FCC Test Report (PART 27)

Report No.:	RF190617E03B-3
FCC ID:	APYHRO00274
Received Date:	July 09, 2019
Test Date:	July 15 to 24, 2019
Issued Date:	Aug. 22, 2019
Applicant:	Sharp Corporation
Address:	1 Takumi-cho, Sakai-ku, Sakai City Osaka, 590-8522 Japan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
FCC Registration / Designation Number:	723255 / TW2022

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RF190617E03B-3	Original release.	Aug. 22, 2019

1 Certificate of Conformity

Product:	Wireless router
Sample Status:	ENGINEERING SAMPLE
Applicant:	Sharp Corporation
Test Date:	July 15 to 24, 2019
Standards:	FCC Part 27, Subpart H / L

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Wendy Wu , **Date:** Aug. 22, 2019

Wendy Wu / Specialis

Approved by : , **Date:** Aug. 22, 2019

May Chen / Manager

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 27.50	Radiated Power	PASS	Meet the requirement of limit.
2.1047	Modulation characteristics	PASS	Meet the requirement
2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	PASS	Meet the requirement of limit.
2.1049 27.53	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.53	Band Edge Measurements	PASS	Meet the requirement of limit.
---	Peak To Average Ratio	PASS	Meet the requirement of limit.
2.1051 27.53	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -19.19dB at 8662.5MHz.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	4.8 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.1 dB
	6GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.3 dB

2.2 Test Site and Instruments

For radiated spurious emissions test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 03, 2019	July 02, 2020
Pre-Amplifier EMCI	EMC001340	980142	Jan. 25, 2019	Jan. 24, 2020
Loop Antenna Electro-Metrics	EM-6879	269	Sep. 07, 2018	Sep. 06, 2019
RF Cable	NA	LOOPCAB-001	Jan. 14, 2019	Jan. 13, 2020
RF Cable	NA	LOOPCAB-002	Jan. 14, 2019	Jan. 13, 2020
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-01	Oct. 30, 2018	Oct. 29, 2019
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Nov. 22, 2018	Nov. 21, 2019
RF Cable	8D	966-4-1	Mar. 19, 2019	Mar. 18, 2020
RF Cable	8D	966-4-2	Mar. 19, 2019	Mar. 18, 2020
RF Cable	8D	966-4-3	Mar. 19, 2019	Mar. 18, 2020
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-4-01	Sep. 27, 2018	Sep. 26, 2019
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980385	Aug. 16, 2018	Aug. 15, 2019
RF Cable	EMC104-SM-SM-1200	160923	Jan. 28, 2019	Jan. 27, 2020
RF Cable	104 RF cable	131215	Jan. 10, 2019	Jan. 09, 2020
RF Cable	EMC104-SM-SM-6000	180418	May 03, 2019	May 02, 2020
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 4.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: July 24, 2019

For other test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSV40	100964	June 04, 2019	June 03, 2020
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 01, 2018	July 31, 2019
Power meter Anritsu	ML2495A	1014008	May 13, 2019	May 12, 2020
Power sensor Anritsu	MA2411B	0917122	May 13, 2019	May 12, 2020
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 15, 2019	Apr. 14, 2020
AC Power Source Extech Electronics	6205	1440452	NA	NA
DC Power Supply Topward	6603D	795558	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 09, 2019	Jan. 08, 2020
True RMS Clamp Meter FLUKE	325	31130711WS	May 21, 2019	May 20, 2020
ESG Vector signal generator Agilent	E4438C	MY45094468/ 005 506 602 UK6 UNJ	Nov. 19, 2018	Nov. 18, 2019
Mech Switch Absorptive Mini-Circuits	MSP4TA-18+	0140	Feb. 11, 2019	Feb. 10, 2020
FXD ATTEN Mini-Circuits	BW-S3W2+	MN71981	Feb. 11, 2019	Feb. 10, 2020
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA
Universal Radio Communication Tester R&S	CMU200	121040	Apr. 17, 2019	Apr. 16, 2020
Spectrum Analyzer Keysight	N9030A	MY55410176	July 03, 2019	July 02, 2020

NOTE: 1. The test was performed in Oven room 2.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Tested Date: July 15 to 18, 2019

3 General Information

3.1 General Description of EUT

Product	Wireless router	
Status of EUT	ENGINEERING SAMPLE	
Power Supply Rating	Refer to Note	
Modulation Type	WCDMA, HSDPA, HSUPA, DC-HSDPA	BPSK
	LTE	QPSK, 16QAM, 64QAM
Operating Frequency	WCDMA Band 4	1712.4 ~ 1752.6 MHz
	LTE Band 4	1710.7 ~ 1754.3 MHz
	LTE Band 12	699.7 ~ 715.3 MHz
	LTE Band 17	706.5 ~ 713.5 MHz
Max. EIRP Power	WCDMA Band 4	20.87dBm
	LTE Band 4 (Channel Bandwidth 1.4MHz)	20.61dBm
	LTE Band 4 (Channel Bandwidth 3MHz)	20.72dBm
	LTE Band 4 (Channel Bandwidth 5MHz)	20.70dBm
	LTE Band 4 (Channel Bandwidth 10MHz)	20.72dBm
	LTE Band 4 (Channel Bandwidth 15MHz)	20.76dBm
	LTE Band 4 (Channel Bandwidth 20MHz)	20.82dBm
Max. ERP Power	LTE Band 12 (Channel Bandwidth 1.4MHz)	14.67dBm
	LTE Band 12 (Channel Bandwidth 3MHz)	14.58dBm
	LTE Band 12 (Channel Bandwidth 5MHz)	14.66dBm
	LTE Band 12 (Channel Bandwidth 10MHz)	14.70dBm
	LTE Band 17 (Channel Bandwidth 5MHz)	14.62dBm
	LTE Band 17 (Channel Bandwidth 10MHz)	14.71dBm

Emission Designator	WCDMA Band 4	4M13F9W
	LTE Band 4 (Channel Bandwidth 1.4MHz)	QPSK: 1M09G7D
		16QAM: 1M09D7W
		64QAM: 1M09D7W
	LTE Band 4 (Channel Bandwidth 3MHz)	QPSK: 2M70G7D
		16QAM: 2M68D7W
		64QAM: 2M70D7W
	LTE Band 4 (Channel Bandwidth 5MHz)	QPSK: 4M51G7D
		16QAM: 4M51D7W
		64QAM: 4M50D7W
	LTE Band 4 (Channel Bandwidth 10MHz)	QPSK: 9M00G7D
		16QAM: 9M00D7W
		64QAM: 9M00D7W
	LTE Band 4 (Channel Bandwidth 15MHz)	QPSK: 13M5G7D
		16QAM: 13M5D7W
		64QAM: 13M5D7W
	LTE Band 4 (Channel Bandwidth 20MHz)	QPSK: 18M0G7D
		16QAM: 17M9D7W
		64QAM: 18M0D7W
	LTE Band 12 (Channel Bandwidth 1.4MHz)	QPSK: 1M09G7D
		16QAM: 1M09D7W
		64QAM: 1M08D7W
	LTE Band 12 (Channel Bandwidth 3MHz)	QPSK: 2M70G7D
		16QAM: 2M68D7W
		64QAM: 2M70D7W
	LTE Band 12 (Channel Bandwidth 5MHz)	QPSK: 4M51G7D
		16QAM: 4M50D7W
		64QAM: 4M51D7W
	LTE Band 12 (Channel Bandwidth 10MHz)	QPSK: 9M00G7D
		16QAM: 9M00D7W
		64QAM: 9M02D7W
	LTE Band 17 (Channel Bandwidth 5MHz)	QPSK: 4M51G7D
		16QAM: 4M51D7W
		64QAM: 4M51D7W
	LTE Band 17 (Channel Bandwidth 10MHz)	QPSK: 9M00G7D
		16QAM: 9M02D7W
		64QAM: 9M02D7W
Antenna Type	Refer to Note	
Antenna Connector	Refer to Note	
Accessory Device	Cradle x1 (Option, Model: J03W039.02) AC Adapter x 1	
Data Cable Supplied	NA	

Note:
1. Simultaneously transmission condition.

Condition	Technology	
1	WLAN	WWAN
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.		

2. The EUT must be supplied one power adapter or Battery as the following table:

Adapter	
Model No.	Spec.
SB-AC19TCPD	Input: 100-240V, 0.7A, 50/60Hz Output: 5V/7V/9V/12V, 3.0A/3.0A/3.0A/2.25A DC output cable (Unshielded, 1.6m)

Battery		
Brand	Model No.	Spec.
NA	UBATIA301AFN2	3.85 Vdc, 4000mAh

3. The antennas provided to the EUT, please refer to the following table:

Antenna No.	RF Chain No.	Antenna Net Gain(dBi)	Frequency range (MHz)	Antenna Type	Connector Type
1	Main	Please refer to below table	Please refer to below table	PIFA	i-pex(MHF)
2	Aux	Please refer to below table	Please refer to below table	PIFA	i-pex(MHF)
3	Aux / chain0	Please refer to below table	Please refer to below table	PIFA	i-pex(MHF)
4	Aux / chain1	Please refer to below table	Please refer to below table	PIFA	i-pex(MHF)

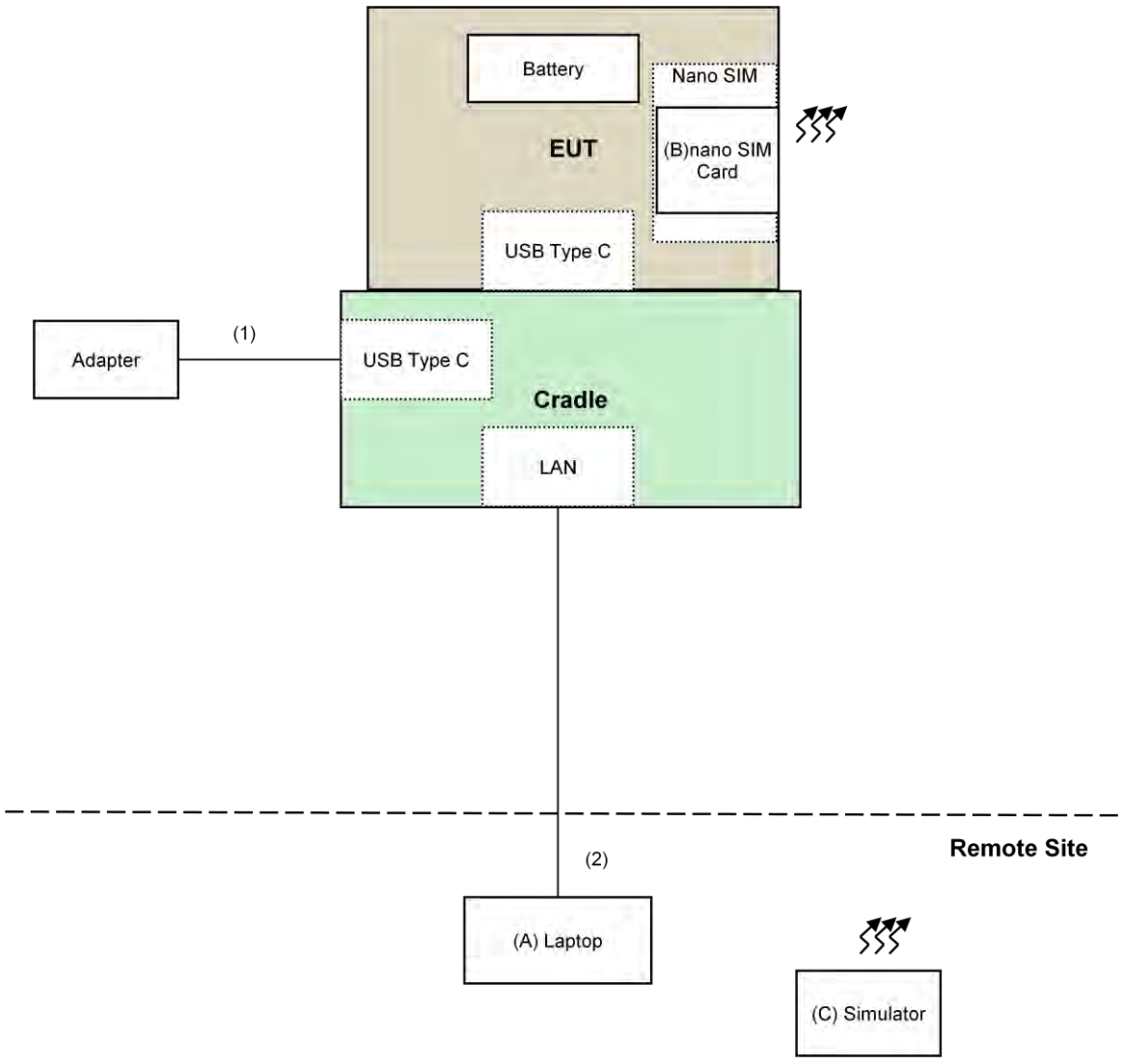
Antenna gain list					
Band	Freq. Range (MHz)	Gain (dBi)			
		Ant 1 (Main)	Ant 2 (Aux)	Ant 3 (Aux / chain0)	Ant 4 (Aux / chain1)
WLAN 2.4GHz	2.4~2.4835	NA	NA	-0.843	-0.484
WCDMA II (B2)	1850~1910	-2.01	-2.67	-2.67	-3.77
WCDMA IV (B4)	1710~1755	-2.63	-3.67	-3.67	-3.67
WCDMA V (B5)	824~849	-2.21	NA	NA	NA
LTE Band (2)	1850~1910	-2.01	-2.67	-2.67	-3.77
LTE Band (4)	1710~1755	-2.63	-3.67	-3.67	-3.67
LTE Band (5)	824~849	-2.21	NA	NA	NA
LTE Band (12)	698~716	-6.05	NA	NA	NA
LTE Band (17)	704~716	-6.05	NA	NA	NA

4. For radiated emissions, the EUT was pre-tested under the following modes:

Test Mode	Description
Mode A	Power from USB adapter (positioned: X-plane)
Mode B	Power from USB adapter (positioned: Y-plane)
Mode C	Power from USB adapter (positioned: Z-plane)
Mode D	Power from Battery (positioned: Z-plane)
Mode E	**Power from Cradle**
Note: From the above modes, the worst case was found in **Mode E**. Therefore only the test data of the mode was recorded in this report.	

5. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 Configuration of System under Test



3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab
B.	SIM Card	NA	NA	NA	NA	Provided by Lab
C.	Simulator	Anritsu	MT8820C	6201127458	NA	Provided by Lab

Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC Cable	1	1.6	No	0	Supplied by client
2.	RJ-45 Cable	1	10	No	0	Provided by Lab

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports.
The worst case was found when positioned on X-plane. Following channel(s) was (were) selected for the final test as listed below:

WCDMA Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
EIRP	1312 to 1513	1312, 1413, 1513	WCDMA
Frequency Stability	1312 to 1513	1413	WCDMA
Occupied Bandwidth	1312 to 1513	1312, 1413, 1513	WCDMA
Peak to Average Ratio	1312 to 1513	1312, 1413, 1513	WCDMA
Band Edge	1312 to 1513	1312, 1513	WCDMA
Conducted Emission	1312 to 1513	1312, 1413, 1513	WCDMA
Radiated Emission	1312 to 1513	1312, 1413, 1513	WCDMA

LTE Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	19957 to 20393	20175	1.4MHz	QPSK	-
	19965 to 20385	20175	3MHz	QPSK	-
	19975 to 20375	20175	5MHz	QPSK	-
	20000 to 20350	20175	10MHz	QPSK	-
	20025 to 20325	20175	15MHz	QPSK	-
	20050 to 20300	20175	20MHz	QPSK	-
Occupied Bandwidth	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK/16QAM/64QAM	Full RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK/16QAM/64QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK/16QAM/64QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK/16QAM/64QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK/16QAM/64QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK/16QAM/64QAM	Full RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK/16QAM/64QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK/16QAM/64QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK/16QAM/64QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK/16QAM/64QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	19957 to 20393	19957	1.4MHz	QPSK	1 RB / 0 RB Offset
		20393			1 RB / 5 RB Offset
		19957, 20393			6 RB / 0 RB Offset
	19965 to 20385	19965	3MHz	QPSK	1 RB / 0 RB Offset
		20385			1 RB / 14 RB Offset
		19965 , 20385			15 RB / 0 RB Offset
	19975 to 20375	19975	5MHz	QPSK	1 RB / 0 RB Offset
		20375			1 RB / 24 RB Offset
		19975, 20375			25 RB / 0 RB Offset
	20000 to 20350	20000	10MHz	QPSK	1 RB / 0 RB Offset
		20350			1 RB / 49 RB Offset
		20000, 20350			50 RB / 0 RB Offset
	20025 to 20325	20025	15MHz	QPSK	1 RB / 0 RB Offset
		20325			1 RB / 74 RB Offset
		20025, 20325			75 RB / 0 RB Offset
	20050 to 20300	20050	20MHz	QPSK	1 RB / 0 RB Offset
		20300			1 RB / 99 RB Offset
		20050, 20300			100 RB / 0 RB Offset

Conducted Emission	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Emission	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK	1 RB / 0 RB Offset

LTE Band 12

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	23017 to 23173	23095	1.4MHz	QPSK	-
	23025 to 23165	23095	3MHz	QPSK	-
	23035 to 23155	23095	5MHz	QPSK	-
	23060 to 23130	23095	10MHz	QPSK	-
Occupied Bandwidth	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK/16QAM/64QAM	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK/16QAM/64QAM	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK/16QAM/64QAM	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK/16QAM/64QAM	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK/16QAM/64QAM	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK/16QAM/64QAM	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	23017 to 23173	23017	1.4MHz	QPSK	1 RB / 0 RB Offset
		23173			1 RB / 5 RB Offset
		23017, 23173			6 RB / 0 RB Offset
	23025 to 23165	23025	3MHz	QPSK	1 RB / 0 RB Offset
		23165			1 RB / 14 RB Offset
		23025, 23165			15 RB / 0 RB Offset
	23035 to 23155	23035	5MHz	QPSK	1 RB / 0 RB Offset
		23155			1 RB / 24 RB Offset
		23035, 23155			25 RB / 0 RB Offset
	23060 to 23130	23060	10MHz	QPSK	1 RB / 0 RB Offset
		23130			1 RB / 49 RB Offset
		23060, 23130			50 RB / 0 RB Offset
Conducted Emission	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK	1RB / 0 RB offset
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK	1RB / 0 RB offset
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK	1RB / 0 RB offset
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK	1RB / 0 RB offset
Radiated Emission	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK	1RB / 0 RB offset
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK	1RB / 0 RB offset
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK	1RB / 0 RB offset
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK	1RB / 0 RB offset

LTE Band 17

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	23755 to 23825	23790	5MHz	QPSK	-
	23780 to 23800	23790	10MHz	QPSK	-
Occupied Bandwidth	23755 to 23825	23755, 23790, 23825	5MHz	QPSK/16QAM/64QAM	25 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK/16QAM/64QAM	50 RB / 0 RB Offset
Peak to Average Ratio	23755 to 23825	23755, 23790, 23825	5MHz	QPSK/16QAM/64QAM	25 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK/16QAM/64QAM	50 RB / 0 RB Offset
Band Edge	23755 to 23825	23755	5MHz	QPSK	1 RB / 0 RB Offset
		23825			1 RB / 24 RB Offset
		23755, 23825			25 RB / 0 RB Offset
	23780 to 23800	23780	10MHz	QPSK	1 RB / 0 RB Offset
		23825			1 RB / 49 RB Offset
		23755, 23825			50 RB / 0 RB Offset
Conducted Emission	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1RB / 0 RB offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1RB / 0 RB offset
Radiated Emission	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1RB / 0 RB offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1RB / 0 RB offset

NOTE:
All supported modulation types were evaluated.The Worst case of QPSK was selected. Therefore, the Frequency Stability, Band Edge, Condcudeted Emission and Radiated Emission were presented under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power (System)	Tested By
EIRP/ERP	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Frequency Stability	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Occupied Bandwidth	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Band Edge	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Peak to Average Ratio	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Condcudeted Emission	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Radiated Emission Below 1GHz	25deg. C, 75%RH	120Vac, 60Hz	James Chan
Radiated Emission Above 1GHz	25deg. C, 75%RH	120Vac, 60Hz	James Chan

3.4 EUT Operating Conditions

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 27, Subpart H / L

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For section 27.50(d)(4): Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

For section 27.50(b)(10): Portable stations (hand-held devices) operating in the 698-787 MHz band are limited to 3 watts ERP. In the BRS and EBS Band, Mobile and other user stations are limited to 2.0 watts EIRP.

For section 27.50 (c)(10): 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.

4.1.2 Test Procedures

Conducted Power Measurement:

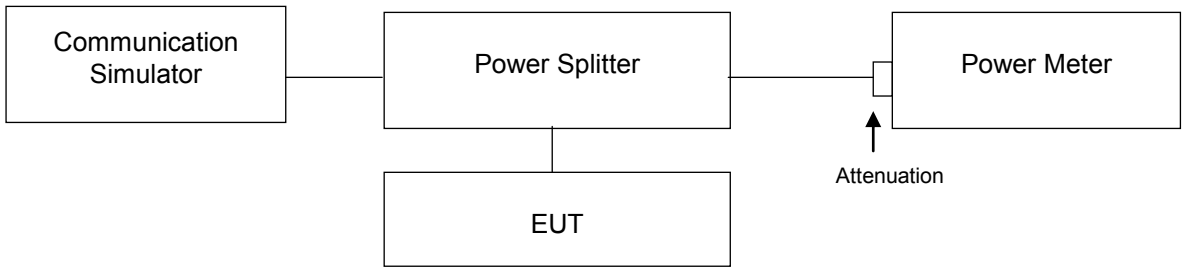
The EUT was set up for the maximum power with WCDMA/LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and difference RB size/ RB offset for difference bandwidth record the power level shown on power meter.

EIRP / ERP Measurement:

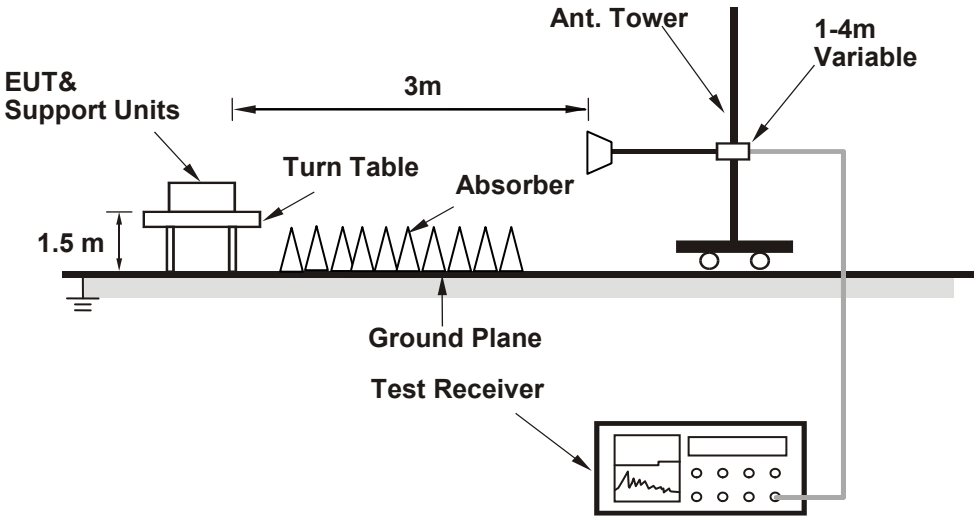
a. EIRP = Conducted Output power level + Antenna gain.
b. ERP power can be calculated form EIRP power by subtracting the gain of dipole, ERP power = EIPR power - 2.15dBi.
c. ERP = Conducted Output power level + Antenna gain (dBi) - Isotropically Factor (2.15dB)

4.1.3 Test Setup

Conducted Power Measurement:



EIRP Power Density Measurement:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.4 Test Results

CONDUCTED OUTPUT POWER (dBm)

Band	WCDMA B4		
Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
RMC	23.50	23.41	23.46
HSDPA Subtest-1	22.49	22.40	22.42
HSDPA Subtest-2	22.52	22.41	22.41
HSDPA Subtest-3	22.03	21.88	21.92
HSDPA Subtest-4	22.00	21.92	21.98
DC-HSDPA Subtest-1	22.40	22.33	22.36
DC-HSDPA Subtest-2	22.41	22.36	22.39
DC-HSDPA Subtest-3	21.96	21.79	21.82
DC-HSDPA Subtest-4	21.98	21.83	21.85
HSUPA Subtest-1	22.50	22.41	22.45
HSUPA Subtest-2	20.46	20.40	20.43
HSUPA Subtest-3	21.44	21.34	21.41
HSUPA Subtest-4	20.50	20.39	20.42
HSUPA Subtest-5	22.50	22.40	22.40

LTE Band 4

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19957	20175	20393		19957	20175	20393		19957	20175	20393	
			1710.7	1732.5	1754.3		1710.7	1732.5	1754.3		1710.7	1732.5	1754.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 1.4M	1	0	23.24	23.23	23.21	0	22.14	22.37	22.43	1	21.14	21.22	21.46	2
	1	2	23.18	23.14	22.17	0	22.11	22.19	21.26	1	21.14	21.18	20.31	2
	1	5	22.99	22.97	23.09	0	21.91	21.87	22.09	1	20.96	20.86	21.18	2
	3	0	23.00	23.03	23.21	0	22.19	21.97	22.16	1	21.16	21.29	21.23	2
	3	1	22.97	22.91	23.12	0	22.04	22.02	22.11	1	20.97	21.10	21.20	2
	3	3	22.86	22.94	23.14	0	21.89	22.01	22.08	1	21.06	21.09	21.16	2
	6	0	22.11	22.11	22.28	1	21.30	21.18	21.21	2	20.23	20.16	20.26	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19965	20175	20385		19965	20175	20385		19965	20175	20385	
			1711.5	1732.5	1753.5		1711.5	1732.5	1753.5		1711.5	1732.5	1753.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 3M	1	0	23.15	23.14	23.35	0	22.12	22.26	22.40	1	21.24	21.27	21.41	2
	1	7	23.06	23.20	22.26	0	22.16	22.13	21.28	1	21.25	21.22	20.29	2
	1	14	22.94	22.85	23.13	0	21.90	21.88	22.17	1	20.95	21.03	21.15	2
	8	0	22.16	22.11	22.10	1	21.22	21.03	21.19	2	20.12	20.24	20.29	3
	8	3	21.88	22.09	22.08	1	20.90	21.02	21.30	2	19.91	20.07	20.24	3
	8	7	21.98	21.92	22.17	1	20.90	20.95	21.10	2	20.02	20.12	20.27	3
	15	0	22.14	22.09	22.26	1	21.29	21.03	21.25	2	20.26	20.31	20.24	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19975	20175	20375		19975	20175	20375		19975	20175	20375	
			1712.5	1732.5	1752.5		1712.5	1732.5	1752.5		1712.5	1732.5	1752.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 5M	1	0	23.26	23.32	23.33	0	22.14	22.30	22.43	1	21.16	21.23	21.42	2
	1	12	23.27	23.16	22.29	0	22.11	22.28	21.25	1	21.14	21.17	20.32	2
	1	24	22.93	22.91	23.06	0	21.81	21.91	22.16	1	20.94	21.09	21.14	2
	12	0	22.00	22.24	22.11	1	21.14	21.07	21.30	2	20.23	20.21	20.18	3
	12	6	21.90	21.99	21.96	1	21.06	20.95	21.23	2	20.04	20.19	20.21	3
	12	13	21.79	22.01	21.99	1	20.86	21.02	21.13	2	20.09	20.03	20.25	3
	25	0	21.97	22.13	22.02	1	21.10	21.00	21.12	2	20.22	20.30	20.35	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20000	20175	20350		20000	20175	20350		20000	20175	20350	
			1715	1732.5	1750		1715	1732.5	1750		1715	1732.5	1750	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 10M	1	0	23.23	23.25	23.35	0	22.23	22.22	22.39	1	21.31	21.30	21.35	2
	1	24	23.12	23.20	22.22	0	22.14	22.15	21.28	1	21.30	21.18	20.37	2
	1	49	22.88	22.91	23.02	0	21.87	21.83	22.16	1	21.00	21.04	21.15	2
	25	0	22.19	22.04	22.20	1	21.06	21.05	21.16	2	20.24	20.28	20.31	3
	25	12	21.90	22.04	22.24	1	21.01	20.94	21.20	2	20.06	20.07	20.28	3
	25	25	21.87	21.87	22.00	1	20.94	20.97	21.11	2	19.90	20.07	20.09	3
	50	0	22.09	22.03	22.14	1	21.20	21.18	21.26	2	20.22	20.29	20.20	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20025	20175	20325		20025	20175	20325		20025	20175	20325	
			1717.5	1732.5	1747.5		1717.5	1732.5	1747.5		1717.5	1732.5	1747.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 15M	1	0	23.28	23.31	23.39	0	22.28	22.36	22.42	1	21.30	21.39	21.41	2
	1	37	23.21	23.30	22.40	0	22.24	22.30	21.37	1	21.31	21.36	20.39	2
	1	74	22.90	22.95	23.16	0	21.96	21.98	22.26	1	20.99	21.01	21.30	2
	36	0	22.13	22.17	22.25	1	21.27	21.12	21.29	2	20.25	20.36	20.30	3
	36	19	21.98	22.05	22.17	1	21.10	21.05	21.25	2	20.11	20.19	20.33	3
	36	39	21.99	22.03	22.20	1	21.05	21.09	21.19	2	20.10	20.08	20.25	3
	75	0	22.15	22.26	22.22	1	21.27	21.10	21.27	2	20.31	20.31	20.38	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20050	20175	20300		20050	20175	20300		20050	20175	20300	
			1720	1732.5	1745		1720	1732.5	1745		1720	1732.5	1745	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 20M	1	0	23.35	23.37	23.45	0	22.33	22.40	22.48	1	21.35	21.42	21.50	2
	1	50	23.28	23.32	22.40	0	22.29	22.32	21.45	1	21.31	21.36	20.46	2
	1	99	23.00	23.03	23.22	0	22.01	22.00	22.26	1	21.05	21.11	21.31	2
	50	0	22.20	22.25	22.33	1	21.30	21.15	21.37	2	20.33	20.38	20.40	3
	50	25	22.05	22.13	22.25	1	21.11	21.11	21.31	2	20.15	20.22	20.36	3
	50	50	22.00	22.10	22.21	1	21.05	21.11	21.20	2	20.10	20.17	20.30	3
	100	0	22.20	22.27	22.30	1	21.30	21.20	21.35	2	20.35	20.40	20.40	3

LTE Band 12

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23017	23095	23173		23017	23095	23173		23017	23095	23173	
			699.7	707.5	715.3		699.7	707.5	715.3		699.7	707.5	715.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 1.4M	1	0	22.87	22.70	22.60	0	21.79	21.82	21.70	1	20.77	20.84	20.63	2
	1	2	22.82	22.76	22.68	0	21.69	21.61	21.68	1	20.73	20.70	20.61	2
	1	5	22.63	22.64	22.57	0	21.74	21.64	21.64	1	20.65	20.61	20.59	2
	3	0	21.85	21.74	21.56	0	20.80	20.67	20.70	1	19.83	19.81	19.78	2
	3	1	21.80	21.79	21.58	0	20.83	20.74	20.66	1	19.81	19.73	19.69	2
	3	3	21.77	21.63	21.53	0	20.70	20.61	20.65	1	19.85	19.57	19.61	2
	6	0	21.84	21.79	21.57	1	20.82	20.73	20.80	2	19.82	19.72	19.72	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23025	23095	23165		23025	23095	23165		23025	23095	23165	
			700.5	707.5	714.5		700.5	707.5	714.5		700.5	707.5	714.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 3M	1	0	22.78	22.66	22.71	0	21.79	21.71	21.75	1	20.86	20.75	20.60	2
	1	7	22.73	22.72	22.72	0	21.75	21.69	21.65	1	20.70	20.64	20.56	2
	1	14	22.70	22.70	22.56	0	21.69	21.64	21.67	1	20.70	20.72	20.59	2
	8	0	21.79	21.83	21.81	1	20.77	20.69	20.74	2	19.79	19.80	19.77	3
	8	3	21.86	21.70	21.68	1	20.82	20.70	20.60	2	19.72	19.73	19.69	3
	8	7	21.75	21.66	21.71	1	20.81	20.73	20.55	2	19.82	19.56	19.50	3
	15	0	21.83	21.79	21.74	1	20.89	20.73	20.75	2	19.82	19.77	19.75	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23035	23095	23155		23035	23095	23155		23035	23095	23155	
			701.5	707.5	713.5		701.5	707.5	713.5		701.5	707.5	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 5M	1	0	22.86	22.85	22.75	0	21.84	21.85	21.74	1	20.86	20.78	20.78	2
	1	12	22.84	22.83	22.74	0	21.84	21.70	21.68	1	20.86	20.72	20.66	2
	1	24	22.73	22.73	22.72	0	21.76	21.74	21.68	1	20.79	20.79	20.66	2
	12	0	21.95	21.85	21.84	1	20.95	20.80	20.71	2	19.89	19.87	19.78	3
	12	6	21.83	21.87	21.81	1	20.92	20.79	20.70	2	19.86	19.83	19.82	3
	12	13	21.75	21.72	21.78	1	20.80	20.68	20.73	2	19.91	19.62	19.62	3
	25	0	21.87	21.88	21.82	1	20.90	20.80	20.79	2	19.89	19.84	19.87	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23060	23095	23130		23060	23095	23130		23060	23095	23130	
			704	707.5	711		704	707.5	711		704	707.5	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 10M	1	0	22.90	22.89	22.85	0	21.91	21.87	21.80	1	20.89	20.84	20.80	2
	1	24	22.85	22.83	22.79	0	21.88	21.80	21.74	1	20.88	20.80	20.76	2
	1	49	22.80	22.79	22.75	0	21.82	21.77	21.70	1	20.80	20.80	20.73	2
	25	0	21.95	21.90	21.88	1	20.95	20.88	20.80	2	19.97	19.90	19.85	3
	25	12	21.90	21.90	21.86	1	20.92	20.85	20.80	2	19.95	19.88	19.84	3
	25	25	21.85	21.81	21.80	1	20.90	20.77	20.73	2	19.95	19.72	19.70	3
	50	0	21.92	21.90	21.90	1	20.95	20.90	20.81	2	19.95	19.92	19.90	3

LTE Band 17

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23755	23790	23825		23755	23790	23825		23755	23790	23825	
			706.5	710	713.5		706.5	710	713.5		706.5	710	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 5M	1	0	22.82	22.79	22.65	0	21.82	21.69	21.79	1	20.78	20.88	20.69	2
	1	12	22.81	22.75	22.63	0	21.91	21.85	21.61	1	20.71	20.81	20.71	2
	1	24	22.66	22.76	22.62	0	21.76	21.82	21.69	1	20.87	20.61	20.59	2
	12	0	21.98	21.72	21.58	1	20.86	20.81	20.73	2	19.85	19.79	19.71	3
	12	6	21.76	21.71	21.74	1	20.88	20.81	20.84	2	19.88	19.69	19.78	3
	12	13	21.84	21.71	21.52	1	20.87	20.81	20.72	2	19.68	19.72	19.71	3
	25	0	21.81	21.79	21.70	1	20.86	20.78	20.79	2	19.98	19.80	19.82	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23780	23790	23800		23780	23790	23800		23780	23790	23800	
			709	710	711		709	710	711		709	710	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 10M	1	0	22.91	22.90	22.87	0	21.95	21.93	21.89	1	20.96	20.94	20.90	2
	1	24	22.90	22.88	22.80	0	21.93	21.90	21.82	1	20.91	20.88	20.85	2
	1	49	22.85	22.80	22.78	0	21.90	21.88	21.80	1	20.90	20.81	20.79	2
	25	0	22.00	21.96	21.91	1	21.00	20.95	20.90	2	19.98	19.90	19.89	3
	25	12	21.95	21.93	21.90	1	20.91	20.89	20.90	2	19.93	19.85	19.87	3
	25	25	21.90	21.88	21.80	1	20.90	20.87	20.83	2	19.90	19.82	19.85	3
	50	0	21.92	21.90	21.90	1	20.95	20.92	20.90	2	19.98	19.90	19.90	3

