RF TEST REPORT

Applicant	Huawei Technologies Co., Ltd.
FCC ID	QISB612-533
Product	LTE CPE
Model	B612-533
Report No.	R1910H0207-R3
Issue Date	November 11, 2019

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2018)/ FCC CFR47 Part 27C (2018)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Peng Tao

Performed by: Peng Tao

Kai Xu

Approved by: Kai Xu

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Summary of Measurement Results

Number	Test Case	Clause in FCC rules	Verdict
1	RF power output and Effective 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
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.			
Date of Testing: October 17, 2019~ October 30, 2019			

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 Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
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2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	Huawei Technologies Co., Ltd.
Applicant address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Manufacturer	Huawei Technologies Co., Ltd.
Manufacturer address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

2.2 General information

EUT Description			
Model	B612-533		
SN	CSD7S19919000100		
Hardware Version	WL2B612M01		
Software Version	10.0.2.1（H200SP5C00）		
Power Supply	AC/DC adapter		
Antenna Type	Internal Antenna / External Antenna		
Antenna Gain	Internal Antenna: WCDMA Band IV/ LTE Band 4: 2 dBi LTE Band 7/ 38/ 41: 1.5 dBi External Antenna 1: 3 dBi External Antenna 2: 1 dBi		
Test Mode(s)	WCDMA Band IV; LTE Band 4, LTE Band 7, LTE Band 38,LTE Band 41;		
Test Modulation	(WCDMA) QPSK,16QAM; (LTE)QPSK 16QAM;		
HSDPA UE Category	24		
HSUPA UE Category	6		
DC-HSDPA	24		
LTE Category	6		
Maximum E.I.R.P./ E.R.P.	WCDMA Band IV:	24.44dBm	
	LTE Band 4:	25.88dBm	
	LTE Band 7:	24.91dBm	
	LTE Band 38:	25.73dBm	
	LTE Band 41:	25.73dBm	
Rated Power Supply Voltage:	12V		
Extreme Voltage	Minimum: 10.8V Maximum: 13.2V		
Extreme 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	2545 ~ 2655	2545 ~ 2655
EUT Accessory			
Adapter 1	Manufacturer: HuaweiTechnologies Co., Ltd. Model:HW-120100E01		
Adapter 2	Manufacturer: HuaweiTechnologies Co., Ltd. Model: HW-120100B01		
Adapter 3	Manufacturer: HuaweiTechnologies Co., Ltd. Model: HW-120100U01		
Adapter 4	Manufacturer: HuaweiTechnologies Co., Ltd. Model: HW-120100A01		
Note: 1. The information of the EUT is declared by the manufacturer.			

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 (2018)

ANSI C63.26 (2015)

Reference standard:

FCC CFR47 Part 2 (2018)

KDB 971168 D01 Power Meas License Digital Systems v03r01

4 Test Configuration

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

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, 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 detailin the following table:
Test modes are chosen to be reported as the worst case configuration below for WCDMA Band IV:

Test items	**Modes/Modulation**
	WCDMA Band IV
RF power output and Effective Isotropic Radiated power	RMC HSDPA/HSUPA DC-HSDPA
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	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
	LTE 7	-	-	O	O	O	O	O	O	O	-	-	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	O	-	-	O	O	O
Occupied Bandwidth	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	-	-	O	O	O	O
Band Edge Compliance	LTE 4	O	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 7	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 41	-	-	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	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
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	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 Radiated Power

Ambient condition

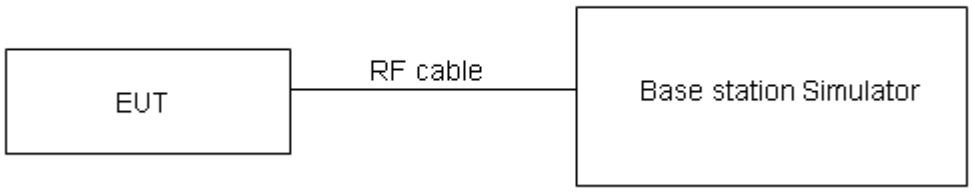
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

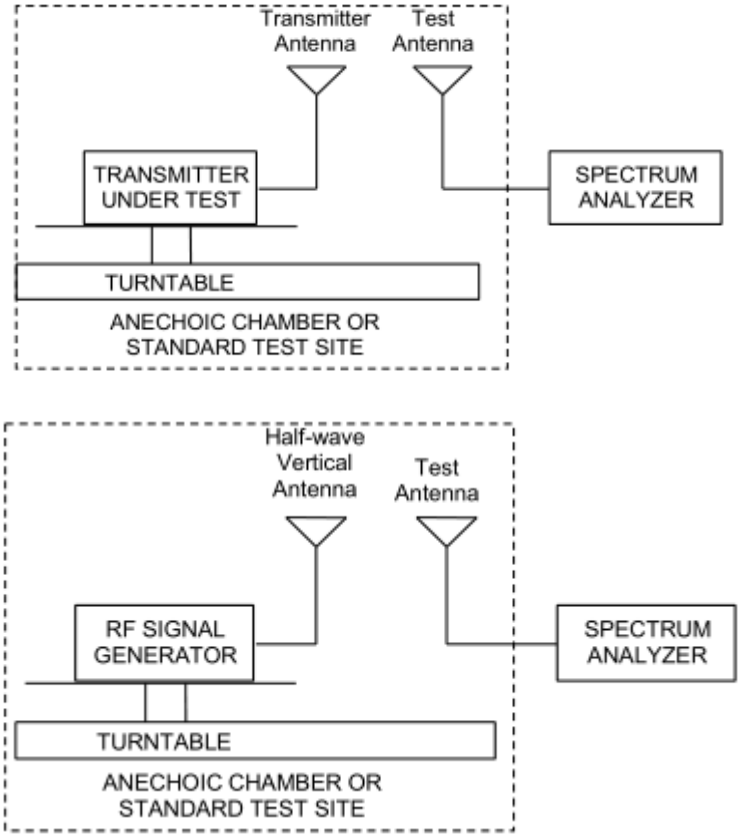
During the process of the testing, The EUT is controlled by the Base Station Simulator to ensure max power transmission and proper modulation.

1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.8 and ANSI C63.26 (2015).
a) Connect the equipment as illustrated. Mount the equipment with the manufacturer specified antenna in a vertical orientation on a manufacturer specified mounting surface located on a non-conducting rotating platform of a RF anechoic chamber (preferred) or a standard radiation site.
b) Key the transmitter, then rotate the EUT 360° azimuthally and record spectrum analyzer power level (LVL) measurements at angular increments that are sufficiently small to permit resolution of all peaks. If a standard radiation test site is used, raise and lower the test antenna to obtain a maximum reading at each angular increment. (Note: several batteries may be needed to offset the effect of battery voltage droop, which should not exceed 5% of the manufactured specified battery voltage during transmission).
c) Replace the transmitter under test with a vertically polarized half-wave dipole (or an antenna whose gain is known relative to an ideal half-wave dipole). The center of the antenna should be at the same location as the center of the antenna under test.
d) Connect the antenna to a signal generator with a known output power and record the path loss (in dB) as LOSS. If a standard radiation test site is used, raise and lower the test antenna to obtain a maximum reading.LOSS = Generator Output Power (dBm) – Analyzer reading (dBm)
e) Determine the effective radiated output power at each angular position from the readings in steps b) and d) using the following equation:ERP (dBm) = LVL (dBm) + LOSS (dB)
f) The maximum ERP is the maximum value determined in the preceding step.
g) When calculating ERP, in addition to knowing the antenna radiation and matching characteristics, it is necessary to know the loss values of all elements (e.g.transmission line attenuation, mismatches, filters, combiners) interposed between the point where transmitter output power is measured, and the point where power is applied to the antenna. ERP can then be calculated as follows:
EIRP (dBm) = Output Power (dBm) - Losses (dB) + Antenna Gain (dBi)
where:dBd refers to gain relative to an ideal dipole.
EIRP (dBm) = ERP (dBm) + 2.15 (dB.)
The RB allocation refers to section 5.1, using the maximum output power configuration.

Test Setup



The loss between RF output port of the EUT and the input port of the tester has been taken into consideration.



Note: Area side:2.4mX3.6m

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

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	⩽ 1 W (30 dBm)
Part 27.50(h)(2) Limit	⩽ 2 W (33 dBm)

Measurement Uncertainty

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

Test Results

WCDMA Band IV		Conducted Power (dBm)			Internal Antenna EIRP (dBm)			External Antenna 1 EIRP (dBm)			External Antenna 2 EIRP (dBm)		
		Channel 1312	Channel 1413	Channel 1513	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)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)
RMC		21.44	21.81	21.38	23.44	23.81	23.38	24.44	24.44	24.38	22.44	22.81	22.38
HSDPA	Sub-Test 1	20.90	21.23	20.82	22.90	23.23	22.82	23.90	23.90	23.82	21.90	22.23	21.82
	Sub-Test 2	20.89	21.25	20.79	22.89	23.25	22.79	23.89	23.89	23.79	21.89	22.25	21.79
	Sub-Test 3	20.36	20.75	20.31	22.36	22.75	22.31	23.36	23.36	23.31	21.36	21.75	21.31
	Sub-Test 4	20.37	20.76	20.29	22.37	22.76	22.29	23.37	23.37	23.29	21.37	21.76	21.29
HSUPA	Sub-Test 1	20.86	21.22	20.77	22.86	23.22	22.77	23.86	23.86	23.77	21.86	22.22	21.77
	Sub-Test 2	19.85	20.20	19.76	21.85	22.20	21.76	22.85	22.85	22.76	20.85	21.20	20.76
	Sub-Test 3	20.32	20.68	20.25	22.32	22.68	22.25	23.32	23.32	23.25	21.32	21.68	21.25
	Sub-Test 4	19.78	20.17	19.73	21.78	22.17	21.73	22.78	22.78	22.73	20.78	21.17	20.73
	Sub-Test 5	20.79	21.15	20.71	22.79	23.15	22.71	23.79	23.79	23.71	21.79	22.15	21.71
DC-HSDPA	Sub-Test 1	20.78	21.17	20.72	22.78	23.17	22.72	23.78	23.78	23.72	21.78	22.17	21.72
	Sub-Test 2	20.77	21.16	20.71	22.77	23.16	22.71	23.77	23.77	23.71	21.77	22.16	21.71
	Sub-Test 3	20.35	20.65	20.22	22.35	22.65	22.22	23.35	23.35	23.22	21.35	21.65	21.22
	Sub-Test 4	20.34	20.64	20.21	22.34	22.64	22.21	23.34	23.34	23.21	21.34	21.64	21.21

LTE Band 4

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	Internal Antenna EIRP	External Antenna 1 EIRP	External Antenna 2 EIRP
Band4	1.4M	QPSK	19957	1RB#0	22.46	24.46	25.46	23.46
Band4	1.4M	QPSK	19957	1RB#2	22.78	24.78	25.78	23.78
Band4	1.4M	QPSK	19957	1RB#5	22.50	24.50	25.50	23.50
Band4	1.4M	QPSK	19957	3RB#0	21.61	23.61	24.61	22.61
Band4	1.4M	QPSK	19957	3RB#2	21.53	23.53	24.53	22.53
Band4	1.4M	QPSK	19957	3RB#3	21.47	23.47	24.47	22.47
Band4	1.4M	QPSK	19957	6RB#0	21.53	23.53	24.53	22.53
Band4	1.4M	QPSK	20175	1RB#0	22.53	24.53	25.53	23.53
Band4	1.4M	QPSK	20175	1RB#2	22.75	24.75	25.75	23.75
Band4	1.4M	QPSK	20175	1RB#5	22.33	24.33	25.33	23.33
Band4	1.4M	QPSK	20175	3RB#0	21.67	23.67	24.67	22.67
Band4	1.4M	QPSK	20175	3RB#2	21.65	23.65	24.65	22.65
Band4	1.4M	QPSK	20175	3RB#3	21.58	23.58	24.58	22.58
Band4	1.4M	QPSK	20175	6RB#0	21.66	23.66	24.66	22.66

