



RF TEST REPORT

Applicant XCHENG TECH CO.,LIMITED
FCC ID 2AZ4F-P1012-P10
Product P10 Stylish POS Terminal
Brand Kobile; Clip; YOCO; MPOS; Positivo
Model P10
Report No. R2208A0725-R1V1
Issue Date September 5, 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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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	September 1, 2022
Rev.1	Update information and data.	September 5, 2022
Note: This revised report (Report No. R2208A0725-R1V1) supersedes and replaces the previously issued report (Report No. R2208A0725-R1). Please discard or destroy the previously issued report and dispose of it accordingly.		



Summary of measurement results

No.	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective 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: August 6, 2022 ~ August 22, 2022

Date of Sample Received: August 5, 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	XCHENG TECH CO.,LIMITED
Applicant address	ROOM 401F, Building 5, No.3000 LONG DONG Avenue, Pudong New District, Shanghai, China
Manufacturer	XCHENG TECH CO.,LIMITED
Manufacturer address	ROOM 401F, Building 5, No.3000 LONG DONG Avenue, Pudong New District, Shanghai, China

2.2. General Information

EUT Description		
Model	P10	
IMEI	IMEI 1: 866805060000523 IMEI 2: 866805060002925	
Hardware Version	V1.0	
Software Version	SW1.0	
Power Supply	Battery / AC adapter	
Antenna Type	Dipole Antenna	
Antenna Gain	0dBi	
Test Mode(s)	GSM 850; WCDMA Band V; LTE Band 5/26;	
Test Modulation	(GPRS)GMSK, (EGPRS) GMSK/ 8PSK; (WCDMA) BPSK, QPSK,16QAM; (LTE) QPSK, 16QAM, 64QAM;	
GPRS Multislot Class	12	
EGPRS Multislot Class	12	
HSDPA UE Category	12	
HSUPA UE Category	7	
DC-HSDPA UE Category	24	
HSPA+ UE Category	7	
LTE Category	7	
Maximum E.R.P.	GSM 850:	30.02 dBm
	WCDMA Band V:	20.02 dBm
	LTE Band 5:	20.85 dBm
	LTE Band 26:	19.98 dBm
Rated Power Supply Voltage	7.6V	
Operating Voltage	Minimum: 7.2V Maximum: 8.4V	
Operating Temperature	Lowest: -10°C Highest: +45°C	
Testing Temperature	Lowest: -10°C Highest: +45°C	



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	Manufacturer: Chongqing Lianmao Electronics Co., Ltd Model: 1110303-K022002		
Battery	Manufacturer: Pow-Tech New Power CO., LTD. Model: 18650-2600mAh-2S1P-7.2V (P1012)		
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			



3. Applied Standards

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

Test standards:

FCC CFR 47 Part 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) 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 HSDPA/HSUPA DC-HSDPA/HSPA+
Occupied Bandwidth	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Band Edge Compliance	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Peak-to-Average Power Ratio	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Frequency Stability	GSM GPRS(1Tx slot) EGPRS(1Tx slot)	RMC
Spurious Emissions at Antenna Terminals	GSM	RMC
Radiates Spurious Emission	GSM	RMC



Test modes are chosen 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.

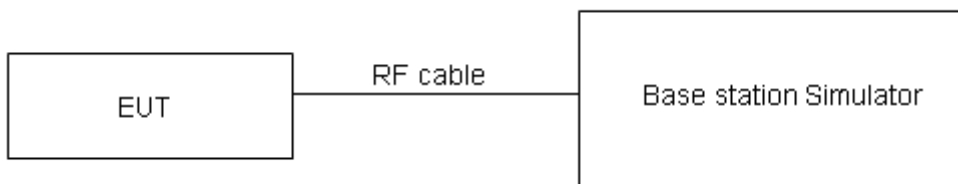
ERP can then be calculated as follows:

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

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

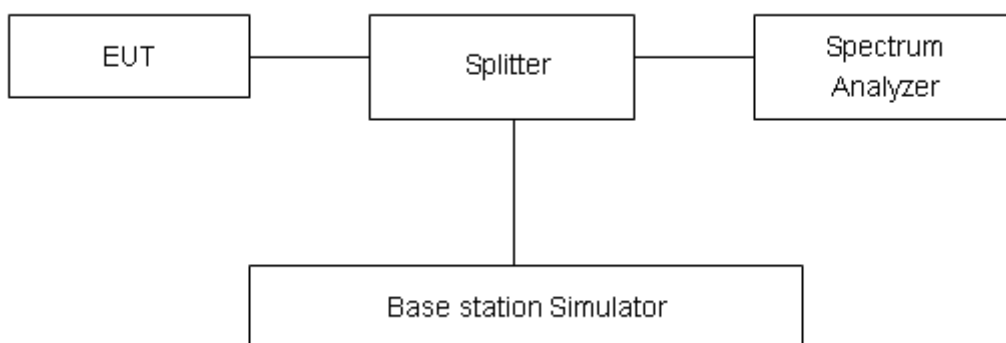
Method of Measurement

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

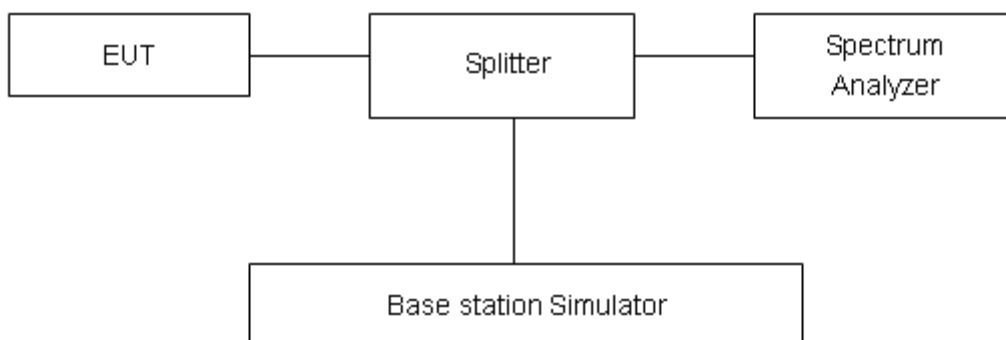
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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 $k = 1.96$, $U=0.684\text{dB}$.

Test Results

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

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

Ambient condition

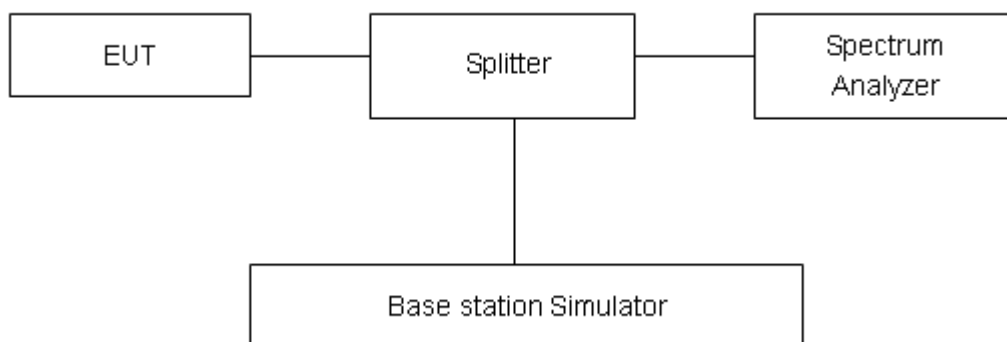
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

Measure the total peak power and record as 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 -10°C to +45°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.

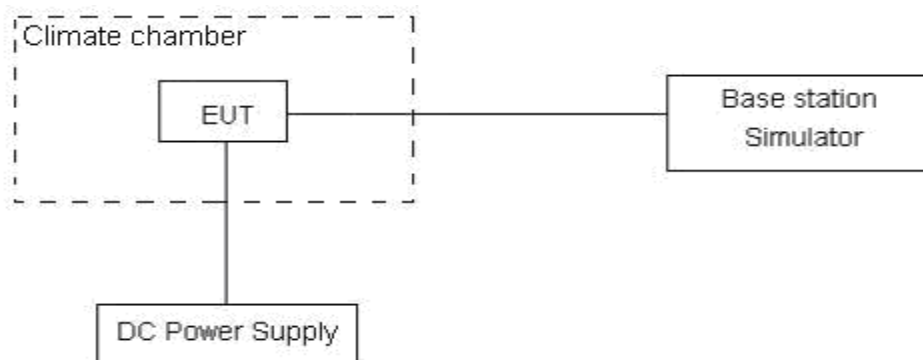
(3) Repeat the above measurements at 10°C increments from -10°C to +45°. Allow at least 1.5 hours at each temperature, un-powered, before making measurements. Frequency Stability (Voltage Variation)

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 7.2 V and 8.4V, with a nominal voltage of 7.6V.

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),

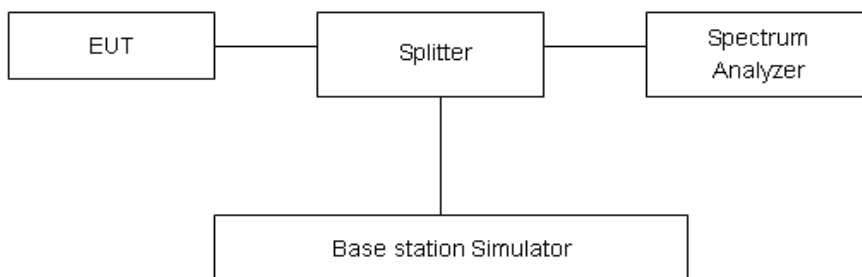
RBW is set to 10 kHz (0.15 MHz~ 30 MHz)

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:
$$\text{Power(EIRP)} = \text{PMea} - \text{PAg} - \text{Pcl} + \text{Ga}$$

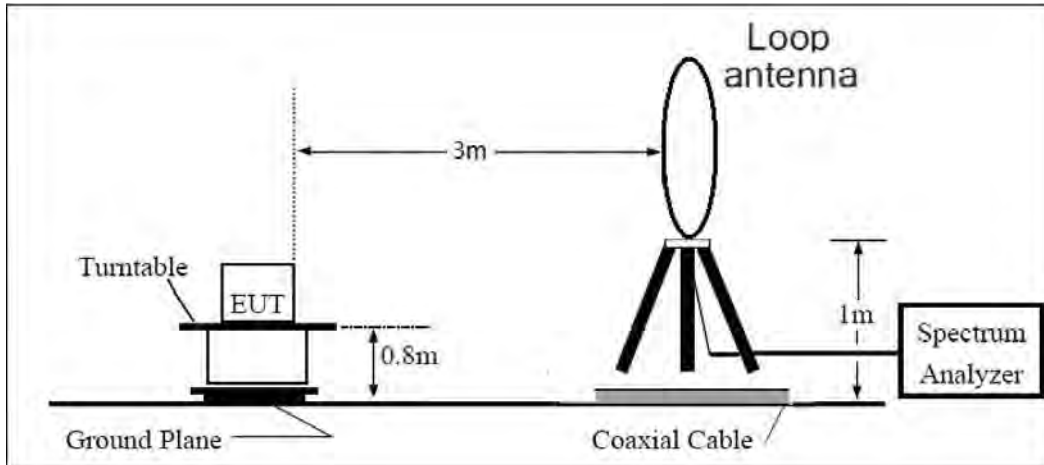
The measurement results are amend as described below:
$$\text{Power(EIRP)} = \text{PMea} - \text{Pcl} + \text{Ga}$$
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the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

= EIRP-2.15dB.

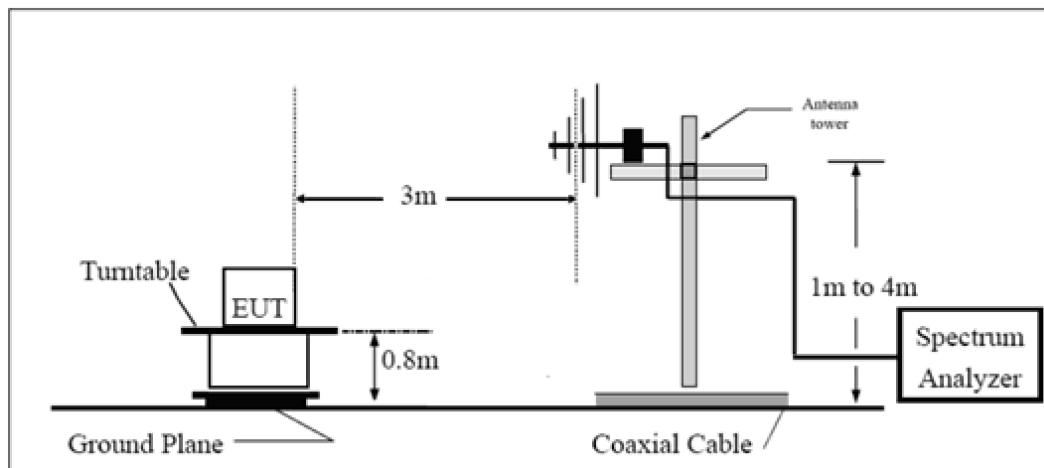
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

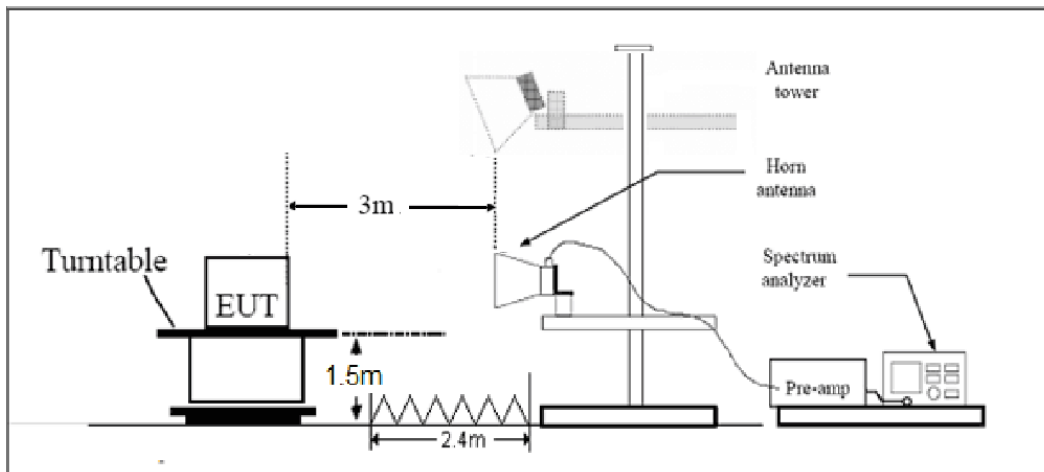
9KHz~ 30MHz



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)			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)
GPRS (GMSK)	1TXslot	32.12	32.15	32.17	29.97	30.00	30.02
	2TXslots	32.13	32.15	32.17	29.98	30.00	30.02
	3TXslots	31.74	31.71	31.78	29.59	29.56	29.63
	4TXslots	30.39	30.32	30.35	28.24	28.17	28.20
EGPRS (8PSK)	1TXslot	29.26	29.24	29.26	27.11	27.09	27.11
	2TXslots	22.17	22.25	22.47	20.02	20.10	20.32
	3TXslots	21.42	21.37	21.38	19.27	19.22	19.23
	4TXslots	19.25	18.95	19.30	17.10	16.80	17.15

WCDMA Band V		Maximum Output Power (dBm)			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	12.2k	22.16	22.16	22.17	20.01	20.01	20.02
AMR	12.2k	22.06	22.07	22.04	19.91	19.92	19.89
HSDPA	Sub - Test 1	21.58	21.58	21.59	19.43	19.43	19.44
	Sub - Test 2	21.57	21.57	21.58	19.42	19.42	19.43
	Sub - Test 3	21.06	21.06	21.07	18.91	18.91	18.92
	Sub - Test 4	21.05	21.05	21.06	18.90	18.90	18.91
HSUPA	Sub - Test 1	20.54	20.54	20.55	18.39	18.39	18.40
	Sub - Test 2	18.53	18.53	18.54	16.38	16.38	16.39
	Sub - Test 3	19.51	19.52	19.53	17.36	17.37	17.38
	Sub - Test 4	18.50	18.51	18.52	16.35	16.36	16.37
	Sub - Test 5	21.99	22.00	22.01	19.84	19.85	19.86
DC-HSDPA	Sub - Test 1	21.50	21.52	21.51	19.35	19.37	19.36
	Sub - Test 2	21.49	21.51	21.50	19.34	19.36	19.35
	Sub - Test 3	21.07	21.00	21.01	18.92	18.85	18.86
	Sub - Test 4	21.06	20.99	21.00	18.91	18.84	18.85
HSPA+	16QAM	19.65	19.67	19.68	17.50	17.52	17.53



LTE Band5				Maximum Output Power (dBm)			ERP (dBm)		
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			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	22.86	22.81	22.74	20.71	20.66	20.59
		1	2	23.00	22.93	22.97	20.85	20.78	20.82
		1	5	22.83	22.80	22.87	20.68	20.65	20.72
		3	0	22.69	22.69	22.74	20.54	20.54	20.59
		3	2	22.69	22.75	22.76	20.54	20.60	20.61
		3	3	22.73	22.65	22.62	20.58	20.50	20.47
		6	0	21.74	21.76	21.74	19.59	19.61	19.59
	16QAM	1	0	22.17	22.09	22.10	20.02	19.94	19.95
		1	2	22.28	22.25	22.32	20.13	20.10	20.17
		1	5	22.10	22.13	22.30	19.95	19.98	20.15
		3	0	21.70	21.67	21.77	19.55	19.52	19.62
		3	2	21.76	21.72	21.78	19.61	19.57	19.63
		3	3	21.72	21.68	21.67	19.57	19.53	19.52
		6	0	20.77	20.78	20.82	18.62	18.63	18.67
	64QAM	1	0	21.01	20.89	20.85	18.86	18.74	18.70
		1	2	21.09	20.97	21.02	18.94	18.82	18.87
		1	5	20.95	20.97	21.04	18.80	18.82	18.89
		3	0	20.67	20.65	20.77	18.52	18.50	18.62
		3	2	20.79	20.75	20.74	18.64	18.60	18.59
		3	3	20.73	20.68	20.61	18.58	18.53	18.46
		6	0	19.77	19.76	19.83	17.62	17.61	17.68
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			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	22.85	22.83	22.73	20.70	20.68	20.58
		1	7	22.96	22.92	22.98	20.81	20.77	20.83
		1	14	22.83	22.80	22.87	20.68	20.65	20.72
		8	0	21.76	21.76	21.83	19.61	19.61	19.68
		8	4	21.79	21.81	21.83	19.64	19.66	19.68
		8	7	21.81	21.74	21.68	19.66	19.59	19.53
		15	0	21.74	21.79	21.75	19.59	19.64	19.60
	16QAM	1	0	22.17	22.07	22.10	20.02	19.92	19.95
		1	7	22.28	22.23	22.33	20.13	20.08	20.18
		1	14	22.09	22.15	22.29	19.94	20.00	20.14
		8	0	20.79	20.76	20.86	18.64	18.61	18.71
		8	4	20.84	20.80	20.86	18.69	18.65	18.71
		8	7	20.79	20.75	20.76	18.64	18.60	18.61
		15	0	20.78	20.78	20.80	18.63	18.63	18.65
	64QAM	1	0	21.01	20.91	20.85	18.86	18.76	18.70
		1	7	21.09	20.99	21.01	18.94	18.84	18.86



		1	14	20.98	20.94	21.03	18.83	18.79	18.88
		8	0	19.76	19.74	19.90	17.61	17.59	17.75
		8	4	19.87	19.83	19.82	17.72	17.68	17.67
		8	7	19.80	19.75	19.70	17.65	17.60	17.55
		15	0	19.78	19.76	19.81	17.63	17.61	17.66
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			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	22.86	22.80	22.74	20.71	20.65	20.59
		1	13	22.97	22.96	22.99	20.82	20.81	20.84
		1	24	22.82	22.79	22.86	20.67	20.64	20.71
		12	0	21.77	21.77	21.84	19.62	19.62	19.69
		12	6	21.79	21.81	21.83	19.64	19.66	19.68
		12	13	21.80	21.75	21.69	19.65	19.60	19.54
		25	0	21.76	21.77	21.74	19.61	19.62	19.59
	16QAM	1	0	22.19	22.08	22.10	20.04	19.93	19.95
		1	13	22.30	22.24	22.34	20.15	20.09	20.19
		1	24	22.10	22.13	22.29	19.95	19.98	20.14
		12	0	20.79	20.79	20.87	18.64	18.64	18.72
		12	6	20.83	20.79	20.85	18.68	18.64	18.70
		12	13	20.80	20.76	20.77	18.65	18.61	18.62
		25	0	20.78	20.78	20.80	18.63	18.63	18.65
	64QAM	1	0	20.98	20.88	20.85	18.83	18.73	18.70
		1	13	21.10	20.96	21.02	18.95	18.81	18.87
		1	24	20.98	20.95	21.07	18.83	18.80	18.92
		12	0	19.78	19.81	19.91	17.63	17.66	17.76
		12	6	19.87	19.84	19.84	17.72	17.69	17.69
		12	13	19.81	19.76	19.71	17.66	17.61	17.56
		25	0	19.78	19.76	19.81	17.63	17.61	17.66
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20450/829	20525/836.5	20600/844	20450/829	20525/836.5	20600/844
10MHz	QPSK	1	0	22.83	22.76	22.71	20.68	20.61	20.56
		1	25	22.96	22.92	22.97	20.81	20.77	20.82
		1	49	22.80	22.78	22.83	20.65	20.63	20.68
		25	0	21.74	21.72	21.80	19.59	19.57	19.65
		25	13	21.77	21.77	21.80	19.62	19.62	19.65
		25	25	21.77	21.70	21.65	19.62	19.55	19.50
		50	0	21.73	21.72	21.70	19.58	19.57	19.55
	16QAM	1	0	22.16	22.04	22.05	20.01	19.89	19.90
		1	25	22.27	22.22	22.30	20.12	20.07	20.15
		1	49	22.07	22.10	22.27	19.92	19.95	20.12
		25	0	20.76	20.75	20.84	18.61	18.60	18.69
		25	13	20.80	20.77	20.82	18.65	18.62	18.67
		25	25	20.77	20.71	20.73	18.62	18.56	18.58



	64QAM	50	0	20.76	20.74	20.77	18.61	18.59	18.62
		1	0	20.96	20.84	20.80	18.81	18.69	18.65
		1	25	21.06	20.94	20.98	18.91	18.79	18.83
		1	49	20.92	20.89	21.01	18.77	18.74	18.86
		25	0	19.73	19.73	19.84	17.58	17.58	17.69
		25	13	19.83	19.80	19.78	17.68	17.65	17.63
		25	25	19.78	19.71	19.67	17.63	17.56	17.52
		50	0	19.76	19.72	19.78	17.61	17.57	17.63

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	ERP (dBm)
LTE Band26	1.4	26797	1	#0	QPSK	21.94	19.79
LTE Band26	1.4	26797	1	#Mid	QPSK	22.13	19.98
LTE Band26	1.4	26797	1	#Max	QPSK	21.89	19.74
LTE Band26	1.4	26797	3	#0	QPSK	21.92	19.77
LTE Band26	1.4	26797	3	#Mid	QPSK	21.94	19.79
LTE Band26	1.4	26797	3	#Max	QPSK	21.91	19.76
LTE Band26	1.4	26797	6	#0	QPSK	20.90	18.75
LTE Band26	1.4	26797	1	#0	16QAM	20.88	18.73
LTE Band26	1.4	26797	1	#Mid	16QAM	21.12	18.97
LTE Band26	1.4	26797	1	#Max	16QAM	20.90	18.75
LTE Band26	1.4	26797	3	#0	16QAM	21.08	18.93
LTE Band26	1.4	26797	3	#Mid	16QAM	21.06	18.91
LTE Band26	1.4	26797	3	#Max	16QAM	21.11	18.96
LTE Band26	1.4	26797	6	#0	16QAM	19.94	17.79
LTE Band26	1.4	26915	1	#0	QPSK	21.72	19.57
LTE Band26	1.4	26915	1	#Mid	QPSK	21.98	19.83
LTE Band26	1.4	26915	1	#Max	QPSK	21.71	19.56
LTE Band26	1.4	26915	3	#0	QPSK	21.75	19.60
LTE Band26	1.4	26915	3	#Mid	QPSK	21.76	19.61
LTE Band26	1.4	26915	3	#Max	QPSK	21.79	19.64
LTE Band26	1.4	26915	6	#0	QPSK	20.84	18.69
LTE Band26	1.4	26915	1	#0	16QAM	20.90	18.75
LTE Band26	1.4	26915	1	#Mid	16QAM	21.12	18.97
LTE Band26	1.4	26915	1	#Max	16QAM	20.93	18.78
LTE Band26	1.4	26915	3	#0	16QAM	20.82	18.67
LTE Band26	1.4	26915	3	#Mid	16QAM	20.82	18.67
LTE Band26	1.4	26915	3	#Max	16QAM	20.83	18.68
LTE Band26	1.4	26915	6	#0	16QAM	19.80	17.65
LTE Band26	1.4	27033	1	#0	QPSK	21.81	19.66
LTE Band26	1.4	27033	1	#Mid	QPSK	21.99	19.84
LTE Band26	1.4	27033	1	#Max	QPSK	21.86	19.71
LTE Band26	1.4	27033	3	#0	QPSK	21.92	19.77



LTE Band26	1.4	27033	3	#Mid	QPSK	21.88	19.73
LTE Band26	1.4	27033	3	#Max	QPSK	21.88	19.73
LTE Band26	1.4	27033	6	#0	QPSK	20.86	18.71
LTE Band26	1.4	27033	1	#0	16QAM	20.72	18.57
LTE Band26	1.4	27033	1	#Mid	16QAM	20.83	18.68
LTE Band26	1.4	27033	1	#Max	16QAM	20.72	18.57
LTE Band26	1.4	27033	3	#0	16QAM	20.82	18.67
LTE Band26	1.4	27033	3	#Mid	16QAM	20.80	18.65
LTE Band26	1.4	27033	3	#Max	16QAM	20.81	18.66
LTE Band26	1.4	27033	6	#0	16QAM	19.89	17.74
LTE Band26	3	26805	1	#0	QPSK	21.92	19.77
LTE Band26	3	26805	1	#Mid	QPSK	21.91	19.76
LTE Band26	3	26805	1	#Max	QPSK	21.91	19.76
LTE Band26	3	26805	8	#0	QPSK	20.91	18.76
LTE Band26	3	26805	8	#Mid	QPSK	20.90	18.75
LTE Band26	3	26805	8	#Max	QPSK	20.92	18.77
LTE Band26	3	26805	15	#0	QPSK	20.87	18.72
LTE Band26	3	26805	1	#0	16QAM	21.10	18.95
LTE Band26	3	26805	1	#Mid	16QAM	21.04	18.89
LTE Band26	3	26805	1	#Max	16QAM	21.02	18.87
LTE Band26	3	26805	8	#0	16QAM	19.92	17.77
LTE Band26	3	26805	8	#Mid	16QAM	19.92	17.77
LTE Band26	3	26805	8	#Max	16QAM	19.93	17.78
LTE Band26	3	26805	15	#0	16QAM	19.80	17.65
LTE Band26	3	26915	1	#0	QPSK	21.87	19.72
LTE Band26	3	26915	1	#Mid	QPSK	21.90	19.75
LTE Band26	3	26915	1	#Max	QPSK	21.93	19.78
LTE Band26	3	26915	8	#0	QPSK	20.84	18.69
LTE Band26	3	26915	8	#Mid	QPSK	20.83	18.68
LTE Band26	3	26915	8	#Max	QPSK	20.87	18.72
LTE Band26	3	26915	15	#0	QPSK	20.90	18.75
LTE Band26	3	26915	1	#0	16QAM	20.73	18.58
LTE Band26	3	26915	1	#Mid	16QAM	20.72	18.57
LTE Band26	3	26915	1	#Max	16QAM	20.71	18.56
LTE Band26	3	26915	8	#0	16QAM	19.84	17.69
LTE Band26	3	26915	8	#Mid	16QAM	19.84	17.69
LTE Band26	3	26915	8	#Max	16QAM	19.90	17.75
LTE Band26	3	26915	15	#0	16QAM	19.91	17.76
LTE Band26	3	27025	1	#0	QPSK	21.89	19.74
LTE Band26	3	27025	1	#Mid	QPSK	21.89	19.74
LTE Band26	3	27025	1	#Max	QPSK	21.80	19.65
LTE Band26	3	27025	8	#0	QPSK	20.87	18.72
LTE Band26	3	27025	8	#Mid	QPSK	20.89	18.74



LTE Band26	3	27025	8	#Max	QPSK	20.84	18.69
LTE Band26	3	27025	15	#0	QPSK	20.88	18.73
LTE Band26	3	27025	1	#0	16QAM	21.14	18.99
LTE Band26	3	27025	1	#Mid	16QAM	21.12	18.97
LTE Band26	3	27025	1	#Max	16QAM	21.08	18.93
LTE Band26	3	27025	8	#0	16QAM	19.93	17.78
LTE Band26	3	27025	8	#Mid	16QAM	19.91	17.76
LTE Band26	3	27025	8	#Max	16QAM	19.88	17.73
LTE Band26	3	27025	15	#0	16QAM	19.89	17.74
LTE Band26	5	26815	1	#0	QPSK	21.78	19.63
LTE Band26	5	26815	1	#Mid	QPSK	21.92	19.77
LTE Band26	5	26815	1	#Max	QPSK	21.79	19.64
LTE Band26	5	26815	12	#0	QPSK	20.90	18.75
LTE Band26	5	26815	12	#Mid	QPSK	20.92	18.77
LTE Band26	5	26815	12	#Max	QPSK	20.91	18.76
LTE Band26	5	26815	25	#0	QPSK	20.89	18.74
LTE Band26	5	26815	1	#0	16QAM	21.02	18.87
LTE Band26	5	26815	1	#Mid	16QAM	21.10	18.95
LTE Band26	5	26815	1	#Max	16QAM	20.99	18.84
LTE Band26	5	26815	12	#0	16QAM	19.84	17.69
LTE Band26	5	26815	12	#Mid	16QAM	19.82	17.67
LTE Band26	5	26815	12	#Max	16QAM	19.84	17.69
LTE Band26	5	26815	25	#0	16QAM	19.88	17.73
LTE Band26	5	26915	1	#0	QPSK	21.69	19.54
LTE Band26	5	26915	1	#Mid	QPSK	21.80	19.65
LTE Band26	5	26915	1	#Max	QPSK	21.68	19.53
LTE Band26	5	26915	12	#0	QPSK	20.81	18.66
LTE Band26	5	26915	12	#Mid	QPSK	20.81	18.66
LTE Band26	5	26915	12	#Max	QPSK	20.81	18.66
LTE Band26	5	26915	25	#0	QPSK	20.86	18.71
LTE Band26	5	26915	1	#0	16QAM	20.97	18.82
LTE Band26	5	26915	1	#Mid	16QAM	21.07	18.92
LTE Band26	5	26915	1	#Max	16QAM	20.93	18.78
LTE Band26	5	26915	12	#0	16QAM	19.87	17.72
LTE Band26	5	26915	12	#Mid	16QAM	19.84	17.69
LTE Band26	5	26915	12	#Max	16QAM	19.86	17.71
LTE Band26	5	26915	25	#0	16QAM	19.92	17.77
LTE Band26	5	27015	1	#0	QPSK	21.77	19.62
LTE Band26	5	27015	1	#Mid	QPSK	21.89	19.74
LTE Band26	5	27015	1	#Max	QPSK	21.74	19.59
LTE Band26	5	27015	12	#0	QPSK	21.00	18.85
LTE Band26	5	27015	12	#Mid	QPSK	20.96	18.81
LTE Band26	5	27015	12	#Max	QPSK	20.83	18.68



