



# RF TEST REPORT

**Applicant**      Xiaomi Communications Co., Ltd.  
**FCC ID**          2AFZZ1119DG  
**Product**        Mobile Phone  
**Brand**            Redmi  
**Model**            21061119DG  
**Report No.**      R2106A0482-R3V1  
**Issue Date**      August 2, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2020)/ FCC CFR47 Part 27C (2020)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	July27,2021
Rev.1	Update data	August 2, 2021

Note: This revised report (Report No. R2106A0482-R3V1) supersedes and replaces the previously issued report (Report No. R2106A0482-R3). Please discard or destroy the previously issued report and dispose of it accordingly.



## Summary of Measurement Results

Number	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Isotropic Radiated Power	2.1046 /27.50(d)(4) /27.50(h)(2)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	27.53(h) /27.53(m)	PASS
4	Peak-to-Average Power Ratio	27.50(d)/KDB971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 27.54	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 /27.53(h) /27.53(m)	PASS
7	Radiates Spurious Emission	2.1053 /27.53(h) /27.53(m)	PASS

Date of Testing: June 26, 2021 ~ July 8, 2021

Date of Sample Received: June 22, 2021

Note: PASS: The EUT complies with the essential requirements in the standard.

FAIL: The EUT does not comply with the essential requirements in the standard.

All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.



# 1 Test Laboratory

## 1.1 Notes of the Test Report

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

## 1.2. Test facility

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

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

### **A2LA (Certificate Number: 3857.01)**

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

## 1.3 Testing Location

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

### 2.1 Applicant and Manufacturer Information

Applicant	Xiaomi Communications Co., Ltd.
Applicant address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer	Xiaomi Communications Co., Ltd.
Manufacturer address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

### 2.2 General information

EUT Description			
Model	21061119DG		
IMEI	IMEI 868393050034644 IMEI 868393050034651		
Hardware Version	P1.1		
Software Version	MIUI12.5		
Power Supply	Battery / AC adapter		
Memory	4G+64G; 6G+128G; 4G+128G		
Antenna Type	PIFA Antenna		
Antenna Gain		Main Antenna	Second Antenna
	WCDMA Band IV:	- 0.8 dBi	-1.4 dBi
	LTE Band 4:	- 0.8 dBi	-1.4 dBi
	LTE Band 7:	1.6 dBi	-1.7 dBi
	LTE Band 38:	0 dBi	-1.6 dBi
	LTE Band 41:	0 dBi	-1.6 dBi
Test Mode(s)	WCDMA Band IV; LTE Band 4/7/38/41 CA_38C/CA_7C		
Test Modulation	(WCDMA) BPSK, QPSK,16QAM; (LTE)QPSK 16QAM; 64QAM;		
HSDPA UE Category	24		
HSUPA UE Category	7		
DC-HSDPA UE Category	7		
Maximum E.I.R.P.	WCDMA Band IV:	23.06dBm	
	LTE Band 4:	23.71dBm	
	LTE Band 7:	26.62dBm	
	LTE Band 38:	24.60dBm	
	LTE Band 41:	24.51dBm	
Rated Power Supply Voltage	3.87V		



Operating Voltage	Minimum: 3.6V    Maximum: 4.45V		
Operating Temperature	Lowest: 0°C    Highest: +40°C		
Extreme Temperature	Lowest: -30°C    Highest: +50°C		
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	WCDMA Band IV	1710 ~ 1755	2110 ~ 2155
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 38	2570 ~ 2620	2570 ~ 2620
LTE Band 41	2535 ~ 2655	2535 ~ 2655	
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			



### 3 Applied Standards

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

**Test standards:**

**FCC CFR47 Part 27C (2020)**

**ANSI C63.26 (2015)**

**Reference standard:**

**FCC CFR47 Part 2 (2020)**

**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 (Z axis, verticalpolarization) and the worst case was recorded.

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

Subsequently, only the worst case emissions are reported.

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

The following testing in different Bandwidth is set to detailin the following table:

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

Test items	Modes/Modulation
	WCDMA Band IV
RF Power Output and Effective Isotropic Radiated Power	RMC HSDPA/HSUPA DC-HSDPA/HSPA+
Occupied Bandwidth	RMC
Band Edge Compliance	RMC
Peak-to-Average Power Ratio	RMC
Frequency Stability	RMC
Spurious Emissions at Antenna Terminals	RMC
Radiates Spurious Emission	RMC



Test modes are chosen to be reported as the worst case configuration below for LTE Band 4/7/38/41:

Test items	Modes	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	LTE 4	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	LTE 4	O	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
Band Edge Compliance	LTE 4	O	O	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 7	-	-	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 38	-	-	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 41	-	-	O	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	LTE 4	O	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	LTE 4	O	O	O	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 7	-	-	O	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 38	-	-	O	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 41	-	-	O	O	O	O	O	O	O	O	-	-	-	O	-
Spurious Emissions at Antenna Terminals	LTE 4	O	O	O	O	O	O	O	-	-	O	-	-	O	O	O
	LTE 7	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
	LTE 38	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
	LTE 41	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
Radiates Spurious Emission	LTE 4	O	-	O	-	-	O	O	-	-	O	-	-	-	O	-
	LTE 7	-	-	O	-	-	O	O	-	-	O	-	-	-	O	-
	LTE 38	-	-	O	-	-	O	O	-	-	O	-	-	-	O	-
	LTE 41	-	-	O	-	-	O	O	-	-	O	-	-	-	O	-
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.															

:

## 5 Test Case Results

### 5.1 RF Power Output and Effective Isotropic Radiated Power Ambient condition

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

#### Methods of Measurement

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

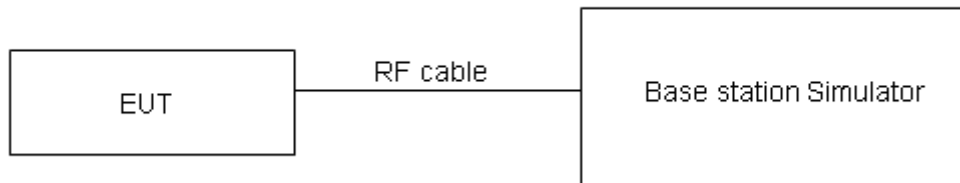
ERP can then be calculated as follows:

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

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 27.50(b) (10) specifies that “Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP”

Rule Part 27.50(c) (10) specifies that “Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP”

Rule Part 27.50(d) (4) specifies that “Fixed, mobile and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP”

Rule Part 27.50(h) (2) specifies that “Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.”

Rule Part 27.50(a) (3) specifies that “(i) For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations



compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. ”

Part 27.50(d)(4)Limit	-LTE 4/66	$\leq 1 \text{ W}$ (30 dBm)
Part 27.50(h)(2) Limit	-LTE 7/41	$\leq 2 \text{ W}$ (33 dBm)

### Measurement Uncertainty

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



## Test Results

WCDMA Band IV		Maximum Output Power (dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
		Channel 1312	Channel 1413	Channel 1513	Channel 1312	Channel 1413	Channel 1513	Channel 1312	Channel 1413	Channel 1513
		1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)
RMC		23.74	23.86	23.69	22.94	23.06	22.89	22.34	22.46	22.29
AMR		23.58	23.69	23.54	22.78	22.89	22.74	22.18	22.29	22.14
HSDPA	Sub - Test 1	23.16	23.28	23.11	22.36	22.48	22.31	21.76	21.88	21.71
	Sub - Test 2	23.15	23.27	23.10	22.35	22.47	22.30	21.75	21.87	21.70
	Sub - Test 3	22.64	22.76	22.59	21.84	21.96	21.79	21.24	21.36	21.19
	Sub - Test 4	22.63	22.75	22.58	21.83	21.95	21.78	21.23	21.35	21.18
HSUPA	Sub - Test 1	23.12	23.24	23.07	22.32	22.44	22.27	21.72	21.84	21.67
	Sub - Test 2	22.11	22.23	22.06	21.31	21.43	21.26	20.71	20.83	20.66
	Sub - Test 3	22.59	22.72	22.55	21.79	21.92	21.75	21.19	21.32	21.15
	Sub - Test 4	22.08	22.21	22.04	21.28	21.41	21.24	20.68	20.81	20.64
	Sub - Test 5	23.07	23.20	23.03	22.27	22.40	22.23	21.67	21.80	21.63
DC-HSDPA A	Sub - Test 1	23.08	23.22	23.03	22.28	22.42	22.23	21.68	21.82	21.63
	Sub - Test 2	23.07	23.21	23.02	22.27	22.41	22.22	21.67	21.81	21.62
	Sub - Test 3	22.65	22.70	22.53	21.85	21.90	21.73	21.25	21.30	21.13
	Sub - Test 4	22.64	22.69	22.52	21.84	21.89	21.72	21.24	21.29	21.12
HSPA+	16QAM	22.63	22.77	22.60	21.83	21.97	21.80	21.23	21.37	21.20



LTE Band 4				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				19957/ 1710.7	20175/ 1732.5	20393/ 1754.3	19957/ 1710.7	20175/ 1732.5	20393/ 1754.3	19957/ 1710.7	20175/ 1732.5	20393/ 1754.3
1.4MHz	QPSK	1	0	24.21	24.34	24.34	23.41	23.54	23.54	22.81	22.94	22.94
		1	2	24.39	24.43	24.35	23.59	23.63	23.55	22.99	23.03	22.95
		1	5	24.29	24.20	24.36	23.49	23.40	23.56	22.89	22.80	22.96
		3	0	24.15	24.42	24.30	23.35	23.62	23.50	22.75	23.02	22.90
		3	2	24.25	24.37	24.41	23.45	23.57	23.61	22.85	22.97	23.01
		3	3	24.19	24.20	24.51	23.39	23.40	23.71	22.79	22.80	23.11
		6	0	23.09	23.44	23.50	22.29	22.64	22.70	21.69	22.04	22.10
	16QAM	1	0	23.68	23.43	23.59	22.88	22.63	22.79	22.28	22.03	22.19
		1	2	23.66	23.53	23.77	22.86	22.73	22.97	22.26	22.13	22.37
		1	5	23.43	23.42	23.58	22.63	22.62	22.78	22.03	22.02	22.18
		3	0	23.23	23.31	23.30	22.43	22.51	22.50	21.83	21.91	21.90
		3	2	23.35	23.38	23.50	22.55	22.58	22.70	21.95	21.98	22.10
		3	3	23.16	23.38	23.55	22.36	22.58	22.75	21.76	21.98	22.15
		6	0	22.20	22.45	22.58	21.40	21.65	21.78	20.80	21.05	21.18
	64QAM	1	0	22.51	22.49	22.56	21.71	21.69	21.76	21.11	21.09	21.16
		1	2	22.47	22.29	22.43	21.67	21.49	21.63	21.07	20.89	21.03
		1	5	22.36	22.51	22.48	21.56	21.71	21.68	20.96	21.11	21.08
		3	0	22.19	22.31	22.40	21.39	21.51	21.60	20.79	20.91	21.00
		3	2	22.33	22.48	22.53	21.53	21.68	21.73	20.93	21.08	21.13
		3	3	22.22	22.45	22.38	21.42	21.65	21.58	20.82	21.05	20.98
		6	0	21.33	21.50	21.58	20.53	20.70	20.78	19.93	20.10	20.18
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				19965/ 1711.5	20175/ 1732.5	20385/ 1753.5	19965/ 1711.5	20175/ 1732.5	20385/ 1753.5	19965/ 1711.5	20175/ 1732.5	20385/ 1753.5
3MHz	QPSK	1	0	24.23	24.38	24.37	23.43	23.58	23.57	22.83	22.98	22.97
		1	7	24.37	24.46	24.39	23.57	23.66	23.59	22.97	23.06	22.99
		1	14	24.32	24.25	24.40	23.52	23.45	23.60	22.92	22.85	23.00
		8	0	23.25	23.54	23.43	22.45	22.74	22.63	21.85	22.14	22.03
		8	4	23.37	23.47	23.53	22.57	22.67	22.73	21.97	22.07	22.13
		8	7	23.29	23.31	23.61	22.49	22.51	22.81	21.89	21.91	22.21
		15	0	23.09	23.48	23.53	22.29	22.68	22.73	21.69	22.08	22.13
	16QAM	1	0	23.71	23.45	23.62	22.91	22.65	22.82	22.31	22.05	22.22
		1	7	23.69	23.53	23.81	22.89	22.73	23.01	22.29	22.13	22.41



		1	14	23.45	23.46	23.61	22.65	22.66	22.81	22.05	22.06	22.21
		8	0	22.34	22.44	22.42	21.54	21.64	21.62	20.94	21.04	21.02
		8	4	22.46	22.51	22.62	21.66	21.71	21.82	21.06	21.11	21.22
		8	7	22.26	22.50	22.68	21.46	21.70	21.88	20.86	21.10	21.28
		15	0	22.23	22.49	22.61	21.43	21.69	21.81	20.83	21.09	21.21
	64QAM	1	0	22.54	22.51	22.59	21.74	21.71	21.79	21.14	21.11	21.19
		1	7	22.50	22.29	22.45	21.70	21.49	21.65	21.10	20.89	21.05
		1	14	22.38	22.50	22.51	21.58	21.70	21.71	20.98	21.10	21.11
		8	0	21.30	21.44	21.52	20.50	20.64	20.72	19.90	20.04	20.12
		8	4	21.44	21.61	21.65	20.64	20.81	20.85	20.04	20.21	20.25
		8	7	21.32	21.57	21.51	20.52	20.77	20.71	19.92	20.17	20.11
		15	0	21.36	21.54	21.61	20.56	20.74	20.81	19.96	20.14	20.21
	BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)							
19975/1712.5					20175/1732.5	20375/1752.5	19975/1712.5	20175/1732.5	20375/1752.5	19975/1712.5	20175/1732.5	20375/1752.5
5MHz	QPSK	1	0	24.20	24.36	24.33	23.40	23.56	23.53	22.80	22.96	22.93
		1	13	24.35	24.42	24.36	23.55	23.62	23.56	22.95	23.02	22.96
		1	24	24.29	24.20	24.36	23.49	23.40	23.56	22.89	22.80	22.96
		12	0	23.22	23.49	23.39	22.42	22.69	22.59	21.82	22.09	21.99
		12	6	23.35	23.43	23.48	22.55	22.63	22.68	21.95	22.03	22.08
		12	13	23.27	23.29	23.57	22.47	22.49	22.77	21.87	21.89	22.17
		25	0	23.09	23.47	23.51	22.29	22.67	22.71	21.69	22.07	22.11
	16QAM	1	0	23.68	23.41	23.59	22.88	22.61	22.79	22.28	22.01	22.19
		1	13	23.66	23.51	23.78	22.86	22.71	22.98	22.26	22.11	22.38
		1	24	23.42	23.44	23.57	22.62	22.64	22.77	22.02	22.04	22.17
		12	0	22.32	22.40	22.39	21.52	21.60	21.59	20.92	21.00	20.99
		12	6	22.43	22.46	22.58	21.63	21.66	21.78	21.03	21.06	21.18
		12	13	22.23	22.45	22.64	21.43	21.65	21.84	20.83	21.05	21.24
		25	0	22.21	22.45	22.56	21.41	21.65	21.76	20.81	21.05	21.16
	64QAM	1	0	22.51	22.51	22.56	21.71	21.71	21.76	21.11	21.11	21.16
		1	13	22.47	22.31	22.42	21.67	21.51	21.62	21.07	20.91	21.02
		1	24	22.39	22.48	22.47	21.59	21.68	21.67	20.99	21.08	21.07
		12	0	21.28	21.40	21.53	20.48	20.60	20.73	19.88	20.00	20.13
		12	6	21.41	21.56	21.61	20.61	20.76	20.81	20.01	20.16	20.21
		12	13	21.29	21.52	21.47	20.49	20.72	20.67	19.89	20.12	20.07
		25	0	21.34	21.50	21.56	20.54	20.70	20.76	19.94	20.10	20.16



BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20000/1715	20175/1732.5	20350/1750	20000/1715	20175/1732.5	20350/1750	20000/1715	20175/1732.5	20350/1750
10MHz	QPSK	1	0	24.22	24.37	24.36	23.42	23.57	23.56	22.82	22.97	22.96
		1	50	24.38	24.47	24.40	23.58	23.67	23.60	22.98	23.07	23.00
		1	99	24.31	24.24	24.39	23.51	23.44	23.59	22.91	22.84	22.99
		50	0	23.25	23.54	23.43	22.45	22.74	22.63	21.85	22.14	22.03
		50	25	23.38	23.48	23.52	22.58	22.68	22.72	21.98	22.08	22.12
		50	50	23.29	23.33	23.62	22.49	22.53	22.82	21.89	21.93	22.22
		100	0	23.13	23.49	23.55	22.33	22.69	22.75	21.73	22.09	22.15
	16QAM	1	0	23.70	23.44	23.61	22.90	22.64	22.81	22.30	22.04	22.21
		1	50	23.69	23.55	23.81	22.89	22.75	23.01	22.29	22.15	22.41
		1	99	23.45	23.46	23.60	22.65	22.66	22.80	22.05	22.06	22.20
		50	0	22.35	22.45	22.43	21.55	21.65	21.63	20.95	21.05	21.03
		50	25	22.45	22.50	22.61	21.65	21.70	21.81	21.05	21.10	21.21
		50	50	22.26	22.50	22.68	21.46	21.70	21.88	20.86	21.10	21.28
		100	0	22.24	22.50	22.60	21.44	21.70	21.80	20.84	21.10	21.20
	64QAM	1	0	22.53	22.50	22.58	21.73	21.70	21.78	21.13	21.10	21.18
		1	50	22.50	22.31	22.45	21.70	21.51	21.65	21.10	20.91	21.05
		1	99	22.38	22.50	22.50	21.58	21.70	21.70	20.98	21.10	21.10
		50	0	21.31	21.45	21.53	20.51	20.65	20.73	19.91	20.05	20.13
		50	25	21.43	21.60	21.64	20.63	20.80	20.84	20.03	20.20	20.24
		50	50	21.32	21.57	21.51	20.52	20.77	20.71	19.92	20.17	20.11
		100	0	21.37	21.55	21.60	20.57	20.75	20.80	19.97	20.15	20.20
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20025/1717.5	20175/1732.5	20325/1747.5	20025/1717.5	20175/1732.5	20325/1747.5	20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	24.21	24.33	24.34	23.41	23.53	23.54	22.81	22.93	22.94
		1	50	24.36	24.46	24.37	23.56	23.66	23.57	22.96	23.06	22.97
		1	99	24.28	24.19	24.35	23.48	23.39	23.55	22.88	22.79	22.95
		50	0	23.23	23.50	23.40	22.43	22.70	22.60	21.83	22.10	22.00
		50	25	23.35	23.43	23.48	22.55	22.63	22.68	21.95	22.03	22.08
		50	50	23.26	23.30	23.58	22.46	22.50	22.78	21.86	21.90	22.18
		100	0	23.11	23.45	23.50	22.31	22.65	22.70	21.71	22.05	22.10
	16QAM	1	0	23.65	23.42	23.59	22.85	22.62	22.79	22.25	22.02	22.19
		1	50	23.67	23.52	23.79	22.87	22.72	22.99	22.27	22.12	22.39
		1	99	23.42	23.42	23.57	22.62	22.62	22.77	22.02	22.02	22.17





		50	0	22.32	22.43	22.40	21.52	21.63	21.60	20.92	21.03	21.00	
		50	25	22.42	22.45	22.57	21.62	21.65	21.77	21.02	21.05	21.17	
		50	50	22.24	22.46	22.65	21.44	21.66	21.85	20.84	21.06	21.25	
		100	0	22.21	22.45	22.56	21.41	21.65	21.76	20.81	21.05	21.16	
	64QAM	1	0	22.48	22.48	22.56	21.68	21.68	21.76	21.08	21.08	21.16	
		1	50	22.48	22.28	22.43	21.68	21.48	21.63	21.08	20.88	21.03	
		1	99	22.39	22.49	22.51	21.59	21.69	21.71	20.99	21.09	21.11	
		50	0	21.30	21.47	21.54	20.50	20.67	20.74	19.90	20.07	20.14	
		50	25	21.41	21.57	21.63	20.61	20.77	20.83	20.01	20.17	20.23	
		50	50	21.30	21.53	21.48	20.50	20.73	20.68	19.90	20.13	20.08	
		100	0	21.34	21.50	21.56	20.54	20.70	20.76	19.94	20.10	20.16	
	BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
					20050/1720	20175/1732.5	20300/1745	20050/1720	20175/1732.5	20300/1745	20050/1720	20175/1732.5	20300/1745
20MHz	QPSK	1	0	24.18	24.29	24.31	23.38	23.49	23.51	22.78	22.89	22.91	
		1	50	24.35	24.42	24.35	23.55	23.62	23.55	22.95	23.02	22.95	
		1	99	24.26	24.18	24.32	23.46	23.38	23.52	22.86	22.78	22.92	
		50	0	23.20	23.45	23.36	22.40	22.65	22.56	21.80	22.05	21.96	
		50	25	23.33	23.39	23.45	22.53	22.59	22.65	21.93	21.99	22.05	
		50	50	23.23	23.25	23.54	22.43	22.45	22.74	21.83	21.85	22.14	
		100	0	23.08	23.40	23.46	22.28	22.60	22.66	21.68	22.00	22.06	
	16QAM	1	0	23.65	23.38	23.54	22.85	22.58	22.74	22.25	21.98	22.14	
		1	50	23.63	23.50	23.75	22.83	22.70	22.95	22.23	22.10	22.35	
		1	99	23.40	23.39	23.55	22.60	22.59	22.75	22.00	21.99	22.15	
		50	0	22.29	22.39	22.37	21.49	21.59	21.57	20.89	20.99	20.97	
		50	25	22.39	22.43	22.54	21.59	21.63	21.74	20.99	21.03	21.14	
		50	50	22.21	22.41	22.61	21.41	21.61	21.81	20.81	21.01	21.21	
		100	0	22.19	22.41	22.53	21.39	21.61	21.73	20.79	21.01	21.13	
	64QAM	1	0	22.46	22.44	22.51	21.66	21.64	21.71	21.06	21.04	21.11	
		1	50	22.44	22.26	22.39	21.64	21.46	21.59	21.04	20.86	20.99	
		1	99	22.33	22.43	22.45	21.53	21.63	21.65	20.93	21.03	21.05	
		50	0	21.25	21.39	21.47	20.45	20.59	20.67	19.85	19.99	20.07	
		50	25	21.37	21.53	21.57	20.57	20.73	20.77	19.97	20.13	20.17	
		50	50	21.27	21.48	21.44	20.47	20.68	20.64	19.87	20.08	20.04	
		100	0	21.32	21.46	21.53	20.52	20.66	20.73	19.92	20.06	20.13	



LTE Band 7				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20775/ 2502.5	21100/ 2535	21425/ 2567.5	20775/ 2502.5	21100/ 2535	21425/ 2567.5	20775/ 2502.5	21100/ 2535	21425/ 2567.5
5MHz	QPSK	1	0	24.83	24.83	24.66	26.43	26.43	26.26	23.13	23.13	22.96
		1	13	24.94	24.95	24.98	26.54	26.55	26.58	23.24	23.25	23.28
		1	24	24.80	24.88	24.94	26.40	26.48	26.54	23.10	23.18	23.24
		12	0	23.99	24.10	24.25	25.59	25.70	25.85	22.29	22.40	22.55
		12	6	24.14	24.11	24.32	25.74	25.71	25.92	22.44	22.41	22.62
		12	13	24.10	24.16	24.25	25.70	25.76	25.85	22.40	22.46	22.55
		25	0	23.99	24.13	24.35	25.59	25.73	25.95	22.29	22.43	22.65
	16QAM	1	0	23.89	23.97	24.03	25.49	25.57	25.63	22.19	22.27	22.33
		1	13	23.87	23.88	23.94	25.47	25.48	25.54	22.17	22.18	22.24
		1	24	24.13	24.19	24.20	25.73	25.79	25.80	22.43	22.49	22.50
		12	0	23.30	23.19	23.24	24.90	24.79	24.84	21.60	21.49	21.54
		12	6	23.29	23.26	23.31	24.89	24.86	24.91	21.59	21.56	21.61
		12	13	23.33	23.31	23.34	24.93	24.91	24.94	21.63	21.61	21.64
		25	0	23.33	23.33	23.36	24.93	24.93	24.96	21.63	21.63	21.66
	64QAM	1	0	23.38	23.38	23.40	24.98	24.98	25.00	21.68	21.68	21.70
		1	13	23.37	23.32	23.34	24.97	24.92	24.94	21.67	21.62	21.64
		1	24	23.33	23.34	23.31	24.93	24.94	24.91	21.63	21.64	21.61
		12	0	22.29	22.25	22.34	23.89	23.85	23.94	20.59	20.55	20.64
		12	6	22.32	22.23	22.28	23.92	23.83	23.88	20.62	20.53	20.58
		12	13	22.31	22.24	22.22	23.91	23.84	23.82	20.61	20.54	20.52
		25	0	22.38	22.25	22.34	23.98	23.85	23.94	20.68	20.55	20.64
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20800/ 2505	21100/ 2535	21400/ 2565	20800/ 2505	21100/ 2535	21400/ 2565	20800/ 2505	21100/ 2535	21400/ 2565
10MHz	QPSK	1	0	24.85	24.84	24.69	26.45	26.44	26.29	23.15	23.14	22.99
		1	25	24.97	25.00	25.02	26.57	26.60	26.62	23.27	23.30	23.32
		1	49	24.82	24.92	24.97	26.42	26.52	26.57	23.12	23.22	23.27
		25	0	24.02	24.15	24.29	25.62	25.75	25.89	22.32	22.45	22.59
		25	13	24.17	24.16	24.36	25.77	25.76	25.96	22.47	22.46	22.66
		25	25	24.12	24.20	24.30	25.72	25.80	25.90	22.42	22.50	22.60
		50	0	24.03	24.15	24.39	25.63	25.75	25.99	22.33	22.45	22.69



	16QAM	1	0	23.91	24.00	24.05	25.51	25.60	25.65	22.21	22.30	22.35
		1	25	23.90	23.92	23.97	25.50	25.52	25.57	22.20	22.22	22.27
		1	49	24.16	24.21	24.23	25.76	25.81	25.83	22.46	22.51	22.53
		25	0	23.33	23.24	23.28	24.93	24.84	24.88	21.63	21.54	21.58
		25	13	23.31	23.30	23.34	24.91	24.90	24.94	21.61	21.60	21.64
		25	25	23.36	23.36	23.38	24.96	24.96	24.98	21.66	21.66	21.68
		50	0	23.36	23.38	23.40	24.96	24.98	25.00	21.66	21.68	21.70
	64QAM	1	0	23.40	23.37	23.42	25.00	24.97	25.02	21.70	21.67	21.72
		1	25	23.40	23.32	23.37	25.00	24.92	24.97	21.70	21.62	21.67
		1	49	23.32	23.36	23.34	24.92	24.96	24.94	21.62	21.66	21.64
		25	0	22.32	22.30	22.34	23.92	23.90	23.94	20.62	20.60	20.64
		25	13	22.34	22.27	22.31	23.94	23.87	23.91	20.64	20.57	20.61
		25	25	22.34	22.29	22.26	23.94	23.89	23.86	20.64	20.59	20.56
		50	0	22.41	22.30	22.38	24.01	23.90	23.98	20.71	20.60	20.68
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20825/ 2507.5	21100/ 2535	21375/ 2562.5	20825/ 2507.5	21100/ 2535	21375/ 2562.5	20825/ 2507.5	21100/ 2535	21375/ 2562.5
15MHz	QPSK	1	0	24.84	24.80	24.67	26.44	26.40	26.27	23.14	23.10	22.97
		1	38	24.95	24.99	24.99	26.55	26.59	26.59	23.25	23.29	23.29
		1	74	24.79	24.87	24.93	26.39	26.47	26.53	23.09	23.17	23.23
		36	0	24.00	24.11	24.26	25.60	25.71	25.86	22.30	22.41	22.56
		36	18	24.14	24.11	24.32	25.74	25.71	25.92	22.44	22.41	22.62
		36	39	24.09	24.17	24.26	25.69	25.77	25.86	22.39	22.47	22.56
		75	0	24.01	24.11	24.34	25.61	25.71	25.94	22.31	22.41	22.64
	16QAM	1	0	23.86	23.98	24.03	25.46	25.58	25.63	22.16	22.28	22.33
		1	38	23.88	23.89	23.95	25.48	25.49	25.55	22.18	22.19	22.25
		1	74	24.13	24.17	24.20	25.73	25.77	25.80	22.43	22.47	22.50
		36	0	23.30	23.22	23.25	24.90	24.82	24.85	21.60	21.52	21.55
		36	18	23.28	23.25	23.30	24.88	24.85	24.90	21.58	21.55	21.60
		36	39	23.34	23.32	23.35	24.94	24.92	24.95	21.64	21.62	21.65
		75	0	23.33	23.33	23.36	24.93	24.93	24.96	21.63	21.63	21.66
	64QAM	1	0	23.35	23.35	23.40	24.95	24.95	25.00	21.65	21.65	21.70
		1	38	23.38	23.29	23.35	24.98	24.89	24.95	21.68	21.59	21.65
		1	74	23.33	23.35	23.35	24.93	24.95	24.95	21.63	21.65	21.65
		36	0	22.31	22.32	22.35	23.91	23.92	23.95	20.61	20.62	20.65
		36	18	22.32	22.24	22.30	23.92	23.84	23.90	20.62	20.54	20.60
		36	39	22.32	22.25	22.23	23.92	23.85	23.83	20.62	20.55	20.53



BW	Modulation	75	0	22.38	22.25	22.34	23.98	23.85	23.94	20.68	20.55	20.64
		RB size	RB offset	Channel/Frequency(MHz)								
				20850/2510	21100/2535	21350/2560	20850/2510	21100/2535	21350/2560	20850/2510	21100/2535	21350/2560
20MHz	QPSK	1	0	24.81	24.76	24.64	26.41	26.36	26.24	23.11	23.06	22.94
		1	50	24.94	24.97	24.95	26.54	26.57	26.55	23.24	23.27	23.25
		1	99	24.77	24.86	24.90	26.37	26.46	26.50	23.07	23.16	23.20
		50	0	23.97	24.12	24.22	25.57	25.72	25.82	22.27	22.42	22.52
		50	25	24.12	24.07	24.29	25.72	25.67	25.89	22.42	22.37	22.59
		50	50	24.06	24.06	24.22	25.66	25.66	25.82	22.36	22.36	22.52
		100	0	23.98	24.06	24.30	25.58	25.66	25.90	22.28	22.36	22.60
	16QAM	1	0	23.91	23.94	23.98	25.51	25.54	25.58	22.21	22.24	22.28
		1	50	23.84	23.87	23.91	25.44	25.47	25.51	22.14	22.17	22.21
		1	99	24.11	24.14	24.18	25.71	25.74	25.78	22.41	22.44	22.48
		50	0	23.27	23.18	23.22	24.87	24.78	24.82	21.57	21.48	21.52
		50	25	23.25	23.23	23.27	24.85	24.83	24.87	21.55	21.53	21.57
		50	50	23.31	23.27	23.31	24.91	24.87	24.91	21.61	21.57	21.61
		100	0	23.31	23.29	23.33	24.91	24.89	24.93	21.61	21.59	21.63
	64QAM	1	0	23.33	23.31	23.35	24.93	24.91	24.95	21.63	21.61	21.65
		1	50	23.34	23.27	23.31	24.94	24.87	24.91	21.64	21.57	21.61
		1	99	23.27	23.29	23.29	24.87	24.89	24.89	21.57	21.59	21.59
		50	0	22.26	22.24	22.28	23.86	23.84	23.88	20.56	20.54	20.58
		50	25	22.28	22.20	22.24	23.88	23.80	23.84	20.58	20.50	20.54
		50	50	22.29	22.20	22.19	23.89	23.80	23.79	20.59	20.50	20.49
		100	0	22.36	22.21	22.31	23.96	23.81	23.91	20.66	20.51	20.61



LTE Band 38				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37775/ 2572.5	38000/ 2595	38225/ 2617.5	37775/ 2572.5	38000/ 2595	38225/ 2617.5	37775/ 2572.5	38000/ 2595	38225/ 2617.5
5MHz	QPSK	1	0	24.20	24.35	24.27	24.20	24.35	24.27	22.60	22.75	22.67
		1	13	24.49	24.52	24.56	24.49	24.52	24.56	22.89	22.92	22.96
		1	24	24.20	24.40	24.42	24.20	24.40	24.42	22.60	22.80	22.82
		12	0	23.24	23.49	23.47	23.24	23.49	23.47	21.64	21.89	21.87
		12	6	23.38	23.50	23.56	23.38	23.50	23.56	21.78	21.90	21.96
		12	13	23.20	23.53	23.55	23.20	23.53	23.55	21.60	21.93	21.95
		25	0	23.27	23.56	23.60	23.27	23.56	23.60	21.67	21.96	22.00
	16QAM	1	0	23.40	23.38	23.11	23.40	23.38	23.11	21.80	21.78	21.51
		1	13	23.38	23.30	23.34	23.38	23.30	23.34	21.78	21.70	21.74
		1	24	23.05	23.11	23.11	23.05	23.11	23.11	21.45	21.51	21.51
		12	0	22.77	22.30	22.49	22.77	22.30	22.49	21.17	20.70	20.89
		12	6	22.77	22.57	22.63	22.77	22.57	22.63	21.17	20.97	21.03
		12	13	22.76	22.53	22.71	22.76	22.53	22.71	21.16	20.93	21.11
		25	0	22.71	22.41	22.70	22.71	22.41	22.70	21.11	20.81	21.10
	64QAM	1	0	22.52	22.47	22.43	22.52	22.47	22.43	20.92	20.87	20.83
		1	13	22.54	22.50	22.44	22.54	22.50	22.44	20.94	20.90	20.84
		1	24	22.59	22.63	22.45	22.59	22.63	22.45	20.99	21.03	20.85
		12	0	21.53	21.50	21.45	21.53	21.50	21.45	19.93	19.90	19.85
		12	6	21.46	21.45	21.38	21.46	21.45	21.38	19.86	19.85	19.78
		12	13	21.44	21.52	21.41	21.44	21.52	21.41	19.84	19.92	19.81
		25	0	21.33	21.40	21.33	21.33	21.40	21.33	19.73	19.80	19.73
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37800/ 2575	38000/ 2595	38200/ 2615	37800/ 2575	38000/ 2595	38200/ 2615	37800/ 2575	38000/ 2595	38200/ 2615
10MHz	QPSK	1	0	24.22	24.36	24.30	24.22	24.36	24.30	22.62	22.76	22.70
		1	25	24.52	24.57	24.60	24.52	24.57	24.60	22.92	22.97	23.00
		1	49	24.22	24.44	24.45	24.22	24.44	24.45	22.62	22.84	22.85
		25	0	23.27	23.54	23.51	23.27	23.54	23.51	21.67	21.94	21.91
		25	13	23.41	23.55	23.60	23.41	23.55	23.60	21.81	21.95	22.00
		25	25	23.22	23.57	23.60	23.22	23.57	23.60	21.62	21.97	22.00
		50	0	23.31	23.58	23.64	23.31	23.58	23.64	21.71	21.98	22.04
	16QAM	1	0	23.42	23.41	23.13	23.42	23.41	23.13	21.82	21.81	21.53



BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37825/ 2577.5	38000/ 2595	38175/ 2612.5	37825/ 2577.5	38000/ 2595	38175/ 2612.5	37825/ 2577.5	38000/ 2595	38175/ 2612.5
		1	25	23.41	23.34	23.37	23.41	23.34	23.37	21.81	21.74	21.77
		1	49	23.08	23.13	23.14	23.08	23.13	23.14	21.48	21.53	21.54
		25	0	22.80	22.35	22.53	22.80	22.35	22.53	21.20	20.75	20.93
		25	13	22.79	22.61	22.66	22.79	22.61	22.66	21.19	21.01	21.06
		25	25	22.79	22.58	22.75	22.79	22.58	22.75	21.19	20.98	21.15
		50	0	22.74	22.46	22.74	22.74	22.46	22.74	21.14	20.86	21.14
	64QAM	1	0	22.54	22.46	22.45	22.54	22.46	22.45	20.94	20.86	20.85
		1	25	22.57	22.50	22.47	22.57	22.50	22.47	20.97	20.90	20.87
		1	49	22.58	22.65	22.48	22.58	22.65	22.48	20.98	21.05	20.88
		25	0	21.56	21.55	21.45	21.56	21.55	21.45	19.96	19.95	19.85
		25	13	21.48	21.49	21.41	21.48	21.49	21.41	19.88	19.89	19.81
		25	25	21.47	21.57	21.45	21.47	21.57	21.45	19.87	19.97	19.85
		50	0	21.36	21.45	21.37	21.36	21.45	21.37	19.76	19.85	19.77
		15MHz	QPSK	1	0	24.21	24.32	24.28	24.21	24.32	24.28	22.61
1	38			24.50	24.56	24.57	24.50	24.56	24.57	22.90	22.96	22.97
1	74			24.19	24.39	24.41	24.19	24.39	24.41	22.59	22.79	22.81
36	0			23.25	23.50	23.48	23.25	23.50	23.48	21.65	21.90	21.88
36	18			23.38	23.50	23.56	23.38	23.50	23.56	21.78	21.90	21.96
36	39			23.19	23.54	23.56	23.19	23.54	23.56	21.59	21.94	21.96
75	0			23.29	23.54	23.59	23.29	23.54	23.59	21.69	21.94	21.99
16QAM	1		0	23.37	23.39	23.11	23.37	23.39	23.11	21.77	21.79	21.51
	1		38	23.39	23.31	23.35	23.39	23.31	23.35	21.79	21.71	21.75
	1		74	23.05	23.09	23.11	23.05	23.09	23.11	21.45	21.49	21.51
	36		0	22.77	22.33	22.50	22.77	22.33	22.50	21.17	20.73	20.90
	36		18	22.76	22.56	22.62	22.76	22.56	22.62	21.16	20.96	21.02
	36		39	22.77	22.54	22.72	22.77	22.54	22.72	21.17	20.94	21.12
	75		0	22.71	22.41	22.70	22.71	22.41	22.70	21.11	20.81	21.10
64QAM	1		0	22.49	22.44	22.43	22.49	22.44	22.43	20.89	20.84	20.83
	1		38	22.55	22.47	22.45	22.55	22.47	22.45	20.95	20.87	20.85
	1		74	22.59	22.64	22.49	22.59	22.64	22.49	20.99	21.04	20.89
	36		0	21.55	21.57	21.46	21.55	21.57	21.46	19.95	19.97	19.86
	36		18	21.46	21.46	21.40	21.46	21.46	21.40	19.86	19.86	19.80
	36		39	21.45	21.53	21.42	21.45	21.53	21.42	19.85	19.93	19.82
	75		0	21.33	21.40	21.33	21.33	21.40	21.33	19.73	19.80	19.73



BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37850/ 2580	38000/ 2595	38150/ 2610	37850/ 2580	38000/ 2595	38150/ 2610	37850/ 2580	38000/ 2595	38150/ 2610
20MHz	QPSK	1	0	24.18	24.28	24.25	24.18	24.28	24.25	22.58	22.68	22.65
		1	50	24.49	24.52	24.55	24.49	24.52	24.55	22.89	22.92	22.95
		1	99	24.17	24.38	24.38	24.17	24.38	24.38	22.57	22.78	22.78
		50	0	23.22	23.45	23.44	23.22	23.45	23.44	21.62	21.85	21.84
		50	25	23.36	23.46	23.53	23.36	23.46	23.53	21.76	21.86	21.93
		50	50	23.16	23.49	23.52	23.16	23.49	23.52	21.56	21.89	21.92
		100	0	23.26	23.49	23.55	23.26	23.49	23.55	21.66	21.89	21.95
	16QAM	1	0	23.36	23.35	23.06	23.36	23.35	23.06	21.76	21.75	21.46
		1	50	23.35	23.29	23.31	23.35	23.29	23.31	21.75	21.69	21.71
		1	99	23.03	23.06	23.09	23.03	23.06	23.09	21.43	21.46	21.49
		50	0	22.74	22.29	22.47	22.74	22.29	22.47	21.14	20.69	20.87
		50	25	22.73	22.54	22.59	22.73	22.54	22.59	21.13	20.94	20.99
		50	50	22.74	22.49	22.68	22.74	22.49	22.68	21.14	20.89	21.08
		100	0	22.69	22.37	22.67	22.69	22.37	22.67	21.09	20.77	21.07
	64QAM	1	0	22.47	22.40	22.38	22.47	22.40	22.38	20.87	20.80	20.78
		1	50	22.51	22.45	22.41	22.51	22.45	22.41	20.91	20.85	20.81
		1	99	22.53	22.58	22.43	22.53	22.58	22.43	20.93	20.98	20.83
		50	0	21.50	21.49	21.39	21.50	21.49	21.39	19.90	19.89	19.79
		50	25	21.42	21.42	21.34	21.42	21.42	21.34	19.82	19.82	19.74
		50	50	21.42	21.48	21.38	21.42	21.48	21.38	19.82	19.88	19.78
		100	0	21.31	21.36	21.30	21.31	21.36	21.30	19.71	19.76	19.70



LTE Band 41				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40065/ 2537.5	40640/ 2595	41215/ 2652.5	40065/ 2537.5	40640/ 2595	41215/ 2652.5	40065/ 2537.5	40640/ 2595	41215/ 2652.5
5MHz	QPSK	1	0	24.24	24.34	24.23	24.24	24.34	24.23	22.64	22.74	22.63
		1	13	24.45	24.39	24.47	24.45	24.39	24.47	22.85	22.79	22.87
		1	24	24.34	24.31	24.30	24.34	24.31	24.30	22.74	22.71	22.70
		12	0	23.35	23.42	23.36	23.35	23.42	23.36	21.75	21.82	21.76
		12	6	23.41	23.46	23.43	23.41	23.46	23.43	21.81	21.86	21.83
		12	13	23.50	23.41	23.35	23.50	23.41	23.35	21.90	21.81	21.75
		25	0	23.37	23.51	23.46	23.37	23.51	23.46	21.77	21.91	21.86
	16QAM	1	0	23.64	23.49	23.31	23.64	23.49	23.31	22.04	21.89	21.71
		1	13	23.62	23.62	23.62	23.62	23.62	23.62	22.02	22.02	22.02
		1	24	23.42	23.60	23.38	23.42	23.60	23.38	21.82	22.00	21.78
		12	0	22.44	22.28	22.37	22.44	22.28	22.37	20.84	20.68	20.77
		12	6	22.57	22.40	22.55	22.57	22.40	22.55	20.97	20.80	20.95
		12	13	22.43	22.46	22.54	22.43	22.46	22.54	20.83	20.86	20.94
		25	0	22.44	22.44	22.49	22.44	22.44	22.49	20.84	20.84	20.89
	64QAM	1	0	22.14	22.60	22.04	22.14	22.60	22.04	20.54	21.00	20.44
		1	13	22.48	22.47	22.32	22.48	22.47	22.32	20.88	20.87	20.72
		1	24	22.25	22.56	22.07	22.25	22.56	22.07	20.65	20.96	20.47
		12	0	21.29	21.56	21.31	21.29	21.56	21.31	19.69	19.96	19.71
		12	6	21.41	21.65	21.41	21.41	21.65	21.41	19.81	20.05	19.81
		12	13	21.34	21.62	21.41	21.34	21.62	21.41	19.74	20.02	19.81
		25	0	21.45	21.49	21.46	21.45	21.49	21.46	19.85	19.89	19.86
10MHz	QPSK	1	0	24.26	24.35	24.26	24.26	24.35	24.26	22.66	22.75	22.66
		1	25	24.48	24.44	24.51	24.48	24.44	24.51	22.88	22.84	22.91
1		49	24.36	24.35	24.33	24.36	24.35	24.33	22.76	22.75	22.73	
25		0	23.38	23.47	23.40	23.38	23.47	23.40	21.78	21.87	21.80	
25		13	23.44	23.51	23.47	23.44	23.51	23.47	21.84	21.91	21.87	
25		25	23.52	23.45	23.40	23.52	23.45	23.40	21.92	21.85	21.80	
50		0	23.41	23.53	23.50	23.41	23.53	23.50	21.81	21.93	21.90	
16QAM	1	0	23.66	23.52	23.33	23.66	23.52	23.33	22.06	21.92	21.73	
	1	25	23.65	23.66	23.65	23.65	23.66	23.65	22.05	22.06	22.05	





BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)									
				40115/ 2542.5	40640/ 2595	41165/ 2647.5	40115/ 2542.5	40640/ 2595	41165/ 2647.5	40115/ 2542.5	40640/ 2595	41165/ 2647.5	
		1	49	23.45	23.62	23.41	23.45	23.62	23.41	21.85	22.02	21.81	
		25	0	22.47	22.33	22.41	22.47	22.33	22.41	20.87	20.73	20.81	
		25	13	22.59	22.44	22.58	22.59	22.44	22.58	20.99	20.84	20.98	
		25	25	22.46	22.51	22.58	22.46	22.51	22.58	20.86	20.91	20.98	
		50	0	22.47	22.49	22.53	22.47	22.49	22.53	20.87	20.89	20.93	
	64QAM	1	0	22.16	22.59	22.06	22.16	22.59	22.06	20.56	20.99	20.46	
		1	25	22.51	22.47	22.35	22.51	22.47	22.35	20.91	20.87	20.75	
		1	49	22.24	22.58	22.10	22.24	22.58	22.10	20.64	20.98	20.50	
		25	0	21.32	21.61	21.31	21.32	21.61	21.31	19.72	20.01	19.71	
		25	13	21.43	21.69	21.44	21.43	21.69	21.44	19.83	20.09	19.84	
		25	25	21.37	21.67	21.45	21.37	21.67	21.45	19.77	20.07	19.85	
		50	0	21.48	21.54	21.50	21.48	21.54	21.50	19.88	19.94	19.90	
	15MHz	QPSK	1	0	24.25	24.31	24.24	24.25	24.31	24.24	22.65	22.71	22.64
			1	38	24.46	24.43	24.48	24.46	24.43	24.48	22.86	22.83	22.88
1			74	24.33	24.30	24.29	24.33	24.30	24.29	22.73	22.70	22.69	
36			0	23.36	23.43	23.37	23.36	23.43	23.37	21.76	21.83	21.77	
36			18	23.41	23.46	23.43	23.41	23.46	23.43	21.81	21.86	21.83	
36			39	23.49	23.42	23.36	23.49	23.42	23.36	21.89	21.82	21.76	
75			0	23.39	23.49	23.45	23.39	23.49	23.45	21.79	21.89	21.85	
16QAM		1	0	23.61	23.50	23.31	23.61	23.50	23.31	22.01	21.90	21.71	
		1	38	23.63	23.63	23.63	23.63	23.63	23.63	22.03	22.03	22.03	
		1	74	23.42	23.58	23.38	23.42	23.58	23.38	21.82	21.98	21.78	
		36	0	22.44	22.31	22.38	22.44	22.31	22.38	20.84	20.71	20.78	
		36	18	22.56	22.39	22.54	22.56	22.39	22.54	20.96	20.79	20.94	
		36	39	22.44	22.47	22.55	22.44	22.47	22.55	20.84	20.87	20.95	
		75	0	22.44	22.44	22.49	22.44	22.44	22.49	20.84	20.84	20.89	
64QAM		1	0	22.11	22.57	22.04	22.11	22.57	22.04	20.51	20.97	20.44	
		1	38	22.49	22.44	22.33	22.49	22.44	22.33	20.89	20.84	20.73	
		1	74	22.25	22.57	22.11	22.25	22.57	22.11	20.65	20.97	20.51	
		36	0	21.31	21.63	21.32	21.31	21.63	21.32	19.71	20.03	19.72	
		36	18	21.41	21.66	21.43	21.41	21.66	21.43	19.81	20.06	19.83	
		36	39	21.35	21.63	21.42	21.35	21.63	21.42	19.75	20.03	19.82	
		75	0	21.45	21.49	21.46	21.45	21.49	21.46	19.85	19.89	19.86	
BW		Modulation	RB size	RB	Channel/Frequency(MHz)								



	on		offset	40140/ 2545	40640/ 2595	41140/ 2645	40140/ 2545	40640/ 2595	41140/ 2645	40140/ 2545	40640/ 2595	41140/ 2645
20MHz	QPSK	1	0	24.22	24.27	24.21	24.22	24.27	24.21	22.62	22.67	22.61
		1	50	24.45	24.39	24.46	24.45	24.39	24.46	22.85	22.79	22.86
		1	99	24.31	24.29	24.26	24.31	24.29	24.26	22.71	22.69	22.66
		50	0	23.33	23.38	23.33	23.33	23.38	23.33	21.73	21.78	21.73
		50	25	23.39	23.42	23.40	23.39	23.42	23.40	21.79	21.82	21.80
		50	50	23.46	23.37	23.32	23.46	23.37	23.32	21.86	21.77	21.72
		100	0	23.36	23.44	23.41	23.36	23.44	23.41	21.76	21.84	21.81
	16QAM	1	0	23.61	23.46	23.26	23.61	23.46	23.26	22.01	21.86	21.66
		1	50	23.59	23.61	23.59	23.59	23.61	23.59	21.99	22.01	21.99
		1	99	23.40	23.55	23.36	23.40	23.55	23.36	21.80	21.95	21.76
		50	0	22.41	22.27	22.35	22.41	22.27	22.35	20.81	20.67	20.75
		50	25	22.53	22.37	22.51	22.53	22.37	22.51	20.93	20.77	20.91
		50	50	22.41	22.42	22.51	22.41	22.42	22.51	20.81	20.82	20.91
		100	0	22.42	22.40	22.46	22.42	22.40	22.46	20.82	20.80	20.86
	64QAM	1	0	22.09	22.53	21.99	22.09	22.53	21.99	20.49	20.93	20.39
		1	50	22.45	22.42	22.29	22.45	22.42	22.29	20.85	20.82	20.69
		1	99	22.19	22.51	22.05	22.19	22.51	22.05	20.59	20.91	20.45
		50	0	21.26	21.55	21.25	21.26	21.55	21.25	19.66	19.95	19.65
		50	25	21.37	21.62	21.37	21.37	21.62	21.37	19.77	20.02	19.77
		50	50	21.32	21.58	21.38	21.32	21.58	21.38	19.72	19.98	19.78
		100	0	21.43	21.45	21.43	21.43	21.45	21.43	19.83	19.85	19.83

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BW	PCC	SCC	PCC RB		SCC1 RB		Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
	Frequency (MHz)	Frequency (MHz)	Size	Offset	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10MHz+ 20MHz	2505.5	2519.9	1	49	1	0	24.44	23.50	21.98	26.04	25.10	23.58	22.74	21.80	20.28
			50	0	100	0	22.08	21.07	20.02	23.68	22.67	21.62	20.38	19.37	18.32
	2525.6	2540	1	49	1	0	24.45	24.11	22.57	26.05	25.71	24.17	22.75	22.41	20.87
			50	0	100	0	22.48	21.59	20.55	24.08	23.19	22.15	20.78	19.89	18.85
	2545.6	2560	1	49	1	0	24.57	23.61	22.21	26.17	25.21	23.81	22.87	21.91	20.51
			50	0	100	0	22.74	21.65	20.05	24.34	23.25	21.65	21.04	19.95	18.35
20MHz+ 10MHz	2510	2524.4	1	99	1	0	24.52	23.95	22.22	26.12	25.55	23.82	22.82	22.25	20.52
			100	0	50	0	22.13	21.16	20.05	23.73	22.76	21.65	20.43	19.46	18.35
	2530.1	2544.5	1	99	1	0	24.48	24.08	23.11	26.08	25.68	24.71	22.78	22.38	21.41
			100	0	50	0	22.51	21.54	20.49	24.11	23.14	22.09	20.81	19.84	18.79



	2550.1	2564.5	1	99	1	0	24.55	24.13	23.16	26.15	25.73	24.76	22.85	22.43	21.46
			100	0	50	0	22.69	21.89	20.79	24.29	23.49	22.39	20.99	20.19	19.09
15MHz+ 15MHz	2507.5	2522.5	1	74	1	0	24.48	23.85	22.78	26.08	25.45	24.38	22.78	22.15	21.08
			75	0	75	0	22.15	21.11	20.06	23.75	22.71	21.66	20.45	19.41	18.36
	2527.5	2542.5	1	74	1	0	24.43	24.00	22.95	26.03	25.60	24.55	22.73	22.30	21.25
			75	0	75	0	22.41	21.65	20.70	24.01	23.25	22.30	20.71	19.95	19.00
	2547.5	2562.5	1	74	1	0	24.52	24.08	22.52	26.12	25.68	24.12	22.82	22.38	20.82
			75	0	75	0	22.84	21.87	20.74	24.44	23.47	22.34	21.14	20.17	19.04
15MHz+ 20MHz	2507.8	2524.9	1	74	1	0	24.39	23.84	22.81	25.99	25.44	24.41	22.69	22.14	21.11
			75	0	100	0	22.12	21.09	19.95	23.72	22.69	21.55	20.42	19.39	18.25
	2525.3	2542.4	1	74	1	0	24.55	23.97	22.92	26.15	25.57	24.52	22.85	22.27	21.22
			75	0	100	0	22.66	21.61	20.61	24.26	23.21	22.21	20.96	19.91	18.91
	2542.9	2560	1	74	1	0	24.49	24.11	22.96	26.09	25.71	24.56	22.79	22.41	21.26
			75	0	100	0	22.73	21.76	20.45	24.33	23.36	22.05	21.03	20.06	18.75
20MHz+ 15MHz	2510	2527.1	1	99	1	0	24.47	24.12	23.10	26.07	25.72	24.70	22.77	22.42	21.40
			100	0	75	0	22.12	21.14	20.02	23.72	22.74	21.62	20.42	19.44	18.32
	2527.6	2544.7	1	99	1	0	24.56	23.97	23.13	26.16	25.57	24.73	22.86	22.27	21.43
			100	0	75	0	22.67	21.61	20.64	24.27	23.21	22.24	20.97	19.91	18.94
	2545.1	2562.2	1	99	1	0	24.60	24.09	23.11	26.20	25.69	24.71	22.90	22.39	21.41
			100	0	75	0	22.78	21.81	20.70	24.38	23.41	22.30	21.08	20.11	19.00
20MHz+ 20MHz	2510	2529.8	1	99	1	0	24.51	24.13	22.87	26.11	25.73	24.47	22.81	22.43	21.17
			1	0	1	99	15.61	16.16	15.15	17.21	17.76	16.75	13.91	14.46	13.45
			100	0	100	0	22.17	21.18	20.10	23.77	22.78	21.70	20.47	19.48	18.40
	2525.1	2544.9	1	99	1	0	24.56	24.21	21.56	26.16	25.81	23.16	22.86	22.51	19.86
			1	0	1	99	15.72	16.35	15.41	17.32	17.95	17.01	14.02	14.65	13.71
			100	0	100	0	22.64	21.68	20.70	24.24	23.28	22.30	20.94	19.98	19.00
	2540.2	2560	1	99	1	0	24.66	24.02	23.16	26.26	25.62	24.76	22.96	22.32	21.46
			1	0	1	99	16.29	16.63	15.62	17.89	18.23	17.22	14.59	14.93	13.92
			100	0	100	0	22.66	21.64	20.65	24.26	23.24	22.25	20.96	19.94	18.95



CA_38C															
BW	PCC	SCC	PCC RB		SCC1 RB		Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
	Frequency (MHz)	Frequency (MHz)	Size	Offset	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15MHz+ 15MHz	2577.5	2592.5	1	74	1	0	23.90	22.95	21.12	23.90	22.95	21.12	22.30	21.35	19.52
			75	0	75	0	19.67	18.33	17.38	19.67	18.33	17.38	18.07	16.73	15.78
	2587.5	2602.5	1	74	1	0	23.60	22.98	22.17	23.60	22.98	22.17	22.00	21.38	20.57
			75	0	75	0	19.43	18.74	17.83	19.43	18.74	17.83	17.83	17.14	16.23
	2597.5	2612.5	1	74	1	0	23.81	22.96	21.98	23.81	22.96	21.98	22.21	21.36	20.38
			75	0	75	0	20.37	18.85	17.96	20.37	18.85	17.96	18.77	17.25	16.36
20MHz+ 20MHz	2580	2599.8	1	99	1	0	24.30	23.16	22.27	24.30	23.16	22.27	22.70	21.56	20.67
			1	0	1	99	12.83	12.58	12.15	12.83	12.58	12.15	11.23	10.98	10.55
			100	0	100	0	19.70	18.77	17.84	19.70	18.77	17.84	18.10	17.17	16.24
	2585.1	2604.9	1	99	1	0	24.22	23.15	22.24	24.22	23.15	22.24	22.62	21.55	20.64
			1	0	1	99	12.95	12.62	12.29	12.95	12.62	12.29	11.35	11.02	10.69
			100	0	100	0	19.68	19.01	18.27	19.68	19.01	18.27	18.08	17.41	16.67
	2590.2	2610	1	99	1	0	24.23	23.08	22.24	24.23	23.08	22.24	22.63	21.48	20.64
			1	0	1	99	13.22	12.79	12.37	13.22	12.79	12.37	11.62	11.19	10.77
			100	0	100	0	19.91	18.94	17.96	19.91	18.94	17.96	18.31	17.34	16.36

## 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 51 kHz, VBW is set to 160 kHz for WCDMA Band IV.

RBW is set to 30kHz, VBW is set to 91 kHz for LTE Band 4 (1.4MHz).

RBW is set to 62 kHz, VBW is set to 180 kHz for LTE Band 4 (3MHz).

RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4/7/38/41 (5MHz).

RBW is set to 200 kHz, VBW is set to 620 kHz for LTE Band 4/7/38/41 (10MHz).

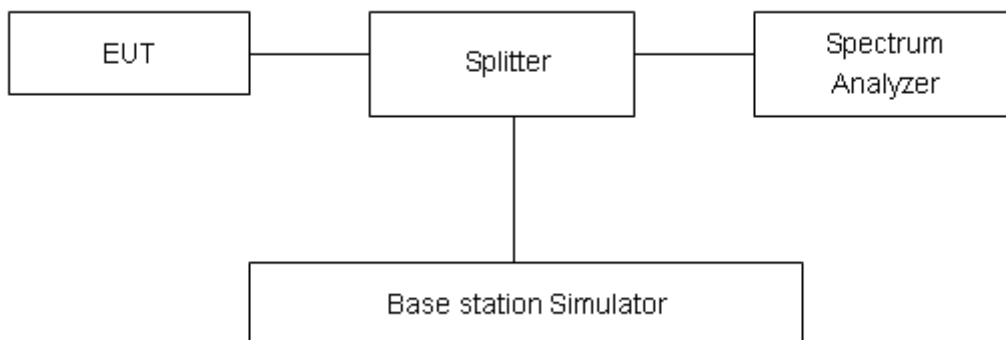
RBW is set to 300 kHz, VBW is set to 910 kHz for LTE Band 4/7/38/41 (15MHz).

RBW is set to 430 kHz, VBW is set to 1.2 MHz for LTE Band 4/7/38/41 (20MHz).

RBW is set to 1 MHz, VBW is set to 3 MHz for CA\_7C/CA\_38C

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 Result

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.1672	4.697
	1413	1732.6	4.1635	4.678
	1513	1752.6	4.1617	4.667

LTE Band 4					
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
QPSK	1.4	19957	1710.7	1.099	1.327
		20175	1732.5	1.093	1.269
		20393	1754.3	1.094	1.292
	3	19965	1711.5	2.697	2.923
		20175	1732.5	2.695	2.927
		20385	1753.5	2.704	2.930
	5	19975	1712.5	4.513	4.884
		20175	1732.5	4.517	4.893
		20375	1752.5	4.501	4.900
	10	20000	1715	9.004	9.671
		20175	1732.5	9.009	9.725
		20350	1750	9.010	9.643
	15	20025	1717.5	13.472	14.519
		20175	1732.5	13.457	14.485
		20325	1747.5	13.515	14.665
	20	20050	1720	18.035	19.416
		20175	1732.5	17.941	19.208
		20300	1745	17.998	19.233
16QAM	1.4	19957	1710.7	1.094	1.287
		20175	1732.5	1.100	1.304
		20393	1754.3	1.092	1.274
	3	19965	1711.5	2.682	2.933
		20175	1732.5	2.678	2.900
		20385	1753.5	2.687	2.893
	5	19975	1712.5	4.508	4.903



		20175	1732.5	4.509	4.909
		20375	1752.5	4.512	4.893
	10	20000	1715	8.995	9.626
		20175	1732.5	8.990	9.722
		20350	1750	8.991	9.615
	15	20025	1717.5	13.489	14.507
		20175	1732.5	13.436	14.492
		20325	1747.5	13.443	14.561
	20	20050	1720	17.954	19.309
		20175	1732.5	17.929	18.974
		20300	1745	17.955	19.219
	64QAM	1.4	19957	1710.7	1.098
20175			1732.5	1.099	1.308
20393			1754.3	1.090	1.260
3		19965	1711.5	2.699	2.940
		20175	1732.5	2.689	2.929
		20385	1753.5	2.684	2.933
5		19975	1712.5	4.513	4.881
		20175	1732.5	4.502	4.889
		20375	1752.5	4.520	4.908
10		20000	1715	8.992	9.682
		20175	1732.5	8.972	9.551
		20350	1750	8.993	9.787
15		20025	1717.5	13.497	15.287
		20175	1732.5	13.431	14.522
		20325	1747.5	13.535	14.582
20		20050	1720	17.963	19.288
		20175	1732.5	17.894	19.456
		20300	1745	17.954	19.426



LTE Band 7					
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
QPSK	5	20775	2502.5	4.509	4.956
		21100	2535	4.518	4.879
		21425	2567.5	4.510	4.952
	10	20800	2505	8.995	9.749
		21100	2535	8.965	9.668
		21400	2565	8.993	9.740
	15	20825	2507.5	13.501	14.539
		21100	2535	13.456	14.543
		21375	2562.5	13.514	14.509
	20	20850	2510	17.995	19.249
		21100	2535	17.964	19.341
		21350	2560	17.986	19.468
16QAM	5	20775	2502.5	4.508	4.894
		21100	2535	4.499	4.917
		21425	2567.5	4.508	4.878
	10	20800	2505	9.018	9.737
		21100	2535	8.982	9.580
		21400	2565	9.000	9.677
	15	20825	2507.5	13.489	14.492
		21100	2535	13.496	14.469
		21375	2562.5	13.524	14.502
	20	20850	2510	17.961	19.270
		21100	2535	17.967	19.258
		21350	2560	18.000	19.020
64QAM	5	20775	2502.5	4.501	4.947
		21100	2535	4.509	4.948
		21425	2567.5	4.530	4.903
	10	20800	2505	8.982	9.653
		21100	2535	8.984	9.772
		21400	2565	8.982	9.718





	15	20825	2507.5	13.460	14.597
		21100	2535	13.490	14.367
		21375	2562.5	13.503	14.651
	20	20850	2510	17.987	19.248
		21100	2535	17.938	19.239
		21350	2560	18.010	19.474

LTE Band 38					
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
QPSK	5	37775	2572.500	4.497	4.852
		38000	2595.000	4.503	4.884
		38225	2617.500	4.530	4.910
	10	37800	2575.000	9.016	9.651
		38000	2595.000	8.973	9.872
		38200	2615.000	8.997	10.026
	15	37825	2577.500	13.451	14.825
		38000	2595.000	13.463	14.757
		38175	2612.500	13.460	15.021
	20	37850	2580.000	17.956	19.141
		38000	2595.000	17.967	19.240
		38150	2610.000	17.950	19.503
16QAM	5	37775	2572.500	4.497	4.923
		38000	2595.000	4.502	5.182
		38225	2617.500	4.497	4.871
	10	37800	2575.000	8.960	9.582
		38000	2595.000	8.974	9.786
		38200	2615.000	8.972	10.012
	15	37825	2577.500	13.487	14.756
		38000	2595.000	13.447	14.490
		38175	2612.500	13.451	15.926
	20	37850	2580.000	17.981	19.138



		38000	2595.000	17.991	19.454
		38150	2610.000	17.973	19.124
64QAM	5	37775	2572.500	4.492	4.871
		38000	2595.000	4.473	4.862
		38225	2617.500	4.495	4.823
	10	37800	2575.000	9.004	9.610
		38000	2595.000	8.980	9.947
		38200	2615.000	8.982	10.082
	15	37825	2577.500	13.490	14.339
		38000	2595.000	13.505	15.900
		38175	2612.500	13.442	14.803
	20	37850	2580.000	17.946	19.602
		38000	2595.000	17.924	20.217
		38150	2610.000	17.946	19.193



LTE Band 41					
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
QPSK	5	40065	2537.5	4.513	5.292
		40640	2595	4.500	4.969
		41215	2652.5	4.518	4.909
	10	40090	2540	9.023	10.670
		40640	2595	8.994	9.736
		41190	2650	8.992	10.060
	15	40115	2542.5	13.429	14.780
		40640	2595	13.527	14.530
		41165	2647.5	13.484	14.910
	20	40140	2545	17.888	19.490
		40640	2595	17.907	19.050
		41140	2645	17.886	19.080
16QAM	5	40065	2537.5	4.493	4.991
		40640	2595	4.504	5.000
		41215	2652.5	4.502	5.179
	10	40090	2540	8.992	10.780
		40640	2595	8.979	10.050
		41190	2650	8.971	10.100
	15	40115	2542.5	13.509	15.880
		40640	2595	13.483	15.400
		41165	2647.5	13.518	14.850
	20	40140	2545	17.888	19.030
		40640	2595	17.895	19.170
		41140	2645	17.923	19.630
64QAM	5	40065	2537.5	4.500	4.962
		40640	2595	4.493	4.916
		41215	2652.5	4.502	5.181
	10	40090	2540	8.996	10.340
		40640	2595	9.013	9.996
		41190	2650	8.975	10.230
	15	40115	2542.5	13.510	16.070



		40640	2595	13.477	15.110
		41165	2647.5	13.464	14.570
	20	40140	2545	17.899	19.190
		40640	2595	17.869	19.040
		41140	2645	17.887	19.340



CA_7C	PCC		SCC1		PCC RB	SCC1 RB	Bandwidth (MHz)	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)			99% Power	-26dBc
CA_7C_10MHz+20MHz_QPSK	21006	2525.6	21150	2540	50#0	100#0	28.27	30.22
CA_7C_10MHz+20MHz_16QAM	21006	2525.6	21150	2540	50#0	100#0	28.19	30.12
CA_7C_10MHz+20MHz_64QAM	21006	2525.6	21150	2540	50#0	100#0	28.14	30.10
CA_7C_20MHz+10MHz_QPSK	21051	2530.1	21195	2544.5	100#0	50#0	28.21	30.25
CA_7C_20MHz+10MHz_16QAM	21051	2530.1	21195	2544.5	100#0	50#0	28.19	30.29
CA_7C_20MHz+10MHz_64QAM	21051	2530.1	21195	2544.5	100#0	50#0	28.18	30.24
CA_7C_15MHz+10MHz_QPSK	21051	2530.1	21171	2542.1	75#0	50#0	23.62	25.67
CA_7C_15MHz+10MHz_16QAM	21025	2530.1	21171	2542.1	75#0	50#0	23.47	25.49
CA_7C_15MHz+10MHz_64QAM	21025	2530.1	21171	2542.1	75#0	50#0	23.52	25.53
CA_7C_15MHz+15MHz_QPSK	21025	2527.5	21175	2542.4	75#0	75#0	28.73	30.81
CA_7C_15MHz+15MHz_16QAM	21025	2527.5	21175	2542.4	75#0	75#0	28.68	30.74
CA_7C_15MHz+15MHz_64QAM	21025	2527.5	21175	2542.4	75#0	75#0	28.64	30.73
CA_7C_15MHz+20MHz_QPSK	21003	2525.3	21174	2542.4	75#0	100#0	33.06	35.26
CA_7C_15MHz+20MHz_16QAM	21003	2525.3	21174	2542.4	75#0	100#0	32.99	35.18
CA_7C_15MHz+20MHz_64QAM	21003	2525.3	21174	2542.4	75#0	100#0	33.01	35.10
CA_7C_20MHz+15MHz_QPSK	21026	2527.6	21197	2544.7	100#0	75#0	33.09	35.26
CA_7C_20MHz+15MHz_16QAM	21026	2527.6	21197	2544.7	100#0	75#0	33.07	35.23
CA_7C_20MHz+15MHz_64QAM	21026	2527.6	21197	2544.7	100#0	75#0	33.12	35.17
CA_7C_20MHz+20MHz_QPSK	21001	2525.1	21199	2544.9	100#0	100#0	37.92	40.11
CA_7C_20MHz+20MHz_16QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.95	40.23
CA_7C_20MHz+20MHz_64QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.92	40.17

CA_38C	PCC		SCC1		PCC RB	SCC1 RB	Bandwidth (MHz)	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)			99% Power	-26dBc
CA_38C_15MHz+15MHz_QPSK	37925	2587.5	38075	2602.5	75#0	75#0	28.70	33.53
CA_38C_15MHz+15MHz_16QAM	37925	2587.5	38075	2602.5	75#0	75#0	29.79	36.57
CA_38C_15MHz+15MHz_64QAM	37925	2587.5	38075	2602.5	75#0	75#0	28.75	35.16
CA_38C_20MHz+20MHz_QPSK	37901	2585.1	38099	2604.9	100#0	100#0	37.41	43.89
CA_38C_20MHz+20MHz_16QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.39	42.29
CA_38C_20MHz+20MHz_64QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.37	44.82



