RF TEST REPORT

Applicant	ZTE Corporation
FCC ID	SRQ-ZTEN9131
Product	LTE/WCDMA/GSM /CDMA Multi-Mode Digital Mobile Phone
Model	N9131
Report No.	RXA1603-0039RF05R3
Issue Date	April 28, 2016

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2015)/ FCC CFR47 Part 27C (2015)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Changxu Wan

Performed by: Changxu Wan

Lingling Kang

Reviewed by: Lingling Kang

Kai Xu

Approved by: Kai Xu

CNAS TESTING No. L2264

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Summary of Measurement Results

Number	Test Case	Clause in FCC rules	Verdict
1	RF power output	2.1046	PASS
2	Effective Isotropic Radiated power	27.50(d)(4)/ 27.50(c)(10)/ 27.50(h)(2)	PASS
3	Occupied Bandwidth	2.1049	PASS
4	Band Edge Compliance	27.53(h)/ 27.53(g)/ 27.53(m)	PASS
5	Peak-to-Average Power Ratio	27.50(d)/KDB971168 D01(5.7)	PASS
6	Frequency Stability	2.1055 / 27.54	PASS
7	Spurious Emissions at Antenna Terminals	2.1051 / 27.53(h) / 27.53(g) / 27.53(m)	PASS
8	Radiates Spurious Emission	2.1053 /27.53(h) / 27.53(g) / 27.53(m)	PASS
Date of Testing: March 21, 2016~ April 11, 2016			
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.			

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. This report must not be used by the client to claim product certification, approval, or endorsement by CNAS or any government agencies.

1.2 Test facility

CNAS (accreditation number:L2264)

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (recognition number is 428261)

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

IC (recognition number is 8510A)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Canada to perform electromagnetic emission measurement.

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
Post code:	201201
Country:	P. R. China
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2 General Description of Equipment under Test

Client Information

Applicant	ZTE Corporation
Applicant address	ZTE Plaza, #55 Keji Road South, Hi-Tech, Industrial Park, Nanshan District
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, #55 Keji Road South, Hi-Tech, Industrial Park, Nanshan District

General information

Model:	N9131		
Product MEID:	99000680000315		
Hardware Version:	cuzA		
Software Version:	N9131V1.0.0B01		
Power Supply:	Battery/AC adapter		
Antenna Type:	Internal Antenna		
Test Mode(s):	WCDMA Band IV; LTE Band 4; LTE Band 12, LTE Band 41;		
HSDPA UE Category:	14		
HSUPA UE Category:	6		
Maximum E.I.R.P./ E.R.P.	WCDMA Band IV: 24.71dBm LTE Band 4: 22.99dBm LTE Band 12: 23.41dBm LTE Band 41: 24.55dBm		
Rated Power Supply Voltage:	3.84V		
Extreme Voltage:	Minimum: 3.5V Maximum: 4.4V		
Extreme Temperature:	Lowest: -10°C Highest: +55°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 12	699 ~ 716	729 ~ 746
	LTE Band 41	2496 ~ 2690	2496 ~ 2690
EUT Accessory			
Battery	Manufacturer: Scud Model: Li3922T44P6h903546 Power Rating: DC 3.84V, Li-ion		
Adapter	Manufacturer: RUIJING Model: STC-A508A-Z M5		
Note：1. The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.			

2.1 Applied Standards

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

Test standards
FCC CFR47 Part 2 (2015)
FCC CFR47 Part 27C (2015)
ANSI/TIA-603-D(2010)
KDB 971168 D01 Power Meas License Digital Systems v02r02

3 Test Configuration

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, vertical 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**
Conducted Test cases	RF power output	WCDMA Band IV	RMC/HSDPA/HSUPA/ DC-HSDPA
	Effective Isotropic Radiated power	WCDMA Band IV	RMC
	Occupied Bandwidth	WCDMA Band IV	RMC
	Band Edge Compliance	WCDMA Band IV	RMC
	Peak-to-Average Power Ratio	WCDMA Band IV	RMC
	Frequency Stability	WCDMA Band IV	RMC
	Spurious Emissions at Antenna Terminals	WCDMA Band IV	RMC
Radiated Test cases	Radiates Spurious Emission	WCDMA Band IV	RMC

Test modes are chosen to be reported as the worst case configuration below for LTE Band 4/12/41:

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	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
	LTE 41	-	O	O	O	O	O	O	O	O	O	O	O	O	O
Effective Isotropic Radiated power	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 12	-	-	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 41	-	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
	LTE 41	-	O	O	O	O	O	O	O	-	-	O	O	O	O
Band Edge Compliance	LTE 4	O	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 12	-	-	O	O	-	-	O	O	O	-	O	O	-	O
	LTE 41	-	O	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 12	-	-	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 41	-	O	O	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	LTE 4	O	O	O	O	O	O	O	O	-	-	O	-	O	-
	LTE 12	-	-	O	O	-	-	O	O	-	-	O	-	O	-
	LTE 41	-	O	O	O	O	O	O	O	-	-	O	-	O	-
Spurious Emissions at Antenna Terminals	LTE 4	O	O	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 12	-	-	O	O	-	-	O	-	O	-	-	O	O	O
	LTE 41	-	O	O	O	O	O	O	-	O	-	-	O	O	O
Radiates Spurious Emission	LTE 4	O	O	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 12	-	-	O	O	-	-	O	-	O	-	-	O	O	O
	LTE 41	-	O	O	O	O	O	O	-	O	-	-	O	O	O
Note	1. The mark “O” means that this configuration is chosen for testing. 2. The mark “-” means that this configuration is not testing.														

4 Test Information

4.1 RF Power Output

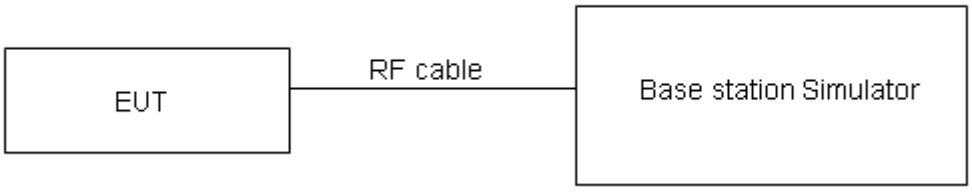
Ambient condition

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.

Test Setup



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

Limits

No specific RF power output requirements in part 2.1046.

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.

