



RF TEST REPORT

Applicant	Honor Device Co., Ltd.
FCC ID	2AYGCVNE-LX3
Product	Smart Phone
Model	VNE-LX3
Report No.	R2207A0619-R2V1
Issue Date	August 2, 2022

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2021)/ FCC CFR 47 Part 24E (2021)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	July 25, 2022
Rev.1	Update description.	August 2, 2022
Note: This revised report (Report No. R2207A0619-R2V1) supersedes and replaces the previously issued report (Report No. R2207A0619-R2). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of measurement results

No.	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Isotropic Radiated Power	2.1046 24.232(c)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	2.1051 /24.238(a)	PASS
4	Peak-to-Average Power Ratio	24.232/KDB 971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 24.235	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 / 24.238(a)	PASS
7	Radiates Spurious Emission	2.1053 / 24.238(a)	PASS
Date of Testing: July 13, 2022 ~July 24, 2022			
Date of Sample Received: July 13, 2022			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			



1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
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2. General Description of Equipment under Test

2.1.Applicant and Manufacturer Information

Applicant	Honor Device Co., Ltd.
Applicant address	Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China
Manufacturer	Honor Device Co., Ltd.
Manufacturer address	Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China

2.2.General information

EUT Description			
Model	VNE-LX3		
SN	A96BNU2625200516		
Hardware Version	HL1VNEM		
Software Version	2.1.0.34(SP02C900E5R1P1)		
Power Supply	Battery / AC adapter		
Antenna Type	Internal Antenna		
Antenna Gain	Band	Main Antenna(dBi)	Second Antenna(dBi)
	GSM 1900	1.2	0.7
	WCDMA Band II	1.2	0.7
	LTE Band 2	1.2	0.7
Test Mode(s)	GSM1900; WCDMA Band II; LTE Band 2;		
Test Modulation	(GSM/GPRS)GMSK, (EGPRS) GMSK/ 8PSK; (WCDMA) BPSK, QPSK,16QAM; (LTE) QPSK, 16QAM(Uplink); QPSK, 16QAM,64QAM(Downlink);		
GPRS Multislot Class	12		
EGPRS Multislot Class	12		
HSDPA UE Category	14		
HSUPA UE Category	7		
DC-HSDPA UE Category	24		
HSPA+ UE Category	24		
LTE Category	4		
Maximum E.I.R.P	GSM 1900:	31.06dBm	
	WCDMA Band II:	25.10dBm	
	LTE Band 2:	24.33dBm	
Rated Power Supply Voltage	3.87V		
Operating Voltage	Minimum: 3.6V Maximum: 4.45V		
Operating Temperature	Lowest: 0°C Highest: +35°C		
Testing Temperature	Lowest:-30°C Highest: +50°C		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)



		GSM1900	1850 ~ 1910	1930 ~ 1990
		WCDMA Band II	1850 ~ 1910	1930 ~ 1990
		LTE Band 2	1850 ~ 1910	1930 ~ 1990
EUT Accessory				
Accessory	Model	Manufacture		No.
Adapter	HW-050200E02	Honor Device Co., Ltd. (Manufacturer: Huntkey)		1
		Honor Device Co., Ltd. (Manufacturer: BYD)		2
	HW-050200B02	Honor Device Co., Ltd. (Manufacturer: Huntkey)		3
		Honor Device Co., Ltd. (Manufacturer: BYD)		4
	HW-050200U02	Honor Device Co., Ltd. (Manufacturer: Huntkey)		5
		Honor Device Co., Ltd. (Manufacturer: BYD)		6
Battery	HB496590EFW	Honor Device Co., Ltd. (Manufacturer: SCUD)		1
		Honor Device Co., Ltd. (Manufacturer: NVT)		2
	HB496590EFW-F	Honor Device Co., Ltd. (Manufacturer: SCUD)		3
		Honor Device Co., Ltd. (Manufacturer: NVT)		4
Data Cable	RY0002	NingBo Broad Telecommunication Co., Ltd.		1
	AU2-CRO013HF	Freeport Resources Enterprises Corp.		2
	2120-00001-0	MING JI ELECTRONICS CO., LTD.		3
	L125UC007-CS-H	LUXSHARE PRECISION INDUSTRY CO., LTD.		4
	CUDU01B-HC451-EH	FOXCONN INTERCONNECT TECHNOLOGY LIMITED		5
Earphone	MEND1532B528C00	Jiangxi Lianchuang Hongsheng Electronic Co., LTD.		1
	1293-3283-3.5MM-339	BOLUO COUNTY QUANCHENG ELECTRONIC CO.,LTD.		2
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.				
2. There is more than one Adapter/Battery/Data cable/Earphone, each one should be applied throughout the compliance test respectively, and however, only the worst case (Battery 3 /Data cable 1/ Earphone 1) will be recorded in this report.				

3. Applied Standards

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

Test standards:

FCC CFR 47 Part 24E (2021)

FCC CFR47 Part 2 (2021)

Reference standard:

ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

4. Test Configuration

There is more than one SIM card slot, each one should be applied throughout the compliance test respectively, and however, only the worst case (SIM 1) will be recorded in this report.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Main Antenna: Z axis, vertical polarization for GSM/WCDMA/LTE; Second Antenna: X axis, horizontal polarization for Second Antenna GSM/WCDMA/LTE) and the worst case was recorded.

All mode and data rates and positions and RB size and modulations were investigated.

Subsequently, only the worst case emissions are reported.

The following testing in GSM/WCDMA/LTE is set based on the maximum RF Output Power.

Test modes are chosen to be reported as the worst case configuration below:

Test items	Modes/Modulation	
	GSM 1900	WCDMA Band II
RF Power Output and Effective Isotropic Radiated Power	GSM GPRS EGPRS	RMC/AMR HSDPA/HSUPA DC-HSDPA/HSPA+
Occupied Bandwidth	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Band Edge Compliance	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Peak-to-Average Power Ratio	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Frequency Stability	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Spurious Emissions at Antenna Terminals	GSM	RMC
Radiates Spurious Emission	GSM	RMC

Test modes are chosen to be reported as the worst case configuration below for LTE Band 2:

Test items	Bandwidth (MHz)						Modulation		RB			Test Channel		
	1.4	3	5	10	15	20	QPSK	16QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	O	O	O	O	O	O	O	O	O	-	O	O	O	O
Band Edge Compliance	O	O	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	O	O	O	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	O	O	O	O	O	O	O	O	O	-	-	-	O	-
Spurious Emissions at Antenna Terminals	O	O	O	O	O	O	O	-	O	-	-	O	O	O
Radiates Spurious Emission	O	-	O	-	-	O	O	-	O	-	-	-	O	-
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.													

5. Test Case

5.1.RF Power Output and Effective Isotropic Radiated Power

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

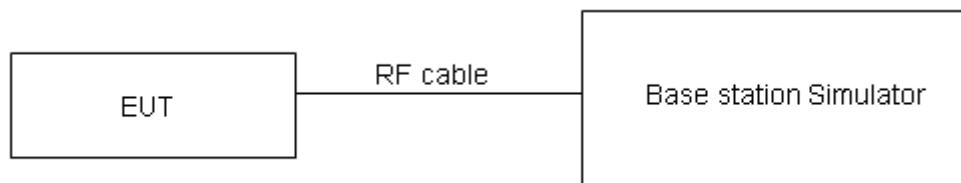
ERP can then be calculated as follows:

$EIRP \text{ (dBm)} = \text{Output Power (dBm)} - \text{Losses (dB)} + \text{Antenna Gain (dBi)}$

where:dBd refers to gain relative to an ideal dipole.

$EIRP \text{ (dBm)} = ERP \text{ (dBm)} + 2.15 \text{ (dB.)}$

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 24.232(c) Mobile and portable stations are limited to 2 watts EIRP.

Rule Part 24.232(e) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

Limit	$\leq 2 \text{ W}$ (33 dBm)
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.4 \text{ dB}$ for RF power output, $k = 2$, $U = 1.19 \text{ dB}$ for EIRP.

Test Results

Refer to the section 6.1 of this report for test data.

5.2.Occupied Bandwidth

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

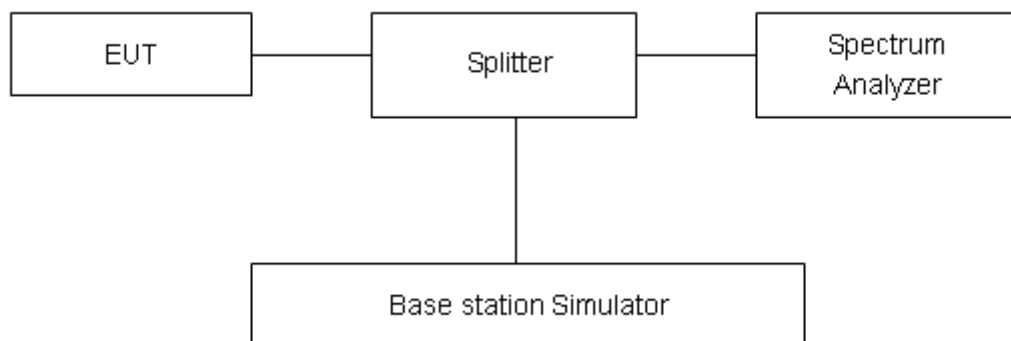
Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer.

RBW is set to $\geq 1\%EBW$, VBW is set to 3x RBW.

99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 624\text{Hz}$.

Test Results

Refer to the section 6.2 of this report for test data.

5.3. Band Edge Compliance

Ambient condition

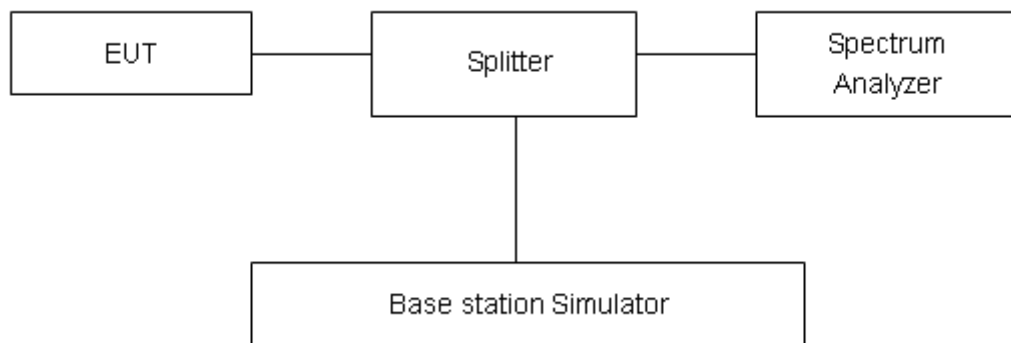
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured. The Average detector is used and RBW is set to $\geq 1\%EBW$, VBW is set to 3x RBW.

Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule Part 24.238(a) specifies that “on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ dB.”

Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U=0.684\text{dB}$.

Test Results

Refer to the section 6.3 of this report for test data.

5.4. Peak-to-Average Power Ratio (PAPR)

Ambient condition

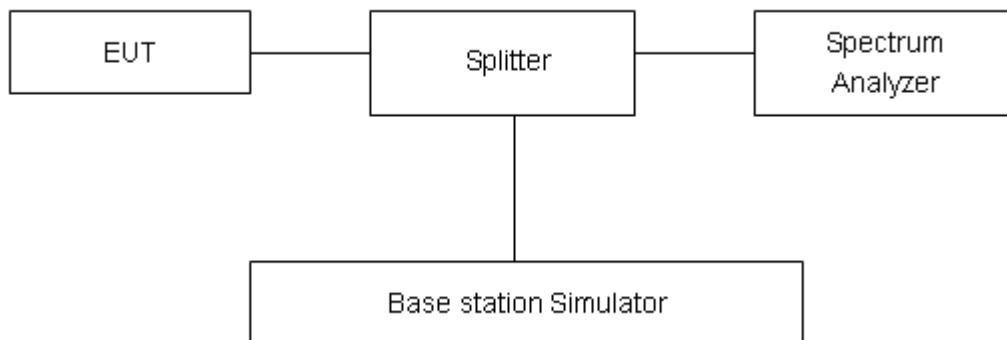
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

Measure the total peak power and record as PPK. And measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

$$\text{PAPR (dB)} = \text{PPk (dBm)} - \text{PAvg (dBm)}.$$

Test Setup



Limits

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 in 24.232(d).

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.4$ dB.

Test Results

Refer to the section 6.4 of this report for test data.

5.5.Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size,

(1) With all power removed, the temperature was decreased to 0°C and permitted to stabilize for three hours.

(2) Measure the carrier frequency with the test equipment in a “call mode”. These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.

(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

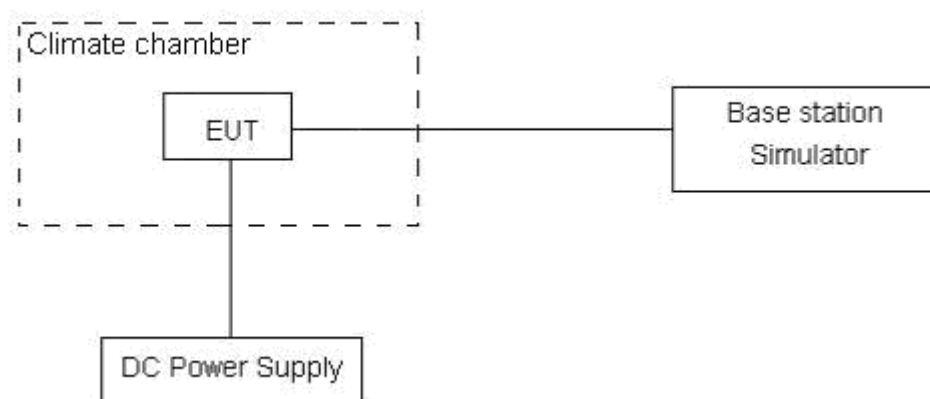
Frequency Stability (Voltage Variation)

The frequency stability shall be measured with variation of primary supply voltage as follows:

Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.60V and 4.4 V, with a nominal voltage of 3.87.

Test setup



Limits

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block

Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor $k = 3$, $U = 0.01\text{ppm}$.

Test Results

Refer to the section 6.5 of this report for test data.

5.6. Spurious Emissions at Antenna Terminals

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 9kHz to the 10th harmonic of the carrier. The peak detector is used.

RBW is set to 100kHz, VBW is set to 300kHz for 30MHz~1GHz

RBW is set to 1MHz, VBW is set to 3MHz for above 1GHz, Sweep is set to ATUO.

RBW is set to 1 kHz (0.009MHz~ 0.15 MHz),

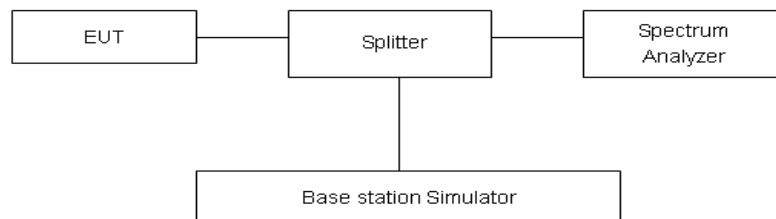
RBW is set to 10 kHz (0.15 MHz~ 30 MHz)

RBW is set to 100 kHz (30MHz~1000 MHz)

RBW is set to 1000 kHz (above 1000MHz)

The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup



Limits

Rule Part 24.238(a) specifies that “on any frequency outside a licensee’s frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ dB.”

Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9kHz-1GHz	0.684 dB
1GHz-20GHz	1.407 dB

Test Results

Refer to the section 6.6 of this report for test data.

5.7. Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26-2015.
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A loop antenna, A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz, and the maximum value of the receiver should be recorded as (Pr).
5. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
7. The measurement results are obtained as described below:
$$\text{Power(EIRP)} = \text{PMea} - \text{PAg} - \text{Pcl} + \text{Ga}$$

The measurement results are amend as described below:

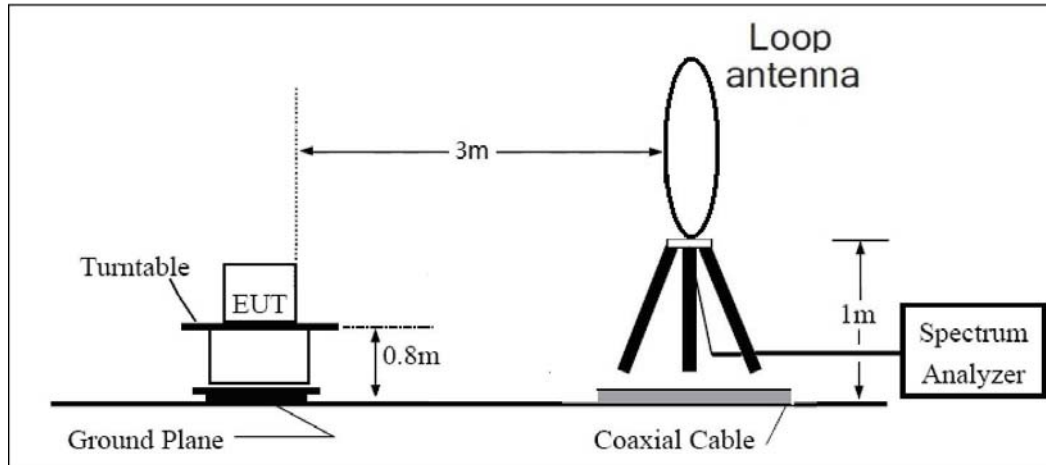
$$\text{Power(EIRP)} = \text{PMea} - \text{Pcl} + \text{Ga}$$
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP

= EIRP-2.15dB.

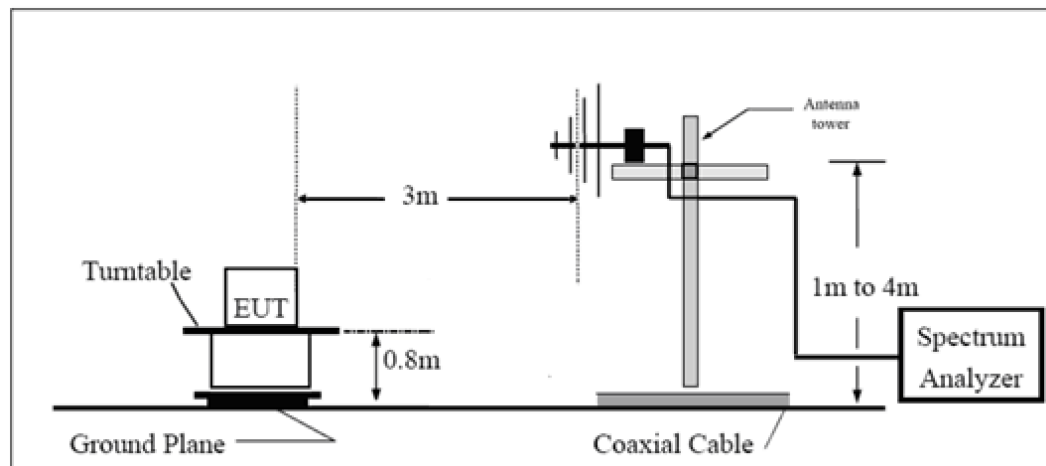
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

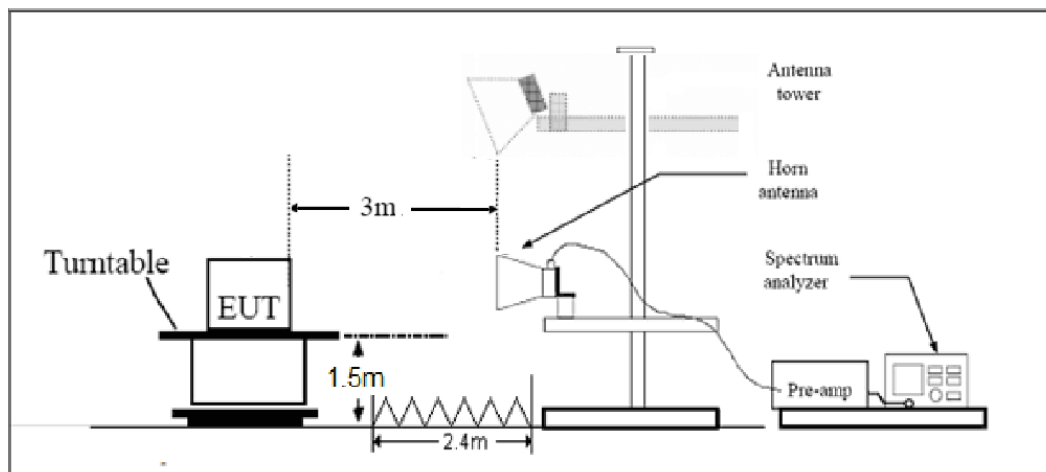
9KHz~ 30MHz



30MHz~ 1GHz



Above 1GHz



Note: Area side: 2.4mX3.6m

Limits

Rule Part 24.238(a) specifies that “on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ dB.”

Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 3.55$ dB.

Test Results

Refer to the section 6.7 of this report for test data.

6. Test Results

6.1.RF Power Output and Effective Isotropic Radiated Power

GSM 1900		Maximum Output Power (dBm)			Main Antenna EIRP (dBm)			Second Antenna EIRP (dBm)		
		Channel/Frenqucy(MHz)			Channel/Frenqucy(MHz)			Channel/Frenqucy(MHz)		
		512/ 1850.2	661/ 1880	810/ 1909.8	512/ 1850.2	661/ 1880	810/ 1909.8	512/ 1850.2	661/ 1880	810/ 1909.8
GSM	CS	29.70	29.79	29.86	30.90	30.99	31.06	30.40	30.49	30.56
GPRS/EGPRS (GMSK)	1 Tx Slot	29.67	29.79	29.83	30.87	30.99	31.03	30.37	30.49	30.53
	2 Tx Slots	26.96	27.06	27.16	28.16	28.26	28.36	27.66	27.76	27.86
	3 Tx Slots	25.23	25.30	25.40	26.43	26.50	26.60	25.93	26.00	26.10
	4 Tx Slots	23.92	23.98	24.07	25.12	25.18	25.27	24.62	24.68	24.77
EGPRS (8PSK)	1 Tx Slot	24.79	24.97	25.32	25.99	26.17	26.52	25.49	25.67	26.02
	2 Tx Slots	22.03	22.95	22.44	23.23	24.15	23.64	22.73	23.65	23.14
	3 Tx Slots	20.65	20.46	20.58	21.85	21.66	21.78	21.35	21.16	21.28
	4 Tx Slots	18.85	18.96	19.32	20.05	20.16	20.52	19.55	19.66	20.02

WCDMA Band II		Maximum Output Power (dBm)			Main Antenna EIRP (dBm)			Second Antenna EIRP (dBm)		
		Channel/Frenqucy(MHz)			Channel/Frenqucy(MHz)			Channel/Frenqucy(MHz)		
		9262/ 1852.4	9400/ 1880	9538/ 1907.6	9262/ 1852.4	9400/ 1880	9538/ 1907.6	9262/ 1852.4	9400/ 1880	9538/ 1907.6
RMC	12.2k	23.67	23.90	23.82	24.87	25.10	25.02	24.37	24.60	24.52
AMR	12.2k	23.53	23.76	23.84	24.73	24.96	25.04	24.23	24.46	24.54
HSDPA	Subtest 1	22.13	22.06	21.98	23.33	23.26	23.18	22.83	22.76	22.68
	Subtest 2	21.99	22.34	22.08	23.19	23.54	23.28	22.69	23.04	22.78
	Subtest 3	21.59	21.66	21.50	22.79	22.86	22.70	22.29	22.36	22.20
	Subtest 4	21.49	21.78	21.78	22.69	22.98	22.98	22.19	22.48	22.48
HSUPA	Subtest 1	21.81	22.28	21.96	23.01	23.48	23.16	22.51	22.98	22.66
	Subtest 2	19.95	20.16	20.08	21.15	21.36	21.28	20.65	20.86	20.78
	Subtest 3	21.05	21.28	21.02	22.25	22.48	22.22	21.75	21.98	21.72
	Subtest 4	20.07	20.36	20.06	21.27	21.56	21.26	20.77	21.06	20.76
	Subtest 5	22.01	22.22	22.28	23.21	23.42	23.48	22.71	22.92	22.98
DC-HSDPA	Subtest 1	21.93	22.10	22.14	23.13	23.30	23.34	22.63	22.80	22.84
	Subtest 2	21.89	22.18	22.10	23.09	23.38	23.30	22.59	22.88	22.80
	Subtest 3	21.57	21.58	21.78	22.77	22.78	22.98	22.27	22.28	22.48
	Subtest 4	21.33	21.60	21.48	22.53	22.80	22.68	22.03	22.30	22.18

