FCC TEST REPORT

(PART 24)

REPORT NO.: RF130814E06-1

MODEL NO.: T77H468

FCC ID: B94T77H468

RECEIVED: Aug. 14, 2013

TESTED: Sep. 06 to 10, 2013

ISSUED: Sep. 18, 2013

APPLICANT: Hewlett-Packard Company

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ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130814E06-1	Original release	Sep. 18, 2013

1 CERTIFICATION

PRODUCT : 3GPP Long Term Evolution Cat3 PCI Express M.2 Module
BRAND NAME : FOXCONN
MODEL NO. : T77H468
TEST ITEM: ENGINEERING SAMPLE
APPLICANT : Hewlett-Packard Company
TESTED DATE : Sep. 06 to 10, 2013
STANDARDS : FCC Part 24, Subpart E

The above equipment (model: T77H468) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____, **DATE:** *Sep. 18, 2013*
(Lori Chung, Specialist)

APPROVED BY : _____, **DATE:** *Sep. 18, 2013*
(May Chen, Manager)

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 24 & Part 2			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
2.1046 24.232	Equivalent isotropically radiated power	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 -10.65dB at 18800MHz.

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	UNCERTAINTY
Radiated emissions	30MHz ~ 200MHz	5.46 dB
	200MHz ~1000MHz	3.54 dB
	1GHz ~ 18GHz	4.08 dB
	18GHz ~ 40GHz	4.11 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2.2 TEST SITE AND INSTRUMENTS

For radiated spurious emissions:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
MXE EMI Receiver Agilent	N9038A	MY50010156	Jan. 16, 2013	Jan. 15, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-04	Nov. 14, 2012	Nov. 13, 2013
Pre-Amplifier Agilent	8449B	3008A01923	Oct. 30, 2012	Oct. 29, 2013
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 14, 2012	Nov. 13, 2013
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Mar. 25, 2013	Mar. 24, 2014
Horn_Antenna AISI	AIH.8018	0000220091110	Nov. 27, 2012	Nov. 26, 2013
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 12, 2012	Oct. 11, 2013
RF Cable	NA	RF104-205 RF104-207 RF104-202	Dec. 26, 2012	Dec. 25, 2013
RF Cable	NA	CHHCAB_001	Oct. 07, 2012	Oct. 06, 2013
Software	ADT_Radiated _V8.7.05	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA
Radio Communication Analyzer	Anritsu	MT8820C	May 30, 2013	May 29, 2014
Universal Radio Communication Tester	R&S	CMU200	Oct. 23, 2012	Oct. 22, 2013

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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in 966 Chamber No. H.
4. The FCC Site Registration No. is 797305.
5. The CANADA Site Registration No. is IC 7450H-3.
6. Tested Date: Sep. 06 to 10, 2013

For other test items:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP 40	100060	May 03, 2013	May 02, 2014
Spectrum Analyzer Agilent	E4446A	MY48250113	Dec. 05, 2012	Dec. 04, 2013
AC Power Source EXTECH Electronics	6502	1140503	NA	NA
Temperature & Humidity Chamber TERCHY	MHU-225AU	911033	Dec. 11, 2012	Dec. 10, 2013
DC Power Supply GOOD WILL INSTRUMENT CO., LTD.	GPC - 3030D	7700087	NA	NA
ESG Vector signal generator Agilent	E4438C	MY47271330 506 602 UNJ	Apr. 30, 2013	Apr. 29, 2014
ESG Vector signal generator Agilent	E4438C	MY45094468/0 05 506 602 UK6 UNJ	Dec. 14, 2012	Dec. 13, 2013
Power meter Anritsu	ML2495A	1014008	Apr. 23, 2013	Apr. 22, 2014
Power sensor Anritsu	MA2411B	0917122	Apr. 23, 2013	Apr. 22, 2014
Power meter Anritsu	ML2495A	0824006	May 20, 2013	May 19, 2014
Power sensor Anritsu	MA2411B	0738172	May 20, 2013	May 19, 2014
Power meter Anritsu	ML2487B	0930006	Nov. 14, 2012	Nov. 13, 2013
Power sensor Anritsu	MA2491A	0845370	Nov. 14, 2012	Nov. 13, 2013
Software	Total Power Measurement Tools V7.1	NA	NA	NA
Software	ADT_RF Test Software V6.6.5.3	NA	NA	NA
Radio Communication Analyzer	Anritsu	MT8820C	May 30, 2013	May 29, 2014
Universal Radio Communication Tester	R&S	CMU200	Oct. 23, 2012	Oct. 22, 2013

NOTE:
1. The test was performed in Oven room A.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Tested Date: Sep. 09, 2013

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	3GPP Long Term Evolution Cat3 PCI Express M.2 Module	
MODEL NO.	T77H468	
OPERATING VOLTAGES	Vnom= 3.3 Vdc Vmin= 3.1 Vdc Vmax= 4.4 Vdc	
HW VERSION	115	
SW VERSION	M9615ACETWMLZD4520	
MODULATION TYPE	**GPRS**	GMSK
	EDGE	8PSK
	WCDMA	BPSK
	CDMA & EVDO	QPSK, OQPSK, HPSK
	LTE	QPSK, 16QAM
FREQUENCY RANGE	**GPRS, EDGE**	1850.2MHz ~ 1909.8MHz
	WCDMA	1852.4MHz ~ 1907.6MHz
	CDMA & EVDO	1851.25MHz ~ 1908.75MHz
	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	**GPRS**	2138.0mW
	EDGE	1023.3mW
	WCDMA	549.5mW
	CDMA & EVDO	572.8mW
	LTE Band 2 (Channel Bandwidth 1.4MHz)	QPSK: 660.7mW
	LTE Band 2 (Channel Bandwidth 3MHz)	QPSK: 616.6mW
	LTE Band 2 (Channel Bandwidth 5MHz)	QPSK: 631.0mW
	LTE Band 2 (Channel Bandwidth 10MHz)	QPSK: 562.3mW
	LTE Band 2 (Channel Bandwidth 15MHz)	QPSK: 575.4mW
	LTE Band 2 (Channel Bandwidth 20MHz)	QPSK: 524.8mW
	LTE Band 25 (Channel Bandwidth 1.4MHz)	QPSK: 524.8mW
	LTE Band 25 (Channel Bandwidth 3MHz)	QPSK: 501.2mW
	LTE Band 25 (Channel Bandwidth 5MHz)	QPSK: 478.6mW
	LTE Band 25 (Channel Bandwidth 10MHz)	QPSK: 524.8mW
	LTE Band 25 (Channel Bandwidth 15MHz)	QPSK: 501.2mW
	LTE Band 25 (Channel Bandwidth 20MHz)	QPSK: 562.3mW

EMISSION DESIGNATOR	**GPRS**	246KG7W
	EDGE	248KG7W
	WCDMA	4M18F9W
	EVDO	1M30F9W
	LTE Band 2 (Channel Bandwidth 1.4MHz)	QPSK: 1M24G7D
		16QAM: 1M24W7D
	LTE Band 2 (Channel Bandwidth 3MHz)	QPSK: 2M72G7D
		16QAM: 2M72W7D
	LTE Band 2 (Channel Bandwidth 5MHz)	QPSK: 4M48G7D
		16QAM: 4M52W7D
	LTE Band 2 (Channel Bandwidth 10MHz)	QPSK: 9M00G7D
		16QAM: 9M00W7D
	LTE Band 2 (Channel Bandwidth 15MHz)	QPSK: 13M4G7D
		16QAM: 13M4W7D
	LTE Band 2 (Channel Bandwidth 20MHz)	QPSK: 17M9G7D
		16QAM: 18M0W7D
	LTE Band 25 (Channel Bandwidth 1.4MHz)	QPSK: 1M23G7D
		16QAM: 1M23W7D
	LTE Band 25 (Channel Bandwidth 3MHz)	QPSK: 2M72G7D
		16QAM: 2M73W7D
	LTE Band 25 (Channel Bandwidth 5MHz)	QPSK: 4M50G7D
		16QAM: 4M50W7D
	LTE Band 25 (Channel Bandwidth 10MHz)	QPSK: 9M00G7D
		16QAM: 9M00W7D
	LTE Band 25 (Channel Bandwidth 15MHz)	QPSK: 13M5G7D
		16QAM: 13M4W7D
	LTE Band 25 (Channel Bandwidth 20MHz)	QPSK: 18M0G7D
		16QAM: 17M9W7D
MULTI-SLOTS CLASS	12	
WCDMA RELEASE VERSION	R8	
CATEGORY	LTE: 3	
ANTENNA TYPE	Refer to NOTE	
I/O PORTS	Refer to users' manual	
DATA CABLE	NA	
ACCESSORY DEVICES	NA	

NOTE:

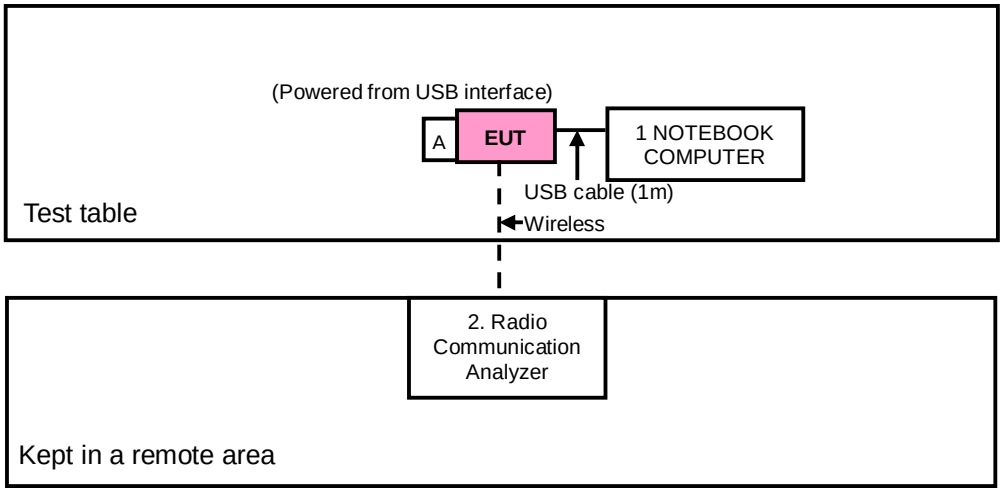
1. The antennas provided to the EUT, please refer to the following table:

Antenna	Antenna Type	Gain(dBi)	Frequency range (MHz to MHz)
1	PIFA	5.28	704~716
2	PIFA	6.33	777~915
3	PIFA	4.97	1710~2690

The EUT was tested with antenna 3.

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

3.2 CONFIGURATION OF SYSTEM UNDER TEST



NOTE: Item A is SIM card.

3.3 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP32LA	FSLB32S	FCC DoC
2	Radio Communication Analyzer	Anritsu	MT8820C	6201127458	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB cable (1m)
2	NA

NOTE:
1. All power cords of the above support units are non-shielded (1.8m).
2. Items 1-2 act as communication partners to transfer data.

3.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports The worst case was found when positioned on X-plane for GPRS/ WCDMA/ CDMA/ EVDO/ LTE Band 2 & Band 25 in radiated emission below 1GHz, Z-axis for GPRS/ WCDMA/ CDMA/ EVDO/ LTE Band 2 & Band 25 in EIRP and radiated emission above 1GHz. Following channel(s) was (were) selected for the final test as listed below:

GPRS MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
EIRP	512 to 810	512, 661, 810	GPRS, EDGE
FREQUENCY STABILITY	512 to 810	661	GPRS, EDGE
OCCUPIED BANDWIDTH	512 to 810	512, 661, 810	GPRS, EDGE
PEAK TO AVERAGE RATIO	512 to 810	512, 661, 810	GPRS, EDGE
BAND EDGE	512 to 810	512, 810	GPRS, EDGE
CONDCUDETED EMISSION	512 to 810	661	GPRS, EDGE
RADIATED EMISSION	512 to 810	661	GPRS, EDGE

WCDMA MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
EIRP	9262 to 9538	9262, 9400, 9538	WCDMA
FREQUENCY STABILITY	9262 to 9538	9400	WCDMA
OCCUPIED BANDWIDTH	9262 to 9538	9262, 9400, 9538	WCDMA
PEAK TO AVERAGE RATIO	9262 to 9538	9262, 9400, 9538	WCDMA
BAND EDGE	9262 to 9538	9262, 9538	WCDMA
CONDCUDETED EMISSION	9262 to 9538	9400	WCDMA
RADIATED EMISSION	9262 to 9538	9400	WCDMA

CDMA & EVDO MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
EIRP	25 to 1175	25, 600, 1175	EVDO Rev 0
FREQUENCY STABILITY	25 to 1175	600	EVDO Rev 0
OCCUPIED BANDWIDTH	25 to 1175	25, 600, 1175	EVDO Rev 0
PEAK TO AVERAGE RATIO	25 to 1175	25, 600, 1175	EVDO Rev 0
BAND EDGE	25 to 1175	25, 1175	EVDO Rev 0
CONDCUDETED EMISSION	25 to 1175	600	EVDO Rev 0
RADIATED EMISSION	25 to 1175	600	EVDO Rev 0

LTE BAND 2 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	18607 to 19193	18607, 18900 19193	1.4MHz	QPSK	1 RB / 0 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK	1 RB / 0 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK	1 RB / 0 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK	1 RB / 0 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK	1 RB / 0 RB Offset
FREQUENCY STABILITY	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
	18615 to 19185	18900	3MHz	QPSK	1 RB / 0 RB Offset
	18625 to 19175	18900	5MHz	QPSK	1 RB / 0 RB Offset
	18650 to 19150	18900	10MHz	QPSK	1 RB / 0 RB Offset
	18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	18607 to 19193	18607, 18900 19193	1.4MHz	QPSK / 16QAM	6 RB / 0 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK / 16QAM	15 RB / 0 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK / 16QAM	25 RB / 0 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK / 16QAM	50 RB / 0 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK / 16QAM	75 RB / 0 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK / 16QAM	100 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	18607 to 19193	18607, 18900 19193	1.4MHz	QPSK	1 RB / 0 RB Offset
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK	1 RB / 0 RB Offset
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK	1 RB / 0 RB Offset
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK	1 RB / 0 RB Offset
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK	1 RB / 0 RB Offset
BAND EDGE	18607 to 19193	18607, 19193	1.4MHz	QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
	18615 to 19185	18615, 19185	3MHz	QPSK	1 RB / 0 RB Offset
					15 RB / 0 RB Offset
	18625 to 19175	18625, 19175	5MHz	QPSK	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
	18650 to 19150	18650, 19150	10MHz	QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
	18675 to 19125	18675, 19125	15MHz	QPSK	1 RB / 0 RB Offset
					75 RB / 0 RB Offset
	18700 to 19100	18700. 19100	20MHz	QPSK	1 RB / 0 RB Offset
					100 RB / 0 RB Offset
CONDCUDETED EMISSION	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
	18615 to 19185	18900	3MHz	QPSK	1 RB / 0 RB Offset
	18625 to 19175	18900	5MHz	QPSK	1 RB / 0 RB Offset
	18650 to 19150	18900	10MHz	QPSK	1 RB / 0 RB Offset
	18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
RADIATED EMISSION	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
	18615 to 19185	18900	3MHz	QPSK	1 RB / 0 RB Offset
	18625 to 19175	18900	5MHz	QPSK	1 RB / 0 RB Offset
	18650 to 19150	18900	10MHz	QPSK	1 RB / 0 RB Offset
	18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
	18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset

LTE BAND 25 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK	1 RB / 0 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK	1 RB / 0 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK	1 RB / 0 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK	1 RB / 0 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK	1 RB / 0 RB Offset
FREQUENCY STABILITY	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 0 RB Offset
	26055 to 26675	26365	3MHz	QPSK	1 RB / 0 RB Offset
	26065 to 26665	26365	5MHz	QPSK	1 RB / 0 RB Offset
	26090 to 26640	26365	10MHz	QPSK	1 RB / 0 RB Offset
	26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK / 16QAM	6 RB / 0 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK / 16QAM	15 RB / 0 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK / 16QAM	25 RB / 0 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK / 16QAM	50 RB / 0 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK / 16QAM	75 RB / 0 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK / 16QAM	100 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK	1 RB / 0 RB Offset
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK	1 RB / 0 RB Offset
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK	1 RB / 0 RB Offset
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK	1 RB / 0 RB Offset
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK	1 RB / 0 RB Offset
BAND EDGE	26047 to 26683	26047, 26683	1.4MHz	QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
	26055 to 26675	26055, 26675	3MHz	QPSK	1 RB / 0 RB Offset
					15 RB / 0 RB Offset
	26065 to 26665	26065, 26665	5MHz	QPSK	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
	26090 to 26640	26090, 26640	10MHz	QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
	26115 to 26615	26115, 26615	15MHz	QPSK	1 RB / 0 RB Offset
					75 RB / 0 RB Offset
	26140 to 26590	26140, 26590	20MHz	QPSK	1 RB / 0 RB Offset
					100 RB / 0 RB Offset
CONDCUDETED EMISSION	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 0 RB Offset
	26055 to 26675	26365	3MHz	QPSK	1 RB / 0 RB Offset
	26065 to 26665	26365	5MHz	QPSK	1 RB / 0 RB Offset
	26090 to 26640	26365	10MHz	QPSK	1 RB / 0 RB Offset
	26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
RADIATED EMISSION	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 0 RB Offset
	26055 to 26675	26365	3MHz	QPSK	1 RB / 0 RB Offset
	26065 to 26665	26365	5MHz	QPSK	1 RB / 0 RB Offset
	26090 to 26640	26365	10MHz	QPSK	1 RB / 0 RB Offset
	26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
	26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
EIRP	25deg. C, 63%RH	3.3Vdc	Rex Huang
FREQUENCY STABILITY	25deg. C, 63%RH	3.3Vdc	Rex Huang
OCCUPIED BANDWIDTH	25deg. C, 63%RH	3.3Vdc	Rex Huang
PEAK TO AVERAGE RATIO	25deg. C, 63%RH	3.3Vdc	Rex Huang
BAND EDGE	25deg. C, 63%RH	3.3Vdc	Rex Huang
CONDCUDETED EMISSION	25deg. C, 63%RH	3.3Vdc	Rex Huang
RADIATED EMISSION	25deg. C, 63%RH	120Vac, 60Hz (SYSTEM)	Rex Huang

3.5 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

3.6 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

ANSI/TIA/EIA-603-C 2004

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

4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile and portable stations are limited to 2 watts EIRP

4.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 1MHz for GPRS & EDGE, 5MHz for CDMA, EVDO & WCDMA, and 10MHz for LTE mode.

b. Substitution method is used for EIRP 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

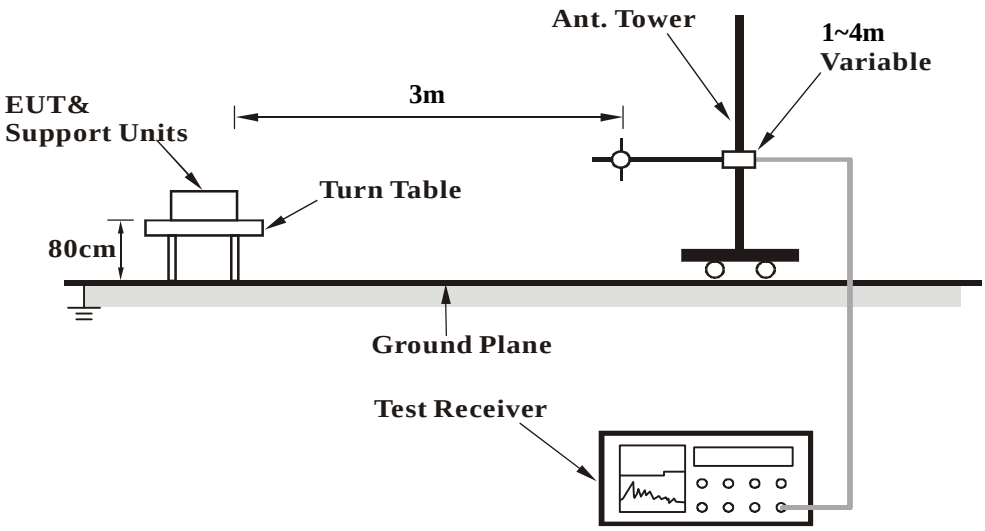
d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.

CONDUCTED POWER MEASUREMENT:

The EUT was set up for the maximum power with GPRS, EDGE, CDMA, EVDO, WCDMA & LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

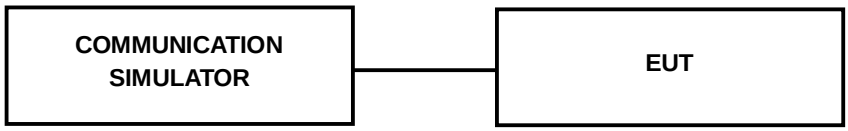
4.1.3 TEST SETUP

EIRP 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	GPRS1900		
Channel	512	661	810
Frequency (MHz)	1850.2	1880.0	1909.8
GPRS 8 (1 Uplink)	29.80	29.70	**29.90**
GPRS 10 (2 Uplink)	29.40	29.30	29.20
GPRS 11 (3 Uplink)	29.10	29.00	29.00
GPRS 12 (4 Uplink)	29.00	29.00	28.90
EDGE 8 (1 Uplink)	26.00	25.90	26.00
EDGE 10 (2 Uplink)	25.80	25.70	25.90
EDGE 11 (3 Uplink)	25.80	25.60	25.70
EDGE 12 (4 Uplink)	25.70	25.60	25.60

Band	WCDMA II		
Channel	9262	9400	9538
Frequency (MHz)	1852.4	1880.0	1907.6
RMC 12.2K	23.70	**24.40**	23.80
HSDPA Subtest-1	23.50	24.30	23.70
HSDPA Subtest-2	23.60	24.20	23.70
HSDPA Subtest-3	23.50	24.30	23.60
HSDPA Subtest-4	23.60	24.30	23.60
HSUPA Subtest-1	23.50	24.20	23.60
HSUPA Subtest-2	23.50	24.10	23.70
HSUPA Subtest-3	23.60	24.20	23.60
HSUPA Subtest-4	23.60	24.30	23.60
HSUPA Subtest-5	23.40	24.10	23.50

Band	CDMA2000 BC1		
Channel	25	600	1175
Frequency (MHz)	1851.25	1880.0	1908.75
RC1+SO55	23.50	**24.00**	23.80
RC3+SO55	23.30	**24.00**	23.70
RC3+SO32(+ F-SCH)	23.30	23.90	23.70
RC3+SO32(+SCH)	23.40	23.80	23.70
RTAP 153.6	23.60	**24.00**	23.70
RETAP 4096	23.50	23.90	23.60

LTE Band 2								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
1.4 MHz	QPSK	18607	1850.7	1	0	0	23.8	23.51
		18900	1880.0	1	0	0	23.8	**23.63**
		19193	1909.3	1	0	0	23.8	23.48
		18607	1850.7	1	2	0	23.8	23.3
		18900	1880.0	1	2	0	23.8	23.29
		19193	1909.3	1	2	0	23.8	23.27
		18607	1850.7	1	5	0	23.8	23.12
		18900	1880.0	1	5	0	23.8	23.39
		19193	1909.3	1	5	0	23.8	23.16
		18607	1850.7	3	0	0	23.8	23.28
		18900	1880.0	3	0	0	23.8	23.36
		19193	1909.3	3	0	0	23.8	23.25
		18607	1850.7	3	1	0	23.8	23.15
		18900	1880.0	3	1	0	23.8	23.38
		19193	1909.3	3	1	0	23.8	23.2
		18607	1850.7	3	3	0	23.8	23.2
		18900	1880.0	3	3	0	23.8	23.42
		19193	1909.3	3	3	0	23.8	23.25
		18607	1850.7	6	0	1	23.8	22.13
		18900	1880.0	6	0	1	23.8	22.28
		19193	1909.3	6	0	1	23.8	22.16
	16QAM	18607	1850.7	1	0	1	23.8	22.49
		18900	1880.0	1	0	1	23.8	22.61
		19193	1909.3	1	0	1	23.8	22.45
		18607	1850.7	1	2	1	23.8	22.27
		18900	1880.0	1	2	1	23.8	22.4
		19193	1909.3	1	2	1	23.8	22.09
		18607	1850.7	1	5	1	23.8	22.13
		18900	1880.0	1	5	1	23.8	22.39
		19193	1909.3	1	5	1	23.8	22.11
		18607	1850.7	3	0	1	23.8	22.22
		18900	1880.0	3	0	1	23.8	22.22
		19193	1909.3	3	0	1	23.8	22.14
		18607	1850.7	3	1	1	23.8	22.21
		18900	1880.0	3	1	1	23.8	22.37
		19193	1909.3	3	1	1	23.8	22.16
		18607	1850.7	3	3	1	23.8	22.17
		18900	1880.0	3	3	1	23.8	22.24
		19193	1909.3	3	3	1	23.8	22.21
		18607	1850.7	6	0	2	23.8	21.25
		18900	1880.0	6	0	2	23.8	21.34
		19193	1909.3	6	0	2	23.8	21.24

LTE Band 2								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
3 MHz	QPSK	18615	1851.5	1	0	0	23.8	23.65
		18900	1880.0	1	0	0	23.8	**23.69**
		19185	1908.5	1	0	0	23.8	23.67
		18615	1851.5	1	7	0	23.8	23.31
		18900	1880.0	1	7	0	23.8	23.45
		19185	1908.5	1	7	0	23.8	23.33
		18615	1851.5	1	14	0	23.8	23.41
		18900	1880.0	1	14	0	23.8	23.32
		19185	1908.5	1	14	0	23.8	23.37
		18615	1851.5	8	0	1	23.8	22.36
		18900	1880.0	8	0	1	23.8	22.33
		19185	1908.5	8	0	1	23.8	22.46
		18615	1851.5	8	3	1	23.8	22.44
		18900	1880.0	8	3	1	23.8	22.38
		19185	1908.5	8	3	1	23.8	22.42
		18615	1851.5	8	7	1	23.8	22.38
		18900	1880.0	8	7	1	23.8	22.31
		19185	1908.5	8	7	1	23.8	22.4
		18615	1851.5	15	0	1	23.8	22.27
		18900	1880.0	15	0	1	23.8	22.33
		19185	1908.5	15	0	1	23.8	22.44
	16QAM	18615	1851.5	1	0	1	23.8	22.58
		18900	1880.0	1	0	1	23.8	22.67
		19185	1908.5	1	0	1	23.8	22.57
		18615	1851.5	1	7	1	23.8	22.28
		18900	1880.0	1	7	1	23.8	22.39
		19185	1908.5	1	7	1	23.8	22.32
		18615	1851.5	1	14	1	23.8	22.23
		18900	1880.0	1	14	1	23.8	22.31
		19185	1908.5	1	14	1	23.8	22.23
		18615	1851.5	8	0	2	23.8	21.33
		18900	1880.0	8	0	2	23.8	21.33
		19185	1908.5	8	0	2	23.8	21.24
		18615	1851.5	8	3	2	23.8	21.35
		18900	1880.0	8	3	2	23.8	21.38
		19185	1908.5	8	3	2	23.8	21.23
		18615	1851.5	8	7	2	23.8	21.36
		18900	1880.0	8	7	2	23.8	21.3
		19185	1908.5	8	7	2	23.8	21.34
		18615	1851.5	15	0	2	23.8	21.25
		18900	1880.0	15	0	2	23.8	21.29
		19185	1908.5	15	0	2	23.8	21.24

