



# RF TEST REPORT

**Applicant** ZTE Corporation  
**FCC ID** SRQ-MF293N  
**Product** CPE  
**Model** MF293N  
**Report No.** R2109A0830-R3V2  
**Issue Date** January 27, 2022

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2020)/ FCC CFR47 Part 27 (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.	December 21, 2021
Rev.1	Add data in Page 37-39. Delete LTE Band 28. Update information in Page 151.	December 24, 2021
Rev.2	Update data.	January 27, 2022

Note: This revised report (Report No. R2109A0830-R3V2) supersedes and replaces the previously issued report (Report No. R2109A0830-R3V1). 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: September 30, 2021~ November 18, 2021 and December 23, 2021 ~ January 26, 2022			
Date of Sample Received: September 27, 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	ZTE Corporation
Applicant address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

### 2.2 General information

EUT Description	
Model	MF293N
IMEI	863397050104476
Hardware Version	MF293N_HW1.0
Software Version	EN_ZTE_LMMF293NV1.0.0B01
Power Supply	AC adapter
Antenna Type	Internal Antenna
Antenna Gain	WCDMA Band IV: 1.7dBi
	LTE Band 4: 1.7dBi
	LTE Band 7: 2.7dBi
	LTE Band 38: 2.5dBi
	LTE Band 40: 2.4dBi
	LTE Band 66: 1.7dBi
Test Mode(s)	WCDMA Band IV; LTE Band 4/7/38/40/66
Test Modulation	(WCDMA) BPSK, QPSK, 16QAM; (LTE)QPSK, 16QAM
DC-HSDPA UE Category	14
DC-HSUPA Category	6
HSPA+ UE Category	14
LTE Category	4
Maximum E.I.R.P./ E.R.P.	WCDMA Band IV: 24.31dBm
	LTE Band 4: 25.38dBm
	LTE Band 7: 23.98dBm
	LTE Band 38: 27.06dBm



	LTE Band 40 Subset 1:	23.95dBm	
		85.016 mW/MHz	
		187.586 mW/5MHz	
	LTE Band 40 Subset 2:	23.93dBm	
		137.467 mW/MHz	
		241.713 mW/5MHz	
LTE Band 66:	25.90dBm		
Rated Power Supply Voltage	12V		
Operating Voltage	Minimum: 10.8V    Maximum: 13.2V		
Operating Temperature	Lowest: -30°C    Highest: +75°C		
Testing 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 40 Subset 1	2305 ~ 2315	2305 ~ 2315
	LTE Band 40 Subset 2	2350 ~ 2360	2350 ~ 2360
	LTE Band 66	1710 ~ 1780	2110~2180
<b>EUT Accessory</b>			
Adapter 1	Manufacturer: baijunda Model: STC-A1215C55A-Z		
Adapter 2	Manufacturer: KLEC Model: KL-WA120150-M		
Adapter 3	Manufacturer: KLEC Model: KL-WE120150-F		
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 27 (2020)**

**FCC CFR47 Part 2 (2020)**

**Reference standard:**

**ANSI C63.26 (2015)**

**KDB 971168 D01 Power Meas License Digital Systems v03r01**



## 4 Test Configuration

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, horizontal polarization) and the worst case was recorded.

All mode and data rates and positions and RB size and modulations were investigated. Subsequently, only the worst case emissions are reported.

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

The following testing in different Bandwidth is set to detail in 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

4/7/38/40/66:

Test items	Modes	Bandwidth (MHz)						Modulation		RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	LTE 4	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
	LTE 38	-	-	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 40	-	-	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 66	O	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
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 40	-	-	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 66	O	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
	LTE 7	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 40	-	-	O	O	-	-	O	O	O	-	O	O	-	O
	LTE 66	O	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
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 40	-	-	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 66	O	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	-
	LTE 7	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 40	-	-	O	O	-	-	O	O	O	-	-	-	O	-
	LTE 66	O	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 40	-	-	O	O	-	-	O	-	O	-	-	O	O	O
	LTE 66	O	O	O	O	O	O	O	-	O	-	-	O	O	O
Radiates Spurious Emission	LTE 4	O	O	O	O	O	O	O	-	O	-	-	-	O	-
	LTE 7	-	-	O	O	O	O	O	-	O	-	-	-	O	-
	LTE 38	-	-	O	O	O	O	O	-	O	-	-	-	O	-
	LTE 40	-	-	O	O	-	-	O	-	O	-	-	-	O	-
	LTE 66	O	O	O	O	O	O	O	-	O	-	-	-	O	-
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.														

## 5 Test Case 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.

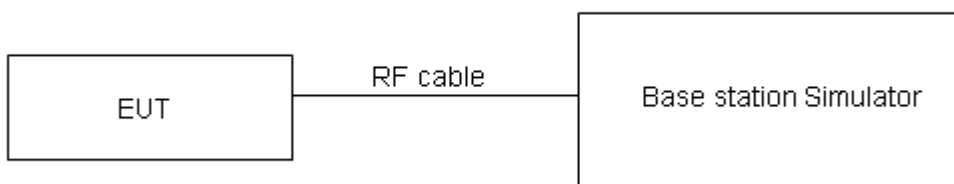
ERP can then be calculated as follows:

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

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(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.”

Part 27.50(c)(10)Limit	≤ 3 W (34.77 dBm)
Part 27.50(d)(4)Limit	≤ 1 W (30 dBm)



Part 27.50(h)(2) Limit

 $\leq 2 \text{ W}$  (33 dBm)

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. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

### Measurement Uncertainty

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



## Test Results

WCDMA Band IV		Maximum Output Power (dBm)			EIRP (dBm)		
		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)
<b>RMC</b>		22.61	22.49	22.57	24.31	24.19	24.27
<b>HSDPA</b>	Sub - Test 1	22.07	21.91	22.01	23.77	23.61	23.71
	Sub - Test 2	22.06	21.93	21.98	23.76	23.63	23.68
	Sub - Test 3	21.53	21.43	21.50	23.23	23.13	23.20
	Sub - Test 4	21.54	21.44	21.48	23.24	23.14	23.18
<b>HSUPA</b>	Sub - Test 1	22.03	21.90	21.96	23.73	23.60	23.66
	Sub - Test 2	21.02	20.88	20.95	22.72	22.58	22.65
	Sub - Test 3	21.49	21.36	21.44	23.19	23.06	23.14
	Sub - Test 4	20.95	20.85	20.92	22.65	22.55	22.62
	Sub - Test 5	21.96	21.83	21.90	23.66	23.53	23.60
<b>DC-HSDPA</b>	Sub - Test 1	21.95	21.85	21.91	23.65	23.55	23.61
	Sub - Test 2	21.94	21.84	21.90	23.64	23.54	23.60
	Sub - Test 3	21.52	21.33	21.41	23.22	23.03	23.11
	Sub - Test 4	21.51	21.32	21.40	23.21	23.02	23.10
<b>HSPA+</b>	16QAM	21.50	21.40	21.47	23.20	23.10	23.17



Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)	Verdict
LTE Band 4	1.4	19957	1	#0	QPSK	22.97	24.67	PASS
LTE Band 4	1.4	19957	1	#Mid	QPSK	22.87	24.57	PASS
LTE Band 4	1.4	19957	1	#Max	QPSK	22.93	24.63	PASS
LTE Band 4	1.4	19957	3	#0	QPSK	23.11	24.81	PASS
LTE Band 4	1.4	19957	3	#Mid	QPSK	23.11	24.81	PASS
LTE Band 4	1.4	19957	3	#Max	QPSK	23.09	24.79	PASS
LTE Band 4	1.4	19957	6	#0	QPSK	21.93	23.63	PASS
LTE Band 4	1.4	19957	1	#0	QAM16	21.81	23.51	PASS
LTE Band 4	1.4	19957	1	#Mid	QAM16	21.41	23.11	PASS
LTE Band 4	1.4	19957	1	#Max	QAM16	21.83	23.53	PASS
LTE Band 4	1.4	19957	3	#0	QAM16	21.66	23.36	PASS
LTE Band 4	1.4	19957	3	#Mid	QAM16	21.66	23.36	PASS
LTE Band 4	1.4	19957	3	#Max	QAM16	21.68	23.38	PASS
LTE Band 4	1.4	19957	6	#0	QAM16	20.71	22.41	PASS
LTE Band 4	1.4	20175	1	#0	QPSK	22.98	24.68	PASS
LTE Band 4	1.4	20175	1	#Mid	QPSK	23.11	24.81	PASS
LTE Band 4	1.4	20175	1	#Max	QPSK	23.25	24.95	PASS
LTE Band 4	1.4	20175	3	#0	QPSK	23.20	24.90	PASS
LTE Band 4	1.4	20175	3	#Mid	QPSK	23.18	24.88	PASS
LTE Band 4	1.4	20175	3	#Max	QPSK	23.23	24.93	PASS
LTE Band 4	1.4	20175	6	#0	QPSK	22.25	23.95	PASS
LTE Band 4	1.4	20175	1	#0	QAM16	22.10	23.80	PASS
LTE Band 4	1.4	20175	1	#Mid	QAM16	21.81	23.51	PASS
LTE Band 4	1.4	20175	1	#Max	QAM16	22.20	23.90	PASS
LTE Band 4	1.4	20175	3	#0	QAM16	21.93	23.63	PASS
LTE Band 4	1.4	20175	3	#Mid	QAM16	21.81	23.51	PASS
LTE Band 4	1.4	20175	3	#Max	QAM16	21.99	23.69	PASS
LTE Band 4	1.4	20175	6	#0	QAM16	21.09	22.79	PASS
LTE Band 4	1.4	20393	1	#0	QPSK	22.71	24.41	PASS
LTE Band 4	1.4	20393	1	#Mid	QPSK	22.52	24.22	PASS
LTE Band 4	1.4	20393	1	#Max	QPSK	22.64	24.34	PASS
LTE Band 4	1.4	20393	3	#0	QPSK	22.86	24.56	PASS
LTE Band 4	1.4	20393	3	#Mid	QPSK	22.86	24.56	PASS
LTE Band 4	1.4	20393	3	#Max	QPSK	22.83	24.53	PASS
LTE Band 4	1.4	20393	6	#0	QPSK	21.94	23.64	PASS
LTE Band 4	1.4	20393	1	#0	QAM16	21.60	23.30	PASS
LTE Band 4	1.4	20393	1	#Mid	QAM16	21.19	22.89	PASS
LTE Band 4	1.4	20393	1	#Max	QAM16	21.43	23.13	PASS
LTE Band 4	1.4	20393	3	#0	QAM16	21.42	23.12	PASS
LTE Band 4	1.4	20393	3	#Mid	QAM16	21.58	23.28	PASS



LTE Band 4	1.4	20393	3	#Max	QAM16	21.56	23.26	PASS
LTE Band 4	1.4	20393	6	#0	QAM16	20.37	22.07	PASS
LTE Band 4	3	19965	1	#0	QPSK	22.89	24.59	PASS
LTE Band 4	3	19965	1	#Mid	QPSK	22.13	23.83	PASS
LTE Band 4	3	19965	1	#Max	QPSK	22.92	24.62	PASS
LTE Band 4	3	19965	8	#0	QPSK	21.36	23.06	PASS
LTE Band 4	3	19965	8	#Mid	QPSK	21.36	23.06	PASS
LTE Band 4	3	19965	8	#Max	QPSK	21.36	23.06	PASS
LTE Band 4	3	19965	15	#0	QPSK	21.27	22.97	PASS
LTE Band 4	3	19965	1	#0	QAM16	21.71	23.41	PASS
LTE Band 4	3	19965	1	#Mid	QAM16	21.23	22.93	PASS
LTE Band 4	3	19965	1	#Max	QAM16	21.87	23.57	PASS
LTE Band 4	3	19965	8	#0	QAM16	20.24	21.94	PASS
LTE Band 4	3	19965	8	#Mid	QAM16	20.25	21.95	PASS
LTE Band 4	3	19965	8	#Max	QAM16	20.19	21.89	PASS
LTE Band 4	3	19965	15	#0	QAM16	20.15	21.85	PASS
LTE Band 4	3	20175	1	#0	QPSK	23.10	24.80	PASS
LTE Band 4	3	20175	1	#Mid	QPSK	22.28	23.98	PASS
LTE Band 4	3	20175	1	#Max	QPSK	22.86	24.56	PASS
LTE Band 4	3	20175	8	#0	QPSK	21.62	23.32	PASS
LTE Band 4	3	20175	8	#Mid	QPSK	21.64	23.34	PASS
LTE Band 4	3	20175	8	#Max	QPSK	21.76	23.46	PASS
LTE Band 4	3	20175	15	#0	QPSK	21.62	23.32	PASS
LTE Band 4	3	20175	1	#0	QAM16	21.92	23.62	PASS
LTE Band 4	3	20175	1	#Mid	QAM16	21.14	22.84	PASS
LTE Band 4	3	20175	1	#Max	QAM16	21.69	23.39	PASS
LTE Band 4	3	20175	8	#0	QAM16	20.41	22.11	PASS
LTE Band 4	3	20175	8	#Mid	QAM16	20.41	22.11	PASS
LTE Band 4	3	20175	8	#Max	QAM16	20.55	22.25	PASS
LTE Band 4	3	20175	15	#0	QAM16	20.37	22.07	PASS
LTE Band 4	3	20385	1	#0	QPSK	22.70	24.40	PASS
LTE Band 4	3	20385	1	#Mid	QPSK	22.08	23.78	PASS
LTE Band 4	3	20385	1	#Max	QPSK	22.60	24.30	PASS
LTE Band 4	3	20385	8	#0	QPSK	21.45	23.15	PASS
LTE Band 4	3	20385	8	#Mid	QPSK	21.46	23.16	PASS
LTE Band 4	3	20385	8	#Max	QPSK	21.44	23.14	PASS
LTE Band 4	3	20385	15	#0	QPSK	21.37	23.07	PASS
LTE Band 4	3	20385	1	#0	QAM16	21.53	23.23	PASS
LTE Band 4	3	20385	1	#Mid	QAM16	20.62	22.32	PASS
LTE Band 4	3	20385	1	#Max	QAM16	21.28	22.98	PASS
LTE Band 4	3	20385	8	#0	QAM16	20.04	21.74	PASS
LTE Band 4	3	20385	8	#Mid	QAM16	20.13	21.83	PASS
LTE Band 4	3	20385	8	#Max	QAM16	20.05	21.75	PASS



LTE Band 4	3	20385	15	#0	QAM16	20.09	21.79	PASS
LTE Band 4	5	19975	1	#0	QPSK	22.87	24.57	PASS
LTE Band 4	5	19975	1	#Mid	QPSK	22.38	24.08	PASS
LTE Band 4	5	19975	1	#Max	QPSK	22.68	24.38	PASS
LTE Band 4	5	19975	12	#0	QPSK	21.41	23.11	PASS
LTE Band 4	5	19975	12	#Mid	QPSK	21.41	23.11	PASS
LTE Band 4	5	19975	12	#Max	QPSK	21.33	23.03	PASS
LTE Band 4	5	19975	25	#0	QPSK	21.37	23.07	PASS
LTE Band 4	5	19975	1	#0	QAM16	21.47	23.17	PASS
LTE Band 4	5	19975	1	#Mid	QAM16	21.03	22.73	PASS
LTE Band 4	5	19975	1	#Max	QAM16	21.39	23.09	PASS
LTE Band 4	5	19975	12	#0	QAM16	20.26	21.96	PASS
LTE Band 4	5	19975	12	#Mid	QAM16	20.28	21.98	PASS
LTE Band 4	5	19975	12	#Max	QAM16	20.23	21.93	PASS
LTE Band 4	5	19975	25	#0	QAM16	20.27	21.97	PASS
LTE Band 4	5	20175	1	#0	QPSK	22.91	24.61	PASS
LTE Band 4	5	20175	1	#Mid	QPSK	22.46	24.16	PASS
LTE Band 4	5	20175	1	#Max	QPSK	22.83	24.53	PASS
LTE Band 4	5	20175	12	#0	QPSK	21.87	23.57	PASS
LTE Band 4	5	20175	12	#Mid	QPSK	21.86	23.56	PASS
LTE Band 4	5	20175	12	#Max	QPSK	21.61	23.31	PASS
LTE Band 4	5	20175	25	#0	QPSK	21.75	23.45	PASS
LTE Band 4	5	20175	1	#0	QAM16	21.78	23.48	PASS
LTE Band 4	5	20175	1	#Mid	QAM16	21.48	23.18	PASS
LTE Band 4	5	20175	1	#Max	QAM16	21.88	23.58	PASS
LTE Band 4	5	20175	12	#0	QAM16	20.60	22.30	PASS
LTE Band 4	5	20175	12	#Mid	QAM16	20.61	22.31	PASS
LTE Band 4	5	20175	12	#Max	QAM16	20.43	22.13	PASS
LTE Band 4	5	20175	25	#0	QAM16	20.57	22.27	PASS
LTE Band 4	5	20375	1	#0	QPSK	22.62	24.32	PASS
LTE Band 4	5	20375	1	#Mid	QPSK	22.13	23.83	PASS
LTE Band 4	5	20375	1	#Max	QPSK	22.51	24.21	PASS
LTE Band 4	5	20375	12	#0	QPSK	21.51	23.21	PASS
LTE Band 4	5	20375	12	#Mid	QPSK	21.52	23.22	PASS
LTE Band 4	5	20375	12	#Max	QPSK	21.50	23.20	PASS
LTE Band 4	5	20375	25	#0	QPSK	21.52	23.22	PASS
LTE Band 4	5	20375	1	#0	QAM16	21.46	23.16	PASS
LTE Band 4	5	20375	1	#Mid	QAM16	20.92	22.62	PASS
LTE Band 4	5	20375	1	#Max	QAM16	21.43	23.13	PASS
LTE Band 4	5	20375	12	#0	QAM16	20.21	21.91	PASS
LTE Band 4	5	20375	12	#Mid	QAM16	20.22	21.92	PASS
LTE Band 4	5	20375	12	#Max	QAM16	20.25	21.95	PASS
LTE Band 4	5	20375	25	#0	QAM16	20.23	21.93	PASS





LTE Band 4	10	20000	1	#0	QPSK	23.50	25.20	PASS
LTE Band 4	10	20000	1	#Mid	QPSK	21.86	23.56	PASS
LTE Band 4	10	20000	1	#Max	QPSK	23.52	25.22	PASS
LTE Band 4	10	20000	25	#0	QPSK	21.35	23.05	PASS
LTE Band 4	10	20000	25	#Mid	QPSK	21.37	23.07	PASS
LTE Band 4	10	20000	25	#Max	QPSK	21.49	23.19	PASS
LTE Band 4	10	20000	50	#0	QPSK	21.34	23.04	PASS
LTE Band 4	10	20000	1	#0	QAM16	21.98	23.68	PASS
LTE Band 4	10	20000	1	#Mid	QAM16	20.78	22.48	PASS
LTE Band 4	10	20000	1	#Max	QAM16	22.18	23.88	PASS
LTE Band 4	10	20000	25	#0	QAM16	20.20	21.90	PASS
LTE Band 4	10	20000	25	#Mid	QAM16	20.23	21.93	PASS
LTE Band 4	10	20000	25	#Max	QAM16	20.33	22.03	PASS
LTE Band 4	10	20000	50	#0	QAM16	20.17	21.87	PASS
LTE Band 4	10	20175	1	#0	QPSK	23.68	25.38	PASS
LTE Band 4	10	20175	1	#Mid	QPSK	22.19	23.89	PASS
LTE Band 4	10	20175	1	#Max	QPSK	23.38	25.08	PASS
LTE Band 4	10	20175	25	#0	QPSK	21.74	23.44	PASS
LTE Band 4	10	20175	25	#Mid	QPSK	21.74	23.44	PASS
LTE Band 4	10	20175	25	#Max	QPSK	21.72	23.42	PASS
LTE Band 4	10	20175	50	#0	QPSK	21.79	23.49	PASS
LTE Band 4	10	20175	1	#0	QAM16	22.29	23.99	PASS
LTE Band 4	10	20175	1	#Mid	QAM16	21.17	22.87	PASS
LTE Band 4	10	20175	1	#Max	QAM16	22.33	24.03	PASS
LTE Band 4	10	20175	25	#0	QAM16	20.45	22.15	PASS
LTE Band 4	10	20175	25	#Mid	QAM16	20.45	22.15	PASS
LTE Band 4	10	20175	25	#Max	QAM16	20.51	22.21	PASS
LTE Band 4	10	20175	50	#0	QAM16	20.58	22.28	PASS
LTE Band 4	10	20350	1	#0	QPSK	23.37	25.07	PASS
LTE Band 4	10	20350	1	#Mid	QPSK	22.06	23.76	PASS
LTE Band 4	10	20350	1	#Max	QPSK	23.14	24.84	PASS
LTE Band 4	10	20350	25	#0	QPSK	21.62	23.32	PASS
LTE Band 4	10	20350	25	#Mid	QPSK	21.63	23.33	PASS
LTE Band 4	10	20350	25	#Max	QPSK	21.50	23.20	PASS
LTE Band 4	10	20350	50	#0	QPSK	21.62	23.32	PASS
LTE Band 4	10	20350	1	#0	QAM16	22.18	23.88	PASS
LTE Band 4	10	20350	1	#Mid	QAM16	20.80	22.50	PASS
LTE Band 4	10	20350	1	#Max	QAM16	22.04	23.74	PASS
LTE Band 4	10	20350	25	#0	QAM16	20.33	22.03	PASS
LTE Band 4	10	20350	25	#Mid	QAM16	20.35	22.05	PASS
LTE Band 4	10	20350	25	#Max	QAM16	20.23	21.93	PASS
LTE Band 4	10	20350	50	#0	QAM16	20.31	22.01	PASS
LTE Band 4	15	20025	1	#0	QPSK	23.34	25.04	PASS



LTE Band 4	15	20025	1	#Mid	QPSK	22.26	23.96	PASS
LTE Band 4	15	20025	1	#Max	QPSK	23.41	25.11	PASS
LTE Band 4	15	20025	36	#0	QPSK	21.37	23.07	PASS
LTE Band 4	15	20025	36	#Mid	QPSK	21.38	23.08	PASS
LTE Band 4	15	20025	36	#Max	QPSK	21.68	23.38	PASS
LTE Band 4	15	20025	75	#0	QPSK	21.70	23.40	PASS
LTE Band 4	15	20025	1	#0	QAM16	22.05	23.75	PASS
LTE Band 4	15	20025	1	#Mid	QAM16	21.03	22.73	PASS
LTE Band 4	15	20025	1	#Max	QAM16	22.14	23.84	PASS
LTE Band 4	15	20025	36	#0	QAM16	20.22	21.92	PASS
LTE Band 4	15	20025	36	#Mid	QAM16	20.24	21.94	PASS
LTE Band 4	15	20025	36	#Max	QAM16	20.51	22.21	PASS
LTE Band 4	15	20025	75	#0	QAM16	20.51	22.21	PASS
LTE Band 4	15	20175	1	#0	QPSK	23.58	25.28	PASS
LTE Band 4	15	20175	1	#Mid	QPSK	22.23	23.93	PASS
LTE Band 4	15	20175	1	#Max	QPSK	23.34	25.04	PASS
LTE Band 4	15	20175	36	#0	QPSK	21.92	23.62	PASS
LTE Band 4	15	20175	36	#Mid	QPSK	21.92	23.62	PASS
LTE Band 4	15	20175	36	#Max	QPSK	21.78	23.48	PASS
LTE Band 4	15	20175	75	#0	QPSK	21.87	23.57	PASS
LTE Band 4	15	20175	1	#0	QAM16	22.17	23.87	PASS
LTE Band 4	15	20175	1	#Mid	QAM16	21.11	22.81	PASS
LTE Band 4	15	20175	1	#Max	QAM16	22.19	23.89	PASS
LTE Band 4	15	20175	36	#0	QAM16	20.66	22.36	PASS
LTE Band 4	15	20175	36	#Mid	QAM16	20.64	22.34	PASS
LTE Band 4	15	20175	36	#Max	QAM16	20.46	22.16	PASS
LTE Band 4	15	20175	75	#0	QAM16	20.66	22.36	PASS
LTE Band 4	15	20325	1	#0	QPSK	23.53	25.23	PASS
LTE Band 4	15	20325	1	#Mid	QPSK	22.28	23.98	PASS
LTE Band 4	15	20325	1	#Max	QPSK	23.01	24.71	PASS
LTE Band 4	15	20325	36	#0	QPSK	21.89	23.59	PASS
LTE Band 4	15	20325	36	#Mid	QPSK	21.89	23.59	PASS
LTE Band 4	15	20325	36	#Max	QPSK	21.61	23.31	PASS
LTE Band 4	15	20325	75	#0	QPSK	21.68	23.38	PASS
LTE Band 4	15	20325	1	#0	QAM16	22.49	24.19	PASS
LTE Band 4	15	20325	1	#Mid	QAM16	21.14	22.84	PASS
LTE Band 4	15	20325	1	#Max	QAM16	22.02	23.72	PASS
LTE Band 4	15	20325	36	#0	QAM16	20.54	22.24	PASS
LTE Band 4	15	20325	36	#Mid	QAM16	20.55	22.25	PASS
LTE Band 4	15	20325	36	#Max	QAM16	20.31	22.01	PASS
LTE Band 4	15	20325	75	#0	QAM16	20.35	22.05	PASS
LTE Band 4	20	20050	1	#0	QPSK	23.06	24.76	PASS
LTE Band 4	20	20050	1	#Mid	QPSK	22.65	24.35	PASS



LTE Band 4	20	20050	1	#Max	QPSK	23.25	24.95	PASS
LTE Band 4	20	20050	50	#0	QPSK	21.37	23.07	PASS
LTE Band 4	20	20050	50	#Mid	QPSK	21.38	23.08	PASS
LTE Band 4	20	20050	50	#Max	QPSK	21.70	23.40	PASS
LTE Band 4	20	20050	100	#0	QPSK	21.87	23.57	PASS
LTE Band 4	20	20050	1	#0	QAM16	21.63	23.33	PASS
LTE Band 4	20	20050	1	#Mid	QAM16	21.21	22.91	PASS
LTE Band 4	20	20050	1	#Max	QAM16	22.01	23.71	PASS
LTE Band 4	20	20050	50	#0	QAM16	20.23	21.93	PASS
LTE Band 4	20	20050	50	#Mid	QAM16	20.24	21.94	PASS
LTE Band 4	20	20050	50	#Max	QAM16	20.54	22.24	PASS
LTE Band 4	20	20050	100	#0	QAM16	20.70	22.40	PASS
LTE Band 4	20	20175	1	#0	QPSK	23.38	25.08	PASS
LTE Band 4	20	20175	1	#Mid	QPSK	22.60	24.30	PASS
LTE Band 4	20	20175	1	#Max	QPSK	23.36	25.06	PASS
LTE Band 4	20	20175	50	#0	QPSK	21.87	23.57	PASS
LTE Band 4	20	20175	50	#Mid	QPSK	21.86	23.56	PASS
LTE Band 4	20	20175	50	#Max	QPSK	21.93	23.63	PASS
LTE Band 4	20	20175	100	#0	QPSK	21.94	23.64	PASS
LTE Band 4	20	20175	1	#0	QAM16	21.91	23.61	PASS
LTE Band 4	20	20175	1	#Mid	QAM16	21.44	23.14	PASS
LTE Band 4	20	20175	1	#Max	QAM16	22.14	23.84	PASS
LTE Band 4	20	20175	50	#0	QAM16	20.59	22.29	PASS
LTE Band 4	20	20175	50	#Mid	QAM16	20.58	22.28	PASS
LTE Band 4	20	20175	50	#Max	QAM16	20.59	22.29	PASS
LTE Band 4	20	20175	100	#0	QAM16	20.74	22.44	PASS
LTE Band 4	20	20300	1	#0	QPSK	23.31	25.01	PASS
LTE Band 4	20	20300	1	#Mid	QPSK	22.39	24.09	PASS
LTE Band 4	20	20300	1	#Max	QPSK	23.11	24.81	PASS
LTE Band 4	20	20300	50	#0	QPSK	21.95	23.65	PASS
LTE Band 4	20	20300	50	#Mid	QPSK	21.96	23.66	PASS
LTE Band 4	20	20300	50	#Max	QPSK	21.69	23.39	PASS
LTE Band 4	20	20300	100	#0	QPSK	21.65	23.35	PASS
LTE Band 4	20	20300	1	#0	QAM16	22.22	23.92	PASS
LTE Band 4	20	20300	1	#Mid	QAM16	21.25	22.95	PASS
LTE Band 4	20	20300	1	#Max	QAM16	21.97	23.67	PASS
LTE Band 4	20	20300	50	#0	QAM16	20.65	22.35	PASS
LTE Band 4	20	20300	50	#Mid	QAM16	20.65	22.35	PASS
LTE Band 4	20	20300	50	#Max	QAM16	20.38	22.08	PASS
LTE Band 4	20	20300	100	#0	QAM16	20.33	22.03	PASS



Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)	Verdict
LTE Band 7	5	20775	1	#0	QPSK	19.14	21.84	PASS
LTE Band 7	5	20775	1	#Mid	QPSK	19.20	21.90	PASS
LTE Band 7	5	20775	1	#Max	QPSK	19.93	22.63	PASS
LTE Band 7	5	20775	12	#0	QPSK	19.17	21.87	PASS
LTE Band 7	5	20775	12	#Mid	QPSK	19.13	21.83	PASS
LTE Band 7	5	20775	12	#Max	QPSK	19.56	22.26	PASS
LTE Band 7	5	20775	25	#0	QPSK	19.36	22.06	PASS
LTE Band 7	5	20775	1	#0	QAM16	19.26	21.96	PASS
LTE Band 7	5	20775	1	#Mid	QAM16	19.28	21.98	PASS
LTE Band 7	5	20775	1	#Max	QAM16	20.12	22.82	PASS
LTE Band 7	5	20775	12	#0	QAM16	19.16	21.86	PASS
LTE Band 7	5	20775	12	#Mid	QAM16	19.17	21.87	PASS
LTE Band 7	5	20775	12	#Max	QAM16	19.57	22.27	PASS
LTE Band 7	5	20775	25	#0	QAM16	19.40	22.10	PASS
LTE Band 7	5	21100	1	#0	QPSK	19.85	22.55	PASS
LTE Band 7	5	21100	1	#Mid	QPSK	19.43	22.13	PASS
LTE Band 7	5	21100	1	#Max	QPSK	19.98	22.68	PASS
LTE Band 7	5	21100	12	#0	QPSK	19.64	22.34	PASS
LTE Band 7	5	21100	12	#Mid	QPSK	19.63	22.33	PASS
LTE Band 7	5	21100	12	#Max	QPSK	19.71	22.41	PASS
LTE Band 7	5	21100	25	#0	QPSK	19.67	22.37	PASS
LTE Band 7	5	21100	1	#0	QAM16	19.93	22.63	PASS
LTE Band 7	5	21100	1	#Mid	QAM16	19.68	22.38	PASS
LTE Band 7	5	21100	1	#Max	QAM16	20.31	23.01	PASS
LTE Band 7	5	21100	12	#0	QAM16	19.89	22.59	PASS
LTE Band 7	5	21100	12	#Mid	QAM16	19.89	22.59	PASS
LTE Band 7	5	21100	12	#Max	QAM16	19.97	22.67	PASS
LTE Band 7	5	21100	25	#0	QAM16	19.93	22.63	PASS
LTE Band 7	5	21425	1	#0	QPSK	20.22	22.92	PASS
LTE Band 7	5	21425	1	#Mid	QPSK	19.52	22.22	PASS
LTE Band 7	5	21425	1	#Max	QPSK	19.74	22.44	PASS
LTE Band 7	5	21425	12	#0	QPSK	19.83	22.53	PASS
LTE Band 7	5	21425	12	#Mid	QPSK	19.83	22.53	PASS
LTE Band 7	5	21425	12	#Max	QPSK	19.59	22.29	PASS
LTE Band 7	5	21425	25	#0	QPSK	19.72	22.42	PASS
LTE Band 7	5	21425	1	#0	QAM16	20.41	23.11	PASS
LTE Band 7	5	21425	1	#Mid	QAM16	19.71	22.41	PASS
LTE Band 7	5	21425	1	#Max	QAM16	19.98	22.68	PASS
LTE Band 7	5	21425	12	#0	QAM16	19.88	22.58	PASS
LTE Band 7	5	21425	12	#Mid	QAM16	19.88	22.58	PASS



LTE Band 7	5	21425	12	#Max	QAM16	19.70	22.40	PASS
LTE Band 7	5	21425	25	#0	QAM16	19.75	22.45	PASS
LTE Band 7	10	20800	1	#0	QPSK	20.00	22.70	PASS
LTE Band 7	10	20800	1	#Mid	QPSK	19.47	22.17	PASS
LTE Band 7	10	20800	1	#Max	QPSK	21.00	23.70	PASS
LTE Band 7	10	20800	25	#0	QPSK	19.57	22.27	PASS
LTE Band 7	10	20800	25	#Mid	QPSK	19.55	22.25	PASS
LTE Band 7	10	20800	25	#Max	QPSK	20.11	22.81	PASS
LTE Band 7	10	20800	50	#0	QPSK	19.90	22.60	PASS
LTE Band 7	10	20800	1	#0	QAM16	20.27	22.97	PASS
LTE Band 7	10	20800	1	#Mid	QAM16	19.72	22.42	PASS
LTE Band 7	10	20800	1	#Max	QAM16	21.28	23.98	PASS
LTE Band 7	10	20800	25	#0	QAM16	19.61	22.31	PASS
LTE Band 7	10	20800	25	#Mid	QAM16	19.60	22.30	PASS
LTE Band 7	10	20800	25	#Max	QAM16	20.15	22.85	PASS
LTE Band 7	10	20800	50	#0	QAM16	19.91	22.61	PASS
LTE Band 7	10	21100	1	#0	QPSK	20.70	23.40	PASS
LTE Band 7	10	21100	1	#Mid	QPSK	19.28	21.98	PASS
LTE Band 7	10	21100	1	#Max	QPSK	20.57	23.27	PASS
LTE Band 7	10	21100	25	#0	QPSK	19.71	22.41	PASS
LTE Band 7	10	21100	25	#Mid	QPSK	19.70	22.40	PASS
LTE Band 7	10	21100	25	#Max	QPSK	19.90	22.60	PASS
LTE Band 7	10	21100	50	#0	QPSK	19.85	22.55	PASS
LTE Band 7	10	21100	1	#0	QAM16	20.89	23.59	PASS
LTE Band 7	10	21100	1	#Mid	QAM16	19.48	22.18	PASS
LTE Band 7	10	21100	1	#Max	QAM16	20.70	23.40	PASS
LTE Band 7	10	21100	25	#0	QAM16	19.74	22.44	PASS
LTE Band 7	10	21100	25	#Mid	QAM16	19.73	22.43	PASS
LTE Band 7	10	21100	25	#Max	QAM16	19.92	22.62	PASS
LTE Band 7	10	21100	50	#0	QAM16	19.86	22.56	PASS
LTE Band 7	10	21400	1	#0	QPSK	20.67	23.37	PASS
LTE Band 7	10	21400	1	#Mid	QPSK	19.60	22.30	PASS
LTE Band 7	10	21400	1	#Max	QPSK	20.33	23.03	PASS
LTE Band 7	10	21400	25	#0	QPSK	19.73	22.43	PASS
LTE Band 7	10	21400	25	#Mid	QPSK	19.75	22.45	PASS
LTE Band 7	10	21400	25	#Max	QPSK	19.67	22.37	PASS
LTE Band 7	10	21400	50	#0	QPSK	19.93	22.63	PASS
LTE Band 7	10	21400	1	#0	QAM16	20.93	23.63	PASS
LTE Band 7	10	21400	1	#Mid	QAM16	19.72	22.42	PASS
LTE Band 7	10	21400	1	#Max	QAM16	20.54	23.24	PASS
LTE Band 7	10	21400	25	#0	QAM16	20.01	22.71	PASS
LTE Band 7	10	21400	25	#Mid	QAM16	20.03	22.73	PASS
LTE Band 7	10	21400	25	#Max	QAM16	19.94	22.64	PASS