Band4	1.4M	QPSK	20393	1RB#0	22.49	24.49	25.49	23.49
Band4	1.4M	QPSK	20393	1RB#2	22.40	24.40	25.40	23.40
Band4	1.4M	QPSK	20393	1RB#5	21.93	23.93	24.93	22.93
Band4	1.4M	QPSK	20393	3RB#0	21.49	23.49	24.49	22.49
Band4	1.4M	QPSK	20393	3RB#2	21.46	23.46	24.46	22.46
Band4	1.4M	QPSK	20393	3RB#3	21.20	23.20	24.20	22.20
Band4	1.4M	QPSK	20393	6RB#0	21.38	23.38	24.38	22.38
Band4	1.4M	16QAM	19957	1RB#0	21.45	23.45	24.45	22.45
Band4	1.4M	16QAM	19957	1RB#2	21.90	23.90	24.90	22.90
Band4	1.4M	16QAM	19957	1RB#5	21.63	23.63	24.63	22.63
Band4	1.4M	16QAM	19957	3RB#0	21.46	23.46	24.46	22.46
Band4	1.4M	16QAM	19957	3RB#2	21.44	23.44	24.44	22.44
Band4	1.4M	16QAM	19957	3RB#3	21.32	23.32	24.32	22.32
Band4	1.4M	16QAM	19957	6RB#0	21.45	23.45	24.45	22.45
Band4	1.4M	16QAM	20175	1RB#0	21.65	23.65	24.65	22.65
Band4	1.4M	16QAM	20175	1RB#2	21.96	23.96	24.96	22.96
Band4	1.4M	16QAM	20175	1RB#5	21.51	23.51	24.51	22.51
Band4	1.4M	16QAM	20175	3RB#0	21.54	23.54	24.54	22.54
Band4	1.4M	16QAM	20175	3RB#2	21.53	23.53	24.53	22.53
Band4	1.4M	16QAM	20175	3RB#3	21.52	23.52	24.52	22.52
Band4	1.4M	16QAM	20175	6RB#0	21.58	23.58	24.58	22.58
Band4	1.4M	16QAM	20393	1RB#0	21.57	23.57	24.57	22.57
Band4	1.4M	16QAM	20393	1RB#2	21.50	23.50	24.50	22.50
Band4	1.4M	16QAM	20393	1RB#5	21.04	23.04	24.04	22.04
Band4	1.4M	16QAM	20393	3RB#0	21.42	23.42	24.42	22.42
Band4	1.4M	16QAM	20393	3RB#2	21.35	23.35	24.35	22.35
Band4	1.4M	16QAM	20393	3RB#3	21.14	23.14	24.14	22.14
Band4	1.4M	16QAM	20393	6RB#0	21.33	23.33	24.33	22.33
Band4	3M	QPSK	19965	1RB#0	22.48	24.48	25.48	23.48
Band4	3M	QPSK	19965	1RB#7	22.81	24.81	25.81	23.81
Band4	3M	QPSK	19965	1RB#14	22.53	24.53	25.53	23.53
Band4	3M	QPSK	19965	8RB#0	21.69	23.69	24.69	22.69
Band4	3M	QPSK	19965	8RB#4	21.63	23.63	24.63	22.63
Band4	3M	QPSK	19965	8RB#7	21.55	23.55	24.55	22.55
Band4	3M	QPSK	19965	15RB#0	21.56	23.56	24.56	22.56
Band4	3M	QPSK	20175	1RB#0	22.57	24.57	25.57	23.57
Band4	3M	QPSK	20175	1RB#7	22.80	24.80	25.80	23.80
Band4	3M	QPSK	20175	1RB#14	22.38	24.38	25.38	23.38
Band4	3M	QPSK	20175	8RB#0	21.77	23.77	24.77	22.77
Band4	3M	QPSK	20175	8RB#4	21.73	23.73	24.73	22.73
Band4	3M	QPSK	20175	8RB#7	21.67	23.67	24.67	22.67
Band4	3M	QPSK	20175	15RB#0	21.70	23.70	24.70	22.70
Band4	3M	QPSK	20385	1RB#0	22.52	24.52	25.52	23.52

Band4	3M	QPSK	20385	1RB#7	22.44	24.44	25.44	23.44
Band4	3M	QPSK	20385	1RB#14	21.97	23.97	24.97	22.97
Band4	3M	QPSK	20385	8RB#0	21.60	23.60	24.60	22.60
Band4	3M	QPSK	20385	8RB#4	21.56	23.56	24.56	22.56
Band4	3M	QPSK	20385	8RB#7	21.28	23.28	24.28	22.28
Band4	3M	QPSK	20385	15RB#0	21.41	23.41	24.41	22.41
Band4	3M	16QAM	19965	1RB#0	21.48	23.48	24.48	22.48
Band4	3M	16QAM	19965	1RB#7	21.93	23.93	24.93	22.93
Band4	3M	16QAM	19965	1RB#14	21.65	23.65	24.65	22.65
Band4	3M	16QAM	19965	8RB#0	21.55	23.55	24.55	22.55
Band4	3M	16QAM	19965	8RB#4	21.53	23.53	24.53	22.53
Band4	3M	16QAM	19965	8RB#7	21.40	23.40	24.40	22.40
Band4	3M	16QAM	19965	15RB#0	21.48	23.48	24.48	22.48
Band4	3M	16QAM	20175	1RB#0	21.67	23.67	24.67	22.67
Band4	3M	16QAM	20175	1RB#7	22.01	24.01	25.01	23.01
Band4	3M	16QAM	20175	1RB#14	21.55	23.55	24.55	22.55
Band4	3M	16QAM	20175	8RB#0	21.65	23.65	24.65	22.65
Band4	3M	16QAM	20175	8RB#4	21.64	23.64	24.64	22.64
Band4	3M	16QAM	20175	8RB#7	21.62	23.62	24.62	22.62
Band4	3M	16QAM	20175	15RB#0	21.62	23.62	24.62	22.62
Band4	3M	16QAM	20385	1RB#0	21.60	23.60	24.60	22.60
Band4	3M	16QAM	20385	1RB#7	21.54	23.54	24.54	22.54
Band4	3M	16QAM	20385	1RB#14	21.07	23.07	24.07	22.07
Band4	3M	16QAM	20385	8RB#0	21.52	23.52	24.52	22.52
Band4	3M	16QAM	20385	8RB#4	21.45	23.45	24.45	22.45
Band4	3M	16QAM	20385	8RB#7	21.25	23.25	24.25	22.25
Band4	3M	16QAM	20385	15RB#0	21.36	23.36	24.36	22.36
Band4	5M	QPSK	19975	1RB#0	22.52	24.52	25.52	23.52
Band4	5M	QPSK	19975	1RB#13	22.88	24.88	25.88	23.88
Band4	5M	QPSK	19975	1RB#24	22.59	24.59	25.59	23.59
Band4	5M	QPSK	19975	12RB#0	21.76	23.76	24.76	22.76
Band4	5M	QPSK	19975	12RB#6	21.68	23.68	24.68	22.68
Band4	5M	QPSK	19975	12RB#13	21.62	23.62	24.62	22.62
Band4	5M	QPSK	19975	25RB#0	21.64	23.64	24.64	22.64
Band4	5M	QPSK	20175	1RB#0	22.69	24.69	25.69	23.69
Band4	5M	QPSK	20175	1RB#13	22.85	24.85	25.85	23.85
Band4	5M	QPSK	20175	1RB#24	22.45	24.45	25.45	23.45
Band4	5M	QPSK	20175	12RB#0	21.81	23.81	24.81	22.81
Band4	5M	QPSK	20175	12RB#6	21.78	23.78	24.78	22.78
Band4	5M	QPSK	20175	12RB#13	21.77	23.77	24.77	22.77
Band4	5M	QPSK	20175	25RB#0	21.79	23.79	24.79	22.79
Band4	5M	QPSK	20375	1RB#0	22.57	24.57	25.57	23.57
Band4	5M	QPSK	20375	1RB#13	22.51	24.51	25.51	23.51

Band4	5M	QPSK	20375	1RB#24	22.06	24.06	25.06	23.06
Band4	5M	QPSK	20375	12RB#0	21.66	23.66	24.66	22.66
Band4	5M	QPSK	20375	12RB#6	21.60	23.60	24.60	22.60
Band4	5M	QPSK	20375	12RB#13	21.28	23.28	24.28	22.28
Band4	5M	QPSK	20375	25RB#0	21.42	23.42	24.42	22.42
Band4	5M	16QAM	19975	1RB#0	21.50	23.50	24.50	22.50
Band4	5M	16QAM	19975	1RB#13	21.95	23.95	24.95	22.95
Band4	5M	16QAM	19975	1RB#24	21.67	23.67	24.67	22.67
Band4	5M	16QAM	19975	12RB#0	21.59	23.59	24.59	22.59
Band4	5M	16QAM	19975	12RB#6	21.55	23.55	24.55	22.55
Band4	5M	16QAM	19975	12RB#13	21.45	23.45	24.45	22.45
Band4	5M	16QAM	19975	25RB#0	21.51	23.51	24.51	22.51
Band4	5M	16QAM	20175	1RB#0	21.69	23.69	24.69	22.69
Band4	5M	16QAM	20175	1RB#13	22.08	24.08	25.08	23.08
Band4	5M	16QAM	20175	1RB#24	21.62	23.62	24.62	22.62
Band4	5M	16QAM	20175	12RB#0	21.69	23.69	24.69	22.69
Band4	5M	16QAM	20175	12RB#6	21.68	23.68	24.68	22.68
Band4	5M	16QAM	20175	12RB#13	21.62	23.62	24.62	22.62
Band4	5M	16QAM	20175	25RB#0	21.63	23.63	24.63	22.63
Band4	5M	16QAM	20375	1RB#0	21.64	23.64	24.64	22.64
Band4	5M	16QAM	20375	1RB#13	21.58	23.58	24.58	22.58
Band4	5M	16QAM	20375	1RB#24	21.10	23.10	24.10	22.10
Band4	5M	16QAM	20375	12RB#0	21.57	23.57	24.57	22.57
Band4	5M	16QAM	20375	12RB#6	21.50	23.50	24.50	22.50
Band4	5M	16QAM	20375	12RB#13	21.28	23.28	24.28	22.28
Band4	5M	16QAM	20375	25RB#0	21.37	23.37	24.37	22.37
Band4	10M	QPSK	20000	1RB#0	22.47	24.47	25.47	23.47
Band4	10M	QPSK	20000	1RB#25	22.82	24.82	25.82	23.82
Band4	10M	QPSK	20000	1RB#49	22.52	24.52	25.52	23.52
Band4	10M	QPSK	20000	25RB#0	21.69	23.69	24.69	22.69
Band4	10M	QPSK	20000	25RB#13	21.64	23.64	24.64	22.64
Band4	10M	QPSK	20000	25RB#25	21.55	23.55	24.55	22.55
Band4	10M	QPSK	20000	50RB#0	21.62	23.62	24.62	22.62
Band4	10M	QPSK	20175	1RB#0	22.56	24.56	25.56	23.56
Band4	10M	QPSK	20175	1RB#25	22.81	24.81	25.81	23.81
Band4	10M	QPSK	20175	1RB#49	22.37	24.37	25.37	23.37
Band4	10M	QPSK	20175	25RB#0	21.77	23.77	24.77	22.77
Band4	10M	QPSK	20175	25RB#13	21.74	23.74	24.74	22.74
Band4	10M	QPSK	20175	25RB#25	21.69	23.69	24.69	22.69
Band4	10M	QPSK	20175	50RB#0	21.71	23.71	24.71	22.71
Band4	10M	QPSK	20350	1RB#0	22.51	24.51	25.51	23.51
Band4	10M	QPSK	20350	1RB#25	22.45	24.45	25.45	23.45
Band4	10M	QPSK	20350	1RB#49	21.96	23.96	24.96	22.96

Band4	10M	QPSK	20350	25RB#0	21.60	23.60	24.60	22.60
Band4	10M	QPSK	20350	25RB#13	21.55	23.55	24.55	22.55
Band4	10M	QPSK	20350	25RB#25	21.29	23.29	24.29	22.29
Band4	10M	QPSK	20350	50RB#0	21.43	23.43	24.43	22.43
Band4	10M	16QAM	20000	1RB#0	21.47	23.47	24.47	22.47
Band4	10M	16QAM	20000	1RB#25	21.93	23.93	24.93	22.93
Band4	10M	16QAM	20000	1RB#49	21.65	23.65	24.65	22.65
Band4	10M	16QAM	20000	25RB#0	21.56	23.56	24.56	22.56
Band4	10M	16QAM	20000	25RB#13	21.52	23.52	24.52	22.52
Band4	10M	16QAM	20000	25RB#25	21.40	23.40	24.40	22.40
Band4	10M	16QAM	20000	50RB#0	21.49	23.49	24.49	22.49
Band4	10M	16QAM	20175	1RB#0	21.66	23.66	24.66	22.66
Band4	10M	16QAM	20175	1RB#25	22.03	24.03	25.03	23.03
Band4	10M	16QAM	20175	1RB#49	21.55	23.55	24.55	22.55
Band4	10M	16QAM	20175	25RB#0	21.66	23.66	24.66	22.66
Band4	10M	16QAM	20175	25RB#13	21.63	23.63	24.63	22.63
Band4	10M	16QAM	20175	25RB#25	21.62	23.62	24.62	22.62
Band4	10M	16QAM	20175	50RB#0	21.63	23.63	24.63	22.63
Band4	10M	16QAM	20350	1RB#0	21.59	23.59	24.59	22.59
Band4	10M	16QAM	20350	1RB#25	21.54	23.54	24.54	22.54
Band4	10M	16QAM	20350	1RB#49	21.06	23.06	24.06	22.06
Band4	10M	16QAM	20350	25RB#0	21.53	23.53	24.53	22.53
Band4	10M	16QAM	20350	25RB#13	21.44	23.44	24.44	22.44
Band4	10M	16QAM	20350	25RB#25	21.25	23.25	24.25	22.25
Band4	10M	16QAM	20350	50RB#0	21.35	23.35	24.35	22.35
Band4	15M	QPSK	20025	1RB#0	22.46	24.46	25.46	23.46
Band4	15M	QPSK	20025	1RB#38	22.80	24.80	25.80	23.80
Band4	15M	QPSK	20025	1RB#74	22.49	24.49	25.49	23.49
Band4	15M	QPSK	20025	36RB#0	21.67	23.67	24.67	22.67
Band4	15M	QPSK	20025	36RB#18	21.61	23.61	24.61	22.61
Band4	15M	QPSK	20025	36RB#39	21.52	23.52	24.52	22.52
Band4	15M	QPSK	20025	75RB#0	21.60	23.60	24.60	22.60
Band4	15M	QPSK	20175	1RB#0	22.52	24.52	25.52	23.52
Band4	15M	QPSK	20175	1RB#38	22.80	24.80	25.80	23.80
Band4	15M	QPSK	20175	1RB#74	22.32	24.32	25.32	23.32
Band4	15M	QPSK	20175	36RB#0	21.73	23.73	24.73	22.73
Band4	15M	QPSK	20175	36RB#18	21.69	23.69	24.69	22.69
Band4	15M	QPSK	20175	36RB#39	21.66	23.66	24.66	22.66
Band4	15M	QPSK	20175	75RB#0	21.67	23.67	24.67	22.67
Band4	15M	QPSK	20325	1RB#0	22.49	24.49	25.49	23.49
Band4	15M	QPSK	20325	1RB#38	22.42	24.42	25.42	23.42
Band4	15M	QPSK	20325	1RB#74	21.92	23.92	24.92	22.92
Band4	15M	QPSK	20325	36RB#0	21.57	23.57	24.57	22.57