LTE Band26	5	27015	25	#0	QPSK	20.99	18.84
LTE Band26	5	27015	1	#0	16QAM	21.06	18.91
LTE Band26	5	27015	1	#Mid	16QAM	21.15	19.00
LTE Band26	5	27015	1	#Max	16QAM	20.99	18.84
LTE Band26	5	27015	12	#0	16QAM	19.94	17.79
LTE Band26	5	27015	12	#Mid	16QAM	19.93	17.78
LTE Band26	5	27015	12	#Max	16QAM	19.85	17.70
LTE Band26	5	27015	25	#0	16QAM	20.05	17.90
LTE Band26	10	26840	1	#0	QPSK	21.88	19.73
LTE Band26	10	26840	1	#Mid	QPSK	22.05	19.90
LTE Band26	10	26840	1	#Max	QPSK	21.88	19.73
LTE Band26	10	26840	25	#0	QPSK	20.95	18.80
LTE Band26	10	26840	25	#Mid	QPSK	20.95	18.80
LTE Band26	10	26840	25	#Max	QPSK	20.93	18.78
LTE Band26	10	26840	50	#0	QPSK	20.86	18.71
LTE Band26	10	26840	1	#0	16QAM	21.17	19.02
LTE Band26	10	26840	1	#Mid	16QAM	21.28	19.13
LTE Band26	10	26840	1	#Max	16QAM	21.06	18.91
LTE Band26	10	26840	25	#0	16QAM	20.02	17.87
LTE Band26	10	26840	25	#Mid	16QAM	20.05	17.90
LTE Band26	10	26840	25	#Max	16QAM	20.01	17.86
LTE Band26	10	26840	50	#0	16QAM	19.95	17.80
LTE Band26	10	26915	1	#0	QPSK	21.89	19.74
LTE Band26	10	26915	1	#Mid	QPSK	21.98	19.83
LTE Band26	10	26915	1	#Max	QPSK	21.90	19.75
LTE Band26	10	26915	25	#0	QPSK	20.86	18.71
LTE Band26	10	26915	25	#Mid	QPSK	20.89	18.74
LTE Band26	10	26915	25	#Max	QPSK	20.86	18.71
LTE Band26	10	26915	50	#0	QPSK	20.91	18.76
LTE Band26	10	26915	1	#0	16QAM	21.01	18.86
LTE Band26	10	26915	1	#Mid	16QAM	21.04	18.89
LTE Band26	10	26915	1	#Max	16QAM	21.01	18.86
LTE Band26	10	26915	25	#0	16QAM	19.90	17.75
LTE Band26	10	26915	25	#Mid	16QAM	19.91	17.76
LTE Band26	10	26915	25	#Max	16QAM	19.92	17.77
LTE Band26	10	26915	50	#0	16QAM	19.91	17.76
LTE Band26	10	26990	1	#0	QPSK	21.93	19.78
LTE Band26	10	26990	1	#Mid	QPSK	22.12	19.97
LTE Band26	10	26990	1	#Max	QPSK	21.87	19.72
LTE Band26	10	26990	25	#0	QPSK	20.98	18.83
LTE Band26	10	26990	25	#Mid	QPSK	20.99	18.84
LTE Band26	10	26990	25	#Max	QPSK	20.80	18.65
LTE Band26	10	26990	50	#0	QPSK	20.96	18.81



LTE Band26	10	26990	1	#0	16QAM	20.75	18.60
LTE Band26	10	26990	1	#Mid	16QAM	20.95	18.80
LTE Band26	10	26990	1	#Max	16QAM	20.73	18.58
LTE Band26	10	26990	25	#0	16QAM	20.04	17.89
LTE Band26	10	26990	25	#Mid	16QAM	20.04	17.89
LTE Band26	10	26990	25	#Max	16QAM	19.84	17.69
LTE Band26	10	26990	50	#0	16QAM	20.00	17.85
LTE Band26	15	26865	1	#0	QPSK	21.79	19.64
LTE Band26	15	26865	1	#Mid	QPSK	21.91	19.76
LTE Band26	15	26865	1	#Max	QPSK	21.71	19.56
LTE Band26	15	26865	36	#0	QPSK	20.94	18.79
LTE Band26	15	26865	36	#Mid	QPSK	20.91	18.76
LTE Band26	15	26865	36	#Max	QPSK	20.92	18.77
LTE Band26	15	26865	75	#0	QPSK	20.90	18.75
LTE Band26	15	26865	1	#0	16QAM	21.08	18.93
LTE Band26	15	26865	1	#Mid	16QAM	21.13	18.98
LTE Band26	15	26865	1	#Max	16QAM	20.98	18.83
LTE Band26	15	26865	36	#0	16QAM	19.92	17.77
LTE Band26	15	26865	36	#Mid	16QAM	19.91	17.76
LTE Band26	15	26865	36	#Max	16QAM	19.91	17.76
LTE Band26	15	26865	75	#0	16QAM	19.97	17.82
LTE Band26	15	26915	1	#0	QPSK	21.83	19.68
LTE Band26	15	26915	1	#Mid	QPSK	21.89	19.74
LTE Band26	15	26915	1	#Max	QPSK	21.81	19.66
LTE Band26	15	26915	36	#0	QPSK	20.88	18.73
LTE Band26	15	26915	36	#Mid	QPSK	20.88	18.73
LTE Band26	15	26915	36	#Max	QPSK	20.83	18.68
LTE Band26	15	26915	75	#0	QPSK	20.91	18.76
LTE Band26	15	26915	1	#0	16QAM	21.01	18.86
LTE Band26	15	26915	1	#Mid	16QAM	21.00	18.85
LTE Band26	15	26915	1	#Max	16QAM	20.94	18.79
LTE Band26	15	26915	36	#0	16QAM	19.89	17.74
LTE Band26	15	26915	36	#Mid	16QAM	19.90	17.75
LTE Band26	15	26915	36	#Max	16QAM	19.84	17.69
LTE Band26	15	26915	75	#0	16QAM	19.89	17.74
LTE Band26	15	26965	1	#0	QPSK	21.82	19.67
LTE Band26	15	26965	1	#Mid	QPSK	21.95	19.80
LTE Band26	15	26965	1	#Max	QPSK	21.75	19.60
LTE Band26	15	26965	36	#0	QPSK	20.91	18.76
LTE Band26	15	26965	36	#Mid	QPSK	20.90	18.75
LTE Band26	15	26965	36	#Max	QPSK	20.79	18.64
LTE Band26	15	26965	75	#0	QPSK	20.91	18.76
LTE Band26	15	26965	1	#0	16QAM	20.83	18.68



LTE Band26	15	26965	1	#Mid	16QAM	20.96	18.81
LTE Band26	15	26965	1	#Max	16QAM	20.79	18.64
LTE Band26	15	26965	36	#0	16QAM	19.92	17.77
LTE Band26	15	26965	36	#Mid	16QAM	19.92	17.77
LTE Band26	15	26965	36	#Max	16QAM	19.80	17.65
LTE Band26	15	26965	75	#0	16QAM	19.92	17.77
LTE Band26	1.4	26797	1	#0	64QAM	20.23	18.08
LTE Band26	1.4	26797	1	#Mid	64QAM	20.48	18.33
LTE Band26	1.4	26797	1	#Max	64QAM	20.19	18.04
LTE Band26	1.4	26797	3	#0	64QAM	20.31	18.16
LTE Band26	1.4	26797	3	#Mid	64QAM	20.34	18.19
LTE Band26	1.4	26797	3	#Max	64QAM	20.39	18.24
LTE Band26	1.4	26797	6	#0	64QAM	19.27	17.12
LTE Band26	1.4	26915	1	#0	64QAM	20.25	18.10
LTE Band26	1.4	26915	1	#Mid	64QAM	20.45	18.30
LTE Band26	1.4	26915	1	#Max	64QAM	20.26	18.11
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LTE Band26	1.4	26915	3	#Mid	64QAM	20.16	18.01
LTE Band26	1.4	26915	3	#Max	64QAM	20.19	18.04
LTE Band26	1.4	26915	6	#0	64QAM	19.15	17.00
LTE Band26	1.4	27033	1	#0	64QAM	20.05	17.90
LTE Band26	1.4	27033	1	#Mid	64QAM	20.20	18.05
LTE Band26	1.4	27033	1	#Max	64QAM	20.06	17.91
LTE Band26	1.4	27033	3	#0	64QAM	20.16	18.01
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LTE Band26	1.4	27033	3	#Max	64QAM	20.12	17.97
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LTE Band26	3	26805	15	#0	64QAM	19.25	17.10
LTE Band26	3	26915	1	#0	64QAM	20.45	18.30
LTE Band26	3	26915	1	#Mid	64QAM	20.38	18.23
LTE Band26	3	26915	1	#Max	64QAM	20.41	18.26
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LTE Band26	3	26915	8	#Mid	64QAM	19.19	17.04
LTE Band26	3	26915	8	#Max	64QAM	19.22	17.07
LTE Band26	3	26915	15	#0	64QAM	19.18	17.03
LTE Band26	3	27025	1	#0	64QAM	20.38	18.23
LTE Band26	3	27025	1	#Mid	64QAM	20.37	18.22



LTE Band26	3	27025	1	#Max	64QAM	20.32	18.17
LTE Band26	3	27025	8	#0	64QAM	19.26	17.11
LTE Band26	3	27025	8	#Mid	64QAM	19.27	17.12
LTE Band26	3	27025	8	#Max	64QAM	19.22	17.07
LTE Band26	3	27025	15	#0	64QAM	19.16	17.01
LTE Band26	5	26815	1	#0	64QAM	20.34	18.19
LTE Band26	5	26815	1	#Mid	64QAM	20.49	18.34
LTE Band26	5	26815	1	#Max	64QAM	20.36	18.21
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LTE Band26	5	26815	25	#0	64QAM	19.28	17.13
LTE Band26	5	26915	1	#0	64QAM	20.32	18.17
LTE Band26	5	26915	1	#Mid	64QAM	20.46	18.31
LTE Band26	5	26915	1	#Max	64QAM	20.37	18.22
LTE Band26	5	26915	12	#0	64QAM	19.11	16.96
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LTE Band26	5	26915	12	#Max	64QAM	19.10	16.95
LTE Band26	5	26915	25	#0	64QAM	19.27	17.12
LTE Band26	5	27015	1	#0	64QAM	20.34	18.19
LTE Band26	5	27015	1	#Mid	64QAM	20.42	18.27
LTE Band26	5	27015	1	#Max	64QAM	20.27	18.12
LTE Band26	5	27015	12	#0	64QAM	19.25	17.10
LTE Band26	5	27015	12	#Mid	64QAM	19.23	17.08
LTE Band26	5	27015	12	#Max	64QAM	19.15	17.00
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LTE Band26	10	26840	1	#0	64QAM	20.47	18.32
LTE Band26	10	26840	1	#Mid	64QAM	20.67	18.52
LTE Band26	10	26840	1	#Max	64QAM	20.43	18.28
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LTE Band26	10	26840	25	#Mid	64QAM	19.35	17.20
LTE Band26	10	26840	25	#Max	64QAM	19.36	17.21
LTE Band26	10	26840	50	#0	64QAM	19.25	17.10
LTE Band26	10	26915	1	#0	64QAM	20.35	18.20
LTE Band26	10	26915	1	#Mid	64QAM	20.54	18.39
LTE Band26	10	26915	1	#Max	64QAM	20.36	18.21
LTE Band26	10	26915	25	#0	64QAM	19.31	17.16
LTE Band26	10	26915	25	#Mid	64QAM	19.30	17.15
LTE Band26	10	26915	25	#Max	64QAM	19.25	17.10
LTE Band26	10	26915	50	#0	64QAM	19.26	17.11
LTE Band26	10	26990	1	#0	64QAM	20.08	17.93
LTE Band26	10	26990	1	#Mid	64QAM	20.28	18.13
LTE Band26	10	26990	1	#Max	64QAM	20.06	17.91



LTE Band26	10	26990	25	#0	64QAM	19.34	17.19
LTE Band26	10	26990	25	#Mid	64QAM	19.37	17.22
LTE Band26	10	26990	25	#Max	64QAM	19.10	16.95
LTE Band26	10	26990	50	#0	64QAM	19.32	17.17
LTE Band26	15	26865	1	#0	64QAM	20.42	18.27
LTE Band26	15	26865	1	#Mid	64QAM	20.50	18.35
LTE Band26	15	26865	1	#Max	64QAM	20.31	18.16
LTE Band26	15	26865	36	#0	64QAM	19.25	17.10
LTE Band26	15	26865	36	#Mid	64QAM	19.27	17.12
LTE Band26	15	26865	36	#Max	64QAM	19.24	17.09
LTE Band26	15	26865	75	#0	64QAM	19.31	17.16
LTE Band26	15	26915	1	#0	64QAM	20.29	18.14
LTE Band26	15	26915	1	#Mid	64QAM	20.33	18.18
LTE Band26	15	26915	1	#Max	64QAM	20.25	18.10
LTE Band26	15	26915	36	#0	64QAM	19.23	17.08
LTE Band26	15	26915	36	#Mid	64QAM	19.25	17.10
LTE Band26	15	26915	36	#Max	64QAM	19.24	17.09
LTE Band26	15	26915	75	#0	64QAM	19.26	17.11
LTE Band26	15	26965	1	#0	64QAM	20.19	18.04
LTE Band26	15	26965	1	#Mid	64QAM	20.27	18.12
LTE Band26	15	26965	1	#Max	64QAM	20.14	17.99
LTE Band26	15	26965	36	#0	64QAM	19.22	17.07
LTE Band26	15	26965	36	#Mid	64QAM	19.24	17.09
LTE Band26	15	26965	36	#Max	64QAM	19.12	16.97
LTE Band26	15	26965	75	#0	64QAM	19.24	17.09

6.2. Occupied Bandwidth

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (kHz)	-26dBc Bandwidth(KHz)
GSM 850 (GMSK)	128	824.2	244.86	316.00
	190	836.6	244.45	315.30
	251	848.8	246.17	311.00
EGPRS 850 (8PSK)	128	824.2	246.99	311.90
	190	836.6	248.44	311.80
	251	848.8	248.64	314.60

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band V (RMC)	4132	826.4	4.16	4.68
	4183	836.6	4.17	4.68
	4233	846.6	4.18	4.69

LTE Band 5						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	20407	824.7	1.10	1.29
			20525	836.5	1.09	1.28
			20643	848.3	1.10	1.30
		3	20415	825.5	2.70	2.93
			20525	836.5	2.70	2.92
			20635	847.5	2.69	2.89
		5	20425	826.5	4.50	4.89
			20525	836.5	4.50	4.92
			20625	846.5	4.50	4.93
		10	20450	829	8.96	9.64
			20525	836.5	8.98	9.72
			20600	844	8.99	9.67



	16QAM	1.4	20407	824.7	1.10	1.29
			20525	836.5	1.10	1.31
			20643	848.3	1.09	1.29
		3	20415	825.5	2.69	2.93
			20525	836.5	2.68	2.93
			20635	847.5	2.69	2.88
		5	20425	826.5	4.50	4.94
			20525	836.5	4.50	4.90
			20625	846.5	4.52	4.94
		10	20450	829	8.99	9.66
			20525	836.5	9.01	9.73
			20600	844	9.00	9.62
	64QAM	1.4	20407	824.7	1.09	1.29
			20525	836.5	1.10	1.27
			20643	848.3	1.10	1.27
		3	20415	825.5	2.69	2.90
			20525	836.5	2.69	2.91
			20635	847.5	2.70	2.95
		5	20425	826.5	4.50	4.90
			20525	836.5	4.50	4.90
			20625	846.5	4.52	4.92
		10	20450	829	9.00	9.66
			20525	836.5	8.98	9.70
			20600	844	8.97	9.76

LTE Band 26						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	26797	824.7	1.10	1.29
			26915	836.5	1.10	1.28
			27033	848.3	1.10	1.28
		3	26805	825.5	2.69	2.91
			26915	836.5	2.70	2.92
			27025	847.5	2.70	2.90
		5	26815	826.5	4.51	4.90



			26915	836.5	4.50	4.91
			27015	846.5	4.50	4.88
		10	26840	829	8.99	9.70
			26915	836.5	8.97	9.62
			26990	844	8.99	9.68
		15	26865	831.5	13.48	14.53
			26915	836.5	13.45	14.51
			26965	841.5	13.44	14.60
	16QAM	1.4	26797	824.7	1.10	1.29
			26915	836.5	1.09	1.27
			27033	848.3	1.09	1.27
		3	26805	825.5	2.68	2.90
			26915	836.5	2.69	2.92
			27025	847.5	2.69	2.90
		5	26815	826.5	4.50	4.90
			26915	836.5	4.52	4.93
			27015	846.5	4.51	4.90
		10	26840	829	8.98	9.65
			26915	836.5	8.96	9.68
			26990	844	8.97	9.68
		15	26865	831.5	13.48	14.32
			26915	836.5	13.48	14.55
			26965	841.5	13.47	14.51
	64QAM	1.4	26797	824.7	1.09	1.27
			26915	836.5	1.10	1.30
			27033	848.3	1.09	1.28
		3	26805	825.5	2.69	2.91
			26915	836.5	2.69	2.93
			27025	847.5	2.69	2.94
		5	26815	826.5	4.50	4.96
			26915	836.5	4.52	4.89
			27015	846.5	4.51	4.94
		10	26840	829	8.99	9.67
			26915	836.5	8.98	9.69



			26990	844	8.97	9.54
		15	26865	831.5	13.46	14.41
			26915	836.5	13.44	14.61
			26965	841.5	13.44	14.55



GSM 850 GPRS CH-Low



GSM 850 GPRS CH-Middle



GSM 850 GPRS CH-High



GSM 850 EGPRS CH-Low



WCDMA Band V CH-Low



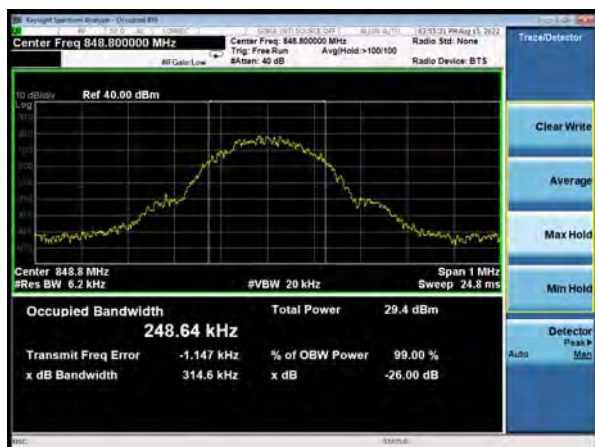
GSM 850 EGPRS CH-Middle



WCDMA Band V CH-Middle



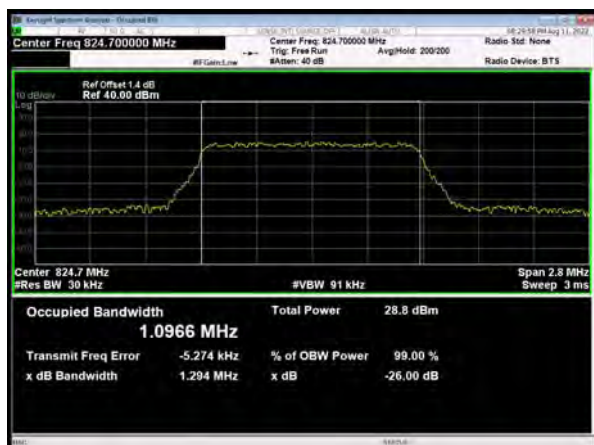
GSM 850 EGPRS CH-High



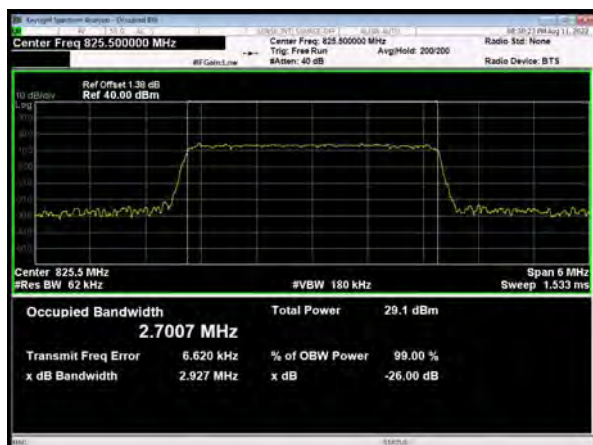
WCDMA Band V CH-High



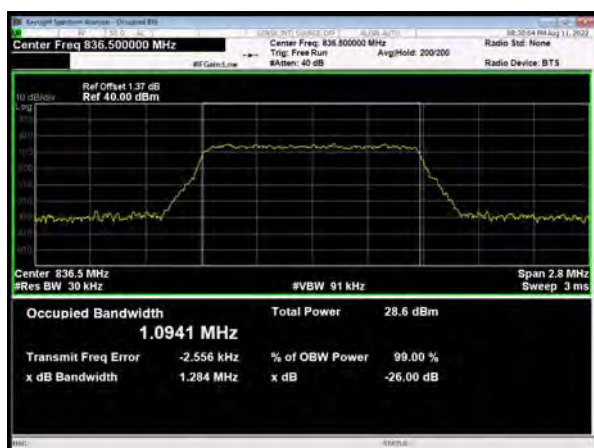
LTE Band 5 QPSK 1.4MHz CH-Low



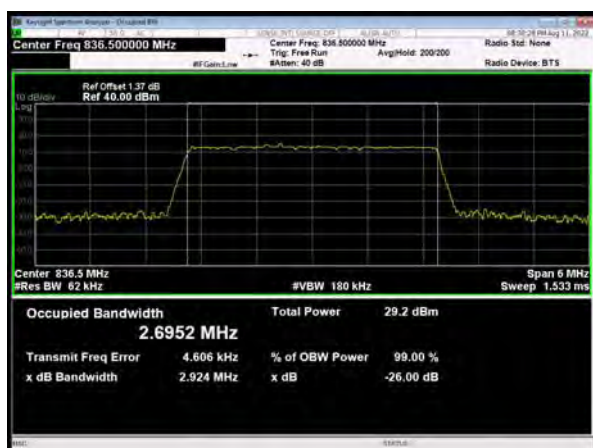
LTE Band 5 QPSK 3MHz CH-Low



LTE Band 5 QPSK 1.4MHz CH-Middle



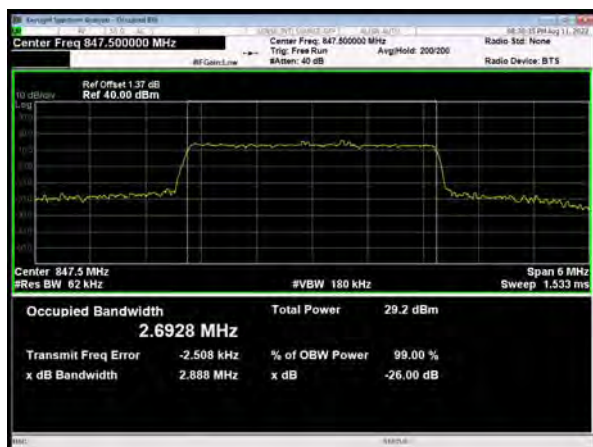
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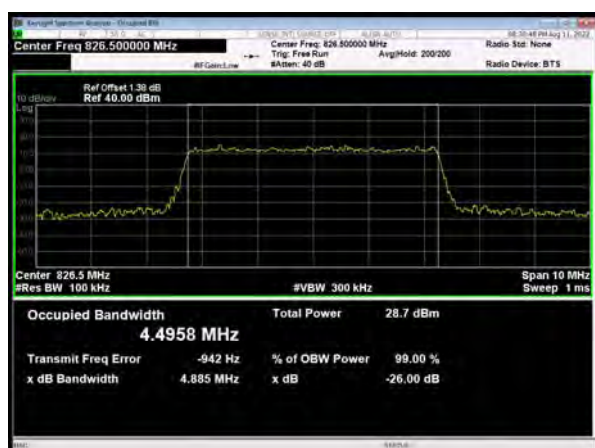
LTE Band 5 QPSK 1.4MHz CH-High



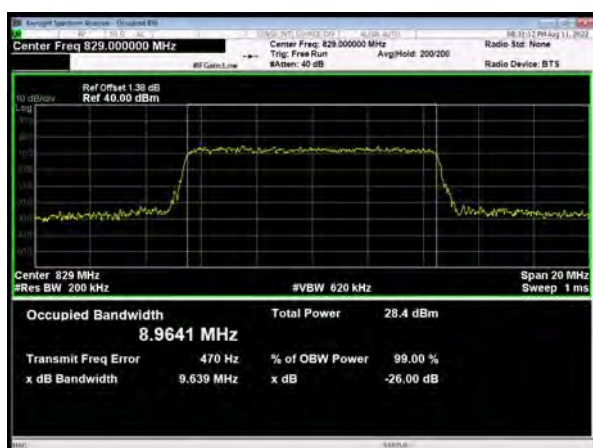
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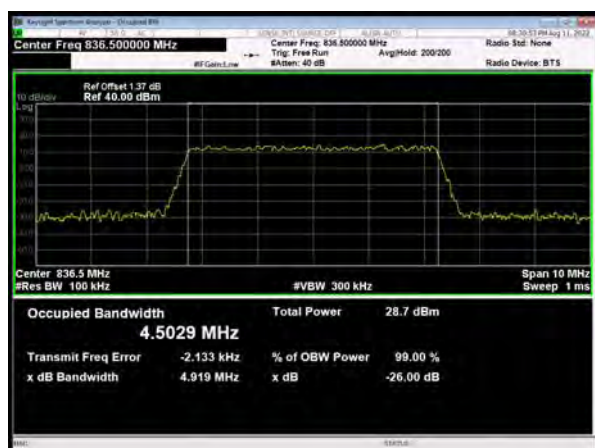
LTE Band 5 QPSK 5MHz CH-Low



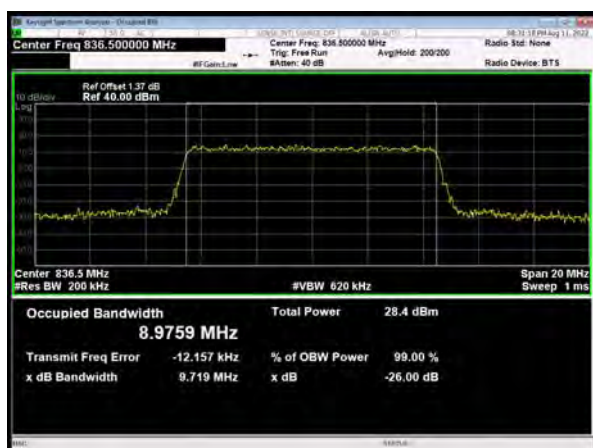
LTE Band 5 QPSK 10MHz CH-Low



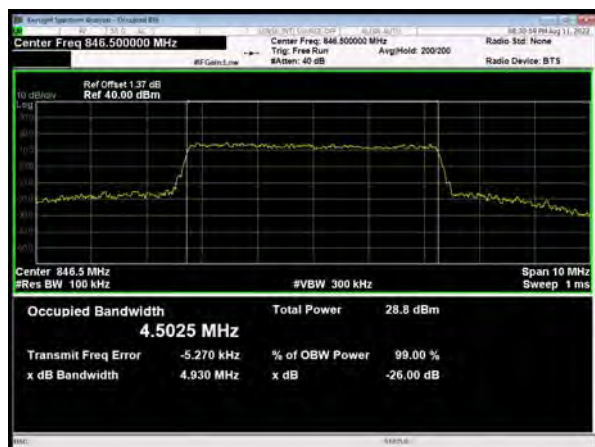
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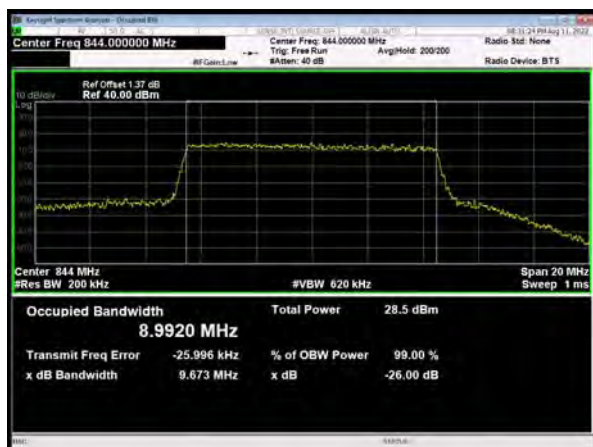
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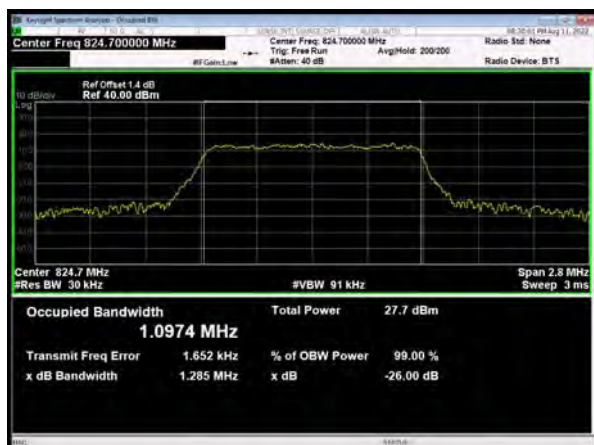
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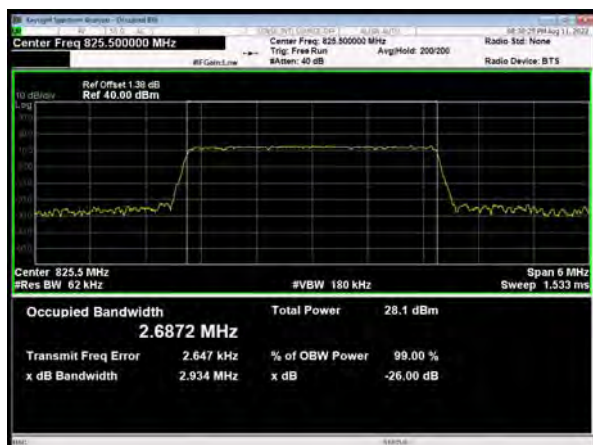
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LTE Band 5 16QAM 1.4MHz CH-Low