EIRP / ERP POWER

Band	WCDMA B4		
Channel	1312	1413	1513
Rx Channel	1537	1638	1738
Frequency (MHz)	1712.4	1732.6	1752.6
RMC 12.2K	23.50	23.41	23.46
Gain (dBi)	-2.63	-2.63	-2.63
Max EIRP Power (dBm)	20.87	20.78	20.83

LTE Band 4

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19957	20175	20393		19957	20175	20393		19957	20175	20393	
			1710.7	1732.5	1754.3		1710.7	1732.5	1754.3		1710.7	1732.5	1754.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 1.4M	1	0	23.24	23.23	23.21	0	22.14	22.37	22.43	1	21.14	21.22	21.46	2
Gain (dBi)			-2.63	-2.63	-2.63		-2.63	-2.63	-2.63		-2.63	-2.63	-2.63	
Max EIRP Power (dBm)			20.61	20.60	20.58		19.51	19.74	19.80		18.51	18.59	18.83	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19965	20175	20385		19965	20175	20385		19965	20175	20385	
			1711.5	1732.5	1753.5		1711.5	1732.5	1753.5		1711.5	1732.5	1753.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 3M	1	0	23.15	23.14	23.35	0	22.12	22.26	22.40	1	21.24	21.27	21.41	2
Gain (dBi)			-2.63	-2.63	-2.63		-2.63	-2.63	-2.63		-2.63	-2.63	-2.63	
Max EIRP Power (dBm)			20.52	20.51	20.72		19.49	19.63	19.77		18.61	18.64	18.78	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19975	20175	20375		19975	20175	20375		19975	20175	20375	
			1712.5	1732.5	1752.5		1712.5	1732.5	1752.5		1712.5	1732.5	1752.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 5M	1	0	23.26	23.32	23.33	0	22.14	22.30	22.43	1	21.16	21.23	21.42	2
Gain (dBi)			-2.63	-2.63	-2.63		-2.63	-2.63	-2.63		-2.63	-2.63	-2.63	
Max EIRP Power (dBm)			20.63	20.69	20.70		19.51	19.67	19.80		18.53	18.60	18.79	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20000	20175	20350		20000	20175	20350		20000	20175	20350	
			1715	1732.5	1750		1715	1732.5	1750		1715	1732.5	1750	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 10M	1	0	23.23	23.25	23.35	0	22.23	22.22	22.39	1	21.31	21.30	21.35	2
Gain (dBi)			-2.63	-2.63	-2.63		-2.63	-2.63	-2.63		-2.63	-2.63	-2.63	
Max EIRP Power (dBm)			20.60	20.62	20.72		19.60	19.59	19.76		18.68	18.67	18.72	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20025	20175	20325		20025	20175	20325		20025	20175	20325	
			1717.5	1732.5	1747.5		1717.5	1732.5	1747.5		1717.5	1732.5	1747.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 15M	1	0	23.28	23.31	23.39	0	22.28	22.36	22.42	1	21.30	21.39	21.41	2
Gain (dBi)			-2.63	-2.63	-2.63		-2.63	-2.63	-2.63		-2.63	-2.63	-2.63	
Max EIRP Power (dBm)			20.65	20.68	20.76		19.65	19.73	19.79		18.67	18.76	18.78	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20050	20175	20300		20050	20175	20300		20050	20175	20300	
			1720	1732.5	1745		1720	1732.5	1745		1720	1732.5	1745	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 20M	1	0	23.35	23.37	23.45	0	22.33	22.40	22.48	1	21.35	21.42	21.50	2
Gain (dBi)			-2.63	-2.63	-2.63		-2.63	-2.63	-2.63		-2.63	-2.63	-2.63	
Max EIRP Power (dBm)			20.72	20.74	20.82		19.70	19.77	19.85		18.72	18.79	18.87	

LTE Band 12

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23017	23095	23173		23017	23095	23173		23017	23095	23173	
			699.7	707.5	715.3		699.7	707.5	715.3		699.7	707.5	715.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 1.4M	1	0	22.87	22.70	22.60	0	21.79	21.82	21.70	1	20.77	20.84	20.63	2
Gain (dBi)			-6.05	-6.05	-6.05		-6.05	-6.05	-6.05		-6.05	-6.05	-6.05	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			14.67	14.50	14.40		13.59	13.62	13.50		12.57	12.64	12.43	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23025	23095	23165		23025	23095	23165		23025	23095	23165	
			700.5	707.5	714.5		700.5	707.5	714.5		700.5	707.5	714.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 3M	1	0	22.78	22.66	22.71	0	21.79	21.71	21.75	1	20.86	20.75	20.60	2
Gain (dBi)			-6.05	-6.05	-6.05		-6.05	-6.05	-6.05		-6.05	-6.05	-6.05	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			14.58	14.46	14.51		13.59	13.51	13.55		12.66	12.55	12.40	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23035	23095	23155		23035	23095	23155		23035	23095	23155	
			701.5	707.5	713.5		701.5	707.5	713.5		701.5	707.5	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 5M	1	0	22.86	22.85	22.75	0	21.84	21.85	21.74	1	20.86	20.78	20.78	2
Gain (dBi)			-6.05	-6.05	-6.05		-6.05	-6.05	-6.05		-6.05	-6.05	-6.05	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			14.66	14.65	14.55		13.64	13.65	13.54		12.66	12.58	12.58	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23060	23095	23130		23060	23095	23130		23060	23095	23130	
			704	707.5	711		704	707.5	711		704	707.5	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 10M	1	0	22.90	22.89	22.85	0	21.91	21.87	21.80	1	20.89	20.84	20.80	2
Gain (dBi)			-6.05	-6.05	-6.05		-6.05	-6.05	-6.05		-6.05	-6.05	-6.05	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			14.70	14.69	14.65		13.71	13.67	13.60		12.69	12.64	12.60	

LTE Band 17

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23755	23790	23825		23755	23790	23825		23755	23790	23825	
			706.5	710	713.5		706.5	710	713.5		706.5	710	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 5M	1	0	22.82	22.79	22.65	0	21.82	21.69	21.79	1	20.78	20.88	20.69	2
Gain (dBi)			-6.05	-6.05	-6.05		-6.05	-6.05	-6.05		-6.05	-6.05	-6.05	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			14.62	14.59	14.45		13.62	13.49	13.59		12.58	12.68	12.49	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23780	23790	23800		23780	23790	23800		23780	23790	23800	
			709	710	711		709	710	711		709	710	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 10M	1	0	22.91	22.90	22.87	0	21.95	21.93	21.89	1	20.96	20.94	20.90	2
Gain (dBi)			-6.05	-6.05	-6.05		-6.05	-6.05	-6.05		-6.05	-6.05	-6.05	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			14.71	14.70	14.67		13.75	13.73	13.69		12.76	12.74	12.70	

4.2 Modulation characteristics Measurement

4.2.1 Limits of Modulation characteristics

N/A

4.2.2 Test Procedure

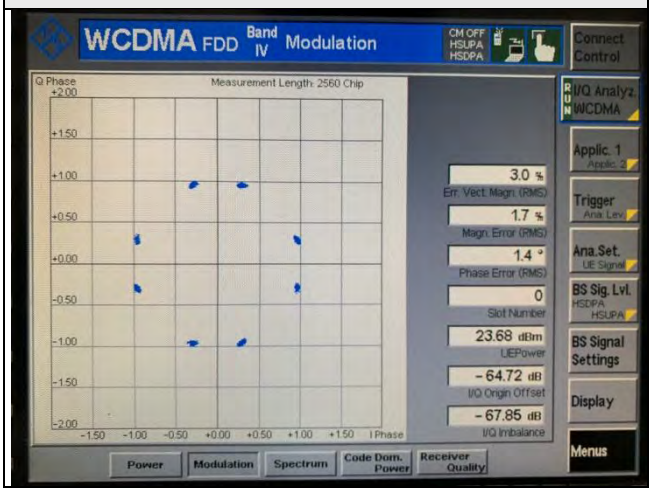
Connect the EUT to Communication Simulator via the antenna connector, The frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

4.2.3 Test Setup

4.2.4 Test Results

WCDMA B4

Frequency: 1732.6 MHz / Chain 0



LTE Band 4

QPSK / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz / Chain 0	16QAM / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz / Chain 0
	
64QAM / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz / Chain 0	
	

LTE Band 12

QPSK / Channel Bandwidth: 10MHz / Frequency: 707.5 MHz / Chain 0	16QAM / Channel Bandwidth: 10MHz / Frequency: 707.5 MHz / Chain 0
	
64QAM / Channel Bandwidth: 10MHz / Frequency: 707.5 MHz / Chain 0	
	

LTE Band 17

QPSK / Channel Bandwidth: 10MHz / Frequency: 710 MHz / Chain 0	16QAM / Channel Bandwidth: 10MHz / Frequency: 710 MHz / Chain 0
	
64QAM / Channel Bandwidth: 10MHz / Frequency: 710 MHz / Chain 0	
	

4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stabiliity Measurement

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.
According to the FCC part 2.1055 shall be tested the frequency stability. The rule is defined that" The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT -30℃ ~ 50℃.

4.3.2 Test Procedure

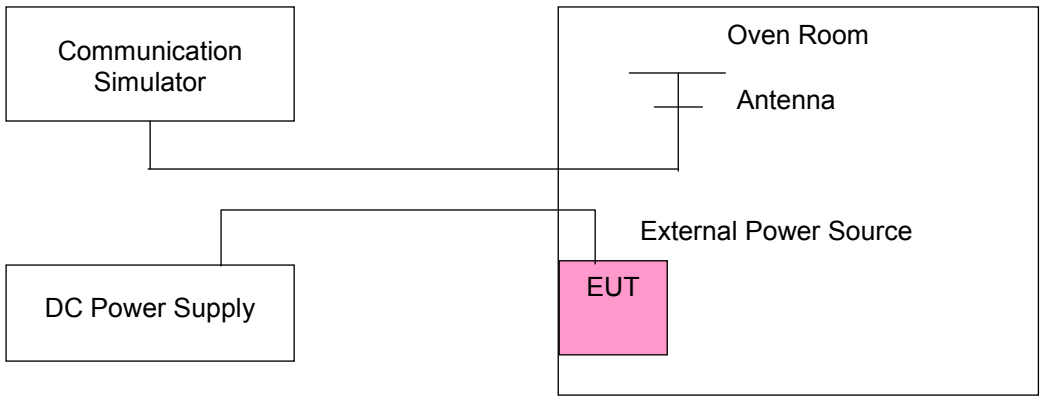
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.

c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5 ℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

4.3.3 Test Setup



4.3.4 Test Results

WCDMA Band 4

Frequency Error vs. Voltage

Voltage (Volts)	Frequency Error (MHz)		Limit (MHz)	
	WCDMA			
	Low	High	Low Edge	High Edge
2.805	1710.41	1710.28	1710	1755
3.795	1710.41	1710.34	1710	1755

Frequency Error vs. Temperature.

Temp. (℃)	Frequency Error (MHz)		Limit (MHz)	
	WCDMA			
	low	high	Low Edge	High Edge
50	1710.44	1754.70	1710	1755
40	1710.25	1754.70	1710	1755
30	1710.36	1754.69	1710	1755
20	1710.35	1754.69	1710	1755
10	1710.35	1754.69	1710	1755
0	1710.39	1754.69	1710	1755
-10	1710.36	1754.69	1710	1755
-20	1710.28	1754.69	1710	1755
-30	1710.36	1754.69	1710	1755

LTE Band 4

Voltage (Volts)	Frequency Error (MHz)												Limit (MHz)	
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz			
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low Edge	High Edge
2.805	1710.15	1754.81	1710.17	1754.93	1710.33	1754.76	1710.43	1754.54	1710.74	1754.23	1711.06	1753.95	1710	1755
3.795	1710.06	1754.84	1710.10	1754.87	1710.31	1754.66	1710.45	1754.49	1710.70	1754.15	1710.96	1753.91	1710	1755

Temp. (℃)	Frequency Error (MHz)												Limit (MHz)	
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz			
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
50	1710.06	1754.81	1710.06	1754.79	1710.31	1754.78	1710.55	1754.49	1710.75	1754.16	1711.03	1754.00	1710	1755
40	1710.15	1754.85	1710.06	1754.79	1710.26	1754.84	1710.54	1754.59	1710.67	1754.30	1710.92	1753.99	1710	1755
30	1710.21	1754.89	1710.05	1754.91	1710.29	1754.80	1710.46	1754.57	1710.66	1754.32	1710.96	1753.96	1710	1755
20	1710.23	1754.84	1710.02	1754.80	1710.23	1754.73	1710.47	1754.49	1710.75	1754.18	1710.93	1754.09	1710	1755
10	1710.09	1754.87	1710.02	1754.88	1710.16	1754.70	1710.58	1754.56	1710.71	1754.19	1710.98	1753.93	1710	1755
0	1710.20	1754.80	1710.19	1754.78	1710.16	1754.81	1710.41	1754.56	1710.72	1754.28	1711.00	1754.06	1710	1755
-10	1710.16	1754.80	1710.12	1754.93	1710.30	1754.74	1710.54	1754.55	1710.72	1754.26	1711.00	1754.03	1710	1755
-20	1710.23	1754.87	1710.02	1754.93	1710.28	1754.80	1710.48	1754.55	1710.77	1754.33	1711.03	1754.06	1710	1755
-30	1710.14	1754.76	1710.11	1754.75	1710.20	1754.82	1710.49	1754.44	1710.77	1754.19	1710.95	1753.99	1710	1755

LTE Band 12

Voltage (Volts)	Frequency Error (MHz)								Limit (MHz)	
	1.4MHz		3MHz		5MHz		10MHz			
	Low	High	Low	High	Low	High	Low	High	Low Edge	High Edge
2.805	699.09	715.93	699.22	715.87	699.21	715.80	699.45	715.44	699	716
3.795	699.07	715.75	699.12	715.91	699.17	715.67	699.61	715.57	699	716

Temp. (℃)	7Frequency Error (MHz)								Limit (MHz)	
	1.4MHz		3MHz		5MHz		10MHz			
	Low	High	Low	High	Low	High	Low	High	Low Edge	High Edge
50	699.16	715.79	699.14	715.93	699.23	715.69	699.61	715.54	699	716
40	699.13	715.78	699.21	715.84	699.21	715.65	699.52	715.54	699	716
30	699.08	715.74	699.17	715.92	699.31	715.80	699.55	715.57	699	716
20	699.12	715.80	699.07	715.79	699.30	715.67	699.47	715.54	699	716
10	699.14	715.79	699.08	715.87	699.27	715.74	699.50	715.42	699	716
0	699.14	715.89	699.06	715.78	699.32	715.66	699.59	715.44	699	716
-10	699.15	715.91	699.18	715.86	699.24	715.76	699.49	715.57	699	716
-20	699.07	715.82	699.16	715.80	699.21	715.72	699.55	715.43	699	716
-30	699.21	715.89	699.17	715.93	699.34	715.66	699.59	715.51	699	716

LTE Band 17

Voltage (Volts)	Frequency Error (MHz)				Limit (MHz)	
	5MHz		10MHz			
	Low	High	Low	High	Low Edge	High Edge
2.805	704.20	715.64	704.53	715.55	704	716
3.795	704.24	715.80	704.52	715.39	704	716

Temp. (℃)	Frequency Error (MHz)				Limit (MHz)	
	5MHz		10MHz			
	Low	High	Low	High	Low Edge	High Edge
50	704.17	715.65	704.51	715.58	704	716
40	704.24	715.65	704.57	715.55	704	716
30	704.24	715.81	704.52	715.47	704	716
20	704.19	715.71	704.54	715.48	704	716
10	704.19	715.67	704.58	715.42	704	716
0	704.26	715.79	704.42	715.42	704	716
-10	704.25	715.73	704.49	715.50	704	716
-20	704.20	715.73	704.42	715.44	704	716
-30	704.18	715.75	704.54	715.54	704	716

4.4 Emission Bandwidth Measurement

4.4.1 Limits of Emission Bandwidth Measurement

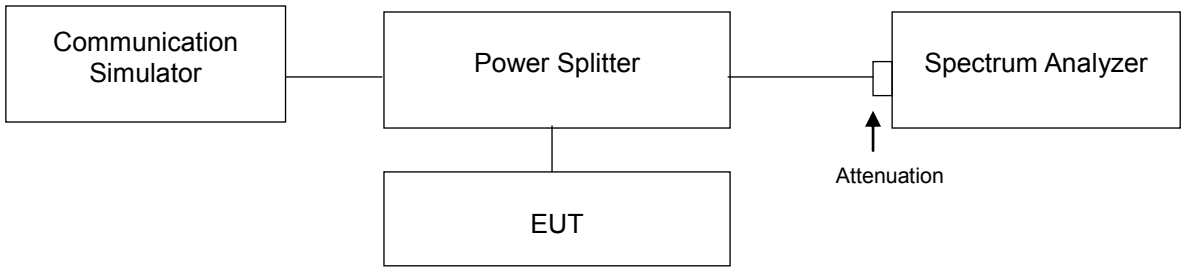
-26dB Bandwidth
According to FCC 27.53 specified that emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

Occupied Bandwidth
The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.4.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW≥1% x OBW and VBW≥3 x VBW.

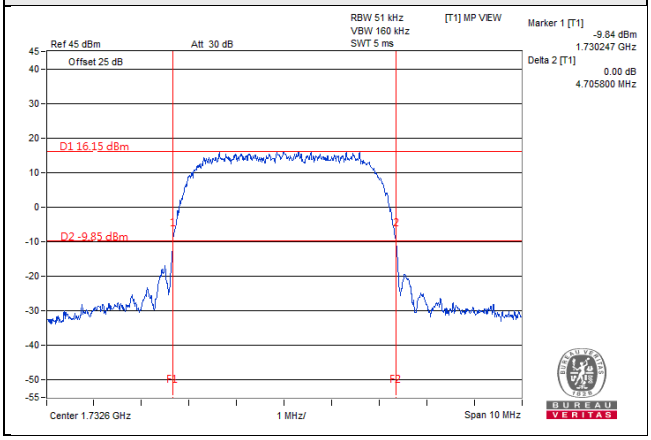
4.4.3 Test Setup



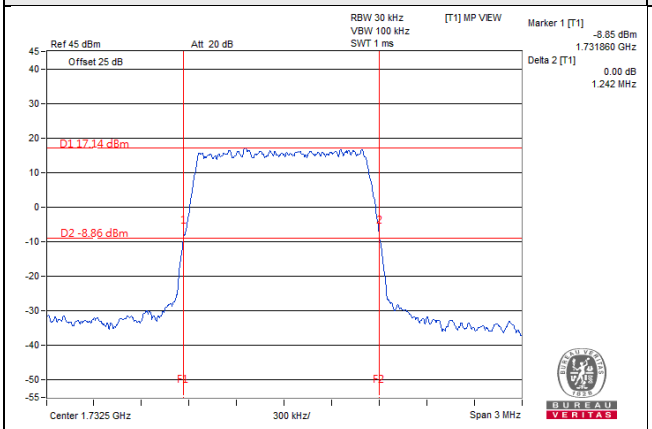
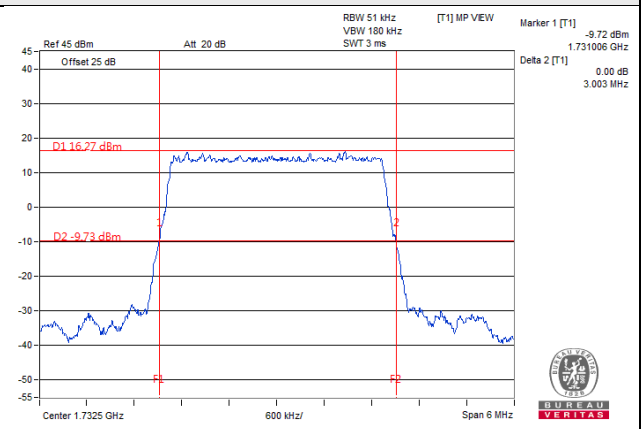
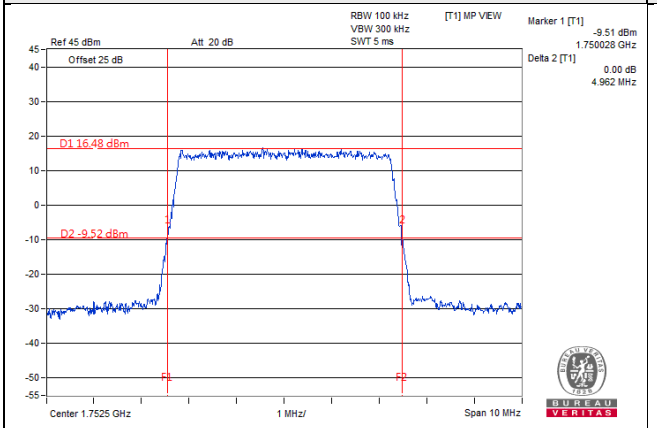
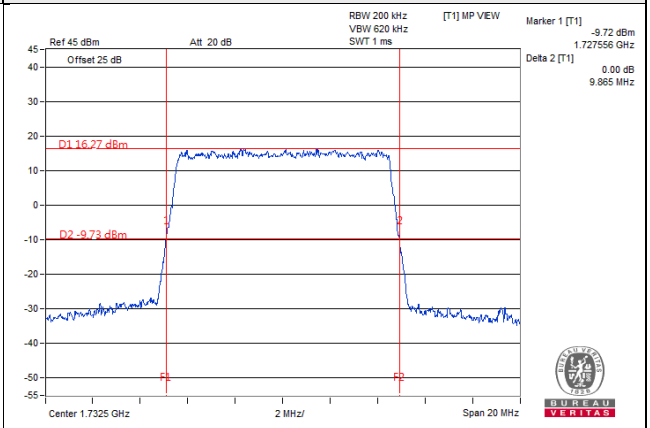
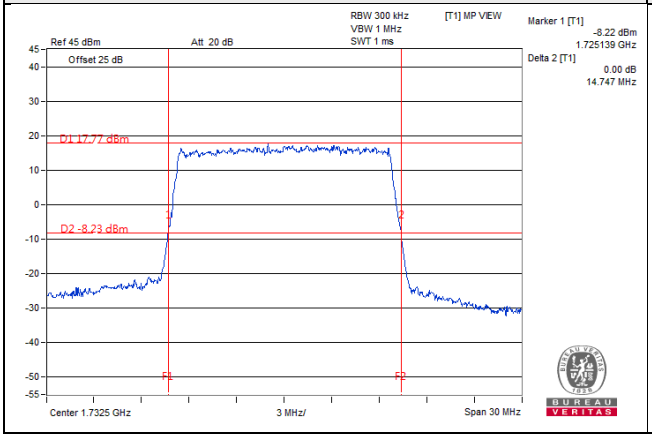
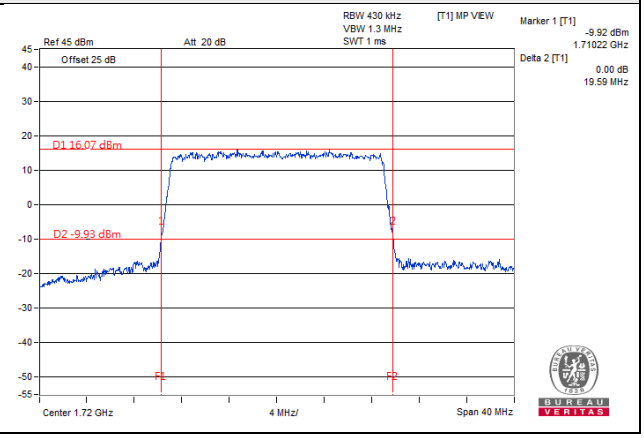
4.4.4 Test Results (-26dB Bandwidth)

Channel	FREQ. (MHz)	-26dB Bandwidth (MHz)
		WCDMA
1312	1712.4	4.66
1413	1732.6	4.70
1513	1752.6	4.66

Spectrum Plot of Worst Value
WCDMA



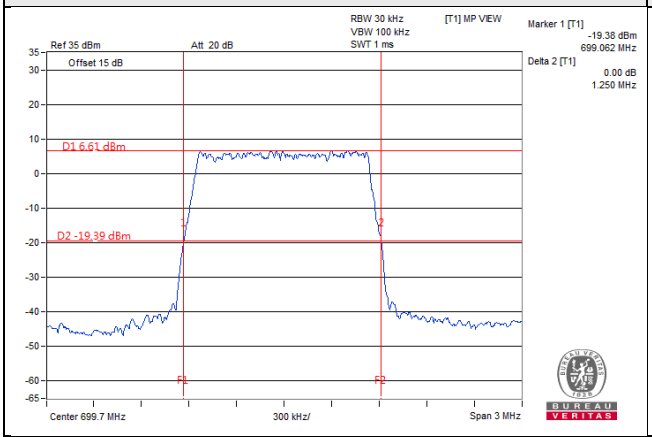
LTE Band 4									
Channel Bandwidth 1.4MHz					Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)			Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
19957	1710.7	1.23	1.24	1.22	19965	1711.5	2.96	2.96	2.97
20175	1732.5	1.24	1.24	1.23	20175	1732.5	3.00	2.97	2.96
20393	1754.3	1.24	1.23	1.24	20385	1753.5	3.00	2.95	2.95
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)			Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
19975	1712.5	4.93	4.94	4.93	20000	1715	9.83	9.82	9.82
20175	1732.5	4.95	4.94	4.90	20175	1732.5	9.80	9.86	9.81
20375	1752.5	4.96	4.96	4.95	20350	1750	9.83	9.82	9.80
Channel Bandwidth 15MHz					Channel Bandwidth 20MHz				
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)			Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
20025	1717.5	14.68	14.63	14.66	20050	1720	19.57	19.45	19.59
20175	1732.5	14.74	14.64	14.69	20175	1732.5	19.51	19.50	19.59
20325	1747.5	14.70	14.67	14.69	20300	1745	19.45	19.53	19.55

Spectrum Plot of Worst Value	
1.4MHz / QPSK	3MHz / QPSK
	
5MHz / QPSK	10MHz / 16QAM
	
15MHz / QPSK	20MHz / 64QAM
	

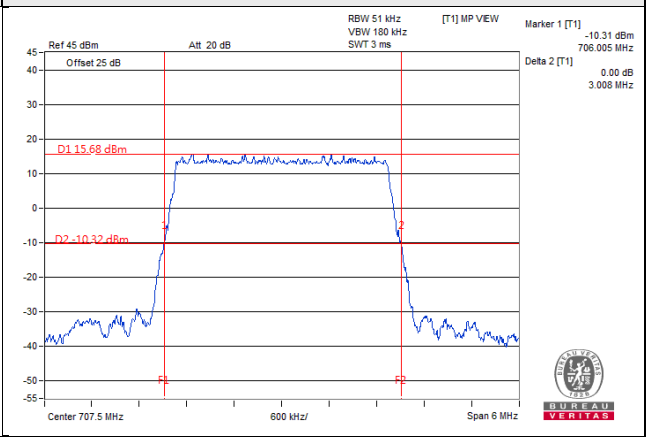
LTE Band 12									
Channel Bandwidth 1.4MHz					Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)			Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23017	699.7	1.25	1.24	1.25	23025	700.5	2.99	2.97	2.97
23095	707.5	1.23	1.24	1.24	23095	707.5	3.00	2.97	2.94
23173	715.3	1.24	1.23	1.24	23165	714.5	3.00	2.96	2.96
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)			Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23035	701.5	4.93	4.95	4.91	23060	704	9.81	9.79	9.79
23095	707.5	4.93	4.93	4.94	23095	707.5	9.83	9.90	9.81
23155	713.5	4.92	4.91	4.93	23130	711	9.81	9.85	9.79

Spectrum Plot of Worst Value

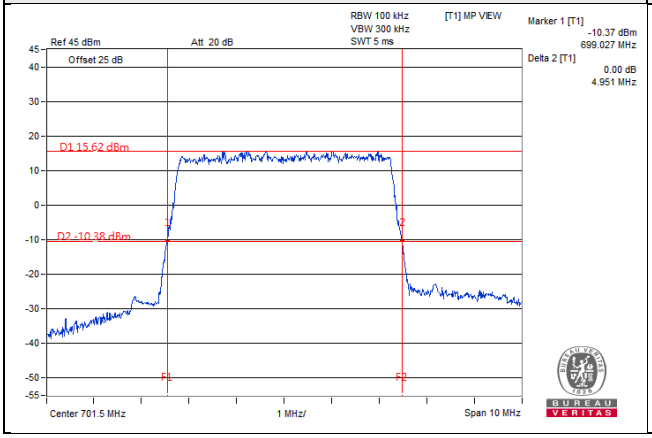
1.4MHz / QPSK



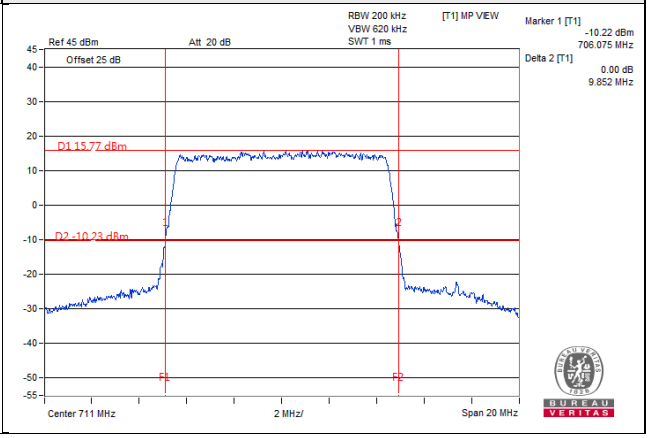
3MHz / QPSK



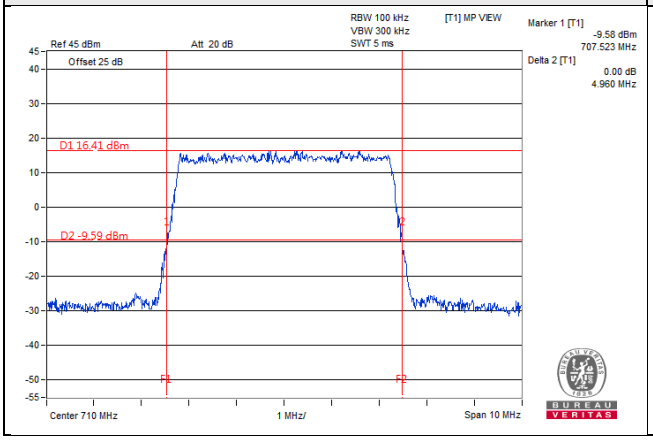
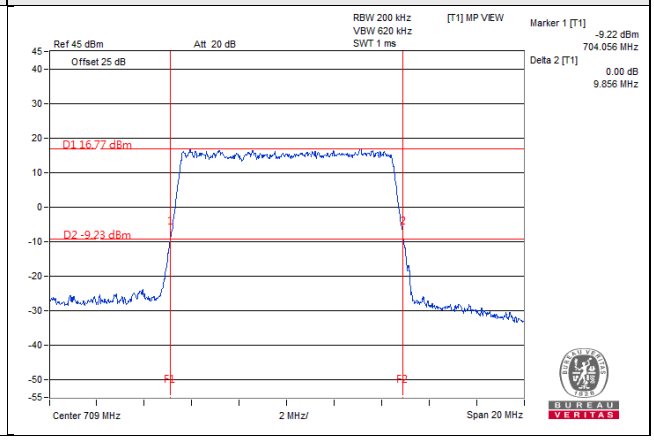
5MHz / 16QAM



10MHz / 16QAM



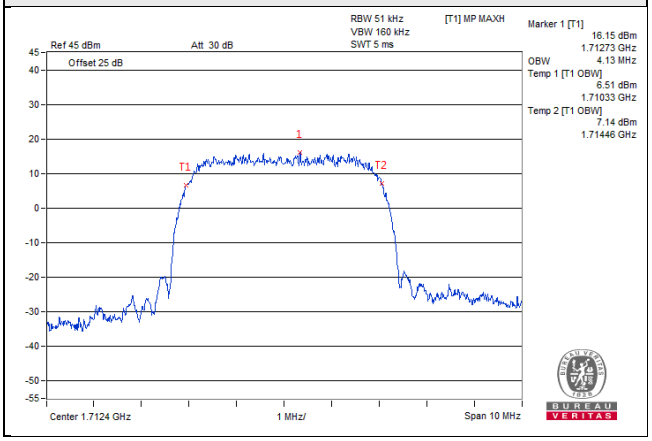
LTE Band 17									
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)			Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23755	706.5	4.92	4.93	4.94	23780	709	9.85	9.85	9.82
23790	710	4.96	4.92	4.94	23790	710	9.83	9.83	9.82
23825	713.5	4.94	4.92	4.93	23800	711	9.82	9.77	9.79

Spectrum Plot of Worst Value	
5MHz / QPSK	10MHz / QPSK
	

4.4.5 Test Results (Occupied Bandwidth)

Channel	FREQ. (MHz)	Occupied Bandwidth (MHz)
		WCDMA
1312	1712.4	4.13
1413	1732.6	4.11
1513	1752.6	4.12

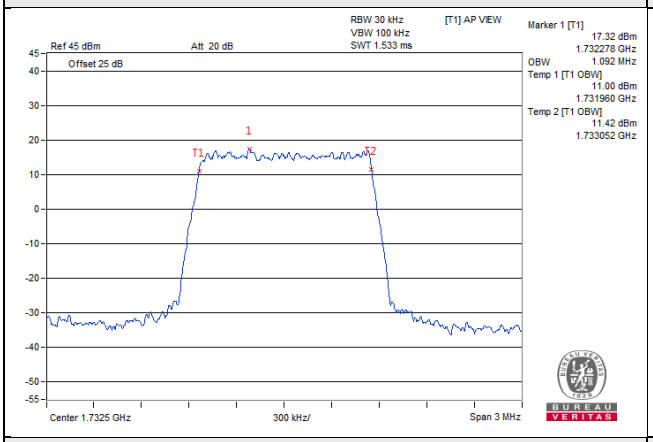
Spectrum Plot of Worst Value
WCDMA



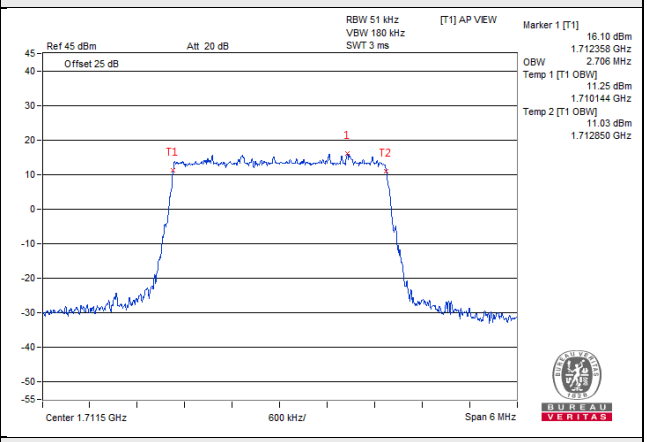
LTE Band 4									
Channel Bandwidth 1.4MHz					Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
19957	1710.7	1.08	1.09	1.08	19965	1711.5	2.70	2.68	2.69
20175	1732.5	1.09	1.09	1.09	20175	1732.5	2.70	2.68	2.70
20393	1754.3	1.09	1.09	1.09	20385	1753.5	2.70	2.68	2.70
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
19975	1712.5	4.49	4.50	4.49	20000	1715	9.00	8.98	8.98
20175	1732.5	4.50	4.50	4.50	20175	1732.5	9.00	8.98	8.98
20375	1752.5	4.51	4.51	4.50	20350	1750	9.00	8.98	8.98
Channel Bandwidth 15MHz					Channel Bandwidth 20MHz				
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
20025	1717.5	13.50	13.47	13.47	20050	1720	18.04	17.92	17.96
20175	1732.5	13.47	13.44	13.50	20175	1732.5	17.96	17.88	17.96
20325	1747.5	13.50	13.47	13.50	20300	1745	18.00	17.92	17.96

