



RF TEST REPORT

Applicant Quectel Wireless Solutions Co., Ltd.

FCC ID XMR202012EC25T

Product LTE Module

Brand Quectel

Model EC25-T, EC25-T MINIPCIE

Marketing Quectel EC25-T, Quectel EC25-T MINIPCIE

Report No. R2011A0762-R3

Issue Date December 11, 2020

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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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(c)(10)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	27.53(h) /27.53(g)	PASS
4	Radiates Spurious Emission	2.1053 /27.53(h) /27.53(g)	PASS
Date of Testing: November 26, 2020 ~ December 7, 2020			
Date of Sample Received: November 25, 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.			

EC25-T, EC25-T MINIPCIE (Report No.: R2011A0762-R3) is a variant model of EC25-AF, EC25-AF MINIPCIE (Report No.: R1806A0301-R3V1). There is only tested RF Power Output and Effective Isotropic Radiated Power, Occupied Bandwidth, Band Edge Compliance and Radiates Spurious Emission for variant in this report. Other test items please refer to the model of EC25-AF, EC25-AF MINIPCIE (Report No.: R1806A0301-R3V1). The detailed product change description please refers to following ANNEX C.



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 electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

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

1.3 Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
City: Shanghai
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Website: <http://www.ta-shanghai.com>
E-mail: xukai@ta-shanghai.com

2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	Quectel Wireless Solutions Co., Ltd.
Applicant address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233
Manufacturer	Quectel Wireless Solutions Co., Ltd.
Manufacturer address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233

2.2 General information

EUT Description			
Model	EC25-T, EC25-T MINIPCIE		
IMEI	EC25-T: 861041050000597 EC25-T MINIPCIE: 861041050001272		
Hardware Version	R1.0		
Software Version	EC25TFAR11A01M4G		
Power Supply	External power supply		
Antenna Type	The EUT don't have standard Antenna, The Antenna used for testing in this report is the after-market accessory (Dipole Antenna)		
Antenna Gain	Band	Frequency(MHz)	Antenna Gain(dBi)
	LTE Band 4	1720	1.94
		1740	2.00
		1760	1.57
	LTE Band 12	700	1.66
		710	3.26
		720	3.95
	LTE Band 66	1720	1.94
		1740	2.00
		1760	1.57
		1780	0.97
	LTE Band 71	700	1.66
Test Mode(s)	LTE Band 4/12/66/71;		
Test Modulation	QPSK 16QAM;		
LTE Category	4		
Maximum E.R.P.	LTE Band 12:	25.38dBm	
	LTE Band 71:	22.87dBm	
Maximum E.I.R.P.	LTE Band 4:	25.48dBm	



	LTE Band 66:	25.25dBm	
Rated Power Supply Voltage:	3.8V		
Extreme Voltage	3.23V ~ 4.37V		
Extreme Temperature	-30℃ ~ +50℃		
Operating Voltage	3.3V ~ 4.3V		
Operating Temperature	-40℃ ~ 85℃		
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 12	699 ~ 716	729 ~ 746
	LTE Band 66	1710 ~ 1780	2110 ~ 2200
	LTE Band 71	663 ~ 698	617 ~ 652
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			

Note: The detailed model difference description please refers to the ANNEX D, There are more than one model, each one should be applied throughout the compliance test respectively, however, only the worst case (EC25-T) will be recorded for conducted parts in this report.



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

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 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 for LTE Band 4/12/66/71:

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 12	O	O	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
	LTE 71	-	-	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 12	O	O	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 66	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 71	-	-	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 12	O	O	O	O	-	-	O	O	O	-	O	O	-	O
	LTE 66	O	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 71	-	-	O	O	O	O	O	O	O	-	O	O	-	O
Radiates Spurious Emission	LTE 4	O	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 12	O	-	O	O	-	-	O	-	O	-	-	-	O	-
	LTE 66	O	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 71	-	-	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.

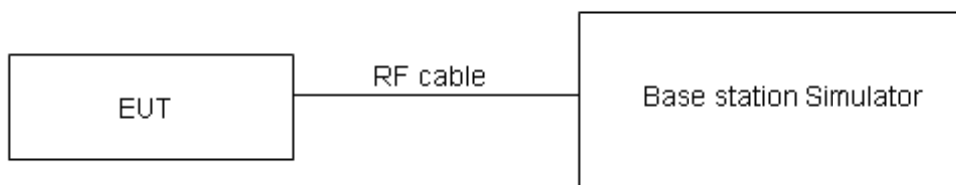
ERP can then be calculated as follows:

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

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”

Part 27.50(c)(10)Limit	$\leq 3 \text{ W}$ (34.77 dBm)
Part 27.50(d)(4)Limit	$\leq 1 \text{ W}$ (30 dBm)

Measurement Uncertainty



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



Test Results

Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Maximum Output Power (dBm)	EIRP (dBm)	Verdict
LTE Band 4	1.4	QPSK	19957	1RB#0	23.18	25.12	PASS
LTE Band 4	1.4	QPSK	19957	1RB#2	23.44	25.38	PASS
LTE Band 4	1.4	QPSK	19957	1RB#5	23.32	25.26	PASS
LTE Band 4	1.4	QPSK	19957	3RB#0	22.28	24.22	PASS
LTE Band 4	1.4	QPSK	19957	3RB#2	22.17	24.11	PASS
LTE Band 4	1.4	QPSK	19957	3RB#3	22.23	24.17	PASS
LTE Band 4	1.4	QPSK	19957	6RB#0	22.26	24.20	PASS
LTE Band 4	1.4	QPSK	20175	1RB#0	23.32	25.32	PASS
LTE Band 4	1.4	QPSK	20175	1RB#2	23.28	25.28	PASS
LTE Band 4	1.4	QPSK	20175	1RB#5	23.35	25.35	PASS
LTE Band 4	1.4	QPSK	20175	3RB#0	22.25	24.25	PASS
LTE Band 4	1.4	QPSK	20175	3RB#2	22.25	24.25	PASS
LTE Band 4	1.4	QPSK	20175	3RB#3	22.29	24.29	PASS
LTE Band 4	1.4	QPSK	20175	6RB#0	22.25	24.25	PASS
LTE Band 4	1.4	QPSK	20393	1RB#0	23.19	24.76	PASS
LTE Band 4	1.4	QPSK	20393	1RB#2	23.35	24.92	PASS
LTE Band 4	1.4	QPSK	20393	1RB#5	23.41	24.98	PASS
LTE Band 4	1.4	QPSK	20393	3RB#0	22.35	23.92	PASS
LTE Band 4	1.4	QPSK	20393	3RB#2	22.31	23.88	PASS
LTE Band 4	1.4	QPSK	20393	3RB#3	22.28	23.85	PASS
LTE Band 4	1.4	QPSK	20393	6RB#0	22.50	24.07	PASS
LTE Band 4	1.4	16QAM	19957	1RB#0	21.91	23.85	PASS
LTE Band 4	1.4	16QAM	19957	1RB#2	22.09	24.03	PASS
LTE Band 4	1.4	16QAM	19957	1RB#5	22.34	24.28	PASS
LTE Band 4	1.4	16QAM	19957	3RB#0	21.06	23.00	PASS



LTE Band 4	1.4	16QAM	19957	3RB#2	20.81	22.75	PASS
LTE Band 4	1.4	16QAM	19957	3RB#3	21.29	23.23	PASS
LTE Band 4	1.4	16QAM	19957	6RB#0	21.36	23.30	PASS
LTE Band 4	1.4	16QAM	20175	1RB#0	22.32	24.32	PASS
LTE Band 4	1.4	16QAM	20175	1RB#2	22.02	24.02	PASS
LTE Band 4	1.4	16QAM	20175	1RB#5	22.20	24.20	PASS
LTE Band 4	1.4	16QAM	20175	3RB#0	21.19	23.19	PASS
LTE Band 4	1.4	16QAM	20175	3RB#2	21.24	23.24	PASS
LTE Band 4	1.4	16QAM	20175	3RB#3	21.32	23.32	PASS
LTE Band 4	1.4	16QAM	20175	6RB#0	21.18	23.18	PASS
LTE Band 4	1.4	16QAM	20393	1RB#0	22.58	24.15	PASS
LTE Band 4	1.4	16QAM	20393	1RB#2	22.38	23.95	PASS
LTE Band 4	1.4	16QAM	20393	1RB#5	22.38	23.95	PASS
LTE Band 4	1.4	16QAM	20393	3RB#0	21.28	22.85	PASS
LTE Band 4	1.4	16QAM	20393	3RB#2	21.22	22.79	PASS
LTE Band 4	1.4	16QAM	20393	3RB#3	21.25	22.82	PASS
LTE Band 4	1.4	16QAM	20393	6RB#0	21.44	23.01	PASS
LTE Band 4	3	QPSK	19965	1RB#0	23.20	25.14	PASS
LTE Band 4	3	QPSK	19965	1RB#7	23.47	25.41	PASS
LTE Band 4	3	QPSK	19965	1RB#14	23.35	25.29	PASS
LTE Band 4	3	QPSK	19965	8RB#0	22.36	24.30	PASS
LTE Band 4	3	QPSK	19965	8RB#4	22.27	24.21	PASS
LTE Band 4	3	QPSK	19965	8RB#7	22.31	24.25	PASS
LTE Band 4	3	QPSK	19965	15RB#0	22.29	24.23	PASS
LTE Band 4	3	QPSK	20175	1RB#0	23.36	25.36	PASS
LTE Band 4	3	QPSK	20175	1RB#7	23.33	25.33	PASS
LTE Band 4	3	QPSK	20175	1RB#14	23.40	25.40	PASS
LTE Band 4	3	QPSK	20175	8RB#0	22.35	24.35	PASS



LTE Band 4	3	QPSK	20175	8RB#4	22.33	24.33	PASS
LTE Band 4	3	QPSK	20175	8RB#7	22.38	24.38	PASS
LTE Band 4	3	QPSK	20175	15RB#0	22.29	24.29	PASS
LTE Band 4	3	QPSK	20385	1RB#0	23.22	24.79	PASS
LTE Band 4	3	QPSK	20385	1RB#7	23.39	24.96	PASS
LTE Band 4	3	QPSK	20385	1RB#14	23.45	25.02	PASS
LTE Band 4	3	QPSK	20385	8RB#0	22.46	24.03	PASS
LTE Band 4	3	QPSK	20385	8RB#4	22.41	23.98	PASS
LTE Band 4	3	QPSK	20385	8RB#7	22.36	23.93	PASS
LTE Band 4	3	QPSK	20385	15RB#0	22.53	24.10	PASS
LTE Band 4	3	16QAM	19965	1RB#0	21.94	23.88	PASS
LTE Band 4	3	16QAM	19965	1RB#7	22.12	24.06	PASS
LTE Band 4	3	16QAM	19965	1RB#14	22.36	24.30	PASS
LTE Band 4	3	16QAM	19965	8RB#0	21.15	23.09	PASS
LTE Band 4	3	16QAM	19965	8RB#4	20.90	22.84	PASS
LTE Band 4	3	16QAM	19965	8RB#7	21.37	23.31	PASS
LTE Band 4	3	16QAM	19965	15RB#0	21.39	23.33	PASS
LTE Band 4	3	16QAM	20175	1RB#0	22.34	24.34	PASS
LTE Band 4	3	16QAM	20175	1RB#7	22.07	24.07	PASS
LTE Band 4	3	16QAM	20175	1RB#14	22.24	24.24	PASS
LTE Band 4	3	16QAM	20175	8RB#0	21.30	23.30	PASS
LTE Band 4	3	16QAM	20175	8RB#4	21.35	23.35	PASS
LTE Band 4	3	16QAM	20175	8RB#7	21.42	23.42	PASS
LTE Band 4	3	16QAM	20175	15RB#0	21.22	23.22	PASS
LTE Band 4	3	16QAM	20385	1RB#0	22.61	24.18	PASS
LTE Band 4	3	16QAM	20385	1RB#7	22.42	23.99	PASS
LTE Band 4	3	16QAM	20385	1RB#14	22.41	23.98	PASS
LTE Band 4	3	16QAM	20385	8RB#0	21.38	22.95	PASS



LTE Band 4	3	16QAM	20385	8RB#4	21.32	22.89	PASS
LTE Band 4	3	16QAM	20385	8RB#7	21.36	22.93	PASS
LTE Band 4	3	16QAM	20385	15RB#0	21.47	23.04	PASS
LTE Band 4	5	QPSK	19975	1RB#0	23.24	25.18	PASS
LTE Band 4	5	QPSK	19975	1RB#13	23.54	25.48	PASS
LTE Band 4	5	QPSK	19975	1RB#24	23.41	25.35	PASS
LTE Band 4	5	QPSK	19975	12RB#0	22.43	24.37	PASS
LTE Band 4	5	QPSK	19975	12RB#6	22.32	24.26	PASS
LTE Band 4	5	QPSK	19975	12RB#13	22.38	24.32	PASS
LTE Band 4	5	QPSK	19975	25RB#0	22.37	24.31	PASS
LTE Band 4	5	QPSK	20175	1RB#0	23.48	25.48	PASS
LTE Band 4	5	QPSK	20175	1RB#13	23.38	25.38	PASS
LTE Band 4	5	QPSK	20175	1RB#24	23.47	25.47	PASS
LTE Band 4	5	QPSK	20175	12RB#0	22.39	24.39	PASS
LTE Band 4	5	QPSK	20175	12RB#6	22.38	24.38	PASS
LTE Band 4	5	QPSK	20175	12RB#13	22.48	24.48	PASS
LTE Band 4	5	QPSK	20175	25RB#0	22.38	24.38	PASS
LTE Band 4	5	QPSK	20375	1RB#0	23.27	24.84	PASS
LTE Band 4	5	QPSK	20375	1RB#13	23.46	25.03	PASS
LTE Band 4	5	QPSK	20375	1RB#24	23.54	25.11	PASS
LTE Band 4	5	QPSK	20375	12RB#0	22.52	24.09	PASS
LTE Band 4	5	QPSK	20375	12RB#6	22.45	24.02	PASS
LTE Band 4	5	QPSK	20375	12RB#13	22.36	23.93	PASS
LTE Band 4	5	QPSK	20375	25RB#0	22.54	24.11	PASS
LTE Band 4	5	16QAM	19975	1RB#0	21.96	23.90	PASS
LTE Band 4	5	16QAM	19975	1RB#13	22.14	24.08	PASS
LTE Band 4	5	16QAM	19975	1RB#24	22.38	24.32	PASS
LTE Band 4	5	16QAM	19975	12RB#0	21.19	23.13	PASS



LTE Band 4	5	16QAM	19975	12RB#6	20.92	22.86	PASS
LTE Band 4	5	16QAM	19975	12RB#13	21.42	23.36	PASS
LTE Band 4	5	16QAM	19975	25RB#0	21.42	23.36	PASS
LTE Band 4	5	16QAM	20175	1RB#0	22.36	24.36	PASS
LTE Band 4	5	16QAM	20175	1RB#13	22.14	24.14	PASS
LTE Band 4	5	16QAM	20175	1RB#24	22.31	24.31	PASS
LTE Band 4	5	16QAM	20175	12RB#0	21.34	23.34	PASS
LTE Band 4	5	16QAM	20175	12RB#6	21.39	23.39	PASS
LTE Band 4	5	16QAM	20175	12RB#13	21.42	23.42	PASS
LTE Band 4	5	16QAM	20175	25RB#0	21.23	23.23	PASS
LTE Band 4	5	16QAM	20375	1RB#0	22.65	24.22	PASS
LTE Band 4	5	16QAM	20375	1RB#13	22.46	24.03	PASS
LTE Band 4	5	16QAM	20375	1RB#24	22.44	24.01	PASS
LTE Band 4	5	16QAM	20375	12RB#0	21.43	23.00	PASS
LTE Band 4	5	16QAM	20375	12RB#6	21.37	22.94	PASS
LTE Band 4	5	16QAM	20375	12RB#13	21.39	22.96	PASS
LTE Band 4	5	16QAM	20375	25RB#0	21.48	23.05	PASS
LTE Band 4	10	QPSK	20000	1RB#0	23.19	25.13	PASS
LTE Band 4	10	QPSK	20000	1RB#25	23.48	25.42	PASS
LTE Band 4	10	QPSK	20000	1RB#49	23.34	25.28	PASS
LTE Band 4	10	QPSK	20000	25RB#0	22.36	24.30	PASS
LTE Band 4	10	QPSK	20000	25RB#13	22.28	24.22	PASS
LTE Band 4	10	QPSK	20000	25RB#25	22.31	24.25	PASS
LTE Band 4	10	QPSK	20000	50RB#0	22.35	24.29	PASS
LTE Band 4	10	QPSK	20175	1RB#0	23.35	25.35	PASS
LTE Band 4	10	QPSK	20175	1RB#25	23.34	25.34	PASS
LTE Band 4	10	QPSK	20175	1RB#49	23.39	25.39	PASS
LTE Band 4	10	QPSK	20175	25RB#0	22.35	24.35	PASS



LTE Band 4	10	QPSK	20175	25RB#13	22.34	24.34	PASS
LTE Band 4	10	QPSK	20175	25RB#25	22.40	24.40	PASS
LTE Band 4	10	QPSK	20175	50RB#0	22.30	24.30	PASS
LTE Band 4	10	QPSK	20350	1RB#0	23.21	24.78	PASS
LTE Band 4	10	QPSK	20350	1RB#25	23.40	24.97	PASS
LTE Band 4	10	QPSK	20350	1RB#49	23.44	25.01	PASS
LTE Band 4	10	QPSK	20350	25RB#0	22.46	24.03	PASS
LTE Band 4	10	QPSK	20350	25RB#13	22.40	23.97	PASS
LTE Band 4	10	QPSK	20350	25RB#25	22.37	23.94	PASS
LTE Band 4	10	QPSK	20350	50RB#0	22.55	24.12	PASS
LTE Band 4	10	16QAM	20000	1RB#0	21.93	23.87	PASS
LTE Band 4	10	16QAM	20000	1RB#25	22.12	24.06	PASS
LTE Band 4	10	16QAM	20000	1RB#49	22.36	24.30	PASS
LTE Band 4	10	16QAM	20000	25RB#0	21.16	23.10	PASS
LTE Band 4	10	16QAM	20000	25RB#13	20.89	22.83	PASS
LTE Band 4	10	16QAM	20000	25RB#25	21.37	23.31	PASS
LTE Band 4	10	16QAM	20000	50RB#0	21.40	23.34	PASS
LTE Band 4	10	16QAM	20175	1RB#0	22.33	24.33	PASS
LTE Band 4	10	16QAM	20175	1RB#25	22.09	24.09	PASS
LTE Band 4	10	16QAM	20175	1RB#49	22.24	24.24	PASS
LTE Band 4	10	16QAM	20175	25RB#0	21.31	23.31	PASS
LTE Band 4	10	16QAM	20175	25RB#13	21.34	23.34	PASS
LTE Band 4	10	16QAM	20175	25RB#25	21.42	23.42	PASS
LTE Band 4	10	16QAM	20175	50RB#0	21.23	23.23	PASS
LTE Band 4	10	16QAM	20350	1RB#0	22.60	24.17	PASS
LTE Band 4	10	16QAM	20350	1RB#25	22.42	23.99	PASS
LTE Band 4	10	16QAM	20350	1RB#49	22.40	23.97	PASS
LTE Band 4	10	16QAM	20350	25RB#0	21.39	22.96	PASS



LTE Band 4	10	16QAM	20350	25RB#13	21.31	22.88	PASS
LTE Band 4	10	16QAM	20350	25RB#25	21.36	22.93	PASS
LTE Band 4	10	16QAM	20350	50RB#0	21.46	23.03	PASS
LTE Band 4	15	QPSK	20025	1RB#0	23.18	25.12	PASS
LTE Band 4	15	QPSK	20025	1RB#38	23.46	25.40	PASS
LTE Band 4	15	QPSK	20025	1RB#74	23.31	25.25	PASS
LTE Band 4	15	QPSK	20025	36RB#0	22.34	24.28	PASS
LTE Band 4	15	QPSK	20025	36RB#18	22.25	24.19	PASS
LTE Band 4	15	QPSK	20025	36RB#39	22.28	24.22	PASS
LTE Band 4	15	QPSK	20025	75RB#0	22.33	24.27	PASS
LTE Band 4	15	QPSK	20175	1RB#0	23.31	25.31	PASS
LTE Band 4	15	QPSK	20175	1RB#38	23.33	25.33	PASS
LTE Band 4	15	QPSK	20175	1RB#74	23.34	25.34	PASS
LTE Band 4	15	QPSK	20175	36RB#0	22.31	24.31	PASS
LTE Band 4	15	QPSK	20175	36RB#18	22.29	24.29	PASS
LTE Band 4	15	QPSK	20175	36RB#39	22.37	24.37	PASS
LTE Band 4	15	QPSK	20175	75RB#0	22.26	24.26	PASS
LTE Band 4	15	QPSK	20325	1RB#0	23.19	24.76	PASS
LTE Band 4	15	QPSK	20325	1RB#38	23.37	24.94	PASS
LTE Band 4	15	QPSK	20325	1RB#74	23.40	24.97	PASS
LTE Band 4	15	QPSK	20325	36RB#0	22.43	24.00	PASS
LTE Band 4	15	QPSK	20325	36RB#18	22.36	23.93	PASS
LTE Band 4	15	QPSK	20325	36RB#39	22.33	23.90	PASS
LTE Band 4	15	QPSK	20325	75RB#0	22.50	24.07	PASS
LTE Band 4	15	16QAM	20025	1RB#0	21.88	23.82	PASS
LTE Band 4	15	16QAM	20025	1RB#38	22.10	24.04	PASS
LTE Band 4	15	16QAM	20025	1RB#74	22.33	24.27	PASS
LTE Band 4	15	16QAM	20025	36RB#0	21.13	23.07	PASS



LTE Band 4	15	16QAM	20025	36RB#18	20.86	22.80	PASS
LTE Band 4	15	16QAM	20025	36RB#39	21.35	23.29	PASS
LTE Band 4	15	16QAM	20025	75RB#0	21.37	23.31	PASS
LTE Band 4	15	16QAM	20175	1RB#0	22.31	24.31	PASS
LTE Band 4	15	16QAM	20175	1RB#38	22.06	24.06	PASS
LTE Band 4	15	16QAM	20175	1RB#74	22.20	24.20	PASS
LTE Band 4	15	16QAM	20175	36RB#0	21.29	23.29	PASS
LTE Band 4	15	16QAM	20175	36RB#18	21.29	23.29	PASS
LTE Band 4	15	16QAM	20175	36RB#39	21.38	23.38	PASS
LTE Band 4	15	16QAM	20175	75RB#0	21.18	23.18	PASS
LTE Band 4	15	16QAM	20325	1RB#0	22.58	24.15	PASS
LTE Band 4	15	16QAM	20325	1RB#38	22.40	23.97	PASS
LTE Band 4	15	16QAM	20325	1RB#74	22.37	23.94	PASS
LTE Band 4	15	16QAM	20325	36RB#0	21.36	22.93	PASS
LTE Band 4	15	16QAM	20325	36RB#18	21.27	22.84	PASS
LTE Band 4	15	16QAM	20325	36RB#39	21.33	22.90	PASS
LTE Band 4	15	16QAM	20325	75RB#0	21.42	22.99	PASS
LTE Band 4	20	QPSK	20050	1RB#0	23.15	25.09	PASS
LTE Band 4	20	QPSK	20050	1RB#50	23.45	25.39	PASS
LTE Band 4	20	QPSK	20050	1RB#99	23.29	25.23	PASS
LTE Band 4	20	QPSK	20050	50RB#0	22.31	24.25	PASS
LTE Band 4	20	QPSK	20050	50RB#25	22.23	24.17	PASS
LTE Band 4	20	QPSK	20050	50RB#50	22.25	24.19	PASS
LTE Band 4	20	QPSK	20050	100RB#0	22.30	24.24	PASS
LTE Band 4	20	QPSK	20175	1RB#0	23.27	25.27	PASS
LTE Band 4	20	QPSK	20175	1RB#50	23.29	25.29	PASS
LTE Band 4	20	QPSK	20175	1RB#99	23.33	25.33	PASS
LTE Band 4	20	QPSK	20175	50RB#0	22.26	24.26	PASS