LTE Band 7	10	21400	50	#0	QAM16	20.13	22.83	PASS
LTE Band 7	15	20825	1	#0	QPSK	19.86	22.56	PASS
LTE Band 7	15	20825	1	#Mid	QPSK	19.64	22.34	PASS
LTE Band 7	15	20825	1	#Max	QPSK	20.53	23.23	PASS
LTE Band 7	15	20825	36	#0	QPSK	19.71	22.41	PASS
LTE Band 7	15	20825	36	#Mid	QPSK	19.72	22.42	PASS
LTE Band 7	15	20825	36	#Max	QPSK	20.09	22.79	PASS
LTE Band 7	15	20825	75	#0	QPSK	19.96	22.66	PASS
LTE Band 7	15	20825	1	#0	QAM16	20.14	22.84	PASS
LTE Band 7	15	20825	1	#Mid	QAM16	19.95	22.65	PASS
LTE Band 7	15	20825	1	#Max	QAM16	20.88	23.58	PASS
LTE Band 7	15	20825	36	#0	QAM16	19.74	22.44	PASS
LTE Band 7	15	20825	36	#Mid	QAM16	19.75	22.45	PASS
LTE Band 7	15	20825	36	#Max	QAM16	20.12	22.82	PASS
LTE Band 7	15	20825	75	#0	QAM16	19.96	22.66	PASS
LTE Band 7	15	21100	1	#0	QPSK	20.75	23.45	PASS
LTE Band 7	15	21100	1	#Mid	QPSK	19.54	22.24	PASS
LTE Band 7	15	21100	1	#Max	QPSK	20.73	23.43	PASS
LTE Band 7	15	21100	36	#0	QPSK	19.89	22.59	PASS
LTE Band 7	15	21100	36	#Mid	QPSK	19.88	22.58	PASS
LTE Band 7	15	21100	36	#Max	QPSK	19.95	22.65	PASS
LTE Band 7	15	21100	75	#0	QPSK	20.08	22.78	PASS
LTE Band 7	15	21100	1	#0	QAM16	20.90	23.60	PASS
LTE Band 7	15	21100	1	#Mid	QAM16	19.71	22.41	PASS
LTE Band 7	15	21100	1	#Max	QAM16	20.95	23.65	PASS
LTE Band 7	15	21100	36	#0	QAM16	19.92	22.62	PASS
LTE Band 7	15	21100	36	#Mid	QAM16	19.91	22.61	PASS
LTE Band 7	15	21100	36	#Max	QAM16	19.98	22.68	PASS
LTE Band 7	15	21100	75	#0	QAM16	20.08	22.78	PASS
LTE Band 7	15	21375	1	#0	QPSK	20.83	23.53	PASS
LTE Band 7	15	21375	1	#Mid	QPSK	19.52	22.22	PASS
LTE Band 7	15	21375	1	#Max	QPSK	20.25	22.95	PASS
LTE Band 7	15	21375	36	#0	QPSK	19.87	22.57	PASS
LTE Band 7	15	21375	36	#Mid	QPSK	19.90	22.60	PASS
LTE Band 7	15	21375	36	#Max	QPSK	19.99	22.69	PASS
LTE Band 7	15	21375	75	#0	QPSK	20.04	22.74	PASS
LTE Band 7	15	21375	1	#0	QAM16	20.90	23.60	PASS
LTE Band 7	15	21375	1	#Mid	QAM16	19.64	22.34	PASS
LTE Band 7	15	21375	1	#Max	QAM16	20.35	23.05	PASS
LTE Band 7	15	21375	36	#0	QAM16	19.87	22.57	PASS
LTE Band 7	15	21375	36	#Mid	QAM16	19.91	22.61	PASS
LTE Band 7	15	21375	36	#Max	QAM16	20.00	22.70	PASS
LTE Band 7	15	21375	75	#0	QAM16	20.04	22.74	PASS



LTE Band 7	20	20850	1	#0	QPSK	19.94	22.64	PASS
LTE Band 7	20	20850	1	#Mid	QPSK	20.14	22.84	PASS
LTE Band 7	20	20850	1	#Max	QPSK	21.14	23.84	PASS
LTE Band 7	20	20850	50	#0	QPSK	20.05	22.75	PASS
LTE Band 7	20	20850	50	#Mid	QPSK	20.08	22.78	PASS
LTE Band 7	20	20850	50	#Max	QPSK	20.08	22.78	PASS
LTE Band 7	20	20850	100	#0	QPSK	20.13	22.83	PASS
LTE Band 7	20	20850	1	#0	QAM16	20.16	22.86	PASS
LTE Band 7	20	20850	1	#Mid	QAM16	20.21	22.91	PASS
LTE Band 7	20	20850	1	#Max	QAM16	21.23	23.93	PASS
LTE Band 7	20	20850	50	#0	QAM16	20.07	22.77	PASS
LTE Band 7	20	20850	50	#Mid	QAM16	20.10	22.80	PASS
LTE Band 7	20	20850	50	#Max	QAM16	20.12	22.82	PASS
LTE Band 7	20	20850	100	#0	QAM16	20.15	22.85	PASS
LTE Band 7	20	21100	1	#0	QPSK	20.63	23.33	PASS
LTE Band 7	20	21100	1	#Mid	QPSK	19.79	22.49	PASS
LTE Band 7	20	21100	1	#Max	QPSK	20.65	23.35	PASS
LTE Band 7	20	21100	50	#0	QPSK	20.15	22.85	PASS
LTE Band 7	20	21100	50	#Mid	QPSK	20.13	22.83	PASS
LTE Band 7	20	21100	50	#Max	QPSK	20.00	22.70	PASS
LTE Band 7	20	21100	100	#0	QPSK	20.13	22.83	PASS
LTE Band 7	20	21100	1	#0	QAM16	20.66	23.36	PASS
LTE Band 7	20	21100	1	#Mid	QAM16	19.84	22.54	PASS
LTE Band 7	20	21100	1	#Max	QAM16	20.67	23.37	PASS
LTE Band 7	20	21100	50	#0	QAM16	20.13	22.83	PASS
LTE Band 7	20	21100	50	#Mid	QAM16	20.12	22.82	PASS
LTE Band 7	20	21100	50	#Max	QAM16	20.00	22.70	PASS
LTE Band 7	20	21100	100	#0	QAM16	20.15	22.85	PASS
LTE Band 7	20	21350	1	#0	QPSK	20.49	23.19	PASS
LTE Band 7	20	21350	1	#Mid	QPSK	20.09	22.79	PASS
LTE Band 7	20	21350	1	#Max	QPSK	20.32	23.02	PASS
LTE Band 7	20	21350	50	#0	QPSK	19.73	22.43	PASS
LTE Band 7	20	21350	50	#Mid	QPSK	19.78	22.48	PASS
LTE Band 7	20	21350	50	#Max	QPSK	20.17	22.87	PASS
LTE Band 7	20	21350	100	#0	QPSK	20.32	23.02	PASS
LTE Band 7	20	21350	1	#0	QAM16	20.61	23.31	PASS
LTE Band 7	20	21350	1	#Mid	QAM16	20.15	22.85	PASS
LTE Band 7	20	21350	1	#Max	QAM16	20.36	23.06	PASS
LTE Band 7	20	21350	50	#0	QAM16	19.79	22.49	PASS
LTE Band 7	20	21350	50	#Mid	QAM16	19.83	22.53	PASS
LTE Band 7	20	21350	50	#Max	QAM16	20.22	22.92	PASS
LTE Band 7	20	21350	100	#0	QAM16	20.34	23.04	PASS



Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)	Verdict
LTE Band 38	5	37775	1	#0	QPSK	23.96	26.46	PASS
LTE Band 38	5	37775	1	#Mid	QPSK	23.86	26.36	PASS
LTE Band 38	5	37775	1	#Max	QPSK	24.08	26.58	PASS
LTE Band 38	5	37775	12	#0	QPSK	23.28	25.78	PASS
LTE Band 38	5	37775	12	#Mid	QPSK	23.29	25.79	PASS
LTE Band 38	5	37775	12	#Max	QPSK	23.32	25.82	PASS
LTE Band 38	5	37775	25	#0	QPSK	23.31	25.81	PASS
LTE Band 38	5	37775	1	#0	QAM16	22.68	25.18	PASS
LTE Band 38	5	37775	1	#Mid	QAM16	22.50	25.00	PASS
LTE Band 38	5	37775	1	#Max	QAM16	22.96	25.46	PASS
LTE Band 38	5	37775	12	#0	QAM16	21.92	24.42	PASS
LTE Band 38	5	37775	12	#Mid	QAM16	21.89	24.39	PASS
LTE Band 38	5	37775	12	#Max	QAM16	21.94	24.44	PASS
LTE Band 38	5	37775	25	#0	QAM16	21.95	24.45	PASS
LTE Band 38	5	38000	1	#0	QPSK	24.08	26.58	PASS
LTE Band 38	5	38000	1	#Mid	QPSK	23.53	26.03	PASS
LTE Band 38	5	38000	1	#Max	QPSK	23.92	26.42	PASS
LTE Band 38	5	38000	12	#0	QPSK	22.67	25.17	PASS
LTE Band 38	5	38000	12	#Mid	QPSK	22.68	25.18	PASS
LTE Band 38	5	38000	12	#Max	QPSK	22.68	25.18	PASS
LTE Band 38	5	38000	25	#0	QPSK	22.69	25.19	PASS
LTE Band 38	5	38000	1	#0	QAM16	22.67	25.17	PASS
LTE Band 38	5	38000	1	#Mid	QAM16	22.08	24.58	PASS
LTE Band 38	5	38000	1	#Max	QAM16	22.34	24.84	PASS
LTE Band 38	5	38000	12	#0	QAM16	21.21	23.71	PASS
LTE Band 38	5	38000	12	#Mid	QAM16	21.22	23.72	PASS
LTE Band 38	5	38000	12	#Max	QAM16	21.23	23.73	PASS
LTE Band 38	5	38000	25	#0	QAM16	21.27	23.77	PASS
LTE Band 38	5	38225	1	#0	QPSK	24.01	26.51	PASS
LTE Band 38	5	38225	1	#Mid	QPSK	23.59	26.09	PASS
LTE Band 38	5	38225	1	#Max	QPSK	23.90	26.40	PASS
LTE Band 38	5	38225	12	#0	QPSK	22.73	25.23	PASS
LTE Band 38	5	38225	12	#Mid	QPSK	22.74	25.24	PASS
LTE Band 38	5	38225	12	#Max	QPSK	22.73	25.23	PASS
LTE Band 38	5	38225	25	#0	QPSK	22.75	25.25	PASS
LTE Band 38	5	38225	1	#0	QAM16	22.48	24.98	PASS
LTE Band 38	5	38225	1	#Mid	QAM16	22.17	24.67	PASS
LTE Band 38	5	38225	1	#Max	QAM16	22.46	24.96	PASS
LTE Band 38	5	38225	12	#0	QAM16	21.30	23.80	PASS
LTE Band 38	5	38225	12	#Mid	QAM16	21.32	23.82	PASS





LTE Band 38	5	38225	12	#Max	QAM16	21.32	23.82	PASS
LTE Band 38	5	38225	25	#0	QAM16	21.36	23.86	PASS
LTE Band 38	10	37800	1	#0	QPSK	24.27	26.77	PASS
LTE Band 38	10	37800	1	#Mid	QPSK	23.64	26.14	PASS
LTE Band 38	10	37800	1	#Max	QPSK	24.56	27.06	PASS
LTE Band 38	10	37800	25	#0	QPSK	23.38	25.88	PASS
LTE Band 38	10	37800	25	#Mid	QPSK	23.39	25.89	PASS
LTE Band 38	10	37800	25	#Max	QPSK	23.52	26.02	PASS
LTE Band 38	10	37800	50	#0	QPSK	23.48	25.98	PASS
LTE Band 38	10	37800	1	#0	QAM16	23.27	25.77	PASS
LTE Band 38	10	37800	1	#Mid	QAM16	22.45	24.95	PASS
LTE Band 38	10	37800	1	#Max	QAM16	23.36	25.86	PASS
LTE Band 38	10	37800	25	#0	QAM16	22.03	24.53	PASS
LTE Band 38	10	37800	25	#Mid	QAM16	22.05	24.55	PASS
LTE Band 38	10	37800	25	#Max	QAM16	22.14	24.64	PASS
LTE Band 38	10	37800	50	#0	QAM16	22.11	24.61	PASS
LTE Band 38	10	38000	1	#0	QPSK	24.25	26.75	PASS
LTE Band 38	10	38000	1	#Mid	QPSK	23.06	25.56	PASS
LTE Band 38	10	38000	1	#Max	QPSK	24.41	26.91	PASS
LTE Band 38	10	38000	25	#0	QPSK	22.92	25.42	PASS
LTE Band 38	10	38000	25	#Mid	QPSK	22.93	25.43	PASS
LTE Band 38	10	38000	25	#Max	QPSK	22.71	25.21	PASS
LTE Band 38	10	38000	50	#0	QPSK	22.76	25.26	PASS
LTE Band 38	10	38000	1	#0	QAM16	23.09	25.59	PASS
LTE Band 38	10	38000	1	#Mid	QAM16	21.83	24.33	PASS
LTE Band 38	10	38000	1	#Max	QAM16	22.99	25.49	PASS
LTE Band 38	10	38000	25	#0	QAM16	21.48	23.98	PASS
LTE Band 38	10	38000	25	#Mid	QAM16	21.49	23.99	PASS
LTE Band 38	10	38000	25	#Max	QAM16	21.03	23.53	PASS
LTE Band 38	10	38000	50	#0	QAM16	21.12	23.62	PASS
LTE Band 38	10	38200	1	#0	QPSK	24.01	26.51	PASS
LTE Band 38	10	38200	1	#Mid	QPSK	23.10	25.60	PASS
LTE Band 38	10	38200	1	#Max	QPSK	24.22	26.72	PASS
LTE Band 38	10	38200	25	#0	QPSK	22.47	24.97	PASS
LTE Band 38	10	38200	25	#Mid	QPSK	22.48	24.98	PASS
LTE Band 38	10	38200	25	#Max	QPSK	22.76	25.26	PASS
LTE Band 38	10	38200	50	#0	QPSK	22.79	25.29	PASS
LTE Band 38	10	38200	1	#0	QAM16	22.56	25.06	PASS
LTE Band 38	10	38200	1	#Mid	QAM16	21.70	24.20	PASS
LTE Band 38	10	38200	1	#Max	QAM16	22.86	25.36	PASS
LTE Band 38	10	38200	25	#0	QAM16	21.05	23.55	PASS
LTE Band 38	10	38200	25	#Mid	QAM16	20.81	23.31	PASS
LTE Band 38	10	38200	25	#Max	QAM16	21.12	23.62	PASS



LTE Band 38	10	38200	50	#0	QAM16	21.14	23.64	PASS
LTE Band 38	15	37825	1	#0	QPSK	24.21	26.71	PASS
LTE Band 38	15	37825	1	#Mid	QPSK	23.76	26.26	PASS
LTE Band 38	15	37825	1	#Max	QPSK	24.19	26.69	PASS
LTE Band 38	15	37825	36	#0	QPSK	23.27	25.77	PASS
LTE Band 38	15	37825	36	#Mid	QPSK	23.27	25.77	PASS
LTE Band 38	15	37825	36	#Max	QPSK	23.19	25.69	PASS
LTE Band 38	15	37825	75	#0	QPSK	23.36	25.86	PASS
LTE Band 38	15	37825	1	#0	QAM16	23.18	25.68	PASS
LTE Band 38	15	37825	1	#Mid	QAM16	22.54	25.04	PASS
LTE Band 38	15	37825	1	#Max	QAM16	23.06	25.56	PASS
LTE Band 38	15	37825	36	#0	QAM16	21.89	24.39	PASS
LTE Band 38	15	37825	36	#Mid	QAM16	21.90	24.40	PASS
LTE Band 38	15	37825	36	#Max	QAM16	21.79	24.29	PASS
LTE Band 38	15	37825	75	#0	QAM16	21.97	24.47	PASS
LTE Band 38	15	38000	1	#0	QPSK	24.40	26.90	PASS
LTE Band 38	15	38000	1	#Mid	QPSK	23.19	25.69	PASS
LTE Band 38	15	38000	1	#Max	QPSK	24.11	26.61	PASS
LTE Band 38	15	38000	36	#0	QPSK	22.73	25.23	PASS
LTE Band 38	15	38000	36	#Mid	QPSK	22.74	25.24	PASS
LTE Band 38	15	38000	36	#Max	QPSK	22.52	25.02	PASS
LTE Band 38	15	38000	75	#0	QPSK	22.56	25.06	PASS
LTE Band 38	15	38000	1	#0	QAM16	22.98	25.48	PASS
LTE Band 38	15	38000	1	#Mid	QAM16	21.65	24.15	PASS
LTE Band 38	15	38000	1	#Max	QAM16	22.54	25.04	PASS
LTE Band 38	15	38000	36	#0	QAM16	21.31	23.81	PASS
LTE Band 38	15	38000	36	#Mid	QAM16	21.32	23.82	PASS
LTE Band 38	15	38000	36	#Max	QAM16	21.12	23.62	PASS
LTE Band 38	15	38000	75	#0	QAM16	21.16	23.66	PASS
LTE Band 38	15	38175	1	#0	QPSK	23.90	26.40	PASS
LTE Band 38	15	38175	1	#Mid	QPSK	22.79	25.29	PASS
LTE Band 38	15	38175	1	#Max	QPSK	24.10	26.60	PASS
LTE Band 38	15	38175	36	#0	QPSK	22.25	24.75	PASS
LTE Band 38	15	38175	36	#Mid	QPSK	22.26	24.76	PASS
LTE Band 38	15	38175	36	#Max	QPSK	22.58	25.08	PASS
LTE Band 38	15	38175	75	#0	QPSK	22.34	24.84	PASS
LTE Band 38	15	38175	1	#0	QAM16	22.22	24.72	PASS
LTE Band 38	15	38175	1	#Mid	QAM16	21.21	23.71	PASS
LTE Band 38	15	38175	1	#Max	QAM16	22.49	24.99	PASS
LTE Band 38	15	38175	36	#0	QAM16	20.84	23.34	PASS
LTE Band 38	15	38175	36	#Mid	QAM16	20.86	23.36	PASS
LTE Band 38	15	38175	36	#Max	QAM16	21.18	23.68	PASS
LTE Band 38	15	38175	75	#0	QAM16	20.92	23.42	PASS



LTE Band 38	20	37850	1	#0	QPSK	24.22	26.72	PASS
LTE Band 38	20	37850	1	#Mid	QPSK	23.89	26.39	PASS
LTE Band 38	20	37850	1	#Max	QPSK	24.31	26.81	PASS
LTE Band 38	20	37850	50	#0	QPSK	23.38	25.88	PASS
LTE Band 38	20	37850	50	#Mid	QPSK	23.39	25.89	PASS
LTE Band 38	20	37850	50	#Max	QPSK	23.00	25.50	PASS
LTE Band 38	20	37850	100	#0	QPSK	23.28	25.78	PASS
LTE Band 38	20	37850	1	#0	QAM16	22.97	25.47	PASS
LTE Band 38	20	37850	1	#Mid	QAM16	22.59	25.09	PASS
LTE Band 38	20	37850	1	#Max	QAM16	22.90	25.40	PASS
LTE Band 38	20	37850	50	#0	QAM16	21.99	24.49	PASS
LTE Band 38	20	37850	50	#Mid	QAM16	21.99	24.49	PASS
LTE Band 38	20	37850	50	#Max	QAM16	21.57	24.07	PASS
LTE Band 38	20	37850	100	#0	QAM16	21.89	24.39	PASS
LTE Band 38	20	38000	1	#0	QPSK	24.18	26.68	PASS
LTE Band 38	20	38000	1	#Mid	QPSK	23.45	25.95	PASS
LTE Band 38	20	38000	1	#Max	QPSK	24.02	26.52	PASS
LTE Band 38	20	38000	50	#0	QPSK	22.81	25.31	PASS
LTE Band 38	20	38000	50	#Mid	QPSK	22.82	25.32	PASS
LTE Band 38	20	38000	50	#Max	QPSK	22.59	25.09	PASS
LTE Band 38	20	38000	100	#0	QPSK	22.65	25.15	PASS
LTE Band 38	20	38000	1	#0	QAM16	22.83	25.33	PASS
LTE Band 38	20	38000	1	#Mid	QAM16	22.06	24.56	PASS
LTE Band 38	20	38000	1	#Max	QAM16	22.33	24.83	PASS
LTE Band 38	20	38000	50	#0	QAM16	21.37	23.87	PASS
LTE Band 38	20	38000	50	#Mid	QAM16	21.39	23.89	PASS
LTE Band 38	20	38000	50	#Max	QAM16	21.16	23.66	PASS
LTE Band 38	20	38000	100	#0	QAM16	21.22	23.72	PASS
LTE Band 38	20	38150	1	#0	QPSK	23.92	26.42	PASS
LTE Band 38	20	38150	1	#Mid	QPSK	23.17	25.67	PASS
LTE Band 38	20	38150	1	#Max	QPSK	24.24	26.74	PASS
LTE Band 38	20	38150	50	#0	QPSK	22.31	24.81	PASS
LTE Band 38	20	38150	50	#Mid	QPSK	22.32	24.82	PASS
LTE Band 38	20	38150	50	#Max	QPSK	22.62	25.12	PASS
LTE Band 38	20	38150	100	#0	QPSK	22.40	24.90	PASS
LTE Band 38	20	38150	1	#0	QAM16	22.26	24.76	PASS
LTE Band 38	20	38150	1	#Mid	QAM16	21.77	24.27	PASS
LTE Band 38	20	38150	1	#Max	QAM16	22.64	25.14	PASS
LTE Band 38	20	38150	50	#0	QAM16	20.89	23.39	PASS
LTE Band 38	20	38150	50	#Mid	QAM16	20.91	23.41	PASS
LTE Band 38	20	38150	50	#Max	QAM16	21.22	23.72	PASS
LTE Band 38	20	38150	100	#0	QAM16	20.98	23.48	PASS



Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)	Verdict
LTE Band 66	1.4	131979	1	#0	QPSK	23.02	24.72	PASS
LTE Band 66	1.4	131979	1	#Mid	QPSK	22.88	24.58	PASS
LTE Band 66	1.4	131979	1	#Max	QPSK	22.96	24.66	PASS
LTE Band 66	1.4	131979	3	#0	QPSK	22.95	24.65	PASS
LTE Band 66	1.4	131979	3	#Mid	QPSK	22.96	24.66	PASS
LTE Band 66	1.4	131979	3	#Max	QPSK	22.93	24.63	PASS
LTE Band 66	1.4	131979	6	#0	QPSK	21.97	23.67	PASS
LTE Band 66	1.4	131979	1	#0	QAM16	21.46	23.16	PASS
LTE Band 66	1.4	131979	1	#Mid	QAM16	21.25	22.95	PASS
LTE Band 66	1.4	131979	1	#Max	QAM16	21.46	23.16	PASS
LTE Band 66	1.4	131979	3	#0	QAM16	21.13	22.83	PASS
LTE Band 66	1.4	131979	3	#Mid	QAM16	21.20	22.90	PASS
LTE Band 66	1.4	131979	3	#Max	QAM16	21.16	22.86	PASS
LTE Band 66	1.4	131979	6	#0	QAM16	20.26	21.96	PASS
LTE Band 66	1.4	132322	1	#0	QPSK	22.49	24.19	PASS
LTE Band 66	1.4	132322	1	#Mid	QPSK	22.37	24.07	PASS
LTE Band 66	1.4	132322	1	#Max	QPSK	22.52	24.22	PASS
LTE Band 66	1.4	132322	3	#0	QPSK	22.39	24.09	PASS
LTE Band 66	1.4	132322	3	#Mid	QPSK	22.42	24.12	PASS
LTE Band 66	1.4	132322	3	#Max	QPSK	22.42	24.12	PASS
LTE Band 66	1.4	132322	6	#0	QPSK	21.42	23.12	PASS
LTE Band 66	1.4	132322	1	#0	QAM16	21.37	23.07	PASS
LTE Band 66	1.4	132322	1	#Mid	QAM16	21.27	22.97	PASS
LTE Band 66	1.4	132322	1	#Max	QAM16	21.44	23.14	PASS
LTE Band 66	1.4	132322	3	#0	QAM16	21.41	23.11	PASS
LTE Band 66	1.4	132322	3	#Mid	QAM16	21.35	23.05	PASS
LTE Band 66	1.4	132322	3	#Max	QAM16	21.38	23.08	PASS
LTE Band 66	1.4	132322	6	#0	QAM16	20.26	21.96	PASS
LTE Band 66	1.4	132665	1	#0	QPSK	23.90	25.60	PASS
LTE Band 66	1.4	132665	1	#Mid	QPSK	23.79	25.49	PASS
LTE Band 66	1.4	132665	1	#Max	QPSK	23.92	25.62	PASS
LTE Band 66	1.4	132665	3	#0	QPSK	23.85	25.55	PASS
LTE Band 66	1.4	132665	3	#Mid	QPSK	23.88	25.58	PASS
LTE Band 66	1.4	132665	3	#Max	QPSK	23.81	25.51	PASS
LTE Band 66	1.4	132665	6	#0	QPSK	22.39	24.09	PASS
LTE Band 66	1.4	132665	1	#0	QAM16	22.34	24.04	PASS
LTE Band 66	1.4	132665	1	#Mid	QAM16	22.25	23.95	PASS
LTE Band 66	1.4	132665	1	#Max	QAM16	22.30	24.00	PASS
LTE Band 66	1.4	132665	3	#0	QAM16	22.30	24.00	PASS
LTE Band 66	1.4	132665	3	#Mid	QAM16	22.34	24.04	PASS



LTE Band 66	1.4	132665	3	#Max	QAM16	22.21	23.91	PASS
LTE Band 66	1.4	132665	6	#0	QAM16	21.32	23.02	PASS
LTE Band 66	3	131987	1	#0	QPSK	23.17	24.87	PASS
LTE Band 66	3	131987	1	#Mid	QPSK	22.41	24.11	PASS
LTE Band 66	3	131987	1	#Max	QPSK	23.11	24.81	PASS
LTE Band 66	3	131987	8	#0	QPSK	21.75	23.45	PASS
LTE Band 66	3	131987	8	#Mid	QPSK	21.75	23.45	PASS
LTE Band 66	3	131987	8	#Max	QPSK	21.71	23.41	PASS
LTE Band 66	3	131987	15	#0	QPSK	21.64	23.34	PASS
LTE Band 66	3	131987	1	#0	QAM16	21.22	22.92	PASS
LTE Band 66	3	131987	1	#Mid	QAM16	20.46	22.16	PASS
LTE Band 66	3	131987	1	#Max	QAM16	21.12	22.82	PASS
LTE Band 66	3	131987	8	#0	QAM16	20.01	21.71	PASS
LTE Band 66	3	131987	8	#Mid	QAM16	20.03	21.73	PASS
LTE Band 66	3	131987	8	#Max	QAM16	19.96	21.66	PASS
LTE Band 66	3	131987	15	#0	QAM16	19.85	21.55	PASS
LTE Band 66	3	132322	1	#0	QPSK	22.36	24.06	PASS
LTE Band 66	3	132322	1	#Mid	QPSK	21.85	23.55	PASS
LTE Band 66	3	132322	1	#Max	QPSK	22.52	24.22	PASS
LTE Band 66	3	132322	8	#0	QPSK	21.09	22.79	PASS
LTE Band 66	3	132322	8	#Mid	QPSK	21.16	22.86	PASS
LTE Band 66	3	132322	8	#Max	QPSK	21.16	22.86	PASS
LTE Band 66	3	132322	15	#0	QPSK	21.03	22.73	PASS
LTE Band 66	3	132322	1	#0	QAM16	21.31	23.01	PASS
LTE Band 66	3	132322	1	#Mid	QAM16	20.77	22.47	PASS
LTE Band 66	3	132322	1	#Max	QAM16	21.52	23.22	PASS
LTE Band 66	3	132322	8	#0	QAM16	19.94	21.64	PASS
LTE Band 66	3	132322	8	#Mid	QAM16	19.94	21.64	PASS
LTE Band 66	3	132322	8	#Max	QAM16	19.95	21.65	PASS
LTE Band 66	3	132322	15	#0	QAM16	19.85	21.55	PASS
LTE Band 66	3	132657	1	#0	QPSK	23.82	25.52	PASS
LTE Band 66	3	132657	1	#Mid	QPSK	22.52	24.22	PASS
LTE Band 66	3	132657	1	#Max	QPSK	23.66	25.36	PASS
LTE Band 66	3	132657	8	#0	QPSK	22.17	23.87	PASS
LTE Band 66	3	132657	8	#Mid	QPSK	22.23	23.93	PASS
LTE Band 66	3	132657	8	#Max	QPSK	22.17	23.87	PASS
LTE Band 66	3	132657	15	#0	QPSK	22.04	23.74	PASS
LTE Band 66	3	132657	1	#0	QAM16	22.23	23.93	PASS
LTE Band 66	3	132657	1	#Mid	QAM16	21.70	23.40	PASS
LTE Band 66	3	132657	1	#Max	QAM16	22.27	23.97	PASS
LTE Band 66	3	132657	8	#0	QAM16	21.10	22.80	PASS
LTE Band 66	3	132657	8	#Mid	QAM16	21.12	22.82	PASS
LTE Band 66	3	132657	8	#Max	QAM16	21.03	22.73	PASS





LTE Band 66	3	132657	15	#0	QAM16	20.93	22.63	PASS
LTE Band 66	5	131997	1	#0	QPSK	22.90	24.60	PASS
LTE Band 66	5	131997	1	#Mid	QPSK	22.33	24.03	PASS
LTE Band 66	5	131997	1	#Max	QPSK	22.55	24.25	PASS
LTE Band 66	5	131997	12	#0	QPSK	21.67	23.37	PASS
LTE Band 66	5	131997	12	#Mid	QPSK	21.66	23.36	PASS
LTE Band 66	5	131997	12	#Max	QPSK	21.52	23.22	PASS
LTE Band 66	5	131997	25	#0	QPSK	21.60	23.30	PASS
LTE Band 66	5	131997	1	#0	QAM16	21.04	22.74	PASS
LTE Band 66	5	131997	1	#Mid	QAM16	20.93	22.63	PASS
LTE Band 66	5	131997	1	#Max	QAM16	21.19	22.89	PASS
LTE Band 66	5	131997	12	#0	QAM16	20.14	21.84	PASS
LTE Band 66	5	131997	12	#Mid	QAM16	20.16	21.86	PASS
LTE Band 66	5	131997	12	#Max	QAM16	20.03	21.73	PASS
LTE Band 66	5	131997	25	#0	QAM16	20.06	21.76	PASS
LTE Band 66	5	132322	1	#0	QPSK	22.48	24.18	PASS
LTE Band 66	5	132322	1	#Mid	QPSK	22.04	23.74	PASS
LTE Band 66	5	132322	1	#Max	QPSK	22.63	24.33	PASS
LTE Band 66	5	132322	12	#0	QPSK	21.43	23.13	PASS
LTE Band 66	5	132322	12	#Mid	QPSK	21.40	23.10	PASS
LTE Band 66	5	132322	12	#Max	QPSK	21.57	23.27	PASS
LTE Band 66	5	132322	25	#0	QPSK	21.47	23.17	PASS
LTE Band 66	5	132322	1	#0	QAM16	21.34	23.04	PASS
LTE Band 66	5	132322	1	#Mid	QAM16	20.92	22.62	PASS
LTE Band 66	5	132322	1	#Max	QAM16	21.51	23.21	PASS
LTE Band 66	5	132322	12	#0	QAM16	19.97	21.67	PASS
LTE Band 66	5	132322	12	#Mid	QAM16	19.97	21.67	PASS
LTE Band 66	5	132322	12	#Max	QAM16	20.11	21.81	PASS
LTE Band 66	5	132322	25	#0	QAM16	20.11	21.81	PASS
LTE Band 66	5	132647	1	#0	QPSK	23.79	25.49	PASS
LTE Band 66	5	132647	1	#Mid	QPSK	23.41	25.11	PASS
LTE Band 66	5	132647	1	#Max	QPSK	23.70	25.40	PASS
LTE Band 66	5	132647	12	#0	QPSK	22.04	23.74	PASS
LTE Band 66	5	132647	12	#Mid	QPSK	22.11	23.81	PASS
LTE Band 66	5	132647	12	#Max	QPSK	22.10	23.80	PASS
LTE Band 66	5	132647	25	#0	QPSK	22.12	23.82	PASS
LTE Band 66	5	132647	1	#0	QAM16	22.25	23.95	PASS
LTE Band 66	5	132647	1	#Mid	QAM16	21.99	23.69	PASS
LTE Band 66	5	132647	1	#Max	QAM16	22.29	23.99	PASS
LTE Band 66	5	132647	12	#0	QAM16	20.96	22.66	PASS
LTE Band 66	5	132647	12	#Mid	QAM16	20.96	22.66	PASS
LTE Band 66	5	132647	12	#Max	QAM16	21.01	22.71	PASS
LTE Band 66	5	132647	25	#0	QAM16	20.96	22.66	PASS



