



RF TEST REPORT

Applicant Xiaomi Communications Co., Ltd.
FCC ID 2AFZZK7AG
Product Mobile Phone
Brand Redmi
Model M2101K7AG
Report No. R2012A0833-R3V1
Issue Date January 18, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2019)/ FCC CFR47 Part 27C (2019)**. 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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TABLE OF CONTENT

1	Test Laboratory.....	5
1.1	Notes of the Test Report	5
1.2.	Test facility	5
1.3	Testing Location.....	5
2	General Description of Equipment under Test.....	6
2.1	Applicant and Manufacturer Information.....	6
2.2	General information.....	6
3	Applied Standards	8
4	Test Configuration	9
5	Test Case Results	11
5.1	RF Power Output and Effective Isotropic Radiated Power	11
5.2	Occupied Bandwidth	27
5.3	Band Edge Compliance	67
5.4	Peak-to-Average Power Ratio (PAPR)	114
5.5	Frequency Stability.....	121
5.6	Spurious Emissions at Antenna Terminals	133
5.7	Radiates Spurious Emission	151
6	Main Test Instruments	170
	ANNEX A: The EUT Appearance.....	171
	ANNEX B: Test Setup Photos.....	172



Version	Revision description	Issue Date
Rev.0	/	January 15, 2021
Rev.1	Update description in Page 32~33. Update information for General Information.	January 18, 2021
Note: This revised report (Report No. R2012A0833-R3V1) supersedes and replaces the previously issued report (Report No. R2012A0833-R3). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of Measurement Results

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

Date of Testing: December 16, 2020 ~ January 3, 2021

Date of Sample Received: December 14, 2020

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

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

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



1 Test Laboratory

1.1 Notes of the Test Report

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

1.2. Test facility

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

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

A2LA (Certificate Number: 3857.01)

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

1.3 Testing Location

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

2.1 Applicant and Manufacturer Information

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

2.2 General information

EUT Description				
Model	M2101K7AG			
IMEI	IMEI 1: 868824050045644 IMEI 2: 868824050045651			
Hardware Version	P2			
Software Version	MIUI12			
Power Supply	Battery / AC adapter			
Antenna Type	Internal Antenna			
Antenna Gain	Band	Frequency (MHz)	Antenna Gain(dBi)	
			Main Antenna	Diversity Antenna
	WCDMA Band IV	1710	-3.5	-3.2
		1730	-2.8	-2.8
		1750	-3.1	-2.4
	LTE Band 4	1710	-3.5	-3.2
		1730	-2.8	-2.8
		1750	-3.1	-2.4
	LTE Band 7 / CA-7C	2500	-1.8	-5.3
		2520	-1.7	-4.6
		2540	-1.4	-4.4
		2560	-1.1	-4.0
	LTE Band 38 / CA-38C	2580	-1.2	-3.5
		2600	-1.1	-3.1
		2620	-0.9	-3.0
	LTE Band 41	2540	-1.4	-4.4
		2600	-1.1	-3.1
		2640	-0.5	-2.75
		2660	-0.7	-2.6
Test Mode(s)	WCDMA Band IV; LTE Band 4/7/38/41; CA-7C, CA-38C;			
Test Modulation	(WCDMA) BPSK, QPSK, 16QAM;			



RF Test Report

Report No.: R2022A0033-RSV1

	(LTE)QPSK, 16QAM, 64QAM;		
HSDPA UE Category	24		
HSUPA UE Category	8		
LTE Category	7		
Maximum E.I.R.P.	WCDMA Band IV:	20.52dBm	
	LTE Band 4:	21.90dBm	
	LTE Band 7:	23.26dBm	
	LTE Band 38:	24.12dBm	
	LTE Band 41:	24.42dBm	
	CA-7C:	22.29dBm	
	CA-38C:	22.08dBm	
Rated Power Supply Voltage	3.87V		
Extreme Voltage	Minimum: 3.29V Maximum: 4.45V		
Extreme Temperature	Lowest: -30°C Highest: +50°C		
Operating Voltage	Minimum: 3.6V Maximum: 4.2V		
Operating Temperature	Lowest: 0°C Highest: +40°C		
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	WCDMA Band IV	1710 ~ 1755	2110 ~ 2155
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 38	2570 ~ 2620	2570 ~ 2620
	LTE Band 41	2535~2655	2535~2655
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			



3 Applied Standards

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

Test standards:

FCC CFR47 Part 27C (2019)

ANSI C63.26 (2015)

Reference standard:

FCC CFR47 Part 2 (2019)

KDB 971168 D01 Power Meas License Digital Systems v03r01

4 Test Configuration

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

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (X 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 4/7/38/41:

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

5 Test Case Results

5.1 RF Power Output and Effective Isotropic Radiated Power

Ambient condition

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

Methods of Measurement

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

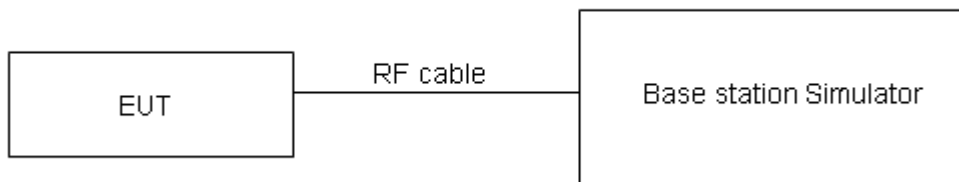
ERP can then be calculated as follows:

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

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

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

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 27.50(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(d)(4)Limit	$\leq 1 \text{ W}$ (30 dBm)
Part 27.50(h)(2) Limit	$\leq 2 \text{ W}$ (33 dBm)

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U=0.4 \text{ dB}$ 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)					
					Main Antenna			Diversity Antenna		
		Channel 1312	Channel 1413	Channel 1513	Channel 1312	Channel 1413	Channel 1513	Channel 1312	Channel 1413	Channel 1513
		1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)
RMC		23.01	23.06	22.92	19.51	20.26	19.82	19.81	20.26	20.52
HSDPA	Sub - Test 1	22.47	22.48	22.36	18.97	19.68	19.26	19.27	19.68	19.96
	Sub - Test 2	22.46	22.50	22.33	18.96	19.70	19.23	19.26	19.70	19.93
	Sub - Test 3	21.93	22.00	21.85	18.43	19.20	18.75	18.73	19.20	19.45
	Sub - Test 4	21.94	22.01	21.83	18.44	19.21	18.73	18.74	19.21	19.43
HSUPA	Sub - Test 1	22.43	22.47	22.31	18.93	19.67	19.21	19.23	19.67	19.91
	Sub - Test 2	21.42	21.45	21.30	17.92	18.65	18.20	18.22	18.65	18.90
	Sub - Test 3	21.89	21.93	21.79	18.39	19.13	18.69	18.69	19.13	19.39
	Sub - Test 4	21.35	21.42	21.27	17.85	18.62	18.17	18.15	18.62	18.87
	Sub - Test 5	22.36	22.40	22.25	18.86	19.60	19.15	19.16	19.60	19.85
DC-HSDPA	Sub - Test 1	22.35	22.42	22.26	18.85	19.62	19.16	19.15	19.62	19.86
	Sub - Test 2	22.34	22.41	22.25	18.84	19.61	19.15	19.14	19.61	19.85
	Sub - Test 3	21.92	21.90	21.76	18.42	19.10	18.66	18.72	19.10	19.36
	Sub - Test 4	21.91	21.89	21.75	18.41	19.09	18.65	18.71	19.09	19.35
HSPA+	16QAM	21.90	21.97	21.82	18.40	19.17	18.72	18.70	19.17	19.42



LTE Band 4				Maximum Output Power (dBm)			EIRP (dBm)					
							Main Antenna			Diversity Antenna		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				19957/ 1710.7	20175/ 1732.5	20393/ 1754.3	19957/ 1710.7	20175/ 1732.5	20393/ 1754.3	19957/ 1710.7	20175/ 1732.5	20393/ 1754.3
1.4MHz	QPSK	1	0	24.42	24.22	24.20	20.92	21.42	21.10	21.22	21.42	21.80
		1	2	24.36	24.13	24.25	20.86	21.33	21.15	21.16	21.33	21.85
		1	5	24.23	24.02	24.16	20.73	21.22	21.06	21.03	21.22	21.76
		3	0	24.41	24.25	24.13	20.91	21.45	21.03	21.21	21.45	21.73
		3	2	24.29	24.18	24.09	20.79	21.38	20.99	21.09	21.38	21.69
		3	3	24.26	24.16	24.09	20.76	21.36	20.99	21.06	21.36	21.69
		6	0	23.36	23.19	23.14	19.86	20.39	20.04	20.16	20.39	20.74
	16QAM	1	0	23.51	23.47	23.55	20.01	20.67	20.45	20.31	20.67	21.15
		1	2	23.49	23.40	23.45	19.99	20.60	20.35	20.29	20.60	21.05
		1	5	23.64	23.48	23.58	20.14	20.68	20.48	20.44	20.68	21.18
		3	0	23.43	23.22	23.33	19.93	20.42	20.23	20.23	20.42	20.93
		3	2	23.51	23.34	23.45	20.01	20.54	20.35	20.31	20.54	21.05
		3	3	23.45	23.26	23.35	19.95	20.46	20.25	20.25	20.46	20.95
		6	0	22.43	22.27	22.38	18.93	19.47	19.28	19.23	19.47	19.98
	64QAM	1	0	23.28	23.36	23.39	19.78	20.56	20.29	20.08	20.56	20.99
		1	2	23.32	23.24	23.37	19.82	20.44	20.27	20.12	20.44	20.97
		1	5	23.42	23.31	23.36	19.92	20.51	20.26	20.22	20.51	20.96
		3	0	23.24	23.16	23.29	19.74	20.36	20.19	20.04	20.36	20.89
		3	2	23.27	23.14	23.27	19.77	20.34	20.17	20.07	20.34	20.87
		3	3	23.25	23.08	23.15	19.75	20.28	20.05	20.05	20.28	20.75
		6	0	22.36	22.29	22.40	18.86	19.49	19.30	19.16	19.49	20.00
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				19965/ 1711.5	20175/ 1732.5	20385/ 1753.5	19965/ 1711.5	20175/ 1732.5	20385/ 1753.5	19965/ 1711.5	20175/ 1732.5	20385/ 1753.5
3MHz	QPSK	1	0	24.44	24.26	24.23	20.94	21.46	21.13	21.24	21.46	21.83
		1	7	24.34	24.16	24.29	20.84	21.36	21.19	21.14	21.36	21.89
		1	14	24.26	24.07	24.20	20.76	21.27	21.10	21.06	21.27	21.80
		8	0	23.51	23.37	23.26	20.01	20.57	20.16	20.31	20.57	20.86
		8	4	23.41	23.28	23.21	19.91	20.48	20.11	20.21	20.48	20.81
		8	7	23.36	23.27	23.19	19.86	20.47	20.09	20.16	20.47	20.79
		15	0	23.36	23.23	23.17	19.86	20.43	20.07	20.16	20.43	20.77
	16QAM	1	0	23.54	23.49	23.58	20.04	20.69	20.48	20.34	20.69	21.18



		1	7	23.52	23.40	23.49	20.02	20.60	20.39	20.32	20.60	21.09
		1	14	23.66	23.52	23.61	20.16	20.72	20.51	20.46	20.72	21.21
		8	0	22.54	22.35	22.45	19.04	19.55	19.35	19.34	19.55	20.05
		8	4	22.62	22.47	22.57	19.12	19.67	19.47	19.42	19.67	20.17
		8	7	22.55	22.38	22.48	19.05	19.58	19.38	19.35	19.58	20.08
		15	0	22.46	22.31	22.41	18.96	19.51	19.31	19.26	19.51	20.01
		15	0	22.46	22.31	22.41	18.96	19.51	19.31	19.26	19.51	20.01
	64QAM	1	0	23.31	23.38	23.42	19.81	20.58	20.32	20.11	20.58	21.02
		1	7	23.35	23.24	23.39	19.85	20.44	20.29	20.15	20.44	20.99
		1	14	23.44	23.30	23.39	19.94	20.50	20.29	20.24	20.50	20.99
		8	0	22.35	22.29	22.41	18.85	19.49	19.31	19.15	19.49	20.01
		8	4	22.38	22.27	22.39	18.88	19.47	19.29	19.18	19.47	19.99
		8	7	22.35	22.20	22.28	18.85	19.40	19.18	19.15	19.40	19.88
		15	0	22.39	22.33	22.43	18.89	19.53	19.33	19.19	19.53	20.03
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				19975/ 1712.5	20175/ 1732.5	20375/ 1752.5	19975/ 1712.5	20175/ 1732.5	20375/ 1752.5	19975/ 1712.5	20175/ 1732.5	20375/ 1752.5
5MHz	QPSK	1	0	24.41	24.24	24.19	20.91	21.44	21.09	21.21	21.44	21.79
		1	13	24.32	24.12	24.26	20.82	21.32	21.16	21.12	21.32	21.86
		1	24	24.23	24.02	24.16	20.73	21.22	21.06	21.03	21.22	21.76
		12	0	23.48	23.32	23.22	19.98	20.52	20.12	20.28	20.52	20.82
		12	6	23.39	23.24	23.16	19.89	20.44	20.06	20.19	20.44	20.76
		12	13	23.34	23.25	23.15	19.84	20.45	20.05	20.14	20.45	20.75
		25	0	23.36	23.22	23.15	19.86	20.42	20.05	20.16	20.42	20.75
	16QAM	1	0	23.51	23.45	23.55	20.01	20.65	20.45	20.31	20.65	21.15
		1	13	23.49	23.38	23.46	19.99	20.58	20.36	20.29	20.58	21.06
		1	24	23.63	23.50	23.57	20.13	20.70	20.47	20.43	20.70	21.17
		12	0	22.52	22.31	22.42	19.02	19.51	19.32	19.32	19.51	20.02
		12	6	22.59	22.42	22.53	19.09	19.62	19.43	19.39	19.62	20.13
		12	13	22.52	22.33	22.44	19.02	19.53	19.34	19.32	19.53	20.04
		25	0	22.44	22.27	22.36	18.94	19.47	19.26	19.24	19.47	19.96
	64QAM	1	0	23.28	23.38	23.39	19.78	20.58	20.29	20.08	20.58	20.99
		1	13	23.32	23.26	23.36	19.82	20.46	20.26	20.12	20.46	20.96
		1	24	23.45	23.28	23.35	19.95	20.48	20.25	20.25	20.48	20.95
		12	0	22.33	22.25	22.42	18.83	19.45	19.32	19.13	19.45	20.02
		12	6	22.35	22.22	22.35	18.85	19.42	19.25	19.15	19.42	19.95
		12	13	22.32	22.15	22.24	18.82	19.35	19.14	19.12	19.35	19.84
		25	0	22.37	22.29	22.38	18.87	19.49	19.28	19.17	19.49	19.98



BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20000/ 1715	20175/ 1732.5	20350/ 1750	20000/ 1715	20175/ 1732.5	20350/ 1750	20000/ 1715	20175/ 1732.5	20350/ 1750
10MHz	QPSK	1	0	24.43	24.25	24.22	20.93	21.45	21.12	21.23	21.45	21.82
		1	25	24.35	24.17	24.30	20.85	21.37	21.20	21.15	21.37	21.90
		1	49	24.25	24.06	24.19	20.75	21.26	21.09	21.05	21.26	21.79
		25	0	23.51	23.37	23.26	20.01	20.57	20.16	20.31	20.57	20.86
		25	13	23.42	23.29	23.20	19.92	20.49	20.10	20.22	20.49	20.80
		25	25	23.36	23.29	23.20	19.86	20.49	20.10	20.16	20.49	20.80
		50	0	23.40	23.24	23.19	19.90	20.44	20.09	20.20	20.44	20.79
	16QAM	1	0	23.53	23.48	23.57	20.03	20.68	20.47	20.33	20.68	21.17
		1	25	23.52	23.42	23.49	20.02	20.62	20.39	20.32	20.62	21.09
		1	49	23.66	23.52	23.60	20.16	20.72	20.50	20.46	20.72	21.20
		25	0	22.55	22.36	22.46	19.05	19.56	19.36	19.35	19.56	20.06
		25	13	22.61	22.46	22.56	19.11	19.66	19.46	19.41	19.66	20.16
		25	25	22.55	22.38	22.48	19.05	19.58	19.38	19.35	19.58	20.08
		50	0	22.47	22.32	22.40	18.97	19.52	19.30	19.27	19.52	20.00
	64QAM	1	0	23.30	23.37	23.41	19.80	20.57	20.31	20.10	20.57	21.01
		1	25	23.35	23.26	23.39	19.85	20.46	20.29	20.15	20.46	20.99
		1	49	23.44	23.30	23.38	19.94	20.50	20.28	20.24	20.50	20.98
		25	0	22.36	22.30	22.42	18.86	19.50	19.32	19.16	19.50	20.02
		25	13	22.37	22.26	22.38	18.87	19.46	19.28	19.17	19.46	19.98
		25	25	22.35	22.20	22.28	18.85	19.40	19.18	19.15	19.40	19.88
		50	0	22.40	22.34	22.42	18.90	19.54	19.32	19.20	19.54	20.02
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20025/ 1717.5	20175/ 1732.5	20325/ 1747.5	20025/ 1717.5	20175/ 1732.5	20325/ 1747.5	20025/ 1717.5	20175/ 1732.5	20325/ 1747.5
15MHz	QPSK	1	0	24.42	24.21	24.20	20.92	21.41	21.10	21.22	21.41	21.80
		1	38	24.33	24.16	24.27	20.83	21.36	21.17	21.13	21.36	21.87
		1	74	24.22	24.01	24.15	20.72	21.21	21.05	21.02	21.21	21.75
		36	0	23.49	23.33	23.23	19.99	20.53	20.13	20.29	20.53	20.83
		36	18	23.39	23.24	23.16	19.89	20.44	20.06	20.19	20.44	20.76
		36	39	23.33	23.26	23.16	19.83	20.46	20.06	20.13	20.46	20.76
		75	0	23.38	23.20	23.14	19.88	20.40	20.04	20.18	20.40	20.74
	16QAM	1	0	23.48	23.46	23.55	19.98	20.66	20.45	20.28	20.66	21.15
		1	38	23.50	23.39	23.47	20.00	20.59	20.37	20.30	20.59	21.07
		1	74	23.63	23.48	23.57	20.13	20.68	20.47	20.43	20.68	21.17



		36	0	22.52	22.34	22.43	19.02	19.54	19.33	19.32	19.54	20.03
		36	18	22.58	22.41	22.52	19.08	19.61	19.42	19.38	19.61	20.12
		36	39	22.53	22.34	22.45	19.03	19.54	19.35	19.33	19.54	20.05
		75	0	22.44	22.27	22.36	18.94	19.47	19.26	19.24	19.47	19.96
	64QAM	1	0	23.25	23.35	23.39	19.75	20.55	20.29	20.05	20.55	20.99
		1	38	23.33	23.23	23.37	19.83	20.43	20.27	20.13	20.43	20.97
		1	74	23.45	23.29	23.39	19.95	20.49	20.29	20.25	20.49	20.99
		36	0	22.35	22.32	22.43	18.85	19.52	19.33	19.15	19.52	20.03
		36	18	22.35	22.23	22.37	18.85	19.43	19.27	19.15	19.43	19.97
		36	39	22.33	22.16	22.25	18.83	19.36	19.15	19.13	19.36	19.85
		75	0	22.37	22.29	22.38	18.87	19.49	19.28	19.17	19.49	19.98
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20050/ 1720	20175/ 1732.5	20300/ 1745	20050/ 1720	20175/ 1732.5	20300/ 1745	20050/ 1720	20175/ 1732.5	20300/ 1745
20MHz	QPSK	1	0	24.39	24.17	24.17	20.89	21.37	21.07	21.19	21.37	21.77
		1	50	24.32	24.12	24.25	20.82	21.32	21.15	21.12	21.32	21.85
		1	99	24.20	24.00	24.12	20.70	21.20	21.02	21.00	21.20	21.72
		50	0	23.46	23.28	23.19	19.96	20.48	20.09	20.26	20.48	20.79
		50	25	23.37	23.20	23.13	19.87	20.40	20.03	20.17	20.40	20.73
		50	50	23.30	23.21	23.12	19.80	20.41	20.02	20.10	20.41	20.72
		100	0	23.35	23.15	23.10	19.85	20.35	20.00	20.15	20.35	20.70
	16QAM	1	0	23.59	23.42	23.50	20.09	20.62	20.40	20.39	20.62	21.10
		1	50	23.46	23.37	23.43	19.96	20.57	20.33	20.26	20.57	21.03
		1	99	23.61	23.45	23.55	20.11	20.65	20.45	20.41	20.65	21.15
		50	0	22.49	22.30	22.40	18.99	19.50	19.30	19.29	19.50	20.00
		50	25	22.55	22.39	22.49	19.05	19.59	19.39	19.35	19.59	20.09
		50	50	22.50	22.29	22.41	19.00	19.49	19.31	19.30	19.49	20.01
		100	0	22.42	22.23	22.33	18.92	19.43	19.23	19.22	19.43	19.93
	64QAM	1	0	23.23	23.31	23.34	19.73	20.51	20.24	20.03	20.51	20.94
		1	50	23.29	23.21	23.33	19.79	20.41	20.23	20.09	20.41	20.93
		1	99	23.39	23.23	23.33	19.89	20.43	20.23	20.19	20.43	20.93
		50	0	22.30	22.24	22.36	18.80	19.44	19.26	19.10	19.44	19.96
		50	25	22.31	22.19	22.31	18.81	19.39	19.21	19.11	19.39	19.91
		50	50	22.30	22.11	22.21	18.80	19.31	19.11	19.10	19.31	19.81
		100	0	22.35	22.25	22.35	18.85	19.45	19.25	19.15	19.45	19.95