LTE Band 4	20	QPSK	20175	50RB#25	22.25	24.25	PASS
LTE Band 4	20	QPSK	20175	50RB#50	22.32	24.32	PASS
LTE Band 4	20	QPSK	20175	100RB#0	22.21	24.21	PASS
LTE Band 4	20	QPSK	20300	1RB#0	23.16	24.73	PASS
LTE Band 4	20	QPSK	20300	1RB#50	23.35	24.92	PASS
LTE Band 4	20	QPSK	20300	1RB#99	23.37	24.94	PASS
LTE Band 4	20	QPSK	20300	50RB#0	22.39	23.96	PASS
LTE Band 4	20	QPSK	20300	50RB#25	22.33	23.90	PASS
LTE Band 4	20	QPSK	20300	50RB#50	22.29	23.86	PASS
LTE Band 4	20	QPSK	20300	100RB#0	22.46	24.03	PASS
LTE Band 4	20	16QAM	20050	1RB#0	21.86	23.80	PASS
LTE Band 4	20	16QAM	20050	1RB#50	22.06	24.00	PASS
LTE Band 4	20	16QAM	20050	1RB#99	22.31	24.25	PASS
LTE Band 4	20	16QAM	20050	50RB#0	21.10	23.04	PASS
LTE Band 4	20	16QAM	20050	50RB#25	20.83	22.77	PASS
LTE Band 4	20	16QAM	20050	50RB#50	21.32	23.26	PASS
LTE Band 4	20	16QAM	20050	100RB#0	21.35	23.29	PASS
LTE Band 4	20	16QAM	20175	1RB#0	22.27	24.27	PASS
LTE Band 4	20	16QAM	20175	1RB#50	22.04	24.04	PASS
LTE Band 4	20	16QAM	20175	1RB#99	22.17	24.17	PASS
LTE Band 4	20	16QAM	20175	50RB#0	21.25	23.25	PASS
LTE Band 4	20	16QAM	20175	50RB#25	21.27	23.27	PASS
LTE Band 4	20	16QAM	20175	50RB#50	21.33	23.33	PASS
LTE Band 4	20	16QAM	20175	100RB#0	21.14	23.14	PASS
LTE Band 4	20	16QAM	20300	1RB#0	22.53	24.10	PASS
LTE Band 4	20	16QAM	20300	1RB#50	22.36	23.93	PASS
LTE Band 4	20	16QAM	20300	1RB#99	22.35	23.92	PASS
LTE Band 4	20	16QAM	20300	50RB#0	21.33	22.90	PASS



LTE Band 4	20	16QAM	20300	50RB#25	21.24	22.81	PASS
LTE Band 4	20	16QAM	20300	50RB#50	21.29	22.86	PASS
LTE Band 4	20	16QAM	20300	100RB#0	21.39	22.96	PASS

Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Maximum Output Power (dBm)	ERP (dBm)	Verdict
LTE Band 12	1.4	QPSK	23017	1RB#0	23.37	22.88	PASS
LTE Band 12	1.4	QPSK	23017	1RB#2	23.70	23.21	PASS
LTE Band 12	1.4	QPSK	23017	1RB#5	23.47	22.98	PASS
LTE Band 12	1.4	QPSK	23017	3RB#0	22.51	22.02	PASS
LTE Band 12	1.4	QPSK	23017	3RB#2	22.51	22.02	PASS
LTE Band 12	1.4	QPSK	23017	3RB#3	22.62	22.13	PASS
LTE Band 12	1.4	QPSK	23017	6RB#0	22.46	21.97	PASS
LTE Band 12	1.4	QPSK	23095	1RB#0	23.49	24.60	PASS
LTE Band 12	1.4	QPSK	23095	1RB#2	23.56	24.67	PASS
LTE Band 12	1.4	QPSK	23095	1RB#5	23.33	24.44	PASS
LTE Band 12	1.4	QPSK	23095	3RB#0	22.62	23.73	PASS
LTE Band 12	1.4	QPSK	23095	3RB#2	22.53	23.64	PASS
LTE Band 12	1.4	QPSK	23095	3RB#3	22.47	23.58	PASS
LTE Band 12	1.4	QPSK	23095	6RB#0	22.62	23.73	PASS
LTE Band 12	1.4	QPSK	23173	1RB#0	23.58	25.38	PASS
LTE Band 12	1.4	QPSK	23173	1RB#2	23.52	25.32	PASS
LTE Band 12	1.4	QPSK	23173	1RB#5	23.46	25.26	PASS
LTE Band 12	1.4	QPSK	23173	3RB#0	22.67	24.47	PASS
LTE Band 12	1.4	QPSK	23173	3RB#2	22.60	24.40	PASS
LTE Band 12	1.4	QPSK	23173	3RB#3	22.59	24.39	PASS
LTE Band 12	1.4	QPSK	23173	6RB#0	22.63	24.43	PASS
LTE Band 12	1.4	16QAM	23017	1RB#0	22.51	22.02	PASS



LTE Band 12	1.4	16QAM	23017	1RB#2	22.28	21.79	PASS
LTE Band 12	1.4	16QAM	23017	1RB#5	22.26	21.77	PASS
LTE Band 12	1.4	16QAM	23017	3RB#0	21.67	21.18	PASS
LTE Band 12	1.4	16QAM	23017	3RB#2	21.56	21.07	PASS
LTE Band 12	1.4	16QAM	23017	3RB#3	21.53	21.04	PASS
LTE Band 12	1.4	16QAM	23017	6RB#0	21.60	21.11	PASS
LTE Band 12	1.4	16QAM	23095	1RB#0	22.31	23.42	PASS
LTE Band 12	1.4	16QAM	23095	1RB#2	22.47	23.58	PASS
LTE Band 12	1.4	16QAM	23095	1RB#5	22.30	23.41	PASS
LTE Band 12	1.4	16QAM	23095	3RB#0	21.45	22.56	PASS
LTE Band 12	1.4	16QAM	23095	3RB#2	21.60	22.71	PASS
LTE Band 12	1.4	16QAM	23095	3RB#3	21.53	22.64	PASS
LTE Band 12	1.4	16QAM	23095	6RB#0	21.54	22.65	PASS
LTE Band 12	1.4	16QAM	23173	1RB#0	22.14	23.94	PASS
LTE Band 12	1.4	16QAM	23173	1RB#2	22.27	24.07	PASS
LTE Band 12	1.4	16QAM	23173	1RB#5	22.39	24.19	PASS
LTE Band 12	1.4	16QAM	23173	3RB#0	21.49	23.29	PASS
LTE Band 12	1.4	16QAM	23173	3RB#2	21.66	23.46	PASS
LTE Band 12	1.4	16QAM	23173	3RB#3	21.48	23.28	PASS
LTE Band 12	1.4	16QAM	23173	6RB#0	21.58	23.38	PASS
LTE Band 12	3	QPSK	23025	1RB#0	23.32	22.83	PASS
LTE Band 12	3	QPSK	23025	1RB#7	23.64	23.15	PASS
LTE Band 12	3	QPSK	23025	1RB#14	23.40	22.91	PASS
LTE Band 12	3	QPSK	23025	8RB#0	22.44	21.95	PASS
LTE Band 12	3	QPSK	23025	8RB#4	22.47	21.98	PASS
LTE Band 12	3	QPSK	23025	8RB#7	22.55	22.06	PASS
LTE Band 12	3	QPSK	23025	15RB#0	22.44	21.95	PASS
LTE Band 12	3	QPSK	23095	1RB#0	23.36	24.47	PASS



LTE Band 12	3	QPSK	23095	1RB#7	23.52	24.63	PASS
LTE Band 12	3	QPSK	23095	1RB#14	23.25	24.36	PASS
LTE Band 12	3	QPSK	23095	8RB#0	22.58	23.69	PASS
LTE Band 12	3	QPSK	23095	8RB#4	22.49	23.60	PASS
LTE Band 12	3	QPSK	23095	8RB#7	22.39	23.50	PASS
LTE Band 12	3	QPSK	23095	15RB#0	22.54	23.65	PASS
LTE Band 12	3	QPSK	23165	1RB#0	23.52	25.32	PASS
LTE Band 12	3	QPSK	23165	1RB#7	23.46	25.26	PASS
LTE Band 12	3	QPSK	23165	1RB#14	23.36	25.16	PASS
LTE Band 12	3	QPSK	23165	8RB#0	22.61	24.41	PASS
LTE Band 12	3	QPSK	23165	8RB#4	22.55	24.35	PASS
LTE Band 12	3	QPSK	23165	8RB#7	22.60	24.40	PASS
LTE Band 12	3	QPSK	23165	15RB#0	22.64	24.44	PASS
LTE Band 12	3	16QAM	23025	1RB#0	22.48	21.99	PASS
LTE Band 12	3	16QAM	23025	1RB#7	22.26	21.77	PASS
LTE Band 12	3	16QAM	23025	1RB#14	22.24	21.75	PASS
LTE Band 12	3	16QAM	23025	8RB#0	21.64	21.15	PASS
LTE Band 12	3	16QAM	23025	8RB#4	21.53	21.04	PASS
LTE Band 12	3	16QAM	23025	8RB#7	21.48	20.99	PASS
LTE Band 12	3	16QAM	23025	15RB#0	21.58	21.09	PASS
LTE Band 12	3	16QAM	23095	1RB#0	22.28	23.39	PASS
LTE Band 12	3	16QAM	23095	1RB#7	22.42	23.53	PASS
LTE Band 12	3	16QAM	23095	1RB#14	22.23	23.34	PASS
LTE Band 12	3	16QAM	23095	8RB#0	21.42	22.53	PASS
LTE Band 12	3	16QAM	23095	8RB#4	21.55	22.66	PASS
LTE Band 12	3	16QAM	23095	8RB#7	21.53	22.64	PASS
LTE Band 12	3	16QAM	23095	15RB#0	21.54	22.65	PASS
LTE Band 12	3	16QAM	23165	1RB#0	22.09	23.89	PASS



LTE Band 12	3	16QAM	23165	1RB#7	22.23	24.03	PASS
LTE Band 12	3	16QAM	23165	1RB#14	22.35	24.15	PASS
LTE Band 12	3	16QAM	23165	8RB#0	21.45	23.25	PASS
LTE Band 12	3	16QAM	23165	8RB#4	21.60	23.40	PASS
LTE Band 12	3	16QAM	23165	8RB#7	21.45	23.25	PASS
LTE Band 12	3	16QAM	23165	15RB#0	21.56	23.36	PASS
LTE Band 12	5	QPSK	23035	1RB#0	23.31	22.82	PASS
LTE Band 12	5	QPSK	23035	1RB#13	23.62	23.13	PASS
LTE Band 12	5	QPSK	23035	1RB#24	23.37	22.88	PASS
LTE Band 12	5	QPSK	23035	12RB#0	22.42	21.93	PASS
LTE Band 12	5	QPSK	23035	12RB#6	22.44	21.95	PASS
LTE Band 12	5	QPSK	23035	12RB#13	22.52	22.03	PASS
LTE Band 12	5	QPSK	23035	25RB#0	22.42	21.93	PASS
LTE Band 12	5	QPSK	23095	1RB#0	23.32	24.43	PASS
LTE Band 12	5	QPSK	23095	1RB#13	23.51	24.62	PASS
LTE Band 12	5	QPSK	23095	1RB#24	23.20	24.31	PASS
LTE Band 12	5	QPSK	23095	12RB#0	22.54	23.65	PASS
LTE Band 12	5	QPSK	23095	12RB#6	22.44	23.55	PASS
LTE Band 12	5	QPSK	23095	12RB#13	22.36	23.47	PASS
LTE Band 12	5	QPSK	23095	25RB#0	22.50	23.61	PASS
LTE Band 12	5	QPSK	23155	1RB#0	23.50	25.30	PASS
LTE Band 12	5	QPSK	23155	1RB#13	23.43	25.23	PASS
LTE Band 12	5	QPSK	23155	1RB#24	23.32	25.12	PASS
LTE Band 12	5	QPSK	23155	12RB#0	22.58	24.38	PASS
LTE Band 12	5	QPSK	23155	12RB#6	22.51	24.31	PASS
LTE Band 12	5	QPSK	23155	12RB#13	22.56	24.36	PASS
LTE Band 12	5	QPSK	23155	25RB#0	22.59	24.39	PASS
LTE Band 12	5	16QAM	23035	1RB#0	22.43	21.94	PASS



LTE Band 12	5	16QAM	23035	1RB#13	22.24	21.75	PASS
LTE Band 12	5	16QAM	23035	1RB#24	22.21	21.72	PASS
LTE Band 12	5	16QAM	23035	12RB#0	21.61	21.12	PASS
LTE Band 12	5	16QAM	23035	12RB#6	21.50	21.01	PASS
LTE Band 12	5	16QAM	23035	12RB#13	21.46	20.97	PASS
LTE Band 12	5	16QAM	23035	25RB#0	21.55	21.06	PASS
LTE Band 12	5	16QAM	23095	1RB#0	22.26	23.37	PASS
LTE Band 12	5	16QAM	23095	1RB#13	22.39	23.50	PASS
LTE Band 12	5	16QAM	23095	1RB#24	22.19	23.30	PASS
LTE Band 12	5	16QAM	23095	12RB#0	21.40	22.51	PASS
LTE Band 12	5	16QAM	23095	12RB#6	21.50	22.61	PASS
LTE Band 12	5	16QAM	23095	12RB#13	21.49	22.60	PASS
LTE Band 12	5	16QAM	23095	25RB#0	21.49	22.60	PASS
LTE Band 12	5	16QAM	23155	1RB#0	22.07	23.87	PASS
LTE Band 12	5	16QAM	23155	1RB#13	22.21	24.01	PASS
LTE Band 12	5	16QAM	23155	1RB#24	22.32	24.12	PASS
LTE Band 12	5	16QAM	23155	12RB#0	21.42	23.22	PASS
LTE Band 12	5	16QAM	23155	12RB#6	21.56	23.36	PASS
LTE Band 12	5	16QAM	23155	12RB#13	21.42	23.22	PASS
LTE Band 12	5	16QAM	23155	25RB#0	21.52	23.32	PASS
LTE Band 12	10	QPSK	23060	1RB#0	23.28	22.79	PASS
LTE Band 12	10	QPSK	23060	1RB#25	23.61	23.12	PASS
LTE Band 12	10	QPSK	23060	1RB#49	23.35	22.86	PASS
LTE Band 12	10	QPSK	23060	25RB#0	22.39	21.90	PASS
LTE Band 12	10	QPSK	23060	25RB#13	22.42	21.93	PASS
LTE Band 12	10	QPSK	23060	25RB#25	22.49	22.00	PASS
LTE Band 12	10	QPSK	23060	50RB#0	22.39	21.90	PASS
LTE Band 12	10	QPSK	23095	1RB#0	23.28	24.39	PASS



LTE Band 12	10	QPSK	23095	1RB#25	23.47	24.58	PASS
LTE Band 12	10	QPSK	23095	1RB#49	23.19	24.30	PASS
LTE Band 12	10	QPSK	23095	25RB#0	22.49	23.60	PASS
LTE Band 12	10	QPSK	23095	25RB#13	22.40	23.51	PASS
LTE Band 12	10	QPSK	23095	25RB#25	22.31	23.42	PASS
LTE Band 12	10	QPSK	23095	50RB#0	22.45	23.56	PASS
LTE Band 12	10	QPSK	23130	1RB#0	23.47	25.27	PASS
LTE Band 12	10	QPSK	23130	1RB#25	23.41	25.21	PASS
LTE Band 12	10	QPSK	23130	1RB#49	23.29	25.09	PASS
LTE Band 12	10	QPSK	23130	25RB#0	22.54	24.34	PASS
LTE Band 12	10	QPSK	23130	25RB#13	22.48	24.28	PASS
LTE Band 12	10	QPSK	23130	25RB#25	22.52	24.32	PASS
LTE Band 12	10	QPSK	23130	50RB#0	22.55	24.35	PASS
LTE Band 12	10	16QAM	23060	1RB#0	22.41	21.92	PASS
LTE Band 12	10	16QAM	23060	1RB#25	22.20	21.71	PASS
LTE Band 12	10	16QAM	23060	1RB#49	22.19	21.70	PASS
LTE Band 12	10	16QAM	23060	25RB#0	21.58	21.09	PASS
LTE Band 12	10	16QAM	23060	25RB#13	21.47	20.98	PASS
LTE Band 12	10	16QAM	23060	25RB#25	21.43	20.94	PASS
LTE Band 12	10	16QAM	23060	50RB#0	21.53	21.04	PASS
LTE Band 12	10	16QAM	23095	1RB#0	22.22	23.33	PASS
LTE Band 12	10	16QAM	23095	1RB#25	22.37	23.48	PASS
LTE Band 12	10	16QAM	23095	1RB#49	22.16	23.27	PASS
LTE Band 12	10	16QAM	23095	25RB#0	21.36	22.47	PASS
LTE Band 12	10	16QAM	23095	25RB#13	21.48	22.59	PASS
LTE Band 12	10	16QAM	23095	25RB#25	21.44	22.55	PASS
LTE Band 12	10	16QAM	23095	50RB#0	21.45	22.56	PASS
LTE Band 12	10	16QAM	23130	1RB#0	22.02	23.82	PASS



LTE Band 12	10	16QAM	23130	1RB#25	22.17	23.97	PASS
LTE Band 12	10	16QAM	23130	1RB#49	22.30	24.10	PASS
LTE Band 12	10	16QAM	23130	25RB#0	21.39	23.19	PASS
LTE Band 12	10	16QAM	23130	25RB#13	21.53	23.33	PASS
LTE Band 12	10	16QAM	23130	25RB#25	21.38	23.18	PASS
LTE Band 12	10	16QAM	23130	50RB#0	21.49	23.29	PASS

Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Maximum Output Power(dBm)	EIRP (dBm)	Verdict
LTE Band 66	1.4	QPSK	131979	1RB#0	22.92	24.86	PASS
LTE Band 66	1.4	QPSK	131979	1RB#2	23.02	24.96	PASS
LTE Band 66	1.4	QPSK	131979	1RB#5	22.95	24.89	PASS
LTE Band 66	1.4	QPSK	131979	3RB#0	22.01	23.95	PASS
LTE Band 66	1.4	QPSK	131979	3RB#2	21.90	23.84	PASS
LTE Band 66	1.4	QPSK	131979	3RB#3	22.10	24.04	PASS
LTE Band 66	1.4	QPSK	131979	6RB#0	22.03	23.97	PASS
LTE Band 66	1.4	QPSK	132322	1RB#0	22.99	24.99	PASS
LTE Band 66	1.4	QPSK	132322	1RB#2	23.08	25.08	PASS
LTE Band 66	1.4	QPSK	132322	1RB#5	23.13	25.13	PASS
LTE Band 66	1.4	QPSK	132322	3RB#0	22.24	24.24	PASS
LTE Band 66	1.4	QPSK	132322	3RB#2	22.21	24.21	PASS
LTE Band 66	1.4	QPSK	132322	3RB#3	22.02	24.02	PASS
LTE Band 66	1.4	QPSK	132322	6RB#0	22.29	24.29	PASS
LTE Band 66	1.4	QPSK	132665	1RB#0	23.15	24.12	PASS
LTE Band 66	1.4	QPSK	132665	1RB#2	23.36	24.33	PASS
LTE Band 66	1.4	QPSK	132665	1RB#5	23.23	24.20	PASS
LTE Band 66	1.4	QPSK	132665	3RB#0	22.16	23.13	PASS
LTE Band 66	1.4	QPSK	132665	3RB#2	22.26	23.23	PASS
LTE Band 66	1.4	QPSK	132665	3RB#3	22.20	23.17	PASS
LTE Band 66	1.4	QPSK	132665	6RB#0	22.16	23.13	PASS
LTE Band 66	1.4	16QAM	131979	1RB#0	21.92	23.86	PASS
LTE Band 66	1.4	16QAM	131979	1RB#2	22.13	24.07	PASS
LTE Band 66	1.4	16QAM	131979	1RB#5	22.15	24.09	PASS
LTE Band 66	1.4	16QAM	131979	3RB#0	21.12	23.06	PASS
LTE Band 66	1.4	16QAM	131979	3RB#2	21.09	23.03	PASS
LTE Band 66	1.4	16QAM	131979	3RB#3	21.18	23.12	PASS
LTE Band 66	1.4	16QAM	131979	6RB#0	21.08	23.02	PASS
LTE Band 66	1.4	16QAM	132322	1RB#0	22.08	24.08	PASS
LTE Band 66	1.4	16QAM	132322	1RB#2	22.22	24.22	PASS



LTE Band 66	1.4	16QAM	132322	1RB#5	22.31	24.31	PASS
LTE Band 66	1.4	16QAM	132322	3RB#0	21.27	23.27	PASS
LTE Band 66	1.4	16QAM	132322	3RB#2	21.19	23.19	PASS
LTE Band 66	1.4	16QAM	132322	3RB#3	21.23	23.23	PASS
LTE Band 66	1.4	16QAM	132322	6RB#0	21.34	23.34	PASS
LTE Band 66	1.4	16QAM	132665	1RB#0	22.20	23.17	PASS
LTE Band 66	1.4	16QAM	132665	1RB#2	22.03	23.00	PASS
LTE Band 66	1.4	16QAM	132665	1RB#5	22.12	23.09	PASS
LTE Band 66	1.4	16QAM	132665	3RB#0	21.22	22.19	PASS
LTE Band 66	1.4	16QAM	132665	3RB#2	21.22	22.19	PASS
LTE Band 66	1.4	16QAM	132665	3RB#3	21.24	22.21	PASS
LTE Band 66	1.4	16QAM	132665	6RB#0	21.32	22.29	PASS
LTE Band 66	3	QPSK	131987	1RB#0	22.94	24.88	PASS
LTE Band 66	3	QPSK	131987	1RB#7	23.05	24.99	PASS
LTE Band 66	3	QPSK	131987	1RB#14	22.98	24.92	PASS
LTE Band 66	3	QPSK	131987	8RB#0	22.09	24.03	PASS
LTE Band 66	3	QPSK	131987	8RB#4	22.00	23.94	PASS
LTE Band 66	3	QPSK	131987	8RB#7	22.18	24.12	PASS
LTE Band 66	3	QPSK	131987	15RB#0	22.06	24.00	PASS
LTE Band 66	3	QPSK	132322	1RB#0	23.03	25.03	PASS
LTE Band 66	3	QPSK	132322	1RB#7	23.13	25.13	PASS
LTE Band 66	3	QPSK	132322	1RB#14	23.18	25.18	PASS
LTE Band 66	3	QPSK	132322	8RB#0	22.34	24.34	PASS
LTE Band 66	3	QPSK	132322	8RB#4	22.29	24.29	PASS
LTE Band 66	3	QPSK	132322	8RB#7	22.11	24.11	PASS
LTE Band 66	3	QPSK	132322	15RB#0	22.33	24.33	PASS
LTE Band 66	3	QPSK	132657	1RB#0	23.18	24.15	PASS
LTE Band 66	3	QPSK	132657	1RB#7	23.40	24.37	PASS
LTE Band 66	3	QPSK	132657	1RB#14	23.27	24.24	PASS
LTE Band 66	3	QPSK	132657	8RB#0	22.27	23.24	PASS
LTE Band 66	3	QPSK	132657	8RB#4	22.36	23.33	PASS
LTE Band 66	3	QPSK	132657	8RB#7	22.28	23.25	PASS
LTE Band 66	3	QPSK	132657	15RB#0	22.19	23.16	PASS
LTE Band 66	3	16QAM	131987	1RB#0	21.95	23.89	PASS
LTE Band 66	3	16QAM	131987	1RB#7	22.16	24.10	PASS
LTE Band 66	3	16QAM	131987	1RB#14	22.17	24.11	PASS
LTE Band 66	3	16QAM	131987	8RB#0	21.21	23.15	PASS
LTE Band 66	3	16QAM	131987	8RB#4	21.18	23.12	PASS
LTE Band 66	3	16QAM	131987	8RB#7	21.26	23.20	PASS
LTE Band 66	3	16QAM	131987	15RB#0	21.11	23.05	PASS
LTE Band 66	3	16QAM	132322	1RB#0	22.10	24.10	PASS
LTE Band 66	3	16QAM	132322	1RB#7	22.27	24.27	PASS
LTE Band 66	3	16QAM	132322	1RB#14	22.35	24.35	PASS