LTE Band 66	10	132022	1	#0	QPSK	23.45	25.15	PASS
LTE Band 66	10	132022	1	#Mid	QPSK	21.88	23.58	PASS
LTE Band 66	10	132022	1	#Max	QPSK	23.59	25.29	PASS
LTE Band 66	10	132022	25	#0	QPSK	21.69	23.39	PASS
LTE Band 66	10	132022	25	#Mid	QPSK	21.70	23.40	PASS
LTE Band 66	10	132022	25	#Max	QPSK	21.73	23.43	PASS
LTE Band 66	10	132022	50	#0	QPSK	21.61	23.31	PASS
LTE Band 66	10	132022	1	#0	QAM16	22.48	24.18	PASS
LTE Band 66	10	132022	1	#Mid	QAM16	20.43	22.13	PASS
LTE Band 66	10	132022	1	#Max	QAM16	22.30	24.00	PASS
LTE Band 66	10	132022	25	#0	QAM16	19.91	21.61	PASS
LTE Band 66	10	132022	25	#Mid	QAM16	19.95	21.65	PASS
LTE Band 66	10	132022	25	#Max	QAM16	19.74	21.44	PASS
LTE Band 66	10	132022	50	#0	QAM16	19.81	21.51	PASS
LTE Band 66	10	132322	1	#0	QPSK	23.73	25.43	PASS
LTE Band 66	10	132322	1	#Mid	QPSK	21.71	23.41	PASS
LTE Band 66	10	132322	1	#Max	QPSK	23.91	25.61	PASS
LTE Band 66	10	132322	25	#0	QPSK	21.33	23.03	PASS
LTE Band 66	10	132322	25	#Mid	QPSK	21.36	23.06	PASS
LTE Band 66	10	132322	25	#Max	QPSK	21.55	23.25	PASS
LTE Band 66	10	132322	50	#0	QPSK	21.49	23.19	PASS
LTE Band 66	10	132322	1	#0	QAM16	21.99	23.69	PASS
LTE Band 66	10	132322	1	#Mid	QAM16	20.67	22.37	PASS
LTE Band 66	10	132322	1	#Max	QAM16	22.24	23.94	PASS
LTE Band 66	10	132322	25	#0	QAM16	19.94	21.64	PASS
LTE Band 66	10	132322	25	#Mid	QAM16	19.92	21.62	PASS
LTE Band 66	10	132322	25	#Max	QAM16	20.14	21.84	PASS
LTE Band 66	10	132322	50	#0	QAM16	20.08	21.78	PASS
LTE Band 66	10	132622	1	#0	QPSK	23.74	25.44	PASS
LTE Band 66	10	132622	1	#Mid	QPSK	22.99	24.69	PASS
LTE Band 66	10	132622	1	#Max	QPSK	24.20	25.90	PASS
LTE Band 66	10	132622	25	#0	QPSK	21.78	23.48	PASS
LTE Band 66	10	132622	25	#Mid	QPSK	21.73	23.43	PASS
LTE Band 66	10	132622	25	#Max	QPSK	21.99	23.69	PASS
LTE Band 66	10	132622	50	#0	QPSK	21.85	23.55	PASS
LTE Band 66	10	132622	1	#0	QAM16	21.72	23.42	PASS
LTE Band 66	10	132622	1	#Mid	QAM16	21.33	23.03	PASS
LTE Band 66	10	132622	1	#Max	QAM16	22.47	24.17	PASS
LTE Band 66	10	132622	25	#0	QAM16	20.48	22.18	PASS
LTE Band 66	10	132622	25	#Mid	QAM16	20.43	22.13	PASS
LTE Band 66	10	132622	25	#Max	QAM16	20.82	22.52	PASS
LTE Band 66	10	132622	50	#0	QAM16	20.59	22.29	PASS
LTE Band 66	15	132047	1	#0	QPSK	23.50	25.20	PASS



LTE Band 66	15	132047	1	#Mid	QPSK	22.28	23.98	PASS
LTE Band 66	15	132047	1	#Max	QPSK	23.63	25.33	PASS
LTE Band 66	15	132047	36	#0	QPSK	21.60	23.30	PASS
LTE Band 66	15	132047	36	#Mid	QPSK	21.63	23.33	PASS
LTE Band 66	15	132047	36	#Max	QPSK	21.62	23.32	PASS
LTE Band 66	15	132047	75	#0	QPSK	21.95	23.65	PASS
LTE Band 66	15	132047	1	#0	QAM16	22.05	23.75	PASS
LTE Band 66	15	132047	1	#Mid	QAM16	20.39	22.09	PASS
LTE Band 66	15	132047	1	#Max	QAM16	22.27	23.97	PASS
LTE Band 66	15	132047	36	#0	QAM16	19.86	21.56	PASS
LTE Band 66	15	132047	36	#Mid	QAM16	19.88	21.58	PASS
LTE Band 66	15	132047	36	#Max	QAM16	19.81	21.51	PASS
LTE Band 66	15	132047	75	#0	QAM16	19.93	21.63	PASS
LTE Band 66	15	132322	1	#0	QPSK	23.00	24.70	PASS
LTE Band 66	15	132322	1	#Mid	QPSK	21.74	23.44	PASS
LTE Band 66	15	132322	1	#Max	QPSK	23.11	24.81	PASS
LTE Band 66	15	132322	36	#0	QPSK	21.34	23.04	PASS
LTE Band 66	15	132322	36	#Mid	QPSK	21.36	23.06	PASS
LTE Band 66	15	132322	36	#Max	QPSK	21.56	23.26	PASS
LTE Band 66	15	132322	75	#0	QPSK	21.51	23.21	PASS
LTE Band 66	15	132322	1	#0	QAM16	22.06	23.76	PASS
LTE Band 66	15	132322	1	#Mid	QAM16	20.97	22.67	PASS
LTE Band 66	15	132322	1	#Max	QAM16	22.24	23.94	PASS
LTE Band 66	15	132322	36	#0	QAM16	19.93	21.63	PASS
LTE Band 66	15	132322	36	#Mid	QAM16	19.92	21.62	PASS
LTE Band 66	15	132322	36	#Max	QAM16	20.15	21.85	PASS
LTE Band 66	15	132322	75	#0	QAM16	20.08	21.78	PASS
LTE Band 66	15	132597	1	#0	QPSK	22.83	24.53	PASS
LTE Band 66	15	132597	1	#Mid	QPSK	22.82	24.52	PASS
LTE Band 66	15	132597	1	#Max	QPSK	23.97	25.67	PASS
LTE Band 66	15	132597	36	#0	QPSK	21.00	22.70	PASS
LTE Band 66	15	132597	36	#Mid	QPSK	20.98	22.68	PASS
LTE Band 66	15	132597	36	#Max	QPSK	21.86	23.56	PASS
LTE Band 66	15	132597	75	#0	QPSK	21.67	23.37	PASS
LTE Band 66	15	132597	1	#0	QAM16	21.06	22.76	PASS
LTE Band 66	15	132597	1	#Mid	QAM16	21.17	22.87	PASS
LTE Band 66	15	132597	1	#Max	QAM16	22.36	24.06	PASS
LTE Band 66	15	132597	36	#0	QAM16	19.71	21.41	PASS
LTE Band 66	15	132597	36	#Mid	QAM16	19.71	21.41	PASS
LTE Band 66	15	132597	36	#Max	QAM16	20.65	22.35	PASS
LTE Band 66	15	132597	75	#0	QAM16	20.34	22.04	PASS
LTE Band 66	20	132072	1	#0	QPSK	23.18	24.88	PASS
LTE Band 66	20	132072	1	#Mid	QPSK	22.67	24.37	PASS





LTE Band 66	20	132072	1	#Max	QPSK	23.78	25.48	PASS
LTE Band 66	20	132072	50	#0	QPSK	21.60	23.30	PASS
LTE Band 66	20	132072	50	#Mid	QPSK	21.59	23.29	PASS
LTE Band 66	20	132072	50	#Max	QPSK	22.15	23.85	PASS
LTE Band 66	20	132072	100	#0	QPSK	22.18	23.88	PASS
LTE Band 66	20	132072	1	#0	QAM16	21.21	22.91	PASS
LTE Band 66	20	132072	1	#Mid	QAM16	21.18	22.88	PASS
LTE Band 66	20	132072	1	#Max	QAM16	21.85	23.55	PASS
LTE Band 66	20	132072	50	#0	QAM16	19.78	21.48	PASS
LTE Band 66	20	132072	50	#Mid	QAM16	19.78	21.48	PASS
LTE Band 66	20	132072	50	#Max	QAM16	20.36	22.06	PASS
LTE Band 66	20	132072	100	#0	QAM16	20.21	21.91	PASS
LTE Band 66	20	132322	1	#0	QPSK	23.85	25.55	PASS
LTE Band 66	20	132322	1	#Mid	QPSK	22.09	23.79	PASS
LTE Band 66	20	132322	1	#Max	QPSK	23.68	25.38	PASS
LTE Band 66	20	132322	50	#0	QPSK	21.54	23.24	PASS
LTE Band 66	20	132322	50	#Mid	QPSK	21.54	23.24	PASS
LTE Band 66	20	132322	50	#Max	QPSK	21.72	23.42	PASS
LTE Band 66	20	132322	100	#0	QPSK	21.52	23.22	PASS
LTE Band 66	20	132322	1	#0	QAM16	21.90	23.60	PASS
LTE Band 66	20	132322	1	#Mid	QAM16	20.81	22.51	PASS
LTE Band 66	20	132322	1	#Max	QAM16	21.95	23.65	PASS
LTE Band 66	20	132322	50	#0	QAM16	20.17	21.87	PASS
LTE Band 66	20	132322	50	#Mid	QAM16	20.18	21.88	PASS
LTE Band 66	20	132322	50	#Max	QAM16	20.38	22.08	PASS
LTE Band 66	20	132322	100	#0	QAM16	20.10	21.80	PASS
LTE Band 66	20	132572	1	#0	QPSK	22.35	24.05	PASS
LTE Band 66	20	132572	1	#Mid	QPSK	22.55	24.25	PASS
LTE Band 66	20	132572	1	#Max	QPSK	23.98	25.68	PASS
LTE Band 66	20	132572	50	#0	QPSK	20.70	22.40	PASS
LTE Band 66	20	132572	50	#Mid	QPSK	20.72	22.42	PASS
LTE Band 66	20	132572	50	#Max	QPSK	21.74	23.44	PASS
LTE Band 66	20	132572	100	#0	QPSK	21.43	23.13	PASS
LTE Band 66	20	132572	1	#0	QAM16	20.62	22.32	PASS
LTE Band 66	20	132572	1	#Mid	QAM16	20.60	22.30	PASS
LTE Band 66	20	132572	1	#Max	QAM16	22.25	23.95	PASS
LTE Band 66	20	132572	50	#0	QAM16	19.46	21.16	PASS
LTE Band 66	20	132572	50	#Mid	QAM16	19.47	21.17	PASS
LTE Band 66	20	132572	50	#Max	QAM16	20.57	22.27	PASS
LTE Band 66	20	132572	100	#0	QAM16	20.17	21.87	PASS



Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)	Verdict
LTE Band 40 Subset 1	5	38725	1	#0	QPSK	20.81	23.21	PASS
LTE Band 40 Subset 1	5	38725	1	#Mid	QPSK	20.21	22.61	PASS
LTE Band 40 Subset 1	5	38725	1	#Max	QPSK	20.81	23.21	PASS
LTE Band 40 Subset 1	5	38725	12	#0	QPSK	20.57	22.97	PASS
LTE Band 40 Subset 1	5	38725	12	#Mid	QPSK	20.57	22.97	PASS
LTE Band 40 Subset 1	5	38725	12	#Max	QPSK	20.43	22.83	PASS
LTE Band 40 Subset 1	5	38725	25	#0	QPSK	20.62	23.02	PASS
LTE Band 40 Subset 1	5	38725	1	#0	QAM16	21.01	23.41	PASS
LTE Band 40 Subset 1	5	38725	1	#Mid	QAM16	20.40	22.80	PASS
LTE Band 40 Subset 1	5	38725	1	#Max	QAM16	21.00	23.40	PASS
LTE Band 40 Subset 1	5	38725	12	#0	QAM16	20.58	22.98	PASS
LTE Band 40 Subset 1	5	38725	12	#Mid	QAM16	20.58	22.98	PASS
LTE Band 40 Subset 1	5	38725	12	#Max	QAM16	20.45	22.85	PASS
LTE Band 40 Subset 1	5	38725	25	#0	QAM16	20.66	23.06	PASS
LTE Band 40 Subset 1	5	38750	1	#0	QPSK	20.58	22.98	PASS
LTE Band 40 Subset 1	5	38750	1	#Mid	QPSK	20.38	22.78	PASS
LTE Band 40 Subset 1	5	38750	1	#Max	QPSK	21.02	23.42	PASS
LTE Band 40 Subset 1	5	38750	12	#0	QPSK	20.42	22.82	PASS
LTE Band 40 Subset 1	5	38750	12	#Mid	QPSK	20.42	22.82	PASS
LTE Band 40 Subset 1	5	38750	12	#Max	QPSK	20.58	22.98	PASS
LTE Band 40 Subset 1	5	38750	25	#0	QPSK	20.49	22.89	PASS
LTE Band 40 Subset 1	5	38750	1	#0	QAM16	20.89	23.29	PASS
LTE Band 40 Subset 1	5	38750	1	#Mid	QAM16	20.58	22.98	PASS
LTE Band 40 Subset 1	5	38750	1	#Max	QAM16	21.21	23.61	PASS
LTE Band 40 Subset 1	5	38750	12	#0	QAM16	20.51	22.91	PASS
LTE Band 40 Subset 1	5	38750	12	#Mid	QAM16	20.51	22.91	PASS
LTE Band 40 Subset 1	5	38750	12	#Max	QAM16	20.66	23.06	PASS
LTE Band 40 Subset 1	5	38750	25	#0	QAM16	20.56	22.96	PASS
LTE Band 40 Subset 1	5	38775	1	#0	QPSK	20.72	23.12	PASS
LTE Band 40 Subset 1	5	38775	1	#Mid	QPSK	20.47	22.87	PASS
LTE Band 40 Subset 1	5	38775	1	#Max	QPSK	21.00	23.40	PASS
LTE Band 40 Subset 1	5	38775	12	#0	QPSK	20.56	22.96	PASS
LTE Band 40 Subset 1	5	38775	12	#Mid	QPSK	20.56	22.96	PASS
LTE Band 40 Subset 1	5	38775	12	#Max	QPSK	20.71	23.11	PASS
LTE Band 40 Subset 1	5	38775	25	#0	QPSK	20.63	23.03	PASS
LTE Band 40 Subset 1	5	38775	1	#0	QAM16	20.82	23.22	PASS
LTE Band 40 Subset 1	5	38775	1	#Mid	QAM16	20.77	23.17	PASS
LTE Band 40 Subset 1	5	38775	1	#Max	QAM16	21.30	23.70	PASS
LTE Band 40 Subset 1	5	38775	12	#0	QAM16	20.53	22.93	PASS
LTE Band 40 Subset 1	5	38775	12	#Mid	QAM16	20.53	22.93	PASS



LTE Band 40 Subset 1	5	38775	12	#Max	QAM16	20.69	23.09	PASS
LTE Band 40 Subset 1	5	38775	25	#0	QAM16	20.71	23.11	PASS
LTE Band 40 Subset 1	10	38750	1	#0	QPSK	21.36	23.76	PASS
LTE Band 40 Subset 1	10	38750	1	#Mid	QPSK	19.99	22.39	PASS
LTE Band 40 Subset 1	10	38750	1	#Max	QPSK	21.55	23.95	PASS
LTE Band 40 Subset 1	10	38750	25	#0	QPSK	20.55	22.95	PASS
LTE Band 40 Subset 1	10	38750	25	#Mid	QPSK	20.55	22.95	PASS
LTE Band 40 Subset 1	10	38750	25	#Max	QPSK	20.59	22.99	PASS
LTE Band 40 Subset 1	10	38750	50	#0	QPSK	20.51	22.91	PASS
LTE Band 40 Subset 1	10	38750	1	#0	QAM16	21.55	23.95	PASS
LTE Band 40 Subset 1	10	38750	1	#Mid	QAM16	20.23	22.63	PASS
LTE Band 40 Subset 1	10	38750	1	#Max	QAM16	21.49	23.89	PASS
LTE Band 40 Subset 1	10	38750	25	#0	QAM16	20.54	22.94	PASS
LTE Band 40 Subset 1	10	38750	25	#Mid	QAM16	20.54	22.94	PASS
LTE Band 40 Subset 1	10	38750	25	#Max	QAM16	20.59	22.99	PASS
LTE Band 40 Subset 1	10	38750	50	#0	QAM16	20.51	22.91	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)	Verdict
LTE Band 40 Subset 2	5	39175	1	#0	QPSK	20.76	23.16	PASS
LTE Band 40 Subset 2	5	39175	1	#Mid	QPSK	20.43	22.83	PASS
LTE Band 40 Subset 2	5	39175	1	#Max	QPSK	20.92	23.32	PASS
LTE Band 40 Subset 2	5	39175	12	#0	QPSK	20.53	22.93	PASS
LTE Band 40 Subset 2	5	39175	12	#Mid	QPSK	20.52	22.92	PASS
LTE Band 40 Subset 2	5	39175	12	#Max	QPSK	20.64	23.04	PASS
LTE Band 40 Subset 2	5	39175	25	#0	QPSK	20.59	22.99	PASS
LTE Band 40 Subset 2	5	39175	1	#0	QAM16	20.74	23.14	PASS
LTE Band 40 Subset 2	5	39175	1	#Mid	QAM16	20.41	22.81	PASS
LTE Band 40 Subset 2	5	39175	1	#Max	QAM16	21.26	23.66	PASS
LTE Band 40 Subset 2	5	39175	12	#0	QAM16	20.55	22.95	PASS
LTE Band 40 Subset 2	5	39175	12	#Mid	QAM16	20.55	22.95	PASS
LTE Band 40 Subset 2	5	39175	12	#Max	QAM16	20.67	23.07	PASS
LTE Band 40 Subset 2	5	39175	25	#0	QAM16	20.62	23.02	PASS
LTE Band 40 Subset 2	5	39200	1	#0	QPSK	20.90	23.30	PASS
LTE Band 40 Subset 2	5	39200	1	#Mid	QPSK	20.27	22.67	PASS
LTE Band 40 Subset 2	5	39200	1	#Max	QPSK	20.78	23.18	PASS
LTE Band 40 Subset 2	5	39200	12	#0	QPSK	20.62	23.02	PASS
LTE Band 40 Subset 2	5	39200	12	#Mid	QPSK	20.62	23.02	PASS
LTE Band 40 Subset 2	5	39200	12	#Max	QPSK	20.49	22.89	PASS
LTE Band 40 Subset 2	5	39200	25	#0	QPSK	20.70	23.10	PASS
LTE Band 40 Subset 2	5	39200	1	#0	QAM16	21.06	23.46	PASS
LTE Band 40 Subset 2	5	39200	1	#Mid	QAM16	20.44	22.84	PASS
LTE Band 40 Subset 2	5	39200	1	#Max	QAM16	20.88	23.28	PASS



LTE Band 40 Subset 2	5	39200	12	#0	QAM16	20.59	22.99	PASS
LTE Band 40 Subset 2	5	39200	12	#Mid	QAM16	20.59	22.99	PASS
LTE Band 40 Subset 2	5	39200	12	#Max	QAM16	20.47	22.87	PASS
LTE Band 40 Subset 2	5	39200	25	#0	QAM16	20.76	23.16	PASS
LTE Band 40 Subset 2	5	39225	1	#0	QPSK	20.64	23.04	PASS
LTE Band 40 Subset 2	5	39225	1	#Mid	QPSK	20.25	22.65	PASS
LTE Band 40 Subset 2	5	39225	1	#Max	QPSK	20.90	23.30	PASS
LTE Band 40 Subset 2	5	39225	12	#0	QPSK	20.48	22.88	PASS
LTE Band 40 Subset 2	5	39225	12	#Mid	QPSK	20.48	22.88	PASS
LTE Band 40 Subset 2	5	39225	12	#Max	QPSK	20.63	23.03	PASS
LTE Band 40 Subset 2	5	39225	25	#0	QPSK	20.57	22.97	PASS
LTE Band 40 Subset 2	5	39225	1	#0	QAM16	20.59	22.99	PASS
LTE Band 40 Subset 2	5	39225	1	#Mid	QAM16	20.19	22.59	PASS
LTE Band 40 Subset 2	5	39225	1	#Max	QAM16	20.80	23.20	PASS
LTE Band 40 Subset 2	5	39225	12	#0	QAM16	20.52	22.92	PASS
LTE Band 40 Subset 2	5	39225	12	#Mid	QAM16	20.52	22.92	PASS
LTE Band 40 Subset 2	5	39225	12	#Max	QAM16	20.67	23.07	PASS
LTE Band 40 Subset 2	5	39225	25	#0	QAM16	20.57	22.97	PASS
LTE Band 40 Subset 2	10	39200	1	#0	QPSK	21.30	23.70	PASS
LTE Band 40 Subset 2	10	39200	1	#Mid	QPSK	19.94	22.34	PASS
LTE Band 40 Subset 2	10	39200	1	#Max	QPSK	21.52	23.92	PASS
LTE Band 40 Subset 2	10	39200	25	#0	QPSK	20.54	22.94	PASS
LTE Band 40 Subset 2	10	39200	25	#Mid	QPSK	20.54	22.94	PASS
LTE Band 40 Subset 2	10	39200	25	#Max	QPSK	20.53	22.93	PASS
LTE Band 40 Subset 2	10	39200	50	#0	QPSK	20.71	23.11	PASS
LTE Band 40 Subset 2	10	39200	1	#0	QAM16	21.41	23.81	PASS
LTE Band 40 Subset 2	10	39200	1	#Mid	QAM16	20.07	22.47	PASS
LTE Band 40 Subset 2	10	39200	1	#Max	QAM16	21.53	23.93	PASS
LTE Band 40 Subset 2	10	39200	25	#0	QAM16	20.58	22.98	PASS
LTE Band 40 Subset 2	10	39200	25	#Mid	QAM16	20.58	22.98	PASS
LTE Band 40 Subset 2	10	39200	25	#Max	QAM16	20.55	22.95	PASS
LTE Band 40 Subset 2	10	39200	50	#0	QAM16	20.71	23.11	PASS

**EIRP and Duty Cycle for 3GPP LTE Band 40**

Band	RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Duty Cycle
LTE Band 40 Subset 1	100%	QPSK	5	38725	2307.5	30.06%
				38750	2310	30.12%
				38775	2312.5	30.11%
			10	38750	2310	30.04%
		16QAM	5	38725	2307.5	30.11%
				38750	2310	30.12%
				38775	2312.5	30.11%
			10	38750	2310	30.10%

Band	RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Duty Cycle
LTE Band 40 Subset 2	100%	QPSK	5	39175	2352.5	30.11%
				39200	2355	30.05%
				39225	2357.5	30.11%
			10	39200	2355	30.04%
		16QAM	5	39175	2352.5	30.05%
				39200	2355	30.11%
				39225	2357.5	30.12%
			10	39200	2355	30.09%



LTE Band 40 Subset 1				Conducted Power (dBm/MHz)			EIRP Power (dBm/MHz)			EIRP Power (mW/MHz)			Limit (mW/MHz)
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
				38725/2307.5	38750/2310	38775/2312.5	38725/2307.5	38750/2310	38775/2312.5	38725/2307.5	38750/2310	38775/2312.5	
5MHz	QPSK	25	0	12.715	16.558	16.895	15.115	18.958	19.295	32.471	78.668	85.016	250
	16QAM	25	0	15.825	15.982	16.140	18.225	18.382	18.540	66.451	68.897	71.450	250
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW/MHz)
				38750/2310			38750/2310			38750/2310			
10MHz	QPSK	50	0	14.207			16.607			45.783			250
	16QAM	50	0	13.268			15.668			36.881			250

LTE Band 40 Subset 1				Conducted Power (dBm/5MHz)			EIRP Power (dBm/5MHz)			EIRP Power (mW/5MHz)			Limit (mW/5MHz)
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
				38725/2307.5	38750/2310	38775/2312.5	38725/2307.5	38750/2310	38775/2312.5	38725/2307.5	38750/2310	38775/2312.5	
5MHz	QPSK	25	0	20.029	19.914	20.332	22.429	22.314	22.732	174.944	170.373	187.586	250
	16QAM	25	0	18.386	19.962	19.337	20.786	22.362	21.737	119.840	172.266	149.176	250
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW/5MHz)
				38750/2310			38750/2310			38750/2310			
10MHz	QPSK	50	0	18.165			20.565			113.894			250
	16QAM	50	0	17.083			19.483			88.777			250



LTE Band 40 Subset 2				Conducted Power (dBm/MHz)			EIRP Power (dBm/MHz)			EIRP Power (mW/MHz)			Limit (mW/MHz)
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
				39175/2352.5	39200/2355	39225/2357.5	39175/2352.5	39200/2355	39225/2357.5	39175/2352.5	39200/2355	39225/2357.5	
5MHz	QPSK	25	0	18.982	18.441	18.910	21.382	20.841	21.310	137.467	121.367	135.207	250
	16QAM	25	0	17.553	18.291	17.274	19.953	20.691	19.674	98.924	117.247	92.768	250
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW/MHz)
				39200/2355			39200/2355			39200/2355			
10MHz	QPSK	50	0	16.081			18.481			70.486			250
	16QAM	50	0	10.573			12.973			19.829			250

LTE Band 40 Subset 2				Conducted Power (dBm/5MHz)			EIRP Power (dBm/5MHz)			EIRP Power (mW/5MHz)			Limit (mW/5MHz)
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
				39175/2352.5	39200/2355	39225/2357.5	39175/2352.5	39200/2355	39225/2357.5	39175/2352.5	39200/2355	39225/2357.5	
5MHz	QPSK	25	0	21.185	21.370	21.433	23.585	23.770	23.833	228.297	238.232	241.713	250
	16QAM	25	0	21.281	20.260	21.130	23.681	22.660	23.530	233.400	184.502	225.424	250
BW	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW/5MHz)
				39200/2355			39200/2355			39200/2355			
10MHz	QPSK	50	0	19.264			21.664			146.690			250
	16QAM	50	0	19.434			21.834			152.546			250



EIRP (dBm/MHz)

LTE Band 40 Subset 1 QPSK 5MHz CH-Low



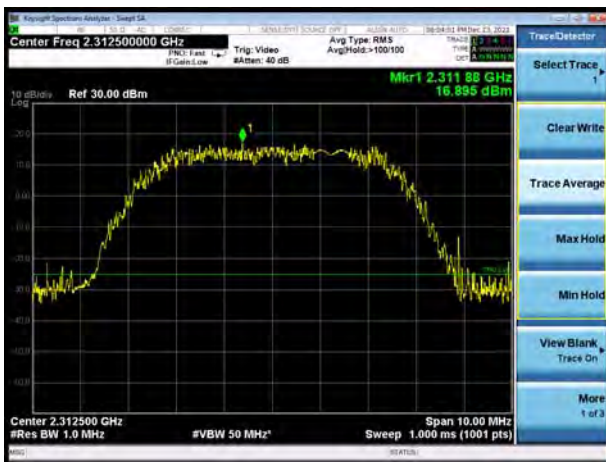
LTE Band 40 Subset 1 QPSK 10MHz



LTE Band 40 Subset 1 QPSK 5MHz CH-Middle



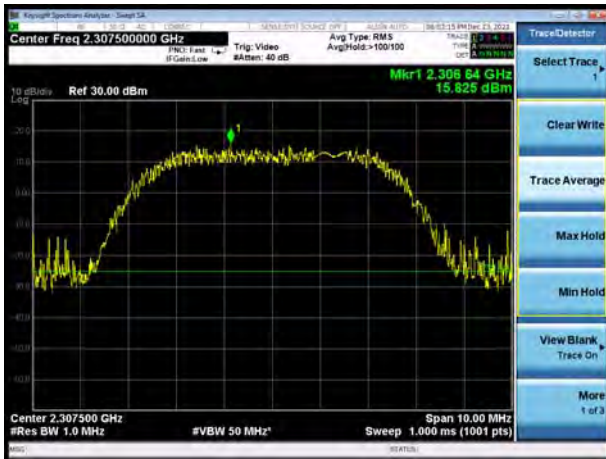
LTE Band 40 Subset 1 QPSK 5MHz CH-High



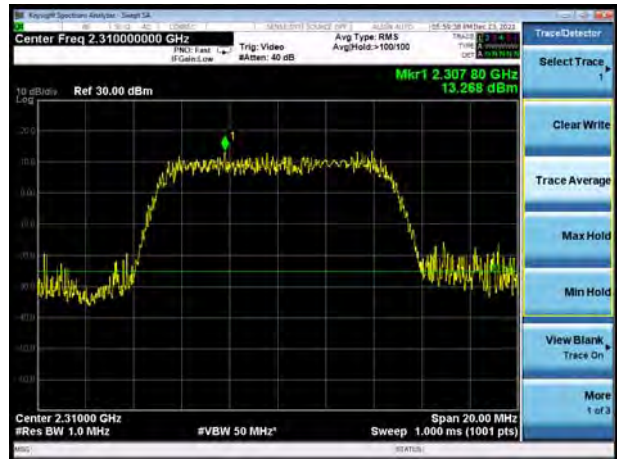




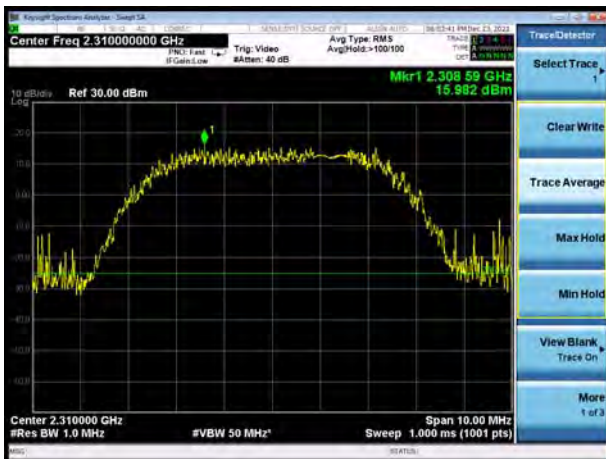
### LTE Band 40 Subset 1 16QAM 5MHz CH-Low



### LTE Band 40 Subset 1 16QAM 10MHz



### LTE Band 40 Subset 1 16QAM 5MHz CH-Middle



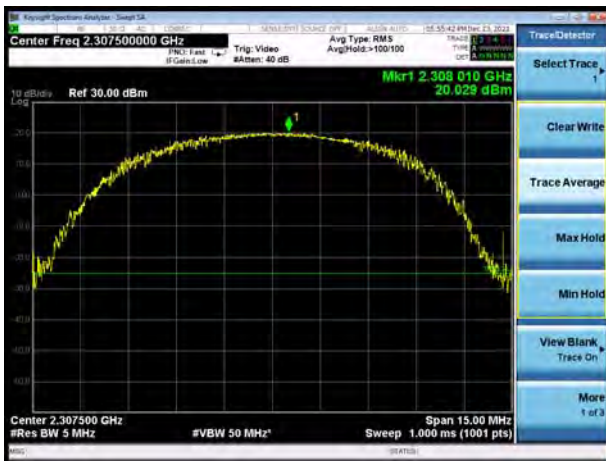
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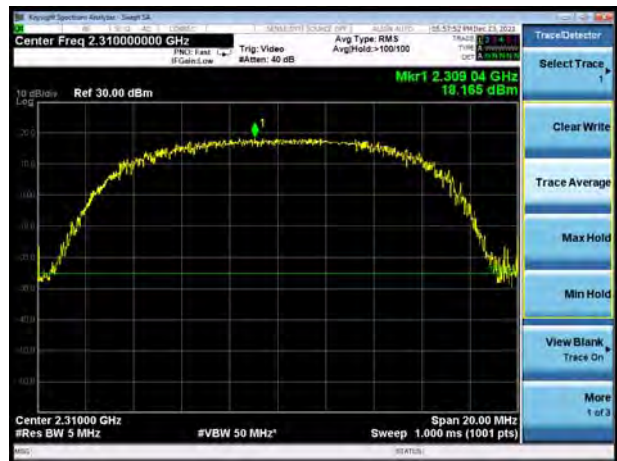


EIRP (dBm/5MHz)

LTE Band 40 Subset 1 QPSK 5MHz CH-Low



LTE Band 40 Subset 1 QPSK 10MHz



LTE Band 40 Subset 1 QPSK 5MHz CH-Middle



LTE Band 40 Subset 1 QPSK 5MHz CH-High

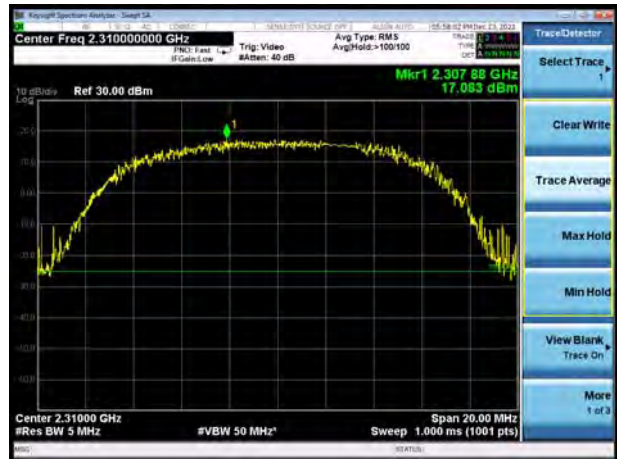




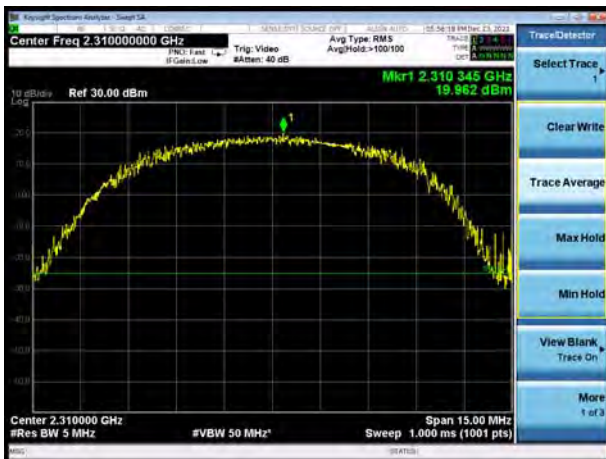
### LTE Band 40 Subset 1 16QAM 5MHz CH-Low



