



# RF TEST REPORT

**Applicant** ZTE Corporation  
**FCC ID** SRQ-ZTEA2023G  
**Product** 5G NR Multi model smart phone  
**Model** ZTE A2023G  
**Report No.** R2204A0354-R1V1  
**Issue Date** June 2, 2022

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2021)/ FCC CFR 47 Part 22H (2021)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Peng Tao

Approved by: Kai Xu

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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	May 28, 2022
Rev.1	Update information.	June 2, 2022

Note: This revised report (Report No. R2204A0354-R1V1) supersedes and replaces the previously issued report (Report No. R2204A0354-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: April 29, 2022 ~ May 27, 2022

Date of Sample Received: April 12, 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.  
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong  
City: Shanghai  
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## 2. General Description of Equipment under Test

### 2.1. Applicant and Manufacturer Information

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

### 2.2. General Information

EUT Description			
Model	ZTE A2023G		
SN	327324660005		
Hardware Version	ZTE A2023GHW1.0		
Software Version	MyOS12.0.2_A2023G_GLB		
Power Supply	Battery / AC adapter		
Antenna Type	Internal Antenna		
Antenna Gain	Band	Main Antenna (dBi)	Second Antenna (dBi)
	GSM 850:	ANT 0:-5.0	ANT 6:-8.8
	WCDMA Band V:	ANT 0:-5.0	ANT 6:-8.8
	LTE Band 5:	ANT 0:-5.0	ANT 6:-8.8
	NR n5	ANT 0:-5.0	ANT 6:-8.8
Test Mode(s)	GSM 850; WCDMA Band V; LTE Band 5; NR n5;		
Test Modulation	(GSM/GPRS)GMSK, (EGPRS) GMSK/ 8PSK; (WCDMA) BPSK, QPSK, 16QAM; (LTE) QPSK, 16QAM, 64QAM; (NR) CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM; DFT-s OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM		
GPRS Multislot Class	12		
EGPRS Multislot Class	12		
HSDPA UE Category	24		
HSUPA UE Category	6		
HSPA+ UE Category	7		
Maximum E.R.P.	GSM 850:	24.83dBm	
	WCDMA Band V:	17.02dBm	
	LTE Band 5:	17.05dBm	
	NR n5:	16.59dBm	
	DC_66A-n5A	17.10 dBm	



Rated Power Supply Voltage	3.89V		
Operating Voltage	Minimum: 3.7V    Maximum: 4.45V		
Operating Temperature	Lowest: -10°C    Highest: +40°C		
Testing Temperature	Lowest: -30°C    Highest: +50°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
	NR n5	824 ~ 849	869 ~ 894
<b>EUT Accessory</b>			
Adapter	Manufacturer: ShenZhen KunXing Technology Co., Ltd. Model: STC-A59152050AC-Z		
Battery	Manufacturer: Zhuhai CosMX Battery Co., Ltd Model: LI3949T44P8h806459		
Earphone 1	Manufacturer: JUWEI ELECTRONICS CO.,LTD Model: JWEP1092-Z01		
Earphone 2	Manufacturer: ShenZhen FDC Electronic Co.,Ltd Model: DEM-9A		
USB Cable 1	Manufacturer: King Power Electronics Co., Ltd Model: TC20-TC20-W-100-M-6A-HSF		
USB Cable 1	Manufacturer: Luxshare-ICT Co., Ltd Model: TC20-TC20-W-100-M-6A-HSF		
Type-C to 3.5 mm Headphone Jack	Manufacturer: JUWEI ELECTRONICS CO., LTD Model: 080503000100		
<p>Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.</p> <p>2. There is more than one USB cable/ Earphone, each one should be applied throughout the compliance test respectively, and however, only the worst case (USB cable 2) will be recorded in this report.</p>			



### 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

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

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

Test items	Bandwidth (MHz)				Modulation		RB			Test Channel			
	1.4	3	5	10	QPSK	16QAM/ 64QAM	1	50%	100%	L	M	H	
RF power output and Effective Radiated power	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	O	O	O	O	O	O	-	-	O	O	O	O	O
Band Edge Compliance	O	O	O	O	O	O	O	-	O	O	-	O	O
Peak-to-Average Power Ratio	O	O	O	O	O	O	-	-	O	O	O	O	O
Frequency Stability	O	O	O	O	O	O	O	-	-	-	O	-	-
Spurious Emissions at Antenna Terminals	O	O	O	O	O	-	O	-	-	O	O	O	O
Radiates Spurious Emission	O	-	O	O	O	-	O	-	-	-	O	-	-
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.												

Test modes are chosen to be reported as the worst case configuration below for NR n5/ DC\_66A\_n5A:

Test items	Mode	Bandwidth (MHz)				Modulation					RB			Test Channel			
		5	10	15	20	PI/2 BPSK	QPSK	16 QAM	64 QAM	256 QAM	1	50%	100%	L	M	H	
RF Power Output and Effective Isotropic Radiated Power	NR n5	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	DC_66A-n5A	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	NR n5	-	-	-	O	O	O	O	O	O	O	-	O	O	O	O	O
	DC_66A-n5A	-	-	-	O	O	O	O	O	O	O	-	O	O	O	O	O
Band Edge Compliance	NR n5	-	-	-	O	O	O	O	O	O	O	-	O	O	-	O	O
	DC_66A-n5A	-	-	-	O	O	O	O	O	O	O	-	O	O	-	O	O
Peak-to-Average Power Ratio	NR n5	-	-	-	O	O	O	O	O	O	-	-	O	O	O	O	O
	DC_66A-n5A	-	-	-	O	O	O	O	O	O	-	-	O	O	O	O	O
Frequency Stability	NR n5	O	O	O	O	O	O	O	O	O	O	-	-	-	O	-	-
	DC_66A-n5A	O	O	O	O	O	O	O	O	O	O	-	-	-	O	-	-
Spurious Emissions at Antenna Terminals	NR n5	-	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	DC_66A-n5A	-	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
Radiates Spurious Emission	NR n5	O	O	-	O	-	O	-	-	-	O	-	-	-	O	-	-
	DC_66A-n5A	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. 3. Sub 6GHz operates using 15kHz Subcarrier Spacing with both CP-OFDM and DFT-s OFDM waveforms. The band supports PI/2 BPSK, QPSK, 16QAM, 64QAM, and 256QAM modulation. The test data provided in this report represents the worst case configurations.																

## 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.

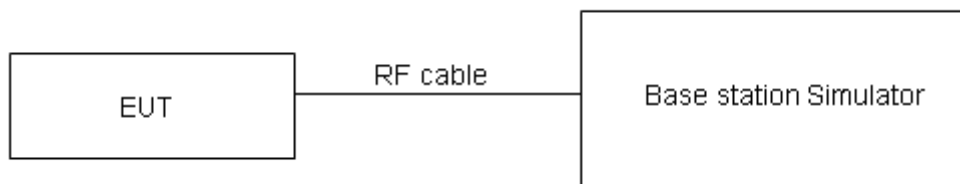
ERP can then be calculated as follows:

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

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	≤ 7 W (38.45 dBm)
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#### Measurement Uncertainty

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

#### Test Results

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

## 5.2. Occupied Bandwidth

### Ambient condition

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

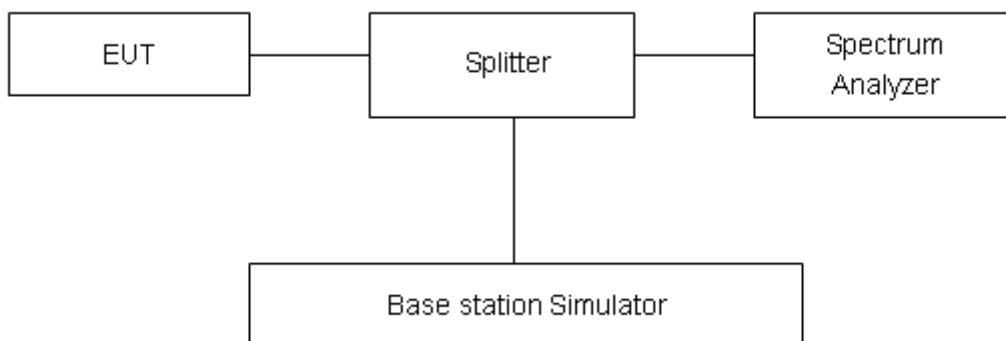
### Method of Measurement

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

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

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

### Test Setup



### Limits

No specific occupied bandwidth requirements in part 2.1049.

### Measurement Uncertainty

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

### Test Results

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

### 5.3. Band Edge Compliance

#### Ambient condition

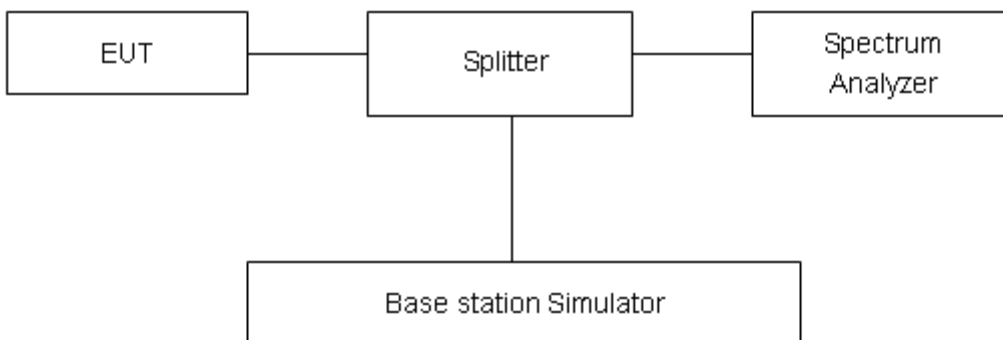
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

#### Method of Measurement

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

Spectrum analyzer plots are included on the following pages.

#### Test Setup



#### Limits

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

Limit	-13 dBm
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#### Measurement Uncertainty

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

#### Test Results

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

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

#### Ambient condition

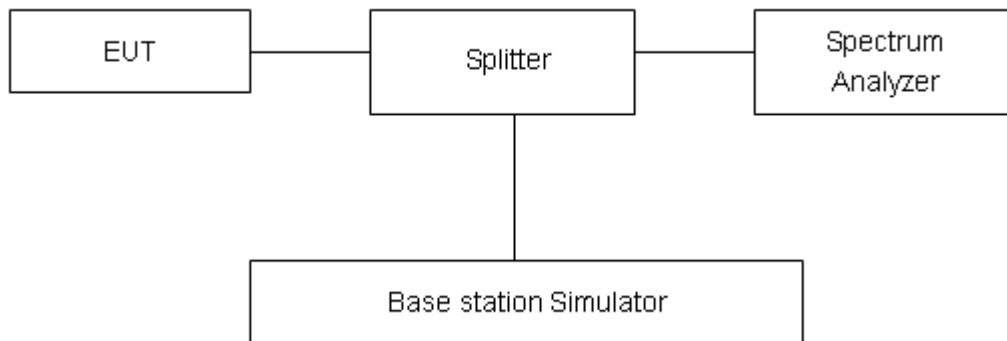
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

#### Methods of Measurement

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

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

#### Test Setup



#### Limits

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

#### Measurement Uncertainty

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

#### Test Results

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

### 5.5. Frequency Stability

#### Ambient condition

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

#### Method of Measurement

##### Frequency Stability (Temperature Variation)

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

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

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

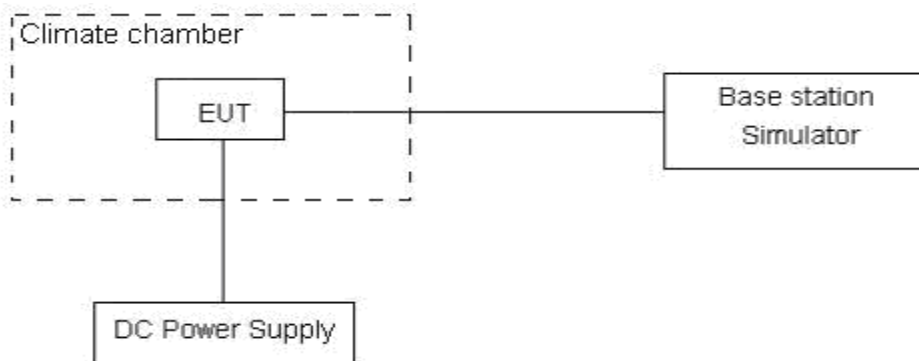
(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements. Frequency Stability (Voltage Variation)

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

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

This transceiver is specified to operate with an input voltage of between 3.7 V and 4.45 V, with a nominal voltage of 3.89V.

#### 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),

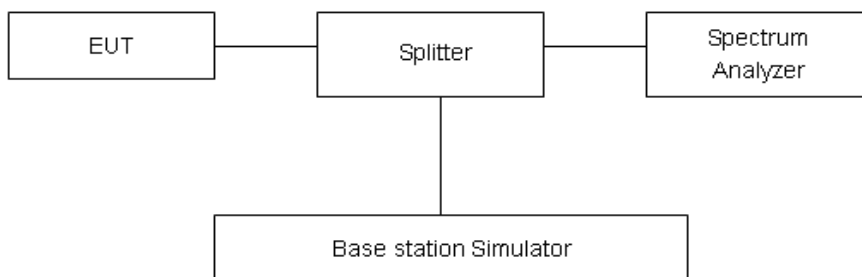
RBW is set to 10 kHz (0.15 MHz~ 30 MHz)

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-18GHz	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

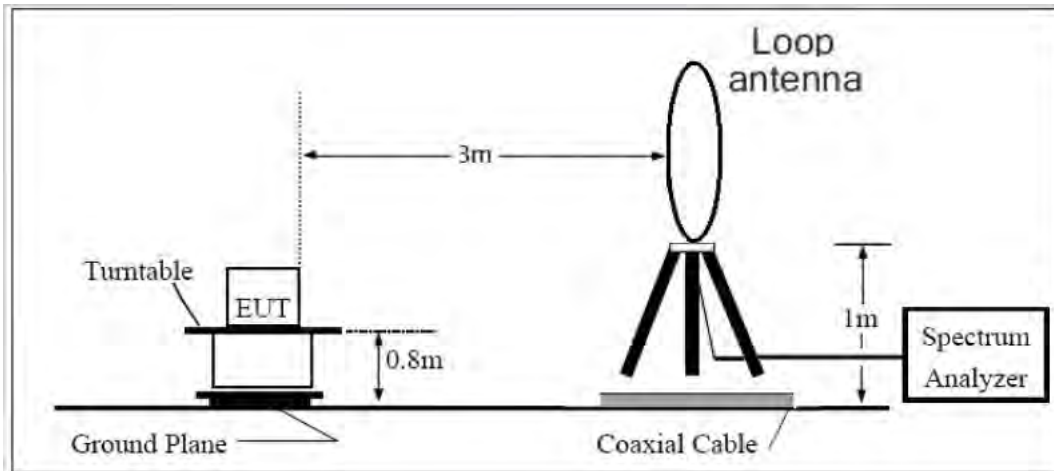
1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26 (2015).
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable 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:  
Power(EIRP)=PMea- PAg - Pcl + Ga  
The measurement results are amend as described below:  
Power(EIRP)=PMea- Pcl + Ga
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP

= EIRP-2.15dB.

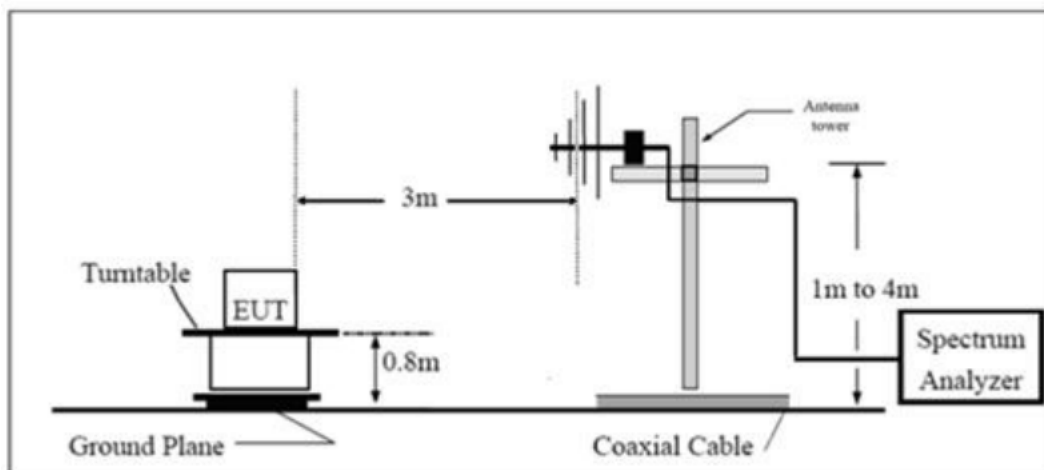
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

**Test setup**

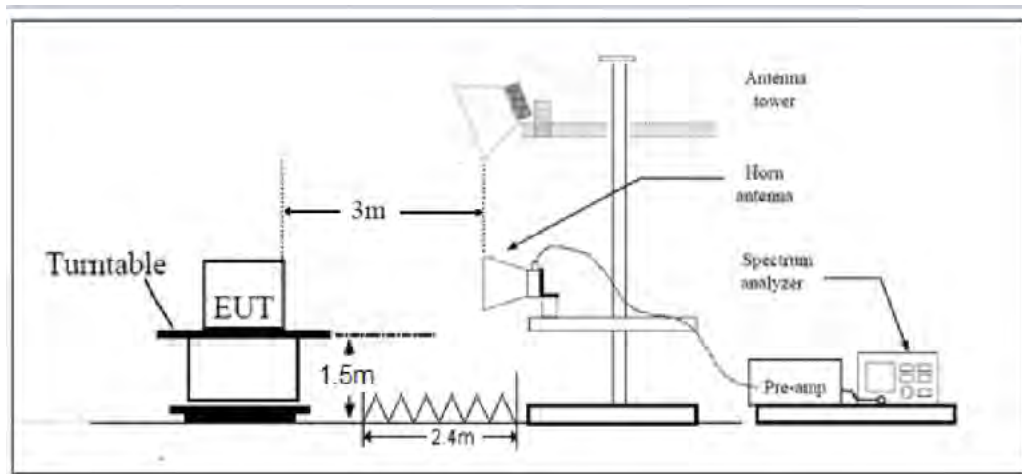
**9KHz ~ 30MHz**



**30MHz ~ 1GHz**



**Above 1GHz**



Note: Area side:2.4mX3.6m



### Limits

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

Limit	-13 dBm
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### Measurement Uncertainty

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

### Test Results

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



## 6. Test Result

### 6.1. RF Power Output and Effective Radiated Power

GSM 850		Maximum Output Power (dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)		
		Channel 128	Channel 190	Channel 251	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)	824.2 (MHz)	836.6 (MHz)	848.8 (MHz)
GSM(GMSK)	Results	31.98	31.76	31.94	24.83	24.61	24.79	21.03	20.81	20.99
GPRS (GMSK)	1TXslot	31.89	31.67	31.83	24.74	24.52	24.68	20.94	20.72	20.88
	2TXslots	30.85	30.98	30.76	23.70	23.83	23.61	19.90	20.03	19.81
	3TXslots	28.76	28.71	28.73	21.61	21.56	21.58	17.81	17.76	17.78
	4TXslots	27.66	27.61	27.55	20.51	20.46	20.40	16.71	16.66	16.60
EGPRS (8PSK)	1TXslot	26.42	26.45	26.13	19.27	19.30	18.98	15.47	15.50	15.18
	2TXslots	24.08	24.12	23.92	16.93	16.97	16.77	13.13	13.17	12.97
	3TXslots	22.36	22.32	22.43	15.21	15.17	15.28	11.41	11.37	11.48
	4TXslots	21.42	21.31	21.12	14.27	14.16	13.97	10.47	10.36	10.17

WCDMA Band V		Maximum Output Power (dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)		
		Channel 4132	Channel 4183	Channel 4233	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)	826.4 (MHz)	836.6 (MHz)	846.6 (MHz)
RMC	12.2k	24.02	<b>24.05</b>	23.92	16.87	16.90	16.77	13.07	13.10	12.97
AMR	12.2k	24.12	24.17	24.02	16.97	17.02	16.87	13.17	13.22	13.07
HSDPA	Sub - Test 1	22.92	22.99	23.00	15.77	15.84	15.85	11.97	12.04	12.05
	Sub - Test 2	23.10	23.11	23.04	15.95	15.96	15.89	12.15	12.16	12.09
	Sub - Test 3	22.58	22.49	22.52	15.43	15.34	15.37	11.63	11.54	11.57
	Sub - Test 4	22.54	22.47	22.48	15.39	15.32	15.33	11.59	11.52	11.53
HSUPA	Sub - Test 1	22.88	23.05	23.08	15.73	15.90	15.93	11.93	12.10	12.13
	Sub - Test 2	21.14	21.01	21.00	13.99	13.86	13.85	10.19	10.06	10.05
	Sub - Test 3	21.90	22.15	22.00	14.75	15.00	14.85	10.95	11.20	11.05
	Sub - Test 4	21.12	21.07	20.78	13.97	13.92	13.63	10.17	10.12	9.83
	Sub - Test 5	22.96	23.17	23.04	15.81	16.02	15.89	12.01	12.22	12.09
DC-HSDPA	Sub - Test 1	23.02	22.91	22.98	15.87	15.76	15.83	12.07	11.96	12.03
	Sub - Test 2	23.04	22.91	22.78	15.89	15.76	15.63	12.09	11.96	11.83
	Sub - Test 3	22.52	22.71	22.56	15.37	15.56	15.41	11.57	11.76	11.61
	Sub - Test 4	22.68	22.65	22.26	15.53	15.50	15.11	11.73	11.70	11.31
HSPA+	16QAM	21.78	21.77	21.62	14.63	14.62	14.47	10.83	10.82	10.67



LTE Band 5				Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20407 /824.7	20525 /836.5	20643 /848.3	20407 /824.7	20525 /836.5	20643 /848.3	20407 /824.7	20525 /836.5	20643 /848.3
1.4MHz	QPSK	1	0	24.17	24.06	24.13	17.02	16.91	16.98	13.22	13.11	13.18
		1	2	24.04	24.09	24.02	16.89	16.94	16.87	13.09	13.14	13.07
		1	5	24.09	24.07	24.08	16.94	16.92	16.93	13.14	13.12	13.13
		3	0	23.99	24.13	24.08	16.84	16.98	16.93	13.04	13.18	13.13
		3	2	24.13	24.16	24.05	16.98	17.01	16.90	13.18	13.21	13.10
		3	3	24.14	24.20	24.13	16.99	17.05	16.98	13.19	13.25	13.18
		6	0	23.23	23.23	23.18	16.08	16.08	16.03	12.28	12.28	12.23
	16QAM	1	0	23.64	23.60	23.66	16.49	16.45	16.51	12.69	12.65	12.71
		1	2	23.65	23.63	23.65	16.50	16.48	16.50	12.70	12.68	12.70
		1	5	23.75	23.71	23.82	16.60	16.56	16.67	12.80	12.76	12.87
		3	0	23.20	23.05	23.16	16.05	15.90	16.01	12.25	12.10	12.21
		3	2	23.26	23.11	23.23	16.11	15.96	16.08	12.31	12.16	12.28
		3	3	23.27	23.15	23.23	16.12	16.00	16.08	12.32	12.20	12.28
		6	0	22.28	22.21	22.27	15.13	15.06	15.12	11.33	11.26	11.32
	64QAM	1	0	22.36	22.22	22.31	15.21	15.07	15.16	11.41	11.27	11.36
		1	2	22.58	22.48	22.56	15.43	15.33	15.41	11.63	11.53	11.61
		1	5	22.45	22.38	22.43	15.30	15.23	15.28	11.50	11.43	11.48
		3	0	22.23	22.09	22.20	15.08	14.94	15.05	11.28	11.14	11.25
		3	2	22.38	22.19	22.34	15.23	15.04	15.19	11.43	11.24	11.39
		3	3	22.10	21.99	22.06	14.95	14.84	14.91	11.15	11.04	11.11
		6	0	21.37	21.29	21.38	14.22	14.14	14.23	10.42	10.34	10.43
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20415 /825.5	20525 /836.5	20635 /847.5	20415 /825.5	20525 /836.5	20635 /847.5	20415 /825.5	20525 /836.5	20635 /847.5
3MHz	QPSK	1	0	24.19	24.10	24.16	17.04	16.95	17.01	13.24	13.15	13.21
		1	7	24.02	24.12	24.06	16.87	16.97	16.91	13.07	13.17	13.11
		1	14	24.12	24.12	24.12	16.97	16.97	16.97	13.17	13.17	13.17
		8	0	23.09	23.25	23.21	15.94	16.10	16.06	12.14	12.30	12.26
		8	4	23.25	23.26	23.17	16.10	16.11	16.02	12.30	12.31	12.22
		8	7	23.24	23.31	23.23	16.09	16.16	16.08	12.29	12.36	12.28
		15	0	23.23	23.27	23.21	16.08	16.12	16.06	12.28	12.32	12.26
	16QAM	1	0	23.64	23.62	23.69	16.49	16.47	16.54	12.69	12.67	12.74



		1	7	23.65	23.63	23.69	16.50	16.48	16.54	12.70	12.68	12.74	
		1	14	23.77	23.75	23.85	16.62	16.60	16.70	12.82	12.80	12.90	
		8	0	22.31	22.18	22.28	15.16	15.03	15.13	11.36	11.23	11.33	
		8	4	22.37	22.24	22.35	15.22	15.09	15.20	11.42	11.29	11.40	
		8	7	22.37	22.27	22.36	15.22	15.12	15.21	11.42	11.32	11.41	
		15	0	22.31	22.25	22.30	15.16	15.10	15.15	11.36	11.30	11.35	
	64QAM	1	0	22.39	22.24	22.34	15.24	15.09	15.19	11.44	11.29	11.39	
		1	7	22.61	22.48	22.58	15.46	15.33	15.43	11.66	11.53	11.63	
		1	14	22.47	22.37	22.46	15.32	15.22	15.31	11.52	11.42	11.51	
		8	0	21.34	21.22	21.32	14.19	14.07	14.17	10.39	10.27	10.37	
		8	4	21.49	21.32	21.46	14.34	14.17	14.31	10.54	10.37	10.51	
		8	7	21.20	21.11	21.19	14.05	13.96	14.04	10.25	10.16	10.24	
			15	0	21.40	21.33	21.41	14.25	14.18	14.26	10.45	10.38	10.46
	BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
20425 /826.5					20525 /836.5	20625 /846.5	20425 /826.5	20525 /836.5	20625 /846.5	20425 /826.5	20525 /836.5	20625 /846.5	
5MHz	QPSK	1	0	24.17	24.05	24.13	17.02	16.90	16.98	13.22	13.10	13.18	
		1	13	24.01	24.12	24.04	16.86	16.97	16.89	13.06	13.17	13.09	
		1	24	24.08	24.06	24.07	16.93	16.91	16.92	13.13	13.11	13.12	
		12	0	23.07	23.21	23.18	15.92	16.06	16.03	12.12	12.26	12.23	
		12	6	23.23	23.22	23.12	16.08	16.07	15.97	12.28	12.27	12.17	
		12	13	23.21	23.30	23.20	16.06	16.15	16.05	12.26	12.35	12.25	
		25	0	23.25	23.24	23.18	16.10	16.09	16.03	12.30	12.29	12.23	
	16QAM	1	0	23.66	23.59	23.66	16.51	16.44	16.51	12.71	12.64	12.71	
		1	13	23.67	23.62	23.67	16.52	16.47	16.52	12.72	12.67	12.72	
		1	24	23.75	23.71	23.81	16.60	16.56	16.66	12.80	12.76	12.86	
		12	0	22.29	22.17	22.26	15.14	15.02	15.11	11.34	11.22	11.31	
		12	6	22.33	22.18	22.30	15.18	15.03	15.15	11.38	11.23	11.35	
		12	13	22.35	22.23	22.33	15.20	15.08	15.18	11.40	11.28	11.38	
		25	0	22.29	22.21	22.25	15.14	15.06	15.10	11.34	11.26	11.30	
	64QAM	1	0	22.33	22.21	22.31	15.18	15.06	15.16	11.38	11.26	11.36	
		1	13	22.59	22.47	22.56	15.44	15.32	15.41	11.64	11.52	11.61	
		1	24	22.48	22.36	22.46	15.33	15.21	15.31	11.53	11.41	11.51	
		12	0	21.34	21.25	21.34	14.19	14.10	14.19	10.39	10.30	10.39	
		12	6	21.46	21.28	21.44	14.31	14.13	14.29	10.51	10.33	10.49	
		12	13	21.18	21.07	21.16	14.03	13.92	14.01	10.23	10.12	10.21	
		25	0	21.38	21.29	21.36	14.23	14.14	14.21	10.43	10.34	10.41	



BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20450 /829	20525 /836.5	20600 /844	20450 /829	20525 /836.5	20600 /844	20450 /829	20525 /836.5	20600 /844
10MHz	QPSK	1	0	<b>24.14</b>	24.01	<b>24.10</b>	16.99	16.86	16.95	13.19	13.06	13.15
		1	25	24.00	<b>24.08</b>	24.02	16.85	16.93	16.87	13.05	13.13	13.07
		1	49	24.06	24.05	24.04	16.91	16.90	16.89	13.11	13.10	13.09
		25	0	23.04	23.16	23.14	15.89	16.01	15.99	12.09	12.21	12.19
		25	13	<b>23.21</b>	23.18	23.09	16.06	16.03	15.94	12.26	12.23	12.14
		25	25	23.18	<b>23.25</b>	<b>23.16</b>	16.03	16.10	16.01	12.23	12.30	12.21
		50	0	<b>23.22</b>	23.19	23.14	16.07	16.04	15.99	12.27	12.24	12.19
	16QAM	1	0	23.63	23.55	23.61	16.48	16.40	16.46	12.68	12.60	12.66
		1	25	23.64	23.60	23.63	16.49	16.45	16.48	12.69	12.65	12.68
		1	49	23.72	23.68	23.79	16.57	16.53	16.64	12.77	12.73	12.84
		25	0	22.26	22.13	22.23	15.11	14.98	15.08	11.31	11.18	11.28
		25	13	22.30	22.16	22.27	15.15	15.01	15.12	11.35	11.21	11.32
		25	25	22.32	22.18	22.29	15.17	15.03	15.14	11.37	11.23	11.34
		50	0	22.27	22.17	22.22	15.12	15.02	15.07	11.32	11.22	11.27
	64QAM	1	0	22.31	22.17	22.26	15.16	15.02	15.11	11.36	11.22	11.31
		1	25	22.55	22.45	22.52	15.40	15.30	15.37	11.60	11.50	11.57
		1	49	22.42	22.30	22.40	15.27	15.15	15.25	11.47	11.35	11.45
		25	0	21.29	21.17	21.27	14.14	14.02	14.12	10.34	10.22	10.32
		25	13	21.42	21.24	21.38	14.27	14.09	14.23	10.47	10.29	10.43
		25	25	21.15	21.02	21.12	14.00	13.87	13.97	10.20	10.07	10.17
		50	0	21.36	21.25	21.33	14.21	14.10	14.18	10.41	10.30	10.38





NR n5													
Bandwidth(MHz)	Modulation	SCS(KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)		
					165300	167300	169300	165300	167300	169300	165300	167300	169300
					826.5	836.5	846.5	826.5	836.5	846.5	826.5	836.5	846.5
5	PI/2 BPSK	15	1	0	23.30	23.37	23.18	16.15	16.22	16.03	12.35	12.42	12.23
			1	1	23.25	23.35	23.32	16.10	16.20	16.17	12.30	12.40	12.37
			12	6	23.36	23.23	23.30	16.21	16.08	16.15	12.41	12.28	12.35
			25	0	23.30	23.30	23.27	16.15	16.15	16.12	12.35	12.35	12.32
	QPSK		1	0	23.39	23.33	23.28	16.24	16.18	16.13	12.44	12.38	12.33
			1	1	23.42	23.34	23.30	16.27	16.19	16.15	12.47	12.39	12.35
			12	6	23.29	23.38	23.27	16.14	16.23	16.12	12.34	12.43	12.32
			25	0	23.34	23.32	23.24	16.19	16.17	16.09	12.39	12.37	12.29
	16QAM		1	0	22.11	22.36	22.24	14.96	15.21	15.09	11.16	11.41	11.29
			1	1	23.21	<b>23.48</b>	23.29	16.06	16.33	16.14	12.26	12.53	12.34
			12	6	23.35	23.22	23.22	16.20	16.07	16.07	12.40	12.27	12.27
			25	0	22.37	22.27	22.20	15.22	15.12	15.05	11.42	11.32	11.25
	64QAM		1	0	21.61	21.47	21.59	14.46	14.32	14.44	10.66	10.52	10.64
			1	1	21.51	21.51	21.65	14.36	14.36	14.50	10.56	10.56	10.70
			12	6	21.87	21.72	21.81	14.72	14.57	14.66	10.92	10.77	10.86
			25	0	21.88	21.87	21.67	14.73	14.72	14.52	10.93	10.92	10.72
256QAM	1	0	19.76	20.14	19.84	12.61	12.99	12.69	8.81	9.19	8.89		
	1	1	19.79	20.10	19.81	12.64	12.95	12.66	8.84	9.15	8.86		
	12	6	19.80	19.71	19.83	12.65	12.56	12.68	8.85	8.76	8.88		
	25	0	19.74	19.71	19.72	12.59	12.56	12.57	8.79	8.76	8.77		
Bandwidth(MHz)	Modulation	SCS(KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)		
					165800	167300	168800	165800	167300	168800	165800	167300	168800
					829	836.5	844	829	836.5	844	829	836.5	844
10	PI/2 BPSK	15	1	0	23.41	23.47	23.30	16.26	16.32	16.15	12.46	12.52	12.35
			1	1	23.37	23.49	23.45	16.22	16.34	16.30	12.42	12.54	12.50
			25	12	23.47	23.36	23.42	16.32	16.21	16.27	12.52	12.41	12.47
			50	0	23.42	23.44	23.40	16.27	16.29	16.25	12.47	12.49	12.45
	QPSK		1	0	23.51	23.47	23.41	16.36	16.32	16.26	12.56	12.52	12.46
			1	1	23.53	23.47	23.44	16.38	16.32	16.29	12.58	12.52	12.49
			25	12	23.46	23.49	23.40	16.31	16.34	16.25	12.51	12.54	12.45
			50	0	23.45	23.44	23.35	16.30	16.29	16.20	12.50	12.49	12.40
	16QAM		1	0	22.23	22.49	22.36	15.08	15.34	15.21	11.28	11.54	11.41
			1	1	23.33	<b>23.59</b>	23.41	16.18	16.44	16.26	12.38	12.64	12.46
			25	12	23.47	23.36	23.35	16.32	16.21	16.20	12.52	12.41	12.40



