



RF TEST REPORT

Applicant ZTE Corporation
FCC ID SRQ-ZTE7540NMX
Product 5G NR Multi model smart phone
Model ZTE 7540N
Report No. R2206A0499-R1
Issue Date July 18, 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 22H (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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Summary of measurement results

No.	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Radiated Power	2.1046 22.913(a)(5)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	2.1051 / 22.917(a)	PASS
4	Peak-to-Average Power Ratio	22.913(d)/ KDB 971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 22.355	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 / 22.917(a)	PASS
7	Radiates Spurious Emission	2.1053 / 22.917 (a)	PASS
Date of Testing: June 16, 2022 ~ July 7, 2022			
Date of Sample Received: June 10, 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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City: Shanghai
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E-mail: xukai@ta-shanghai.com

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	ZTE Corporation
Applicant address	ZTE Plaza, #55 Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, #55 Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China

2.2. General Information

EUT Description			
Model	ZTE 7540N		
SN	324225110229		
Hardware Version	zs9A		
Software Version	MyOS11.0.0_7540N_TEL		
Power Supply	Battery / AC adapter		
Antenna Type	Internal Antenna		
Antenna Gain	Band	Antenna	Gain(dBi)
	GSM 850:	Antenna 0	-4.1
	WCDMA Band V:	Antenna 0	-4.1
	LTE Band 5:	Antenna 0	-4.1
	LTE Band 26:	Antenna 0	-4.1
Test Mode(s)	GSM 850; WCDMA Band V; LTE Band 5/26;		
Test Modulation	(GSM/GPRS)GMSK, (EGPRS) GMSK/ 8PSK; (WCDMA) BPSK, QPSK,16QAM; (LTE) QPSK, 16QAM, 64QAM;		
GPRS Multislot Class	12		
HSDPA UE Category	24		
HSUPA UE Category	6		
HSPA+ UE Category	7		
LTE Category	13		
Maximum E.R.P.	GSM 850	26.15 dBm	
	WCDMA Band V	17.18 dBm	
	LTE Band 5	16.98 dBm	
	LTE Band 26	17.20 dBm	
Rated Power Supply Voltage	3.87V		
Operating Voltage	Minimum: 3.50V Maximum: 4.45V		
Operating Temperature	Lowest: -10°C Highest: +55°C		



Testing Temperature	Lowest: -30℃ Highest: +50℃		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM850	824 ~ 849	869 ~ 894
	WCDMA Band V	824 ~ 849	869 ~ 894
	LTE Band 5	824 ~ 849	869 ~ 894
	LTE Band 26	824 ~ 849	869 ~ 894
EUT Accessory			
Adapter 1	Manufacturer: Jiangsu Chenyang Electron Co., Ltd. Model: STC-A520A-Z		
Adapter 2	Manufacturer: Shenzhen Ruijing Industrial Co Ltd Model: STC-A520A-Z		
Battery	Manufacturer: ZHONGSHAN TIANMAO BATTERY CO.LTD. Model: Li3839T44P8h866445		
USB Cable1	Manufacturer: Shenzhen Luxshare Precision Industry Co.,Ltd. Model: USB-TC20-W-70-M-L		
USB Cable 2	Manufacturer: Dongguan Guojun Plastic Electronic Co.,Ltd Model: USB-TC20-W-70-M-L		
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant. 2. There are more than one Adapter and USB Cable, each one should be applied throughout the compliance test respectively, however, only the worst case (Adapter 1, and USB Cable 2) 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 22H (2021)

FCC CFR47 Part 2 (2021)

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 GSM/WCDMA, X axis, vertical polarization for 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 850	WCDMA Band V
RF Power Output and Effective Radiated power	GSM GPRS EGPRS	RMC/AMR HSDPA/HSUPA 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 as the worst case configuration below for LTE Band 5/26;

Test items	Modes	Bandwidth (MHz)					Modulation		RB			Test Channel		
		1.4	3	5	10	15	QPSK	16QAM/ 64QAM	1	50%	100%	L	M	H
RF power output and Effective Radiated power	LTE 5	O	O	O	O	-	O	O	O	O	O	O	O	O
	LTE 26	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	LTE 5	O	O	O	O	-	O	O	-	-	O	O	O	O
	LTE 26	O	O	O	O	O	O	O	-	-	O	O	O	O
Band Edge Compliance	LTE 5	O	O	O	O	-	O	O	O	-	O	O	-	O
	LTE 26	O	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	LTE 5	O	O	O	O	-	O	O	-	-	O	O	O	O
	LTE 26	O	O	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	LTE 5	O	O	O	O	-	O	O	O	-	-	-	O	-
	LTE 26	O	O	O	O	O	O	O	O	-	-	-	O	-
Spurious Emissions at Antenna Terminals	LTE 5	O	O	O	O	-	O	-	O	-	-	O	O	O
	LTE 26	O	O	O	O	O	O	-	O	-	-	O	O	O
Radiates Spurious Emission	LTE 5	O	-	O	O	-	O	-	O	-	-	-	O	-
	LTE 26	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 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.

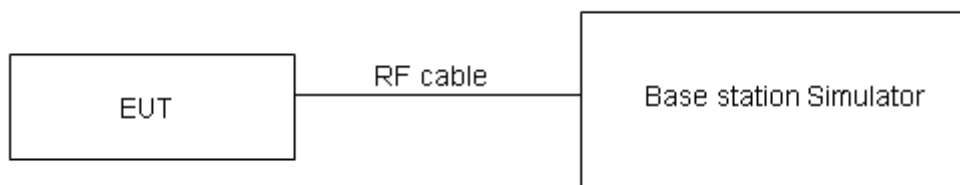
ERP can then be calculated as follows:

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

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

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

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 22.913(a)(5) specifies that "Mobile/portable stations are limited to 7 watts ERP".

Limit	$\leq 7 \text{ W}$ (38.45 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 ERP.

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

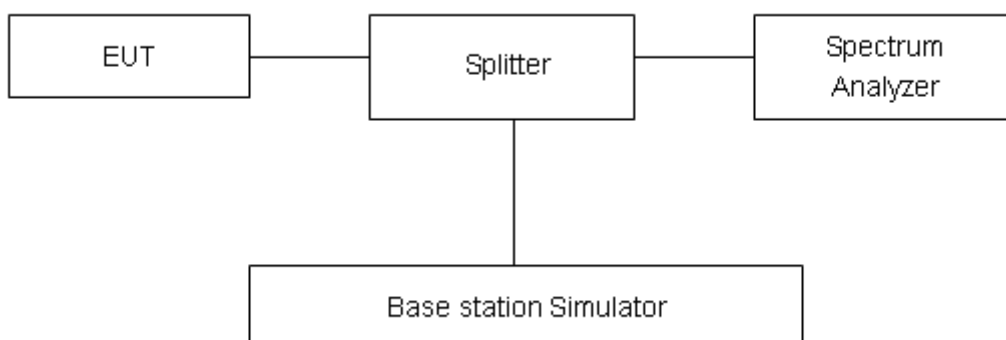
Method of Measurement

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

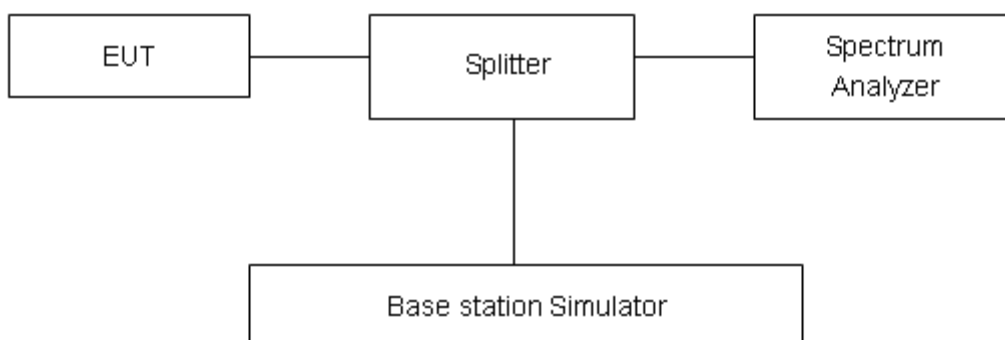
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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. 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 22.917(a) specifies that “The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ 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 $k = 1.96$, $U=0.684dB$.

Test Results

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

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

Ambient condition

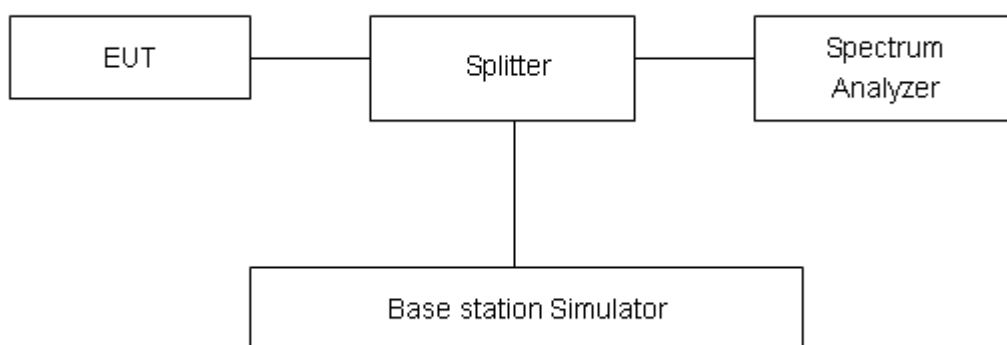
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

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

$$PAPR (dB) = P_{Pk} (dBm) - P_{Avg} (dBm).$$

Test Setup



Limits

According to the Sec. 22.913(d), The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

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.

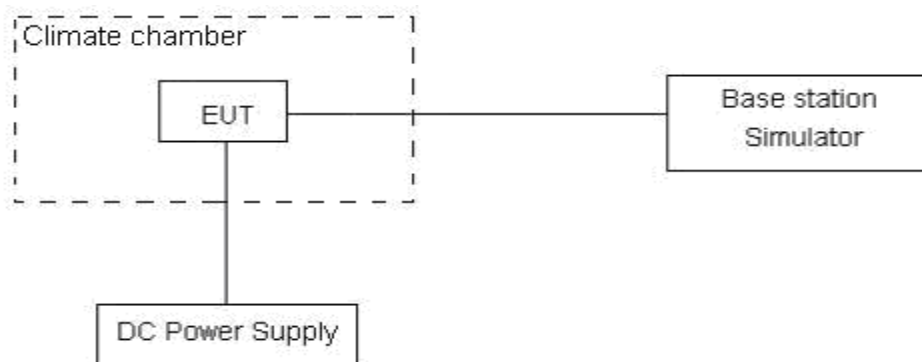
(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements. Frequency Stability (Voltage Variation)

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 3.50 V and 4.45 V, with a nominal voltage of 3.87V.

Test setup



Limits

According to the Sec. 22.355, the frequency stability of the carrier shall be accurate to within 2.5 ppm of the received frequency for mobile stations.

Limits	≤ 2.5 ppm
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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 $k = 3$, $U = 0.01\text{ppm}$.



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 are set to 100 kHz and VBW are set to 300 kHz for below 1G, RBW are set to 1MHz and VBW are set to 3MHz for above 1G, Sweep is set to ATUO.

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

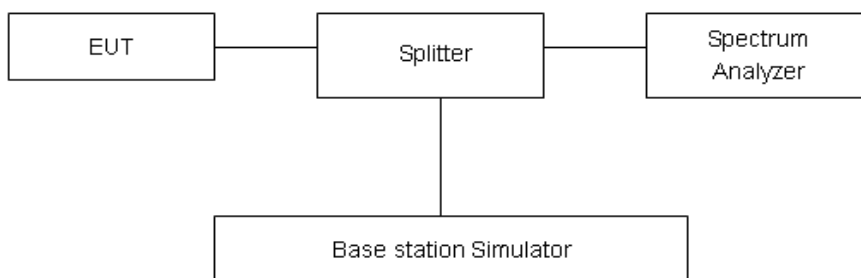
RBW is set to 10 kHz (0.15 MHz~ 30 MHz)

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 22.917(a) specifies that “The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ 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=100kHz,VBW=300kHz, 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:
$$\text{Power(EIRP)} = \text{PMea} - \text{PAg} - \text{Pcl} + \text{Ga}$$

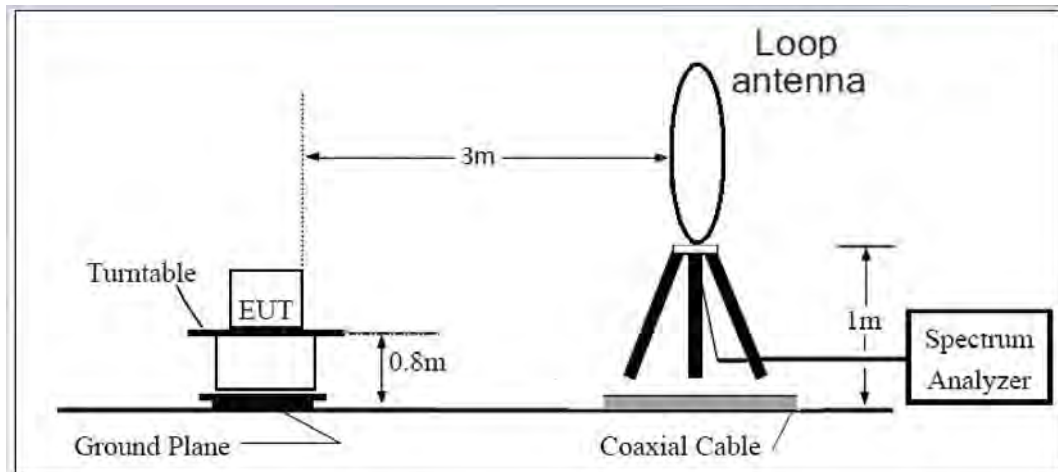
The measurement results are amend as described below:
$$\text{Power(EIRP)} = \text{PMea} - \text{Pcl} + \text{Ga}$$
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the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

= EIRP-2.15dB.

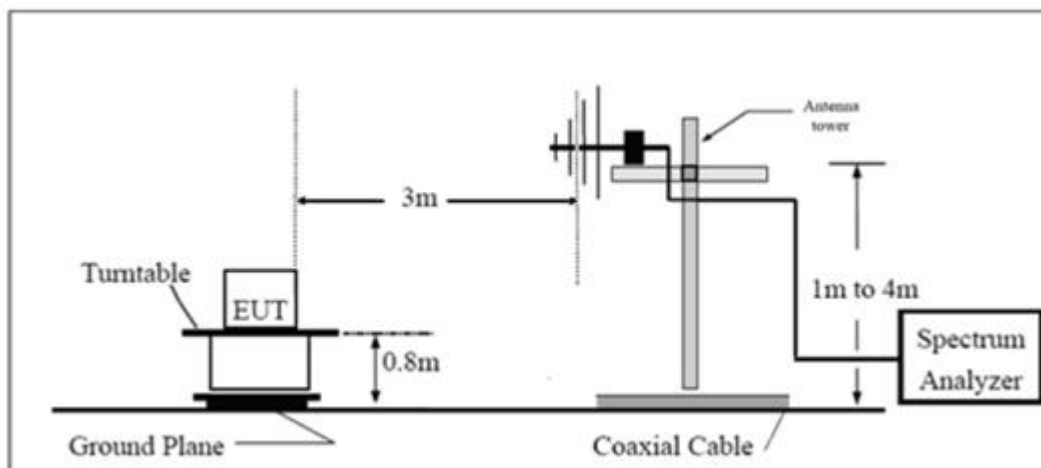
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

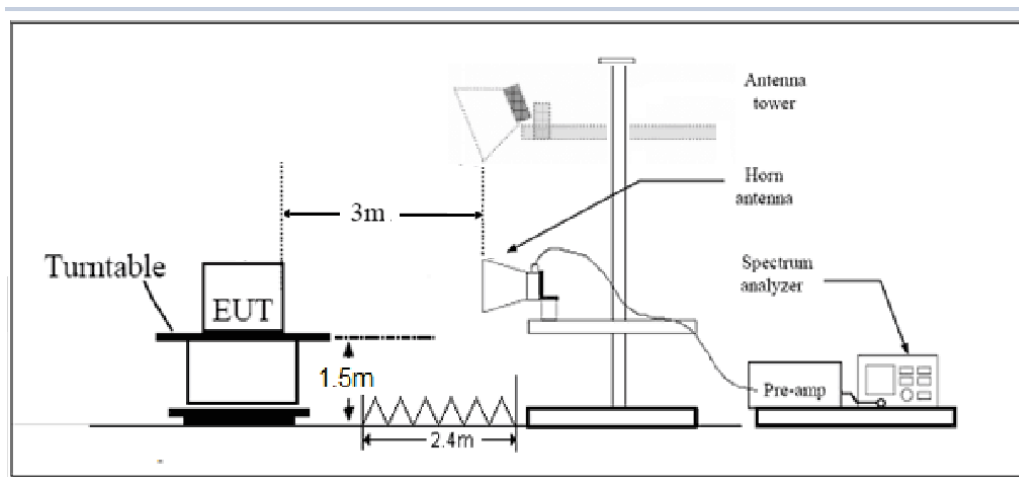
9KHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

Rule Part 22.917(a) specifies that “The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ 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 Result

6.1. RF Power Output and Effective Radiated Power

GSM 850		Maximum Output Power (dBm)			Antenna 0 ERP (dBm)		
		Channel 128	Channel 190	Channel 251	Channel 128	Channel 190	Channel 251
		824.2 (MHz)	836.6 (MHz)	848.8 (MHz)	824.2 (MHz)	836.6 (MHz)	848.8 (MHz)
GSM(GMSK)	Results	32.37	32.40	32.26	26.12	26.15	26.01
GPRS/EGPRS (GMSK)	1TXslot	32.33	32.40	32.21	26.08	26.15	25.96
	2TXslots	31.90	31.89	31.77	25.65	25.64	25.52
	3TXslots	30.53	30.52	30.37	24.28	24.27	24.12
	4TXslots	29.52	29.52	29.33	23.27	23.27	23.08
EGPRS (8PSK)	1TXslot	26.66	26.52	26.14	20.41	20.27	19.89
	2TXslots	25.55	25.10	25.22	19.30	18.85	18.97
	3TXslots	23.26	23.25	22.96	17.01	17.00	16.71
	4TXslots	22.18	22.15	21.95	15.93	15.90	15.70

WCDMA Band V		Maximum Output Power (dBm)			Antenna 0 ERP (dBm)		
		Channel 4132	Channel 4183	Channel 4233	Channel 4132	Channel 4183	Channel 4233
		826.4 (MHz)	836.6 (MHz)	846.6 (MHz)	826.4 (MHz)	836.6 (MHz)	846.6 (MHz)
RMC		23.33	23.36	23.35	17.08	17.11	17.10
AMR		23.43	23.26	23.25	17.18	17.01	17.00
HSDPA	Sub - Test 1	22.39	22.46	22.25	16.14	16.21	16.00
	Sub - Test 2	22.27	22.50	22.41	16.02	16.25	16.16
	Sub - Test 3	21.99	21.74	21.71	15.74	15.49	15.46
	Sub - Test 4	21.75	21.86	21.69	15.50	15.61	15.44
HSUPA	Sub - Test 1	21.85	22.18	21.97	15.60	15.93	15.72
	Sub - Test 2	20.17	20.52	20.39	13.92	14.27	14.14
	Sub - Test 3	21.27	21.52	21.39	15.02	15.27	15.14
	Sub - Test 4	20.19	20.38	20.31	13.94	14.13	14.06
	Sub - Test 5	22.09	22.12	22.07	15.84	15.87	15.82
HSPA+	16QAM	21.24	21.07	20.98	14.99	14.82	14.73

LTE Band 5				Maximum Output Power(dBm)			Antenna 0 ERP (dBm)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20407 /824.7	20525 /836.5	20643 /848.3	20407 /824.7	20525 /836.5	20643 /848.3
1.4MHz	QPSK	1	0	23.14	23.23	23.11	16.89	16.98	16.86
		1	2	23.21	23.10	23.01	16.96	16.85	16.76
		1	5	23.17	23.05	23.13	16.92	16.80	16.88
		3	0	22.98	23.04	22.98	16.73	16.79	16.73
		3	2	22.96	23.02	22.97	16.71	16.77	16.72
		3	3	23.14	22.95	22.99	16.89	16.70	16.74
		6	0	22.13	22.13	22.08	15.88	15.88	15.83
	16QAM	1	0	22.44	22.45	22.54	16.19	16.20	16.29
		1	2	22.19	22.20	22.24	15.94	15.95	15.99
		1	5	22.65	22.63	22.73	16.40	16.38	16.48
		3	0	22.00	21.95	22.06	15.75	15.70	15.81
		3	2	22.11	22.08	22.19	15.86	15.83	15.94
		3	3	22.05	22.04	22.11	15.80	15.79	15.86
		6	0	21.07	21.07	21.18	14.82	14.82	14.93
	64QAM	1	0	21.51	21.48	21.59	15.26	15.23	15.34
		1	2	21.56	21.53	21.63	15.31	15.28	15.38
		1	5	21.46	21.48	21.52	15.21	15.23	15.27
		3	0	21.07	21.02	21.11	14.82	14.77	14.86
		3	2	21.03	20.99	21.11	14.78	14.74	14.86
		3	3	21.01	21.00	21.07	14.76	14.75	14.82
		6	0	20.11	20.12	20.23	13.86	13.87	13.98
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20415 /825.5	20525 /836.5	20635 /847.5	20415 /825.5	20525 /836.5	20635 /847.5
3MHz	QPSK	1	0	23.16	23.27	23.14	16.91	17.02	16.89
		1	7	23.19	23.13	23.05	16.94	16.88	16.80
		1	14	23.20	23.10	23.17	16.95	16.85	16.92
		8	0	22.08	22.16	22.11	15.83	15.91	15.86
		8	4	22.08	22.12	22.09	15.83	15.87	15.84
		8	7	22.24	22.06	22.09	15.99	15.81	15.84
		15	0	22.13	22.17	22.11	15.88	15.92	15.86
	16QAM	1	0	22.44	22.47	22.57	16.19	16.22	16.32
		1	7	22.19	22.20	22.28	15.94	15.95	16.03
		1	14	22.67	22.67	22.76	16.42	16.42	16.51
		8	0	21.11	21.08	21.18	14.86	14.83	14.93
		8	4	21.22	21.21	21.31	14.97	14.96	15.06
		8	7	21.15	21.16	21.24	14.90	14.91	14.99



		15	0	21.10	21.11	21.21	14.85	14.86	14.96
	64QAM	1	0	21.54	21.50	21.62	15.29	15.25	15.37
		1	7	21.59	21.53	21.65	15.34	15.28	15.40
		1	14	21.48	21.47	21.55	15.23	15.22	15.30
		8	0	20.18	20.15	20.23	13.93	13.90	13.98
		8	4	20.14	20.12	20.23	13.89	13.87	13.98
		8	7	20.11	20.12	20.20	13.86	13.87	13.95
		15	0	20.14	20.16	20.26	13.89	13.91	14.01
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20425 /826.5	20525 /836.5	20625 /846.5	20425 /826.5	20525 /836.5	20625 /846.5
5MHz	QPSK	1	0	23.14	23.22	23.11	16.89	16.97	16.86
		1	13	23.18	23.13	23.03	16.93	16.88	16.78
		1	24	23.16	23.04	23.12	16.91	16.79	16.87
		12	0	22.06	22.12	22.08	15.81	15.87	15.83
		12	6	22.06	22.08	22.04	15.81	15.83	15.79
		12	13	22.21	22.05	22.06	15.96	15.80	15.81
		25	0	22.15	22.14	22.08	15.90	15.89	15.83
	16QAM	1	0	22.46	22.44	22.54	16.21	16.19	16.29
		1	13	22.21	22.19	22.26	15.96	15.94	16.01
		1	24	22.65	22.63	22.72	16.40	16.38	16.47
		12	0	21.09	21.07	21.16	14.84	14.82	14.91
		12	6	21.18	21.15	21.26	14.93	14.90	15.01
		12	13	21.13	21.12	21.21	14.88	14.87	14.96
		25	0	21.08	21.07	21.16	14.83	14.82	14.91
	64QAM	1	0	21.48	21.47	21.59	15.23	15.22	15.34
		1	13	21.57	21.52	21.63	15.32	15.27	15.38
		1	24	21.49	21.46	21.55	15.24	15.21	15.30
		12	0	20.18	20.18	20.25	13.93	13.93	14.00
		12	6	20.11	20.08	20.21	13.86	13.83	13.96
		12	13	20.09	20.08	20.17	13.84	13.83	13.92
		25	0	20.12	20.12	20.21	13.87	13.87	13.96
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20450 /829	20525 /836.5	20600 /844	20450 /829	20525 /836.5	20600 /844
10MHz	QPSK	1	0	23.11	23.18	23.08	16.86	16.93	16.83
		1	25	23.17	23.09	23.01	16.92	16.84	16.76
		1	49	23.14	23.03	23.09	16.89	16.78	16.84
		25	0	22.03	22.07	22.04	15.78	15.82	15.79
		25	13	22.04	22.04	22.01	15.79	15.79	15.76
		25	25	22.18	22.00	22.02	15.93	15.75	15.77
		50	0	22.12	22.09	22.04	15.87	15.84	15.79
	16QAM	1	0	22.43	22.40	22.49	16.18	16.15	16.24



		1	25	22.18	22.17	22.22	15.93	15.92	15.97
		1	49	22.62	22.60	22.70	16.37	16.35	16.45
		25	0	21.06	21.03	21.13	14.81	14.78	14.88
		25	13	21.15	21.13	21.23	14.90	14.88	14.98
		25	25	21.10	21.07	21.17	14.85	14.82	14.92
		50	0	21.06	21.03	21.13	14.81	14.78	14.88
	64QAM	1	0	21.46	21.43	21.54	15.21	15.18	15.29
		1	25	21.53	21.50	21.59	15.28	15.25	15.34
		1	49	21.43	21.40	21.49	15.18	15.15	15.24
		25	0	20.13	20.10	20.18	13.88	13.85	13.93
		25	13	20.07	20.04	20.15	13.82	13.79	13.90
		25	25	20.06	20.03	20.13	13.81	13.78	13.88
		50	0	20.10	20.08	20.18	13.85	13.83	13.93

LTE band 26						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Antenna 0 ERP (dBm)
1.4	26797	1	#0	QPSK	23.42	17.17
1.4	26797	1	#Mid	QPSK	23.45	17.20
1.4	26797	1	#Max	QPSK	23.44	17.19
1.4	26797	3	#0	QPSK	23.39	17.14
1.4	26797	3	#Mid	QPSK	23.38	17.13
1.4	26797	3	#Max	QPSK	23.36	17.11
1.4	26797	6	#0	QPSK	22.37	16.12
1.4	26915	1	#0	QPSK	23.31	17.06
1.4	26915	1	#Mid	QPSK	23.35	17.10
1.4	26915	1	#Max	QPSK	23.30	17.05
1.4	26915	3	#0	QPSK	23.29	17.04
1.4	26915	3	#Mid	QPSK	23.28	17.03
1.4	26915	3	#Max	QPSK	23.28	17.03
1.4	26915	6	#0	QPSK	22.35	16.10
1.4	27033	1	#0	QPSK	23.34	17.09
1.4	27033	1	#Mid	QPSK	23.33	17.08
1.4	27033	1	#Max	QPSK	23.31	17.06
1.4	27033	3	#0	QPSK	23.42	17.17
1.4	27033	3	#Mid	QPSK	23.42	17.17
1.4	27033	3	#Max	QPSK	23.39	17.14
1.4	27033	6	#0	QPSK	22.36	16.11
3	26805	1	#0	QPSK	23.23	16.98
3	26805	1	#Mid	QPSK	23.34	17.09
3	26805	1	#Max	QPSK	23.30	17.05
3	26805	8	#0	QPSK	22.36	16.11
3	26805	8	#Mid	QPSK	22.38	16.13



3	26805	8	#Max	QPSK	22.39	16.14
3	26805	15	#0	QPSK	22.39	16.14
3	26915	1	#0	QPSK	23.35	17.10
3	26915	1	#Mid	QPSK	23.33	17.08
3	26915	1	#Max	QPSK	23.34	17.09
3	26915	8	#0	QPSK	22.36	16.11
3	26915	8	#Mid	QPSK	22.35	16.10
3	26915	8	#Max	QPSK	22.37	16.12
3	26915	15	#0	QPSK	22.41	16.16
3	27025	1	#0	QPSK	23.31	17.06
3	27025	1	#Mid	QPSK	23.35	17.10
3	27025	1	#Max	QPSK	23.36	17.11
3	27025	8	#0	QPSK	22.38	16.13
3	27025	8	#Mid	QPSK	22.38	16.13
3	27025	8	#Max	QPSK	22.36	16.11
3	27025	15	#0	QPSK	22.38	16.13
5	26815	1	#0	QPSK	23.34	17.09
5	26815	1	#Mid	QPSK	23.35	17.10
5	26815	1	#Max	QPSK	23.42	17.17
5	26815	12	#0	QPSK	22.42	16.17
5	26815	12	#Mid	QPSK	22.35	16.10
5	26815	12	#Max	QPSK	22.41	16.16
5	26815	25	#0	QPSK	22.42	16.17
5	26915	1	#0	QPSK	23.48	17.23
5	26915	1	#Mid	QPSK	23.43	17.18
5	26915	1	#Max	QPSK	23.49	17.24
5	26915	12	#0	QPSK	22.38	16.13
5	26915	12	#Mid	QPSK	22.39	16.14
5	26915	12	#Max	QPSK	22.35	16.10
5	26915	25	#0	QPSK	22.41	16.16
5	27015	1	#0	QPSK	23.43	17.18
5	27015	1	#Mid	QPSK	23.43	17.18
5	27015	1	#Max	QPSK	23.49	17.24
5	27015	12	#0	QPSK	22.44	16.19
5	27015	12	#Mid	QPSK	22.44	16.19
5	27015	12	#Max	QPSK	22.34	16.09
5	27015	25	#0	QPSK	22.36	16.11
10	26840	1	#0	QPSK	23.42	17.17
10	26840	1	#Mid	QPSK	23.55	17.30
10	26840	1	#Max	QPSK	23.35	17.10
10	26840	25	#0	QPSK	22.40	16.15
10	26840	25	#Mid	QPSK	22.41	16.16
10	26840	25	#Max	QPSK	22.41	16.16