LTE Band 7				Maximum Output Power (dBm)			EIRP (dBm)					
			Main Antenna				Diversity Antenna					
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20775/ 2502.5	21100/ 2535	21425/ 2567.5	20775/ 2502.5	21100/ 2535	21425/ 2567.5	20775/ 2502.5	21100/ 2535	21425/ 2567.5
5MHz	QPSK	1	0	24.47	24.30	24.36	22.67	22.90	23.26	19.17	19.90	20.36
		1	13	24.45	24.31	24.34	22.65	22.91	23.24	19.15	19.91	20.34
		1	24	24.39	24.35	23.96	22.59	22.95	22.86	19.09	19.95	19.96
		12	0	23.63	23.37	23.40	21.83	21.97	22.30	18.33	18.97	19.40
		12	6	23.65	22.69	23.48	21.85	21.29	22.38	18.35	18.29	19.48
		12	13	23.79	23.42	23.50	21.99	22.02	22.40	18.49	19.02	19.50
		25	0	23.74	23.40	23.46	21.94	22.00	22.36	18.44	19.00	19.46
	16QAM	1	0	23.46	23.31	23.49	21.66	21.91	22.39	18.16	18.91	19.49
		1	13	23.45	23.40	23.47	21.65	22.00	22.37	18.15	19.00	19.47
		1	24	23.53	23.53	23.56	21.73	22.13	22.46	18.23	19.13	19.56
		12	0	22.41	22.38	22.44	20.61	20.98	21.34	17.11	17.98	18.44
		12	6	22.55	22.53	22.59	20.75	21.13	21.49	17.25	18.13	18.59
		12	13	22.51	22.52	22.55	20.71	21.12	21.45	17.21	18.12	18.55
		25	0	22.43	22.45	22.48	20.63	21.05	21.38	17.13	18.05	18.48
	64QAM	1	0	23.36	23.33	23.41	21.56	21.93	22.31	18.06	18.93	19.41
		1	13	23.39	23.34	23.41	21.59	21.94	22.31	18.09	18.94	19.41
		1	24	23.32	23.28	23.31	21.52	21.88	22.21	18.02	18.88	19.31
		12	0	22.32	22.27	22.33	20.52	20.87	21.23	17.02	17.87	18.33
		12	6	22.32	22.29	22.35	20.52	20.89	21.25	17.02	17.89	18.35
		12	13	22.40	22.41	22.44	20.60	21.01	21.34	17.10	18.01	18.44
		25	0	22.38	22.40	22.43	20.58	21.00	21.33	17.08	18.00	18.43
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20800/ 2505	21100/ 2535	21400/ 2565	20800/ 2505	21100/ 2535	21400/ 2565	20800/ 2505	21100/ 2535	21400/ 2565
10MHz	QPSK	1	0	24.45	24.29	24.33	22.65	22.89	23.23	19.15	19.89	20.33
		1	25	24.42	24.26	24.30	22.62	22.86	23.20	19.12	19.86	20.30
		1	49	24.37	24.31	23.93	22.57	22.91	22.83	19.07	19.91	19.93
		25	0	23.60	23.32	23.36	21.80	21.92	22.26	18.30	18.92	19.36
		25	13	23.62	22.64	23.44	21.82	21.24	22.34	18.32	18.24	19.44
		25	25	23.77	23.38	23.45	21.97	21.98	22.35	18.47	18.98	19.45
		50	0	23.70	23.38	23.42	21.90	21.98	22.32	18.40	18.98	19.42



	16QAM	1	0	23.44	23.28	23.47	21.64	21.88	22.37	18.14	18.88	19.47
		1	25	23.42	23.36	23.44	21.62	21.96	22.34	18.12	18.96	19.44
		1	49	23.50	23.51	23.53	21.70	22.11	22.43	18.20	19.11	19.53
		25	0	22.38	22.33	22.40	20.58	20.93	21.30	17.08	17.93	18.40
		25	13	22.53	22.49	22.56	20.73	21.09	21.46	17.23	18.09	18.56
		25	25	22.48	22.47	22.51	20.68	21.07	21.41	17.18	18.07	18.51
		50	0	22.40	22.40	22.44	20.60	21.00	21.34	17.10	18.00	18.44
	64QAM	1	0	23.34	23.34	23.39	21.54	21.94	22.29	18.04	18.94	19.39
		1	25	23.36	23.34	23.38	21.56	21.94	22.28	18.06	18.94	19.38
		1	49	23.33	23.26	23.28	21.53	21.86	22.18	18.03	18.86	19.28
		25	0	22.29	22.22	22.33	20.49	20.82	21.23	16.99	17.82	18.33
		25	13	22.30	22.25	22.32	20.50	20.85	21.22	17.00	17.85	18.32
		25	25	22.37	22.36	22.40	20.57	20.96	21.30	17.07	17.96	18.40
		50	0	22.35	22.35	22.39	20.55	20.95	21.29	17.05	17.95	18.39
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20825/ 2507.5	21100/ 2535	21375/ 2562.5	20825/ 2507.5	21100/ 2535	21375/ 2562.5	20825/ 2507.5	21100/ 2535	21375/ 2562.5
15MHz	QPSK	1	0	24.46	24.26	24.34	22.66	22.86	23.24	19.16	19.86	20.34
		1	38	24.43	24.30	24.31	22.63	22.90	23.21	19.13	19.90	20.31
		1	74	24.36	24.30	23.92	22.56	22.90	22.82	19.06	19.90	19.92
		36	0	23.61	23.33	23.37	21.81	21.93	22.27	18.31	18.93	19.37
		36	18	23.62	22.64	23.44	21.82	21.24	22.34	18.32	18.24	19.44
		36	39	23.76	23.39	23.46	21.96	21.99	22.36	18.46	18.99	19.46
		75	0	23.72	23.36	23.41	21.92	21.96	22.31	18.42	18.96	19.41
	16QAM	1	0	23.41	23.29	23.47	21.61	21.89	22.37	18.11	18.89	19.47
		1	38	23.43	23.37	23.45	21.63	21.97	22.35	18.13	18.97	19.45
		1	74	23.50	23.49	23.53	21.70	22.09	22.43	18.20	19.09	19.53
		36	0	22.38	22.36	22.41	20.58	20.96	21.31	17.08	17.96	18.41
		36	18	22.52	22.48	22.55	20.72	21.08	21.45	17.22	18.08	18.55
		36	39	22.49	22.48	22.52	20.69	21.08	21.42	17.19	18.08	18.52
		75	0	22.40	22.40	22.44	20.60	21.00	21.34	17.10	18.00	18.44
	64QAM	1	0	23.31	23.31	23.39	21.51	21.91	22.29	18.01	18.91	19.39
		1	38	23.37	23.31	23.39	21.57	21.91	22.29	18.07	18.91	19.39
		1	74	23.33	23.27	23.32	21.53	21.87	22.22	18.03	18.87	19.32
		36	0	22.31	22.29	22.34	20.51	20.89	21.24	17.01	17.89	18.34
		36	18	22.30	22.26	22.34	20.50	20.86	21.24	17.00	17.86	18.34
		36	39	22.38	22.37	22.41	20.58	20.97	21.31	17.08	17.97	18.41



		75	0	22.35	22.35	22.39	20.55	20.95	21.29	17.05	17.95	18.39
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20850/ 2510	21100/ 2535	21350/ 2560	20850/ 2510	21100/ 2535	21350/ 2560	20850/ 2510	21100/ 2535	21350/ 2560
20MHz	QPSK	1	0	24.43	24.22	24.31	22.63	22.82	23.21	19.13	19.82	20.31
		1	50	24.42	24.26	24.29	22.62	22.86	23.19	19.12	19.86	20.29
		1	99	24.34	24.29	23.89	22.54	22.89	22.79	19.04	19.89	19.89
		50	0	23.58	23.28	23.33	21.78	21.88	22.23	18.28	18.88	19.33
		50	25	23.60	22.60	23.41	21.80	21.20	22.31	18.30	18.20	19.41
		50	50	23.73	23.34	23.42	21.93	21.94	22.32	18.43	18.94	19.42
		100	0	23.69	23.31	23.37	21.89	21.91	22.27	18.39	18.91	19.37
	16QAM	1	0	23.37	23.25	23.42	21.57	21.85	22.32	18.07	18.85	19.42
		1	50	23.39	23.35	23.41	21.59	21.95	22.31	18.09	18.95	19.41
		1	99	23.48	23.46	23.51	21.68	22.06	22.41	18.18	19.06	19.51
		50	0	22.35	22.32	22.38	20.55	20.92	21.28	17.05	17.92	18.38
		50	25	22.49	22.46	22.52	20.69	21.06	21.42	17.19	18.06	18.52
		50	50	22.46	22.43	22.48	20.66	21.03	21.38	17.16	18.03	18.48
		100	0	22.38	22.36	22.41	20.58	20.96	21.31	17.08	17.96	18.41
	64QAM	1	0	23.29	23.27	23.34	21.49	21.87	22.24	17.99	18.87	19.34
		1	50	23.33	23.29	23.35	21.53	21.89	22.25	18.03	18.89	19.35
		1	99	23.27	23.21	23.26	21.47	21.81	22.16	17.97	18.81	19.26
		50	0	22.26	22.21	22.27	20.46	20.81	21.17	16.96	17.81	18.27
		50	25	22.26	22.22	22.28	20.46	20.82	21.18	16.96	17.82	18.28
		50	50	22.35	22.32	22.37	20.55	20.92	21.27	17.05	17.92	18.37
		100	0	22.33	22.31	22.36	20.53	20.91	21.26	17.03	17.91	18.36

LTE Band 38				Maximum Output Power (dBm)			EIRP (dBm)					
							Main Antenna			Diversity Antenna		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37775/ 2572.5	38000/ 2595	38225/ 2617.5	37775/ 2572.5	38000/ 2595	38225/ 2617.5	37775/ 2572.5	38000/ 2595	38225/ 2617.5
5MHz	QPSK	1	0	24.22	24.76	24.79	23.02	23.66	23.89	20.72	21.66	21.79
		1	13	24.64	24.80	24.88	23.44	23.70	23.98	21.14	21.70	21.88
		1	24	24.75	25.04	24.99	23.55	23.94	24.09	21.25	21.94	21.99
		12	0	23.56	23.84	23.81	22.36	22.74	22.91	20.06	20.74	20.81
		12	6	23.65	23.75	23.90	22.45	22.65	23.00	20.15	20.65	20.90
		12	13	23.78	23.85	24.07	22.58	22.75	23.17	20.28	20.75	21.07



	16QAM	25	0	23.62	23.74	23.98	22.42	22.64	23.08	20.12	20.64	20.98
		1	0	23.93	23.79	23.85	22.73	22.69	22.95	20.43	20.69	20.85
		1	13	23.91	23.85	23.92	22.71	22.75	23.02	20.41	20.75	20.92
		1	24	24.19	24.20	24.20	22.99	23.10	23.30	20.69	21.10	21.20
		12	0	22.86	22.81	22.83	21.66	21.71	21.93	19.36	19.71	19.83
		12	6	22.90	22.86	22.90	21.70	21.76	22.00	19.40	19.76	19.90
		12	13	22.87	22.86	22.89	21.67	21.76	21.99	19.37	19.76	19.89
		25	0	22.94	22.94	22.94	21.74	21.84	22.04	19.44	19.84	19.94
	64QAM	1	0	23.29	23.29	23.32	22.09	22.19	22.42	19.79	20.19	20.32
		1	13	23.47	23.45	23.48	22.27	22.35	22.58	19.97	20.35	20.48
		1	24	23.79	23.76	23.75	22.59	22.66	22.85	20.29	20.66	20.75
		12	0	22.90	22.85	22.95	21.70	21.75	22.05	19.40	19.75	19.95
		12	6	22.93	22.89	22.92	21.73	21.79	22.02	19.43	19.79	19.92
		12	13	22.72	22.71	22.73	21.52	21.61	21.83	19.22	19.61	19.73
		25	0	22.97	22.97	23.00	21.77	21.87	22.10	19.47	19.87	20.00
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37800/ 2575	38000/ 2595	38200/ 2615	37800/ 2575	38000/ 2595	38200/ 2615	37800/ 2575	38000/ 2595	38200/ 2615
10MHz	QPSK	1	0	24.24	24.77	24.82	23.04	23.67	23.92	20.74	21.67	21.82
		1	25	24.67	24.85	24.92	23.47	23.75	24.02	21.17	21.75	21.92
		1	49	24.77	25.08	25.02	23.57	23.98	24.12	21.27	21.98	22.02
		25	0	23.59	23.89	23.85	22.39	22.79	22.95	20.09	20.79	20.85
		25	13	23.68	23.80	23.94	22.48	22.70	23.04	20.18	20.70	20.94
		25	25	23.80	23.89	24.12	22.60	22.79	23.22	20.30	20.79	21.12
		50	0	23.66	23.76	24.02	22.46	22.66	23.12	20.16	20.66	21.02
	16QAM	1	0	23.95	23.82	23.87	22.75	22.72	22.97	20.45	20.72	20.87
		1	25	23.94	23.89	23.95	22.74	22.79	23.05	20.44	20.79	20.95
		1	49	24.22	24.22	24.23	23.02	23.12	23.33	20.72	21.12	21.23
		25	0	22.89	22.86	22.87	21.69	21.76	21.97	19.39	19.76	19.87
		25	13	22.92	22.90	22.93	21.72	21.80	22.03	19.42	19.80	19.93
		25	25	22.90	22.91	22.93	21.70	21.81	22.03	19.40	19.81	19.93
		50	0	22.97	22.99	22.98	21.77	21.89	22.08	19.47	19.89	19.98
	64QAM	1	0	23.31	23.28	23.34	22.11	22.18	22.44	19.81	20.18	20.34
		1	25	23.50	23.45	23.42	22.30	22.35	22.52	20.00	20.35	20.42
		1	49	23.78	23.78	23.78	22.58	22.68	22.88	20.28	20.68	20.78
		25	0	22.93	22.90	22.95	21.73	21.80	22.05	19.43	19.80	19.95
		25	13	22.95	22.93	22.95	21.75	21.83	22.05	19.45	19.83	19.95



		25	25	22.75	22.76	22.77	21.55	21.66	21.87	19.25	19.66	19.77
		50	0	22.81	22.98	22.89	21.61	21.88	21.99	19.31	19.88	19.89
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37825/ 2577.5	38000/ 2595	38175/ 2612.5	37825/ 2577.5	38000/ 2595	38175/ 2612.5	37825/ 2577.5	38000/ 2595	38175/ 2612.5
15MHz	QPSK	1	0	24.23	24.73	24.80	23.03	23.63	23.90	20.73	21.63	21.80
		1	38	24.65	24.84	24.89	23.45	23.74	23.99	21.15	21.74	21.89
		1	74	24.74	25.03	24.98	23.54	23.93	24.08	21.24	21.93	21.98
		36	0	23.57	23.85	23.82	22.37	22.75	22.92	20.07	20.75	20.82
		36	18	23.65	23.75	23.90	22.45	22.65	23.00	20.15	20.65	20.90
		36	39	23.77	23.86	24.08	22.57	22.76	23.18	20.27	20.76	21.08
		75	0	23.64	23.72	23.97	22.44	22.62	23.07	20.14	20.62	20.97
	16QAM	1	0	23.90	23.80	23.85	22.70	22.70	22.95	20.40	20.70	20.85
		1	38	23.92	23.86	23.93	22.72	22.76	23.03	20.42	20.76	20.93
		1	74	24.19	24.18	24.20	22.99	23.08	23.30	20.69	21.08	21.20
		36	0	22.86	22.84	22.84	21.66	21.74	21.94	19.36	19.74	19.84
		36	18	22.89	22.85	22.89	21.69	21.75	21.99	19.39	19.75	19.89
		36	39	22.88	22.87	22.90	21.68	21.77	22.00	19.38	19.77	19.90
		75	0	22.94	22.94	22.94	21.74	21.84	22.04	19.44	19.84	19.94
	64QAM	1	0	23.26	23.26	23.32	22.06	22.16	22.42	19.76	20.16	20.32
		1	38	23.48	23.42	23.49	22.28	22.32	22.59	19.98	20.32	20.49
		1	74	23.79	23.77	23.79	22.59	22.67	22.89	20.29	20.67	20.79
		36	0	22.92	22.92	22.96	21.72	21.82	22.06	19.42	19.82	19.96
		36	18	22.93	22.90	22.94	21.73	21.80	22.04	19.43	19.80	19.94
		36	39	22.73	22.72	22.74	21.53	21.62	21.84	19.23	19.62	19.74
		75	0	22.97	22.97	23.00	21.77	21.87	22.10	19.47	19.87	20.00
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				37850/ 2580	38000/ 2595	38150/ 2610	37850/ 2580	38000/ 2595	38150/ 2610	37850/ 2580	38000/ 2595	38150/ 2610
20MHz	QPSK	1	0	24.20	24.69	24.77	23.00	23.59	23.87	20.70	21.59	21.77
		1	50	24.64	24.80	24.87	23.44	23.70	23.97	21.14	21.70	21.87
		1	99	24.72	25.02	24.95	23.52	23.92	24.05	21.22	21.92	21.95
		50	0	23.54	23.80	23.78	22.34	22.70	22.88	20.04	20.70	20.78
		50	25	23.63	23.71	23.87	22.43	22.61	22.97	20.13	20.61	20.87
		50	50	23.74	23.81	24.04	22.54	22.71	23.14	20.24	20.71	21.04
		100	0	23.61	23.67	23.93	22.41	22.57	23.03	20.11	20.57	20.93
	16QAM	1	0	23.78	23.76	23.80	22.58	22.66	22.90	20.28	20.66	20.80



		1	50	23.88	23.84	23.89	22.68	22.74	22.99	20.38	20.74	20.89
		1	99	24.17	24.15	24.18	22.97	23.05	23.28	20.67	21.05	21.18
		50	0	22.83	22.80	22.81	21.63	21.70	21.91	19.33	19.70	19.81
		50	25	22.86	22.83	22.86	21.66	21.73	21.96	19.36	19.73	19.86
		50	50	22.85	22.82	22.86	21.65	21.72	21.96	19.35	19.72	19.86
		100	0	22.92	22.90	22.91	21.72	21.80	22.01	19.42	19.80	19.91
	64QAM	1	0	23.24	23.22	23.27	22.04	22.12	22.37	19.74	20.12	20.27
		1	50	23.44	23.40	23.45	22.24	22.30	22.55	19.94	20.30	20.45
		1	99	23.73	23.71	23.73	22.53	22.61	22.83	20.23	20.61	20.73
		50	0	22.87	22.84	22.89	21.67	21.74	21.99	19.37	19.74	19.89
		50	25	22.89	22.86	22.88	21.69	21.76	21.98	19.39	19.76	19.88
		50	50	22.70	22.67	22.70	21.50	21.57	21.80	19.20	19.57	19.70
		100	0	22.95	22.93	22.97	21.75	21.83	22.07	19.45	19.83	19.97

LTE Band 41				Maximum Output Power (dBm)			EIRP (dBm)					
							Main Antenna			Diversity Antenna		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40065 /2537.5	40640 /2595	41215 /2652.5	40065 /2537.5	40640 /2595	41215 /2652.5	40065 /2537.5	40640 /2595	41215 /2652.5
5MHz	QPSK	1	0	23.91	24.07	24.53	22.51	22.97	24.03	19.51	20.97	21.78
		1	13	23.91	24.28	24.64	22.51	23.18	24.14	19.51	21.18	21.89
		1	24	24.03	24.40	24.92	22.63	23.30	24.42	19.63	21.30	22.17
		12	0	23.20	23.36	23.73	21.80	22.26	23.23	18.80	20.26	20.98
		12	6	23.09	23.43	23.80	21.69	22.33	23.30	18.69	20.33	21.05
		12	13	23.19	23.42	23.91	21.79	22.32	23.41	18.79	20.32	21.16
		25	0	23.09	23.36	23.87	21.69	22.26	23.37	18.69	20.26	21.12
	16QAM	1	0	23.69	23.89	24.17	22.29	22.79	23.67	19.29	20.79	21.42
		1	13	23.67	23.78	24.11	22.27	22.68	23.61	19.27	20.68	21.36
		1	24	23.67	23.89	24.13	22.27	22.79	23.63	19.27	20.79	21.38
		12	0	22.52	22.69	22.96	21.12	21.59	22.46	18.12	19.59	20.21
		12	6	22.67	22.85	23.12	21.27	21.75	22.62	18.27	19.75	20.37
		12	13	22.48	22.74	22.96	21.08	21.64	22.46	18.08	19.64	20.21
		25	0	22.60	22.86	23.10	21.20	21.76	22.60	18.20	19.76	20.35
	64QAM	1	0	23.66	23.51	23.56	22.26	22.41	23.06	19.26	20.41	20.81
		1	13	23.80	23.61	23.64	22.40	22.51	23.14	19.40	20.51	20.89
		1	24	23.70	23.59	23.53	22.30	22.49	23.03	19.30	20.49	20.78
		12	0	22.85	22.71	22.76	21.45	21.61	22.26	18.45	19.61	20.01



		12	6	22.87	22.68	22.73	21.47	21.58	22.23	18.47	19.58	19.98
		12	13	22.85	22.85	22.83	21.45	21.75	22.33	18.45	19.75	20.08
		25	0	22.76	22.84	22.83	21.36	21.74	22.33	18.36	19.74	20.08
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40090 /2540	40640 /2595	41190 /2650	40090 /2540	40640 /2595	41190 /2650	40090 /2540	40640 /2595	41190 /2650
10MHz	QPSK	1	0	23.90	24.06	24.52	22.50	22.96	24.02	19.50	20.96	21.77
		1	25	23.92	24.29	24.65	22.52	23.19	24.15	19.52	21.19	21.90
		1	49	24.02	24.39	24.91	22.62	23.29	24.41	19.62	21.29	22.16
		25	0	23.20	23.36	23.73	21.80	22.26	23.23	18.80	20.26	20.98
		25	13	23.10	23.44	23.79	21.70	22.34	23.29	18.70	20.34	21.04
		25	25	23.19	23.44	23.92	21.79	22.34	23.42	18.79	20.34	21.17
		50	0	23.13	23.37	23.89	21.73	22.27	23.39	18.73	20.27	21.14
	16QAM	1	0	23.68	23.88	24.16	22.28	22.78	23.66	19.28	20.78	21.41
		1	25	23.67	23.80	24.11	22.27	22.70	23.61	19.27	20.70	21.36
		1	49	23.67	23.89	24.12	22.27	22.79	23.62	19.27	20.79	21.37
		25	0	22.53	22.70	22.97	21.13	21.60	22.47	18.13	19.60	20.22
		25	13	22.66	22.84	23.11	21.26	21.74	22.61	18.26	19.74	20.36
		25	25	22.48	22.74	22.96	21.08	21.64	22.46	18.08	19.64	20.21
		50	0	22.61	22.87	23.09	21.21	21.77	22.59	18.21	19.77	20.34
	64QAM	1	0	23.67	23.52	23.57	22.27	22.42	23.07	19.27	20.42	20.82
		1	25	23.80	23.59	23.64	22.40	22.49	23.14	19.40	20.49	20.89
		1	49	23.70	23.59	23.54	22.30	22.49	23.04	19.30	20.49	20.79
		25	0	22.84	22.70	22.75	21.44	21.60	22.25	18.44	19.60	20.00
		25	13	22.88	22.69	22.74	21.48	21.59	22.24	18.48	19.59	19.99
		25	25	22.85	22.85	22.83	21.45	21.75	22.33	18.45	19.75	20.08
		50	0	22.75	22.83	22.84	21.35	21.73	22.34	18.35	19.73	20.09
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40115 /2542.5	40640 /2595	41165 /2647.5	40115 /2542.5	40640 /2595	41165 /2647.5	40115 /2542.5	40640 /2595	41165 /2647.5
15MHz	QPSK	1	0	23.89	24.02	24.50	22.49	22.92	24.00	19.49	20.92	21.75
		1	38	23.90	24.28	24.62	22.50	23.18	24.12	19.50	21.18	21.87
		1	74	23.99	24.34	24.87	22.59	23.24	24.37	19.59	21.24	22.12
		36	0	23.18	23.32	23.70	21.78	22.22	23.20	18.78	20.22	20.95
		36	18	23.07	23.39	23.75	21.67	22.29	23.25	18.67	20.29	21.00
		36	39	23.16	23.41	23.88	21.76	22.31	23.38	18.76	20.31	21.13
		75	0	23.11	23.33	23.84	21.71	22.23	23.34	18.71	20.23	21.09