Bandwidth(MHz)	Modulation	SCS(KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)			
					166300	167300	168300	166300	167300	168300	166300	167300	168300	
					831.5	836.5	841.5	831.5	836.5	841.5	831.5	836.5	841.5	
15	64QAM	15	50	0	22.48	22.40	22.32	15.33	15.25	15.17	11.53	11.45	11.37	
			1	0	21.73	21.61	21.72	14.58	14.46	14.57	10.78	10.66	10.77	
			1	1	21.63	21.65	21.78	14.48	14.50	14.63	10.68	10.70	10.83	
			25	12	21.98	21.84	21.92	14.83	14.69	14.77	11.03	10.89	10.97	
	50		0	22.00	22.00	21.79	14.85	14.85	14.64	11.05	11.05	10.84		
	1		0	19.88	20.25	19.96	12.73	13.10	12.81	8.93	9.30	9.01		
	1		1	19.91	20.24	19.94	12.76	13.09	12.79	8.96	9.29	8.99		
	25		12	19.91	19.84	19.95	12.76	12.69	12.80	8.96	8.89	9.00		
	50	0	19.86	19.85	19.85	12.71	12.70	12.70	8.91	8.90	8.90			
	15	PI/2 BPSK	15	1	0	23.34	23.37	23.22	16.19	16.22	16.07	12.39	12.42	12.27
				1	1	23.29	23.42	23.36	16.14	16.27	16.21	12.34	12.47	12.41
				36	18	23.38	23.25	23.32	16.23	16.10	16.17	12.43	12.30	12.37
				75	0	23.34	23.34	23.31	16.19	16.19	16.16	12.39	12.39	12.36
		1		0	23.42	23.36	23.31	16.27	16.21	16.16	12.47	12.41	12.36	
		1		1	23.44	23.38	23.34	16.29	16.23	16.19	12.49	12.43	12.39	
		36		18	23.38	23.39	23.29	16.23	16.24	16.14	12.43	12.44	12.34	
		75		0	23.34	23.36	23.27	16.19	16.21	16.12	12.39	12.41	12.32	
		1	0	22.15	22.40	22.28	15.00	15.25	15.13	11.20	11.45	11.33		
		1	1	23.24	<b>23.49</b>	23.32	16.09	16.34	16.17	12.29	12.54	12.37		
		36	18	23.38	23.28	23.26	16.23	16.13	16.11	12.43	12.33	12.31		
75		0	22.39	22.29	22.22	15.24	15.14	15.07	11.44	11.34	11.27			
1		0	21.65	21.51	21.63	14.50	14.36	14.48	10.70	10.56	10.68			
1		1	21.54	21.54	21.68	14.39	14.39	14.53	10.59	10.59	10.73			
36		18	21.87	21.76	21.84	14.72	14.61	14.69	10.92	10.81	10.89			
75		0	21.92	21.91	21.71	14.77	14.76	14.56	10.97	10.96	10.76			
1		0	19.79	20.15	19.87	12.64	13.00	12.72	8.84	9.20	8.92			
1		1	19.82	20.16	19.85	12.67	13.01	12.70	8.87	9.21	8.90			
36		18	19.82	19.73	19.85	12.67	12.58	12.70	8.87	8.78	8.90			
75		0	19.78	19.75	19.76	12.63	12.60	12.61	8.83	8.80	8.81			
20	PI/2 BPSK	15	1	0	23.59	23.61	23.47	16.44	16.46	16.32	12.64	12.66	12.52	
			1	1	23.56	23.66	23.62	16.41	16.51	16.47	12.61	12.71	12.67	
			50	25	23.64	23.52	23.57	16.49	16.37	16.42	12.69	12.57	12.62	
100			0	23.59	23.57	23.55	16.44	16.42	16.40	12.64	12.62	12.60		



	QPSK	1	0	23.68	23.60	23.56	16.53	16.45	16.41	12.73	12.65	12.61
		1	1	23.69	23.61	23.58	16.54	16.46	16.43	12.74	12.66	12.63
		50	25	23.63	23.62	23.53	16.48	16.47	16.38	12.68	12.67	12.58
		100	0	23.60	23.60	23.50	16.45	16.45	16.35	12.65	12.65	12.55
	16QAM	1	0	22.39	22.66	22.52	15.24	15.51	15.37	11.44	11.71	11.57
		1	1	23.50	<b>23.74</b>	23.58	16.35	16.59	16.43	12.55	12.79	12.63
		50	25	23.63	23.52	23.51	16.48	16.37	16.36	12.68	12.57	12.56
		100	0	22.64	22.55	22.47	15.49	15.40	15.32	11.69	11.60	11.52
	64QAM	1	0	21.90	21.74	21.87	14.75	14.59	14.72	10.95	10.79	10.92
		1	1	21.80	21.78	21.93	14.65	14.63	14.78	10.85	10.83	10.98
		50	25	22.13	22.00	22.07	14.98	14.85	14.92	11.18	11.05	11.12
		100	0	22.16	22.17	21.95	15.01	15.02	14.80	11.21	11.22	11.00
	256QAM	1	0	20.05	20.40	20.13	12.90	13.25	12.98	9.10	9.45	9.18
		1	1	20.07	20.40	20.10	12.92	13.25	12.95	9.12	9.45	9.15
		50	25	20.07	19.99	20.10	12.92	12.84	12.95	9.12	9.04	9.15
		100	0	20.03	19.98	20.00	12.88	12.83	12.85	9.08	9.03	9.05

DC_66A-n5A														
Bandwidth(MHz)	Modulation	Modulation (LTE)	SCS(KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)		
						165300	167300	169300	165300	167300	169300	165300	167300	169300
						826.5	836.5	846.5	826.5	836.5	846.5	826.5	836.5	846.5
5	PI/2 BPSK	Band66-10 MHz-1745MHz-QPSK-1 #0	15	1	0	23.57	23.74	23.71	16.42	16.59	16.56	12.62	12.79	12.76
				1	1	24.06	23.88	23.86	16.91	16.73	16.71	13.11	12.93	12.91
				12	6	24.02	23.96	24.04	16.87	16.81	16.89	13.07	13.01	13.09
				25	0	23.69	23.73	23.77	16.54	16.58	16.62	12.74	12.78	12.82
	QPSK			1	0	23.52	23.60	23.65	16.37	16.45	16.50	12.57	12.65	12.70
				1	1	24.10	<b>24.12</b>	23.88	16.95	16.97	16.73	13.15	13.17	12.93
				12	6	23.97	24.00	24.03	16.82	16.85	16.88	13.02	13.05	13.08
				25	0	23.62	23.68	23.60	16.47	16.53	16.45	12.67	12.73	12.65
	16QAM			1	0	22.43	23.03	22.39	15.28	15.88	15.24	11.48	12.08	11.44
				1	1	23.40	24.02	23.59	16.25	16.87	16.44	12.45	13.07	12.64
				12	6	24.01	23.72	23.57	16.86	16.57	16.42	13.06	12.77	12.62
				25	0	22.73	22.67	22.65	15.58	15.52	15.50	11.78	11.72	11.70
	64QAM			1	0	21.79	22.07	22.53	14.64	14.92	15.38	10.84	11.12	11.58
				1	1	21.76	22.15	22.68	14.61	15.00	15.53	10.81	11.20	11.73
				12	6	22.32	22.28	22.27	15.17	15.13	15.12	11.37	11.33	11.32
				25	0	22.28	22.15	22.14	15.13	15.00	14.99	11.33	11.20	11.19
256QAM	1	0	20.09	19.41	20.02	12.94	12.26	12.87	9.14	8.46	9.07			



Bandwidth(MHz)	Modulation	Modulation (LTE)	SCS(KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)			
						165800	167300	168800	165800	167300	168800	165800	167300	168800	
						829	836.5	844	829	836.5	844	829	836.5	844	
				1	1	20.11	20.06	20.14	12.96	12.91	12.99	9.16	9.11	9.19	
				12	6	20.50	20.40	20.49	13.35	13.25	13.34	9.55	9.45	9.54	
				25	0	20.44	20.33	20.31	13.29	13.18	13.16	9.49	9.38	9.36	
10	PI/2 BPSK	Band66-10 MHz-1745MHz-QPSK-1 #0	15	1	0	23.49	23.65	23.64	16.34	16.50	16.49	12.54	12.70	12.69	
				1	1	23.99	23.83	23.80	16.84	16.68	16.65	13.04	12.88	12.85	
				25	12	23.94	23.90	23.97	16.79	16.75	16.82	12.99	12.95	13.02	
	50			0	23.62	23.68	23.71	16.47	16.53	16.56	12.67	12.73	12.76		
	QPSK			1	0	23.45	23.55	23.59	16.30	16.40	16.44	12.50	12.60	12.64	
				1	1	<b>24.02</b>	23.98	23.83	16.87	16.83	16.68	13.07	13.03	12.88	
				25	12	23.95	23.92	23.97	16.80	16.77	16.82	13.00	12.97	13.02	
	16QAM			50	0	23.54	23.61	23.52	16.39	16.46	16.37	12.59	12.66	12.57	
				1	0	22.36	22.97	22.32	15.21	15.82	15.17	11.41	12.02	11.37	
				1	1	23.33	23.98	23.52	16.18	16.83	16.37	12.38	13.03	12.57	
	64QAM			25	12	23.94	23.67	23.51	16.79	16.52	16.36	12.99	12.72	12.56	
				50	0	22.65	22.61	22.58	15.50	15.46	15.43	11.70	11.66	11.63	
		1	0	21.72	22.02	22.47	14.57	14.87	15.32	10.77	11.07	11.52			
	256QAM	1	1	21.69	22.10	22.62	14.54	14.95	15.47	10.74	11.15	11.67			
		25	12	22.24	22.21	22.19	15.09	15.06	15.04	11.29	11.26	11.24			
		50	0	22.21	22.09	22.07	15.06	14.94	14.92	11.26	11.14	11.12			
					1	0	20.02	19.33	19.95	12.87	12.18	12.80	9.07	8.38	9.00
					1	1	20.04	20.01	20.08	12.89	12.86	12.93	9.09	9.06	9.13
					25	12	20.42	20.34	20.42	13.27	13.19	13.27	9.47	9.39	9.47
					50	0	20.37	20.28	20.25	13.22	13.13	13.10	9.42	9.33	9.30
Bandwidth(MHz)	Modulation	Modulation (LTE)	SCS(KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)			
						166300	167300	168300	166300	167300	168300	166300	167300	168300	
						831.5	836.5	841.5	831.5	836.5	841.5	831.5	836.5	841.5	
15	PI/2 BPSK	Band66-10 MHz-1745MHz-QPSK-1 #0	15	1	0	23.56	23.69	23.70	16.41	16.54	16.55	12.61	12.74	12.75	
				1	1	24.05	23.90	23.85	16.90	16.75	16.70	13.10	12.95	12.90	
				36	18	23.99	23.93	24.01	16.84	16.78	16.86	13.04	12.98	13.06	
	75			0	23.68	23.72	23.76	16.53	16.57	16.61	12.73	12.77	12.81		
	QPSK			1	0	23.50	23.58	23.63	16.35	16.43	16.48	12.55	12.63	12.68	
				1	1	<b>24.07</b>	24.03	23.87	16.92	16.88	16.72	13.12	13.08	12.92	
				36	18	24.01	23.96	24.00	16.86	16.81	16.85	13.06	13.01	13.05	
				75	0	23.57	23.67	23.58	16.42	16.52	16.43	12.62	12.72	12.63	



	16QAM			1	0	22.42	23.02	22.38	15.27	15.87	15.23	11.47	12.07	11.43
				1	1	23.38	24.01	23.57	16.23	16.86	16.42	12.43	13.06	12.62
				36	18	23.99	23.73	23.56	16.84	16.58	16.41	13.04	12.78	12.61
				75	0	22.70	22.64	22.62	15.55	15.49	15.47	11.75	11.69	11.67
	64QAM			1	0	21.78	22.06	22.52	14.63	14.91	15.37	10.83	11.11	11.57
				1	1	21.74	22.13	22.66	14.59	14.98	15.51	10.79	11.18	11.71
				36	18	22.27	22.27	22.25	15.12	15.12	15.10	11.32	11.32	11.30
				75	0	22.27	22.14	22.13	15.12	14.99	14.98	11.32	11.19	11.18
	256QAM			1	0	20.07	19.37	20.00	12.92	12.22	12.85	9.12	8.42	9.05
				1	1	20.09	20.07	20.13	12.94	12.92	12.98	9.14	9.12	9.18
				36	18	20.47	20.37	20.46	13.32	13.22	13.31	9.52	9.42	9.51
				75	0	20.43	20.32	20.30	13.28	13.17	13.15	9.48	9.37	9.35
Bandwidth(MHz)	Modulation	Modulation (LTE)	SCS(KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 0 ERP (dBm)			Antenna 6 ERP (dBm)		
						166800	167300	167800	166800	167300	167800	166800	167300	167800
						834	836.5	839	834	836.5	839	834	836.5	839
20	PI/2 BPSK	Band66-10 MHz-1745MHz-QPSK-1#0	15	1	0	23.72	23.84	23.86	16.57	16.69	16.71	12.77	12.89	12.91
				1	1	24.23	24.05	24.02	17.08	16.90	16.87	13.28	13.10	13.07
				50	25	24.16	24.11	24.17	17.01	16.96	17.02	13.21	13.16	13.22
				100	0	23.84	23.86	23.91	16.69	16.71	16.76	12.89	12.91	12.96
	QPSK			1	0	23.67	23.73	23.79	16.52	16.58	16.64	12.72	12.78	12.84
				1	1	24.23	24.17	24.02	17.08	17.02	16.87	13.28	13.22	13.07
				50	25	24.17	24.10	24.15	17.02	16.95	17.00	13.22	13.15	13.20
				100	0	23.74	23.82	23.72	16.59	16.67	16.57	12.79	12.87	12.77
	16QAM			1	0	22.57	23.19	22.53	15.42	16.04	15.38	11.62	12.24	11.58
				1	1	23.55	<b>24.25</b>	23.74	16.40	17.10	16.59	12.60	13.30	12.79
				50	25	24.15	23.88	23.72	17.00	16.73	16.57	13.20	12.93	12.77
				100	0	22.86	22.81	22.78	15.71	15.66	15.63	11.91	11.86	11.83
	64QAM			1	0	21.94	22.20	22.67	14.79	15.05	15.52	10.99	11.25	11.72
				1	1	21.91	22.28	22.82	14.76	15.13	15.67	10.96	11.33	11.87
				50	25	22.44	22.42	22.39	15.29	15.27	15.24	11.49	11.47	11.44
				100	0	22.42	22.31	22.28	15.27	15.16	15.13	11.47	11.36	11.33
	256QAM			1	0	20.24	19.53	20.17	13.09	12.38	13.02	9.29	8.58	9.22
				1	1	20.25	20.22	20.29	13.10	13.07	13.14	9.30	9.27	9.34
				50	25	20.63	20.54	20.62	13.48	13.39	13.47	9.68	9.59	9.67
				100	0	20.59	20.46	20.45	13.44	13.31	13.30	9.64	9.51	9.50

## 6.2. Occupied Bandwidth

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
GSM 850 (GMSK)	128	824.2	0.236	0.303
	190	836.6	0.247	0.312
	251	848.8	0.243	0.308
GPRS 850 (GMSK)	128	824.2	0.244	0.318
	190	836.6	0.244	0.311
	251	848.8	0.242	0.306
EGPRS 850 (8PSK)	128	824.2	0.246	0.312
	190	836.6	0.241	0.320
	251	848.8	0.246	0.298
WCDMA Band V (RMC)	4132	826.4	4.135	4.701
	4183	836.6	4.143	4.689
	4233	846.6	4.138	4.703

LTE Band 5						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	20407	824.7	1.095	1.235
			20525	836.5	1.094	1.240
			20643	848.3	1.092	1.233
		3	20415	825.5	2.698	3.000
			20525	836.5	2.706	2.979
			20635	847.5	2.700	3.002
		5	20425	826.5	4.532	4.930
			20525	836.5	4.519	4.931
			20625	846.5	4.511	4.937
		10	20450	829	8.971	9.740
			20525	836.5	8.987	9.814
			20600	844	8.984	9.778
	16QAM	1.4	20407	824.7	1.097	1.243
			20525	836.5	1.095	1.232
			20643	848.3	1.097	1.220



		3	20415	825.5	2.697	3.038
			20525	836.5	2.702	2.962
			20635	847.5	2.696	2.997
		5	20425	826.5	4.514	4.978
			20525	836.5	4.526	4.962
			20625	846.5	4.504	4.924
		10	20450	829	8.979	9.830
			20525	836.5	8.975	9.774
			20600	844	8.976	9.781
	64QAM	1.4	20407	824.7	1.093	1.240
			20525	836.5	1.095	1.247
			20643	848.3	1.098	1.229
		3	20415	825.5	2.703	2.958
			20525	836.5	2.705	3.001
			20635	847.5	2.696	2.998
		5	20425	826.5	4.517	4.968
			20525	836.5	4.509	4.955
			20625	846.5	4.516	4.914
10	20450	829	8.991	9.774		
	20525	836.5	8.966	9.720		
	20600	844	8.949	9.726		

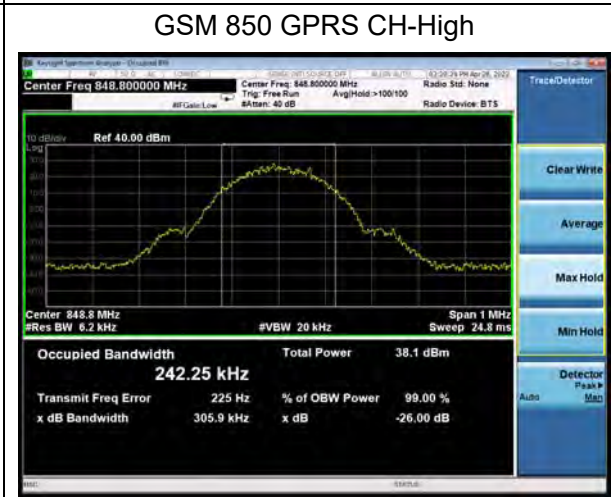
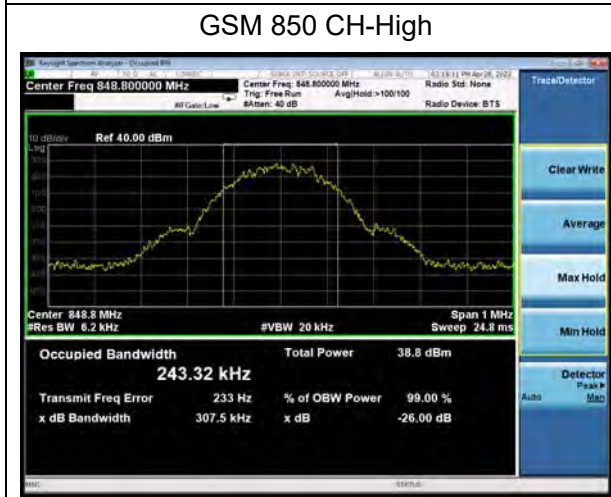
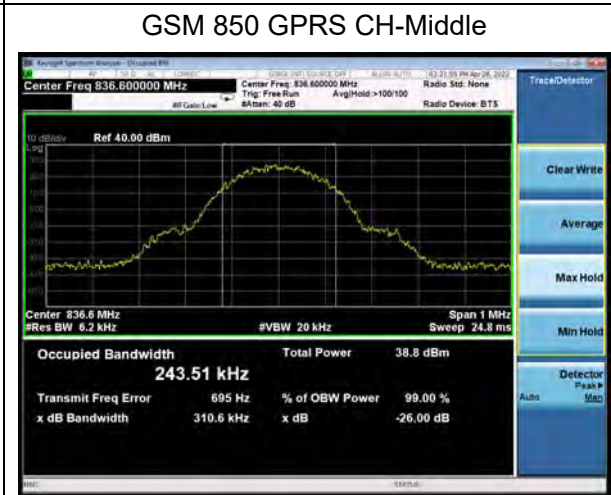
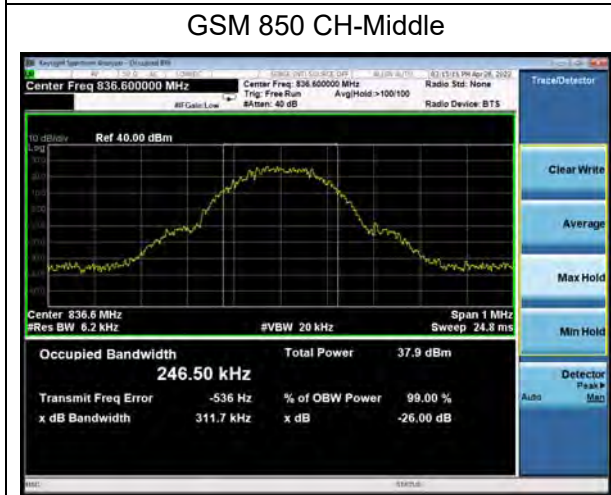
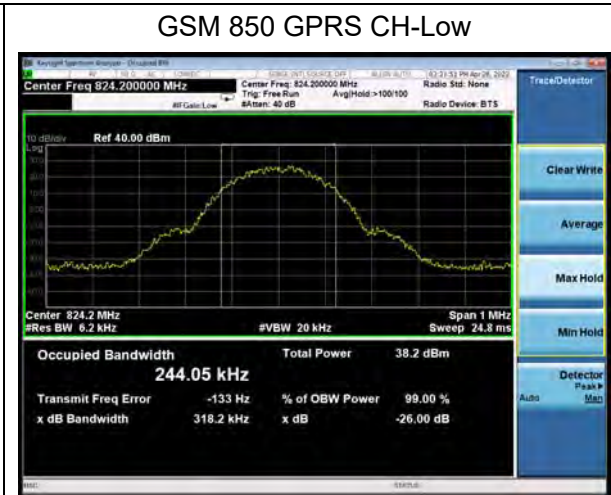
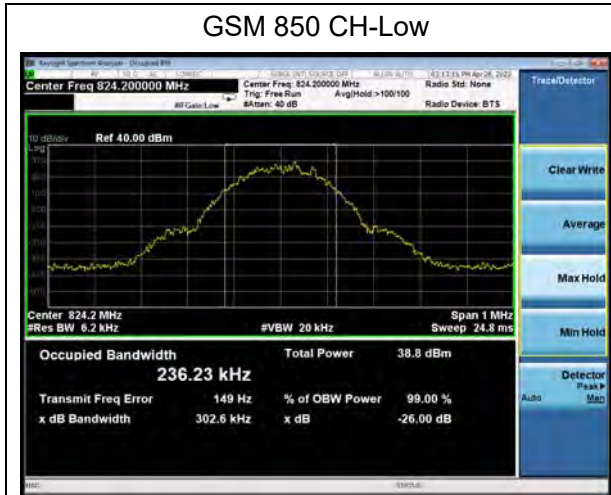


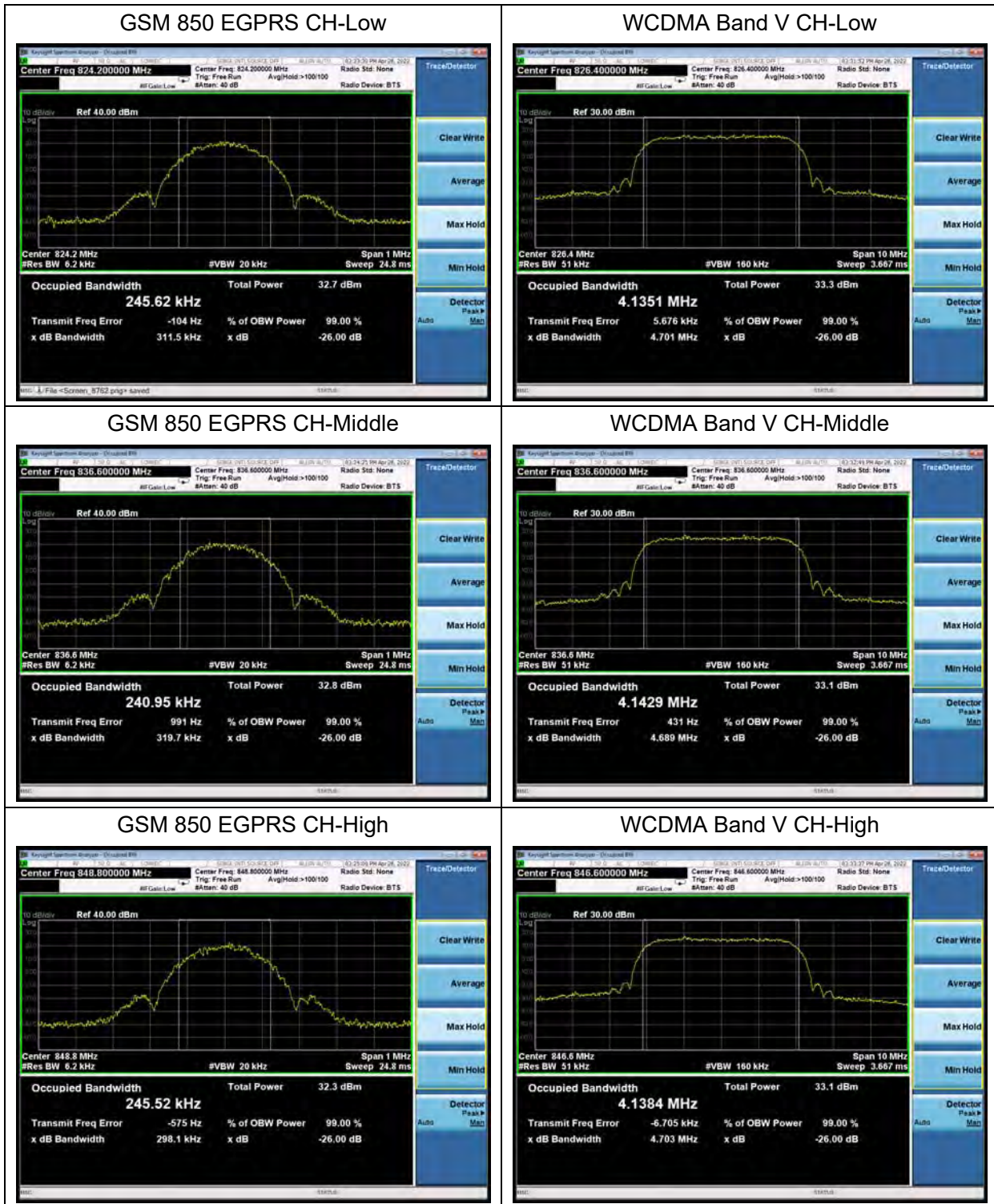
NR n5						
RB	Modulation	Bandwidth	Channel	Frequency (MHz)	99% Power	-26dBc Bandwidth(MHz)
		(MHz)			Bandwidth(MHz)	
100%	BPSK	20	166800	834	18.283	20.14
			167300	836.5	18.374	20.15
			167800	839	18.257	20.10
	QPSK	20	166800	834	18.307	20.16
			167300	836.5	18.312	20.16
			167800	839	18.355	20.13
	16QAM	20	166800	834	18.308	20.07
			167300	836.5	18.256	20.13
			167800	839	18.314	20.19
	64QAM	20	166800	834	18.341	20.01
			167300	836.5	18.301	20.19
			167800	839	18.327	20.08
256QAM	20	166800	834	18.286	20.09	
		167300	836.5	18.229	20.06	
		167800	839	18.249	20.12	
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
1%	BPSK	20	166800	834	2.1346	2.820
			167300	836.5	2.1751	2.800
			167800	839	2.1285	2.821
	QPSK	20	166800	834	2.1564	2.870
			167300	836.5	2.1856	2.866
			167800	839	2.1976	2.872
	16QAM	20	166800	834	2.1720	2.821
			167300	836.5	2.1096	2.835
			167800	839	2.1656	2.777
	64QAM	20	166800	834	2.0855	2.840
			167300	836.5	2.1391	2.799
			167800	839	2.1762	2.851
256QAM	20	166800	834	2.1436	2.804	
		167300	836.5	2.1490	2.899	
		167800	839	2.1433	2.850	



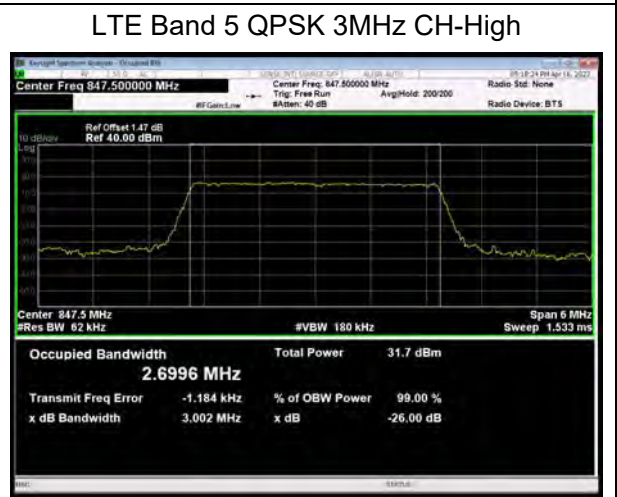
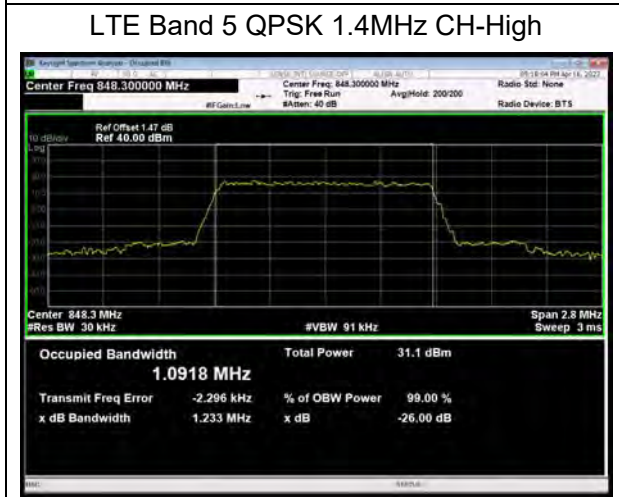
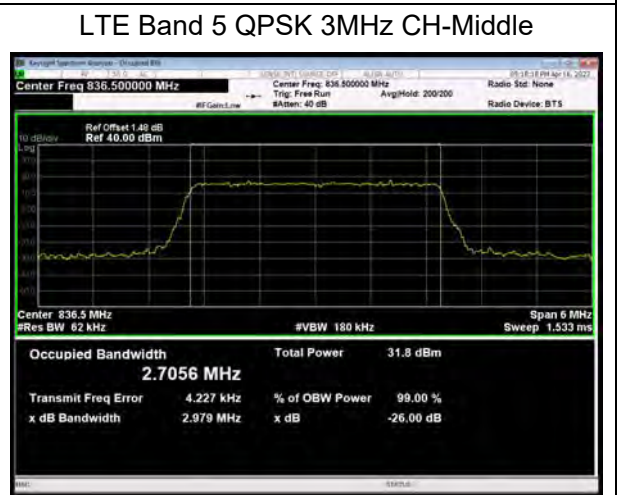
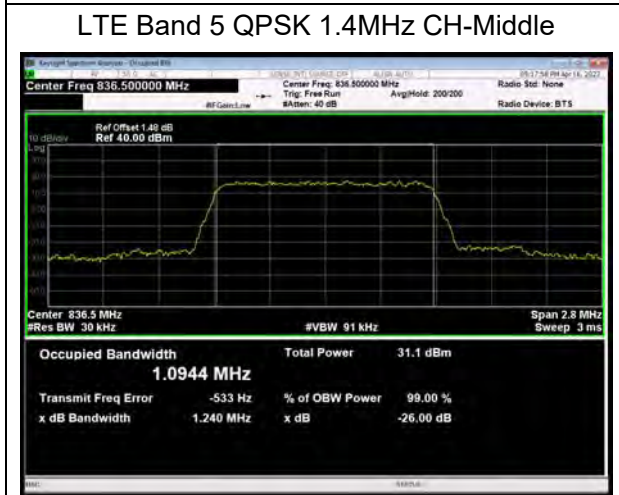
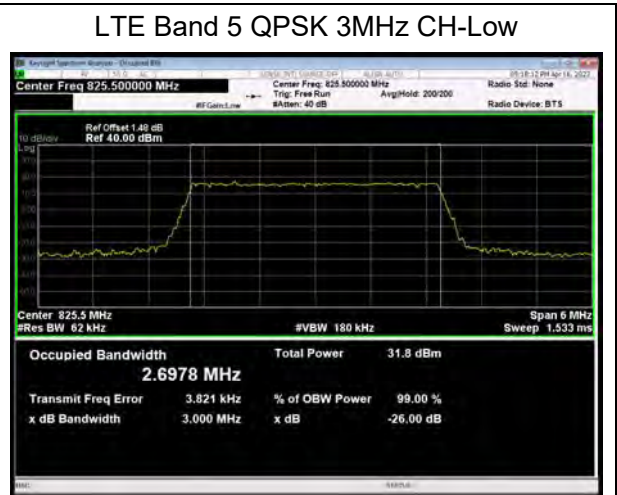
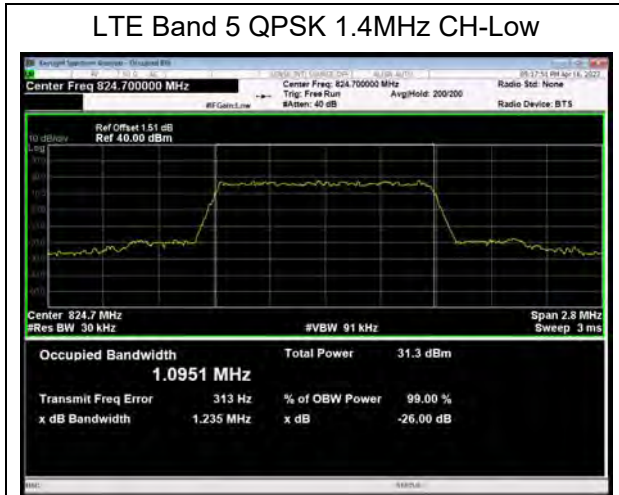


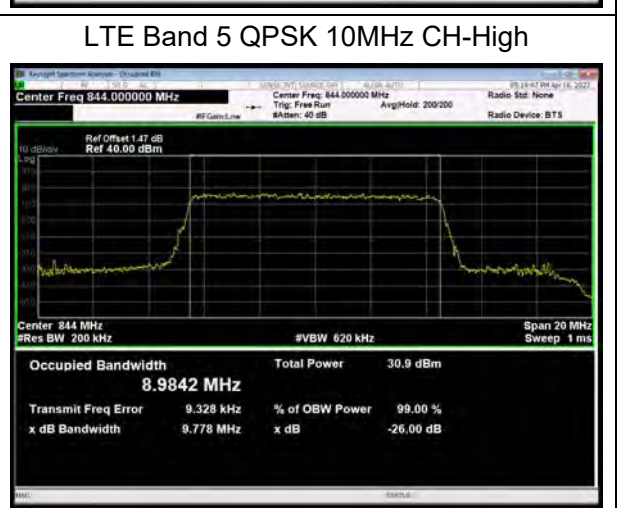
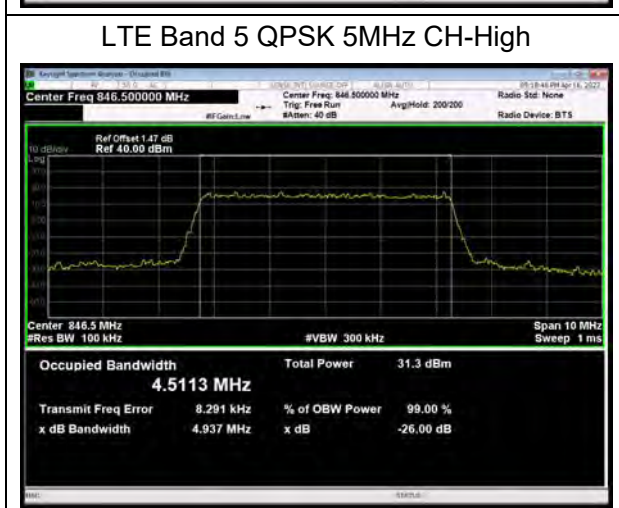
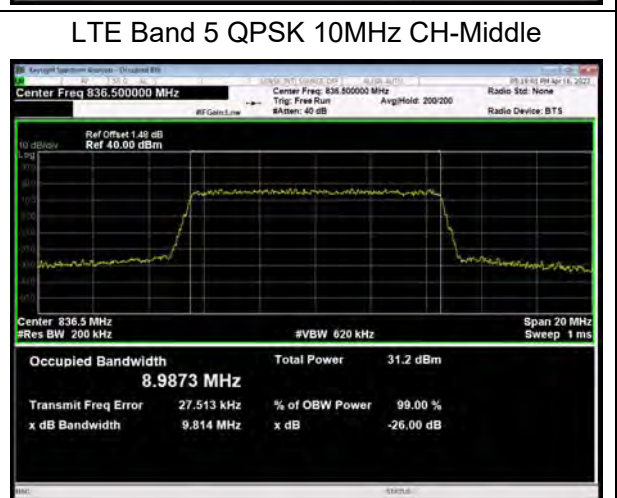
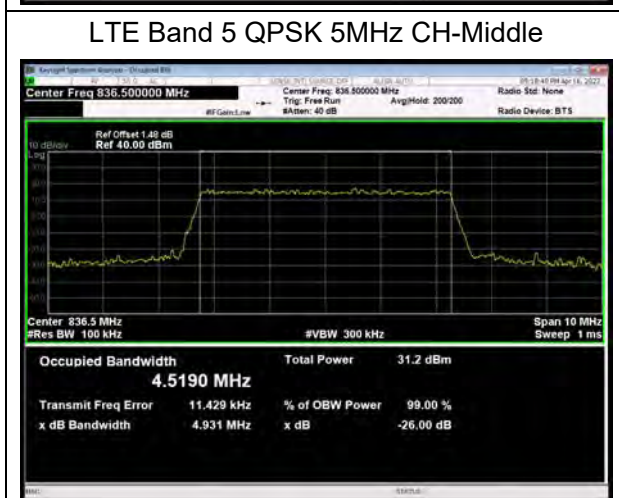
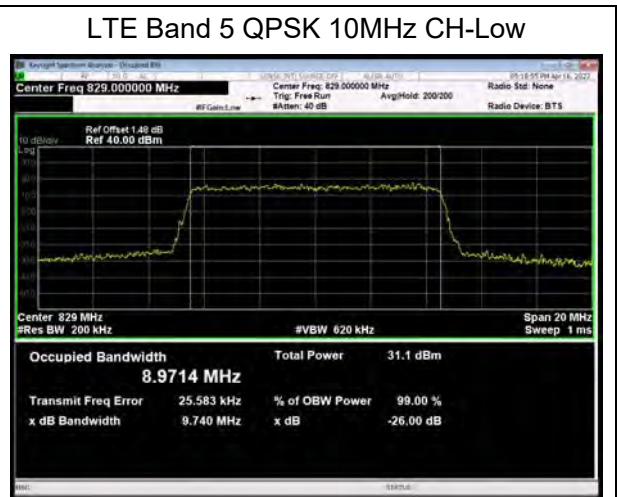
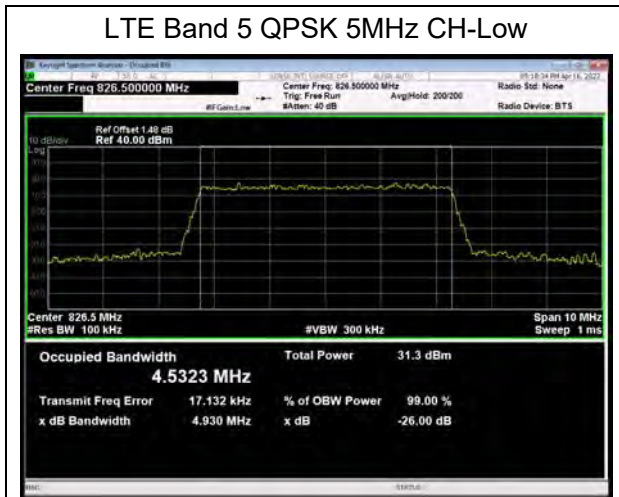
DC_66A-n5A						
RB	Modulation	Bandwidth	Channel	Frequency (MHz)	99% Power	-26dBc Bandwidth(MHz)
		(MHz)			Bandwidth(MHz)	
100%	BPSK	20	166800	834	18.303	20.14
			167300	836.5	18.255	20.20
			167800	839	18.319	20.14
	QPSK	20	166800	834	18.248	20.16
			167300	836.5	18.343	20.14
			167800	839	18.277	20.10
	16QAM	20	166800	834	18.316	20.12
			167300	836.5	18.272	20.17
			167800	839	18.357	20.16
	64QAM	20	166800	834	18.231	20.15
			167300	836.5	18.278	20.18
			167800	839	18.242	20.10
256QAM	20	166800	834	18.310	20.08	
		167300	836.5	18.307	20.14	
		167800	839	18.284	20.07	
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
1%	BPSK	20	166800	834	2.1539	2.825
			167300	836.5	2.1643	2.867
			167800	839	2.1770	2.916
	QPSK	20	166800	834	2.1884	2.841
			167300	836.5	2.1623	2.885
			167800	839	2.1459	2.838
	16QAM	20	166800	834	2.1260	2.829
			167300	836.5	2.1543	2.826
			167800	839	2.1405	2.792
	64QAM	20	166800	834	2.1213	2.838
			167300	836.5	2.1299	2.818
			167800	839	2.1737	2.809
256QAM	20	166800	834	2.1701	2.853	
		167300	836.5	2.1087	2.814	
		167800	839	2.1244	2.789	