Band4	15M	QPSK	20325	36RB#18	21.51	23.51	24.51	22.51
Band4	15M	QPSK	20325	36RB#39	21.25	23.25	24.25	22.25
Band4	15M	QPSK	20325	75RB#0	21.38	23.38	24.38	22.38
Band4	15M	16QAM	20025	1RB#0	21.42	23.42	24.42	22.42
Band4	15M	16QAM	20025	1RB#38	21.91	23.91	24.91	22.91
Band4	15M	16QAM	20025	1RB#74	21.62	23.62	24.62	22.62
Band4	15M	16QAM	20025	36RB#0	21.53	23.53	24.53	22.53
Band4	15M	16QAM	20025	36RB#18	21.49	23.49	24.49	22.49
Band4	15M	16QAM	20025	36RB#39	21.38	23.38	24.38	22.38
Band4	15M	16QAM	20025	75RB#0	21.46	23.46	24.46	22.46
Band4	15M	16QAM	20175	1RB#0	21.64	23.64	24.64	22.64
Band4	15M	16QAM	20175	1RB#38	22.00	24.00	25.00	23.00
Band4	15M	16QAM	20175	1RB#74	21.51	23.51	24.51	22.51
Band4	15M	16QAM	20175	36RB#0	21.64	23.64	24.64	22.64
Band4	15M	16QAM	20175	36RB#18	21.58	23.58	24.58	22.58
Band4	15M	16QAM	20175	36RB#39	21.58	23.58	24.58	22.58
Band4	15M	16QAM	20175	75RB#0	21.58	23.58	24.58	22.58
Band4	15M	16QAM	20325	1RB#0	21.57	23.57	24.57	22.57
Band4	15M	16QAM	20325	1RB#38	21.52	23.52	24.52	22.52
Band4	15M	16QAM	20325	1RB#74	21.03	23.03	24.03	22.03
Band4	15M	16QAM	20325	36RB#0	21.50	23.50	24.50	22.50
Band4	15M	16QAM	20325	36RB#18	21.40	23.40	24.40	22.40
Band4	15M	16QAM	20325	36RB#39	21.22	23.22	24.22	22.22
Band4	15M	16QAM	20325	75RB#0	21.31	23.31	24.31	22.31
Band4	20M	QPSK	20050	1RB#0	22.43	24.43	25.43	23.43
Band4	20M	QPSK	20050	1RB#50	22.79	24.79	25.79	23.79
Band4	20M	QPSK	20050	1RB#99	22.47	24.47	25.47	23.47
Band4	20M	QPSK	20050	50RB#0	21.64	23.64	24.64	22.64
Band4	20M	QPSK	20050	50RB#25	21.59	23.59	24.59	22.59
Band4	20M	QPSK	20050	50RB#50	21.49	23.49	24.49	22.49
Band4	20M	QPSK	20050	100RB#0	21.57	23.57	24.57	22.57
Band4	20M	QPSK	20175	1RB#0	22.48	24.48	25.48	23.48
Band4	20M	QPSK	20175	1RB#50	22.76	24.76	25.76	23.76
Band4	20M	QPSK	20175	1RB#99	22.31	24.31	25.31	23.31
Band4	20M	QPSK	20175	50RB#0	21.68	23.68	24.68	22.68
Band4	20M	QPSK	20175	50RB#25	21.65	23.65	24.65	22.65
Band4	20M	QPSK	20175	50RB#50	21.61	23.61	24.61	22.61
Band4	20M	QPSK	20175	100RB#0	21.62	23.62	24.62	22.62
Band4	20M	QPSK	20300	1RB#0	22.46	24.46	25.46	23.46
Band4	20M	QPSK	20300	1RB#50	22.40	24.40	25.40	23.40
Band4	20M	QPSK	20300	1RB#99	21.89	23.89	24.89	22.89
Band4	20M	QPSK	20300	50RB#0	21.53	23.53	24.53	22.53
Band4	20M	QPSK	20300	50RB#25	21.48	23.48	24.48	22.48

Band4	20M	QPSK	20300	50RB#50	21.21	23.21	24.21	22.21
Band4	20M	QPSK	20300	100RB#0	21.34	23.34	24.34	22.34
Band4	20M	16QAM	20050	1RB#0	21.40	23.40	24.40	22.40
Band4	20M	16QAM	20050	1RB#50	21.87	23.87	24.87	22.87
Band4	20M	16QAM	20050	1RB#99	21.60	23.60	24.60	22.60
Band4	20M	16QAM	20050	50RB#0	21.50	23.50	24.50	22.50
Band4	20M	16QAM	20050	50RB#25	21.46	23.46	24.46	22.46
Band4	20M	16QAM	20050	50RB#50	21.35	23.35	24.35	22.35
Band4	20M	16QAM	20050	100RB#0	21.44	23.44	24.44	22.44
Band4	20M	16QAM	20175	1RB#0	21.60	23.60	24.60	22.60
Band4	20M	16QAM	20175	1RB#50	21.98	23.98	24.98	22.98
Band4	20M	16QAM	20175	1RB#99	21.48	23.48	24.48	22.48
Band4	20M	16QAM	20175	50RB#0	21.60	23.60	24.60	22.60
Band4	20M	16QAM	20175	50RB#25	21.56	23.56	24.56	22.56
Band4	20M	16QAM	20175	50RB#50	21.53	23.53	24.53	22.53
Band4	20M	16QAM	20175	100RB#0	21.54	23.54	24.54	22.54
Band4	20M	16QAM	20300	1RB#0	21.52	23.52	24.52	22.52
Band4	20M	16QAM	20300	1RB#50	21.48	23.48	24.48	22.48
Band4	20M	16QAM	20300	1RB#99	21.01	23.01	24.01	22.01
Band4	20M	16QAM	20300	50RB#0	21.47	23.47	24.47	22.47
Band4	20M	16QAM	20300	50RB#25	21.37	23.37	24.37	22.37
Band4	20M	16QAM	20300	50RB#50	21.18	23.18	24.18	22.18
Band4	20M	16QAM	20300	100RB#0	21.28	23.28	24.28	22.28

LTE Band 7

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power (dBm)	Internal Antenna EIRP	External Antenna 1 EIRP	External Antenna 2 EIRP
Band7	5M	QPSK	20775	1RB#0	21.91	23.41	24.91	22.91
Band7	5M	QPSK	20775	1RB#13	21.53	23.03	24.53	22.53
Band7	5M	QPSK	20775	1RB#24	21.34	22.84	24.34	22.34
Band7	5M	QPSK	20775	12RB#0	20.88	22.38	23.88	21.88
Band7	5M	QPSK	20775	12RB#6	20.80	22.30	23.80	21.80
Band7	5M	QPSK	20775	12RB#13	20.42	21.92	23.42	21.42
Band7	5M	QPSK	20775	25RB#0	20.61	22.11	23.61	21.61
Band7	5M	QPSK	21100	1RB#0	21.25	22.75	24.25	22.25
Band7	5M	QPSK	21100	1RB#13	21.66	23.16	24.66	22.66
Band7	5M	QPSK	21100	1RB#24	21.65	23.15	24.65	22.65
Band7	5M	QPSK	21100	12RB#0	20.60	22.10	23.60	21.60
Band7	5M	QPSK	21100	12RB#6	20.67	22.17	23.67	21.67
Band7	5M	QPSK	21100	12RB#13	20.82	22.32	23.82	21.82
Band7	5M	QPSK	21100	25RB#0	20.73	22.23	23.73	21.73
Band7	5M	QPSK	21425	1RB#0	21.38	22.88	24.38	22.38
Band7	5M	QPSK	21425	1RB#13	21.34	22.84	24.34	22.34
Band7	5M	QPSK	21425	1RB#24	21.88	23.38	24.88	22.88
Band7	5M	QPSK	21425	12RB#0	20.47	21.97	23.47	21.47
Band7	5M	QPSK	21425	12RB#6	20.43	21.93	23.43	21.43
Band7	5M	QPSK	21425	12RB#13	20.19	21.69	23.19	21.19
Band7	5M	QPSK	21425	25RB#0	20.42	21.92	23.42	21.42
Band7	5M	16QAM	20775	1RB#0	21.21	22.71	24.21	22.21
Band7	5M	16QAM	20775	1RB#13	20.85	22.35	23.85	21.85
Band7	5M	16QAM	20775	1RB#24	20.67	22.17	23.67	21.67
Band7	5M	16QAM	20775	12RB#0	20.71	22.21	23.71	21.71
Band7	5M	16QAM	20775	12RB#6	20.65	22.15	23.65	21.65
Band7	5M	16QAM	20775	12RB#13	20.28	21.78	23.28	21.28
Band7	5M	16QAM	20775	25RB#0	20.51	22.01	23.51	21.51
Band7	5M	16QAM	21100	1RB#0	20.30	21.80	23.30	21.30
Band7	5M	16QAM	21100	1RB#13	20.88	22.38	23.88	21.88
Band7	5M	16QAM	21100	1RB#24	20.84	22.34	23.84	21.84
Band7	5M	16QAM	21100	12RB#0	20.40	21.90	23.40	21.40
Band7	5M	16QAM	21100	12RB#6	20.59	22.09	23.59	21.59
Band7	5M	16QAM	21100	12RB#13	20.61	22.11	23.61	21.61
Band7	5M	16QAM	21100	25RB#0	20.53	22.03	23.53	21.53
Band7	5M	16QAM	21425	1RB#0	20.49	21.99	23.49	21.49
Band7	5M	16QAM	21425	1RB#13	20.51	22.01	23.51	21.51
Band7	5M	16QAM	21425	1RB#24	20.83	22.33	23.83	21.83
Band7	5M	16QAM	21425	12RB#0	20.33	21.83	23.33	21.33

Band7	5M	16QAM	21425	12RB#6	20.31	21.81	23.31	21.31
Band7	5M	16QAM	21425	12RB#13	20.19	21.69	23.19	21.19
Band7	5M	16QAM	21425	25RB#0	20.35	21.85	23.35	21.35
Band7	10M	QPSK	20800	1RB#0	21.86	23.36	24.86	22.86
Band7	10M	QPSK	20800	1RB#25	21.47	22.97	24.47	22.47
Band7	10M	QPSK	20800	1RB#49	21.27	22.77	24.27	22.27
Band7	10M	QPSK	20800	25RB#0	20.81	22.31	23.81	21.81
Band7	10M	QPSK	20800	25RB#13	20.76	22.26	23.76	21.76
Band7	10M	QPSK	20800	25RB#25	20.35	21.85	23.35	21.35
Band7	10M	QPSK	20800	50RB#0	20.59	22.09	23.59	21.59
Band7	10M	QPSK	21100	1RB#0	21.12	22.62	24.12	22.12
Band7	10M	QPSK	21100	1RB#25	21.62	23.12	24.62	22.62
Band7	10M	QPSK	21100	1RB#49	21.57	23.07	24.57	22.57
Band7	10M	QPSK	21100	25RB#0	20.56	22.06	23.56	21.56
Band7	10M	QPSK	21100	25RB#13	20.63	22.13	23.63	21.63
Band7	10M	QPSK	21100	25RB#25	20.74	22.24	23.74	21.74
Band7	10M	QPSK	21100	50RB#0	20.65	22.15	23.65	21.65
Band7	10M	QPSK	21400	1RB#0	21.32	22.82	24.32	22.32
Band7	10M	QPSK	21400	1RB#25	21.28	22.78	24.28	22.28
Band7	10M	QPSK	21400	1RB#49	21.78	23.28	24.78	22.78
Band7	10M	QPSK	21400	25RB#0	20.41	21.91	23.41	21.41
Band7	10M	QPSK	21400	25RB#13	20.38	21.88	23.38	21.38
Band7	10M	QPSK	21400	25RB#25	20.20	21.70	23.20	21.20
Band7	10M	QPSK	21400	50RB#0	20.43	21.93	23.43	21.43
Band7	10M	16QAM	20800	1RB#0	21.18	22.68	24.18	22.18
Band7	10M	16QAM	20800	1RB#25	20.83	22.33	23.83	21.83
Band7	10M	16QAM	20800	1RB#49	20.65	22.15	23.65	21.65
Band7	10M	16QAM	20800	25RB#0	20.68	22.18	23.68	21.68
Band7	10M	16QAM	20800	25RB#13	20.62	22.12	23.62	21.62
Band7	10M	16QAM	20800	25RB#25	20.23	21.73	23.23	21.23
Band7	10M	16QAM	20800	50RB#0	20.49	21.99	23.49	21.49
Band7	10M	16QAM	21100	1RB#0	20.27	21.77	23.27	21.27
Band7	10M	16QAM	21100	1RB#25	20.83	22.33	23.83	21.83
Band7	10M	16QAM	21100	1RB#49	20.77	22.27	23.77	21.77
Band7	10M	16QAM	21100	25RB#0	20.37	21.87	23.37	21.37
Band7	10M	16QAM	21100	25RB#13	20.54	22.04	23.54	21.54
Band7	10M	16QAM	21100	25RB#25	20.61	22.11	23.61	21.61
Band7	10M	16QAM	21100	50RB#0	20.53	22.03	23.53	21.53
Band7	10M	16QAM	21400	1RB#0	20.44	21.94	23.44	21.44
Band7	10M	16QAM	21400	1RB#25	20.47	21.97	23.47	21.47
Band7	10M	16QAM	21400	1RB#49	20.79	22.29	23.79	21.79
Band7	10M	16QAM	21400	25RB#0	20.29	21.79	23.29	21.29
Band7	10M	16QAM	21400	25RB#13	20.25	21.75	23.25	21.25

