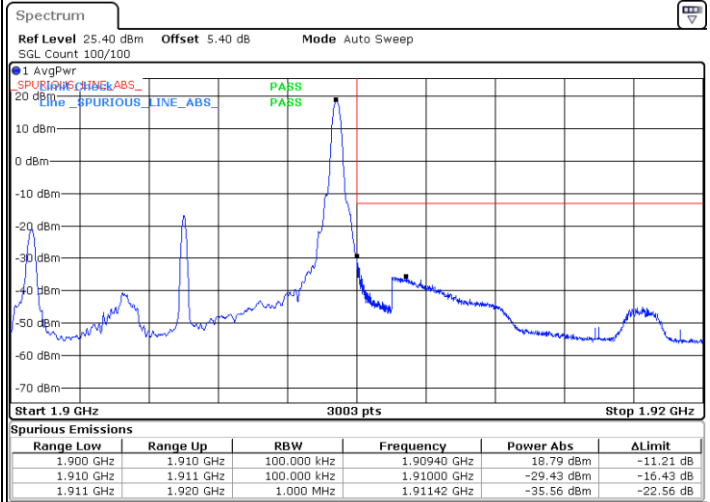


LTE Band 2 / 10MHz / 16QAM

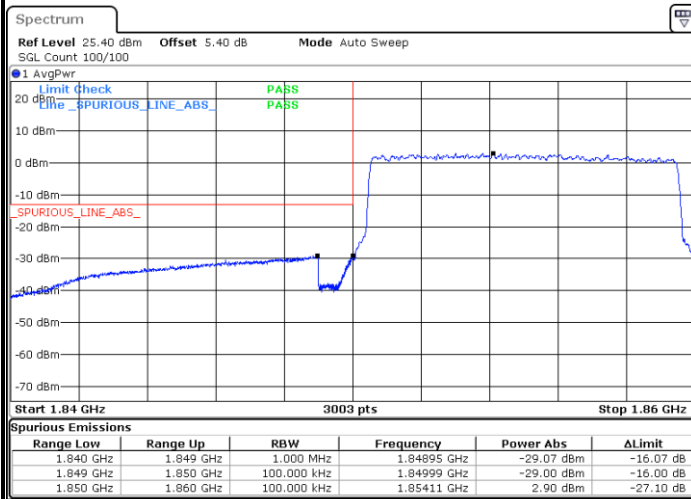
Lowest Band Edge / 1 RB



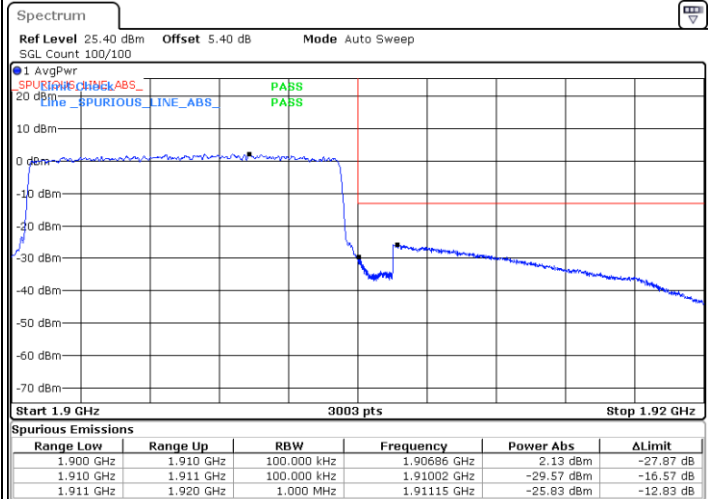
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



