FCC Test Report (PART 27)

Report No.:	RF180206E03-4
FCC ID:	S9GM510
Test Model:	M510
Received Date:	Feb. 06, 2018
Test Date:	Mar. 07 to 22, 2018
Issued Date:	Apr. 24, 2018
Applicant:	Ruckus Wireless, Inc.
Address:	350 West Java Drive, Sunnyvale, CA 94089
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

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Table of Contents

Release Control Record 4

1 Certificate of Conformity 5

2 Summary of Test Results 6

2.1 Measurement Uncertainty 6
2.2 Test Site and Instruments 7

3 General Information 9

3.1 General Description of EUT 9
3.2 Configuration of System under Test 12
3.2.1 Description of Support Units 13
3.3 Test Mode Applicability and Tested Channel Detail 14
3.4 EUT Operating Conditions 19
3.5 General Description of Applied Standards 19

4 Test Types and Results 20

4.1 Output Power Measurement 20
4.1.1 Limits of Output Power Measurement 20
4.1.2 Test Procedures 20
4.1.3 Test Setup 20
4.1.4 Test Results 21
4.2 Modulation characteristics Measurement 34
4.2.1 Limits of Modulation characteristics 34
4.2.2 Test Procedure 34
4.2.3 Test Setup 34
4.2.4 Test Results 35
4.3 Frequency Stability Measurement 36
4.3.1 Limits of Frequency Stabiliity Measurement 36
4.3.2 Test Procedure 36
4.3.3 Test Setup 36
4.3.4 Test Results 37
4.4 Emission Bandwidth Measurement 40
4.4.1 Limits of Emission Bandwidth Measurement 40
4.4.2 Test Procedure 40
4.4.3 Test Setup 40
4.4.4 Test Results (-26dBc Bandwidth) 41
4.4.5 Test Results (Occupied Bandwidth) 45
4.5 Channel Edge Measurement 49
4.5.1 Limits of Channel Edge Measurement 49
4.5.2 Test Setup 49
4.5.3 Test Procedures 49
4.5.4 Test Results 50
4.6 Peak to Average Ratio 61
4.5.1 Limits of Peak to Average Ratio Measurement 61
4.5.2 Test Setup 61
4.5.3 Test Procedures 61
4.5.4 Test Results 62
4.7 Conducted Spurious Emissions 66
4.7.1 Limits of Conducted Spurious Emissions Measurement 66
4.7.2 Test Setup 66
4.7.3 Test Procedure 66
4.7.5 Test Results 67
4.8 Radiated Emission Measurement 92
4.8.1 Limits of Radiated Emission Measurement 92
4.8.2 Test Procedure 92
4.8.3 Deviation from Test Standard 92

4.8.4 Test Setup 93
4.8.5 Test Results 94
5 Pictures of Test Arrangements 160
Appendix – Information on the Testing Laboratories 161

Release Control Record

Issue No.	Description	Date Issued
RF180206E03-4	Original release.	Apr. 24, 2018

1 Certificate of Conformity

Product:	M510 Access Point
Brand:	Ruckus Wireless
Test Model:	M510
Sample Status:	ENGINEERING SAMPLE
Applicant:	Ruckus Wireless, Inc.
Test Date:	Mar. 07 to 22, 2018
Standards:	FCC Part 27 Subpart L FCC Part 27 Subpart H FCC Part 2

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 : _____ , **Date:** Apr. 24, 2018

Claire Kuan / Specialist

Approved by : _____ , **Date:** Apr. 24, 2018

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 -17.80dB at 17526MHz.

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	5.33 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.10 dB
	6GHz ~ 18GHz	4.85 dB
	18GHz ~ 40GHz	5.24 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 08, 2017	July 07, 2018
Pre-Amplifier EMCI	EMC001340	980142	Feb. 09, 2018	Feb. 08, 2019
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2016	Dec. 15, 2018
RF Cable	5D-FB	LOOPCAB-001 LOOPCAB-002	Jan. 15, 2018	Jan. 14, 2019
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-01	Nov. 09, 2017	Nov. 08, 2018
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Nov. 29, 2017	Nov. 28, 2018
RF Cable	8D	966-4-1 966-4-2 966-4-3	Apr. 01, 2017	Mar. 31, 2018
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-4-01	Oct. 03, 2017	Oct. 02, 2018
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Dec. 12, 2017	Dec. 11, 2018
Pre-Amplifier EMCI	EMC12630SE	980385	Jan. 29, 2018	Jan. 28, 2019
RF Cable	EMC104-SM-SM-1200 EMC104-SM-SM-2000 EMC104-SM-SM-5000	160923 150318 150321	Jan. 29, 2018	Jan. 28, 2019
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 29, 2018	Jan. 28, 2019
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 14, 2017	Dec. 13, 2018
RF Cable	EMC102-KM-KM-1200	160925	Jan. 29, 2018	Jan. 28, 2019
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208410	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP02	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 calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 4.
4. The CANADA Site Registration No. is 20331-2
5. Loop antenna was used for all emissions below 30 MHz.
6. Tested Date: Mar. 07 to 22, 2018

For other test items:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSV40	100964	July 01, 2017	June 30, 2018
Spectrum Analyzer Agilent	E4446A	MY48250254	Nov. 21, 2017	Nov. 20, 2018
Power meter Anritsu	ML2495A	1014008	May 11, 2017	May 10, 2018
Power sensor Anritsu	MA2411B	0917122	May 11, 2017	May 10, 2018
AC Power Source Extech Electronics	6205	1440452	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 10, 2018	Jan. 09, 2019
DC Power Supply Topward	6603D	795558	NA	NA
True RMS Clamp Meter FLUKE	325	31130711WS	May 29, 2017	May 28, 2018
ESG Vector signal generator Agilent	E4438C	MY45094468/005 506 602 UK6 UNJ	Nov. 26, 2017	Nov. 25, 2018
ESG Vector signal generator Agilent	E4438C	MY47271330 506 602 UNJ	Oct. 11, 2017	Oct. 10, 2018
Mech Switch Absorptive Mini-Circuits	MSP4TA-18+	0140	Feb. 12, 2018	Feb. 11, 2019
FXD ATTEN Mini-Circuits	BW-S3W2+	MN71981	Feb. 12, 2018	Feb. 11, 2019
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA

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: Mar. 08 to 13, 2018

3 General Information

3.1 General Description of EUT

Product	M510 Access Point	
Brand	Ruckus Wireless	
Test Model	M510	
Status of EUT	ENGINEERING SAMPLE	
Power Supply Rating	DC 48V from POE or DC 12V from adapter or DC 12V from Terminal	
Modulation Type	WCDMA, HSDPA, HSUPA	BPSK
	LTE	QPSK, 16QAM
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
Max. EIRP Power	WCDMA Band 4	261.22mW(24.17dBm)
	LTE Band 4 (Channel Bandwidth 1.4MHz)	213.30mW(23.29dBm)
	LTE Band 4 (Channel Bandwidth 3MHz)	211.35mW(23.25dBm)
	LTE Band 4 (Channel Bandwidth 5MHz)	217.27mW(23.37dBm)
	LTE Band 4 (Channel Bandwidth 10MHz)	218.27mW(23.39dBm)
	LTE Band 4 (Channel Bandwidth 15MHz)	214.78mW(23.32dBm)
	LTE Band 4 (Channel Bandwidth 20MHz)	220.29mW(23.43dBm)
Max. ERP Power	LTE Band 12 (Channel Bandwidth 1.4MHz)	179.06mW(22.53dBm)
	LTE Band 12 (Channel Bandwidth 3MHz)	177.42mW(22.49dBm)
	LTE Band 12 (Channel Bandwidth 5MHz)	172.58mW(22.37dBm)
	LTE Band 12 (Channel Bandwidth 10MHz)	174.98mW(22.43dBm)

Emission Designator	WCDMA Band 4	4M14F9W
	LTE Band 4 (Channel Bandwidth 1.4MHz)	QPSK: 1M10G7D
		16QAM: 1M10D7W
	LTE Band 4 (Channel Bandwidth 3MHz)	QPSK: 2M71G7D
		16QAM: 2M69D7W
	LTE Band 4 (Channel Bandwidth 5MHz)	QPSK: 4M51G7D
		16QAM: 4M52D7W
	LTE Band 4 (Channel Bandwidth 10MHz)	QPSK: 9M00G7D
		16QAM: 8M98D7W
	LTE Band 4 (Channel Bandwidth 15MHz)	QPSK: 13M5G7D
		16QAM: 13M5D7W
	LTE Band 4 (Channel Bandwidth 20MHz)	QPSK: 18M0G7D
		16QAM: 18M0D7W
	LTE Band 12 (Channel Bandwidth 1.4MHz)	QPSK: 1M10G7D
		16QAM: 1M10D7W
	LTE Band 12 (Channel Bandwidth 3MHz)	QPSK: 2M71G7D
		16QAM: 2M69D7W
	LTE Band 12 (Channel Bandwidth 5MHz)	QPSK: 4M50G7D
		16QAM: 4M50D7W
	LTE Band 12 (Channel Bandwidth 10MHz)	QPSK: 9M00G7D
		16QAM: 8M98D7W
Antenna Type	Refer to note as below	
Antenna Connector	Refer to user's manual	
Accessory Device	NA	
Data Cable Supplied	NA	

Note:

1. The EUT is a WLAN, WWAN and GPS device.
2. Simultaneously transmission condition.

Condition	Technology			
1	WLAN 2.4GHz	WLAN 5GHz	WWAN WCDMA	GPS
2	WLAN 2.4GHz	WLAN 5GHz	WWAN LTE	GPS
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.				

3. The EUT must be supplied with a POE or power adapter as following table:

PoE (only for test)		
Brand	Model No.	Spec.
Ruckus Wireless, Inc	740-64214-001	Input: 100-240V, 0.75A, 50/60Hz Output: 48V, 0.5A
Adapter (only for test)		
Brand	Model No.	Spec.
Ruckus Wireless, Inc	NBS24J120200B3	Input: 100-240V, 0.6A, 50/60Hz Output: 12V, 2.0A

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

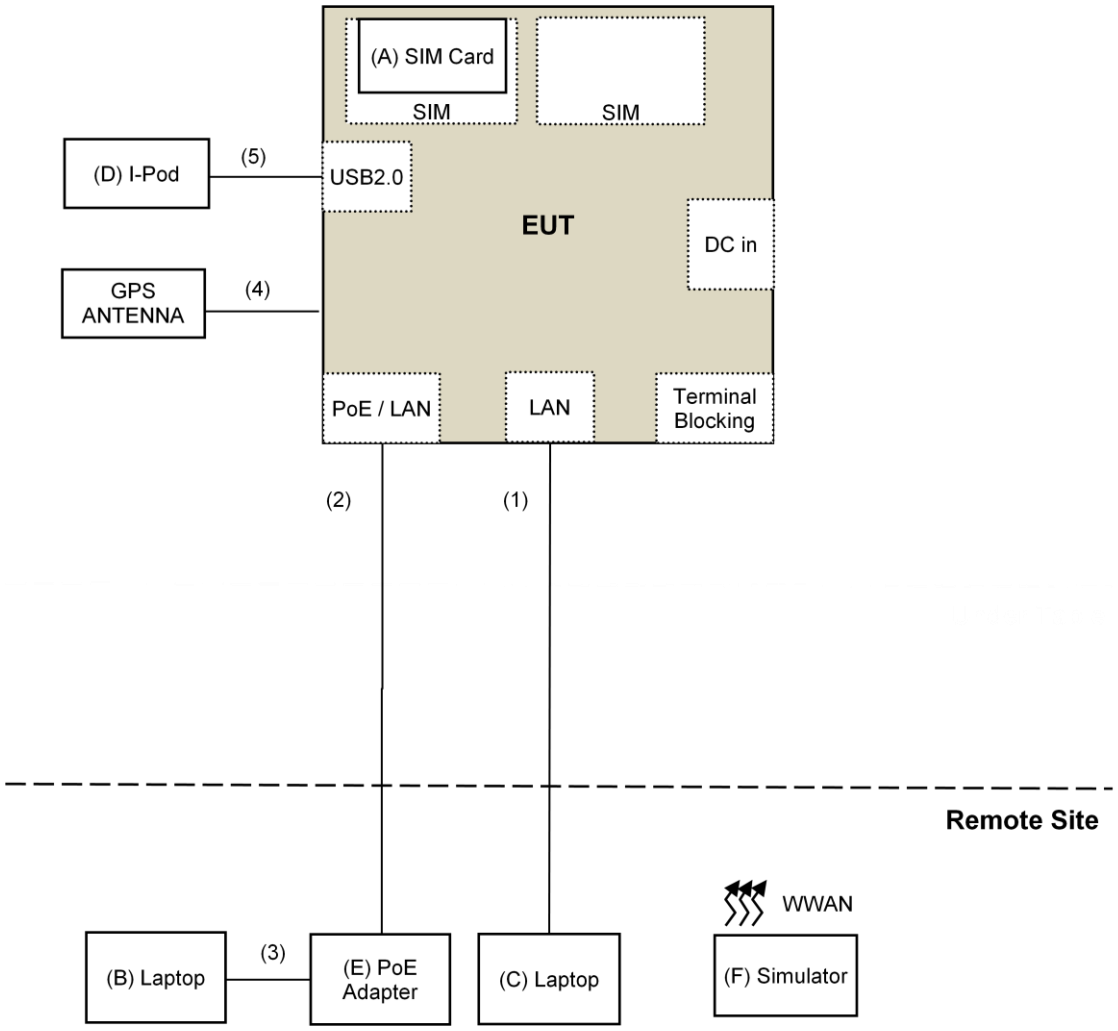
WLAN								
Antenna NO.	Transmitter Circuit	Antenna Net Gain(dBi)	Frequency range (GHz)	Antenna Type	Connecter Type	Cable Length (mm)	Cable Loss (dB)	Excluding cable loss Antenna Gain(dBi)
1	5GHz_chain_0 2.4GHz_chain_1	1	2.4~2.4835	PIFA	i-pex (MHF)	120	0	1
		3	5.15~5.85				0	3
2	5GHz_chain_1 2.4GHz_chain_0	1.2	2.4~2.4835	PIFA	i-pex (MHF)	70	0	1.2
		3	5.15~5.85				0	3

GPS						
Antenna Net Gain(dBi)	Frequency range (MHz)	Antenna Type	Connecter Type	Cable Length (mm)	Cable Loss (dB)	Excluding cable loss Antenna Gain(dBi)
1.66	1575.42	Dipole	i-pex (MHF)	80	0.34	2

WWAN						
Antenna NO.	Antenna Type	Brand	Model	Band	Freq. Range	Gain (dBi)
1 (Main)	Dipole	Aristotle	RFA-LTE-C55-B70-C255	WCDMA II (B2)	1850~1910	1.66
				WCDMA IV (B4)	1710~1755	1.66
				WCDMA V (B5)	824~849	1.66
				LTE Band (2)	1850~1910	1.66
				LTE Band (4)	1710~1755	1.66
				LTE Band (12)	698~716	1.53
2 (Aux)	Dipole	Aristotle	RFA-LTE-C55-B70-C255	WCDMA II (B2)	1850~1910	1.5
				WCDMA IV (B4)	1710~1755	1.5
				WCDMA V (B5)	824~849	1.5
				LTE Band (2)	1850~1910	1.5
				LTE Band (4)	1710~1755	1.5
				LTE Band (12)	698~716	1.37

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.	SIM Card	R&S	CMW-Z04	NA	NA	Provided by Lab
B.	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab
C.	Laptop	DELL	E6420	482T3R1	FCC DoC	Provided by Lab
D.	iPod	Apple	MD778TA/A	CC4JL03FF4T1	NA	Provided by Lab
E.	PoE Adapter	Ruckus	740-64214-001	NA	NA	Supplied by client
F.	Simulator	R&S	CMW500	151084	NA	Provided by Lab (for LTE)
	Simulator	R&S	CMU200	121040	NA	Provided by Lab (for WCDMA)

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.	RJ-45 Cable	1	10	No	0	Provided by Lab
2.	RJ-45 Cable	1	10	No	0	Provided by Lab
3.	RJ-45 Cable	1	3	No	0	Provided by Lab
4.	GPS Cable	1	5	No	0	Supplied by client
5.	USB Cable	1	0.1	Yes	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, XY axis and antenna ports
The worst case was found when positioned on Y-plane. Following channel(s) was (were) selected for the final test as listed below:

Test results are presented in the report as below.

Test Mode	Test Condition
A	Power from POE
B	Power from adapter
C	Power from Terminal

The worst radiated emission was found in **Mode A**. Therefore only the test data of the modes were recorded in this report.

WCDMA IV

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
EIRP	1312 to 1513	1312, 1413, 1513	WCDMA
Modulation characteristics	1312 to 1513	1413	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

Test Condition:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
EIRP	25deg. C, 63%RH	120Vac, 60Hz	Jyunchun Lin
Modulation characteristics	25deg. C, 63%RH	120Vac, 60Hz	Jyunchun Lin
Frequency Stability	25deg. C, 63%RH	120Vac, 60Hz	Jyunchun Lin
Occupied Bandwidth	25deg. C, 63%RH	120Vac, 60Hz	Jyunchun Lin
Band Edge	25deg. C, 63%RH	120Vac, 60Hz	Jyunchun Lin
Peak to Average Ratio	25deg. C, 63%RH	120Vac, 60Hz	Jyunchun Lin
Conducted Emission	25deg. C, 63%RH	120Vac, 60Hz	Jyunchun Lin
Radiated Emission Below 1GHz	25deg. C, 66%RH	120Vac, 60Hz	Eason Tseng
Radiated Emission Above 1GHz	25deg. C, 66%RH	120Vac, 60Hz	Eason Tseng

LTE Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK / 16QAM	1RB / 0 RB offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK / 16QAM	1RB / 0 RB offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK / 16QAM	1RB / 0 RB offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK / 16QAM	1RB / 0 RB offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK / 16QAM	1RB / 0 RB offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK / 16QAM	1RB / 0 RB offset
Modulation characteristics	20050 to 20300	20175	20MHz	QPSK / 16QAM	-
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	Full RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK / 16QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK / 16QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK / 16QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK / 16QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK / 16QAM	Full RB
Peak to Average Ratio	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	Full RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK	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

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
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

NOTE:
All supported modulation types were evaluated.The Worst case of QPSK was selected. Therefore, the Output power, Frequency Stability, Peak to Average Ratio, Band Edge, Conducted Emission and Radiated Emission were presented under QPSK mode only.

Test Condition:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
EIRP	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Modulation characteristics	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Frequency Stability	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Occupied Bandwidth	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Band Edge	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Peak to Average Ratio	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Conducted Emission	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Radiated Emission Below 1GHz	25deg. C, 66%RH	120Vac, 60Hz	Eason Tseng
Radiated Emission Above 1GHz	25deg. C, 66%RH	120Vac, 60Hz	Eason Tseng

LTE Band 12

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK / 16QAM	1RB / 0 RB offset
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK / 16QAM	1RB / 0 RB offset
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK / 16QAM	1RB / 0 RB offset
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK / 16QAM	1RB / 0 RB offset
Modulation characteristics	23060 to 23130	23095	10MHz	QPSK / 16QAM	-
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	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK / 16QAM	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK / 16QAM	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK / 16QAM	Full RB
Peak to Average Ratio	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK	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
		23155			1 RB / 49 RB Offset
		23060, 23155			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

NOTE:
All supported modulation types were evaluated.The Worst case of QPSK was selected. Therefore, the Output power, Frequency Stability, Peak to Average Ratio, Band Edge, Conducted Emission and Radiated Emission were presented under QPSK mode only.

Test Condition:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
ERP	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Modulation characteristics	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Frequency Stability	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Occupied Bandwidth	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Band Edge	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Peak to Average Ratio	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Conducted Emission	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Radiated Emission Below 1GHz	25deg. C, 66%RH	120Vac, 60Hz	Eason Tseng
Radiated Emission Above 1GHz	25deg. C, 66%RH	120Vac, 60Hz	Eason Tseng

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 L

FCC 47 CFR Part 27 Subpart H

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

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. Portable stations (hand-held devices) operating in the 698-787 MHz band are limited to 3 watts ERP.

4.1.2 Test Procedures

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 record the power level shown on simulator.

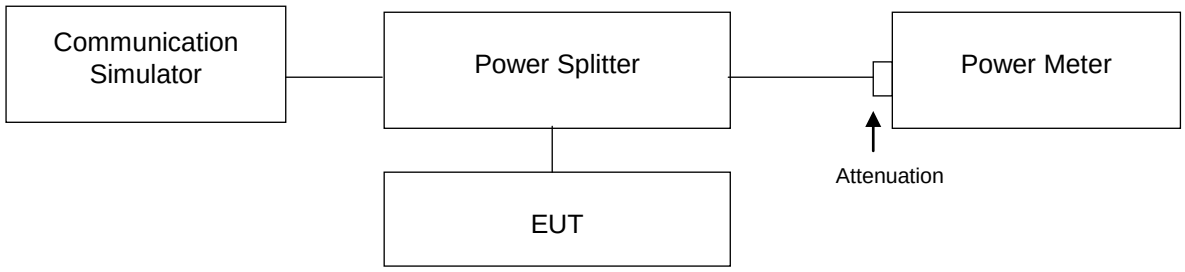
Conducted Power Measurement:

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

EIRP / ERP Measurement:

1. EIRP = Conducted output power level + Antenna gain
2. ERP power = EIRP power - 2.15dBi.

4.1.3 Test Setup



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

4.1.4 Test Results

CONDUCTED OUTPUT POWER (dBm)

WCDMA IV

Band	WCDMA IV		
Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
RMC	22.27	22.43	22.51
HSDPA Subtest-1	21.49	20.63	20.72
HSDPA Subtest-2	21.87	21.01	21.10
HSDPA Subtest-3	21.38	20.54	20.63
HSDPA Subtest-4	21.37	20.52	20.62
HSUPA Subtest-1	20.26	19.70	19.74
HSUPA Subtest-2	21.07	20.52	20.55
HSUPA Subtest-3	20.49	19.91	19.97
HSUPA Subtest-4	18.79	18.22	18.28
HSUPA Subtest-5	20.88	20.33	20.37

LTE Band 4

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19957	20175	20393		19957	20175	20393	
			1710.7	1732.5	1754.3		1710.7	1732.5	1754.3	
			MHz	MHz	MHz		MHz	MHz	MHz	
4 / 1.4M	1	0	21.39	21.63	21.57	0	20.34	20.62	20.53	1
	1	2	21.28	21.47	21.48	0	20.21	20.46	20.33	1
	1	5	21.11	21.34	21.32	0	20.06	20.30	20.17	1
	3	0	21.30	21.45	21.45	0	20.28	20.37	20.41	1
	3	1	21.13	21.30	21.31	0	20.11	20.20	20.25	1
	3	3	20.99	21.19	21.24	0	19.96	20.06	20.14	1
	6	0	20.17	20.55	20.47	1	19.13	19.49	19.47	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19965	20175	20385		19965	20175	20385	
			1711.5	1732.5	1753.5		1711.5	1732.5	1753.5	
			MHz	MHz	MHz		MHz	MHz	MHz	
4 / 3M	1	0	21.55	21.59	21.57	0	20.46	20.57	20.55	1
	1	7	21.39	21.46	21.48	0	20.40	20.44	20.40	1
	1	14	21.26	21.24	21.20	0	20.22	20.16	20.15	1
	8	0	20.44	20.41	20.53	1	19.22	19.24	19.33	2
	8	3	20.33	20.31	20.41	1	19.28	19.21	19.32	2
	8	7	20.23	20.12	20.31	1	19.03	19.13	19.13	2
	15	0	20.36	20.54	20.55	1	19.32	19.35	19.32	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19975	20175	20375		19975	20175	20375	
			1712.5	1732.5	1752.5		1712.5	1732.5	1752.5	
			MHz	MHz	MHz		MHz	MHz	MHz	
4 / 5M	1	0	21.57	21.65	21.71	0	20.49	20.56	20.62	1
	1	12	21.46	21.53	21.55	0	20.40	20.46	20.54	1
	1	24	21.36	21.27	21.40	0	20.21	20.26	20.35	1
	12	0	20.41	20.55	20.75	1	19.35	19.50	19.71	2
	12	6	20.32	20.39	20.63	1	19.28	19.42	19.64	2
	12	13	20.09	20.21	20.45	1	19.05	19.21	19.35	2
	25	0	20.51	20.63	20.55	1	19.47	19.48	19.54	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20000	20175	20350		20000	20175	20350	
			1715	1732.5	1750		1715	1732.5	1750	
			MHz	MHz	MHz		MHz	MHz	MHz	
4 / 10M	1	0	21.63	21.73	21.28	0	20.61	20.70	20.26	1
	1	24	21.54	21.59	21.13	0	20.43	20.53	20.09	1
	1	49	21.29	21.52	20.90	0	20.39	20.44	19.87	1
	25	0	20.43	20.52	20.07	1	19.22	19.37	18.86	2
	25	12	20.28	20.36	19.98	1	19.24	19.35	18.93	2
	25	25	20.08	20.18	19.73	1	19.19	19.13	18.73	2
	50	0	20.48	20.52	20.11	1	19.59	19.52	19.24	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20025	20175	20325		20025	20175	20325	
			1717.5	1732.5	1747.5		1717.5	1732.5	1747.5	
			MHz	MHz	MHz		MHz	MHz	MHz	
4 / 15M	1	0	21.56	21.66	21.50	0	20.51	20.61	20.42	1
	1	37	21.43	21.52	21.41	0	20.34	20.46	20.35	1
	1	74	21.19	21.45	21.27	0	20.20	20.25	20.20	1
	36	0	20.60	20.67	20.59	1	19.57	19.58	19.48	2
	36	19	20.45	20.54	20.49	1	19.44	19.50	19.42	2
	36	39	20.39	20.35	20.37	1	19.15	19.37	19.18	2
	75	0	20.49	20.54	20.31	1	19.37	19.50	19.24	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20050	20175	20300		20050	20175	20300	
			1720	1732.5	1745		1720	1732.5	1745	
			MHz	MHz	MHz		MHz	MHz	MHz	
4 / 20M	1	0	21.77	21.69	21.73	0	20.69	20.68	20.70	1
	1	50	21.62	21.55	21.63	0	20.67	20.55	20.59	1
	1	99	21.47	21.47	21.36	0	20.38	20.29	20.42	1
	50	0	20.79	20.86	20.76	1	19.58	19.73	19.62	2
	50	25	20.68	20.74	20.65	1	19.60	19.74	19.60	2
	50	50	20.44	20.60	20.54	1	19.34	19.60	19.34	2
	100	0	20.70	20.48	20.67	1	19.58	19.63	19.64	2

LTE Band 12

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23017	23095	23173		23017	23095	23173	
			699.7	707.5	715.3		699.7	707.5	715.3	
			MHz	MHz	MHz		MHz	MHz	MHz	
12 / 1.4M	1	0	23.15	22.92	22.86	0	22.23	21.92	21.87	1
	1	2	22.88	22.76	22.68	0	22.00	21.80	21.78	1
	1	5	23.15	22.92	22.86	0	21.84	21.72	21.58	1
	3	0	22.88	22.76	22.68	0	21.93	21.62	21.78	1
	3	1	22.87	22.58	22.63	0	21.79	21.55	21.62	1
	3	3	22.73	22.41	22.49	0	21.68	21.41	21.38	1
	6	0	22.04	21.83	21.83	1	21.11	20.74	20.68	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23025	23095	23165		23025	23095	23165	
			700.5	707.5	714.5		700.5	707.5	714.5	
			MHz	MHz	MHz		MHz	MHz	MHz	
12 / 3M	1	0	23.11	22.96	23.04	0	22.10	21.92	21.97	1
	1	7	23.01	22.87	22.93	0	21.89	21.76	21.89	1
	1	14	22.73	22.68	22.82	0	21.75	21.67	21.70	1
	8	0	22.13	21.74	21.98	1	21.12	20.61	20.92	2
	8	3	22.04	21.58	21.83	1	20.96	20.53	20.82	2
	8	7	21.89	21.50	21.68	1	20.80	20.35	20.71	2
	15	0	21.98	21.91	21.82	1	20.96	20.72	20.81	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23035	23095	23155		23035	23095	23155	
			701.5	707.5	713.5		701.5	707.5	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz	
12 / 5M	1	0	22.99	22.92	22.96	0	21.97	21.84	21.87	1
	1	12	22.90	22.82	22.86	0	21.84	21.76	21.79	1
	1	24	22.77	22.56	22.74	0	21.57	21.54	21.59	1
	12	0	22.00	21.74	21.82	1	20.98	20.55	20.74	2
	12	6	21.91	21.64	21.66	1	20.82	20.64	20.62	2
	12	13	21.75	21.43	21.48	1	20.64	20.46	20.44	2
	25	0	21.89	21.85	21.78	1	20.70	20.70	20.78	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23060	23095	23130		23060	23095	23130	
			704	707.5	711		704	707.5	711	
			MHz	MHz	MHz		MHz	MHz	MHz	
12 / 10M	1	0	23.05	22.97	22.86	0	22.00	21.93	21.84	1
	1	24	22.90	22.85	22.73	0	21.84	21.79	21.72	1
	1	49	22.79	22.72	22.50	0	21.78	21.68	21.58	1
	25	0	22.01	22.04	21.78	1	20.88	21.03	20.73	2
	25	12	21.89	21.91	21.67	1	20.84	20.86	20.68	2
	25	25	21.71	21.83	21.43	1	20.56	20.64	20.38	2
	50	0	21.95	21.80	21.84	1	20.95	20.79	20.77	2

EIRP/ERP POWER

WCDMA IV

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
1312	1712.4	22.27	1.66	23.93	247.17	Pass	Max
1413	1732.6	22.43	1.66	24.09	256.45	Pass	Max
1513	1752.6	22.51	1.66	24.17	261.22	Pass	Max

LTE Band 4

QPSK

1.4MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
19957	1710.7	21.39	1.66	23.05	201.84	Pass	Max
20175	1732.5	21.63	1.66	23.29	213.30	Pass	Max
20393	1754.3	21.57	1.66	23.23	210.38	Pass	Max

3MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
19957	1711.5	21.55	1.66	23.21	209.41	Pass	Max
20175	1732.5	21.59	1.66	23.25	211.35	Pass	Max
20385	1753.5	21.57	1.66	23.23	210.38	Pass	Max

5MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
19975	1712.5	21.57	1.66	23.23	210.38	Pass	Max
20175	1732.5	21.65	1.66	23.31	214.29	Pass	Max
20375	1752.5	21.71	1.66	23.37	217.27	Pass	Max

10MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
20000	1715	21.63	1.66	23.29	213.30	Pass	Max
20175	1732.5	21.73	1.66	23.39	218.27	Pass	Max
20350	1750	21.28	1.66	22.94	196.79	Pass	Max

15MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
20025	1717.5	21.56	1.66	23.22	209.89	Pass	Max
20175	1732.5	21.66	1.66	23.32	214.78	Pass	Max
20325	1747.5	21.50	1.66	23.16	207.01	Pass	Max

20MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
20050	1720	21.77	1.66	23.43	220.29	Pass	Max
20175	1732.5	21.69	1.66	23.35	216.27	Pass	Max
20300	1745	21.73	1.66	23.39	218.27	Pass	Max

16QAM

1.4MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
19957	1710.7	20.34	1.66	22.00	158.49	Pass	Max
20175	1732.5	20.62	1.66	22.28	169.04	Pass	Max
20393	1754.3	20.53	1.66	22.19	165.58	Pass	Max

3MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
19957	1711.5	20.46	1.66	22.12	162.93	Pass	Max
20175	1732.5	20.57	1.66	22.23	167.11	Pass	Max
20385	1753.5	20.55	1.66	22.21	166.34	Pass	Max

5MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
19975	1712.5	20.49	1.66	22.15	164.06	Pass	Max
20175	1732.5	20.56	1.66	22.22	166.72	Pass	Max
20375	1752.5	20.62	1.66	22.28	169.04	Pass	Max

10MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
20000	1715	20.61	1.66	22.27	168.66	Pass	Max
20175	1732.5	20.70	1.66	22.36	172.19	Pass	Max
20350	1750	20.26	1.66	21.92	155.60	Pass	Max

15MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
20025	1717.5	20.51	1.66	22.17	164.82	Pass	Max
20175	1732.5	20.61	1.66	22.27	168.66	Pass	Max
20325	1747.5	20.42	1.66	22.08	161.44	Pass	Max

20MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	EIRP(dBm)	EIRP(mW)	Pass /Fail	Setting
20050	1720	20.69	1.66	22.35	171.79	Pass	Max
20175	1732.5	20.68	1.66	22.34	171.40	Pass	Max
20300	1745	20.70	1.66	22.36	172.19	Pass	Max

LTE Band 12

QPSK

1.4MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
20017	699.7	23.15	1.53	22.53	179.06	Pass	Max
23095	707.5	22.92	1.53	22.30	169.82	Pass	Max
23173	715.3	22.86	1.53	22.24	167.49	Pass	Max

3MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
23025	700.5	23.11	1.53	22.49	177.42	Pass	Max
23095	707.5	22.96	1.53	22.34	171.40	Pass	Max
23165	714.5	23.04	1.53	22.42	174.58	Pass	Max

5MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
23035	701.5	22.99	1.53	22.37	172.58	Pass	Max
23095	707.5	22.92	1.53	22.30	169.82	Pass	Max
23155	713.5	22.96	1.53	22.34	171.40	Pass	Max

10MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
23060	704	23.05	1.53	22.43	174.98	Pass	Max
23095	707.5	22.97	1.53	22.35	171.79	Pass	Max
23130	711	22.86	1.53	22.24	167.49	Pass	Max

16QAM

1.4MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
20017	699.7	22.23	1.53	21.61	144.88	Pass	Max
23095	707.5	21.92	1.53	21.30	134.90	Pass	Max
23173	715.3	21.87	1.53	21.25	133.35	Pass	Max

3MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
23025	700.5	22.10	1.53	21.48	140.60	Pass	Max
23095	707.5	21.92	1.53	21.30	134.90	Pass	Max
23165	714.5	21.97	1.53	21.35	136.46	Pass	Max

5MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
23035	701.5	21.97	1.53	21.35	136.46	Pass	Max
23095	707.5	21.84	1.53	21.22	132.43	Pass	Max
23155	713.5	21.87	1.53	21.25	133.35	Pass	Max

10MHz

Channel Number	Freq. (MHz)	Conducted Average Power (dBm)	Gain	ERP(dBm)	ERP(mW)	Pass /Fail	Setting
23060	704	22.00	1.53	21.38	137.40	Pass	Max
23095	707.5	21.93	1.53	21.31	135.21	Pass	Max
23130	711	21.84	1.53	21.22	132.43	Pass	Max

4.2 Modulation characteristics Measurement

4.2.1 Limits of Modulation characteristics

N/A

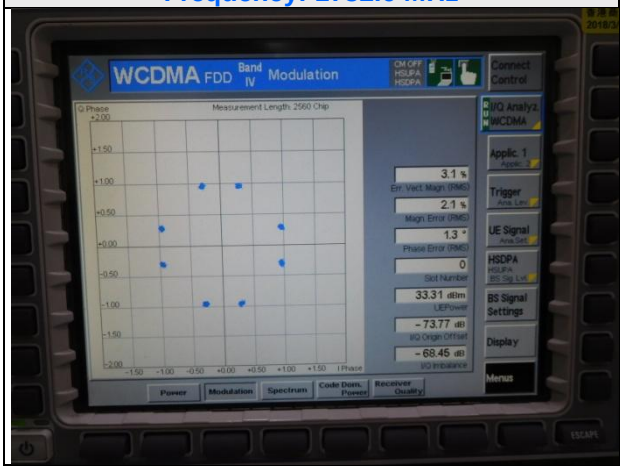
4.2.2 Test Procedure

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 Band 4

WCDMA Band 4 / Frequency: 1732.6 MHz


LTE Band 4

QPSK / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz	16QAM / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz

LTE Band 12

QPSK / Channel Bandwidth: 10MHz / Frequency: 707.5 MHz	16QAM / Channel Bandwidth: 10MHz / Frequency: 707.5 MHz

4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stabiliity Measurement

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 102 to 138 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT -30℃ ~ 75℃.