Band7	10M	16QAM	21400	25RB#25	20.16	21.66	23.16	21.16
Band7	10M	16QAM	21400	50RB#0	20.33	21.83	23.33	21.33
Band7	15M	QPSK	20825	1RB#0	21.85	23.35	24.85	22.85
Band7	15M	QPSK	20825	1RB#38	21.45	22.95	24.45	22.45
Band7	15M	QPSK	20825	1RB#74	21.24	22.74	24.24	22.24
Band7	15M	QPSK	20825	36RB#0	20.79	22.29	23.79	21.79
Band7	15M	QPSK	20825	36RB#18	20.73	22.23	23.73	21.73
Band7	15M	QPSK	20825	36RB#39	20.32	21.82	23.32	21.32
Band7	15M	QPSK	20825	75RB#0	20.57	22.07	23.57	21.57
Band7	15M	QPSK	21100	1RB#0	21.08	22.58	24.08	22.08
Band7	15M	QPSK	21100	1RB#38	21.61	23.11	24.61	22.61
Band7	15M	QPSK	21100	1RB#74	21.52	23.02	24.52	22.52
Band7	15M	QPSK	21100	36RB#0	20.52	22.02	23.52	21.52
Band7	15M	QPSK	21100	36RB#18	20.58	22.08	23.58	21.58
Band7	15M	QPSK	21100	36RB#39	20.71	22.21	23.71	21.71
Band7	15M	QPSK	21100	75RB#0	20.61	22.11	23.61	21.61
Band7	15M	QPSK	21375	1RB#0	21.30	22.80	24.30	22.30
Band7	15M	QPSK	21375	1RB#38	21.25	22.75	24.25	22.25
Band7	15M	QPSK	21375	1RB#74	21.74	23.24	24.74	22.74
Band7	15M	QPSK	21375	36RB#0	20.38	21.88	23.38	21.38
Band7	15M	QPSK	21375	36RB#18	20.34	21.84	23.34	21.34
Band7	15M	QPSK	21375	36RB#39	20.16	21.66	23.16	21.16
Band7	15M	QPSK	21375	75RB#0	20.38	21.88	23.38	21.38
Band7	15M	16QAM	20825	1RB#0	21.13	22.63	24.13	22.13
Band7	15M	16QAM	20825	1RB#38	20.81	22.31	23.81	21.81
Band7	15M	16QAM	20825	1RB#74	20.62	22.12	23.62	21.62
Band7	15M	16QAM	20825	36RB#0	20.65	22.15	23.65	21.65
Band7	15M	16QAM	20825	36RB#18	20.59	22.09	23.59	21.59
Band7	15M	16QAM	20825	36RB#39	20.21	21.71	23.21	21.21
Band7	15M	16QAM	20825	75RB#0	20.46	21.96	23.46	21.46
Band7	15M	16QAM	21100	1RB#0	20.25	21.75	23.25	21.25
Band7	15M	16QAM	21100	1RB#38	20.80	22.30	23.80	21.80
Band7	15M	16QAM	21100	1RB#74	20.73	22.23	23.73	21.73
Band7	15M	16QAM	21100	36RB#0	20.35	21.85	23.35	21.35
Band7	15M	16QAM	21100	36RB#18	20.49	21.99	23.49	21.49
Band7	15M	16QAM	21100	36RB#39	20.57	22.07	23.57	21.57
Band7	15M	16QAM	21100	75RB#0	20.48	21.98	23.48	21.48
Band7	15M	16QAM	21375	1RB#0	20.42	21.92	23.42	21.42
Band7	15M	16QAM	21375	1RB#38	20.45	21.95	23.45	21.45
Band7	15M	16QAM	21375	1RB#74	20.76	22.26	23.76	21.76
Band7	15M	16QAM	21375	36RB#0	20.26	21.76	23.26	21.26
Band7	15M	16QAM	21375	36RB#18	20.21	21.71	23.21	21.21
Band7	15M	16QAM	21375	36RB#39	20.13	21.63	23.13	21.13

Band7	15M	16QAM	21375	75RB#0	20.29	21.79	23.29	21.29
Band7	20M	QPSK	20850	1RB#0	21.82	23.32	24.82	22.82
Band7	20M	QPSK	20850	1RB#50	21.44	22.94	24.44	22.44
Band7	20M	QPSK	20850	1RB#99	21.22	22.72	24.22	22.22
Band7	20M	QPSK	20850	50RB#0	20.76	22.26	23.76	21.76
Band7	20M	QPSK	20850	50RB#25	20.71	22.21	23.71	21.71
Band7	20M	QPSK	20850	50RB#50	20.29	21.79	23.29	21.29
Band7	20M	QPSK	20850	100RB#0	20.54	22.04	23.54	21.54
Band7	20M	QPSK	21100	1RB#0	21.04	22.54	24.04	22.04
Band7	20M	QPSK	21100	1RB#50	21.57	23.07	24.57	22.57
Band7	20M	QPSK	21100	1RB#99	21.51	23.01	24.51	22.51
Band7	20M	QPSK	21100	50RB#0	20.47	21.97	23.47	21.47
Band7	20M	QPSK	21100	50RB#25	20.54	22.04	23.54	21.54
Band7	20M	QPSK	21100	50RB#50	20.66	22.16	23.66	21.66
Band7	20M	QPSK	21100	100RB#0	20.56	22.06	23.56	21.56
Band7	20M	QPSK	21350	1RB#0	21.27	22.77	24.27	22.27
Band7	20M	QPSK	21350	1RB#50	21.23	22.73	24.23	22.23
Band7	20M	QPSK	21350	1RB#99	21.71	23.21	24.71	22.71
Band7	20M	QPSK	21350	50RB#0	20.34	21.84	23.34	21.34
Band7	20M	QPSK	21350	50RB#25	20.31	21.81	23.31	21.31
Band7	20M	QPSK	21350	50RB#50	20.12	21.62	23.12	21.12
Band7	20M	QPSK	21350	100RB#0	20.34	21.84	23.34	21.34
Band7	20M	16QAM	20850	1RB#0	21.11	22.61	24.11	22.11
Band7	20M	16QAM	20850	1RB#50	20.77	22.27	23.77	21.77
Band7	20M	16QAM	20850	1RB#99	20.60	22.10	23.60	21.60
Band7	20M	16QAM	20850	50RB#0	20.62	22.12	23.62	21.62
Band7	20M	16QAM	20850	50RB#25	20.56	22.06	23.56	21.56
Band7	20M	16QAM	20850	50RB#50	20.18	21.68	23.18	21.18
Band7	20M	16QAM	20850	100RB#0	20.44	21.94	23.44	21.44
Band7	20M	16QAM	21100	1RB#0	20.21	21.71	23.21	21.21
Band7	20M	16QAM	21100	1RB#50	20.78	22.28	23.78	21.78
Band7	20M	16QAM	21100	1RB#99	20.70	22.20	23.70	21.70
Band7	20M	16QAM	21100	50RB#0	20.31	21.81	23.31	21.31
Band7	20M	16QAM	21100	50RB#25	20.47	21.97	23.47	21.47
Band7	20M	16QAM	21100	50RB#50	20.52	22.02	23.52	21.52
Band7	20M	16QAM	21100	100RB#0	20.44	21.94	23.44	21.44
Band7	20M	16QAM	21350	1RB#0	20.37	21.87	23.37	21.37
Band7	20M	16QAM	21350	1RB#50	20.41	21.91	23.41	21.41
Band7	20M	16QAM	21350	1RB#99	20.74	22.24	23.74	21.74
Band7	20M	16QAM	21350	50RB#0	20.23	21.73	23.23	21.23
Band7	20M	16QAM	21350	50RB#25	20.18	21.68	23.18	21.18
Band7	20M	16QAM	21350	50RB#50	20.09	21.59	23.09	21.09
Band7	20M	16QAM	21350	100RB#0	20.26	21.76	23.26	21.26

LTE Band 38

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power (dBm)	Internal Antenna EIRP	External Antenna 1 EIRP	External Antenna 2 EIRP
Band38	5M	QPSK	37775	1RB#0	21.63	23.13	24.63	22.63
Band38	5M	QPSK	37775	1RB#13	22.32	23.82	25.32	23.32
Band38	5M	QPSK	37775	1RB#24	22.73	24.23	25.73	23.73
Band38	5M	QPSK	37775	12RB#0	21.15	22.65	24.15	22.15
Band38	5M	QPSK	37775	12RB#6	21.21	22.71	24.21	22.21
Band38	5M	QPSK	37775	12RB#13	21.47	22.97	24.47	22.47
Band38	5M	QPSK	37775	25RB#0	21.21	22.71	24.21	22.21
Band38	5M	QPSK	38000	1RB#0	22.49	23.99	25.49	23.49
Band38	5M	QPSK	38000	1RB#13	22.64	24.14	25.64	23.64
Band38	5M	QPSK	38000	1RB#24	22.40	23.90	25.40	23.40
Band38	5M	QPSK	38000	12RB#0	21.57	23.07	24.57	22.57
Band38	5M	QPSK	38000	12RB#6	21.51	23.01	24.51	22.51
Band38	5M	QPSK	38000	12RB#13	21.36	22.86	24.36	22.36
Band38	5M	QPSK	38000	25RB#0	21.55	23.05	24.55	22.55
Band38	5M	QPSK	38225	1RB#0	22.25	23.75	25.25	23.25
Band38	5M	QPSK	38225	1RB#13	22.43	23.93	25.43	23.43
Band38	5M	QPSK	38225	1RB#24	22.11	23.61	25.11	23.11
Band38	5M	QPSK	38225	12RB#0	21.32	22.82	24.32	22.32
Band38	5M	QPSK	38225	12RB#6	21.27	22.77	24.27	22.27
Band38	5M	QPSK	38225	12RB#13	21.09	22.59	24.09	22.09
Band38	5M	QPSK	38225	25RB#0	21.19	22.69	24.19	22.19
Band38	5M	16QAM	37775	1RB#0	20.98	22.48	23.98	21.98
Band38	5M	16QAM	37775	1RB#13	21.58	23.08	24.58	22.58
Band38	5M	16QAM	37775	1RB#24	21.88	23.38	24.88	22.88
Band38	5M	16QAM	37775	12RB#0	20.98	22.48	23.98	21.98
Band38	5M	16QAM	37775	12RB#6	21.01	22.51	24.01	22.01
Band38	5M	16QAM	37775	12RB#13	21.28	22.78	24.28	22.28
Band38	5M	16QAM	37775	25RB#0	21.12	22.62	24.12	22.12
Band38	5M	16QAM	38000	1RB#0	21.38	22.88	24.38	22.38
Band38	5M	16QAM	38000	1RB#13	21.68	23.18	24.68	22.68
Band38	5M	16QAM	38000	1RB#24	21.42	22.92	24.42	22.42
Band38	5M	16QAM	38000	12RB#0	21.43	22.93	24.43	22.43
Band38	5M	16QAM	38000	12RB#6	21.48	22.98	24.48	22.48
Band38	5M	16QAM	38000	12RB#13	21.20	22.70	24.20	22.20
Band38	5M	16QAM	38000	25RB#0	21.39	22.89	24.39	22.39
Band38	5M	16QAM	38225	1RB#0	20.93	22.43	23.93	21.93
Band38	5M	16QAM	38225	1RB#13	21.12	22.62	24.12	22.12
Band38	5M	16QAM	38225	1RB#24	20.69	22.19	23.69	21.69
Band38	5M	16QAM	38225	12RB#0	21.20	22.70	24.20	22.20

