RF TEST REPORT

Applicant	MeiG Smart Technology Co., Ltd
FCC ID	2APJ4-MT579
Product	4G Mobile WiFi
Brand	MEIGLink
Model	MT579
Report No.	R2402A0143-R2
Issue Date	July 1, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2023)/ FCC CFR 47 Part 24E (2023)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Xu Ying *Approved by: Xu Kai*

Eurofins TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
TEL: +86-021-50791141/2/3
FAX: +86-021-50791141/2/3-8000

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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	Radiated Spurious Emission	2.1053 / 24.238(a)	PASS
Date of Testing: February 23, 2024 ~ March 14, 2024 Date of Sample Received: February 22, 2024			
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 Eurofins 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 **Eurofins 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)

Eurofins 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)

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

1.3. Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
Address:	Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Xu Kai
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	https://www.eurofins.com/electrical-and-electronics
E-mail:	Kain.Xu@cpt.eurofinscn.com

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	MeiG Smart Technology Co., Ltd
Applicant address	2nd Floor,Office Building,No.5 Lingxia Road,Fenghuang,Fuyong Street,Bao'an District,Shenzhen
Manufacturer	MeiG Smart Technology Co., Ltd
Manufacturer address	2nd Floor,Office Building,No.5 Lingxia Road,Fenghuang,Fuyong Street,Bao'an District,Shenzhen

2.2. General information

EUT Description			
Model	MT579		
Lab internal SN	R2402A0143/S01		
Hardware Version	MT579_PCB_V1.00		
Software Version	MT579-SA_4.0.2_EQ100		
Power Supply	Battery / AC adapter		
Antenna Type	Internal Antenna		
Antenna Gain	-0.43 dBi		
Test Mode(s)	WCDMA Band II; LTE Band 2;		
Test Modulation	(WCDMA) BPSK, QPSK,16QAM; (LTE) QPSK, 16QAM;		
HSDPA UE Category	14		
HSUPA UE Category	6		
HSPA+ UE Category	14		
LTE Category	4		
Maximum E.I.R.P	WCDMA Band II:	20.74 dBm	
	LTE Band 2:	23.63 dBm	
Rated Power Supply Voltage	3.8V		
Operating Voltage	Minimum: 3.5V Maximum: 4.25V		
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)
	WCDMA Band II	1850 ~ 1910	1930 ~ 1990
	LTE Band 2	1850 ~ 1910	1930 ~ 1990
EUT Accessory			
Adapter	Manufacturer: Dongguan Sunun Power Co., Ltd Model: SA68-050100U Input: 100-240V 0.2A		

Battery 1	Manufacturer: ShenzhenAerospaceElectronic Co.,Ltd. Model: MG584463
Battery 2	Manufacturer: Zhongshan Tianmao Battery Co., Ltd. Model: MG584463
USB Cable	Manufacturer: Shenzhen Gaohangda Technology Co., LTD Model: /
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.	

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 (2023)

FCC CFR47 Part 2 (2023)

Reference standard:
ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

4. Test Configuration

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 (Z axis, vertical polarization for WCDMA Band II; X axis, horizontal polarization for LTE Band 2) 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 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
	WCDMA Band II
RF Power Output and Effective Isotropic Radiated Power	RMC HSDPA/HSUPA HSPA+
Occupied Bandwidth	RMC
Band Edge Compliance	RMC
Peak-to-Average Power Ratio	RMC
Frequency Stability	RMC
Spurious Emissions at Antenna Terminals	RMC
Radiated Spurious Emission	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
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
Radiated 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

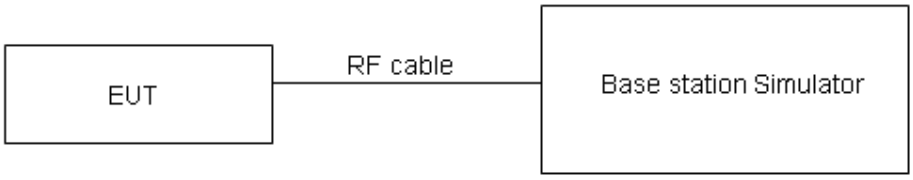
Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

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 (dBm) = Output Power (dBm) + Antenna Gain (dBi)
EIRP (dBm) = ERP (dBm) + 2.15 (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	⩽ 2 W (33 dBm)

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 for RF power output, k = 2, U= 1.19 dB for EIRP.

Test Results

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

5.2. Occupied Bandwidth

Ambient condition

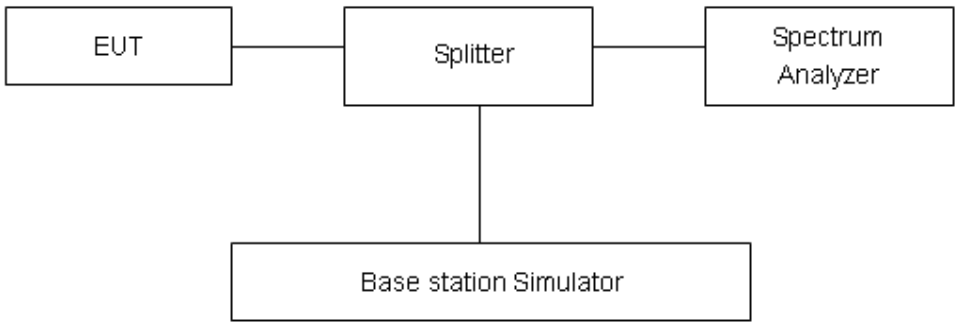
Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

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 ≥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= 624Hz.

Test Results

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

5.3. Band Edge Compliance

Ambient condition

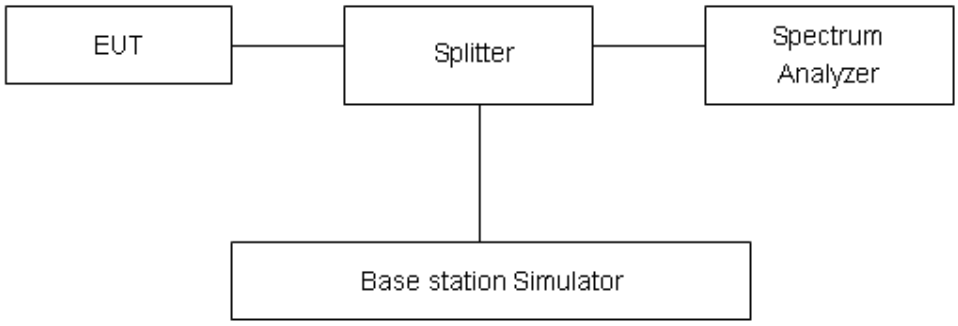
Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

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 ≥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 log10 (P) dB.”

Limit	-13 dBm

Measurement Uncertainty

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

Test Results

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

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

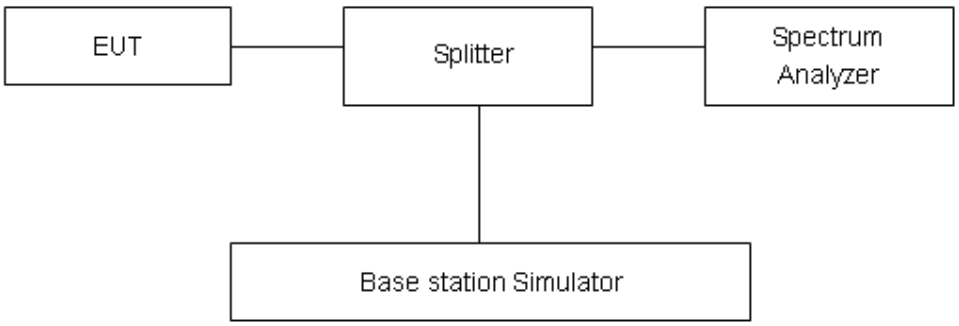
Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

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:
PAPR (dB) = PPk (dBm) - PAvg (dBm).

Test Setup



Limits

In measuring transmissions in this band using an average power technique, the peakto-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
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

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.

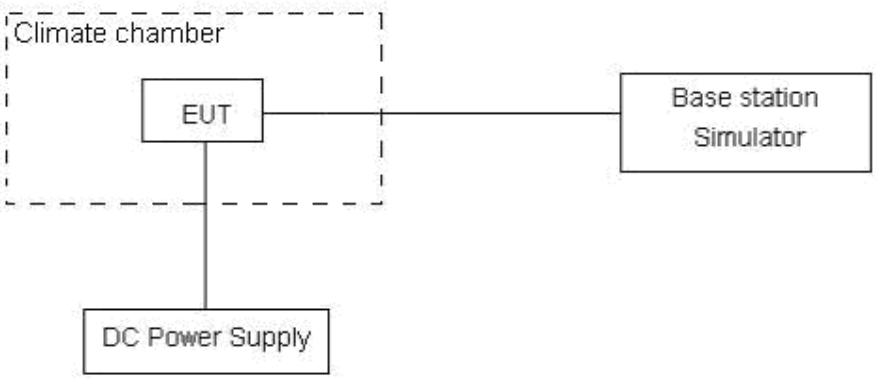
Frequency Stability (Voltage Variation)

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 3.5 V and 4.25 V, with a nominal voltage of 3.8V.

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= 0.01ppm.

Test Results

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

5.6. Spurious Emissions at Antenna Terminals

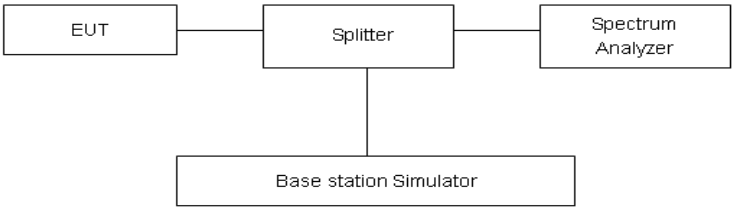
Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

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 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)
Sweep is set to AUTO.
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 log10 (P) dB.”

Limit	-13 dBm

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. Radiated Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

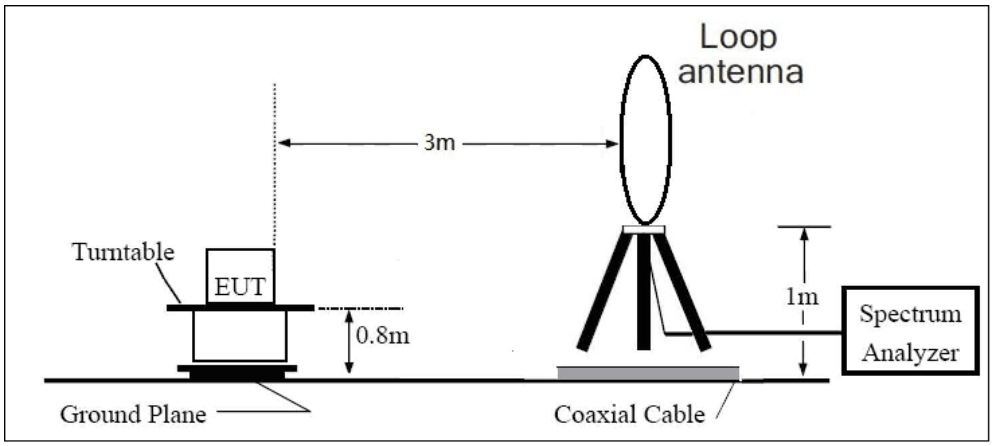
1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26-2015.
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable 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:
Power(EIRP)=PMea- PAg - Pcl + Ga
The measurement results are amend as described below:
Power(EIRP)=PMea- Pcl + 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.

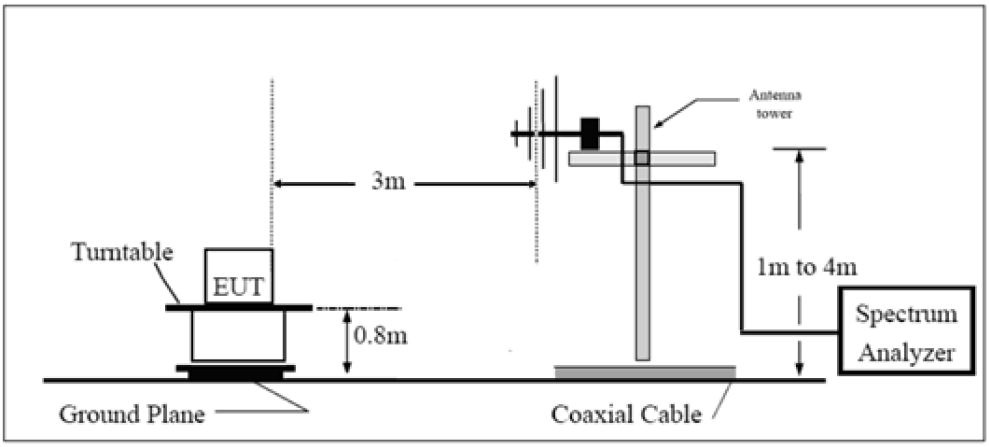
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

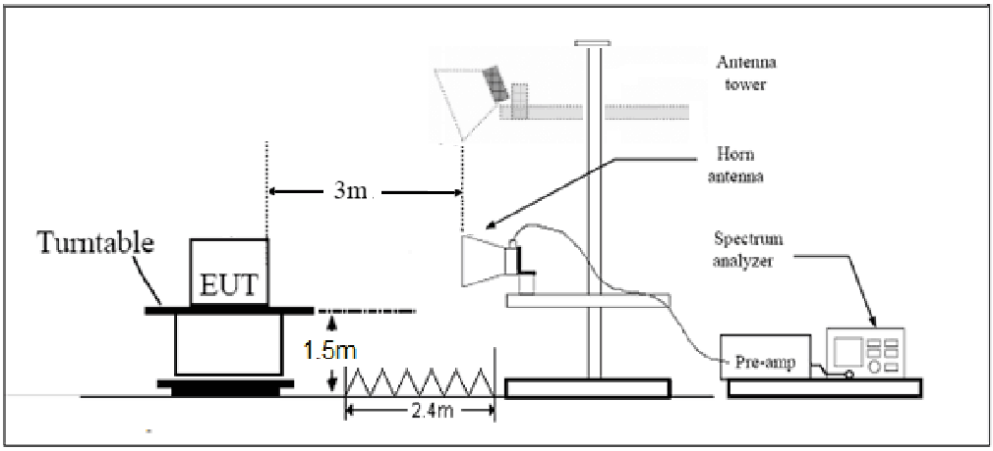
9KHz~ 30MHz



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 log10 (P) dB.”