Test Results

WCDMA Band IV		AV Conducted Power(dBm)		
		Channel 1312	Channel 1413	Channel 1513
		1712.4 (MHz)	1732.6 (MHz)	1752.6(MHz)
RMC		**24.41**	**24.47**	**24.36**
HSDPA	Sub - Test 1	24.24	24.31	24.20
	Sub - Test 2	24.25	24.30	24.22
	Sub - Test 3	23.85	23.88	23.80
	Sub - Test 4	23.84	23.90	23.79
HSUPA	Sub - Test 1	24.33	24.39	24.28
	Sub - Test 2	22.32	22.38	22.27
	Sub - Test 3	23.31	23.37	23.26
	Sub - Test 4	22.30	22.36	22.25
	Sub - Test 5	24.29	24.35	24.24
DC-HSDPA	Sub - Test 1	24.28	24.34	24.23
	Sub - Test 2	24.26	24.33	24.22
	Sub - Test 3	23.75	23.82	23.71
	Sub - Test 4	23.74	23.81	23.70

Note:
1) The maximum RF Output Power numbers are marks in bold.
2) The following testing in RMC based on the maximum RF Output Power.

LTE TDD Band 4				AV Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
1.4MHz	QPSK	1	0	23.33	23.22	23.66
		1	2	23.14	23.30	23.69
		1	5	23.32	23.51	23.40
		3	0	22.30	22.42	22.44
		3	2	22.22	22.42	22.44
		3	3	22.29	22.39	22.43
		6	0	22.18	22.39	22.42
	16QAM	1	0	22.18	22.40	21.86
		1	2	22.00	22.52	22.58
		1	5	22.20	22.65	22.40
		3	0	21.11	21.32	21.40
		3	2	21.11	21.39	21.51
		3	3	21.20	21.41	21.45
		6	0	21.23	21.27	21.38
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
3MHz	QPSK	1	0	23.35	23.26	23.69
		1	7	23.17	23.35	23.73
		1	14	23.35	23.56	23.44
		8	0	22.32	22.46	22.49
		8	4	22.30	22.44	22.48
		8	7	22.31	22.42	22.45
		15	0	22.21	22.43	22.45
	16QAM	1	0	22.21	22.42	21.89
		1	7	22.03	22.57	22.62
		1	14	22.22	22.69	22.43
		8	0	21.14	21.37	21.44
		8	4	21.14	21.44	21.55
		8	7	21.22	21.45	21.50
		15	0	21.26	21.31	21.41
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
5MHz	QPSK	1	0	23.32	23.24	23.65
		1	13	23.15	23.31	23.70
		1	24	23.32	23.51	23.40
		12	0	22.29	22.41	22.45
		12	6	22.28	22.40	22.43
		12	13	22.29	22.40	22.41
		25	0	22.19	22.42	22.43

	16QAM	1	0	22.18	22.38	21.86
		1	13	22.00	22.55	22.59
		1	24	22.19	22.67	22.39
		12	0	21.12	21.33	21.41
		12	6	21.11	21.39	21.51
		12	13	21.19	21.40	21.46
		25	0	21.24	21.27	21.36
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				20000/1715	20175/1732.5	20350/1750
10MHz	QPSK	1	0	23.34	23.25	23.68
		1	25	23.18	23.36	23.74
		1	49	23.34	23.55	23.43
		25	0	22.32	22.46	22.49
		25	13	22.31	22.45	22.47
		25	25	22.31	22.44	22.46
		50	0	22.27	22.44	22.47
	16QAM	1	0	22.20	22.41	21.88
		1	25	22.03	22.59	22.62
		1	49	22.22	22.69	22.42
		25	0	21.15	21.38	21.45
		25	13	21.13	21.43	21.54
		25	25	21.22	21.45	21.50
		50	0	21.27	21.32	21.40
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	23.33	23.21	23.66
		1	38	23.16	23.35	23.71
		1	74	23.31	23.50	23.39
		36	0	22.30	22.42	22.46
		36	18	22.28	22.40	22.43
		36	39	22.28	22.41	22.42
		75	0	22.25	22.40	22.42
	16QAM	1	0	22.15	22.39	21.86
		1	38	22.01	22.56	22.60
		1	74	22.19	22.65	22.39
		36	0	21.12	21.36	21.42
		36	18	21.10	21.38	21.50
		36	39	21.20	21.41	21.47
		75	0	21.24	21.27	21.36
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				20050/1720	20175/1732.5	20300/1745
20MHz	QPSK	1	0	23.30	23.17	23.63
		1	50	23.15	23.31	23.69

		1	99	23.29	23.49	23.36
		50	0	22.27	22.37	22.42
		50	25	22.26	22.36	22.40
		50	50	22.25	22.36	22.38
		100	0	22.22	22.35	22.38
	16QAM	1	0	22.13	22.35	21.81
		1	50	21.97	22.54	22.56
		1	99	22.17	22.62	22.37
		50	0	21.09	21.32	21.39
		50	25	21.07	21.36	21.47
		50	50	21.17	21.36	21.43
		100	0	21.22	21.23	21.33
Note: 1) The following testing in worst case based on the maximum RF Output Power.						

LTE TDD Band 12				AV Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				23017/699.7	23095/707.5	23173/715.3
1.4MHz	QPSK	1	0	23.50	23.27	23.49
		1	2	23.46	23.62	23.88
		1	5	23.44	23.38	23.93
		3	0	22.46	22.59	22.76
		3	2	22.51	22.58	22.79
		3	3	22.55	22.59	22.82
		6	0	22.43	22.81	22.75
	16QAM	1	0	22.80	22.47	22.87
		1	2	22.61	22.54	22.85
		1	5	22.63	22.41	22.87
		3	0	21.17	21.56	21.58
		3	2	21.19	21.44	21.73
		3	3	21.21	21.59	21.90
		6	0	21.57	21.38	21.78
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				23025/700.5	23095/707.5	23165/714.5
3MHz	QPSK	1	0	23.52	23.28	23.52
		1	7	23.49	23.67	23.92
		1	14	23.46	23.42	23.96
		8	0	22.49	22.64	22.80
		8	4	22.54	22.63	22.83
		8	7	22.57	22.63	22.87
		15	0	22.51	22.83	22.79
	16QAM	1	0	22.82	22.50	22.89
		1	7	22.64	22.58	22.88
		1	14	22.66	22.43	22.90
		8	0	21.20	21.61	21.62
		8	4	21.21	21.48	21.76
		8	7	21.24	21.64	21.94
		15	0	21.60	21.43	21.82
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				23035/701.5	23095/707.5	23155/713.5
5MHz	QPSK	1	0	23.51	23.24	23.50
		1	13	23.47	23.66	23.89
		1	24	23.43	23.37	23.92
		12	0	22.47	22.60	22.77
		12	6	22.51	22.58	22.79
		12	13	22.54	22.60	22.83
		25	0	22.49	22.79	22.74
	16QAM	1	0	22.77	22.48	22.87