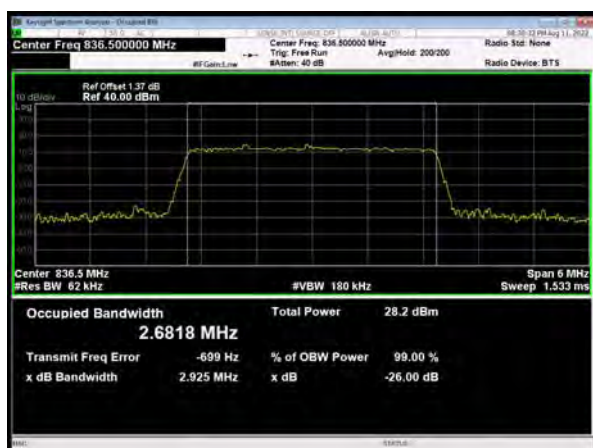
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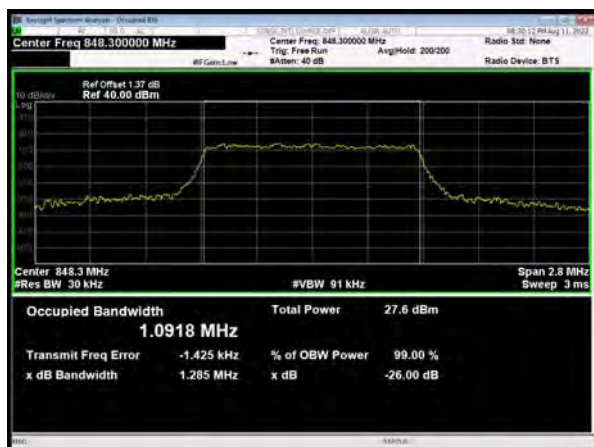
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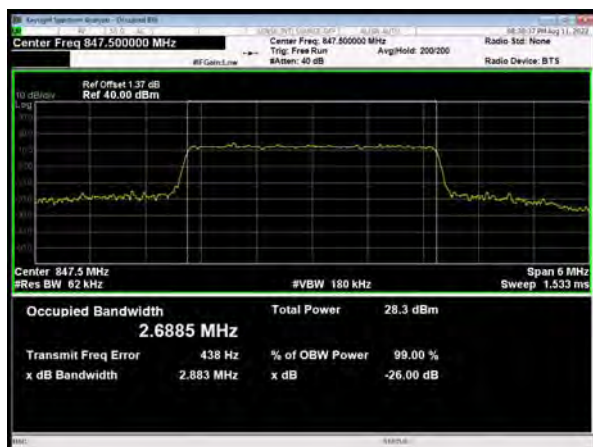
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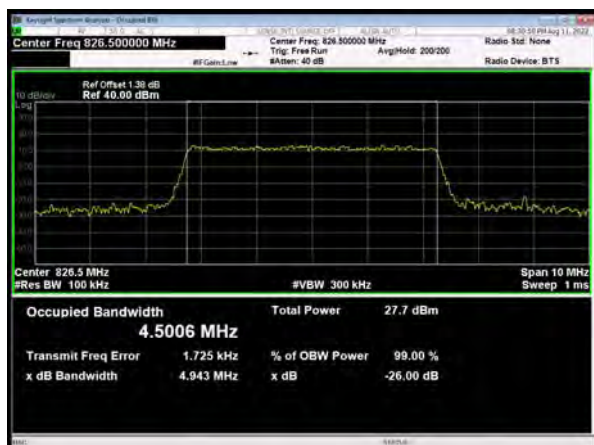
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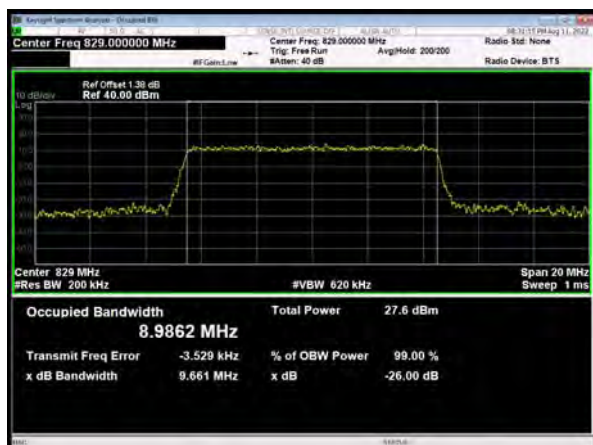
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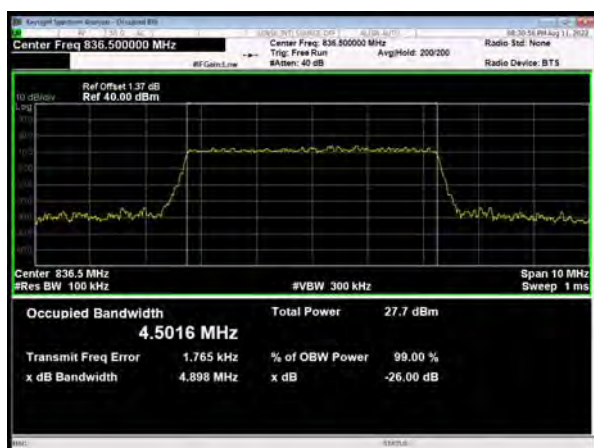
LTE Band 5 16QAM 5MHz CH-Low



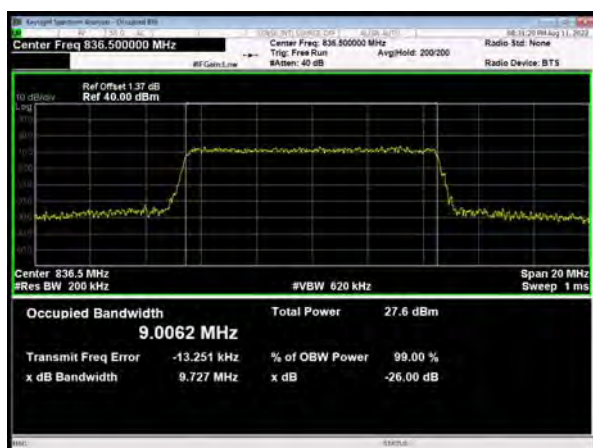
LTE Band 5 16QAM 10MHz CH-Low



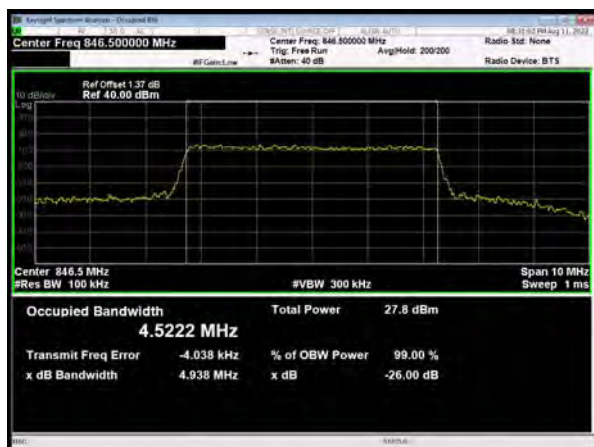
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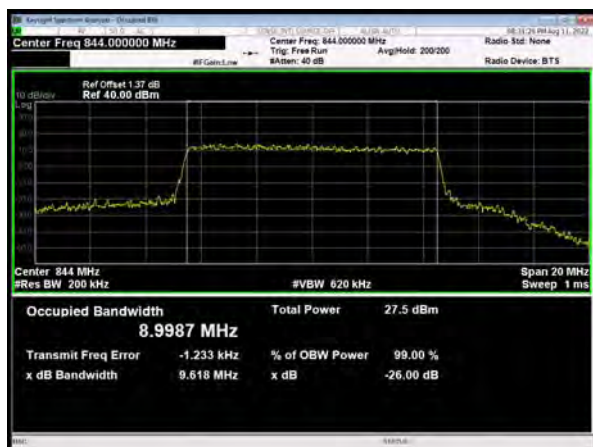
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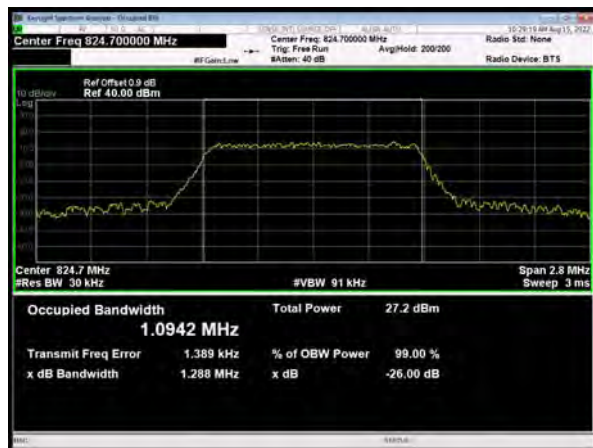