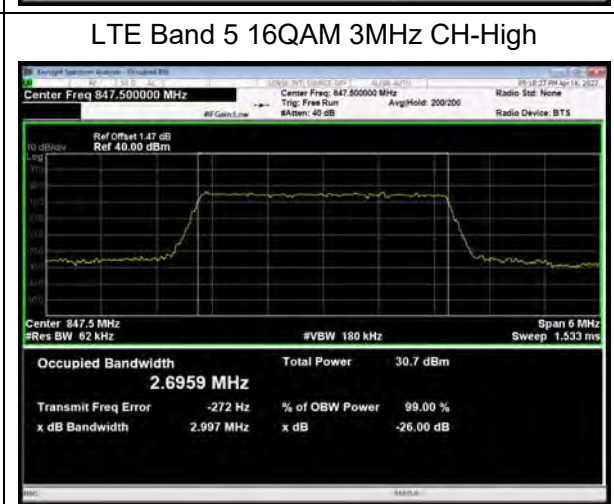
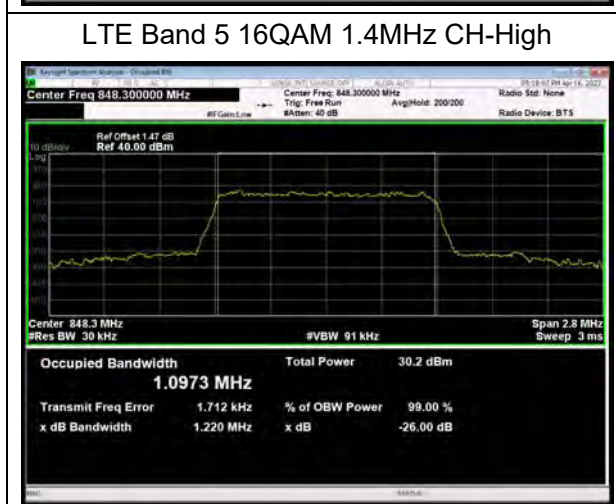
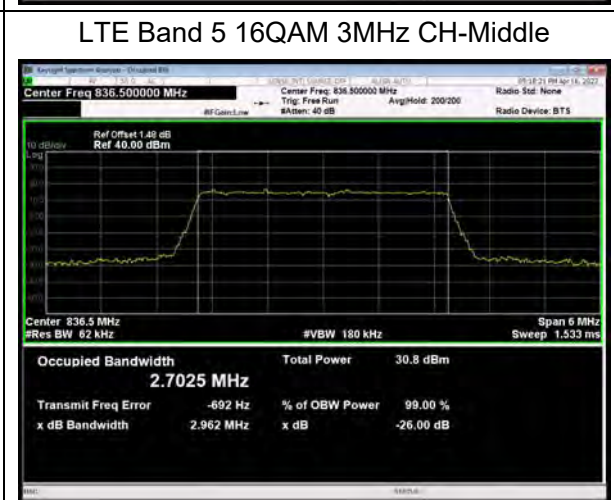
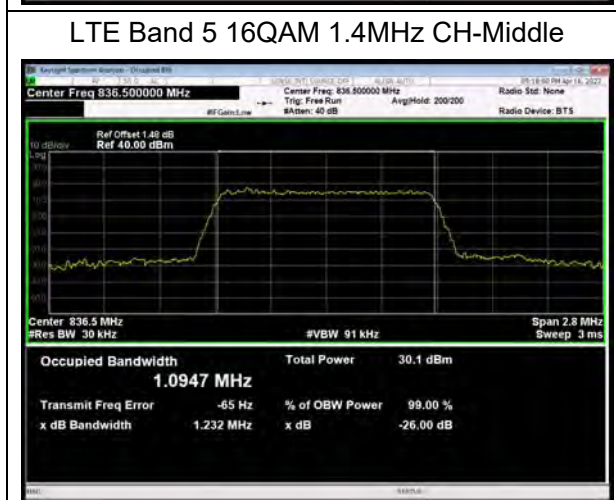
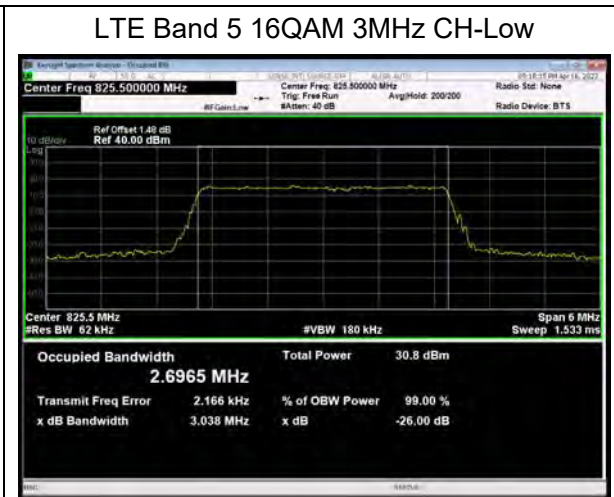
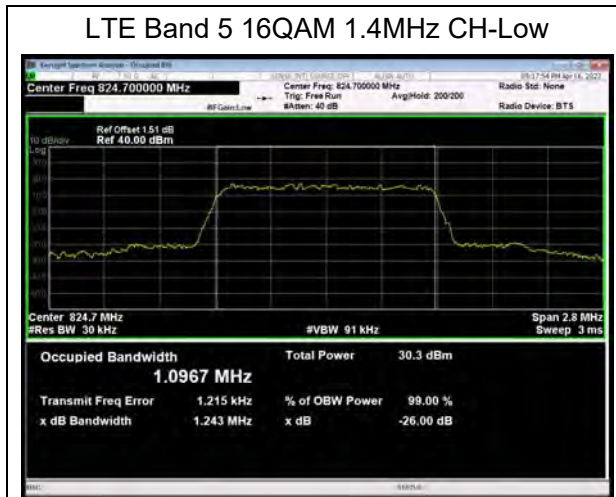


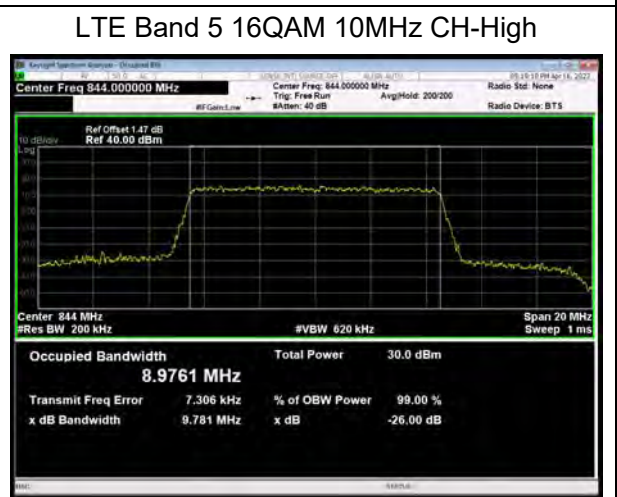
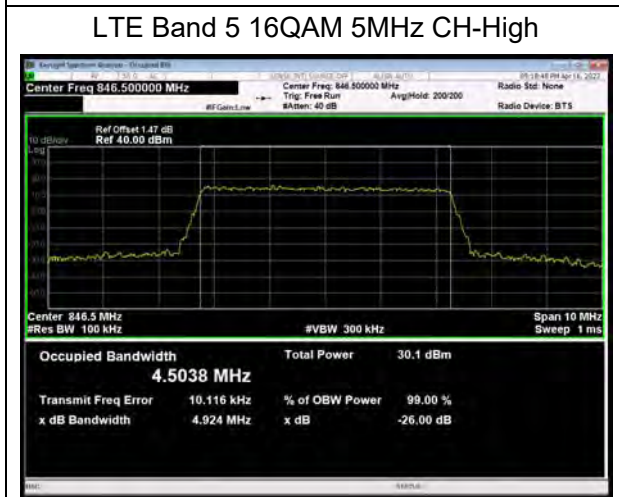
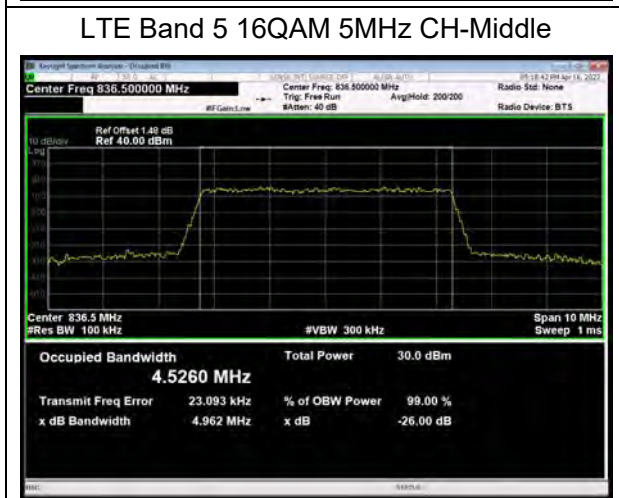
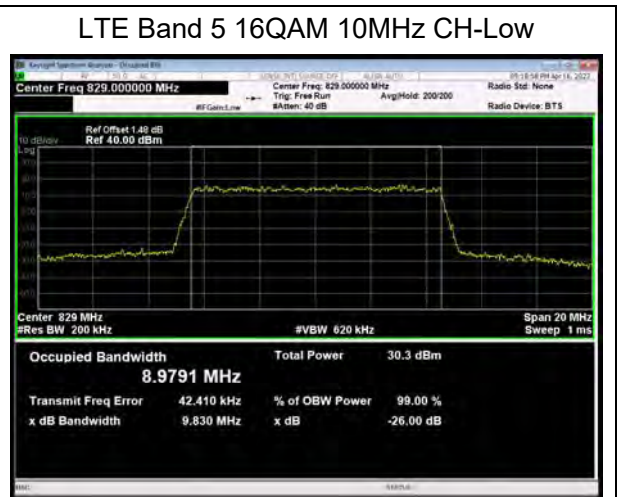
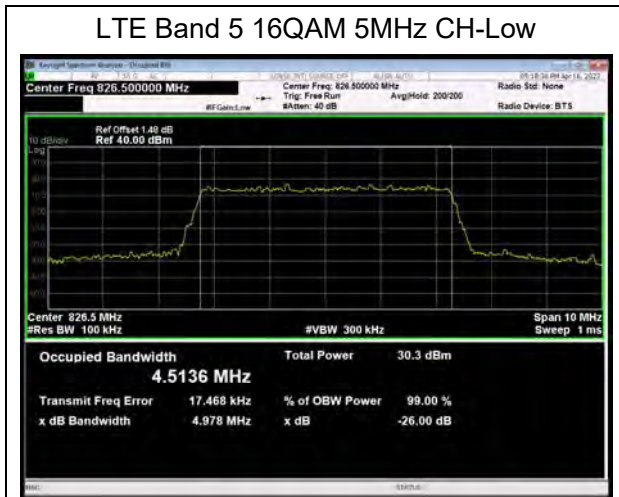




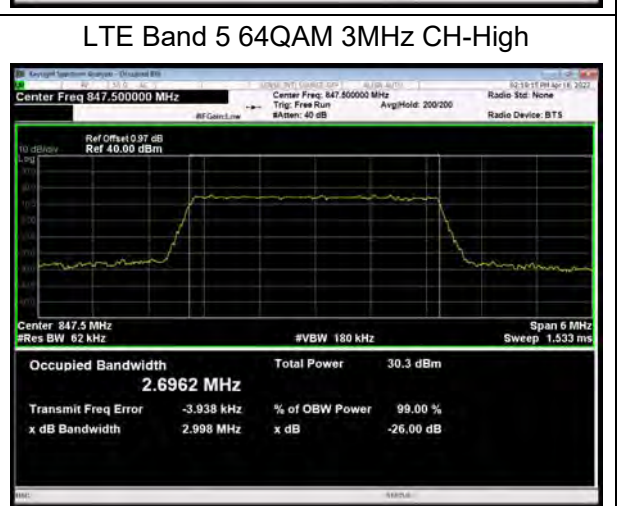
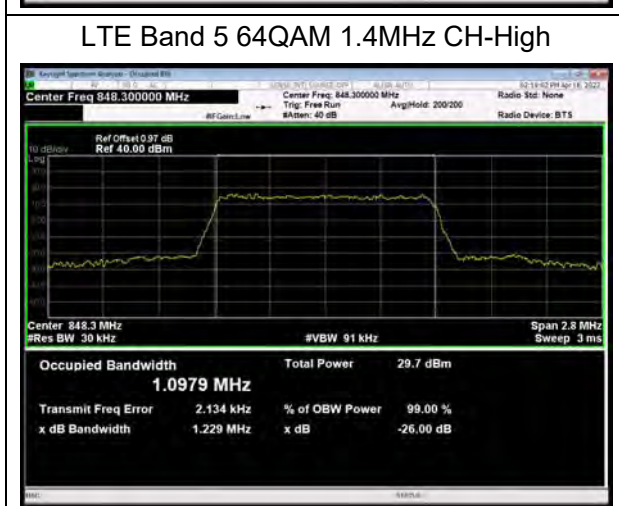
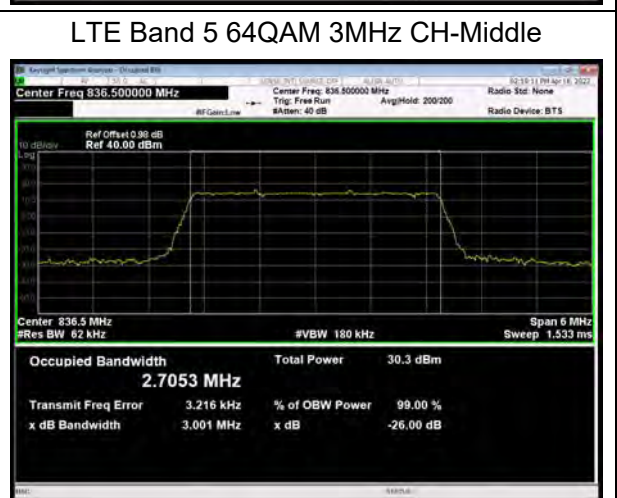
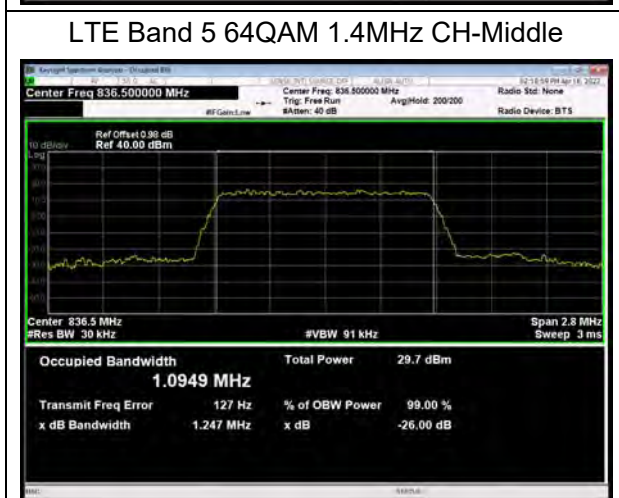
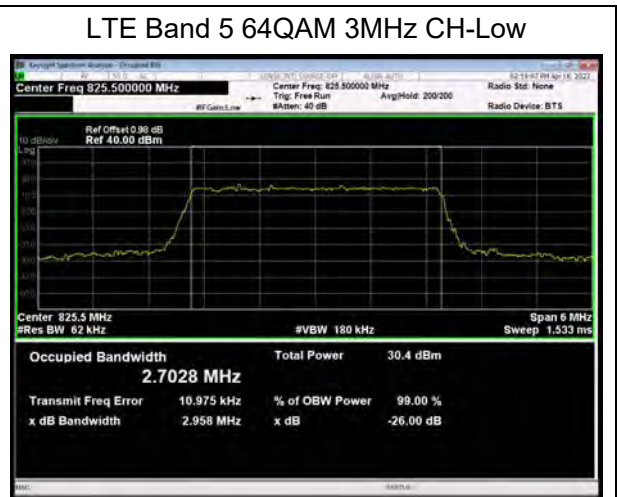
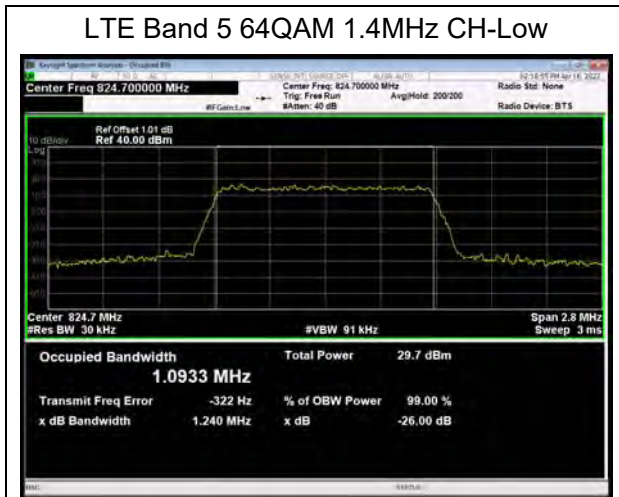




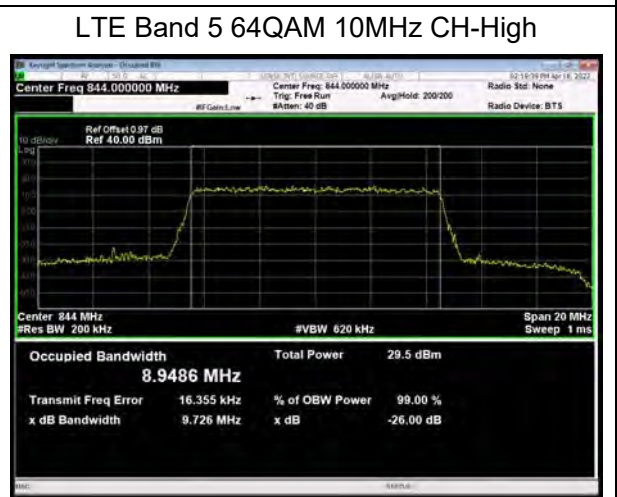
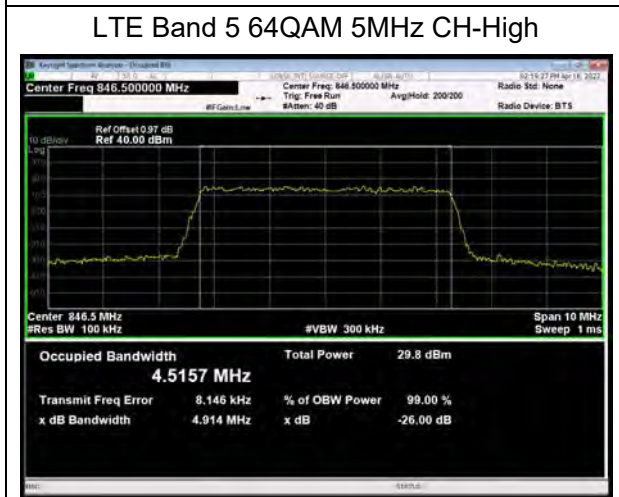
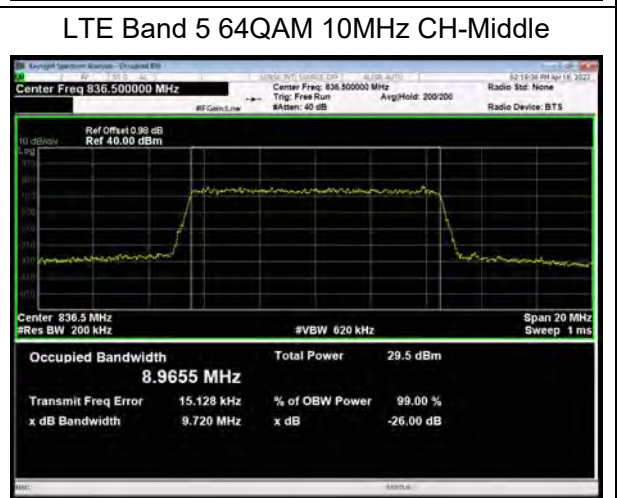
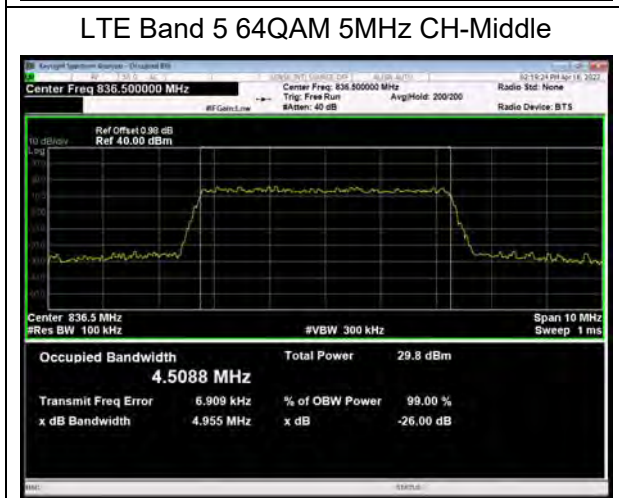
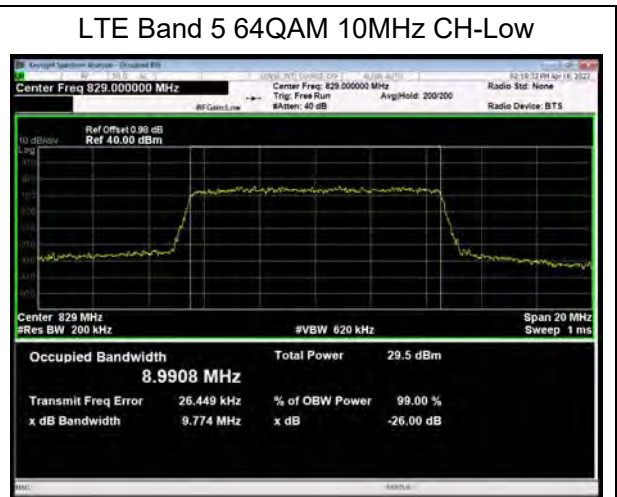
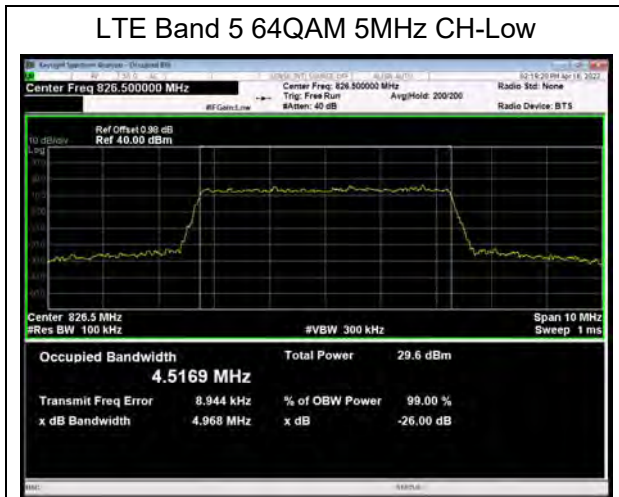






