

FCC Test Report (Part 24)

Report No.: RF151229C25-6

FCC ID: M82-TREK733L

Test Model: TREK-733L

Received Date: Apr. 14, 2016

Test Date: Jun. 15 ~ Aug. 08, 2016

Issued Date: Aug. 10, 2016

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Release Control Record

Issue No.	Description	Date Issued
RF151229C25-6	Original release.	Aug. 10, 2016

1 Certificate of Conformity

Product: Computer

Brand: Advantech

Test Model: TREK-733L

Sample Status: Engineering sample

Applicant: ADVANTECH CO., LTD

Test Date: Jun. 15 ~ Aug. 08, 2016

Standards: FCC Part 24, Subpart E

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 : Sunt Lee , **Date:** Aug. 10, 2016
Sunt Lee / Specialist

Approved by : Bruce Chen , **Date:** Aug. 10, 2016
Bruce Chen / Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 24 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 24.232	Effective radiated power	PASS	Meet the requirement of limit.
2.1046 24.232(d)	Peak To Average Ratio	PASS	Meet the requirement of limit.
2.1055 24.235	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 24.238(b)	Occupied Bandwidth	PASS	Meet the requirement of limit.
24.238(b)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 24.238	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 24.238	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -18.8dB at 3765.00, 5740.50MHz.

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 ~ 200MHz	3.86 dB
	200MHz ~ 1000MHz	3.87 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	Apr. 18, 2016	Apr. 17, 2017
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Sep. 02, 2015	Sep. 01, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Jan. 07, 2016	Jan. 06, 2017
HORN Antenna SCHWARZBECK	9120D	209	Jan. 20, 2016	Jan. 19, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Jan. 18, 2016	Jan. 17, 2017
Preamplifier Agilent	8447D	2944A10738	Oct. 18, 2015	Oct. 17, 2016
Preamplifier Agilent	8449B	3008A01964	Aug. 22, 2015	Aug. 21, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (214378)	Aug. 22, 2015	Aug. 21, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 106	Cable-CH3-03 (309224+12738)	Aug. 22, 2015	Aug. 21, 2016
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 08, 2016	Jun. 07, 2017
Mini-Circuits Power Splitter	ZN2PD-9G	NA	Jun. 09, 2016	Jun. 08, 2017
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA

- Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 3.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 988962.
5. The IC Site Registration No. is IC 7450F-3.

3 General Information

3.1 General Description of EUT

Product	Computer	
Brand	Advantech	
Test Model	TREK-733L	
Sample Status	Engineering sample	
Nominal Voltage	12 or 24Vdc (Car power system) 3.6Vdc (Battery)	
Modulation Type	QPSK, 16QAM	
Operating Frequency	LTE Band 2 (Channel Bandwidth 1.4MHz)	1850.7MHz ~ 1909.3MHz
	LTE Band 2 (Channel Bandwidth 3MHz)	1851.5MHz ~ 1908.5MHz
	LTE Band 2 (Channel Bandwidth 5MHz)	1852.5MHz ~ 1907.5MHz
	LTE Band 2 (Channel Bandwidth 10MHz)	1855MHz ~ 1905MHz
	LTE Band 2 (Channel Bandwidth 15MHz)	1857.5MHz ~ 1902.5MHz
	LTE Band 2 (Channel Bandwidth 20MHz)	1860MHz ~ 1900MHz
	LTE Band 25 (Channel Bandwidth 1.4MHz)	1850.7MHz ~ 1914.3MHz
	LTE Band 25 (Channel Bandwidth 3MHz)	1851.5MHz ~ 1913.5MHz
	LTE Band 25 (Channel Bandwidth 5MHz)	1852.5MHz ~ 1912.5MHz
	LTE Band 25 (Channel Bandwidth 10MHz)	1855MHz ~ 1910MHz
	LTE Band 25 (Channel Bandwidth 15MHz)	1857.5MHz ~ 1907.5MHz
	LTE Band 25 (Channel Bandwidth 20MHz)	1860MHz ~ 1905MHz
Max. EIRP Power	LTE Band 2 (Channel Bandwidth 1.4MHz)	208.930mW (23.2dBm)
	LTE Band 2 (Channel Bandwidth 3MHz)	162.181mW (22.1dBm)
	LTE Band 2 (Channel Bandwidth 5MHz)	177.828mW (22.5dBm)
	LTE Band 2 (Channel Bandwidth 10MHz)	275.423mW (24.4dBm)
	LTE Band 2 (Channel Bandwidth 15MHz)	269.153mW (24.3dBm)
	LTE Band 2 (Channel Bandwidth 20MHz)	281.838mW (24.5dBm)
	LTE Band 25 (Channel Bandwidth 1.4MHz)	269.153mW (24.3dBm)
	LTE Band 25 (Channel Bandwidth 3MHz)	288.403mW (24.6dBm)
	LTE Band 25 (Channel Bandwidth 5MHz)	239.883mW (23.8dBm)
	LTE Band 25 (Channel Bandwidth 10MHz)	239.883mW (23.8dBm)
	LTE Band 25 (Channel Bandwidth 15MHz)	229.087mW (23.6dBm)
	LTE Band 25 (Channel Bandwidth 20MHz)	218.776mW (23.4dBm)
Antenna Type	Refer to Note	
Antenna Connector	Refer to Note	
Accessory Device	Stand, GPS + LTE antenna, LTE antenna, Core (For power cable), Battery	
Data Cable Supplied	2.1m Display cable with 1 core 5m Coaxial cable without core (For GPS + LTE antenna) 5.1m Coaxial cable without core (For LTE antenna) 0.27m power cable with one external ferrite core	

Note:

1. The EUT provides 1 completed transmitter (Fixed on chain 0) and 2 receivers.
2. The EUT uses following antennas.

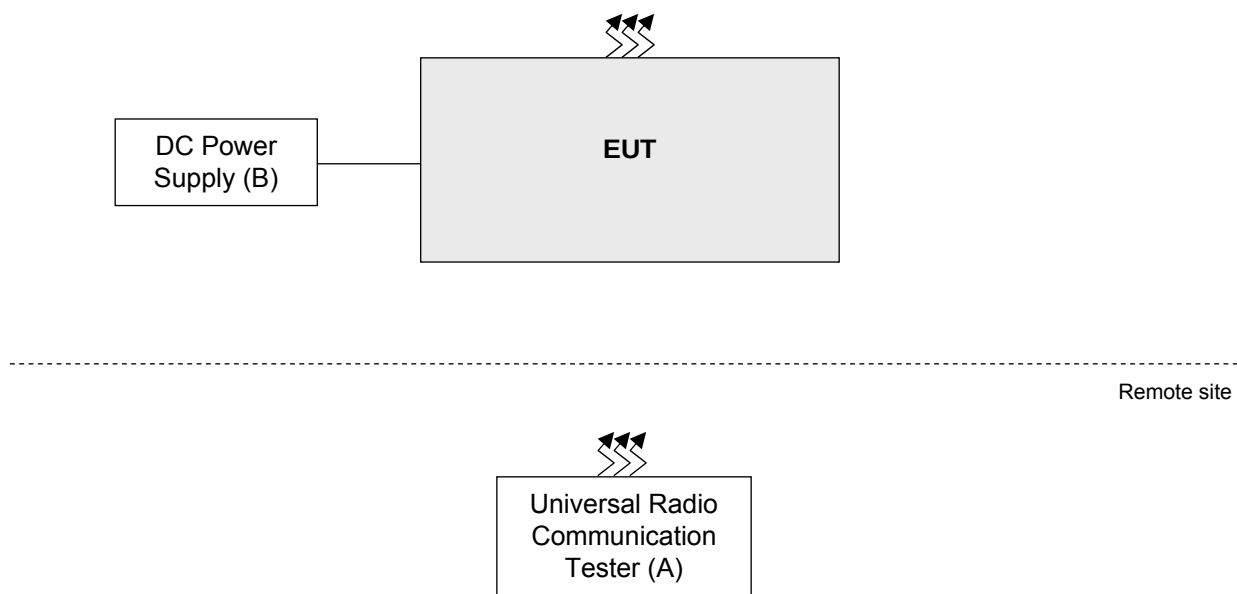
Antenna	Brand	Frequency Range (MHz)	Antenna Gain (dBi)	Antenna Type	Antenna Connector
WWAN (Main) – Chain 0	JEM	1850-1910	0.9	Dipole	SMA
		1710-1755	-0.5		
		824-849	0.5		
		777-787	0.2		
		704-716	0.2		
		1920-1980	-0.4		
WWAN (Aux) – Chain 1	JEM	1850-1910	1.2	Dipole	SMA
		1710-1755	1.8		
		824-849	-0.1		
		777-787	1		
		704-716	1		
		1920-1980	0.7		
WiFi & BT	JEM	2400-2483.5	2.87	PCB	i-pex(MHF)

3. The EUT was operated with following battery:

Battery	
Brand:	Formosan
Model:	GP01NCR18650PF
Rating:	3.6Vdc, 2270mA

4. WLAN 2.4GHz, WWAN 2/3G and LTE 4G technologies can transmit at same time.
5. Spurious emission of the simultaneous operation (WLAN 2.4GHz, WWAN 2/3G and LTE 4G) has been evaluated and no non-compliance was found.

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.	Universal Radio Communication Tester	R&S	CMU200	123112	NA	-
B.	DC Power Supply	Topward	6603D	700637	NA	-

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

3.3 Test Mode Applicability and Tested Channel Detail

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

LTE Band 2

Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
EIRP	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK	1 RB / 5 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK	1 RB / 14 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK	1 RB / 24 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK	1 RB / 49 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK	1 RB / 74 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK	1 RB / 99 RB Offset
Frequency Stability	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 5 RB Offset
Occupied Bandwidth	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK / 16QAM	1 RB / 5 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK / 16QAM	1 RB / 14 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK / 16QAM	1 RB / 24 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK / 16QAM	1 RB / 49 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK / 16QAM	1 RB / 74 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK / 16QAM	1 RB / 99 RB Offset
Band Edge	18607 to 19193	18607, 19193	1.4MHz	QPSK	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
	18615 to 19185	18615, 19185	3MHz	QPSK	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
	18625 to 19175	18625, 19175	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
	18650 to 19150	18650, 19150	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
	18675 to 19125	18675, 19125	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
	18700 to 19100	18700, 19100	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
Peak to Average Ratio	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK / 16QAM	1 RB / 5 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK / 16QAM	1 RB / 14 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK / 16QAM	1 RB / 24 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK / 16QAM	1 RB / 49 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK / 16QAM	1 RB / 74 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK / 16QAM	1 RB / 99 RB Offset
Conducted Emission	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK	1 RB / 5 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK	1 RB / 14 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK	1 RB / 24 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK	1 RB / 49 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK	1 RB / 74 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK	1 RB / 99 RB Offset
Radiated Emission Below 1GHz	18607 to 19193	18607	1.4MHz	QPSK	1 RB / 5 RB Offset
	18615 to 19185	18615	3MHz	QPSK	1 RB / 14 RB Offset
	18625 to 19175	18625	5MHz	QPSK	1 RB / 24 RB Offset
	18650 to 19150	18650	10MHz	QPSK	1 RB / 49 RB Offset
	18675 to 19125	18675	15MHz	QPSK	1 RB / 74 RB Offset
	18700 to 19100	18700	20MHz	QPSK	1 RB / 99 RB Offset
Radiated Emission Above 1GHz	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK	1 RB / 5 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK	1 RB / 14 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK	1 RB / 24 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK	1 RB / 49 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK	1 RB / 74 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK	1 RB / 99 RB Offset

LTE Band 25

Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
EIRP	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK	1 RB / 5 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK	1 RB / 14 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK	1 RB / 24 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK	1 RB / 49 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK	1 RB / 74 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK	1 RB / 99 RB Offset
Frequency Stability	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 0 RB Offset
Occupied Bandwidth	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK / 16QAM	1 RB / 5 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK / 16QAM	1 RB / 14 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK / 16QAM	1 RB / 24 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK / 16QAM	1 RB / 49 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK / 16QAM	1 RB / 74 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK / 16QAM	1 RB / 99 RB Offset
Band Edge	26047 to 26683	26047, 26683	1.4MHz	QPSK	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
	26055 to 26675	26055, 26675	3MHz	QPSK	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
	26065 to 26665	26065, 26665	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
	26090 to 26640	26090, 26640	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
	26115 to 26615	26115, 26615	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
	26140 to 26590	26140, 26590	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
Peak to Average Ratio	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK / 16QAM	1 RB / 5 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK / 16QAM	1 RB / 14 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK / 16QAM	1 RB / 24 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK / 16QAM	1 RB / 49 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK / 16QAM	1 RB / 74 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK / 16QAM	1 RB / 99 RB Offset
Conducted Emission	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK	1 RB / 5 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK	1 RB / 14 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK	1 RB / 24 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK	1 RB / 49 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK	1 RB / 74 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK	1 RB / 99 RB Offset
Radiated Emission Below 1GHz	26047 to 26683	26047	1.4MHz	QPSK	1 RB / 5 RB Offset
	26055 to 26675	26055	3MHz	QPSK	1 RB / 14 RB Offset
	26065 to 26665	26065	5MHz	QPSK	1 RB / 24 RB Offset
	26090 to 26640	26090	10MHz	QPSK	1 RB / 49 RB Offset
	26115 to 26615	26115	15MHz	QPSK	1 RB / 74 RB Offset
	26140 to 26590	26140	20MHz	QPSK	1 RB / 99 RB Offset
Radiated Emission Above 1GHz	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK	1 RB / 5 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK	1 RB / 14 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK	1 RB / 24 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK	1 RB / 49 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK	1 RB / 74 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK	1 RB / 99 RB Offset

Note:

1. For radiated emission below 1GHz, the low, mid and high channels were pre-tested in chamber. The low channel was the worst case and chosen for final test.
2. The conducted output power for QPSK and 16QAM, measured value of QPSK is higher than 16QAM mode. Therefore, only Occupied bandwidth and Peak to average ratio items had been tested under QPSK and 16QAM modes, the other test items were performed under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power (System)	Tested By
EIRP	25deg. C, 69%RH	120Vac, 60Hz	Bayu Chen Tank Wu
Frequency Stability	24deg. C, 64%RH	120Vac, 60Hz	Match Tsui
Occupied Bandwidth	24deg. C, 64%RH	120Vac, 60Hz	Match Tsui
Band Edge	24deg. C, 64%RH	120Vac, 60Hz	Match Tsui
Peak To Average Ratio	24deg. C, 64%RH	120Vac, 60Hz	Match Tsui
Conducted Emission	24deg. C, 64%RH	120Vac, 60Hz	Match Tsui
Radiated Emission	20deg. C, 69%RH 25deg. C, 69%RH	120Vac, 60Hz	Bayu Chen Tank Wu

3.4 EUT Operating Conditions

The EUT makes a call to the communication simulator. 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 24

KDB 971168 D01 Power Meas License Digital Systems v02r02

ANSI/TIA/EIA-603-C 2004

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

Note: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC).
The test report has been issued separately.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

Mobile / Portable station are limited to 2 watts e.r.p.

4.1.2 Test Procedures

EIRP / ERP Measurement:

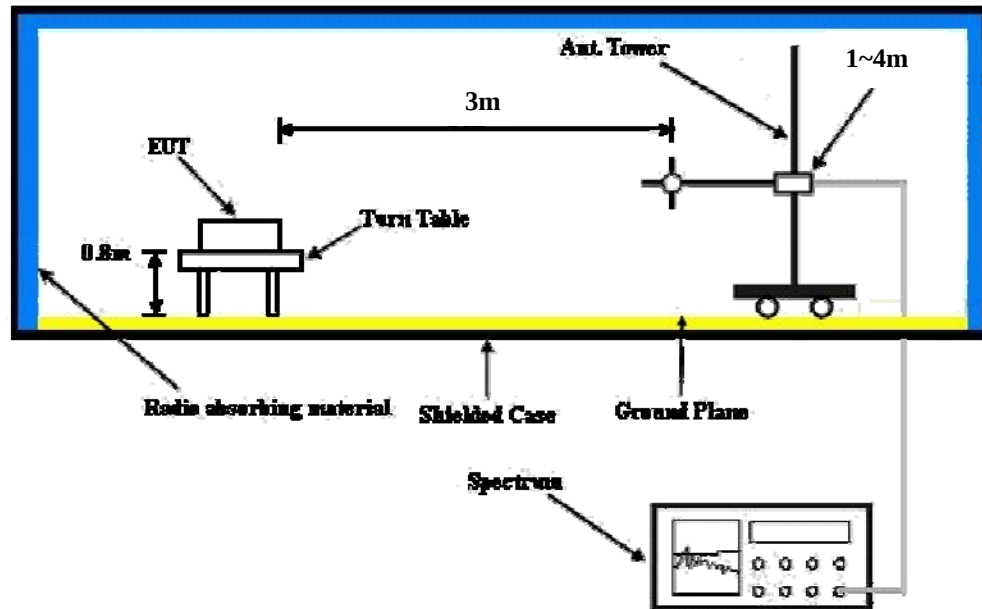
- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 10MHz for LTE mode.
- b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the 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 horn 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. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15\text{dBi}$.

Conducted Power Measurement:

The EUT was set up for the maximum power with 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.

4.1.3 Test Setup

EIRP / ERP Measurement:



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

Conducted Power Measurement:



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

4.1.4 Test Results

Conducted Output Power (dBm)

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 18607	CH 18900	CH 19193	CH 18607	CH 18900	CH 19193
			1850.7 MHz	1880 MHz	1909.3 MHz	1850.7 MHz	1880 MHz	1909.3 MHz
2 / 1.4MHz	1	0	22.85	22.80	23.09	21.83	21.78	22.00
	1	2	22.89	22.83	23.07	21.86	21.82	22.01
	1	5	22.93	22.87	23.17	21.90	21.86	22.11
	3	0	22.81	22.76	23.05	21.81	21.78	21.97
	3	1	22.83	22.79	23.07	21.80	21.78	22.01
	3	3	22.82	22.77	23.08	21.79	21.76	22.02
	6	0	21.86	21.85	22.16	20.92	20.87	21.21

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 18615	CH 18900	CH 19185	CH 18615	CH 18900	CH 19185
			1851.5 MHz	1880 MHz	1908.5 MHz	1851.5 MHz	1880 MHz	1908.5 MHz
2 / 3MHz	1	0	22.88	22.77	23.03	21.77	21.67	22.05
	1	7	22.92	22.79	23.09	21.90	21.70	21.99
	1	14	22.96	22.84	23.15	21.94	21.75	22.09
	8	0	22.06	22.01	22.14	21.04	20.91	21.01
	8	3	22.01	21.97	22.11	21.08	20.88	21.01
	8	7	22.03	22.00	22.11	21.01	20.91	21.05
	15	0	21.88	21.82	22.06	20.90	20.89	21.09

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 18625	CH 18900	CH 19175	CH 18625	CH 18900	CH 19175
			1852.5 MHz	1880 MHz	1907.5 MHz	1852.5 MHz	1880 MHz	1907.5 MHz
2 / 5MHz	1	0	22.85	22.82	22.96	21.81	21.71	21.98
	1	12	22.92	22.82	23.07	21.88	21.71	22.09
	1	24	22.84	22.74	23.10	21.80	21.63	22.12
	12	0	21.96	21.91	22.03	20.92	20.80	21.05
	12	6	21.99	21.95	22.06	20.91	20.83	21.14
	12	13	22.06	22.03	22.13	21.02	20.92	21.15
	25	0	21.81	21.75	22.01	20.86	20.70	21.02

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 18650	CH 18900	CH 19150	CH 18650	CH 18900	CH 19150
			1855 MHz	1880 MHz	1905 MHz	1855 MHz	1880 MHz	1905 MHz
2 / 10MHz	1	0	22.97	22.88	23.01	21.80	21.74	21.86
	1	24	23.07	22.95	23.11	22.09	21.92	22.05
	1	49	23.10	23.05	23.12	22.06	22.04	22.12
	25	0	21.84	21.79	21.97	20.86	20.78	20.91
	25	12	21.92	21.86	22.04	20.94	20.87	20.98
	25	25	22.00	21.92	22.10	21.04	20.91	21.14
	50	0	21.73	21.65	21.81	20.76	20.71	20.85

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 18675	CH 18900	CH 19125	CH 18675	CH 18900	CH 19125
			1857.5 MHz	1880 MHz	1902.5 MHz	1857.5 MHz	1880 MHz	1902.5 MHz
2 / 15MHz	1	0	22.85	22.92	22.95	21.96	21.94	22.00
	1	37	23.14	22.99	23.01	22.15	22.05	21.98
	1	74	23.24	23.15	23.85	22.25	22.21	22.82
	36	0	21.72	21.65	21.84	20.73	20.71	20.85
	36	19	21.76	21.69	21.88	20.75	20.75	20.85
	36	39	21.84	21.72	21.96	20.81	20.78	20.90
	75	0	21.71	21.64	21.84	20.75	20.67	20.82

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 18700	CH 18900	CH 19100	CH 18700	CH 18900	CH 19100
			1860 MHz	1880 MHz	1900 MHz	1860 MHz	1880 MHz	1900 MHz
2 / 20MHz	1	0	22.92	22.89	22.96	21.83	21.86	21.93
	1	50	22.95	22.91	23.01	21.90	21.94	22.10
	1	99	23.42	23.35	23.77	22.38	22.32	22.86
	50	0	21.86	21.76	21.77	20.82	20.79	20.86
	50	25	21.88	21.83	21.82	20.84	20.82	20.91
	50	50	21.83	21.78	21.80	20.79	20.81	20.89
	100	0	21.66	21.67	21.83	20.67	20.68	20.74

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 26047	CH 26365	CH 26683	CH 26047	CH 26365	CH 26683
			1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz
25 / 1.4MHz	1	0	22.75	22.67	22.83	21.61	21.48	21.88
	1	2	22.79	22.71	22.93	21.70	21.52	21.95
	1	5	22.86	22.79	22.98	21.77	21.60	22.03
	3	0	22.72	22.65	22.81	21.60	21.46	21.86
	3	1	22.76	22.65	22.85	21.67	21.45	21.88
	3	3	22.79	22.71	22.88	21.68	21.52	21.90
	6	0	21.86	21.79	21.98	20.77	20.51	21.03

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 26055	CH 26365	CH 26675	CH 26055	CH 26365	CH 26675
			1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz
25 / 3MHz	1	0	22.83	22.74	22.91	21.72	21.55	21.97
	1	7	22.86	22.79	22.95	21.79	21.60	22.01
	1	14	22.91	22.84	23.01	21.84	21.65	22.07
	8	0	21.92	21.84	22.04	20.81	20.63	21.10
	8	3	21.95	21.85	22.08	20.88	20.66	21.14
	8	7	21.89	21.80	22.01	20.80	20.61	21.17
	15	0	21.90	21.81	22.04	20.79	20.65	21.10

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 26065	CH 26365	CH 26665	CH 26065	CH 26365	CH 26665
			1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz
25 / 5MHz	1	0	22.89	22.81	22.97	22.00	21.80	22.16
	1	12	22.83	22.74	22.95	21.94	21.73	22.00
	1	24	22.93	22.85	23.01	22.00	21.84	22.21
	12	0	22.02	21.95	22.11	21.13	20.94	21.21
	12	6	21.92	21.85	22.02	21.03	20.84	21.03
	12	13	21.95	21.89	22.06	21.06	20.88	21.14
	25	0	21.90	21.84	22.02	21.01	20.83	21.09

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 26090	CH 26365	CH 26640	CH 26090	CH 26365	CH 26640
			1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz
25 / 10MHz	1	0	22.74	22.66	22.85	21.69	21.68	21.76
	1	24	22.75	22.63	22.85	21.67	21.65	21.76
	1	49	22.83	22.76	22.91	21.75	21.71	21.82
	25	0	21.61	21.54	21.76	20.53	20.56	20.67
	25	12	21.63	21.55	21.76	20.62	20.57	20.70
	25	25	21.56	21.51	21.66	20.48	20.52	20.57
	50	0	21.51	21.46	21.62	20.41	20.48	20.50

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 26115	CH 26365	CH 26615	CH 26115	CH 26365	CH 26615
			1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz
25 / 15MHz	1	0	22.71	22.64	22.79	21.76	21.63	21.87
	1	37	22.86	21.79	22.99	21.91	20.75	22.08
	1	74	22.92	22.84	23.00	21.95	21.83	22.09
	36	0	21.74	21.65	21.83	20.79	20.64	20.92
	36	19	21.75	21.69	21.83	20.80	20.67	20.92
	36	39	21.79	21.82	21.91	20.81	20.75	21.00
	75	0	21.76	21.68	21.89	20.80	20.65	20.98

Band / BW	RB Size	RB Offset	QPSK			16QAM		
			CH 26140	CH 26365	CH 26590	CH 26140	CH 26365	CH 26590
			1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz
25 / 20MHz	1	0	21.76	21.65	22.87	20.58	20.51	21.76
	1	50	22.79	21.68	22.88	21.61	20.60	21.79
	1	99	21.83	21.71	22.91	20.65	20.61	21.82
	50	0	21.56	21.49	21.63	20.38	20.35	20.54
	50	25	21.59	21.50	21.60	20.41	20.35	20.51
	50	50	21.46	21.40	21.56	20.28	20.19	20.47
	100	0	21.53	21.45	21.62	20.35	20.24	20.53

EIRP Power (dBm)

LTE Band 2, Channel Bandwidth: 1.4MHz

MODE		TX channel 18607					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1850.70	-20.2	20.0	0.1	20.1	33.0	-12.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1850.70	-17.7	22.7	0.1	22.8	33.0	-10.2

MODE		TX channel 18900					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-20.4	20.1	0.0	20.1	33.0	-12.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-17.4	23.2	0.0	23.2	33.0	-9.8

MODE		TX channel 19193					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1909.30	-20.8	19.9	-0.1	19.8	33.0	-13.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1909.30	-18.9	21.9	-0.1	21.8	33.0	-11.2

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 2, Channel Bandwidth: 3MHz

MODE		TX channel 18615					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1851.50	-20.4	19.8	0.1	19.9	33.0	-13.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1851.50	-18.5	21.9	0.1	22.0	33.0	-11.0

MODE		TX channel 18900					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-20.5	20.0	0.0	20.0	33.0	-13.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-18.6	22.0	0.0	22.0	33.0	-11.0

MODE		TX channel 19185					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1908.50	-20.7	20.0	-0.1	19.9	33.0	-13.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1908.50	-18.6	22.2	-0.1	22.1	33.0	-10.9

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 2, Channel Bandwidth: 5MHz

MODE		TX channel 18625					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1852.50	-20.9	19.3	0.1	19.4	33.0	-13.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1852.50	-18.8	21.6	0.1	21.7	33.0	-11.3

MODE		TX channel 18900					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-20.5	20.0	0.0	20.0	33.0	-13.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-18.2	22.4	0.0	22.4	33.0	-10.6

MODE		TX channel 19175					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1907.50	-20.4	20.3	-0.1	20.2	33.0	-12.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1907.50	-18.2	22.6	-0.1	22.5	33.0	-10.5

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 2, Channel Bandwidth: 10MHz

MODE		TX channel 18650					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1855.00	-19.4	20.9	0.0	20.9	33.0	-12.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1855.00	-17.6	22.9	0.0	22.9	33.0	-10.1

MODE		TX channel 18900					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-19.8	20.7	0.0	20.7	33.0	-12.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-17.9	22.7	0.0	22.7	33.0	-10.3

MODE		TX channel 19150					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1905.00	-18.5	22.2	-0.1	22.1	33.0	-10.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1905.00	-16.3	24.5	-0.1	24.4	33.0	-8.6

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 2, Channel Bandwidth: 15MHz

MODE		TX channel 18675					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1857.50	-19.3	21.0	0.0	21.0	33.0	-12.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1857.50	-16.2	24.3	0.0	24.3	33.0	-8.7

MODE		TX channel 18900					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-20.1	20.4	0.0	20.4	33.0	-12.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-17.0	23.6	0.0	23.6	33.0	-9.4

MODE		TX channel 19125					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1902.50	-19.8	20.9	-0.1	20.8	33.0	-12.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1902.50	-16.4	24.4	-0.1	24.3	33.0	-8.7

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 2, Channel Bandwidth: 20MHz

MODE		TX channel 18700					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1860.00	-19.6	20.7	0.0	20.7	33.0	-12.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1860.00	-16.0	24.5	0.0	24.5	33.0	-8.5

MODE		TX channel 18900					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-20.0	20.5	0.0	20.5	33.0	-12.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-16.4	24.2	0.0	24.2	33.0	-8.8

MODE		TX channel 19100					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1900.00	-19.8	20.9	-0.1	20.8	33.0	-12.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1900.00	-16.4	24.4	-0.1	24.3	33.0	-8.7

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 25, Channel Bandwidth: 1.4MHz

MODE		TX channel 26047					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1850.70	-18.9	21.3	0.1	21.4	33.0	-11.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1850.70	-17.1	23.3	0.1	23.4	33.0	-9.6

MODE		TX channel 26365					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-18.5	22.0	0.0	22.0	33.0	-11.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-16.5	24.1	0.0	24.1	33.0	-8.9

MODE		TX channel 26683					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1914.30	-18.3	22.3	-0.1	22.2	33.0	-10.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1914.30	-16.4	24.4	-0.1	24.3	33.0	-8.7

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 25, Channel Bandwidth: 3MHz

MODE		TX channel 26055					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1851.50	-18.8	21.4	0.1	21.5	33.0	-11.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1851.50	-16.7	23.7	0.1	23.8	33.0	-9.2

MODE		TX channel 26365					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-19.2	21.3	0.0	21.3	33.0	-11.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-16.5	24.1	0.0	24.1	33.0	-8.9

MODE		TX channel 26675					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1913.50	-18.9	21.7	-0.1	21.6	33.0	-11.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1913.50	-16.1	24.7	-0.1	24.6	33.0	-8.4

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 25, Channel Bandwidth: 5MHz

MODE		TX channel 26065					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1852.50	-18.2	22.0	0.1	22.1	33.0	-10.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1852.50	-16.7	23.7	0.1	23.8	33.0	-9.2

MODE		TX channel 26365					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-20.1	20.4	0.0	20.4	33.0	-12.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-17.7	22.9	0.0	22.9	33.0	-10.1

MODE		TX channel 26665					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1912.50	-20.4	20.2	-0.1	20.1	33.0	-12.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1912.50	-18.4	22.4	-0.1	22.3	33.0	-10.7

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 25, Channel Bandwidth: 10MHz

MODE		TX channel 26090					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1855.00	-19.7	20.6	0.0	20.6	33.0	-12.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1855.00	-16.7	23.8	0.0	23.8	33.0	-9.2

MODE		TX channel 26365					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-19.8	20.7	0.0	20.7	33.0	-12.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-17.1	23.5	0.0	23.5	33.0	-9.5

MODE		TX channel 26640					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1910.00	-21.3	19.3	-0.1	19.2	33.0	-13.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1910.00	-18.7	22.1	-0.1	22.0	33.0	-11.0

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 25, Channel Bandwidth: 15MHz

MODE		TX channel 26115					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1857.50	-19.1	21.2	0.0	21.2	33.0	-11.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1857.50	-16.9	23.6	0.0	23.6	33.0	-9.4

MODE		TX channel 26365					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-19.6	20.9	0.0	20.9	33.0	-12.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-17.2	23.4	0.0	23.4	33.0	-9.6

MODE		TX channel 26615					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1907.50	-20.8	19.9	-0.1	19.8	33.0	-13.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1907.50	-18.7	22.1	-0.1	22.0	33.0	-11.0

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 25, Channel Bandwidth: 20MHz

MODE		TX channel 26140					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1860.00	-18.3	22.0	0.0	22.0	33.0	-11.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1860.00	-17.1	23.4	0.0	23.4	33.0	-9.6

MODE		TX channel 26365					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.50	-18.1	22.4	0.0	22.4	33.0	-10.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1882.5	-17.6	23.0	0.0	23.0	33.0	-10.0

MODE		TX channel 26590					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1905.00	-20.3	20.4	-0.1	20.3	33.0	-12.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1905.00	-18.9	21.9	-0.1	21.8	33.0	-11.2

Note: EIRP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

4.2 Frequency Stability Measurement

4.2.1 Limits of Frequency Stability Measurement

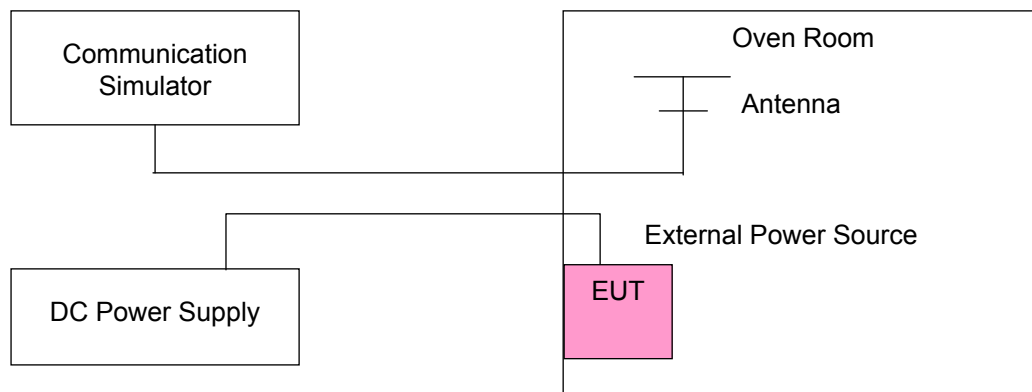
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

4.2.2 Test Procedure

- 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.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ 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.

