FCC TEST REPORT

(PART 27)

REPORT NO.:	RF130326C14-2
MODEL NO.:	K005
FCC ID:	MSQK005
RECEIVED:	Mar. 26, 2013
TESTED:	Apr. 17, 2013 ~ Apr. 19, 2013
ISSUED:	May 02, 2013

APPLICANT: ASUSTek COMPUTER INC.

ADDRESS: 4F., No. 150, LI-TE Rd., PEITOU, TAIPEI 112, TAIWAN

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
LAB ADDRESS:	No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
TEST LOCATION:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130326C14-2	Original release	May 02, 2013

1 CERTIFICATION

PRODUCT:	ASUS Tablet
MODEL NO.:	K005
BRAND:	ASUS
APPLICANT:	ASUSTek COMPUTER INC.
TESTED:	Apr. 17, 2013 ~ Apr. 19, 2013
TEST SAMPLE:	Production Unit
TEST STANDARDS:	**FCC Part 27, Subpart C, L** **FCC Part 2** ANSI C63.4-2003

The above equipment (model: K005) 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 : Vera Huang , **DATE:** May 02, 2013

Vera Huang / Specialist

APPROVED BY : Sam chen , **DATE:** May 02, 2013

Sam Chen / Assistant Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

OPERATING BAND: 704–716 MHz			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
2.1046 27.50(C)(10)	Maximum Peak Output Power	PASS	Meet the requirement of limit.
2.1055 27.54	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 27.53(g)	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.50(d)(5)	Peak to average ratio	PASS	Meet the requirement of limit.
27.53(g)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 27.53(g)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53(g)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -19.78dB at 33.24MHz.

OPERATING BAND: 1710~1755 MHz			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
2.1046 27.50(d)(4)	Maximum Peak Output Power	PASS	Meet the requirement of limit.
2.1055 27.54	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 27.53(h)	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.50(d)(5)	Peak to average ratio	PASS	Meet the requirement of limit.
27.53(h)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 27.53(h)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53(h)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -21.57dB at 31.08MHz.

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
Conducted emissions	150kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~1000MHz	2.95 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 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

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Aug. 21, 2012	Aug. 20, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 17, 2012	Dec. 16, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Mar. 25, 2013	Mar. 24, 2014
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Jan. 07, 2013	Jan. 06, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 25, 2012	Dec. 24, 2013
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier EMCI	EMC 012645	980115	Dec. 28, 2012	Dec. 27, 2013
Preamplifier EMCI	EMC 184045	980116	Dec. 28, 2012	Dec. 27, 2013
Preamplifier EMCI	EMC 330H	980112	Dec. 28, 2012	Dec. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4	Oct. 19, 2012	Oct. 18, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 19, 2012	Oct. 18, 2013
RF signal cable Worken	RG-213	NA	Dec. 29, 2012	Dec. 28, 2013
Software	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower &Turn Table Controller MF	MF-7802	NA	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 10.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 690701.
5. The IC Site Registration No. is IC 7450F-10.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	ASUS Tablet	
MODEL NO.	K005	
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.7Vdc (battery)	
MODULATION TECHNOLOGY	**LTE Band 17**	QPSK, 16QAM
	LTE Band 4	QPSK, 16QAM
FREQUENCY RANGE	**LTE Band 17 Channel Bandwidth: 5MHz**	706.5MHz ~ 713.5MHz
	LTE Band 17 Channel Bandwidth: 10MHz	709MHz ~ 711MHz
	LTE Band 4 Channel Bandwidth: 1.4MHz	1710.7MHz ~1754.3MHz
	LTE Band 4 Channel Bandwidth: 3MHz	1711.5MHz ~1753.5MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715MHz ~1750MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~1747.5MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~1745MHz
EMISSION DESIGNATOR	**LTE Band 17 Channel Bandwidth: 5MHz**	4M50G7D
	LTE Band 17 Channel Bandwidth: 10MHz	8M91G7D
	LTE Band 4 Channel Bandwidth: 1.4MHz	1M08G7D
	LTE Band 4 Channel Bandwidth: 3MHz	2M68G7D
	LTE Band 4 Channel Bandwidth: 5MHz	4M50G7D
	LTE Band 4 Channel Bandwidth: 10MHz	8M93W7D
	LTE Band 4 Channel Bandwidth: 15MHz	13M4G7D
	LTE Band 4 Channel Bandwidth: 20MHz	17M9W7D

MAX. ERP POWER (W)	**LTE Band 17 Channel Bandwidth: 5MHz**	75.34mW
	LTE Band 17 Channel Bandwidth: 10MHz	74.64mW
MAX. EIRP POWER (mW)	**LTE Band 4 Channel Bandwidth: 1.4MHz**	380.19mW
	LTE Band 4 Channel Bandwidth: 3MHz	382.82mW
	LTE Band 4 Channel Bandwidth: 5MHz	363.08mW
	LTE Band 4 Channel Bandwidth: 10MHz	376.70mW
	LTE Band 4 Channel Bandwidth: 15MHz	381.94mW
	LTE Band 4 Channel Bandwidth: 20MHz	381.94mW
CATEGORY	3	
ANTENNA TYPE	Fixed Internal Antenna	
DATA CABLE	Refer to Note as below	
I/O PORTS	Refer to users' manual	
ACCESSORY DEVICES	Refer to Note as below	

NOTE:

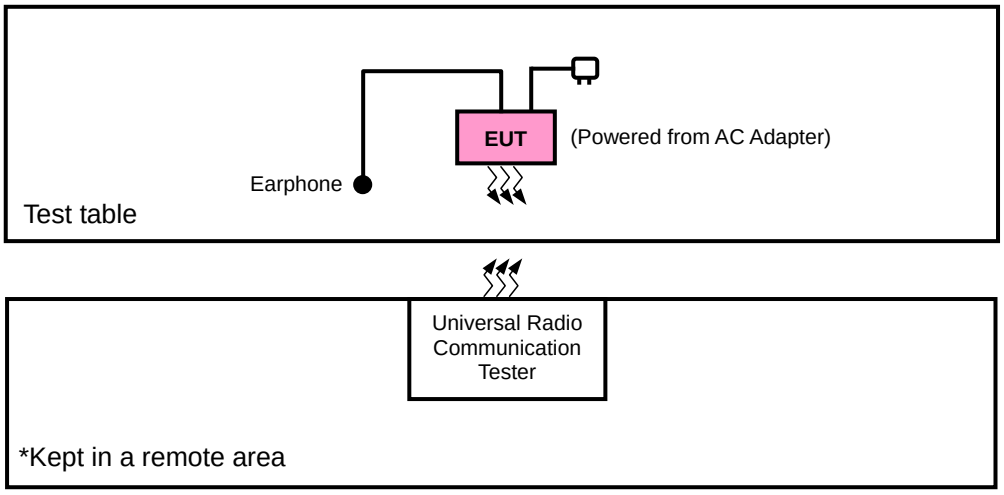
1. The EUT has following accessories.