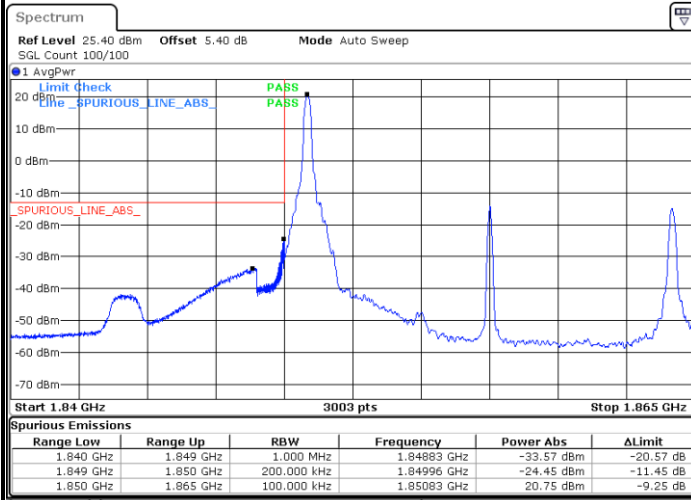
Highest Band Edge / Full RB



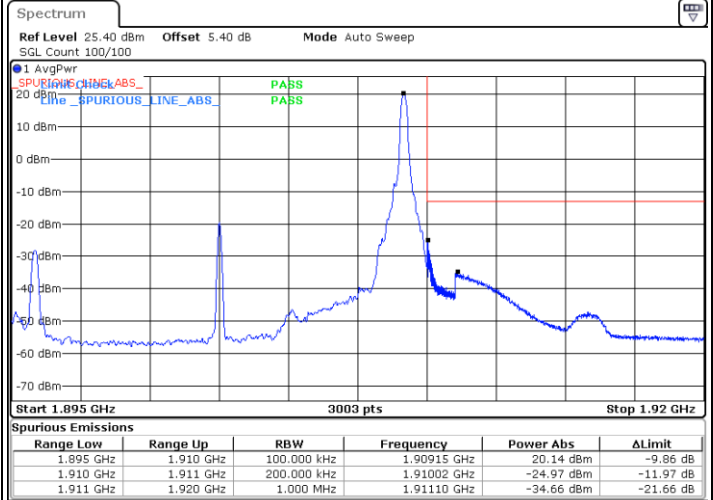


LTE Band 2 / 15MHz / QPSK

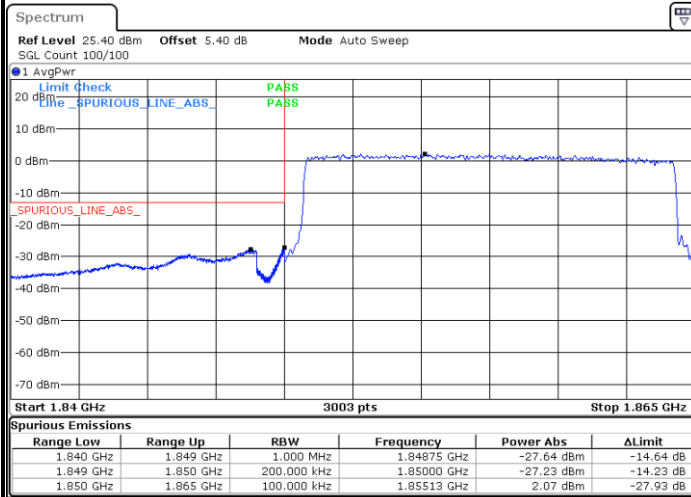
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