		1	13	22.62	22.55	22.86
		1	24	22.63	22.39	22.87
		12	0	21.17	21.59	21.59
		12	6	21.18	21.43	21.72
		12	13	21.22	21.60	21.91
		25	0	21.57	21.38	21.78
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				23060/704	23095/707.5	23130/711
10MHz	QPSK	1	0	23.48	23.20	23.47
		1	25	23.46	23.62	23.87
		1	49	23.41	23.36	23.89
		25	0	22.44	22.55	22.73
		25	13	22.49	22.54	22.76
		25	25	22.51	22.55	22.79
		50	0	22.46	22.74	22.70
	16QAM	1	0	22.75	22.44	22.82
		1	25	22.58	22.53	22.82
		1	49	22.61	22.36	22.85
		25	0	21.14	21.55	21.56
		25	13	21.15	21.41	21.69
		25	25	21.19	21.55	21.87
		50	0	21.55	21.34	21.75

LTE TDD Band 41				AV Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				39675/2498.5	40620/2593	41565/2687.5
5MHz	QPSK	1	0	23.67	23.48	23.61
		1	13	23.76	23.26	23.90
		1	24	23.62	23.22	23.47
		12	0	22.13	22.32	22.41
		12	6	22.05	22.41	22.25
		12	13	21.99	22.16	22.19
		25	0	22.01	22.18	22.22
	16QAM	1	0	22.18	22.65	22.29
		1	13	22.65	22.76	22.26
		1	24	22.50	22.61	22.10
		12	0	21.30	21.34	21.20
		12	6	21.23	21.24	21.14
		12	13	21.13	21.19	21.05
		25	0	21.11	21.18	21.06
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				39700/2501	40620/2593	41540/2685
10MHz	QPSK	1	0	23.69	23.49	23.64
		1	25	23.79	23.31	23.94
		1	49	23.64	23.26	23.50
		25	0	22.16	22.37	22.45
		25	13	22.08	22.46	22.29
		25	25	22.01	22.20	22.24
		50	0	22.09	22.20	22.26
	16QAM	1	0	22.20	22.68	22.31
		1	25	22.68	22.80	22.29
		1	49	22.53	22.63	22.13
		25	0	21.33	21.39	21.24
		25	13	21.25	21.28	21.17
		25	25	21.16	21.24	21.09
		50	0	21.14	21.23	21.10
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				39725/2503.5	40620/2593	41515/2682.5
15MHz	QPSK	1	0	23.68	23.45	23.62
		1	38	23.77	23.30	23.91
		1	74	23.61	23.21	23.46
		36	0	22.14	22.33	22.42
		36	18	22.05	22.41	22.25

		36	39	21.98	22.17	22.20
		75	0	22.07	22.16	22.21
	16QAM	1	0	22.15	22.66	22.29
		1	38	22.66	22.77	22.27
		1	74	22.50	22.59	22.10
		36	0	21.30	21.37	21.21
		36	18	21.22	21.23	21.13
		36	39	21.14	21.20	21.06
		75	0	21.11	21.18	21.06
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				39750/2506	40620/2593	41490/2680
20MHz	QPSK	1	0	23.65	23.41	23.59
		1	50	23.76	23.26	23.89
		1	99	23.59	23.20	23.43
		50	0	22.11	22.28	22.38
		50	25	22.03	22.37	22.22
		50	50	21.95	22.12	22.16
		100	0	22.04	22.11	22.17
	16QAM	1	0	22.13	22.62	22.24
		1	50	22.62	22.75	22.23
		1	99	22.48	22.56	22.08
		50	0	21.27	21.33	21.18
		50	25	21.19	21.21	21.10
		50	50	21.11	21.15	21.02
		100	0	21.09	21.14	21.03

4.2 Effective Isotropic Radiated Power

Ambient condition

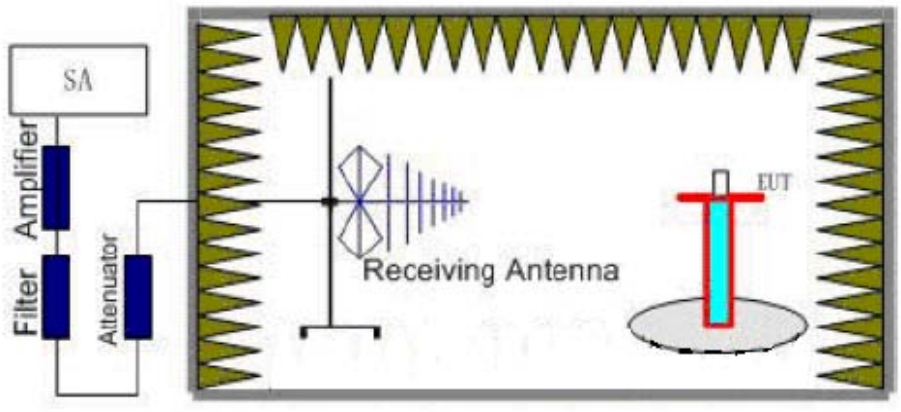
Temperature	Relative humidity
21°C ~25°C	40%~60%

Methods of Measurement

The measurement procedures in TIA- 603-D are used.
1. The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antennatower.
3.UMTS operating modes: Set RBW= 100 KHz, VBW= 300 KHz, RMS detector over frame, and use channel power option with bandwidth=5MHz, per section 4.0 of KDB 971168 D01.
4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10. ERP/EIRP = Ps + Et – Es + Gs = Ps + Rt – Rs + Gs
Ps (dBm)：Input power to substitution antenna.
Gs (dBi or dBd)：Substitution antenna Gain.
Et = Rt + AF
Es = Rs + AF
AF (dB/m)：Receive antenna factor
Rt：The highest received signal in spectrum analyzer for EUT.
Rs：The highest received signal in spectrum analyzer for substitution antenna.