4.2.3 Test Setup



4.2.4 Test Results

Frequency Error vs. Voltage

Voltage (Volts)	Frequency Error (ppm)		Limit (ppm)
	LTE Band 2	LTE Band 25	
26.4	-0.007	-0.006	2.5
24	-0.006	-0.004	2.5
21.6	-0.007	-0.005	2.5

NOTE: The applicant defined the normal working voltage is from 21.6Vdc to 26.4Vdc.

Frequency Error vs. Temperature.

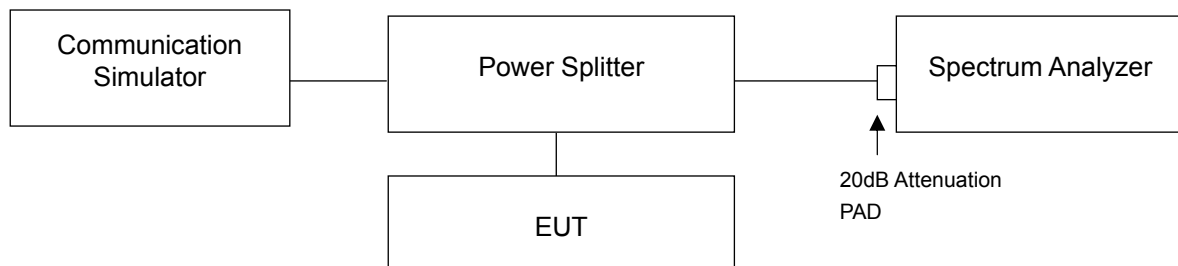
TEMP. (°C)	Frequency Error (ppm)		Limit (ppm)
	LTE Band 2	LTE Band 25	
70	-0.010	-0.009	2.5
60	-0.010	-0.010	2.5
50	-0.009	-0.009	2.5
40	-0.008	-0.006	2.5
30	-0.007	-0.005	2.5
20	-0.006	-0.004	2.5
10	-0.008	-0.006	2.5
0	-0.009	-0.006	2.5
-10	-0.010	-0.008	2.5
-20	-0.012	-0.010	2.5

4.3 Occupied Bandwidth Measurement

4.3.1 Test Procedure

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.

4.3.2 Test Setup



4.3.3 Test Result

LTE Band 2, Channel Bandwidth 1.4MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
18607	1850.7	1.09	1.10
18900	1880.0	1.09	1.10
19193	1909.3	1.09	1.09

LTE Band 2, Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
18615	1851.5	2.69	2.69
18900	1880.0	2.69	2.69
19185	1908.5	2.69	2.69

LTE Band 2, Channel Bandwidth 5MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
18625	1852.5	4.45	4.47
18900	1880.0	4.48	4.48
19175	1907.5	4.47	4.47

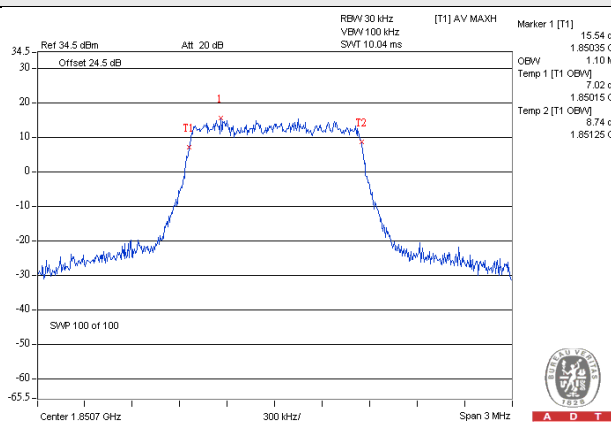
LTE Band 2, Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
18650	1855.0	8.93	8.93
18900	1880.0	8.93	8.93
19150	1905.0	8.93	8.97

LTE Band 2, Channel Bandwidth 15MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
18675	1857.5	13.37	13.37
18900	1880.0	13.43	13.40
19125	1902.5	13.43	13.47

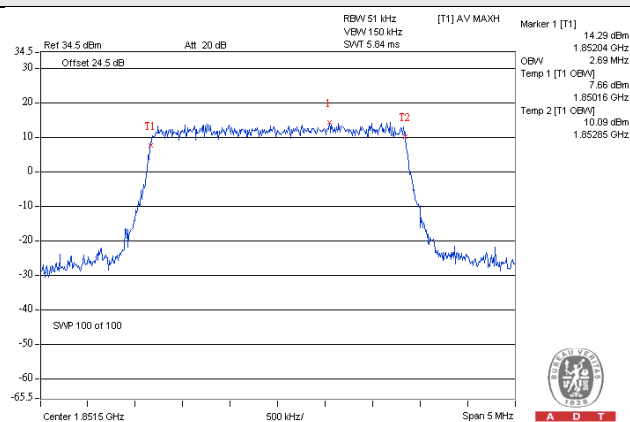
LTE Band 2, Channel Bandwidth 20MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
18700	1860.0	17.73	17.80
18900	1880.0	18.00	18.00
19100	1900.0	18.00	17.93

Spectrum Plot Of Worst Value

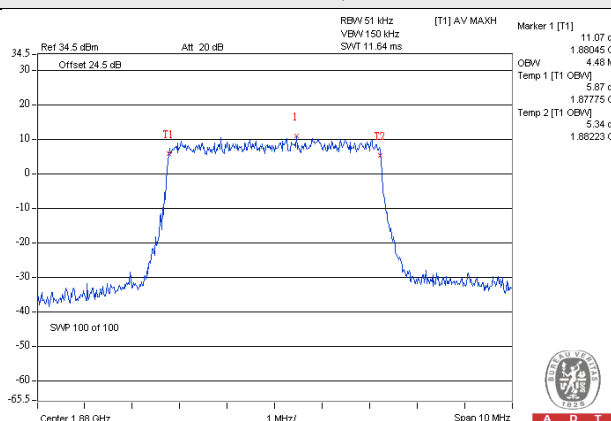
1.4MHz / 16QAM



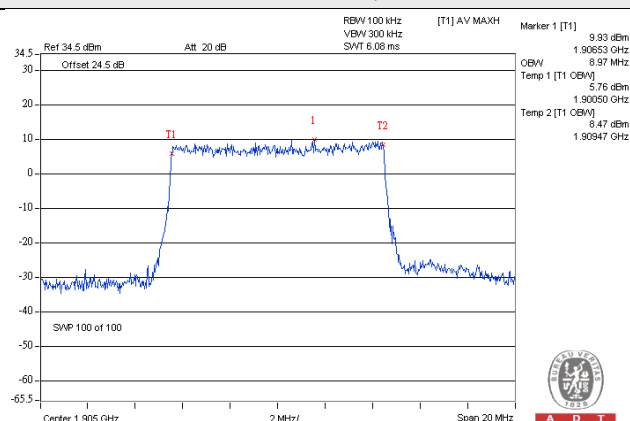
3MHz / QPSK



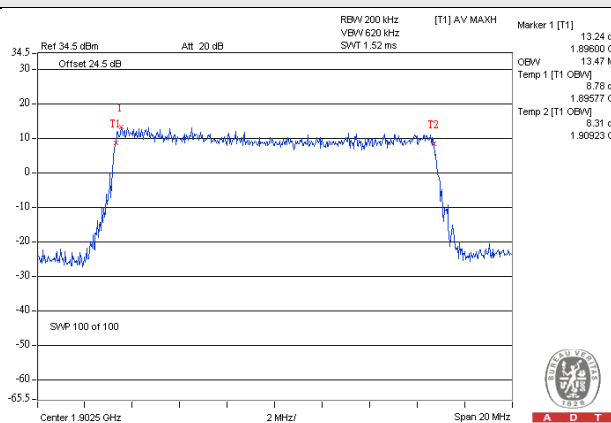
5MHz / QPSK



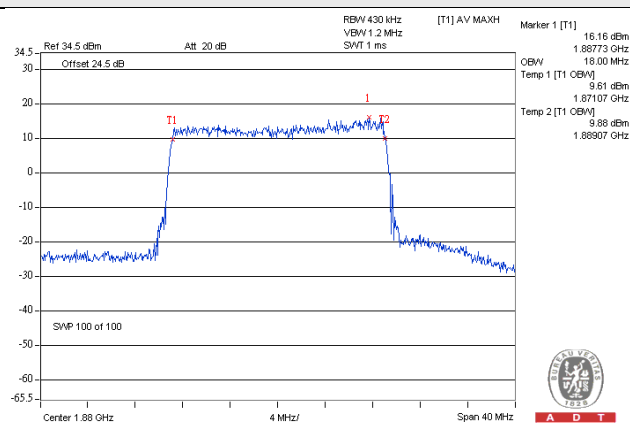
10MHz / 16QAM



15MHz / 16QAM



20MHz / QPSK



LTE Band 25, Channel Bandwidth 1.4MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
26047	1850.7	1.09	1.10
26365	1882.5	1.10	1.09
26683	1914.3	1.09	1.10

LTE Band 25, Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
26055	1851.5	2.70	2.69
26365	1882.5	2.69	2.68
26675	1913.5	2.69	2.69

LTE Band 25, Channel Bandwidth 5MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
26065	1852.5	4.48	4.47
26365	1882.5	4.45	4.47
26665	1912.5	4.45	4.43

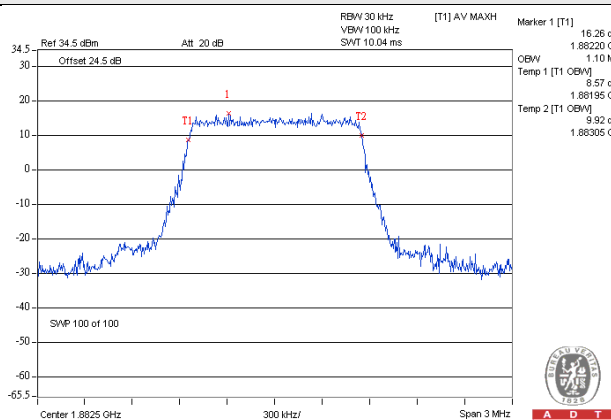
LTE Band 25, Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
26090	1855.0	8.93	8.97
26365	1882.5	8.93	8.97
26640	1910.0	8.90	8.93

LTE Band 25, Channel Bandwidth 15MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
26115	1857.5	13.37	13.37
26365	1882.5	13.47	13.43
26615	1907.5	13.43	13.43

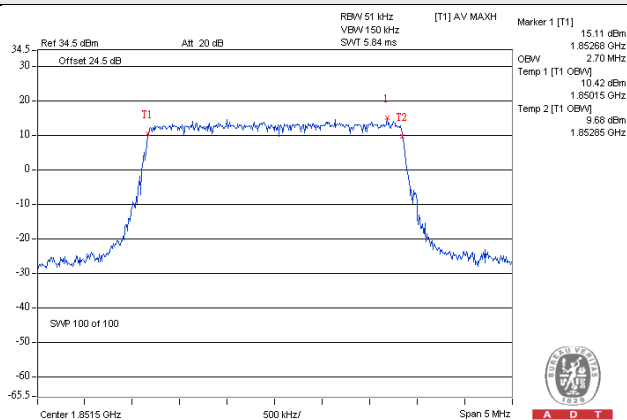
LTE Band 25, Channel Bandwidth 20MHz			
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	
		QPSK	16QAM
26140	1860.0	17.80	17.87
26365	1882.5	18.00	18.07
26590	1905.0	18.07	18.07

Spectrum Plot Of Worst Value

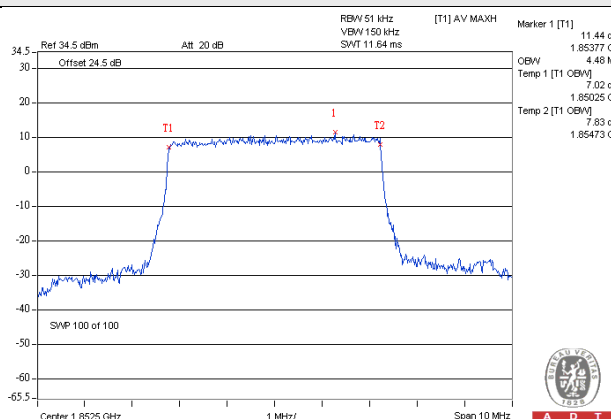
1.4MHz / QPSK



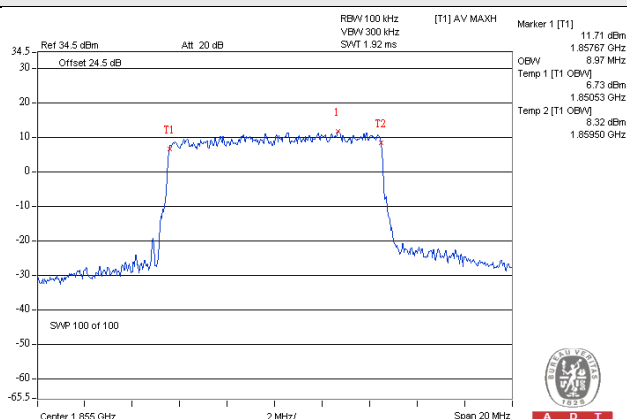
3MHz / QPSK



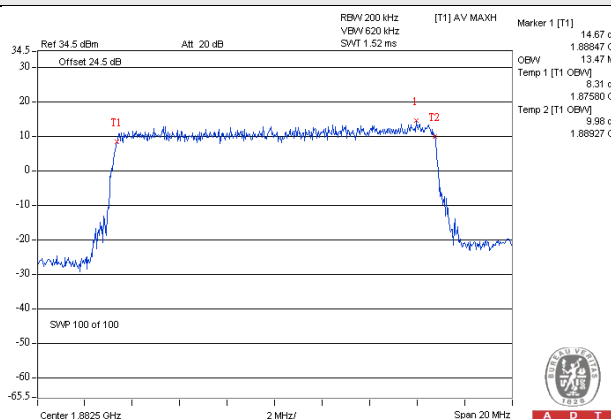
5MHz / QPSK



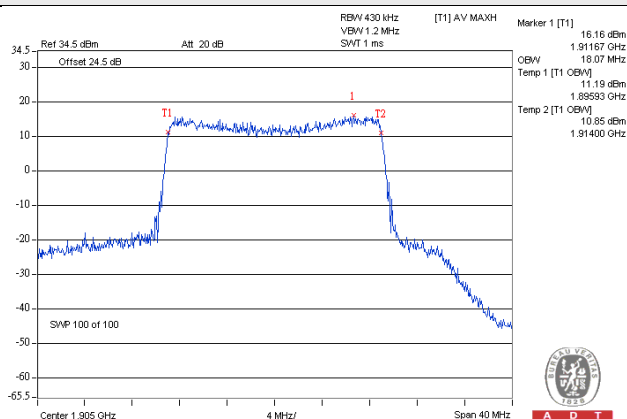
10MHz / 16QAM



15MHz / QPSK



20MHz / QPSK

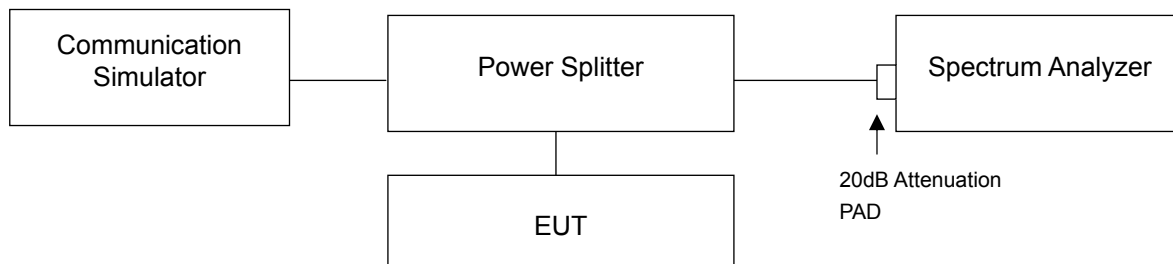


4.4 Band Edge Measurement

4.4.1 Limits of Band Edge Measurement

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

4.4.2 Test Setup

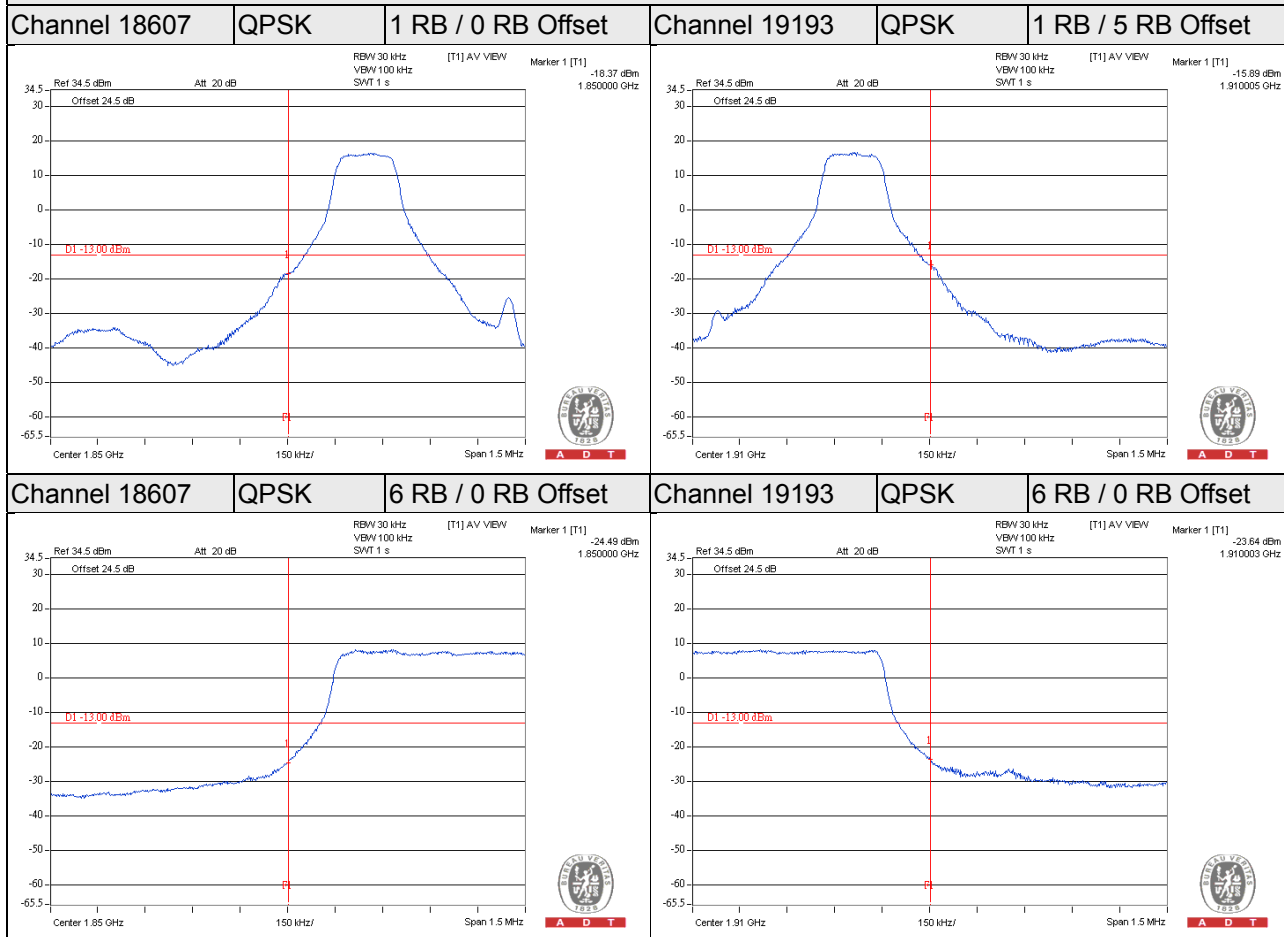


4.4.3 Test Procedures

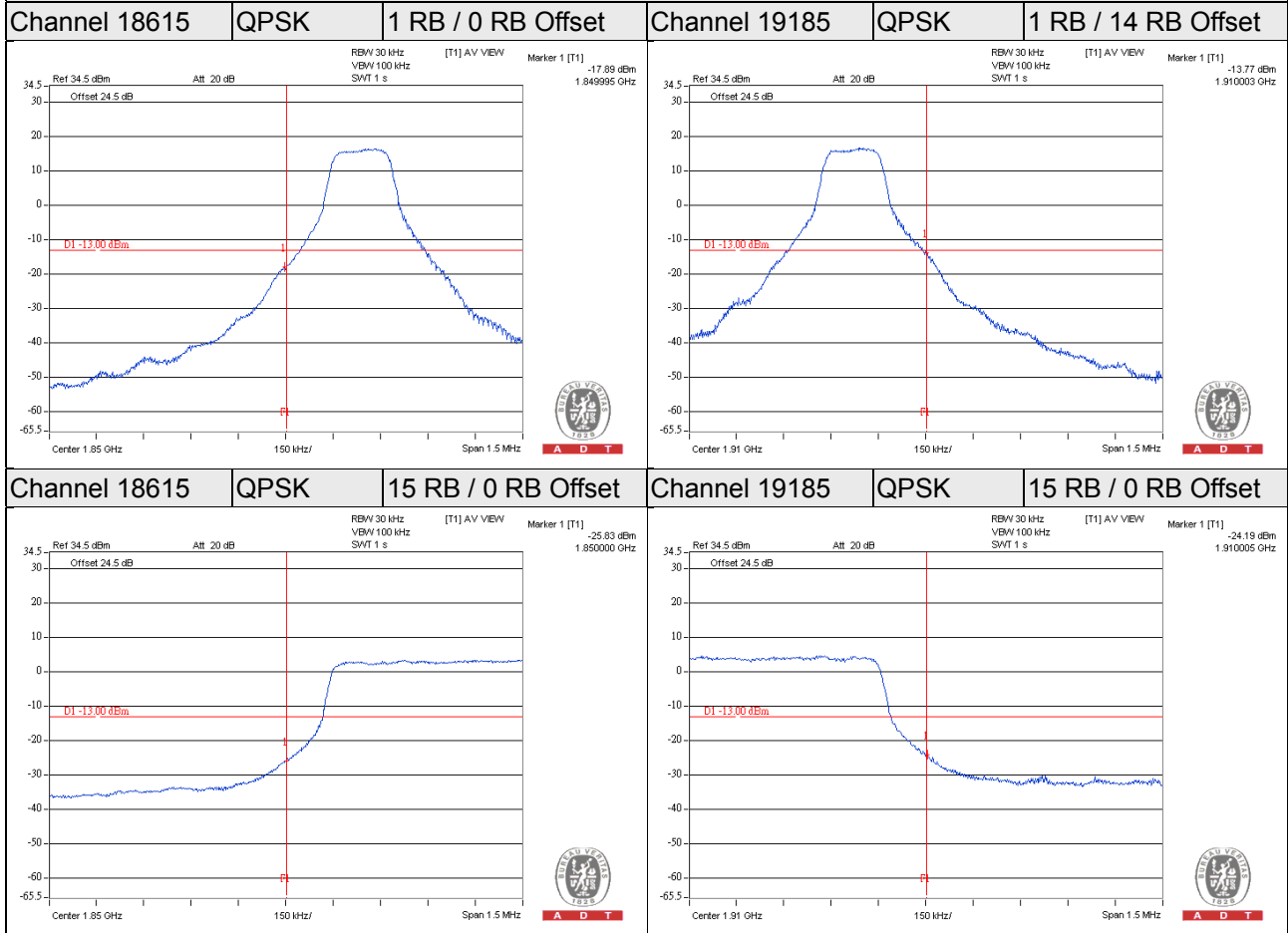
- All measurements were done at low and high operational frequency range.
- The center frequency of spectrum is the band edge frequency and span is 1.5MHz. RB of the spectrum is 30kHz and VB of the spectrum is 100kHz (LTE Channel Bandwidth 1.4MHz and 3MHz).
- The center frequency of spectrum is the band edge frequency and span is 1.5MHz. RB of the spectrum is 51kHz and VB of the spectrum is 150kHz (LTE Channel Bandwidth 5MHz).
- The center frequency of spectrum is the band edge frequency and span is 1.5MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Channel Bandwidth 10MHz).
- The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 200kHz and VB of the spectrum is 620kHz (LTE Channel Bandwidth 15MHz).
- The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 430kHz and VB of the spectrum is 1200kHz (LTE Channel Bandwidth 20MHz).
- Record the max trace plot into the test report.