WCDMA Band IV CH-Low



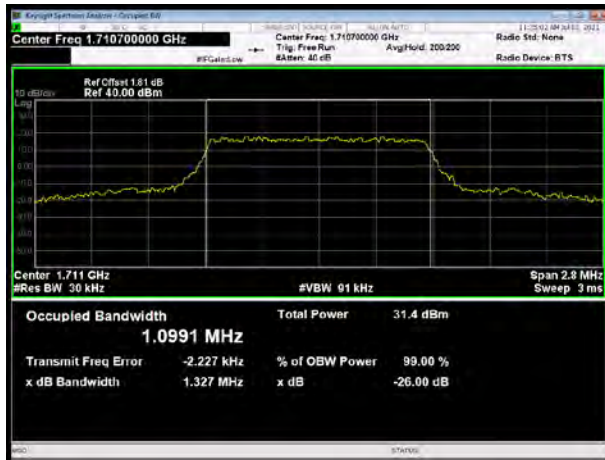
WCDMA Band IV CH Middle



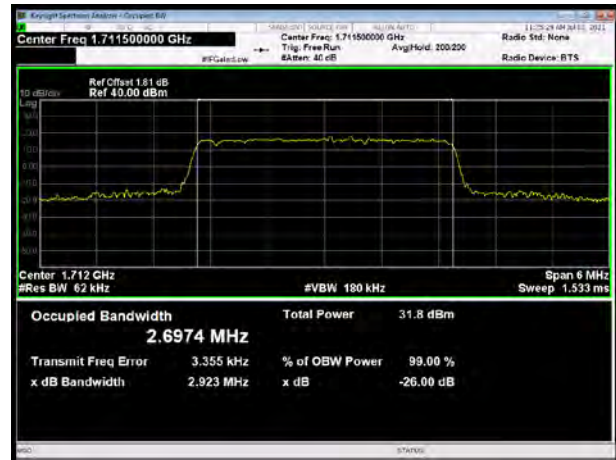
WCDMA Band IV CH High



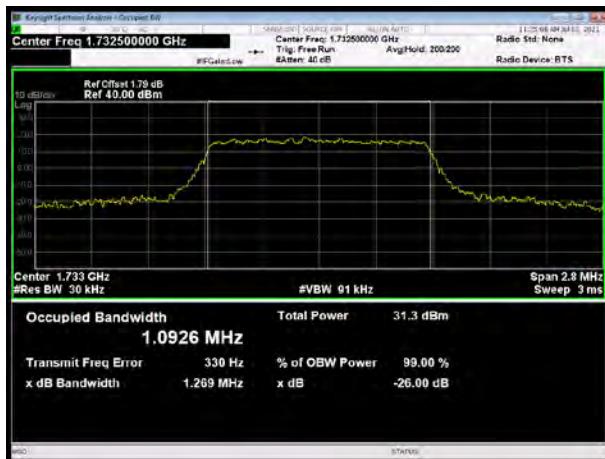
LTE Band 4 QPSK 1.4MHz CH-Low



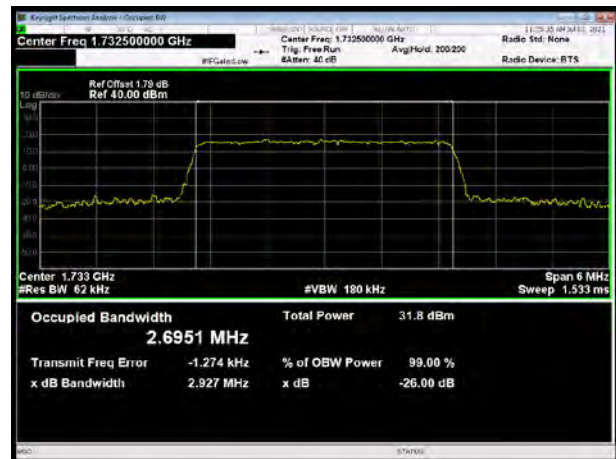
LTE Band 4 QPSK 3MHz CH-Low



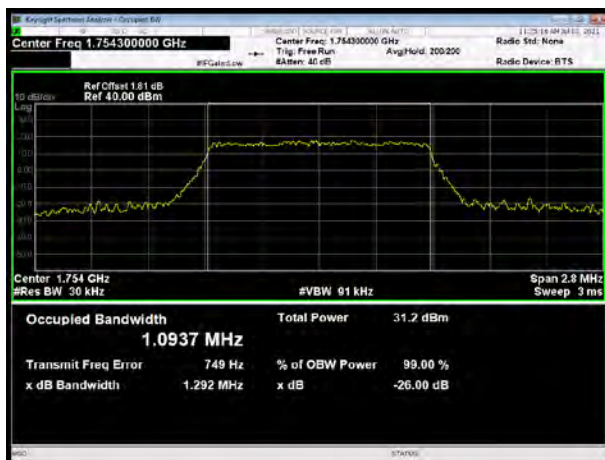
LTE Band 4 QPSK 1.4MHz CH-Middle



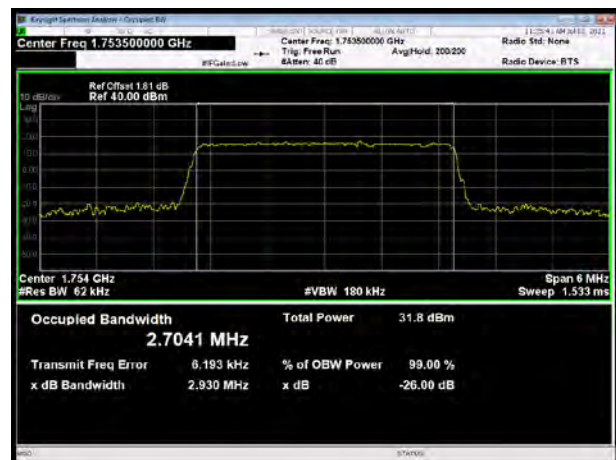
LTE Band 4 QPSK 3MHz CH-Middle



LTE Band 4 QPSK 1.4MHz CH-High

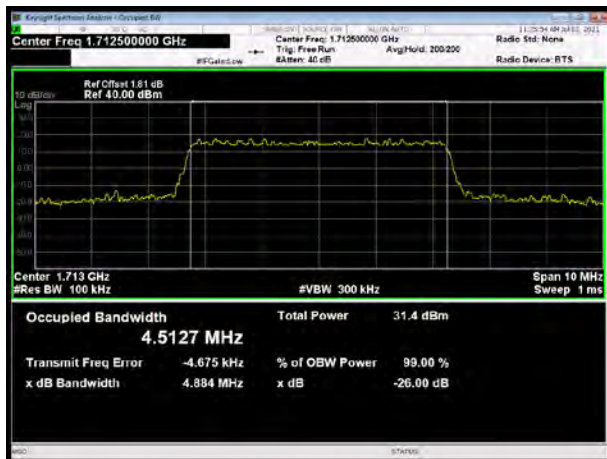


LTE Band 4 QPSK 3MHz CH-High

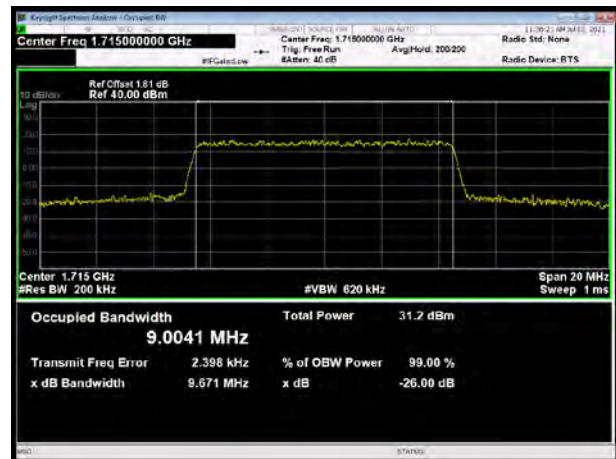




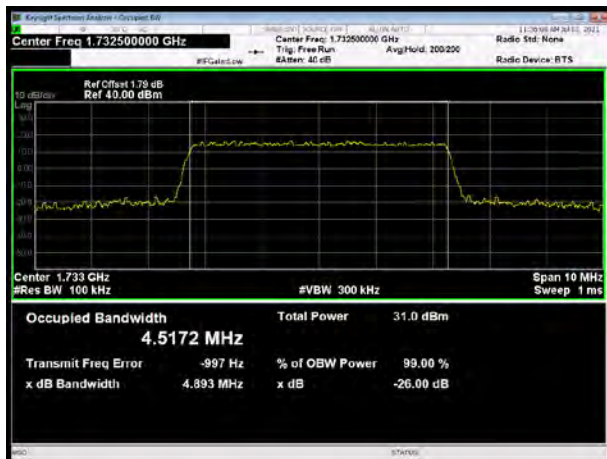
LTE Band 4 QPSK 5MHz CH-Low



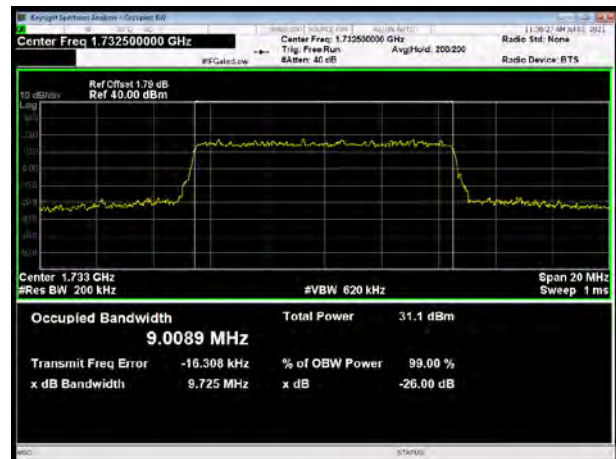
LTE Band 4 QPSK 10MHz CH-Low



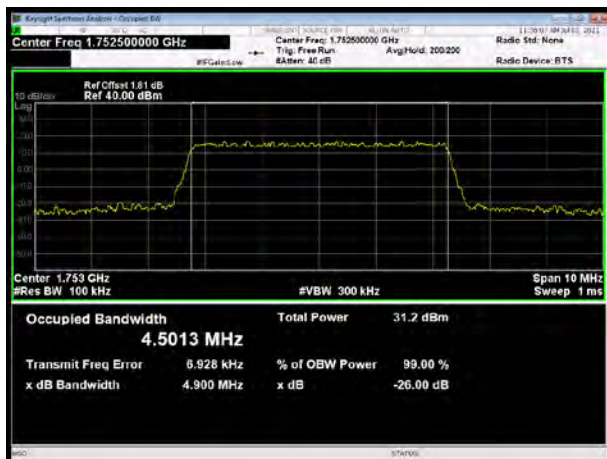
LTE Band 4 QPSK 5MHz CH-Middle



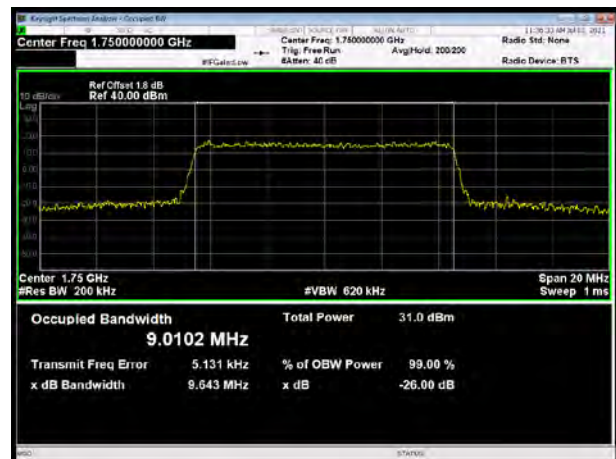
LTE Band 4 QPSK 10MHz CH-Middle



LTE Band 4 QPSK 5MHz CH-High



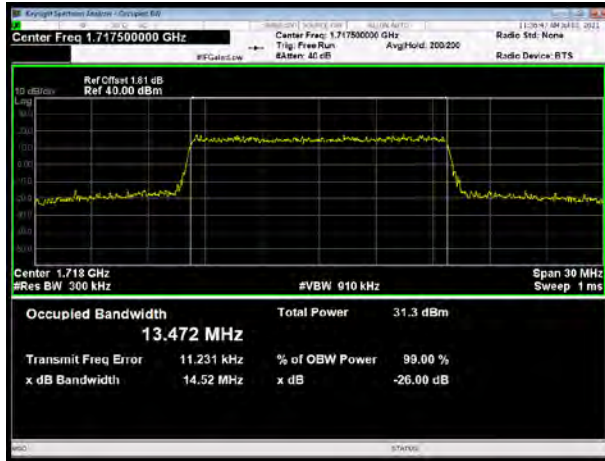
LTE Band 4 QPSK 10MHz CH-High



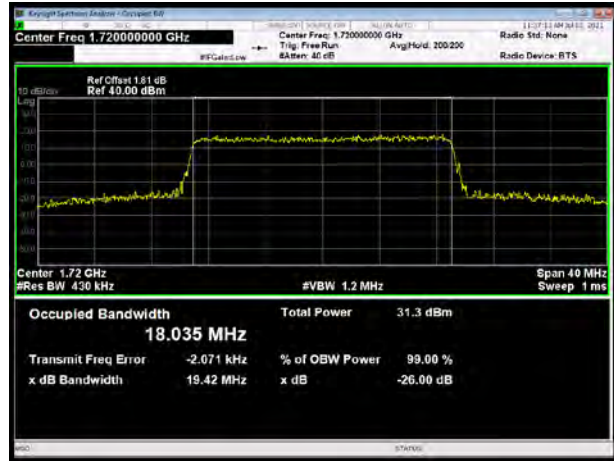




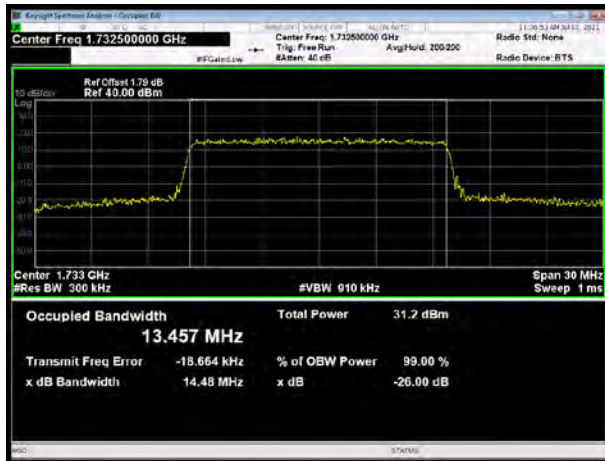
LTE Band 4 QPSK 15MHz CH-Low



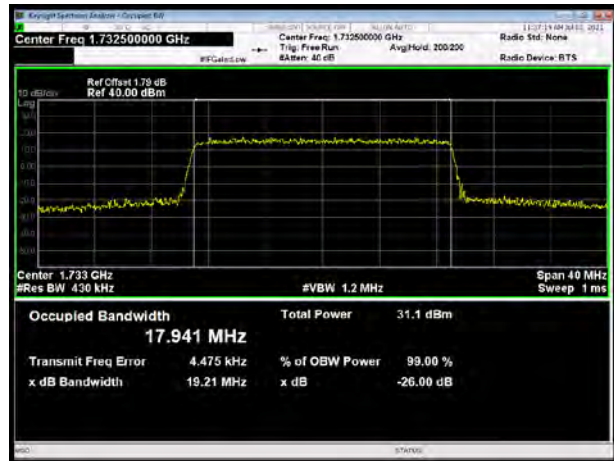
LTE Band 4 QPSK 20MHz CH-Low



LTE Band 4 QPSK 15MHz CH-Middle



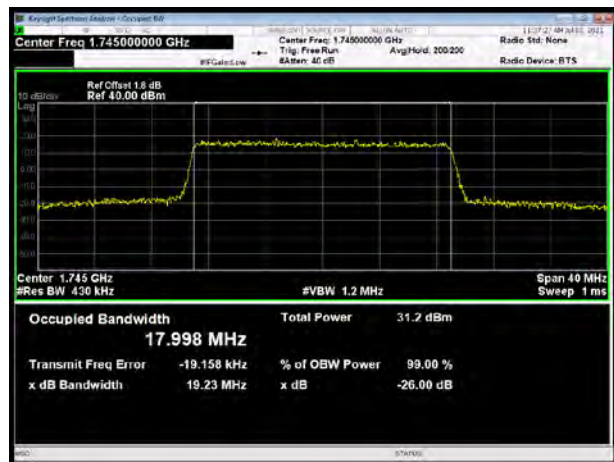
LTE Band 4 QPSK 20MHz CH-Middle



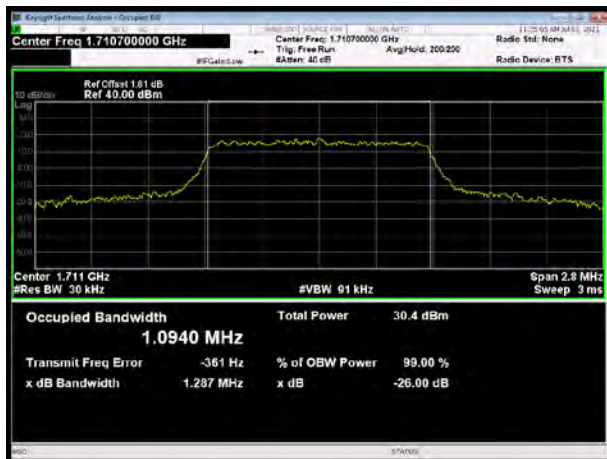
LTE Band 4 QPSK 15MHz CH-High



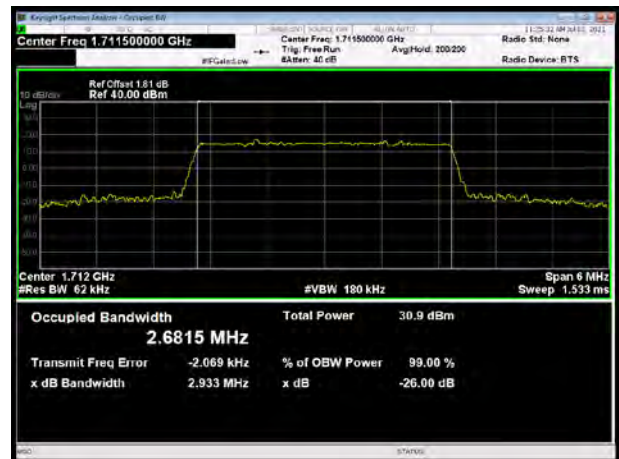
LTE Band 4 QPSK 20MHz CH-High



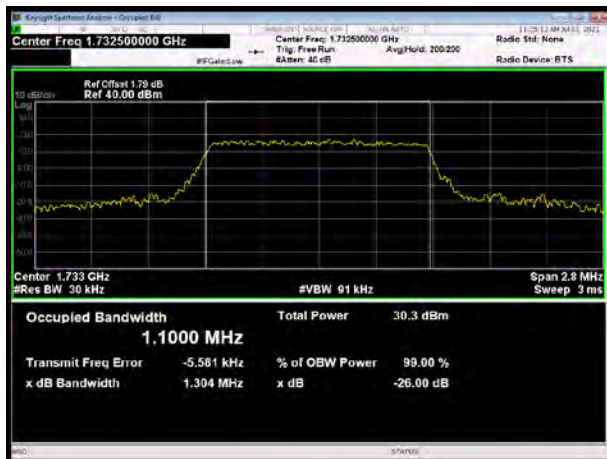
LTE Band 4 16QAM 1.4MHz CH-Low



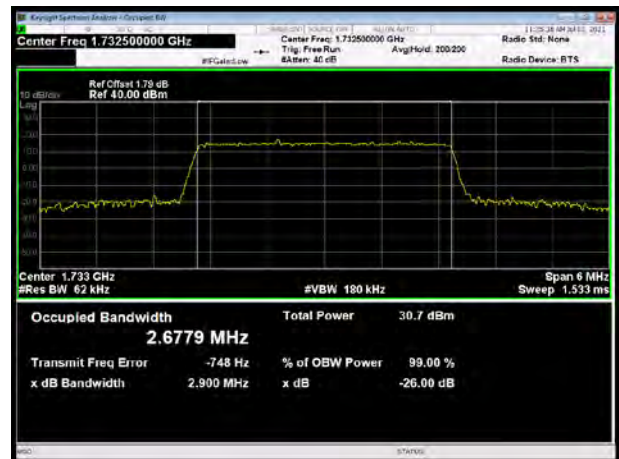
LTE Band 4 16QAM 3MHz CH-Low



LTE Band 4 16QAM 1.4MHz CH-Middle



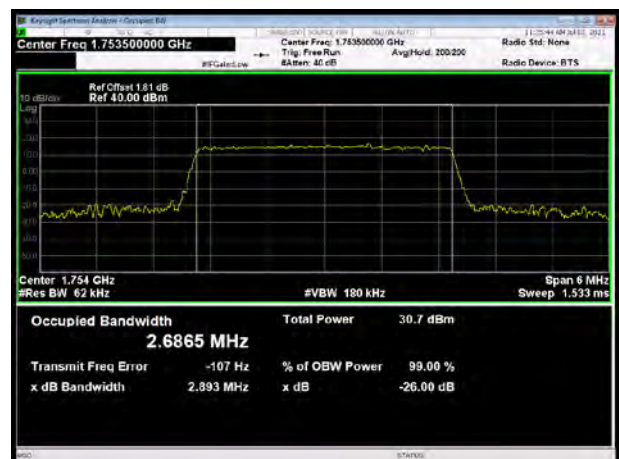
LTE Band 4 16QAM 3MHz CH-Middle



LTE Band 4 16QAM 1.4MHz CH-High

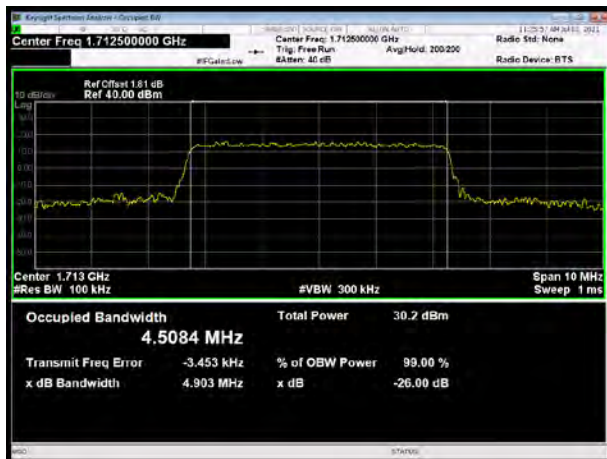


LTE Band 4 16QAM 3MHz CH-High

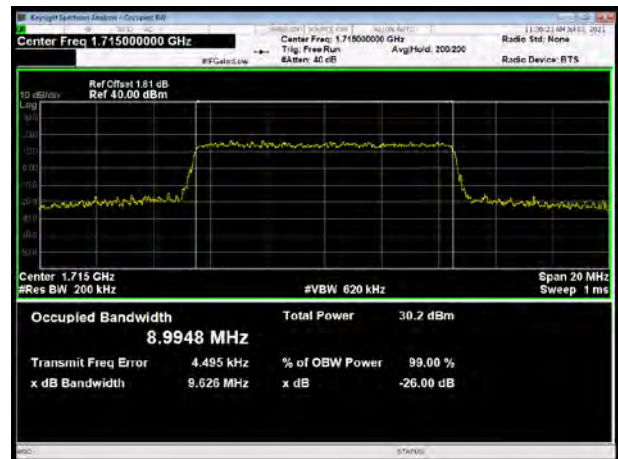




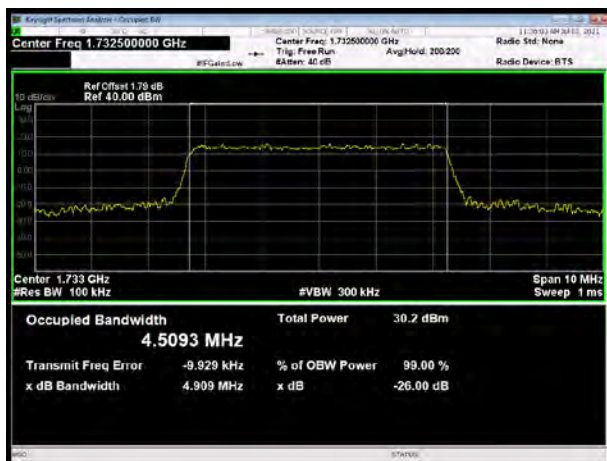
LTE Band 4 16QAM 5MHz CH-Low



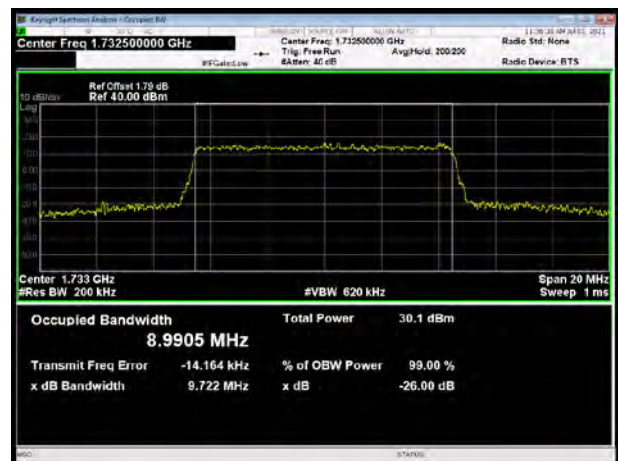
LTE Band 4 16QAM 10MHz CH-Low



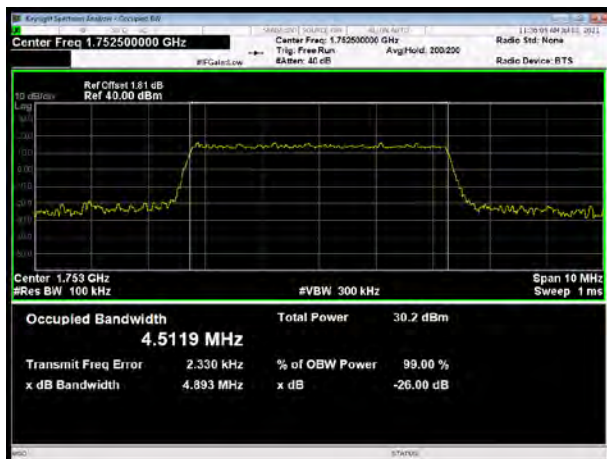
LTE Band 4 16QAM 5MHz CH-Middle



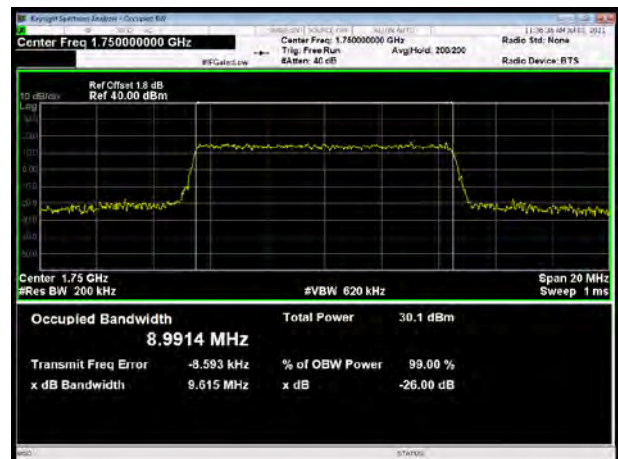
LTE Band 4 16QAM 10MHz CH-Middle



LTE Band 4 16QAM 5MHz CH-High

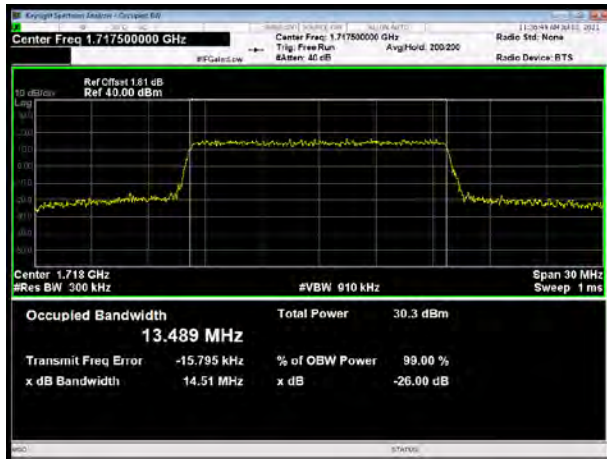


LTE Band 4 16QAM 10MHz CH-High

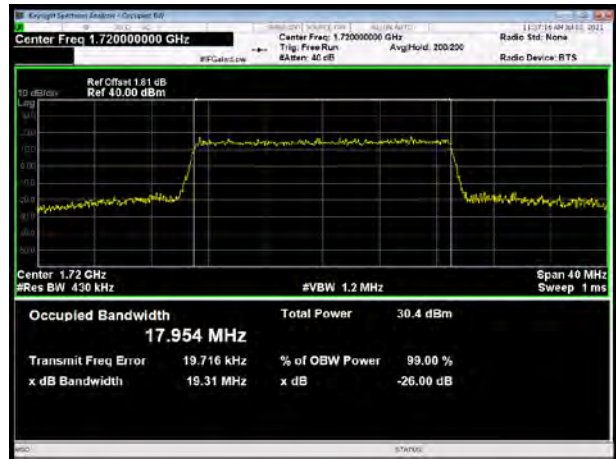




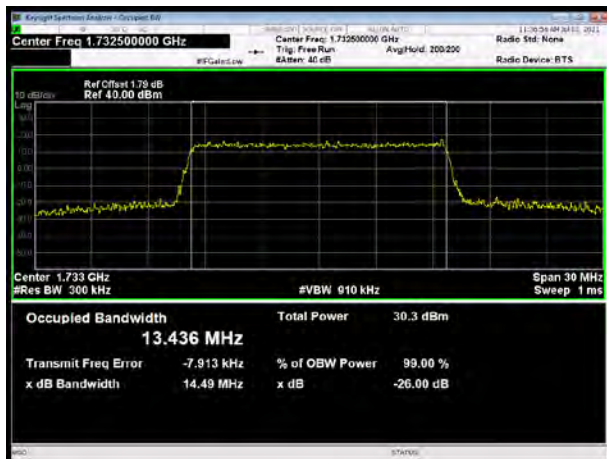
LTE Band 4 16QAM 15MHz CH-Low



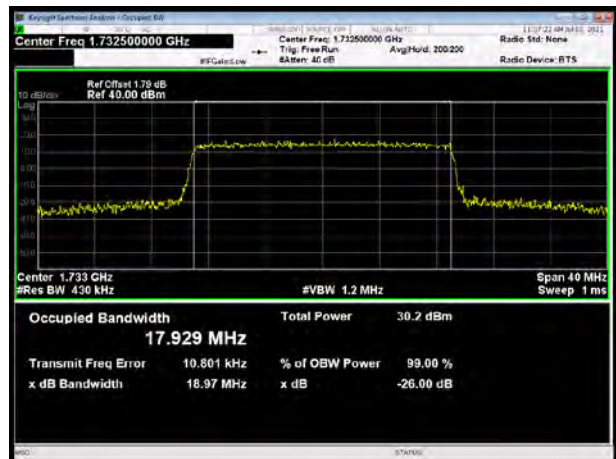
LTE Band 4 16QAM 20MHz CH-Low



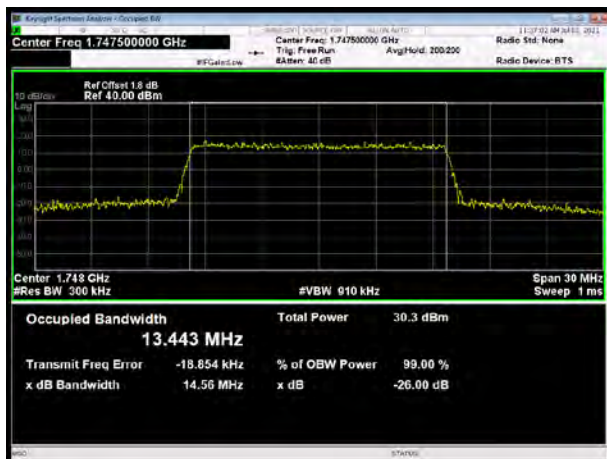
LTE Band 4 16QAM 15MHz CH-Middle



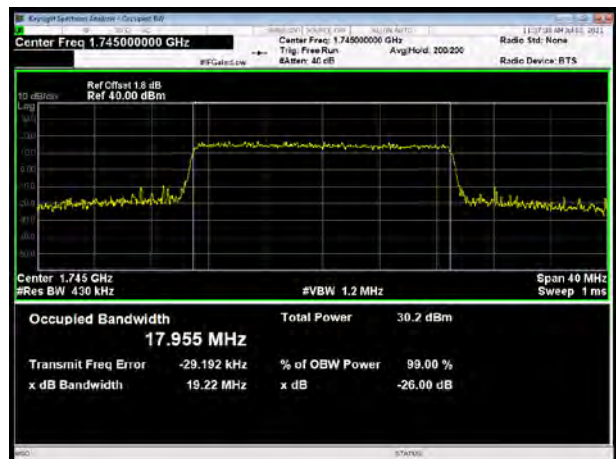
LTE Band 4 16QAM 20MHz CH-Middle



LTE Band 4 16QAM 15MHz CH-High



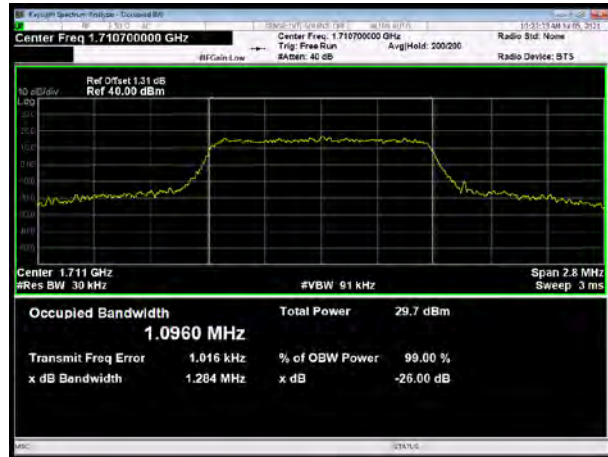
LTE Band 4 16QAM 20MHz CH-High



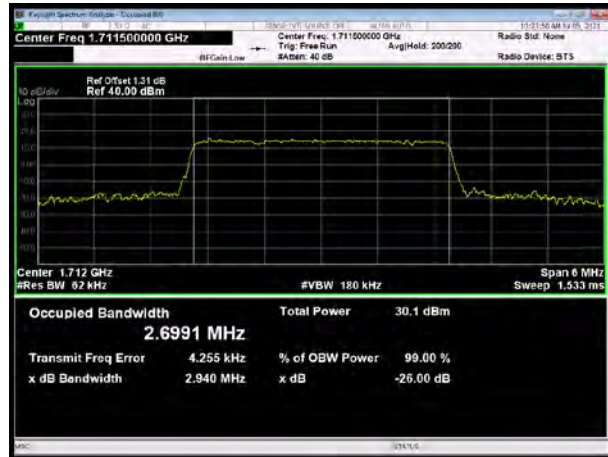




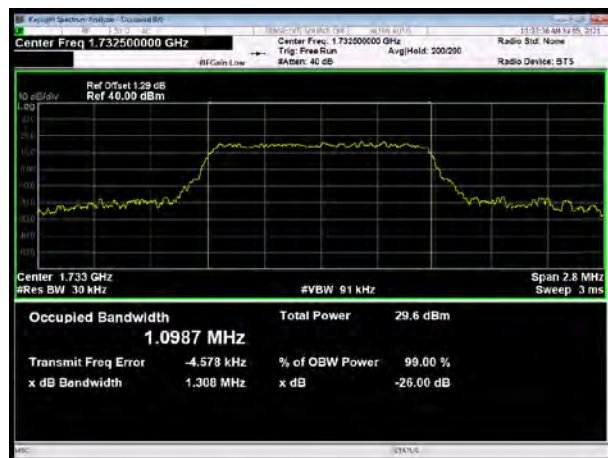
### LTE Band 4 1.4MHz 64QAM CH-Low



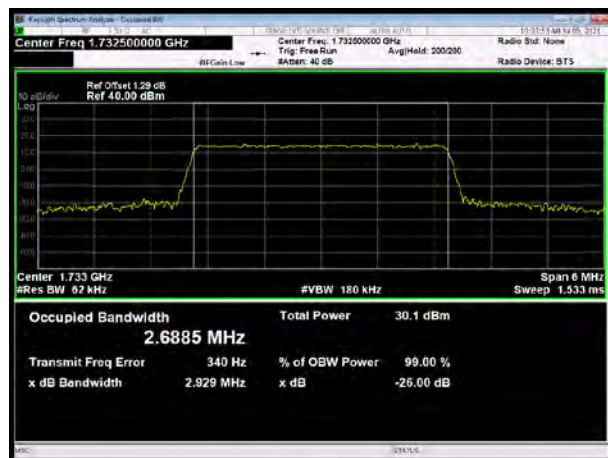
### LTE Band 4 3MHz 64QAM CH-Low



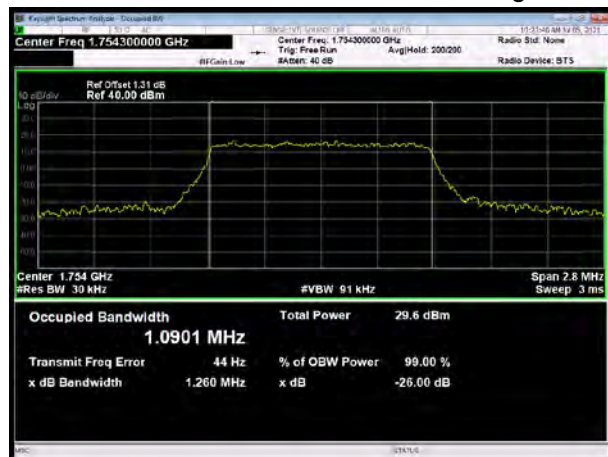
### LTE Band 4 1.4MHz 64QAM CH-Middle



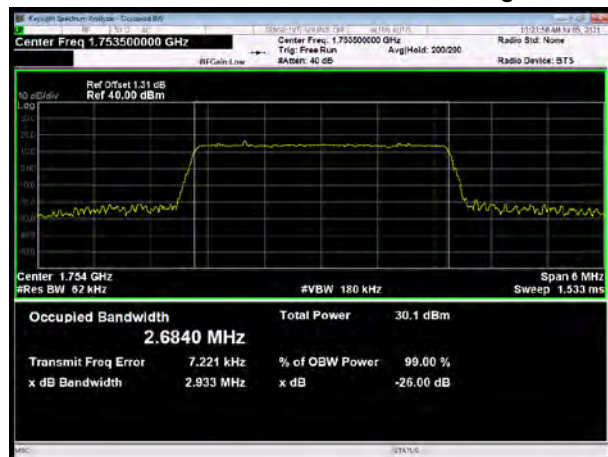
### LTE Band 4 3MHz 64QAM CH-Middle



### LTE Band 4 1.4MHz 64QAM CH-High

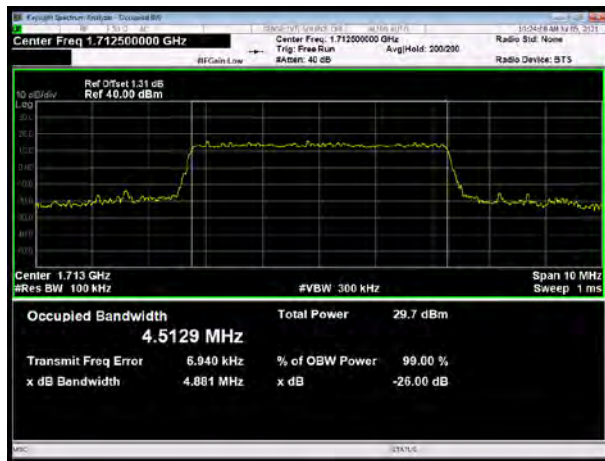


### LTE Band 4 3MHz 64QAM CH-High

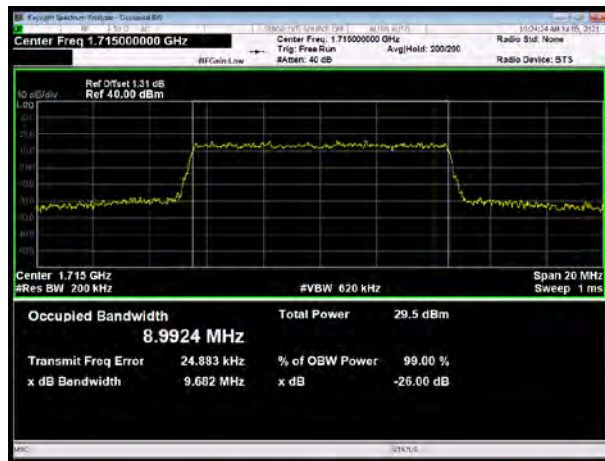




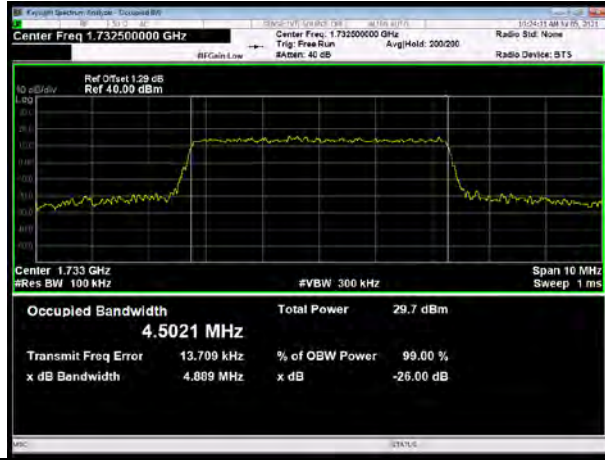
### LTE Band 4 5MHz 64QAM CH-Low



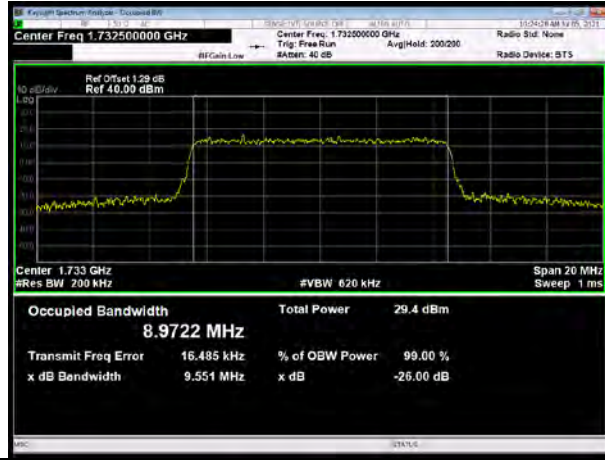
### LTE Band 4 10MHz 64QAM CH-Low



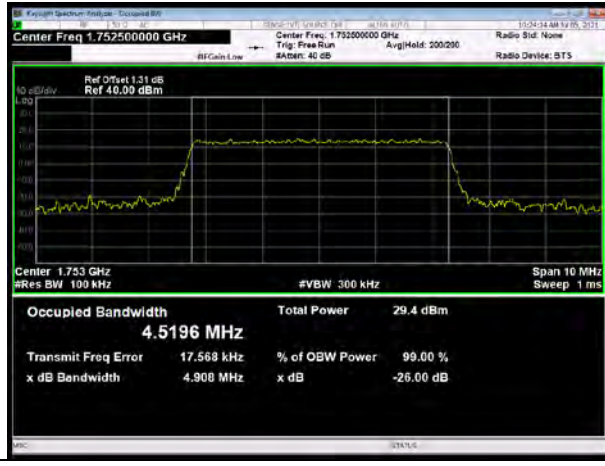
### LTE Band 4 5MHz 64QAM CH-Middle



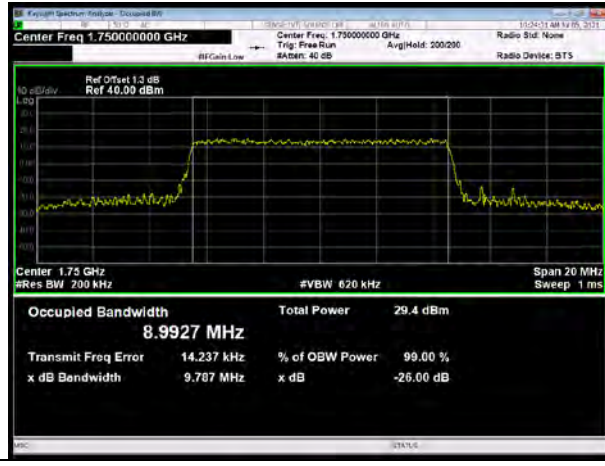
### LTE Band 4 10MHz 64QAM CH-Middle



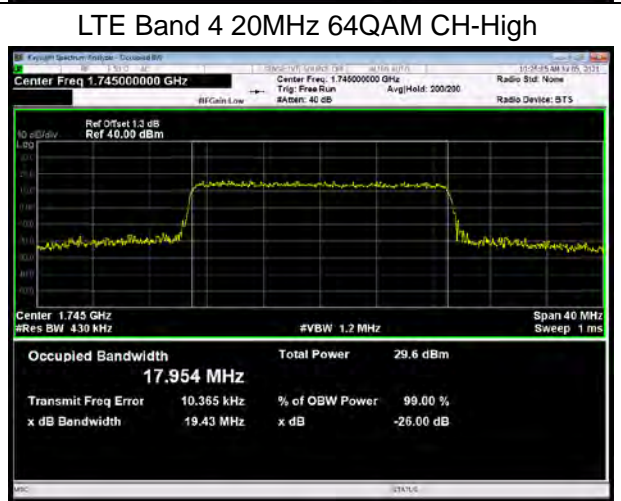
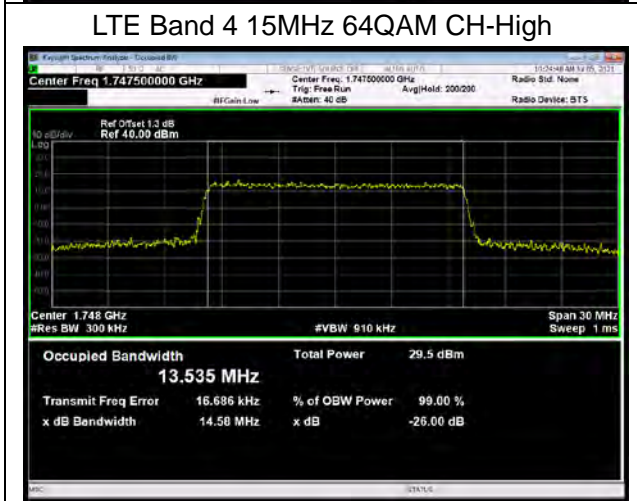
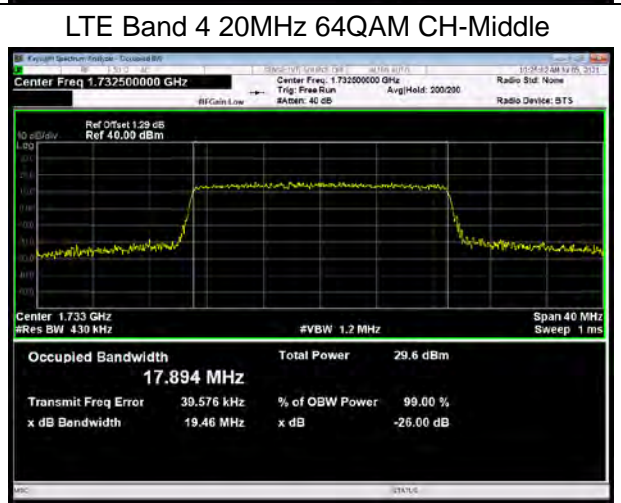
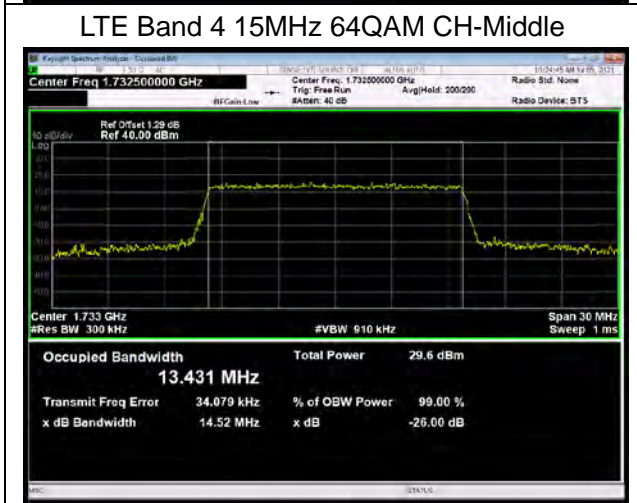
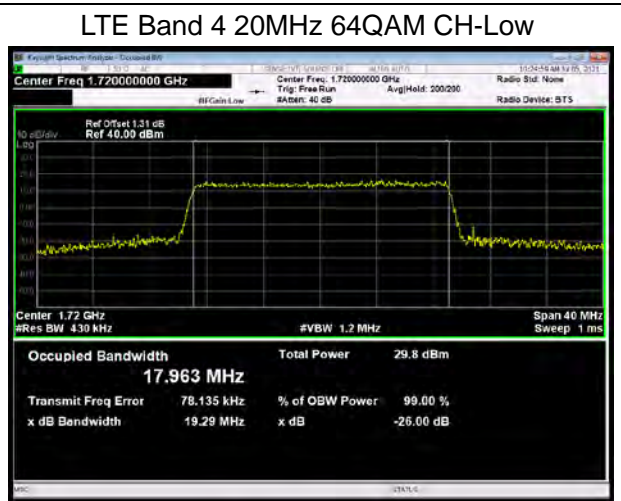
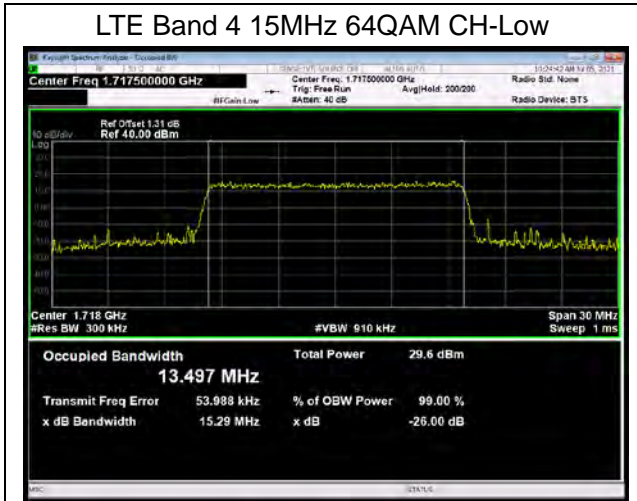
### LTE Band 4 5MHz 64QAM CH-High