LTE Band 2								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
5 MHz	QPSK	18625	1852.5	1	0	0	23.8	23.46
		18900	1880.0	1	0	0	23.8	**23.71**
		19175	1907.5	1	0	0	23.8	23.65
		18625	1852.5	1	12	0	23.8	23.25
		18900	1880.0	1	12	0	23.8	23.48
		19175	1907.5	1	12	0	23.8	23.43
		18625	1852.5	1	24	0	23.8	23.09
		18900	1880.0	1	24	0	23.8	23.35
		19175	1907.5	1	24	0	23.8	23.32
		18625	1852.5	12	0	1	23.8	22.25
		18900	1880.0	12	0	1	23.8	22.42
		19175	1907.5	12	0	1	23.8	22.32
		18625	1852.5	12	6	1	23.8	22.07
		18900	1880.0	12	6	1	23.8	22.47
		19175	1907.5	12	6	1	23.8	22.43
		18625	1852.5	12	13	1	23.8	22.08
		18900	1880.0	12	13	1	23.8	22.38
		19175	1907.5	12	13	1	23.8	22.44
		18625	1852.5	25	0	1	23.8	22.26
		18900	1880.0	25	0	1	23.8	22.5
		19175	1907.5	25	0	1	23.8	22.31
	16QAM	18625	1852.5	1	0	1	23.8	22.43
		18900	1880.0	1	0	1	23.8	22.68
		19175	1907.5	1	0	1	23.8	22.63
		18625	1852.5	1	12	1	23.8	22.14
		18900	1880.0	1	12	1	23.8	22.32
		19175	1907.5	1	12	1	23.8	22.42
		18625	1852.5	1	24	1	23.8	22.07
		18900	1880.0	1	24	1	23.8	22.43
		19175	1907.5	1	24	1	23.8	22.4
		18625	1852.5	12	0	2	23.8	21.16
		18900	1880.0	12	0	2	23.8	21.35
		19175	1907.5	12	0	2	23.8	21.38
		18625	1852.5	12	6	2	23.8	21.21
		18900	1880.0	12	6	2	23.8	21.44
		19175	1907.5	12	6	2	23.8	21.25
		18625	1852.5	12	13	2	23.8	21.12
		18900	1880.0	12	13	2	23.8	21.38
		19175	1907.5	12	13	2	23.8	21.31
		18625	1852.5	25	0	2	23.8	21.06
		18900	1880.0	25	0	2	23.8	21.29
		19175	1907.5	25	0	2	23.8	21.42

LTE Band 2								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
10MHz	QPSK	18650	1855.0	1	0	0	23.8	**23.54**
		18900	1880.0	1	0	0	23.8	23.29
		19150	1905.0	1	0	0	23.8	23.45
		18650	1855.0	1	24	0	23.8	23.26
		18900	1880.0	1	24	0	23.8	22.92
		19150	1905.0	1	24	0	23.8	23.13
		18650	1855.0	1	49	0	23.8	23.26
		18900	1880.0	1	49	0	23.8	22.96
		19150	1905.0	1	49	0	23.8	23.13
		18650	1855.0	25	0	1	23.8	22.33
		18900	1880.0	25	0	1	23.8	22.06
		19150	1905.0	25	0	1	23.8	22.1
		18650	1855.0	25	12	1	23.8	22.32
		18900	1880.0	25	12	1	23.8	22.09
		19150	1905.0	25	12	1	23.8	22.11
		18650	1855.0	25	25	1	23.8	22.31
		18900	1880.0	25	25	1	23.8	21.97
		19150	1905.0	25	25	1	23.8	22.25
		18650	1855.0	50	0	1	23.8	22.18
		18900	1880.0	50	0	1	23.8	21.94
		19150	1905.0	50	0	1	23.8	22.18
	16QAM	18650	1855.0	1	0	1	23.8	22.51
		18900	1880.0	1	0	1	23.8	22.29
		19150	1905.0	1	0	1	23.8	22.38
		18650	1855.0	1	24	1	23.8	22.13
		18900	1880.0	1	24	1	23.8	22.08
		19150	1905.0	1	24	1	23.8	22
		18650	1855.0	1	49	1	23.8	22.29
		18900	1880.0	1	49	1	23.8	22.07
		19150	1905.0	1	49	1	23.8	22.09
		18650	1855.0	25	0	2	23.8	21.26
		18900	1880.0	25	0	2	23.8	21
		19150	1905.0	25	0	2	23.8	21.15
		18650	1855.0	25	12	2	23.8	21.24
		18900	1880.0	25	12	2	23.8	20.94
		19150	1905.0	25	12	2	23.8	21.14
		18650	1855.0	25	25	2	23.8	21.2
		18900	1880.0	25	25	2	23.8	20.91
		19150	1905.0	25	25	2	23.8	21.15
		18650	1855.0	50	0	2	23.8	21.26
		18900	1880.0	50	0	2	23.8	21.01
		19150	1905.0	50	0	2	23.8	21.18

LTE Band 2								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
15MHz	QPSK	18675	1857.5	1	0	0	23.8	**23.29**
		18900	1880.0	1	0	0	23.8	23.18
		19125	1902.5	1	0	0	23.8	23.17
		18675	1857.5	1	37	0	23.8	22.9
		18900	1880.0	1	37	0	23.8	22.97
		19125	1902.5	1	37	0	23.8	22.89
		18675	1857.5	1	74	0	23.8	23.03
		18900	1880.0	1	74	0	23.8	22.94
		19125	1902.5	1	74	0	23.8	22.9
		18675	1857.5	36	0	1	23.8	21.95
		18900	1880.0	36	0	1	23.8	21.91
		19125	1902.5	36	0	1	23.8	21.81
		18675	1857.5	36	19	1	23.8	21.93
		18900	1880.0	36	19	1	23.8	21.82
		19125	1902.5	36	19	1	23.8	21.82
		18675	1857.5	36	39	1	23.8	21.93
		18900	1880.0	36	39	1	23.8	21.85
		19125	1902.5	36	39	1	23.8	21.84
		18675	1857.5	75	0	1	23.8	22.05
		18900	1880.0	75	0	1	23.8	21.85
		19125	1902.5	75	0	1	23.8	21.97
	16QAM	18675	1857.5	1	0	1	23.8	22.27
		18900	1880.0	1	0	1	23.8	22.2
		19125	1902.5	1	0	1	23.8	22.18
		18675	1857.5	1	37	1	23.8	22.02
		18900	1880.0	1	37	1	23.8	21.84
		19125	1902.5	1	37	1	23.8	21.9
		18675	1857.5	1	74	1	23.8	21.92
		18900	1880.0	1	74	1	23.8	21.95
		19125	1902.5	1	74	1	23.8	21.85
		18675	1857.5	36	0	2	23.8	20.91
		18900	1880.0	36	0	2	23.8	20.91
		19125	1902.5	36	0	2	23.8	20.95
		18675	1857.5	36	19	2	23.8	21.01
		18900	1880.0	36	19	2	23.8	20.98
		19125	1902.5	36	19	2	23.8	20.94
		18675	1857.5	36	39	2	23.8	20.95
		18900	1880.0	36	39	2	23.8	20.87
		19125	1902.5	36	39	2	23.8	20.93
		18675	1857.5	75	0	2	23.8	21.03
		18900	1880.0	75	0	2	23.8	20.93
		19125	1902.5	75	0	2	23.8	20.81

LTE Band 2								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
20MHz	QPSK	18700	1860.0	1	0	0	23.8	**23.41**
		18900	1880.0	1	0	0	23.8	23.31
		19100	1900.0	1	0	0	23.8	23.32
		18700	1860.0	1	50	0	23.8	23.2
		18900	1880.0	1	50	0	23.8	23.05
		19100	1900.0	1	50	0	23.8	23.1
		18700	1860.0	1	99	0	23.8	23.03
		18900	1880.0	1	99	0	23.8	22.92
		19100	1900.0	1	99	0	23.8	22.97
		18700	1860.0	50	0	1	23.8	22.16
		18900	1880.0	50	0	1	23.8	22.03
		19100	1900.0	50	0	1	23.8	21.96
		18700	1860.0	50	25	1	23.8	22.18
		18900	1880.0	50	25	1	23.8	22
		19100	1900.0	50	25	1	23.8	22.07
		18700	1860.0	50	50	1	23.8	22.08
		18900	1880.0	50	50	1	23.8	22.06
		19100	1900.0	50	50	1	23.8	22
		18700	1860.0	100	0	1	23.8	22.12
		18900	1880.0	100	0	1	23.8	22.03
		19100	1900.0	100	0	1	23.8	21.96
	16QAM	18700	1860.0	1	0	1	23.8	22.37
		18900	1880.0	1	0	1	23.8	22.29
		19100	1900.0	1	0	1	23.8	22.32
		18700	1860.0	1	50	1	23.8	22.07
		18900	1880.0	1	50	1	23.8	21.95
		19100	1900.0	1	50	1	23.8	22.1
		18700	1860.0	1	99	1	23.8	22.09
		18900	1880.0	1	99	1	23.8	21.93
		19100	1900.0	1	99	1	23.8	22.07
		18700	1860.0	50	0	2	23.8	21.06
		18900	1880.0	50	0	2	23.8	21.05
		19100	1900.0	50	0	2	23.8	21.01
		18700	1860.0	50	25	2	23.8	21.09
		18900	1880.0	50	25	2	23.8	20.93
		19100	1900.0	50	25	2	23.8	21.09
		18700	1860.0	50	50	2	23.8	20.99
		18900	1880.0	50	50	2	23.8	20.9
		19100	1900.0	50	50	2	23.8	21.05
		18700	1860.0	100	0	2	23.8	21.01
		18900	1880.0	100	0	2	23.8	20.96
		19100	1900.0	100	0	2	23.8	21.11

LTE Band 25								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
1.4 MHz	QPSK	26047	1850.7	1	0	0	23.8	**23.68**
		26365	1882.5	1	0	0	23.8	23.28
		26683	1914.3	1	0	0	23.8	23.41
		26047	1850.7	1	2	0	23.8	23.3
		26365	1882.5	1	2	0	23.8	23
		26683	1914.3	1	2	0	23.8	23.07
		26047	1850.7	1	5	0	23.8	23.3
		26365	1882.5	1	5	0	23.8	23.05
		26683	1914.3	1	5	0	23.8	23.06
		26047	1850.7	3	0	0	23.8	23.47
		26365	1882.5	3	0	0	23.8	23.04
		26683	1914.3	3	0	0	23.8	23.1
		26047	1850.7	3	1	0	23.8	23.43
		26365	1882.5	3	1	0	23.8	23.03
		26683	1914.3	3	1	0	23.8	23.16
		26047	1850.7	3	3	0	23.8	23.42
		26365	1882.5	3	3	0	23.8	22.92
		26683	1914.3	3	3	0	23.8	23.05
		26047	1850.7	6	0	1	23.8	22.32
		26365	1882.5	6	0	1	23.8	22.07
		26683	1914.3	6	0	1	23.8	22.11
	16QAM	26047	1850.7	1	0	1	23.8	22.57
		26365	1882.5	1	0	1	23.8	22.46
		26683	1914.3	1	0	1	23.8	22.36
		26047	1850.7	1	2	1	23.8	22.28
		26365	1882.5	1	2	1	23.8	22.12
		26683	1914.3	1	2	1	23.8	22.14
		26047	1850.7	1	5	1	23.8	22.31
		26365	1882.5	1	5	1	23.8	22.17
		26683	1914.3	1	5	1	23.8	22.05
		26047	1850.7	3	0	1	23.8	22.23
		26365	1882.5	3	0	1	23.8	22.11
		26683	1914.3	3	0	1	23.8	22.14
		26047	1850.7	3	1	1	23.8	22.32
		26365	1882.5	3	1	1	23.8	22.24
		26683	1914.3	3	1	1	23.8	22.06
		26047	1850.7	3	3	1	23.8	22.29
		26365	1882.5	3	3	1	23.8	22.11
		26683	1914.3	3	3	1	23.8	22.01
		26047	1850.7	6	0	2	23.8	21.21
		26365	1882.5	6	0	2	23.8	21.11
		26683	1914.3	6	0	2	23.8	21.09

LTE Band 25								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
3 MHz	QPSK	26055	1851.5	1	0	0	23.8	**23.65**
		26365	1882.5	1	0	0	23.8	23.23
		26675	1913.5	1	0	0	23.8	23.51
		26055	1851.5	1	7	0	23.8	23.33
		26365	1882.5	1	7	0	23.8	23
		26675	1913.5	1	7	0	23.8	23.29
		26055	1851.5	1	14	0	23.8	23.32
		26365	1882.5	1	14	0	23.8	22.87
		26675	1913.5	1	14	0	23.8	23.17
		26055	1851.5	8	0	1	23.8	22.34
		26365	1882.5	8	0	1	23.8	21.88
		26675	1913.5	8	0	1	23.8	22.14
		26055	1851.5	8	3	1	23.8	22.26
		26365	1882.5	8	3	1	23.8	21.87
		26675	1913.5	8	3	1	23.8	22.15
		26055	1851.5	8	7	1	23.8	22.41
		26365	1882.5	8	7	1	23.8	21.9
		26675	1913.5	8	7	1	23.8	22.13
		26055	1851.5	15	0	1	23.8	22.41
		26365	1882.5	15	0	1	23.8	21.98
		26675	1913.5	15	0	1	23.8	22.2
	16QAM	26055	1851.5	1	0	1	23.8	22.56
		26365	1882.5	1	0	1	23.8	22.18
		26675	1913.5	1	0	1	23.8	22.47
		26055	1851.5	1	7	1	23.8	22.18
		26365	1882.5	1	7	1	23.8	21.94
		26675	1913.5	1	7	1	23.8	22.12
		26055	1851.5	1	14	1	23.8	22.33
		26365	1882.5	1	14	1	23.8	21.95
		26675	1913.5	1	14	1	23.8	22.08
		26055	1851.5	8	0	2	23.8	21.32
		26365	1882.5	8	0	2	23.8	20.95
		26675	1913.5	8	0	2	23.8	21.2
		26055	1851.5	8	3	2	23.8	21.29
		26365	1882.5	8	3	2	23.8	20.94
		26675	1913.5	8	3	2	23.8	21.21
		26055	1851.5	8	7	2	23.8	21.3
		26365	1882.5	8	7	2	23.8	20.85
		26675	1913.5	8	7	2	23.8	21.21
		26055	1851.5	15	0	2	23.8	21.26
		26365	1882.5	15	0	2	23.8	20.94
		26675	1913.5	15	0	2	23.8	21.13

LTE Band 25								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
5 MHz	QPSK	26065	1852.5	1	0	0	23.8	**23.73**
		26365	1882.5	1	0	0	23.8	23.26
		26665	1912.5	1	0	0	23.8	23.45
		26065	1852.5	1	12	0	23.8	23.34
		26365	1882.5	1	12	0	23.8	22.95
		26665	1912.5	1	12	0	23.8	23.13
		26065	1852.5	1	24	0	23.8	23.44
		26365	1882.5	1	24	0	23.8	22.95
		26665	1912.5	1	24	0	23.8	23.18
		26065	1852.5	12	0	1	23.8	22.49
		26365	1882.5	12	0	1	23.8	21.96
		26665	1912.5	12	0	1	23.8	22.22
		26065	1852.5	12	6	1	23.8	22.5
		26365	1882.5	12	6	1	23.8	22.03
		26665	1912.5	12	6	1	23.8	22.07
		26065	1852.5	12	13	1	23.8	22.52
		26365	1882.5	12	13	1	23.8	21.97
		26665	1912.5	12	13	1	23.8	22.1
		26065	1852.5	25	0	1	23.8	22.53
		26365	1882.5	25	0	1	23.8	21.89
		26665	1912.5	25	0	1	23.8	22.19
	16QAM	26065	1852.5	1	0	1	23.8	22.71
		26365	1882.5	1	0	1	23.8	22.2
		26665	1912.5	1	0	1	23.8	22.38
		26065	1852.5	1	12	1	23.8	22.48
		26365	1882.5	1	12	1	23.8	21.93
		26665	1912.5	1	12	1	23.8	22.08
		26065	1852.5	1	24	1	23.8	22.47
		26365	1882.5	1	24	1	23.8	21.99
		26665	1912.5	1	24	1	23.8	22.03
		26065	1852.5	12	0	2	23.8	21.38
		26365	1882.5	12	0	2	23.8	21
		26665	1912.5	12	0	2	23.8	21.12
		26065	1852.5	12	6	2	23.8	21.41
		26365	1882.5	12	6	2	23.8	20.95
		26665	1912.5	12	6	2	23.8	20.99
		26065	1852.5	12	13	2	23.8	21.42
		26365	1882.5	12	13	2	23.8	20.94
		26665	1912.5	12	13	2	23.8	21.11
		26065	1852.5	25	0	2	23.8	21.34
		26365	1882.5	25	0	2	23.8	20.82
		26665	1912.5	25	0	2	23.8	21.13

LTE Band 25								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
10 MHz	QPSK	26090	1855.0	1	0	0	23.8	**23.68**
		26365	1882.5	1	0	0	23.8	23.51
		26640	1910.0	1	0	0	23.8	23.29
		26090	1855.0	1	24	0	23.8	23.35
		26365	1882.5	1	24	0	23.8	23.14
		26640	1910.0	1	24	0	23.8	23.03
		26090	1855.0	1	49	0	23.8	23.42
		26365	1882.5	1	49	0	23.8	23.23
		26640	1910.0	1	49	0	23.8	22.97
		26090	1855.0	25	0	1	23.8	22.43
		26365	1882.5	25	0	1	23.8	22.24
		26640	1910.0	25	0	1	23.8	22.03
		26090	1855.0	25	12	1	23.8	22.31
		26365	1882.5	25	12	1	23.8	22.13
		26640	1910.0	25	12	1	23.8	22.06
		26090	1855.0	25	25	1	23.8	22.39
		26365	1882.5	25	25	1	23.8	22.29
		26640	1910.0	25	25	1	23.8	21.99
		26090	1855.0	50	0	1	23.8	22.3
		26365	1882.5	50	0	1	23.8	22.17
		26640	1910.0	50	0	1	23.8	22.08
	16QAM	26090	1855.0	1	0	1	23.8	22.58
		26365	1882.5	1	0	1	23.8	22.46
		26640	1910.0	1	0	1	23.8	22.29
		26090	1855.0	1	24	1	23.8	22.35
		26365	1882.5	1	24	1	23.8	22.23
		26640	1910.0	1	24	1	23.8	21.94
		26090	1855.0	1	49	1	23.8	22.29
		26365	1882.5	1	49	1	23.8	22.19
		26640	1910.0	1	49	1	23.8	21.99
		26090	1855.0	25	0	2	23.8	21.2
		26365	1882.5	25	0	2	23.8	21.24
		26640	1910.0	25	0	2	23.8	21.07
		26090	1855.0	25	12	2	23.8	21.33
		26365	1882.5	25	12	2	23.8	21.21
		26640	1910.0	25	12	2	23.8	21
		26090	1855.0	25	25	2	23.8	21.31
		26365	1882.5	25	25	2	23.8	21.25
		26640	1910.0	25	25	2	23.8	21.07
		26090	1855.0	50	0	2	23.8	21.35
		26365	1882.5	50	0	2	23.8	21.18
		26640	1910.0	50	0	2	23.8	20.92

LTE Band 25								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
15 MHz	QPSK	26115	1857.5	1	0	0	23.8	**23.68**
		26365	1882.5	1	0	0	23.8	23.51
		26615	1907.5	1	0	0	23.8	23.29
		26115	1857.5	1	37	0	23.8	23.41
		26365	1882.5	1	37	0	23.8	23.19
		26615	1907.5	1	37	0	23.8	22.95
		26115	1857.5	1	74	0	23.8	23.36
		26365	1882.5	1	74	0	23.8	23.12
		26615	1907.5	1	74	0	23.8	23.08
		26115	1857.5	36	0	1	23.8	22.3
		26365	1882.5	36	0	1	23.8	22.25
		26615	1907.5	36	0	1	23.8	21.95
		26115	1857.5	36	19	1	23.8	22.31
		26365	1882.5	36	19	1	23.8	22.22
		26615	1907.5	36	19	1	23.8	22.03
		26115	1857.5	36	39	1	23.8	22.36
		26365	1882.5	36	39	1	23.8	22.19
		26615	1907.5	36	39	1	23.8	22.07
		26115	1857.5	75	0	1	23.8	22.48
		26365	1882.5	75	0	1	23.8	22.12
		26615	1907.5	75	0	1	23.8	21.98
	16QAM	26115	1857.5	1	0	1	23.8	22.58
		26365	1882.5	1	0	1	23.8	22.46
		26615	1907.5	1	0	1	23.8	22.29
		26115	1857.5	1	37	1	23.8	22.33
		26365	1882.5	1	37	1	23.8	22.16
		26615	1907.5	1	37	1	23.8	22.07
		26115	1857.5	1	74	1	23.8	22.27
		26365	1882.5	1	74	1	23.8	22.2
		26615	1907.5	1	74	1	23.8	22.07
		26115	1857.5	36	0	2	23.8	21.34
		26365	1882.5	36	0	2	23.8	21.19
		26615	1907.5	36	0	2	23.8	21.06
		26115	1857.5	36	19	2	23.8	21.28
		26365	1882.5	36	19	2	23.8	21.13
		26615	1907.5	36	19	2	23.8	20.96
		26115	1857.5	36	39	2	23.8	21.37
		26365	1882.5	36	39	2	23.8	21.21
		26615	1907.5	36	39	2	23.8	20.92
		26115	1857.5	75	0	2	23.8	21.23
		26365	1882.5	75	0	2	23.8	21.12
		26615	1907.5	75	0	2	23.8	21.04

LTE Band 25								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
20 MHz	QPSK	26140	1860.0	1	0	0	23.8	**23.68**
		26365	1882.5	1	0	0	23.8	23.51
		26590	1905.0	1	0	0	23.8	23.29
		26140	1860.0	1	50	0	23.8	23.3
		26365	1882.5	1	50	0	23.8	23.17
		26590	1905.0	1	50	0	23.8	23.05
		26140	1860.0	1	99	0	23.8	23.34
		26365	1882.5	1	99	0	23.8	23.26
		26590	1905.0	1	99	0	23.8	22.9
		26140	1860.0	50	0	1	23.8	22.44
		26365	1882.5	50	0	1	23.8	22.13
		26590	1905.0	50	0	1	23.8	21.99
		26140	1860.0	50	25	1	23.8	22.44
		26365	1882.5	50	25	1	23.8	22.21
		26590	1905.0	50	25	1	23.8	21.94
		26140	1860.0	50	50	1	23.8	22.45
		26365	1882.5	50	50	1	23.8	22.29
		26590	1905.0	50	50	1	23.8	22.06
		26140	1860.0	100	0	1	23.8	22.38
		26365	1882.5	100	0	1	23.8	22.23
		26590	1905.0	100	0	1	23.8	22
	16QAM	26140	1860.0	1	0	1	23.8	22.58
		26365	1882.5	1	0	1	23.8	22.46
		26590	1905.0	1	0	1	23.8	22.29
		26140	1860.0	1	50	1	23.8	22.24
		26365	1882.5	1	50	1	23.8	22.09
		26590	1905.0	1	50	1	23.8	22.06
		26140	1860.0	1	99	1	23.8	22.26
		26365	1882.5	1	99	1	23.8	22.13
		26590	1905.0	1	99	1	23.8	22.06
		26140	1860.0	50	0	2	23.8	21.2
		26365	1882.5	50	0	2	23.8	21.11
		26590	1905.0	50	0	2	23.8	21.01
		26140	1860.0	50	25	2	23.8	21.35
		26365	1882.5	50	25	2	23.8	21.26
		26590	1905.0	50	25	2	23.8	20.99
		26140	1860.0	50	50	2	23.8	21.31
		26365	1882.5	50	50	2	23.8	21.15
		26590	1905.0	50	50	2	23.8	21.04
		26140	1860.0	100	0	2	23.8	21.23
		26365	1882.5	100	0	2	23.8	21.14
		26590	1905.0	100	0	2	23.8	20.9

EIRP POWER (dBm)

GPRS

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	512	1850.2	26.7	6.6	33.3	2138.0
	661	1880.0	26.2	6.7	32.9	1949.8
	810	1909.8	26.2	6.7	32.9	1949.8

EDGE

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)
Z	512	1850.2	22.8	6.6	29.4	871.0
	661	1880.0	23.1	6.7	29.8	955.0
	810	1909.8	23.4	6.7	30.1	1023.3

WCDMA

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	9262	1852.4	20.2	6.6	26.8	478.6
	9400	1880.0	20.7	6.7	27.4	549.5
	9538	1907.6	20.7	6.7	27.4	549.5

CDMA & EVDO

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	25	1851.25	20.7	6.6	27.3	537.03
	600	1880.0	20.9	6.7	27.6	572.80
	1175	1908.75	20.2	6.7	26.9	486.41

LTE Band 2

Channel Bandwidth: 1.4MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	18607	1850.7	21.3	6.6	27.9	616.6
	18900	1880.0	21.5	6.7	28.2	660.7
	19193	1909.3	20.7	6.7	27.4	549.5

Channel Bandwidth: 3MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	18615	1851.5	21.1	6.6	27.7	588.8
	18900	1880.0	21.2	6.7	27.9	616.6
	19185	1908.5	20.7	6.7	27.4	549.5

Channel Bandwidth: 5MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	18625	1852.5	21.2	6.6	27.8	602.6
	18900	1880.0	21.3	6.7	28.0	631.0
	19175	1907.5	20.7	6.7	27.4	549.5

Channel Bandwidth: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	18650	1855.0	20.9	6.6	27.5	562.3
	18900	1880.0	20.7	6.7	27.4	549.5
	19150	1905.0	20.3	6.7	27.0	501.2

Channel Bandwidth: 15MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	18675	1857.5	21.0	6.6	27.6	575.4
	18900	1880.0	20.8	6.7	27.5	562.3
	19125	1902.5	20.2	6.7	26.9	489.8

Channel Bandwidth: 20MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	18700	1860.0	20.1	6.6	26.7	467.7
	18900	1880.0	20.5	6.7	27.2	524.8
	19100	1900.0	19.9	6.7	26.6	457.1

LTE Band 25

Channel Bandwidth: 1.4MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	26047	1850.7	20.4	6.6	27.0	501.2
	26365	1882	20.5	6.7	27.2	524.8
	26683	1914.3	20.2	6.7	26.9	489.8

Channel Bandwidth: 3MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	26055	1851.5	20.3	6.6	26.9	489.8
	26365	1882.5	20.3	6.7	27.0	501.2
	26675	1913.5	20.0	6.7	26.7	467.7

Channel Bandwidth: 5MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	26065	1852.5	20.2	6.6	26.8	478.6
	26365	1882.5	20.0	6.7	26.7	467.7
	26665	1912.5	20.1	6.7	26.8	478.6

Channel Bandwidth: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	26090	1855.0	20.6	6.6	27.2	524.8
	26365	1882.5	20.5	6.7	27.2	524.8
	26640	1910.0	20.2	6.7	26.9	489.8

Channel Bandwidth: 15MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	26115	1857.5	20.4	6.6	27.0	501.2
	26365	1882.5	20.2	6.7	26.9	489.8
	26615	1907.5	19.8	6.7	26.5	446.7

Channel Bandwidth: 20MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
Z	26140	1860.0	20.9	6.6	27.5	562.3
	26365	1882.5	20.7	6.7	27.4	549.5
	26590	1905.0	20.2	6.7	26.9	489.8

4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

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

4.2.2 TEST PROCEDURE

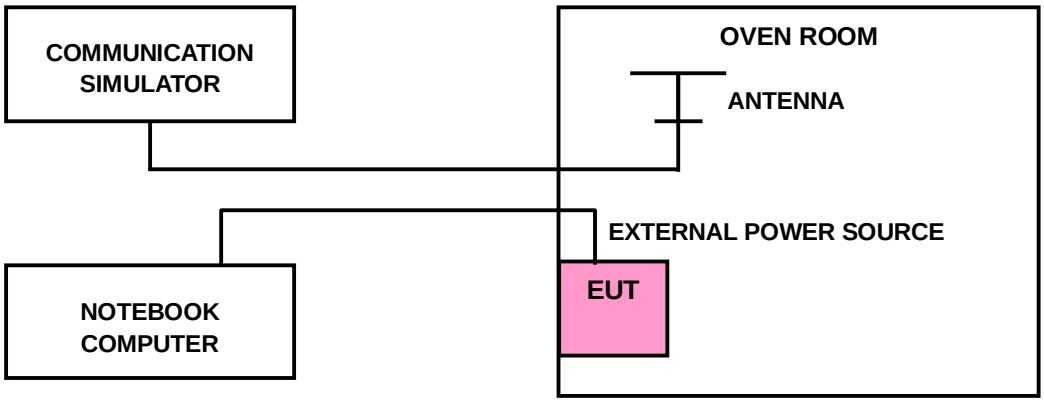
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected notebook. The test voltage range is from 102 to 138 working voltage. Each step shall be record the frequency error rate.