LTE Band 66	3	16QAM	132322	8RB#0	21.38	23.38	PASS
LTE Band 66	3	16QAM	132322	8RB#4	21.30	23.30	PASS
LTE Band 66	3	16QAM	132322	8RB#7	21.33	23.33	PASS
LTE Band 66	3	16QAM	132322	15RB#0	21.38	23.38	PASS
LTE Band 66	3	16QAM	132657	1RB#0	22.23	23.20	PASS
LTE Band 66	3	16QAM	132657	1RB#7	22.07	23.04	PASS
LTE Band 66	3	16QAM	132657	1RB#14	22.15	23.12	PASS
LTE Band 66	3	16QAM	132657	8RB#0	21.32	22.29	PASS
LTE Band 66	3	16QAM	132657	8RB#4	21.32	22.29	PASS
LTE Band 66	3	16QAM	132657	8RB#7	21.35	22.32	PASS
LTE Band 66	3	16QAM	132657	15RB#0	21.35	22.32	PASS
LTE Band 66	5	QPSK	131997	1RB#0	22.98	24.92	PASS
LTE Band 66	5	QPSK	131997	1RB#13	23.12	25.06	PASS
LTE Band 66	5	QPSK	131997	1RB#24	23.04	24.98	PASS
LTE Band 66	5	QPSK	131997	12RB#0	22.16	24.10	PASS
LTE Band 66	5	QPSK	131997	12RB#6	22.05	23.99	PASS
LTE Band 66	5	QPSK	131997	12RB#13	22.25	24.19	PASS
LTE Band 66	5	QPSK	131997	25RB#0	22.14	24.08	PASS
LTE Band 66	5	QPSK	132322	1RB#0	23.15	25.15	PASS
LTE Band 66	5	QPSK	132322	1RB#13	23.18	25.18	PASS
LTE Band 66	5	QPSK	132322	1RB#24	23.25	25.25	PASS
LTE Band 66	5	QPSK	132322	12RB#0	22.38	24.38	PASS
LTE Band 66	5	QPSK	132322	12RB#6	22.34	24.34	PASS
LTE Band 66	5	QPSK	132322	12RB#13	22.21	24.21	PASS
LTE Band 66	5	QPSK	132322	25RB#0	22.42	24.42	PASS
LTE Band 66	5	QPSK	132647	1RB#0	23.23	24.20	PASS
LTE Band 66	5	QPSK	132647	1RB#13	23.47	24.44	PASS
LTE Band 66	5	QPSK	132647	1RB#24	23.36	24.33	PASS
LTE Band 66	5	QPSK	132647	12RB#0	22.33	23.30	PASS
LTE Band 66	5	QPSK	132647	12RB#6	22.40	23.37	PASS
LTE Band 66	5	QPSK	132647	12RB#13	22.28	23.25	PASS
LTE Band 66	5	QPSK	132647	25RB#0	22.20	23.17	PASS
LTE Band 66	5	16QAM	131997	1RB#0	21.97	23.91	PASS
LTE Band 66	5	16QAM	131997	1RB#13	22.18	24.12	PASS
LTE Band 66	5	16QAM	131997	1RB#24	22.19	24.13	PASS
LTE Band 66	5	16QAM	131997	12RB#0	21.25	23.19	PASS
LTE Band 66	5	16QAM	131997	12RB#6	21.20	23.14	PASS
LTE Band 66	5	16QAM	131997	12RB#13	21.31	23.25	PASS
LTE Band 66	5	16QAM	131997	25RB#0	21.14	23.08	PASS
LTE Band 66	5	16QAM	132322	1RB#0	22.12	24.12	PASS
LTE Band 66	5	16QAM	132322	1RB#13	22.34	24.34	PASS
LTE Band 66	5	16QAM	132322	1RB#24	22.42	24.42	PASS
LTE Band 66	5	16QAM	132322	12RB#0	21.42	23.42	PASS



LTE Band 66	5	16QAM	132322	12RB#6	21.34	23.34	PASS
LTE Band 66	5	16QAM	132322	12RB#13	21.33	23.33	PASS
LTE Band 66	5	16QAM	132322	25RB#0	21.39	23.39	PASS
LTE Band 66	5	16QAM	132647	1RB#0	22.27	23.24	PASS
LTE Band 66	5	16QAM	132647	1RB#13	22.11	23.08	PASS
LTE Band 66	5	16QAM	132647	1RB#24	22.18	23.15	PASS
LTE Band 66	5	16QAM	132647	12RB#0	21.37	22.34	PASS
LTE Band 66	5	16QAM	132647	12RB#6	21.37	22.34	PASS
LTE Band 66	5	16QAM	132647	12RB#13	21.38	22.35	PASS
LTE Band 66	5	16QAM	132647	25RB#0	21.36	22.33	PASS
LTE Band 66	10	QPSK	132022	1RB#0	22.93	24.87	PASS
LTE Band 66	10	QPSK	132022	1RB#25	23.06	25.00	PASS
LTE Band 66	10	QPSK	132022	1RB#49	22.97	24.91	PASS
LTE Band 66	10	QPSK	132022	25RB#0	22.09	24.03	PASS
LTE Band 66	10	QPSK	132022	25RB#13	22.01	23.95	PASS
LTE Band 66	10	QPSK	132022	25RB#25	22.18	24.12	PASS
LTE Band 66	10	QPSK	132022	50RB#0	22.12	24.06	PASS
LTE Band 66	10	QPSK	132322	1RB#0	23.02	25.02	PASS
LTE Band 66	10	QPSK	132322	1RB#25	23.14	25.14	PASS
LTE Band 66	10	QPSK	132322	1RB#49	23.17	25.17	PASS
LTE Band 66	10	QPSK	132322	25RB#0	22.34	24.34	PASS
LTE Band 66	10	QPSK	132322	25RB#13	22.30	24.30	PASS
LTE Band 66	10	QPSK	132322	25RB#25	22.13	24.13	PASS
LTE Band 66	10	QPSK	132322	50RB#0	22.34	24.34	PASS
LTE Band 66	10	QPSK	132622	1RB#0	23.17	24.14	PASS
LTE Band 66	10	QPSK	132622	1RB#25	23.41	24.38	PASS
LTE Band 66	10	QPSK	132622	1RB#49	23.26	24.23	PASS
LTE Band 66	10	QPSK	132622	25RB#0	22.27	23.24	PASS
LTE Band 66	10	QPSK	132622	25RB#13	22.35	23.32	PASS
LTE Band 66	10	QPSK	132622	25RB#25	22.29	23.26	PASS
LTE Band 66	10	QPSK	132622	50RB#0	22.21	23.18	PASS
LTE Band 66	10	16QAM	132022	1RB#0	21.94	23.88	PASS
LTE Band 66	10	16QAM	132022	1RB#25	22.16	24.10	PASS
LTE Band 66	10	16QAM	132022	1RB#49	22.17	24.11	PASS
LTE Band 66	10	16QAM	132022	25RB#0	21.22	23.16	PASS
LTE Band 66	10	16QAM	132022	25RB#13	21.17	23.11	PASS
LTE Band 66	10	16QAM	132022	25RB#25	21.26	23.20	PASS
LTE Band 66	10	16QAM	132022	50RB#0	21.12	23.06	PASS
LTE Band 66	10	16QAM	132322	1RB#0	22.09	24.09	PASS
LTE Band 66	10	16QAM	132322	1RB#25	22.29	24.29	PASS
LTE Band 66	10	16QAM	132322	1RB#49	22.35	24.35	PASS
LTE Band 66	10	16QAM	132322	25RB#0	21.39	23.39	PASS
LTE Band 66	10	16QAM	132322	25RB#13	21.29	23.29	PASS



LTE Band 66	10	16QAM	132322	25RB#25	21.33	23.33	PASS
LTE Band 66	10	16QAM	132322	50RB#0	21.39	23.39	PASS
LTE Band 66	10	16QAM	132622	1RB#0	22.22	23.19	PASS
LTE Band 66	10	16QAM	132622	1RB#25	22.07	23.04	PASS
LTE Band 66	10	16QAM	132622	1RB#49	22.14	23.11	PASS
LTE Band 66	10	16QAM	132622	25RB#0	21.33	22.30	PASS
LTE Band 66	10	16QAM	132622	25RB#13	21.31	22.28	PASS
LTE Band 66	10	16QAM	132622	25RB#25	21.35	22.32	PASS
LTE Band 66	10	16QAM	132622	50RB#0	21.34	22.31	PASS
LTE Band 66	15	QPSK	132047	1RB#0	22.92	24.86	PASS
LTE Band 66	15	QPSK	132047	1RB#38	23.04	24.98	PASS
LTE Band 66	15	QPSK	132047	1RB#74	22.94	24.88	PASS
LTE Band 66	15	QPSK	132047	36RB#0	22.07	24.01	PASS
LTE Band 66	15	QPSK	132047	36RB#18	21.98	23.92	PASS
LTE Band 66	15	QPSK	132047	36RB#39	22.15	24.09	PASS
LTE Band 66	15	QPSK	132047	75RB#0	22.10	24.04	PASS
LTE Band 66	15	QPSK	132322	1RB#0	22.98	24.98	PASS
LTE Band 66	15	QPSK	132322	1RB#38	23.13	25.13	PASS
LTE Band 66	15	QPSK	132322	1RB#74	23.12	25.12	PASS
LTE Band 66	15	QPSK	132322	36RB#0	22.30	24.30	PASS
LTE Band 66	15	QPSK	132322	36RB#18	22.25	24.25	PASS
LTE Band 66	15	QPSK	132322	36RB#39	22.10	24.10	PASS
LTE Band 66	15	QPSK	132322	75RB#0	22.30	24.30	PASS
LTE Band 66	15	QPSK	132597	1RB#0	23.15	24.12	PASS
LTE Band 66	15	QPSK	132597	1RB#38	23.38	24.35	PASS
LTE Band 66	15	QPSK	132597	1RB#74	23.22	24.19	PASS
LTE Band 66	15	QPSK	132597	36RB#0	22.24	23.21	PASS
LTE Band 66	15	QPSK	132597	36RB#18	22.31	23.28	PASS
LTE Band 66	15	QPSK	132597	36RB#39	22.25	23.22	PASS
LTE Band 66	15	QPSK	132597	75RB#0	22.16	23.13	PASS
LTE Band 66	15	16QAM	132047	1RB#0	21.89	23.83	PASS
LTE Band 66	15	16QAM	132047	1RB#38	22.14	24.08	PASS
LTE Band 66	15	16QAM	132047	1RB#74	22.14	24.08	PASS
LTE Band 66	15	16QAM	132047	36RB#0	21.19	23.13	PASS
LTE Band 66	15	16QAM	132047	36RB#18	21.14	23.08	PASS
LTE Band 66	15	16QAM	132047	36RB#39	21.24	23.18	PASS
LTE Band 66	15	16QAM	132047	75RB#0	21.09	23.03	PASS
LTE Band 66	15	16QAM	132322	1RB#0	22.07	24.07	PASS
LTE Band 66	15	16QAM	132322	1RB#38	22.26	24.26	PASS
LTE Band 66	15	16QAM	132322	1RB#74	22.31	24.31	PASS
LTE Band 66	15	16QAM	132322	36RB#0	21.37	23.37	PASS
LTE Band 66	15	16QAM	132322	36RB#18	21.24	23.24	PASS
LTE Band 66	15	16QAM	132322	36RB#39	21.29	23.29	PASS



LTE Band 66	15	16QAM	132322	75RB#0	21.34	23.34	PASS
LTE Band 66	15	16QAM	132597	1RB#0	22.20	23.17	PASS
LTE Band 66	15	16QAM	132597	1RB#38	22.05	23.02	PASS
LTE Band 66	15	16QAM	132597	1RB#74	22.11	23.08	PASS
LTE Band 66	15	16QAM	132597	36RB#0	21.30	22.27	PASS
LTE Band 66	15	16QAM	132597	36RB#18	21.27	22.24	PASS
LTE Band 66	15	16QAM	132597	36RB#39	21.32	22.29	PASS
LTE Band 66	15	16QAM	132597	75RB#0	21.30	22.27	PASS
LTE Band 66	20	QPSK	132072	1RB#0	22.89	24.83	PASS
LTE Band 66	20	QPSK	132072	1RB#50	23.03	24.97	PASS
LTE Band 66	20	QPSK	132072	1RB#99	22.92	24.86	PASS
LTE Band 66	20	QPSK	132072	50RB#0	22.04	23.98	PASS
LTE Band 66	20	QPSK	132072	50RB#25	21.96	23.90	PASS
LTE Band 66	20	QPSK	132072	50RB#50	22.12	24.06	PASS
LTE Band 66	20	QPSK	132072	100RB#0	22.07	24.01	PASS
LTE Band 66	20	QPSK	132322	1RB#0	22.94	24.94	PASS
LTE Band 66	20	QPSK	132322	1RB#50	23.09	25.09	PASS
LTE Band 66	20	QPSK	132322	1RB#99	23.11	25.11	PASS
LTE Band 66	20	QPSK	132322	50RB#0	22.25	24.25	PASS
LTE Band 66	20	QPSK	132322	50RB#25	22.21	24.21	PASS
LTE Band 66	20	QPSK	132322	50RB#50	22.05	24.05	PASS
LTE Band 66	20	QPSK	132322	100RB#0	22.25	24.25	PASS
LTE Band 66	20	QPSK	132572	1RB#0	23.12	24.09	PASS
LTE Band 66	20	QPSK	132572	1RB#50	23.36	24.33	PASS
LTE Band 66	20	QPSK	132572	1RB#99	23.19	24.16	PASS
LTE Band 66	20	QPSK	132572	50RB#0	22.20	23.17	PASS
LTE Band 66	20	QPSK	132572	50RB#25	22.28	23.25	PASS
LTE Band 66	20	QPSK	132572	50RB#50	22.21	23.18	PASS
LTE Band 66	20	QPSK	132572	100RB#0	22.12	23.09	PASS
LTE Band 66	20	16QAM	132072	1RB#0	21.87	23.81	PASS
LTE Band 66	20	16QAM	132072	1RB#50	22.10	24.04	PASS
LTE Band 66	20	16QAM	132072	1RB#99	22.12	24.06	PASS
LTE Band 66	20	16QAM	132072	50RB#0	21.16	23.10	PASS
LTE Band 66	20	16QAM	132072	50RB#25	21.11	23.05	PASS
LTE Band 66	20	16QAM	132072	50RB#50	21.21	23.15	PASS
LTE Band 66	20	16QAM	132072	100RB#0	21.07	23.01	PASS
LTE Band 66	20	16QAM	132322	1RB#0	22.03	24.03	PASS
LTE Band 66	20	16QAM	132322	1RB#50	22.24	24.24	PASS
LTE Band 66	20	16QAM	132322	1RB#99	22.28	24.28	PASS
LTE Band 66	20	16QAM	132322	50RB#0	21.33	23.33	PASS
LTE Band 66	20	16QAM	132322	50RB#25	21.22	23.22	PASS
LTE Band 66	20	16QAM	132322	50RB#50	21.24	23.24	PASS
LTE Band 66	20	16QAM	132322	100RB#0	21.30	23.30	PASS



LTE Band 66	20	16QAM	132572	1RB#0	22.15	23.12	PASS
LTE Band 66	20	16QAM	132572	1RB#50	22.01	22.98	PASS
LTE Band 66	20	16QAM	132572	1RB#99	22.09	23.06	PASS
LTE Band 66	20	16QAM	132572	50RB#0	21.27	22.24	PASS
LTE Band 66	20	16QAM	132572	50RB#25	21.24	22.21	PASS
LTE Band 66	20	16QAM	132572	50RB#50	21.28	22.25	PASS
LTE Band 66	20	16QAM	132572	100RB#0	21.27	22.24	PASS

Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Maximum Output Power(dBm)	ERP (dBm)	Verdict
LTE Band 71	5	QPSK	133147	1RB#0	22.97	22.48	PASS
LTE Band 71	5	QPSK	133147	1RB#13	23.22	22.73	PASS
LTE Band 71	5	QPSK	133147	1RB#24	23.23	22.74	PASS
LTE Band 71	5	QPSK	133147	12RB#0	22.35	21.86	PASS
LTE Band 71	5	QPSK	133147	12RB#6	22.24	21.75	PASS
LTE Band 71	5	QPSK	133147	12RB#13	22.15	21.66	PASS
LTE Band 71	5	QPSK	133147	25RB#0	22.10	21.61	PASS
LTE Band 71	5	QPSK	133297	1RB#0	23.11	22.62	PASS
LTE Band 71	5	QPSK	133297	1RB#13	23.36	22.87	PASS
LTE Band 71	5	QPSK	133297	1RB#24	23.03	22.54	PASS
LTE Band 71	5	QPSK	133297	12RB#0	22.28	21.79	PASS
LTE Band 71	5	QPSK	133297	12RB#6	22.14	21.65	PASS
LTE Band 71	5	QPSK	133297	12RB#13	22.22	21.73	PASS
LTE Band 71	5	QPSK	133297	25RB#0	22.14	21.65	PASS
LTE Band 71	5	QPSK	133447	1RB#0	22.97	22.48	PASS
LTE Band 71	5	QPSK	133447	1RB#13	23.35	22.86	PASS
LTE Band 71	5	QPSK	133447	1RB#24	23.04	22.55	PASS
LTE Band 71	5	QPSK	133447	12RB#0	22.18	21.69	PASS
LTE Band 71	5	QPSK	133447	12RB#6	22.23	21.74	PASS
LTE Band 71	5	QPSK	133447	12RB#13	22.07	21.58	PASS
LTE Band 71	5	QPSK	133447	25RB#0	22.06	21.57	PASS
LTE Band 71	5	16QAM	133147	1RB#0	22.01	21.52	PASS
LTE Band 71	5	16QAM	133147	1RB#13	22.17	21.68	PASS
LTE Band 71	5	16QAM	133147	1RB#24	21.84	21.35	PASS
LTE Band 71	5	16QAM	133147	12RB#0	21.24	20.75	PASS
LTE Band 71	5	16QAM	133147	12RB#6	21.32	20.83	PASS
LTE Band 71	5	16QAM	133147	12RB#13	21.18	20.69	PASS
LTE Band 71	5	16QAM	133147	25RB#0	21.12	20.63	PASS
LTE Band 71	5	16QAM	133297	1RB#0	22.07	21.58	PASS
LTE Band 71	5	16QAM	133297	1RB#13	22.14	21.65	PASS
LTE Band 71	5	16QAM	133297	1RB#24	21.87	21.38	PASS
LTE Band 71	5	16QAM	133297	12RB#0	21.04	20.55	PASS



LTE Band 71	5	16QAM	133297	12RB#6	21.10	20.61	PASS
LTE Band 71	5	16QAM	133297	12RB#13	21.15	20.66	PASS
LTE Band 71	5	16QAM	133297	25RB#0	21.02	20.53	PASS
LTE Band 71	5	16QAM	133447	1RB#0	22.19	21.70	PASS
LTE Band 71	5	16QAM	133447	1RB#13	21.98	21.49	PASS
LTE Band 71	5	16QAM	133447	1RB#24	21.88	21.39	PASS
LTE Band 71	5	16QAM	133447	12RB#0	21.06	20.57	PASS
LTE Band 71	5	16QAM	133447	12RB#6	21.08	20.59	PASS
LTE Band 71	5	16QAM	133447	12RB#13	21.10	20.61	PASS
LTE Band 71	5	16QAM	133447	25RB#0	21.10	20.61	PASS
LTE Band 71	10	QPSK	133172	1RB#0	22.92	22.43	PASS
LTE Band 71	10	QPSK	133172	1RB#25	23.16	22.67	PASS
LTE Band 71	10	QPSK	133172	1RB#49	23.16	22.67	PASS
LTE Band 71	10	QPSK	133172	25RB#0	22.28	21.79	PASS
LTE Band 71	10	QPSK	133172	25RB#13	22.20	21.71	PASS
LTE Band 71	10	QPSK	133172	25RB#25	22.08	21.59	PASS
LTE Band 71	10	QPSK	133172	50RB#0	22.08	21.59	PASS
LTE Band 71	10	QPSK	133297	1RB#0	22.98	22.49	PASS
LTE Band 71	10	QPSK	133297	1RB#25	23.32	22.83	PASS
LTE Band 71	10	QPSK	133297	1RB#49	22.95	22.46	PASS
LTE Band 71	10	QPSK	133297	25RB#0	22.24	21.75	PASS
LTE Band 71	10	QPSK	133297	25RB#13	22.10	21.61	PASS
LTE Band 71	10	QPSK	133297	25RB#25	22.14	21.65	PASS
LTE Band 71	10	QPSK	133297	50RB#0	22.06	21.57	PASS
LTE Band 71	10	QPSK	133422	1RB#0	22.91	22.42	PASS
LTE Band 71	10	QPSK	133422	1RB#25	23.29	22.80	PASS
LTE Band 71	10	QPSK	133422	1RB#49	22.94	22.45	PASS
LTE Band 71	10	QPSK	133422	25RB#0	22.12	21.63	PASS
LTE Band 71	10	QPSK	133422	25RB#13	22.18	21.69	PASS
LTE Band 71	10	QPSK	133422	25RB#25	22.08	21.59	PASS
LTE Band 71	10	QPSK	133422	50RB#0	22.07	21.58	PASS
LTE Band 71	10	16QAM	133172	1RB#0	21.98	21.49	PASS
LTE Band 71	10	16QAM	133172	1RB#25	22.15	21.66	PASS
LTE Band 71	10	16QAM	133172	1RB#49	21.82	21.33	PASS
LTE Band 71	10	16QAM	133172	25RB#0	21.21	20.72	PASS
LTE Band 71	10	16QAM	133172	25RB#13	21.29	20.80	PASS
LTE Band 71	10	16QAM	133172	25RB#25	21.13	20.64	PASS
LTE Band 71	10	16QAM	133172	50RB#0	21.10	20.61	PASS
LTE Band 71	10	16QAM	133297	1RB#0	22.04	21.55	PASS
LTE Band 71	10	16QAM	133297	1RB#25	22.09	21.60	PASS
LTE Band 71	10	16QAM	133297	1RB#49	21.80	21.31	PASS
LTE Band 71	10	16QAM	133297	25RB#0	21.01	20.52	PASS
LTE Band 71	10	16QAM	133297	25RB#13	21.05	20.56	PASS