ITEM	BRAND	MODEL	DESCRIPTION
AC Adapter 1	ASUS	AD83531	Input: 100-240Vac, 50/60Hz, 0.3A Output: 5Vdc, 2A
AC Adapter 2	ASUS	W12-010N3A	Input: 100-240Vac, 50/60Hz, 0.3A Output: 5Vdc, 2A
Battery	SMP (cell SDI)	C12P1302	Rating: 3.7Vdc, 6560mAh / 25Wh
USB Cable	ASUS	AA757600	0.9m shielded cable without ferrite core
LCD Panel	AUO	AUO/B101UAN01.7_ H/W 1A	--
Video Camera (Front)	Liteon	LITEON/10P2SF130K	--
Video Camera (Rear)	Liteon	LITEON/12P2BA540	--
WWAN Module	Qualcomm	MDM-9215M	--
WLAN Module	Qualcomm	WCN-3660	--
CPU	Qualcomm	APQ-8064	1.7GHz, 1067 pins
Mainboard	Asus	ME302KL	--

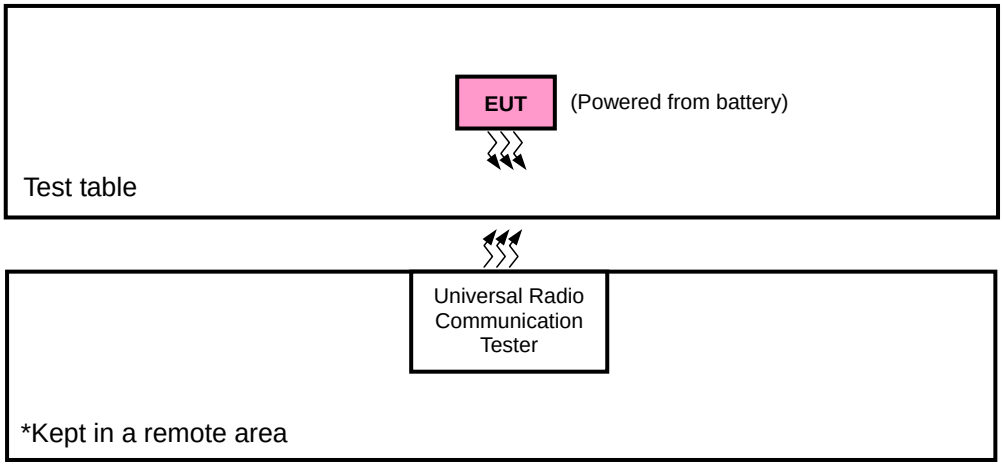
2. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST



FOR E.R.P. TEST



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	Earphone	Acon	CW-010M.V	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A

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

3.4 DESCRIPTION OF TEST MODES

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 as listed below for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

	BAND	AXIS FOR RADIATED EMISSION
ERP	LTE Band 17	X
	LTE Band 4	Z
RADIATED EMISSION	LTE Band 17	X
	LTE Band 4	Y

LTE Band 17

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1 RB / 24 RB Offset
				16QAM	1 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1 RB / 49 RB Offset
				16QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	23755 to 23825	23790	5MHz	QPSK	1 RB / 24 RB Offset
	23780 to 23800	23790	10MHz	QPSK	1 RB / 49 RB Offset
OCCUPIED BANDWIDTH	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1 RB / 24 RB Offset
				16QAM	1 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1 RB / 0 RB Offset
				16QAM	1 RB / 0 RB Offset
BAND EDGE	23755 to 23825	23755	5MHz	QPSK	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
		23825	5MHz	QPSK	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	23780 to 23800	23780	10MHz	QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
		23800	10MHz	QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
CONDCUDETED EMISSION	23755 to 23825	23790	5MHz	QPSK	1 RB / 24 RB Offset
	23780 to 23800	23790	10MHz	QPSK	1 RB / 0 RB Offset
RADIATED EMISSION	23755 to 23825	23790	5MHz	QPSK	1 RB / 24 RB Offset
	23780 to 23800	23790	10MHz	QPSK	1 RB / 49 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case were found in QPSK modulation.

LTE Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 2 RB Offset
				16QAM	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK	1 RB / 0 RB Offset
				16QAM	1 RB / 7 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	19957 to 20393	20175	1.4MHz	QPSK	1 RB / 2 RB Offset
	19965 to 20385	20175	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	20175	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20175	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20175	20MHz	QPSK	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	6 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	15 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	75 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	100 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	6 RB / 2 RB Offset
				16QAM	6 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK	1 RB / 0 RB Offset
				16QAM	1 RB / 7 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
BAND EDGE	19957 to 20393	19957	1.4MHz	QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
		20393	1.4MHz	QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
	19965 to 20385	19965	3MHz	QPSK	1 RB / 0 RB Offset
					15 RB / 0 RB Offset
		20385	3MHz	QPSK	1 RB / 14 RB Offset
					15 RB / 0 RB Offset
	19975 to 20375	19975	5MHz	QPSK	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
		20375	5MHz	QPSK	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	20000 to 20350	20000	10MHz	QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
		20350	10MHz	QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
BAND EDGE	20025 to 20325	20025	15MHz	QPSK	1 RB / 0 RB Offset
					75 RB / 0 RB Offset
		20325	15MHz	QPSK	1 RB / 74 RB Offset
					75 RB / 0 RB Offset
	20050 to 20300	20050	20MHz	QPSK	1 RB / 0 RB Offset
					100 RB / 0 RB Offset
		20300	20MHz	QPSK	1 RB / 99 RB Offset
					100 RB / 0 RB Offset
CONDCUDETED EMISSION	19957 to 20393	20175	1.4MHz	QPSK	1 RB / 2 RB Offset
	19965 to 20385	20175	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	20175	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20175	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20175	20MHz	QPSK	1 RB / 0 RB Offset
RADIATED EMISSION	19957 to 20393	20175	1.4MHz	QPSK	1 RB / 2 RB Offset
	19965 to 20385	20175	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	20175	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20175	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20175	20MHz	QPSK	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case were found in QPSK modulation.