Spectrum Plot of Worst Value

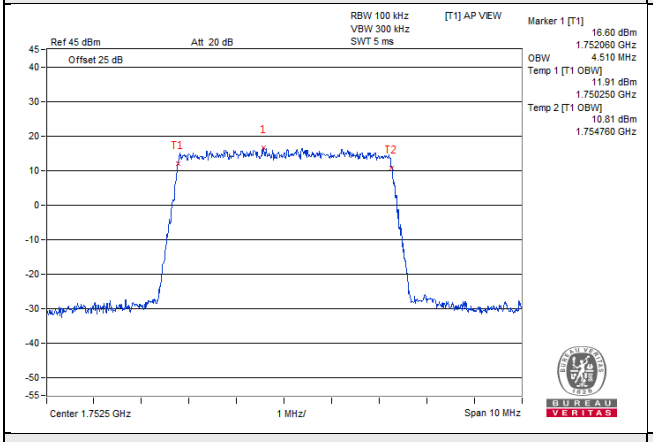
1.4MHz / QPSK



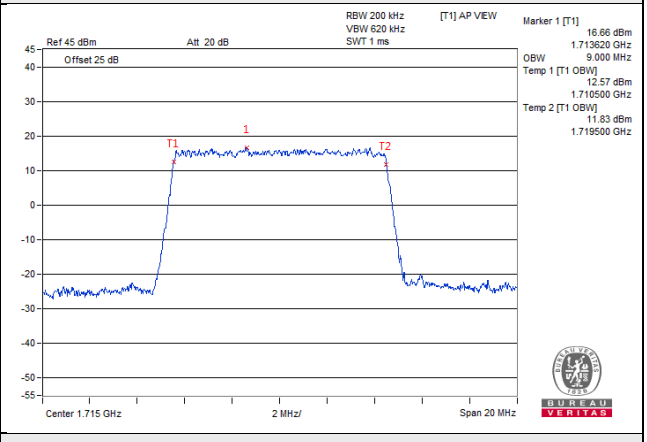
3MHz / QPSK



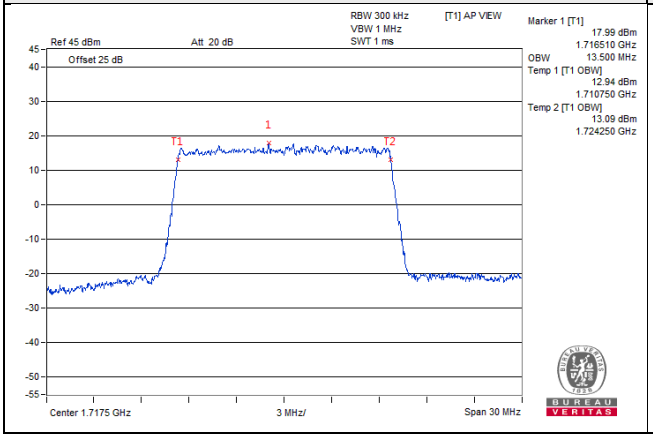
5MHz / QPSK



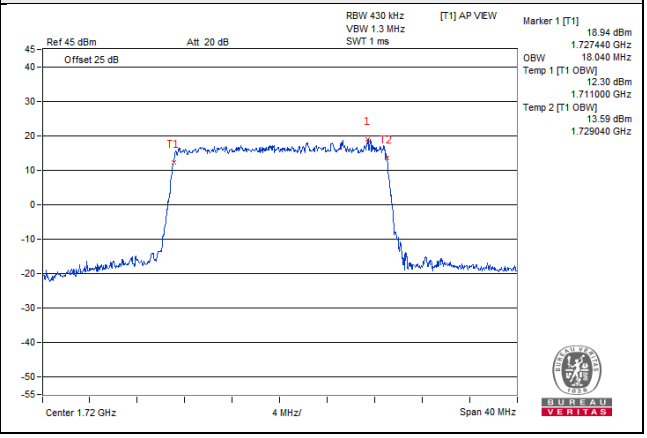
10MHz / QPSK



15MHz / QPSK



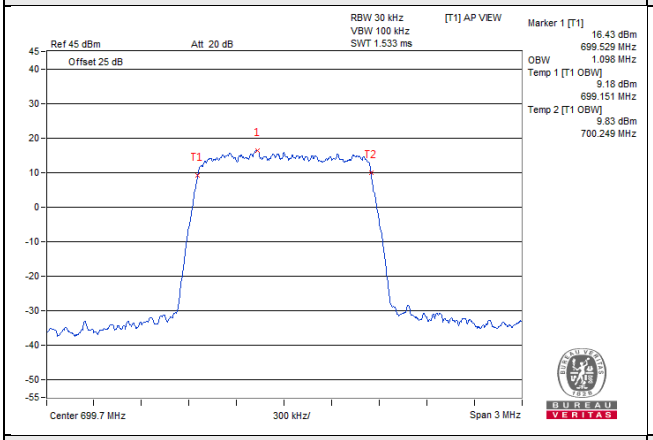
20MHz / QPSK



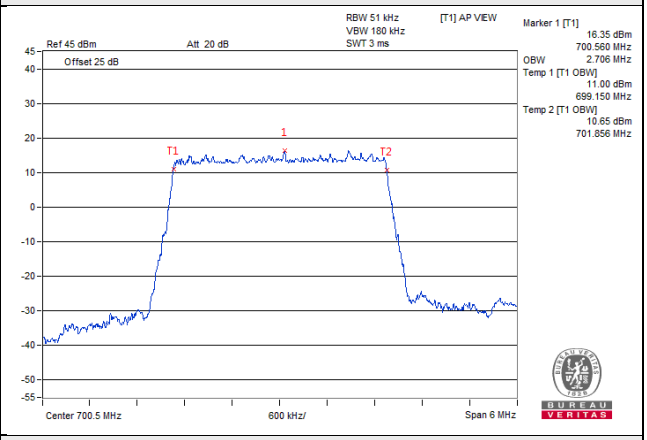
LTE Band 12									
Channel Bandwidth 1.4MHz					Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23017	699.7	1.09	1.09	1.08	23025	700.5	2.70	2.68	2.69
23095	707.5	1.08	1.09	1.09	23095	707.5	2.70	2.68	2.70
23173	715.3	1.08	1.09	1.09	23165	714.5	2.70	2.68	2.69
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23035	701.5	4.50	4.50	4.50	23060	704	8.96	8.98	8.96
23095	707.5	4.50	4.50	4.51	23095	707.5	9.00	9.00	9.02
23155	713.5	4.51	4.50	4.50	23130	711	8.98	9.00	8.98

Spectrum Plot of Worst Value

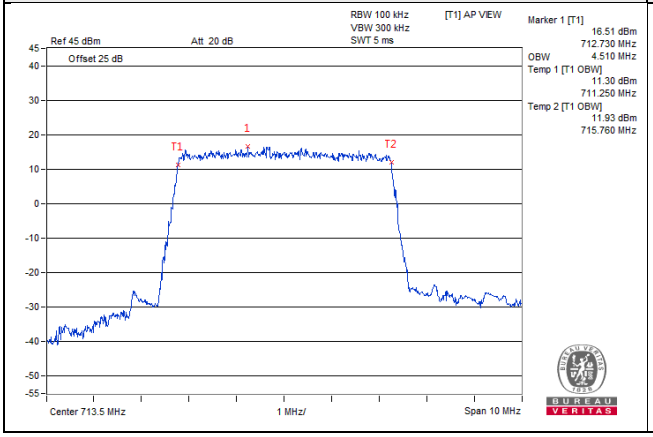
1.4MHz / 16QAM



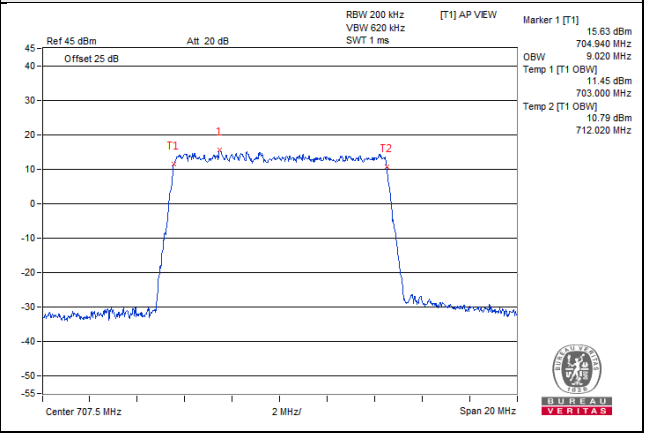
3MHz / QPSK



5MHz / QPSK

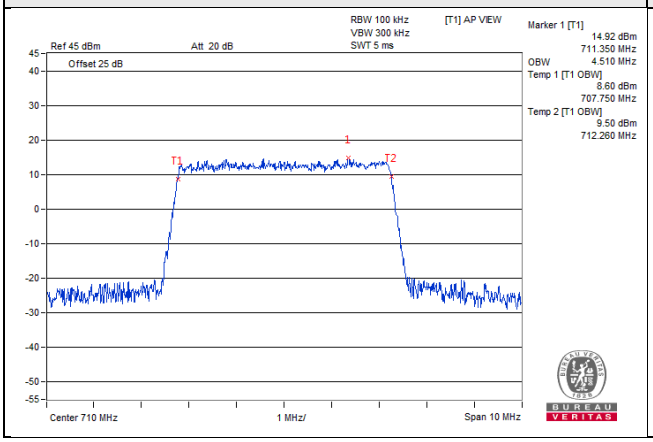


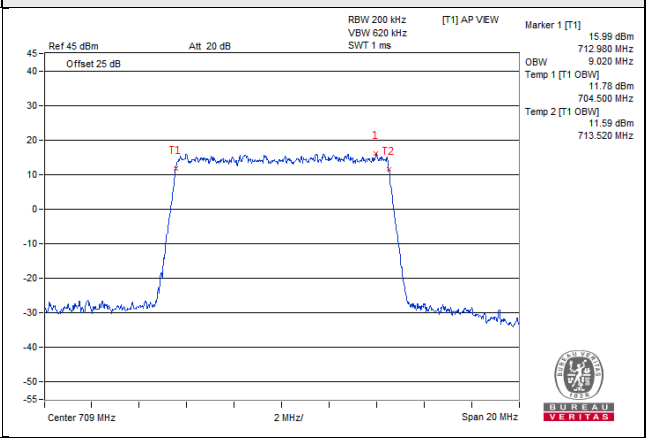
10MHz / 64QAM



LTE Band 17									
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23755	706.5	4.50	4.50	4.50	23780	709	9.00	9.02	9.02
23790	710	4.51	4.51	4.51	23790	710	8.98	8.98	9.00
23825	713.5	4.50	4.50	4.49	23800	711	9.00	9.00	8.98

Spectrum Plot of Worst Value	
5MHz / 64QAM	10MHz / 16QAM





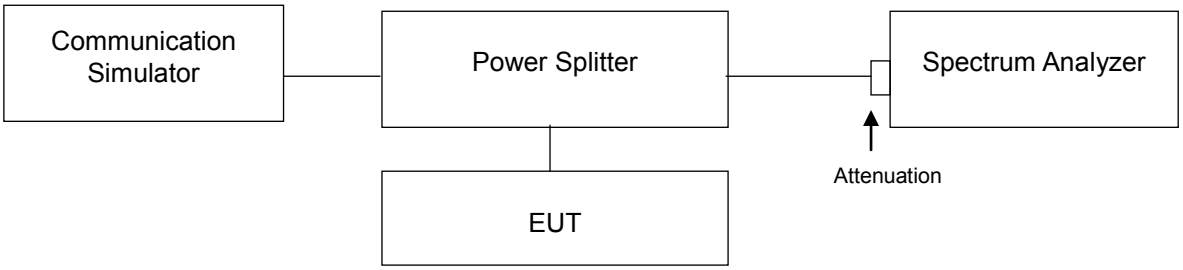
4.5 Channel Edge Measurement

4.5.1 Limits of Channel Edge Measurement

According to FCC 27.53(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) AWS emission limits— General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

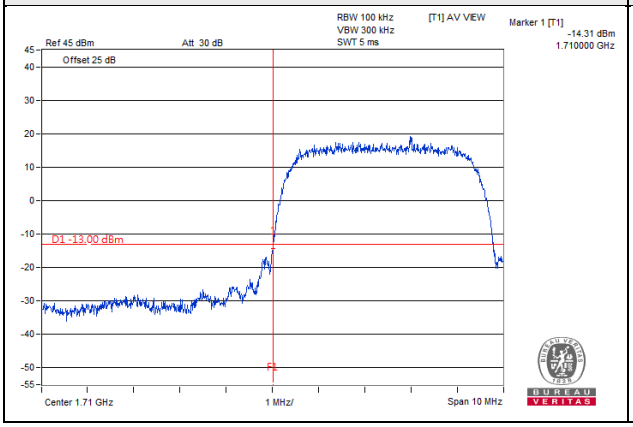
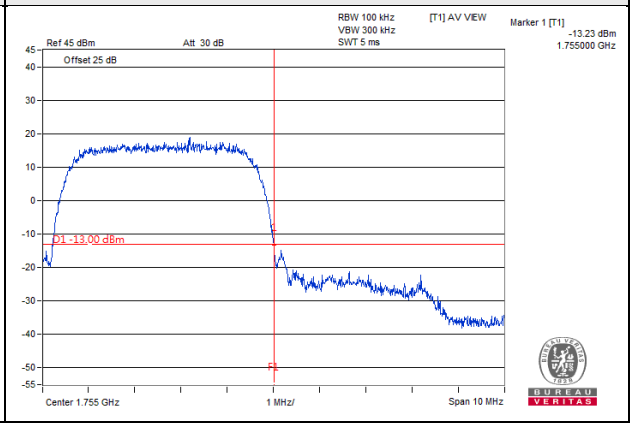
4.5.2 Test Setup

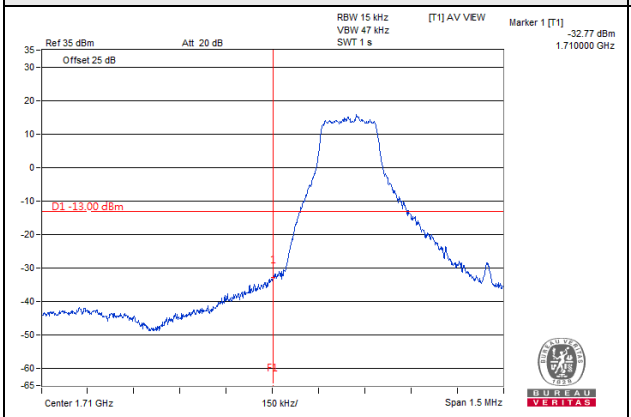
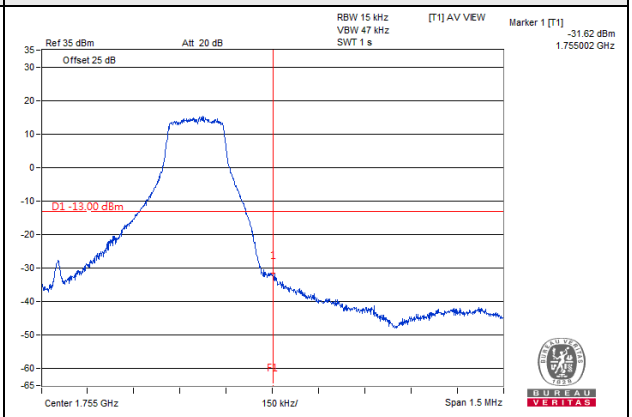
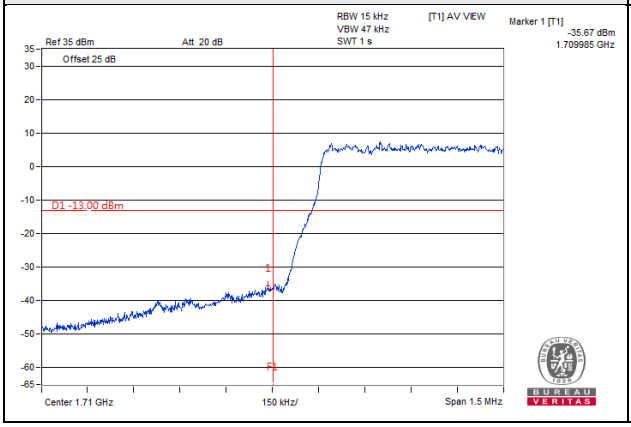
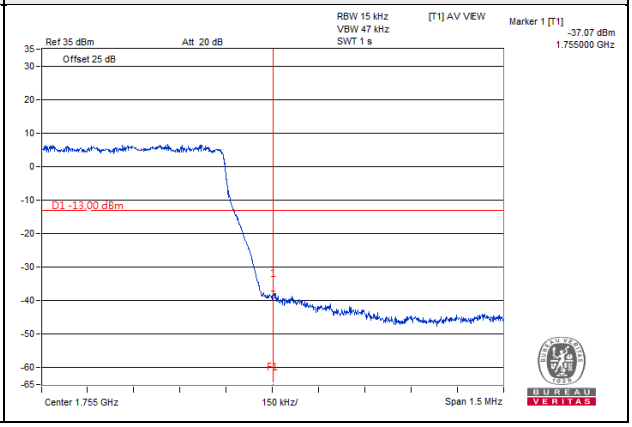


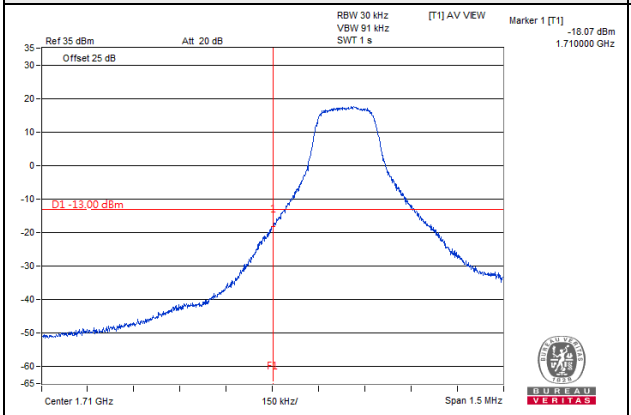
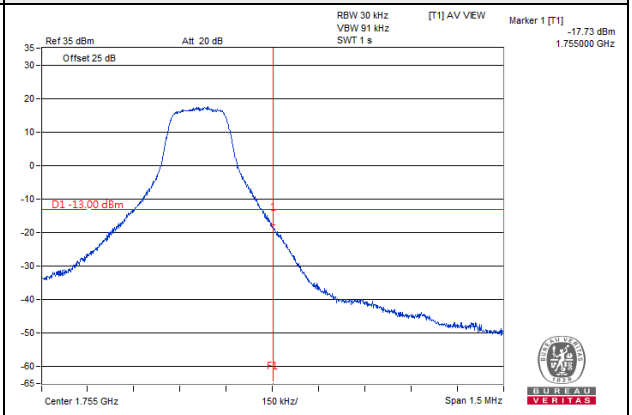
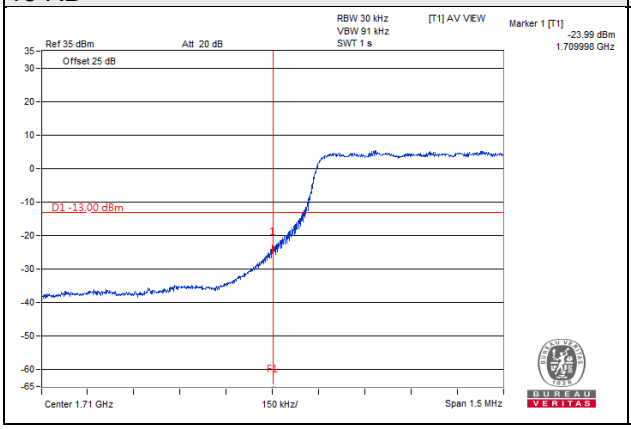
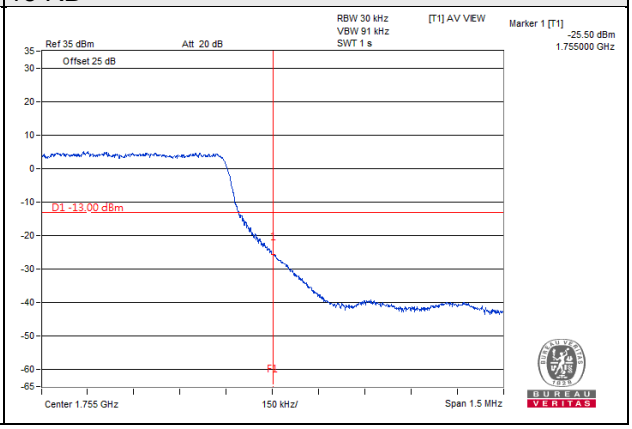
4.5.3 Test Procedures

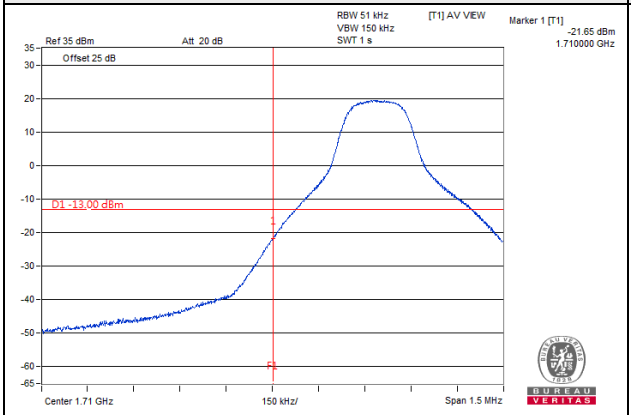
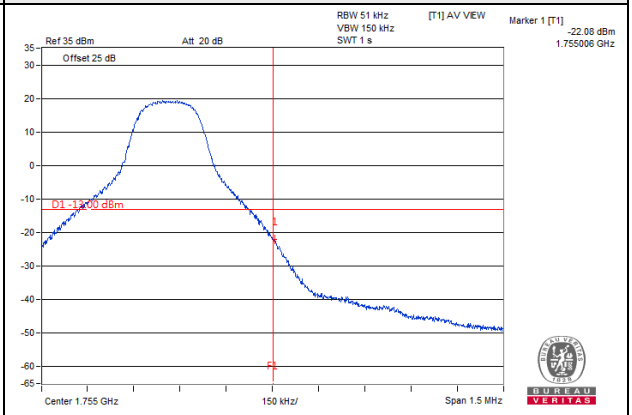
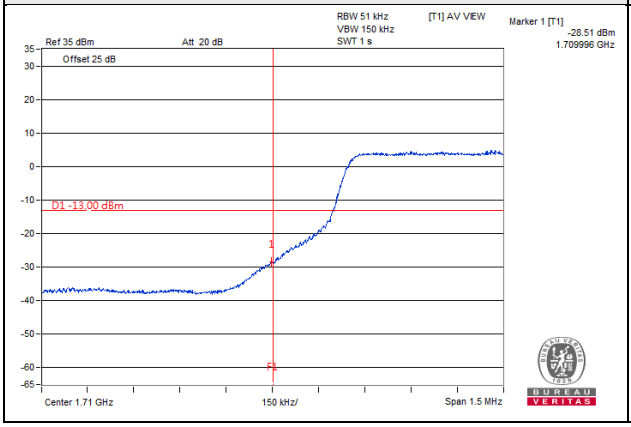
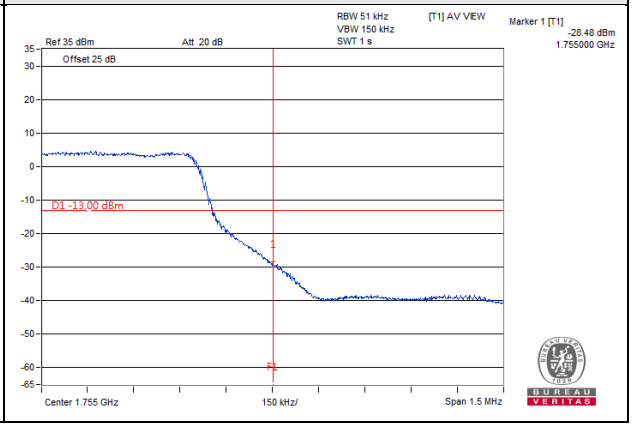
a. All measurements were done at low and high operational frequency range.
b. The center frequency of spectrum is the band edge frequency and s RB of the spectrum is >1% emission bandwidth and VB of the spectrum is ≧ 3*RB.
c. Record the max trace plot into the test report.

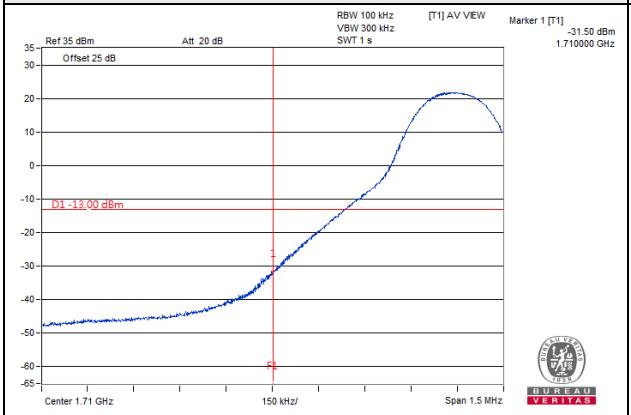
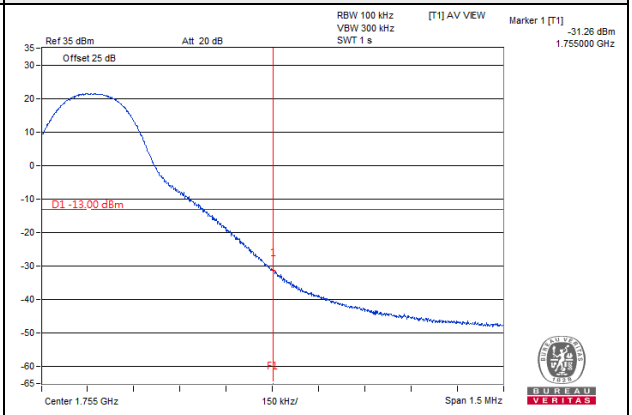
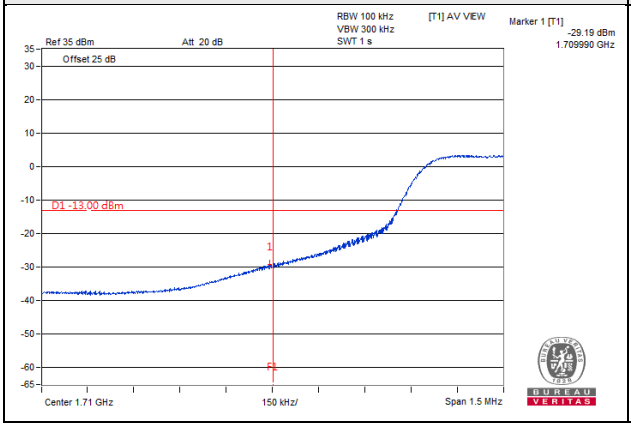
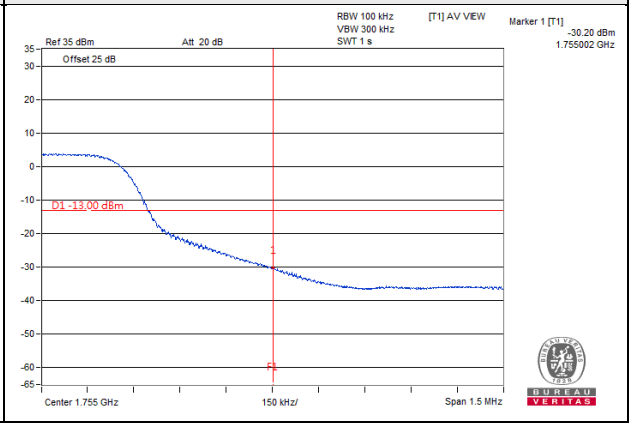
4.5.4 Test Results

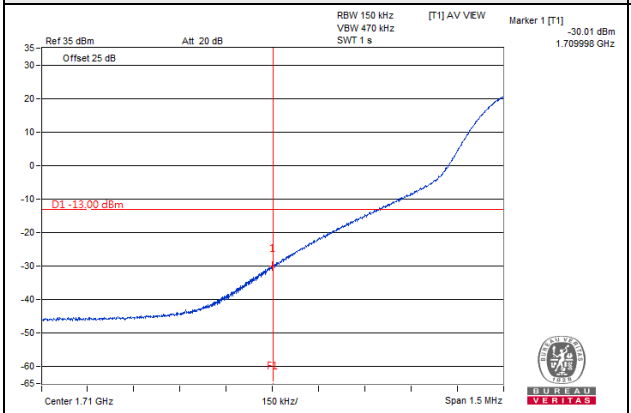
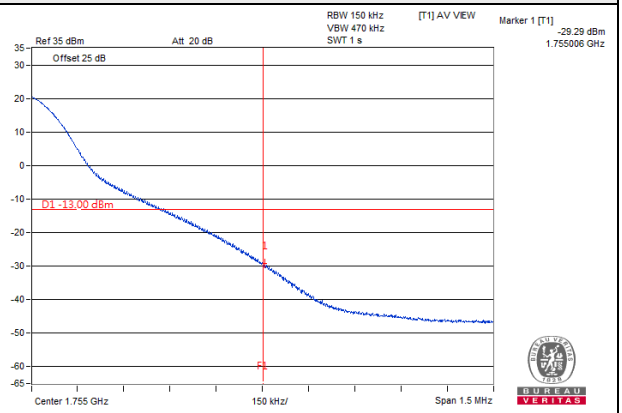
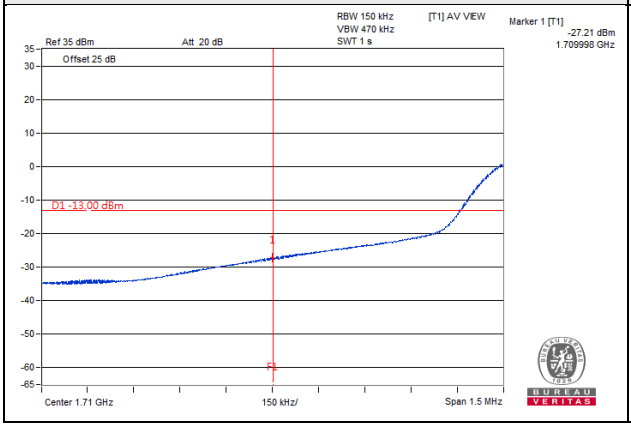
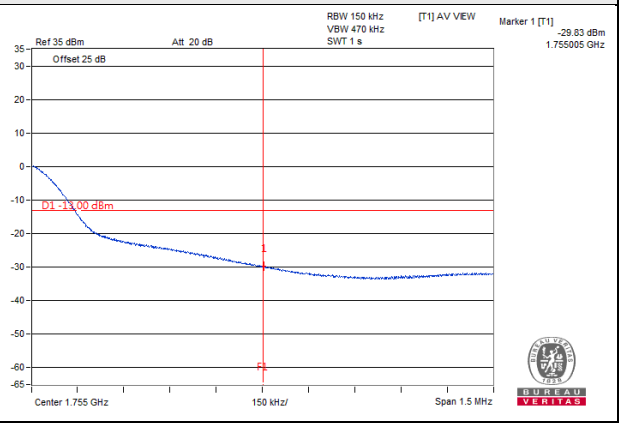
WCDMA	
Channel 1312	Channel 1513
	

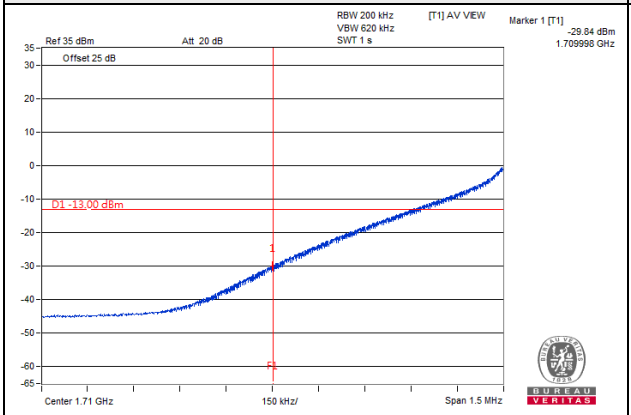
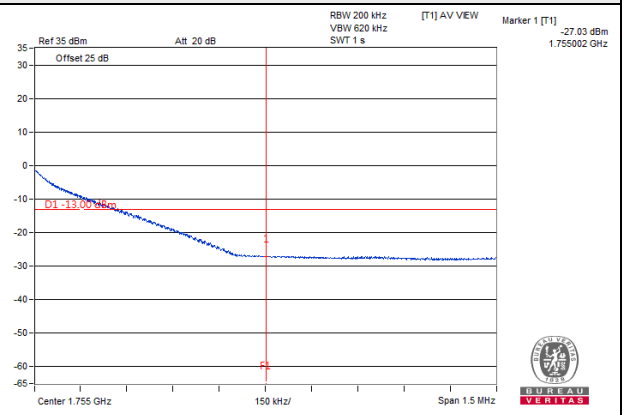
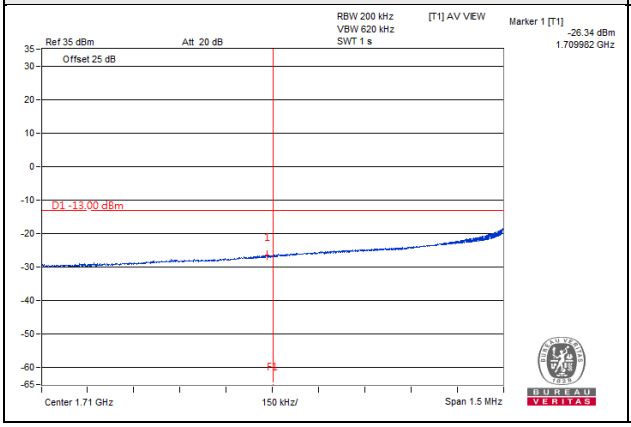
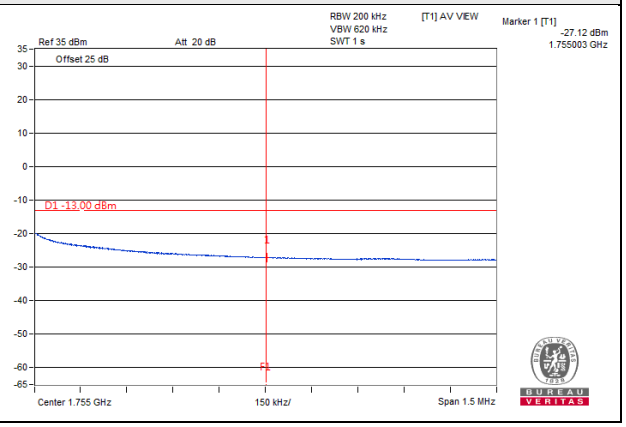
LTE Band 4 Channel Band width: 1.4MHz	
Channel 19957	Channel 20393
1 RB	1 RB
	