10	26840	50	#0	QPSK	22.46	16.21
10	26915	1	#0	QPSK	23.43	17.18
10	26915	1	#Mid	QPSK	23.45	17.20
10	26915	1	#Max	QPSK	23.49	17.24
10	26915	25	#0	QPSK	22.40	16.15
10	26915	25	#Mid	QPSK	22.39	16.14
10	26915	25	#Max	QPSK	22.35	16.10
10	26915	50	#0	QPSK	22.41	16.16
10	26990	1	#0	QPSK	23.44	17.19
10	26990	1	#Mid	QPSK	23.46	17.21
10	26990	1	#Max	QPSK	23.43	17.18
10	26990	25	#0	QPSK	22.46	16.21
10	26990	25	#Mid	QPSK	22.47	16.22
10	26990	25	#Max	QPSK	22.37	16.12
10	26990	50	#0	QPSK	22.46	16.21
15	26865	1	#0	QPSK	23.31	17.06
15	26865	1	#Mid	QPSK	23.39	17.14
15	26865	1	#Max	QPSK	23.33	17.08
15	26865	36	#0	QPSK	22.31	16.06
15	26865	36	#Mid	QPSK	22.37	16.12
15	26865	36	#Max	QPSK	22.36	16.11
15	26865	75	#0	QPSK	22.36	16.11
15	26915	1	#0	QPSK	23.38	17.13
15	26915	1	#Mid	QPSK	23.34	17.09
15	26915	1	#Max	QPSK	23.41	17.16
15	26915	36	#0	QPSK	22.34	16.09
15	26915	36	#Mid	QPSK	22.32	16.07
15	26915	36	#Max	QPSK	22.29	16.04
15	26915	75	#0	QPSK	22.37	16.12
15	26965	1	#0	QPSK	23.35	17.10
15	26965	1	#Mid	QPSK	23.51	17.26
15	26965	1	#Max	QPSK	23.35	17.10
15	26965	36	#0	QPSK	22.37	16.12
15	26965	36	#Mid	QPSK	22.37	16.12
15	26965	36	#Max	QPSK	22.32	16.07
15	26965	75	#0	QPSK	22.36	16.11
1.4	26797	1	#0	QAM16	22.34	16.09
1.4	26797	1	#Mid	QAM16	22.40	16.15
1.4	26797	1	#Max	QAM16	22.36	16.11
1.4	26797	3	#0	QAM16	22.56	16.31
1.4	26797	3	#Mid	QAM16	22.56	16.31
1.4	26797	3	#Max	QAM16	22.55	16.30
1.4	26797	6	#0	QAM16	21.39	15.14



1.4	26915	1	#0	QAM16	22.42	16.17
1.4	26915	1	#Mid	QAM16	22.43	16.18
1.4	26915	1	#Max	QAM16	22.44	16.19
1.4	26915	3	#0	QAM16	22.43	16.18
1.4	26915	3	#Mid	QAM16	22.44	16.19
1.4	26915	3	#Max	QAM16	22.44	16.19
1.4	26915	6	#0	QAM16	21.28	15.03
1.4	27033	1	#0	QAM16	22.38	16.13
1.4	27033	1	#Mid	QAM16	22.33	16.08
1.4	27033	1	#Max	QAM16	22.35	16.10
1.4	27033	3	#0	QAM16	22.34	16.09
1.4	27033	3	#Mid	QAM16	22.34	16.09
1.4	27033	3	#Max	QAM16	22.32	16.07
1.4	27033	6	#0	QAM16	21.34	15.09
3	26805	1	#0	QAM16	22.69	16.44
3	26805	1	#Mid	QAM16	22.67	16.42
3	26805	1	#Max	QAM16	22.64	16.39
3	26805	8	#0	QAM16	21.40	15.15
3	26805	8	#Mid	QAM16	21.39	15.14
3	26805	8	#Max	QAM16	21.39	15.14
3	26805	15	#0	QAM16	21.33	15.08
3	26915	1	#0	QAM16	22.45	16.20
3	26915	1	#Mid	QAM16	22.41	16.16
3	26915	1	#Max	QAM16	22.43	16.18
3	26915	8	#0	QAM16	21.33	15.08
3	26915	8	#Mid	QAM16	21.35	15.10
3	26915	8	#Max	QAM16	21.35	15.10
3	26915	15	#0	QAM16	21.31	15.06
3	27025	1	#0	QAM16	22.38	16.13
3	27025	1	#Mid	QAM16	22.31	16.06
3	27025	1	#Max	QAM16	22.29	16.04
3	27025	8	#0	QAM16	21.36	15.11
3	27025	8	#Mid	QAM16	21.37	15.12
3	27025	8	#Max	QAM16	21.31	15.06
3	27025	15	#0	QAM16	21.36	15.11
5	26815	1	#0	QAM16	22.66	16.41
5	26815	1	#Mid	QAM16	22.66	16.41
5	26815	1	#Max	QAM16	22.68	16.43
5	26815	12	#0	QAM16	21.38	15.13
5	26815	12	#Mid	QAM16	21.39	15.14
5	26815	12	#Max	QAM16	21.42	15.17
5	26815	25	#0	QAM16	21.42	15.17
5	26915	1	#0	QAM16	22.58	16.33



5	26915	1	#Mid	QAM16	22.58	16.33
5	26915	1	#Max	QAM16	22.56	16.31
5	26915	12	#0	QAM16	21.34	15.09
5	26915	12	#Mid	QAM16	21.35	15.10
5	26915	12	#Max	QAM16	21.29	15.04
5	26915	25	#0	QAM16	21.45	15.20
5	27015	1	#0	QAM16	22.62	16.37
5	27015	1	#Mid	QAM16	22.55	16.30
5	27015	1	#Max	QAM16	22.55	16.30
5	27015	12	#0	QAM16	21.35	15.10
5	27015	12	#Mid	QAM16	21.35	15.10
5	27015	12	#Max	QAM16	21.26	15.01
5	27015	25	#0	QAM16	21.33	15.08
10	26840	1	#0	QAM16	22.58	16.33
10	26840	1	#Mid	QAM16	22.66	16.41
10	26840	1	#Max	QAM16	22.43	16.18
10	26840	25	#0	QAM16	21.44	15.19
10	26840	25	#Mid	QAM16	21.42	15.17
10	26840	25	#Max	QAM16	21.46	15.21
10	26840	50	#0	QAM16	21.38	15.13
10	26915	1	#0	QAM16	22.35	16.10
10	26915	1	#Mid	QAM16	22.34	16.09
10	26915	1	#Max	QAM16	22.39	16.14
10	26915	25	#0	QAM16	21.39	15.14
10	26915	25	#Mid	QAM16	21.40	15.15
10	26915	25	#Max	QAM16	21.35	15.10
10	26915	50	#0	QAM16	21.38	15.13
10	26990	1	#0	QAM16	22.67	16.42
10	26990	1	#Mid	QAM16	22.72	16.47
10	26990	1	#Max	QAM16	22.65	16.40
10	26990	25	#0	QAM16	21.51	15.26
10	26990	25	#Mid	QAM16	21.52	15.27
10	26990	25	#Max	QAM16	21.47	15.22
10	26990	50	#0	QAM16	21.38	15.13
15	26865	1	#0	QAM16	22.66	16.41
15	26865	1	#Mid	QAM16	22.70	16.45
15	26865	1	#Max	QAM16	22.56	16.31
15	26865	36	#0	QAM16	21.33	15.08
15	26865	36	#Mid	QAM16	21.34	15.09
15	26865	36	#Max	QAM16	21.36	15.11
15	26865	75	#0	QAM16	21.34	15.09
15	26915	1	#0	QAM16	22.55	16.30
15	26915	1	#Mid	QAM16	22.44	16.19



15	26915	1	#Max	QAM16	22.44	16.19
15	26915	36	#0	QAM16	21.36	15.11
15	26915	36	#Mid	QAM16	21.38	15.13
15	26915	36	#Max	QAM16	21.32	15.07
15	26915	75	#0	QAM16	21.37	15.12
15	26965	1	#0	QAM16	22.29	16.04
15	26965	1	#Mid	QAM16	22.33	16.08
15	26965	1	#Max	QAM16	22.18	15.93
15	26965	36	#0	QAM16	21.37	15.12
15	26965	36	#Mid	QAM16	21.38	15.13
15	26965	36	#Max	QAM16	21.31	15.06
15	26965	75	#0	QAM16	21.36	15.11
1.4	26797	1	#0	QAM64	22.14	15.89
1.4	26797	1	#Mid	QAM64	22.23	15.98
1.4	26797	1	#Max	QAM64	22.18	15.93
1.4	26797	3	#0	QAM64	22.30	16.05
1.4	26797	3	#Mid	QAM64	22.29	16.04
1.4	26797	3	#Max	QAM64	22.32	16.07
1.4	26797	6	#0	QAM64	21.09	14.84
1.4	26915	1	#0	QAM64	22.22	15.97
1.4	26915	1	#Mid	QAM64	22.22	15.97
1.4	26915	1	#Max	QAM64	22.16	15.91
1.4	26915	3	#0	QAM64	22.26	16.01
1.4	26915	3	#Mid	QAM64	22.22	15.97
1.4	26915	3	#Max	QAM64	22.22	15.97
1.4	26915	6	#0	QAM64	20.98	14.73
1.4	27033	1	#0	QAM64	22.12	15.87
1.4	27033	1	#Mid	QAM64	22.09	15.84
1.4	27033	1	#Max	QAM64	22.11	15.86
1.4	27033	3	#0	QAM64	22.10	15.85
1.4	27033	3	#Mid	QAM64	22.09	15.84
1.4	27033	3	#Max	QAM64	22.06	15.81
1.4	27033	6	#0	QAM64	21.01	14.76
3	26805	1	#0	QAM64	22.01	15.76
3	26805	1	#Mid	QAM64	22.00	15.75
3	26805	1	#Max	QAM64	22.01	15.76
3	26805	8	#0	QAM64	21.14	14.89
3	26805	8	#Mid	QAM64	21.17	14.92
3	26805	8	#Max	QAM64	21.13	14.88
3	26805	15	#0	QAM64	21.09	14.84
3	26915	1	#0	QAM64	22.45	16.20
3	26915	1	#Mid	QAM64	22.44	16.19
3	26915	1	#Max	QAM64	22.41	16.16



3	26915	8	#0	QAM64	21.13	14.88
3	26915	8	#Mid	QAM64	21.13	14.88
3	26915	8	#Max	QAM64	21.10	14.85
3	26915	15	#0	QAM64	21.01	14.76
3	27025	1	#0	QAM64	22.27	16.02
3	27025	1	#Mid	QAM64	22.16	15.91
3	27025	1	#Max	QAM64	22.12	15.87
3	27025	8	#0	QAM64	21.09	14.84
3	27025	8	#Mid	QAM64	21.10	14.85
3	27025	8	#Max	QAM64	21.03	14.78
3	27025	15	#0	QAM64	20.93	14.68
5	26815	1	#0	QAM64	22.45	16.20
5	26815	1	#Mid	QAM64	22.48	16.23
5	26815	1	#Max	QAM64	22.49	16.24
5	26815	12	#0	QAM64	21.16	14.91
5	26815	12	#Mid	QAM64	21.17	14.92
5	26815	12	#Max	QAM64	21.13	14.88
5	26815	25	#0	QAM64	21.21	14.96
5	26915	1	#0	QAM64	22.38	16.13
5	26915	1	#Mid	QAM64	22.33	16.08
5	26915	1	#Max	QAM64	22.37	16.12
5	26915	12	#0	QAM64	21.10	14.85
5	26915	12	#Mid	QAM64	21.05	14.80
5	26915	12	#Max	QAM64	21.03	14.78
5	26915	25	#0	QAM64	21.02	14.77
5	27015	1	#0	QAM64	22.37	16.12
5	27015	1	#Mid	QAM64	22.32	16.07
5	27015	1	#Max	QAM64	22.33	16.08
5	27015	12	#0	QAM64	21.17	14.92
5	27015	12	#Mid	QAM64	21.13	14.88
5	27015	12	#Max	QAM64	21.10	14.85
5	27015	25	#0	QAM64	21.06	14.81
10	26840	1	#0	QAM64	22.01	15.76
10	26840	1	#Mid	QAM64	22.05	15.80
10	26840	1	#Max	QAM64	22.02	15.77
10	26840	25	#0	QAM64	21.18	14.93
10	26840	25	#Mid	QAM64	21.16	14.91
10	26840	25	#Max	QAM64	21.19	14.94
10	26840	50	#0	QAM64	21.16	14.91
10	26915	1	#0	QAM64	22.45	16.20
10	26915	1	#Mid	QAM64	22.41	16.16
10	26915	1	#Max	QAM64	22.43	16.18
10	26915	25	#0	QAM64	21.18	14.93



10	26915	25	#Mid	QAM64	21.18	14.93
10	26915	25	#Max	QAM64	21.15	14.90
10	26915	50	#0	QAM64	21.04	14.79
10	26990	1	#0	QAM64	22.28	16.03
10	26990	1	#Mid	QAM64	22.27	16.02
10	26990	1	#Max	QAM64	22.15	15.90
10	26990	25	#0	QAM64	21.22	14.97
10	26990	25	#Mid	QAM64	21.24	14.99
10	26990	25	#Max	QAM64	21.14	14.89
10	26990	50	#0	QAM64	21.10	14.85
15	26865	1	#0	QAM64	22.41	16.16
15	26865	1	#Mid	QAM64	22.44	16.19
15	26865	1	#Max	QAM64	22.30	16.05
15	26865	36	#0	QAM64	21.09	14.84
15	26865	36	#Mid	QAM64	21.11	14.86
15	26865	36	#Max	QAM64	21.11	14.86
15	26865	75	#0	QAM64	21.06	14.81
15	26915	1	#0	QAM64	22.31	16.06
15	26915	1	#Mid	QAM64	22.17	15.92
15	26915	1	#Max	QAM64	22.20	15.95
15	26915	36	#0	QAM64	21.10	14.85
15	26915	36	#Mid	QAM64	21.10	14.85
15	26915	36	#Max	QAM64	21.07	14.82
15	26915	75	#0	QAM64	21.03	14.78
15	26965	1	#0	QAM64	22.06	15.81
15	26965	1	#Mid	QAM64	22.10	15.85
15	26965	1	#Max	QAM64	21.99	15.74
15	26965	36	#0	QAM64	21.15	14.90
15	26965	36	#Mid	QAM64	21.12	14.87
15	26965	36	#Max	QAM64	21.03	14.78
15	26965	75	#0	QAM64	21.07	14.82

6.2. Occupied Bandwidth

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
GSM 850 (GMSK)	128	824.2	0.251	0.304
	190	836.6	0.248	0.318
	251	848.8	0.245	0.320
GPRS 850 (GMSK)	128	824.2	0.246	0.316
	190	836.6	0.247	0.308
	251	848.8	0.246	0.310
EGPRS 850 (8PSK)	128	824.2	0.240	0.309
	190	836.6	0.253	0.319
	251	848.8	0.255	0.316
WCDMA Band V (RMC)	4132	826.4	4.148	4.674
	4183	836.6	4.153	4.703
	4233	846.6	4.145	4.713

LTE Band 5						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	20407	824.7	1.105	1.288
			20525	836.5	1.098	1.311
			20643	848.3	1.099	1.302
		3	20415	825.5	2.693	2.939
			20525	836.5	2.701	2.944
			20635	847.5	2.704	2.951
		5	20425	826.5	4.505	4.938
			20525	836.5	4.500	4.941
			20625	846.5	4.513	4.927
		10	20450	829	9.005	9.710
			20525	836.5	8.989	9.768
			20600	844	9.026	9.669
	16QAM	1.4	20407	824.7	1.100	1.291
			20525	836.5	1.101	1.325
			20643	848.3	1.098	1.275
		3	20415	825.5	2.689	2.949



			20525	836.5	2.692	2.998
			20635	847.5	2.697	2.940
		5	20425	826.5	4.512	4.987
			20525	836.5	4.505	4.959
			20625	846.5	4.506	4.961
		10	20450	829	8.996	9.703
			20525	836.5	9.012	9.634
			20600	844	8.991	9.743
	64QAM	1.4	20407	824.7	1.100	1.293
			20525	836.5	1.098	1.301
			20643	848.3	1.091	1.288
		3	20415	825.5	2.686	2.915
			20525	836.5	2.699	2.929
			20635	847.5	2.690	2.953
		5	20425	826.5	4.505	4.926
			20525	836.5	4.530	4.956
			20625	846.5	4.503	4.977
		10	20450	829	8.985	9.693
			20525	836.5	8.956	9.713
			20600	844	8.998	9.746

LTE Band 26						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	26797	824.7	1.095	1.317
			26915	836.5	1.098	1.290
			27033	848.3	1.097	1.303
		3	26805	825.5	2.702	2.940
			26915	836.5	2.708	2.942
			27025	847.5	2.705	2.952
		5	26815	826.5	4.525	4.967
			26915	836.5	4.511	4.899
			27015	846.5	4.510	4.932
		10	26840	829	8.998	9.769



			26915	836.5	8.975	9.693
			26990	844	8.988	9.845
		15	26865	831.5	13.447	14.576
			26915	836.5	13.438	14.732
			26965	841.5	13.438	14.639
	16QAM	1.4	26797	824.7	1.092	1.289
			26915	836.5	1.097	1.280
			27033	848.3	1.102	1.322
		3	26805	825.5	2.690	2.947
			26915	836.5	2.691	2.953
			27025	847.5	2.694	2.944
		5	26815	826.5	4.502	4.960
			26915	836.5	4.514	4.966
			27015	846.5	4.509	4.953
		10	26840	829	8.986	9.769
			26915	836.5	8.960	9.666
			26990	844	8.971	9.779
		15	26865	831.5	13.484	14.622
			26915	836.5	13.485	14.589
			26965	841.5	13.455	14.358
	64QAM	1.4	26797	824.7	1.099	1.295
			26915	836.5	1.092	1.279
			27033	848.3	1.097	1.310
		3	26805	825.5	2.694	2.925
			26915	836.5	2.690	2.949
			27025	847.5	2.689	2.941
		5	26815	826.5	4.510	4.924
			26915	836.5	4.511	4.925
			27015	846.5	4.508	4.961
		10	26840	829	8.993	9.778
			26915	836.5	8.973	9.636
			26990	844	8.997	9.751
		15	26865	831.5	13.463	14.575
			26915	836.5	13.418	14.608



			26965	841.5	13.506	14.407
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GSM 850 CH-Low



GSM 850 GPRS CH-Low



GSM 850 CH-Middle



GSM 850 GPRS CH-Middle



GSM 850 CH-High



GSM 850 GPRS CH-High



GSM 850 EGPRS CH-Low



WCDMA Band V CH-Low



GSM 850 EGPRS CH-Middle



WCDMA Band V CH-Middle



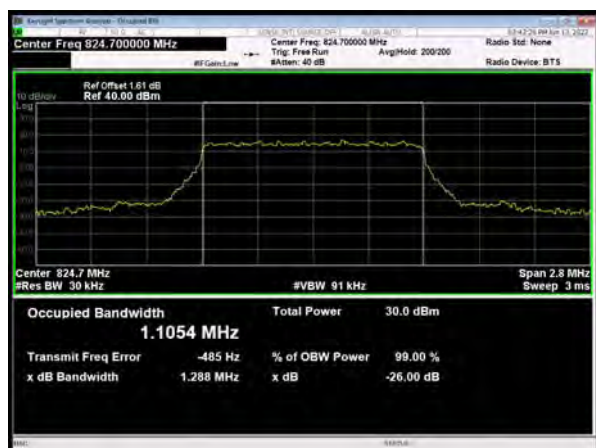
GSM 850 EGPRS CH-High



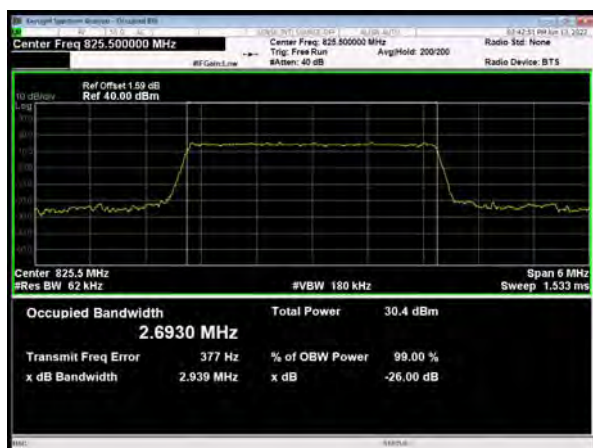
WCDMA Band V CH-High



LTE Band 5 QPSK 1.4MHz CH-Low



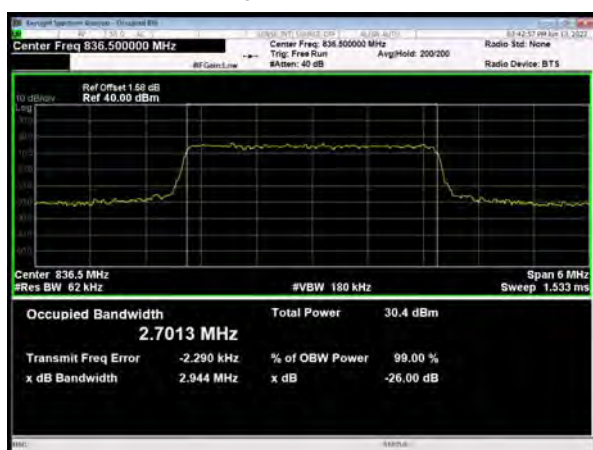
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LTE Band 5 QPSK 1.4MHz CH-Middle



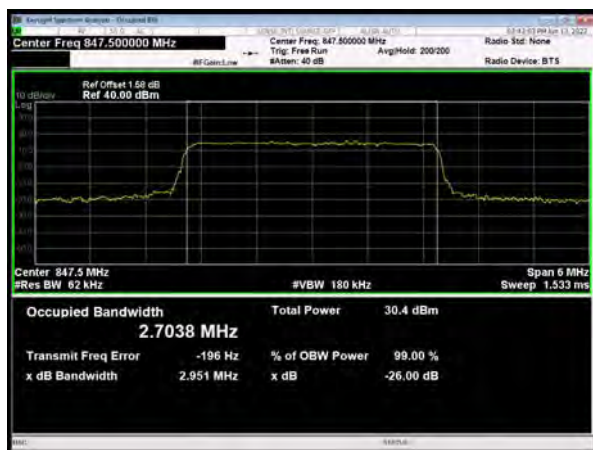
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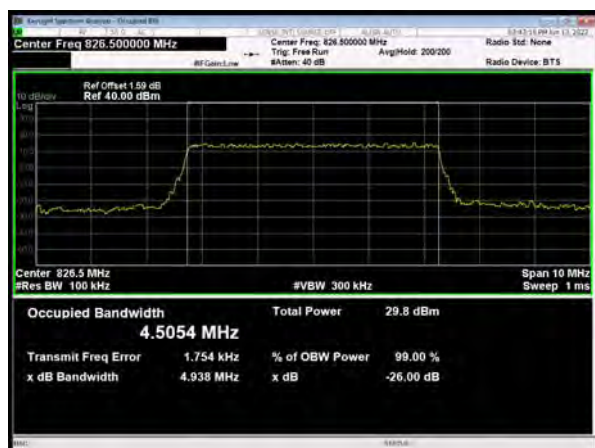
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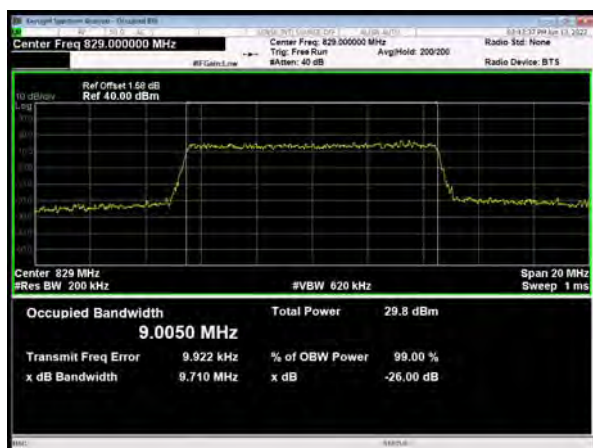
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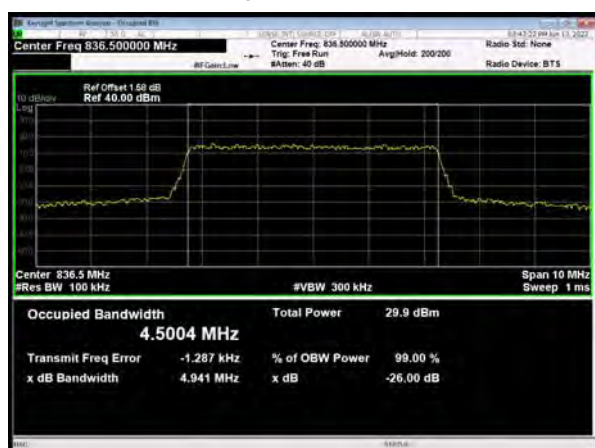
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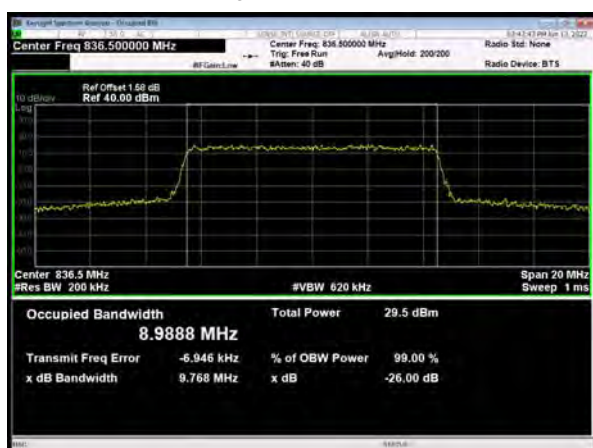
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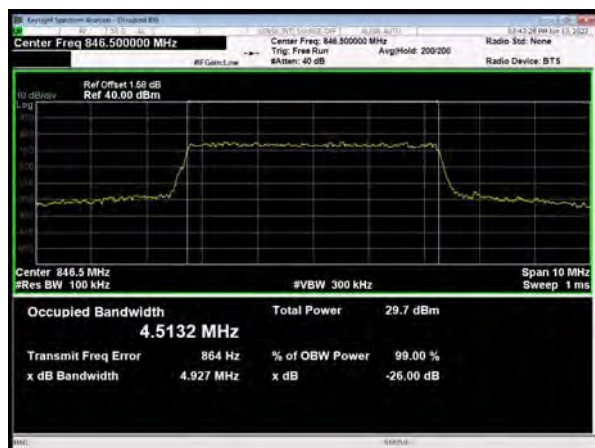
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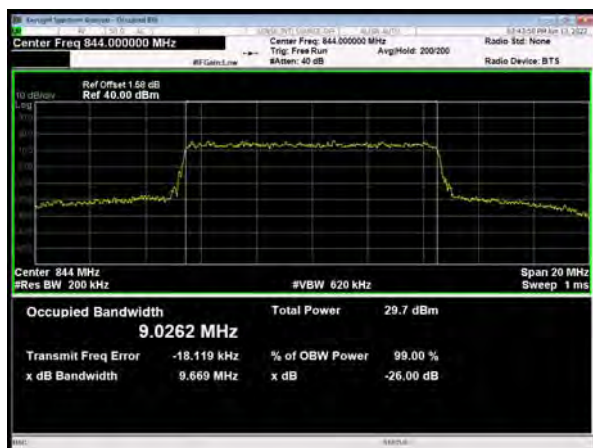
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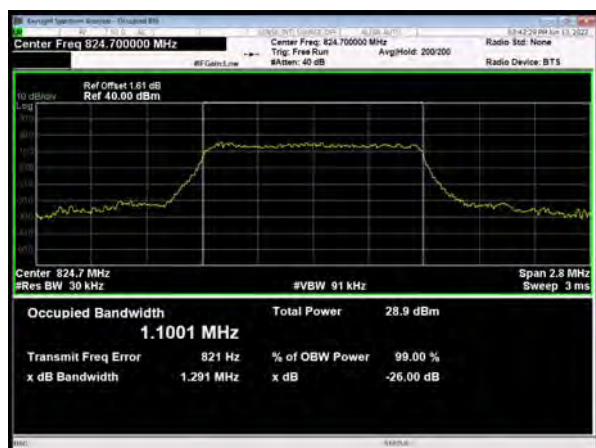
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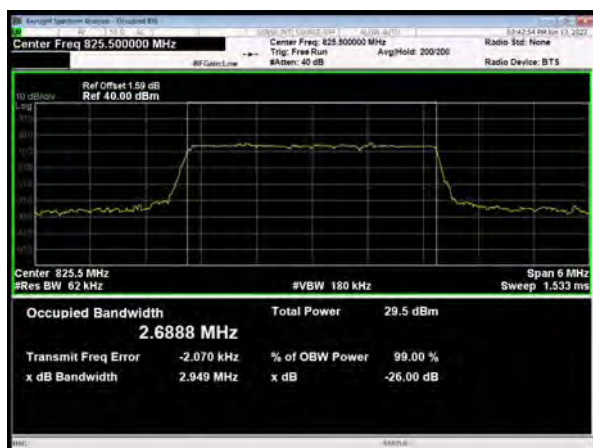
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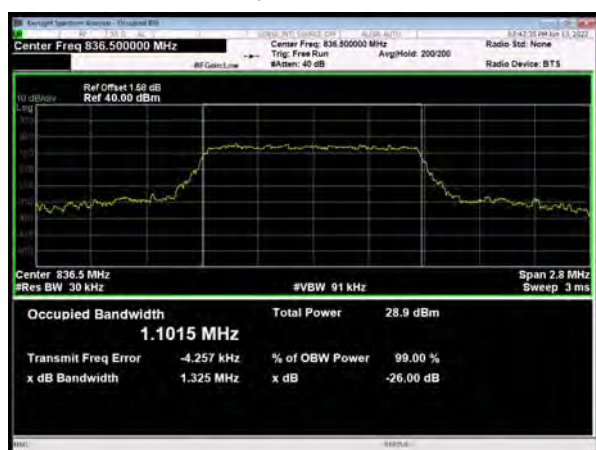
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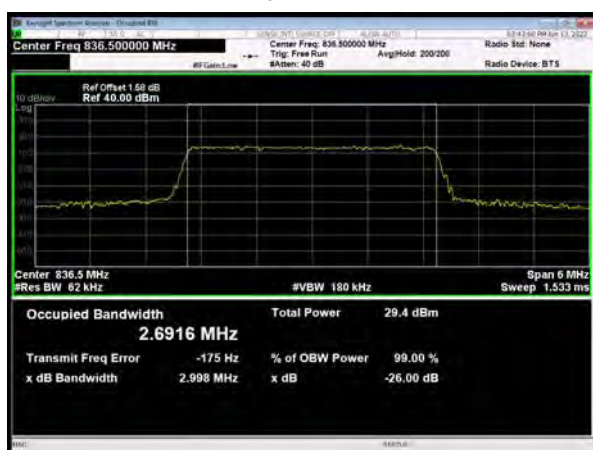
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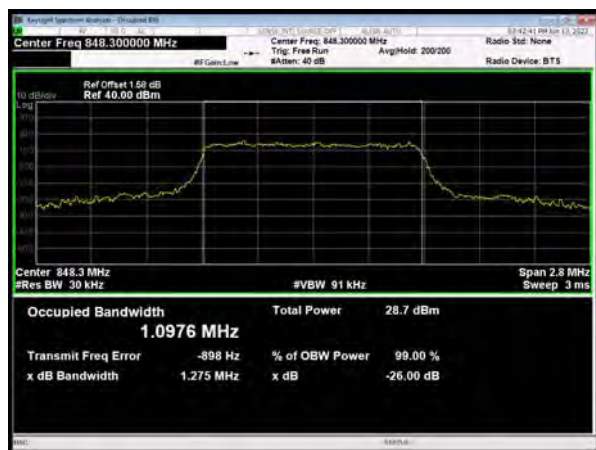
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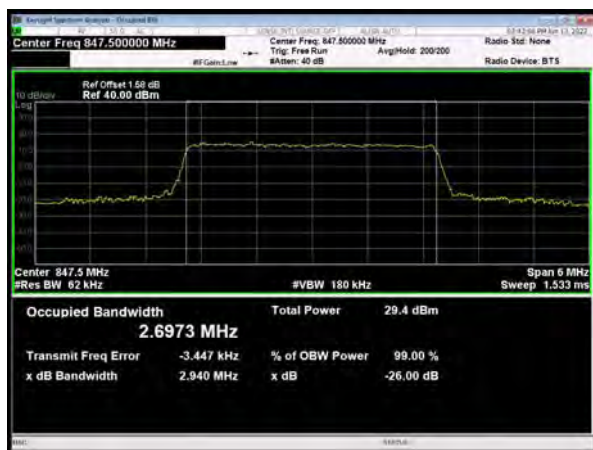
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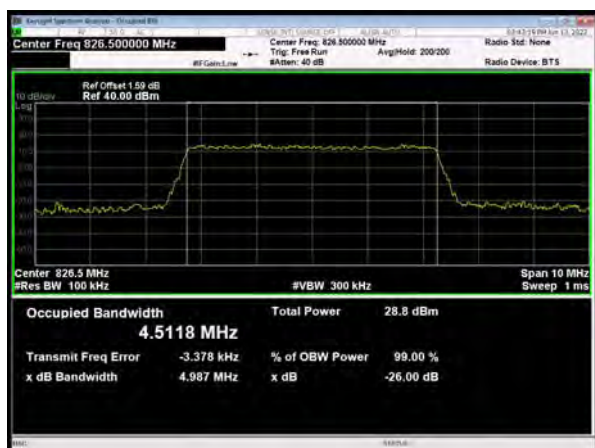
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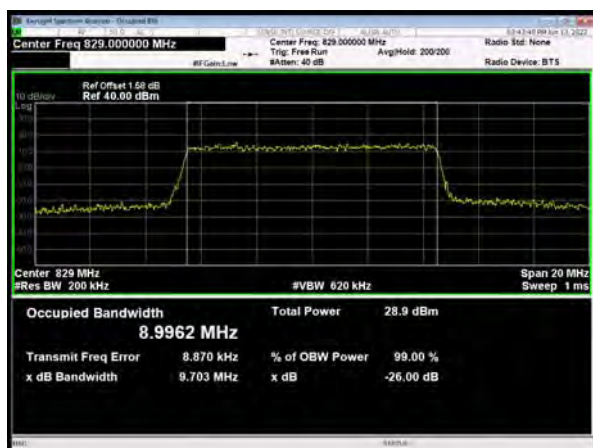
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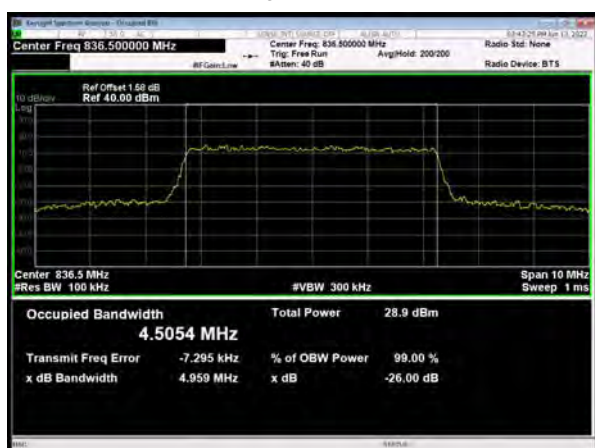
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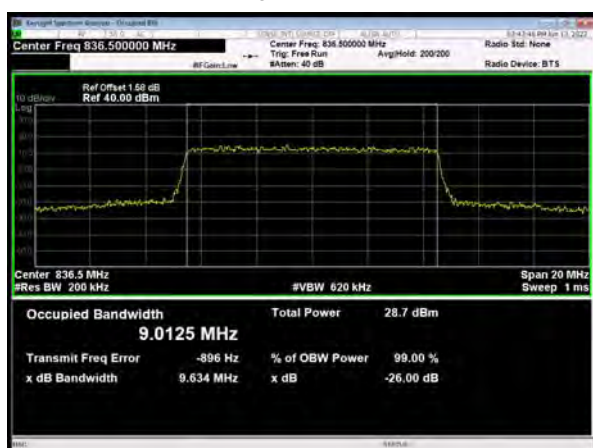
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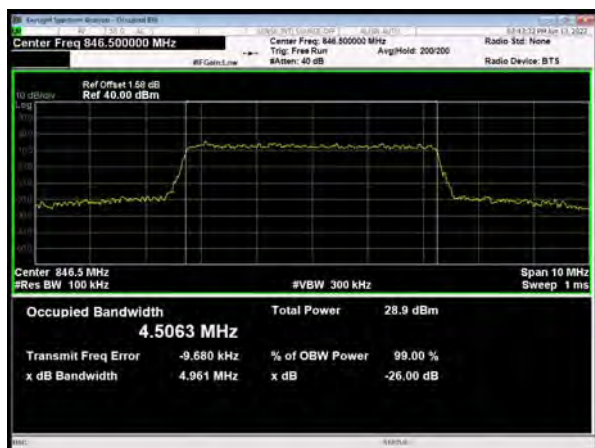
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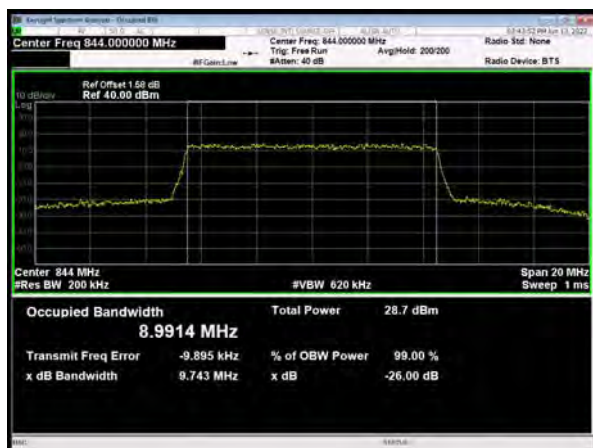
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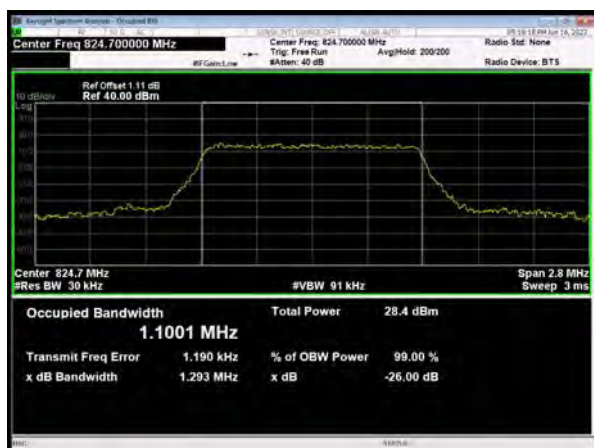
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LTE Band 5 16QAM 10MHz CH-High