LTE Band 5 16QAM 10MHz CH-High

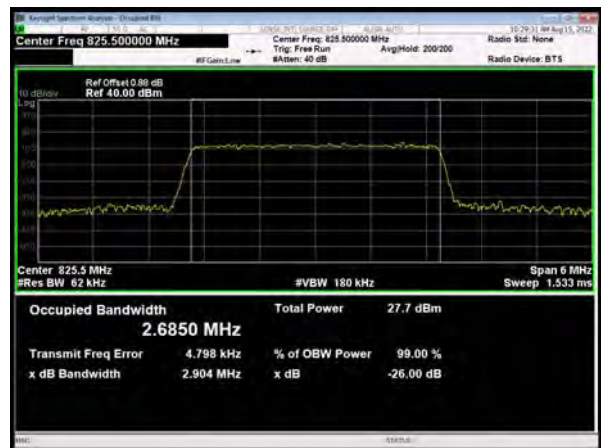




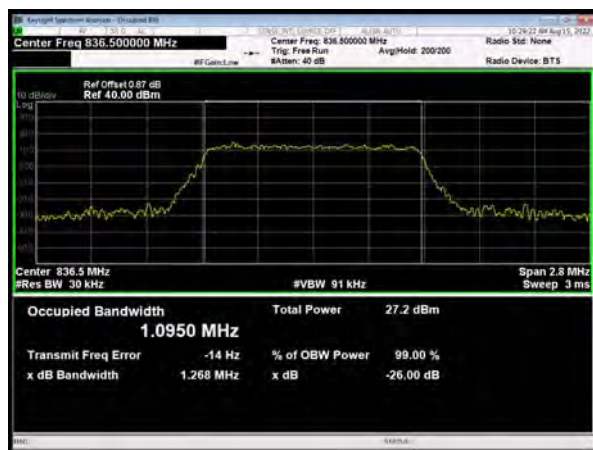
LTE Band 5 64QAM 1.4MHz CH-Low



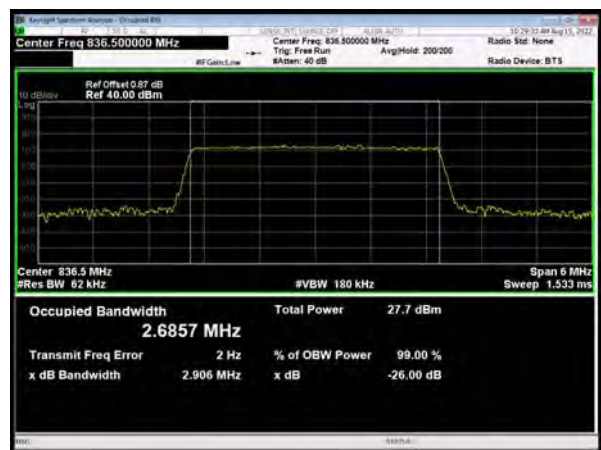
LTE Band 5 64QAM 3MHz CH-Low



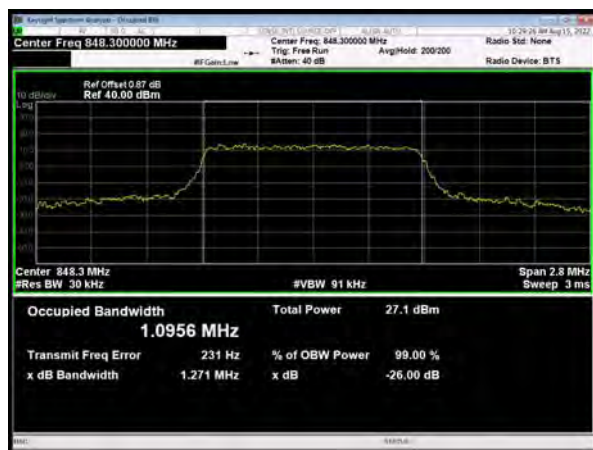
LTE Band 5 64QAM 1.4MHz CH-Middle



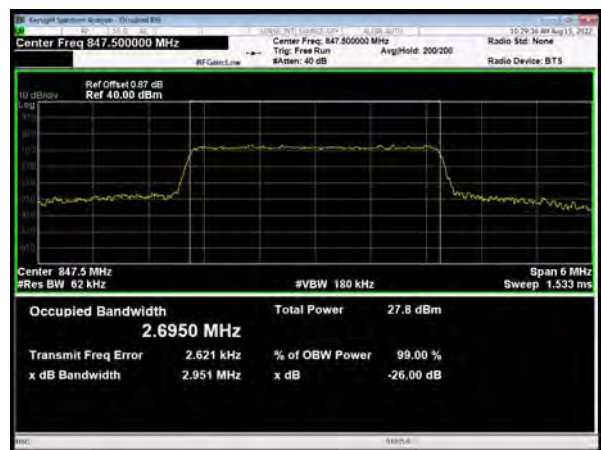
LTE Band 5 64QAM 3MHz CH-Middle



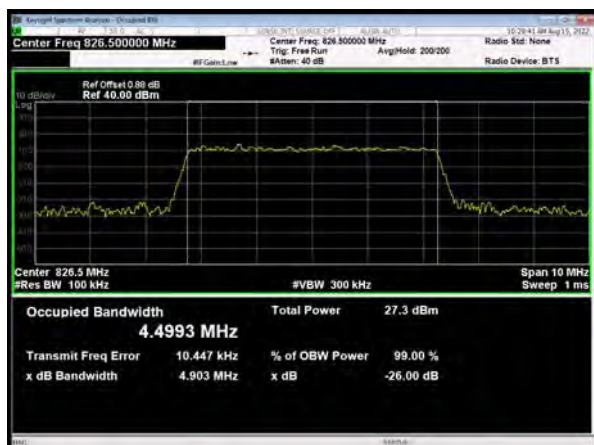
LTE Band 5 64QAM 1.4MHz CH-High



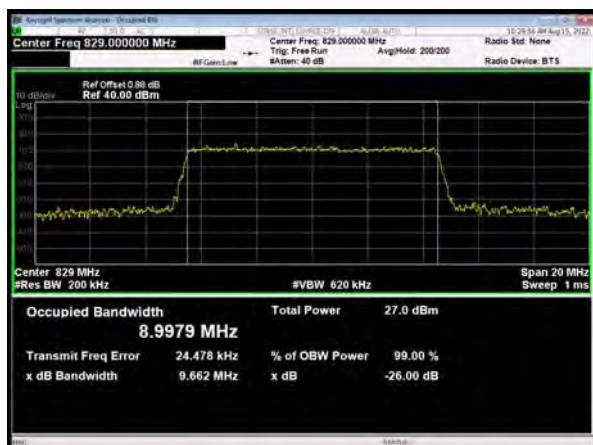
LTE Band 5 64QAM 3MHz CH-High



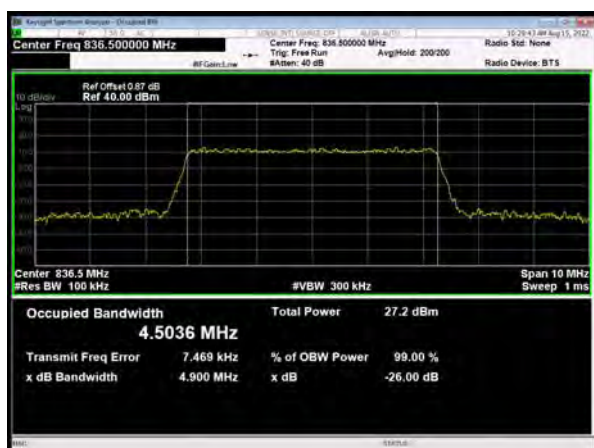
LTE Band 5 64QAM 5MHz CH-Low



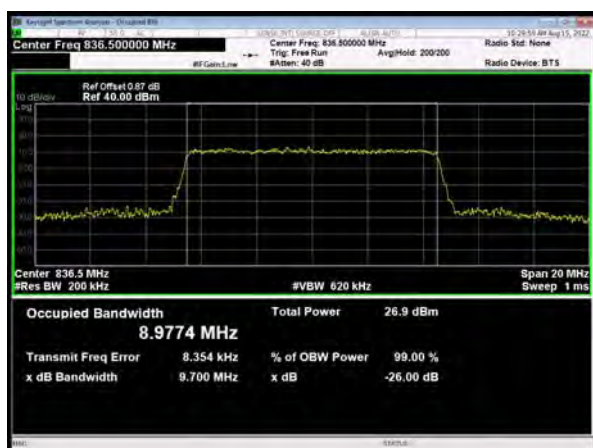
LTE Band 5 64QAM 10MHz CH-Low



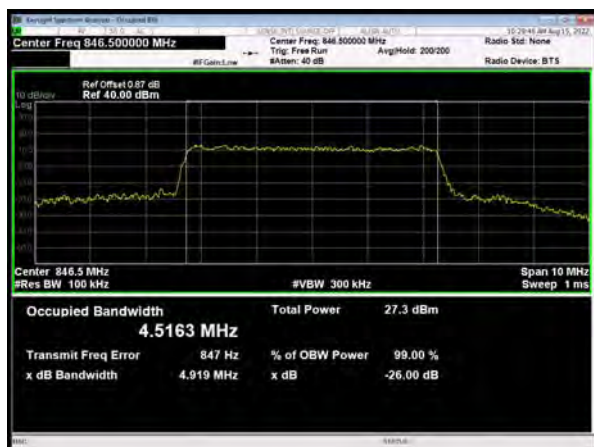
LTE Band 5 64QAM 5MHz CH-Middle



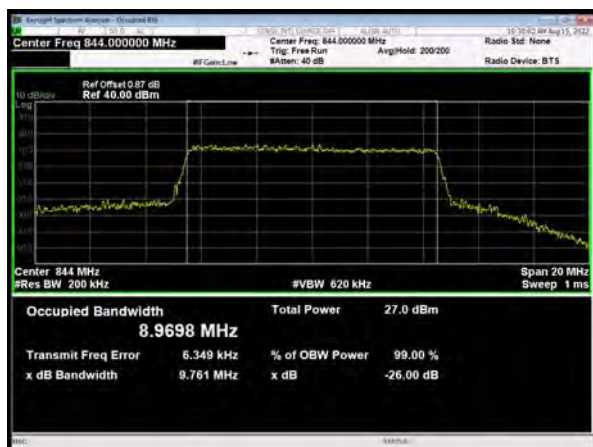
LTE Band 5 64QAM 10MHz CH-Middle



LTE Band 5 64QAM 5MHz CH-High



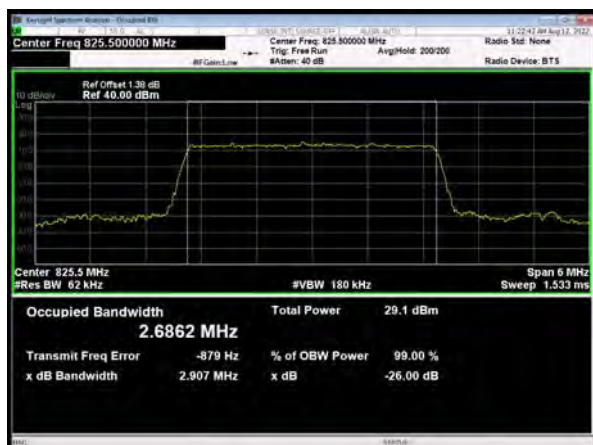
LTE Band 5 64QAM 10MHz CH-High



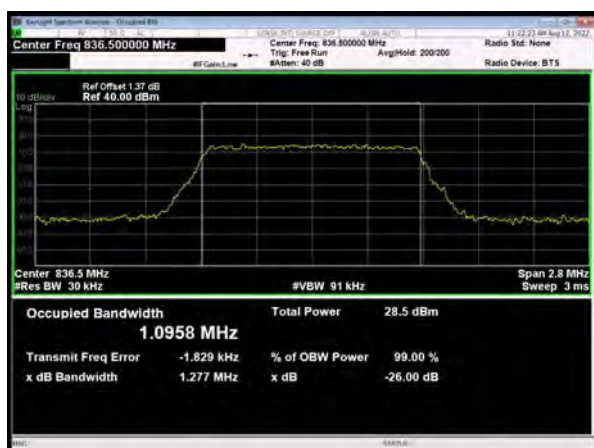
LTE Band 26 QPSK 1.4MHz CH-Low



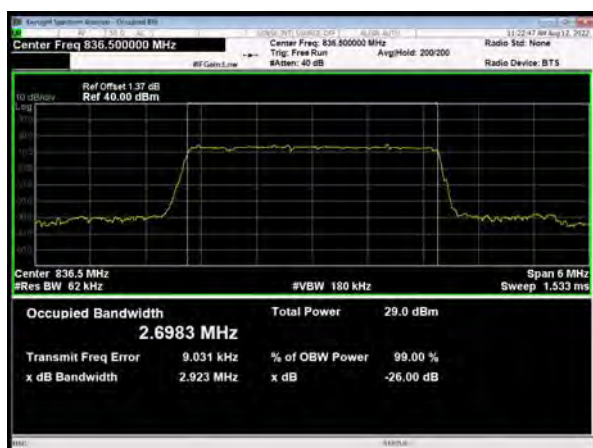
LTE Band 26 QPSK 3MHz CH-Low



LTE Band 26 QPSK 1.4MHz CH-Middle



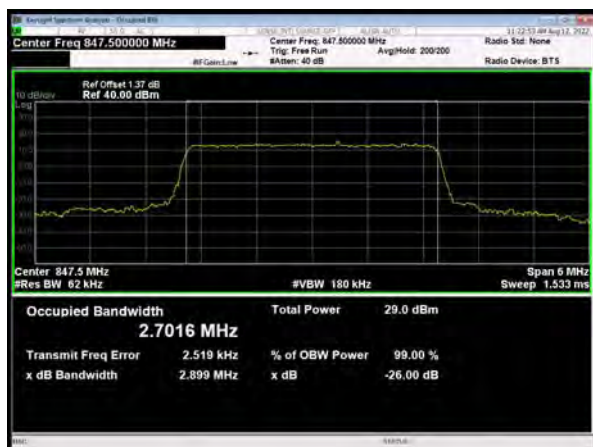
LTE Band 26 QPSK 3MHz CH-Middle



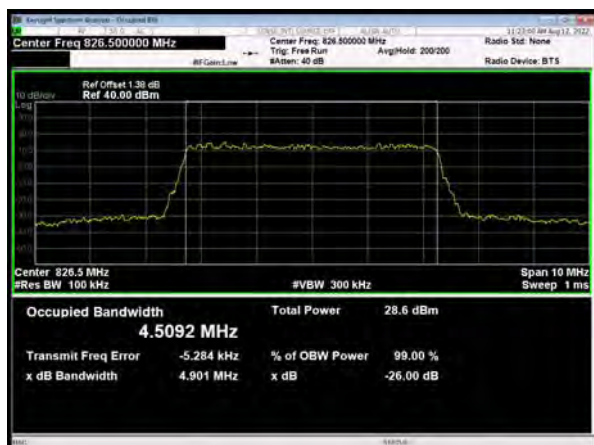
LTE Band 26 QPSK 1.4MHz CH-High



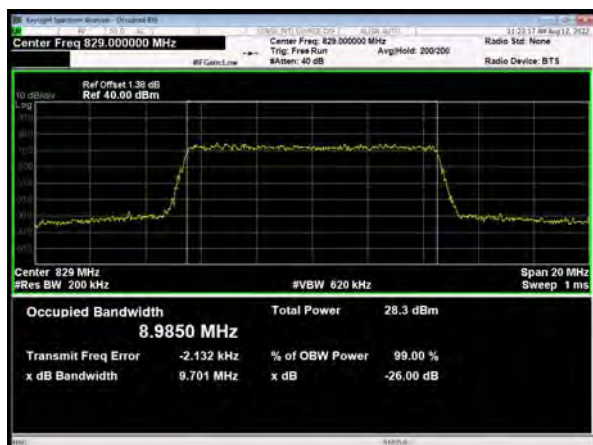
LTE Band 26 QPSK 3MHz CH-High



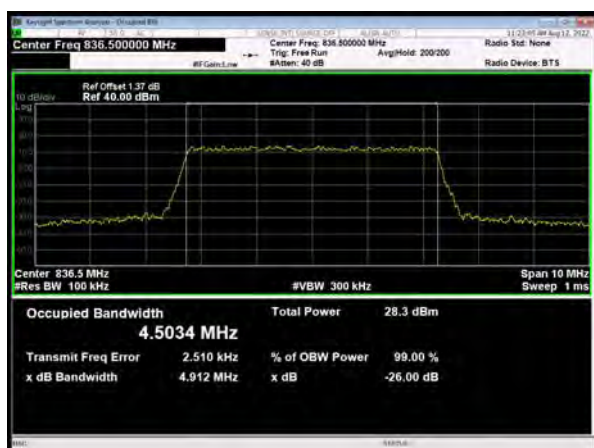
LTE Band 26 QPSK 5MHz CH-Low



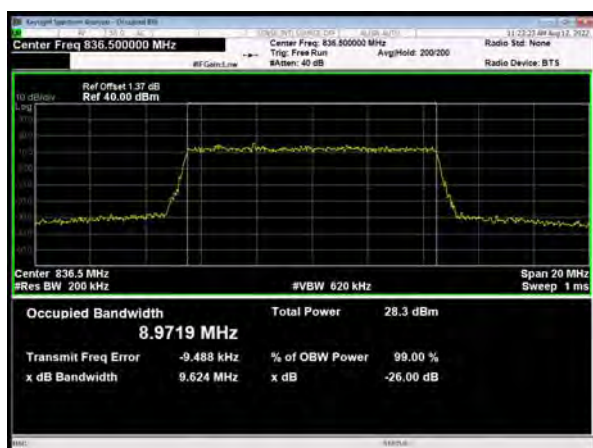
LTE Band 26 QPSK 10MHz CH-Low



LTE Band 26 QPSK 5MHz CH-Middle



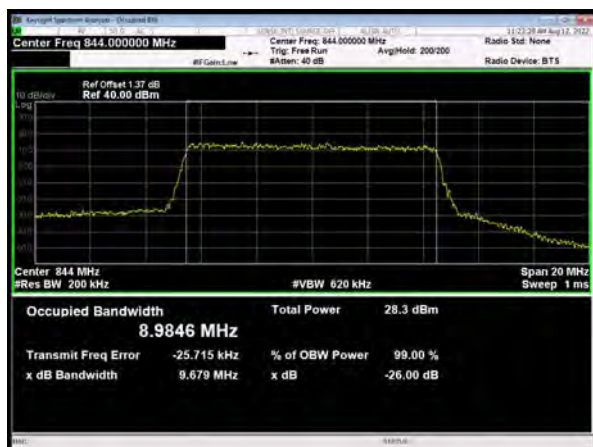
LTE Band 26 QPSK 10MHz CH-Middle



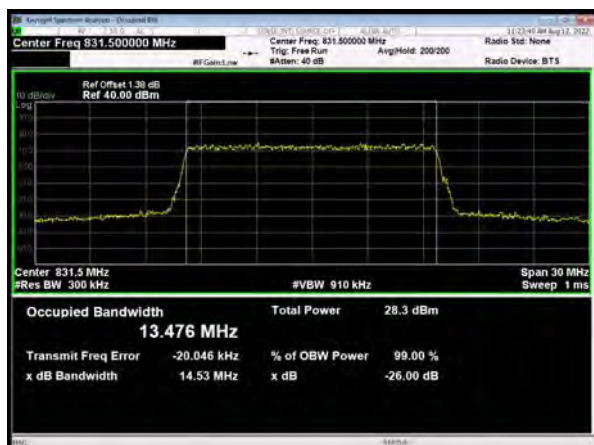
LTE Band 26 QPSK 5MHz CH-High



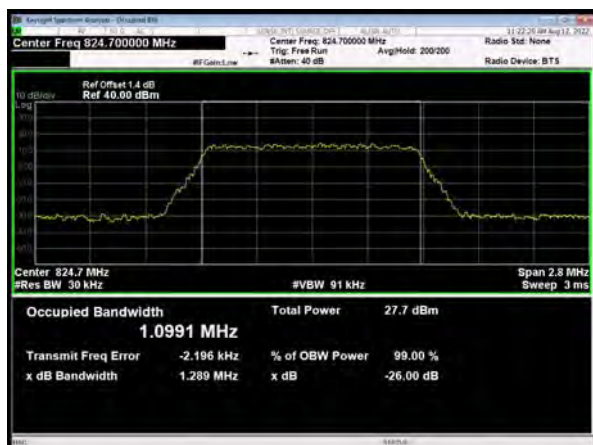
LTE Band 26 QPSK 10MHz CH-High



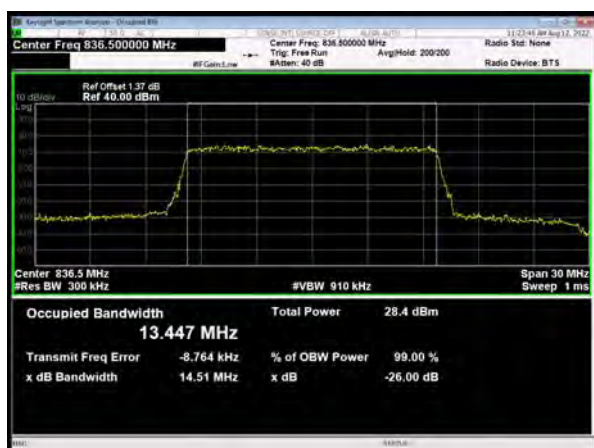
LTE Band 26 QPSK 15MHz CH-Low



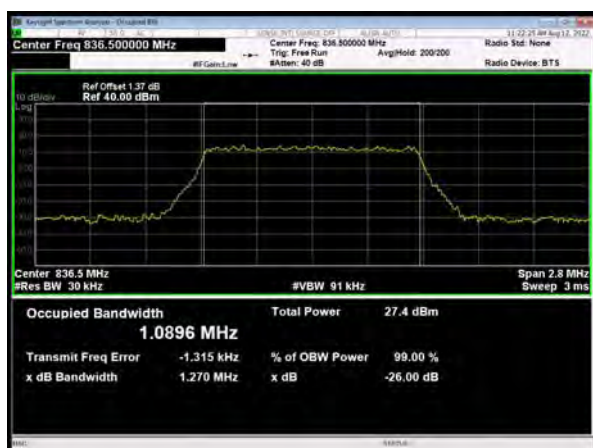
LTE Band 26 16QAM 1.4MHz CH-Low



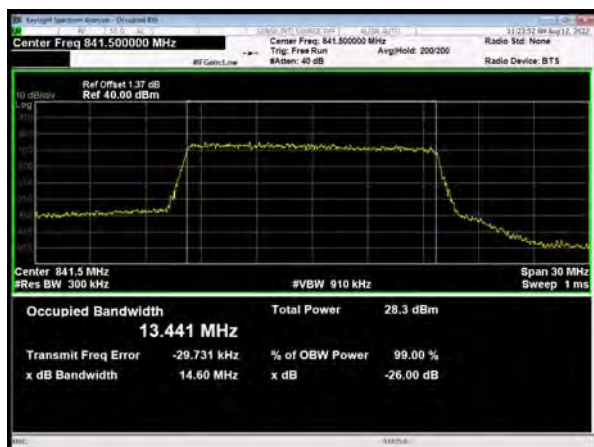
LTE Band 26 QPSK 15MHz CH-Middle



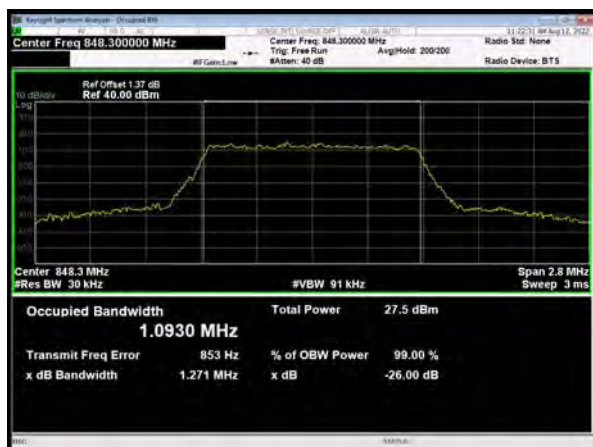
LTE Band 26 16QAM 1.4MHz CH-Middle



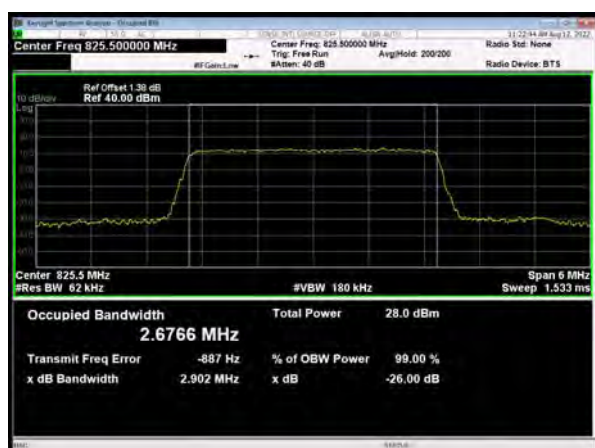
LTE Band 26 QPSK 15MHz CH-High



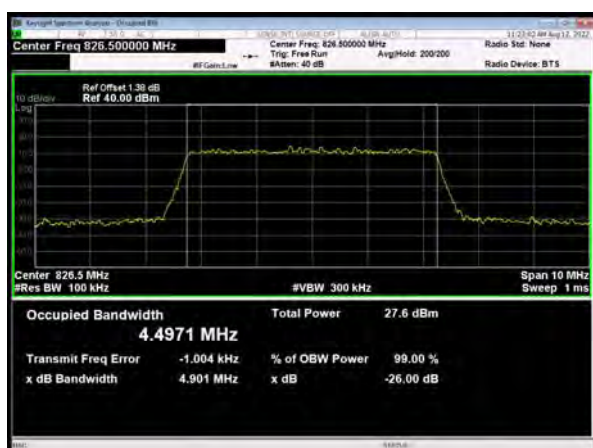
LTE Band 26 16QAM 1.4MHz CH-High



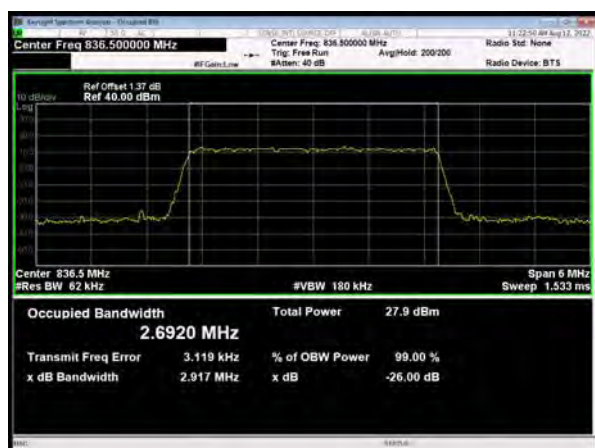
LTE Band 26 16QAM 3MHz CH-Low



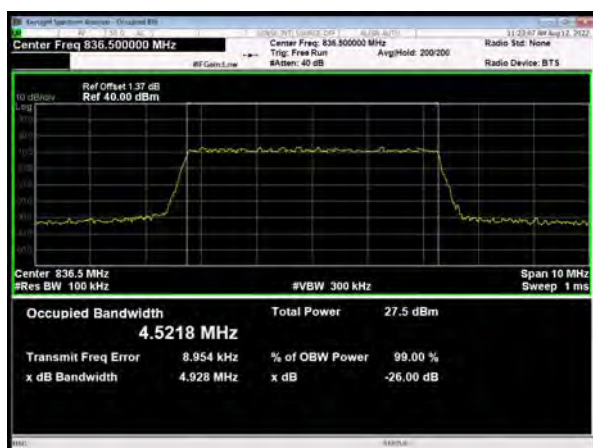
LTE Band 26 16QAM 5MHz CH-Low



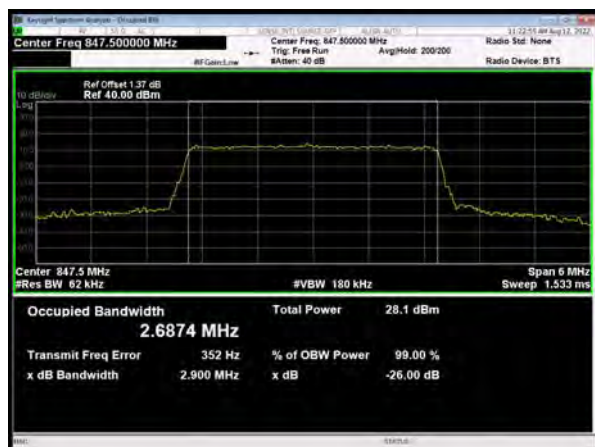
LTE Band 26 16QAM 3MHz CH-Middle



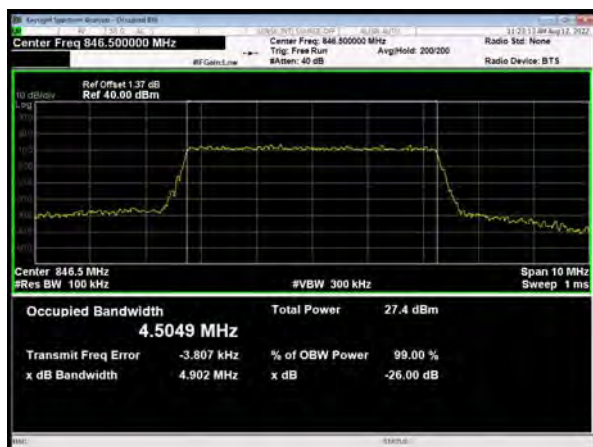
LTE Band 26 16QAM 5MHz CH-Middle



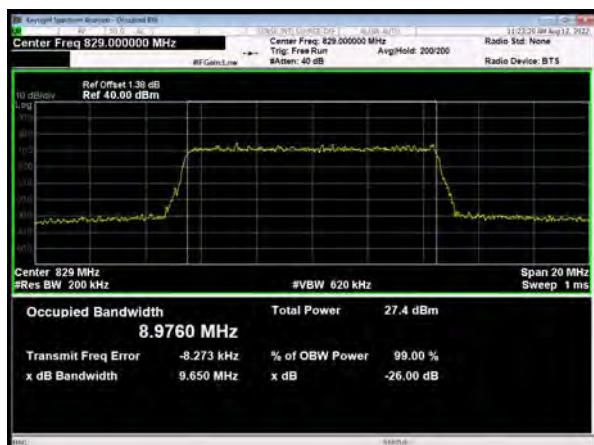
LTE Band 26 16QAM 3MHz CH-High



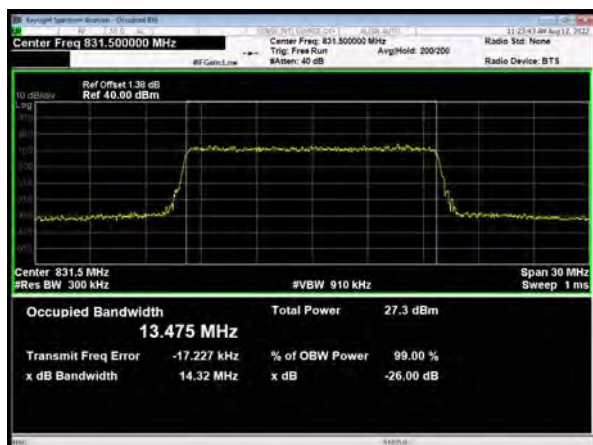
LTE Band 26 16QAM 5MHz CH-High



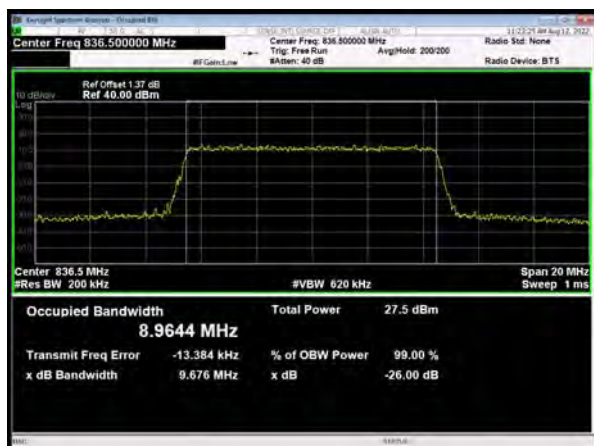
LTE Band 26 16QAM 10MHz CH-Low



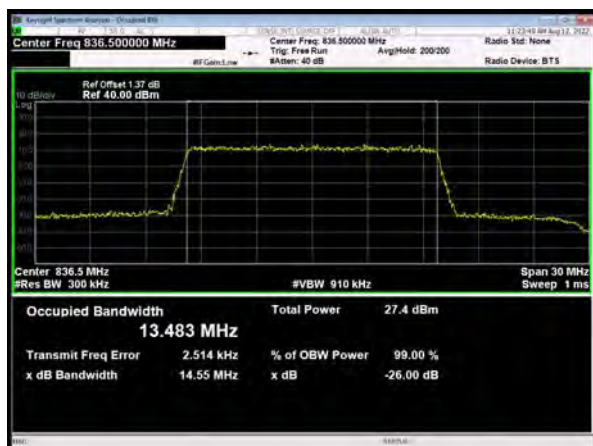
LTE Band 26 16QAM 15MHz CH-Low



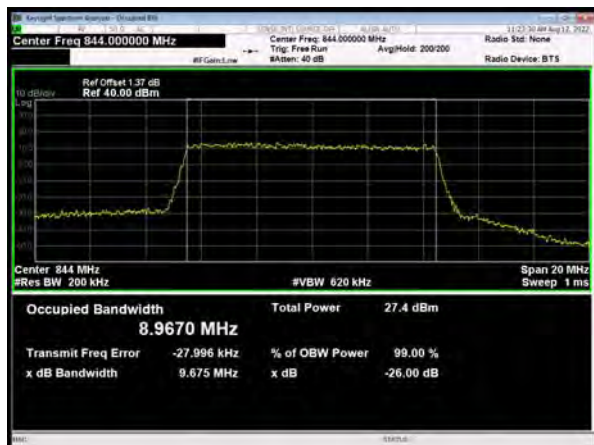
LTE Band 26 16QAM 10MHz CH-Middle



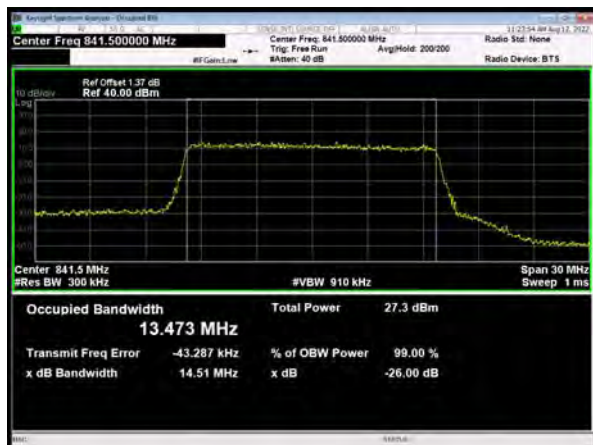
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LTE Band 26 16QAM 10MHz CH-High



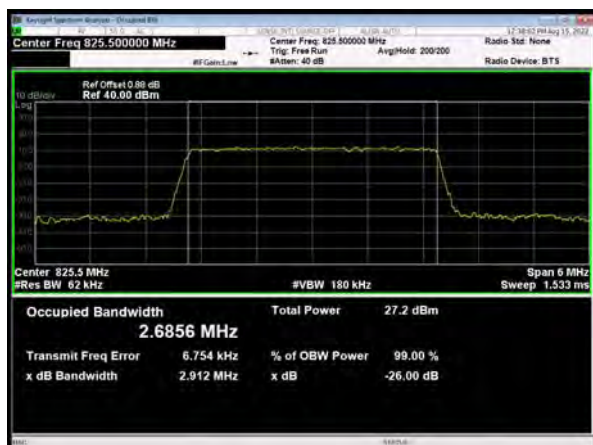
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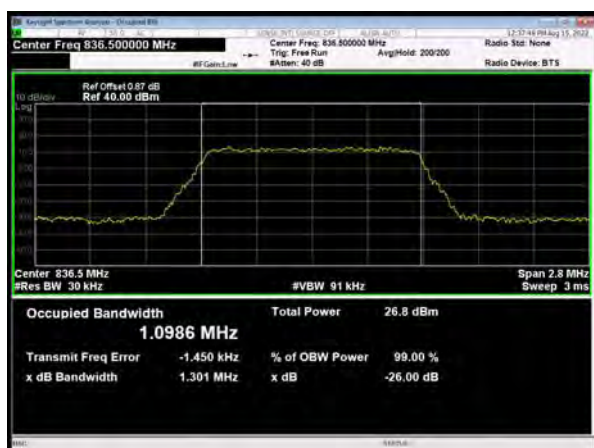
LTE Band 26 64QAM 1.4MHz CH-Low



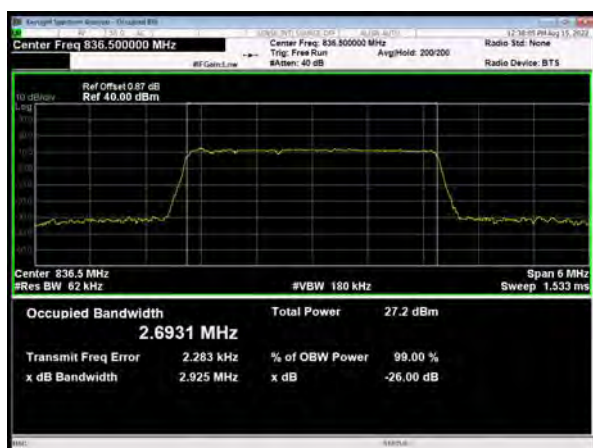
LTE Band 26 64QAM 3MHz CH-Low



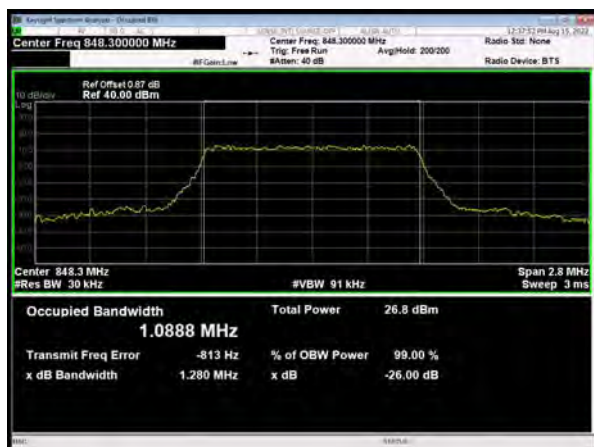
LTE Band 26 64QAM 1.4MHz CH-Middle



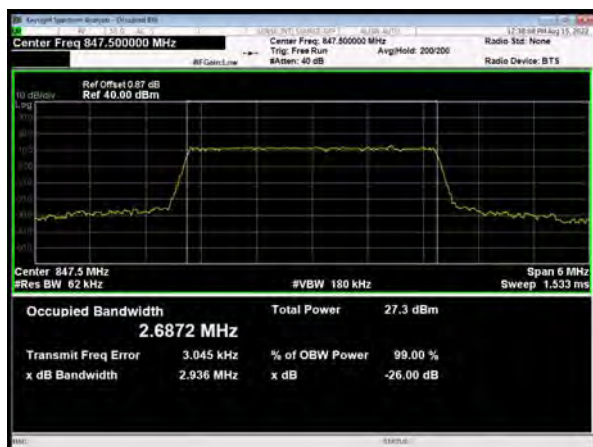
LTE Band 26 64QAM 3MHz CH-Middle



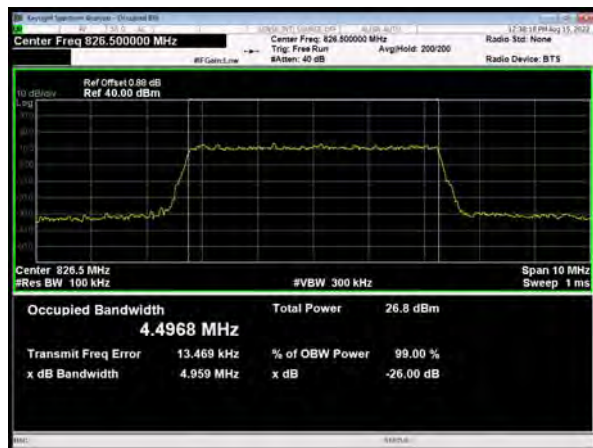
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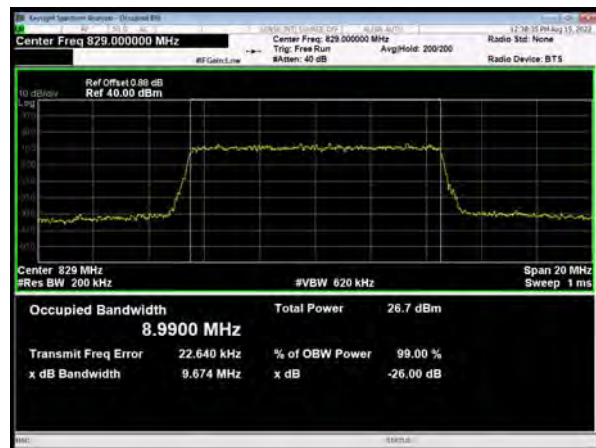
LTE Band 26 64QAM 3MHz CH-High