4.4.4 Test Results

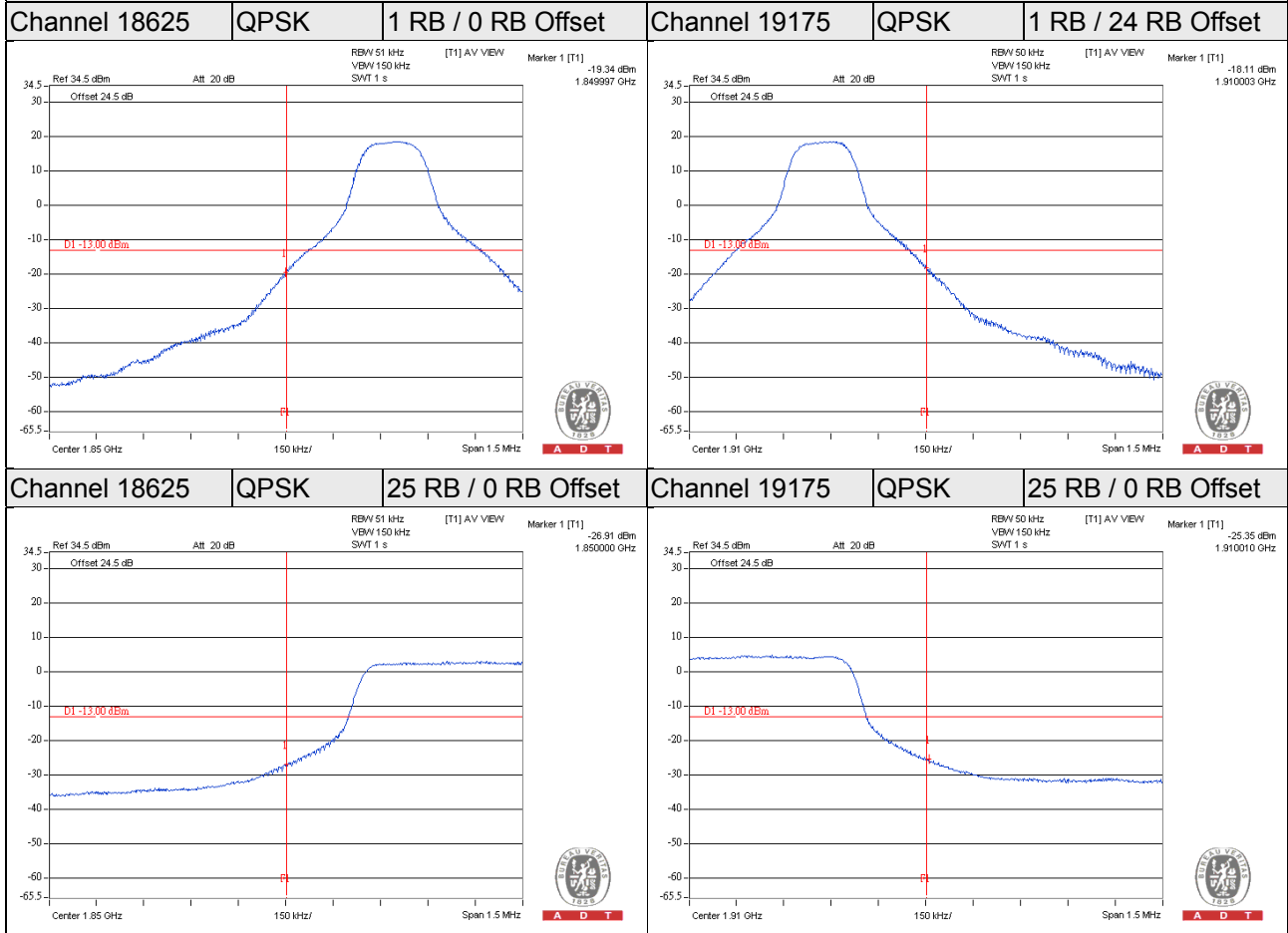
LTE Band 2, Channel Bandwidth 1.4MHz



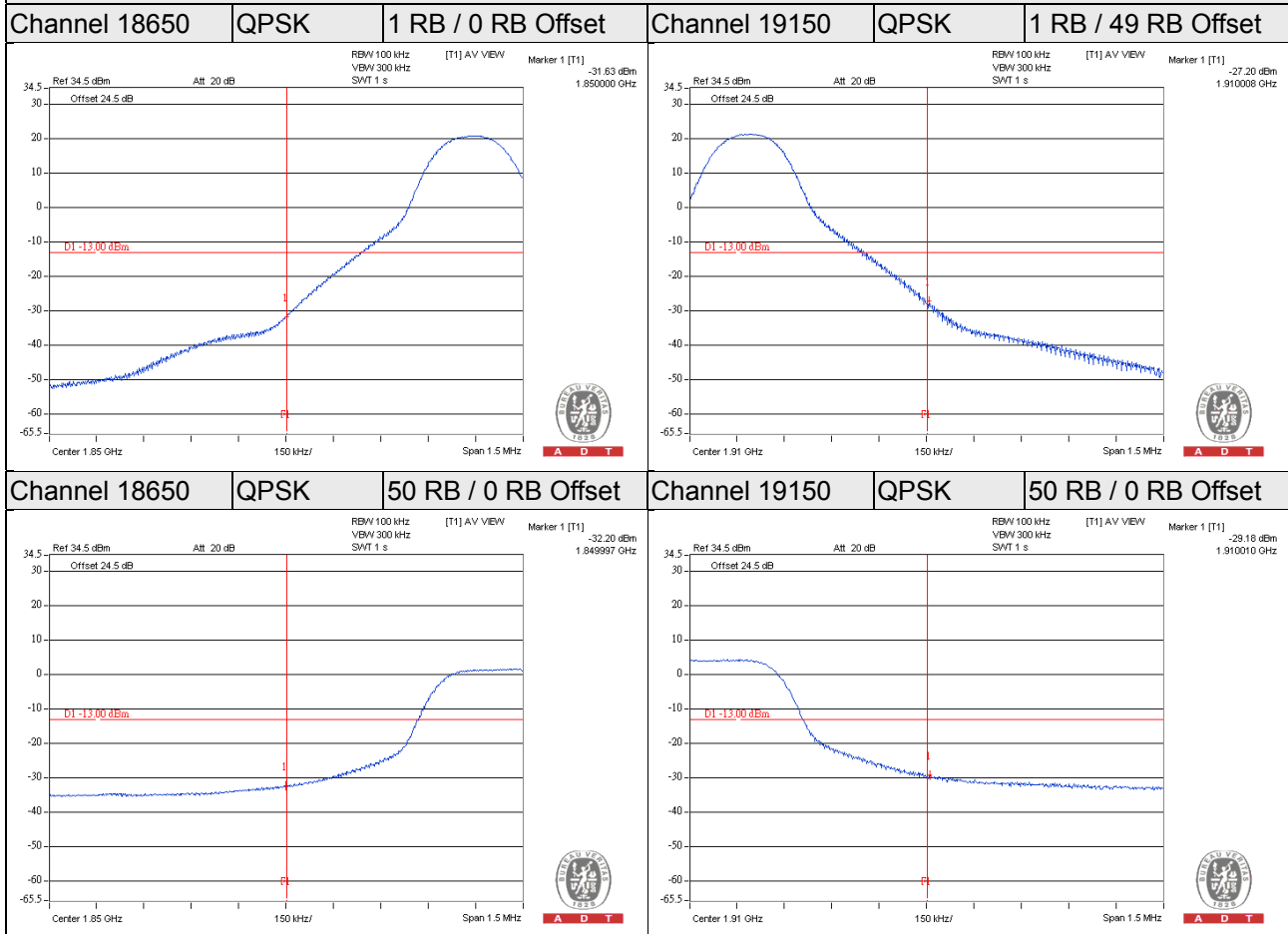
LTE Band 2, Channel Bandwidth 3MHz



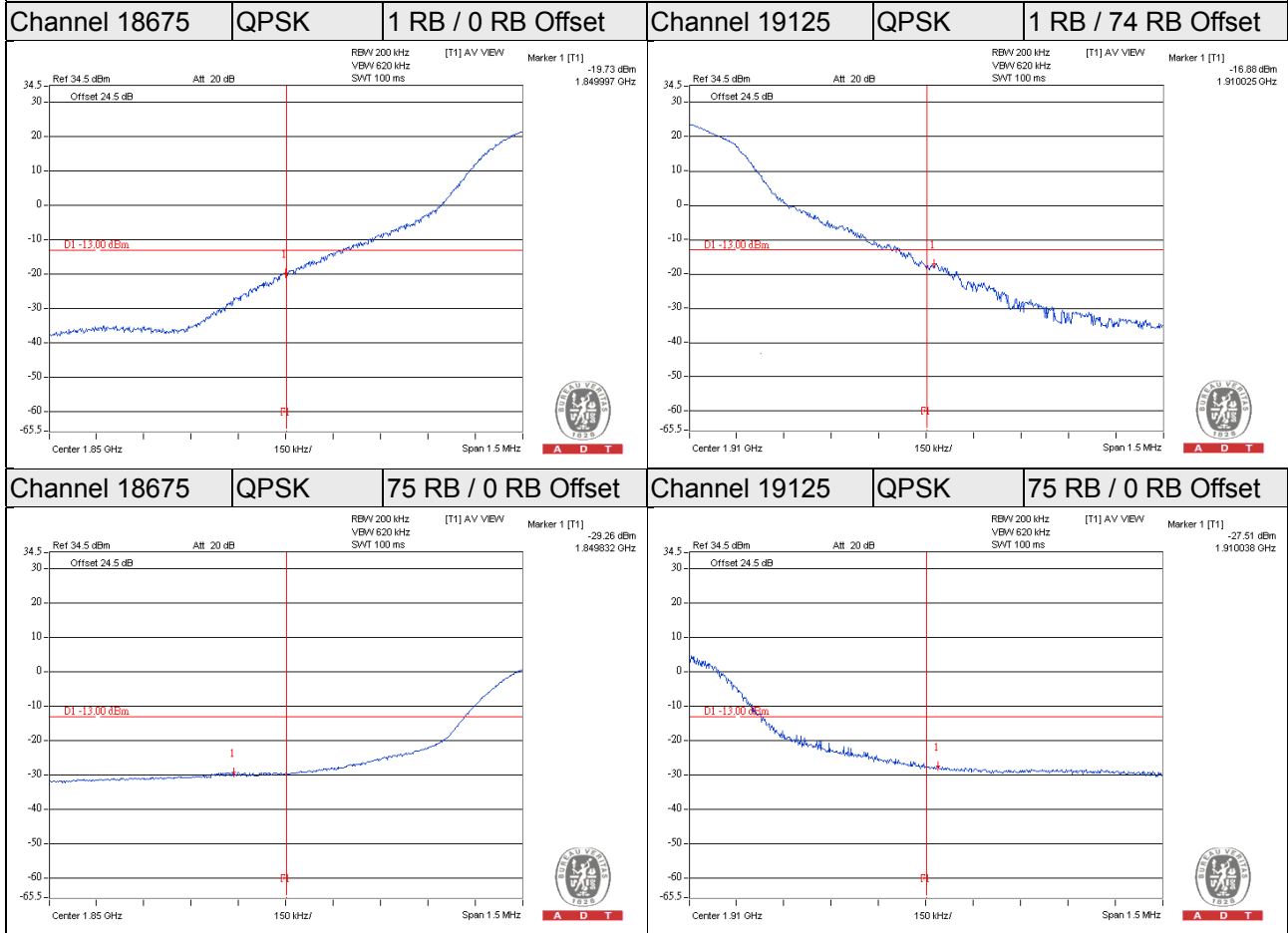
LTE Band 2, Channel Bandwidth 5MHz



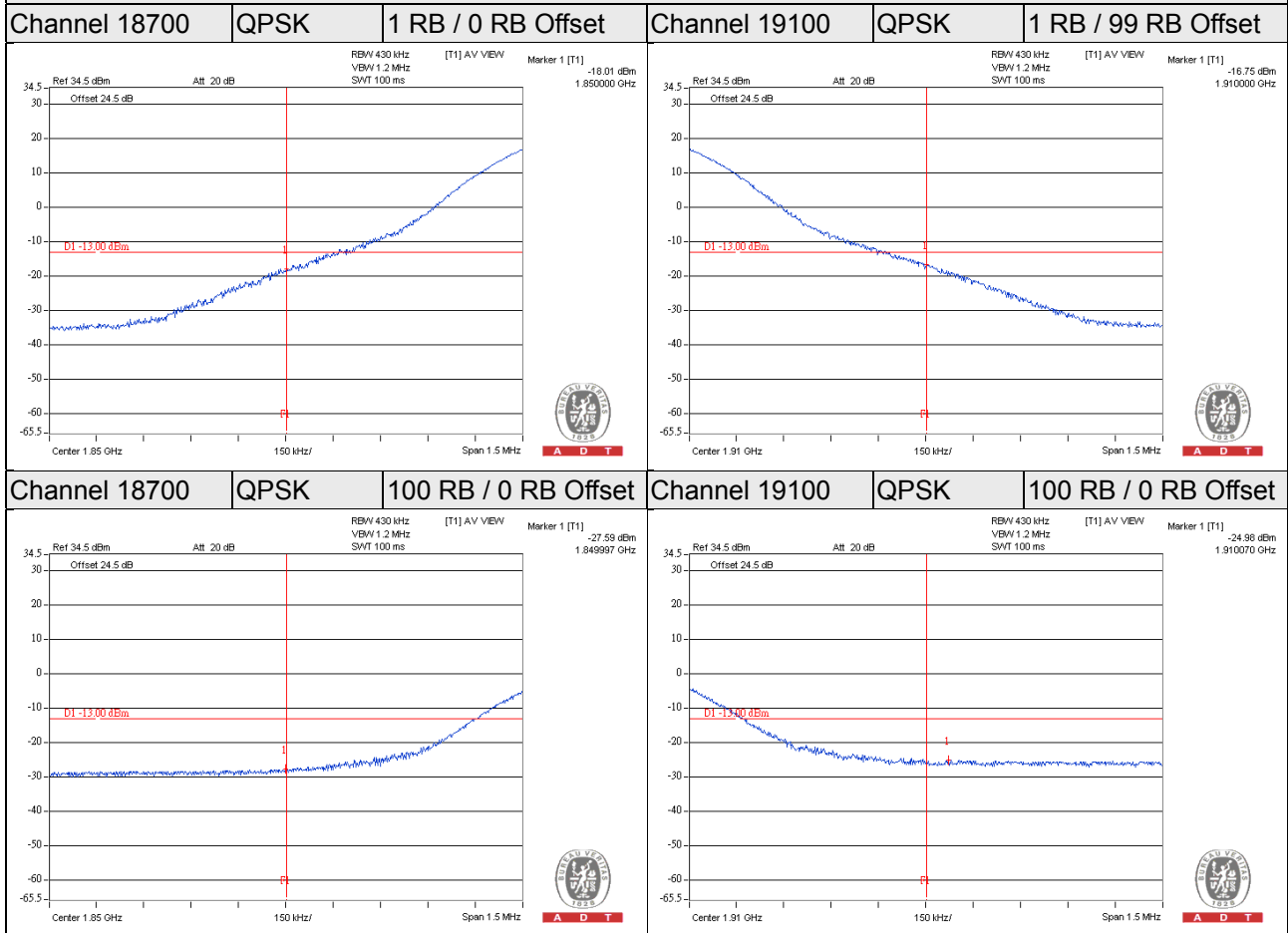
LTE Band 2, Channel Bandwidth 10MHz



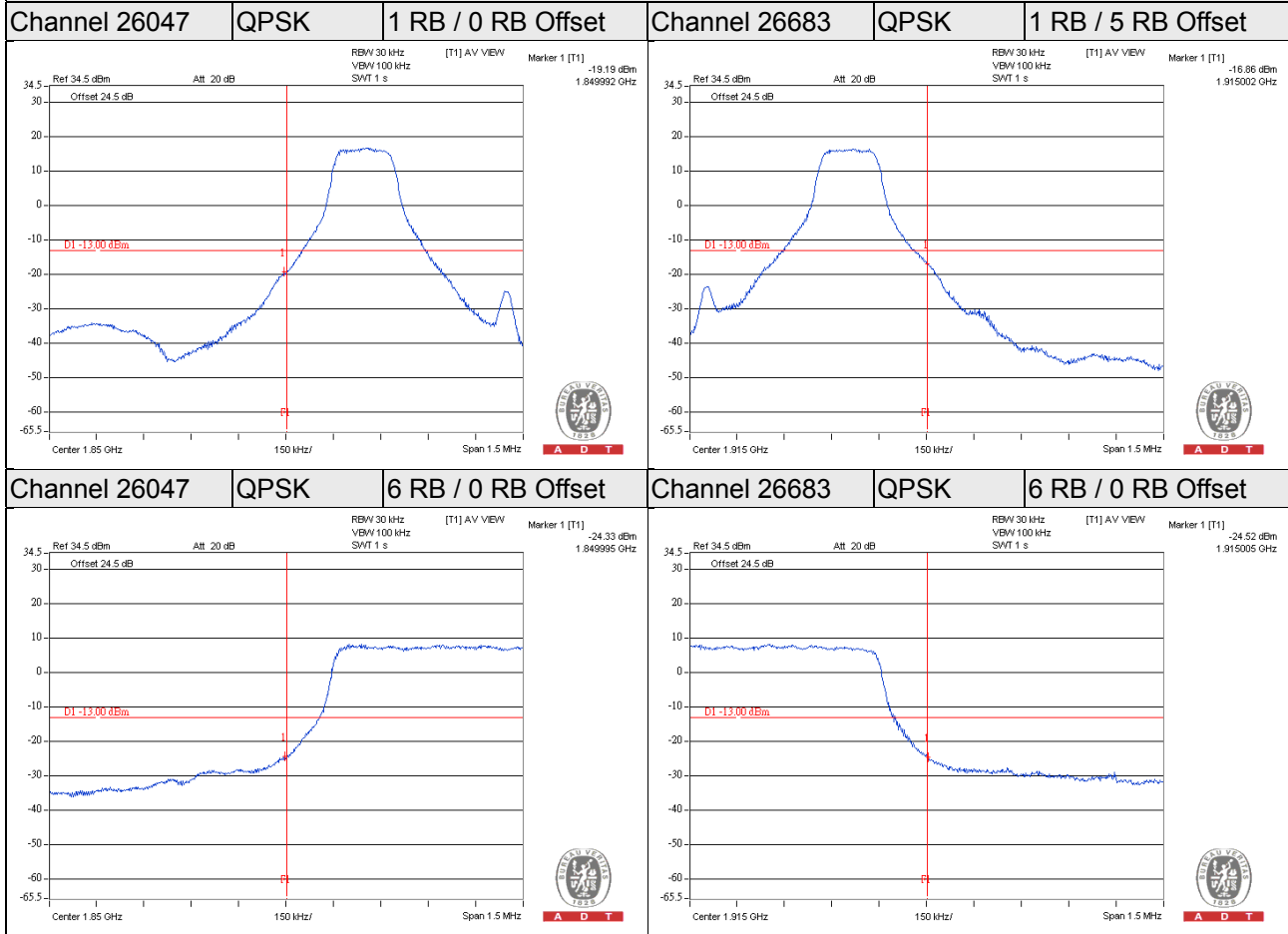
LTE Band 2, Channel Bandwidth 15MHz



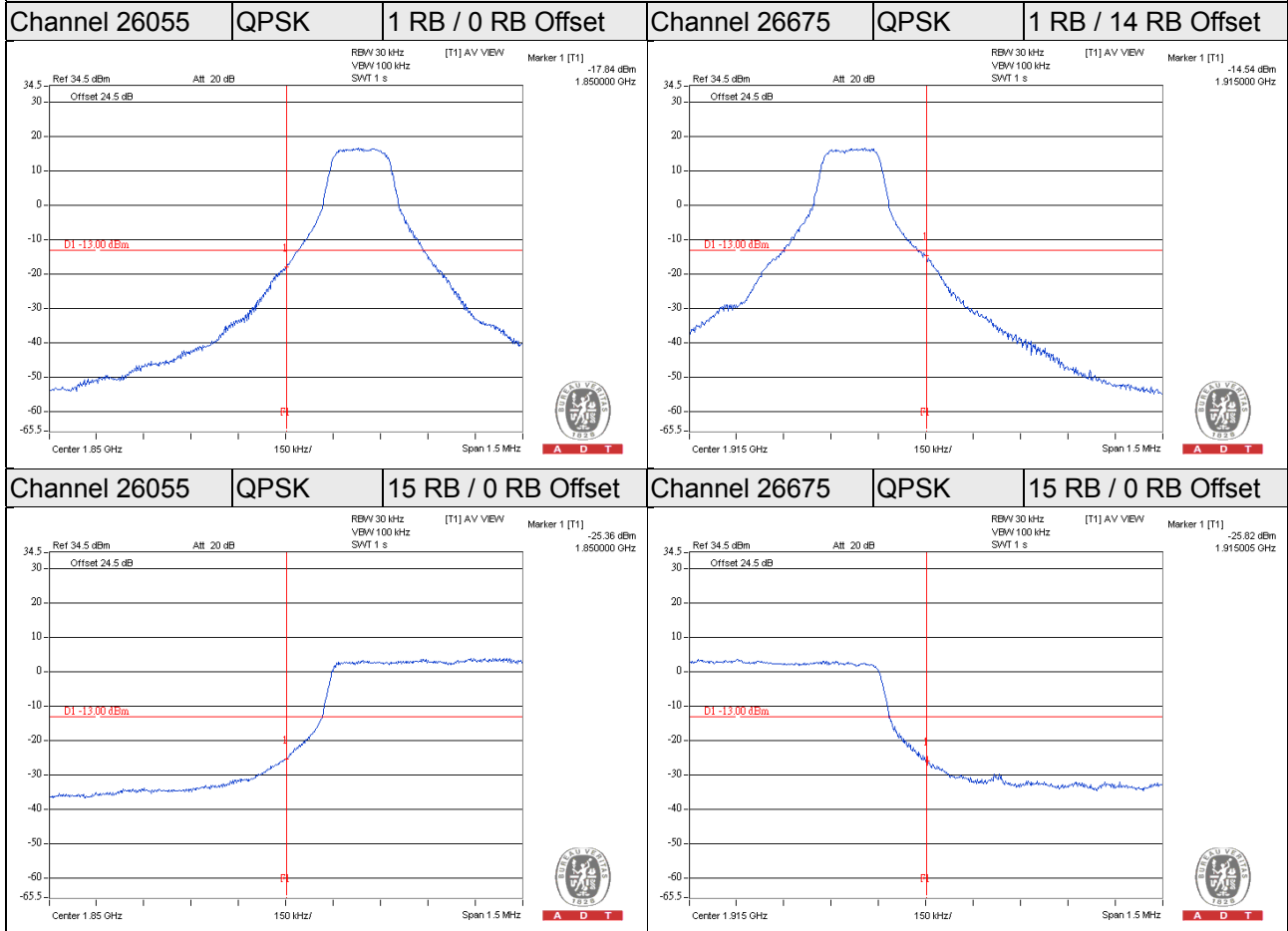
LTE Band 2, Channel Bandwidth 20MHz



LTE Band 25, Channel Bandwidth 1.4MHz

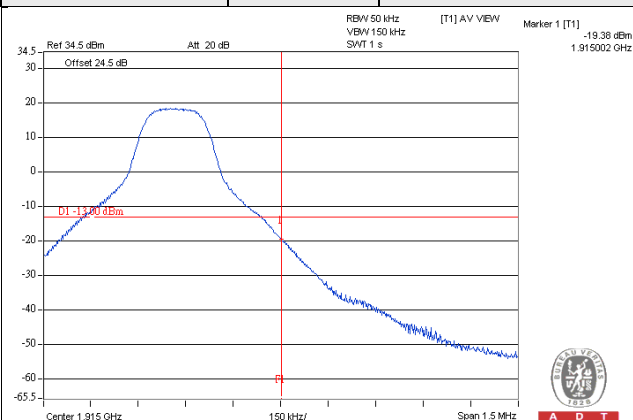
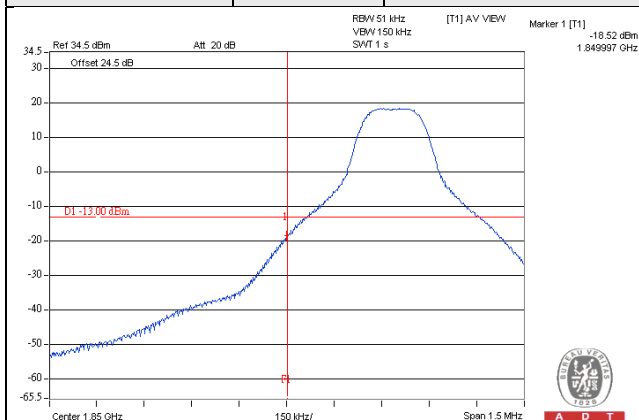


LTE Band 25, Channel Bandwidth 3MHz

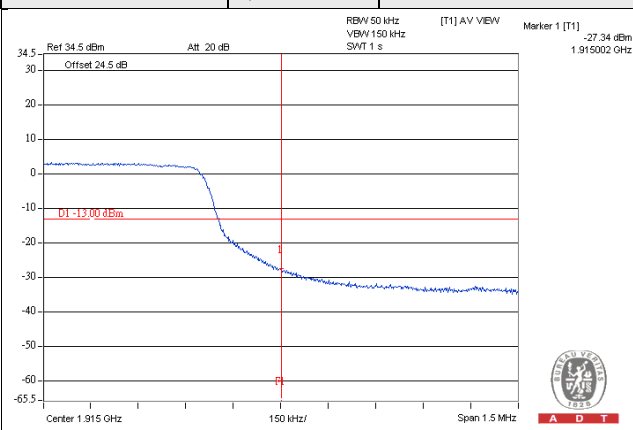
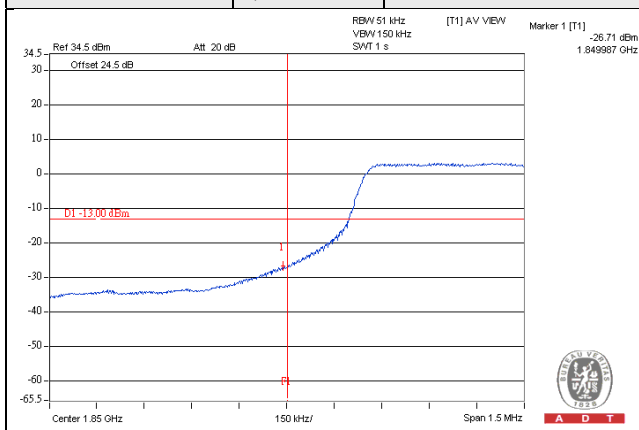


LTE Band 25, Channel Bandwidth 5MHz

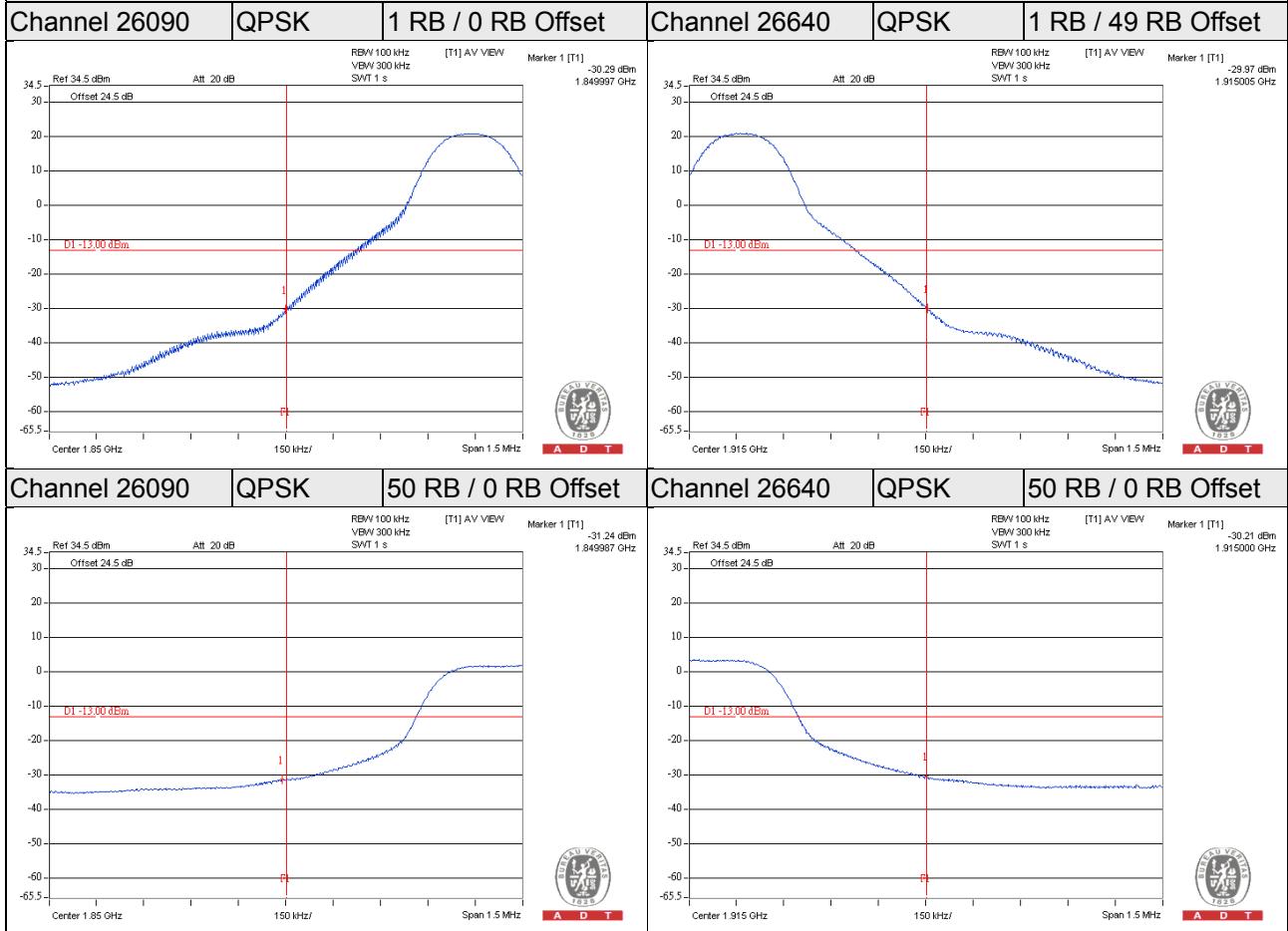
Channel 26065	QPSK	1 RB / 0 RB Offset	Channel 26665	QPSK	1 RB / 24 RB Offset
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Channel 26065	QPSK	25 RB / 0 RB Offset	Channel 26665	QPSK	25 RB / 0 RB Offset
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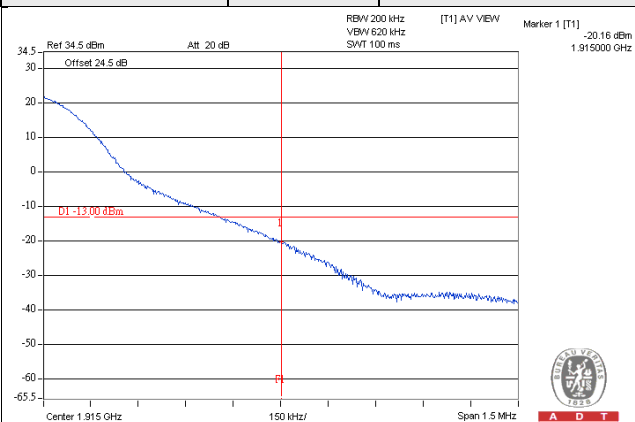
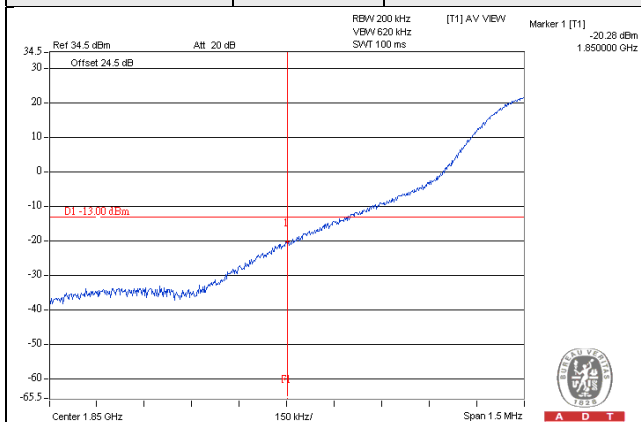


LTE Band 25, Channel Bandwidth 10MHz

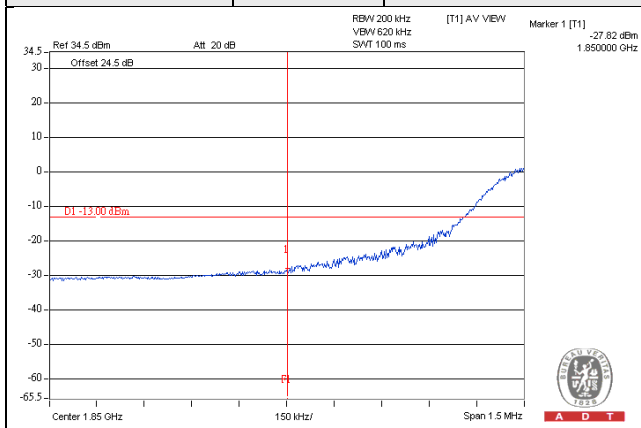


LTE Band 25, Channel Bandwidth 15MHz

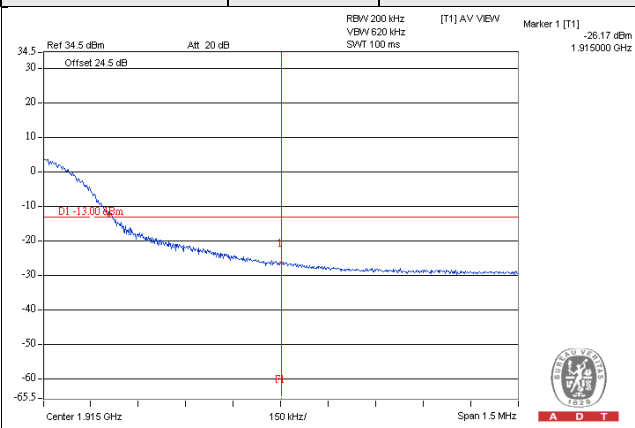
Channel 26115	QPSK	1 RB / 0 RB Offset	Channel 26615	QPSK	1 RB / 74 RB Offset
---------------	------	--------------------	---------------	------	---------------------