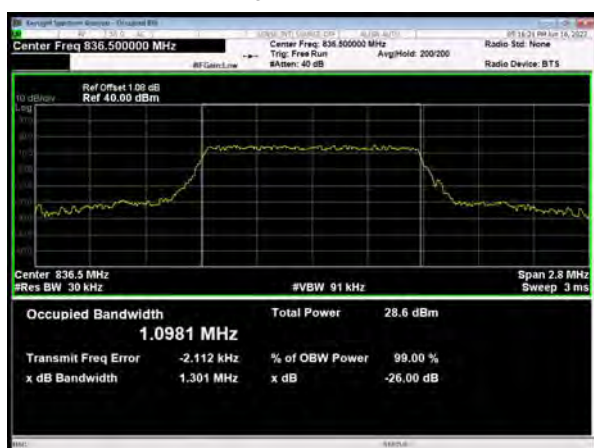
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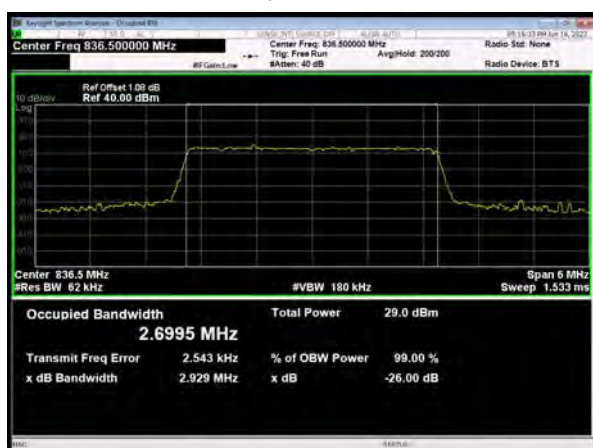
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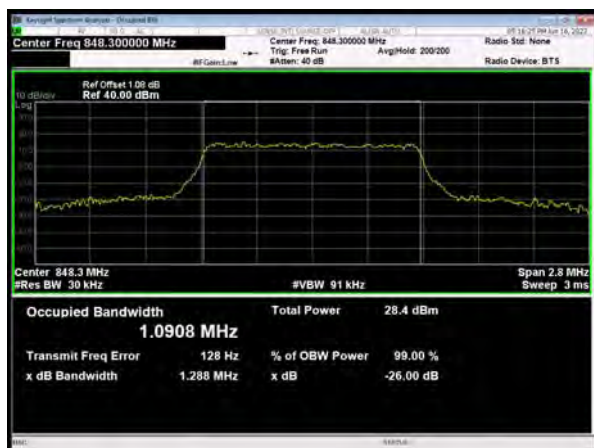
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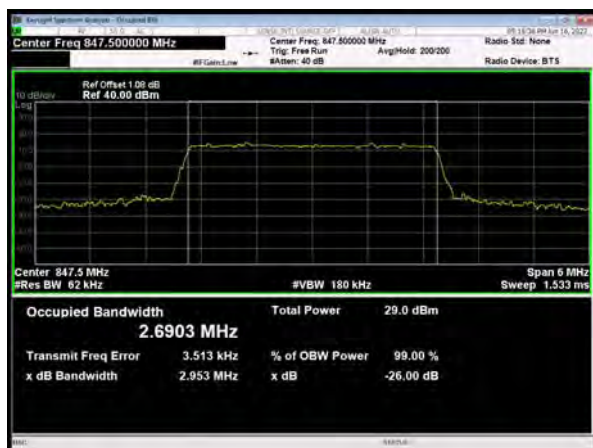
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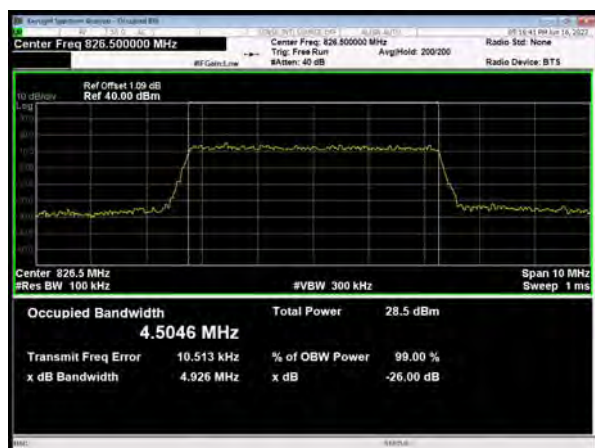
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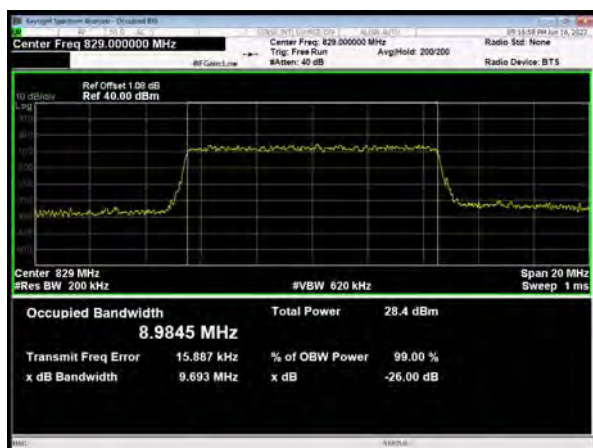
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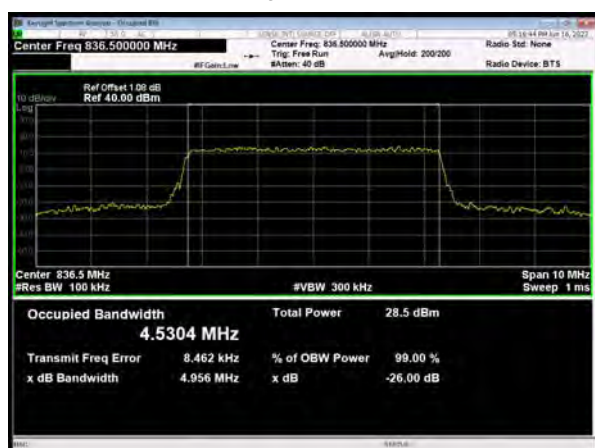
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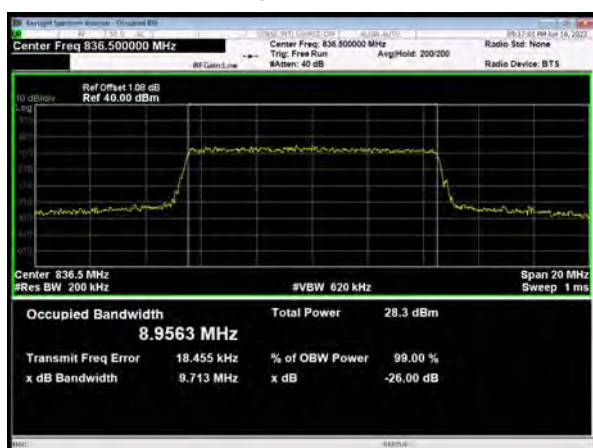
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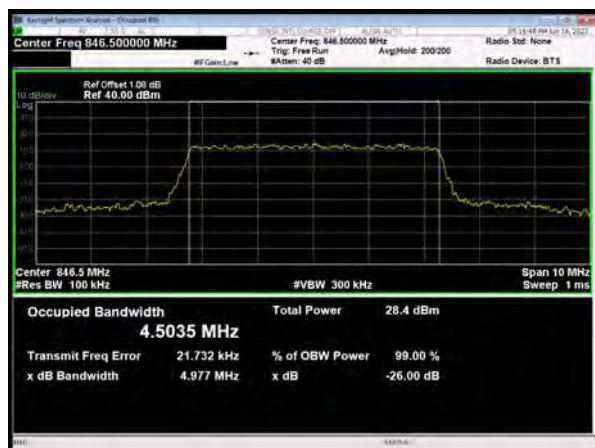
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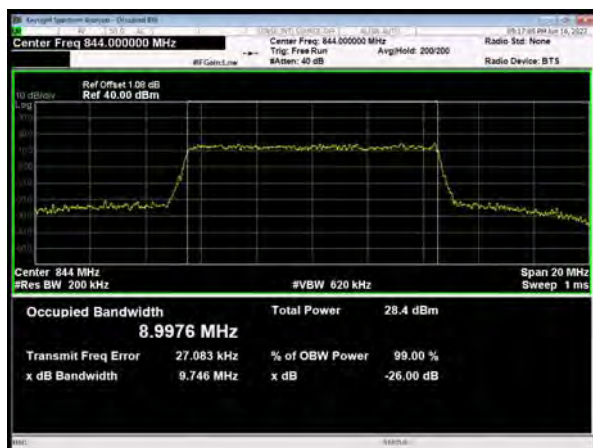
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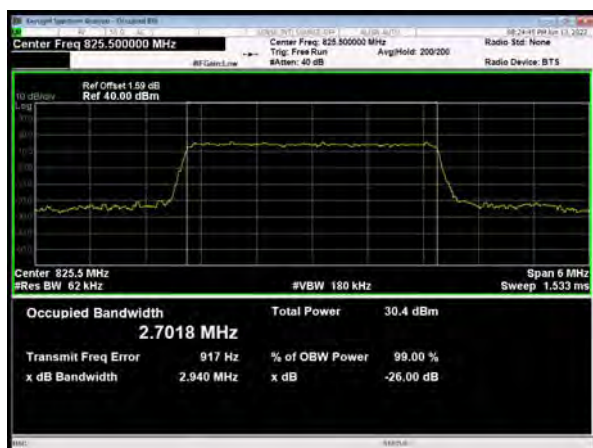
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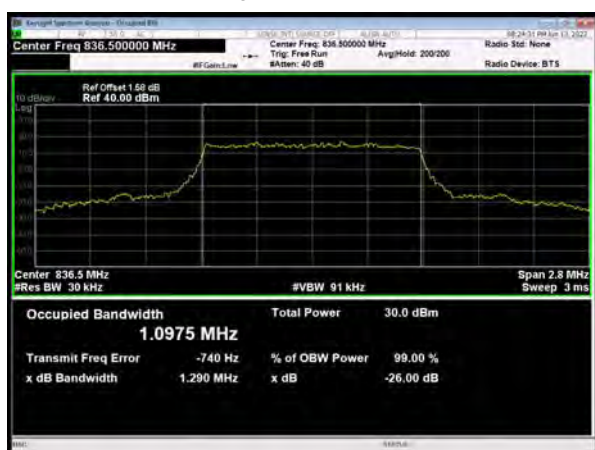
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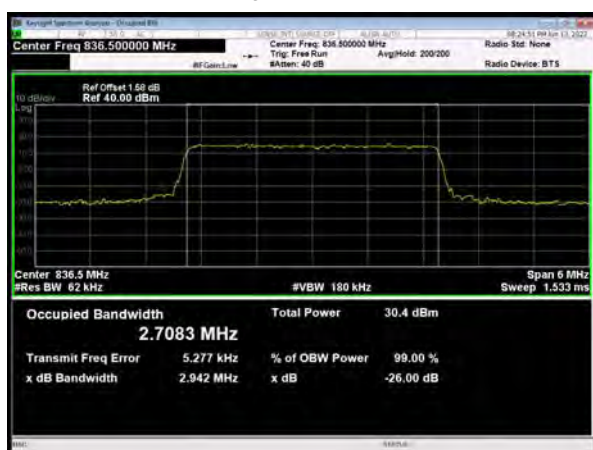
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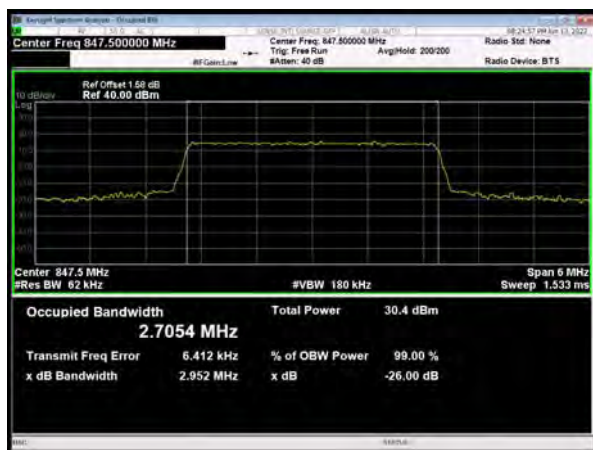
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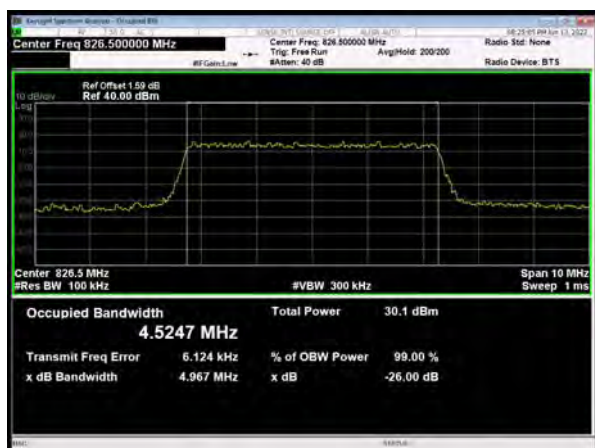
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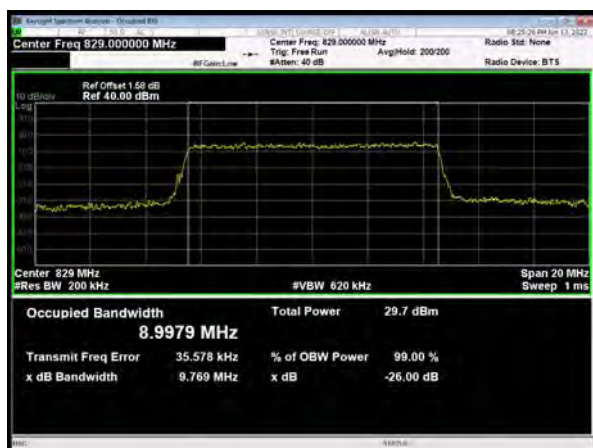
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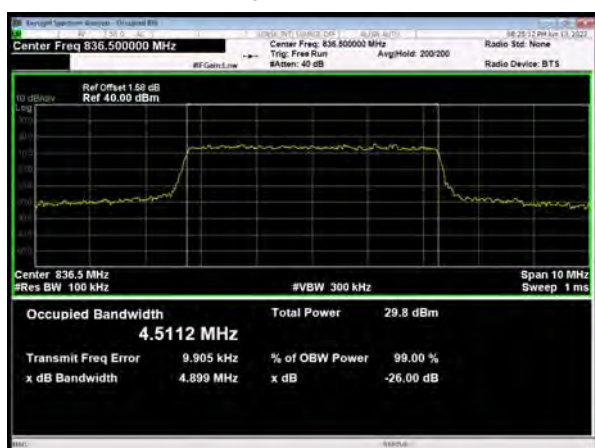
LTE Band 26 QPSK 5MHz CH-Low