### LTE Band 40 Subset 1 16QAM 10MHz



### LTE Band 40 Subset 1 16QAM 5MHz CH-Middle



### LTE Band 40 Subset 1 16QAM 5MHz CH-High





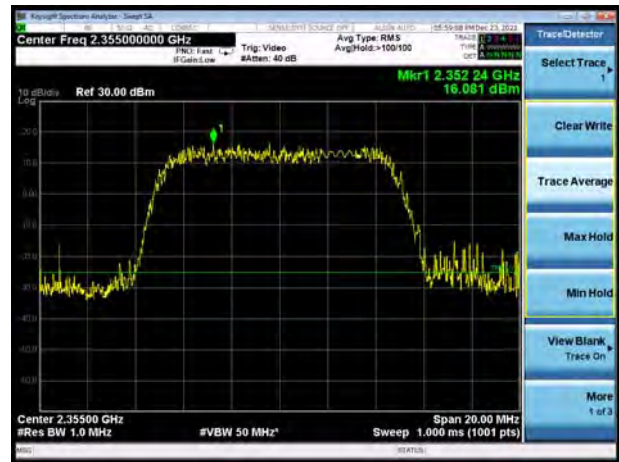


### EIRP (dBm/MHz)

LTE Band 40 Subset 2 QPSK 5MHz CH-Low



LTE Band 40 Subset 2 QPSK 10MHz



LTE Band 40 Subset 2 QPSK 5MHz CH-Middle

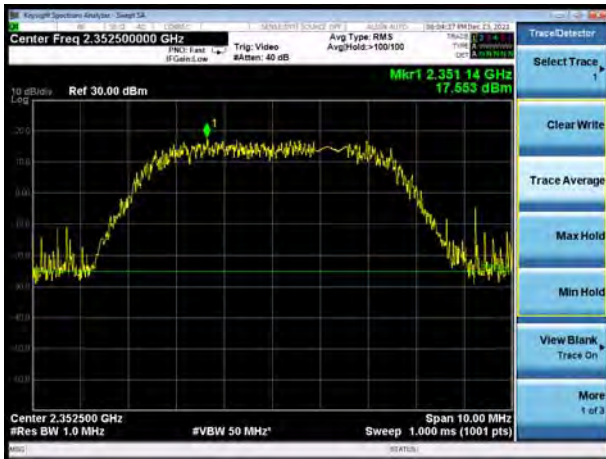


LTE Band 40 Subset 2 QPSK 5MHz CH-High

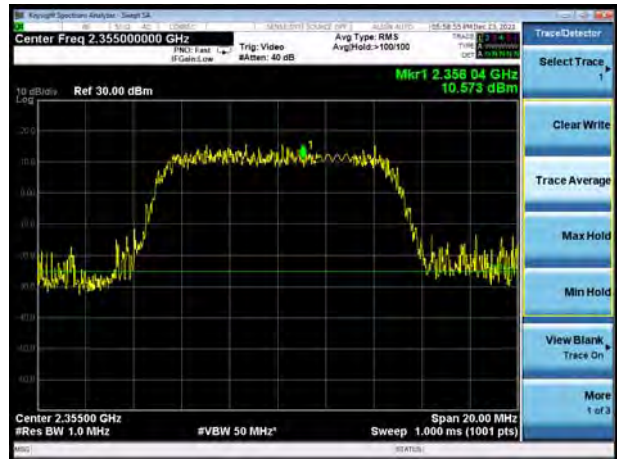




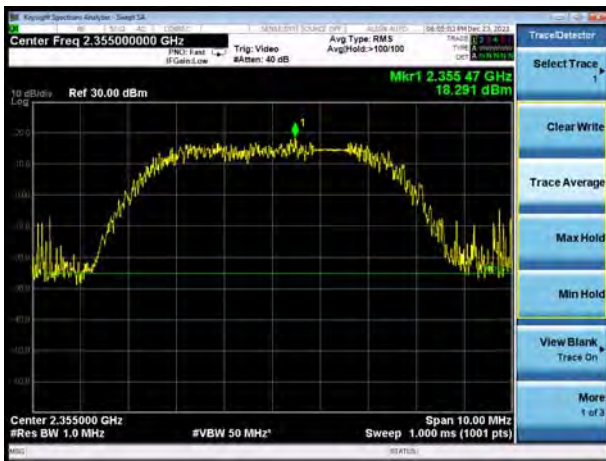
### LTE Band 40 Subset 2 16QAM 5MHz CH-Low



### LTE Band 40 Subset 2 16QAM 10MHz



### LTE Band 40 Subset 2 16QAM 5MHz CH-Middle



### LTE Band 40 Subset 2 16QAM 5MHz CH-High

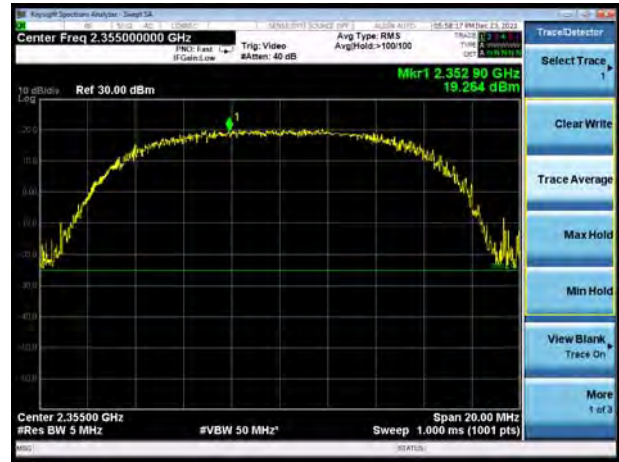


EIRP (dBm/5MHz)

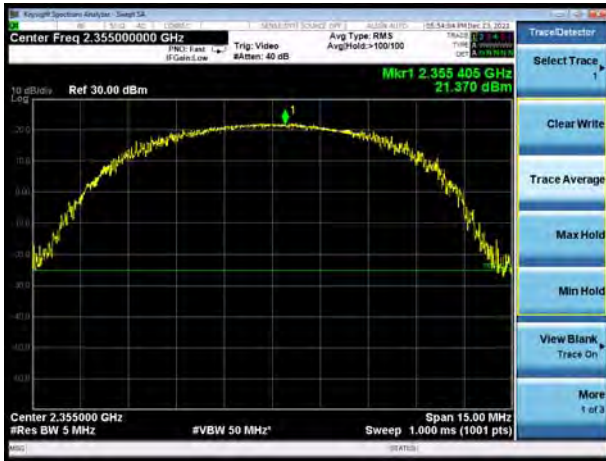
LTE Band 40 Subset 2 QPSK 5MHz CH-Low



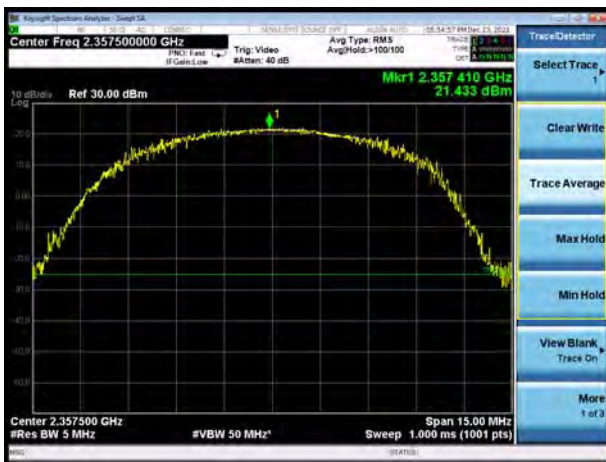
LTE Band 40 Subset 2 QPSK 10MHz



LTE Band 40 Subset 2 QPSK 5MHz CH-Middle



LTE Band 40 Subset 2 QPSK 5MHz CH-High



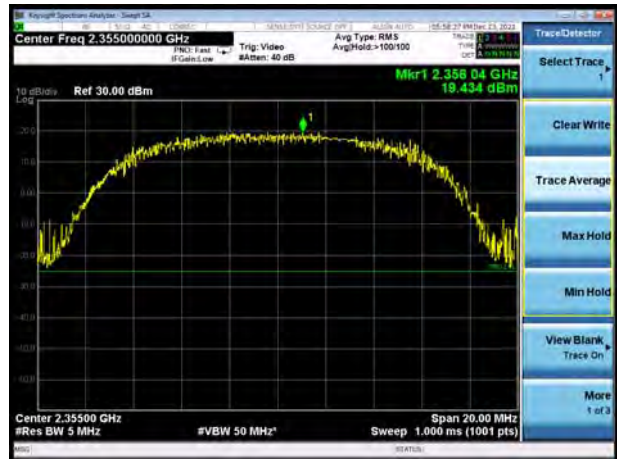




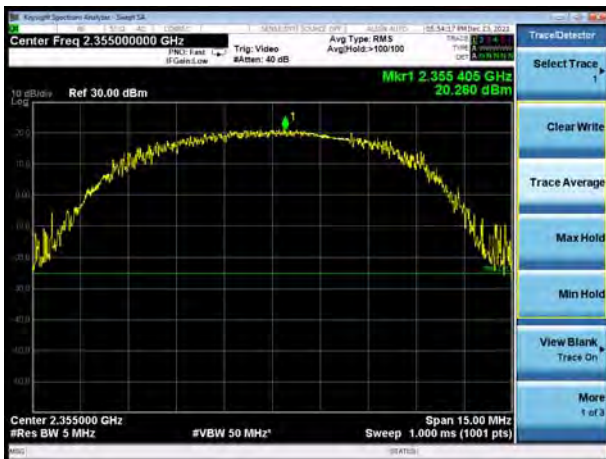
### LTE Band 40 Subset 2 16QAM 5MHz CH-Low



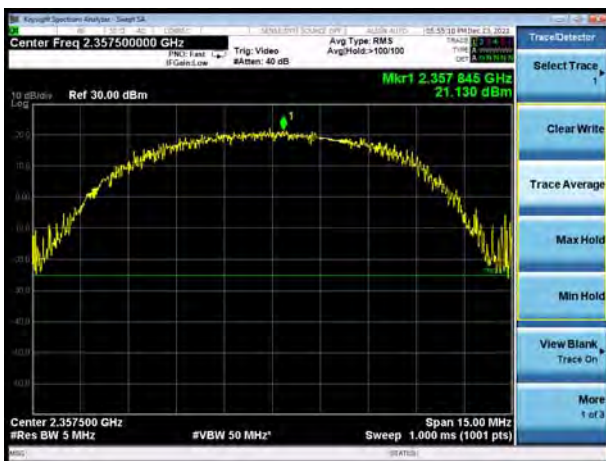
### LTE Band 40 Subset 2 16QAM 10MHz



### LTE Band 40 Subset 2 16QAM 5MHz CH-Middle



### LTE Band 40 Subset 2 16QAM 5MHz CH-High



## 5.2 Occupied Bandwidth

### Ambient condition

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

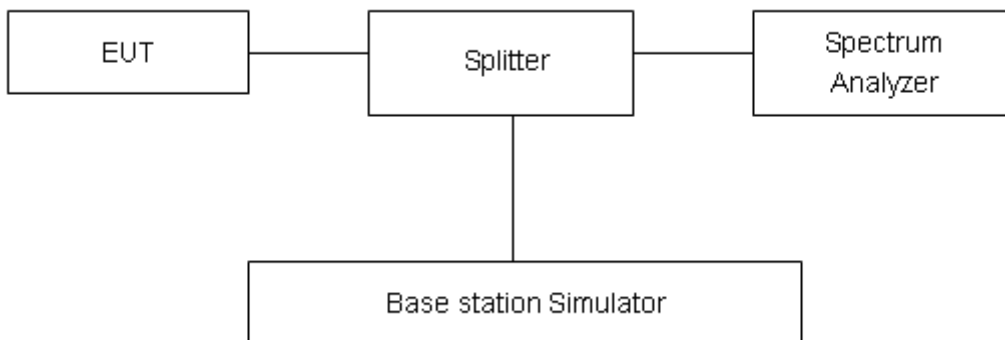
### Method of Measurement

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

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

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

### Test Setup



### Limits

No specific occupied bandwidth requirements in part 2.1049.

### Measurement Uncertainty

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





## Test Result

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.1580	4.636
	1413	1732.6	4.1660	4.643
	1513	1752.6	4.1665	4.652

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.127	1.835
			20175	1732.5	1.113	1.482
			20393	1754.3	1.111	1.466
		3	19965	1711.5	2.706	3.051
			20175	1732.5	2.711	3.025
			20385	1753.5	2.711	3.015
		5	19975	1712.5	4.541	5.091
			20175	1732.5	4.531	5.142
			20375	1752.5	4.533	5.083
		10	20000	1715	9.039	10.188
			20175	1732.5	9.034	10.397
			20350	1750	9.033	10.231
		15	20025	1717.5	13.544	15.548
			20175	1732.5	13.525	15.852
			20325	1747.5	13.541	15.556
		20	20050	1720	17.978	19.260
			20175	1732.5	17.933	19.170
			20300	1745	18.005	19.529
	16QAM	1.4	19957	1710.7	1.123	1.462
			20175	1732.5	1.125	1.479
			20393	1754.3	1.124	1.467
		3	19965	1711.5	2.717	3.031
			20175	1732.5	2.717	3.015
			20385	1753.5	2.708	3.001
		5	19975	1712.5	4.544	5.093
			20175	1732.5	4.536	5.107
			20375	1752.5	4.538	5.133
10		20000	1715	9.035	10.408	
		20175	1732.5	9.054	10.442	
		20350	1750	9.004	10.293	



		15	20025	1717.5	13.565	15.765
			20175	1732.5	13.489	15.482
			20325	1747.5	13.541	15.677
		20	20050	1720	18.038	19.681
			20175	1732.5	18.026	19.668
			20300	1745	18.002	19.570

LTE Band 7						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	20775	2502.5	4.542	5.081
			21100	2535	4.528	5.117
			21425	2567.5	4.537	5.065
		10	20800	2505	9.008	10.300
			21100	2535	9.037	10.192
			21400	2565	9.018	10.336
		15	20825	2507.5	13.518	15.618
			21100	2535	13.517	15.729
			21375	2562.5	13.501	15.652
		20	20850	2510	17.957	19.686
			21100	2535	17.991	19.727
			21350	2560	18.043	19.703
	16QAM	5	20775	2502.5	4.519	5.189
			21100	2535	4.524	5.172
			21425	2567.5	4.541	5.128
		10	20800	2505	9.031	10.328
			21100	2535	9.038	10.323
			21400	2565	9.023	10.227
		15	20825	2507.5	13.516	15.574
			21100	2535	13.531	15.551
			21375	2562.5	13.539	15.597
		20	20850	2510	17.955	19.530
			21100	2535	18.028	19.780
			21350	2560	18.044	19.700



LTE Band 38						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	37775	2572.5	4.583	6.665
			38000	2595	4.543	6.866
			38225	2617.5	4.544	6.781
		10	37800	2575	9.130	15.685
			38000	2595	9.068	15.587
			38200	2615	9.051	15.321
		15	37825	2577.5	13.595	20.122
			38000	2595	13.547	15.402
			38175	2612.5	13.534	15.513
		20	37850	2580	18.086	23.139
			38000	2595	18.014	20.240
			38150	2610	18.002	19.945
	16QAM	5	37775	2572.5	4.541	6.823
			38000	2595	4.532	6.800
			38225	2617.5	4.551	6.937
		10	37800	2575	9.076	15.001
			38000	2595	9.055	13.128
			38200	2615	9.019	15.719
		15	37825	2577.5	13.598	15.847
			38000	2595	13.537	15.565
			38175	2612.5	13.498	15.564
		20	37850	2580	18.046	21.423
			38000	2595	18.018	20.590
			38150	2610	18.022	19.495

LTE Band 40 Subset 1							
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)	
100%	QPSK	5	38725	2307.5	4.551	7.746	
			38750	2310	4.546	6.012	
			38775	2312.5	4.519	6.324	
	16QAM	10	38750	2310	9.042	15.147	
			5	38725	2307.5	4.529	7.385
				38750	2310	4.544	5.948
		38775		2312.5	4.549	5.907	
		10	38750	2310	9.128	14.736	



LTE Band 40 Subset 2						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	39175	2352.5	4.552	7.974
			39200	2355	4.526	5.774
			39225	2357.5	4.528	8.201
	16QAM	10	39200	2355	9.192	15.726
				39175	2352.5	4.532
		5	39200	2355	4.553	5.739
			39225	2357.5	4.529	7.258
			39200	2355	9.126	16.075

LTE Band 66							
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)	
100%	QPSK	1.4	131979	1710.7	1.126	1.467	
			132322	1745	1.109	1.434	
			132665	1779.3	1.106	1.396	
		3	131987	1711.5	2.715	3.005	
			132322	1745	2.711	3.017	
			132657	1778.5	2.705	3.007	
		5	131997	1712.5	4.527	5.137	
			132322	1745	4.548	5.131	
			132647	1777.5	4.531	5.138	
		10	132022	1715	9.017	10.319	
			132322	1745	9.042	10.247	
			132622	1775	9.074	10.263	
		15	132047	1717.5	13.541	15.611	
			132322	1745	13.523	15.435	
			132597	1772.5	13.577	15.776	
		20	132072	1720	18.037	19.627	
			132322	1745	18.028	19.336	
			132572	1770	18.010	19.650	
		16QAM	1.4	131979	1710.7	1.116	1.444
				132322	1745	1.112	1.447
				132665	1779.3	1.118	1.454
3	131987		1711.5	2.708	3.025		
	132322		1745	2.720	3.026		



			132657	1778.5	2.708	3.031
	5		131997	1712.5	4.534	5.092
			132322	1745	4.545	5.152
			132647	1777.5	4.538	5.111
	10		132022	1715	9.034	10.310
			132322	1745	9.041	10.474
			132622	1775	9.030	10.281
	15		132047	1717.5	13.561	15.666
			132322	1745	13.514	15.481
			132597	1772.5	13.510	15.474
	20		132072	1720	18.090	19.664
			132322	1745	17.986	19.735
			132572	1770	17.987	19.732



### WCDMA Band IV CH-Low



### WCDMA Band IV CH Middle



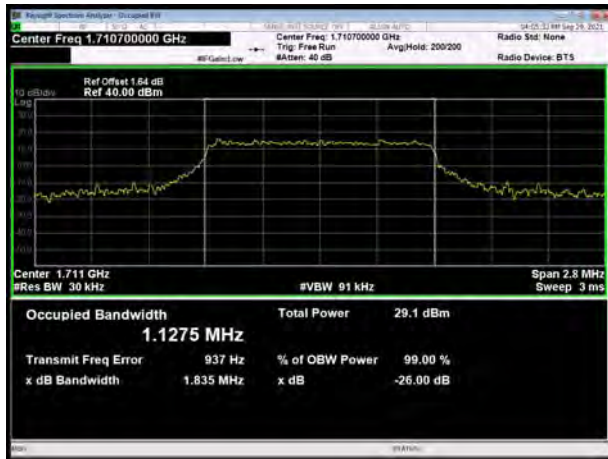
### WCDMA Band IV CH High



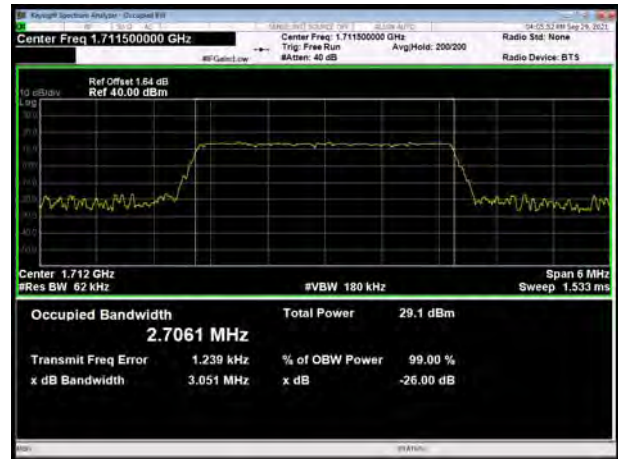




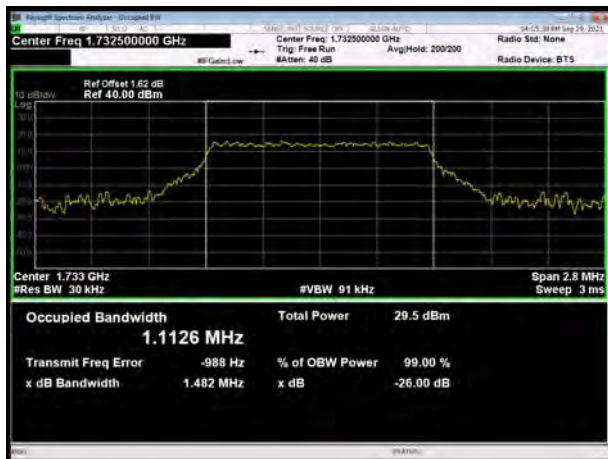
### LTE Band 4 QPSK 1.4MHz CH-Low



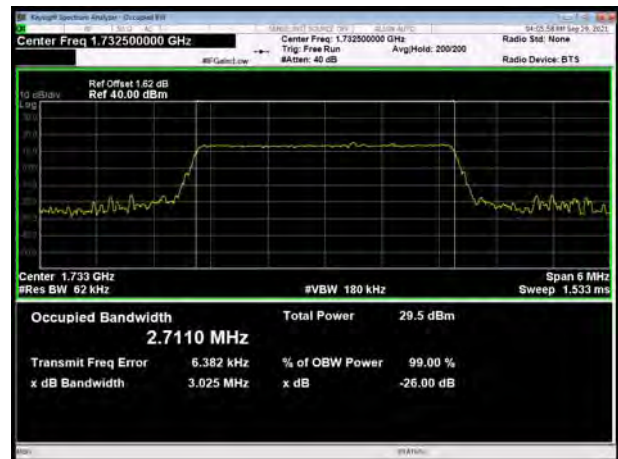
### LTE Band 4 QPSK 3MHz CH-Low



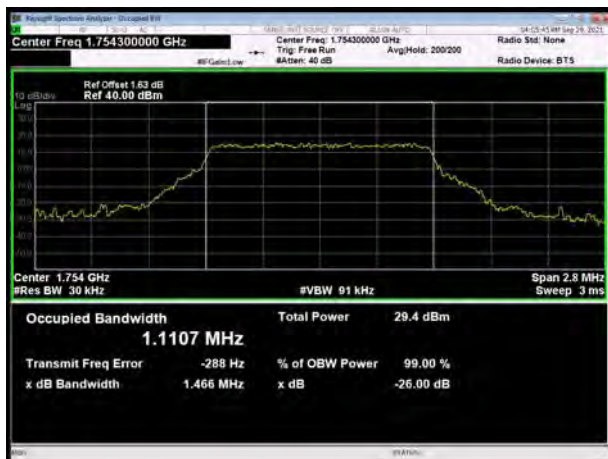
### LTE Band 4 QPSK 1.4MHz CH-Middle



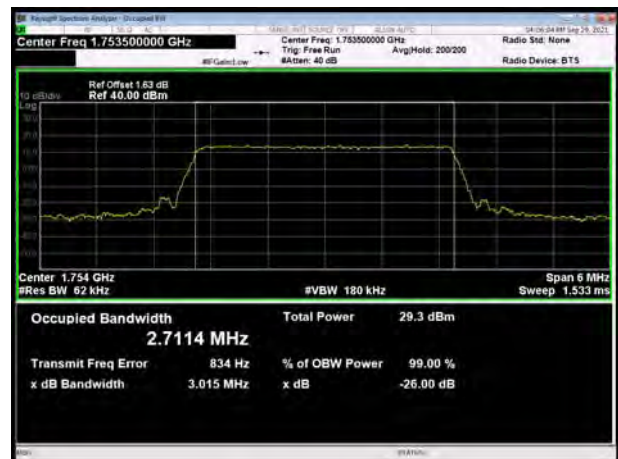
### LTE Band 4 QPSK 3MHz CH-Middle



### LTE Band 4 QPSK 1.4MHz CH-High



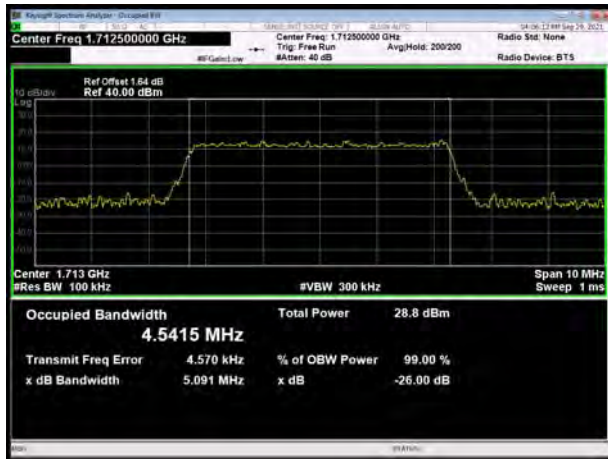
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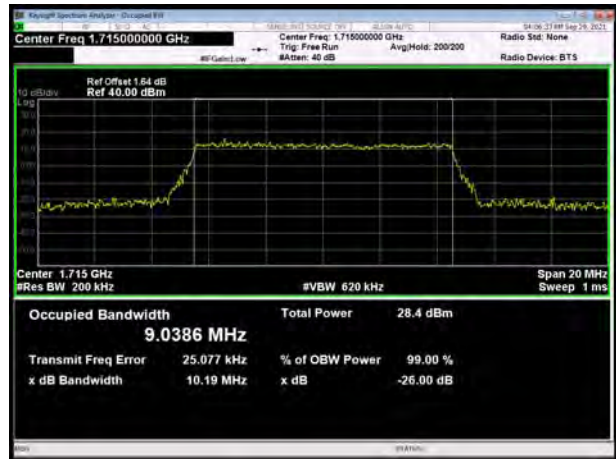




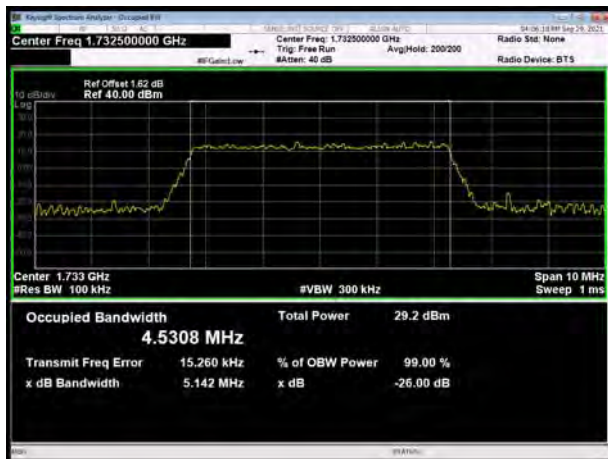
LTE Band 4 QPSK 5MHz CH-Low



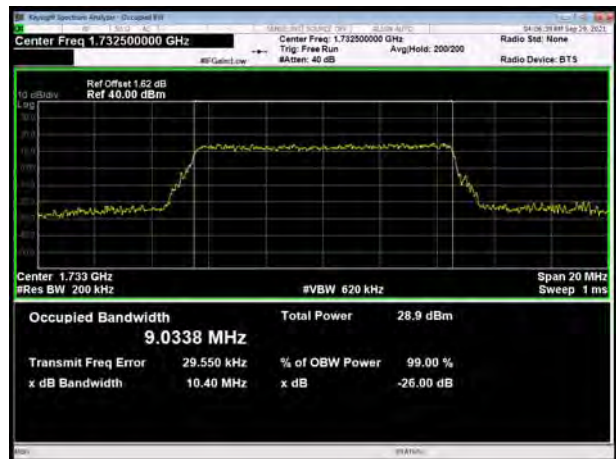
LTE Band 4 QPSK 10MHz CH-Low



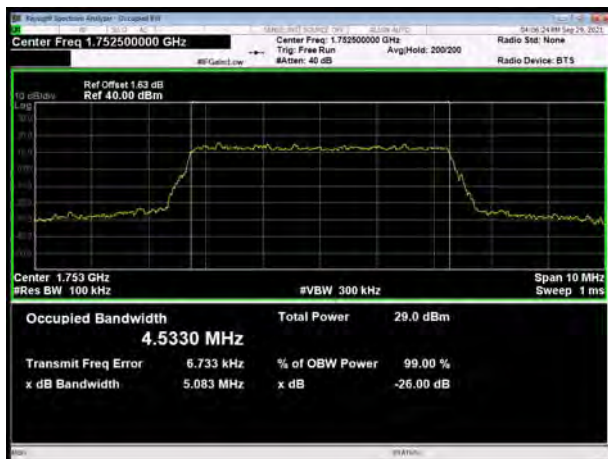
LTE Band 4 QPSK 5MHz CH-Middle



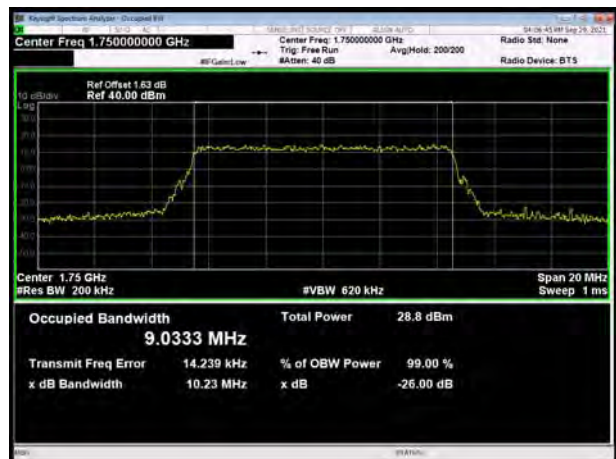
LTE Band 4 QPSK 10MHz CH-Middle



LTE Band 4 QPSK 5MHz CH-High

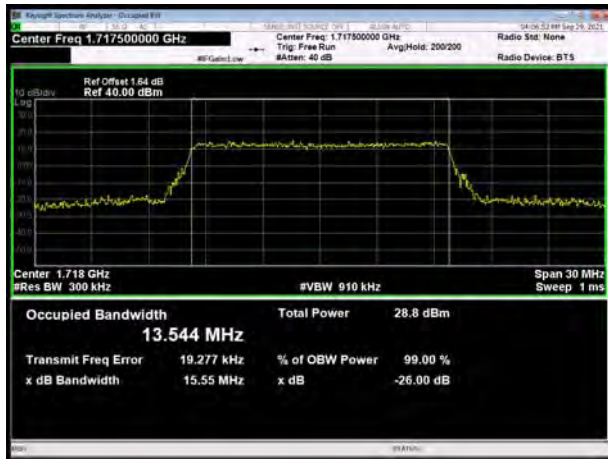


LTE Band 4 QPSK 10MHz CH-High

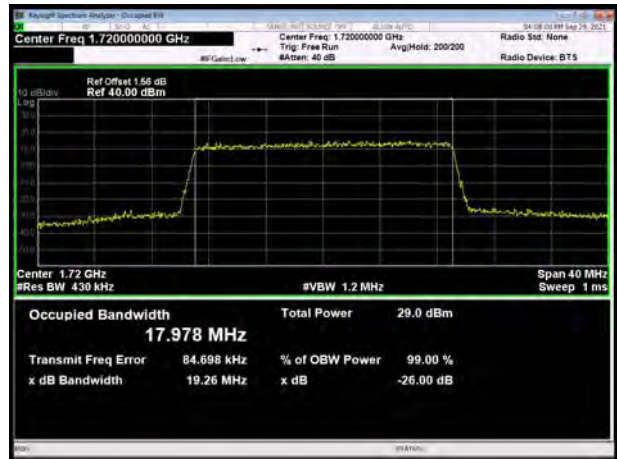




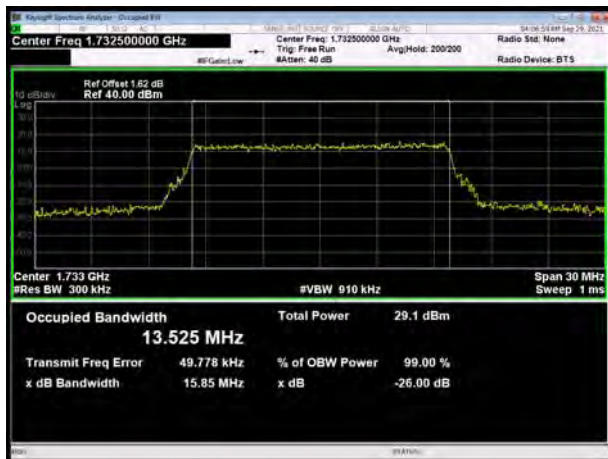
### LTE Band 4 QPSK 15MHz CH-Low



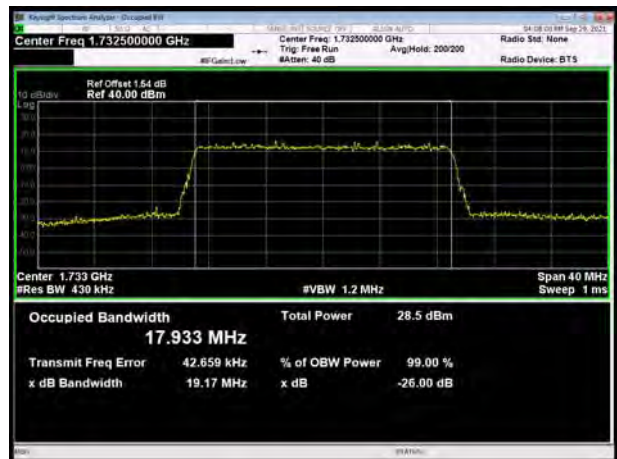
### LTE Band 4 QPSK 20MHz CH-Low



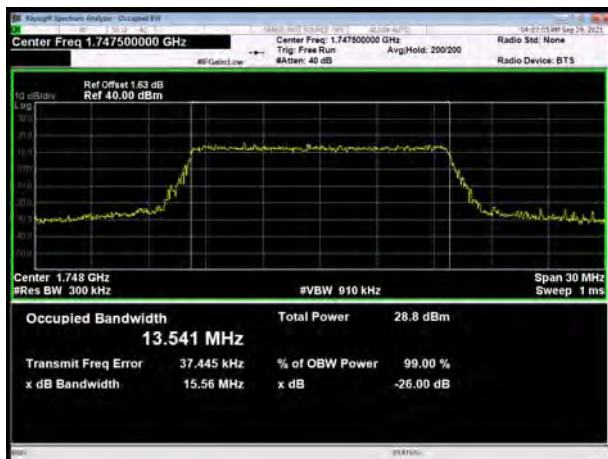
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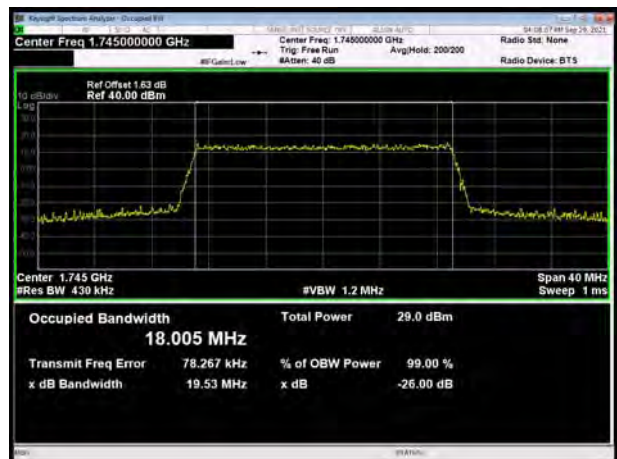
### LTE Band 4 QPSK 20MHz CH-Middle