4.3.2 Test Procedure

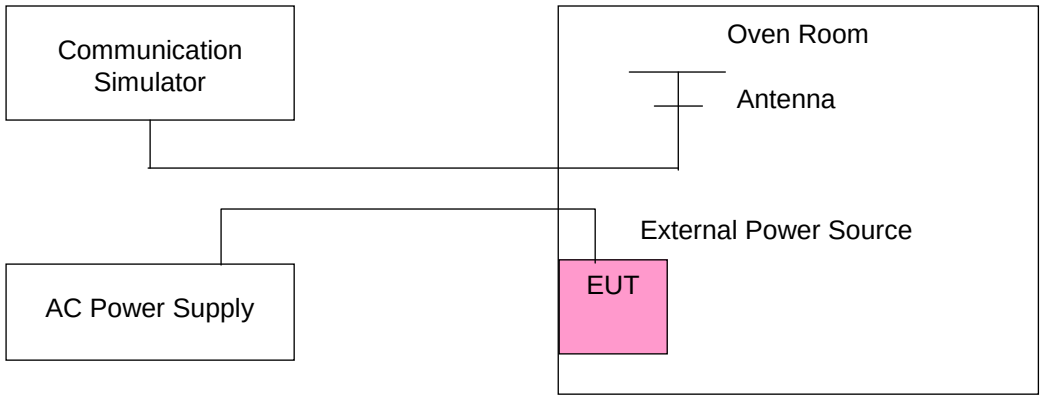
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected the external power supply to control the AC 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 IV

Frequency Error vs. Voltage

Voltage (Volts)	Frequency Error (MHz)
	WCDMA
102	1732.600043
138	1732.600041

Frequency Error vs. Temperature.

TEMP. (℃)	Frequency Error (MHz)
	WCDMA
75	1732.600021
70	1732.600035
60	1732.600040
50	1732.600036
40	1732.600028
30	1732.600039
20	1732.600031
10	1732.600042
0	1732.600044
-10	1732.600030
-20	1732.600047
-30	1732.600030

LTE Band 4

Voltage (Volts)	Frequency Error (MHz)					
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz
102	1732.500025	1732.500046	1732.500034	1732.500049	1732.500028	1732.500049
138	1732.500047	1732.500034	1732.500025	1732.500025	1732.500042	1732.500049

TEMP. (℃)	Frequency Error (MHz)					
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz
75	1732.500029	1732.500034	1732.500022	1732.500048	1732.500048	1732.500042
70	1732.500043	1732.500039	1732.500046	1732.500029	1732.500022	1732.500048
60	1732.500044	1732.500028	1732.500028	1732.500036	1732.500034	1732.500029
50	1732.500023	1732.500022	1732.500033	1732.500041	1732.500029	1732.500022
40	1732.500033	1732.500046	1732.500028	1732.500042	1732.500032	1732.500049
30	1732.500037	1732.500041	1732.500026	1732.500042	1732.500031	1732.500038
20	1732.500033	1732.500030	1732.500023	1732.500033	1732.500045	1732.500035
10	1732.500025	1732.500049	1732.500047	1732.500036	1732.500029	1732.500046
0	1732.500028	1732.500020	1732.500032	1732.500043	1732.500045	1732.500028
-10	1732.500021	1732.500042	1732.500021	1732.500034	1732.500041	1732.500033
-20	1732.500020	1732.500042	1732.500022	1732.500021	1732.500038	1732.500045
-30	1732.500035	1732.500030	1732.500046	1732.500036	1732.500032	1732.500029

LTE Band 12

Voltage (Volts)	Frequency Error (MHz)			
	1.4MHz	3MHz	5MHz	10MHz
102	707.500038	707.500048	707.500044	707.500030
138	707.500028	707.500035	707.500041	707.500027

TEMP. (℃)	Frequency Error (MHz)			
	1.4MHz	3MHz	5MHz	10MHz
75	707.500021	707.500031	707.500046	707.500043
70	707.500033	707.500032	707.500041	707.500028
60	707.500036	707.500023	707.500025	707.500049
50	707.500033	707.500045	707.500039	707.500021
40	707.500041	707.500024	707.500040	707.500026
30	707.500036	707.500039	707.500026	707.500041
20	707.500049	707.500033	707.500047	707.500040
10	707.500031	707.500036	707.500037	707.500046
0	707.500031	707.500022	707.500036	707.500030
-10	707.500039	707.500035	707.500037	707.500036
-20	707.500041	707.500024	707.500032	707.500026
-30	707.500043	707.500044	707.500022	707.500040

4.4 Emission Bandwidth Measurement

4.4.1 Limits of Emission Bandwidth Measurement

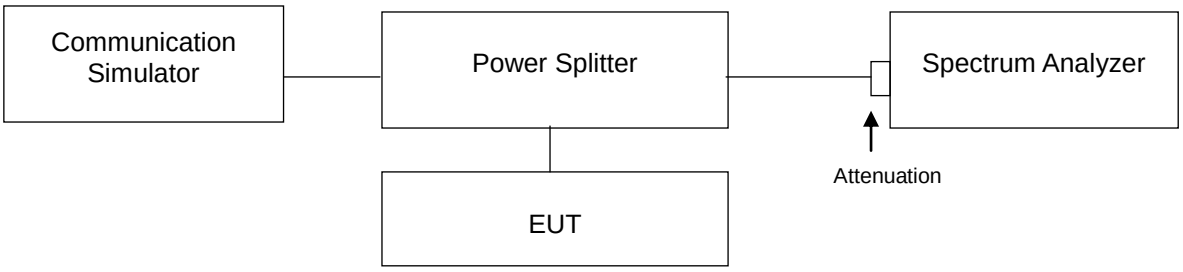
-26dBc Bandwidth
According to FCC 27.53 specified that emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

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.

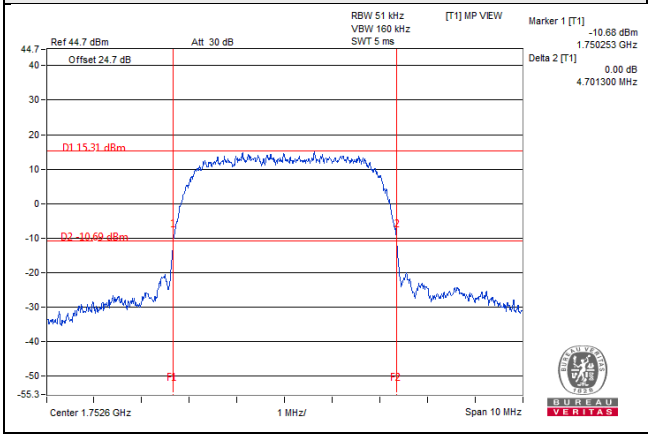
4.4.3 Test Setup



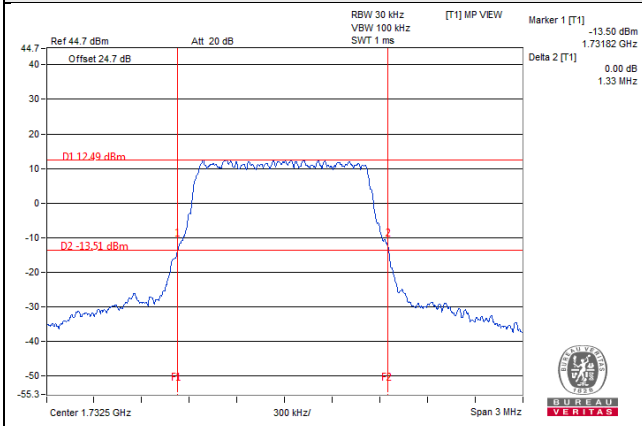
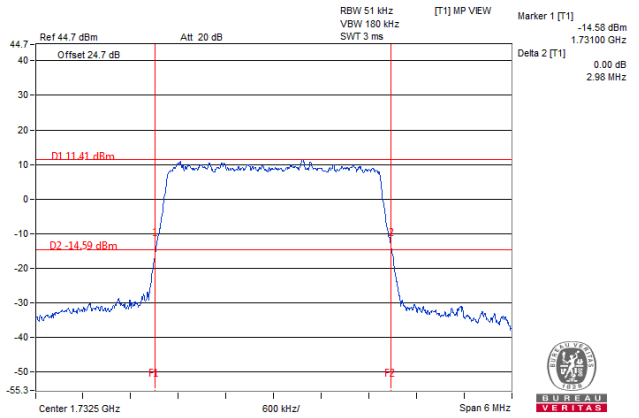
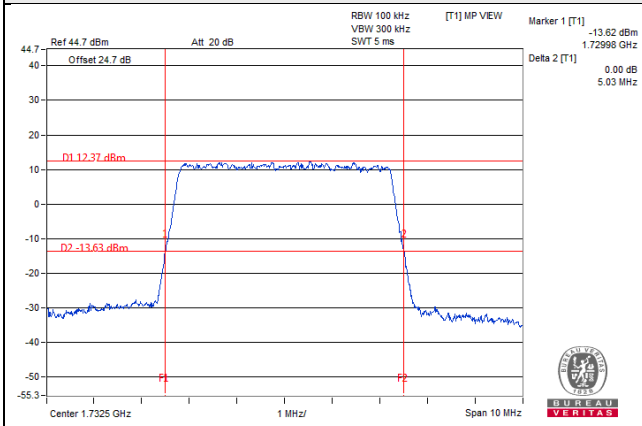
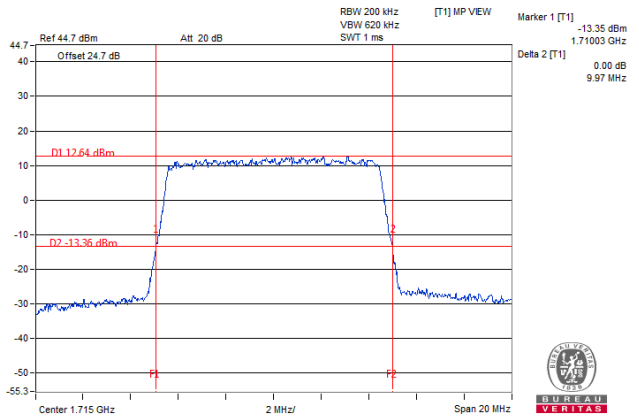
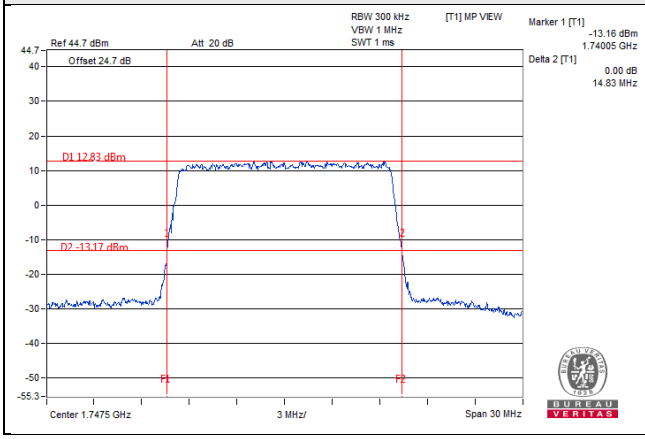
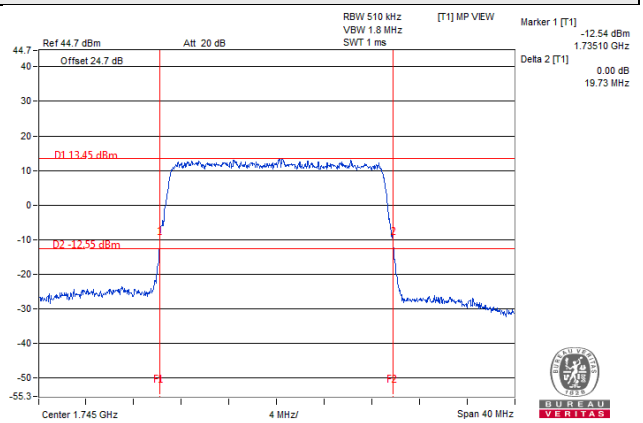
4.4.4 Test Results (-26dBc Bandwidth)

Channel	FREQ. (MHz)	-26dB Bandwidth (MHz)
		WCDMA IV
1312	1712.4	4.70
1413	1732.6	4.68
1513	1752.6	4.70

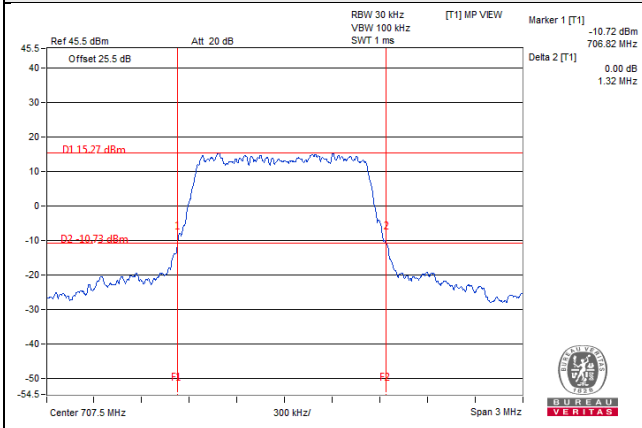
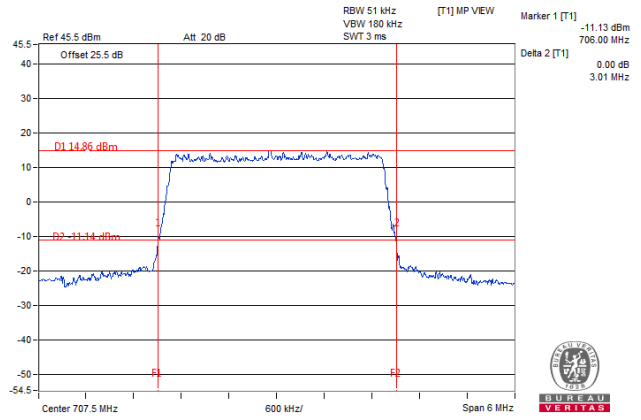
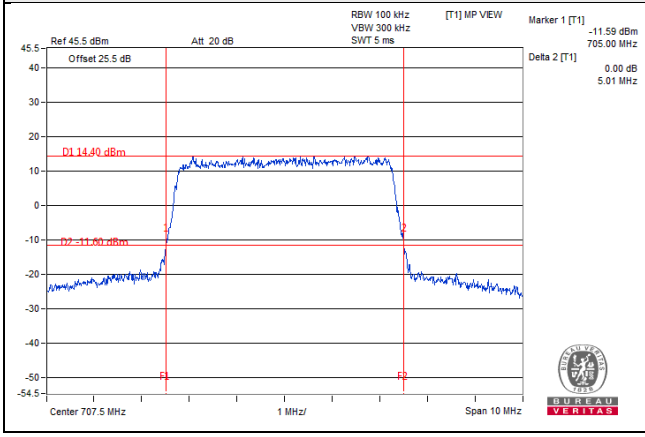
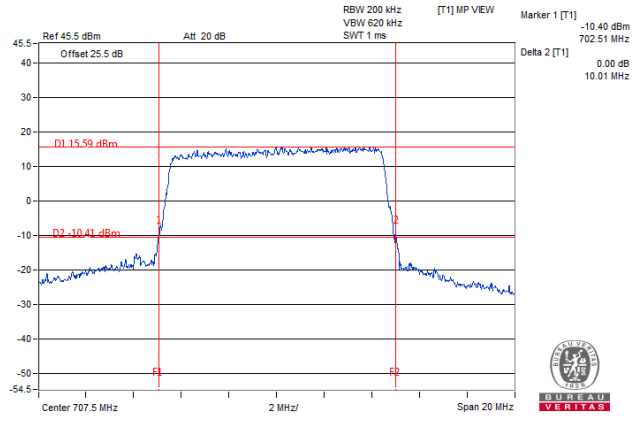
Spectrum Plot of Worst Value
WCDMA



LTE Band 4							
Channel Bandwidth 1.4MHz				Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		Channel	Frequency (MHz)	-26dB Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
19957	1710.7	1.30	1.31	19965	1711.5	2.96	2.95
20175	1732.5	1.33	1.29	20175	1732.5	2.96	2.98
20393	1754.3	1.29	1.30	20385	1753.5	2.97	2.98
Channel Bandwidth 5MHz				Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		Channel	Frequency (MHz)	-26dB Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	4.95	4.97	20000	1715	9.97	9.92
20175	1732.5	5.03	5.00	20175	1732.5	9.95	9.86
20375	1752.5	5.01	5.02	20350	1750	9.92	9.81
Channel Bandwidth 15MHz				Channel Bandwidth 20MHz			
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		Channel	Frequency (MHz)	-26dB Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
20025	1717.5	14.69	14.69	20050	1720	19.62	19.67
20175	1732.5	14.57	14.58	20175	1732.5	19.49	19.50
20325	1747.5	14.83	14.73	20300	1745	19.66	19.73

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

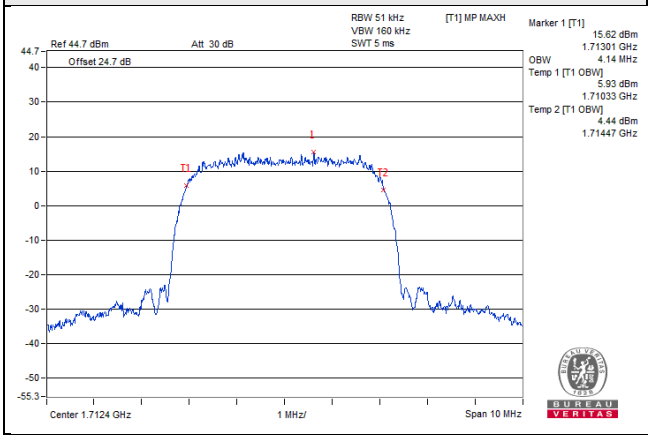
LTE Band 12							
Channel Bandwidth 1.4MHz				Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		Channel	Frequency (MHz)	-26dB Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
23017	699.7	1.29	1.30	23025	700.5	2.99	2.95
23095	707.5	1.31	1.32	23095	707.5	3.01	2.98
23173	715.3	1.31	1.30	23165	714.5	2.97	2.93
Channel Bandwidth 5MHz				Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	-26dB Bandwidth (MHz)		Channel	Frequency (MHz)	-26dB Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
23035	701.5	4.99	4.99	23060	704	9.98	9.88
23095	707.5	5.01	5.01	23095	707.5	10.01	9.95
23155	713.5	4.96	4.98	23130	711	9.74	9.77

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

4.4.5 Test Results (Occupied Bandwidth)

Channel	FREQ. (MHz)	Occupied Bandwidth (MHz)
		WCDMA
1312	1712.4	4.14
1413	1732.6	4.12
1513	1752.6	4.14

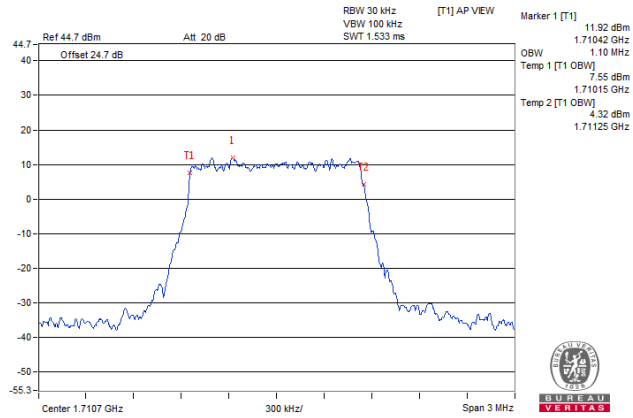
Spectrum Plot of Worst Value
WCDMA



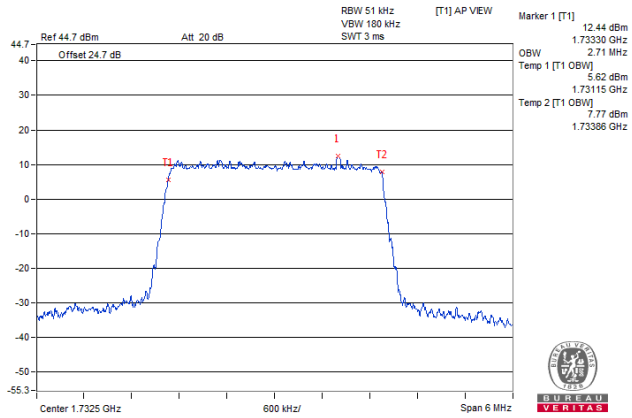
LTE Band 4							
Channel Bandwidth 1.4MHz				Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
19957	1710.7	1.10	1.10	19965	1711.5	2.69	2.68
20175	1732.5	1.10	1.10	20175	1732.5	2.71	2.69
20393	1754.3	1.09	1.10	20385	1753.5	2.69	2.68
Channel Bandwidth 5MHz				Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	4.50	4.51	20000	1715	9.00	8.96
20175	1732.5	4.51	4.51	20175	1732.5	8.98	8.94
20375	1752.5	4.50	4.52	20350	1750	8.98	8.98
Channel Bandwidth 15MHz				Channel Bandwidth 20MHz			
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
20025	1717.5	13.44	13.41	20050	1720	17.96	17.96
20175	1732.5	13.41	13.44	20175	1732.5	17.88	17.96
20325	1747.5	13.50	13.47	20300	1745	18.04	18.00

Spectrum Plot of Worst Value

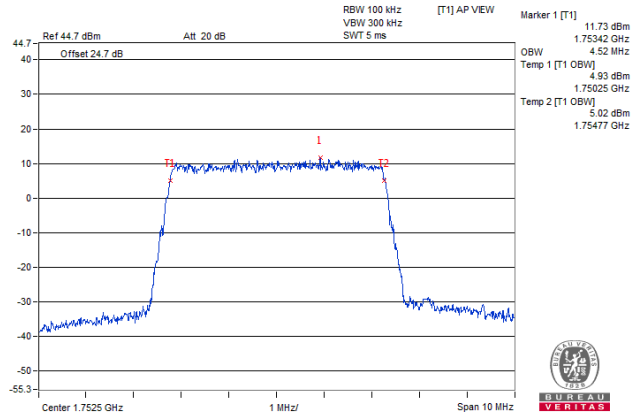
1.4MHz / QPSK



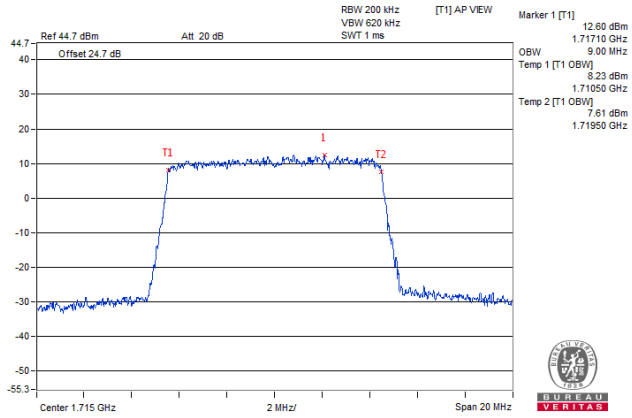
3MHz / QPSK



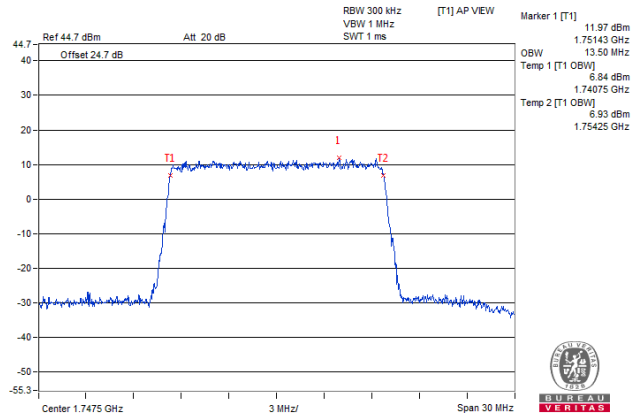
5MHz / 16QAM



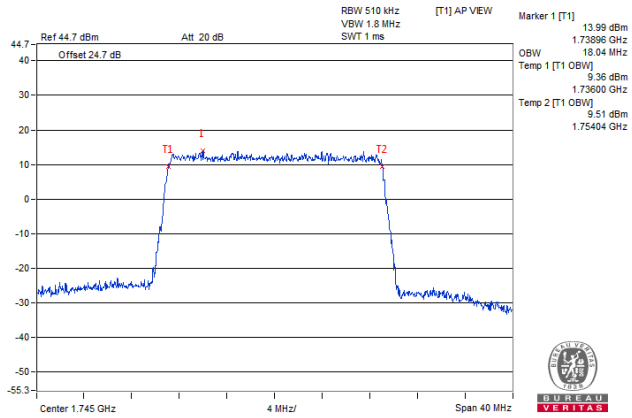
10MHz / QPSK



15MHz / QPSK



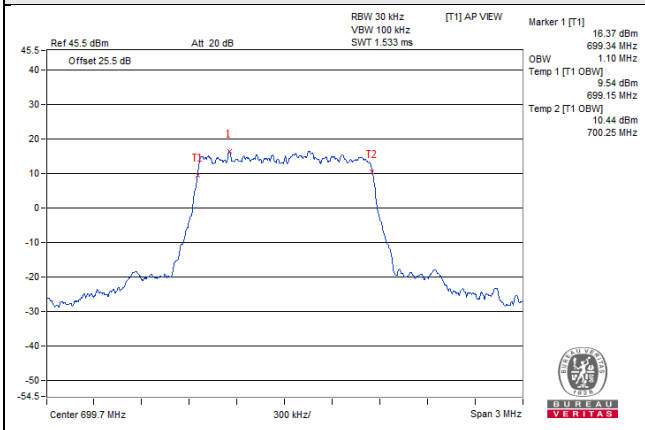
20MHz / QPSK



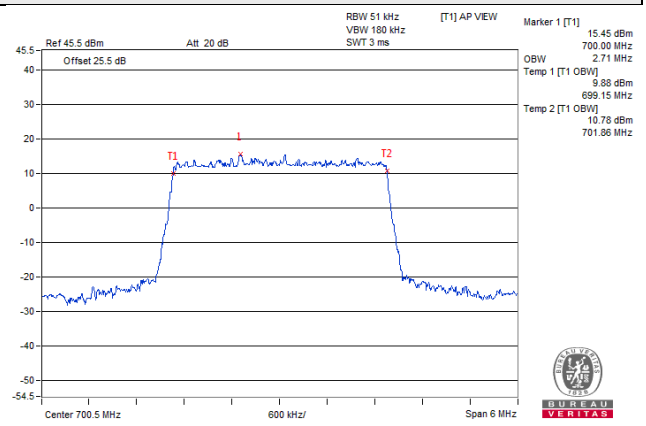
LTE Band 12							
Channel Bandwidth 1.4MHz				Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
23017	699.7	1.10	1.10	23025	700.5	2.71	2.69
23095	707.5	1.08	1.08	23095	707.5	2.68	2.68
23173	715.3	1.09	1.08	23165	714.5	2.68	2.68
Channel Bandwidth 5MHz				Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		QPSK	16QAM			QPSK	16QAM
23035	701.5	4.50	4.50	23060	704	9.00	8.98
23095	707.5	4.49	4.51	23095	707.5	8.94	8.94
23155	713.5	4.49	4.49	23130	711	8.92	8.92

Spectrum Plot of Worst Value

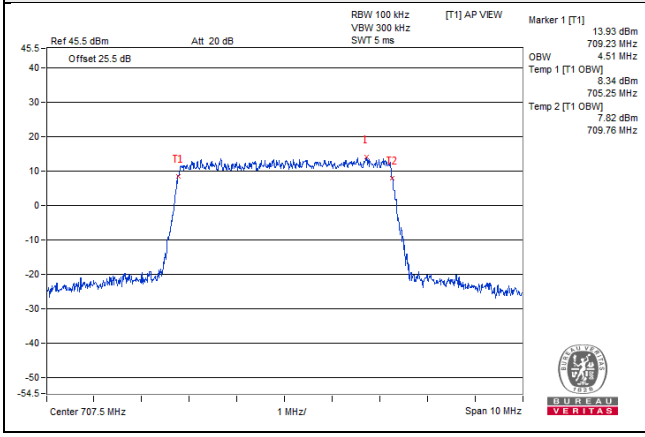
1.4MHz / QPSK



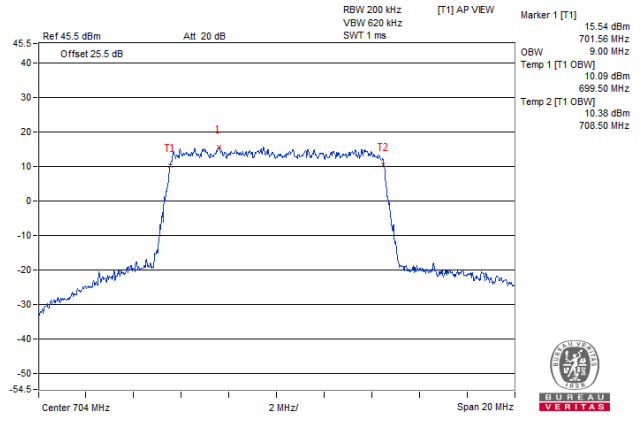
3MHz / QPSK



5MHz / 16QAM



10MHz / QPSK



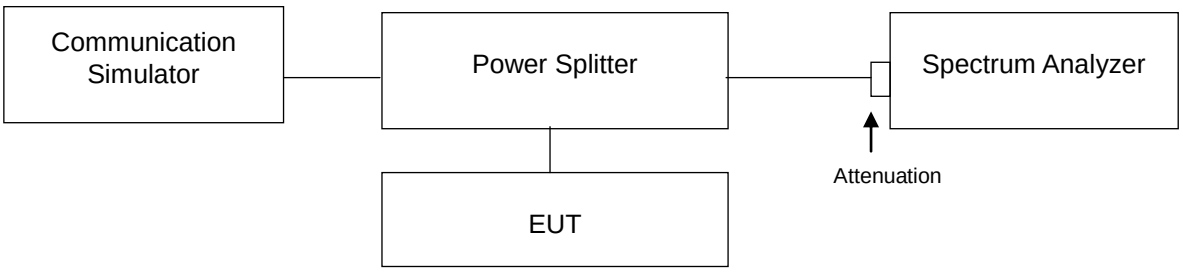
4.5 Channel Edge Measurement

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.

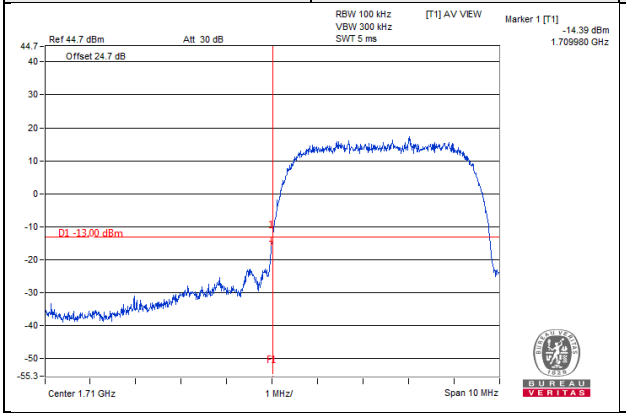
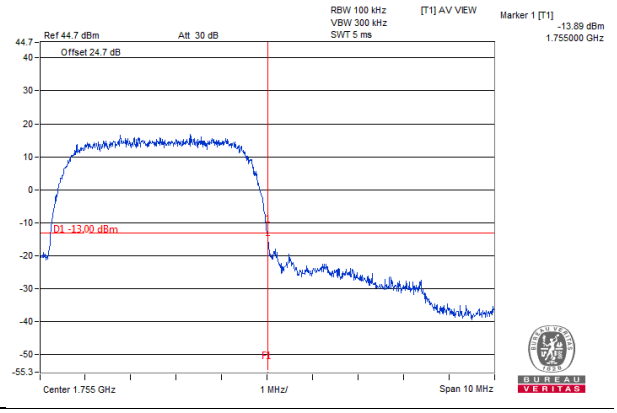
4.5.2 Test Setup

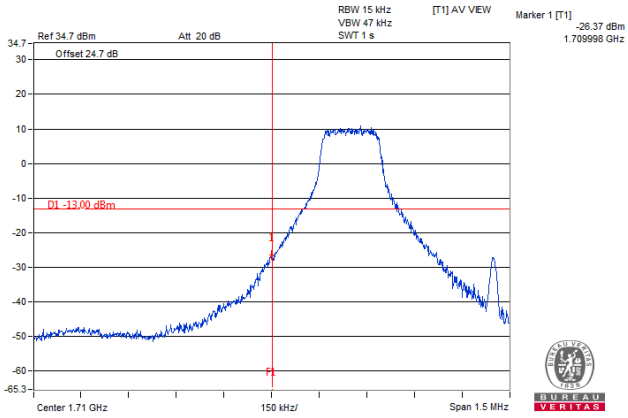
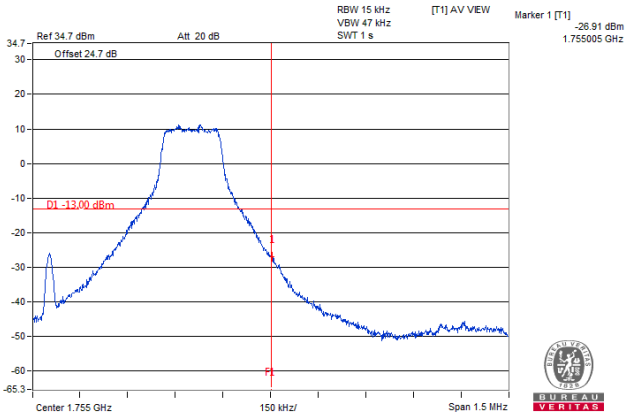
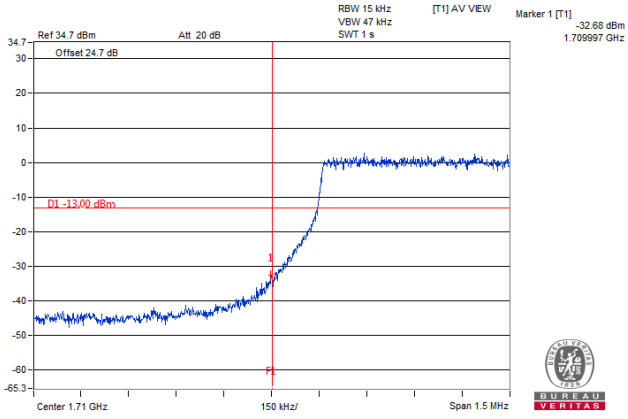
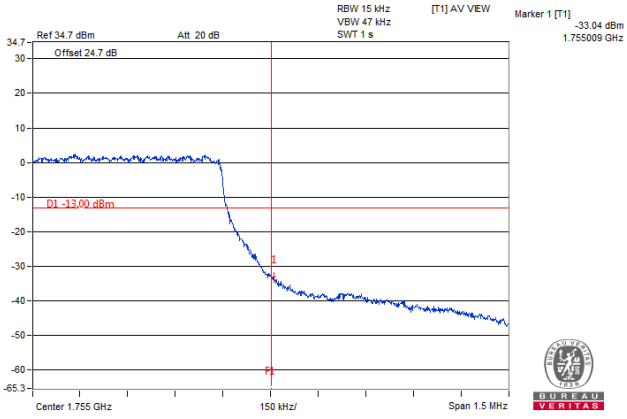


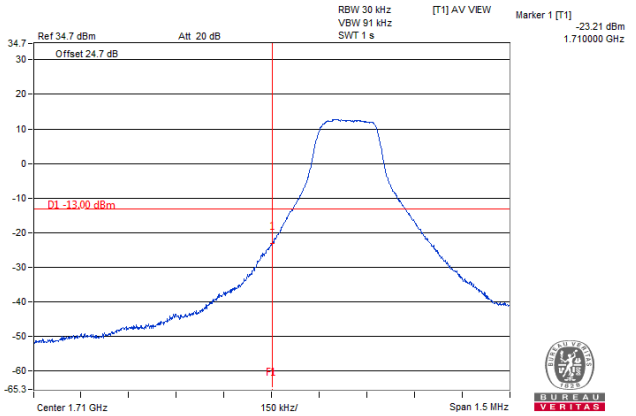
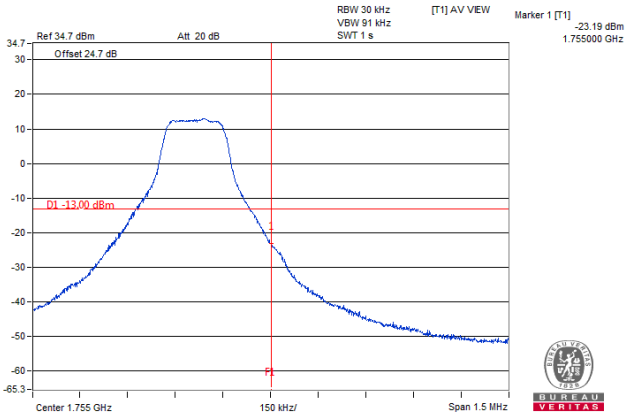
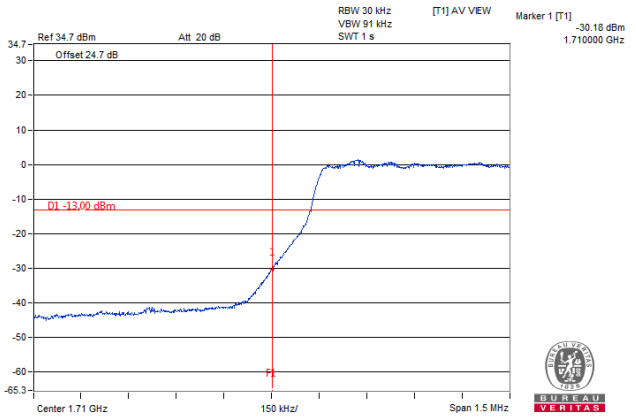
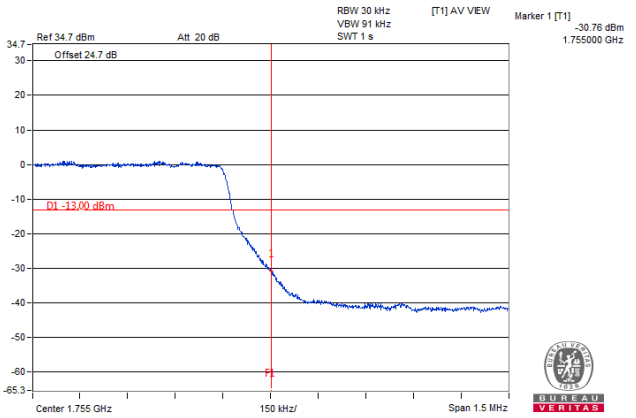
4.5.3 Test Procedures

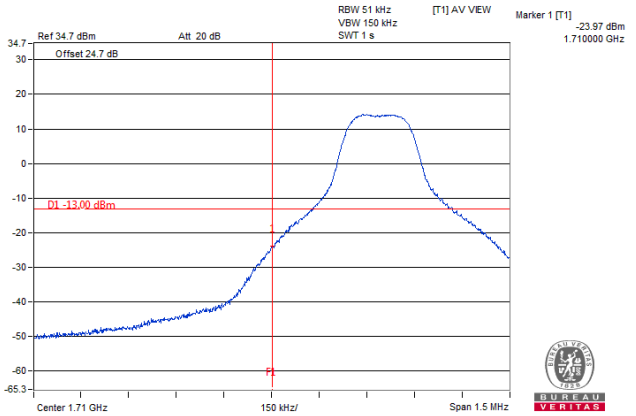
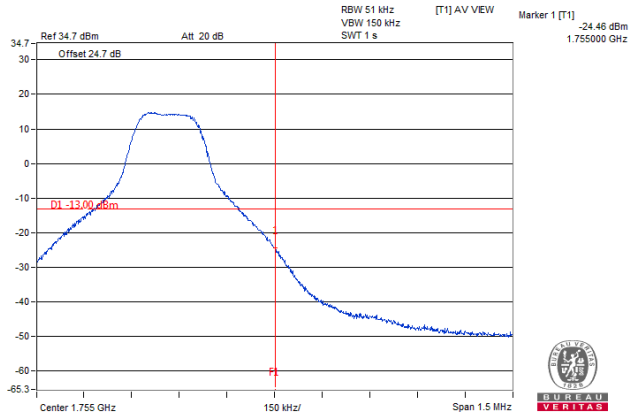
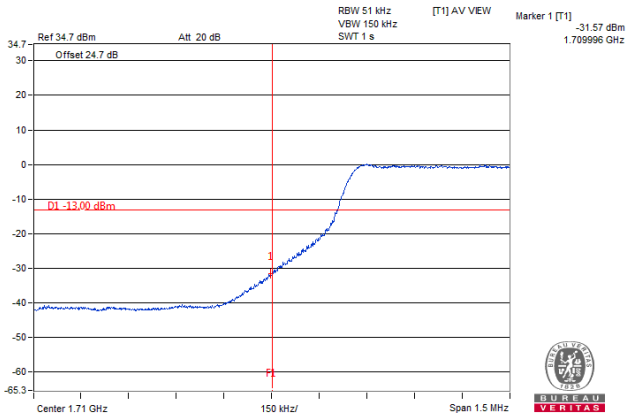
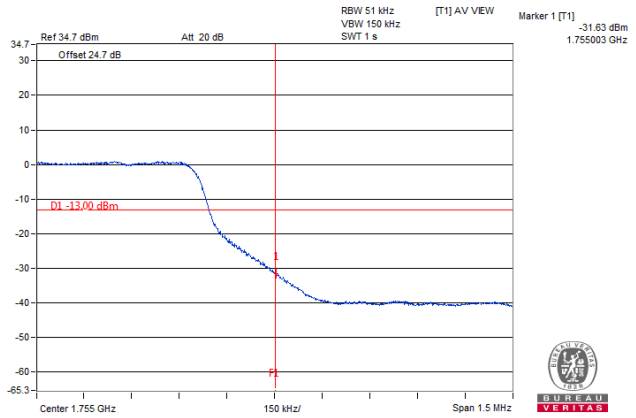
a. All measurements were done at low and high operational frequency range.
b. The center frequency of spectrum is the band edge frequency and s RB of the spectrum is >1% emission bandwidth and VB of the spectrum is ≧ 3*RB.
c. Record the max trace plot into the test report.