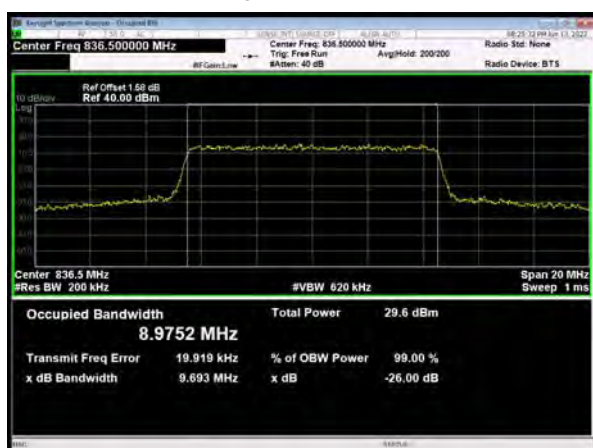
LTE Band 26 QPSK 10MHz CH-Low



LTE Band 26 QPSK 5MHz CH-Middle



LTE Band 26 QPSK 10MHz CH-Middle



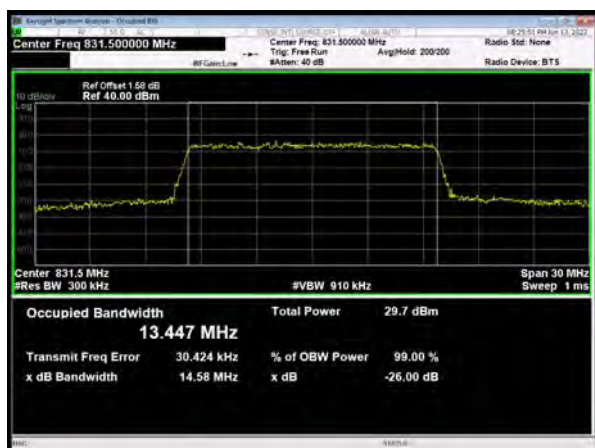
LTE Band 26 QPSK 5MHz CH-High



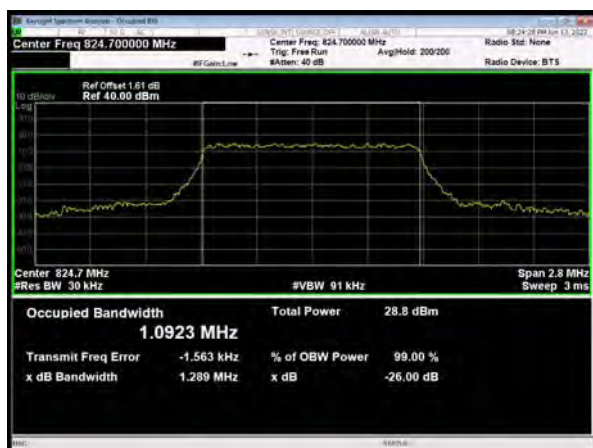
LTE Band 26 QPSK 10MHz CH-High



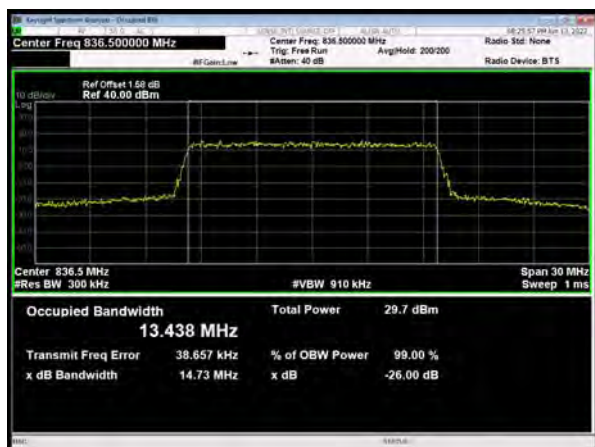
LTE Band 26 QPSK 15MHz CH-Low



LTE Band 26 16QAM 1.4MHz CH-Low



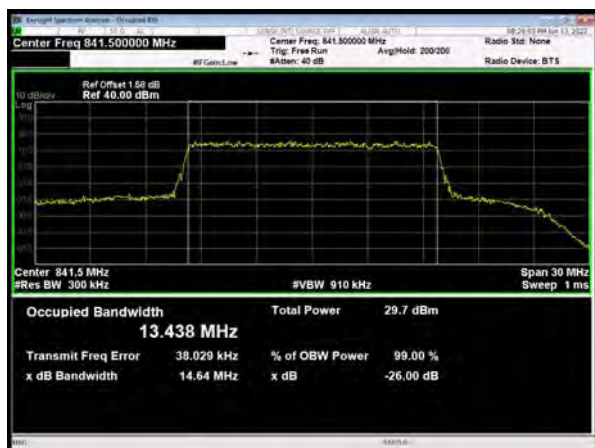
LTE Band 26 QPSK 15MHz CH-Middle



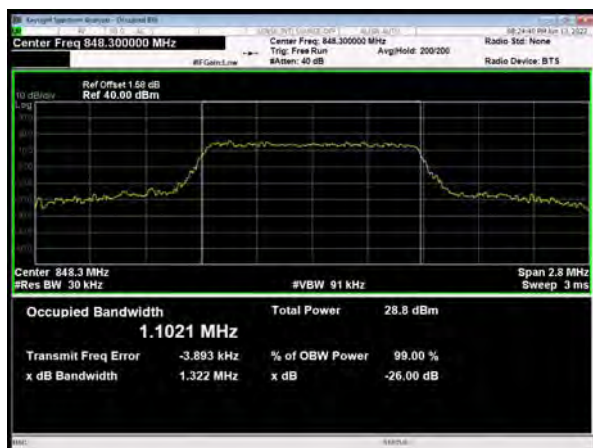
LTE Band 26 16QAM 1.4MHz CH-Middle



LTE Band 26 QPSK 15MHz CH-High

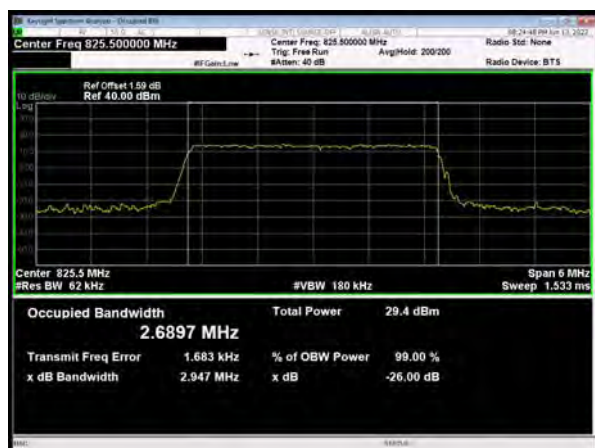


LTE Band 26 16QAM 1.4MHz CH-High

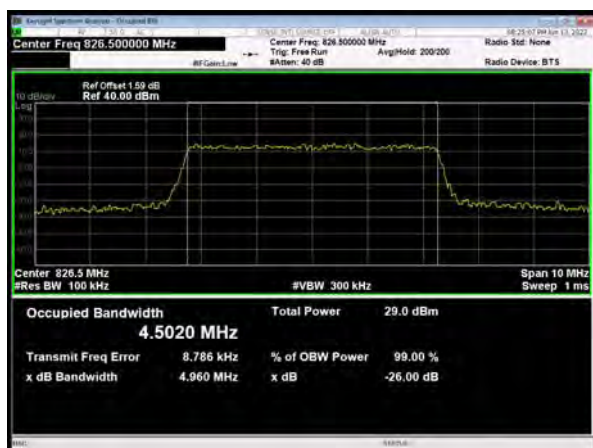




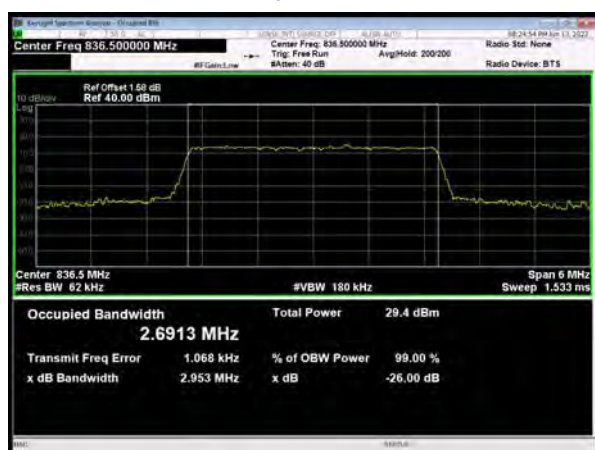
LTE Band 26 16QAM 3MHz CH-Low



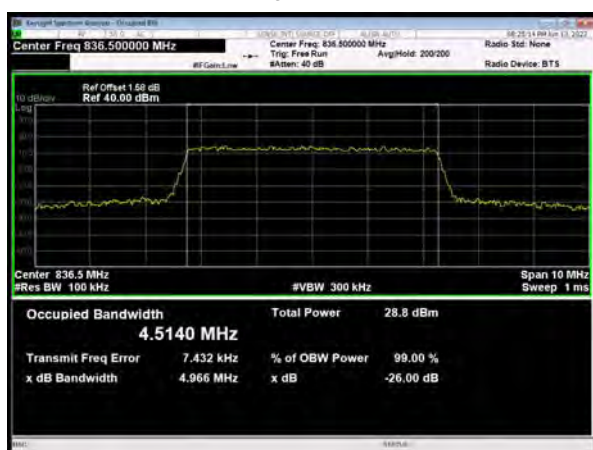
LTE Band 26 16QAM 5MHz CH-Low



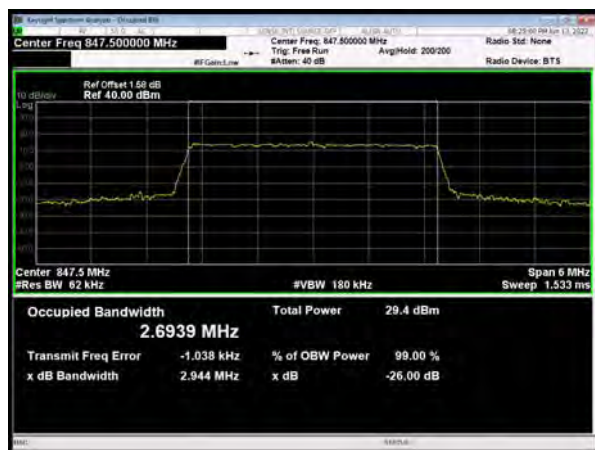
LTE Band 26 16QAM 3MHz CH-Middle



LTE Band 26 16QAM 5MHz CH-Middle

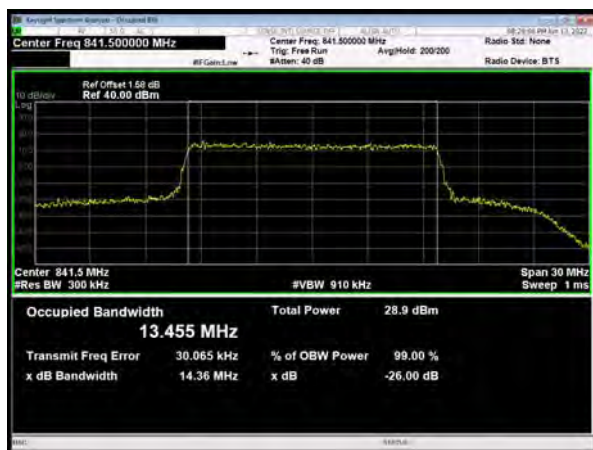
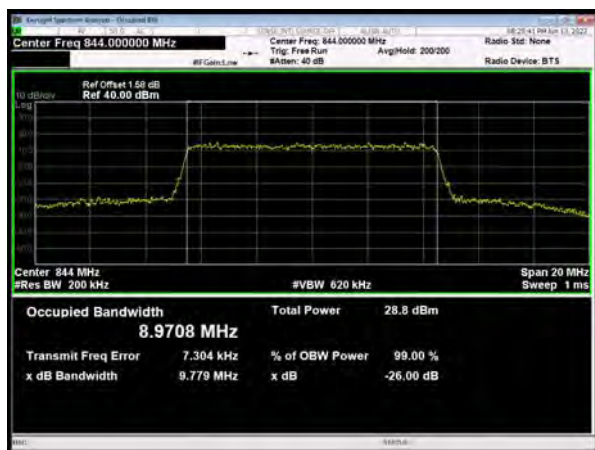
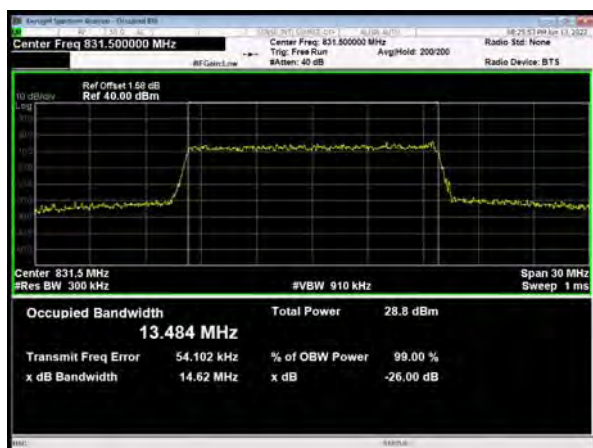
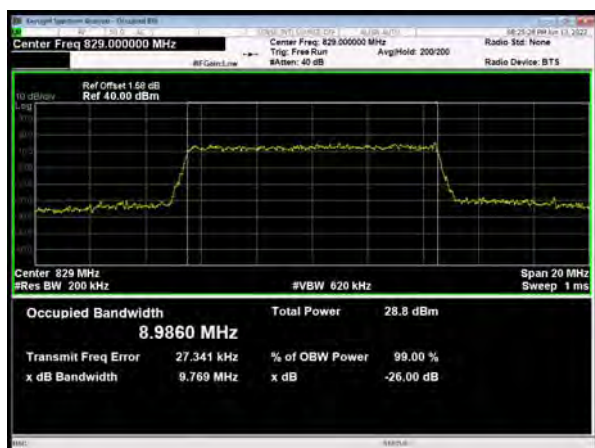


LTE Band 26 16QAM 3MHz CH-High



LTE Band 26 16QAM 5MHz CH-High

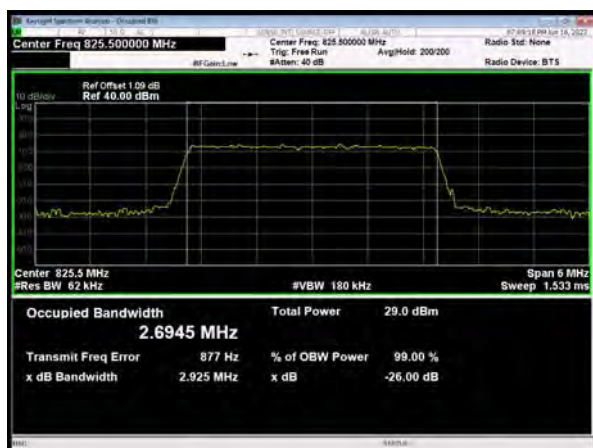




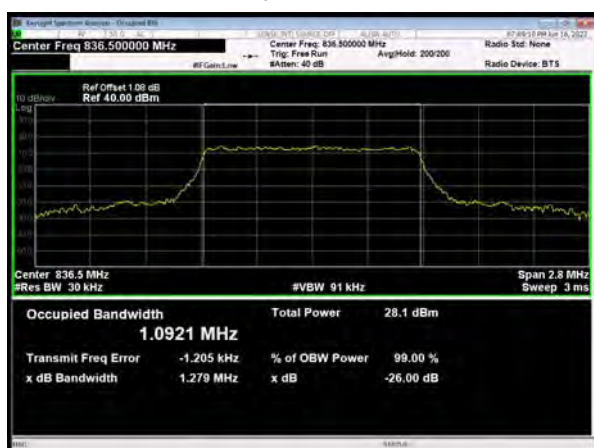
LTE Band 26 64QAM 1.4MHz CH-Low



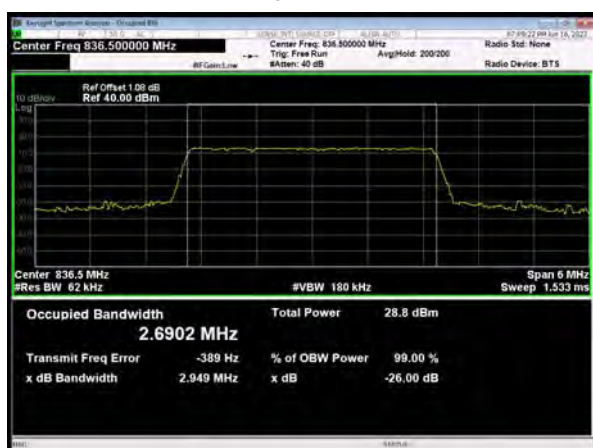
LTE Band 26 64QAM 3MHz CH-Low



LTE Band 26 64QAM 1.4MHz CH-Middle



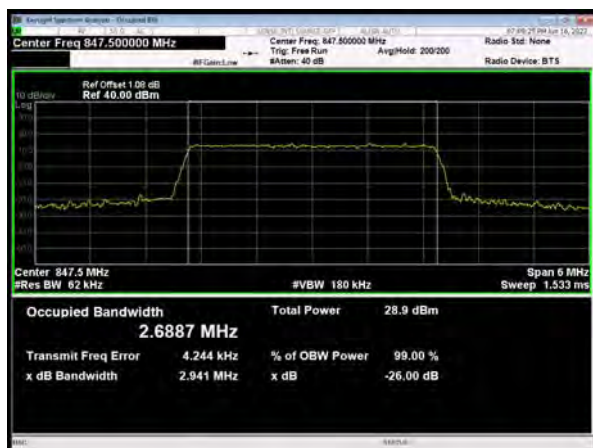
LTE Band 26 64QAM 3MHz CH-Middle



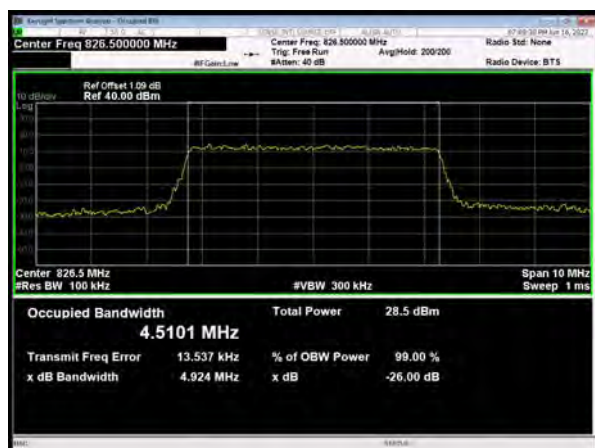
LTE Band 26 64QAM 1.4MHz CH-High



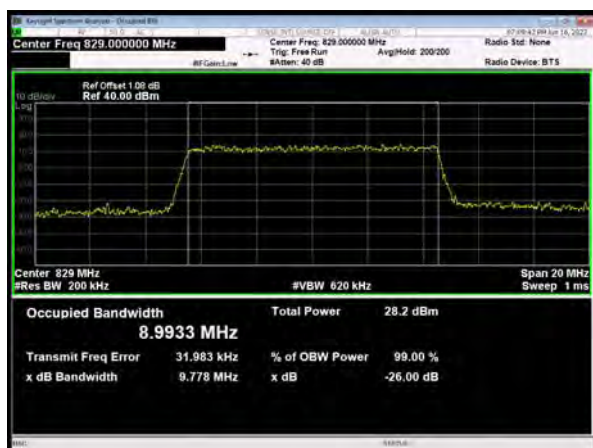
LTE Band 26 64QAM 3MHz CH-High



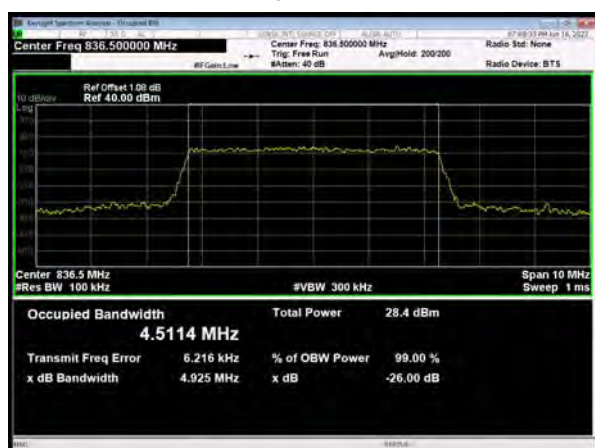
LTE Band 26 64QAM 5MHz CH-Low



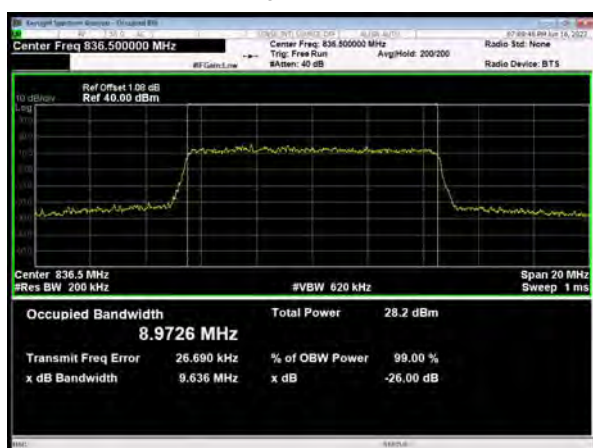
LTE Band 26 64QAM 10MHz CH-Low



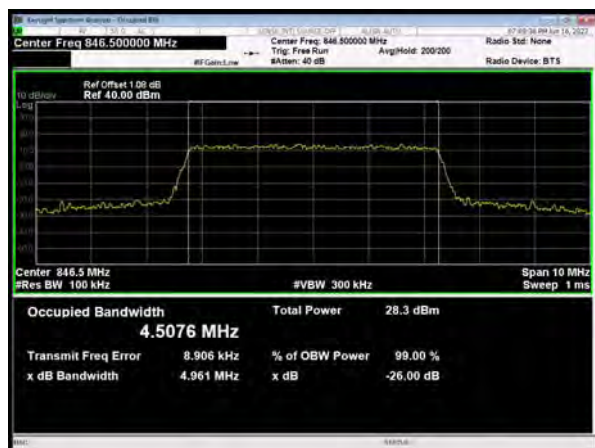
LTE Band 26 64QAM 5MHz CH-Middle



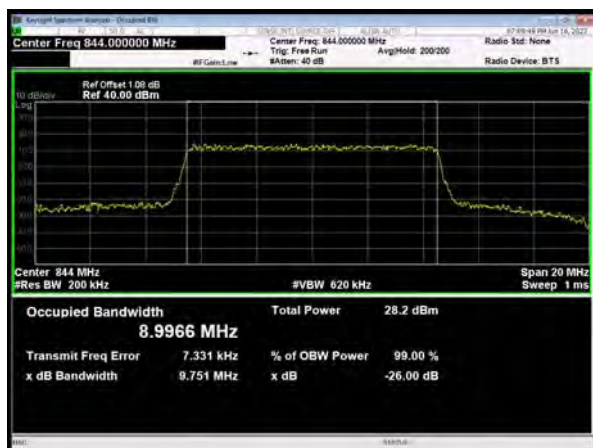
LTE Band 26 64QAM 10MHz CH-Middle



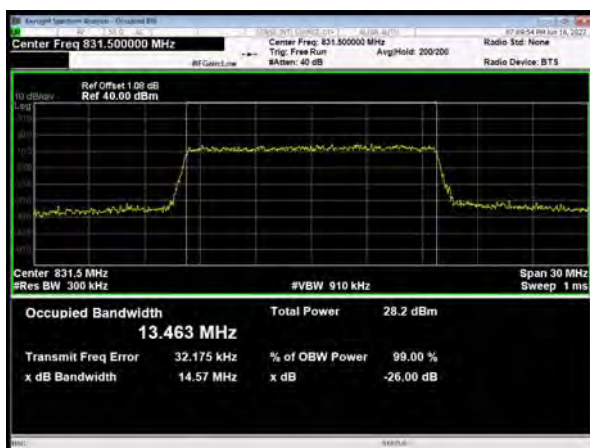
LTE Band 26 64QAM 5MHz CH-High



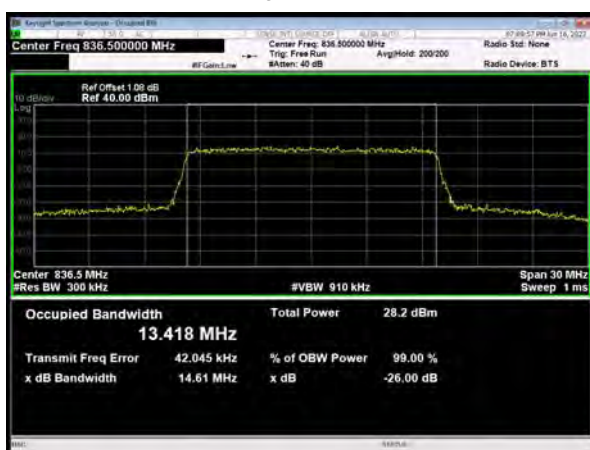
LTE Band 26 64QAM 10MHz CH-High



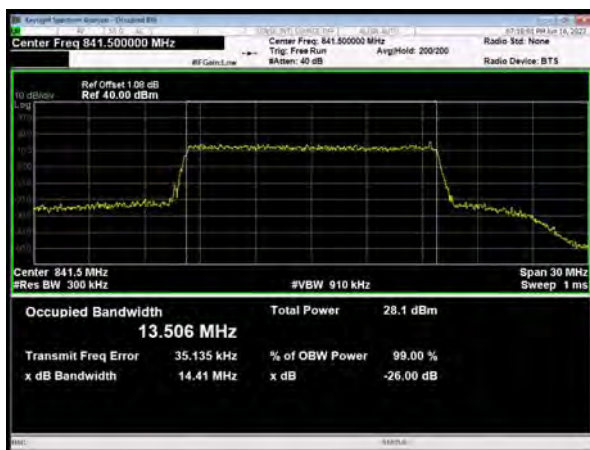
LTE Band 26 64QAM 15MHz CH-Low



LTE Band 26 64QAM 15MHz CH-Middle



LTE Band 26 64QAM 15MHz CH-High



6.3. Band Edge Compliance

GSM 850 CH-Low



GSM 850 CH-High



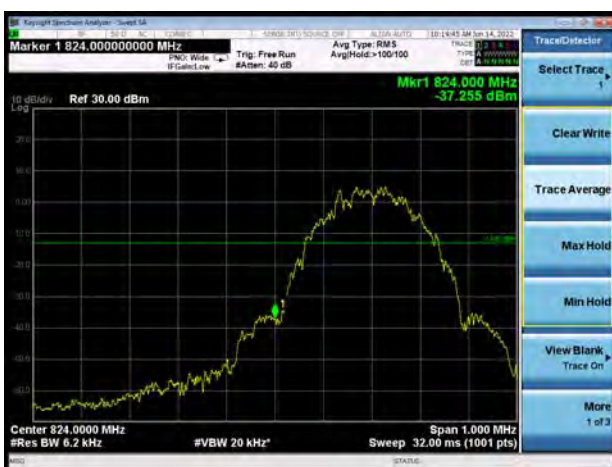
GSM 850 GPRS CH-Low



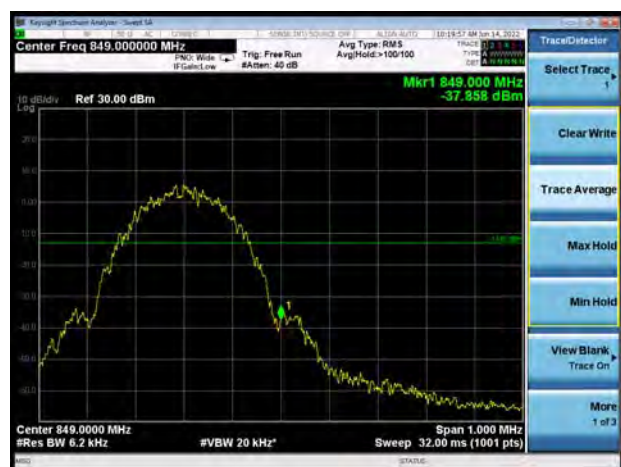
GSM 850 GPRS CH-High



GSM 850 EGPRS CH-Low



GSM 850 EGPRS CH-High

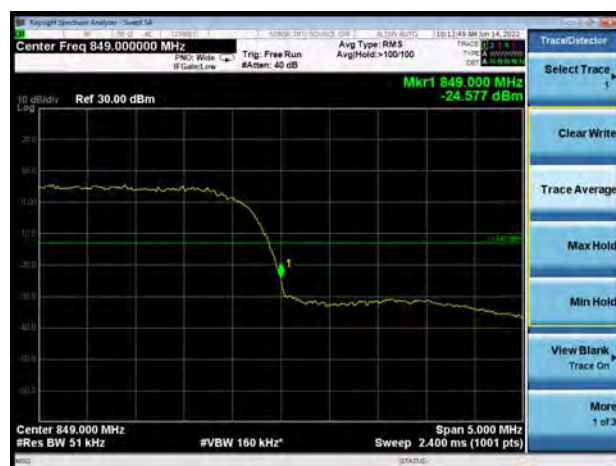




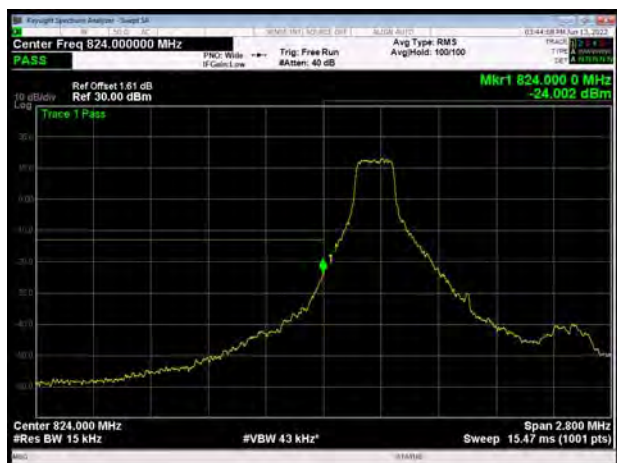
WCDMA Band V CH-Low



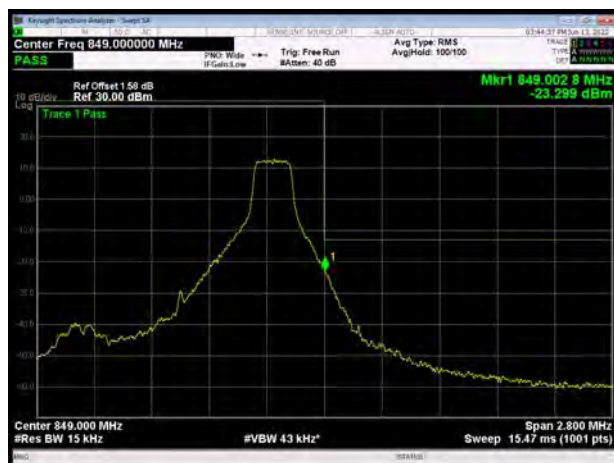
WCDMA Band V CH-High



LTE Band 5 QPSK 1.4MHz CH-Low 1RB



LTE Band 5 QPSK 1.4MHz CH-High 1RB



LTE Band 5 QPSK 1.4MHz CH-Low 100%RB



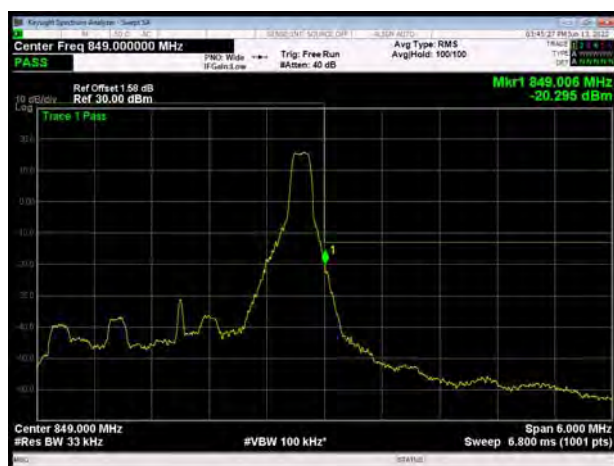
LTE Band 5 QPSK 1.4MHz CH-High 100%RB



LTE Band 5 QPSK 3MHz CH-Low 1RB



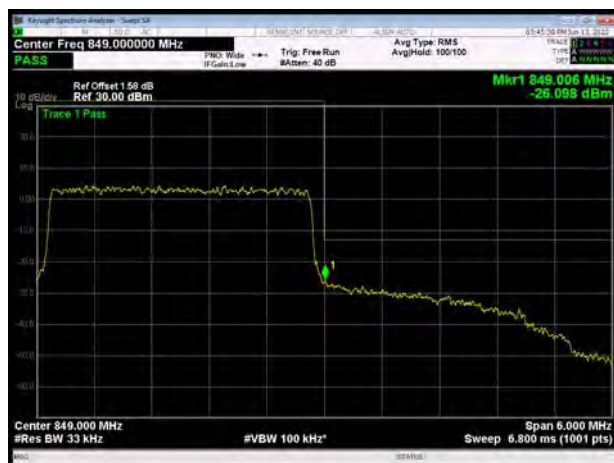
LTE Band 5 QPSK 3MHz CH-High 1RB



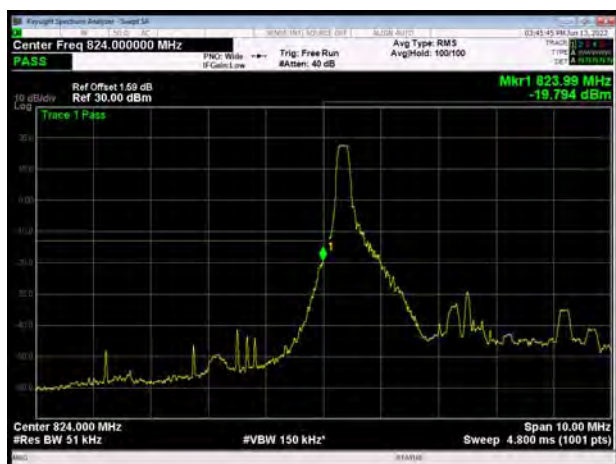
LTE Band 5 QPSK 3MHz CH-Low 100%RB



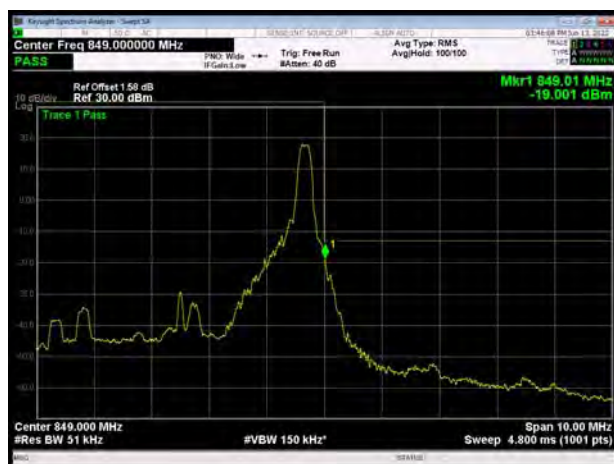
LTE Band 5 QPSK 3MHz CH-High 100%RB



LTE Band 5 QPSK 5MHz CH-Low 1RB



LTE Band 5 QPSK 5MHz CH-High 1RB



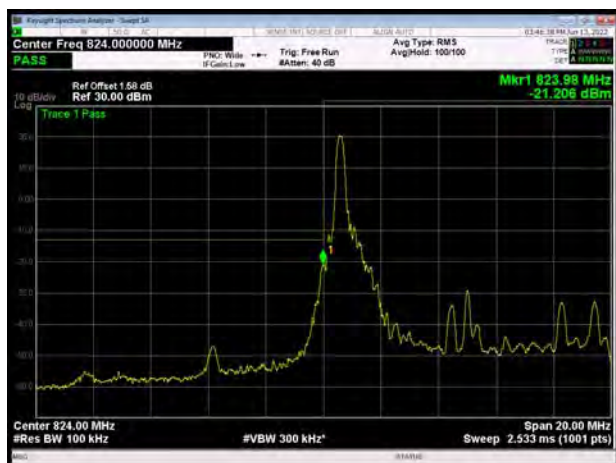
LTE Band 5 QPSK 5MHz CH-Low 100%RB



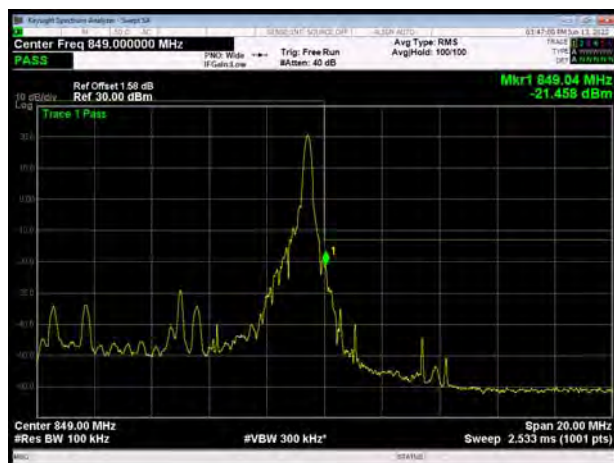
LTE Band 5 QPSK 5MHz CH-High 100%RB



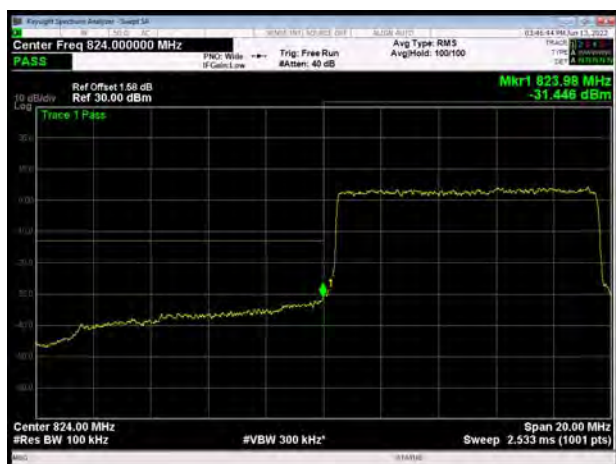
LTE Band 5 QPSK 10MHz CH-Low 1RB



LTE Band 5 QPSK 10MHz CH-High 1RB



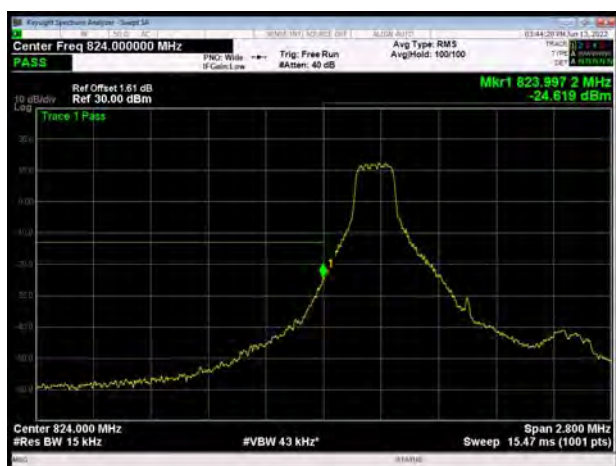
LTE Band 5 QPSK 10MHz CH-Low 100%RB



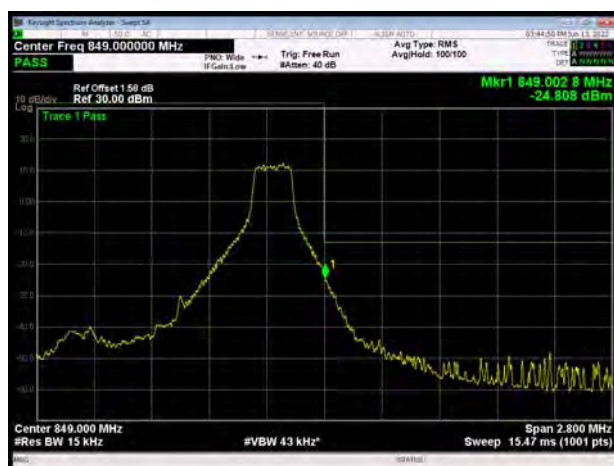
LTE Band 5 QPSK 10MHz CH-High 100%RB



LTE Band 5 16QAM 1.4MHz CH-Low 1RB



LTE Band 5 16QAM 1.4MHz CH-High 1RB



LTE Band 5 16QAM 1.4MHz CH-Low 100%RB



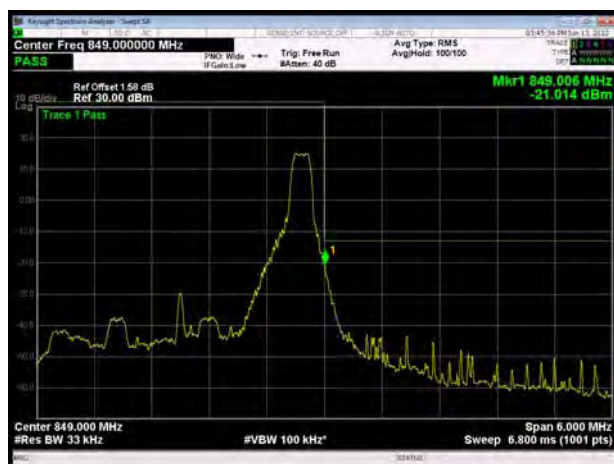
LTE Band 5 16QAM 1.4MHz CH-High 100%RB



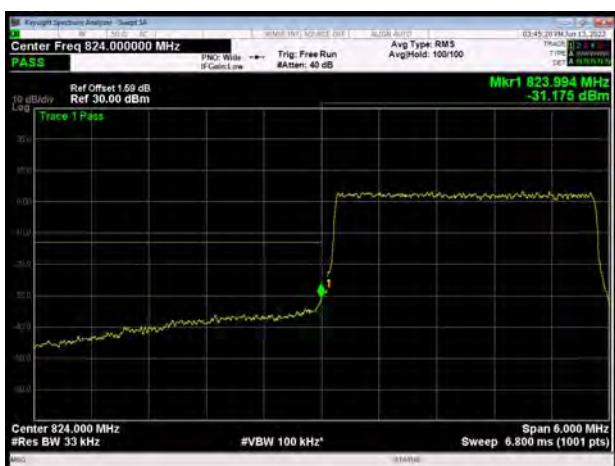
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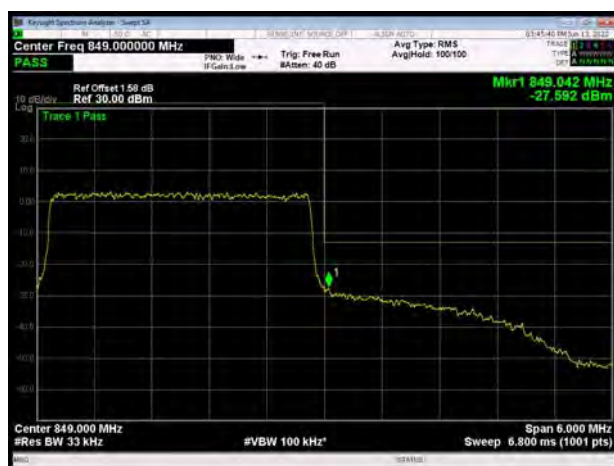
LTE Band 5 16QAM 3MHz CH-High 1RB