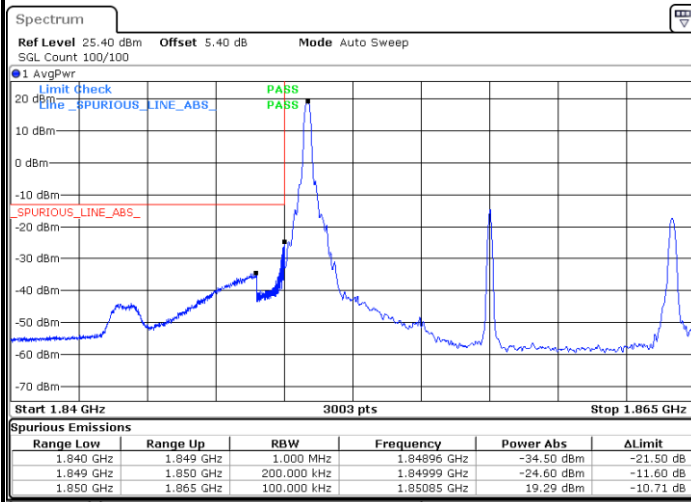
Highest Band Edge / Full RB



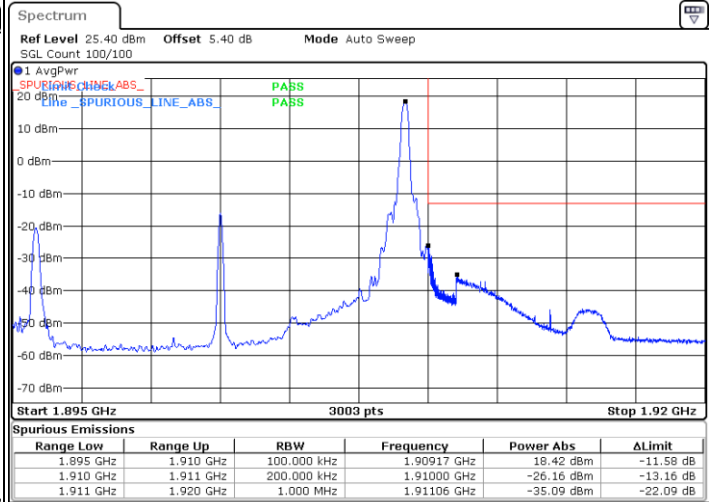


LTE Band 2 / 15MHz / 16QAM

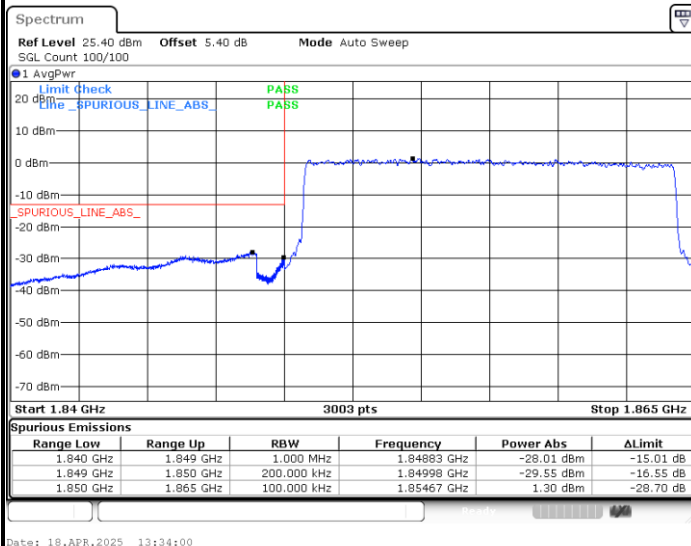
Lowest Band Edge / 1 RB



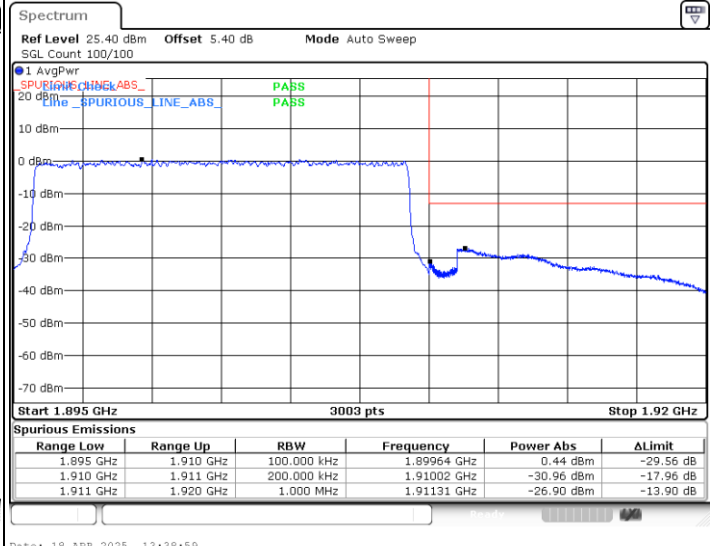
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



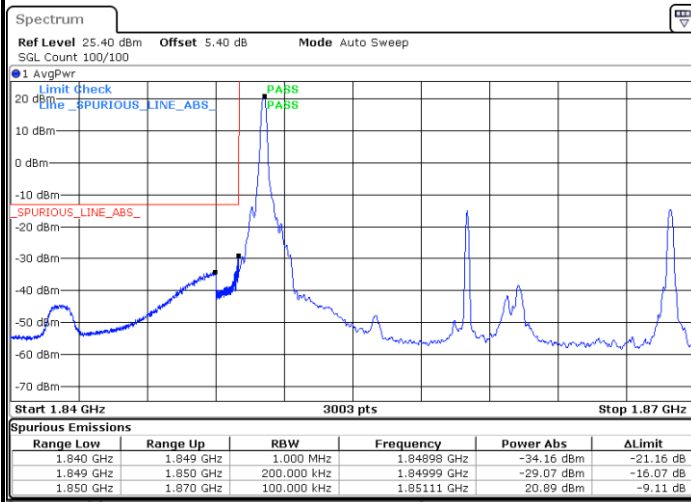
Highest Band Edge / Full RB



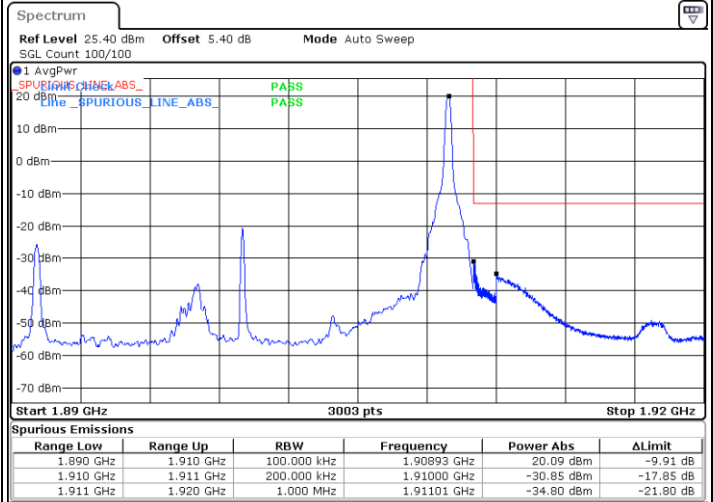


LTE Band 2 / 20MHz / QPSK

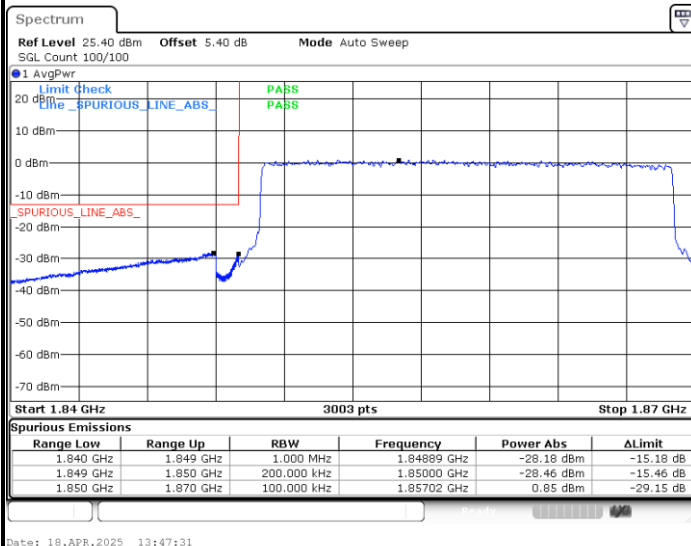
Lowest Band Edge / 1 RB



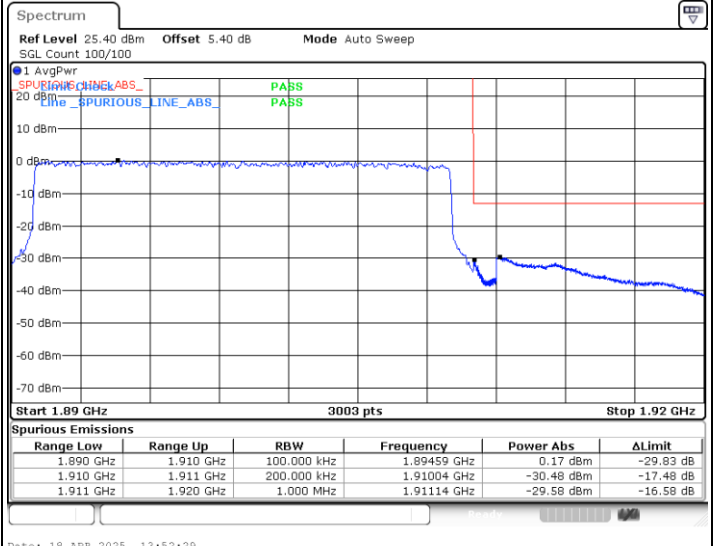
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