### LTE Band 4 QPSK 15MHz CH-High



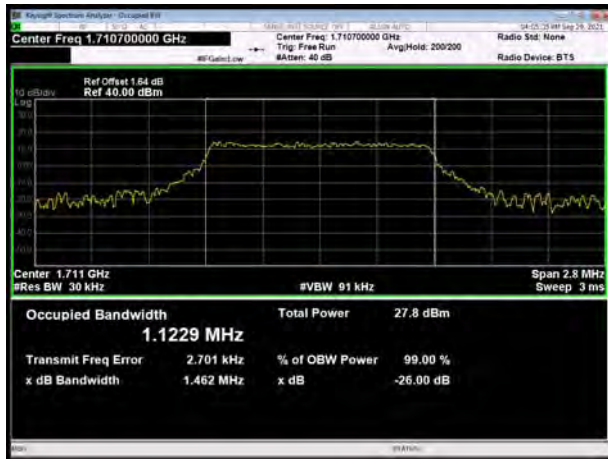
### LTE Band 4 QPSK 20MHz CH-High



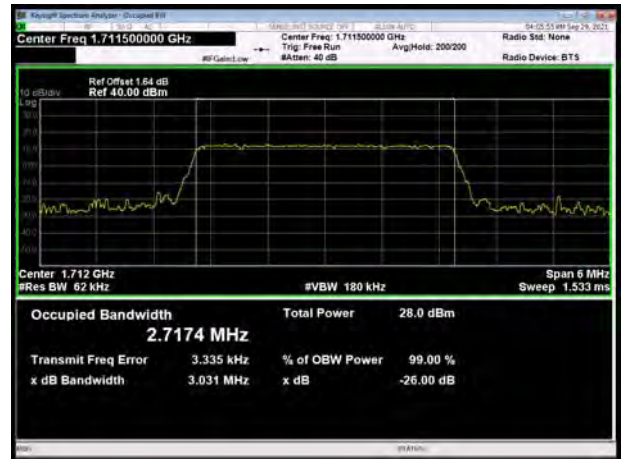




LTE Band 4 16QAM 1.4MHz CH-Low



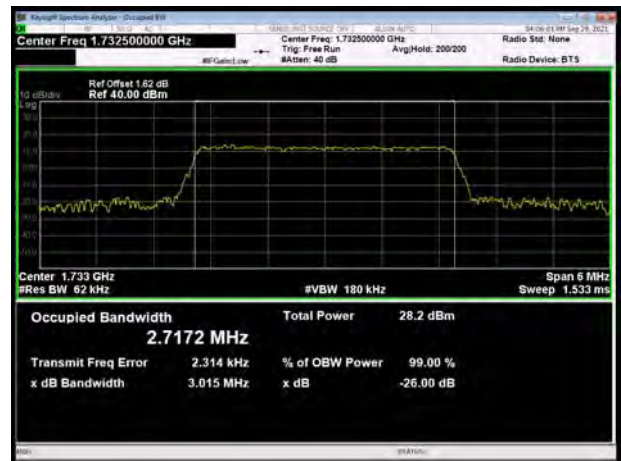
LTE Band 4 16QAM 3MHz CH-Low



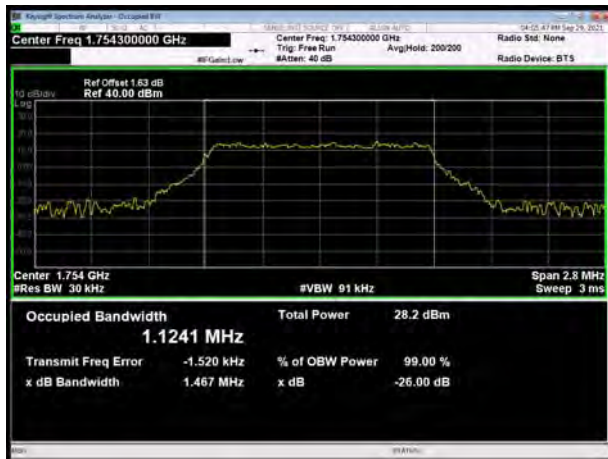
LTE Band 4 16QAM 1.4MHz CH-Middle



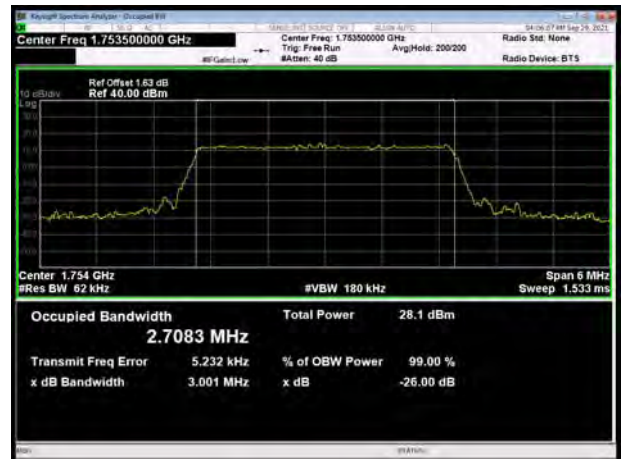
LTE Band 4 16QAM 3MHz CH-Middle



LTE Band 4 16QAM 1.4MHz CH-High

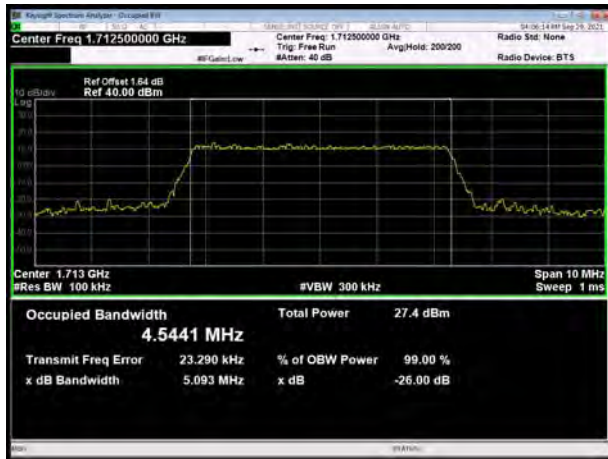


LTE Band 4 16QAM 3MHz CH-High

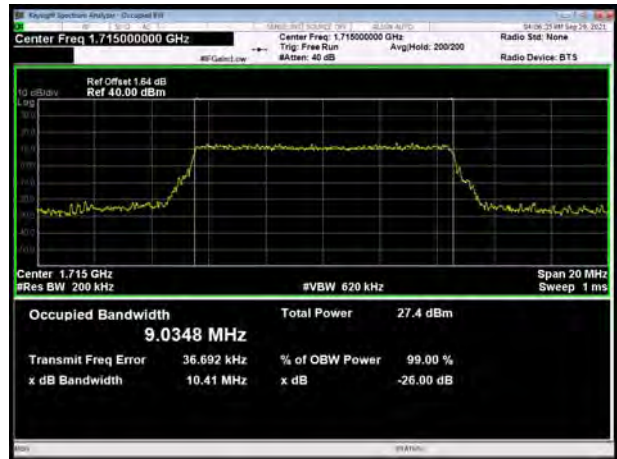




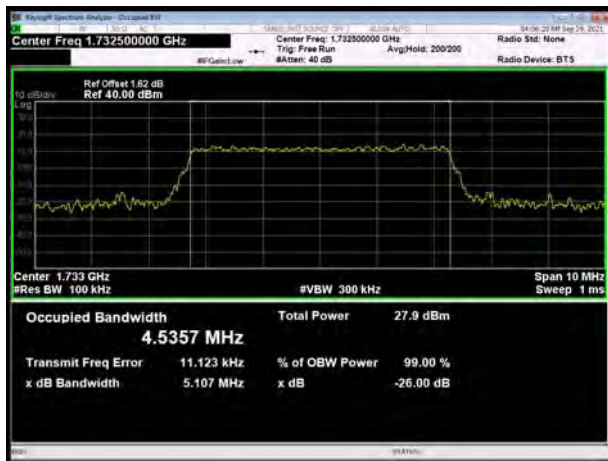
LTE Band 4 16QAM 5MHz CH-Low



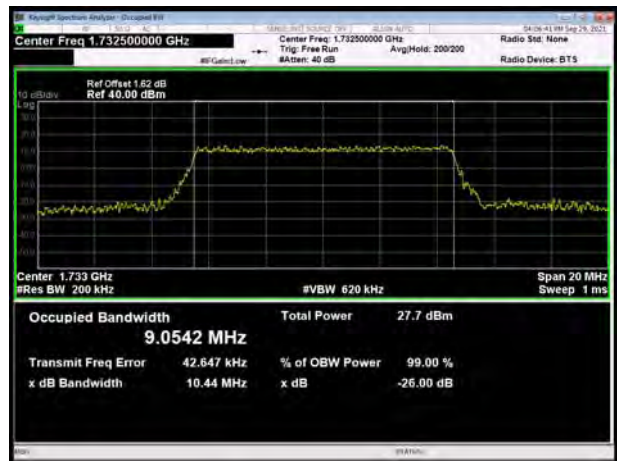
LTE Band 4 16QAM 10MHz CH-Low



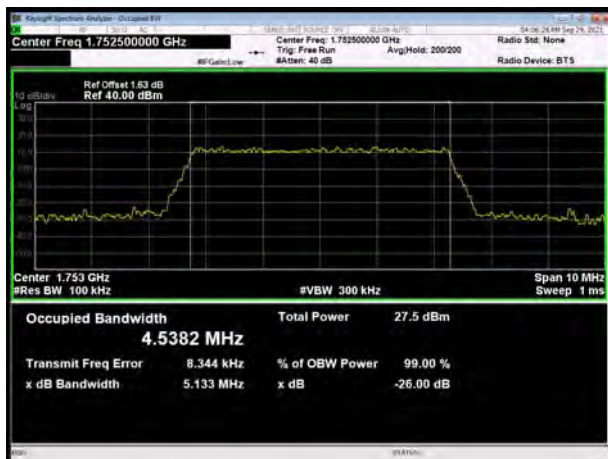
LTE Band 4 16QAM 5MHz CH-Middle



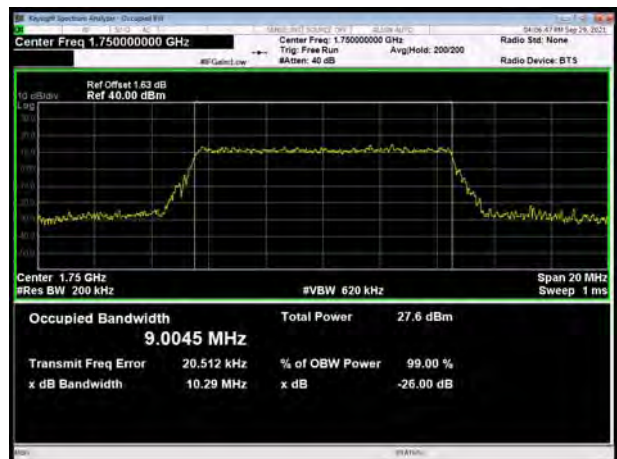
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LTE Band 4 16QAM 5MHz CH-High



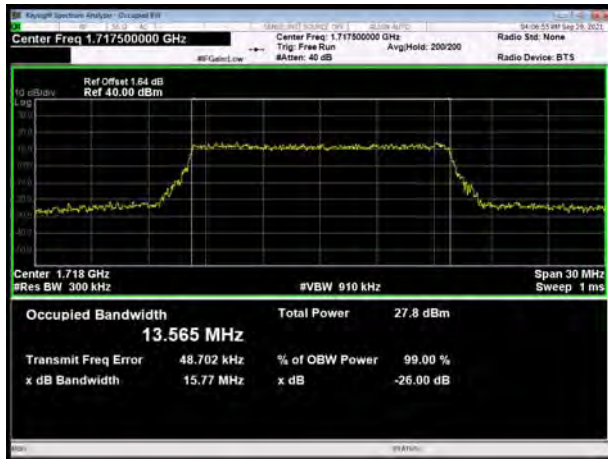
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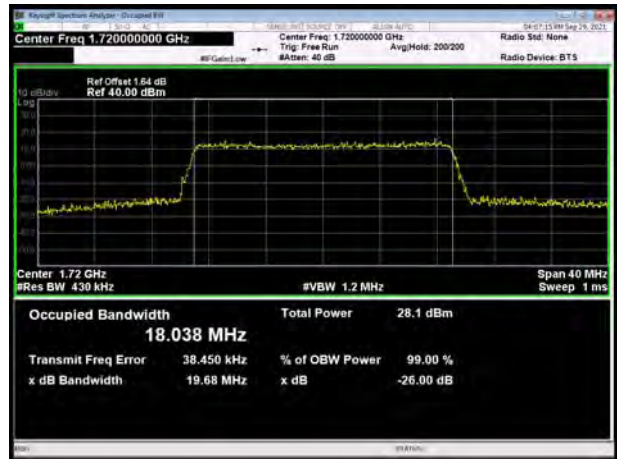




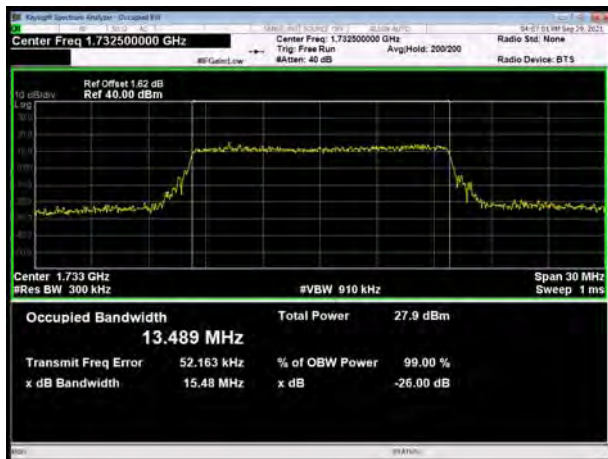
LTE Band 4 16QAM 15MHz CH-Low



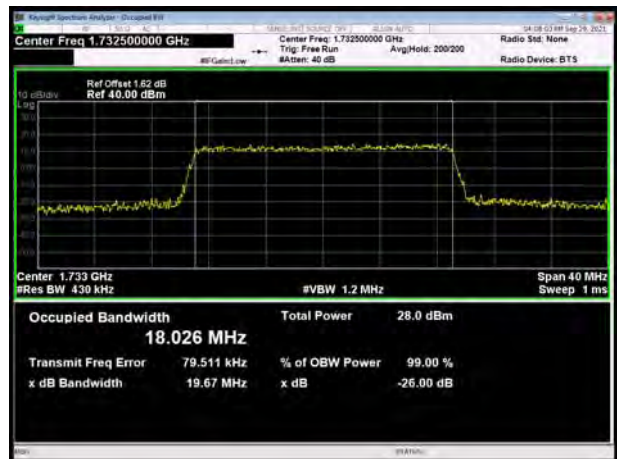
LTE Band 4 16QAM 20MHz CH-Low



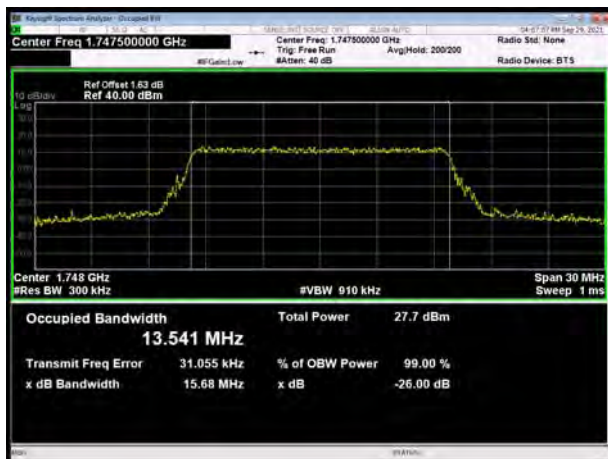
LTE Band 4 16QAM 15MHz CH-Middle



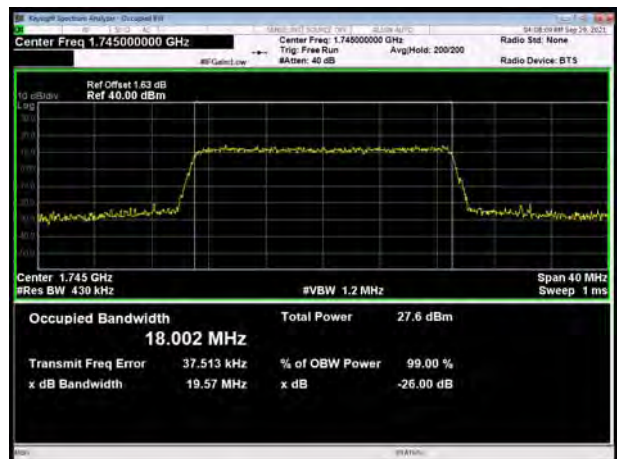
LTE Band 4 16QAM 20MHz CH-Middle



LTE Band 4 16QAM 15MHz CH-High

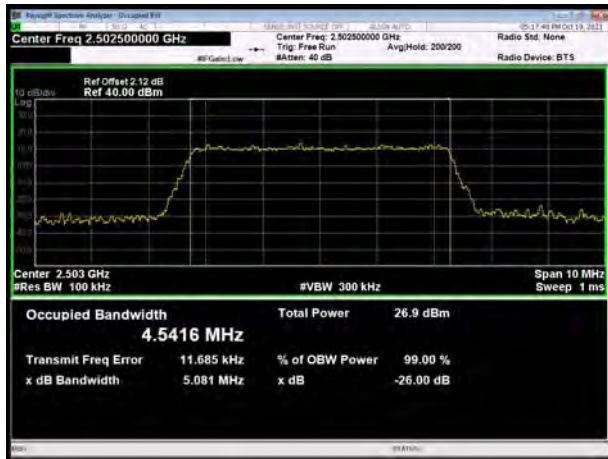


LTE Band 4 16QAM 20MHz CH-High

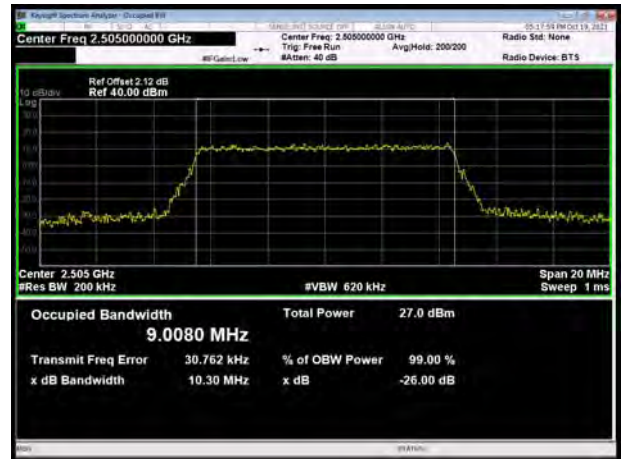




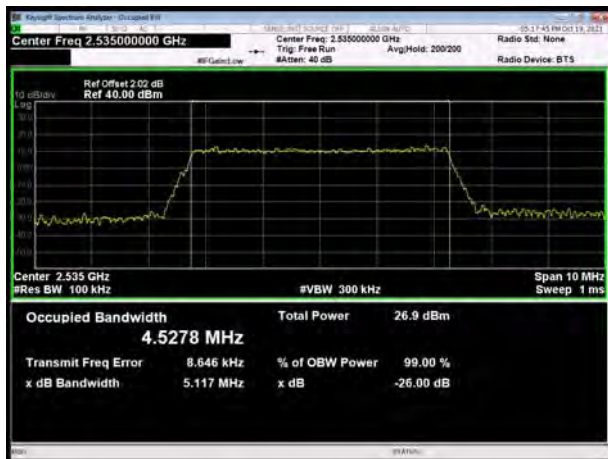
LTE Band 7 QPSK 5MHz CH-Low



LTE Band 7 QPSK 10MHz CH-Low



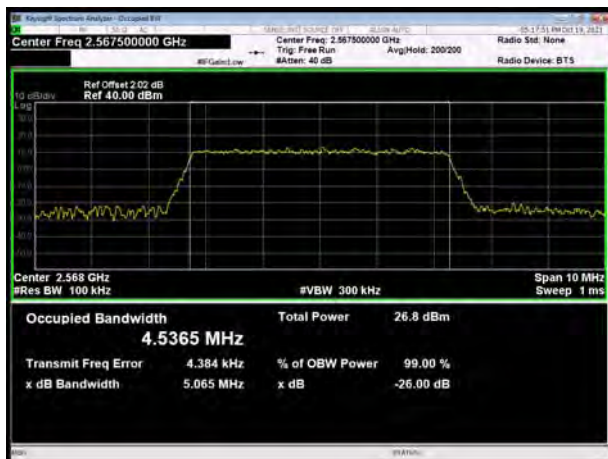
LTE Band 7 QPSK 5MHz CH-Middle



LTE Band 7 QPSK 10MHz CH-Middle



LTE Band 7 QPSK 5MHz CH-High



LTE Band 7 QPSK 10MHz CH-High



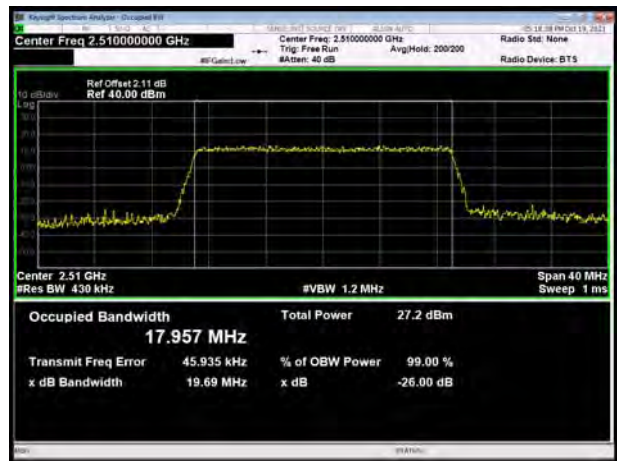




### LTE Band 7 QPSK 15MHz CH-Low



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



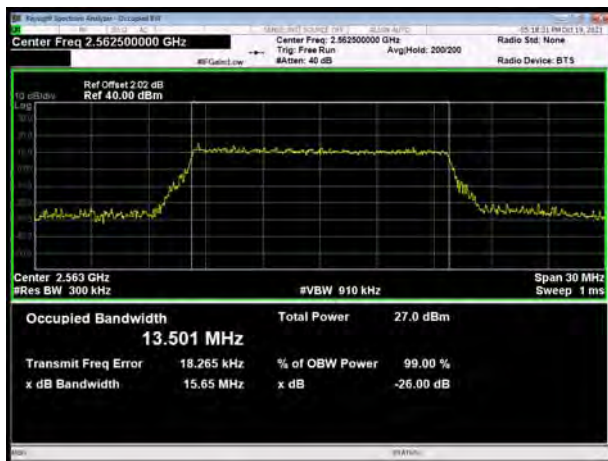
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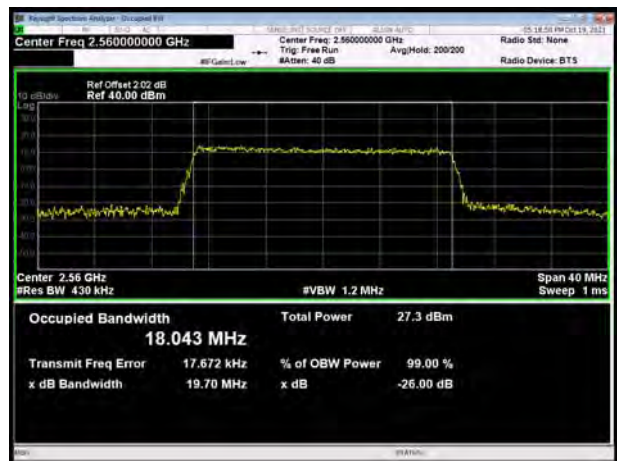
### LTE Band 7 QPSK 20MHz CH-Middle