LTE Band 5 16QAM 3MHz CH-Low 100%RB



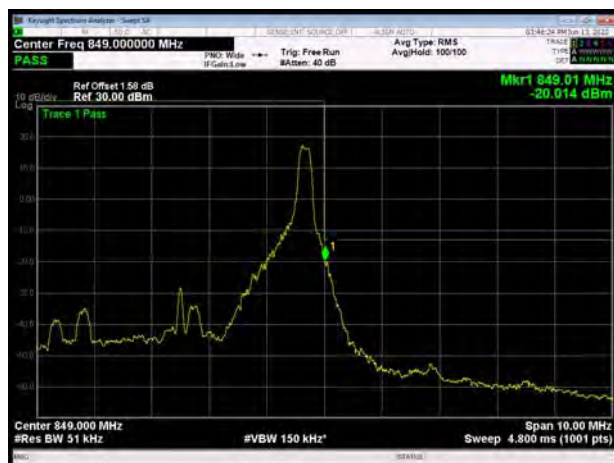
LTE Band 5 16QAM 3MHz CH-High 100%RB



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



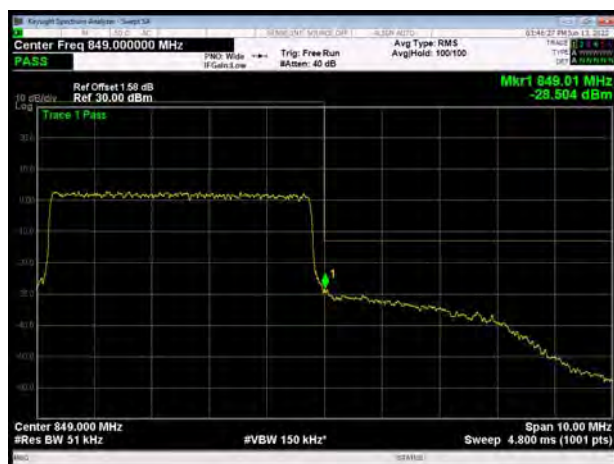
LTE Band 5 16QAM 5MHz CH-High 1RB



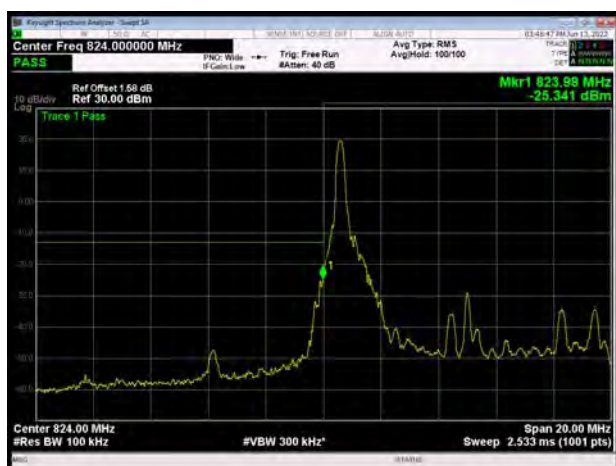
LTE Band 5 16QAM 5MHz CH-Low 100%RB



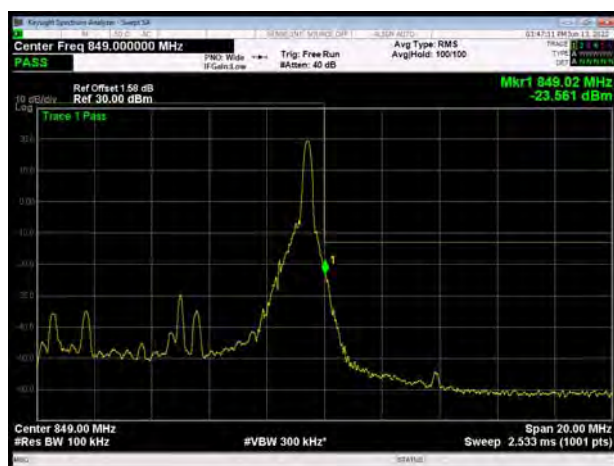
LTE Band 5 16QAM 5MHz CH-High 100%RB



LTE Band 5 16QAM 10MHz CH-Low 1RB



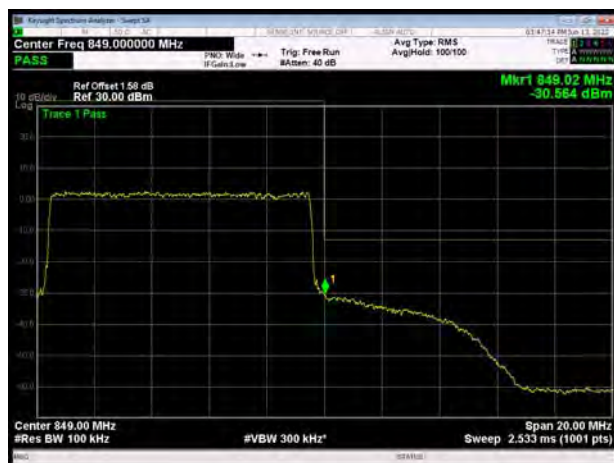
LTE Band 5 16QAM 10MHz CH-High 1RB



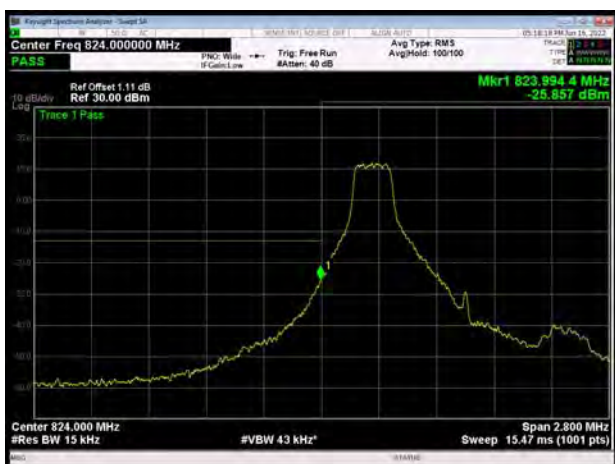
LTE Band 5 16QAM 10MHz CH-Low 100%RB



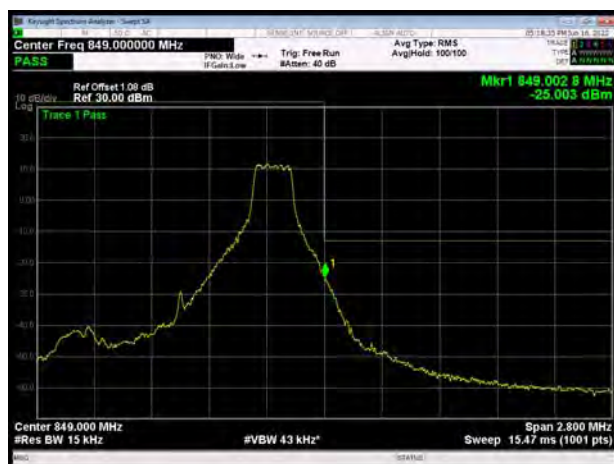
LTE Band 5 16QAM 10MHz CH-High 100%RB



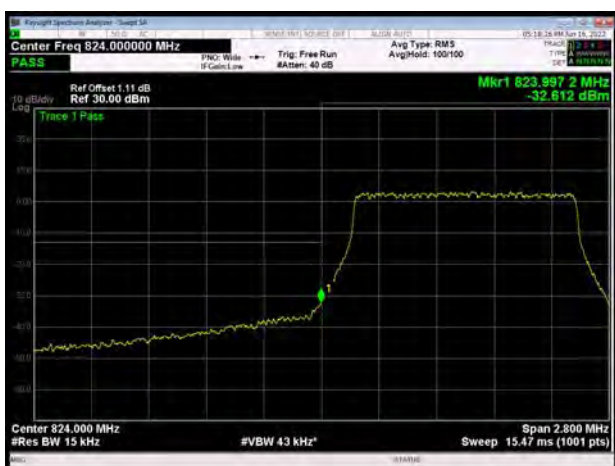
LTE Band 5 64QAM 1.4MHz CH-Low 1RB



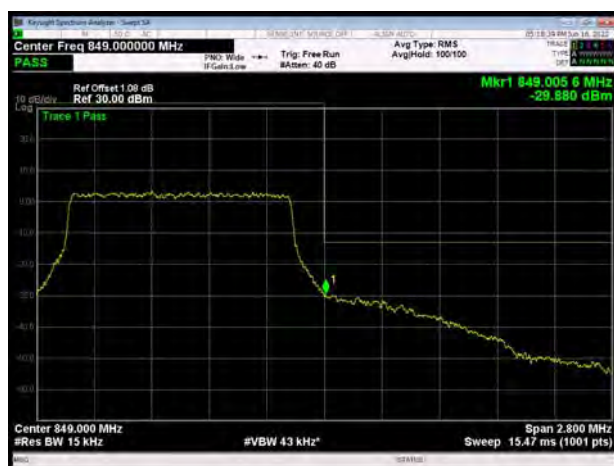
LTE Band 5 64QAM 1.4MHz CH-High 1RB



LTE Band 5 64QAM 1.4MHz CH-Low 100%RB



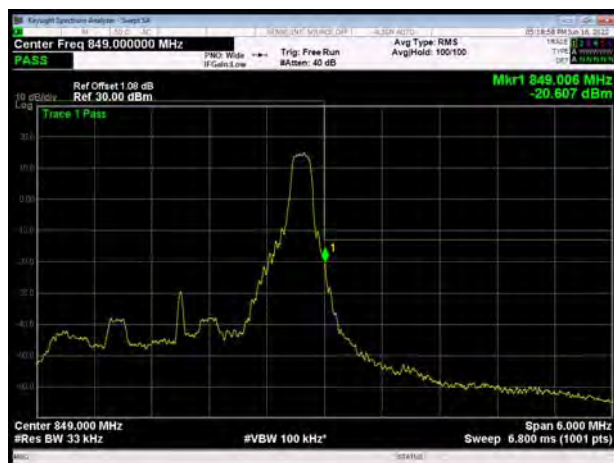
LTE Band 5 64QAM 1.4MHz CH-High 100%RB



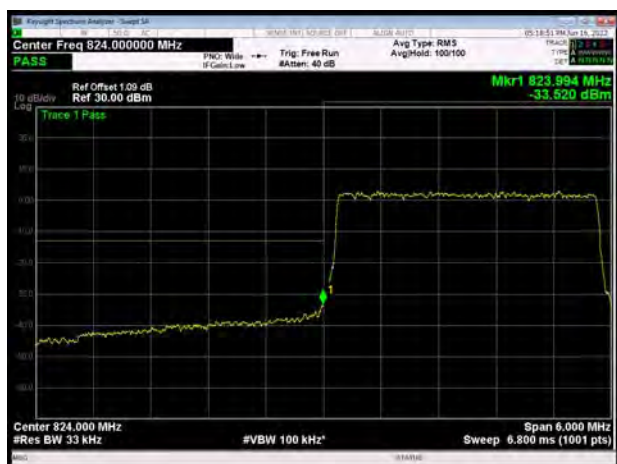
LTE Band 5 64QAM 3MHz CH-Low 1RB



LTE Band 5 64QAM 3MHz CH-High 1RB



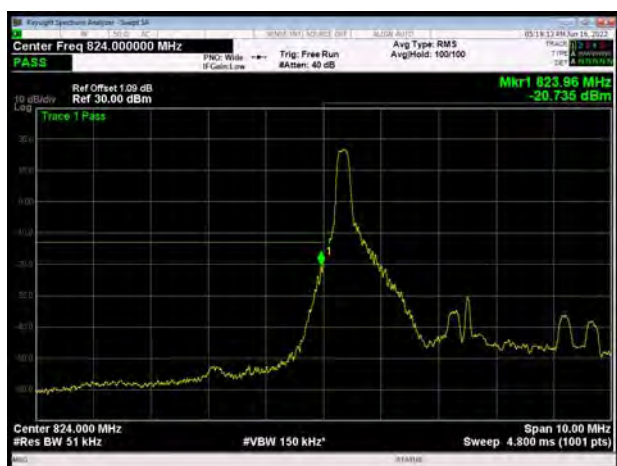
LTE Band 5 64QAM 3MHz CH-Low 100%RB



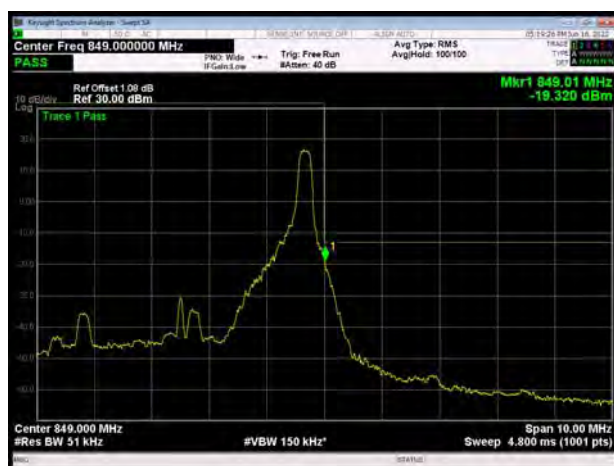
LTE Band 5 64QAM 3MHz CH-High 100%RB



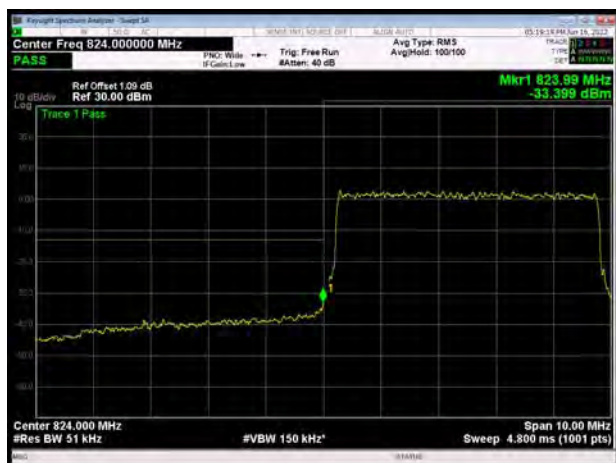
LTE Band 5 64QAM 5MHz CH-Low 1RB



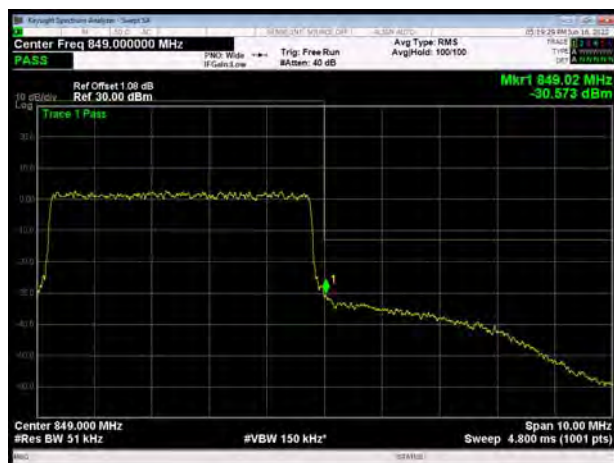
LTE Band 5 64QAM 5MHz CH-High 1RB



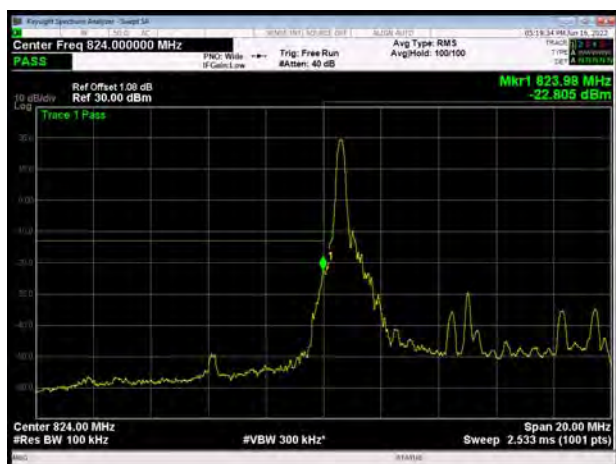
LTE Band 5 64QAM 5MHz CH-Low 100%RB



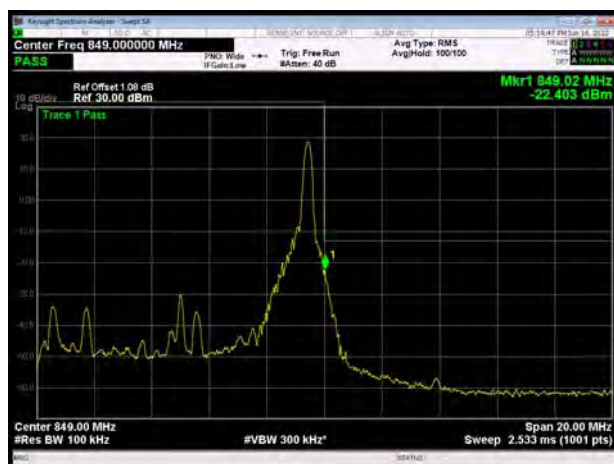
LTE Band 5 64QAM 5MHz CH-High 100%RB



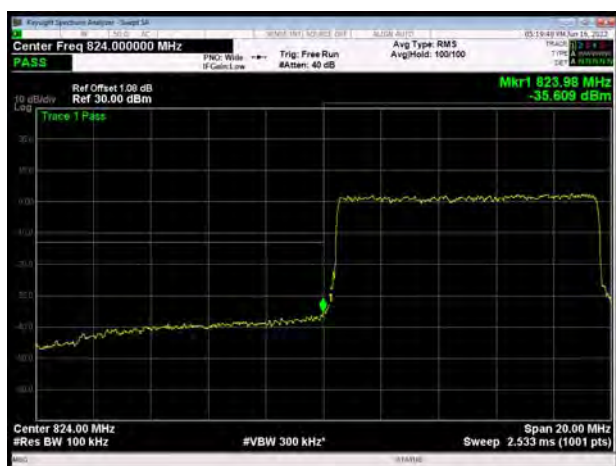
LTE Band 5 64QAM 10MHz CH-Low 1RB



LTE Band 5 64QAM 10MHz CH-High 1RB



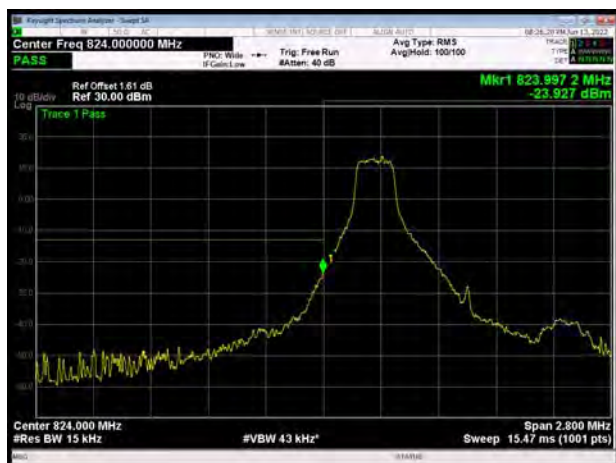
LTE Band 5 64QAM 10MHz CH-Low 100%RB



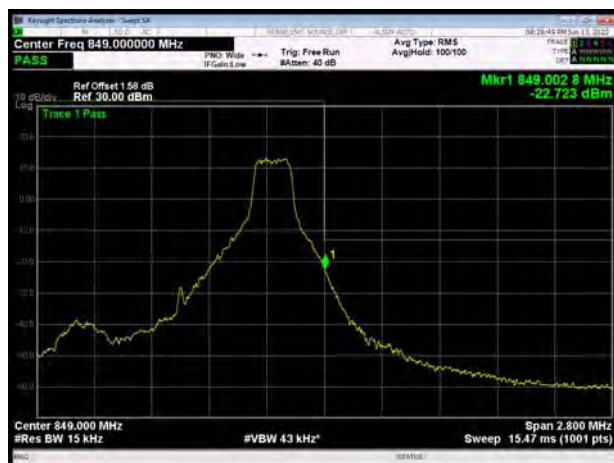
LTE Band 5 64QAM 10MHz CH-High 100%RB



LTE Band 26 QPSK 1.4MHz CH-Low 1RB



LTE Band 26 QPSK 1.4MHz CH-High 1RB



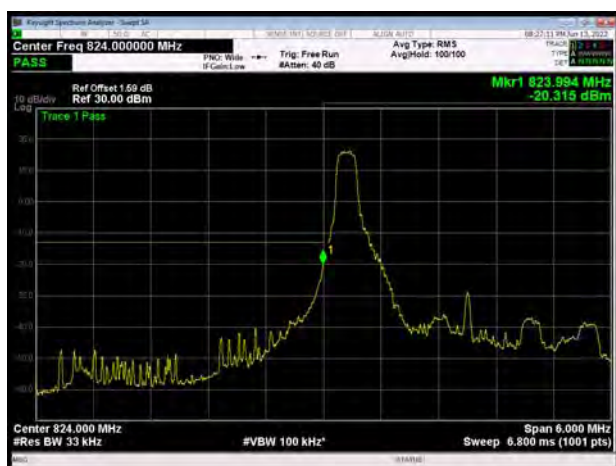
LTE Band 26 QPSK 1.4MHz CH-Low 100%RB



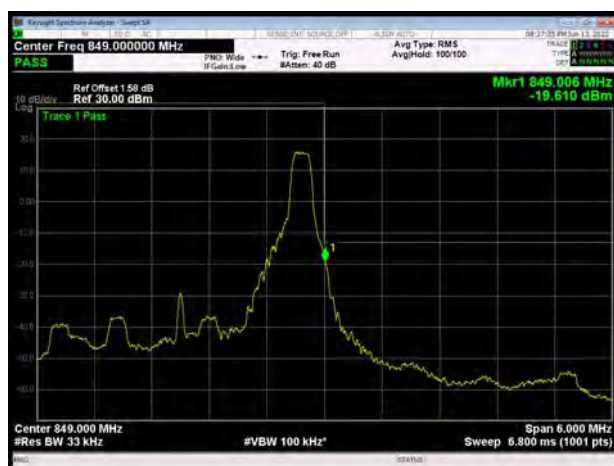
LTE Band 26 QPSK 1.4MHz CH-High 100%RB



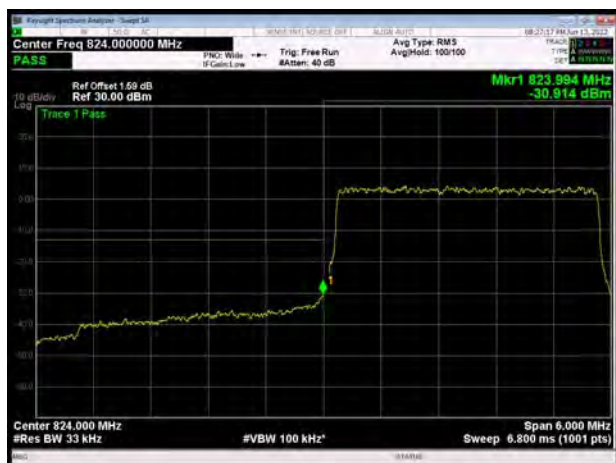
LTE Band 26 QPSK 3MHz CH-Low 1RB



LTE Band 26 QPSK 3MHz CH-High 1RB



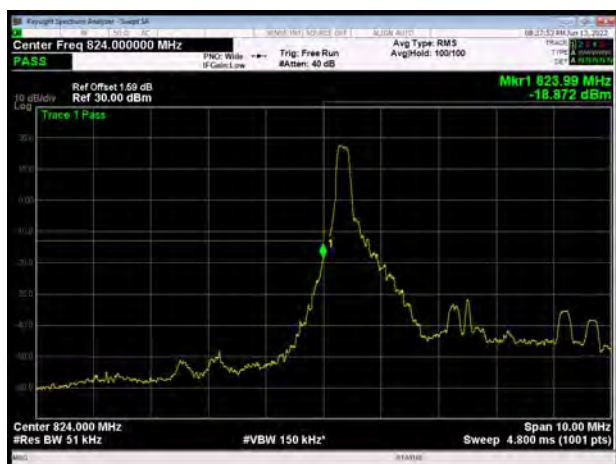
LTE Band 26 QPSK 3MHz CH-Low 100%RB



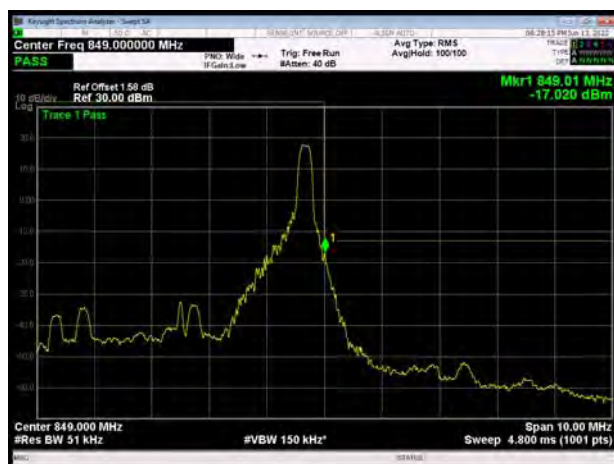
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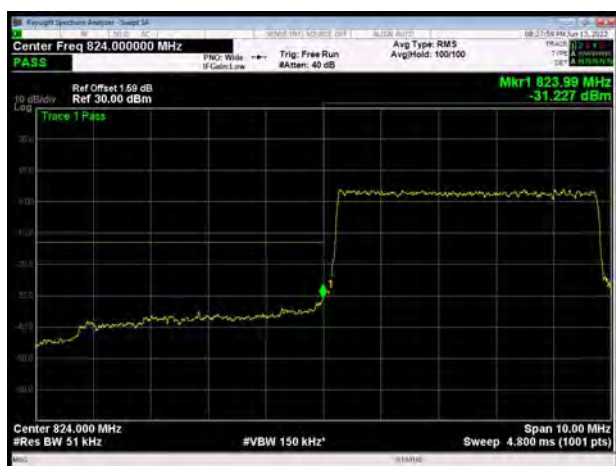
LTE Band 26 QPSK 5MHz CH-Low 1RB