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP/EIRP	25deg. C, 59%RH	3.7Vdc	Howard Kao
FREQUENCY STABILITY	25deg. C, 59%RH	3.7Vdc	Howard Kao
OCCUPIED BANDWIDTH	25deg. C, 59%RH	3.7Vdc	Howard Kao
BAND EDGE	25deg. C, 59%RH	3.7Vdc	Howard Kao
CONDCUDETED EMISSION	25deg. C, 59%RH	3.7Vdc	Howard Kao
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Johnson Liao

3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI C63.4-2003

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

Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP.
Portable stations (hand-held devices) operating in the 704-716 MHz band are limited to 3 watts ERP

4.1.2 TEST PROCEDURES

EIRP / ERP MEASUREMENT:

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

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

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

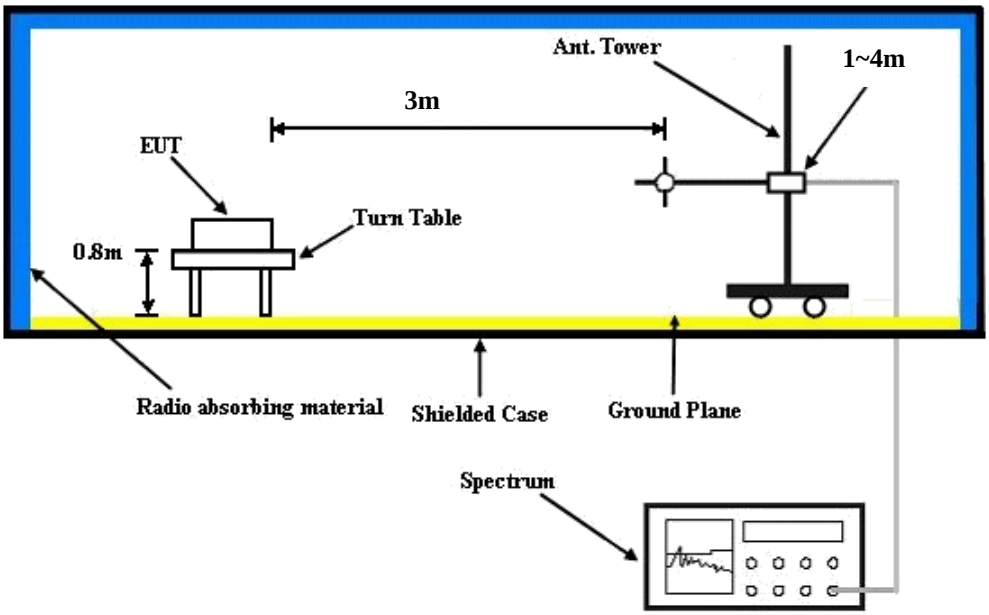
d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power - 2.15dBi.

CONDUCTED POWER MEASUREMENT:

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

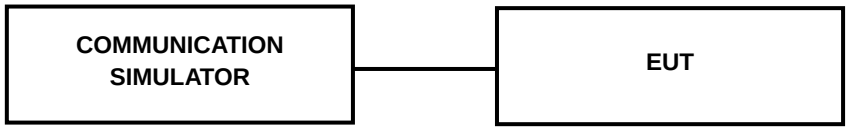
4.1.3 TEST SETUP

EIRP / ERP MEASUREMENT:



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

CONDUCTED POWER MEASUREMENT:



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

4.1.4 TEST RESULTS

AVERAGE CONDUCTED OUTPUT POWER (dBm)

LTE Band 17								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
5 MHz	QPSK	23755	706.5	1	0	0	23.7	23.54
		23790	710	1	0	0	23.7	23.48
		23825	713.5	1	0	0	23.7	23.34
		23755	706.5	1	12	0	23.7	23.2
		23790	710	1	12	0	23.7	23.14
		23825	713.5	1	12	0	23.7	23
		23755	706.5	1	24	0	23.7	23.58
		23790	710	1	24	0	23.7	23.52
		23825	713.5	1	24	0	23.7	23.38
		23755	706.5	12	0	1	23.7	22.26
		23790	710	12	0	1	23.7	22.2
		23825	713.5	12	0	1	23.7	22.06
		23755	706.5	12	6	1	23.7	22.1
		23790	710	12	6	1	23.7	22.04
		23825	713.5	12	6	1	23.7	21.9
		23755	706.5	12	13	1	23.7	22.33
		23790	710	12	13	1	23.7	22.27
		23825	713.5	12	13	1	23.7	22.13
		23755	706.5	25	0	1	23.7	22.07
		23790	710	25	0	1	23.7	22.01
		23825	713.5	25	0	1	23.7	21.87
	16QAM	23755	706.5	1	0	1	23.7	22.65
		23790	710	1	0	1	23.7	22.51
		23825	713.5	1	0	1	23.7	22.37
		23755	706.5	1	12	1	23.7	22.28
		23790	710	1	12	1	23.7	22.14
		23825	713.5	1	12	1	23.7	22
		23755	706.5	1	24	1	23.7	22.61
		23790	710	1	24	1	23.7	22.47
		23825	713.5	1	24	1	23.7	22.33
		23755	706.5	12	0	2	23.7	21.21
		23790	710	12	0	2	23.7	21.07
		23825	713.5	12	0	2	23.7	20.93
		23755	706.5	12	6	2	23.7	21.01
		23790	710	12	6	2	23.7	20.87
		23825	713.5	12	6	2	23.7	20.73
		23755	706.5	12	13	2	23.7	21.26
		23790	710	12	13	2	23.7	21.12
		23825	713.5	12	13	2	23.7	20.98
		23755	706.5	25	0	2	23.7	21.02
		23790	710	25	0	2	23.7	20.88
		23825	713.5	25	0	2	23.7	20.74