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



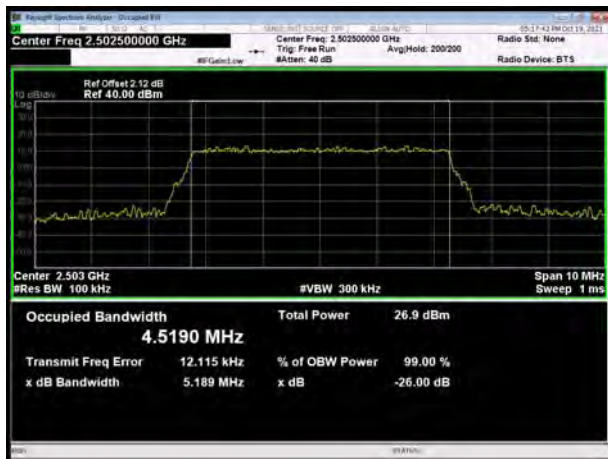
### LTE Band 7 QPSK 20MHz CH-High



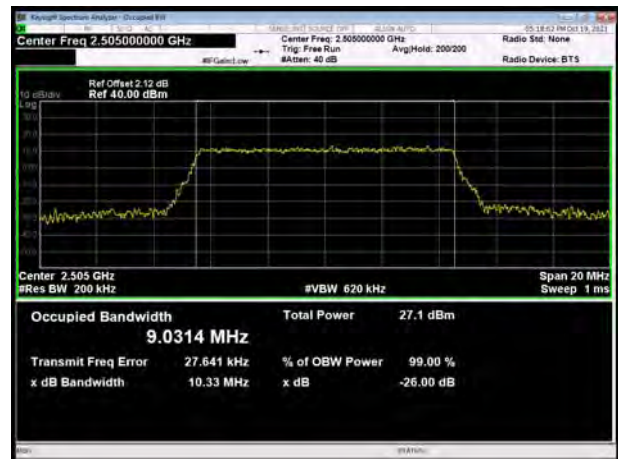




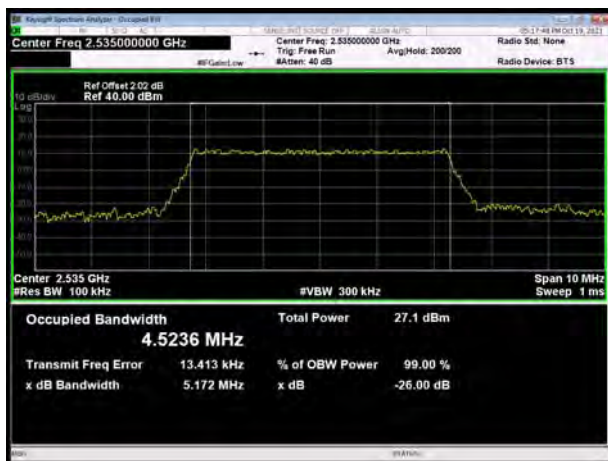
### LTE Band 7 16QAM 5MHz CH-Low



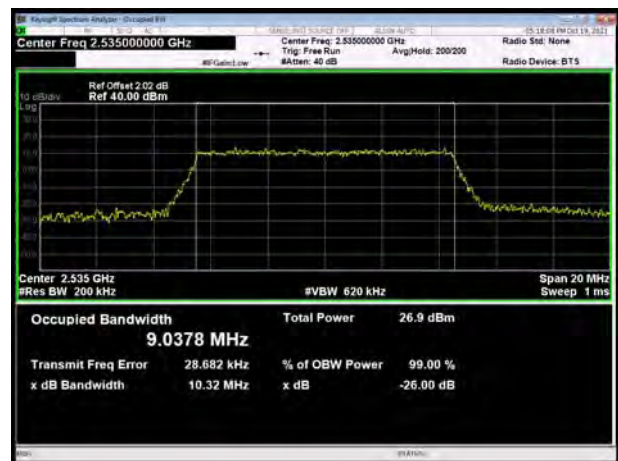
### LTE Band 7 16QAM 10MHz CH-Low



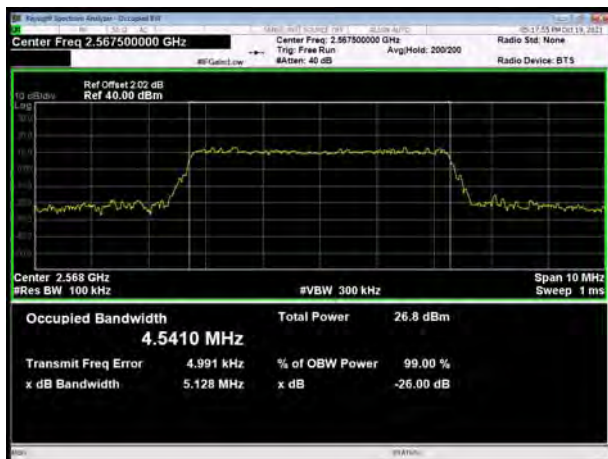
### LTE Band 7 16QAM 5MHz CH-Middle



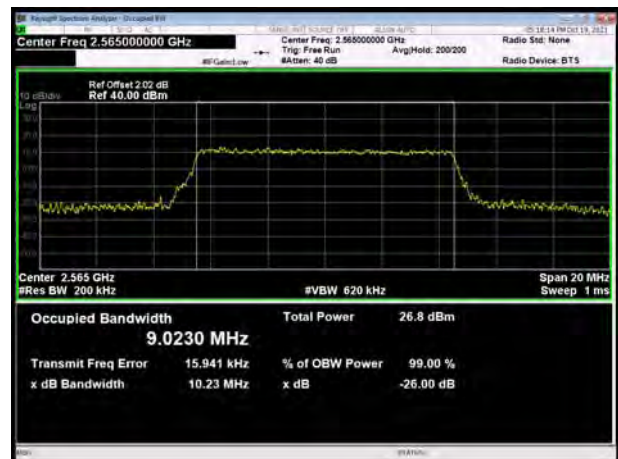
### LTE Band 7 16QAM 10MHz CH-Middle



### LTE Band 7 16QAM 5MHz CH-High



### LTE Band 7 16QAM 10MHz CH-High

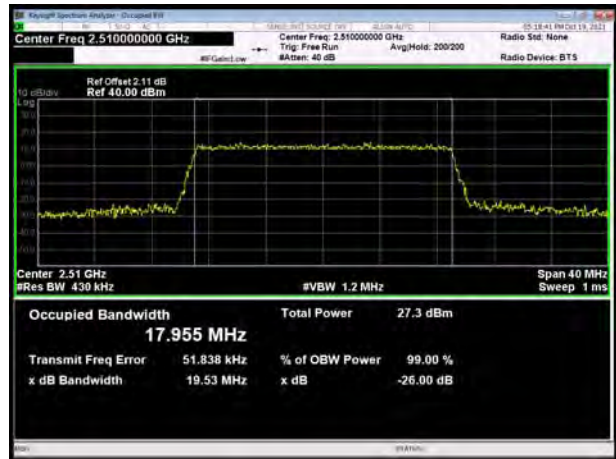




LTE Band 7 16QAM 15MHz CH-Low



LTE Band 7 16QAM 20MHz CH-Low



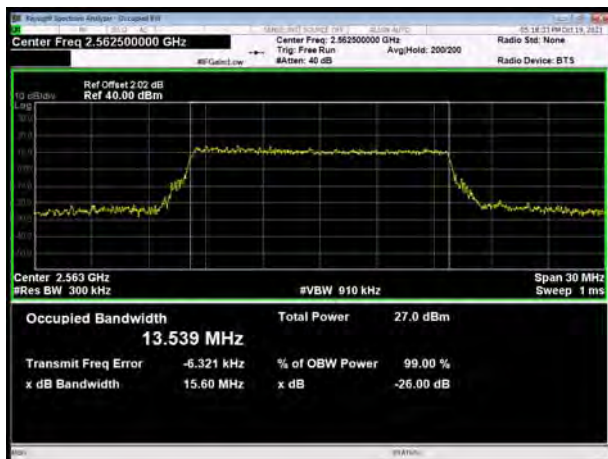
LTE Band 7 16QAM 15MHz CH-Middle



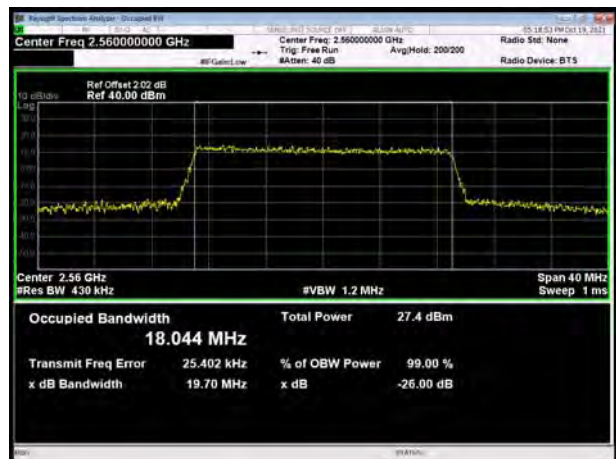
LTE Band 7 16QAM 20MHz CH-Middle



LTE Band 7 16QAM 15MHz CH-High



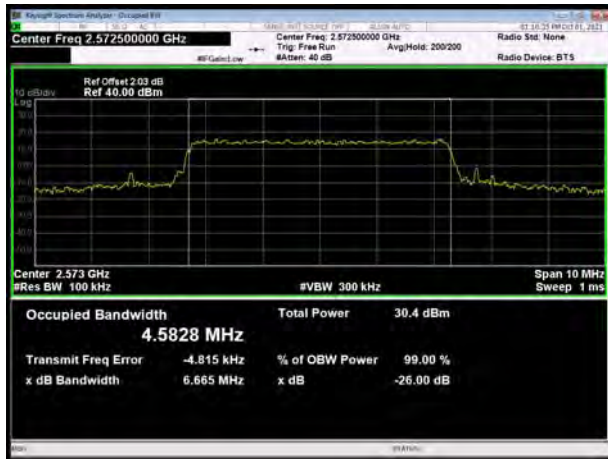
LTE Band 7 16QAM 20MHz CH-High



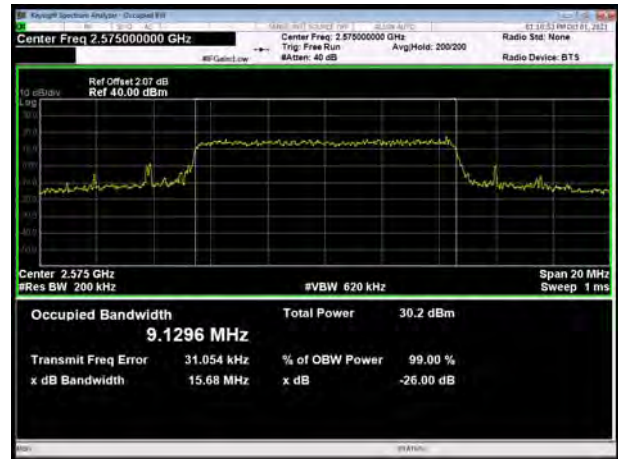




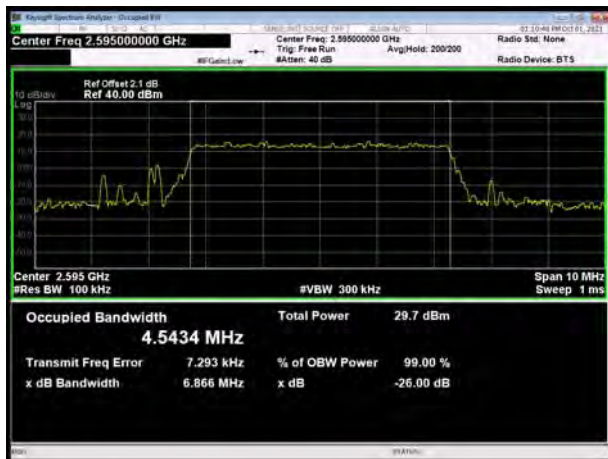
### LTE Band 38 QPSK 5MHz CH-Low



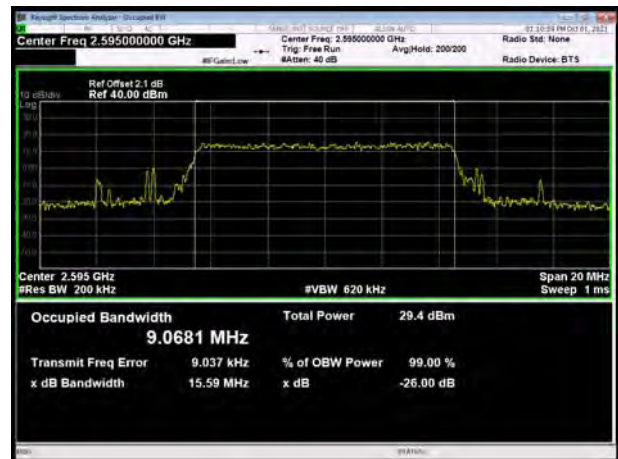
### LTE Band 38 QPSK 10MHz CH-Low



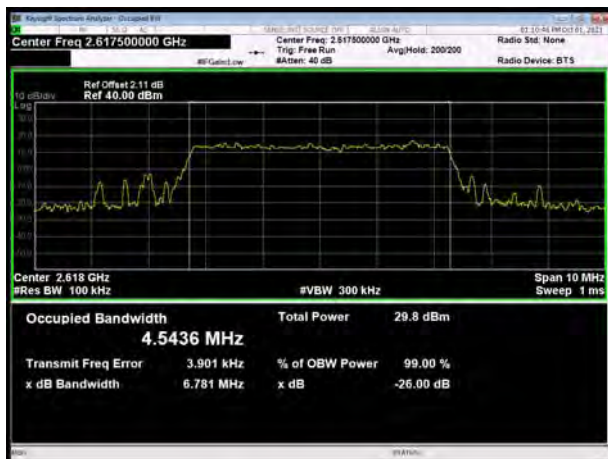
### LTE Band 38 QPSK 5MHz CH-Middle



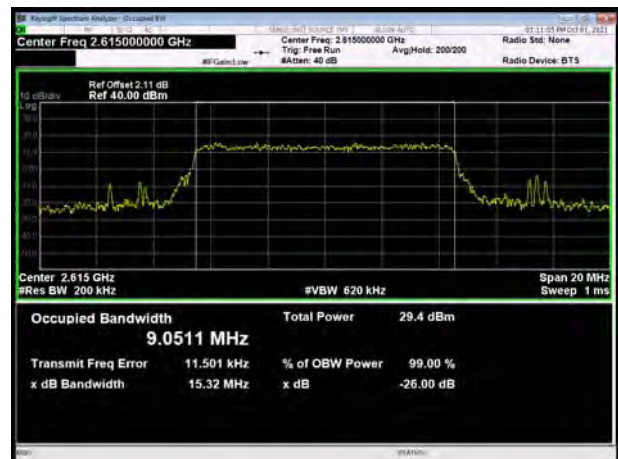
### LTE Band 38 QPSK 10MHz CH-Middle



### LTE Band 38 QPSK 5MHz CH-High

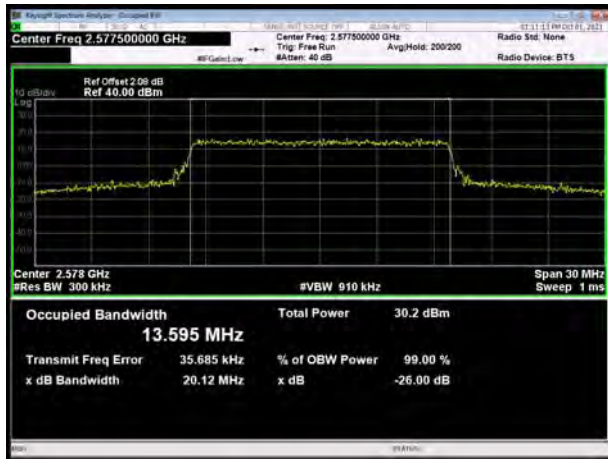


### LTE Band 38 QPSK 10MHz CH-High

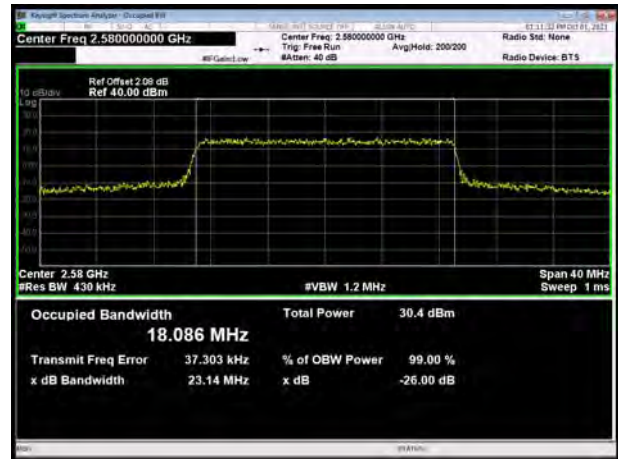




LTE Band 38 QPSK 15MHz CH-Low



LTE Band 38 QPSK 20MHz CH-Low



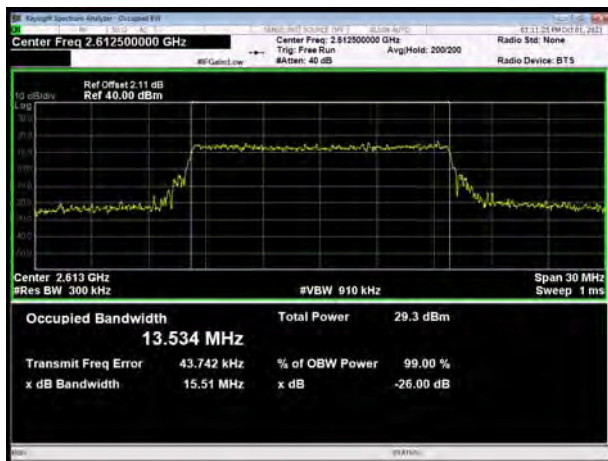
LTE Band 38 QPSK 15MHz CH-Middle



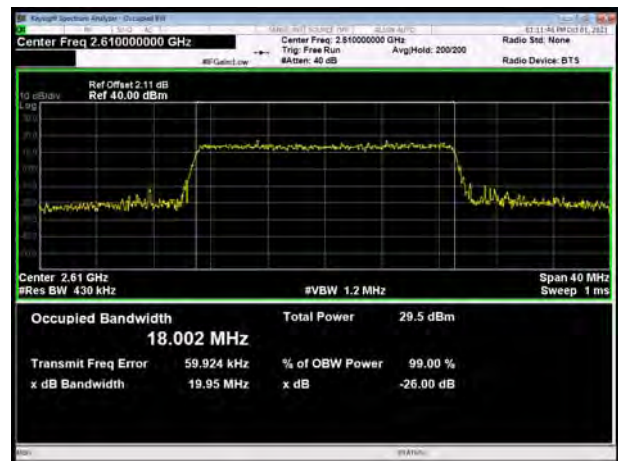
LTE Band 38 QPSK 20MHz CH-Middle



LTE Band 38 QPSK 15MHz CH-High



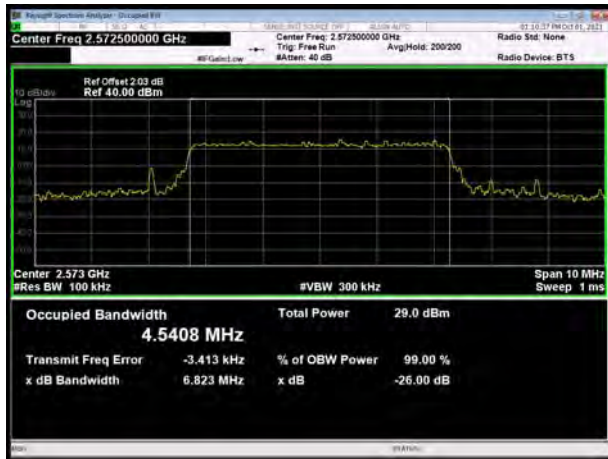
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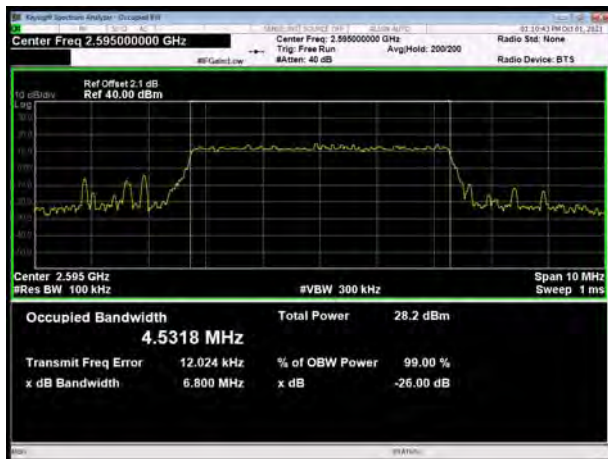
LTE Band 38 16QAM 5MHz CH-Low



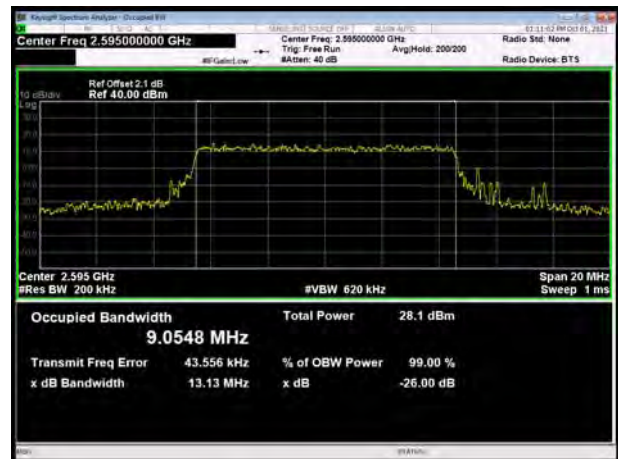
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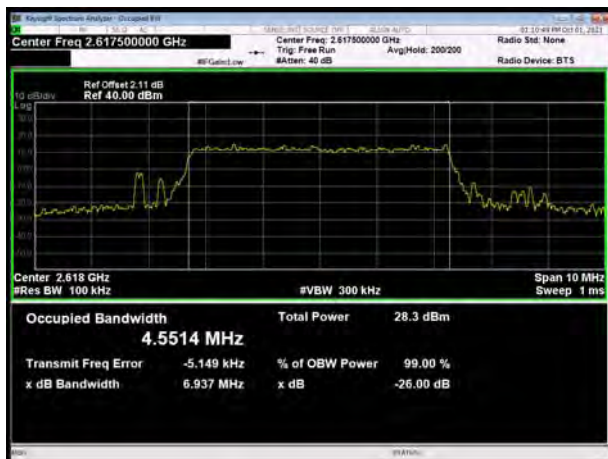
LTE Band 38 16QAM 5MHz CH-Middle



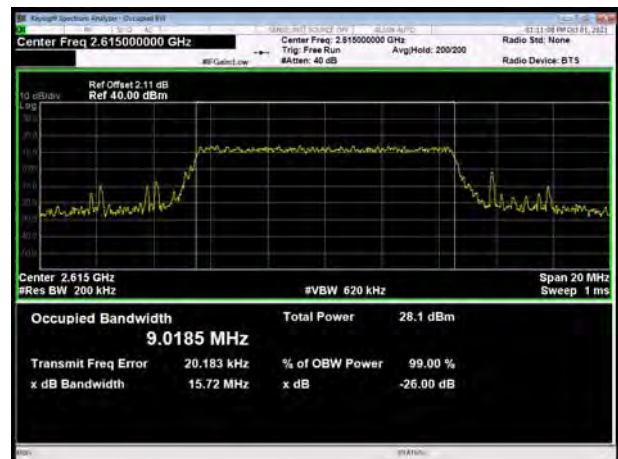
LTE Band 38 16QAM 10MHz CH-Middle



LTE Band 38 16QAM 5MHz CH-High

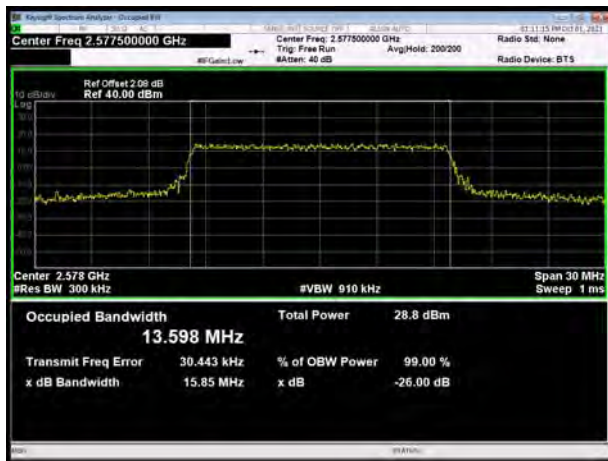


LTE Band 38 16QAM 10MHz CH-High





LTE Band 38 16QAM 15MHz CH-Low



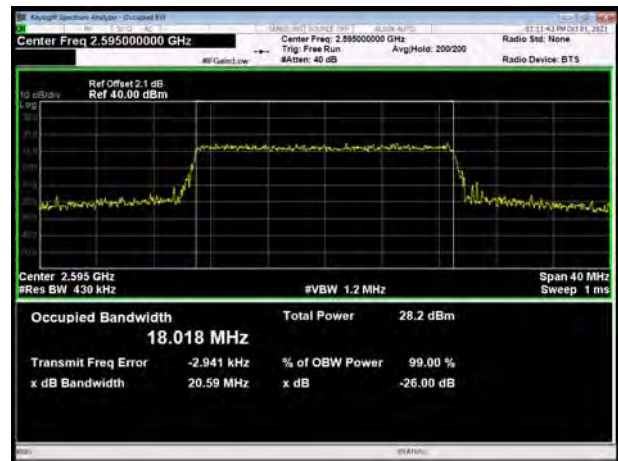
LTE Band 38 16QAM 20MHz CH-Low



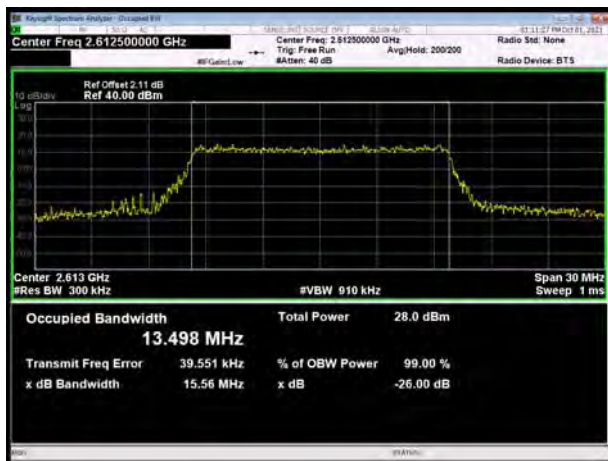
LTE Band 38 16QAM 15MHz CH-Middle



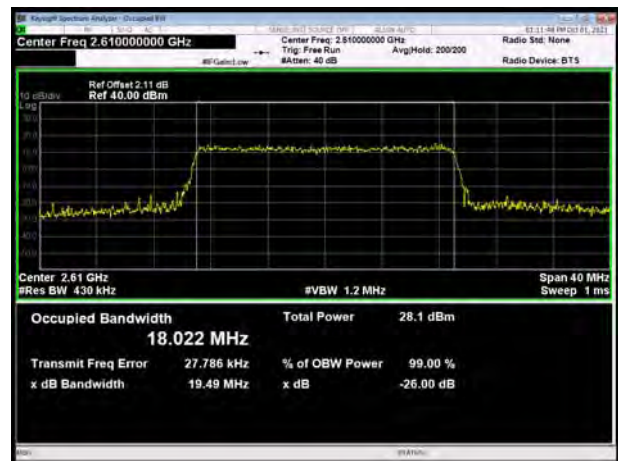
LTE Band 38 16QAM 20MHz CH-Middle



LTE Band 38 16QAM 15MHz CH-High



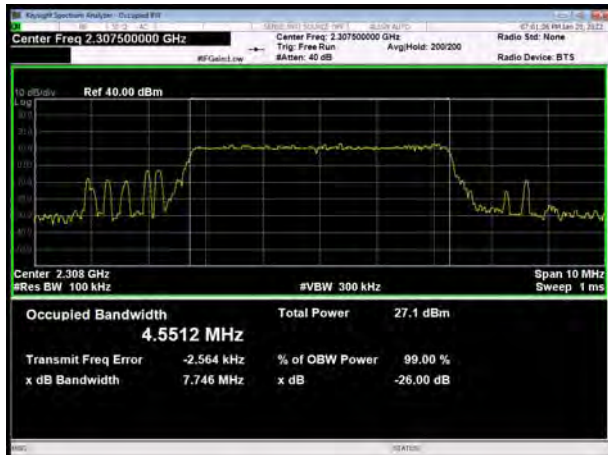
LTE Band 38 16QAM 20MHz CH-High







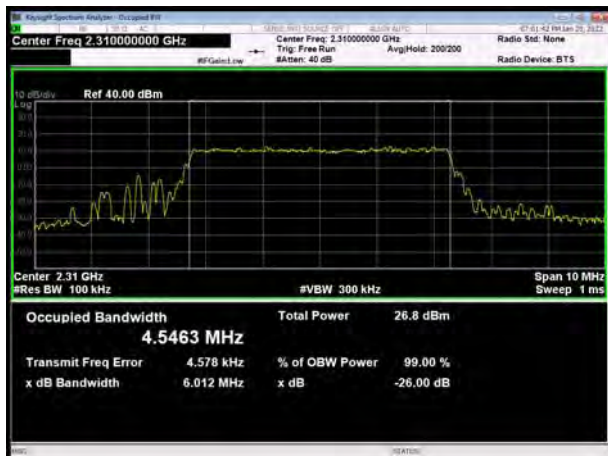
### LTE Band 40 Subset 1 QPSK 5MHz CH-Low



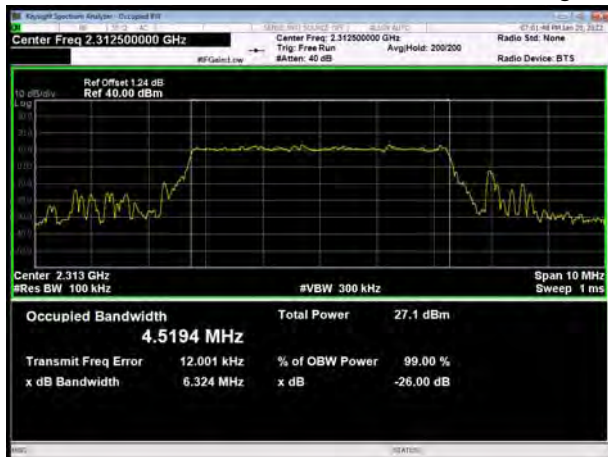
### LTE Band 40 Subset 1 QPSK 10MHz



### LTE Band 40 Subset 1 QPSK 5MHz CH-Middle



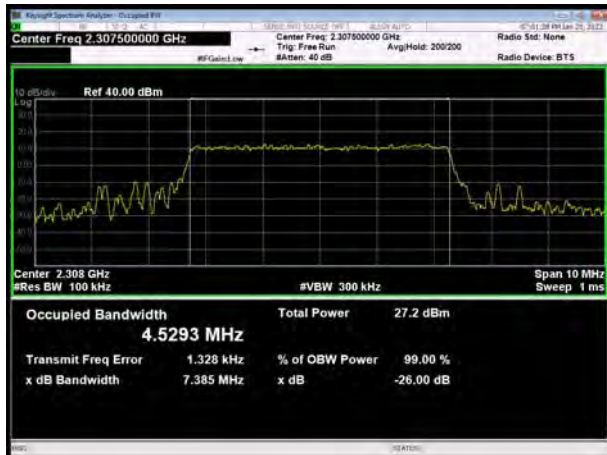
### LTE Band 40 Subset 1 QPSK 5MHz CH-High



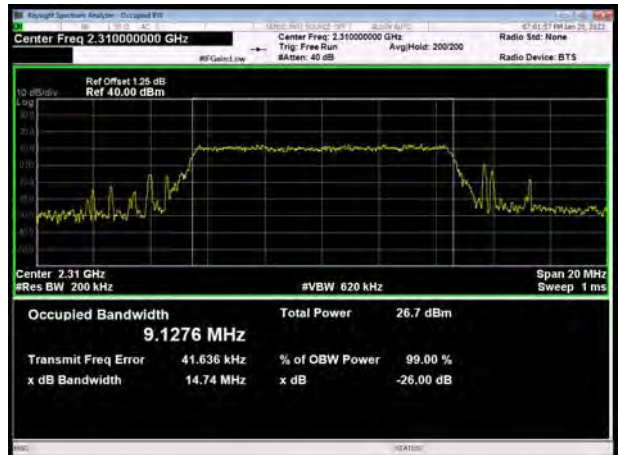




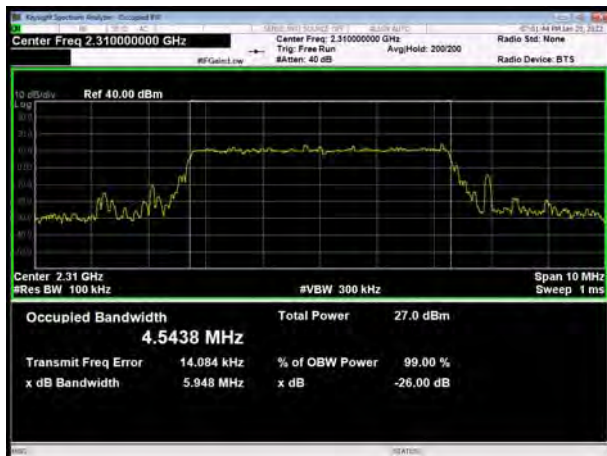
### LTE Band 40 Subset 1 16QAM 5MHz CH-Low



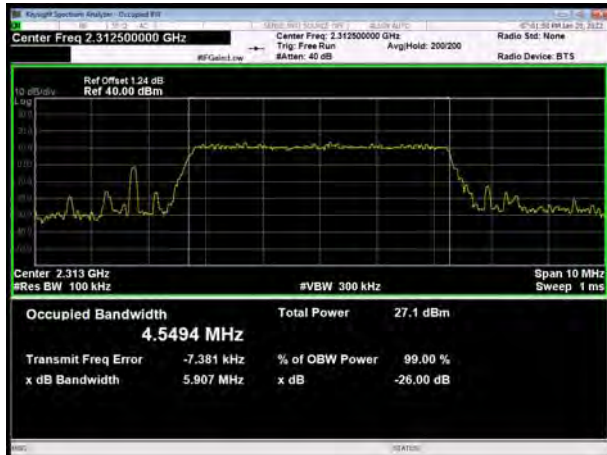
### LTE Band 40 Subset 1 16QAM 10MHz



### LTE Band 40 Subset 1 16QAM 5MHz CH-Middle

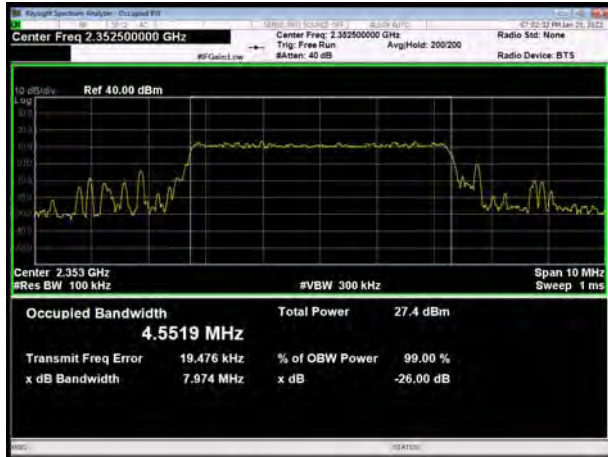


### LTE Band 40 Subset 1 16QAM 5MHz CH-High

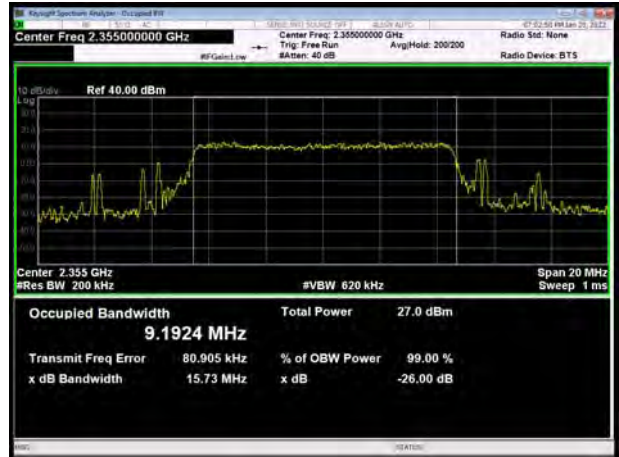




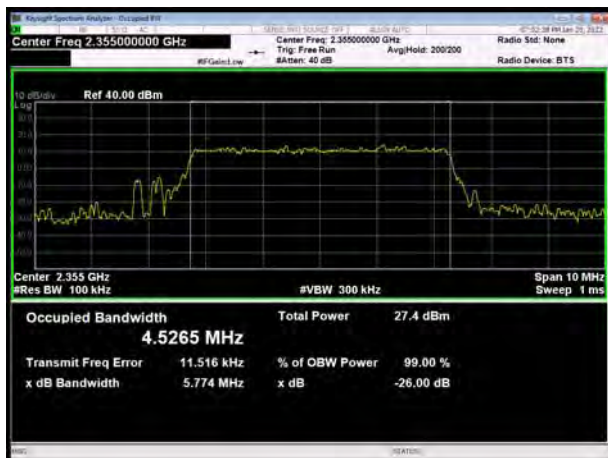
### LTE Band 40 Subset 2 QPSK 5MHz CH-Low



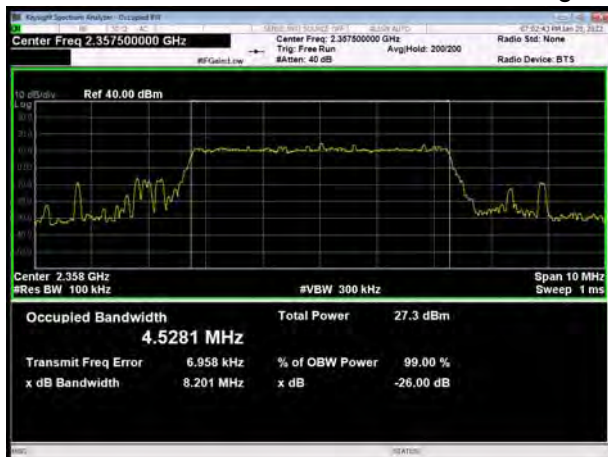
### LTE Band 40 Subset 2 QPSK 10MHz



### LTE Band 40 Subset 2 QPSK 5MHz CH-Middle

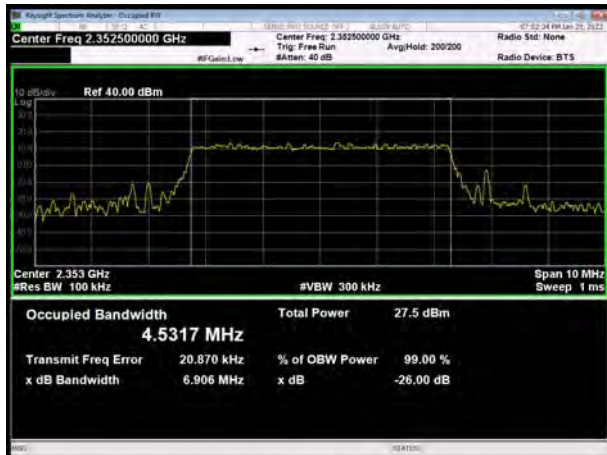


### LTE Band 40 Subset 2 QPSK 5MHz CH-High

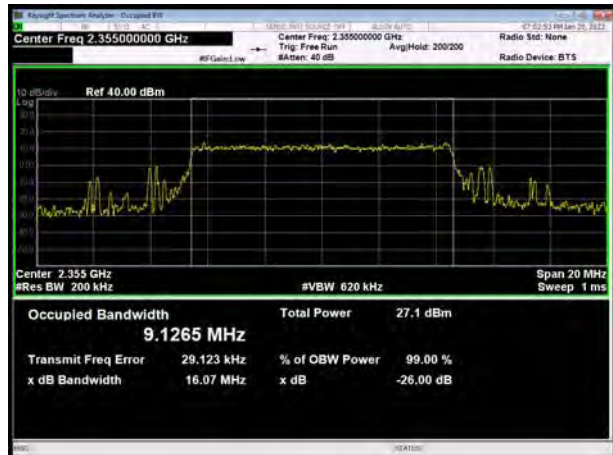




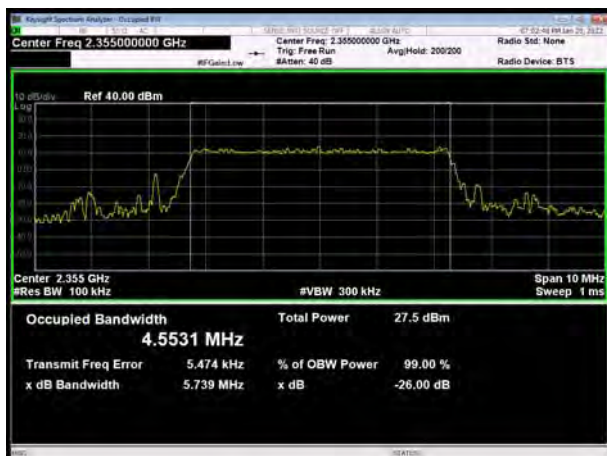
### LTE Band 40 Subset 2 16QAM 5MHz CH-Low



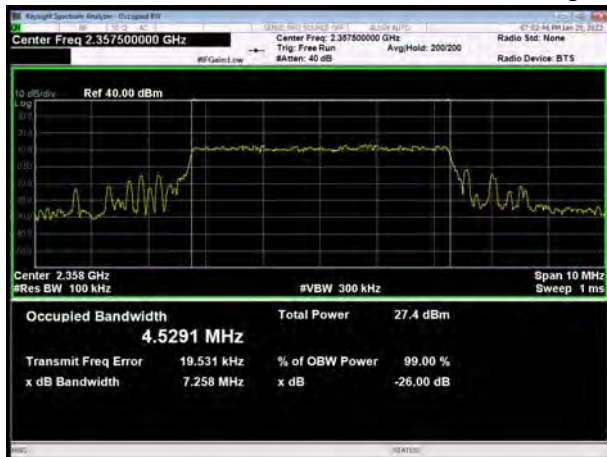
### LTE Band 40 Subset 2 16QAM 10MHz



### LTE Band 40 Subset 2 16QAM 5MHz CH-Middle



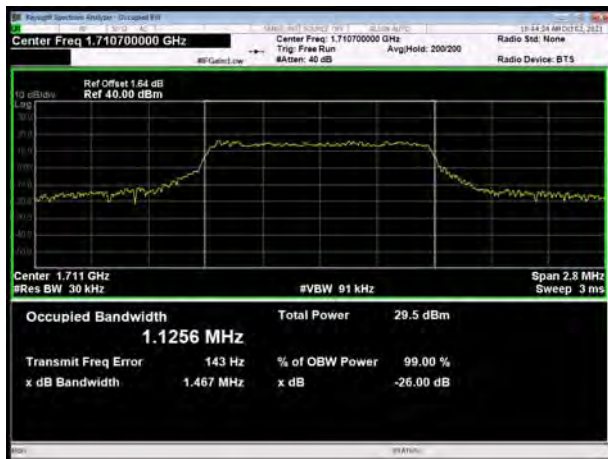
### LTE Band 40 Subset 2 16QAM 5MHz CH-High