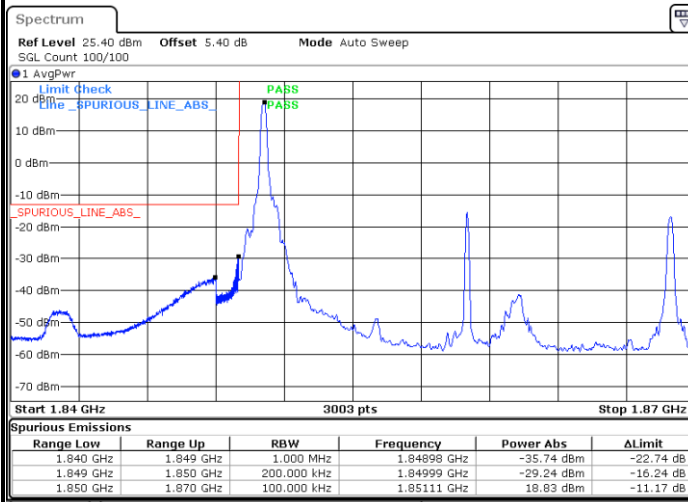
Highest Band Edge / Full RB



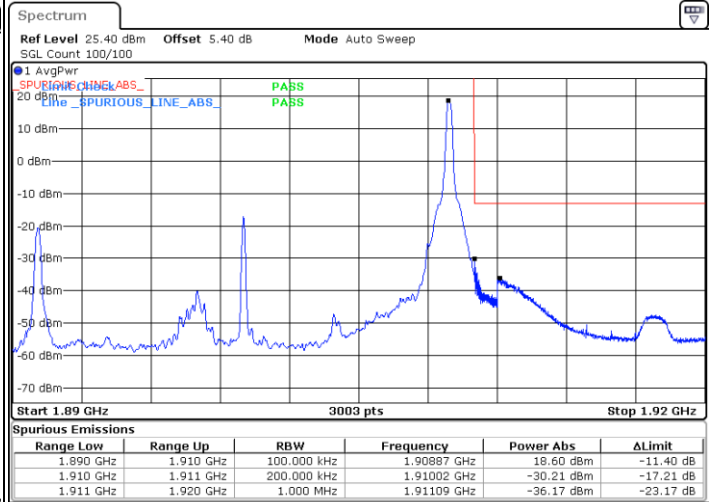


LTE Band 2 / 20MHz / 16QAM

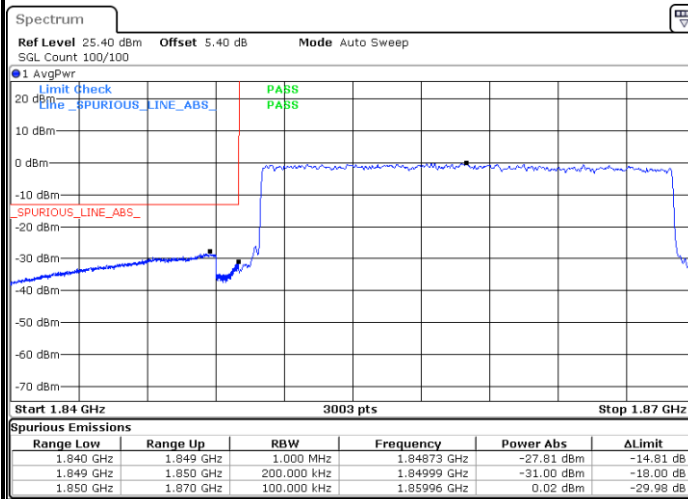
Lowest Band Edge / 1 RB



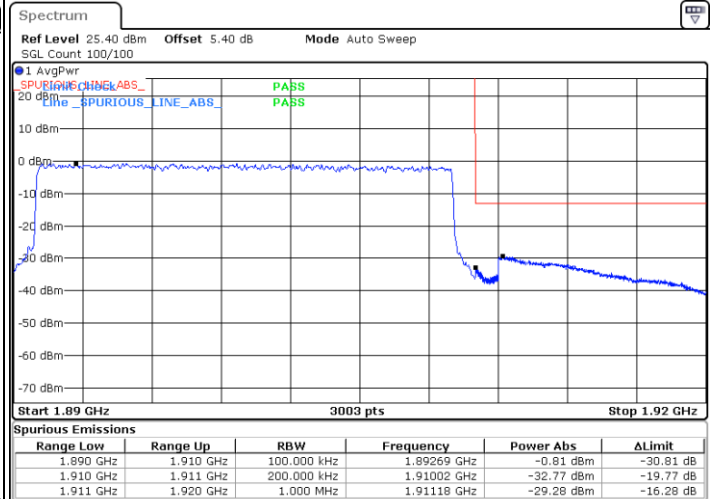
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