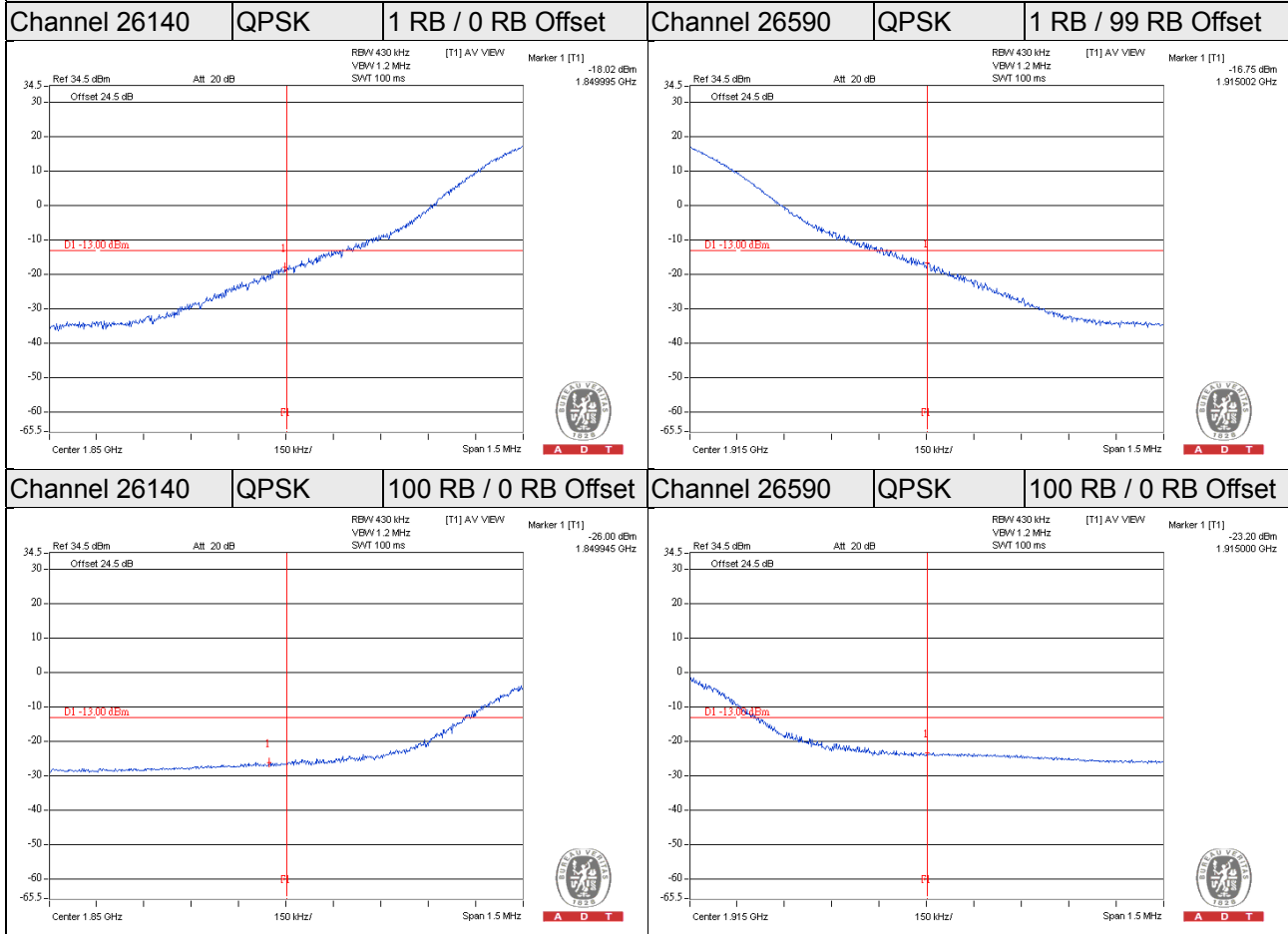
Channel 26115	QPSK	75 RB / 0 RB Offset
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Channel 26615	QPSK	75 RB / 0 RB Offset
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LTE Band 25, Channel Bandwidth 20MHz

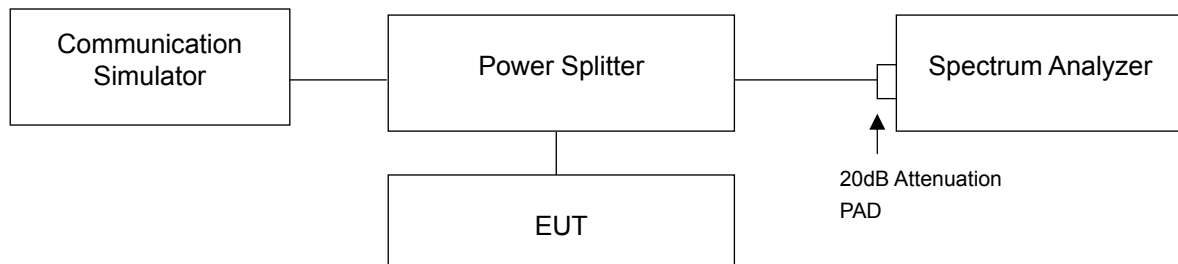


4.5 Peak To Average Ratio

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 $\geq$ 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

LTE Band 2, Channel Bandwidth 1.4MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
18607	1850.7	5.77	5.56
18900	1880.0	5.54	5.57
19193	1909.3	4.99	4.97

LTE Band 2, Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
18615	1851.5	5.59	5.57
18900	1880.0	5.56	5.49
19185	1908.5	5.07	5.15

LTE Band 2, Channel Bandwidth 5MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
18625	1852.5	5.65	5.65
18900	1880.0	5.48	5.53
19175	1907.5	5.25	5.22

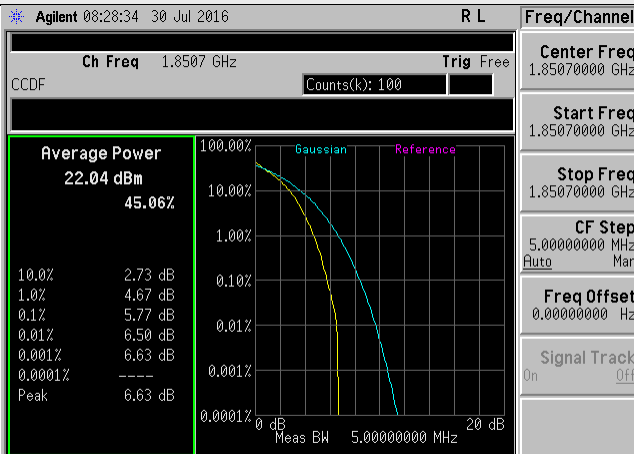
LTE Band 2, Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
18650	1855.0	5.43	5.45
18900	1880.0	5.49	5.51
19150	1905.0	5.43	5.43

LTE Band 2, Channel Bandwidth 15MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
18675	1857.5	5.17	5.17
18900	1880.0	5.28	5.28
19125	1902.5	5.37	5.37

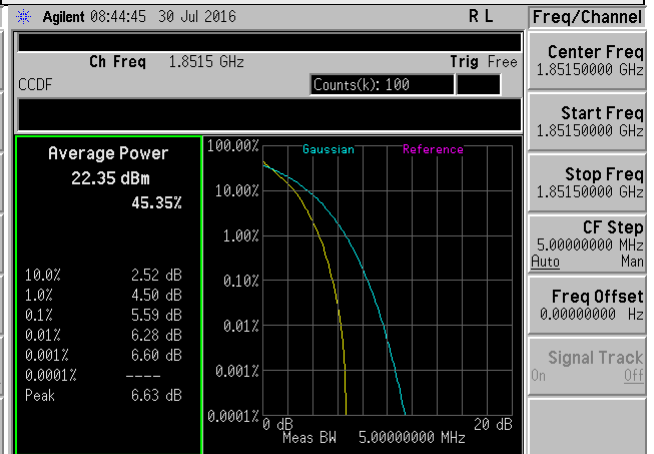
LTE Band 2, Channel Bandwidth 20MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
18700	1860.0	5.33	5.34
18900	1880.0	5.62	5.61
19100	1900.0	5.57	5.57

Spectrum Plot Of Worst Value

1.4MHz / QPSK



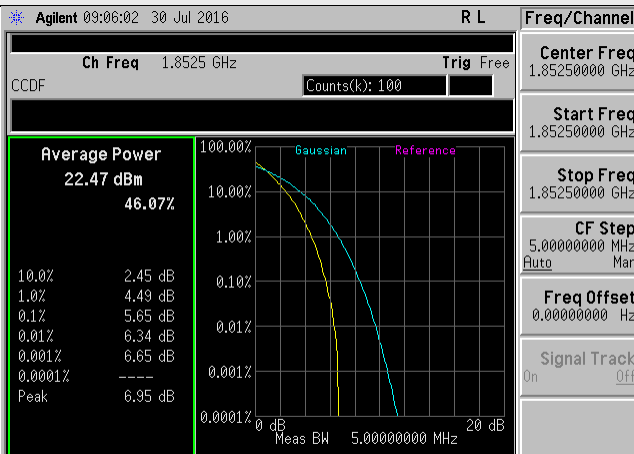
3MHz / QPSK



File name error

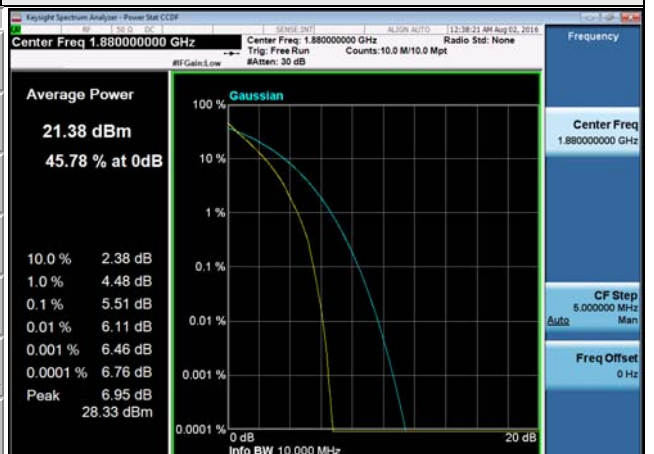
Copyright 2000-2012 Agilent Technologies

5MHz / QPSK



Copyright 2000-2012 Agilent Technologies

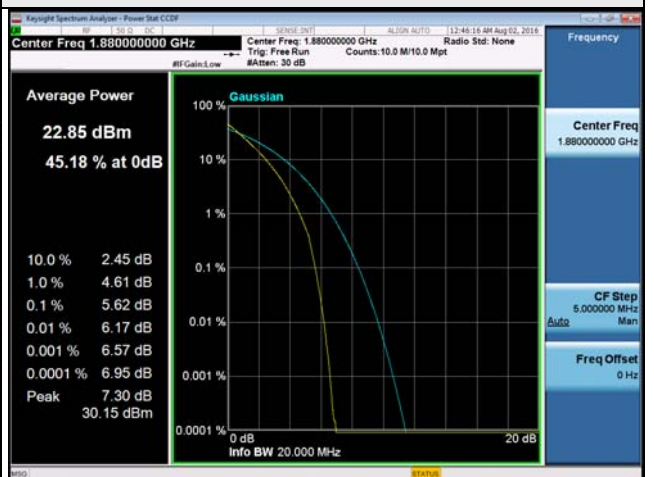
10MHz / 16QAM



15MHz / QPSK



20MHz / QPSK



LTE Band 25, Channel Bandwidth 1.4MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
26047	1850.7	5.54	5.61
26365	1882.5	5.56	5.56
26683	1914.3	4.89	4.80

LTE Band 25, Channel Bandwidth 3MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
26055	1851.5	5.59	5.66
26365	1882.5	5.47	5.48
26675	1913.5	4.99	4.97

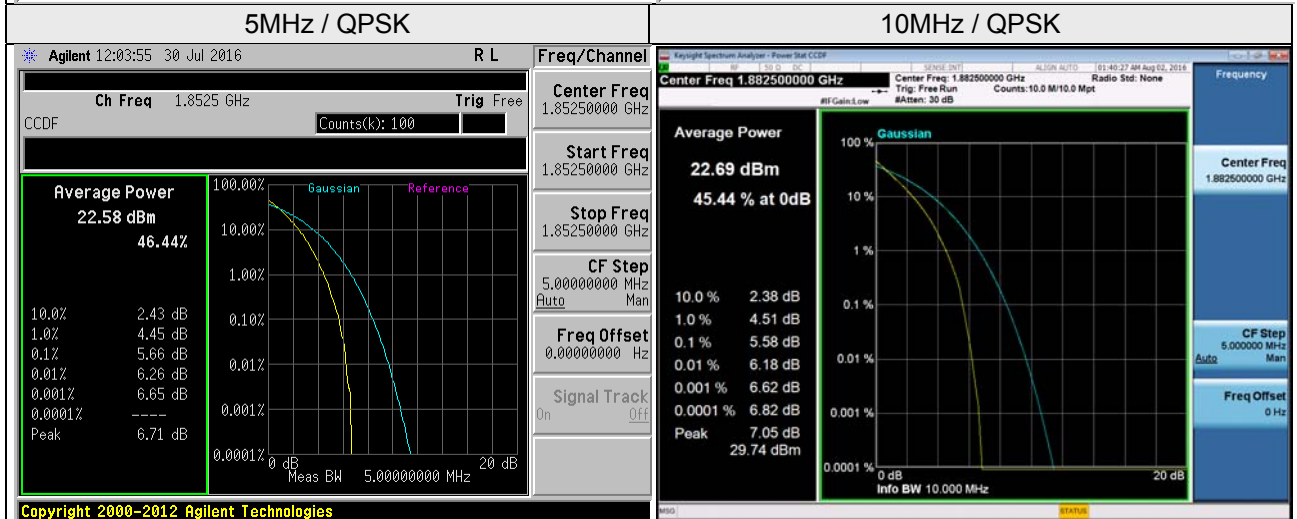
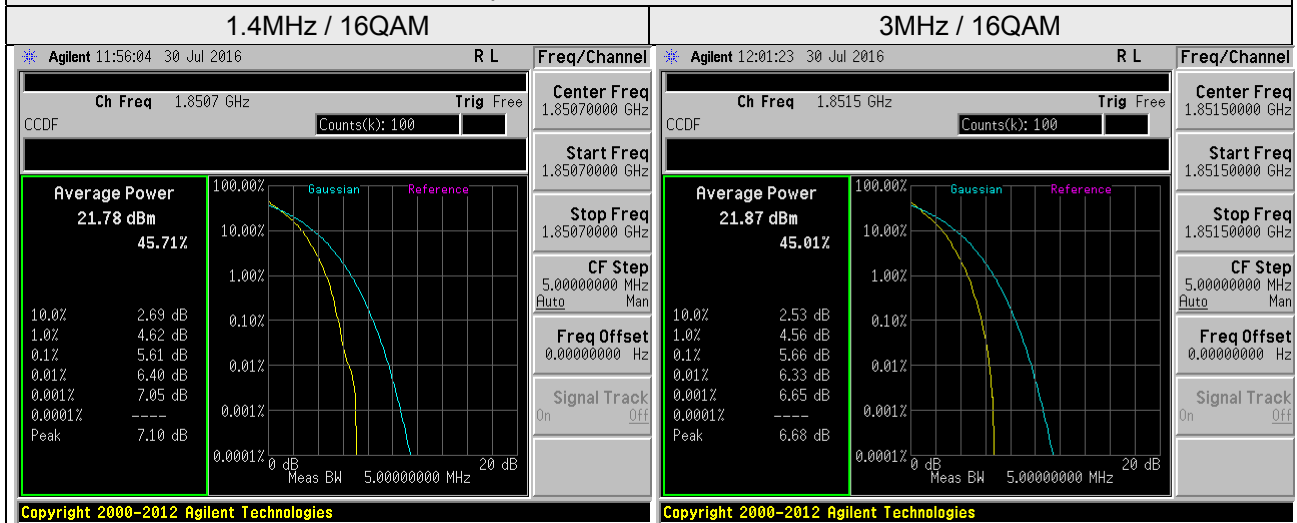
LTE Band 25, Channel Bandwidth 5MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
26065	1852.5	5.66	5.65
26365	1882.5	5.49	5.55
26665	1912.5	5.03	4.94

LTE Band 25, Channel Bandwidth 10MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
26090	1855.0	5.53	5.52
26365	1882.5	5.58	5.57
26640	1910.0	5.32	5.34

LTE Band 25, Channel Bandwidth 15MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
26115	1857.5	5.67	5.66
26365	1882.5	5.83	5.82
26615	1907.5	5.58	5.59

LTE Band 25, Channel Bandwidth 20MHz			
Channel	Frequency (MHz)	Peak To Average Ratio (dB)	
		QPSK	16QAM
26140	1860.0	4.89	5.37
26365	1882.5	5.30	5.66
26590	1905.0	5.53	5.63

Spectrum Plot Of Worst Value

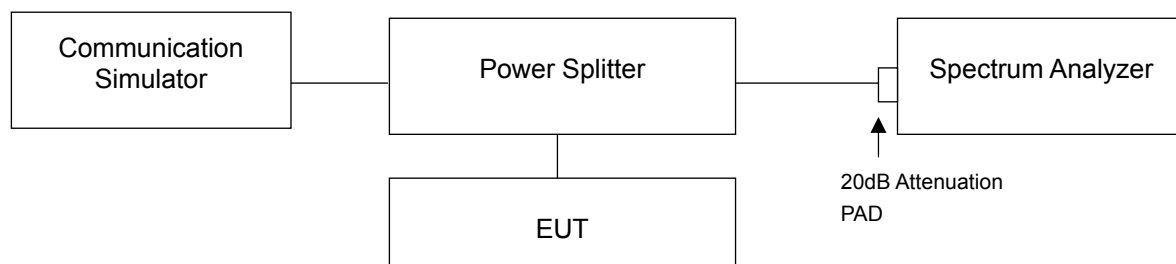


4.6 Conducted Spurious Emissions

4.6.1 Limits of Conducted Spurious Emissions Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

4.6.2 Test Setup



4.6.3 Test Procedure

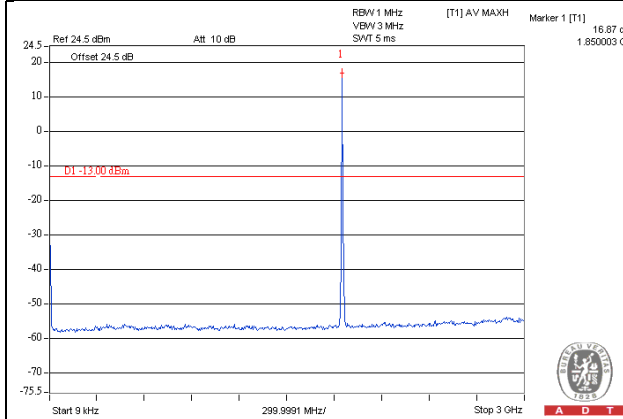
- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9 kHz to 20GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

4.6.4 Test Results

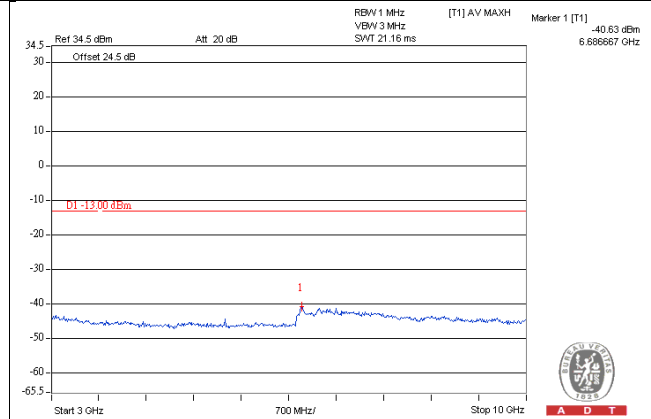
LTE Band 2, Channel Bandwidth 1.4MHz

Channel 18607

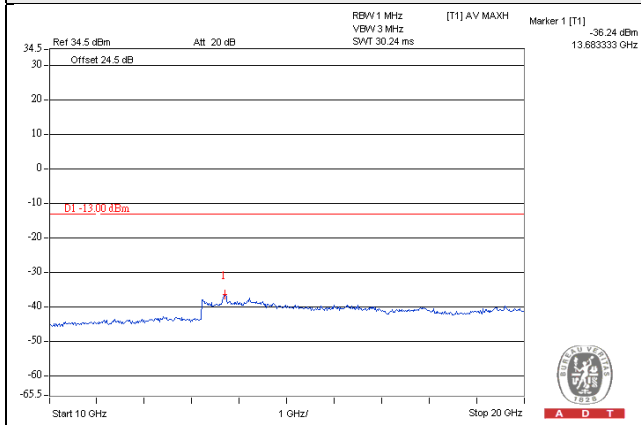
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



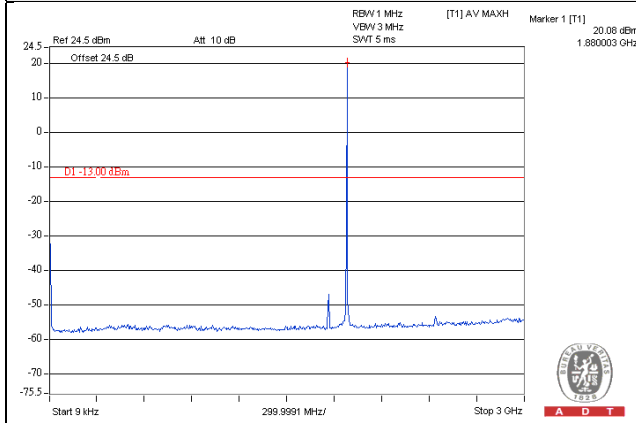
Frequency Range : 10GHz~20GHz



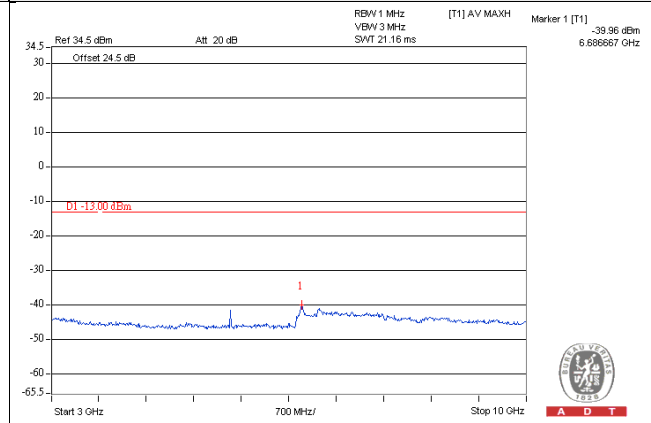
LTE Band 2, Channel Bandwidth 1.4MHz

Channel 18900

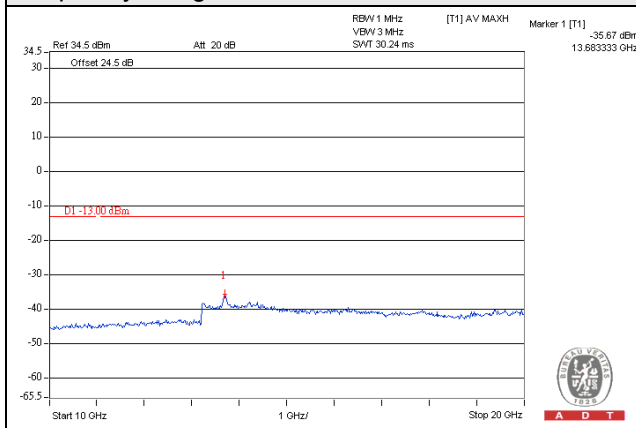
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



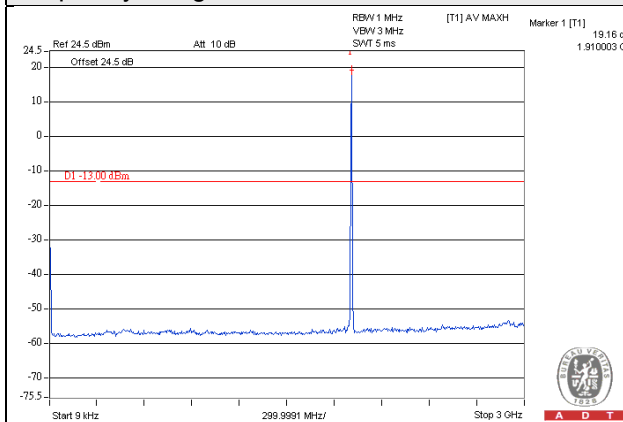
Frequency Range : 10GHz~20GHz



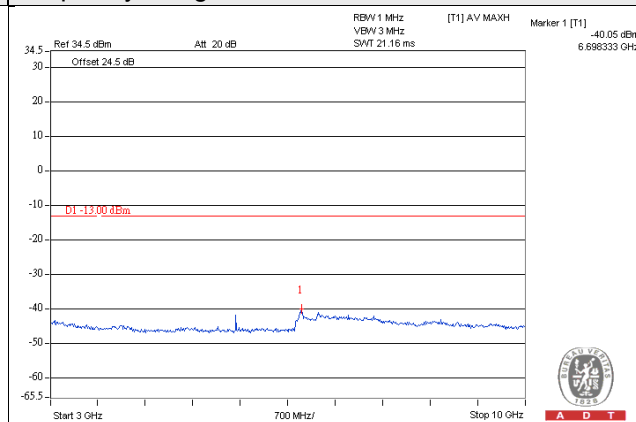
LTE Band 2, Channel Bandwidth 1.4MHz

Channel 19193

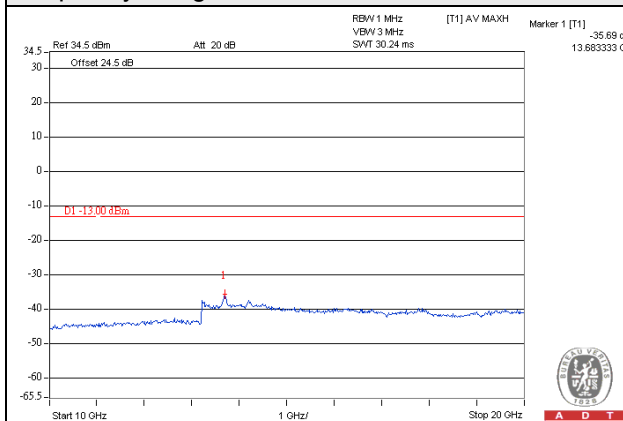
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



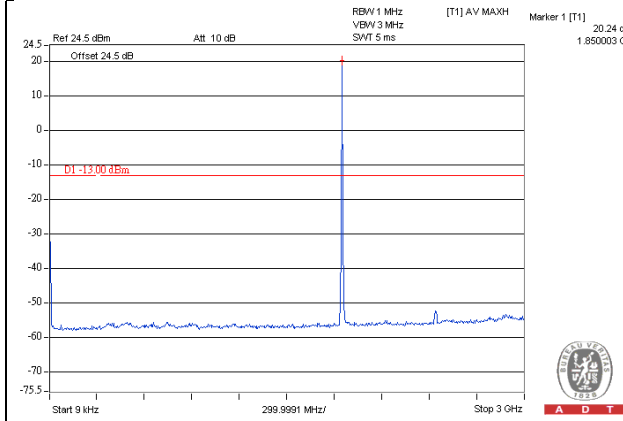
Frequency Range : 10GHz~20GHz



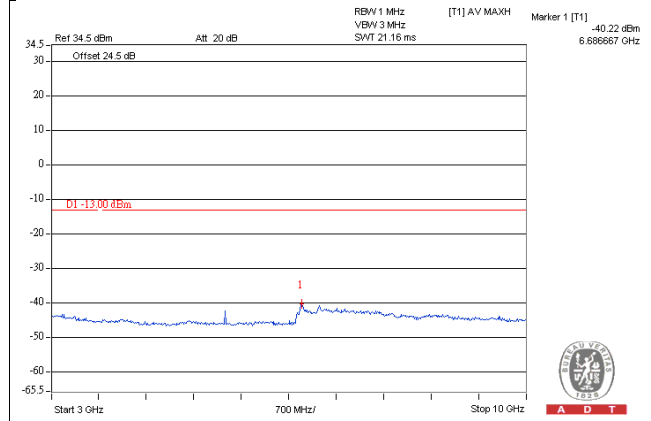
LTE Band 2, Channel Bandwidth 3MHz

Channel 18615

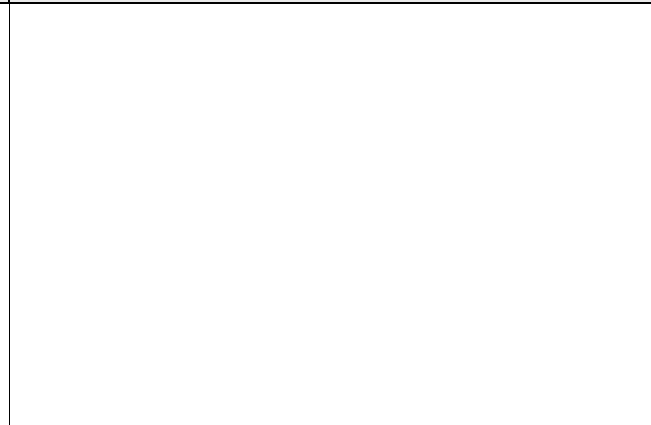
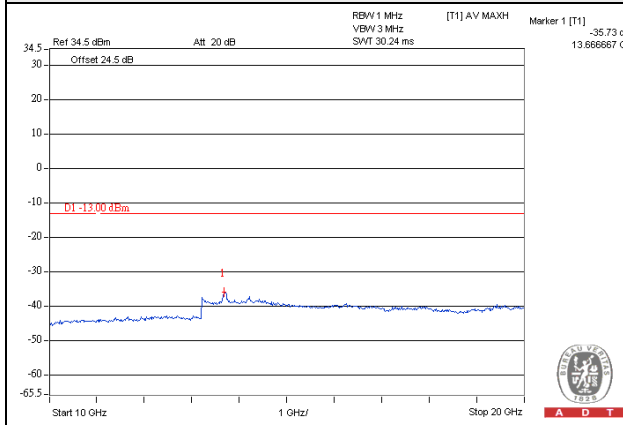
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



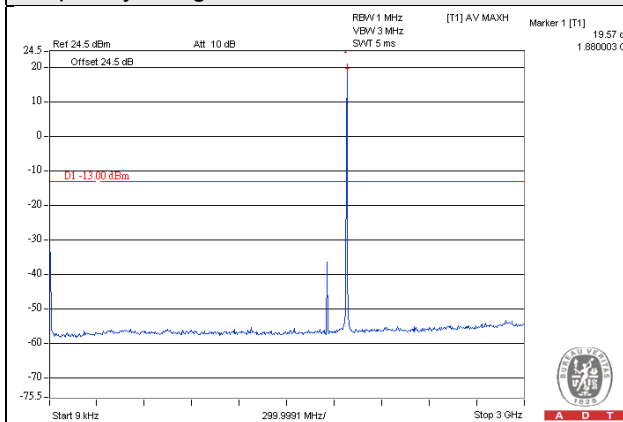
Frequency Range : 10GHz~20GHz



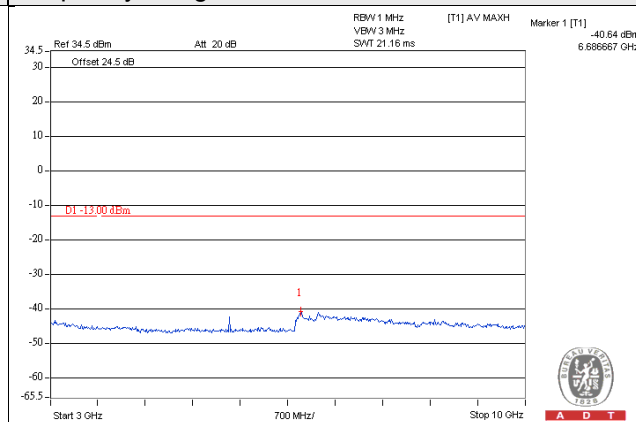
LTE Band 2, Channel Bandwidth 3MHz

Channel 18900

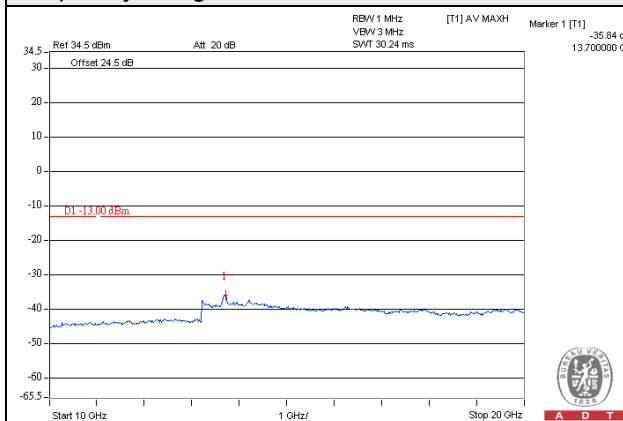
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