### LTE Band 4 10MHz 64QAM CH-High

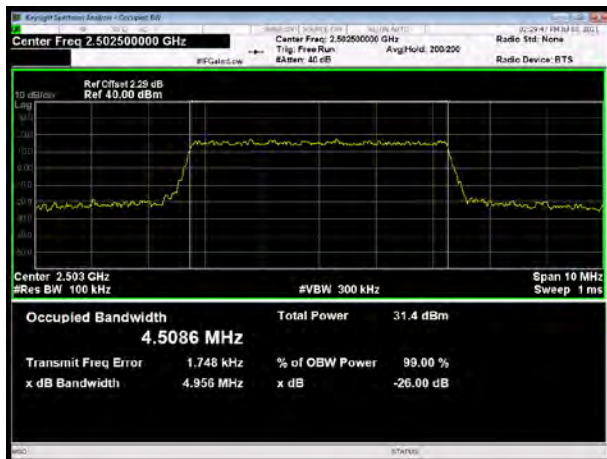




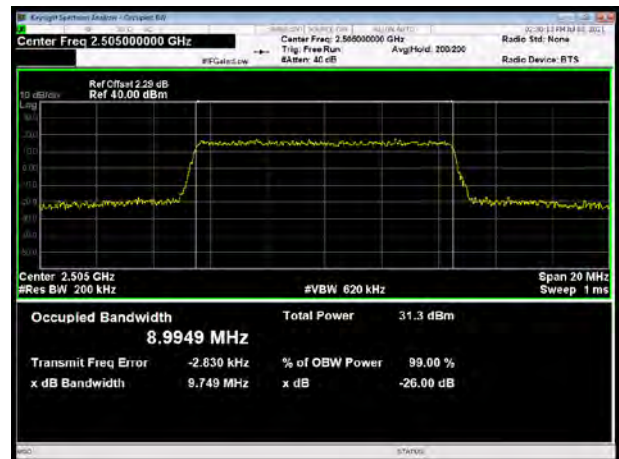




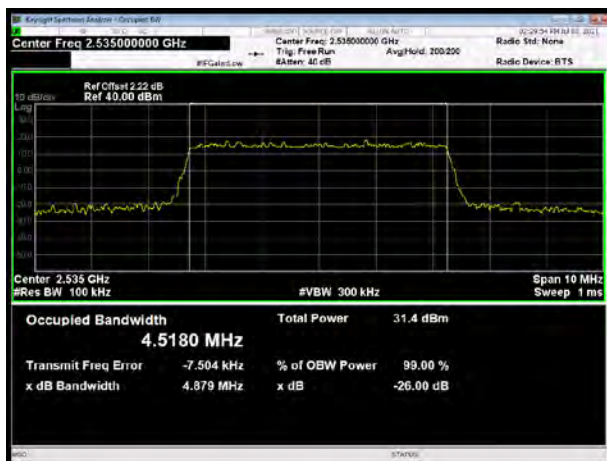
### LTE Band 7 QPSK 5MHz CH-Low



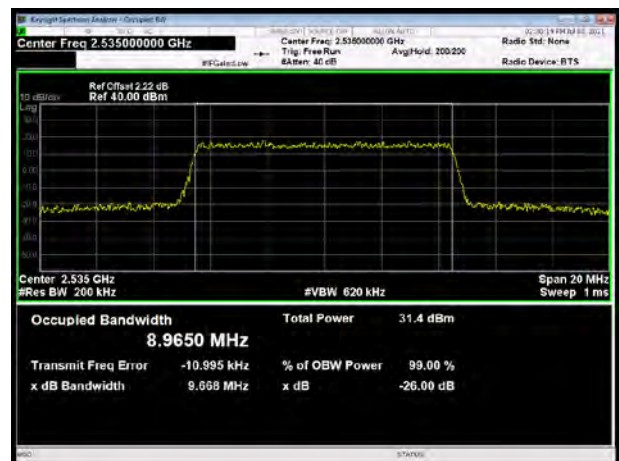
### LTE Band 7 QPSK 10MHz CH-Low



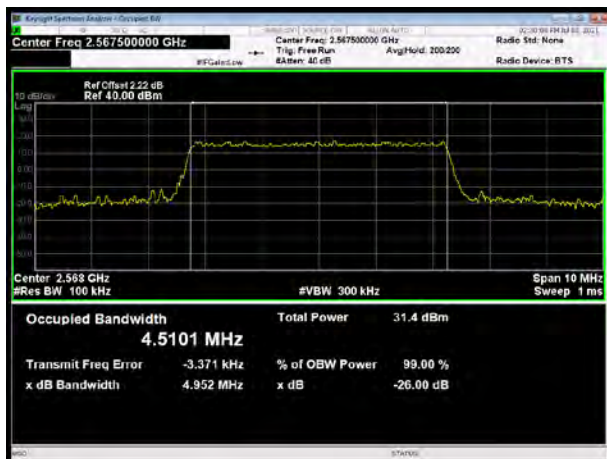
### LTE Band 7 QPSK 5MHz CH-Middle



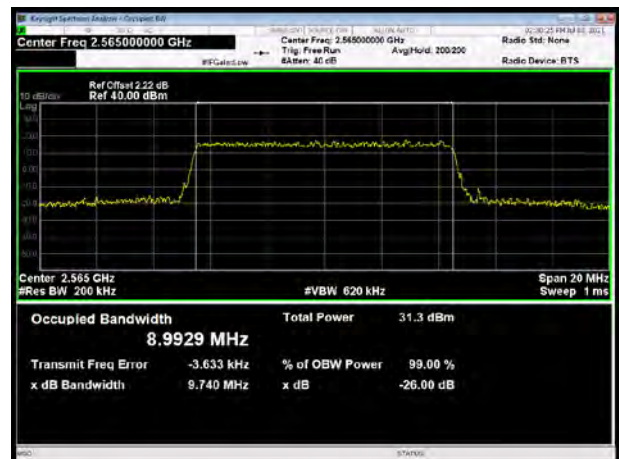
### LTE Band 7 QPSK 10MHz CH-Middle



### LTE Band 7 QPSK 5MHz CH-High



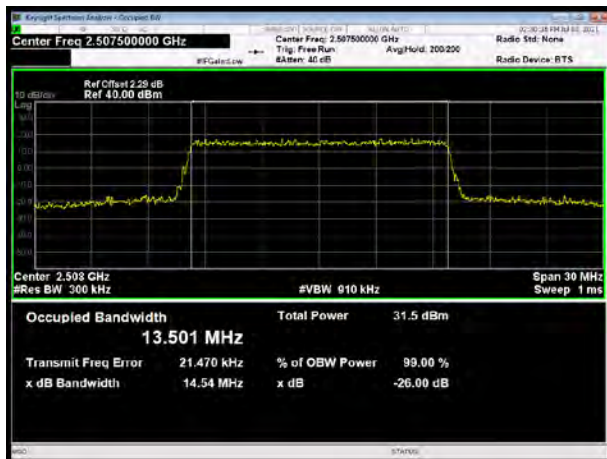
### LTE Band 7 QPSK 10MHz CH-High



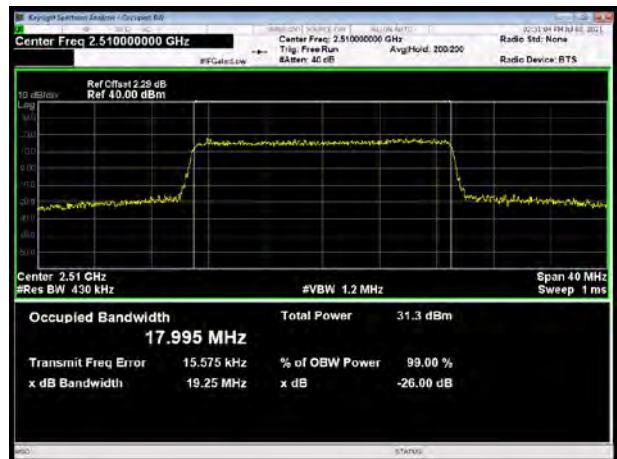




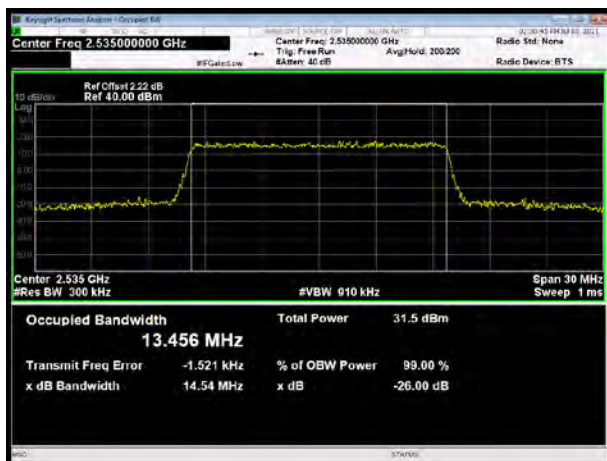
### LTE Band 7 QPSK 15MHz CH-Low



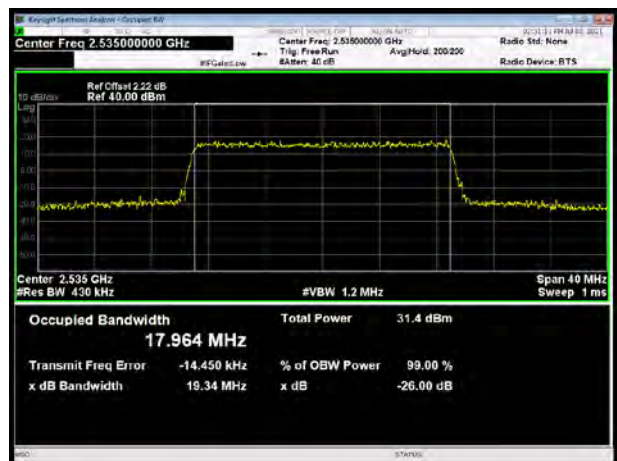
### LTE Band 7 QPSK 20MHz CH-Low



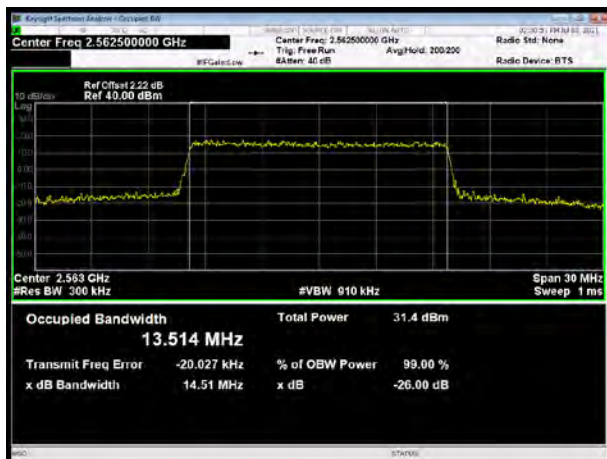
### LTE Band 7 QPSK 15MHz CH-Middle



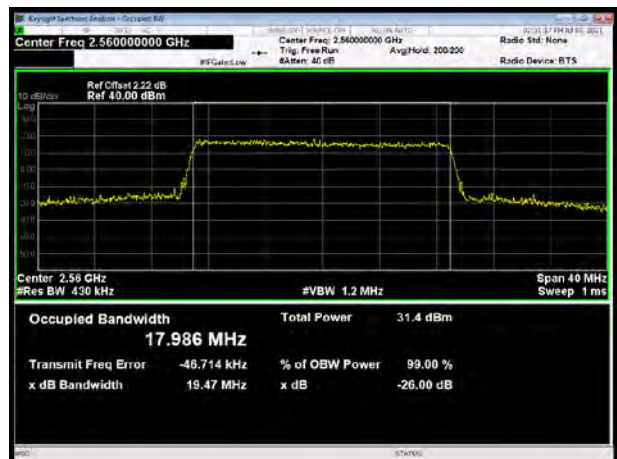
### LTE Band 7 QPSK 20MHz CH-Middle



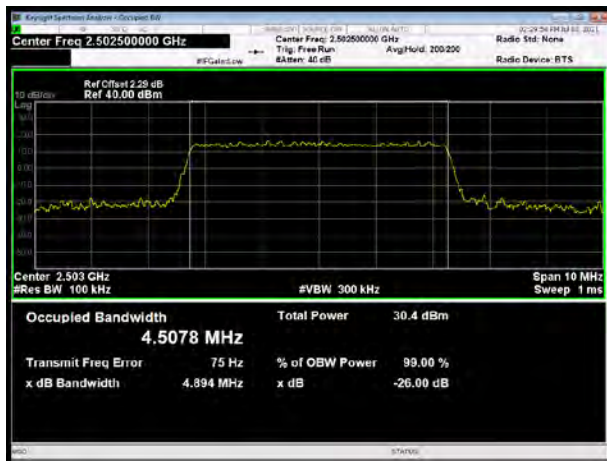
### LTE Band 7 QPSK 15MHz CH-High



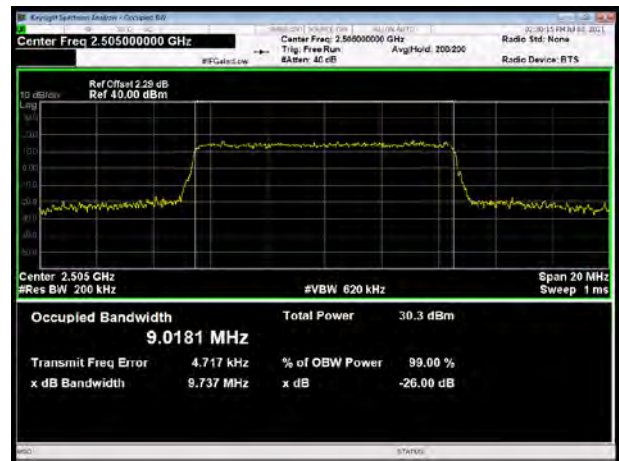
### LTE Band 7 QPSK 20MHz CH-High



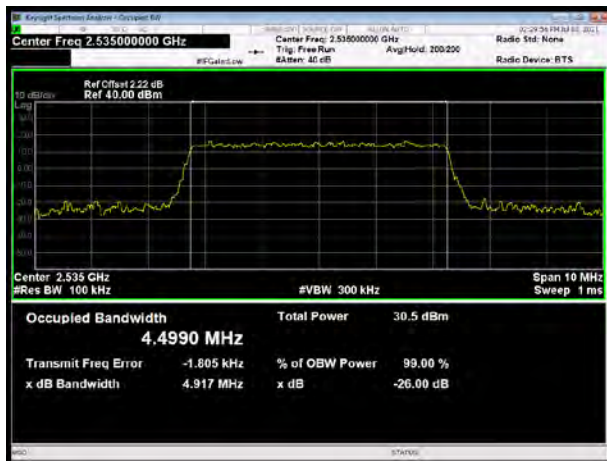
LTE Band 7 16QAM 5MHz CH-Low



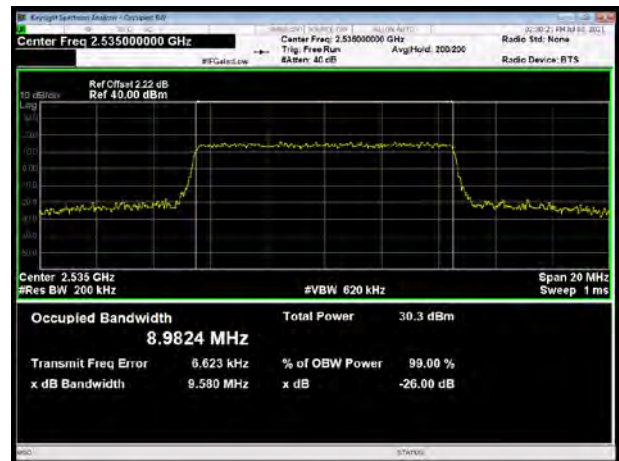
LTE Band 7 16QAM 10MHz CH-Low



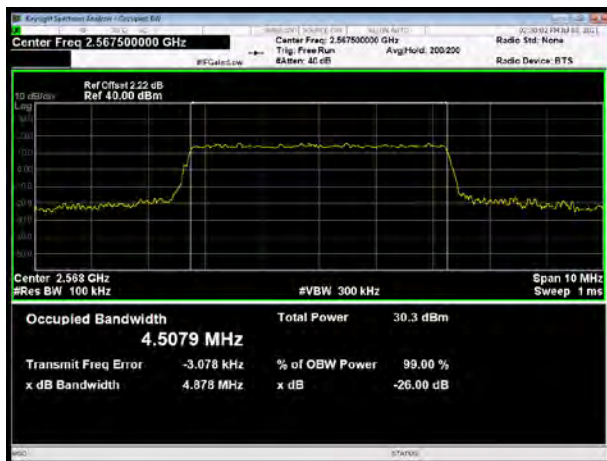
LTE Band 7 16QAM 5MHz CH-Middle



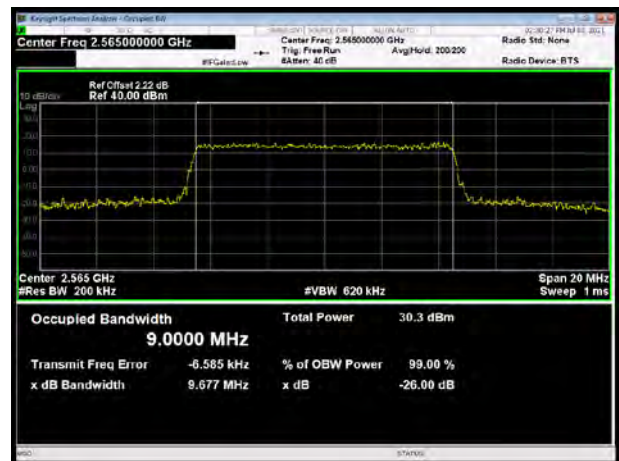
LTE Band 7 16QAM 10MHz CH-Middle



LTE Band 7 16QAM 5MHz CH-High



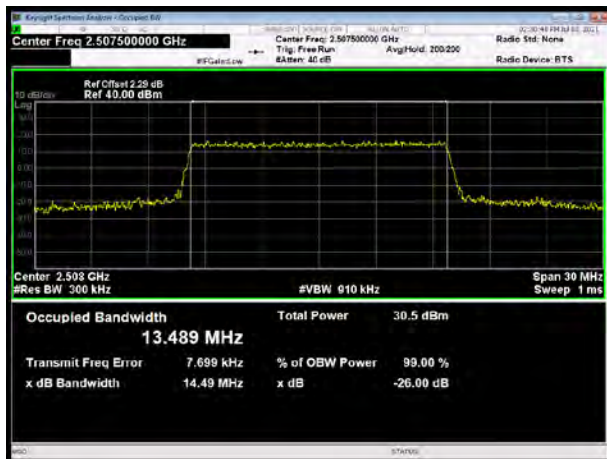
LTE Band 7 16QAM 10MHz CH-High



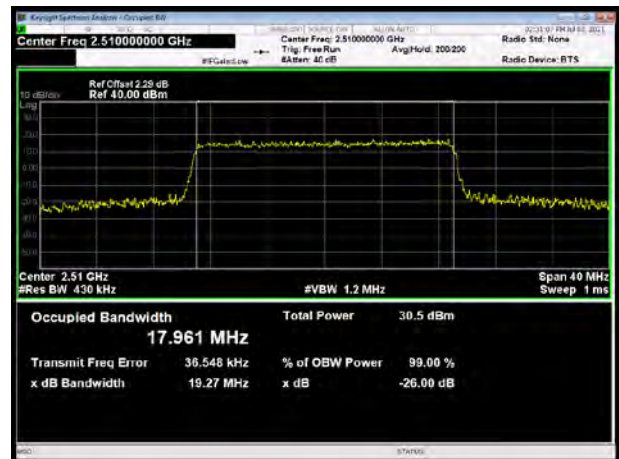




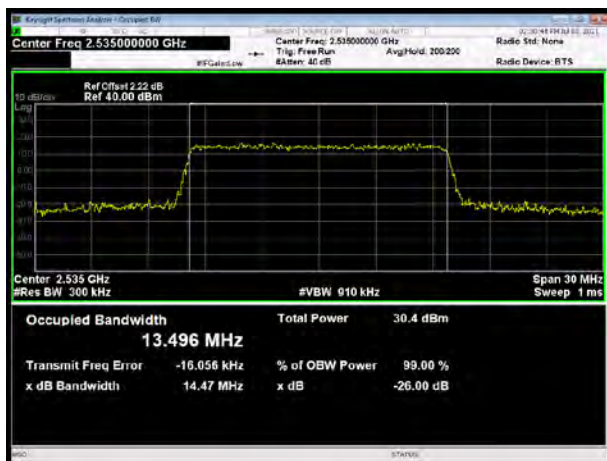
### LTE Band 7 16QAM 15MHz CH-Low



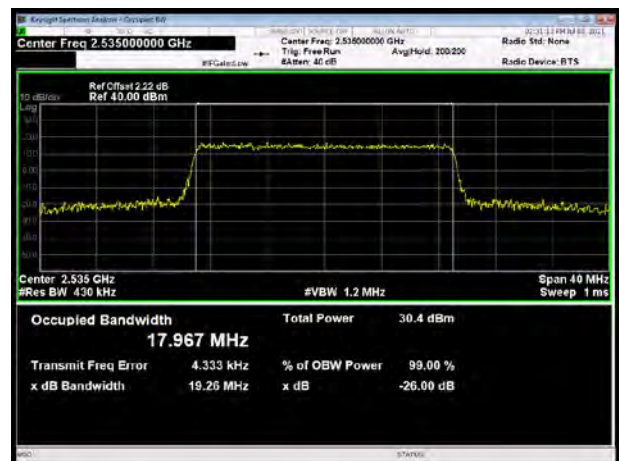
### LTE Band 7 16QAM 20MHz CH-Low



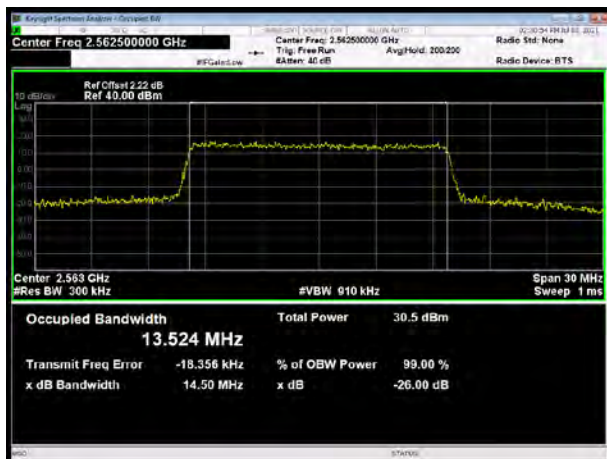
### LTE Band 7 16QAM 15MHz CH-Middle



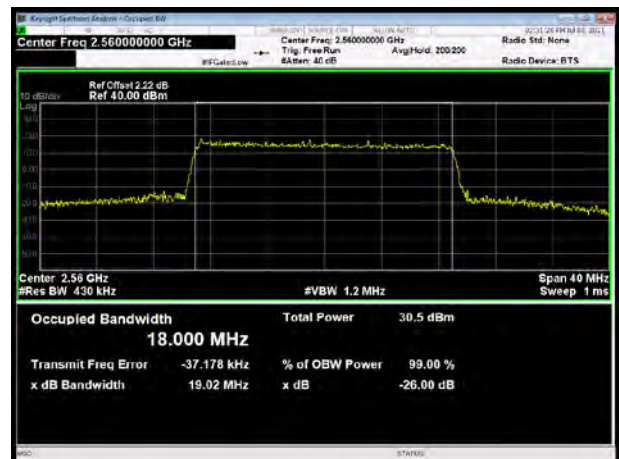
### LTE Band 7 16QAM 20MHz CH-Middle



### LTE Band 7 16QAM 15MHz CH-High



### LTE Band 7 16QAM 20MHz CH-High





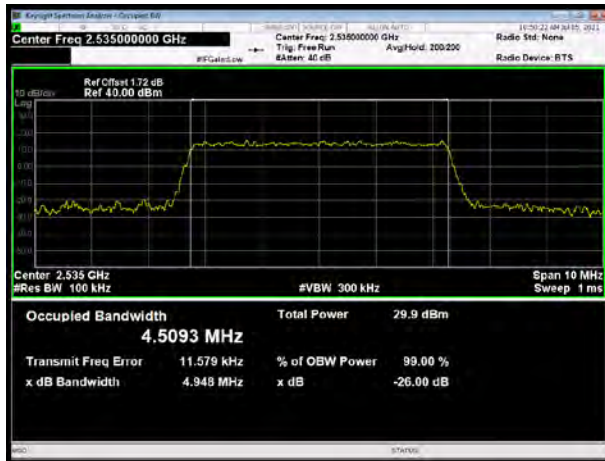
LTE Band 7 64QAM 5MHz CH-Low



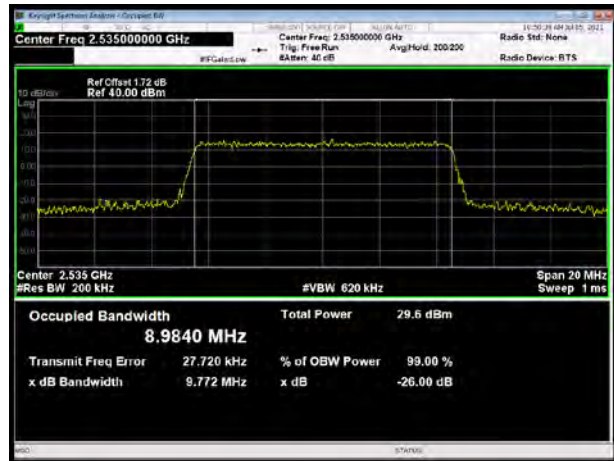
LTE Band 7 64QAM 10MHz CH-Low



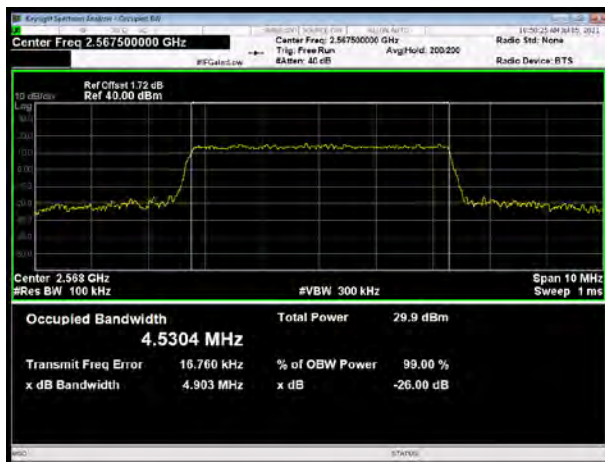
LTE Band 7 64QAM 5MHz CH-Middle



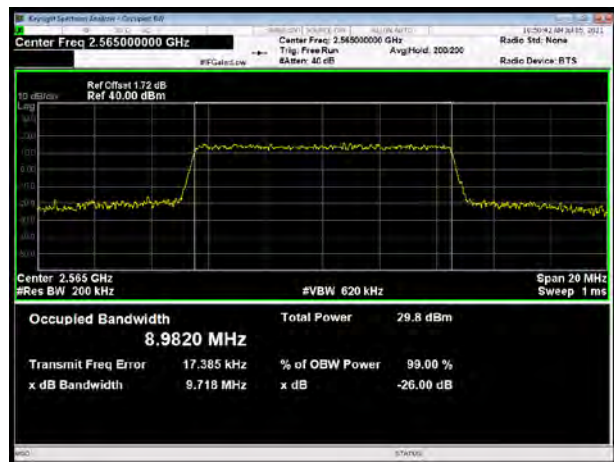
LTE Band 7 64QAM 10MHz CH-Middle



LTE Band 7 64QAM 5MHz CH-High



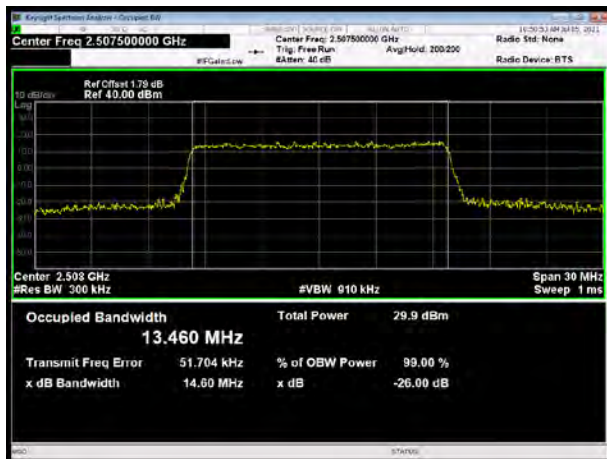
LTE Band 7 64QAM 10MHz CH-High



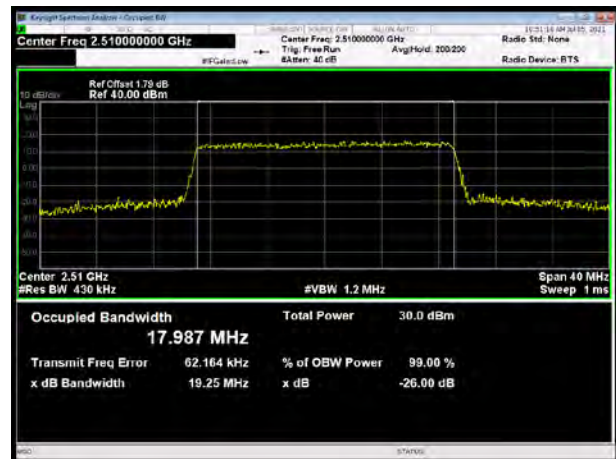




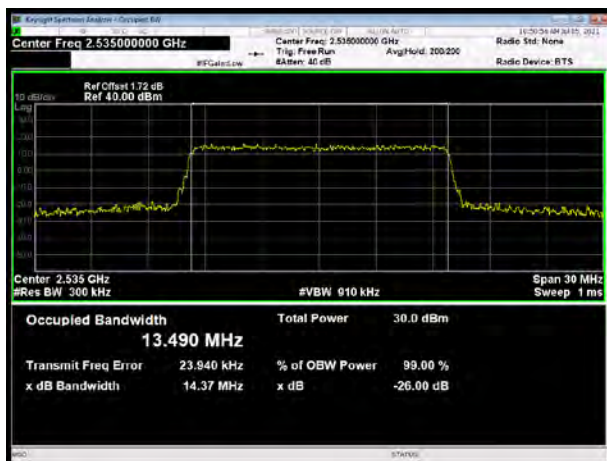
LTE Band 7 64QAM 15MHz CH-Low



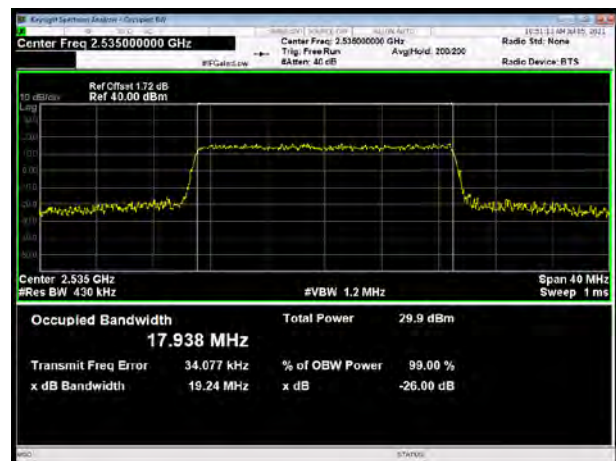
LTE Band 7 64QAM 20MHz CH-Low



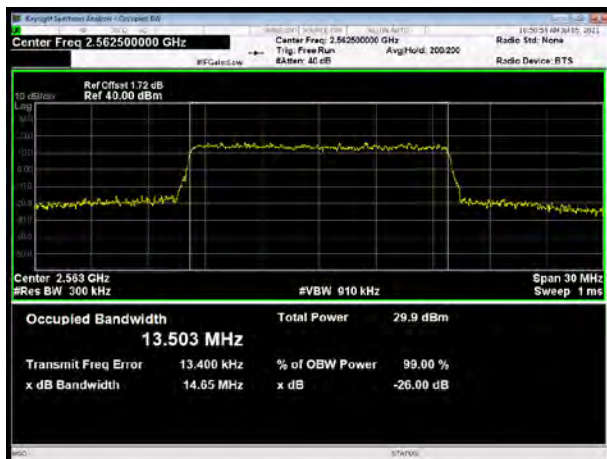
LTE Band 7 64QAM 15MHz CH-Middle



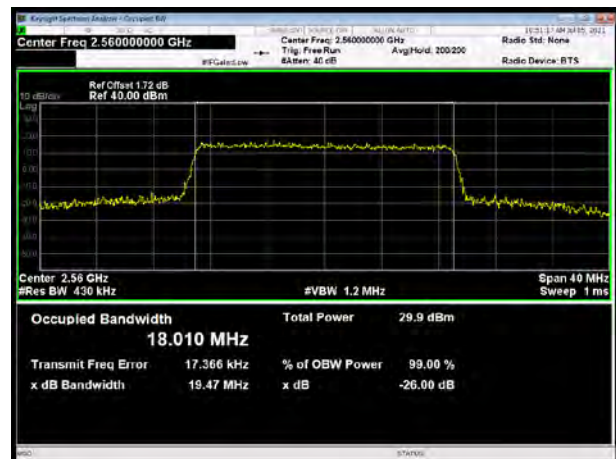
LTE Band 7 64QAM 20MHz CH-Middle



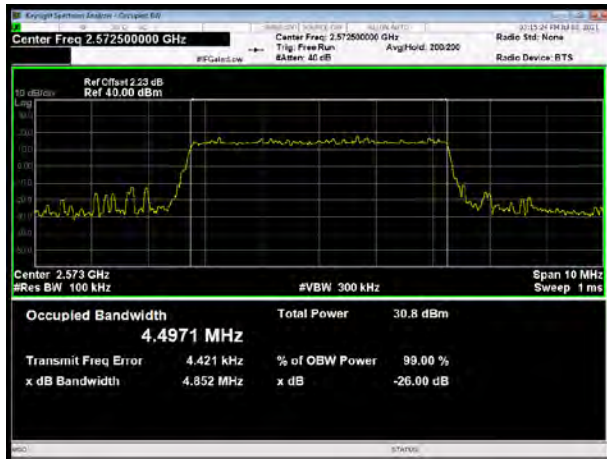
LTE Band 7 64QAM 15MHz CH-High



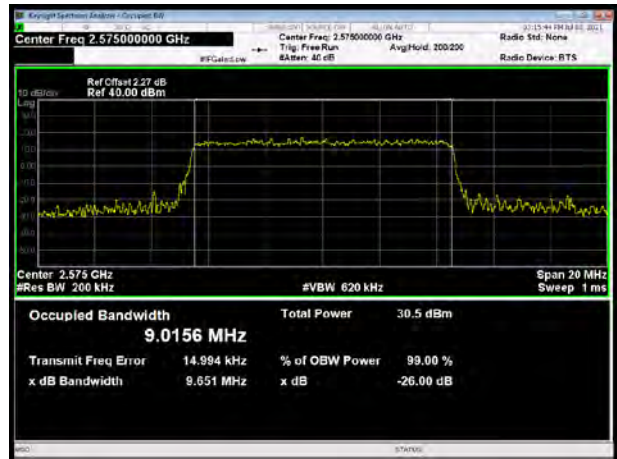
LTE Band 7 64QAM 20MHz CH-High



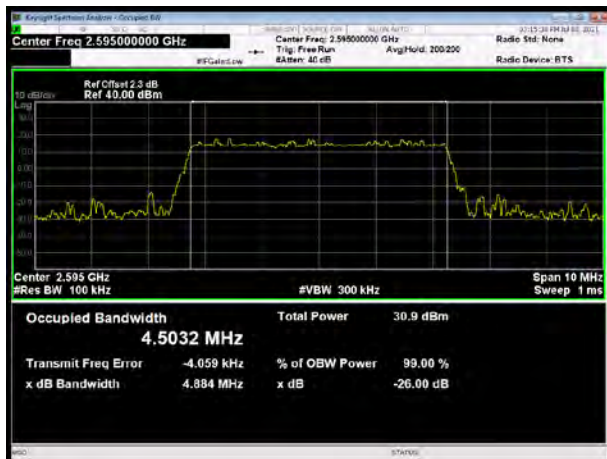
LTE Band 38 QPSK 5MHz CH-Low



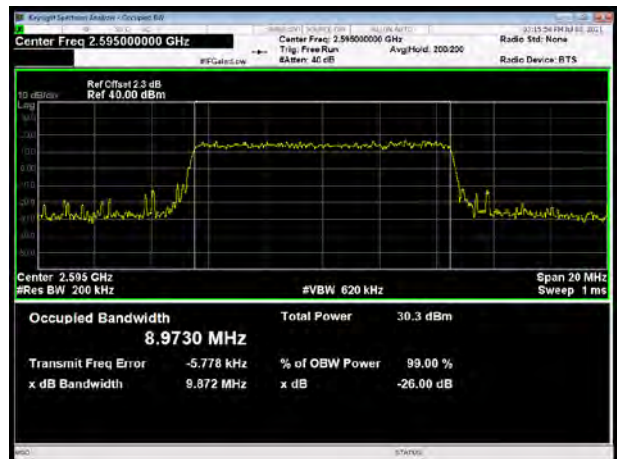
LTE Band 38 QPSK 10MHz CH-Low



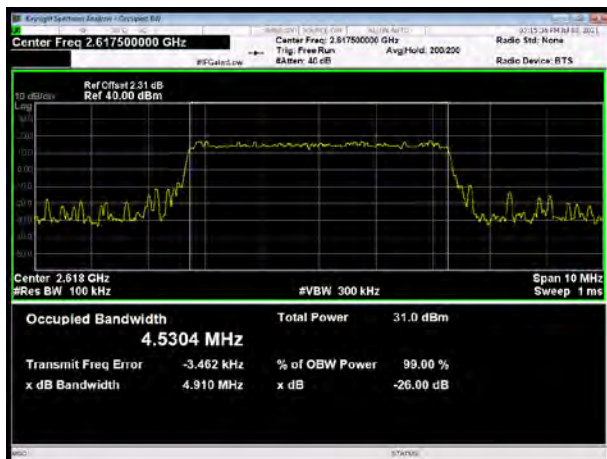
LTE Band 38 QPSK 5MHz CH-Middle



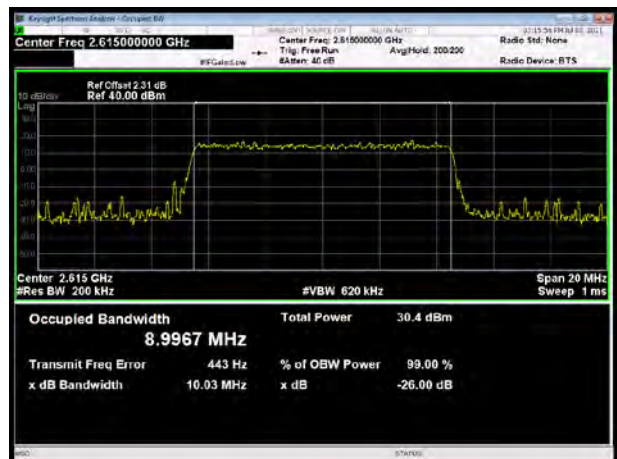
LTE Band 38 QPSK 10MHz CH-Middle



LTE Band 38 QPSK 5MHz CH-High



LTE Band 38 QPSK 10MHz CH-High



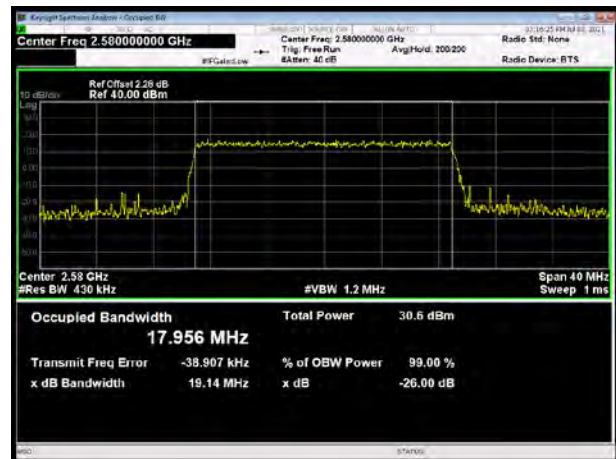




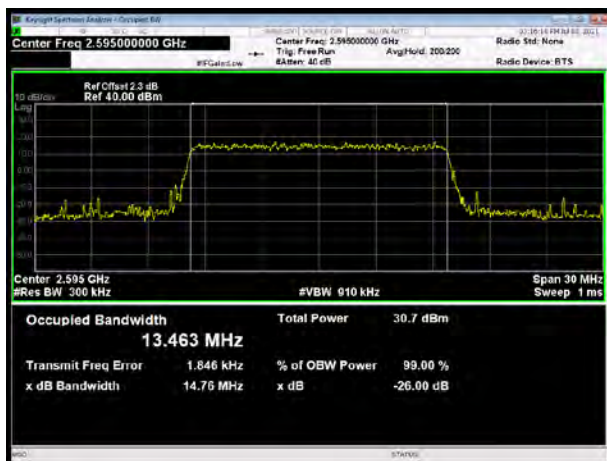
### LTE Band 38 QPSK 15MHz CH-Low



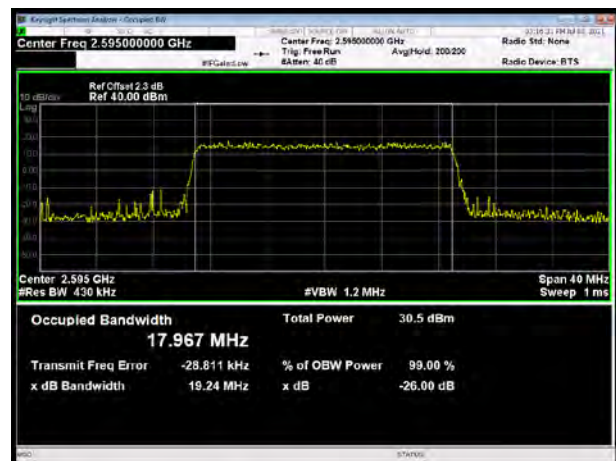
### LTE Band 38 QPSK 20MHz CH-Low



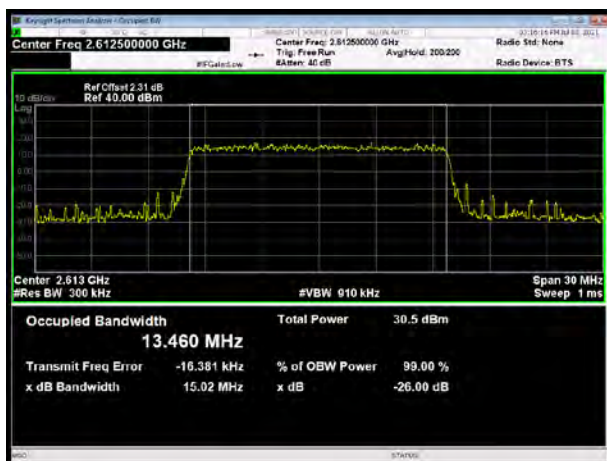
### LTE Band 38 QPSK 15MHz CH-Middle



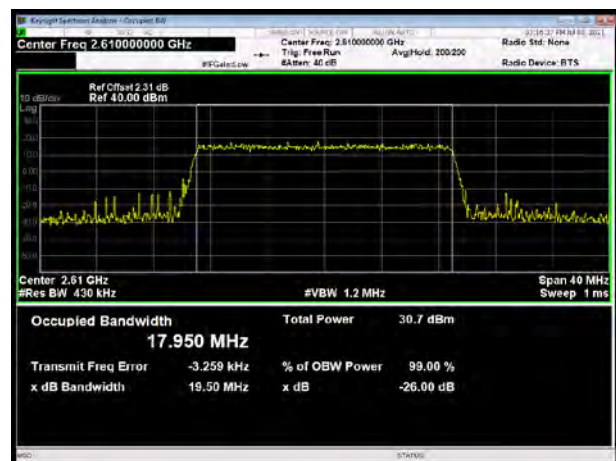
### LTE Band 38 QPSK 20MHz CH-Middle



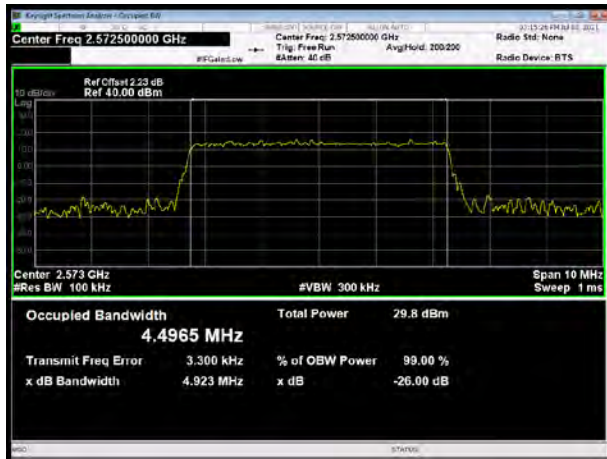
### LTE Band 38 QPSK 15MHz CH-High



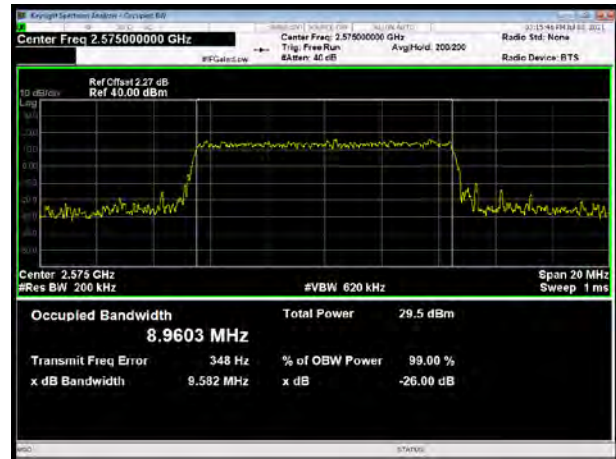
### LTE Band 38 QPSK 20MHz CH-High



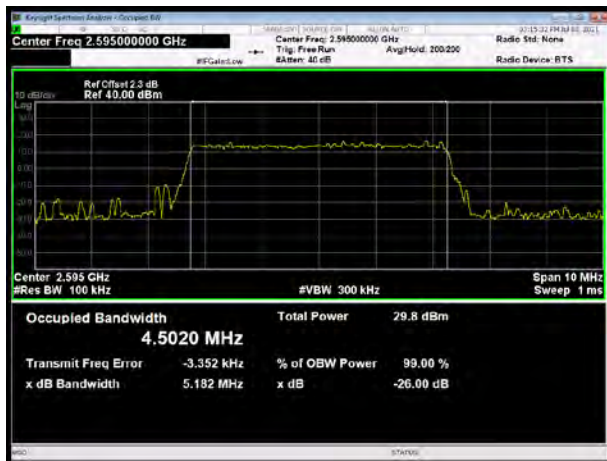
LTE Band 38 16QAM 5MHz CH-Low



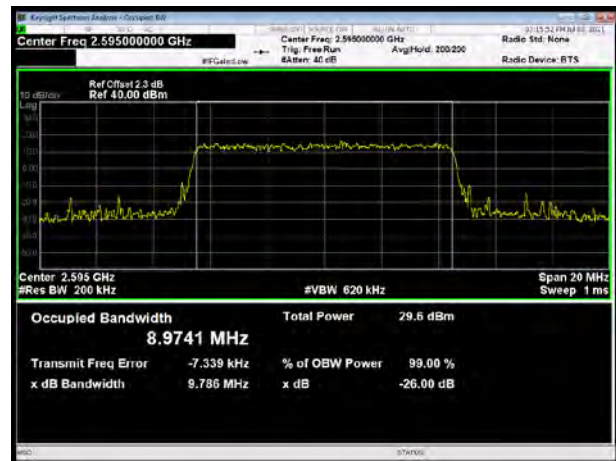
LTE Band 38 16QAM 10MHz CH-Low



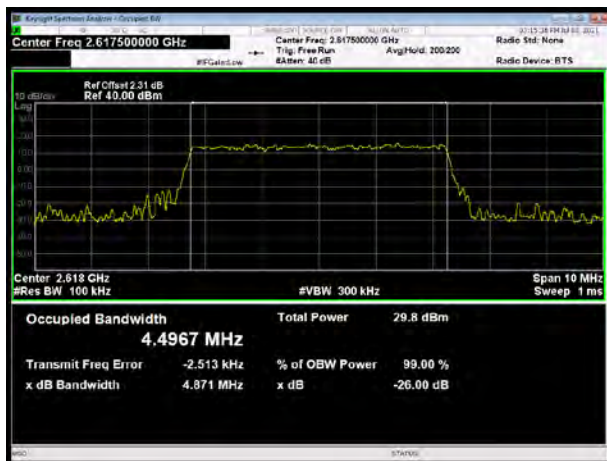
LTE Band 38 16QAM 5MHz CH-Middle



LTE Band 38 16QAM 10MHz CH-Middle



LTE Band 38 16QAM 5MHz CH-High

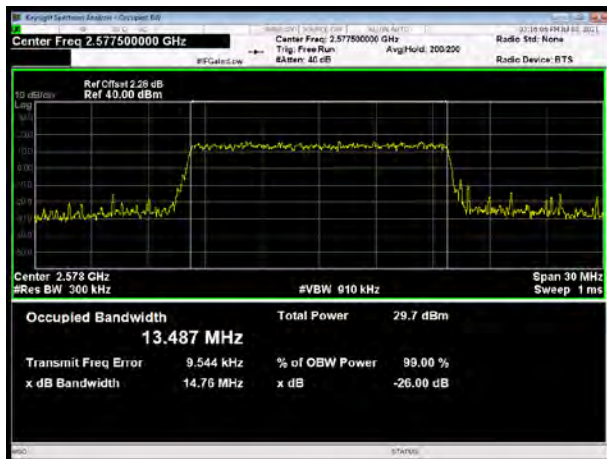


LTE Band 38 16QAM 10MHz CH-High

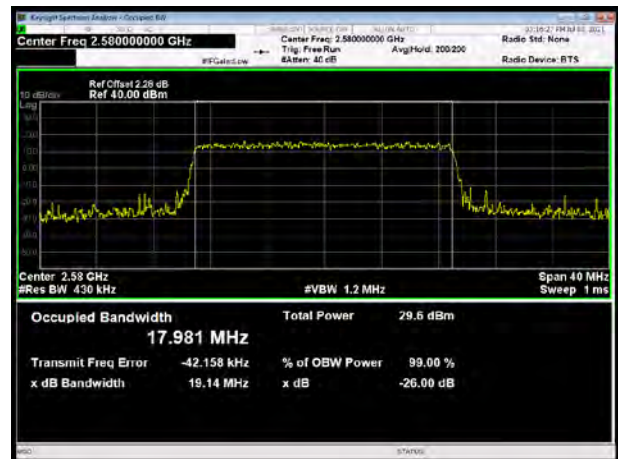




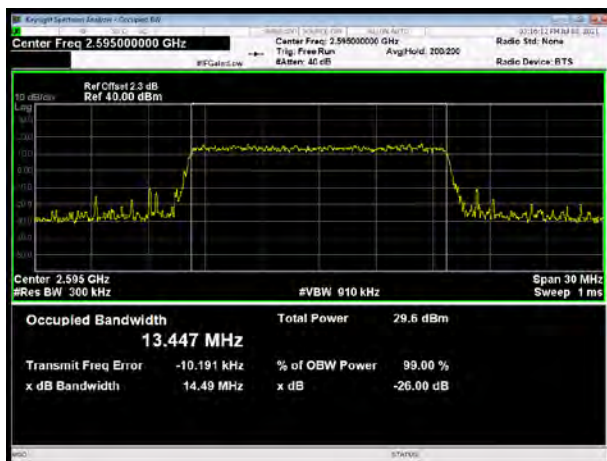
LTE Band 38 16QAM 15MHz CH-Low



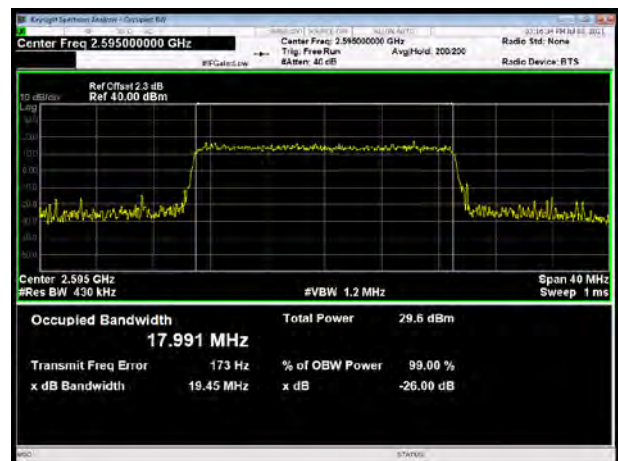
LTE Band 38 16QAM 20MHz CH-Low



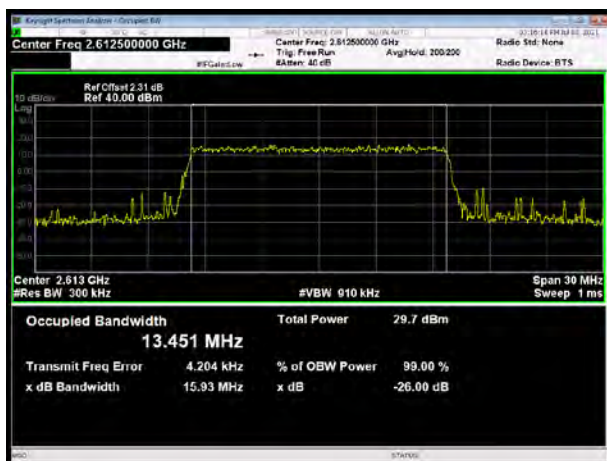
LTE Band 38 16QAM 15MHz CH-Middle



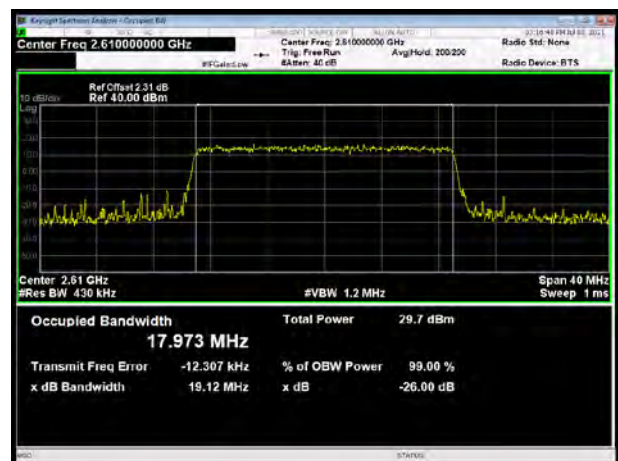