	16QAM	1	0	23.63	23.86	24.14	22.23	22.76	23.64	19.23	20.76	21.39
		1	38	23.65	23.77	24.09	22.25	22.67	23.59	19.25	20.67	21.34
		1	74	23.64	23.85	24.09	22.24	22.75	23.59	19.24	20.75	21.34
		36	0	22.50	22.68	22.94	21.10	21.58	22.44	18.10	19.58	20.19
		36	18	22.63	22.79	23.07	21.23	21.69	22.57	18.23	19.69	20.32
		36	39	22.46	22.70	22.93	21.06	21.60	22.43	18.06	19.60	20.18
		75	0	22.58	22.82	23.05	21.18	21.72	22.55	18.18	19.72	20.30
	64QAM	1	0	23.64	23.52	23.54	22.24	22.42	23.04	19.24	20.42	20.79
		1	38	23.77	23.61	23.61	22.37	22.51	23.11	19.37	20.51	20.86
		1	74	23.71	23.57	23.50	22.31	22.47	23.00	19.31	20.47	20.75
		36	0	22.82	22.66	22.76	21.42	21.56	22.26	18.42	19.56	20.01
		36	18	22.85	22.64	22.70	21.45	21.54	22.20	18.45	19.54	19.95
		36	39	22.82	22.80	22.79	21.42	21.70	22.29	18.42	19.70	20.04
		75	0	22.73	22.79	22.79	21.33	21.69	22.29	18.33	19.69	20.04
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40140 /2545	40640 /2595	41140 /2645	40140 /2545	40640 /2595	41140 /2645	40140 /2545	40640 /2595	41140 /2645
20MHz	QPSK	1	0	23.73	23.98	24.47	22.33	22.88	23.97	19.33	20.88	21.72
		1	50	24.18	24.24	24.60	22.78	23.14	24.10	19.78	21.14	21.85
		1	99	24.24	24.33	24.84	22.84	23.23	24.34	19.84	21.23	22.09
		50	0	22.81	23.27	23.66	21.41	22.17	23.16	18.41	20.17	20.91
		50	25	23.04	23.35	23.72	21.64	22.25	23.22	18.64	20.25	20.97
		50	50	23.25	23.36	23.84	21.85	22.26	23.34	18.85	20.26	21.09
		100	0	22.99	23.28	23.80	21.59	22.18	23.30	18.59	20.18	21.05
	16QAM	1	0	23.82	23.82	24.09	22.42	22.72	23.59	19.42	20.72	21.34
		1	50	23.79	23.75	24.05	22.39	22.65	23.55	19.39	20.65	21.30
		1	99	23.91	23.82	24.07	22.51	22.72	23.57	19.51	20.72	21.32
		50	0	22.89	22.64	22.91	21.49	21.54	22.41	18.49	19.54	20.16
		50	25	22.92	22.77	23.04	21.52	21.67	22.54	18.52	19.67	20.29
		50	50	22.97	22.65	22.89	21.57	21.55	22.39	18.57	19.55	20.14
		100	0	22.82	22.78	23.02	21.42	21.68	22.52	18.42	19.68	20.27
	64QAM	1	0	23.59	23.45	23.49	22.19	22.35	22.99	19.19	20.35	20.74
		1	50	23.74	23.56	23.58	22.34	22.46	23.08	19.34	20.46	20.83
		1	99	23.65	23.52	23.48	22.25	22.42	22.98	19.25	20.42	20.73
		50	0	22.79	22.65	22.70	21.39	21.55	22.20	18.39	19.55	19.95
		50	25	22.81	22.61	22.66	21.41	21.51	22.16	18.41	19.51	19.91
		50	50	22.80	22.76	22.76	21.40	21.66	22.26	18.40	19.66	20.01



		100	0	22.71	22.75	22.76	21.31	21.65	22.26	18.31	19.65	20.01
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CA_7C	PCC	SCC	PCC RB		SCC1 RB		Conducted Power (dBm)			EIRP (dBm)					
	Frequency (MHz)	Frequency (MHz)	Size	Offset	Size	Offset	QPSK	16QAM	64QAM	Main Antenna			Diversity Antenna		
10MHz+20MHz	2505.5	2519.9	1	49	1	0	23.67	22.63	21.91	21.87	20.83	20.11	18.37	17.33	16.61
			50	0	100	0	20.98	20.04	19.33	19.18	18.24	17.53	15.68	14.74	14.03
	2525.6	2540	1	49	1	0	23.63	22.64	21.90	22.23	21.24	20.50	19.23	18.24	17.50
			50	0	100	0	20.85	19.88	19.30	19.45	18.48	17.90	16.45	15.48	14.90
	2545.6	2560	1	49	1	0	23.43	22.51	21.55	22.03	21.11	20.15	19.03	18.11	17.15
			50	0	100	0	20.65	19.60	18.95	19.25	18.20	17.55	16.25	15.20	14.55
20MHz+10MHz	2510	2524.4	1	99	1	0	23.85	22.78	22.11	22.05	20.98	20.31	18.55	17.48	16.81
			100	0	50	0	21.08	20.16	19.37	19.28	18.36	17.57	15.78	14.86	14.07
	2530.1	2544.5	1	99	1	0	23.51	22.43	21.95	22.11	21.03	20.55	19.11	18.03	17.55
			100	0	50	0	20.84	19.89	19.01	19.44	18.49	17.61	16.44	15.49	14.61
	2550.1	2564.5	1	99	1	0	23.44	22.57	21.81	22.04	21.17	20.41	19.04	18.17	17.41
			100	0	50	0	20.71	19.83	18.99	19.31	18.43	17.59	16.31	15.43	14.59
15MHz+15MHz	2507.5	2522.5	1	74	1	0	23.61	22.56	22.07	21.81	20.76	20.27	18.31	17.26	16.77
			75	0	75	0	21.04	20.05	19.26	19.24	18.25	17.46	15.74	14.75	13.96
	2527.5	2542.5	1	74	1	0	23.63	22.52	21.91	22.23	21.12	20.51	19.23	18.12	17.51
			75	0	75	0	20.86	19.89	19.15	19.46	18.49	17.75	16.46	15.49	14.75
	2547.5	2562.5	1	74	1	0	23.38	22.28	21.38	21.98	20.88	19.98	18.98	17.88	16.98
			75	0	75	0	20.61	19.70	18.87	19.21	18.30	17.47	16.21	15.30	14.47
15MHz+20MHz	2507.8	2524.9	1	74	1	0	23.56	22.48	21.69	21.76	20.68	19.89	18.26	17.18	16.39
			75	0	100	0	20.86	19.97	19.13	19.06	18.17	17.33	15.56	14.67	13.83
	2525.3	2542.4	1	74	1	0	23.50	22.62	22.15	22.10	21.22	20.75	19.10	18.22	17.75
			75	0	100	0	20.77	19.89	19.25	19.37	18.49	17.85	16.37	15.49	14.85
	2542.9	2560	1	74	1	0	23.27	22.21	21.74	21.87	20.81	20.34	18.87	17.81	17.34
			75	0	100	0	20.48	19.60	18.98	19.08	18.20	17.58	16.08	15.20	14.58
20MHz+15MHz	2510	2527.1	1	99	1	0	23.67	22.71	22.11	21.87	20.91	20.31	18.37	17.41	16.81
			100	0	75	0	21.03	20.06	19.37	19.23	18.26	17.57	15.73	14.76	14.07
	2527.6	2544.7	1	99	1	0	23.69	22.14	21.35	22.29	20.74	19.95	19.29	17.74	16.95
			100	0	75	0	20.88	19.87	19.33	19.48	18.47	17.93	16.48	15.47	14.93
	2545.1	2562.2	1	99	1	0	23.55	22.12	21.59	22.15	20.72	20.19	19.15	17.72	17.19
			100	0	75	0	20.56	19.64	19.02	19.16	18.24	17.62	16.16	15.24	14.62
20MHz+20MHz	2510	2529.8	1	99	1	0	23.74	22.29	21.81	21.94	20.49	20.01	18.44	16.99	16.51
			1	0	1	99	14.61	14.07	13.41	12.81	12.27	11.61	9.31	8.77	8.11
			100	0	100	0	21.07	20.01	19.44	19.27	18.21	17.64	15.77	14.71	14.14
	2525.1	2544.9	1	99	1	0	23.48	22.44	21.87	22.08	21.04	20.47	19.08	18.04	17.47
			1	0	1	99	14.42	14.03	13.53	13.02	12.63	12.13	10.02	9.63	9.13
			100	0	100	0	20.91	19.93	19.29	19.51	18.53	17.89	16.51	15.53	14.89
	2540.2	2560	1	99	1	0	23.38	22.01	21.18	21.98	20.61	19.78	18.98	17.61	16.78



			1	0	1	99	14.20	14.14	13.68	12.80	12.74	12.28	9.80	9.74	9.28
			100	0	100	0	20.61	19.72	19.21	19.21	18.32	17.81	16.21	15.32	14.81

CA_38C	PCC	SCC	PCC RB		SCC1 RB		Conducted Power (dBm)			EIRP (dBm)					
	Frequency (MHz)	Frequency (MHz)	Size	Offset	Size	Offset	QPSK	16QAM	64QAM	Main Antenna			Diversity Antenna		
15MHz+15MHz	2577.5	2592.5	1	74	1	0	22.81	21.78	21.16	21.61	20.58	19.96	19.31	18.28	17.66
			75	0	75	0	20.24	19.33	18.61	19.04	18.13	17.41	16.74	15.83	15.11
	2587.5	2602.5	1	74	1	0	22.93	21.85	21.37	21.73	20.65	20.17	19.83	18.75	18.27
			75	0	75	0	20.26	19.29	18.86	19.06	18.09	17.66	17.16	16.19	15.76
	2597.5	2612.5	1	74	1	0	23.18	22.36	21.44	22.08	21.26	20.34	20.18	19.36	18.44
			75	0	75	0	20.37	19.36	18.69	19.27	18.26	17.59	17.37	16.36	15.69
20MHz+20MHz	2580	2599.8	1	99	1	0	23.09	22.06	21.47	21.89	20.86	20.27	19.59	18.56	17.97
			1	0	1	99	13.72	13.74	13.11	12.52	12.54	11.91	10.22	10.24	9.61
			100	0	100	0	20.28	19.34	18.84	19.08	18.14	17.64	16.78	15.84	15.34
	2585.1	2604.9	1	99	1	0	23.18	22.19	21.24	21.98	20.99	20.04	20.08	19.09	18.14
			1	0	1	99	13.72	13.57	13.07	12.52	12.37	11.87	10.62	10.47	9.97
			100	0	100	0	20.34	19.49	18.72	19.14	18.29	17.52	17.24	16.39	15.62
	2590.2	2610	1	99	1	0	23.07	21.81	21.23	21.97	20.71	20.13	20.07	18.81	18.23
			1	0	1	99	13.71	13.48	12.99	12.61	12.38	11.89	10.71	10.48	9.99
			100	0	100	0	20.39	19.40	18.75	19.29	18.30	17.65	17.39	16.40	15.75

5.2 Occupied Bandwidth

Ambient condition

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

Method of Measurement

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

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

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

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

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

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

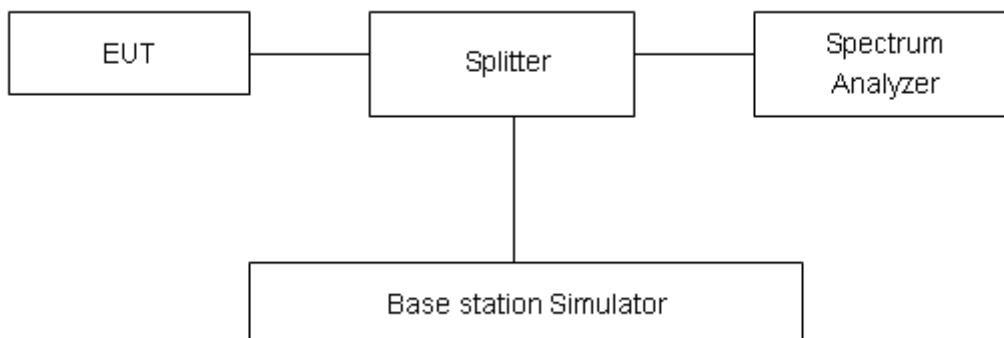
RBW is set to 300kHz, VBW is set to 910kHz for LTE Band 4/7/38/41 (15MHz).

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

RBW is set to 1MHz, VBW is set to 3MHz for CA-7C/CA-38C.

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

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

Measurement Uncertainty

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



Test Result

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.1177	4.684
	1413	1732.6	4.1232	4.675
	1513	1752.6	4.1183	4.695

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.0992	1.241
			20175	1732.5	1.0891	1.243
			20393	1754.3	1.0933	1.237
		3	19965	1711.5	2.7058	3.018
			20175	1732.5	2.7022	2.995
			20385	1753.5	2.7029	3.005
		5	19975	1712.5	4.5369	4.929
			20175	1732.5	4.5145	4.969
			20375	1752.5	4.5237	4.902
		10	20000	1715	9.0130	9.768
			20175	1732.5	8.9949	9.711
			20350	1750	8.9712	9.723
		15	20025	1717.5	13.4400	14.560
			20175	1732.5	13.4400	14.590
			20325	1747.5	13.4370	14.560
		20	20050	1720	17.9560	19.340
			20175	1732.5	17.9150	19.420
			20300	1745	17.9230	19.410
	16QAM	1.4	19957	1710.7	1.0987	1.239
			20175	1732.5	1.0969	1.239
			20393	1754.3	1.0864	1.229
		3	19965	1711.5	2.6935	2.988
			20175	1732.5	2.7046	3.040
			20385	1753.5	2.6992	3.007
		5	19975	1712.5	4.5075	5.027
			20175	1732.5	4.5174	4.927
			20375	1752.5	4.5342	4.958
		10	20000	1715	8.9818	9.631
			20175	1732.5	8.9659	9.680
			20350	1750	9.0006	9.689



		15	20025	1717.5	13.4830	14.550
			20175	1732.5	13.4410	14.660
			20325	1747.5	13.4510	14.670
		20	20050	1720	18.0120	19.360
			20175	1732.5	17.9320	19.420
			20300	1745	17.9730	19.370
	64QAM	1.4	19957	1710.7	1.0961	1.231
			20175	1732.5	1.0897	1.231
			20393	1754.3	1.0946	1.249
		3	19965	1711.5	2.7030	3.020
			20175	1732.5	2.7152	2.998
			20385	1753.5	2.7118	3.008
		5	19975	1712.5	4.5102	4.967
			20175	1732.5	4.5127	5.015
			20375	1752.5	4.5141	4.944
		10	20000	1715	8.9906	9.814
			20175	1732.5	8.9574	9.723
			20350	1750	8.9841	9.727
		15	20025	1717.5	13.4700	14.560
			20175	1732.5	13.4540	14.600
			20325	1747.5	13.4250	14.560
		20	20050	1720	17.9850	19.410
			20175	1732.5	17.9300	19.380
			20300	1745	17.9300	19.150

LTE Band 7						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	20775	2502.5	4.5039	4.955
			21100	2535	4.5388	4.977
			21425	2567.5	4.5107	4.927
		10	20800	2505	8.9774	9.751
			21100	2535	8.9791	9.794
			21400	2565	8.9876	9.688
		15	20825	2507.5	13.4760	14.630
			21100	2535	13.4240	14.660
			21375	2562.5	13.4020	14.590
		20	20850	2510	18.0000	19.380
			21100	2535	17.9010	19.500
			21350	2560	17.9420	19.500



	16QAM	5	20775	2502.5	4.5126	4.977
			21100	2535	4.5180	4.906
			21425	2567.5	4.5386	4.931
		10	20800	2505	9.0129	9.811
			21100	2535	8.9819	9.748
			21400	2565	8.9919	9.855
		15	20825	2507.5	13.4640	14.640
			21100	2535	13.4390	14.540
			21375	2562.5	13.4810	14.510
		20	20850	2510	18.0230	19.350
			21100	2535	17.9440	19.530
			21350	2560	17.9310	19.480
	64QAM	5	20775	2502.5	4.5164	4.994
			21100	2535	4.5149	4.938
			21425	2567.5	4.5077	4.941
		10	20800	2505	8.9828	9.784
			21100	2535	8.9711	9.815
			21400	2565	8.9490	9.756
		15	20825	2507.5	13.4690	14.450
			21100	2535	13.4150	14.610
			21375	2562.5	13.4270	14.450
		20	20850	2510	17.9440	19.410
			21100	2535	17.8750	19.370
			21350	2560	17.9240	19.470

LTE Band 38						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	37775	2572.5	4.5050	4.931
			38000	2595	4.5219	4.963
			38225	2617.5	4.5111	4.892
		10	37800	2575	8.9702	9.573
			38000	2595	8.9897	9.688
			38200	2615	8.9760	9.648
		15	37825	2577.5	13.4470	14.490
			38000	2595	13.4110	14.310
			38175	2612.5	13.4260	14.400
		20	37850	2580	17.9230	19.310
			38000	2595	17.9040	19.080
			38150	2610	17.8480	19.300



	16QAM	5	37775	2572.5	4.4946	4.957
			38000	2595	4.5146	4.883
			38225	2617.5	4.4847	4.911
		10	37800	2575	8.9851	9.713
			38000	2595	8.9484	9.681
			38200	2615	8.9737	9.721
		15	37825	2577.5	13.4780	14.480
			38000	2595	13.4620	14.480
			38175	2612.5	13.4990	14.530
		20	37850	2580	17.9530	19.420
			38000	2595	17.9480	19.090
			38150	2610	17.9610	19.520
	64QAM	5	37775	2572.5	4.5132	4.935
			38000	2595	4.5215	4.899
			38225	2617.5	4.5125	4.932
		10	37800	2575	8.9785	9.765
			38000	2595	8.9706	9.623
			38200	2615	8.9997	9.696
		15	37825	2577.5	13.4890	14.500
			38000	2595	13.4350	14.480
			38175	2612.5	13.4350	14.480
		20	37850	2580	17.8930	19.160
			38000	2595	17.9230	19.150
			38150	2610	17.9480	19.190

LTE Band 41						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	40065	2537.5	4.5073	4.931
			40640	2595	4.5066	4.934
			41215	2652.5	4.5261	4.909
		10	40090	2540	8.9947	9.861
			40640	2595	8.9681	9.867
			41190	2650	8.9916	9.755
		15	40115	2542.5	13.4610	14.660
			40640	2595	13.4270	14.550
			41165	2647.5	13.4260	14.610
		20	40140	2545	17.9830	19.390
			40640	2595	17.8980	19.500
			41140	2645	17.9240	19.460



	16QAM	5	40065	2537.5	4.5254	4.975
			40640	2595	4.5066	4.929
			41215	2652.5	4.5139	4.953
		10	40090	2540	8.9780	9.785
			40640	2595	8.9651	9.655
			41190	2650	8.9811	9.762
		15	40115	2542.5	13.4590	14.610
			40640	2595	13.4580	14.590
			41165	2647.5	13.4400	14.670
		20	40140	2545	17.9420	19.370
			40640	2595	17.9150	19.470
			41140	2645	17.9330	19.450
	64QAM	5	40065	2537.5	4.5130	4.975
			40640	2595	4.5231	4.976
			41215	2652.5	4.5129	4.951
		10	40090	2540	8.9931	9.818
			40640	2595	8.9504	9.725
			41190	2650	8.9725	9.774
		15	40115	2542.5	13.4800	14.730
			40640	2595	13.4890	14.570
			41165	2647.5	13.4650	14.570
		20	40140	2545	17.9090	19.580
			40640	2595	17.9220	19.410
			41140	2645	17.9290	19.330

CA-7C	PCC		SCC1		PCC RB	SCC1 RB	Bandwidth(MHz)	
	Channel	Frequency(MHz)	Channel	Frequency(MHz)			99% Power	-26dBc
10MHz+20MHz_QPSK	21006	2525.6	21150	2540	50#0	75#0	28.133	30.15
10MHz+20MHz_16QAM	21006	2525.6	21150	2540	50#0	75#0	28.103	30.20
10MHz+20MHz_64QAM	21006	2525.6	21150	2540	50#0	75#0	28.068	30.14
20MHz+10MHz_QPSK	21051	2530.1	21195	2544.5	75#0	50#0	28.093	31.01
20MHz+10MHz_16QAM	21051	2530.1	21195	2544.5	75#0	50#0	27.989	30.07
20MHz+10MHz_64QAM	21051	2530.1	21195	2544.5	75#0	50#0	28.010	30.09
15MHz+10MHz_QPSK	21051	2530.1	21171	2542.1	75#0	75#0	23.666	25.71
15MHz+10MHz_16QAM	21025	2527.5	21175	2542.5	75#0	75#0	23.559	25.49
15MHz+10MHz_64QAM	21025	2527.5	21175	2542.5	75#0	75#0	23.568	25.48
15MHz+15MHz_QPSK	21025	2527.5	21175	2542.5	75#0	75#0	28.718	30.88
15MHz+15MHz_16QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.661	30.82
15MHz+15MHz_64QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.656	30.88
15MHz+20MHz_QPSK	21003	2525.3	21174	2542.4	75#0	100#0	32.901	35.28
15MHz+20MHz_16QAM	21003	2525.3	21174	2542.4	75#0	100#0	32.896	35.14



15MHz+20MHz_64QAM	21003	2525.3	21174	2542.4	75#0	100#0	32.889	35.33
20MHz+15MHz_QPSK	21026	2527.6	21197	2544.7	100#0	75#0	32.891	35.14
20MHz+15MHz_16QAM	21026	2527.6	21197	2544.7	100#0	75#0	32.939	35.21
20MHz+15MHz_64QAM	21026	2527.6	21197	2544.7	100#0	75#0	32.874	35.14
20MHz+20MHz_QPSK	21001	2525.1	21199	2544.9	100#0	100#0	37.801	40.19
20MHz+20MHz_16QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.792	40.10
20MHz+20MHz_64QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.704	40.28

CA-38C	PCC		SCC1		PCC RB	SCC1 RB	Bandwidth(MHz)	
	Channel	Frequency(MHz)	Channel	Frequency(MHz)			99% Power	-26dBc
15MHz+15MHz_QPSK	37925	2587.5	38075	2602.5	75#0	75#0	28.594	30.81
15MHz+15MHz_16QAM	37925	2587.5	38075	2602.5	75#0	75#0	28.636	30.95
15MHz+15MHz_64QAM	37925	2587.5	38075	2602.5	75#0	75#0	28.562	30.78
20MHz+20MHz_QPSK	37901	2585.1	38099	2604.9	100#0	100#0	37.781	40.19
20MHz+20MHz_16QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.657	40.05
20MHz+20MHz_64QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.697	40.12