Limit	-13 dBm

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

WCDMA Band II		Maximum Output Power (dBm)			EIRP (dBm)		
		Channel 9262	Channel 9400	Channel 9538	Channel 9262	Channel 9400	Channel 9538
		1852.4 (MHz)	1880 (MHz)	1907.6 (MHz)	1852.4 (MHz)	1880 (MHz)	1907.6 (MHz)
RMC	12.2k	21.01	21.08	20.98	20.67	20.74	20.64
HSDPA	Sub - Test 1	20.43	20.50	20.40	20.09	20.16	20.06
	Sub - Test 2	20.42	20.49	20.39	20.08	20.15	20.05
	Sub - Test 3	19.91	19.98	19.88	19.57	19.64	19.54
	Sub - Test 4	19.90	19.97	19.87	19.56	19.63	19.53
HSUPA	Sub - Test 1	19.39	19.46	19.36	19.05	19.12	19.02
	Sub - Test 2	17.38	17.45	17.35	17.04	17.11	17.01
	Sub - Test 3	18.36	18.44	18.34	18.02	18.10	18.00
	Sub - Test 4	17.35	17.43	17.33	17.01	17.09	16.99
	Sub - Test 5	20.84	20.92	20.82	20.50	20.58	20.48
HSPA+	16QAM	18.50	18.59	18.49	18.16	18.25	18.15

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)
LTE Band2	1.4	18607	1	#Max	QPSK	23.97	23.63
LTE Band2	1.4	18607	1	#0	QPSK	23.89	23.55
LTE Band2	1.4	18607	1	#Mid	QPSK	23.87	23.53
LTE Band2	1.4	18607	3	#Max	QPSK	23.73	23.39
LTE Band2	1.4	18607	3	#0	QPSK	23.71	23.37
LTE Band2	1.4	18607	3	#Mid	QPSK	23.70	23.36
LTE Band2	1.4	18900	1	#0	QPSK	23.50	23.16
LTE Band2	1.4	19193	1	#0	QPSK	23.47	23.13
LTE Band2	1.4	18900	1	#Max	QPSK	23.43	23.09
LTE Band2	1.4	18900	1	#Mid	QPSK	23.36	23.02
LTE Band2	1.4	19193	1	#Max	QPSK	23.36	23.02
LTE Band2	1.4	18900	3	#0	QPSK	23.34	23.00
LTE Band2	1.4	18900	3	#Mid	QPSK	23.33	22.99
LTE Band2	1.4	18900	3	#Max	QPSK	23.30	22.96
LTE Band2	1.4	19193	1	#Mid	QPSK	23.27	22.93
LTE Band2	1.4	19193	3	#0	QPSK	23.21	22.87
LTE Band2	1.4	19193	3	#Mid	QPSK	23.19	22.85
LTE Band2	1.4	19193	3	#Max	QPSK	23.13	22.79
LTE Band2	1.4	18607	1	#Max	16QAM	23.00	22.66
LTE Band2	1.4	18607	1	#0	16QAM	22.95	22.61
LTE Band2	1.4	18607	3	#Max	16QAM	22.93	22.59
LTE Band2	1.4	18607	3	#Mid	16QAM	22.92	22.58
LTE Band2	1.4	18607	3	#0	16QAM	22.90	22.56
LTE Band2	1.4	18607	1	#Mid	16QAM	22.82	22.48
LTE Band2	1.4	18607	6	#0	QPSK	22.75	22.41
LTE Band2	1.4	18900	1	#0	16QAM	22.71	22.37
LTE Band2	1.4	18900	1	#Max	16QAM	22.67	22.33
LTE Band2	1.4	18900	1	#Mid	16QAM	22.59	22.25
LTE Band2	1.4	18900	6	#0	QPSK	22.43	22.09
LTE Band2	1.4	18900	3	#0	16QAM	22.43	22.09
LTE Band2	1.4	18900	3	#Mid	16QAM	22.43	22.09
LTE Band2	1.4	18900	3	#Max	16QAM	22.39	22.05
LTE Band2	1.4	19193	6	#0	QPSK	22.15	21.81
LTE Band2	1.4	19193	1	#0	16QAM	22.13	21.79
LTE Band2	1.4	19193	1	#Max	16QAM	22.13	21.79
LTE Band2	1.4	19193	3	#0	16QAM	22.10	21.76
LTE Band2	1.4	19193	3	#Mid	16QAM	22.10	21.76
LTE Band2	1.4	19193	3	#Max	16QAM	22.05	21.71
LTE Band2	1.4	19193	1	#Mid	16QAM	22.03	21.69
LTE Band2	1.4	18607	6	#0	16QAM	21.82	21.48

LTE Band2	1.4	18900	6	#0	16QAM	21.39	21.05
LTE Band2	1.4	19193	6	#0	16QAM	21.04	20.70
LTE Band2	3	18615	1	#Max	QPSK	23.63	23.29
LTE Band2	3	18615	1	#Mid	QPSK	23.62	23.28
LTE Band2	3	18615	1	#0	QPSK	23.55	23.21
LTE Band2	3	19185	1	#0	QPSK	23.31	22.97
LTE Band2	3	18900	1	#Mid	QPSK	23.22	22.88
LTE Band2	3	18900	1	#0	QPSK	23.19	22.85
LTE Band2	3	19185	1	#Mid	QPSK	23.18	22.84
LTE Band2	3	18900	1	#Max	QPSK	23.15	22.81
LTE Band2	3	19185	1	#Max	QPSK	23.05	22.71
LTE Band2	3	18615	1	#Max	16QAM	22.97	22.63
LTE Band2	3	18615	1	#Mid	16QAM	22.94	22.60
LTE Band2	3	18615	1	#0	16QAM	22.84	22.50
LTE Band2	3	18615	8	#Max	QPSK	22.68	22.34
LTE Band2	3	18615	15	#0	QPSK	22.64	22.30
LTE Band2	3	18615	8	#0	QPSK	22.62	22.28
LTE Band2	3	18615	8	#Mid	QPSK	22.62	22.28
LTE Band2	3	18900	1	#Mid	16QAM	22.46	22.12
LTE Band2	3	18900	1	#0	16QAM	22.42	22.08
LTE Band2	3	18900	8	#0	QPSK	22.35	22.01
LTE Band2	3	18900	8	#Mid	QPSK	22.35	22.01
LTE Band2	3	18900	1	#Max	16QAM	22.34	22.00
LTE Band2	3	18900	15	#0	QPSK	22.31	21.97
LTE Band2	3	18900	8	#Max	QPSK	22.29	21.95
LTE Band2	3	19185	8	#0	QPSK	22.12	21.78
LTE Band2	3	19185	8	#Mid	QPSK	22.12	21.78
LTE Band2	3	19185	15	#0	QPSK	22.10	21.76
LTE Band2	3	19185	1	#0	16QAM	22.06	21.72
LTE Band2	3	19185	8	#Max	QPSK	22.05	21.71
LTE Band2	3	19185	1	#Mid	16QAM	21.97	21.63
LTE Band2	3	19185	1	#Max	16QAM	21.81	21.47
LTE Band2	3	18615	8	#Max	16QAM	21.73	21.39
LTE Band2	3	18615	8	#Mid	16QAM	21.66	21.32
LTE Band2	3	18615	8	#0	16QAM	21.65	21.31
LTE Band2	3	18615	15	#0	16QAM	21.62	21.28
LTE Band2	3	18900	8	#0	16QAM	21.33	20.99
LTE Band2	3	18900	8	#Mid	16QAM	21.33	20.99
LTE Band2	3	18900	8	#Max	16QAM	21.27	20.93
LTE Band2	3	18900	15	#0	16QAM	21.19	20.85
LTE Band2	3	19185	8	#0	16QAM	21.09	20.75
LTE Band2	3	19185	8	#Mid	16QAM	21.09	20.75
LTE Band2	3	19185	15	#0	16QAM	21.02	20.68

LTE Band2	3	19185	8	#Max	16QAM	20.98	20.64
LTE Band2	5	18625	1	#Mid	QPSK	23.58	23.24
LTE Band2	5	18625	1	#Max	QPSK	23.53	23.19
LTE Band2	5	18625	1	#0	QPSK	23.47	23.13
LTE Band2	5	19175	1	#0	QPSK	23.27	22.93
LTE Band2	5	18900	1	#Mid	QPSK	23.20	22.86
LTE Band2	5	19175	1	#Mid	QPSK	23.16	22.82
LTE Band2	5	18900	1	#0	QPSK	23.14	22.80
LTE Band2	5	18900	1	#Max	QPSK	23.08	22.74
LTE Band2	5	18625	1	#Mid	16QAM	23.01	22.67
LTE Band2	5	18625	1	#Max	16QAM	22.96	22.62
LTE Band2	5	19175	1	#Max	QPSK	22.92	22.58
LTE Band2	5	18625	1	#0	16QAM	22.84	22.50
LTE Band2	5	18625	12	#Max	QPSK	22.67	22.33
LTE Band2	5	18625	25	#0	QPSK	22.63	22.29
LTE Band2	5	18625	12	#0	QPSK	22.49	22.15
LTE Band2	5	18625	12	#Mid	QPSK	22.49	22.15
LTE Band2	5	18900	1	#Mid	16QAM	22.45	22.11
LTE Band2	5	19175	1	#0	16QAM	22.38	22.04
LTE Band2	5	19175	1	#Mid	16QAM	22.37	22.03
LTE Band2	5	18900	1	#0	16QAM	22.33	21.99
LTE Band2	5	18900	1	#Max	16QAM	22.29	21.95
LTE Band2	5	18900	12	#0	QPSK	22.28	21.94
LTE Band2	5	18900	12	#Mid	QPSK	22.28	21.94
LTE Band2	5	18900	25	#0	QPSK	22.20	21.86
LTE Band2	5	19175	12	#0	QPSK	22.19	21.85
LTE Band2	5	19175	12	#Mid	QPSK	22.19	21.85
LTE Band2	5	18900	12	#Max	QPSK	22.16	21.82
LTE Band2	5	19175	1	#Max	16QAM	22.10	21.76
LTE Band2	5	19175	25	#0	QPSK	22.07	21.73
LTE Band2	5	19175	12	#Max	QPSK	22.00	21.66
LTE Band2	5	18625	12	#Max	16QAM	21.62	21.28
LTE Band2	5	18625	25	#0	16QAM	21.62	21.28
LTE Band2	5	18625	12	#0	16QAM	21.54	21.20
LTE Band2	5	18625	12	#Mid	16QAM	21.54	21.20
LTE Band2	5	18900	12	#0	16QAM	21.26	20.92
LTE Band2	5	18900	12	#Mid	16QAM	21.26	20.92
LTE Band2	5	18900	25	#0	16QAM	21.20	20.86
LTE Band2	5	18900	12	#Max	16QAM	21.15	20.81
LTE Band2	5	19175	12	#Mid	16QAM	21.14	20.80
LTE Band2	5	19175	12	#0	16QAM	21.13	20.79
LTE Band2	5	19175	12	#Max	16QAM	21.02	20.68
LTE Band2	5	19175	25	#0	16QAM	20.98	20.64

LTE Band2	10	18650	1	#Mid	QPSK	23.46	23.12
LTE Band2	10	19150	1	#Mid	QPSK	23.20	22.86
LTE Band2	10	18650	1	#0	QPSK	23.19	22.85
LTE Band2	10	19150	1	#0	QPSK	23.19	22.85
LTE Band2	10	18650	1	#Max	QPSK	23.14	22.80
LTE Band2	10	18900	1	#Mid	QPSK	23.03	22.69
LTE Band2	10	18900	1	#0	QPSK	22.93	22.59
LTE Band2	10	18650	1	#Mid	16QAM	22.82	22.48
LTE Band2	10	19150	1	#Max	QPSK	22.81	22.47
LTE Band2	10	18900	1	#Max	QPSK	22.78	22.44
LTE Band2	10	18650	1	#0	16QAM	22.47	22.13
LTE Band2	10	18650	1	#Max	16QAM	22.45	22.11
LTE Band2	10	18650	25	#0	QPSK	22.37	22.03
LTE Band2	10	18650	25	#Mid	QPSK	22.37	22.03
LTE Band2	10	18650	50	#0	QPSK	22.35	22.01
LTE Band2	10	18650	25	#Max	QPSK	22.34	22.00
LTE Band2	10	18900	1	#Mid	16QAM	22.29	21.95
LTE Band2	10	18900	1	#0	16QAM	22.12	21.78
LTE Band2	10	18900	25	#0	QPSK	22.00	21.66
LTE Band2	10	18900	25	#Mid	QPSK	22.00	21.66
LTE Band2	10	18900	1	#Max	16QAM	21.99	21.65
LTE Band2	10	19150	1	#Mid	16QAM	21.95	21.61
LTE Band2	10	18900	50	#0	QPSK	21.93	21.59
LTE Band2	10	19150	25	#0	QPSK	21.92	21.58
LTE Band2	10	19150	25	#Mid	QPSK	21.92	21.58
LTE Band2	10	18900	25	#Max	QPSK	21.87	21.53
LTE Band2	10	19150	1	#0	16QAM	21.86	21.52
LTE Band2	10	19150	50	#0	QPSK	21.85	21.51
LTE Band2	10	19150	25	#Max	QPSK	21.84	21.50
LTE Band2	10	19150	1	#Max	16QAM	21.54	21.20
LTE Band2	10	18650	25	#Mid	16QAM	21.43	21.09
LTE Band2	10	18650	25	#0	16QAM	21.42	21.08
LTE Band2	10	18650	25	#Max	16QAM	21.41	21.07
LTE Band2	10	18650	50	#0	16QAM	21.35	21.01
LTE Band2	10	18900	25	#0	16QAM	21.06	20.72
LTE Band2	10	18900	25	#Mid	16QAM	21.06	20.72
LTE Band2	10	18900	25	#Max	16QAM	20.96	20.62
LTE Band2	10	18900	50	#0	16QAM	20.93	20.59
LTE Band2	10	19150	25	#Mid	16QAM	20.91	20.57
LTE Band2	10	19150	25	#0	16QAM	20.90	20.56
LTE Band2	10	19150	50	#0	16QAM	20.82	20.48
LTE Band2	10	19150	25	#Max	16QAM	20.77	20.43
LTE Band2	15	18675	1	#Mid	QPSK	23.37	23.03

LTE Band2	15	18675	1	#0	QPSK	23.32	22.98
LTE Band2	15	19125	1	#Mid	QPSK	23.24	22.90
LTE Band2	15	18675	1	#Max	QPSK	23.19	22.85
LTE Band2	15	18900	1	#0	QPSK	23.12	22.78
LTE Band2	15	19125	1	#0	QPSK	23.04	22.70
LTE Band2	15	18900	1	#Mid	QPSK	22.98	22.64
LTE Band2	15	19125	1	#Max	QPSK	22.91	22.57
LTE Band2	15	18900	1	#Max	QPSK	22.75	22.41
LTE Band2	15	18675	1	#Mid	16QAM	22.74	22.40
LTE Band2	15	18675	1	#0	16QAM	22.64	22.30
LTE Band2	15	18675	1	#Max	16QAM	22.55	22.21
LTE Band2	15	18675	36	#0	QPSK	22.43	22.09
LTE Band2	15	18675	36	#Mid	QPSK	22.43	22.09
LTE Band2	15	18675	75	#0	QPSK	22.34	22.00
LTE Band2	15	18675	36	#Max	QPSK	22.30	21.96
LTE Band2	15	18900	1	#0	16QAM	22.29	21.95
LTE Band2	15	18900	1	#Mid	16QAM	22.23	21.89
LTE Band2	15	19125	1	#Mid	16QAM	22.19	21.85
LTE Band2	15	18900	36	#Mid	QPSK	22.11	21.77
LTE Band2	15	18900	36	#0	QPSK	22.10	21.76
LTE Band2	15	19125	36	#Max	QPSK	22.02	21.68
LTE Band2	15	19125	36	#Mid	QPSK	22.01	21.67
LTE Band2	15	19125	75	#0	QPSK	22.01	21.67
LTE Band2	15	19125	36	#0	QPSK	22.00	21.66
LTE Band2	15	18900	1	#Max	16QAM	21.96	21.62
LTE Band2	15	19125	1	#0	16QAM	21.96	21.62
LTE Band2	15	18900	75	#0	QPSK	21.92	21.58
LTE Band2	15	18900	36	#Max	QPSK	21.85	21.51
LTE Band2	15	19125	1	#Max	16QAM	21.79	21.45
LTE Band2	15	18675	36	#0	16QAM	21.43	21.09
LTE Band2	15	18675	36	#Mid	16QAM	21.43	21.09
LTE Band2	15	18675	75	#0	16QAM	21.35	21.01
LTE Band2	15	18675	36	#Max	16QAM	21.31	20.97
LTE Band2	15	18900	36	#0	16QAM	21.14	20.80
LTE Band2	15	18900	36	#Mid	16QAM	21.14	20.80
LTE Band2	15	19125	75	#0	16QAM	21.06	20.72
LTE Band2	15	19125	36	#Mid	16QAM	21.04	20.70
LTE Band2	15	19125	36	#0	16QAM	21.02	20.68
LTE Band2	15	19125	36	#Max	16QAM	21.02	20.68
LTE Band2	15	18900	75	#0	16QAM	20.96	20.62
LTE Band2	15	18900	36	#Max	16QAM	20.93	20.59
LTE Band2	20	18700	1	#Mid	QPSK	23.33	22.99
LTE Band2	20	19100	1	#Mid	QPSK	23.25	22.91