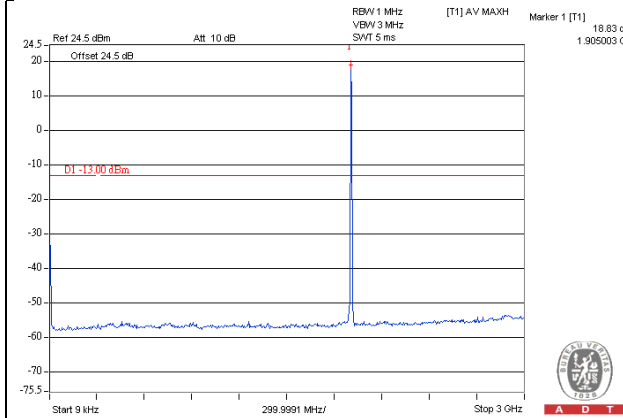
Frequency Range : 10GHz~20GHz



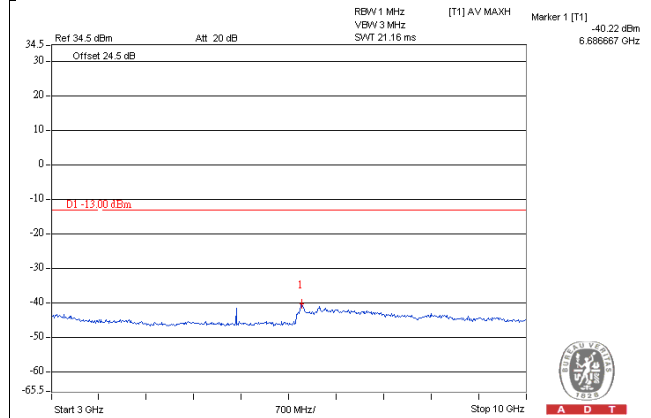
LTE Band 2, Channel Bandwidth 3MHz

Channel 19185

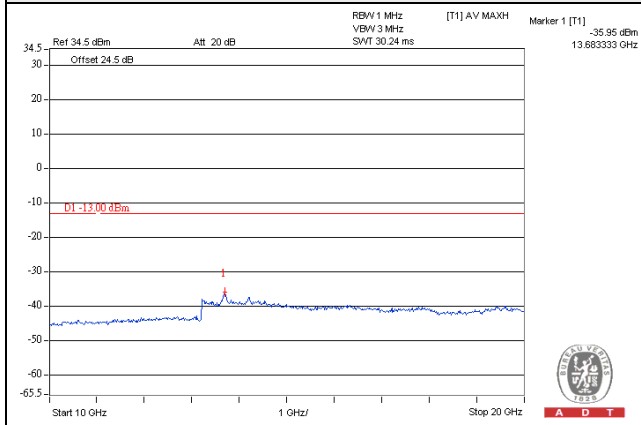
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



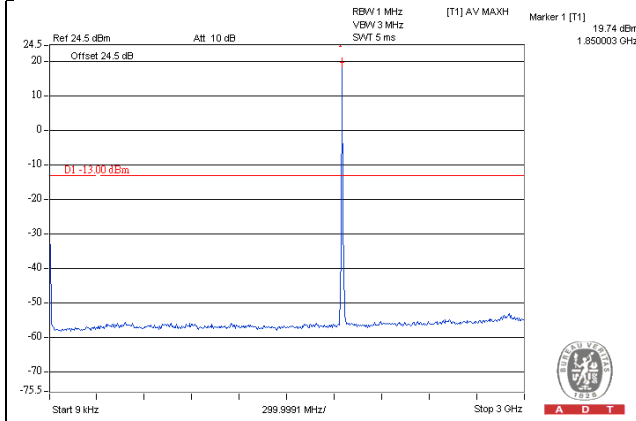
Frequency Range : 10GHz~20GHz



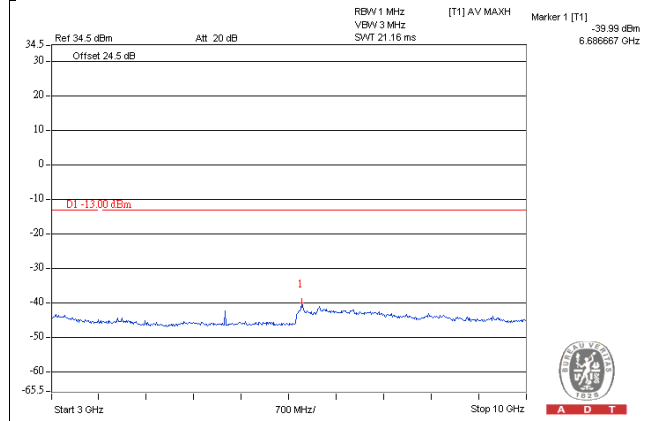
LTE Band 2, Channel Bandwidth 5MHz

Channel 18625

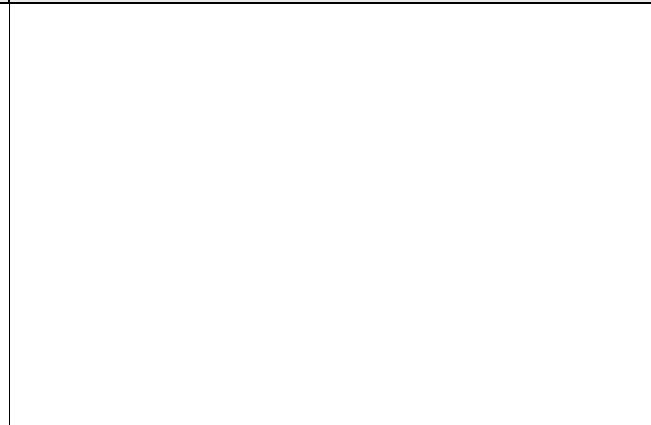
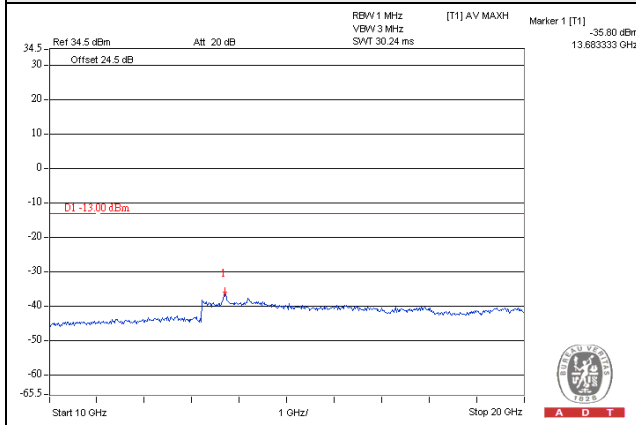
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



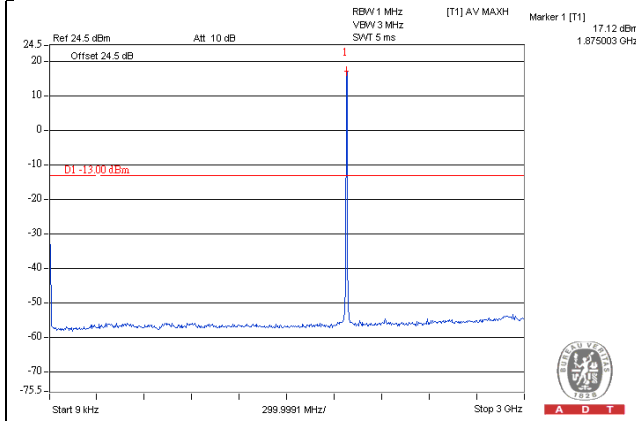
Frequency Range : 10GHz~20GHz



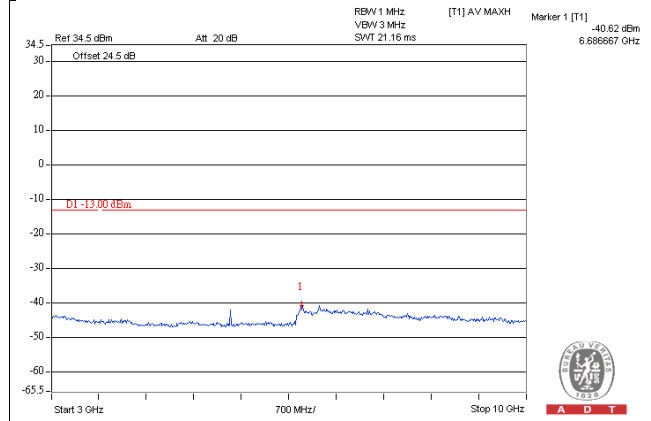
LTE Band 2, Channel Bandwidth 5MHz

Channel 18900

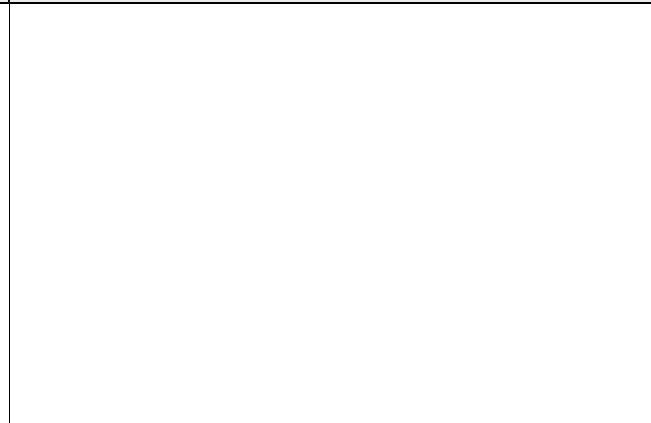
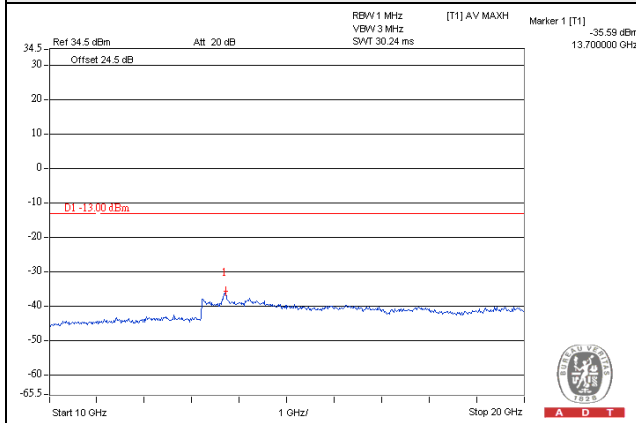
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



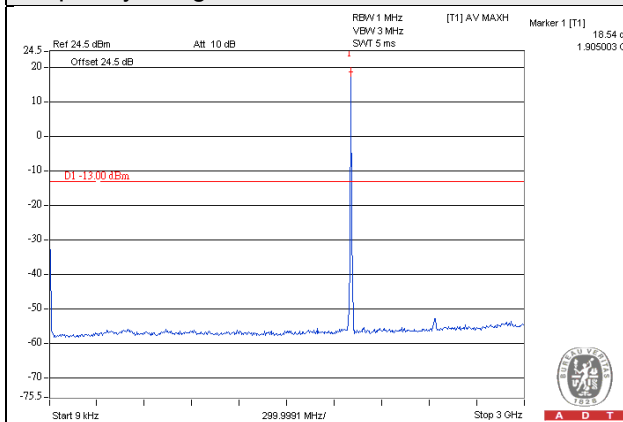
Frequency Range : 10GHz~20GHz



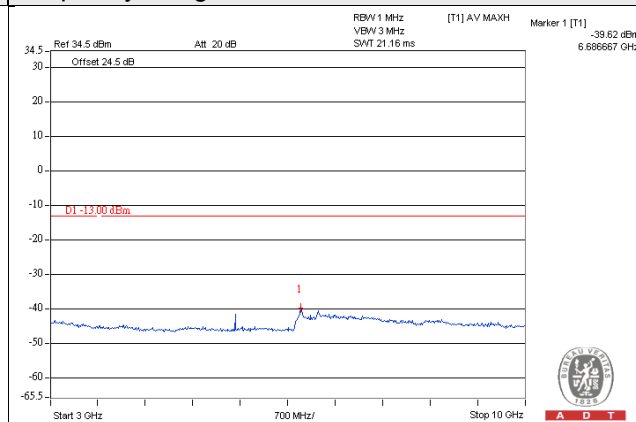
LTE Band 2, Channel Bandwidth 5MHz

Channel 19175

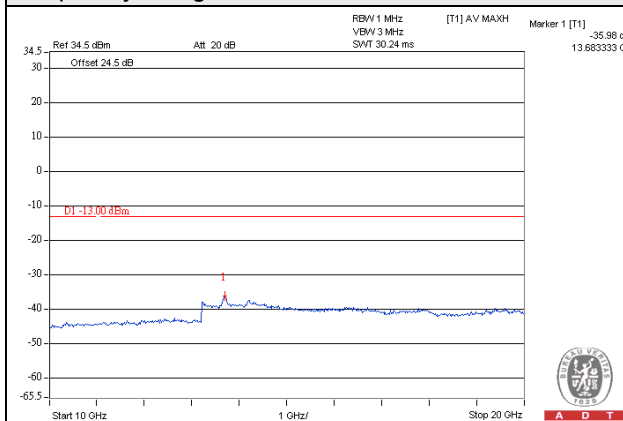
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



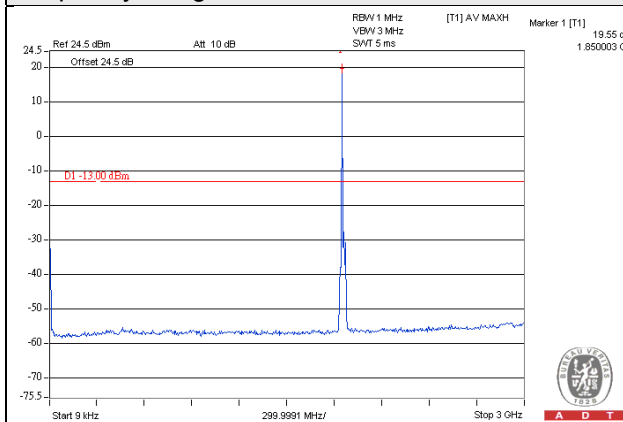
Frequency Range : 10GHz~20GHz



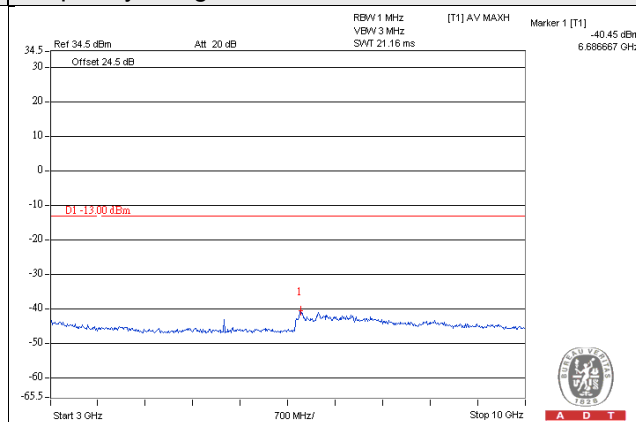
LTE Band 2, Channel Bandwidth 10MHz

Channel 18650

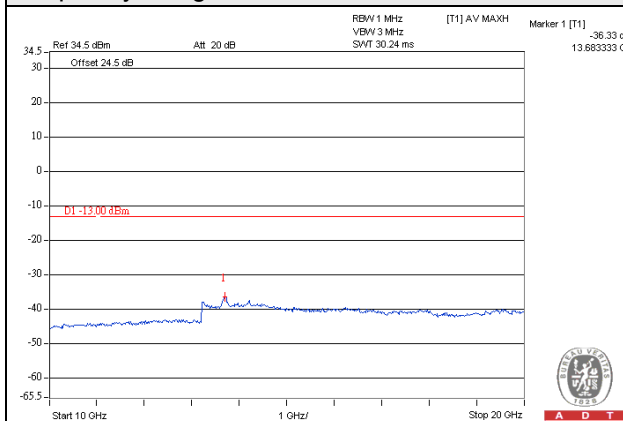
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



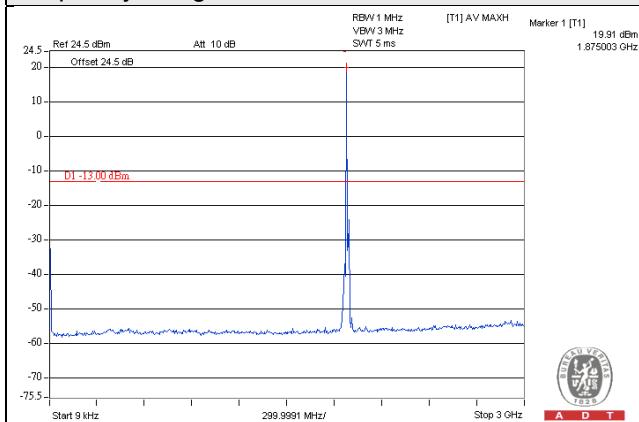
Frequency Range : 10GHz~20GHz



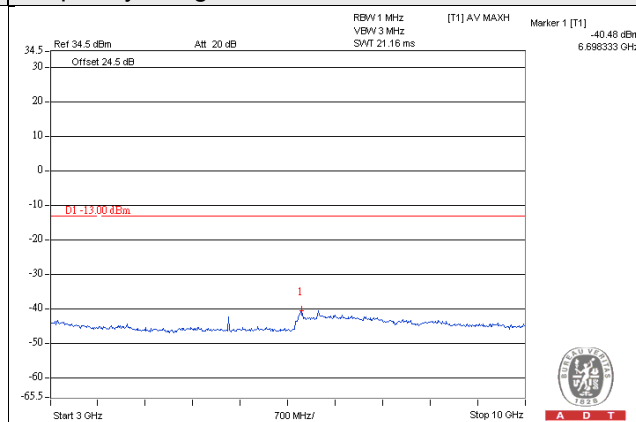
LTE Band 2, Channel Bandwidth 10MHz

Channel 18900

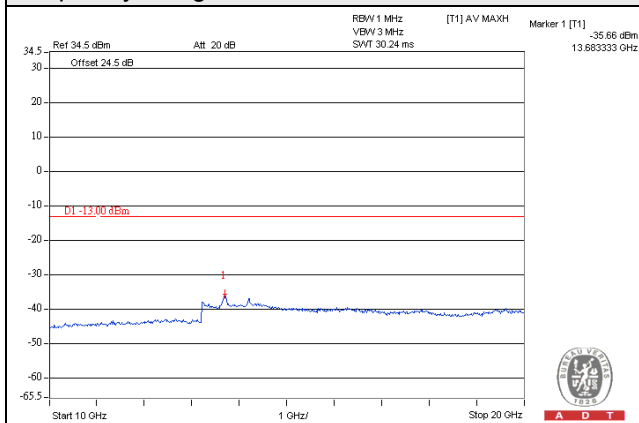
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



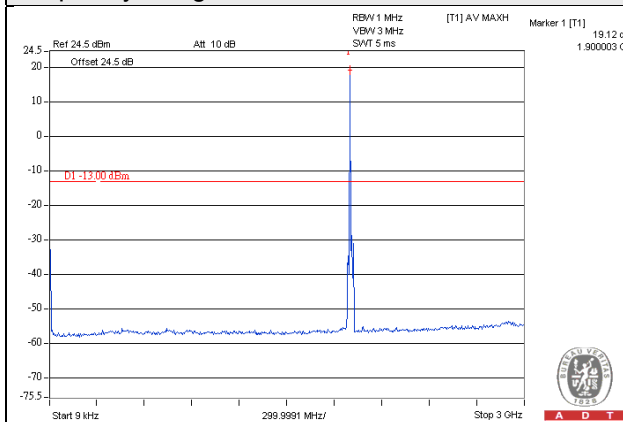
Frequency Range : 10GHz~20GHz



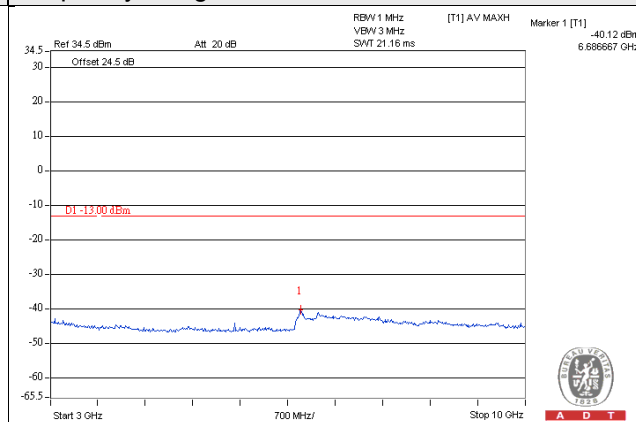
LTE Band 2, Channel Bandwidth 10MHz

Channel 19150

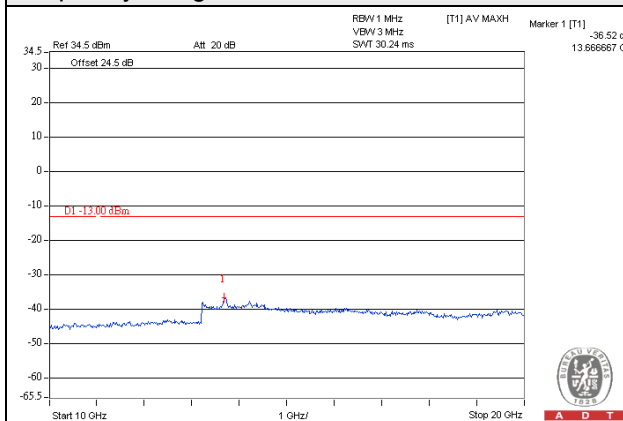
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



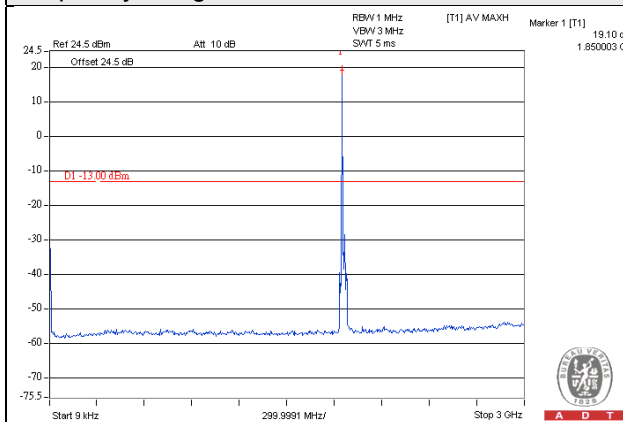
Frequency Range : 10GHz~20GHz



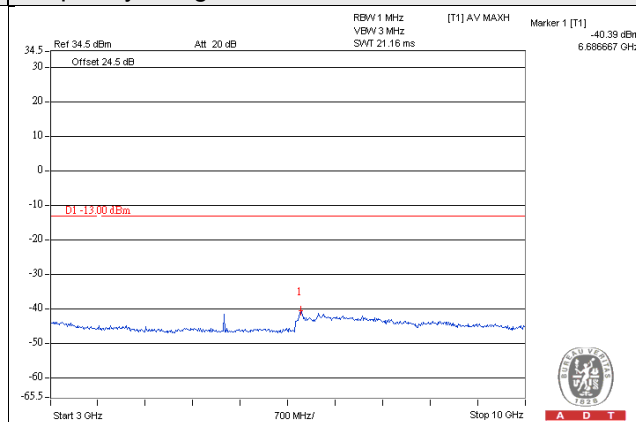
LTE Band 2, Channel Bandwidth 15MHz

Channel 18675

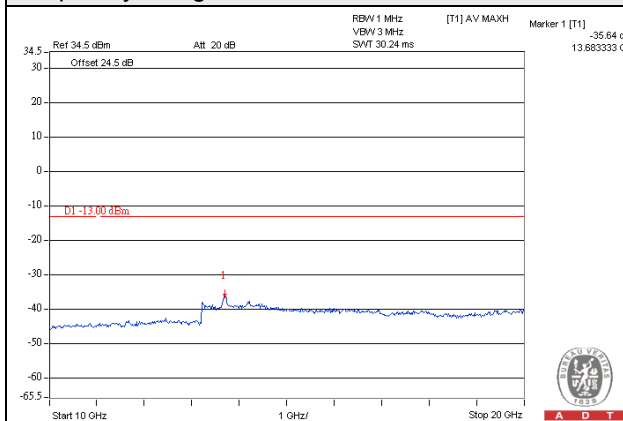
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



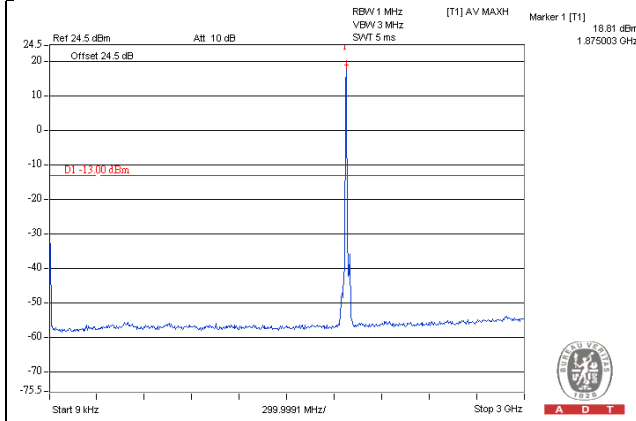
Frequency Range : 10GHz~20GHz



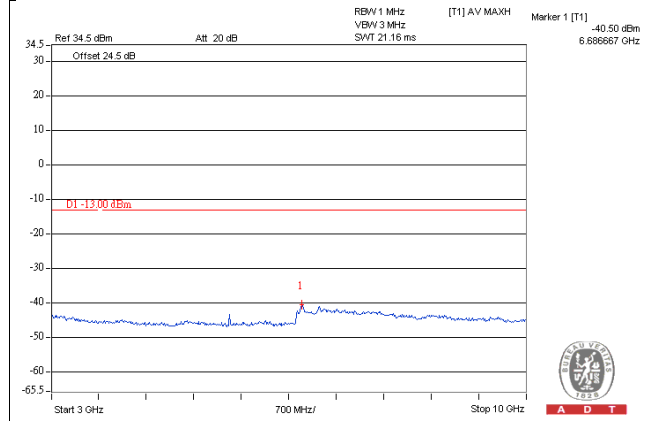
LTE Band 2, Channel Bandwidth 15MHz

Channel 18900

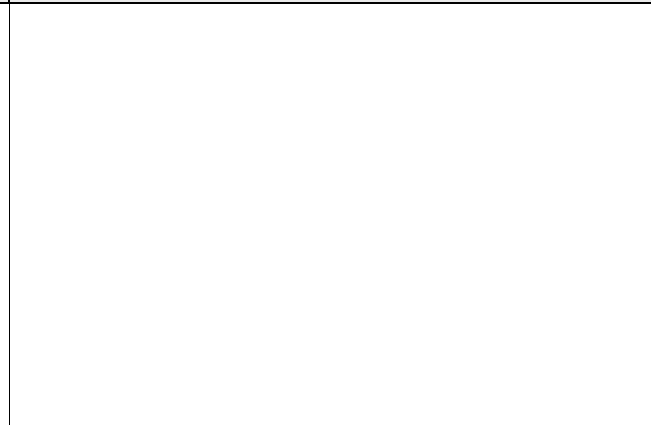
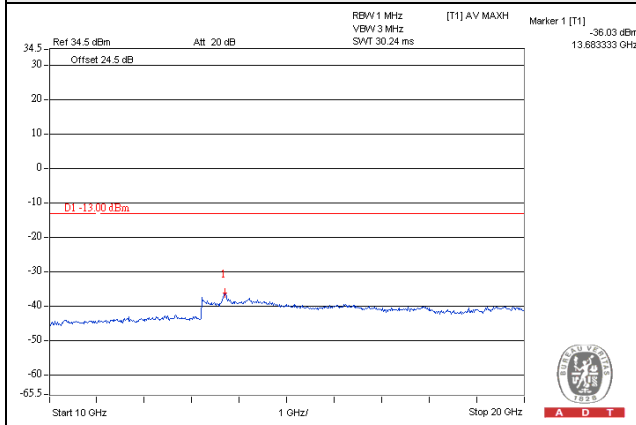
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



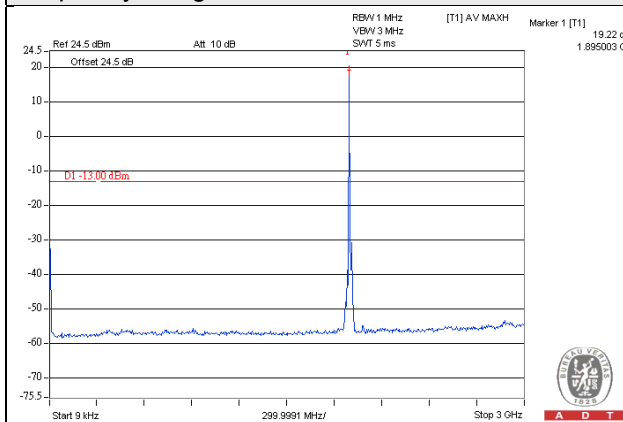
Frequency Range : 10GHz~20GHz



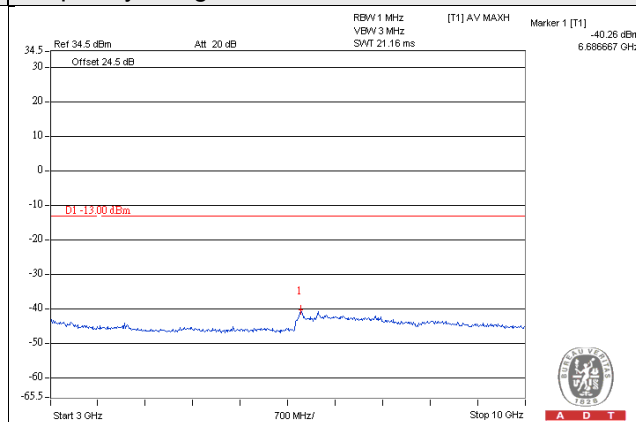
LTE Band 2, Channel Bandwidth 15MHz

Channel 19125

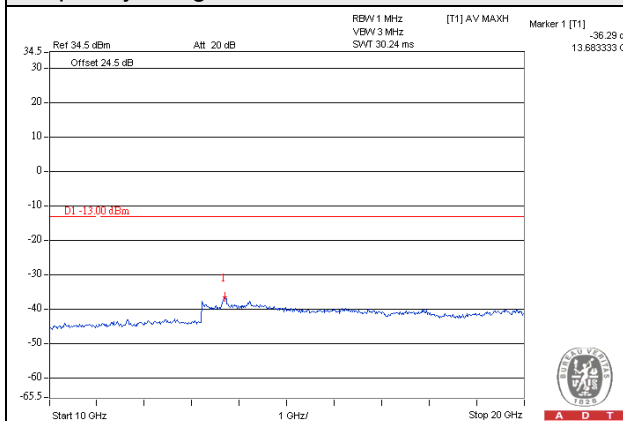
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