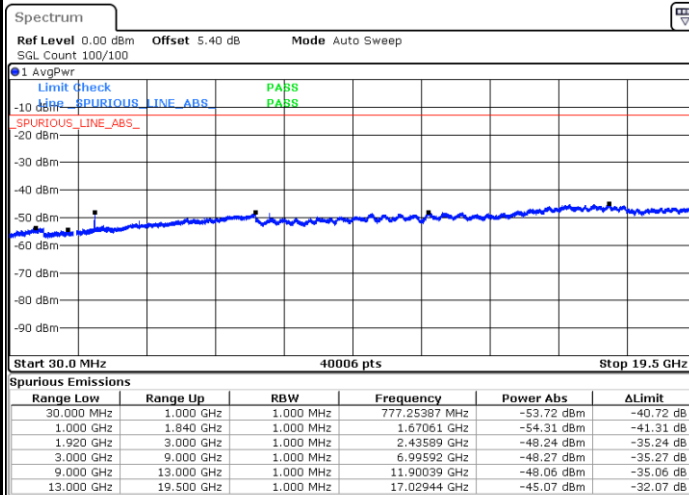




Conducted Spurious Emission

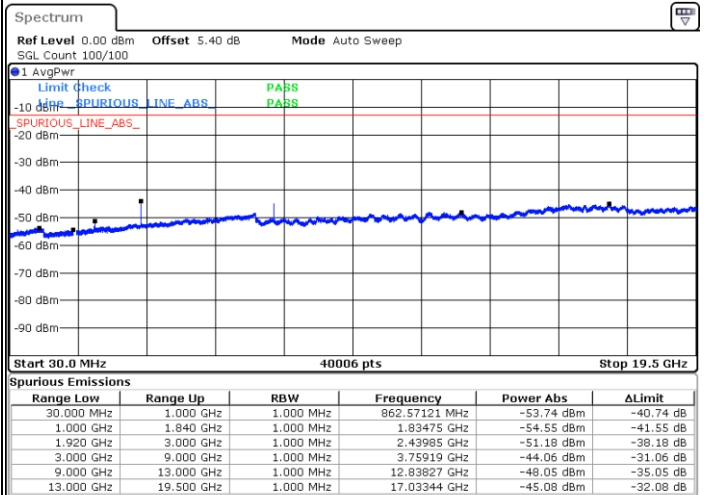
LTE Band 2 / 1.4MHz

Lowest Channel / QPSK



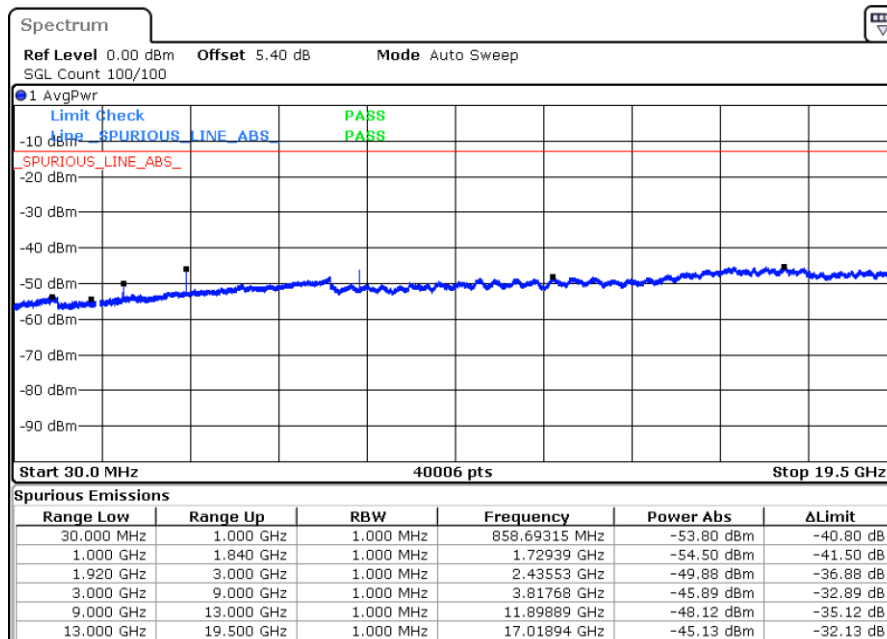
Date: 18.APR.2025 11:38:55

Middle Channel / QPSK



Date: 18.APR.2025 11:43:57

Highest Channel / QPSK

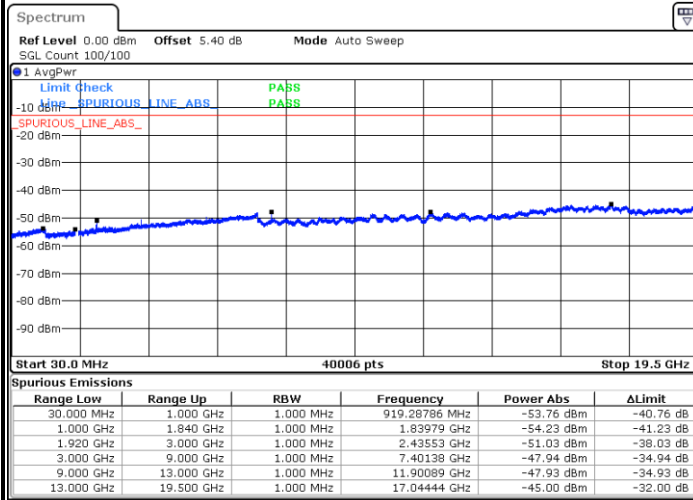


Date: 18.APR.2025 11:44:59