LTE Band 38 16QAM 20MHz CH-Middle



LTE Band 38 16QAM 15MHz CH-High



LTE Band 38 16QAM 20MHz CH-High





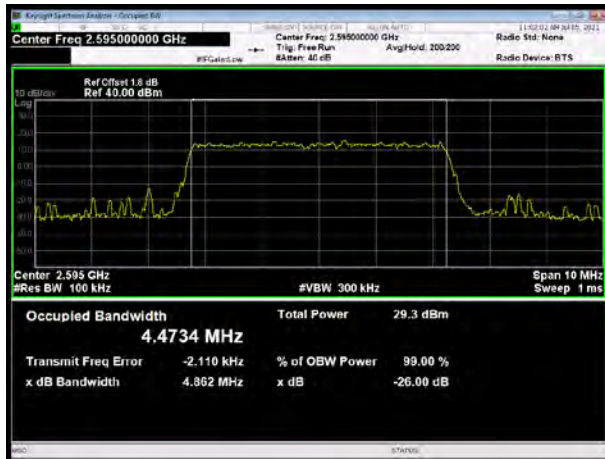
LTE Band 38 64QAM 5MHz CH-Low



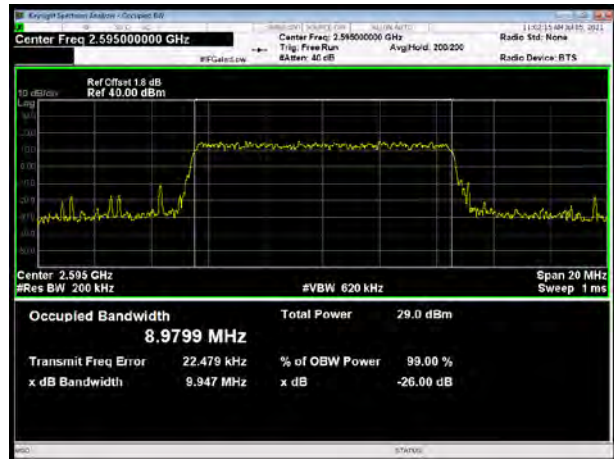
LTE Band 38 64QAM 10MHz CH-Low



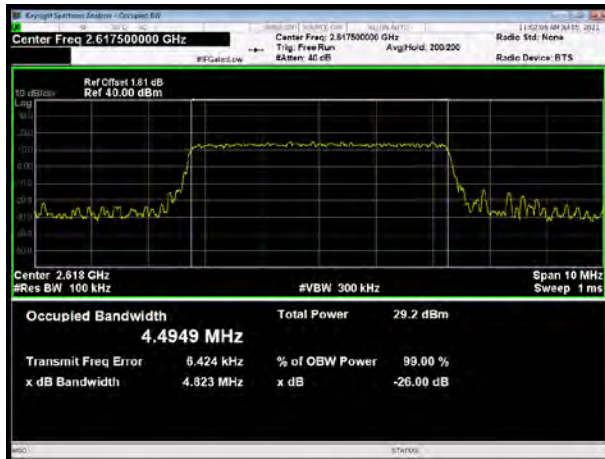
LTE Band 38 64QAM 5MHz CH-Middle



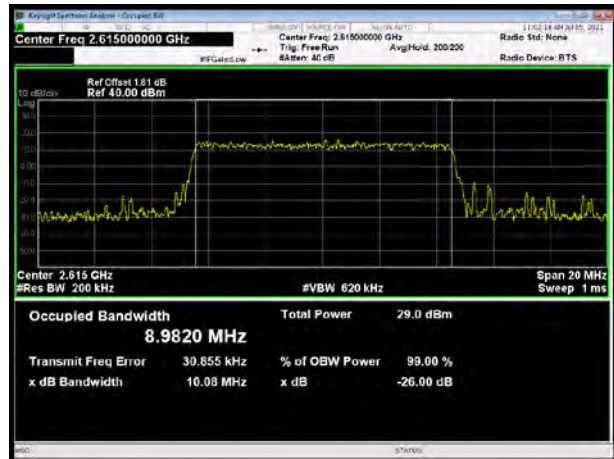
LTE Band 38 64QAM 10MHz CH-Middle



LTE Band 38 64QAM 5MHz CH-High



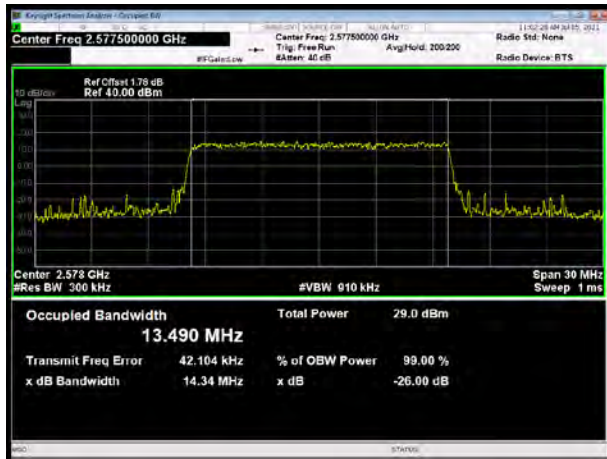
LTE Band 38 64QAM 10MHz CH-High



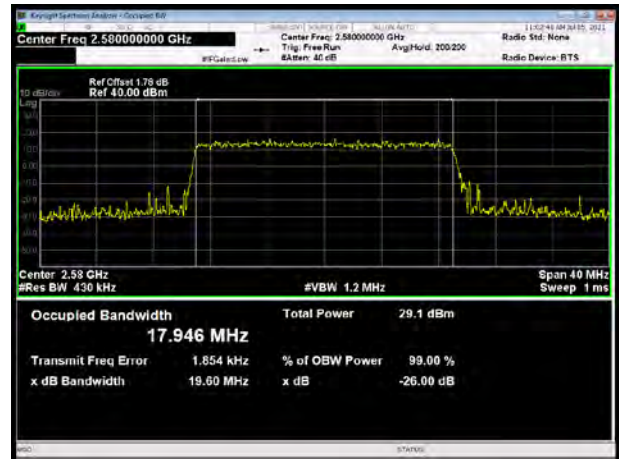




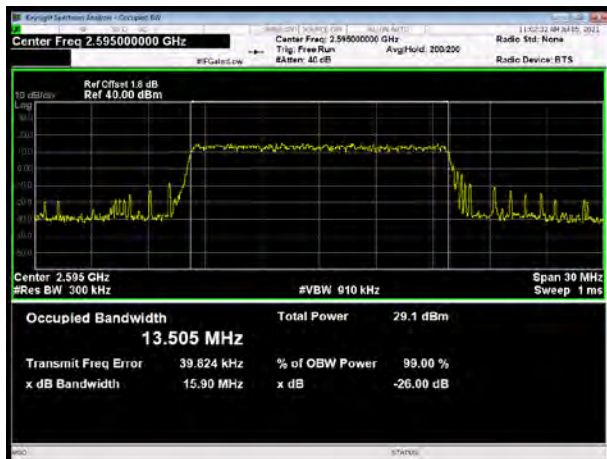
### LTE Band 38 64QAM 15MHz CH-Low



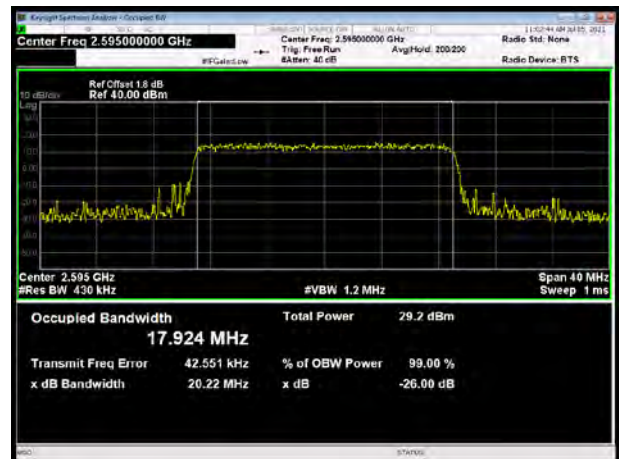
### LTE Band 38 64QAM 20MHz CH-Low



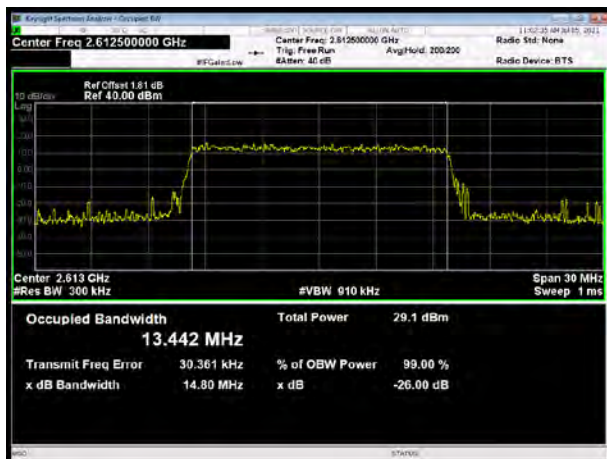
### LTE Band 38 64QAM 15MHz CH-Middle



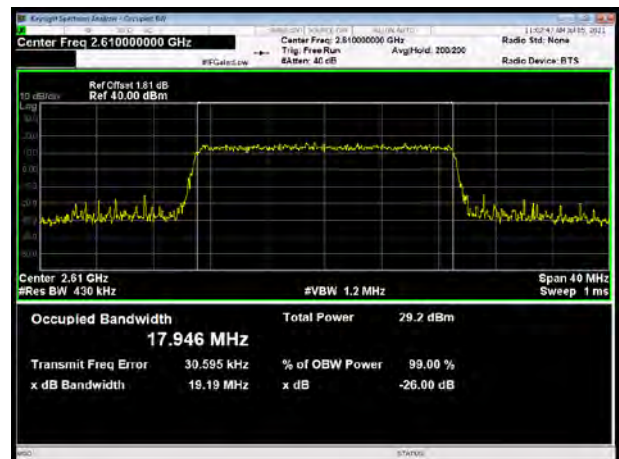
### LTE Band 38 64QAM 20MHz CH-Middle



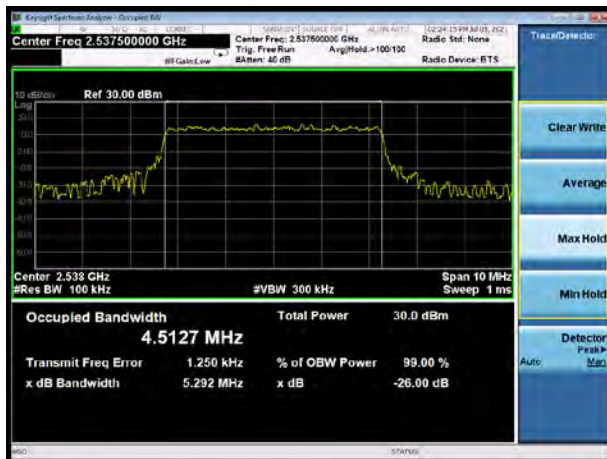
### LTE Band 38 64QAM 15MHz CH-High



### LTE Band 38 64QAM 20MHz CH-High



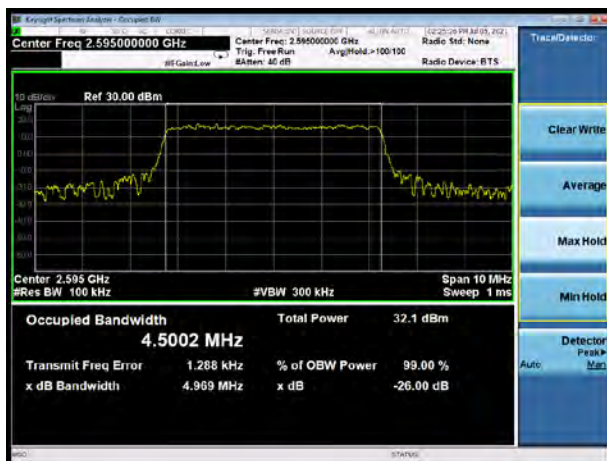
LTE Band 41 QPSK 5MHz CH-Low



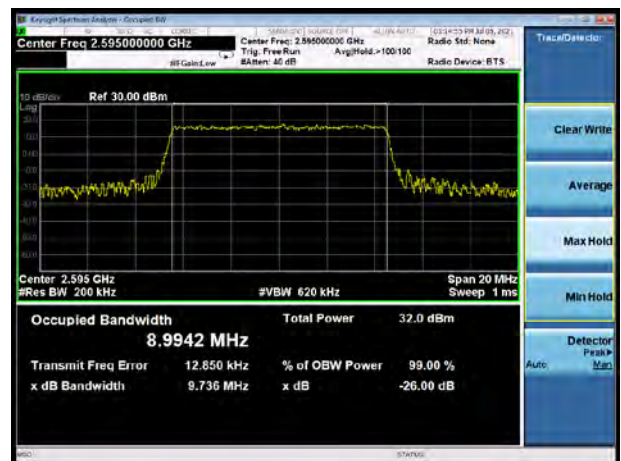
LTE Band 41 QPSK 10MHz CH-Low



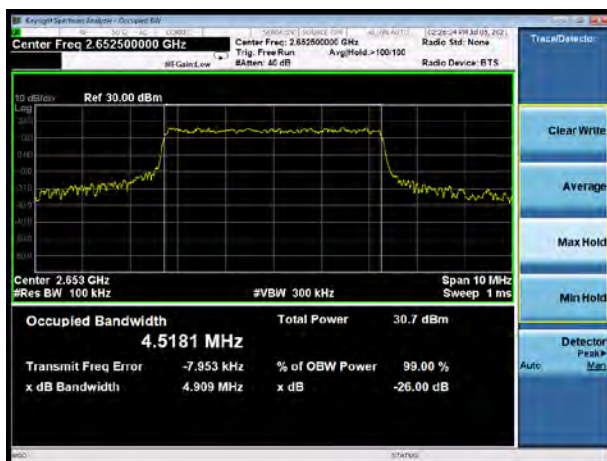
LTE Band 41 QPSK 5MHz CH-Middle



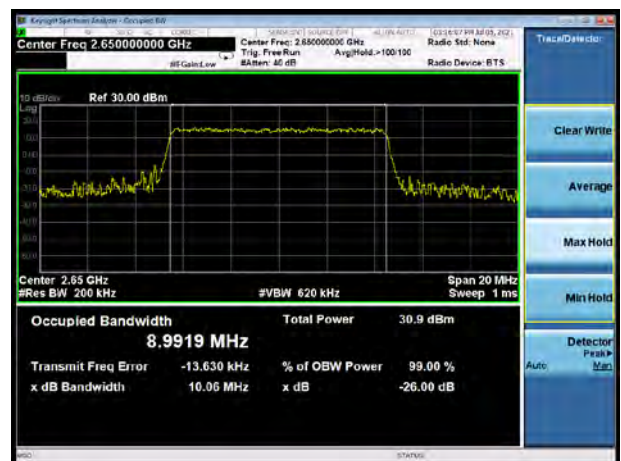
LTE Band 41 QPSK 10MHz CH-Middle



LTE Band 41 QPSK 5MHz CH-High



LTE Band 41 QPSK 10MHz CH-High



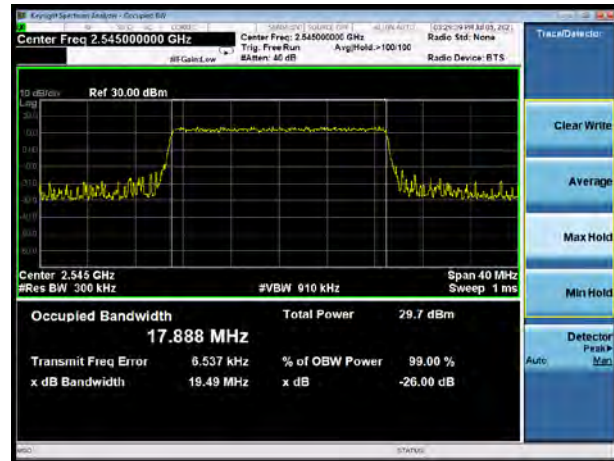




LTE Band 41 QPSK 15MHz CH-Low



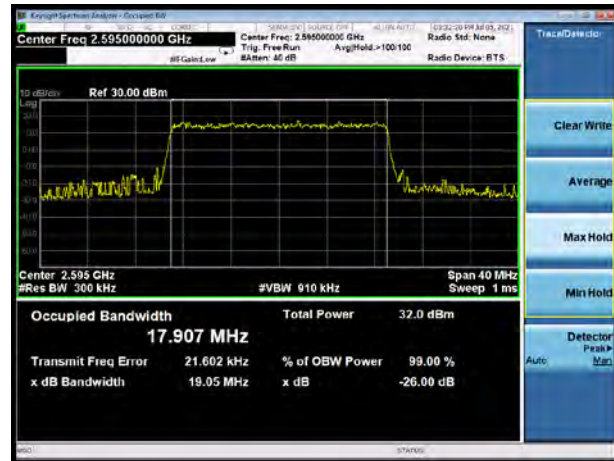
LTE Band 41 QPSK 20MHz CH-Low



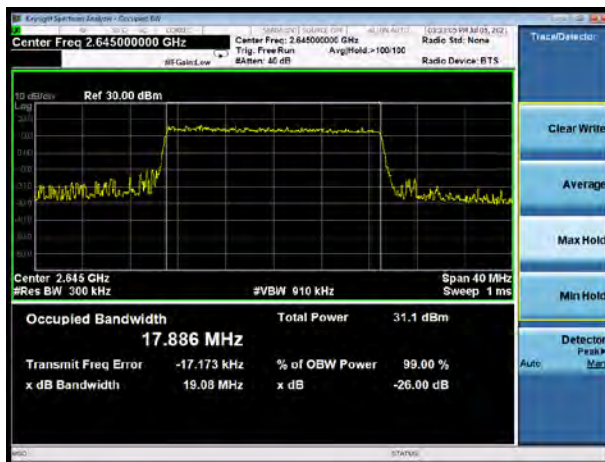
LTE Band 41 QPSK 15MHz CH-Middle



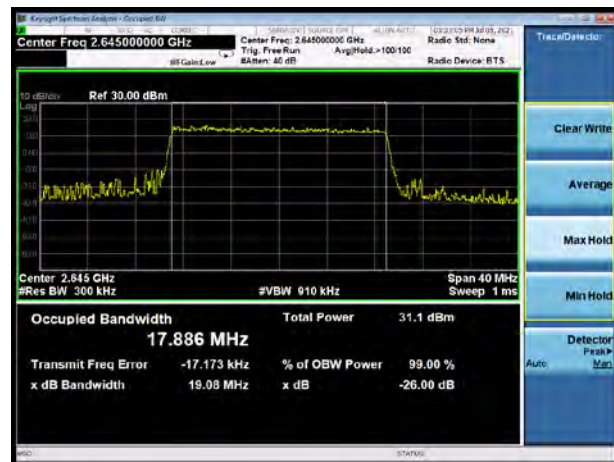
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LTE Band 41 QPSK 15MHz CH-High



LTE Band 41 QPSK 20MHz CH-High

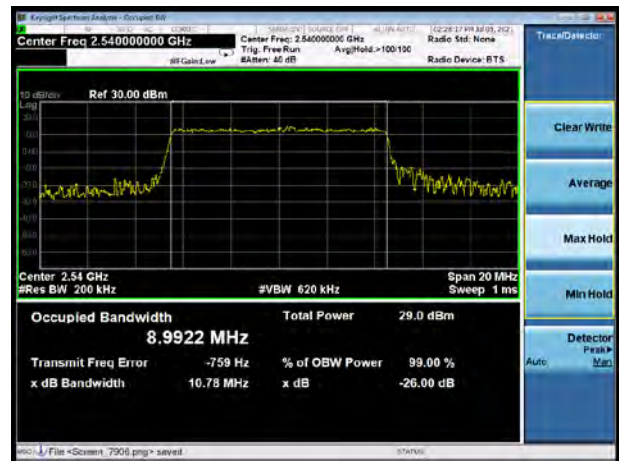




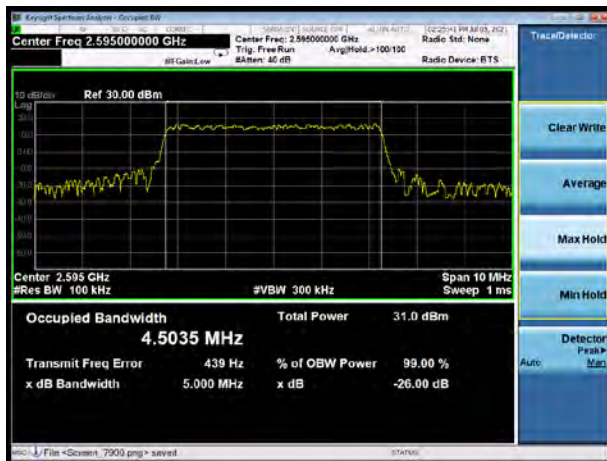
LTE Band 41 16QAM 5MHz CH-Low



LTE Band 41 16QAM 10MHz CH-Low



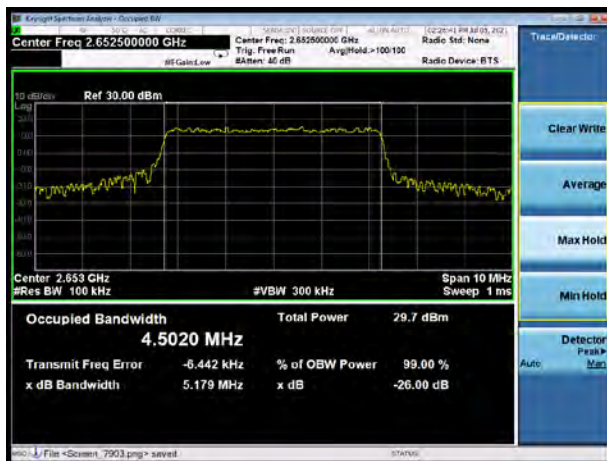
LTE Band 41 16QAM 5MHz CH-Middle



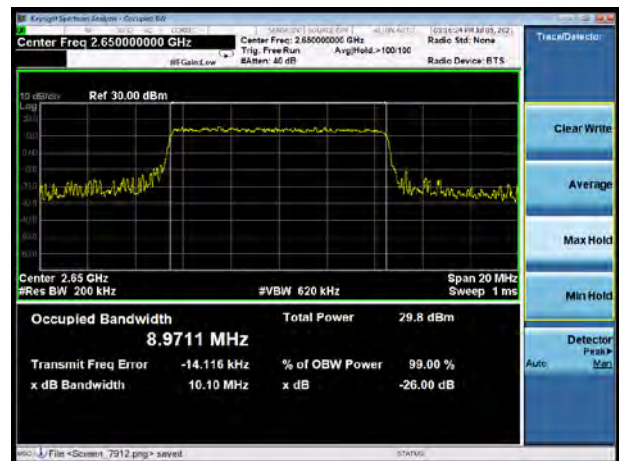
LTE Band 41 16QAM 10MHz CH-Middle



LTE Band 41 16QAM 5MHz CH-High



LTE Band 41 16QAM 10MHz CH-High

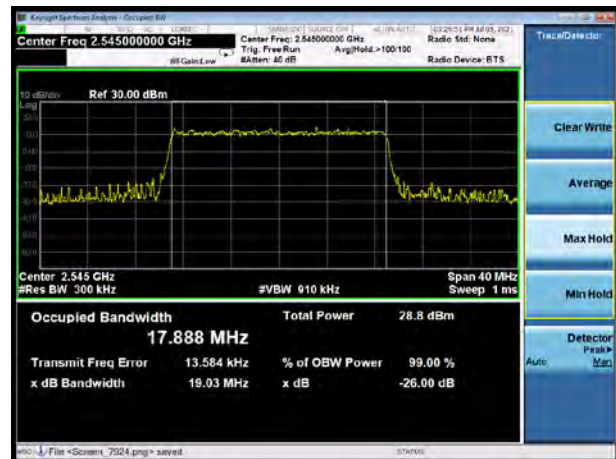




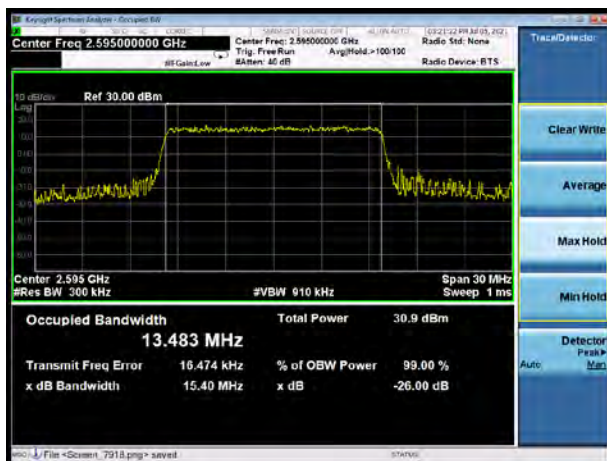
LTE Band 41 16QAM 15MHz CH-Low



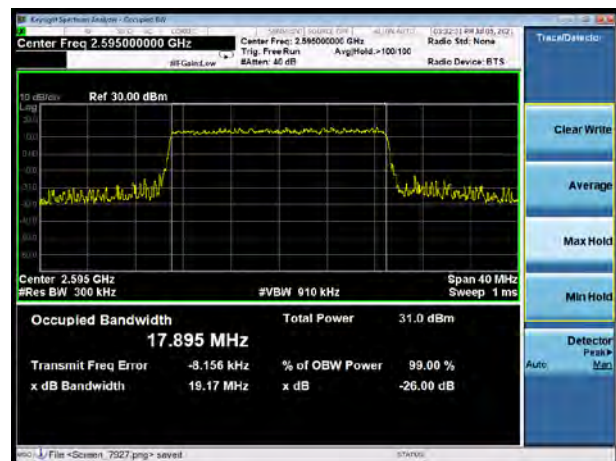
LTE Band 41 16QAM 20MHz CH-Low



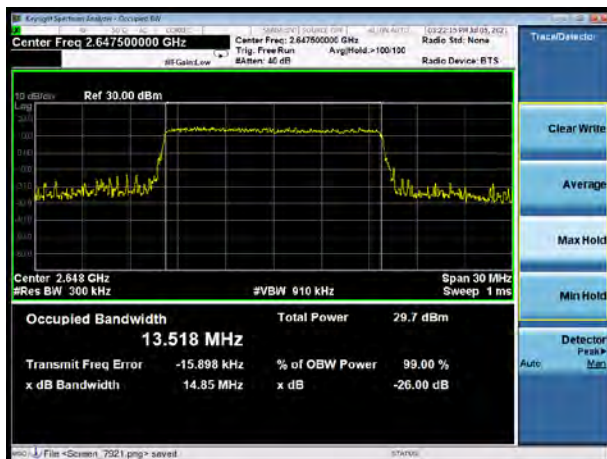
LTE Band 41 16QAM 15MHz CH-Middle



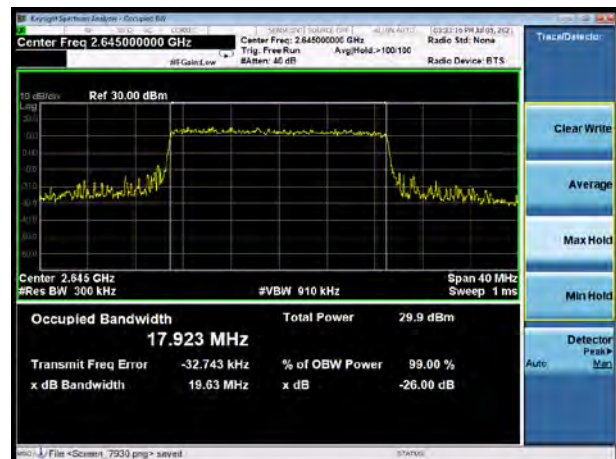
LTE Band 41 16QAM 20MHz CH-Middle



LTE Band 41 16QAM 15MHz CH-High

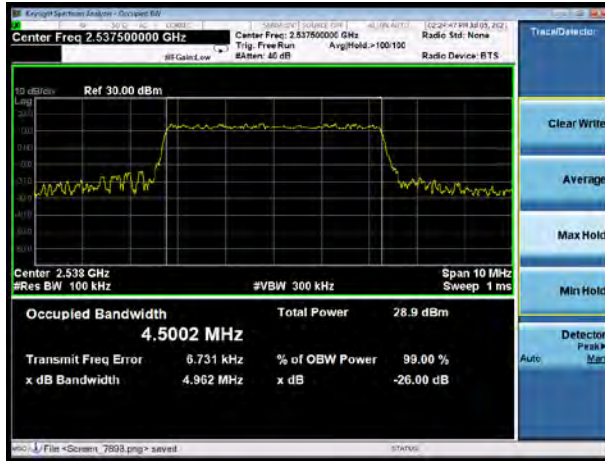


LTE Band 41 16QAM 20MHz CH-High

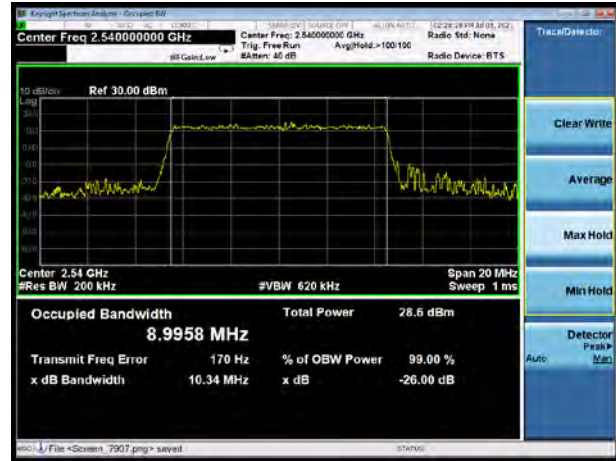




LTE Band 41 64QAM 5MHz CH-Low



LTE Band 41 64QAM 10MHz CH-Low



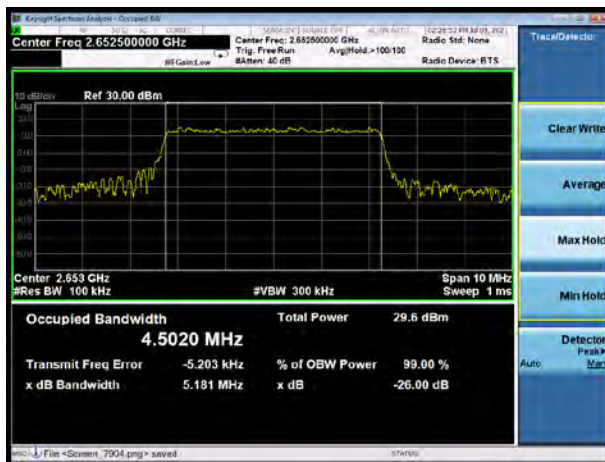
LTE Band 41 64QAM 5MHz CH-Middle



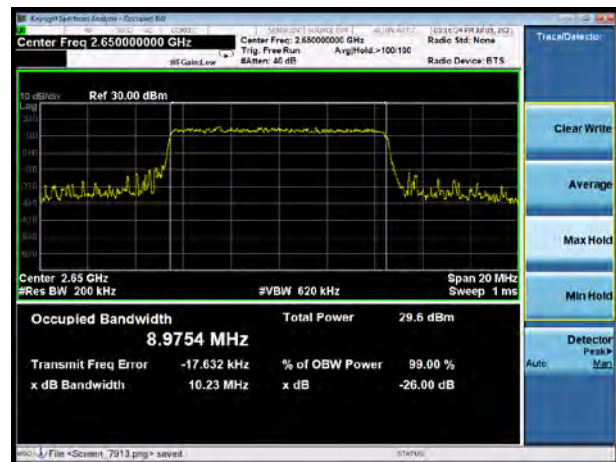
LTE Band 41 64QAM 10MHz CH-Middle



LTE Band 41 64QAM 5MHz CH-High



LTE Band 41 64QAM 10MHz CH-High

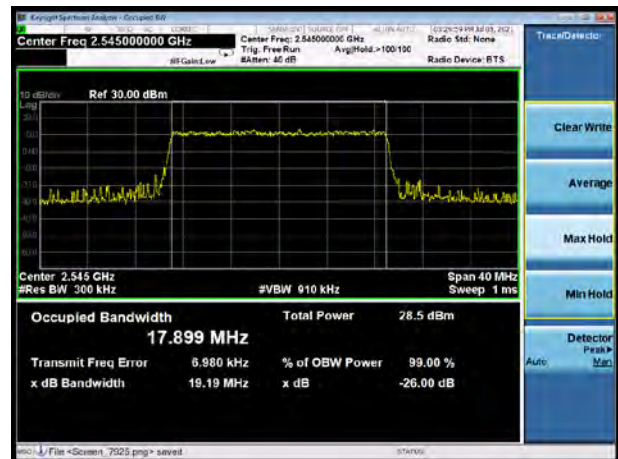




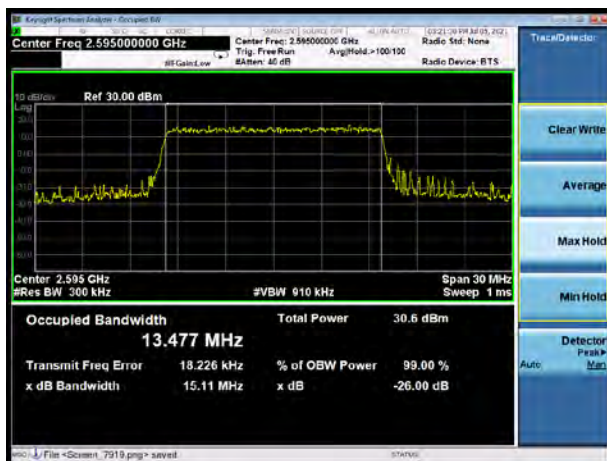
LTE Band 41 64QAM 15MHz CH-Low



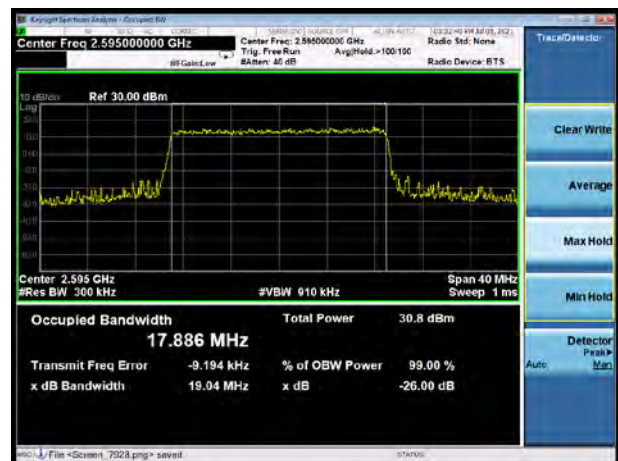
LTE Band 41 64QAM 20MHz CH-Low



LTE Band 41 64QAM 15MHz CH-Middle



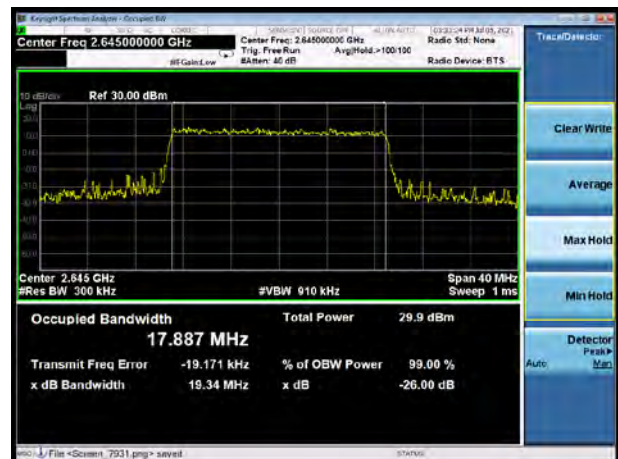
LTE Band 41 64QAM 20MHz CH-Middle



LTE Band 41 64QAM 15MHz CH-High



LTE Band 41 64QAM 20MHz CH-High





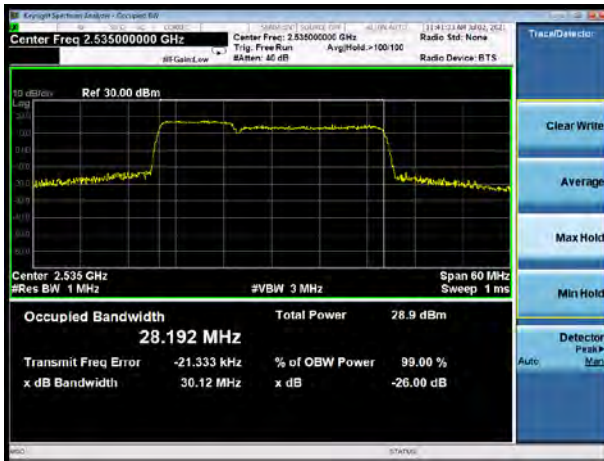
CA\_7C\_10MHz+20MHz QPSK



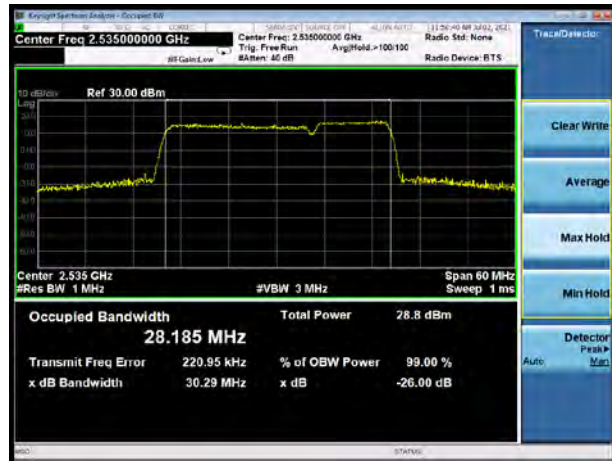
CA\_7C\_20MHz+10MHz QPSK



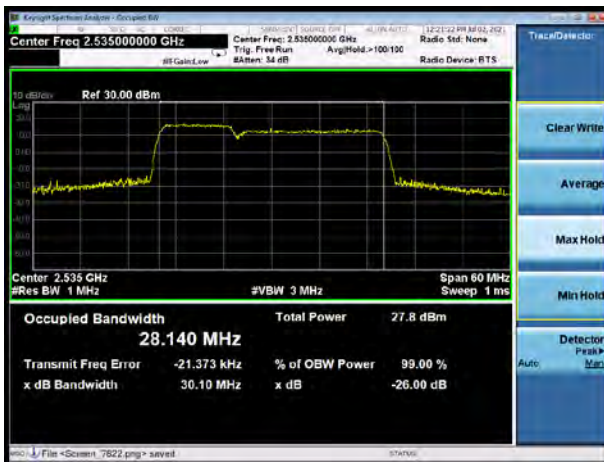
CA\_7C\_10MHz+20MHz 16QAM



CA\_7C\_20MHz+10MHz 16QAM



CA\_7C\_10MHz+20MHz 64QAM



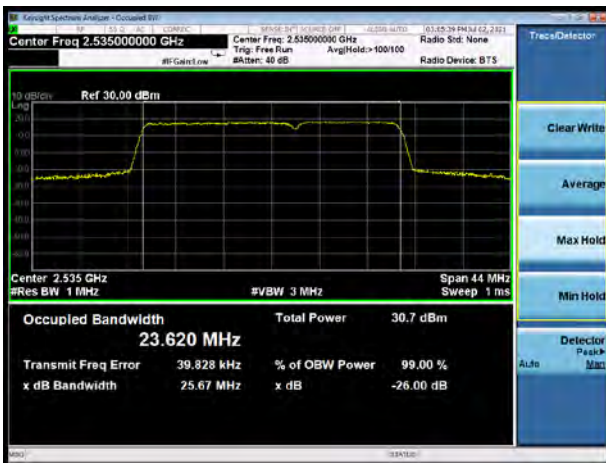
CA\_7C\_20MHz+10MHz 64QAM







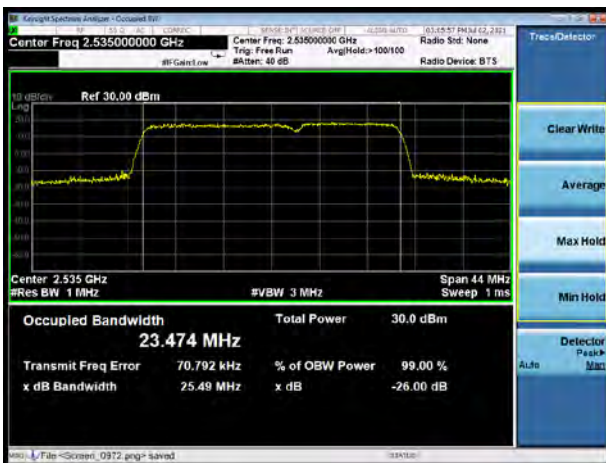
### CA\_7C\_15MHz+10MHz QPSK



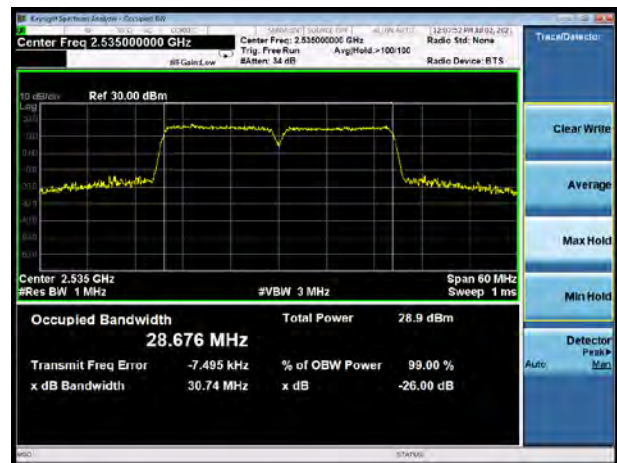
### CA\_7C\_15MHz+15MHz QPSK



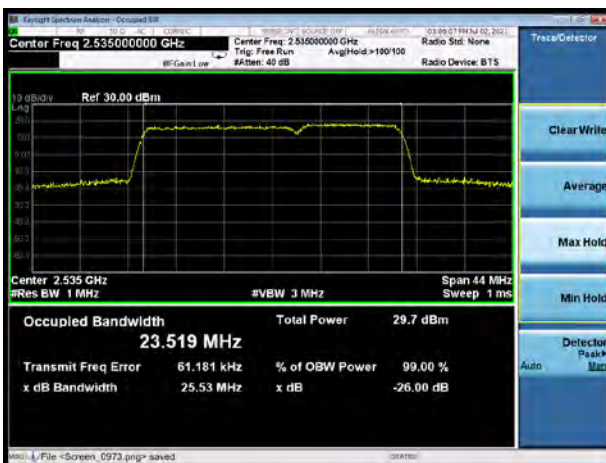
### CA\_7C\_15MHz+10MHz 16QAM



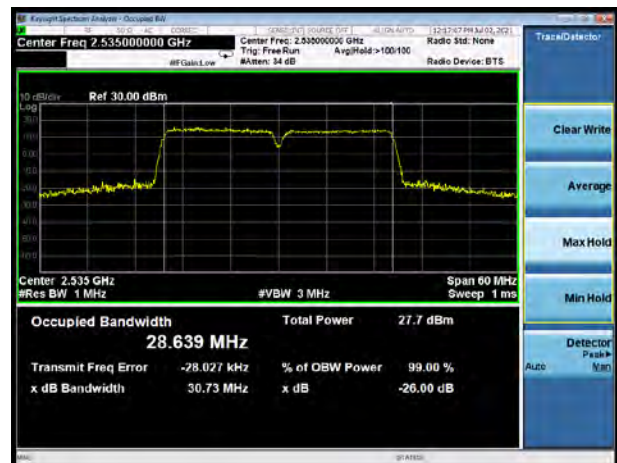
### CA\_7C\_15MHz+15MHz 16QAM



### CA\_7C\_15MHz+10MHz 64QAM



### CA\_7C\_15MHz+15MHz 64QAM

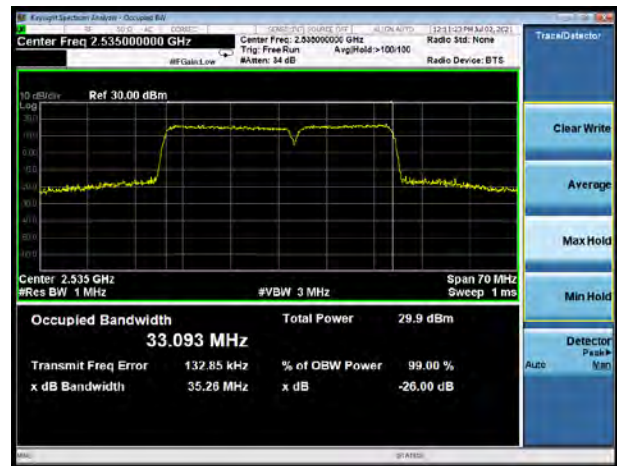




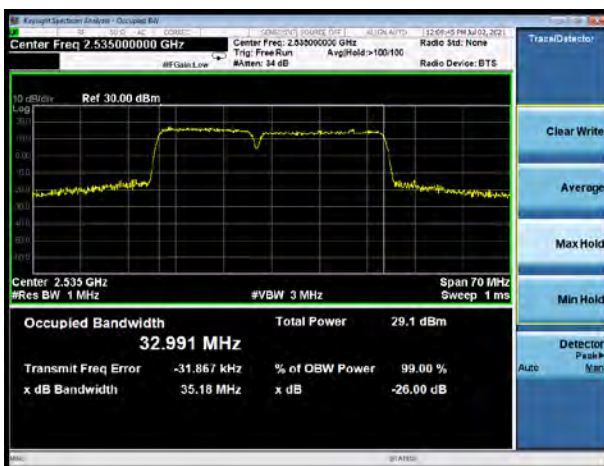
### CA\_7C\_15MHz+20MHz QPSK



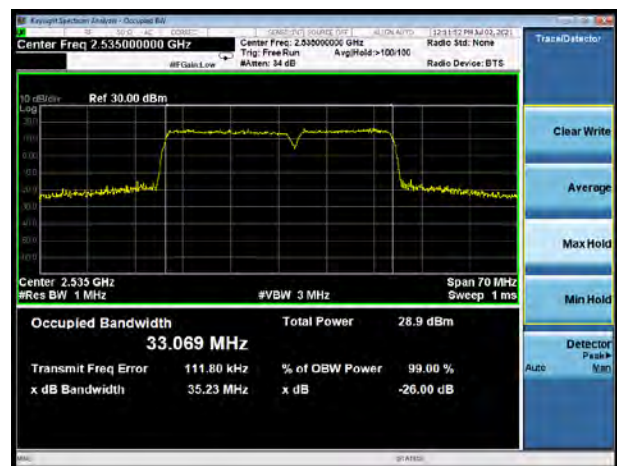
### CA\_7C\_20MHz+15MHz QPSK



### CA\_7C\_15MHz+20MHz 16QAM



### CA\_7C\_20MHz+15MHz 16QAM



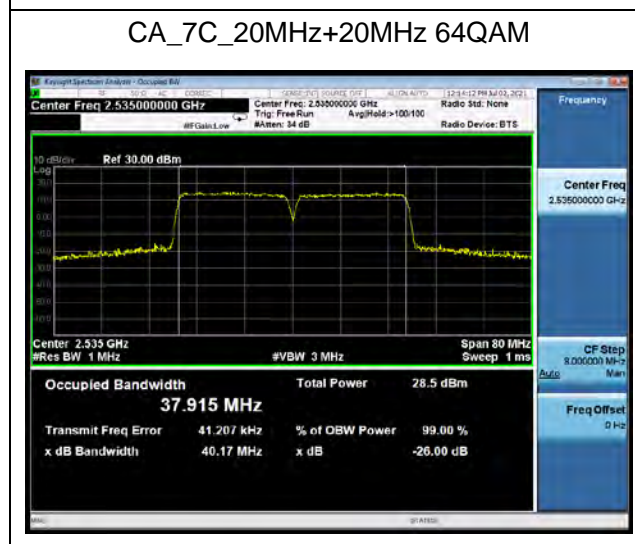
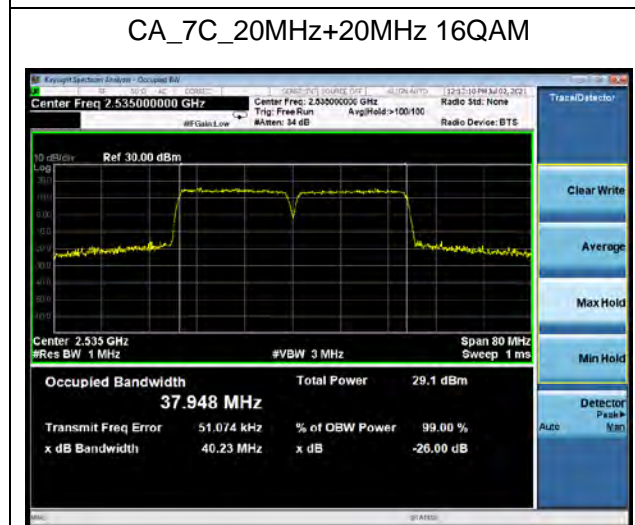
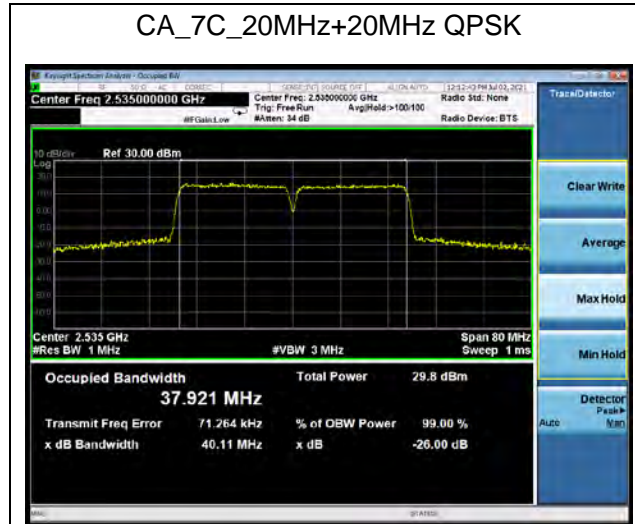
### CA\_7C\_15MHz+20MHz 64QAM