6 RB	6 RB
	

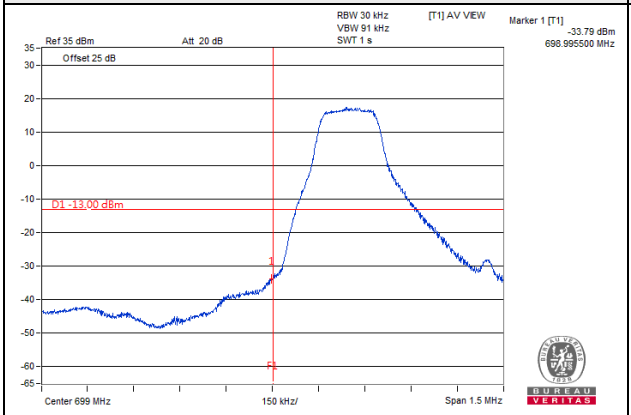
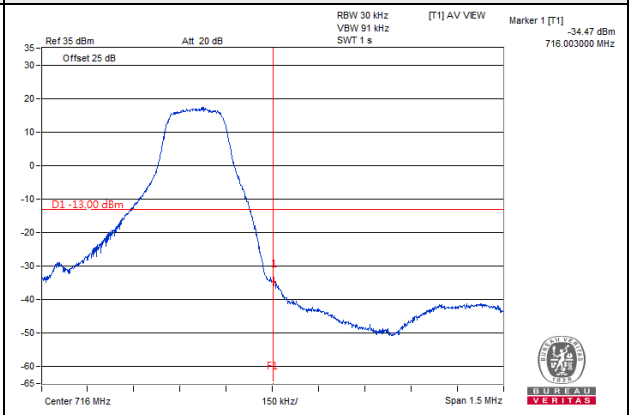
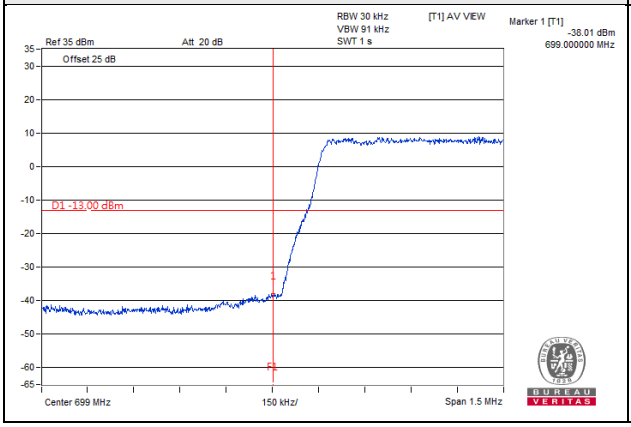
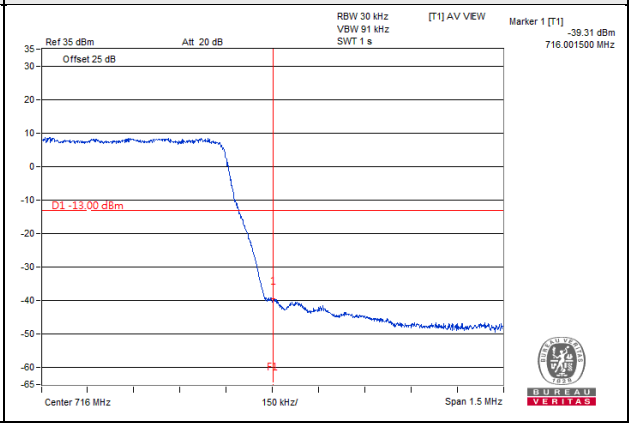
LTE Band 4 Channel Band width: 3MHz	
Channel 19965	Channel 20385
1 RB	1 RB
	
15 RB	15 RB
	

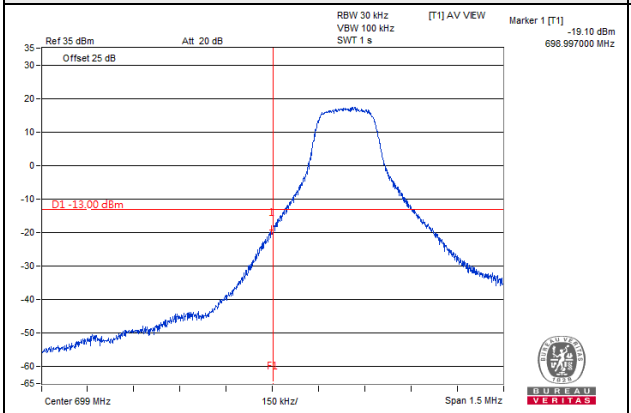
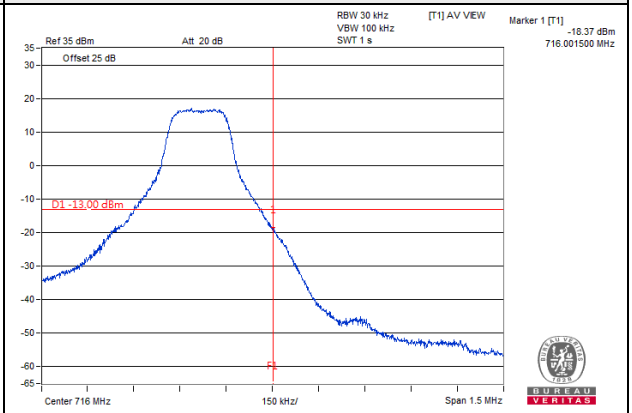
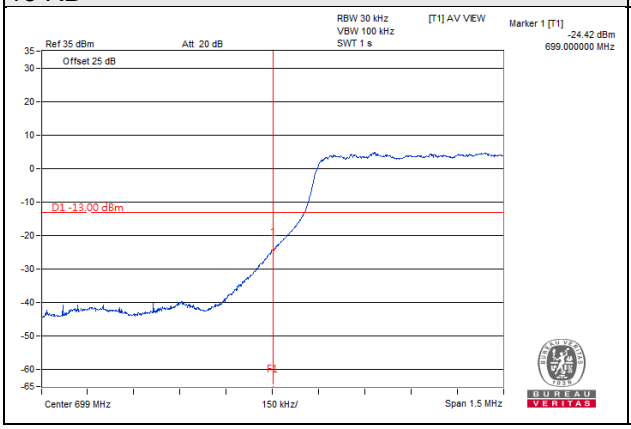
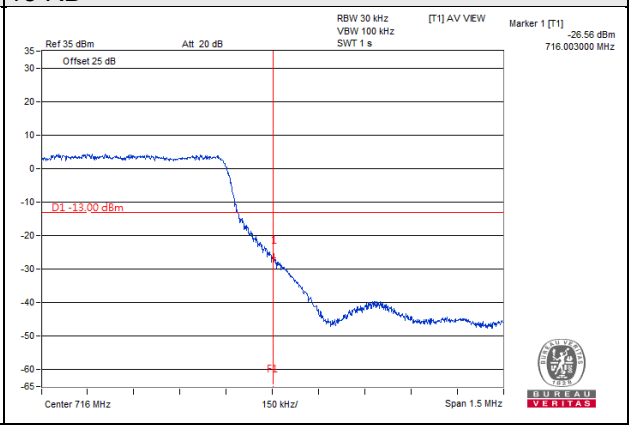
LTE Band 4 Channel Band width: 5MHz	
Channel 19975	Channel 20375
1 RB	1 RB
	
25 RB	25 RB
	

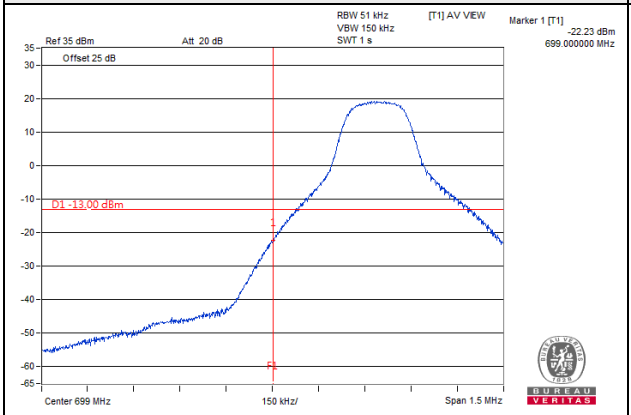
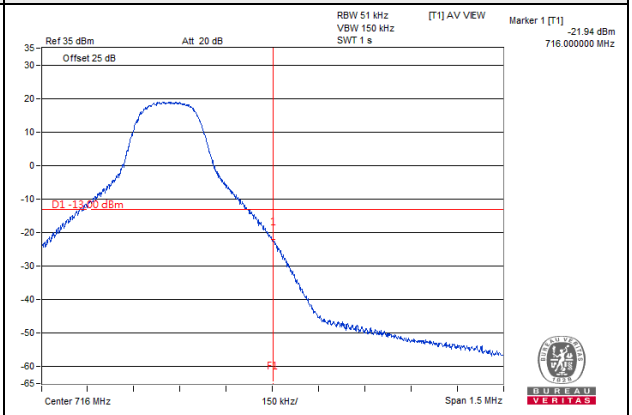
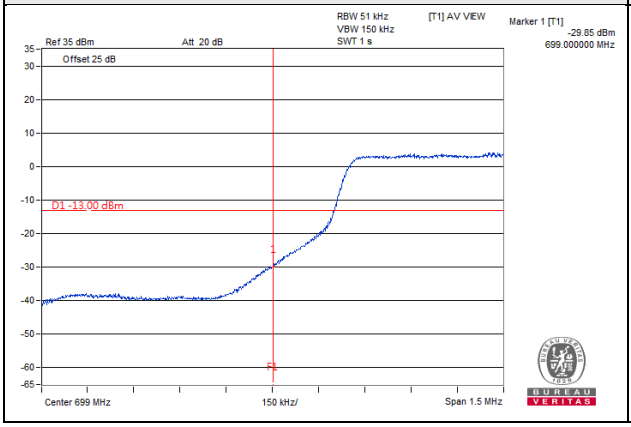
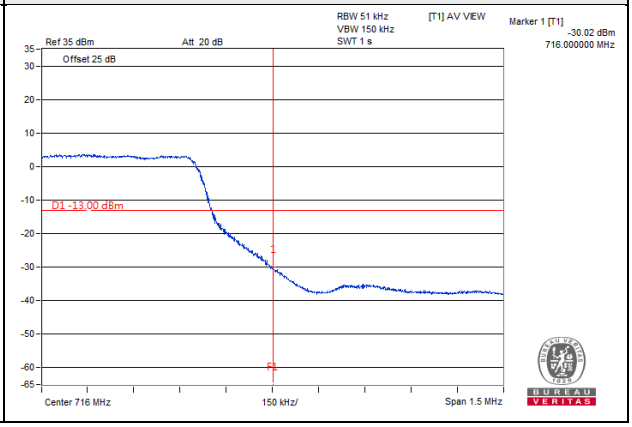
LTE Band 4 Channel Band width: 10MHz	
Channel 20000	Channel 20350
1 RB	1 RB
	
50 RB	50 RB
	

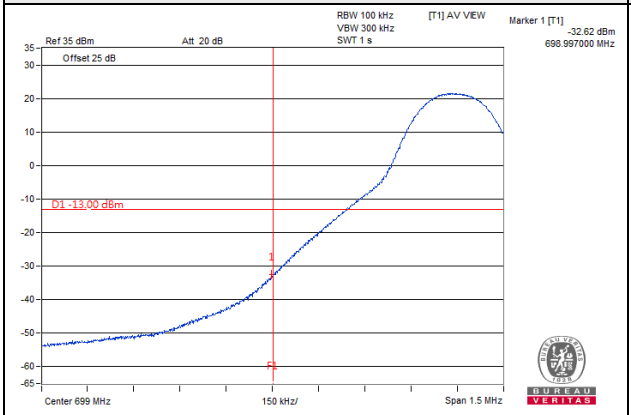
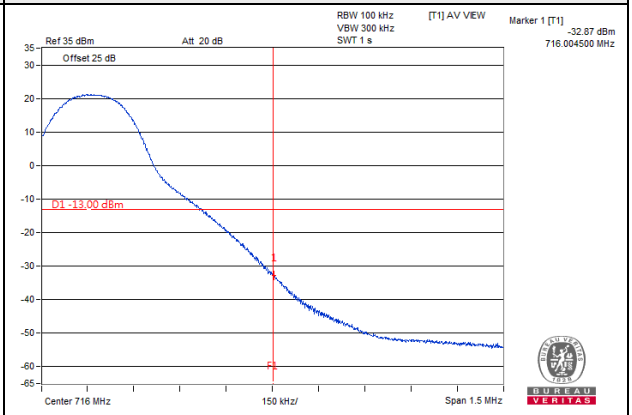
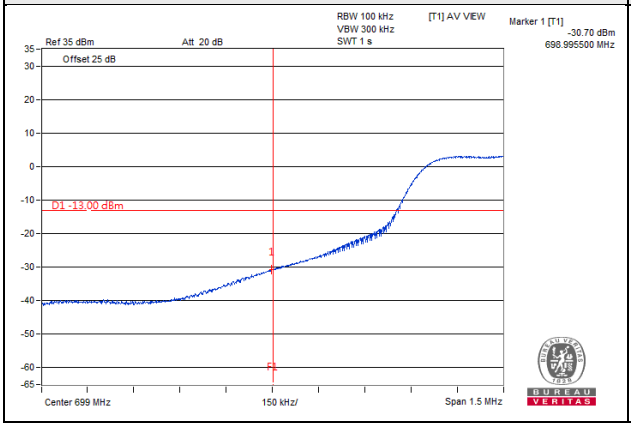
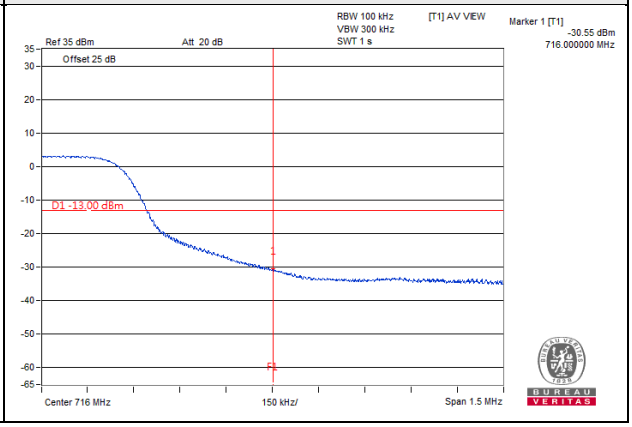
LTE Band 4 Channel Band width: 15MHz	
Channel 20025	Channel 20325
1 RB	1 RB
	
75 RB	75 RB
	

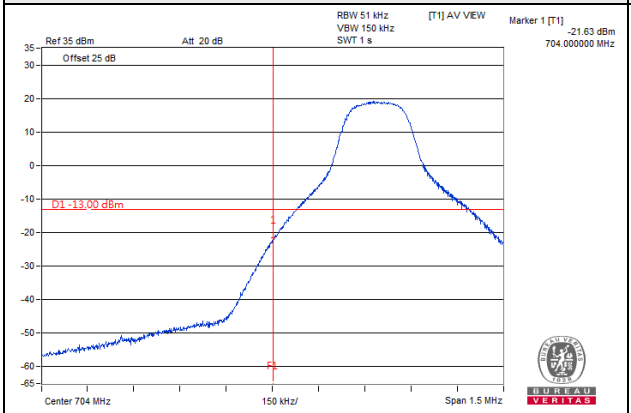
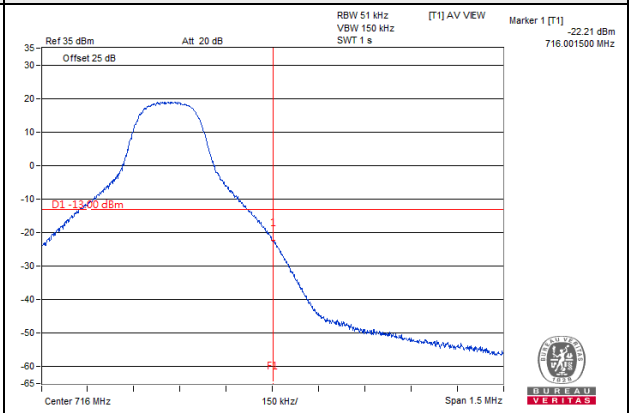
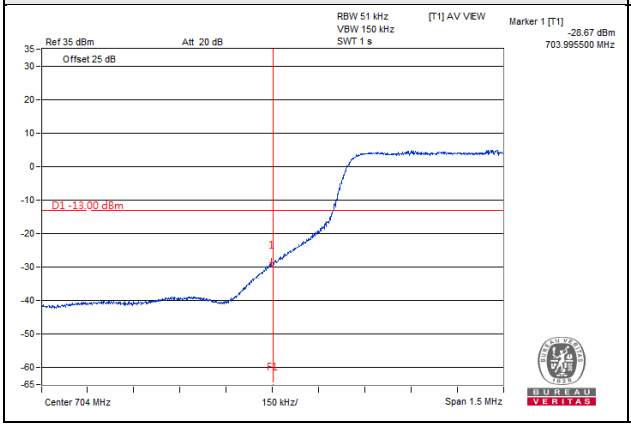
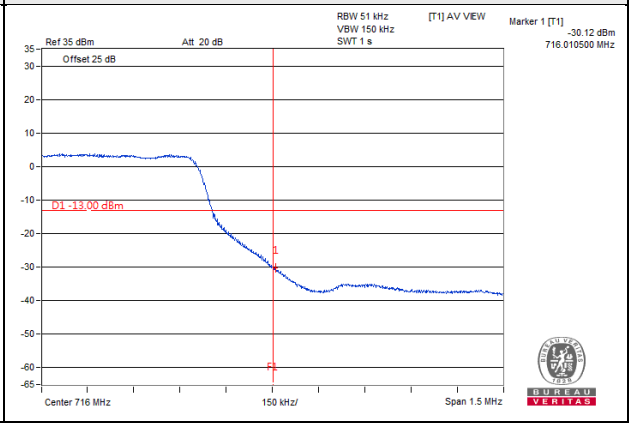
LTE Band 4 Channel Band width: 20MHz	
Channel 20050	Channel 20300
1 RB	1 RB
	
100 RB	100 RB
	

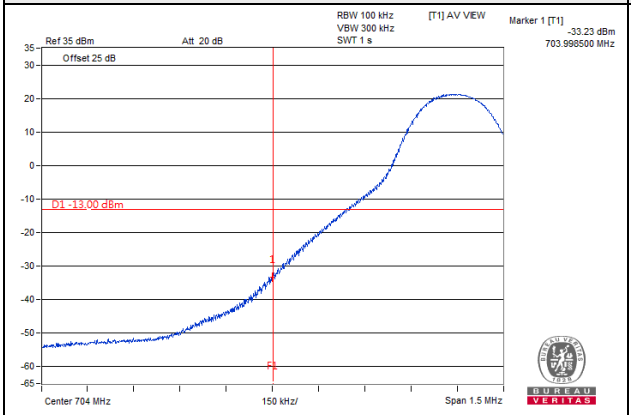
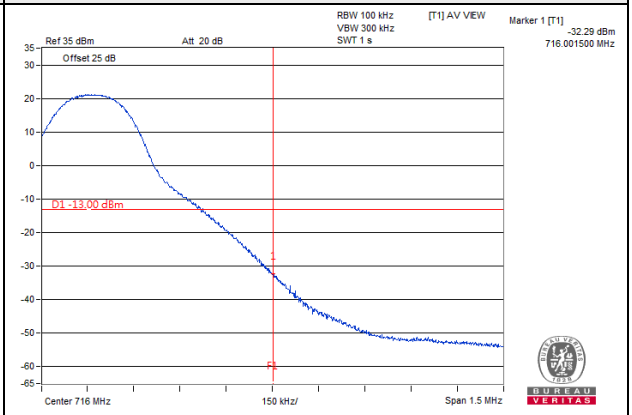
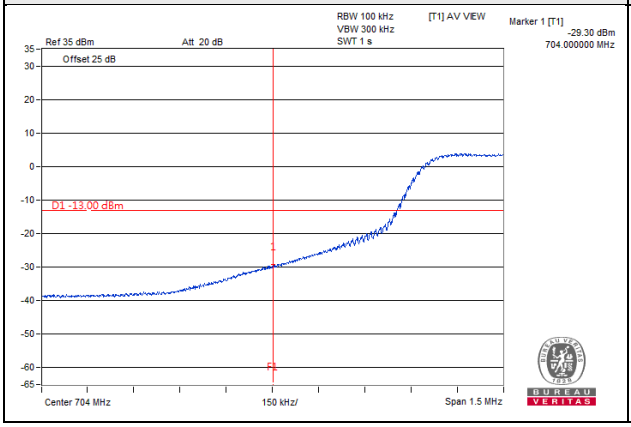
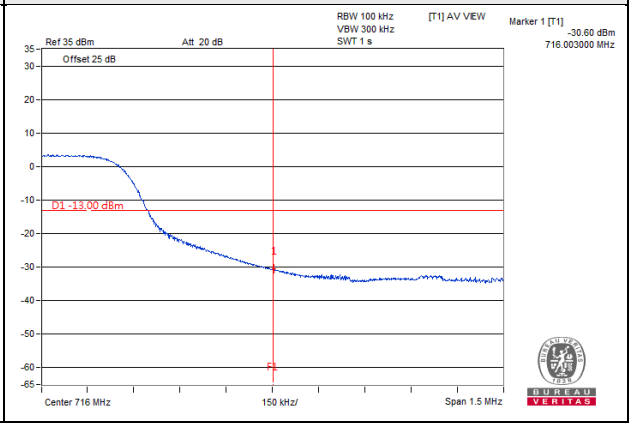
LTE Band 12 Channel Band width: 1.4MHz	
Channel 23017	Channel 23173
1 RB	1 RB
	
6 RB	6 RB
	

LTE Band 12 Channel Band width: 3MHz	
Channel 23025	Channel 23165
1 RB	1 RB
	
15 RB	15 RB
	

LTE Band 12 Channel Band width: 5MHz	
Channel 23035	Channel 23155
1 RB	1 RB
	
25 RB	25 RB
	

LTE Band 12 Channel Band width: 10MHz	
Channel 23060	Channel 23130
1 RB	1 RB
	
50 RB	50 RB
	

LTE Band 17 Channel Band width: 5MHz	
Channel 23755	Channel 23825
1 RB	1 RB
	
25 RB	25 RB
	

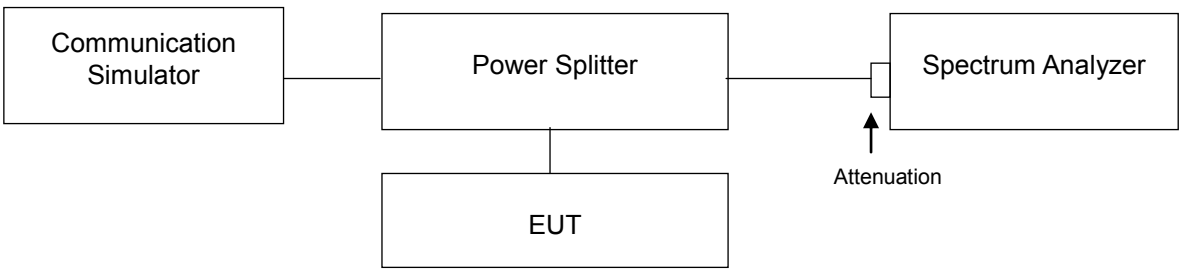
LTE Band 17 Channel Band width: 10MHz	
Channel 23780	Channel 23800
1 RB	1 RB
	
50 RB	50 RB
	

4.6 Peak to Average Ratio

4.5.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

4.5.2 Test Setup



4.5.3 Test Procedures

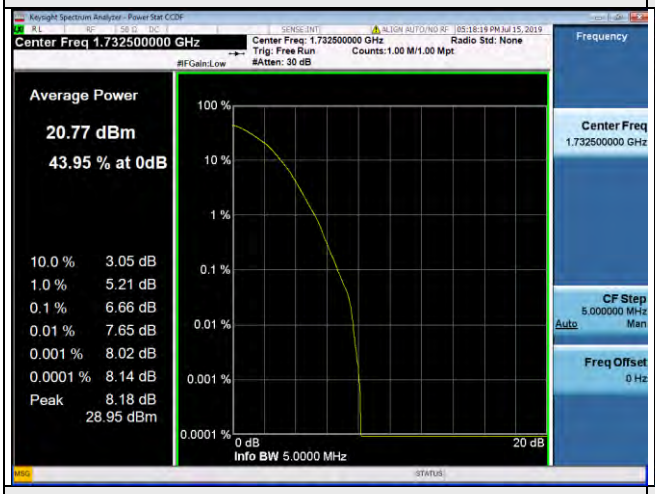
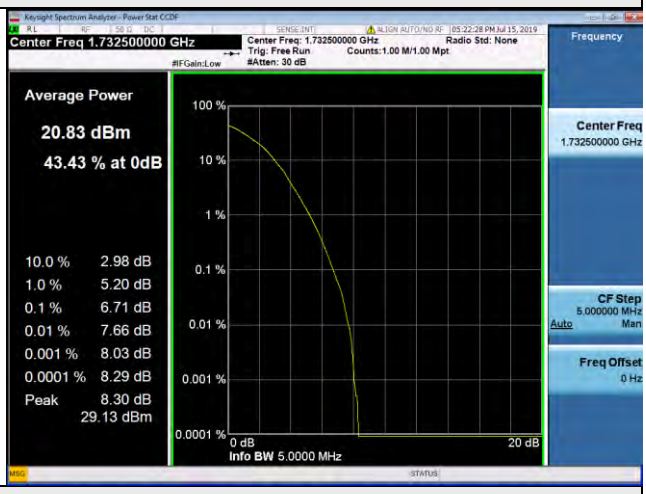
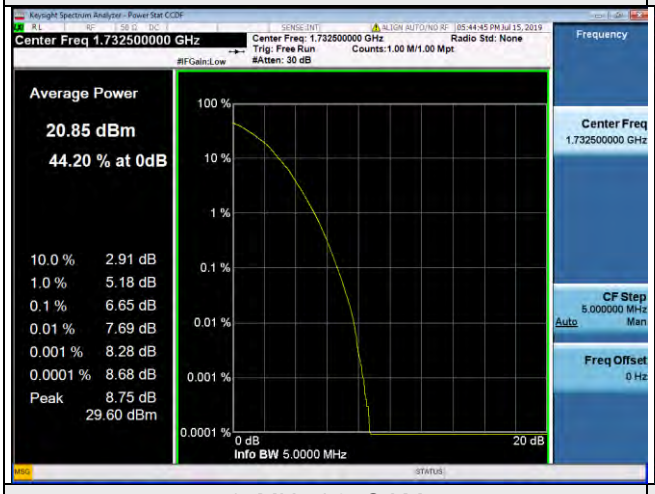
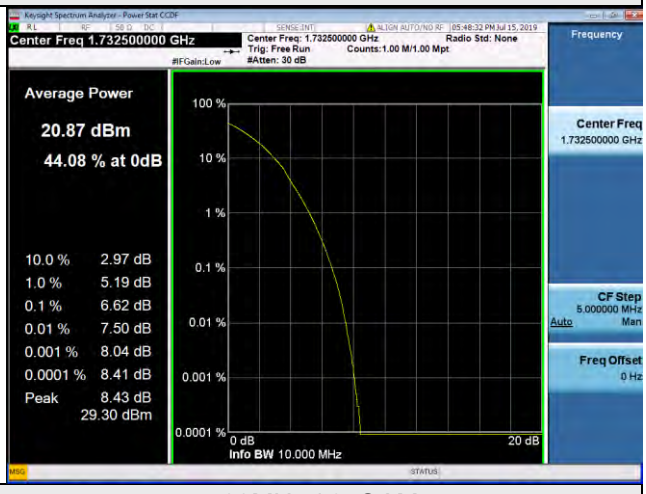
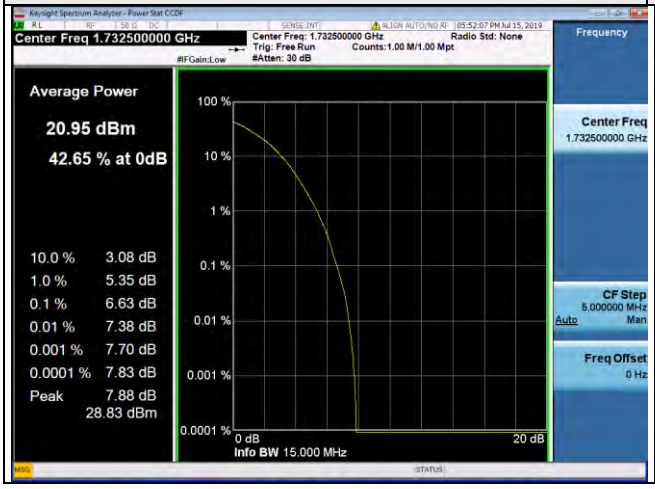
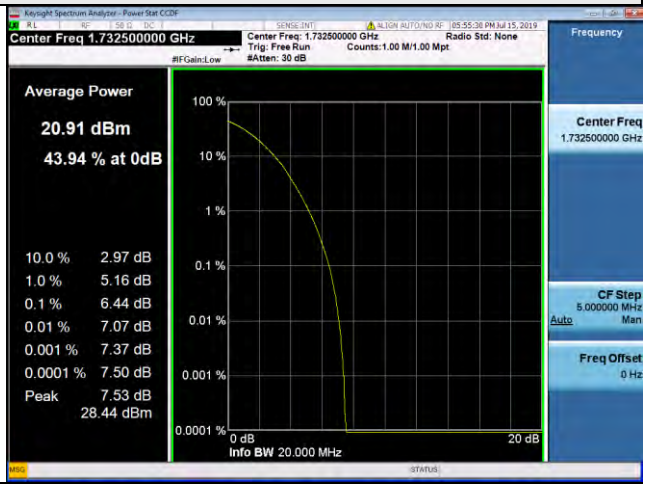
1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

4.5.4 Test Results

Channel	Freq. (MHz)	Peak to Average Ratio (dB)
		WCDMA
1312	1712.4	3.11
1413	1732.6	3.14
1513	1752.6	3.08

Spectrum Plot of Worst Value
WCDMA

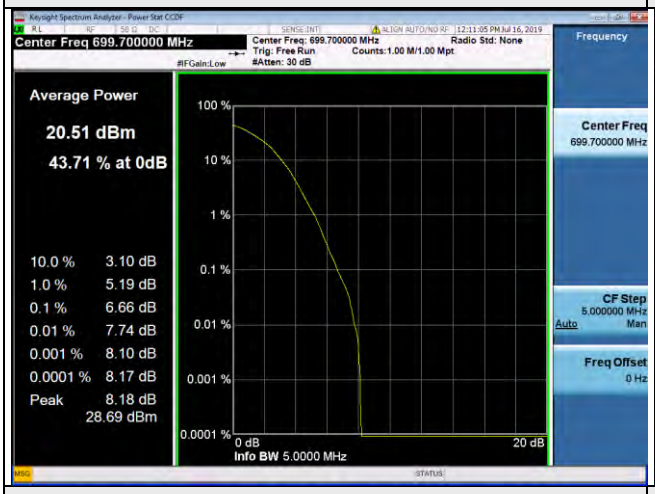
LTE Band 4									
Channel Bandwidth 1.4MHz					Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
19957	1710.7	4.90	6.10	6.61	19965	1711.5	4.60	6.00	6.60
20175	1732.5	4.92	6.15	6.66	20175	1732.5	4.66	6.05	6.71
20393	1754.3	4.85	6.08	6.63	20385	1753.5	4.63	6.02	6.61
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
19975	1712.5	4.61	5.82	6.53	20000	1715	4.57	5.65	6.39
20175	1732.5	4.86	6.08	6.65	20175	1732.5	4.81	6.02	6.62
20375	1752.5	4.79	5.94	6.56	20350	1750	4.61	5.71	6.47
Channel Bandwidth 15MHz					Channel Bandwidth 20MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
20025	1717.5	4.58	5.59	6.33	20050	1720	4.38	5.48	6.19
20175	1732.5	4.87	6.01	6.63	20175	1732.5	4.52	5.76	6.44
20325	1747.5	4.68	5.66	6.50	20300	1745	4.49	5.63	6.36

Spectrum Plot of Worst Value	
1.4MHz / 64QAM	3MHz / 64QAM
	
5MHz / 64QAM	10MHz / 64QAM
	
15MHz / 64QAM	20MHz / 64QAM
	

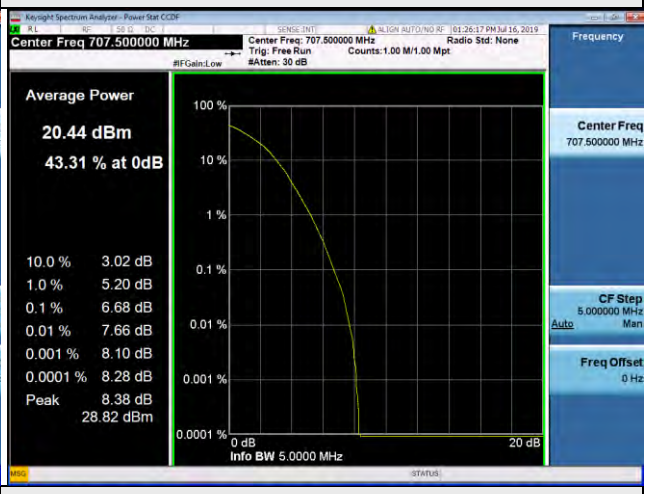
LTE Band 12									
Channel Bandwidth 1.4MHz					Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23017	699.7	4.89	6.12	6.66	23025	700.5	4.62	6.05	6.67
23095	707.5	4.88	6.11	6.64	23095	707.5	4.63	6.04	6.68
23173	715.3	4.89	6.10	6.66	23165	714.5	4.61	6.05	6.68
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23035	701.5	4.82	6.05	6.64	23060	704	4.8	6.06	6.61
23095	707.5	4.88	6.10	6.68	23095	707.5	4.86	6.13	6.64
23155	713.5	4.81	6.06	6.64	23130	711	4.78	6.04	6.58

Spectrum Plot of Worst Value

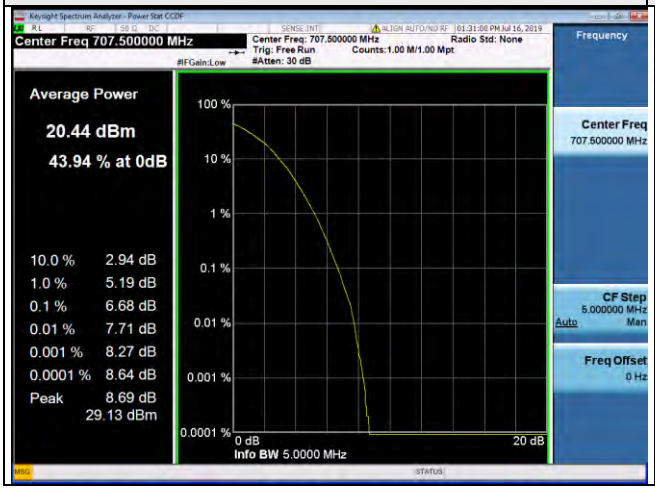
1.4MHz / 64QAM



3MHz / 64QAM

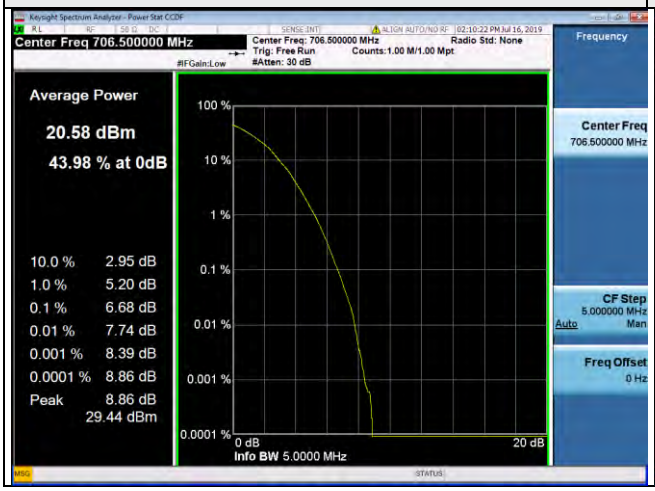
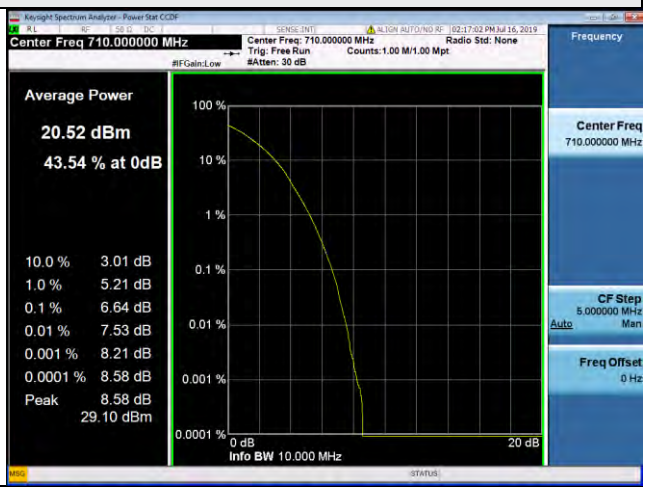