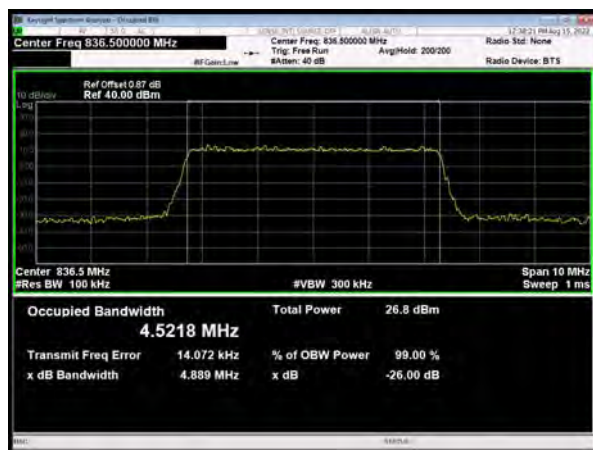
LTE Band 26 64QAM 5MHz CH-Low



LTE Band 26 64QAM 10MHz CH-Low



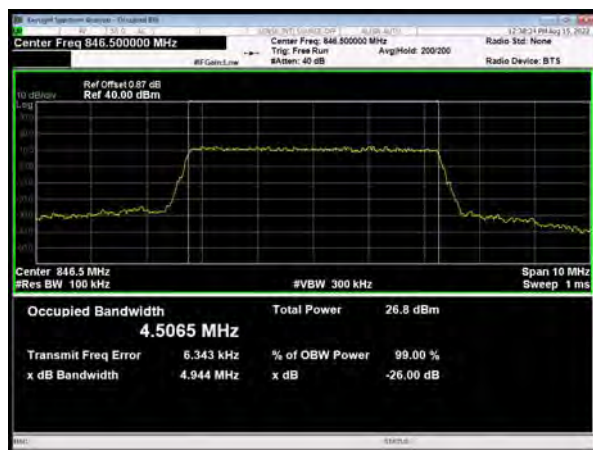
LTE Band 26 64QAM 5MHz CH-Middle



LTE Band 26 64QAM 10MHz CH-Middle



LTE Band 26 64QAM 5MHz CH-High

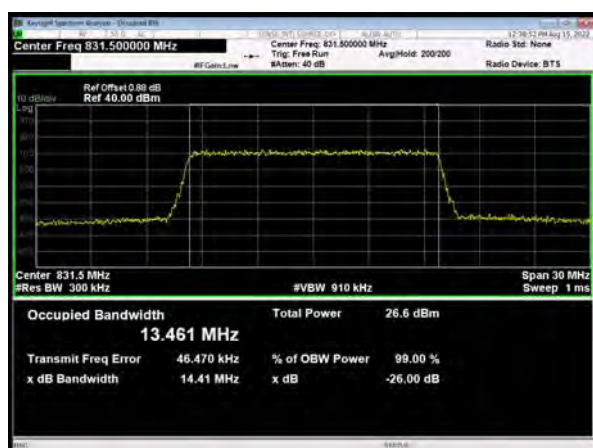


LTE Band 26 64QAM 10MHz CH-High

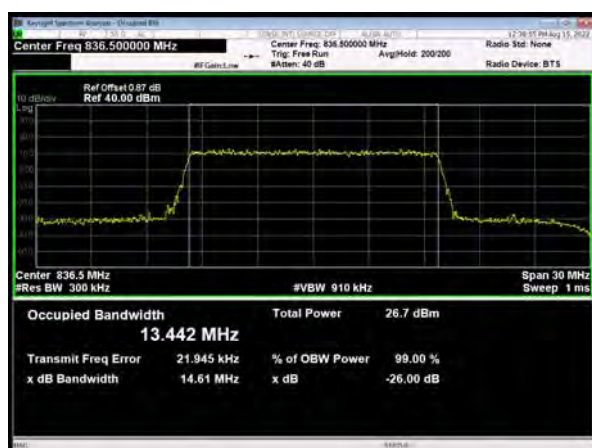




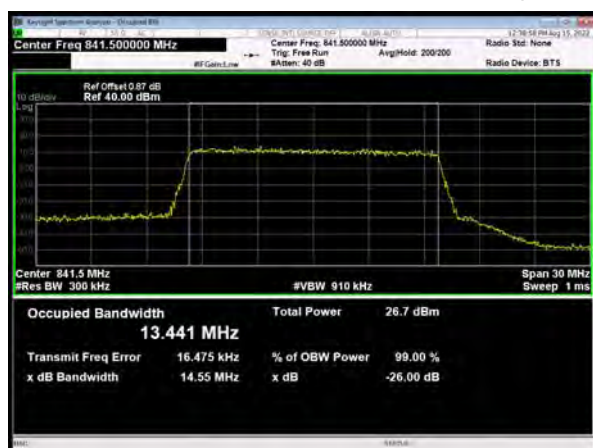
LTE Band 26 64QAM 15MHz CH-Low



LTE Band 26 64QAM 15MHz CH- Middle



LTE Band 26 64QAM 15MHz CH- High



6.3. Band Edge Compliance

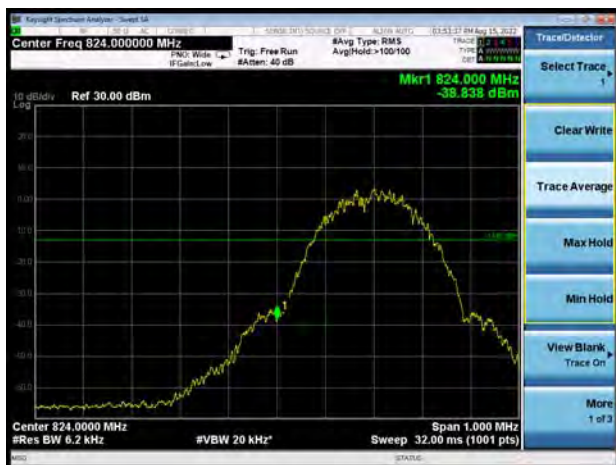
GSM 850 GPRS CH-Low



GSM 850 GPRS CH-High



GSM 850 EGPRS CH-Low



GSM 850 EGPRS CH-High





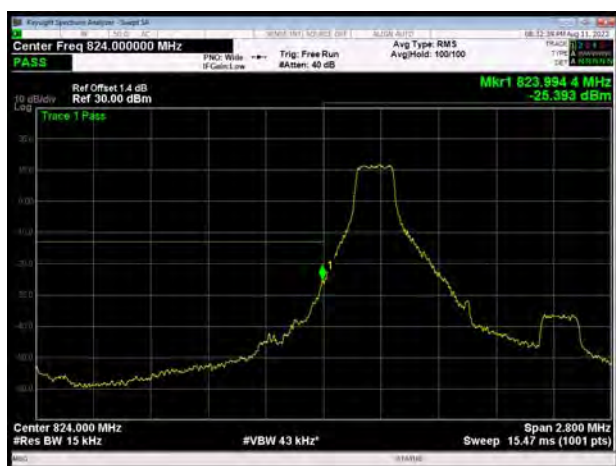
WCDMA Band V CH-Low



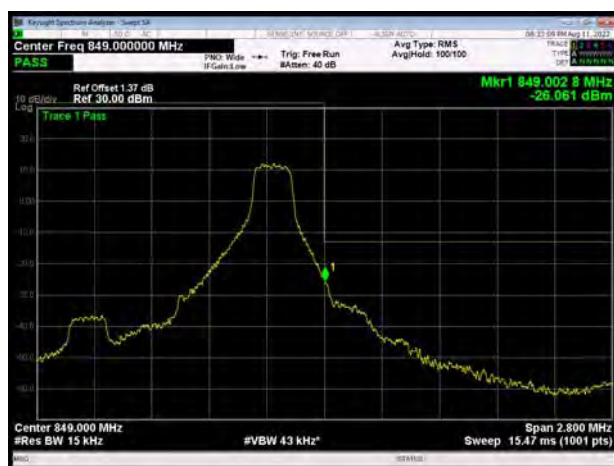
WCDMA Band V CH-High



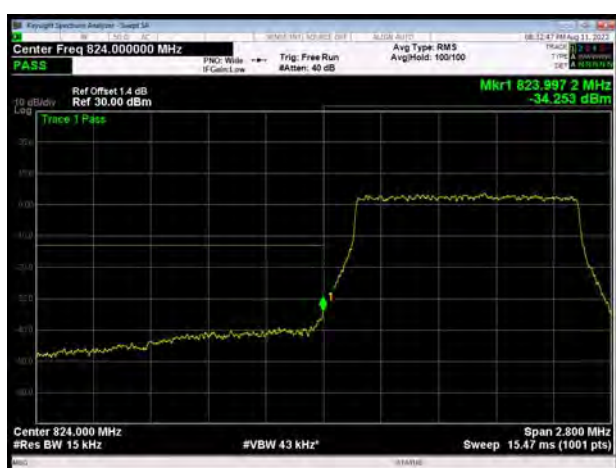
LTE Band 5 QPSK 1.4MHz CH-Low 1RB



LTE Band 5 QPSK 1.4MHz CH-High 1RB



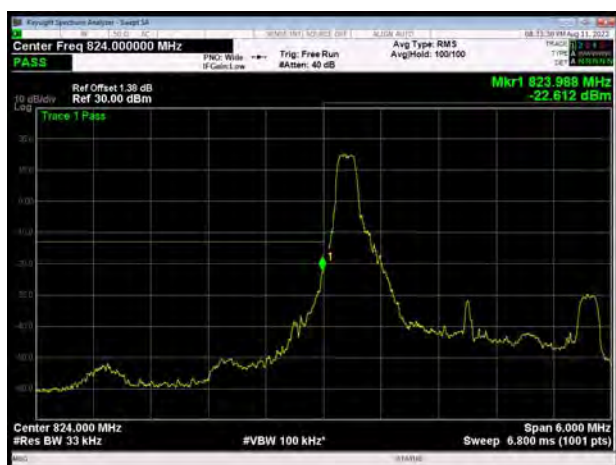
LTE Band 5 QPSK 1.4MHz CH-Low 100%RB



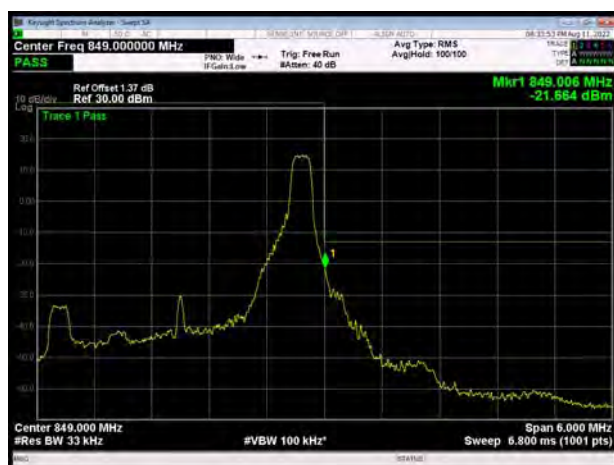
LTE Band 5 QPSK 1.4MHz CH-High 100%RB



LTE Band 5 QPSK 3MHz CH-Low 1RB



LTE Band 5 QPSK 3MHz CH-High 1RB



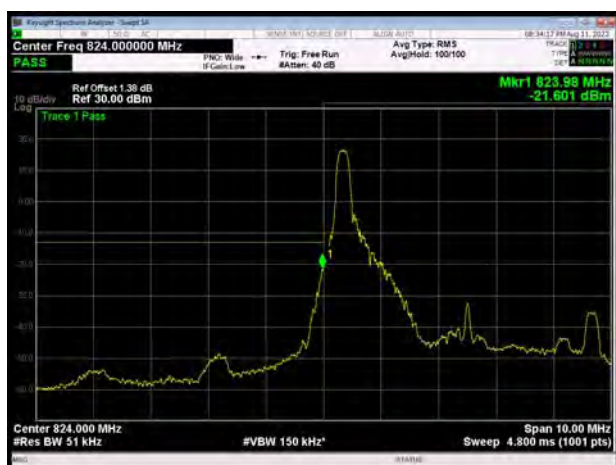
LTE Band 5 QPSK 3MHz CH-Low 100%RB



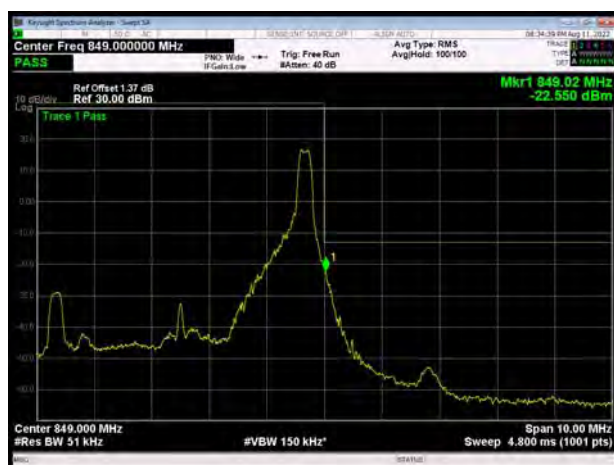
LTE Band 5 QPSK 3MHz CH-High 100%RB



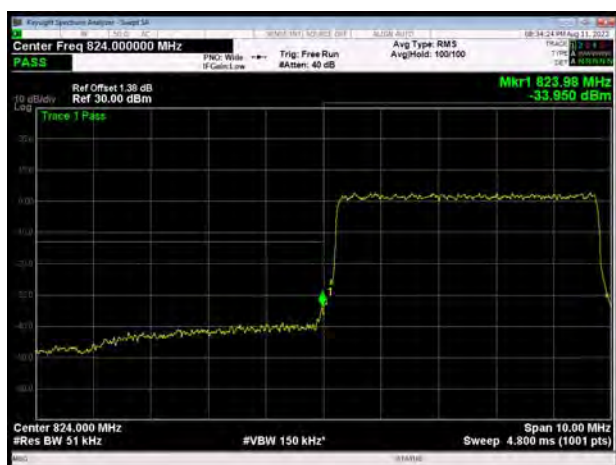
LTE Band 5 QPSK 5MHz CH-Low 1RB



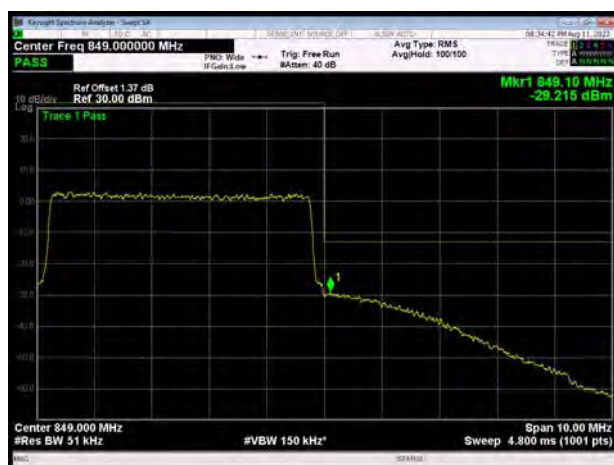
LTE Band 5 QPSK 5MHz CH-High 1RB



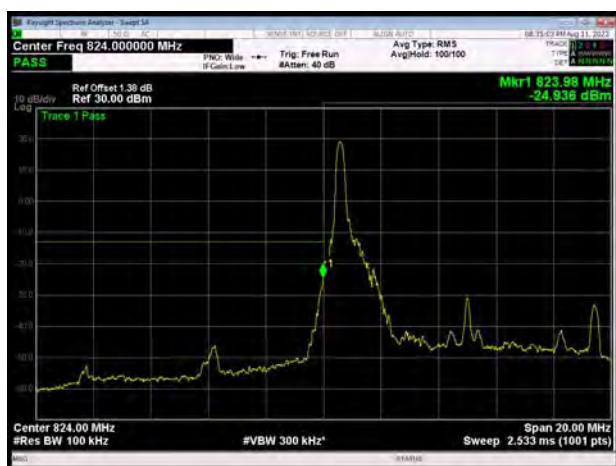
LTE Band 5 QPSK 5MHz CH-Low 100%RB



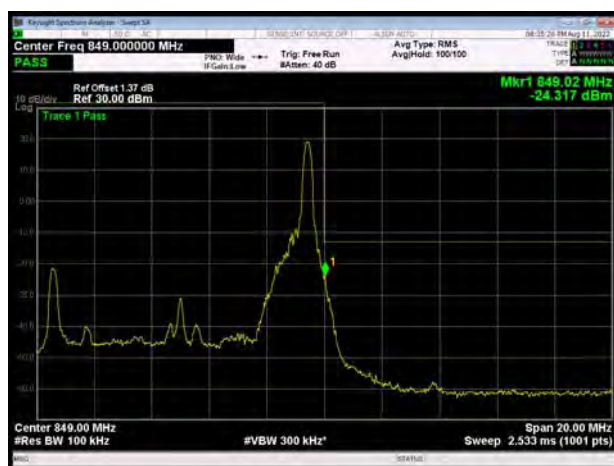
LTE Band 5 QPSK 5MHz CH-High 100%RB



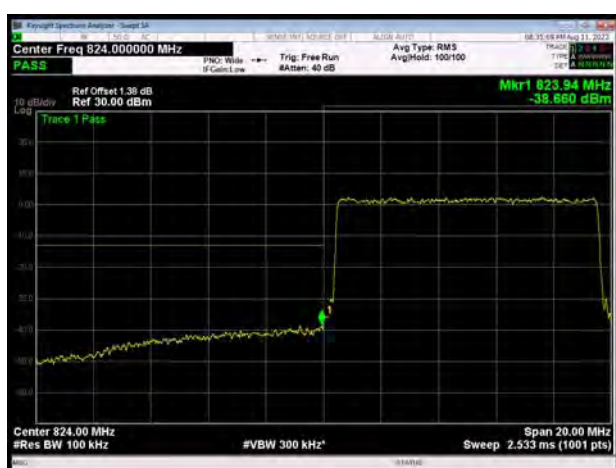
LTE Band 5 QPSK 10MHz CH-Low 1RB



LTE Band 5 QPSK 10MHz CH-High 1RB



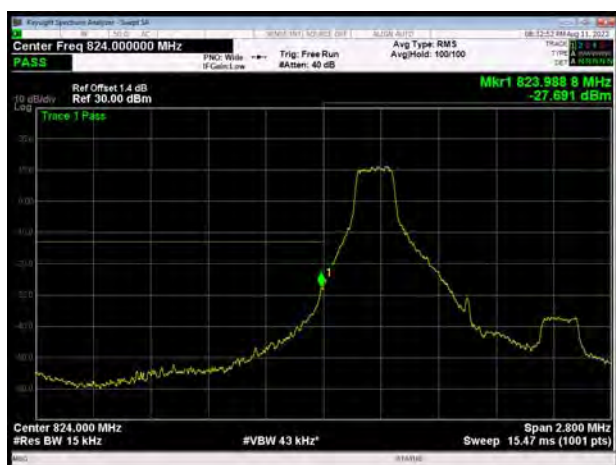
LTE Band 5 QPSK 10MHz CH-Low 100%RB



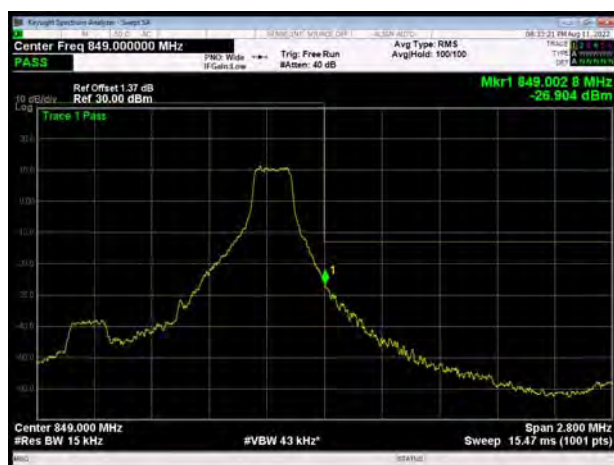
LTE Band 5 QPSK 10MHz CH-High 100%RB



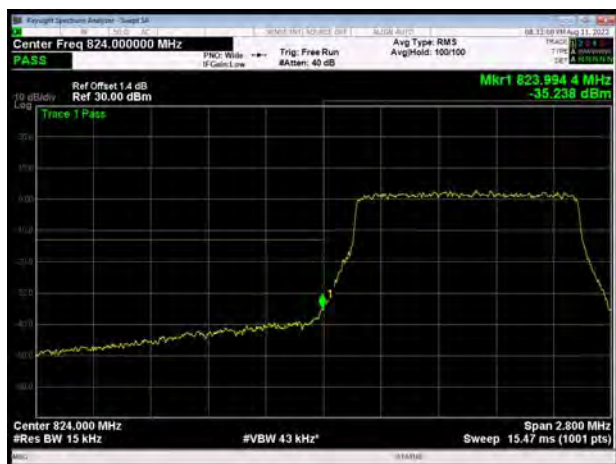
LTE Band 5 16QAM 1.4MHz CH-Low 1RB



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



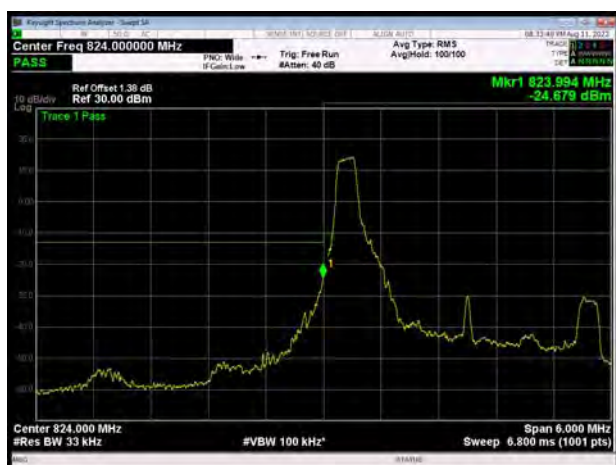
LTE Band 5 16QAM 1.4MHz CH-Low 100%RB



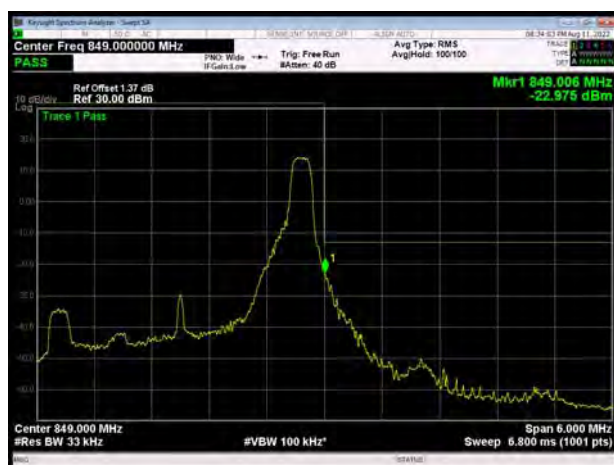
LTE Band 5 16QAM 1.4MHz CH-High 100%RB



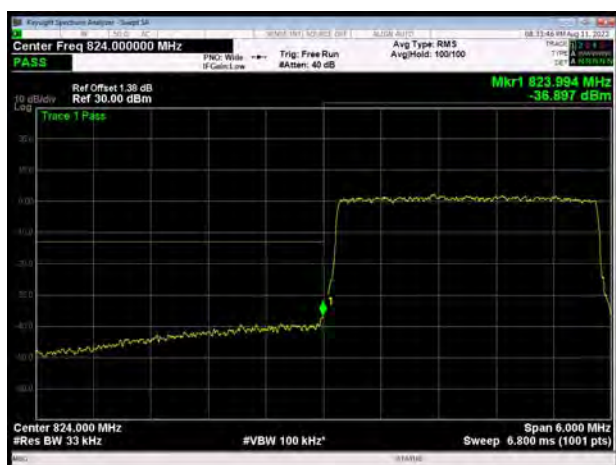
LTE Band 5 16QAM 3MHz CH-Low 1RB



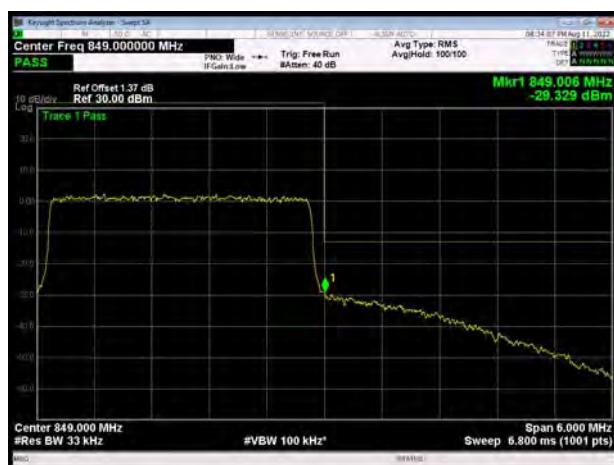
LTE Band 5 16QAM 3MHz CH-High 1RB



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

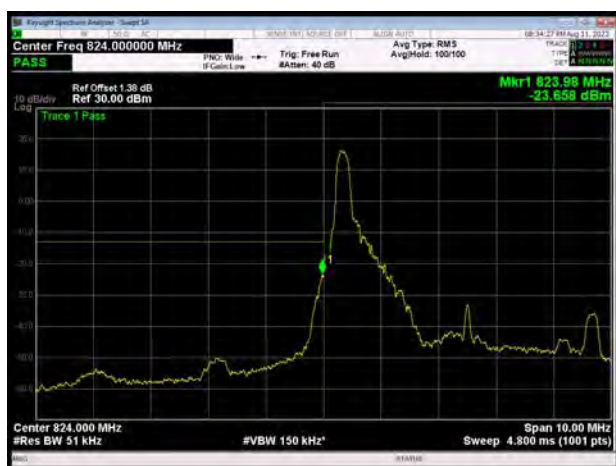


LTE Band 5 16QAM 3MHz CH-High 100%RB

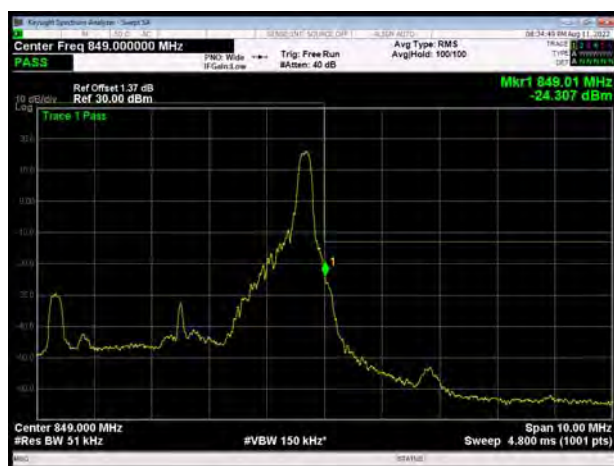




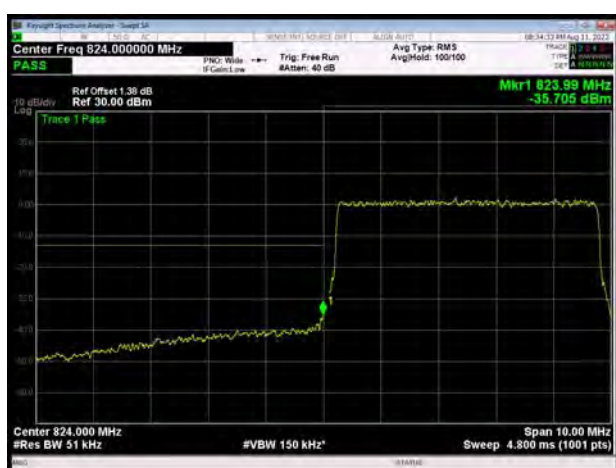
LTE Band 5 16QAM 5MHz CH-Low 1RB



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



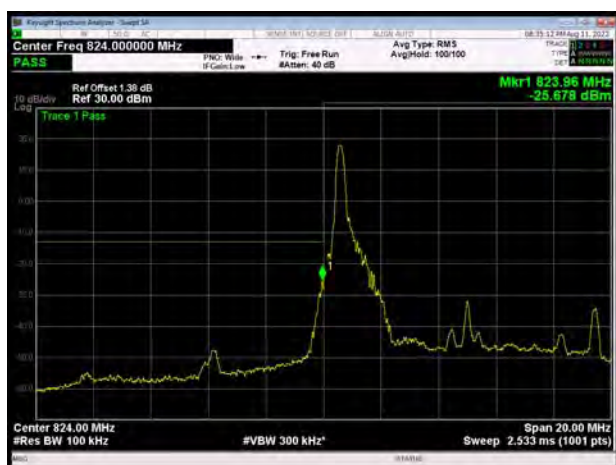
LTE Band 5 16QAM 5MHz CH-Low 100%RB



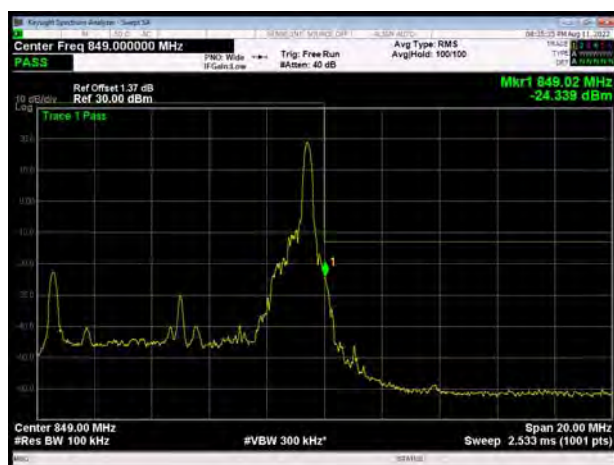
LTE Band 5 16QAM 5MHz CH-High 100%RB



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

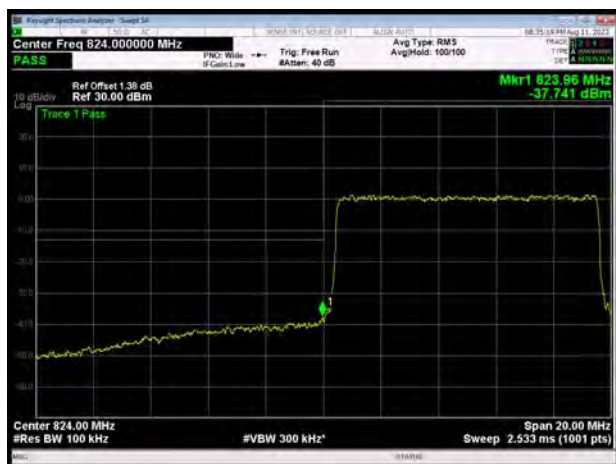


LTE Band 5 16QAM 10MHz CH-High 1RB

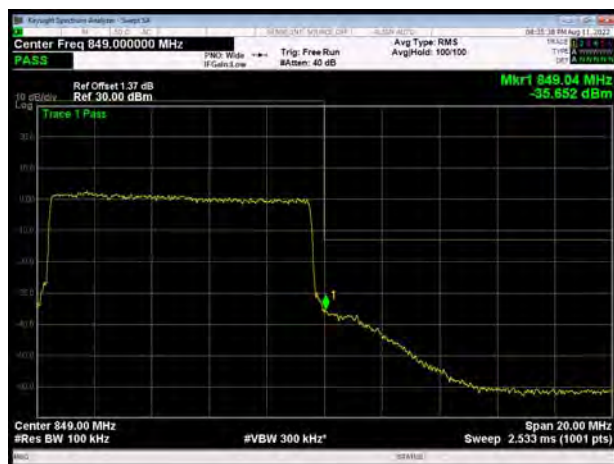




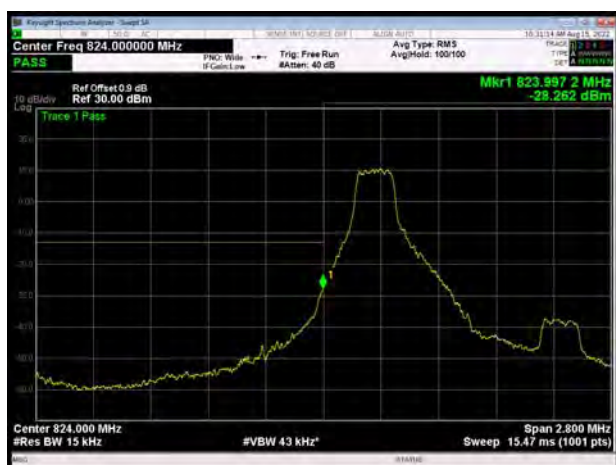
LTE Band 5 16QAM 10MHz CH-Low 100%RB



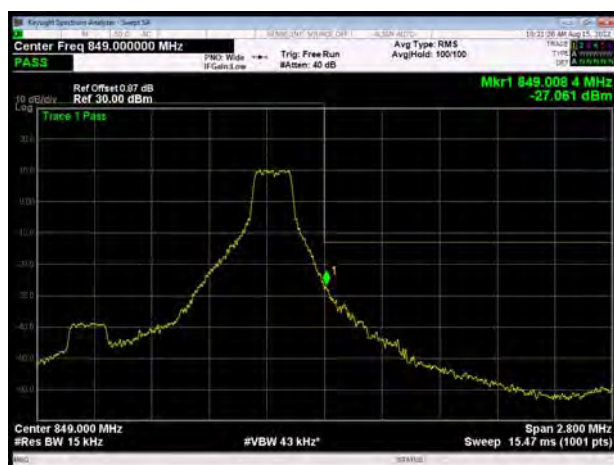
LTE Band 5 16QAM 10MHz CH-High 100%RB



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

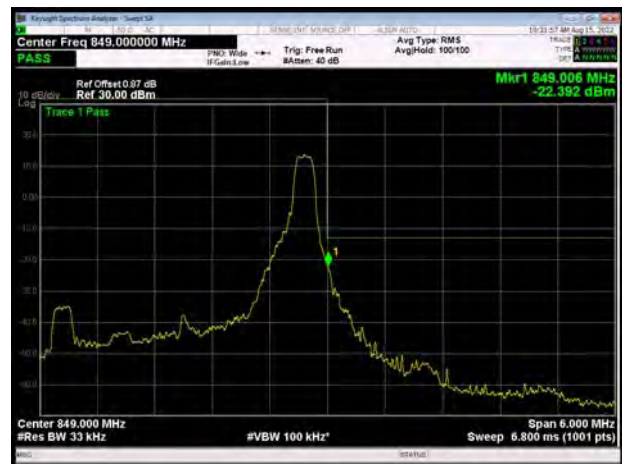




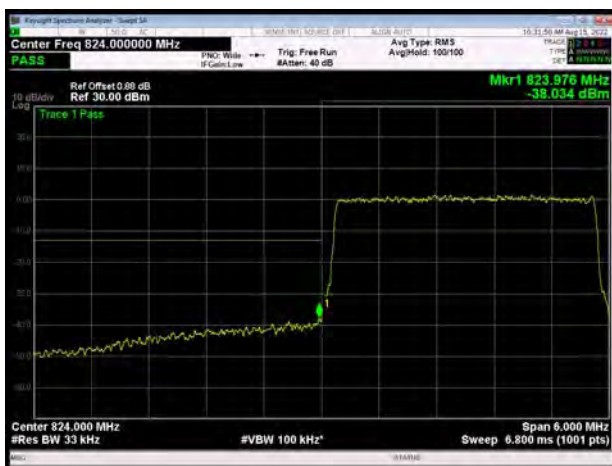
LTE Band 5 64QAM 3MHz CH-Low 1RB



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



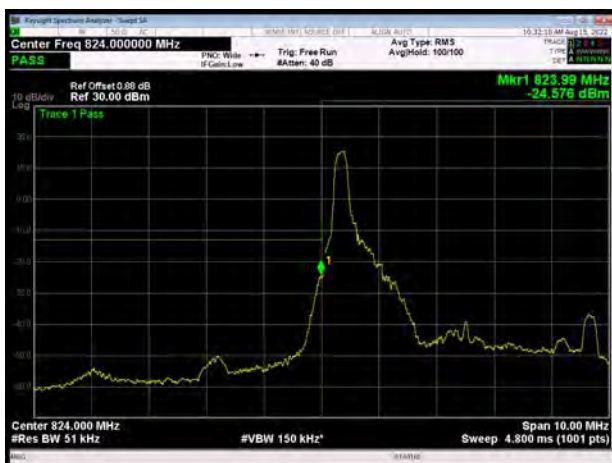
LTE Band 5 64QAM 3MHz CH-Low 100%RB



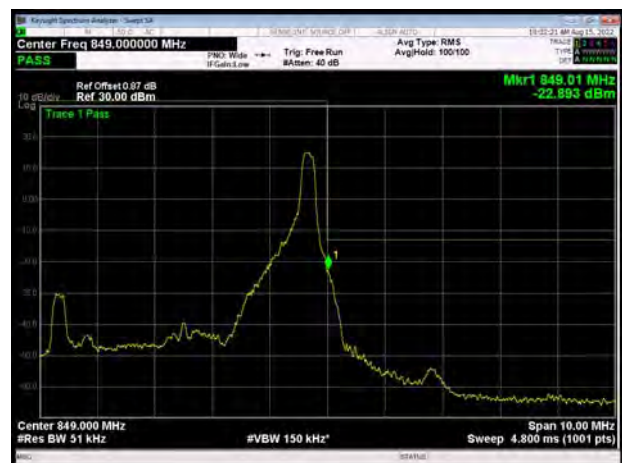
LTE Band 5 64QAM 3MHz CH-High 100%RB



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

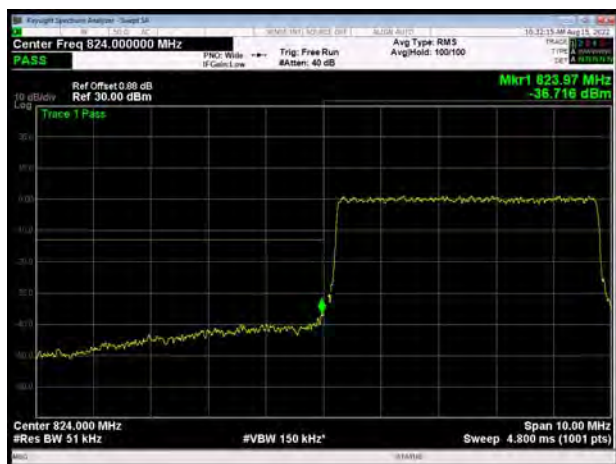


LTE Band 5 64QAM 5MHz CH-High 1RB

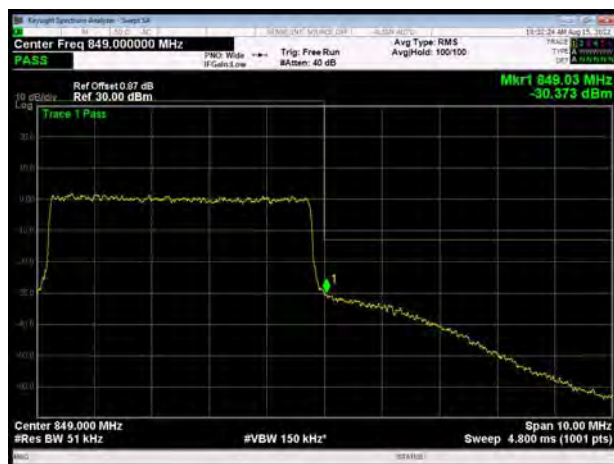




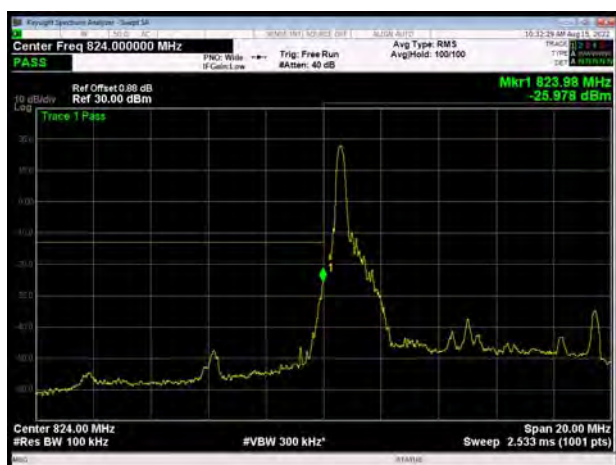
LTE Band 5 64QAM 5MHz CH-Low 100%RB



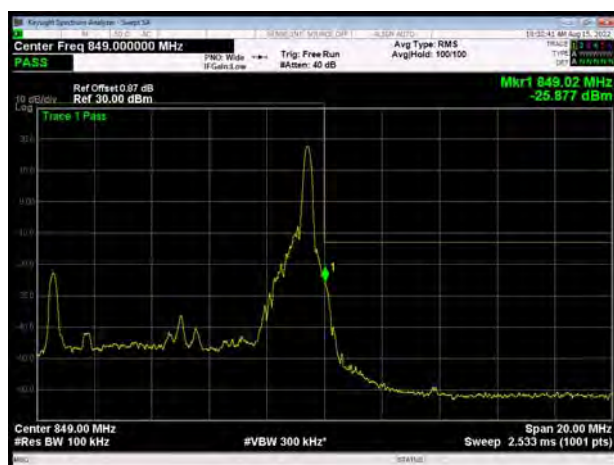
LTE Band 5 64QAM 5MHz CH-High 100%RB



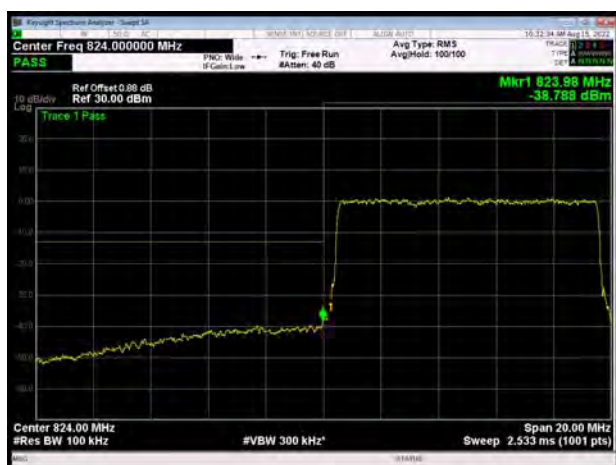
LTE Band 5 64QAM 10MHz CH-Low 1RB



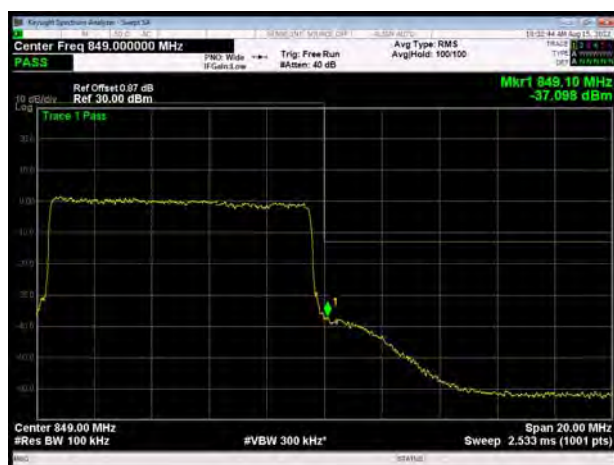
LTE Band 5 64QAM 10MHz CH-High 1RB



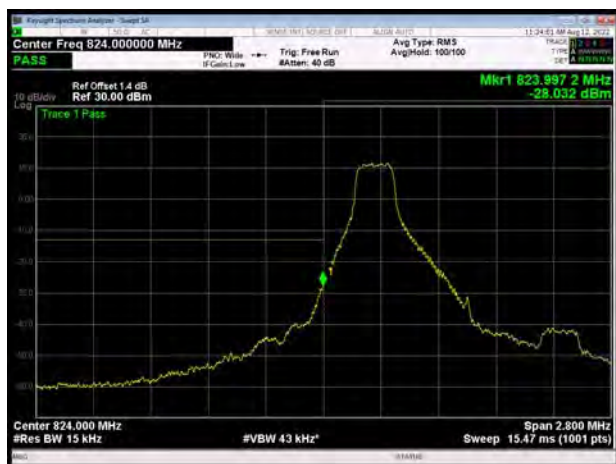
LTE Band 5 64QAM 10MHz CH-Low 100%RB



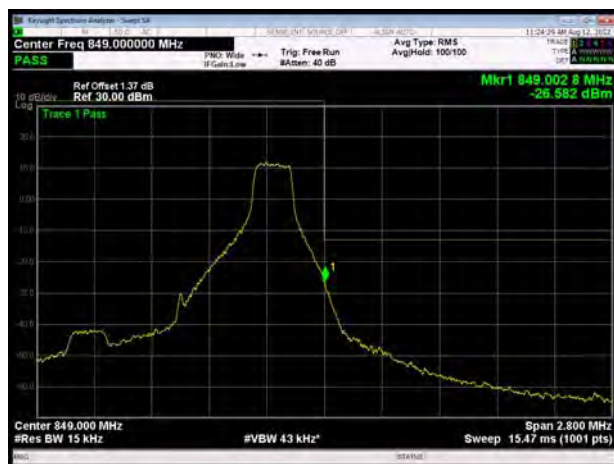
LTE Band 5 64QAM 10MHz CH-High 100%RB



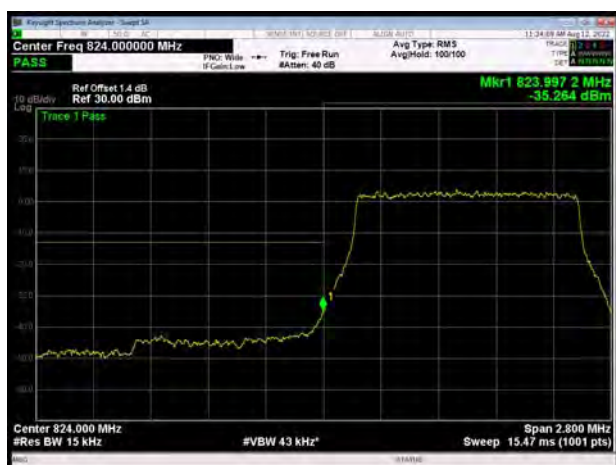
LTE Band 26 QPSK 1.4MHz CH-Low 1RB



LTE Band 26 QPSK 1.4MHz CH-High 1RB



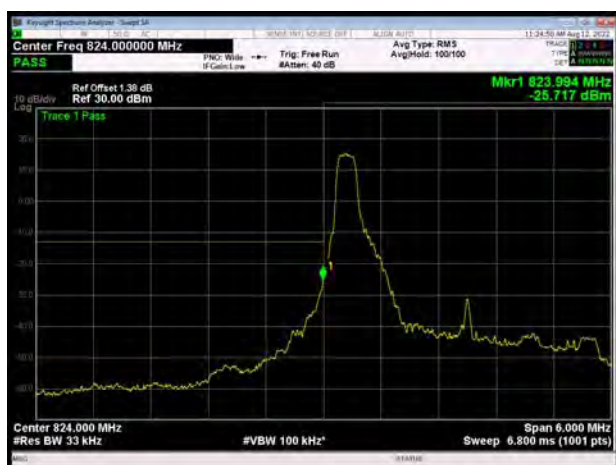
LTE Band 26 QPSK 1.4MHz CH-Low 100%RB



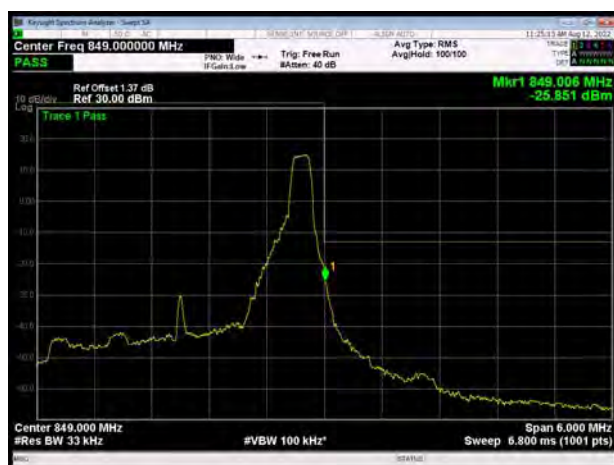
LTE Band 26 QPSK 1.4MHz CH-High 100%RB



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



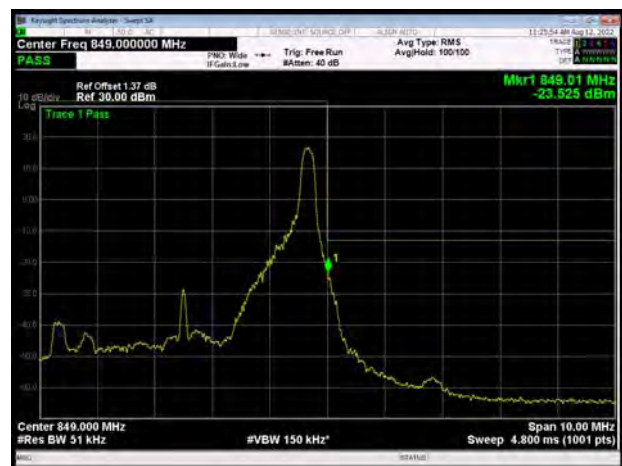
LTE Band 26 QPSK 3MHz CH-High 100%RB



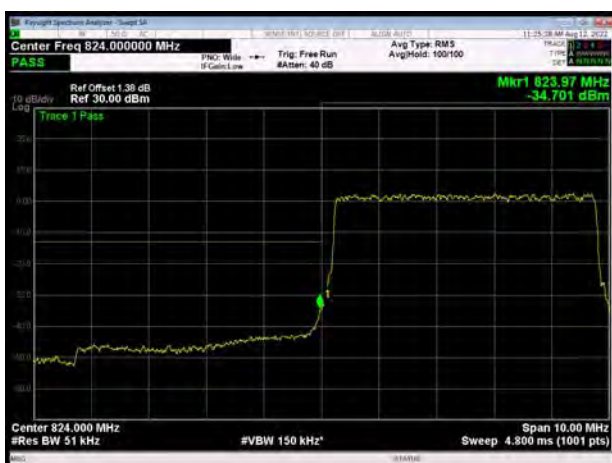
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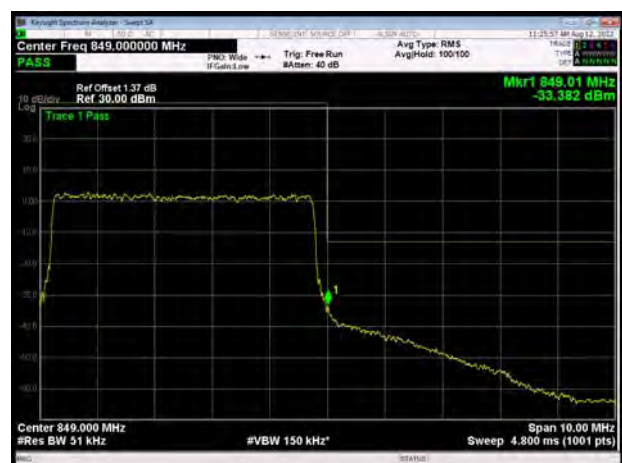
LTE Band 26 QPSK 5MHz CH-High 1RB