LTE Band2	20	18700	1	#0	QPSK	23.21	22.87
LTE Band2	20	18900	1	#0	QPSK	23.14	22.80
LTE Band2	20	18900	1	#Mid	QPSK	23.11	22.77
LTE Band2	20	18700	1	#Max	QPSK	23.04	22.70
LTE Band2	20	19100	1	#Max	QPSK	22.81	22.47
LTE Band2	20	18900	1	#Max	QPSK	22.79	22.45
LTE Band2	20	19100	1	#0	QPSK	22.77	22.43
LTE Band2	20	18700	1	#Mid	16QAM	22.60	22.26
LTE Band2	20	18700	1	#0	16QAM	22.47	22.13
LTE Band2	20	18700	50	#0	QPSK	22.35	22.01
LTE Band2	20	18700	50	#Mid	QPSK	22.35	22.01
LTE Band2	20	18700	1	#Max	16QAM	22.27	21.93
LTE Band2	20	18700	100	#0	QPSK	22.24	21.90
LTE Band2	20	18700	50	#Max	QPSK	22.19	21.85
LTE Band2	20	19100	100	#0	QPSK	22.09	21.75
LTE Band2	20	18900	50	#Mid	QPSK	22.07	21.73
LTE Band2	20	18900	50	#0	QPSK	22.06	21.72
LTE Band2	20	18900	1	#Mid	16QAM	21.98	21.64
LTE Band2	20	19100	50	#Max	QPSK	21.97	21.63
LTE Band2	20	19100	1	#Mid	16QAM	21.94	21.60
LTE Band2	20	18900	1	#0	16QAM	21.89	21.55
LTE Band2	20	18900	100	#0	QPSK	21.85	21.51
LTE Band2	20	18900	50	#Max	QPSK	21.82	21.48
LTE Band2	20	19100	50	#Mid	QPSK	21.82	21.48
LTE Band2	20	19100	50	#0	QPSK	21.81	21.47
LTE Band2	20	18900	1	#Max	16QAM	21.55	21.21
LTE Band2	20	19100	1	#Max	16QAM	21.53	21.19
LTE Band2	20	19100	1	#0	16QAM	21.47	21.13
LTE Band2	20	18700	50	#Mid	16QAM	21.41	21.07
LTE Band2	20	18700	50	#0	16QAM	21.40	21.06
LTE Band2	20	18700	100	#0	16QAM	21.29	20.95
LTE Band2	20	18700	50	#Max	16QAM	21.25	20.91
LTE Band2	20	18900	50	#0	16QAM	21.11	20.77
LTE Band2	20	18900	50	#Mid	16QAM	21.11	20.77
LTE Band2	20	19100	100	#0	16QAM	21.11	20.77
LTE Band2	20	19100	50	#Max	16QAM	20.95	20.61
LTE Band2	20	18900	100	#0	16QAM	20.94	20.60
LTE Band2	20	19100	50	#Mid	16QAM	20.87	20.53
LTE Band2	20	18900	50	#Max	16QAM	20.86	20.52
LTE Band2	20	19100	50	#0	16QAM	20.86	20.52

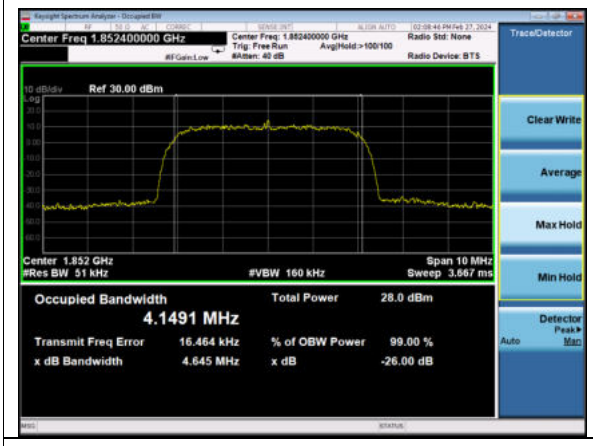
6.2. Occupied Bandwidth

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band II (RMC)	9262	1852.4	4.1491	4.645
	9400	1880	4.1543	4.658
	9538	1907.6	4.1628	4.648

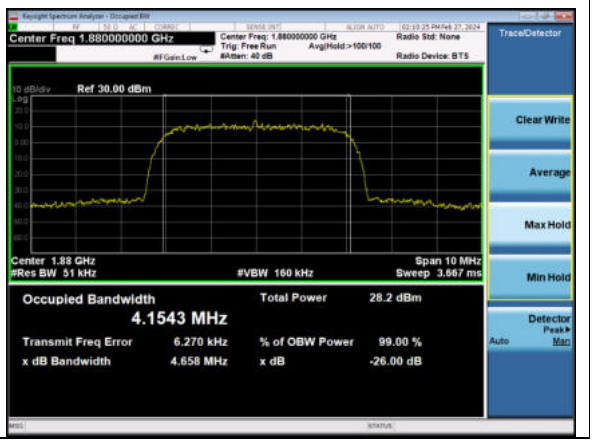
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)
LTE Band2	1.4	18607	6	#0	QPSK	1.104	1.262
LTE Band2	1.4	18607	6	#0	16QAM	1.111	1.269
LTE Band2	1.4	18900	6	#0	QPSK	1.102	1.265
LTE Band2	1.4	18900	6	#0	16QAM	1.094	1.265
LTE Band2	1.4	19193	6	#0	QPSK	1.103	1.271
LTE Band2	1.4	19193	6	#0	16QAM	1.105	1.259
LTE Band2	3	18615	15	#0	QPSK	2.704	2.934
LTE Band2	3	18615	15	#0	16QAM	2.693	2.926
LTE Band2	3	18900	15	#0	QPSK	2.701	2.925
LTE Band2	3	18900	15	#0	16QAM	2.702	2.919
LTE Band2	3	19185	15	#0	QPSK	2.702	2.932
LTE Band2	3	19185	15	#0	16QAM	2.696	2.930
LTE Band2	5	18625	25	#0	QPSK	4.513	4.845
LTE Band2	5	18625	25	#0	16QAM	4.492	4.824
LTE Band2	5	18900	25	#0	QPSK	4.510	4.860
LTE Band2	5	18900	25	#0	16QAM	4.507	4.838
LTE Band2	5	19175	25	#0	QPSK	4.501	4.853
LTE Band2	5	19175	25	#0	16QAM	4.517	4.851
LTE Band2	10	18650	50	#0	QPSK	8.984	9.671
LTE Band2	10	18650	50	#0	16QAM	8.951	9.652
LTE Band2	10	18900	50	#0	QPSK	8.965	9.628
LTE Band2	10	18900	50	#0	16QAM	8.985	9.617
LTE Band2	10	19150	50	#0	QPSK	8.974	9.604
LTE Band2	10	19150	50	#0	16QAM	8.973	9.581
LTE Band2	15	18675	75	#0	QPSK	13.455	14.326
LTE Band2	15	18675	75	#0	16QAM	13.401	14.390
LTE Band2	15	18900	75	#0	QPSK	13.426	14.362
LTE Band2	15	18900	75	#0	16QAM	13.471	14.326
LTE Band2	15	19125	75	#0	QPSK	13.449	14.403

LTE Band2	15	19125	75	#0	16QAM	13.426	14.453
LTE Band2	20	18700	100	#0	QPSK	17.924	19.397
LTE Band2	20	18700	100	#0	16QAM	17.910	19.339
LTE Band2	20	18900	100	#0	QPSK	17.929	19.244
LTE Band2	20	18900	100	#0	16QAM	17.916	19.288
LTE Band2	20	19100	100	#0	QPSK	17.987	19.505
LTE Band2	20	19100	100	#0	16QAM	17.942	19.167