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

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

4.2.3 TEST SETUP



4.2.4 TEST RESULTS

FREQUENCY ERROR VS. VOLTAGE

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)								LIMIT (ppm)
	GPRS	EDGE	WCDMA	CDMA & EVDO	LTE Band 2				
					1.4MHz	3MHz	5MHz	10MHz	
102	0.007	0.009	0.010	-0.011	0.001	0.001	0.002	0.002	2.5
138	0.008	0.008	0.009	-0.009	0.001	0.002	0.002	0.002	2.5

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)								LIMIT (ppm)
	LTE Band 2		LTE Band 25						
	15MHz	20MHz	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
102	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.002	2.5
138	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.001	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 102Vac to 138Vac.

FREQUENCY ERROR vs. TEMPERATURE

TEMP. (℃)	FREQUENCY ERROR (ppm)								LIMIT (ppm)
	GPRS	EDGE	WCDMA	CDMA & EVDO	LTE Band 2				
					1.4MHz	3MHz	5MHz	10MHz	
75	0.017	0.016	0.018	-0.016	0.001	0.002	0.002	0.002	2.5
70	0.016	0.017	0.016	-0.015	0.002	0.002	0.002	0.002	2.5
60	0.015	0.014	0.016	-0.014	0.002	0.001	0.001	0.002	2.5
50	0.013	0.013	0.013	-0.014	0.001	0.002	0.002	0.002	2.5
40	0.012	0.013	0.011	-0.013	0.002	0.001	0.001	0.002	2.5
30	0.010	0.011	0.011	-0.012	0.001	0.002	0.001	0.002	2.5
20	0.009	0.010	0.010	-0.010	0.002	0.002	0.002	0.001	2.5
10	0.010	0.010	0.010	-0.009	0.002	0.002	0.002	0.002	2.5
0	0.012	0.013	0.011	-0.009	0.002	0.001	0.002	0.002	2.5
-10	0.014	0.014	0.012	-0.011	0.002	0.002	0.002	0.002	2.5
-20	0.015	0.014	0.013	-0.013	0.002	0.002	0.001	0.002	2.5
-30	0.019	0.018	0.014	-0.014	0.002	0.001	0.001	0.001	2.5

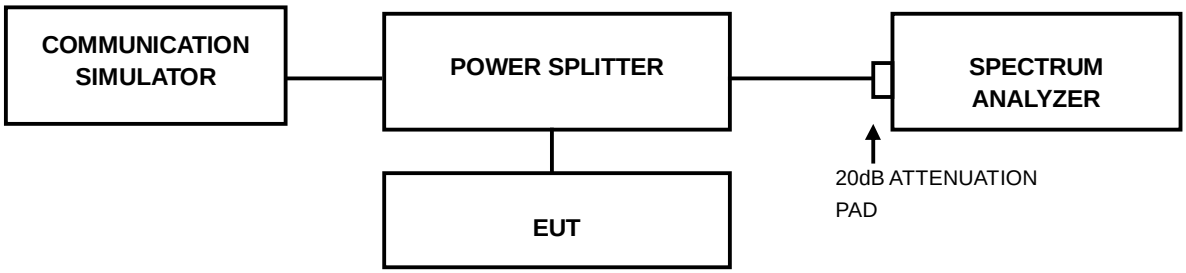
TEMP. (℃)	FREQUENCY ERROR (ppm)								LIMIT (ppm)
	LTE Band 2		LTE Band 25						
	15MHz	20MHz	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
75	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	2.5
70	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.001	2.5
60	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	2.5
50	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.001	2.5
40	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.001	2.5
30	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	2.5
20	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	2.5
10	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	2.5
0	0.002	0.001	0.002	0.001	0.001	0.001	0.002	0.002	2.5
-10	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	2.5
-20	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	2.5
-30	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	2.5

4.3 OCCUPIED BANDWIDTH MEASUREMENT

4.3.1 TEST PROCEDURES

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



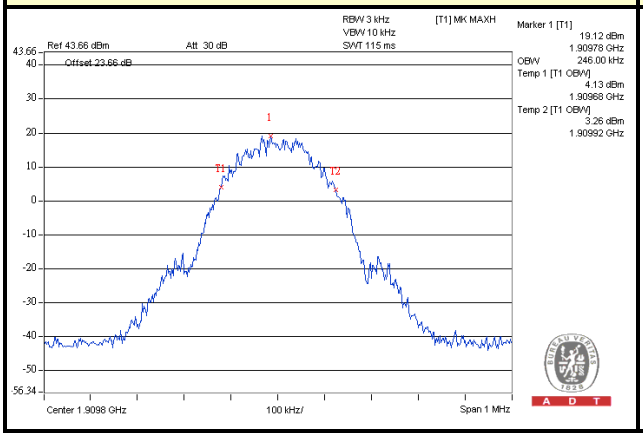
4.3.3 TEST RESULTS

GPRS/EDGE

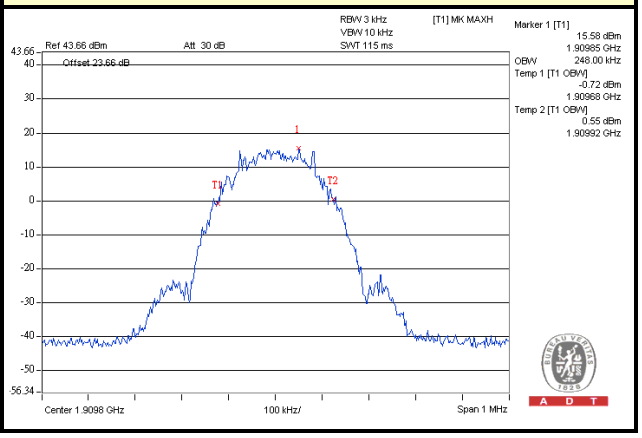
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (kHz)	
		GPRS	EDGE
512	1850.2	242	244
661	1880.0	244	248
810	1909.8	246	248

SPECTRUM PLOT OF WORST VALUE

GPRS



EDGE

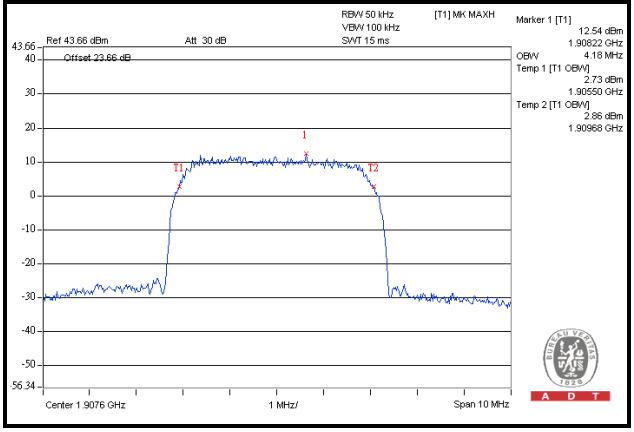


WCDMA

CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)
		WCDMA
9262	1852.4	4.18
9400	1880.0	4.16
9538	1907.6	4.18

SPECTRUM PLOT OF WORST VALUE

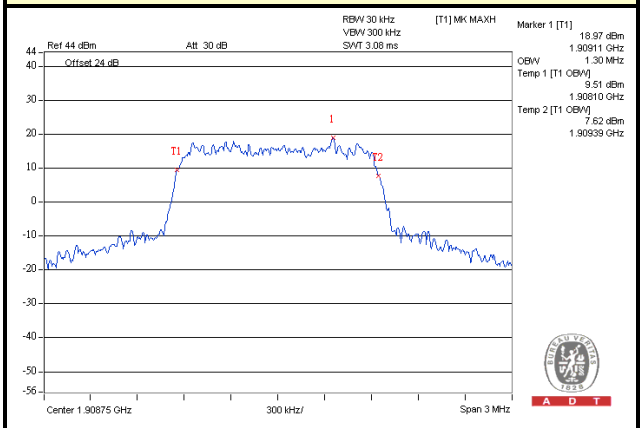
WCDMA



CDMA & EVDO

CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)
25	1851.25	1.29
600	1880.0	1.29
1175	1908.75	1.30

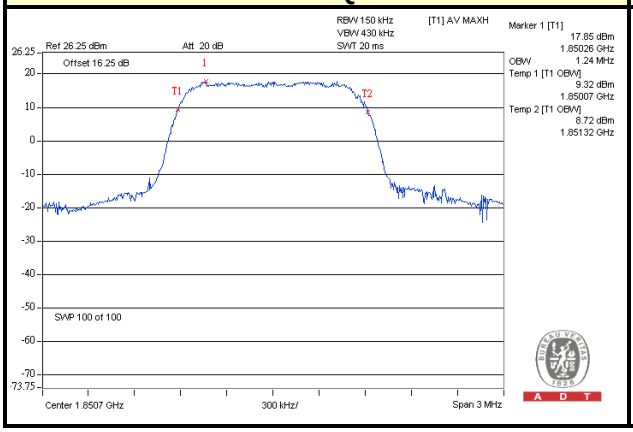
SPECTRUM PLOT OF WORST VALUE
CDMA & EVDO



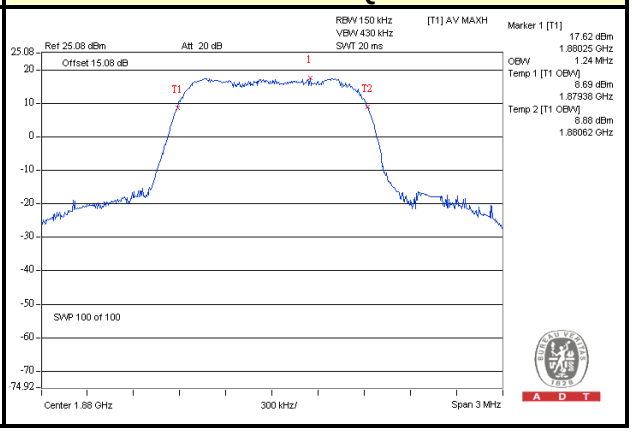
LTE BAND 2							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18607	1850.7	1.24	1.23	18615	1851.5	2.72	2.72
18900	1880.0	1.23	1.24	18900	1880.0	2.72	2.72
19193	1909.3	1.23	1.22	19185	1908.5	2.72	2.72
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18625	1852.5	4.48	4.50	18650	1855.0	9.00	9.00
18900	1880.0	4.48	4.52	18900	1880.0	9.00	9.00
19175	1907.5	4.48	4.48	19150	1905.0	9.00	8.97
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18675	1857.5	13.43	13.37	18700	1860.0	17.93	17.93
18900	1880.0	13.37	13.40	18900	1880.0	17.93	17.93
19125	1902.5	13.33	13.37	19100	1900.0	17.93	18.00

SPECTRUM PLOT OF WORST VALUE

1.4MHz / QPSK

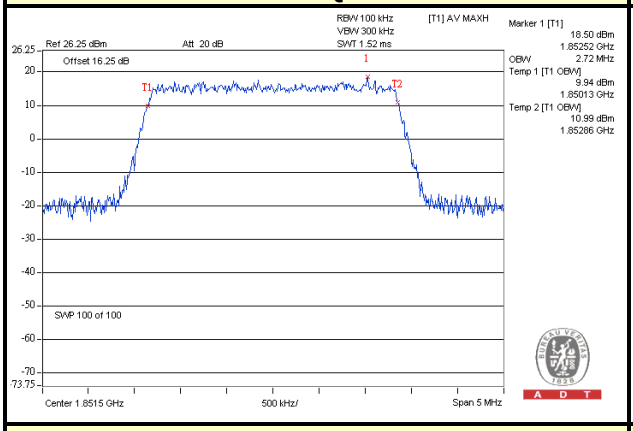


1.4MHz / 16QAM

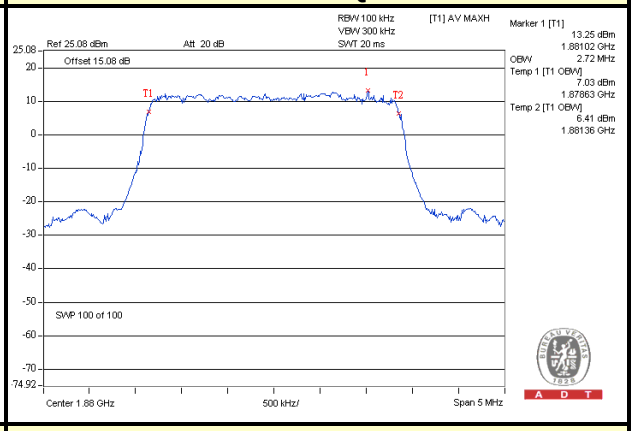


SPECTRUM PLOT OF WORST VALUE

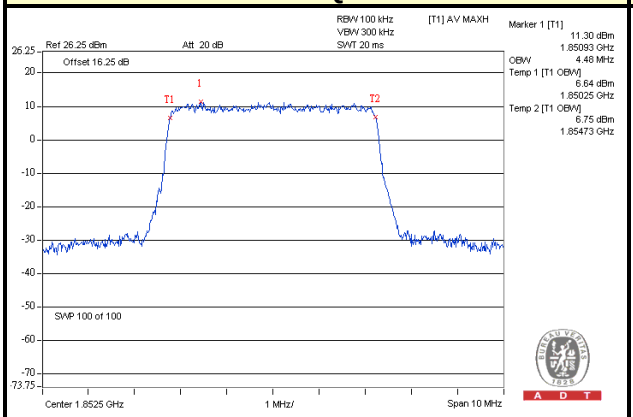
3MHz / QPSK



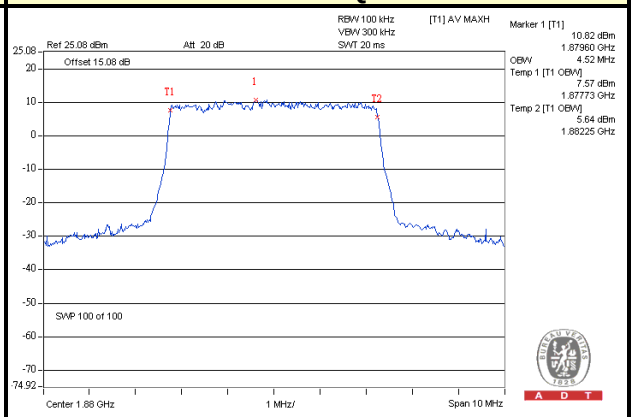
3MHz / 16QAM



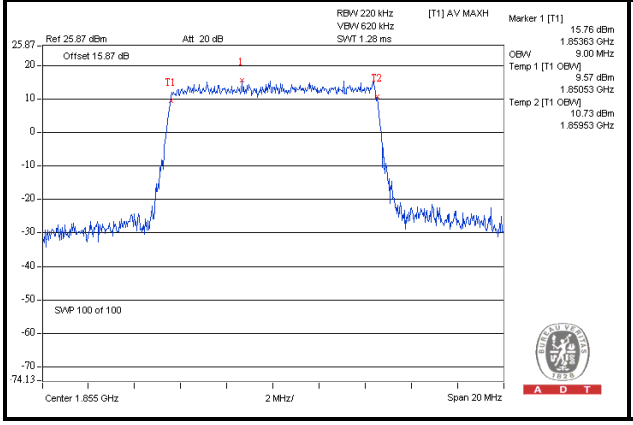
5MHz / QPSK



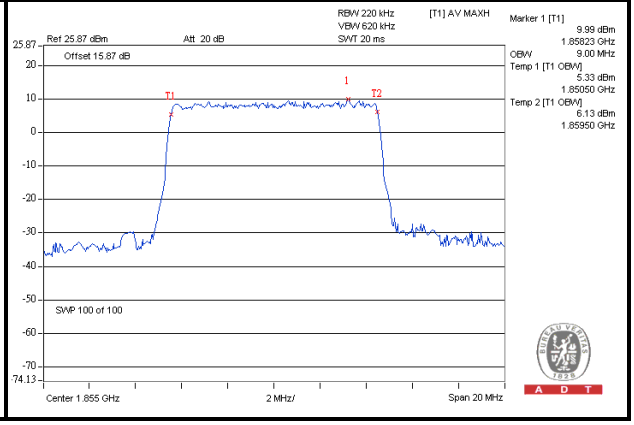
5MHz / 16QAM



10MHz / QPSK

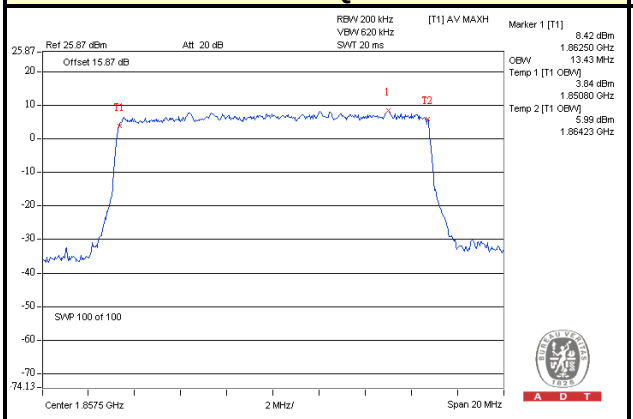


10MHz / 16QAM

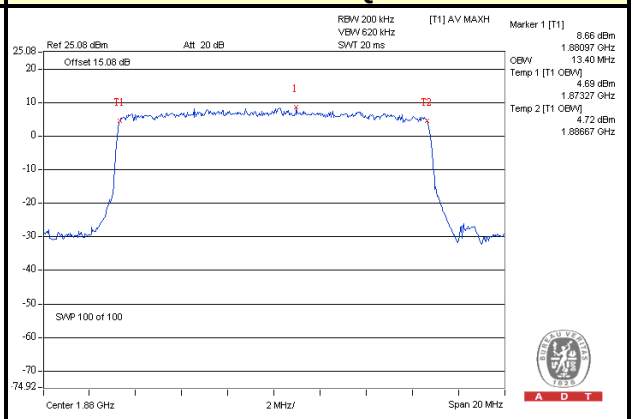


SPECTRUM PLOT OF WORST VALUE

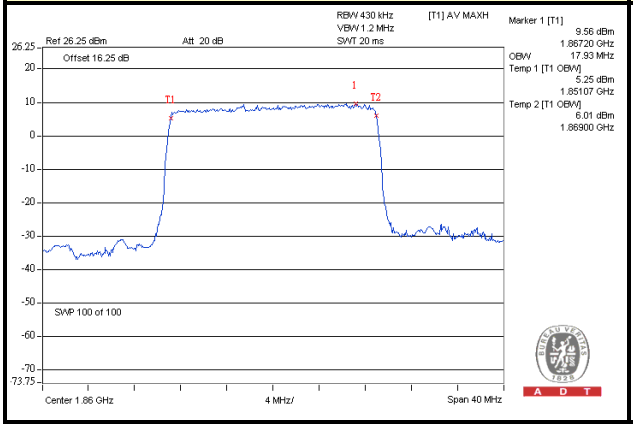
15MHz / QPSK



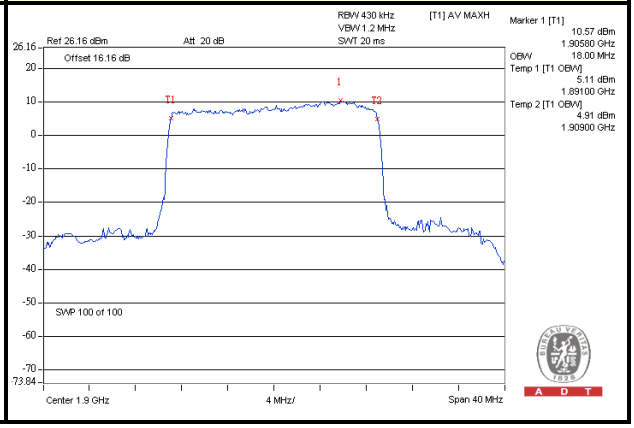
15MHz / 16QAM



20MHz / QPSK

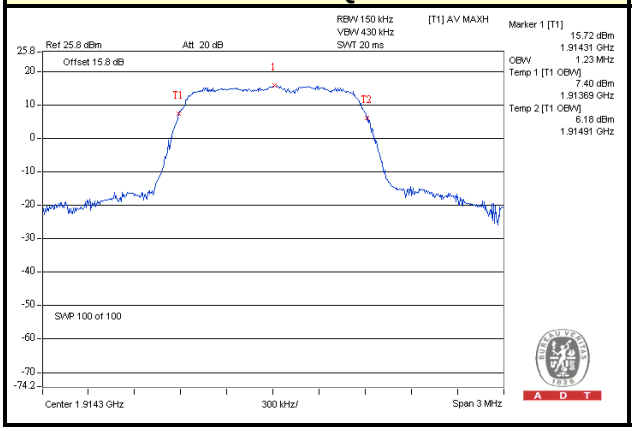


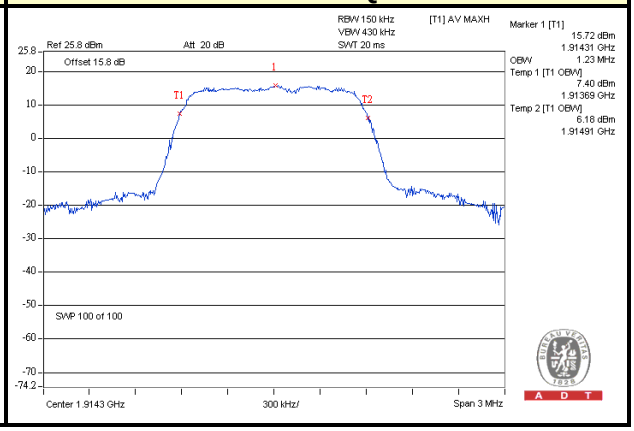
20MHz / 16QAM



LTE BAND 25							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26047	1850.7	1.22	1.23	26055	1851.5	2.72	2.73
26365	1882.5	1.22	1.22	26365	1882.5	2.72	2.72
26683	1914.3	1.23	1.23	26675	1913.5	2.72	2.73
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26065	1852.5	4.50	4.50	26090	1855.0	9.00	9.00
26365	1882.5	4.48	4.50	26365	1882.5	8.97	9.00
26665	1912.5	4.50	4.50	26640	1910.0	9.00	9.00
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26115	1857.5	13.47	13.43	26140	1860.0	18.00	17.93
26365	1882.5	13.33	13.43	26365	1882.5	17.93	17.93
26615	1907.5	13.33	13.33	26590	1905.0	17.87	17.87

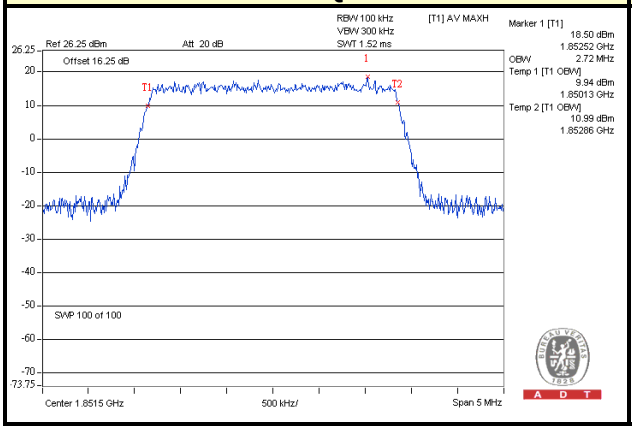
SPECTRUM PLOT OF WORST VALUE	
1.4MHz / QPSK	1.4MHz / 16QAM