LTE Band 2				Maximum Output Power (dBm)			Main Antenna EIRP (dBm)			Second Antenna EIRP (dBm)		
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3	18607/1850.7	18900/1880	19193/1909.3	18607/1850.7	18900/1880	19193/1909.3
1.4MHz	QPSK	1	0	22.60	22.68	22.79	23.80	23.88	23.99	23.30	23.38	23.49
		1	2	22.92	23.09	23.07	24.12	24.29	24.27	23.62	23.79	23.77
		1	5	22.59	22.67	22.73	23.79	23.87	23.93	23.29	23.37	23.43
		3	0	22.64	22.90	23.03	23.84	24.10	24.23	23.34	23.60	23.73
		3	2	22.71	23.08	23.04	23.91	24.28	24.24	23.41	23.78	23.74
		3	3	22.87	22.93	22.85	24.07	24.13	24.05	23.57	23.63	23.55
		6	0	21.81	21.99	22.05	23.01	23.19	23.25	22.51	22.69	22.75
	16QAM	1	0	21.93	22.01	22.19	23.13	23.21	23.39	22.63	22.71	22.89
		1	2	22.12	22.36	22.49	23.32	23.56	23.69	22.82	23.06	23.19
		1	5	21.81	22.10	22.07	23.01	23.30	23.27	22.51	22.80	22.77
		3	0	21.64	21.84	22.05	22.84	23.04	23.25	22.34	22.54	22.75
		3	2	21.75	21.99	22.08	22.95	23.19	23.28	22.45	22.69	22.78
		3	3	21.82	21.98	21.83	23.02	23.18	23.03	22.52	22.68	22.53
		6	0	20.81	20.95	21.03	22.01	22.15	22.23	21.51	21.65	21.73
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5	18615/1851.5	18900/1880	19185/1908.5	18615/1851.5	18900/1880	19185/1908.5
3MHz	QPSK	1	0	22.62	22.72	22.82	23.82	23.92	24.02	23.32	23.42	23.52
		1	7	22.90	23.12	23.11	24.10	24.32	24.31	23.60	23.82	23.81
		1	14	22.62	22.72	22.77	23.82	23.92	23.97	23.32	23.42	23.47
		8	0	21.74	22.02	22.16	22.94	23.22	23.36	22.44	22.72	22.86
		8	4	21.83	22.18	22.16	23.03	23.38	23.36	22.53	22.88	22.86
		8	7	21.97	22.04	21.95	23.17	23.24	23.15	22.67	22.74	22.65
		15	0	21.81	22.03	22.08	23.01	23.23	23.28	22.51	22.73	22.78
	16QAM	1	0	21.93	22.03	22.22	23.13	23.23	23.42	22.63	22.73	22.92
		1	7	22.12	22.36	22.53	23.32	23.56	23.73	22.82	23.06	23.23
		1	14	21.83	22.14	22.10	23.03	23.34	23.30	22.53	22.84	22.80
		8	0	20.75	20.97	21.17	21.95	22.17	22.37	21.45	21.67	21.87
		8	4	20.86	21.12	21.20	22.06	22.32	22.40	21.56	21.82	21.90
		8	7	20.92	21.10	20.96	22.12	22.30	22.16	21.62	21.80	21.66
		15	0	20.84	20.99	21.06	22.04	22.19	22.26	21.54	21.69	21.76
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5	18625/1852.5	18900/1880	19175/1907.5	18625/1852.5	18900/1880	19175/1907.5
5MHz	QPSK	1	0	22.59	22.70	22.78	23.79	23.90	23.98	23.29	23.40	23.48
		1	13	22.88	23.08	23.08	24.08	24.28	24.28	23.58	23.78	23.78
		1	24	22.59	22.67	22.73	23.79	23.87	23.93	23.29	23.37	23.43



		12	0	21.71	21.97	22.12	22.91	23.17	23.32	22.41	22.67	22.82
		12	6	21.81	22.14	22.11	23.01	23.34	23.31	22.51	22.84	22.81
		12	13	21.95	22.02	21.91	23.15	23.22	23.11	22.65	22.72	22.61
		25	0	21.81	22.02	22.06	23.01	23.22	23.26	22.51	22.72	22.76
	16QAM	1	0	21.93	21.99	22.19	23.13	23.19	23.39	22.63	22.69	22.89
		1	13	22.12	22.34	22.50	23.32	23.54	23.70	22.82	23.04	23.20
		1	24	21.80	22.12	22.06	23.00	23.32	23.26	22.50	22.82	22.76
		12	0	20.73	20.93	21.14	21.93	22.13	22.34	21.43	21.63	21.84
		12	6	20.83	21.07	21.16	22.03	22.27	22.36	21.53	21.77	21.86
		12	13	20.89	21.05	20.92	22.09	22.25	22.12	21.59	21.75	21.62
		25	0	20.82	20.95	21.01	22.02	22.15	22.21	21.52	21.65	21.71
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905	18650/1855	18900/1880	19150/1905	18650/1855	18900/1880	19150/1905
10MHz	QPSK	1	0	22.61	22.71	22.81	23.81	23.91	24.01	23.31	23.41	23.51
		1	25	22.91	23.13	23.12	24.11	24.33	24.32	23.61	23.83	23.82
		1	49	22.61	22.71	22.76	23.81	23.91	23.96	23.31	23.41	23.46
		25	0	21.74	22.02	22.16	22.94	23.22	23.36	22.44	22.72	22.86
		25	13	21.84	22.19	22.15	23.04	23.39	23.35	22.54	22.89	22.85
		25	25	21.97	22.06	21.96	23.17	23.26	23.16	22.67	22.76	22.66
		50	0	21.85	22.04	22.10	23.05	23.24	23.30	22.55	22.74	22.80
	16QAM	1	0	21.97	22.02	22.21	23.17	23.22	23.41	22.67	22.72	22.91
		1	25	22.16	22.38	22.53	23.36	23.58	23.73	22.86	23.08	23.23
		1	49	21.83	22.14	22.09	23.03	23.34	23.29	22.53	22.84	22.79
		25	0	20.76	20.98	21.18	21.96	22.18	22.38	21.46	21.68	21.88
		25	13	20.85	21.11	21.19	22.05	22.31	22.39	21.55	21.81	21.89
		25	25	20.92	21.10	20.96	22.12	22.30	22.16	21.62	21.80	21.66
		50	0	20.85	21.00	21.05	22.05	22.20	22.25	21.55	21.70	21.75
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5	18675/1857.5	18900/1880	19125/1902.5	18675/1857.5	18900/1880	19125/1902.5
15MHz	QPSK	1	0	22.60	22.67	22.79	23.80	23.87	23.99	23.30	23.37	23.49
		1	38	22.89	23.12	23.09	24.09	24.32	24.29	23.59	23.82	23.79
		1	74	22.58	22.66	22.72	23.78	23.86	23.92	23.28	23.36	23.42
		36	0	21.72	21.98	22.13	22.92	23.18	23.33	22.42	22.68	22.83
		36	18	21.81	22.14	22.11	23.01	23.34	23.31	22.51	22.84	22.81
		36	39	21.94	22.03	21.92	23.14	23.23	23.12	22.64	22.73	22.62
		75	0	21.83	22.00	22.05	23.03	23.20	23.25	22.53	22.70	22.75
	16QAM	1	0	21.95	22.00	22.19	23.15	23.20	23.39	22.65	22.70	22.89
		1	38	22.14	22.35	22.51	23.34	23.55	23.71	22.84	23.05	23.21
		1	74	21.81	22.10	22.06	23.01	23.30	23.26	22.51	22.80	22.76
		36	0	20.73	20.96	21.15	21.93	22.16	22.35	21.43	21.66	21.85
		36	18	20.82	21.06	21.15	22.02	22.26	22.35	21.52	21.76	21.85



		36	39	20.90	21.06	20.93	22.10	22.26	22.13	21.60	21.76	21.63
		75	0	20.82	20.95	21.01	22.02	22.15	22.21	21.52	21.65	21.71
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900	18700/1860	18900/1880	19100/1900	18700/1860	18900/1880	19100/1900
20MHz	QPSK	1	0	22.57	22.63	22.76	23.77	23.83	23.96	23.27	23.33	23.46
		1	50	22.88	23.08	23.07	24.08	24.28	24.27	23.58	23.78	23.77
		1	99	22.56	22.65	22.69	23.76	23.85	23.89	23.26	23.35	23.39
		50	0	21.69	21.93	22.09	22.89	23.13	23.29	22.39	22.63	22.79
		50	25	21.79	22.10	22.08	22.99	23.30	23.28	22.49	22.80	22.78
		50	50	21.91	21.98	21.88	23.11	23.18	23.08	22.61	22.68	22.58
		100	0	21.80	21.95	22.01	23.00	23.15	23.21	22.50	22.65	22.71
	16QAM	1	0	21.92	21.96	22.14	23.12	23.16	23.34	22.62	22.66	22.84
		1	50	22.11	22.33	22.47	23.31	23.53	23.67	22.81	23.03	23.17
		1	99	21.78	22.07	22.04	22.98	23.27	23.24	22.48	22.77	22.74
		50	0	20.70	20.92	21.12	21.90	22.12	22.32	21.40	21.62	21.82
		50	25	20.79	21.04	21.12	21.99	22.24	22.32	21.49	21.74	21.82
		50	50	20.87	21.01	20.89	22.07	22.21	22.09	21.57	21.71	21.59
		100	0	20.80	20.91	20.98	22.00	22.11	22.18	21.50	21.61	21.68

6.2.Occupied Bandwidth

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
GSM 1900 (GMSK)	512	1850.2	0.246	0.321
	661	1880.0	0.244	0.312
	810	1909.8	0.247	0.315
GPRS 1900 (GMSK)	512	1850.2	0.248	0.310
	661	1880.0	0.246	0.317
	810	1909.8	0.249	0.311
EGPRS 1900 (8PSK)	512	1850.2	0.253	0.319
	661	1880.0	0.246	0.302
	810	1909.8	0.246	0.305
WCDMA Band II (RMC)	9262	1852.4	4.158	4.659
	9400	1880	4.163	4.684
	9538	1907.6	4.166	4.670

LTE Band 2						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
1	QPSK	1.4	18607	1850.7	0.288	0.462
			18900	1880.0	0.291	0.469
			19193	1909.3	0.301	0.473
		3	18615	1851.5	0.398	0.567
			18900	1880	0.395	0.572
			19185	1908.5	0.389	0.590
		5	18625	1852.5	0.702	1.003
			18900	1880	0.693	1.012
			19175	1907.5	0.712	1.000
		10	18650	1855	1.142	1.638
			18900	1880	1.111	1.468
			19150	1905	1.110	1.489
		15	18675	1857.5	1.523	2.095
			18900	1880	1.427	2.033
			19125	1902.5	1.533	2.089
		20	18700	1860	1.802	2.520
			18900	1880	1.803	2.454



	16QAM	1.4	19100	1900	1.766	2.466
			18607	1850.7	0.297	0.452
			18900	1880.0	0.306	0.499
			19193	1909.3	0.299	0.479
		3	18615	1851.5	0.385	0.564
			18900	1880	0.379	0.561
			19185	1908.5	0.403	0.554
		5	18625	1852.5	0.684	1.030
			18900	1880	0.733	1.065
			19175	1907.5	0.665	0.974
		10	18650	1855	1.055	1.558
			18900	1880	1.046	1.461
			19150	1905	1.118	1.530
		15	18675	1857.5	1.429	1.867
			18900	1880	1.476	2.076
			19125	1902.5	1.396	2.113
		20	18700	1860	1.759	2.381
			18900	1880	1.830	2.516
			19100	1900	1.762	2.272
100%	QPSK	1.4	18607	1850.7	1.094	1.284
			18900	1880.0	1.090	1.272
			19193	1909.3	1.097	1.294
		3	18615	1851.5	2.692	2.914
			18900	1880	2.701	2.918
			19185	1908.5	2.694	2.908
		5	18625	1852.5	4.500	4.890
			18900	1880	4.507	4.889
			19175	1907.5	4.517	4.955
		10	18650	1855	8.983	9.736
			18900	1880	8.966	9.661
			19150	1905	9.001	9.622
		15	18675	1857.5	13.462	14.421
			18900	1880	13.446	14.380
			19125	1902.5	13.486	14.620
		20	18700	1860	17.932	19.221
			18900	1880	17.971	19.369
			19100	1900	17.906	19.305
	16QAM	1.4	18607	1850.7	1.095	1.274
			18900	1880.0	1.096	1.297
			19193	1909.3	1.093	1.272



		3	18615	1851.5	2.681	2.920
			18900	1880	2.688	2.889
			19185	1908.5	2.688	2.908
		5	18625	1852.5	4.501	5.412
			18900	1880	4.506	4.914
			19175	1907.5	4.526	4.870
		10	18650	1855	8.959	9.683
			18900	1880	8.980	9.653
			19150	1905	8.996	9.651
		15	18675	1857.5	13.493	14.330
			18900	1880	13.480	14.387
			19125	1902.5	13.468	14.493
		20	18700	1860	17.956	19.197
			18900	1880	18.001	19.354
			19100	1900	17.969	19.140

GSM1900 GSM CH-Low



GSM1900 GPRS CH-Low



GSM 1900 GSM CH-Middle



GSM 1900 GPRS CH-Middle



GSM 1900 GSM CH-High



GSM 1900 GPRS CH-High



GSM1900 EGPRS CH-Low



WCDMA Band II RMC CH-LOW



GSM 1900 EGPRS CH-Middle



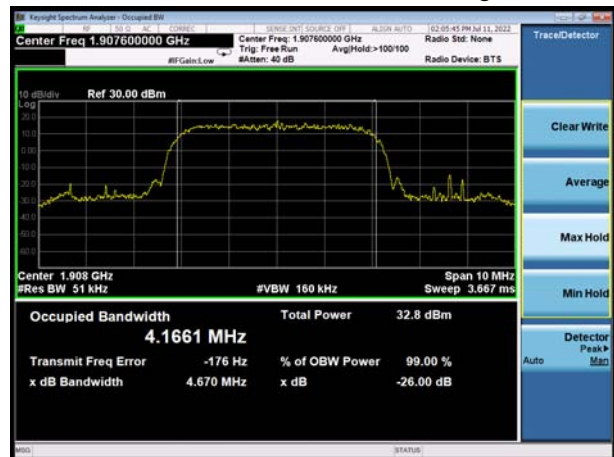
WCDMA Band II RMC CH-Middle



GSM 1900 EGPRS CH-High

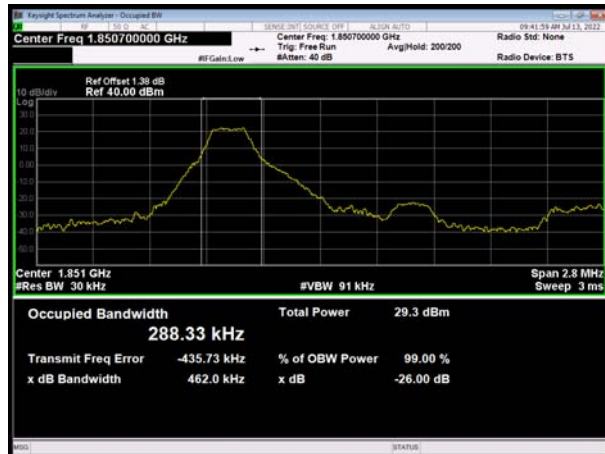


WCDMA Band II RMC CH-High

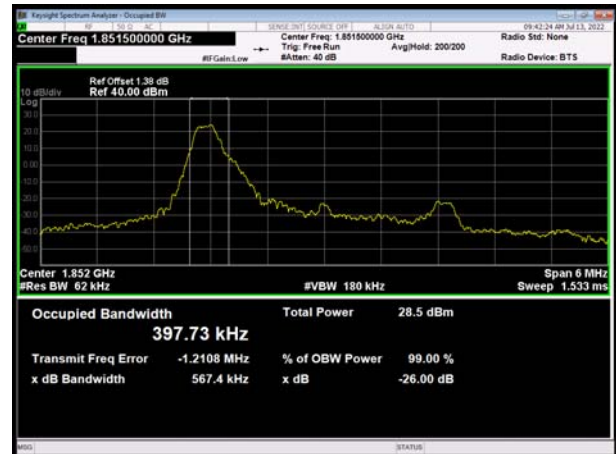


1 RB

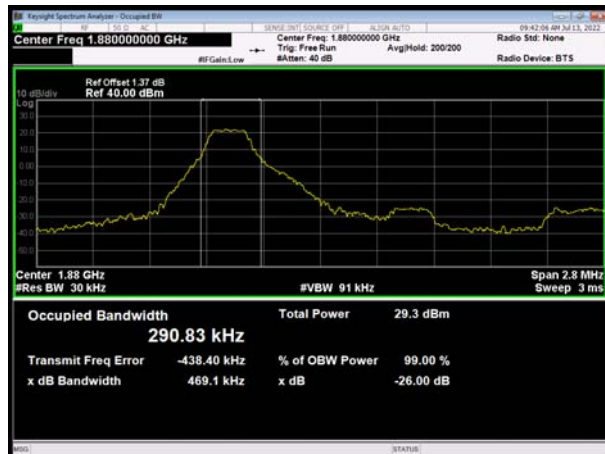
LTE Band 2 1.4MHz QPSK CH-Low



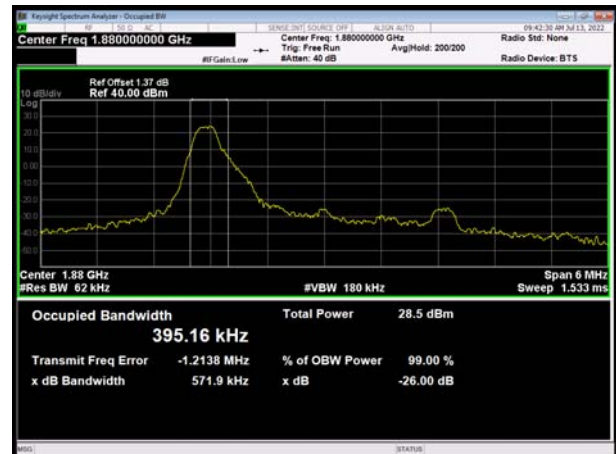
LTE Band 2 3MHz QPSK CH-Low



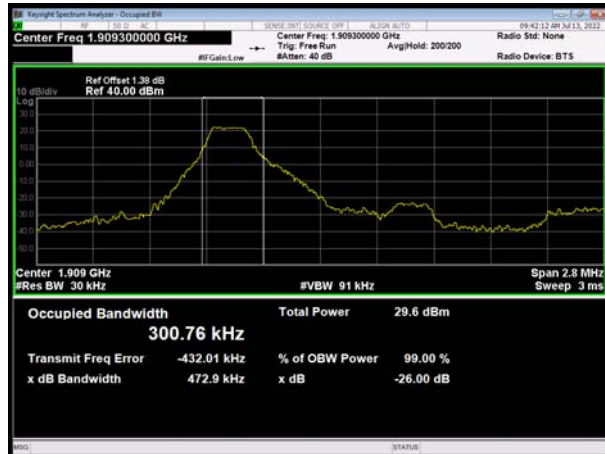
LTE Band 2 1.4MHz QPSK CH-Middle



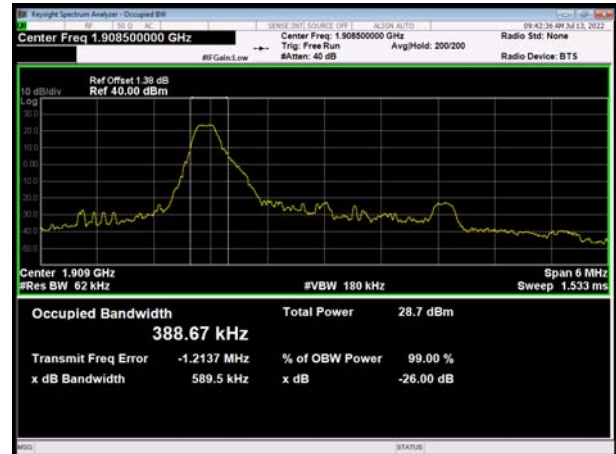
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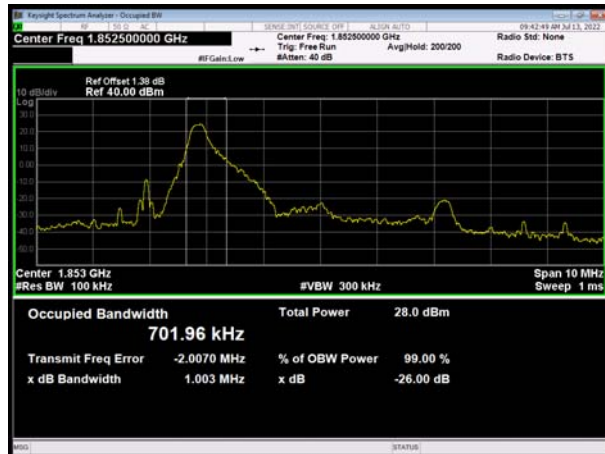
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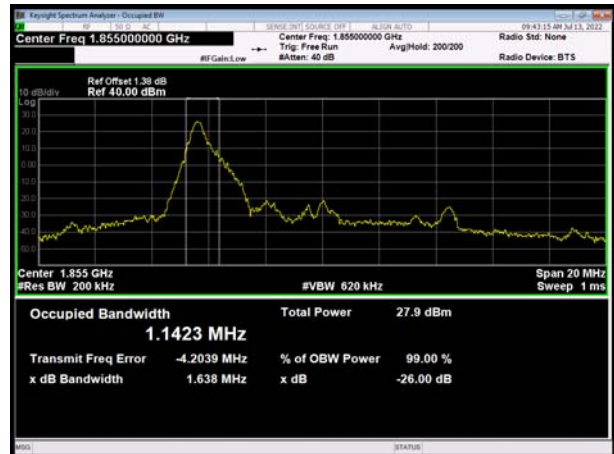
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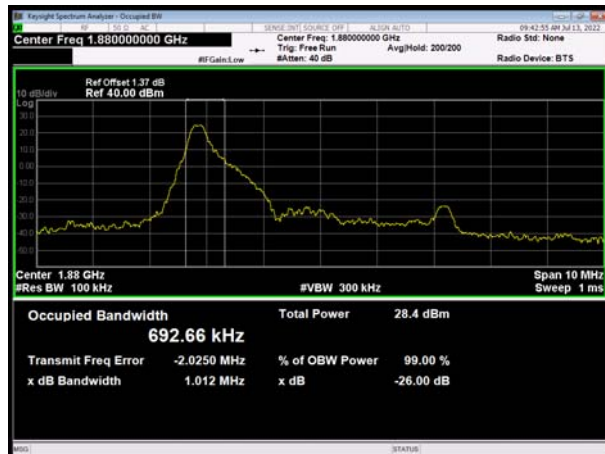
LTE Band 2 5MHz QPSK CH-Low