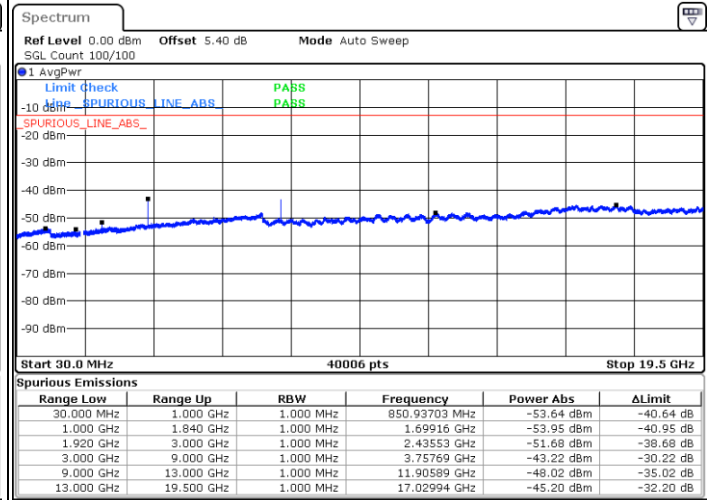
LTE Band 2 / 3MHz

Lowest Channel / QPSK



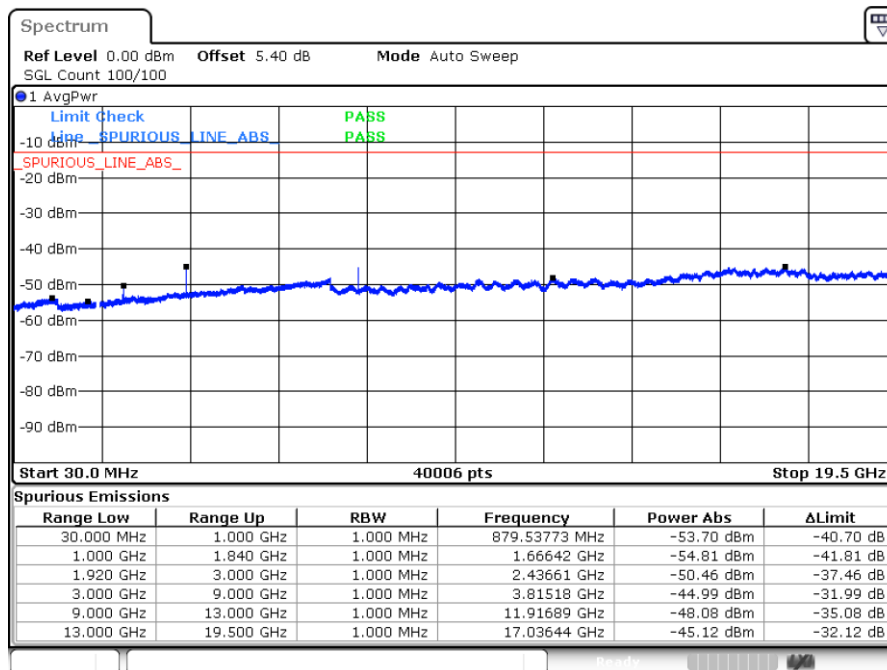
Date: 18.APR.2025 11:54:00

Middle Channel / QPSK



Date: 18.APR.2025 11:57:44

Highest Channel / QPSK

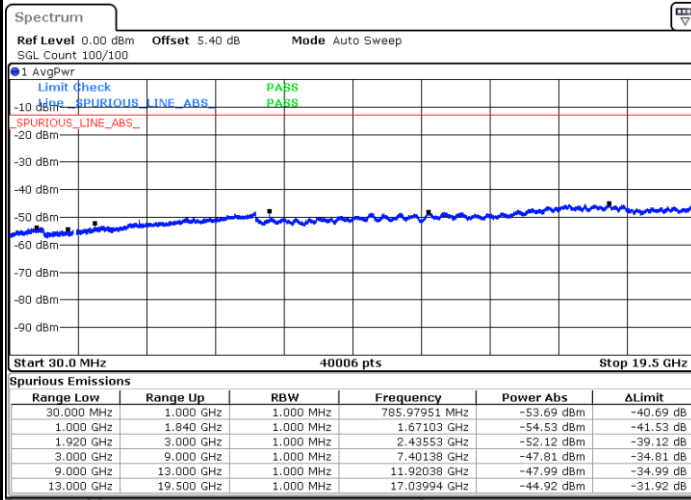


Date: 18.APR.2025 11:58:46



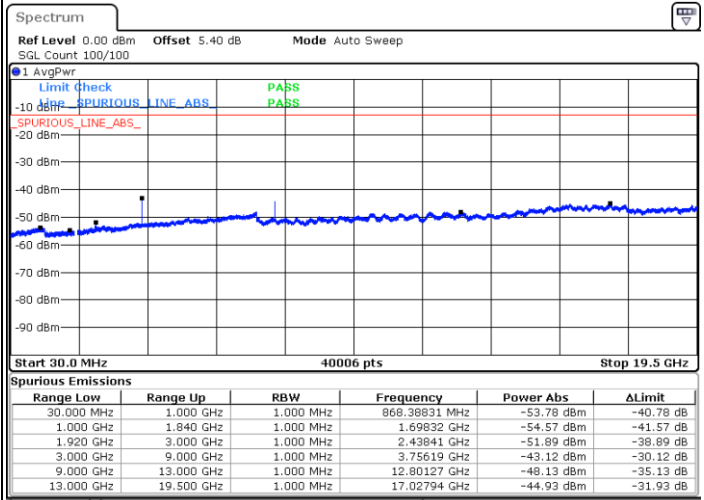
LTE Band 2 / 5MHz

Lowest Channel / QPSK