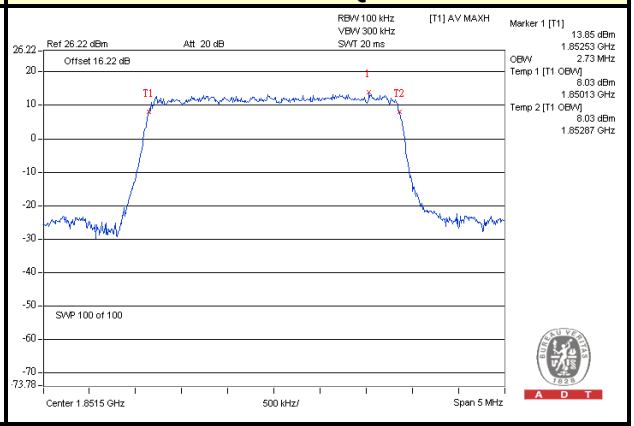


SPECTRUM PLOT OF WORST VALUE

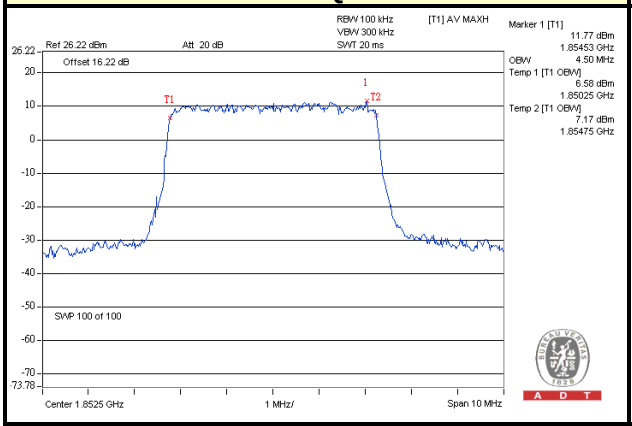
3MHz / QPSK



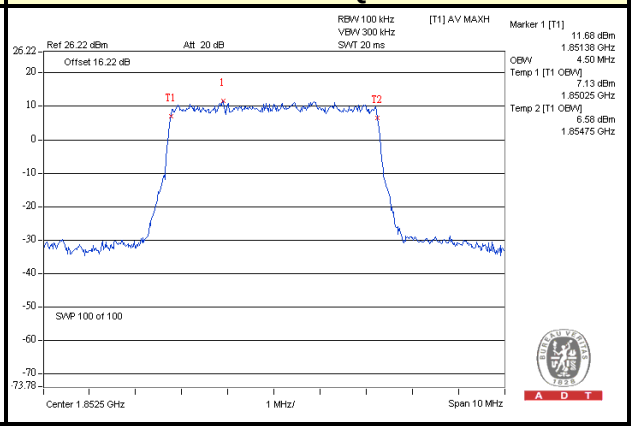
3MHz / 16QAM



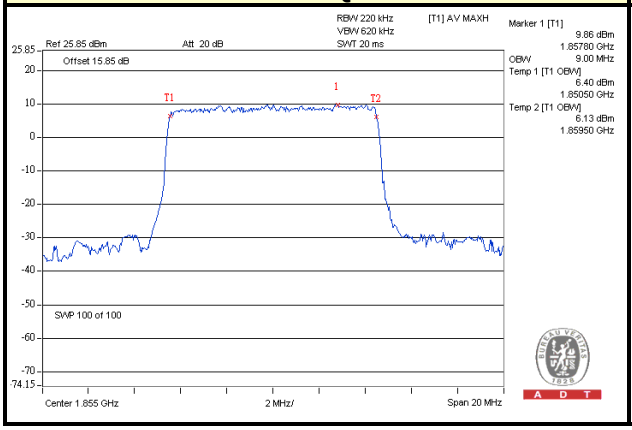
5MHz / QPSK



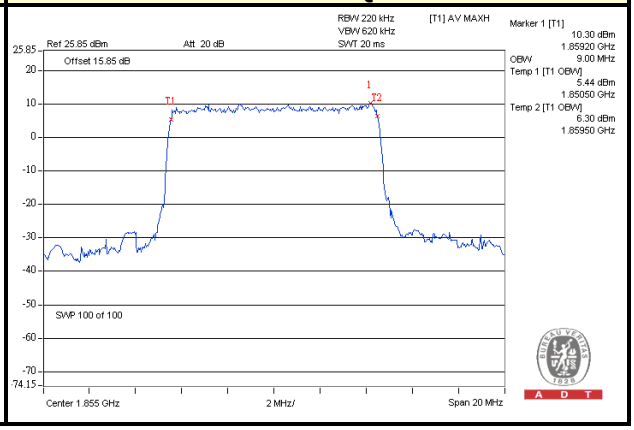
5MHz / 16QAM



10MHz / QPSK

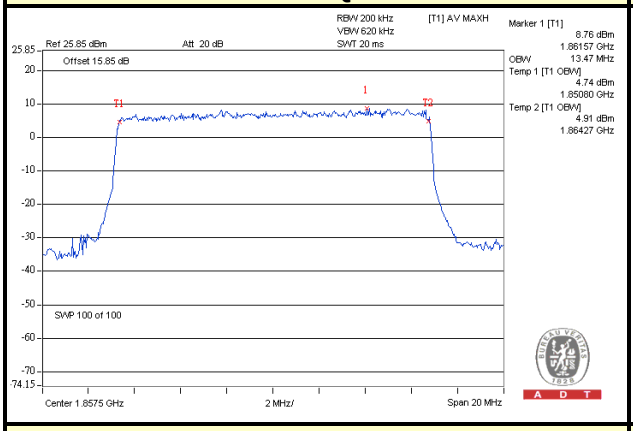


10MHz / 16QAM

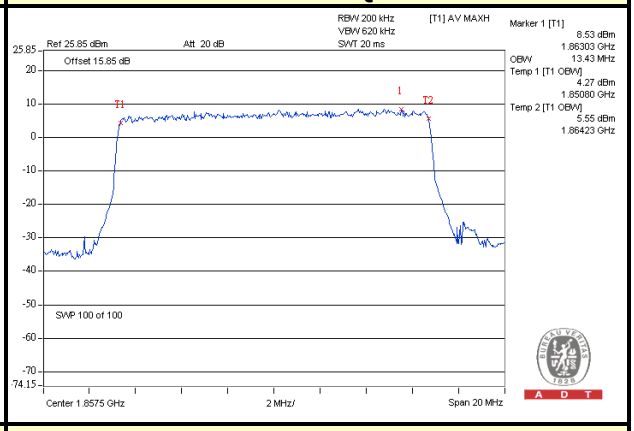


SPECTRUM PLOT OF WORST VALUE

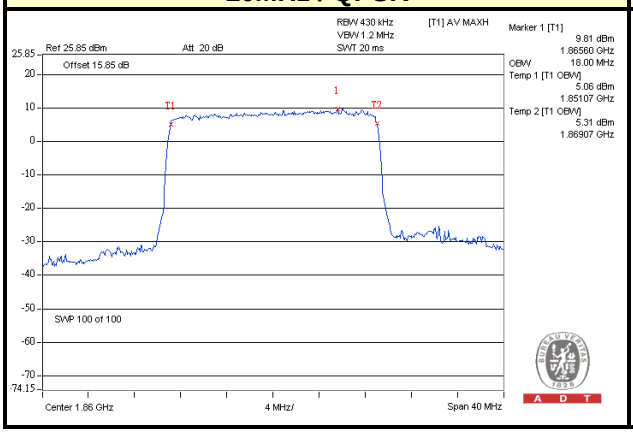
15MHz / QPSK



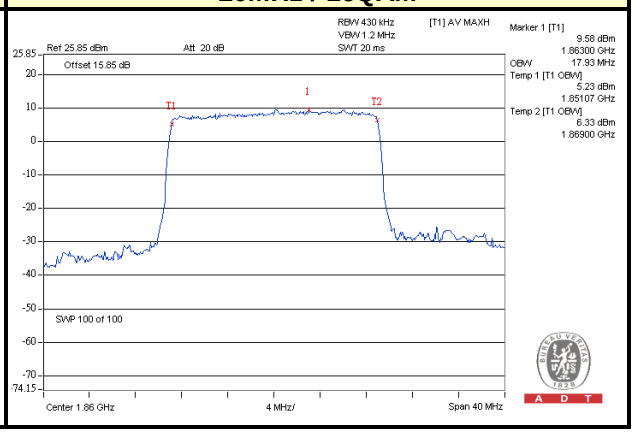
15MHz / 16QAM



20MHz / QPSK



20MHz / 16QAM

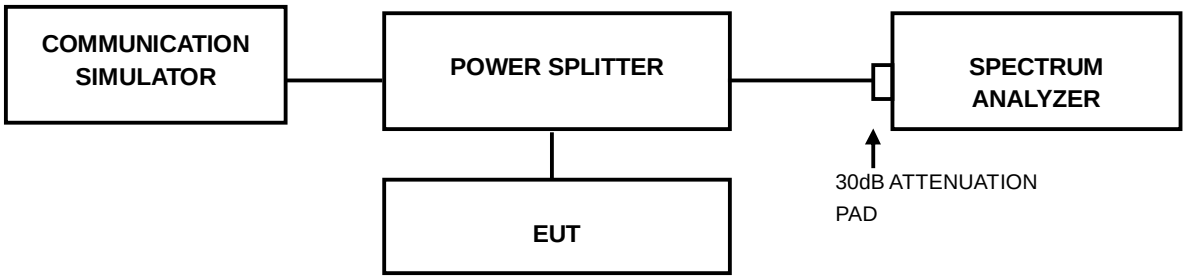


4.4 PEAK TO AVERAGE RATIO

4.4.1 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

4.4.2 TEST SETUP



4.4.3 TEST PROCEDURES

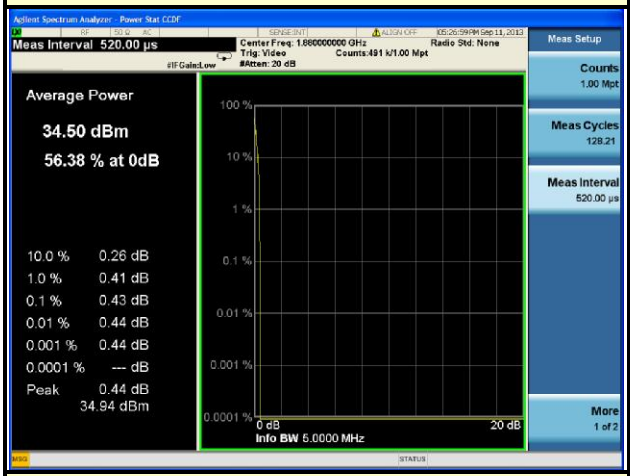
1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

4.4.4 TEST RESULTS

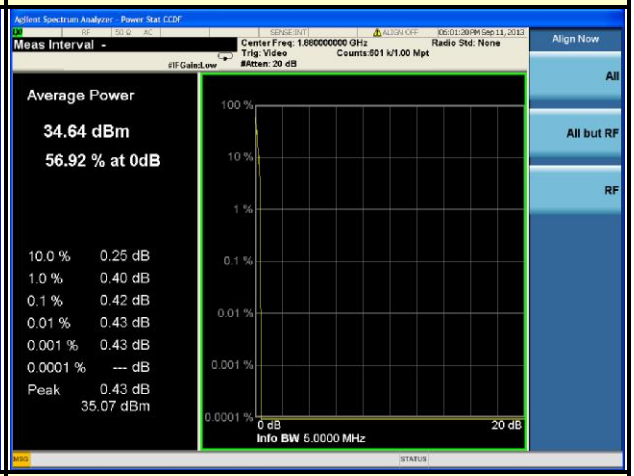
GPRS			EDGE		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
512	1850.2	0.42	512	1850.2	0.41
661	1880.0	0.43	661	1880.0	0.42
810	1909.8	0.41	810	1909.8	0.4
WCDMA			**CDMA & EVDO**		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
9262	1852.4	2.5	25	1851.25	2.13
9400	1880.0	2.53	600	1880.0	2.2
9538	1907.6	2.46	1175	1908.75	2.17

SPECTRUM PLOT OF WORST VALUE

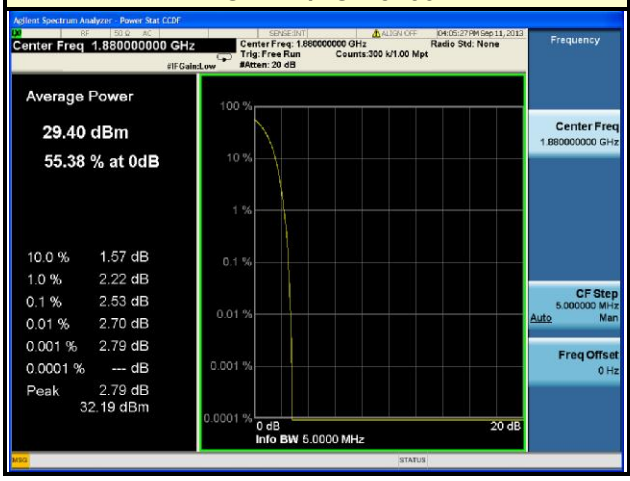
GPRS / CH 661



EDGE / CH 661



WCDMA / CH 9400



CDMA & EVDO / CH 600

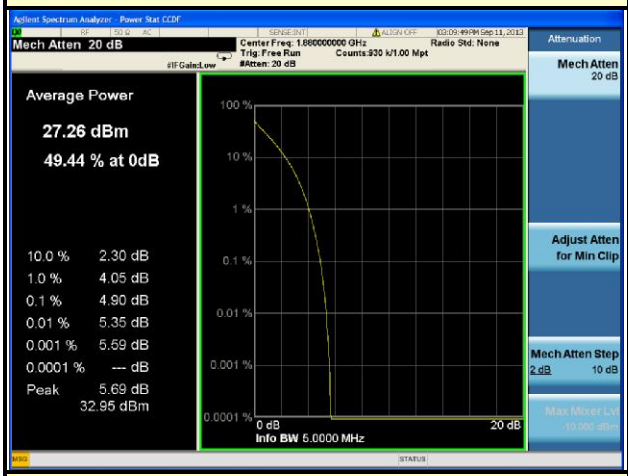
LTE BAND 2					
CHANNEL BANDWIDTH: 1.4MHz			CHANNEL BANDWIDTH: 3MHz		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
18607	1850.7	4.4	18615	1851.5	4.48
18900	1880.0	4.45	18900	1880.0	4.56
19193	1909.3	4.39	19185	1908.5	4.47
CHANNEL BANDWIDTH: 5MHz			CHANNEL BANDWIDTH: 10MHz		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
18625	1852.5	4.85	18650	1855.0	4.58
18900	1880.0	4.9	18900	1880.0	4.65
19175	1907.5	4.81	19150	1905.0	4.49
CHANNEL BANDWIDTH: 15MHz			CHANNEL BANDWIDTH: 20MHz		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
18675	1857.5	5.66	18700	1860.0	6.46
18900	1880.0	5.71	18900	1880.0	6.52
19125	1902.5	5.69	19100	1900.0	6.47

SPECTRUM PLOT OF WORST VALUE

1.4 MHz / CH 18900

3MHz / CH 18900

5MHz / CH 18900



10MHz / CH 18900

15MHz / CH 18900

20MHz / CH 18900

LTE BAND 25					
CHANNEL BANDWIDTH: 1.4MHz			CHANNEL BANDWIDTH: 3MHz		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
26047	1850.7	4.62	26055	1851.5	4.91
26365	1882.0	4.68	26365	1882.0	4.93
26683	1914.3	4.58	26675	1913.5	4.85
CHANNEL BANDWIDTH: 5MHz			CHANNEL BANDWIDTH: 10MHz		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
26065	1852.5	5.1	26090	1855.0	4.62
26365	1882.5	5.12	26365	1882.0	4.68
26665	1912.5	5.06	26640	1910.0	4.63
CHANNEL BANDWIDTH: 15MHz			CHANNEL BANDWIDTH: 20MHz		
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
26115	1857.5	5.71	26140	1860.0	6.5
26365	1882.0	5.75	26365	1882.0	6.54
26615	1907.5	5.69	26590	1905.0	6.53

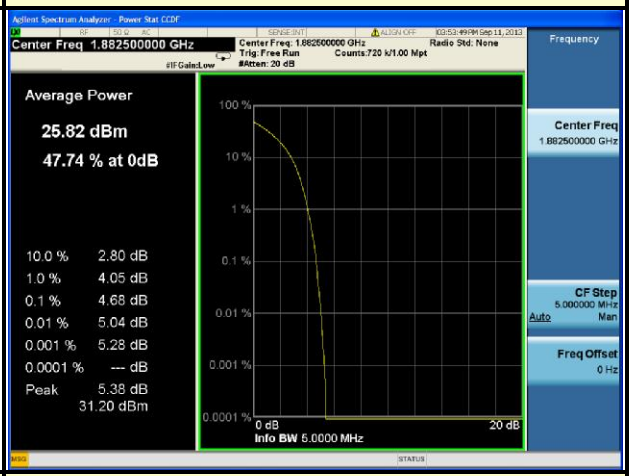
SPECTRUM PLOT OF WORST VALUE

1.4 MHz / CH 26365

3MHz / CH 26365

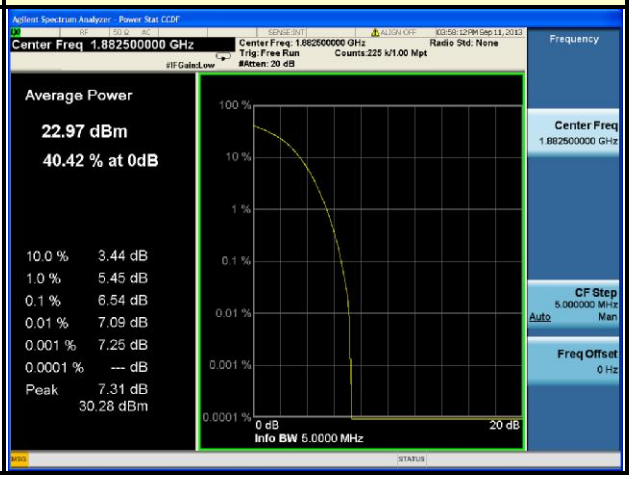
5MHz / CH 26365

10MHz / CH 26365



15MHz / CH 26365

20MHz / CH 26365

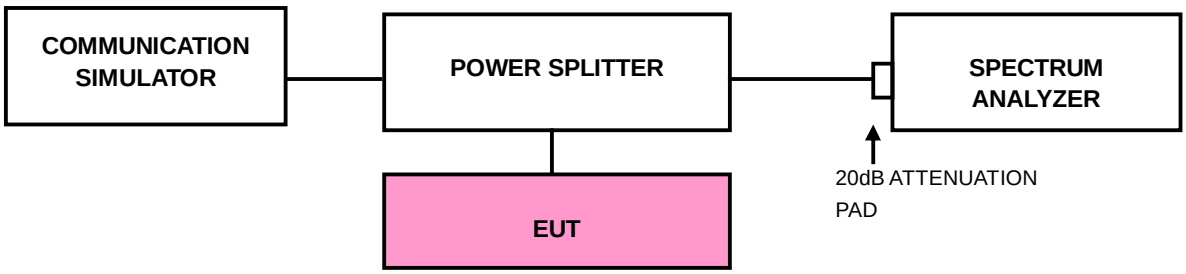


4.5 BAND EDGE MEASUREMENT

4.5.1 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.

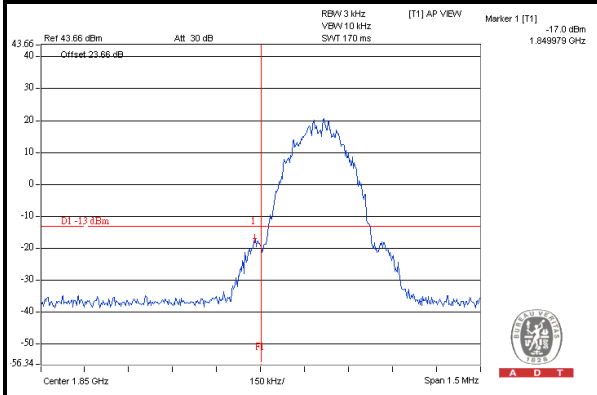
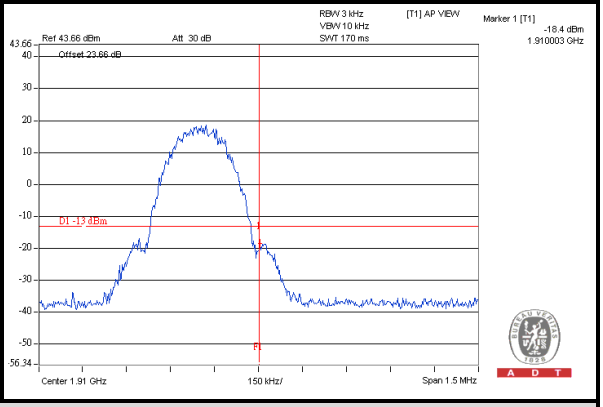
4.5.2 TEST SETUP

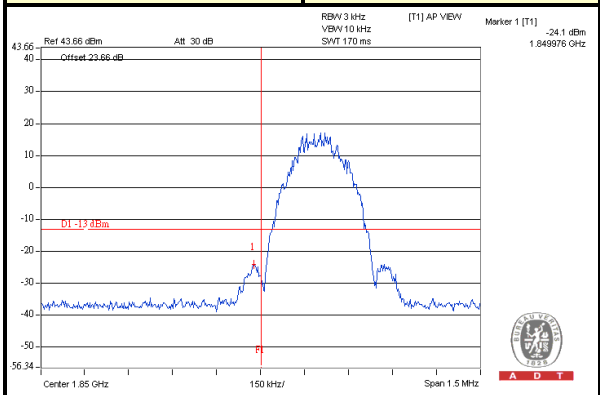
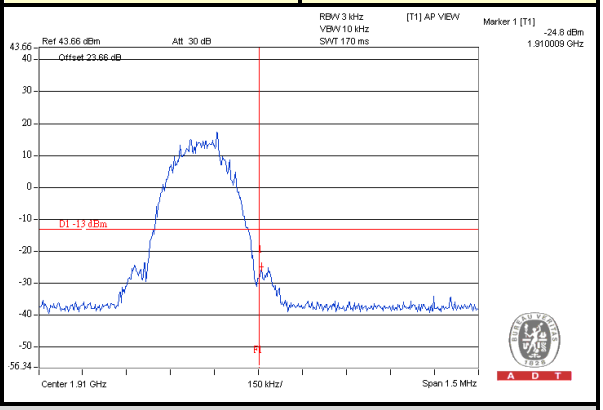


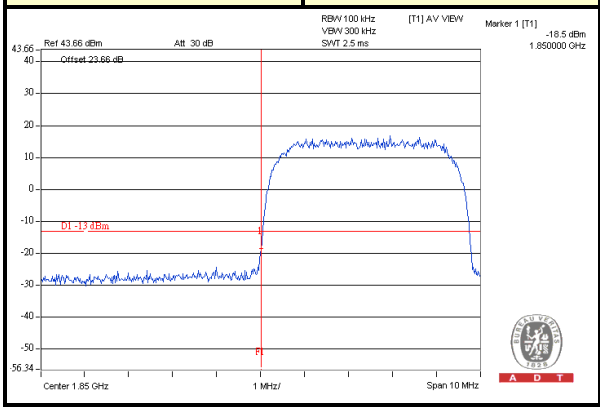
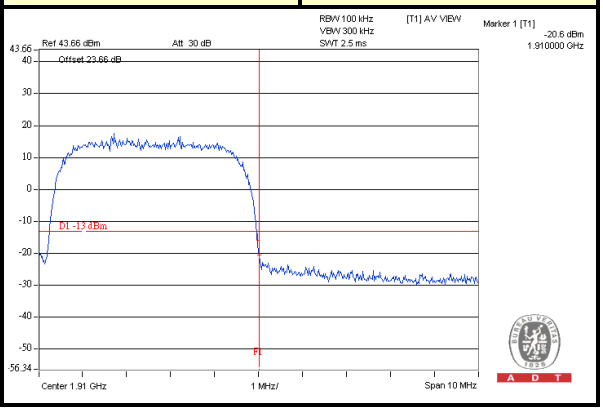
4.5.3 TEST PROCEDURES

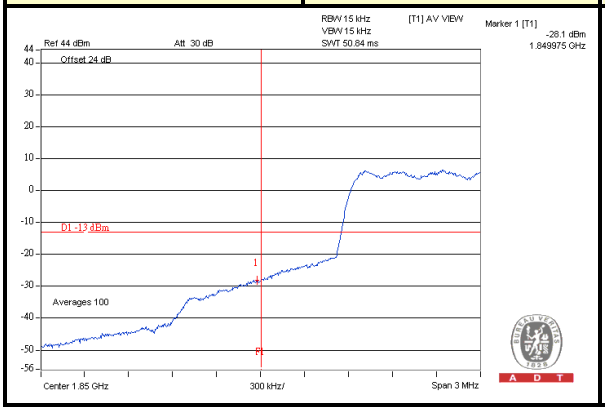
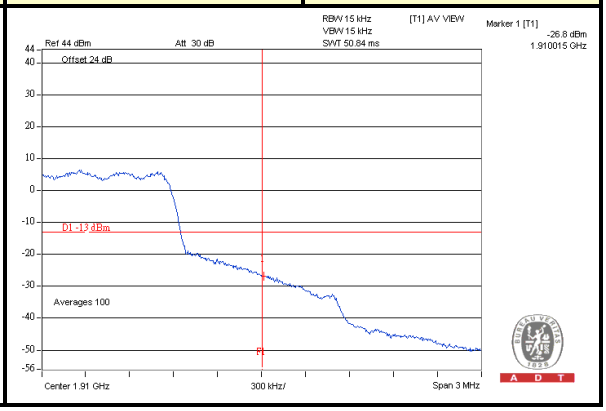
a. All measurements were done at low and high operational frequency range.
b. The center frequency of spectrum is the band edge frequency and s RB of the spectrum is >1% OCCUPIED BANDWIDTH and VB of the spectrum is ≧ 3*RB.
c. Record the max trace plot into the test report.