WCDMA Band IV CH-Low



WCDMA Band IV CH Middle



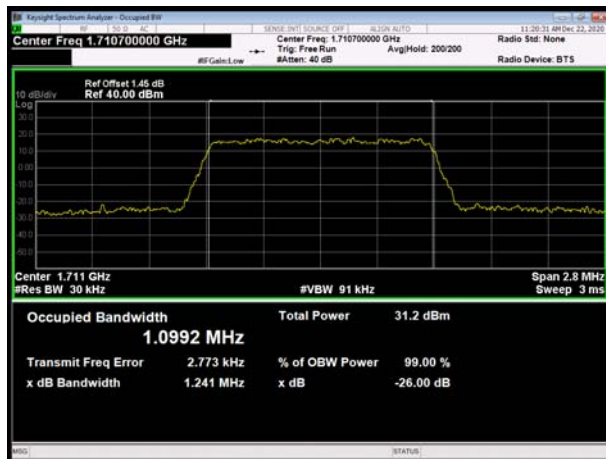
WCDMA Band IV CH High



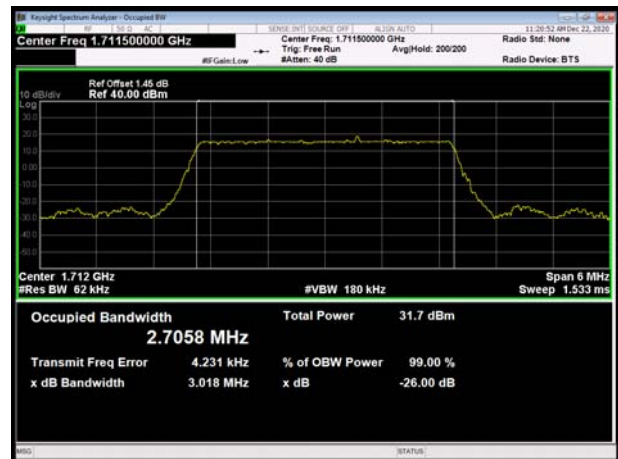
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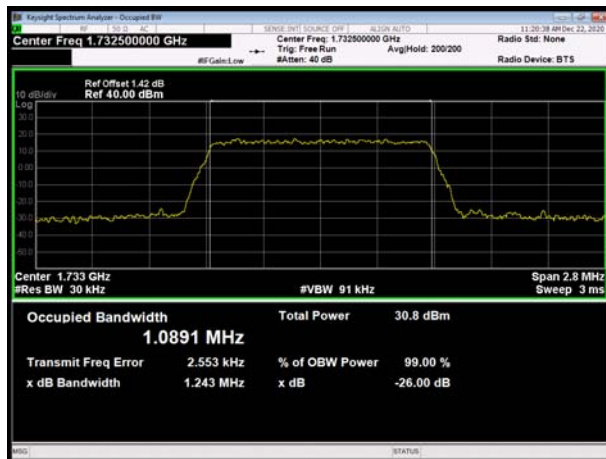
LTE Band 4 QPSK 1.4MHz CH-Low