LTE Band 26 QPSK 5MHz CH-High 1RB



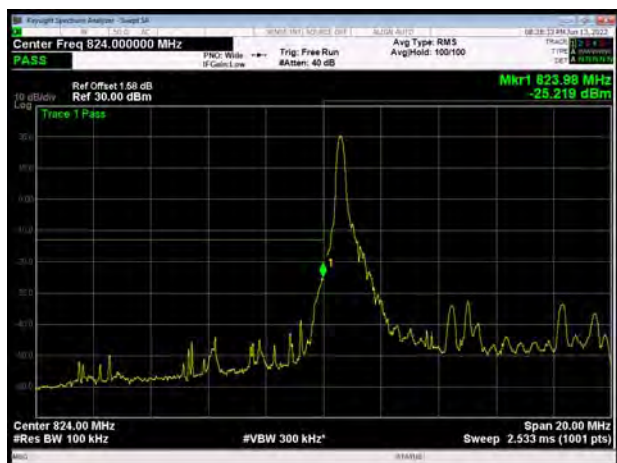
LTE Band 26 QPSK 5MHz CH-Low 100%RB



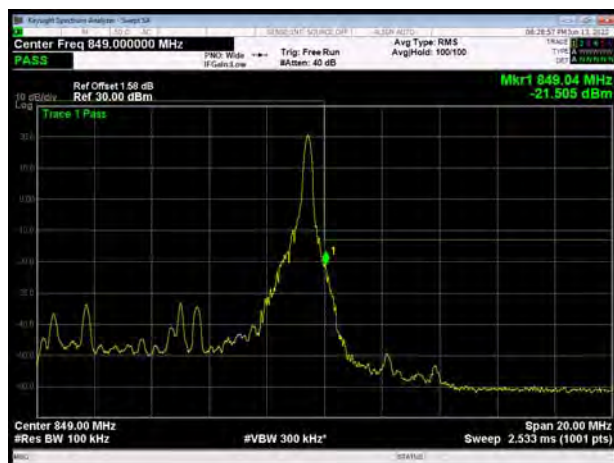
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LTE Band 26 QPSK 10MHz CH-Low 1RB



LTE Band 26 QPSK 10MHz CH-High 1RB



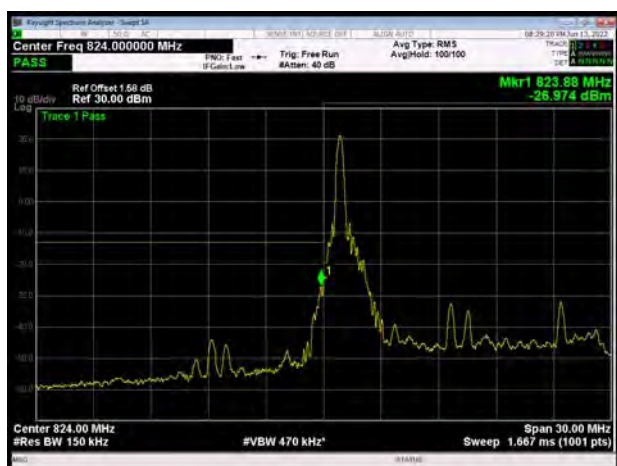
LTE Band 26 QPSK 10MHz CH-Low 100%RB



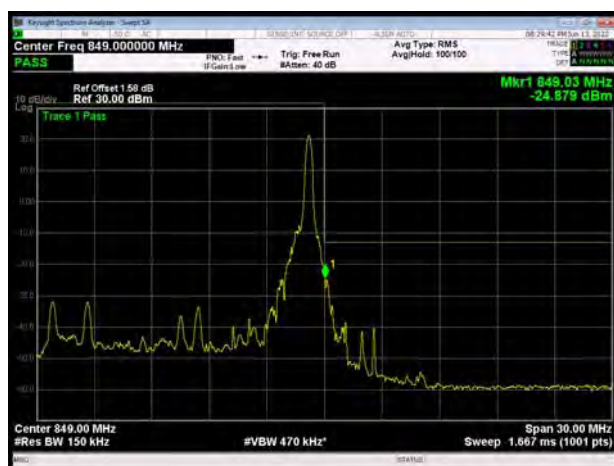
LTE Band 26 QPSK 10MHz CH-High 100%RB



LTE Band 26 QPSK 15MHz CH-Low 1RB



LTE Band 26 QPSK 15MHz CH-High 1RB



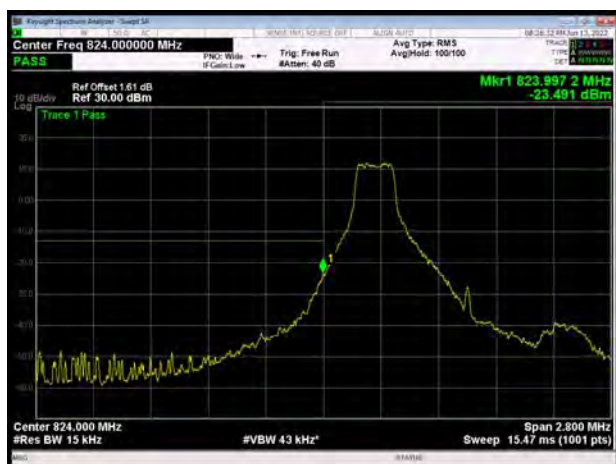
LTE Band 26 QPSK 15MHz CH-Low 100%RB



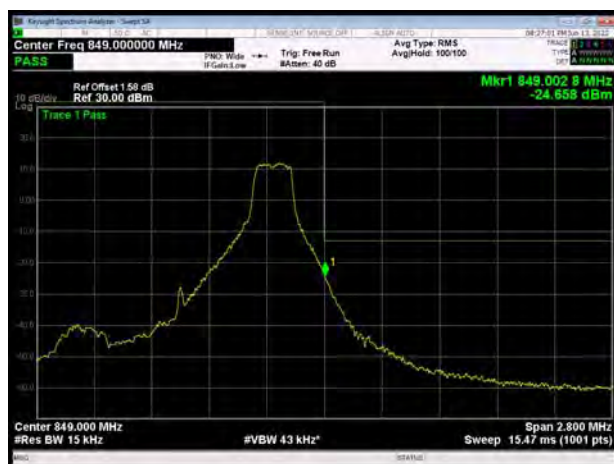
LTE Band 26 QPSK 15MHz CH-High 100%RB



LTE Band 26 16QAM 1.4MHz CH-Low 1RB



LTE Band 26 16QAM 1.4MHz CH-High 1RB



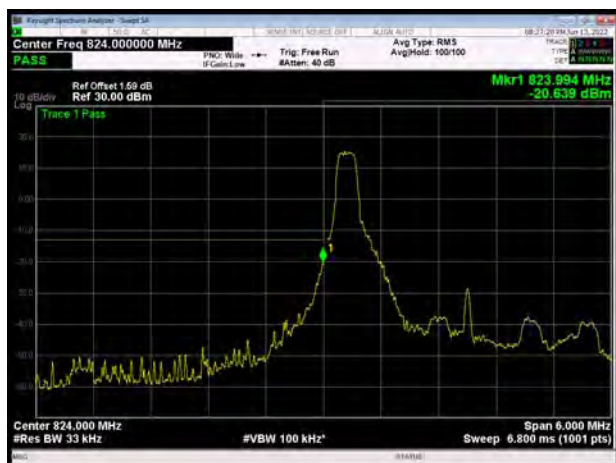
LTE Band 26 16QAM 1.4MHz CH-Low 100%RB



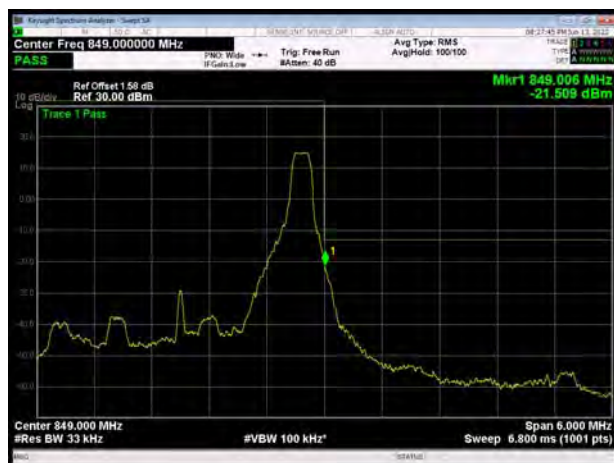
LTE Band 26 16QAM 1.4MHz CH-High 100%RB



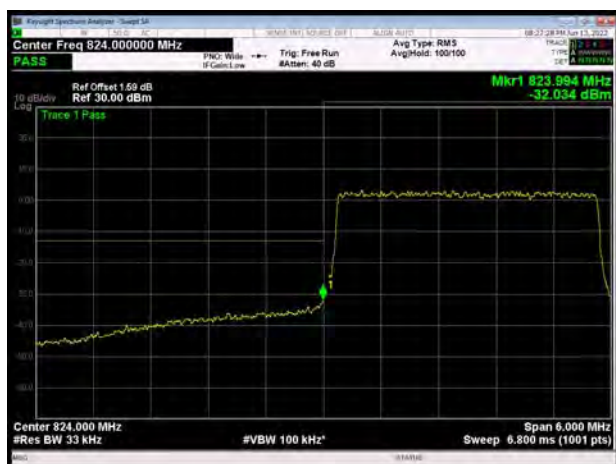
LTE Band 26 16QAM 3MHz CH-Low 1RB



LTE Band 26 16QAM 3MHz CH-High 1RB



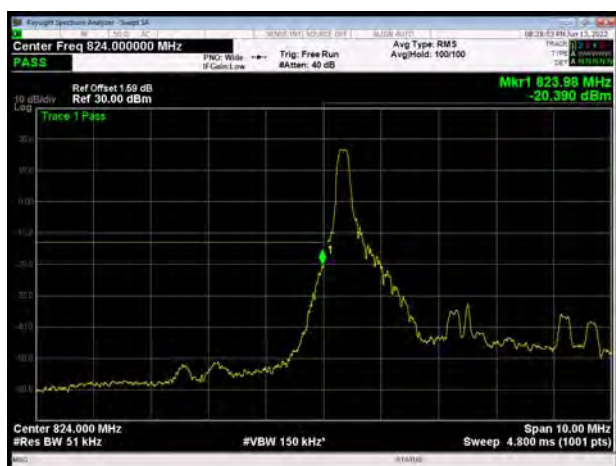
LTE Band 26 16QAM 3MHz CH-Low 100%RB



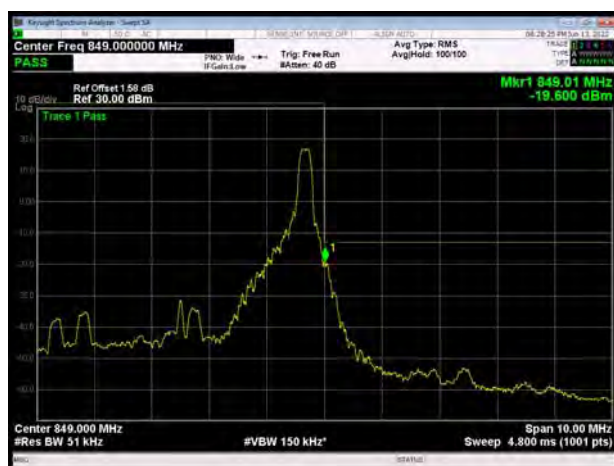
LTE Band 26 16QAM 3MHz CH-High 100%RB



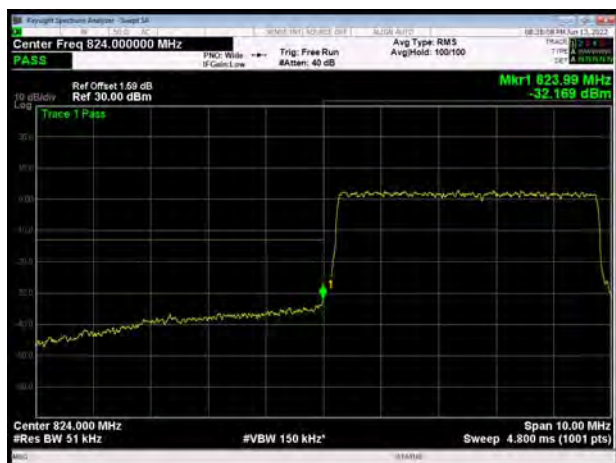
LTE Band 26 16QAM 5MHz CH-Low 1RB



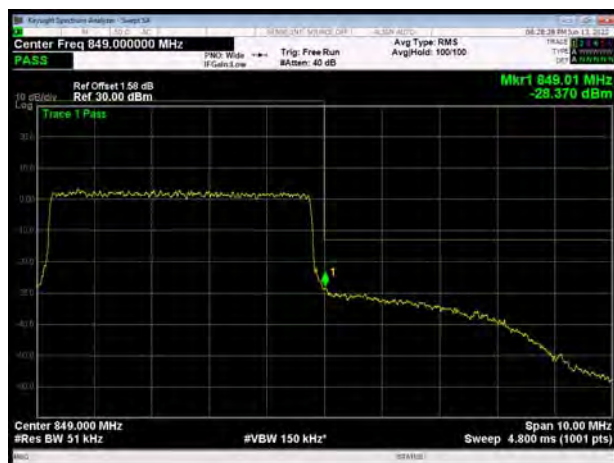
LTE Band 26 16QAM 5MHz CH-High 1RB



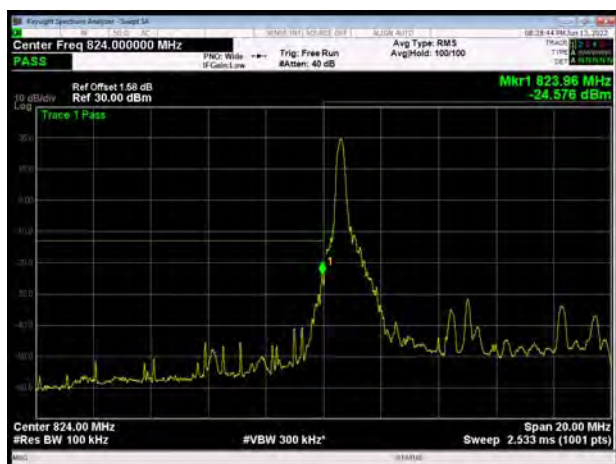
LTE Band 26 16QAM 5MHz CH-Low 100%RB



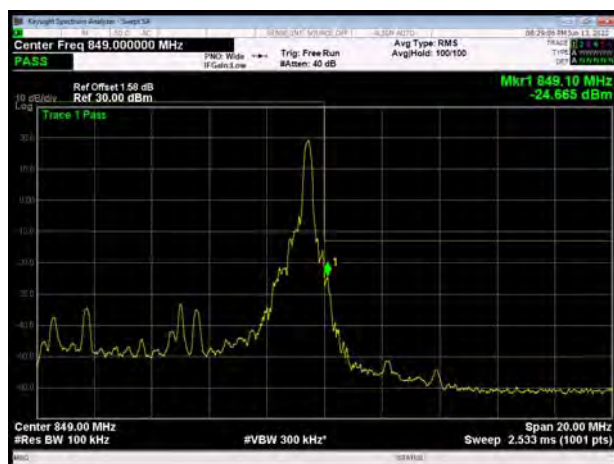
LTE Band 26 16QAM 5MHz CH-High 100%RB



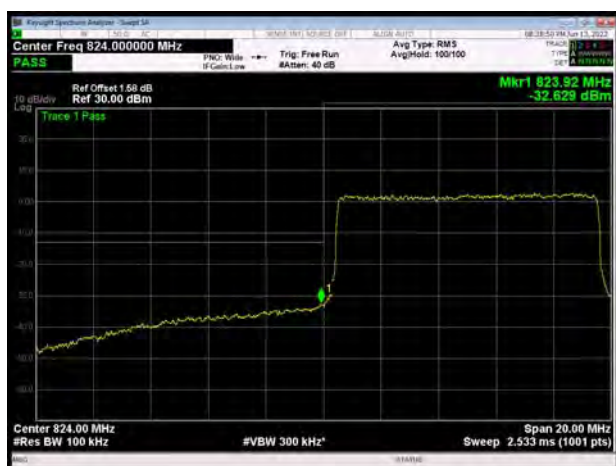
LTE Band 26 16QAM 10MHz CH-Low 1RB



LTE Band 26 16QAM 10MHz CH-High 1RB



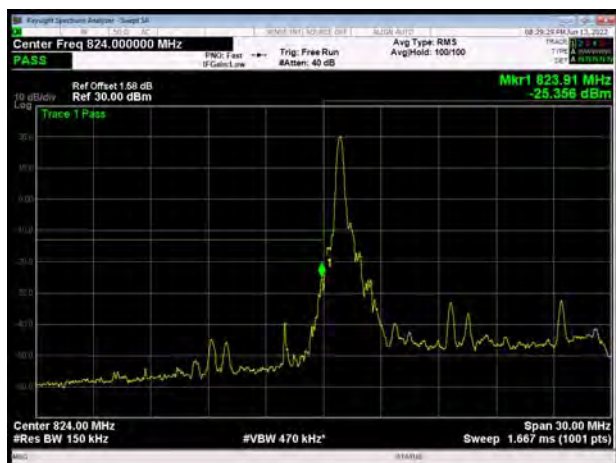
LTE Band 26 16QAM 10MHz CH-Low 100%RB



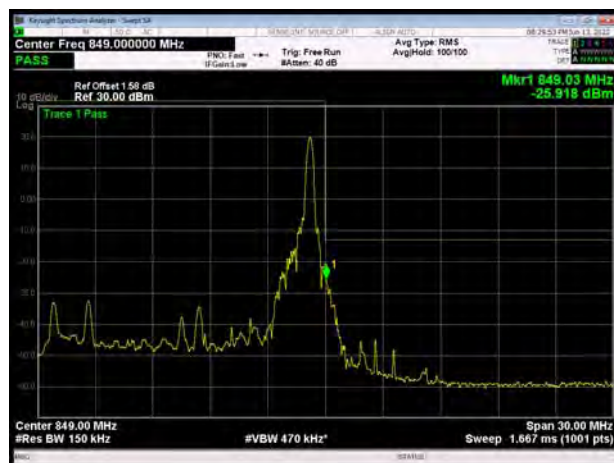
LTE Band 26 16QAM 10MHz CH-High 100%RB



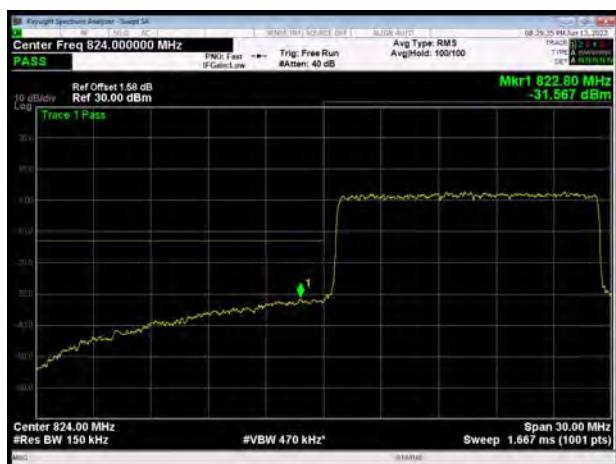
LTE Band 26 16QAM 15MHz CH-Low 1RB



LTE Band 26 16QAM 15MHz CH-High 1RB



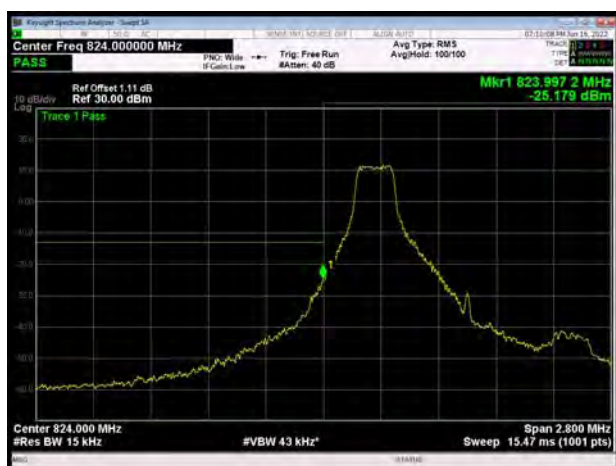
LTE Band 26 16QAM 15MHz CH-Low 100%RB



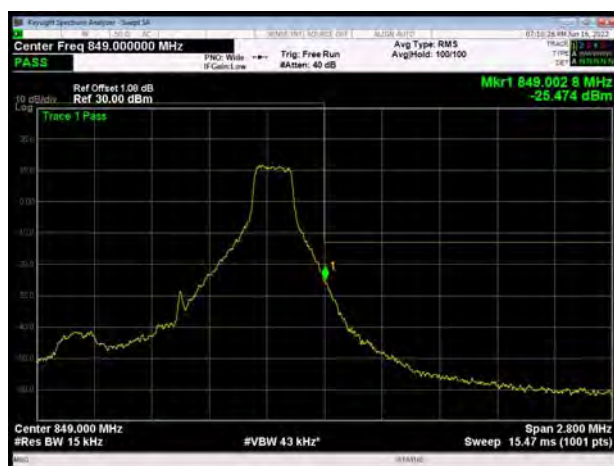
LTE Band 26 16QAM 15MHz CH-High 100%RB



LTE Band 26 64QAM 1.4MHz CH-Low 1RB



LTE Band 26 64QAM 1.4MHz CH-High 1RB



LTE Band 26 64QAM 1.4MHz CH-Low 100%RB



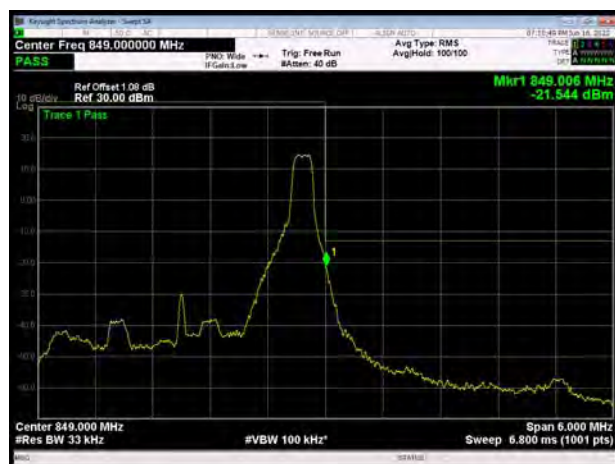
LTE Band 26 64QAM 1.4MHz CH-High 100%RB



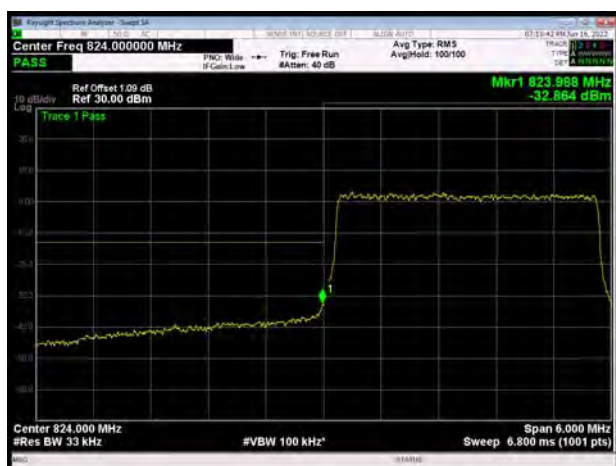
LTE Band 26 64QAM 3MHz CH-Low 1RB



LTE Band 26 64QAM 3MHz CH-High 1RB



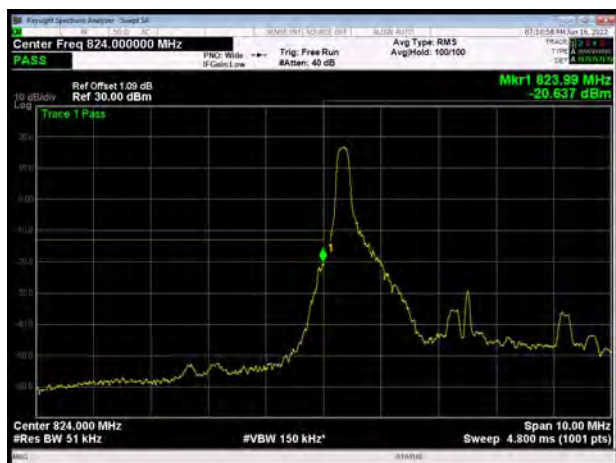
LTE Band 26 64QAM 3MHz CH-Low 100%RB



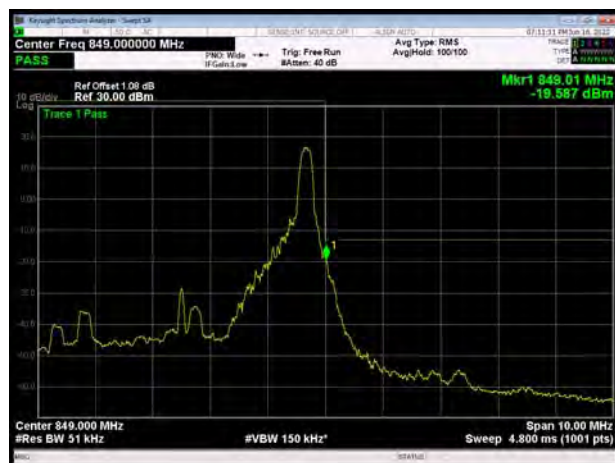
LTE Band 26 64QAM 3MHz CH-High 100%RB



LTE Band 26 64QAM 5MHz CH-Low 1RB



LTE Band 26 64QAM 5MHz CH-High 1RB



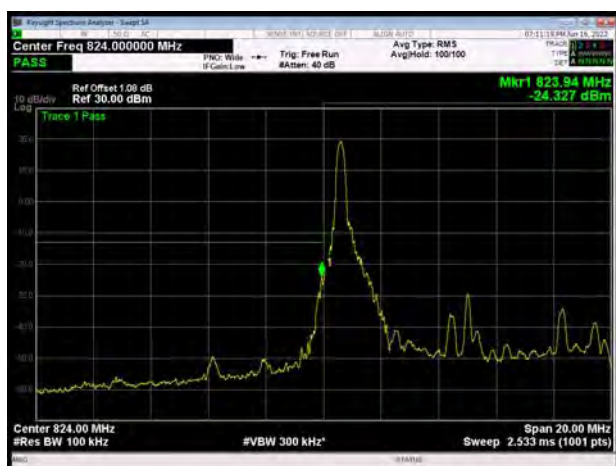
LTE Band 26 64QAM 5MHz CH-Low 100%RB



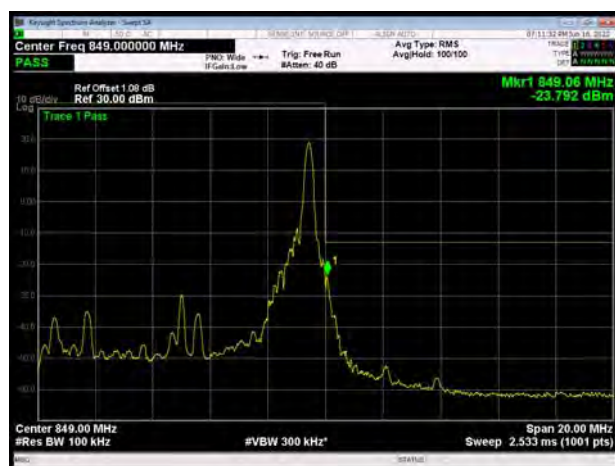
LTE Band 26 64QAM 5MHz CH-High 100%RB



LTE Band 26 64QAM 10MHz CH-Low 1RB



LTE Band 26 64QAM 10MHz CH-High 1RB



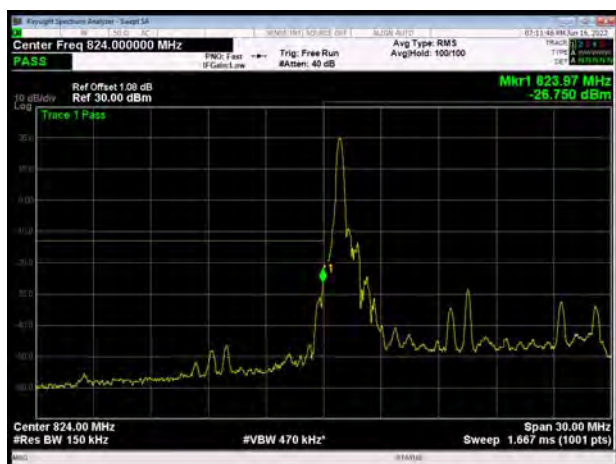
LTE Band 26 64QAM 10MHz CH-Low 100%RB



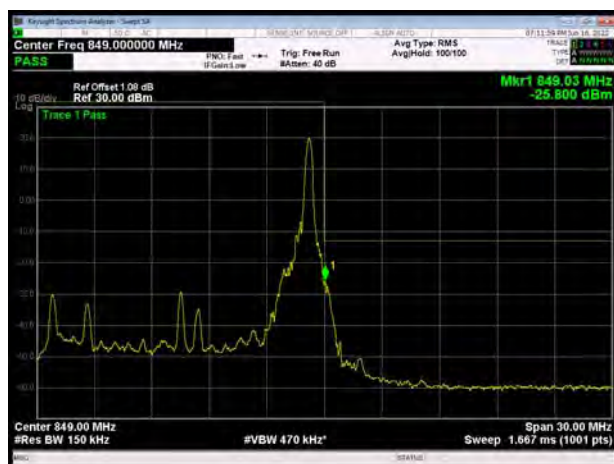
LTE Band 26 64QAM 10MHz CH-High 100%RB



LTE Band 26 64QAM 15MHz CH-Low 1RB



LTE Band 26 64QAM 15MHz CH-High 1RB



LTE Band 26 64QAM 15MHz CH-Low 100%RB



LTE Band 26 64QAM 15MHz CH-High 100%RB



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

Mode	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
GSM 850 (GMSK)	128	824.2	32.02	29.41	2.61	≤13	PASS
	190	836.6	32.12	29.50	2.62	≤13	PASS
	251	848.8	32.00	29.38	2.62	≤13	PASS
GPRS 850 (GMSK)	128	824.2	32.03	29.42	2.61	≤13	PASS
	190	836.6	32.12	29.50	2.62	≤13	PASS
	251	848.8	32.01	29.39	2.62	≤13	PASS
EGPRS 850 (8PSK)	128	824.2	28.99	23.29	5.70	≤13	PASS
	190	836.6	29.06	23.36	5.70	≤13	PASS
	251	848.8	29.08	23.44	5.64	≤13	PASS
WCDMA Band V (RMC)	4132	826.4	26.37	23.09	3.28	≤13	PASS
	4183	836.6	25.87	23.07	2.80	≤13	PASS
	4233	846.6	25.79	22.97	2.82	≤13	PASS

LTE Band 5								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	20407	824.7	27.44	21.87	5.57	≤13	PASS
		20525	836.5	26.68	21.81	4.87	≤13	PASS
		20643	848.3	26.31	21.76	4.55	≤13	PASS
	3	20415	825.5	27.52	21.82	5.70	≤13	PASS
		20525	836.5	26.73	21.84	4.89	≤13	PASS
		20635	847.5	26.49	21.79	4.70	≤13	PASS
	5	20425	826.5	27.51	21.91	5.60	≤13	PASS
		20525	836.5	26.78	21.82	4.96	≤13	PASS
		20625	846.5	26.61	21.77	4.84	≤13	PASS
	10	20450	829	27.34	21.93	5.41	≤13	PASS
		20525	836.5	26.87	21.83	5.04	≤13	PASS
		20600	844	26.93	21.86	5.07	≤13	PASS
16QAM	1.4	20407	824.7	27.26	20.87	6.39	≤13	PASS
		20525	836.5	26.56	20.83	5.73	≤13	PASS
		20643	848.3	26.21	20.80	5.41	≤13	PASS
	3	20415	825.5	27.35	20.83	6.52	≤13	PASS