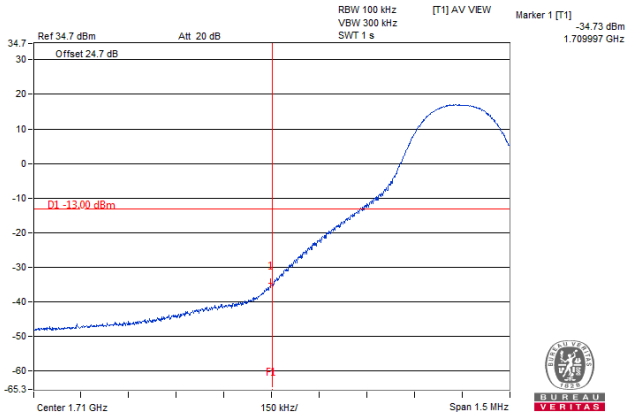
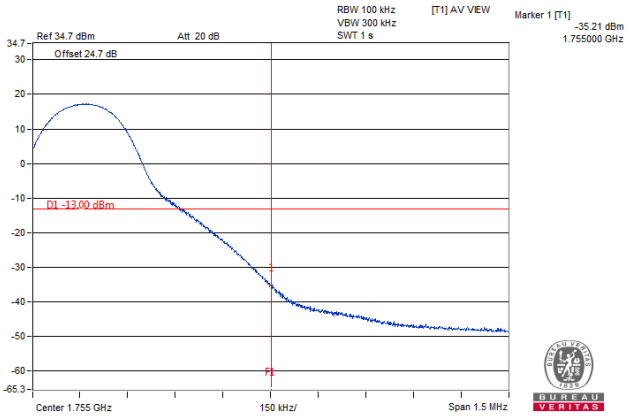
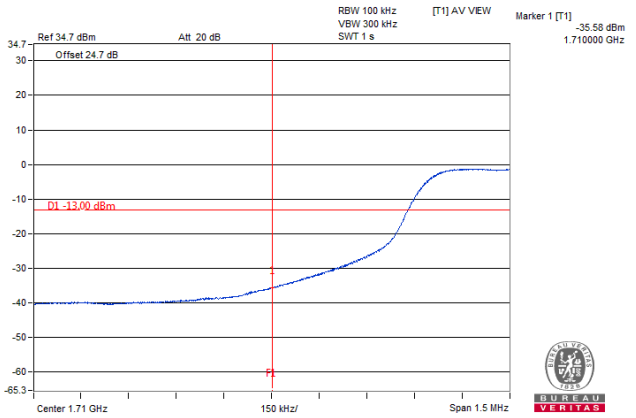
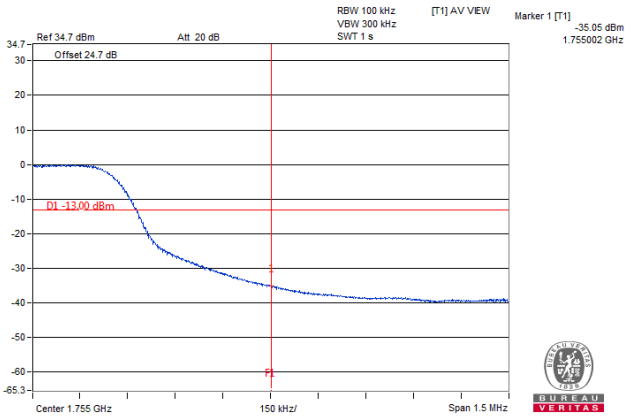
4.5.4 Test Results

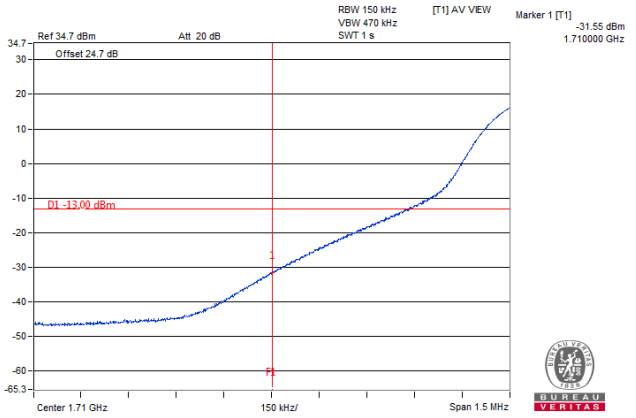
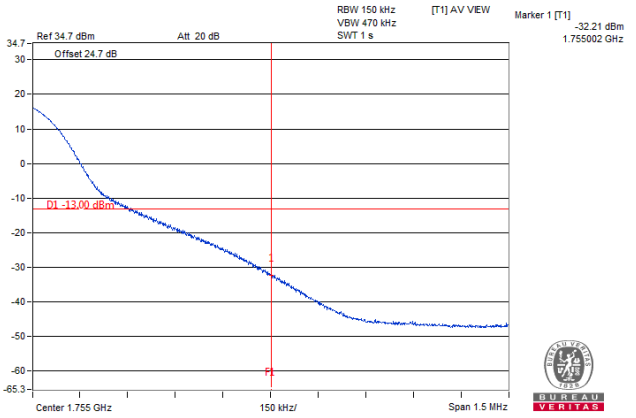
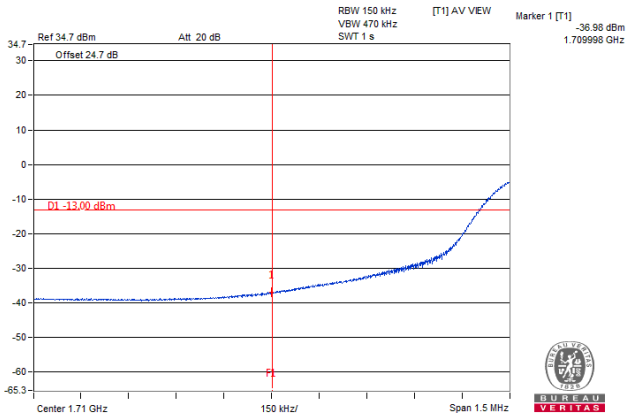
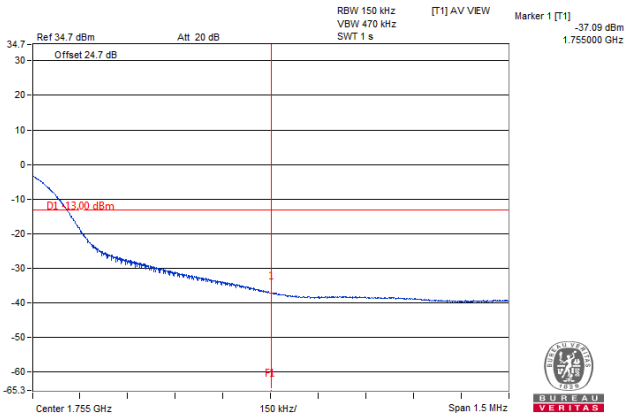
WCDMA Band 4			
Channel	1312	Channel	1513
			

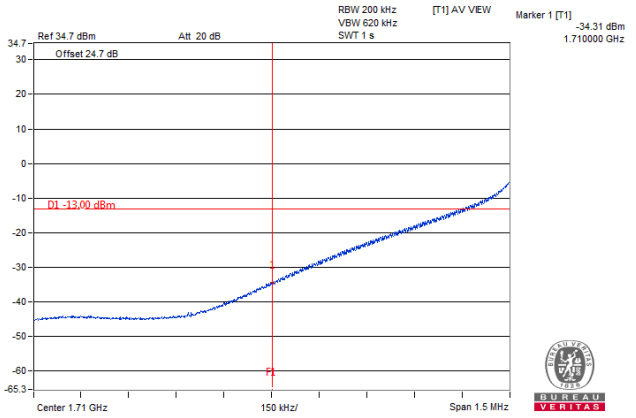
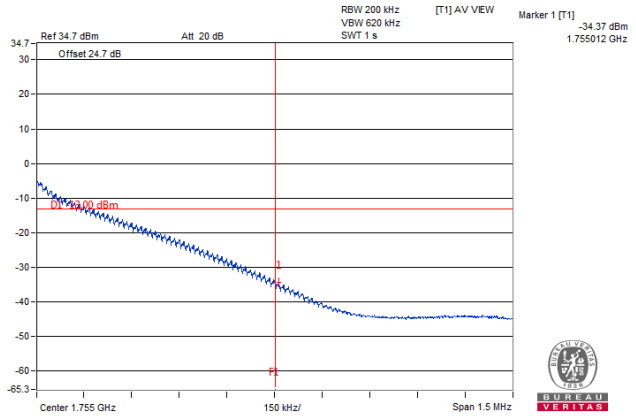
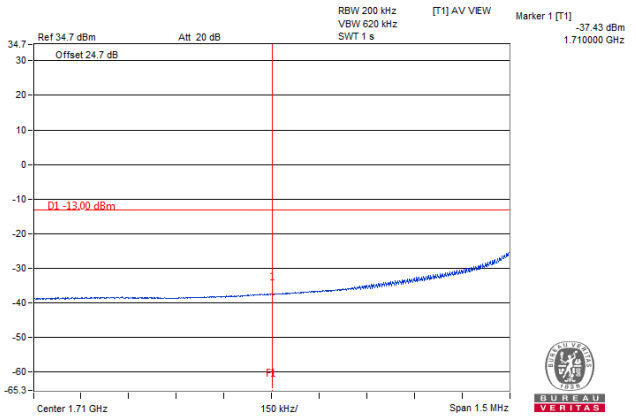
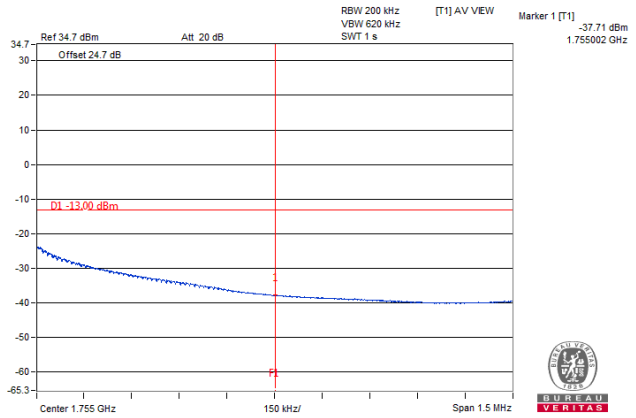
LTE Band 4					
Channel Bandwidth 1.4MHz					
Channel	19957	1 RB	Channel	20393	1 RB
					
Channel	19957	6 RB	Channel	20393	6 RB
					

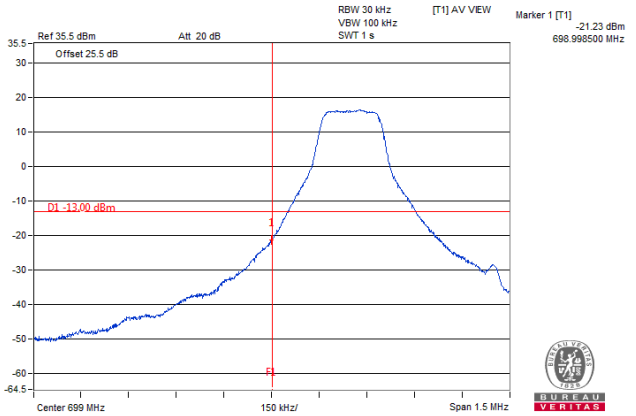
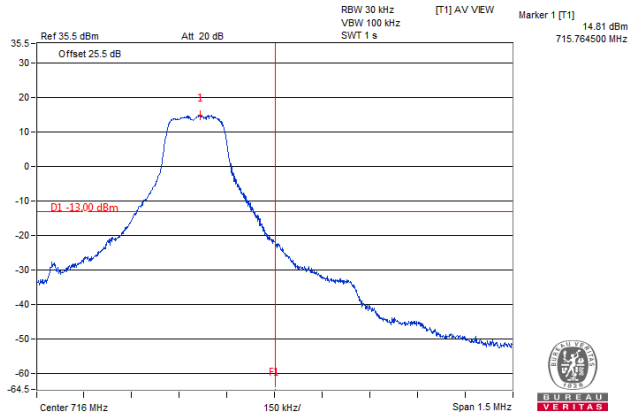
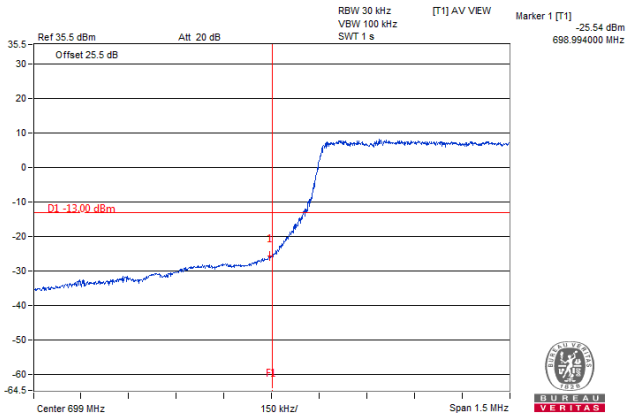
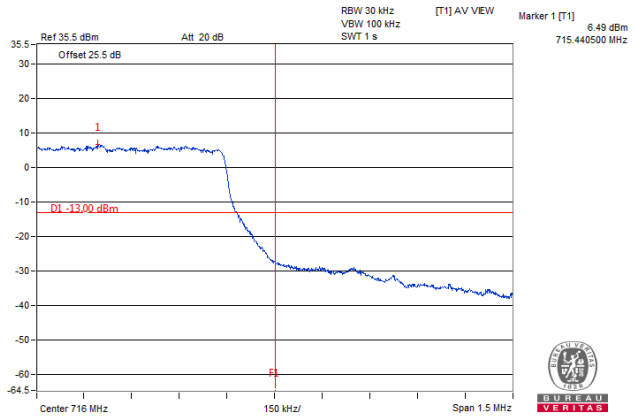
LTE Band 4					
Channel Bandwidth 3MHz					
Channel	19965	1 RB	Channel	20385	1 RB
					
Channel	19965	15 RB	Channel	20385	15 RB
					

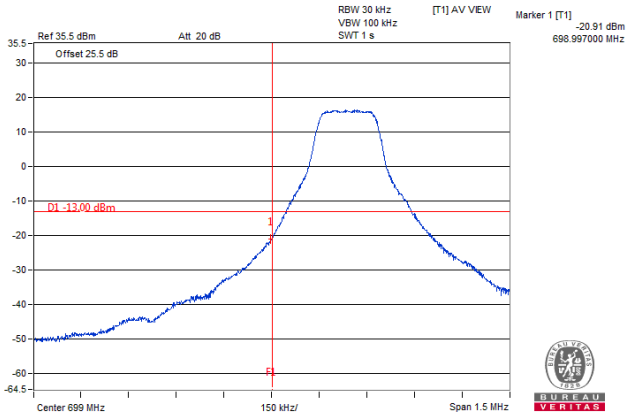
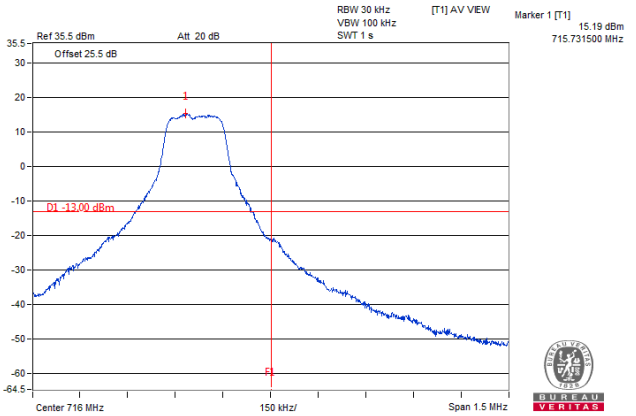
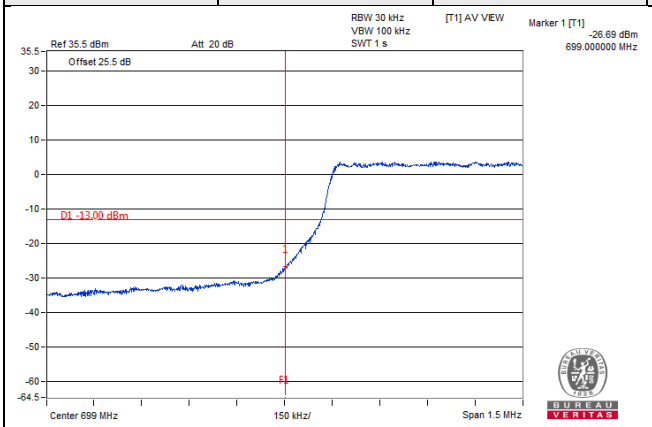
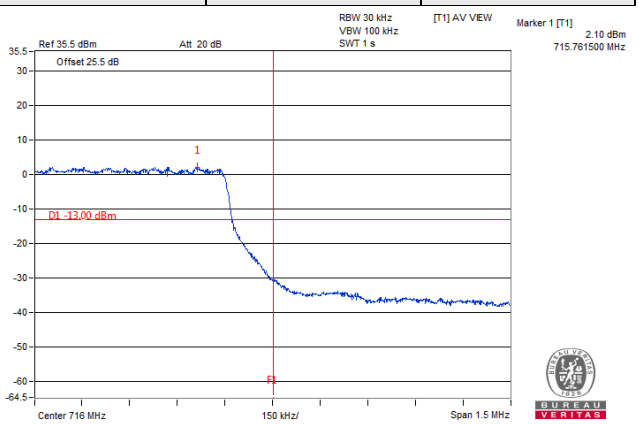
LTE Band 4					
Channel Bandwidth 5MHz					
Channel	19975	1 RB	Channel	20375	1 RB
					
Channel	19975	25 RB	Channel	20375	25 RB
					

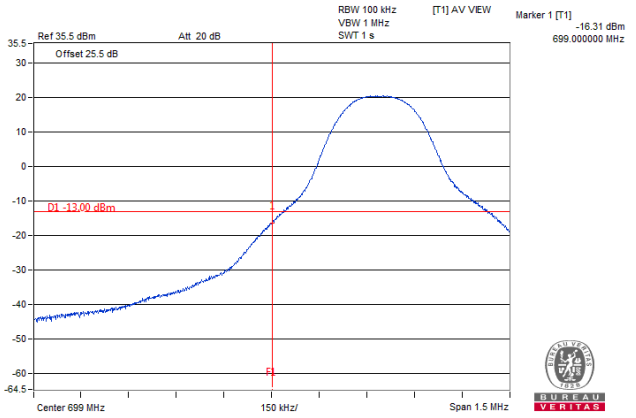
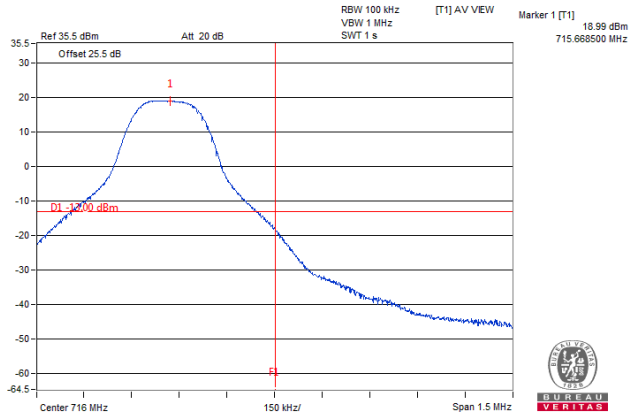
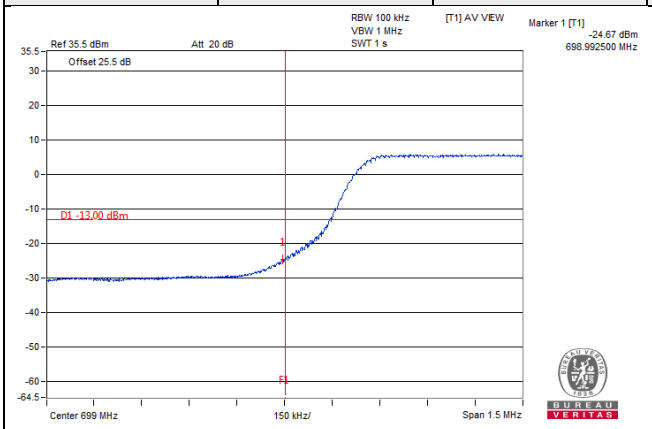
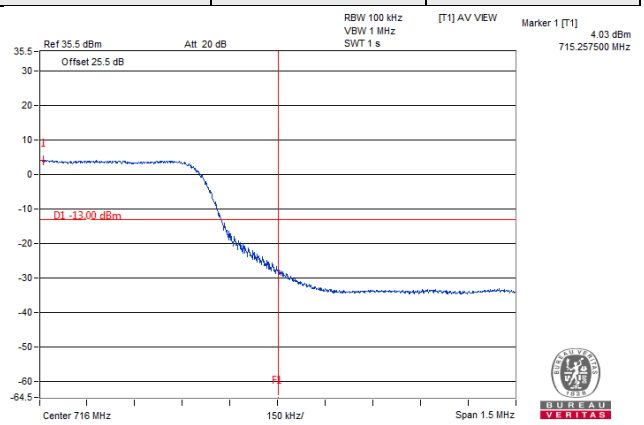
LTE Band 4					
Channel Bandwidth 10MHz					
Channel	20000	1 RB	Channel	20350	1 RB
					
Channel	20000	50 RB	Channel	20350	50 RB
					

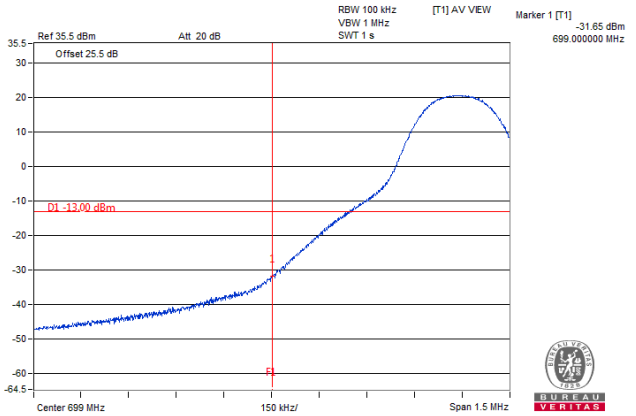
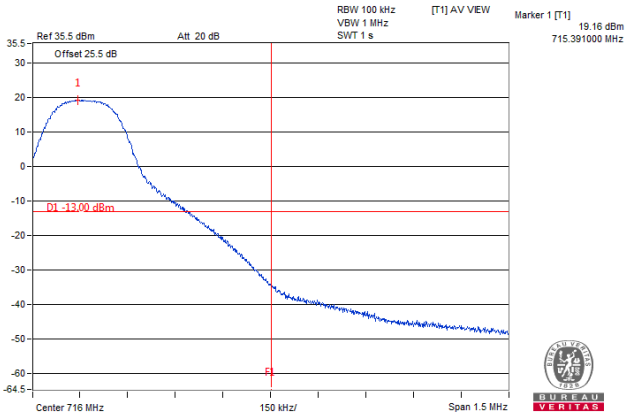
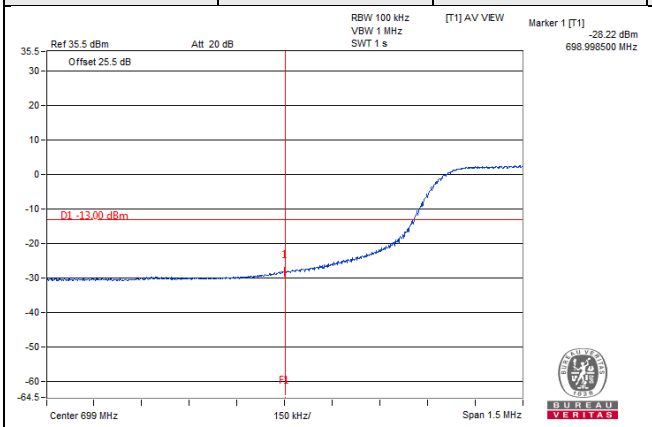
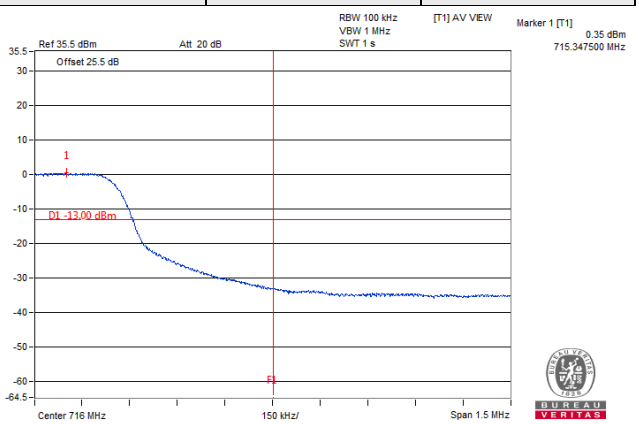
LTE Band 4					
Channel Bandwidth 15MHz					
Channel	20025	1 RB	Channel	20325	1 RB
					
Channel	20025	75 RB	Channel	20325	75 RB
					

LTE Band 4					
Channel Bandwidth 20MHz					
Channel	20050	1 RB	Channel	20300	1 RB
					
Channel	20050	100 RB	Channel	20300	100 RB
					

LTE Band 12					
Channel Bandwidth 1.4MHz					
Channel	23017	1 RB	Channel	23173	1 RB
					
Channel	23017	6 RB	Channel	23173	6 RB
					

LTE Band 12					
Channel Bandwidth 3MHz					
Channel	23025	1 RB	Channel	23165	1 RB
					
Channel	23025	15 RB	Channel	23165	15 RB
					

LTE Band 12					
Channel Bandwidth 5MHz					
Channel	23035	1 RB	Channel	23155	1 RB
					
Channel	23035	25 RB	Channel	23155	25 RB
					

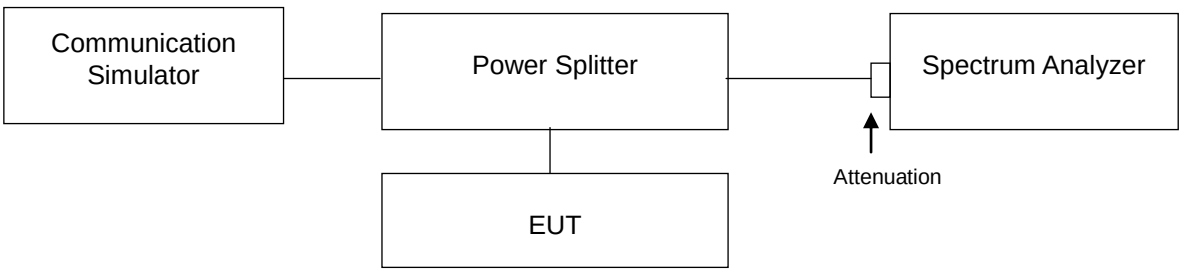
LTE Band 12					
Channel Bandwidth 10MHz					
Channel	23060	1 RB	Channel	23155	1 RB
					
Channel	23060	50 RB	Channel	23155	50 RB
					

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



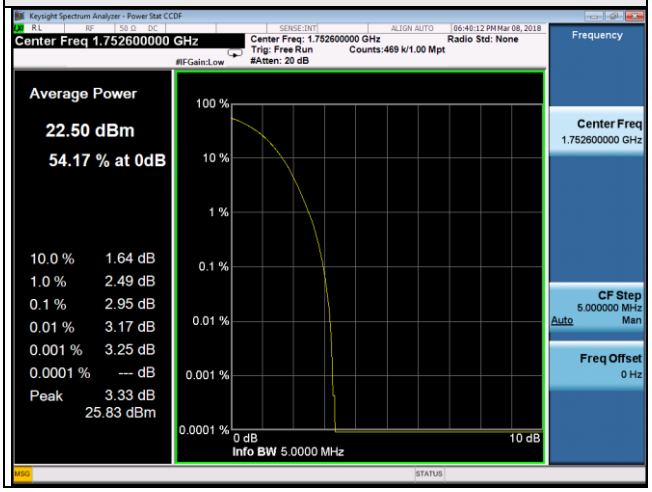
4.5.3 Test Procedures

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%.