EIRP= E.R.P+2.15

Test Setup



Limits

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(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(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 (EIRP)	≤ 1 W (30 dBm)
Part 27.50(c)(10)Limit (ERP)	≤ 3 W (34.77 dBm)
Part 27.50(h)(2) Limit (EIRP)	≤ 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= 1.19 dB

Test Results

WCDMA Band IV							
Frequency (MHz)	Ant Pot (H/V)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	Conclusion
1712.4	H	-36.73	-55.63	0.00	1.44	20.34	Pass
1732.6	H	-34.42	-55.58	0.00	1.56	22.72	Pass
1752.6	H	-34.55	-55.27	0.00	1.71	22.43	Pass
1712.4	V	-31.91	-54.75	0.00	1.44	24.28	Pass
1732.6	V	-32.85	-54.94	0.00	1.56	23.65	Pass
1752.6	V	-32.08	-55.08	0.00	1.71	24.71	Pass

LTE Band 4								
Bandwidth	Frequency (MHz)	Ant Pot (H/V)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	Conclusion
1.4MHz (QPSK)	1710.7	H	-35.02	-54.30	0.00	1.44	20.72	Pass
	1732.5	H	-34.00	-54.32	0.00	1.57	21.88	Pass
	1754.3	H	-33.84	-54.10	0.00	1.72	21.98	Pass
	1710.7	V	-34.13	-54.35	0.00	1.44	21.66	Pass
	1732.5	V	-33.40	-54.41	0.00	1.57	22.58	Pass
	1754.3	V	-33.31	-54.52	0.00	1.72	22.93	Pass
1.4MHz (16QAM)	1710.7	H	-35.83	-54.30	0.00	1.44	19.90	Pass
	1732.5	H	-35.80	-54.32	0.00	1.57	20.08	Pass
	1754.3	H	-34.84	-54.10	0.00	1.72	20.98	Pass
	1710.7	V	-34.95	-54.35	0.00	1.44	20.84	Pass
	1732.5	V	-35.20	-54.41	0.00	1.57	20.78	Pass
	1754.3	V	-34.31	-54.52	0.00	1.72	21.93	Pass
3MHz (QPSK)	1711.5	H	-34.39	-54.33	0.00	1.44	21.38	Pass
	1732.5	H	-33.88	-54.32	0.00	1.57	22.00	Pass
	1753.5	H	-33.82	-54.11	0.00	1.72	22.01	Pass
	1711.5	V	-33.41	-54.35	0.00	1.44	22.38	Pass
	1732.5	V	-33.37	-54.41	0.00	1.57	22.61	Pass
	1753.5	V	-33.43	-54.48	0.00	1.72	22.77	Pass
3MHz (16QAM)	1711.5	H	-35.21	-54.33	0.00	1.44	20.56	Pass
	1732.5	H	-35.68	-54.32	0.00	1.57	20.20	Pass
	1753.5	H	-34.82	-54.11	0.00	1.72	21.01	Pass
	1711.5	V	-34.23	-54.35	0.00	1.44	21.56	Pass
	1732.5	V	-35.17	-54.41	0.00	1.57	20.81	Pass
	1753.5	V	-34.43	-54.48	0.00	1.72	21.77	Pass
5MHz (QPSK)	1712.5	H	-34.31	-54.34	0.00	1.44	21.47	Pass
	1732.5	H	-33.94	-54.32	0.00	1.57	21.94	Pass
	1752.5	H	-33.87	-54.13	0.00	1.72	21.97	Pass
	1712.5	V	-33.27	-54.38	0.00	1.44	22.55	Pass
	1732.5	V	-33.30	-54.41	0.00	1.57	22.68	Pass

	1752.5	V	-33.20	-54.47	0.00	1.72	22.99	Pass
5MHz (16QAM)	1712.5	H	-35.17	-54.34	0.00	1.44	20.61	Pass
	1732.5	H	-35.73	-54.32	0.00	1.57	20.15	Pass
	1752.5	H	-34.87	-54.13	0.00	1.72	20.97	Pass
	1712.5	V	-34.13	-54.38	0.00	1.44	21.69	Pass
	1732.5	V	-35.09	-54.41	0.00	1.57	20.89	Pass
	1752.5	V	-34.21	-54.47	0.00	1.72	21.98	Pass
10MHz (QPSK)	1715	H	-34.16	-54.33	0.00	1.44	21.61	Pass
	1732.5	H	-33.57	-54.32	0.00	1.57	22.31	Pass
	1750	H	-33.83	-54.12	0.00	1.66	21.95	Pass
	1715	V	-33.26	-54.32	0.00	1.44	22.50	Pass
	1732.5	V	-33.01	-54.41	0.00	1.57	22.97	Pass
	1750	V	-33.31	-54.52	0.00	1.66	22.87	Pass
10MHz (16QAM)	1715	H	-35.00	-54.33	0.00	1.44	20.77	Pass
	1732.5	H	-35.37	-54.32	0.00	1.57	20.51	Pass
	1750	H	-34.84	-54.12	0.00	1.66	20.94	Pass
	1715	V	-34.10	-54.32	0.00	1.44	21.66	Pass
	1732.5	V	-34.81	-54.41	0.00	1.57	21.17	Pass
	1750	V	-34.32	-54.52	0.00	1.66	21.86	Pass
15MHz (QPSK)	1717.5	H	-34.18	-54.35	0.00	1.49	21.65	Pass
	1732.5	H	-33.96	-54.32	0.00	1.57	21.92	Pass
	1747.5	H	-34.11	-54.17	0.00	1.66	21.72	Pass
	1717.5	V	-33.30	-54.39	0.00	1.49	22.58	Pass
	1732.5	V	-33.45	-54.41	0.00	1.57	22.53	Pass
	1747.5	V	-33.80	-54.51	0.00	1.66	22.37	Pass
15MHz (16QAM)	1717.5	H	-35.02	-54.35	0.00	1.49	20.81	Pass
	1732.5	H	-35.76	-54.32	0.00	1.57	20.12	Pass
	1747.5	H	-35.12	-54.17	0.00	1.66	20.71	Pass
	1717.5	V	-34.13	-54.39	0.00	1.49	21.74	Pass
	1732.5	V	-35.25	-54.41	0.00	1.57	20.73	Pass
	1747.5	V	-34.82	-54.51	0.00	1.66	21.35	Pass
20MHz (QPSK)	1720	H	-34.22	-54.37	0.00	1.49	21.64	Pass
	1732.5	H	-33.82	-54.32	0.00	1.57	22.06	Pass
	1745	H	-33.84	-54.23	0.00	1.63	22.02	Pass
	1720	V	-33.33	-54.44	0.00	1.49	22.60	Pass
	1732.5	V	-33.17	-54.41	0.00	1.57	22.81	Pass
	1745	V	-33.41	-54.59	0.00	1.63	22.81	Pass
20MHz (16QAM)	1720	H	-35.05	-54.37	0.00	1.49	20.81	Pass
	1732.5	H	-35.64	-54.32	0.00	1.57	20.24	Pass
	1745	H	-34.98	-54.23	0.00	1.63	20.88	Pass
	1720	V	-34.16	-54.44	0.00	1.49	21.77	Pass
	1732.5	V	-34.99	-54.41	0.00	1.57	20.99	Pass
	1745	V	-34.55	-54.59	0.00	1.63	21.67	Pass