4.5.4 TEST RESULTS

GPRS			
CHANNEL	512	CHANNEL	810
			

EDGE			
CHANNEL	512	CHANNEL	810
			

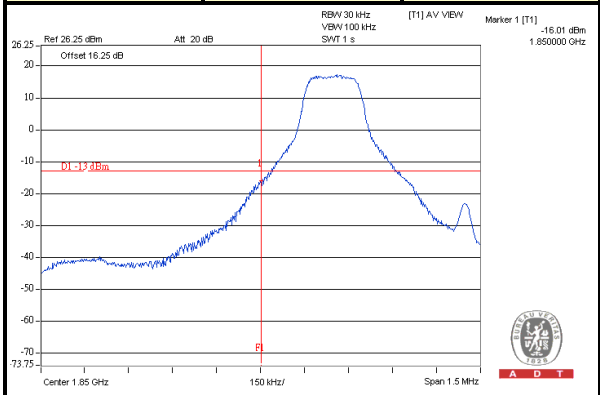
WCDMA			
CHANNEL	9262	CHANNEL	9538
			

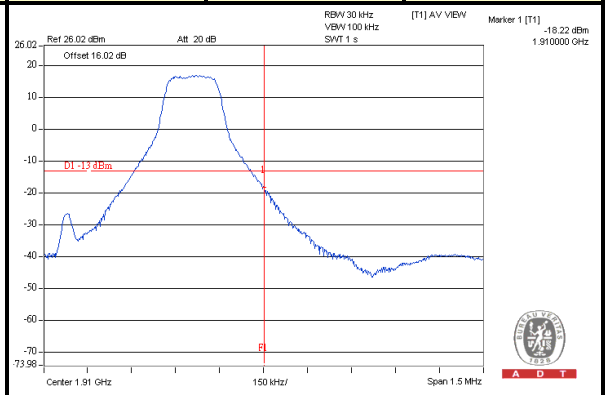
CDMA & EVDO			
CHANNEL	25	CHANNEL	1175
			

LTE Band 2

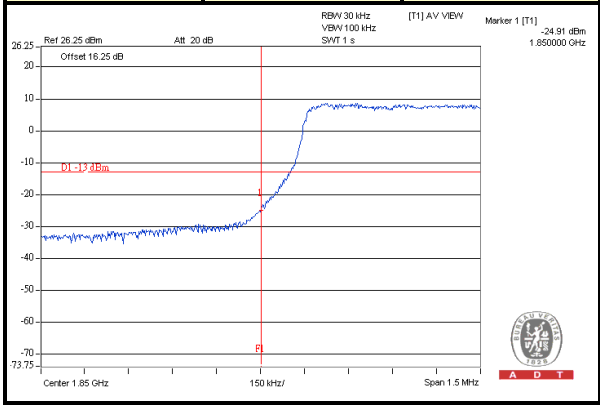
Channel Bandwidth: 1.4MHz

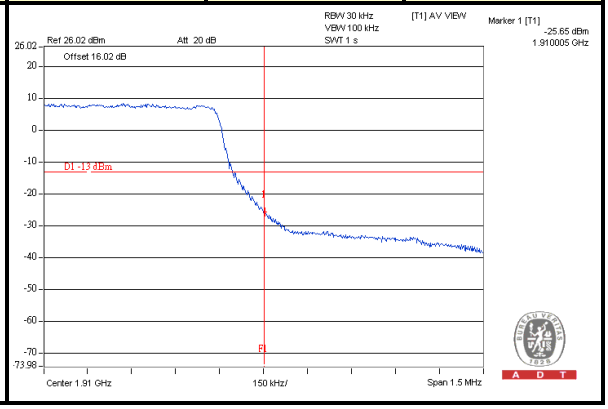
CHANNEL	18607	1 RB	CHANNEL	19193	1 RB





CHANNEL	18607	6 RB	CHANNEL	19193	6 RB

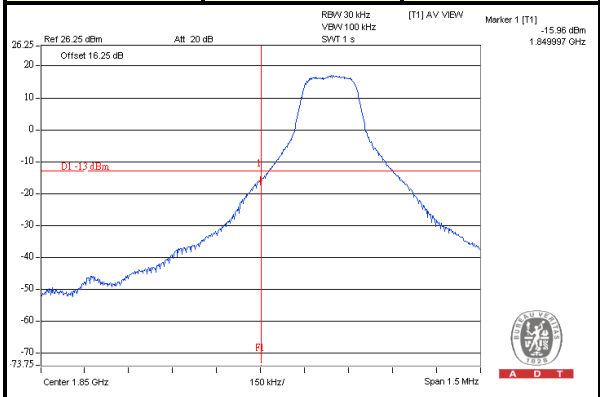


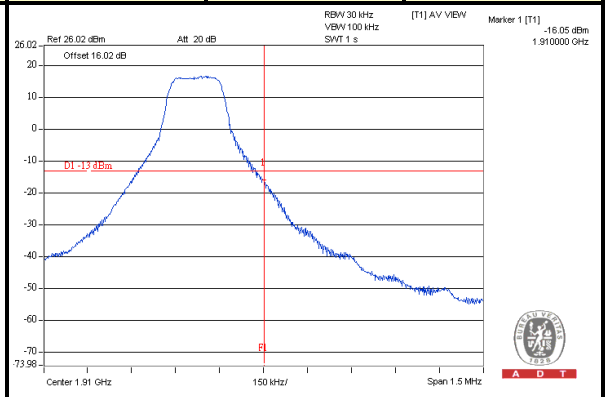


LTE Band 2

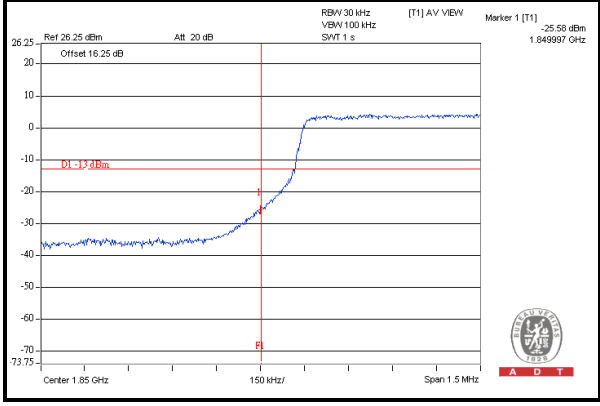
Channel Bandwidth: 3MHz

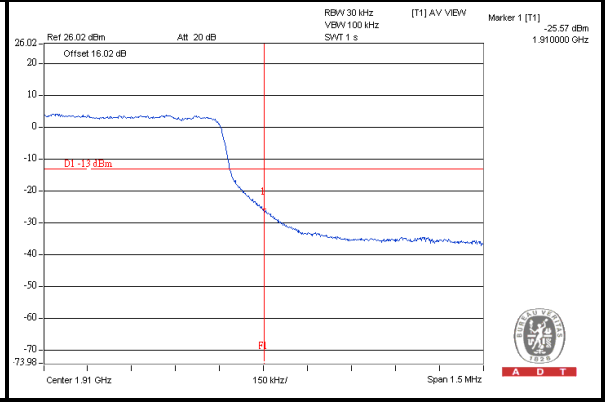
CHANNEL	18615	1 RB	CHANNEL	19185	1 RB





CHANNEL	18615	15 RB	CHANNEL	19185	15 RB

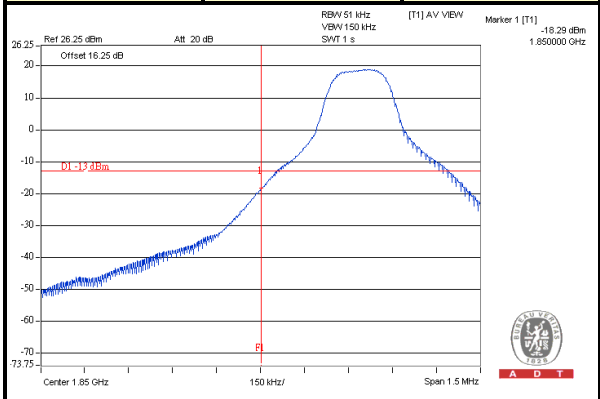


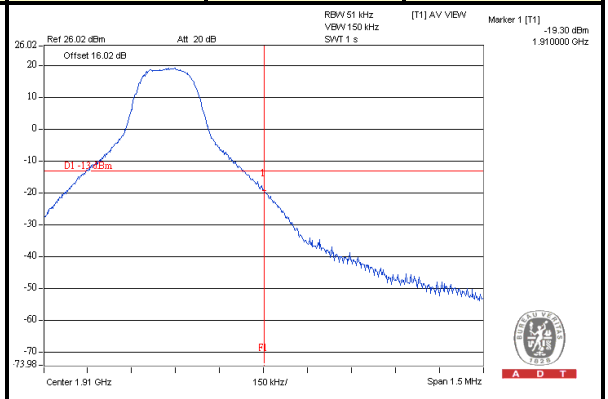


LTE Band 2

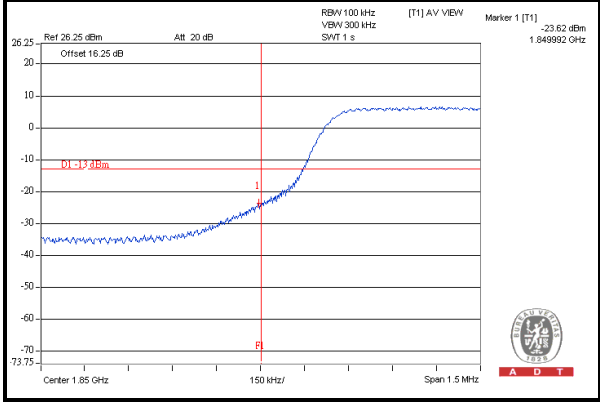
Channel Bandwidth: 5MHz

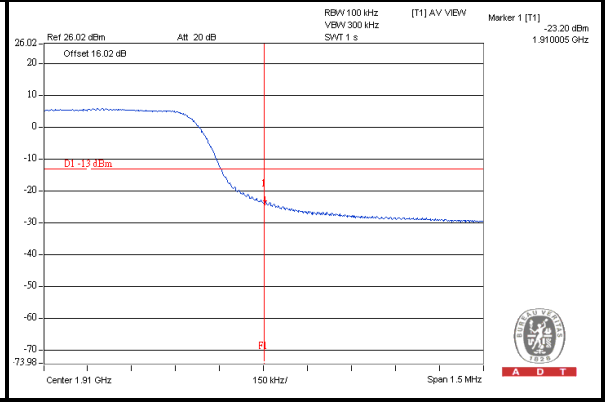
CHANNEL	18625	1 RB	CHANNEL	19175	1 RB





CHANNEL	18625	25 RB	CHANNEL	19175	25 RB

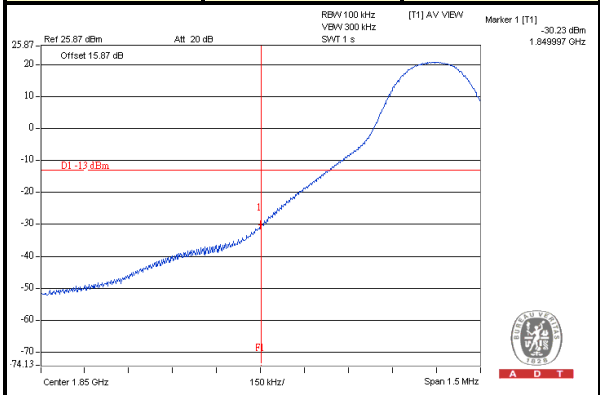


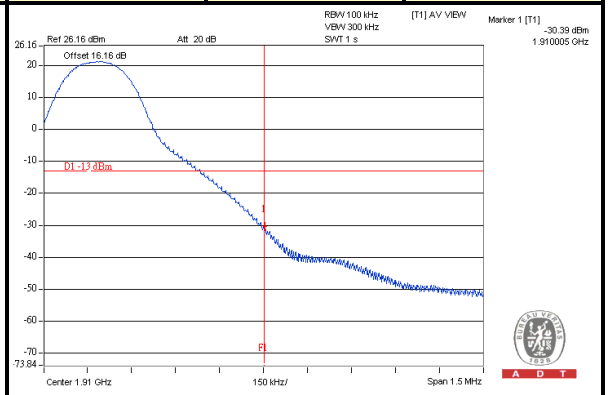


LTE Band 2

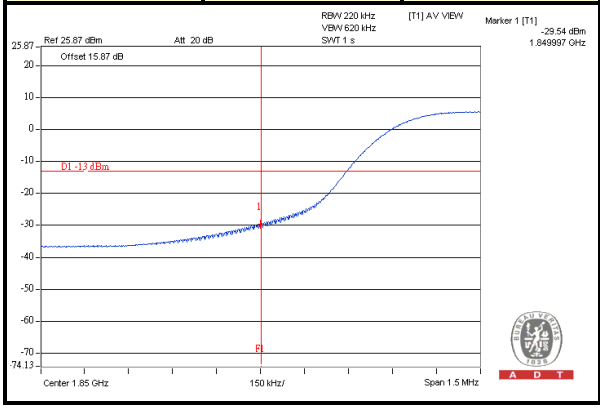
Channel Bandwidth: 10MHz

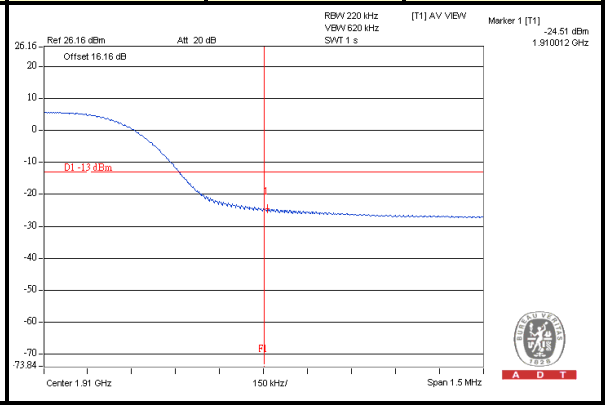
CHANNEL	18650	1 RB	CHANNEL	19150	1 RB





CHANNEL	18650	50 RB	CHANNEL	19150	50 RB

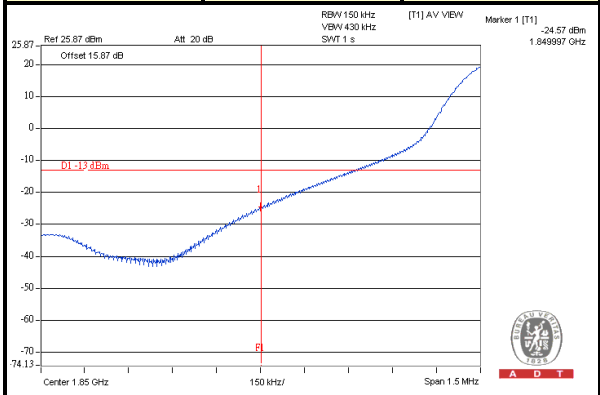


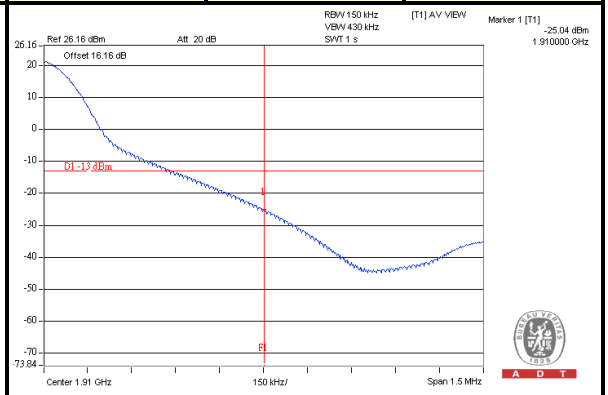


LTE Band 2

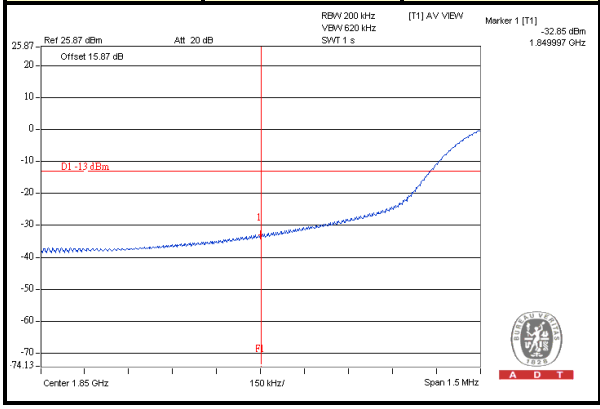
Channel Bandwidth: 15MHz

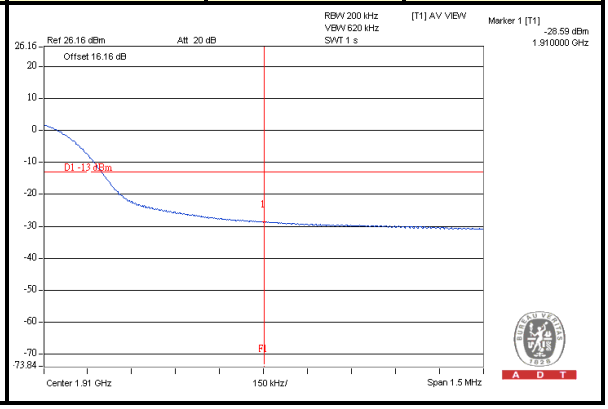
CHANNEL	18675	1 RB	CHANNEL	19125	1 RB





CHANNEL	18675	75 RB	CHANNEL	19125	75 RB

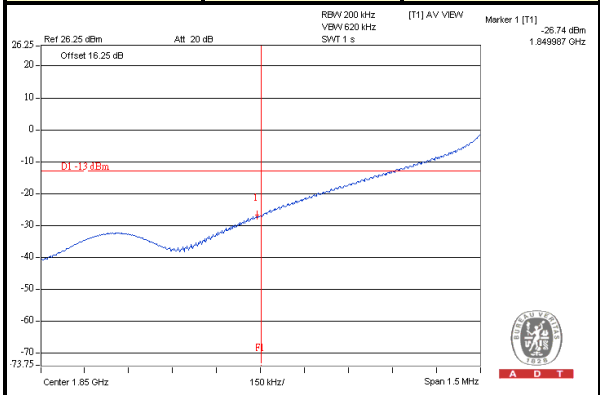


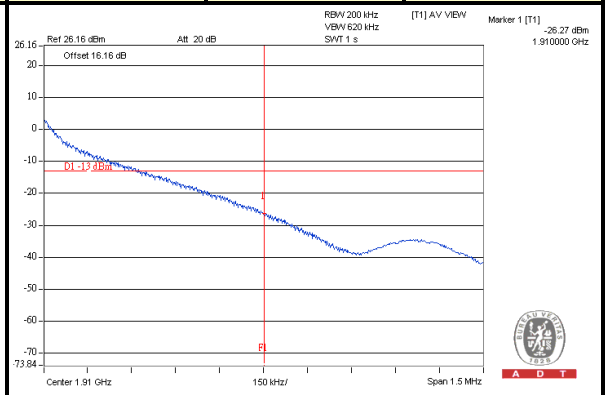


LTE Band 2

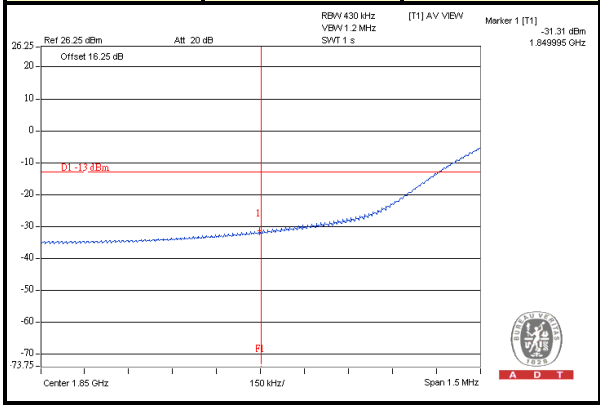
Channel Bandwidth: 20MHz

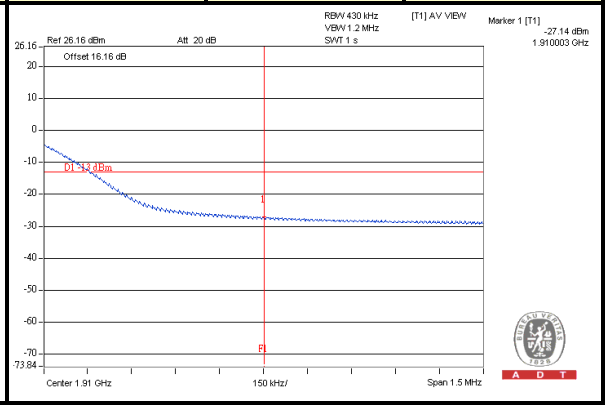
CHANNEL	18700	1 RB	CHANNEL	19100	1 RB





CHANNEL	18700	100 RB	CHANNEL	19100	100 RB

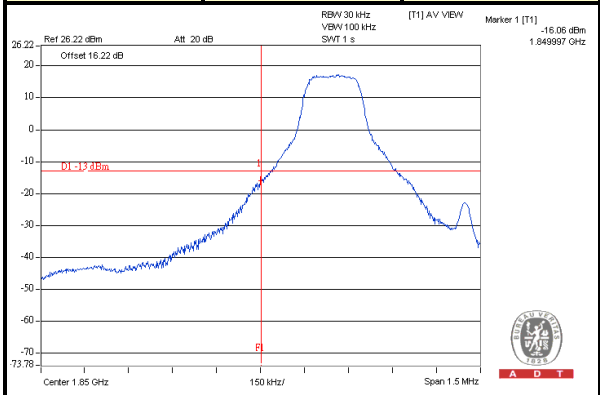


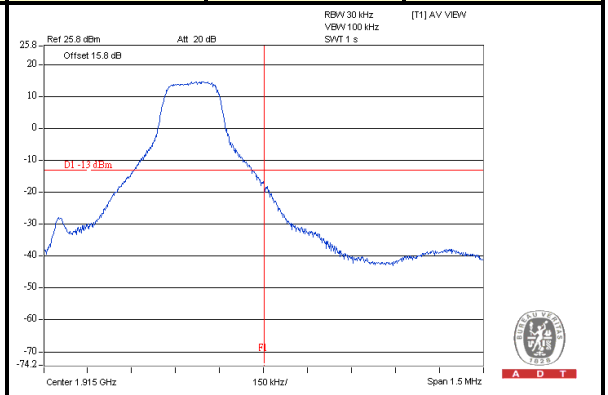


LTE Band 25

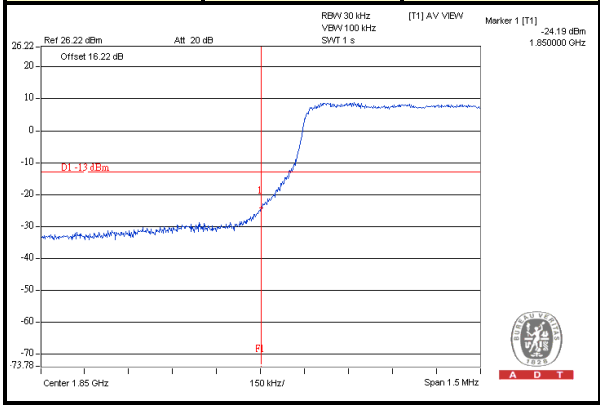
Channel Bandwidth: 1.4MHz

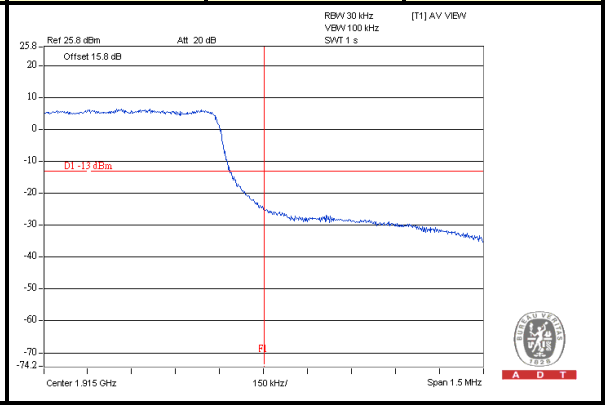
CHANNEL	26047	1 RB	CHANNEL	26683	1 RB





CHANNEL	26047	6 RB	CHANNEL	26683	6 RB

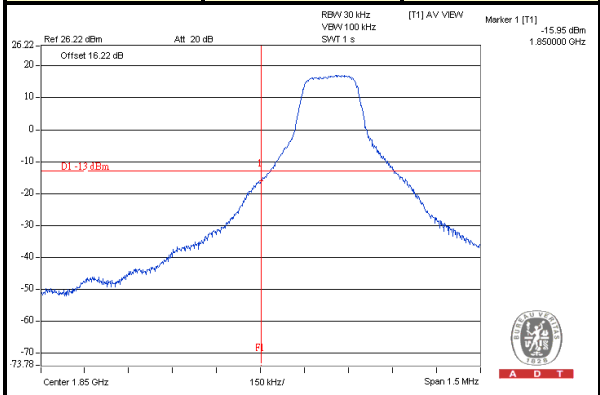


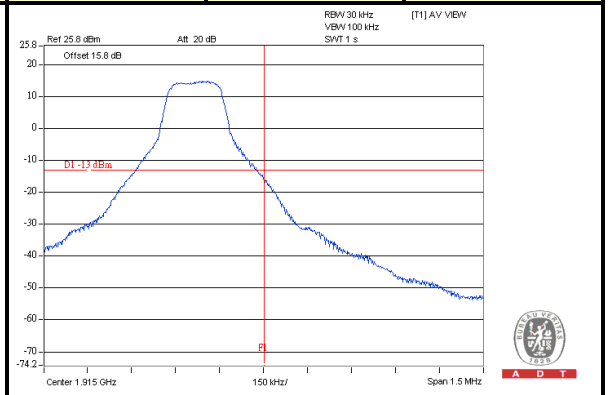


LTE Band 25

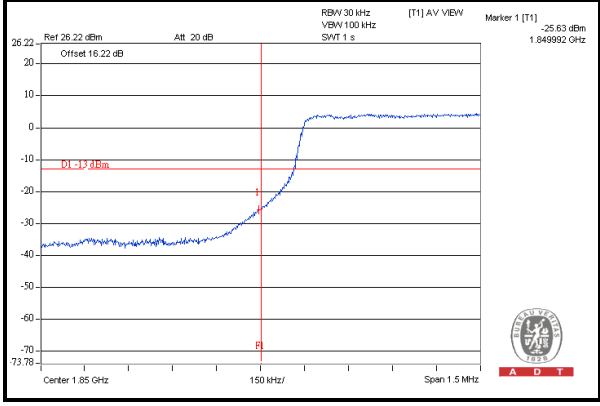
Channel Bandwidth: 3MHz

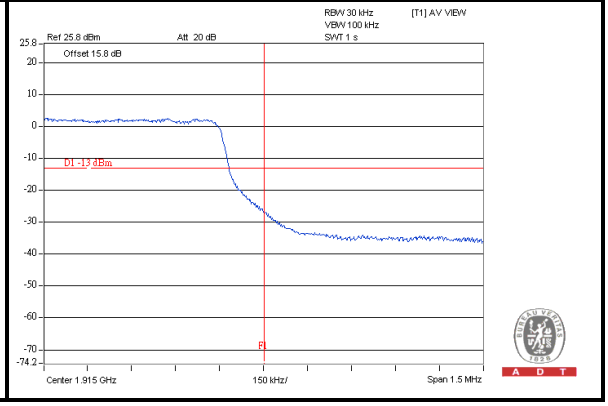
CHANNEL	26055	1 RB	CHANNEL	26675	1 RB





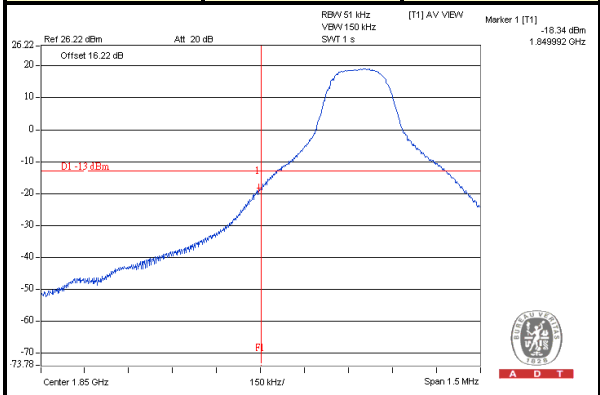
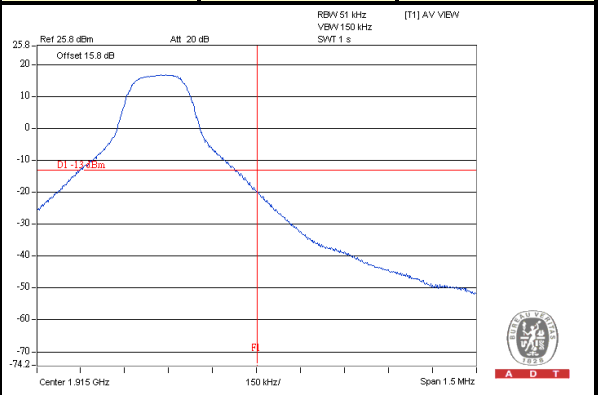
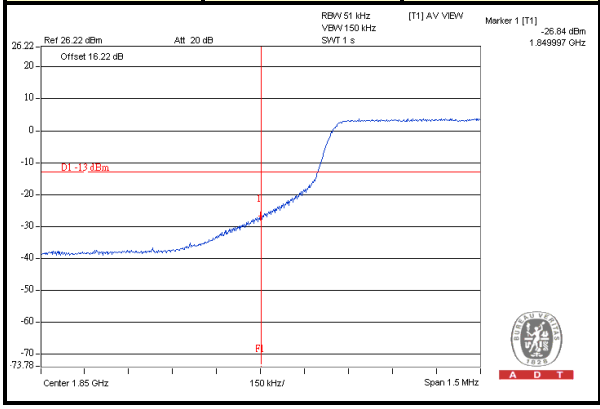
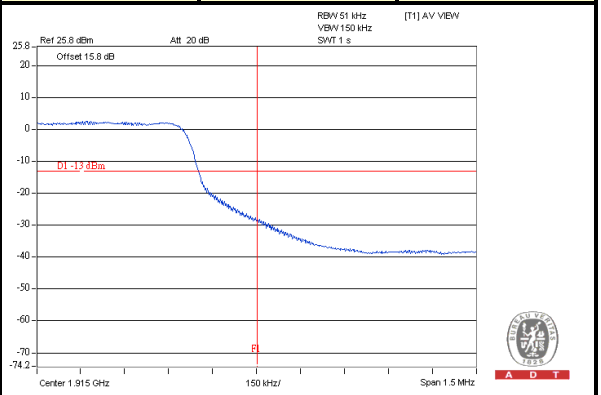
CHANNEL	26055	15 RB	CHANNEL	26675	15 RB