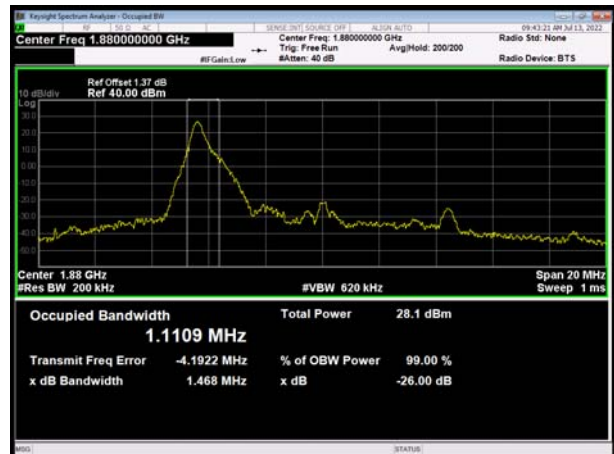
LTE Band 2 10MHz QPSK CH-Low



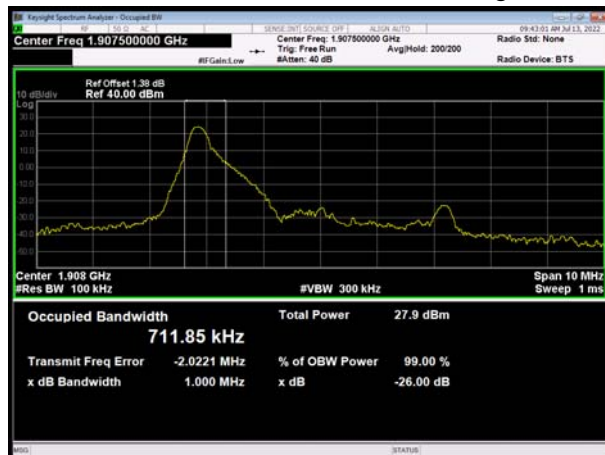
LTE Band 2 5MHz QPSK CH-Middle



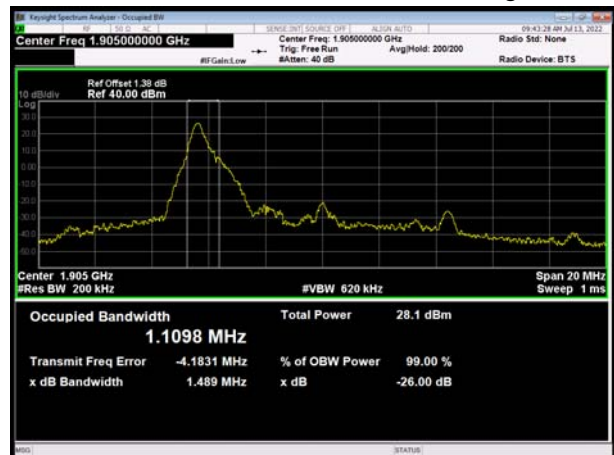
LTE Band 2 10MHz QPSK CH-Middle



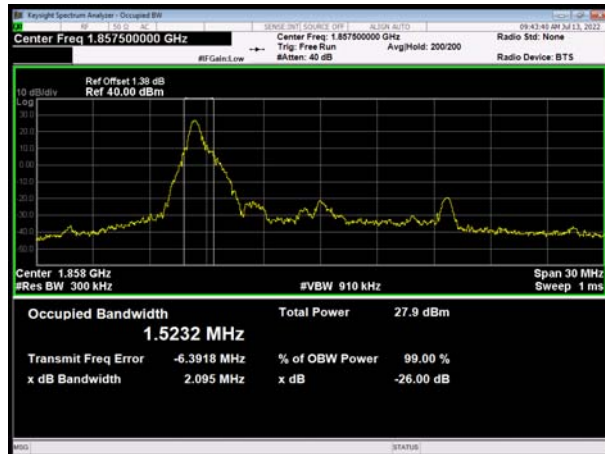
LTE Band 2 5MHz QPSK CH-High



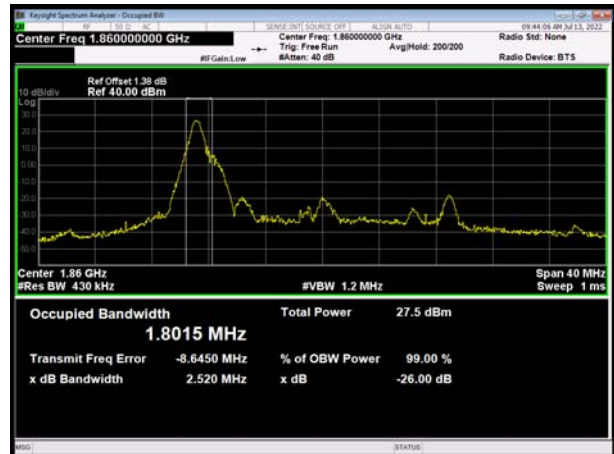
LTE Band 2 10MHz QPSK CH-High



LTE Band 2 15MHz QPSK CH-Low



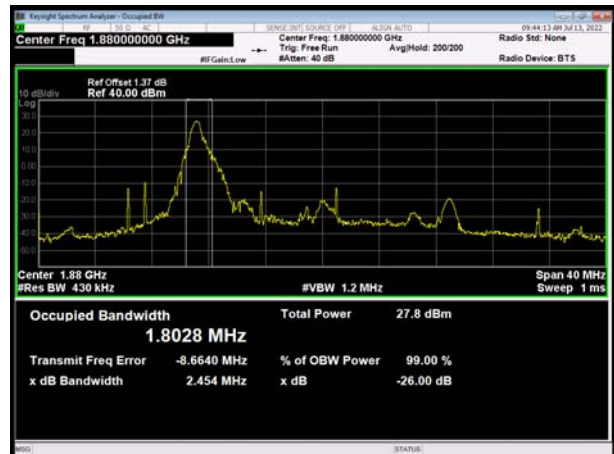
LTE Band 2 20MHz QPSK CH-Low



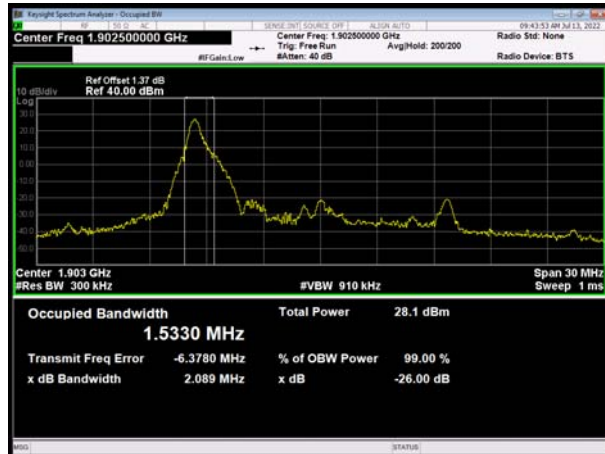
LTE Band 2 15MHz QPSK CH-Middle



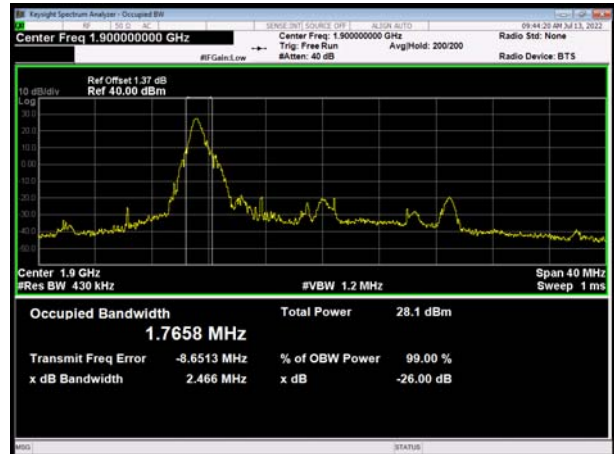
LTE Band 2 20MHz QPSK CH-Middle



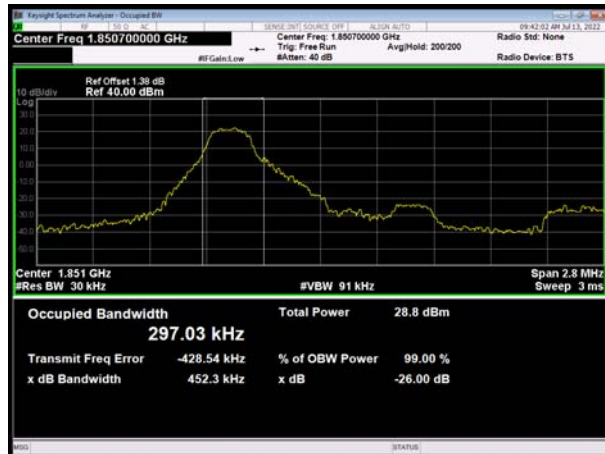
LTE Band 2 15MHz QPSK CH-High



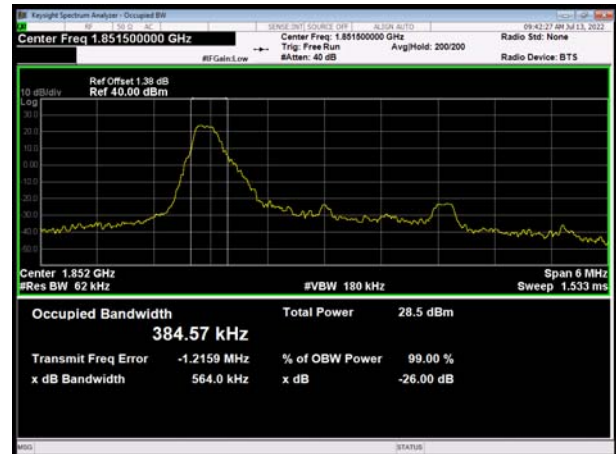
LTE Band 2 20MHz QPSK CH-High



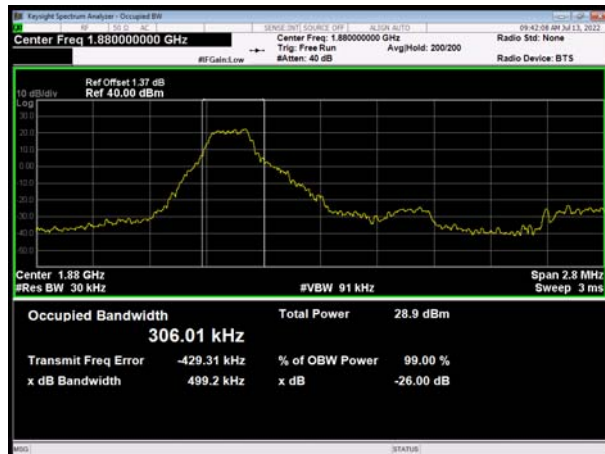
LTE Band 2 1.4MHz 16QAM CH-Low



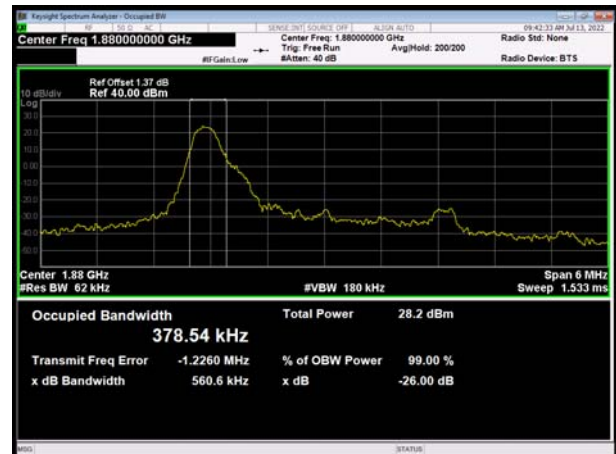
LTE Band 2 3MHz 16QAM CH-Low



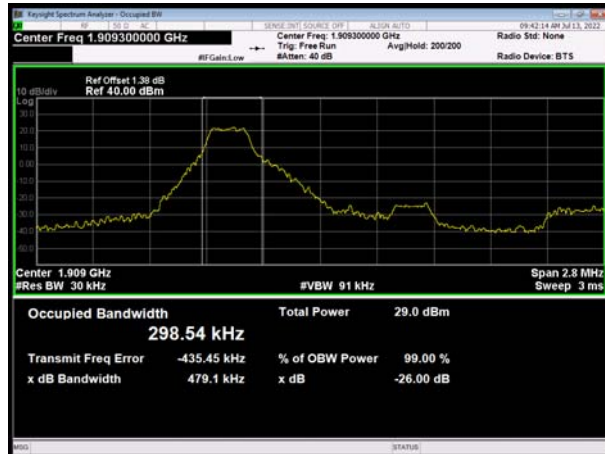
LTE Band 2 1.4MHz 16QAM CH-Middle



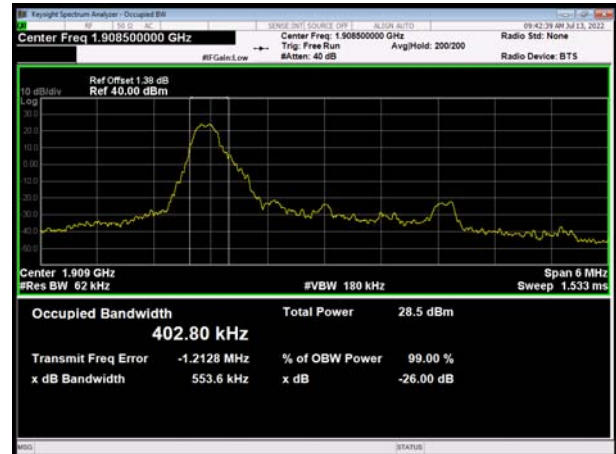
LTE Band 2 3MHz 16QAM CH-Middle



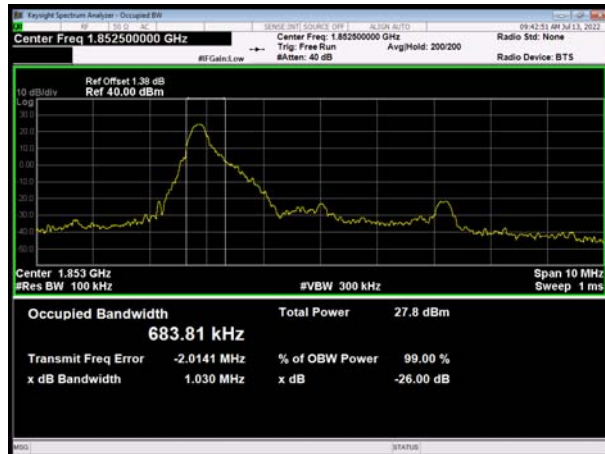
LTE Band 2 1.4MHz 16QAM CH-High



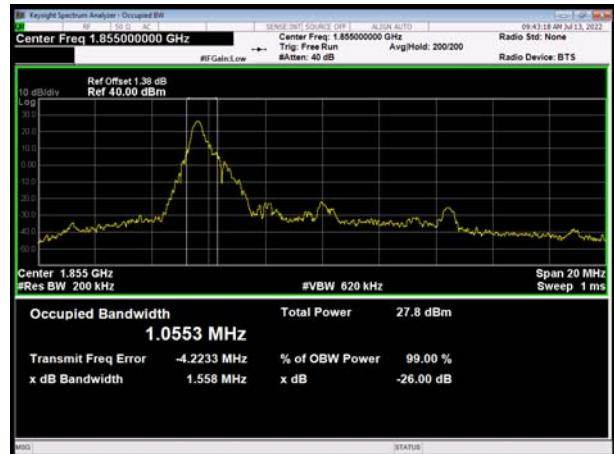
LTE Band 2 3MHz 16QAM CH-High



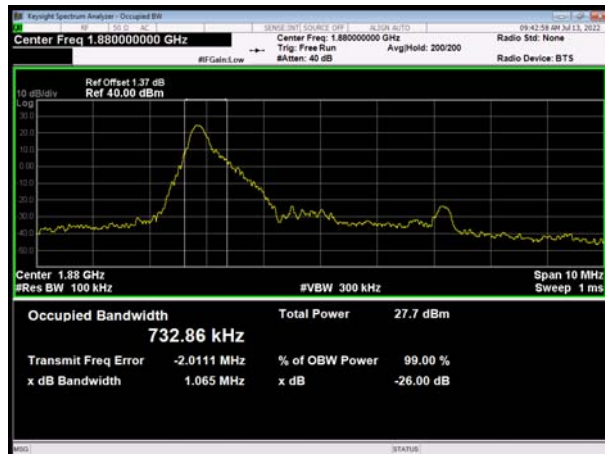
LTE Band 2 5MHz 16QAM CH-Low



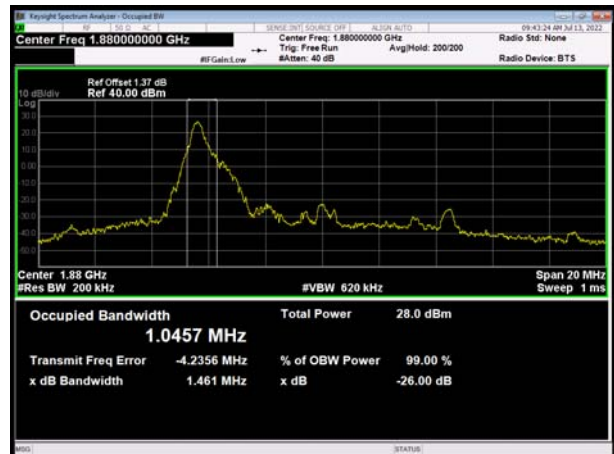
LTE Band 2 10MHz 16QAM CH-Low



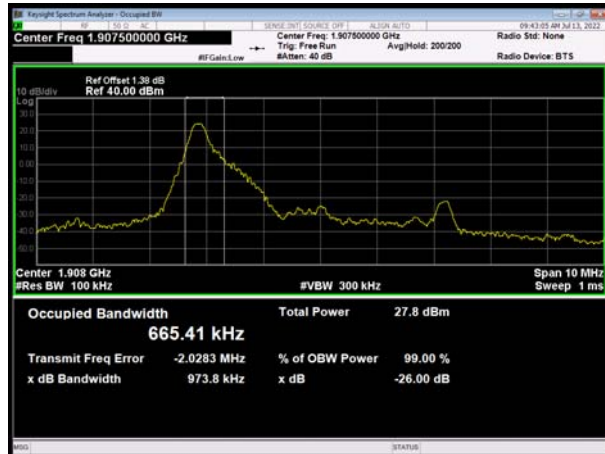
LTE Band 2 5MHz 16QAM CH-Middle



LTE Band 2 10MHz 16QAM CH-Middle



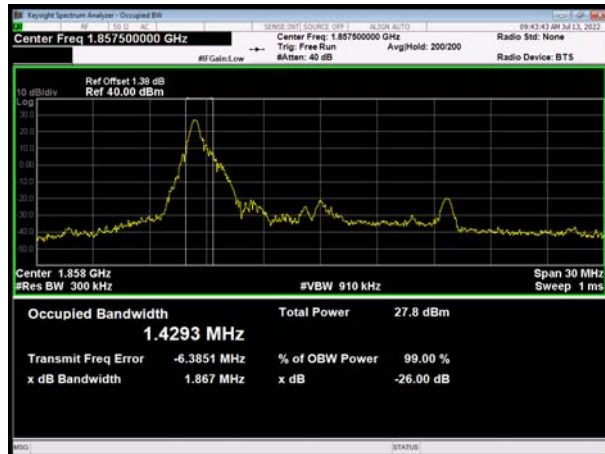
LTE Band 2 5MHz 16QAM CH-High



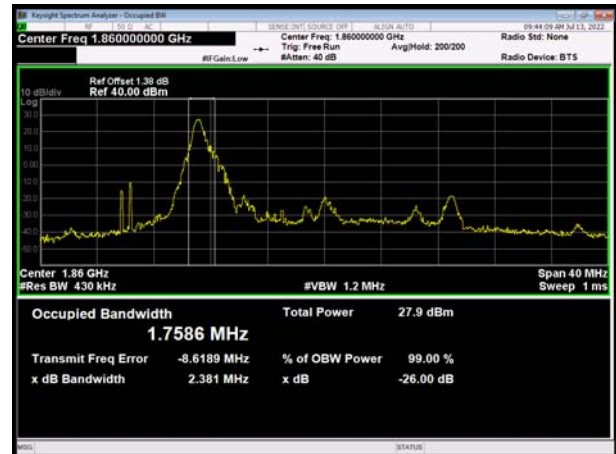
LTE Band 2 10MHz 16QAM CH-High



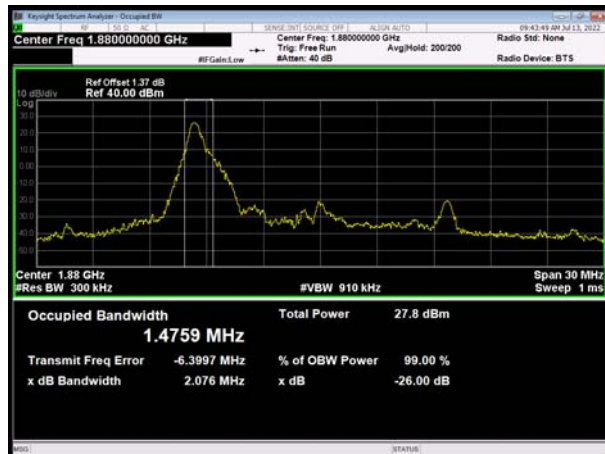
LTE Band 2 15MHz 16QAM CH-Low



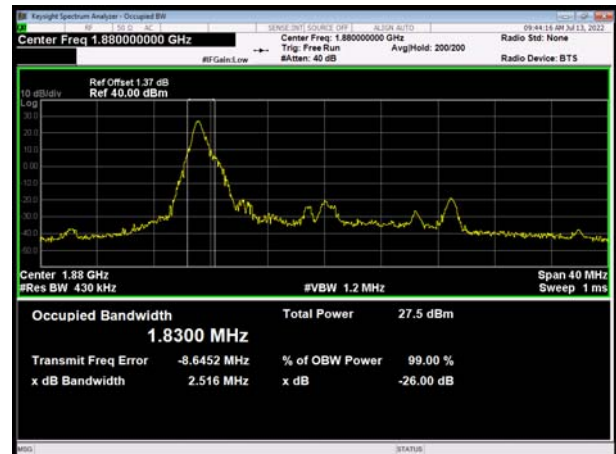
LTE Band 2 20MHz 16QAM CH-Low



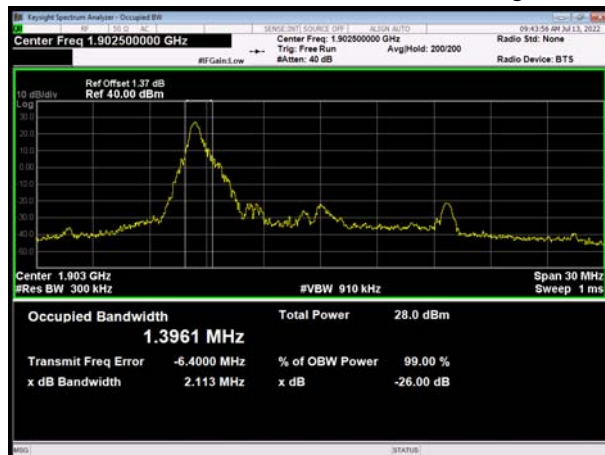
LTE Band 2 15MHz 16QAM CH-Middle



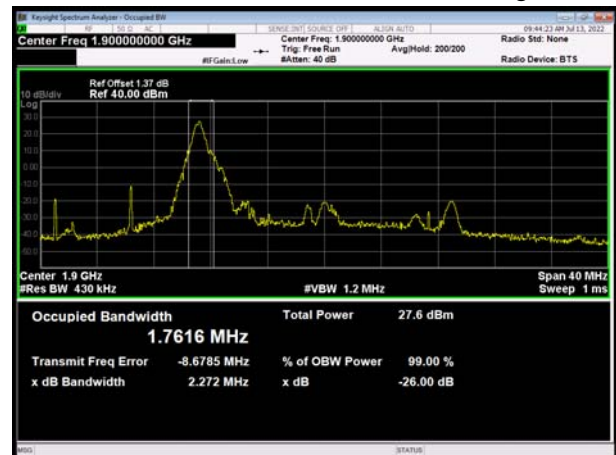
LTE Band 2 20MHz 16QAM CH-Middle



LTE Band 2 15MHz 16QAM CH-High

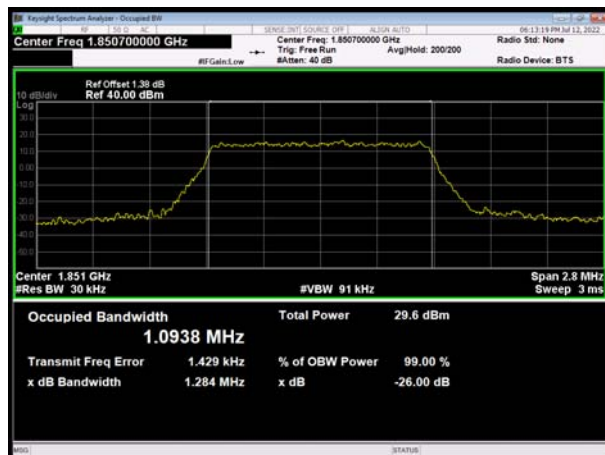


LTE Band 2 20MHz 16QAM CH-High

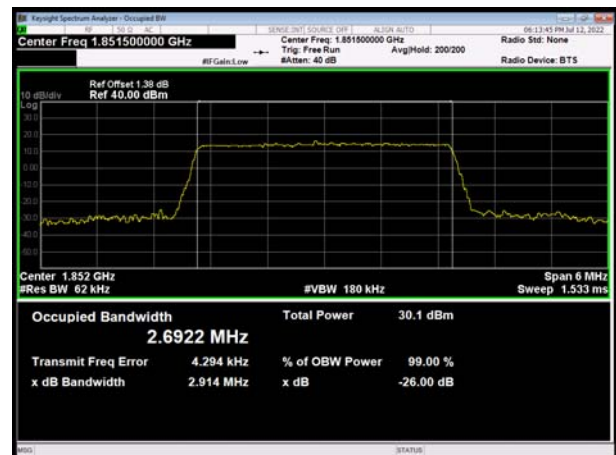


100% RB

LTE Band 2 1.4MHz QPSK CH-Low



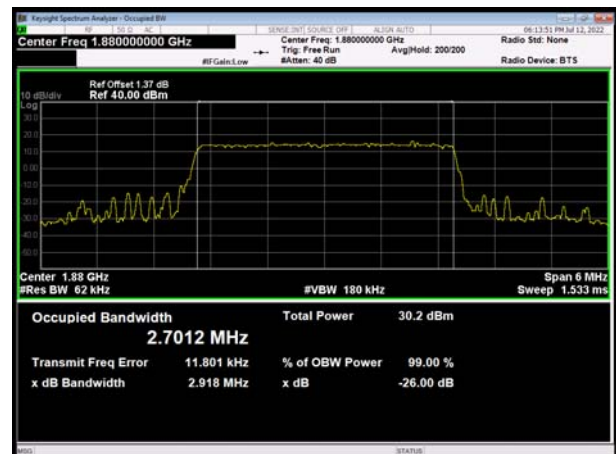
LTE Band 2 3MHz QPSK CH-Low



LTE Band 2 1.4MHz QPSK CH-Middle



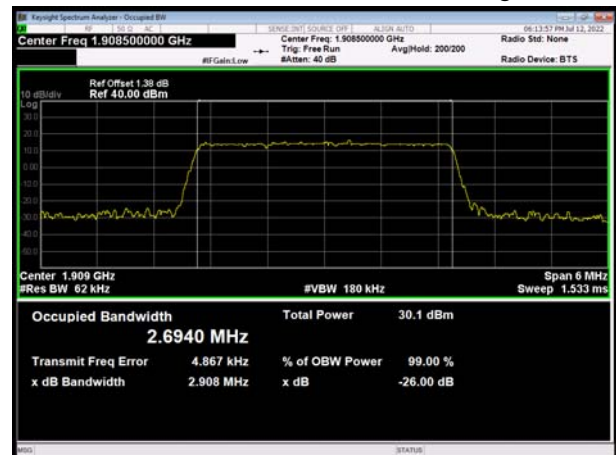
LTE Band 2 3MHz QPSK CH-Middle



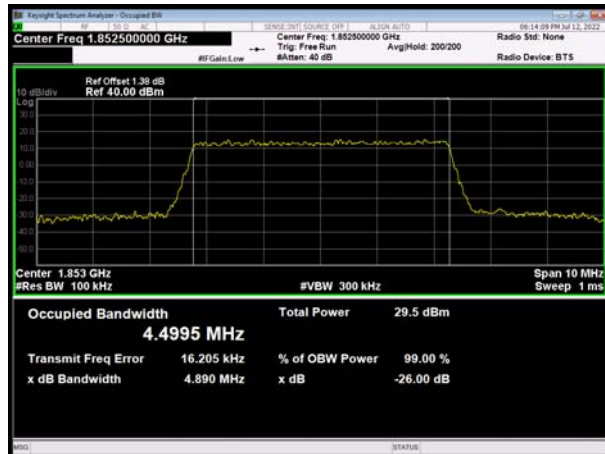