LTE Band 71	10	16QAM	133297	25RB#25	21.15	20.66	PASS
LTE Band 71	10	16QAM	133297	50RB#0	21.02	20.53	PASS
LTE Band 71	10	16QAM	133422	1RB#0	22.14	21.65	PASS
LTE Band 71	10	16QAM	133422	1RB#25	21.94	21.45	PASS
LTE Band 71	10	16QAM	133422	1RB#49	21.84	21.35	PASS
LTE Band 71	10	16QAM	133422	25RB#0	21.02	20.53	PASS
LTE Band 71	10	16QAM	133422	25RB#13	21.02	20.53	PASS
LTE Band 71	10	16QAM	133422	25RB#25	21.07	20.58	PASS
LTE Band 71	10	16QAM	133422	50RB#0	21.08	20.59	PASS
LTE Band 71	15	QPSK	133197	1RB#0	22.91	22.42	PASS
LTE Band 71	15	QPSK	133197	1RB#38	23.14	22.65	PASS
LTE Band 71	15	QPSK	133197	1RB#74	23.13	22.64	PASS
LTE Band 71	15	QPSK	133197	36RB#0	22.26	21.77	PASS
LTE Band 71	15	QPSK	133197	36RB#18	22.17	21.68	PASS
LTE Band 71	15	QPSK	133197	36RB#39	22.05	21.56	PASS
LTE Band 71	15	QPSK	133197	75RB#0	22.06	21.57	PASS
LTE Band 71	15	QPSK	133297	1RB#0	22.94	22.45	PASS
LTE Band 71	15	QPSK	133297	1RB#38	23.31	22.82	PASS
LTE Band 71	15	QPSK	133297	1RB#74	22.90	22.41	PASS
LTE Band 71	15	QPSK	133297	36RB#0	22.20	21.71	PASS
LTE Band 71	15	QPSK	133297	36RB#18	22.05	21.56	PASS
LTE Band 71	15	QPSK	133297	36RB#39	22.11	21.62	PASS
LTE Band 71	15	QPSK	133297	75RB#0	22.02	21.53	PASS
LTE Band 71	15	QPSK	133397	1RB#0	22.89	22.40	PASS
LTE Band 71	15	QPSK	133397	1RB#38	23.26	22.77	PASS
LTE Band 71	15	QPSK	133397	1RB#74	22.90	22.41	PASS
LTE Band 71	15	QPSK	133397	36RB#0	22.09	21.60	PASS
LTE Band 71	15	QPSK	133397	36RB#18	22.14	21.65	PASS
LTE Band 71	15	QPSK	133397	36RB#39	22.04	21.55	PASS
LTE Band 71	15	QPSK	133397	75RB#0	22.02	21.53	PASS
LTE Band 71	15	16QAM	133197	1RB#0	21.93	21.44	PASS
LTE Band 71	15	16QAM	133197	1RB#38	22.13	21.64	PASS
LTE Band 71	15	16QAM	133197	1RB#74	21.79	21.30	PASS
LTE Band 71	15	16QAM	133197	36RB#0	21.18	20.69	PASS
LTE Band 71	15	16QAM	133197	36RB#18	21.26	20.77	PASS
LTE Band 71	15	16QAM	133197	36RB#39	21.11	20.62	PASS
LTE Band 71	15	16QAM	133197	75RB#0	21.07	20.58	PASS
LTE Band 71	15	16QAM	133297	1RB#0	22.02	21.53	PASS
LTE Band 71	15	16QAM	133297	1RB#38	22.06	21.57	PASS
LTE Band 71	15	16QAM	133297	1RB#74	21.76	21.27	PASS
LTE Band 71	15	16QAM	133297	36RB#0	20.99	20.50	PASS
LTE Band 71	15	16QAM	133297	36RB#18	21.00	20.51	PASS
LTE Band 71	15	16QAM	133297	36RB#39	21.11	20.62	PASS



LTE Band 71	15	16QAM	133297	75RB#0	20.97	20.48	PASS
LTE Band 71	15	16QAM	133397	1RB#0	22.12	21.63	PASS
LTE Band 71	15	16QAM	133397	1RB#38	21.92	21.43	PASS
LTE Band 71	15	16QAM	133397	1RB#74	21.81	21.32	PASS
LTE Band 71	15	16QAM	133397	36RB#0	20.99	20.50	PASS
LTE Band 71	15	16QAM	133397	36RB#18	20.98	20.49	PASS
LTE Band 71	15	16QAM	133397	36RB#39	21.04	20.55	PASS
LTE Band 71	15	16QAM	133397	75RB#0	21.04	20.55	PASS
LTE Band 71	20	QPSK	133222	1RB#0	22.88	22.39	PASS
LTE Band 71	20	QPSK	133222	1RB#50	23.13	22.64	PASS
LTE Band 71	20	QPSK	133222	1RB#99	23.11	22.62	PASS
LTE Band 71	20	QPSK	133222	50RB#0	22.23	21.74	PASS
LTE Band 71	20	QPSK	133222	50RB#25	22.15	21.66	PASS
LTE Band 71	20	QPSK	133222	50RB#50	22.02	21.53	PASS
LTE Band 71	20	QPSK	133222	100RB#0	22.03	21.54	PASS
LTE Band 71	20	QPSK	133322	1RB#0	22.90	22.41	PASS
LTE Band 71	20	QPSK	133322	1RB#50	23.27	22.78	PASS
LTE Band 71	20	QPSK	133322	1RB#99	22.89	22.40	PASS
LTE Band 71	20	QPSK	133322	50RB#0	22.15	21.66	PASS
LTE Band 71	20	QPSK	133322	50RB#25	22.01	21.52	PASS
LTE Band 71	20	QPSK	133322	50RB#50	22.06	21.57	PASS
LTE Band 71	20	QPSK	133322	100RB#0	21.97	21.48	PASS
LTE Band 71	20	QPSK	133372	1RB#0	22.86	22.37	PASS
LTE Band 71	20	QPSK	133372	1RB#50	23.24	22.75	PASS
LTE Band 71	20	QPSK	133372	1RB#99	22.87	22.38	PASS
LTE Band 71	20	QPSK	133372	50RB#0	22.05	21.56	PASS
LTE Band 71	20	QPSK	133372	50RB#25	22.11	21.62	PASS
LTE Band 71	20	QPSK	133372	50RB#50	22.00	21.51	PASS
LTE Band 71	20	QPSK	133372	100RB#0	21.98	21.49	PASS
LTE Band 71	20	16QAM	133222	1RB#0	21.91	21.42	PASS
LTE Band 71	20	16QAM	133222	1RB#50	22.09	21.60	PASS
LTE Band 71	20	16QAM	133222	1RB#99	21.77	21.28	PASS
LTE Band 71	20	16QAM	133222	50RB#0	21.15	20.66	PASS
LTE Band 71	20	16QAM	133222	50RB#25	21.23	20.74	PASS
LTE Band 71	20	16QAM	133222	50RB#50	21.08	20.59	PASS
LTE Band 71	20	16QAM	133222	100RB#0	21.05	20.56	PASS
LTE Band 71	20	16QAM	133322	1RB#0	21.98	21.49	PASS
LTE Band 71	20	16QAM	133322	1RB#50	22.04	21.55	PASS
LTE Band 71	20	16QAM	133322	1RB#99	21.73	21.24	PASS
LTE Band 71	20	16QAM	133322	50RB#0	20.95	20.46	PASS
LTE Band 71	20	16QAM	133322	50RB#25	20.98	20.49	PASS
LTE Band 71	20	16QAM	133322	50RB#50	21.06	20.57	PASS
LTE Band 71	20	16QAM	133322	100RB#0	20.93	20.44	PASS



LTE Band 71	20	16QAM	133372	1RB#0	22.07	21.58	PASS
LTE Band 71	20	16QAM	133372	1RB#50	21.88	21.39	PASS
LTE Band 71	20	16QAM	133372	1RB#99	21.79	21.30	PASS
LTE Band 71	20	16QAM	133372	50RB#0	20.96	20.47	PASS
LTE Band 71	20	16QAM	133372	50RB#25	20.95	20.46	PASS
LTE Band 71	20	16QAM	133372	50RB#50	21.00	20.51	PASS
LTE Band 71	20	16QAM	133372	100RB#0	21.01	20.52	PASS

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 30 kHz, VBW is set to 91 kHz for LTE Band 4/12/66 (1.4MHz).

RBW is set to 62 kHz, VBW is set to 180 kHz for LTE Band 4/12/66 (3MHz).

RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4/12/66/71 (5MHz).

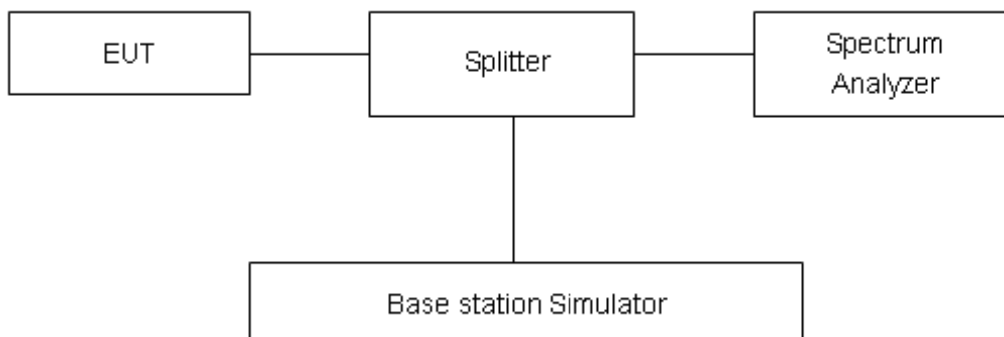
RBW is set to 200 kHz, VBW is set to 620 kHz for LTE Band 4/12/66/71 (10MHz).

RBW is set to 300 kHz, VBW is set to 910 kHz for LTE Band 4/66/71 (15MHz).

RBW is set to 430 kHz, VBW is set to 1.2 MHz for LTE Band 4/66/71 (20MHz).

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

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.0939	1.305
			20175	1732.5	1.0941	1.313
			20393	1754.3	1.1010	1.288
		3	19965	1711.5	2.7005	3.009
			20175	1732.5	2.7080	2.960
			20385	1753.5	2.7099	2.998
		5	19975	1712.5	4.5135	5.026
			20175	1732.5	4.5119	5.015
			20375	1752.5	4.5077	4.989
		10	20000	1715	8.9694	10.000
			20175	1732.5	8.9816	9.731
			20350	1750	8.9675	9.785
		15	20025	1717.5	13.4000	14.610
			20175	1732.5	13.4350	14.610
			20325	1747.5	13.4280	14.460
		20	20050	1720	17.9200	19.310
			20175	1732.5	17.9400	19.420
			20300	1745	17.9270	19.360
	16QAM	1.4	19957	1710.7	1.1021	1.319
			20175	1732.5	1.0951	1.279
			20393	1754.3	1.0955	1.301
		3	19965	1711.5	2.7105	3.021
			20175	1732.5	2.7023	3.002
			20385	1753.5	2.7024	2.965
		5	19975	1712.5	4.5226	4.984
			20175	1732.5	4.5096	4.986
			20375	1752.5	4.5171	4.986
		10	20000	1715	8.9605	9.823
			20175	1732.5	8.9655	9.814
			20350	1750	8.9783	9.768
		15	20025	1717.5	13.4040	14.570
			20175	1732.5	13.4640	14.600
			20325	1747.5	13.4130	14.560
		20	20050	1720	17.8870	9.300
			20175	1732.5	17.9600	19.390
			20300	1745	17.8550	19.320



LTE Band 12						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	23017	699.7	1.0909	1.276
			23095	707.5	1.1010	1.286
			23173	715.3	1.1033	1.285
		3	23025	700.5	2.6992	2.990
			23095	707.5	2.7072	2.971
			23165	714.5	2.7118	3.006
		5	23035	701.5	4.5037	4.978
			23095	707.5	4.5056	4.921
			23155	713.5	4.5151	4.928
		10	23060	704	8.9990	9.676
			23095	707.5	8.9806	9.851
			23130	711	8.9862	9.874
	16QAM	1.4	23017	699.7	1.0986	1.279
			23095	707.5	1.0922	1.270
			23173	715.3	1.0979	1.298
		3	23025	700.5	2.6907	2.963
			23095	707.5	2.6939	2.989
			23165	714.5	2.7081	2.996
		5	23035	701.5	4.4976	4.952
			23095	707.5	4.5060	4.998
			23155	713.5	4.5183	5.044
		10	23060	704	8.9343	9.809
			23095	707.5	8.9901	9.800
			23130	711	8.9678	9.726



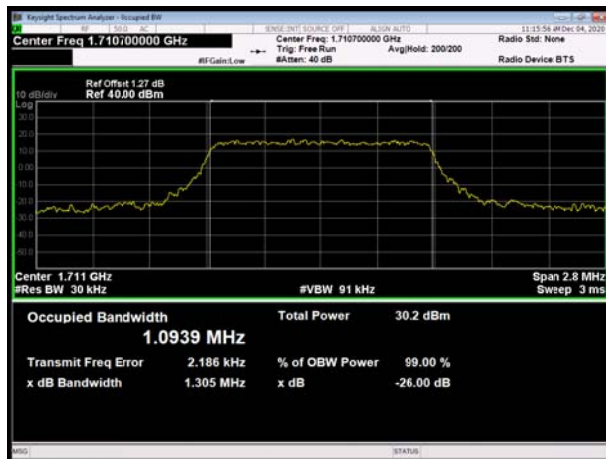
LTE Band 66						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	131979	1710.7	1.0915	1.327
			132322	1745	1.0992	1.285
			132665	1779.3	1.0966	1.296
		3	131987	1711.5	2.6997	2.989
			132322	1745	2.7093	3.003
			132657	1778.5	2.7017	2.981
		5	131997	1712.5	4.5271	4.956
			132322	1745	4.5180	4.961
			132647	1777.5	4.5145	5.017
		10	132022	1715	8.9767	10.030
			132322	1745	8.9435	9.778
			132622	1775	8.9563	9.817
		15	132047	1717.5	13.3970	14.610
			132322	1745	13.4240	14.400
			132597	1772.5	13.4160	14.670
		20	132072	1720	17.8900	19.200
			132322	1745	17.8550	19.250
			132572	1770	17.9010	19.440
	16QAM	1.4	131979	1710.7	1.1044	1.300
			132322	1745	1.0911	1.279
			132665	1779.3	1.0997	1.309
		3	131987	1711.5	2.6921	2.952
			132322	1745	2.6903	2.985
			132657	1778.5	2.6997	3.026
		5	131997	1712.5	4.5059	4.924
			132322	1745	4.5092	5.012
			132647	1777.5	4.5243	5.001
		10	132022	1715	8.9381	9.745
			132322	1745	8.9390	9.698
			132622	1775	8.9644	9.752
		15	132047	1717.5	13.4470	14.540
			132322	1745	13.3860	14.450
			132597	1772.5	13.4710	14.640
		20	132072	1720	17.9680	19.490
			132322	1745	17.8990	19.260
			132572	1770	17.9070	19.430



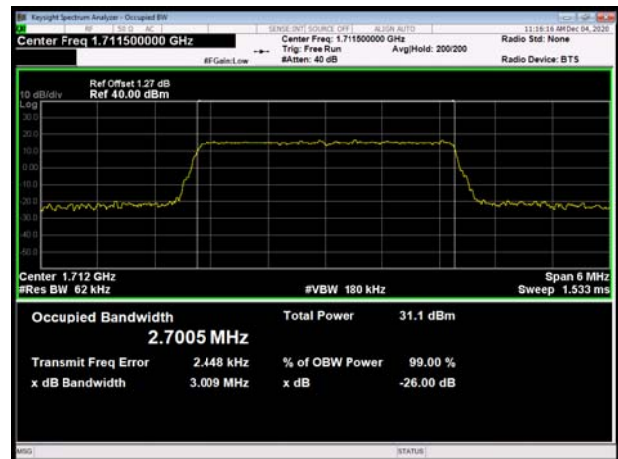
LTE Band 71						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	133147	665.5	4.5236	4.971
			133297	680.5	4.5050	4.948
			133447	695.5	4.5271	4.961
		10	133172	668	8.9485	9.784
			133297	680.5	8.9677	9.821
			133422	693	8.9951	9.772
		15	133197	670.5	13.4380	14.540
			133297	680.5	13.3930	14.560
			133397	690.5	13.4690	14.640
		20	133222	673	17.8920	19.470
			133322	683	17.8190	19.210
			133372	688	17.9270	19.320
	16QAM	5	133147	665.5	4.5082	4.956
			133297	680.5	4.5122	5.016
			133447	695.5	4.5077	4.947
		10	133172	668	8.9494	9.751
			133297	680.5	8.9593	9.699
			133422	693	8.9872	9.933
		15	133197	670.5	13.4470	14.520
			133297	680.5	13.4280	14.520
			133397	690.5	13.4420	14.600
		20	133222	673	17.8810	19.410
			133322	683	17.8070	19.480
			133372	688	17.8840	19.230