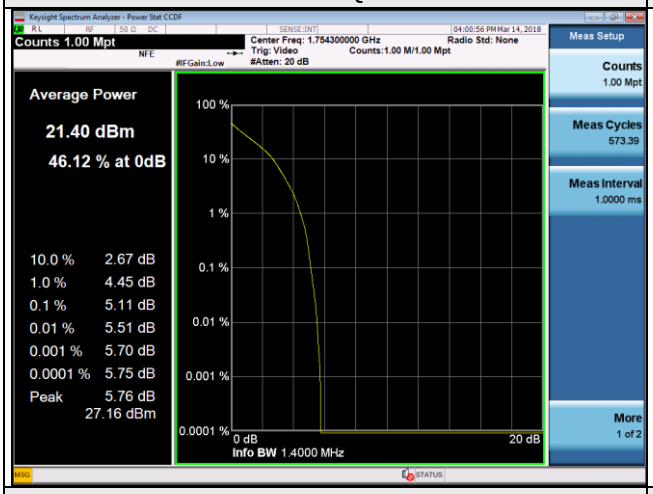
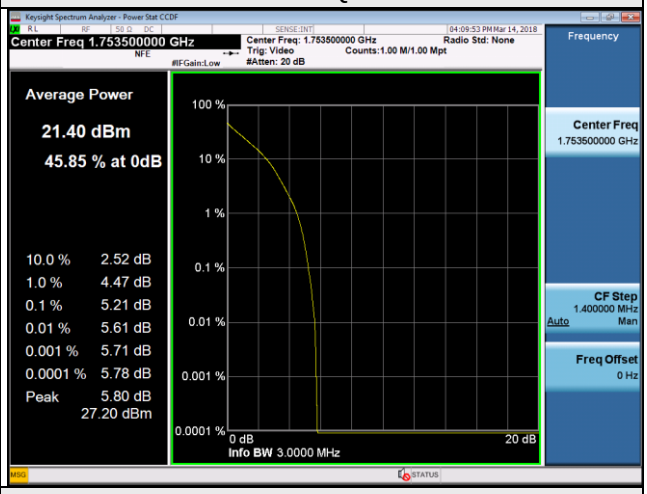
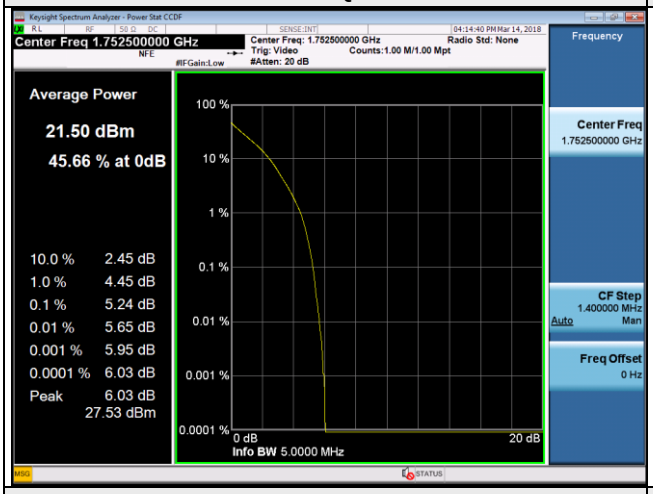
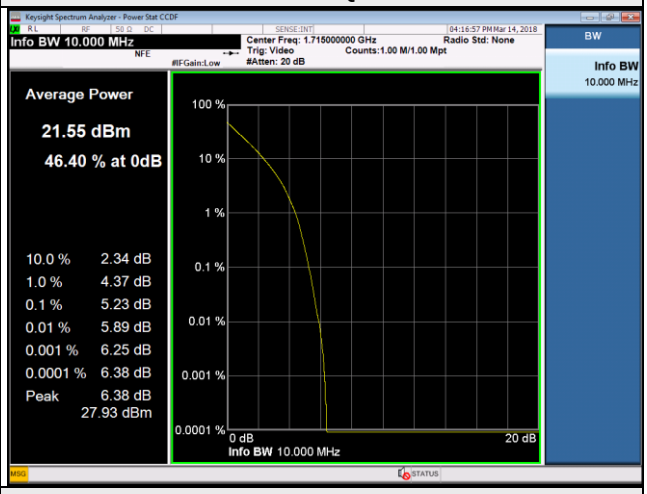
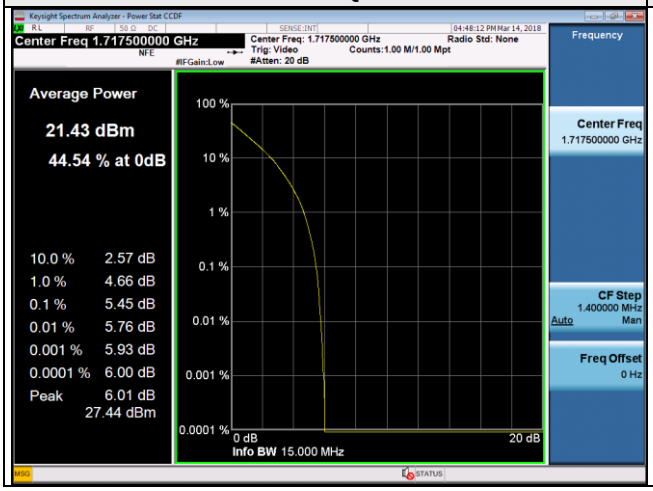
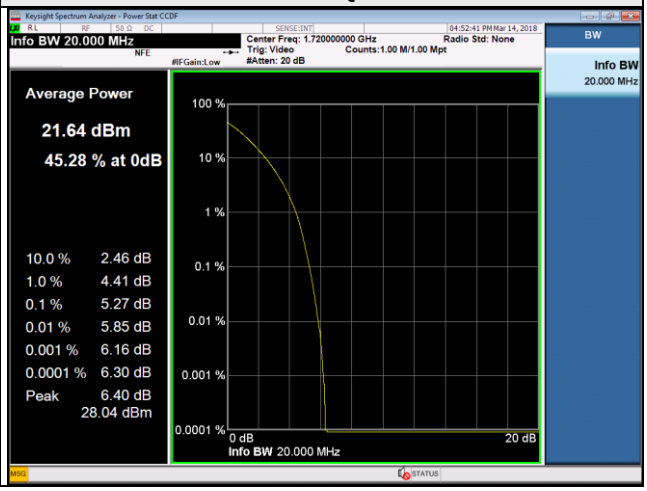
4.5.4 Test Results

Channel	Freq. (MHz)	Peak to Average Ratio (dB)
		WCDMA BAND4
1312	1712.4	2.85
1413	1732.6	2.92
1513	1752.6	2.95

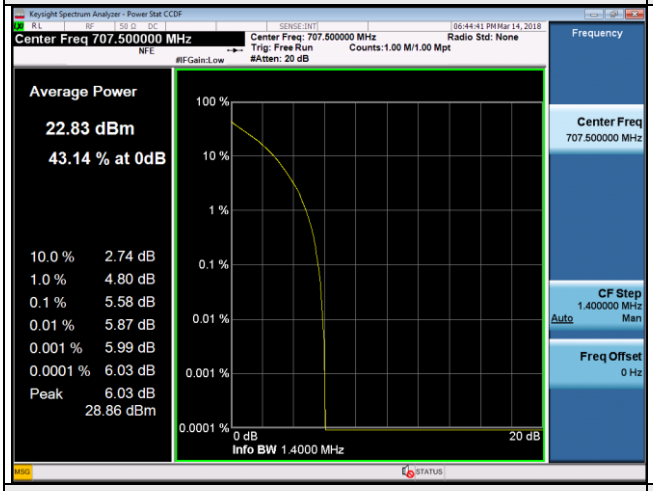
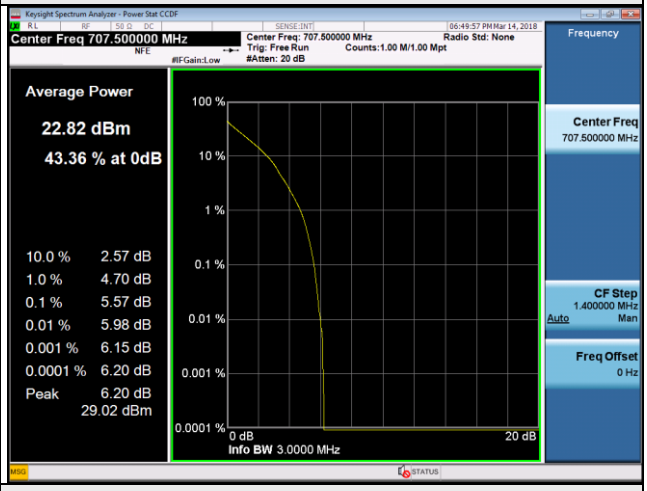
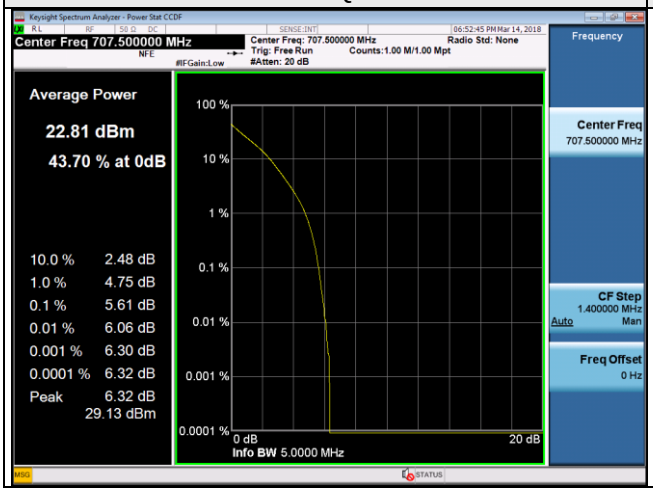
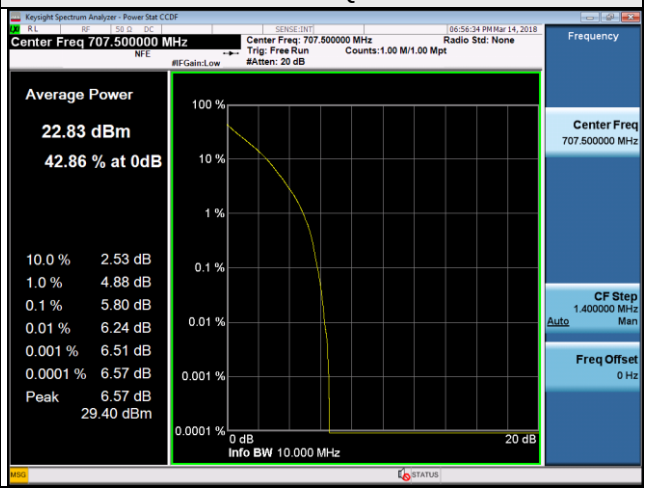
Spectrum Plot of Worst Value
WCDMA



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			QPSK
19957	1710.7	5.01	19965	1711.5	5.16
20175	1732.5	4.95	20175	1732.5	5.03
20393	1754.3	5.11	20385	1753.5	5.21
Channel Bandwidth 5MHz			Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		QPSK			QPSK
19975	1712.5	5.22	20000	1715	5.23
20175	1732.5	5.10	20175	1732.5	5.03
20375	1752.5	5.24	20350	1750	4.88
Channel Bandwidth 15MHz			Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		QPSK			QPSK
20025	1717.5	5.45	20050	1720	5.27
20175	1732.5	5.16	20175	1732.5	4.98
20325	1747.5	5.40	20300	1745	5.26

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)	Peak To Average Ratio (dB)	Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		QPSK			QPSK
23017	699.7	5.36	23025	700.5	5.48
23095	707.5	5.58	23095	707.5	5.57
23173	715.3	5.34	23165	714.5	5.40
Channel Bandwidth 5MHz			Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		QPSK			QPSK
23035	701.5	5.46	23025	700.5	5.73
23095	707.5	5.61	23095	707.5	5.80
23155	713.5	5.35	23165	714.5	5.44

Spectrum Plot of Worst Value	
1.4MHz / QPSK	3MHz / QPSK
	
5MHz / QPSK	10MHz / QPSK
	

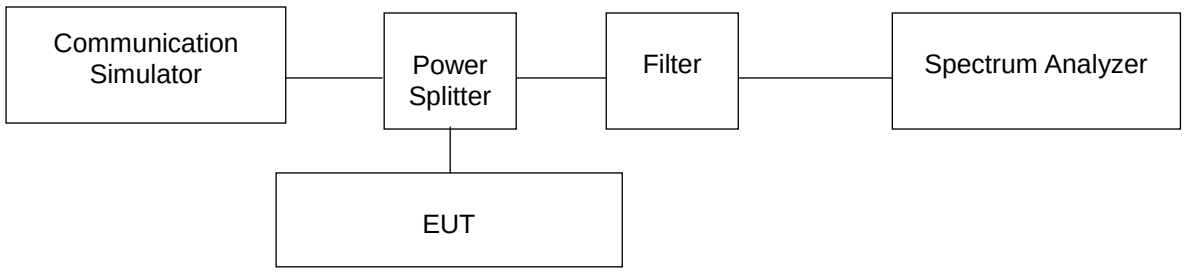
4.7 Conducted Spurious Emissions

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



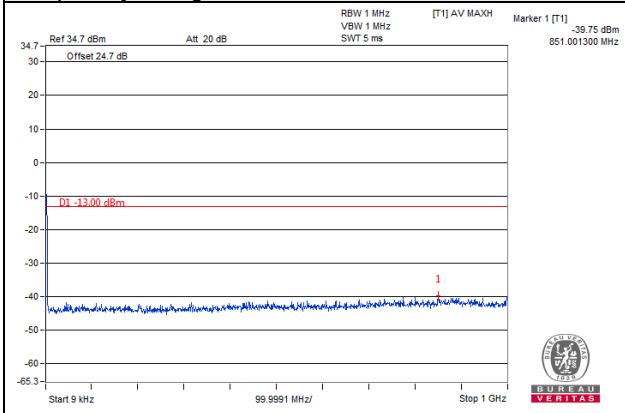
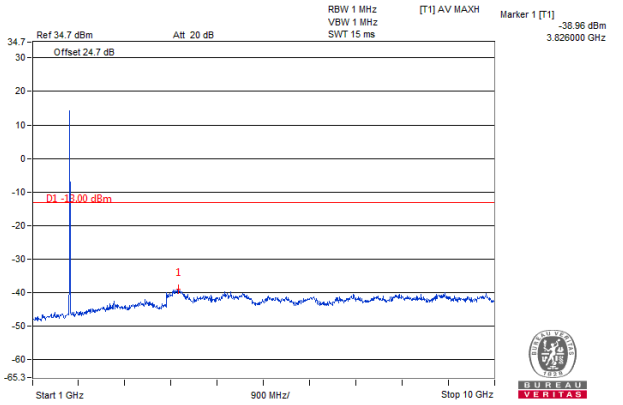
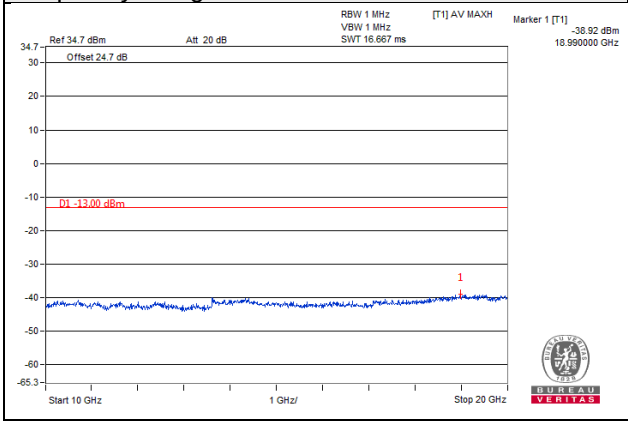
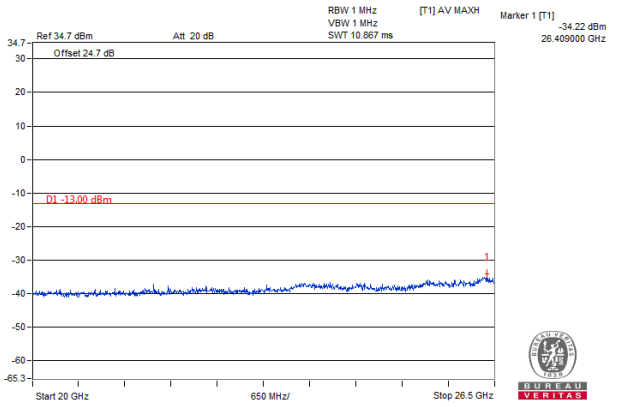
4.7.3 Test Procedure

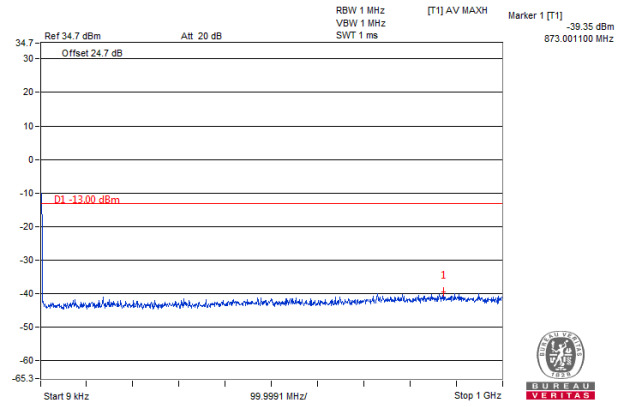
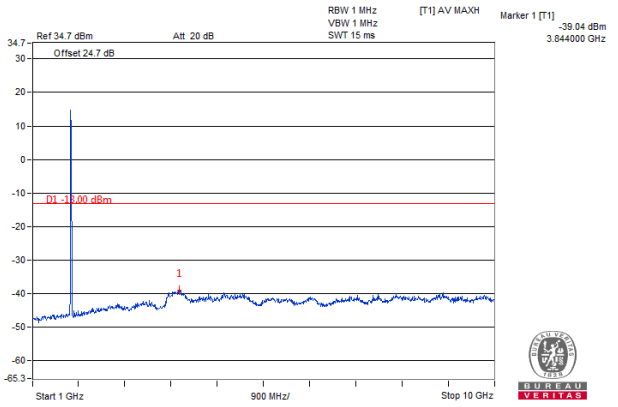
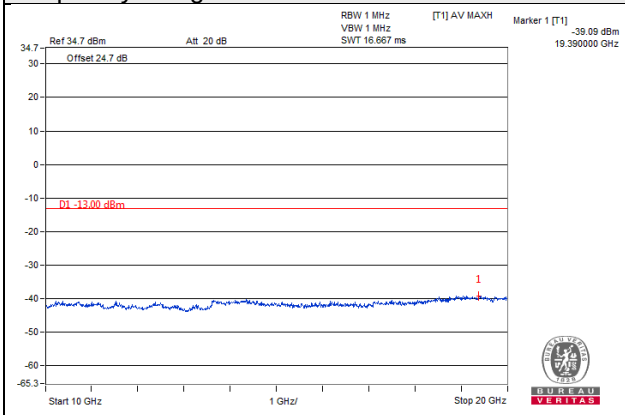
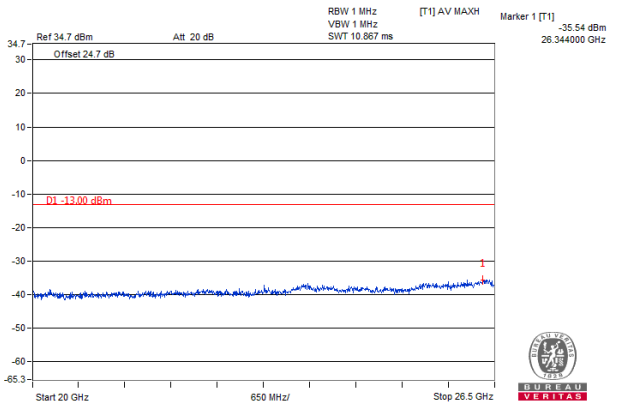
a. All measurements were done at middle operational frequency range.

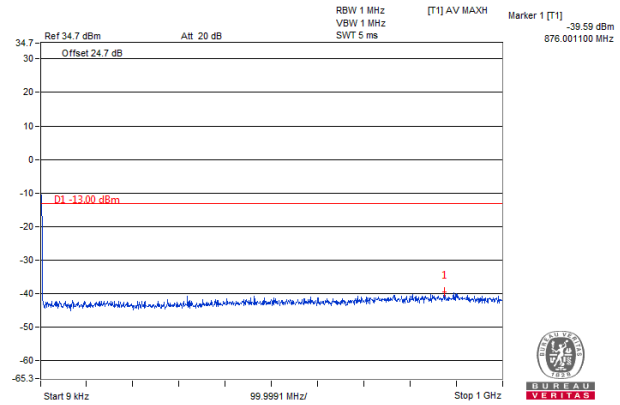
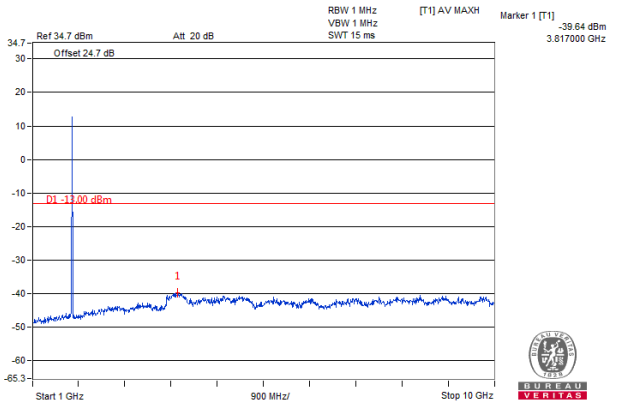
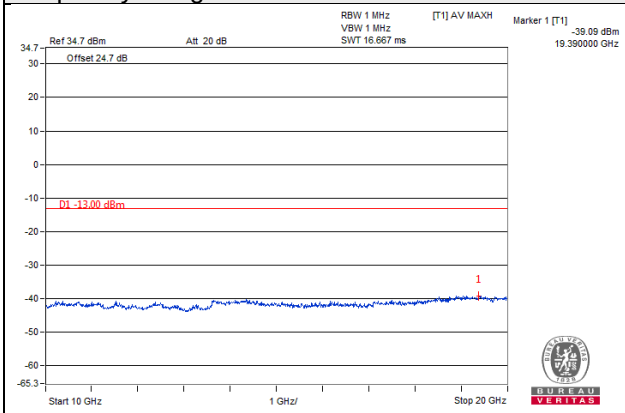
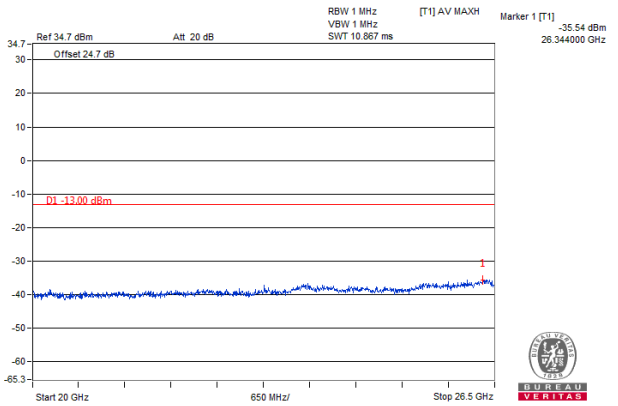
b. When the spectrum scanned from 9 kHz to suitable frequency, it shall be connected to the 20dB pad attenuated the carried frequency.

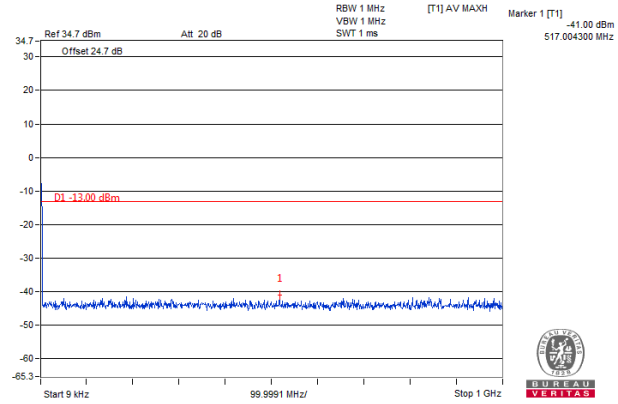
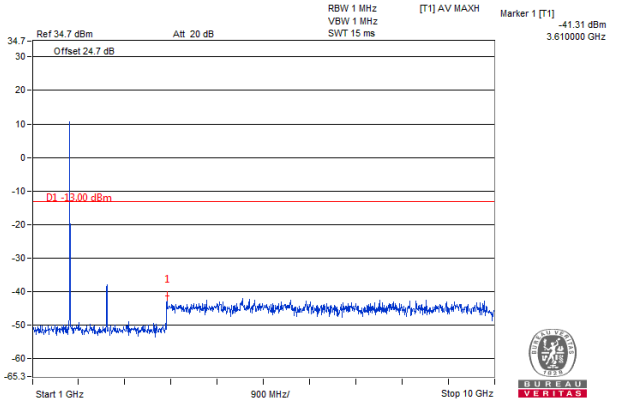
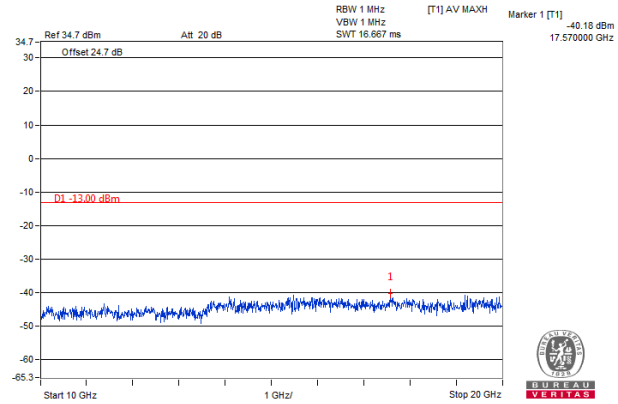
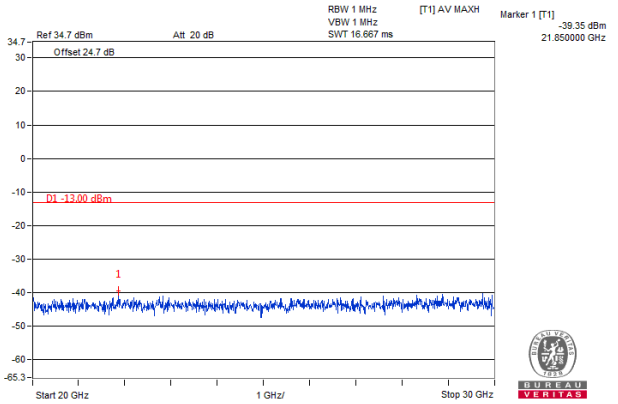
c. RBW=1MHz and VBW=1MHz is used for conducted emission measurement.

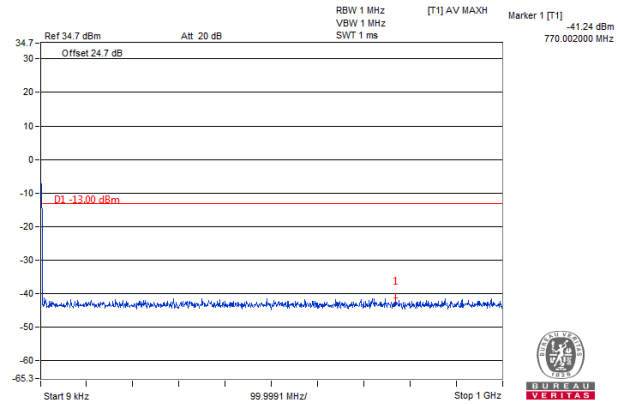
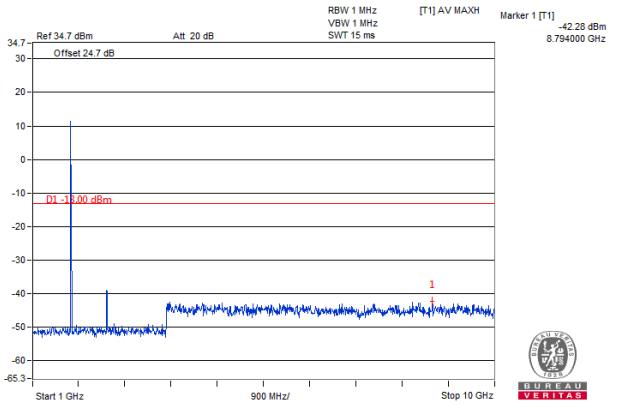
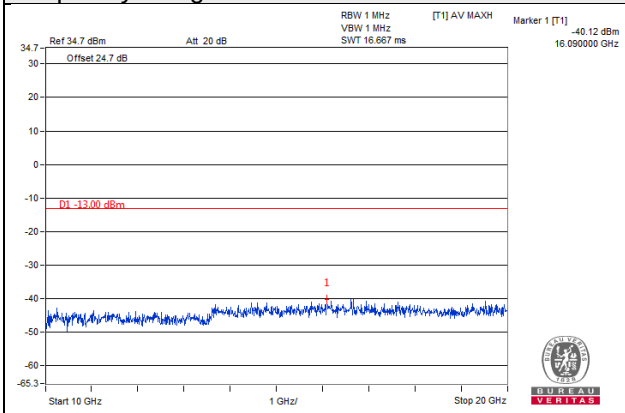
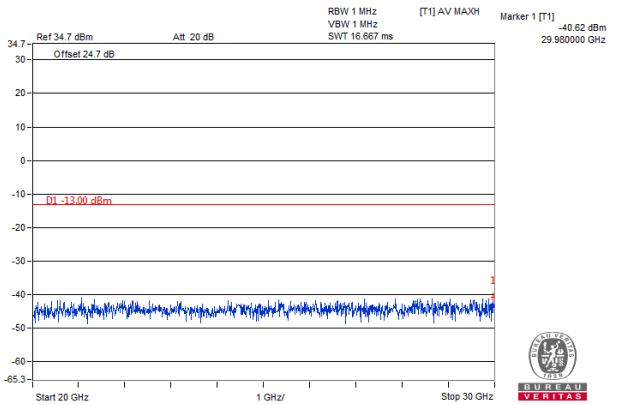
4.7.5 Test Results

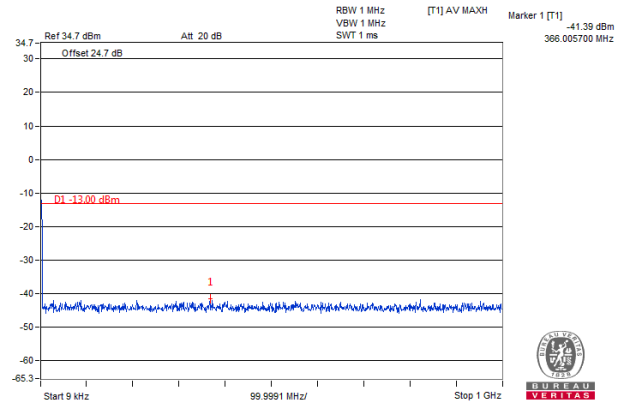
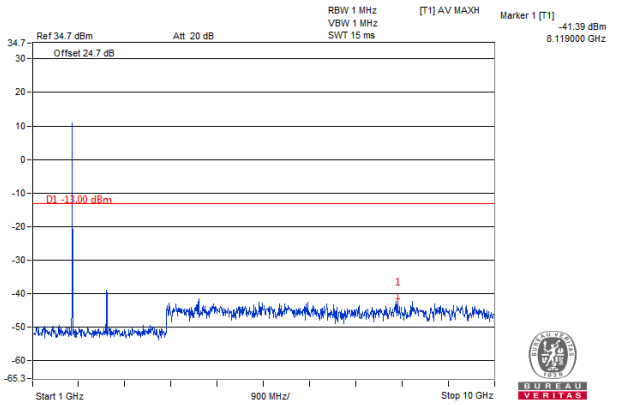
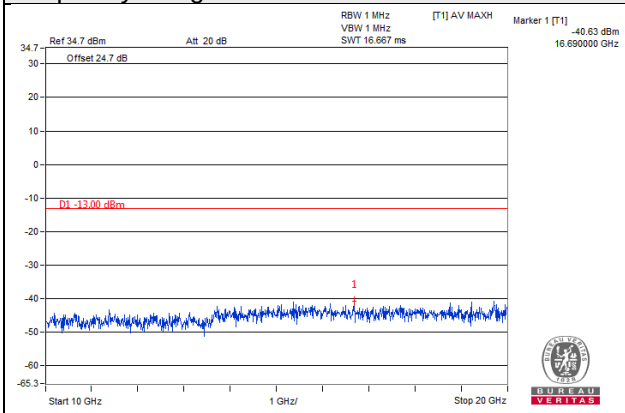
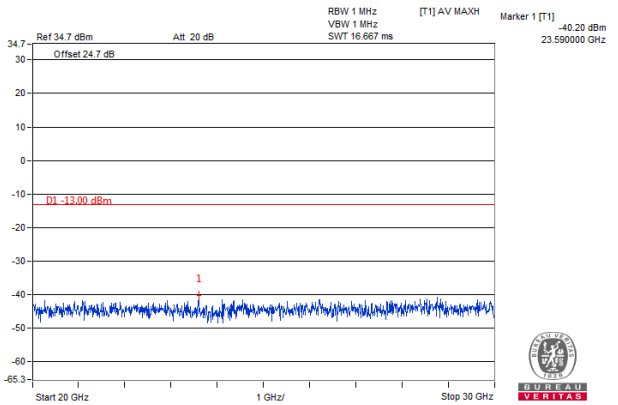
WCDMA	
Channel 1312	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~26.5GHz
	

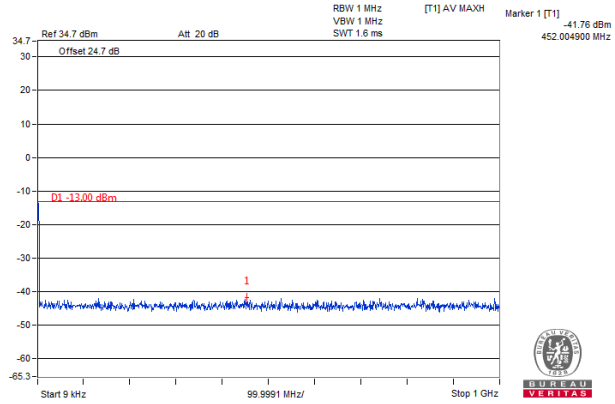
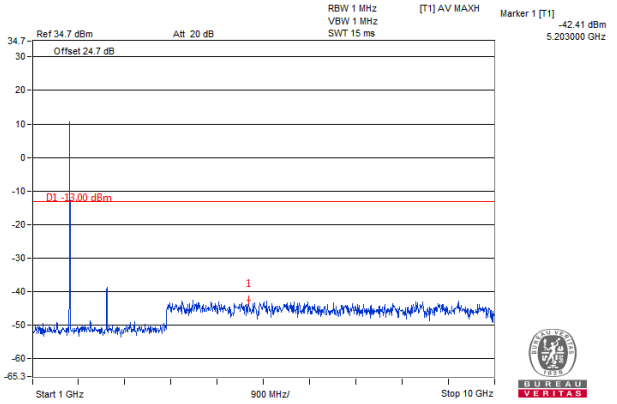
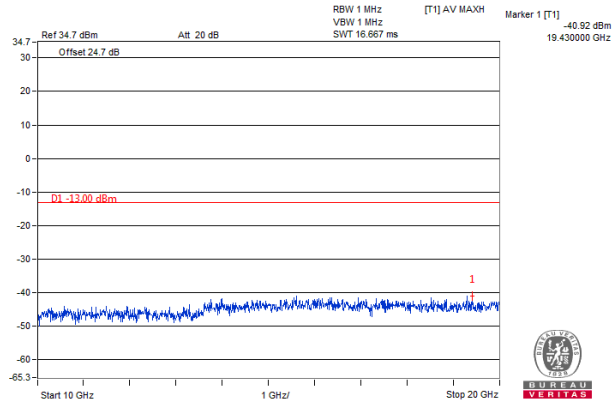
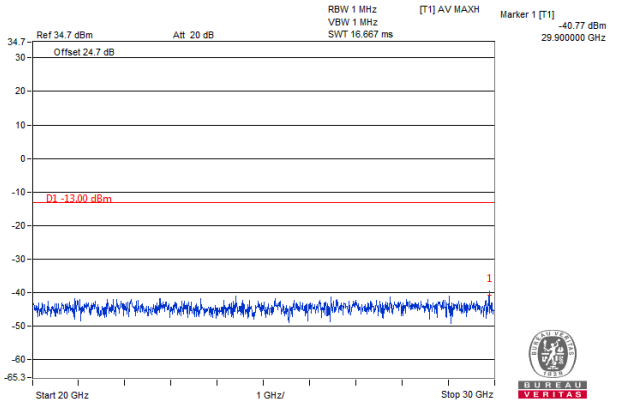
Channel 1413	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~26.5GHz
	

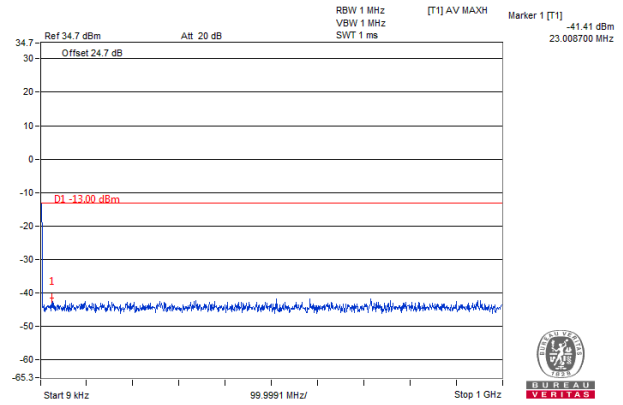
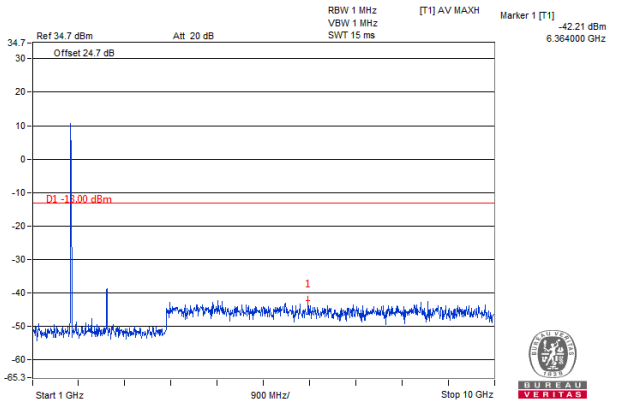
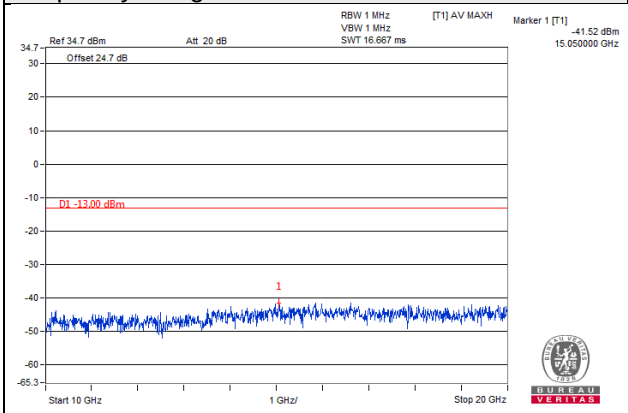
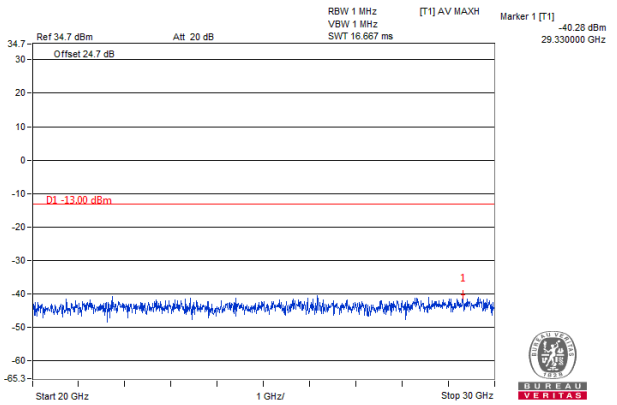
Channel 1513	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~26.5GHz
	