LTE Band 2 1.4MHz QPSK CH-High



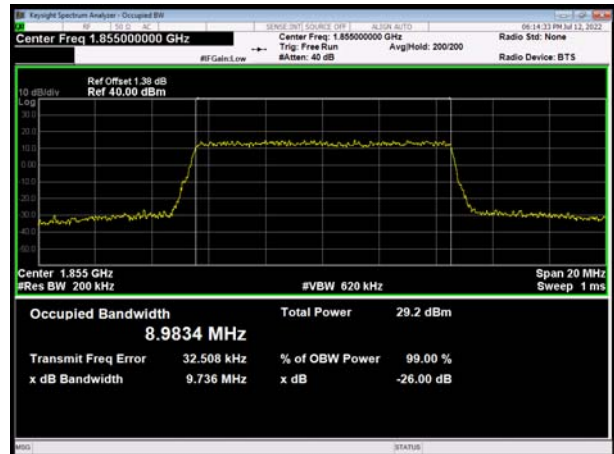
LTE Band 2 3MHz QPSK CH-High



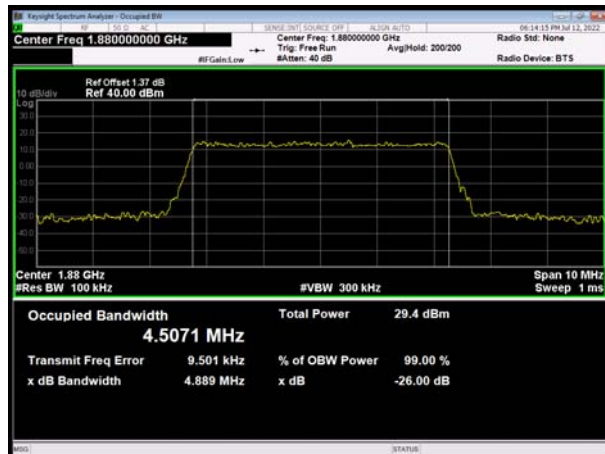
LTE Band 2 5MHz QPSK CH-Low



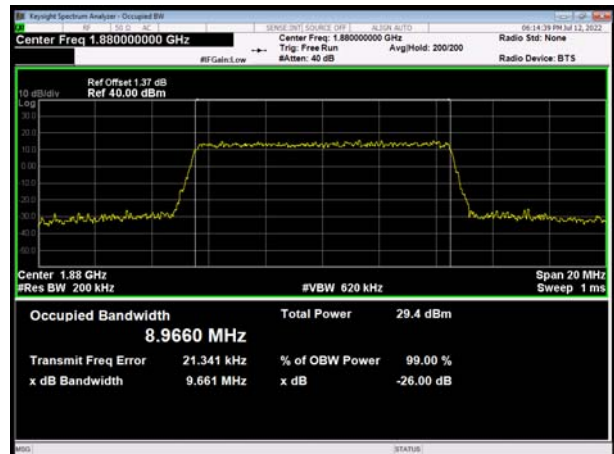
LTE Band 2 10MHz QPSK CH-Low



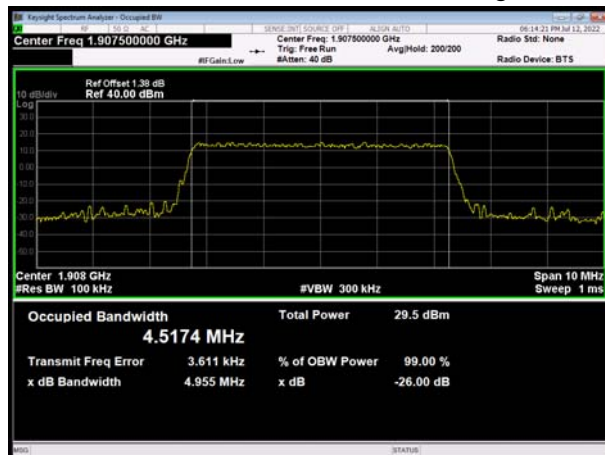
LTE Band 2 5MHz QPSK CH-Middle



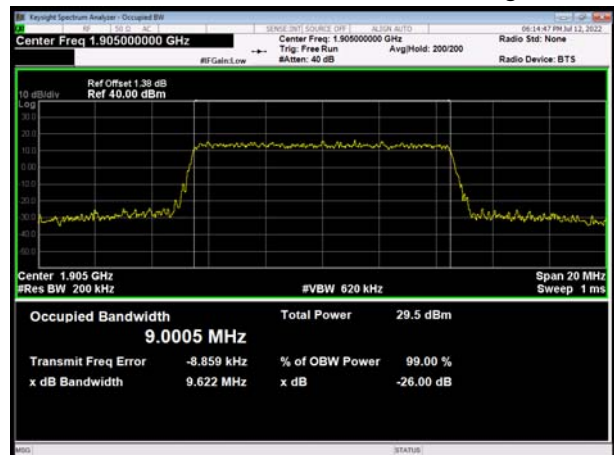
LTE Band 2 10MHz QPSK CH-Middle



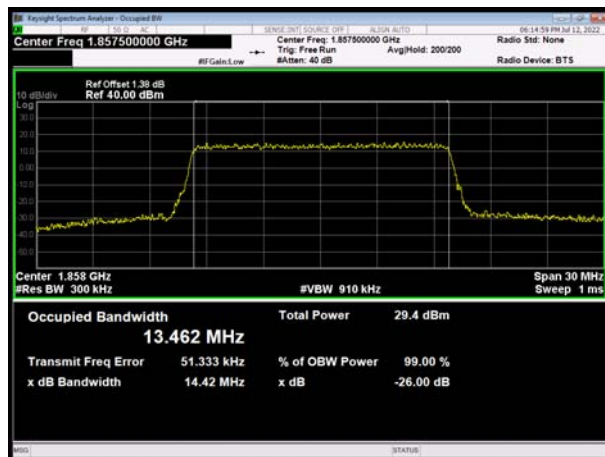
LTE Band 2 5MHz QPSK CH-High



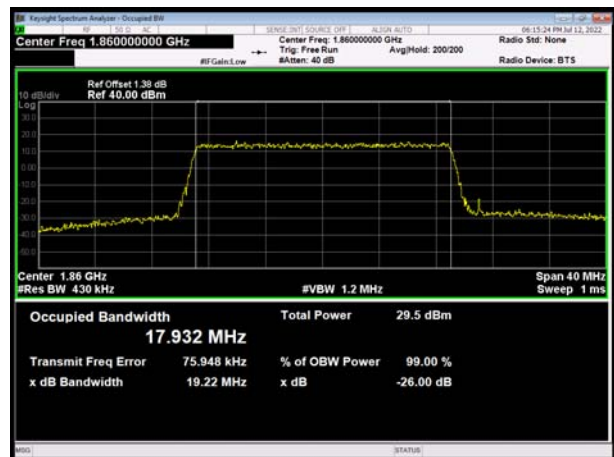
LTE Band 2 10MHz QPSK CH-High



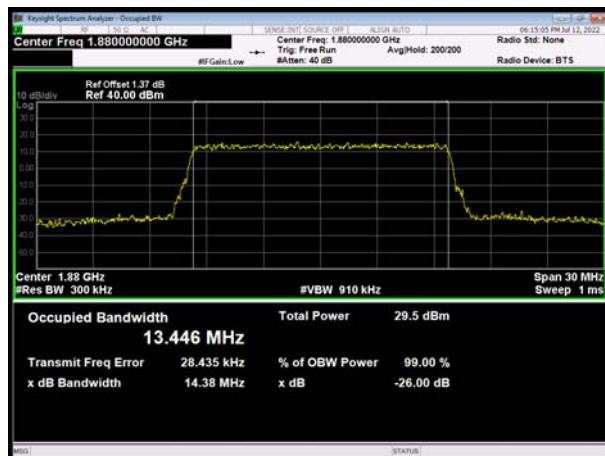
LTE Band 2 15MHz QPSK CH-Low



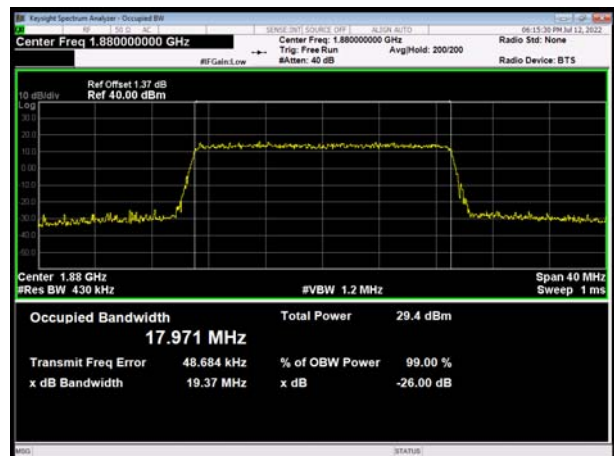
LTE Band 2 20MHz QPSK CH-Low



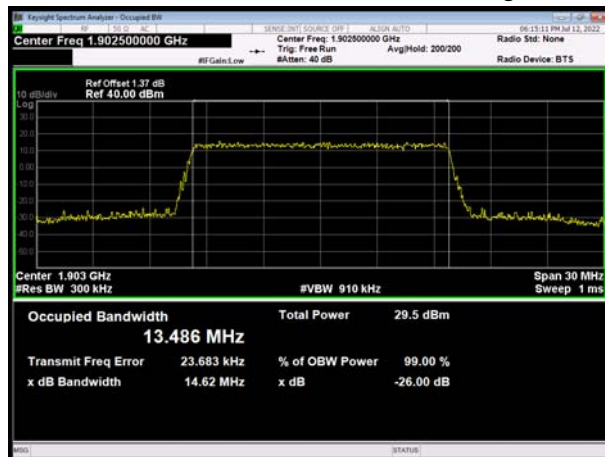
LTE Band 2 15MHz QPSK CH-Middle



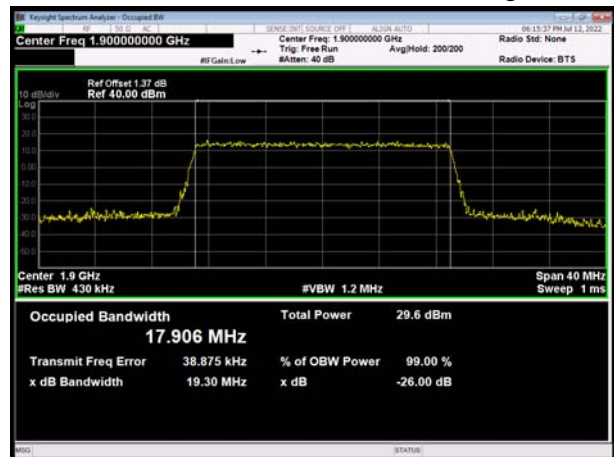
LTE Band 2 20MHz QPSK CH-Middle



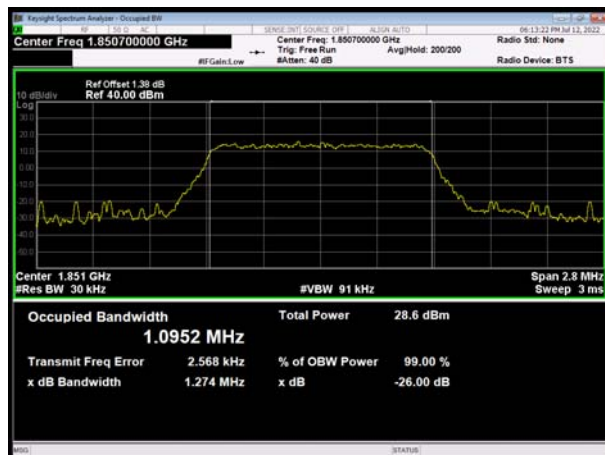
LTE Band 2 15MHz QPSK CH-High



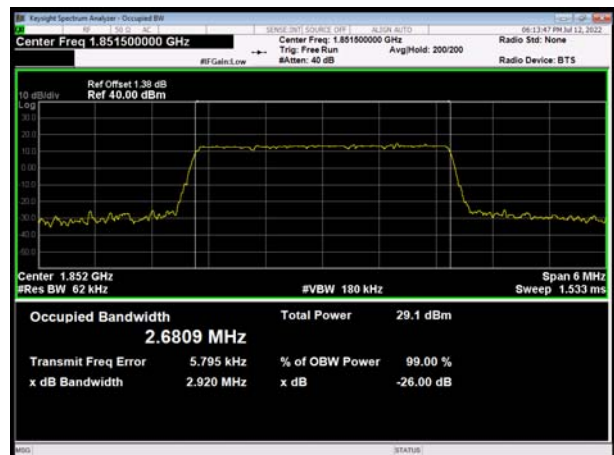
LTE Band 2 20MHz QPSK CH-High



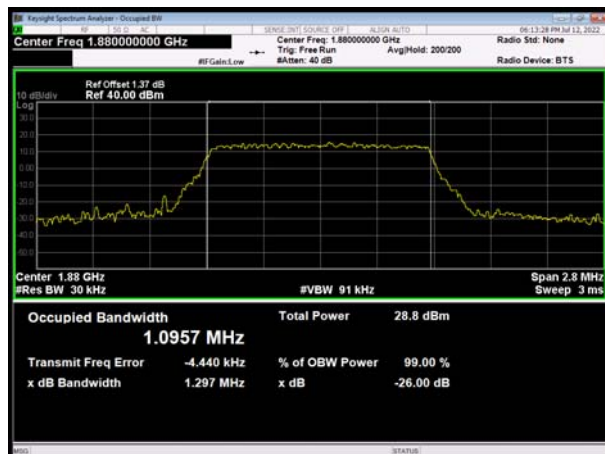
LTE Band 2 1.4MHz 16QAM CH-Low



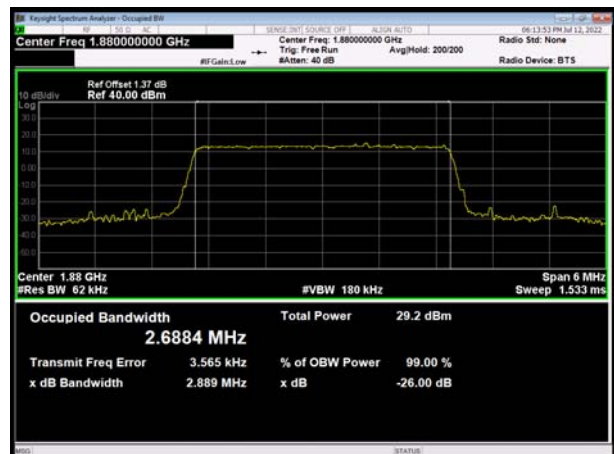
LTE Band 2 3MHz 16QAM CH-Low



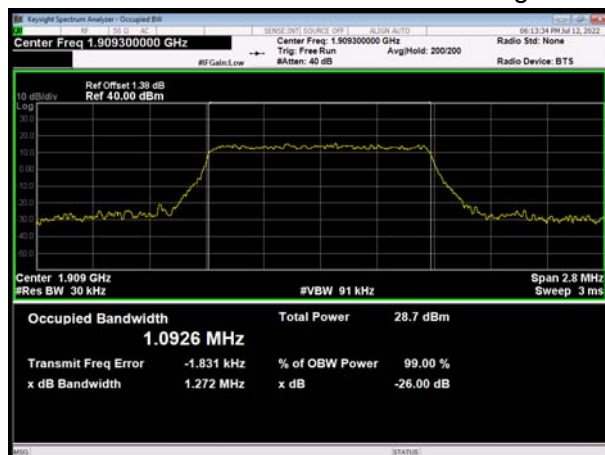
LTE Band 2 1.4MHz 16QAM CH-Middle



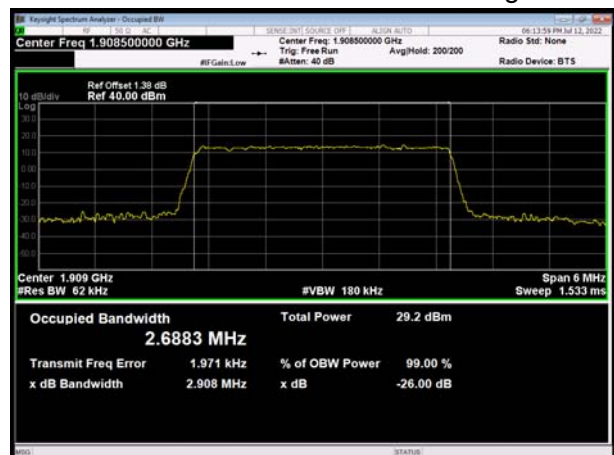
LTE Band 2 3MHz 16QAM CH-Middle



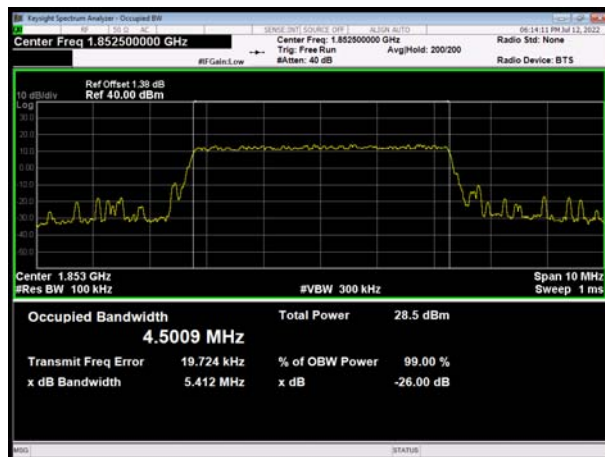
LTE Band 2 1.4MHz 16QAM CH-High



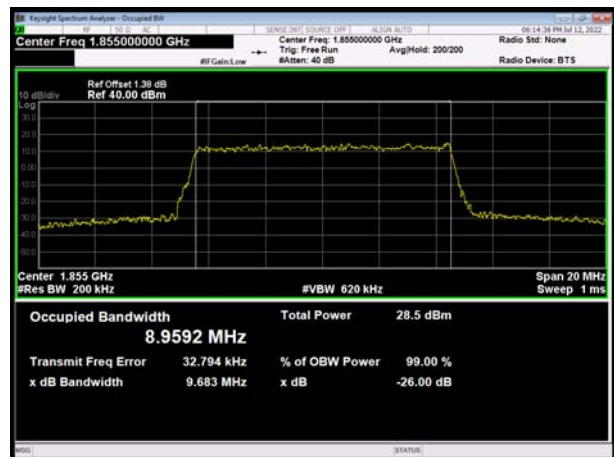
LTE Band 2 3MHz 16QAM CH-High



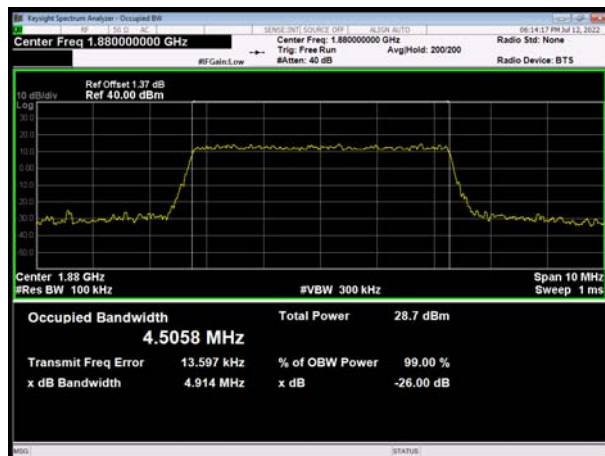
LTE Band 2 5MHz 16QAM CH-Low



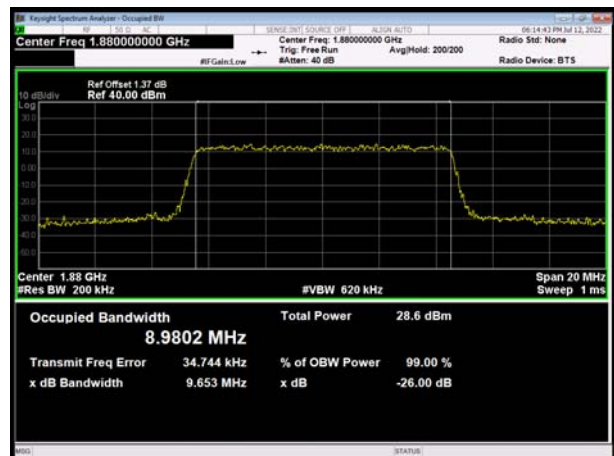
LTE Band 2 10MHz 16QAM CH-Low



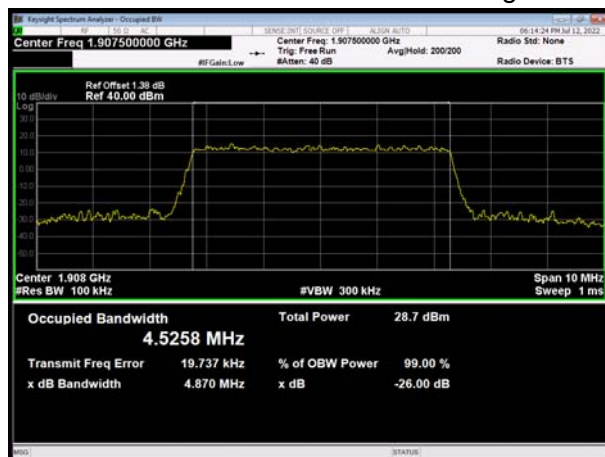
LTE Band 2 5MHz 16QAM CH-Middle



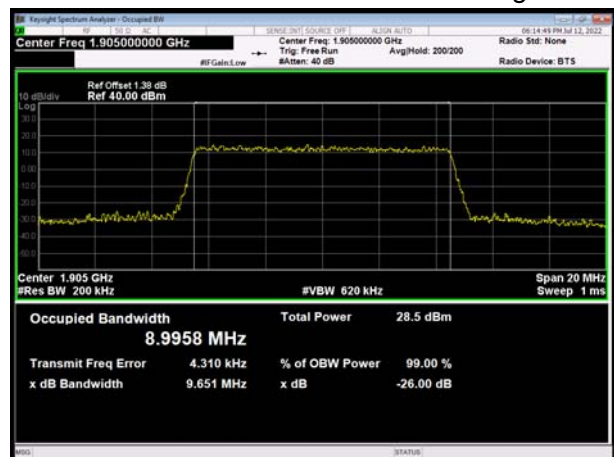
LTE Band 2 10MHz 16QAM CH-Middle



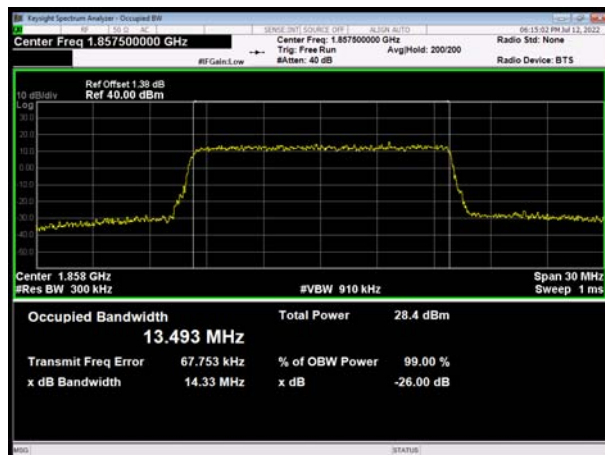
LTE Band 2 5MHz 16QAM CH-High



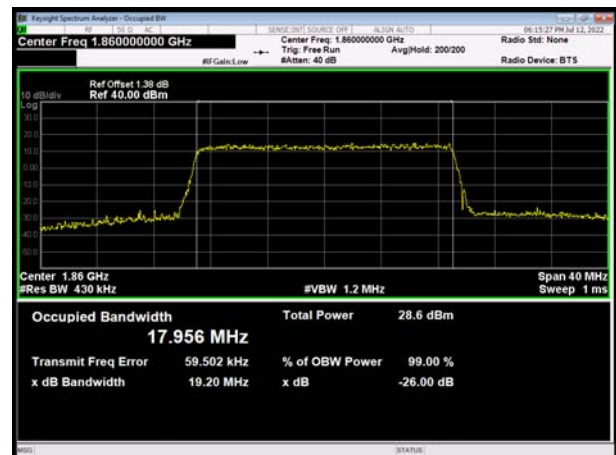
LTE Band 2 10MHz 16QAM CH-High



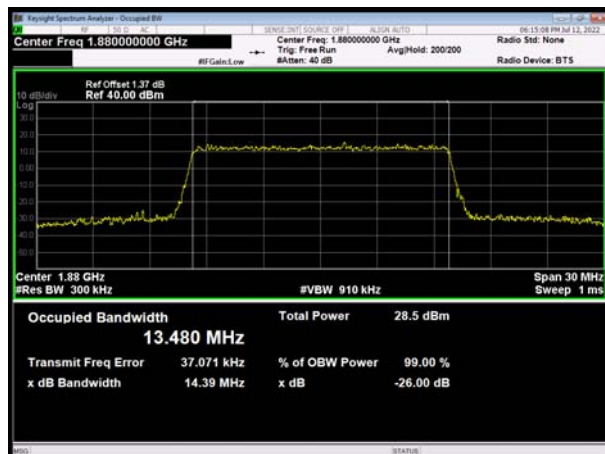
LTE Band 2 15MHz 16QAM CH-Low



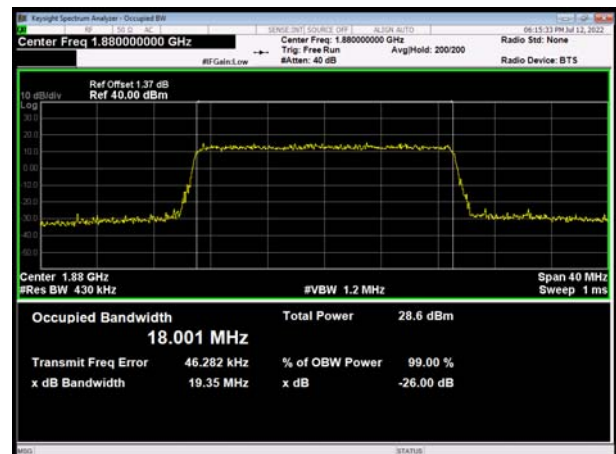
LTE Band 2 20MHz 16QAM CH-Low



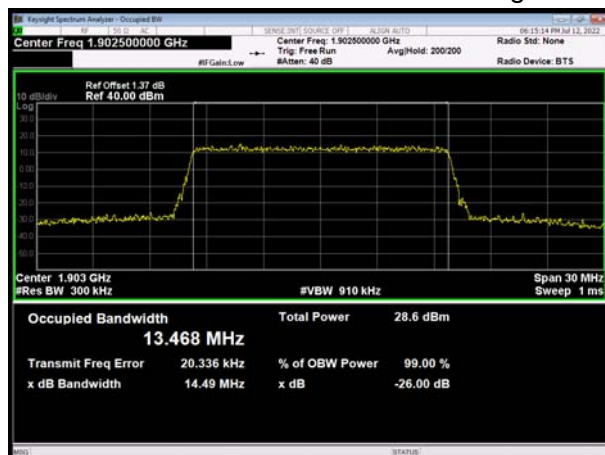
LTE Band 2 15MHz 16QAM CH-Middle



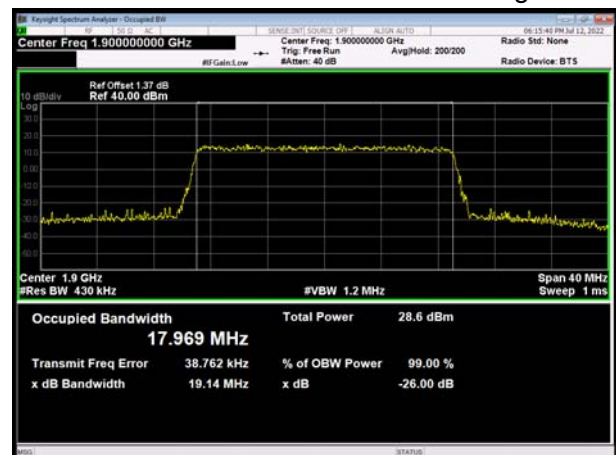
LTE Band 2 20MHz 16QAM CH-Middle



LTE Band 2 15MHz 16QAM CH-High

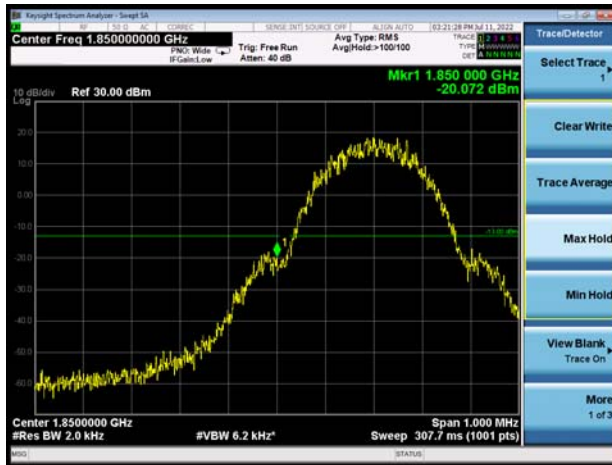


LTE Band 2 20MHz 16QAM CH-High

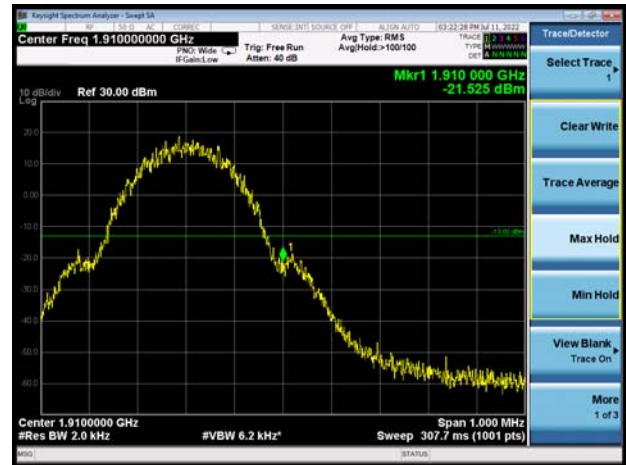


6.3. Band Edge Compliance