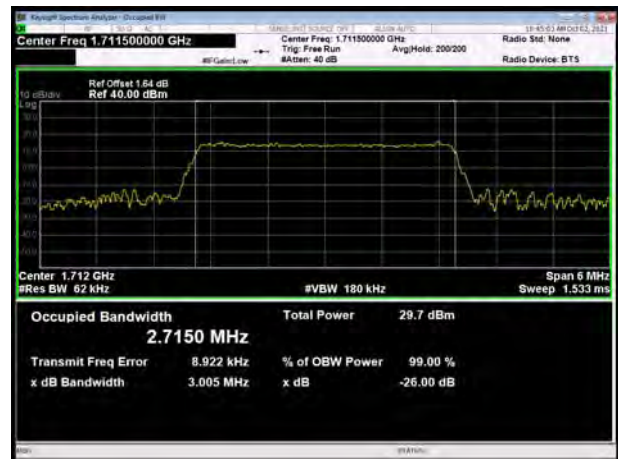




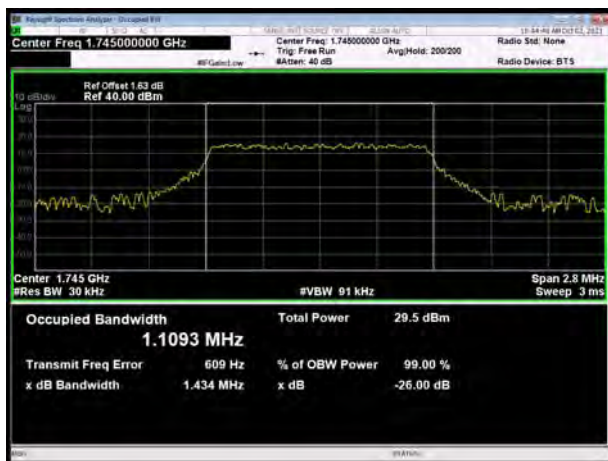
### LTE Band 66 QPSK 1.4MHz CH-Low



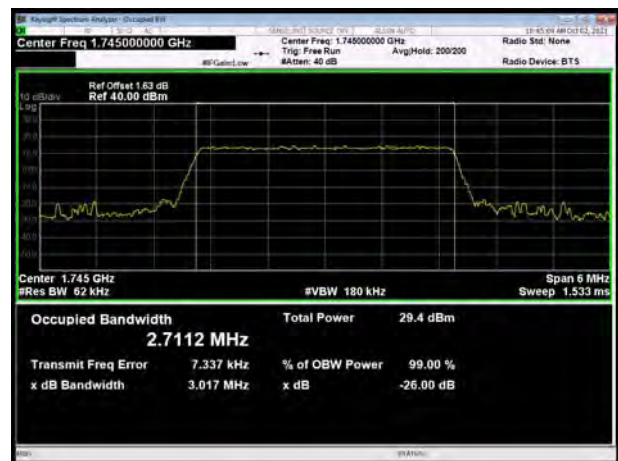
### LTE Band 66 QPSK 3MHz CH-Low



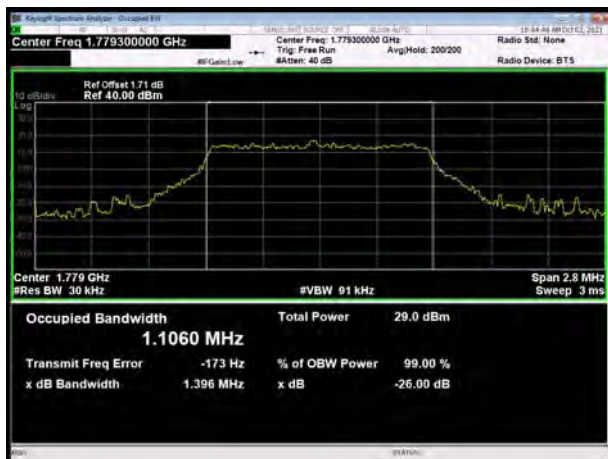
### LTE Band 66 QPSK 1.4MHz CH-Middle



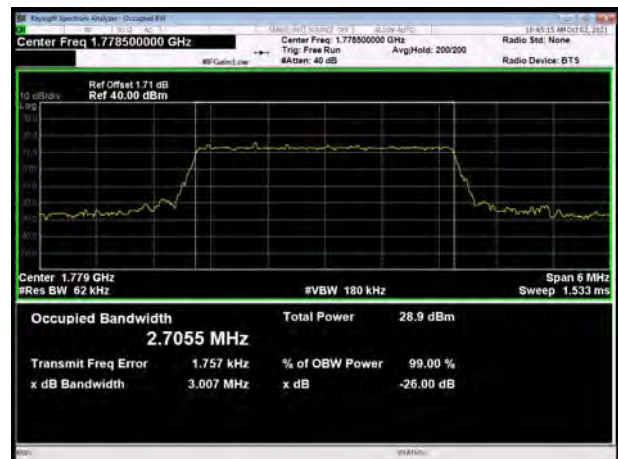
### LTE Band 66 QPSK 3MHz CH-Middle



### LTE Band 66 QPSK 1.4MHz CH-High

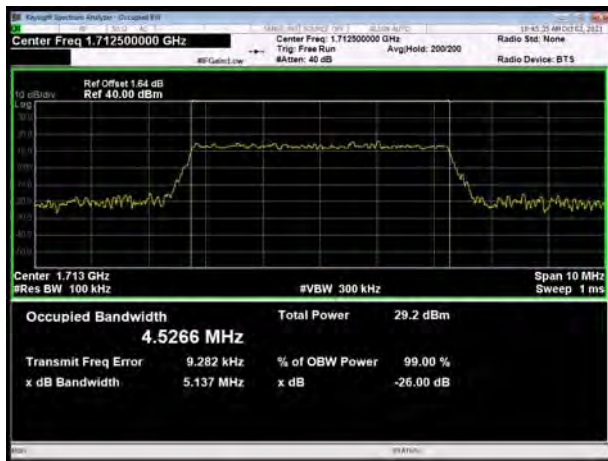


### LTE Band 66 QPSK 3MHz CH-High

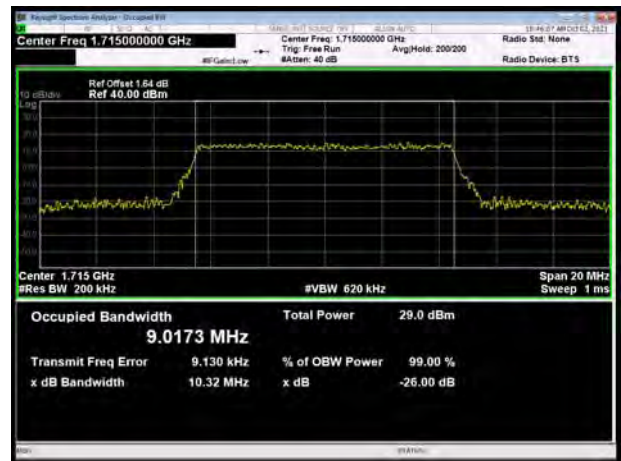




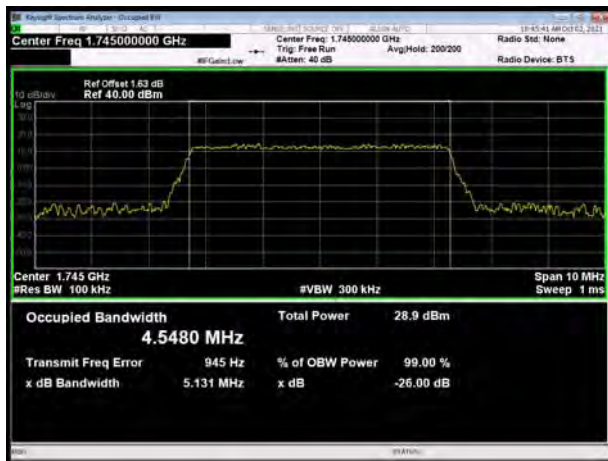
### LTE Band 66 QPSK 5MHz CH-Low



### LTE Band 66 QPSK 10MHz CH-Low



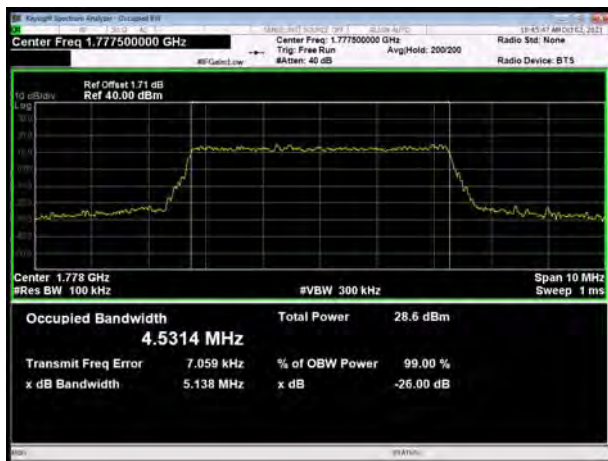
### LTE Band 66 QPSK 5MHz CH-Middle



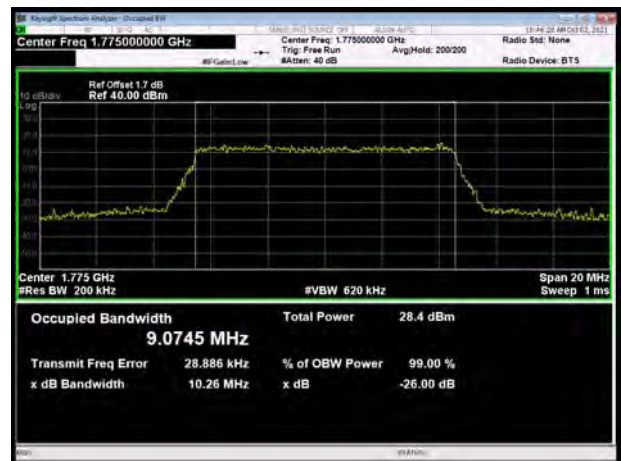
### LTE Band 66 QPSK 10MHz CH-Middle



### LTE Band 66 QPSK 5MHz CH-High



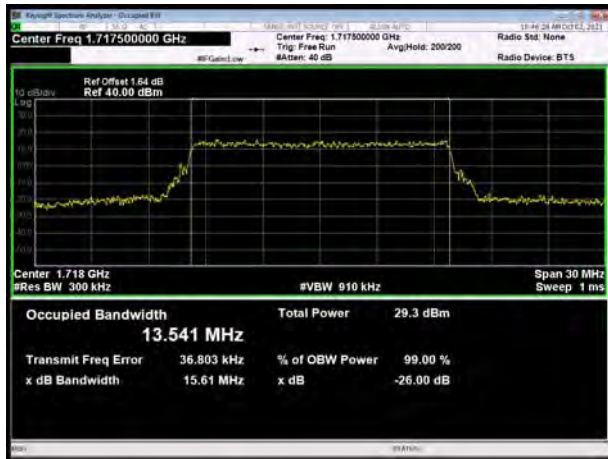
### LTE Band 66 QPSK 10MHz CH-High



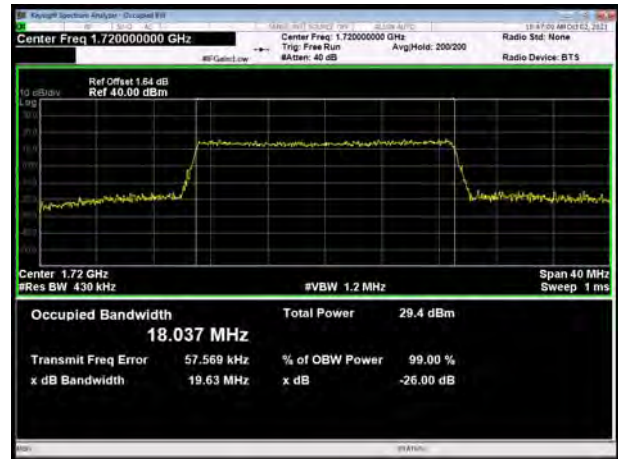




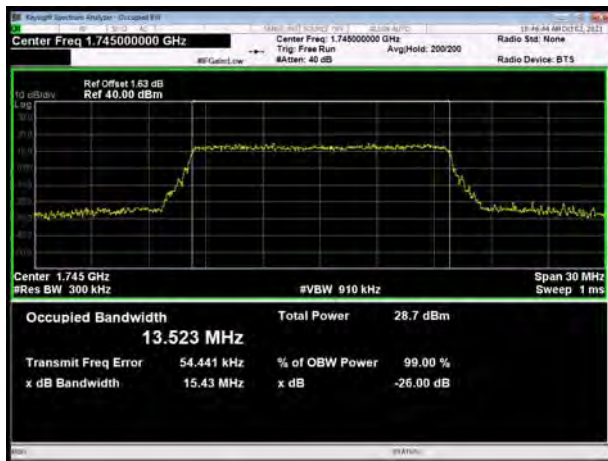
LTE Band 66 QPSK 15MHz CH-Low



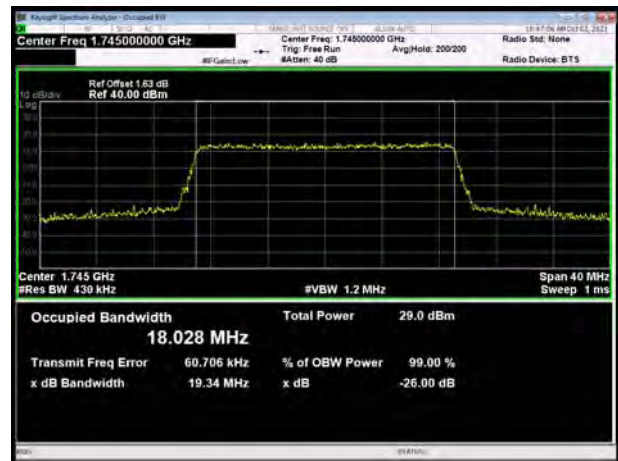
LTE Band 66 QPSK 20MHz CH-Low



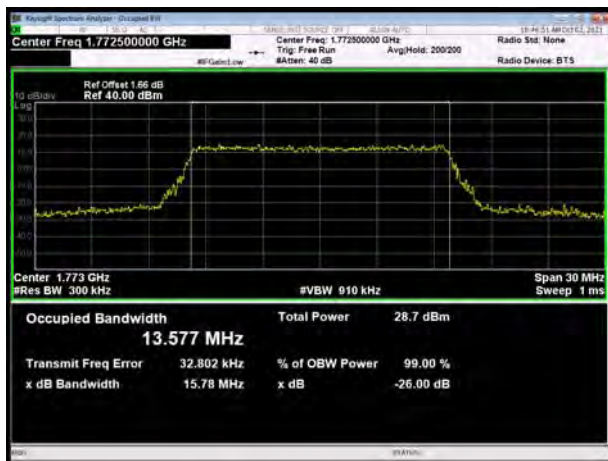
LTE Band 66 QPSK 15MHz CH-Middle



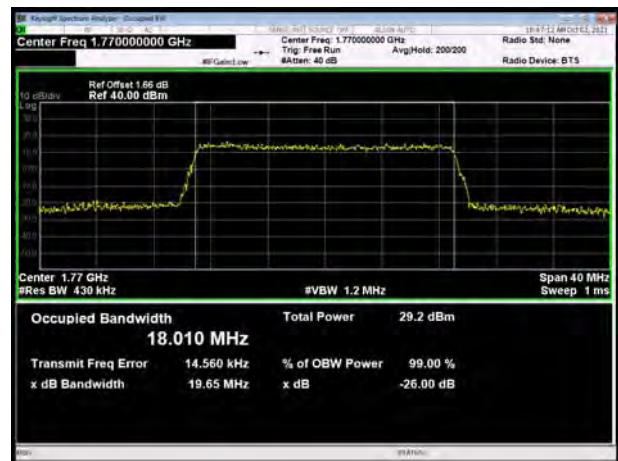
LTE Band 66 QPSK 20MHz CH-Middle



LTE Band 66 QPSK 15MHz CH-High

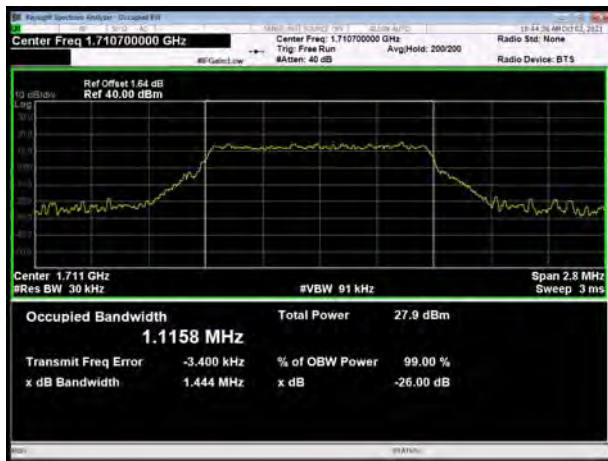


LTE Band 66 QPSK 20MHz CH-High

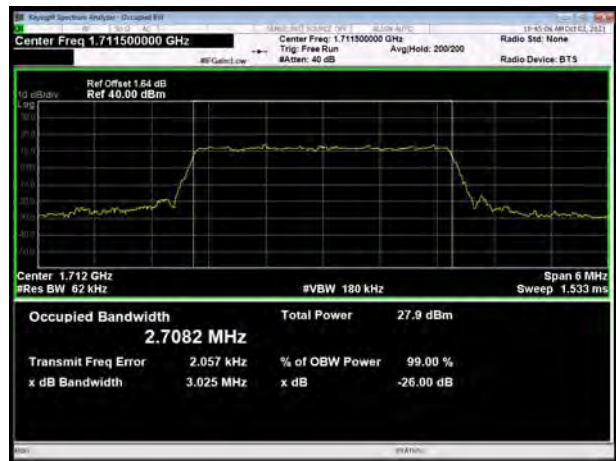




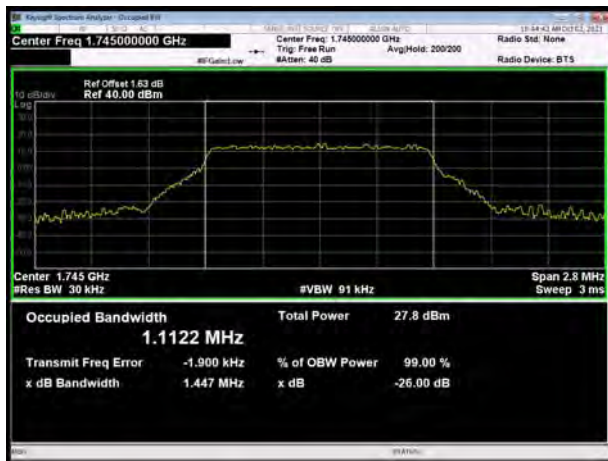
LTE Band 66 16QAM 1.4MHz CH-Low



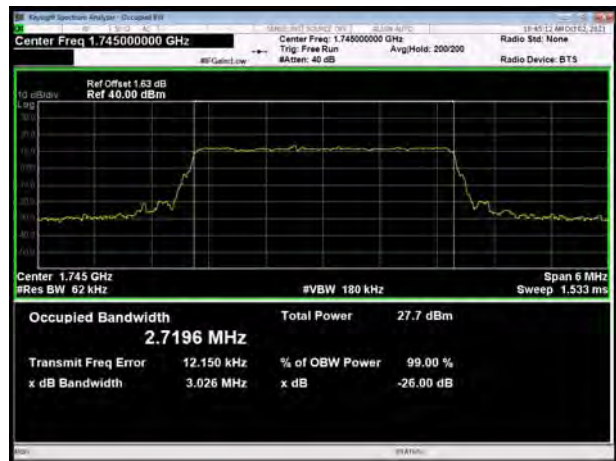
LTE Band 66 16QAM 3MHz CH-Low



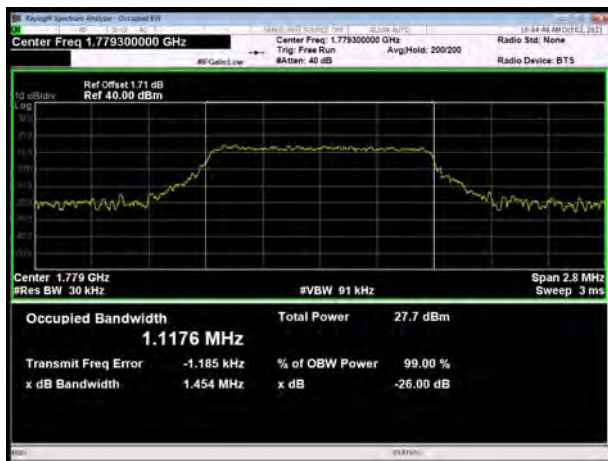
LTE Band 66 16QAM 1.4MHz CH-Middle



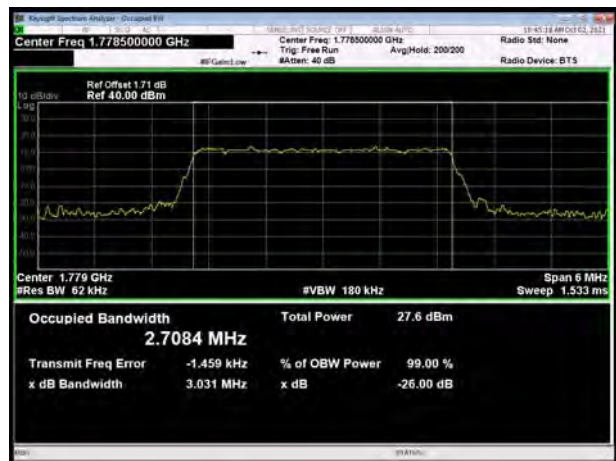
LTE Band 66 16QAM 3MHz CH-Middle



LTE Band 66 16QAM 1.4MHz CH-High



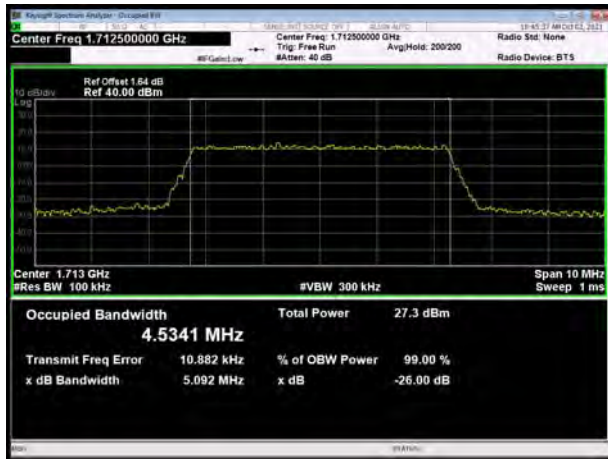
LTE Band 66 16QAM 3MHz CH-High







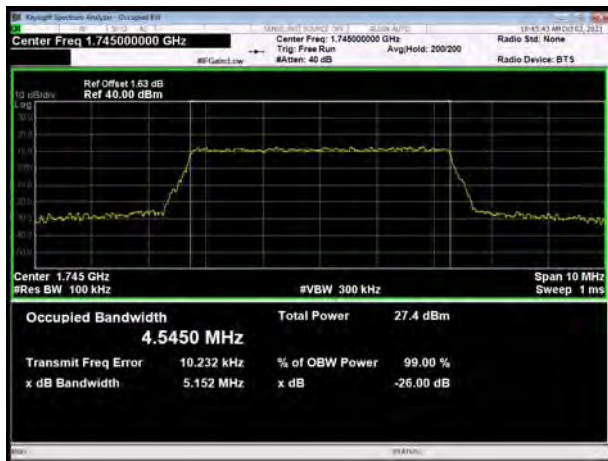
LTE Band 66 16QAM 5MHz CH-Low



LTE Band 66 16QAM 10MHz CH-Low



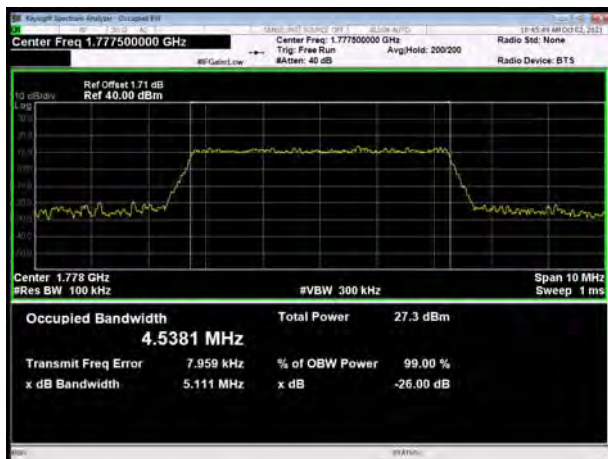
LTE Band 66 16QAM 5MHz CH-Middle



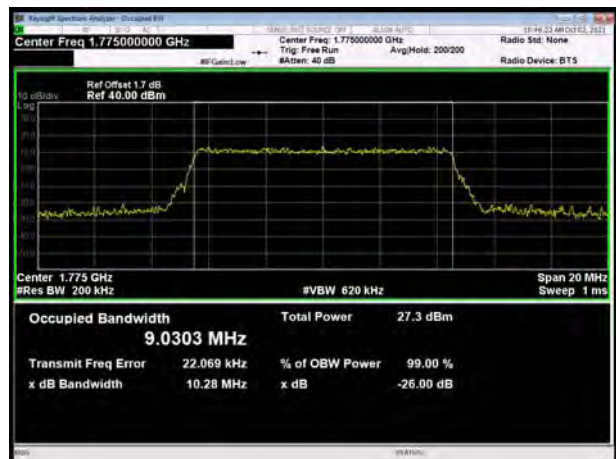
LTE Band 66 16QAM 10MHz CH-Middle



LTE Band 66 16QAM 5MHz CH-High

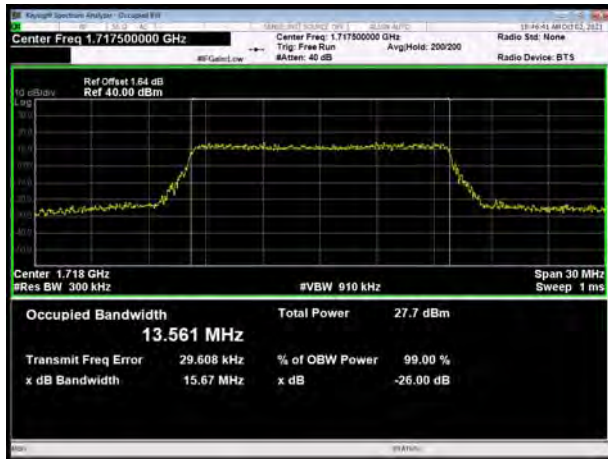


LTE Band 66 16QAM 10MHz CH-High

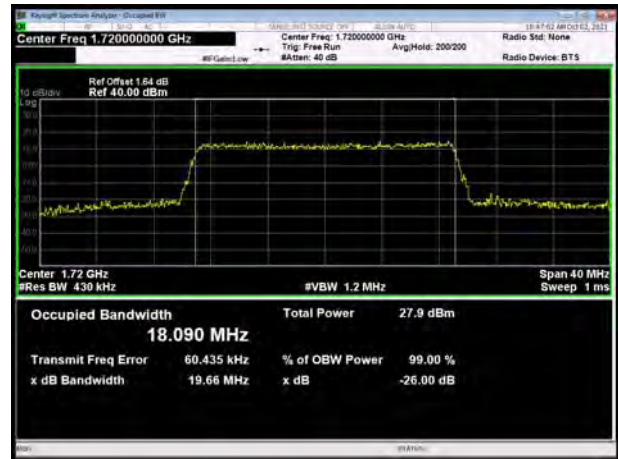




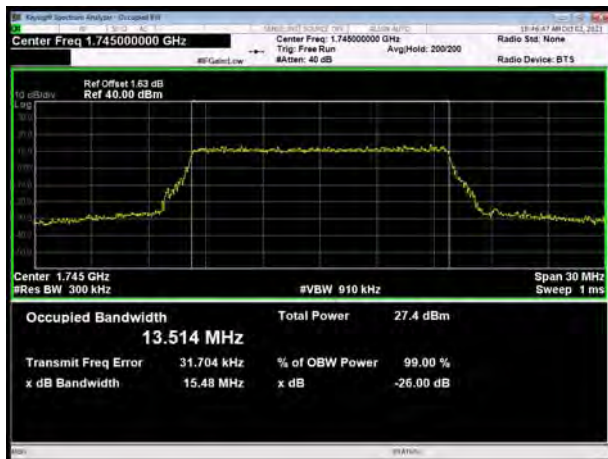
LTE Band 66 16QAM 15MHz CH-Low



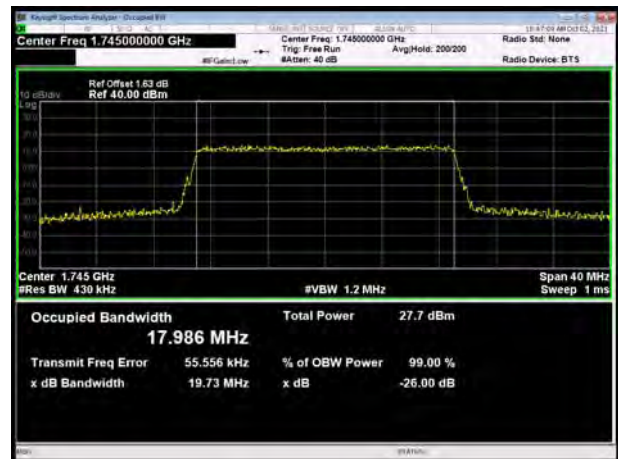
LTE Band 66 16QAM 20MHz CH-Low



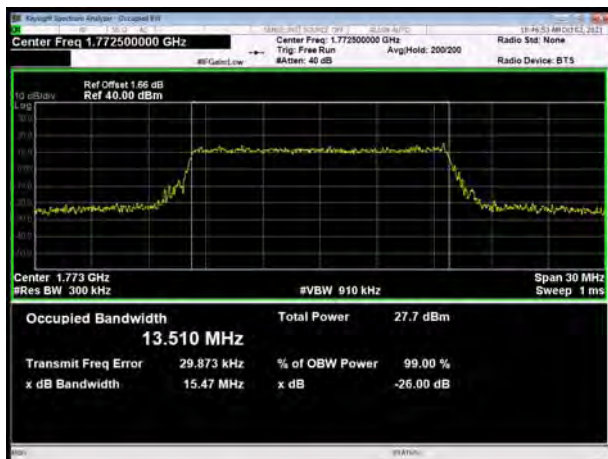
LTE Band 66 16QAM 15MHz CH-Middle



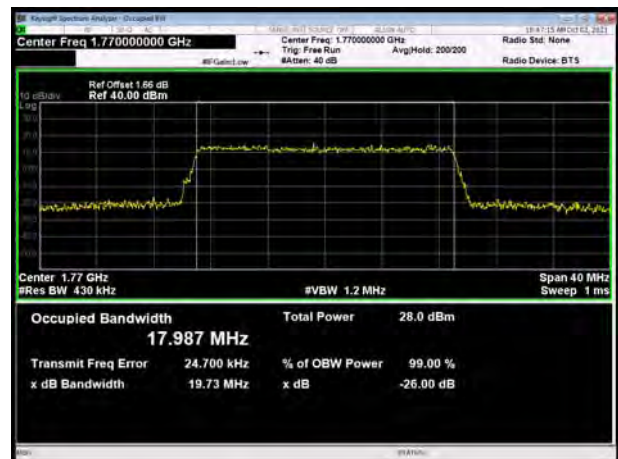
LTE Band 66 16QAM 20MHz CH-Middle



LTE Band 66 16QAM 15MHz CH-High



LTE Band 66 16QAM 20MHz CH-High



### 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.

For LTE Band 7/38 set RBW  $\geq$  1% EBW in the 1MHz band immediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.

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

For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than:  $43 + 10 \log (P)$  dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than  $55 + 10 \log (P)$  dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than  $61 + 10 \log (P)$  dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than  $67 + 10 \log (P)$  dB on all frequencies between 2328 and 2337 MHz;
- (ii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2300 and 2305 MHz,  $55 + 10 \log (P)$  dB on all frequencies between 2296 and 2300 MHz,  $61 + 10 \log (P)$  dB on all frequencies between 2292 and 2296 MHz,  $67 + 10 \log (P)$  dB on all frequencies between 2288 and 2292 MHz, and  $70 + 10 \log (P)$  dB below 2288 MHz;
- (iii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2360 and 2365 MHz, and not less than  $70 + 10 \log (P)$  dB above 2365 MHz.

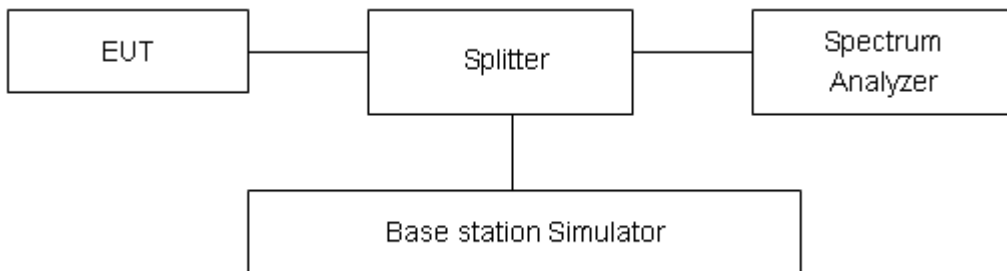
on spectrum analyzer.

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.