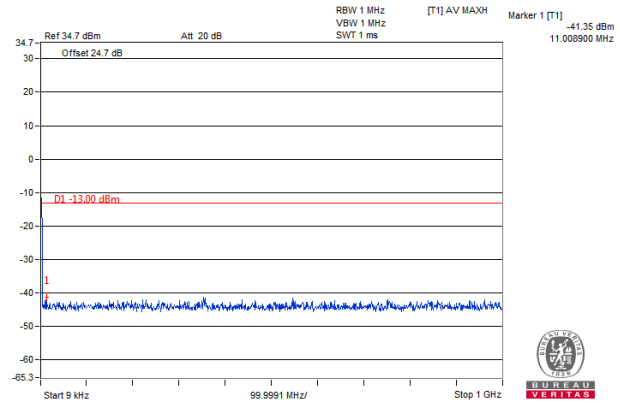
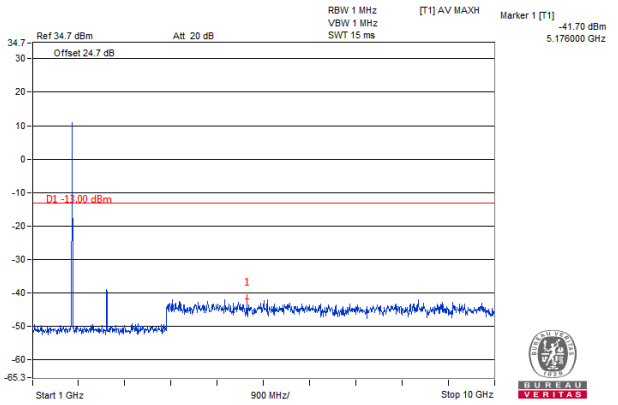
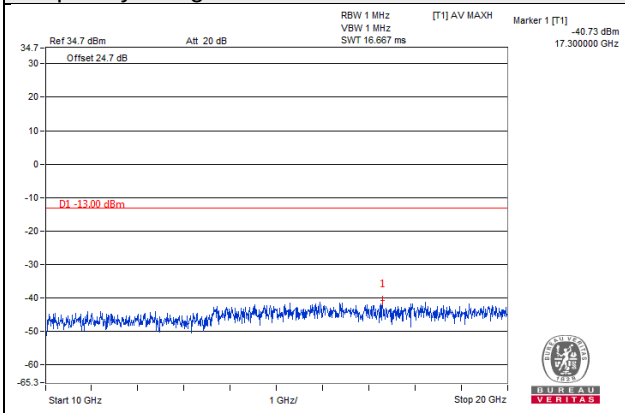
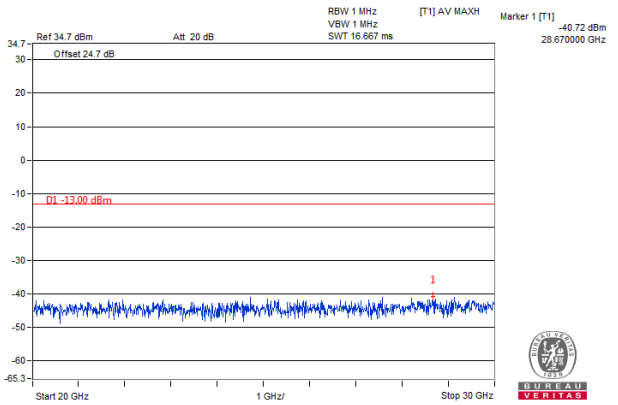
LTE Band 4 Channel Band width: 1.4MHz	
Channel 19957	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

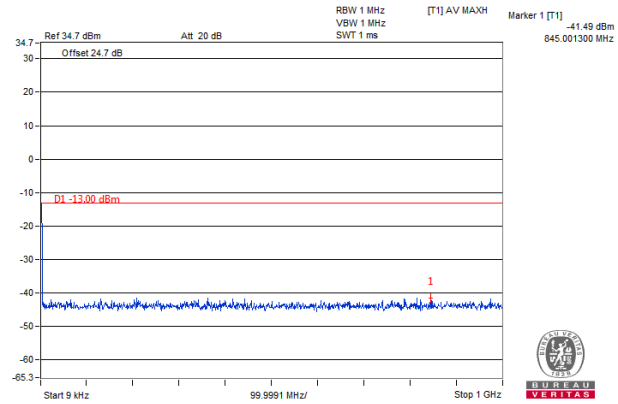
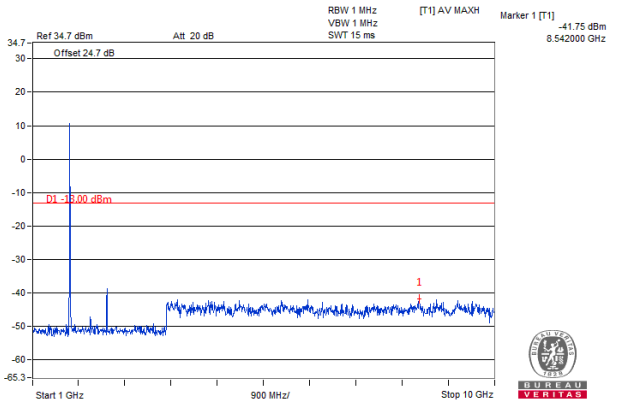
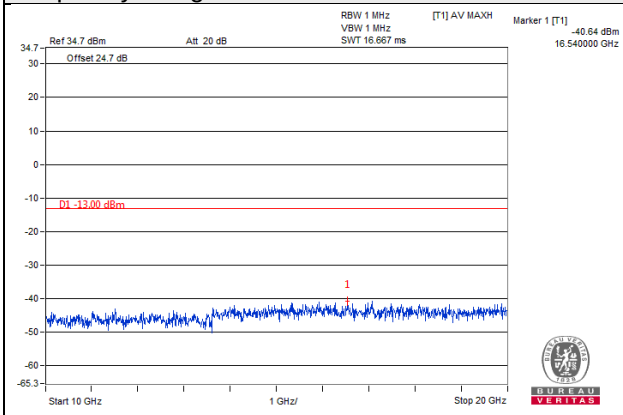
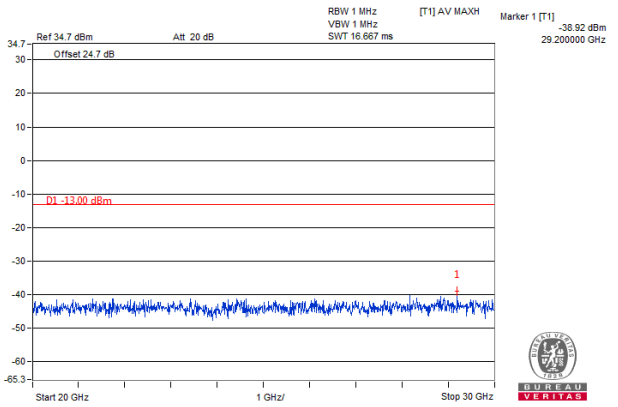
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

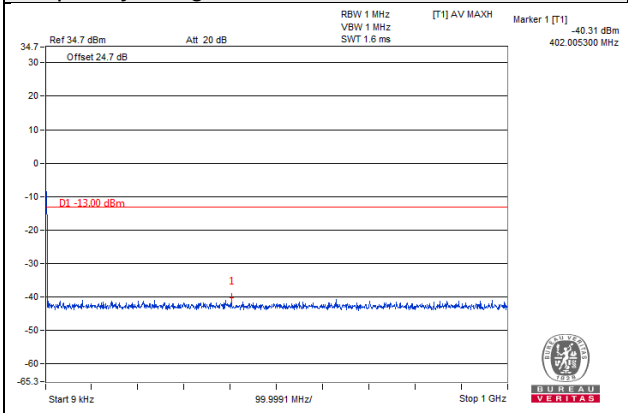
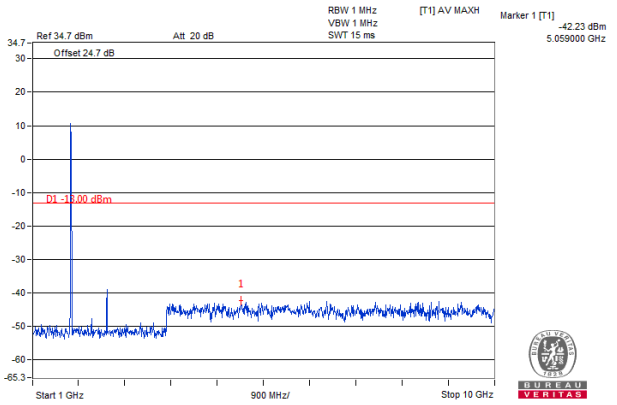
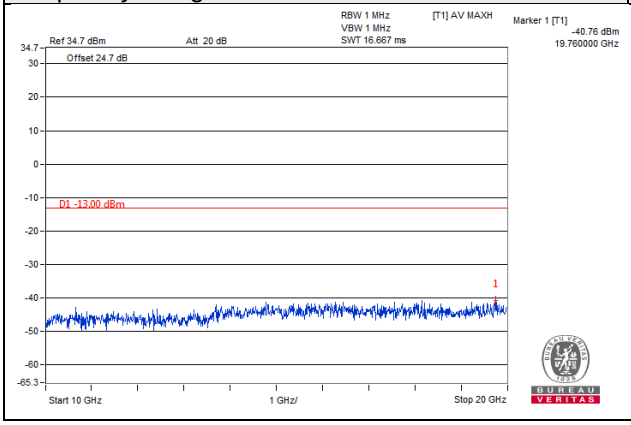
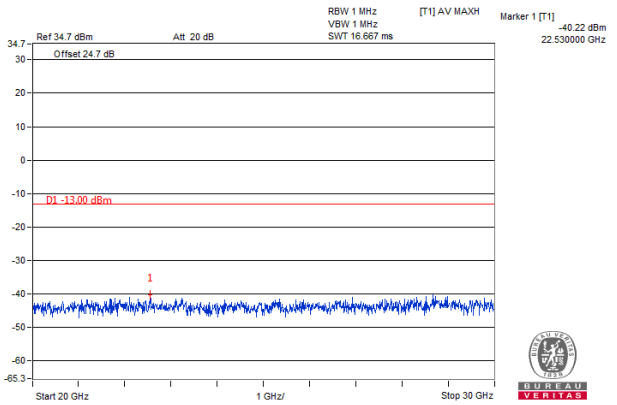
Channel 20393	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

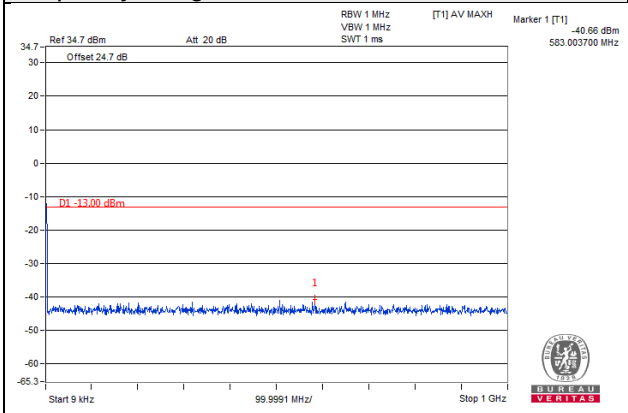
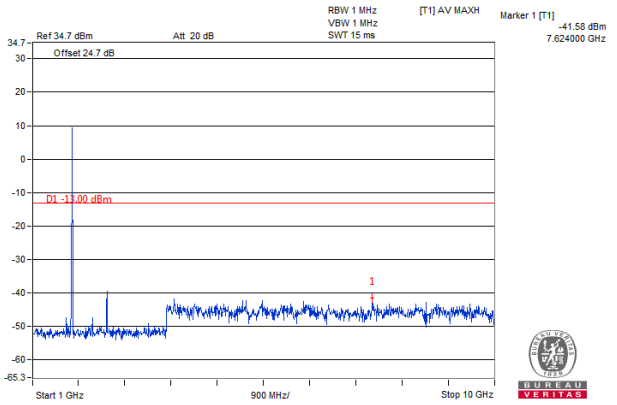
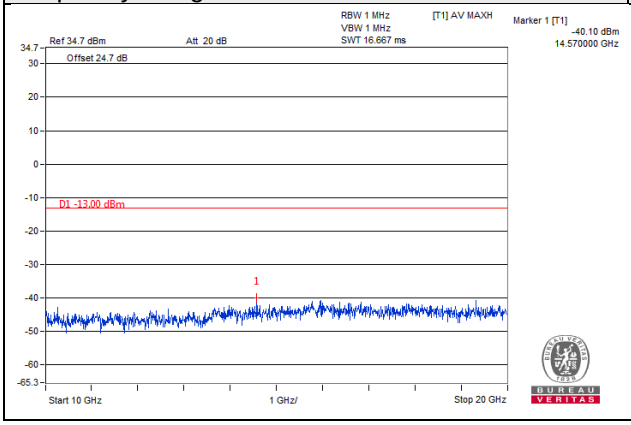
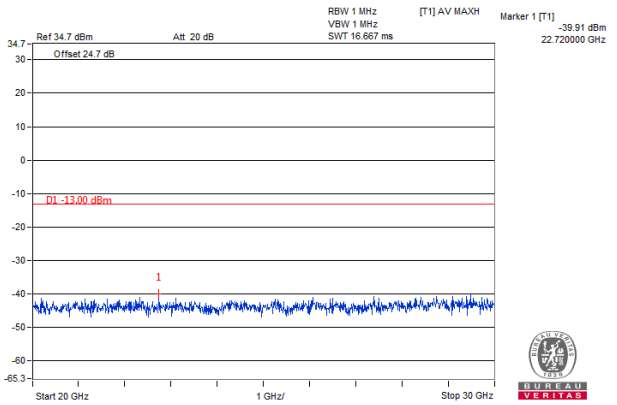
LTE Band 4 Channel Band width: 3MHz	
Channel 19965	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

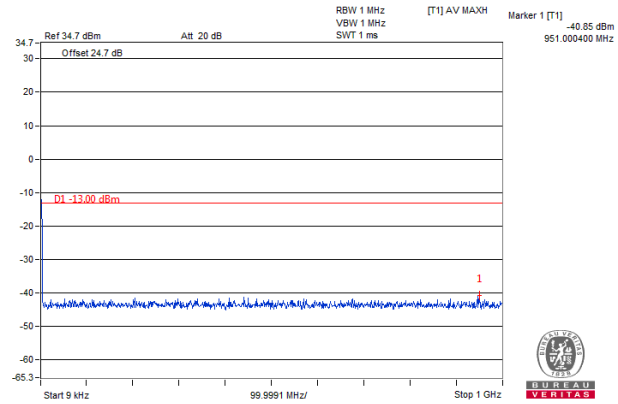
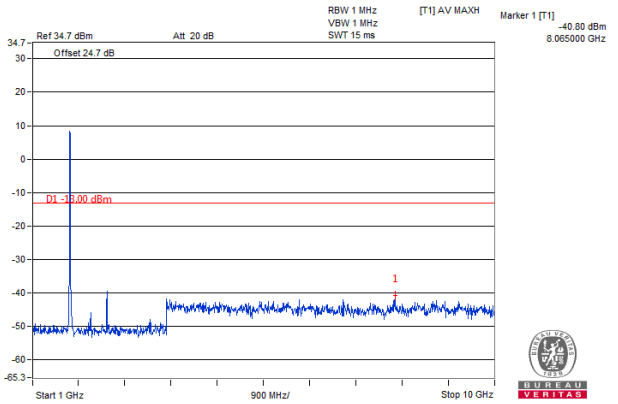
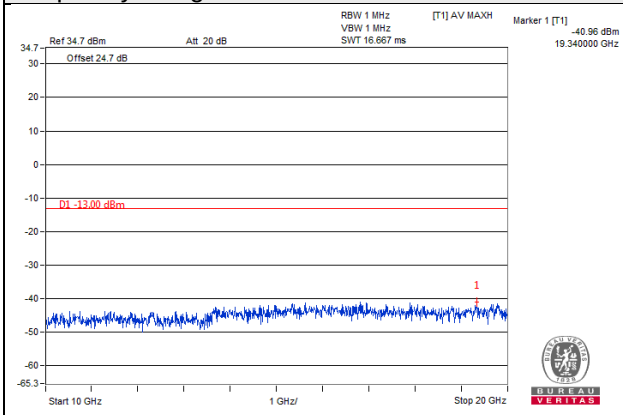
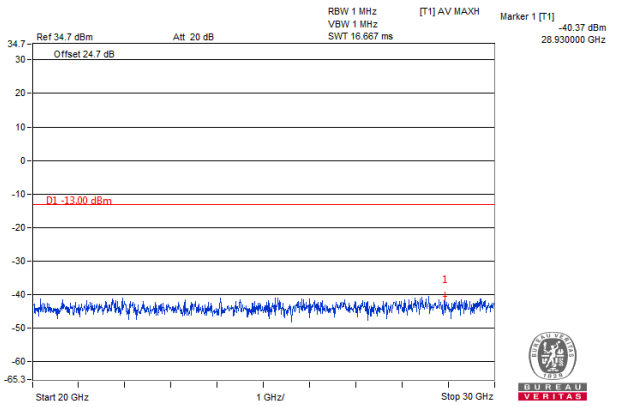
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

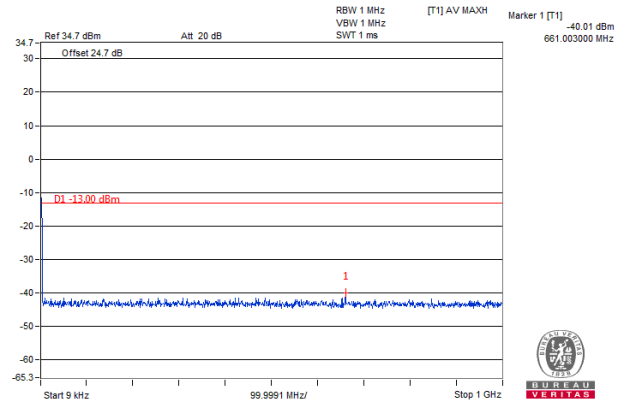
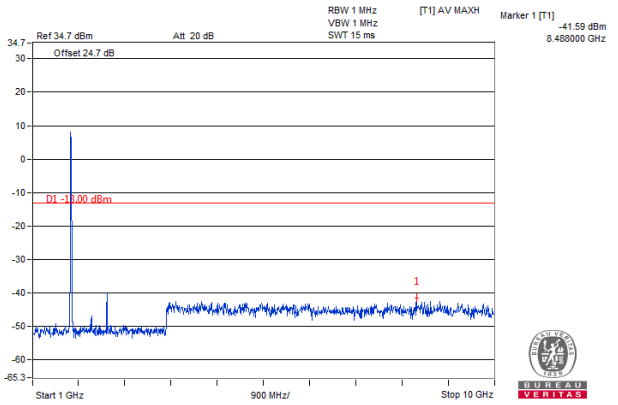
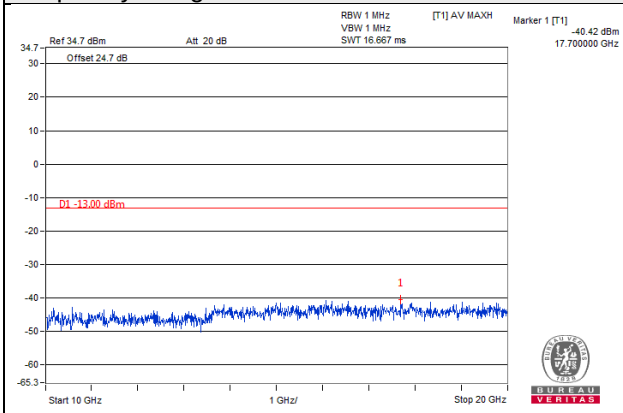
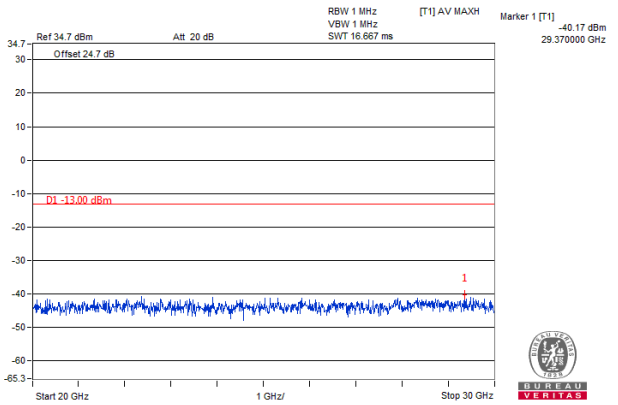
Channel 20385	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

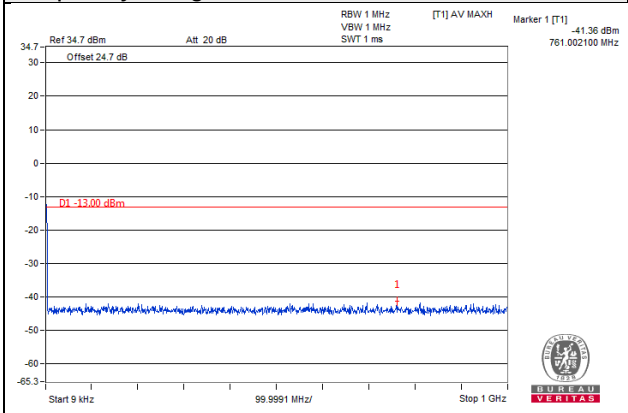
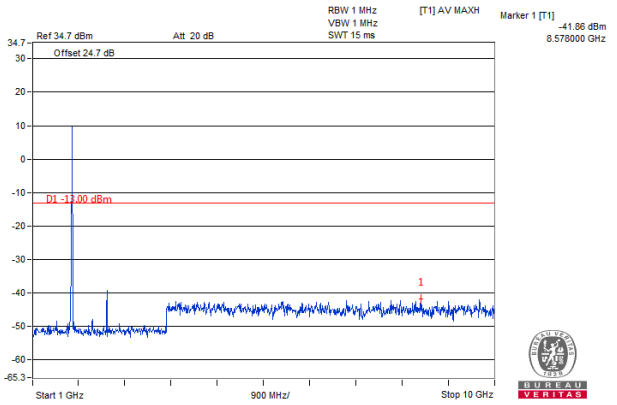
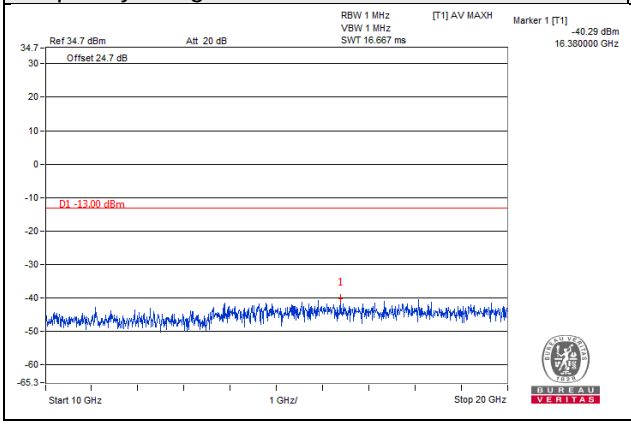
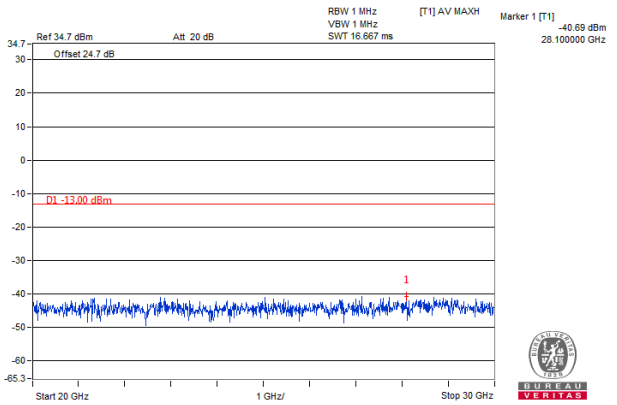
LTE Band 4 Channel Band width: 5MHz	
Channel 19975	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

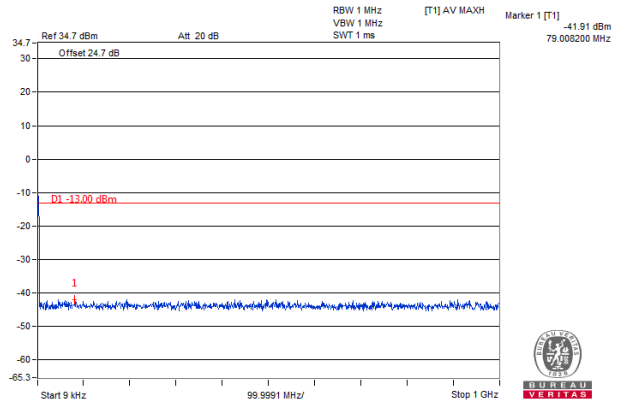
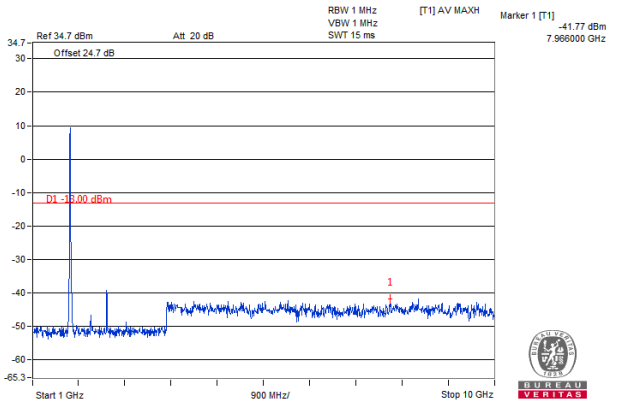
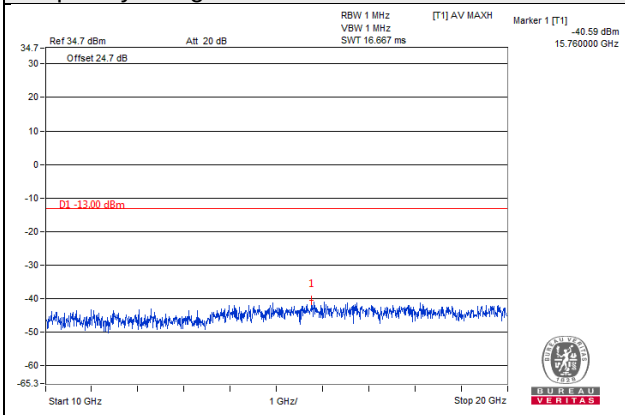
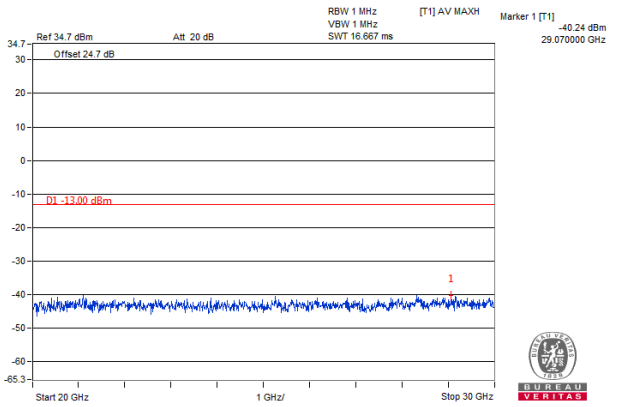
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

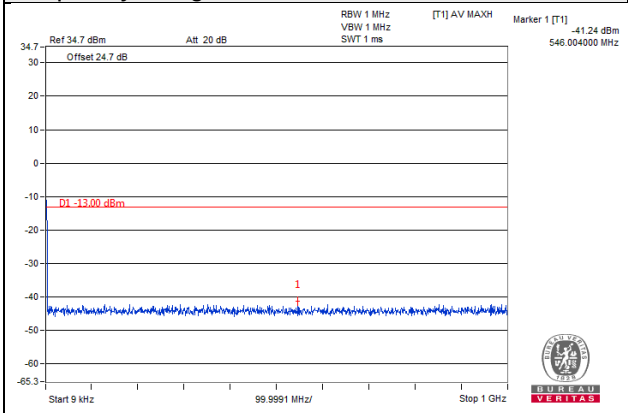
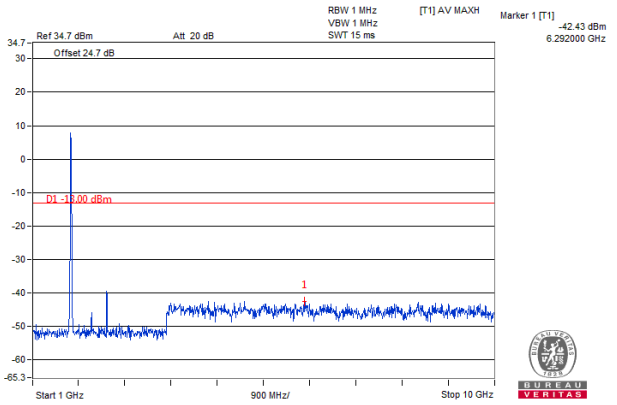
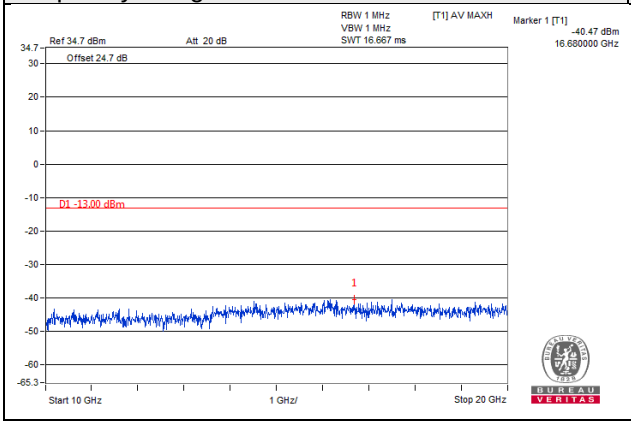
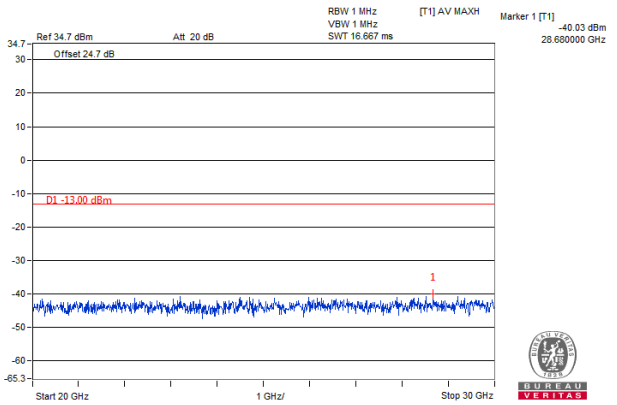
Channel 20375	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

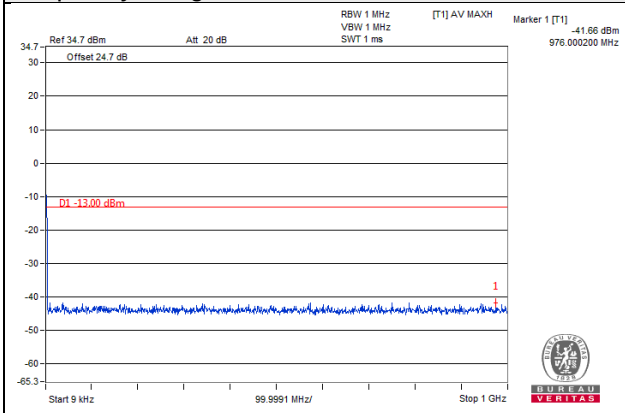
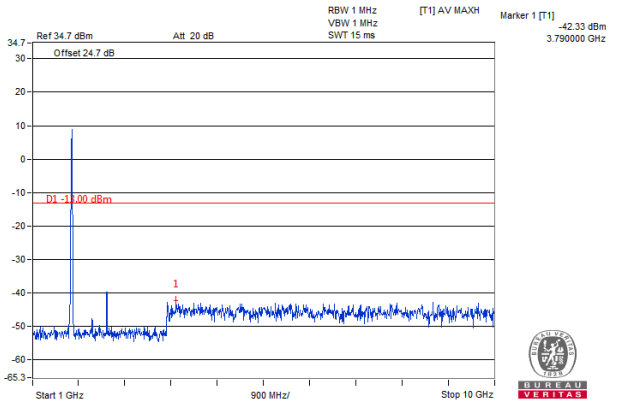
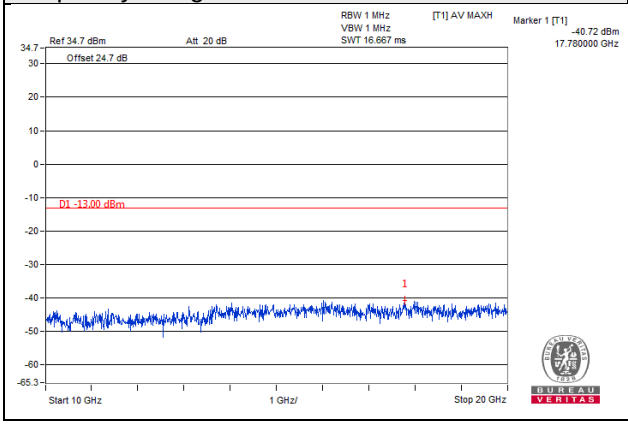
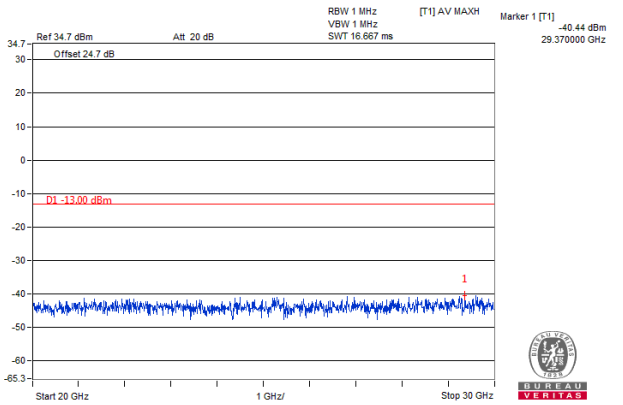
LTE Band 4 Channel Band width: 10MHz	
Channel 20000	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

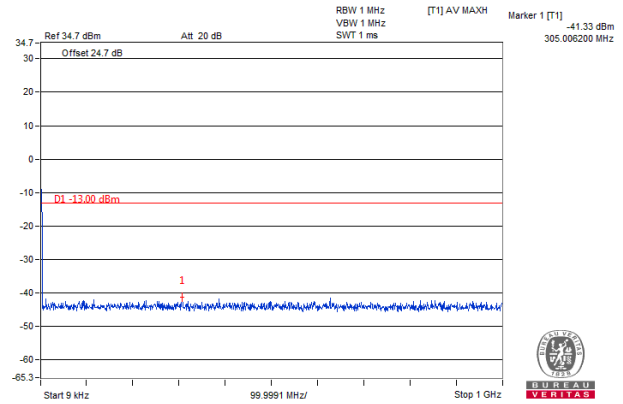
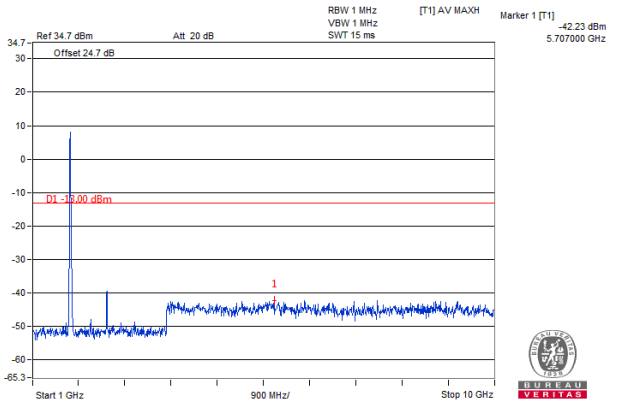
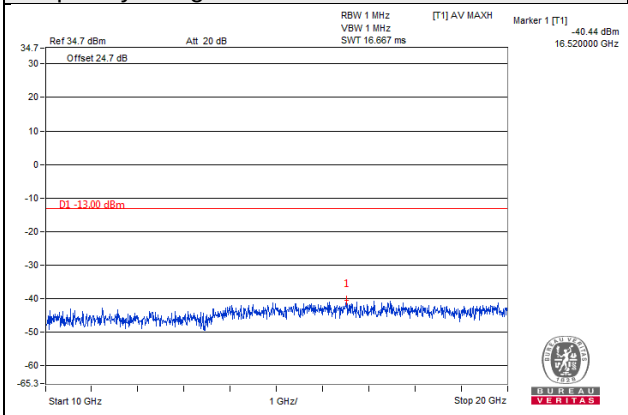
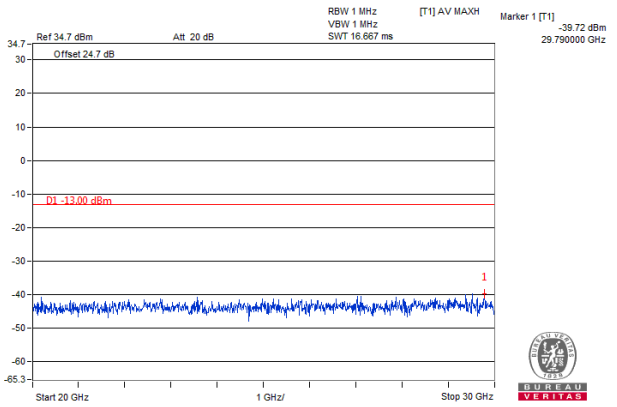
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