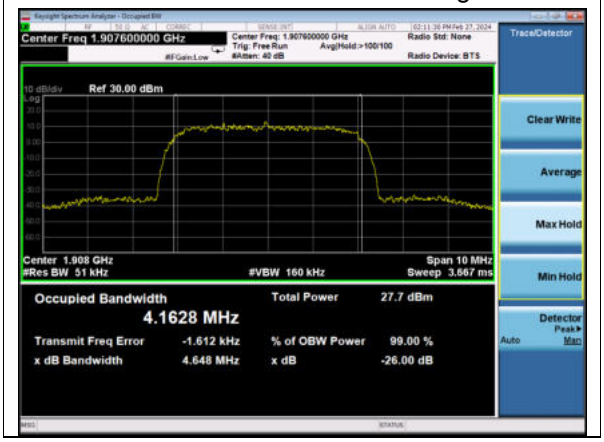
WCDMA Band II RMC CH-LOW



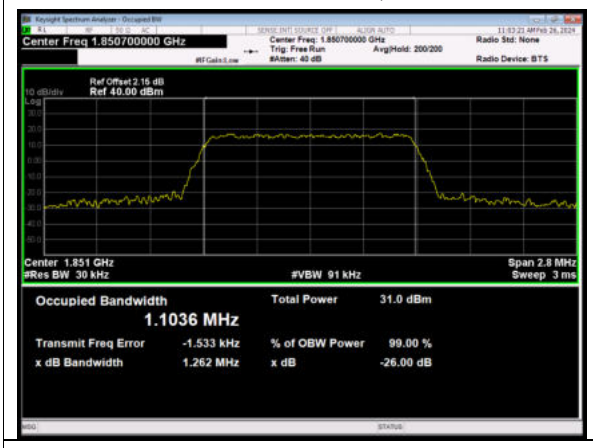
WCDMA Band II RMC CH-Middle



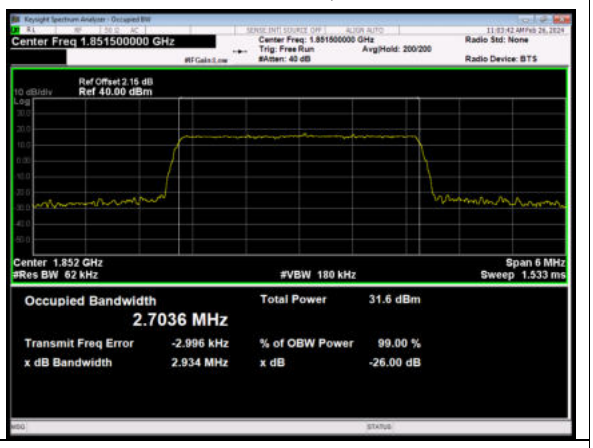
WCDMA Band II RMC CH-High



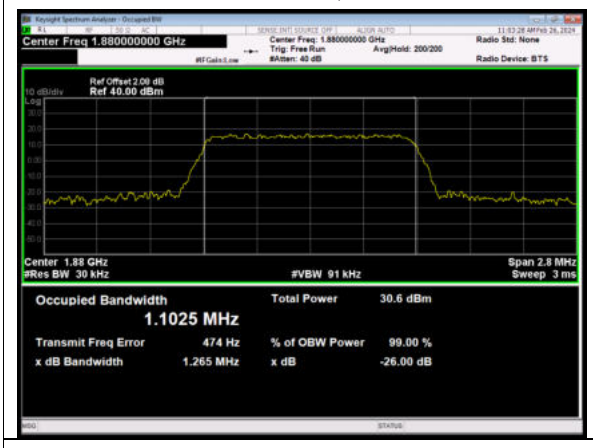
LTE Band 2 1.4MHz QPSK CH-Low



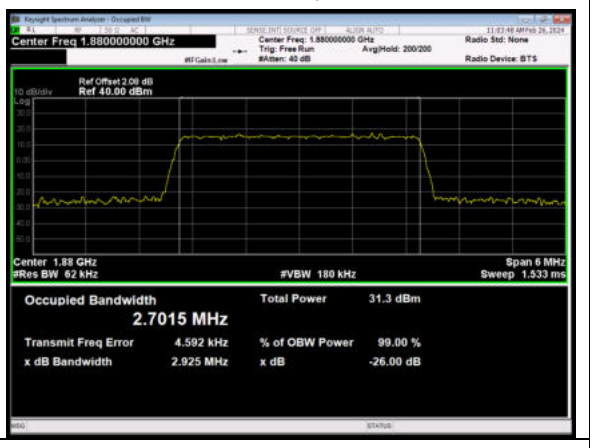
LTE Band 2 3MHz QPSK CH-Low



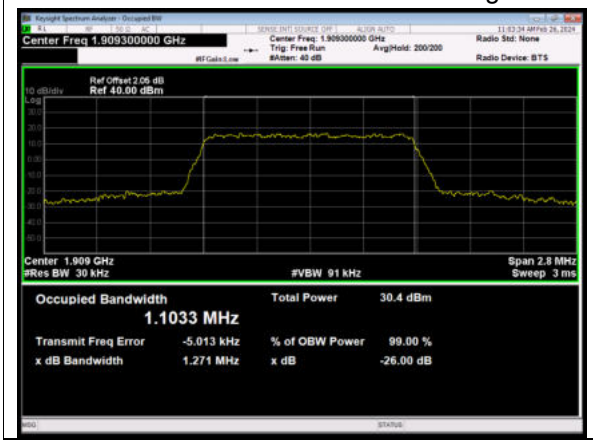
LTE Band 2 1.4MHz QPSK CH-Middle



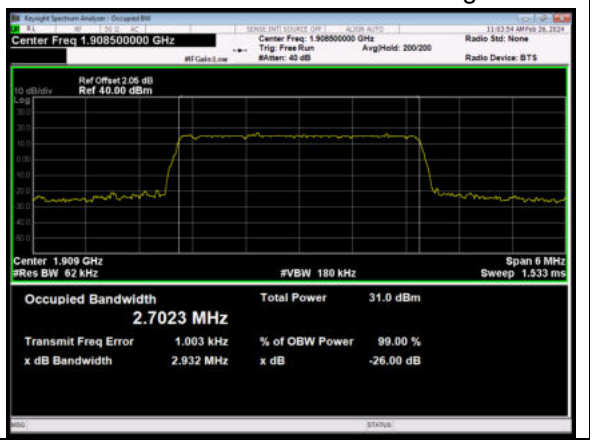
LTE Band 2 3MHz QPSK CH-Middle



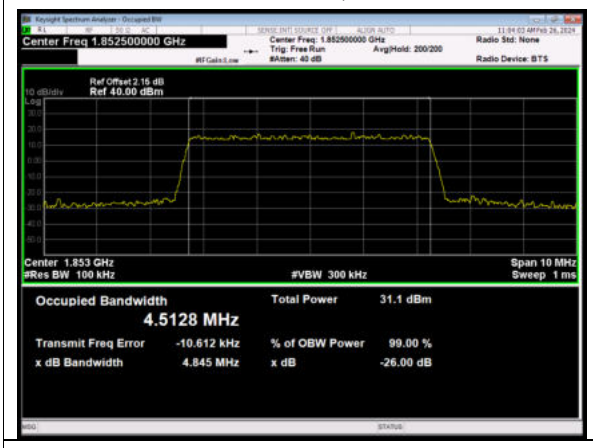
LTE Band 2 1.4MHz QPSK CH-High



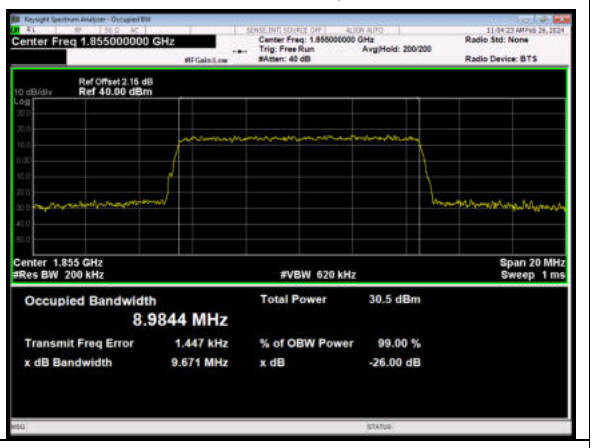
LTE Band 2 3MHz QPSK CH-High



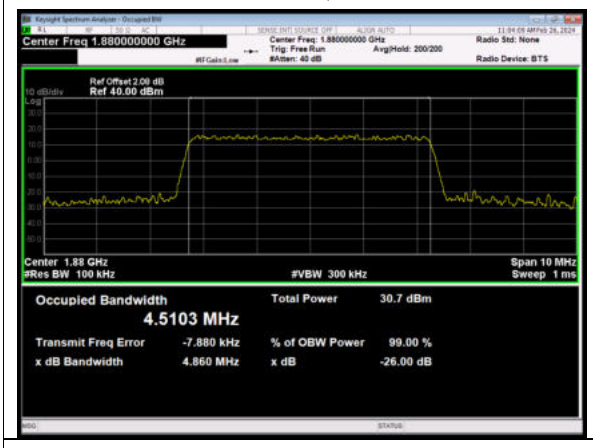
LTE Band 2 5MHz QPSK CH-Low



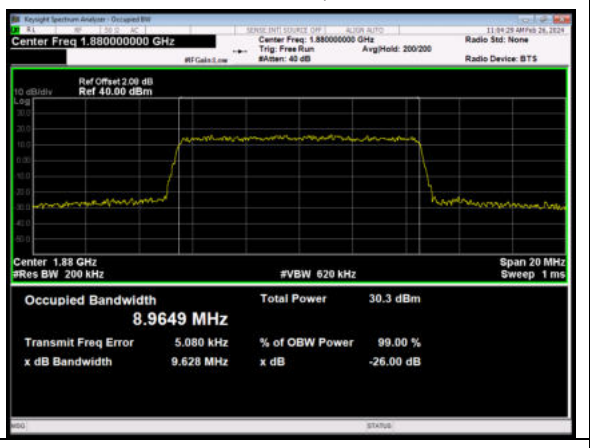
LTE Band 2 10MHz QPSK CH-Low



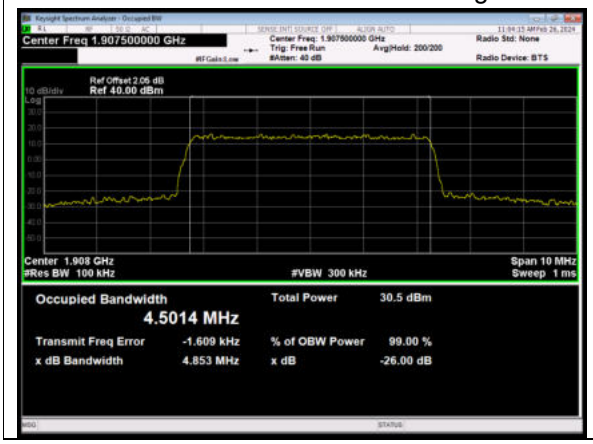
LTE Band 2 5MHz QPSK CH-Middle



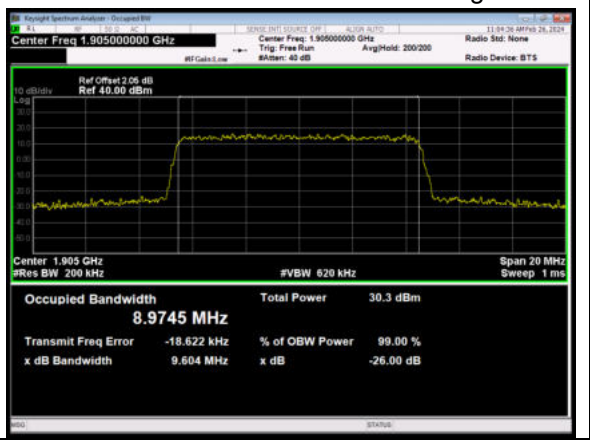
LTE Band 2 10MHz QPSK CH-Middle



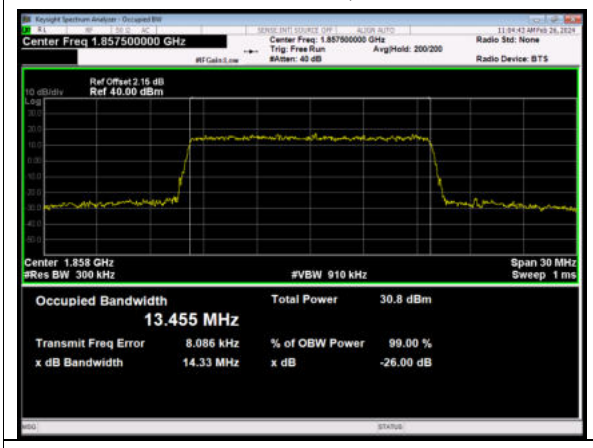
LTE Band 2 5MHz QPSK CH-High



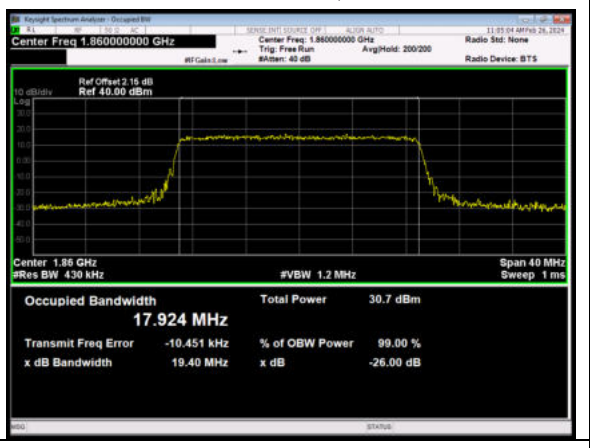
LTE Band 2 10MHz QPSK CH-High



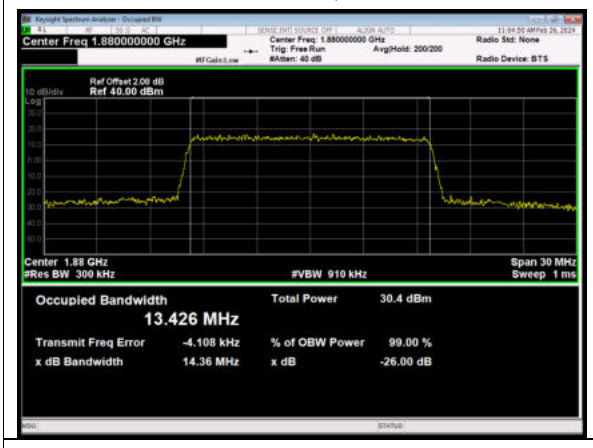
LTE Band 2 15MHz QPSK CH-Low



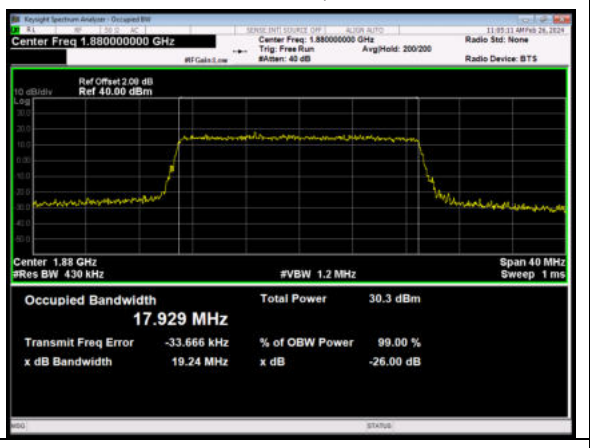
LTE Band 2 20MHz QPSK CH-Low



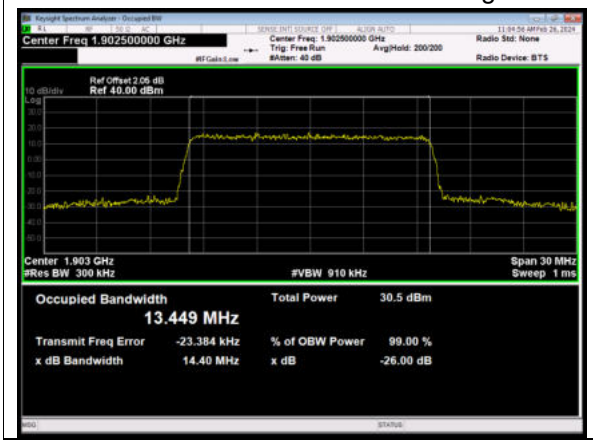
LTE Band 2 15MHz QPSK CH-Middle



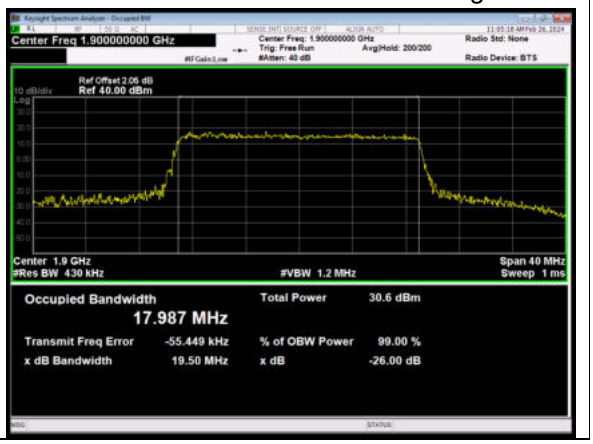
LTE Band 2 20MHz QPSK CH-Middle



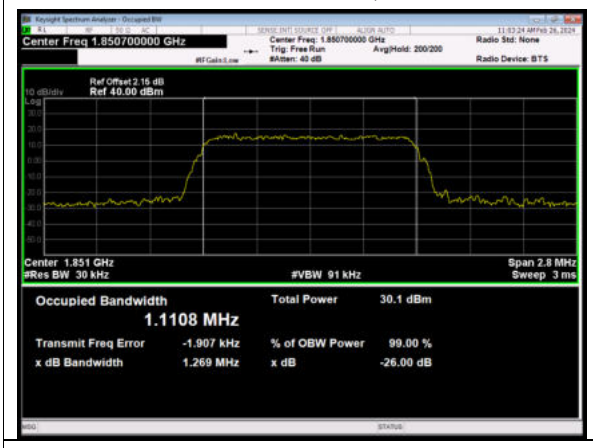
LTE Band 2 15MHz QPSK CH-High



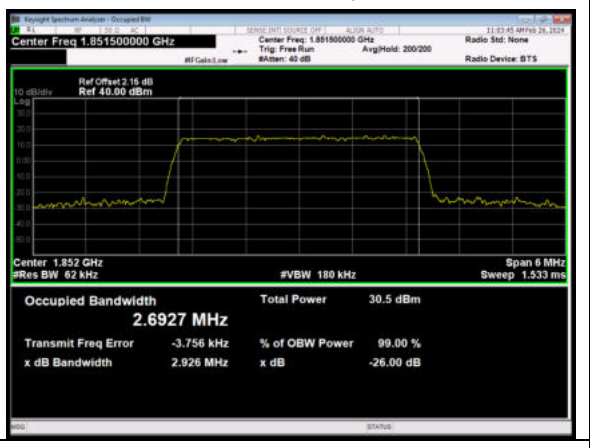
LTE Band 2 20MHz QPSK CH-High



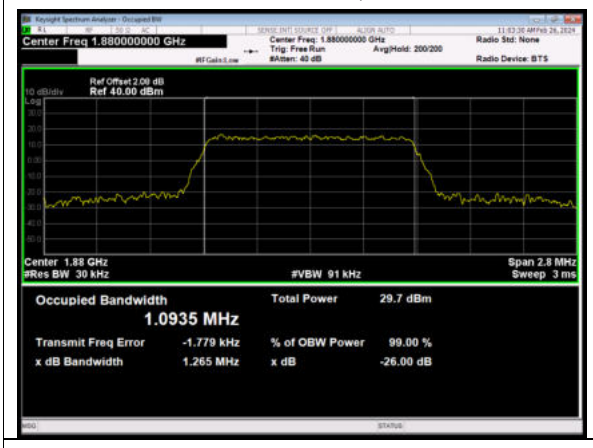