### CA\_7C\_20MHz+15MHz 64QAM





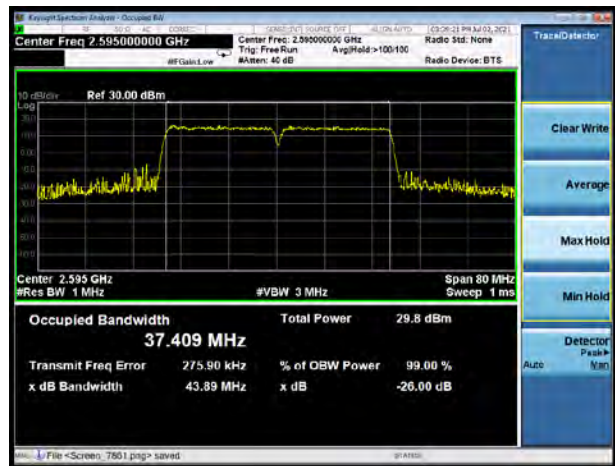




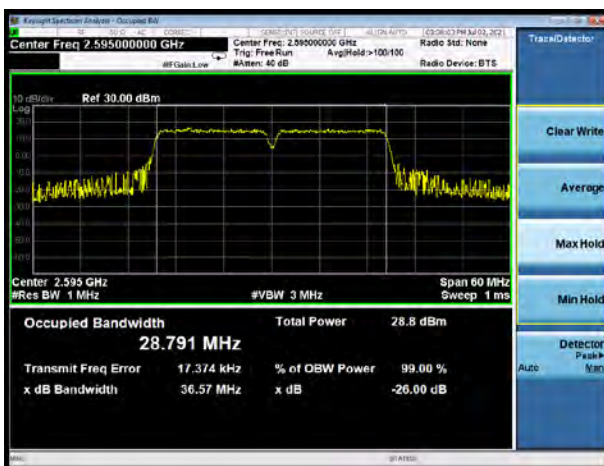
### CA\_38C\_15MHz+15MHz QPSK



### CA\_38C\_20MHz+20MHz QPSK



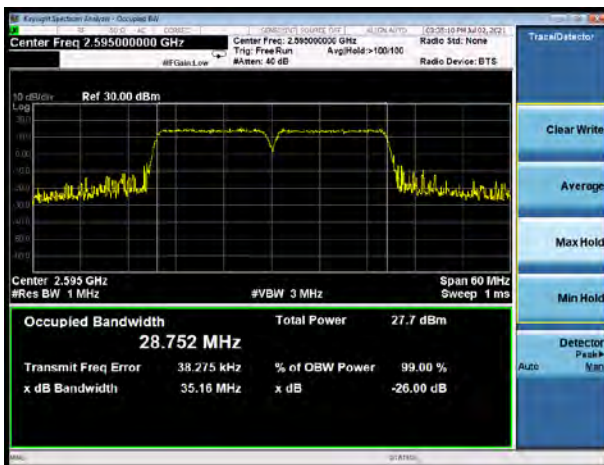
### CA\_38C\_15MHz+15MHz 16QAM



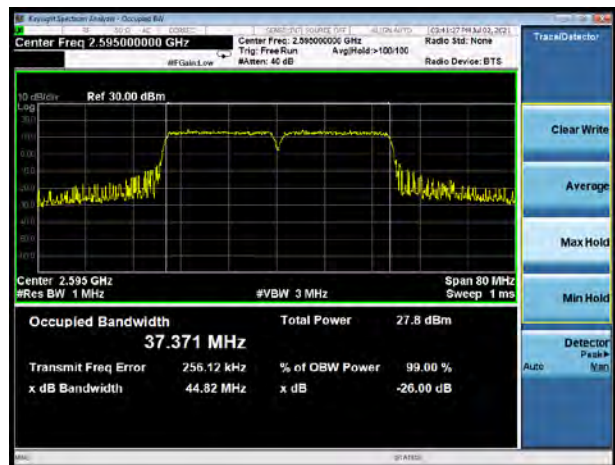
### CA\_38C\_20MHz+20MHz 16QAM



### CA\_38C\_15MHz+15MHz 64QAM



### CA\_38C\_20MHz+20MHz 64QAM



### 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 testing follows KDB 971168 D01 v03r01 Section 6.0

The EUT was connected to spectrum analyzer and system simulator via a power divider.

The band edges of low and high channels for the highest RF powers were measured.

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

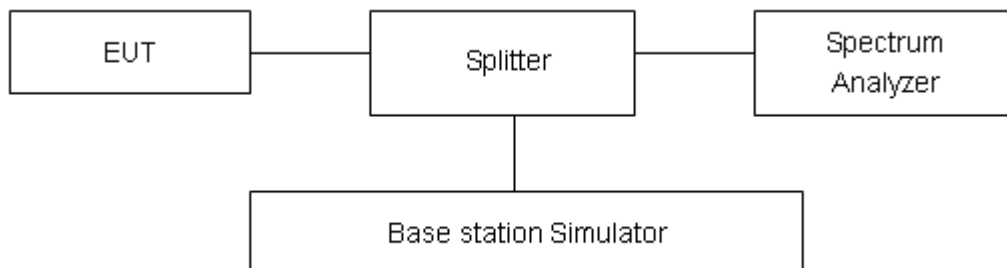
on spectrum analyzer.

Set spectrum analyzer with RMS detector.

The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

Checked that all the results comply with the emission limit line.

#### Test Setup



#### Limits

Rule Part 27.53(i) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2305 and 2320 MHz.

LTE 4- Rule Part 27.53(h) specifies that “for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10} (P)$  dB”

LTE 7/38/41- Rule Part 27.53(m) (4)/ specifies that “for BRS and EBS stations. For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all



frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(4) of this section. In addition, the attenuation factor shall not be less than  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Example:

The limit line is derived from  $43 + 10 \log (P)$  dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10 \log (P)] \text{ (dB)}$$

$$= [30 + 10 \log (P)] \text{ (dBm)} - [43 + 10 \log (P)] \text{ (dB)} = -13 \text{ dBm.}$$

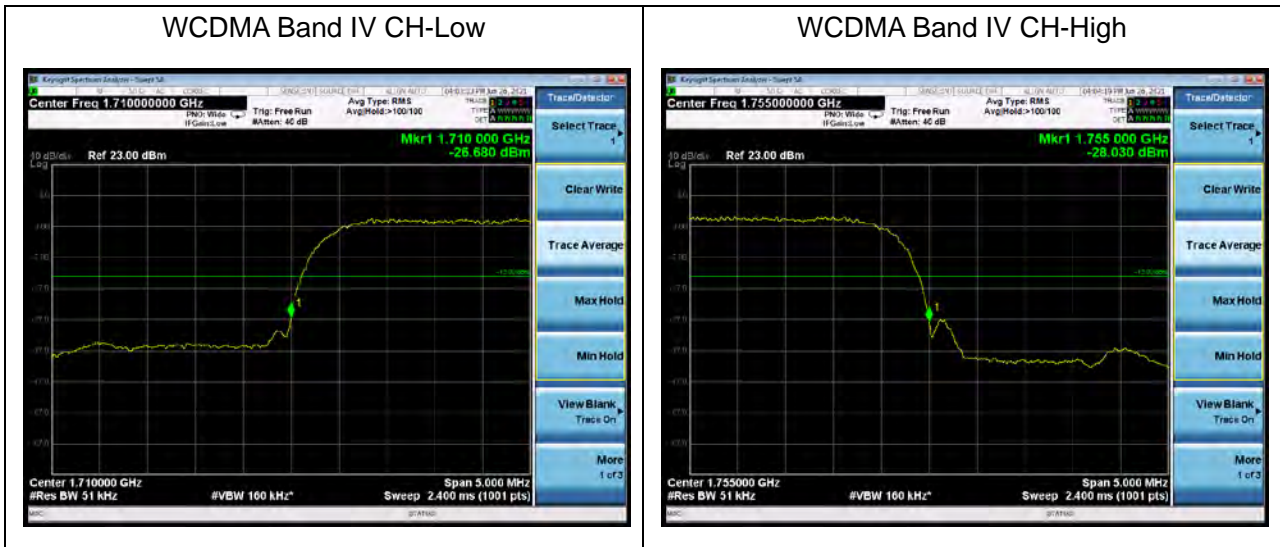
### Measurement Uncertainty

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



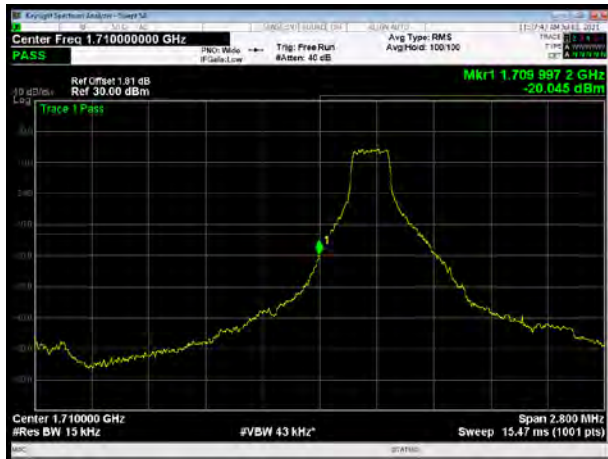
### Test Result

All the test traces in the plots shows the test results clearly.