Band38	5M	16QAM	38225	12RB#6	21.18	22.68	24.18	22.18
Band38	5M	16QAM	38225	12RB#13	21.04	22.54	24.04	22.04
Band38	5M	16QAM	38225	25RB#0	21.13	22.63	24.13	22.13
Band38	10M	QPSK	37800	1RB#0	21.58	23.08	24.58	22.58
Band38	10M	QPSK	37800	1RB#25	22.26	23.76	25.26	23.26
Band38	10M	QPSK	37800	1RB#49	22.66	24.16	25.66	23.66
Band38	10M	QPSK	37800	25RB#0	21.08	22.58	24.08	22.08
Band38	10M	QPSK	37800	25RB#13	21.17	22.67	24.17	22.17
Band38	10M	QPSK	37800	25RB#25	21.40	22.90	24.40	22.40
Band38	10M	QPSK	37800	50RB#0	21.19	22.69	24.19	22.19
Band38	10M	QPSK	38000	1RB#0	22.36	23.86	25.36	23.36
Band38	10M	QPSK	38000	1RB#25	22.60	24.10	25.60	23.60
Band38	10M	QPSK	38000	1RB#49	22.32	23.82	25.32	23.32
Band38	10M	QPSK	38000	25RB#0	21.53	23.03	24.53	22.53
Band38	10M	QPSK	38000	25RB#13	21.47	22.97	24.47	22.47
Band38	10M	QPSK	38000	25RB#25	21.28	22.78	24.28	22.28
Band38	10M	QPSK	38000	50RB#0	21.47	22.97	24.47	22.47
Band38	10M	QPSK	38200	1RB#0	22.19	23.69	25.19	23.19
Band38	10M	QPSK	38200	1RB#25	22.37	23.87	25.37	23.37
Band38	10M	QPSK	38200	1RB#49	22.01	23.51	25.01	23.01
Band38	10M	QPSK	38200	25RB#0	21.26	22.76	24.26	22.26
Band38	10M	QPSK	38200	25RB#13	21.22	22.72	24.22	22.22
Band38	10M	QPSK	38200	25RB#25	21.10	22.60	24.10	22.10
Band38	10M	QPSK	38200	50RB#0	21.20	22.70	24.20	22.20
Band38	10M	16QAM	37800	1RB#0	20.95	22.45	23.95	21.95
Band38	10M	16QAM	37800	1RB#25	21.56	23.06	24.56	22.56
Band38	10M	16QAM	37800	1RB#49	21.86	23.36	24.86	22.86
Band38	10M	16QAM	37800	25RB#0	20.95	22.45	23.95	21.95
Band38	10M	16QAM	37800	25RB#13	20.98	22.48	23.98	21.98
Band38	10M	16QAM	37800	25RB#25	21.23	22.73	24.23	22.23
Band38	10M	16QAM	37800	50RB#0	21.10	22.60	24.10	22.10
Band38	10M	16QAM	38000	1RB#0	21.35	22.85	24.35	22.35
Band38	10M	16QAM	38000	1RB#25	21.63	23.13	24.63	22.63
Band38	10M	16QAM	38000	1RB#49	21.35	22.85	24.35	22.35
Band38	10M	16QAM	38000	25RB#0	21.40	22.90	24.40	22.40
Band38	10M	16QAM	38000	25RB#13	21.43	22.93	24.43	22.43
Band38	10M	16QAM	38000	25RB#25	21.20	22.70	24.20	22.20
Band38	10M	16QAM	38000	50RB#0	21.39	22.89	24.39	22.39
Band38	10M	16QAM	38200	1RB#0	20.88	22.38	23.88	21.88
Band38	10M	16QAM	38200	1RB#25	21.08	22.58	24.08	22.08
Band38	10M	16QAM	38200	1RB#49	20.65	22.15	23.65	21.65
Band38	10M	16QAM	38200	25RB#0	21.16	22.66	24.16	22.16
Band38	10M	16QAM	38200	25RB#13	21.12	22.62	24.12	22.12

Band38	10M	16QAM	38200	25RB#25	21.01	22.51	24.01	22.01
Band38	10M	16QAM	38200	50RB#0	21.11	22.61	24.11	22.11
Band38	15M	QPSK	37825	1RB#0	21.57	23.07	24.57	22.57
Band38	15M	QPSK	37825	1RB#38	22.24	23.74	25.24	23.24
Band38	15M	QPSK	37825	1RB#74	22.63	24.13	25.63	23.63
Band38	15M	QPSK	37825	36RB#0	21.06	22.56	24.06	22.06
Band38	15M	QPSK	37825	36RB#18	21.14	22.64	24.14	22.14
Band38	15M	QPSK	37825	36RB#39	21.37	22.87	24.37	22.37
Band38	15M	QPSK	37825	75RB#0	21.17	22.67	24.17	22.17
Band38	15M	QPSK	38000	1RB#0	22.32	23.82	25.32	23.32
Band38	15M	QPSK	38000	1RB#38	22.59	24.09	25.59	23.59
Band38	15M	QPSK	38000	1RB#74	22.27	23.77	25.27	23.27
Band38	15M	QPSK	38000	36RB#0	21.49	22.99	24.49	22.49
Band38	15M	QPSK	38000	36RB#18	21.42	22.92	24.42	22.42
Band38	15M	QPSK	38000	36RB#39	21.25	22.75	24.25	22.25
Band38	15M	QPSK	38000	75RB#0	21.43	22.93	24.43	22.43
Band38	15M	QPSK	38175	1RB#0	22.17	23.67	25.17	23.17
Band38	15M	QPSK	38175	1RB#38	22.34	23.84	25.34	23.34
Band38	15M	QPSK	38175	1RB#74	21.97	23.47	24.97	22.97
Band38	15M	QPSK	38175	36RB#0	21.23	22.73	24.23	22.23
Band38	15M	QPSK	38175	36RB#18	21.18	22.68	24.18	22.18
Band38	15M	QPSK	38175	36RB#39	21.06	22.56	24.06	22.06
Band38	15M	QPSK	38175	75RB#0	21.15	22.65	24.15	22.15
Band38	15M	16QAM	37825	1RB#0	20.90	22.40	23.90	21.90
Band38	15M	16QAM	37825	1RB#38	21.54	23.04	24.54	22.54
Band38	15M	16QAM	37825	1RB#74	21.83	23.33	24.83	22.83
Band38	15M	16QAM	37825	36RB#0	20.92	22.42	23.92	21.92
Band38	15M	16QAM	37825	36RB#18	20.95	22.45	23.95	21.95
Band38	15M	16QAM	37825	36RB#39	21.21	22.71	24.21	22.21
Band38	15M	16QAM	37825	75RB#0	21.07	22.57	24.07	22.07
Band38	15M	16QAM	38000	1RB#0	21.33	22.83	24.33	22.33
Band38	15M	16QAM	38000	1RB#38	21.60	23.10	24.60	22.60
Band38	15M	16QAM	38000	1RB#74	21.31	22.81	24.31	22.31
Band38	15M	16QAM	38000	36RB#0	21.38	22.88	24.38	22.38
Band38	15M	16QAM	38000	36RB#18	21.38	22.88	24.38	22.38
Band38	15M	16QAM	38000	36RB#39	21.16	22.66	24.16	22.16
Band38	15M	16QAM	38000	75RB#0	21.34	22.84	24.34	22.34
Band38	15M	16QAM	38175	1RB#0	20.86	22.36	23.86	21.86
Band38	15M	16QAM	38175	1RB#38	21.06	22.56	24.06	22.06
Band38	15M	16QAM	38175	1RB#74	20.62	22.12	23.62	21.62
Band38	15M	16QAM	38175	36RB#0	21.13	22.63	24.13	22.13
Band38	15M	16QAM	38175	36RB#18	21.08	22.58	24.08	22.08
Band38	15M	16QAM	38175	36RB#39	20.98	22.48	23.98	21.98

Band38	15M	16QAM	38175	75RB#0	21.07	22.57	24.07	22.07
Band38	20M	QPSK	37850	1RB#0	21.54	23.04	24.54	22.54
Band38	20M	QPSK	37850	1RB#50	22.23	23.73	25.23	23.23
Band38	20M	QPSK	37850	1RB#99	22.61	24.11	25.61	23.61
Band38	20M	QPSK	37850	50RB#0	21.03	22.53	24.03	22.03
Band38	20M	QPSK	37850	50RB#25	21.12	22.62	24.12	22.12
Band38	20M	QPSK	37850	50RB#50	21.34	22.84	24.34	22.34
Band38	20M	QPSK	37850	100RB#0	21.14	22.64	24.14	22.14
Band38	20M	QPSK	38000	1RB#0	22.28	23.78	25.28	23.28
Band38	20M	QPSK	38000	1RB#50	22.55	24.05	25.55	23.55
Band38	20M	QPSK	38000	1RB#99	22.26	23.76	25.26	23.26
Band38	20M	QPSK	38000	50RB#0	21.44	22.94	24.44	22.44
Band38	20M	QPSK	38000	50RB#25	21.38	22.88	24.38	22.38
Band38	20M	QPSK	38000	50RB#50	21.20	22.70	24.20	22.20
Band38	20M	QPSK	38000	100RB#0	21.38	22.88	24.38	22.38
Band38	20M	QPSK	38150	1RB#0	22.14	23.64	25.14	23.14
Band38	20M	QPSK	38150	1RB#50	22.32	23.82	25.32	23.32
Band38	20M	QPSK	38150	1RB#99	21.94	23.44	24.94	22.94
Band38	20M	QPSK	38150	50RB#0	21.19	22.69	24.19	22.19
Band38	20M	QPSK	38150	50RB#25	21.15	22.65	24.15	22.15
Band38	20M	QPSK	38150	50RB#50	21.02	22.52	24.02	22.02
Band38	20M	QPSK	38150	100RB#0	21.11	22.61	24.11	22.11
Band38	20M	16QAM	37850	1RB#0	20.88	22.38	23.88	21.88
Band38	20M	16QAM	37850	1RB#50	21.50	23.00	24.50	22.50
Band38	20M	16QAM	37850	1RB#99	21.81	23.31	24.81	22.81
Band38	20M	16QAM	37850	50RB#0	20.89	22.39	23.89	21.89
Band38	20M	16QAM	37850	50RB#25	20.92	22.42	23.92	21.92
Band38	20M	16QAM	37850	50RB#50	21.18	22.68	24.18	22.18
Band38	20M	16QAM	37850	100RB#0	21.05	22.55	24.05	22.05
Band38	20M	16QAM	38000	1RB#0	21.29	22.79	24.29	22.29
Band38	20M	16QAM	38000	1RB#50	21.58	23.08	24.58	22.58
Band38	20M	16QAM	38000	1RB#99	21.28	22.78	24.28	22.28
Band38	20M	16QAM	38000	50RB#0	21.34	22.84	24.34	22.34
Band38	20M	16QAM	38000	50RB#25	21.36	22.86	24.36	22.36
Band38	20M	16QAM	38000	50RB#50	21.11	22.61	24.11	22.11
Band38	20M	16QAM	38000	100RB#0	21.30	22.80	24.30	22.30
Band38	20M	16QAM	38150	1RB#0	20.81	22.31	23.81	21.81
Band38	20M	16QAM	38150	1RB#50	21.02	22.52	24.02	22.02
Band38	20M	16QAM	38150	1RB#99	20.60	22.10	23.60	21.60
Band38	20M	16QAM	38150	50RB#0	21.10	22.60	24.10	22.10
Band38	20M	16QAM	38150	50RB#25	21.05	22.55	24.05	22.05
Band38	20M	16QAM	38150	50RB#50	20.94	22.44	23.94	21.94
Band38	20M	16QAM	38150	100RB#0	21.04	22.54	24.04	22.04