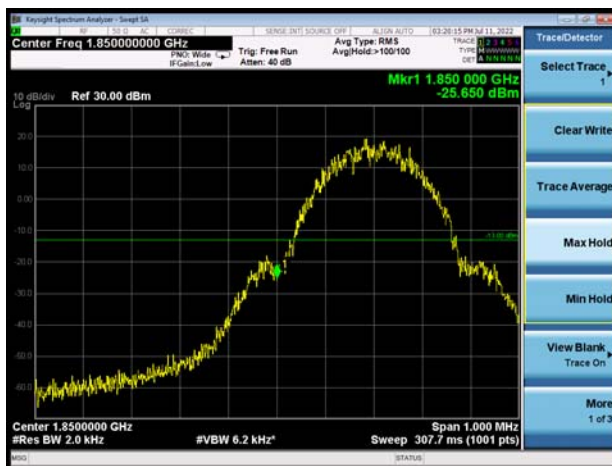
GSM1900 GSM CH-Low



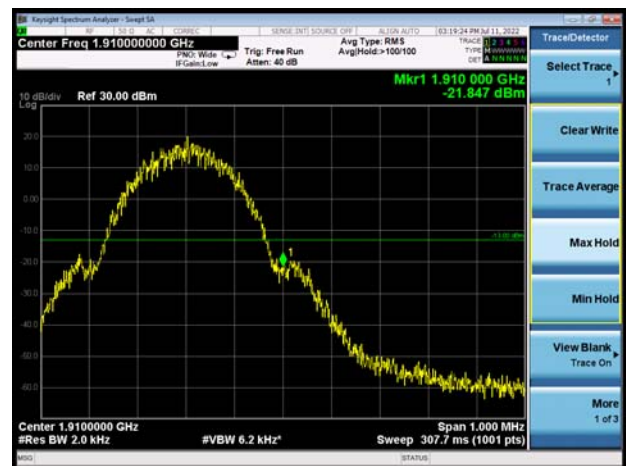
GSM 1900 GSM CH-High



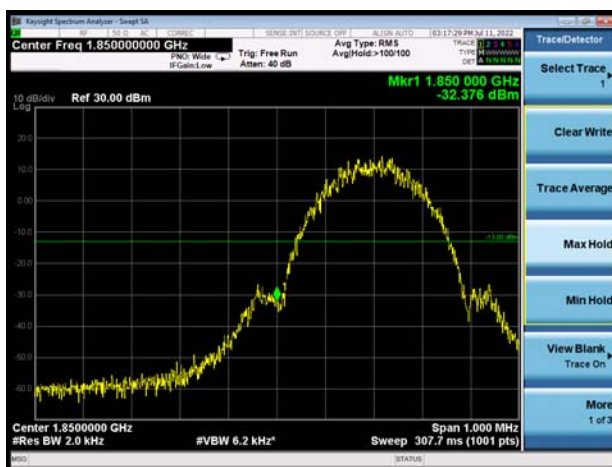
GSM1900 GPRS CH-Low



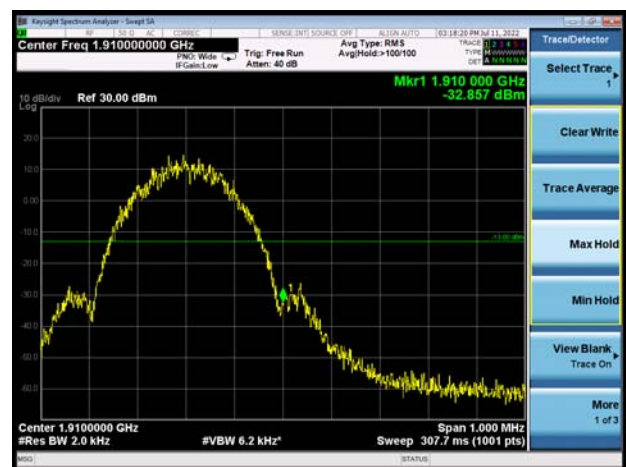
GSM 1900 GPRS CH-High



GSM1900 EGPRS CH-Low

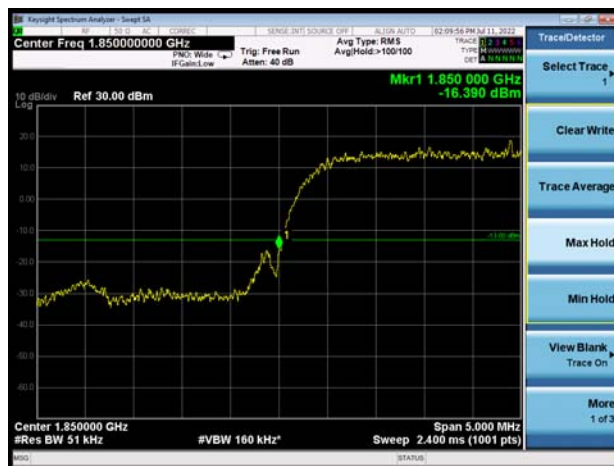


GSM 1900 EGPRS CH-High





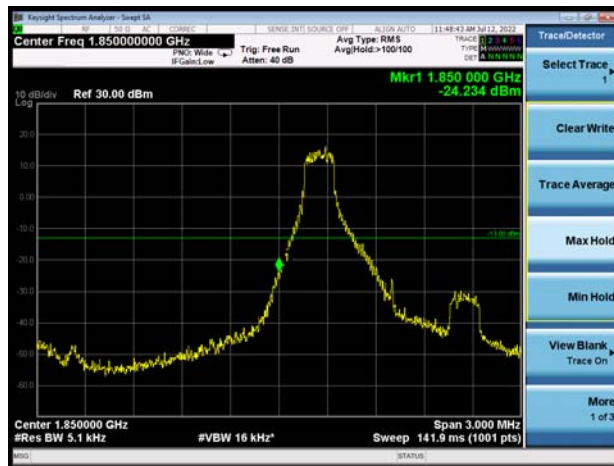
WCDMA Band II RMC CH-Low



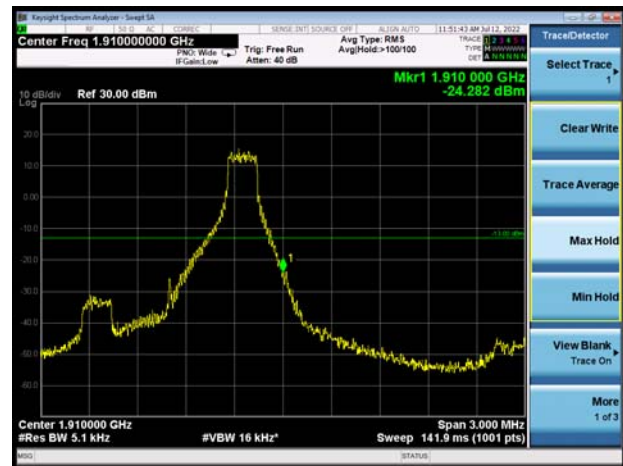
WCDMA Band II RMC CH-High



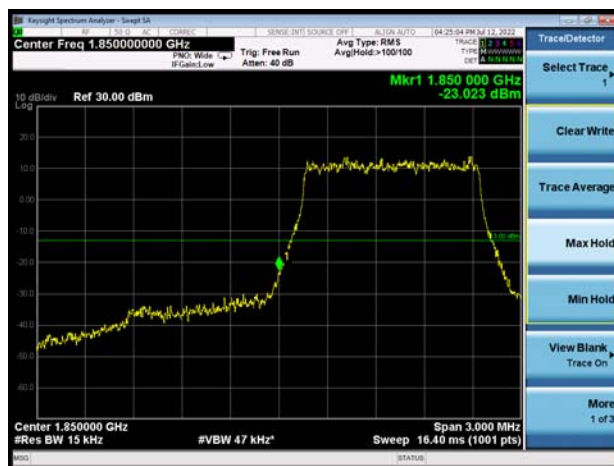
LTE Band 2 1.4MHz QPSK 1RB CH-Low



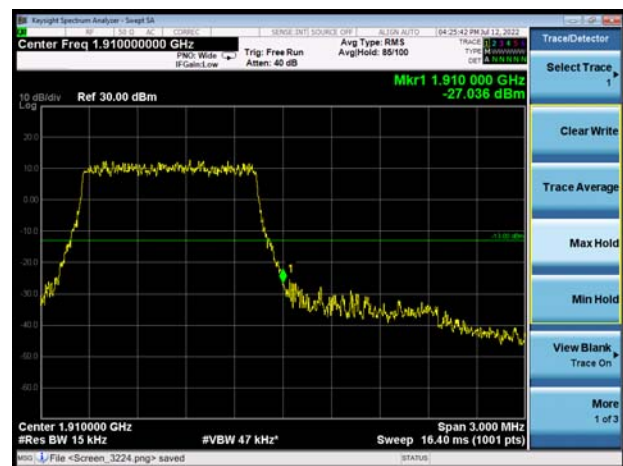
LTE Band 2 1.4MHz QPSK 1RB CH-High



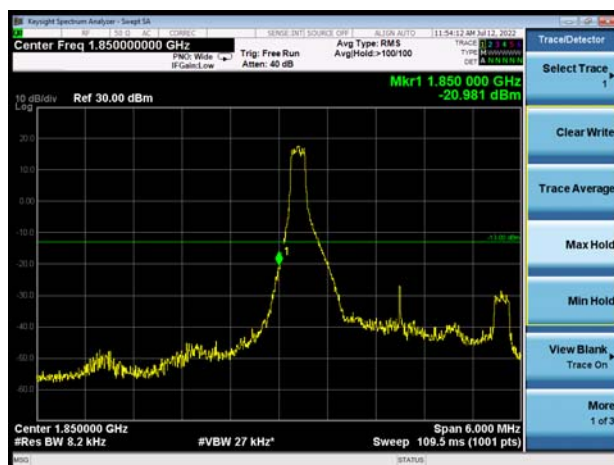
LTE Band 2 1.4MHz QPSK 100%RB CH-Low



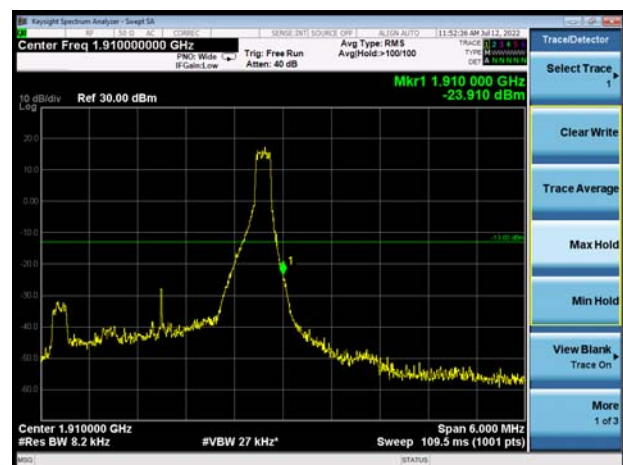
LTE Band 2 1.4MHz QPSK 100%RB CH-High



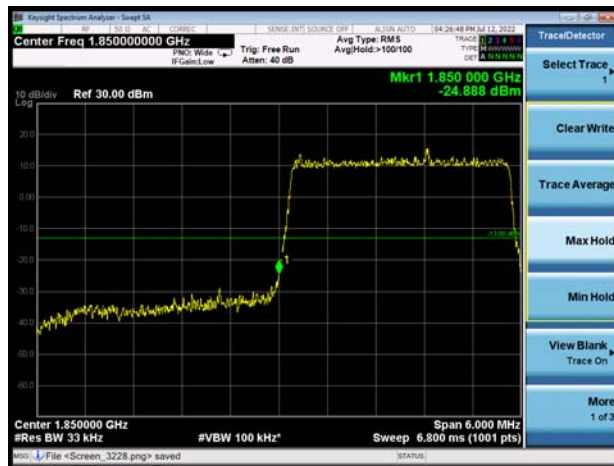
LTE Band 2 3MHz QPSK 1RB CH-Low



LTE Band 2 3MHz QPSK 1RB CH-High



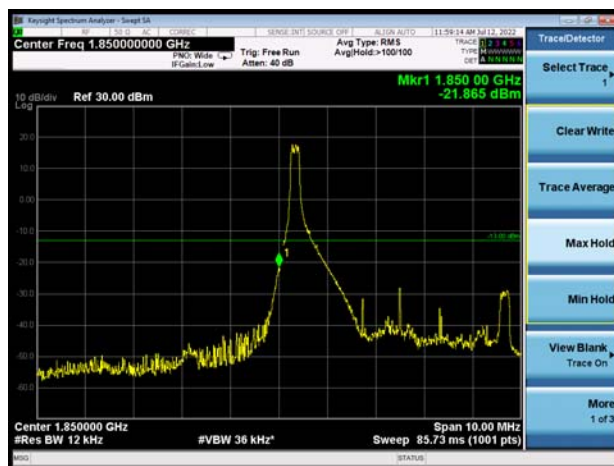
LTE Band 2 3MHz QPSK 100%RB CH-Low



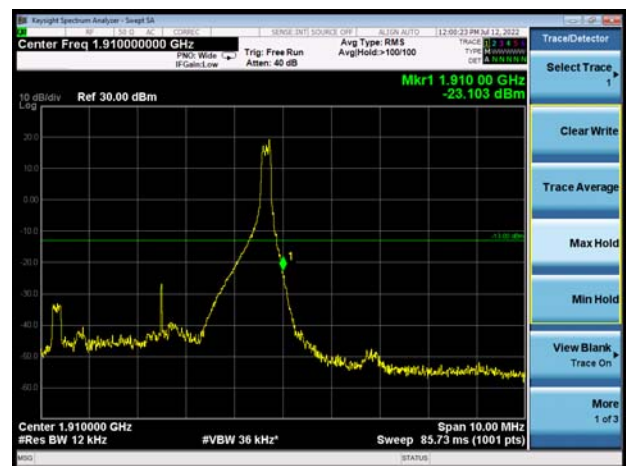
LTE Band 2 3MHz QPSK 100%RB CH-High



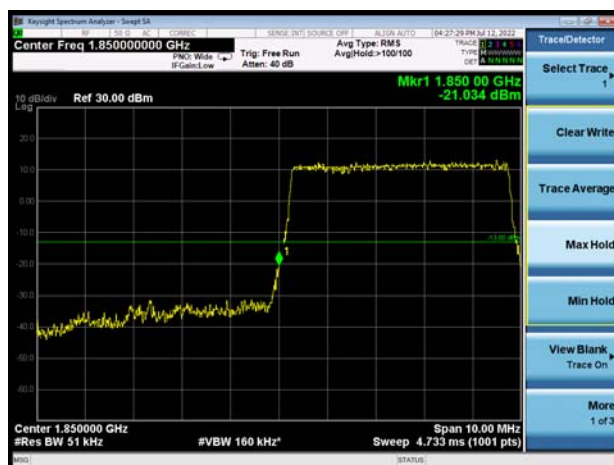
LTE Band 2 5MHz QPSK 1RB CH-Low



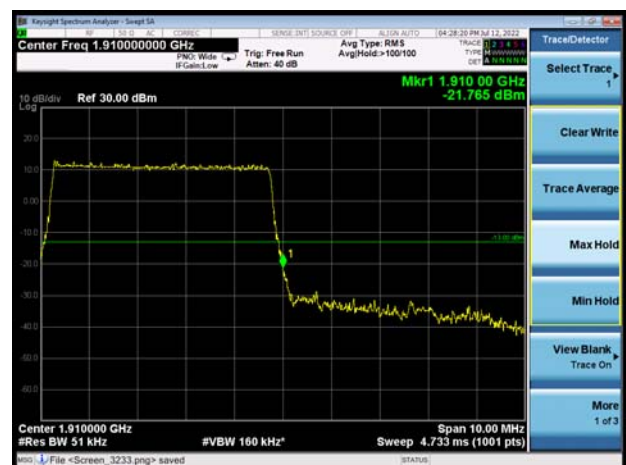
LTE Band 2 5MHz QPSK 1RB CH-High



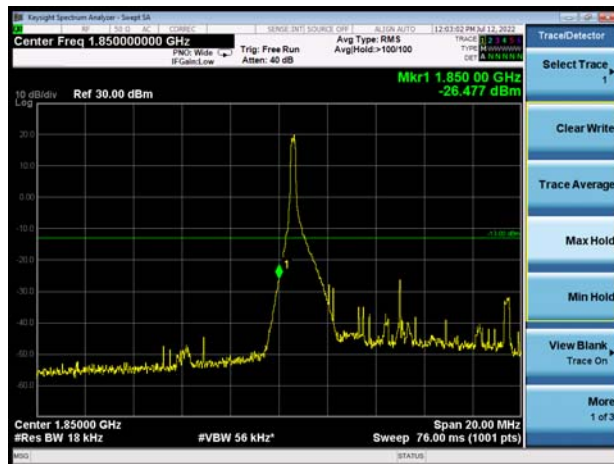
LTE Band 2 5MHz QPSK 100%RB CH-Low



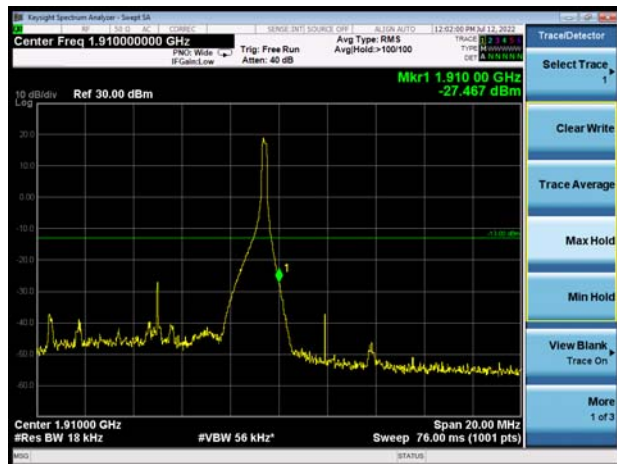
LTE Band 2 5MHz QPSK 100%RB CH-High



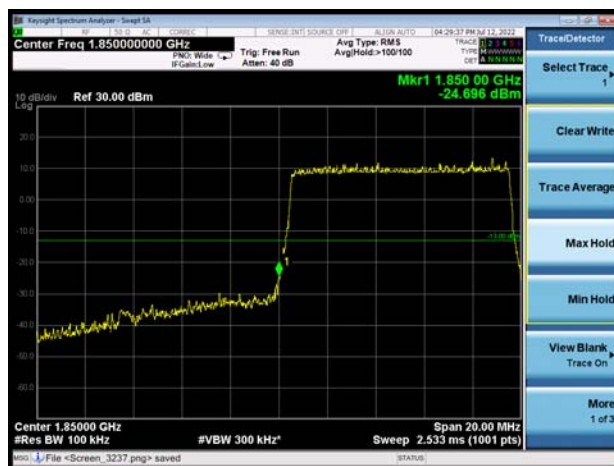
LTE Band 2 10MHz QPSK 1RB CH-Low



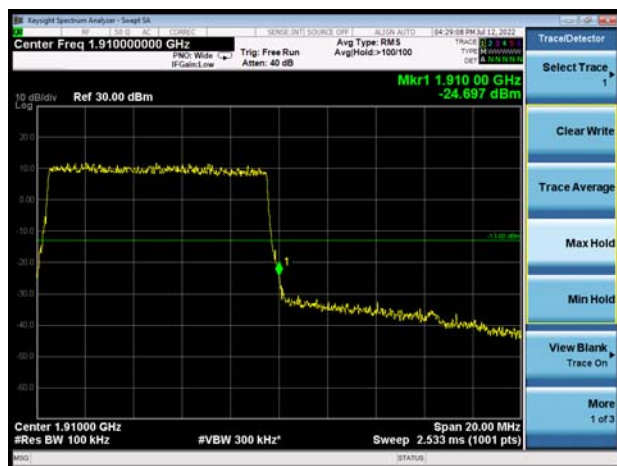
LTE Band 2 10MHz QPSK 1RB CH-High



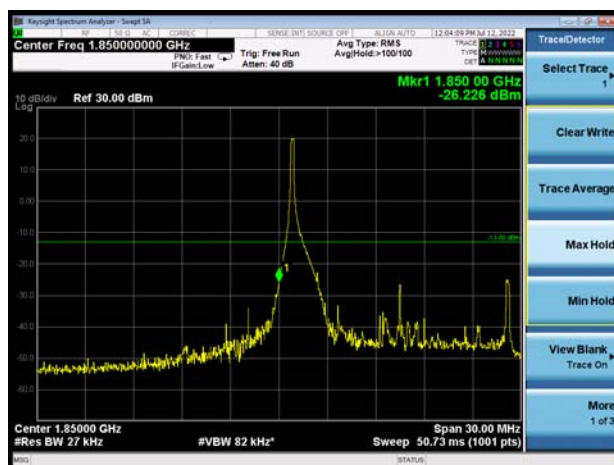
LTE Band 2 10MHz QPSK 100%RB CH-Low



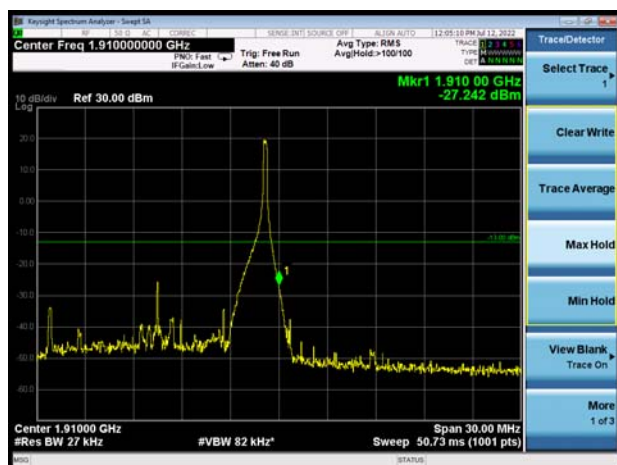
LTE Band 2 10MHz QPSK 100%RB CH-High



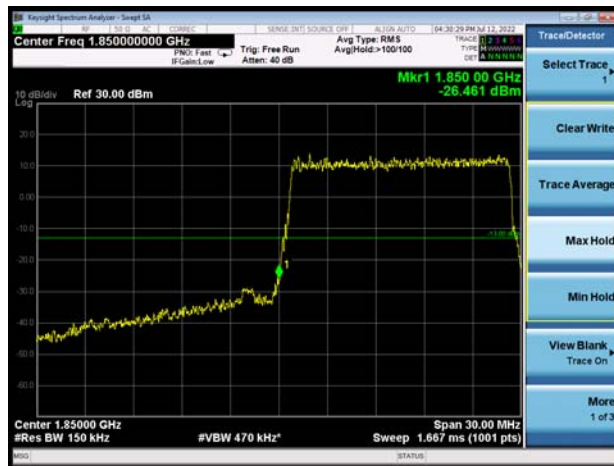
LTE Band 2 15MHz QPSK 1RB CH-Low



LTE Band 2 15MHz QPSK 1RB CH-High



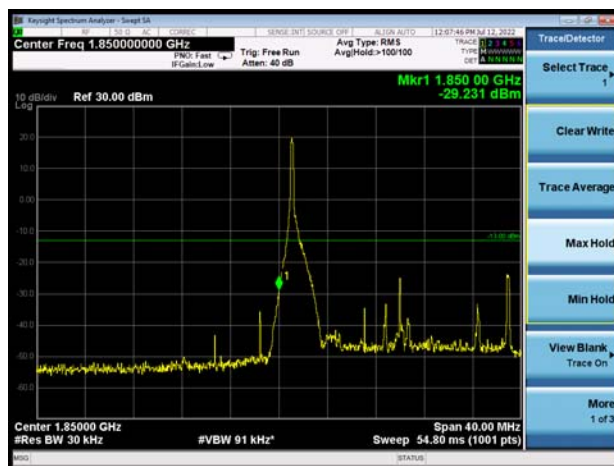
LTE Band 2 15MHz QPSK 100%RB CH-Low



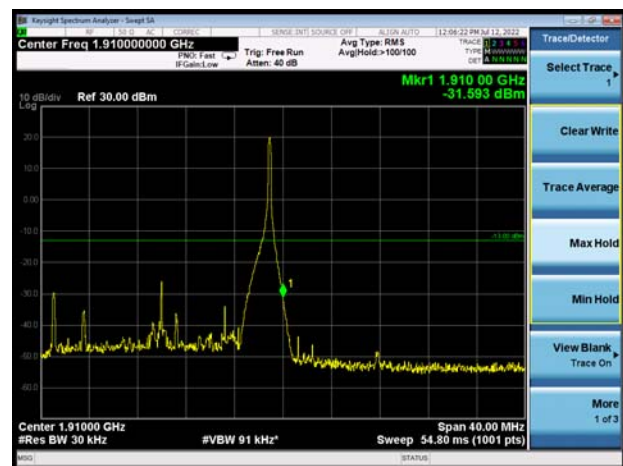
LTE Band 2 15MHz QPSK 100%RB CH-High



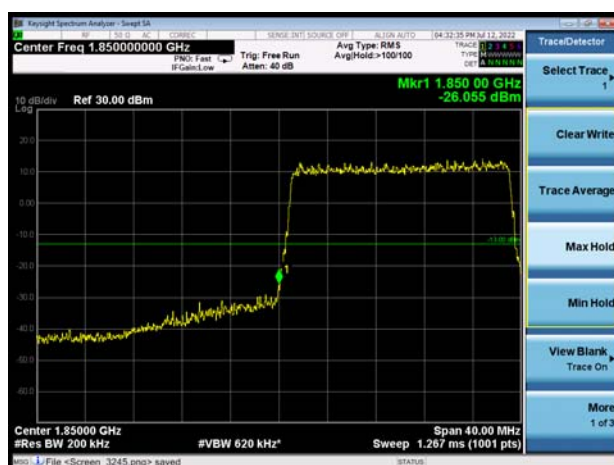
LTE Band 2 20MHz QPSK 1RB CH-Low



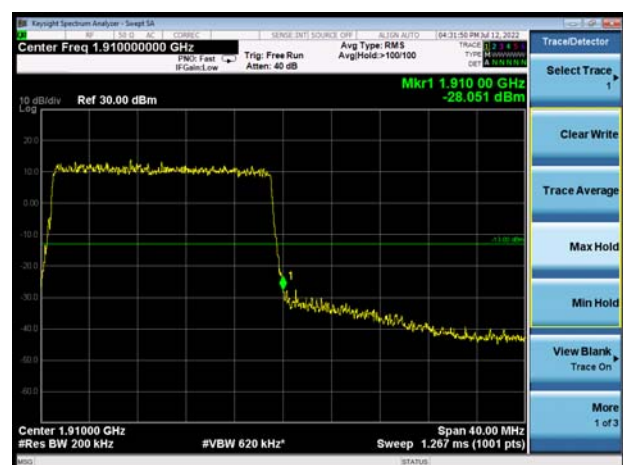
LTE Band 2 20MHz QPSK 1RB CH-High



LTE Band 2 20MHz QPSK 100%RB CH-Low

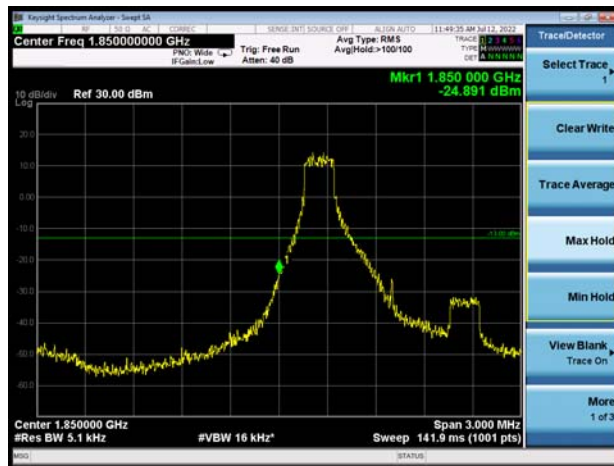


LTE Band 2 20MHz QPSK 100%RB CH-High

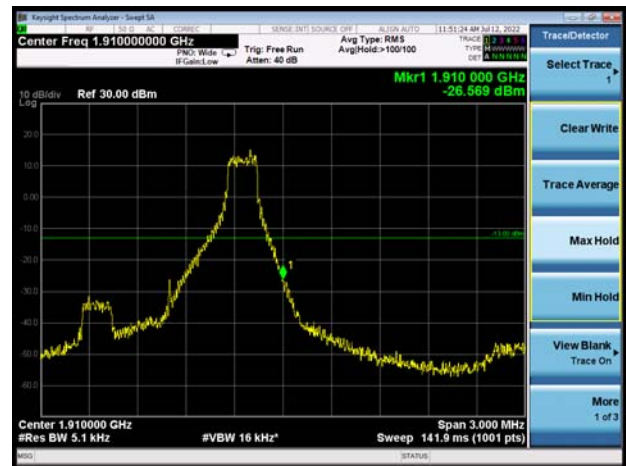




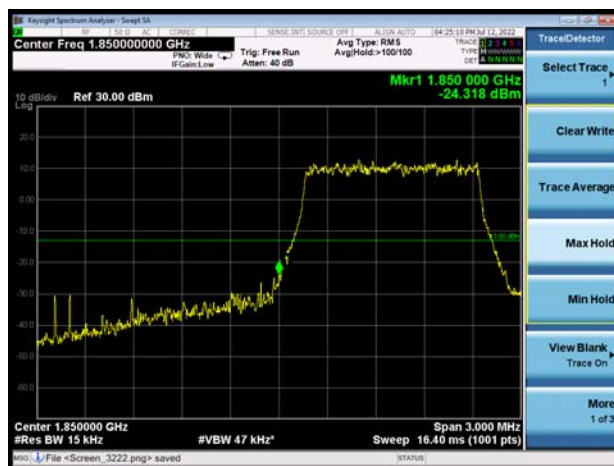
LTE Band 2 1.4MHz 16QAM 1RB CH-Low