5MHz / 64QAM



10MHz / 64QAM

LTE Band 17									
Channel Bandwidth 5MHz					Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
23755	706.5	4.87	6.10	6.68	23780	709	4.88	6.10	6.65
23790	710	4.61	5.76	6.37	23790	710	4.79	6.06	6.64
23825	713.5	4.82	6.07	6.61	23800	711	4.76	6.03	6.63

Spectrum Plot of Worst Value	
5MHz / 64QAM	10MHz / 64QAM
	

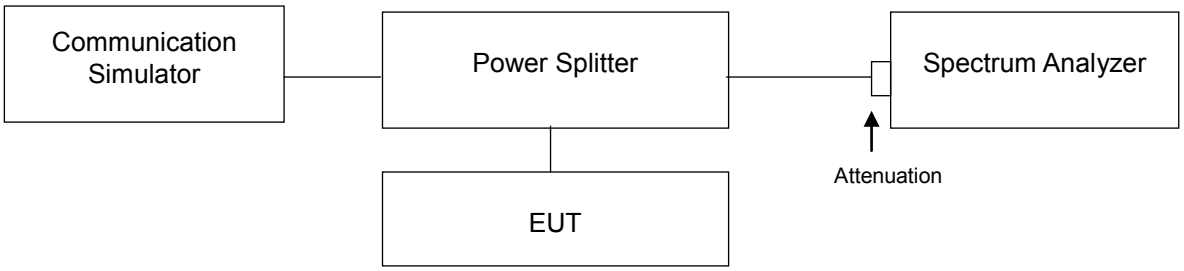
4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) AWS emission limits— General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

4.7.2 Test Setup

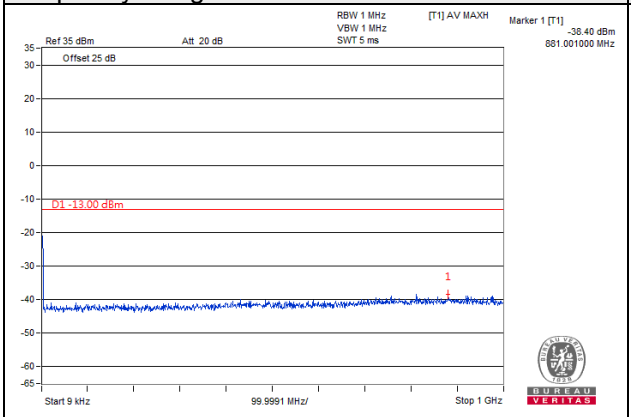
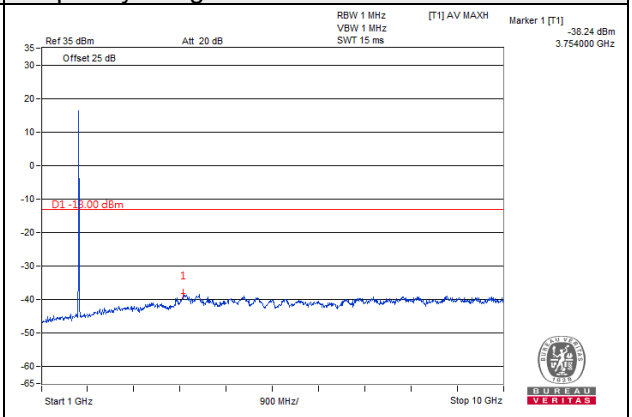
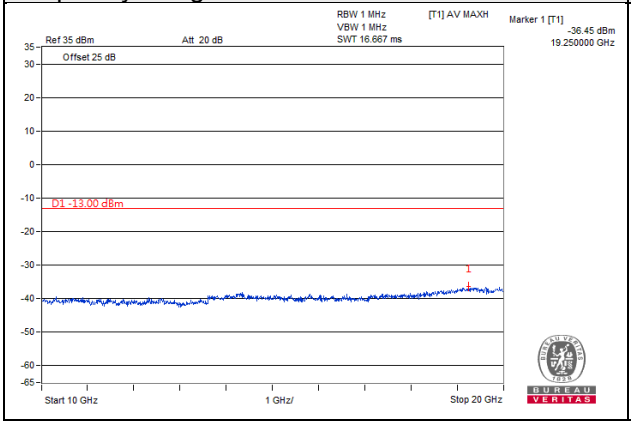


4.7.3 Test Procedure

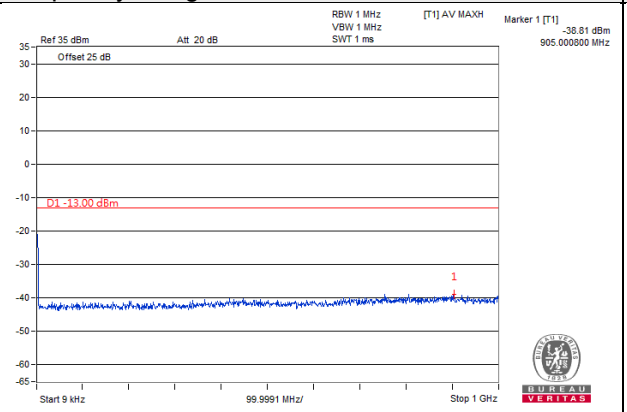
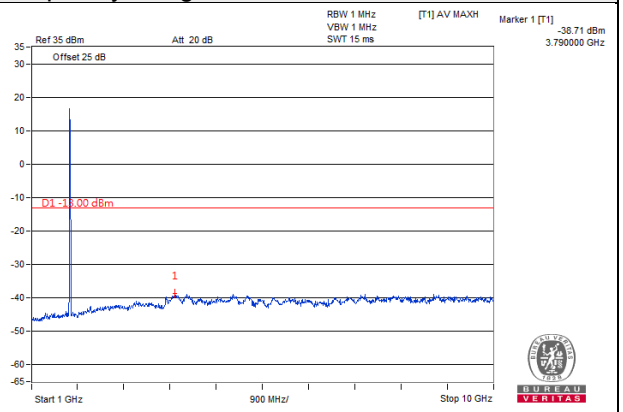
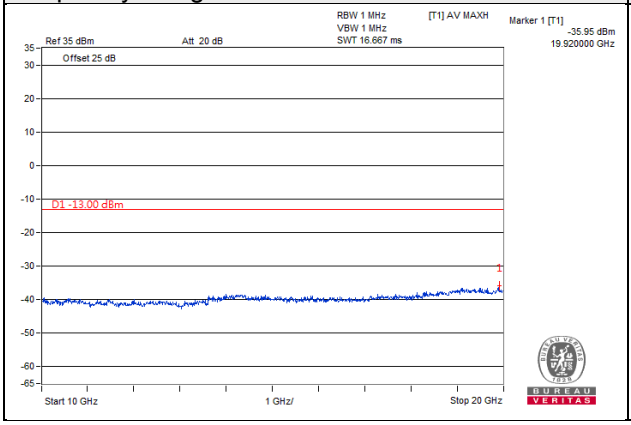
a. All measurements were done at 3 channels: low, middle and high operational frequency range.

b. When the spectrum scanned from 9 kHz to the tenth harmonic of the highest fundamental frequency, it shall be connected to the 20dB pad attenuated the carried frequency.

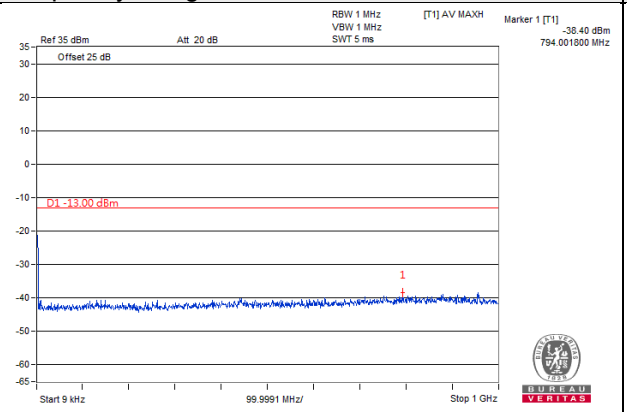
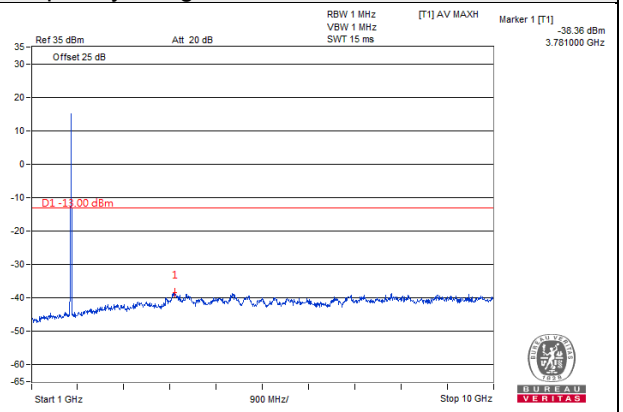
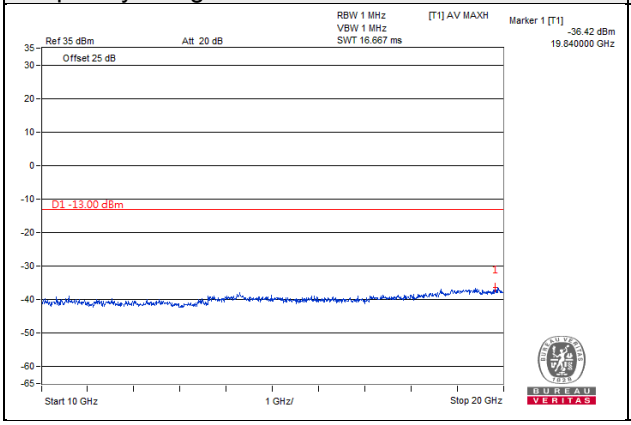
4.7.5 Test Results

WCDMA	
Channel 1312	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

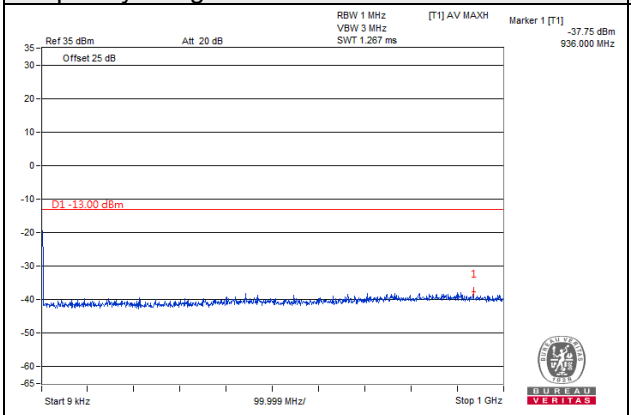
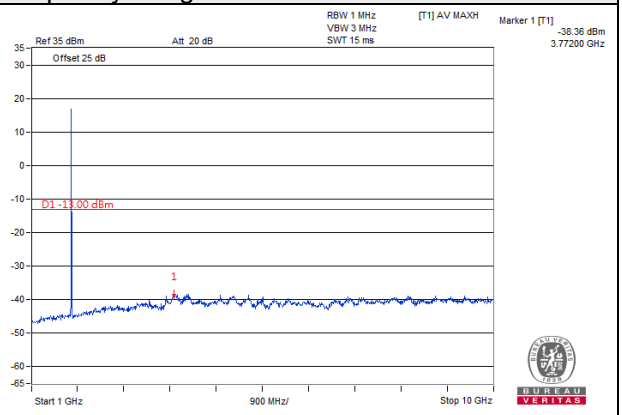
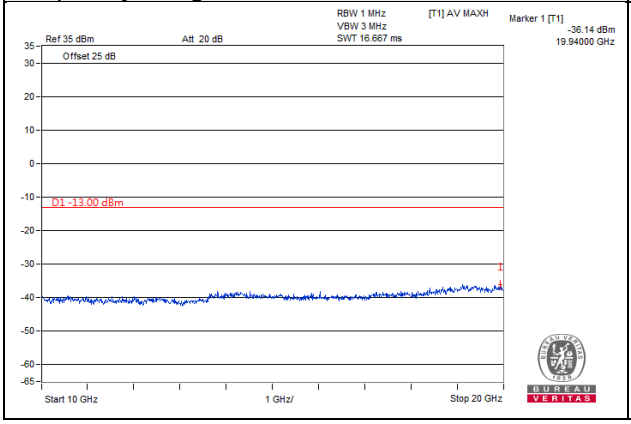
Note: The signal of 9kHz is IF signal from test instrument.

WCDMA	
Channel 1413	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

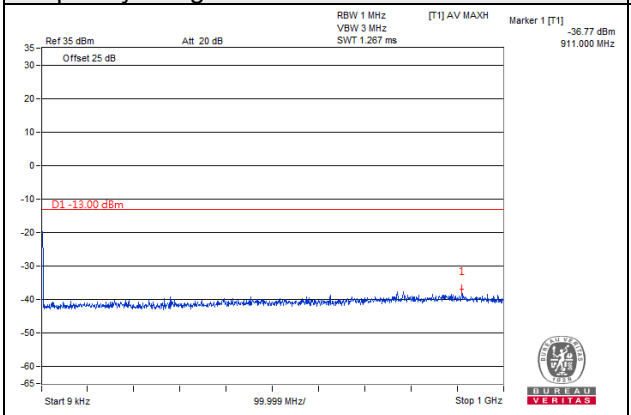
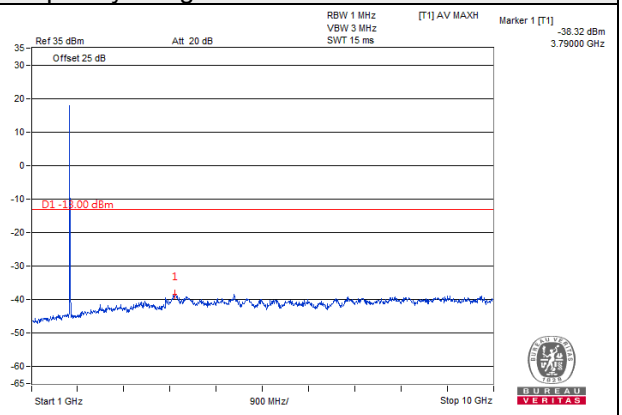
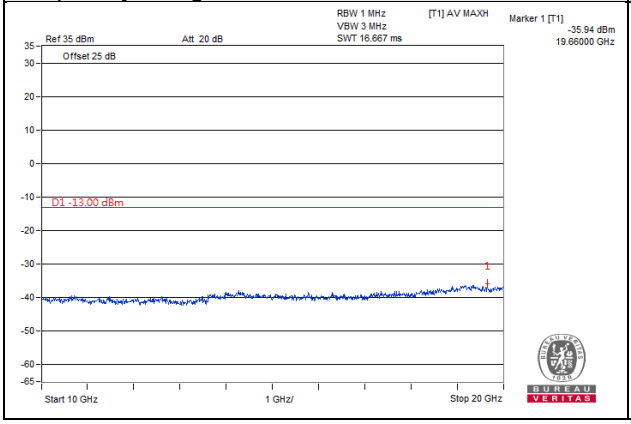
Note: The signal of 9kHz is IF signal from test instrument.

WCDMA	
Channel 1513	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

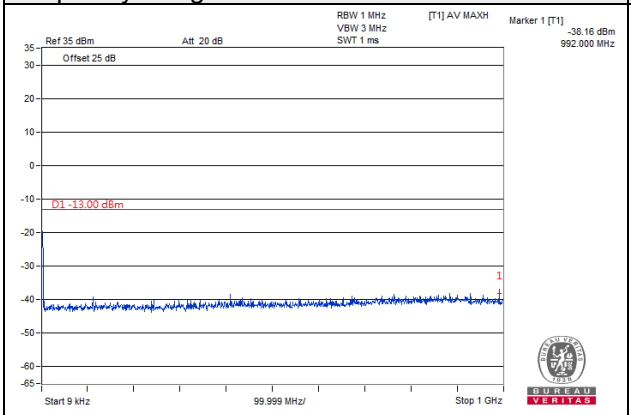
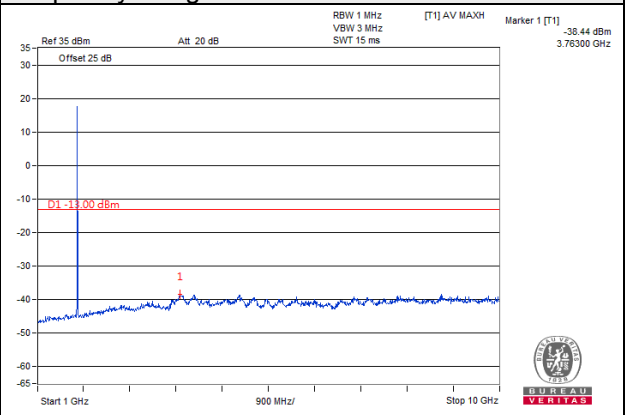
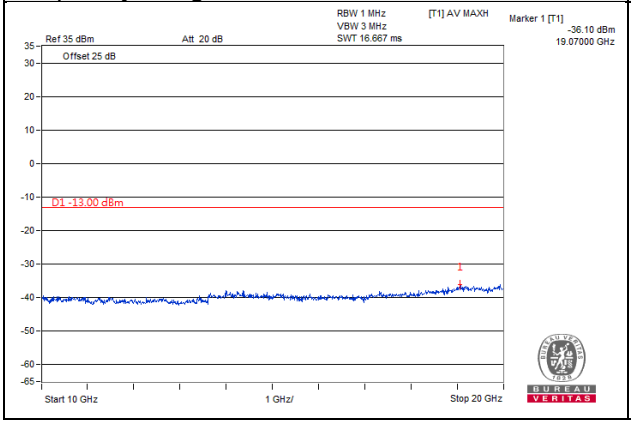
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 1.4MHz	
Channel 19957	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

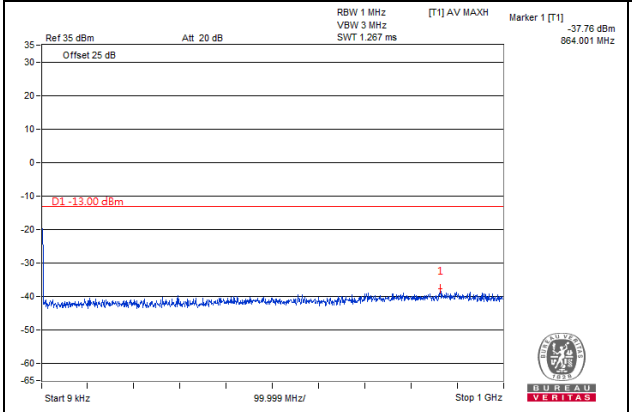
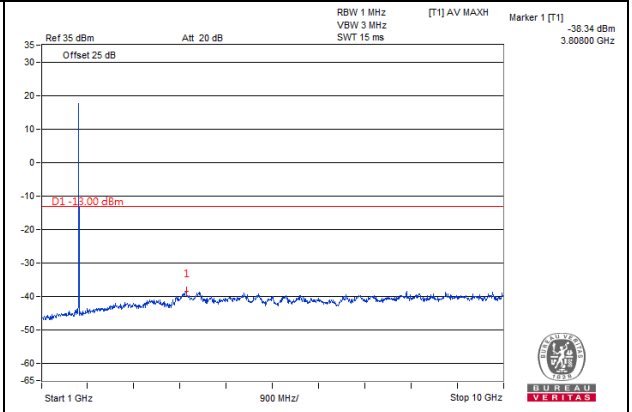
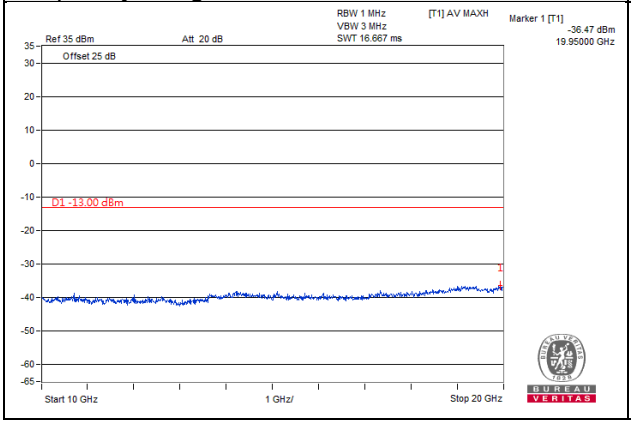
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 1.4MHz	
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

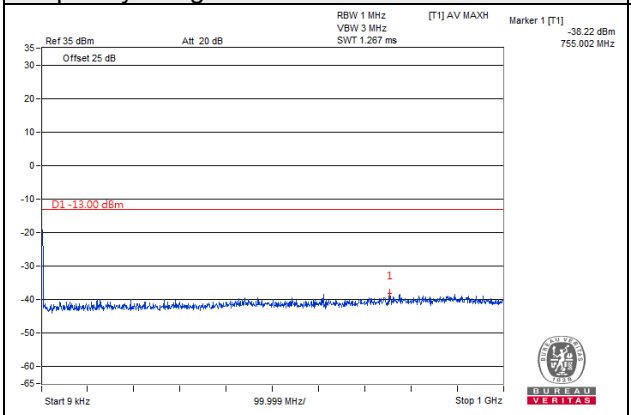
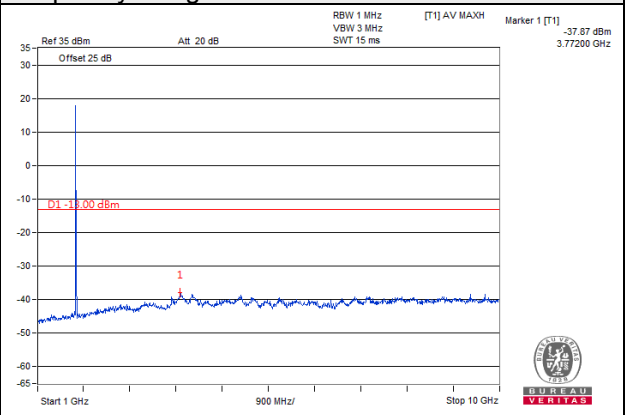
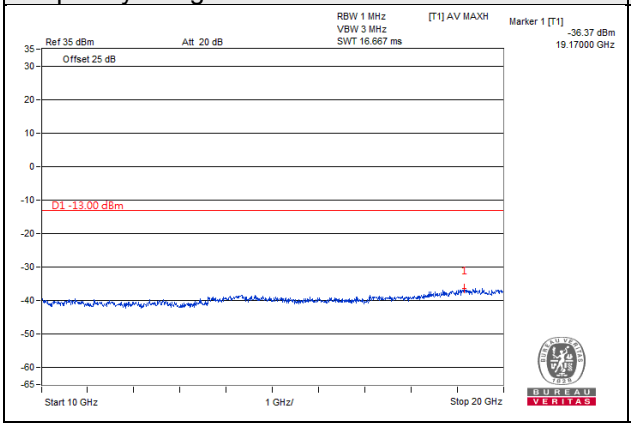
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 1.4MHz	
Channel 20393	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

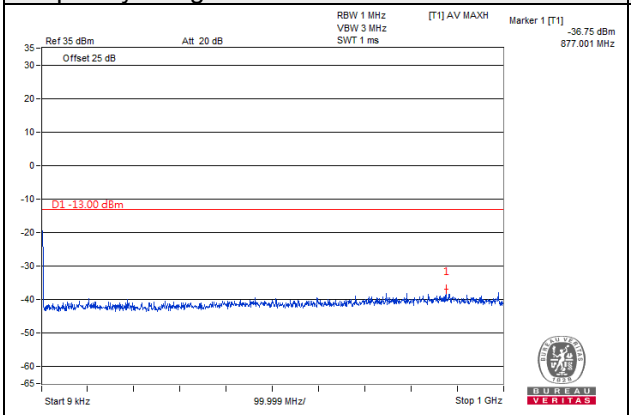
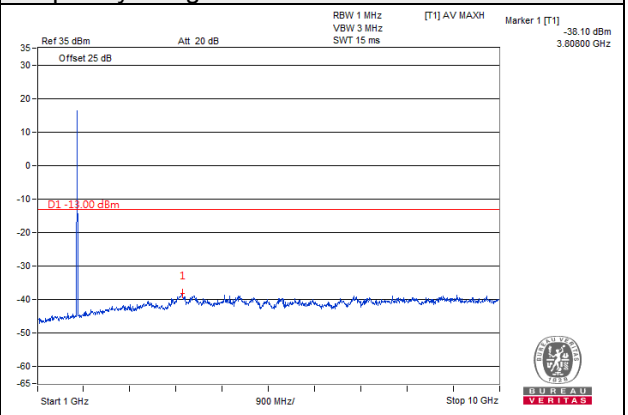
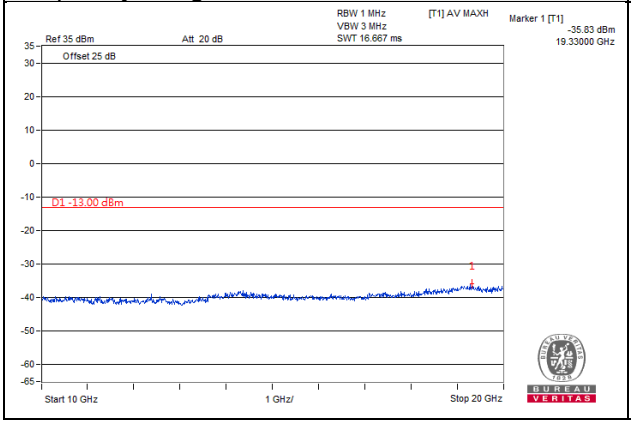
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 3MHz	
Channel 19965	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

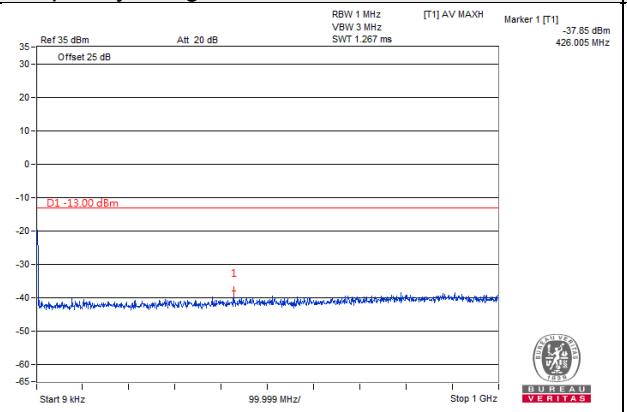
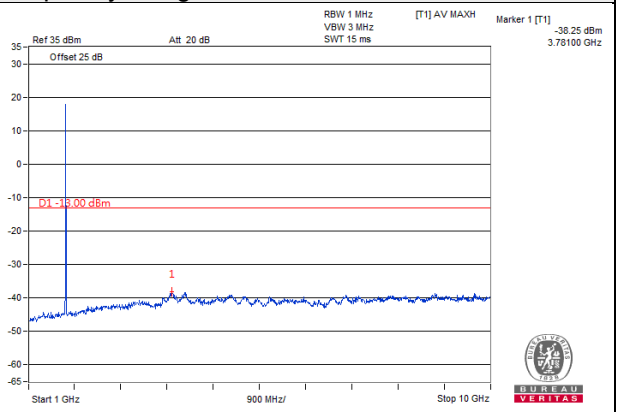
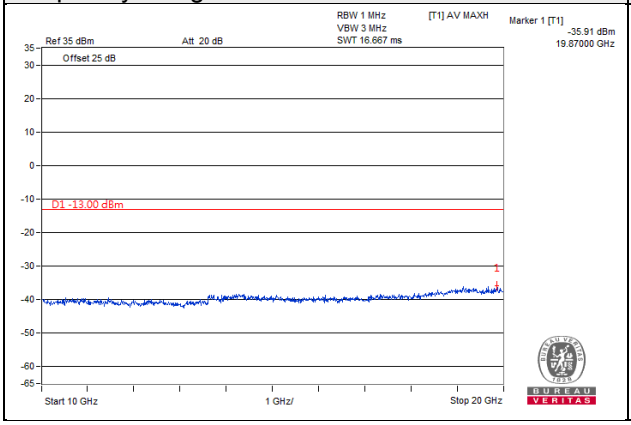
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 3MHz	
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

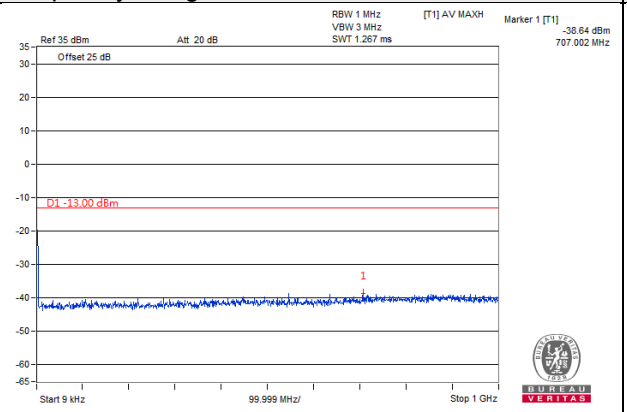
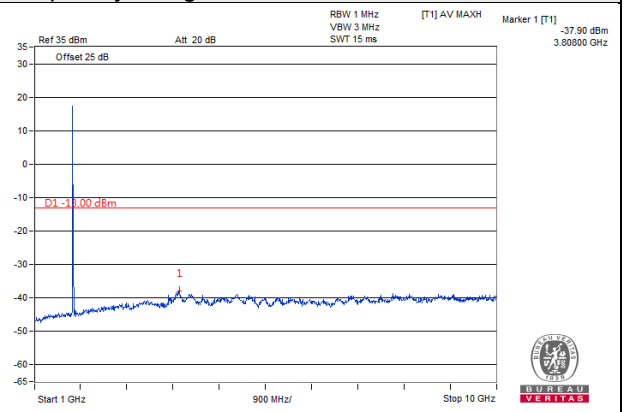
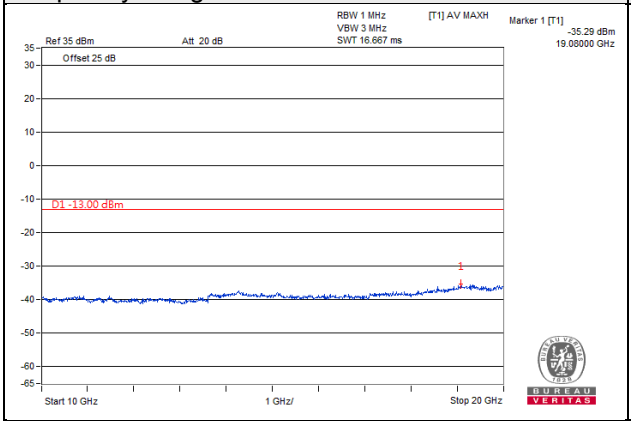
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 3MHz	
Channel 20385	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

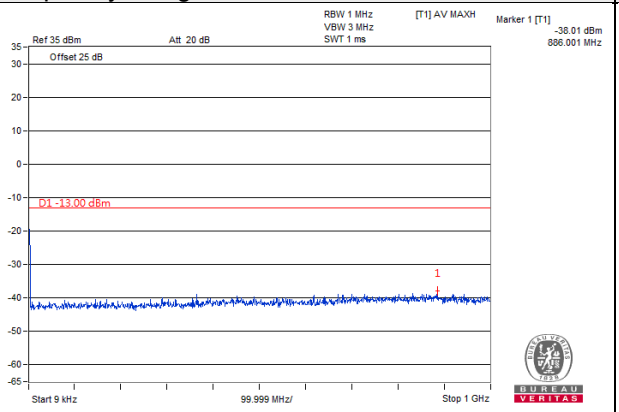
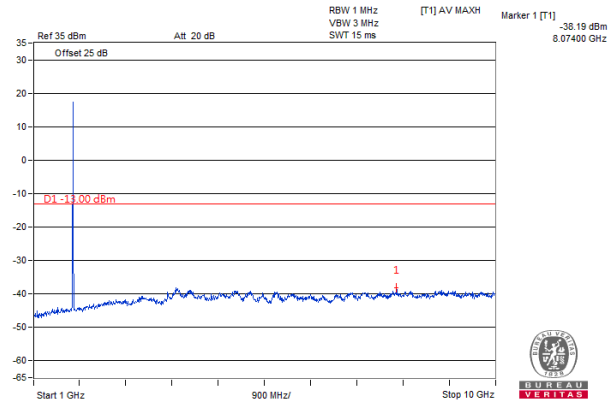
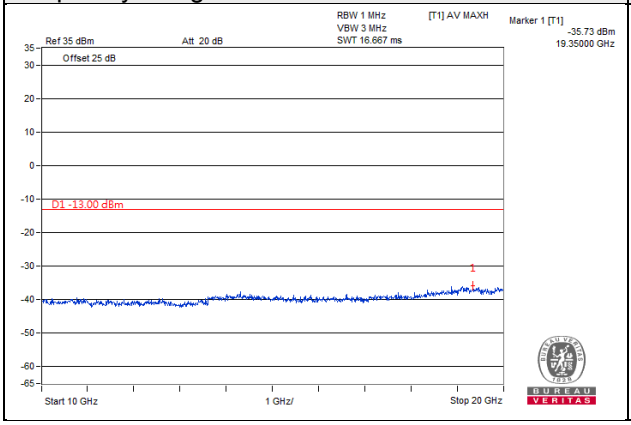
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 5MHz	
Channel 19975	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

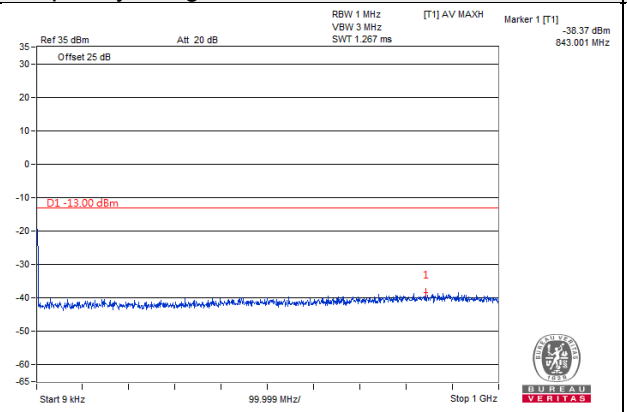
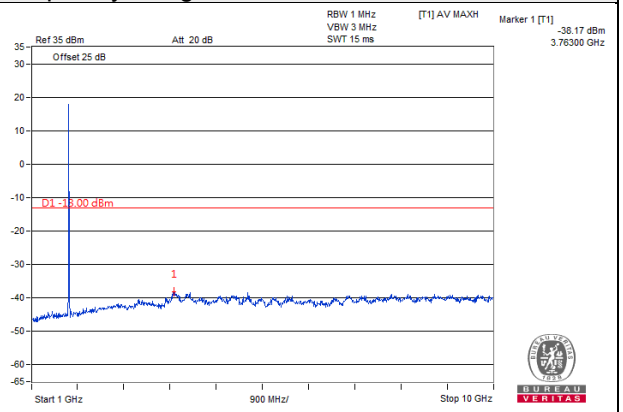
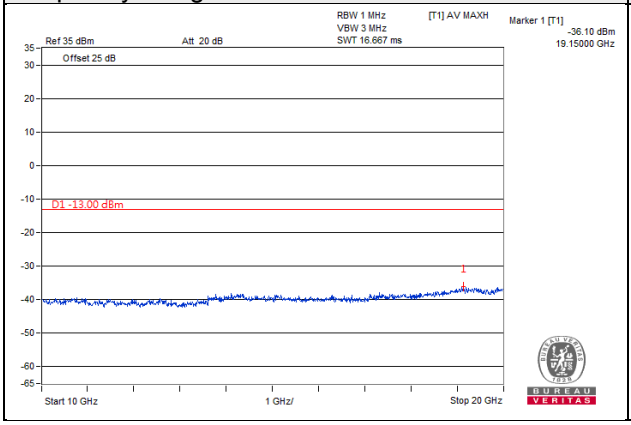
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 5MHz	
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