LTE Band 17								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
10MHz	QPSK	23780	709	1	0	0	23.7	23.61
		23790	710	1	0	0	23.7	23.55
		23800	711	1	0	0	23.7	23.41
		23780	709	1	24	0	23.7	23.27
		23790	710	1	24	0	23.7	23.21
		23800	711	1	24	0	23.7	23.07
		23780	709	1	49	0	23.7	23.65
		23790	710	1	49	0	23.7	23.59
		23800	711	1	49	0	23.7	23.45
		23780	709	25	0	1	23.7	22.33
		23790	710	25	0	1	23.7	22.27
		23800	711	25	0	1	23.7	22.13
		23780	709	25	12	1	23.7	22.17
		23790	710	25	12	1	23.7	22.11
		23800	711	25	12	1	23.7	21.97
		23780	709	25	25	1	23.7	22.4
		23790	710	25	25	1	23.7	22.34
		23800	711	25	25	1	23.7	22.2
		23780	709	50	0	1	23.7	22.14
		23790	710	50	0	1	23.7	22.08
		23800	711	50	0	1	23.7	21.94
	16QAM	23780	709	1	0	1	23.7	22.72
		23790	710	1	0	1	23.7	22.58
		23800	711	1	0	1	23.7	22.44
		23780	709	1	24	1	23.7	22.35
		23790	710	1	24	1	23.7	22.21
		23800	711	1	24	1	23.7	22.07
		23780	709	1	49	1	23.7	22.68
		23790	710	1	49	1	23.7	22.54
		23800	711	1	49	1	23.7	22.4
		23780	709	25	0	2	23.7	21.28
		23790	710	25	0	2	23.7	21.14
		23800	711	25	0	2	23.7	21
		23780	709	25	12	2	23.7	21.08
		23790	710	25	12	2	23.7	20.94
		23800	711	25	12	2	23.7	20.8
		23780	709	25	25	2	23.7	21.33
		23790	710	25	25	2	23.7	21.19
		23800	711	25	25	2	23.7	21.05
		23780	709	50	0	2	23.7	21.09
		23790	710	50	0	2	23.7	20.95
		23800	711	50	0	2	23.7	20.81

LTE Band 4								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
1.4 MHz	QPSK	19957	1710.7	1	0	0	23.3	22.63
		20175	1732.5	1	0	0	23.3	22.76
		20393	1754.3	1	0	0	23.3	22.85
		19957	1710.7	1	2	0	23.3	22.73
		20175	1732.5	1	2	0	23.3	22.86
		20393	1754.3	1	2	0	23.3	22.95
		19957	1710.7	1	5	0	23.3	22.63
		20175	1732.5	1	5	0	23.3	22.76
		20393	1754.3	1	5	0	23.3	22.85
		19957	1710.7	3	0	0	23.3	22.64
		20175	1732.5	3	0	0	23.3	22.77
		20393	1754.3	3	0	0	23.3	22.86
		19957	1710.7	3	1	0	23.3	22.64
		20175	1732.5	3	1	0	23.3	22.77
		20393	1754.3	3	1	0	23.3	22.86
		19957	1710.7	3	3	0	23.3	22.6
		20175	1732.5	3	3	0	23.3	22.73
		20393	1754.3	3	3	0	23.3	22.82
		19957	1710.7	6	0	1	23.3	22.17
		20175	1732.5	6	0	1	23.3	22.3
		20393	1754.3	6	0	1	23.3	22.39
	16QAM	19957	1710.7	1	0	1	23.3	22.07
		20175	1732.5	1	0	1	23.3	22.2
		20393	1754.3	1	0	1	23.3	22.31
		19957	1710.7	1	2	1	23.3	22.11
		20175	1732.5	1	2	1	23.3	22.24
		20393	1754.3	1	2	1	23.3	22.3
		19957	1710.7	1	5	1	23.3	22.06
		20175	1732.5	1	5	1	23.3	22.19
		20393	1754.3	1	5	1	23.3	22.3
		19957	1710.7	3	0	1	23.3	22.14
		20175	1732.5	3	0	1	23.3	22.27
		20393	1754.3	3	0	1	23.3	22.31
		19957	1710.7	3	1	1	23.3	22.13
		20175	1732.5	3	1	1	23.3	22.26
		20393	1754.3	3	1	1	23.3	22.28
		19957	1710.7	3	3	1	23.3	22.09
		20175	1732.5	3	3	1	23.3	22.22
		20393	1754.3	3	3	1	23.3	22.29
		19957	1710.7	6	0	2	23.3	21.14
		20175	1732.5	6	0	2	23.3	21.27
		20393	1754.3	6	0	2	23.3	21.38

LTE Band 4								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
3MHz	QPSK	19965	1711.5	1	0	0	23.3	22.73
		20175	1732.5	1	0	0	23.3	23.02
		20385	1753.5	1	0	0	23.3	22.83
		19965	1711.5	1	7	0	23.3	22.72
		20175	1732.5	1	7	0	23.3	23.01
		20385	1753.5	1	7	0	23.3	22.82
		19965	1711.5	1	14	0	23.3	22.7
		20175	1732.5	1	14	0	23.3	22.99
		20385	1753.5	1	14	0	23.3	22.8
		19965	1711.5	8	0	1	23.3	21.83
		20175	1732.5	8	0	1	23.3	22.12
		20385	1753.5	8	0	1	23.3	21.93
		19965	1711.5	8	3	1	23.3	21.83
		20175	1732.5	8	3	1	23.3	22.12
		20385	1753.5	8	3	1	23.3	21.93
		19965	1711.5	8	7	1	23.3	21.79
		20175	1732.5	8	7	1	23.3	22.08
		20385	1753.5	8	7	1	23.3	21.89
		19965	1711.5	15	0	1	23.3	21.75
		20175	1732.5	15	0	1	23.3	22.04
		20385	1753.5	15	0	1	23.3	21.85
	16QAM	19965	1711.5	1	0	1	23.3	21.94
		20175	1732.5	1	0	1	23.3	22.18
		20385	1753.5	1	0	1	23.3	22.07
		19965	1711.5	1	7	1	23.3	22.01
		20175	1732.5	1	7	1	23.3	22.25
		20385	1753.5	1	7	1	23.3	22.14
		19965	1711.5	1	14	1	23.3	21.94
		20175	1732.5	1	14	1	23.3	22.18
		20385	1753.5	1	14	1	23.3	22.07
		19965	1711.5	8	0	2	23.3	20.84
		20175	1732.5	8	0	2	23.3	21.08
		20385	1753.5	8	0	2	23.3	20.97
		19965	1711.5	8	3	2	23.3	20.85
		20175	1732.5	8	3	2	23.3	21.09
		20385	1753.5	8	3	2	23.3	20.98
		19965	1711.5	8	7	2	23.3	20.81
		20175	1732.5	8	7	2	23.3	21.05
		20385	1753.5	8	7	2	23.3	20.94
		19965	1711.5	15	0	2	23.3	20.85
		20175	1732.5	15	0	2	23.3	21.09
		20385	1753.5	15	0	2	23.3	20.98