LTE Band 25

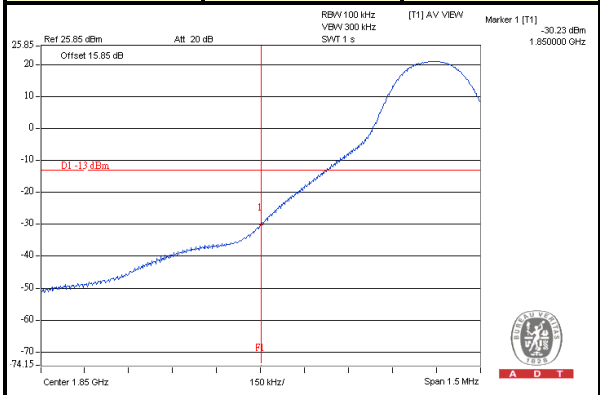
Channel Bandwidth: 5MHz

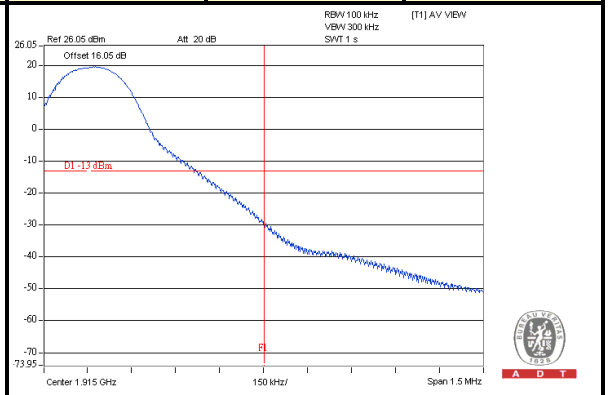
CHANNEL	26065	1 RB	CHANNEL	26665	1 RB
					
CHANNEL	26065	25 RB	CHANNEL	26665	25 RB
					

LTE Band 25

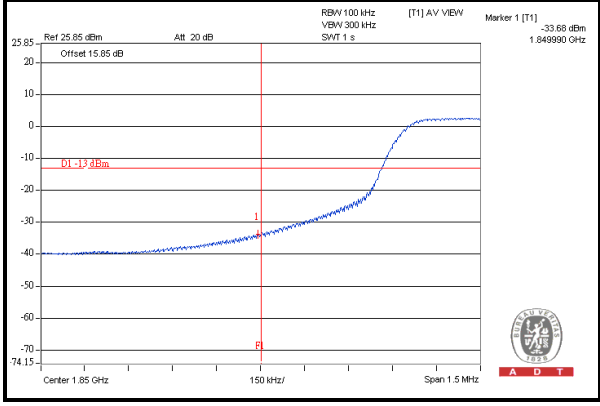
Channel Bandwidth: 10MHz

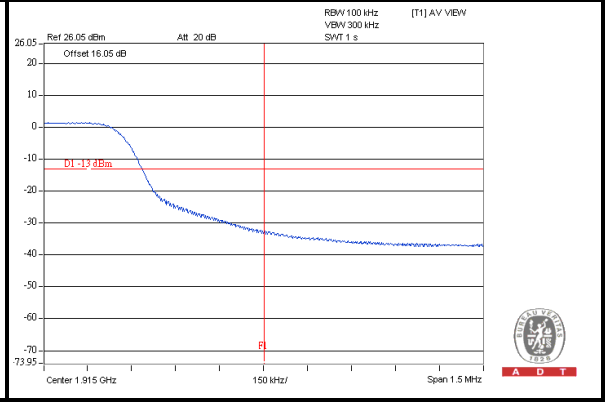
CHANNEL	26090	1 RB	CHANNEL	26640	1 RB





CHANNEL	26090	50 RB	CHANNEL	26640	50 RB

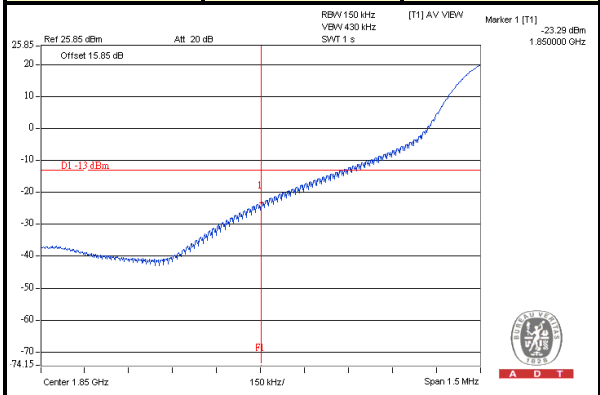


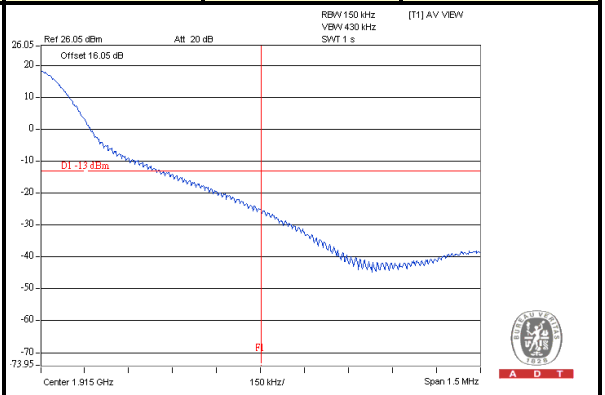


LTE Band 25

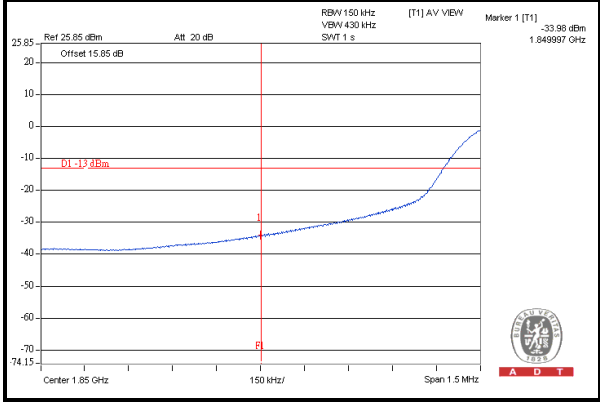
Channel Bandwidth: 15MHz

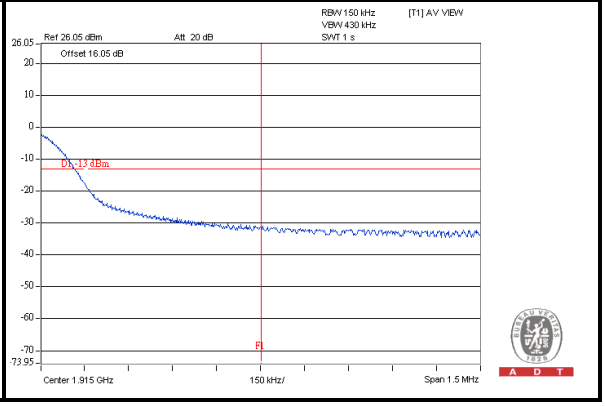
CHANNEL	26115	1 RB	CHANNEL	26615	1 RB





CHANNEL	26115	75 RB	CHANNEL	26615	75 RB

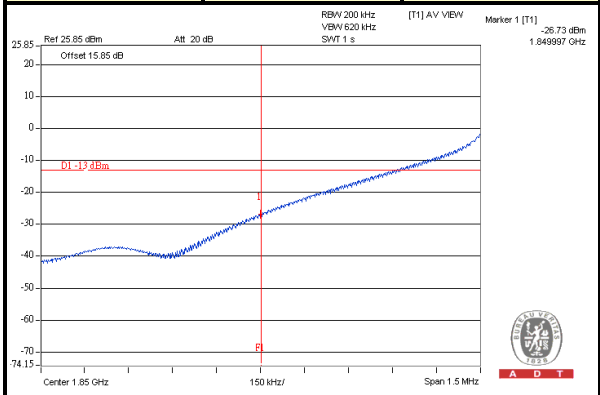


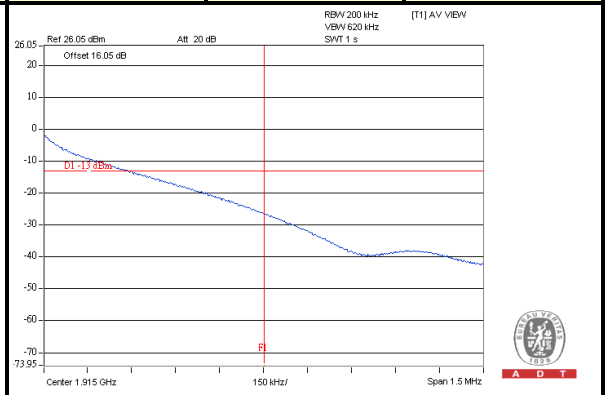


LTE Band 25

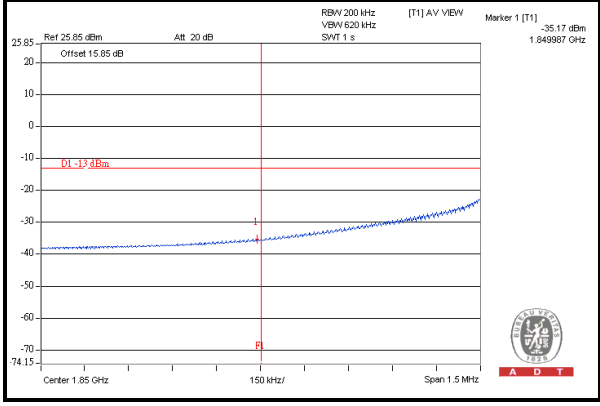
Channel Bandwidth: 20MHz

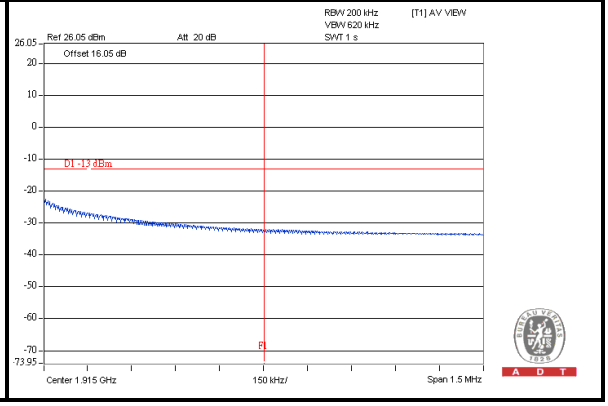
CHANNEL	26140	1 RB	CHANNEL	26590	1 RB





CHANNEL	26140	100 RB	CHANNEL	26590	100 RB





4.6 CONDUCTED SPURIOUS EMISSIONS

4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

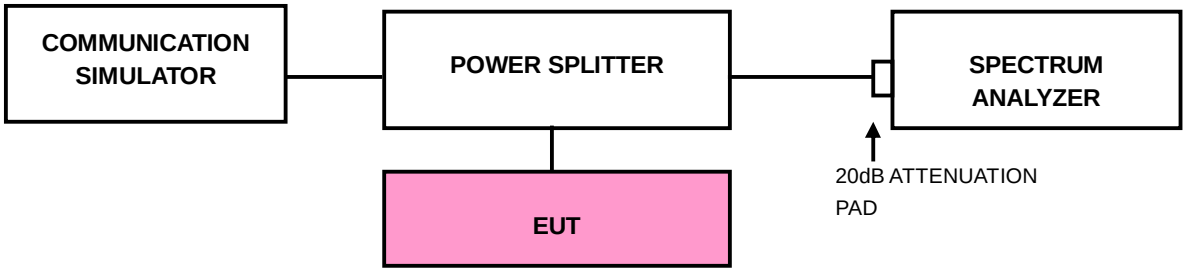
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

4.6.2 TEST PROCEDURE

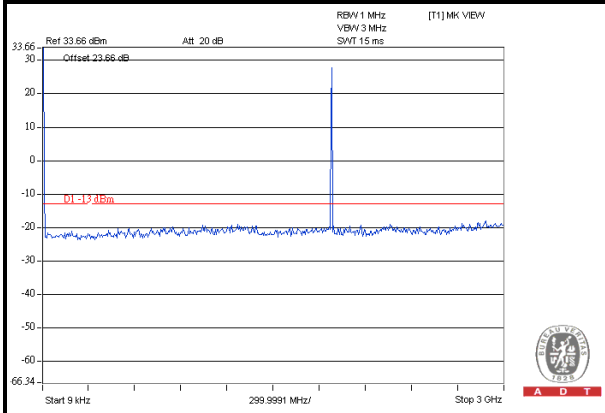
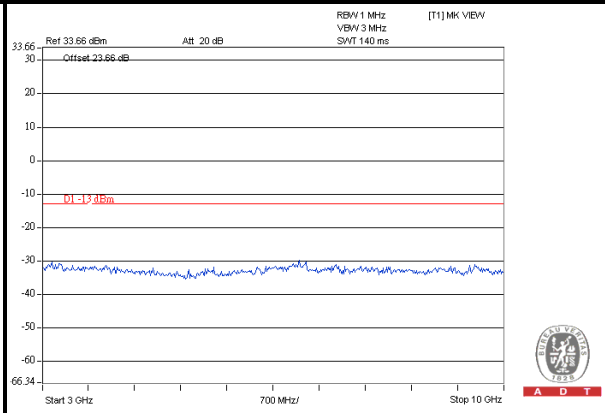
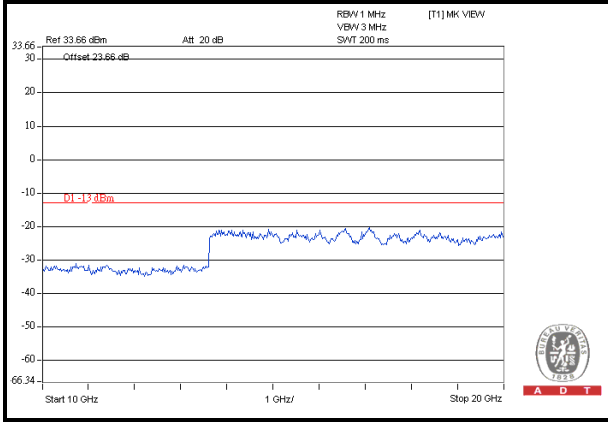
a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.

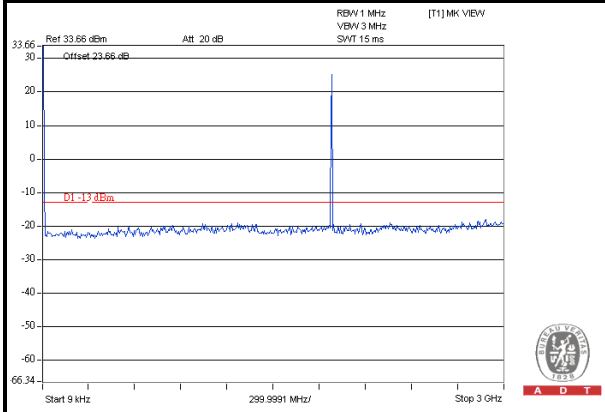
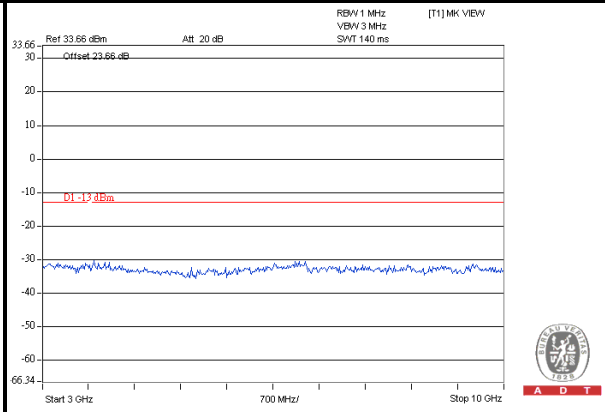
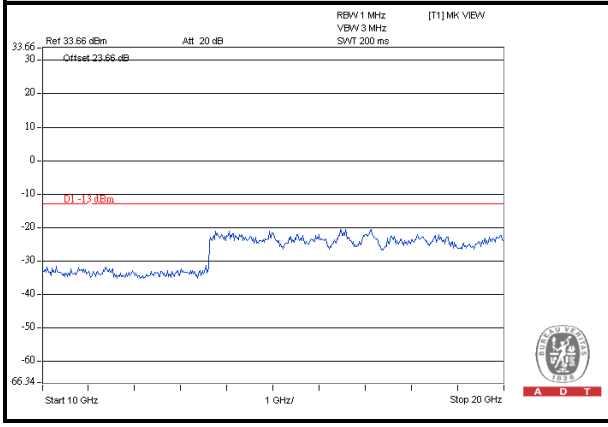
b. Measuring frequency range is from 9kHz to 20GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

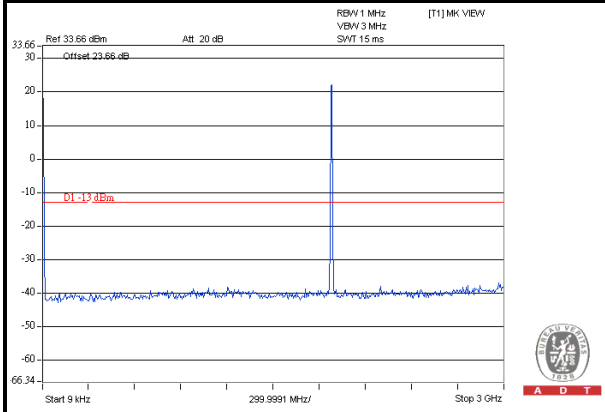
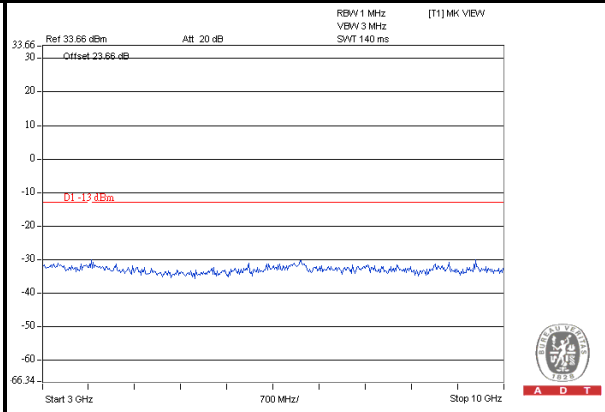
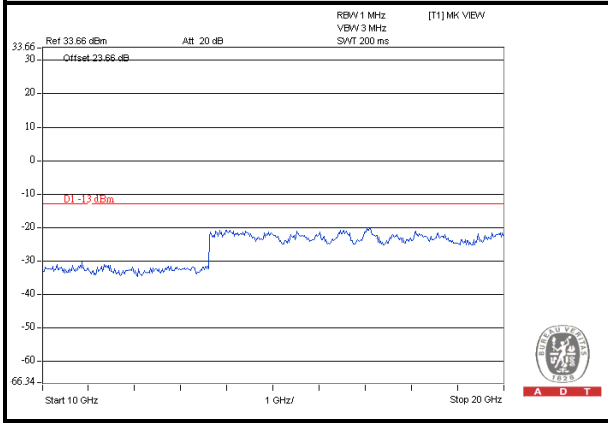
4.6.3 TEST SETUP

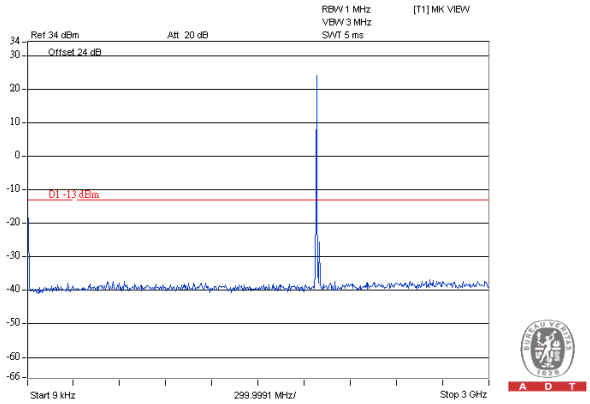
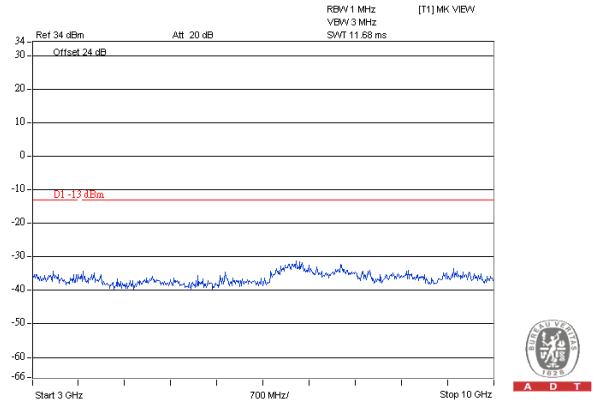
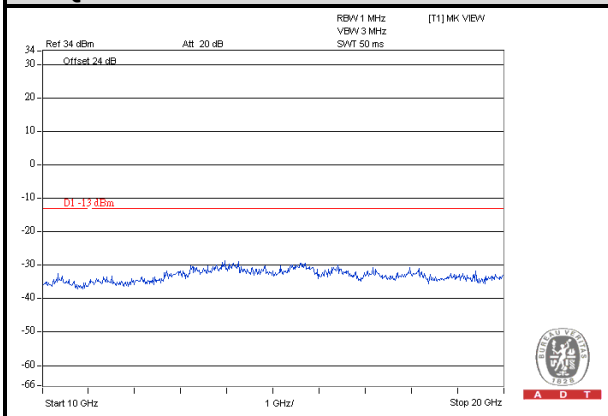


4.6.4 TEST RESULTS

GPRS	
CHANNEL 661	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

EDGE	
CHANNEL 661	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

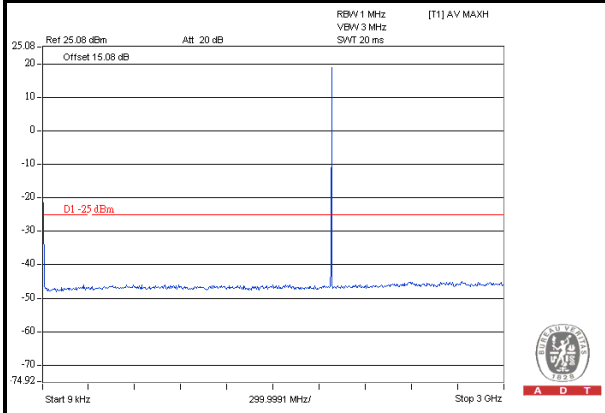
WCDMA	
CHANNEL 9400	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

CDMA & EVDO	
CHANNEL 600	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

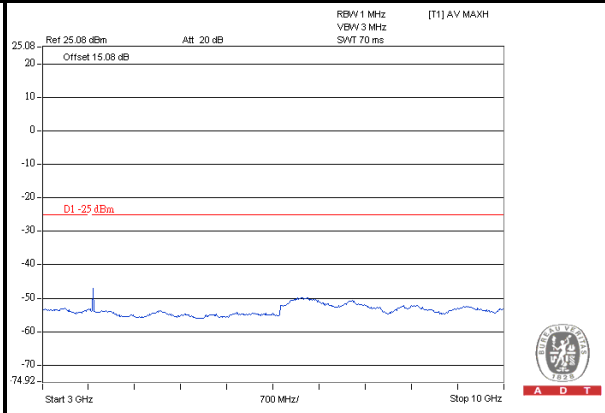
LTE Band 2 (Channel Bandwidth: 1.4MHz)

CHANNEL18900

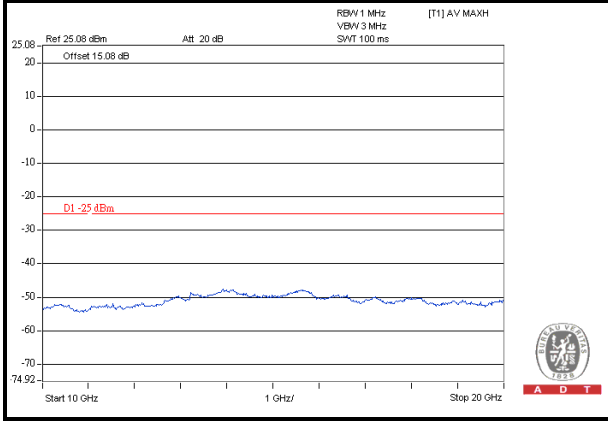
FREQUENCY RANGE : 9kHz~3GHz

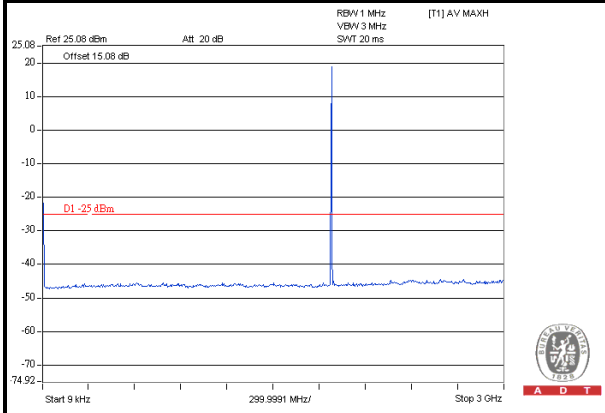
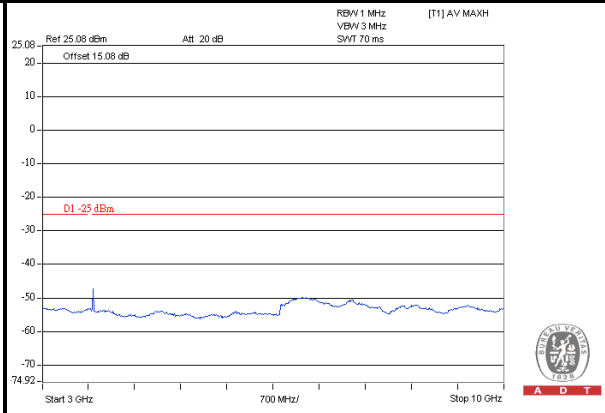
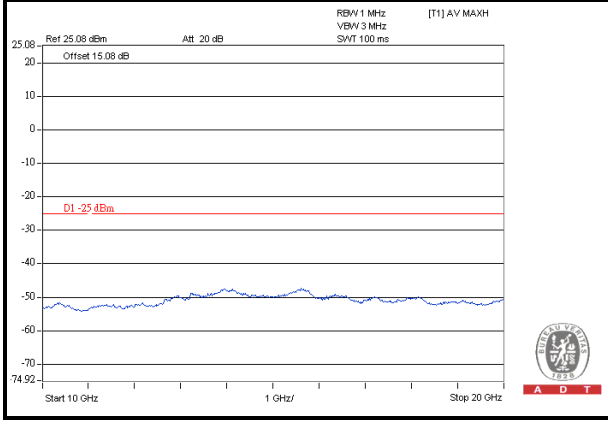


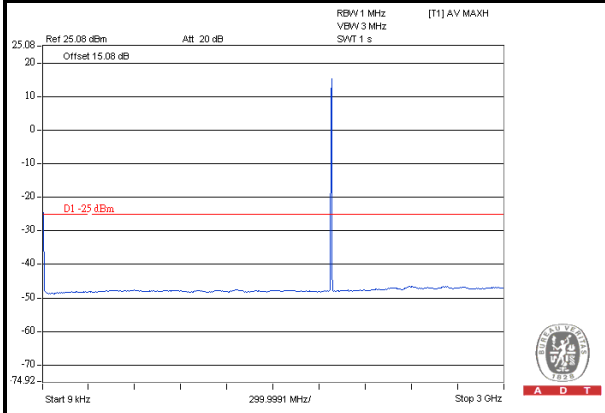
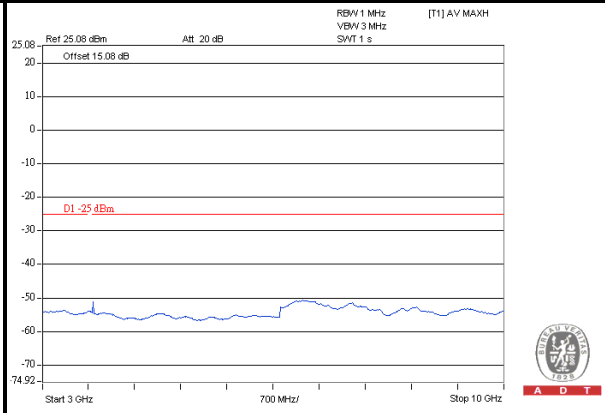
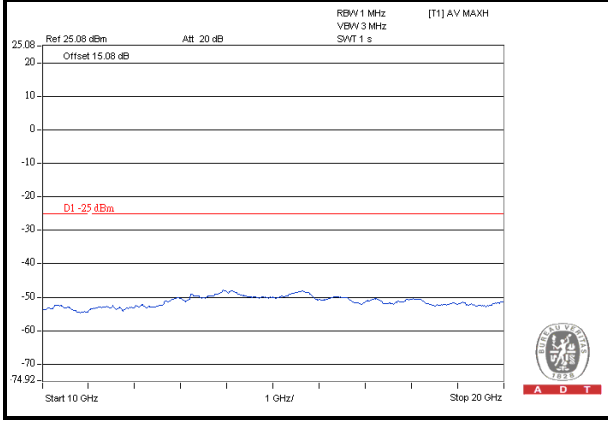
FREQUENCY RANGE : 3GHz~10GHz