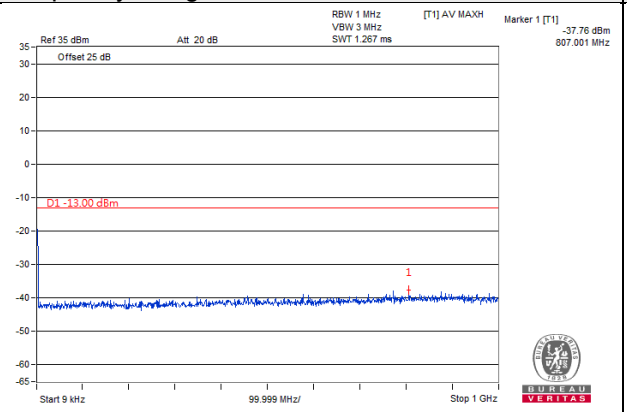
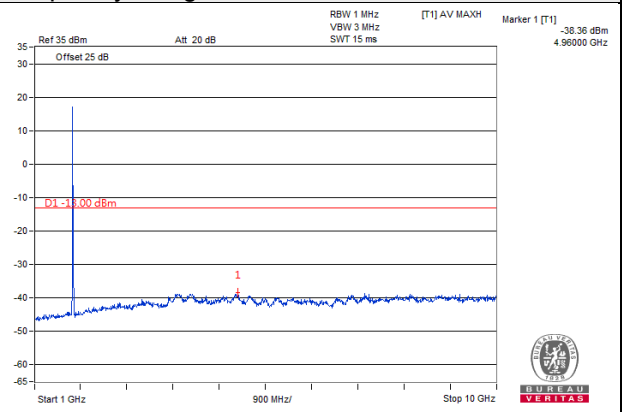
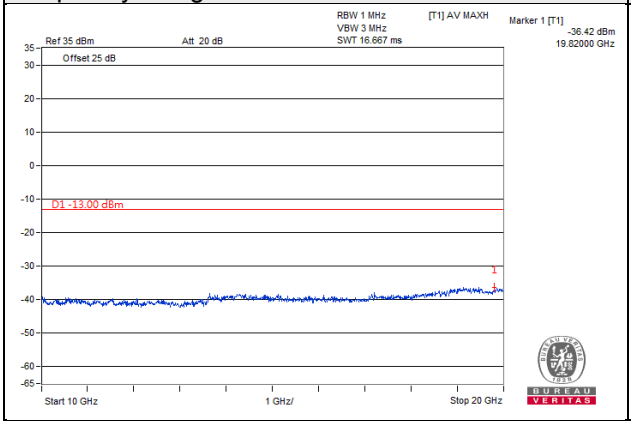
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 5MHz	
Channel 20375	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

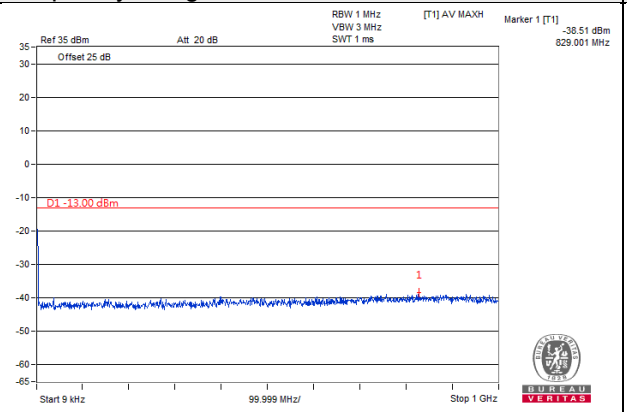
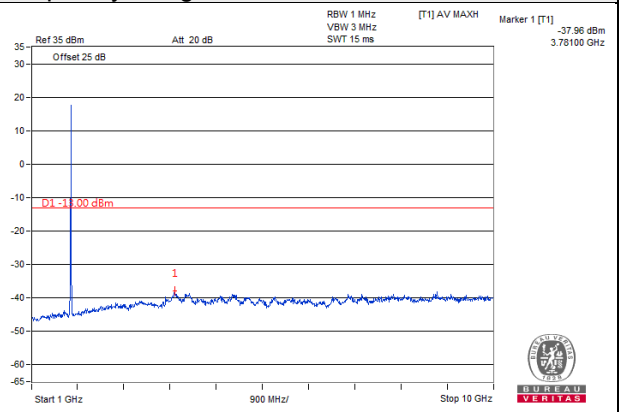
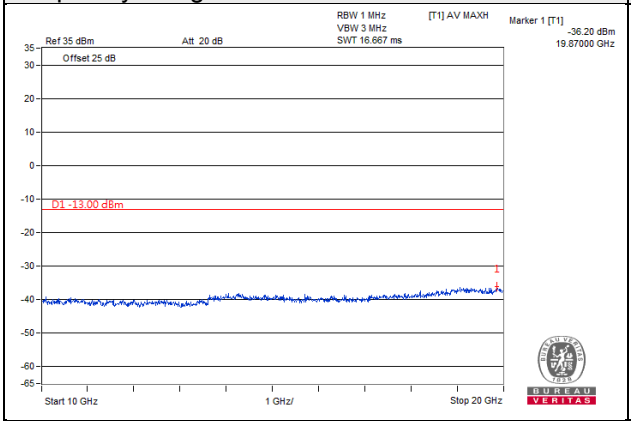
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 10MHz	
Channel 20000	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

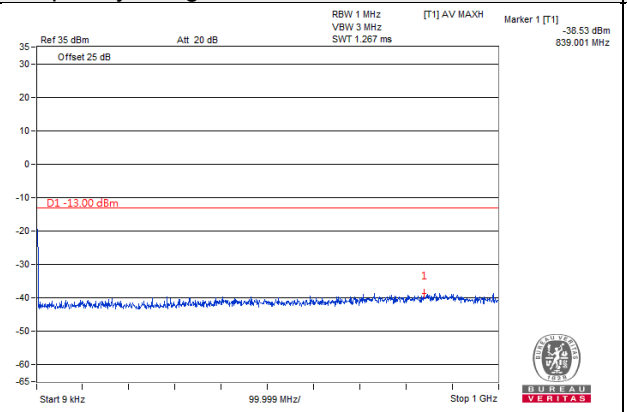
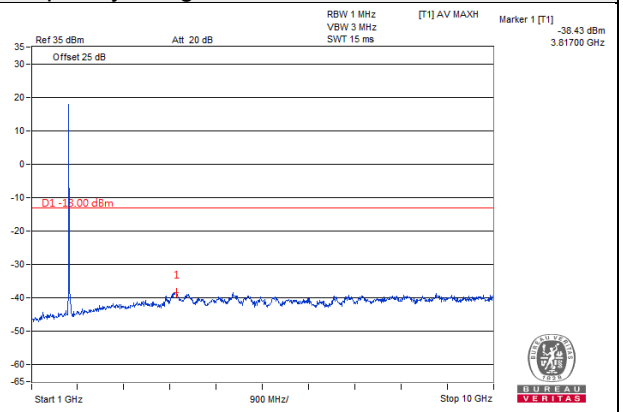
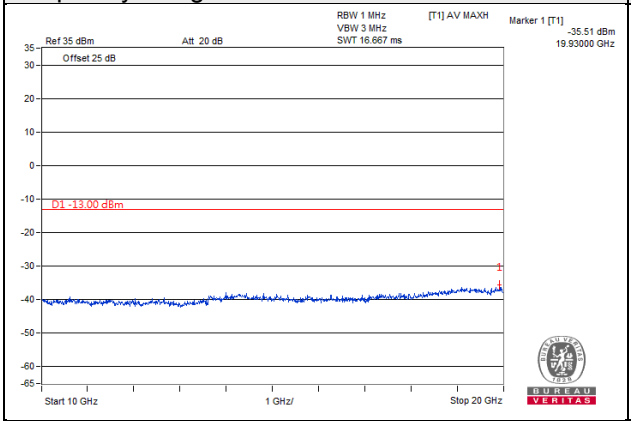
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 10MHz	
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

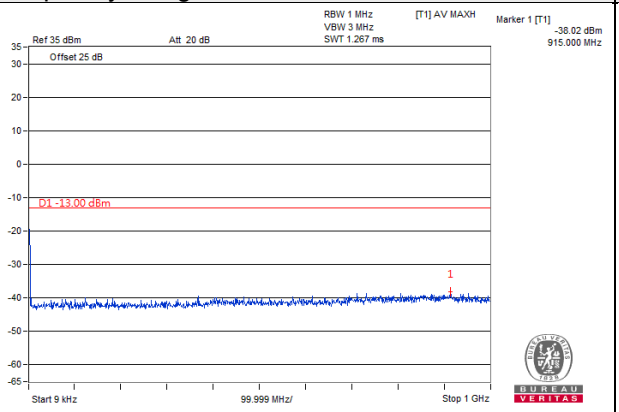
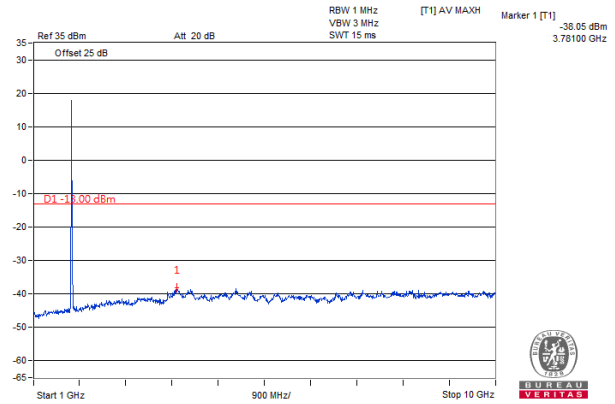
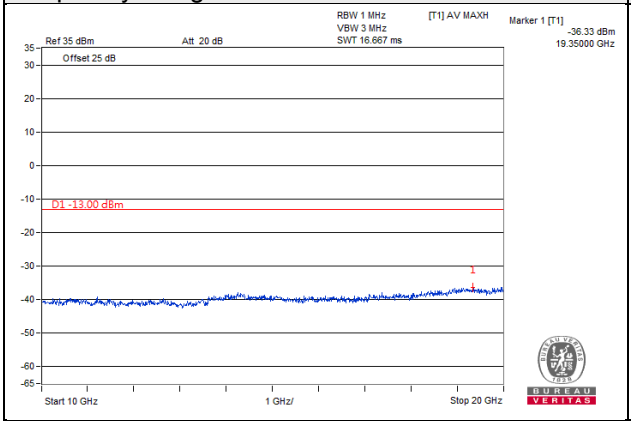
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 10MHz	
Channel 20350	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

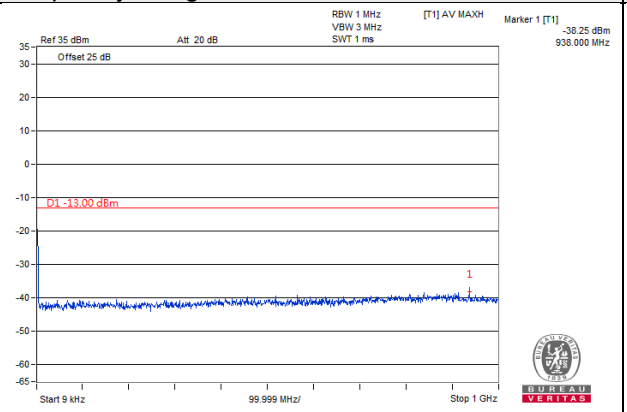
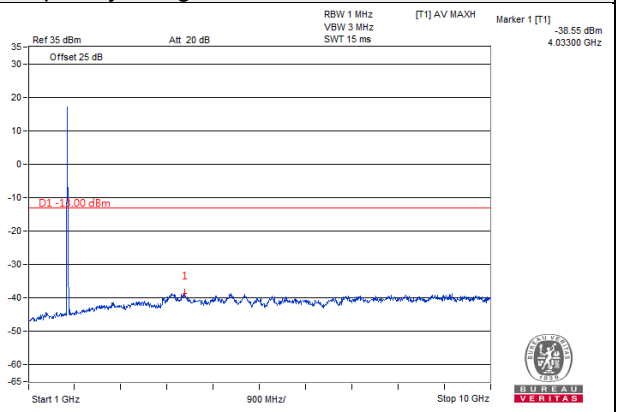
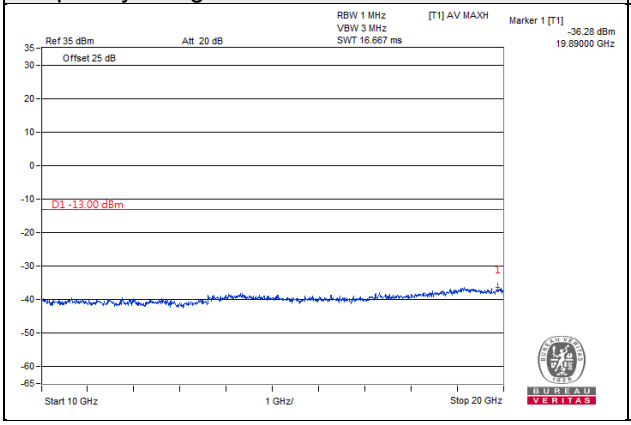
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 15MHz	
Channel 20025	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

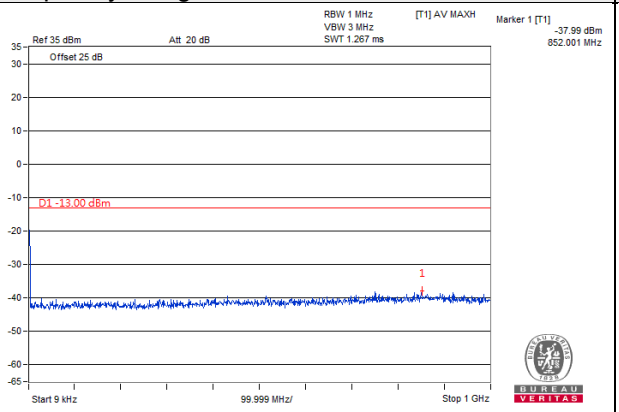
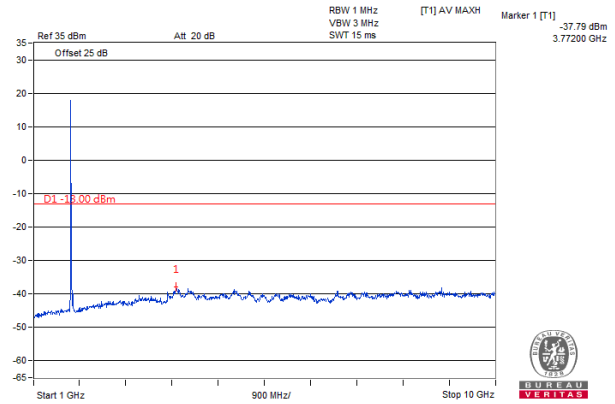
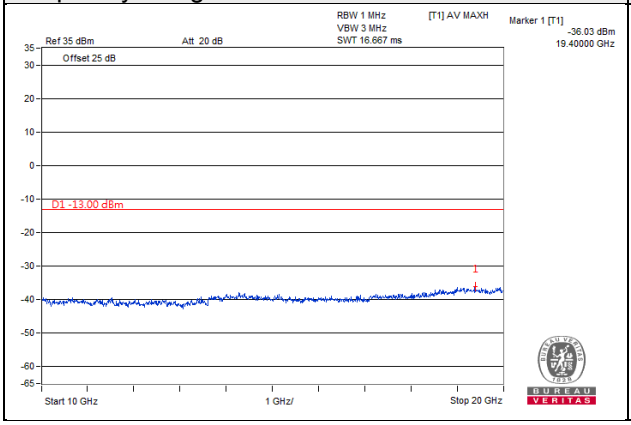
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 15MHz	
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

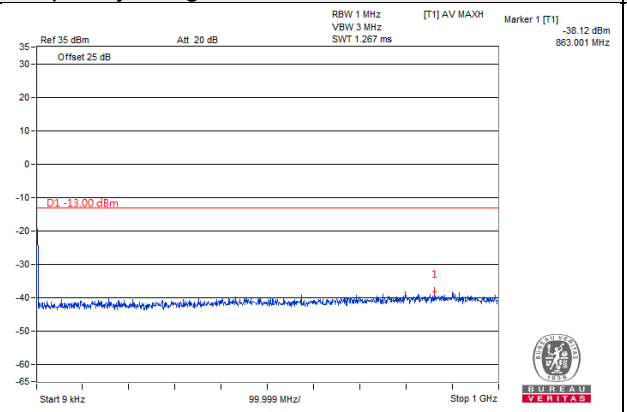
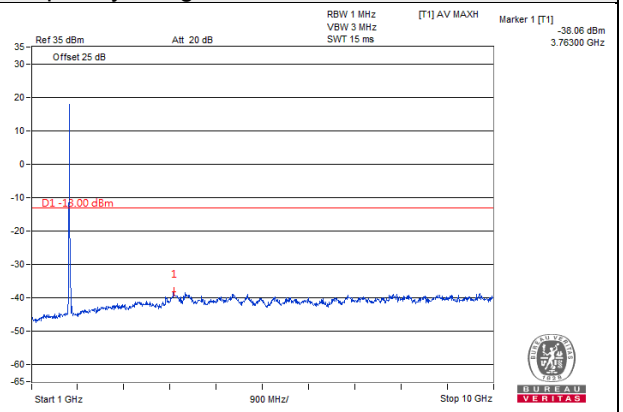
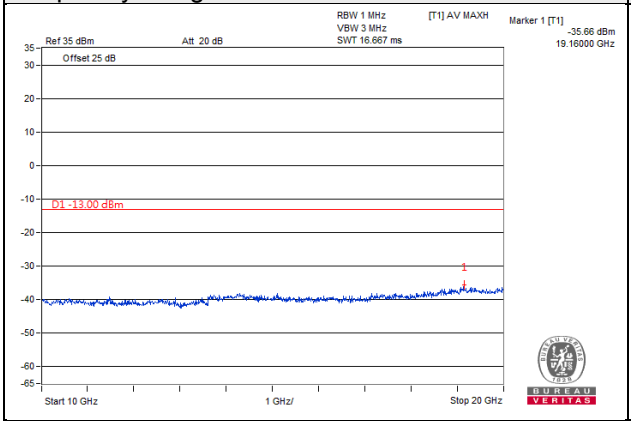
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 15MHz	
Channel 20325	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

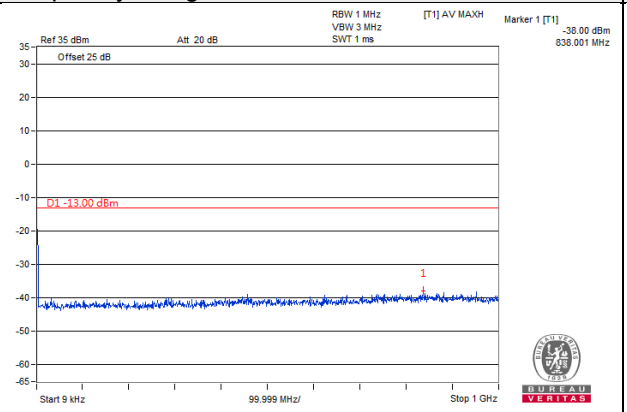
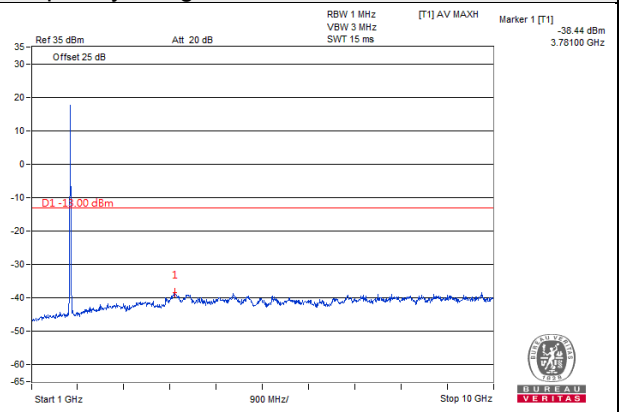
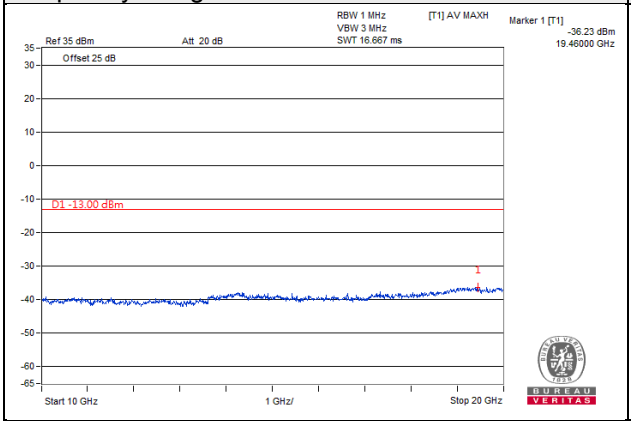
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 20MHz	
Channel 20050	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

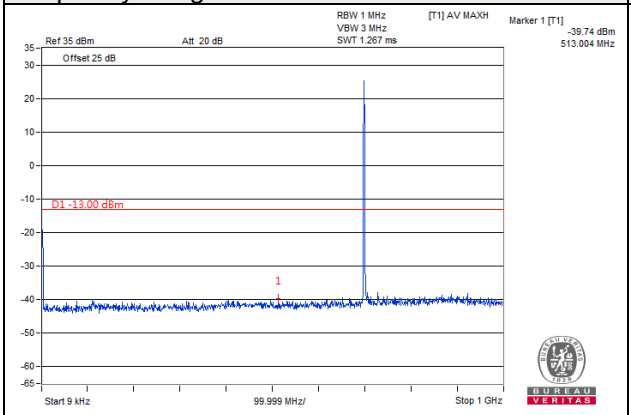
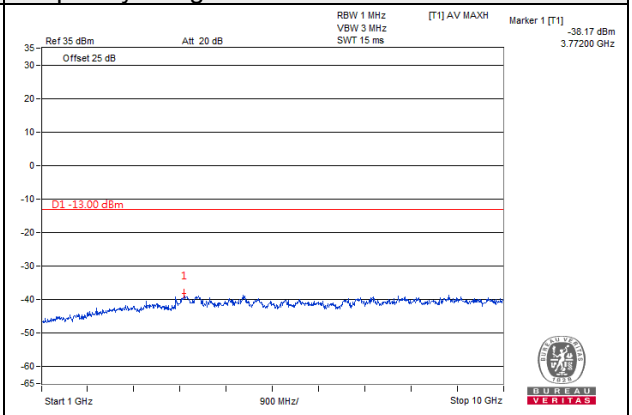
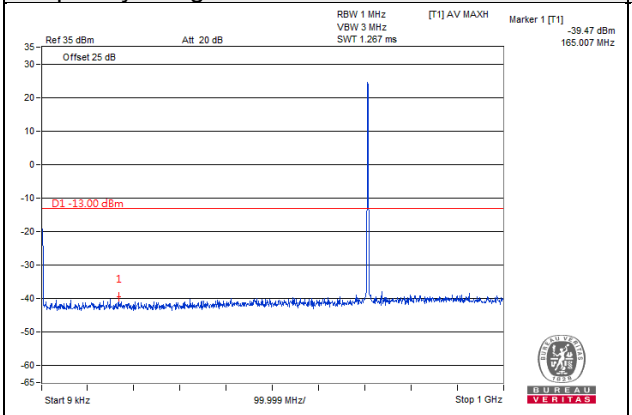
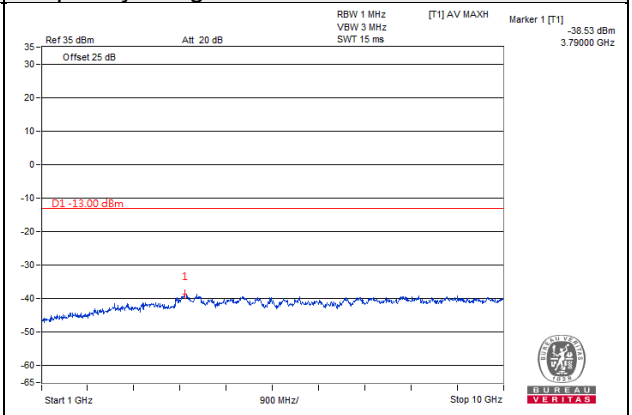
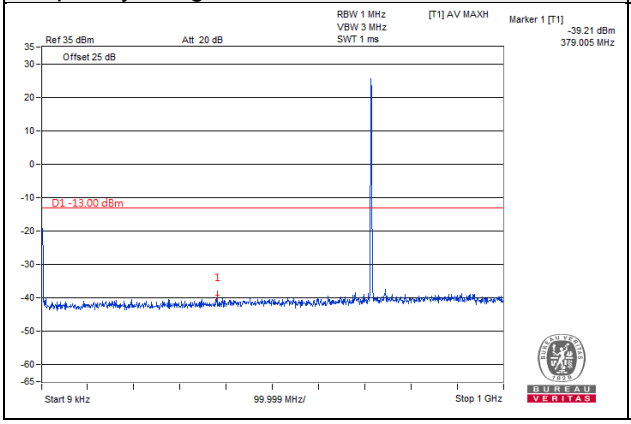
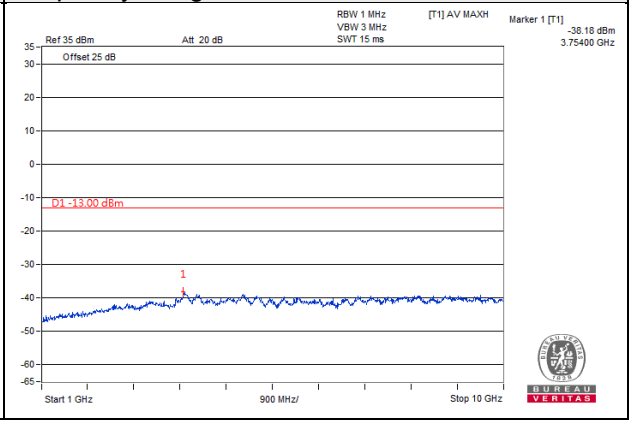
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 20MHz	
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

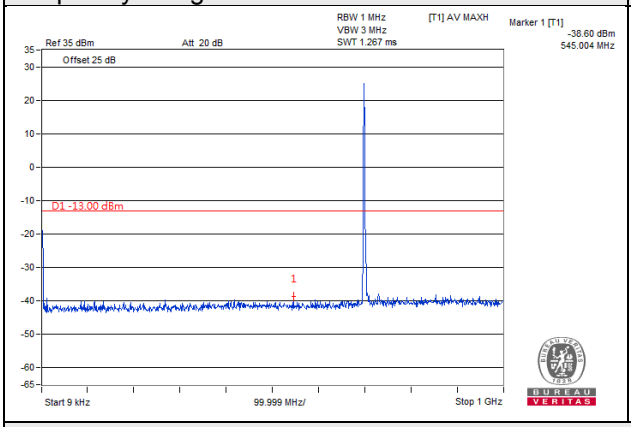
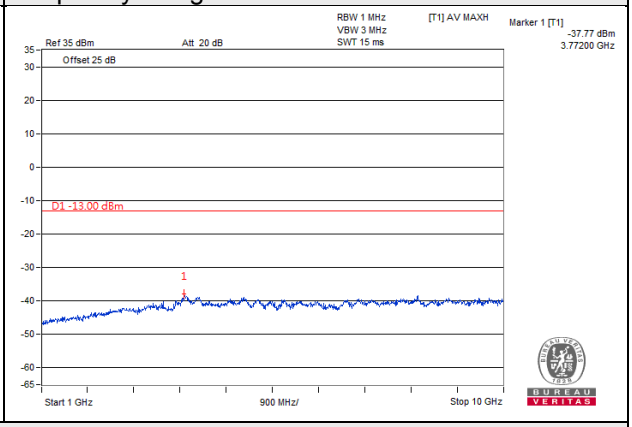
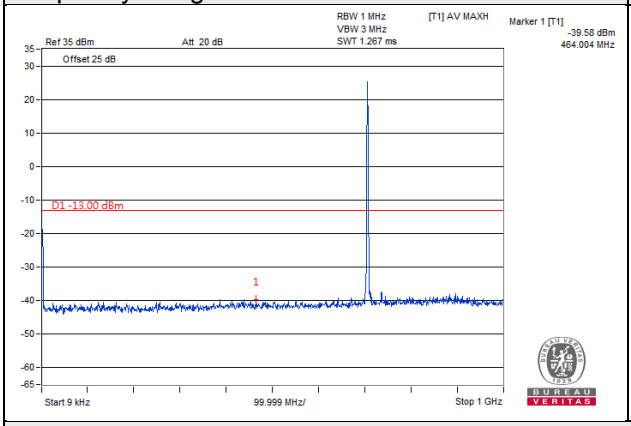
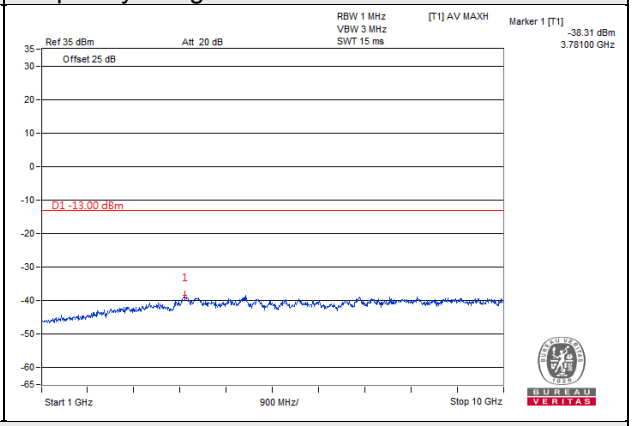
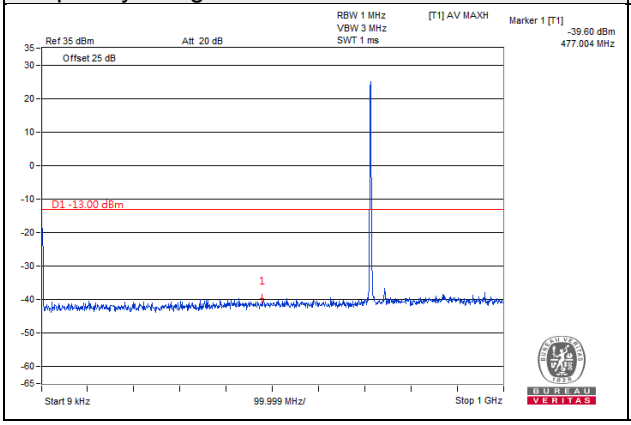
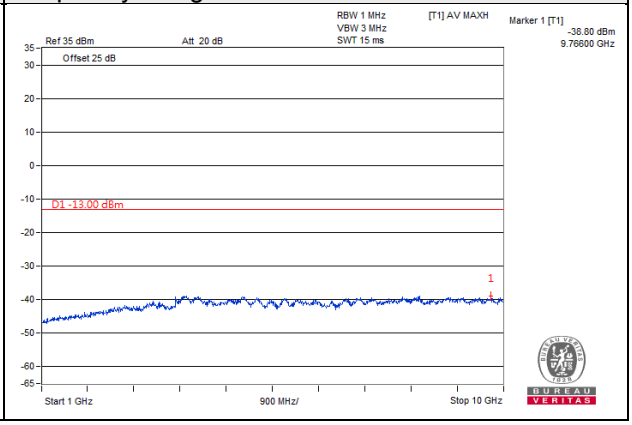
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 4 Channel Band width: 20MHz	
Channel 20300	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	
	

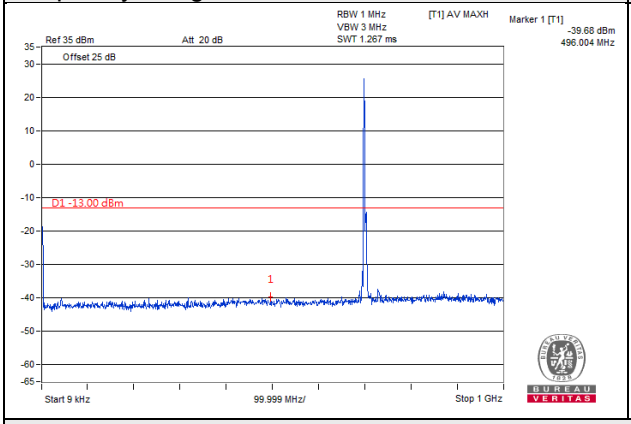
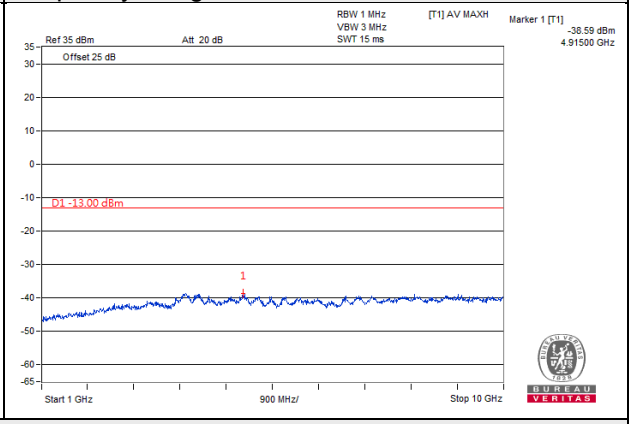
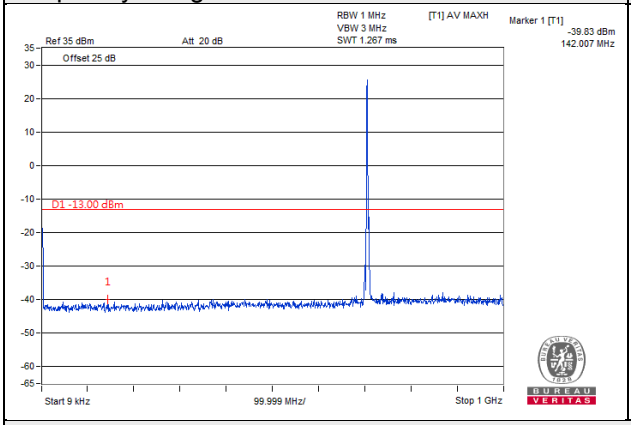
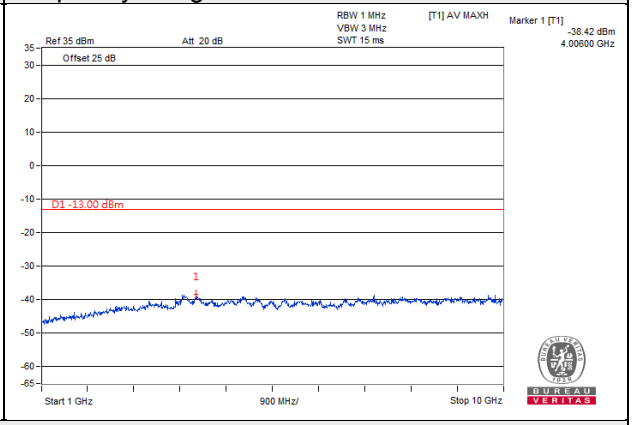
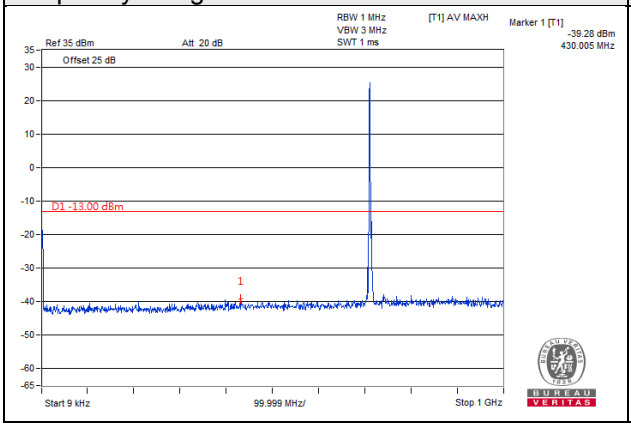
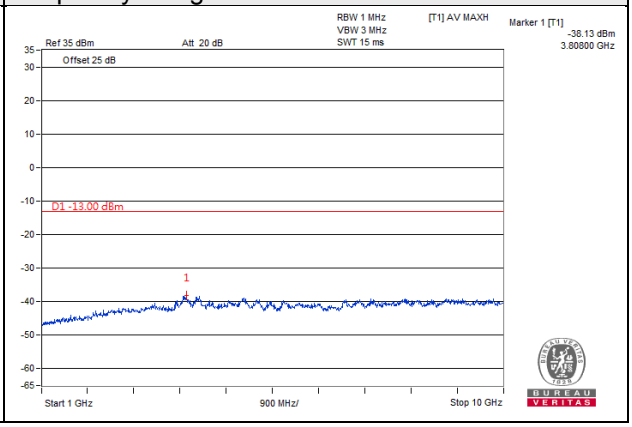
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 12 Channel Band width: 1.4MHz	
Channel 23017	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23095	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23173	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	