		20525	836.5	26.61	20.86	5.75	≤13	PASS
		20635	847.5	26.37	20.81	5.56	≤13	PASS
	5	20425	826.5	27.29	20.92	6.37	≤13	PASS
		20525	836.5	26.57	20.83	5.74	≤13	PASS
		20625	846.5	26.50	20.82	5.68	≤13	PASS
	10	20450	829	27.14	20.91	6.23	≤13	PASS
		20525	836.5	26.66	20.80	5.86	≤13	PASS
		20600	844	26.66	20.82	5.84	≤13	PASS
64QAM	1.4	20407	824.7	27.00	20.47	6.53	≤13	PASS
		20525	836.5	26.37	20.41	5.96	≤13	PASS
		20643	848.3	26.00	20.41	5.59	≤13	PASS
	3	20415	825.5	27.15	20.46	6.69	≤13	PASS
		20525	836.5	26.47	20.44	6.03	≤13	PASS
		20635	847.5	26.16	20.40	5.76	≤13	PASS
	5	20425	826.5	27.13	20.54	6.59	≤13	PASS
		20525	836.5	26.46	20.43	6.03	≤13	PASS
		20625	846.5	26.39	20.43	5.96	≤13	PASS
	10	20450	829	27.13	20.52	6.61	≤13	PASS
		20525	836.5	26.56	20.40	6.16	≤13	PASS
		20600	844	26.58	20.44	6.14	≤13	PASS

LTE Band 26								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	26797	824.7	27.35	21.90	5.45	≤13	PASS
		26915	836.5	26.54	21.80	4.74	≤13	PASS
		27033	848.3	26.25	21.80	4.45	≤13	PASS
	3	26805	825.5	27.34	21.85	5.49	≤13	PASS
		26915	836.5	26.60	21.81	4.79	≤13	PASS
		27025	847.5	26.39	21.82	4.57	≤13	PASS
	5	26815	826.5	27.37	21.90	5.47	≤13	PASS
		26915	836.5	26.68	21.84	4.84	≤13	PASS
		27015	846.5	26.57	21.81	4.76	≤13	PASS
	10	26840	829	27.26	21.92	5.34	≤13	PASS
		26915	836.5	26.79	21.82	4.97	≤13	PASS
		26990	844	26.83	21.88	4.95	≤13	PASS
	15	26865	831.5	27.29	21.80	5.49	≤13	PASS
		26915	836.5	27.23	21.81	5.42	≤13	PASS
		26965	841.5	27.17	21.83	5.34	≤13	PASS



16QAM	1.4	26797	824.7	27.00	20.88	6.12	≤13	PASS
		26915	836.5	26.50	20.86	5.64	≤13	PASS
		27033	848.3	26.09	20.80	5.29	≤13	PASS
	3	26805	825.5	27.19	20.85	6.34	≤13	PASS
		26915	836.5	26.49	20.84	5.65	≤13	PASS
		27025	847.5	26.29	20.82	5.47	≤13	PASS
	5	26815	826.5	27.17	20.94	6.23	≤13	PASS
		26915	836.5	26.44	20.85	5.59	≤13	PASS
		27015	846.5	26.44	20.86	5.58	≤13	PASS
	10	26840	829	27.05	20.89	6.16	≤13	PASS
		26915	836.5	26.61	20.80	5.81	≤13	PASS
		26990	844	26.65	20.85	5.80	≤13	PASS
	15	26865	831.5	26.91	20.83	6.08	≤13	PASS
		26915	836.5	26.79	20.74	6.05	≤13	PASS
		26965	841.5	26.74	20.80	5.94	≤13	PASS
64QAM	1.4	26797	824.7	26.84	20.41	6.43	≤13	PASS
		26915	836.5	26.29	20.34	5.95	≤13	PASS
		27033	848.3	25.82	20.31	5.51	≤13	PASS
	3	26805	825.5	27.04	20.38	6.66	≤13	PASS
		26915	836.5	26.37	20.32	6.05	≤13	PASS
		27025	847.5	26.08	20.30	5.78	≤13	PASS
	5	26815	826.5	27.15	20.48	6.67	≤13	PASS
		26915	836.5	26.36	20.31	6.05	≤13	PASS
		27015	846.5	26.27	20.37	5.90	≤13	PASS
	10	26840	829	26.91	20.39	6.52	≤13	PASS
		26915	836.5	26.44	20.29	6.15	≤13	PASS
		26990	844	26.45	20.36	6.09	≤13	PASS
	15	26865	831.5	26.73	20.31	6.42	≤13	PASS
		26915	836.5	26.57	20.26	6.31	≤13	PASS
		26965	841.5	26.52	20.33	6.19	≤13	PASS

6.5. Frequency Stability

GSM 850						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	GMSK	8PSK	GMSK	8PSK	
Normal (25℃)	Normal	2.75	14.91	0.00329	0.01782	PASS
Extreme (50℃)		10.87	2.36	0.01300	0.00282	PASS
Extreme (40℃)		13.89	12.11	0.01660	0.01447	PASS
Extreme (30℃)		8.62	7.91	0.01031	0.00945	PASS
Extreme (20℃)		3.59	2.07	0.00429	0.00247	PASS
Extreme (10℃)		3.22	4.69	0.00385	0.00561	PASS
Extreme (0℃)		7.58	12.59	0.00906	0.01504	PASS
Extreme (-10℃)		7.13	9.02	0.00852	0.01078	PASS
Extreme (-20℃)		2.05	7.87	0.00245	0.00941	PASS
Extreme (-30℃)		2.49	8.54	0.00298	0.01021	PASS
25℃	LV	3.13	8.46	0.00374	0.01011	PASS
	HV	7.80	16.22	0.00933	0.01938	PASS

WCDMA Band V						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	BPSK	QPSK	BPSK	QPSK	
Normal (25℃)	Normal	11.84	5.98	0.01415	0.00714	PASS
Extreme (50℃)		2.83	3.31	0.00339	0.00395	PASS
Extreme (40℃)		15.39	16.41	0.01839	0.01962	PASS
Extreme (30℃)		11.00	10.38	0.01314	0.01241	PASS
Extreme (20℃)		4.53	7.81	0.00541	0.00933	PASS
Extreme (10℃)		14.72	7.76	0.01760	0.00927	PASS
Extreme (0℃)		14.28	8.54	0.01707	0.01021	PASS
Extreme (-10℃)		12.41	5.17	0.01484	0.00618	PASS
Extreme (-20℃)		13.23	5.67	0.01581	0.00677	PASS
Extreme (-30℃)		4.83	7.63	0.00577	0.00912	PASS
25℃	LV	10.46	8.03	0.01250	0.00960	PASS
	HV	3.55	3.26	0.00424	0.00390	PASS



LTE Band 5								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	14.05	16.43	5.59	0.01680	0.01964	0.00668	PASS
Extreme (50℃)		6.06	1.68	16.59	0.00724	0.00201	0.01983	PASS
Extreme (40℃)		8.25	6.22	1.05	0.00987	0.00744	0.00126	PASS
Extreme (30℃)		15.34	1.20	11.15	0.01833	0.00144	0.01333	PASS
Extreme (20℃)		1.47	11.25	14.94	0.00176	0.01345	0.01786	PASS
Extreme (10℃)		6.72	14.23	5.08	0.00803	0.01701	0.00608	PASS
Extreme (0℃)		10.44	4.19	7.54	0.01248	0.00501	0.00901	PASS
Extreme (-10℃)		12.89	3.45	7.39	0.01541	0.00412	0.00883	PASS
Extreme (-20℃)		15.71	5.33	16.02	0.01878	0.00637	0.01915	PASS
Extreme (-30℃)		17.60	17.21	4.80	0.02103	0.02057	0.00574	PASS
25℃	LV	13.21	12.82	6.23	0.01579	0.01532	0.00744	PASS
	HV	9.67	1.97	5.98	0.01156	0.00236	0.00715	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	6.49	16.36	1.85	0.00776	0.01956	0.00222	PASS
Extreme (50℃)		10.18	7.72	10.35	0.01217	0.00923	0.01238	PASS
Extreme (40℃)		1.83	7.69	3.54	0.00219	0.00919	0.00423	PASS
Extreme (30℃)		14.54	7.83	16.82	0.01738	0.00936	0.02010	PASS
Extreme (20℃)		16.06	11.35	13.94	0.01920	0.01357	0.01667	PASS
Extreme (10℃)		11.02	6.36	13.13	0.01318	0.00761	0.01569	PASS
Extreme (0℃)		1.38	13.31	3.25	0.00165	0.01592	0.00388	PASS
Extreme (-10℃)		3.18	1.54	3.30	0.00380	0.00184	0.00395	PASS
Extreme (-20℃)		15.45	5.19	3.02	0.01847	0.00620	0.00361	PASS
Extreme (-30℃)		8.68	5.35	12.26	0.01038	0.00640	0.01466	PASS
25℃	LV	4.58	7.22	10.88	0.00547	0.00863	0.01300	PASS
	HV	9.17	10.51	5.45	0.01097	0.01257	0.00651	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	14.35	17.93	11.41	0.01715	0.02143	0.01365	PASS
Extreme (50℃)		3.14	1.87	4.23	0.00375	0.00223	0.00505	PASS



Extreme (40℃)		6.11	8.00	1.85	0.00730	0.00956	0.00221	PASS
Extreme (30℃)		12.66	13.61	8.96	0.01514	0.01627	0.01071	PASS
Extreme (20℃)		2.07	15.21	12.34	0.00247	0.01818	0.01476	PASS
Extreme (10℃)		4.22	17.05	12.34	0.00505	0.02038	0.01476	PASS
Extreme (0℃)		10.21	16.20	9.65	0.01220	0.01937	0.01153	PASS
Extreme (-10℃)		17.33	17.71	9.41	0.02071	0.02117	0.01125	PASS
Extreme (-20℃)		2.79	13.96	17.50	0.00333	0.01669	0.02092	PASS
Extreme (-30℃)		11.90	15.91	13.34	0.01422	0.01901	0.01594	PASS
25℃	LV	1.45	3.04	8.88	0.00173	0.00364	0.01061	PASS
	HV	10.70	2.19	7.94	0.01280	0.00262	0.00949	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	13.54	14.34	5.87	0.01618	0.01714	0.00702	PASS
Extreme (50℃)		1.93	17.20	6.29	0.00231	0.02056	0.00752	PASS
Extreme (40℃)		2.95	8.95	9.47	0.00352	0.01069	0.01133	PASS
Extreme (30℃)		17.54	6.87	14.07	0.02096	0.00821	0.01682	PASS
Extreme (20℃)		14.90	12.11	3.32	0.01781	0.01448	0.00397	PASS
Extreme (10℃)		3.05	13.81	16.90	0.00365	0.01650	0.02020	PASS
Extreme (0℃)		3.96	7.89	11.25	0.00474	0.00943	0.01344	PASS
Extreme (-10℃)		4.80	12.27	7.55	0.00573	0.01466	0.00903	PASS
Extreme (-20℃)		3.16	10.82	9.73	0.00378	0.01293	0.01163	PASS
Extreme (-30℃)		6.86	14.07	10.22	0.00821	0.01682	0.01221	PASS
25℃	LV	15.02	14.90	11.20	0.01796	0.01781	0.01339	PASS
	HV	9.30	14.66	15.30	0.01112	0.01752	0.01829	PASS

LTE Band 26								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	12.54	8.41	3.87	0.01499	0.01006	0.00463	PASS
Extreme (50℃)		16.71	4.36	14.86	0.01997	0.00521	0.01777	PASS
Extreme (40℃)		3.63	15.80	16.21	0.00434	0.01888	0.01937	PASS
Extreme (30℃)		9.30	2.11	2.57	0.01112	0.00252	0.00308	PASS
Extreme (20℃)		10.02	7.36	11.52	0.01198	0.00880	0.01377	PASS
Extreme (10℃)		1.58	2.37	1.29	0.00189	0.00283	0.00154	PASS
Extreme (0℃)		9.62	10.49	9.66	0.01150	0.01254	0.01155	PASS
Extreme (-10℃)		12.67	6.41	2.08	0.01515	0.00766	0.00249	PASS
Extreme (-20℃)		16.58	14.03	3.92	0.01982	0.01678	0.00468	PASS



Extreme (-30℃)		5.85	4.05	6.80	0.00699	0.00484	0.00813	PASS
25℃	LV	14.98	6.60	14.59	0.01791	0.00789	0.01744	PASS
	HV	1.67	17.63	16.80	0.00199	0.02108	0.02008	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	10.70	8.07	7.93	0.01279	0.00965	0.00948	PASS
Extreme (50℃)		10.02	7.39	3.50	0.01198	0.00883	0.00418	PASS
Extreme (40℃)		3.64	17.04	13.40	0.00436	0.02037	0.01602	PASS
Extreme (30℃)		15.97	10.96	14.14	0.01909	0.01311	0.01690	PASS
Extreme (20℃)		3.07	9.74	6.95	0.00366	0.01164	0.00831	PASS
Extreme (10℃)		12.08	6.39	12.11	0.01444	0.00764	0.01448	PASS
Extreme (0℃)		15.24	6.77	15.62	0.01822	0.00809	0.01867	PASS
Extreme (-10℃)		11.57	4.29	12.91	0.01383	0.00513	0.01543	PASS
Extreme (-20℃)		15.06	12.31	15.03	0.01801	0.01472	0.01797	PASS
Extreme (-30℃)		10.63	13.86	10.37	0.01271	0.01657	0.01240	PASS
25℃	LV	7.92	6.26	9.47	0.00947	0.00749	0.01133	PASS
	HV	5.21	16.13	2.87	0.00623	0.01928	0.00343	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	8.76	8.61	16.86	0.01047	0.01029	0.02015	PASS
Extreme (50℃)		10.10	9.25	16.44	0.01207	0.01105	0.01965	PASS
Extreme (40℃)		13.04	14.53	6.50	0.01558	0.01737	0.00777	PASS
Extreme (30℃)		11.82	10.89	15.05	0.01413	0.01302	0.01800	PASS
Extreme (20℃)		5.81	9.44	6.54	0.00695	0.01129	0.00782	PASS
Extreme (10℃)		4.57	9.58	14.49	0.00546	0.01145	0.01733	PASS
Extreme (0℃)		2.14	4.14	6.50	0.00255	0.00495	0.00777	PASS
Extreme (-10℃)		14.46	14.86	12.85	0.01728	0.01776	0.01537	PASS
Extreme (-20℃)		13.59	16.44	16.68	0.01625	0.01965	0.01994	PASS
Extreme (-30℃)		1.70	12.59	17.94	0.00204	0.01506	0.02145	PASS
25℃	LV	14.62	5.47	4.63	0.01747	0.00654	0.00554	PASS
	HV	9.04	1.49	13.14	0.01081	0.00178	0.01571	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	12.51	3.64	14.70	0.01495	0.00435	0.01757	PASS



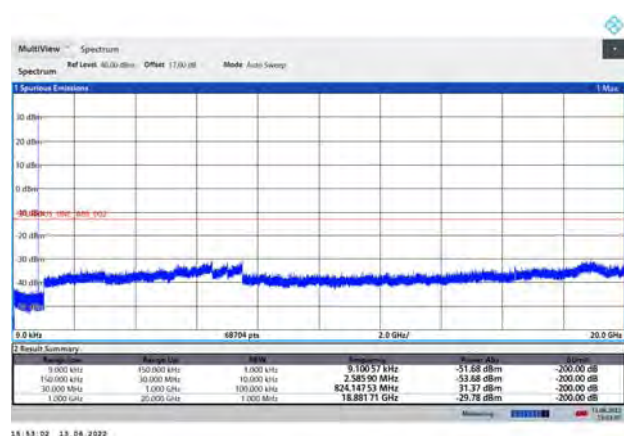
Extreme (50℃)		15.94	1.80	4.73	0.01905	0.00215	0.00565	PASS
Extreme (40℃)		4.17	6.26	12.74	0.00498	0.00749	0.01523	PASS
Extreme (30℃)		5.03	7.06	2.68	0.00602	0.00844	0.00321	PASS
Extreme (20℃)		1.52	15.74	17.34	0.00181	0.01882	0.02073	PASS
Extreme (10℃)		5.89	14.88	13.85	0.00704	0.01779	0.01656	PASS
Extreme (0℃)		8.38	14.43	7.62	0.01002	0.01725	0.00911	PASS
Extreme (-10℃)		6.21	13.22	14.95	0.00742	0.01580	0.01787	PASS
Extreme (-20℃)		14.19	9.44	7.29	0.01697	0.01129	0.00872	PASS
Extreme (-30℃)		14.69	5.36	15.46	0.01757	0.00640	0.01849	PASS
25℃	LV	16.40	16.34	14.47	0.01960	0.01954	0.01730	PASS
	HV	17.80	5.28	6.15	0.02128	0.00631	0.00735	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz							
Temperature	Voltage							
Normal (25℃)	Normal	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Extreme (50℃)		6.00	17.53	3.04	0.00717	0.00837	0.01793	PASS
Extreme (40℃)		3.00	3.55	17.71	0.00359	0.00478	0.00478	PASS
Extreme (30℃)		4.00	15.54	16.82	0.00478	0.01315	0.00478	PASS
Extreme (20℃)		2.00	12.86	13.40	0.00239	0.00239	0.00598	PASS
Extreme (10℃)		7.00	9.56	11.53	0.00837	0.00478	0.00478	PASS
Extreme (0℃)		17.00	9.37	2.61	0.02032	0.01076	0.00478	PASS
Extreme (-10℃)		3.00	2.46	1.22	0.00359	0.01793	0.00478	PASS
Extreme (-20℃)		10.00	9.87	11.12	0.01195	0.02032	0.01076	PASS
Extreme (-30℃)		1.00	14.10	9.74	0.00120	0.01913	0.01913	PASS
25℃	LV	14.00	10.23	12.33	0.01674	0.00120	0.00120	PASS
	HV	17.00	10.10	8.69	0.02032	0.00120	0.00359	PASS
		4.00	15.70	4.12	0.00478	0.01674	0.00120	PASS

6.6. Spurious Emissions at Antenna Terminals

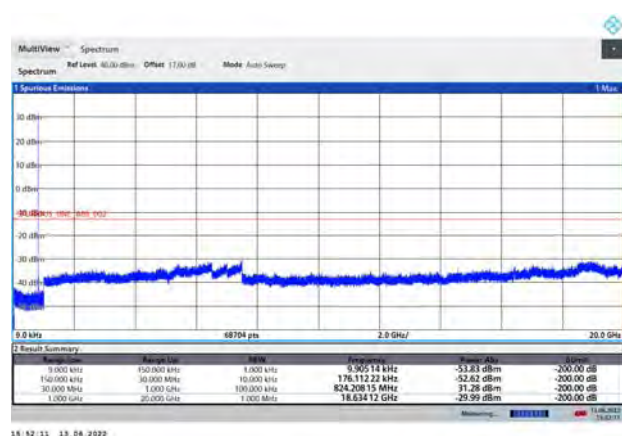
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

The signal beyond the limit is carrier.