LTE Band 4								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
5 MHz	QPSK	19975	1712.5	1	0	0	23.3	22.83
		20175	1732.5	1	0	0	23.3	23.05
		20375	1752.5	1	0	0	23.3	22.94
		19975	1712.5	1	12	0	23.3	22.67
		20175	1732.5	1	12	0	23.3	22.89
		20375	1752.5	1	12	0	23.3	22.78
		19975	1712.5	1	24	0	23.3	22.82
		20175	1732.5	1	24	0	23.3	23.04
		20375	1752.5	1	24	0	23.3	22.93
		19975	1712.5	12	0	1	23.3	21.83
		20175	1732.5	12	0	1	23.3	22.05
		20375	1752.5	12	0	1	23.3	21.94
		19975	1712.5	12	6	1	23.3	21.83
		20175	1732.5	12	6	1	23.3	22.05
		20375	1752.5	12	6	1	23.3	21.94
		19975	1712.5	12	13	1	23.3	21.86
		20175	1732.5	12	13	1	23.3	22.08
		20375	1752.5	12	13	1	23.3	21.97
		19975	1712.5	25	0	1	23.3	21.73
		20175	1732.5	25	0	1	23.3	21.95
		20375	1752.5	25	0	1	23.3	21.84
	16QAM	19975	1712.5	1	0	1	23.3	21.9
		20175	1732.5	1	0	1	23.3	22.2
		20375	1752.5	1	0	1	23.3	22.35
		19975	1712.5	1	12	1	23.3	21.6
		20175	1732.5	1	12	1	23.3	21.9
		20375	1752.5	1	12	1	23.3	22.05
		19975	1712.5	1	24	1	23.3	21.72
		20175	1732.5	1	24	1	23.3	22.02
		20375	1752.5	1	24	1	23.3	22.17
		19975	1712.5	12	0	2	23.3	20.69
		20175	1732.5	12	0	2	23.3	20.99
		20375	1752.5	12	0	2	23.3	21.14
		19975	1712.5	12	6	2	23.3	20.62
		20175	1732.5	12	6	2	23.3	20.92
		20375	1752.5	12	6	2	23.3	21.07
		19975	1712.5	12	13	2	23.3	20.77
		20175	1732.5	12	13	2	23.3	21.07
		20375	1752.5	12	13	2	23.3	21.22
		19975	1712.5	25	0	2	23.3	20.67
		20175	1732.5	25	0	2	23.3	20.97
		20375	1752.5	25	0	2	23.3	21.12

LTE Band 4								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
10MHz	QPSK	20000	1715	1	0	0	23.3	22.86
		20175	1732.5	1	0	0	23.3	23.03
		20350	1750	1	0	0	23.3	23.08
		20000	1715	1	24	0	23.3	22.73
		20175	1732.5	1	24	0	23.3	22.9
		20350	1750	1	24	0	23.3	22.95
		20000	1715	1	49	0	23.3	22.79
		20175	1732.5	1	49	0	23.3	22.96
		20350	1750	1	49	0	23.3	23.01
		20000	1715	25	0	1	23.3	21.8
		20175	1732.5	25	0	1	23.3	21.97
		20350	1750	25	0	1	23.3	22.02
		20000	1715	25	12	1	23.3	21.65
		20175	1732.5	25	12	1	23.3	21.82
		20350	1750	25	12	1	23.3	21.87
		20000	1715	25	25	1	23.3	21.57
		20175	1732.5	25	25	1	23.3	21.74
		20350	1750	25	25	1	23.3	21.79
		20000	1715	50	0	1	23.3	21.71
		20175	1732.5	50	0	1	23.3	21.88
		20350	1750	50	0	1	23.3	21.93
	16QAM	20000	1715	1	0	1	23.3	21.82
		20175	1732.5	1	0	1	23.3	22.02
		20350	1750	1	0	1	23.3	22.14
		20000	1715	1	24	1	23.3	21.66
		20175	1732.5	1	24	1	23.3	21.86
		20350	1750	1	24	1	23.3	21.98
		20000	1715	1	49	1	23.3	21.74
		20175	1732.5	1	49	1	23.3	21.94
		20350	1750	1	49	1	23.3	22.06
		20000	1715	25	0	2	23.3	20.6
		20175	1732.5	25	0	2	23.3	20.8
		20350	1750	25	0	2	23.3	20.92
		20000	1715	25	12	2	23.3	20.57
		20175	1732.5	25	12	2	23.3	20.77
		20350	1750	25	12	2	23.3	20.89
		20000	1715	25	25	2	23.3	20.56
		20175	1732.5	25	25	2	23.3	20.76
		20350	1750	25	25	2	23.3	20.88
		20000	1715	50	0	2	23.3	20.64
		20175	1732.5	50	0	2	23.3	20.84
		20350	1750	50	0	2	23.3	20.96