LTE Band 2 1.4MHz 16QAM CH-Low



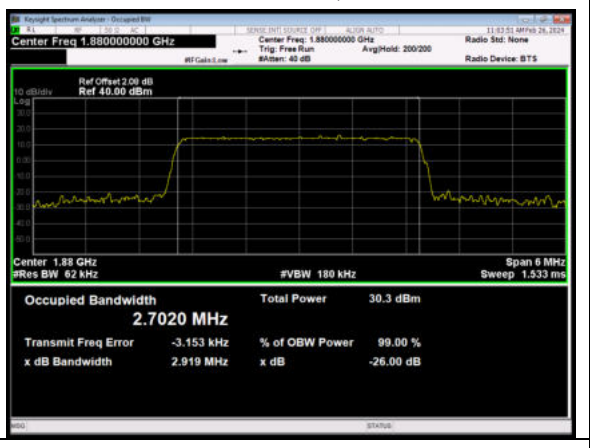
LTE Band 2 3MHz 16QAM CH-Low



LTE Band 2 1.4MHz 16QAM CH-Middle

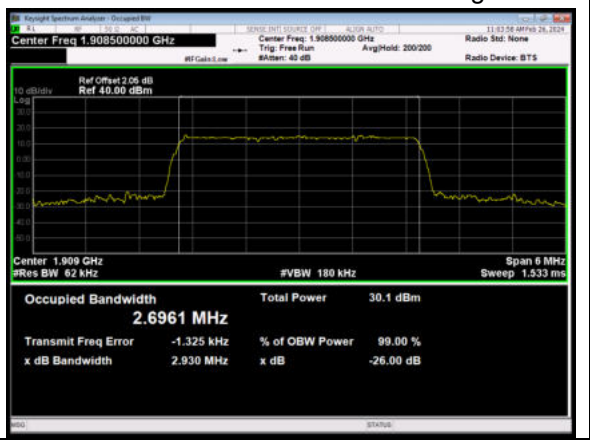


LTE Band 2 3MHz 16QAM CH-Middle

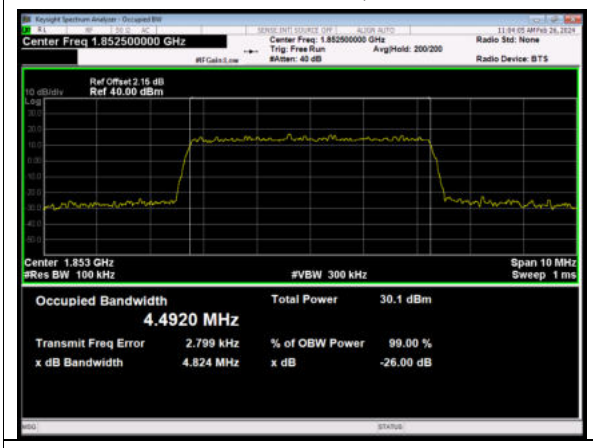


LTE Band 2 1.4MHz 16QAM CH-High

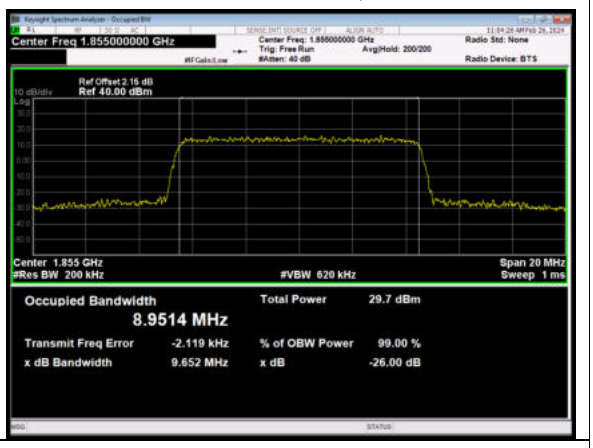
LTE Band 2 3MHz 16QAM CH-High



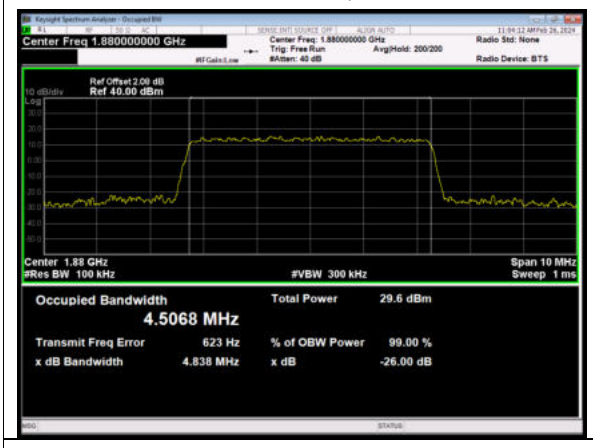
LTE Band 2 5MHz 16QAM CH-Low



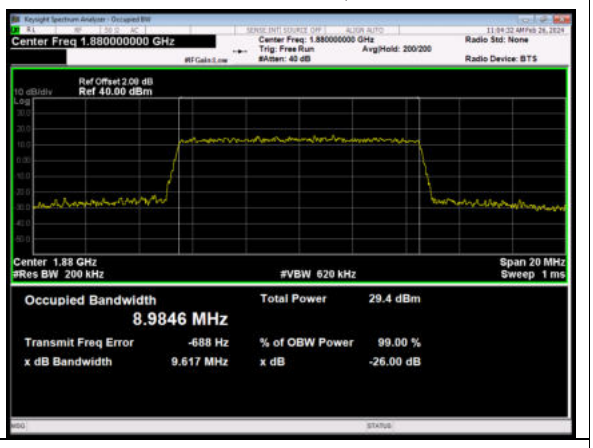
LTE Band 2 10MHz 16QAM CH-Low



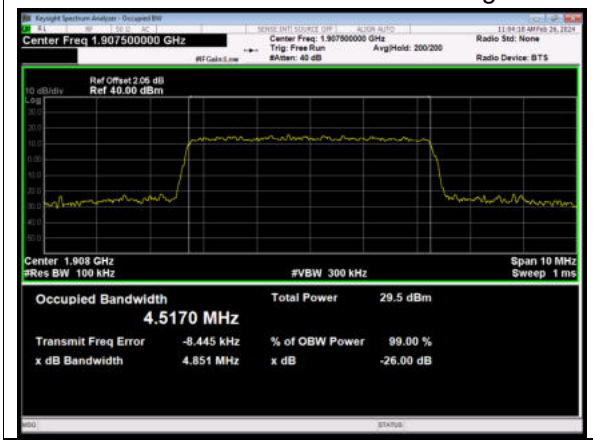
LTE Band 2 5MHz 16QAM CH-Middle



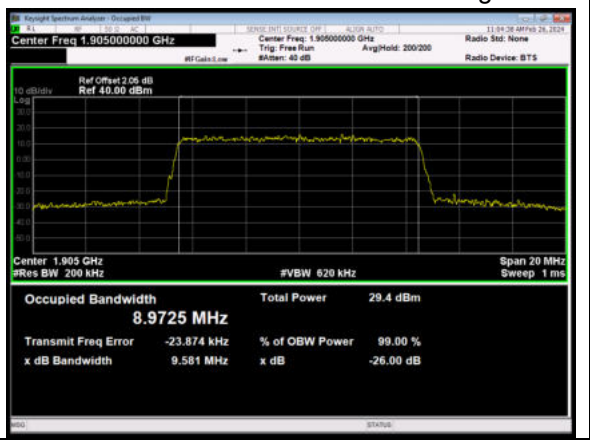
LTE Band 2 10MHz 16QAM CH-Middle



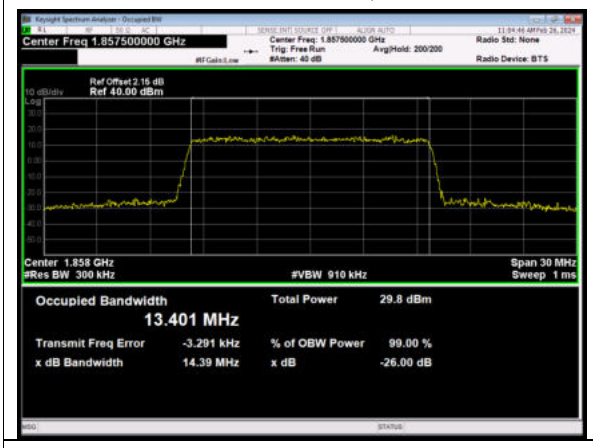
LTE Band 2 5MHz 16QAM CH-High



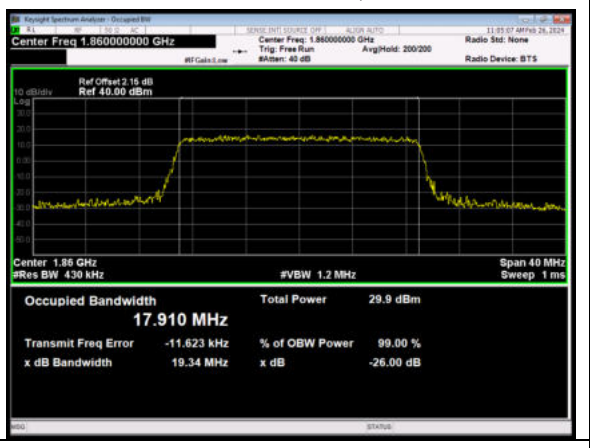
LTE Band 2 10MHz 16QAM CH-High



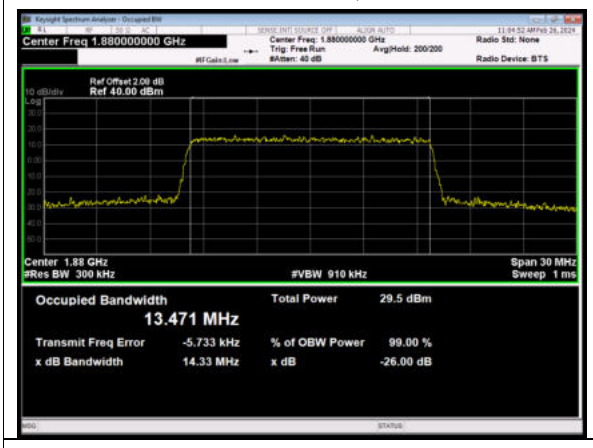
LTE Band 2 15MHz 16QAM CH-Low



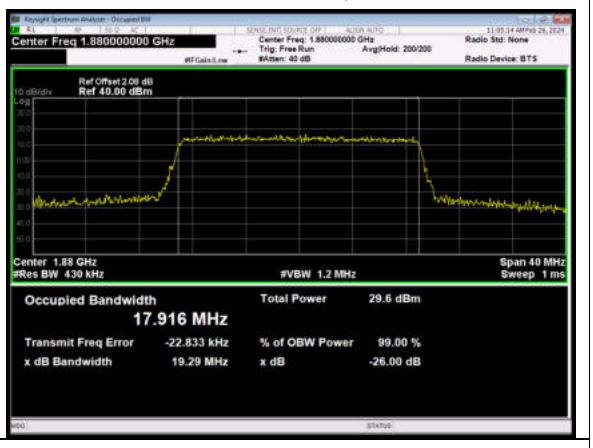
LTE Band 2 20MHz 16QAM CH-Low



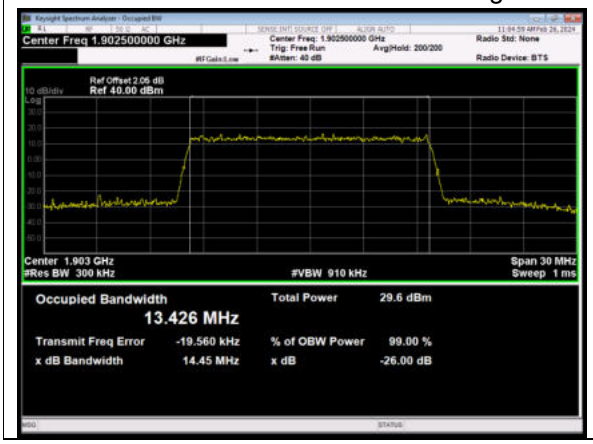
LTE Band 2 15MHz 16QAM CH-Middle



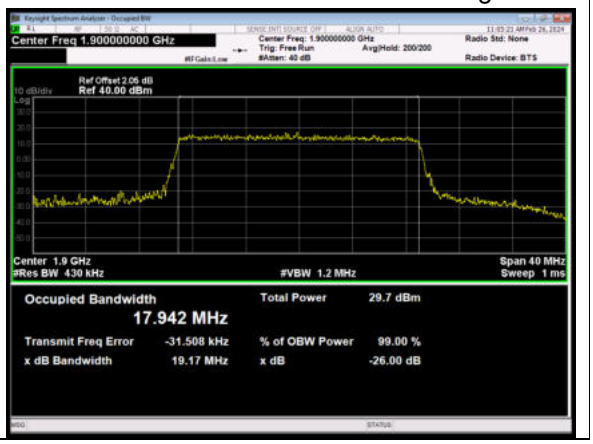
LTE Band 2 20MHz 16QAM CH-Middle



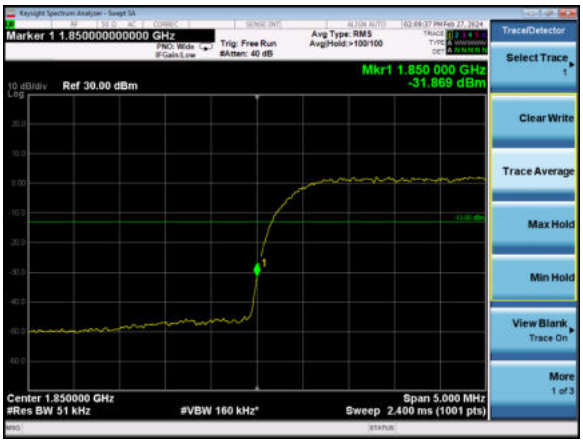
LTE Band 2 15MHz 16QAM CH-High

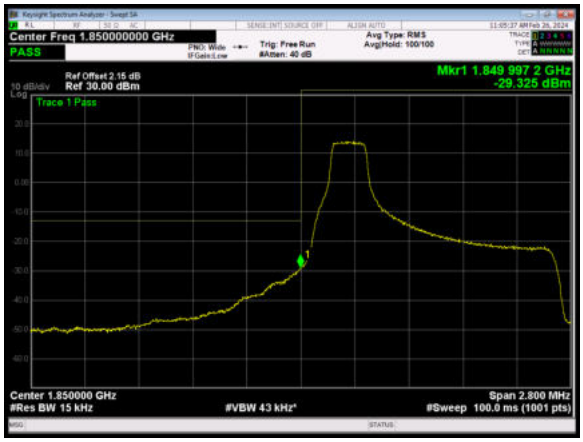
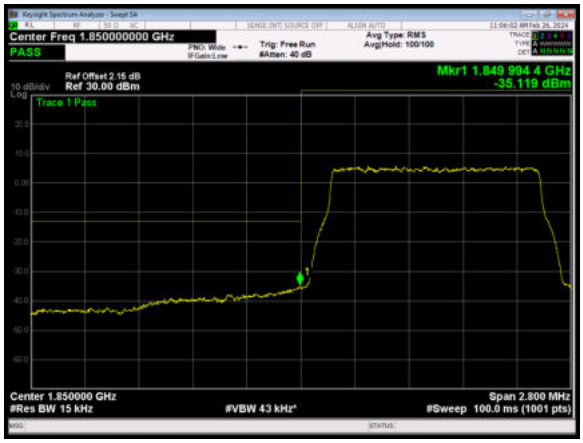
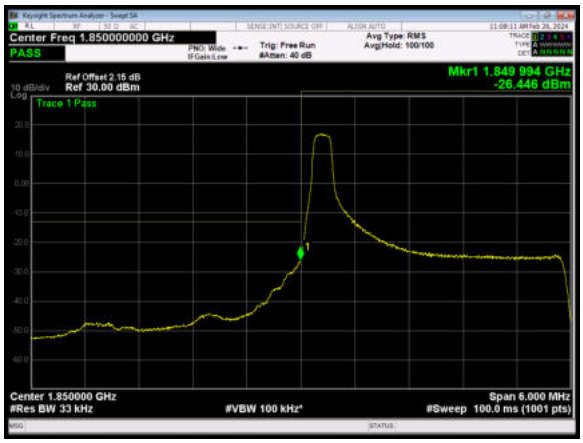
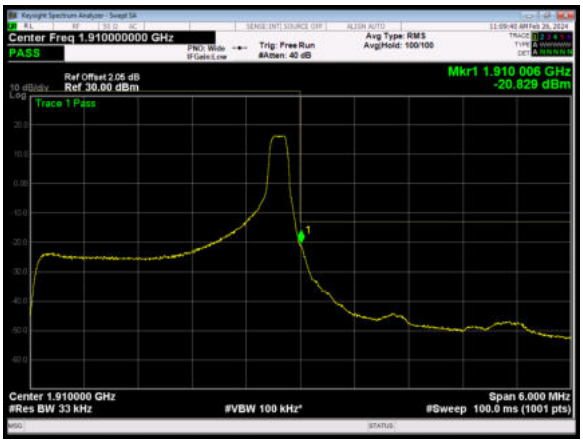


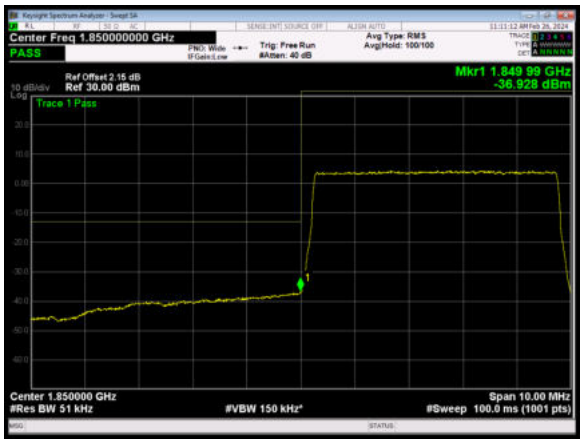
LTE Band 2 20MHz 16QAM CH-High

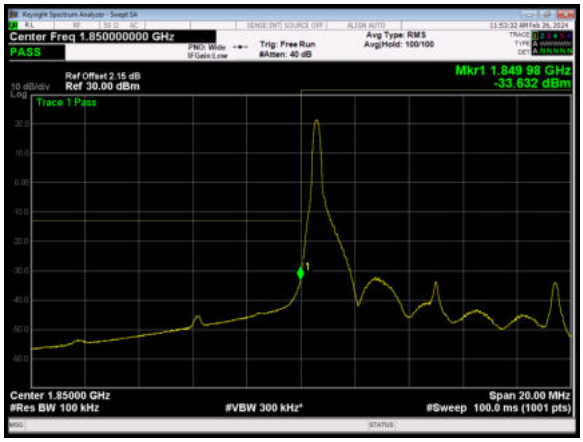
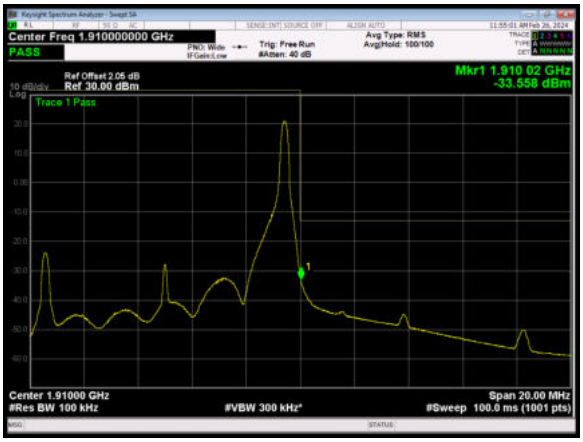
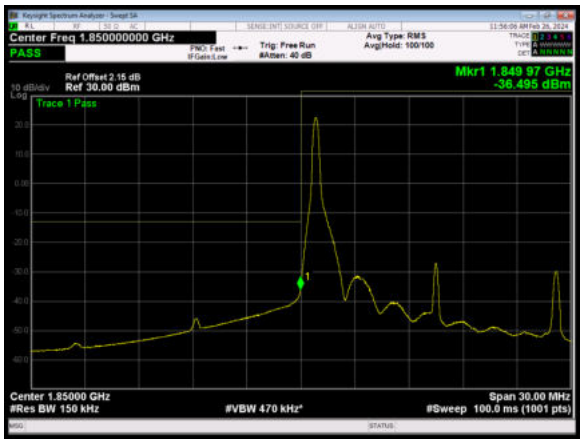
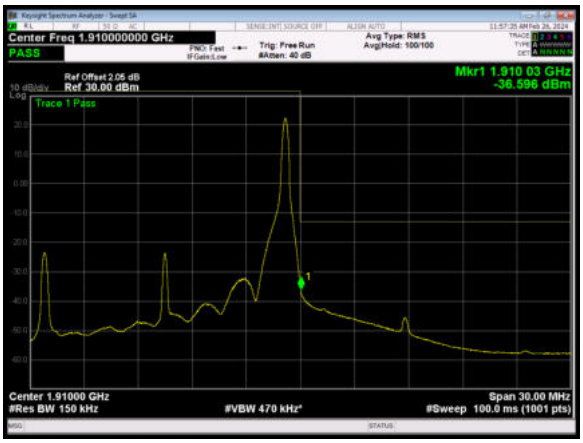