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



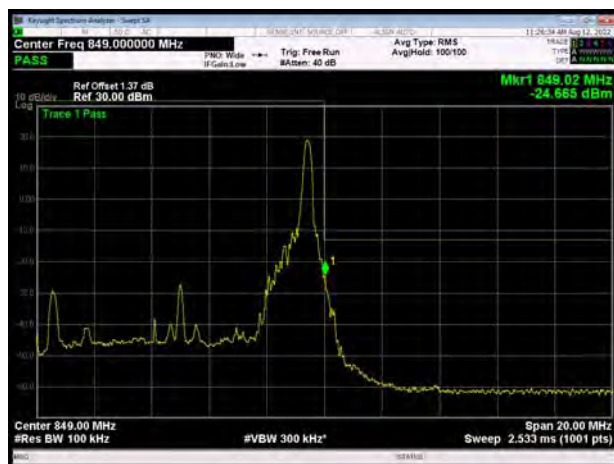
LTE Band 26 QPSK 5MHz CH-High 100%RB



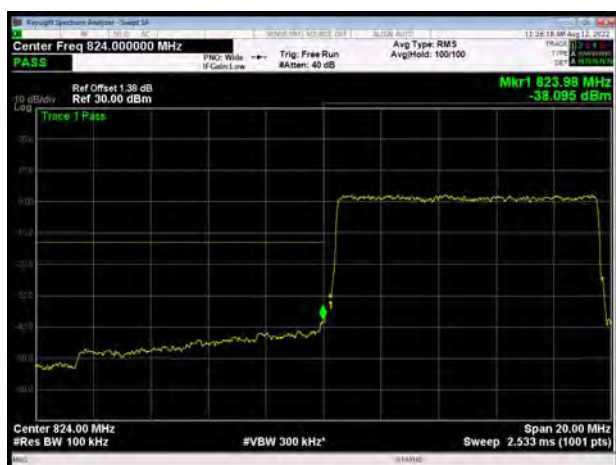
LTE Band 26 QPSK 10MHz CH-Low 1RB



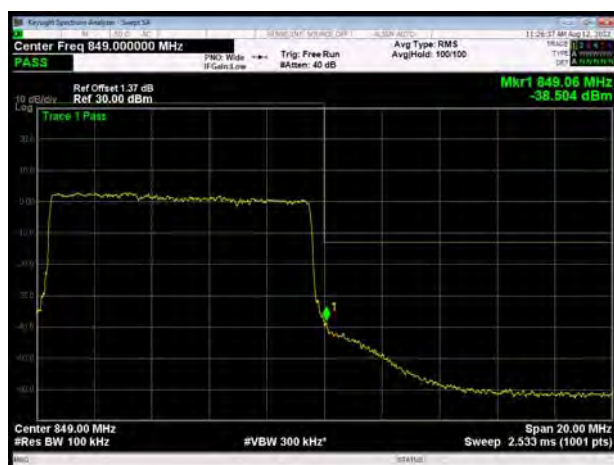
LTE Band 26 QPSK 10MHz CH-High 1RB



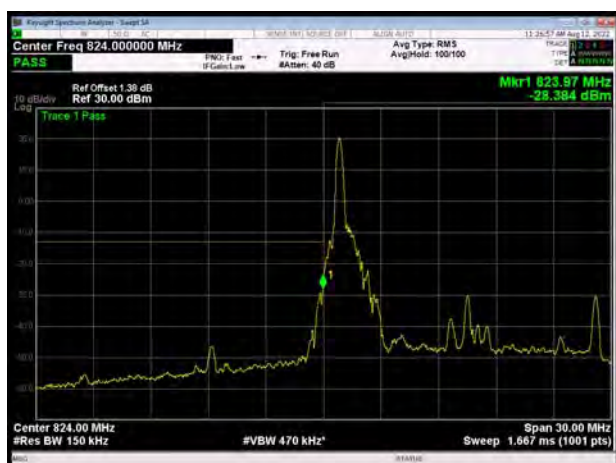
LTE Band 26 QPSK 10MHz CH-Low 100%RB



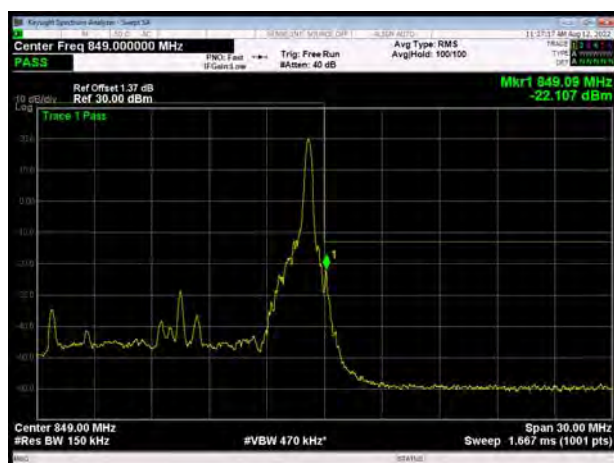
LTE Band 26 QPSK 10MHz CH-High 100%RB



LTE Band 26 QPSK 15MHz CH-Low 1RB

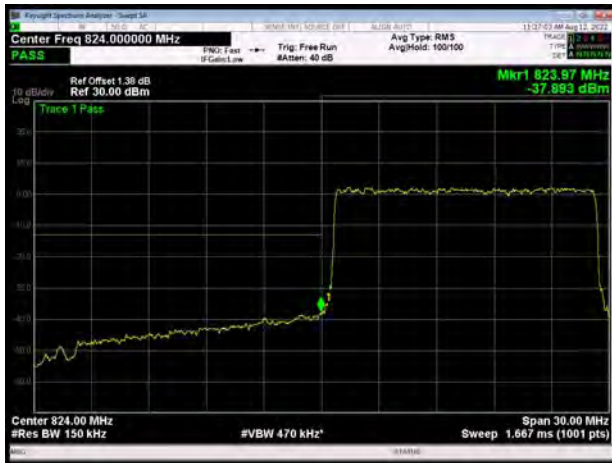


LTE Band 26 QPSK 15MHz CH-High 1RB





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



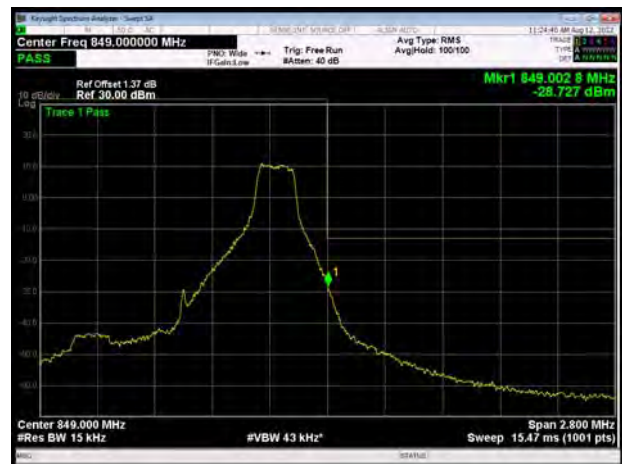
LTE Band 26 QPSK 15MHz CH-High 100%RB



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

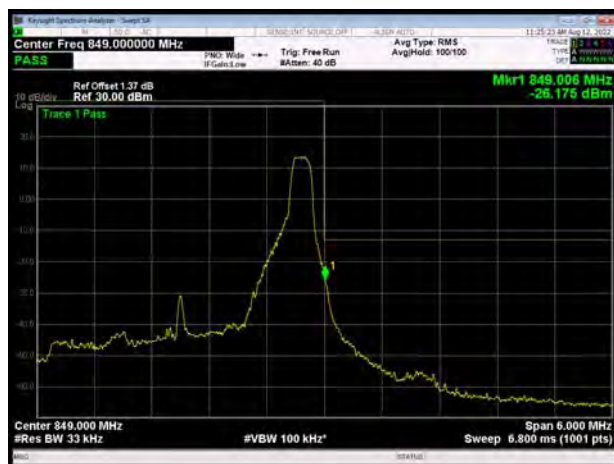




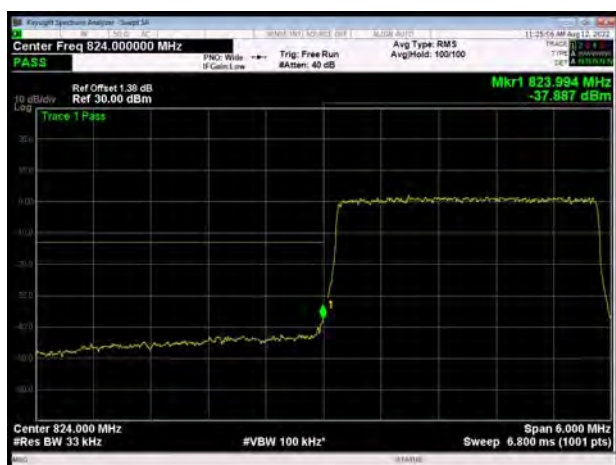
LTE Band 26 16QAM 3MHz CH-Low 1RB



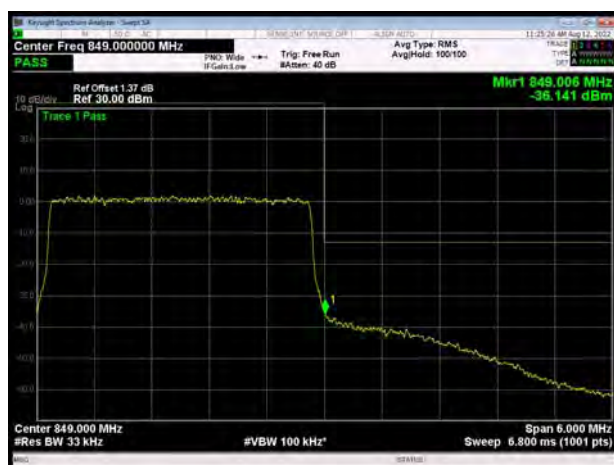
LTE Band 26 16QAM 3MHz CH-High 1RB



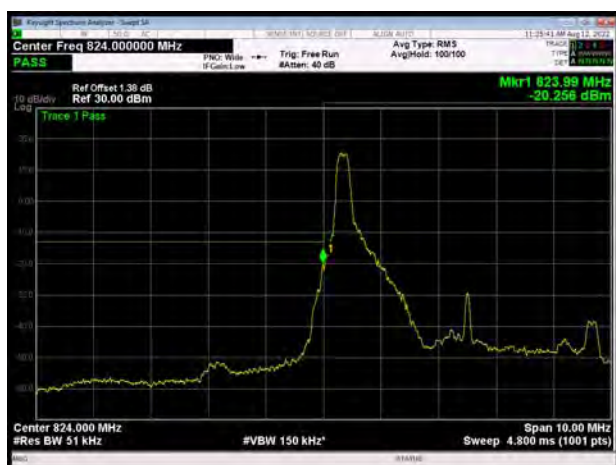
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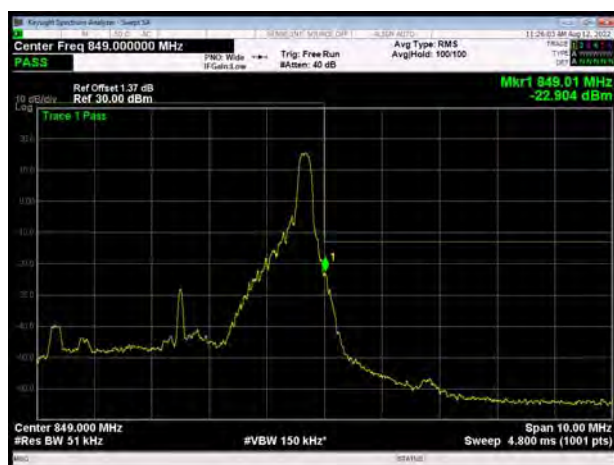
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LTE Band 26 16QAM 5MHz CH-Low 1RB

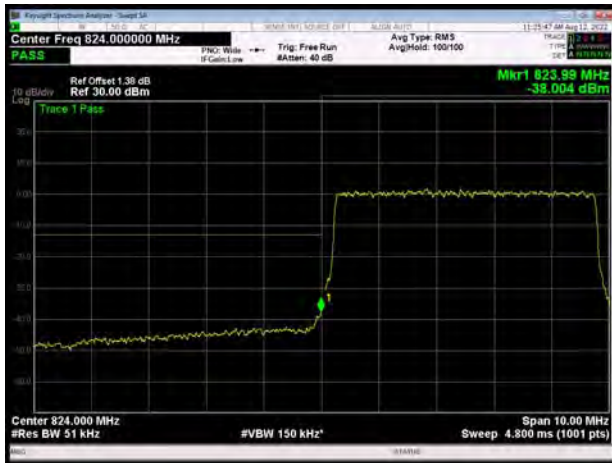


LTE Band 26 16QAM 5MHz CH-High 1RB





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



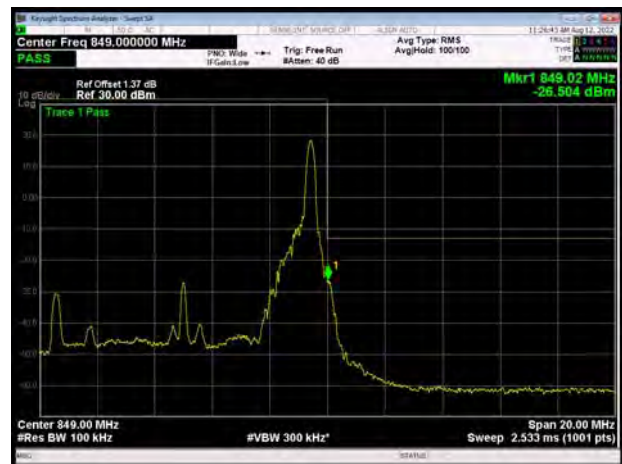
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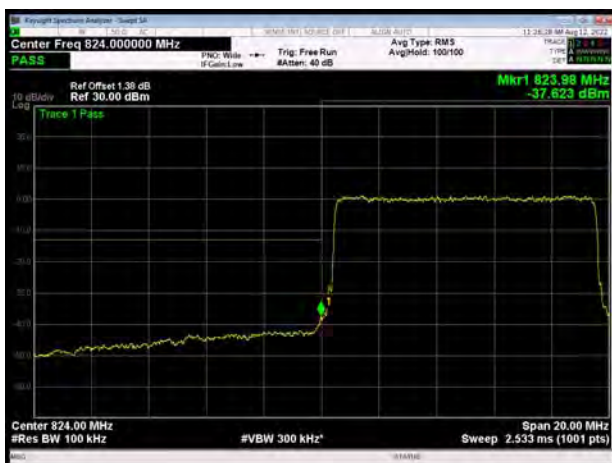
LTE Band 26 16QAM 10MHz CH-Low 1RB