LTE Band 4 QPSK 1.4MHz CH-Low



LTE Band 4 QPSK 3MHz CH-Low



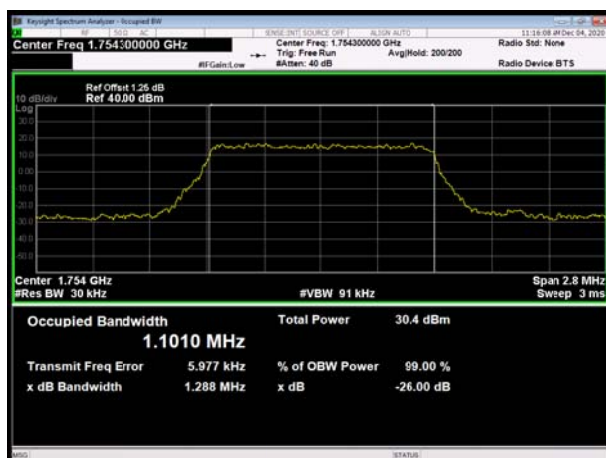
LTE Band 4 QPSK 1.4MHz CH-Middle



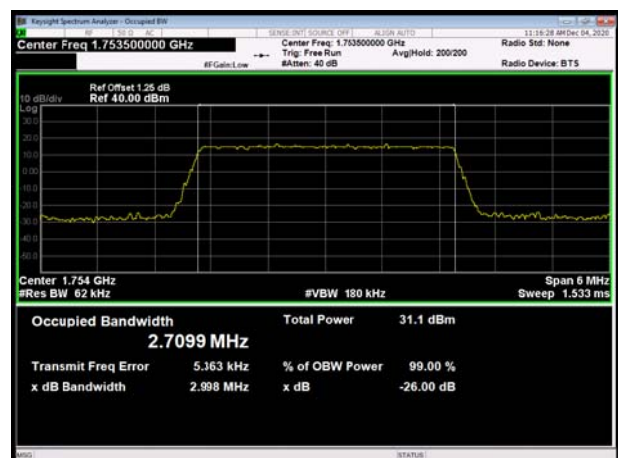
LTE Band 4 QPSK 3MHz CH-Middle



LTE Band 4 QPSK 1.4MHz CH-High

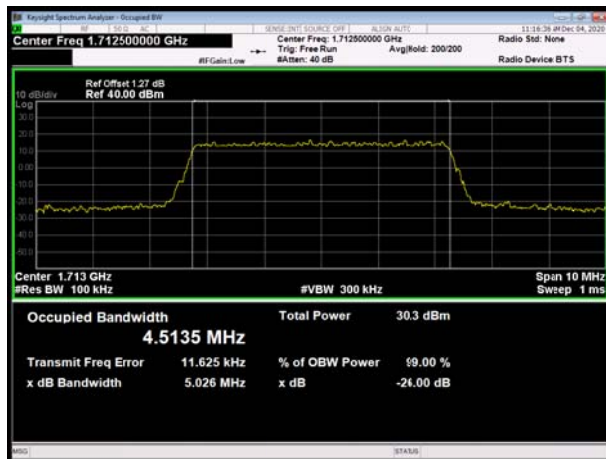


LTE Band 4 QPSK 3MHz CH-High





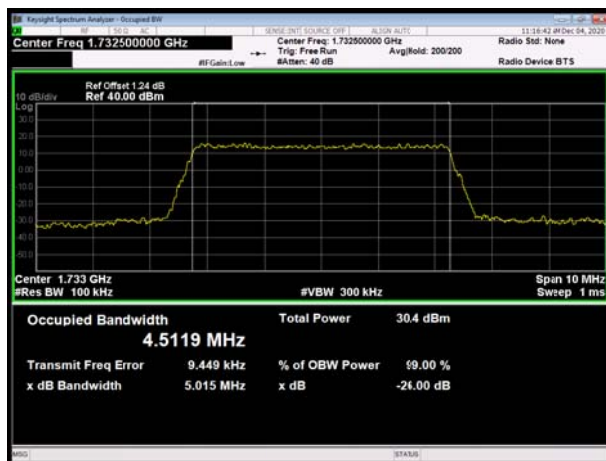
LTE Band 4 QPSK 5MHz CH-Low



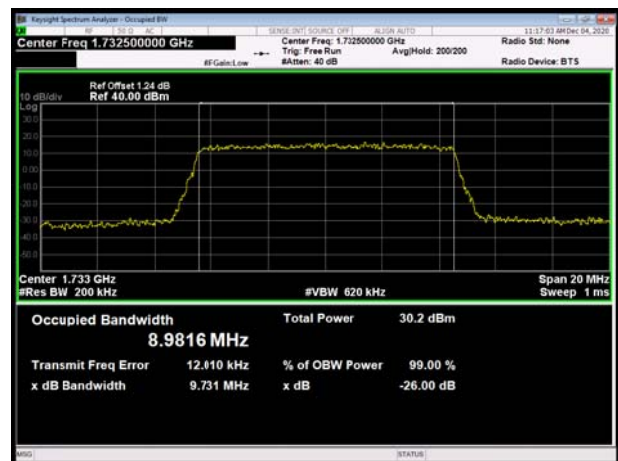
LTE Band 4 QPSK 10MHz CH-Low



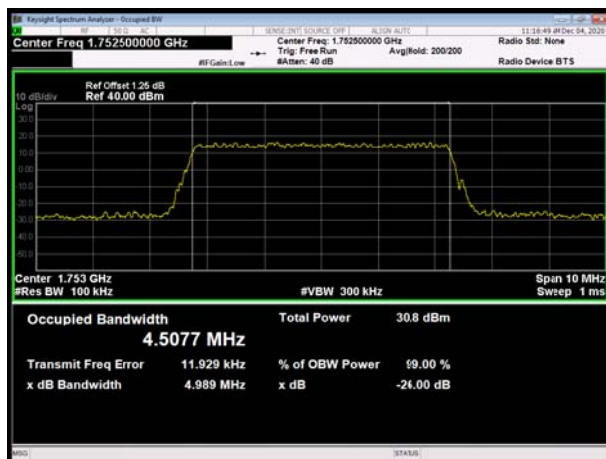
LTE Band 4 QPSK 5MHz CH-Middle



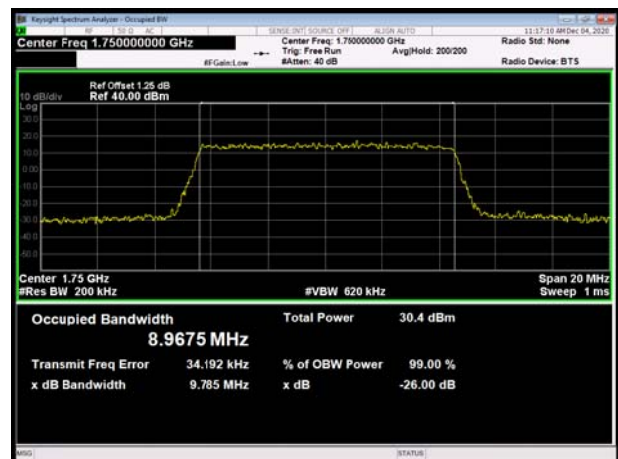
LTE Band 4 QPSK 10MHz CH-Middle



LTE Band 4 QPSK 5MHz CH-High

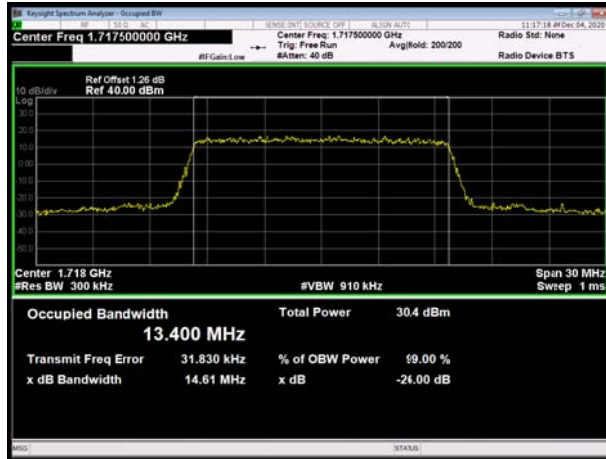


LTE Band 4 QPSK 10MHz CH-High

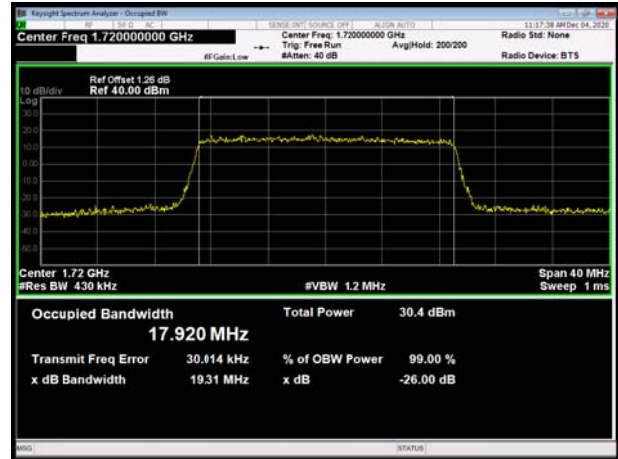




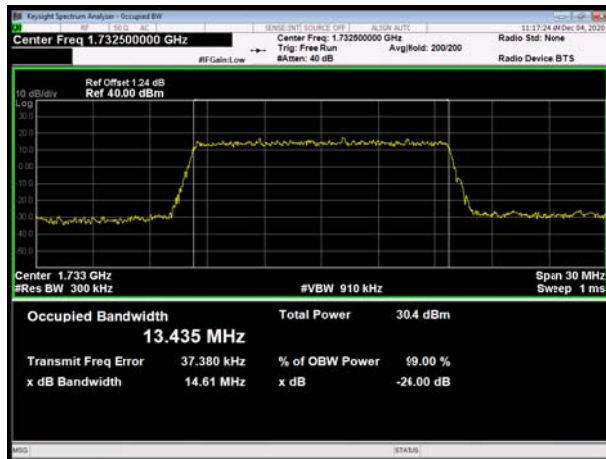
LTE Band 4 QPSK 15MHz CH-Low



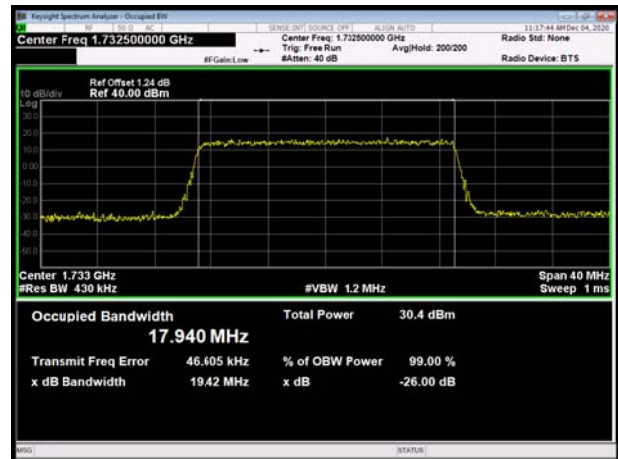
LTE Band 4 QPSK 20MHz CH-Low



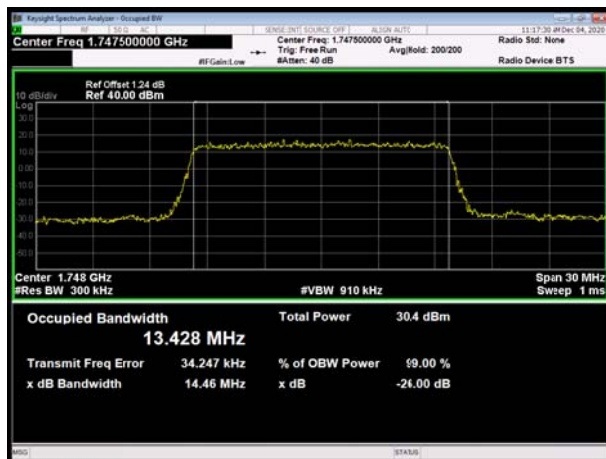
LTE Band 4 QPSK 15MHz CH-Middle



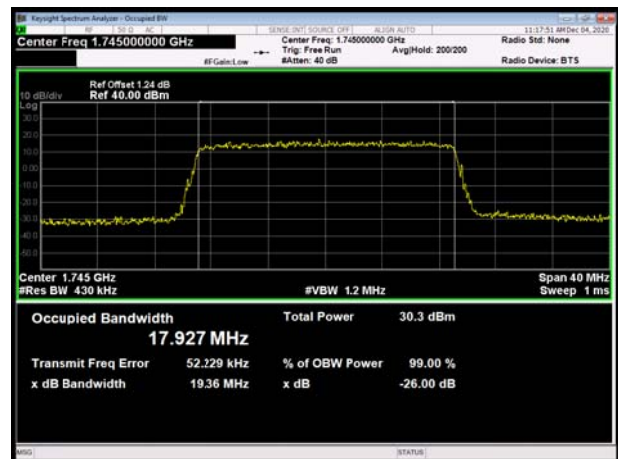
LTE Band 4 QPSK 20MHz CH-Middle



LTE Band 4 QPSK 15MHz CH-High

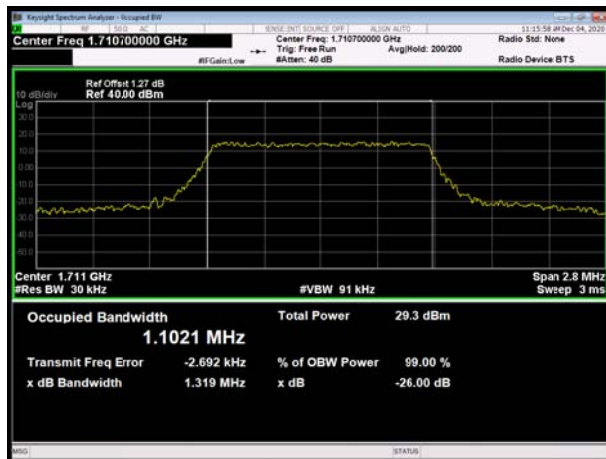


LTE Band 4 QPSK 20MHz CH-High

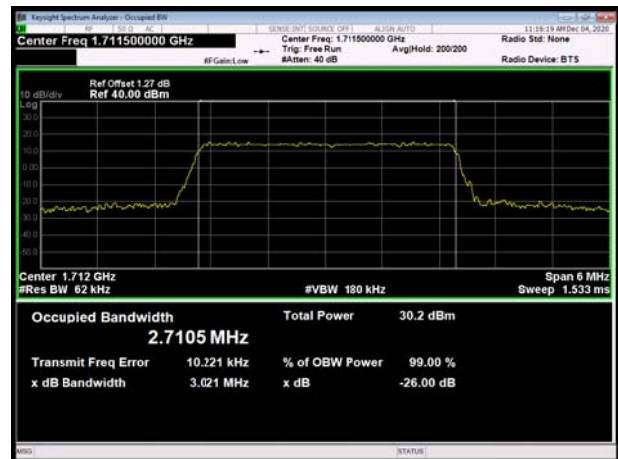




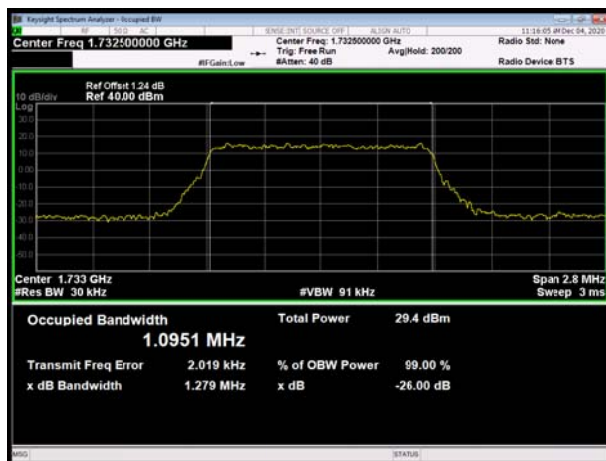
LTE Band 4 16QAM 1.4MHz CH-Low



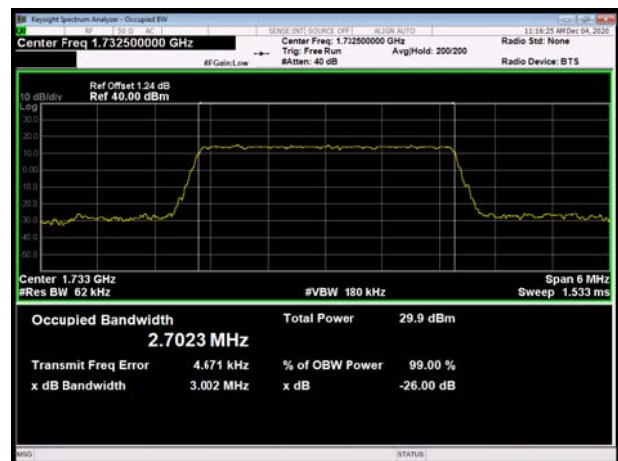
LTE Band 4 16QAM 3MHz CH-Low



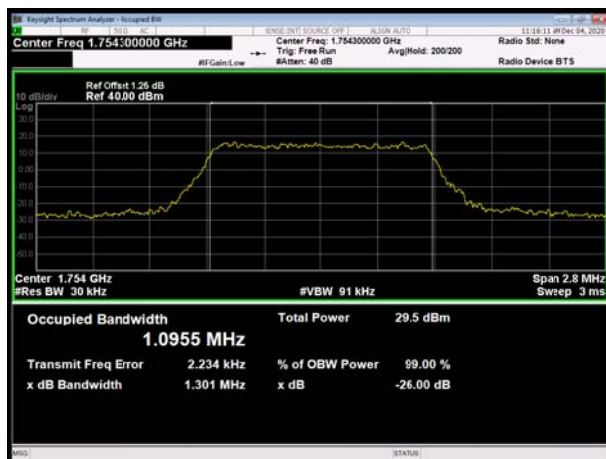
LTE Band 4 16QAM 1.4MHz CH-Middle



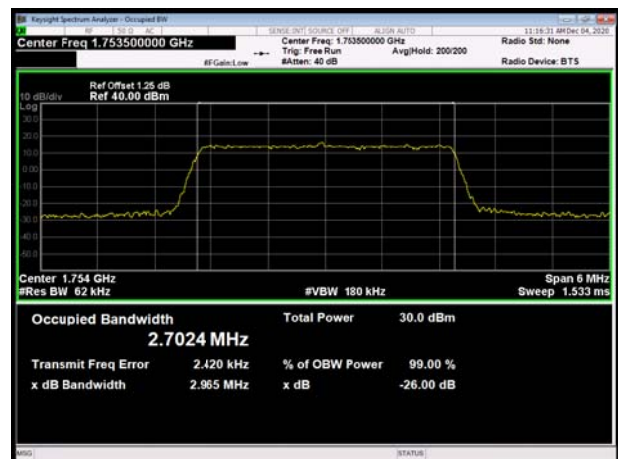
LTE Band 4 16QAM 3MHz CH-Middle



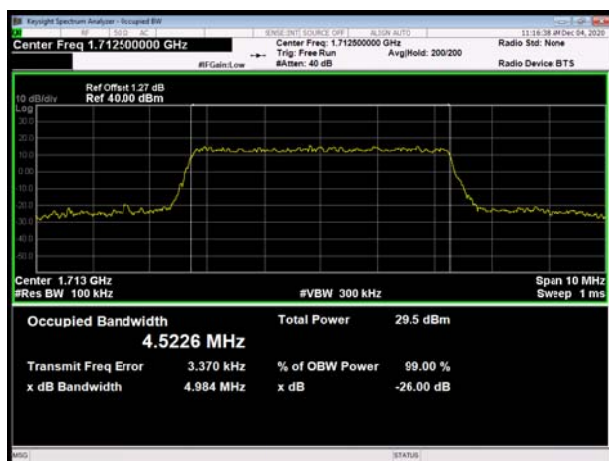
LTE Band 4 16QAM 1.4MHz CH-High



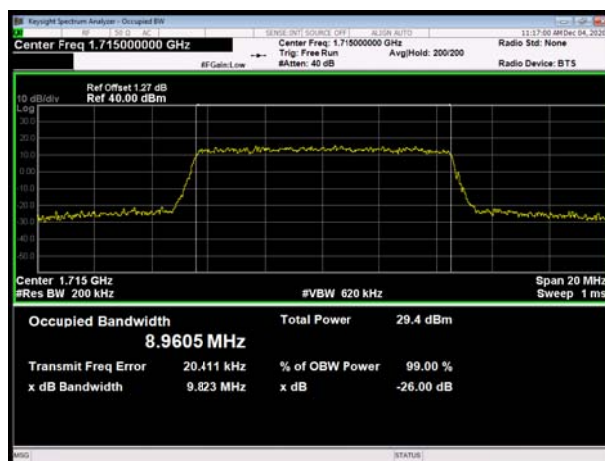
LTE Band 4 16QAM 3MHz CH-High



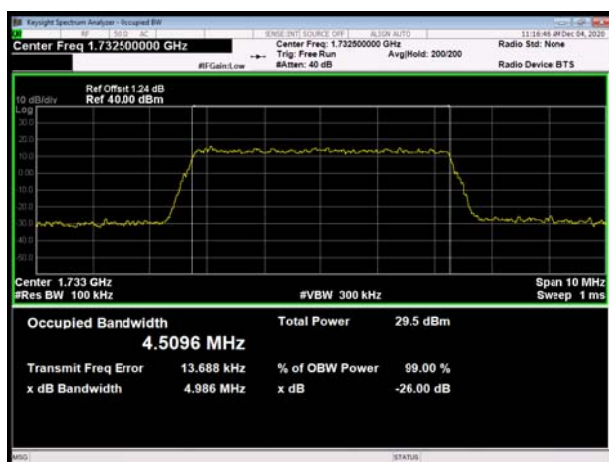
LTE Band 4 16QAM 5MHz CH-Low



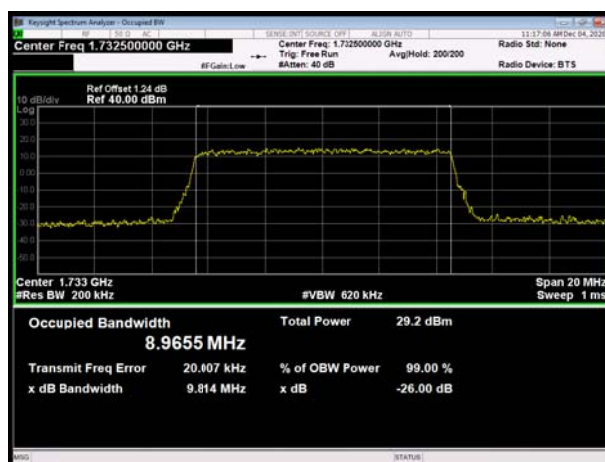
LTE Band 4 16QAM 10MHz CH-Low



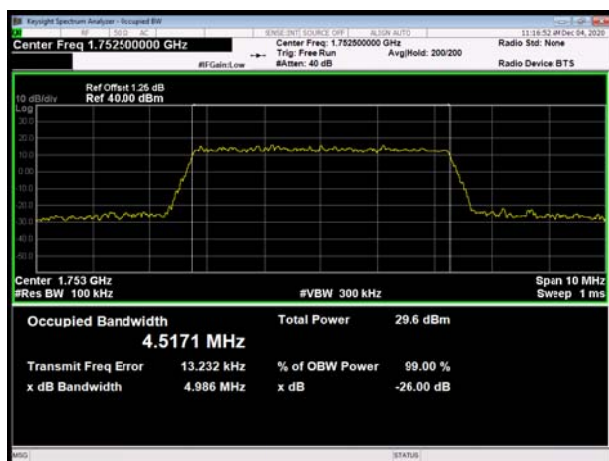
LTE Band 4 16QAM 5MHz CH-Middle



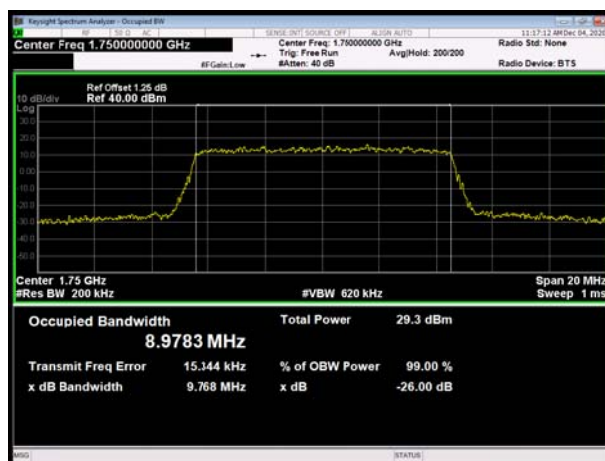
LTE Band 4 16QAM 10MHz CH-Middle



LTE Band 4 16QAM 5MHz CH-High

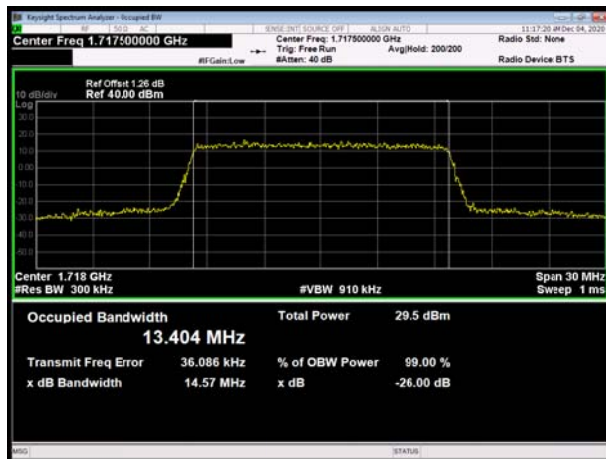


LTE Band 4 16QAM 10MHz CH-High





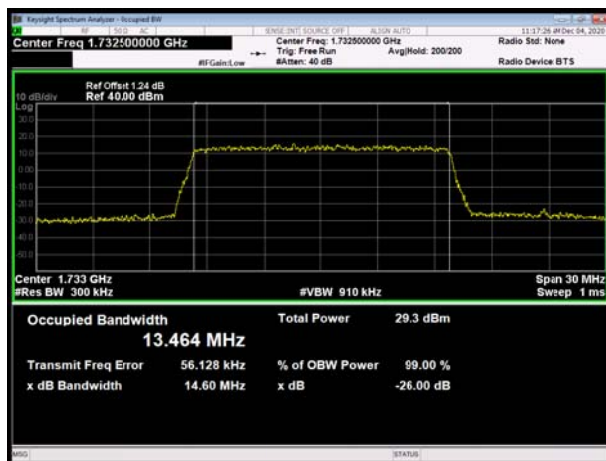
LTE Band 4 16QAM 15MHz CH-Low



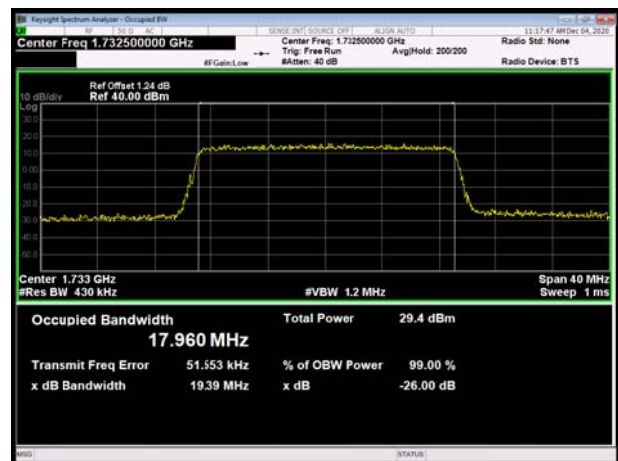
LTE Band 4 16QAM 20MHz CH-Low



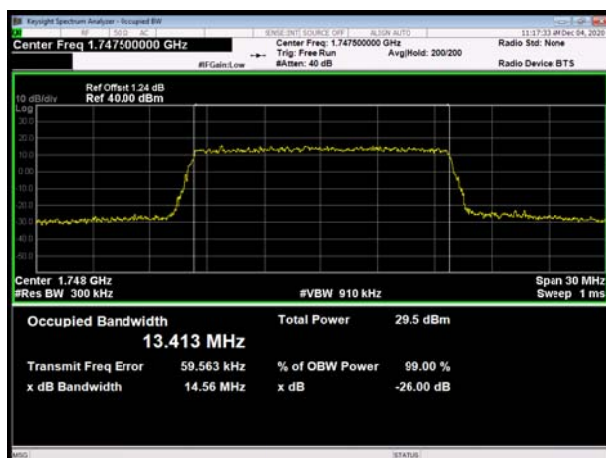
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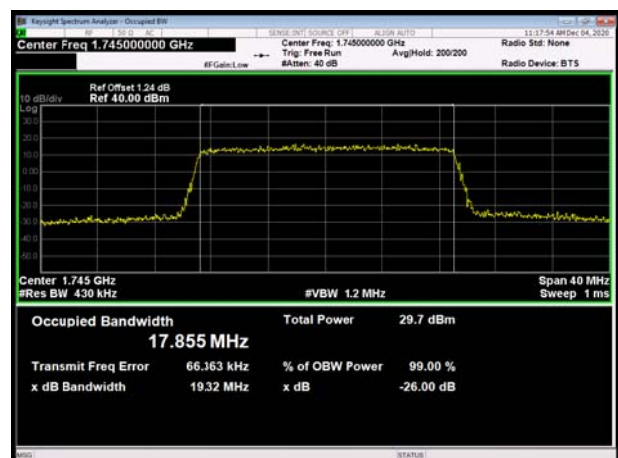
LTE Band 4 16QAM 20MHz CH-Middle