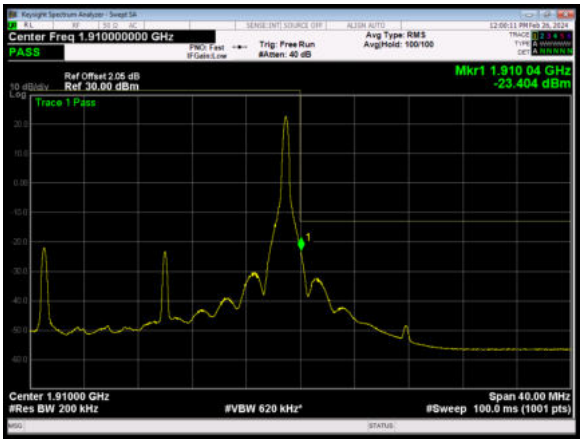
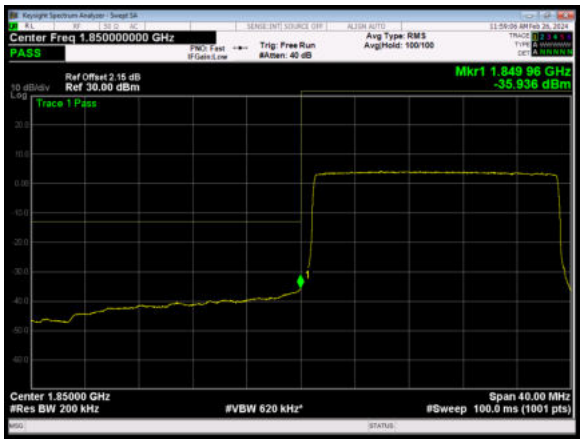
6.3. Band Edge Compliance

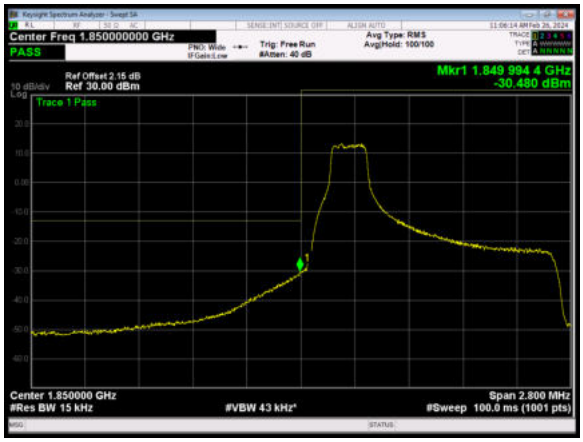
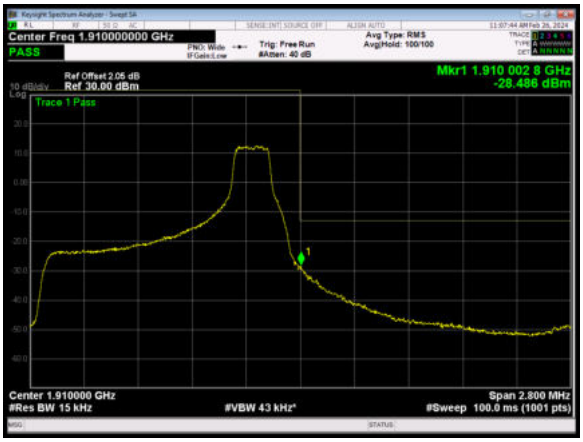
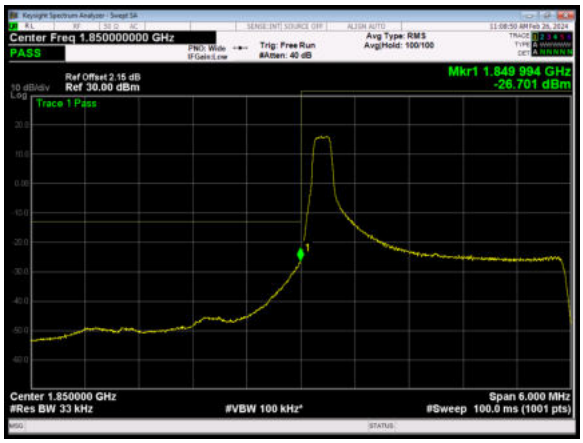
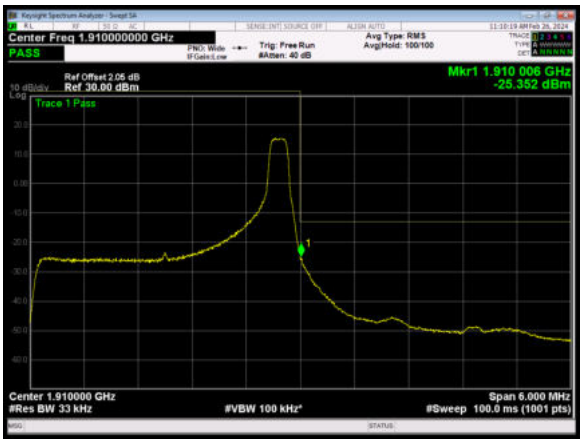
WCDMA Band II RMC CH-Low	WCDMA Band II RMC CH-High
	

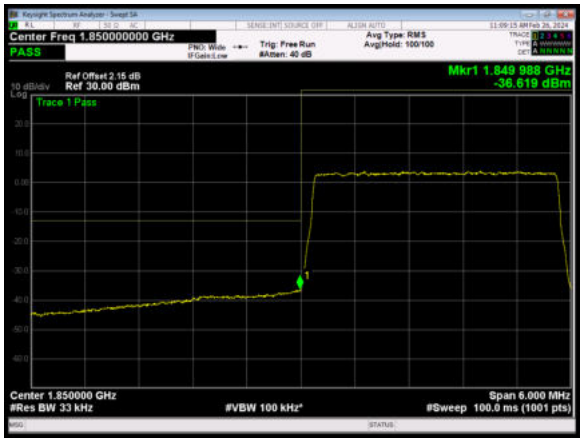
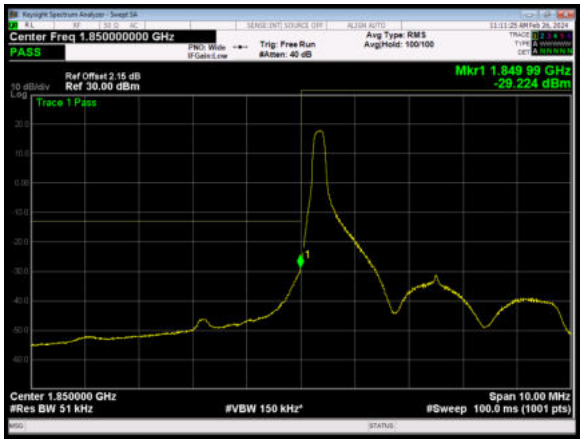
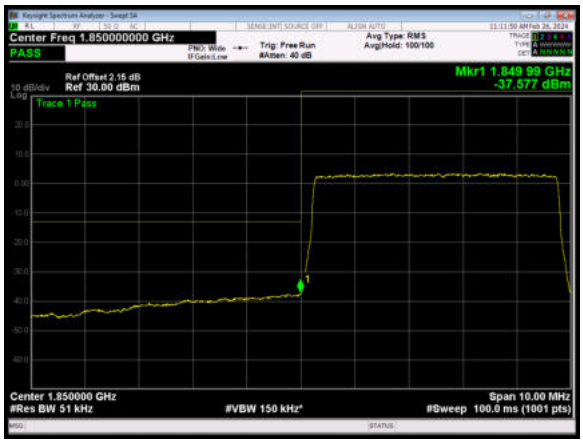
LTE Band 2 1.4MHz QPSK 1RB CH-Low	LTE Band 2 1.4MHz QPSK 1RB CH-High
	
LTE Band 2 1.4MHz QPSK 100%RB CH-Low	LTE Band 2 1.4MHz QPSK 100%RB CH-High
	
LTE Band 2 3MHz QPSK 1RB CH-Low	LTE Band 2 3MHz QPSK 1RB CH-High
	

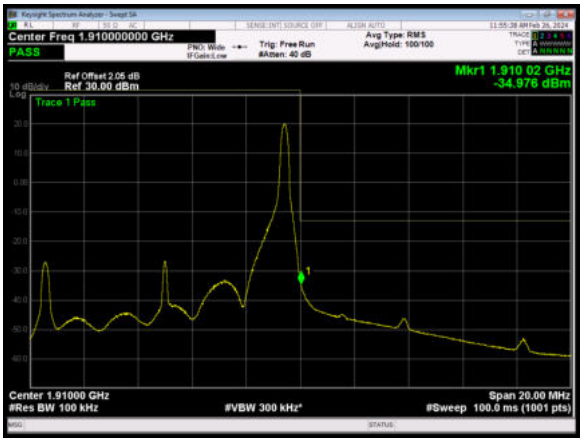
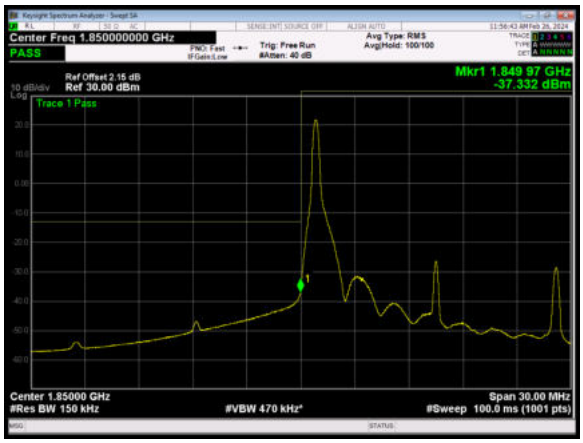
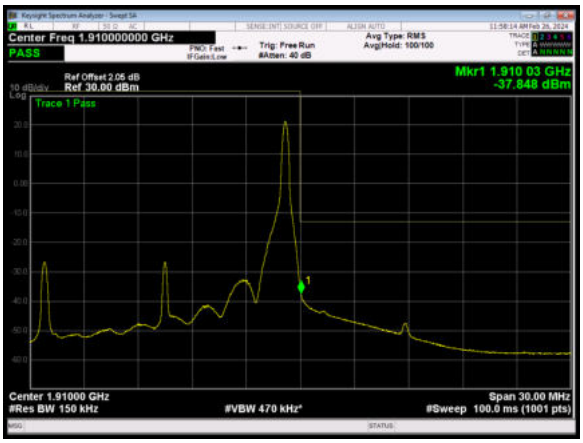
LTE Band 2 3MHz QPSK 100%RB CH-Low	LTE Band 2 3MHz QPSK 100%RB CH-High
	
LTE Band 2 5MHz QPSK 1RB CH-Low	LTE Band 2 5MHz QPSK 1RB CH-High
	
LTE Band 2 5MHz QPSK 100%RB CH-Low	LTE Band 2 5MHz QPSK 100%RB CH-High
	

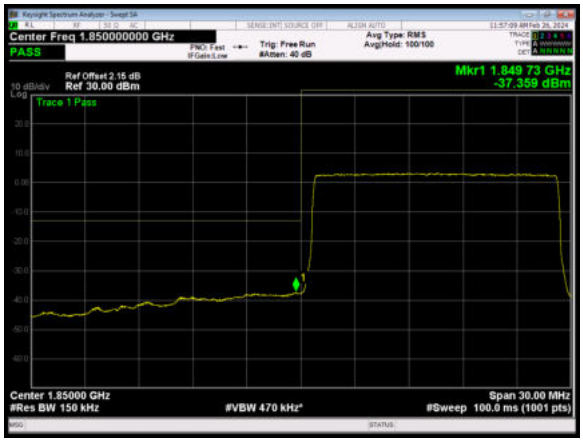
LTE Band 2 10MHz QPSK 1RB CH-Low	LTE Band 2 10MHz QPSK 1RB CH-High
	
LTE Band 2 10MHz QPSK 100%RB CH-Low	LTE Band 2 10MHz QPSK 100%RB CH-High
	
LTE Band 2 15MHz QPSK 1RB CH-Low	LTE Band 2 15MHz QPSK 1RB CH-High
	

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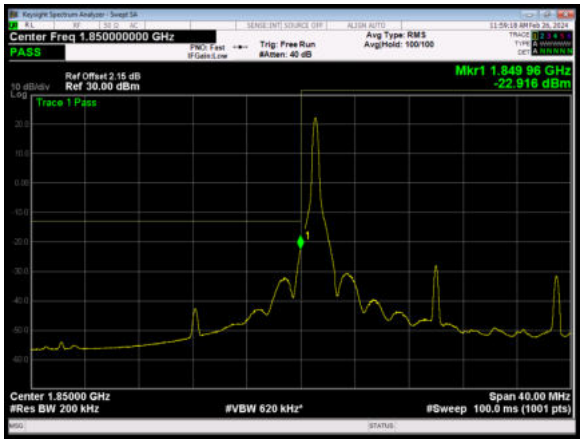
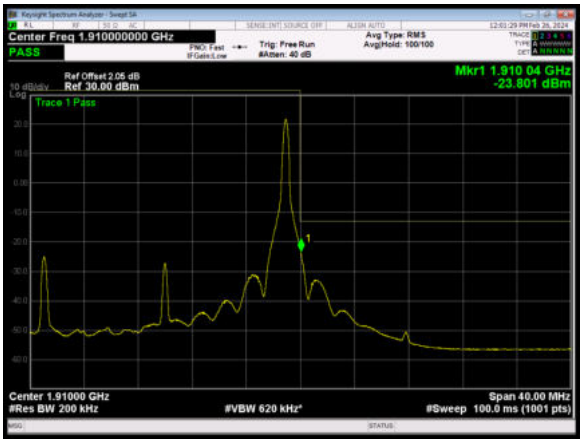
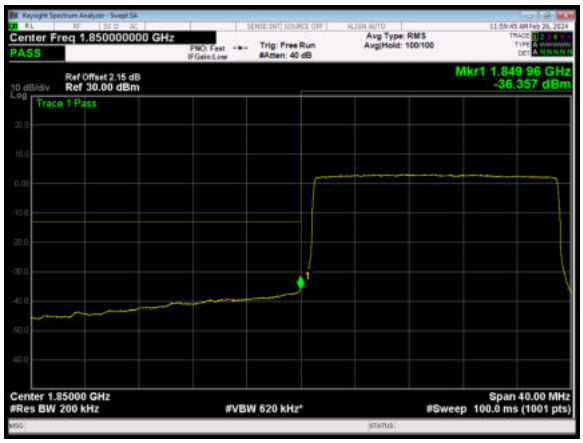
	
LTE Band 2 20MHz 16QAM 100%RB CH-Low	LTE Band 2 20MHz 16QAM 100%RB CH-High
	

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

Mode	Channel	Frequency (MHz)	Peak(dBm)	Avg(dBm)	PAPR(dB)	Limit(dB)	Conclusion
WCDMA Band II (RMC)	9262	1852.4	26.04	22.94	3.10	≤13	PASS
	9400	1880	24.76	21.77	2.99	≤13	PASS
	9538	1907.6	24.62	21.61	3.01	≤13	PASS