LTE Band 41

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	Internal Antenna EIRP	External Antenna 1 EIRP	External Antenna 2 EIRP
Band41	5M	QPSK	40165	1RB#0	22.71	24.21	25.71	23.71
Band41	5M	QPSK	40165	1RB#13	22.60	24.10	25.60	23.60
Band41	5M	QPSK	40165	1RB#24	21.97	23.47	24.97	22.97
Band41	5M	QPSK	40165	12RB#0	21.69	23.19	24.69	22.69
Band41	5M	QPSK	40165	12RB#6	21.62	23.12	24.62	22.62
Band41	5M	QPSK	40165	12RB#13	21.19	22.69	24.19	22.19
Band41	5M	QPSK	40165	25RB#0	21.29	22.79	24.29	22.29
Band41	5M	QPSK	40690	1RB#0	22.20	23.70	25.20	23.20
Band41	5M	QPSK	40690	1RB#13	22.52	24.02	25.52	23.52
Band41	5M	QPSK	40690	1RB#24	22.16	23.66	25.16	23.16
Band41	5M	QPSK	40690	12RB#0	21.64	23.14	24.64	22.64
Band41	5M	QPSK	40690	12RB#6	21.59	23.09	24.59	22.59
Band41	5M	QPSK	40690	12RB#13	21.43	22.93	24.43	22.43
Band41	5M	QPSK	40690	25RB#0	21.58	23.08	24.58	22.58
Band41	5M	QPSK	41215	1RB#0	21.81	23.31	24.81	22.81
Band41	5M	QPSK	41215	1RB#13	22.73	24.23	25.73	23.73
Band41	5M	QPSK	41215	1RB#24	22.24	23.74	25.24	23.24
Band41	5M	QPSK	41215	12RB#0	21.48	22.98	24.48	22.48
Band41	5M	QPSK	41215	12RB#6	21.45	22.95	24.45	22.45
Band41	5M	QPSK	41215	12RB#13	21.31	22.81	24.31	22.31
Band41	5M	QPSK	41215	25RB#0	21.31	22.81	24.31	22.31
Band41	5M	16QAM	40165	1RB#0	21.67	23.17	24.67	22.67
Band41	5M	16QAM	40165	1RB#13	21.64	23.14	24.64	22.64
Band41	5M	16QAM	40165	1RB#24	20.87	22.37	23.87	21.87
Band41	5M	16QAM	40165	12RB#0	21.56	23.06	24.56	22.56
Band41	5M	16QAM	40165	12RB#6	21.47	22.97	24.47	22.47
Band41	5M	16QAM	40165	12RB#13	20.98	22.48	23.98	21.98
Band41	5M	16QAM	40165	25RB#0	21.11	22.61	24.11	22.11
Band41	5M	16QAM	40690	1RB#0	21.12	22.62	24.12	22.12
Band41	5M	16QAM	40690	1RB#13	21.45	22.95	24.45	22.45
Band41	5M	16QAM	40690	1RB#24	21.10	22.60	24.10	22.10
Band41	5M	16QAM	40690	12RB#0	21.43	22.93	24.43	22.43
Band41	5M	16QAM	40690	12RB#6	21.38	22.88	24.38	22.38
Band41	5M	16QAM	40690	12RB#13	21.22	22.72	24.22	22.22
Band41	5M	16QAM	40690	25RB#0	21.38	22.88	24.38	22.38
Band41	5M	16QAM	41215	1RB#0	20.88	22.38	23.88	21.88
Band41	5M	16QAM	41215	1RB#13	21.75	23.25	24.75	22.75
Band41	5M	16QAM	41215	1RB#24	21.19	22.69	24.19	22.19
Band41	5M	16QAM	41215	12RB#0	21.20	22.70	24.20	22.20

Band41	5M	16QAM	41215	12RB#6	21.15	22.65	24.15	22.15
Band41	5M	16QAM	41215	12RB#13	21.11	22.61	24.11	22.11
Band41	5M	16QAM	41215	25RB#0	21.16	22.66	24.16	22.16
Band41	10M	QPSK	40190	1RB#0	22.66	24.16	25.66	23.66
Band41	10M	QPSK	40190	1RB#25	22.54	24.04	25.54	23.54
Band41	10M	QPSK	40190	1RB#49	21.90	23.40	24.90	22.90
Band41	10M	QPSK	40190	25RB#0	21.62	23.12	24.62	22.62
Band41	10M	QPSK	40190	25RB#13	21.58	23.08	24.58	22.58
Band41	10M	QPSK	40190	25RB#25	21.12	22.62	24.12	22.12
Band41	10M	QPSK	40190	50RB#0	21.27	22.77	24.27	22.27
Band41	10M	QPSK	40690	1RB#0	22.07	23.57	25.07	23.07
Band41	10M	QPSK	40690	1RB#25	22.48	23.98	25.48	23.48
Band41	10M	QPSK	40690	1RB#49	22.08	23.58	25.08	23.08
Band41	10M	QPSK	40690	25RB#0	21.60	23.10	24.60	22.60
Band41	10M	QPSK	40690	25RB#13	21.55	23.05	24.55	22.55
Band41	10M	QPSK	40690	25RB#25	21.35	22.85	24.35	22.35
Band41	10M	QPSK	40690	50RB#0	21.50	23.00	24.50	22.50
Band41	10M	QPSK	41190	1RB#0	21.75	23.25	24.75	22.75
Band41	10M	QPSK	41190	1RB#25	22.67	24.17	25.67	23.67
Band41	10M	QPSK	41190	1RB#49	22.14	23.64	25.14	23.14
Band41	10M	QPSK	41190	25RB#0	21.42	22.92	24.42	22.42
Band41	10M	QPSK	41190	25RB#13	21.40	22.90	24.40	22.40
Band41	10M	QPSK	41190	25RB#25	21.32	22.82	24.32	22.32
Band41	10M	QPSK	41190	50RB#0	21.32	22.82	24.32	22.32
Band41	10M	16QAM	40190	1RB#0	21.64	23.14	24.64	22.64
Band41	10M	16QAM	40190	1RB#25	21.62	23.12	24.62	22.62
Band41	10M	16QAM	40190	1RB#49	20.85	22.35	23.85	21.85
Band41	10M	16QAM	40190	25RB#0	21.53	23.03	24.53	22.53
Band41	10M	16QAM	40190	25RB#13	21.44	22.94	24.44	22.44
Band41	10M	16QAM	40190	25RB#25	20.93	22.43	23.93	21.93
Band41	10M	16QAM	40190	50RB#0	21.09	22.59	24.09	22.09
Band41	10M	16QAM	40690	1RB#0	21.09	22.59	24.09	22.09
Band41	10M	16QAM	40690	1RB#25	21.40	22.90	24.40	22.40
Band41	10M	16QAM	40690	1RB#49	21.03	22.53	24.03	22.03
Band41	10M	16QAM	40690	25RB#0	21.40	22.90	24.40	22.40
Band41	10M	16QAM	40690	25RB#13	21.33	22.83	24.33	22.33
Band41	10M	16QAM	40690	25RB#25	21.22	22.72	24.22	22.22
Band41	10M	16QAM	40690	50RB#0	21.38	22.88	24.38	22.38
Band41	10M	16QAM	41190	1RB#0	20.83	22.33	23.83	21.83
Band41	10M	16QAM	41190	1RB#25	21.71	23.21	24.71	22.71
Band41	10M	16QAM	41190	1RB#49	21.15	22.65	24.15	22.15
Band41	10M	16QAM	41190	25RB#0	21.16	22.66	24.16	22.16
Band41	10M	16QAM	41190	25RB#13	21.09	22.59	24.09	22.09

Band41	10M	16QAM	41190	25RB#25	21.08	22.58	24.08	22.08
Band41	10M	16QAM	41190	50RB#0	21.14	22.64	24.14	22.14
Band41	15M	QPSK	40215	1RB#0	22.65	24.15	25.65	23.65
Band41	15M	QPSK	40215	1RB#38	22.52	24.02	25.52	23.52
Band41	15M	QPSK	40215	1RB#74	21.87	23.37	24.87	22.87
Band41	15M	QPSK	40215	36RB#0	21.60	23.10	24.60	22.60
Band41	15M	QPSK	40215	36RB#18	21.55	23.05	24.55	22.55
Band41	15M	QPSK	40215	36RB#39	21.09	22.59	24.09	22.09
Band41	15M	QPSK	40215	75RB#0	21.25	22.75	24.25	22.25
Band41	15M	QPSK	40690	1RB#0	22.03	23.53	25.03	23.03
Band41	15M	QPSK	40690	1RB#38	22.47	23.97	25.47	23.47
Band41	15M	QPSK	40690	1RB#74	22.03	23.53	25.03	23.03
Band41	15M	QPSK	40690	36RB#0	21.56	23.06	24.56	22.56
Band41	15M	QPSK	40690	36RB#18	21.50	23.00	24.50	22.50
Band41	15M	QPSK	40690	36RB#39	21.32	22.82	24.32	22.32
Band41	15M	QPSK	40690	75RB#0	21.46	22.96	24.46	22.46
Band41	15M	QPSK	41165	1RB#0	21.73	23.23	24.73	22.73
Band41	15M	QPSK	41165	1RB#38	22.64	24.14	25.64	23.64
Band41	15M	QPSK	41165	1RB#74	22.10	23.60	25.10	23.10
Band41	15M	QPSK	41165	36RB#0	21.39	22.89	24.39	22.39
Band41	15M	QPSK	41165	36RB#18	21.36	22.86	24.36	22.36
Band41	15M	QPSK	41165	36RB#39	21.28	22.78	24.28	22.28
Band41	15M	QPSK	41165	75RB#0	21.27	22.77	24.27	22.27
Band41	15M	16QAM	40215	1RB#0	21.59	23.09	24.59	22.59
Band41	15M	16QAM	40215	1RB#38	21.60	23.10	24.60	22.60
Band41	15M	16QAM	40215	1RB#74	20.82	22.32	23.82	21.82
Band41	15M	16QAM	40215	36RB#0	21.50	23.00	24.50	22.50
Band41	15M	16QAM	40215	36RB#18	21.41	22.91	24.41	22.41
Band41	15M	16QAM	40215	36RB#39	20.91	22.41	23.91	21.91
Band41	15M	16QAM	40215	75RB#0	21.06	22.56	24.06	22.06
Band41	15M	16QAM	40690	1RB#0	21.07	22.57	24.07	22.07
Band41	15M	16QAM	40690	1RB#38	21.37	22.87	24.37	22.37
Band41	15M	16QAM	40690	1RB#74	20.99	22.49	23.99	21.99
Band41	15M	16QAM	40690	36RB#0	21.38	22.88	24.38	22.38
Band41	15M	16QAM	40690	36RB#18	21.28	22.78	24.28	22.28
Band41	15M	16QAM	40690	36RB#39	21.18	22.68	24.18	22.18
Band41	15M	16QAM	40690	75RB#0	21.33	22.83	24.33	22.33
Band41	15M	16QAM	41165	1RB#0	20.81	22.31	23.81	21.81
Band41	15M	16QAM	41165	1RB#38	21.69	23.19	24.69	22.69
Band41	15M	16QAM	41165	1RB#74	21.12	22.62	24.12	22.12
Band41	15M	16QAM	41165	36RB#0	21.13	22.63	24.13	22.13
Band41	15M	16QAM	41165	36RB#18	21.05	22.55	24.05	22.05
Band41	15M	16QAM	41165	36RB#39	21.05	22.55	24.05	22.05

Band41	15M	16QAM	41165	75RB#0	21.10	22.60	24.10	22.10
Band41	20M	QPSK	40240	1RB#0	22.62	24.12	25.62	23.62
Band41	20M	QPSK	40240	1RB#50	22.51	24.01	25.51	23.51
Band41	20M	QPSK	40240	1RB#99	21.85	23.35	24.85	22.85
Band41	20M	QPSK	40240	50RB#0	21.57	23.07	24.57	22.57
Band41	20M	QPSK	40240	50RB#25	21.53	23.03	24.53	22.53
Band41	20M	QPSK	40240	50RB#50	21.06	22.56	24.06	22.06
Band41	20M	QPSK	40240	100RB#0	21.22	22.72	24.22	22.22
Band41	20M	QPSK	40690	1RB#0	21.99	23.49	24.99	22.99
Band41	20M	QPSK	40690	1RB#50	22.43	23.93	25.43	23.43
Band41	20M	QPSK	40690	1RB#99	22.02	23.52	25.02	23.02
Band41	20M	QPSK	40690	50RB#0	21.51	23.01	24.51	22.51
Band41	20M	QPSK	40690	50RB#25	21.46	22.96	24.46	22.46
Band41	20M	QPSK	40690	50RB#50	21.27	22.77	24.27	22.27
Band41	20M	QPSK	40690	100RB#0	21.41	22.91	24.41	22.41
Band41	20M	QPSK	41140	1RB#0	21.70	23.20	24.70	22.70
Band41	20M	QPSK	41140	1RB#50	22.62	24.12	25.62	23.62
Band41	20M	QPSK	41140	1RB#99	22.07	23.57	25.07	23.07
Band41	20M	QPSK	41140	50RB#0	21.35	22.85	24.35	22.35
Band41	20M	QPSK	41140	50RB#25	21.33	22.83	24.33	22.33
Band41	20M	QPSK	41140	50RB#50	21.24	22.74	24.24	22.24
Band41	20M	QPSK	41140	100RB#0	21.23	22.73	24.23	22.23
Band41	20M	16QAM	40240	1RB#0	21.57	23.07	24.57	22.57
Band41	20M	16QAM	40240	1RB#50	21.56	23.06	24.56	22.56
Band41	20M	16QAM	40240	1RB#99	20.80	22.30	23.80	21.80
Band41	20M	16QAM	40240	50RB#0	21.47	22.97	24.47	22.47
Band41	20M	16QAM	40240	50RB#25	21.38	22.88	24.38	22.38
Band41	20M	16QAM	40240	50RB#50	20.88	22.38	23.88	21.88
Band41	20M	16QAM	40240	100RB#0	21.04	22.54	24.04	22.04
Band41	20M	16QAM	40690	1RB#0	21.03	22.53	24.03	22.03
Band41	20M	16QAM	40690	1RB#50	21.35	22.85	24.35	22.35
Band41	20M	16QAM	40690	1RB#99	20.96	22.46	23.96	21.96
Band41	20M	16QAM	40690	50RB#0	21.34	22.84	24.34	22.34
Band41	20M	16QAM	40690	50RB#25	21.26	22.76	24.26	22.26
Band41	20M	16QAM	40690	50RB#50	21.13	22.63	24.13	22.13
Band41	20M	16QAM	40690	100RB#0	21.29	22.79	24.29	22.29
Band41	20M	16QAM	41140	1RB#0	20.76	22.26	23.76	21.76
Band41	20M	16QAM	41140	1RB#50	21.65	23.15	24.65	22.65
Band41	20M	16QAM	41140	1RB#99	21.10	22.60	24.10	22.10
Band41	20M	16QAM	41140	50RB#0	21.10	22.60	24.10	22.10
Band41	20M	16QAM	41140	50RB#25	21.02	22.52	24.02	22.02
Band41	20M	16QAM	41140	50RB#50	21.01	22.51	24.01	22.01
Band41	20M	16QAM	41140	100RB#0	21.07	22.57	24.07	22.07

5.2 Occupied Bandwidth

Ambient condition

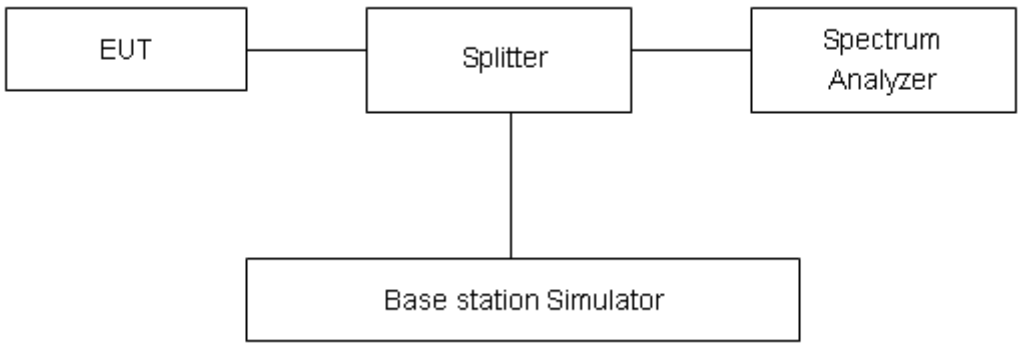
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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 51 kHz, VBW is set to 160 kHz for LTE Band 4 (1.4MHz).
RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4 (3MHz).
RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4/7/38/41 (5MHz).
RBW is set to 300 kHz, VBW is set to 1MHz for LTE Band 4/7/38/41 (10MHz/15MHz/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=624Hz.