LTE Band 4 16QAM 15MHz CH-High

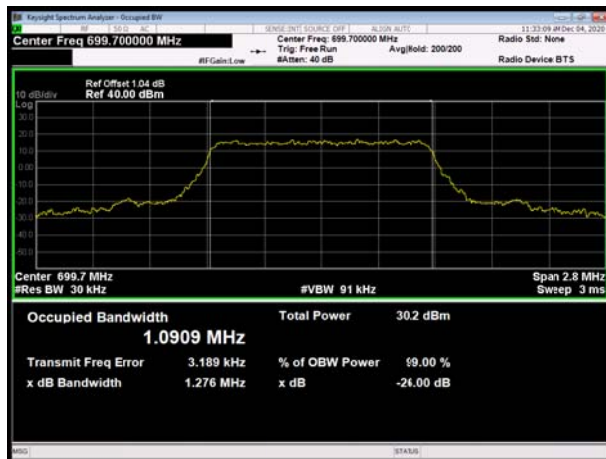


LTE Band 4 16QAM 20MHz CH-High





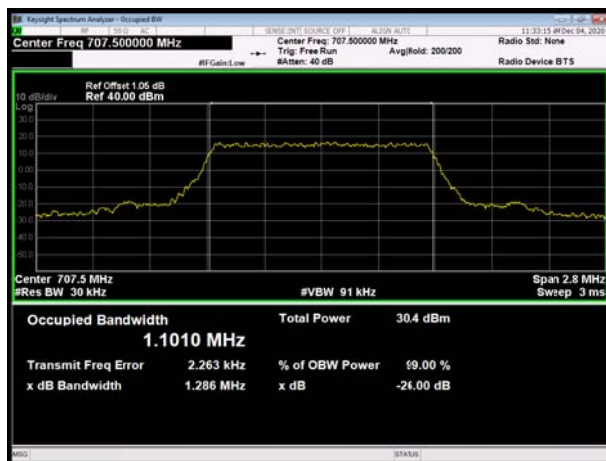
LTE Band 12 QPSK 1.4MHz CH-Low



LTE Band 12 QPSK 3MHz CH-Low



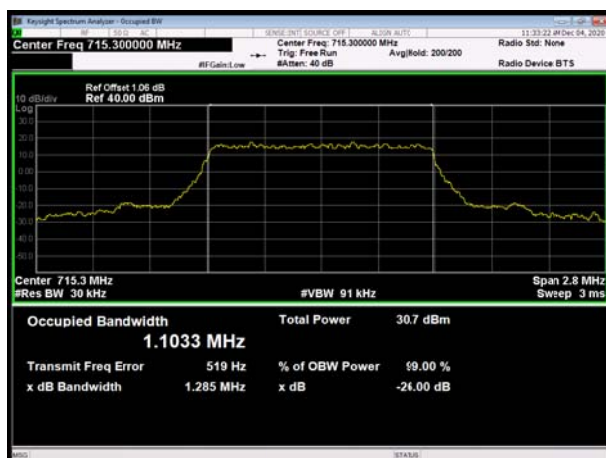
LTE Band 12 QPSK 1.4MHz CH-Middle



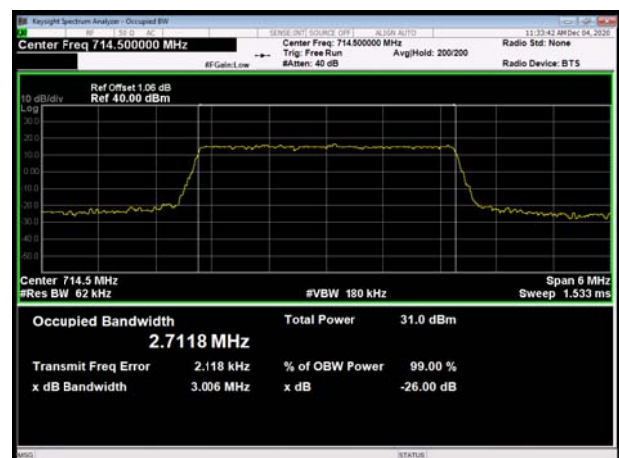
LTE Band 12 QPSK 3MHz CH-Middle



LTE Band 12 QPSK 1.4MHz CH-High

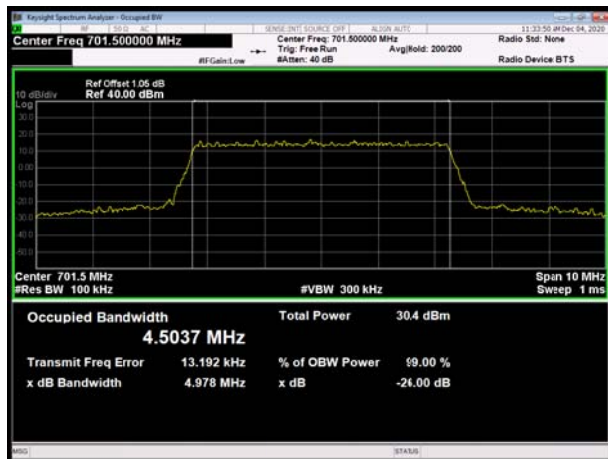


LTE Band 12 QPSK 3MHz CH-High





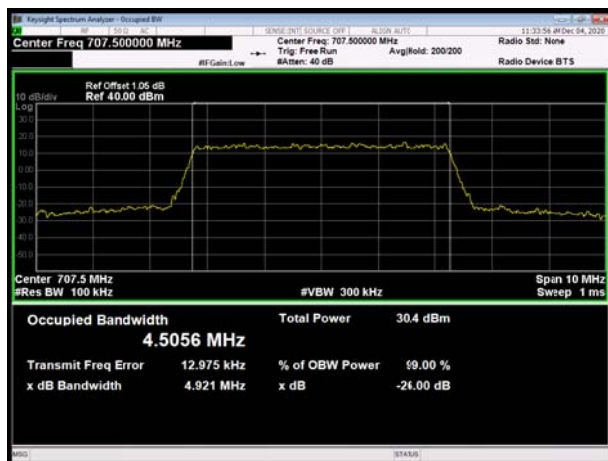
LTE Band 12 QPSK 5MHz CH-Low



LTE Band 12 QPSK 10MHz CH-Low



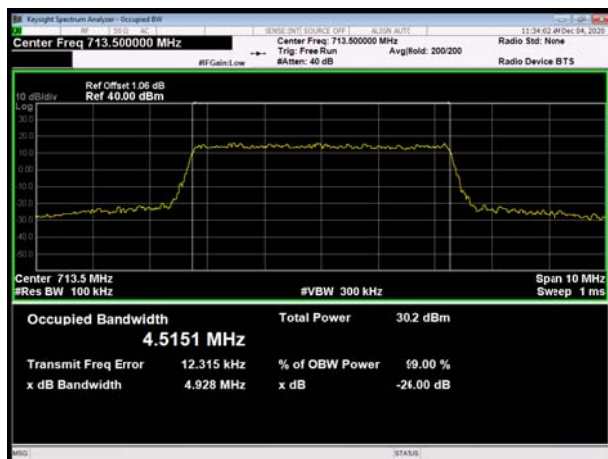
LTE Band 12 QPSK 5MHz CH-Middle



LTE Band 12 QPSK 10MHz CH-Middle



LTE Band 12 QPSK 5MHz CH-High



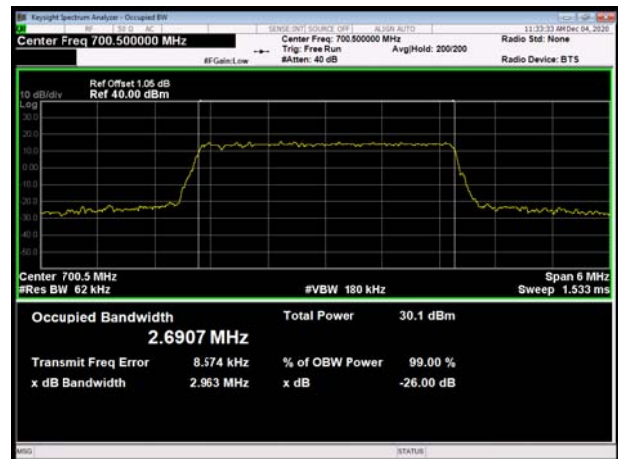
LTE Band 12 QPSK 10MHz CH-High



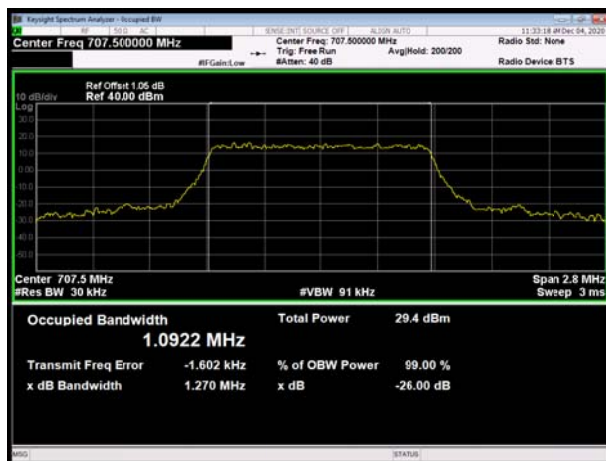
LTE Band 12 16QAM 1.4MHz CH-Low



LTE Band 12 16QAM 3MHz CH-Low



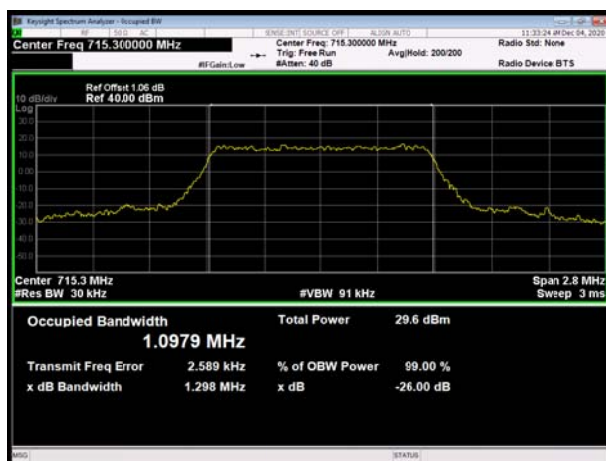
LTE Band 12 16QAM 1.4MHz CH-Middle



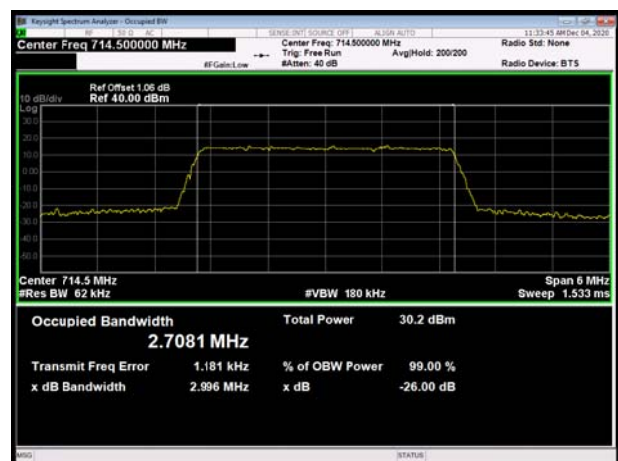
LTE Band 12 16QAM 3MHz CH-Middle



LTE Band 12 16QAM 1.4MHz CH-High



LTE Band 12 16QAM 3MHz CH-High



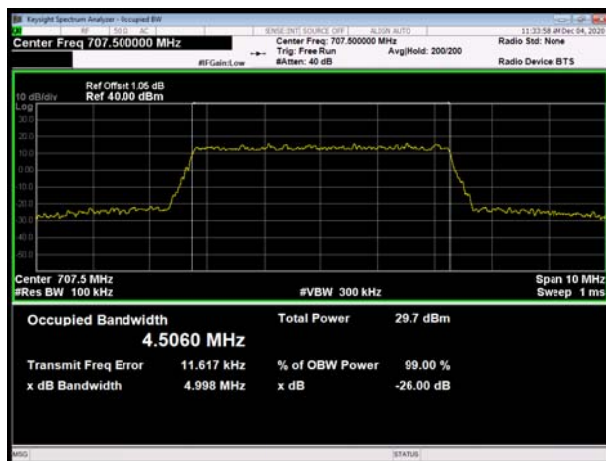
LTE Band 12 16QAM 5MHz CH-Low



LTE Band 12 16QAM 10MHz CH-Low



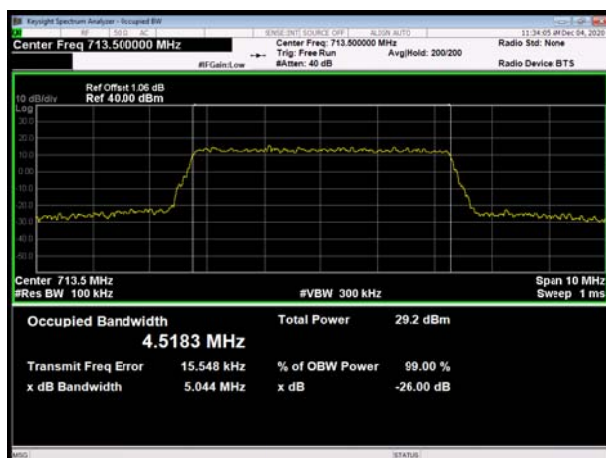
LTE Band 12 16QAM 5MHz CH-Middle



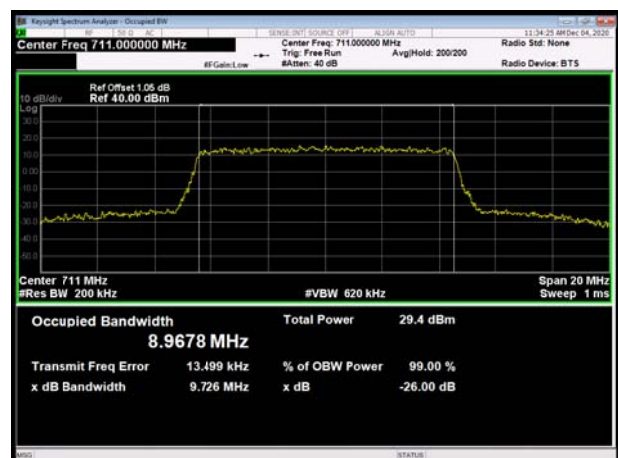
LTE Band 12 16QAM 10MHz CH-Middle



LTE Band 12 16QAM 5MHz CH-High

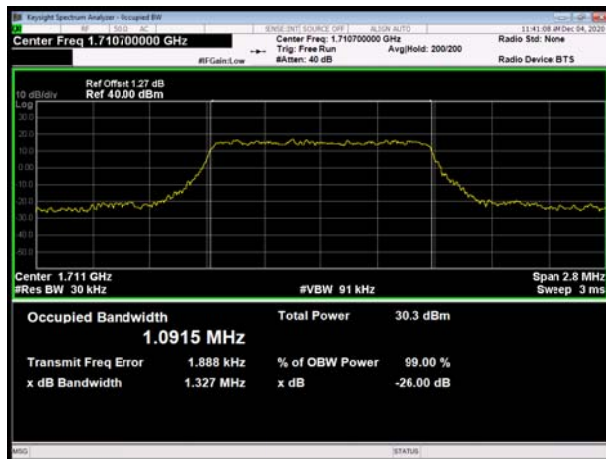


LTE Band 12 16QAM 10MHz CH-High

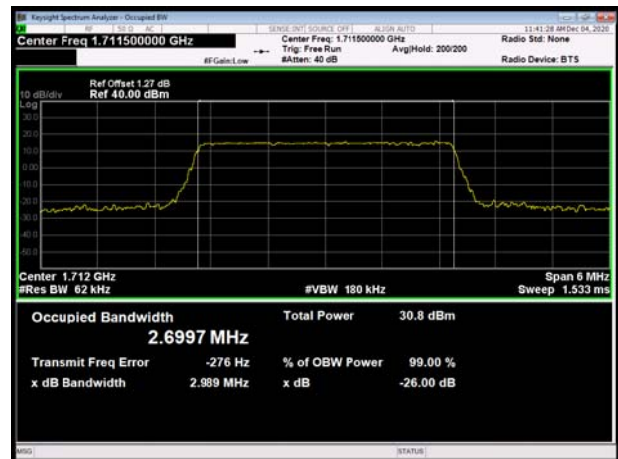




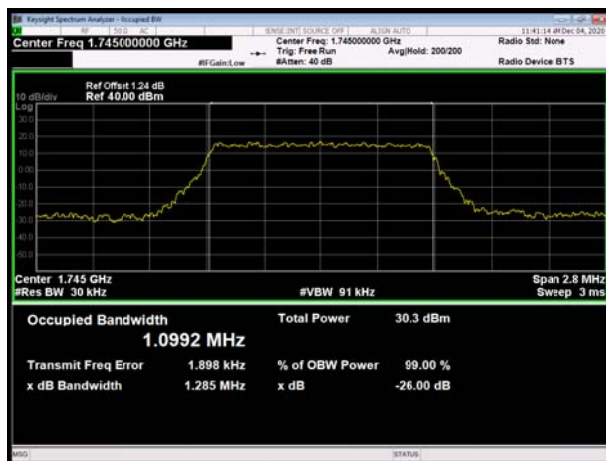
LTE Band 66 QPSK 1.4MHz CH-Low



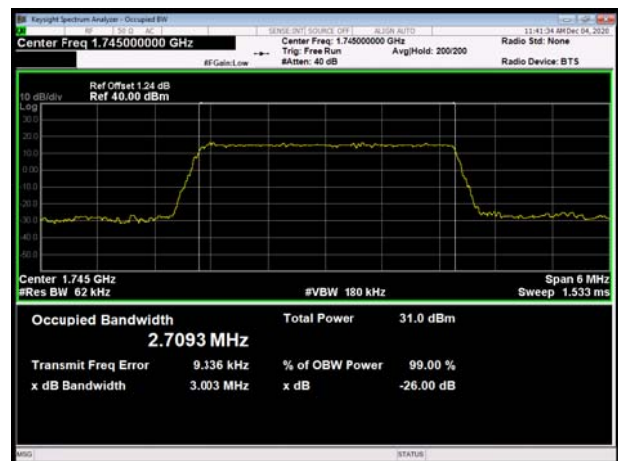
LTE Band 66 QPSK 3MHz CH-Low



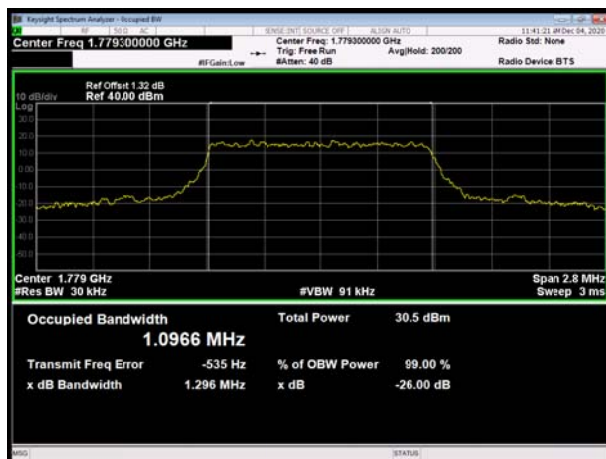
LTE Band 66 QPSK 1.4MHz CH-Middle



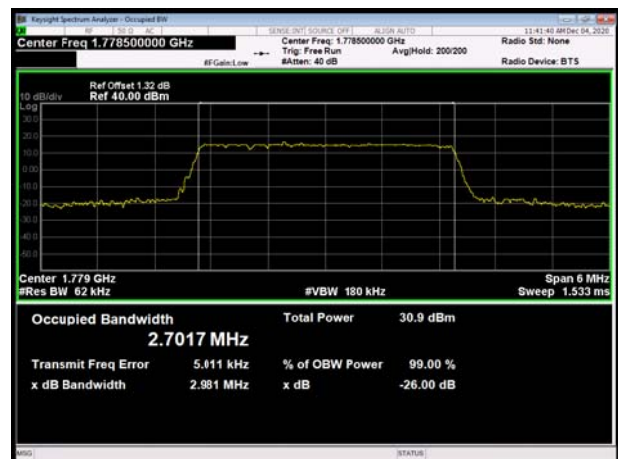
LTE Band 66 QPSK 3MHz CH-Middle



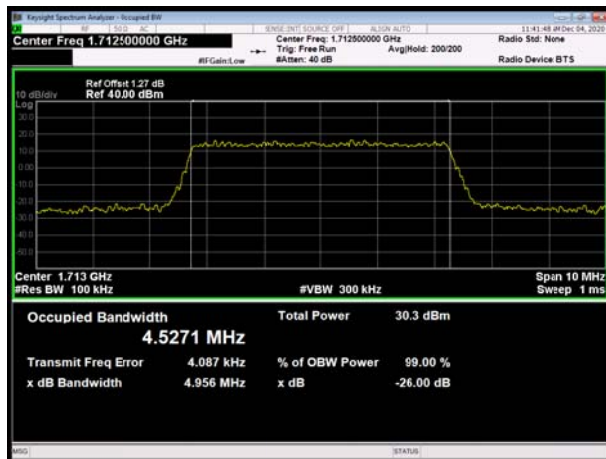
LTE Band 66 QPSK 1.4MHz CH-High



LTE Band 66 QPSK 3MHz CH-High



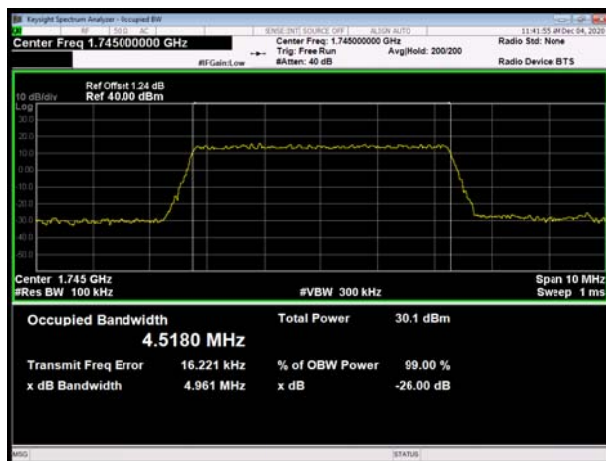
LTE Band 66 QPSK 5MHz CH-Low



LTE Band 66 QPSK 10MHz CH-Low



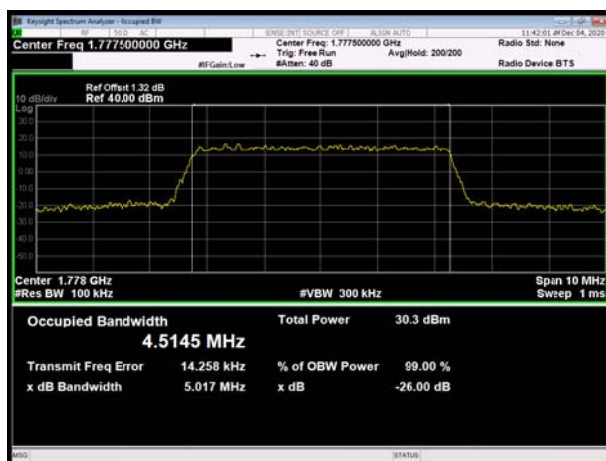
LTE Band 66 QPSK 5MHz CH-Middle



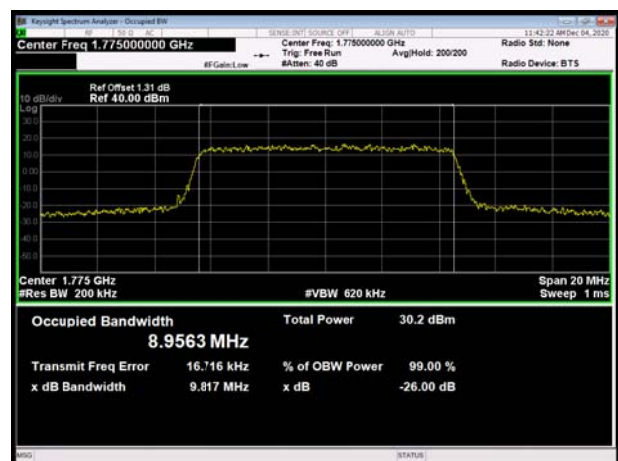
LTE Band 66 QPSK 10MHz CH-Middle



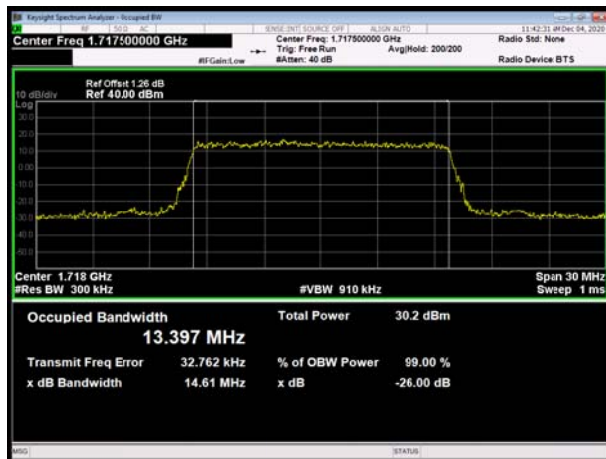
LTE Band 66 QPSK 5MHz CH-High



LTE Band 66 QPSK 10MHz CH-High



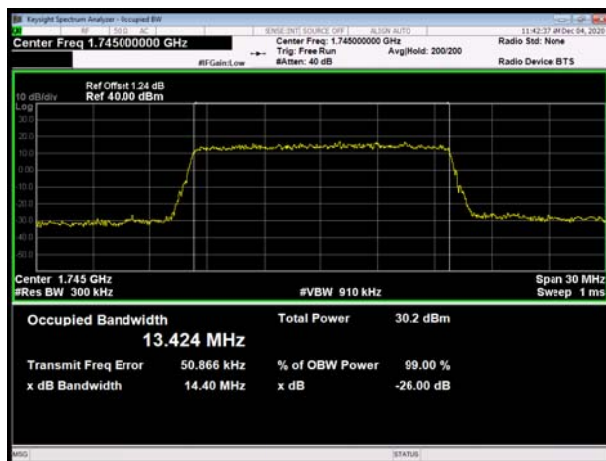
LTE Band 66 QPSK 15MHz CH-Low



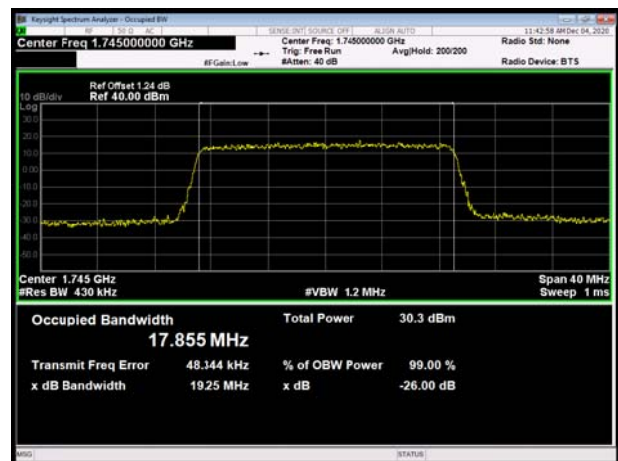
LTE Band 66 QPSK 20MHz CH-Low



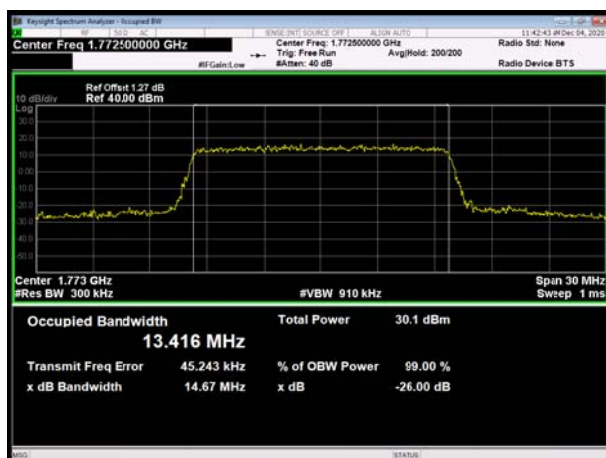