LTE Band 4								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
15 MHz	QPSK	20025	1717.5	1	0	0	23.3	22.93
		20175	1732.5	1	0	0	23.3	23.1
		20325	1747.5	1	0	0	23.3	23.15
		20025	1717.5	1	37	0	23.3	22.8
		20175	1732.5	1	37	0	23.3	22.97
		20325	1747.5	1	37	0	23.3	23.02
		20025	1717.5	1	74	0	23.3	22.86
		20175	1732.5	1	74	0	23.3	23.03
		20325	1747.5	1	74	0	23.3	23.08
		20025	1717.5	36	0	1	23.3	21.87
		20175	1732.5	36	0	1	23.3	22.04
		20325	1747.5	36	0	1	23.3	22.09
		20025	1717.5	36	19	1	23.3	21.72
		20175	1732.5	36	19	1	23.3	21.89
		20325	1747.5	36	19	1	23.3	21.94
		20025	1717.5	36	39	1	23.3	21.64
		20175	1732.5	36	39	1	23.3	21.81
		20325	1747.5	36	39	1	23.3	21.86
		20025	1717.5	75	0	1	23.3	21.78
		20175	1732.5	75	0	1	23.3	21.95
		20325	1747.5	75	0	1	23.3	22
	16QAM	20025	1717.5	1	0	1	23.3	21.89
		20175	1732.5	1	0	1	23.3	22.09
		20325	1747.5	1	0	1	23.3	22.21
		20025	1717.5	1	37	1	23.3	21.73
		20175	1732.5	1	37	1	23.3	21.93
		20325	1747.5	1	37	1	23.3	22.05
		20025	1717.5	1	74	1	23.3	21.81
		20175	1732.5	1	74	1	23.3	22.01
		20325	1747.5	1	74	1	23.3	22.13
		20025	1717.5	36	0	2	23.3	20.67
		20175	1732.5	36	0	2	23.3	20.87
		20325	1747.5	36	0	2	23.3	20.99
		20025	1717.5	36	19	2	23.3	20.64
		20175	1732.5	36	19	2	23.3	20.84
		20325	1747.5	36	19	2	23.3	20.96
		20025	1717.5	36	39	2	23.3	20.63
		20175	1732.5	36	39	2	23.3	20.83
		20325	1747.5	36	39	2	23.3	20.95
		20025	1717.5	75	0	2	23.3	20.71
		20175	1732.5	75	0	2	23.3	20.91
		20325	1747.5	75	0	2	23.3	21.03

LTE Band 4								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
20MHz	QPSK	20050	1720	1	0	0	23.3	22.99
		20175	1732.5	1	0	0	23.3	23.16
		20300	1745	1	0	0	23.3	23.21
		20050	1720	1	50	0	23.3	22.86
		20175	1732.5	1	50	0	23.3	23.03
		20300	1745	1	50	0	23.3	23.08
		20050	1720	1	99	0	23.3	22.92
		20175	1732.5	1	99	0	23.3	23.09
		20300	1745	1	99	0	23.3	23.14
		20050	1720	50	0	1	23.3	21.93
		20175	1732.5	50	0	1	23.3	22.1
		20300	1745	50	0	1	23.3	22.15
		20050	1720	50	25	1	23.3	21.78
		20175	1732.5	50	25	1	23.3	21.95
		20300	1745	50	25	1	23.3	22
		20050	1720	50	50	1	23.3	21.7
		20175	1732.5	50	50	1	23.3	21.87
		20300	1745	50	50	1	23.3	21.92
		20050	1720	100	0	1	23.3	21.84
		20175	1732.5	100	0	1	23.3	22.01
		20300	1745	100	0	1	23.3	22.06
	16QAM	20050	1720	1	0	1	23.3	21.95
		20175	1732.5	1	0	1	23.3	22.15
		20300	1745	1	0	1	23.3	22.27
		20050	1720	1	50	1	23.3	21.79
		20175	1732.5	1	50	1	23.3	21.99
		20300	1745	1	50	1	23.3	22.11
		20050	1720	1	99	1	23.3	21.87
		20175	1732.5	1	99	1	23.3	22.07
		20300	1745	1	99	1	23.3	22.19
		20050	1720	50	0	2	23.3	20.73
		20175	1732.5	50	0	2	23.3	20.93
		20300	1745	50	0	2	23.3	21.05
		20050	1720	50	25	2	23.3	20.7
		20175	1732.5	50	25	2	23.3	20.9
		20300	1745	50	25	2	23.3	21.02
		20050	1720	50	50	2	23.3	20.69
		20175	1732.5	50	50	2	23.3	20.89
		20300	1745	50	50	2	23.3	21.01
		20050	1720	100	0	2	23.3	20.77
		20175	1732.5	100	0	2	23.3	20.97
		20300	1745	100	0	2	23.3	21.09

AVERAGE ERP (dBm)

LTE BAND 17

CHANNEL BANDWIDTH: 5MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23755	706.5	-9.89	30.36	18.32	67.92	H
	23790	710	-9.25	30.17	18.77	75.34	H
	23825	713.5	-9.31	30.17	18.71	74.30	H
	23755	706.5	-17.14	32.03	12.74	18.79	V
	23790	710	-17.57	31.98	12.26	16.83	V
	23825	713.5	-17.86	32.06	12.05	16.03	V

CHANNEL BANDWIDTH: 5MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23755	706.5	-10.31	30.36	17.90	61.66	H
	23790	710	-10.04	30.17	17.98	62.81	H
	23825	713.5	-10.82	30.17	17.20	52.48	H
	23755	706.5	-18.85	32.03	11.03	12.68	V
	23790	710	-18.35	31.98	11.48	14.06	V
	23825	713.5	-18.25	32.06	11.66	14.66	V

CHANNEL BANDWIDTH: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23780	709	-9.29	30.17	18.73	74.64	H
	23790	710	-9.95	30.17	18.07	64.12	H
	23800	711	-9.41	30.18	18.62	72.78	H
	23780	709	-16.82	31.96	12.99	19.91	V
	23790	710	-17.47	31.98	12.36	17.22	V
	23800	711	-16.99	32.03	12.89	19.45	V

CHANNEL BANDWIDTH: 10MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23780	709	-10.48	30.17	17.54	56.75	H
	23790	710	-10.02	30.17	18.00	63.10	H
	23800	711	-10.48	30.18	17.55	56.89	H
	23780	709	-17.38	31.96	12.43	17.50	V
	23790	710	-17.35	31.98	12.48	17.70	V
	23800	711	-17.55	32.03	12.33	17.10	V

AVERAGE EIRP (dBm)

LTE BAND 4

CHANNEL BANDWIDTH: 1.4MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19957	1710.7	-14.88	37.90	23.02	200.45	H
	20175	1732.5	-14.78	37.99	23.21	209.41	H
	20393	1754.3	-14.65	38.31	23.66	232.27	H
	19957	1710.7	-12.18	37.81	25.63	365.59	V
	20175	1732.5	-12.87	38.00	25.13	325.84	V
	20393	1754.3	-12.42	38.22	25.80	380.19	V