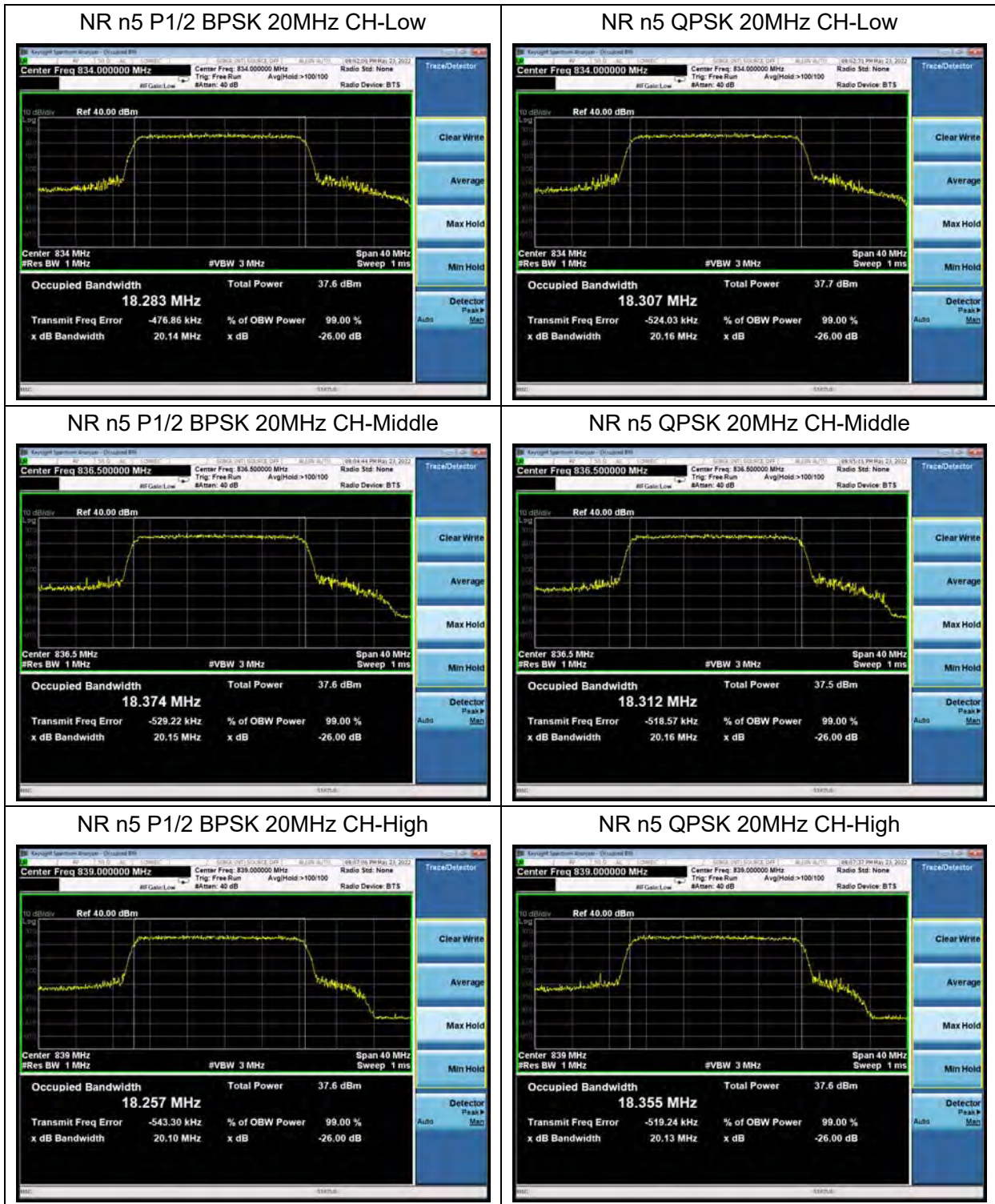




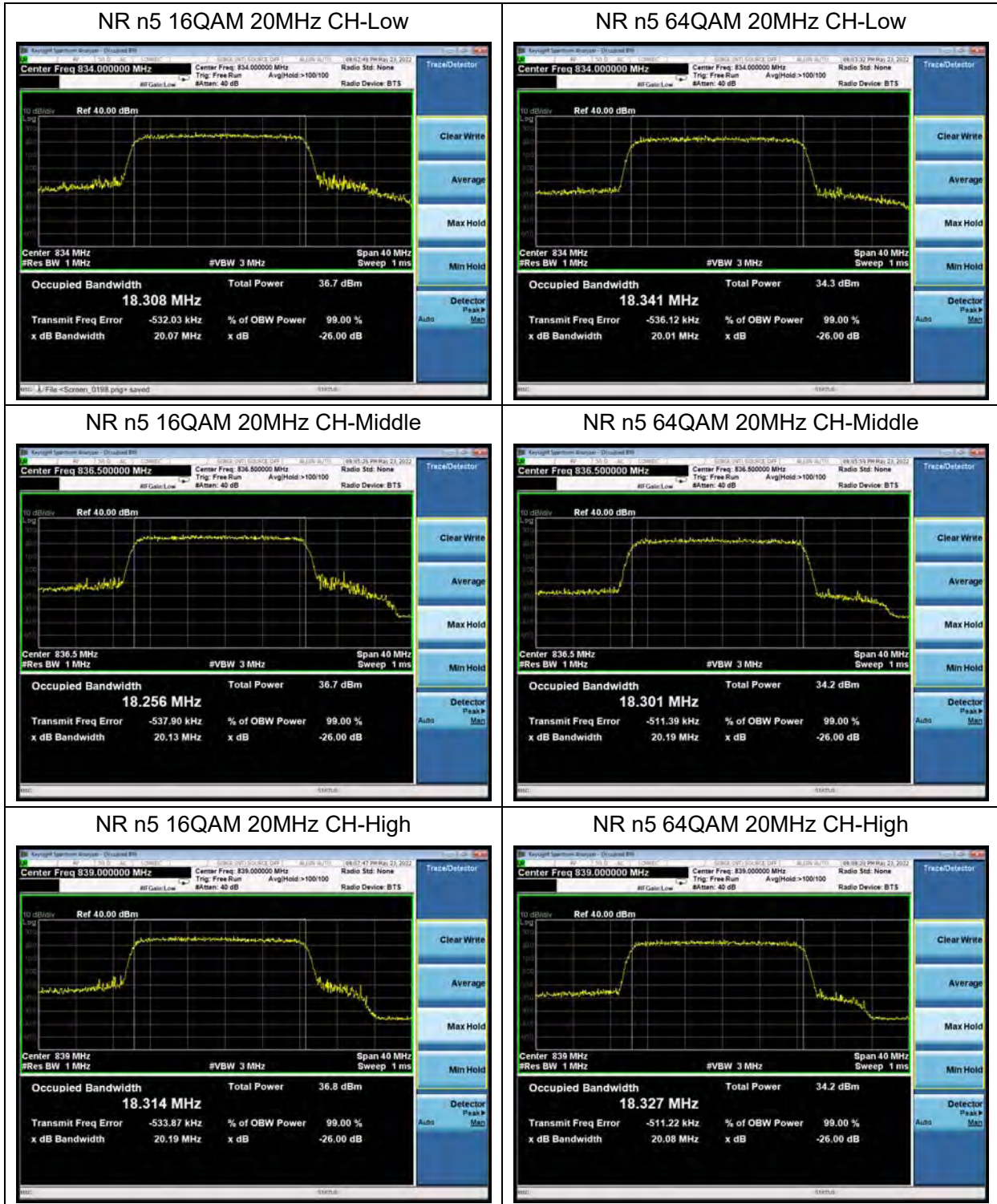




100%RB







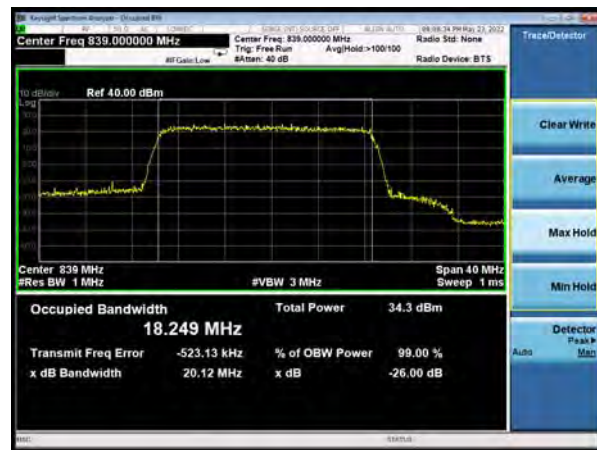
### NR n5 256QAM 20MHz CH-Low



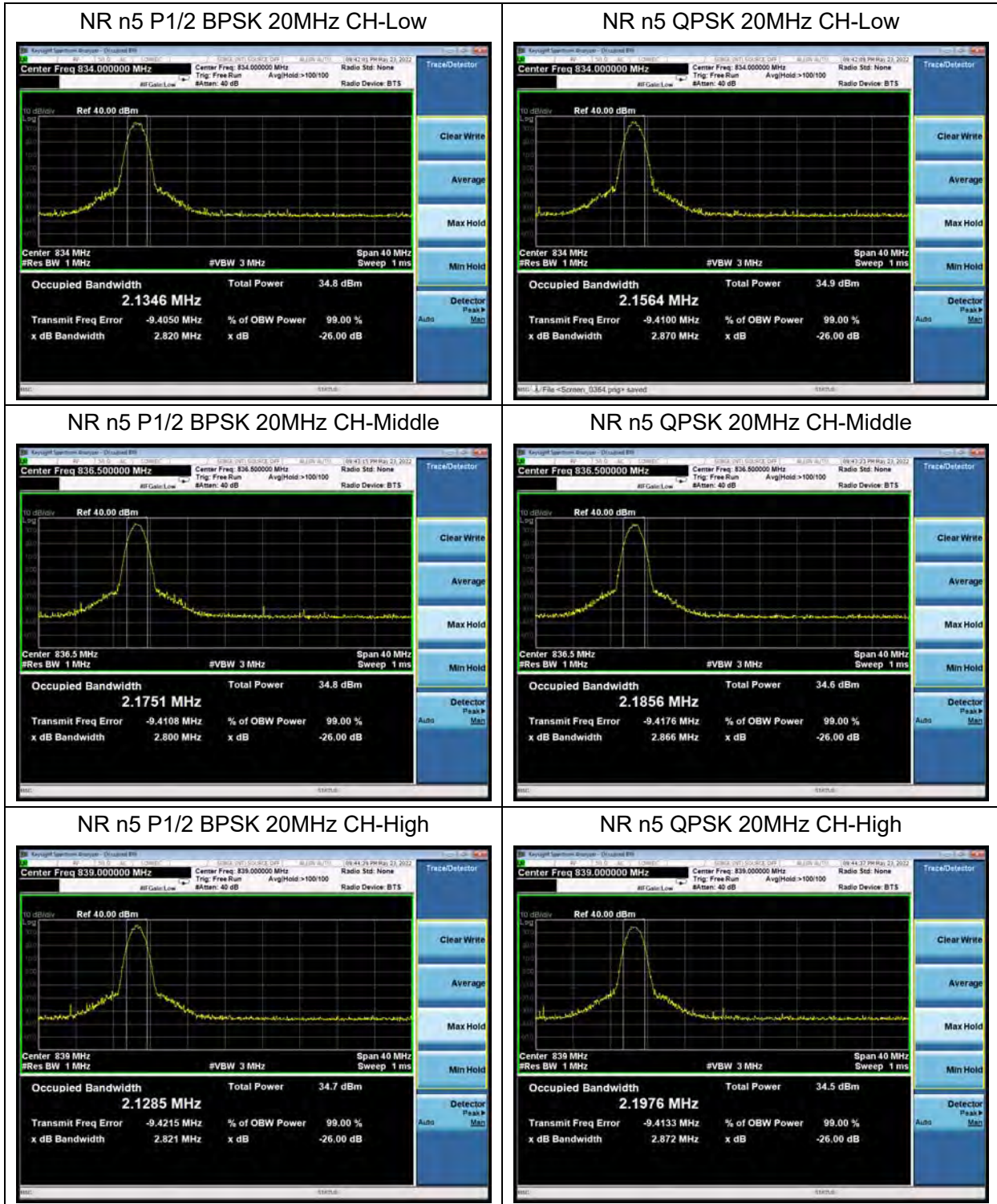
### NR n5 256QAM 20MHz CH-Middle



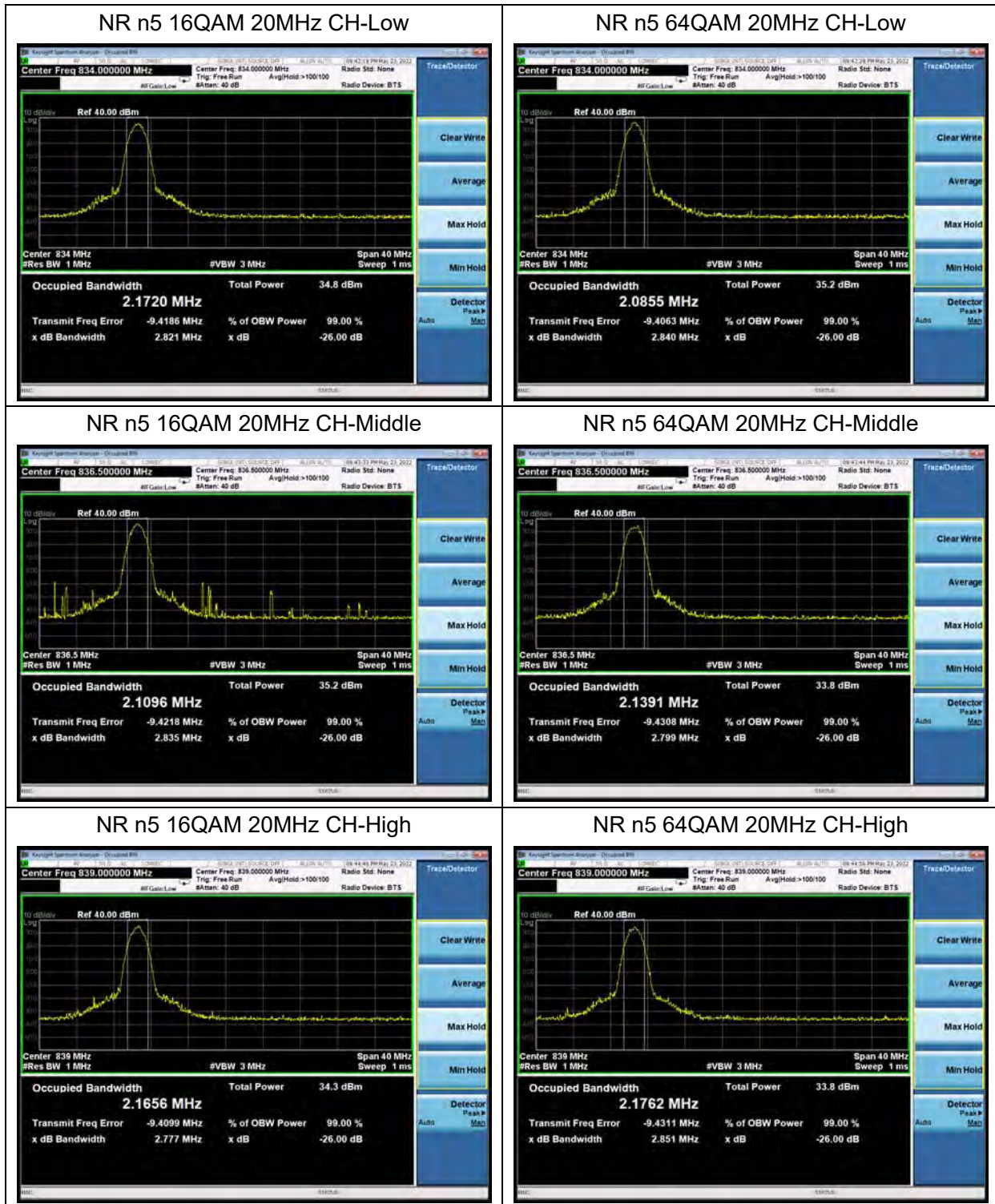
### NR n5 256QAM 20MHz CH-High



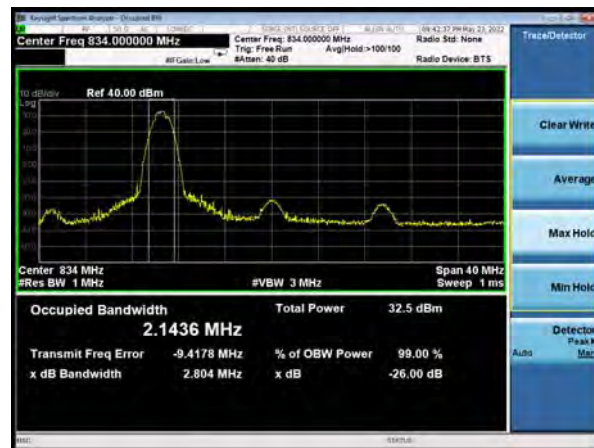
1 RB



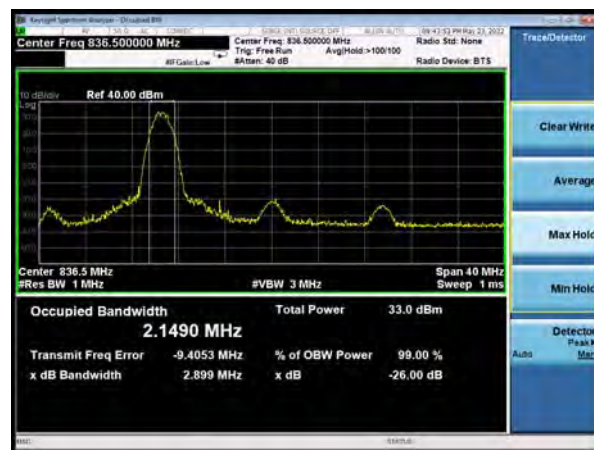




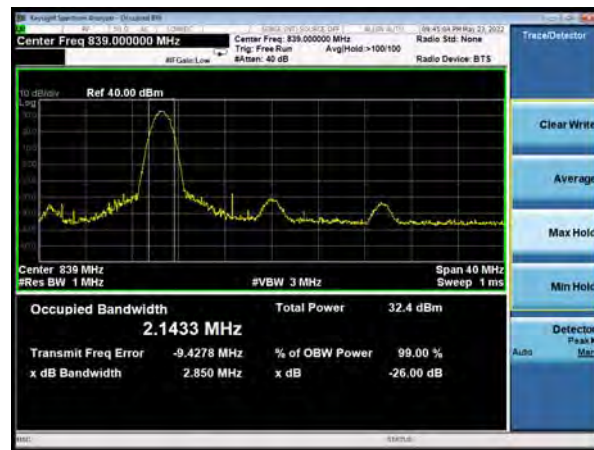
### NR n5 256QAM 20MHz CH-Low



### NR n5 256QAM 20MHz CH-Middle

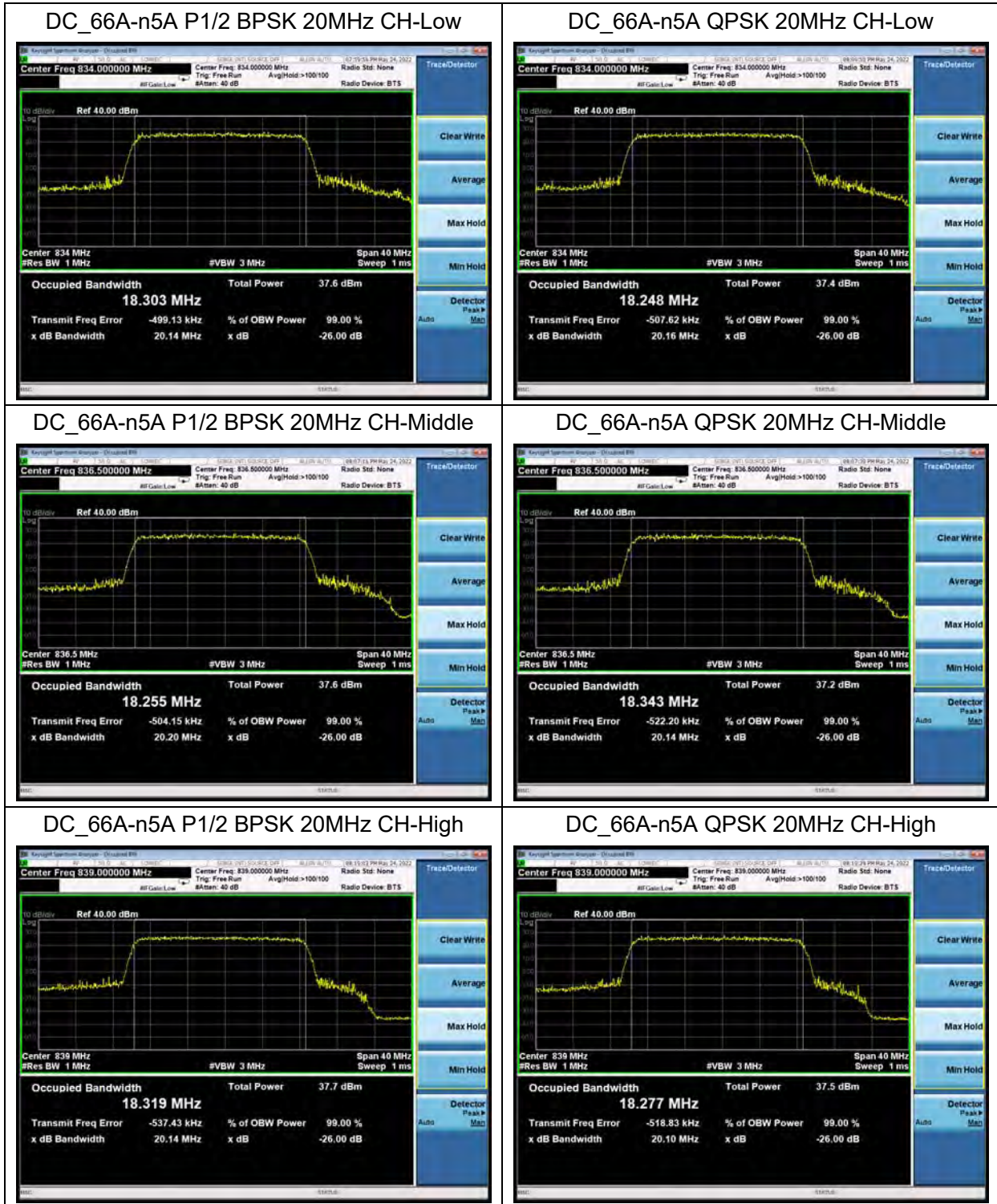


### NR n5 256QAM 20MHz CH-High

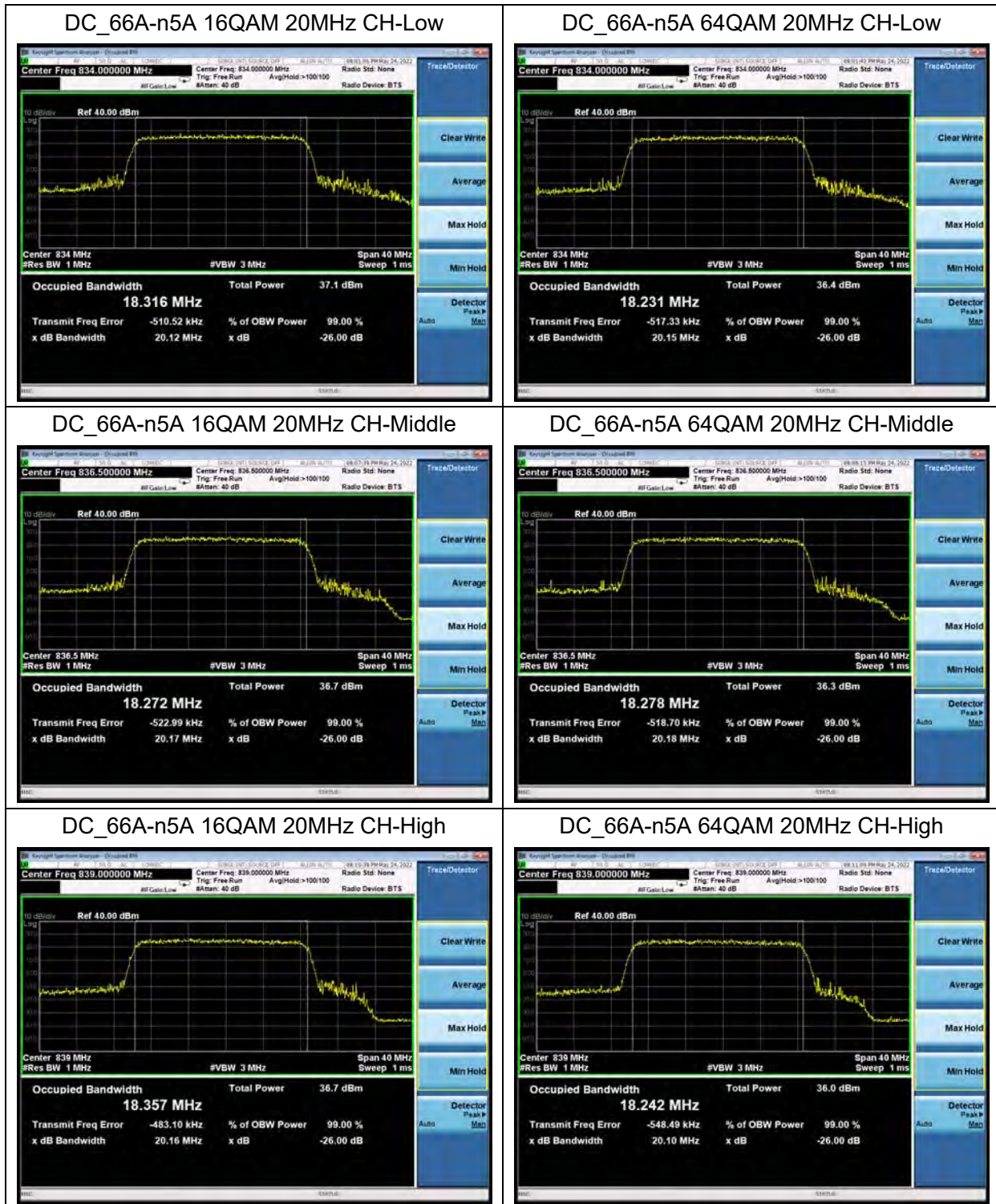




100%RB







DC\_66A-n5A 256QAM 20MHz CH-Low



DC\_66A-n5A 256QAM 20MHz CH-Middle

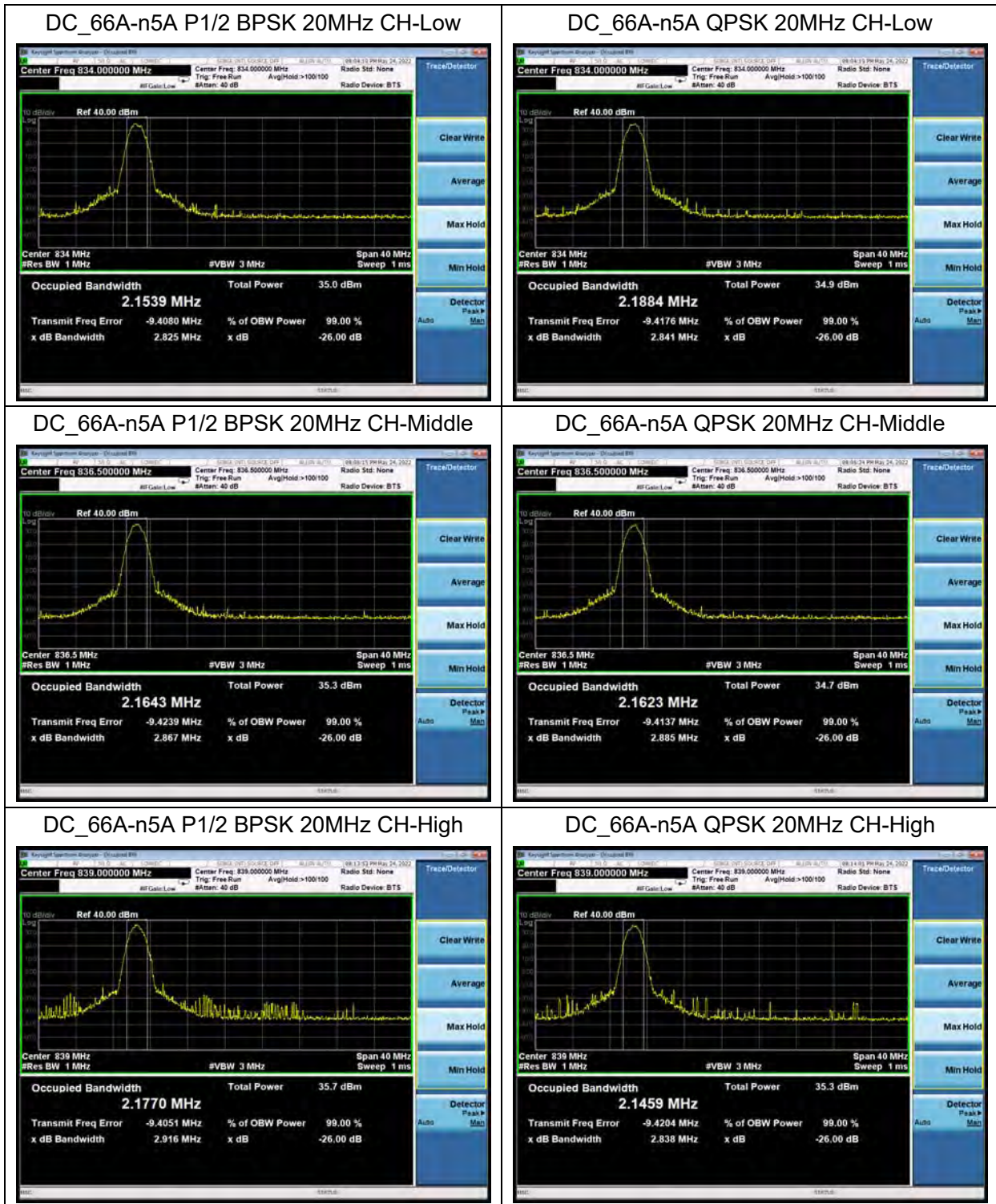


DC\_66A-n5A 256QAM 20MHz CH-High

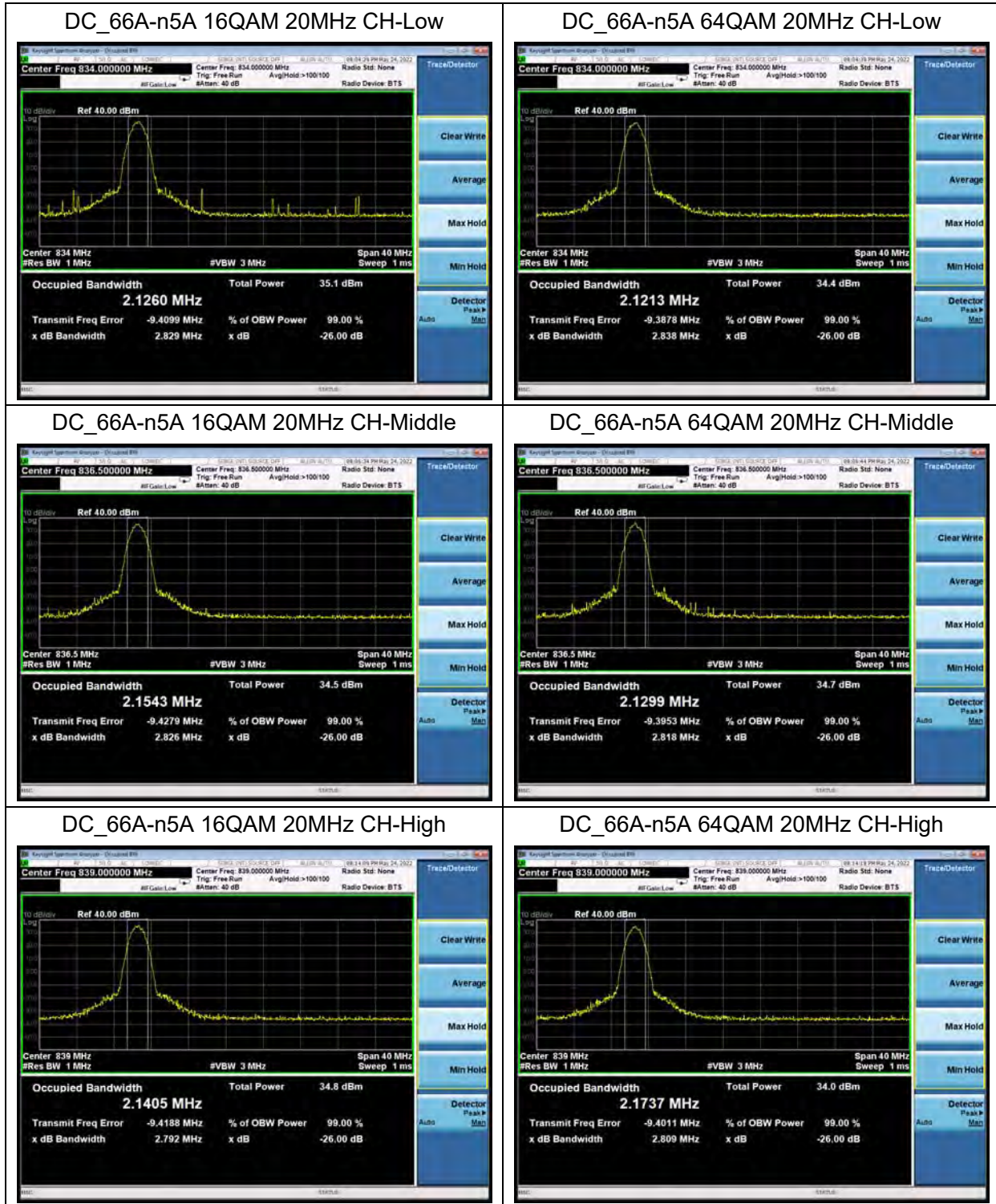




1 RB







DC\_66A-n5A 256QAM 20MHz CH-Low



DC\_66A-n5A 256QAM 20MHz CH-Middle



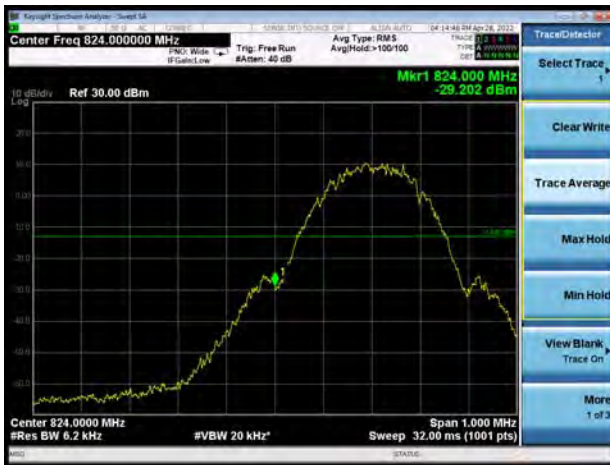
DC\_66A-n5A 256QAM 20MHz CH-High





### 6.3. Band Edge Compliance

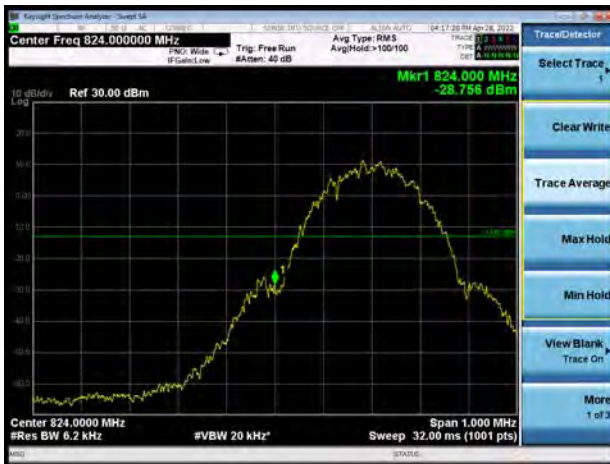
GSM 850 CH-Low



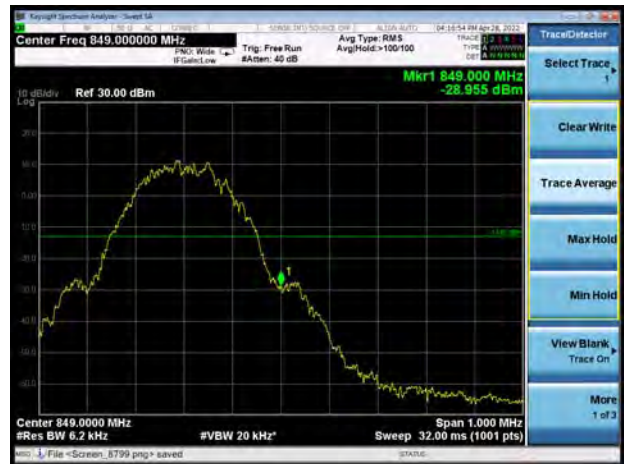
GSM 850 CH-High



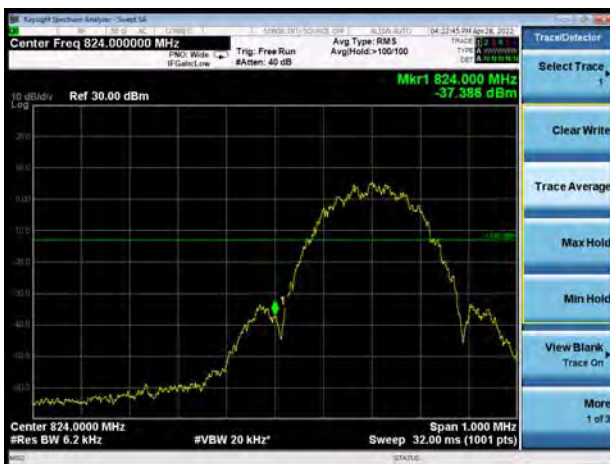
GSM 850 GPRS CH-Low



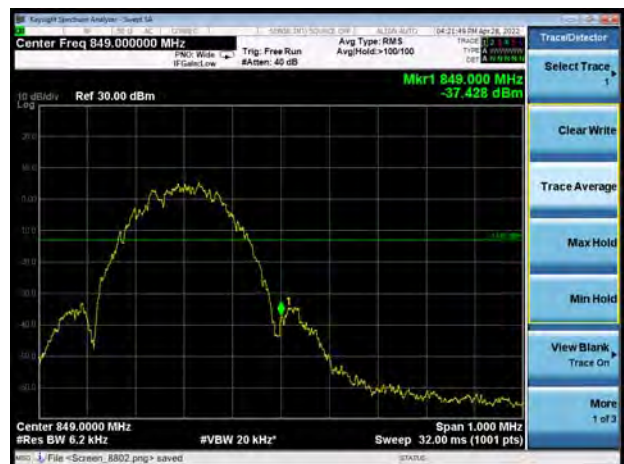
GSM 850 GPRS CH-High



GSM 850 EGPRS CH-Low



GSM 850 EGPRS CH-High





### WCDMA Band V CH-Low

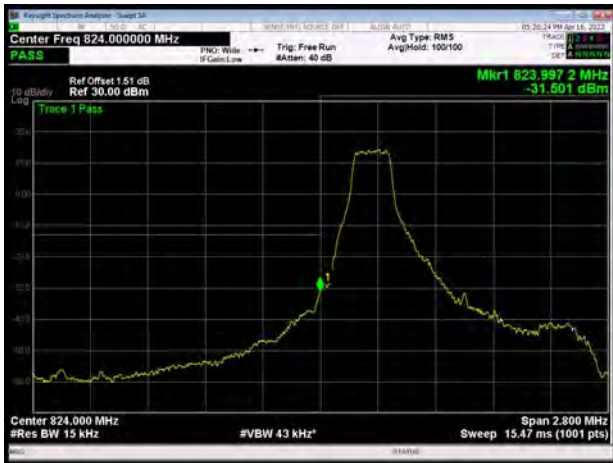


### WCDMA Band V CH-High

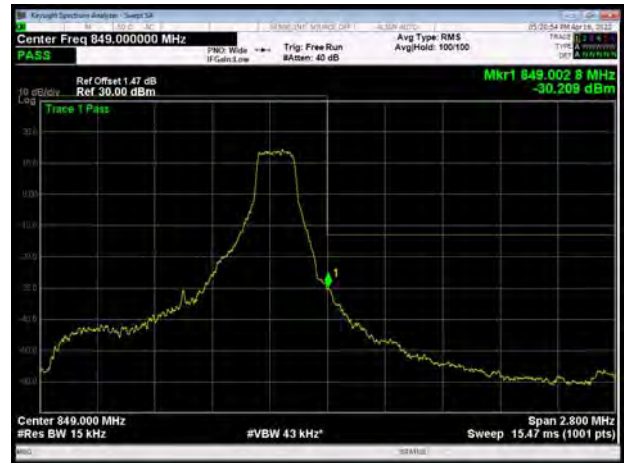




LTE Band 5 QPSK 1.4MHz CH-Low 1RB



LTE Band 5 QPSK 1.4MHz CH-High 1RB



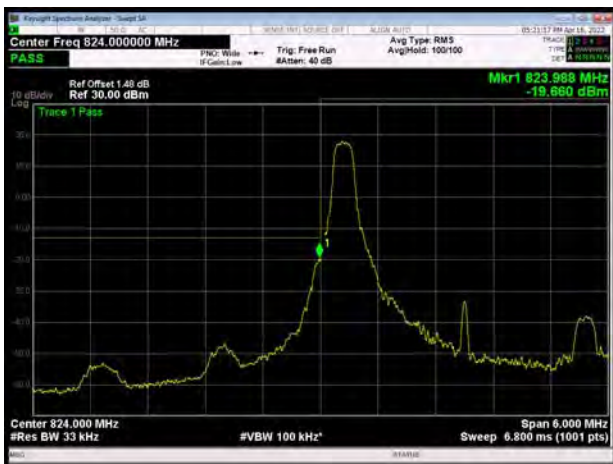
LTE Band 5 QPSK 1.4MHz CH-Low 100%RB



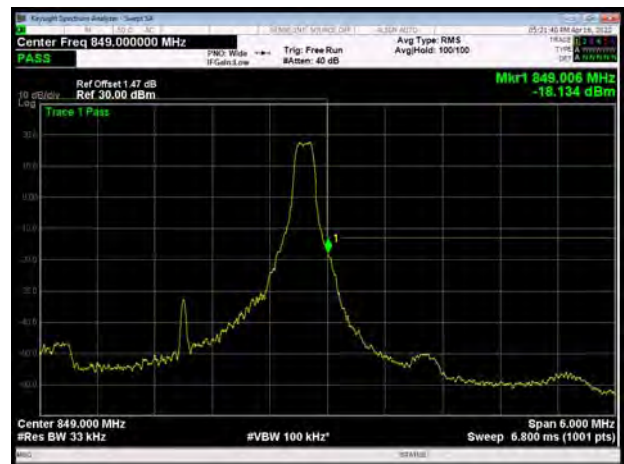
LTE Band 5 QPSK 1.4MHz CH-High 100%RB



LTE Band 5 QPSK 3MHz CH-Low 1RB



LTE Band 5 QPSK 3MHz CH-High 1RB





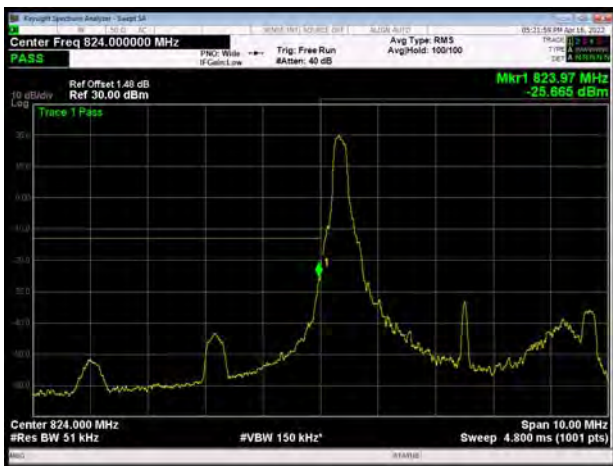
LTE Band 5 QPSK 3MHz CH-Low 100%RB



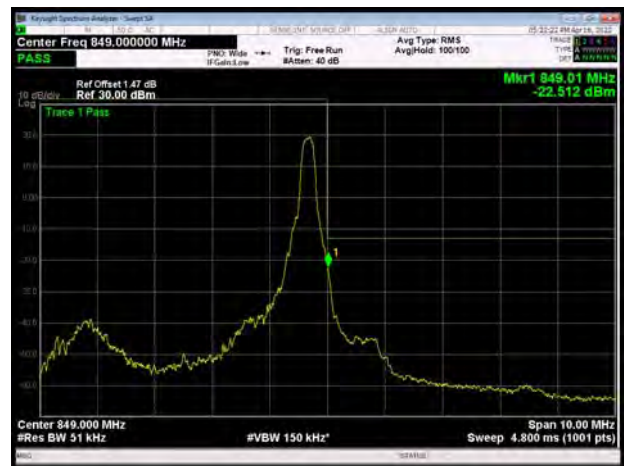
LTE Band 5 QPSK 3MHz CH-High 100%RB



LTE Band 5 QPSK 5MHz CH-Low 1RB



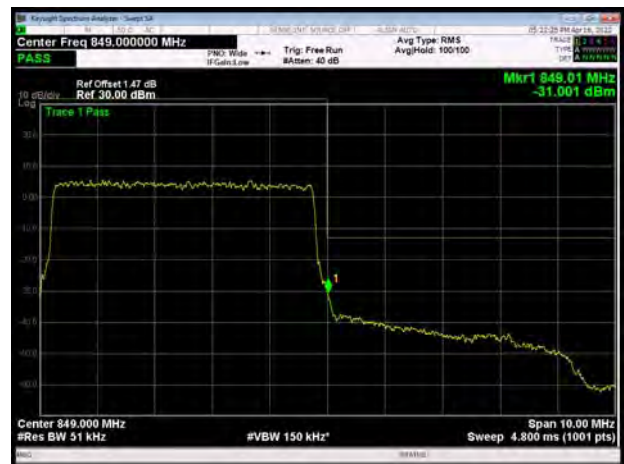
LTE Band 5 QPSK 5MHz CH-High 1RB



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



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

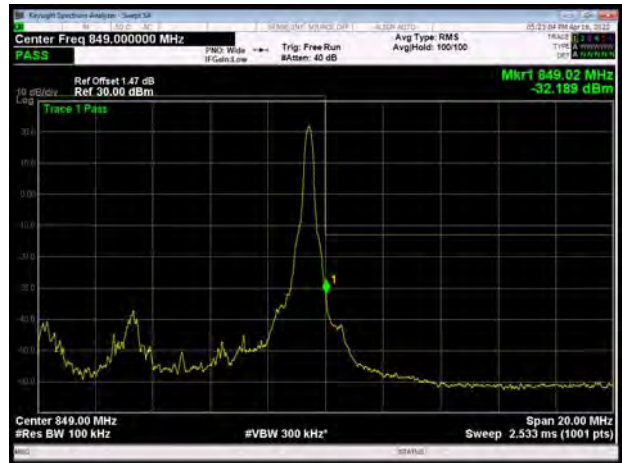




LTE Band 5 QPSK 10MHz CH-Low 1RB



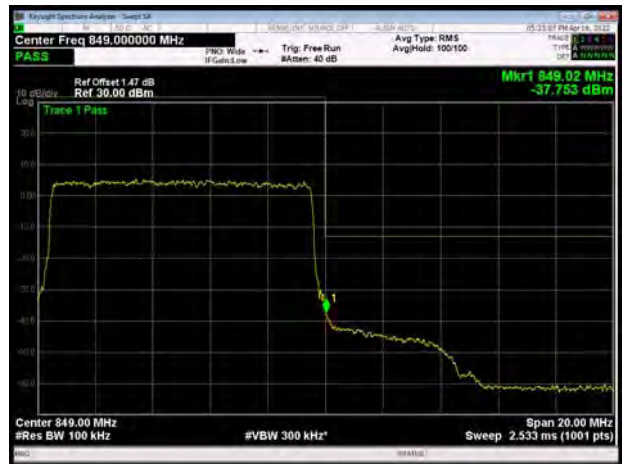
LTE Band 5 QPSK 10MHz CH-High 1RB



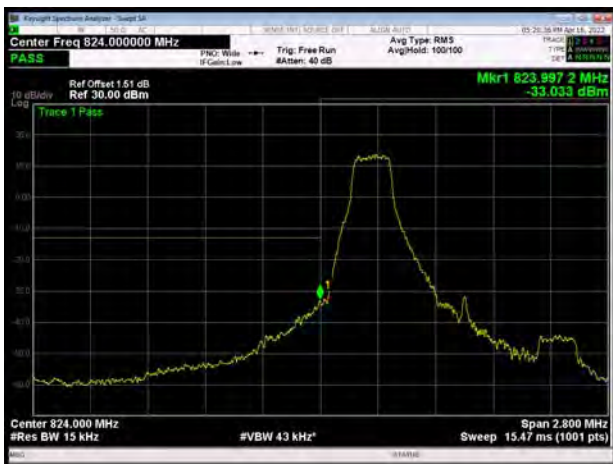
LTE Band 5 QPSK 10MHz CH-Low 100%RB



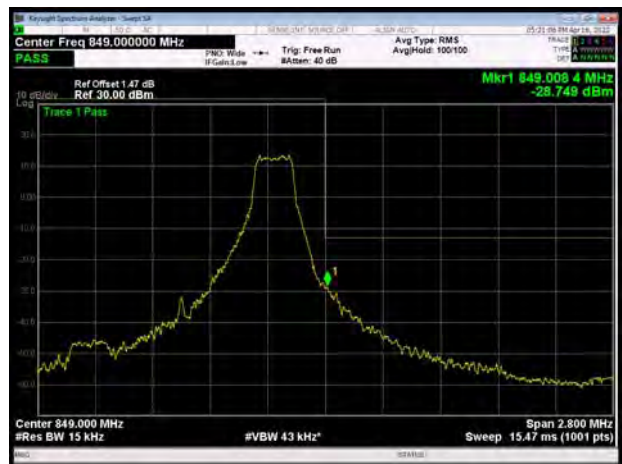
LTE Band 5 QPSK 10MHz CH-High 100%RB



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



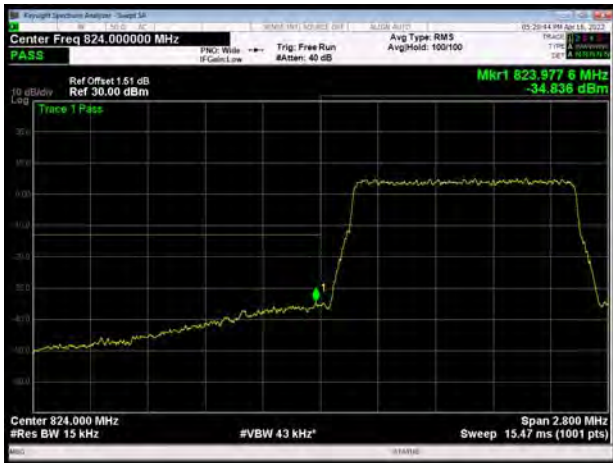
LTE Band 5 16QAM 1.4MHz CH-High 1RB







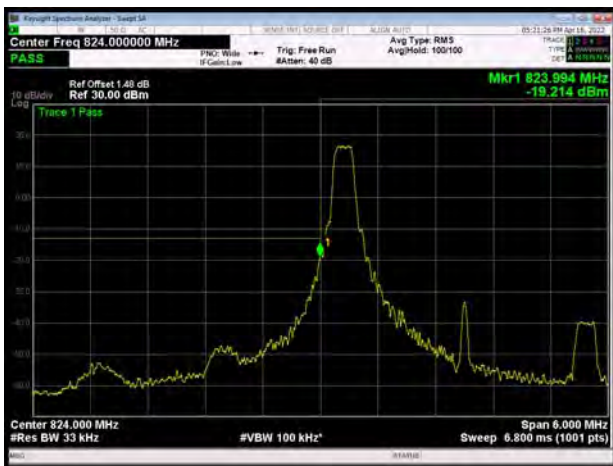
LTE Band 5 16QAM 1.4MHz CH-Low 100%RB



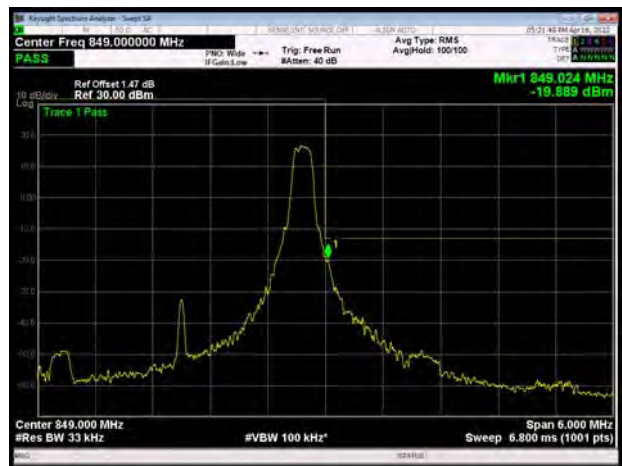
LTE Band 5 16QAM 1.4MHz CH-High 100%RB



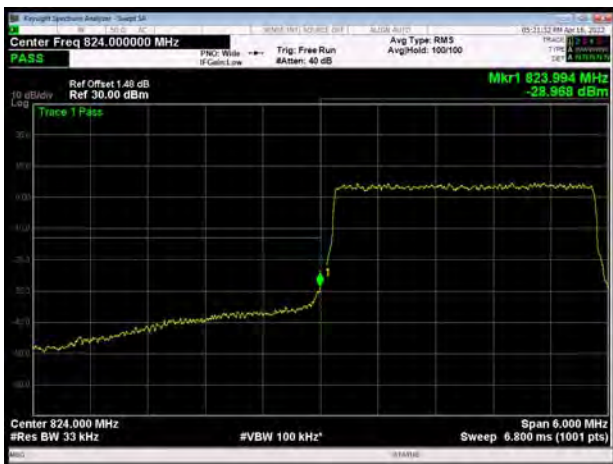
LTE Band 5 16QAM 3MHz CH-Low 1RB



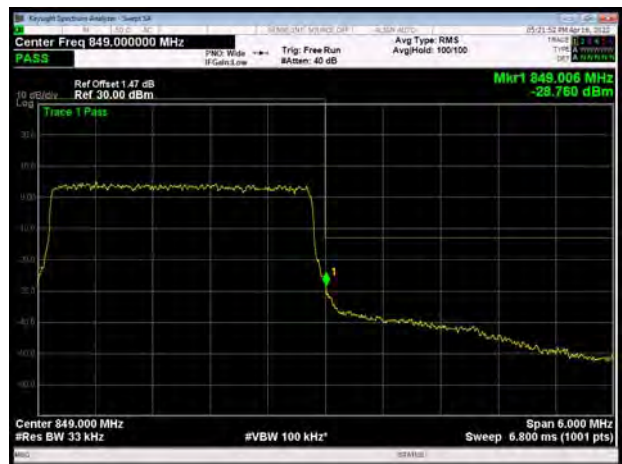
LTE Band 5 16QAM 3MHz CH-High 1RB



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

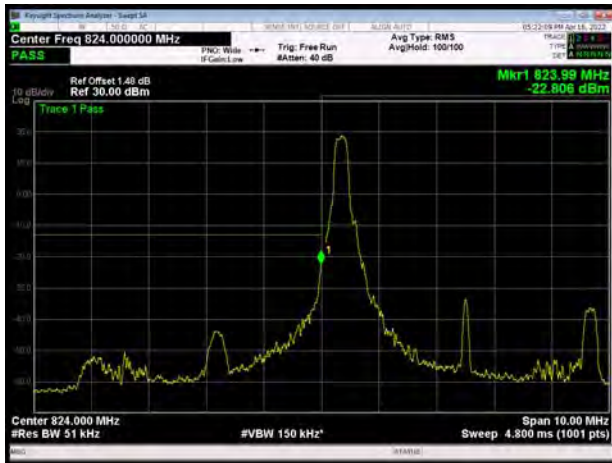


LTE Band 5 16QAM 3MHz CH-High 100%RB