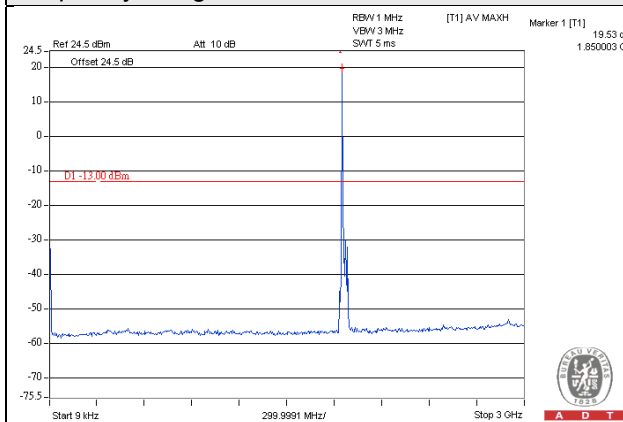
Frequency Range : 10GHz~20GHz



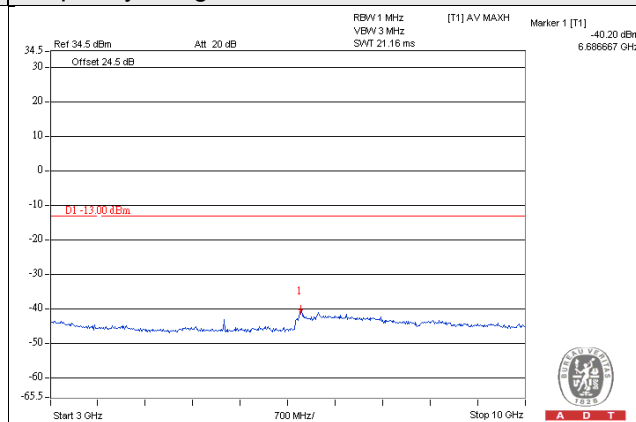
LTE Band 2, Channel Bandwidth 20MHz

Channel 18700

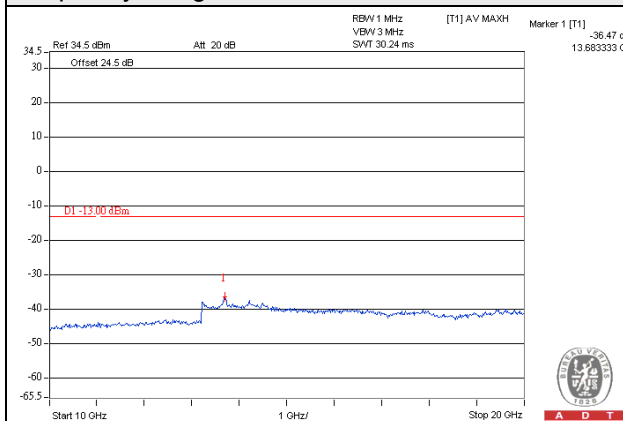
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



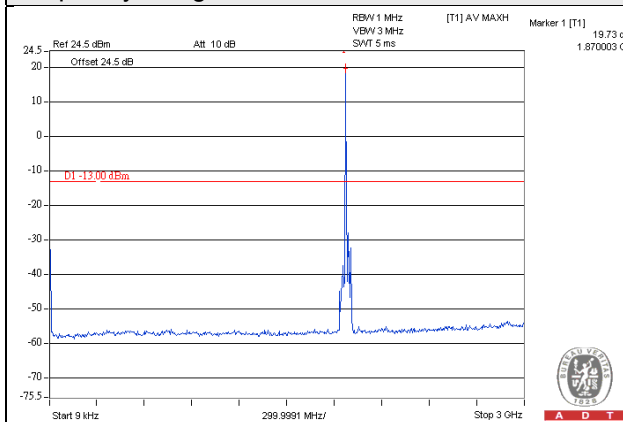
Frequency Range : 10GHz~20GHz



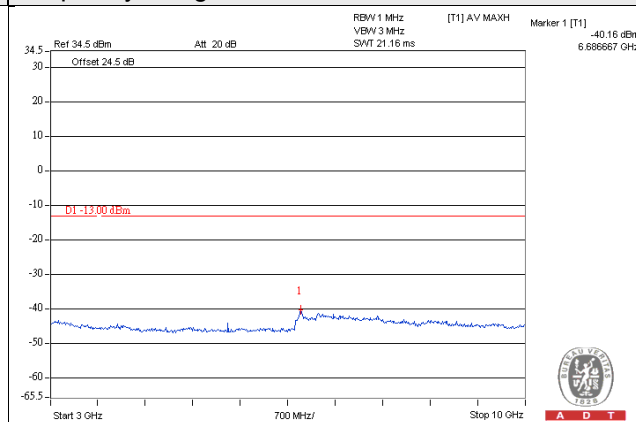
LTE Band 2, Channel Bandwidth 20MHz

Channel 18900

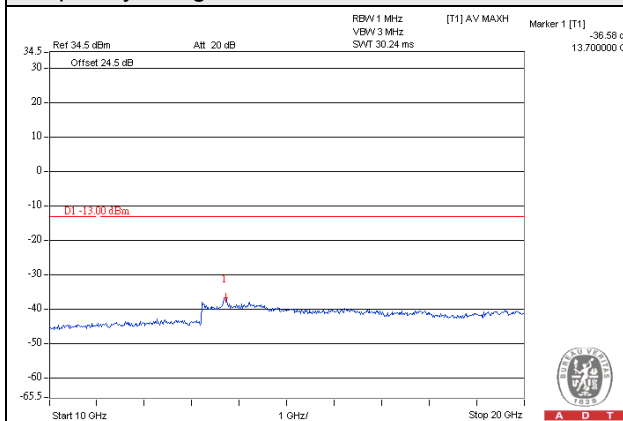
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



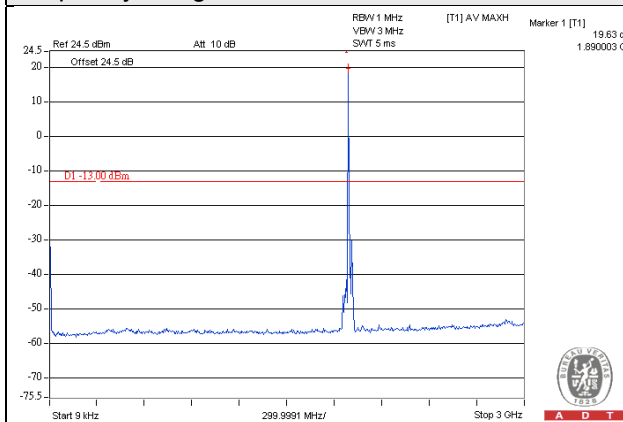
Frequency Range : 10GHz~20GHz



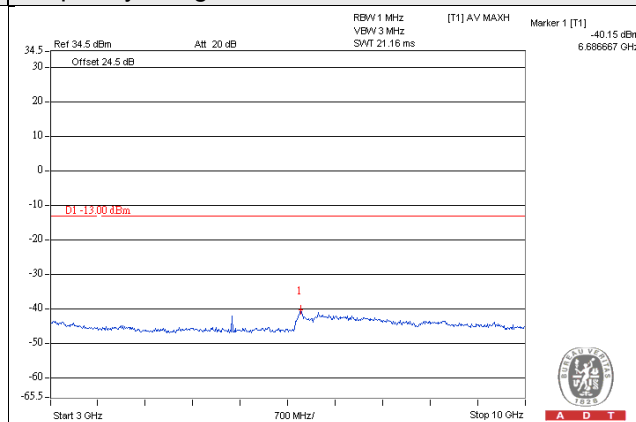
LTE Band 2, Channel Bandwidth 20MHz

Channel 19100

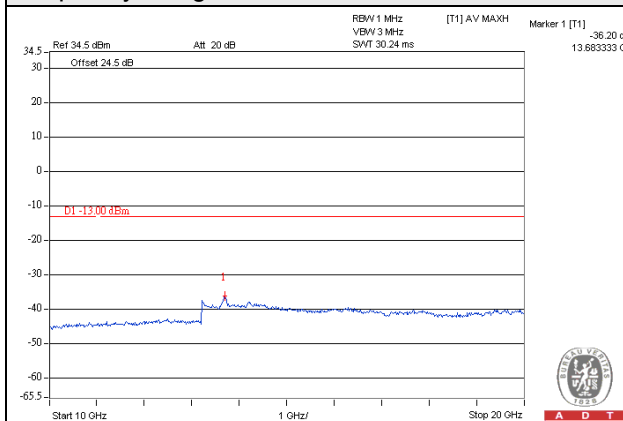
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



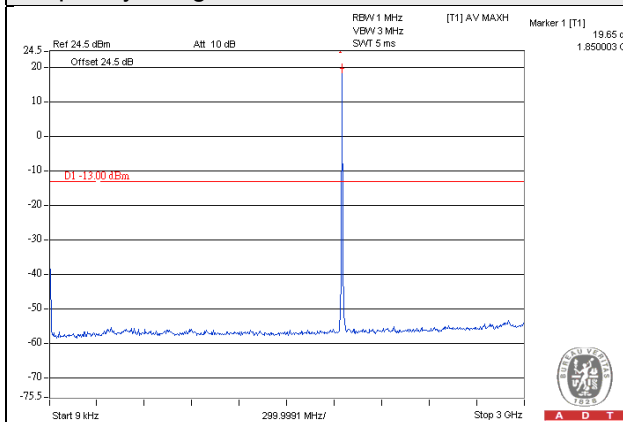
Frequency Range : 10GHz~20GHz



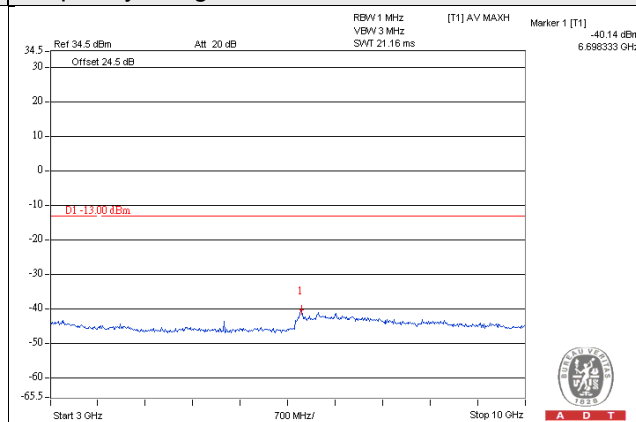
LTE Band 25, Channel Bandwidth 1.4MHz

Channel 26047

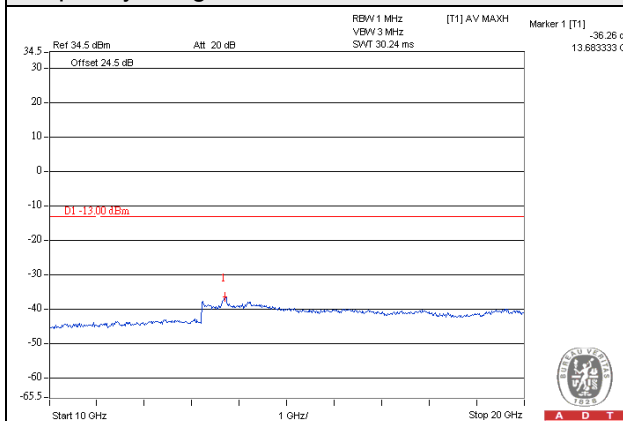
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



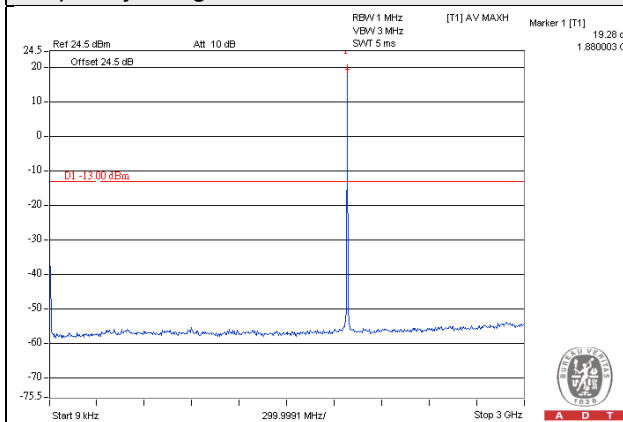
Frequency Range : 10GHz~20GHz



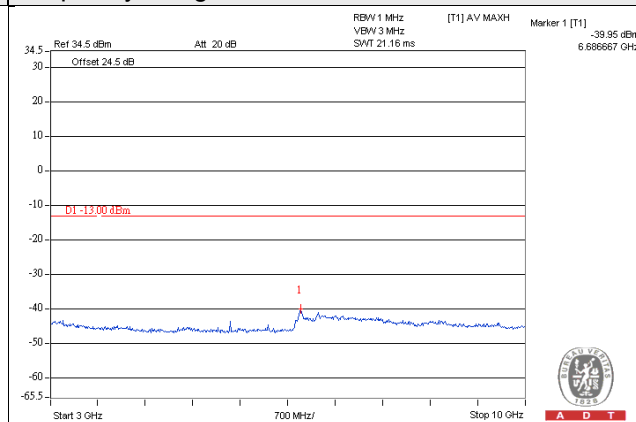
LTE Band 25, Channel Bandwidth 1.4MHz

Channel 26365

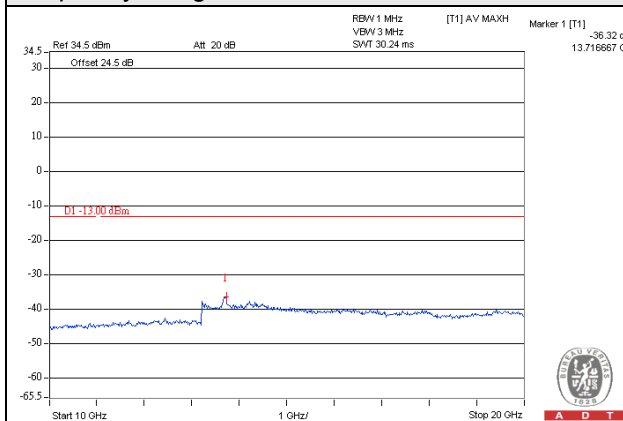
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



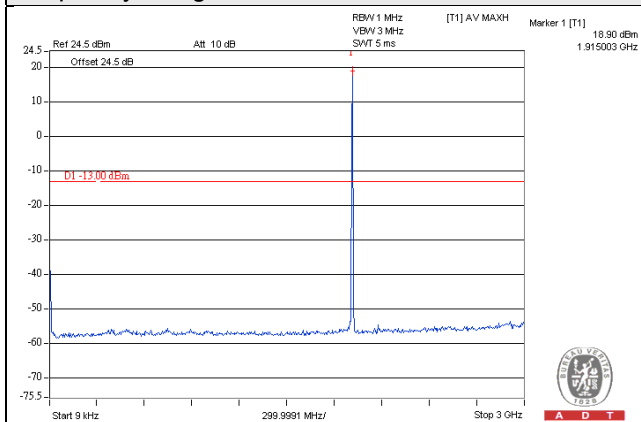
Frequency Range : 10GHz~20GHz



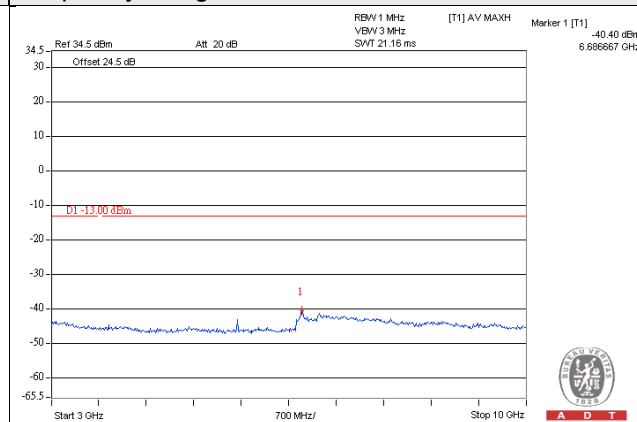
LTE Band 25, Channel Bandwidth 1.4MHz

Channel 26683

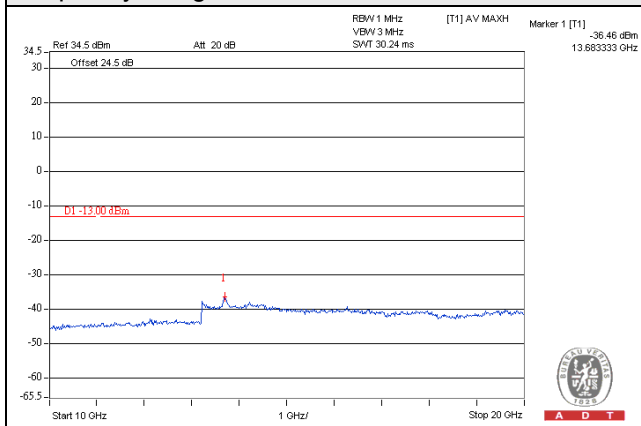
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



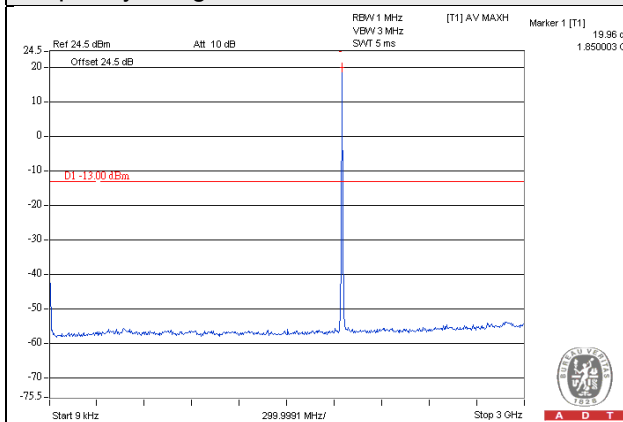
Frequency Range : 10GHz~20GHz



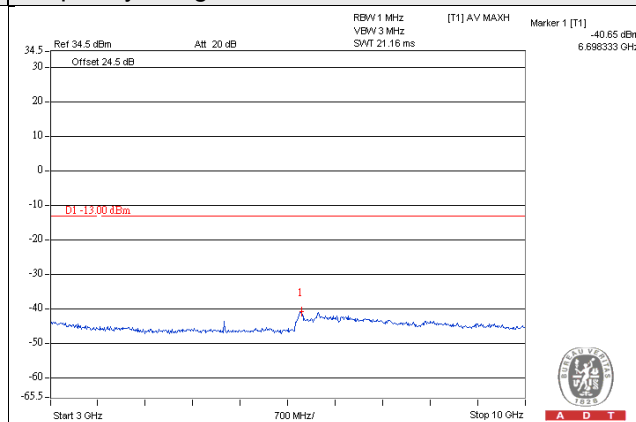
LTE Band 25, Channel Bandwidth 3MHz

Channel 26055

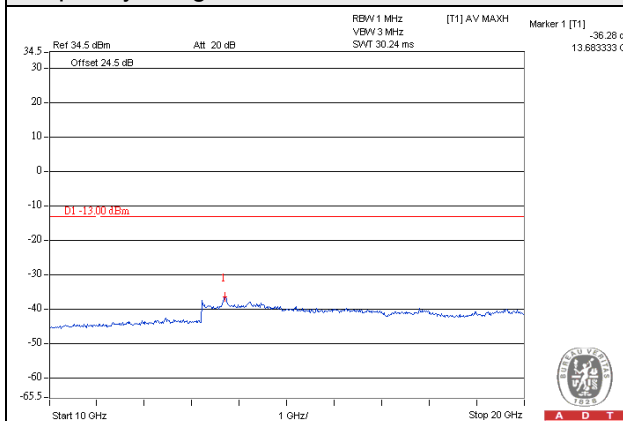
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



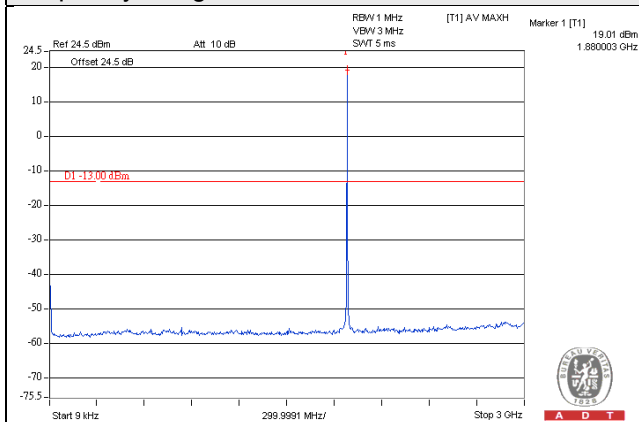
Frequency Range : 10GHz~20GHz



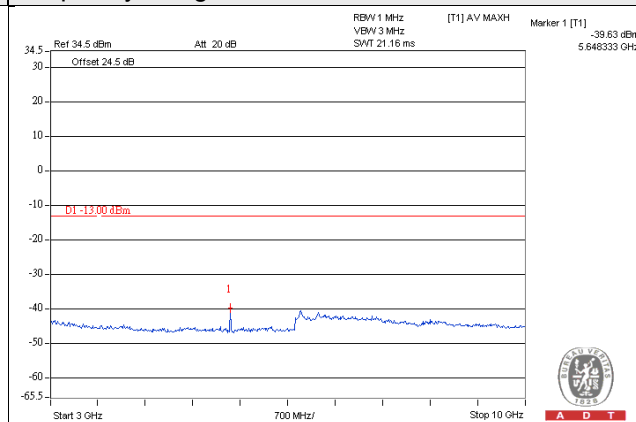
LTE Band 25, Channel Bandwidth 3MHz

Channel 26365

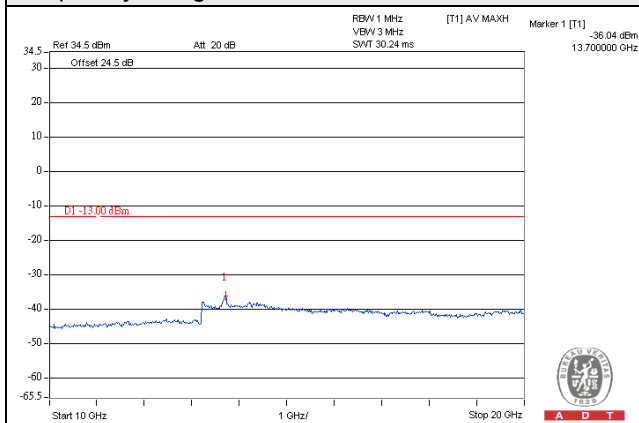
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



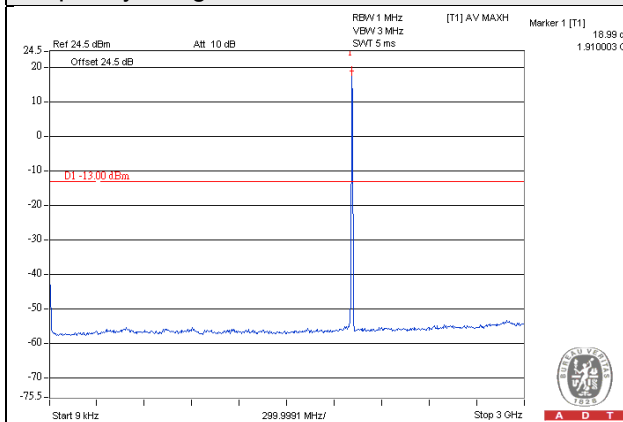
Frequency Range : 10GHz~20GHz



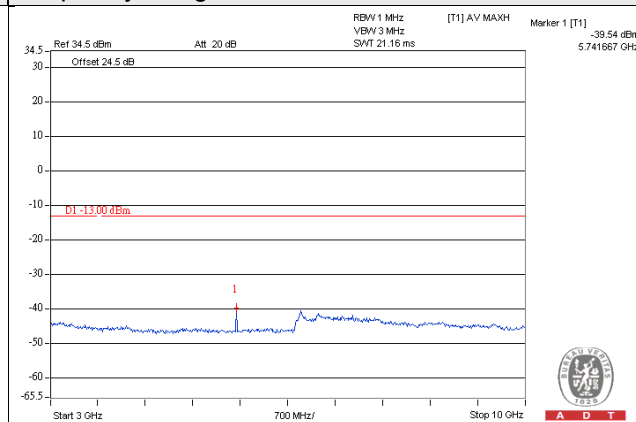
LTE Band 25, Channel Bandwidth 3MHz

Channel 26675

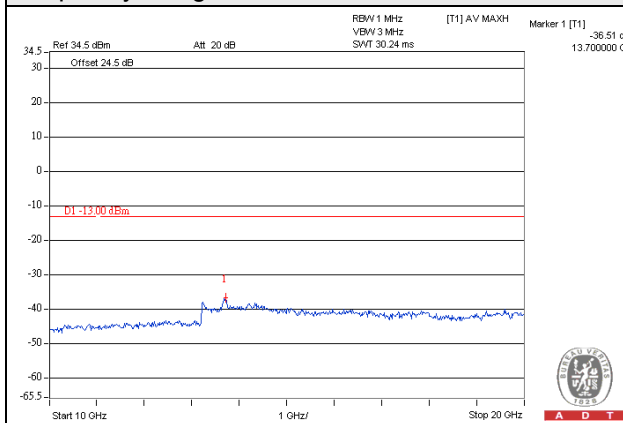
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



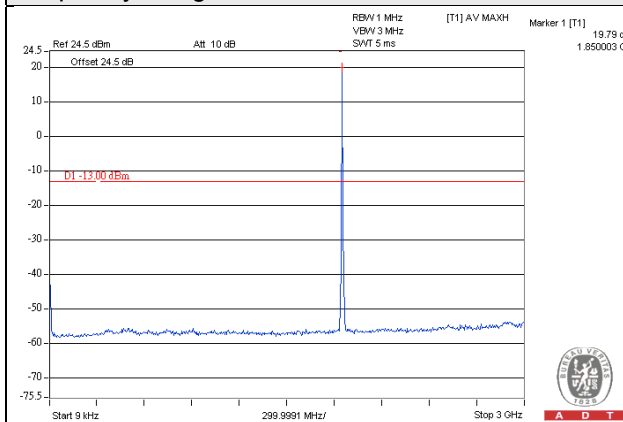
Frequency Range : 10GHz~20GHz



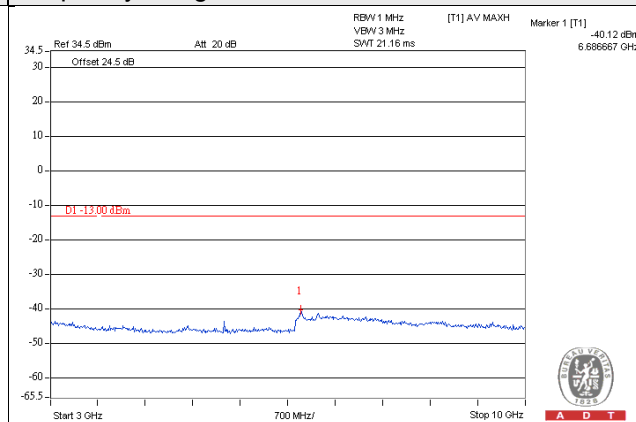
LTE Band 25, Channel Bandwidth 5MHz

Channel 26065

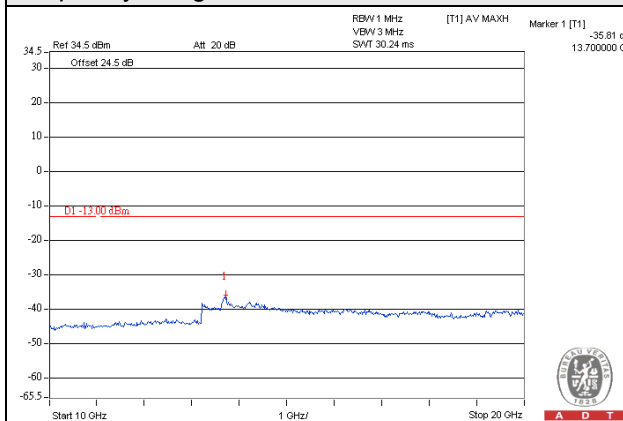
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



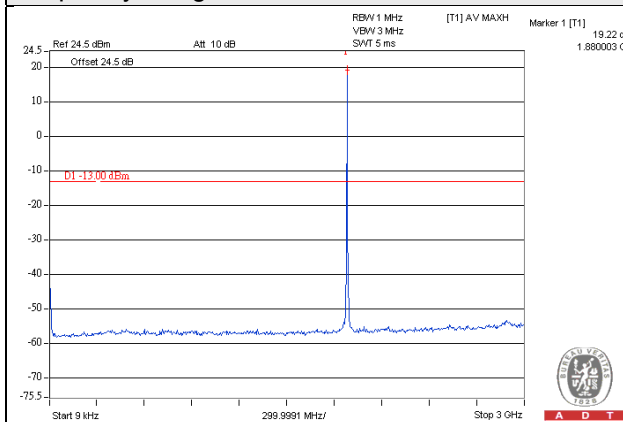
Frequency Range : 10GHz~20GHz



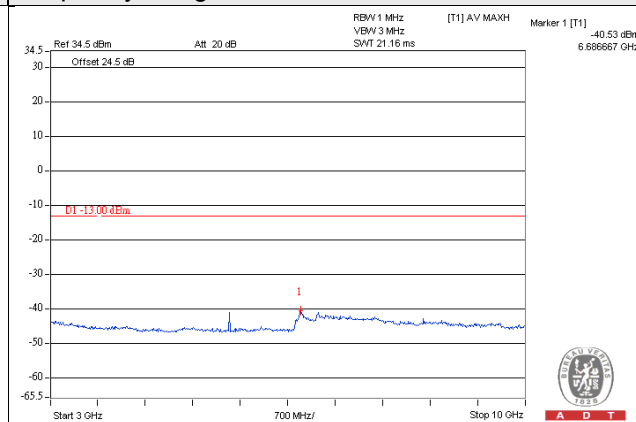
LTE Band 25, Channel Bandwidth 5MHz

Channel 26365

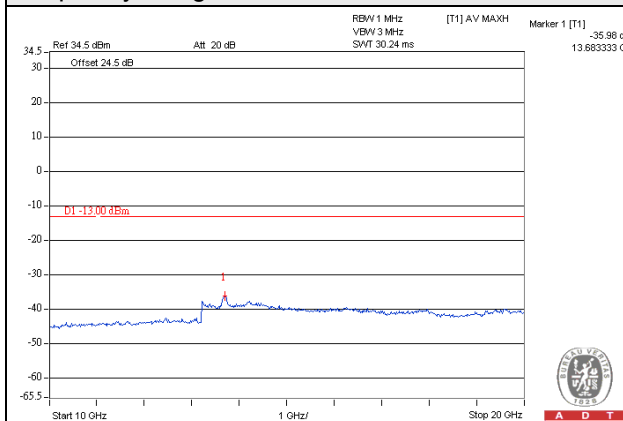
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