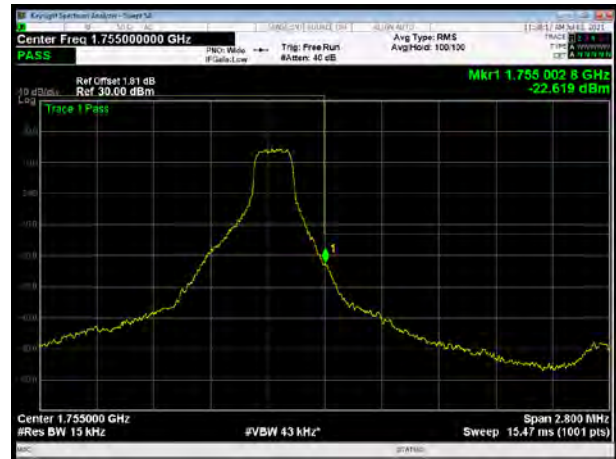




LTE Band 4 QPSK 1.4MHz CH-Low, 1 RB



LTE Band 4 QPSK 1.4MHz CH-High, 1 RB



LTE Band 4 QPSK 1.4MHz CH-Low, 100%RB



LTE Band 4 QPSK 1.4MHz CH-High, 100%RB



LTE Band 4 QPSK 3MHz CH-Low, 1 RB



LTE Band 4 QPSK 3MHz CH-High, 1 RB





LTE Band 4 QPSK 3MHz CH-Low, 100%RB



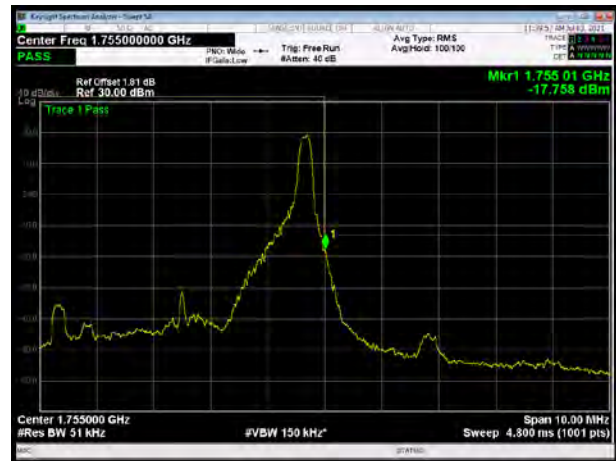
LTE Band 4 QPSK 3MHz CH-High, 100%RB



LTE Band 4 QPSK 5MHz CH-Low, 1 RB



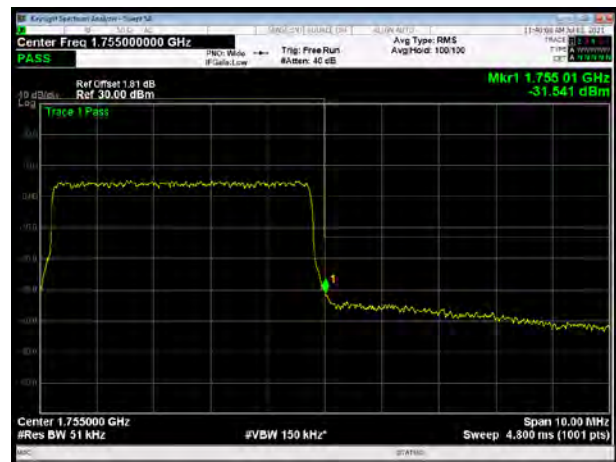
LTE Band 4 QPSK 5MHz CH-High, 1 RB



LTE Band 4 QPSK 5MHz CH-Low, 100%RB



LTE Band 4 QPSK 5MHz CH-High, 100%RB







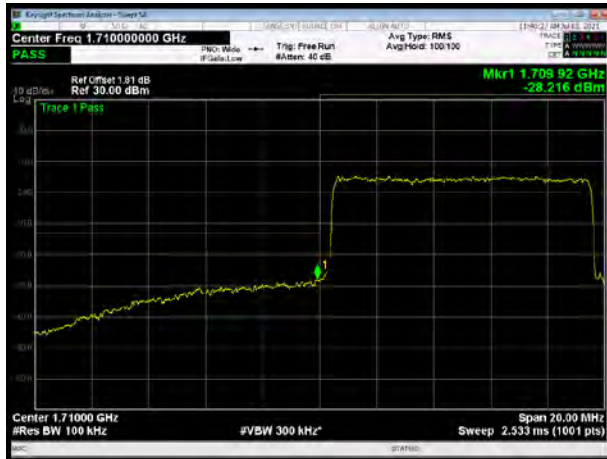
LTE Band 4 QPSK 10MHz CH-Low, 1 RB



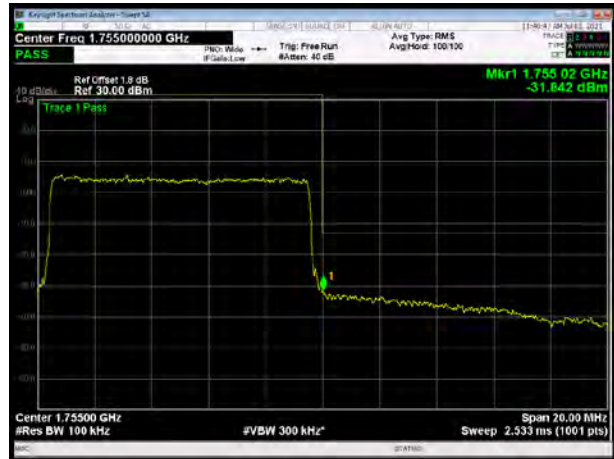
LTE Band 4 QPSK 10MHz CH-High, 1 RB



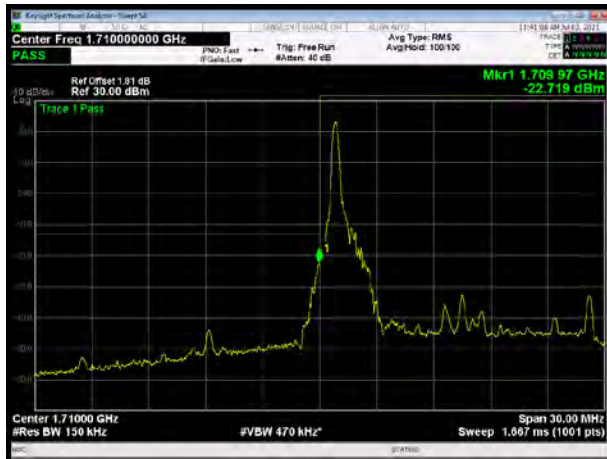
LTE Band 4 QPSK 10MHz CH-Low, 100%RB



LTE Band 4 QPSK 10MHz CH-High, 100%RB



LTE Band 4 QPSK 15MHz CH-Low, 1 RB



LTE Band 4 QPSK 15MHz CH-High, 1 RB





LTE Band 4 QPSK 15MHz CH-Low, 100%RB



LTE Band 4 QPSK 15MHz CH-High, 100%RB



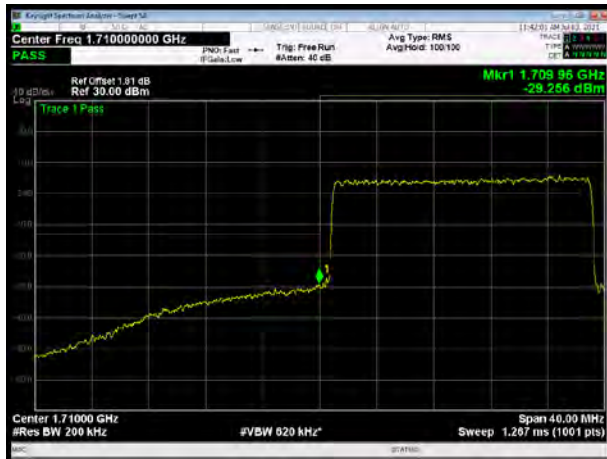
LTE Band 4 QPSK 20MHz CH-Low, 1 RB



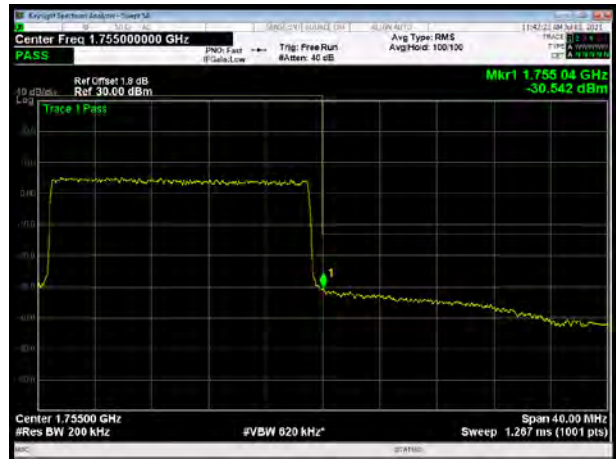
LTE Band 4 QPSK 20MHz CH-High, 1 RB



LTE Band 4 QPSK 20MHz CH-Low, 100%RB



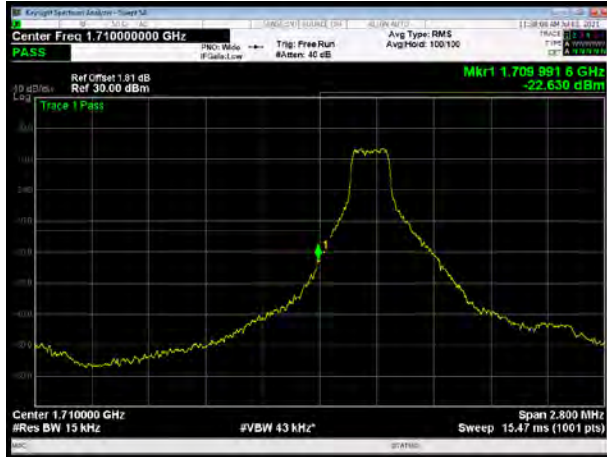
LTE Band 4 QPSK 20MHz CH-High, 100%RB







LTE Band 4 16QAM 1.4MHz CH-Low, 1 RB



LTE Band 4 16QAM 1.4MHz CH-High, 1 RB



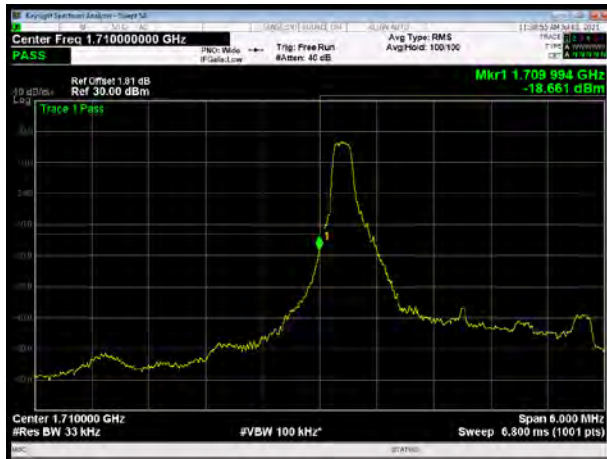
LTE Band 4 16QAM 1.4MHz CH-Low, 100%RB



LTE Band 4 16QAM 1.4MHz CH-High, 100%RB



LTE Band 4 16QAM 3MHz CH-Low, 1 RB

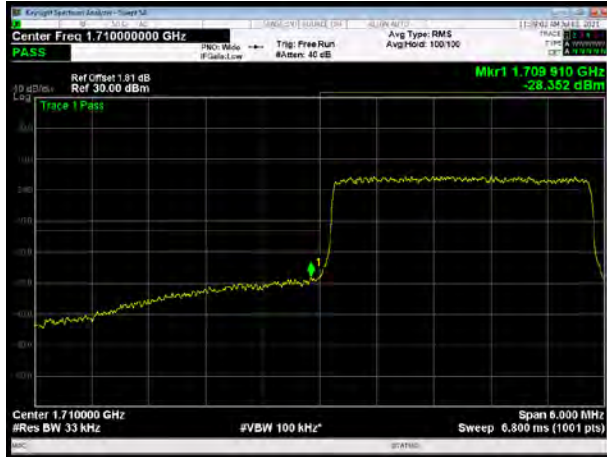


LTE Band 4 16QAM 3MHz CH-High, 1 RB





LTE Band 4 16QAM 3MHz CH-Low, 100%RB



LTE Band 4 16QAM 3MHz CH-High, 100%RB



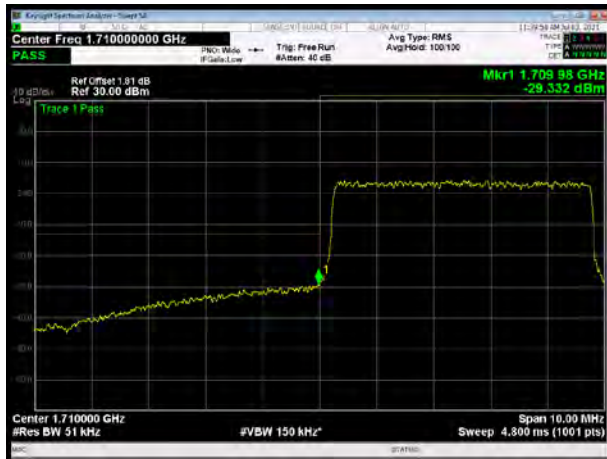
LTE Band 4 16QAM 5MHz CH-Low, 1 RB



LTE Band 4 16QAM 5MHz CH-High, 1 RB



LTE Band 4 16QAM 5MHz CH-Low, 100%RB



LTE Band 4 16QAM 5MHz CH-High, 100%RB





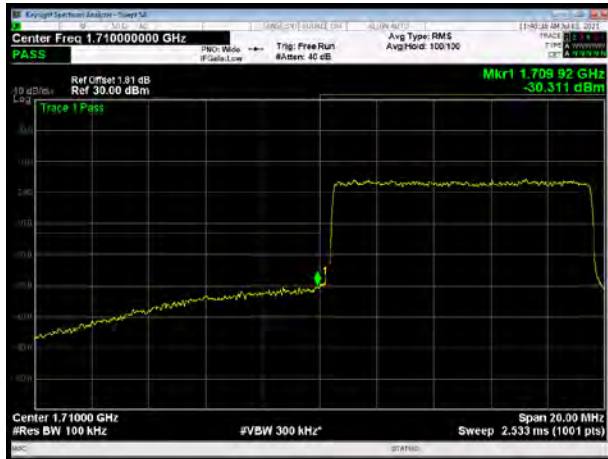
LTE Band 4 16QAM 10MHz CH-Low, 1 RB



LTE Band 4 16QAM 10MHz CH-High, 1 RB



LTE Band 4 16QAM 10MHz CH-Low, 100%RB



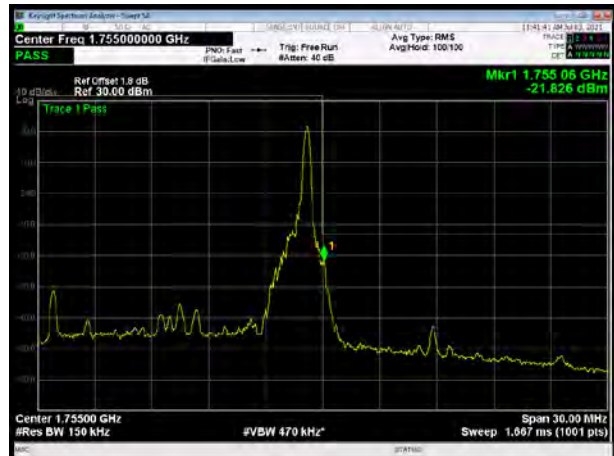
LTE Band 4 16QAM 10MHz CH-High, 100%RB



LTE Band 4 16QAM 15MHz CH-Low, 1 RB



LTE Band 4 16QAM 15MHz CH-High, 1 RB







LTE Band 4 16QAM 15MHz CH-Low, 100%RB



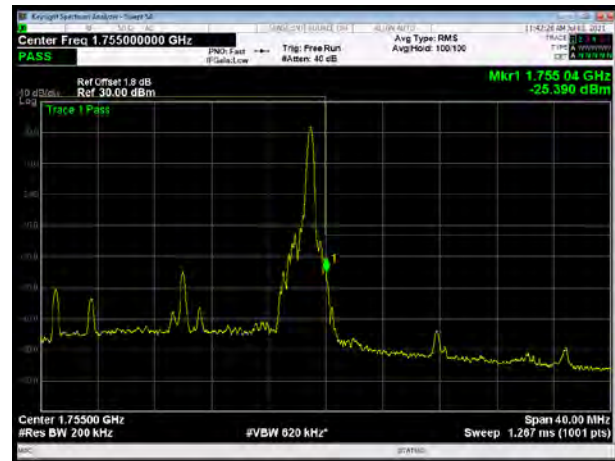
LTE Band 4 16QAM 15MHz CH-High, 100%RB



LTE Band 4 16QAM 20MHz CH-Low, 1 RB



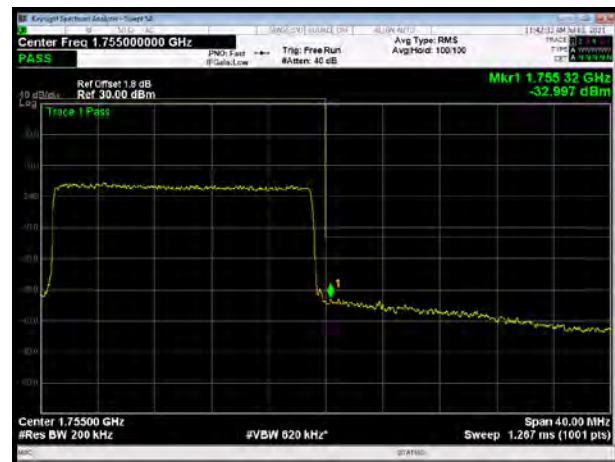
LTE Band 4 16QAM 20MHz CH-High, 1 RB



LTE Band 4 16QAM 20MHz CH-Low, 100%RB



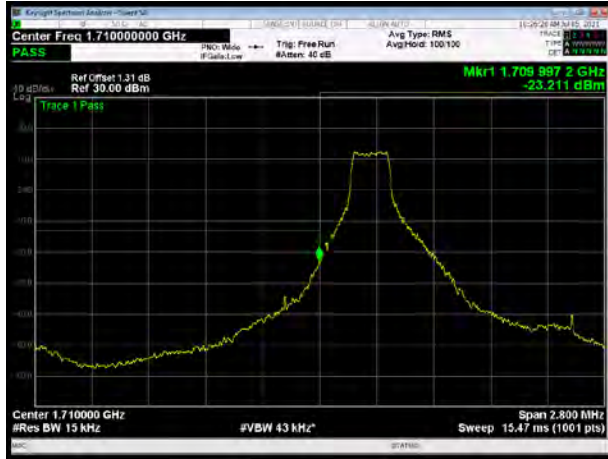
LTE Band 4 16QAM 20MHz CH-High, 100%RB







LTE Band 4 64QAM 1.4MHz CH-Low, 1 RB



LTE Band 4 64QAM 1.4MHz CH-High, 1 RB



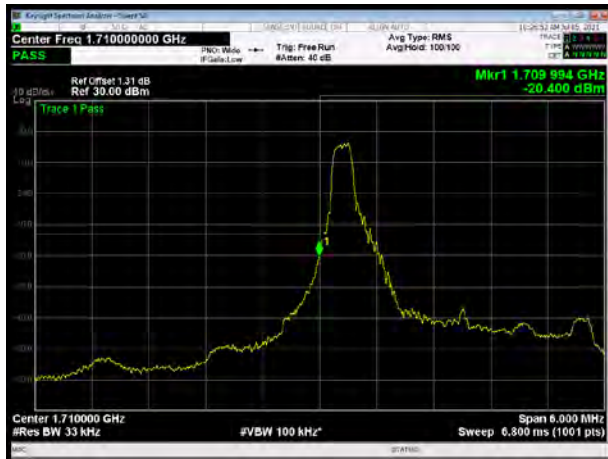
LTE Band 4 64QAM 1.4MHz CH-Low, 100%RB



LTE Band 4 64QAM 1.4MHz CH-High, 100%RB



LTE Band 4 64QAM 3MHz CH-Low, 1 RB

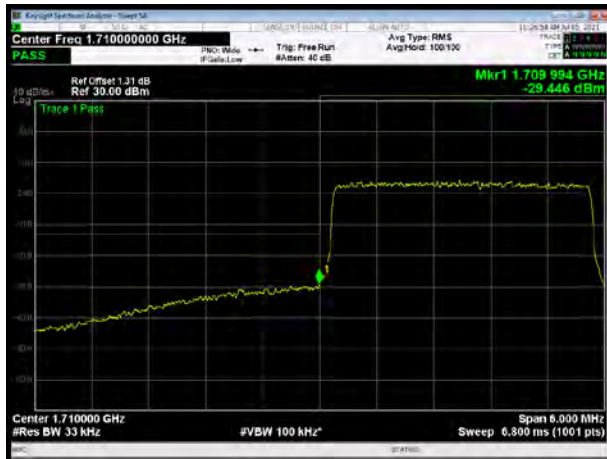


LTE Band 4 64QAM 3MHz CH-High, 1 RB





LTE Band 4 64QAM 3MHz CH-Low, 100%RB



LTE Band 4 64QAM 3MHz CH-High, 100%RB



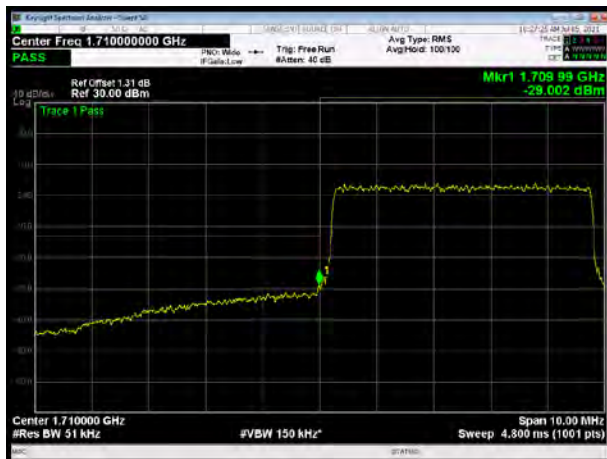
LTE Band 4 64QAM 5MHz CH-Low, 1 RB



LTE Band4 64QAM 5MHz CH-High, 1 RB



LTE Band 4 64QAM 5MHz CH-Low, 100%RB

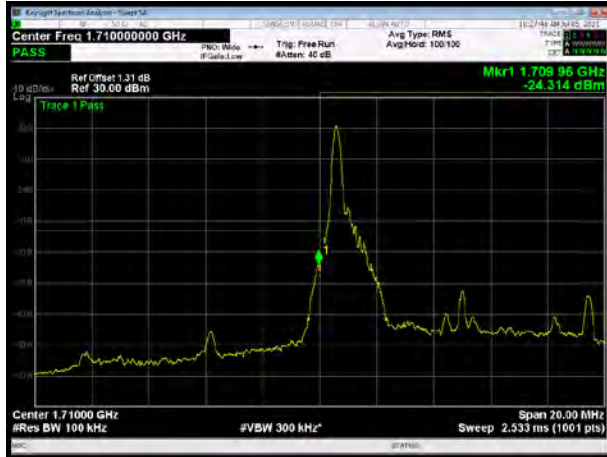


LTE Band 4 64QAM 5MHz CH-High, 100%RB

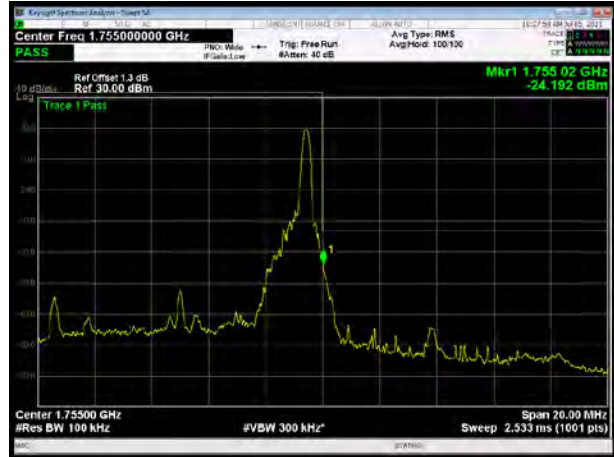




LTE Band 4 64QAM 10MHz CH-Low, 1 RB



LTE Band 4 64QAM 10MHz CH-High, 1 RB



LTE Band 4 64QAM 10MHz CH-Low, 100%RB



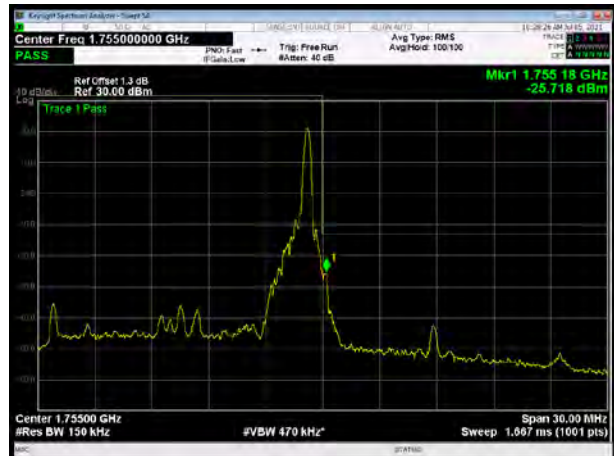
LTE Band 4 64QAM 10MHz CH-High, 100%RB



LTE Band 4 64QAM 15MHz CH-Low, 1 RB



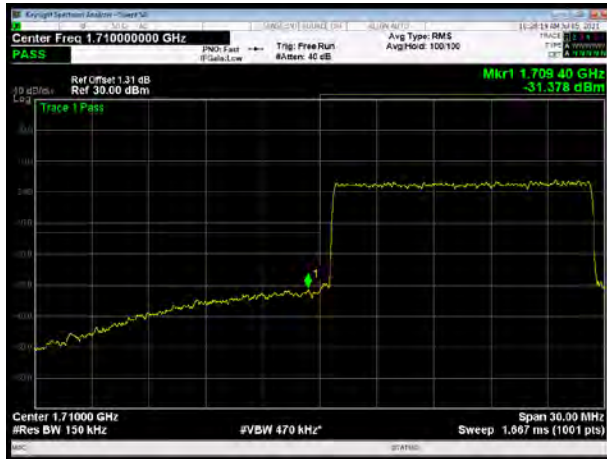
LTE Band 4 64QAM 15MHz CH-High, 1 RB







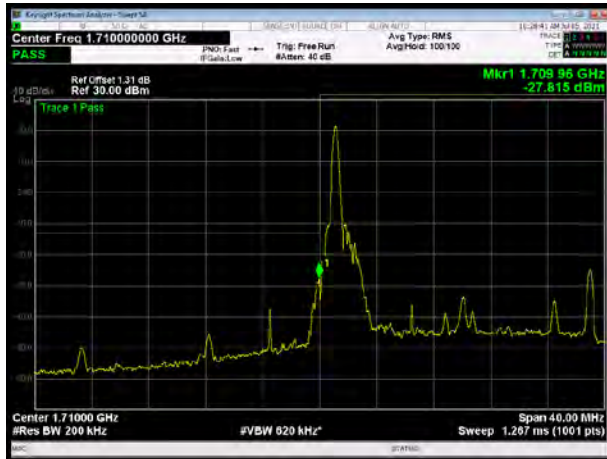
LTE Band 4 64QAM 15MHz CH-Low, 100%RB



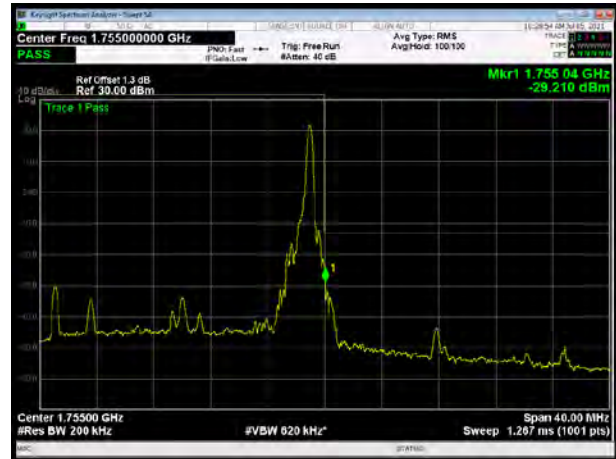
LTE Band 4 64QAM 15MHz CH-High, 100%RB



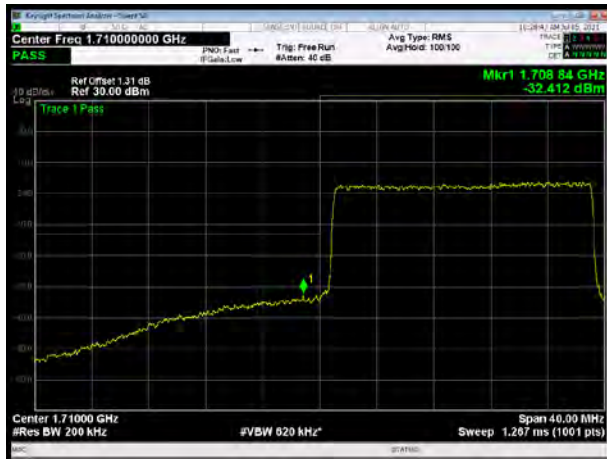
LTE Band 4 64QAM 20MHz CH-Low, 1 RB



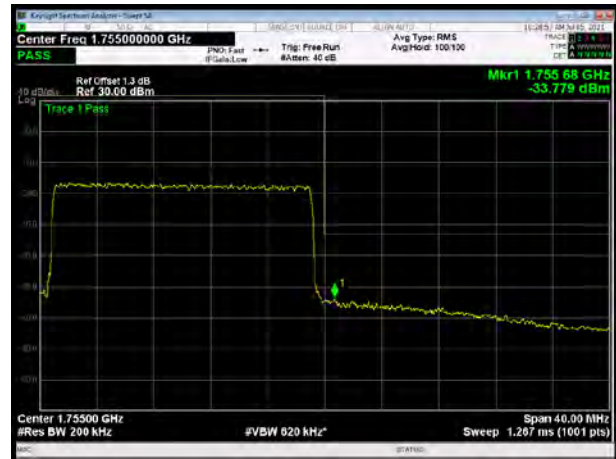
LTE Band 4 64QAM 20MHz CH-High, 1 RB



LTE Band 4 64QAM 20MHz CH-Low, 100%RB



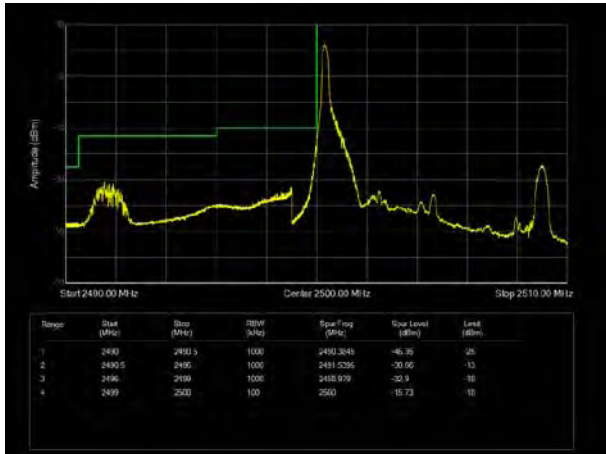
LTE Band 4 64QAM 20MHz CH-High, 100%RB



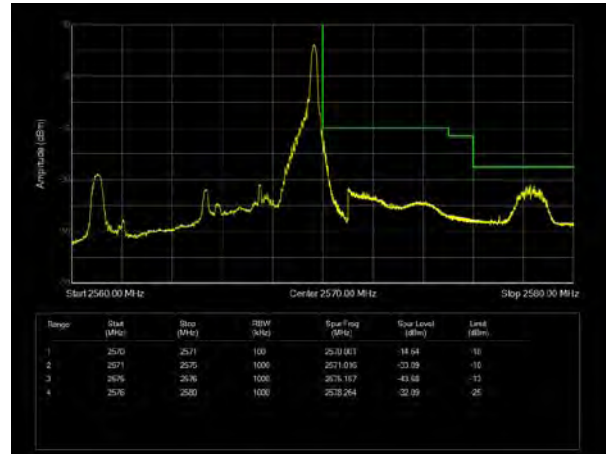




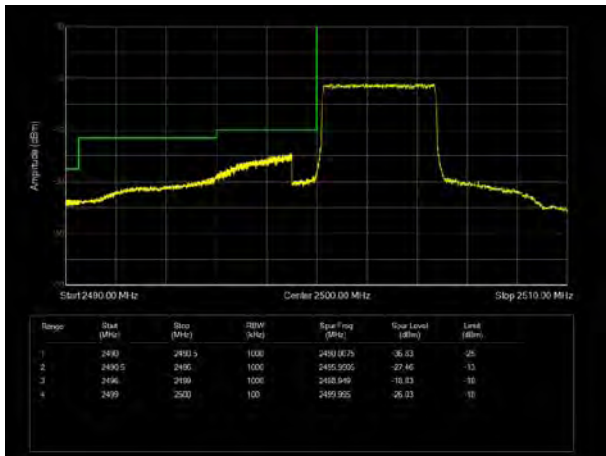
LTE Band 7 QPSK 5MHz CH-Low, 1 RB



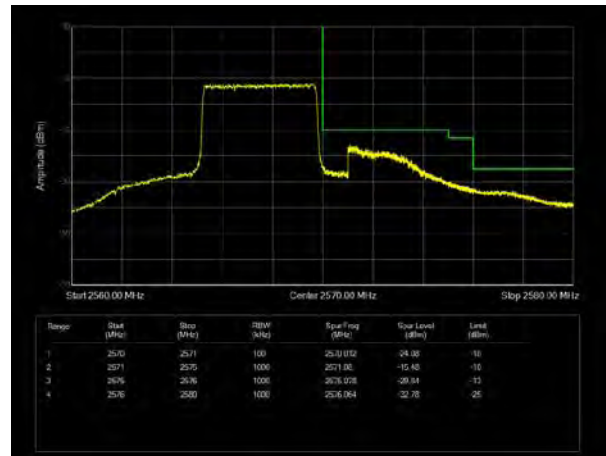
LTE Band 7 QPSK 5MHz CH-High, 1 RB



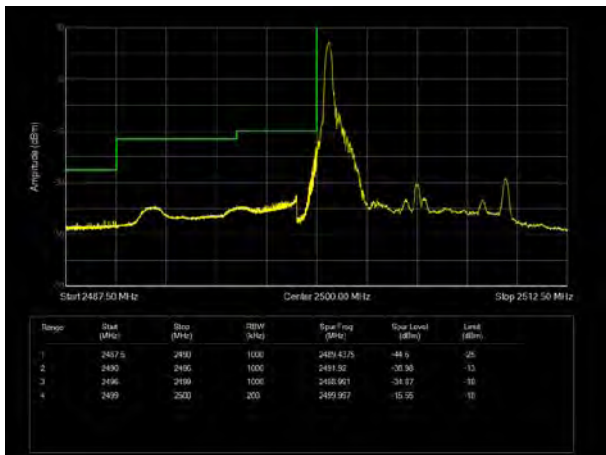
LTE Band 7 QPSK 5MHz CH-Low, 100%RB



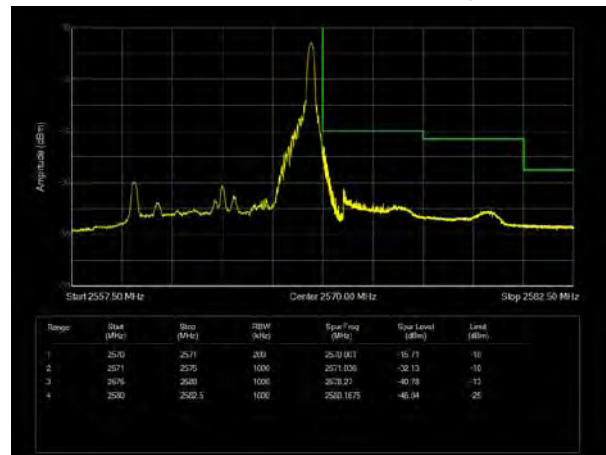
LTE Band 7 QPSK 5MHz CH-High, 100%RB



LTE Band 7 QPSK 10MHz CH-Low, 1 RB

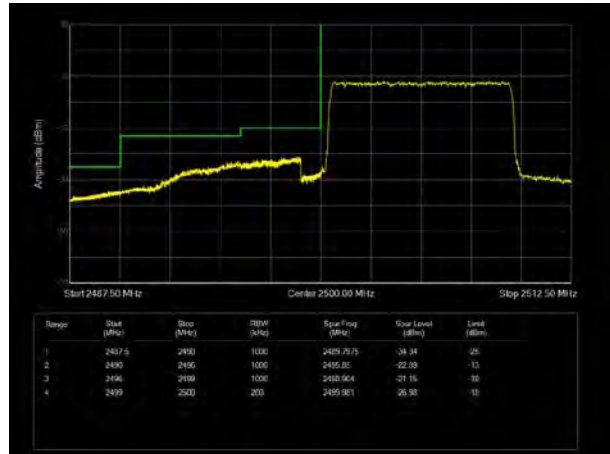


LTE Band 7 QPSK 10MHz CH-High, 1 RB

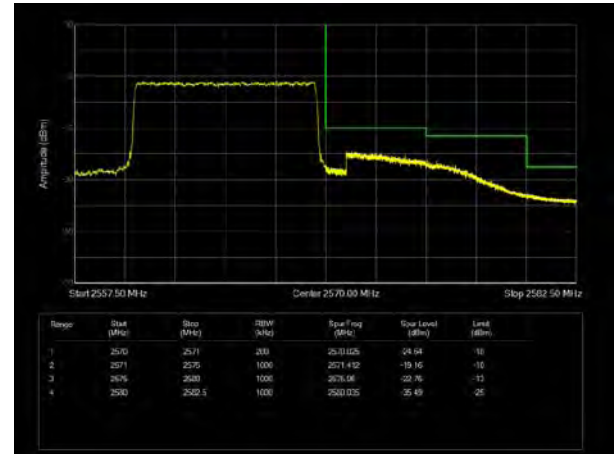




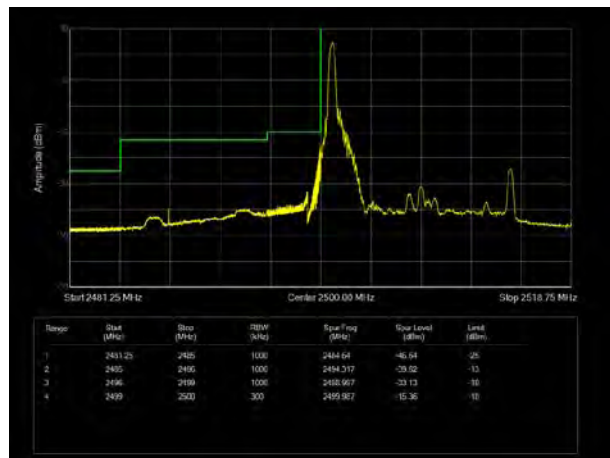
LTE Band 7 QPSK 10MHz CH-Low, 100%RB



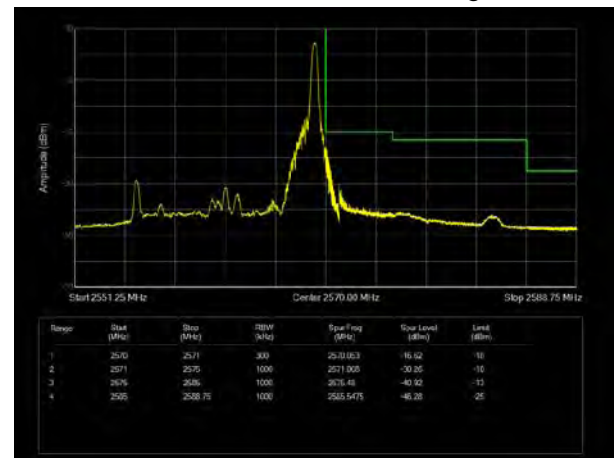
LTE Band 7 QPSK 10MHz CH-High, 100%RB



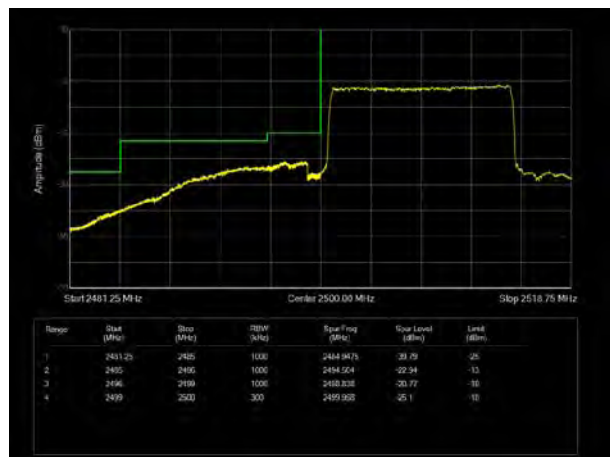
LTE Band 7 QPSK 15MHz CH-Low, 1 RB



LTE Band 7 QPSK 15MHz CH-High, 1 RB



LTE Band 7 QPSK 15MHz CH-Low, 100%RB

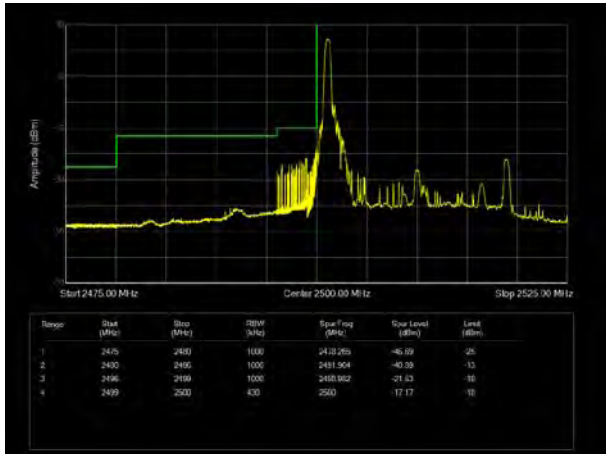


LTE Band 7 QPSK 15MHz CH-High, 100%RB

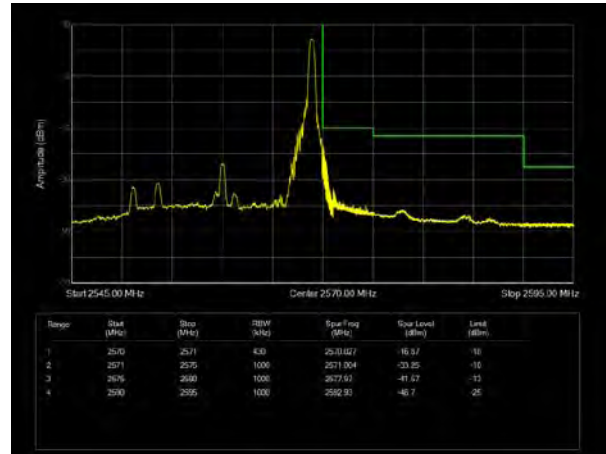




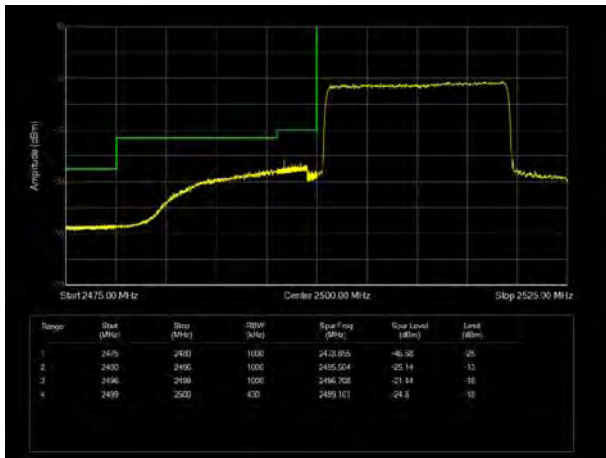
LTE Band 7 QPSK 20MHz CH-Low, 1 RB



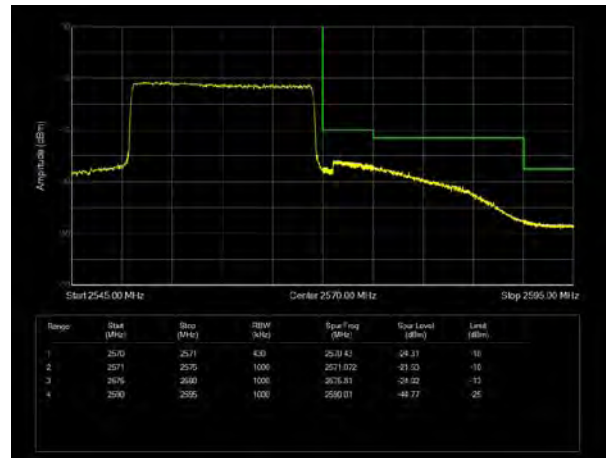
LTE Band 7 QPSK 20MHz CH-High, 1 RB



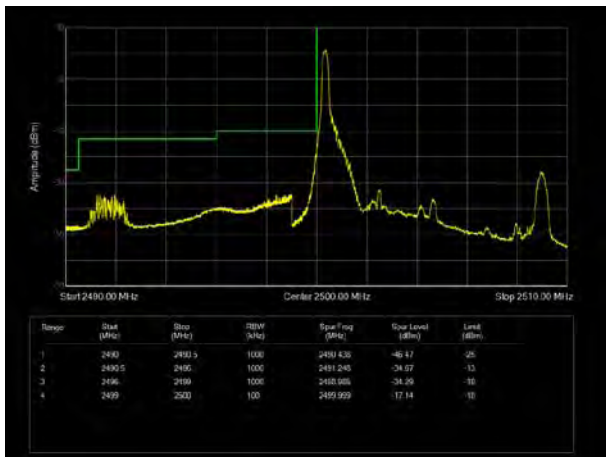
LTE Band 7 QPSK 20MHz CH-Low, 100%RB



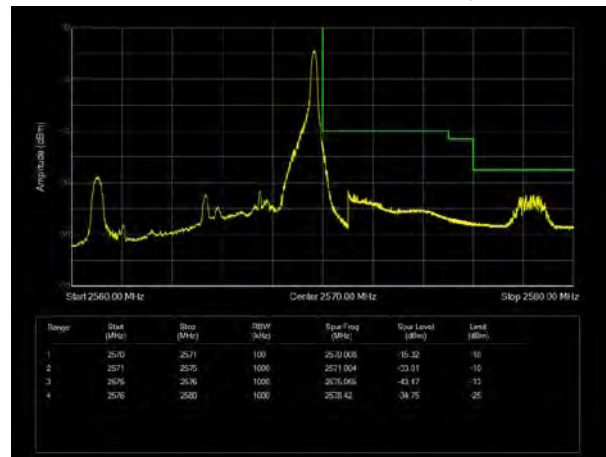
LTE Band 7 QPSK 20MHz CH-High, 100%RB



LTE Band 7 16QAM 5MHz CH-Low, 1 RB

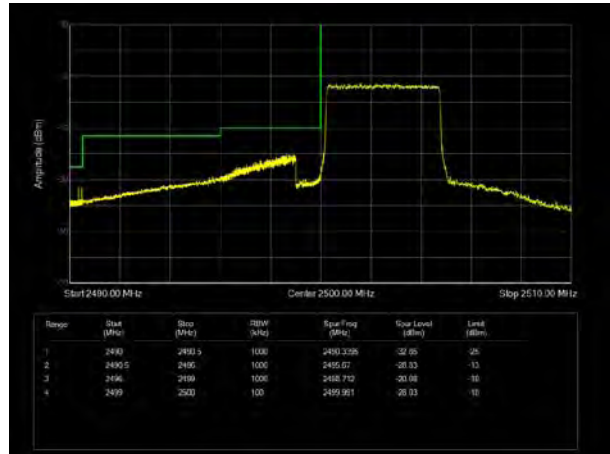


LTE Band 7 16QAM 5MHz CH-High, 1 RB

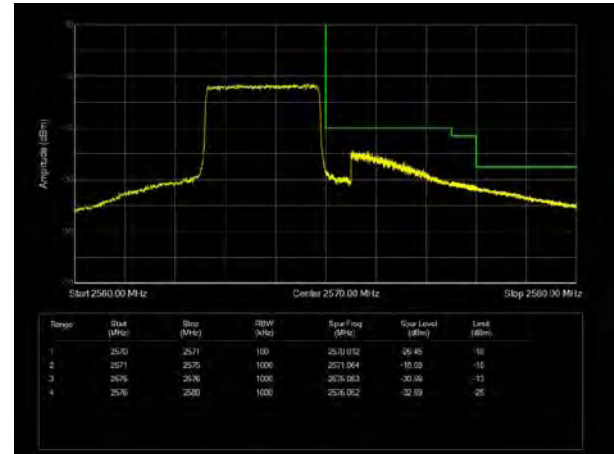




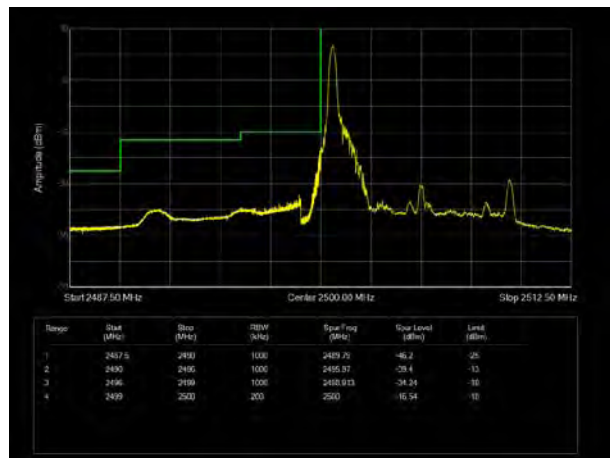
LTE Band 7 16QAM 5MHz CH-Low, 100%RB