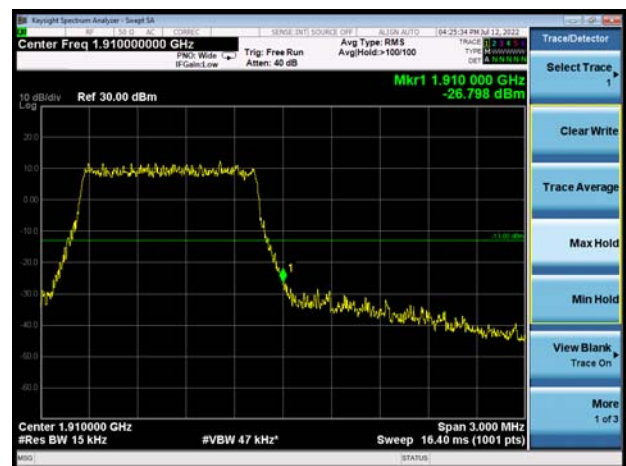
LTE Band 2 1.4MHz 16QAM 1RB CH-High



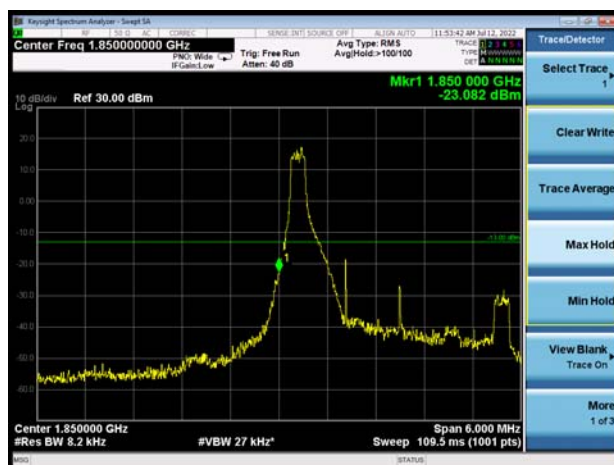
LTE Band 2 1.4MHz 16QAM 100%RB CH-Low



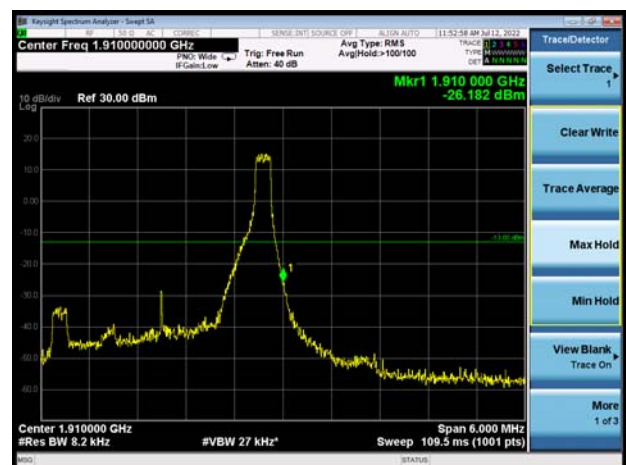
LTE Band 2 1.4MHz 16QAM 100%RB CH-High



LTE Band 2 3MHz 16QAM 1RB CH-Low

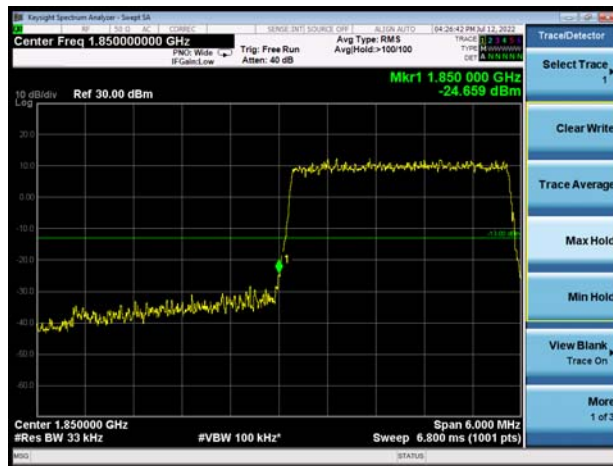


LTE Band 2 3MHz 16QAM 1RB CH-High





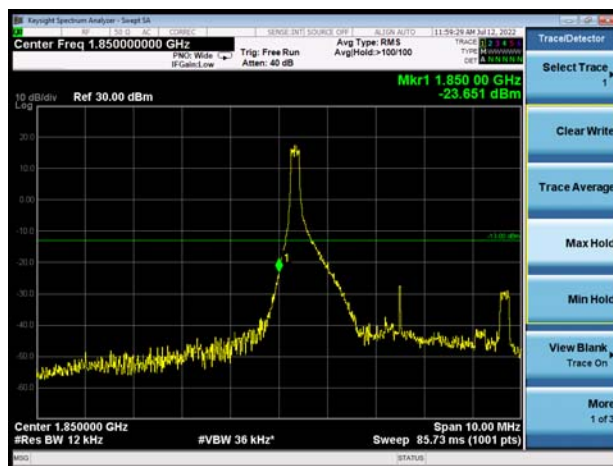
LTE Band 2 3MHz 16QAM 100%RB CH-Low



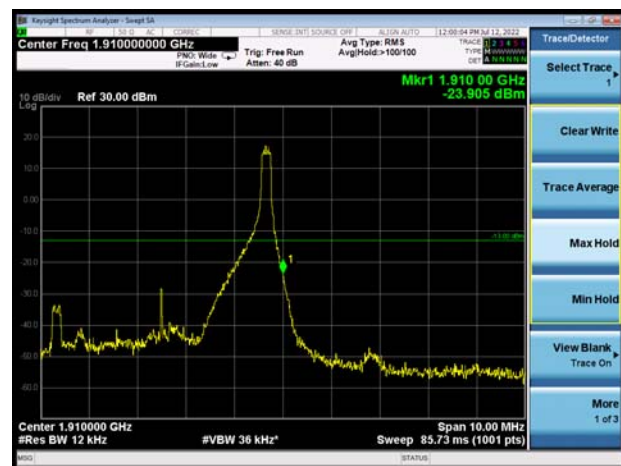
LTE Band 2 3MHz 16QAM 100%RB CH-High



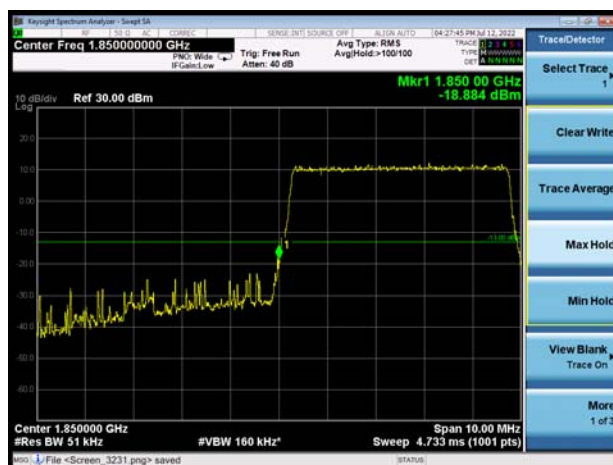
LTE Band 2 5MHz 16QAM 1RB CH-Low



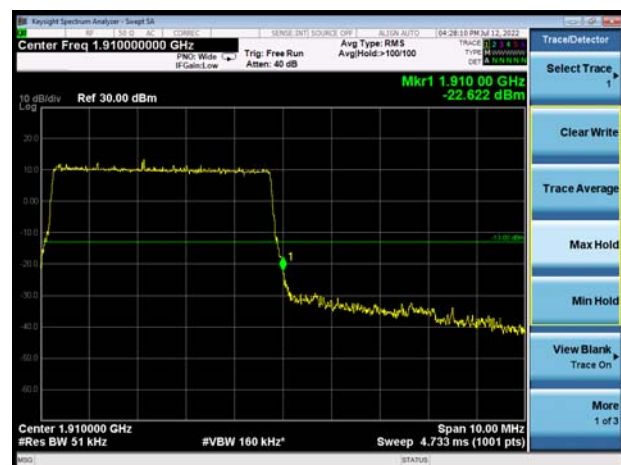
LTE Band 2 5MHz 16QAM 1RB CH-High



LTE Band 2 5MHz 16QAM 100%RB CH-Low

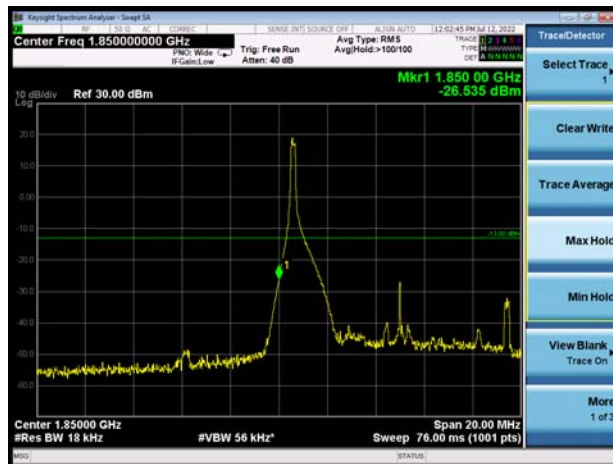


LTE Band 2 5MHz 16QAM 100%RB CH-High

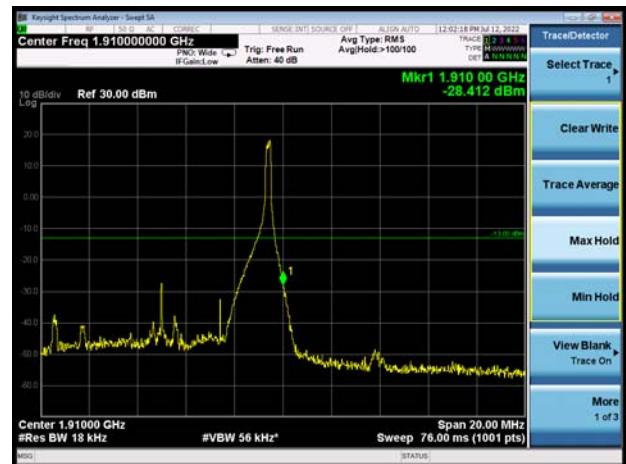




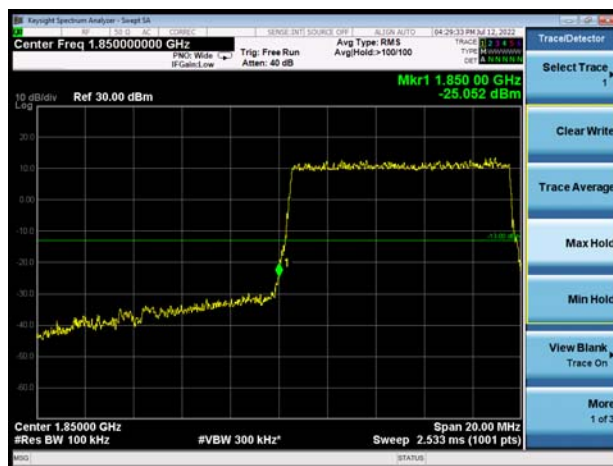
LTE Band 2 10MHz 16QAM 1RB CH-Low



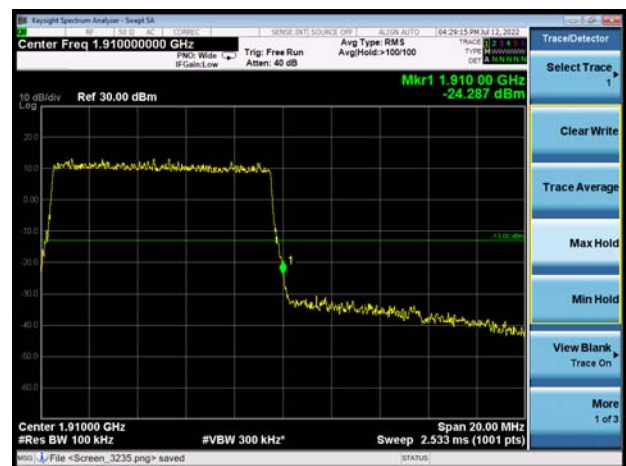
LTE Band 2 10MHz 16QAM 1RB CH-High



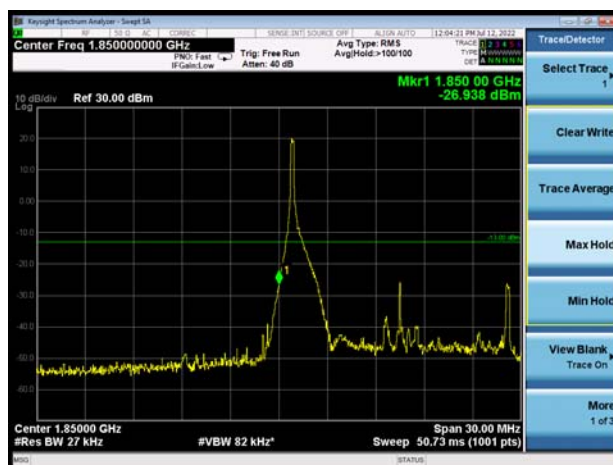
LTE Band 2 10MHz 16QAM 100%RB CH-Low



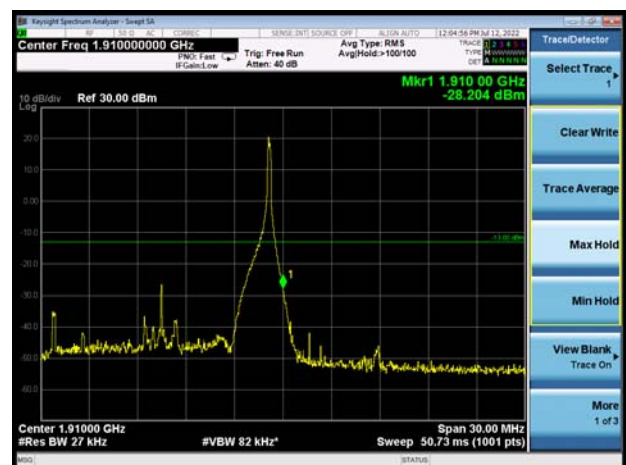
LTE Band 2 10MHz 16QAM 100%RB CH-High



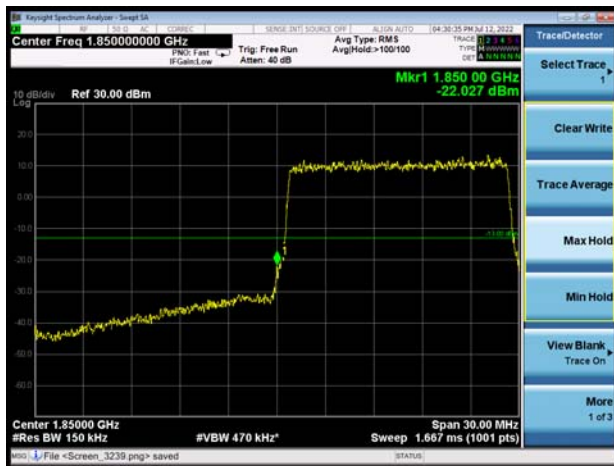
LTE Band 2 15MHz 16QAM 1RB CH-Low



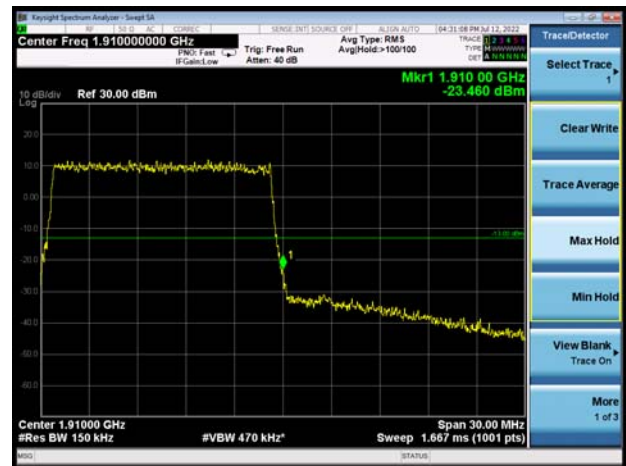
LTE Band 2 15MHz 16QAM 1RB CH-High



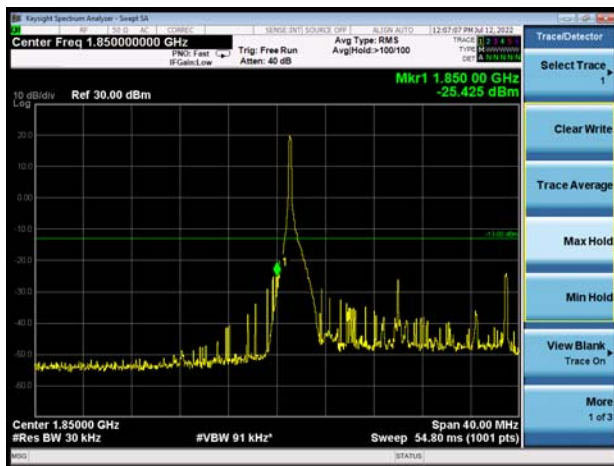
LTE Band 2 15MHz 16QAM 100%RB CH-Low



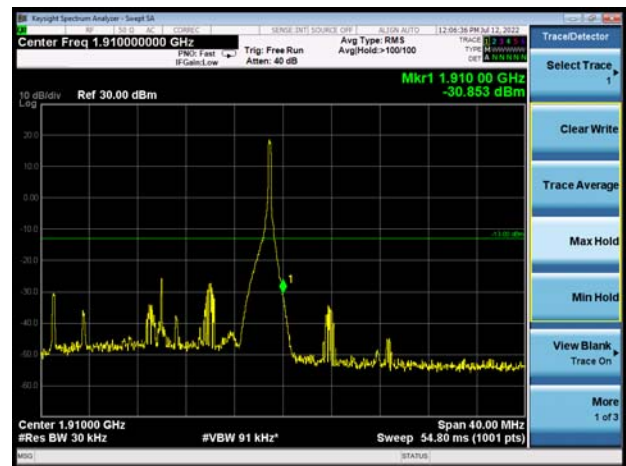
LTE Band 2 15MHz 16QAM 100%RB CH-High



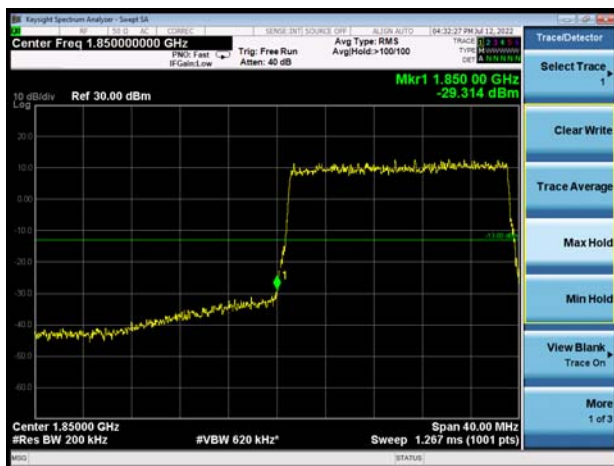
LTE Band 2 20MHz 16QAM 1RB CH-Low



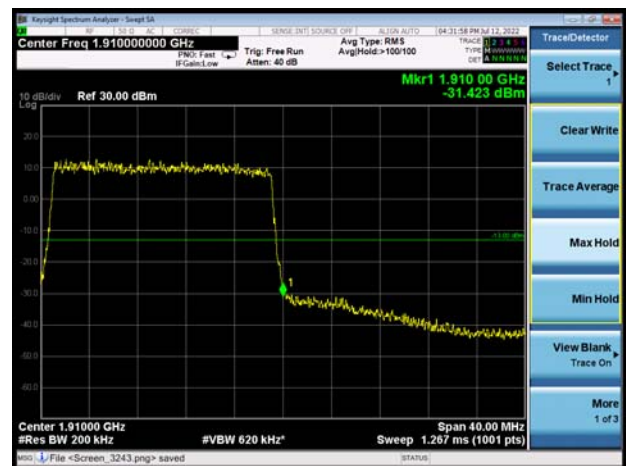
LTE Band 2 20MHz 16QAM 1RB CH-High



LTE Band 2 20MHz 16QAM 100%RB CH-Low



LTE Band 2 20MHz 16QAM 100%RB CH-High



6.4. Peak-to-Average Power Ratio (PAPR)

Mode	Channel	Frequency (MHz)	Peak(dBm)	Avg(dBm)	PAPR(dB)	Limit(dB)	Conclusion
GSM 1900 (GMSK)	512	1850.2	31.17	28.41	2.76	≤13	PASS
	661	1880	30.46	27.77	2.69	≤13	PASS
	810	1909.8	30.58	27.93	2.65	≤13	PASS
GPRS 1900 (GMSK)	512	1850.2	31.22	28.57	2.65	≤13	PASS
	661	1880	30.50	27.82	2.68	≤13	PASS
	810	1909.8	30.62	27.94	2.68	≤13	PASS
EGPRS 1900 (8PSK)	512	1850.2	29.67	24.12	5.55	≤13	PASS
	661	1880	28.36	22.80	5.56	≤13	PASS
	810	1909.8	28.99	23.44	5.55	≤13	PASS
WCDMA Band II (RMC)	9262	1852.4	28.09	25.08	3.01	≤13	PASS
	9400	1880	27.63	24.64	2.99	≤13	PASS
	9538	1907.6	27.58	24.66	2.92	≤13	PASS