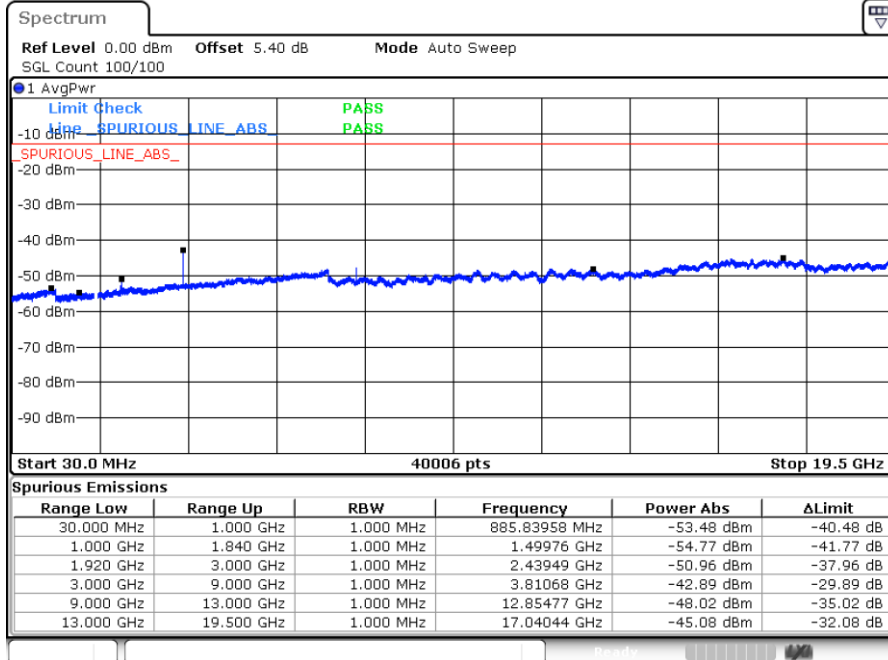
Date: 18.APR.2025 12:03:25

Middle Channel / QPSK



Date: 18.APR.2025 12:07:08

Highest Channel / QPSK

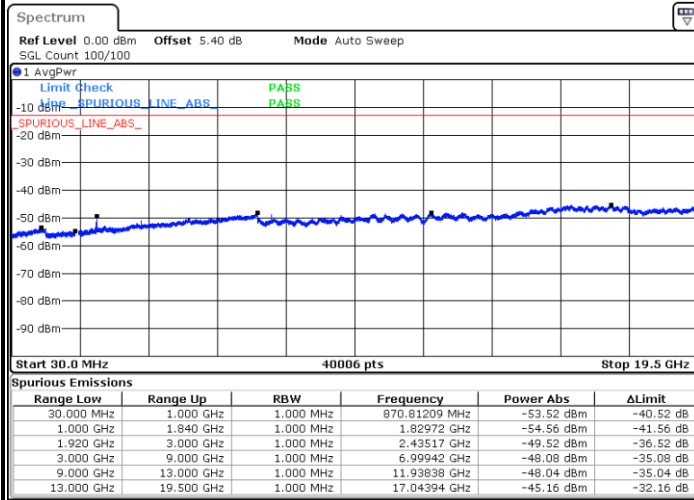


Date: 18.APR.2025 12:08:11



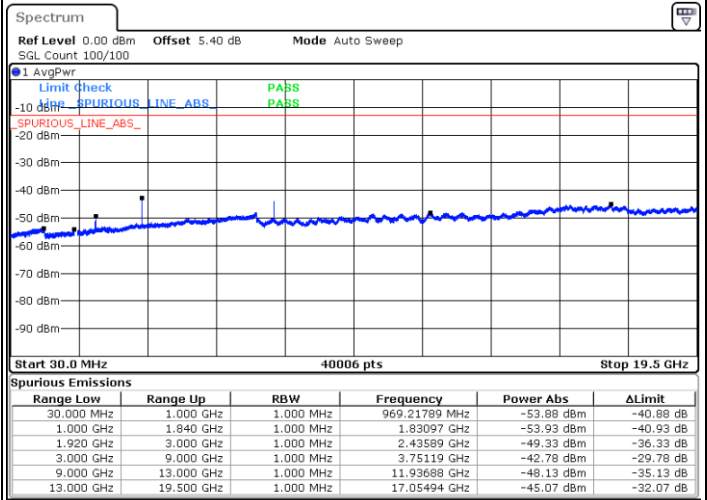
LTE Band 2 / 10MHz

Lowest Channel / QPSK



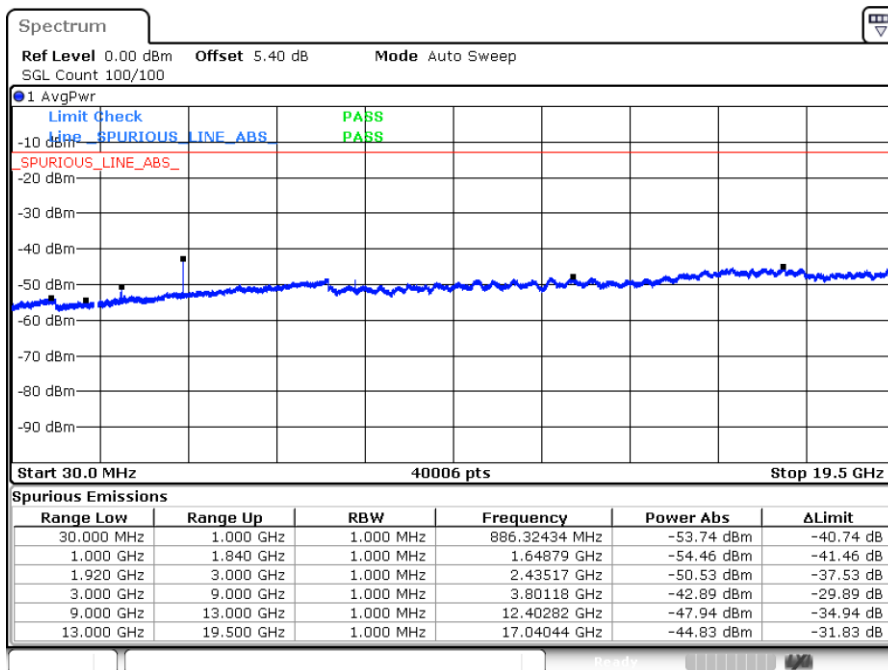
Date: 18.APR.2025 12:16:35

Middle Channel / QPSK