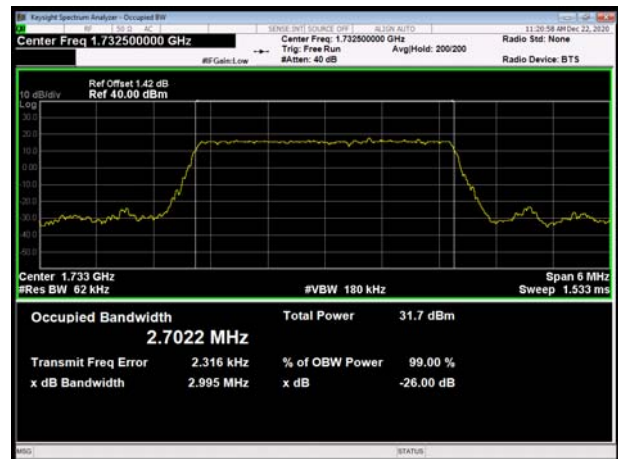
LTE Band 4 QPSK 3MHz CH-Low



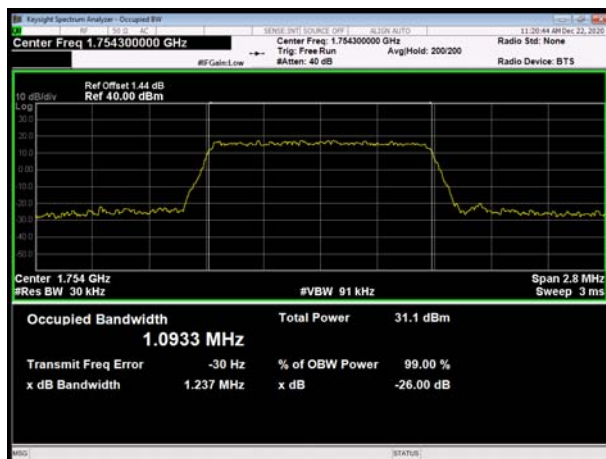
LTE Band 4 QPSK 1.4MHz CH-Middle



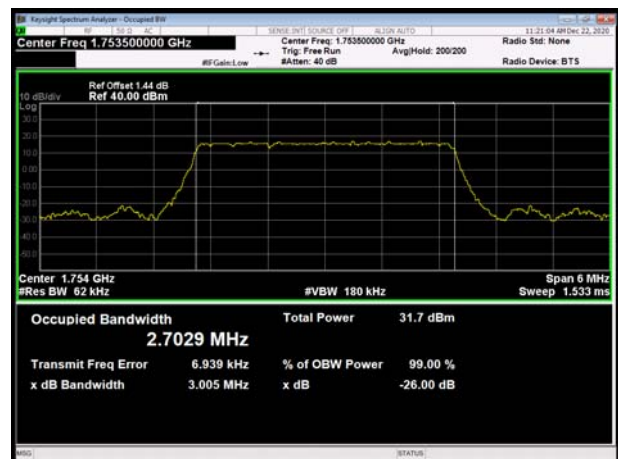
LTE Band 4 QPSK 3MHz CH-Middle



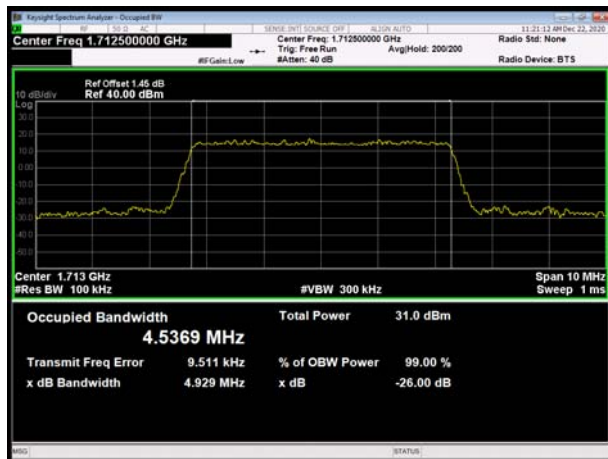
LTE Band 4 QPSK 1.4MHz CH-High



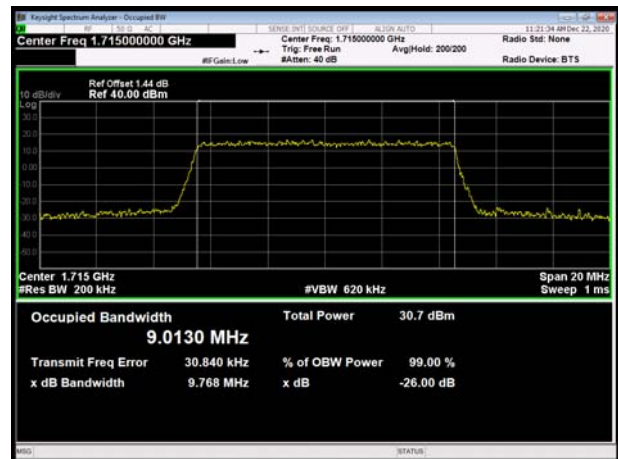
LTE Band 4 QPSK 3MHz CH-High



LTE Band 4 QPSK 5MHz CH-Low



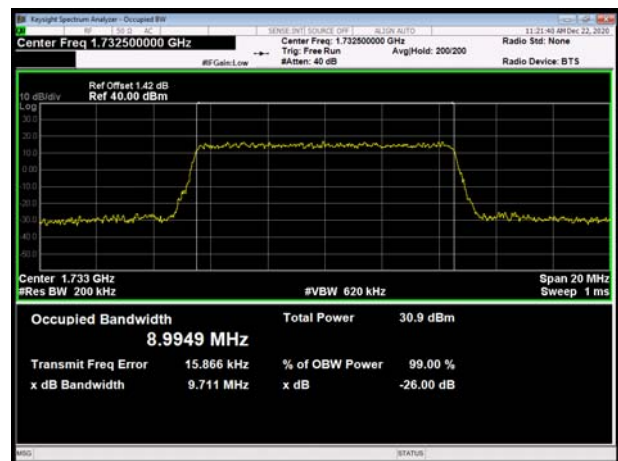
LTE Band 4 QPSK 10MHz CH-Low



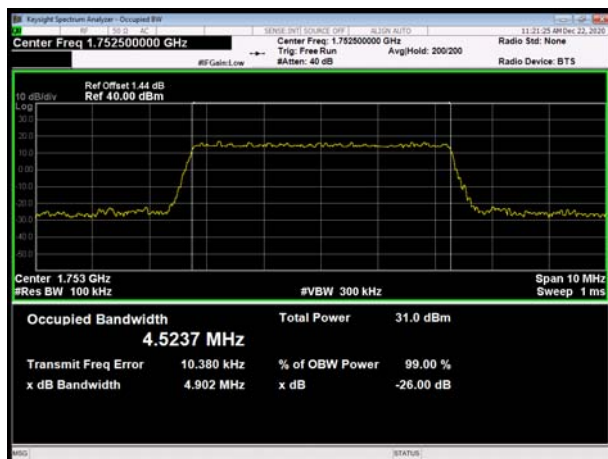
LTE Band 4 QPSK 5MHz CH-Middle



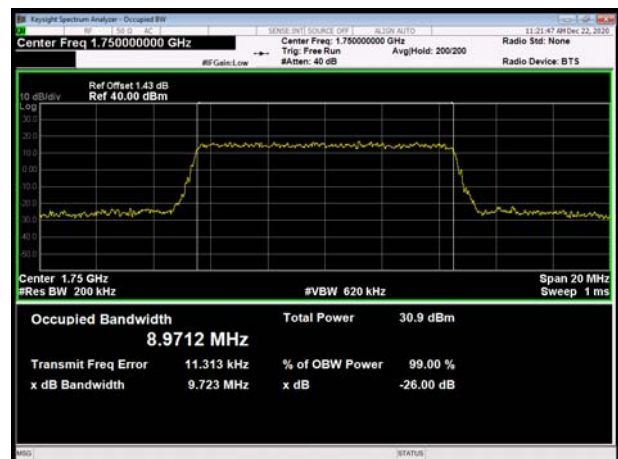
LTE Band 4 QPSK 10MHz CH-Middle



LTE Band 4 QPSK 5MHz CH-High

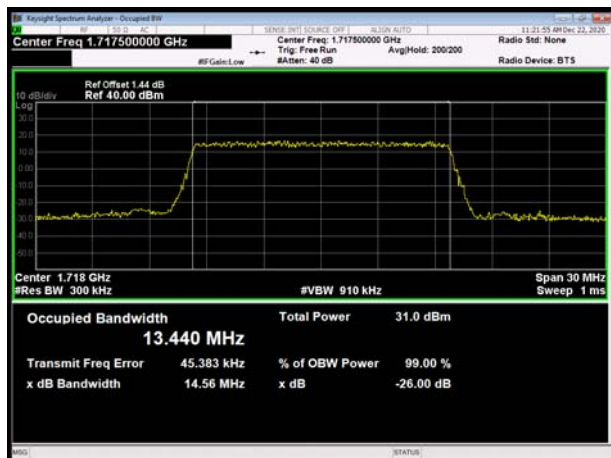


LTE Band 4 QPSK 10MHz CH-High

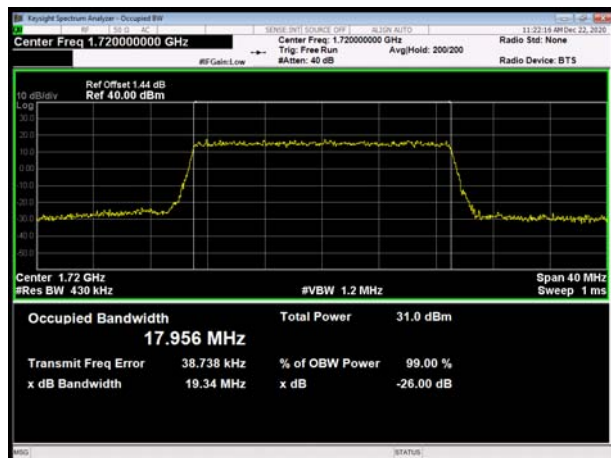




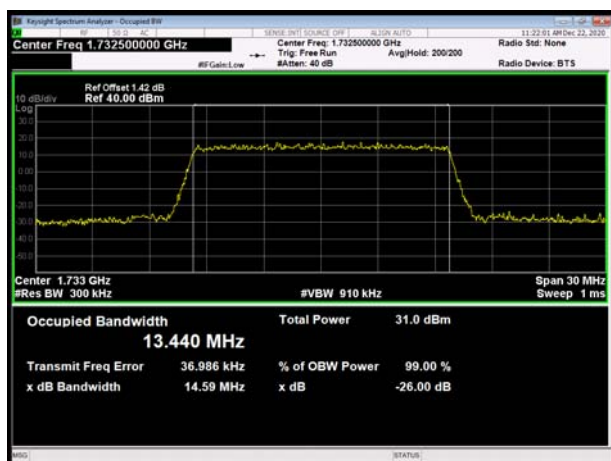
LTE Band 4 QPSK 15MHz CH-Low



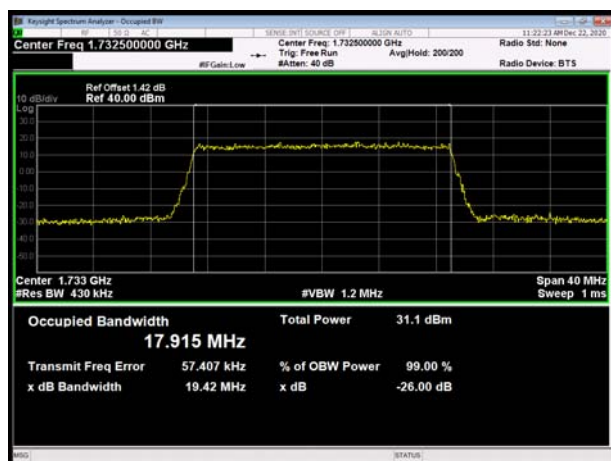
LTE Band 4 QPSK 20MHz CH-Low



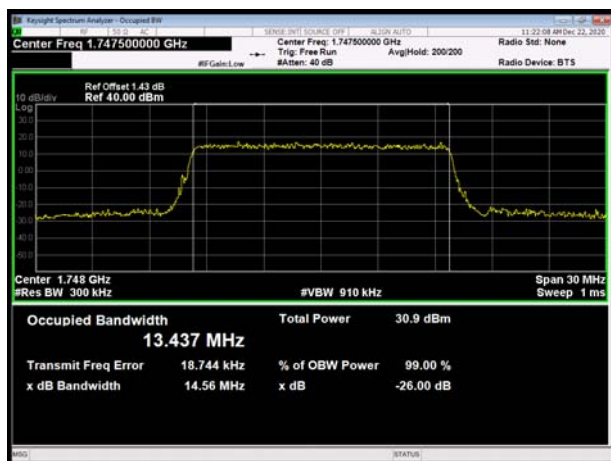
LTE Band 4 QPSK 15MHz CH-Middle



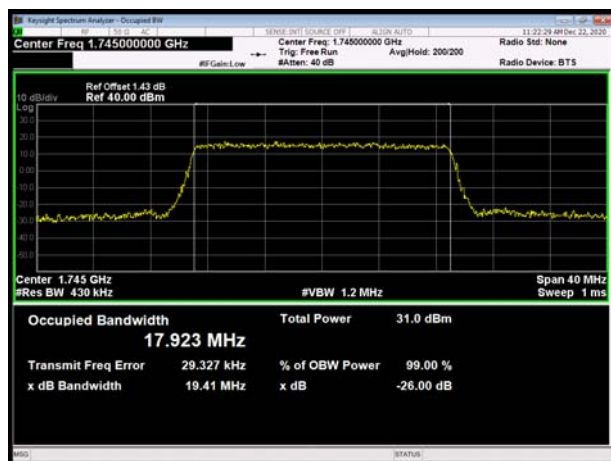
LTE Band 4 QPSK 20MHz CH-Middle



LTE Band 4 QPSK 15MHz CH-High

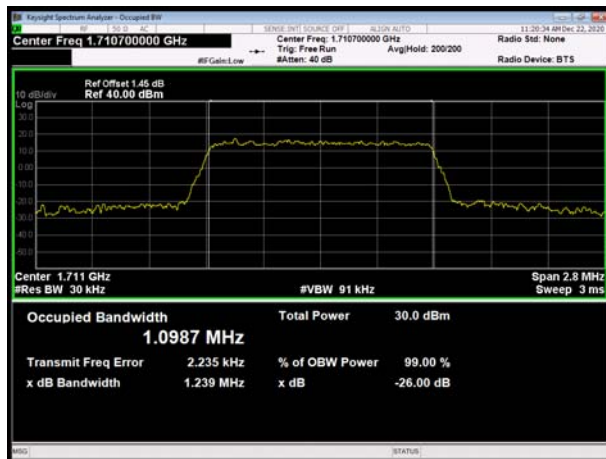


LTE Band 4 QPSK 20MHz CH-High

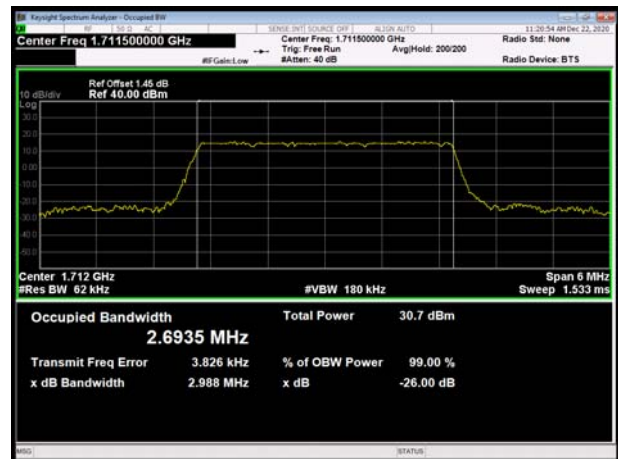




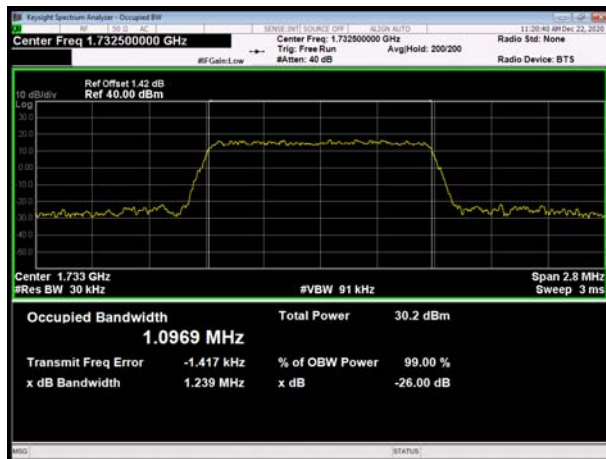
LTE Band 4 16QAM 1.4MHz CH-Low



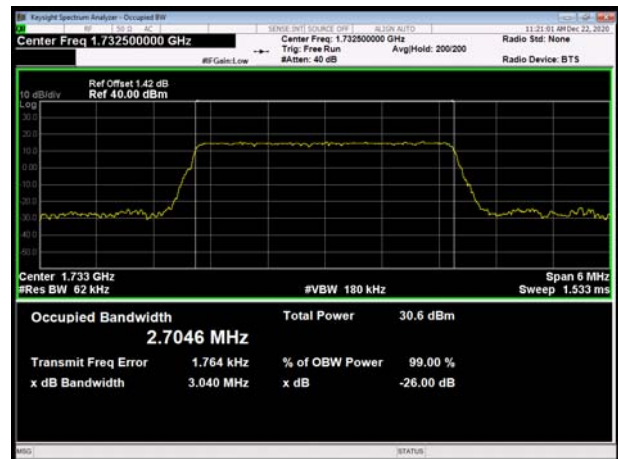
LTE Band 4 16QAM 3MHz CH-Low



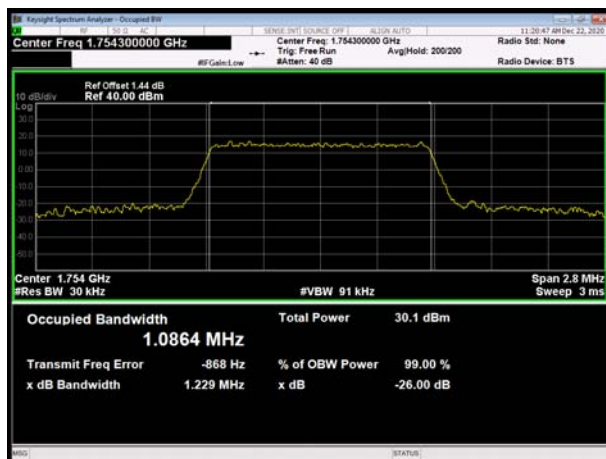
LTE Band 4 16QAM 1.4MHz CH-Middle



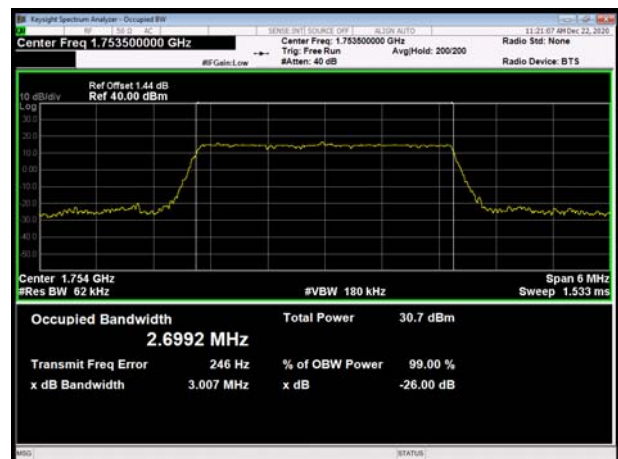
LTE Band 4 16QAM 3MHz CH-Middle



LTE Band 4 16QAM 1.4MHz CH-High

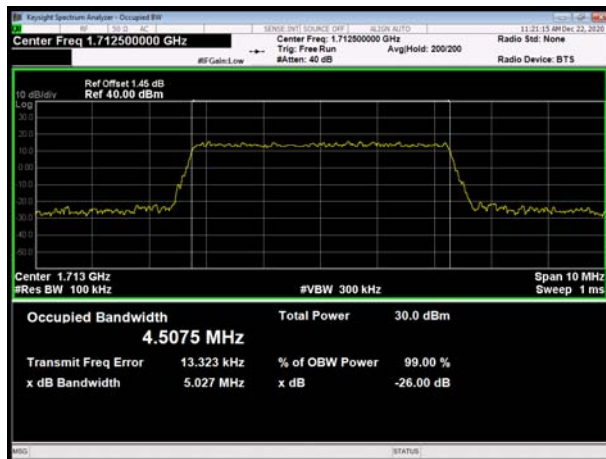


LTE Band 4 16QAM 3MHz CH-High

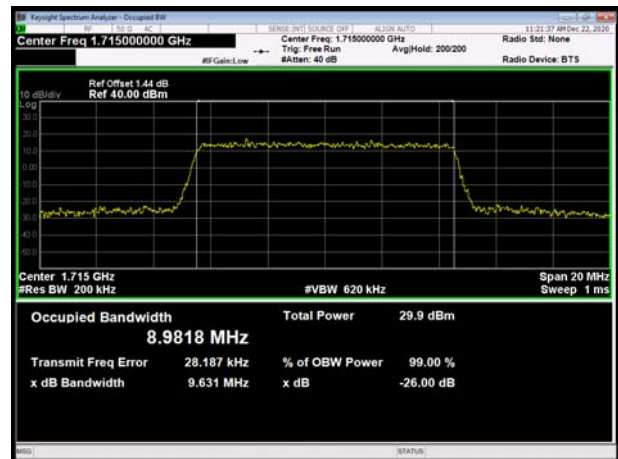




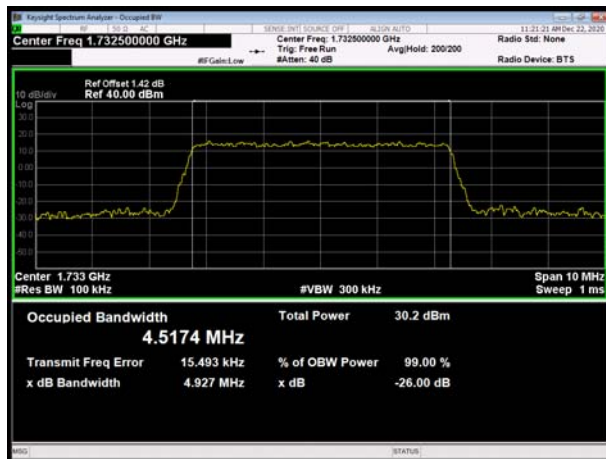
LTE Band 4 16QAM 5MHz CH-Low



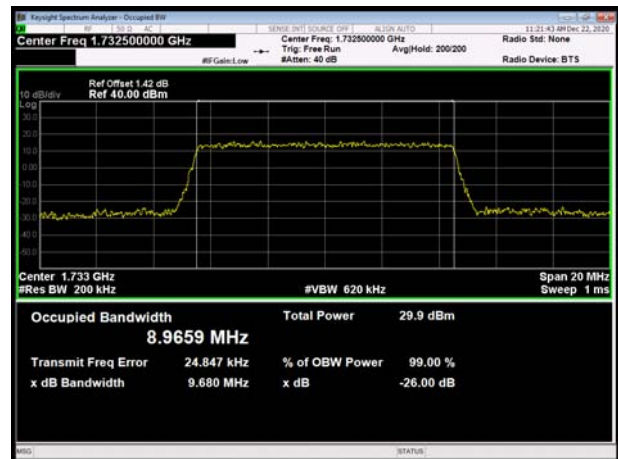
LTE Band 4 16QAM 10MHz CH-Low



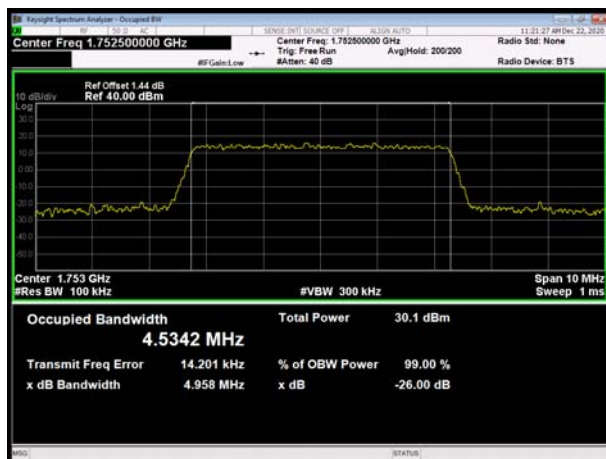
LTE Band 4 16QAM 5MHz CH-Middle



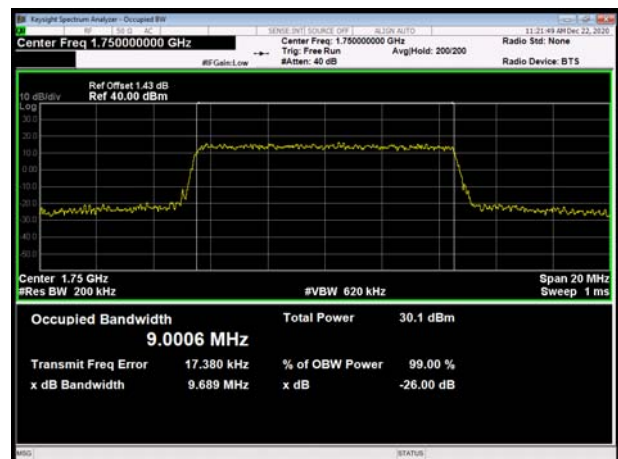
LTE Band 4 16QAM 10MHz CH-Middle



LTE Band 4 16QAM 5MHz CH-High

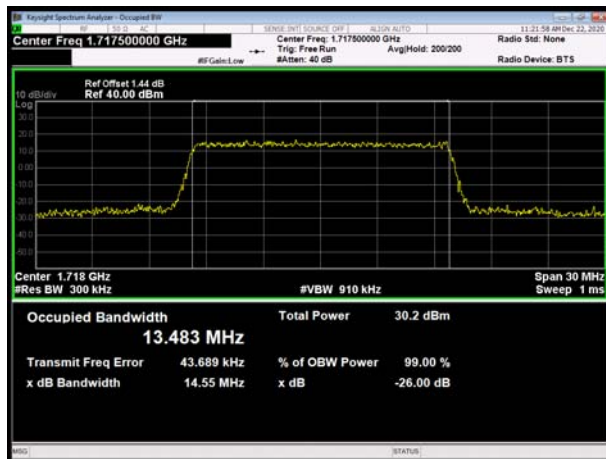


LTE Band 4 16QAM 10MHz CH-High

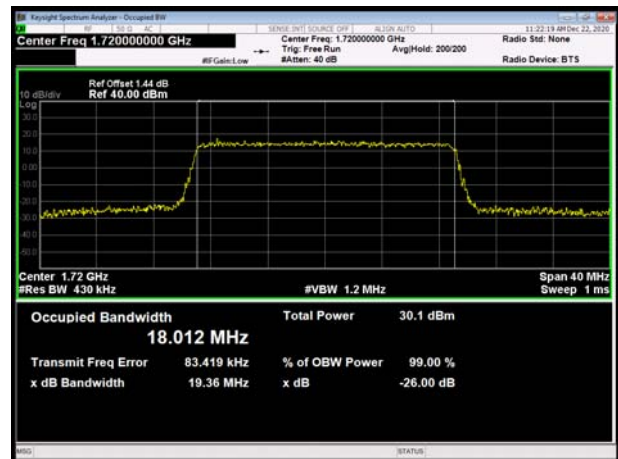




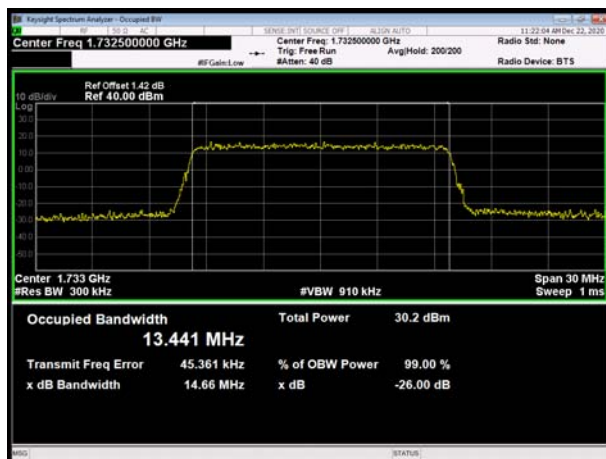
LTE Band 4 16QAM 15MHz CH-Low



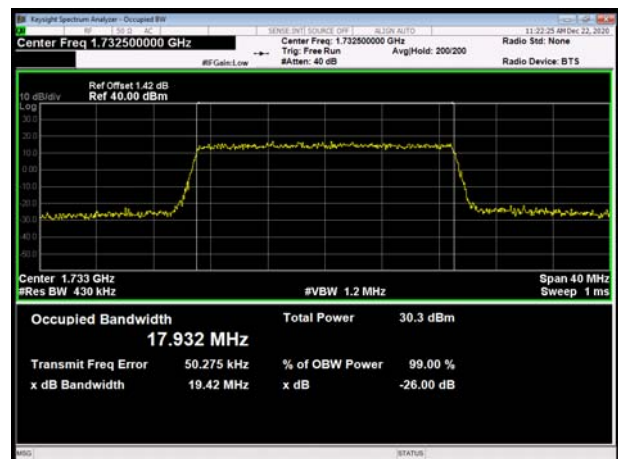
LTE Band 4 16QAM 20MHz CH-Low



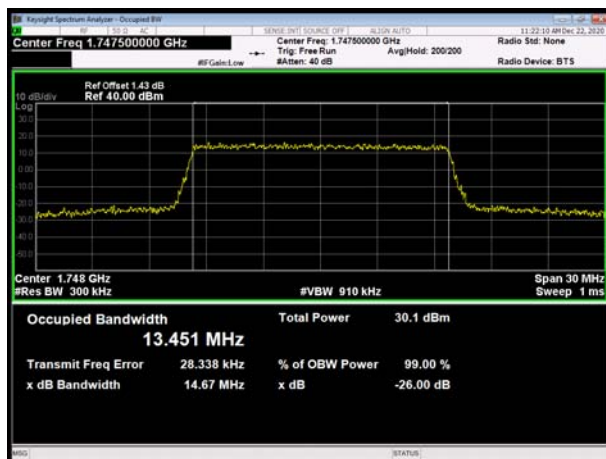
LTE Band 4 16QAM 15MHz CH-Middle



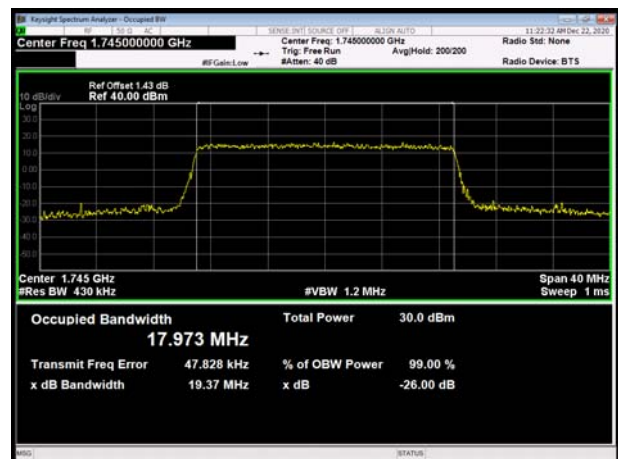
LTE Band 4 16QAM 20MHz CH-Middle



LTE Band 4 16QAM 15MHz CH-High

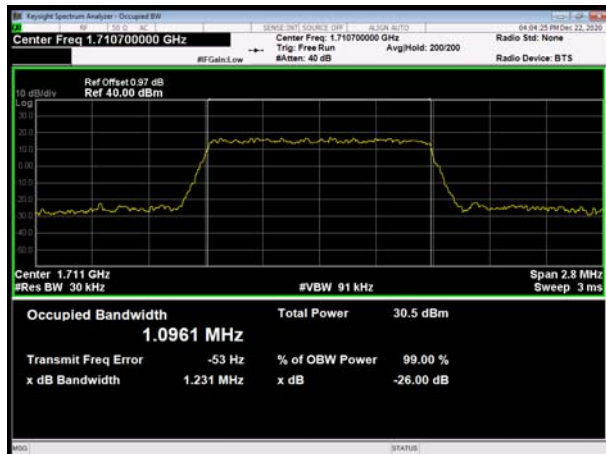


LTE Band 4 16QAM 20MHz CH-High