LTE Band 12								
Bandwidth	**Frequency (MHz)**	**Ant Pot (H/V)**	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBi)**	**ERP (dBm)**	**Conclusion**
1.4MHz (QPSK)	699.7	H	-28.65	-49.12	0.00	2.04	22.51	Pass
	707.5	H	-28.78	-49.39	0.00	2.03	22.65	Pass
	715.3	H	-28.41	-49.76	0.00	1.99	23.34	Pass
	699.7	V	-33.69	-48.91	0.00	2.04	17.27	Pass
	707.5	V	-33.02	-49.12	0.00	2.03	18.13	Pass
	715.3	V	-33.32	-49.43	0.00	1.99	18.11	Pass
1.4MHz (16QAM)	699.7	H	-29.34	-49.12	0.00	2.04	21.82	Pass
	707.5	H	-29.55	-49.39	0.00	2.03	21.88	Pass
	715.3	H	-29.03	-49.76	0.00	1.99	22.72	Pass
	699.7	V	-34.38	-48.91	0.00	2.04	16.58	Pass
	707.5	V	-33.80	-49.12	0.00	2.03	17.35	Pass
	715.3	V	-33.95	-49.43	0.00	1.99	17.48	Pass
3MHz (QPSK)	700.5	H	-28.85	-49.15	0.00	2.04	22.34	Pass
	707.5	H	-29.06	-49.39	0.00	2.03	22.37	Pass
	714.5	H	-28.32	-49.73	0.00	2.00	23.41	Pass
	700.5	V	-32.99	-48.94	0.00	2.04	17.99	Pass
	707.5	V	-33.34	-49.12	0.00	2.03	17.81	Pass
	714.5	V	-32.44	-49.37	0.00	2.00	18.93	Pass
3MHz (16QAM)	700.5	H	-29.55	-49.15	0.00	2.04	21.64	Pass
	707.5	H	-29.85	-49.39	0.00	2.03	21.58	Pass
	714.5	H	-28.93	-49.73	0.00	2.00	22.80	Pass
	700.5	V	-33.70	-48.94	0.00	2.04	17.28	Pass
	707.5	V	-34.15	-49.12	0.00	2.03	17.00	Pass
	714.5	V	-33.04	-49.37	0.00	2.00	18.33	Pass
5MHz (QPSK)	701.5	H	-28.87	-49.17	0.00	2.04	22.35	Pass
	707.5	H	-29.11	-49.39	0.00	2.03	22.32	Pass
	713.5	H	-28.62	-49.72	0.00	2.01	23.10	Pass
	701.5	V	-32.91	-48.95	0.00	2.04	18.08	Pass
	707.5	V	-33.33	-49.12	0.00	2.03	17.82	Pass
	713.5	V	-32.69	-49.35	0.00	2.01	18.67	Pass
5MHz (16QAM)	701.5	H	-29.60	-49.17	0.00	2.04	21.61	Pass
	707.5	H	-29.87	-49.39	0.00	2.03	21.56	Pass
	713.5	H	-29.25	-49.72	0.00	2.01	22.47	Pass
	701.5	V	-33.62	-48.95	0.00	2.04	17.37	Pass
	707.5	V	-34.14	-49.12	0.00	2.03	17.01	Pass
	713.5	V	-33.29	-49.35	0.00	2.01	18.07	Pass
10MHz	704	H	-29.01	-49.25	0.00	2.04	22.28	Pass

(QPSK)	707.5	H	-29.16	-49.39	0.00	2.03	22.27	Pass
	711	H	-28.27	-49.65	0.00	2.02	23.40	Pass
	704	V	-33.01	-49.00	0.00	2.04	18.03	Pass
	707.5	V	-33.28	-49.12	0.00	2.03	17.87	Pass
	711	V	-32.37	-49.33	0.00	2.02	18.97	Pass
10MHz (16QAM)	704	H	-29.71	-49.25	0.00	2.04	21.58	Pass
	707.5	H	-29.95	-49.39	0.00	2.03	21.48	Pass
	711	H	-28.88	-49.65	0.00	2.02	22.79	Pass
	704	V	-33.72	-49.00	0.00	2.04	17.32	Pass
	707.5	V	-34.09	-49.12	0.00	2.03	17.06	Pass
	711	V	-32.99	-49.33	0.00	2.02	18.35	Pass

LTE Band 41								
Band width	**Frequency (MHz)**	**Ant Pot (H/V)**	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBd)**	**EIRP (dBm)**	**Conclusion**
5MHz (QPSK)	2498.5	H	-38.91	-61.07	0.00	1.80	23.96	Pass
	2593	H	-40.05	-62.08	0.00	1.85	23.88	Pass
	2687.5	H	-44.07	-63.61	0.00	2.00	21.54	Pass
	2498.5	V	-39.25	-60.85	0.00	1.80	23.40	Pass
	2593	V	-42.67	-62.08	0.00	1.85	21.26	Pass
	2687.5	V	-48.98	-64.28	0.00	2.00	17.30	Pass
5MHz (16QAM)	2498.5	H	-39.59	-61.07	0.00	1.80	23.28	Pass
	2593	H	-41.49	-62.08	0.00	1.85	22.44	Pass
	2687.5	H	-45.39	-63.61	0.00	2.00	20.22	Pass
	2498.5	V	-39.81	-60.85	0.00	1.80	22.84	Pass
	2593	V	-44.12	-62.08	0.00	1.85	19.81	Pass
	2687.5	V	-50.37	-64.28	0.00	2.00	15.91	Pass
10MHz (QPSK)	2501	H	-38.40	-61.08	0.00	1.81	24.49	Pass
	2593	H	-40.05	-62.08	0.00	1.85	23.88	Pass
	2685	H	-43.40	-63.56	0.00	1.99	22.15	Pass
	2501	V	-38.85	-60.90	0.00	1.81	23.86	Pass
	2593	V	-42.94	-62.08	0.00	1.85	20.99	Pass
	2685	V	-48.51	-64.37	0.00	1.99	17.85	Pass
10MHz (16QAM)	2501	H	-39.01	-61.08	0.00	1.81	23.88	Pass
	2593	H	-41.47	-62.08	0.00	1.85	22.46	Pass
	2685	H	-44.73	-63.56	0.00	1.99	20.82	Pass
	2501	V	-39.43	-60.90	0.00	1.81	23.28	Pass
	2593	V	-44.39	-62.08	0.00	1.85	19.54	Pass
	2685	V	-49.90	-64.37	0.00	1.99	16.46	Pass