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”

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 that  $43 + 10 \log (P)$  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)

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

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

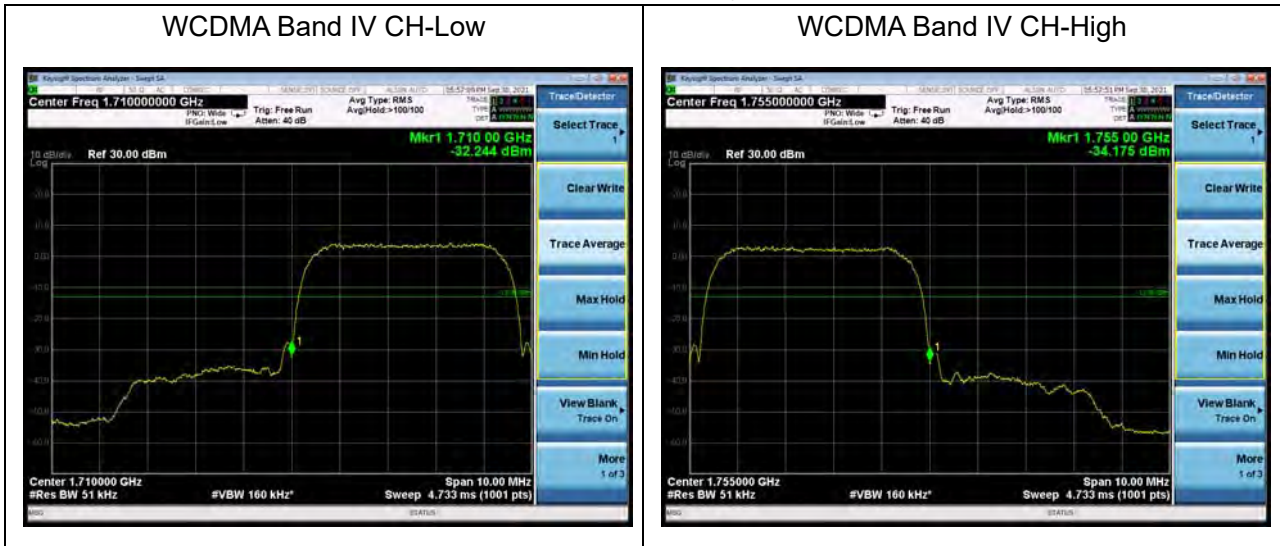
**Measurement Uncertainty**

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



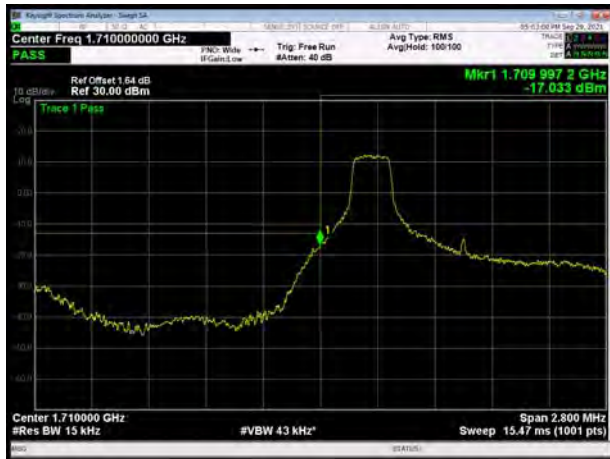
### Test Result

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



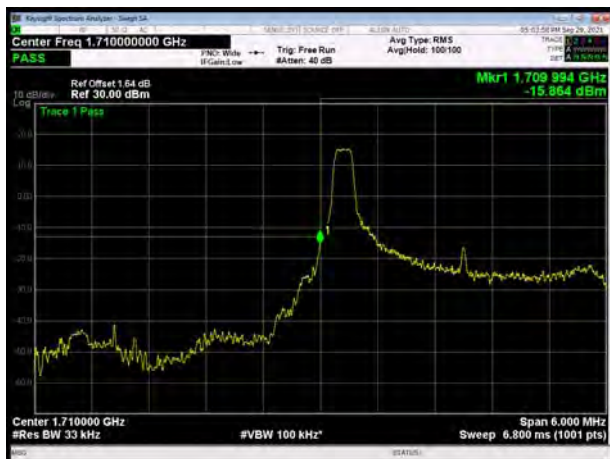
LTE Band 4 QPSK 1.4MHz CH-Low, 100%RB



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



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



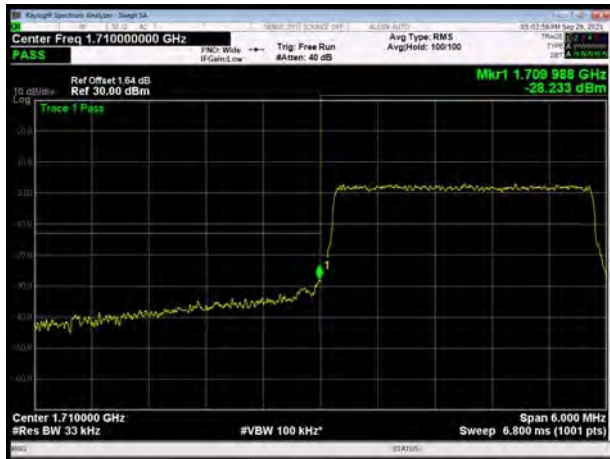
LTE Band 4 QPSK 3MHz CH-High, 1 RB







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

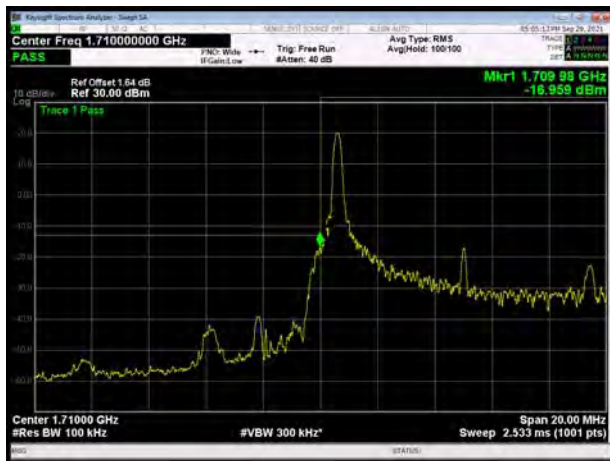


LTE Band 4 QPSK 5MHz CH-High, 100%RB





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



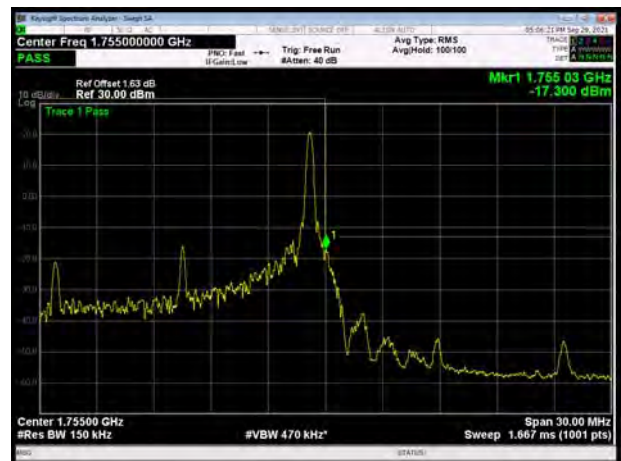
LTE Band 4 QPSK 10MHz CH-High, 100%RB



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

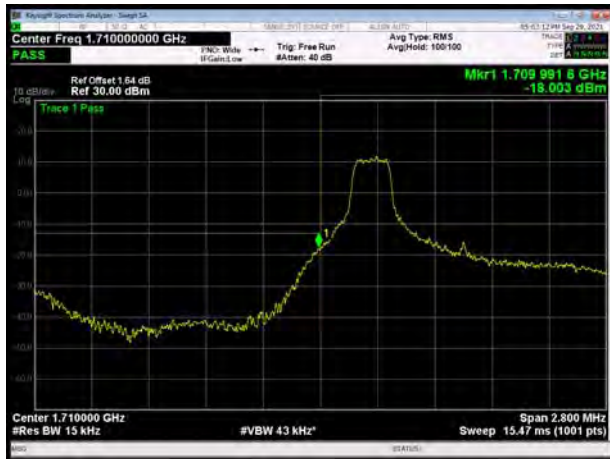


LTE Band 4 QPSK 20MHz CH-High, 100%RB





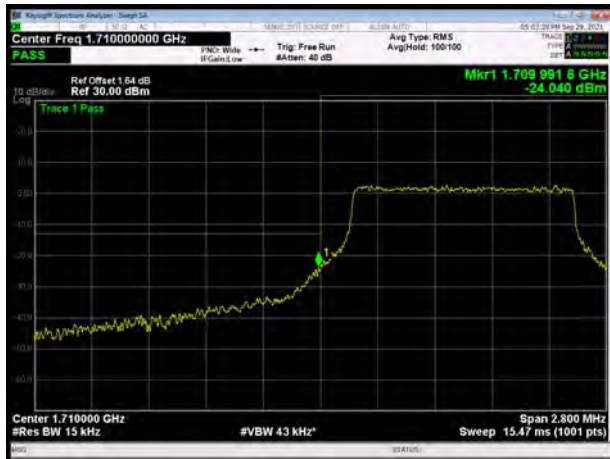
LTE Band 4 16QAM 1.4MHz CH-Low, 1 RB



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



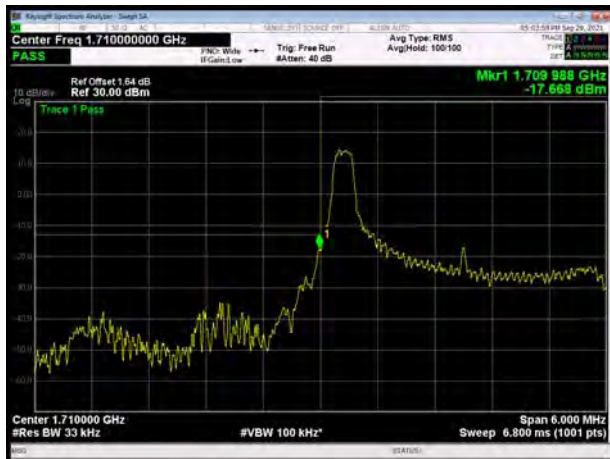
LTE Band 4 16QAM 1.4MHz CH-Low, 100%RB



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



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



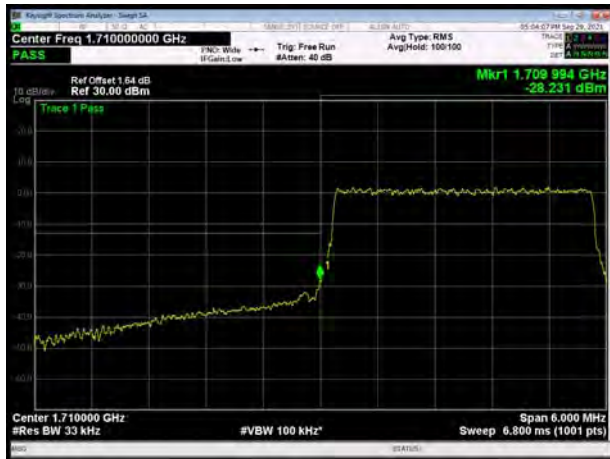
LTE Band 4 16QAM 3MHz CH-High, 1 RB







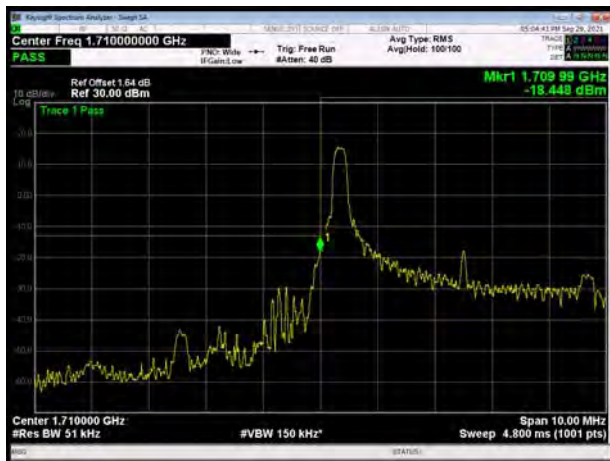
LTE Band 4 16QAM 3MHz CH-Low, 100%RB



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



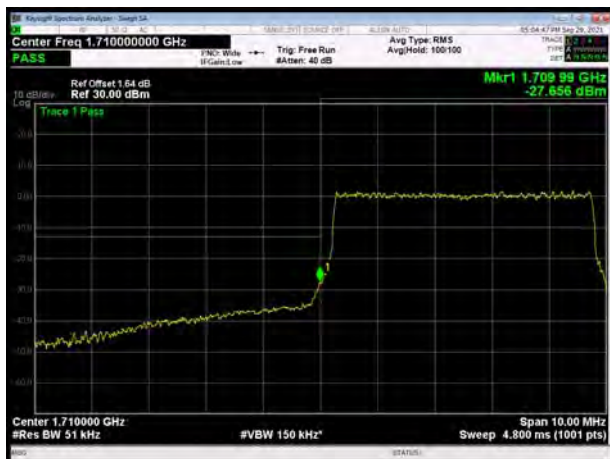
LTE Band 4 16QAM 5MHz CH-Low, 1 RB



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



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

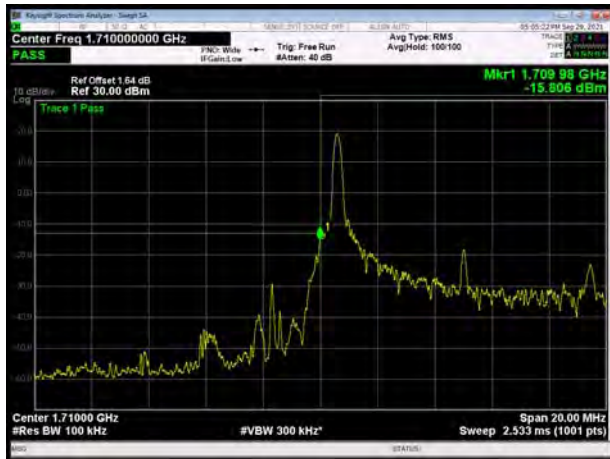


LTE Band 4 16QAM 5MHz CH-High, 100%RB

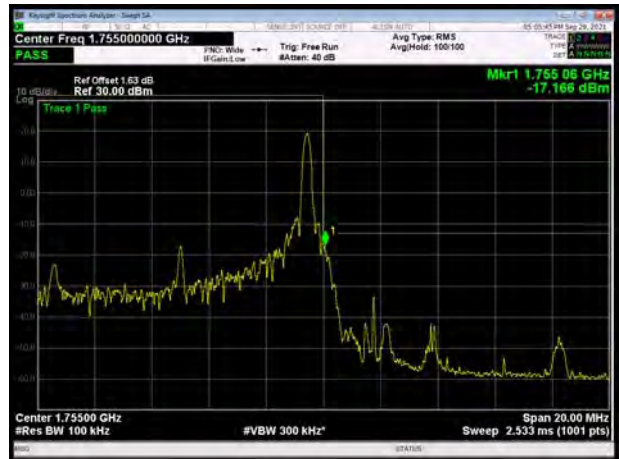




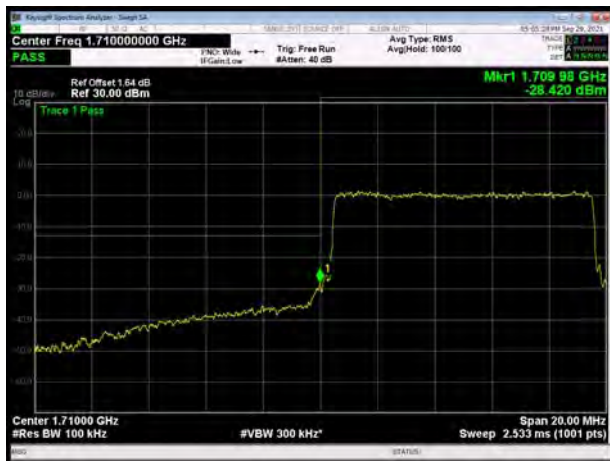
LTE Band 4 16QAM 10MHz CH-Low, 1 RB



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



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



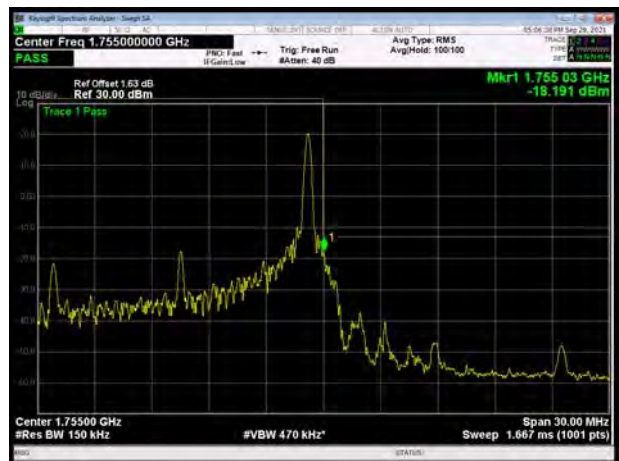
LTE Band 4 16QAM 10MHz CH-High, 100%RB



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



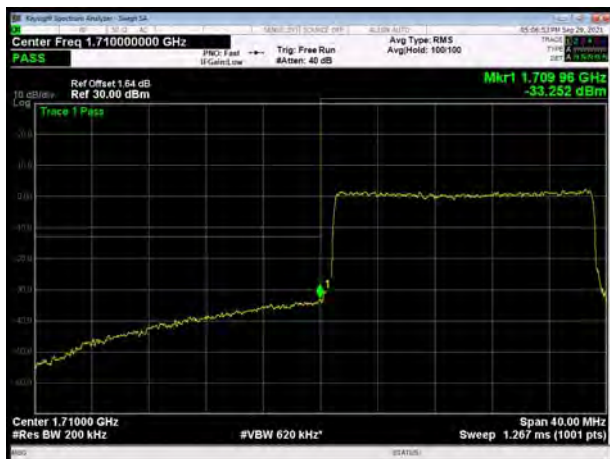
LTE Band 4 16QAM 20MHz CH-Low, 1 RB



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

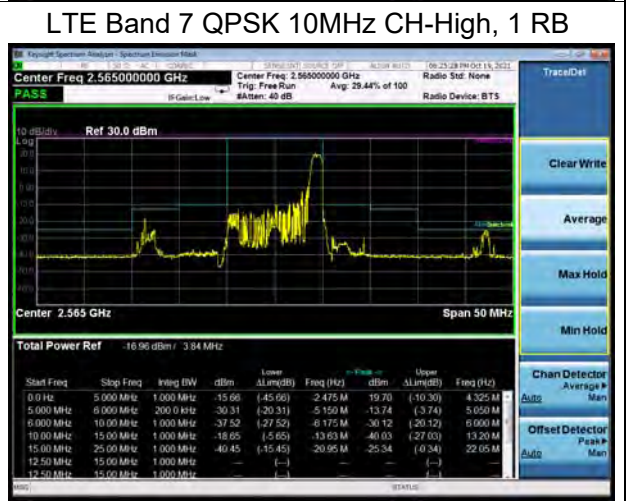
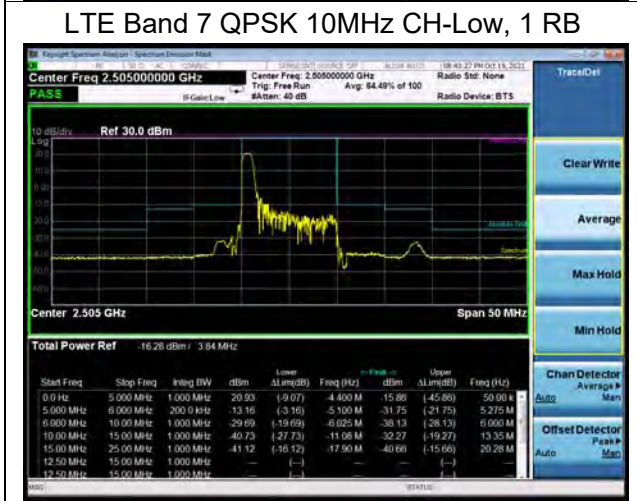
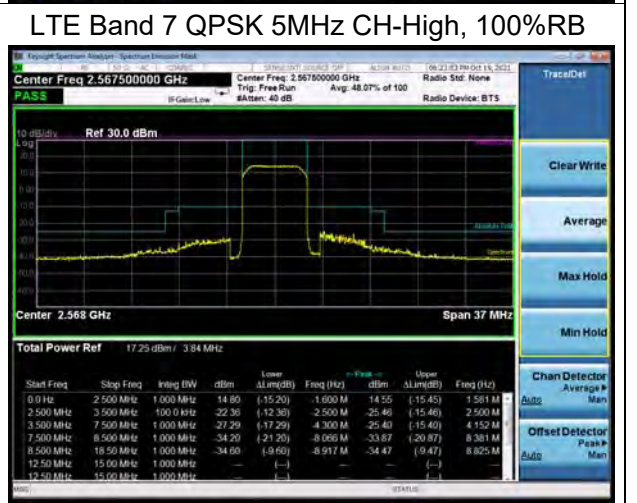
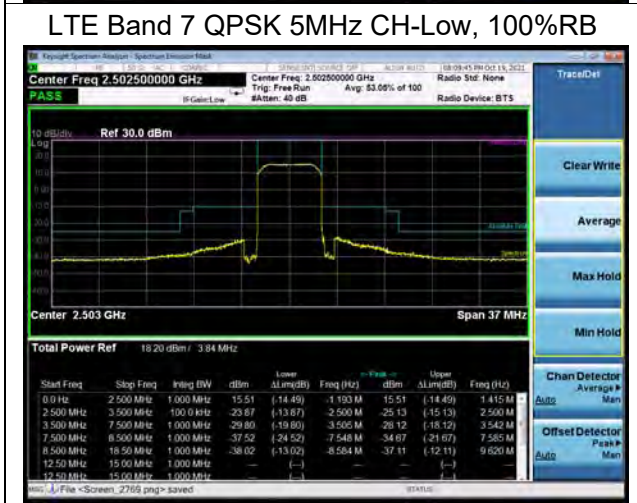
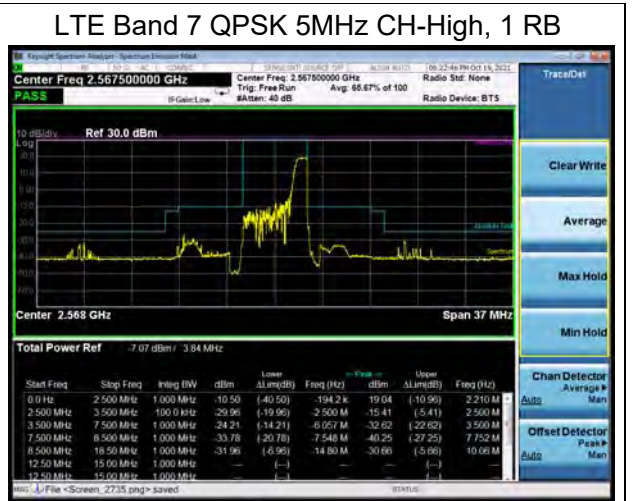
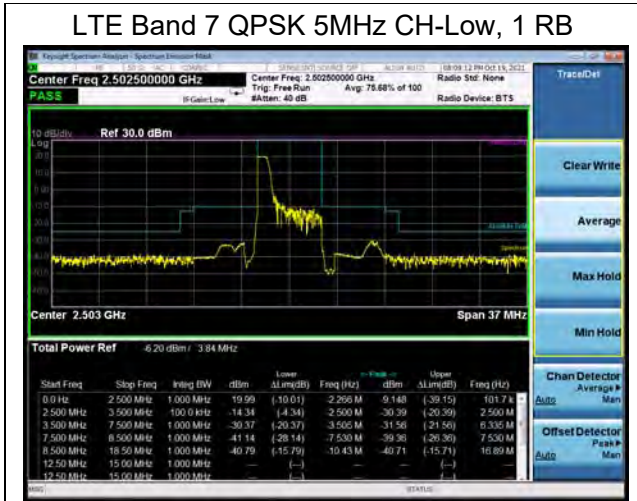


LTE Band 4 16QAM 20MHz CH-Low, 100%RB



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









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



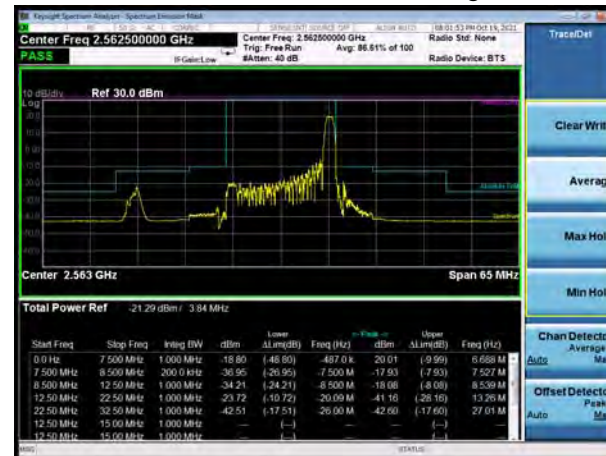
LTE Band 7 QPSK 10MHz CH-High, 100%RB



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



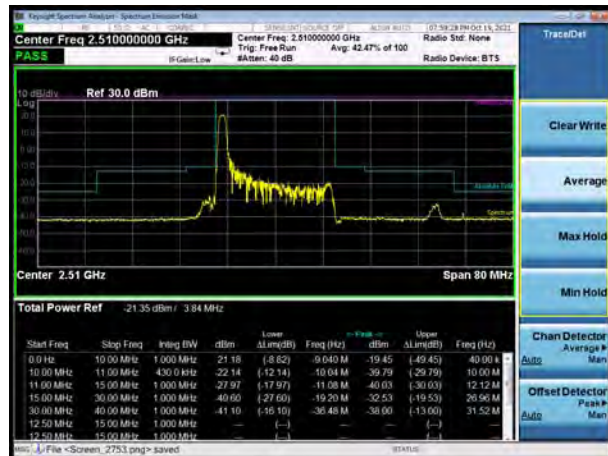
LTE Band 7 16QAM 15MHz CH-Low, 100%RB



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



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



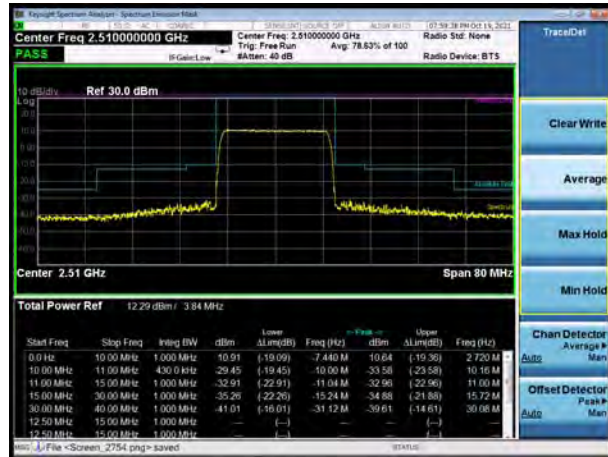
LTE Band 7 16QAM 20MHz CH-High, 1 RB







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



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





LTE Band 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



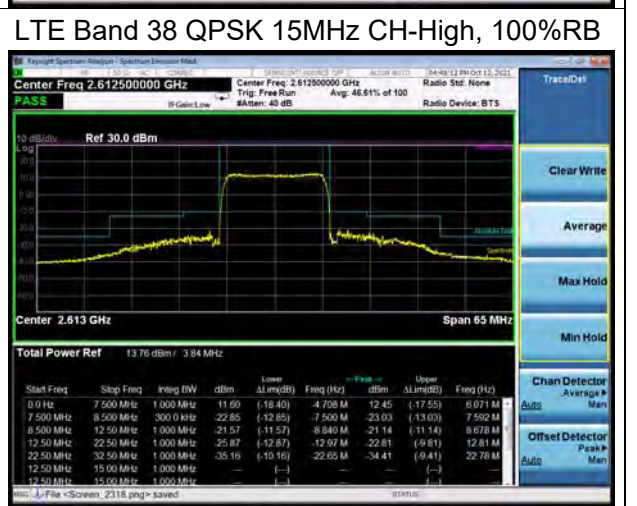
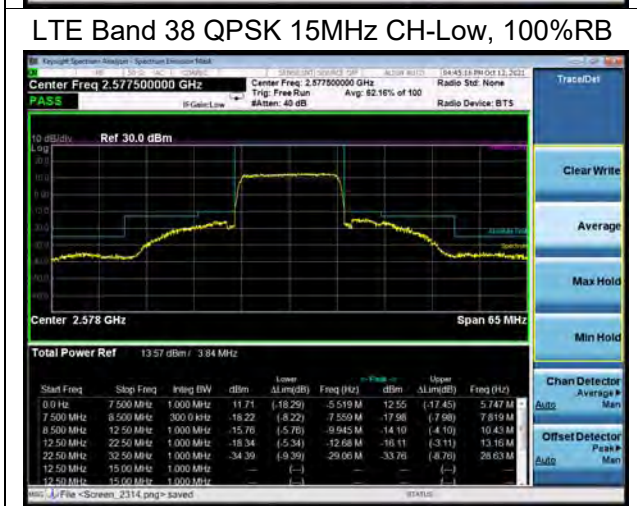
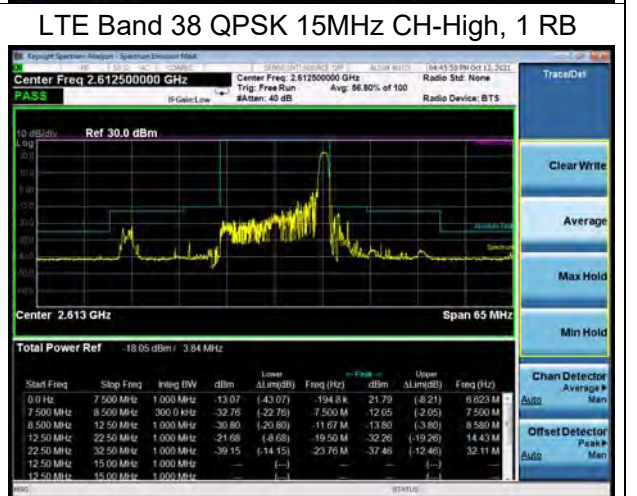
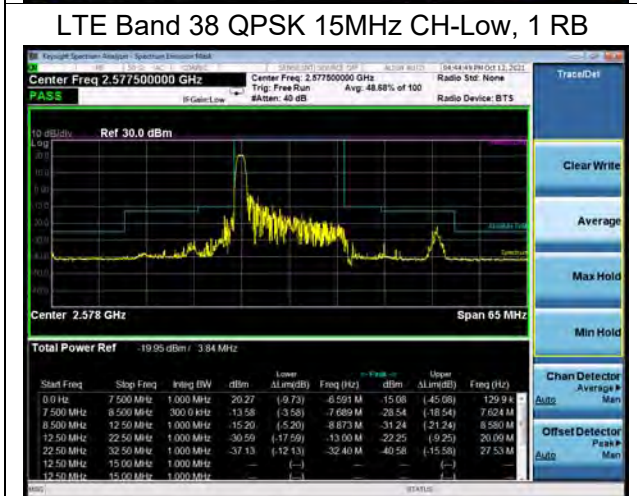
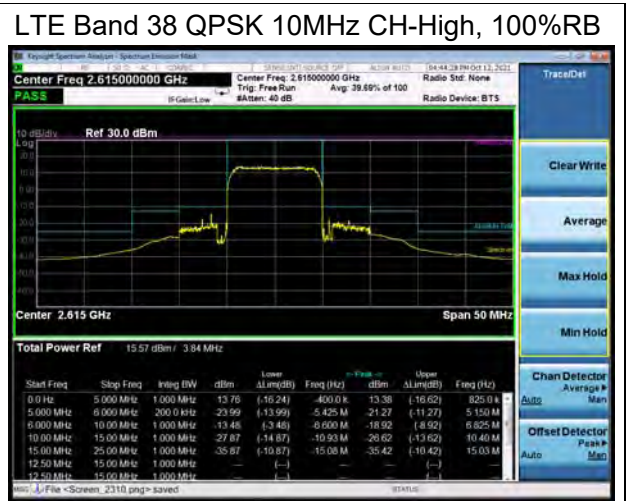
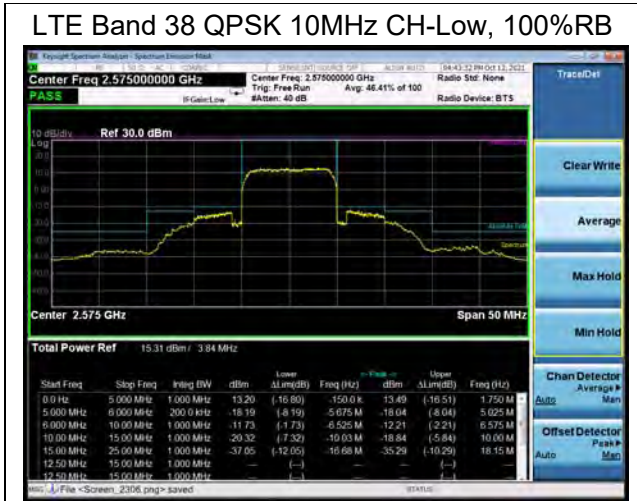
LTE Band 38 QPSK 10MHz CH-Low, 1 RB



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

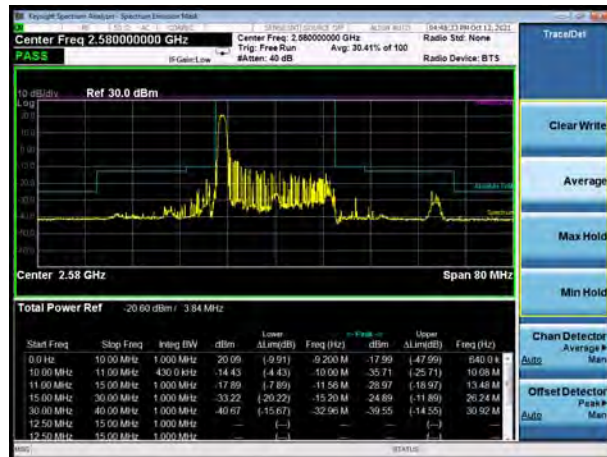




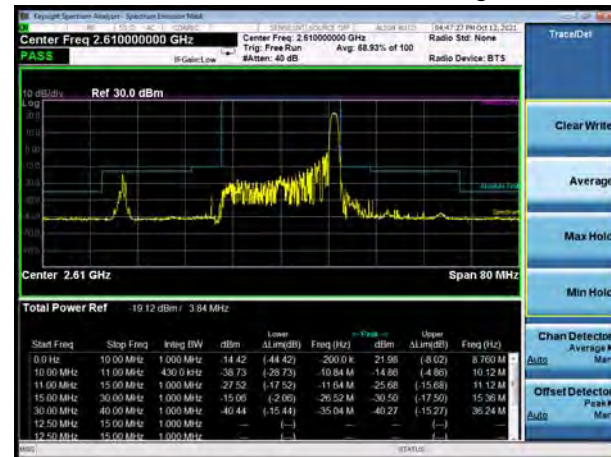




LTE Band 38 QPSK 20MHz CH-Low, 1 RB



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



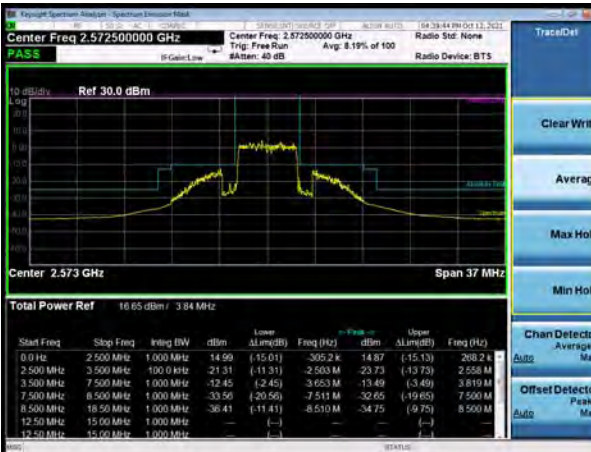
LTE Band 38 16QAM 5MHz CH-High, 1 RB







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