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19957	1710.7	-15.83	37.90	22.07	161.06	H
	20175	1732.5	-15.37	37.99	22.62	182.81	H
	20393	1754.3	-15.55	38.31	22.76	188.80	H
	19957	1710.7	-13.45	37.81	24.36	272.90	V
	20175	1732.5	-13.49	38.00	24.51	282.49	V
	20393	1754.3	-13.44	38.22	24.78	300.61	V

CHANNEL BANDWIDTH: 3MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19965	1711.5	-14.85	37.90	23.05	201.84	H
	20175	1732.5	-14.46	37.99	23.53	225.42	H
	20385	1753.5	-14.50	38.31	23.81	240.44	H
	19965	1711.5	-12.12	37.81	25.69	370.68	V
	20175	1732.5	-12.65	38.00	25.35	342.77	V
	20385	1753.5	-12.39	38.22	25.83	382.82	V

CHANNEL BANDWIDTH: 3MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19965	1711.5	-14.98	37.90	22.92	195.88	H
	20175	1732.5	-15.18	37.99	22.81	190.99	H
	20385	1753.5	-16.16	38.31	22.15	164.06	H
	19965	1711.5	-13.71	37.81	24.10	257.04	V
	20175	1732.5	-13.31	38.00	24.69	294.44	V
	20385	1753.5	-14.02	38.22	24.20	263.03	V

CHANNEL BANDWIDTH: 5MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19975	1712.5	-14.85	37.90	23.05	201.84	H
	20175	1732.5	-14.48	37.99	23.51	224.39	H
	20375	1752.5	-14.44	38.31	23.87	243.78	H
	19975	1712.5	-12.90	37.81	24.91	309.74	V
	20175	1732.5	-12.40	38.00	25.60	363.08	V
	20375	1752.5	-13.16	38.22	25.06	320.63	V

CHANNEL BANDWIDTH: 5MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19975	1712.5	-15.94	37.90	21.96	157.04	H
	20175	1732.5	-15.13	37.99	22.86	193.20	H
	20375	1752.5	-16.38	38.31	21.93	155.96	H
	19975	1712.5	-13.68	37.81	24.13	258.82	V
	20175	1732.5	-13.09	38.00	24.91	309.74	V
	20375	1752.5	-14.03	38.22	24.19	262.42	V

CHANNEL BANDWIDTH: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20000	1715	-14.98	37.99	23.01	199.99	H
	20175	1732.5	-14.43	37.99	23.56	226.99	H
	20350	1750	-14.66	38.36	23.70	234.42	H
	20000	1715	-12.79	37.91	25.12	325.09	V
	20175	1732.5	-12.24	38.00	25.76	376.70	V
	20350	1750	-12.97	38.28	25.31	339.63	V

CHANNEL BANDWIDTH: 10MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20000	1715	-15.94	37.99	22.05	160.32	H
	20175	1732.5	-15.33	37.99	22.66	184.50	H
	20350	1750	-15.68	38.36	22.68	185.35	H
	20000	1715	-13.63	37.91	24.28	267.92	V
	20175	1732.5	-13.74	38.00	24.26	266.69	V
	20350	1750	-13.82	38.28	24.46	279.25	V

CHANNEL BANDWIDTH: 15MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20025	1717.5	-14.89	37.99	23.10	204.17	H
	20175	1732.5	-14.47	37.99	23.52	224.91	H
	20325	1747.5	-15.01	38.36	23.35	216.27	H
	20025	1717.5	-12.85	37.91	25.06	320.63	V
	20175	1732.5	-12.18	38.00	25.82	381.94	V
	20325	1747.5	-12.55	38.28	25.73	374.11	V

CHANNEL BANDWIDTH: 15MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20025	1717.5	-15.56	37.99	22.43	174.98	H
	20175	1732.5	-15.94	37.99	22.05	160.32	H
	20325	1747.5	-16.06	38.36	22.30	169.82	H
	20025	1717.5	-13.62	37.91	24.29	268.53	V
	20175	1732.5	-13.78	38.00	24.22	264.24	V
	20325	1747.5	-13.51	38.28	24.77	299.92	V

CHANNEL BANDWIDTH: 20MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20050	1720	-14.74	37.99	23.25	211.35	H
	20175	1732.5	-14.70	37.99	23.29	213.30	H
	20300	1745	-14.39	38.36	23.97	249.46	H
	20050	1720	-12.89	37.91	25.02	317.69	V
	20175	1732.5	-12.18	38.00	25.82	381.94	V
	20300	1745	-13.06	38.28	25.22	332.66	V

CHANNEL BANDWIDTH: 20MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20050	1720	-15.61	37.99	22.38	172.98	H
	20175	1732.5	-15.51	37.99	22.48	177.01	H
	20300	1745	-15.90	38.36	22.46	176.20	H
	20050	1720	-13.58	37.91	24.33	271.02	V
	20175	1732.5	-13.30	38.00	24.70	295.12	V
	20300	1745	-13.85	38.28	24.43	277.33	V

4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

4.2.2 TEST PROCEDURE

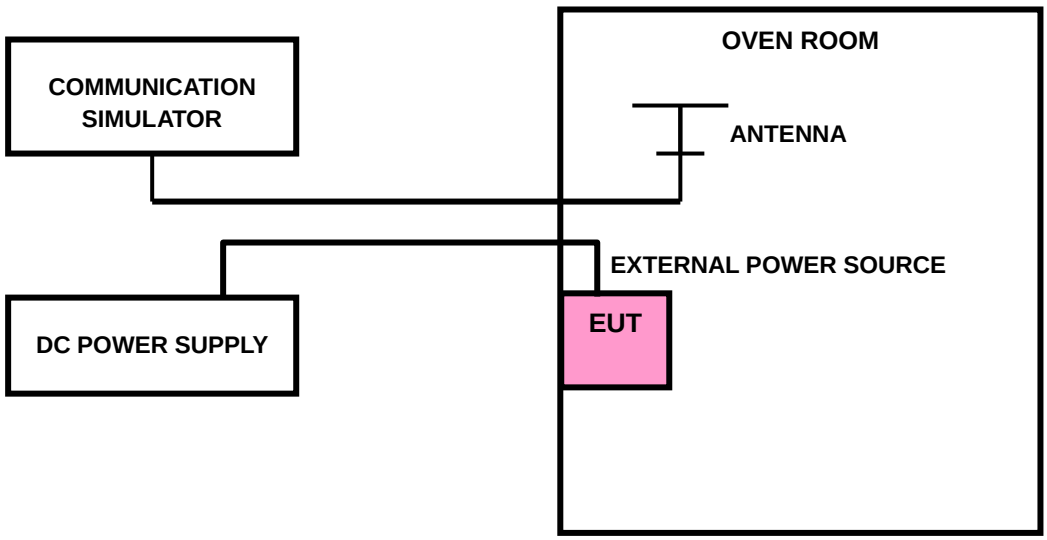
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