15MHz (QPSK)	2503.5	H	-38.46	-61.13	0.00	1.82	24.49	Pass
	2593	H	-39.51	-62.08	0.00	1.85	24.42	Pass
	2682.5	H	-43.80	-63.50	0.00	2.00	21.70	Pass
	2503.5	V	-39.13	-60.93	0.00	1.82	23.62	Pass
	2593	V	-42.08	-62.08	0.00	1.85	21.85	Pass
	2682.5	V	-48.81	-64.41	0.00	2.00	17.60	Pass
15MHz (16QAM)	2503.5	H	-39.14	-61.13	0.00	1.82	23.81	Pass
	2593	H	-40.95	-62.08	0.00	1.85	22.98	Pass
	2682.5	H	-45.12	-63.50	0.00	2.00	20.38	Pass
	2503.5	V	-39.59	-60.93	0.00	1.82	23.16	Pass
	2593	V	-43.60	-62.08	0.00	1.85	20.33	Pass
	2682.5	V	-50.20	-64.41	0.00	2.00	16.21	Pass
20MHz (QPSK)	2506	H	-38.40	-61.14	0.00	1.81	24.55	Pass
	2593	H	-39.71	-62.08	0.00	1.85	24.22	Pass
	2680	H	-43.52	-63.56	0.00	1.80	21.84	Pass
	2506	V	-39.13	-60.93	0.00	1.81	23.61	Pass
	2593	V	-42.44	-62.08	0.00	1.85	21.49	Pass
	2680	V	-48.58	-64.34	0.00	1.80	17.56	Pass
20MHz (16QAM)	2506	H	-39.01	-61.14	0.00	1.81	23.94	Pass
	2593	H	-41.13	-62.08	0.00	1.85	22.80	Pass
	2680	H	-44.91	-63.56	0.00	1.80	20.45	Pass
	2506	V	-39.65	-60.93	0.00	1.81	23.09	Pass
	2593	V	-43.77	-62.08	0.00	1.85	20.16	Pass
	2680	V	-50.00	-64.34	0.00	1.80	16.14	Pass

Note: 1. EIRP= E.R.P+2.15

4.3 Occupied Bandwidth

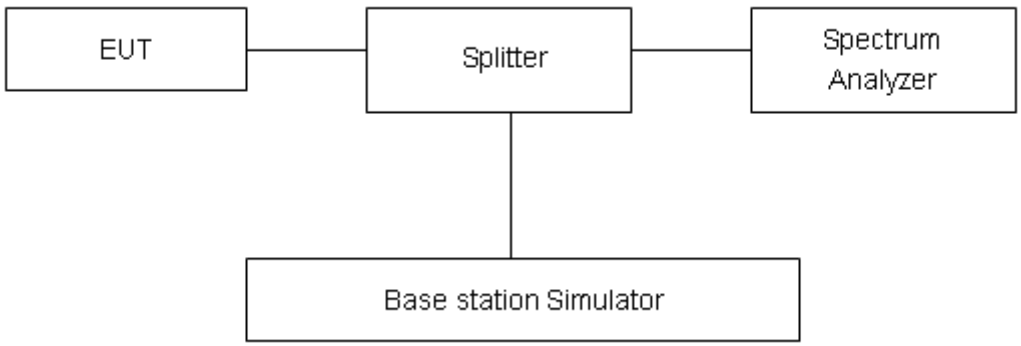
Ambient condition

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 4/12 (1.4MHz). RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4/12 (3MHz). RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4/12/41 (5MHz). RBW is set to 300 kHz, VBW is set to 1MHz for LTE Band 4/12/41 (10MHz). RBW is set to 300 kHz, VBW is set to 1MHz for LTE Band 4/41 (15MHz/20MHz) on spectrum analyzer. 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	4.1613	4.716
	1413	1732.6	4.1665	4.728
	1513	1752.6	4.1498	4.698

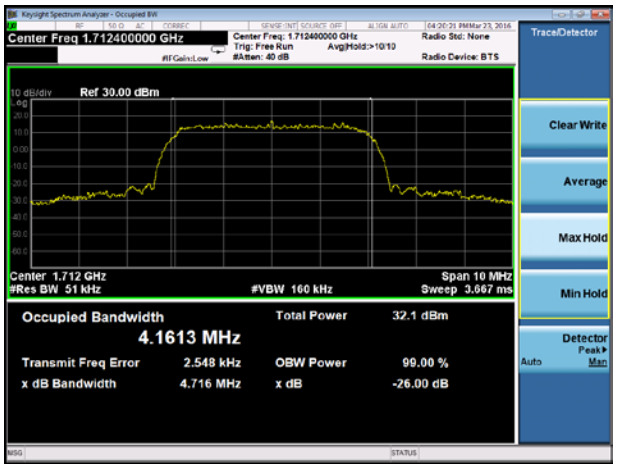
LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(kHz)	-26dBc Bandwidth(kHz)
100%	QPSK	1.4	19957	1710.7	1.1268	1.351
			20175	1732.5	1.1299	1.398
			20393	1754.3	1.1244	1.353
		3	19965	1711.5	2.7305	3.032
			20175	1732.5	2.7439	3.067
			20385	1753.5	2.7436	3.047
		5	19975	1712.5	4.5132	5.038
			20175	1732.5	4.5295	5.039
			20375	1752.5	4.5043	4.993
		10	20000	1715	9.0165	9.971
			20175	1732.5	9.0630	10.01
			20350	1750	9.0475	10.13
		15	20025	1717.5	13.479	14.66
			20175	1732.5	13.541	14.80
			20325	1747.5	13.449	14.70
		20	20050	1720	17.903	19.24
			20175	1732.5	17.916	19.32
			20300	1745	17.877	19.30
	16QAM	1.4	19957	1710.7	1.1143	1.344
			20175	1732.5	1.1254	1.396
			20393	1754.3	1.1204	1.360
		3	19965	1711.5	2.7406	3.058
			20175	1732.5	2.7346	3.095
			20385	1753.5	2.7384	3.067
		5	19975	1712.5	4.5211	4.975
			20175	1732.5	4.5179	5.033
			20375	1752.5	4.5144	5.057
		10	20000	1715	9.0206	10.04

			20175	1732.5	9.0420	9.946
			20350	1750	9.0196	9.953
		15	20025	1717.5	13.493	14.62
			20175	1732.5	13.499	14.75
			20325	1747.5	13.491	14.65
		20	20050	1720	17.914	19.23
			20175	1732.5	17.939	19.29
			20300	1745	17.848	19.14