Date: 18.APR.2025 12:20:18

Highest Channel / QPSK

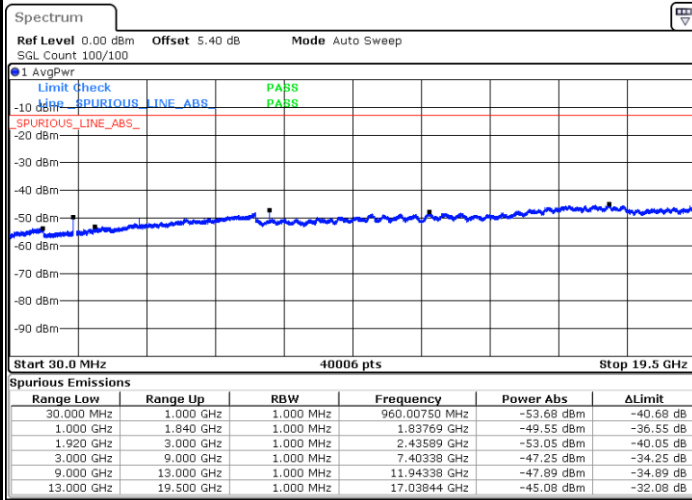


Date: 18.APR.2025 12:21:21



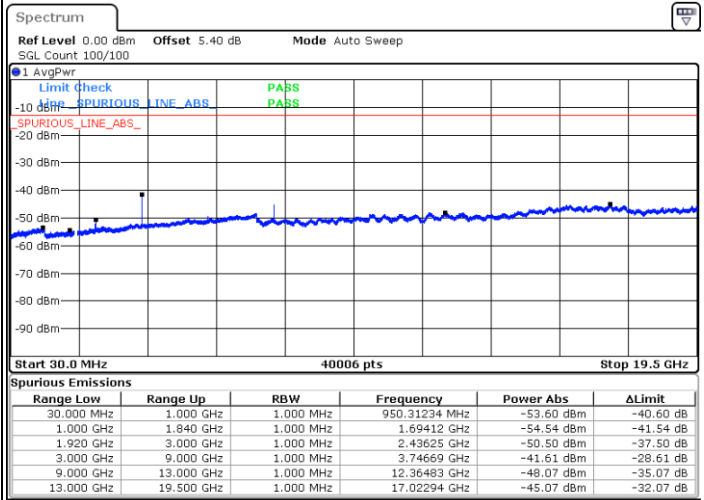
LTE Band 2 / 15MHz

Lowest Channel / QPSK



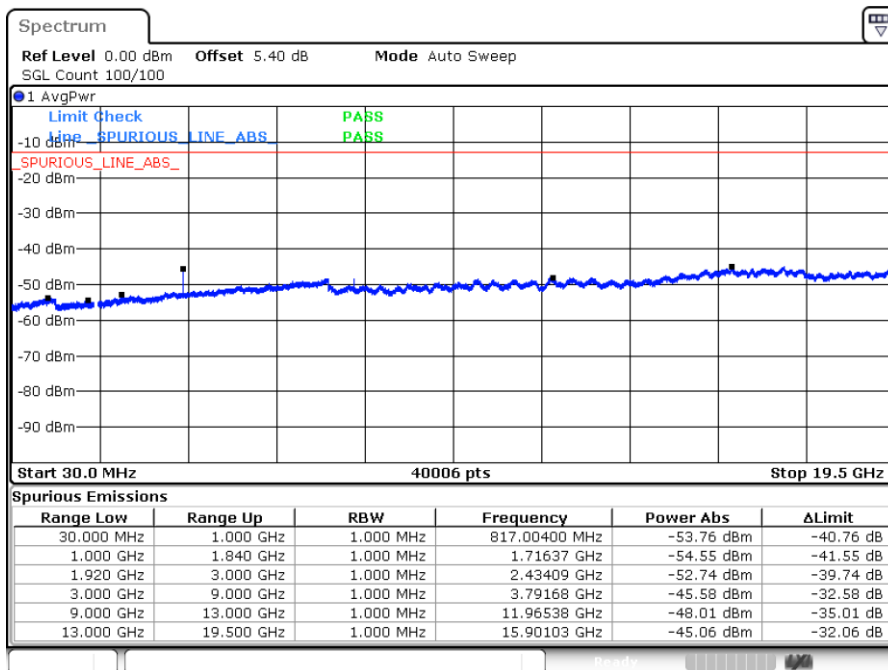
Date: 18.APR.2025 13:31:19

Middle Channel / QPSK



Date: 18.APR.2025 13:35:03

Highest Channel / QPSK



Date: 18.APR.2025 13:36:05