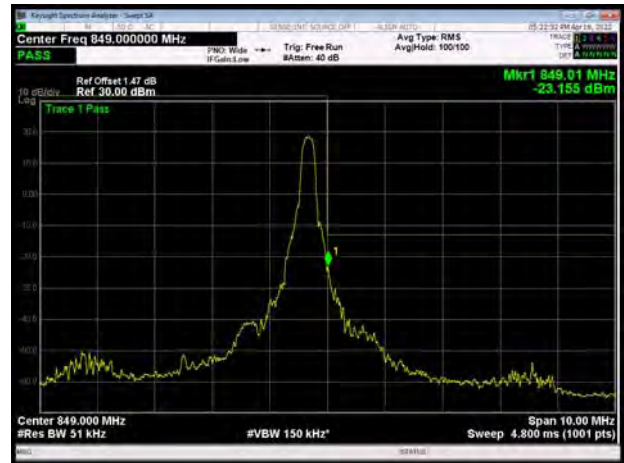




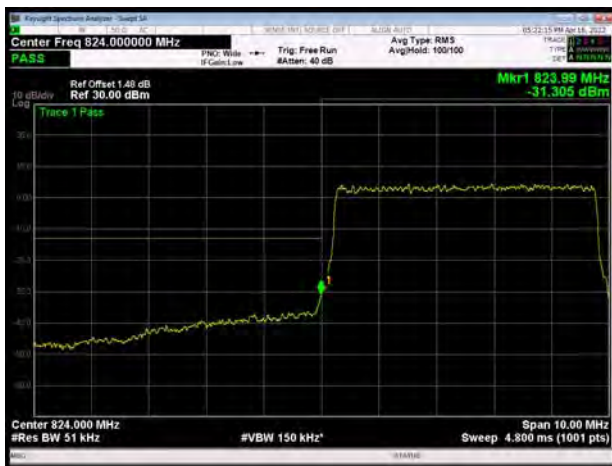
LTE Band 5 16QAM 5MHz CH-Low 1RB



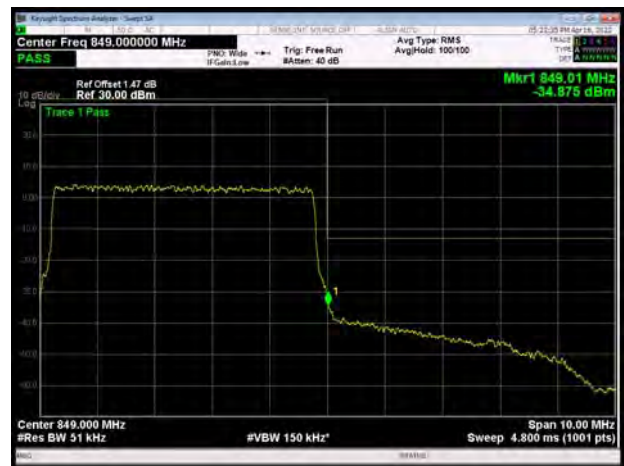
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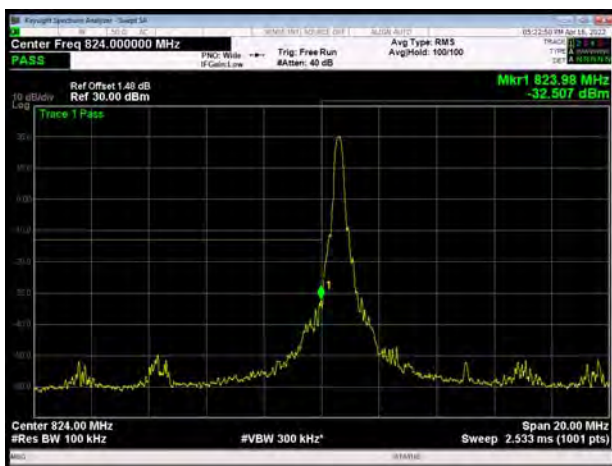
LTE Band 5 16QAM 5MHz CH-Low 100%RB



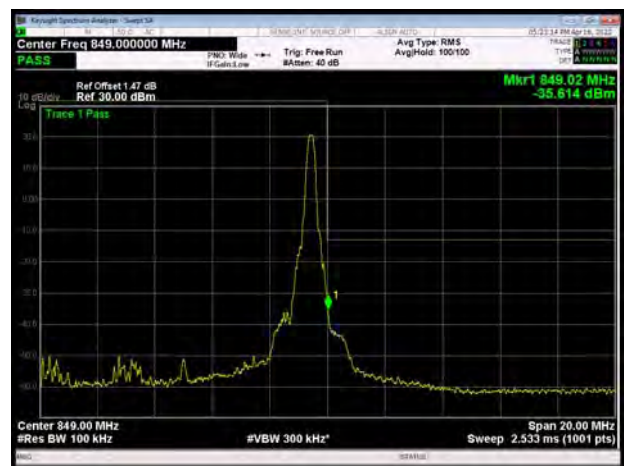
LTE Band 5 16QAM 5MHz CH-High 100%RB



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



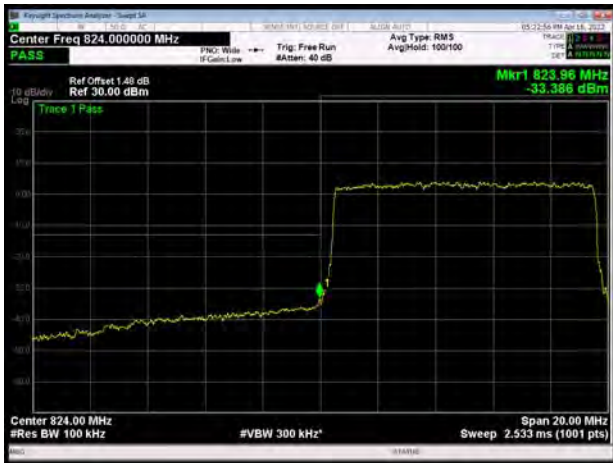
LTE Band 5 16QAM 10MHz CH-High 1RB







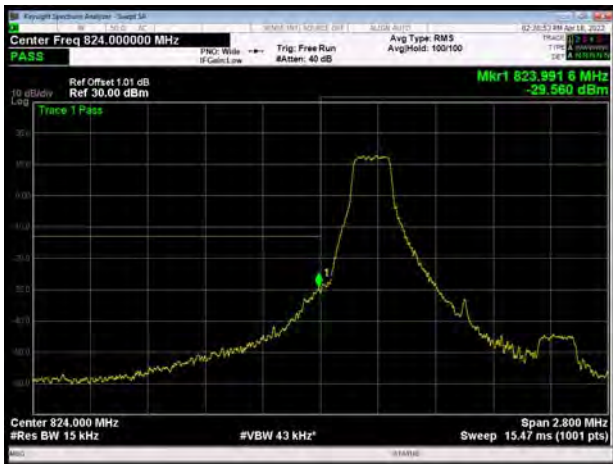
LTE Band 5 16QAM 10MHz CH-Low 100%RB



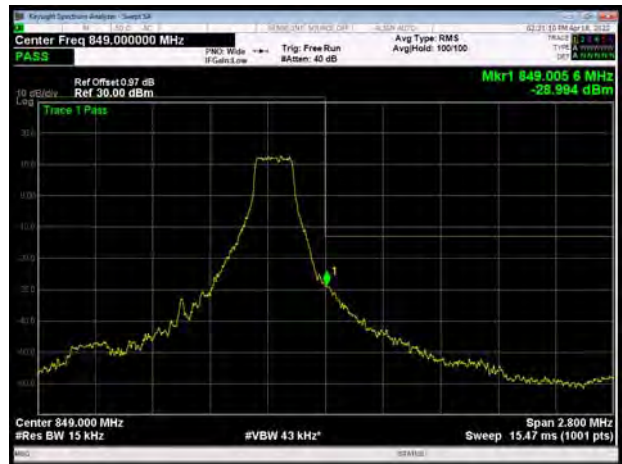
LTE Band 5 16QAM 10MHz CH-High 100%RB



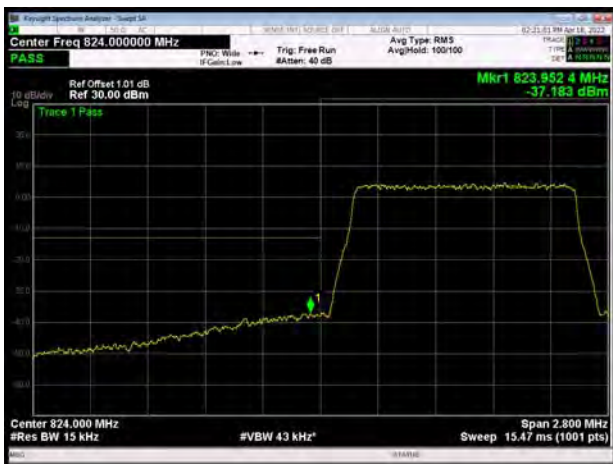
LTE Band 5 64QAM 1.4MHz CH-Low 1RB



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



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

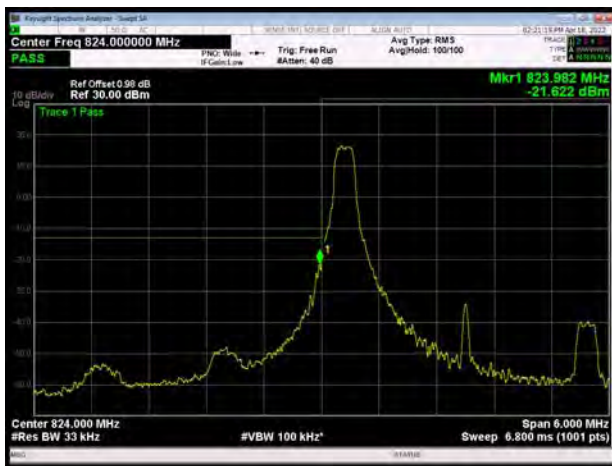


LTE Band 5 64QAM 1.4MHz CH-High 100%RB

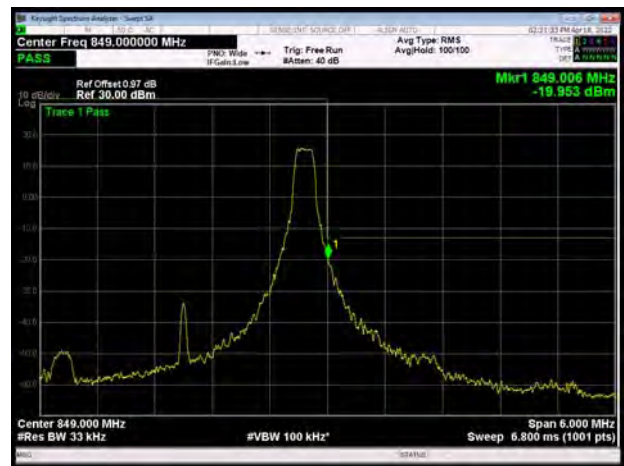




LTE Band 5 64QAM 3MHz CH-Low 1RB



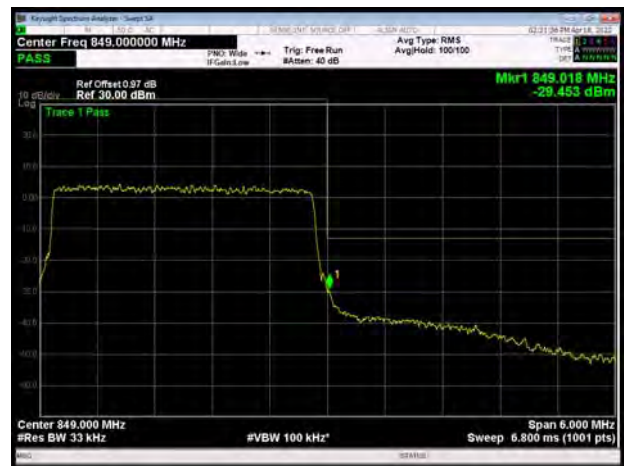
LTE Band 5 64QAM 3MHz CH-High 1RB



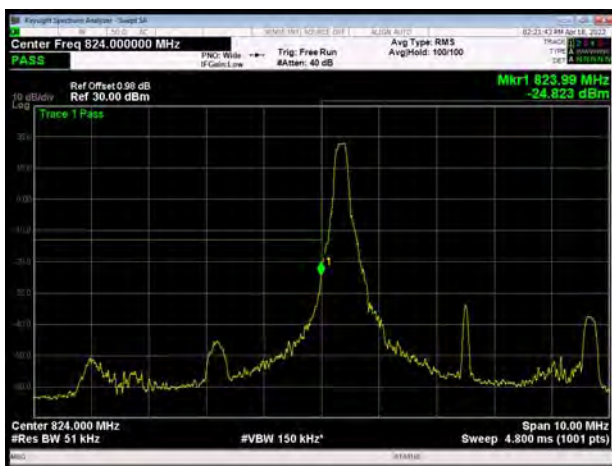
LTE Band 5 64QAM 3MHz CH-Low 100%RB



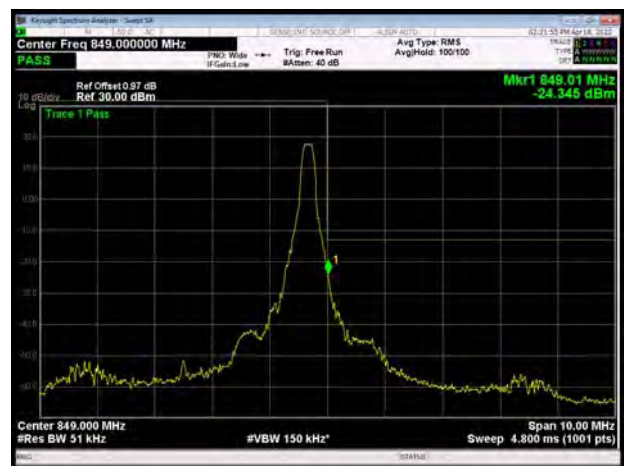
LTE Band 5 64QAM 3MHz CH-High 100%RB



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



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







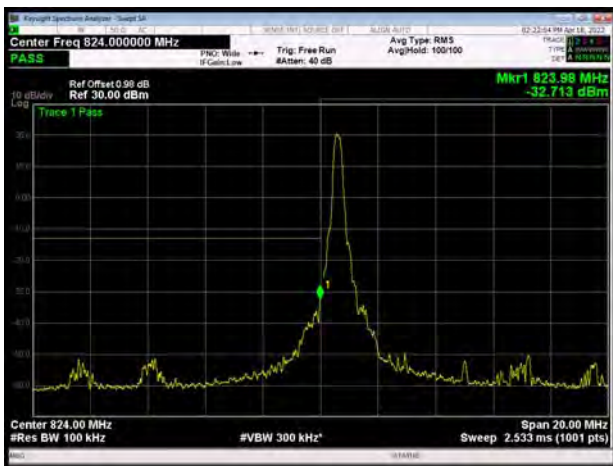
LTE Band 5 64QAM 5MHz CH-Low 100%RB



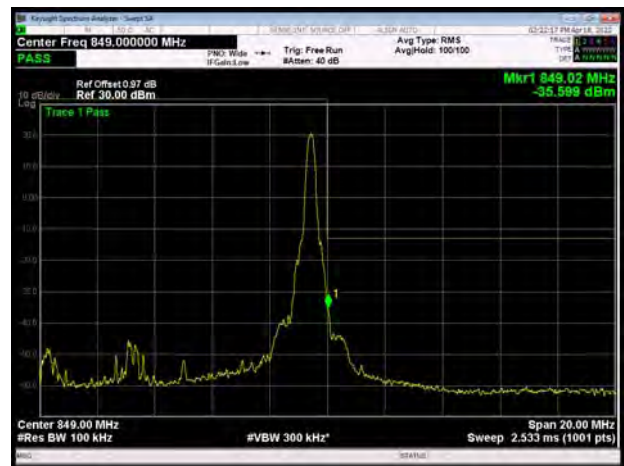
LTE Band 5 64QAM 5MHz CH-High 100%RB



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



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



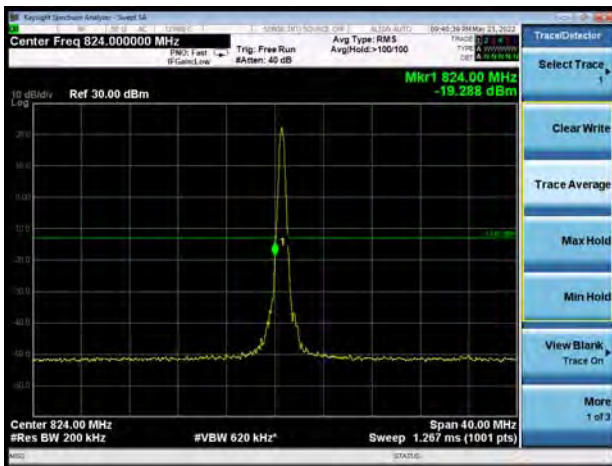
LTE Band 5 64QAM 10MHz CH-Low 100%RB



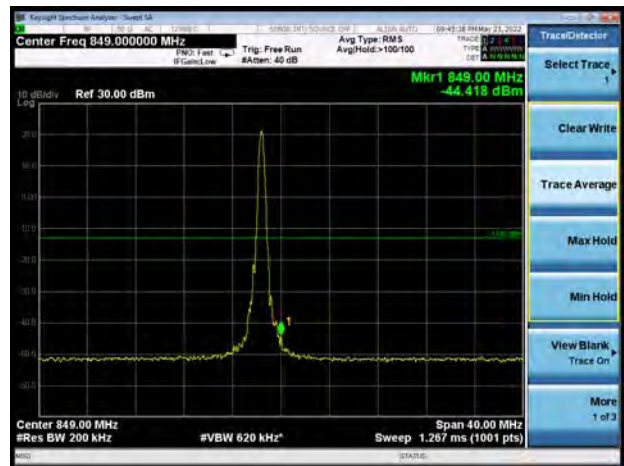
LTE Band 5 64QAM 10MHz CH-High 100%RB



NR n5 P1/2 BPSK 20MHz CH-Low 1RB



NR n5 P1/2 BPSK 20MHz CH-High 1RB



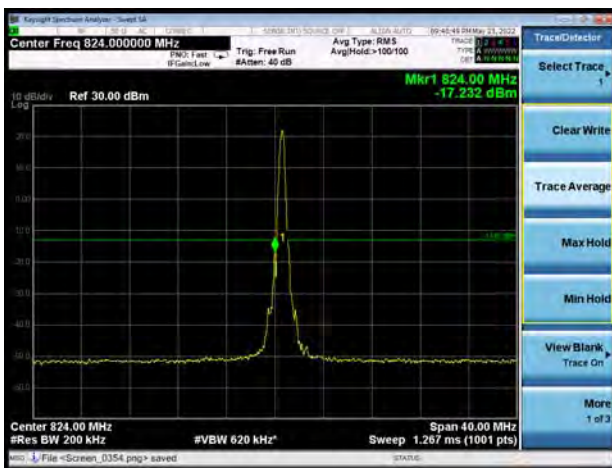
NR n5 P1/2 BPSK 20MHz CH-Low 100%RB



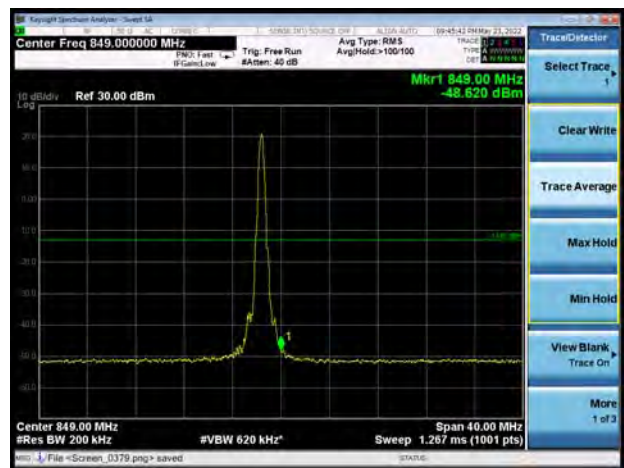
NR n5 P1/2 BPSK 20MHz CH-High 100%RB



NR n5 QPSK 20MHz CH-Low 1RB



NR n5 QPSK 20MHz CH-High 1RB





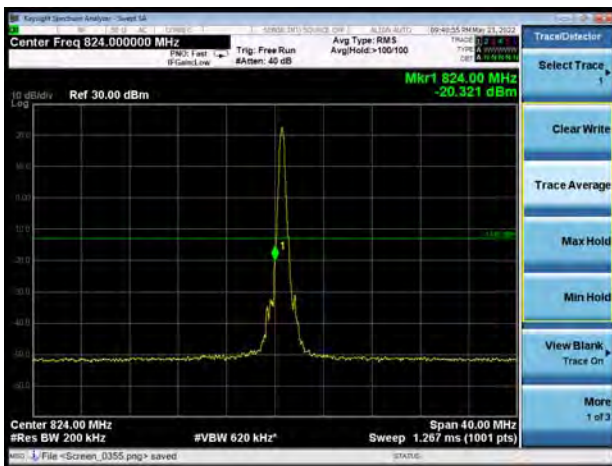
NR n5 QPSK 20MHz CH-Low 100%RB



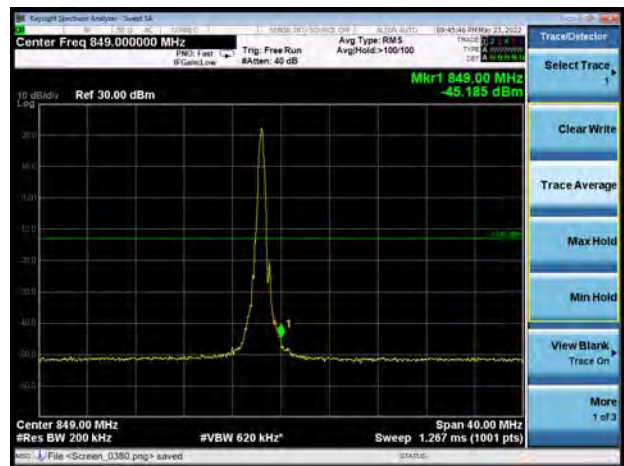
NR n5 QPSK 20MHz CH-High 100%RB



NR n5 16QAM 20MHz CH-Low 1RB



NR n5 16QAM 20MHz CH-High 1RB



NR n5 16QAM 20MHz CH-Low 100%RB

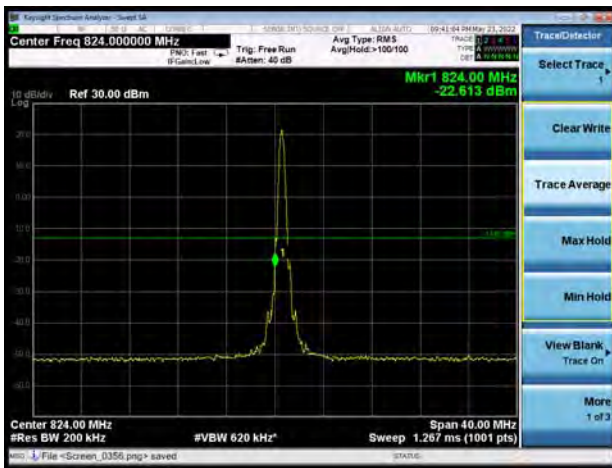


NR n5 16QAM 20MHz CH-High 100%RB

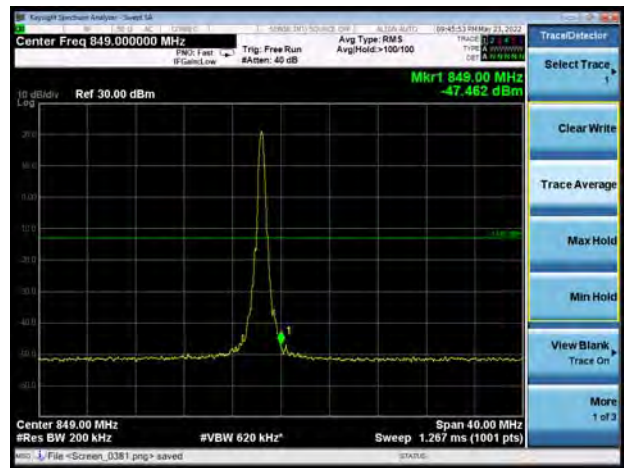




NR n5 64QAM 20MHz CH-Low 1RB



NR n5 64QAM 20MHz CH-High 1RB



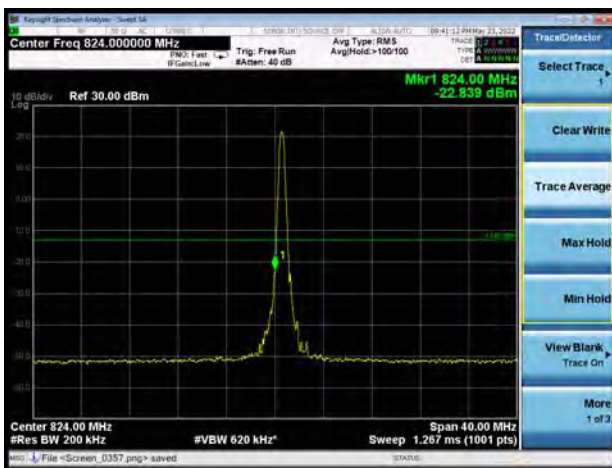
NR n5 64QAM 20MHz CH-Low 100%RB



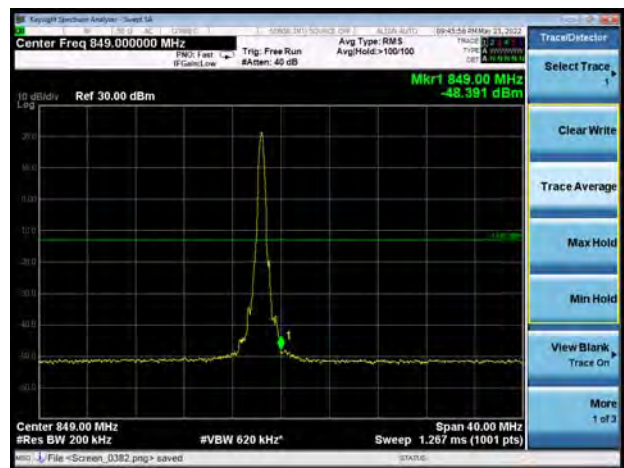
NR n5 64QAM 20MHz CH-High 100%RB



NR n5 256QAM 20MHz CH-Low 1RB



NR n5 256QAM 20MHz CH-High 1RB





NR n5 256QAM 20MHz CH-Low 100%RB



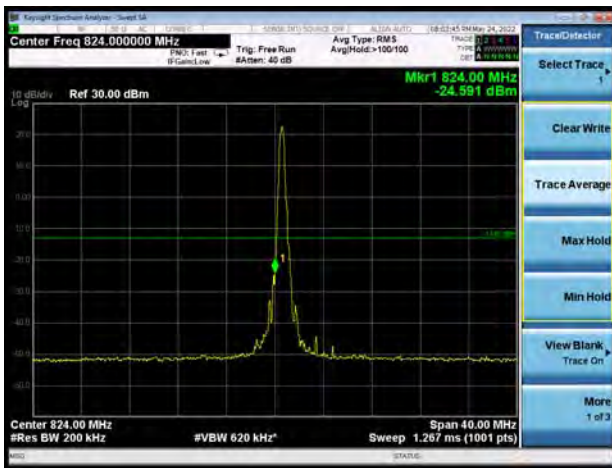
NR n5 256QAM 20MHz CH-High 100%RB



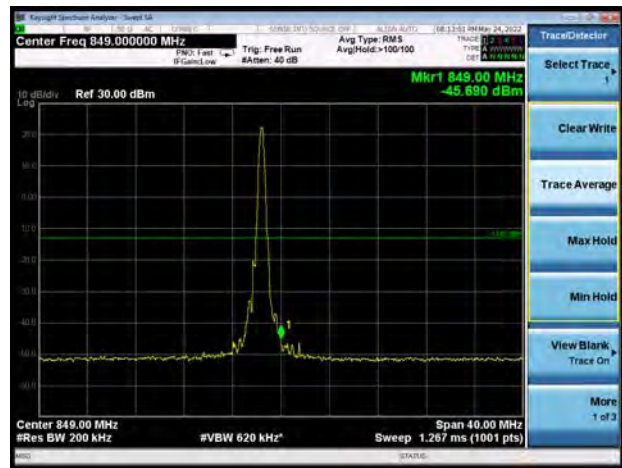




DC\_66A-n5A P1/2 BPSK 20MHz CH-Low 1RB



DC\_66A-n5A P1/2 BPSK 20MHz CH-High 1RB



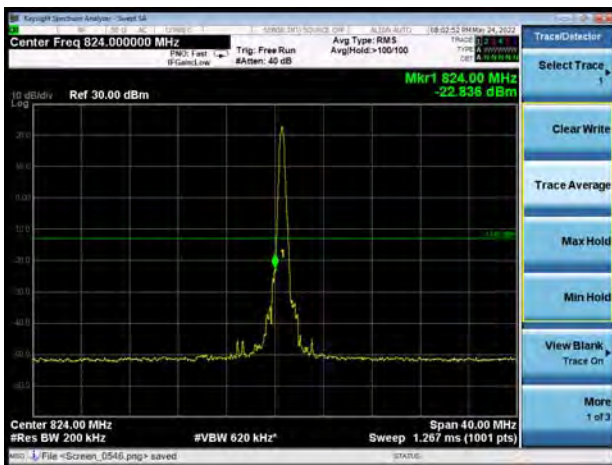
DC\_66A-n5A P1/2 BPSK 20MHz CH-Low  
100%RB