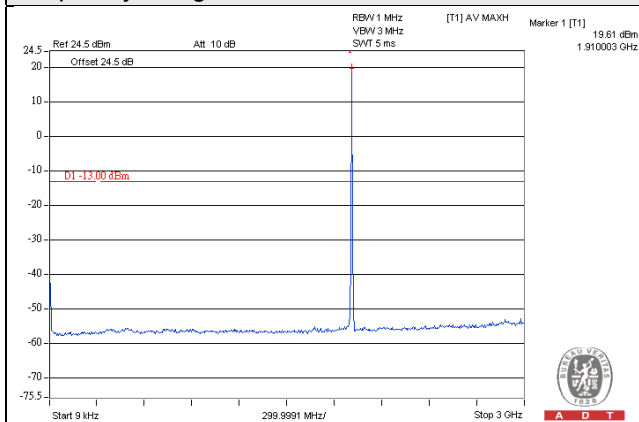
Frequency Range : 10GHz~20GHz



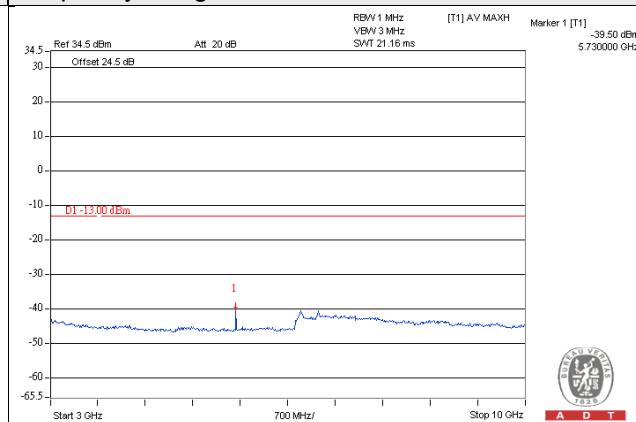
LTE Band 25, Channel Bandwidth 5MHz

Channel 26665

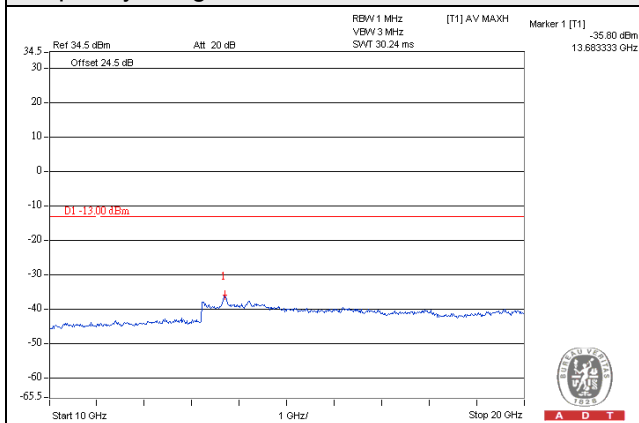
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



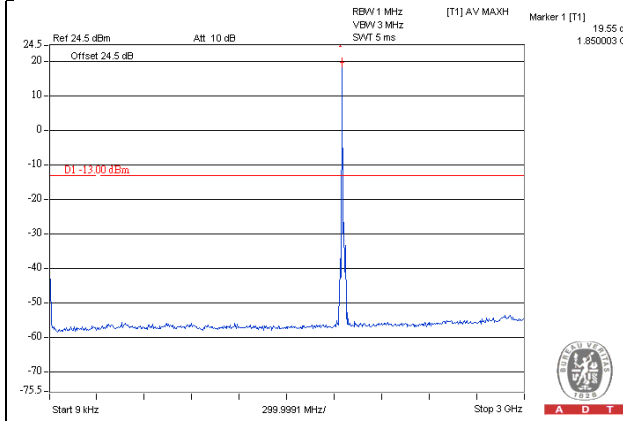
Frequency Range : 10GHz~20GHz



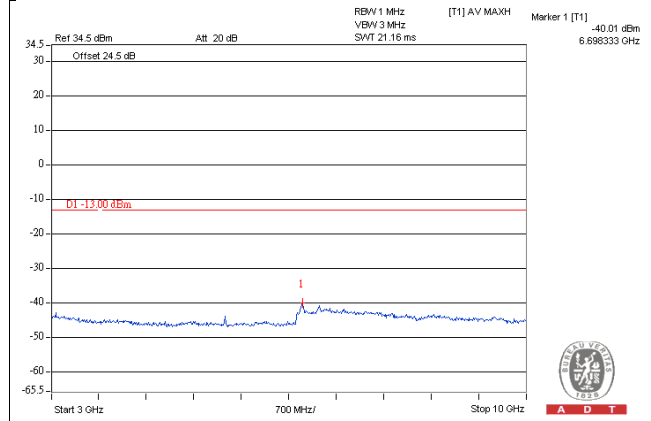
LTE Band 25, Channel Bandwidth 10MHz

Channel 26090

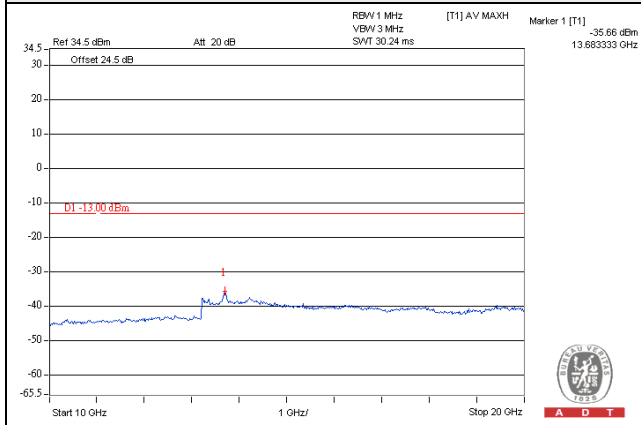
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



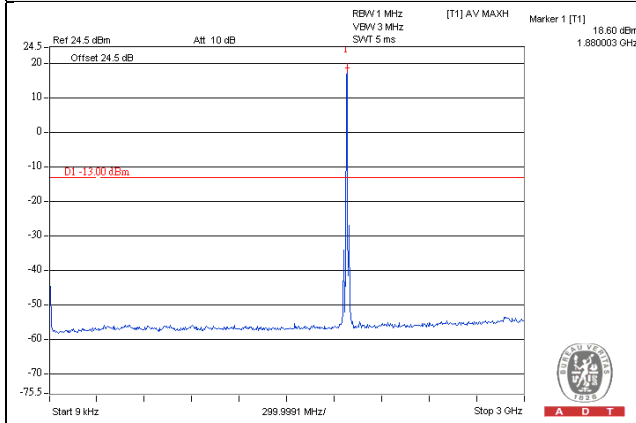
Frequency Range : 10GHz~20GHz



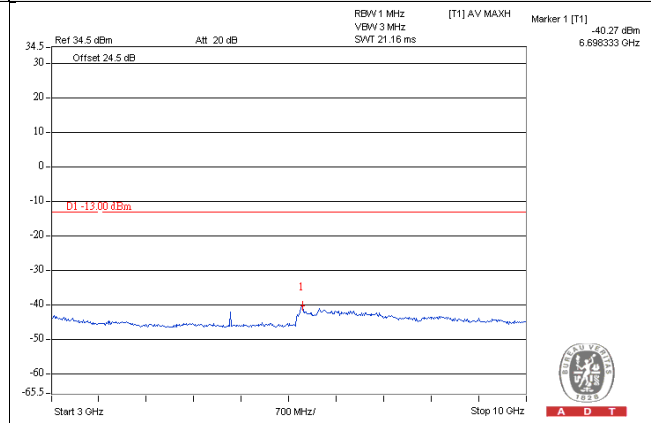
LTE Band 25, Channel Bandwidth 10MHz

Channel 26365

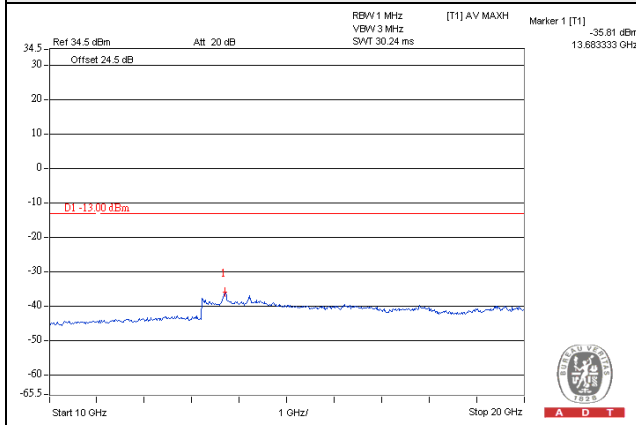
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



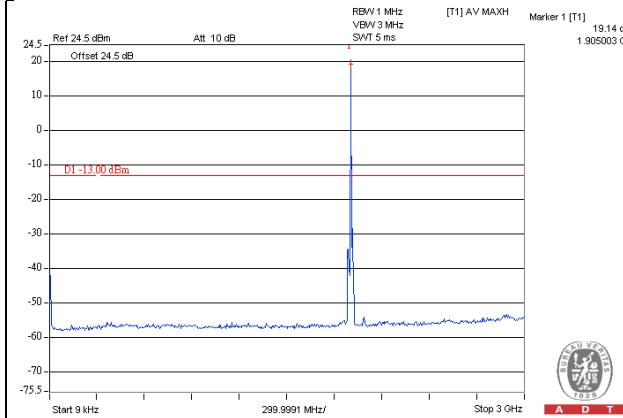
Frequency Range : 10GHz~20GHz



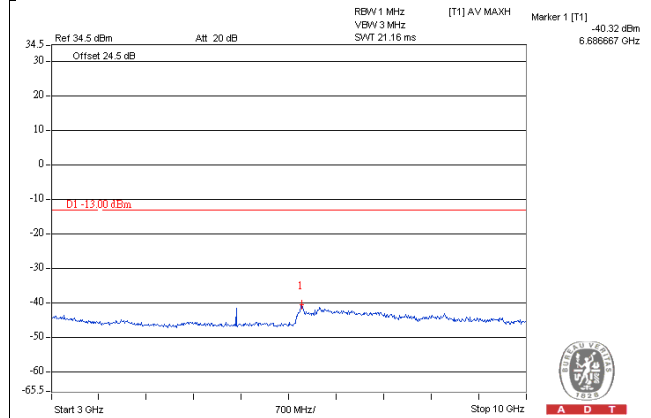
LTE Band 25, Channel Bandwidth 10MHz

Channel 26640

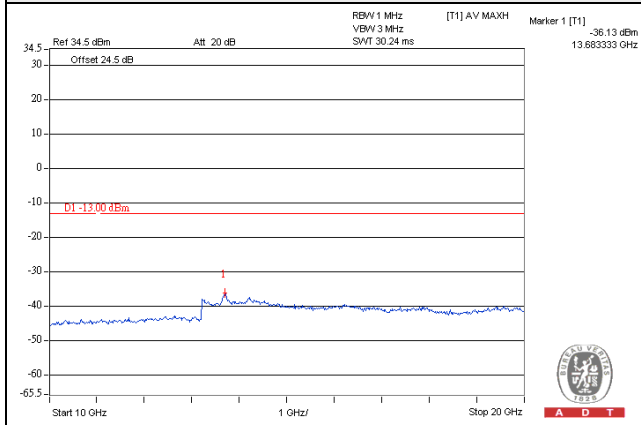
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



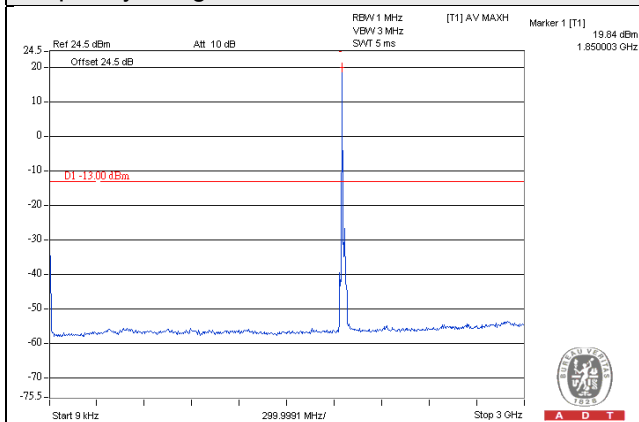
Frequency Range : 10GHz~20GHz



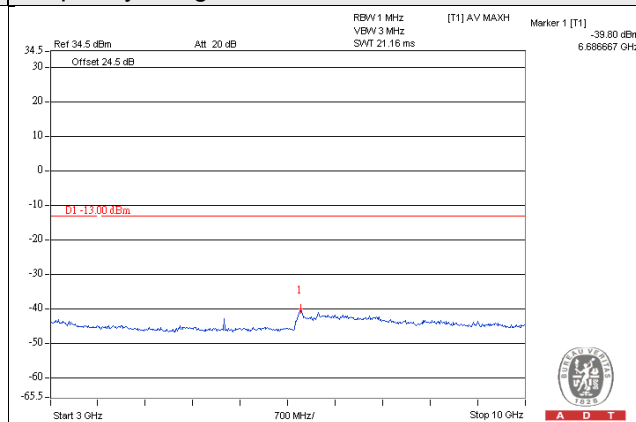
LTE Band 25, Channel Bandwidth 15MHz

Channel 26115

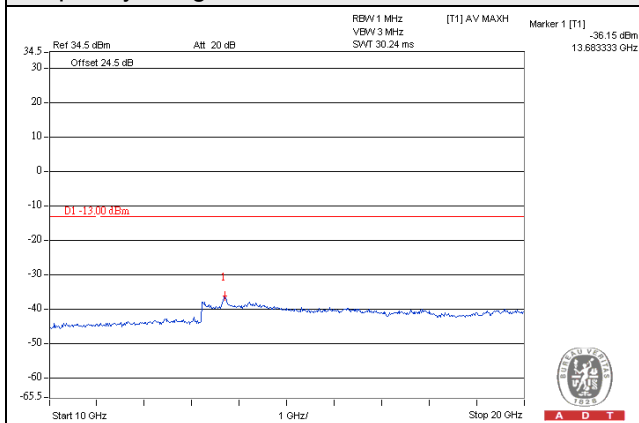
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



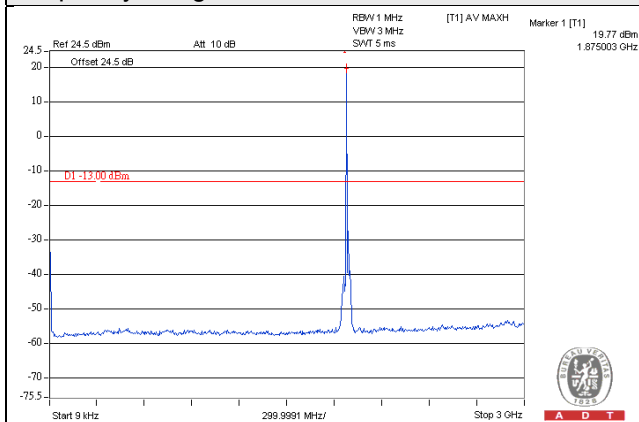
Frequency Range : 10GHz~20GHz



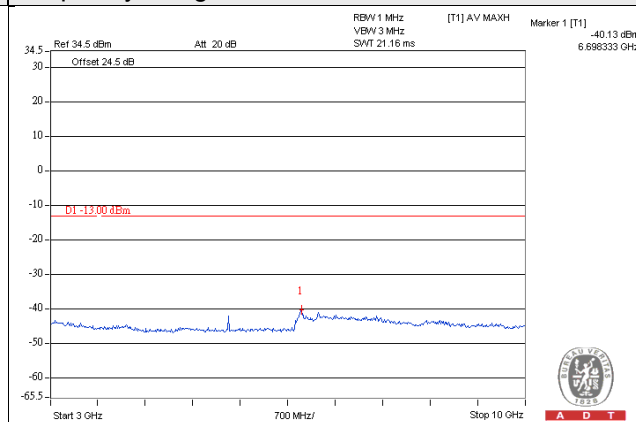
LTE Band 25, Channel Bandwidth 15MHz

Channel 26365

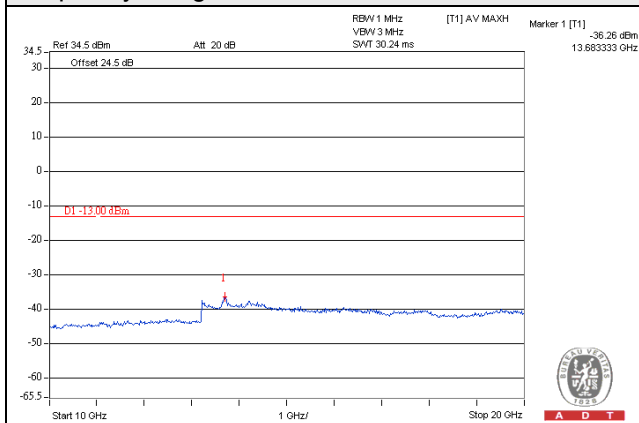
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



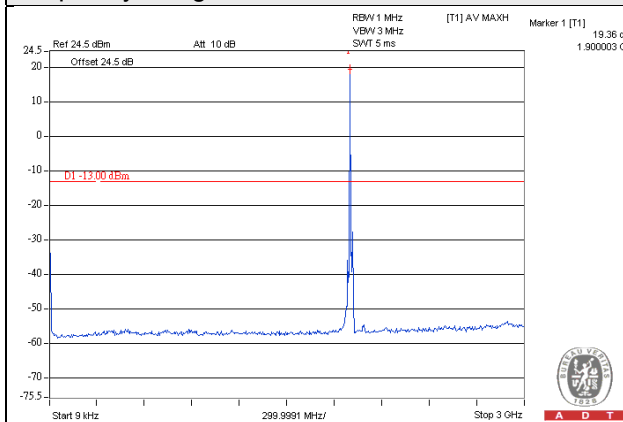
Frequency Range : 10GHz~20GHz



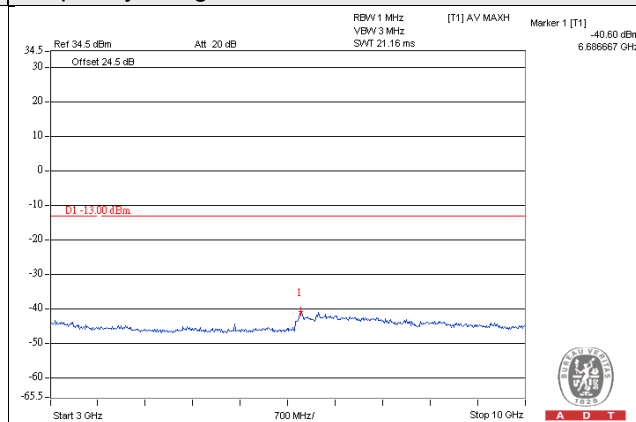
LTE Band 25, Channel Bandwidth 15MHz

Channel 26615

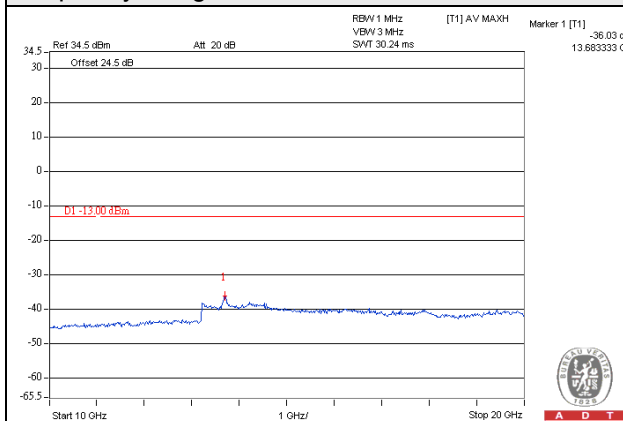
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



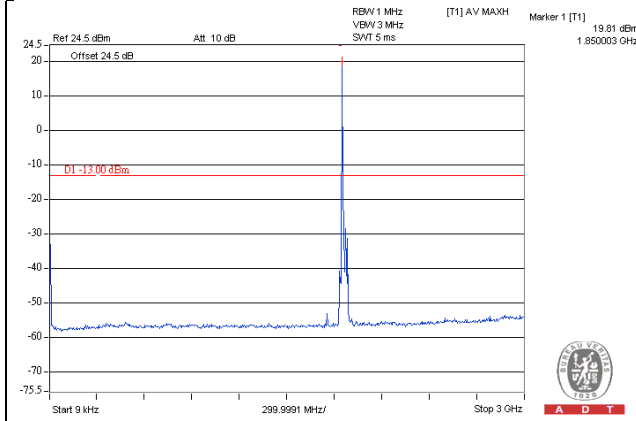
Frequency Range : 10GHz~20GHz



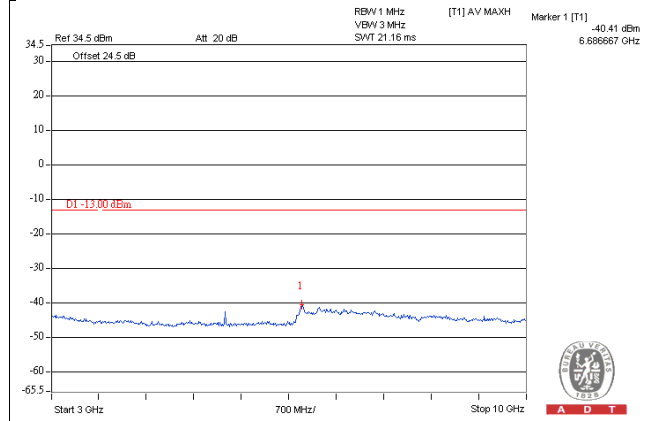
LTE Band 25, Channel Bandwidth 20MHz

Channel 26140

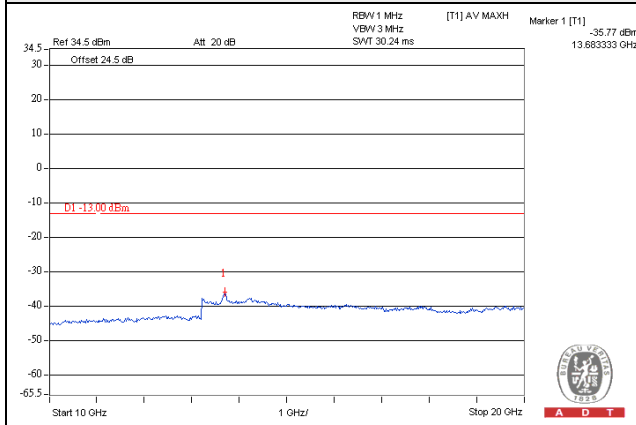
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



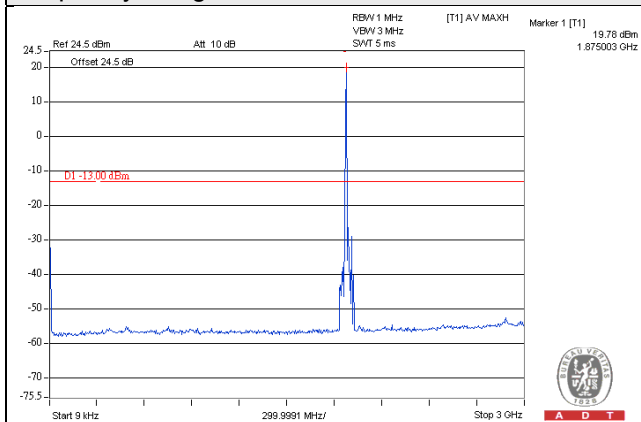
Frequency Range : 10GHz~20GHz



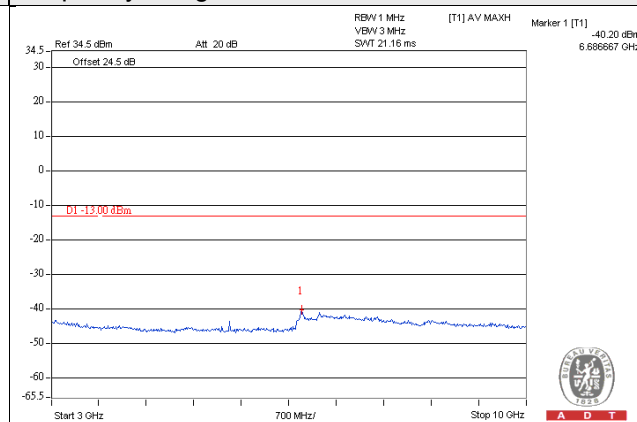
LTE Band 25, Channel Bandwidth 20MHz

Channel 26365

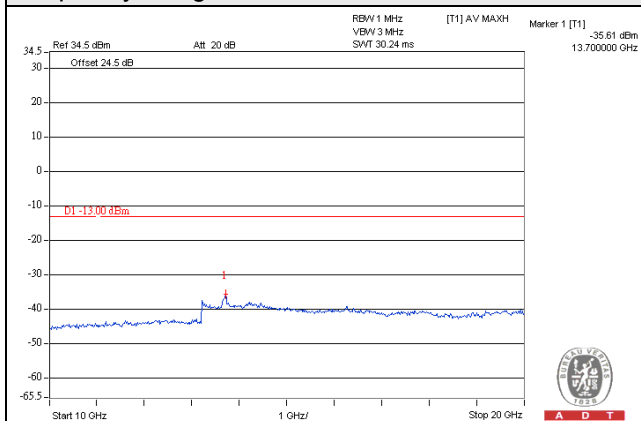
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



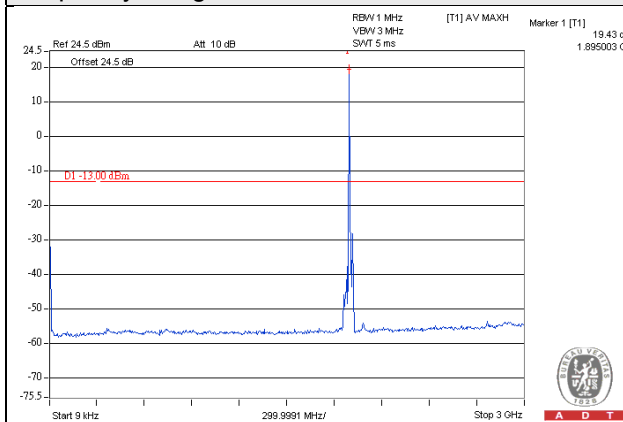
Frequency Range : 10GHz~20GHz



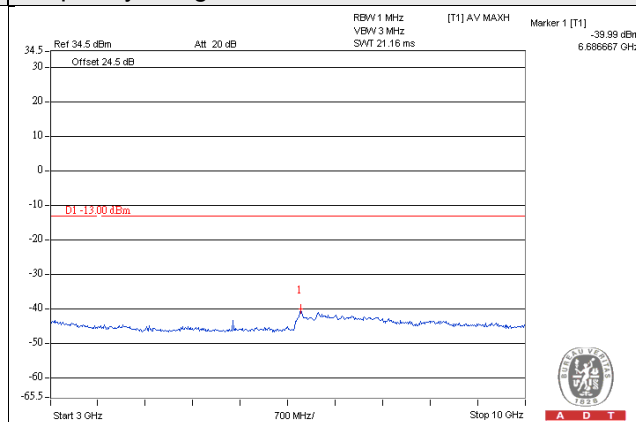
LTE Band 25, Channel Bandwidth 20MHz

Channel 26590

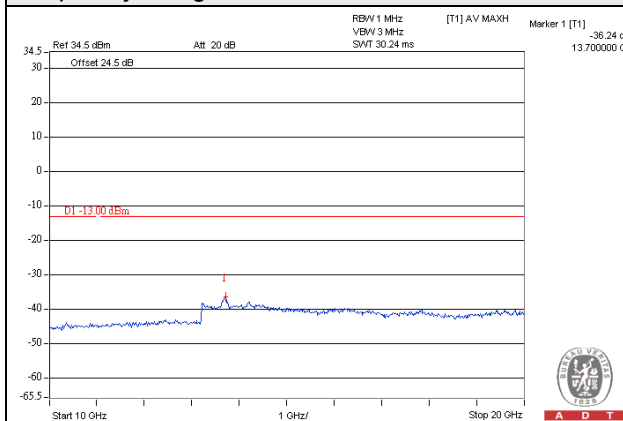
Frequency Range : 9kHz~3GHz



Frequency Range : 3GHz~10GHz



Frequency Range : 10GHz~20GHz



4.7 Radiated Emission Measurement

4.7.1 Limits of Radiated Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

4.7.2 Test Procedure

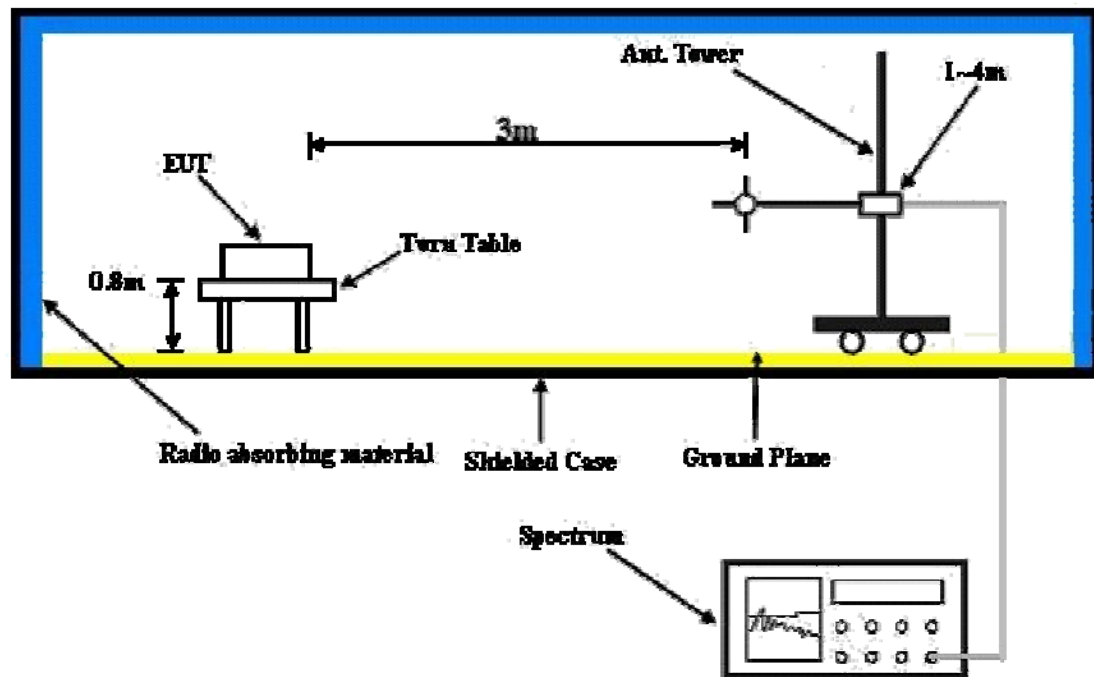
- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn 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 a. Record the power level of S.G
- c. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $\text{E.R.P power} = \text{E.I.R.P power} - 2.15\text{dBi}$.