LTE Band 66 QPSK 15MHz CH-Middle



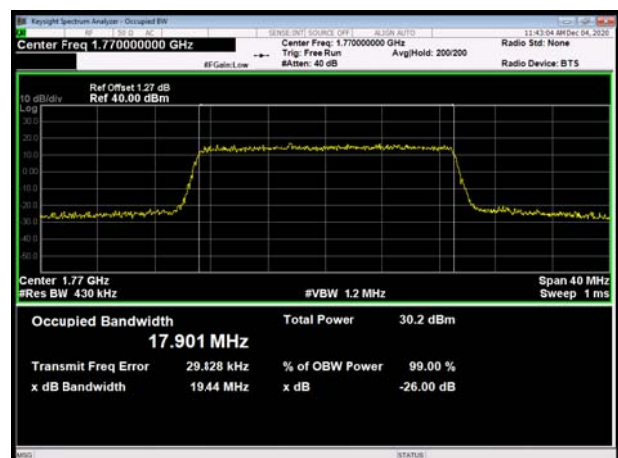
LTE Band 66 QPSK 20MHz CH-Middle



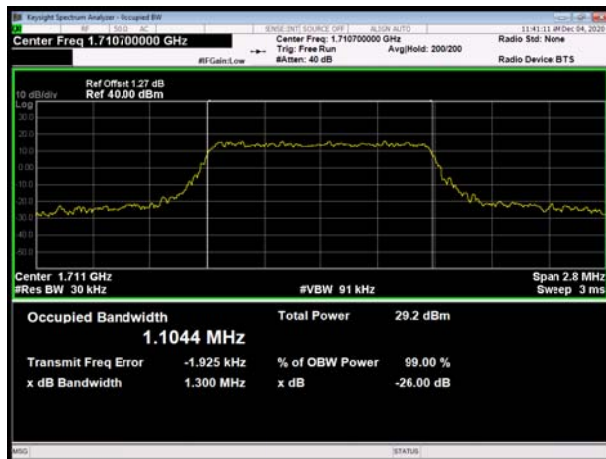
LTE Band 66 QPSK 15MHz CH-High



LTE Band 66 QPSK 20MHz CH-High



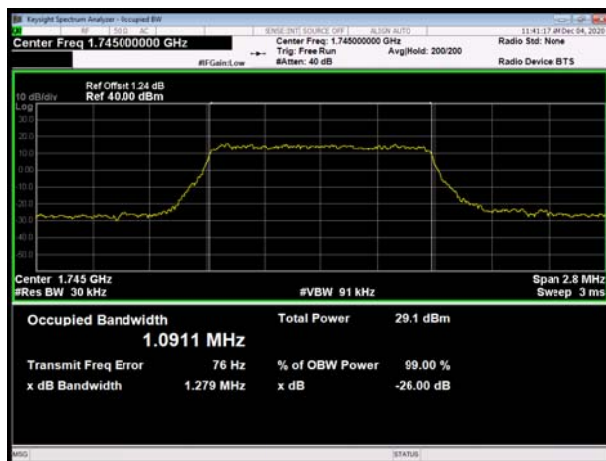
LTE Band 66 16QAM 1.4MHz CH-Low



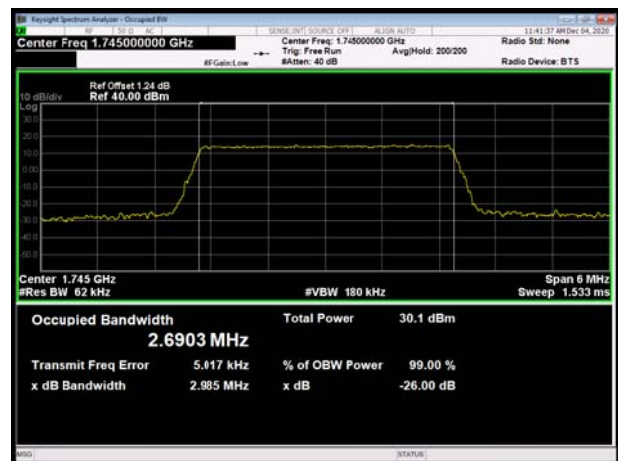
LTE Band 66 16QAM 3MHz CH-Low



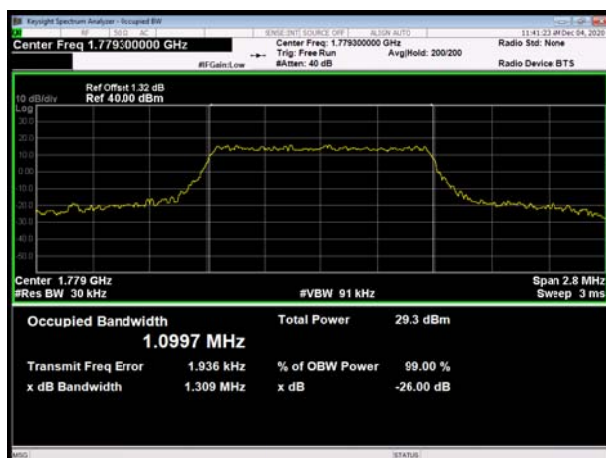
LTE Band 66 16QAM 1.4MHz CH-Middle



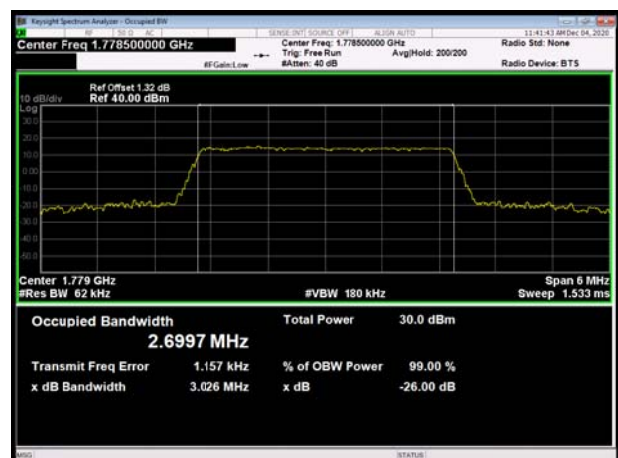
LTE Band 66 16QAM 3MHz CH-Middle



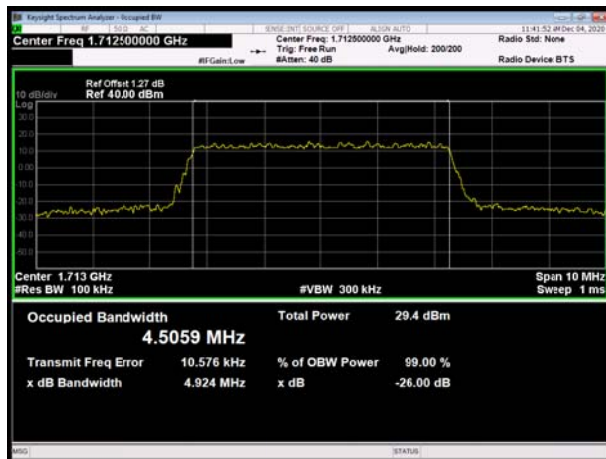
LTE Band 66 16QAM 1.4MHz CH-High



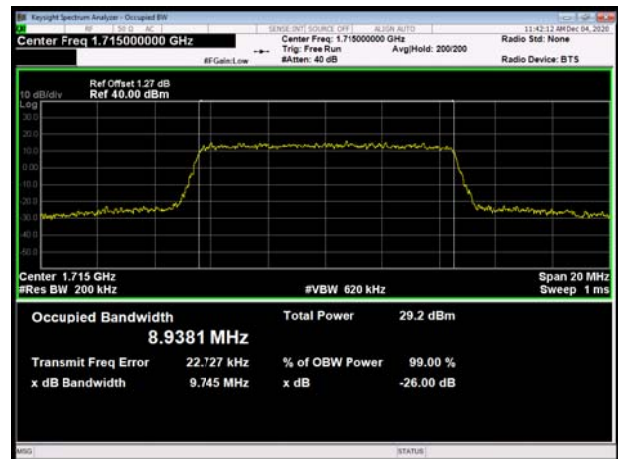
LTE Band 66 16QAM 3MHz CH-High



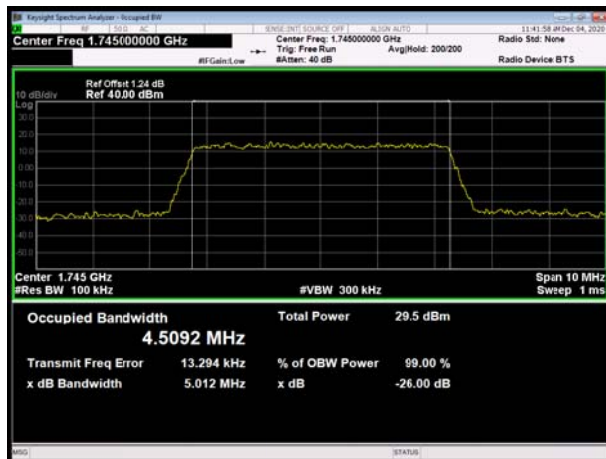
LTE Band 66 16QAM 5MHz CH-Low



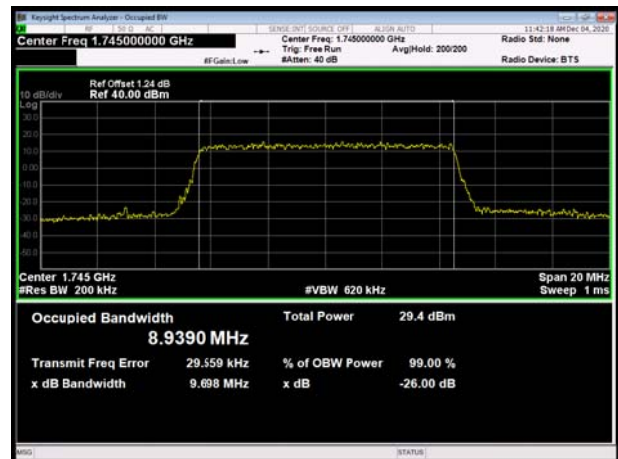
LTE Band 66 16QAM 10MHz CH-Low



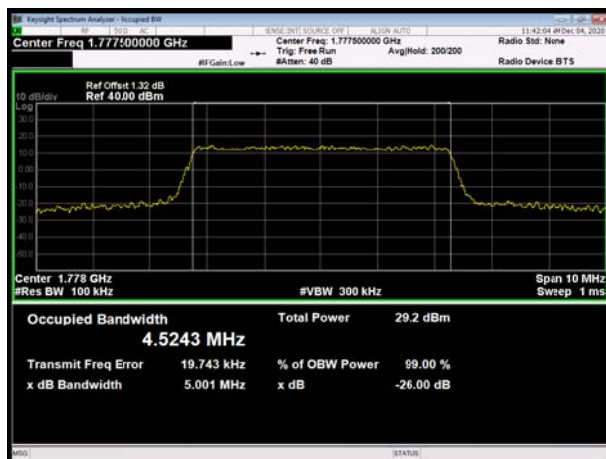
LTE Band 66 16QAM 5MHz CH-Middle



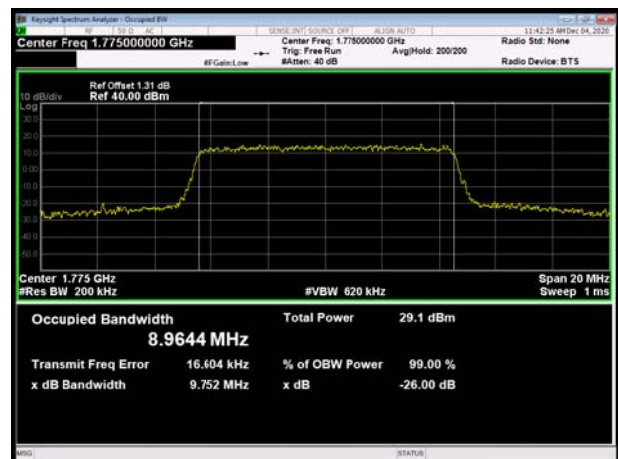
LTE Band 66 16QAM 10MHz CH-Middle



LTE Band 66 16QAM 5MHz CH-High

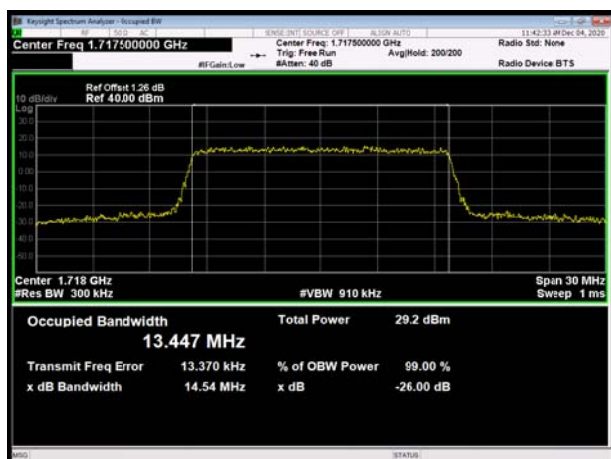


LTE Band 66 16QAM 10MHz CH-High

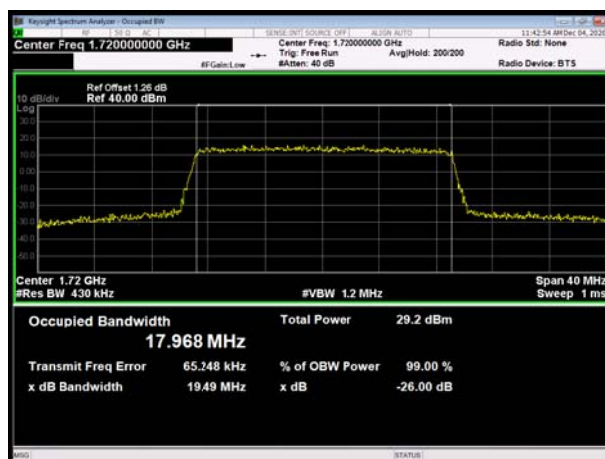




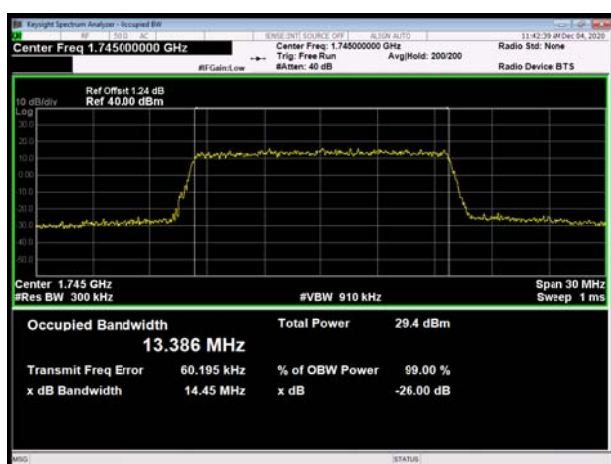
LTE Band 66 16QAM 15MHz CH-Low



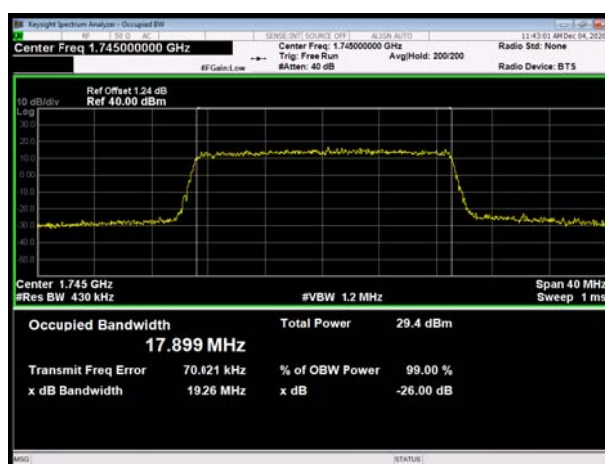
LTE Band 66 16QAM 20MHz CH-Low



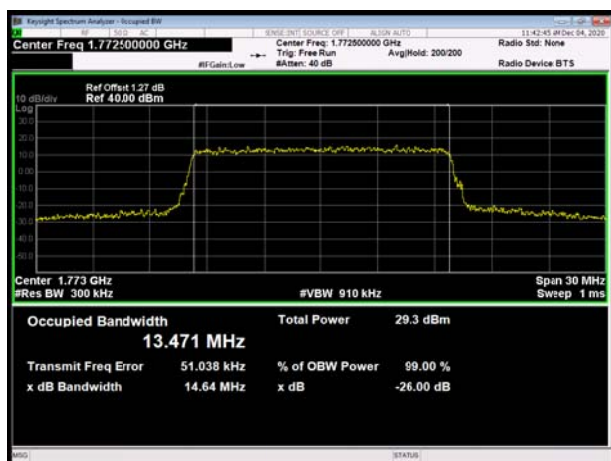
LTE Band 66 16QAM 15MHz CH-Middle



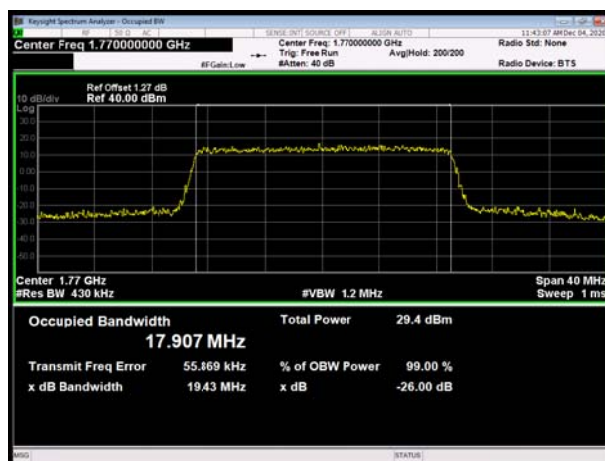
LTE Band 66 16QAM 20MHz CH-Middle



LTE Band 66 16QAM 15MHz CH-High



LTE Band 66 16QAM 20MHz CH-High



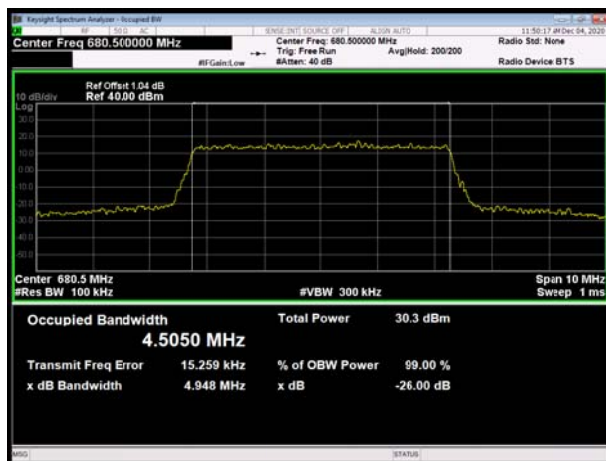
LTE Band 71 QPSK 5MHz CH-Low



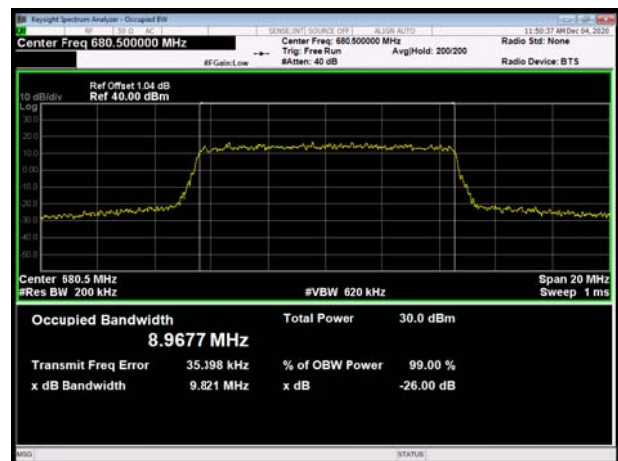
LTE Band 71 QPSK 10MHz CH-Low



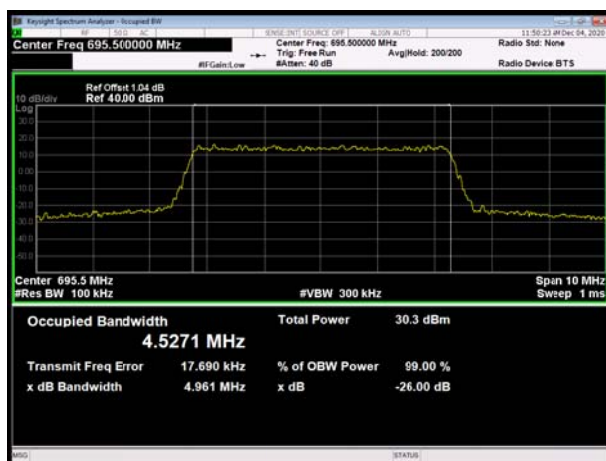
LTE Band 71 QPSK 5MHz CH-Middle



LTE Band 71 QPSK 10MHz CH-Middle



LTE Band 71 QPSK 5MHz CH-High



LTE Band 71 QPSK 10MHz CH-High

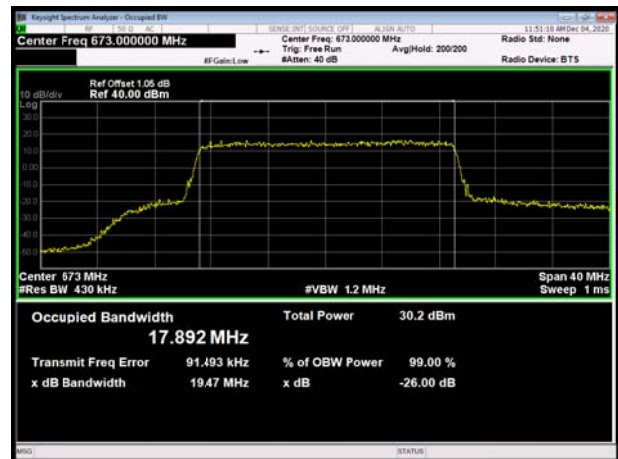




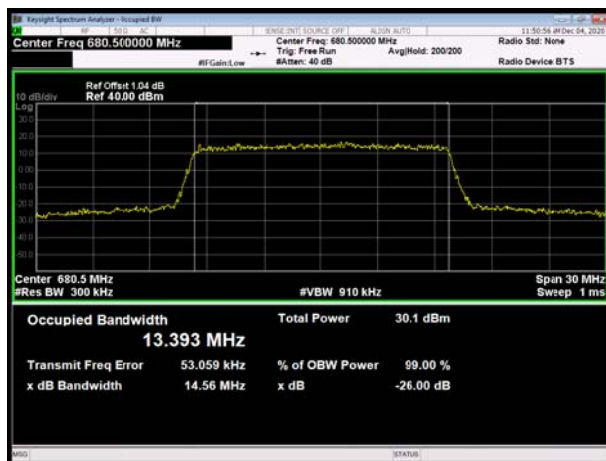
LTE Band 71 QPSK 15MHz CH-Low



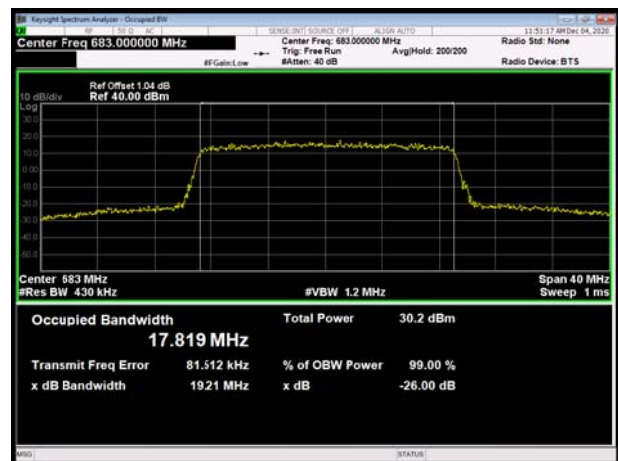
LTE Band 71 QPSK 20MHz CH-Low



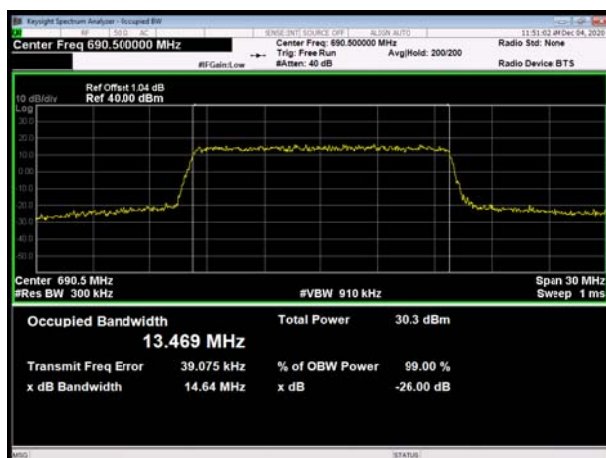
LTE Band 71 QPSK 15MHz CH-Middle



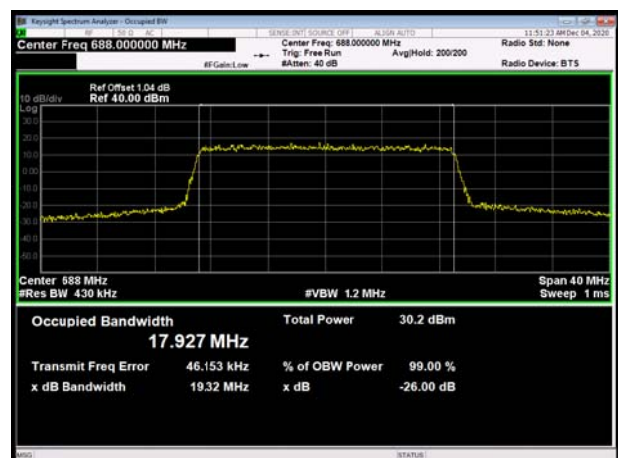
LTE Band 71 QPSK 20MHz CH-Middle



LTE Band 71 QPSK 15MHz CH-High



LTE Band 71 QPSK 20MHz CH-High



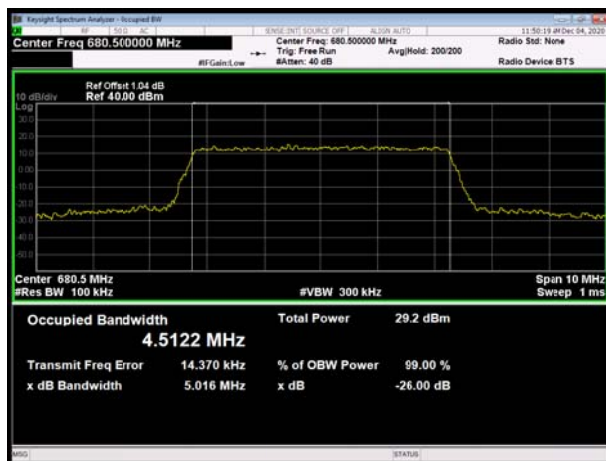
LTE Band 71 16QAM 5MHz CH-Low



LTE Band 71 16QAM 10MHz CH-Low



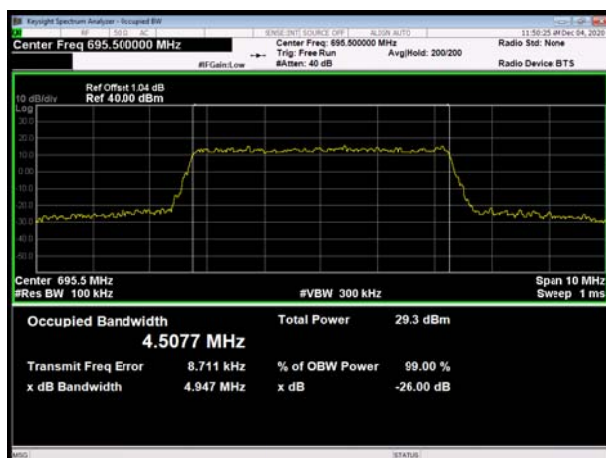
LTE Band 71 16QAM 5MHz CH-Middle



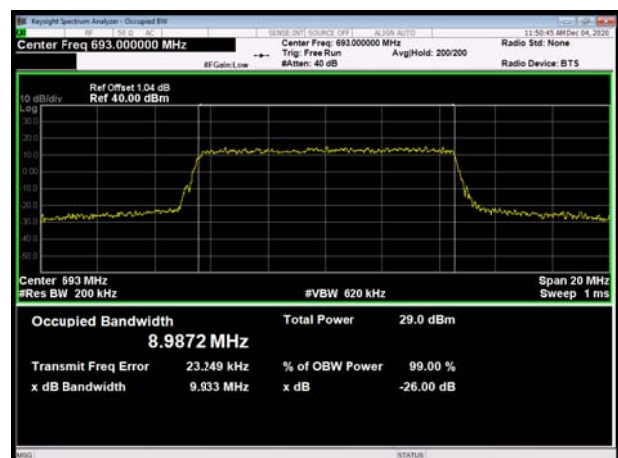
LTE Band 71 16QAM 10MHz CH-Middle