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



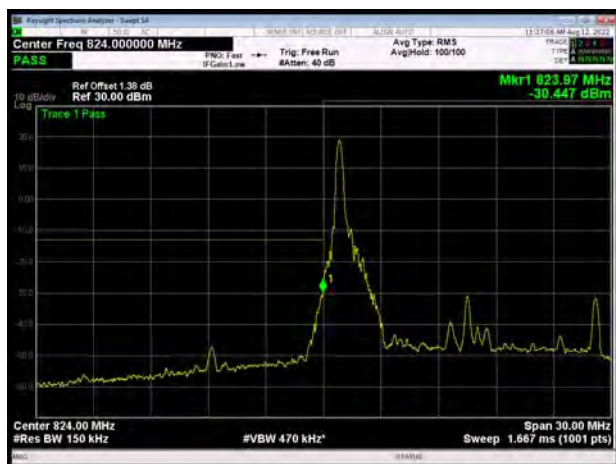
LTE Band 26 16QAM 10MHz CH-Low 100%RB



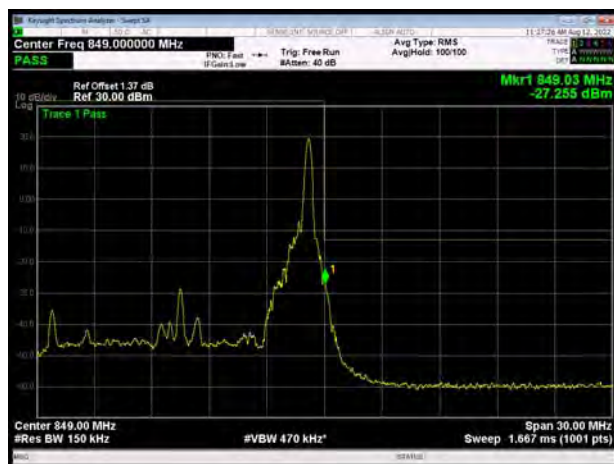
LTE Band 26 16QAM 10MHz CH-High 100%RB



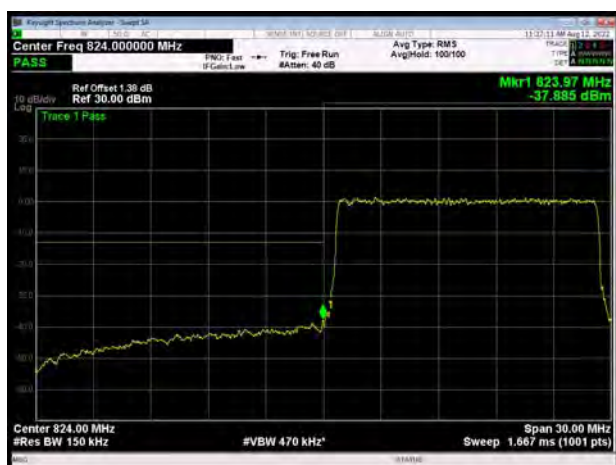
LTE Band 26 16QAM 15MHz CH-Low 1RB



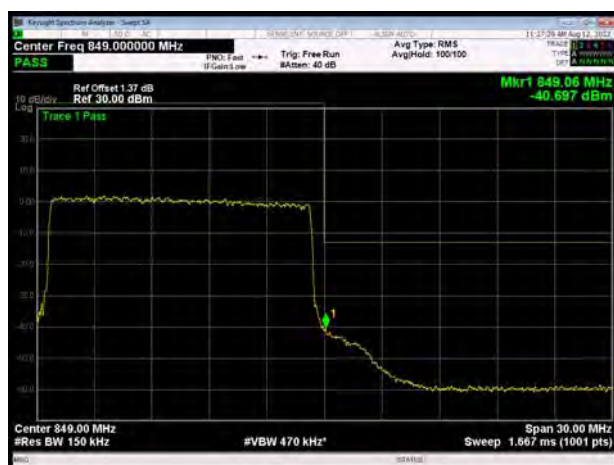
LTE Band 26 16QAM 15MHz CH-High 1RB



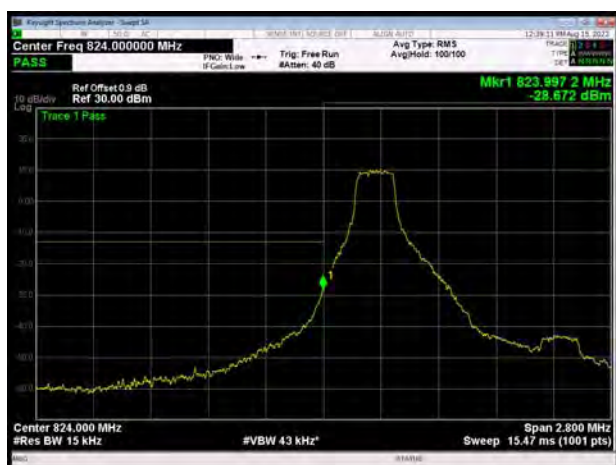
LTE Band 26 16QAM 15MHz CH-Low 100%RB



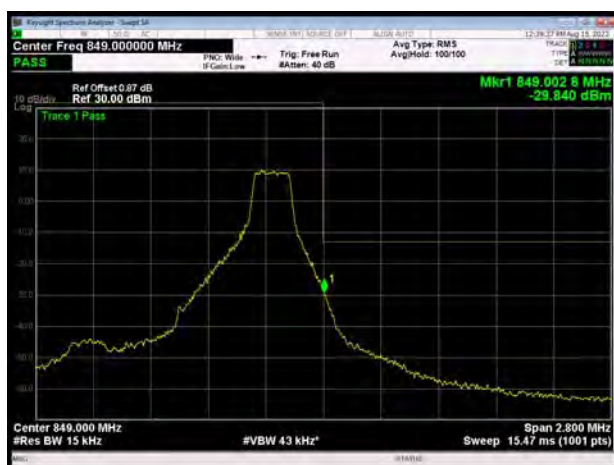
LTE Band 26 16QAM 15MHz CH-High 100%RB



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

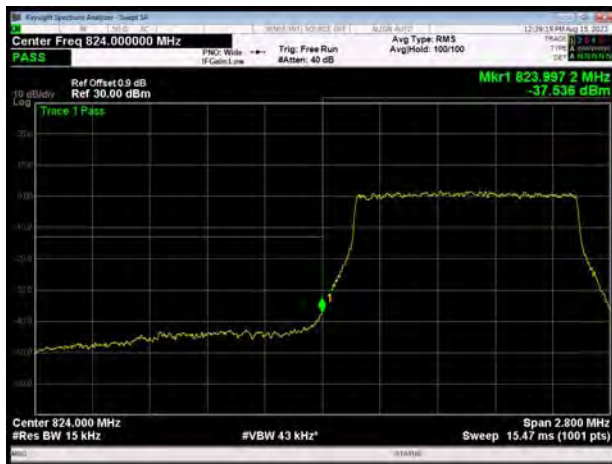


LTE Band 26 64QAM 1.4MHz CH-High 1RB





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



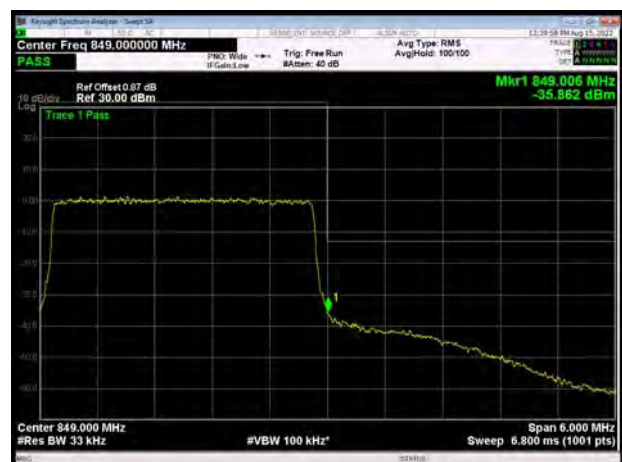
LTE Band 26 64QAM 3MHz CH-High 1RB



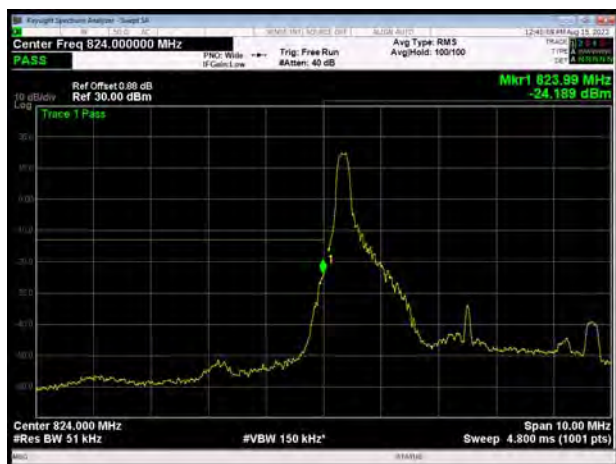
LTE Band 26 64QAM 3MHz CH-Low 100%RB



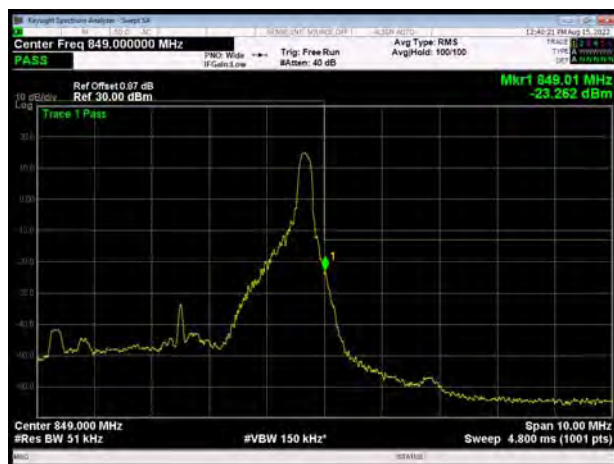
LTE Band 26 64QAM 3MHz CH-High 100%RB



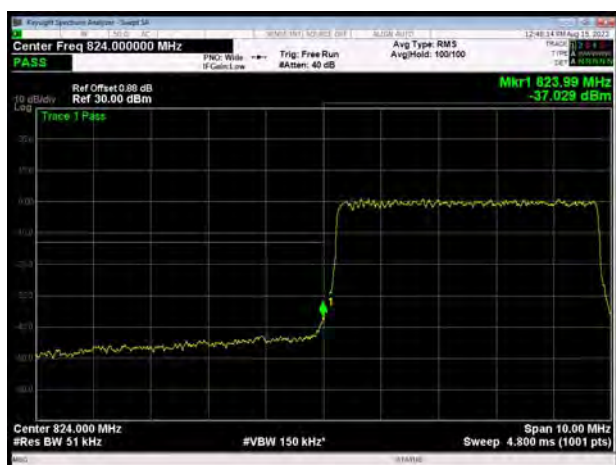
LTE Band 26 64QAM 5MHz CH-Low 1RB



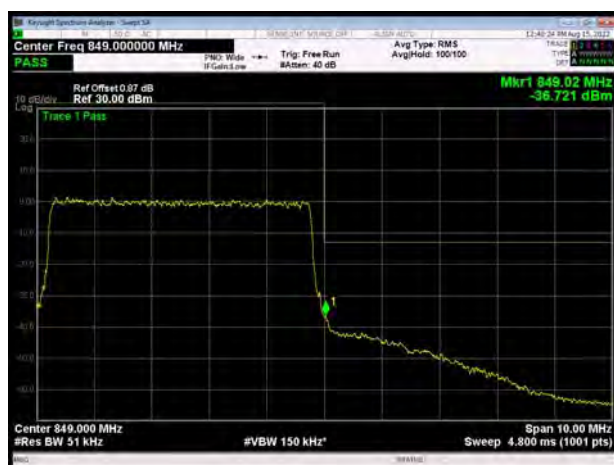
LTE Band 26 64QAM 5MHz CH-High 1RB



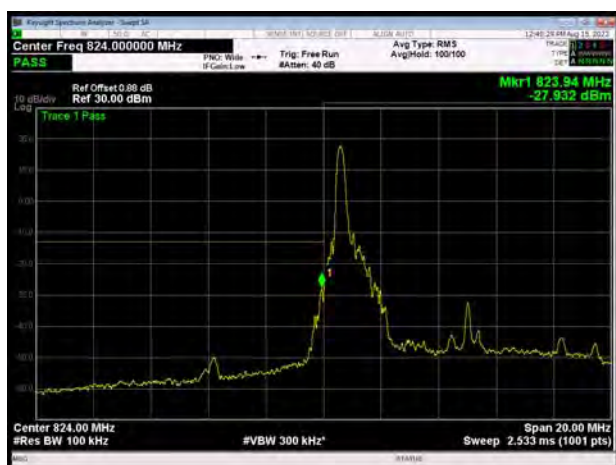
LTE Band 26 64QAM 5MHz CH-Low 100%RB



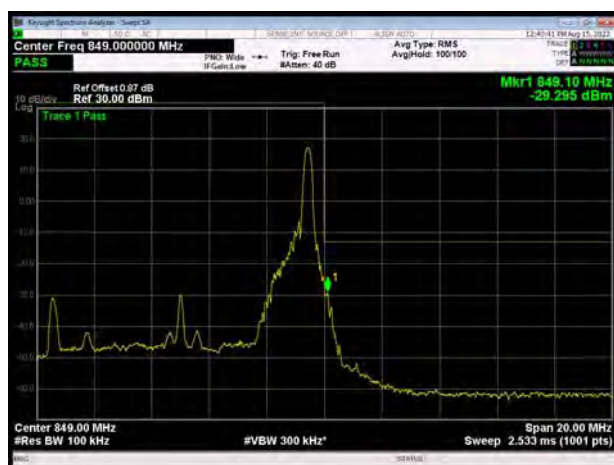
LTE Band 26 64QAM 5MHz CH-High 100%RB



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



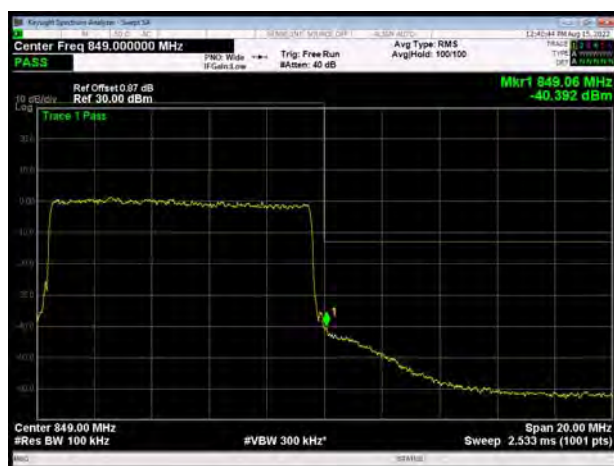
LTE Band 26 64QAM 10MHz CH-High 1RB



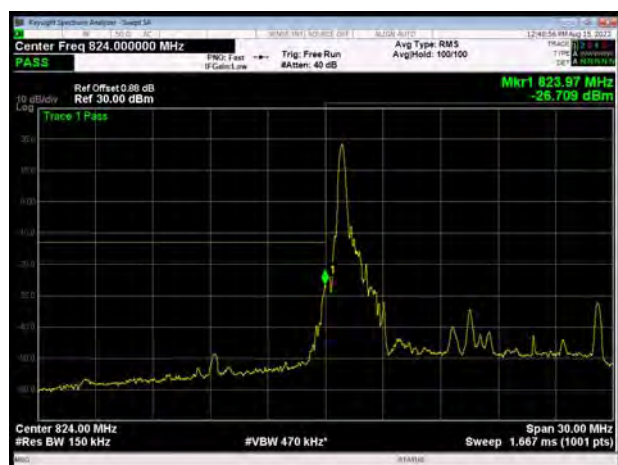
LTE Band 26 64QAM 10MHz CH-Low 100%RB



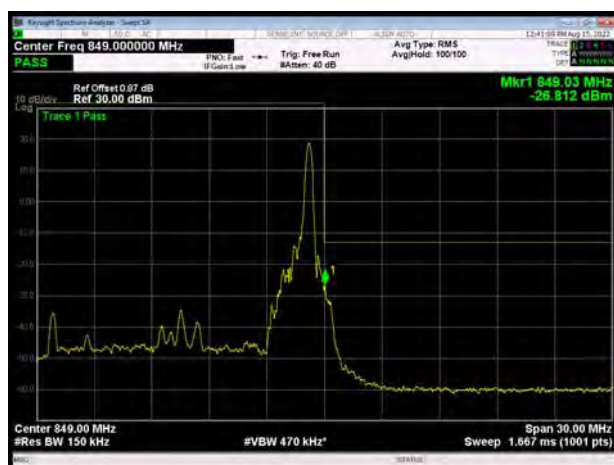
LTE Band 26 64QAM 10MHz CH-High 100%RB



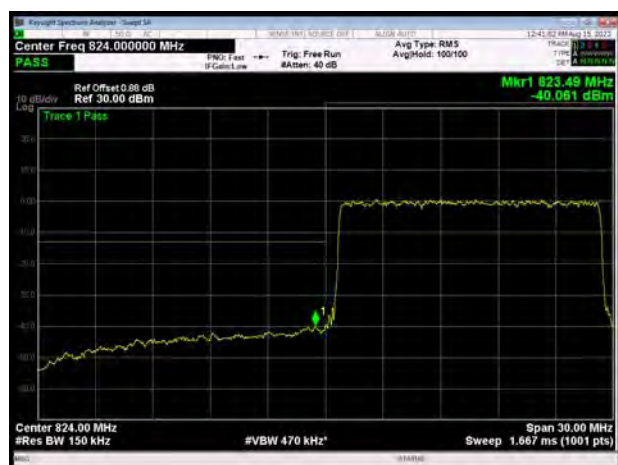
LTE Band 26 64QAM 15MHz CH-Low 1RB



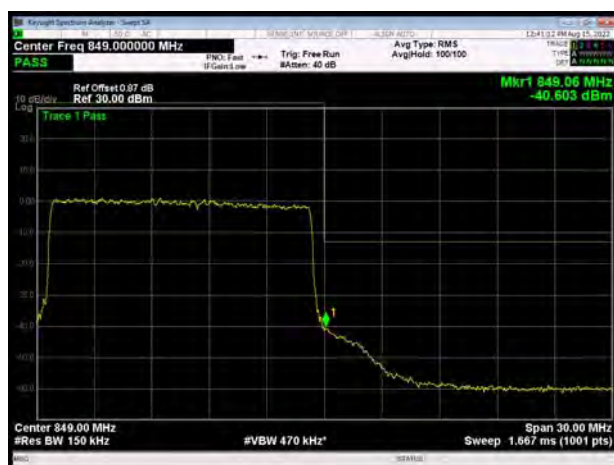
LTE Band 26 64QAM 15MHz CH-High 1RB



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
GPRS 850 (GMSK)	128	824.2	32.36	29.60	2.76	≤13	PASS
	190	836.6	32.35	29.59	2.76	≤13	PASS
	251	848.8	32.42	29.67	2.75	≤13	PASS
EGPRS 850 (8PSK)	128	824.2	26.99	21.23	5.76	≤13	PASS
	190	836.6	26.98	21.15	5.83	≤13	PASS
	251	848.8	27.02	21.17	5.85	≤13	PASS
WCDMA Band V (RMC)	4132	826.4	25.38	22.51	2.87	≤13	PASS
	4183	836.6	25.32	22.47	2.85	≤13	PASS
	4233	846.6	25.37	22.49	2.88	≤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	27.08	20.61	6.47	≤13	PASS
		20525	836.5	26.79	20.61	6.18	≤13	PASS
		20643	848.3	27.64	20.56	7.08	≤13	PASS
	3	20415	825.5	26.94	20.60	6.34	≤13	PASS
		20525	836.5	26.66	20.62	6.04	≤13	PASS
		20635	847.5	28.03	20.67	7.36	≤13	PASS
	5	20425	826.5	27.21	20.67	6.54	≤13	PASS
		20525	836.5	27.02	20.65	6.37	≤13	PASS
		20625	846.5	28.25	20.81	7.44	≤13	PASS
	10	20450	829	27.03	20.68	6.35	≤13	PASS
		20525	836.5	26.86	20.66	6.20	≤13	PASS
		20600	844	27.34	20.71	6.63	≤13	PASS
16QAM	1.4	20407	824.7	26.59	19.64	6.95	≤13	PASS
		20525	836.5	26.51	19.70	6.81	≤13	PASS
		20643	848.3	27.66	19.73	7.93	≤13	PASS
	3	20415	825.5	26.57	19.65	6.92	≤13	PASS
		20525	836.5	26.39	19.64	6.75	≤13	PASS
		20635	847.5	27.86	19.78	8.08	≤13	PASS
	5	20425	826.5	26.83	19.72	7.11	≤13	PASS
		20525	836.5	26.47	19.67	6.80	≤13	PASS
		20625	846.5	27.95	19.85	8.10	≤13	PASS



64QAM	10	20450	829	26.74	19.72	7.02	≤13	PASS
		20525	836.5	26.56	19.71	6.85	≤13	PASS
		20600	844	27.02	19.74	7.28	≤13	PASS
	1.4	20407	824.7	26.17	19.08	7.09	≤13	PASS
		20525	836.5	26.02	19.13	6.89	≤13	PASS
		20643	848.3	27.18	19.22	7.96	≤13	PASS
	3	20415	825.5	26.23	19.11	7.12	≤13	PASS
		20525	836.5	26.03	19.10	6.93	≤13	PASS
		20635	847.5	27.36	19.23	8.13	≤13	PASS
	5	20425	826.5	26.10	19.00	7.10	≤13	PASS
		20525	836.5	25.88	18.98	6.90	≤13	PASS
		20625	846.5	27.13	19.07	8.06	≤13	PASS
	10	20450	829	26.09	19.13	6.96	≤13	PASS
		20525	836.5	26.18	19.18	7.00	≤13	PASS
		20600	844	26.45	19.16	7.29	≤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	26.03	20.52	5.51	≤13	PASS
		26915	836.5	25.85	20.41	5.44	≤13	PASS
		27033	848.3	25.94	20.45	5.49	≤13	PASS
	3	26805	825.5	26.01	20.47	5.54	≤13	PASS
		26915	836.5	25.87	20.43	5.44	≤13	PASS
		27025	847.5	25.99	20.43	5.56	≤13	PASS
	5	26815	826.5	26.13	20.49	5.64	≤13	PASS
		26915	836.5	25.98	20.42	5.56	≤13	PASS
		27015	846.5	26.20	20.51	5.69	≤13	PASS
	10	26840	829	26.01	20.49	5.52	≤13	PASS
		26915	836.5	25.97	20.45	5.52	≤13	PASS
		26990	844	25.98	20.49	5.49	≤13	PASS
	15	26865	831.5	26.42	20.48	5.94	≤13	PASS
		26915	836.5	26.38	20.45	5.93	≤13	PASS
		26965	841.5	26.23	20.42	5.81	≤13	PASS
16QAM	1.4	26797	824.7	25.71	19.55	6.16	≤13	PASS
		26915	836.5	25.70	19.48	6.22	≤13	PASS
		27033	848.3	25.60	19.46	6.14	≤13	PASS
	3	26805	825.5	25.78	19.48	6.30	≤13	PASS
		26915	836.5	25.70	19.45	6.25	≤13	PASS



		27025	847.5	25.75	19.49	6.26	≤ 13	PASS
	5	26815	826.5	25.76	19.48	6.28	≤ 13	PASS
		26915	836.5	25.71	19.46	6.25	≤ 13	PASS
		27015	846.5	25.86	19.58	6.28	≤ 13	PASS
	10	26840	829	25.78	19.48	6.30	≤ 13	PASS
		26915	836.5	25.74	19.49	6.25	≤ 13	PASS
		26990	844	25.77	19.52	6.25	≤ 13	PASS
	15	26865	831.5	25.84	19.50	6.34	≤ 13	PASS
		26915	836.5	25.82	19.47	6.35	≤ 13	PASS
		26965	841.5	25.70	19.45	6.25	≤ 13	PASS
64QAM	1.4	26797	824.7	25.03	18.79	6.24	≤ 13	PASS
		26915	836.5	24.85	18.65	6.20	≤ 13	PASS
		27033	848.3	24.80	18.75	6.05	≤ 13	PASS
	3	26805	825.5	24.96	18.70	6.26	≤ 13	PASS
		26915	836.5	24.98	18.69	6.29	≤ 13	PASS
		27025	847.5	24.94	18.71	6.23	≤ 13	PASS
	5	26815	826.5	24.94	18.71	6.23	≤ 13	PASS
		26915	836.5	24.98	18.71	6.27	≤ 13	PASS
		27015	846.5	25.04	18.80	6.24	≤ 13	PASS
	10	26840	829	24.95	18.70	6.25	≤ 13	PASS
		26915	836.5	24.93	18.71	6.22	≤ 13	PASS
		26990	844	24.91	18.73	6.18	≤ 13	PASS
	15	26865	831.5	25.02	18.71	6.31	≤ 13	PASS
		26915	836.5	25.08	18.73	6.35	≤ 13	PASS
		26965	841.5	24.93	18.68	6.25	≤ 13	PASS

6.5. Frequency Stability

GSM850						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	GMSK	8PSK	GMSK	8PSK	
Normal (25℃)	Normal	16.34	2.92	0.01953	0.00349	PASS
Extreme (45℃)		2.75	9.70	0.00329	0.01159	PASS
Extreme (40℃)		6.19	12.54	0.00740	0.01499	PASS
Extreme (30℃)		7.79	6.10	0.00931	0.00729	PASS
Extreme (20℃)		2.00	17.85	0.00239	0.02134	PASS
Extreme (10℃)		3.24	14.54	0.00388	0.01738	PASS
Extreme (0℃)		11.69	2.99	0.01398	0.00357	PASS
Extreme (-10℃)		12.64	13.81	0.01510	0.01650	PASS
25℃	LV	17.56	14.31	0.02099	0.01710	PASS
	HV	8.71	6.91	0.01041	0.00826	PASS

WCDMA B5						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	BPSK	QPSK	BPSK	QPSK	
Normal (25℃)	Normal	13.77	10.17	0.01646	0.01215	PASS
Extreme (45℃)		7.80	17.73	0.00932	0.02119	PASS
Extreme (40℃)		14.16	3.52	0.01692	0.00421	PASS
Extreme (30℃)		1.83	8.87	0.00219	0.01060	PASS
Extreme (20℃)		10.03	1.17	0.01199	0.00140	PASS
Extreme (10℃)		14.82	13.89	0.01772	0.01660	PASS
Extreme (0℃)		6.62	16.35	0.00791	0.01955	PASS
Extreme (-10℃)		17.17	1.47	0.02052	0.00176	PASS
25℃	LV	3.77	2.56	0.00451	0.00306	PASS
	HV	8.49	14.09	0.01015	0.01684	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	7.86	3.36	14.43	0.00940	0.00402	0.01725	PASS
Extreme (45℃)		14.38	10.25	5.95	0.01719	0.01225	0.00712	PASS
Extreme (40℃)		6.37	4.13	7.64	0.00762	0.00494	0.00913	PASS
Extreme (30℃)		5.94	2.58	11.30	0.00710	0.00308	0.01351	PASS
Extreme (20℃)		7.43	6.29	7.86	0.00889	0.00752	0.00940	PASS
Extreme (10℃)		13.98	3.89	5.27	0.01672	0.00465	0.00630	PASS
Extreme (0℃)		15.45	1.38	6.84	0.01847	0.00165	0.00818	PASS
Extreme (-10℃)		16.88	10.51	4.75	0.02019	0.01257	0.00568	PASS
25℃	LV	15.23	5.21	17.73	0.01821	0.00623	0.02119	PASS
	HV	5.11	14.95	17.95	0.00611	0.01788	0.02146	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	6.87	8.30	11.48	0.00821	0.00992	0.01372	PASS
Extreme (45℃)		14.55	14.46	9.01	0.01740	0.01729	0.01078	PASS
Extreme (40℃)		15.08	2.34	7.14	0.01803	0.00279	0.00853	PASS
Extreme (30℃)		7.04	12.31	17.53	0.00842	0.01471	0.02095	PASS
Extreme (20℃)		9.50	11.42	6.46	0.01136	0.01366	0.00772	PASS
Extreme (10℃)		15.73	8.78	12.42	0.01880	0.01049	0.01485	PASS
Extreme (0℃)		11.35	13.39	17.18	0.01357	0.01601	0.02054	PASS
Extreme (-10℃)		1.08	9.48	10.57	0.00130	0.01133	0.01263	PASS
25℃	LV	7.31	14.02	9.96	0.00874	0.01677	0.01191	PASS
	HV	10.05	7.92	17.86	0.01202	0.00946	0.02135	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	1.07	3.16	17.30	0.00128	0.00378	0.02068	PASS
Extreme (45℃)		2.85	10.77	2.71	0.00340	0.01288	0.00324	PASS
Extreme (40℃)		15.69	4.81	15.68	0.01875	0.00575	0.01874	PASS
Extreme (30℃)		12.55	9.09	11.64	0.01500	0.01087	0.01391	PASS
Extreme (20℃)		5.68	1.96	7.20	0.00679	0.00234	0.00861	PASS
Extreme (10℃)		11.05	16.20	10.76	0.01321	0.01937	0.01286	PASS



Extreme (0℃)		7.89	10.66	6.22	0.00943	0.01275	0.00743	PASS
Extreme (-10℃)		17.61	16.59	10.84	0.02105	0.01983	0.01295	PASS
25℃	LV	13.12	4.48	17.73	0.01569	0.00535	0.02120	PASS
	HV	16.07	10.76	9.62	0.01921	0.01287	0.01150	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	14.25	17.20	14.10	0.01703	0.02056	0.01685	PASS
Extreme (45℃)		7.70	7.41	10.29	0.00920	0.00886	0.01230	PASS
Extreme (40℃)		2.11	6.44	7.52	0.00252	0.00770	0.00899	PASS
Extreme (30℃)		16.54	9.15	10.51	0.01977	0.01094	0.01256	PASS
Extreme (20℃)		3.83	4.06	14.53	0.00458	0.00486	0.01737	PASS
Extreme (10℃)		3.49	15.58	8.92	0.00417	0.01863	0.01066	PASS
Extreme (0℃)		11.10	9.06	15.52	0.01327	0.01083	0.01855	PASS
Extreme (-10℃)		9.65	16.29	3.02	0.01153	0.01948	0.00361	PASS
25℃	LV	5.93	17.81	11.36	0.00709	0.02130	0.01359	PASS
	HV	10.82	16.82	16.52	0.01294	0.02011	0.01974	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	4.44	11.17	13.16	0.00530	0.01336	0.01573	PASS
Extreme (45℃)		5.06	14.82	3.55	0.00605	0.01771	0.00424	PASS
Extreme (40℃)		7.09	5.11	7.25	0.00848	0.00611	0.00866	PASS
Extreme (30℃)		9.58	7.46	15.05	0.01145	0.00892	0.01799	PASS
Extreme (20℃)		14.28	12.07	15.55	0.01707	0.01443	0.01859	PASS
Extreme (10℃)		2.91	7.16	11.27	0.00348	0.00856	0.01347	PASS
Extreme (0℃)		8.83	13.74	5.82	0.01056	0.01642	0.00695	PASS
Extreme (-10℃)		2.16	17.64	16.26	0.00258	0.02109	0.01944	PASS
25℃	LV	11.55	13.18	13.96	0.01380	0.01576	0.01669	PASS
	HV	6.42	5.02	3.18	0.00768	0.00600	0.00381	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	1.10	4.89	12.00	0.00132	0.00585	0.01435	PASS
Extreme (45℃)		11.86	4.59	13.36	0.01418	0.00549	0.01597	PASS



Extreme (40℃)		10.74	10.69	3.67	0.01284	0.01278	0.00438	PASS
Extreme (30℃)		14.35	7.19	3.30	0.01716	0.00860	0.00395	PASS
Extreme (20℃)		2.48	8.14	12.34	0.00296	0.00973	0.01475	PASS
Extreme (10℃)		4.50	3.13	14.25	0.00538	0.00374	0.01703	PASS
Extreme (0℃)		2.39	5.64	14.98	0.00285	0.00674	0.01791	PASS
Extreme (-10℃)		13.37	8.10	13.10	0.01598	0.00968	0.01566	PASS
25℃	LV	1.26	5.39	3.33	0.00150	0.00644	0.00398	PASS
	HV	8.62	4.22	8.55	0.01031	0.00504	0.01022	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	2.86	9.35	10.09	0.00342	0.01118	0.01206	PASS
Extreme (45℃)		9.49	5.87	10.09	0.01135	0.00702	0.01206	PASS
Extreme (40℃)		5.14	11.78	1.14	0.00614	0.01409	0.00136	PASS
Extreme (30℃)		17.60	8.93	12.72	0.02104	0.01067	0.01520	PASS
Extreme (20℃)		9.80	6.64	4.05	0.01171	0.00794	0.00484	PASS
Extreme (10℃)		12.09	7.74	2.11	0.01445	0.00925	0.00252	PASS
Extreme (0℃)		16.03	16.63	7.73	0.01916	0.01988	0.00924	PASS
Extreme (-10℃)		12.73	4.36	15.93	0.01522	0.00522	0.01904	PASS
25℃	LV	13.25	8.69	12.25	0.01584	0.01039	0.01465	PASS
	HV	4.23	11.25	15.63	0.00506	0.01345	0.01869	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	2.72	2.71	15.35	0.00325	0.00324	0.01835	PASS
Extreme (45℃)		6.72	1.41	12.03	0.00804	0.00169	0.01438	PASS
Extreme (40℃)		10.56	10.02	3.92	0.01262	0.01198	0.00468	PASS
Extreme (30℃)		9.87	6.04	14.86	0.01180	0.00722	0.01776	PASS
Extreme (20℃)		15.38	4.87	15.52	0.01839	0.00582	0.01855	PASS
Extreme (10℃)		7.50	4.60	2.13	0.00897	0.00550	0.00255	PASS
Extreme (0℃)		10.22	6.39	15.00	0.01222	0.00763	0.01793	PASS
Extreme (-10℃)		11.40	13.22	9.44	0.01363	0.01580	0.01128	PASS
25℃	LV	2.18	17.39	10.32	0.00260	0.02079	0.01234	PASS
	HV	8.10	12.54	1.34	0.00968	0.01499	0.00161	PASS



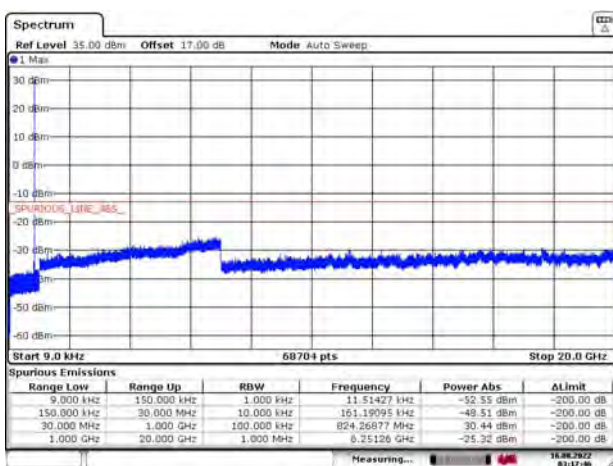
LTE Band 26								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	10.35	11.59	6.16	0.01238	0.01386	0.00737	PASS
Extreme (45℃)		10.12	9.69	4.81	0.01210	0.01158	0.00575	PASS
Extreme (40℃)		6.47	12.86	1.22	0.00773	0.01537	0.00146	PASS
Extreme (30℃)		17.83	12.87	1.43	0.02131	0.01538	0.00171	PASS
Extreme (20℃)		13.51	12.60	7.48	0.01616	0.01506	0.00895	PASS
Extreme (10℃)		7.03	15.45	8.98	0.00841	0.01847	0.01073	PASS
Extreme (0℃)		2.36	6.91	6.38	0.00282	0.00826	0.00763	PASS
Extreme (-10℃)		13.30	9.19	16.87	0.01590	0.01099	0.02017	PASS
25℃	LV	6.93	4.67	9.35	0.00828	0.00558	0.01117	PASS
	HV	10.81	16.48	3.17	0.01292	0.01971	0.00379	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.

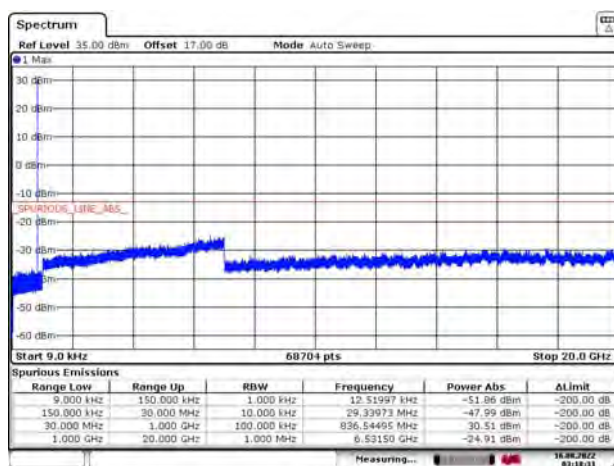
The signal beyond the limit is carrier.