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

4.7.3 Deviation from Test Standard

No deviation.

4.7.4 Test Setup



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

4.7.5 Test Results

Below 1GHz

LTE Band 2, Channel Bandwidth: 1.4MHz

Mode	TX channel 18607	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-45.4	-22.0	-19.4	-41.4	-13.0	-28.4
2	57.16	-57.7	-56.6	-4.7	-61.3	-13.0	-48.3
3	95.96	-55.4	-63.3	-1.2	-64.5	-13.0	-51.5
4	194.90	-55.3	-61.2	-2.6	-63.8	-13.0	-50.8
5	363.68	-58.4	-64.8	3.9	-60.9	-13.0	-47.9
6	903.00	-61.1	-57.1	3.6	-53.5	-13.0	-40.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	33.88	-43.4	-36.9	-17.1	-54.0	-13.0	-41.0
2	115.36	-49.6	-54.0	-2.9	-56.9	-13.0	-43.9
3	194.90	-55.3	-53.8	-2.6	-56.4	-13.0	-43.4
4	295.78	-55.9	-54.1	-1.8	-55.9	-13.0	-42.9
5	363.68	-58.1	-62.3	3.9	-58.4	-13.0	-45.4
6	802.12	-62.1	-59.3	4.0	-55.3	-13.0	-42.3

Remarks:

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

LTE Band 2, Channel Bandwidth: 3MHz

Mode	TX channel 18615	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-45.9	-24.2	-18.3	-42.5	-13.0	-29.5
2	57.16	-58.9	-57.8	-4.7	-62.5	-13.0	-49.5
3	95.96	-54.9	-62.8	-1.2	-64.0	-13.0	-51.0
4	297.72	-58.9	-59.9	-1.7	-61.6	-13.0	-48.6
5	363.68	-57.1	-63.5	3.9	-59.6	-13.0	-46.6
6	825.40	-57.9	-55.0	3.9	-51.1	-13.0	-38.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	33.88	-38.9	-32.4	-17.1	-49.5	-13.0	-36.5
2	51.34	-38.4	-38.3	-7.3	-45.6	-13.0	-32.6
3	109.54	-51.8	-57.5	-2.5	-60.0	-13.0	-47.0
4	194.90	-56.3	-54.8	-2.6	-57.4	-13.0	-44.4
5	295.78	-54.8	-53.0	-1.8	-54.8	-13.0	-41.8
6	837.04	-58.1	-54.6	3.8	-50.8	-13.0	-37.8

Remarks:

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

LTE Band 2, Channel Bandwidth: 5MHz

Mode	TX channel 18625	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-45.0	-23.3	-18.3	-41.6	-13.0	-28.6
2	113.42	-54.4	-59.4	-2.7	-62.1	-13.0	-49.1
3	194.90	-56.5	-62.4	-2.6	-65.0	-13.0	-52.0
4	297.72	-60.6	-61.6	-1.7	-63.3	-13.0	-50.3
5	363.68	-59.5	-65.9	3.9	-62.0	-13.0	-49.0
6	802.12	-63.8	-62.1	4.0	-58.1	-13.0	-45.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-31.8	-22.3	-19.4	-41.7	-13.0	-28.7
2	57.16	-50.9	-53.1	-4.7	-57.8	-13.0	-44.8
3	196.84	-57.4	-55.8	-2.5	-58.3	-13.0	-45.3
4	297.72	-55.1	-53.7	-1.7	-55.4	-13.0	-42.4
5	363.68	-57.2	-61.4	3.9	-57.5	-13.0	-44.5
6	802.12	-61.3	-58.5	4.0	-54.5	-13.0	-41.5

Remarks:

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

LTE Band 2, Channel Bandwidth: 10MHz

Mode	TX channel 18650	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	33.88	-44.9	-24.9	-17.1	-42.0	-13.0	-29.0
2	57.16	-58.8	-57.7	-4.7	-62.4	-13.0	-49.4
3	95.96	-53.5	-61.4	-1.2	-62.6	-13.0	-49.6
4	210.42	-56.5	-63.0	-2.0	-65.0	-13.0	-52.0
5	297.72	-60.0	-61.0	-1.7	-62.7	-13.0	-49.7
6	363.68	-58.9	-65.3	3.9	-61.4	-13.0	-48.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-33.3	-25.5	-18.3	-43.8	-13.0	-30.8
2	119.24	-50.0	-53.5	-3.1	-56.6	-13.0	-43.6
3	194.90	-58.2	-56.7	-2.6	-59.3	-13.0	-46.3
4	295.78	-55.4	-53.6	-1.8	-55.4	-13.0	-42.4
5	363.68	-58.0	-62.2	3.9	-58.3	-13.0	-45.3
6	802.12	-61.6	-58.8	4.0	-54.8	-13.0	-41.8

Remarks:

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

LTE Band 2, Channel Bandwidth: 15MHz

Mode	TX channel 18675	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-44.9	-21.5	-19.4	-40.9	-13.0	-27.9
2	55.22	-56.6	-53.8	-5.4	-59.2	-13.0	-46.2
3	113.42	-57.2	-62.2	-2.7	-64.9	-13.0	-51.9
4	297.72	-59.8	-60.8	-1.7	-62.5	-13.0	-49.5
5	363.68	-57.8	-64.2	3.9	-60.3	-13.0	-47.3
6	429.64	-64.4	-68.4	3.5	-64.9	-13.0	-51.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	33.88	-35.7	-29.2	-17.1	-46.3	-13.0	-33.3
2	57.16	-50.3	-52.5	-4.7	-57.2	-13.0	-44.2
3	194.90	-56.6	-55.1	-2.6	-57.7	-13.0	-44.7
4	297.72	-54.8	-53.4	-1.7	-55.1	-13.0	-42.1
5	363.68	-56.8	-61.0	3.9	-57.1	-13.0	-44.1
6	904.94	-62.5	-57.7	3.6	-54.1	-13.0	-41.1

Remarks:

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

LTE Band 2, Channel Bandwidth: 20MHz

Mode	TX channel 18700	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	33.88	-44.8	-24.8	-17.1	-41.9	-13.0	-28.9
2	51.34	-61.2	-55.1	-7.3	-62.4	-13.0	-49.4
3	113.42	-55.2	-60.2	-2.7	-62.9	-13.0	-49.9
4	212.36	-58.4	-64.8	-2.1	-66.9	-13.0	-53.9
5	363.68	-56.9	-63.3	3.9	-59.4	-13.0	-46.4
6	899.12	-59.4	-55.3	3.5	-51.8	-13.0	-38.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-39.9	-32.1	-18.3	-50.4	-13.0	-37.4
2	55.22	-48.7	-50.2	-5.4	-55.6	-13.0	-42.6
3	177.44	-57.3	-58.0	-3.0	-61.0	-13.0	-48.0
4	297.72	-55.0	-53.6	-1.7	-55.3	-13.0	-42.3
5	363.68	-57.0	-61.2	3.9	-57.3	-13.0	-44.3
6	901.06	-61.1	-56.3	3.5	-52.8	-13.0	-39.8

Remarks:

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

LTE Band 25, Channel Bandwidth: 1.4MHz

Mode	TX channel 26047	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-44.6	-22.9	-18.3	-41.2	-13.0	-28.2
2	76.56	-54.7	-60.6	0.3	-60.3	-13.0	-47.3
3	295.78	-57.1	-58.2	-1.8	-60.0	-13.0	-47.0
4	730.34	-54.5	-54.3	3.6	-50.7	-13.0	-37.7
5	786.60	-60.3	-59.1	4.0	-55.1	-13.0	-42.1
6	870.02	-65.3	-61.4	3.3	-58.1	-13.0	-45.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-33.1	-25.3	-18.3	-43.6	-13.0	-30.6
2	84.32	-53.6	-59.0	0.4	-58.6	-13.0	-45.6
3	295.78	-54.1	-52.3	-1.8	-54.1	-13.0	-41.1
4	714.82	-50.9	-48.4	3.5	-44.9	-13.0	-31.9
5	800.18	-62.7	-60.0	4.0	-56.0	-13.0	-43.0
6	871.96	-64.9	-60.8	3.4	-57.4	-13.0	-44.4

Remarks:

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

LTE Band 25, Channel Bandwidth: 3MHz

Mode	TX channel 26055	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-42.7	-19.3	-19.4	-38.7	-13.0	-25.7
2	76.56	-54.2	-60.1	0.3	-59.8	-13.0	-46.8
3	297.72	-56.6	-57.6	-1.7	-59.3	-13.0	-46.3
4	495.60	-63.6	-67.6	3.8	-63.8	-13.0	-50.8
5	699.30	-59.1	-59.7	3.4	-56.3	-13.0	-43.3
6	788.54	-60.5	-59.2	4.0	-55.2	-13.0	-42.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	33.88	-36.0	-29.5	-17.1	-46.6	-13.0	-33.6
2	84.32	-53.9	-59.3	0.4	-58.9	-13.0	-45.9
3	194.90	-57.9	-56.4	-2.6	-59.0	-13.0	-46.0
4	295.78	-54.6	-52.8	-1.8	-54.6	-13.0	-41.6
5	429.64	-60.7	-64.6	3.5	-61.1	-13.0	-48.1
6	802.12	-62.7	-59.9	4.0	-55.9	-13.0	-42.9

Remarks:

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

LTE Band 25, Channel Bandwidth: 5MHz

Mode	TX channel 26065	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-43.7	-22.0	-18.3	-40.3	-13.0	-27.3
2	74.62	-54.6	-60.5	0.1	-60.4	-13.0	-47.4
3	297.72	-56.8	-57.8	-1.7	-59.5	-13.0	-46.5
4	495.60	-62.9	-66.9	3.8	-63.1	-13.0	-50.1
5	714.82	-49.3	-49.5	3.5	-46.0	-13.0	-33.0
6	780.78	-60.4	-59.3	4.0	-55.3	-13.0	-42.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-36.0	-28.2	-18.3	-46.5	-13.0	-33.5
2	84.32	-52.9	-58.3	0.4	-57.9	-13.0	-44.9
3	268.62	-60.3	-57.1	-1.5	-58.6	-13.0	-45.6
4	295.78	-54.3	-52.5	-1.8	-54.3	-13.0	-41.3
5	429.64	-60.7	-64.6	3.5	-61.1	-13.0	-48.1
6	802.12	-62.7	-59.9	4.0	-55.9	-13.0	-42.9

Remarks:

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

LTE Band 25, Channel Bandwidth: 10MHz

Mode	TX channel 26090	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-43.6	-21.9	-18.3	-40.2	-13.0	-27.2
2	76.56	-54.1	-60.0	0.3	-59.7	-13.0	-46.7
3	297.72	-56.9	-57.9	-1.7	-59.6	-13.0	-46.6
4	561.56	-63.5	-66.5	3.7	-62.8	-13.0	-49.8
5	695.42	-58.8	-59.5	3.4	-56.1	-13.0	-43.1
6	784.66	-60.3	-59.1	4.0	-55.1	-13.0	-42.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-32.0	-22.5	-19.4	-41.9	-13.0	-28.9
2	84.32	-54.3	-59.7	0.4	-59.3	-13.0	-46.3
3	297.72	-55.4	-54.0	-1.7	-55.7	-13.0	-42.7
4	363.68	-60.3	-64.5	3.9	-60.6	-13.0	-47.6
5	703.18	-63.5	-61.1	3.5	-57.6	-13.0	-44.6
6	802.12	-62.2	-59.4	4.0	-55.4	-13.0	-42.4

Remarks:

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

LTE Band 25, Channel Bandwidth: 15MHz

Mode	TX channel 26115	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-43.8	-22.1	-18.3	-40.4	-13.0	-27.4
2	74.62	-54.9	-60.8	0.1	-60.7	-13.0	-47.7
3	297.72	-57.6	-58.6	-1.7	-60.3	-13.0	-47.3
4	363.68	-62.1	-68.5	3.9	-64.6	-13.0	-51.6
5	707.06	-59.3	-59.7	3.5	-56.2	-13.0	-43.2
6	784.66	-60.6	-59.4	4.0	-55.4	-13.0	-42.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-36.0	-28.2	-18.3	-46.5	-13.0	-33.5
2	84.32	-52.4	-57.8	0.4	-57.4	-13.0	-44.4
3	194.90	-58.8	-57.3	-2.6	-59.9	-13.0	-46.9
4	297.72	-55.3	-53.9	-1.7	-55.6	-13.0	-42.6
5	363.68	-59.5	-63.7	3.9	-59.8	-13.0	-46.8
6	802.12	-62.8	-60.0	4.0	-56.0	-13.0	-43.0

Remarks:

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

LTE Band 25, Channel Bandwidth: 20MHz

Mode	TX channel 26140	Frequency Range	Below 1000 MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-45.3	-23.6	-18.3	-41.9	-13.0	-28.9
2	74.62	-55.2	-61.1	0.1	-61.0	-13.0	-48.0
3	297.72	-56.6	-57.6	-1.7	-59.3	-13.0	-46.3
4	569.32	-64.6	-67.4	3.8	-63.6	-13.0	-50.6
5	722.58	-47.7	-47.9	3.6	-44.3	-13.0	-31.3
6	780.78	-60.2	-59.1	4.0	-55.1	-13.0	-42.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-37.3	-29.5	-18.3	-47.8	-13.0	-34.8
2	84.32	-54.5	-59.9	0.4	-59.5	-13.0	-46.5
3	295.78	-54.4	-52.6	-1.8	-54.4	-13.0	-41.4
4	363.68	-60.5	-64.7	3.9	-60.8	-13.0	-47.8
5	714.82	-48.4	-45.9	3.5	-42.4	-13.0	-29.4
6	819.58	-61.3	-58.0	3.9	-54.1	-13.0	-41.1

Remarks:

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

Above 1GHz

LTE Band 2, Channel Bandwidth: 1.4MHz

Mode	TX channel 18607	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3701.40 (PK)	-52.3	-43.8	1.4	-42.4	-13.0	-29.4
2	5552.10 (PK)	-52.1	-39.3	1.4	-37.9	-13.0	-24.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3701.40 (PK)	-50.6	-42.4	1.4	-41.0	-13.0	-28.0
2	5552.10 (PK)	-47.9	-35.9	1.4	-34.5	-13.0	-21.5

Remarks:

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

Mode	TX channel 18900	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-50.9	-42.4	1.3	-41.1	-13.0	-28.1
2	5640.00 (PK)	-54.2	-41.2	1.3	-39.9	-13.0	-26.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-50.7	-42.4	1.3	-41.1	-13.0	-28.1
2	5640.00 (PK)	-51.8	-39.9	1.3	-38.6	-13.0	-25.6

Remarks:

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

Mode	TX channel 19193	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3818.60 (PK)	-48.8	-40.5	1.4	-39.1	-13.0	-26.1
2	5727.90 (PK)	-53.9	-40.8	1.2	-39.6	-13.0	-26.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3818.60 (PK)	-49.9	-41.7	1.4	-40.3	-13.0	-27.3
2	5727.90 (PK)	-49.1	-36.9	1.2	-35.7	-13.0	-22.7

Remarks:

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

LTE Band 2, Channel Bandwidth: 3MHz

Mode	TX channel 18615	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3703.00 (PK)	-47.1	-38.6	1.4	-37.2	-13.0	-24.2
2	5554.50 (PK)	-50.6	-37.7	1.3	-36.4	-13.0	-23.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3703.00 (PK)	-47.4	-39.2	1.4	-37.8	-13.0	-24.8
2	5554.50 (PK)	-48.6	-36.5	1.3	-35.2	-13.0	-22.2

Remarks:

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

Mode	TX channel 18900	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-50.2	-41.7	1.3	-40.4	-13.0	-27.4
2	5640.00 (PK)	-52.5	-39.5	1.3	-38.2	-13.0	-25.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-49.2	-40.9	1.3	-39.6	-13.0	-26.6
2	5640.00 (PK)	-51.2	-39.3	1.3	-38.0	-13.0	-25.0

Remarks:

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

Mode	TX channel 19185	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3817.00 (PK)	-50.2	-41.9	1.4	-40.5	-13.0	-27.5
2	5725.50 (PK)	-54.2	-41.1	1.2	-39.9	-13.0	-26.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3817.00 (PK)	-49.6	-41.4	1.4	-40.0	-13.0	-27.0
2	5725.50 (PK)	-50.3	-38.1	1.2	-36.9	-13.0	-23.9

Remarks:

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

LTE Band 2, Channel Bandwidth: 5MHz

Mode	TX channel 18625	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3705.00 (PK)	-48.6	-40.1	1.4	-38.7	-13.0	-25.7
2	5557.50 (PK)	-48.2	-35.3	1.3	-34.0	-13.0	-21.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3705.00 (PK)	-48.2	-40.0	1.4	-38.6	-13.0	-25.6
2	5557.50 (PK)	-46.7	-34.6	1.3	-33.3	-13.0	-20.3

Remarks:

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

Mode	TX channel 18900	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-49.9	-41.4	1.3	-40.1	-13.0	-27.1
2	5640.00 (PK)	-51.1	-38.1	1.3	-36.8	-13.0	-23.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-47.9	-39.6	1.3	-38.3	-13.0	-25.3
2	5640.00 (PK)	-49.8	-37.9	1.3	-36.6	-13.0	-23.6

Remarks:

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

Mode	TX channel 19175	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3815.00 (PK)	-47.4	-39.1	1.4	-37.7	-13.0	-24.7
2	5722.50 (PK)	-51.5	-38.4	1.2	-37.2	-13.0	-24.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3815.00 (PK)	-48.2	-40.0	1.4	-38.6	-13.0	-25.6
2	5722.50 (PK)	-47.9	-35.8	1.2	-34.6	-13.0	-21.6

Remarks:

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

LTE Band 2, Channel Bandwidth: 10MHz

Mode	TX channel 18650	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3710.00 (PK)	-49.6	-41.1	1.4	-39.7	-13.0	-26.7
2	5565.00 (PK)	-49.4	-36.5	1.3	-35.2	-13.0	-22.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3710.00 (PK)	-50.1	-41.9	1.4	-40.5	-13.0	-27.5
2	5565.00 (PK)	-47.6	-35.6	1.3	-34.3	-13.0	-21.3

Remarks:

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

Mode	TX channel 18900	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-47.3	-38.8	1.3	-37.5	-13.0	-24.5
2	5640.00 (PK)	-50.9	-37.9	1.3	-36.6	-13.0	-23.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-48.3	-40.0	1.3	-38.7	-13.0	-25.7
2	5640.00 (PK)	-48.8	-36.9	1.3	-35.6	-13.0	-22.6

Remarks:

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

Mode	TX channel 19150	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3810.00 (PK)	-46.7	-38.3	1.3	-37.0	-13.0	-24.0
2	5715.00 (PK)	-49.9	-36.8	1.2	-35.6	-13.0	-22.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3810.00 (PK)	-48.1	-39.8	1.3	-38.5	-13.0	-25.5
2	5715.00 (PK)	-48.9	-36.8	1.2	-35.6	-13.0	-22.6

Remarks:

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

LTE Band 2, Channel Bandwidth: 15MHz

Mode	TX channel 18675	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3715.00 (PK)	-52.3	-43.8	1.4	-42.4	-13.0	-29.4
2	5572.50 (PK)	-52.8	-39.9	1.3	-38.6	-13.0	-25.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3715.00 (PK)	-50.3	-42.1	1.4	-40.7	-13.0	-27.7
2	5572.50 (PK)	-49.5	-37.5	1.3	-36.2	-13.0	-23.2

Remarks:

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

Mode	TX channel 18900	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-49.6	-41.1	1.3	-39.8	-13.0	-26.8
2	5640.00 (PK)	-52.1	-39.1	1.3	-37.8	-13.0	-24.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-47.4	-39.1	1.3	-37.8	-13.0	-24.8
2	5640.00 (PK)	-50.8	-38.9	1.3	-37.6	-13.0	-24.6

Remarks:

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

Mode	TX channel 19125	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3805.00 (PK)	-45.5	-37.1	1.3	-35.8	-13.0	-22.8
2	5707.50 (PK)	-51.2	-38.1	1.2	-36.9	-13.0	-23.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3805.00 (PK)	-46.2	-38.0	1.3	-36.7	-13.0	-23.7
2	5707.50 (PK)	-46.7	-34.7	1.2	-33.5	-13.0	-20.5

Remarks:

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

LTE Band 2, Channel Bandwidth: 20MHz

Mode	TX channel 18700	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3720.00 (PK)	-46.2	-37.7	1.4	-36.3	-13.0	-23.3
2	5580.00 (PK)	-54.5	-41.5	1.3	-40.2	-13.0	-27.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3720.00 (PK)	-46.6	-38.4	1.4	-37.0	-13.0	-24.0
2	5580.00 (PK)	-52.1	-40.1	1.3	-38.8	-13.0	-25.8

Remarks:

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

Mode	TX channel 18900	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-47.4	-38.9	1.3	-37.6	-13.0	-24.6
2	5640.00 (PK)	-52.3	-39.3	1.3	-38.0	-13.0	-25.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00 (PK)	-46.9	-38.6	1.3	-37.3	-13.0	-24.3
2	5640.00 (PK)	-51.9	-40.0	1.3	-38.7	-13.0	-25.7

Remarks:

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

Mode	TX channel 19100	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3800.00 (PK)	-45.8	-37.4	1.3	-36.1	-13.0	-23.1
2	5700.00 (PK)	-50.8	-37.7	1.2	-36.5	-13.0	-23.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3800.00 (PK)	-45.5	-37.3	1.3	-36.0	-13.0	-23.0
2	5700.00 (PK)	-51.2	-39.3	1.2	-38.1	-13.0	-25.1

Remarks:

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

LTE Band 25, Channel Bandwidth: 1.4MHz

Mode	TX channel 26047	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3701.40 (PK)	-48.5	-40.0	1.4	-38.6	-13.0	-25.6
2	5552.10 (PK)	-46.7	-33.9	1.4	-32.5	-13.0	-19.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3701.40 (PK)	-42.6	-34.4	1.4	-33.0	-13.0	-20.0
2	5552.10 (PK)	-46.4	-34.4	1.4	-33.0	-13.0	-20.0

Remarks:

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

Mode	TX channel 26365	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-47.3	-38.8	1.3	-37.5	-13.0	-24.5
2	5647.50 (PK)	-49.5	-36.5	1.3	-35.2	-13.0	-22.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-42.4	-34.1	1.3	-32.8	-13.0	-19.8
2	5647.50 (PK)	-48.7	-36.8	1.3	-35.5	-13.0	-22.5

Remarks:

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

Mode	TX channel 26683	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3828.60 (PK)	-48.7	-40.4	1.4	-39.0	-13.0	-26.0
2	5742.90 (PK)	-48.6	-35.5	1.2	-34.3	-13.0	-21.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3828.60 (PK)	-45.1	-36.8	1.4	-35.4	-13.0	-22.4
2	5742.90 (PK)	-48.4	-36.1	1.2	-34.9	-13.0	-21.9

Remarks:

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

LTE Band 25, Channel Bandwidth: 3MHz

Mode	TX channel 26055	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	5554.50 (PK)	-46.9	-34.0	1.3	-32.7	-13.0	-19.7
2	5554.50 (PK)	-49.2	-36.3	1.3	-35.0	-13.0	-22.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3703.00 (PK)	-42.4	-34.2	1.4	-32.8	-13.0	-19.8
2	5554.50 (PK)	-45.6	-33.5	1.3	-32.2	-13.0	-19.2

Remarks:

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

Mode	TX channel 26365	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-47.1	-38.6	1.3	-37.3	-13.0	-24.3
2	5647.50 (PK)	-49.9	-36.9	1.3	-35.6	-13.0	-22.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-41.4	-33.1	1.3	-31.8	-13.0	-18.8
2	5647.50 (PK)	-48.4	-36.5	1.3	-35.2	-13.0	-22.2

Remarks:

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

Mode	TX channel 26675	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3827.00 (PK)	-43.5	-35.2	1.4	-33.8	-13.0	-20.8
2	5740.50 (PK)	-48.8	-35.7	1.2	-34.5	-13.0	-21.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3827.00 (PK)	-42.7	-34.4	1.4	-33.0	-13.0	-20.0
2	5740.50 (PK)	-45.3	-33.0	1.2	-31.8	-13.0	-18.8

Remarks:

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

LTE Band 25, Channel Bandwidth: 5MHz

Mode	TX channel 26065	Frequency Range	Above 1000MHz
Environmental Conditions	25deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3705.00 (PK)	-48.8	-40.3	1.4	-38.9	-13.0	-25.9
2	5557.50 (PK)	-51.5	-38.6	1.3	-37.3	-13.0	-24.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3705.00 (PK)	-49.4	-41.2	1.4	-39.8	-13.0	-26.8
2	5557.50 (PK)	-48.0	-35.9	1.3	-34.6	-13.0	-21.6

Remarks:

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

Mode	TX channel 26365	Frequency Range	Above 1000MHz
Environmental Conditions	25deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-47.5	-39.0	1.3	-37.7	-13.0	-24.7
2	5647.50 (PK)	-54.4	-41.4	1.3	-40.1	-13.0	-27.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-47.6	-39.3	1.3	-38.0	-13.0	-25.0
2	5647.50 (PK)	-52.7	-40.8	1.3	-39.5	-13.0	-26.5

Remarks:

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

Mode	TX channel 26665	Frequency Range	Above 1000MHz
Environmental Conditions	25deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3825.00 (PK)	-50.4	-42.1	1.4	-40.7	-13.0	-27.7
2	5737.50 (PK)	-51.6	-38.5	1.2	-37.3	-13.0	-24.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3825.00 (PK)	-48.7	-40.5	1.4	-39.1	-13.0	-26.1
2	5737.50 (PK)	-53.5	-41.2	1.2	-40.0	-13.0	-27.0

Remarks:

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

LTE Band 25, Channel Bandwidth: 10MHz

Mode	TX channel 26090	Frequency Range	Above 1000MHz
Environmental Conditions	25deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3710.00 (PK)	-49.3	-40.8	1.4	-39.4	-13.0	-26.4
2	5565.00 (PK)	-50.6	-37.7	1.3	-36.4	-13.0	-23.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3710.00 (PK)	-50.1	-41.9	1.4	-40.5	-13.0	-27.5
2	5565.00 (PK)	-48.9	-36.9	1.3	-35.6	-13.0	-22.6

Remarks:

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

Mode	TX channel 26365	Frequency Range	Above 1000MHz
Environmental Conditions	25deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-49.3	-40.8	1.3	-39.5	-13.0	-26.5
2	5647.50 (PK)	-49.9	-36.9	1.3	-35.6	-13.0	-22.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-50.5	-42.2	1.3	-40.9	-13.0	-27.9
2	5647.50 (PK)	-48.7	-36.8	1.3	-35.5	-13.0	-22.5

Remarks:

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

Mode	TX channel 26640	Frequency Range	Above 1000MHz
Environmental Conditions	25deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Tank Wu		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3820.00 (PK)	-49.1	-40.8	1.4	-39.4	-13.0	-26.4
2	5730.00 (PK)	-48.3	-35.2	1.2	-34.0	-13.0	-21.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3820.00 (PK)	-49.4	-41.2	1.4	-39.8	-13.0	-26.8
2	5730.00 (PK)	-47.8	-35.6	1.2	-34.4	-13.0	-21.4

Remarks:

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

LTE Band 25, Channel Bandwidth: 15MHz

Mode	TX channel 26115	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3715.00 (PK)	-44.9	-36.4	1.4	-35.0	-13.0	-22.0
2	5572.50 (PK)	-52.5	-39.6	1.3	-38.3	-13.0	-25.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3715.00 (PK)	-47.8	-39.6	1.4	-38.2	-13.0	-25.2
2	5572.50 (PK)	-49.4	-37.4	1.3	-36.1	-13.0	-23.1

Remarks:

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

Mode	TX channel 26365	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-46.0	-37.5	1.3	-36.2	-13.0	-23.2
2	5647.50 (PK)	-52.0	-39.0	1.3	-37.7	-13.0	-24.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-51.2	-42.9	1.3	-41.6	-13.0	-28.6
2	5647.50 (PK)	-48.6	-36.7	1.3	-35.4	-13.0	-22.4

Remarks:

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

Mode	TX channel 26615	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3815.00 (PK)	-44.0	-35.7	1.4	-34.3	-13.0	-21.3
2	5722.50 (PK)	-50.2	-37.1	1.2	-35.9	-13.0	-22.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3815.00 (PK)	-46.5	-38.3	1.4	-36.9	-13.0	-23.9
2	5722.50 (PK)	-48.0	-35.9	1.2	-34.7	-13.0	-21.7

Remarks:

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

LTE Band 25, Channel Bandwidth: 20MHz

Mode	TX channel 26140	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3720.00 (PK)	-44.6	-36.1	1.4	-34.7	-13.0	-21.7
2	5580.00 (PK)	-54.3	-41.3	1.3	-40.0	-13.0	-27.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3720.00 (PK)	-45.6	-37.4	1.4	-36.0	-13.0	-23.0
2	5580.00 (PK)	-51.8	-39.8	1.3	-38.5	-13.0	-25.5

Remarks:

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

Mode	TX channel 26365	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-47.3	-38.8	1.3	-37.5	-13.0	-24.5
2	5647.50 (PK)	-51.7	-38.7	1.3	-37.4	-13.0	-24.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3765.00 (PK)	-48.0	-39.7	1.3	-38.4	-13.0	-25.4
2	5647.50 (PK)	-47.4	-35.5	1.3	-34.2	-13.0	-21.2

Remarks:

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

Mode	TX channel 26590	Frequency Range	Above 1000MHz
Environmental Conditions	20deg. C, 69%RH	Input Power	120Vac, 60Hz
Tested By	Bayu Chen		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3810.00 (PK)	-45.2	-36.8	1.3	-35.5	-13.0	-22.5
2	5715.00 (PK)	-48.9	-35.8	1.2	-34.6	-13.0	-21.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3810.00 (PK)	-45.9	-37.6	1.3	-36.3	-13.0	-23.3
2	5715.00 (PK)	-45.8	-33.7	1.2	-32.5	-13.0	-19.5

Remarks:

1. Output Power (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.

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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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