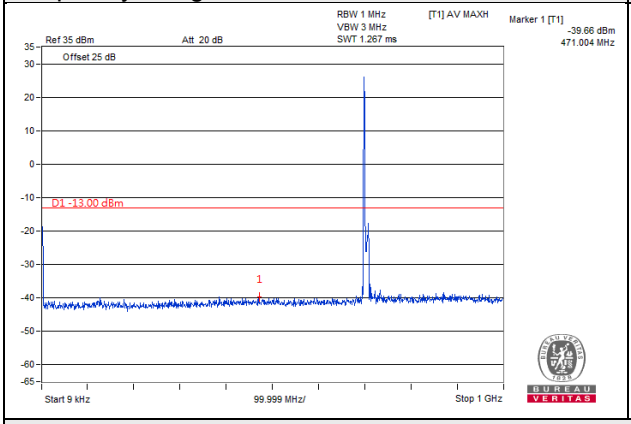
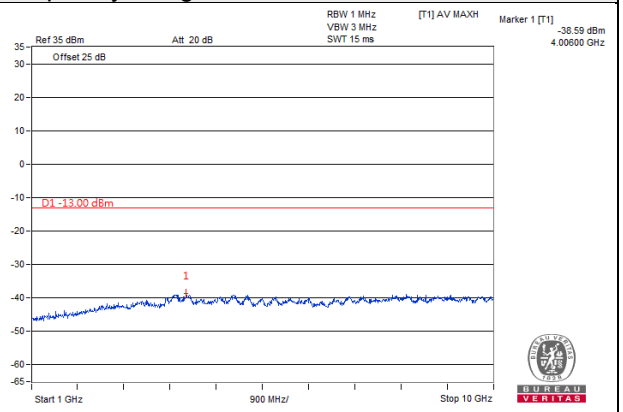
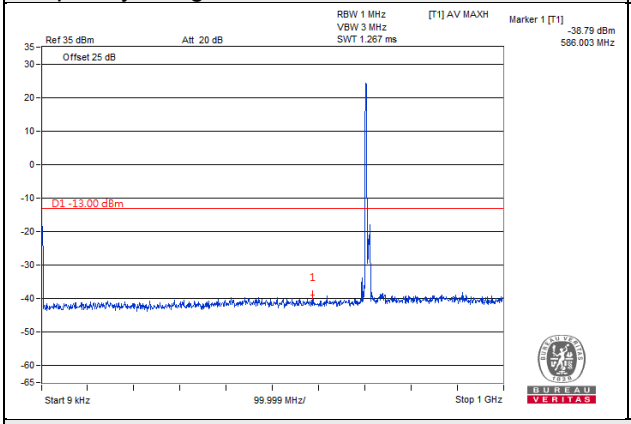
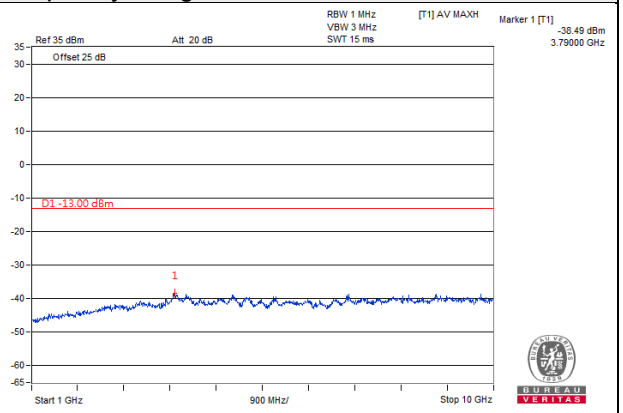
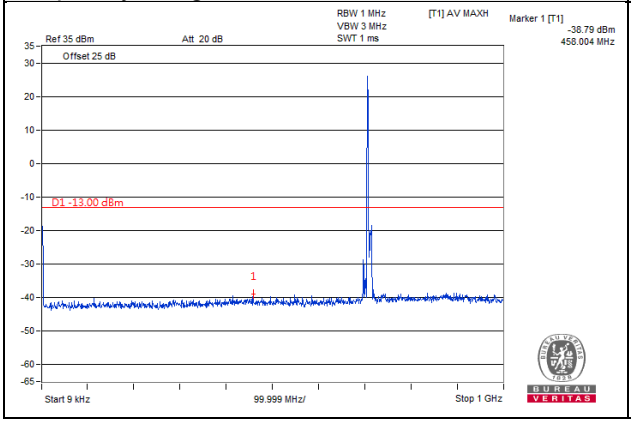
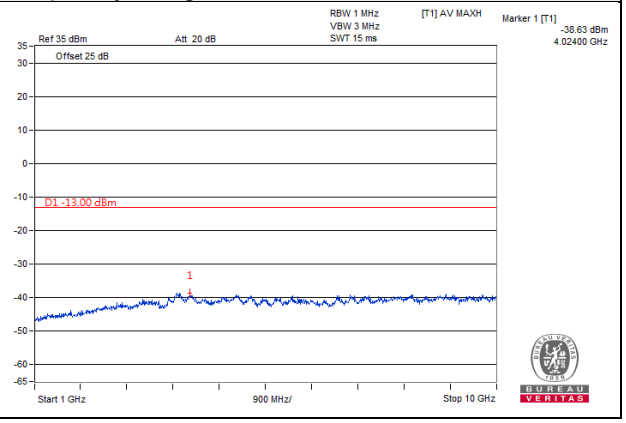
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 12 Channel Band width: 3MHz	
Channel 23025	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23095	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23165	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	

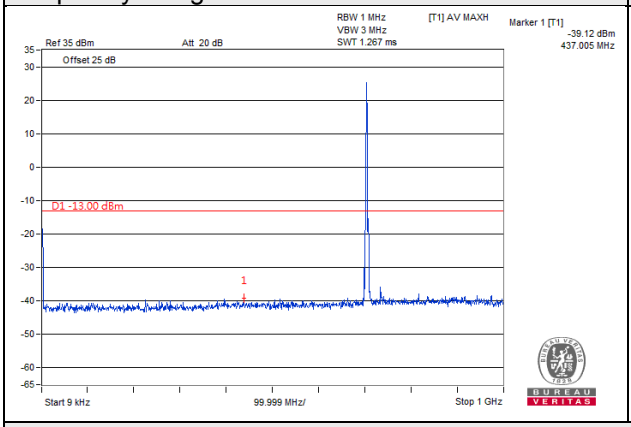
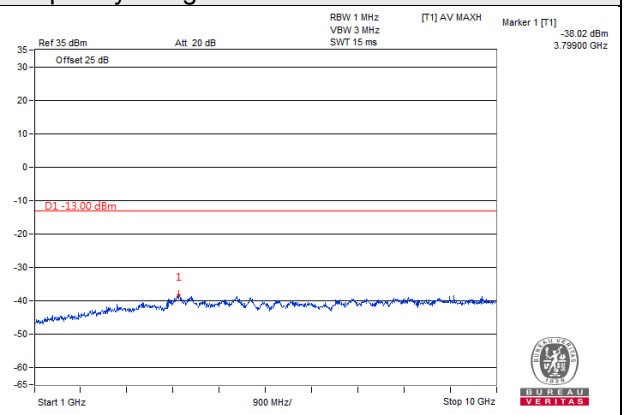
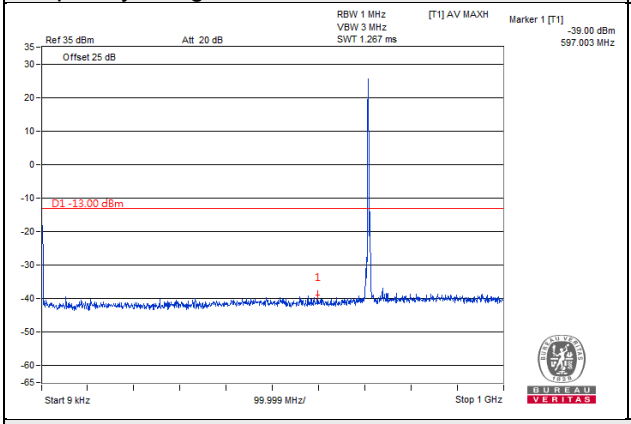
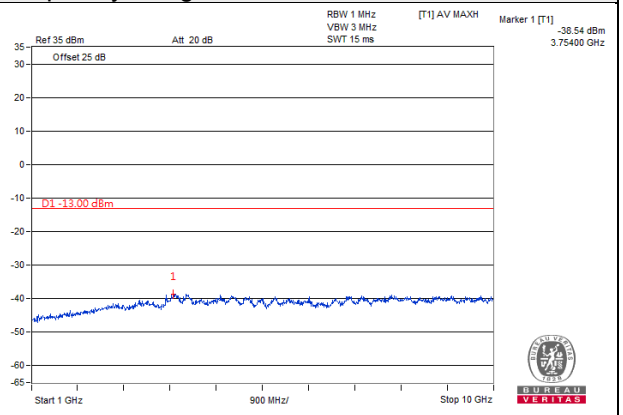
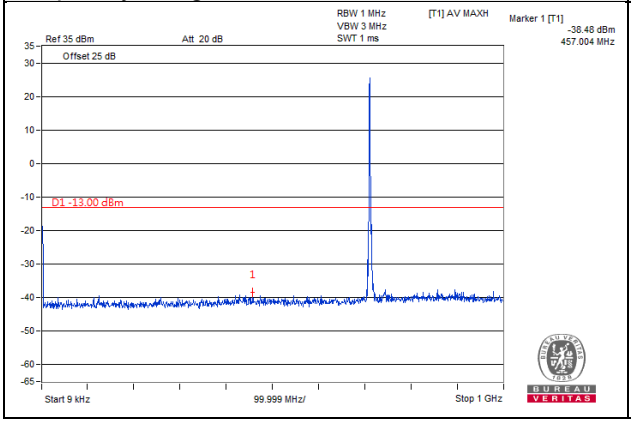
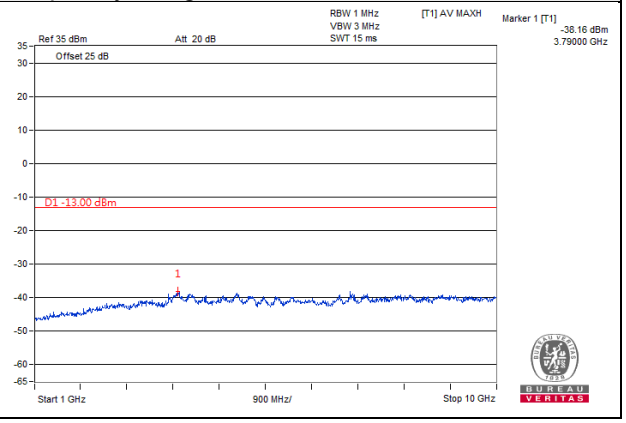
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 12 Channel Band width: 5MHz	
Channel 23035	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23095	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23155	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	

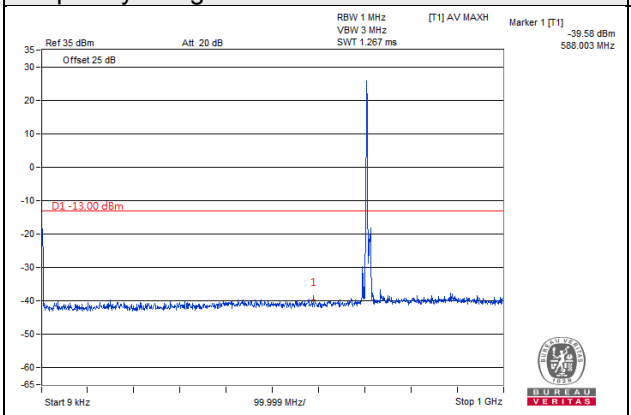
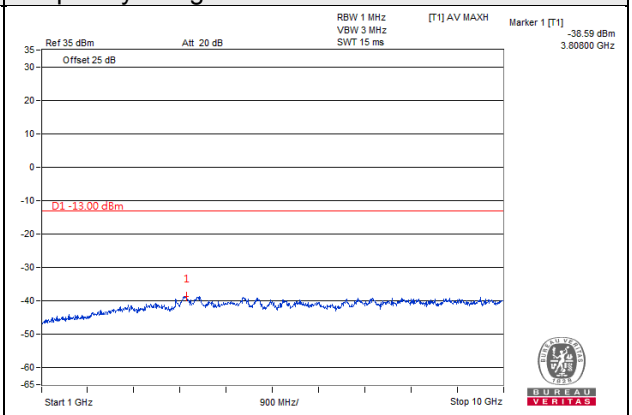
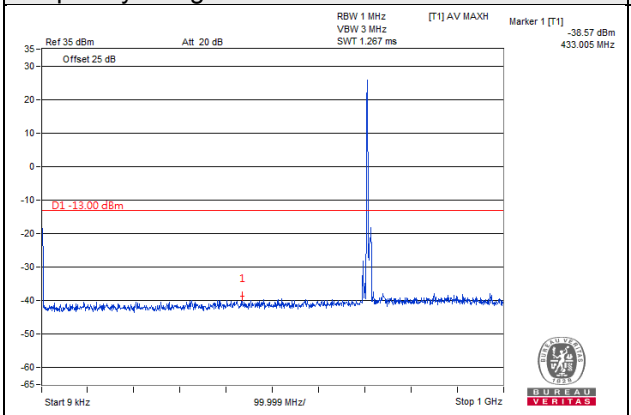
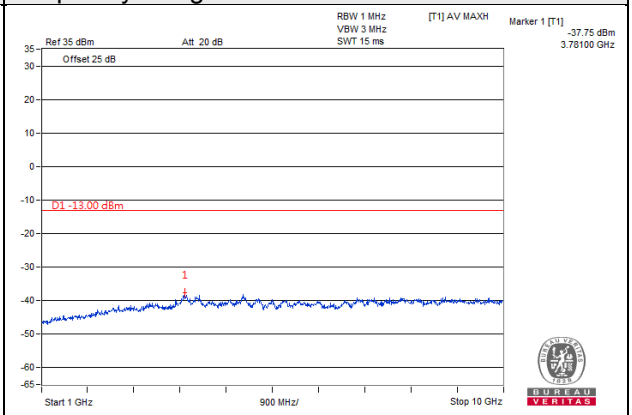
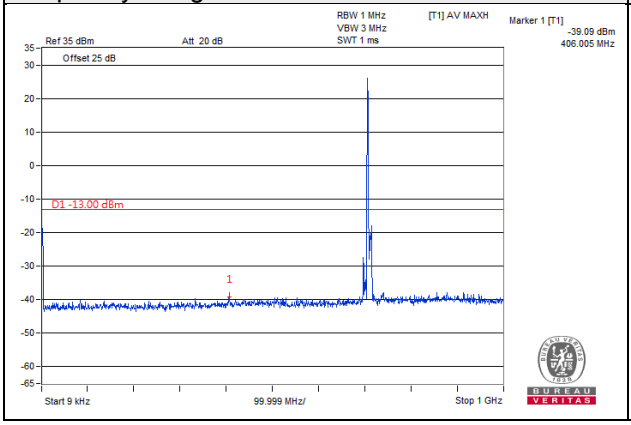
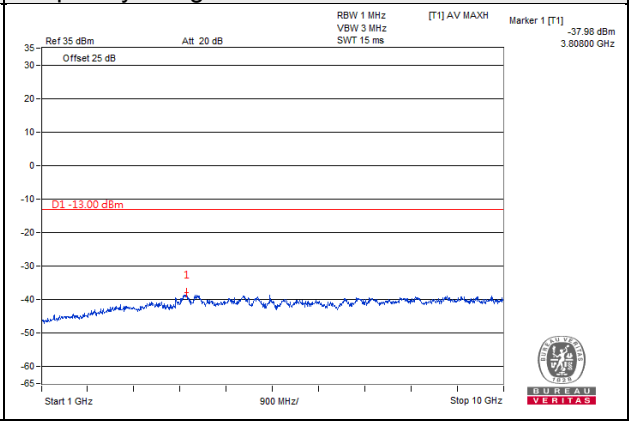
Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 12 Channel Band width: 10MHz	
Channel 23060	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23095	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23130	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	

Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 17 Channel Band width: 5MHz	
Channel 23755	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23790	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23825	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	

Note: The signal of 9kHz is IF signal from test instrument.

LTE Band 17 Channel Band width: 10MHz	
Channel 23780	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23790	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Channel 23800	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	

Note: The signal of 9kHz is IF signal from test instrument.

4.8 Radiated Emission Measurement

4.8.1 Limits of Radiated Emission Measurement

According to FCC 27.53(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) AWS emission limits— General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

4.8.2 Test Procedure

a. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high channel of operational frequency range.)

b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m/1.5m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

c. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = Read Value (dBμV/m) - Correction Factor @ 3m

d. Correction Factor (dB) @ 3m = 20log(D) − 104.8; where D is the measurement distance @ 3m =-95.26dB

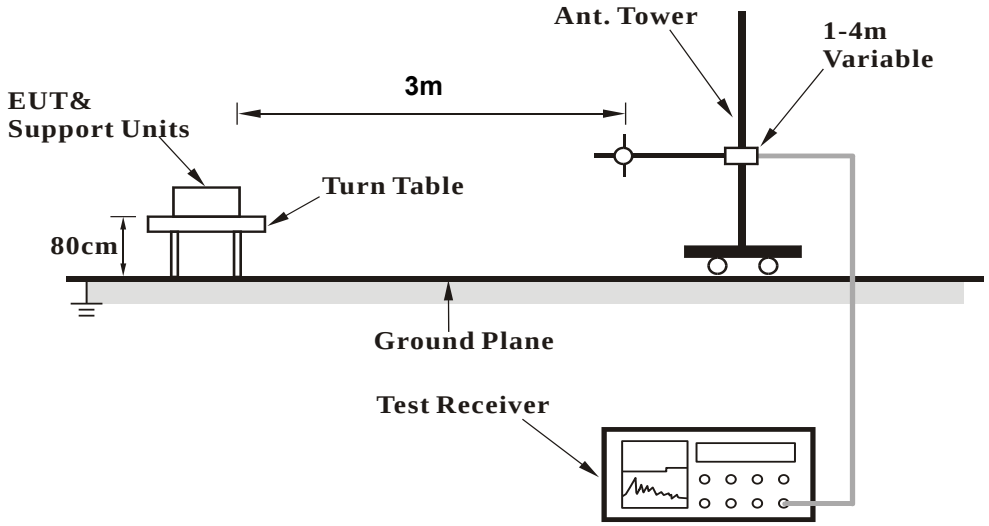
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.8.3 Deviation from Test Standard

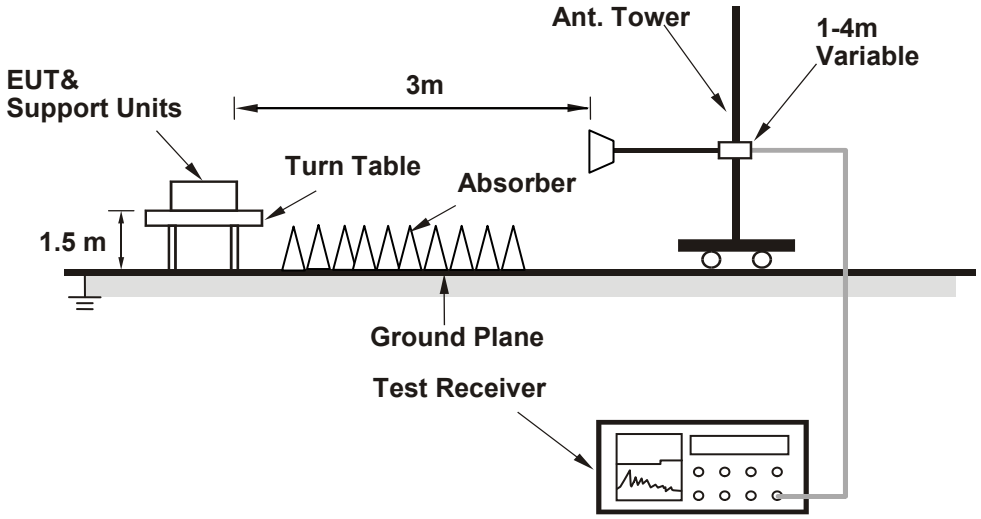
No deviation.

4.8.4 Test Setup

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.8.5 Test Results

Below 1GHz

WCDMA:

Mode	TX channel 1312	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	39.97	34.09	-95.26	-61.17	-13	-48.17
2	122.79	35.05	-95.26	-60.21	-13	-47.21
3	178.62	27.54	-95.26	-67.72	-13	-54.72
4	222.52	34	-95.26	-61.26	-13	-48.26
5	344.24	31.46	-95.26	-63.80	-13	-50.80
6	513.3	29.77	-95.26	-65.49	-13	-52.49
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.53	35.77	-95.26	-59.49	-13	-46.49
2	137.75	35.35	-95.26	-59.91	-13	-46.91
3	211.52	31.26	-95.26	-64.00	-13	-51.00
4	311.51	26.16	-95.26	-69.10	-13	-56.10
5	489.72	32.8	-95.26	-62.46	-13	-49.46
6	615.24	33.06	-95.26	-62.20	-13	-49.20

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 1413	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	39.88	35.06	-95.26	-60.20	-13	-47.20
2	122.59	35.46	-95.26	-59.80	-13	-46.80
3	177.34	27.77	-95.26	-67.49	-13	-54.49
4	222.02	33.69	-95.26	-61.57	-13	-48.57
5	344.54	31.1	-95.26	-64.16	-13	-51.16
6	513.09	29.86	-95.26	-65.40	-13	-52.40
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	41.74	35.15	-95.26	-60.11	-13	-47.11
2	137.84	36.23	-95.26	-59.03	-13	-46.03
3	211.35	31.57	-95.26	-63.69	-13	-50.69
4	312.2	26.11	-95.26	-69.15	-13	-56.15
5	490.45	34.45	-95.26	-60.81	-13	-47.81
6	615.61	32.73	-95.26	-62.53	-13	-49.53

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 1513	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	38.9	35.52	-95.26	-59.74	-13	-46.74
2	124.25	35.11	-95.26	-60.15	-13	-47.15
3	178.58	28.56	-95.26	-66.70	-13	-53.70
4	220.92	33.29	-95.26	-61.97	-13	-48.97
5	345.38	31.53	-95.26	-63.73	-13	-50.73
6	513.14	29.96	-95.26	-65.30	-13	-52.30
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	41.98	35.19	-95.26	-60.07	-13	-47.07
2	137.79	35.31	-95.26	-59.95	-13	-46.95
3	211.33	32.09	-95.26	-63.17	-13	-50.17
4	310.24	26.7	-95.26	-68.56	-13	-55.56
5	488.99	34.05	-95.26	-61.21	-13	-48.21
6	615.9	33.13	-95.26	-62.13	-13	-49.13

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 1.4MHz

Mode	TX channel 19957	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	40.97	32.24	-95.26	-63.02	-13	-50.02
2	102.06	34.67	-95.26	-60.59	-13	-47.59
3	157.66	26.73	-95.26	-68.53	-13	-55.53
4	183.39	32.89	-95.26	-62.37	-13	-49.37
5	323.03	29.97	-95.26	-65.29	-13	-52.29
6	446.38	28.09	-95.26	-67.17	-13	-54.17
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.6	35.53	-95.26	-59.73	-13	-46.73
2	86.57	35.03	-95.26	-60.23	-13	-47.23
3	124.56	30.19	-95.26	-65.07	-13	-52.07
4	169.27	25.32	-95.26	-69.94	-13	-56.94
5	317.34	33.64	-95.26	-61.62	-13	-48.62
6	552.66	31.28	-95.26	-63.98	-13	-50.98

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	39.86	32.22	-95.26	-63.04	-13	-50.04
2	101.47	34.72	-95.26	-60.54	-13	-47.54
3	156.54	28.07	-95.26	-67.19	-13	-54.19
4	182.81	32.81	-95.26	-62.45	-13	-49.45
5	324.21	30.68	-95.26	-64.58	-13	-51.58
6	446.86	29.74	-95.26	-65.52	-13	-52.52
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.01	34.32	-95.26	-60.94	-13	-47.94
2	87.48	35.89	-95.26	-59.37	-13	-46.37
3	125.19	30.77	-95.26	-64.49	-13	-51.49
4	168.69	25.73	-95.26	-69.53	-13	-56.53
5	316.03	32.57	-95.26	-62.69	-13	-49.69
6	551.63	31.59	-95.26	-63.67	-13	-50.67

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20393	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	41.1	32.16	-95.26	-63.10	-13	-50.10
2	100.67	34.57	-95.26	-60.69	-13	-47.69
3	157.57	26.57	-95.26	-68.69	-13	-55.69
4	183.52	33.09	-95.26	-62.17	-13	-49.17
5	322.74	30.33	-95.26	-64.93	-13	-51.93
6	446.7	28.57	-95.26	-66.69	-13	-53.69
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.9	35.25	-95.26	-60.01	-13	-47.01
2	86.29	34.85	-95.26	-60.41	-13	-47.41
3	125.09	30.86	-95.26	-64.40	-13	-51.40
4	169.2	25.42	-95.26	-69.84	-13	-56.84
5	317.27	33.18	-95.26	-62.08	-13	-49.08
6	552	31.25	-95.26	-64.01	-13	-51.01

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 3MHz

Mode	TX channel 19965	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	40.46	33.95	-95.26	-61.31	-13	-48.31
2	101.86	34.75	-95.26	-60.51	-13	-47.51
3	157.3	27.85	-95.26	-67.41	-13	-54.41
4	182.83	33.15	-95.26	-62.11	-13	-49.11
5	322.52	30.21	-95.26	-65.05	-13	-52.05
6	445.82	30.06	-95.26	-65.20	-13	-52.20
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.32	34.56	-95.26	-60.70	-13	-47.70
2	87.31	35.75	-95.26	-59.51	-13	-46.51
3	124.15	31.54	-95.26	-63.72	-13	-50.72
4	169.06	24.53	-95.26	-70.73	-13	-57.73
5	317.09	32.71	-95.26	-62.55	-13	-49.55
6	552.84	31.65	-95.26	-63.61	-13	-50.61

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	40.35	32.86	-95.26	-62.40	-13	-49.40
2	100.42	35.43	-95.26	-59.83	-13	-46.83
3	156.86	27.26	-95.26	-68.00	-13	-55.00
4	183.16	32.32	-95.26	-62.94	-13	-49.94
5	322.98	31.18	-95.26	-64.08	-13	-51.08
6	446.52	29.98	-95.26	-65.28	-13	-52.28
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.24	34.97	-95.26	-60.29	-13	-47.29
2	86.55	34.55	-95.26	-60.71	-13	-47.71
3	124.63	31.32	-95.26	-63.94	-13	-50.94
4	168.61	25.86	-95.26	-69.40	-13	-56.40
5	316.62	32.57	-95.26	-62.69	-13	-49.69
6	552.56	32.12	-95.26	-63.14	-13	-50.14

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20385	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	40.34	33.84	-95.26	-61.42	-13	-48.42
2	102.12	35.3	-95.26	-59.96	-13	-46.96
3	157.8	26.62	-95.26	-68.64	-13	-55.64
4	183.97	33.85	-95.26	-61.41	-13	-48.41
5	323.24	29.77	-95.26	-65.49	-13	-52.49
6	445.84	29.2	-95.26	-66.06	-13	-53.06
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.6	35.2	-95.26	-60.06	-13	-47.06
2	87.41	35.61	-95.26	-59.65	-13	-46.65
3	124.78	31.33	-95.26	-63.93	-13	-50.93
4	168.3	25.34	-95.26	-69.92	-13	-56.92
5	317.58	33.17	-95.26	-62.09	-13	-49.09
6	551.91	31.48	-95.26	-63.78	-13	-50.78

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 5MHz

Mode	TX channel 19975	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	41.46	32.86	-95.26	-62.40	-13	-49.40
2	100.51	35.5	-95.26	-59.76	-13	-46.76
3	158.03	26.77	-95.26	-68.49	-13	-55.49
4	182.97	33.75	-95.26	-61.51	-13	-48.51
5	322.51	31.16	-95.26	-64.10	-13	-51.10
6	446.06	28.42	-95.26	-66.84	-13	-53.84
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.25	34.53	-95.26	-60.73	-13	-47.73
2	97.74	35.82	-95.26	-59.44	-13	-46.44
3	143.3	31.02	-95.26	-64.24	-13	-51.24
4	183.35	26.06	-95.26	-69.20	-13	-56.20
5	325.96	33.43	-95.26	-61.83	-13	-48.83
6	564.73	32.16	-95.26	-63.10	-13	-50.10

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.08	32.34	-95.26	-62.92	-13	-49.92
2	102.01	33.91	-95.26	-61.35	-13	-48.35
3	162.02	27	-95.26	-68.26	-13	-55.26
4	188.13	33.87	-95.26	-61.39	-13	-48.39
5	322.15	31.07	-95.26	-64.19	-13	-51.19
6	450.63	29.69	-95.26	-65.57	-13	-52.57
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.74	35.72	-95.26	-59.54	-13	-46.54
2	97.88	35.15	-95.26	-60.11	-13	-47.11
3	140.84	31.34	-95.26	-63.92	-13	-50.92
4	182.9	24.66	-95.26	-70.60	-13	-57.60
5	321.19	32.64	-95.26	-62.62	-13	-49.62
6	559.82	32.92	-95.26	-62.34	-13	-49.34

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20375	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.83	32.92	-95.26	-62.34	-13	-49.34
2	99.81	33.74	-95.26	-61.52	-13	-48.52
3	160.73	27.25	-95.26	-68.01	-13	-55.01
4	188.09	33.73	-95.26	-61.53	-13	-48.53
5	321.69	31.33	-95.26	-63.93	-13	-50.93
6	450.46	28.99	-95.26	-66.27	-13	-53.27
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	47.04	34.09	-95.26	-61.17	-13	-48.17
2	94.98	35.33	-95.26	-59.93	-13	-46.93
3	139.25	31.67	-95.26	-63.59	-13	-50.59
4	187.14	24.95	-95.26	-70.31	-13	-57.31
5	324.56	33.56	-95.26	-61.70	-13	-48.70
6	564.62	31.32	-95.26	-63.94	-13	-50.94

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 10MHz

Mode	TX channel 20000	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.43	32.1	-95.26	-63.16	-13	-50.16
2	105.98	34.31	-95.26	-60.95	-13	-47.95
3	157.16	28.15	-95.26	-67.11	-13	-54.11
4	184.49	33.56	-95.26	-61.70	-13	-48.70
5	320.66	30.75	-95.26	-64.51	-13	-51.51
6	448.91	28.34	-95.26	-66.92	-13	-53.92
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	48.04	34.87	-95.26	-60.39	-13	-47.39
2	100.96	36	-95.26	-59.26	-13	-46.26
3	138.04	31.64	-95.26	-63.62	-13	-50.62
4	186.27	24.45	-95.26	-70.81	-13	-57.81
5	325.41	33.42	-95.26	-61.84	-13	-48.84
6	557	31.53	-95.26	-63.73	-13	-50.73

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.9	32.09	-95.26	-63.17	-13	-50.17
2	102.71	35.1	-95.26	-60.16	-13	-47.16
3	158.52	26.59	-95.26	-68.67	-13	-55.67
4	185.37	32.11	-95.26	-63.15	-13	-50.15
5	322.01	30.18	-95.26	-65.08	-13	-52.08
6	450.31	28.5	-95.26	-66.76	-13	-53.76
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	45.68	34.38	-95.26	-60.88	-13	-47.88
2	96.31	35.08	-95.26	-60.18	-13	-47.18
3	140.1	29.8	-95.26	-65.46	-13	-52.46
4	189.88	25.88	-95.26	-69.38	-13	-56.38
5	321.76	33.19	-95.26	-62.07	-13	-49.07
6	556.7	31.97	-95.26	-63.29	-13	-50.29

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20350	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.08	33.44	-95.26	-61.82	-13	-48.82
2	105.66	35.35	-95.26	-59.91	-13	-46.91
3	160.7	26.41	-95.26	-68.85	-13	-55.85
4	182.9	32.04	-95.26	-63.22	-13	-50.22
5	318.16	31.32	-95.26	-63.94	-13	-50.94
6	451.73	28.36	-95.26	-66.90	-13	-53.90
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.67	34.42	-95.26	-60.84	-13	-47.84
2	102.19	35.13	-95.26	-60.13	-13	-47.13
3	137.55	29.97	-95.26	-65.29	-13	-52.29
4	182.93	24.63	-95.26	-70.63	-13	-57.63
5	325.38	33.2	-95.26	-62.06	-13	-49.06
6	564.95	31.99	-95.26	-63.27	-13	-50.27

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 15MHz

Mode	TX channel 20025	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.57	32.54	-95.26	-62.72	-13	-49.72
2	106.93	35.43	-95.26	-59.83	-13	-46.83
3	158.48	26.45	-95.26	-68.81	-13	-55.81
4	185.2	33.57	-95.26	-61.69	-13	-48.69
5	323.31	30.77	-95.26	-64.49	-13	-51.49
6	443.34	29.57	-95.26	-65.69	-13	-52.69
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	52.29	34	-95.26	-61.26	-13	-48.26
2	97.77	35.78	-95.26	-59.48	-13	-46.48
3	140.2	30.62	-95.26	-64.64	-13	-51.64
4	183.26	25.29	-95.26	-69.97	-13	-56.97
5	318.75	33.25	-95.26	-62.01	-13	-49.01
6	565.26	31.48	-95.26	-63.78	-13	-50.78

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.91	33.75	-95.26	-61.51	-13	-48.51
2	106.21	34.13	-95.26	-61.13	-13	-48.13
3	163.08	27.02	-95.26	-68.24	-13	-55.24
4	185.98	33.1	-95.26	-62.16	-13	-49.16
5	319.55	31.56	-95.26	-63.70	-13	-50.70
6	448.4	28.34	-95.26	-66.92	-13	-53.92
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.55	34.87	-95.26	-60.39	-13	-47.39
2	93.99	34.34	-95.26	-60.92	-13	-47.92
3	145.01	30.37	-95.26	-64.89	-13	-51.89
4	187.65	25.62	-95.26	-69.64	-13	-56.64
5	323.57	33.75	-95.26	-61.51	-13	-48.51
6	556.51	32.53	-95.26	-62.73	-13	-49.73

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20325	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.28	33.73	-95.26	-61.53	-13	-48.53
2	102.6	35.03	-95.26	-60.23	-13	-47.23
3	157.38	27.27	-95.26	-67.99	-13	-54.99
4	188.57	33.91	-95.26	-61.35	-13	-48.35
5	322.85	31.51	-95.26	-63.75	-13	-50.75
6	451.51	28.28	-95.26	-66.98	-13	-53.98
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	45.29	34.46	-95.26	-60.80	-13	-47.80
2	95.96	34.32	-95.26	-60.94	-13	-47.94
3	136.9	31.28	-95.26	-63.98	-13	-50.98
4	183.2	24.47	-95.26	-70.79	-13	-57.79
5	322.5	33.96	-95.26	-61.30	-13	-48.30
6	562.84	31.43	-95.26	-63.83	-13	-50.83

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 20MHz

Mode	TX channel 20050	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	48.12	32.41	-95.26	-62.85	-13	-49.85
2	103.69	34.75	-95.26	-60.51	-13	-47.51
3	164.68	27.31	-95.26	-67.95	-13	-54.95
4	186.56	33.11	-95.26	-62.15	-13	-49.15
5	319.79	30.67	-95.26	-64.59	-13	-51.59
6	448.9	28.53	-95.26	-66.73	-13	-53.73
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.1	35.3	-95.26	-59.96	-13	-46.96
2	93.76	34.45	-95.26	-60.81	-13	-47.81
3	143.72	31.43	-95.26	-63.83	-13	-50.83
4	183.27	26.07	-95.26	-69.19	-13	-56.19
5	325.88	33.88	-95.26	-61.38	-13	-48.38
6	559.72	32.36	-95.26	-62.90	-13	-49.90