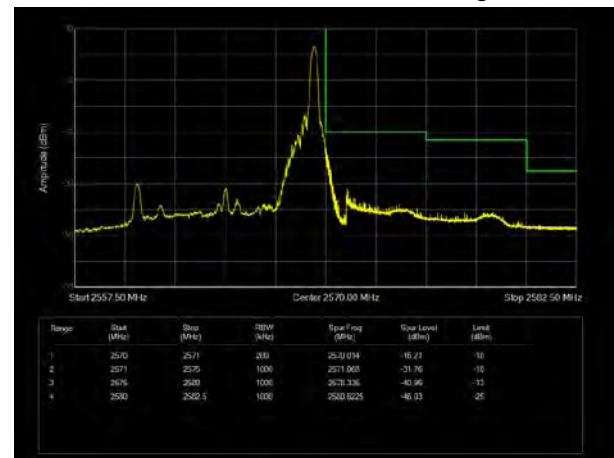
LTE Band 7 16QAM 5MHz CH-High, 100%RB



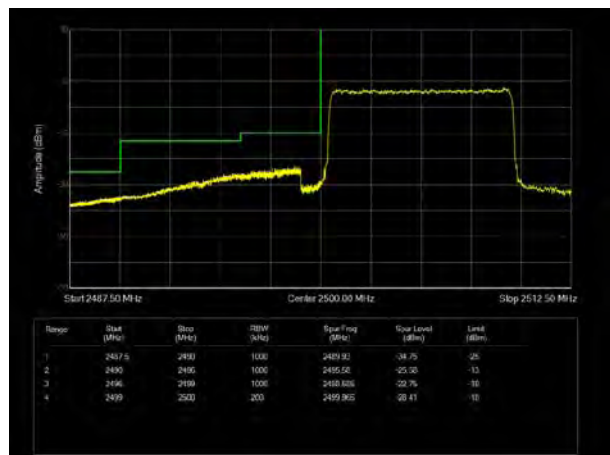
LTE Band 7 16QAM 10MHz CH-Low, 1 RB



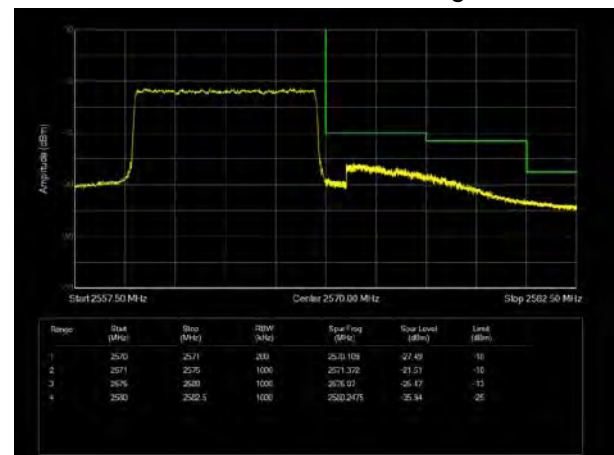
LTE Band 7 16QAM 10MHz CH-High, 1 RB



LTE Band 7 16QAM 10MHz CH-Low, 100%RB



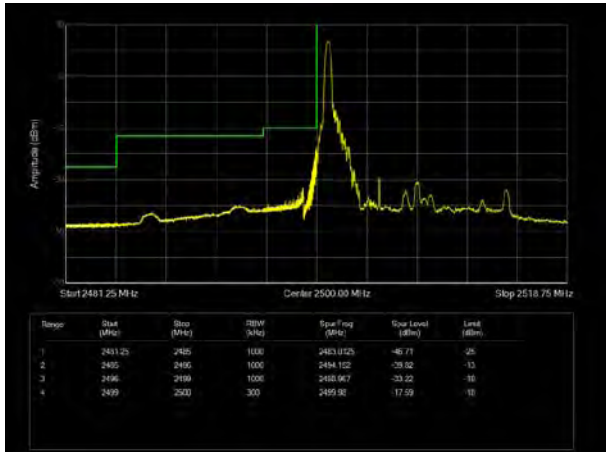
LTE Band 7 16QAM 10MHz CH-High, 100%RB



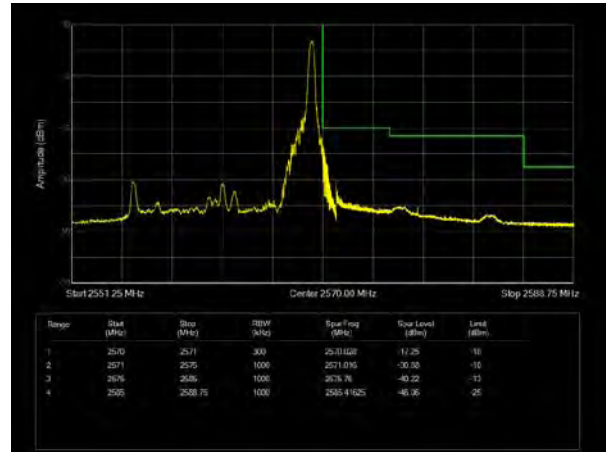




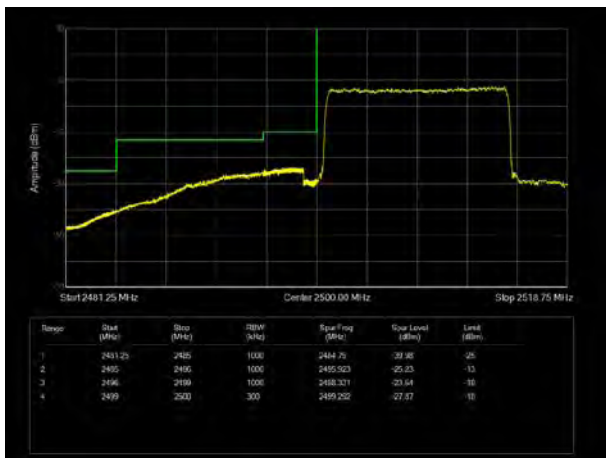
LTE Band 7 16QAM 15MHz CH-Low, 1 RB



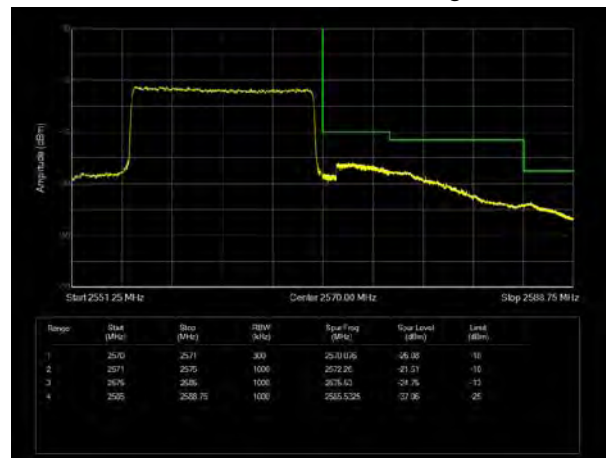
LTE Band 7 16QAM 15MHz CH-High, 1 RB



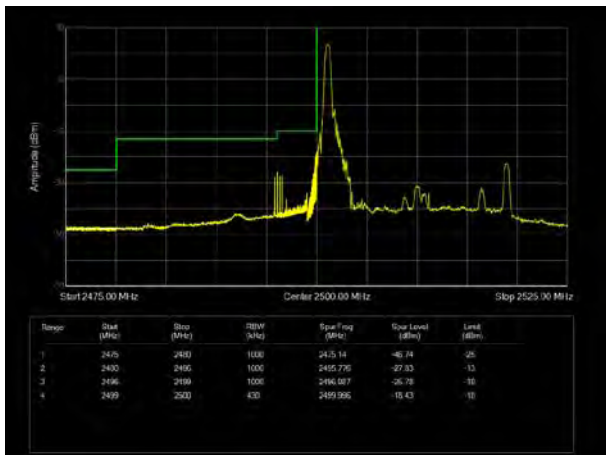
LTE Band 7 16QAM 15MHz CH-Low, 100%RB



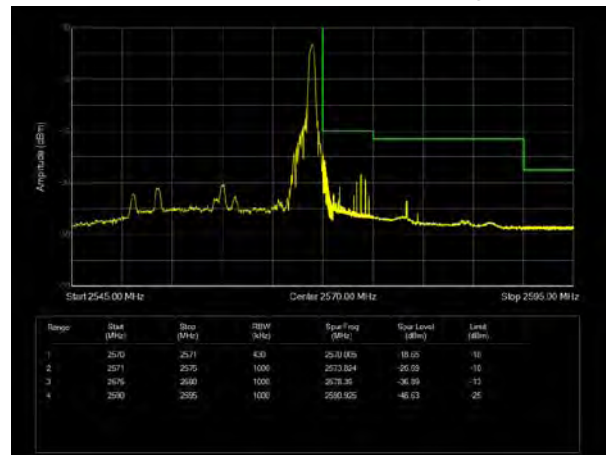
LTE Band 7 16QAM 15MHz CH-High, 100%RB



LTE Band 7 16QAM 20MHz CH-Low, 1 RB

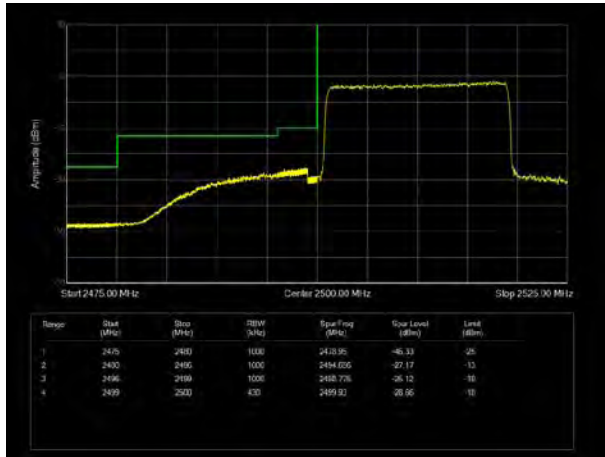


LTE Band 7 16QAM 20MHz CH-High, 1 RB

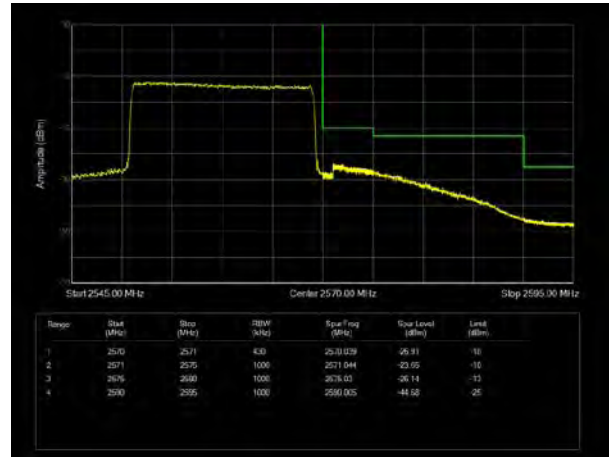




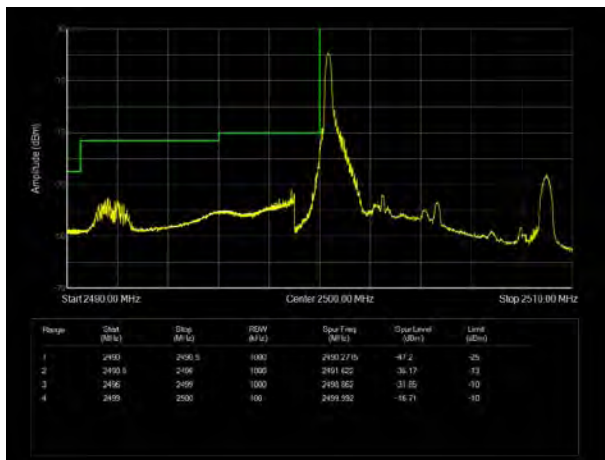
LTE Band 7 16QAM 20MHz CH-Low, 100%RB



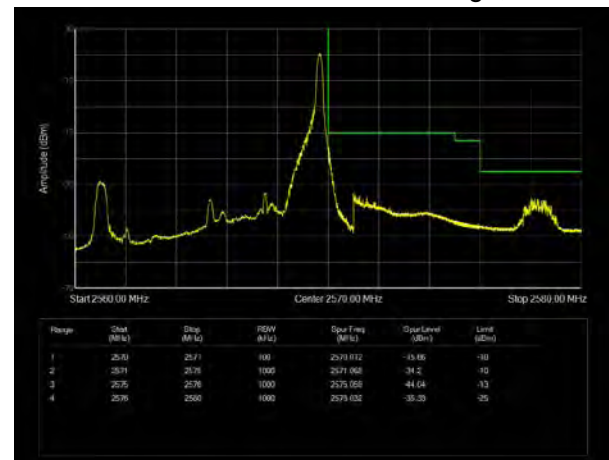
LTE Band 7 16QAM 20MHz CH-High, 100%RB



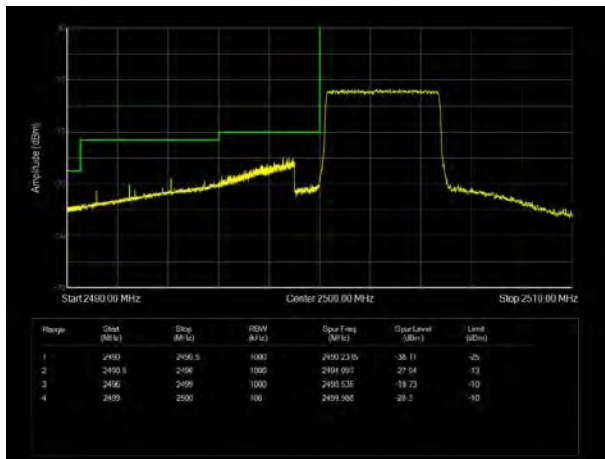
LTE Band 7 64QAM 5MHz CH-Low, 1 RB



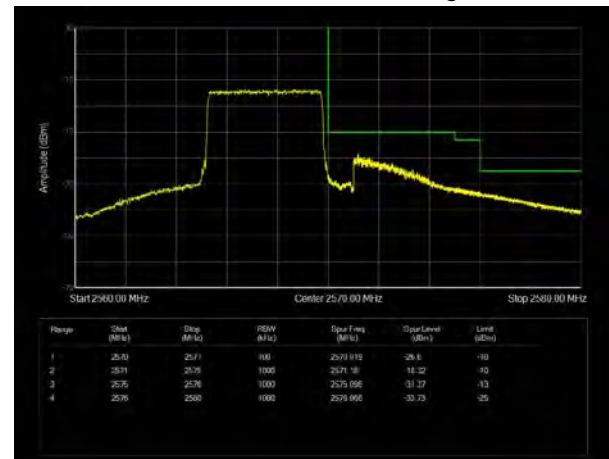
LTE Band 7 64QAM 5MHz CH-High, 1 RB



LTE Band 7 64QAM 5MHz CH-Low, 100%RB

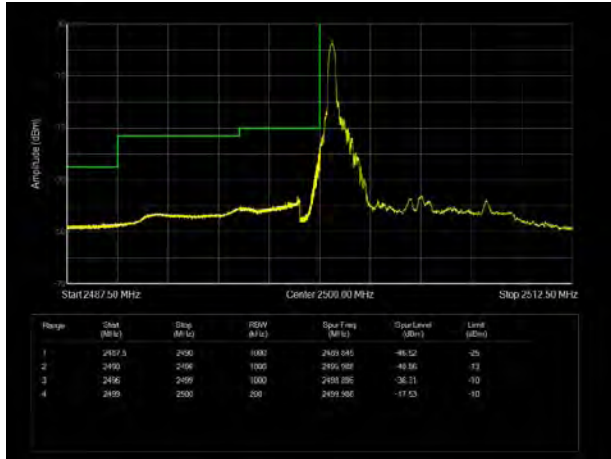


LTE Band 7 64QAM 5MHz CH-High, 100%RB

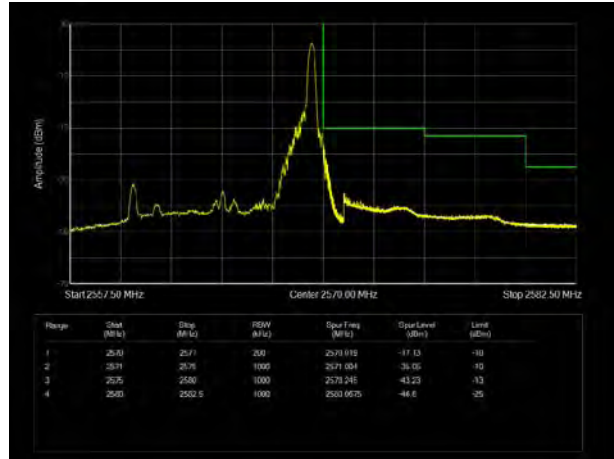




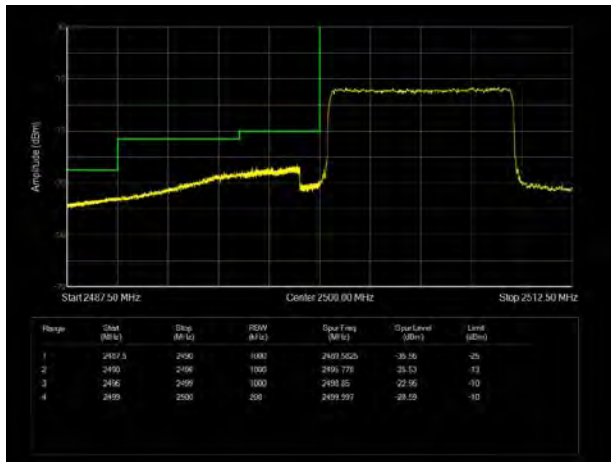
LTE Band 7 64QAM 10MHz CH-Low, 1 RB



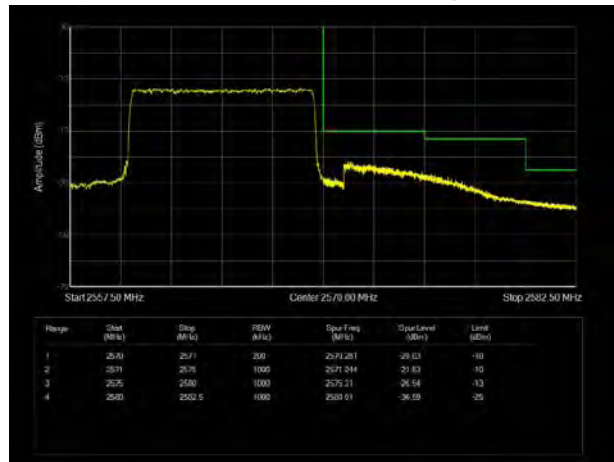
LTE Band 7 64QAM 10MHz CH-High, 1 RB



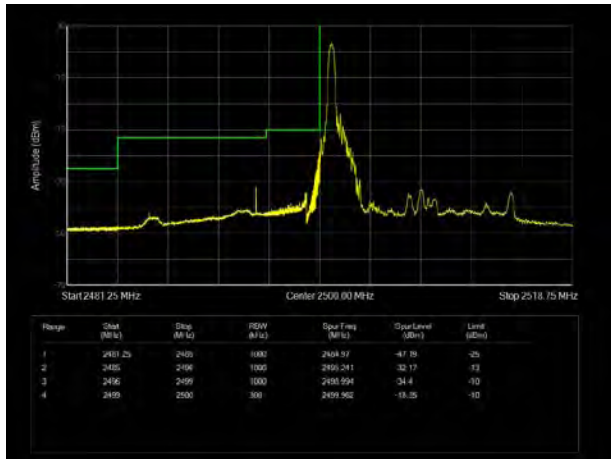
LTE Band 7 64QAM 10MHz CH-Low, 100%RB



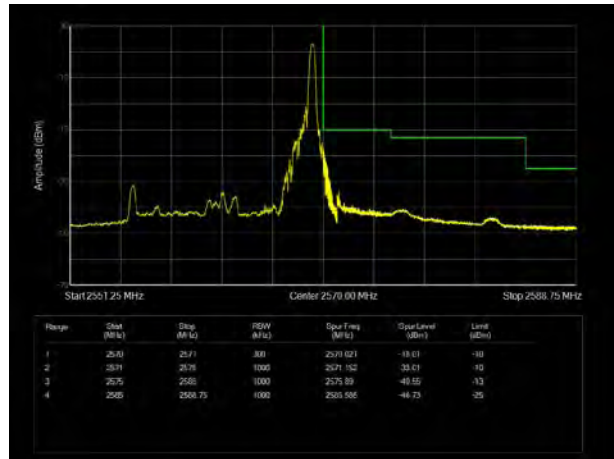
LTE Band 7 64QAM 10MHz CH-High, 100%RB



LTE Band 7 64QAM 15MHz CH-Low, 1 RB

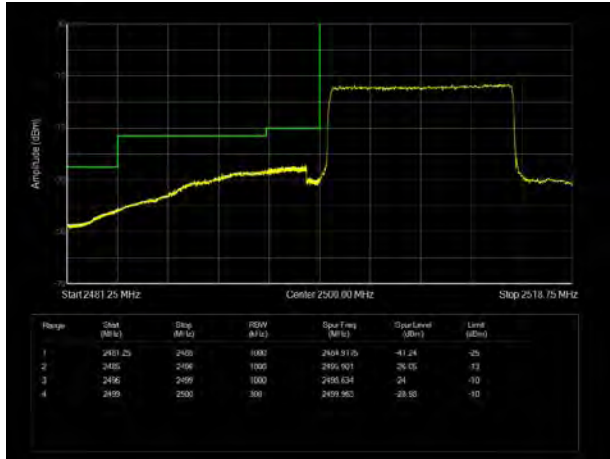


LTE Band 7 64QAM 15MHz CH-High, 1 RB

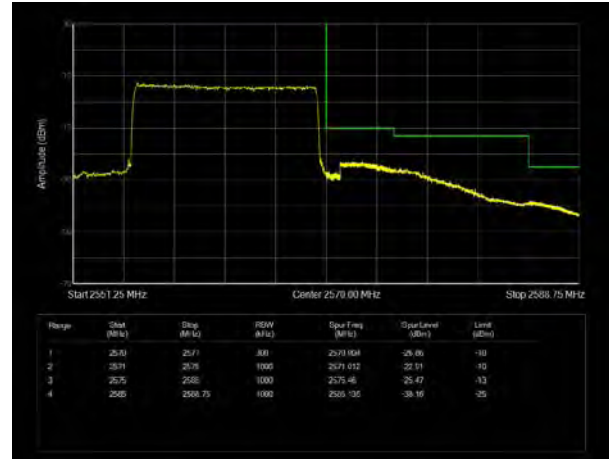




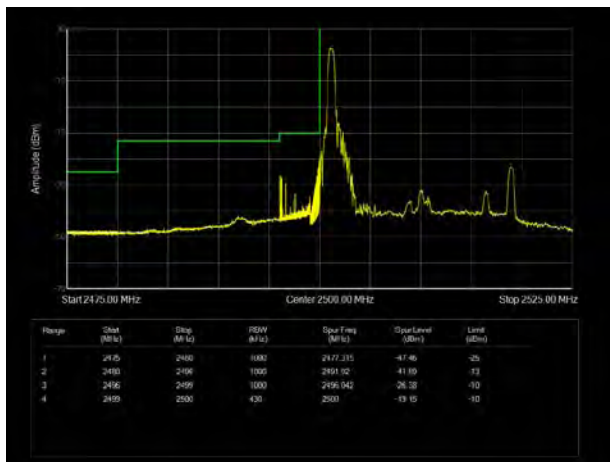
LTE Band 7 64QAM 15MHz CH-Low, 100%RB



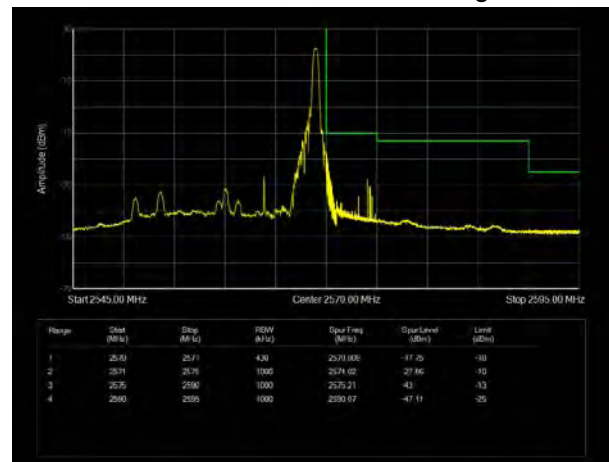
LTE Band 7 64QAM 15MHz CH-High, 100%RB



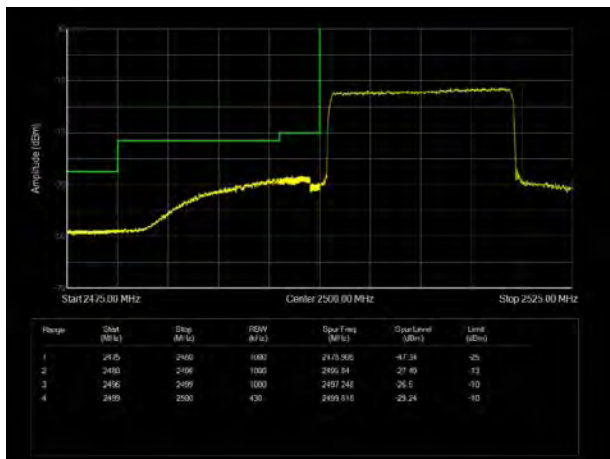
LTE Band 7 64QAM 20MHz CH-Low, 1 RB



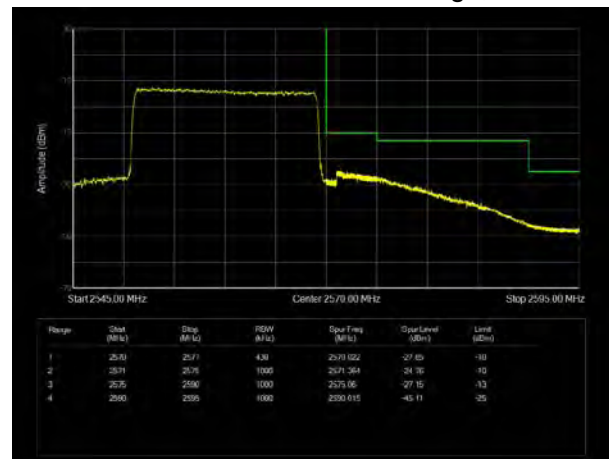
LTE Band 7 64QAM 20MHz CH-High, 1 RB



LTE Band 7 64QAM 20MHz CH-Low, 100%RB



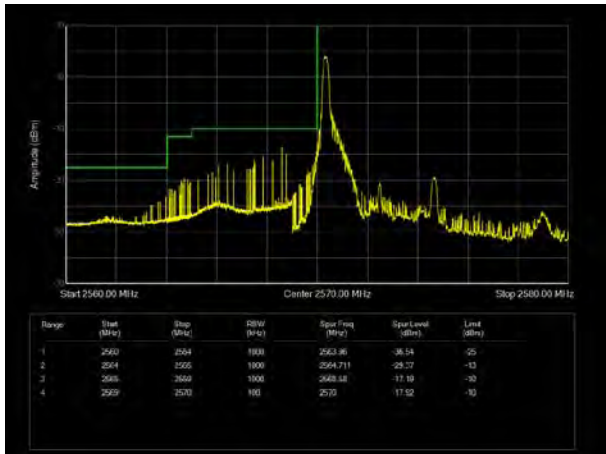
LTE Band 7 64QAM 20MHz CH-High, 100%RB



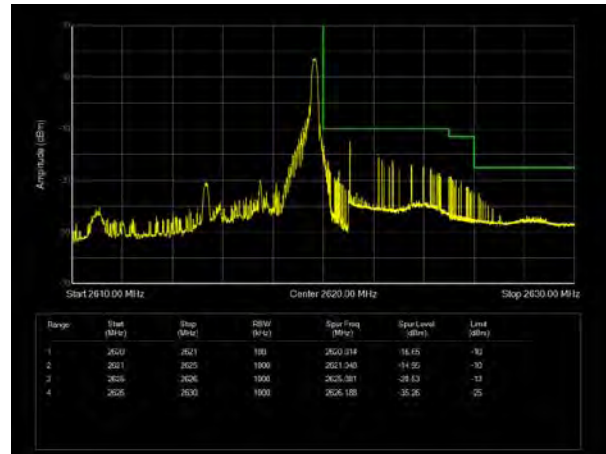




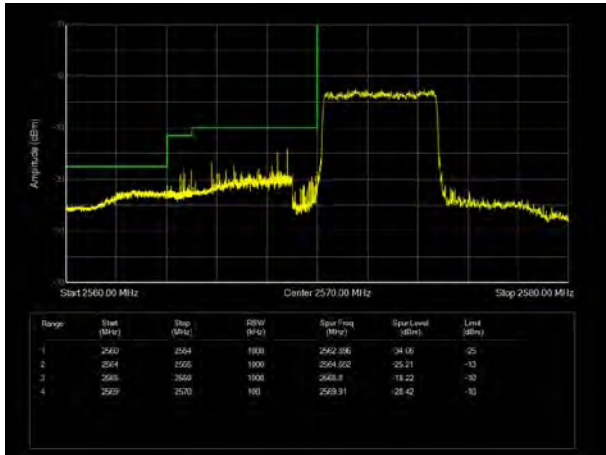
LTE Band 38 QPSK 5MHz CH-Low, 1 RB



LTE Band 38 QPSK 5MHz CH-High, 1 RB



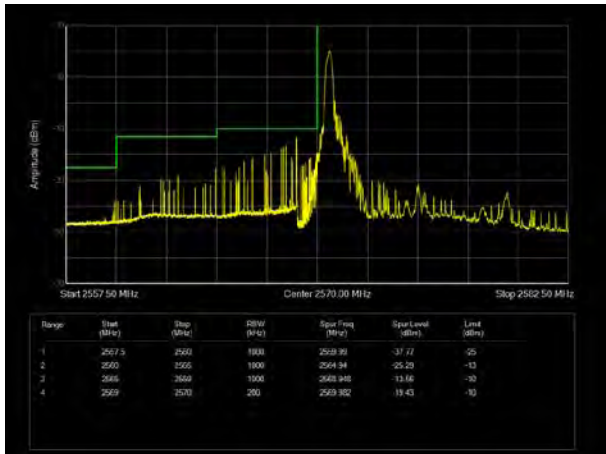
LTE Band 38 QPSK 5MHz CH-Low, 100%RB



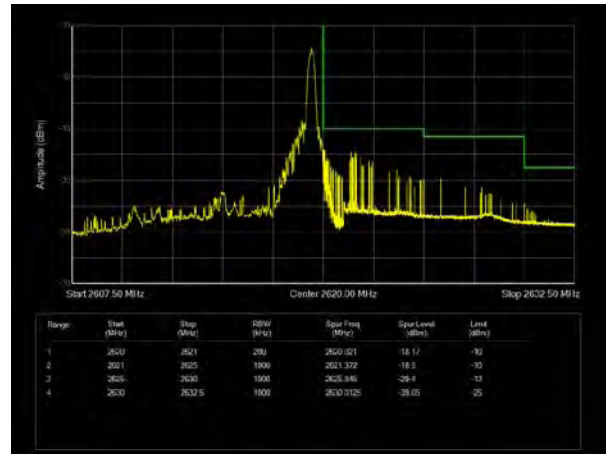
LTE Band 38 QPSK 5MHz CH-High, 100%RB



LTE Band 38 QPSK 10MHz CH-Low, 1 RB

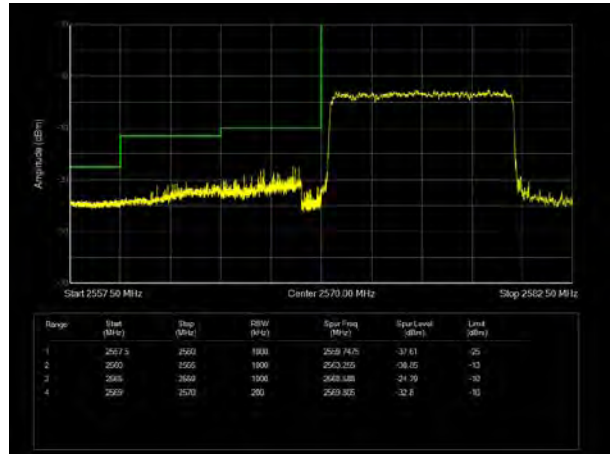


LTE Band 38 QPSK 10MHz CH-High, 1 RB

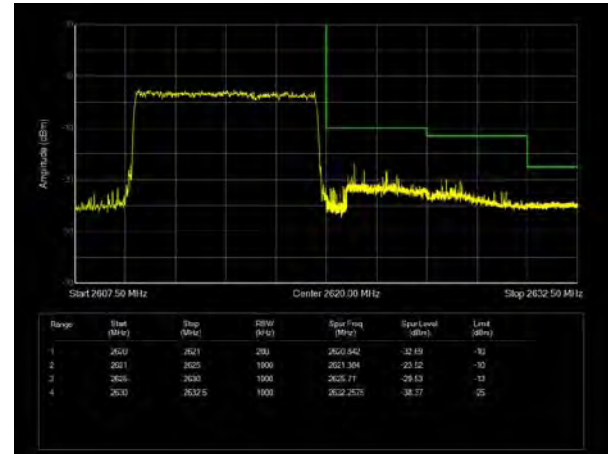




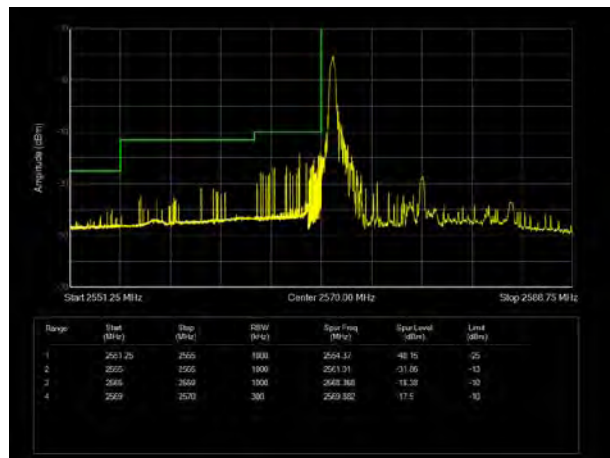
LTE Band 38 QPSK 10MHz CH-Low, 100%RB



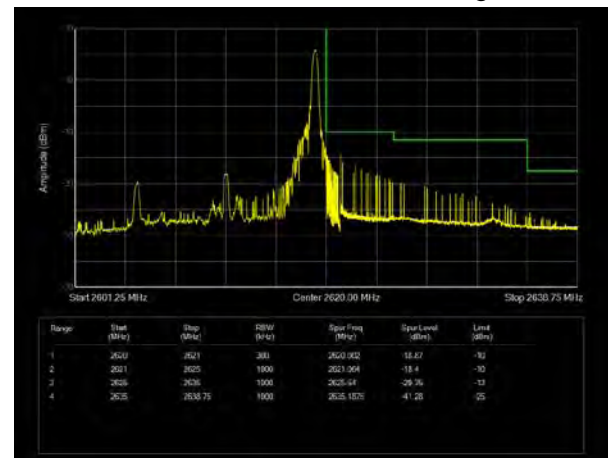
LTE Band 38 QPSK 10MHz CH-High, 100%RB



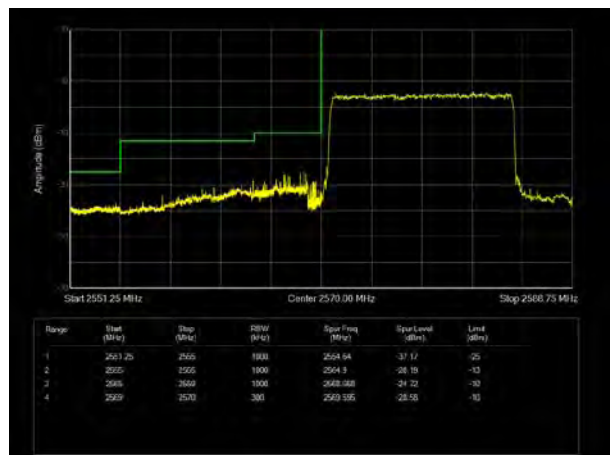
LTE Band 38 QPSK 15MHz CH-Low, 1 RB



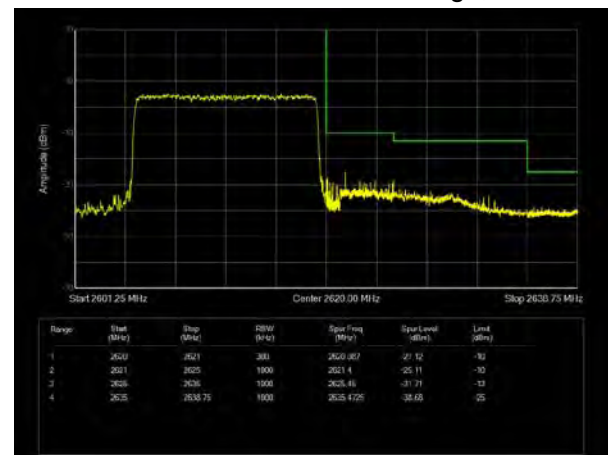
LTE Band 38 QPSK 15MHz CH-High, 1 RB



LTE Band 38 QPSK 15MHz CH-Low, 100%RB

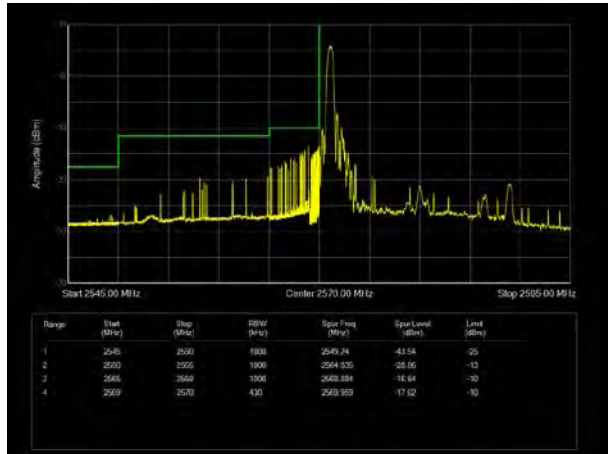


LTE Band 38 QPSK 15MHz CH-High, 100%RB

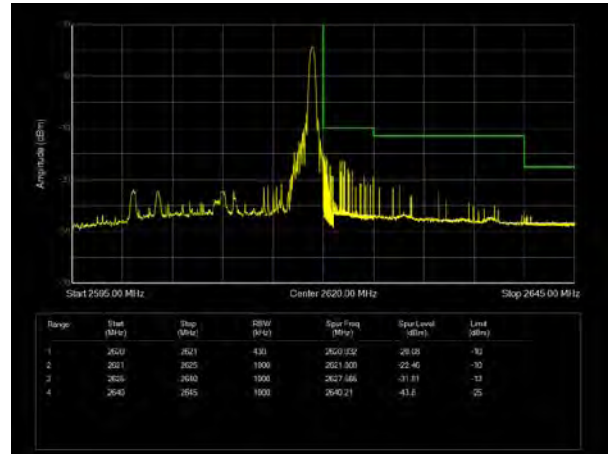




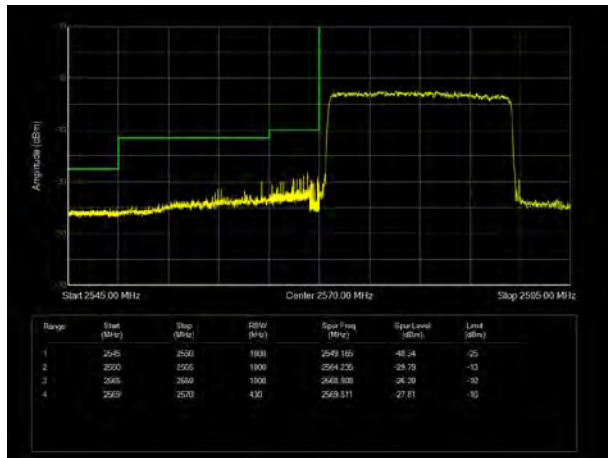
LTE Band 38 QPSK 20MHz CH-Low, 1 RB



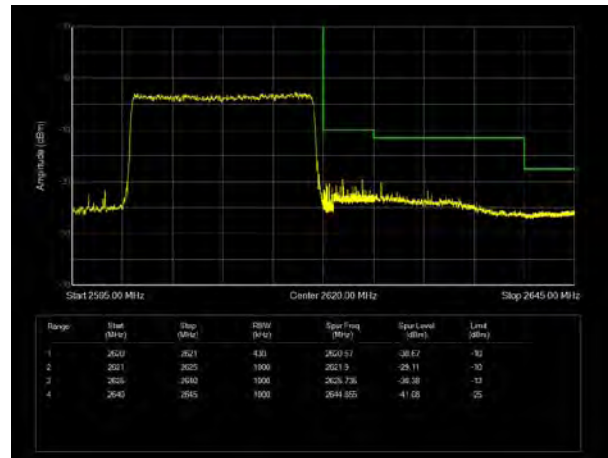
LTE Band 38 QPSK 20MHz CH-High, 1 RB



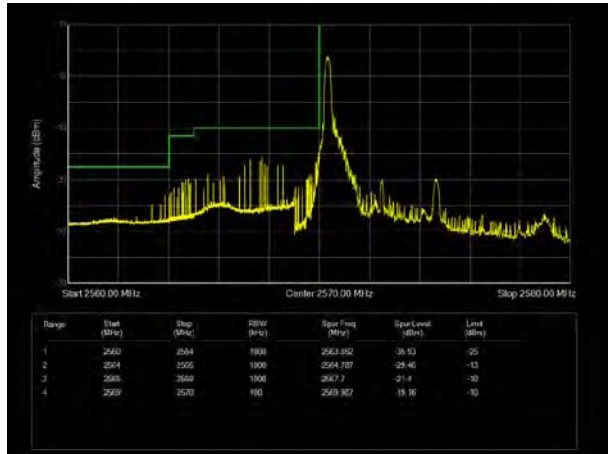
LTE Band 38 QPSK 20MHz CH-Low, 100%RB



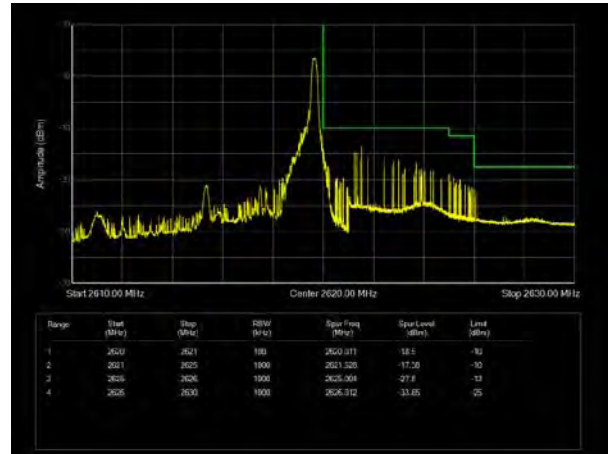
LTE Band 38 QPSK 20MHz CH-High, 100%RB



LTE Band 38 16QAM 5MHz CH-Low, 1 RB



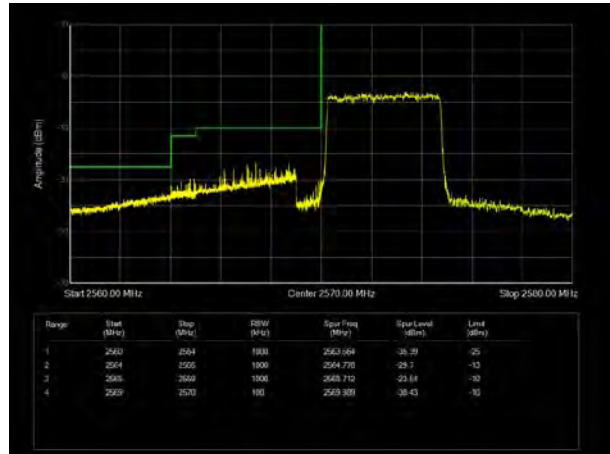
LTE Band 38 16QAM 5MHz CH-High, 1 RB



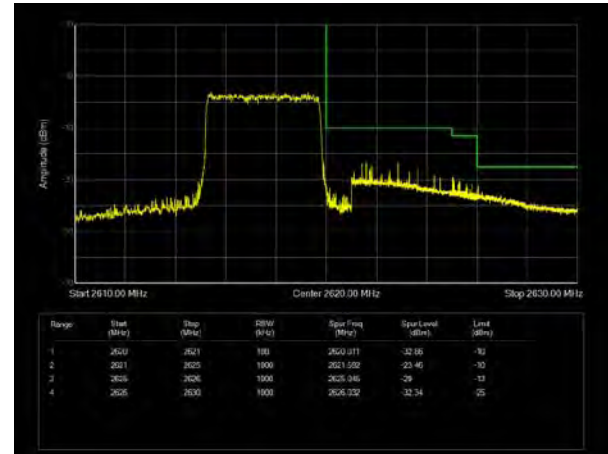




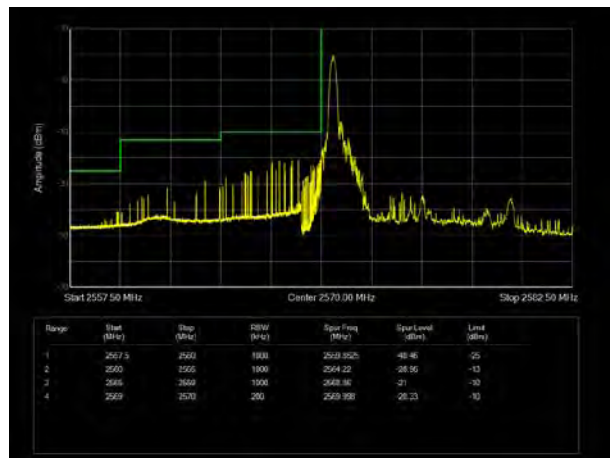
LTE Band 38 16QAM 5MHz CH-Low, 100%RB



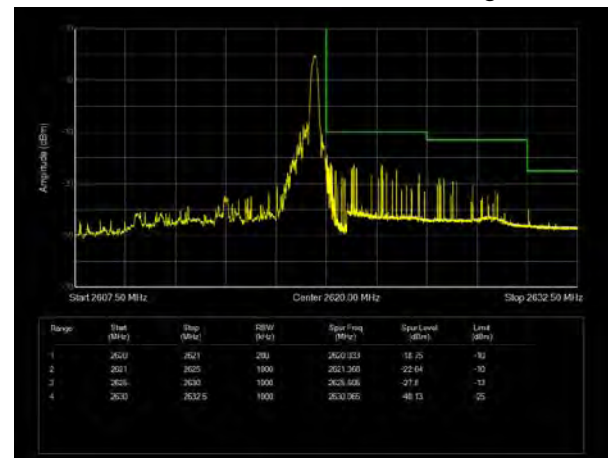
LTE Band 38 16QAM 5MHz CH-High, 100%RB



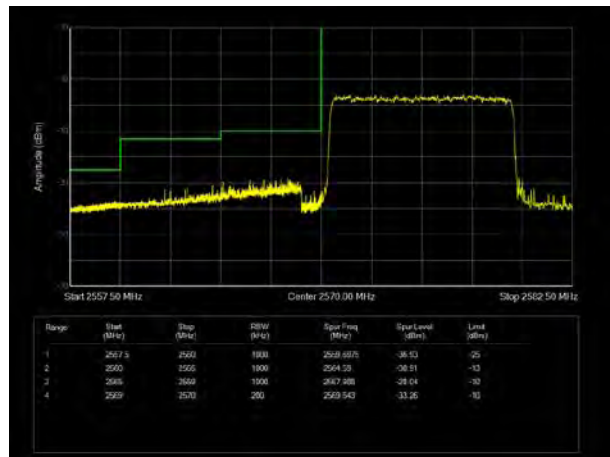
LTE Band 38 16QAM 10MHz CH-Low, 1 RB



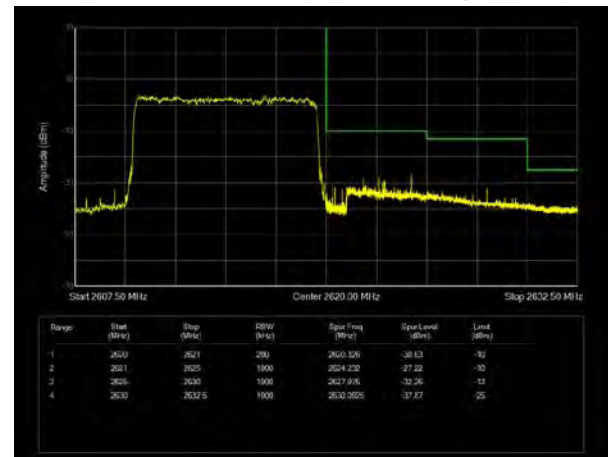
LTE Band 38 16QAM 10MHz CH-High, 1 RB



LTE Band 38 16QAM 10MHz CH-Low, 100%RB



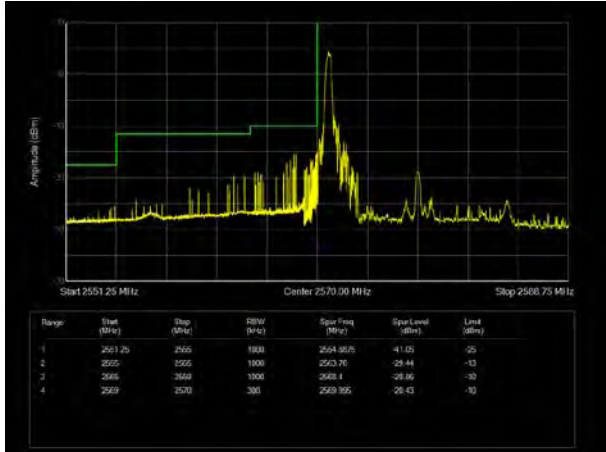
LTE Band 38 16QAM 10MHz CH-High, 100%RB



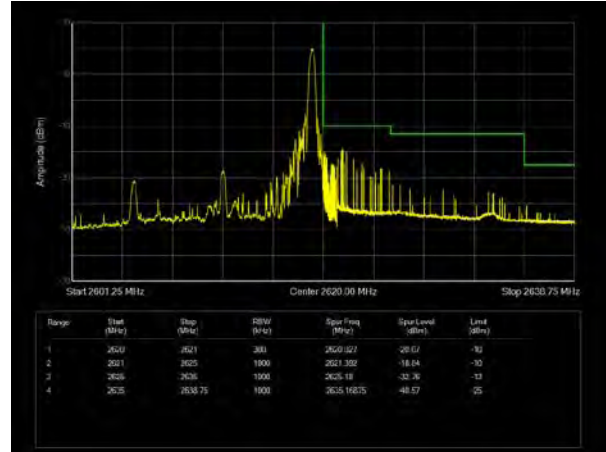




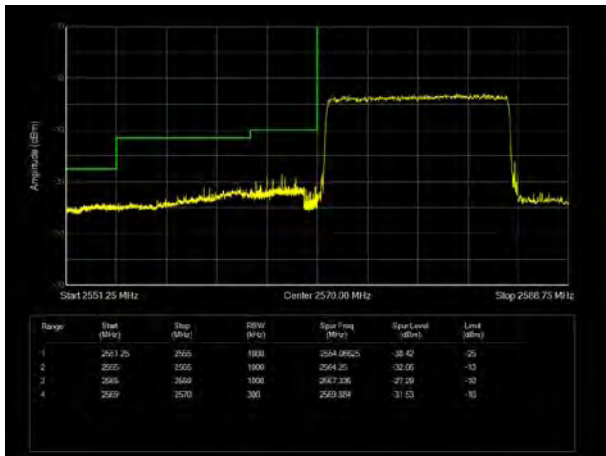
LTE Band 38 16QAM 15MHz CH-Low, 1 RB



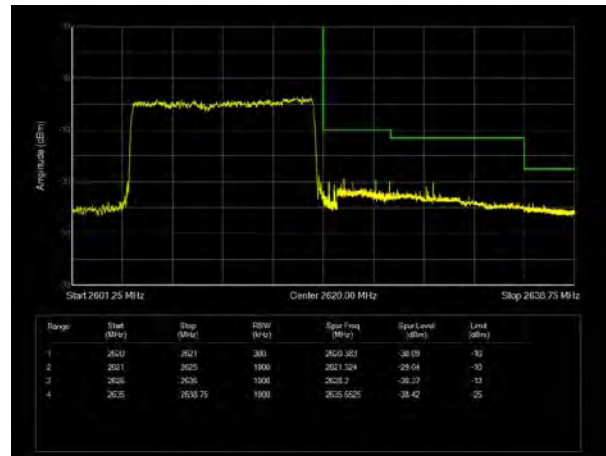
LTE Band 38 16QAM 15MHz CH-High, 1 RB



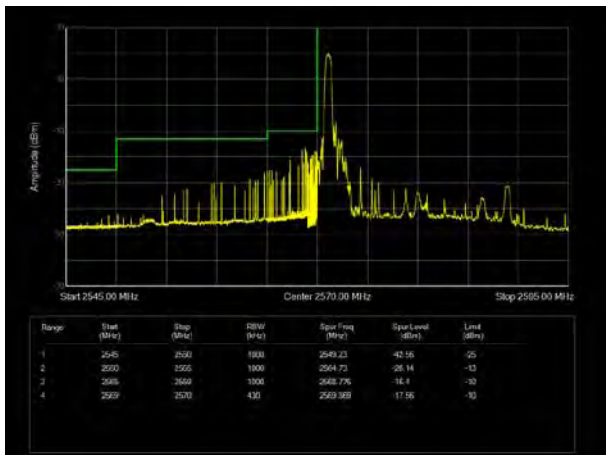
LTE Band 38 16QAM 15MHz CH-Low, 100%RB



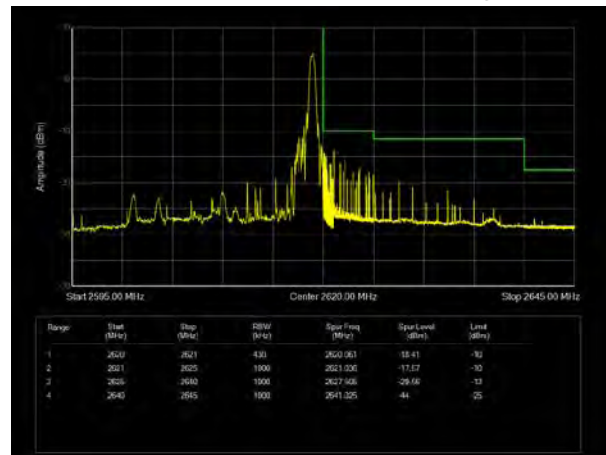
LTE Band 38 16QAM 15MHz CH-High, 100%RB



LTE Band 38 16QAM 20MHz CH-Low, 1 RB

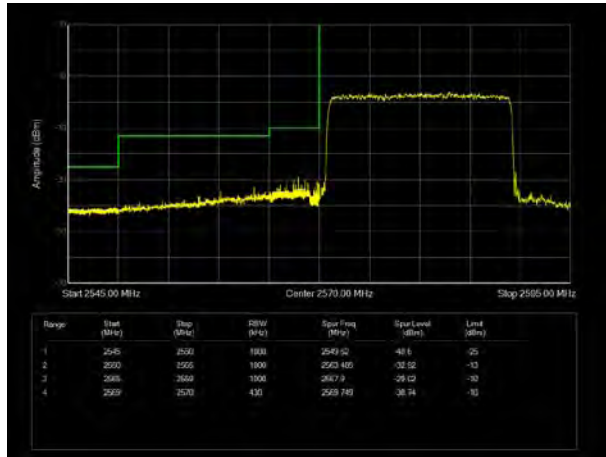


LTE Band 38 16QAM 20MHz CH-High, 1 RB

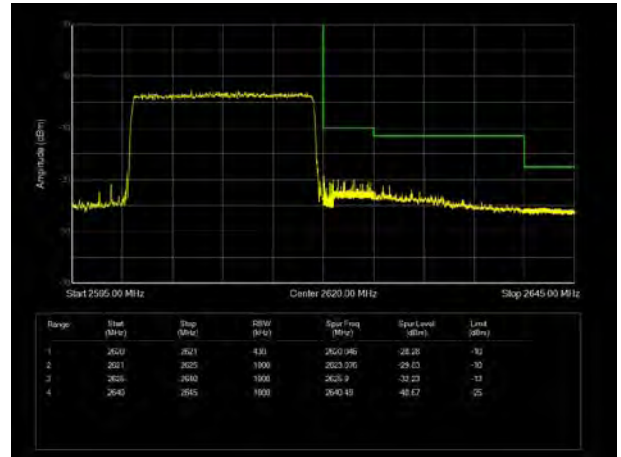




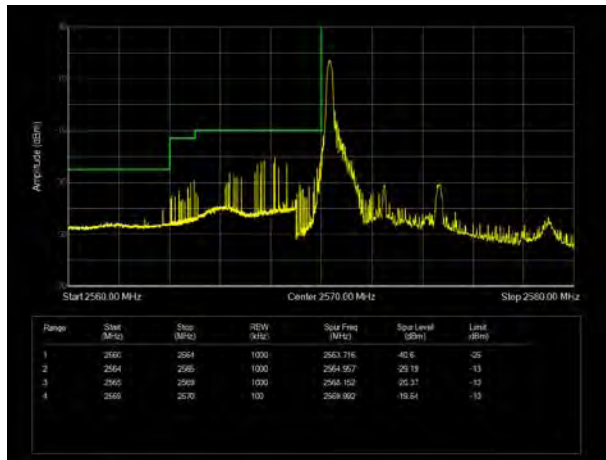
LTE Band 38 16QAM 20MHz CH-Low, 100%RB



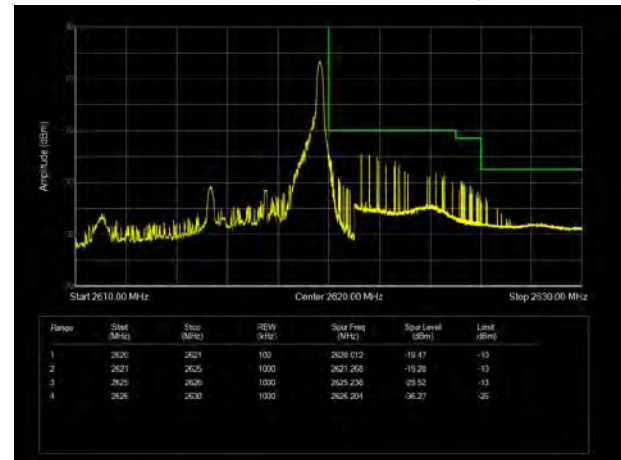
LTE Band 38 16QAM 20MHz CH-High, 100%RB



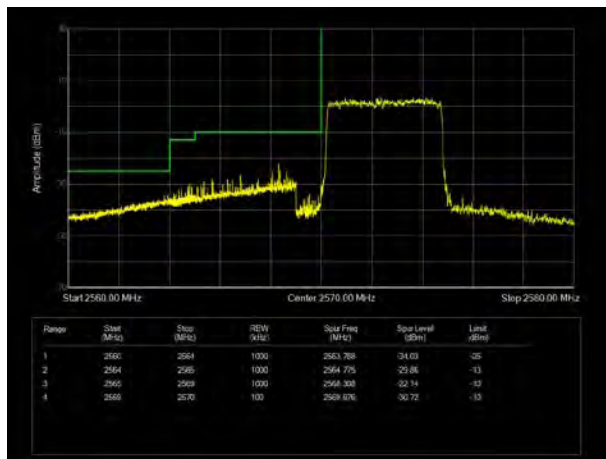
LTE Band 38 64QAM 5MHz CH-Low, 1 RB



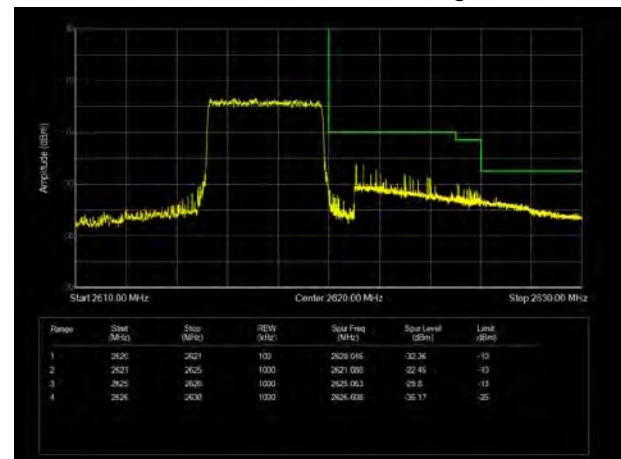
LTE Band38 64QAM 5MHz CH-High, 1 RB



LTE Band 38 64QAM 5MHz CH-Low, 100%RB

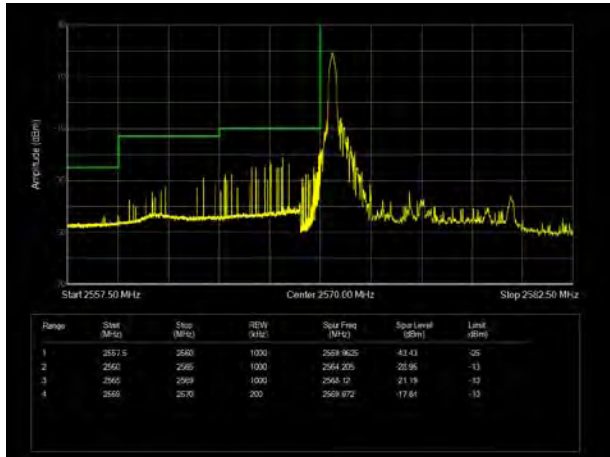


LTE Band 38 64QAM 5MHz CH-High, 100%RB

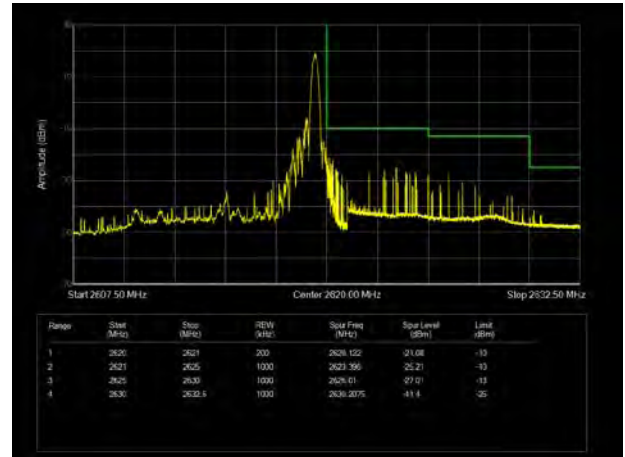




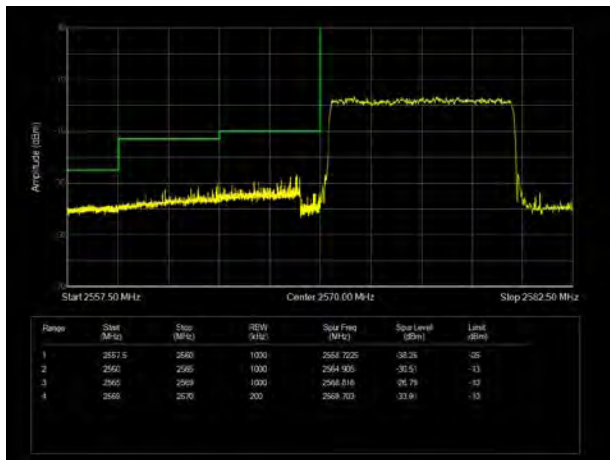
LTE Band 38 64QAM 10MHz CH-Low, 1 RB



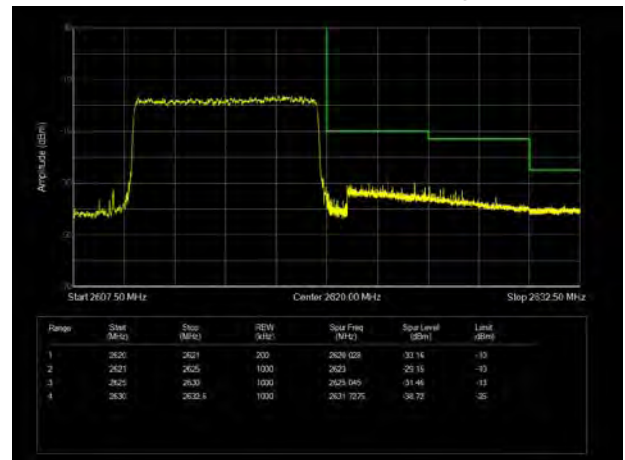
LTE Band 38 64QAM 10MHz CH-High, 1 RB



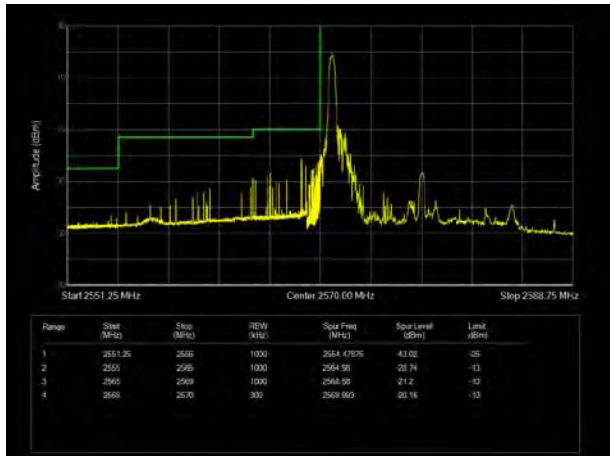
LTE Band 38 64QAM 10MHz CH-Low, 100%RB



LTE Band 38 64QAM 10MHz CH-High, 100%RB



LTE Band 38 64QAM 15MHz CH-Low, 1 RB



LTE Band 38 64QAM 15MHz CH-High, 1 RB