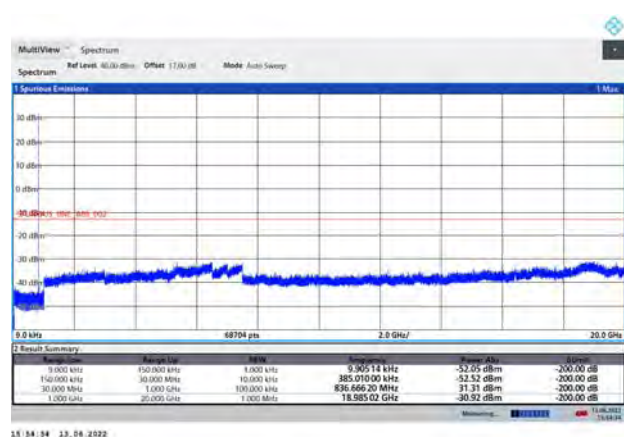
GSM 850 CH-Low 9kHz ~ 20GHz



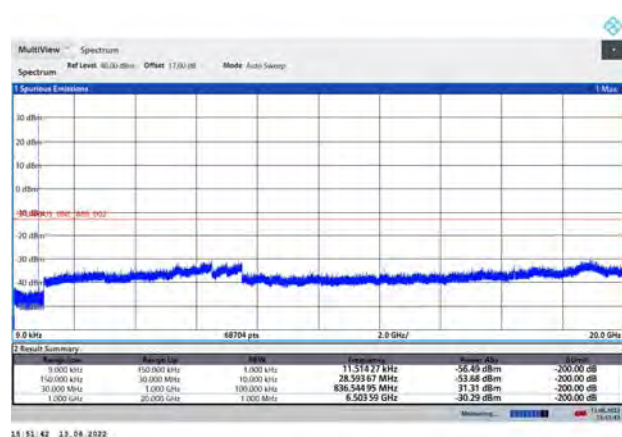
GPRS 850 CH-Low 9kHz ~ 20GHz



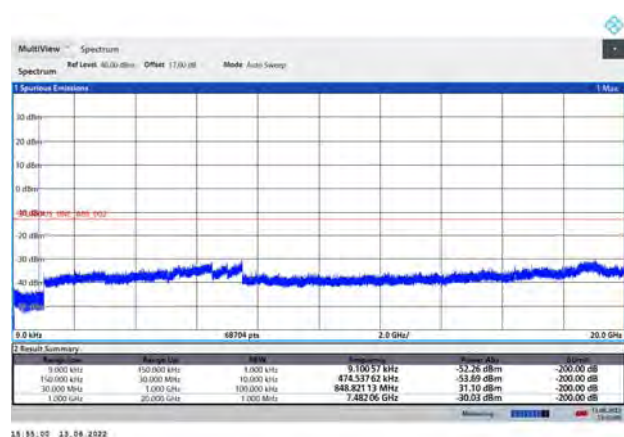
GSM 850 CH-Middle 9kHz ~ 20GHz



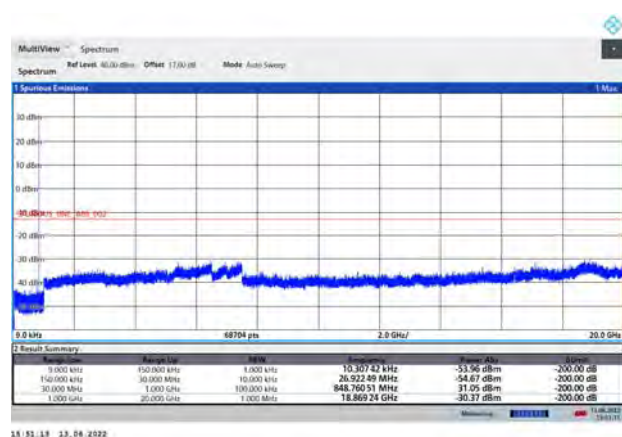
GPRS 850 CH-Middle 9kHz ~ 20GHz



GSM 850 CH-High 9kHz ~ 20GHz



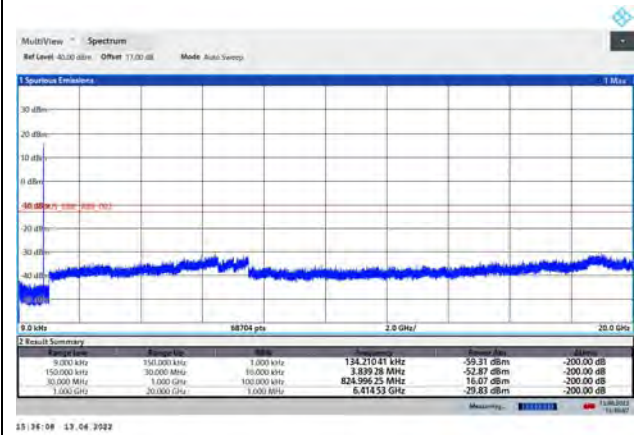
GPRS 850 CH-High 9kHz ~ 20GHz



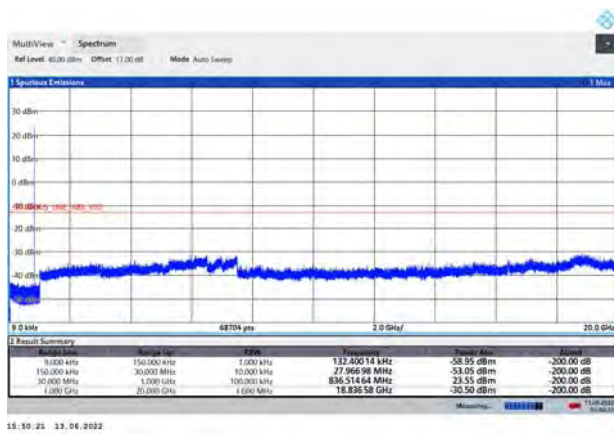
EGPRS 850 CH-Low 9kHz ~ 20GHz



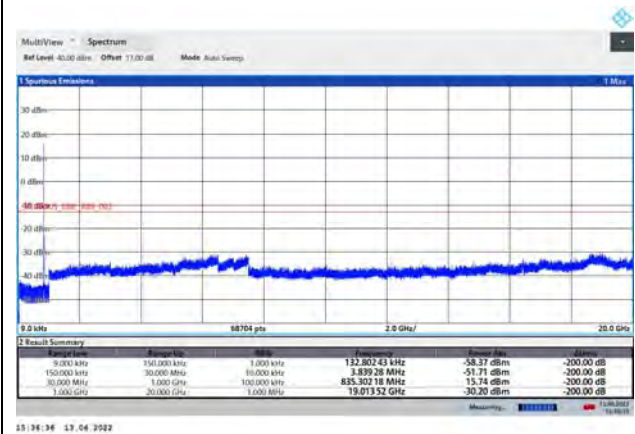
WCDMA BAND V CH-Low 9kHz ~ 20GHz



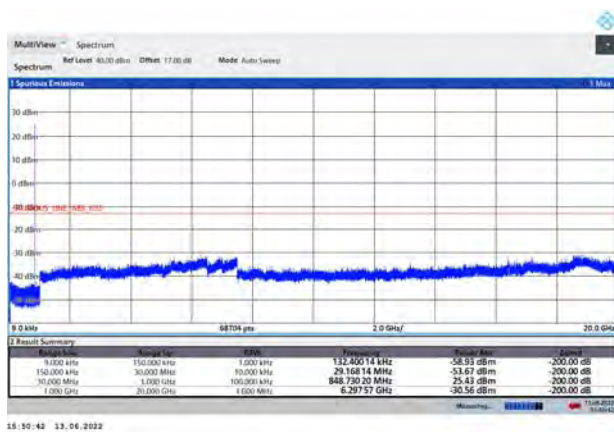
EGPRS 850 CH-Middle 9kHz ~ 20GHz



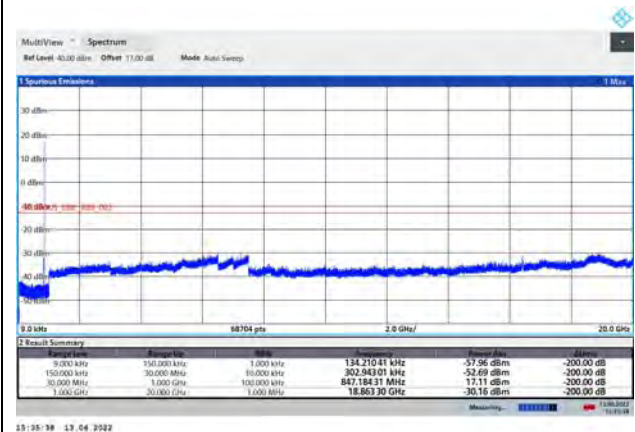
WCDMA BAND V CH-Middle 9kHz ~ 20GHz



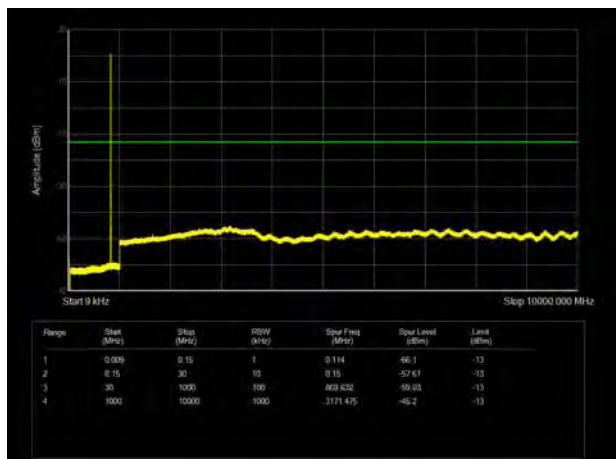
EGPRS 850 CH-High 9kHz ~ 20GHz



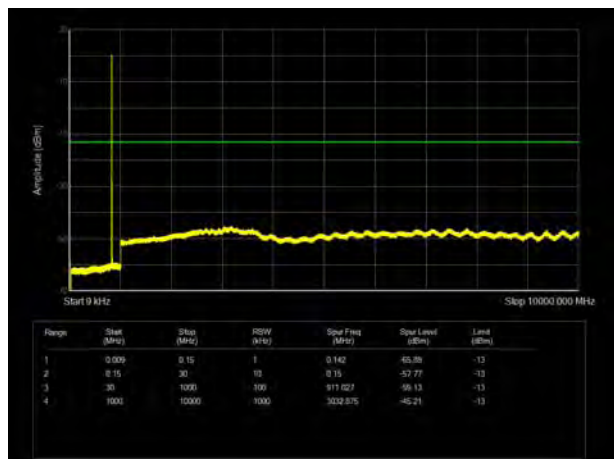
WCDMA BAND V CH-High 9kHz ~ 20GHz



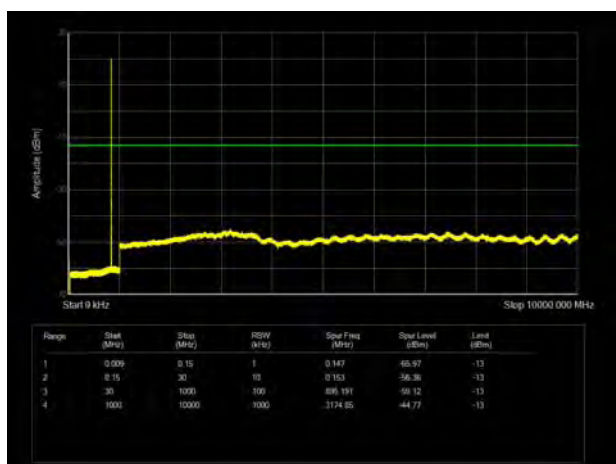
LTE Band 5 1.4MHz CH-Low 9kHz~10GHz



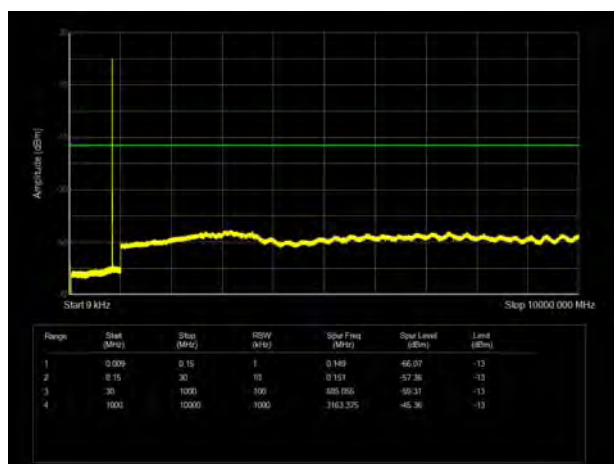
LTE Band 5 3MHz CH-Low 9kHz~10GHz



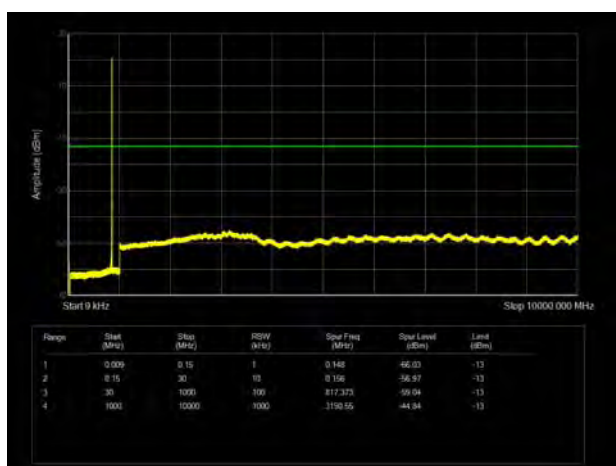
LTE Band 5 1.4MHz CH-Middle 9kHz~10GHz



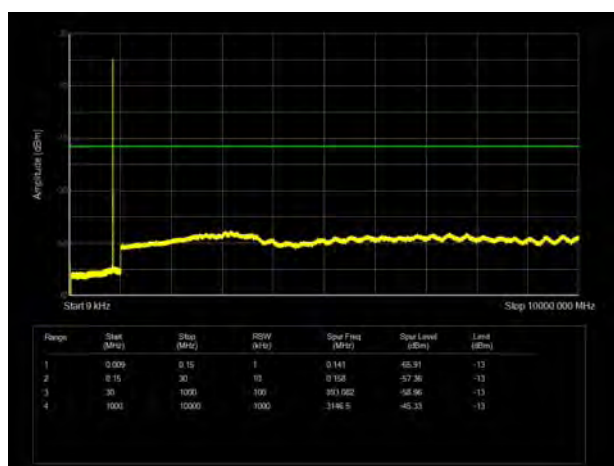
LTE Band 5 3MHz CH-Middle 9kHz~10GHz



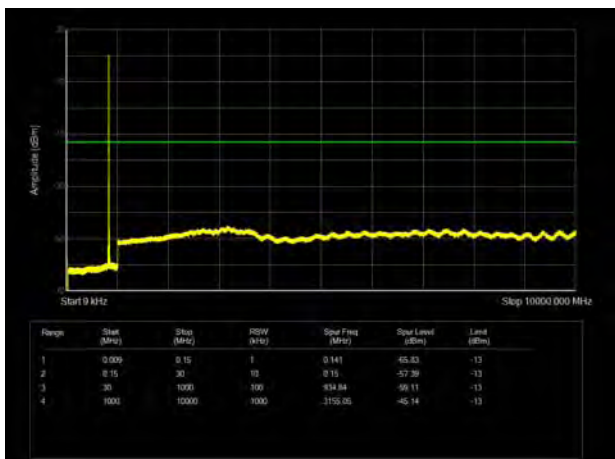
LTE Band 5 1.4MHz CH-High 9kHz~10GHz



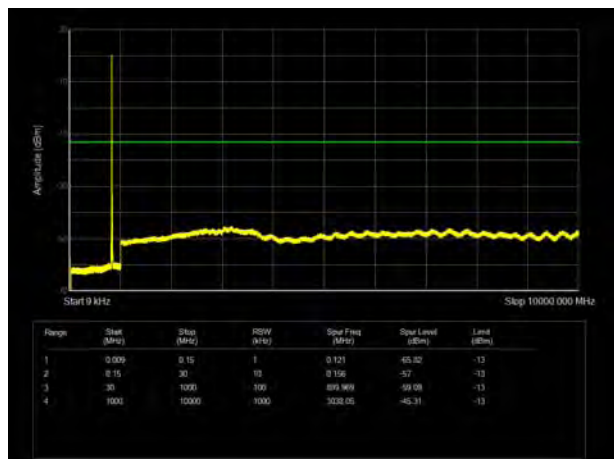
LTE Band 5 3MHz CH-High 9kHz~10GHz



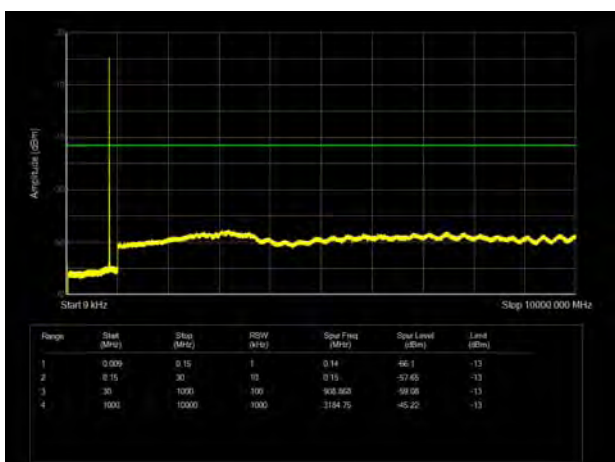
LTE Band 5 5MHz CH-Low 9kHz~10GHz



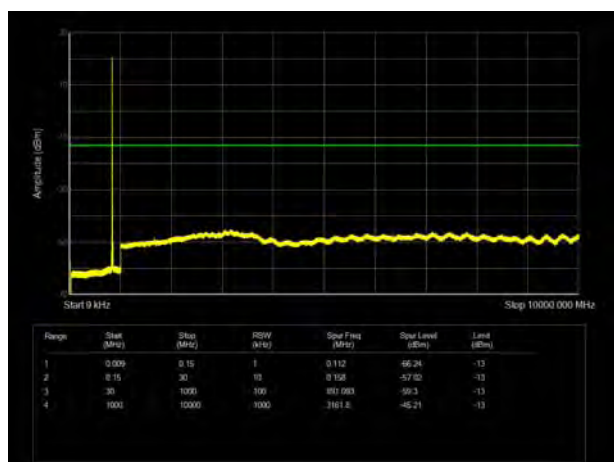
LTE Band 5 10MHz CH-Low 9kHz~10GHz



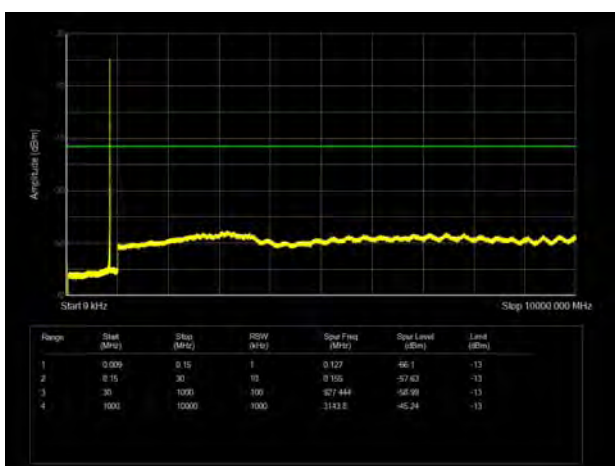
LTE Band 5 5MHz CH-Middle 9kHz~10GHz



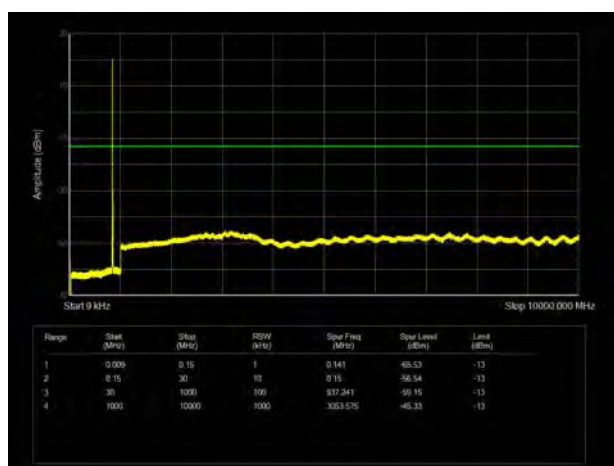
LTE Band 5 10MHz CH-Middle 9kHz~10GHz



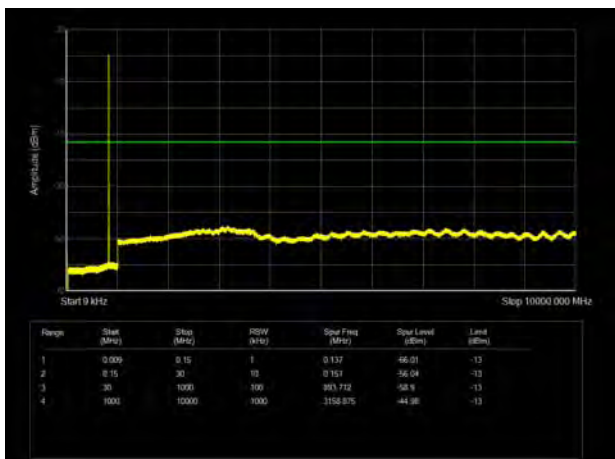
LTE Band 5 5MHz CH-High 9kHz~10GHz



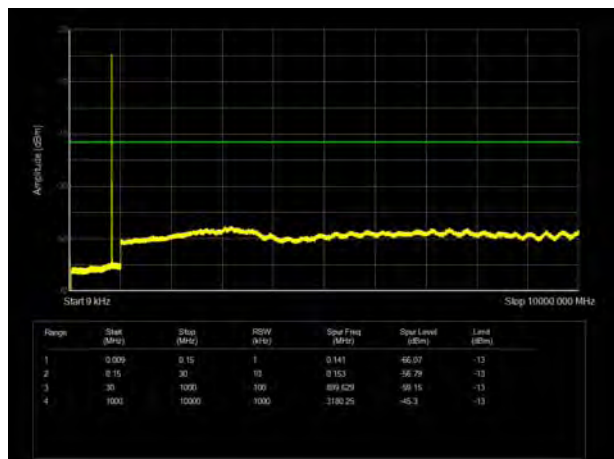
LTE Band 5 10MHz CH-High 9kHz~10GHz



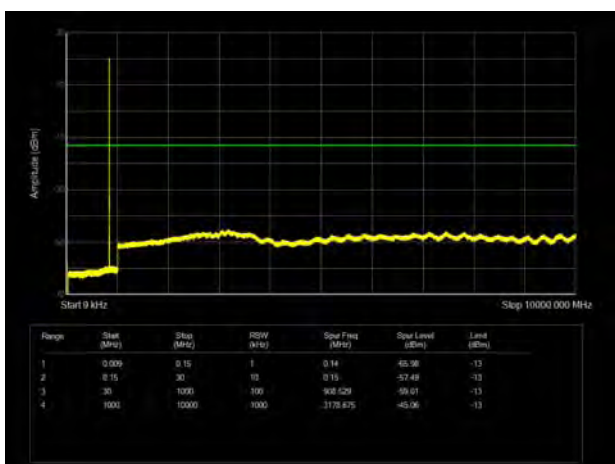
LTE Band 26 1.4MHz CH-Low 9kHz~10GHz



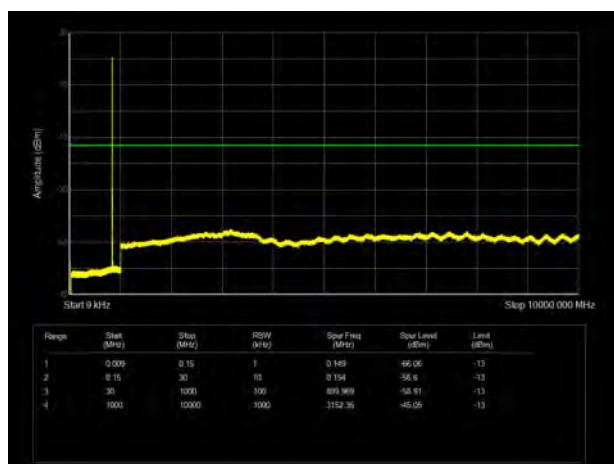
LTE Band 26 3MHz CH-Low 9kHz~10GHz



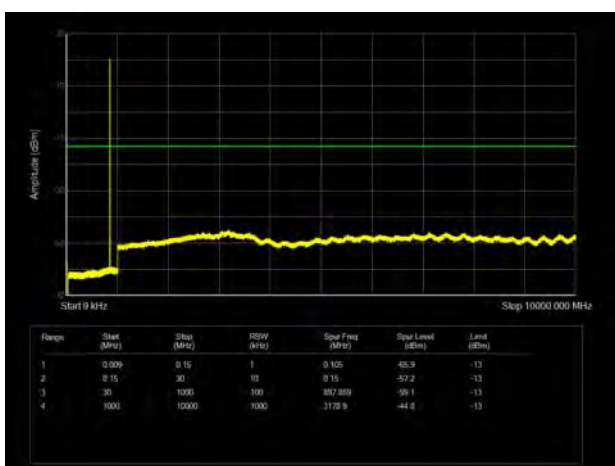
LTE Band 26 1.4MHz CH-Middle 9kHz~10GHz



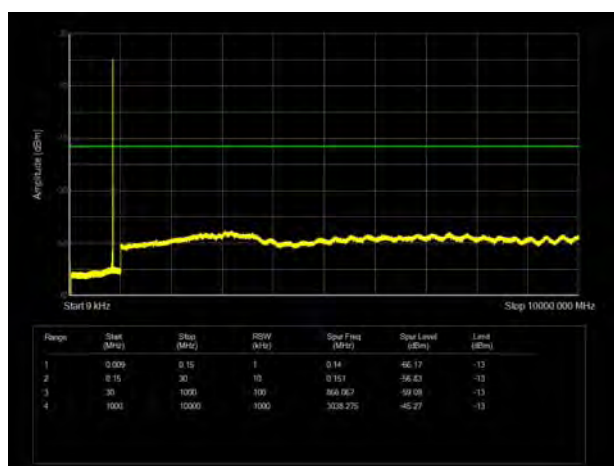
LTE Band 26 3MHz CH-Middle 9kHz~10GHz



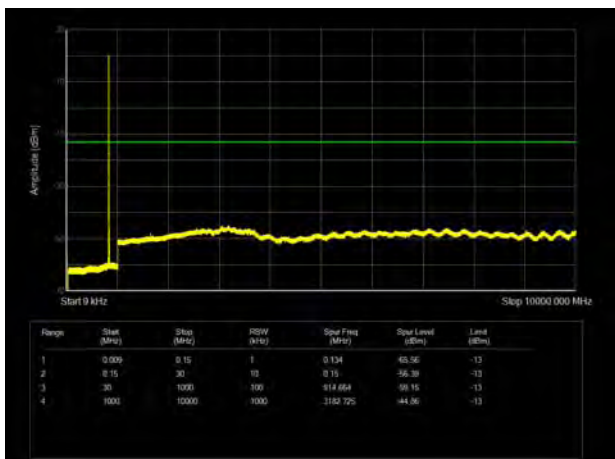
LTE Band 26 1.4MHz CH-High 9kHz~10GHz



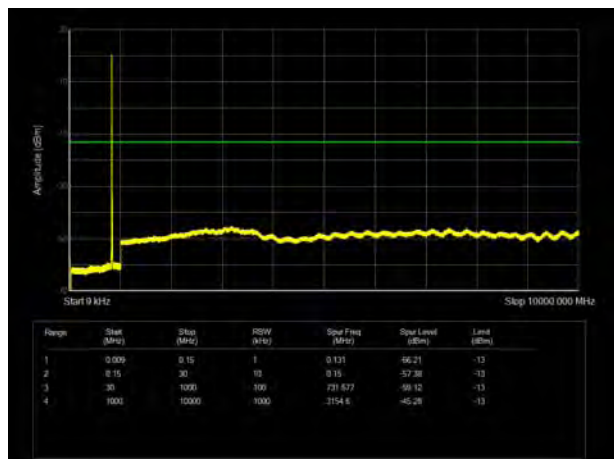
LTE Band 26 3MHz CH-High 9kHz~10GHz



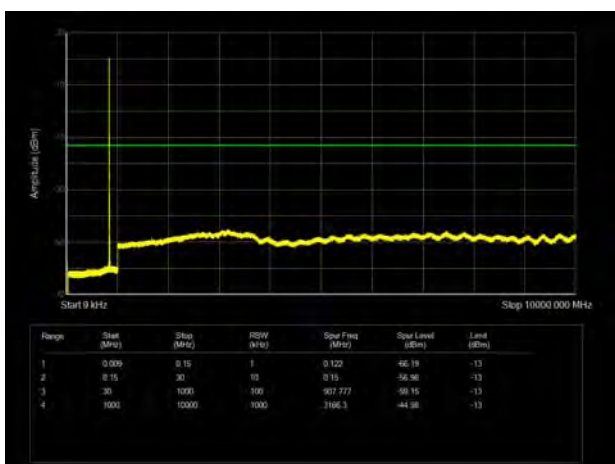
LTE Band 26 5MHz CH-Low 9kHz~10GHz



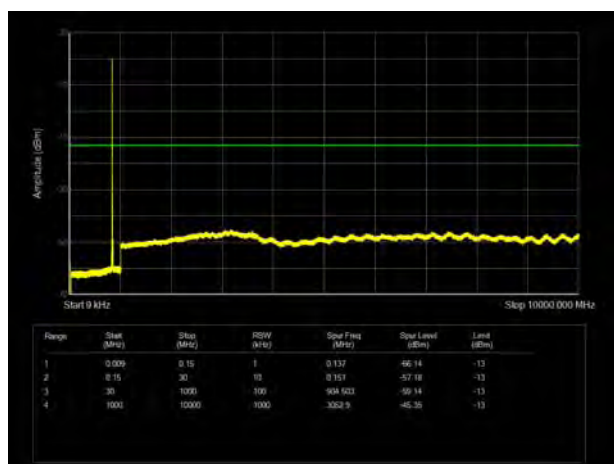
LTE Band 26 10MHz CH-Low 9kHz~10GHz



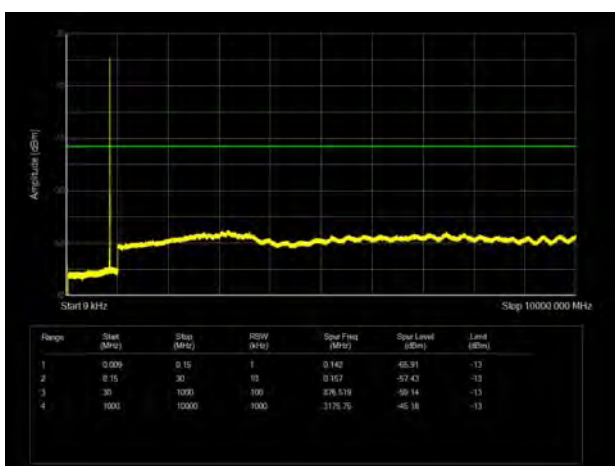
LTE Band 26 5MHz CH-Middle 9kHz~10GHz



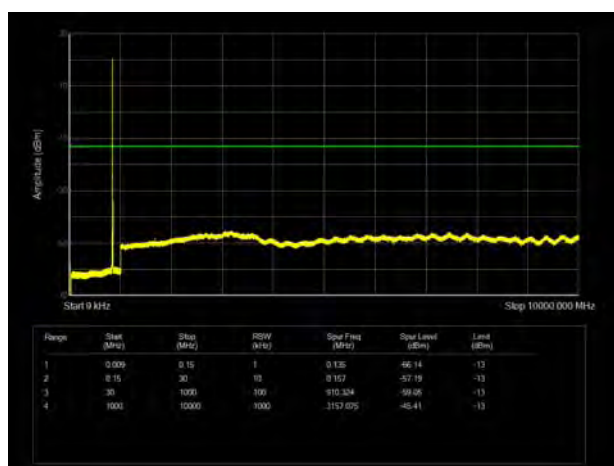
LTE Band 26 10MHz CH-Middle 9kHz~10GHz



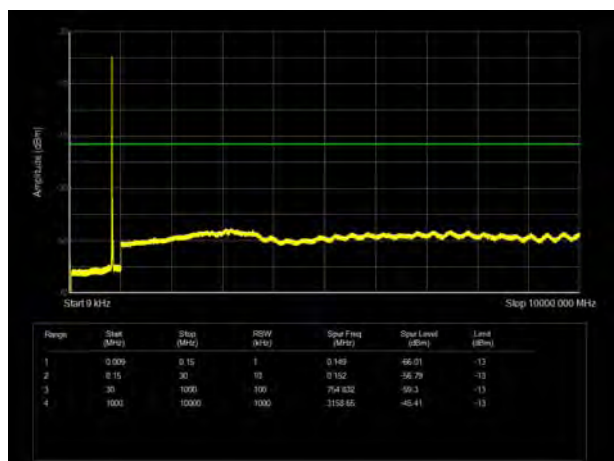
LTE Band 26 5MHz CH-High 9kHz~10GHz



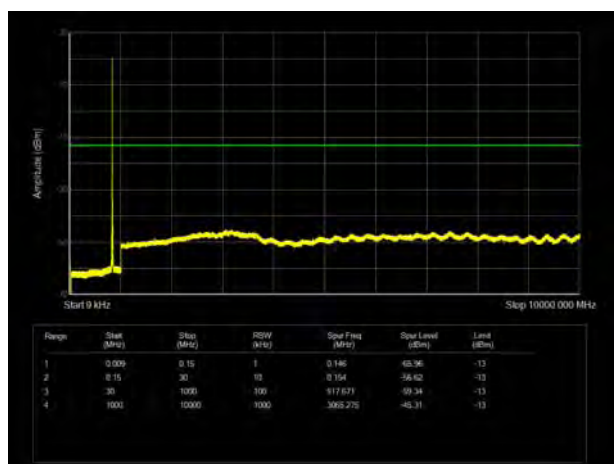
LTE Band 26 10MHz CH-High 9kHz~10GHz



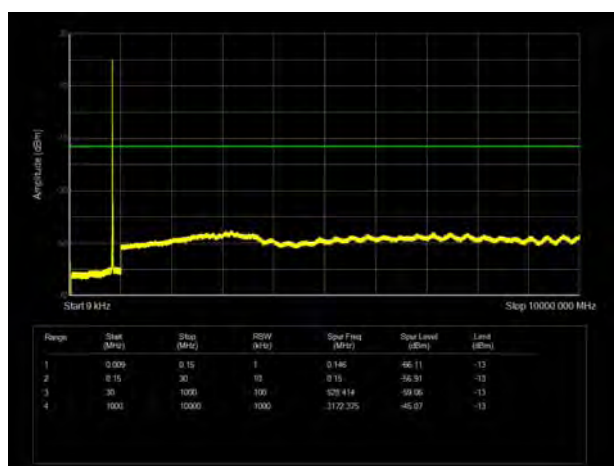
LTE Band 26 15MHz CH-Low 9kHz~10GHz



LTE Band 26 15MHz CH-Middle 9kHz~10GHz



LTE Band 26 15MHz CH-High 9kHz~10GHz



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.

GSM 850 CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.05	-58.96	1.70	8.70	Vertical	-54.11	-13.00	41.11	45
3	2509.75	-46.46	2.30	12.00	Vertical	-38.91	-13.00	25.91	225
4	3346.40	-63.68	2.70	12.70	Vertical	-55.83	-13.00	42.83	135
5	4183.00	-63.23	3.00	12.50	Vertical	-55.88	-13.00	42.88	225
6	5019.60	-61.74	3.40	12.50	Vertical	-54.79	-13.00	41.79	45
7	5856.20	-59.81	3.40	12.80	Vertical	-52.56	-13.00	39.56	180
8	6692.80	-59.40	4.10	11.50	Vertical	-54.15	-13.00	41.15	135
9	7529.40	-58.05	4.20	12.20	Vertical	-52.20	-13.00	39.20	0
10	8366.00	-56.81	4.30	12.50	Vertical	-50.76	-13.00	37.76	45

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 V CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1674.40	-61.49	1.70	8.70	Vertical	-56.64	-13.00	43.64	225
3	2506.35	-54.94	2.30	12.00	Vertical	-47.39	-13.00	34.39	45
4	3346.40	-64.69	2.70	12.70	Vertical	-56.84	-13.00	43.84	270
5	4183.00	-62.98	3.00	12.50	Vertical	-55.63	-13.00	42.63	45
6	5019.60	-59.78	3.40	12.50	Vertical	-52.83	-13.00	39.83	180
7	5856.20	-58.98	3.40	12.80	Vertical	-51.73	-13.00	38.73	315
8	6692.80	-58.07	4.10	11.50	Vertical	-52.82	-13.00	39.82	90
9	7529.40	-57.24	4.20	12.20	Vertical	-51.39	-13.00	38.39	0
10	8366.00	-56.54	4.30	12.50	Vertical	-50.49	-13.00	37.49	135

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 5 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.00	-63.29	1.70	8.70	Vertical	-58.44	-13.00	45.44	225
3	2509.50	-54.13	2.30	12.00	Vertical	-46.58	-13.00	33.58	135
4	3346.00	-65.50	2.70	12.70	Vertical	-57.65	-13.00	44.65	315
5	4182.50	-63.49	3.00	12.50	Vertical	-56.14	-13.00	43.14	225
6	5019.00	-61.29	3.40	12.50	Vertical	-54.34	-13.00	41.34	180
7	5855.50	-58.86	3.40	12.80	Vertical	-51.61	-13.00	38.61	270
8	6692.00	-59.51	4.10	11.50	Vertical	-54.26	-13.00	41.26	45
9	7528.50	-57.55	4.20	12.20	Vertical	-51.70	-13.00	38.70	225
10	8365.00	-57.25	4.30	12.50	Vertical	-51.20	-13.00	38.20	180

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 5 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1668.60	-63.43	1.70	8.70	Vertical	-58.58	-13.00	45.58	90
3	2503.30	-54.70	2.30	12.00	Vertical	-47.15	-13.00	34.15	180
4	3466.20	-64.94	2.70	12.70	Vertical	-57.09	-13.00	44.09	135
5	4215.90	-63.41	3.00	12.50	Vertical	-56.06	-13.00	43.06	45
6	5165.60	-59.68	3.40	12.50	Vertical	-52.73	-13.00	39.73	90
7	5815.30	-60.28	3.40	12.80	Vertical	-53.03	-13.00	40.03	225
8	6765.00	-59.50	4.10	11.50	Vertical	-54.25	-13.00	41.25	45
9	7614.70	-57.51	4.20	12.20	Vertical	-51.66	-13.00	38.66	180
10	8464.40	-57.34	4.30	12.50	Vertical	-51.29	-13.00	38.29	90

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 5 10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1664.40	-62.87	1.70	8.70	Vertical	-58.02	-13.00	45.02	45
3	2496.60	-57.00	2.30	12.00	Vertical	-49.45	-13.00	36.45	0
4	3328.00	-65.17	2.70	12.70	Vertical	-57.32	-13.00	44.32	180
5	4160.00	-63.34	3.00	12.50	Vertical	-55.99	-13.00	42.99	90
6	4992.00	-60.10	3.40	12.50	Vertical	-53.15	-13.00	40.15	225
7	5824.00	-60.04	3.40	12.80	Vertical	-52.79	-13.00	39.79	135
8	6656.00	-59.02	4.10	11.50	Vertical	-53.77	-13.00	40.77	45
9	7488.00	-57.66	4.20	12.20	Vertical	-51.81	-13.00	38.81	90
10	8320.00	-57.53	4.30	12.50	Vertical	-51.48	-13.00	38.48	225

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 26 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.00	-62.33	1.70	8.70	Vertical	-57.48	-13.00	44.48	225
3	2509.50	-53.61	2.30	12.00	Vertical	-46.06	-13.00	33.06	180
4	3346.00	-66.87	2.70	12.70	Vertical	-59.02	-13.00	46.02	90
5	4182.50	-64.43	3.00	12.50	Vertical	-57.08	-13.00	44.08	135
6	5019.00	-60.74	3.40	12.50	Vertical	-53.79	-13.00	40.79	225
7	5855.50	-60.29	3.40	12.80	Vertical	-53.04	-13.00	40.04	135
8	6692.00	-59.81	4.10	11.50	Vertical	-54.56	-13.00	41.56	225
9	7528.50	-59.07	4.20	12.20	Vertical	-53.22	-13.00	40.22	90
10	8365.00	-56.50	4.30	12.50	Vertical	-50.45	-13.00	37.45	270

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 26 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1668.00	-62.99	1.70	8.70	Vertical	-58.14	-13.00	45.14	90
3	2502.00	-50.80	2.30	12.00	Vertical	-43.25	-13.00	30.25	135
4	3336.00	-66.78	2.70	12.70	Vertical	-58.93	-13.00	45.93	180
5	4170.00	-64.03	3.00	12.50	Vertical	-56.68	-13.00	43.68	45
6	5004.00	-61.07	3.40	12.50	Vertical	-54.12	-13.00	41.12	0
7	5838.00	-61.53	3.40	12.80	Vertical	-54.28	-13.00	41.28	225
8	6672.00	-60.07	4.10	11.50	Vertical	-54.82	-13.00	41.82	45
9	7506.00	-59.35	4.20	12.20	Vertical	-53.50	-13.00	40.50	180
10	8340.00	-56.17	4.30	12.50	Vertical	-50.12	-13.00	37.12	225

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 26 15MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1658.00	-63.48	1.70	8.70	Vertical	-58.63	-13.00	45.63	225
3	2487.00	-54.15	2.30	12.00	Vertical	-46.60	-13.00	33.60	45
4	3316.00	-66.30	2.70	12.70	Vertical	-58.45	-13.00	45.45	135
5	4145.00	-64.25	3.00	12.50	Vertical	-56.90	-13.00	43.90	45
6	4974.00	-61.49	3.40	12.50	Vertical	-54.54	-13.00	41.54	180
7	5803.00	-60.68	3.40	12.80	Vertical	-53.43	-13.00	40.43	45
8	6632.00	-59.68	4.10	11.50	Vertical	-54.43	-13.00	41.43	0
9	7461.00	-58.90	4.20	12.20	Vertical	-53.05	-13.00	40.05	315
10	8290.00	-56.28	4.30	12.50	Vertical	-50.23	-13.00	37.23	225

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
Base Station Simulator	R&S	CMW500	150415	2022-05-14	2023-05-13
Universal Radio Communication Tester	StarPoint	SP9500	SP9500-20440	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
Signal Analyzer	R&S	FSV3030	101411	2021-12-12	2022-12-11
Climatic Chamber	ESPEC	SU-242	93000506	2021-12-12	2022-12-11
Radiates Spurious Emission					
Signal Analyzer	R&S	FSV30	100815	2021-12-12	2022-12-11
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2019-12-16	2022-12-15
Horn Antenna	R&S	HF907	102723	2020-08-11	2023-08-10
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
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.