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	41.51	32.94	-95.26	-62.32	-13	-49.32
2	104.4	34.52	-95.26	-60.74	-13	-47.74
3	157.44	26.92	-95.26	-68.34	-13	-55.34
4	183.23	32.08	-95.26	-63.18	-13	-50.18
5	317.14	30.89	-95.26	-64.37	-13	-51.37
6	449.52	29.48	-95.26	-65.78	-13	-52.78
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	45.86	34.22	-95.26	-61.04	-13	-48.04
2	98.15	35.79	-95.26	-59.47	-13	-46.47
3	141.21	31.45	-95.26	-63.81	-13	-50.81
4	184.69	25	-95.26	-70.26	-13	-57.26
5	319.1	32.25	-95.26	-63.01	-13	-50.01
6	556.8	32.45	-95.26	-62.81	-13	-49.81

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20300	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.82	32.14	-95.26	-63.12	-13	-50.12
2	105.84	35.57	-95.26	-59.69	-13	-46.69
3	160.19	26.86	-95.26	-68.40	-13	-55.40
4	188.77	32.11	-95.26	-63.15	-13	-50.15
5	316.98	30.48	-95.26	-64.78	-13	-51.78
6	449.34	29.42	-95.26	-65.84	-13	-52.84
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.73	35.49	-95.26	-59.77	-13	-46.77
2	94.59	35.08	-95.26	-60.18	-13	-47.18
3	143.61	30.01	-95.26	-65.25	-13	-52.25
4	188.71	25.94	-95.26	-69.32	-13	-56.32
5	326.28	34.01	-95.26	-61.25	-13	-48.25
6	559.66	31.28	-95.26	-63.98	-13	-50.98

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 1.4MHz

Mode	TX channel 23017	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.1	34.08	-95.26	-61.18	-13	-48.18
2	86.88	35.39	-95.26	-59.87	-13	-46.87
3	124.29	27.63	-95.26	-67.63	-13	-54.63
4	168.62	31.54	-95.26	-63.72	-13	-50.72
5	316.6	30.25	-95.26	-65.01	-13	-52.01
6	552.02	28.43	-95.26	-66.83	-13	-53.83
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.43	33.77	-95.26	-61.49	-13	-48.49
2	85.7	32.84	-95.26	-62.42	-13	-49.42
3	124.2	29.13	-95.26	-66.13	-13	-53.13
4	168.91	24.15	-95.26	-71.11	-13	-58.11
5	317.82	32.04	-95.26	-63.22	-13	-50.22
6	552.84	32.07	-95.26	-63.19	-13	-50.19

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.69	33.42	-95.26	-61.84	-13	-48.84
2	86.2	35.05	-95.26	-60.21	-13	-47.21
3	124.26	28.52	-95.26	-66.74	-13	-53.74
4	170.23	31.27	-95.26	-63.99	-13	-50.99
5	317.24	28.75	-95.26	-66.51	-13	-53.51
6	551.81	29.53	-95.26	-65.73	-13	-52.73
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.93	35.04	-95.26	-60.22	-13	-47.22
2	86.19	33.93	-95.26	-61.33	-13	-48.33
3	124.18	29.9	-95.26	-65.36	-13	-52.36
4	169.45	24.96	-95.26	-70.30	-13	-57.30
5	317.28	33.54	-95.26	-61.72	-13	-48.72
6	551.83	31.79	-95.26	-63.47	-13	-50.47

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23173	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.86	32.92	-95.26	-62.34	-13	-49.34
2	87.18	35.22	-95.26	-60.04	-13	-47.04
3	125.1	26.95	-95.26	-68.31	-13	-55.31
4	169.86	31.27	-95.26	-63.99	-13	-50.99
5	317.59	29.96	-95.26	-65.30	-13	-52.30
6	552.69	28.46	-95.26	-66.80	-13	-53.80
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.34	34.75	-95.26	-60.51	-13	-47.51
2	86.36	33.39	-95.26	-61.87	-13	-48.87
3	124.6	28.94	-95.26	-66.32	-13	-53.32
4	169.72	25.14	-95.26	-70.12	-13	-57.12
5	317.77	33.4	-95.26	-61.86	-13	-48.86
6	553.35	30.9	-95.26	-64.36	-13	-51.36

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 3MHz

Mode	TX channel 23025	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.82	32.78	-95.26	-62.48	-13	-49.48
2	86.35	35.5	-95.26	-59.76	-13	-46.76
3	125.21	27.63	-95.26	-67.63	-13	-54.63
4	168.99	32.44	-95.26	-62.82	-13	-49.82
5	317.38	30.68	-95.26	-64.58	-13	-51.58
6	552.21	30.03	-95.26	-65.23	-13	-52.23
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43	33.28	-95.26	-61.98	-13	-48.98
2	87.45	34.19	-95.26	-61.07	-13	-48.07
3	123.99	29.79	-95.26	-65.47	-13	-52.47
4	169.1	25.12	-95.26	-70.14	-13	-57.14
5	317.45	31.92	-95.26	-63.34	-13	-50.34
6	552.59	31.18	-95.26	-64.08	-13	-51.08

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.25	33.87	-95.26	-61.39	-13	-48.39
2	87.46	34.23	-95.26	-61.03	-13	-48.03
3	124.14	27.42	-95.26	-67.84	-13	-54.84
4	169.89	31.82	-95.26	-63.44	-13	-50.44
5	317.26	29.02	-95.26	-66.24	-13	-53.24
6	553.39	29.29	-95.26	-65.97	-13	-52.97
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.34	33.45	-95.26	-61.81	-13	-48.81
2	86.15	33.86	-95.26	-61.40	-13	-48.40
3	124.02	29.15	-95.26	-66.11	-13	-53.11
4	168.68	24.3	-95.26	-70.96	-13	-57.96
5	317.05	32.5	-95.26	-62.76	-13	-49.76
6	552.86	30.68	-95.26	-64.58	-13	-51.58

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23165	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.7	34.17	-95.26	-61.09	-13	-48.09
2	86.34	34.82	-95.26	-60.44	-13	-47.44
3	124.71	27.02	-95.26	-68.24	-13	-55.24
4	168.86	30.86	-95.26	-64.40	-13	-51.40
5	317.28	30.28	-95.26	-64.98	-13	-51.98
6	552.59	29.24	-95.26	-66.02	-13	-53.02
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.29	33.35	-95.26	-61.91	-13	-48.91
2	85.78	33.83	-95.26	-61.43	-13	-48.43
3	125.03	30.16	-95.26	-65.10	-13	-52.10
4	169.37	24.84	-95.26	-70.42	-13	-57.42
5	317.11	32.36	-95.26	-62.90	-13	-49.90
6	552.2	30.9	-95.26	-64.36	-13	-51.36

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 5MHz

Mode	TX channel 23035	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.18	32.28	-95.26	-62.98	-13	-49.98
2	87	34.31	-95.26	-60.95	-13	-47.95
3	124.9	27.07	-95.26	-68.19	-13	-55.19
4	168.74	31.98	-95.26	-63.28	-13	-50.28
5	317.14	30.62	-95.26	-64.64	-13	-51.64
6	553.64	29.06	-95.26	-66.20	-13	-53.20
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.66	34.07	-95.26	-61.19	-13	-48.19
2	86.36	33.29	-95.26	-61.97	-13	-48.97
3	124.59	29.2	-95.26	-66.06	-13	-53.06
4	168.74	25.17	-95.26	-70.09	-13	-57.09
5	317.23	32.25	-95.26	-63.01	-13	-50.01
6	551.78	31.66	-95.26	-63.60	-13	-50.60

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.85	32.72	-95.26	-62.54	-13	-49.54
2	87.16	34.41	-95.26	-60.85	-13	-47.85
3	125.42	28.4	-95.26	-66.86	-13	-53.86
4	169.74	32.23	-95.26	-63.03	-13	-50.03
5	317.63	30.43	-95.26	-64.83	-13	-51.83
6	553.29	29.42	-95.26	-65.84	-13	-52.84
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.41	33.98	-95.26	-61.28	-13	-48.28
2	86.8	34.04	-95.26	-61.22	-13	-48.22
3	125.19	30.71	-95.26	-64.55	-13	-51.55
4	168.3	23.91	-95.26	-71.35	-13	-58.35
5	318.24	33.16	-95.26	-62.10	-13	-49.10
6	551.93	31.08	-95.26	-64.18	-13	-51.18

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23155	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.05	32.55	-95.26	-62.71	-13	-49.71
2	85.96	35.28	-95.26	-59.98	-13	-46.98
3	124.21	28.23	-95.26	-67.03	-13	-54.03
4	169.6	31.81	-95.26	-63.45	-13	-50.45
5	318.24	30.05	-95.26	-65.21	-13	-52.21
6	552.08	29.08	-95.26	-66.18	-13	-53.18
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.26	34.47	-95.26	-60.79	-13	-47.79
2	86.73	33.87	-95.26	-61.39	-13	-48.39
3	123.73	30.51	-95.26	-64.75	-13	-51.75
4	169.19	25.2	-95.26	-70.06	-13	-57.06
5	317.19	32.34	-95.26	-62.92	-13	-49.92
6	551.99	30.83	-95.26	-64.43	-13	-51.43

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 10MHz

Mode	TX channel 23060	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.18	33.45	-95.26	-61.81	-13	-48.81
2	85.66	34.5	-95.26	-60.76	-13	-47.76
3	124.01	27.88	-95.26	-67.38	-13	-54.38
4	168.5	31.61	-95.26	-63.65	-13	-50.65
5	318.12	30.49	-95.26	-64.77	-13	-51.77
6	553.63	28.66	-95.26	-66.60	-13	-53.60
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.63	33.76	-95.26	-61.50	-13	-48.50
2	87.37	33.05	-95.26	-62.21	-13	-49.21
3	125.14	30.6	-95.26	-64.66	-13	-51.66
4	168.84	23.89	-95.26	-71.37	-13	-58.37
5	316.75	33.58	-95.26	-61.68	-13	-48.68
6	552.99	32.27	-95.26	-62.99	-13	-49.99

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.67	33.79	-95.26	-61.47	-13	-48.47
2	86.7	36.04	-95.26	-59.22	-13	-46.22
3	124.82	28.78	-95.26	-66.48	-13	-53.48
4	168.37	31.49	-95.26	-63.77	-13	-50.77
5	317.98	29.06	-95.26	-66.20	-13	-53.20
6	552.72	28.55	-95.26	-66.71	-13	-53.71
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.31	34.76	-95.26	-60.50	-13	-47.50
2	85.94	33.84	-95.26	-61.42	-13	-48.42
3	125.45	30.2	-95.26	-65.06	-13	-52.06
4	169.78	24.24	-95.26	-71.02	-13	-58.02
5	316.73	31.89	-95.26	-63.37	-13	-50.37
6	552.19	31.94	-95.26	-63.32	-13	-50.32

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23130	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.75	33.38	-95.26	-61.88	-13	-48.88
2	87.06	34.87	-95.26	-60.39	-13	-47.39
3	124.82	28.24	-95.26	-67.02	-13	-54.02
4	168.74	32.52	-95.26	-62.74	-13	-49.74
5	318.19	29.63	-95.26	-65.63	-13	-52.63
6	552.78	29.49	-95.26	-65.77	-13	-52.77
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.1	33.72	-95.26	-61.54	-13	-48.54
2	87.45	33.32	-95.26	-61.94	-13	-48.94
3	123.83	29.81	-95.26	-65.45	-13	-52.45
4	168.84	23.25	-95.26	-72.01	-13	-59.01
5	317.38	32.84	-95.26	-62.42	-13	-49.42
6	553.18	31.64	-95.26	-63.62	-13	-50.62

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 17: 5MHz

Mode	TX channel 23755	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.51	33.15	-95.26	-62.11	-13	-49.11
2	87.26	34.27	-95.26	-60.99	-13	-47.99
3	125.72	26.97	-95.26	-68.29	-13	-55.29
4	168.59	31.81	-95.26	-63.45	-13	-50.45
5	316.87	29.79	-95.26	-65.47	-13	-52.47
6	553.16	29.53	-95.26	-65.73	-13	-52.73
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.8	34.82	-95.26	-60.44	-13	-47.44
2	85.89	34.1	-95.26	-61.16	-13	-48.16
3	125.4	28.76	-95.26	-66.50	-13	-53.50
4	168.76	25.35	-95.26	-69.91	-13	-56.91
5	317.86	32.63	-95.26	-62.63	-13	-49.63
6	551.66	32.42	-95.26	-62.84	-13	-49.84

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23790	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	44.16	32.56	-95.26	-62.70	-13	-49.70
2	86.64	33.65	-95.26	-61.61	-13	-48.61
3	125.71	26.1	-95.26	-69.16	-13	-56.16
4	168.83	31.13	-95.26	-64.13	-13	-51.13
5	316.76	30.04	-95.26	-65.22	-13	-52.22
6	553.39	29.52	-95.26	-65.74	-13	-52.74
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.05	33.93	-95.26	-61.33	-13	-48.33
2	87.08	33.72	-95.26	-61.54	-13	-48.54
3	123.73	28.54	-95.26	-66.72	-13	-53.72
4	169.63	25.61	-95.26	-69.65	-13	-56.65
5	317.69	32.08	-95.26	-63.18	-13	-50.18
6	551.42	31.69	-95.26	-63.57	-13	-50.57

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23825	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.22	31.47	-95.26	-63.79	-13	-50.79
2	86.18	34.04	-95.26	-61.22	-13	-48.22
3	125.61	27.48	-95.26	-67.78	-13	-54.78
4	168.83	32.18	-95.26	-63.08	-13	-50.08
5	317.16	29.82	-95.26	-65.44	-13	-52.44
6	553.77	28.92	-95.26	-66.34	-13	-53.34
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.09	34.28	-95.26	-60.98	-13	-47.98
2	86.34	32.53	-95.26	-62.73	-13	-49.73
3	123.77	28.42	-95.26	-66.84	-13	-53.84
4	168.02	25.7	-95.26	-69.56	-13	-56.56
5	317.91	32.79	-95.26	-62.47	-13	-49.47
6	552.39	31.37	-95.26	-63.89	-13	-50.89

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 17: 10MHz

Mode	TX channel 23780	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.47	32.18	-95.26	-63.08	-13	-50.08
2	87.85	35.2	-95.26	-60.06	-13	-47.06
3	124.68	27.74	-95.26	-67.52	-13	-54.52
4	168.02	31.21	-95.26	-64.05	-13	-51.05
5	317.35	30.62	-95.26	-64.64	-13	-51.64
6	554.04	29.34	-95.26	-65.92	-13	-52.92
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.58	34.39	-95.26	-60.87	-13	-47.87
2	85.98	32.79	-95.26	-62.47	-13	-49.47
3	124.33	28.4	-95.26	-66.86	-13	-53.86
4	168.24	25.68	-95.26	-69.58	-13	-56.58
5	316.39	32.05	-95.26	-63.21	-13	-50.21
6	551.16	31.02	-95.26	-64.24	-13	-51.24

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23790	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.27	33.06	-95.26	-62.20	-13	-49.20
2	87.24	33.86	-95.26	-61.40	-13	-48.40
3	124.03	27.22	-95.26	-68.04	-13	-55.04
4	168.29	31.9	-95.26	-63.36	-13	-50.36
5	317.25	30.42	-95.26	-64.84	-13	-51.84
6	553.34	29.52	-95.26	-65.74	-13	-52.74
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	42.46	33.57	-95.26	-61.69	-13	-48.69
2	86.57	33.45	-95.26	-61.81	-13	-48.81
3	125.01	29.03	-95.26	-66.23	-13	-53.23
4	168.03	24.18	-95.26	-71.08	-13	-58.08
5	317.58	31.27	-95.26	-63.99	-13	-50.99
6	552.57	31.91	-95.26	-63.35	-13	-50.35

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23800	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	43.43	31.64	-95.26	-63.62	-13	-50.62
2	86.69	35.23	-95.26	-60.03	-13	-47.03
3	124.62	26.17	-95.26	-69.09	-13	-56.09
4	167.88	31.61	-95.26	-63.65	-13	-50.65
5	317.88	31.33	-95.26	-63.93	-13	-50.93
6	554.09	28.25	-95.26	-67.01	-13	-54.01
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	41.71	33.84	-95.26	-61.42	-13	-48.42
2	85.88	32.93	-95.26	-62.33	-13	-49.33
3	123.74	29.08	-95.26	-66.18	-13	-53.18
4	168.17	25.1	-95.26	-70.16	-13	-57.16
5	317.49	32.92	-95.26	-62.34	-13	-49.34
6	551.47	31.94	-95.26	-63.32	-13	-50.32

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

ABOVE 1GHz

WCDMA:

Mode	TX channel 1312	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3424.8	38.41	-95.26	-56.85	-13	-43.85
2	5137.2	45.71	-95.26	-49.55	-13	-36.55
3	6849.6	44.85	-95.26	-50.41	-13	-37.41
4	8562	56.99	-95.26	-38.27	-13	-25.27
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3424.8	38.43	-95.26	-56.83	-13	-43.83
2	5137.2	45.38	-95.26	-49.88	-13	-36.88
3	6849.6	48.28	-95.26	-46.98	-13	-33.98
4	8562	57.45	-95.26	-37.81	-13	-24.81

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 1413	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465.2	37.89	-95.26	-57.37	-13	-44.37
2	5197.8	45.56	-95.26	-49.70	-13	-36.70
3	6930.4	46.27	-95.26	-48.99	-13	-35.99
4	8663	56.68	-95.26	-38.58	-13	-25.58
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465.2	37.01	-95.26	-58.25	-13	-45.25
2	5197.8	45.99	-95.26	-49.27	-13	-36.27
3	6930.4	48.61	-95.26	-46.65	-13	-33.65
4	8663	57.65	-95.26	-37.61	-13	-24.61

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 1513	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3505.2	37.1	-95.26	-58.16	-13	-45.16
2	5257.8	44.22	-95.26	-51.04	-13	-38.04
3	7010.4	45.06	-95.26	-50.20	-13	-37.20
4	8763	56.71	-95.26	-38.55	-13	-25.55
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3505.2	37.78	-95.26	-57.48	-13	-44.48
2	5257.8	45.2	-95.26	-50.06	-13	-37.06
3	7010.4	49.24	-95.26	-46.02	-13	-33.02
4	8763	57.18	-95.26	-38.08	-13	-25.08

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 1.4MHz

Mode	TX channel 19957	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3421.4	37.92	-95.26	-57.34	-13	-44.34
2	5132.1	44.77	-95.26	-50.49	-13	-37.49
3	6842.8	49.64	-95.26	-45.62	-13	-32.62
4	8553.5	61.67	-95.26	-33.59	-13	-20.59
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3421.4	37.9	-95.26	-57.36	-13	-44.36
2	5132.1	45.41	-95.26	-49.85	-13	-36.85
3	6842.8	53.81	-95.26	-41.45	-13	-28.45
4	8553.5	61.1	-95.26	-34.16	-13	-21.16

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	38.7	-95.26	-56.56	-13	-43.56
2	5197.5	44.2	-95.26	-51.06	-13	-38.06
3	6930	49.5	-95.26	-45.76	-13	-32.76
4	8662.5	62.1	-95.26	-33.16	-13	-20.16
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	38	-95.26	-57.26	-13	-44.26
2	5197.5	45.1	-95.26	-50.16	-13	-37.16
3	6930	54.5	-95.26	-40.76	-13	-27.76
4	8662.5	61.6	-95.26	-33.66	-13	-20.66

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20393	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3508.6	38.77	-95.26	-56.49	-13	-43.49
2	5262.9	45.04	-95.26	-50.22	-13	-37.22
3	7017.2	50.19	-95.26	-45.07	-13	-32.07
4	8771.5	62.83	-95.26	-32.43	-13	-19.43
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3508.6	37.49	-95.26	-57.77	-13	-44.77
2	5262.9	45.07	-95.26	-50.19	-13	-37.19
3	7017.2	55.08	-95.26	-40.18	-13	-27.18
4	8771.5	61.25	-95.26	-34.01	-13	-21.01

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 3MHz

Mode	TX channel 19965	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3423	37.82	-95.26	-57.44	-13	-44.44
2	5134.5	44.43	-95.26	-50.83	-13	-37.83
3	6846	49.72	-95.26	-45.54	-13	-32.54
4	8557.5	62.98	-95.26	-32.28	-13	-19.28
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3423	37.24	-95.26	-58.02	-13	-45.02
2	5134.5	44.67	-95.26	-50.59	-13	-37.59
3	6846	54.78	-95.26	-40.48	-13	-27.48
4	8557.5	60.69	-95.26	-34.57	-13	-21.57

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	39.14	-95.26	-56.12	-13	-43.12
2	5197.5	44.28	-95.26	-50.98	-13	-37.98
3	6930	50.23	-95.26	-45.03	-13	-32.03
4	8662.5	62.58	-95.26	-32.68	-13	-19.68
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	37.18	-95.26	-58.08	-13	-45.08
2	5197.5	45.3	-95.26	-49.96	-13	-36.96
3	6930	54.82	-95.26	-40.44	-13	-27.44
4	8662.5	62.26	-95.26	-33.00	-13	-20.00

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20385	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3507	38.25	-95.26	-57.01	-13	-44.01
2	5260.5	44.02	-95.26	-51.24	-13	-38.24
3	7014	49.19	-95.26	-46.07	-13	-33.07
4	8767.5	61.4	-95.26	-33.86	-13	-20.86
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3507	38.28	-95.26	-56.98	-13	-43.98
2	5260.5	44.8	-95.26	-50.46	-13	-37.46
3	7014	55.08	-95.26	-40.18	-13	-27.18
4	8767.5	61.14	-95.26	-34.12	-13	-21.12

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 5MHz

Mode	TX channel 19975	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3425	38.49	-95.26	-56.77	-13	-43.77
2	5137.5	43.21	-95.26	-52.05	-13	-39.05
3	6850	49.32	-95.26	-45.94	-13	-32.94
4	8562.5	61.84	-95.26	-33.42	-13	-20.42
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3425	38.45	-95.26	-56.81	-13	-43.81
2	5137.5	45.3	-95.26	-49.96	-13	-36.96
3	6850	55.01	-95.26	-40.25	-13	-27.25
4	8562.5	62.6	-95.26	-32.66	-13	-19.66

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	37.85	-95.26	-57.41	-13	-44.41
2	5197.5	43.31	-95.26	-51.95	-13	-38.95
3	6930	49.18	-95.26	-46.08	-13	-33.08
4	8662.5	61.75	-95.26	-33.51	-13	-20.51
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	37.52	-95.26	-57.74	-13	-44.74
2	5197.5	44.57	-95.26	-50.69	-13	-37.69
3	6930	53.82	-95.26	-41.44	-13	-28.44
4	8662.5	61.47	-95.26	-33.79	-13	-20.79

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20375	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3505	38.14	-95.26	-57.12	-13	-44.12
2	5257.5	43.26	-95.26	-52.00	-13	-39.00
3	7010	48.79	-95.26	-46.47	-13	-33.47
4	8762.5	62.61	-95.26	-32.65	-13	-19.65
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3505	37.62	-95.26	-57.64	-13	-44.64
2	5257.5	45.13	-95.26	-50.13	-13	-37.13
3	7010	54.42	-95.26	-40.84	-13	-27.84
4	8762.5	61.36	-95.26	-33.90	-13	-20.90

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 10MHz

Mode	TX channel 20000	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3430	39.59	-95.26	-55.67	-13	-42.67
2	5145	43.24	-95.26	-52.02	-13	-39.02
3	6860	49.31	-95.26	-45.95	-13	-32.95
4	8575	61.8	-95.26	-33.46	-13	-20.46
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3430	38.85	-95.26	-56.41	-13	-43.41
2	5145	45.6	-95.26	-49.66	-13	-36.66
3	6860	54.38	-95.26	-40.88	-13	-27.88
4	8575	60.69	-95.26	-34.57	-13	-21.57

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	38.46	-95.26	-56.80	-13	-43.80
2	5197.5	44.45	-95.26	-50.81	-13	-37.81
3	6930	48.94	-95.26	-46.32	-13	-33.32
4	8662.5	62.31	-95.26	-32.95	-13	-19.95
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	37.93	-95.26	-57.33	-13	-44.33
2	5197.5	44.46	-95.26	-50.80	-13	-37.80
3	6930	54.12	-95.26	-41.14	-13	-28.14
4	8662.5	61.68	-95.26	-33.58	-13	-20.58

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20350	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3500	39.64	-95.26	-55.62	-13	-42.62
2	5250	43.59	-95.26	-51.67	-13	-38.67
3	7000	48.65	-95.26	-46.61	-13	-33.61
4	8750	61.37	-95.26	-33.89	-13	-20.89
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3500	38.45	-95.26	-56.81	-13	-43.81
2	5250	44.65	-95.26	-50.61	-13	-37.61
3	7000	53.82	-95.26	-41.44	-13	-28.44
4	8750	62.32	-95.26	-32.94	-13	-19.94

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 15MHz

Mode	TX channel 20025	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3435	39.34	-95.26	-55.92	-13	-42.92
2	5152.5	45.01	-95.26	-50.25	-13	-37.25
3	6870	49.76	-95.26	-45.50	-13	-32.50
4	8587.5	62.79	-95.26	-32.47	-13	-19.47
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3435	37.16	-95.26	-58.10	-13	-45.10
2	5152.5	45.96	-95.26	-49.30	-13	-36.30
3	6870	54.62	-95.26	-40.64	-13	-27.64
4	8587.5	62.56	-95.26	-32.70	-13	-19.70

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	38.13	-95.26	-57.13	-13	-44.13
2	5197.5	44.42	-95.26	-50.84	-13	-37.84
3	6930	49.05	-95.26	-46.21	-13	-33.21
4	8662.5	61.39	-95.26	-33.87	-13	-20.87
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	38.57	-95.26	-56.69	-13	-43.69
2	5197.5	45.9	-95.26	-49.36	-13	-36.36
3	6930	55.47	-95.26	-39.79	-13	-26.79
4	8662.5	61.01	-95.26	-34.25	-13	-21.25

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20325	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3495	39.03	-95.26	-56.23	-13	-43.23
2	5242.5	44.86	-95.26	-50.40	-13	-37.40
3	6990	48.71	-95.26	-46.55	-13	-33.55
4	8737.5	61.53	-95.26	-33.73	-13	-20.73
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3495	38.31	-95.26	-56.95	-13	-43.95
2	5242.5	44.26	-95.26	-51.00	-13	-38.00
3	6990	54.49	-95.26	-40.77	-13	-27.77
4	8737.5	60.83	-95.26	-34.43	-13	-21.43

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 4: 20MHz

Mode	TX channel 20050	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3440	38.41	-95.26	-56.85	-13	-43.85
2	5160	43.32	-95.26	-51.94	-13	-38.94
3	6880	48.64	-95.26	-46.62	-13	-33.62
4	8600	62.8	-95.26	-32.46	-13	-19.46
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3440	37.75	-95.26	-57.51	-13	-44.51
2	5160	45.37	-95.26	-49.89	-13	-36.89
3	6880	54.52	-95.26	-40.74	-13	-27.74
4	8600	61.68	-95.26	-33.58	-13	-20.58

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20175	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	38.05	-95.26	-57.21	-13	-44.21
2	5197.5	44.39	-95.26	-50.87	-13	-37.87
3	6930	50.14	-95.26	-45.12	-13	-32.12
4	8662.5	63.07	-95.26	-32.19	-13	-19.19
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3465	38.72	-95.26	-56.54	-13	-43.54
2	5197.5	45.11	-95.26	-50.15	-13	-37.15
3	6930	54.9	-95.26	-40.36	-13	-27.36
4	8662.5	61.07	-95.26	-34.19	-13	-21.19

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 20300	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490	39.64	-95.26	-55.62	-13	-42.62
2	5235	44.37	-95.26	-50.89	-13	-37.89
3	6980	50.49	-95.26	-44.77	-13	-31.77
4	8725	62.59	-95.26	-32.67	-13	-19.67
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490	37.05	-95.26	-58.21	-13	-45.21
2	5235	44.52	-95.26	-50.74	-13	-37.74
3	6980	55.23	-95.26	-40.03	-13	-27.03
4	8725	62.37	-95.26	-32.89	-13	-19.89

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 1.4MHz

Mode	TX channel 23017	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1399.4	36.87	-95.26	-58.39	-13	-45.39
2	2099.1	36.39	-95.26	-58.87	-13	-45.87
3	2798.8	46.28	-95.26	-48.98	-13	-35.98
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1399.4	38.31	-95.26	-56.95	-13	-43.95
2	2099.1	37.88	-95.26	-57.38	-13	-44.38
3	2798.8	43.3	-95.26	-51.96	-13	-38.96

Remarks:
1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	36.26	-95.26	-59.00	-13	-46.00
2	2122.5	36.41	-95.26	-58.85	-13	-45.85
3	2830	44.65	-95.26	-50.61	-13	-37.61
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	36.74	-95.26	-58.52	-13	-45.52
2	2122.5	37.07	-95.26	-58.19	-13	-45.19
3	2830	43.68	-95.26	-51.58	-13	-38.58

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23173	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1430.6	37.03	-95.26	-58.23	-13	-45.23
2	2145.9	37.06	-95.26	-58.20	-13	-45.20
3	2861.2	44.81	-95.26	-50.45	-13	-37.45
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1430.6	38.35	-95.26	-56.91	-13	-43.91
2	2145.9	37.19	-95.26	-58.07	-13	-45.07
3	2861.2	44.63	-95.26	-50.63	-13	-37.63

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 3MHz

Mode	TX channel 23025	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1401	37.59	-95.26	-57.67	-13	-44.67
2	2101.5	37.18	-95.26	-58.08	-13	-45.08
3	2802	46	-95.26	-49.26	-13	-36.26
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1401	36.73	-95.26	-58.53	-13	-45.53
2	2101.5	37.13	-95.26	-58.13	-13	-45.13
3	2802	43.82	-95.26	-51.44	-13	-38.44

Remarks:
1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	37.29	-95.26	-57.97	-13	-44.97
2	2122.5	37.84	-95.26	-57.42	-13	-44.42
3	2830	45.52	-95.26	-49.74	-13	-36.74
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	36.86	-95.26	-58.40	-13	-45.40
2	2122.5	38.08	-95.26	-57.18	-13	-44.18
3	2830	44.12	-95.26	-51.14	-13	-38.14

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23165	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1429	36.79	-95.26	-58.47	-13	-45.47
2	2143.5	36.07	-95.26	-59.19	-13	-46.19
3	2858	44.89	-95.26	-50.37	-13	-37.37
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1429	38.3	-95.26	-56.96	-13	-43.96
2	2143.5	38.09	-95.26	-57.17	-13	-44.17
3	2858	42.93	-95.26	-52.33	-13	-39.33

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 5MHz

Mode	TX channel 23035	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1403	37.59	-95.26	-57.67	-13	-44.67
2	2104.5	37.72	-95.26	-57.54	-13	-44.54
3	2806	45.17	-95.26	-50.09	-13	-37.09
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1403	38.28	-95.26	-56.98	-13	-43.98
2	2104.5	37.51	-95.26	-57.75	-13	-44.75
3	2806	44.62	-95.26	-50.64	-13	-37.64

Remarks:
1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	37.08	-95.26	-58.18	-13	-45.18
2	2122.5	36.41	-95.26	-58.85	-13	-45.85
3	2830	46.21	-95.26	-49.05	-13	-36.05
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	38.63	-95.26	-56.63	-13	-43.63
2	2122.5	38.39	-95.26	-56.87	-13	-43.87
3	2830	42.85	-95.26	-52.41	-13	-39.41

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23155	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1427	37.09	-95.26	-58.17	-13	-45.17
2	2140.5	37.2	-95.26	-58.06	-13	-45.06
3	2854	45.01	-95.26	-50.25	-13	-37.25
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1427	37.71	-95.26	-57.55	-13	-44.55
2	2140.5	37.39	-95.26	-57.87	-13	-44.87
3	2854	44.23	-95.26	-51.03	-13	-38.03

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 12: 10MHz

Mode	TX channel 23060	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1408	36.14	-95.26	-59.12	-13	-46.12
2	2112	36.84	-95.26	-58.42	-13	-45.42
3	2816	44.63	-95.26	-50.63	-13	-37.63
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1408	38.25	-95.26	-57.01	-13	-44.01
2	2112	37.08	-95.26	-58.18	-13	-45.18
3	2816	43.46	-95.26	-51.80	-13	-38.80

Remarks:
1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23095	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	37.15	-95.26	-58.11	-13	-45.11
2	2122.5	37.04	-95.26	-58.22	-13	-45.22
3	2830	44.84	-95.26	-50.42	-13	-37.42
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1415	38.11	-95.26	-57.15	-13	-44.15
2	2122.5	37.41	-95.26	-57.85	-13	-44.85
3	2830	44.5	-95.26	-50.76	-13	-37.76

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23130	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1422	37.09	-95.26	-58.17	-13	-45.17
2	2133	36.98	-95.26	-58.28	-13	-45.28
3	2844	46.31	-95.26	-48.95	-13	-35.95
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1422	37.35	-95.26	-57.91	-13	-44.91
2	2133	38.16	-95.26	-57.10	-13	-44.10
3	2844	43.23	-95.26	-52.03	-13	-39.03

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 17: 5MHz

Mode	TX channel 23755	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1413	36.93	-95.26	-58.33	-13	-45.33
2	2119.5	37.23	-95.26	-58.03	-13	-45.03
3	2826	46.07	-95.26	-49.19	-13	-36.19
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1413	38.04	-95.26	-57.22	-13	-44.22
2	2119.5	39.83	-95.26	-55.43	-13	-42.43
3	2826	42.98	-95.26	-52.28	-13	-39.28

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23790	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1420	36.99	-95.26	-58.27	-13	-45.27
2	2130	36.88	-95.26	-58.38	-13	-45.38
3	2840	44.69	-95.26	-50.57	-13	-37.57
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1420	37.66	-95.26	-57.60	-13	-44.60
2	2130	38.51	-95.26	-56.75	-13	-43.75
3	2840	44.67	-95.26	-50.59	-13	-37.59

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23825	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1427	38.02	-95.26	-57.24	-13	-44.24
2	2140.5	37.05	-95.26	-58.21	-13	-45.21
3	2854	46.17	-95.26	-49.09	-13	-36.09
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1427	39.15	-95.26	-56.11	-13	-43.11
2	2140.5	38.63	-95.26	-56.63	-13	-43.63
3	2854	43.24	-95.26	-52.02	-13	-39.02

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

LTE Band 17: 10MHz

Mode	TX channel 23780	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1418	36.97	-95.26	-58.29	-13	-45.29
2	2127	36.9	-95.26	-58.36	-13	-45.36
3	2836	46.46	-95.26	-48.80	-13	-35.80
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1418	39.21	-95.26	-56.05	-13	-43.05
2	2127	40.04	-95.26	-55.22	-13	-42.22
3	2836	43.28	-95.26	-51.98	-13	-38.98

Remarks:
1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23790	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1420	38.52	-95.26	-56.74	-13	-43.74
2	2130	37.74	-95.26	-57.52	-13	-44.52
3	2840	45.4	-95.26	-49.86	-13	-36.86
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1420	38.98	-95.26	-56.28	-13	-43.28
2	2130	38.19	-95.26	-57.07	-13	-44.07
3	2840	43.83	-95.26	-51.43	-13	-38.43

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Mode	TX channel 23800	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1422	38.36	-95.26	-56.90	-13	-43.90
2	2133	38.37	-95.26	-56.89	-13	-43.89
3	2844	43.38	-95.26	-51.88	-13	-38.88
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμ V/m)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1422	38.41	-95.26	-56.85	-13	-43.85
2	2133	38.89	-95.26	-56.37	-13	-43.37
3	2844	43.83	-95.26	-51.43	-13	-38.43

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dBμ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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