LTE Band 12						
RB	**Modulation**	**Bandwidth (MHz)**	**Channel**	**Frequency (MHz)**	**99% Power Bandwidth(kHz)**	**-26dBc Bandwidth(kHz)**
100%	QPSK	1.4	23017	699.7	1.1146	1.356
			23095	707.5	1.1248	1.335
			23173	715.3	1.1196	1.320
		3	23025	700.5	2.7357	3.044
			23095	707.5	2.7484	3.054
			23165	714.5	2.7378	3.051
		5	23035	701.5	4.5115	5.018
			23095	707.5	4.5207	5.021
			23155	713.5	4.5158	4.964
		10	23060	704	9.0586	10.06
			23095	707.5	9.0528	10.15
			23130	711	9.0396	9.924
	16QAM	1.4	23017	699.7	1.1154	1.319
			23095	707.5	1.1246	1.336
			23173	715.3	1.1150	1.332
		3	23025	700.5	2.7353	3.051
			23095	707.5	2.7351	3.049
			23165	714.5	2.7338	3.050
		5	23035	701.5	4.5219	5.011
			23095	707.5	4.5081	5.036
			23155	713.5	4.5262	5.040
		10	23060	704	9.0414	10.04
			23095	707.5	9.0324	9.986
			23130	711	9.0378	9.950

LTE Band 41						
RB	**Modulation**	**Bandwidth (MHz)**	**Channel**	**Frequency (MHz)**	**99% Power Bandwidth(kHz)**	**-26dBc Bandwidth(kHz)**
100%	QPSK	5	39675	2498.5	4.5239	5.326
			40620	2593	4.5198	5.211
			41565	2687.5	4.5207	5.267
		10	39700	2501	9.0174	10.68
			40620	2593	9.0654	10.89
			41540	2685	9.0574	10.66
		15	39725	2503.5	13.484	15.05
			40620	2593	13.551	16.17
			41515	2682.5	13.511	15.43
		20	39750	2506	17.919	19.88
			40620	2593	17.959	19.35
			41490	2680	17.902	19.60
	16QAM	5	39675	2498.5	4.5176	4.984
			40620	2593	4.5181	4.984
			41565	2687.5	4.5190	5.012
		10	39700	2501	9.0308	10.38
			40620	2593	9.0193	9.895
			41540	2685	9.0224	10.29
		15	39725	2503.5	13.558	16.00
			40620	2593	13.493	15.27
			41515	2682.5	13.542	15.16
		20	39750	2506	17.915	20.64
			40620	2593	17.949	19.78
			41490	2680	17.873	19.24

WCDMA Band IV CH1312 Occupied Bandwidth

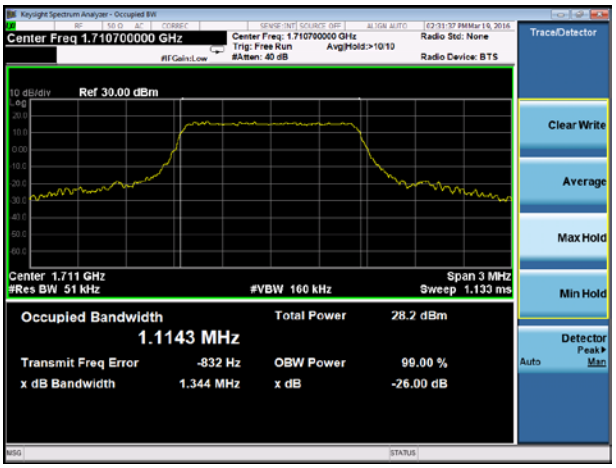


WCDMA Band IV CH1413 Occupied Bandwidth

WCDMA Band IV CH1513 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 1.4MHz
CH19957 Occupied Bandwidth

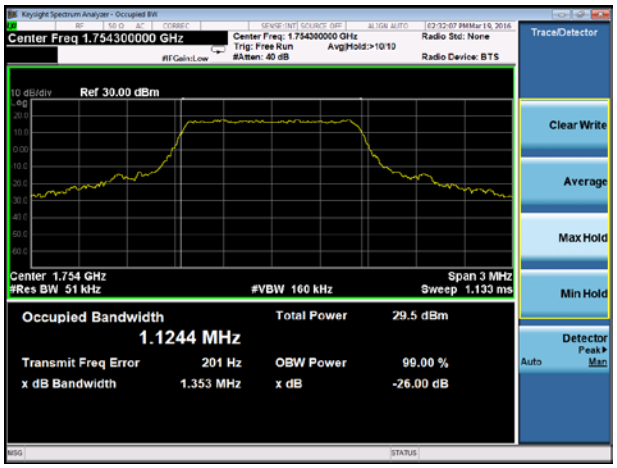
LTE Band 4 16QAM Bandwidth = 1.4MHz
CH19957 Occupied Bandwidth



LTE Band 4 QPSK Bandwidth = 1.4MHz
CH20175 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 1.4MHz
CH20175 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 1.4MHz
CH20393 Occupied Bandwidth



LTE Band 4 16QAM Bandwidth = 1.4MHz
CH20393 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 3MHz CH19965 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 3MHz CH19965 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 3MHz CH20175 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 3MHz CH20175 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 3MHz CH20385 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 3MHz CH20385 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 5MHz CH19975 Occupied Bandwidth	LTE Band 4 16QAM Bandwidth = 5MHz CH19975 Occupied Bandwidth
	
LTE Band 4 QPSK Bandwidth = 5MHz CH20175 Occupied Bandwidth	LTE Band 4 16QAM Bandwidth = 5MHz CH20175 Occupied Bandwidth
	
LTE Band 4 QPSK Bandwidth = 5MHz CH20375 Occupied Bandwidth	LTE Band 4 16QAM Bandwidth = 5MHz CH20375 Occupied Bandwidth
	

LTE Band 4 QPSK Bandwidth = 10MHz
CH20000 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 10MHz
CH20000 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 10MHz
CH20175 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 10MHz
CH20175 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 10MHz
CH20350 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 10MHz
CH20350 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 15MHz CH20025 Occupied Bandwidth	LTE Band 4 16QAM Bandwidth = 15MHz CH20025 Occupied Bandwidth
	
LTE Band 4 QPSK Bandwidth = 15MHz CH20175 Occupied Bandwidth	LTE Band 4 16QAM Bandwidth = 15MHz CH20175 Occupied Bandwidth
	
LTE Band 4 QPSK Bandwidth = 15MHz CH20325 Occupied Bandwidth	LTE Band 4 16QAM Bandwidth = 15MHz CH20325 Occupied Bandwidth
	