Test Result

Mode	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.1416	4.683
	1413	1732.6	4.1388	4.651
	1513	1752.6	4.1361	4.650

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.1239	1.282
			20175	1732.5	1.1205	1.290
			20393	1754.3	1.1179	1.284
		3	19965	1711.5	2.7471	3.044
			20175	1732.5	2.7413	3.048
			20385	1753.5	2.7440	3.018
		5	19975	1712.5	4.5236	4.968
			20175	1732.5	4.5175	5.004
			20375	1752.5	4.5333	4.975
		10	20000	1715	9.0795	10.020
			20175	1732.5	9.0511	10.040
			20350	1750	9.0641	10.040
		15	20025	1717.5	13.538	14.980
			20175	1732.5	13.501	14.860
			20325	1747.5	13.514	14.900
		20	20050	1720	17.952	19.670
			20175	1732.5	17.901	19.550
			20300	1745	17.970	19.590
	16QAM	1.4	19957	1710.7	1.1230	1.283
			20175	1732.5	1.1252	1.280
			20393	1754.3	1.1298	1.288
		3	19965	1711.5	2.7361	3.047
			20175	1732.5	2.7398	3.045
			20385	1753.5	2.7574	3.025
		5	19975	1712.5	4.5176	4.994
			20175	1732.5	4.5145	4.943
			20375	1752.5	4.5161	4.972
		10	20000	1715	9.0809	10.040
			20175	1732.5	9.0440	10.070

			20350	1750	9.0385	10.000
		15	20025	1717.5	13.5430	15.010
			20175	1732.5	13.5090	14.890
			20325	1747.5	13.4990	14.980
		20	20050	1720	17.9280	19.590
			20175	1732.5	17.8610	19.650
			20300	1745	17.9530	19.640

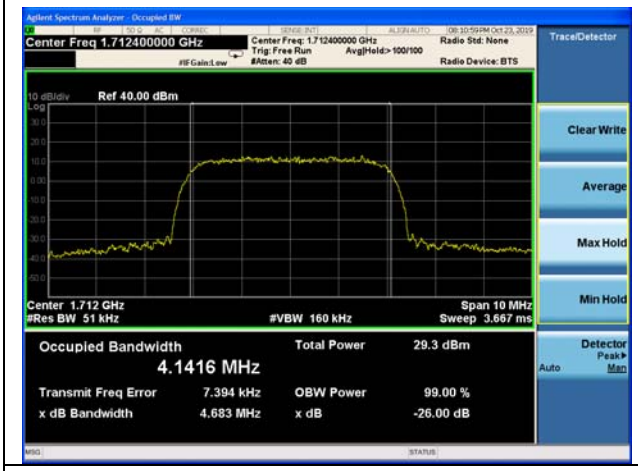
LTE Band 7						
RB	**Modulation**	**Bandwidth (MHz)**	**Channel**	**Frequency (MHz)**	**99% Power Bandwidth(MHz)**	**-26dBc Bandwidth(MHz)**
100%	QPSK	5	20775	2502.5	4.5067	4.982
			21100	2535	4.5137	4.978
			21425	2567.5	4.5200	4.958
		10	20800	2505	9.0475	9.970
			21100	2535	9.0860	10.030
			21400	2565	9.0776	10.010
		15	20825	2507.5	13.4740	14.920
			21100	2535	13.4740	14.920
			21375	2562.5	13.5490	14.980
		20	20850	2510	17.9230	19.510
			21100	2535	17.9290	19.680
			21350	2560	17.9770	19.710
	16QAM	5	20775	2502.5	4.5131	4.973
			21100	2535	4.5165	4.990
			21425	2567.5	4.5253	4.977
		10	20800	2505	9.0505	10.020
			21100	2535	9.0550	10.060
			21400	2565	9.0895	10.140
		15	20825	2507.5	13.4810	14.960
			21100	2535	13.5000	14.930
			21375	2562.5	13.5090	14.970
		20	20850	2510	17.9600	19.620
			21100	2535	17.8800	19.540
			21350	2560	17.9310	19.700

LTE Band 38						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	37775	2572.5	4.5092	4.963
			38000	2595	4.5192	4.941
			38225	2617.5	4.4964	4.965
		10	37800	2575	9.0505	10.040
			38000	2595	9.0682	9.973
			38200	2615	9.0323	10.010
		15	37825	2577.5	13.5820	15.050
			38000	2595	13.4880	14.960
			38175	2612.5	13.5080	14.790
		20	37850	2580	17.9080	19.570
			38000	2595	17.8860	19.460
			38150	2610	17.9080	19.530
	16QAM	5	37775	2572.5	4.5228	5.057
			38000	2595	4.5115	4.984
			38225	2617.5	4.5137	4.956
		10	37800	2575	9.0352	10.010
			38000	2595	9.0591	10.000
			38200	2615	9.0237	10.020
		15	37825	2577.5	13.5500	14.910
			38000	2595	13.5040	15.080
			38175	2612.5	13.4920	15.350
		20	37850	2580	17.8880	19.550
			38000	2595	17.9340	19.430
			38150	2610	18.0140	19.610

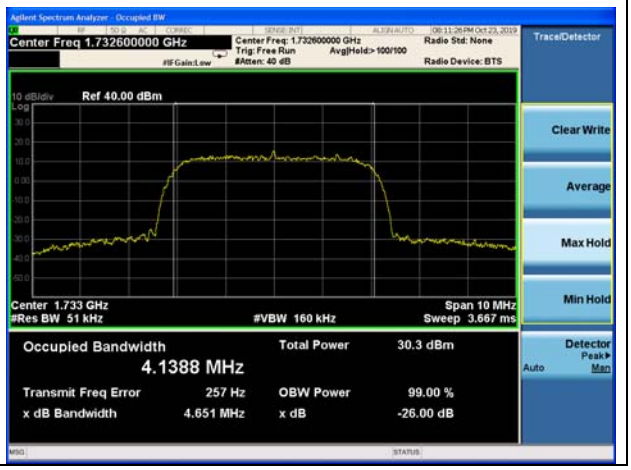
LTE Band 41						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	40165	2547.5	4.5069	5.010
			40690	2600	4.4011	4.945
			41215	2652.5	4.5171	4.978
		10	40190	2550	9.0346	10.030
			40690	2600	9.0099	9.936
			41190	2650	9.0352	9.995
		15	40215	2552.5	13.4980	14.890
			40690	2600	13.4720	14.930

			41165	2647.5	13.4570	14.860
		20	40240	2555	17.9050	19.430
			40690	2600	17.8920	19.330
			41140	2645	17.9160	19.500
	16QAM	5	40165	2547.5	4.4998	4.936
			40690	2600	4.4952	4.966
			41215	2652.5	4.5088	5.019
		10	40190	2550	9.0202	10.000
			40690	2600	9.0734	9.947
			41190	2650	9.0102	10.040
		15	40215	2552.5	13.4810	15.090
			40690	2600	13.4790	15.350
			41165	2647.5	13.4390	14.680
		20	40240	2555	17.8850	19.540
			40690	2600	17.8640	19.430
			41140	2645	17.9420	19.460