LTE Band 71 16QAM 5MHz CH-High

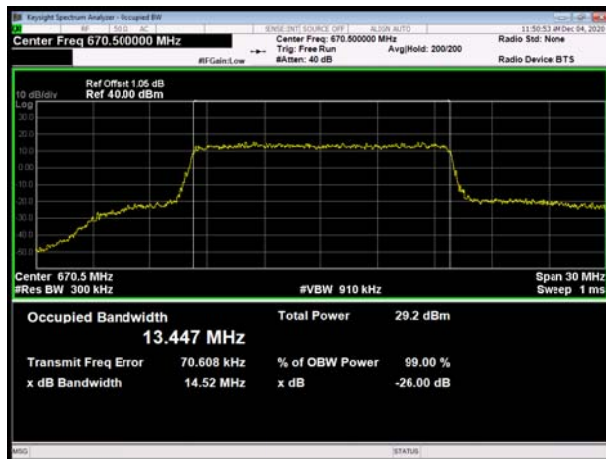


LTE Band 71 16QAM 10MHz CH-High

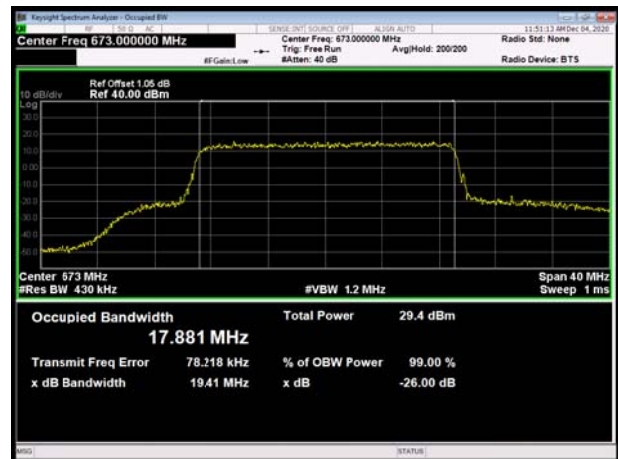




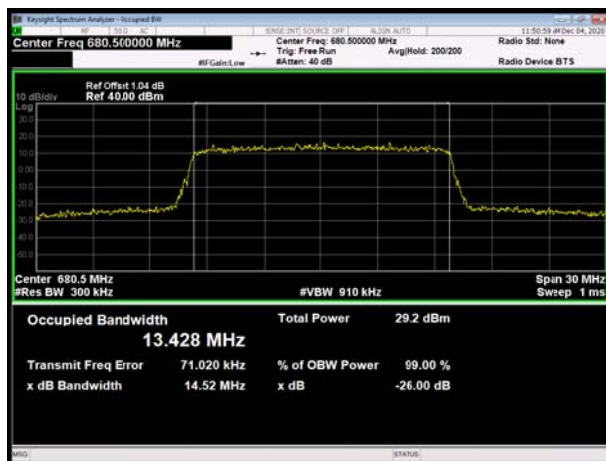
LTE Band 71 16QAM 15MHz CH-Low



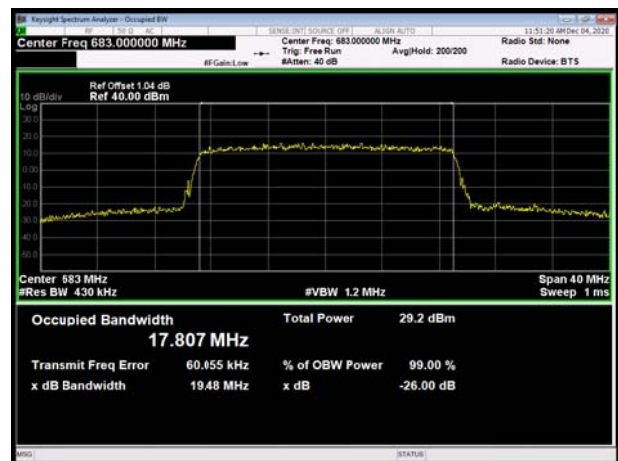
LTE Band 71 16QAM 20MHz CH-Low



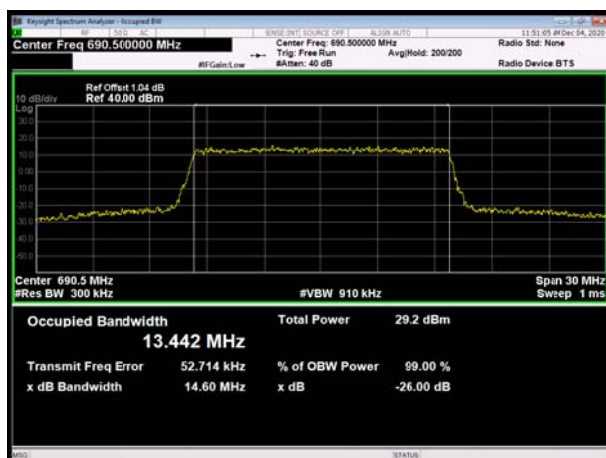
LTE Band 71 16QAM 15MHz CH-Middle



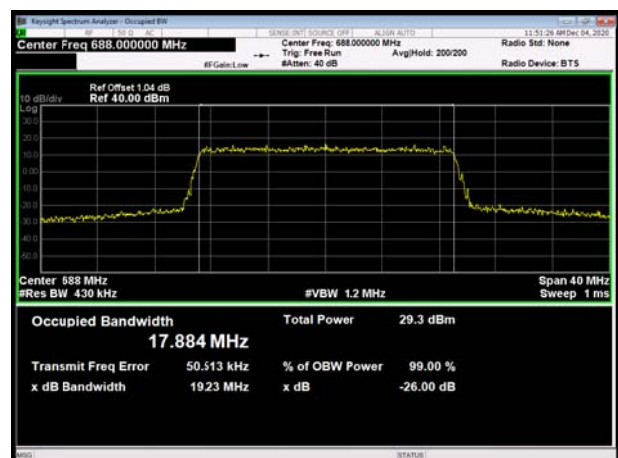
LTE Band 71 16QAM 20MHz CH-Middle



LTE Band 71 16QAM 15MHz CH-High



LTE Band 71 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.

RBW is set to 15 kHz, VBW is set to 43 kHz for LTE Band 4/66 (1.4MHz).

RBW is set to 30 kHz, VBW is set to 91 kHz for LTE Band 4/66 (3MHz).

RBW is set to 51 kHz, VBW is set to 150 kHz for LTE Band 4/66 (5MHz).

RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4/66 (10MHz).

RBW is set to 150 kHz, VBW is set to 470 kHz for LTE Band 4/66 (15MHz).

RBW is set to 200 kHz, VBW is set to 620 kHz for LTE Band 4/66 (20MHz).

RBW is set to 30 kHz, VBW is set to 100 kHz for LTE Band 12 (1.4MHz, 3MHz, 5MHz, 10MHz).

RBW is set to 30 kHz, VBW is set to 100 kHz for LTE Band 71 (5MHz, 10MHz, 15MHz, 20MHz).

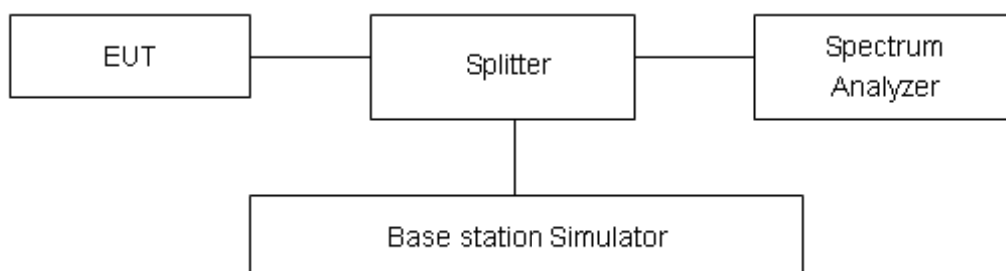
on spectrum analyzer.

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(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(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Measurement Uncertainty

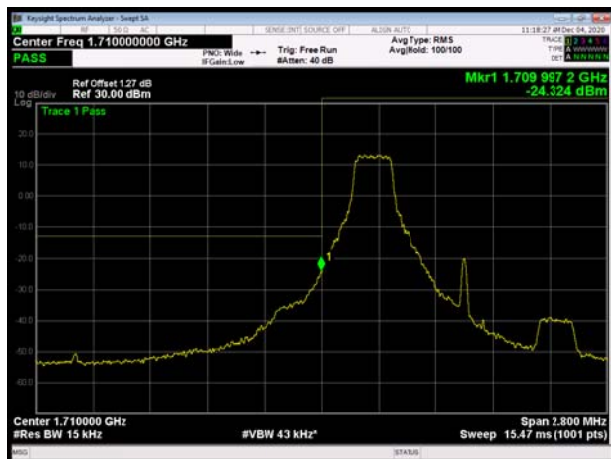
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U=0.684\text{dB}$.



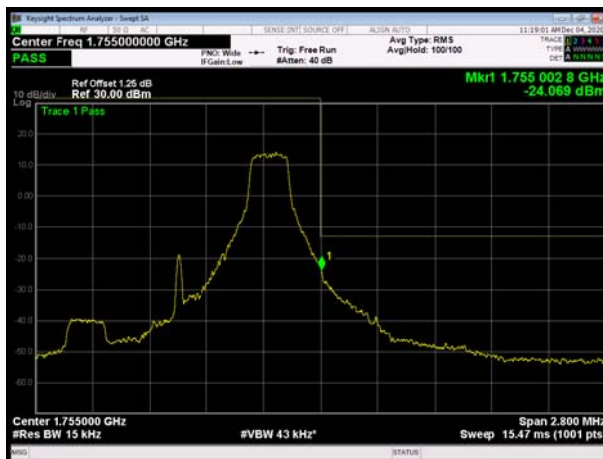
Test Result

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

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



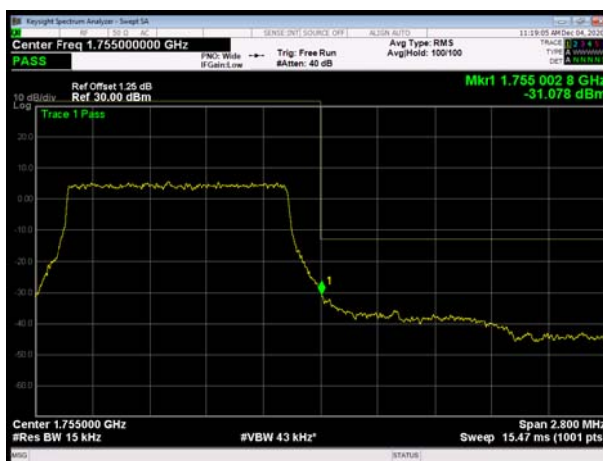
LTE Band 4 QPSK 1.4MHz CH-High, 1 RB



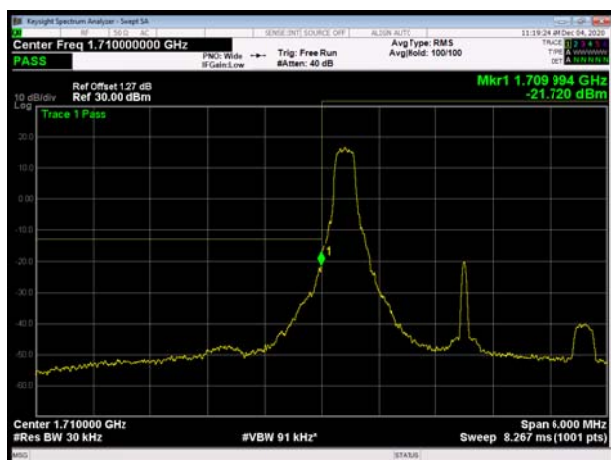
LTE Band 4 QPSK 1.4MHz CH-Low, 100%RB



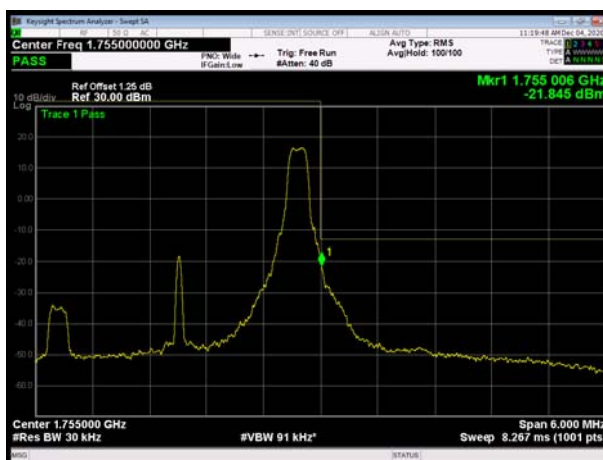
LTE Band 4 QPSK 1.4MHz CH-High, 100%RB



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

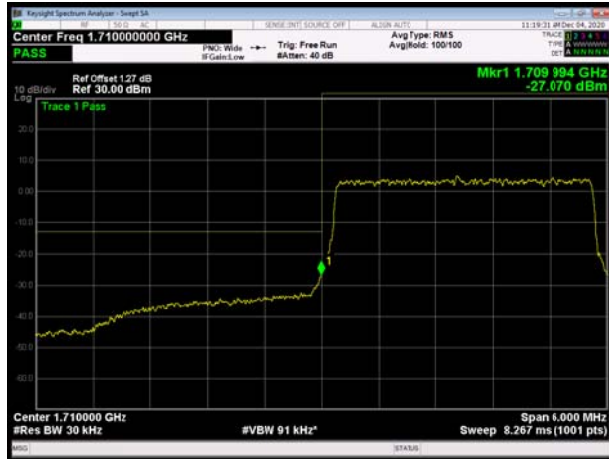


LTE Band 4 QPSK 3MHz CH-High, 1 RB

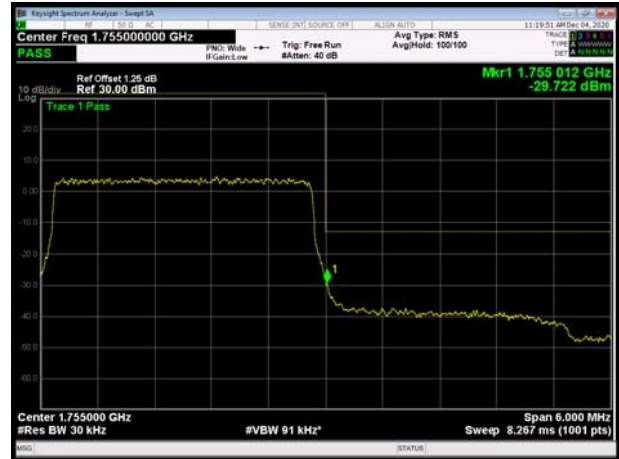




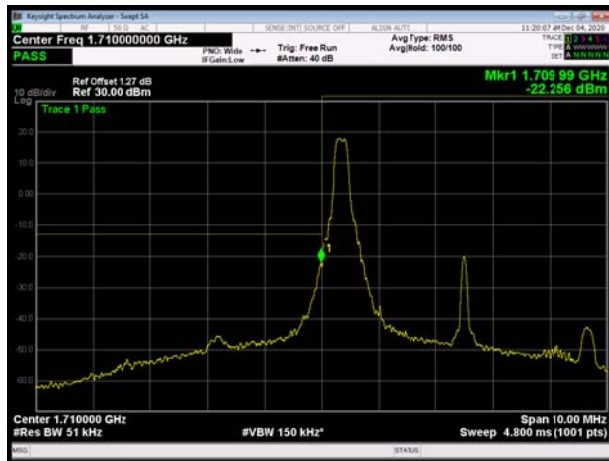
LTE Band 4 QPSK 3MHz CH-Low, 100%RB



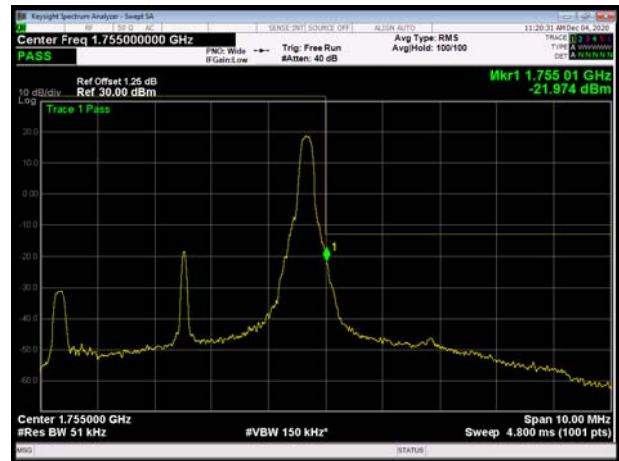
LTE Band 4 QPSK 3MHz CH-High, 100%RB



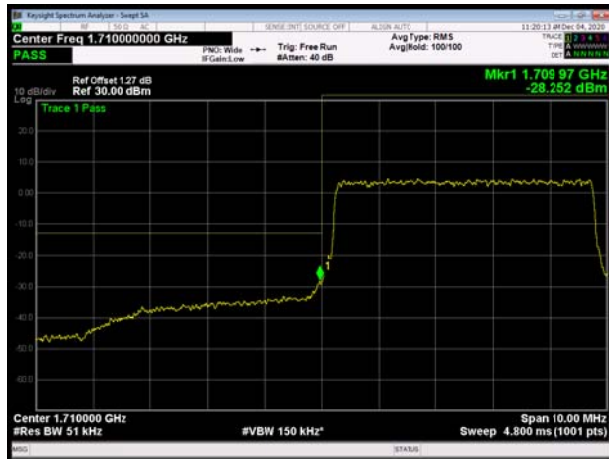
LTE Band 4 QPSK 5MHz CH-Low, 1 RB



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



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



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