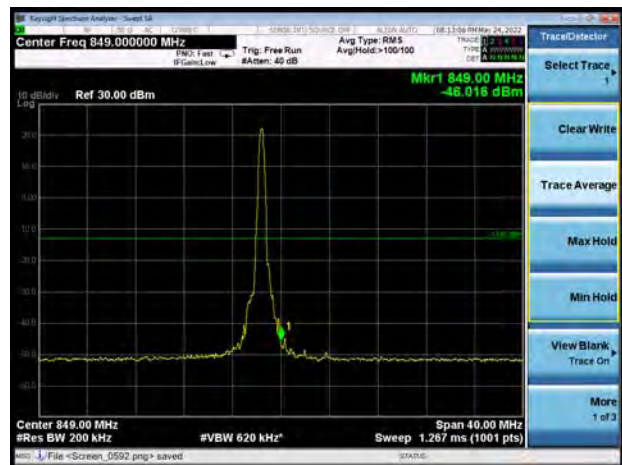
DC\_66A-n5A P1/2 BPSK 20MHz CH-High  
100%RB



DC\_66A-n5A QPSK 20MHz CH-Low 1RB



DC\_66A-n5A QPSK 20MHz CH-High 1RB



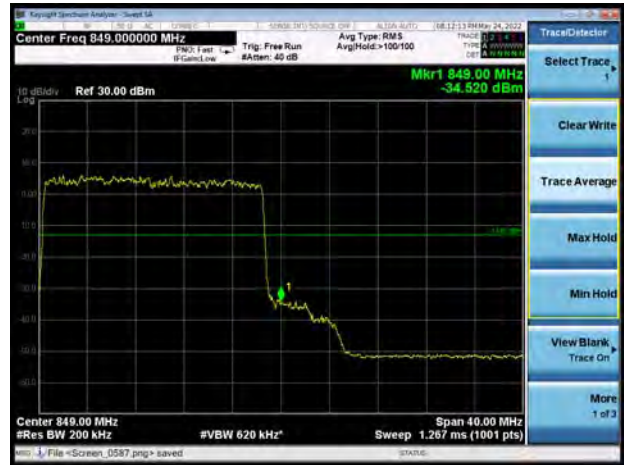




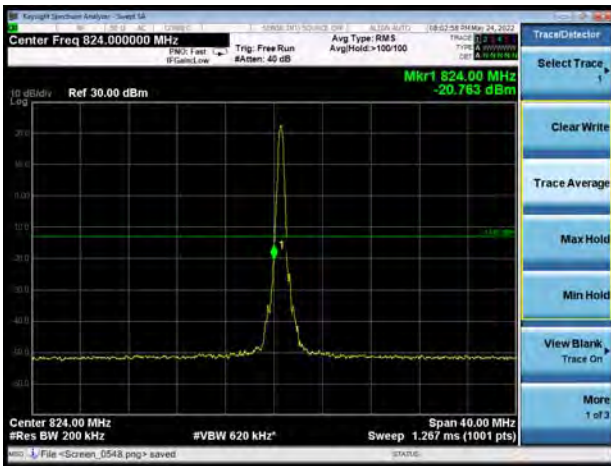
DC\_66A-n5A QPSK 20MHz CH-Low 100%RB



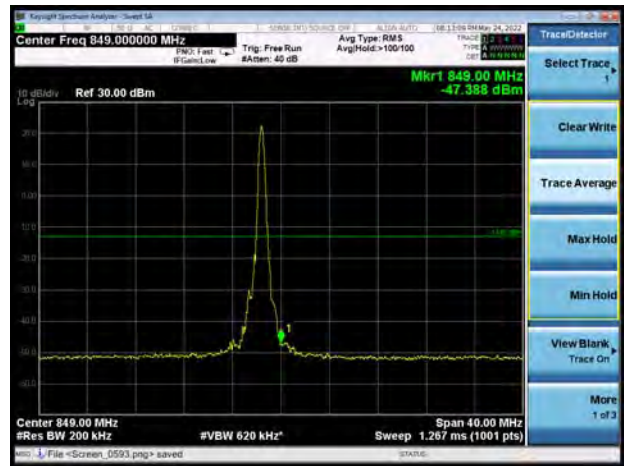
DC\_66A-n5A QPSK 20MHz CH-High 100%RB



DC\_66A-n5A 16QAM 20MHz CH-Low 1RB



DC\_66A-n5A 16QAM 20MHz CH-High 1RB



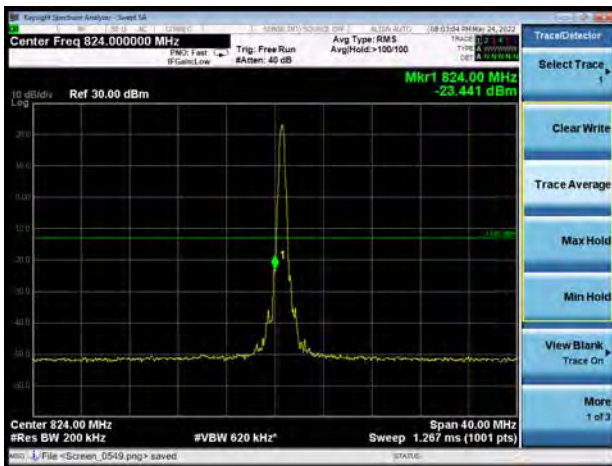
DC\_66A-n5A 16QAM 20MHz CH-Low 100%RB



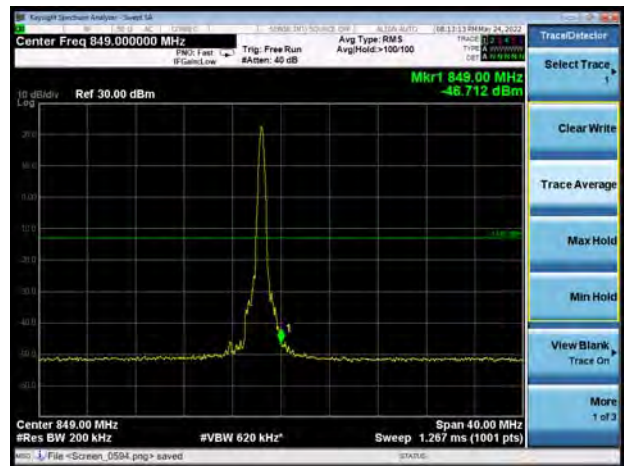
DC\_66A-n5A 16QAM 20MHz CH-High 100%RB



DC\_66A-n5A 64QAM 20MHz CH-Low 1RB



DC\_66A-n5A 64QAM 20MHz CH-High 1RB



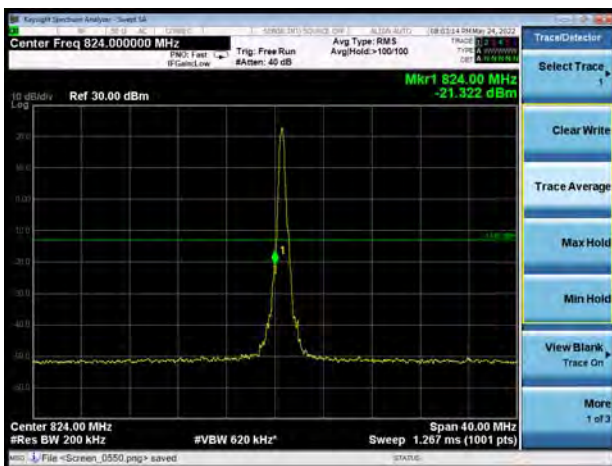
DC\_66A-n5A 64QAM 20MHz CH-Low 100%RB



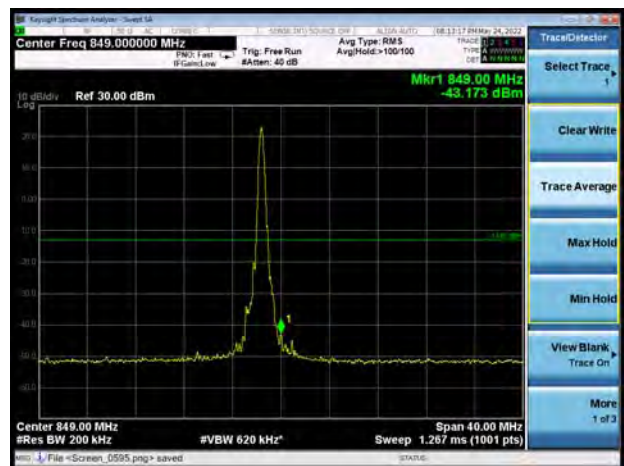
DC\_66A-n5A 64QAM 20MHz CH-High 100%RB



DC\_66A-n5A 256QAM 20MHz CH-Low 1RB



DC\_66A-n5A 256QAM 20MHz CH-High 1RB





DC\_66A-n5A 256QAM 20MHz CH-Low 100%RB



DC\_66A-n5A 256QAM 20MHz CH-High 100%RB





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

Mode	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
GSM 850 (GMSK)	128	824.2	31.79	29.04	2.75	≤13	PASS
	190	836.6	32.00	29.29	2.71	≤13	PASS
	251	848.8	31.98	29.26	2.72	≤13	PASS
GPRS 850 (GMSK)	128	824.2	31.86	29.11	2.75	≤13	PASS
	190	836.6	32.05	29.31	2.74	≤13	PASS
	251	848.8	32.02	29.30	2.72	≤13	PASS
EGPRS 850 (8PSK)	128	824.2	29.32	23.48	5.84	≤13	PASS
	190	836.6	29.64	23.76	5.88	≤13	PASS
	251	848.8	29.41	23.54	5.87	≤13	PASS
WCDMA Band V (RMC)	4132	828a .4	26.84	23.92	2.92	≤13	PASS
	4183	836.6	26.63	23.87	2.76	≤13	PASS
	4233	846.6	26.69	23.83	2.86	≤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	28.70	23.21	5.49	≤13	PASS
		20525	836.5	28.58	23.15	5.43	≤13	PASS
		20643	848.3	28.32	23.06	5.26	≤13	PASS
	3	20415	825.5	28.65	23.25	5.40	≤13	PASS
		20525	836.5	28.48	23.24	5.24	≤13	PASS
		20635	847.5	28.39	23.14	5.25	≤13	PASS
	5	20425	828a .5	28.67	23.28	5.39	≤13	PASS
		20525	836.5	28.45	23.24	5.21	≤13	PASS
		20625	846.5	28.52	23.25	5.27	≤13	PASS
	10	20450	829	28.58	23.28	5.30	≤13	PASS
		20525	836.5	28.54	23.21	5.33	≤13	PASS
		20600	844	28.41	23.19	5.22	≤13	PASS
16QAM	1.4	20407	824.7	28.45	22.18	6.27	≤13	PASS
		20525	836.5	28.38	22.15	6.23	≤13	PASS
		20643	848.3	28.34	22.12	6.22	≤13	PASS
	3	20415	825.5	28.51	22.29	6.22	≤13	PASS





		20525	836.5	28.41	22.22	6.19	≤13	PASS
		20635	847.5	28.33	22.17	6.16	≤13	PASS
		20425	828a .5	28.49	22.28	6.21	≤13	PASS
	5	20525	836.5	28.41	22.26	6.15	≤13	PASS
		20625	846.5	28.37	22.25	6.12	≤13	PASS
		20450	829	28.41	22.26	6.15	≤13	PASS
	10	20525	836.5	28.34	22.20	6.14	≤13	PASS
		20600	844	28.19	22.17	6.02	≤13	PASS
		20407	824.7	27.87	21.68	6.19	≤13	PASS
64QAM	1.4	20525	836.5	27.75	21.58	6.17	≤13	PASS
		20643	848.3	27.73	21.58	6.15	≤13	PASS
		20415	825.5	28.04	21.76	6.28	≤13	PASS
	3	20525	836.5	27.79	21.67	6.12	≤13	PASS
		20635	847.5	27.76	21.60	6.16	≤13	PASS
		20425	828a .5	27.99	21.75	6.24	≤13	PASS
	5	20525	836.5	27.77	21.71	6.06	≤13	PASS
		20625	846.5	27.83	21.70	6.13	≤13	PASS
		20450	829	27.91	21.73	6.18	≤13	PASS
	10	20525	836.5	27.81	21.72	6.09	≤13	PASS
		20600	844	27.62	21.65	5.97	≤13	PASS
		20407	824.7	27.87	21.68	6.19	≤13	PASS

NR n5								
Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
20	P1/2 BPSK	166800	834	34.74	23.10	11.64	≤13	PASS
		167300	836.5	34.76	23.27	11.49	≤13	PASS
		167800	839	34.75	23.01	11.74	≤13	PASS
	QPSK	166800	834	34.74	22.91	11.83	≤13	PASS
		167300	836.5	34.75	23.19	11.56	≤13	PASS
		167800	839	34.83	23.67	11.16	≤13	PASS
	16QAM	166800	834	34.47	22.51	11.96	≤13	PASS
		167300	836.5	34.47	22.23	12.24	≤13	PASS
		167800	839	34.44	21.95	12.49	≤13	PASS
	64QAM	166800	834	32.25	20.50	11.75	≤13	PASS
		167300	836.5	32.20	20.17	12.03	≤13	PASS
		167800	839	32.08	19.31	12.77	≤13	PASS
	256QAM	166800	834	32.23	20.34	11.89	≤13	PASS
		167300	836.5	32.26	20.59	11.67	≤13	PASS
		167800	839	32.02	19.08	12.94	≤13	PASS



DC_66A-n5A								
Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
20	P1/2 BPSK	166800	834	34.77	22.13	12.64	≤13	PASS
		167300	836.5	35.00	23.43	11.57	≤13	PASS
		167800	839	34.71	22.60	12.11	≤13	PASS
	QPSK	166800	834	34.87	22.77	12.10	≤13	PASS
		167300	836.5	34.94	23.11	11.83	≤13	PASS
		167800	839	34.81	23.29	11.52	≤13	PASS
	16QAM	166800	834	34.85	23.36	11.49	≤13	PASS
		167300	836.5	34.69	22.49	12.20	≤13	PASS
		167800	839	34.58	21.82	12.76	≤13	PASS
	64QAM	166800	834	34.41	22.02	12.39	≤13	PASS
		167300	836.5	34.48	22.75	11.73	≤13	PASS
		167800	839	34.31	21.61	12.70	≤13	PASS
	256QAM	166800	834	32.58	19.91	12.67	≤13	PASS
		167300	836.5	32.63	20.20	12.43	≤13	PASS
		167800	839	32.77	20.96	11.81	≤13	PASS

## 6.5. Frequency Stability

GSM 850						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	GMSK	8PSK	GMSK	8PSK	
Normal (25°C)	Normal	11.41	12.93	0.01364	0.01545	PASS
Extreme (50°C)		12.40	6.61	0.01483	0.00790	PASS
Extreme (40°C)		17.81	7.48	0.02129	0.00894	PASS
Extreme (30°C)		3.40	1.21	0.00406	0.00145	PASS
Extreme (20°C)		16.90	1.99	0.02020	0.00237	PASS
Extreme (10°C)		4.13	11.18	0.00494	0.01337	PASS
Extreme (0°C)		16.34	14.09	0.01953	0.01685	PASS
Extreme (-10°C)		12.52	7.34	0.01496	0.00877	PASS
Extreme (-20°C)		10.88	9.76	0.01301	0.01166	PASS
Extreme (-30°C)		15.94	17.92	0.01905	0.02142	PASS
25°C	LV	11.14	4.28	0.01332	0.00512	PASS
	HV	6.08	2.53	0.00726	0.00302	PASS

WCDMA Band 5						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	BPSK	QPSK	BPSK	QPSK	
Normal (25°C)	Normal	13.91	7.52	0.01663	0.00899	PASS
Extreme (50°C)		4.18	11.00	0.00499	0.01315	PASS
Extreme (40°C)		12.18	14.70	0.01456	0.01757	PASS
Extreme (30°C)		10.30	5.69	0.01231	0.00681	PASS
Extreme (20°C)		14.26	5.79	0.01705	0.00693	PASS
Extreme (10°C)		12.47	10.42	0.01490	0.01246	PASS
Extreme (0°C)		17.76	17.18	0.02122	0.02053	PASS
Extreme (-10°C)		3.67	12.83	0.00439	0.01534	PASS
Extreme (-20°C)		17.23	11.80	0.02059	0.01410	PASS
Extreme (-30°C)		3.82	13.04	0.00456	0.01559	PASS
25°C	LV	11.79	12.41	0.01410	0.01483	PASS
	HV	17.75	10.11	0.02122	0.01208	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°C)	Normal	9.98	6.20	12.36	0.01193	0.00741	0.01478	PASS
Extreme (50°C)		11.05	15.67	4.53	0.01322	0.01873	0.00542	PASS
Extreme (40°C)		12.12	16.62	13.92	0.01449	0.01987	0.01665	PASS
Extreme (30°C)		15.56	8.84	11.18	0.01860	0.01057	0.01336	PASS
Extreme (20°C)		10.22	10.01	14.36	0.01221	0.01196	0.01717	PASS
Extreme (10°C)		12.52	16.15	15.69	0.01496	0.01931	0.01875	PASS
Extreme (0°C)		1.73	10.09	11.75	0.00207	0.01206	0.01405	PASS
Extreme (-10°C)		10.70	4.53	14.80	0.01279	0.00541	0.01769	PASS
Extreme (-20°C)		3.58	17.18	5.73	0.00428	0.02053	0.00685	PASS
Extreme (-30°C)		16.42	11.17	15.54	0.01963	0.01335	0.01857	PASS
25°C	LV	5.52	6.69	15.35	0.00660	0.00799	0.01835	PASS
	HV	15.98	10.95	10.74	0.01911	0.01310	0.01284	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°C)	Normal	12.96	10.87	11.59	0.01549	0.01300	0.01385	PASS
Extreme (50°C)		5.36	5.92	14.70	0.00641	0.00708	0.01758	PASS
Extreme (40°C)		10.49	5.09	13.28	0.01254	0.00608	0.01588	PASS
Extreme (30°C)		10.21	7.53	13.47	0.01221	0.00900	0.01610	PASS
Extreme (20°C)		7.32	2.67	2.57	0.00875	0.00320	0.00307	PASS
Extreme (10°C)		10.14	12.82	14.49	0.01212	0.01532	0.01732	PASS
Extreme (0°C)		12.74	2.75	14.50	0.01523	0.00329	0.01734	PASS
Extreme (-10°C)		8.83	10.54	7.26	0.01055	0.01260	0.00867	PASS
Extreme (-20°C)		2.45	2.07	5.84	0.00292	0.00247	0.00698	PASS
Extreme (-30°C)		12.17	11.43	11.14	0.01455	0.01367	0.01332	PASS
25°C	LV	7.19	9.78	3.01	0.00859	0.01169	0.00360	PASS
	HV	14.73	6.73	17.49	0.01761	0.00804	0.02091	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°C)	Normal	8.13	15.56	1.07	0.00972	0.01860	0.00128	PASS
Extreme (50°C)		4.31	2.13	15.21	0.00515	0.00254	0.01818	PASS





Extreme (40°C)		10.98	2.31	17.49	0.01312	0.00276	0.02091	PASS
Extreme (30°C)		6.26	7.12	5.56	0.00749	0.00851	0.00665	PASS
Extreme (20°C)		2.94	11.84	2.11	0.00351	0.01415	0.00252	PASS
Extreme (10°C)		13.57	17.50	5.83	0.01623	0.02092	0.00697	PASS
Extreme (0°C)		11.49	6.67	4.01	0.01374	0.00798	0.00479	PASS
Extreme (-10°C)		3.77	1.04	4.69	0.00450	0.00124	0.00561	PASS
Extreme (-20°C)		15.89	4.96	5.84	0.01899	0.00593	0.00698	PASS
Extreme (-30°C)		12.70	7.06	10.57	0.01518	0.00843	0.01263	PASS
25°C	LV	11.99	15.67	12.14	0.01433	0.01874	0.01451	PASS
	HV	10.67	8.53	11.05	0.01276	0.01020	0.01320	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°C)	Normal	7.04	15.52	13.44	0.00842	0.01856	0.01607	PASS
Extreme (50°C)		8.72	8.90	14.96	0.01042	0.01064	0.01788	PASS
Extreme (40°C)		6.48	9.33	17.09	0.00774	0.01116	0.02044	PASS
Extreme (30°C)		2.35	16.83	8.98	0.00280	0.02012	0.01073	PASS
Extreme (20°C)		15.32	3.01	14.15	0.01832	0.00359	0.01692	PASS
Extreme (10°C)		13.93	12.80	6.65	0.01665	0.01530	0.00796	PASS
Extreme (0°C)		13.88	12.98	2.69	0.01660	0.01552	0.00322	PASS
Extreme (-10°C)		9.32	5.26	2.03	0.01114	0.00629	0.00242	PASS
Extreme (-20°C)		15.44	9.63	12.43	0.01846	0.01151	0.01486	PASS
Extreme (-30°C)		12.99	14.41	14.82	0.01553	0.01722	0.01772	PASS
25°C	LV	2.50	15.55	15.54	0.00298	0.01859	0.01858	PASS
	HV	3.23	7.52	10.10	0.00387	0.00899	0.01207	PASS



NR n5												
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	5MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	Stability	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	6.01	5.34	15.59	17.01	1.34	0.00320	0.00284	0.00829	0.00905	0.00071	PASS
Extreme (50°C)		4.81	2.95	17.14	12.81	2.95	0.00256	0.00157	0.00912	0.00681	0.00157	PASS
Extreme (40°C)		5.95	16.19	10.79	7.95	17.19	0.00316	0.00861	0.00574	0.00423	0.00914	PASS
Extreme (30°C)		14.43	5.36	4.24	15.43	11.36	0.00767	0.00285	0.00225	0.00821	0.00604	PASS
Extreme (20°C)		15.88	4.46	15.26	14.88	9.46	0.00845	0.00237	0.00812	0.00792	0.00503	PASS
Extreme (10°C)		16.50	4.19	15.51	4.50	2.19	0.00877	0.00223	0.00825	0.00239	0.00117	PASS
Extreme (0°C)		11.82	7.05	11.43	9.82	10.05	0.00629	0.00375	0.00608	0.00522	0.00534	PASS
Extreme (-10°C)		3.66	16.59	7.75	7.66	4.59	0.00195	0.00882	0.00412	0.00407	0.00244	PASS
Extreme (-20°C)		16.72	11.51	8.58	4.72	9.51	0.00889	0.00612	0.00457	0.00251	0.00506	PASS
Extreme (-30°C)		18.00	13.55	1.56	16.00	4.55	0.00957	0.00721	0.00083	0.00851	0.00242	PASS
25°C	LV	16.17	7.83	5.71	11.17	15.83	0.00860	0.00417	0.00304	0.00594	0.00842	PASS
	HV	13.52	11.11	8.14	6.52	10.11	0.00719	0.00591	0.00433	0.00347	0.00538	PASS
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	10MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	Stability	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	10.89	13.17	14.23	17.89	15.17	0.00579	0.00701	0.00757	0.00952	0.00807	PASS
Extreme (50°C)		8.20	10.93	4.42	14.20	10.93	0.00436	0.00581	0.00235	0.00755	0.00581	PASS
Extreme (40°C)		12.92	7.86	1.13	4.92	3.86	0.00687	0.00418	0.00060	0.00262	0.00205	PASS
Extreme (30°C)		2.37	1.63	3.95	11.37	1.63	0.00126	0.00087	0.00210	0.00605	0.00087	PASS
Extreme (20°C)		14.29	5.57	17.05	11.29	9.57	0.00760	0.00296	0.00907	0.00601	0.00509	PASS
Extreme (10°C)		17.62	2.96	3.01	4.62	6.96	0.00937	0.00158	0.00160	0.00245	0.00370	PASS
Extreme (0°C)		17.98	3.64	8.00	6.98	6.64	0.00956	0.00194	0.00425	0.00371	0.00353	PASS
Extreme (-10°C)		10.62	8.68	2.12	12.62	7.68	0.00565	0.00462	0.00113	0.00671	0.00409	PASS
Extreme (-20°C)		12.27	1.99	11.20	16.27	12.99	0.00653	0.00106	0.00596	0.00865	0.00691	PASS
Extreme (-30°C)		17.09	10.78	2.13	16.09	16.78	0.00909	0.00573	0.00113	0.00856	0.00892	PASS
25°C	LV	12.02	14.67	8.37	10.02	7.67	0.00639	0.00781	0.00445	0.00533	0.00408	PASS
	HV	6.66	4.25	14.48	17.66	12.25	0.00354	0.00226	0.00770	0.00939	0.00652	PASS
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	15MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	Stability	



Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	3.77	4.60	8.57	3.77	7.60	0.00200	0.00245	0.00456	0.00200	0.00404	PASS
Extreme (50°C)		8.79	3.71	2.06	13.79	8.71	0.00468	0.00197	0.00109	0.00734	0.00463	PASS
Extreme (40°C)		14.50	10.08	1.12	12.50	1.08	0.00771	0.00536	0.00060	0.00665	0.00057	PASS
Extreme (30°C)		14.08	1.35	15.58	8.08	5.35	0.00749	0.00072	0.00829	0.00430	0.00284	PASS
Extreme (20°C)		14.50	2.58	10.34	14.50	13.58	0.00772	0.00137	0.00550	0.00772	0.00722	PASS
Extreme (10°C)		15.33	15.02	8.36	12.33	12.02	0.00815	0.00799	0.00445	0.00656	0.00639	PASS
Extreme (0°C)		10.66	6.19	8.19	12.66	7.19	0.00567	0.00329	0.00436	0.00674	0.00382	PASS
Extreme (-10°C)		16.68	12.90	5.79	4.68	17.90	0.00887	0.00686	0.00308	0.00249	0.00952	PASS
Extreme (-20°C)		13.90	1.61	7.73	13.90	11.61	0.00740	0.00086	0.00411	0.00740	0.00618	PASS
Extreme (-30°C)		2.03	2.05	9.03	5.03	14.05	0.00108	0.00109	0.00480	0.00267	0.00747	PASS
25°C	LV	13.11	17.66	11.66	3.11	12.66	0.00697	0.00939	0.00620	0.00165	0.00673	PASS
	HV	3.07	17.84	9.45	3.07	17.84	0.00163	0.00949	0.00503	0.00163	0.00949	PASS
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	20MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	(ppm)	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	7.29	6.19	8.66	8.29	10.19	0.00388	0.00329	0.00461	0.00441	0.00542	PASS
Extreme (50°C)		7.53	10.19	15.48	16.53	3.19	0.00401	0.00542	0.00823	0.00879	0.00170	PASS
Extreme (40°C)		14.17	11.59	16.25	4.17	16.59	0.00754	0.00616	0.00864	0.00222	0.00882	PASS
Extreme (30°C)		16.90	17.83	5.04	1.90	14.83	0.00899	0.00948	0.00268	0.00101	0.00789	PASS
Extreme (20°C)		4.21	14.92	1.99	9.21	11.92	0.00224	0.00794	0.00106	0.00490	0.00634	PASS
Extreme (10°C)		1.45	16.97	2.09	9.45	3.97	0.00077	0.00903	0.00111	0.00503	0.00211	PASS
Extreme (0°C)		13.25	7.91	8.21	5.25	6.91	0.00705	0.00421	0.00437	0.00279	0.00368	PASS
Extreme (-10°C)		2.14	9.44	4.87	13.14	6.44	0.00114	0.00502	0.00259	0.00699	0.00343	PASS
Extreme (-20°C)		16.78	2.91	10.18	10.78	6.91	0.00892	0.00155	0.00542	0.00573	0.00367	PASS
Extreme (-30°C)		17.97	5.67	14.03	5.97	1.67	0.00956	0.00301	0.00746	0.00317	0.00089	PASS
25°C	LV	12.76	6.06	16.41	1.76	13.06	0.00679	0.00322	0.00873	0.00094	0.00695	PASS
	HV	11.02	14.64	5.80	10.02	6.64	0.00586	0.00779	0.00308	0.00533	0.00353	PASS

DC_66A-n5A												
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	5MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	(ppm)	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	15.28	6.76	1.77	15.28	7.76	0.00813	0.00360	0.00094	0.00813	0.00413	PASS
Extreme (50°C)		3.87	11.00	9.15	7.87	11.00	0.00206	0.00585	0.00487	0.00419	0.00585	PASS
Extreme (40°C)		12.21	1.71	15.22	5.21	3.71	0.00649	0.00091	0.00810	0.00277	0.00197	PASS



Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	10MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	Stability	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Extreme (30°C)		10.80	6.11	1.15	9.80	14.11	0.00574	0.00325	0.00061	0.00521	0.00751	PASS
Extreme (20°C)		16.69	11.25	4.10	17.69	9.25	0.00888	0.00599	0.00218	0.00941	0.00492	PASS
Extreme (10°C)		5.52	14.79	3.31	13.52	10.79	0.00293	0.00787	0.00176	0.00719	0.00574	PASS
Extreme (0°C)		2.14	14.45	17.93	2.14	2.45	0.00114	0.00769	0.00954	0.00114	0.00130	PASS
Extreme (-10°C)		17.50	9.96	9.20	15.50	4.96	0.00931	0.00530	0.00489	0.00825	0.00264	PASS
Extreme (-20°C)		3.64	16.00	16.94	8.64	8.00	0.00194	0.00851	0.00901	0.00460	0.00426	PASS
Extreme (-30°C)		1.40	17.07	11.17	8.40	5.07	0.00075	0.00908	0.00594	0.00447	0.00270	PASS
25°C	LV	14.29	16.46	3.47	9.29	3.46	0.00760	0.00876	0.00185	0.00494	0.00184	PASS
	HV	8.24	13.60	10.61	2.24	13.60	0.00439	0.00724	0.00564	0.00119	0.00724	PASS
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	15MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	Stability	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	17.05	7.42	7.46	3.05	11.42	0.00907	0.00395	0.00397	0.00162	0.00608	PASS
Extreme (50°C)		3.90	10.32	5.81	12.90	7.32	0.00207	0.00549	0.00309	0.00686	0.00389	PASS
Extreme (40°C)		11.61	1.44	9.42	5.61	17.44	0.00618	0.00077	0.00501	0.00298	0.00928	PASS
Extreme (30°C)		11.70	17.47	7.93	8.70	17.47	0.00622	0.00929	0.00422	0.00463	0.00929	PASS
Extreme (20°C)		8.10	17.25	1.48	14.10	11.25	0.00431	0.00917	0.00079	0.00750	0.00598	PASS
Extreme (10°C)		5.95	11.54	8.76	10.95	2.54	0.00317	0.00614	0.00466	0.00582	0.00135	PASS
Extreme (0°C)		7.76	6.19	13.21	7.76	5.19	0.00413	0.00329	0.00703	0.00413	0.00276	PASS
Extreme (-10°C)		16.41	10.67	4.66	4.41	4.67	0.00873	0.00568	0.00248	0.00235	0.00249	PASS
Extreme (-20°C)		11.08	5.07	9.06	12.08	1.07	0.00589	0.00270	0.00482	0.00642	0.00057	PASS
Extreme (-30°C)		16.99	2.39	11.74	12.99	4.39	0.00904	0.00127	0.00624	0.00691	0.00233	PASS
25°C		LV	3.68	4.39	1.70	15.68	2.39	0.00196	0.00233	0.00091	0.00834	0.00127
	HV	11.60	17.58	3.72	8.60	11.58	0.00617	0.00935	0.00198	0.00458	0.00616	PASS
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	15MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	Stability	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	2.99	16.70	3.19	13.99	9.70	0.00159	0.00888	0.00170	0.00744	0.00516	PASS
Extreme (50°C)		13.63	6.41	9.61	10.63	8.41	0.00725	0.00341	0.00511	0.00565	0.00447	PASS
Extreme (40°C)		1.12	14.29	9.78	3.12	16.29	0.00060	0.00760	0.00520	0.00166	0.00867	PASS
Extreme (30°C)		17.39	12.00	3.05	14.39	4.00	0.00925	0.00638	0.00162	0.00765	0.00213	PASS
Extreme (20°C)		1.97	9.70	2.52	9.97	9.70	0.00105	0.00516	0.00134	0.00530	0.00516	PASS
Extreme (10°C)		6.95	11.41	7.71	16.95	12.41	0.00370	0.00607	0.00410	0.00902	0.00660	PASS
Extreme (0°C)		8.52	17.46	5.23	15.52	13.46	0.00453	0.00929	0.00278	0.00825	0.00716	PASS
Extreme (-10°C)		10.27	3.54	2.99	11.27	17.54	0.00546	0.00188	0.00159	0.00599	0.00933	PASS
Extreme (-20°C)		10.66	10.92	11.21	6.66	17.92	0.00567	0.00581	0.00596	0.00354	0.00953	PASS
Extreme (-30°C)		12.12	1.59	2.37	2.12	2.59	0.00645	0.00085	0.00126	0.00113	0.00138	PASS





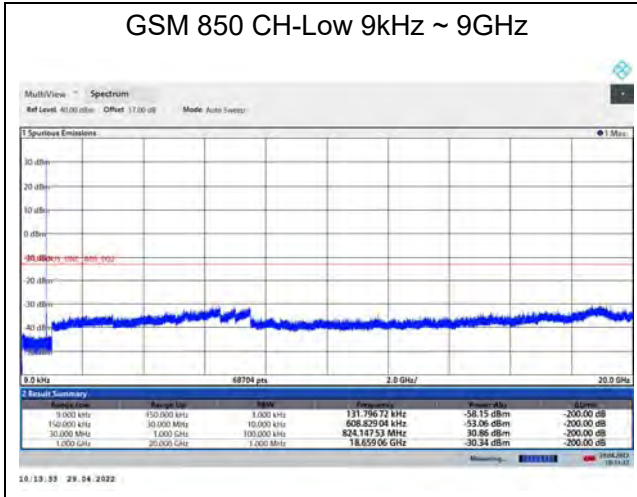
25°C	LV	8.98	12.26	14.36	14.98	3.26	0.00478	0.00652	0.00764	0.00797	0.00173	PASS
	HV	12.94	14.27	16.07	10.94	6.27	0.00688	0.00759	0.00855	0.00582	0.00334	PASS
Condition		Freq.Error	Freq.Error	Freq.Error	Freq.Error	Freq.Error	Frequency	Frequency	Frequency	Frequency	Frequency	Verdict
BANDWIDTH	20MHz	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	Stability	Stability	Stability	Stability	Stability	
Temperature	Voltage	256QAM	BPSK	64QAM	16QAM	QPSK	256QAM	BPSK	64QAM	16QAM	QPSK	
Normal (25°C)	Normal	7.48	15.65	3.96	2.48	10.65	0.00398	0.00832	0.00211	0.00132	0.00566	PASS
Extreme (50°C)		4.53	15.64	17.54	4.53	6.64	0.00241	0.00832	0.00933	0.00241	0.00353	PASS
Extreme (40°C)		6.98	4.66	14.88	2.98	15.66	0.00371	0.00248	0.00792	0.00158	0.00833	PASS
Extreme (30°C)		7.29	14.72	17.62	16.29	15.72	0.00388	0.00783	0.00937	0.00867	0.00836	PASS
Extreme (20°C)		9.77	5.98	14.28	5.77	17.98	0.00520	0.00318	0.00760	0.00307	0.00956	PASS
Extreme (10°C)		10.60	14.23	13.30	2.60	16.23	0.00564	0.00757	0.00707	0.00138	0.00863	PASS
Extreme (0°C)		15.53	1.73	9.86	12.53	16.73	0.00826	0.00092	0.00525	0.00666	0.00890	PASS
Extreme (-10°C)		8.19	10.61	11.56	4.19	5.61	0.00436	0.00564	0.00615	0.00223	0.00298	PASS
Extreme (-20°C)		7.02	13.44	17.60	9.02	1.44	0.00373	0.00715	0.00936	0.00480	0.00076	PASS
Extreme (-30°C)		16.74	15.09	6.44	9.74	5.09	0.00890	0.00802	0.00342	0.00518	0.00271	PASS
25°C		LV	5.89	8.63	17.82	11.89	4.63	0.00313	0.00459	0.00948	0.00633	0.00246
	HV	15.80	15.46	1.12	12.80	5.46	0.00841	0.00822	0.00059	0.00681	0.00290	PASS

### 6.6. Spurious Emissions at Antenna Terminals

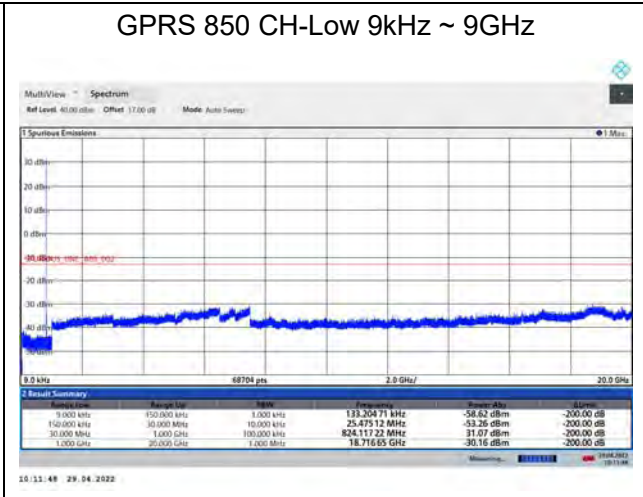
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

The signal beyond the limit is carrier.