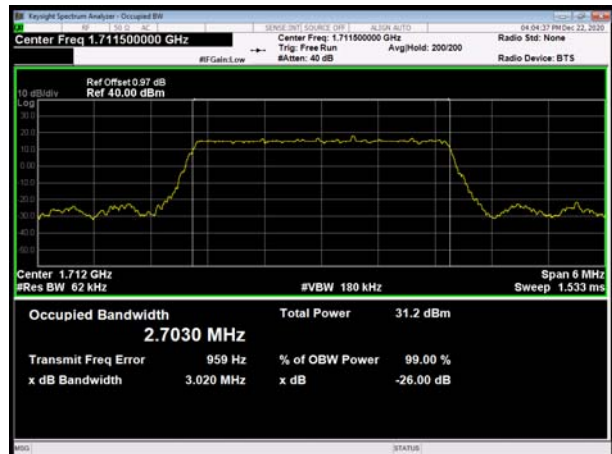




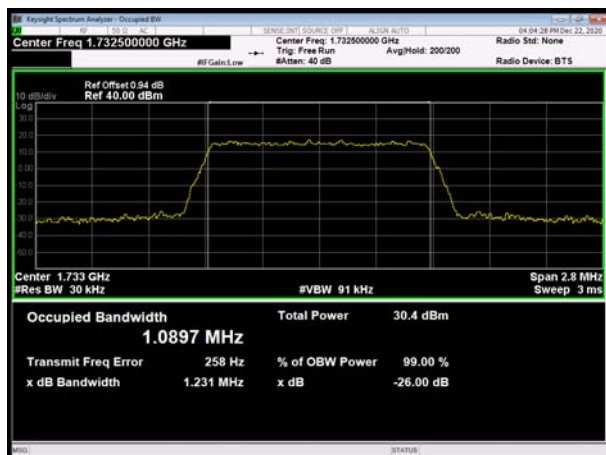
LTE Band 4 1.4MHz 64QAM CH-Low



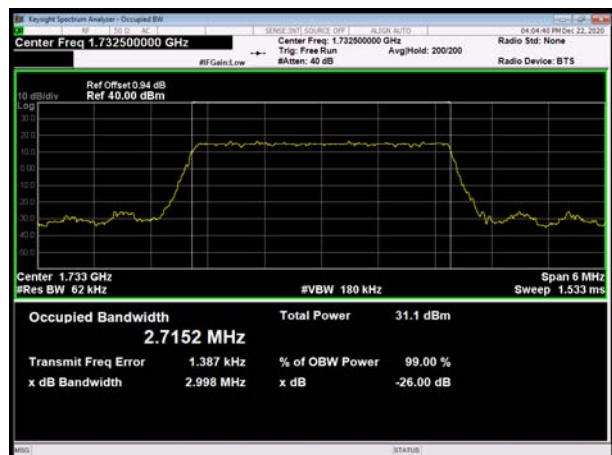
LTE Band 4 3MHz 64QAM CH-Low



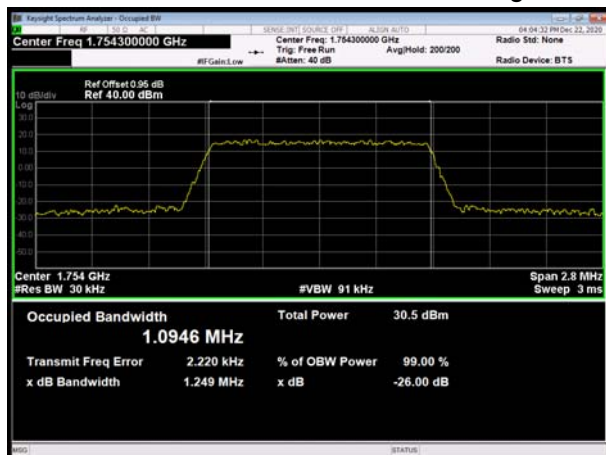
LTE Band 4 1.4MHz 64QAM CH-Middle



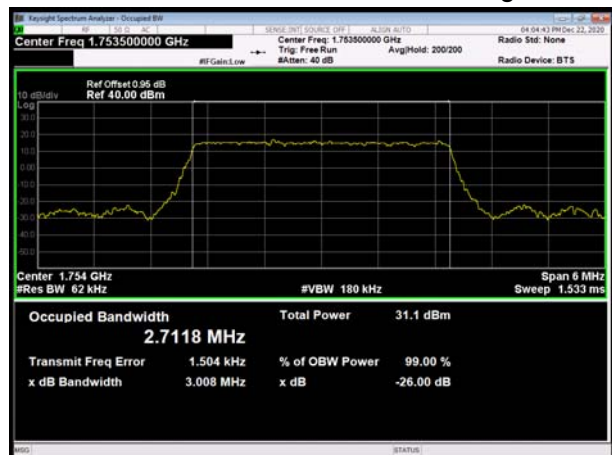
LTE Band 4 3MHz 64QAM CH-Middle



LTE Band 4 1.4MHz 64QAM CH-High

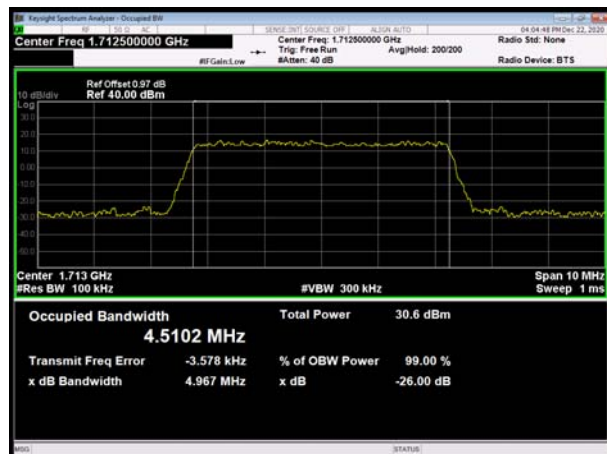


LTE Band 4 3MHz 64QAM CH-High

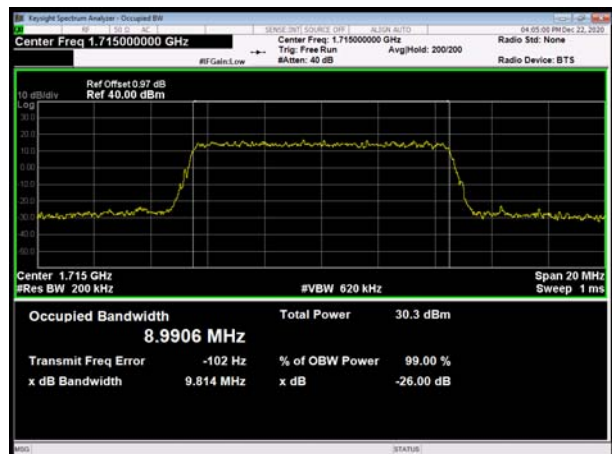




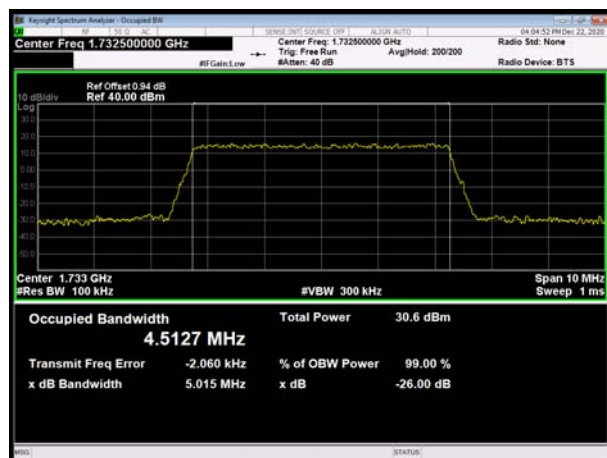
LTE Band 4 5MHz 64QAM CH-Low



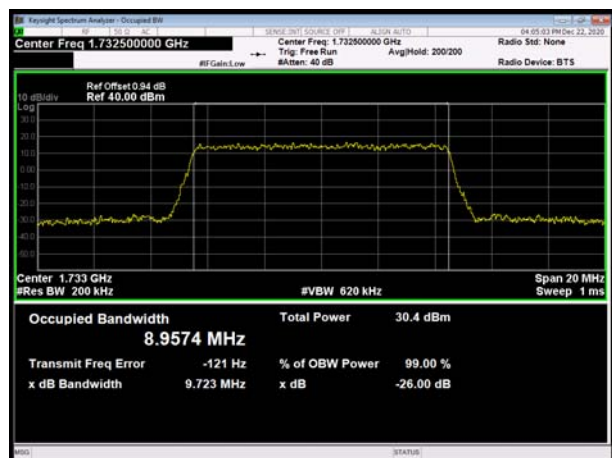
LTE Band 4 10MHz 64QAM CH-Low



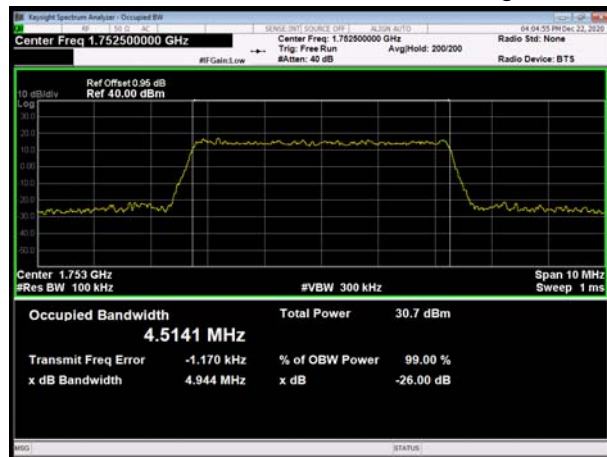
LTE Band 4 5MHz 64QAM CH-Middle



LTE Band 4 10MHz 64QAM CH-Middle



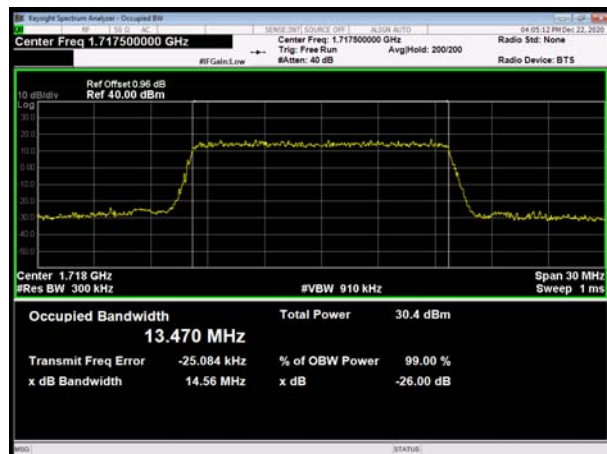
LTE Band 4 5MHz 64QAM CH-High



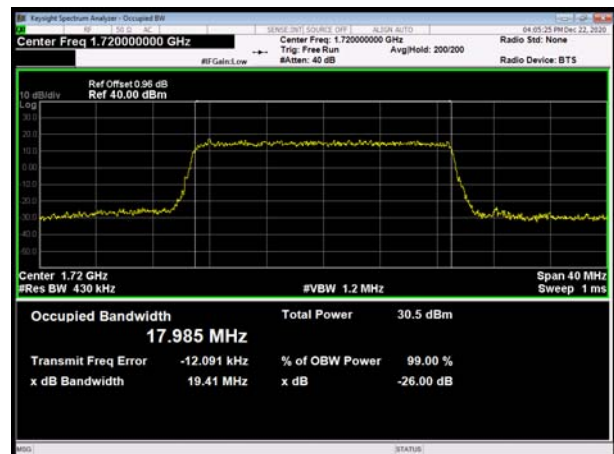
LTE Band 4 10MHz 64QAM CH-High



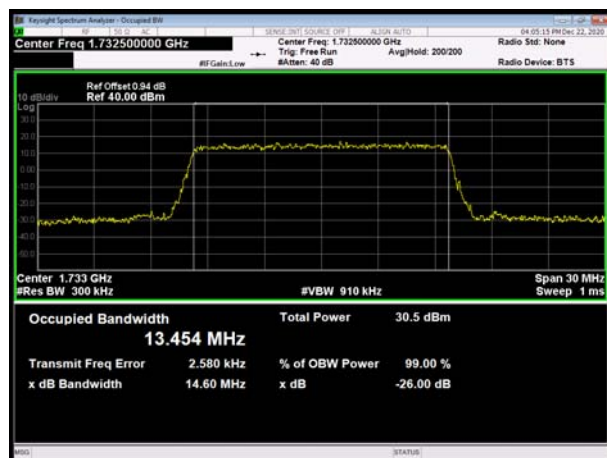
LTE Band 4 15MHz 64QAM CH-Low



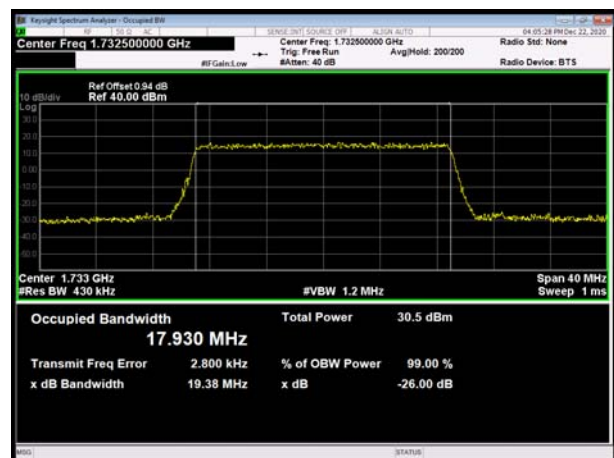
LTE Band 4 20MHz 64QAM CH-Low



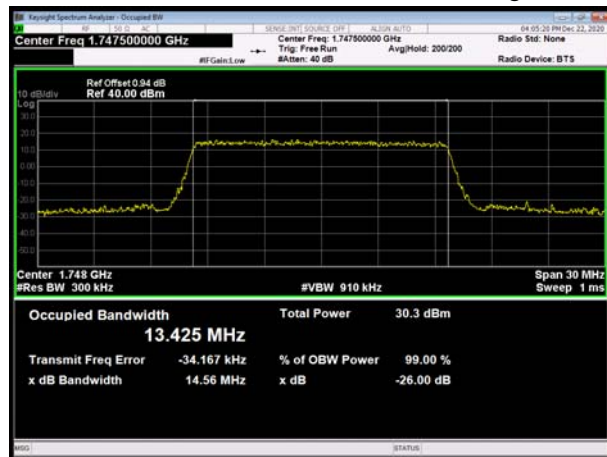
LTE Band 4 15MHz 64QAM CH-Middle



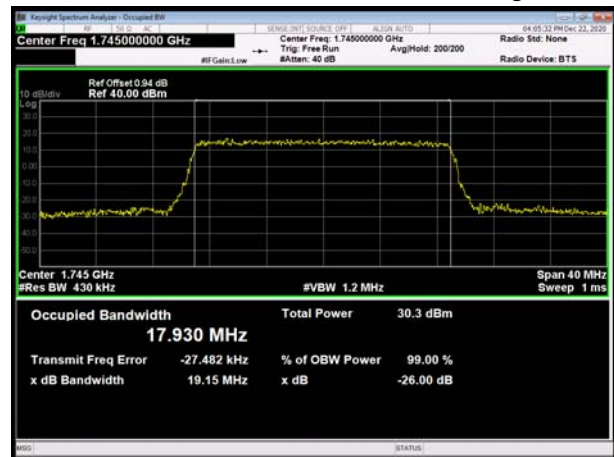
LTE Band 4 20MHz 64QAM CH-Middle



LTE Band 4 15MHz 64QAM CH-High

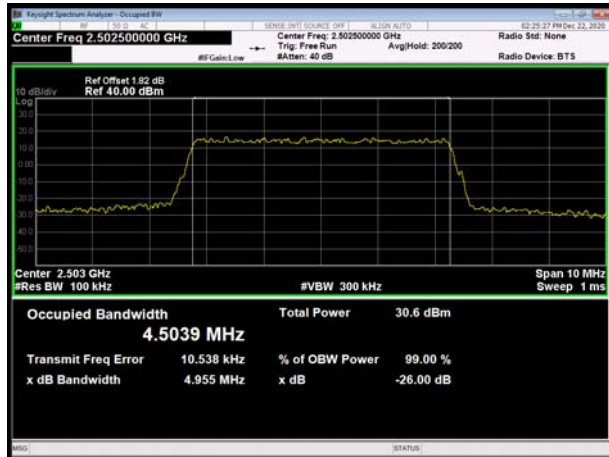


LTE Band 4 20MHz 64QAM CH-High

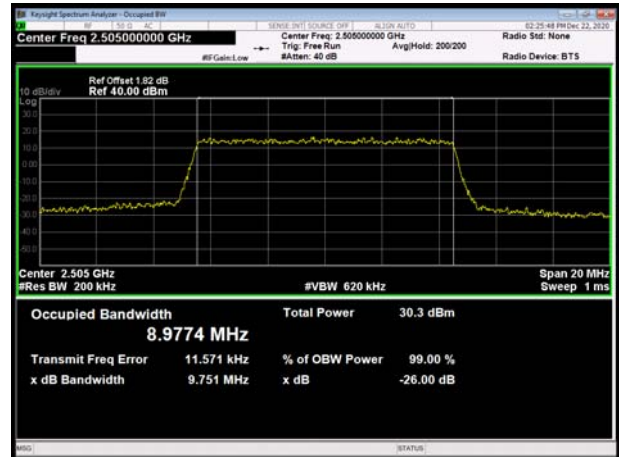




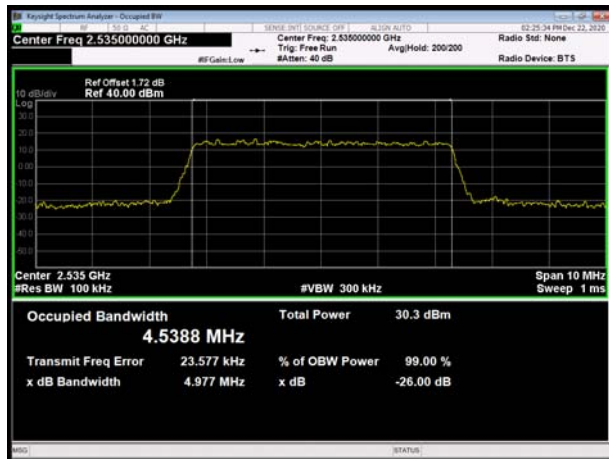
LTE Band 7 QPSK 5MHz CH-Low



LTE Band 7 QPSK 10MHz CH-Low



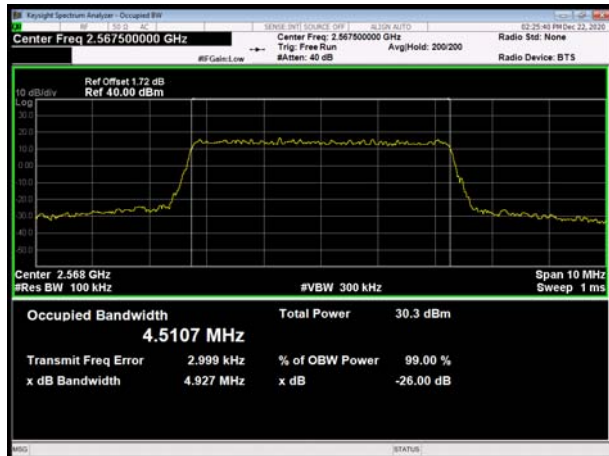
LTE Band 7 QPSK 5MHz CH-Middle



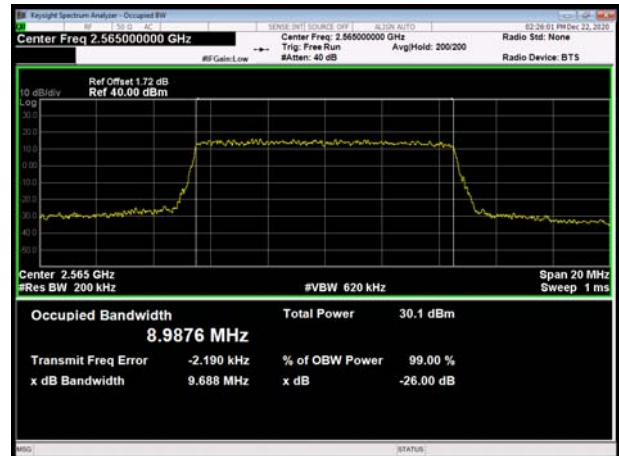
LTE Band 7 QPSK 10MHz CH-Middle



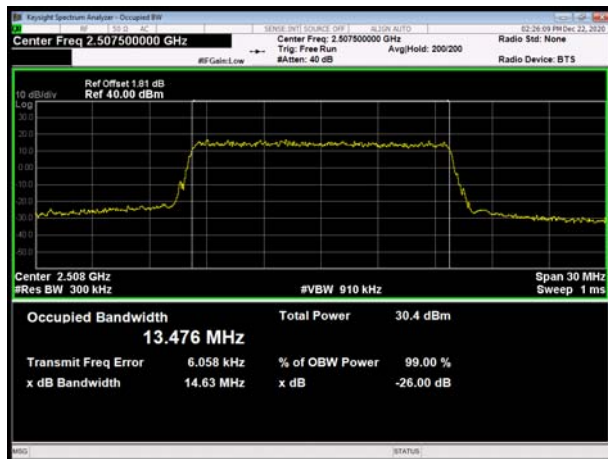
LTE Band 7 QPSK 5MHz CH-High



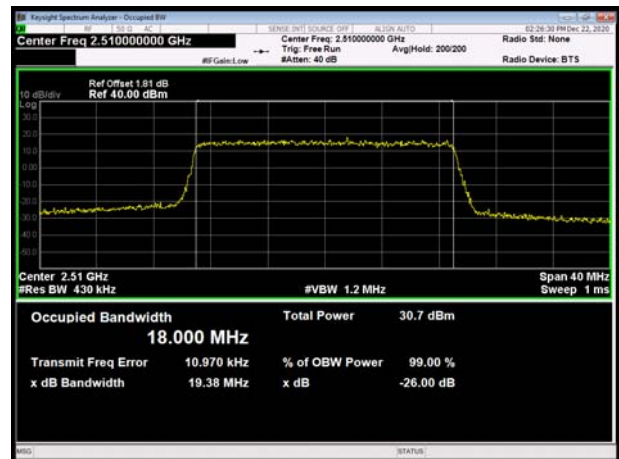
LTE Band 7 QPSK 10MHz CH-High



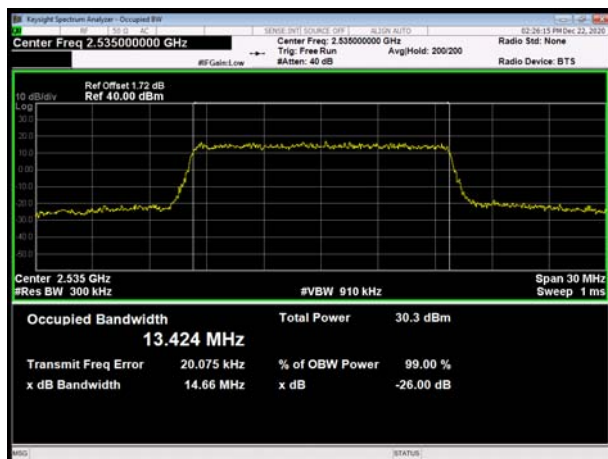
LTE Band 7 QPSK 15MHz CH-Low



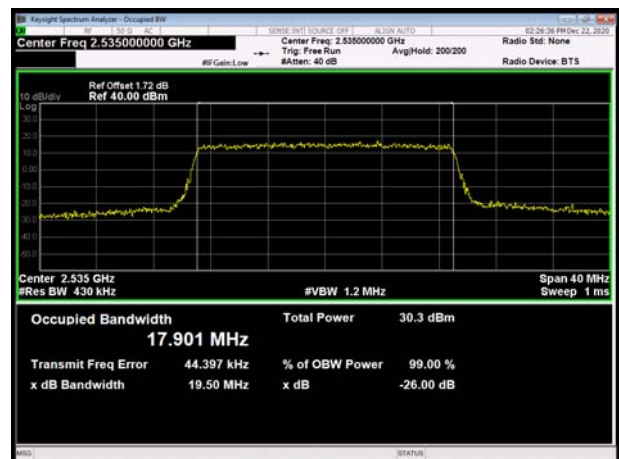
LTE Band 7 QPSK 20MHz CH-Low



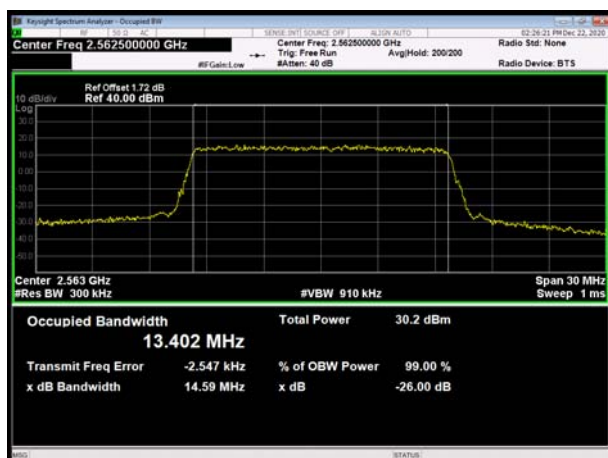
LTE Band 7 QPSK 15MHz CH-Middle



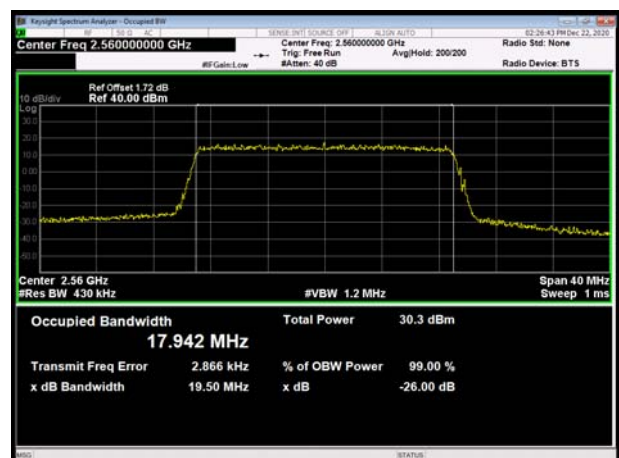
LTE Band 7 QPSK 20MHz CH-Middle



LTE Band 7 QPSK 15MHz CH-High

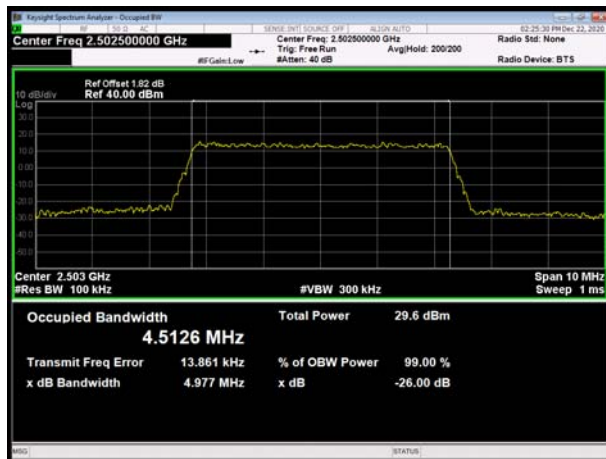


LTE Band 7 QPSK 20MHz CH-High





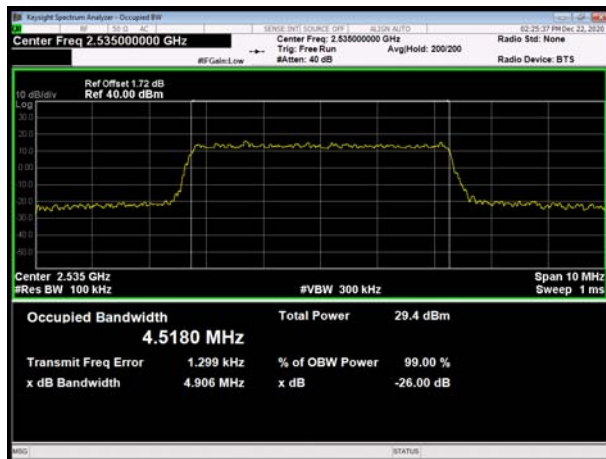
LTE Band 7 16QAM 5MHz CH-Low



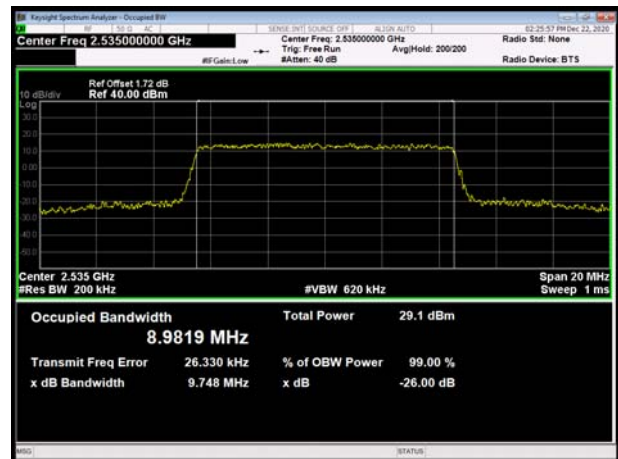
LTE Band 7 16QAM 10MHz CH-Low



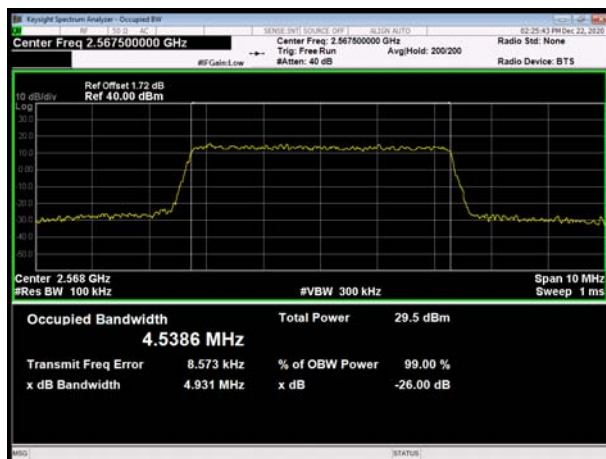
LTE Band 7 16QAM 5MHz CH-Middle



LTE Band 7 16QAM 10MHz CH-Middle



LTE Band 7 16QAM 5MHz CH-High

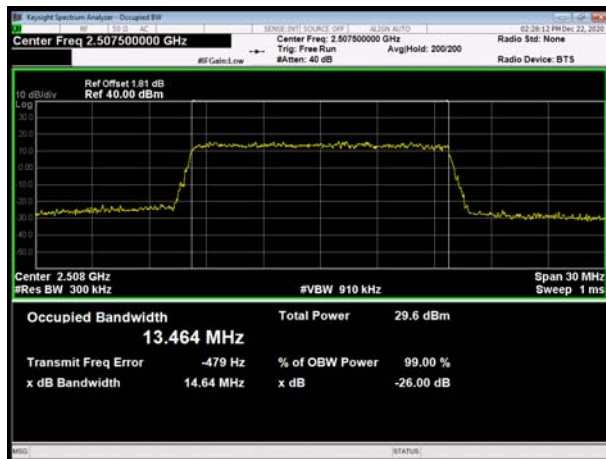