FREQUENCY RANGE : 10GHz~20GHz

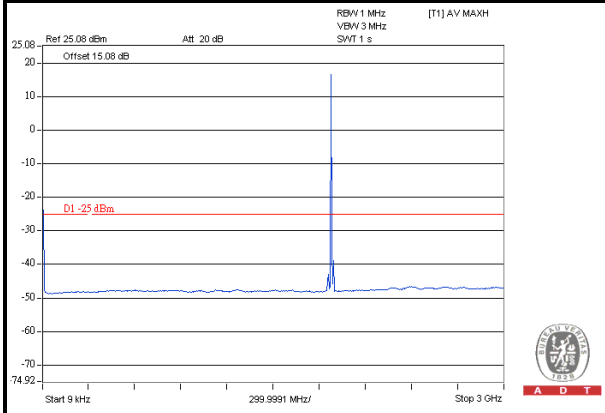
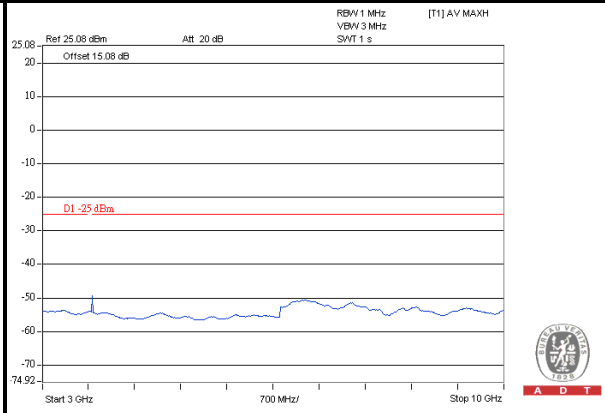
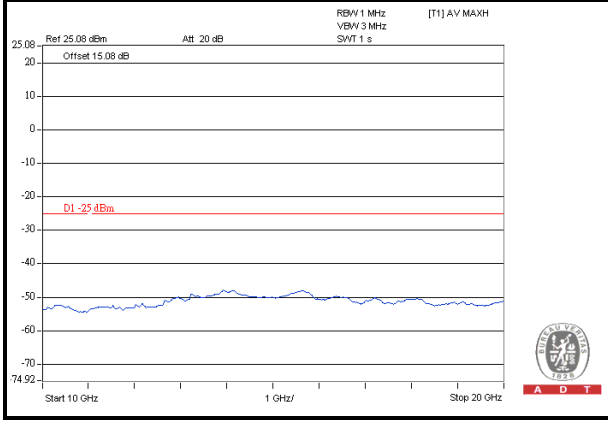


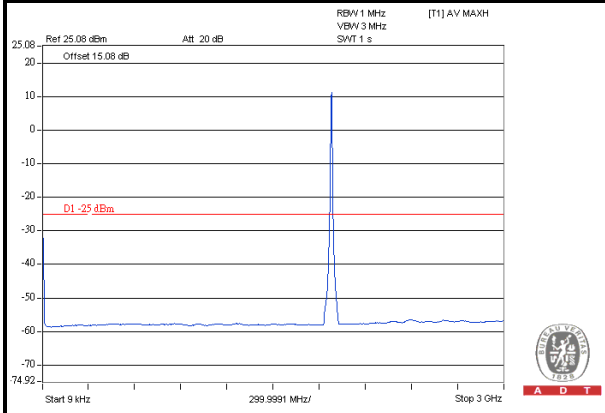
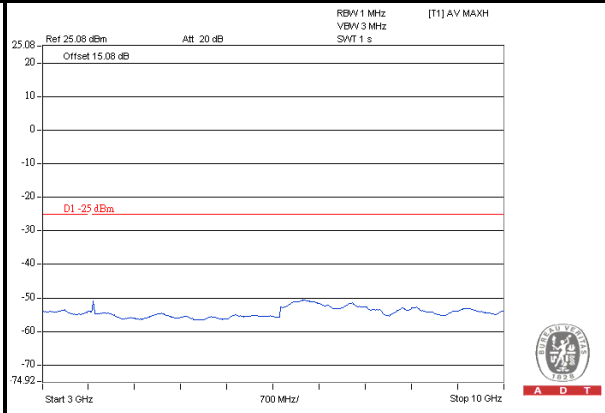
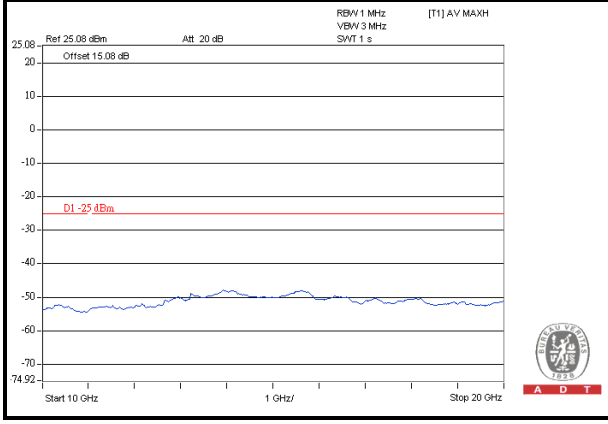
LTE Band 2 (Channel Bandwidth: 3MHz)	
CHANNEL18900	
FREQUENCY RANGE : 9kHz~3GHz	**FREQUENCY RANGE : 3GHz~10GHz**
	
FREQUENCY RANGE : 10GHz~20GHz	
	

LTE Band 2 (Channel Bandwidth: 5MHz)	
CHANNEL18900	
FREQUENCY RANGE : 9kHz~3GHz	**FREQUENCY RANGE : 3GHz~10GHz**
	
FREQUENCY RANGE : 10GHz~20GHz	
	

LTE Band 2 (Channel Bandwidth: 10MHz)

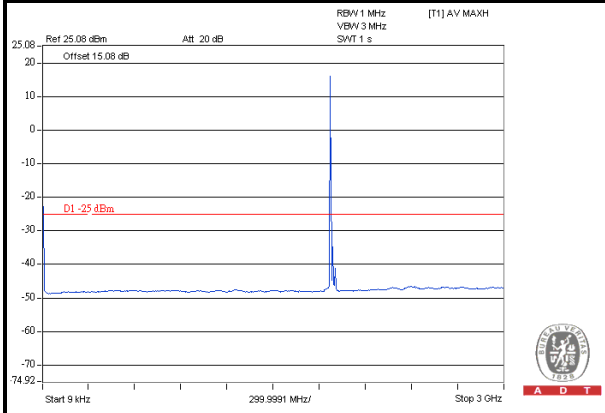
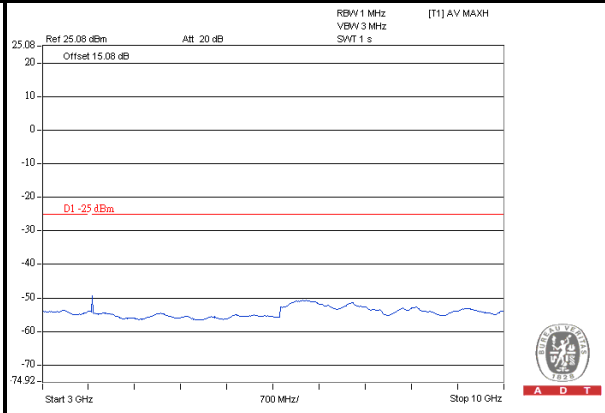
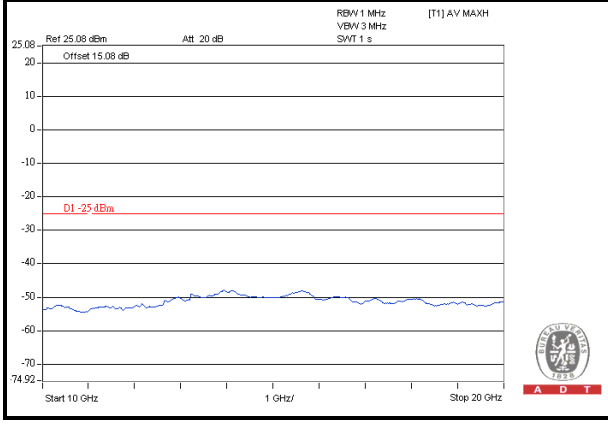
CHANNEL18900

FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

LTE Band 2 (Channel Bandwidth: 15MHz)	
CHANNEL18900	
FREQUENCY RANGE : 9kHz~3GHz	**FREQUENCY RANGE : 3GHz~10GHz**
	
FREQUENCY RANGE : 10GHz~20GHz	
	

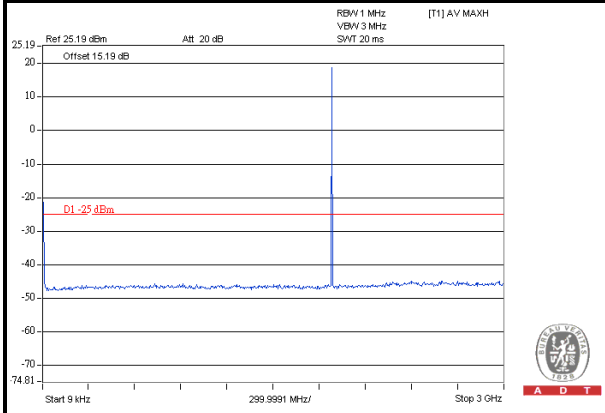
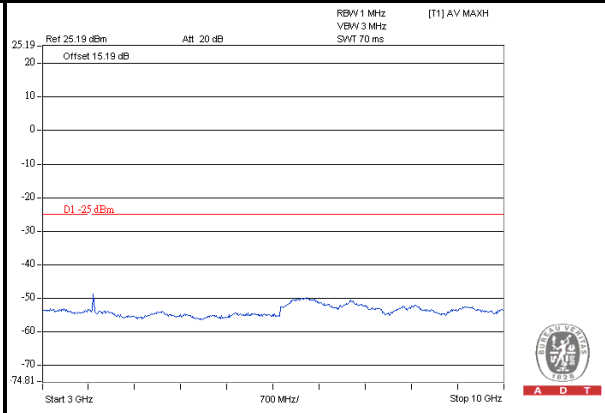
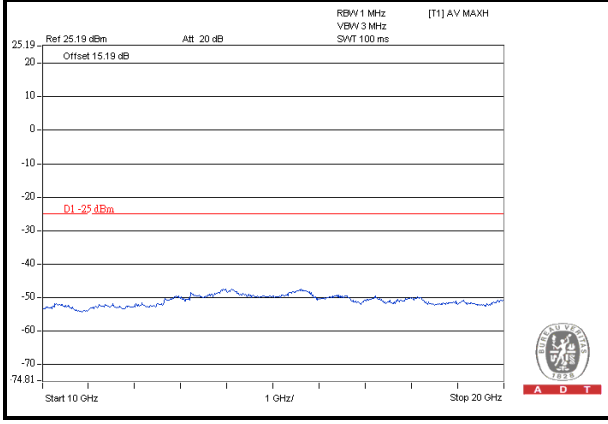
LTE Band 2 (Channel Bandwidth: 20MHz)

CHANNEL18900

FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

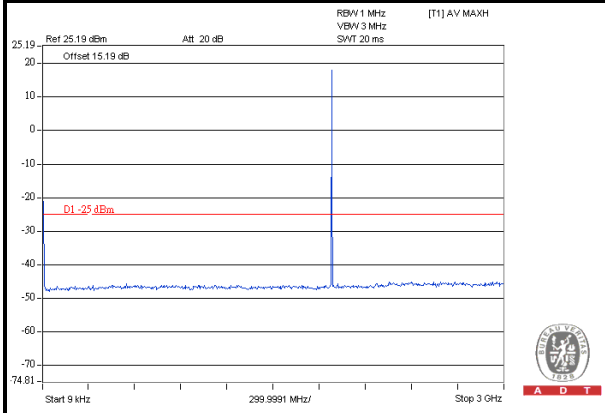
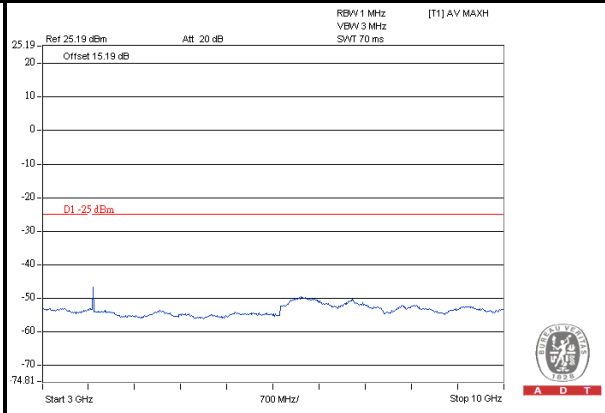
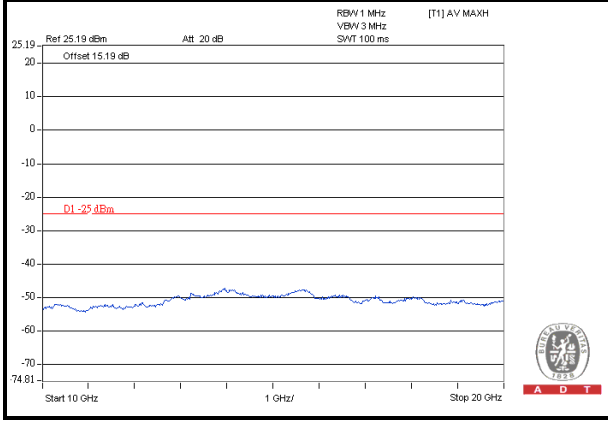
LTE Band 25 (Channel Bandwidth: 1.4MHz)

CHANNEL 26365

FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

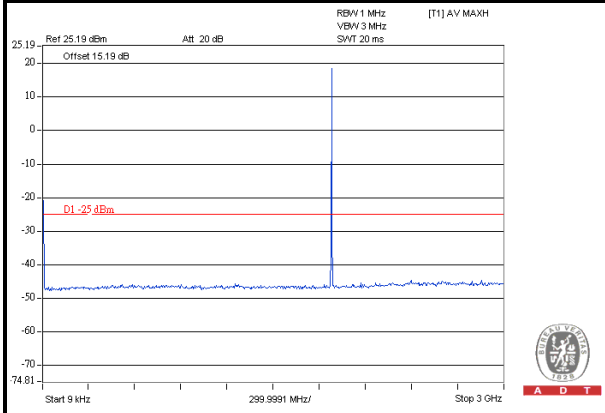
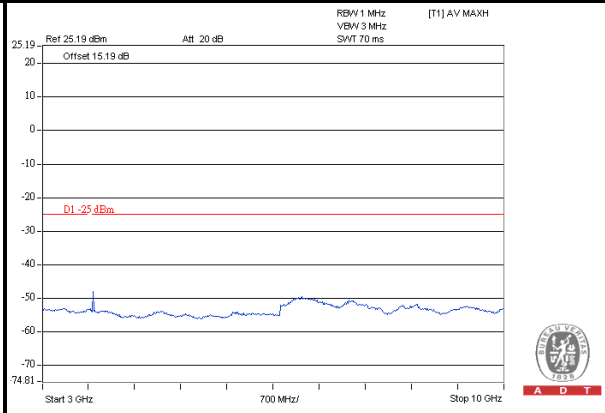
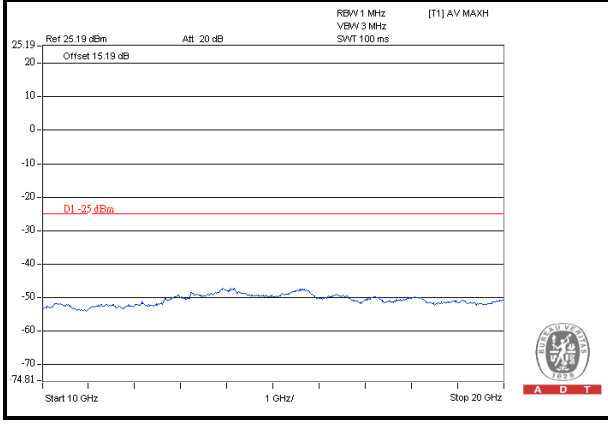
LTE Band 25 (Channel Bandwidth: 3MHz)

CHANNEL 26365

FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

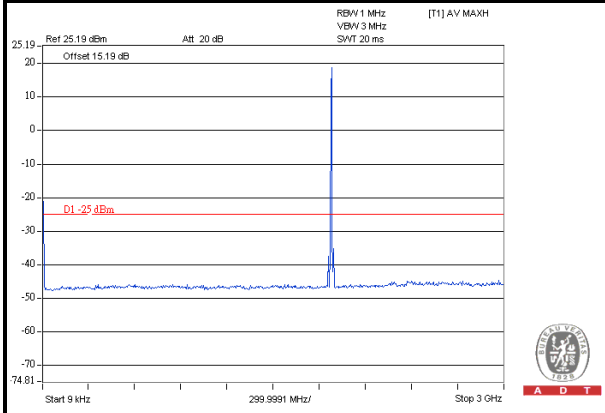
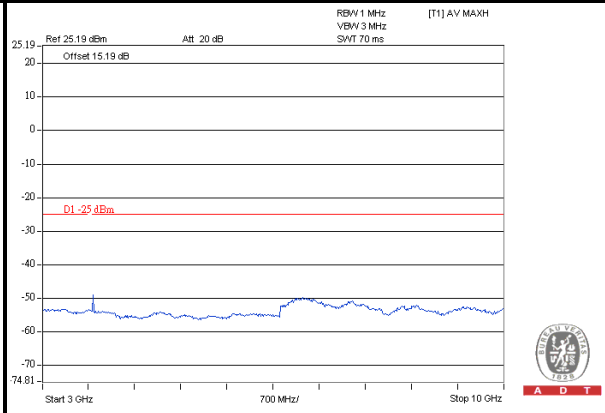
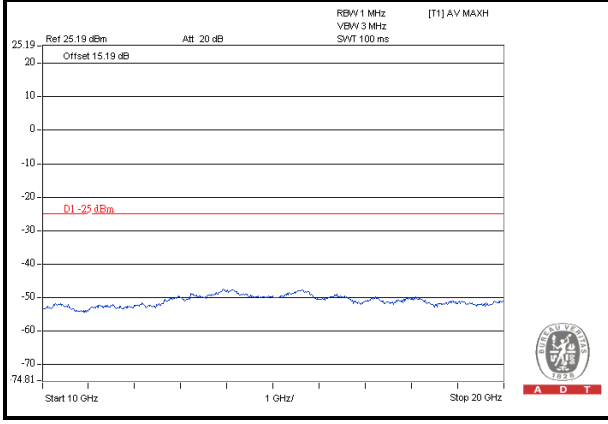
LTE Band 25 (Channel Bandwidth: 5MHz)

CHANNEL 26365

FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

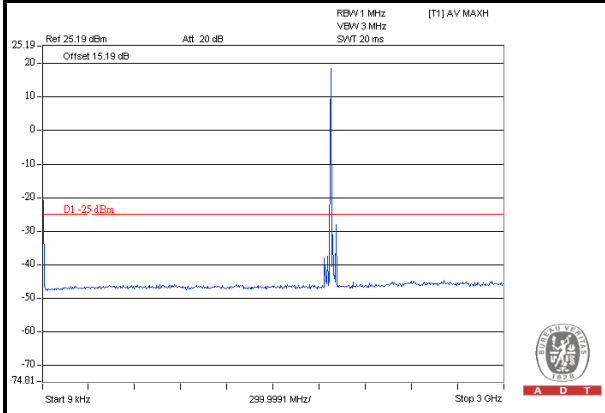
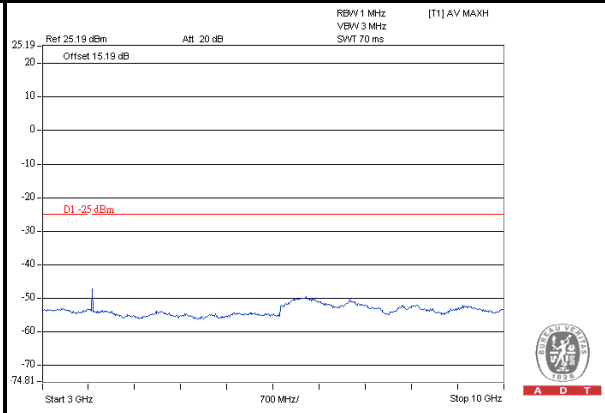
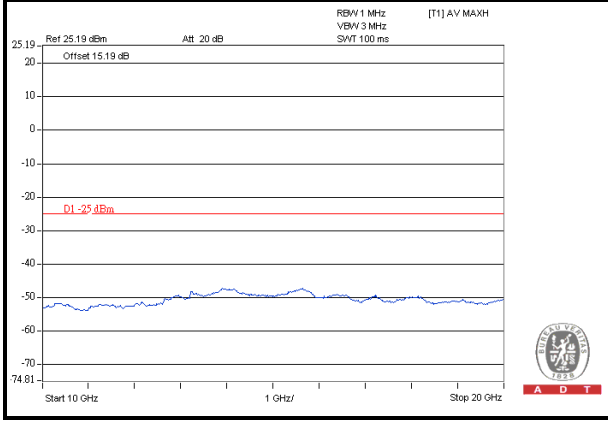
LTE Band 25 (Channel Bandwidth: 10MHz)

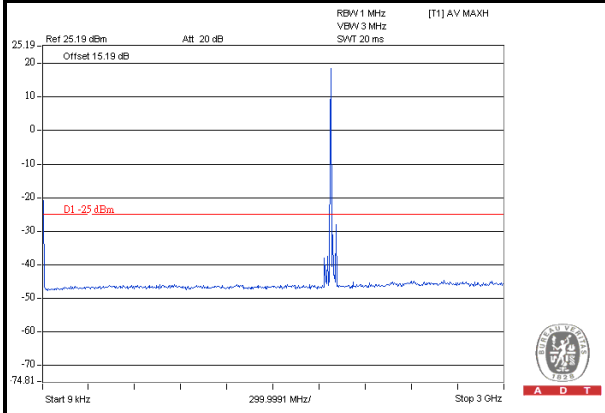
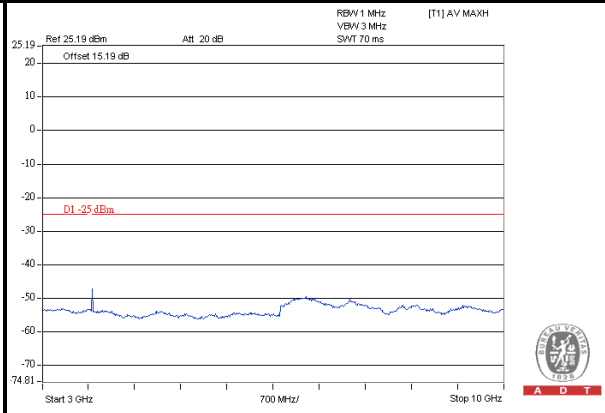
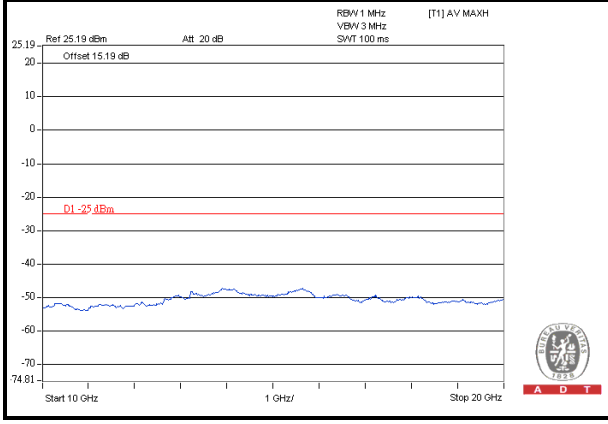
CHANNEL 26365

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: 20MHz)	
CHANNEL 26365	
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 PROCEDURES

a. Substitution method is used for EIRP 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

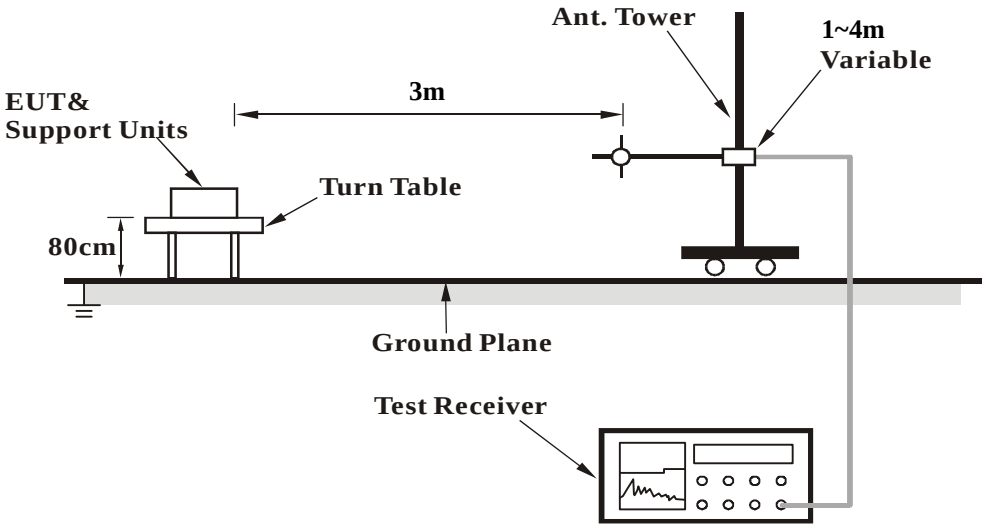
c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.