LTE Band 4 QPSK Bandwidth = 20MHz
CH20050 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 20MHz
CH20050 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 20MHz
CH20175 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 20MHz
CH20175 Occupied Bandwidth

LTE Band 4 QPSK Bandwidth = 20MHz
CH20300 Occupied Bandwidth

LTE Band 4 16QAM Bandwidth = 20MHz
CH20300 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 1.4MHz
CH23017 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 1.4MHz
CH23017 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 1.4MHz
CH23095 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 1.4MHz
CH23095 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 1.4MHz
CH23173 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 1.4MHz
CH23173 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 3MHz
CH23025 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 3MHz
CH23025 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 3MHz
CH23095 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 3MHz
CH23095 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 3MHz
CH23165 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 3MHz
CH23165 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 5MHz
CH23035 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 5MHz
CH23035 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 5MHz
CH23095 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 5MHz
CH23095 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 5MHz
CH23155 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 5MHz
CH23155 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth =10MHz
CH23060 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth =10MHz
CH23060 Occupied Bandwidth

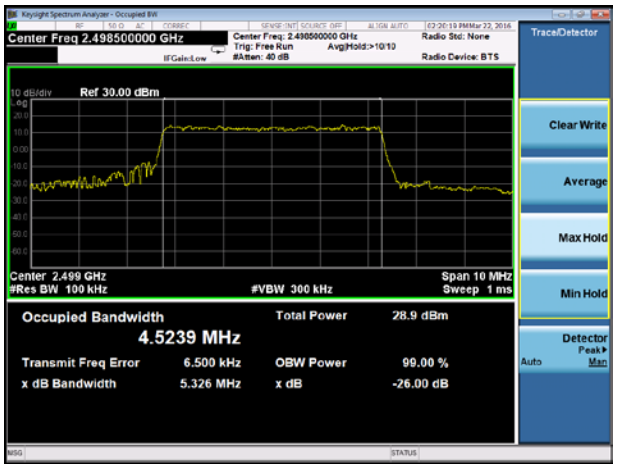
LTE Band 12 QPSK Bandwidth = 10MHz
CH23095 Occupied Bandwidth

LTE Band 12 16QAM Bandwidth = 10MHz
CH23095 Occupied Bandwidth

LTE Band 12 QPSK Bandwidth = 10MHz
CH23130 Occupied Bandwidth

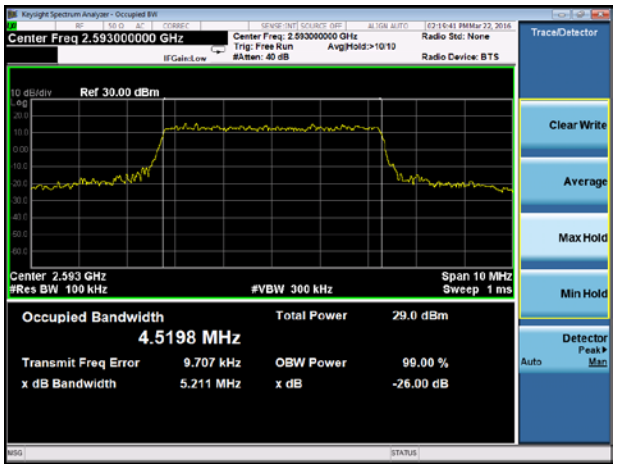
LTE Band 12 16QAM Bandwidth = 10MHz
CH23130 Occupied Bandwidth

LTE Band 41 QPSK Bandwidth = 5MHz
CH39675 Occupied Bandwidth



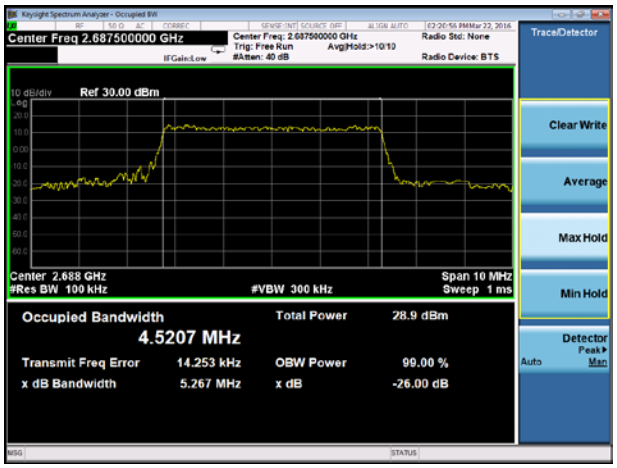
LTE Band 41 16QAM Bandwidth = 5MHz
CH39675 Occupied Bandwidth

LTE Band 41 QPSK Bandwidth = 5MHz
CH40620 Occupied Bandwidth



LTE Band 41 16QAM Bandwidth = 5MHz
CH40620 Occupied Bandwidth

LTE Band 41 QPSK Bandwidth = 5MHz
CH41565 Occupied Bandwidth

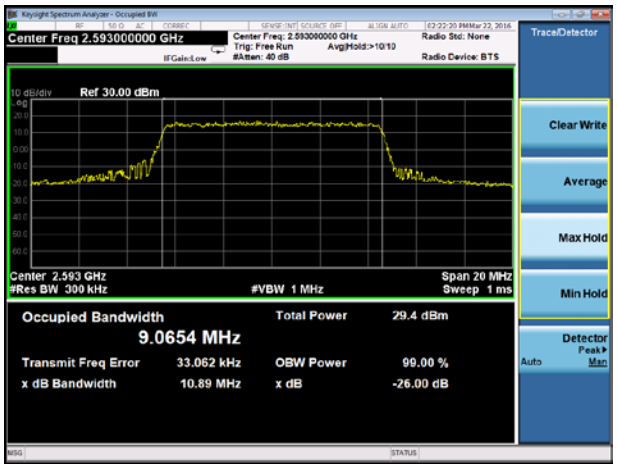


LTE Band 41 16QAM Bandwidth = 5MHz
CH41565 Occupied Bandwidth

LTE Band 41 QPSK Bandwidth = 10MHz
CH39700 Occupied Bandwidth

LTE Band 41 16QAM Bandwidth = 10MHz
CH39700 Occupied Bandwidth

LTE Band 41 QPSK Bandwidth = 10MHz
CH40620 Occupied Bandwidth



LTE Band 41 16QAM Bandwidth = 10MHz
CH40620 Occupied Bandwidth

LTE Band 41 QPSK Bandwidth = 10MHz
CH41540 Occupied Bandwidth

LTE Band 41 16QAM Bandwidth = 10MHz
CH41540 Occupied Bandwidth