LTE Band2							
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
1.4	18607	6	#0	QPSK	5.48	13	PASS
1.4	18607	6	#0	16QAM	6.09	13	PASS
1.4	18900	6	#0	QPSK	5.11	13	PASS
1.4	18900	6	#0	16QAM	5.91	13	PASS
1.4	19193	6	#0	QPSK	5.15	13	PASS
1.4	19193	6	#0	16QAM	5.92	13	PASS
3	18615	15	#0	QPSK	5.37	13	PASS
3	18615	15	#0	16QAM	6.19	13	PASS
3	18900	15	#0	QPSK	5.11	13	PASS
3	18900	15	#0	16QAM	5.91	13	PASS
3	19185	15	#0	QPSK	5.16	13	PASS
3	19185	15	#0	16QAM	5.99	13	PASS
5	18625	25	#0	QPSK	5.32	13	PASS
5	18625	25	#0	16QAM	6.03	13	PASS
5	18900	25	#0	QPSK	5.15	13	PASS
5	18900	25	#0	16QAM	5.90	13	PASS
5	19175	25	#0	QPSK	5.22	13	PASS
5	19175	25	#0	16QAM	5.97	13	PASS
10	18650	50	#0	QPSK	5.29	13	PASS
10	18650	50	#0	16QAM	6.04	13	PASS
10	18900	50	#0	QPSK	5.18	13	PASS
10	18900	50	#0	16QAM	5.94	13	PASS
10	19150	50	#0	QPSK	5.26	13	PASS
10	19150	50	#0	16QAM	6.10	13	PASS
15	18675	75	#0	QPSK	5.64	13	PASS
15	18675	75	#0	16QAM	6.18	13	PASS
15	18900	75	#0	QPSK	5.57	13	PASS
15	18900	75	#0	16QAM	6.08	13	PASS
15	19125	75	#0	QPSK	5.67	13	PASS

15	19125	75	#0	16QAM	6.20	13	PASS
20	18700	100	#0	QPSK	5.42	13	PASS
20	18700	100	#0	16QAM	6.19	13	PASS
20	18900	100	#0	QPSK	5.43	13	PASS
20	18900	100	#0	16QAM	6.14	13	PASS
20	19100	100	#0	QPSK	5.45	13	PASS
20	19100	100	#0	16QAM	6.20	13	PASS

6.5. Frequency Stability

WCDMA Band II						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
Temperature	Voltage	QPSK	BPSK	QPSK	BPSK	
Normal（25℃）	Normal	11.27	9.98	0.00600	0.00531	PASS
Extreme（50℃）		7.23	8.87	0.00385	0.00472	PASS
Extreme（40℃）		17.26	9.61	0.00918	0.00511	PASS
Extreme（30℃）		1.56	16.28	0.00083	0.00866	PASS
Extreme（20℃）		5.59	4.38	0.00297	0.00233	PASS
Extreme（10℃）		15.50	17.63	0.00824	0.00938	PASS
Extreme（0℃）		12.35	17.43	0.00657	0.00927	PASS
Extreme（-10℃）		13.62	10.81	0.00724	0.00575	PASS
Extreme（-20℃）		8.93	14.61	0.00475	0.00777	PASS
Extreme（-30℃）		12.81	3.97	0.00681	0.00211	PASS
Normal（25℃）		10.90	6.81	0.00580	0.00362	PASS
25℃	LV	10.00	3.66	0.00532	0.00195	PASS
	HV	11.27	9.98	0.00600	0.00531	PASS

LTE Band2						
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	8.64	14.11	0.00460	0.00750	PASS
Extreme（50℃）		17.63	9.59	0.00938	0.00510	PASS
Extreme（40℃）		4.02	9.67	0.00214	0.00514	PASS
Extreme（30℃）		7.26	16.13	0.00386	0.00858	PASS
Extreme（20℃）		13.95	17.32	0.00742	0.00921	PASS
Extreme（10℃）		14.15	13.94	0.00753	0.00742	PASS
Extreme（0℃）		16.16	13.81	0.00860	0.00735	PASS
Extreme（-10℃）		17.52	4.30	0.00932	0.00229	PASS
Extreme（-20℃）		3.72	9.51	0.00198	0.00506	PASS
Extreme（-30℃）		5.55	8.21	0.00295	0.00437	PASS
25℃	LV	12.17	15.19	0.00648	0.00808	PASS
	HV	1.98	2.45	0.00105	0.00130	PASS
Condition		Freq.Error	Freq.Error	Frequency	Frequency	Verdict

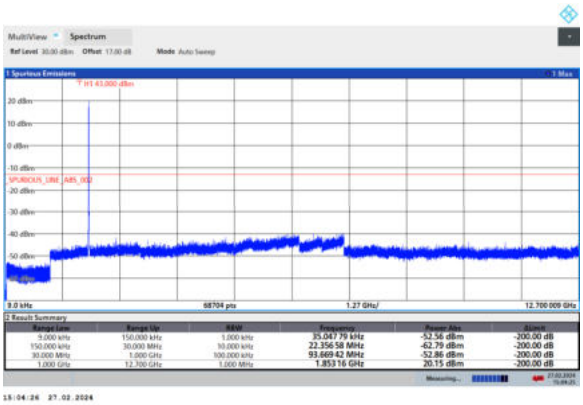
		(Hz)	(Hz)	Stability (ppm)	Stability (ppm)	
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal（25℃）	Normal	3.20	17.67	0.00170	0.00940	PASS
Extreme（50℃）		14.15	7.68	0.00753	0.00408	PASS
Extreme（40℃）		10.85	12.43	0.00577	0.00661	PASS
Extreme（30℃）		2.13	13.50	0.00113	0.00718	PASS
Extreme（20℃）		9.06	17.99	0.00482	0.00957	PASS
Extreme（10℃）		9.39	6.15	0.00499	0.00327	PASS
Extreme（0℃）		3.55	9.13	0.00189	0.00485	PASS
Extreme（-10℃）		5.16	2.20	0.00274	0.00117	PASS
Extreme（-20℃）		6.55	9.14	0.00348	0.00486	PASS
Extreme（-30℃）		12.20	9.71	0.00649	0.00517	PASS
25℃	LV	15.45	15.56	0.00822	0.00828	PASS
	HV	16.15	13.22	0.00859	0.00703	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	7.19	3.33	0.00383	0.00177	PASS
Extreme（50℃）		16.13	4.63	0.00858	0.00246	PASS
Extreme（40℃）		11.77	15.18	0.00626	0.00808	PASS
Extreme（30℃）		10.12	11.70	0.00538	0.00622	PASS
Extreme（20℃）		17.67	12.81	0.00940	0.00681	PASS
Extreme（10℃）		8.18	16.90	0.00435	0.00899	PASS
Extreme（0℃）		9.90	8.31	0.00527	0.00442	PASS
Extreme（-10℃）		15.70	8.55	0.00835	0.00455	PASS
Extreme（-20℃）		14.83	13.37	0.00789	0.00711	PASS
Extreme（-30℃）		13.58	12.01	0.00722	0.00639	PASS
25℃	LV	6.43	3.00	0.00342	0.00160	PASS
	HV	7.98	6.43	0.00425	0.00342	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	4.59	3.28	0.00244	0.00174	PASS
Extreme（50℃）		10.01	14.92	0.00532	0.00794	PASS
Extreme（40℃）		15.48	11.68	0.00824	0.00622	PASS
Extreme（30℃）		6.14	4.79	0.00326	0.00255	PASS
Extreme（20℃）		4.50	12.58	0.00239	0.00669	PASS

Extreme（10℃）		10.78	9.08	0.00573	0.00483	PASS
Extreme（0℃）		12.17	12.89	0.00647	0.00686	PASS
Extreme（-10℃）		5.16	4.57	0.00275	0.00243	PASS
Extreme（-20℃）		10.99	2.88	0.00585	0.00153	PASS
Extreme（-30℃）		12.39	10.04	0.00659	0.00534	PASS
25℃	LV	6.21	4.99	0.00330	0.00265	PASS
	HV	15.52	17.44	0.00825	0.00928	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	16.54	3.51	0.00880	0.00187	PASS
Extreme（50℃）		16.62	4.28	0.00884	0.00228	PASS
Extreme（40℃）		6.16	8.82	0.00328	0.00469	PASS
Extreme（30℃）		4.55	6.53	0.00242	0.00347	PASS
Extreme（20℃）		7.89	5.39	0.00420	0.00287	PASS
Extreme（10℃）		7.65	6.54	0.00407	0.00348	PASS
Extreme（0℃）		15.35	13.42	0.00816	0.00714	PASS
Extreme（-10℃）		3.97	3.59	0.00211	0.00191	PASS
Extreme（-20℃）		5.52	14.09	0.00294	0.00750	PASS
Extreme（-30℃）		1.73	14.06	0.00092	0.00748	PASS
25℃	LV	1.07	11.73	0.00057	0.00624	PASS
	HV	5.13	5.98	0.00273	0.00318	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	8.69	12.09	0.00462	0.00643	PASS
Extreme（50℃）		6.51	4.43	0.00346	0.00236	PASS
Extreme（40℃）		3.34	5.18	0.00178	0.00276	PASS
Extreme（30℃）		11.94	11.46	0.00635	0.00610	PASS
Extreme（20℃）		3.51	12.80	0.00187	0.00681	PASS
Extreme（10℃）		4.38	11.74	0.00233	0.00625	PASS
Extreme（0℃）		13.51	5.26	0.00719	0.00280	PASS
Extreme（-10℃）		15.97	2.66	0.00850	0.00142	PASS
Extreme（-20℃）		2.35	11.84	0.00125	0.00630	PASS
Extreme（-30℃）		11.88	3.03	0.00632	0.00161	PASS
25℃	LV	5.98	8.20	0.00318	0.00436	PASS
	HV	17.83	1.42	0.00948	0.00075	PASS

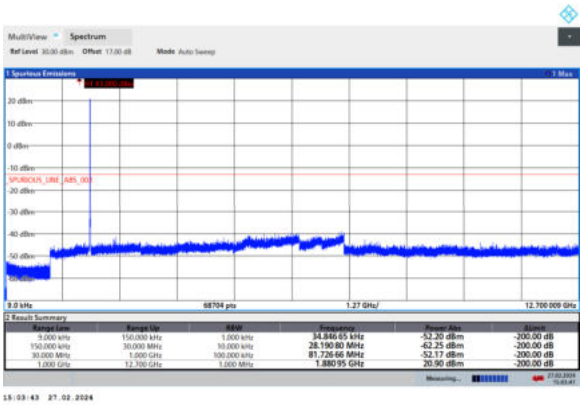
6.6. Spurious Emissions at Antenna Terminals

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.

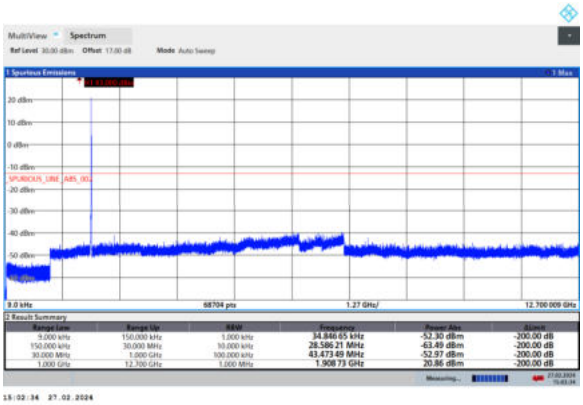
WCDMA BAND II CH-Low 9kHz ~ 12.7GHz

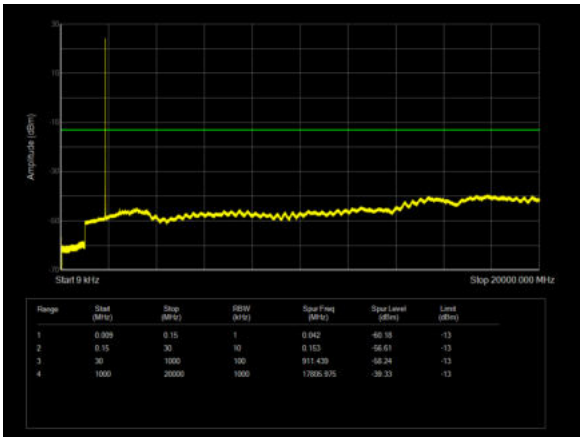
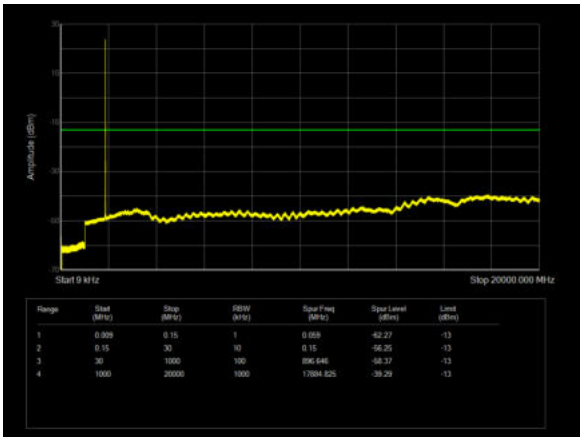
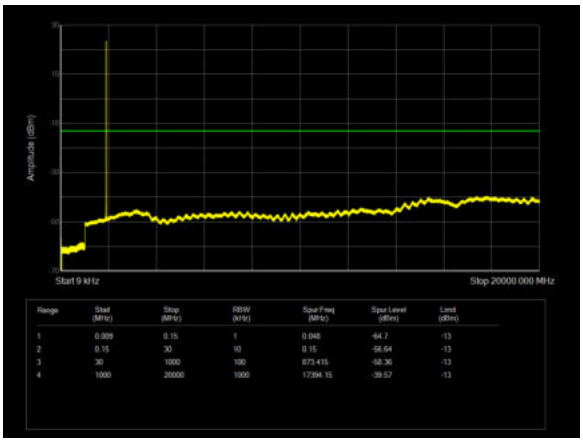
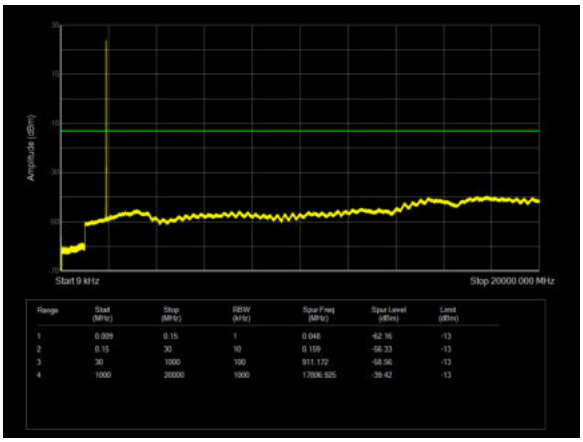
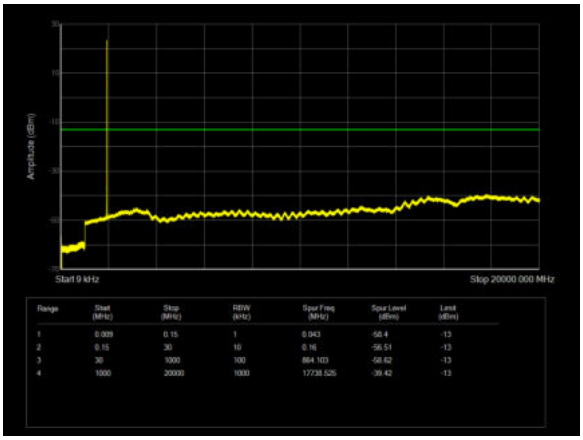
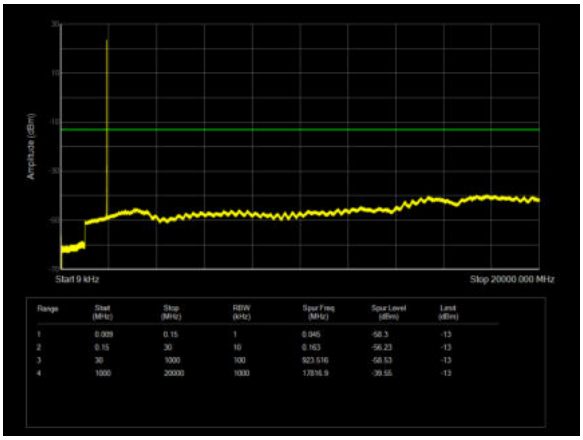