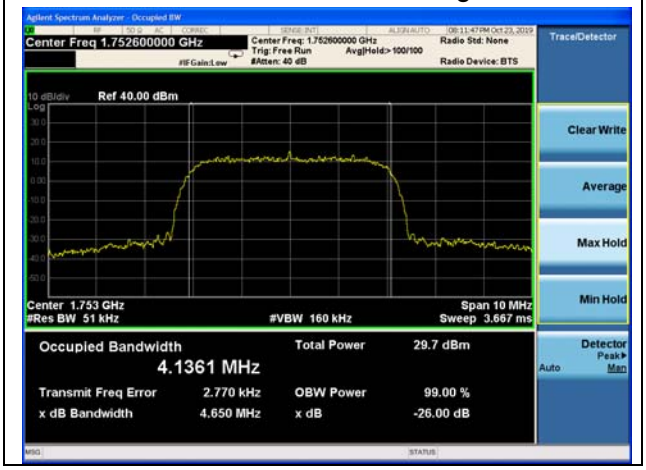
WCDMA Band IV CH-Low



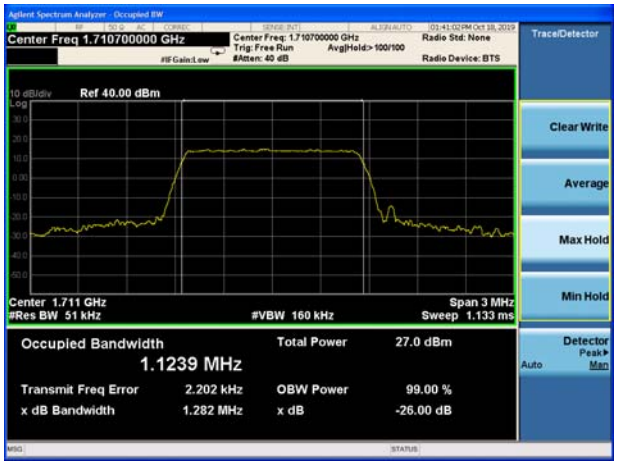
WCDMA Band IV CH Middle



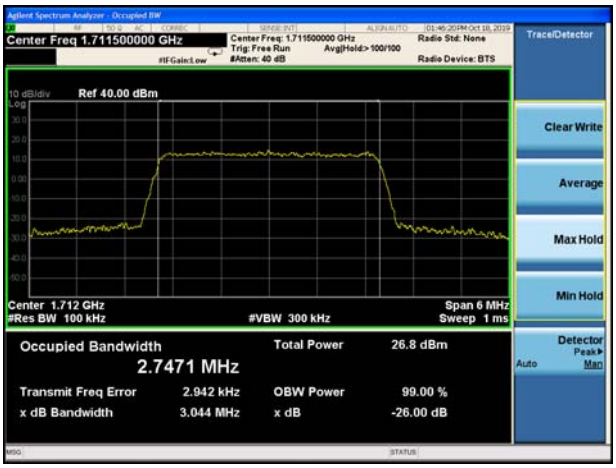
WCDMA Band IV CH High



LTE Band 4 QPSK 1.4MHz CH-Low

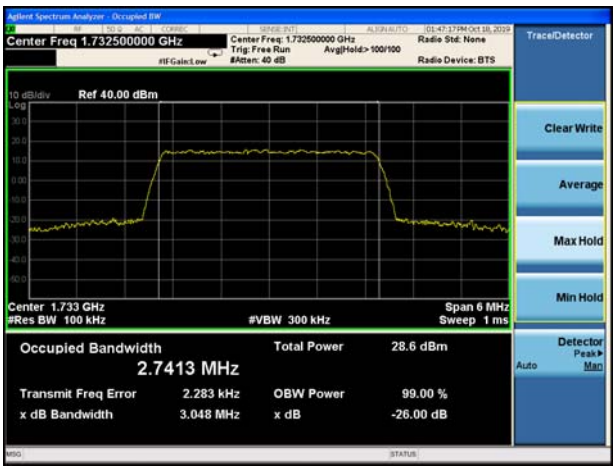


LTE Band 4 QPSK 3MHz CH-Low

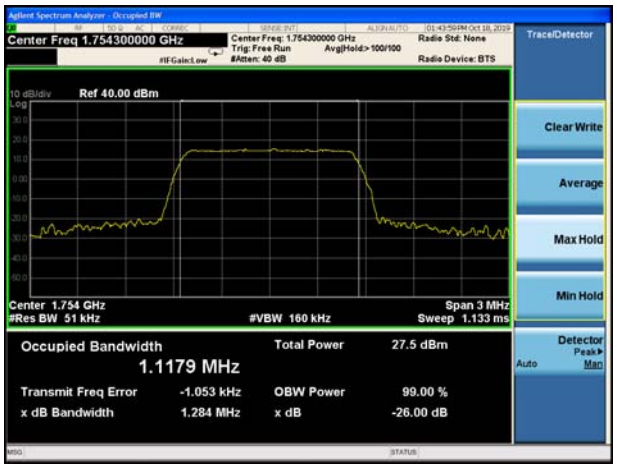


LTE Band 4 QPSK 1.4MHz CH-Middle

LTE Band 4 QPSK 3MHz CH-Middle

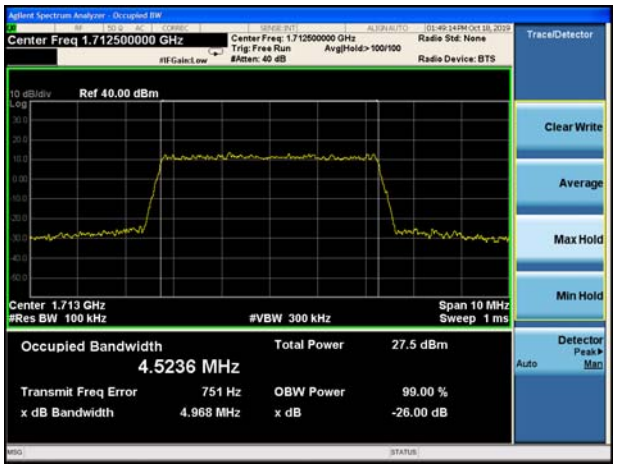


LTE Band 4 QPSK 1.4MHz CH-High



LTE Band 4 QPSK 3MHz CH-High

LTE Band 4 QPSK 5MHz CH-Low

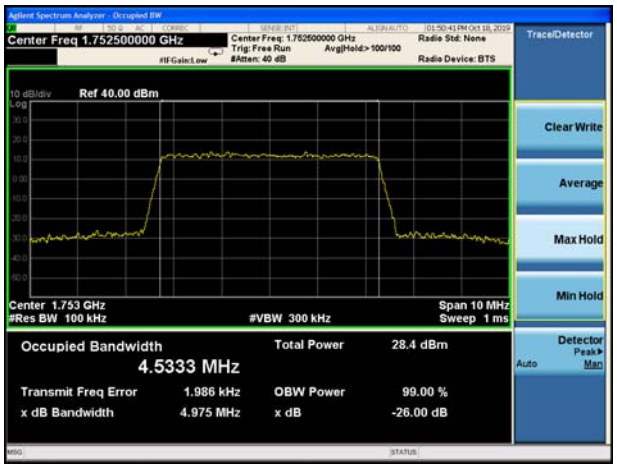


LTE Band 4 QPSK 10MHz CH-Low

LTE Band 4 QPSK 5MHz CH-Middle

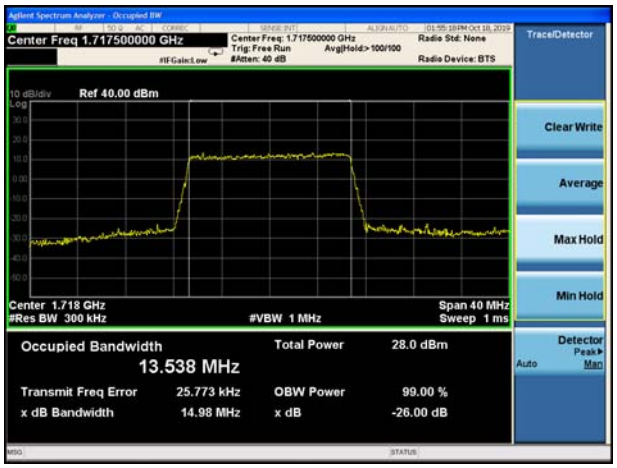
LTE Band 4 QPSK 10MHz CH-Middle

LTE Band 4 QPSK 5MHz CH-High



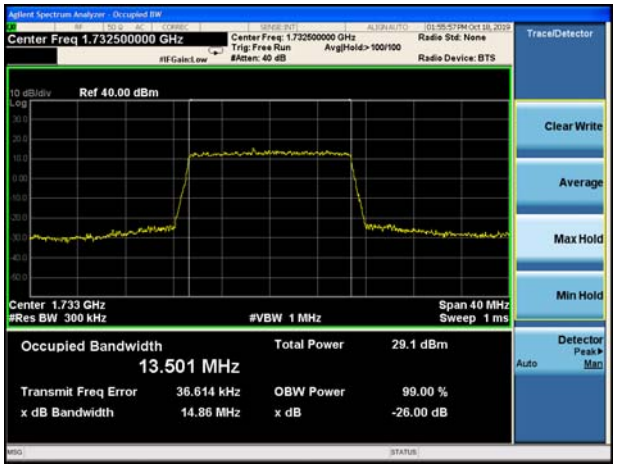
LTE Band 4 QPSK 10MHz CH-High

LTE Band 4 QPSK 15MHz CH-Low



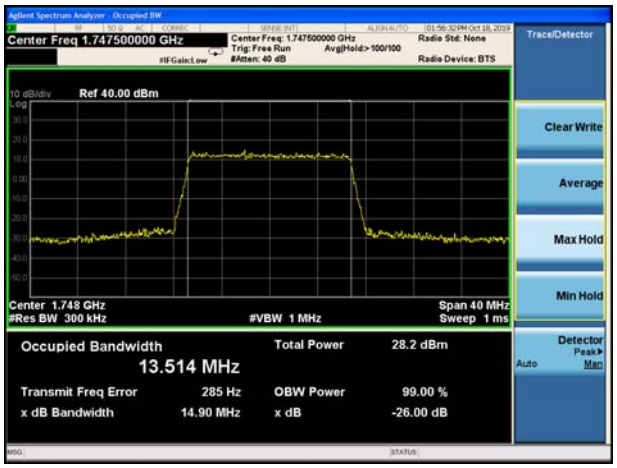
LTE Band 4 QPSK 20MHz CH-Low

LTE Band 4 QPSK 15MHz CH-Middle



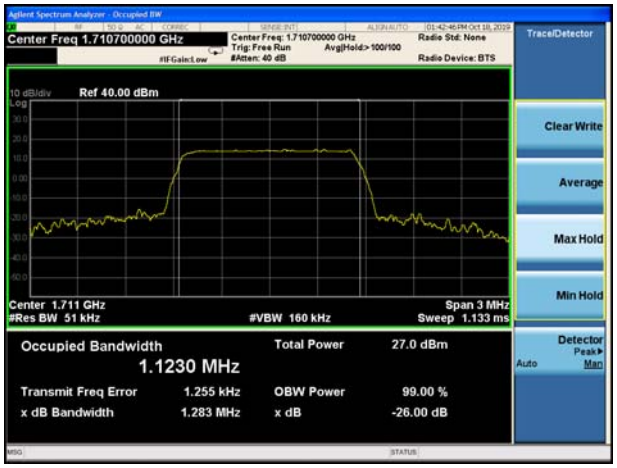
LTE Band 4 QPSK 20MHz CH-Middle

LTE Band 4 QPSK 15MHz CH-High



LTE Band 4 QPSK 20MHz CH-High

LTE Band 4 16QAM 1.4MHz CH-Low



LTE Band 4 16QAM 3MHz CH-Low

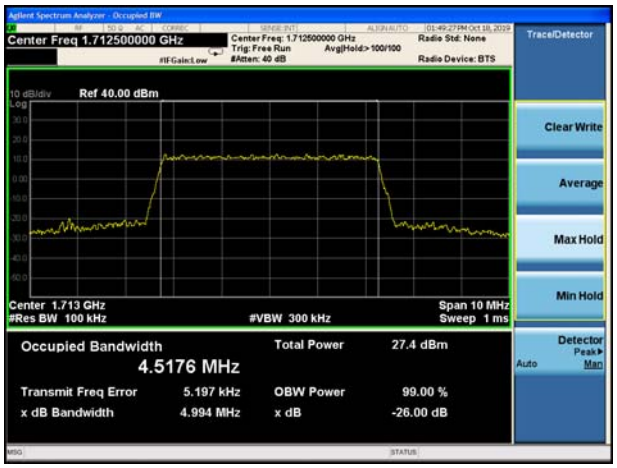
LTE Band 4 16QAM 1.4MHz CH-Middle

LTE Band 4 16QAM 3MHz CH-Middle

LTE Band 4 16QAM 1.4MHz CH-High

LTE Band 4 16QAM 3MHz CH-High

LTE Band 4 16QAM 5MHz CH-Low

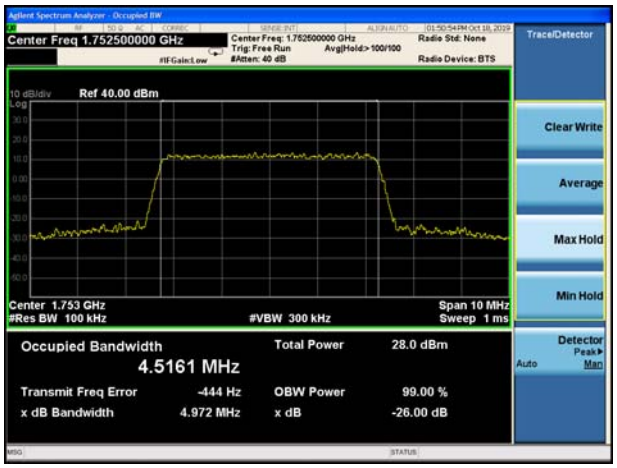


LTE Band 4 16QAM 10MHz CH-Low

LTE Band 4 16QAM 5MHz CH-Middle

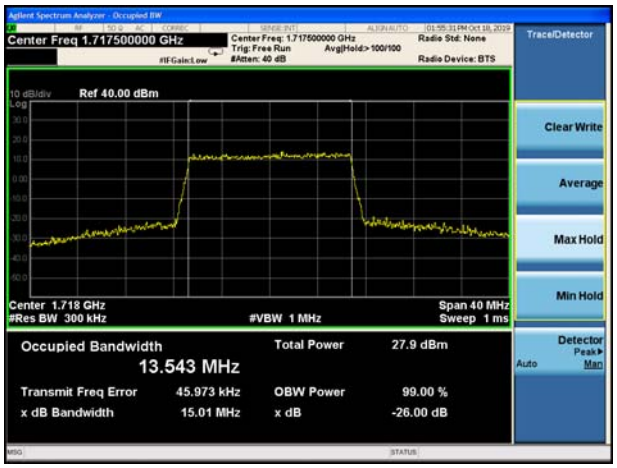
LTE Band 4 16QAM 10MHz CH-Middle

LTE Band 4 16QAM 5MHz CH-High



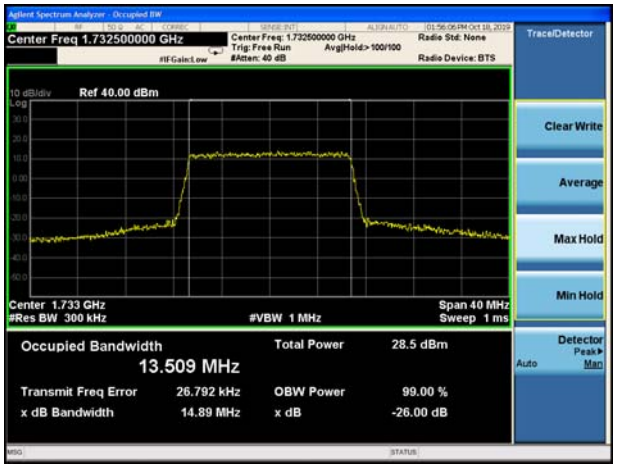
LTE Band 4 16QAM 10MHz CH-High

LTE Band 4 16QAM 15MHz CH-Low



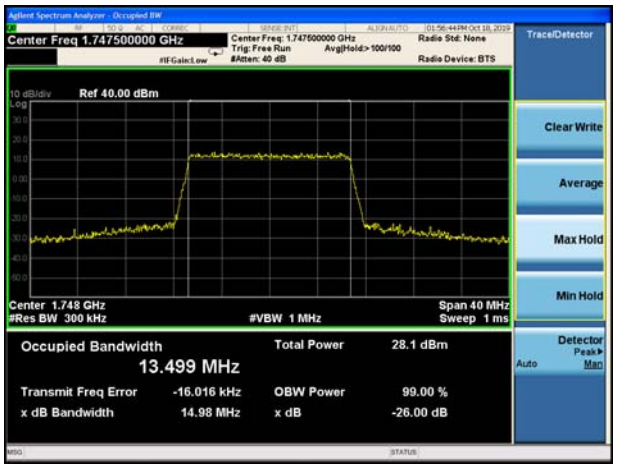
LTE Band 4 16QAM 20MHz CH-Low

LTE Band 4 16QAM 15MHz CH-Middle



LTE Band 4 16QAM 20MHz CH-Middle

LTE Band 416QAM 15MHz CH-High



LTE Band 4 16QAM 20MHz CH-High