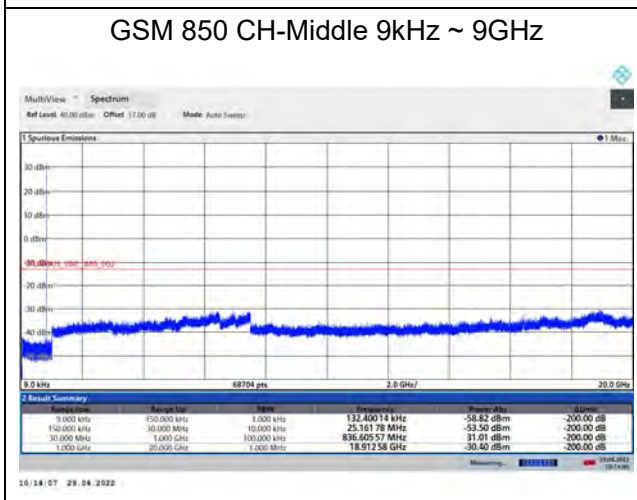
GSM 850 CH-Low 9kHz ~ 9GHz



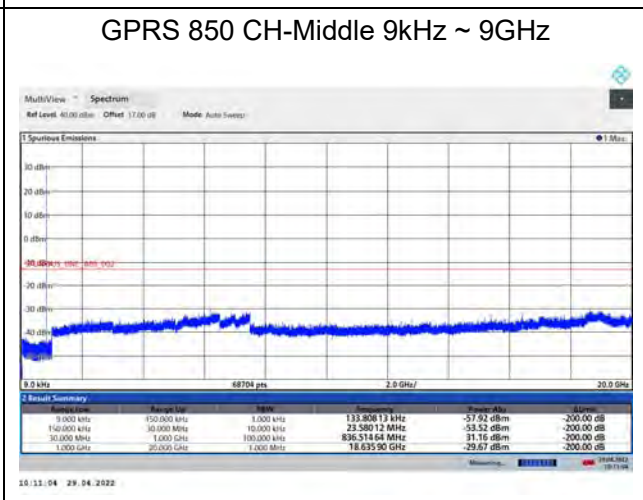
GPRS 850 CH-Low 9kHz ~ 9GHz



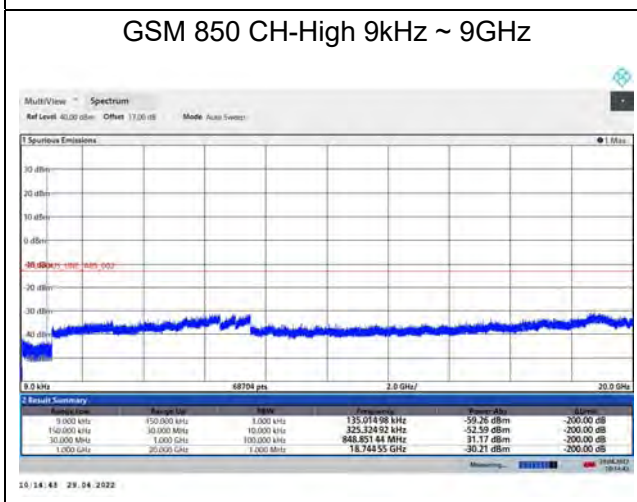
GSM 850 CH-Middle 9kHz ~ 9GHz



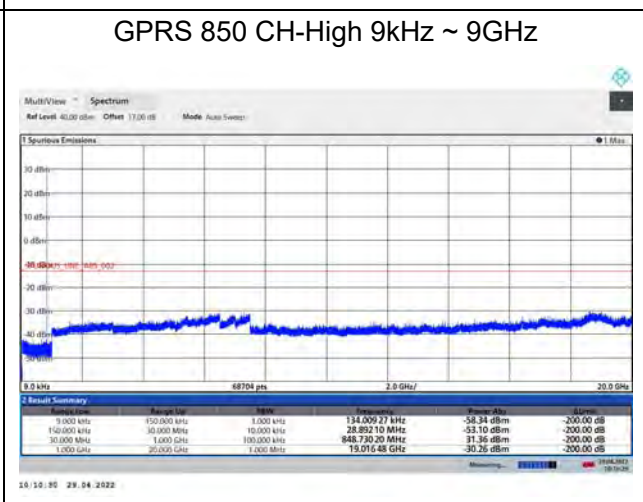
GPRS 850 CH-Middle 9kHz ~ 9GHz



GSM 850 CH-High 9kHz ~ 9GHz

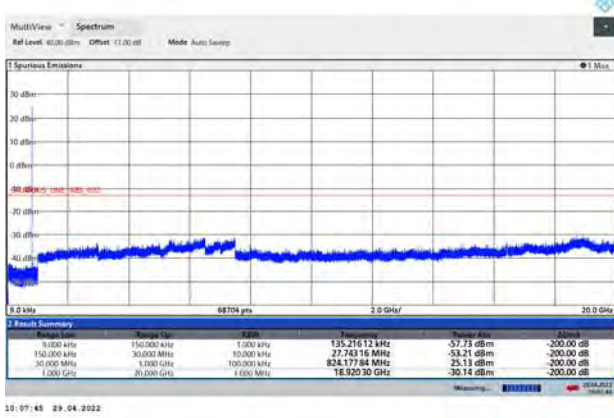


GPRS 850 CH-High 9kHz ~ 9GHz

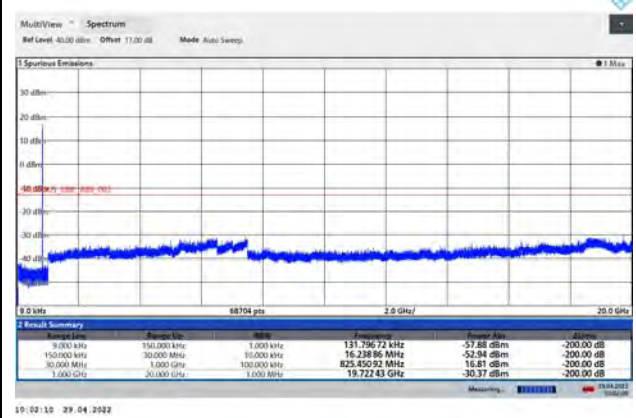




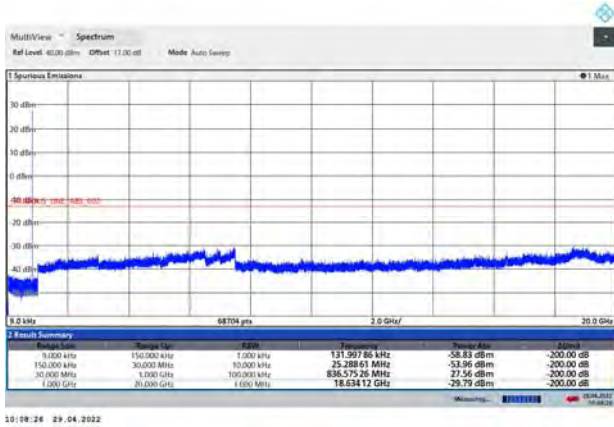
### EGPRS 850 CH-Low 9kHz ~ 9GHz



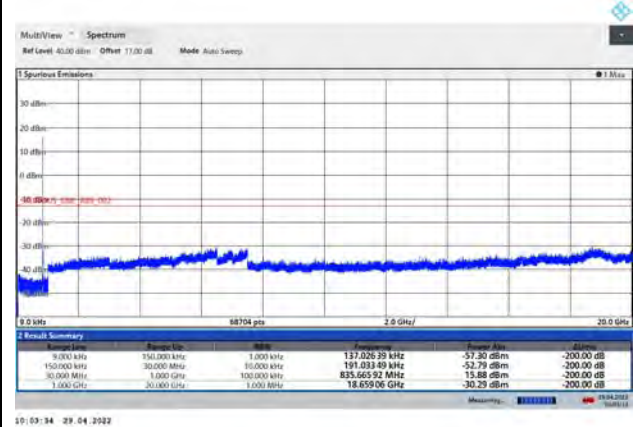
### WCDMA BAND V CH-Low 9kHz ~ 9GHz



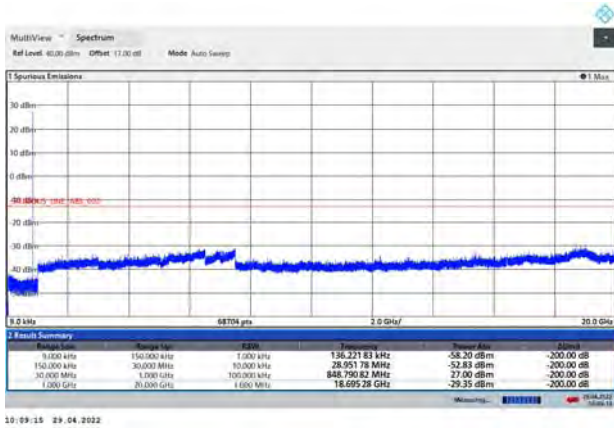
### EGPRS 850 CH-Middle 9kHz ~ 9GHz



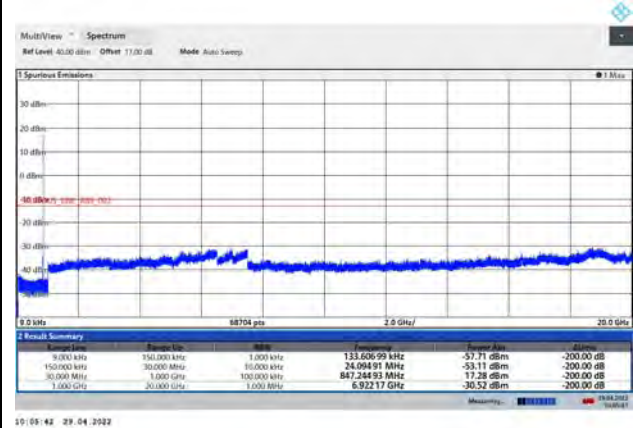
### WCDMA BAND V CH-Middle 9kHz ~ 9GHz



### EGPRS 850 CH-High 9kHz ~ 9GHz

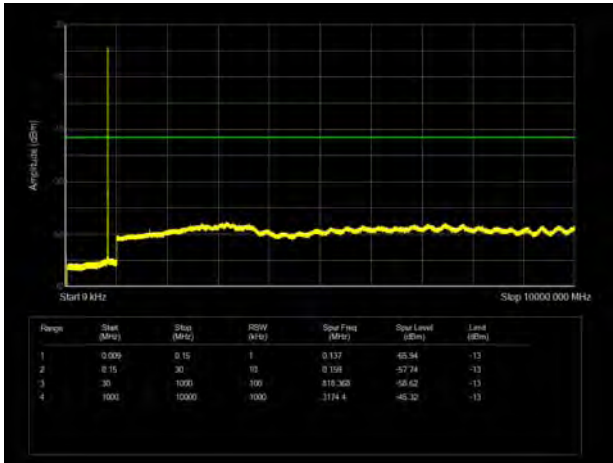


### WCDMA BAND V CH-High 9kHz ~ 9GHz

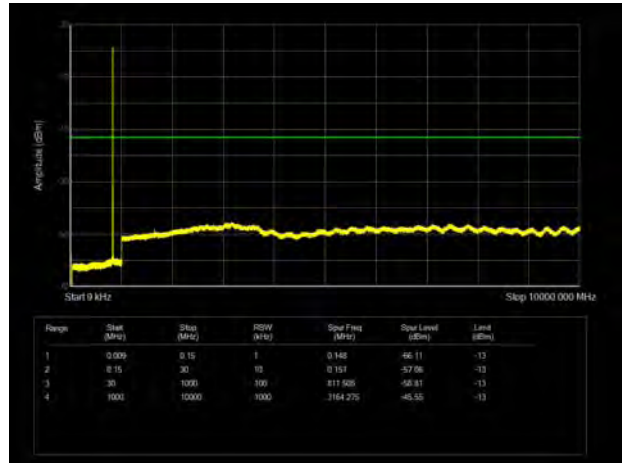




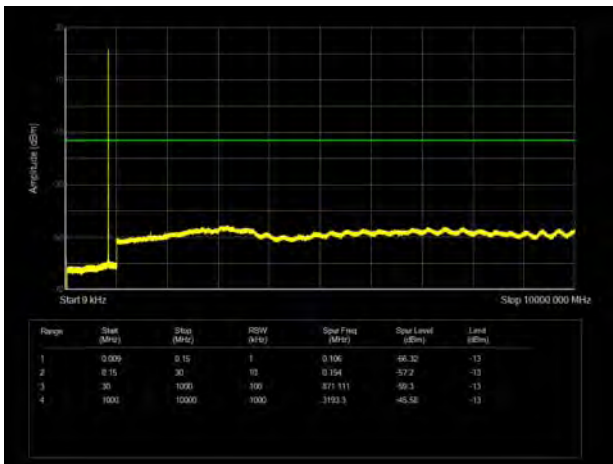
LTE Band 5 1.4MHz CH-Low 9kHz~10GHz



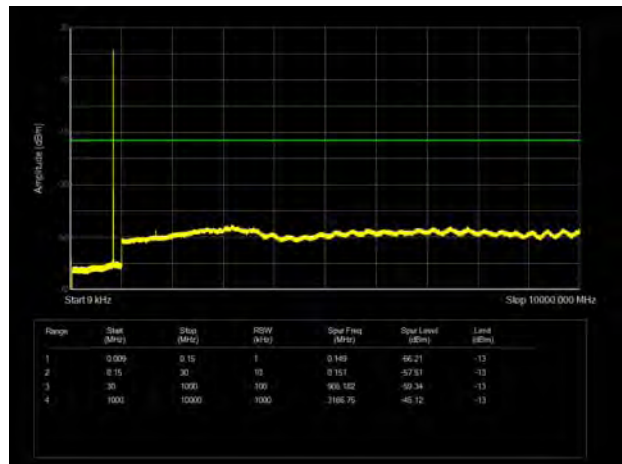
LTE Band 5 3MHz CH-Low 9kHz~10GHz



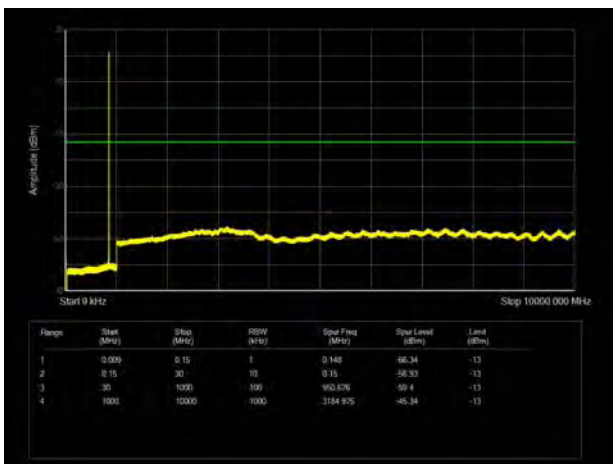
LTE Band 5 1.4MHz CH-Middle 9kHz~10GHz



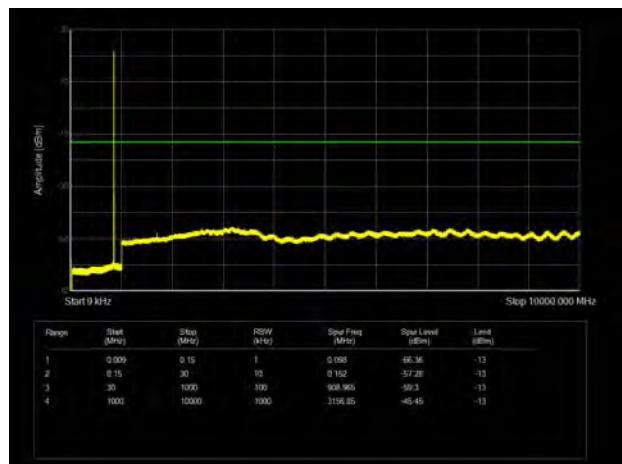
LTE Band 5 3MHz CH-Middle 9kHz~10GHz



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



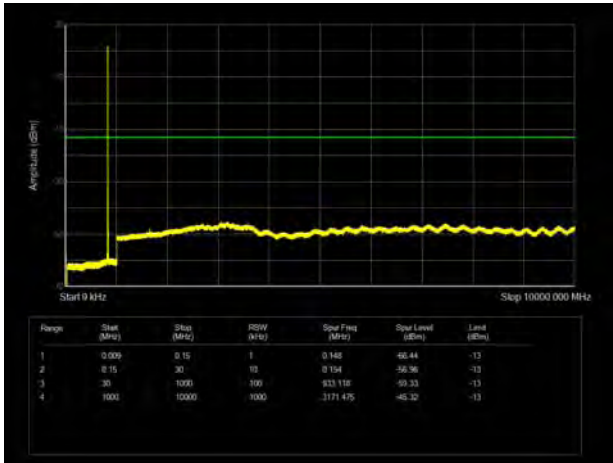
LTE Band 5 3MHz CH-High 9kHz~10GHz



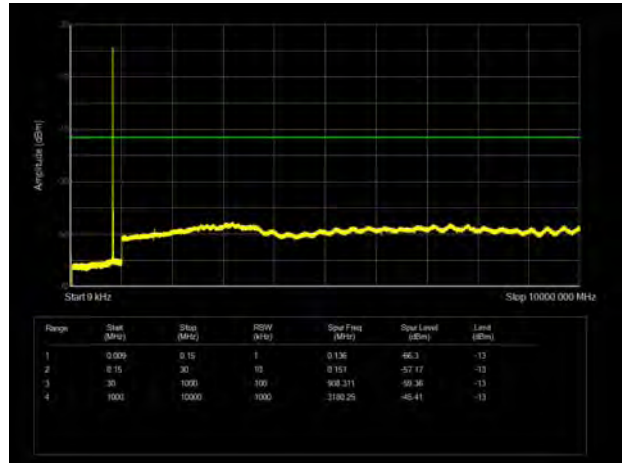




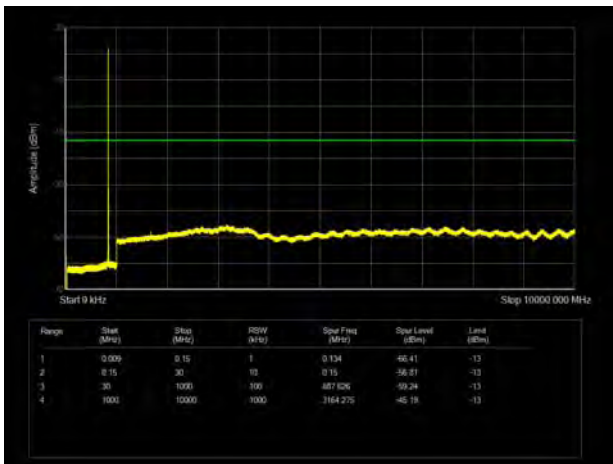
LTE Band 5 5MHz CH-Low 9kHz~10GHz



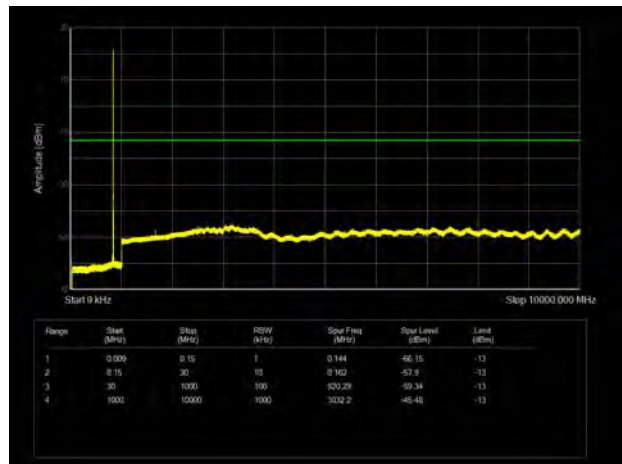
LTE Band 5 10MHz CH-Low 9kHz~10GHz



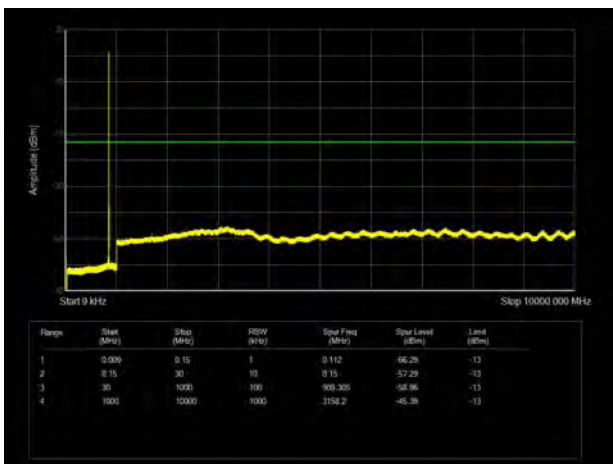
LTE Band 5 5MHz CH-Middle 9kHz~10GHz



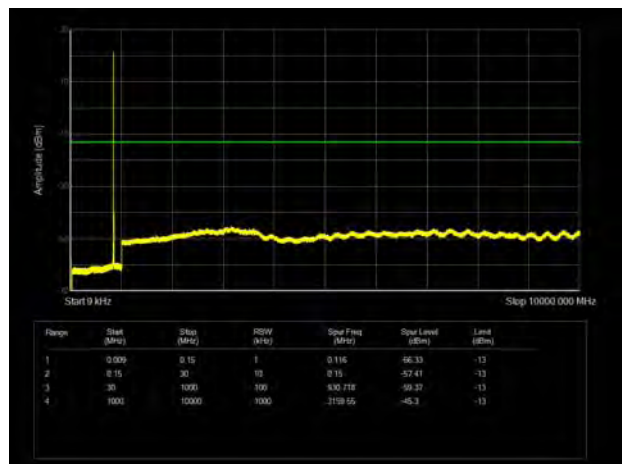
LTE Band 5 10MHz CH-Middle 9kHz~10GHz



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

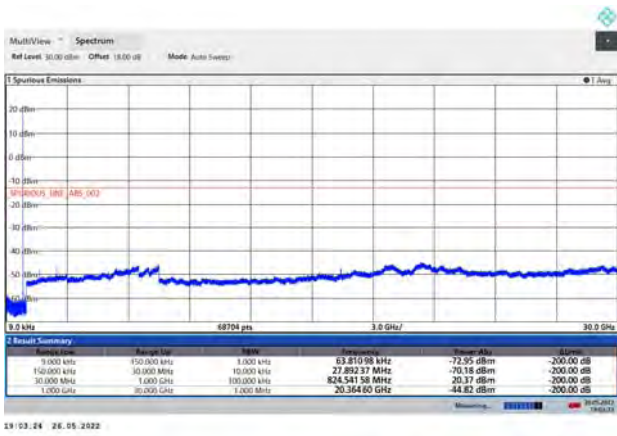


LTE Band 5 10MHz CH-High 9kHz~10GHz

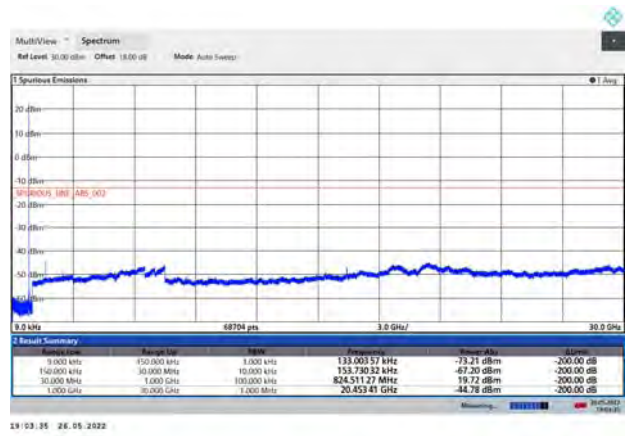




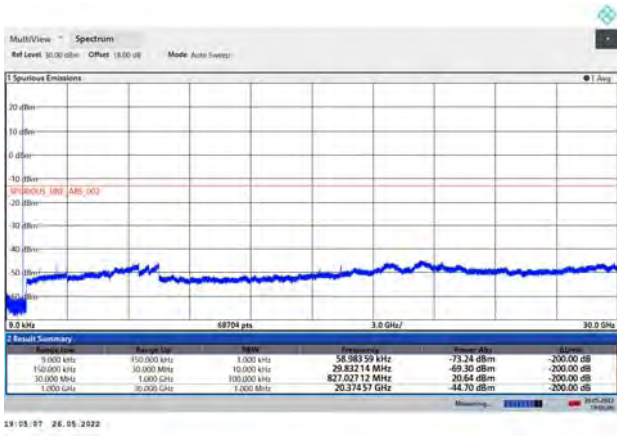
NR n5 P1/2 BPSK 20MHz CH-Low 9kHz~30GHz



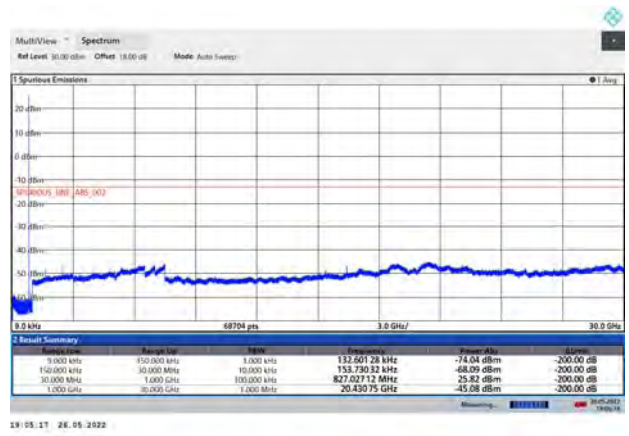
NR n5 QPSK 20MHz CH-Low 9kHz~30GHz



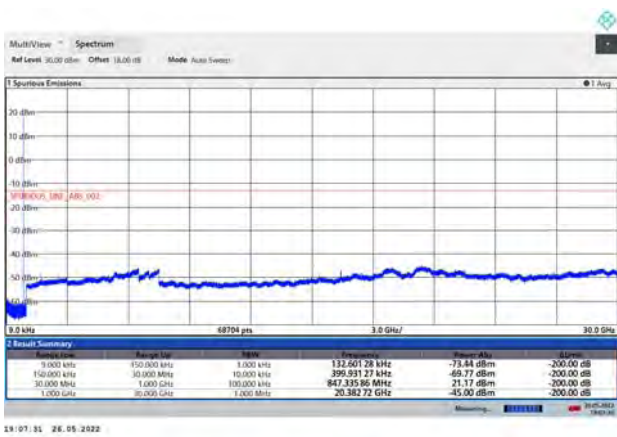
NR n5 P1/2 BPSK 20MHz CH-Middle 9kHz~30GHz



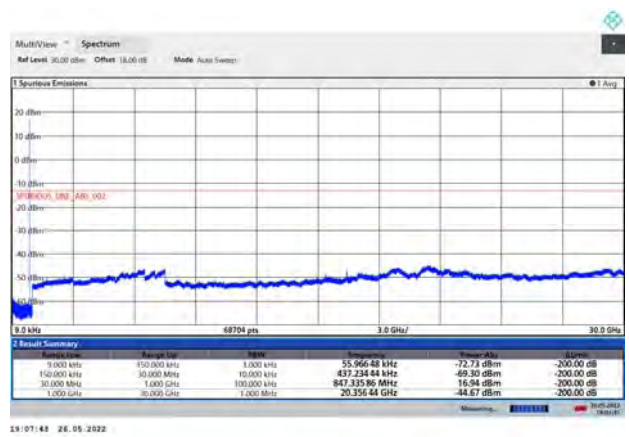
NR n5 QPSK 20MHz CH-Middle 9kHz~30GHz



NR n5 P1/2 BPSK 20MHz CH-High 9kHz~30GHz

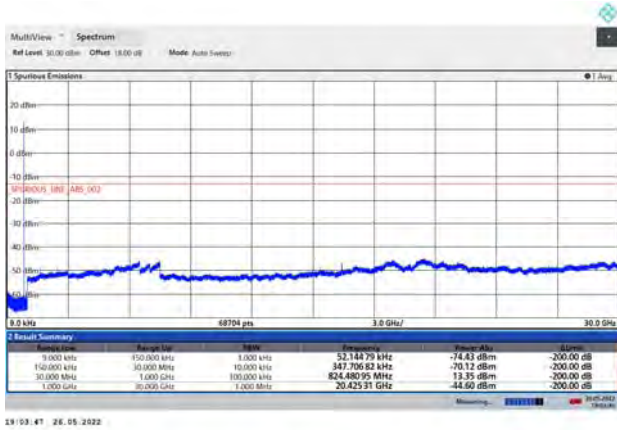


NR n5 QPSK 20MHz CH-High 9kHz~30GHz

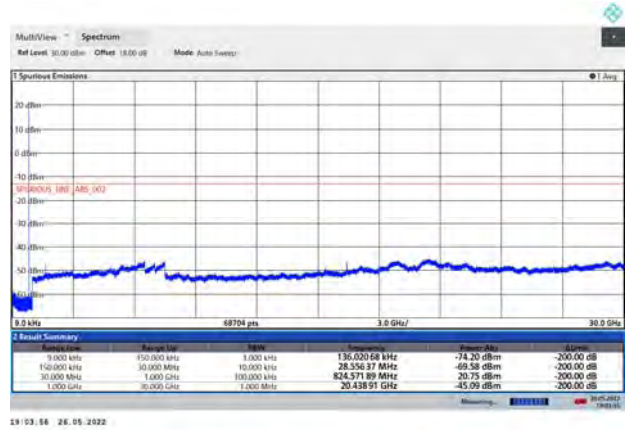




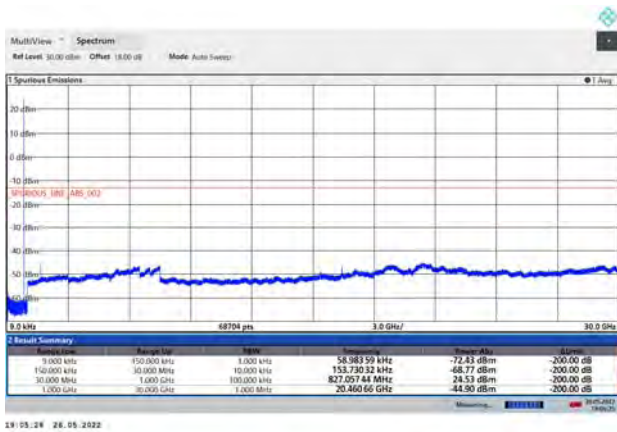
### NR n5 16QAM 20MHz CH-Low 9kHz~30GHz



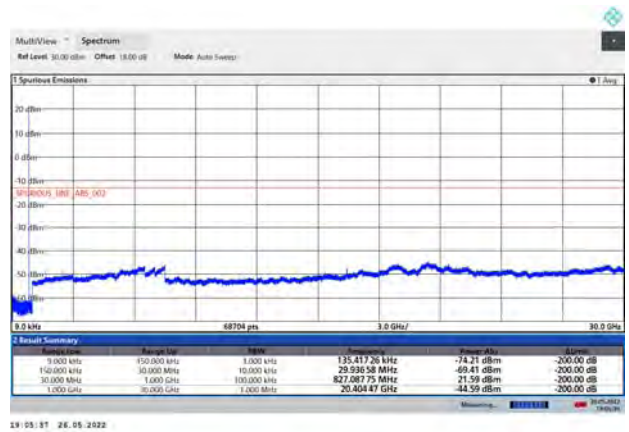
### NR n5 64QAM 20MHz CH-Low 9kHz~30GHz



### NR n5 16QAM 20MHz CH-Middle 9kHz~30GHz



### NR n5 64QAM 20MHz CH-Middle 9kHz~30GHz



### NR n5 16QAM 20MHz CH-High 9kHz~30GHz

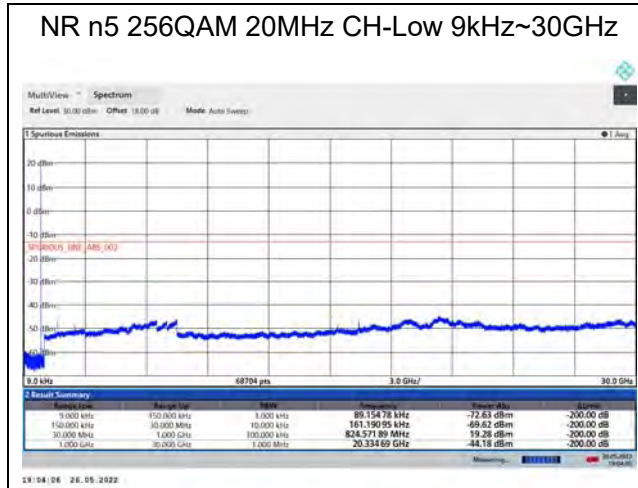


### NR n5 64QAM 20MHz CH-High 9kHz~30GHz



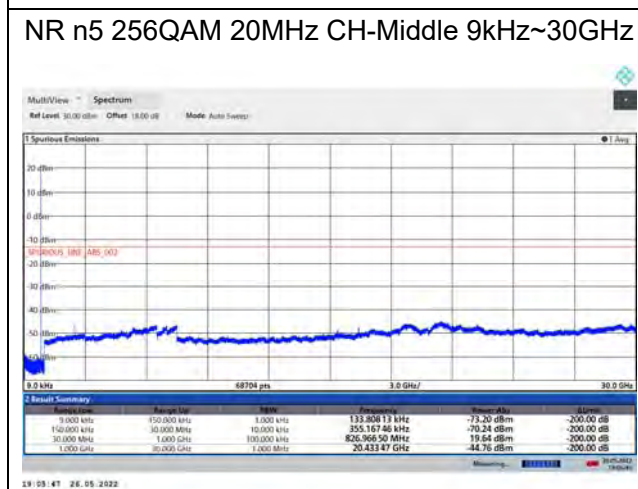


### NR n5 256QAM 20MHz CH-Low 9kHz~30GHz



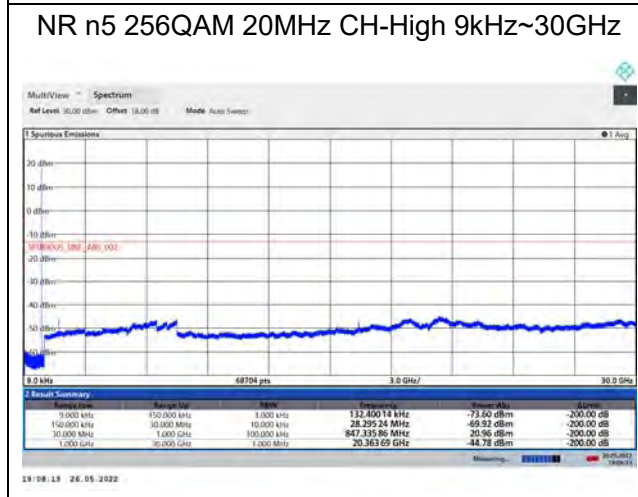
19/04/26 26.05.2022

### NR n5 256QAM 20MHz CH-Middle 9kHz~30GHz



19/05/17 26.05.2022

### NR n5 256QAM 20MHz CH-High 9kHz~30GHz

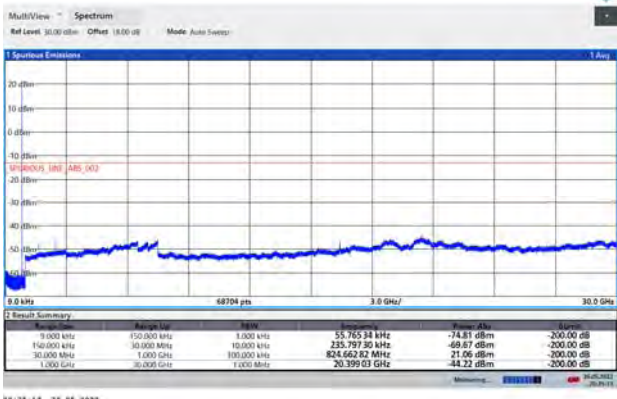


19/09/18 26.05.2022

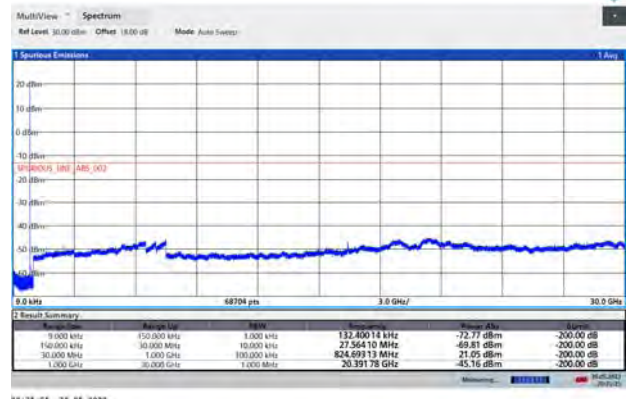




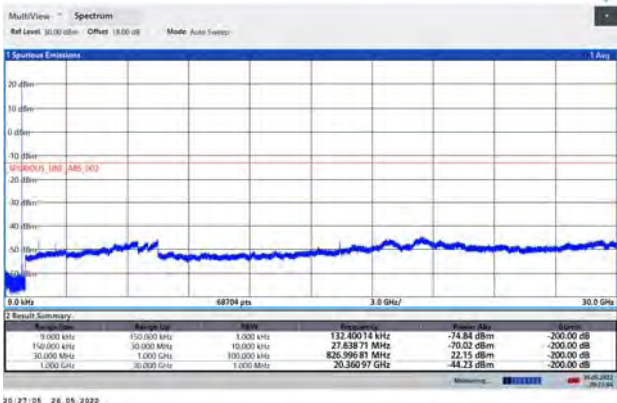
DC\_66A-n5A P1/2 BPSK 20MHz CH-Low  
9kHz~20GHz