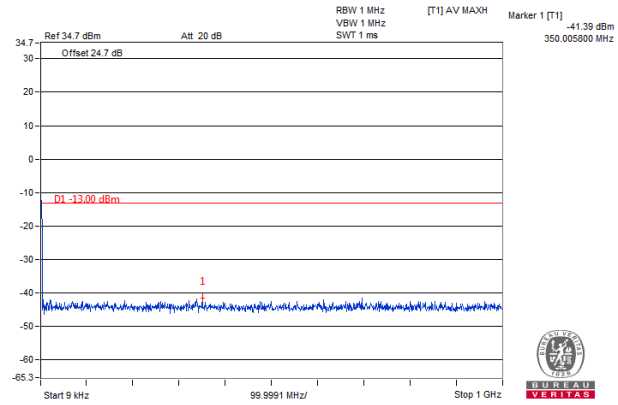
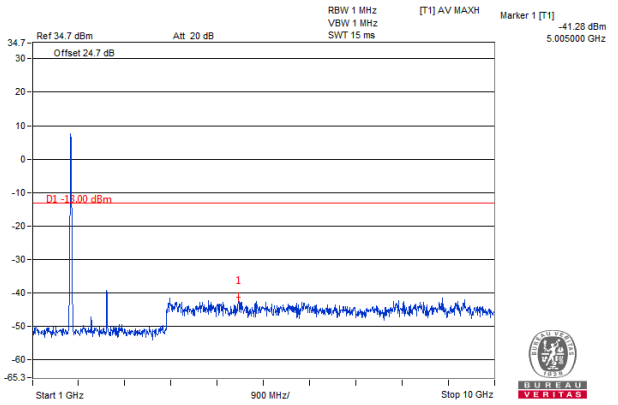
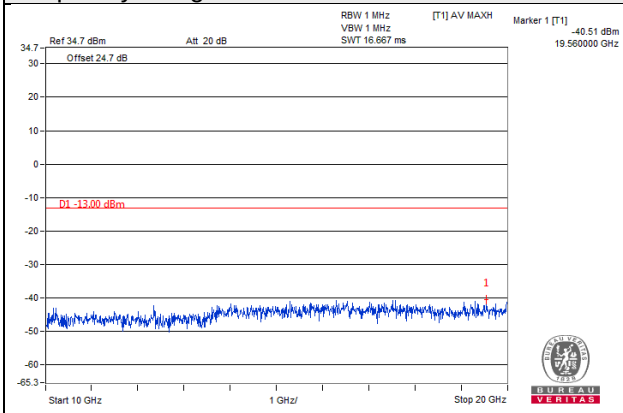
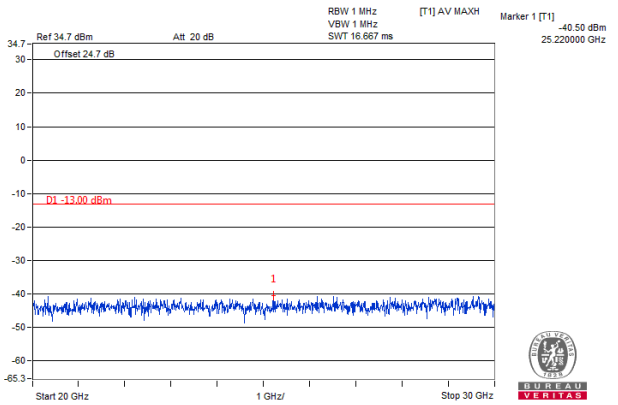
Channel 20350	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

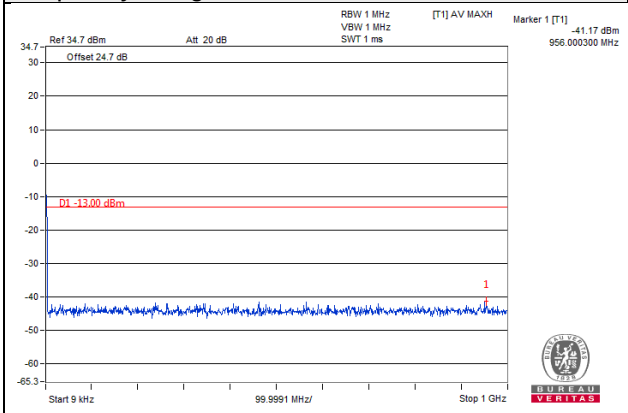
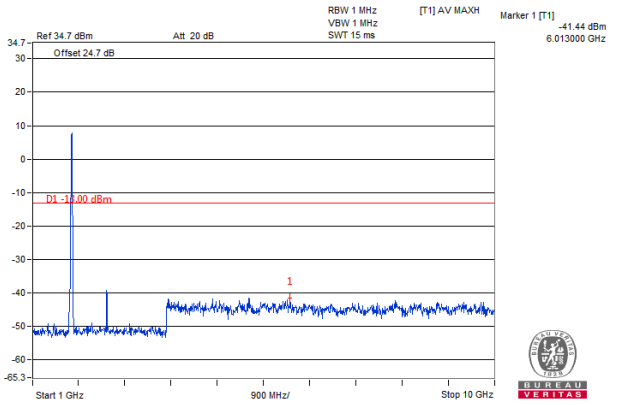
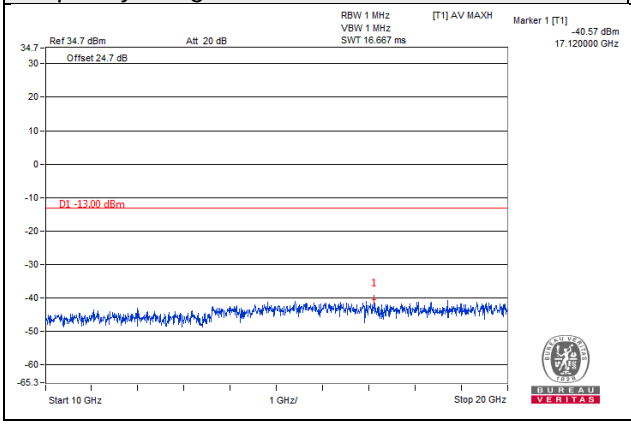
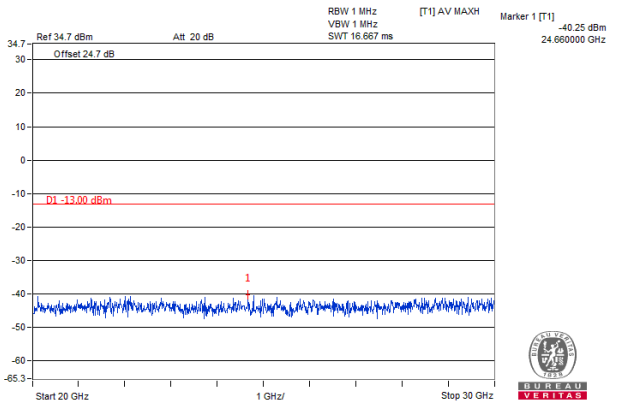
LTE Band 4 Channel Band width: 15MHz	
Channel 20425	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

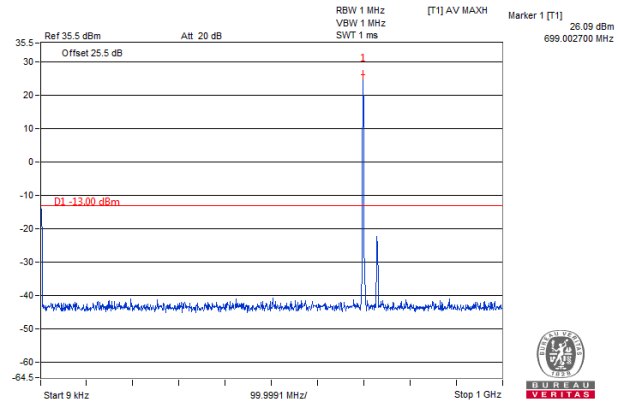
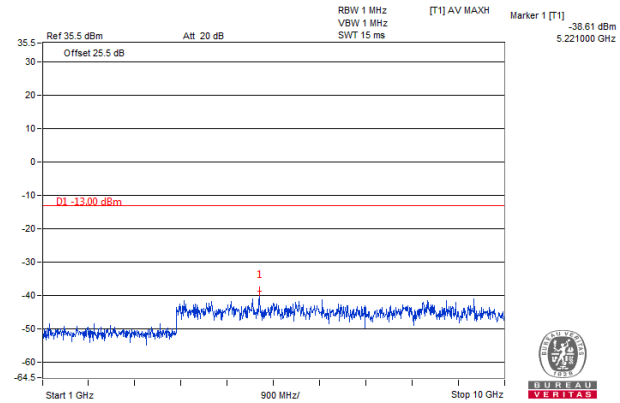
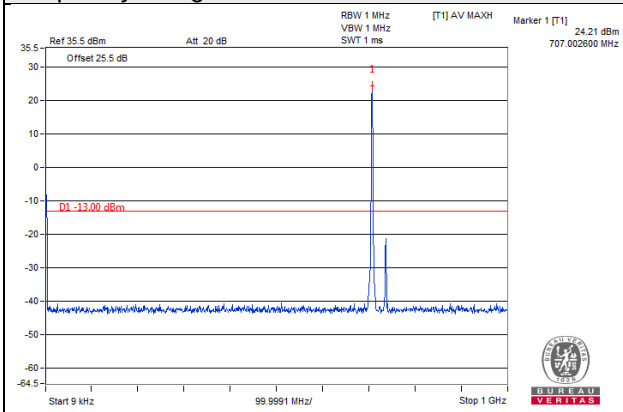
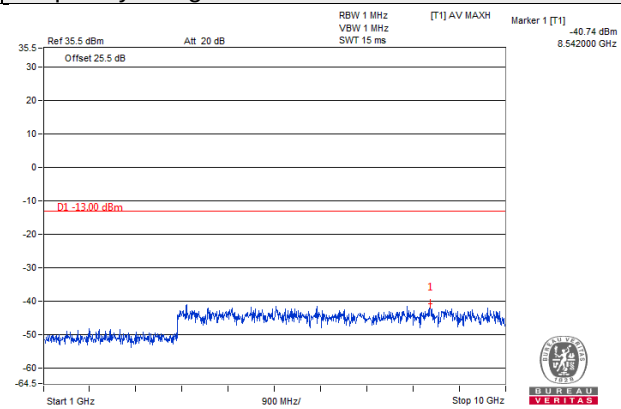
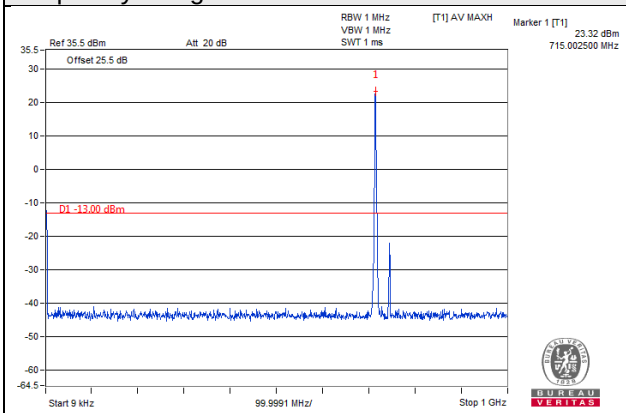
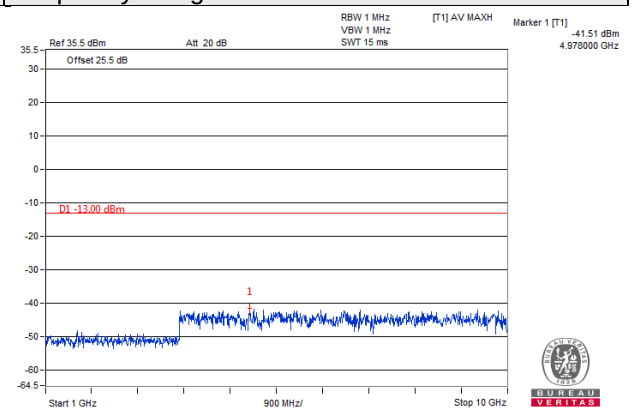
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

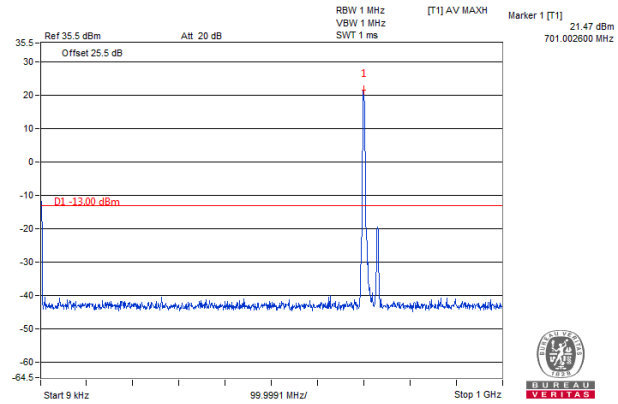
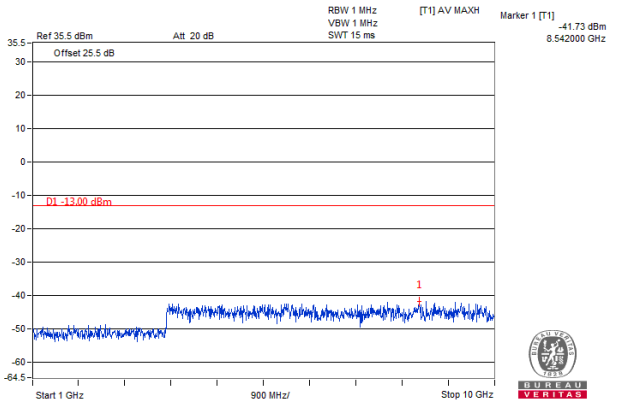
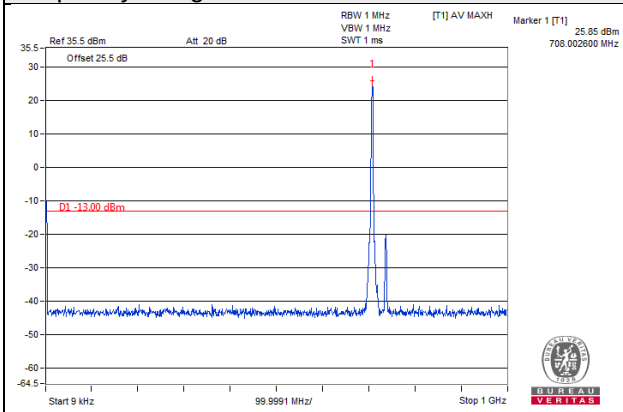
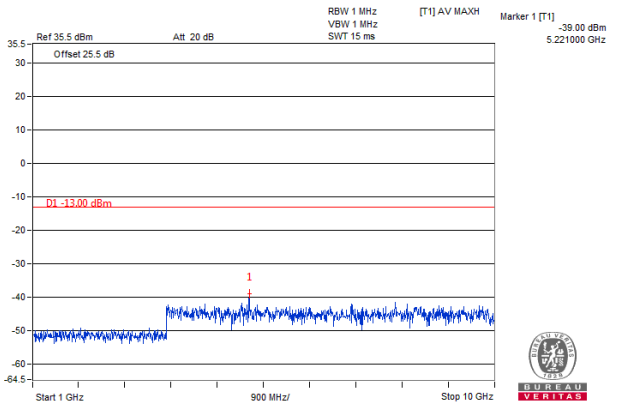
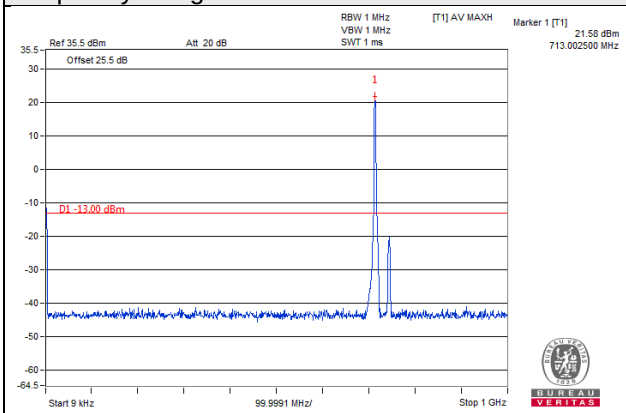
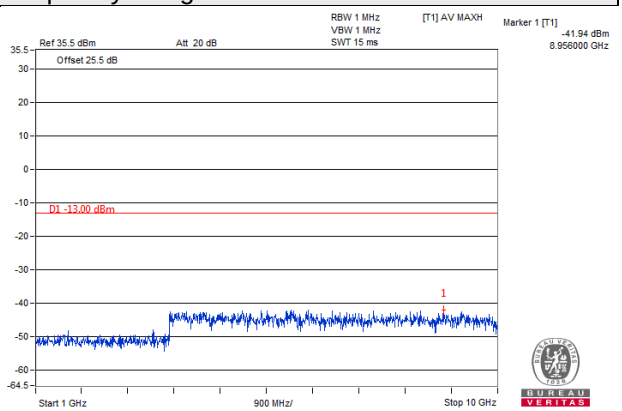
Channel 20625	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

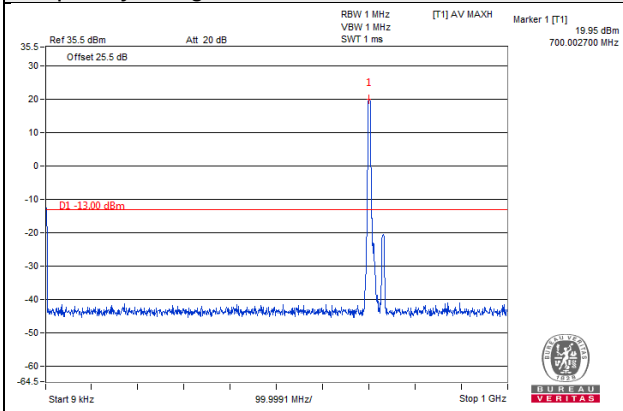
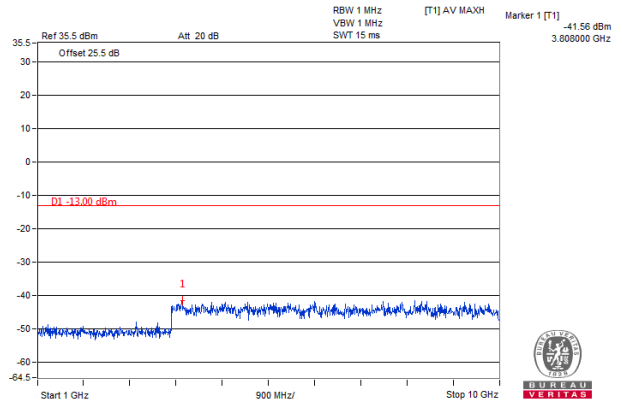
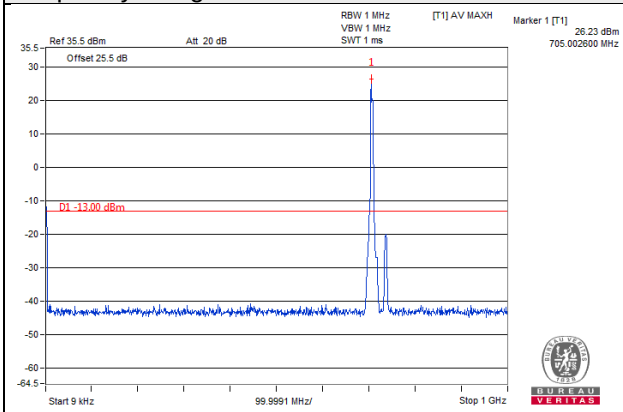
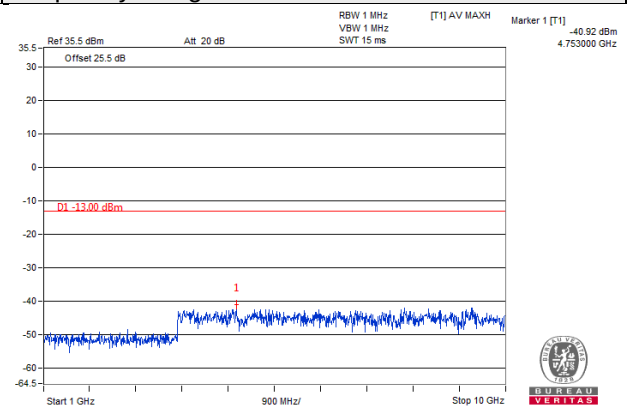
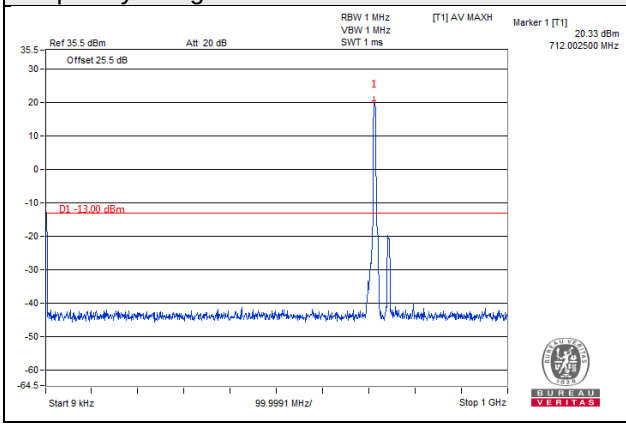
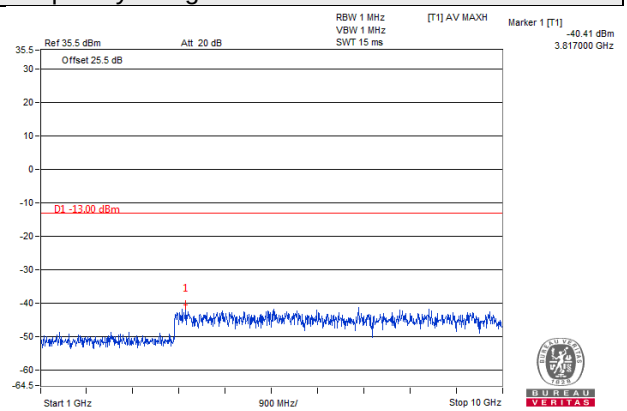
LTE Band 4 Channel Band width: 20MHz	
Channel 20050	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

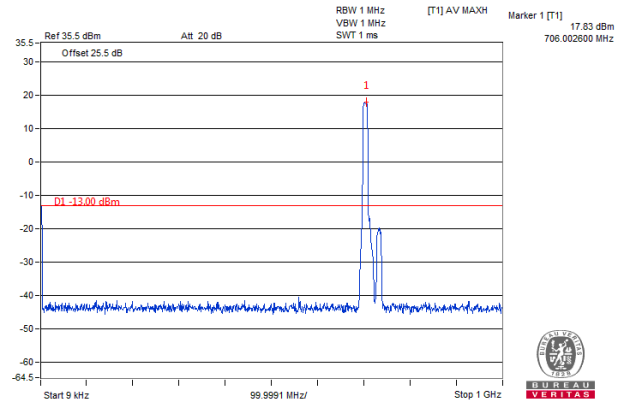
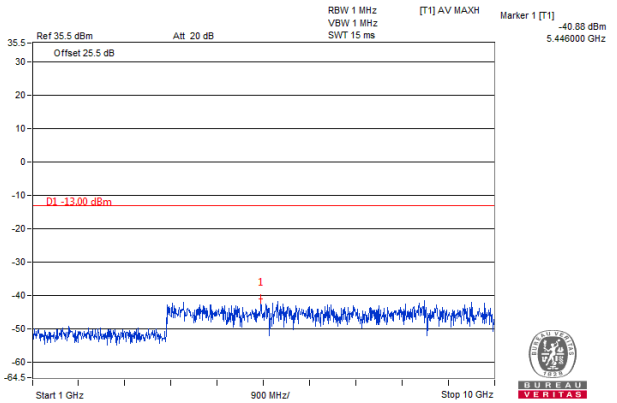
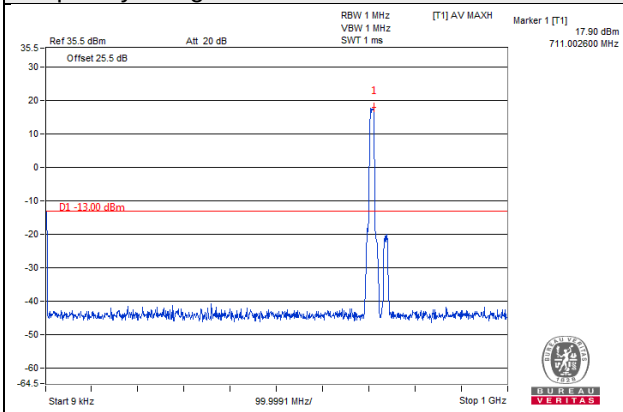
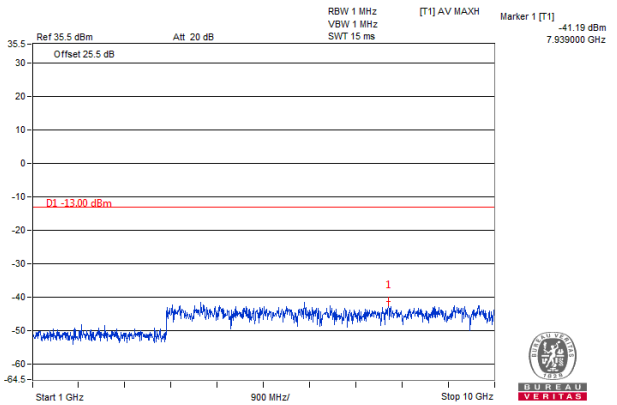
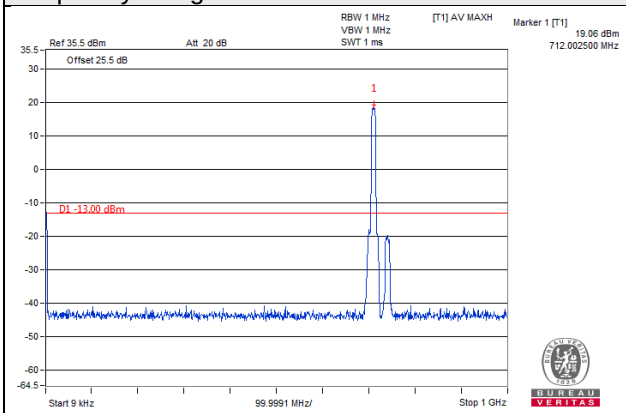
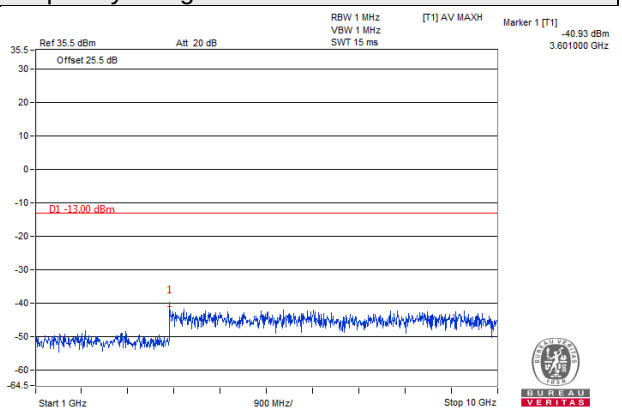
Channel 20175	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

Channel 20300	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz~10GHz
	
Frequency Range : 10GHz~20GHz	Frequency Range : 20GHz~30GHz
	

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
	

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
	

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
	

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
	

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. The substitution antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step b. Record the power level of S.G

d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution antenna.

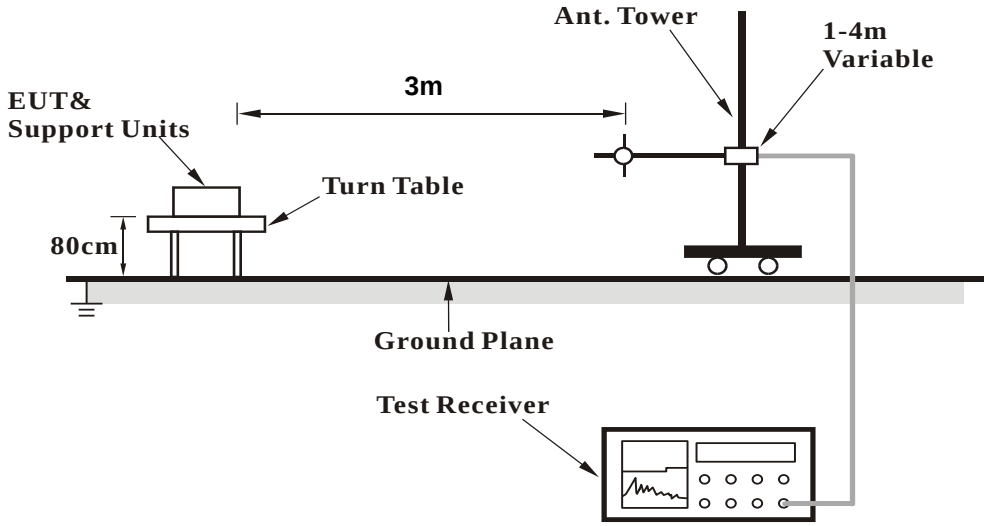
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/1MHz.

4.8.3 Deviation from Test Standard

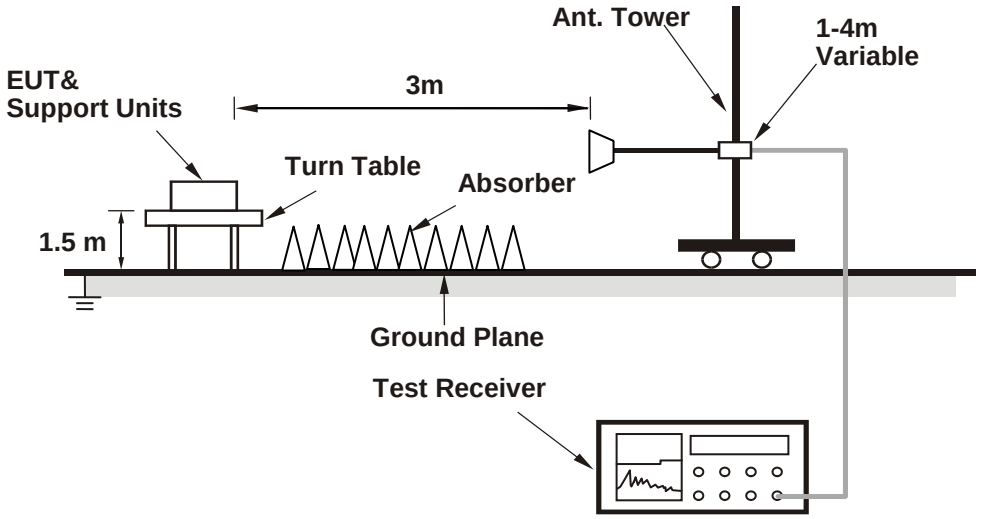
No deviation.