LTE Band 2								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	18607	1850.7	26.92	21.53	5.39	≤13	PASS
		18900	1880.0	27.05	21.61	5.44	≤13	PASS
		19193	1909.3	26.90	21.66	5.24	≤13	PASS
	3	18615	1851.5	26.92	21.51	5.41	≤13	PASS
		18900	1880	27.09	21.57	5.52	≤13	PASS
		19185	1908.5	26.90	21.61	5.29	≤13	PASS
	5	18625	1852.5	27.03	21.48	5.55	≤13	PASS
		18900	1880	27.15	21.60	5.55	≤13	PASS
		19175	1907.5	27.12	21.66	5.46	≤13	PASS
	10	18650	1855	27.10	21.49	5.61	≤13	PASS
		18900	1880	27.21	21.61	5.60	≤13	PASS
		19150	1905	27.16	21.62	5.54	≤13	PASS
	15	18675	1857.5	27.53	21.53	6.00	≤13	PASS
		18900	1880	27.53	21.60	5.93	≤13	PASS
		19125	1902.5	27.50	21.66	5.84	≤13	PASS
	20	18700	1860	27.23	21.48	5.75	≤13	PASS
		18900	1880	27.16	21.54	5.62	≤13	PASS
		19100	1900	27.21	21.61	5.60	≤13	PASS



16QAM	1.4	18607	1850.7	26.73	20.50	6.23	≤13	PASS
		18900	1880.0	26.79	20.64	6.15	≤13	PASS
		19193	1909.3	26.87	20.74	6.13	≤13	PASS
	3	18615	1851.5	26.75	20.54	6.21	≤13	PASS
		18900	1880	26.90	20.61	6.29	≤13	PASS
		19185	1908.5	26.78	20.64	6.14	≤13	PASS
	5	18625	1852.5	26.79	20.51	6.28	≤13	PASS
		18900	1880	26.91	20.65	6.26	≤13	PASS
		19175	1907.5	26.89	20.72	6.17	≤13	PASS
	10	18650	1855	26.92	20.56	6.36	≤13	PASS
		18900	1880	27.02	20.67	6.35	≤13	PASS
		19150	1905	26.93	20.69	6.24	≤13	PASS
	15	18675	1857.5	27.04	20.55	6.49	≤13	PASS
		18900	1880	27.07	20.65	6.42	≤13	PASS
		19125	1902.5	27.06	20.68	6.38	≤13	PASS
	20	18700	1860	26.99	20.57	6.42	≤13	PASS
		18900	1880	26.95	20.58	6.37	≤13	PASS
		19100	1900	27.05	20.67	6.38	≤13	PASS

6.5. Frequency Stability

GSM 1900						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	GMSK	8PSK	GMSK	8PSK	
Normal (25℃)	Normal	12.75	8.28	0.00678	0.00440	PASS
Extreme (50℃)		1.47	17.04	0.00078	0.00906	PASS
Extreme (40℃)		6.74	14.33	0.00358	0.00762	PASS
Extreme (30℃)		14.12	9.38	0.00751	0.00499	PASS
Extreme (20℃)		3.70	1.37	0.00197	0.00073	PASS
Extreme (10℃)		3.75	4.24	0.00199	0.00226	PASS
Extreme (0℃)		11.73	12.69	0.00624	0.00675	PASS
Extreme (-10℃)		17.20	16.81	0.00915	0.00894	PASS
Extreme (-20℃)		11.36	8.20	0.00604	0.00436	PASS
Extreme (-30℃)		4.97	10.85	0.00264	0.00577	PASS
25℃	LV	13.29	6.86	0.00707	0.00365	PASS
	HV	14.57	16.84	0.00775	0.00896	PASS

WCDMA Band II						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	BPSK	QPSK	BPSK	QPSK	
Normal (25℃)	Normal	5.18	8.00	0.00276	0.00425	PASS
Extreme (50℃)		10.92	16.26	0.00581	0.00865	PASS
Extreme (40℃)		11.72	3.04	0.00623	0.00161	PASS
Extreme (30℃)		14.66	11.27	0.00780	0.00599	PASS
Extreme (20℃)		1.34	12.38	0.00071	0.00658	PASS
Extreme (10℃)		16.99	13.00	0.00903	0.00692	PASS
Extreme (0℃)		7.80	2.11	0.00415	0.00112	PASS
Extreme (-10℃)		9.51	6.01	0.00506	0.00319	PASS
Extreme (-20℃)		2.34	3.77	0.00124	0.00200	PASS
Extreme (-30℃)		8.80	17.18	0.00468	0.00914	PASS
25℃	LV	6.58	15.43	0.00350	0.00821	PASS
	HV	3.09	8.60	0.00164	0.00457	PASS

LTE Band 2						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	11.46	12.89	0.00609	0.00685	PASS
Extreme (50℃)		8.54	8.42	0.00454	0.00448	PASS
Extreme (40℃)		10.23	14.02	0.00544	0.00746	PASS
Extreme (30℃)		14.20	11.60	0.00755	0.00617	PASS
Extreme (20℃)		5.48	12.62	0.00291	0.00671	PASS
Extreme (10℃)		8.76	5.02	0.00466	0.00267	PASS
Extreme (0℃)		1.54	17.14	0.00082	0.00912	PASS
Extreme (-10℃)		2.71	14.55	0.00144	0.00774	PASS
Extreme (-20℃)		12.82	1.85	0.00682	0.00098	PASS
Extreme (-30℃)		1.29	9.12	0.00069	0.00485	PASS
25℃	LV	12.10	12.83	0.00644	0.00682	PASS
	HV	8.79	14.62	0.00467	0.00778	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	6.10	9.78	0.00325	0.00520	PASS
Extreme (50℃)		13.07	16.97	0.00695	0.00903	PASS
Extreme (40℃)		1.17	4.53	0.00062	0.00241	PASS
Extreme (30℃)		5.45	16.03	0.00290	0.00853	PASS
Extreme (20℃)		15.22	15.90	0.00810	0.00846	PASS
Extreme (10℃)		12.46	5.69	0.00663	0.00302	PASS
Extreme (0℃)		9.79	10.90	0.00521	0.00580	PASS
Extreme (-10℃)		4.88	11.92	0.00259	0.00634	PASS
Extreme (-20℃)		8.29	17.43	0.00441	0.00927	PASS
Extreme (-30℃)		17.13	8.34	0.00911	0.00443	PASS
25℃	LV	13.97	8.69	0.00743	0.00462	PASS
	HV	1.06	4.85	0.00056	0.00258	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	5.67	14.81	0.00302	0.00788	PASS
Extreme (50℃)		12.75	4.51	0.00678	0.00240	PASS
Extreme (40℃)		1.93	8.87	0.00103	0.00472	PASS



Extreme (30℃)		13.50	2.07	0.00718	0.00110	PASS
Extreme (20℃)		16.37	14.04	0.00871	0.00747	PASS
Extreme (10℃)		5.52	11.65	0.00293	0.00620	PASS
Extreme (0℃)		9.79	9.74	0.00521	0.00518	PASS
Extreme (-10℃)		17.83	2.72	0.00948	0.00145	PASS
Extreme (-20℃)		11.86	2.23	0.00631	0.00119	PASS
Extreme (-30℃)		5.13	13.46	0.00273	0.00716	PASS
25℃	LV	16.64	8.26	0.00885	0.00440	PASS
	HV	9.22	3.02	0.00490	0.00160	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	17.84	5.82	0.00949	0.00309	PASS
Extreme (50℃)		6.32	11.94	0.00336	0.00635	PASS
Extreme (40℃)		2.93	13.70	0.00156	0.00729	PASS
Extreme (30℃)		16.75	15.91	0.00891	0.00846	PASS
Extreme (20℃)		6.06	7.39	0.00323	0.00393	PASS
Extreme (10℃)		17.28	7.98	0.00919	0.00424	PASS
Extreme (0℃)		7.81	14.77	0.00416	0.00786	PASS
Extreme (-10℃)		10.33	15.18	0.00550	0.00807	PASS
Extreme (-20℃)		16.58	10.97	0.00882	0.00583	PASS
Extreme (-30℃)		12.50	10.16	0.00665	0.00540	PASS
25℃	LV	10.40	4.48	0.00553	0.00239	PASS
	HV	5.56	1.81	0.00295	0.00096	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	16.53	11.64	0.00879	0.00619	PASS
Extreme (50℃)		16.91	10.06	0.00899	0.00535	PASS
Extreme (40℃)		6.57	14.73	0.00350	0.00783	PASS
Extreme (30℃)		9.33	11.41	0.00496	0.00607	PASS
Extreme (20℃)		2.49	9.11	0.00132	0.00485	PASS
Extreme (10℃)		10.54	11.51	0.00561	0.00612	PASS
Extreme (0℃)		9.04	1.86	0.00481	0.00099	PASS
Extreme (-10℃)		8.87	16.39	0.00472	0.00872	PASS
Extreme (-20℃)		9.41	9.60	0.00500	0.00510	PASS
Extreme (-30℃)		12.10	15.30	0.00643	0.00814	PASS
25℃	LV	17.61	4.30	0.00937	0.00229	PASS
	HV	13.89	11.16	0.00739	0.00594	PASS



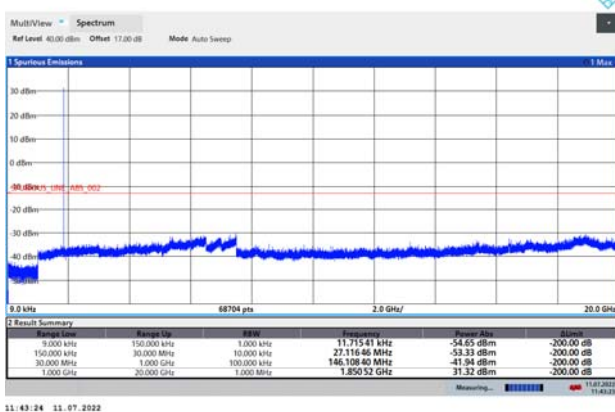
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	20MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	4.54	17.17	0.00242	0.00913	PASS
Extreme (50℃)		17.90	5.25	0.00952	0.00279	PASS
Extreme (40℃)		13.46	15.09	0.00716	0.00803	PASS
Extreme (30℃)		12.38	11.69	0.00658	0.00622	PASS
Extreme (20℃)		7.04	11.12	0.00374	0.00592	PASS
Extreme (10℃)		12.22	9.17	0.00650	0.00488	PASS
Extreme (0℃)		5.53	17.57	0.00294	0.00935	PASS
Extreme (-10℃)		11.61	13.81	0.00617	0.00735	PASS
Extreme (-20℃)		11.29	8.71	0.00600	0.00463	PASS
Extreme (-30℃)		9.49	13.89	0.00505	0.00739	PASS
25℃	LV	12.90	6.62	0.00686	0.00352	PASS
	HV	10.84	13.78	0.00576	0.00733	PASS

6.6. Spurious Emissions at Antenna Terminals

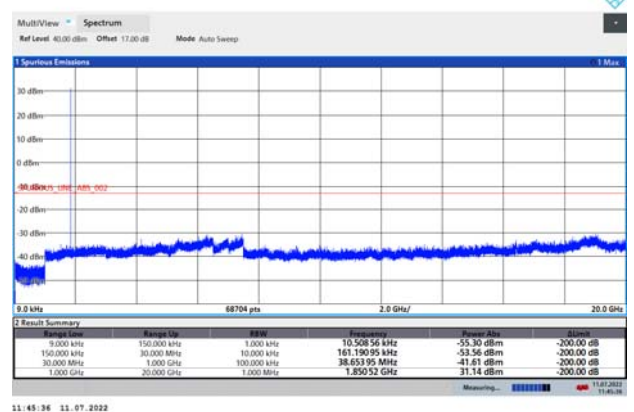
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

The signal beyond the limit is carrier.

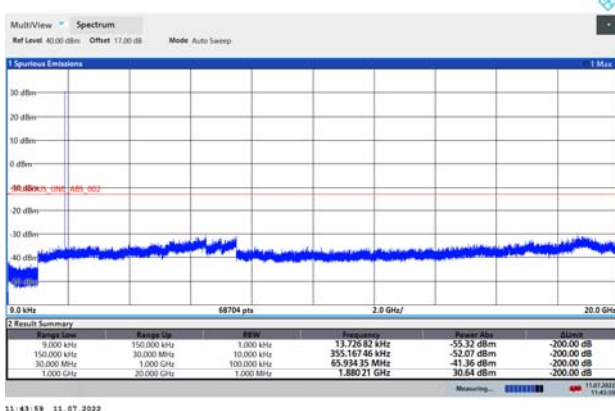
GSM 1900 CH-Low 9kHz ~ 20GHz



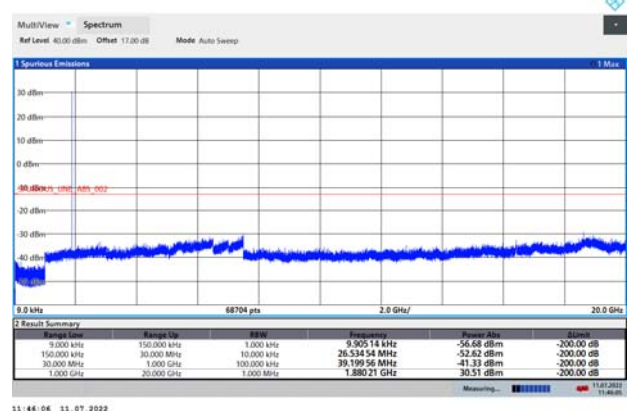
GPRS 1900 CH-Low 9kHz ~ 20GHz



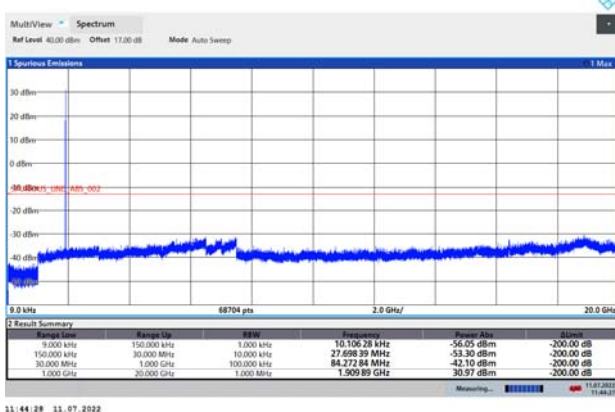
GSM 1900 CH- Middle 9kHz ~ 20GHz



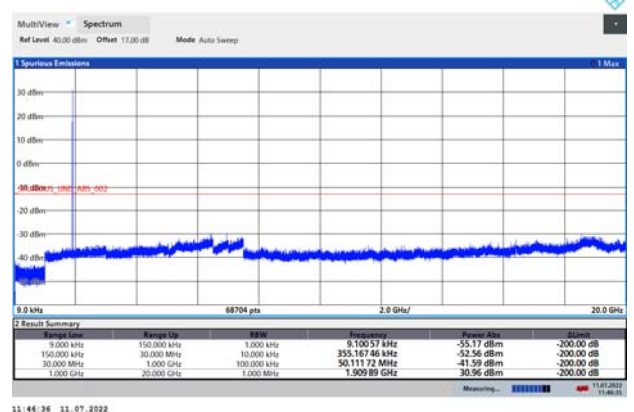
GPRS 1900 CH- Middle 9kHz ~ 20GHz



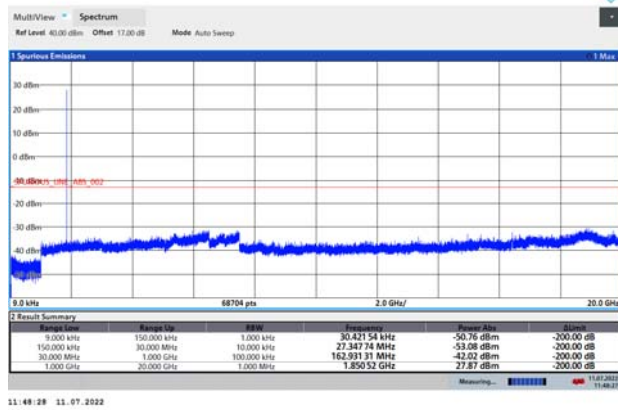
GSM 1900 CH-High 9kHz ~ 20GHz



GPRS 1900 CH-High 9kHz ~ 20GHz

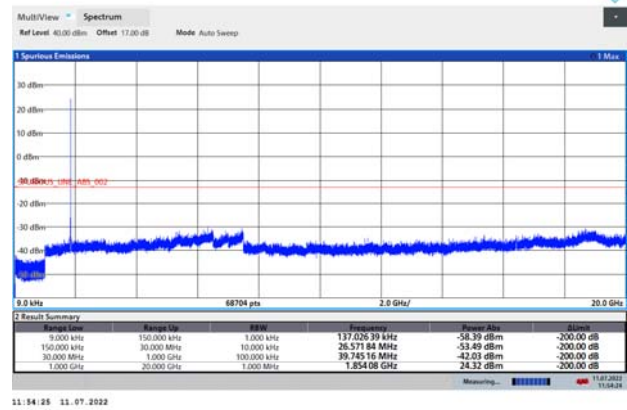


EGPRS 1900 CH-Low 9kHz ~ 20GHz



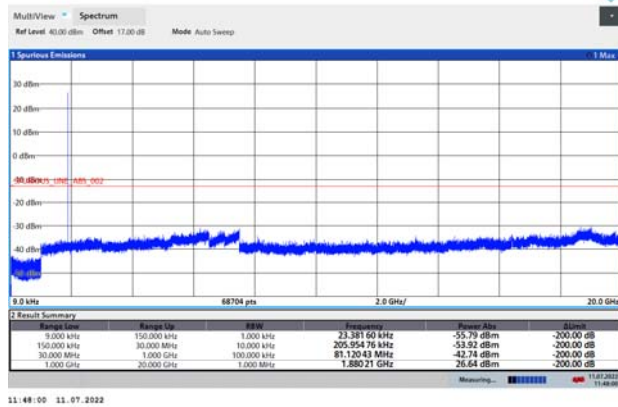
11:49:29 11.07.2022

WCDMA BAND II CH-Low 9kHz ~ 20GHz



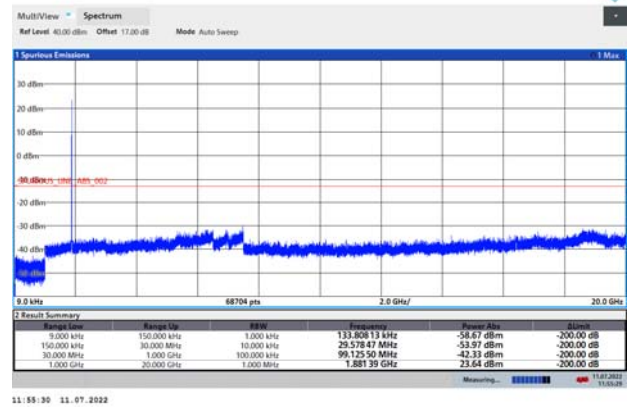
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EGPRS 1900 CH- Middle 9kHz ~ 20GHz