LTE Band 7 16QAM 10MHz CH-High

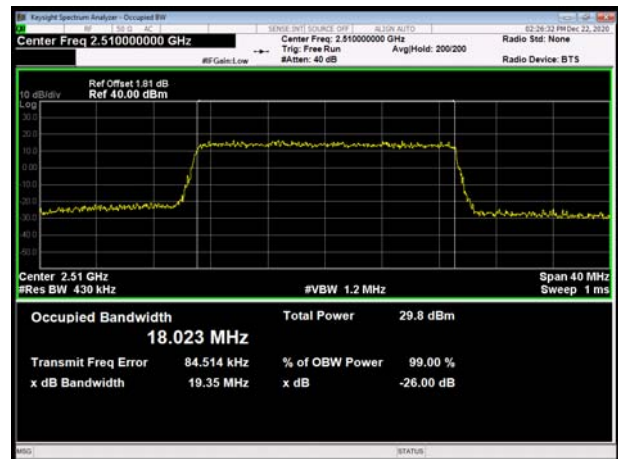




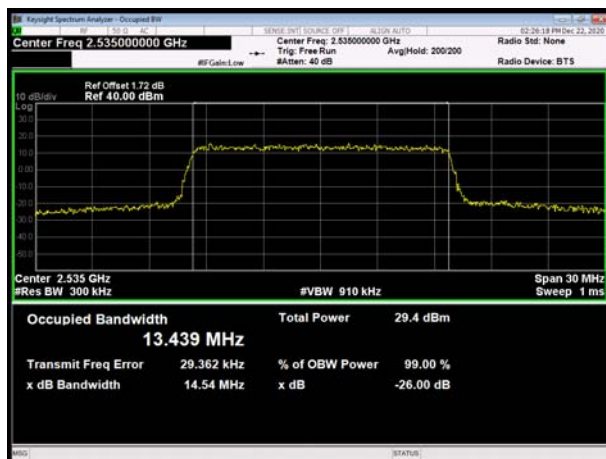
LTE Band 7 16QAM 15MHz CH-Low



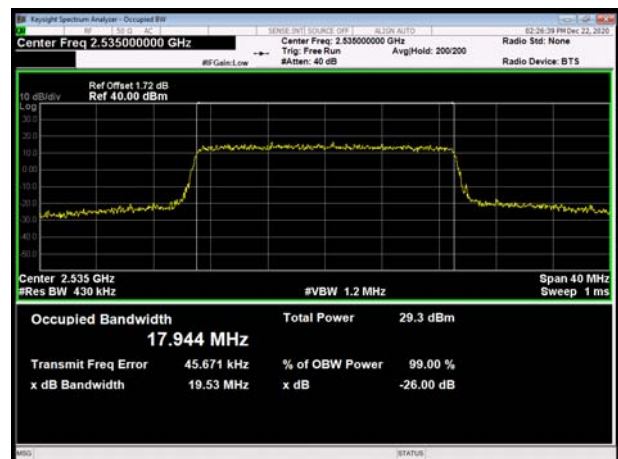
LTE Band 7 16QAM 20MHz CH-Low



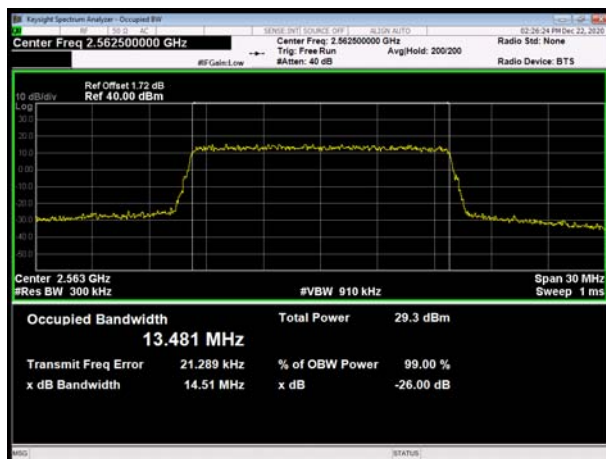
LTE Band 7 16QAM 15MHz CH-Middle



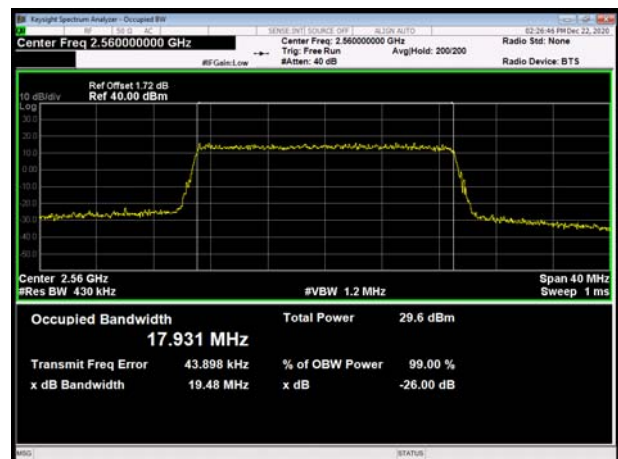
LTE Band 7 16QAM 20MHz CH-Middle



LTE Band 7 16QAM 15MHz CH-High



LTE Band 7 16QAM 20MHz CH-High





LTE Band 7 64QAM 5MHz CH-Low



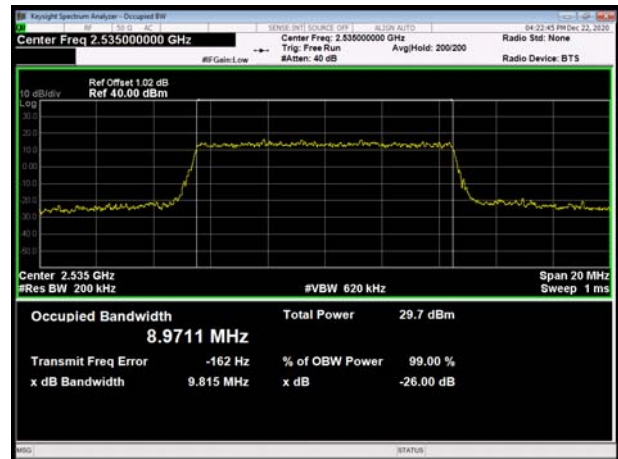
LTE Band 7 64QAM 10MHz CH-Low



LTE Band 7 64QAM 5MHz CH-Middle



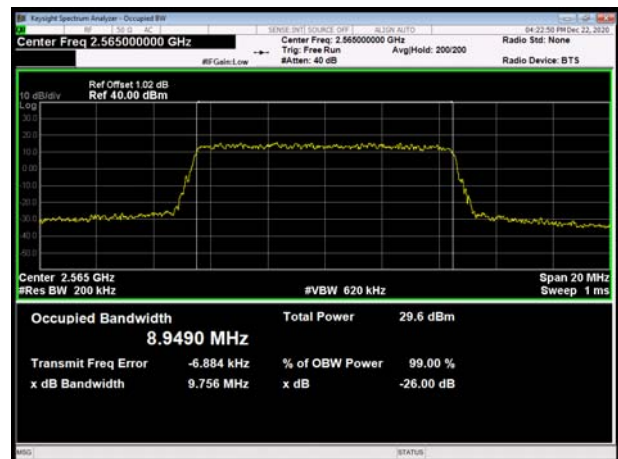
LTE Band 7 64QAM 10MHz CH-Middle



LTE Band 7 64QAM 5MHz CH-High

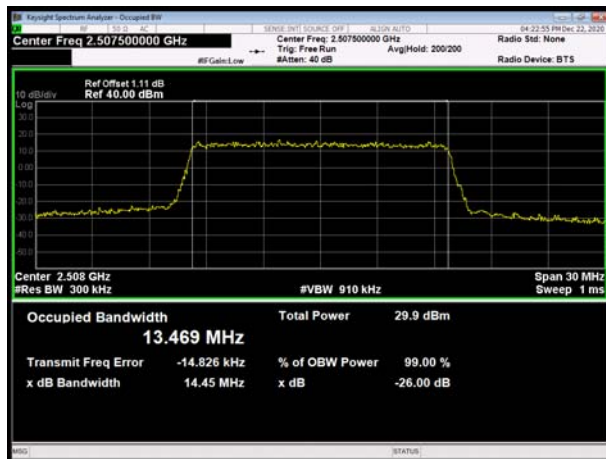


LTE Band 7 64QAM 10MHz CH-High

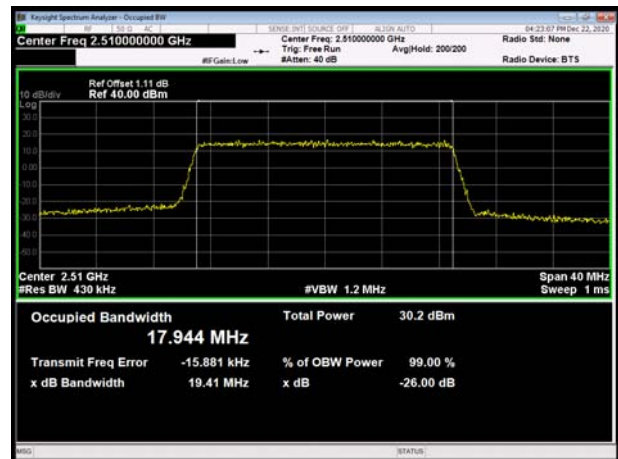




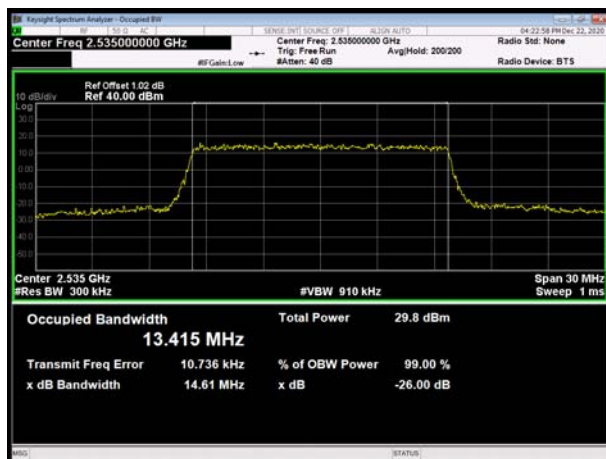
LTE Band 7 64QAM 15MHz CH-Low



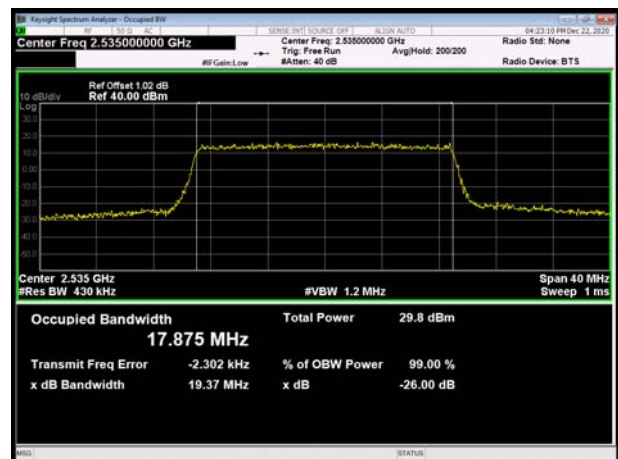
LTE Band 7 64QAM 20MHz CH-Low



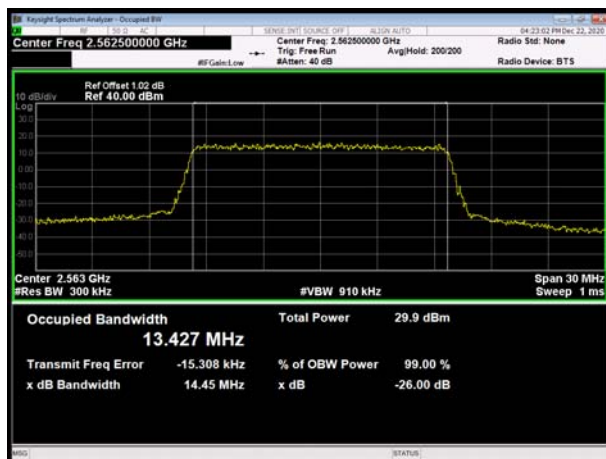
LTE Band 7 64QAM 15MHz CH-Middle



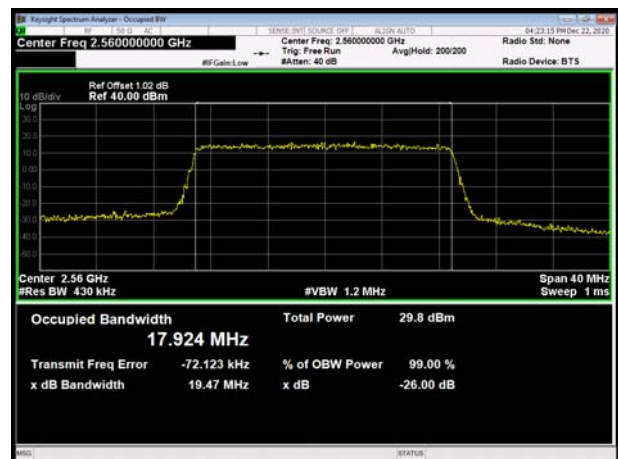
LTE Band 7 64QAM 20MHz CH-Middle



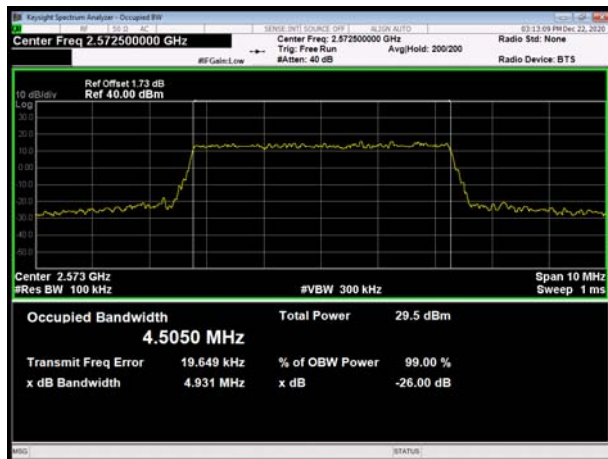
LTE Band 7 64QAM 15MHz CH-High



LTE Band 7 64QAM 20MHz CH-High



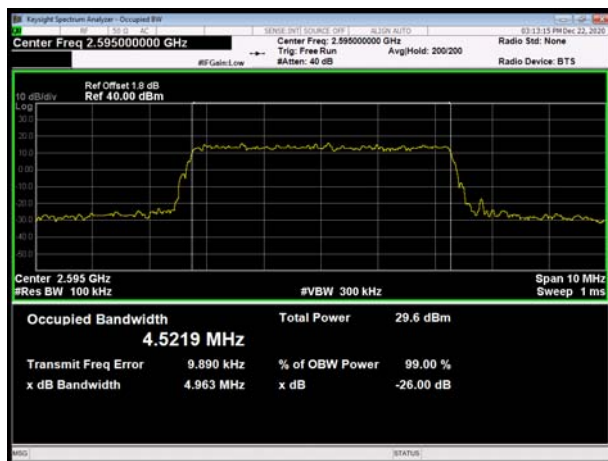
LTE Band 38 QPSK 5MHz CH-Low



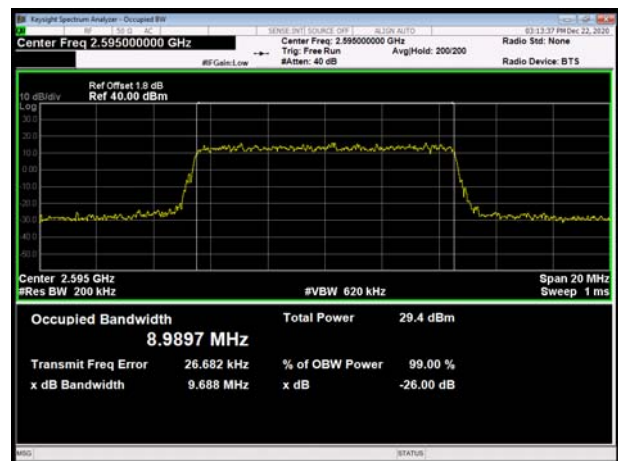
LTE Band 38 QPSK 10MHz CH-Low



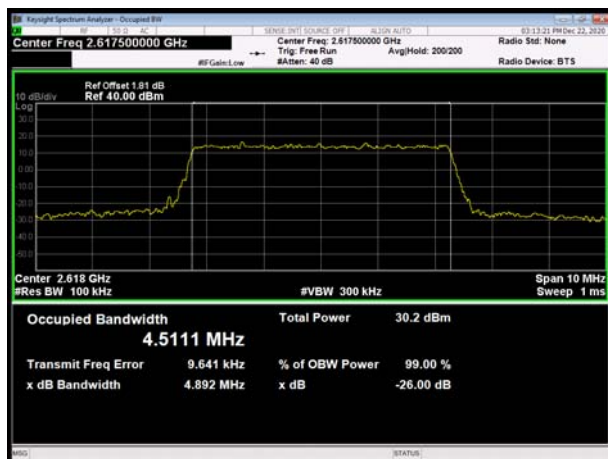
LTE Band 38 QPSK 5MHz CH-Middle



LTE Band 38 QPSK 10MHz CH-Middle



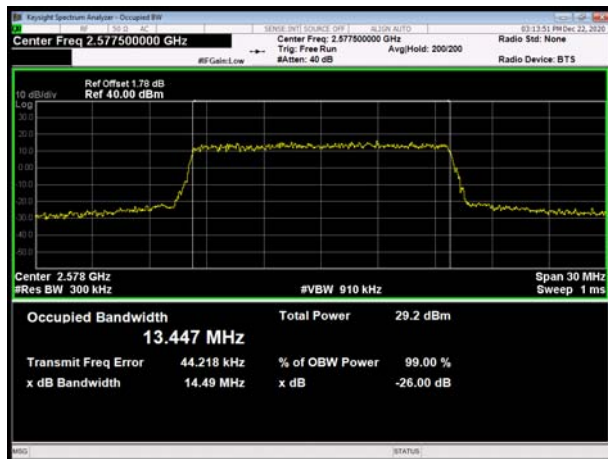
LTE Band 38 QPSK 5MHz CH-High



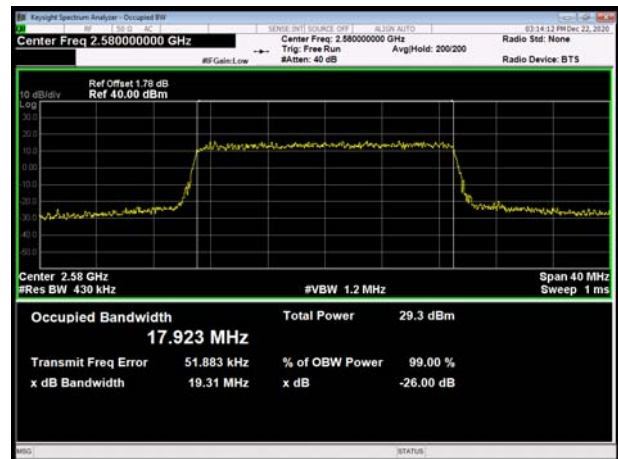
LTE Band 38 QPSK 10MHz CH-High



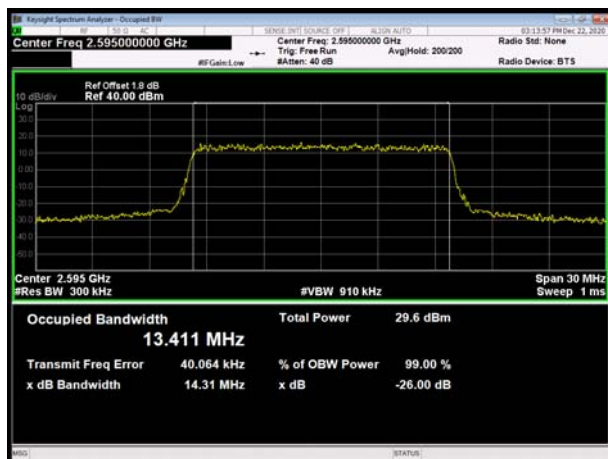
LTE Band 38 QPSK 15MHz CH-Low



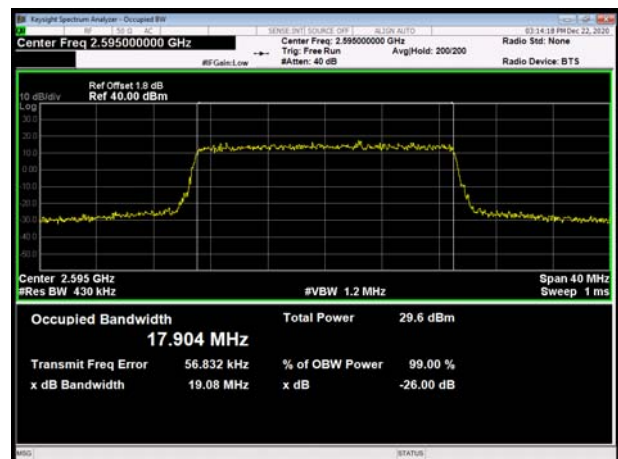
LTE Band 38 QPSK 20MHz CH-Low



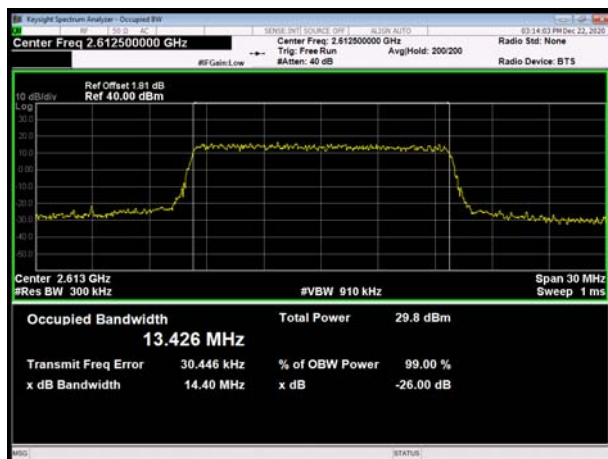
LTE Band 38 QPSK 15MHz CH-Middle



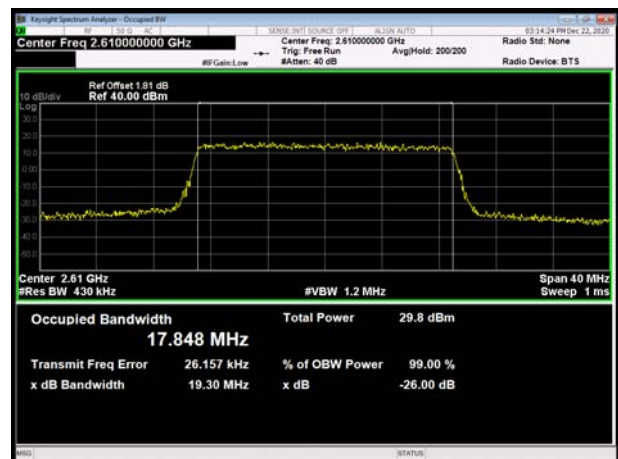
LTE Band 38 QPSK 20MHz CH-Middle



LTE Band 38 QPSK 15MHz CH-High



LTE Band 38 QPSK 20MHz CH-High

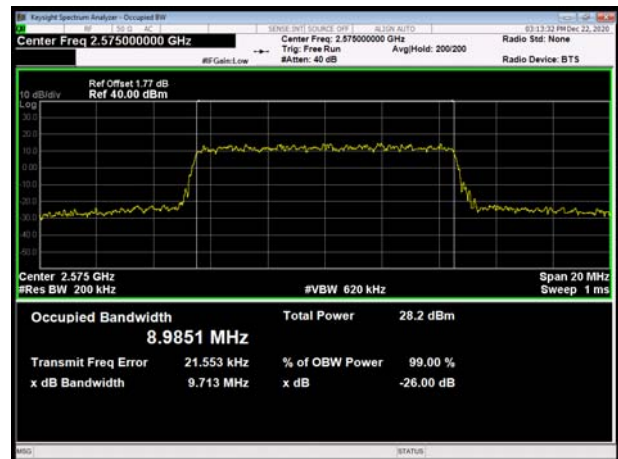




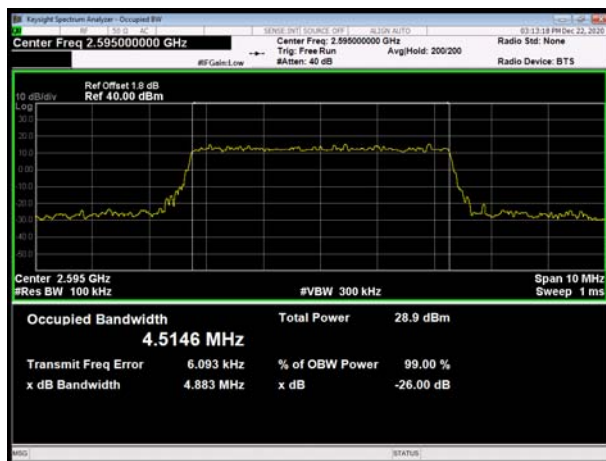
LTE Band 38 16QAM 5MHz CH-Low



LTE Band 38 16QAM 10MHz CH-Low



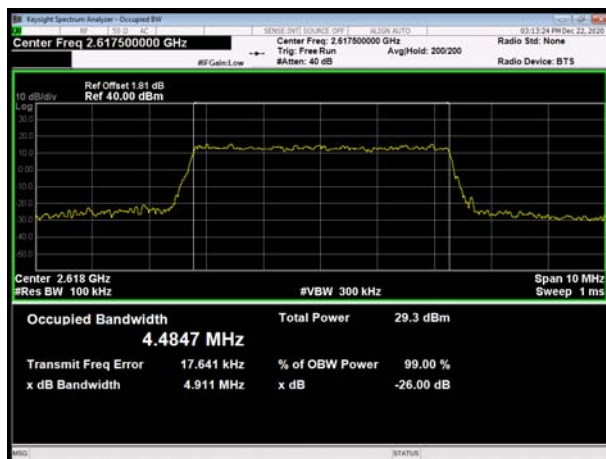
LTE Band 38 16QAM 5MHz CH-Middle



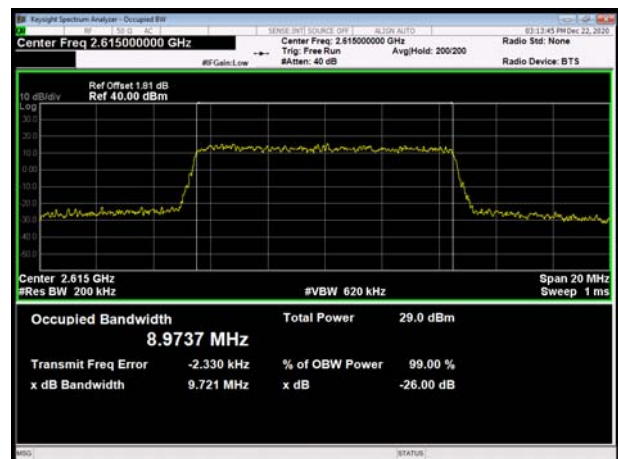
LTE Band 38 16QAM 10MHz CH-Middle



LTE Band 38 16QAM 5MHz CH-High



LTE Band 38 16QAM 10MHz CH-High



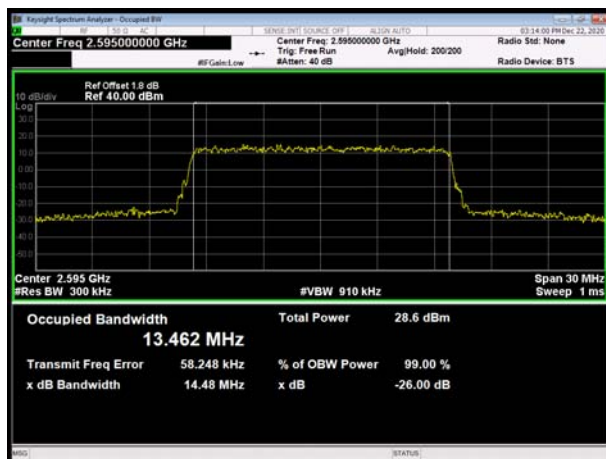
LTE Band 38 16QAM 15MHz CH-Low



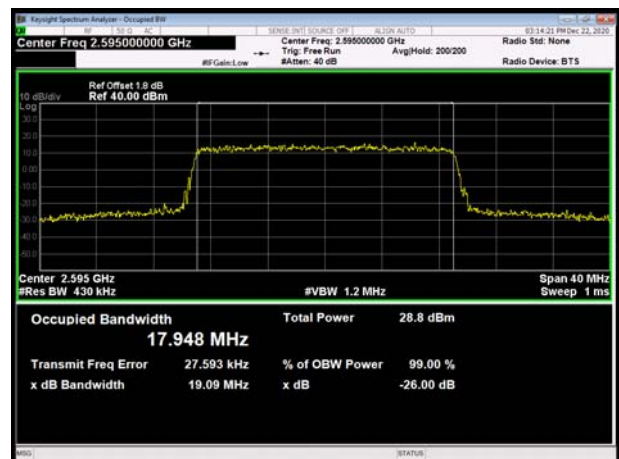
LTE Band 38 16QAM 20MHz CH-Low