WCDMA BAND II CH- Middle 9kHz ~ 12.7GHz

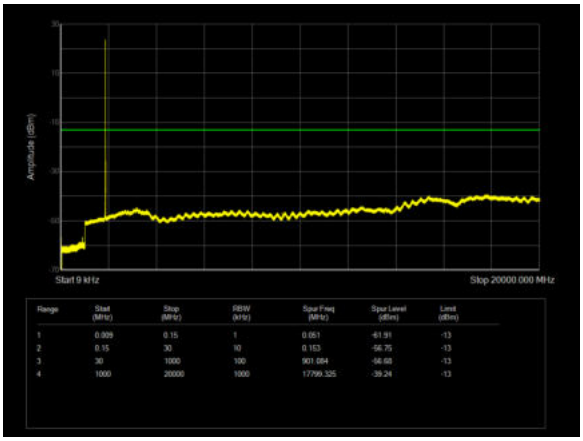


WCDMA BAND II CH-High 9kHz ~ 12.7GHz

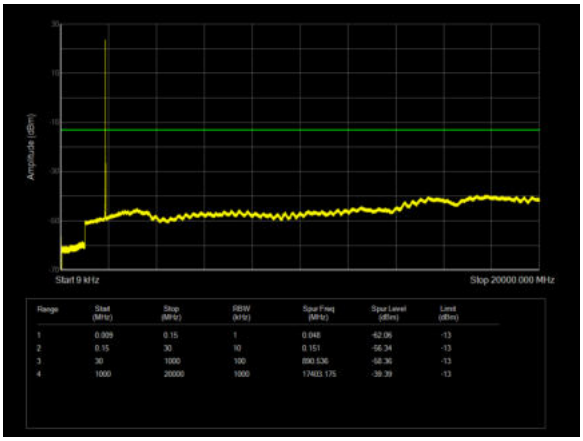


LTE Band 2 1.4MHz CH-Low 9kHz~20GHz	LTE Band 2 3MHz CH-Low 9kHz~20GHz
	
LTE Band 2 1.4MHz CH-Middle 9kHz~20GHz	LTE Band 2 3MHz CH-Middle 9kHz~20GHz
	
LTE Band 2 1.4MHz CH-High 9kHz~20GHz	LTE Band 2 3MHz CH-High 9kHz~20GHz
	

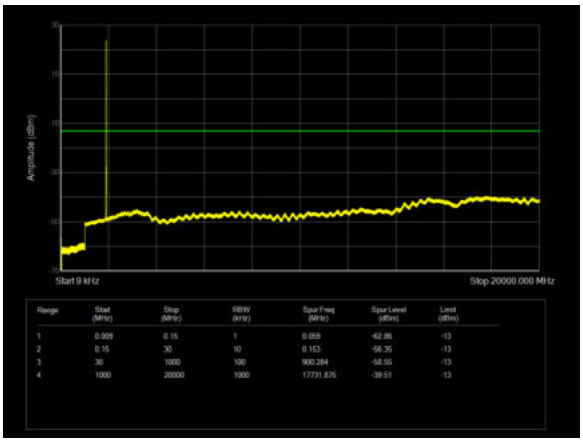
LTE Band 2 5MHz CH-Low 9kHz~20GHz



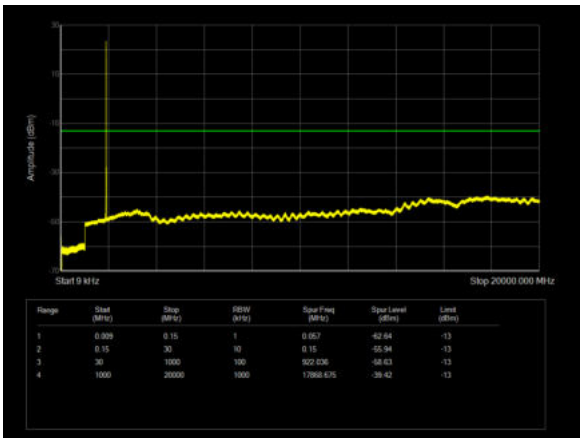
LTE Band 2 10MHz CH-Low 9kHz~20GHz



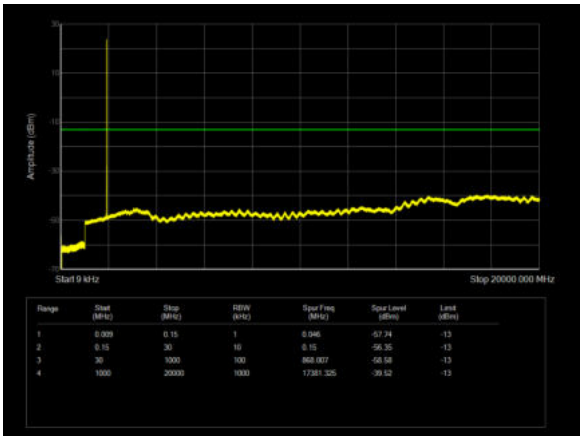
LTE Band 2 5MHz CH-Middle 9kHz~20GHz



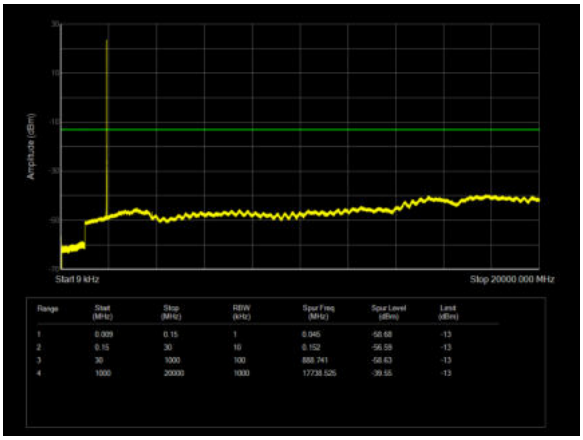
LTE Band 2 10MHz CH-Middle 9kHz~20GHz



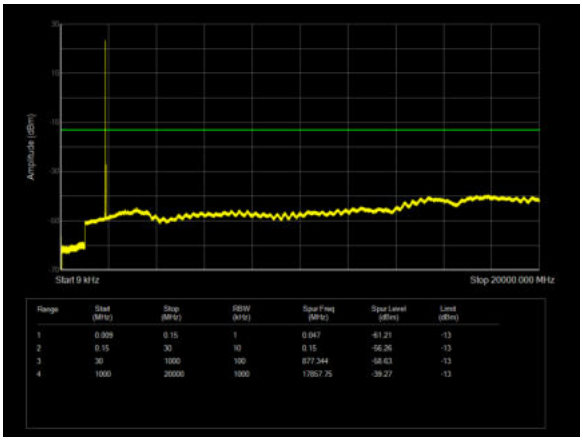
LTE Band 2 5MHz CH-High 9kHz~20GHz



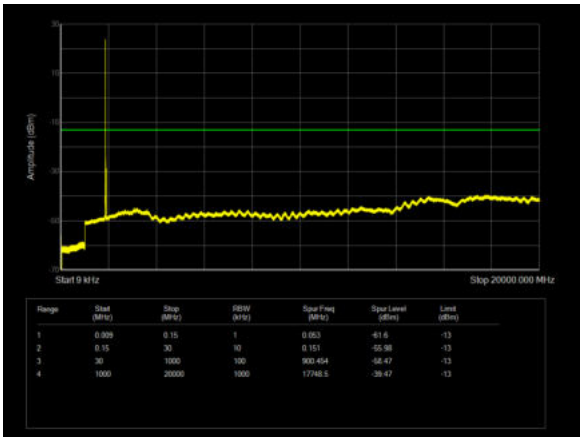
LTE Band 2 10MHz CH-High 9kHz~20GHz



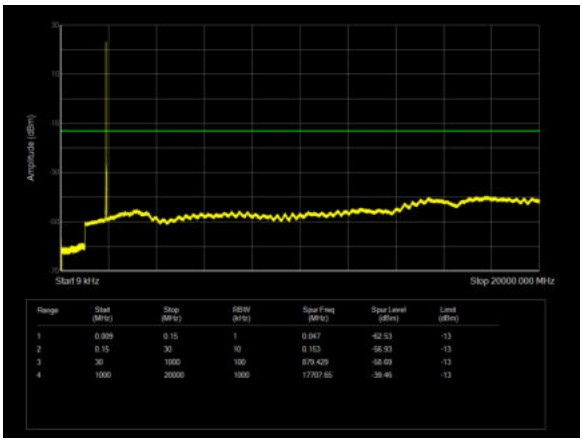
LTE Band 2 15MHz CH-Low 9kHz~20GHz



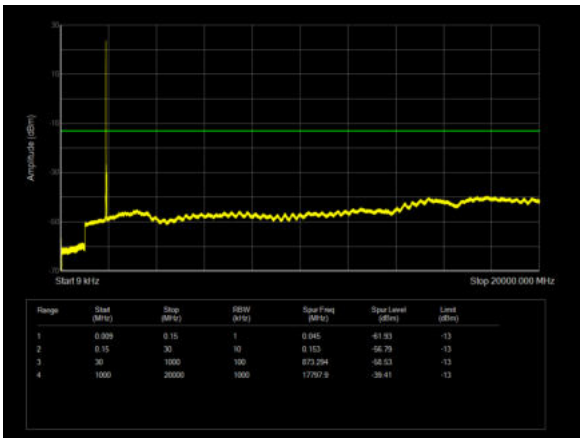
LTE Band 2 20MHz CH-Low 9kHz~20GHz



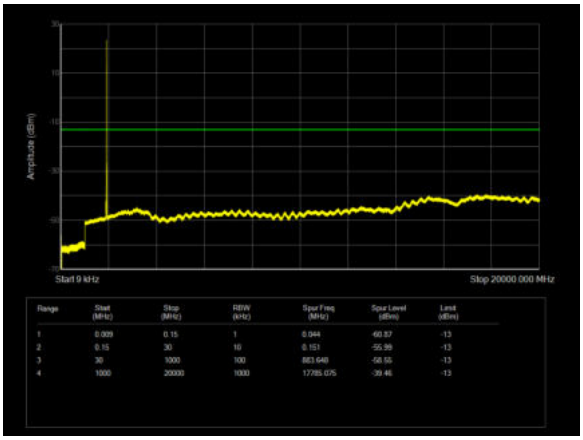
LTE Band 2 15MHz CH-Middle 9kHz~20GHz



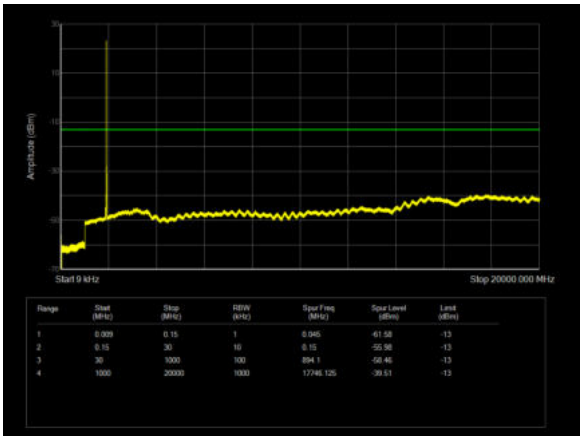
LTE Band 2 20MHz CH-Middle 9kHz~20GHz



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



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



6.7. Radiated 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.

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	-53.01	2.60	12.50	Horizontal	-43.11	-13.00	30.11	1
3	5640.00	-44.90	3.30	12.50	Horizontal	-35.70	-13.00	22.70	78
4	7520.00	-45.32	4.20	12.20	Horizontal	-37.32	-13.00	24.32	13
5	9400.00	-52.77	4.30	11.10	Horizontal	-45.97	-13.00	32.97	264
6	11280.00	-50.30	5.90	11.90	Horizontal	-44.30	-13.00	31.30	44
7	13160.00	-51.72	5.70	14.00	Horizontal	-43.42	-13.00	30.42	9
8	15040.00	-53.39	5.80	13.10	Horizontal	-46.09	-13.00	33.09	45
9	16920.00	-51.40	6.10	14.60	Horizontal	-42.90	-13.00	29.90	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	3759.00	-52.13	2.60	12.50	Vertical	-42.23	-13.00	29.23	13
3	5638.88	-36.28	3.30	12.50	Vertical	-27.08	-13.00	14.08	29
4	7520.00	-38.19	4.20	12.20	Vertical	-30.19	-13.00	17.19	287
5	9400.00	-44.64	4.30	11.10	Vertical	-37.84	-13.00	24.84	287
6	11280.00	-49.96	5.90	11.90	Vertical	-43.96	-13.00	30.96	90
7	13160.00	-50.71	5.70	14.00	Vertical	-42.41	-13.00	29.41	226
8	15040.00	-51.79	5.80	13.10	Vertical	-44.49	-13.00	31.49	11
9	16920.00	-50.85	6.10	14.60	Vertical	-42.35	-13.00	29.35	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.									

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	3755.63	-54.41	2.60	12.50	Vertical	-44.51	-13.00	31.51	139
3	5633.63	-38.50	3.30	12.50	Vertical	-29.30	-13.00	16.30	1
4	7510.00	-37.90	4.20	12.20	Vertical	-29.90	-13.00	16.90	180
5	9387.50	-43.98	4.30	11.10	Vertical	-37.18	-13.00	24.18	156
6	11265.00	-50.48	5.90	11.90	Vertical	-44.48	-13.00	31.48	1
7	13142.00	-51.87	5.70	14.00	Vertical	-43.57	-13.00	30.57	315
8	15020.00	-51.88	5.80	13.10	Vertical	-44.58	-13.00	31.58	79
9	16897.50	-51.91	6.10	14.60	Vertical	-43.41	-13.00	30.41	246
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	-54.62	2.60	12.50	Vertical	-44.72	-13.00	31.72	67
3	5613.38	-43.84	3.30	12.50	Vertical	-34.64	-13.00	21.64	1
4	7484.63	-40.34	4.20	12.20	Vertical	-32.34	-13.00	19.34	123
5	9355.33	-44.92	4.30	11.10	Vertical	-38.12	-13.00	25.12	146
6	11226.39	-50.31	5.90	11.90	Vertical	-44.31	-13.00	31.31	113
7	13097.46	-51.98	5.70	14.00	Vertical	-43.68	-13.00	30.68	44
8	14968.52	-50.42	5.80	13.10	Vertical	-43.12	-13.00	30.12	49
9	16938.59	-51.49	6.10	14.60	Vertical	-42.99	-13.00	29.99	146
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.

7. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Climate Chamber	WEISS	VT 4002	58226119450010	2023-05-12	2024-05-11
Wireless Communication Tester	R&S	CMW500	150415	2023-05-12	2024-05-11
Spectrum Analyzer	Keysight	N9020A	MY50510203	2023-05-12	2024-05-11
Wireless Communication Tester	Agilent	E5515C	MY48367192	2023-05-12	2024-05-11
DC Power Supply	UNI-T	UTP1310+	C220795889	2023-05-12	2024-05-11
Spectrum Analyzer	R&S	FSV3030	101411	2023-12-05	2024-12-04
Radiated Spurious Emission					
Spectrum Analyzer	R&S	FSV30	100815	2023-12-05	2024-12-04
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2022-09-29	2025-09-28
Horn Antenna	SCHWARZBECK	BBHA 9120D	1594	2023-12-05	2026-12-04
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Software	R&S	EMC32	10.35.10	/	/

ANNEX A: The EUT Appearance

The EUT Appearance is submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos is submitted separately.

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