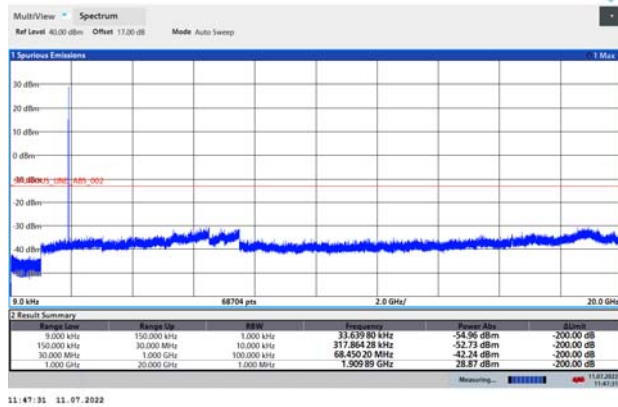
11:49:00 11.07.2022

WCDMA BAND II CH- Middle 9kHz ~ 20GHz



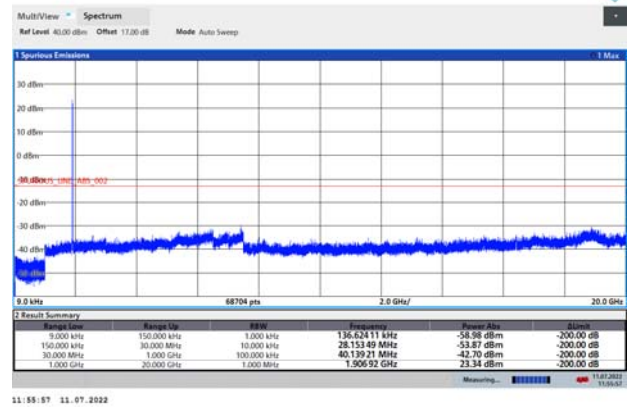
11:59:30 11.07.2022

EGPRS 1900 CH-High 9kHz ~ 20GHz



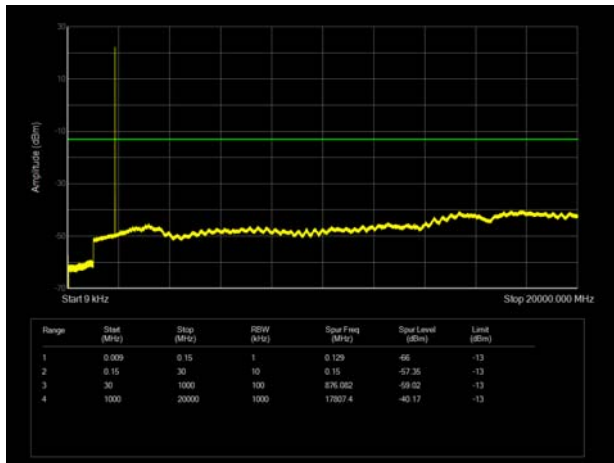
11:47:31 11.07.2022

WCDMA BAND II CH-High 9kHz ~ 20GHz

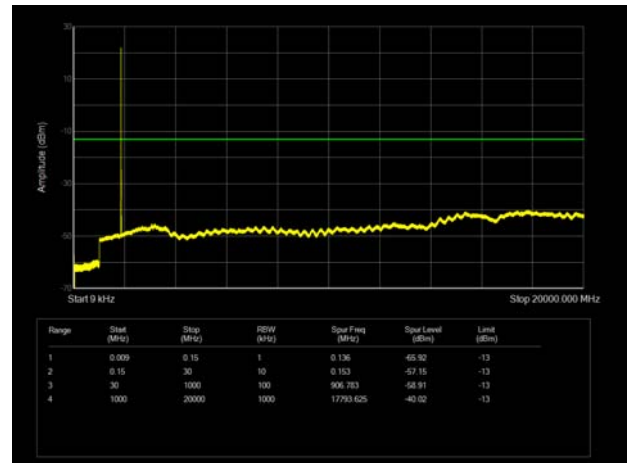


11:55:57 11.07.2022

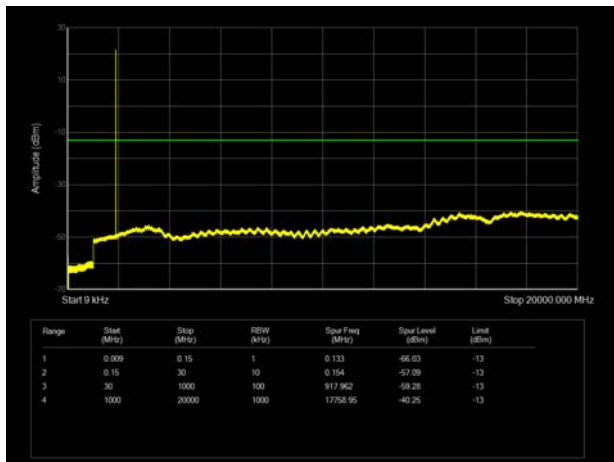
LTE Band 2 1.4MHz CH-Low 9kHz~20GHz



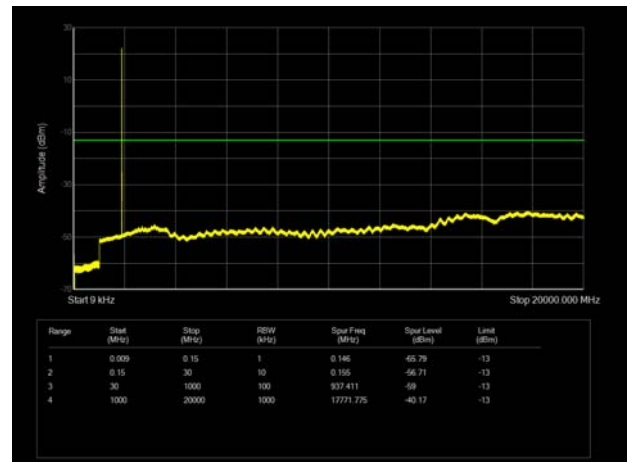
LTE Band 2 3MHz CH-Low 9kHz~20GHz



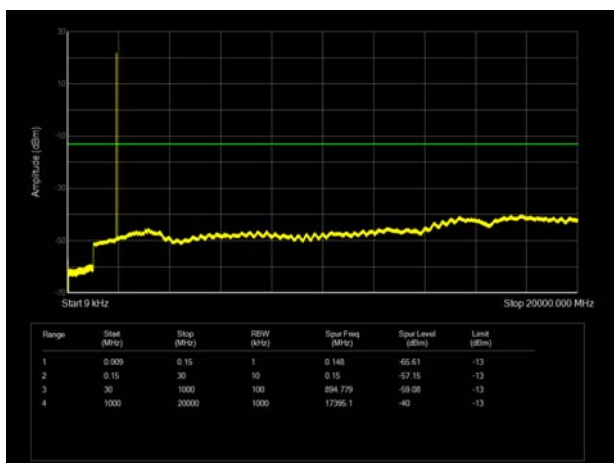
LTE Band 2 1.4MHz CH-Middle 9kHz~20GHz



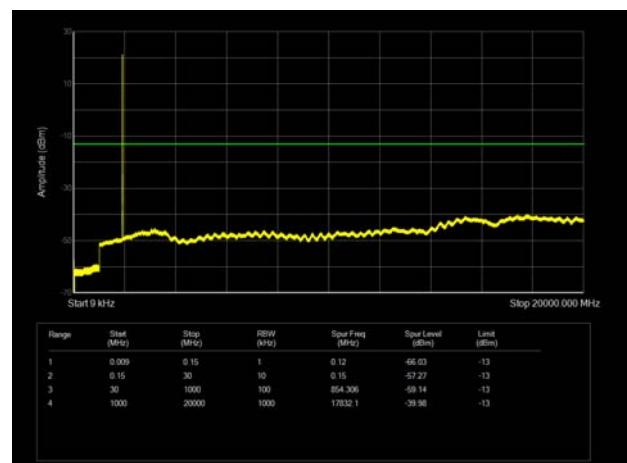
LTE Band 2 3MHz CH-Middle 9kHz~20GHz



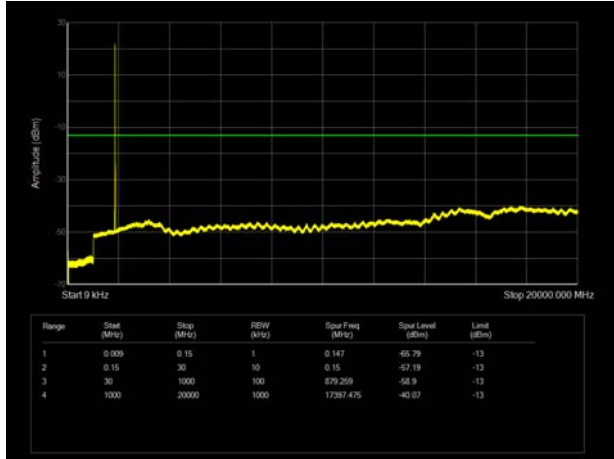
LTE Band 2 1.4MHz CH-High 9kHz~20GHz



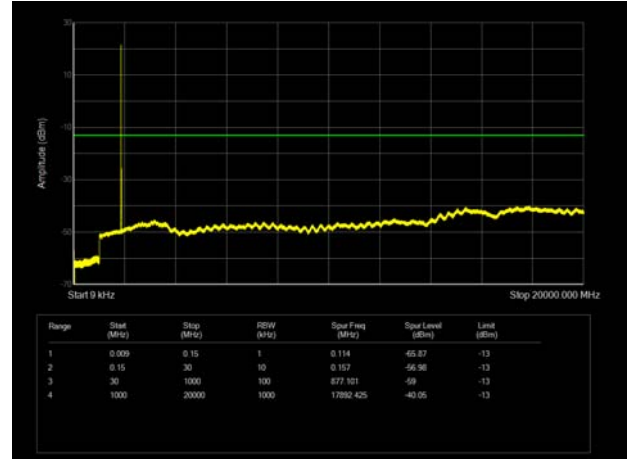
LTE Band 2 3MHz CH-High 9kHz~20GHz



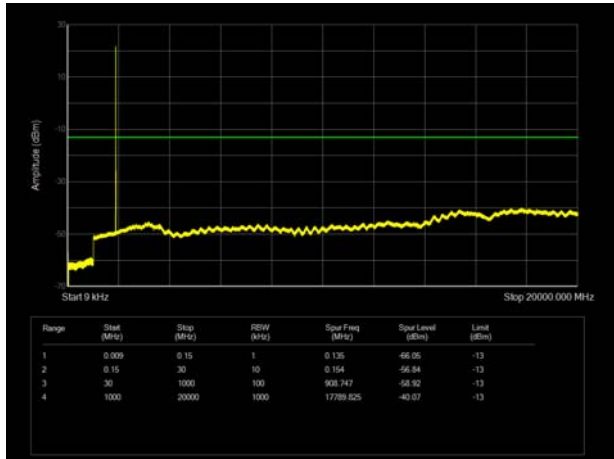
LTE Band 2 5MHz CH-Low 9kHz~20GHz



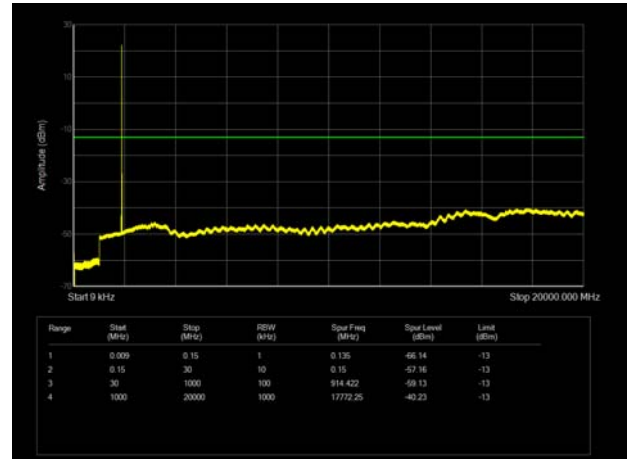
LTE Band 2 10MHz CH-Low 9kHz~20GHz



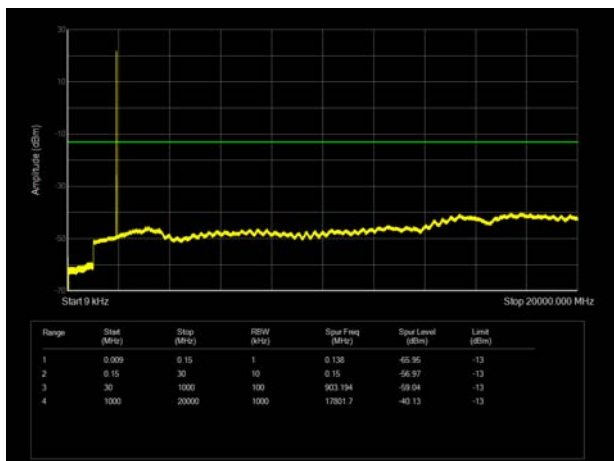
LTE Band 2 5MHz CH-Middle 9kHz~20GHz



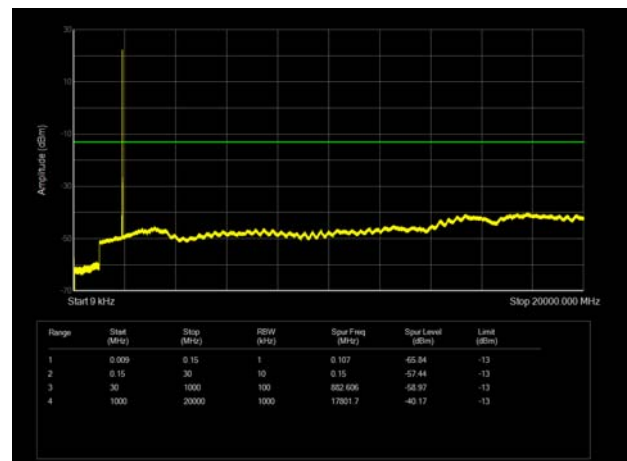
LTE Band 2 10MHz CH-Middle 9kHz~20GHz



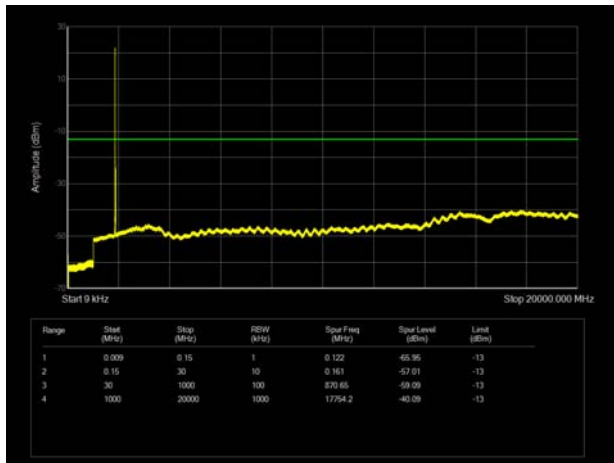
LTE Band 2 5MHz CH-High 9kHz~20GHz



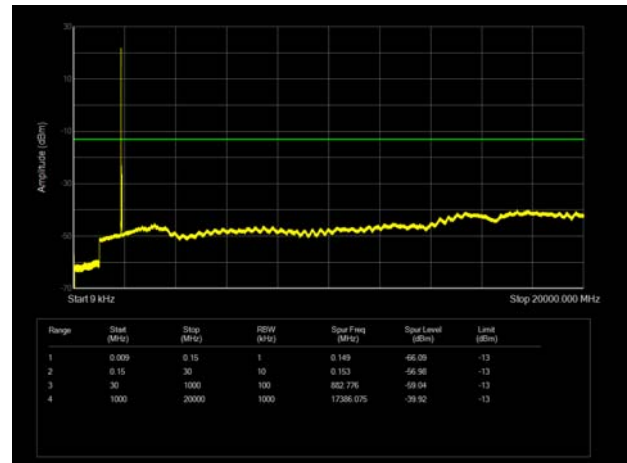
LTE Band 2 10MHz CH-High 9kHz~20GHz



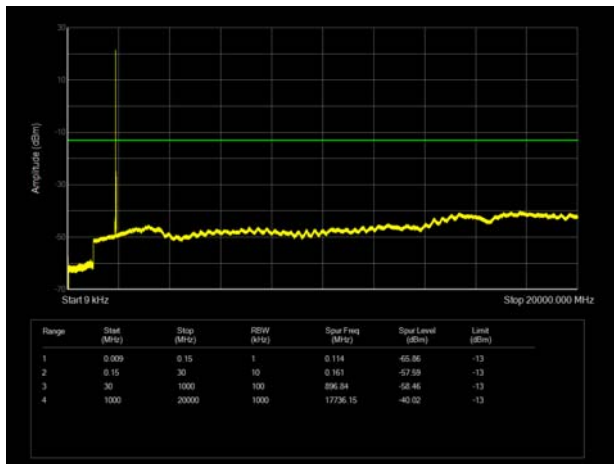
LTE Band 2 15MHz CH-Low 9kHz~20GHz



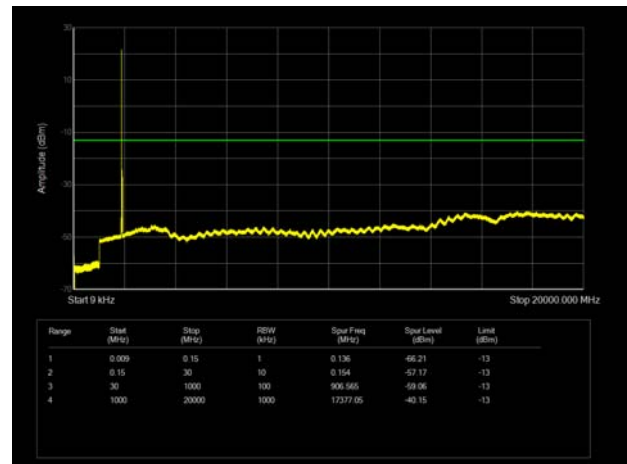
LTE Band 2 20MHz CH-Low 9kHz~20GHz



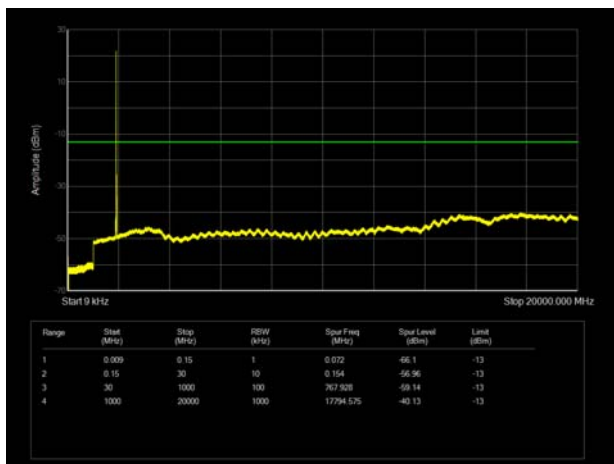
LTE Band 2 15MHz CH-Middle 9kHz~20GHz



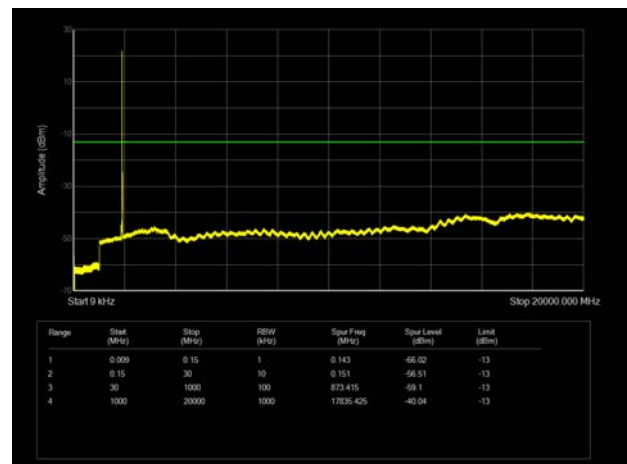
LTE Band 2 20MHz CH-Middle 9kHz~20GHz



LTE Band 2 15MHz CH-High 9kHz~20GHz



LTE Band 2 20MHz CH-High 9kHz~20GHz



6.7. Radiates Spurious Emission

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

Main Antenna

GSM 1900 CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3760.00	-67.32	2.60	12.50	Vertical	-57.42	-13.00	44.42	45
3	5640.00	-62.23	3.30	12.50	Vertical	-53.03	-13.00	40.03	225
4	7520.00	-57.01	4.20	12.20	Vertical	-49.01	-13.00	36.01	0
5	9400.00	-53.53	4.30	11.10	Vertical	-46.73	-13.00	33.73	90
6	11280.00	-49.35	5.90	11.90	Vertical	-43.35	-13.00	30.35	45
7	13160.00	-51.42	5.70	14.00	Vertical	-43.12	-13.00	30.12	315
8	15040.00	-50.19	5.80	13.10	Vertical	-42.89	-13.00	29.89	90
9	16920.00	-50.07	6.10	14.60	Vertical	-41.57	-13.00	28.57	135
10	18800.00	-	-	-	-	-	-	-	-

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

WCDMA Band II CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3760.00	-66.80	2.60	12.50	Vertical	-56.90	-13.00	43.90	0
3	5640.00	-65.63	3.30	12.50	Vertical	-56.43	-13.00	43.43	135
4	7520.00	-56.05	4.20	12.20	Vertical	-48.05	-13.00	35.05	180
5	9400.00	-54.37	4.30	11.10	Vertical	-47.57	-13.00	34.57	0
6	11280.00	-50.65	5.90	11.90	Vertical	-44.65	-13.00	31.65	315
7	13160.00	-50.64	5.70	14.00	Vertical	-42.34	-13.00	29.34	45
8	15040.00	-52.25	5.80	13.10	Vertical	-44.95	-13.00	31.95	180
9	16920.00	-49.91	6.10	14.60	Vertical	-41.41	-13.00	28.41	0
10	18800.00	-	-	-	-	-	-	-	-

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE Band 2 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3758.70	-65.32	2.60	12.50	Vertical	-55.42	-13.00	42.42	45
3	5638.88	-65.87	3.30	12.50	Vertical	-56.67	-13.00	43.67	270
4	7520.00	-57.57	4.20	12.20	Vertical	-49.57	-13.00	36.57	225
5	9400.00	-53.38	4.30	11.10	Vertical	-46.58	-13.00	33.58	315
6	11280.00	-49.76	5.90	11.90	Vertical	-43.76	-13.00	30.76	180
7	13160.00	-52.04	5.70	14.00	Vertical	-43.74	-13.00	30.74	0
8	15040.00	-52.51	5.80	13.10	Vertical	-45.21	-13.00	32.21	45
9	16920.00	-50.19	6.10	14.60	Vertical	-41.69	-13.00	28.69	180
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE Band 2 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3755.40	-66.73	2.60	12.50	Vertical	-56.83	-13.00	43.83	180
3	5633.63	-65.49	3.30	12.50	Vertical	-56.29	-13.00	43.29	0
4	7510.00	-55.94	4.20	12.20	Vertical	-47.94	-13.00	34.94	225
5	9387.50	-52.16	4.30	11.10	Vertical	-45.36	-13.00	32.36	0
6	11265.00	-51.18	5.90	11.90	Vertical	-45.18	-13.00	32.18	270
7	13142.00	-50.41	5.70	14.00	Vertical	-42.11	-13.00	29.11	315
8	15020.00	-52.38	5.80	13.10	Vertical	-45.08	-13.00	32.08	180
9	16897.50	-49.98	6.10	14.60	Vertical	-41.48	-13.00	28.48	45
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE Band 2 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3742.13	-65.64	2.60	12.50	Vertical	-55.74	-13.00	42.74	45
3	5613.38	-65.67	3.30	12.50	Vertical	-56.47	-13.00	43.47	180
4	7484.63	-60.02	4.20	12.20	Vertical	-52.02	-13.00	39.02	0
5	9355.33	-55.28	4.30	11.10	Vertical	-48.48	-13.00	35.48	315
6	11226.39	-52.59	5.90	11.90	Vertical	-46.59	-13.00	33.59	90
7	13097.46	-52.51	5.70	14.00	Vertical	-44.21	-13.00	31.21	270
8	14968.52	-50.56	5.80	13.10	Vertical	-43.26	-13.00	30.26	135
9	16938.59	-50.47	6.10	14.60	Vertical	-41.97	-13.00	28.97	180
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

Second Antenna

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3760.00	-62.55	2.60	12.50	Horizontal	-52.65	-13.00	39.65	135
3	5640.00	-62.55	3.30	12.50	Horizontal	-53.35	-13.00	40.35	180
4	7520.00	-56.41	4.20	12.20	Horizontal	-48.41	-13.00	35.41	90
5	9400.00	-53.46	4.30	11.10	Horizontal	-46.66	-13.00	33.66	0
6	11280.00	-48.86	5.90	11.90	Horizontal	-42.86	-13.00	29.86	45
7	13160.00	-52.10	5.70	14.00	Horizontal	-43.80	-13.00	30.80	225
8	15040.00	-51.55	5.80	13.10	Horizontal	-44.25	-13.00	31.25	90
9	16920.00	-50.03	6.10	14.60	Horizontal	-41.53	-13.00	28.53	135
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

WCDMA Band II CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3760.00	-67.01	2.60	12.50	Horizontal	-57.11	-13.00	44.11	90
3	5640.00	-65.47	3.30	12.50	Horizontal	-56.27	-13.00	43.27	0
4	7520.00	-57.38	4.20	12.20	Horizontal	-49.38	-13.00	36.38	0
5	9400.00	-51.57	4.30	11.10	Horizontal	-44.77	-13.00	31.77	90
6	11280.00	-52.86	5.90	11.90	Horizontal	-46.86	-13.00	33.86	45
7	13160.00	-52.01	5.70	14.00	Horizontal	-43.71	-13.00	30.71	225
8	15040.00	-51.63	5.80	13.10	Horizontal	-44.33	-13.00	31.33	90
9	16920.00	-49.65	6.10	14.60	Horizontal	-41.15	-13.00	28.15	135
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 2 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3758.70	-63.40	2.60	12.50	Horizontal	-53.50	-13.00	40.50	315
3	5638.88	-64.61	3.30	12.50	Horizontal	-55.41	-13.00	42.41	270
4	7520.00	-56.72	4.20	12.20	Horizontal	-48.72	-13.00	35.72	225
5	9400.00	-53.72	4.30	11.10	Horizontal	-46.92	-13.00	33.92	315
6	11280.00	-49.08	5.90	11.90	Horizontal	-43.08	-13.00	30.08	180
7	13160.00	-50.82	5.70	14.00	Horizontal	-42.52	-13.00	29.52	0
8	15040.00	-51.92	5.80	13.10	Horizontal	-44.62	-13.00	31.62	45
9	16920.00	-49.57	6.10	14.60	Horizontal	-41.07	-13.00	28.07	180
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 2 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3755.40	-63.17	2.60	12.50	Horizontal	-53.27	-13.00	40.27	180
3	5633.63	-65.28	3.30	12.50	Horizontal	-56.08	-13.00	43.08	0
4	7510.00	-57.35	4.20	12.20	Horizontal	-49.35	-13.00	36.35	225
5	9387.50	-53.21	4.30	11.10	Horizontal	-46.41	-13.00	33.41	0
6	11265.00	-50.76	5.90	11.90	Horizontal	-44.76	-13.00	31.76	270
7	13142.00	-52.27	5.70	14.00	Horizontal	-43.97	-13.00	30.97	315
8	15020.00	-52.87	5.80	13.10	Horizontal	-45.57	-13.00	32.57	180
9	16897.50	-50.64	6.10	14.60	Horizontal	-42.14	-13.00	29.14	45
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 2 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3742.13	-64.76	2.60	12.50	Horizontal	-54.86	-13.00	41.86	45
3	5613.38	-67.79	3.30	12.50	Horizontal	-58.59	-13.00	45.59	180
4	7484.63	-59.01	4.20	12.20	Horizontal	-51.01	-13.00	38.01	0
5	9355.33	-54.10	4.30	11.10	Horizontal	-47.30	-13.00	34.30	315
6	11226.39	-49.46	5.90	11.90	Horizontal	-43.46	-13.00	30.46	90
7	13097.46	-48.28	5.70	14.00	Horizontal	-39.98	-13.00	26.98	270
8	14968.52	-50.68	5.80	13.10	Horizontal	-43.38	-13.00	30.38	135
9	16938.59	-51.76	6.10	14.60	Horizontal	-43.26	-13.00	30.26	180
10	18800.00	-	-	-	-	-	-	-	-

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

7. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Climate Chamber	ESPEC	SU-242	93000506	2021-12-12	2022-12-11
Wideband radio communication tester	R&S	CMW500	150415	2022-05-14	2023-05-13
Spectrum Analyzer	Keysight	N9020A	MY50510203	2021-12-12	2022-12-11
Universal Radio Communication Tester	Agilent	E5515C	GB44400275	2021-12-12	2022-12-11
Spectrum Analyzer	R&S	FSV3030	101411	2021-12-12	2022-12-11
Spectrum Analyzer	R&S	FSV30	104028	2021-12-12	2022-12-11
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	01111	2019--9-12	2022-09-11
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2023-12-16
Software	R&S	EMC32	10.35.10	/	/

*****END OF REPORT *****



ANNEX A: The EUT Appearance

The EUT Appearance is submitted separately.



ANNEX B: Test Setup Photos

The Test Setup Photos is submitted separately.