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	85.89	31.74	-61.36	-1.44	-62.80	-13	-49.80
2	271.12	36.84	-58.41	3.40	-55.00	-13	-42.00
3	305.04	37.67	-58.27	3.68	-54.59	-13	-41.59
4	315.48	38.65	-57.78	3.68	-54.10	-13	-41.10
5	342.66	39.07	-65.06	2.63	-62.43	-13	-49.43
6	356.26	38.39	-57.69	7.14	-50.56	-13	-37.56
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.69	35.68	-28.87	-16.08	-44.95	-13	-31.95
2	74.48	36.60	-58.46	-2.10	-60.56	-13	-47.56
3	254.73	36.06	-82.79	-2.04	-84.83	-13	-71.83
4	348.89	39.50	-55.48	2.38	-53.10	-13	-40.10
5	420.11	38.37	-58.10	3.48	-54.61	-13	-41.61
6	464.7	38.35	-55.26	1.92	-53.34	-13	-40.34

Remarks:

1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 1413	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	86.21	30.64	-62.40	-1.42	-63.82	-13	-50.82
2	271.23	36.70	-58.55	3.40	-55.14	-13	-42.14
3	305.09	37.17	-58.77	3.68	-55.09	-13	-42.09
4	315.86	38.17	-58.27	3.68	-54.60	-13	-41.60
5	343.24	38.48	-65.62	2.63	-62.99	-13	-49.99
6	355.69	37.70	-58.38	7.15	-51.24	-13	-38.24
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.3	35.36	-29.56	-15.90	-45.46	-13	-32.46
2	74.82	35.50	-59.50	-2.08	-61.58	-13	-48.58
3	254.28	35.89	-82.87	-2.04	-84.90	-13	-71.90
4	349.23	38.12	-56.86	2.37	-54.48	-13	-41.48
5	420.98	37.50	-58.96	3.48	-55.48	-13	-42.48
6	465.45	37.39	-56.23	1.92	-54.31	-13	-41.31

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 1513	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.21	30.12	-62.75	-1.36	-64.12	-13	-51.12
2	270.43	35.60	-59.65	3.41	-56.24	-13	-43.24
3	305.44	37.03	-58.92	3.68	-55.24	-13	-42.24
4	316.82	37.70	-58.78	3.67	-55.11	-13	-42.11
5	342.31	37.63	-66.52	2.63	-63.89	-13	-50.89
6	354.98	37.56	-58.52	7.16	-51.36	-13	-38.36
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.13	34.43	-30.39	-15.95	-46.33	-13	-33.33
2	75.65	34.34	-60.52	-2.03	-62.55	-13	-49.55
3	254.89	35.31	-83.58	-2.04	-85.62	-13	-72.62
4	349.68	37.33	-57.65	2.37	-55.28	-13	-42.28
5	421.94	37.05	-59.39	3.47	-55.92	-13	-42.92
6	465.37	36.90	-56.72	1.92	-54.80	-13	-41.80

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.6	27.94	-64.86	-1.34	-66.21	-13	-53.21
2	268.93	33.74	-61.52	3.43	-58.08	-13	-45.08
3	305.47	36.56	-59.39	3.68	-55.71	-13	-42.71
4	316.82	37.55	-58.93	3.67	-55.26	-13	-42.26
5	342.33	36.60	-67.55	2.63	-64.92	-13	-51.92
6	354.7	36.74	-59.34	7.16	-52.18	-13	-39.18
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.92	31.64	-33.05	-16.01	-49.06	-13	-36.06
2	74.99	30.62	-64.35	-2.07	-66.42	-13	-53.42
3	255.73	32.78	-86.29	-2.04	-88.34	-13	-75.34
4	350.65	35.17	-59.80	2.35	-57.45	-13	-44.45
5	421.04	33.65	-62.80	3.48	-59.33	-13	-46.33
6	467.06	34.33	-59.30	1.92	-57.38	-13	-44.38

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	84.41	29.47	-63.88	-1.52	-65.41	-13	-52.41
2	270.75	34.07	-61.18	3.41	-57.77	-13	-44.77
3	305.02	34.23	-61.70	3.68	-58.02	-13	-45.02
4	313.88	35.38	-60.98	3.68	-57.30	-13	-44.30
5	344.4	38.39	-65.64	2.63	-63.02	-13	-50.02
6	354.82	35.76	-60.32	7.16	-53.16	-13	-40.16
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.72	34.11	-30.46	-16.07	-46.53	-13	-33.53
2	72.74	31.10	-64.26	-2.20	-66.46	-13	-53.46
3	252.24	32.82	-85.49	-2.02	-87.52	-13	-74.52
4	348.31	34.91	-60.07	2.39	-57.69	-13	-44.69
5	421.42	36.98	-59.47	3.47	-56.00	-13	-43.00
6	466.13	37.09	-56.53	1.92	-54.62	-13	-41.62

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20393	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	83.59	28.23	-65.26	-1.57	-66.84	-13	-53.84
2	271.93	31.70	-63.54	3.39	-60.15	-13	-47.15
3	305.77	32.70	-63.26	3.68	-59.58	-13	-46.58
4	312.34	33.25	-63.05	3.68	-59.36	-13	-46.36
5	344.15	37.60	-66.45	2.63	-63.82	-13	-50.82
6	354.25	34.72	-61.36	7.17	-54.19	-13	-41.19
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.6	32.89	-32.21	-15.81	-48.02	-13	-35.02
2	72.97	29.70	-65.62	-2.18	-67.80	-13	-54.80
3	253.03	32.49	-85.99	-2.03	-88.02	-13	-75.02
4	348.06	33.53	-61.45	2.39	-59.06	-13	-46.06
5	422.23	36.18	-60.26	3.47	-56.79	-13	-43.79
6	466.04	36.79	-56.83	1.92	-54.91	-13	-41.91

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.22	25.19	-67.68	-1.36	-69.04	-13	-56.04
2	270.38	31.50	-63.75	3.41	-60.34	-13	-47.34
3	305.48	34.42	-61.53	3.68	-57.85	-13	-44.85
4	318.26	35.07	-61.47	3.67	-57.80	-13	-44.80
5	341.19	35.61	-68.60	2.62	-65.98	-13	-52.98
6	354.07	35.31	-60.77	7.17	-53.60	-13	-40.60
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.24	31.56	-33.32	-15.92	-49.24	-13	-36.24
2	74.76	28.97	-66.04	-2.08	-68.12	-13	-55.12
3	257.15	31.28	-88.10	-2.05	-90.15	-13	-77.15
4	350.71	33.49	-61.48	2.35	-59.13	-13	-46.13
5	422.04	31.81	-64.63	3.47	-61.16	-13	-48.16
6	467.18	32.50	-61.13	1.92	-59.21	-13	-46.21

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.24	23.81	-69.06	-1.36	-70.42	-13	-57.42
2	269.73	29.89	-65.36	3.42	-61.94	-13	-48.94
3	303.97	32.38	-63.52	3.69	-59.84	-13	-46.84
4	316.77	33.73	-62.75	3.67	-59.08	-13	-46.08
5	341.51	34.89	-69.30	2.62	-66.68	-13	-53.68
6	354.08	33.70	-62.38	7.17	-55.21	-13	-42.21
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.4	30.68	-34.30	-15.87	-50.17	-13	-37.17
2	75.93	27.08	-67.73	-2.01	-69.74	-13	-56.74
3	257.54	29.84	-89.62	-2.06	-91.68	-13	-78.68
4	348.8	31.35	-63.63	2.38	-61.25	-13	-48.25
5	421.22	29.23	-67.22	3.48	-63.75	-13	-50.75
6	467.44	30.77	-62.86	1.92	-60.95	-13	-47.95

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20385	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.13	23.54	-69.35	-1.37	-70.71	-13	-57.71
2	270.64	28.66	-66.59	3.41	-63.18	-13	-50.18
3	304.39	32.20	-63.72	3.68	-60.03	-13	-47.03
4	315.8	32.87	-63.57	3.68	-59.90	-13	-46.90
5	342.26	33.46	-70.69	2.62	-68.07	-13	-55.07
6	354.84	32.85	-63.23	7.16	-56.07	-13	-43.07
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.84	29.63	-35.61	-15.74	-51.35	-13	-38.35
2	75.01	26.06	-68.91	-2.07	-70.98	-13	-57.98
3	257.86	28.47	-91.06	-2.06	-93.12	-13	-80.12
4	348.96	31.11	-63.87	2.38	-61.49	-13	-48.49
5	421.55	29.09	-67.36	3.47	-63.89	-13	-50.89
6	466.73	29.48	-64.15	1.92	-62.23	-13	-49.23

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.22	22.83	-70.04	-1.36	-71.40	-13	-58.40
2	269.91	27.33	-67.92	3.42	-64.50	-13	-51.50
3	303.74	31.74	-64.16	3.69	-60.47	-13	-47.47
4	314.81	32.78	-63.62	3.68	-59.94	-13	-46.94
5	342.82	32.03	-72.09	2.63	-69.46	-13	-56.46
6	354.89	31.51	-64.57	7.16	-57.41	-13	-44.41
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.71	29.34	-36.42	-15.49	-51.91	-13	-38.91
2	74.37	25.84	-69.24	-2.10	-71.34	-13	-58.34
3	258.19	28.41	-91.19	-2.06	-93.26	-13	-80.26
4	348.09	31.10	-63.88	2.39	-61.49	-13	-48.49
5	420.67	29.04	-67.42	3.48	-63.94	-13	-50.94
6	467.45	29.05	-64.58	1.92	-62.67	-13	-49.67

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.58	22.69	-70.12	-1.34	-71.46	-13	-58.46
2	270.89	25.84	-69.41	3.41	-66.00	-13	-53.00
3	303.94	31.13	-64.77	3.69	-61.08	-13	-48.08
4	313.88	31.33	-65.03	3.68	-61.35	-13	-48.35
5	342.03	30.94	-73.22	2.62	-70.60	-13	-57.60
6	354.74	30.35	-65.73	7.16	-58.57	-13	-45.57
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.99	27.58	-38.35	-15.41	-53.76	-13	-40.76
2	73.82	23.25	-71.92	-2.13	-74.06	-13	-61.06
3	259.29	26.72	-93.12	-2.07	-95.19	-13	-82.19
4	348.12	29.99	-64.99	2.39	-62.60	-13	-49.60
5	420.74	28.26	-68.20	3.48	-64.72	-13	-51.72
6	468.3	26.86	-66.78	1.91	-64.86	-13	-51.86

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20375	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.66	21.42	-71.37	-1.34	-72.71	-13	-59.71
2	271.19	24.98	-70.27	3.40	-66.86	-13	-53.86
3	303.79	31.11	-64.79	3.69	-61.10	-13	-48.10
4	313.79	30.28	-66.08	3.68	-62.40	-13	-49.40
5	341.54	29.81	-74.38	2.62	-71.76	-13	-58.76
6	354.6	29.11	-66.97	7.17	-59.81	-13	-46.81
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.79	26.39	-39.42	-15.47	-54.89	-13	-41.89
2	74.19	23.00	-72.11	-2.11	-74.22	-13	-61.22
3	258.6	25.27	-94.42	-2.06	-96.49	-13	-83.49
4	348.54	28.84	-66.14	2.38	-63.76	-13	-50.76
5	421.13	26.99	-69.46	3.48	-65.99	-13	-52.99
6	469.22	26.45	-67.20	1.91	-65.28	-13	-52.28

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.61	21.57	-71.23	-1.34	-72.57	-13	-59.57
2	270.72	26.24	-69.01	3.41	-65.60	-13	-52.60
3	303.59	30.30	-65.59	3.69	-61.90	-13	-48.90
4	314.18	32.55	-63.82	3.68	-60.14	-13	-47.14
5	343.31	30.67	-73.42	2.63	-70.80	-13	-57.80
6	355.58	30.61	-65.47	7.15	-58.32	-13	-45.32
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.76	23.45	-41.74	-15.77	-57.51	-13	-44.51
2	74.74	21.53	-73.49	-2.08	-75.57	-13	-62.57
3	259.48	21.84	-98.05	-2.07	-100.11	-13	-87.11
4	350.37	25.91	-69.06	2.36	-66.71	-13	-53.71
5	422.48	23.95	-72.49	3.47	-69.02	-13	-56.02
6	468.2	24.36	-69.28	1.91	-67.36	-13	-54.36

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	86.82	20.16	-72.78	-1.39	-74.16	-13	-61.16
2	270.06	25.57	-69.68	3.42	-66.26	-13	-53.26
3	304.21	28.93	-66.98	3.69	-63.29	-13	-50.29
4	313.78	32.55	-63.81	3.68	-60.13	-13	-47.13
5	343.21	30.07	-74.03	2.63	-71.40	-13	-58.40
6	356.17	29.97	-66.11	7.14	-58.97	-13	-45.97
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.57	21.49	-43.59	-15.82	-59.41	-13	-46.41
2	75.39	19.76	-75.14	-2.04	-77.19	-13	-64.19
3	260.65	19.44	-100.70	-2.08	-102.78	-13	-89.78
4	350.82	23.52	-71.45	2.35	-69.10	-13	-56.10
5	422.77	21.03	-75.40	3.46	-71.94	-13	-58.94
6	466.8	21.53	-72.10	1.92	-70.18	-13	-57.18

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20350	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	88.29	18.39	-74.30	-1.30	-75.60	-13	-62.60
2	269.15	25.31	-69.94	3.43	-66.51	-13	-53.51
3	304.16	27.09	-68.82	3.69	-65.13	-13	-52.13
4	313.5	30.98	-65.37	3.68	-61.68	-13	-48.68
5	343.36	28.20	-75.89	2.63	-73.26	-13	-60.26
6	356.76	27.64	-68.44	7.13	-61.31	-13	-48.31
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.79	20.08	-45.73	-15.47	-61.20	-13	-48.20
2	75.23	17.47	-77.46	-2.05	-79.51	-13	-66.51
3	260.04	18.95	-101.06	-2.07	-103.13	-13	-90.13
4	352.36	22.42	-72.55	2.33	-70.22	-13	-57.22
5	421.03	19.75	-76.71	3.48	-73.23	-13	-60.23
6	466.54	19.60	-74.03	1.92	-72.11	-13	-59.11

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.98	17.28	-75.46	-1.32	-76.78	-13	-63.78
2	269.64	25.00	-70.25	3.42	-66.83	-13	-53.83
3	304.27	26.68	-69.23	3.69	-65.55	-13	-52.55
4	312.55	29.87	-66.44	3.68	-62.75	-13	-49.75
5	344.13	27.84	-76.21	2.63	-73.58	-13	-60.58
6	356.69	26.29	-69.79	7.13	-62.66	-13	-49.66
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.89	18.31	-46.36	-16.02	-62.38	-13	-49.38
2	76.48	15.60	-79.12	-1.98	-81.10	-13	-68.10
3	260.1	18.15	-101.87	-2.07	-103.94	-13	-90.94
4	353.97	20.91	-74.05	2.31	-71.74	-13	-58.74
5	421.2	18.68	-77.77	3.48	-74.30	-13	-61.30
6	465.45	18.98	-74.64	1.92	-72.72	-13	-59.72

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.32	17.04	-75.81	-1.36	-77.17	-13	-64.17
2	270.19	23.99	-71.26	3.42	-67.84	-13	-54.84
3	303.95	25.43	-70.47	3.69	-66.79	-13	-53.79
4	312.55	28.40	-67.91	3.68	-64.22	-13	-51.22
5	343.26	26.41	-77.69	2.63	-75.06	-13	-62.06
6	357.2	26.22	-69.86	7.12	-62.74	-13	-49.74
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.47	17.09	-47.33	-16.14	-63.47	-13	-50.47
2	78.13	14.95	-79.48	-1.89	-81.37	-13	-68.37
3	261.07	16.18	-104.05	-2.08	-106.13	-13	-93.13
4	353.32	18.29	-76.67	2.32	-74.35	-13	-61.35
5	421.06	16.83	-79.62	3.48	-76.15	-13	-63.15
6	465.55	17.38	-76.24	1.92	-74.32	-13	-61.32

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20325	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.62	16.07	-76.73	-1.34	-78.07	-13	-65.07
2	269.08	22.85	-72.40	3.43	-68.97	-13	-55.97
3	305.16	23.86	-72.08	3.68	-68.40	-13	-55.40
4	312.63	26.21	-70.10	3.68	-66.42	-13	-53.42
5	343.87	24.40	-79.66	2.63	-77.04	-13	-64.04
6	356.85	24.21	-71.87	7.13	-64.75	-13	-51.75
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.5	16.28	-48.76	-15.84	-64.60	-13	-51.60
2	77.49	13.76	-80.78	-1.92	-82.71	-13	-69.71
3	262.25	14.77	-105.72	-2.09	-107.80	-13	-94.80
4	352.53	15.98	-78.99	2.33	-76.66	-13	-63.66
5	422.57	15.64	-80.80	3.47	-77.33	-13	-64.33
6	465.36	15.43	-78.19	1.92	-76.27	-13	-63.27

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	88.61	13.73	-78.90	-1.28	-80.18	-13	-67.18
2	268.78	21.86	-73.40	3.44	-69.96	-13	-56.96
3	304.96	23.31	-72.62	3.68	-68.94	-13	-55.94
4	311.78	25.34	-70.93	3.69	-67.25	-13	-54.25
5	344.58	22.48	-81.54	2.63	-78.92	-13	-65.92
6	356.02	23.09	-72.99	7.14	-65.85	-13	-52.85
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.18	14.18	-50.67	-15.93	-66.60	-13	-53.60
2	78.01	12.17	-82.28	-1.89	-84.18	-13	-71.18
3	262.1	12.52	-107.93	-2.09	-110.02	-13	-97.02
4	351.8	14.57	-80.40	2.34	-78.06	-13	-65.06
5	423.2	14.00	-82.43	3.46	-78.97	-13	-65.97
6	464.93	14.90	-78.71	1.92	-76.80	-13	-63.80

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	89.27	11.87	-80.65	-1.25	-81.89	-13	-68.89
2	270.34	20.05	-75.20	3.41	-71.79	-13	-58.79
3	304.65	21.05	-74.87	3.68	-71.19	-13	-58.19
4	311.5	23.87	-72.39	3.69	-68.71	-13	-55.71
5	345.54	20.82	-83.15	2.63	-80.52	-13	-67.52
6	357.36	21.09	-74.99	7.12	-67.87	-13	-54.87
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.05	13.24	-51.53	-15.97	-67.50	-13	-54.50
2	77.82	10.59	-83.90	-1.90	-85.80	-13	-72.80
3	262.29	9.95	-110.55	-2.09	-112.63	-13	-99.63
4	351.37	13.27	-81.70	2.34	-79.36	-13	-66.36
5	423.94	13.13	-83.29	3.46	-79.83	-13	-66.83
6	465.4	12.78	-80.84	1.92	-78.92	-13	-65.92

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20300	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	89.43	11.51	-80.98	-1.24	-82.22	-13	-69.22
2	269.2	18.18	-77.07	3.43	-73.64	-13	-60.64
3	304.25	19.56	-76.35	3.69	-72.67	-13	-59.67
4	313.41	22.63	-73.71	3.68	-70.03	-13	-57.03
5	345.44	18.60	-85.38	2.63	-82.75	-13	-69.75
6	357.24	18.59	-77.49	7.12	-70.37	-13	-57.37
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.89	11.68	-52.99	-16.02	-69.01	-13	-56.01
2	75.99	9.24	-85.56	-2.01	-87.57	-13	-74.57
3	261.65	8.46	-111.90	-2.08	-113.98	-13	-100.98
4	351.81	11.16	-83.81	2.34	-81.47	-13	-68.47
5	425.18	10.73	-85.68	3.45	-82.23	-13	-69.23
6	464.96	11.38	-82.23	1.92	-80.32	-13	-67.32

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.71	15.08	-79.86	-1.33	-81.19	-13	-68.19
2	268.99	23.01	-74.39	3.43	-70.96	-13	-57.96
3	304.45	23.55	-74.52	3.68	-70.83	-13	-57.83
4	314.4	28.68	-69.85	3.68	-66.17	-13	-53.17
5	343.36	26.52	-79.72	2.63	-77.09	-13	-64.09
6	356.23	25.27	-72.96	7.14	-65.82	-13	-52.82
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.38	18.78	-48.94	-15.59	-64.52	-13	-51.52
2	74.33	16.31	-80.93	-2.11	-83.03	-13	-70.03
3	261.09	17.10	-105.28	-2.08	-107.36	-13	-94.36
4	352.78	21.66	-75.46	2.33	-73.13	-13	-60.13
5	421.17	17.69	-80.91	3.48	-77.44	-13	-64.44
6	466.87	18.31	-77.47	1.92	-75.55	-13	-62.55

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	88.07	14.88	-79.99	-1.31	-81.31	-13	-68.31
2	269.81	22.06	-75.34	3.42	-71.92	-13	-58.92
3	305.15	22.51	-75.58	3.68	-71.90	-13	-58.90
4	314.65	28.11	-70.43	3.68	-66.75	-13	-53.75
5	343.36	25.99	-80.25	2.63	-77.62	-13	-64.62
6	357.2	24.04	-74.19	7.12	-67.07	-13	-54.07
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.04	17.49	-50.02	-15.69	-65.71	-13	-52.71
2	74.41	15.62	-81.60	-2.10	-83.70	-13	-70.70
3	262	15.84	-106.74	-2.08	-108.83	-13	-95.83
4	352.82	21.44	-75.68	2.33	-73.35	-13	-60.35
5	420.52	17.38	-81.23	3.48	-77.75	-13	-64.75
6	466.21	16.96	-78.81	1.92	-76.90	-13	-63.90

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23173	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	87.05	12.62	-82.43	-1.37	-83.80	-13	-70.80
2	268.76	21.26	-76.15	3.44	-72.71	-13	-59.71
3	303.72	22.00	-76.05	3.69	-72.36	-13	-59.36
4	315.37	25.82	-72.75	3.68	-69.08	-13	-56.08
5	343.35	23.10	-83.14	2.63	-80.52	-13	-67.52
6	356.89	23.09	-75.14	7.13	-68.02	-13	-55.02
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.24	15.99	-51.04	-15.92	-66.96	-13	-53.96
2	74.21	15.15	-82.11	-2.11	-84.22	-13	-71.22
3	262.31	14.65	-108.00	-2.09	-110.09	-13	-97.09
4	352.58	21.20	-75.92	2.33	-73.59	-13	-60.59
5	420.3	16.63	-81.98	3.48	-78.50	-13	-65.50
6	465.87	16.82	-78.95	1.92	-77.03	-13	-64.03

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	86.32	11.16	-84.01	-1.41	-85.43	-13	-72.43
2	268.39	21.04	-76.37	3.44	-72.93	-13	-59.93
3	304.21	21.75	-76.31	3.69	-72.62	-13	-59.62
4	315.26	25.05	-73.52	3.68	-69.84	-13	-56.84
5	343.75	21.70	-84.52	2.63	-81.89	-13	-68.89
6	357.07	22.80	-75.43	7.13	-68.31	-13	-55.31
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.72	15.04	-52.28	-15.78	-68.06	-13	-55.06
2	73.85	15.04	-82.28	-2.13	-84.41	-13	-71.41
3	262.91	14.40	-108.38	-2.09	-110.47	-13	-97.47
4	353.43	20.24	-76.87	2.32	-74.56	-13	-61.56
5	419.35	16.52	-82.10	3.49	-78.61	-13	-65.61
6	465.99	15.98	-79.79	1.92	-77.87	-13	-64.87

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	85.53	9.89	-85.42	-1.46	-86.88	-13	-73.88
2	268.64	20.88	-76.53	3.44	-73.09	-13	-60.09
3	304.56	21.70	-76.37	3.68	-72.69	-13	-59.69
4	315.79	24.44	-74.15	3.68	-70.47	-13	-57.47
5	344.12	20.86	-85.34	2.63	-82.71	-13	-69.71
6	356.07	21.49	-76.74	7.14	-69.60	-13	-56.60
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.35	13.97	-53.73	-15.60	-69.32	-13	-56.32
2	74.57	14.10	-83.09	-2.09	-85.19	-13	-72.19
3	263.39	14.10	-108.78	-2.09	-110.88	-13	-97.88
4	354.29	19.88	-77.23	2.31	-74.92	-13	-61.92
5	420.18	15.20	-83.42	3.48	-79.93	-13	-66.93
6	465.61	15.90	-79.87	1.92	-77.95	-13	-64.95

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23165	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	85.1	9.76	-85.62	-1.49	-87.11	-13	-74.11
2	269.53	20.74	-76.66	3.43	-73.24	-13	-60.24
3	304.03	21.03	-77.02	3.69	-73.34	-13	-60.34
4	315.19	23.19	-75.38	3.68	-71.70	-13	-58.70
5	343.8	19.55	-86.67	2.63	-84.04	-13	-71.04
6	355.95	20.33	-77.90	7.14	-70.76	-13	-57.76
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	32.46	11.82	-55.94	-15.56	-71.51	-13	-58.51
2	75.78	11.33	-85.66	-2.02	-87.68	-13	-74.68
3	263.21	11.86	-110.99	-2.09	-113.08	-13	-100.08
4	354.92	18.36	-78.75	2.30	-76.45	-13	-63.45
5	421.45	13.97	-84.63	3.47	-81.16	-13	-68.16
6	466.27	14.19	-81.58	1.92	-79.67	-13	-66.67

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	84.56	8.66	-86.82	-1.52	-88.33	-13	-75.33
2	269.83	20.69	-76.71	3.42	-73.29	-13	-60.29
3	304.66	19.61	-78.46	3.68	-74.78	-13	-61.78
4	315.66	22.44	-76.15	3.68	-72.47	-13	-59.47
5	343.43	19.25	-86.99	2.63	-84.36	-13	-71.36
6	356.9	20.30	-77.93	7.13	-70.81	-13	-57.81
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	33.06	10.51	-57.61	-15.39	-73.00	-13	-60.00
2	76.46	11.10	-85.77	-1.98	-87.75	-13	-74.75
3	263.59	11.67	-111.26	-2.09	-113.35	-13	-100.35
4	355.51	16.86	-80.25	2.29	-77.96	-13	-64.96
5	421.47	13.60	-85.00	3.47	-81.53	-13	-68.53
6	466.55	13.49	-82.29	1.92	-80.37	-13	-67.37

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	84.88	6.29	-89.13	-1.50	-90.63	-13	-77.63
2	269.63	19.26	-78.14	3.42	-74.72	-13	-61.72
3	304.16	17.32	-80.74	3.69	-77.05	-13	-64.05
4	316.19	20.54	-78.07	3.67	-74.39	-13	-61.39
5	342.98	17.93	-88.33	2.63	-85.71	-13	-72.71
6	356.36	20.18	-78.05	7.14	-70.92	-13	-57.92
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	34.01	9.92	-58.77	-15.11	-73.89	-13	-60.89
2	76.89	10.99	-85.81	-1.96	-87.76	-13	-74.76
3	263.03	11.23	-111.58	-2.09	-113.67	-13	-100.67
4	355.98	16.11	-80.99	2.28	-78.71	-13	-65.71
5	420.59	12.80	-85.81	3.48	-82.33	-13	-69.33
6	465.96	13.40	-82.37	1.92	-80.45	-13	-67.45

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23155	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	85.43	6.25	-89.08	-1.47	-90.54	-13	-77.54
2	270.15	18.54	-78.86	3.42	-75.44	-13	-62.44
3	304.75	16.62	-81.46	3.68	-77.77	-13	-64.77
4	315.89	19.98	-78.61	3.68	-74.94	-13	-61.94
5	342.87	17.63	-88.64	2.63	-86.01	-13	-73.01
6	355.88	19.15	-79.08	7.14	-71.94	-13	-58.94
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	33.76	8.85	-59.69	-15.19	-74.88	-13	-61.88
2	76.9	10.07	-86.72	-1.96	-88.68	-13	-75.68
3	262.22	10.19	-112.44	-2.09	-114.53	-13	-101.53
4	355.79	15.98	-81.13	2.29	-78.84	-13	-65.84
5	421.2	11.53	-87.07	3.48	-83.60	-13	-70.60
6	466.07	11.90	-83.87	1.92	-81.95	-13	-68.95

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

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 (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	84.61	5.45	-90.02	-1.51	-91.53	-13	-78.53
2	270.61	18.18	-79.22	3.41	-75.81	-13	-62.81
3	304.64	15.31	-82.76	3.68	-79.08	-13	-66.08
4	315.24	19.40	-79.17	3.68	-75.49	-13	-62.49
5	343.64	17.02	-89.21	2.63	-86.58	-13	-73.58
6	354.91	18.64	-79.59	7.16	-72.43	-13	-59.43
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	33.71	6.76	-61.75	-15.20	-76.95	-13	-63.95
2	76.08	8.82	-88.11	-2.00	-90.12	-13	-77.12
3	261.68	8.64	-113.87	-2.08	-115.96	-13	-102.96
4	355.47	15.25	-81.86	2.29	-79.57	-13	-66.57
5	421.67	10.09	-88.51	3.47	-85.03	-13	-72.03
6	464.51	10.26	-85.50	1.92	-83.58	-13	-70.58

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	85.33	4.57	-90.77	-1.47	-92.25	-13	-79.25
2	270.74	17.78	-79.62	3.41	-76.21	-13	-63.21
3	305.45	14.06	-84.04	3.68	-80.36	-13	-67.36
4	315.53	18.57	-80.01	3.68	-76.33	-13	-63.33
5	343.39	16.27	-89.97	2.63	-87.34	-13	-74.34
6	354.43	18.56	-79.67	7.17	-72.50	-13	-59.50
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	34.13	5.58	-63.18	-15.08	-78.26	-13	-65.26
2	76.53	6.87	-89.99	-1.98	-91.97	-13	-78.97
3	263	7.03	-115.77	-2.09	-117.86	-13	-104.86
4	355.83	12.61	-84.50	2.29	-82.21	-13	-69.21
5	422.81	8.69	-89.89	3.46	-86.43	-13	-73.43
6	463.65	8.39	-87.36	1.92	-85.44	-13	-72.44

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23130	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	85.69	3.07	-92.21	-1.45	-93.66	-13	-80.66
2	270.38	16.51	-80.89	3.41	-77.48	-13	-64.48
3	305.93	13.60	-84.51	3.67	-80.84	-13	-67.84
4	315.24	17.11	-81.46	3.68	-77.78	-13	-64.78
5	344.76	14.11	-92.05	2.63	-89.43	-13	-76.43
6	354.9	17.63	-80.60	7.16	-73.44	-13	-60.44
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	34.96	4.80	-64.46	-14.84	-79.30	-13	-66.30
2	77.84	6.50	-90.13	-1.90	-92.04	-13	-79.04
3	263.41	5.21	-117.68	-2.09	-119.77	-13	-106.77
4	357.27	11.18	-85.92	2.27	-83.65	-13	-70.65
5	423.4	7.04	-91.54	3.46	-88.08	-13	-75.08
6	462.85	7.91	-87.84	1.92	-85.92	-13	-72.92

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

ABOVE 1GHz

WCDMA:

Mode	TX channel 1312	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3424.8	35.95	-68.00	7.71	-60.29	-13	-47.29
2	5137.2	50.72	-54.16	7.08	-47.08	-13	-34.08
3	6849.6	45.01	-57.61	4.62	-52.99	-13	-39.99
4	8562	45.83	-56.39	4.23	-52.16	-13	-39.16
5	10274.4	49.05	-52.48	3.25	-49.23	-13	-36.23
6	11986.8	48.58	-52.30	4.44	-47.86	-13	-34.86
7	13699.2	51.52	-46.11	3.44	-42.67	-13	-29.67
8	15411.6	53.25	-44.10	3.70	-40.40	-13	-27.40
9	17124	60.12	-37.23	3.70	-33.53	-13	-20.53
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3424.8	37.21	-66.74	7.71	-59.03	-13	-46.03
2	5137.2	43.19	-61.69	7.08	-54.61	-13	-41.61
3	6849.6	45.43	-57.19	4.62	-52.57	-13	-39.57
4	8562	46.83	-55.39	4.23	-51.16	-13	-38.16
5	10274.4	48.46	-53.07	3.25	-49.82	-13	-36.82
6	11986.8	48.01	-52.87	4.44	-48.43	-13	-35.43
7	13699.2	51.87	-45.76	3.44	-42.32	-13	-29.32
8	15411.6	52.03	-45.32	3.70	-41.62	-13	-28.62
9	17124	60.71	-36.64	3.70	-32.94	-13	-19.94

Remarks:

1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 1413	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465.2	37.18	-66.77	7.71	-59.06	-13	-46.06
2	5197.8	50.55	-54.33	7.08	-47.25	-13	-34.25
3	6930.4	45.50	-57.12	4.62	-52.50	-13	-39.50
4	8663	46.36	-55.86	4.23	-51.63	-13	-38.63
5	10395.6	50.43	-51.10	3.25	-47.85	-13	-34.85
6	12128.2	49.31	-51.57	4.44	-47.13	-13	-34.13
7	13860.8	50.84	-46.79	3.44	-43.35	-13	-30.35
8	15593.4	52.06	-45.29	3.70	-41.59	-13	-28.59
9	17326	60.56	-36.79	3.70	-33.09	-13	-20.09
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465.2	37.77	-66.18	7.71	-58.47	-13	-45.47
2	5197.8	42.76	-62.12	7.08	-55.04	-13	-42.04
3	6930.4	45.45	-57.17	4.62	-52.55	-13	-39.55
4	8663	46.49	-55.73	4.23	-51.50	-13	-38.50
5	10395.6	47.61	-53.92	3.25	-50.67	-13	-37.67
6	12128.2	48.23	-52.65	4.44	-48.21	-13	-35.21
7	13860.8	51.66	-45.97	3.44	-42.53	-13	-29.53
8	15593.4	51.61	-45.74	3.70	-42.04	-13	-29.04
9	17326	61.65	-35.70	3.70	-32.00	-13	-19.00

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 1513	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3505.2	36.37	-67.58	7.71	-59.87	-13	-46.87
2	5257.8	50.45	-54.43	7.08	-47.35	-13	-34.35
3	7010.4	47.11	-55.51	4.62	-50.89	-13	-37.89
4	8763	45.57	-56.65	4.23	-52.42	-13	-39.42
5	10515.6	48.77	-52.76	3.25	-49.51	-13	-36.51
6	12268.2	49.87	-51.01	4.44	-46.57	-13	-33.57
7	14020.8	49.97	-47.66	3.44	-44.22	-13	-31.22
8	15773.4	51.70	-45.65	3.70	-41.95	-13	-28.95
9	**17526**	**62.85**	**-34.50**	**3.70**	**-30.80**	**-13**	**-17.80**
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3505.2	37.15	-66.80	7.71	-59.09	-13	-46.09
2	5257.8	42.2	-62.68	7.08	-55.60	-13	-42.60
3	7010.4	45.67	-56.95	4.62	-52.33	-13	-39.33
4	8763	47.02	-55.20	4.23	-50.97	-13	-37.97
5	10515.6	47.34	-54.19	3.25	-50.94	-13	-37.94
6	12268.2	48.67	-52.21	4.44	-47.77	-13	-34.77
7	14020.8	49.98	-47.65	3.44	-44.21	-13	-31.21
8	15773.4	52.08	-45.27	3.70	-41.57	-13	-28.57
9	17526	60.43	-36.92	3.70	-33.22	-13	-20.22

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 4: 1.4MHz

Mode	TX channel 19957	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3421.4	36.21	-68.59	7.43	-61.17	-13	-48.17
2	5132.1	39.86	-64.28	6.20	-58.08	-13	-45.08
3	6842.8	45.80	-56.82	4.20	-52.62	-13	-39.62
4	8553.5	47.41	-54.64	3.51	-51.13	-13	-38.13
5	10264.2	48.64	-52.69	4.38	-48.32	-13	-35.32
6	11974.9	48.3	-48.86	3.78	-45.08	-13	-32.08
7	13685.6	48.65	-50.38	3.00	-47.38	-13	-34.38
8	15396.3	48.91	-51.45	3.71	-47.74	-13	-34.74
9	17107	49.36	-62.21	4.12	-58.10	-13	-45.10
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3421.4	41.85	-62.95	7.43	-55.53	-13	-42.53
2	5132.1	51.59	-52.55	6.20	-46.35	-13	-33.35
3	6842.8	47.51	-55.11	4.20	-50.91	-13	-37.91
4	8553.5	45.69	-56.36	3.51	-52.85	-13	-39.85
5	10264.2	48.5	-52.83	4.38	-48.46	-13	-35.46
6	11974.9	47.62	-50.06	3.39	-46.67	-13	-33.67
7	13685.6	52.37	-46.66	3.00	-43.66	-13	-30.66
8	15396.3	51.78	-48.58	3.71	-44.87	-13	-31.87
9	17107	52.11	-59.46	4.12	-55.35	-13	-42.35

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	36.21	-68.59	7.43	-61.17	-13	-48.17
2	5197.5	39.86	-64.28	6.20	-58.08	-13	-45.08
3	6930	45.80	-56.82	4.20	-52.62	-13	-39.62
4	8662.5	47.41	-54.64	3.51	-51.13	-13	-38.13
5	10395	48.64	-52.69	4.38	-48.32	-13	-35.32
6	12127.5	48.3	-48.86	3.78	-45.08	-13	-32.08
7	13860	48.65	-50.38	3.00	-47.38	-13	-34.38
8	15592.5	48.91	-51.45	3.71	-47.74	-13	-34.74
9	17325	49.28	-62.29	4.12	-58.18	-13	-45.18
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	41.65	-63.15	7.43	-55.73	-13	-42.73
2	5197.5	50.67	-53.47	6.20	-47.27	-13	-34.27
3	6930	46.86	-55.76	4.20	-51.56	-13	-38.56
4	8662.5	44.43	-57.62	3.51	-54.11	-13	-41.11
5	10395	47.75	-53.58	4.38	-49.21	-13	-36.21
6	12127.5	47.36	-50.32	3.39	-46.93	-13	-33.93
7	13860	51.29	-47.74	3.00	-44.74	-13	-31.74
8	15592.5	51.36	-49.00	3.71	-45.29	-13	-32.29
9	17325	52.32	-59.25	4.12	-55.14	-13	-42.14

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20393	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3508.6	35.01	-69.79	7.43	-62.37	-13	-49.37
2	5262.9	38.45	-65.69	6.20	-59.49	-13	-46.49
3	7017.2	44.85	-57.77	4.20	-53.57	-13	-40.57
4	8771.5	46.67	-55.38	3.51	-51.87	-13	-38.87
5	10525.8	48.04	-53.29	4.38	-48.92	-13	-35.92
6	12280.1	47.68	-49.48	3.78	-45.70	-13	-32.70
7	14034.4	47.91	-51.12	3.00	-48.12	-13	-35.12
8	15788.7	47.88	-52.48	3.71	-48.77	-13	-35.77
9	17543	49.03	-62.54	4.12	-58.43	-13	-45.43
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3508.6	40.64	-64.16	7.43	-56.74	-13	-43.74
2	5262.9	49.29	-54.85	6.20	-48.65	-13	-35.65
3	7017.2	45.94	-56.68	4.20	-52.48	-13	-39.48
4	8771.5	44.29	-57.76	3.51	-54.25	-13	-41.25
5	10525.8	46.78	-54.55	4.38	-50.18	-13	-37.18
6	12280.1	47.13	-50.55	3.39	-47.16	-13	-34.16
7	14034.4	50.78	-48.25	3.00	-45.25	-13	-32.25
8	15788.7	51.18	-49.18	3.71	-45.47	-13	-32.47
9	17543	52.29	-59.28	4.12	-55.17	-13	-42.17

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 4: 3MHz

Mode	TX channel 19965	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3423	35.40	-69.40	7.43	-61.98	-13	-48.98
2	5134.5	38.89	-65.25	6.20	-59.05	-13	-46.05
3	6846	45.25	-57.37	4.20	-53.17	-13	-40.17
4	8557.5	47.04	-55.01	3.51	-51.50	-13	-38.50
5	10269	47.67	-53.66	4.38	-49.29	-13	-36.29
6	11980.5	47.1	-50.06	3.78	-46.28	-13	-33.28
7	13692	47.71	-51.32	3.00	-48.32	-13	-35.32
8	15403.5	48.11	-52.25	3.71	-48.54	-13	-35.54
9	17115	49.16	-62.41	4.12	-58.30	-13	-45.30
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3423	41.78	-63.02	7.43	-55.60	-13	-42.60
2	5134.5	50.49	-53.65	6.20	-47.45	-13	-34.45
3	6846	46.98	-55.64	4.20	-51.44	-13	-38.44
4	8557.5	44.75	-57.30	3.51	-53.79	-13	-40.79
5	10269	47.63	-53.70	4.38	-49.33	-13	-36.33
6	11980.5	47.22	-50.46	3.39	-47.07	-13	-34.07
7	13692	52.1	-46.93	3.00	-43.93	-13	-30.93
8	15403.5	51.35	-49.01	3.71	-45.30	-13	-32.30
9	17115	51.51	-60.06	4.12	-55.95	-13	-42.95