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
GPRS:

MODE	TX channel 661	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.24	31.48	-13	-40.95	-14.11	-55.06	-42.06
2	50.52	35.43	-13	-43.26	-9.89	-53.15	-40.15
3	107.22	36.83	-13	-53.45	-0.83	-54.28	-41.28
4	270.84	34.85	-13	-60.05	3.90	-56.15	-43.15
5	346.2	37.30	-13	-60.40	3.60	-56.80	-43.8
6	357.4	39.04	-13	-58.83	3.56	-55.27	-42.27
7	378.4	39.00	-13	-58.86	3.45	-55.41	-42.41
8	896.4	43.51	-13	-54.93	0.53	-54.40	-41.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.7	39.41	-13	-32.83	-14.24	-47.07	-34.07
2	51.6	40.52	-13	-38.56	-9.63	-48.19	-35.19
3	63.48	43.88	-13	-40.33	-6.57	-46.90	-33.90
4	107.22	42.96	-13	-47.32	-0.83	-48.15	-35.15
5	368.6	36.99	-13	-60.87	3.50	-57.37	-44.37
6	381.2	38.85	-13	-59.00	3.43	-55.57	-42.57
7	395.2	36.65	-13	-61.20	3.36	-57.84	-44.84
8	896.4	44.57	-13	-53.87	0.53	-53.34	-40.34

REMARKS:

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

EDGE:

MODE	TX channel 661	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.24	31.43	-13	-41.00	-14.11	-55.11	-42.11
2	50.52	35.36	-13	-43.33	-9.89	-53.22	-40.22
3	107.22	36.45	-13	-53.83	-0.83	-54.66	-41.66
4	270.84	34.56	-13	-60.34	3.90	-56.44	-43.44
5	346.2	37.25	-13	-60.46	3.60	-56.85	-43.85
6	357.4	39.11	-13	-58.75	3.56	-55.20	-42.20
7	378.4	39.25	-13	-58.60	3.45	-55.16	-42.16
8	896.4	43.45	-13	-54.99	0.53	-54.46	-41.46
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.7	39.54	-13	-32.70	-14.24	-46.94	-33.94
2	51.6	40.23	-13	-38.85	-9.63	-48.48	-35.48
3	63.48	43.96	-13	-40.25	-6.57	-46.82	-33.82
4	107.22	42.66	-13	-47.62	-0.83	-48.45	-35.45
5	368.6	36.13	-13	-61.73	3.50	-58.23	-45.23
6	381.2	38.54	-13	-59.31	3.43	-55.88	-42.88
7	395.2	36.46	-13	-61.39	3.36	-58.03	-45.03
8	896.4	44.87	-13	-53.57	0.53	-53.04	-40.04

REMARKS:

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

WCDMA:

MODE	TX channel 9400	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	53.81	34.84	-13	-45.04	-9.09	-54.13	-41.13
2	162.26	31.03	-13	-57.80	-0.37	-58.18	-45.18
3	227.96	34.32	-13	-61.08	3.97	-57.10	-44.10
4	478.87	27.71	-13	-68.97	2.85	-66.11	-53.11
5	712.37	31.48	-13	-64.87	1.42	-63.45	-50.45
6	848.73	31.54	-13	-63.01	1.05	-61.96	-48.96
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	53.53	27.66	-13	-52.12	-9.16	-61.28	-48.28
2	141.29	27.35	-13	-66.22	-1.27	-67.49	-54.49
3	264.78	28.77	-13	-65.95	3.94	-62.01	-49.01
4	305.88	28.37	-13	-67.66	3.70	-63.96	-50.96
5	478.37	33.45	-13	-63.25	2.85	-60.40	-47.40
6	746.32	29.49	-13	-66.71	0.76	-65.95	-52.95

REMARKS:

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

CDMA & EVDO:

MODE	TX channel 600	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	53.67	33.73	-13	-46.10	-9.12	-55.22	-42.22
2	163.17	29.92	-13	-59.17	-0.24	-59.41	-46.41
3	226.85	33.21	-13	-62.19	3.99	-58.20	-45.20
4	478.85	26.60	-13	-70.08	2.85	-67.22	-54.22
5	711.28	30.37	-13	-65.98	1.44	-64.54	-51.54
6	848.73	30.43	-13	-64.12	1.05	-63.07	-50.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	54.47	28.32	-13	-51.80	-8.93	-60.73	-47.73
2	142.18	26.45	-13	-66.86	-1.24	-68.11	-55.11
3	263.89	27.69	-13	-67.00	3.95	-63.05	-50.05
4	304.39	27.48	-13	-68.49	3.70	-64.78	-51.78
5	479.48	34.56	-13	-62.08	2.86	-59.23	-46.23
6	745.49	28.37	-13	-68.00	0.89	-67.11	-54.11

REMARKS:

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

LTE Band 2 (Channel Bandwidth 1.4MHz):

MODE	TX channel 18900	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.24	31.48	-13	-40.95	-14.11	-55.06	-42.06
2	50.52	35.43	-13	-43.26	-9.89	-53.15	-40.15
3	107.22	36.83	-13	-53.45	-0.83	-54.28	-41.28
4	270.84	34.85	-13	-60.05	3.90	-56.15	-43.15
5	346.2	37.30	-13	-60.40	3.60	-56.80	-43.80
6	357.4	39.04	-13	-58.83	3.56	-55.27	-42.27
7	378.4	39.00	-13	-58.86	3.45	-55.41	-42.41
8	896.4	43.51	-13	-55.27	0.50	-54.76	-41.76
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.7	39.41	-13	-32.83	-14.24	-47.07	-34.07
2	51.6	40.52	-13	-38.56	-9.63	-48.19	-35.19
3	63.48	43.88	-13	-40.33	-6.57	-46.90	-33.90
4	107.22	42.96	-13	-47.32	-0.83	-48.15	-35.15
5	368.6	36.99	-13	-60.87	3.50	-57.37	-44.37
6	381.2	38.85	-13	-59.00	3.43	-55.57	-42.57
7	395.2	36.65	-13	-61.16	3.38	-57.77	-44.77
8	896.4	44.57	-13	-54.21	0.50	-53.70	-40.70

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.58	31.52	-13	-41.03	-14.03	-55.06	-42.06
2	49.88	35.96	-13	-42.50	-10.05	-52.54	-39.54
3	107.92	37.18	-13	-53.06	-0.85	-53.91	-40.91
4	271.24	35.75	-13	-59.17	3.90	-55.26	-42.26
5	346.21	36.91	-13	-60.79	3.60	-57.19	-44.19
6	357.25	38.27	-13	-59.60	3.56	-56.04	-43.04
7	378.4	38.91	-13	-58.95	3.45	-55.50	-42.50
8	895.9	42.53	-13	-56.25	0.51	-55.75	-42.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.23	40.07	-13	-32.00	-14.36	-46.35	-33.35
2	50.86	41.31	-13	-37.50	-9.81	-47.31	-34.31
3	63.97	43.41	-13	-41.09	-6.43	-47.52	-34.52
4	107.26	43.47	-13	-46.81	-0.83	-47.64	-34.64
5	368.71	37.17	-13	-60.69	3.50	-57.19	-44.19
6	382.08	39.70	-13	-58.15	3.43	-54.72	-41.72
7	395.64	37.63	-13	-60.18	3.38	-56.80	-43.80
8	895.76	43.82	-13	-54.96	0.51	-54.46	-41.46

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.78	32.50	-13	-39.76	-14.22	-53.99	-40.99
2	49.53	36.29	-13	-42.04	-10.13	-52.17	-39.17
3	108.23	36.52	-13	-53.71	-0.86	-54.56	-41.56
4	271.56	35.75	-13	-59.18	3.90	-55.28	-42.28
5	347.12	37.79	-13	-59.95	3.60	-56.35	-43.35
6	357.37	39.16	-13	-59.02	3.58	-55.44	-42.44
7	377.64	39.19	-13	-58.67	3.45	-55.22	-42.22
8	896.05	43.51	-13	-55.27	0.51	-54.77	-41.77
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.89	39.91	-13	-32.40	-14.19	-46.59	-33.59
2	50.21	40.58	-13	-38.00	-9.97	-47.97	-34.97
3	63.84	43.20	-13	-41.23	-6.46	-47.69	-34.69
4	106.56	43.79	-13	-46.53	-0.81	-47.34	-34.34
5	368.78	37.64	-13	-60.22	3.50	-56.72	-43.72
6	381.87	40.30	-13	-57.55	3.43	-54.12	-41.12
7	395.75	37.71	-13	-60.10	3.38	-56.72	-43.72
8	895.27	43.21	-13	-55.58	0.51	-55.07	-42.07

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.25	32.76	-13	-39.31	-14.35	-53.66	-40.66
2	49.14	35.29	-13	-42.90	-10.23	-53.13	-40.13
3	107.27	35.21	-13	-48.46	-6.83	-55.29	-42.29
4	270.49	36.40	-13	-53.88	-0.83	-54.71	-41.71
5	346.17	36.83	-13	-58.06	3.91	-54.15	-41.15
6	356.51	38.90	-13	-58.81	3.60	-55.21	-42.21
7	377.51	38.32	-13	-59.54	3.45	-56.09	-43.09
8	897.57	43.19	-13	-55.57	0.50	-55.07	-42.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.21	40.86	-13	-31.56	-14.12	-45.68	-32.68
2	51.06	39.88	-13	-39.01	-9.76	-48.77	-35.77
3	63.51	42.50	-13	-41.73	-6.56	-48.29	-35.29
4	105.97	44.09	-13	-46.26	-0.79	-47.05	-34.05
5	369.07	37.37	-13	-60.49	3.50	-56.99	-43.99
6	382.71	40.10	-13	-57.75	3.42	-54.33	-41.33
7	396.01	37.53	-13	-60.28	3.38	-56.91	-43.91
8	894.71	43.47	-13	-55.33	0.51	-54.82	-41.82

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.24	31.48	-13	-40.95	-14.11	-55.06	-42.06
2	50.52	35.43	-13	-43.26	-9.89	-53.15	-40.15
3	107.22	36.83	-13	-46.84	-6.83	-53.67	-40.67
4	270.84	34.85	-13	-60.05	3.90	-56.15	-43.15
5	346.2	37.30	-13	-60.40	3.60	-56.80	-43.80
6	357.4	39.04	-13	-58.83	3.56	-55.27	-42.27
7	378.4	39.00	-13	-58.86	3.45	-55.41	-42.41
8	896.4	43.51	-13	-55.27	0.50	-54.76	-41.76
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.6	40.79	-13	-31.41	-14.26	-45.68	-32.68
2	50.43	39.15	-13	-39.51	-9.91	-49.42	-36.42
3	62.86	42.09	-13	-41.75	-6.75	-48.50	-35.50
4	105.78	44.33	-13	-46.03	-0.79	-46.82	-33.82
5	369.07	38.36	-13	-59.50	3.50	-56.00	-43.00
6	382.11	40.69	-13	-57.16	3.43	-53.73	-40.73
7	395.11	38.04	-13	-59.77	3.38	-56.38	-43.38
8	895.58	43.69	-13	-55.10	0.51	-54.59	-41.59

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.88	32.33	-13	-40.22	-14.03	-54.25	-41.25
2	50.18	34.90	-13	-44.07	-9.70	-53.77	-40.77
3	106.37	36.32	-13	-54.01	-0.81	-54.81	-41.81
4	271.39	34.46	-13	-60.44	3.90	-56.54	-43.54
5	346.33	38.08	-13	-59.62	3.60	-56.01	-43.01
6	358.25	38.76	-13	-59.11	3.55	-55.55	-42.55
7	379.08	39.12	-13	-58.74	3.45	-55.29	-42.29
8	896.94	42.66	-13	-56.11	0.50	-55.61	-42.61
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.96	39.92	-13	-32.32	-14.24	-46.56	-33.56
2	50.59	39.79	-13	-39.29	-9.63	-48.92	-35.92
3	62.58	43.06	-13	-41.15	-6.57	-47.72	-34.72
4	106.57	44.75	-13	-45.53	-0.83	-46.36	-33.36
5	368.67	38.47	-13	-59.39	3.50	-55.89	-42.89
6	382.66	41.41	-13	-56.44	3.43	-53.01	-40.01
7	395.54	38.94	-13	-58.91	3.36	-55.55	-42.55
8	896.09	43.51	-13	-54.93	0.53	-54.40	-41.40

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.81	31.20	-13	-40.49	-14.61	-55.10	-42.10
2	49.96	36.04	-13	-35.65	-14.61	-50.26	-37.26
3	107.05	37.29	-13	-53.00	-0.82	-53.82	-40.82
4	270.68	35.30	-13	-59.60	3.90	-55.69	-42.69
5	345.65	36.81	-13	-60.87	3.61	-57.27	-44.27
6	356.8	39.10	-13	-58.77	3.56	-55.21	-42.21
7	377.54	39.92	-13	-57.95	3.56	-54.39	-41.39
8	895.49	42.91	-13	-55.46	0.54	-54.92	-41.92
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	30.52	41.53	-13	-29.92	-14.77	-44.69	-31.69
2	52.25	43.90	-13	-27.55	-14.77	-42.32	-29.32
3	63.28	42.63	-13	-41.46	-6.63	-48.09	-35.09
4	108.68	43.95	-13	-46.25	-0.87	-47.12	-34.12
5	368.39	35.57	-13	-62.29	3.50	-58.79	-45.79
6	381.65	37.88	-13	-59.98	3.50	-56.48	-43.48
7	398.41	39.75	-13	-58.08	3.35	-54.73	-41.73
8	897.28	41.66	-13	-56.85	0.52	-56.33	-43.33

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.24	31.48	-13	-40.95	-14.11	-55.06	-42.06
2	50.52	35.43	-13	-37.00	-14.11	-51.11	-38.11
3	107.22	36.83	-13	-53.45	-0.83	-54.28	-41.28
4	270.84	34.85	-13	-60.05	3.90	-56.15	-43.15
5	346.2	37.30	-13	-60.40	3.60	-56.80	-43.80
6	357.4	39.04	-13	-58.83	3.56	-55.27	-42.27
7	378.4	39.00	-13	-58.87	3.56	-55.31	-42.31
8	896.4	43.51	-13	-54.93	0.53	-54.40	-41.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	30.5	40.74	-13	-30.70	-14.78	-45.48	-32.48
2	53.1	43.39	-13	-28.05	-14.78	-42.83	-29.83
3	63.78	41.92	-13	-42.47	-6.48	-48.95	-35.95
4	109.03	44.54	-13	-45.64	-0.88	-46.52	-33.52
5	368.77	35.77	-13	-62.09	3.50	-58.59	-45.59
6	381.73	37.39	-13	-60.47	3.50	-56.97	-43.97
7	397.95	39.39	-13	-58.44	3.35	-55.08	-42.08
8	896.29	41.36	-13	-57.07	0.53	-56.54	-43.54

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.82	29.29	-13	-42.99	-14.21	-57.20	-44.20
2	49.54	37.05	-13	-35.23	-14.21	-49.44	-36.44
3	106.02	39.09	-13	-51.26	-0.79	-52.05	-39.05
4	267.06	36.22	-13	-58.57	3.93	-54.64	-41.64
5	342.06	36.21	-13	-61.32	3.61	-57.71	-44.71
6	355.17	38.68	-13	-59.19	3.57	-55.62	-42.62
7	376.74	40.12	-13	-57.75	3.57	-54.18	-41.18
8	892.62	45.83	-13	-52.30	0.57	-51.73	-38.73
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	31.1	40.10	-13	-31.56	-14.63	-46.19	-33.19
2	52.91	42.80	-13	-28.86	-14.63	-43.49	-30.49
3	63.06	41.34	-13	-42.62	-6.69	-49.31	-36.31
4	108.59	43.90	-13	-46.31	-0.87	-47.17	-34.17
5	368.48	35.28	-13	-62.58	3.50	-59.08	-46.08
6	382.08	37.50	-13	-60.36	3.50	-56.86	-43.86
7	397.2	40.22	-13	-57.60	3.36	-54.24	-41.24
8	895.92	41.54	-13	-56.86	0.54	-56.33	-43.33

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.64	28.88	-13	-43.33	-14.26	-57.59	-44.59
2	48.97	36.99	-13	-35.22	-14.26	-49.48	-36.48
3	106.37	38.14	-13	-52.19	-0.80	-52.99	-39.99
4	268.17	35.30	-13	-59.52	3.92	-55.60	-42.60
5	342.29	37.13	-13	-60.41	3.61	-56.80	-43.80
6	356.14	38.49	-13	-59.38	3.56	-55.81	-42.81
7	376.36	40.42	-13	-57.45	3.56	-53.88	-40.88
8	894.48	45.18	-13	-53.11	0.55	-52.55	-39.55
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	31.99	40.38	-13	-31.60	-14.41	-46.02	-33.02
2	52.55	42.93	-13	-29.05	-14.41	-43.47	-30.47
3	62.16	41.03	-13	-42.39	-6.95	-49.34	-36.34
4	107.84	43.24	-13	-47.01	-0.84	-47.85	-34.85
5	367.83	34.81	-13	-63.05	3.50	-59.55	-46.55
6	382.12	36.98	-13	-60.88	3.50	-57.38	-44.38
7	396.8	39.33	-13	-58.49	3.37	-55.12	-42.12
8	896.46	41.17	-13	-57.28	0.53	-56.75	-43.75

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.66	28.98	-13	-43.24	-14.25	-57.49	-44.49
2	48.5	37.84	-13	-34.38	-14.25	-48.63	-35.63
3	106.31	38.23	-13	-52.10	-0.80	-52.90	-39.90
4	268.88	36.12	-13	-58.72	3.92	-54.81	-41.81
5	343.25	36.66	-13	-60.92	3.61	-57.31	-44.31
6	356.98	39.06	-13	-58.81	3.56	-55.25	-42.25
7	377.04	40.08	-13	-57.79	3.56	-54.23	-41.23
8	895.4	44.35	-13	-54.01	0.54	-53.47	-40.47
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.9	40.02	-13	-32.29	-14.19	-46.48	-33.48
2	51.75	42.28	-13	-30.03	-14.19	-44.22	-31.22
3	62.37	41.68	-13	-41.87	-6.89	-48.76	-35.76
4	107.51	43.37	-13	-46.90	-0.84	-47.73	-34.73
5	368.24	35.76	-13	-62.10	3.50	-58.60	-45.60
6	381.47	36.95	-13	-60.91	3.50	-57.41	-44.41
7	396.01	39.08	-13	-58.73	3.38	-55.36	-42.36
8	896.01	41.51	-13	-56.90	0.54	-56.36	-43.36

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	33.11	29.66	-13	-42.72	-14.14	-56.86	-43.86
2	48.78	36.94	-13	-35.45	-14.14	-49.59	-36.59
3	107.25	38.21	-13	-52.07	-0.83	-52.90	-39.90
4	268.62	36.17	-13	-58.67	3.92	-54.75	-41.75
5	344.22	36.73	-13	-60.89	3.61	-57.28	-44.28
6	357.34	39.87	-13	-58.00	3.56	-54.44	-41.44
7	376.88	40.10	-13	-57.77	3.56	-54.21	-41.21
8	896.01	43.62	-13	-54.79	0.54	-54.25	-41.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	32.81	40.10	-13	-32.18	-14.21	-46.39	-33.39
2	50.88	42.52	-13	-29.76	-14.21	-43.97	-30.97
3	62.89	41.49	-13	-42.37	-6.74	-49.11	-36.11
4	107.74	43.41	-13	-46.84	-0.84	-47.69	-34.69
5	367.58	35.44	-13	-62.42	3.50	-58.92	-45.92
6	381.68	37.68	-13	-60.18	3.50	-56.67	-43.67
7	396.35	38.32	-13	-59.50	3.37	-56.12	-43.12
8	896.37	42.31	-13	-56.13	0.53	-55.60	-42.60

REMARKS:

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

Above 1GHz

GPRS:

MODE	TX channel 661	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	44.20	-13	-59.95	7.68	-52.27	-39.27
2	5640	51.20	-13	-53.54	7.02	-46.52	-33.52
3	7520	56.40	-13	-46.22	4.53	-41.69	-28.69
4	9400	57.3	-13	-44.57	4.21	-40.37	-27.37
5	11280	57.3	-13	-44.19	3.48	-40.71	-27.71
6	13160	59.6	-13	-41.01	4.06	-36.94	-23.94
7	15040	62.5	-13	-34.85	3.70	-31.15	-18.15
8	16920	66.5	-13	-30.85	3.70	-27.15	-14.15
9	18800	68.8	-13	-30.13	3.76	-26.36	-13.36
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	45.1	-13	-59.05	7.68	-51.37	-38.37
2	5640	50.6	-13	-54.14	7.02	-47.12	-34.12
3	7520	55.4	-13	-47.22	4.53	-42.69	-29.69
4	9400	55.5	-13	-46.37	4.21	-42.17	-29.17
5	11280	58.4	-13	-43.09	3.48	-39.61	-26.61
6	13160	60.2	-13	-40.41	4.06	-36.34	-23.34
7	15040	61.9	-13	-35.45	3.70	-31.75	-18.75
8	16920	65.1	-13	-32.25	3.70	-28.55	-15.55
9	18800	68	-13	-30.93	3.76	-27.16	-14.16

REMARKS:

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

EDGE:

MODE	TX channel 661	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	44.25	-13	-59.90	7.68	-52.22	-39.22
2	5640	50.74	-13	-54.00	7.02	-46.98	-33.98
3	7520	55.42	-13	-47.20	4.53	-42.67	-29.67
4	9400	57.15	-13	-44.72	4.21	-40.52	-27.52
5	11280	56.62	-13	-44.87	3.48	-41.39	-28.39
6	13160	60.33	-13	-40.28	4.06	-36.21	-23.21
7	15040	62.78	-13	-34.57	3.70	-30.87	-17.87
8	16920	66.46	-13	-30.89	3.70	-27.19	-14.19
9	18800	69.6	-13	-29.33	3.76	-25.56	-12.56
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	45.55	-13	-58.60	7.68	-50.92	-37.92
2	5640	49.74	-13	-55.00	7.02	-47.98	-34.98
3	7520	54.95	-13	-47.67	4.53	-43.14	-30.14
4	9400	56.26	-13	-45.61	4.21	-41.41	-28.41
5	11280	58.63	-13	-42.86	3.48	-39.38	-26.38
6	13160	59.57	-13	-41.04	4.06	-36.97	-23.97
7	15040	60.9	-13	-36.45	3.70	-32.75	-19.75
8	16920	65.45	-13	-31.90	3.70	-28.20	-15.20
9	18800	68.08	-13	-30.85	3.76	-27.08	-14.08

REMARKS:

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

WCDMA:

MODE	TX channel 9400	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	55.30	-13	-48.85	7.68	-41.17	-28.17
2	5640	50.90	-13	-53.84	7.02	-46.82	-33.82
3	7520	56.30	-13	-46.32	4.53	-41.79	-28.79
4	9400	54.5	-13	-47.37	4.21	-43.17	-30.17
5	11280	57.8	-13	-43.69	3.48	-40.21	-27.21
6	13160	61.4	-13	-39.21	4.06	-35.14	-22.14
7	15040	62.2	-13	-35.15	3.70	-31.45	-18.45
8	16920	65.3	-13	-32.05	3.70	-28.35	-15.35
9	18800	69.6	-13	-29.33	3.76	-25.56	-12.56
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	59.5	-13	-44.65	7.68	-36.97	-23.97
2	5640	50.9	-13	-53.84	7.02	-46.82	-33.82
3	7520	55.8	-13	-46.82	4.53	-42.29	-29.29
4	9400	57.1	-13	-44.77	4.21	-40.57	-27.57
5	11280	57.8	-13	-43.69	3.48	-40.21	-27.21
6	13160	61.3	-13	-39.31	4.06	-35.24	-22.24
7	15040	63	-13	-34.35	3.70	-30.65	-17.65
8	16920	66.8	-13	-30.55	3.70	-26.85	-13.85
9	18800	68.6	-13	-30.33	3.76	-26.56	-13.56

REMARKS:

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

CDMA & EVDO:

MODE	TX channel 600	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**Limit (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Margin (dB)**
1	3760	55.10	-13	-49.05	7.68	-41.37	-28.37
2	5640	51.10	-13	-53.64	7.02	-46.62	-33.62
3	7520	56.10	-13	-46.52	4.53	-41.99	-28.99
4	9400	54.7	-13	-47.17	4.21	-42.97	-29.97
5	11280	57.7	-13	-43.79	3.48	-40.31	-27.31
6	13160	61.3	-13	-39.31	4.06	-35.24	-22.24
7	15040	62.2	-13	-35.15	3.70	-31.45	-18.45
8	16920	65.5	-13	-31.85	3.70	-28.15	-15.15
9	**18800**	**70**	**-13**	**-27.35**	**3.70**	**-23.65**	**-10.65**
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**Limit (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Margin (dB)**
1	3760	59.1	-13	-45.05	7.68	-37.37	-24.37
2	5640	50.4	-13	-54.34	7.02	-47.32	-34.32
3	7520	55.8	-13	-46.82	4.53	-42.29	-29.29
4	9400	57.2	-13	-44.67	4.21	-40.47	-27.47
5	11280	57.5	-13	-43.99	3.48	-40.51	-27.51
6	13160	61.2	-13	-39.41	4.06	-35.34	-22.34
7	15040	62.9	-13	-34.45	3.70	-30.75	-17.75
8	16920	66.5	-13	-30.85	3.70	-27.15	-14.15
9	18800	68	-13	-29.35	3.70	-25.65	-12.65

REMARKS:

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

LTE Band 2 (Channel Bandwidth 1.4MHz):

MODE	TX channel 18900	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	59.00	-13	-45.15	7.68	-37.47	-24.47
2	5640	66.10	-13	-38.64	7.02	-31.62	-18.62
3	7520	56.35	-13	-46.27	4.53	-41.74	-28.74
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	50.61	-13	-53.54	7.68	-45.86	-32.86
2	5640	52.37	-13	-52.37	7.02	-45.35	-32.35
3	7520	56.55	-13	-46.07	4.53	-41.54	-28.54

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	57.90	-13	-46.25	7.68	-38.57	-25.57
2	5640	57.80	-13	-46.94	7.02	-39.92	-26.92
3	7520	56.47	-13	-46.15	4.53	-41.62	-28.62
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	50.6	-13	-53.55	7.68	-45.87	-32.87
2	5640	52.02	-13	-52.72	7.02	-45.70	-32.70
3	7520	55.74	-13	-46.88	4.53	-42.35	-29.35

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3710	56.10	-13	-48.05	7.68	-40.37	-27.37
2	5565	56.30	-13	-48.44	7.02	-41.42	-28.42
3	7420	55.60	-13	-47.02	4.53	-42.49	-29.49
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3710	50.9	-13	-53.25	7.68	-45.57	-32.57
2	5565	51.5	-13	-53.24	7.02	-46.22	-33.22
3	7420	56.2	-13	-46.42	4.53	-41.89	-28.89

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	56.40	-13	-47.75	7.68	-40.07	-27.07
2	5640	54.30	-13	-50.44	7.02	-43.42	-30.42
3	7520	55.00	-13	-47.62	4.53	-43.09	-30.09
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	50.13	-13	-54.02	7.68	-46.34	-33.34
2	5640	51.29	-13	-53.45	7.02	-46.43	-33.43
3	7520	55.79	-13	-46.83	4.53	-42.30	-29.30

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	55.73	-13	-48.42	7.68	-40.74	-27.74
2	5640	57.28	-13	-47.46	7.02	-40.44	-27.44
3	7520	55.95	-13	-46.67	4.53	-42.14	-29.14
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	50.14	-13	-54.01	7.68	-46.33	-33.33
2	5640	51.83	-13	-52.91	7.02	-45.89	-32.89
3	7520	55.6	-13	-47.02	4.53	-42.49	-29.49

REMARKS:

1. EIRP (dBm) = S.G Power 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 18900	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	56.22	-13	-47.93	7.68	-40.25	-27.25
2	5640	57.19	-13	-47.55	7.02	-40.53	-27.53
3	7520	54.86	-13	-47.76	4.53	-43.23	-30.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3760	50.14	-13	-54.01	7.68	-46.33	-33.33
2	5640	51.83	-13	-52.91	7.02	-45.89	-32.89
3	7520	55.6	-13	-47.02	4.53	-42.49	-29.49

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	59.12	-13	-45.05	7.68	-37.37	-24.37
2	5646	65.50	-13	-39.23	7.02	-32.22	-19.22
3	7528	56.44	-13	-46.18	4.52	-41.66	-28.66
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	49.64	-13	-54.53	7.68	-46.85	-33.85
2	5646	52.46	-13	-52.27	7.02	-45.26	-32.26
3	7528	57.54	-13	-45.08	4.52	-40.56	-27.56

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	57.81	-13	-46.36	7.68	-38.68	-25.68
2	5646	57.44	-13	-47.29	7.02	-40.28	-27.28
3	7528	56.22	-13	-46.40	4.52	-41.88	-28.88
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	49.13	-13	-55.04	7.68	-47.36	-34.36
2	5646	52.58	-13	-52.15	7.02	-45.14	-32.14
3	7528	57.68	-13	-44.94	4.52	-40.42	-27.42

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	55.40	-13	-48.77	7.68	-41.09	-28.09
2	5646	56.20	-13	-48.53	7.02	-41.52	-28.52
3	7528	55.54	-13	-47.08	4.52	-42.56	-29.56
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	51.56	-13	-52.61	7.68	-44.93	-31.93
2	5646	50.67	-13	-54.06	7.02	-47.05	-34.05
3	7528	56.13	-13	-46.49	4.52	-41.97	-28.97

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	56.72	-13	-47.45	7.68	-39.77	-26.77
2	5646	54.60	-13	-50.13	7.02	-43.12	-30.12
3	7528	54.88	-13	-47.74	4.52	-43.22	-30.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	51.66	-13	-52.51	7.68	-44.83	-31.83
2	5646	50.86	-13	-53.87	7.02	-46.86	-33.86
3	7528	56.5	-13	-46.12	4.52	-41.60	-28.60

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	55.48	-13	-48.69	7.68	-41.01	-28.01
2	5646	57.26	-13	-47.47	7.02	-40.46	-27.46
3	7528	56.95	-13	-45.67	4.52	-41.15	-28.15
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3764	52.09	-13	-52.08	7.68	-44.40	-31.40
2	5646	51.7	-13	-53.03	7.02	-46.02	-33.02
3	7528	55.89	-13	-46.73	4.52	-42.21	-29.21

REMARKS:

1. EIRP (dBm) = S.G Power 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 26365	FREQUENCY RANGE	Above 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3464	56.34	-13	-47.83	7.68	-40.15	-27.15
2	5196	58.01	-13	-46.72	7.02	-39.71	-26.71
3	6928	57.30	-13	-45.32	4.52	-40.80	-27.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Margin (dB)
1	3464	52.09	-13	-52.08	7.68	-44.40	-31.40
2	5196	51.7	-13	-53.03	7.02	-46.02	-33.02
3	6928	55.89	-13	-46.73	4.52	-42.21	-29.21

REMARKS:

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

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6 INFORMATION ON THE TESTING LABORATORIES

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

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

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

7 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications were made to the EUT by the lab during the test.

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