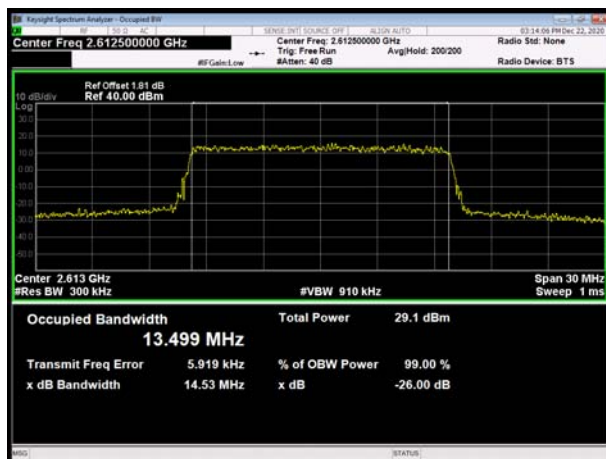
LTE Band 38 16QAM 15MHz CH-Middle



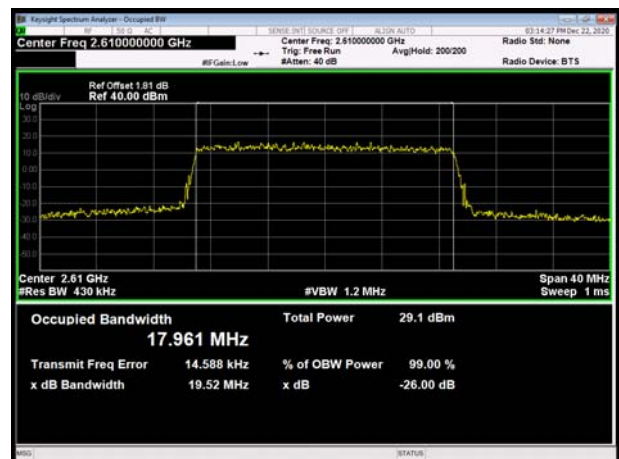
LTE Band 38 16QAM 20MHz CH-Middle



LTE Band 38 16QAM 15MHz CH-High

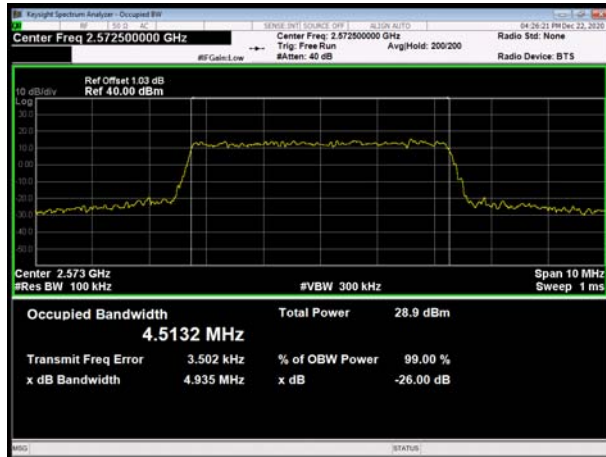


LTE Band 38 16QAM 20MHz CH-High





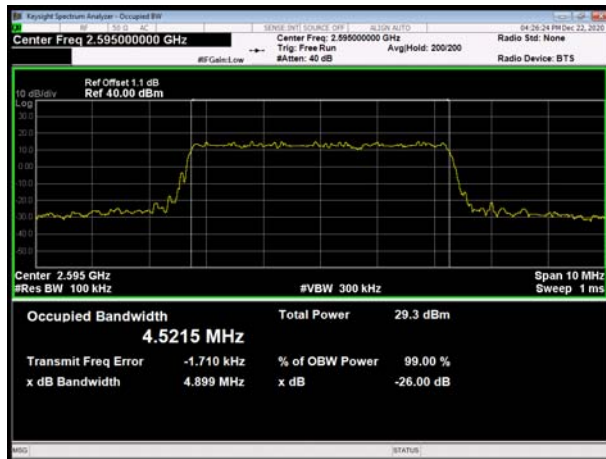
LTE Band 38 64QAM 5MHz CH-Low



LTE Band 38 64QAM 10MHz CH-Low



LTE Band 38 64QAM 5MHz CH-Middle



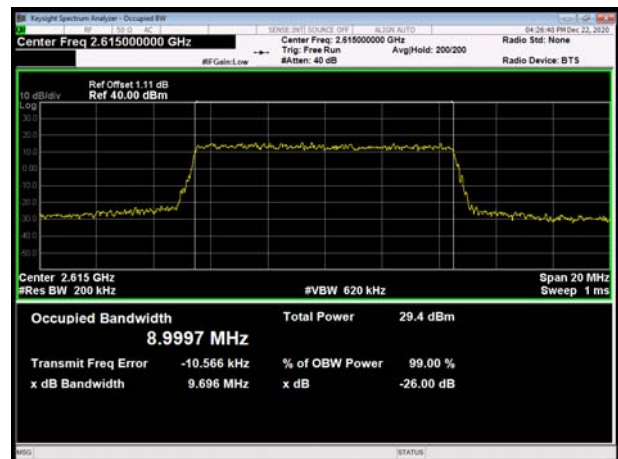
LTE Band 38 64QAM 10MHz CH-Middle



LTE Band 38 64QAM 5MHz CH-High

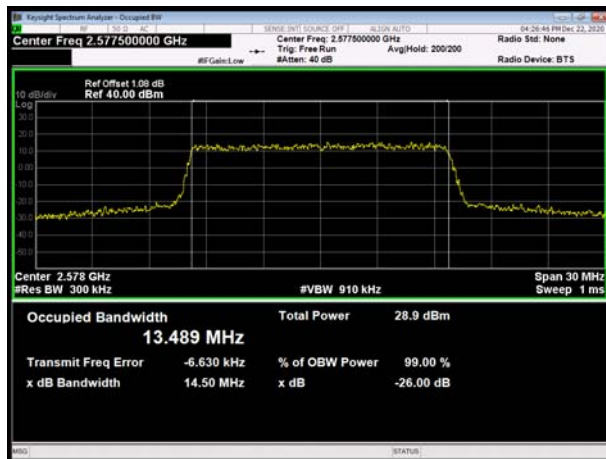


LTE Band 38 64QAM 10MHz CH-High





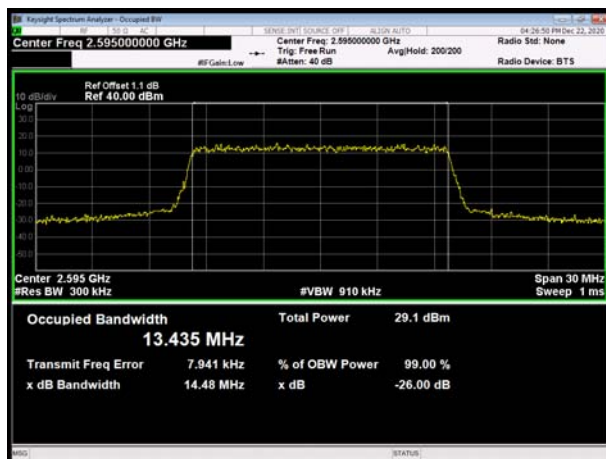
LTE Band 38 64QAM 15MHz CH-Low



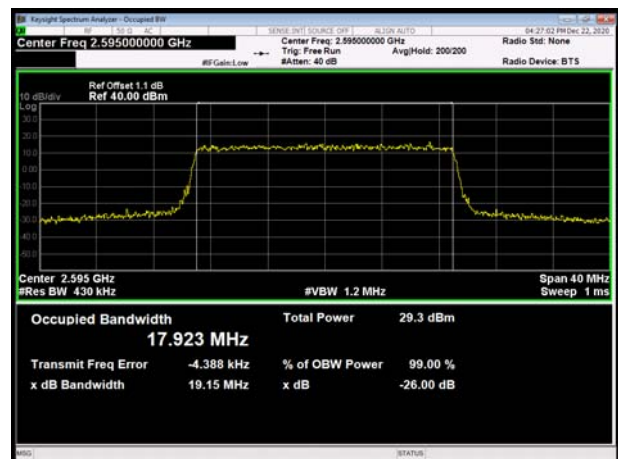
LTE Band 38 64QAM 20MHz CH-Low



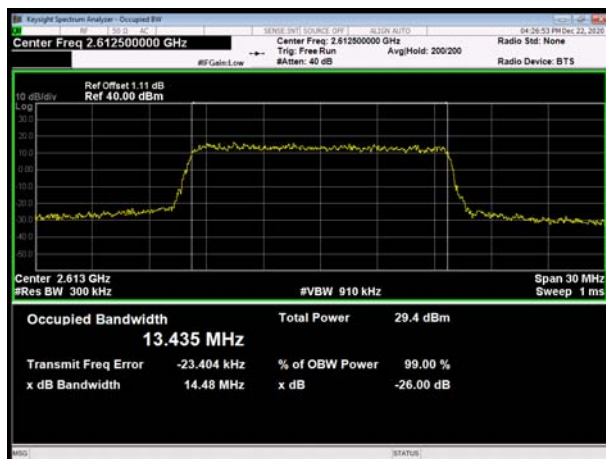
LTE Band 38 64QAM 15MHz CH-Middle



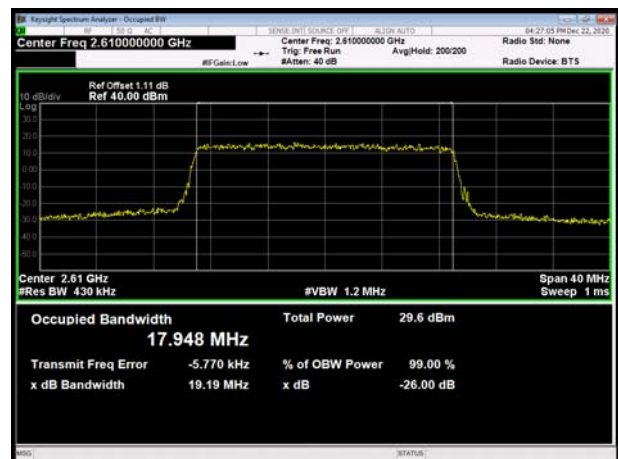
LTE Band 38 64QAM 20MHz CH-Middle



LTE Band 38 64QAM 15MHz CH-High



LTE Band 38 64QAM 20MHz CH-High



LTE Band 41 QPSK 5MHz CH-Low



LTE Band 41 QPSK 10MHz CH-Low



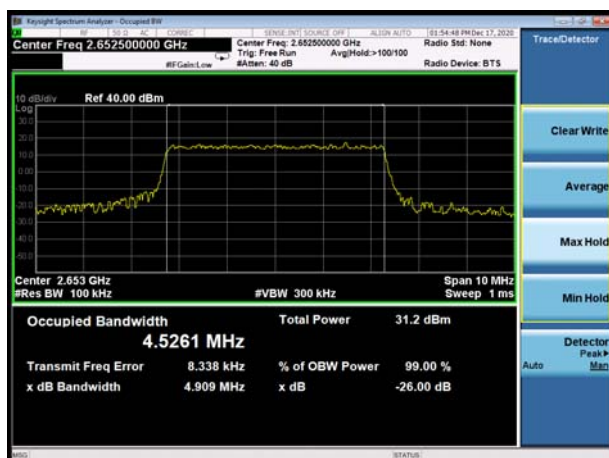
LTE Band 41 QPSK 5MHz CH-Middle



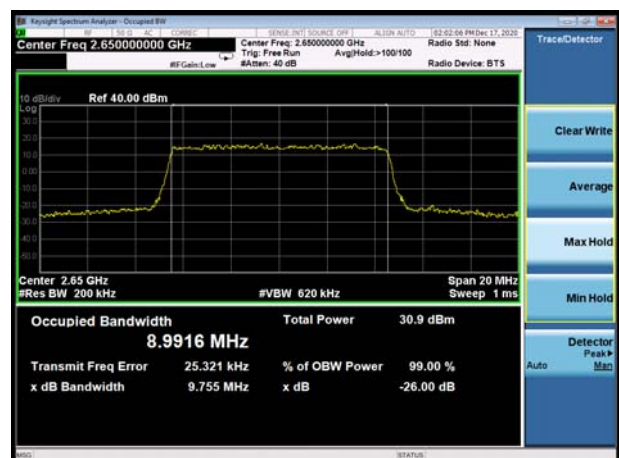
LTE Band 41 QPSK 10MHz CH-Middle



LTE Band 41 QPSK 5MHz CH-High



LTE Band 41 QPSK 10MHz CH-High





LTE Band 41 QPSK 15MHz CH-Low



LTE Band 41 QPSK 20MHz CH-Low



LTE Band 41 QPSK 15MHz CH-Middle



LTE Band 41 QPSK 20MHz CH-Middle



LTE Band 41 QPSK 15MHz CH-High



LTE Band 41 QPSK 20MHz CH-High





LTE Band 41 16QAM 5MHz CH-Low



LTE Band 41 16QAM 10MHz CH-Low



LTE Band 41 16QAM 5MHz CH-Middle



LTE Band 41 16QAM 10MHz CH-Middle



LTE Band 41 16QAM 5MHz CH-High



LTE Band 41 16QAM 10MHz CH-High





LTE Band 41 16QAM 15MHz CH-Low



LTE Band 41 16QAM 20MHz CH-Low



LTE Band 41 16QAM 15MHz CH-Middle



LTE Band 41 16QAM 20MHz CH-Middle



LTE Band 41 16QAM 15MHz CH-High



LTE Band 41 16QAM 20MHz CH-High





LTE Band 41 64QAM 5MHz CH-Low



LTE Band 41 64QAM 10MHz CH-Low



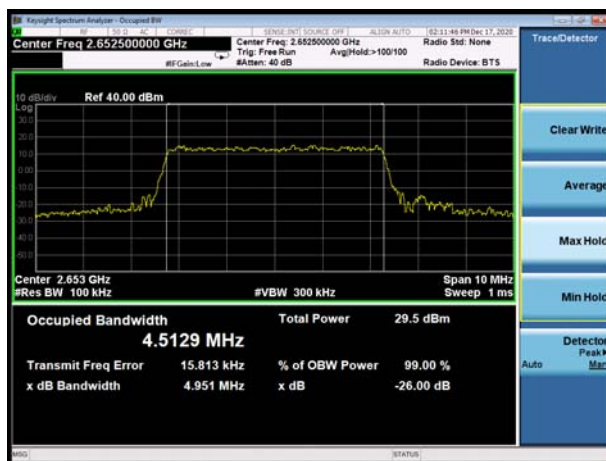
LTE Band 41 64QAM 5MHz CH-Middle



LTE Band 41 64QAM 10MHz CH-Middle



LTE Band 41 64QAM 5MHz CH-High

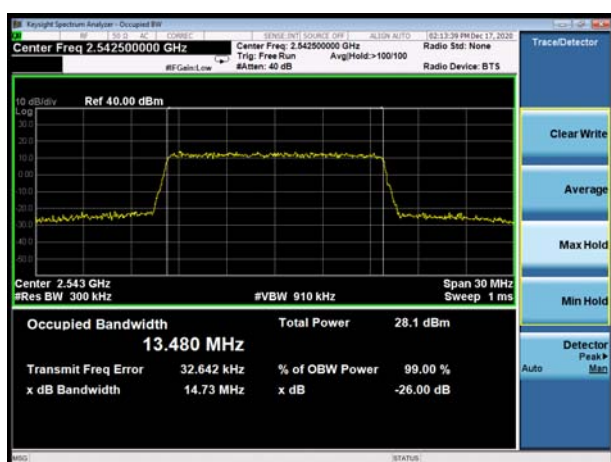


LTE Band 41 64QAM 10MHz CH-High

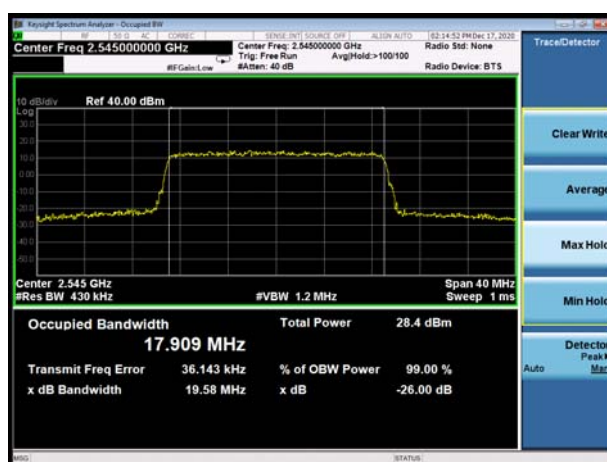




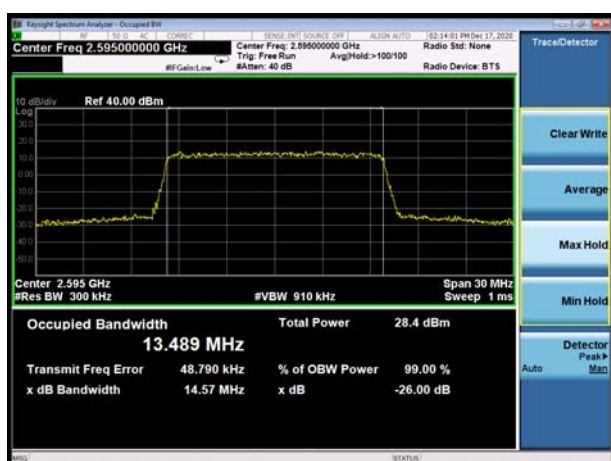
LTE Band 41 64QAM 15MHz CH-Low



LTE Band 41 64QAM 20MHz CH-Low



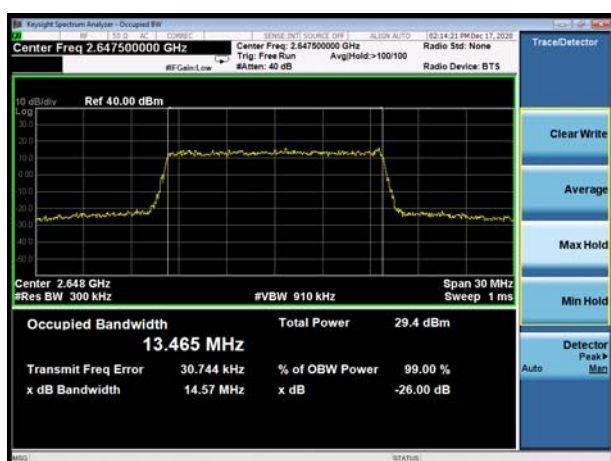
LTE Band 41 64QAM 15MHz CH-Middle



LTE Band 41 64QAM 20MHz CH-Middle



LTE Band 41 64QAM 15MHz CH-High



LTE Band 41 64QAM 20MHz CH-High