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	34.76	-70.04	7.43	-62.62	-13	-49.62
2	5197.5	39.15	-64.99	6.20	-58.79	-13	-45.79
3	6930	45.59	-57.03	4.20	-52.83	-13	-39.83
4	8662.5	46.47	-55.58	3.51	-52.07	-13	-39.07
5	10395	47.72	-53.61	4.38	-49.24	-13	-36.24
6	12127.5	47.93	-49.23	3.78	-45.45	-13	-32.45
7	13860	47.21	-51.82	3.00	-48.82	-13	-35.82
8	15592.5	47.87	-52.49	3.71	-48.78	-13	-35.78
9	17325	48.75	-62.82	4.12	-58.71	-13	-45.71
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	41.27	-63.53	7.43	-56.11	-13	-43.11
2	5197.5	50.27	-53.87	6.20	-47.67	-13	-34.67
3	6930	45.44	-57.18	4.20	-52.98	-13	-39.98
4	8662.5	43.7	-58.35	3.51	-54.84	-13	-41.84
5	10395	46.25	-55.08	4.38	-50.71	-13	-37.71
6	12127.5	46.29	-51.39	3.39	-48.00	-13	-35.00
7	13860	51.12	-47.91	3.00	-44.91	-13	-31.91
8	15592.5	49.92	-50.44	3.71	-46.73	-13	-33.73
9	17325	51.49	-60.08	4.12	-55.97	-13	-42.97

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20385	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3507	34.76	-70.04	7.43	-62.62	-13	-49.62
2	5260.5	39.15	-64.99	6.20	-58.79	-13	-45.79
3	7014	45.59	-57.03	4.20	-52.83	-13	-39.83
4	8767.5	46.47	-55.58	3.51	-52.07	-13	-39.07
5	10521	47.72	-53.61	4.38	-49.24	-13	-36.24
6	12274.5	47.93	-49.23	3.78	-45.45	-13	-32.45
7	14028	47.21	-51.82	3.00	-48.82	-13	-35.82
8	15781.5	47.87	-52.49	3.71	-48.78	-13	-35.78
9	17535	48.75	-62.82	4.12	-58.71	-13	-45.71
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3507	40.74	-64.06	7.43	-56.64	-13	-43.64
2	5260.5	48.89	-55.25	6.20	-49.05	-13	-36.05
3	7014	44.68	-57.94	4.20	-53.74	-13	-40.74
4	8767.5	43.52	-58.53	3.51	-55.02	-13	-42.02
5	10521	45.97	-55.36	4.38	-50.99	-13	-37.99
6	12274.5	45.1	-52.58	3.39	-49.19	-13	-36.19
7	14028	50.67	-48.36	3.00	-45.36	-13	-32.36
8	15781.5	48.45	-51.91	3.71	-48.20	-13	-35.20
9	17535	51	-60.57	4.12	-56.46	-13	-43.46

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 4: 5MHz

Mode	TX channel 19975	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3425	35.11	-69.69	7.43	-62.27	-13	-49.27
2	5137.5	38.30	-65.84	6.20	-59.64	-13	-46.64
3	6850	44.75	-57.87	4.20	-53.67	-13	-40.67
4	8562.5	45.65	-56.40	3.51	-52.89	-13	-39.89
5	10275	47.37	-53.96	4.38	-49.59	-13	-36.59
6	11987.5	46.15	-51.01	3.78	-47.23	-13	-34.23
7	13700	46.85	-52.18	3.00	-49.18	-13	-36.18
8	15412.5	46.69	-53.67	3.71	-49.96	-13	-36.96
9	17125	48.98	-62.59	4.12	-58.48	-13	-45.48
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3425	40.75	-64.05	7.43	-56.63	-13	-43.63
2	5137.5	49.64	-54.50	6.20	-48.30	-13	-35.30
3	6850	46.66	-55.96	4.20	-51.76	-13	-38.76
4	8562.5	43.48	-58.57	3.51	-55.06	-13	-42.06
5	10275	46.2	-55.13	4.38	-50.76	-13	-37.76
6	11987.5	46.49	-51.19	3.39	-47.80	-13	-34.80
7	13700	51.57	-47.46	3.00	-44.46	-13	-31.46
8	15412.5	50.5	-49.86	3.71	-46.15	-13	-33.15
9	17125	50.99	-60.58	4.12	-56.47	-13	-43.47

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	33.73	-71.07	7.43	-63.65	-13	-50.65
2	5197.5	36.93	-67.21	6.20	-61.01	-13	-48.01
3	6930	44.45	-58.17	4.20	-53.97	-13	-40.97
4	8662.5	44.92	-57.13	3.51	-53.62	-13	-40.62
5	10395	46.93	-54.40	4.38	-50.03	-13	-37.03
6	12127.5	44.96	-52.20	3.78	-48.42	-13	-35.42
7	13860	46.6	-52.43	3.00	-49.43	-13	-36.43
8	15592.5	45.7	-54.66	3.71	-50.95	-13	-37.95
9	17325	47.67	-63.90	4.12	-59.79	-13	-46.79
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	40.58	-64.22	7.43	-56.80	-13	-43.80
2	5197.5	49.35	-54.79	6.20	-48.59	-13	-35.59
3	6930	46.45	-56.17	4.20	-51.97	-13	-38.97
4	8662.5	43.4	-58.65	3.51	-55.14	-13	-42.14
5	10395	45.96	-55.37	4.38	-51.00	-13	-38.00
6	12127.5	45.53	-52.15	3.39	-48.76	-13	-35.76
7	13860	50.71	-48.32	3.00	-45.32	-13	-32.32
8	15592.5	49.77	-50.59	3.71	-46.88	-13	-33.88
9	17325	50.35	-61.22	4.12	-57.11	-13	-44.11

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20375	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3505	35.11	-69.69	7.43	-62.27	-13	-49.27
2	5257.5	38.30	-65.84	6.20	-59.64	-13	-46.64
3	7010	44.75	-57.87	4.20	-53.67	-13	-40.67
4	8762.5	45.65	-56.40	3.51	-52.89	-13	-39.89
5	10515	47.37	-53.96	4.38	-49.59	-13	-36.59
6	12267.5	46.15	-51.01	3.78	-47.23	-13	-34.23
7	14020	46.85	-52.18	3.00	-49.18	-13	-36.18
8	15772.5	46.69	-53.67	3.71	-49.96	-13	-36.96
9	17525	48.98	-62.59	4.12	-58.48	-13	-45.48
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3505	40.75	-64.05	7.43	-56.63	-13	-43.63
2	5257.5	49.64	-54.50	6.20	-48.30	-13	-35.30
3	7010	46.66	-55.96	4.20	-51.76	-13	-38.76
4	8762.5	43.48	-58.57	3.51	-55.06	-13	-42.06
5	10515	46.2	-55.13	4.38	-50.76	-13	-37.76
6	12267.5	46.49	-51.19	3.39	-47.80	-13	-34.80
7	14020	51.57	-47.46	3.00	-44.46	-13	-31.46
8	15772.5	50.5	-49.86	3.71	-46.15	-13	-33.15
9	17525	50.99	-60.58	4.12	-56.47	-13	-43.47

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 4: 10MHz

Mode	TX channel 20000	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3430	32.53	-72.27	7.43	-64.85	-13	-51.85
2	5145	36.13	-68.01	6.20	-61.81	-13	-48.81
3	6860	42.39	-60.23	4.20	-56.03	-13	-43.03
4	8575	43.39	-58.66	3.51	-55.15	-13	-42.15
5	10290	45.7	-55.63	4.38	-51.26	-13	-38.26
6	12005	45.22	-51.94	3.78	-48.16	-13	-35.16
7	13720	45.32	-53.71	3.00	-50.71	-13	-37.71
8	15435	45.36	-55.00	3.71	-51.29	-13	-38.29
9	17150	46.93	-64.64	4.12	-60.53	-13	-47.53
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3430	40.73	-64.07	7.43	-56.65	-13	-43.65
2	5145	48.83	-55.31	6.20	-49.11	-13	-36.11
3	6860	46.09	-56.53	4.20	-52.33	-13	-39.33
4	8575	42.56	-59.49	3.51	-55.98	-13	-42.98
5	10290	44.98	-56.35	4.38	-51.98	-13	-38.98
6	12005	45.48	-52.20	3.39	-48.81	-13	-35.81
7	13720	51.14	-47.89	3.00	-44.89	-13	-31.89
8	15435	49.91	-50.45	3.71	-46.74	-13	-33.74
9	17150	50.22	-61.35	4.12	-57.24	-13	-44.24

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	33.37	-71.43	7.43	-64.01	-13	-51.01
2	5197.5	35.81	-68.33	6.20	-62.13	-13	-49.13
3	6930	44.37	-58.25	4.20	-54.05	-13	-41.05
4	8662.5	43.99	-58.06	3.51	-54.55	-13	-41.55
5	10395	45.97	-55.36	4.38	-50.99	-13	-37.99
6	12127.5	44.94	-52.22	3.78	-48.44	-13	-35.44
7	13860	45.93	-53.10	3.00	-50.10	-13	-37.10
8	15592.5	45.37	-54.99	3.71	-51.28	-13	-38.28
9	17325	46.58	-64.99	4.12	-60.88	-13	-47.88
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	39.19	-65.61	7.43	-58.19	-13	-45.19
2	5197.5	48.88	-55.26	6.20	-49.06	-13	-36.06
3	6930	45.64	-56.98	4.20	-52.78	-13	-39.78
4	8662.5	42.34	-59.71	3.51	-56.20	-13	-43.20
5	10395	45.92	-55.41	4.38	-51.04	-13	-38.04
6	12127.5	44.67	-53.01	3.39	-49.62	-13	-36.62
7	13860	50.42	-48.61	3.00	-45.61	-13	-32.61
8	15592.5	48.56	-51.80	3.71	-48.09	-13	-35.09
9	17325	49.03	-62.54	4.12	-58.43	-13	-45.43

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20350	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3500	32.61	-72.19	7.43	-64.77	-13	-51.77
2	5250	35.39	-68.75	6.20	-62.55	-13	-49.55
3	7000	41.94	-60.68	4.20	-56.48	-13	-43.48
4	8750	42.44	-59.61	3.51	-56.10	-13	-43.10
5	10500	43.74	-57.59	4.38	-53.22	-13	-40.22
6	12250	43.84	-53.32	3.78	-49.54	-13	-36.54
7	14000	44.69	-54.34	3.00	-51.34	-13	-38.34
8	15750	43.23	-57.13	3.71	-53.42	-13	-40.42
9	17500	45.72	-65.85	4.12	-61.74	-13	-48.74
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3500	38.59	-66.21	7.43	-58.79	-13	-45.79
2	5250	48.25	-55.89	6.20	-49.69	-13	-36.69
3	7000	44.33	-58.29	4.20	-54.09	-13	-41.09
4	8750	41.44	-60.61	3.51	-57.10	-13	-44.10
5	10500	45.67	-55.66	4.38	-51.29	-13	-38.29
6	12250	43.25	-54.43	3.39	-51.04	-13	-38.04
7	14000	50.14	-48.89	3.00	-45.89	-13	-32.89
8	15750	48.5	-51.86	3.71	-48.15	-13	-35.15
9	17500	47.6	-63.97	4.12	-59.86	-13	-46.86

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 4: 15MHz

Mode	TX channel 20025	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3435	31.50	-73.30	7.43	-65.88	-13	-52.88
2	5152.5	34.96	-69.18	6.20	-62.98	-13	-49.98
3	6870	41.14	-61.48	4.20	-57.28	-13	-44.28
4	8587.5	42.36	-59.69	3.51	-56.18	-13	-43.18
5	10305	45.29	-56.04	4.38	-51.67	-13	-38.67
6	12022.5	44.18	-52.98	3.78	-49.20	-13	-36.20
7	13740	44.7	-54.33	3.00	-51.33	-13	-38.33
8	15457.5	44.42	-55.94	3.71	-52.23	-13	-39.23
9	17175	45.98	-65.59	4.12	-61.48	-13	-48.48
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3435	40.62	-64.18	7.43	-56.76	-13	-43.76
2	5152.5	47.45	-56.69	6.20	-50.49	-13	-37.49
3	6870	45.43	-57.19	4.20	-52.99	-13	-39.99
4	8587.5	41.71	-60.34	3.51	-56.83	-13	-43.83
5	10305	44.44	-56.89	4.38	-52.52	-13	-39.52
6	12022.5	45.46	-52.22	3.39	-48.83	-13	-35.83
7	13740	50.74	-48.29	3.00	-45.29	-13	-32.29
8	15457.5	48.57	-51.79	3.71	-48.08	-13	-35.08
9	17175	49.47	-62.10	4.12	-57.99	-13	-44.99

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	31.94	-72.86	7.43	-65.44	-13	-52.44
2	5197.5	34.55	-69.59	6.20	-63.39	-13	-50.39
3	6930	43.15	-59.47	4.20	-55.27	-13	-42.27
4	8662.5	43.56	-58.49	3.51	-54.98	-13	-41.98
5	10395	44.81	-56.52	4.38	-52.15	-13	-39.15
6	12127.5	44.89	-52.27	3.78	-48.49	-13	-35.49
7	13860	44.68	-54.35	3.00	-51.35	-13	-38.35
8	15592.5	44.2	-56.16	3.71	-52.45	-13	-39.45
9	17325	45.79	-65.78	4.12	-61.67	-13	-48.67
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	39.1	-65.70	7.43	-58.28	-13	-45.28
2	5197.5	48.46	-55.68	6.20	-49.48	-13	-36.48
3	6930	44.63	-57.99	4.20	-53.79	-13	-40.79
4	8662.5	42.33	-59.72	3.51	-56.21	-13	-43.21
5	10395	44.78	-56.55	4.38	-52.18	-13	-39.18
6	12127.5	44.57	-53.11	3.39	-49.72	-13	-36.72
7	13860	49.89	-49.14	3.00	-46.14	-13	-33.14
8	15592.5	47.76	-52.60	3.71	-48.89	-13	-35.89
9	17325	48.9	-62.67	4.12	-58.56	-13	-45.56

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20325	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3495	30.83	-73.97	7.43	-66.55	-13	-53.55
2	5242.5	34.74	-69.40	6.20	-63.20	-13	-50.20
3	6990	39.65	-62.97	4.20	-58.77	-13	-45.77
4	8737.5	41.62	-60.43	3.51	-56.92	-13	-43.92
5	10485	44.89	-56.44	4.38	-52.07	-13	-39.07
6	12232.5	42.9	-54.26	3.78	-50.48	-13	-37.48
7	13980	44.11	-54.92	3.00	-51.92	-13	-38.92
8	15727.5	43.07	-57.29	3.71	-53.58	-13	-40.58
9	17475	44.59	-66.98	4.12	-62.87	-13	-49.87
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3495	39.53	-65.27	7.43	-57.85	-13	-44.85
2	5242.5	46.88	-57.26	6.20	-51.06	-13	-38.06
3	6990	44.78	-57.84	4.20	-53.64	-13	-40.64
4	8737.5	40.79	-61.26	3.51	-57.75	-13	-44.75
5	10485	43.29	-58.04	4.38	-53.67	-13	-40.67
6	12232.5	44.71	-52.97	3.39	-49.58	-13	-36.58
7	13980	50.15	-48.88	3.00	-45.88	-13	-32.88
8	15727.5	48.51	-51.85	3.71	-48.14	-13	-35.14
9	17475	48.56	-63.01	4.12	-58.90	-13	-45.90

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 4: 20MHz

Mode	TX channel 20050	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3440	30.85	-73.95	7.43	-66.53	-13	-53.53
2	5160	33.77	-70.37	6.20	-64.17	-13	-51.17
3	6880	39.85	-62.77	4.20	-58.57	-13	-45.57
4	8600	41.71	-60.34	3.51	-56.83	-13	-43.83
5	10320	43.81	-57.52	4.38	-53.15	-13	-40.15
6	12040	42.92	-54.24	3.78	-50.46	-13	-37.46
7	13760	44.06	-54.97	3.00	-51.97	-13	-38.97
8	15480	43.36	-57.00	3.71	-53.29	-13	-40.29
9	17200	45.73	-65.84	4.12	-61.73	-13	-48.73
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3440	40.62	-64.18	7.43	-56.76	-13	-43.76
2	5160	46.86	-57.28	6.20	-51.08	-13	-38.08
3	6880	45.1	-57.52	4.20	-53.32	-13	-40.32
4	8600	41.45	-60.60	3.51	-57.09	-13	-44.09
5	10320	43.19	-58.14	4.38	-53.77	-13	-40.77
6	12040	44.33	-53.35	3.39	-49.96	-13	-36.96
7	13760	49.3	-49.73	3.00	-46.73	-13	-33.73
8	15480	48.29	-52.07	3.71	-48.36	-13	-35.36
9	17200	48.12	-63.45	4.12	-59.34	-13	-46.34

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20175	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	31.23	-73.57	7.43	-66.15	-13	-53.15
2	5197.5	33.32	-70.82	6.20	-64.62	-13	-51.62
3	6930	42.44	-60.18	4.20	-55.98	-13	-42.98
4	8662.5	42.73	-59.32	3.51	-55.81	-13	-42.81
5	10395	44.28	-57.05	4.38	-52.68	-13	-39.68
6	12127.5	44.55	-52.61	3.78	-48.83	-13	-35.83
7	13860	43.68	-55.35	3.00	-52.35	-13	-39.35
8	15592.5	42.83	-57.53	3.71	-53.82	-13	-40.82
9	17325	44.57	-67.00	4.12	-62.89	-13	-49.89
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3465	38.09	-66.71	7.43	-59.29	-13	-46.29
2	5197.5	48.24	-55.90	6.20	-49.70	-13	-36.70
3	6930	43.97	-58.65	4.20	-54.45	-13	-41.45
4	8662.5	41.86	-60.19	3.51	-56.68	-13	-43.68
5	10395	44.49	-56.84	4.38	-52.47	-13	-39.47
6	12127.5	43.73	-53.95	3.39	-50.56	-13	-37.56
7	13860	49.36	-49.67	3.00	-46.67	-13	-33.67
8	15592.5	47.38	-52.98	3.71	-49.27	-13	-36.27
9	17325	48.87	-62.70	4.12	-58.59	-13	-45.59

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 20300	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3490	29.86	-74.94	7.43	-67.52	-13	-54.52
2	5235	32.76	-71.38	6.20	-65.18	-13	-52.18
3	6980	38.81	-63.81	4.20	-59.61	-13	-46.61
4	8725	41.44	-60.61	3.51	-57.10	-13	-44.10
5	10470	43	-58.33	4.38	-53.96	-13	-40.96
6	12215	42.66	-54.50	3.78	-50.72	-13	-37.72
7	13960	43.79	-55.24	3.00	-52.24	-13	-39.24
8	15705	43.18	-57.18	3.71	-53.47	-13	-40.47
9	17450	44.59	-66.98	4.12	-62.87	-13	-49.87
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	3490	40.51	-64.29	7.43	-56.87	-13	-43.87
2	5235	46.79	-57.35	6.20	-51.15	-13	-38.15
3	6980	44.47	-58.15	4.20	-53.95	-13	-40.95
4	8725	40.29	-61.76	3.51	-58.25	-13	-45.25
5	10470	42.14	-59.19	4.38	-54.82	-13	-41.82
6	12215	44.32	-53.36	3.39	-49.97	-13	-36.97
7	13960	48.81	-50.22	3.00	-47.22	-13	-34.22
8	15705	47.84	-52.52	3.71	-48.81	-13	-35.81
9	17450	47.98	-63.59	4.12	-59.48	-13	-46.48

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 12: 1.4MHz

Mode	TX channel 23017	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1399.4	38.89	-67.02	5.51	-61.51	-13	-48.51
2	2099.1	40.58	-62.06	6.85	-55.21	-13	-42.21
3	2798.8	34.18	-68.89	6.94	-61.95	-13	-48.95
4	3498.5	26.98	-78.36	7.85	-70.52	-13	-57.52
5	4198.2	33.47	-73.14	7.07	-66.07	-13	-53.07
6	4897.9	31.12	-75.32	7.07	-68.25	-13	-55.25
7	5597.6	29.99	-75.83	5.71	-70.11	-13	-57.11
8	6297.3	31.54	-74.75	6.27	-68.48	-13	-55.48
9	6997	33.77	-70.41	4.98	-65.44	-13	-52.44
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1399.4	45.81	-60.10	5.51	-54.59	-13	-41.59
2	2099.1	52.91	-49.73	6.85	-42.88	-13	-29.88
3	2798.8	48.57	-54.50	6.94	-47.56	-13	-34.56
4	3498.5	47.96	-57.38	7.85	-49.54	-13	-36.54
5	4198.2	47.66	-58.95	7.07	-51.88	-13	-38.88
6	4897.9	26.99	-79.45	7.07	-72.38	-13	-59.38
7	5597.6	30.71	-76.26	7.05	-69.20	-13	-56.20
8	6297.3	31.74	-74.55	6.27	-68.28	-13	-55.28
9	6997	33.62	-70.56	4.98	-65.59	-13	-52.59

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	39.35	-66.52	5.58	-60.94	-13	-47.94
2	2122.5	39.70	-62.82	6.84	-55.99	-13	-42.99
3	2830	34.12	-69.21	6.97	-62.24	-13	-49.24
4	3537.5	25.99	-79.50	7.82	-71.67	-13	-58.67
5	4245	32.76	-73.79	7.04	-66.75	-13	-53.75
6	4952.5	30.67	-75.74	7.04	-68.70	-13	-55.70
7	5660	30.68	-75.14	5.71	-69.42	-13	-56.42
8	6367.5	31.53	-74.76	6.15	-68.61	-13	-55.61
9	7075	32.90	-70.95	4.83	-66.12	-13	-53.12
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	45.50	-60.37	5.58	-54.79	-13	-41.79
2	2122.5	53.60	-48.92	6.84	-42.09	-13	-29.09
3	2830	47.61	-55.72	6.97	-48.75	-13	-35.75
4	3537.5	47.88	-57.61	7.82	-49.78	-13	-36.78
5	4245	47.34	-59.21	7.04	-52.17	-13	-39.17
6	4952.5	27.53	-78.88	7.04	-71.84	-13	-58.84
7	5660	29.86	-77.00	7.01	-69.99	-13	-56.99
8	6367.5	31.04	-75.25	6.15	-69.10	-13	-56.10
9	7075	32.91	-70.94	4.83	-66.11	-13	-53.11

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23173	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1430.6	39.81	-66.02	5.66	-60.36	-13	-47.36
2	2145.9	40.50	-61.90	6.83	-55.08	-13	-42.08
3	2861.2	34.63	-68.96	7.00	-61.96	-13	-48.96
4	3576.5	25.14	-80.49	7.80	-72.69	-13	-59.69
5	4291.8	32.01	-74.48	7.00	-67.48	-13	-54.48
6	5007.1	31.04	-75.34	7.00	-68.33	-13	-55.33
7	5722.4	31.27	-74.55	5.71	-68.83	-13	-55.83
8	6437.7	30.70	-75.59	6.03	-69.56	-13	-56.56
9	7153	32.13	-71.39	4.68	-66.71	-13	-53.71
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1430.6	45.96	-59.87	5.66	-54.21	-13	-41.21
2	2145.9	53.83	-48.57	6.83	-41.75	-13	-28.75
3	2861.2	48.32	-55.27	7.00	-48.27	-13	-35.27
4	3576.5	48.06	-57.57	7.80	-49.77	-13	-36.77
5	4291.8	47.06	-59.43	7.00	-52.43	-13	-39.43
6	5007.1	27.17	-79.21	7.00	-72.20	-13	-59.20
7	5722.4	30.67	-76.09	6.96	-69.12	-13	-56.12
8	6437.7	30.78	-75.51	6.03	-69.48	-13	-56.48
9	7153	32.86	-70.66	4.68	-65.98	-13	-52.98

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 12: 3MHz

Mode	TX channel 23025	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1401	37.99	-67.92	5.52	-62.40	-13	-49.40
2	2101.5	39.89	-62.74	6.85	-55.89	-13	-42.89
3	2802	33.18	-69.92	6.94	-62.98	-13	-49.98
4	3502.5	27.63	-77.73	7.85	-69.88	-13	-56.88
5	4203	32.68	-73.92	7.07	-66.86	-13	-53.86
6	4903.5	31.29	-75.15	7.07	-68.08	-13	-55.08
7	5604	29.14	-76.68	5.71	-70.96	-13	-57.96
8	6304.5	32.02	-74.27	6.26	-68.01	-13	-55.01
9	7005	34.06	-70.09	4.96	-65.13	-13	-52.13
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1401	46.23	-59.68	5.52	-54.16	-13	-41.16
2	2101.5	53.66	-48.97	6.85	-42.12	-13	-29.12
3	2802	49.07	-54.03	6.94	-47.09	-13	-34.09
4	3502.5	48.88	-56.48	7.85	-48.63	-13	-35.63
5	4203	48.26	-58.34	7.07	-51.28	-13	-38.28
6	4903.5	27.69	-78.75	7.07	-71.68	-13	-58.68
7	5604	30.15	-76.81	7.05	-69.76	-13	-56.76
8	6304.5	31.43	-74.86	6.26	-68.60	-13	-55.60
9	7005	34.09	-70.06	4.96	-65.10	-13	-52.10

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	39.23	-66.64	5.58	-61.06	-13	-48.06
2	2122.5	40.63	-61.89	6.84	-55.06	-13	-42.06
3	2830	34.56	-68.77	6.97	-61.80	-13	-48.80
4	3537.5	26.90	-78.59	7.82	-70.76	-13	-57.76
5	4245	31.94	-74.61	7.04	-67.57	-13	-54.57
6	4952.5	31.38	-75.03	7.04	-67.99	-13	-54.99
7	5660	30.03	-75.79	5.71	-70.07	-13	-57.07
8	6367.5	30.72	-75.57	6.15	-69.42	-13	-56.42
9	7075	33.38	-70.47	4.83	-65.64	-13	-52.64
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	44.69	-61.18	5.58	-55.60	-13	-42.60
2	2122.5	54.36	-48.16	6.84	-41.33	-13	-28.33
3	2830	47.63	-55.70	6.97	-48.73	-13	-35.73
4	3537.5	47.28	-58.21	7.82	-50.38	-13	-37.38
5	4245	48.29	-58.26	7.04	-51.22	-13	-38.22
6	4952.5	28.44	-77.97	7.04	-70.93	-13	-57.93
7	5660	30.19	-76.67	7.01	-69.66	-13	-56.66
8	6367.5	31.51	-74.78	6.15	-68.63	-13	-55.63
9	7075	33.47	-70.38	4.83	-65.55	-13	-52.55

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23165	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1429	40.15	-65.68	5.65	-60.03	-13	-47.03
2	2143.5	41.46	-60.96	6.83	-54.13	-13	-41.13
3	2858	34.70	-68.86	7.00	-61.87	-13	-48.87
4	3572.5	24.42	-81.20	7.80	-73.39	-13	-60.39
5	4287	32.14	-74.36	7.01	-67.35	-13	-54.35
6	5001.5	31.92	-74.46	7.01	-67.45	-13	-54.45
7	5716	30.66	-75.16	5.71	-69.44	-13	-56.44
8	6430.5	30.75	-75.54	6.04	-69.50	-13	-56.50
9	7145	32.97	-70.59	4.69	-65.89	-13	-52.89
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1429	45.95	-59.88	5.65	-54.23	-13	-41.23
2	2143.5	54.11	-48.31	6.83	-41.48	-13	-28.48
3	2858	49.24	-54.32	7.00	-47.33	-13	-34.33
4	3572.5	48.33	-57.29	7.80	-49.48	-13	-36.48
5	4287	46.75	-59.75	7.01	-52.74	-13	-39.74
6	5001.5	27.44	-78.94	7.01	-71.93	-13	-58.93
7	5716	29.68	-77.09	6.97	-70.12	-13	-57.12
8	6430.5	31.28	-75.01	6.04	-68.97	-13	-55.97
9	7145	32.67	-70.89	4.69	-66.19	-13	-53.19

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 12: 5MHz

Mode	TX channel 23035	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1403	37.40	-68.50	5.53	-62.98	-13	-49.98
2	2104.5	39.67	-62.94	6.85	-56.10	-13	-43.10
3	2806	33.30	-69.83	6.94	-62.89	-13	-49.89
4	3507.5	26.72	-78.66	7.84	-70.81	-13	-57.81
5	4209	31.74	-74.86	7.06	-67.79	-13	-54.79
6	4910.5	30.64	-75.79	7.06	-68.73	-13	-55.73
7	5612	29.98	-75.84	5.71	-70.12	-13	-57.12
8	6313.5	31.90	-74.39	6.24	-68.15	-13	-55.15
9	7015	34.29	-69.82	4.94	-64.87	-13	-51.87
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1403	46.98	-58.92	5.53	-53.40	-13	-40.40
2	2104.5	53.89	-48.72	6.85	-41.88	-13	-28.88
3	2806	48.37	-54.76	6.94	-47.82	-13	-34.82
4	3507.5	48.79	-56.59	7.84	-48.74	-13	-35.74
5	4209	48.43	-58.17	7.06	-51.10	-13	-38.10
6	4910.5	27.94	-78.49	7.06	-71.43	-13	-58.43
7	5612	29.83	-77.11	7.04	-70.07	-13	-57.07
8	6313.5	32.41	-73.88	6.24	-67.64	-13	-54.64
9	7015	34.12	-69.99	4.94	-65.04	-13	-52.04

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	38.41	-67.46	5.58	-61.88	-13	-48.88
2	2122.5	39.88	-62.64	6.84	-55.81	-13	-42.81
3	2830	33.25	-70.08	6.97	-63.11	-13	-50.11
4	3537.5	26.83	-78.66	7.82	-70.83	-13	-57.83
5	4245	32.29	-74.26	7.04	-67.22	-13	-54.22
6	4952.5	31.48	-74.93	7.04	-67.89	-13	-54.89
7	5660	30.44	-75.38	5.71	-69.66	-13	-56.66
8	6367.5	31.00	-75.29	6.15	-69.14	-13	-56.14
9	7075	32.74	-71.11	4.83	-66.28	-13	-53.28
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	45.48	-60.39	5.58	-54.81	-13	-41.81
2	2122.5	53.67	-48.85	6.84	-42.02	-13	-29.02
3	2830	47.86	-55.47	6.97	-48.50	-13	-35.50
4	3537.5	47.14	-58.35	7.82	-50.52	-13	-37.52
5	4245	46.95	-59.60	7.04	-52.56	-13	-39.56
6	4952.5	27.26	-79.15	7.04	-72.11	-13	-59.11
7	5660	30.39	-76.47	7.01	-69.46	-13	-56.46
8	6367.5	32.04	-74.25	6.15	-68.10	-13	-55.10
9	7075	33.90	-69.95	4.83	-65.12	-13	-52.12

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23155	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1427	41.05	-64.79	5.64	-59.15	-13	-46.15
2	2140.5	41.19	-61.24	6.83	-54.41	-13	-41.41
3	2854	34.85	-68.68	6.99	-61.69	-13	-48.69
4	3567.5	24.18	-81.42	7.80	-73.61	-13	-60.61
5	4281	31.85	-74.65	7.01	-67.64	-13	-54.64
6	4994.5	32.12	-74.26	7.01	-67.25	-13	-54.25
7	5708	29.88	-75.94	5.71	-70.22	-13	-57.22
8	6421.5	31.53	-74.76	6.06	-68.70	-13	-55.70
9	7135	32.44	-71.16	4.71	-66.45	-13	-53.45
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1427	46.60	-59.24	5.64	-53.60	-13	-40.60
2	2140.5	54.16	-48.27	6.83	-41.44	-13	-28.44
3	2854	48.32	-55.21	6.99	-48.22	-13	-35.22
4	3567.5	49.49	-56.11	7.80	-48.30	-13	-35.30
5	4281	48.03	-58.47	7.01	-51.46	-13	-38.46
6	4994.5	28.14	-78.24	7.01	-71.23	-13	-58.23
7	5708	29.11	-77.67	6.97	-70.70	-13	-57.70
8	6421.5	32.67	-73.62	6.06	-67.56	-13	-54.56
9	7135	35.05	-68.55	4.71	-63.84	-13	-50.84

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

LTE Band 12: 10MHz

Mode	TX channel 23060	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1408	37.48	-68.41	5.55	-62.86	-13	-49.86
2	2112	40.39	-62.19	6.84	-55.34	-13	-42.34
3	2816	34.21	-69.00	6.95	-62.05	-13	-49.05
4	3520	26.71	-78.71	7.83	-70.88	-13	-57.88
5	4224	31.74	-74.84	7.05	-67.79	-13	-54.79
6	4928	30.18	-76.24	7.05	-69.19	-13	-56.19
7	5632	29.89	-75.93	5.71	-70.21	-13	-57.21
8	6336	31.88	-74.41	6.20	-68.21	-13	-55.21
9	7040	35.17	-68.83	4.89	-63.94	-13	-50.94
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1408	46.19	-59.70	5.55	-54.15	-13	-41.15
2	2112	54.24	-48.34	6.84	-41.49	-13	-28.49
3	2816	49.17	-54.04	6.95	-47.09	-13	-34.09
4	3520	47.86	-57.56	7.83	-49.73	-13	-36.73
5	4224	49.26	-57.32	7.05	-50.27	-13	-37.27
6	4928	28.93	-77.49	7.05	-70.44	-13	-57.44
7	5632	29.55	-77.36	7.03	-70.33	-13	-57.33
8	6336	32.55	-73.74	6.20	-67.54	-13	-54.54
9	7040	33.90	-70.10	4.89	-65.21	-13	-52.21

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23095	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	36.94	-68.93	5.58	-63.35	-13	-50.35
2	2122.5	39.83	-62.69	6.84	-55.86	-13	-42.86
3	2830	33.04	-70.29	6.97	-63.32	-13	-50.32
4	3537.5	25.83	-79.66	7.82	-71.83	-13	-58.83
5	4245	31.43	-75.12	7.04	-68.08	-13	-55.08
6	4952.5	31.27	-75.14	7.04	-68.10	-13	-55.10
7	5660	30.66	-75.16	5.71	-69.44	-13	-56.44
8	6367.5	30.99	-75.30	6.15	-69.15	-13	-56.15
9	7075	33.64	-70.21	4.83	-65.38	-13	-52.38
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1415	46.01	-59.86	5.58	-54.28	-13	-41.28
2	2122.5	54.20	-48.32	6.84	-41.49	-13	-28.49
3	2830	48.30	-55.03	6.97	-48.06	-13	-35.06
4	3537.5	48.24	-57.25	7.82	-49.42	-13	-36.42
5	4245	48.05	-58.50	7.04	-51.46	-13	-38.46
6	4952.5	28.16	-78.25	7.04	-71.21	-13	-58.21
7	5660	29.24	-77.62	7.01	-70.61	-13	-57.61
8	6367.5	32.34	-73.95	6.15	-67.80	-13	-54.80
9	7075	33.84	-70.01	4.83	-65.18	-13	-52.18

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 23130	Frequency Range	Above 1000MHz

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1422	40.12	-65.73	5.62	-60.11	-13	-47.11
2	2133	41.69	-60.78	6.83	-53.95	-13	-40.95
3	2844	35.33	-68.12	6.98	-61.13	-13	-48.13
4	3555	24.53	-81.02	7.81	-73.21	-13	-60.21
5	4266	31.68	-74.84	7.02	-67.82	-13	-54.82
6	4977	31.17	-75.22	7.02	-68.20	-13	-55.20
7	5688	29.58	-76.24	5.71	-70.52	-13	-57.52
8	6399	31.24	-75.05	6.10	-68.95	-13	-55.95
9	7110	32.53	-71.17	4.76	-66.41	-13	-53.41
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1422	46.95	-58.90	5.62	-53.28	-13	-40.28
2	2133	54.76	-47.71	6.83	-40.88	-13	-27.88
3	2844	48.50	-54.95	6.98	-47.96	-13	-34.96
4	3555	50.00	-55.55	7.81	-47.74	-13	-34.74
5	4266	47.90	-58.62	7.02	-51.60	-13	-38.60
6	4977	28.04	-78.35	7.02	-71.33	-13	-58.33
7	5688	30.02	-76.79	6.99	-69.81	-13	-56.81
8	6399	31.75	-74.54	6.10	-68.44	-13	-55.44
9	7110	35.41	-68.29	4.76	-63.53	-13	-50.53

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

5 Pictures of Test Arrangements

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

Appendix – Information on 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.

If you have any comments, please feel free to contact us at the following:

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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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