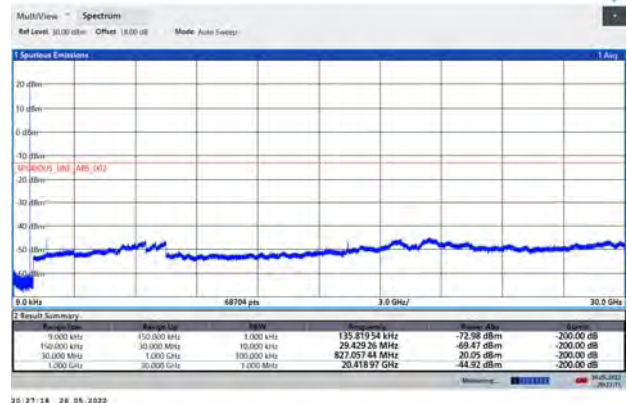
DC\_66A-n5A QPSK 20MHz CH-Low  
9kHz~20GHz



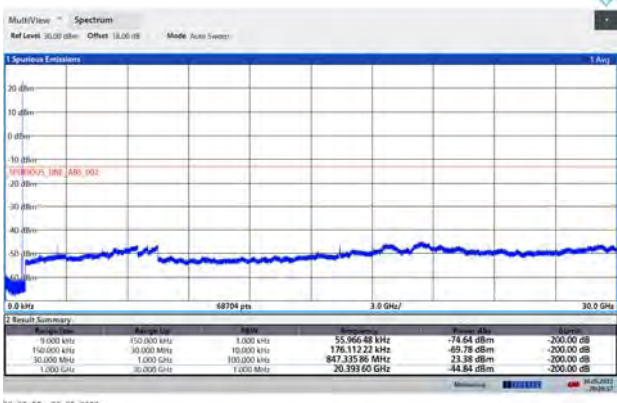
DC\_66A-n5A P1/2 BPSK 20MHz CH-Middle  
9kHz~20GHz



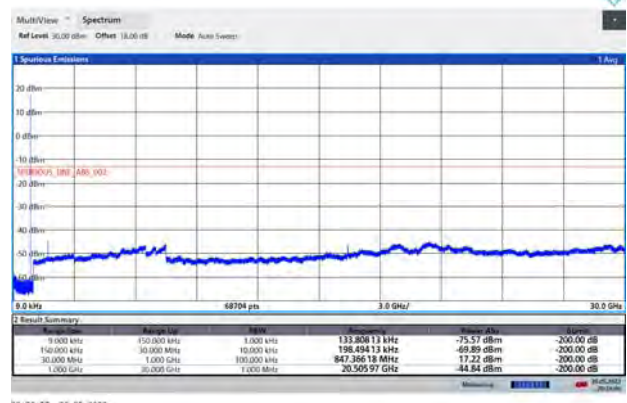
DC\_66A-n5A QPSK 20MHz CH-Middle  
9kHz~20GHz



DC\_66A-n5A P1/2 BPSK 20MHz CH-High  
9kHz~20GHz

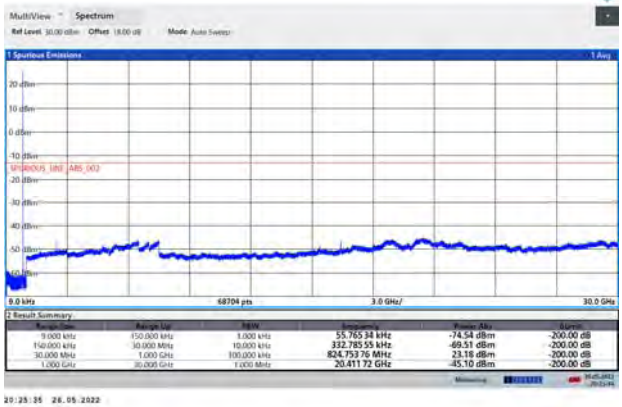


DC\_66A-n5A QPSK 20MHz CH-High  
9kHz~20GHz

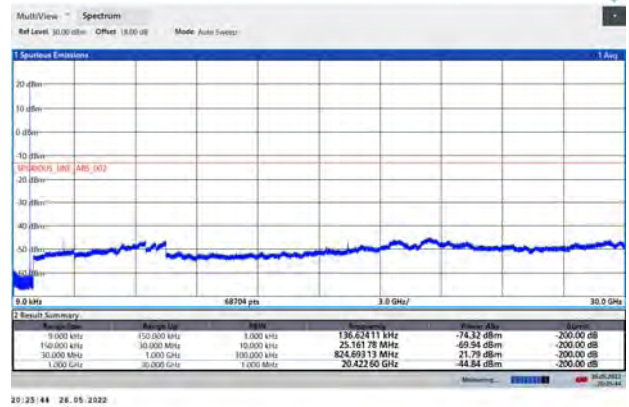




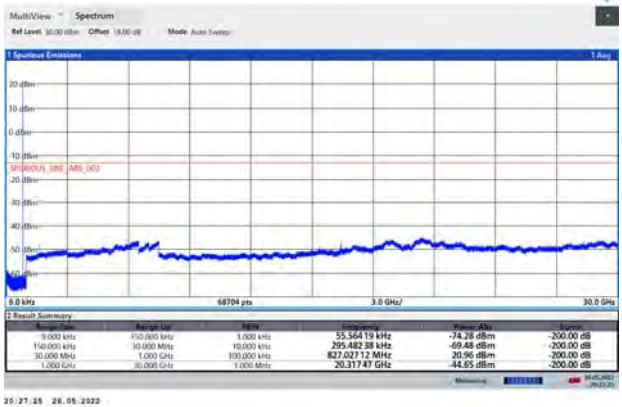
### DC\_66A-n5A 16QAM 20MHz CH-Low 9kHz~20GHz



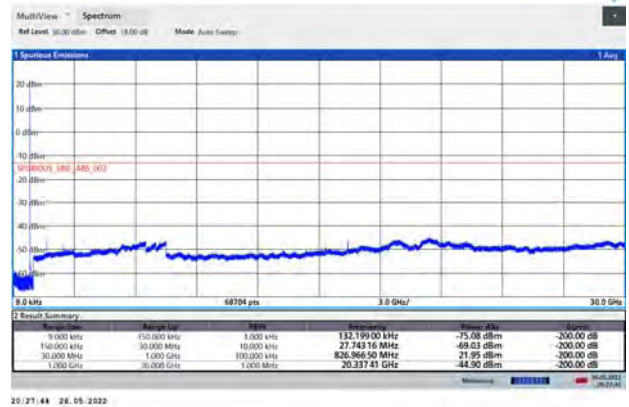
### DC\_66A-n5A 64QAM 20MHz CH-Low 9kHz~20GHz



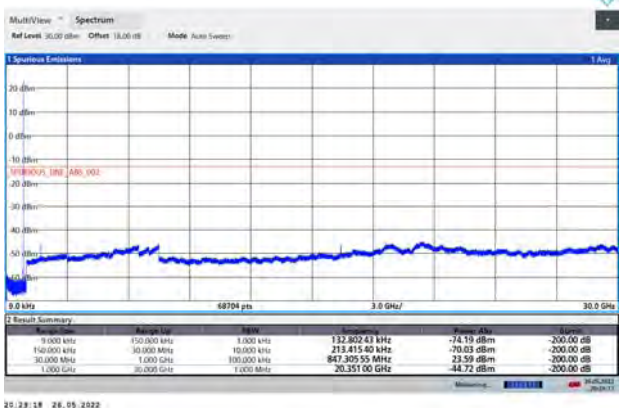
### DC\_66A-n5A 16QAM 20MHz CH-Middle 9kHz~20GHz



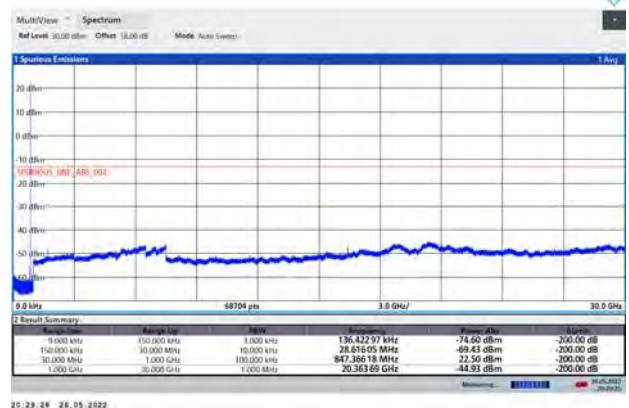
### DC\_66A-n5A 64QAM 20MHz CH-Middle 9kHz~20GHz



### DC\_66A-n5A 16QAM 20MHz CH-High 9kHz~20GHz

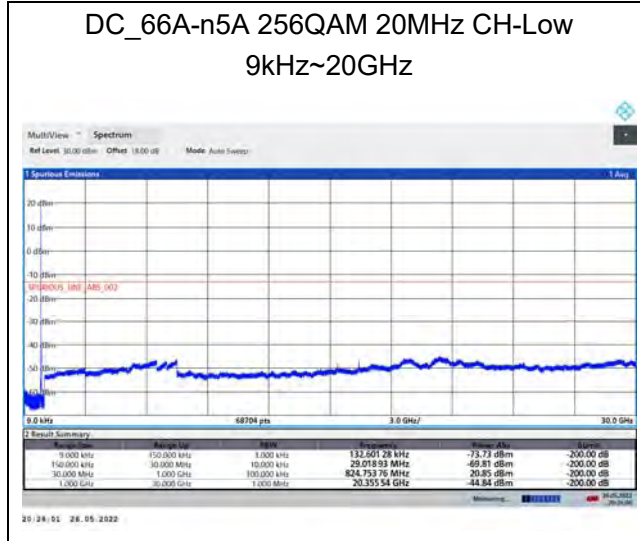


### DC\_66A-n5A 64QAM 20MHz CH-High 9kHz~20GHz

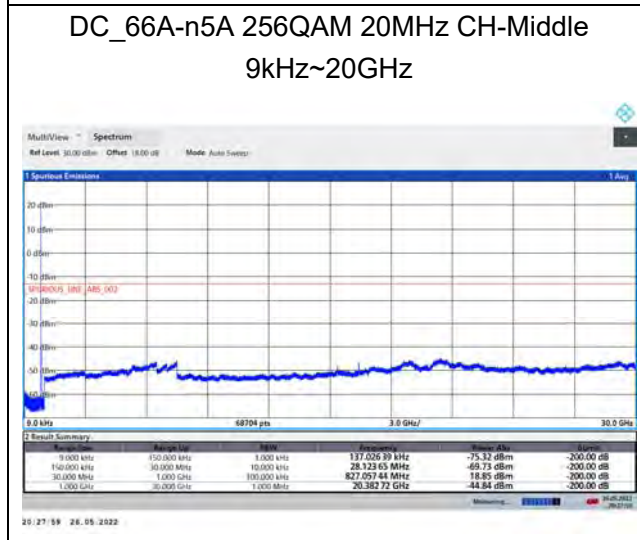




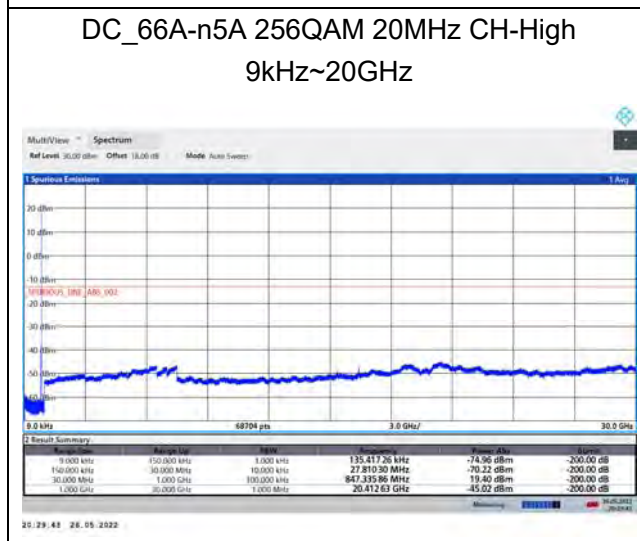
### DC\_66A-n5A 256QAM 20MHz CH-Low 9kHz~20GHz



### DC\_66A-n5A 256QAM 20MHz CH-Middle 9kHz~20GHz



### DC\_66A-n5A 256QAM 20MHz CH-High 9kHz~20GHz





## 6.7. Radiates Spurious Emission

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

### Main Antenna

GSM 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	1674.50	-55.38	1.70	8.70	Horizontal	-50.53	-13.00	37.53	45
3	2510.15	-44.05	2.30	12.00	Horizontal	-36.50	-13.00	23.50	135
4	3346.40	-65.68	2.70	12.70	Horizontal	-57.83	-13.00	44.83	135
5	4183.00	-64.55	3.00	12.50	Horizontal	-57.20	-13.00	44.20	225
6	5019.60	-61.80	3.40	12.50	Horizontal	-54.85	-13.00	41.85	90
7	5856.20	-63.30	3.40	12.80	Horizontal	-56.05	-13.00	43.05	45
8	6692.80	-56.17	4.10	11.50	Horizontal	-50.92	-13.00	37.92	315
9	7529.40	-54.20	4.20	12.20	Horizontal	-48.35	-13.00	35.35	90
10	8366.00	-54.12	4.30	12.50	Horizontal	-48.07	-13.00	35.07	225

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

2. The worst emission was found in the antenna is Horizontal 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	1675.60	-64.31	1.70	8.70	Horizontal	-59.46	-13.00	46.46	45
3	2513.60	-61.87	2.30	12.00	Horizontal	-54.32	-13.00	41.32	315
4	3351.00	-61.92	2.70	12.70	Horizontal	-54.07	-13.00	41.07	90
5	4187.20	-62.08	3.00	12.50	Horizontal	-54.73	-13.00	41.73	45
6	4825.40	-61.58	3.40	12.50	Horizontal	-54.63	-13.00	41.63	225
7	5856.20	-63.95	3.40	12.80	Horizontal	-56.70	-13.00	43.70	90
8	6866.90	-57.72	4.10	11.50	Horizontal	-52.47	-13.00	39.47	45
9	7742.70	-55.86	4.20	12.20	Horizontal	-50.01	-13.00	37.01	315
10	8366.00	-54.50	4.30	12.50	Horizontal	-48.45	-13.00	35.45	90

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

2. The worst emission was found in the antenna is Horizontal 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	1672.05	-57.77	1.70	8.70	vertical	-52.92	-13.00	39.92	45
3	2508.05	-56.50	2.30	12.00	vertical	-48.95	-13.00	35.95	225
4	3344.20	-56.82	2.70	12.70	vertical	-48.97	-13.00	35.97	270
5	4180.00	-61.22	3.00	12.50	vertical	-53.87	-13.00	40.87	0
6	5019.00	-62.89	3.40	12.50	vertical	-55.94	-13.00	42.94	315
7	5855.50	-63.65	3.40	12.80	vertical	-56.40	-13.00	43.40	90
8	6692.00	-57.36	4.10	11.50	vertical	-52.11	-13.00	39.11	45
9	7528.50	-55.30	4.20	12.20	vertical	-49.45	-13.00	36.45	180
10	8365.00	-56.03	4.30	12.50	vertical	-49.98	-13.00	36.98	225

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.  
2. The worst emission was found in the antenna is vertical position.

## LTE Band 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	1668.45	-58.35	1.70	8.70	vertical	-53.50	-13.00	40.50	225
3	2503.00	-56.02	2.30	12.00	vertical	-48.47	-13.00	35.47	135
4	3337.30	-56.78	2.70	12.70	vertical	-48.93	-13.00	35.93	270
5	4171.70	-60.82	3.00	12.50	vertical	-53.47	-13.00	40.47	180
6	5006.25	-61.92	3.40	12.50	vertical	-54.97	-13.00	41.97	225
7	5840.63	-63.49	3.40	12.80	vertical	-56.24	-13.00	43.24	45
8	6675.00	-58.86	4.10	11.50	vertical	-53.61	-13.00	40.61	315
9	7509.38	-54.85	4.20	12.20	vertical	-49.00	-13.00	36.00	90
10	8343.75	-56.37	4.30	12.50	vertical	-50.32	-13.00	37.32	225

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.  
2. The worst emission was found in the antenna is vertical position.



## LTE Band 5 10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1664.15	-57.27	1.70	8.70	vertical	-52.42	-13.00	39.42	135
3	2496.50	-55.70	2.30	12.00	vertical	-48.15	-13.00	35.15	225
4	3328.30	-64.05	2.70	12.70	vertical	-56.20	-13.00	43.20	45
5	4160.10	-61.61	3.00	12.50	vertical	-54.26	-13.00	41.26	180
6	4989.00	-63.21	3.40	12.50	vertical	-56.26	-13.00	43.26	90
7	5820.50	-64.16	3.40	12.80	vertical	-56.91	-13.00	43.91	135
8	6652.00	-58.97	4.10	11.50	vertical	-53.72	-13.00	40.72	45
9	7483.50	-56.62	4.20	12.20	vertical	-50.77	-13.00	37.77	270
10	8315.00	-56.37	4.30	12.50	vertical	-50.32	-13.00	37.32	90

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

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

## NR n5 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	1673.00	-60.56	1.70	8.70	Horizontal	-55.71	-13.00	42.71	180
3	2509.60	-57.94	2.30	12.00	Horizontal	-50.39	-13.00	37.39	0
4	3346.20	-63.33	2.70	12.70	Horizontal	-55.48	-13.00	42.48	180
5	4128.80	-59.23	3.00	12.50	Horizontal	-51.88	-13.00	38.88	225
6	5019.70	-62.96	3.40	12.50	Horizontal	-56.01	-13.00	43.01	0
7	5912.70	-62.52	3.40	12.80	Horizontal	-55.27	-13.00	42.27	45
8	6692.00	-58.71	4.10	11.50	Horizontal	-53.46	-13.00	40.46	90
9	7528.50	-56.35	4.20	12.20	Horizontal	-50.50	-13.00	37.50	90
10	8365.00	-54.59	4.30	12.50	Horizontal	-48.54	-13.00	35.54	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 Horizontal position.



## NR n5 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	1672.90	-59.17	1.70	8.70	Horizontal	-54.32	-13.00	41.32	0
3	2509.75	-60.30	2.30	12.00	Horizontal	-52.75	-13.00	39.75	90
4	3346.30	-59.38	2.70	12.70	Horizontal	-51.53	-13.00	38.53	45
5	4183.00	-60.48	3.00	12.50	Horizontal	-53.13	-13.00	40.13	270
6	4959.00	-63.38	3.40	12.50	Horizontal	-56.43	-13.00	43.43	90
7	5785.50	-64.52	3.40	12.80	Horizontal	-57.27	-13.00	44.27	135
8	6612.00	-60.34	4.10	11.50	Horizontal	-55.09	-13.00	42.09	45
9	7398.00	-56.48	4.20	12.20	Horizontal	-50.63	-13.00	37.63	315
10	8265.00	-55.84	4.30	12.50	Horizontal	-49.79	-13.00	36.79	90

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

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

## NR n5 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1672.90	-60.58	1.70	8.70	Horizontal	-55.73	-13.00	42.73	90
3	2509.75	-59.24	2.30	12.00	Horizontal	-51.69	-13.00	38.69	90
4	3346.30	-62.38	2.70	12.70	Horizontal	-54.53	-13.00	41.53	45
5	4183.00	-57.99	3.00	12.50	Horizontal	-50.64	-13.00	37.64	135
6	4959.00	-62.59	3.40	12.50	Horizontal	-55.64	-13.00	42.64	90
7	5785.50	-63.96	3.40	12.80	Horizontal	-56.71	-13.00	43.71	0
8	6612.00	-58.25	4.10	11.50	Horizontal	-53.00	-13.00	40.00	45
9	7398.00	-54.75	4.20	12.20	Horizontal	-48.90	-13.00	35.90	0
10	8265.00	-54.16	4.30	12.50	Horizontal	-48.11	-13.00	35.11	90

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

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



## DC\_66A-n5A 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	1673.00	-62.48	1.70	8.70	Horizontal	-57.63	-13.00	44.63	0
3	2509.50	-62.73	2.30	12.00	Horizontal	-55.18	-13.00	42.18	45
4	3317.60	-65.20	2.70	12.70	Horizontal	-57.35	-13.00	44.35	45
5	4147.40	-64.35	3.00	12.50	Horizontal	-57.00	-13.00	44.00	225
6	5258.70	-64.52	3.40	12.50	Horizontal	-57.57	-13.00	44.57	0
7	5970.10	-63.92	3.40	12.80	Horizontal	-56.67	-13.00	43.67	90
8	6846.80	-59.10	4.10	11.50	Horizontal	-53.85	-13.00	40.85	135
9	7528.50	-54.48	4.20	12.20	Horizontal	-48.63	-13.00	35.63	45
10	8365.00	-55.40	4.30	12.50	Horizontal	-49.35	-13.00	36.35	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 Horizontal position.

## DC\_66A-n5A 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	1668.60	-67.04	1.70	8.70	Horizontal	-62.19	-13.00	49.19	45
3	2503.30	-66.15	2.30	12.00	Horizontal	-58.60	-13.00	45.60	45
4	3307.90	-61.05	2.70	12.70	Horizontal	-53.20	-13.00	40.20	45
5	4135.10	-56.89	3.00	12.50	Horizontal	-49.54	-13.00	36.54	90
6	5278.20	-63.52	3.40	12.50	Horizontal	-56.57	-13.00	43.57	135
7	6037.30	-62.79	3.40	12.80	Horizontal	-55.54	-13.00	42.54	45
8	6652.00	-58.72	4.10	11.50	Horizontal	-53.47	-13.00	40.47	45
9	7904.00	-52.86	4.20	12.20	Horizontal	-47.01	-13.00	34.01	0
10	8315.00	-53.05	4.30	12.50	Horizontal	-47.00	-13.00	34.00	90

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

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





## DC\_66A-n5A 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1664.40	-61.75	1.70	8.70	Horizontal	-56.90	-13.00	43.90	45
3	2496.60	-62.82	2.30	12.00	Horizontal	-55.27	-13.00	42.27	90
4	3317.60	-59.81	2.70	12.70	Horizontal	-51.96	-13.00	38.96	135
5	4147.40	-56.72	3.00	12.50	Horizontal	-49.37	-13.00	36.37	45
6	5258.70	-57.15	3.40	12.50	Horizontal	-50.20	-13.00	37.20	45
7	5970.10	-62.53	3.40	12.80	Horizontal	-55.28	-13.00	42.28	0
8	6846.80	-57.62	4.10	11.50	Horizontal	-52.37	-13.00	39.37	225
9	7528.50	-53.73	4.20	12.20	Horizontal	-47.88	-13.00	34.88	225
10	8365.00	-53.06	4.30	12.50	Horizontal	-47.01	-13.00	34.01	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 Horizontal position.

**Second Antenna**

## 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	1674.50	-69.99	1.70	8.70	Horizontal	-65.14	-13.00	52.14	0
3	2510.15	-61.83	2.30	12.00	Horizontal	-54.28	-13.00	41.28	45
4	3346.40	-67.96	2.70	12.70	Horizontal	-60.11	-13.00	47.11	0
5	4183.00	-53.43	3.00	12.50	Horizontal	-46.08	-13.00	33.08	90
6	5019.60	-59.57	3.40	12.50	Horizontal	-52.62	-13.00	39.62	135
7	5856.20	-59.00	3.40	12.80	Horizontal	-51.75	-13.00	38.75	225
8	6692.80	-59.15	4.10	11.50	Horizontal	-53.90	-13.00	40.90	45
9	7529.40	-54.97	4.20	12.20	Horizontal	-49.12	-13.00	36.12	135
10	8366.00	-57.00	4.30	12.50	Horizontal	-50.95	-13.00	37.95	225

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.  
2. The worst emission was found in the antenna is Horizontal 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	1675.60	-55.65	1.70	8.70	Horizontal	-50.80	-13.00	37.80	315
3	2513.60	-48.76	2.30	12.00	Horizontal	-41.21	-13.00	28.21	225
4	3351.00	-61.03	2.70	12.70	Horizontal	-53.18	-13.00	40.18	135
5	4187.20	-62.99	3.00	12.50	Horizontal	-55.64	-13.00	42.64	45
6	4825.40	-59.44	3.40	12.50	Horizontal	-52.49	-13.00	39.49	0
7	5856.20	-59.57	3.40	12.80	Horizontal	-52.32	-13.00	39.32	45
8	6866.90	-60.28	4.10	11.50	Horizontal	-55.03	-13.00	42.03	180
9	7742.70	-58.00	4.20	12.20	Horizontal	-52.15	-13.00	39.15	180
10	8366.00	-56.71	4.30	12.50	Horizontal	-50.66	-13.00	37.66	90

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.  
2. The worst emission was found in the antenna is Horizontal 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	1672.05	-66.80	1.70	8.70	Horizontal	-61.95	-13.00	48.95	45
3	2508.05	-60.04	2.30	12.00	Horizontal	-52.49	-13.00	39.49	315
4	3344.20	-62.37	2.70	12.70	Horizontal	-54.52	-13.00	41.52	270
5	4180.00	-57.60	3.00	12.50	Horizontal	-50.25	-13.00	37.25	0
6	5019.00	-60.19	3.40	12.50	Horizontal	-53.24	-13.00	40.24	45
7	5855.50	-61.53	3.40	12.80	Horizontal	-54.28	-13.00	41.28	0
8	6692.00	-58.95	4.10	11.50	Horizontal	-53.70	-13.00	40.70	180
9	7528.50	-57.10	4.20	12.20	Horizontal	-51.25	-13.00	38.25	45
10	8365.00	-56.13	4.30	12.50	Horizontal	-50.08	-13.00	37.08	225

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

2. The worst emission was found in the antenna is Horizontal 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	1668.45	-69.38	1.70	8.70	Horizontal	-64.53	-13.00	51.53	0
3	2503.00	-59.92	2.30	12.00	Horizontal	-52.37	-13.00	39.37	45
4	3337.30	-62.34	2.70	12.70	Horizontal	-54.49	-13.00	41.49	315
5	4171.70	-58.31	3.00	12.50	Horizontal	-50.96	-13.00	37.96	90
6	5006.25	-59.79	3.40	12.50	Horizontal	-52.84	-13.00	39.84	0
7	5840.63	-60.40	3.40	12.80	Horizontal	-53.15	-13.00	40.15	180
8	6675.00	-57.63	4.10	11.50	Horizontal	-52.38	-13.00	39.38	45
9	7509.38	-58.56	4.20	12.20	Horizontal	-52.71	-13.00	39.71	225
10	8343.75	-57.76	4.30	12.50	Horizontal	-51.71	-13.00	38.71	315

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

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



## LTE Band 5 10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1664.15	-67.71	1.70	8.70	Horizontal	-62.86	-13.00	49.86	315
3	2496.50	-60.21	2.30	12.00	Horizontal	-52.66	-13.00	39.66	0
4	3328.30	-61.24	2.70	12.70	Horizontal	-53.39	-13.00	40.39	135
5	4160.10	-59.10	3.00	12.50	Horizontal	-51.75	-13.00	38.75	225
6	4989.00	-59.42	3.40	12.50	Horizontal	-52.47	-13.00	39.47	0
7	5820.50	-58.66	3.40	12.80	Horizontal	-51.41	-13.00	38.41	45
8	6652.00	-57.12	4.10	11.50	Horizontal	-51.87	-13.00	38.87	135
9	7483.50	-57.53	4.20	12.20	Horizontal	-51.68	-13.00	38.68	225
10	8315.00	-57.45	4.30	12.50	Horizontal	-51.40	-13.00	38.40	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 Horizontal position.

## NR n5 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	1673.00	-57.68	1.70	8.70	Horizontal	-52.83	-13.00	39.83	0
3	2509.60	-39.44	2.30	12.00	Horizontal	-31.89	-13.00	18.89	45
4	3346.20	-58.47	2.70	12.70	Horizontal	-50.62	-13.00	37.62	0
5	4128.80	-63.82	3.00	12.50	Horizontal	-56.47	-13.00	43.47	0
6	5019.70	-66.09	3.40	12.50	Horizontal	-59.14	-13.00	46.14	90
7	5912.70	-63.47	3.40	12.80	Horizontal	-56.22	-13.00	43.22	0
8	6692.00	-59.04	4.10	11.50	Horizontal	-53.79	-13.00	40.79	45
9	7528.50	-54.60	4.20	12.20	Horizontal	-48.75	-13.00	35.75	225
10	8365.00	-55.75	4.30	12.50	Horizontal	-49.70	-13.00	36.70	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 Horizontal position.





## NR n5 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	1672.90	-65.50	1.70	8.70	Horizontal	-60.65	-13.00	47.65	0
3	2509.75	-59.92	2.30	12.00	Horizontal	-52.37	-13.00	39.37	45
4	3346.30	-59.84	2.70	12.70	Horizontal	-51.99	-13.00	38.99	45
5	4183.00	-60.58	3.00	12.50	Horizontal	-53.23	-13.00	40.23	90
6	4959.00	-63.01	3.40	12.50	Horizontal	-56.06	-13.00	43.06	45
7	5785.50	-64.05	3.40	12.80	Horizontal	-56.80	-13.00	43.80	135
8	6612.00	-60.03	4.10	11.50	Horizontal	-54.78	-13.00	41.78	0
9	7398.00	-54.92	4.20	12.20	Horizontal	-49.07	-13.00	36.07	45
10	8265.00	-55.96	4.30	12.50	Horizontal	-49.91	-13.00	36.91	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 Horizontal position.

## NR n5 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1672.90	-58.58	1.70	8.70	Horizontal	-53.73	-13.00	40.73	135
3	2509.75	-35.56	2.30	12.00	Horizontal	-28.01	-13.00	15.01	90
4	3346.30	-59.36	2.70	12.70	Horizontal	-51.51	-13.00	38.51	45
5	4183.00	-61.26	3.00	12.50	Horizontal	-53.91	-13.00	40.91	90
6	4959.00	-63.51	3.40	12.50	Horizontal	-56.56	-13.00	43.56	0
7	5785.50	-64.33	3.40	12.80	Horizontal	-57.08	-13.00	44.08	135
8	6612.00	-60.06	4.10	11.50	Horizontal	-54.81	-13.00	41.81	0
9	7398.00	-55.12	4.20	12.20	Horizontal	-49.27	-13.00	36.27	45
10	8265.00	-54.99	4.30	12.50	Horizontal	-48.94	-13.00	35.94	225

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

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



## 7. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Communication tester	Anritsu	MT8821C	6201538758	2021-05-15	2022-05-14
				2022-05-15	2023-05-14
Climate Chamber	ESPEC	SU-242	93000506	2021-12-12	2022-12-11
Universal Radio Communication Tester	R&S	CMW500	150415	2021-05-15	2022-05-14
				2022-05-15	2023-05-14
Spectrum Analyzer	Keysight	N9020A	MY54420163	2021-12-12	2022-12-11
Universal Radio Communication Tester	StarPoint	SP9500	SP9500-20440	2021-05-15	2022-05-14
				2022-05-15	2023-05-14
Spectrum Analyzer	R&S	FSV40	101297	2021-12-12	2022-12-11
Signal Analyzer	R&S	FSV3030	101411	2021-12-12	2022-12-11
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	01111	2019-09-12	2022-09-11
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2023-12-16
Software	R&S	EMC32	10.35.10	/	/

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



## **ANNEX A: The EUT Appearance**

The EUT Appearance is submitted separately.



## ANNEX B: Test Setup Photos

The Test Setup Photos is submitted separately.