GPRS GSM 850 CH-Low 9kHz ~ 20GHz



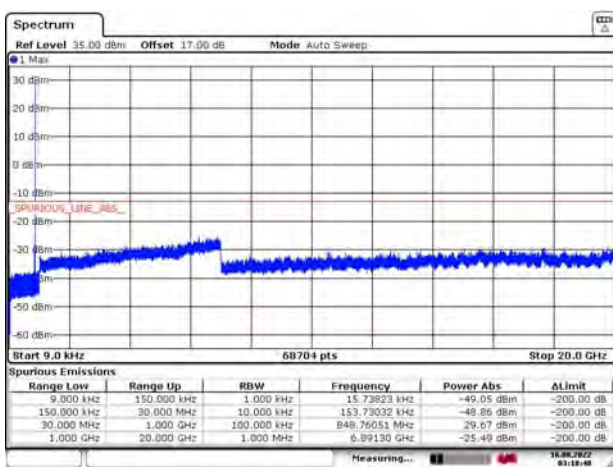
Date: 16 AUG 2022 03:17:47

GPRS GSM 850 CH- Middle 9kHz ~ 20G



Date: 16 AUG 2022 03:18:11

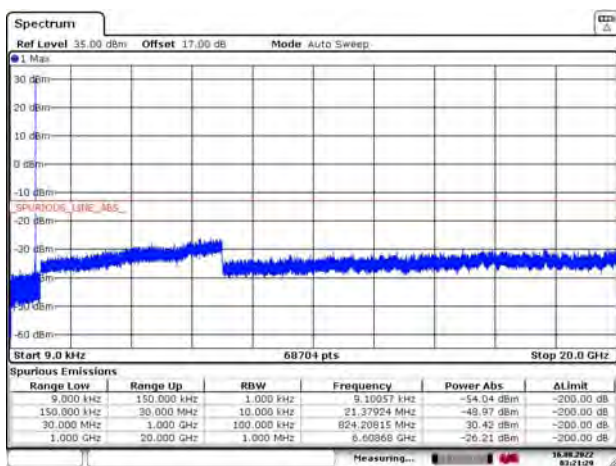
GPRS GSM 850 CH- High 9kHz ~ 20GHz



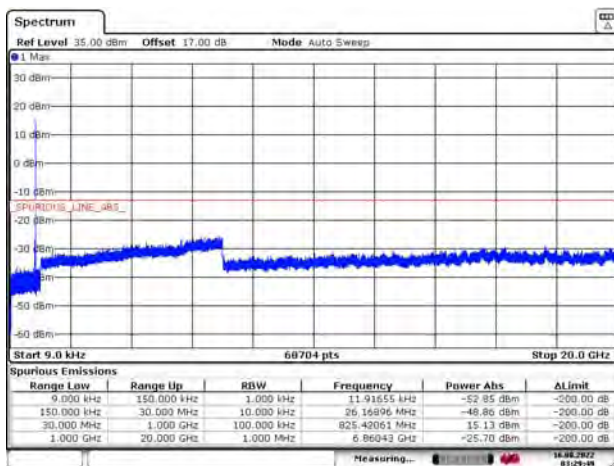
Date: 16 AUG 2022 03:18:48



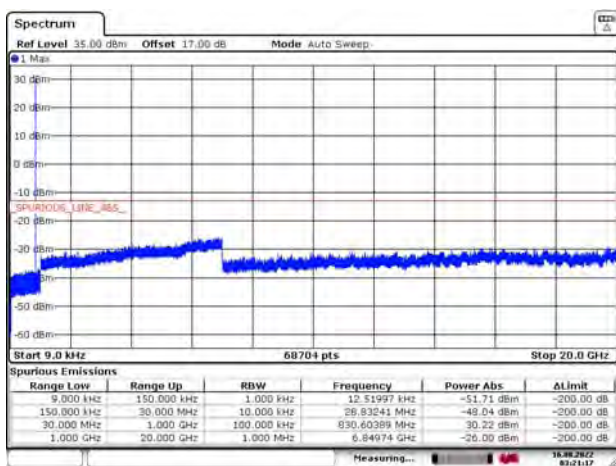
EGPRS 850 CH-Low 9kHz ~ 20GHz



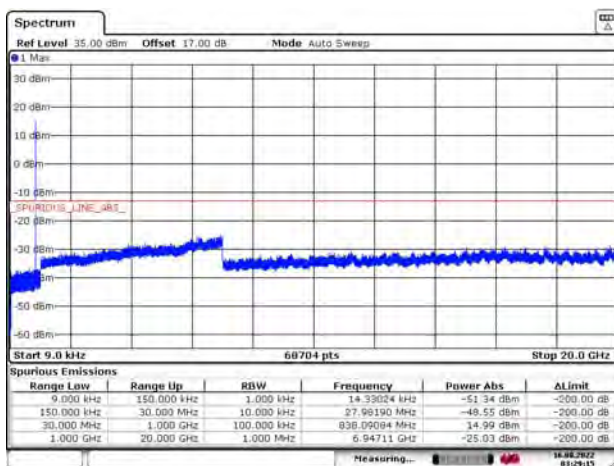
WCDMA BAND V CH-Low 9kHz ~ 20GHz



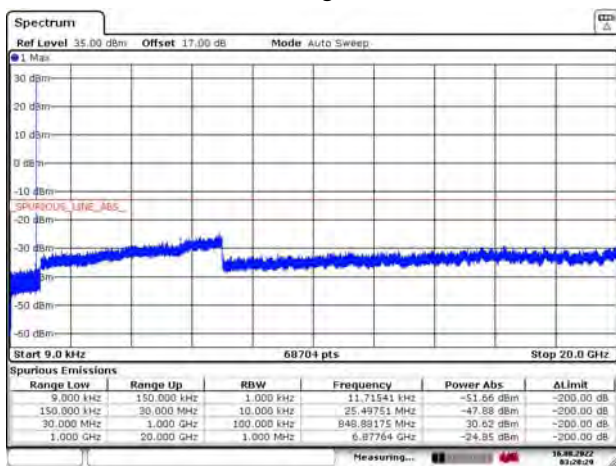
EGPRS 850 CH-Middle 9kHz ~ 20GHz



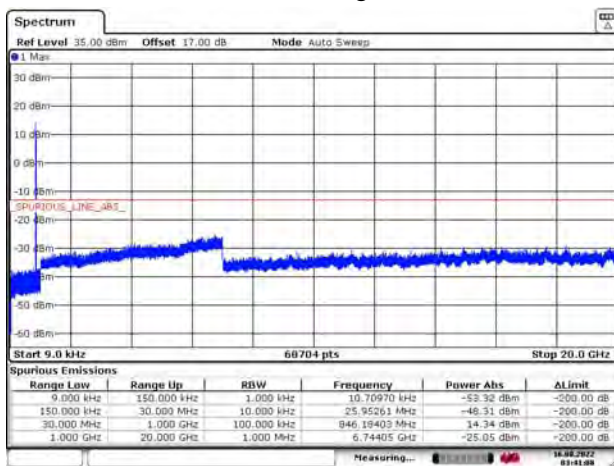
WCDMA BAND V CH-Middle 9kHz ~ 20GHz



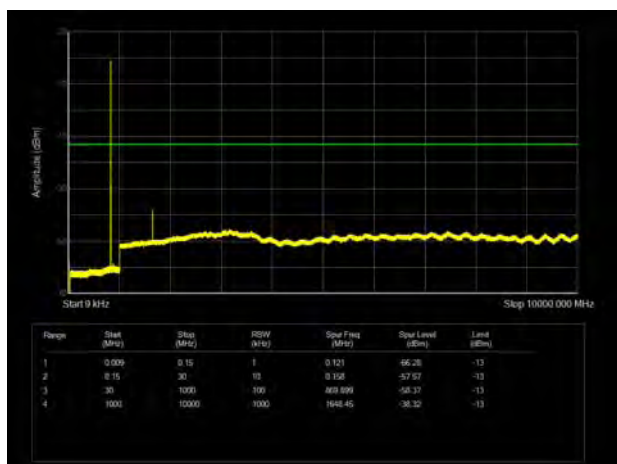
EGPRS 850 CH-High 9kHz ~ 20GHz



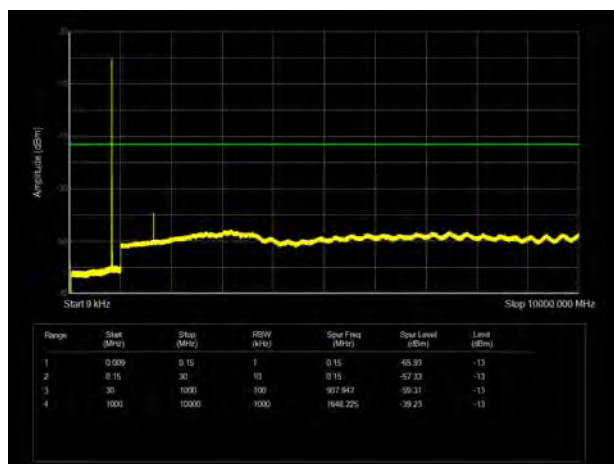
WCDMA BAND V CH-High 9kHz ~ 20GHz



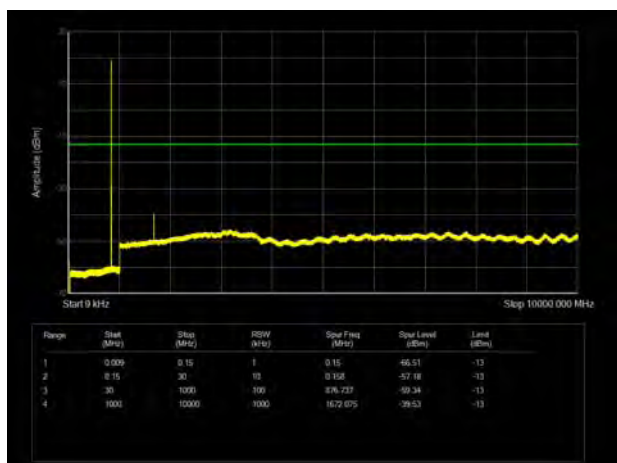
LTE Band 5 1.4MHz CH-Low 9kHz~10GHz



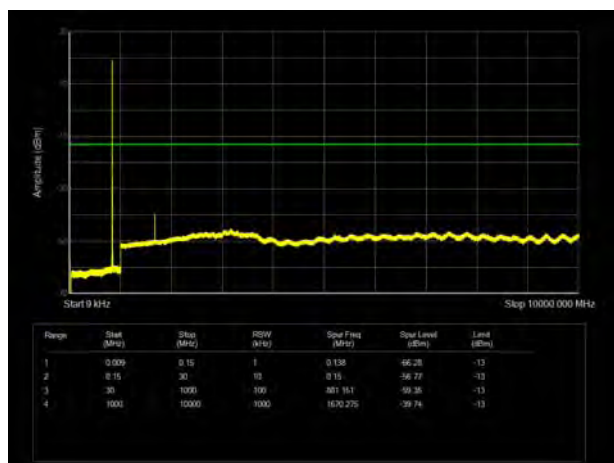
LTE Band 5 3MHz CH-Low 9kHz~10GHz



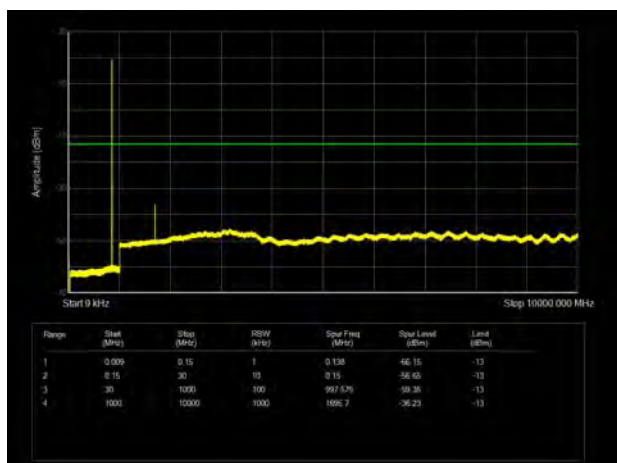
LTE Band 5 1.4MHz CH-Middle 9kHz~10GHz



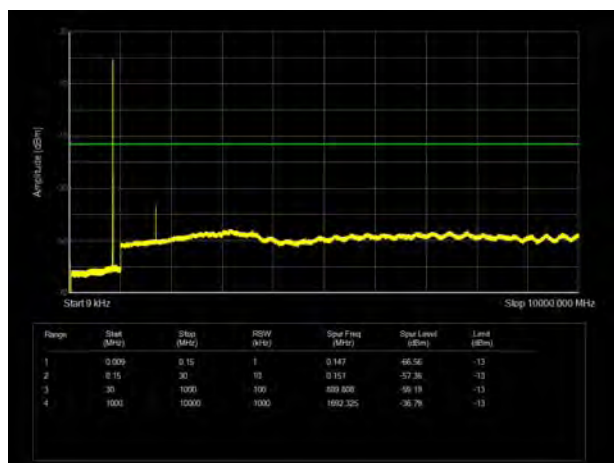
LTE Band 5 3MHz CH-Middle 9kHz~10GHz



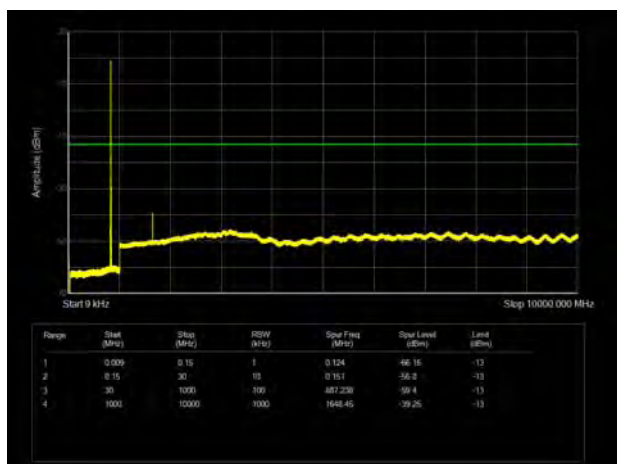
LTE Band 5 1.4MHz CH-High 9kHz~10GHz



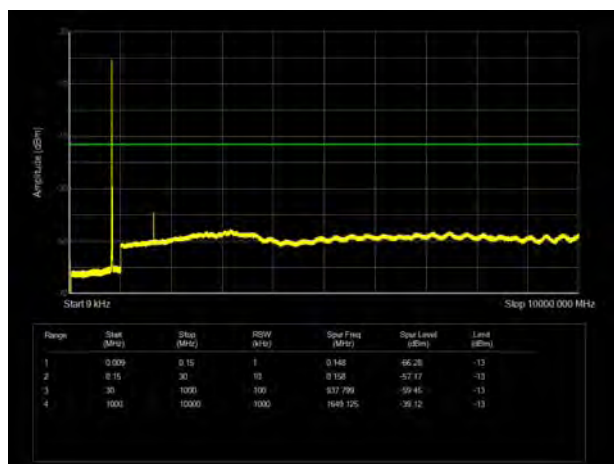
LTE Band 5 3MHz CH-High 9kHz~10GHz



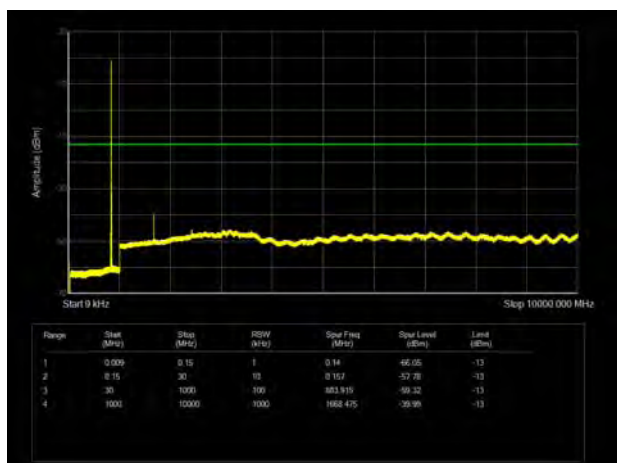
LTE Band 5 5MHz CH-Low 9kHz~10GHz



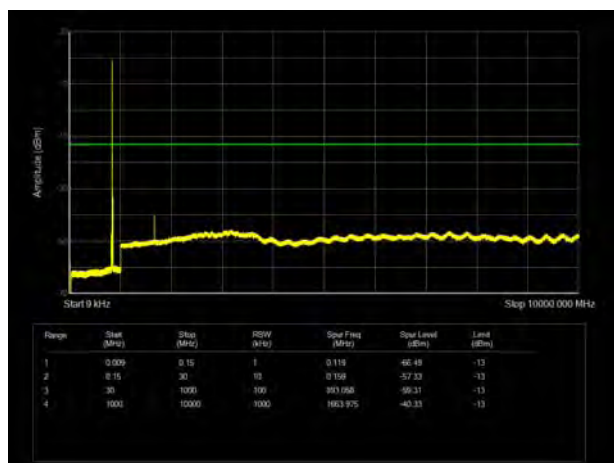
LTE Band 5 10MHz CH-Low 9kHz~10GHz



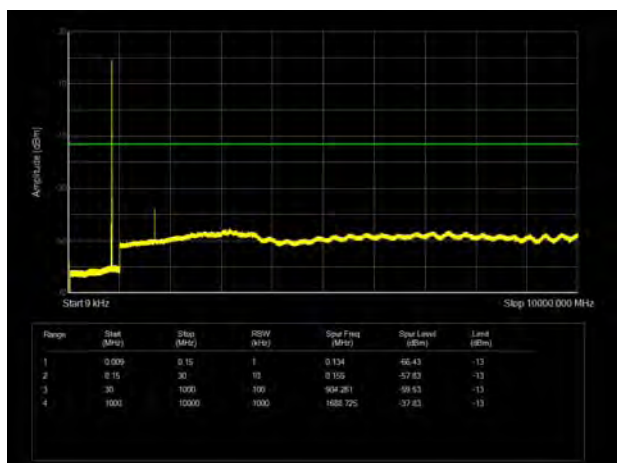
LTE Band 5 5MHz CH-Middle 9kHz~10GHz



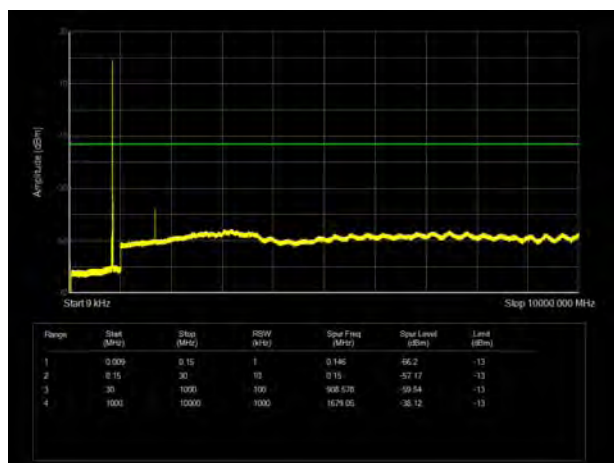
LTE Band 5 10MHz CH-Middle 9kHz~10GHz



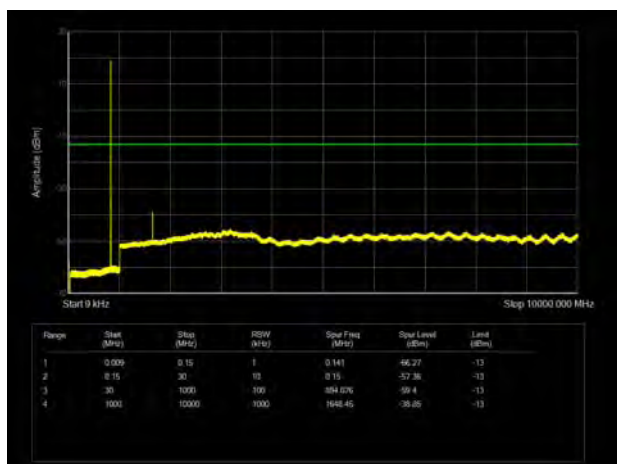
LTE Band 5 5MHz CH-High 9kHz~10GHz



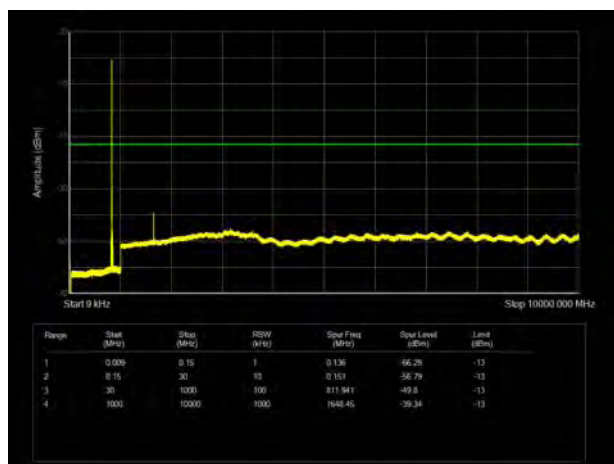
LTE Band 5 10MHz CH-High 9kHz~10GHz



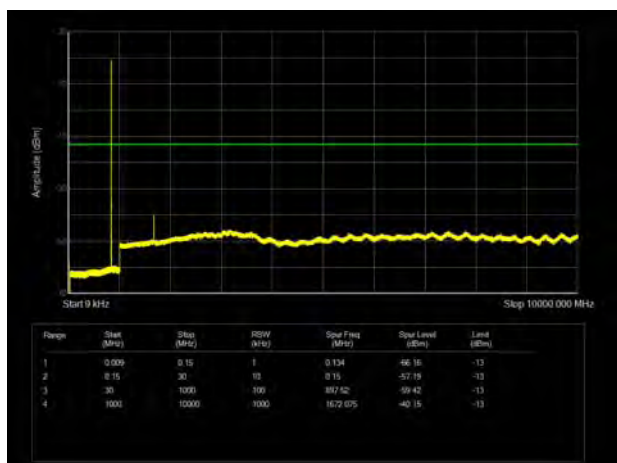
LTE Band 26 1.4MHz CH-Low 9kHz~10GHz



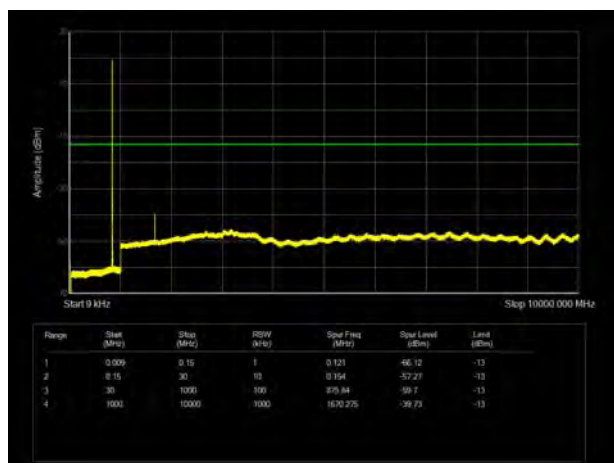
LTE Band 26 3MHz CH-Low 9kHz~10GHz



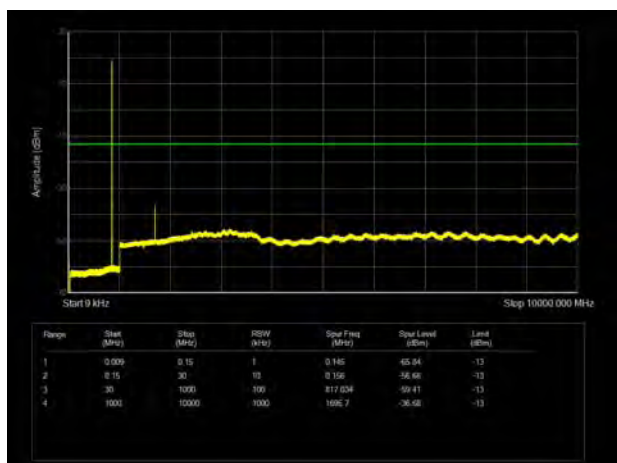
LTE Band 26 1.4MHz CH-Middle 9kHz~10GHz



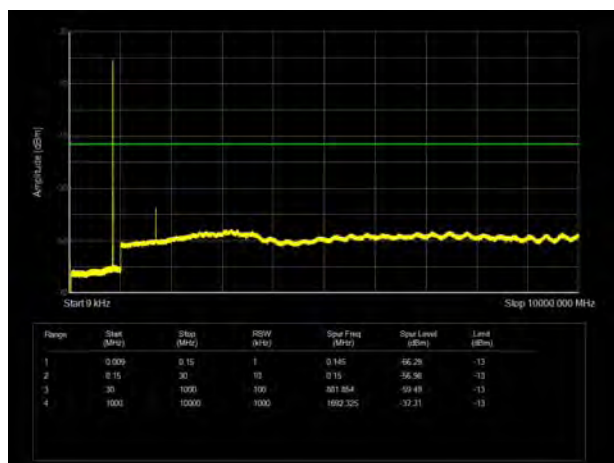
LTE Band 26 3MHz CH-Middle 9kHz~10GHz



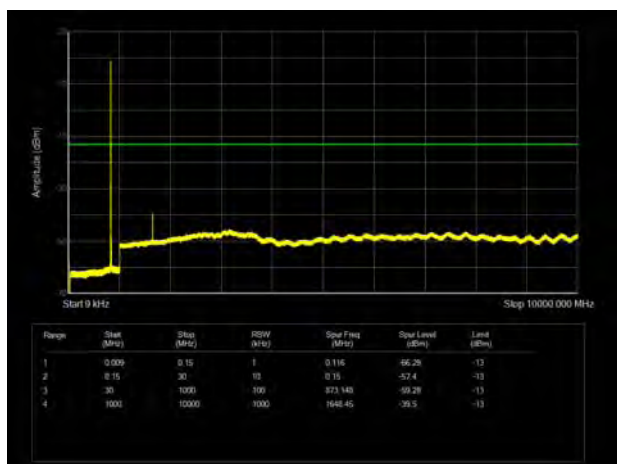
LTE Band 26 1.4MHz CH-High 9kHz~10GHz



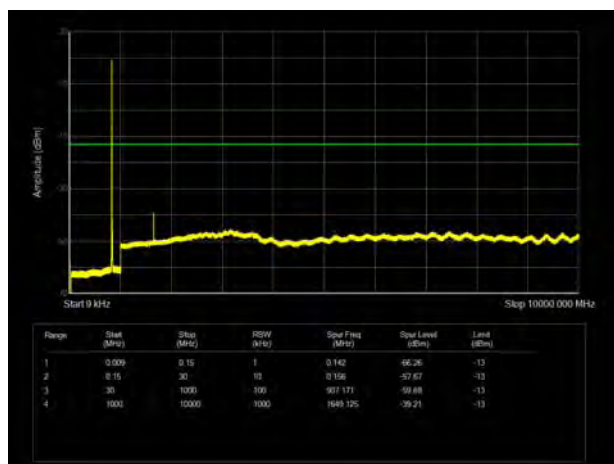
LTE Band 26 3MHz CH-High 9kHz~10GHz



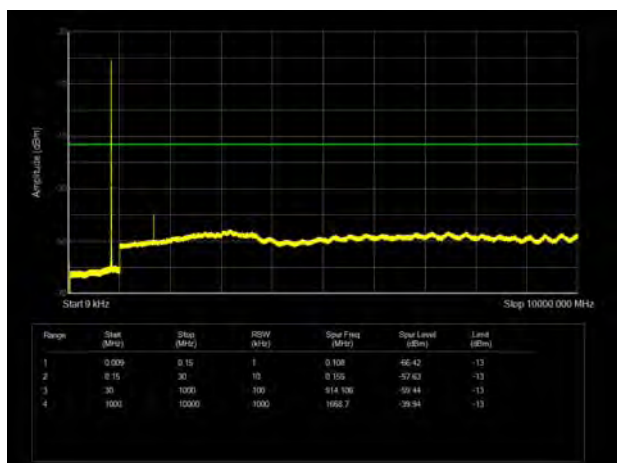
LTE Band 26 5MHz CH-Low 9kHz~10GHz



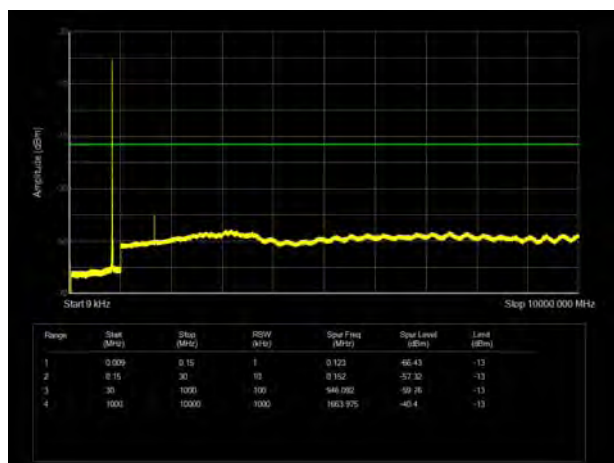
LTE Band 26 10MHz CH-Low 9kHz~10GHz



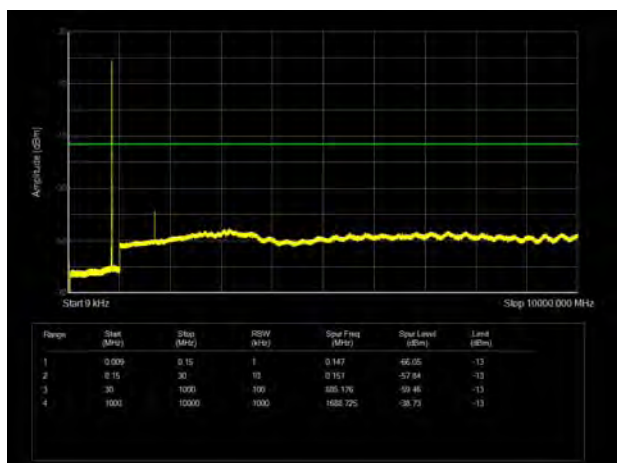
LTE Band 26 5MHz CH-Middle 9kHz~10GHz



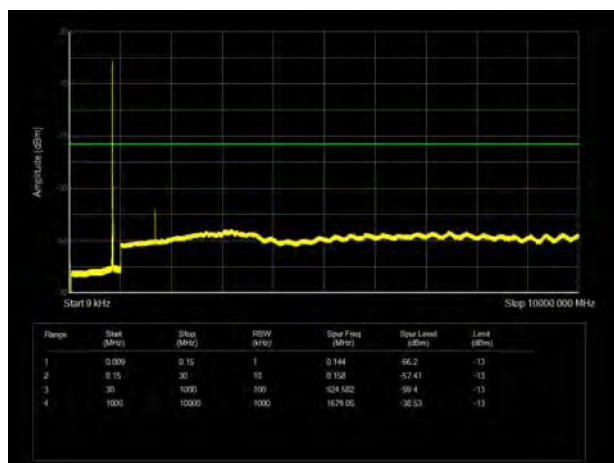
LTE Band 26 10MHz CH-Middle 9kHz~10GHz



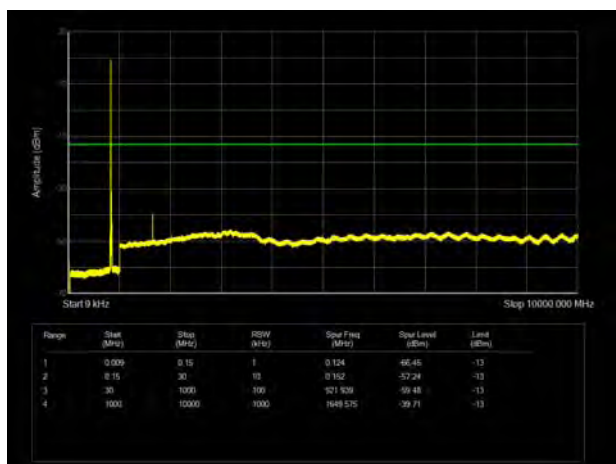
LTE Band 26 5MHz CH-High 9kHz~10GHz



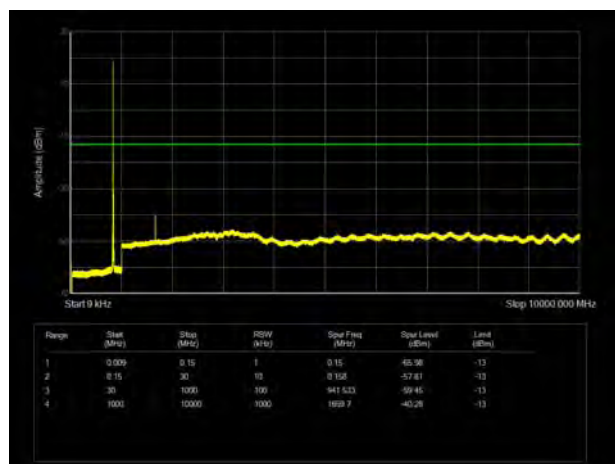
LTE Band 26 10MHz CH-High 9kHz~10GHz



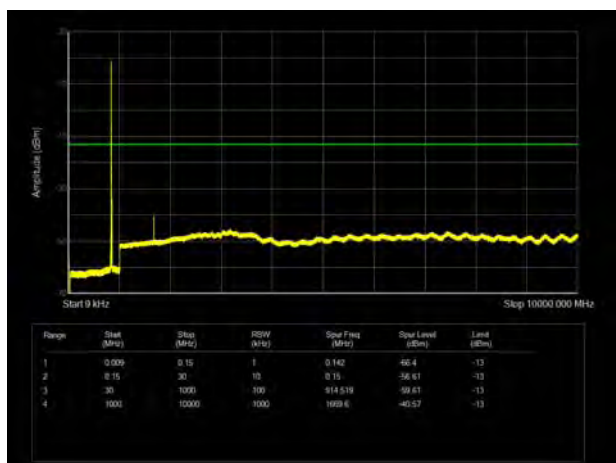
LTE Band 26 15MHz CH-Low 9kHz~10GHz



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	1673.20	-62.21	1.70	8.70	Vertical	-57.36	-13.00	44.36	315
3	2509.80	-60.38	2.30	12.00	Vertical	-52.83	-13.00	39.83	45
4	3346.40	-62.12	2.70	12.70	Vertical	-54.27	-13.00	41.27	270
5	4183.00	-62.98	3.00	12.50	Vertical	-55.63	-13.00	42.63	0
6	5019.60	-61.16	3.40	12.50	Vertical	-54.21	-13.00	41.21	45
7	5856.20	-60.27	3.40	12.80	Vertical	-53.02	-13.00	40.02	225
8	6692.80	-57.83	4.10	11.50	Vertical	-52.58	-13.00	39.58	90
9	7529.40	-55.24	4.20	12.20	Vertical	-49.39	-13.00	36.39	45
10	8366.00	-55.39	4.30	12.50	Vertical	-49.34	-13.00	36.34	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.

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	1671.20	-59.54	1.70	8.70	Vertical	-54.69	-13.00	41.69	90
3	2510.40	-65.65	2.30	12.00	Vertical	-58.10	-13.00	45.10	315
4	3346.40	-66.79	2.70	12.70	Vertical	-58.94	-13.00	45.94	45
5	4183.00	-63.49	3.00	12.50	Vertical	-56.14	-13.00	43.14	180
6	5019.60	-60.68	3.40	12.50	Vertical	-53.73	-13.00	40.73	225
7	5856.20	-59.61	3.40	12.80	Vertical	-52.36	-13.00	39.36	90
8	6692.80	-58.42	4.10	11.50	Vertical	-53.17	-13.00	40.17	0
9	7529.40	-55.22	4.20	12.20	Vertical	-49.37	-13.00	36.37	45
10	8366.00	-55.18	4.30	12.50	Vertical	-49.13	-13.00	36.13	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	1672.10	-57.18	1.70	8.70	Vertical	-52.33	-13.00	39.33	315
3	2535.95	-65.95	2.30	12.00	Vertical	-58.40	-13.00	45.40	90
4	3346.00	-64.11	2.70	12.70	Vertical	-56.26	-13.00	43.26	180
5	4182.50	-61.26	3.00	12.50	Vertical	-53.91	-13.00	40.91	0
6	5019.00	-59.90	3.40	12.50	Vertical	-52.95	-13.00	39.95	315
7	5855.50	-60.42	3.40	12.80	Vertical	-53.17	-13.00	40.17	180
8	6692.00	-55.00	4.10	11.50	Vertical	-49.75	-13.00	36.75	45
9	7528.50	-52.57	4.20	12.20	Vertical	-46.72	-13.00	33.72	315
10	8365.00	-54.38	4.30	12.50	Vertical	-48.33	-13.00	35.33	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 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	1668.50	-57.93	1.70	8.70	Vertical	-53.08	-13.00	40.08	180
3	2503.85	-65.31	2.30	12.00	Vertical	-57.76	-13.00	44.76	0
4	3337.50	-64.23	2.70	12.70	Vertical	-56.38	-13.00	43.38	315
5	4171.88	-61.65	3.00	12.50	Vertical	-54.30	-13.00	41.30	90
6	5006.25	-59.29	3.40	12.50	Vertical	-52.34	-13.00	39.34	180
7	5840.63	-60.47	3.40	12.80	Vertical	-53.22	-13.00	40.22	0
8	6675.00	-59.59	4.10	11.50	Vertical	-54.34	-13.00	41.34	315
9	7509.38	-54.68	4.20	12.20	Vertical	-48.83	-13.00	35.83	90
10	8343.75	-54.62	4.30	12.50	Vertical	-48.57	-13.00	35.57	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 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	1663.95	-53.68	1.70	8.70	Vertical	-48.83	-13.00	35.83	315
3	2639.05	-65.05	2.30	12.00	Vertical	-57.50	-13.00	44.50	90
4	3346.00	-63.86	2.70	12.70	Vertical	-56.01	-13.00	43.01	0
5	4182.50	-60.82	3.00	12.50	Vertical	-53.47	-13.00	40.47	315
6	5019.00	-59.60	3.40	12.50	Vertical	-52.65	-13.00	39.65	180
7	5855.50	-61.49	3.40	12.80	Vertical	-54.24	-13.00	41.24	45
8	6692.00	-55.27	4.10	11.50	Vertical	-50.02	-13.00	37.02	315
9	7528.50	-55.72	4.20	12.20	Vertical	-49.87	-13.00	36.87	270
10	8365.00	-54.44	4.30	12.50	Vertical	-48.39	-13.00	35.39	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.

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	1671.95	-57.44	1.70	8.70	Vertical	-52.59	-13.00	39.59	45
3	2508.10	-63.77	2.30	12.00	Vertical	-56.22	-13.00	43.22	315
4	3346.00	-65.49	2.70	12.70	Vertical	-57.64	-13.00	44.64	0
5	4182.50	-62.41	3.00	12.50	Vertical	-55.06	-13.00	42.06	315
6	5019.00	-58.90	3.40	12.50	Vertical	-51.95	-13.00	38.95	90
7	5855.50	-60.55	3.40	12.80	Vertical	-53.30	-13.00	40.30	180
8	6692.00	-55.54	4.10	11.50	Vertical	-50.29	-13.00	37.29	0
9	7528.50	-55.42	4.20	12.20	Vertical	-49.57	-13.00	36.57	315
10	8365.00	-54.41	4.30	12.50	Vertical	-48.36	-13.00	35.36	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 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	1668.60	-59.15	1.70	8.70	Vertical	-54.30	-13.00	41.30	270
3	2502.00	-65.67	2.30	12.00	Vertical	-58.12	-13.00	45.12	225
4	3336.00	-63.05	2.70	12.70	Vertical	-55.20	-13.00	42.20	45
5	4170.00	-61.28	3.00	12.50	Vertical	-53.93	-13.00	40.93	315
6	5004.00	-60.24	3.40	12.50	Vertical	-53.29	-13.00	40.29	270
7	5838.00	-61.76	3.40	12.80	Vertical	-54.51	-13.00	41.51	225
8	6672.00	-54.89	4.10	11.50	Vertical	-49.64	-13.00	36.64	45
9	7506.00	-54.70	4.20	12.20	Vertical	-48.85	-13.00	35.85	180
10	8340.00	-54.06	4.30	12.50	Vertical	-48.01	-13.00	35.01	0

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	1659.50	-51.52	1.70	8.70	Vertical	-46.67	-13.00	33.67	45
3	2489.40	-62.77	2.30	12.00	Vertical	-55.22	-13.00	42.22	180
4	3316.00	-64.84	2.70	12.70	Vertical	-56.99	-13.00	43.99	315
5	4145.00	-62.32	3.00	12.50	Vertical	-54.97	-13.00	41.97	90
6	4974.00	-61.80	3.40	12.50	Vertical	-54.85	-13.00	41.85	180
7	5803.00	-60.53	3.40	12.80	Vertical	-53.28	-13.00	40.28	0
8	6632.00	-59.57	4.10	11.50	Vertical	-54.32	-13.00	41.32	315
9	7461.00	-56.04	4.20	12.20	Vertical	-50.19	-13.00	37.19	180
10	8290.00	-53.76	4.30	12.50	Vertical	-47.71	-13.00	34.71	0

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

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



7. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Climate Chamber	ESPEC	SU-242	93000506	2021-12-12	2022-12-11
Comprehensive tester	R&S	CMW500	150415	2022-05-14	2023-05-13
Spectrum Analyzer	Keysight	N9020A	MY50510203	2021-12-12	2022-12-11
Wireless communication tester	Agilent	E5515C	GB44400275	2021-12-12	2022-12-11
Spectrum Analyzer	R&S	FSV40	101297	2021-12-12	2022-12-11
Radiated Spurious Emissions					
Spectrum Analyzer	R&S	FSV30	104028	2021-12-12	2022-12-11
log periodic antenna	Schwarzbeck	VULB 9163	01111	2019-09-12	2022-09-11
high frequency horn antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2023-12-16
software	R&S	EMC32	10.35.10	/	/

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



ANNEX A: The EUT Appearance

The EUT Appearance is submitted separately.



ANNEX B: Test Setup Photos

The Test Setup Photos is submitted separately.