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

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

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

4.2.3 TEST SETUP



4.2.4 TEST RESULTS

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)								LIMIT (ppm)
	LTE BAND 4						LTE BAND 17		
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	5MHz	10MHz	
4.0	-0.0032	0.0072	-0.0043	-0.0018	0.0072	-0.0012	-0.0034	0.0038	2.5
3.6	-0.0018	0.0009	0.0071	-0.0065	0.0094	-0.0033	0.0068	0.0041	2.5
4.30	-0.0044	0.0043	-0.0014	-0.0066	-0.0082	-0.0026	-0.0099	-0.0100	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.6Vdc to 4.30Vdc.

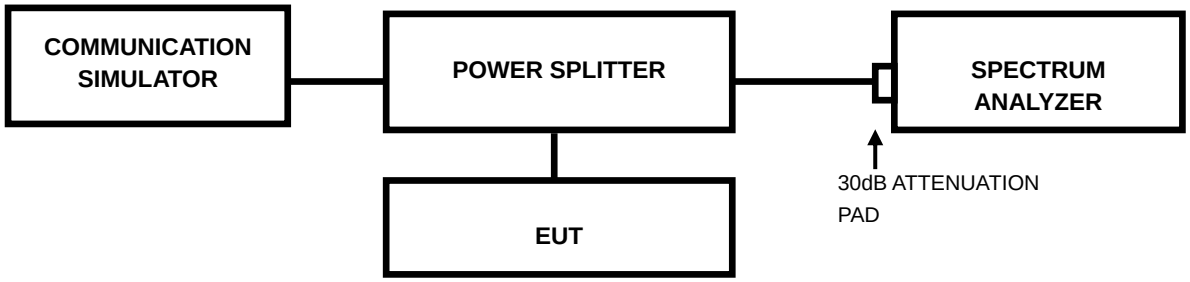
TEMP. (℃)	FREQUENCY ERROR (ppm)								LIMIT (ppm)
	LTE BAND 4						LTE BAND 17		
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	5MHz	10MHz	
-30	-0.0091	-0.0043	0.0044	-0.0024	-0.0038	-0.0054	-0.0018	-0.0049	2.5
-20	-0.0060	-0.0024	-0.0033	0.0092	-0.0037	-0.0002	-0.0108	-0.0076	2.5
-10	0.0037	0.0042	-0.0042	0.0075	-0.0023	-0.0017	0.0121	0.0015	2.5
0	-0.0011	-0.0010	0.0081	0.0062	-0.0078	0.0068	-0.0044	-0.0052	2.5
10	0.0149	0.0053	0.0025	-0.0043	-0.0015	0.0076	-0.0092	-0.0045	2.5
20	0.0084	0.0020	-0.0023	-0.0055	-0.0039	-0.0039	0.0041	0.0046	2.5
30	-0.0015	-0.0106	0.0018	0.0019	0.0007	-0.0038	-0.0090	-0.0051	2.5
40	0.0041	0.0066	-0.0043	0.0053	0.0011	0.0096	-0.0083	-0.0032	2.5
50	-0.0080	0.0026	-0.0038	0.0091	0.0068	0.0017	-0.0104	-0.0024	2.5
55	0.0112	-0.0030	-0.0046	0.0071	0.0087	0.0092	0.0027	-0.0035	2.5

4.3 OCCUPIED BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.3.2 TEST SETUP



4.3.3 TEST PROCEDURES

a. The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

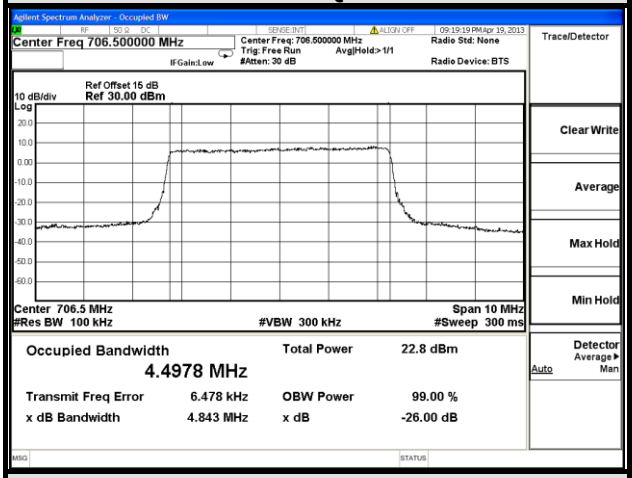
b. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.3.4 TEST RESULTS

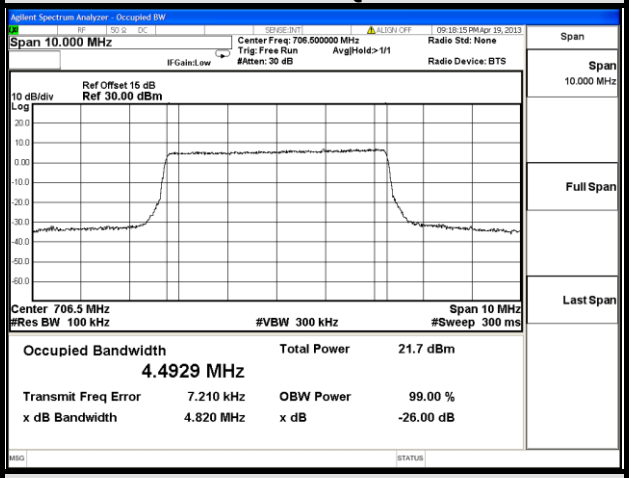
LTE BAND 17							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
23755	706.5	4.4978	4.4929	23780	709.0	8.9092	8.9068
23790	710.0	4.4864	4.4855	23790	710.0	8.8965	8.8940
23825	713.5	4.4867	4.4825	23800	711.0	8.8997	8.8898

SPECTRUM PLOT OF WORST VALUE

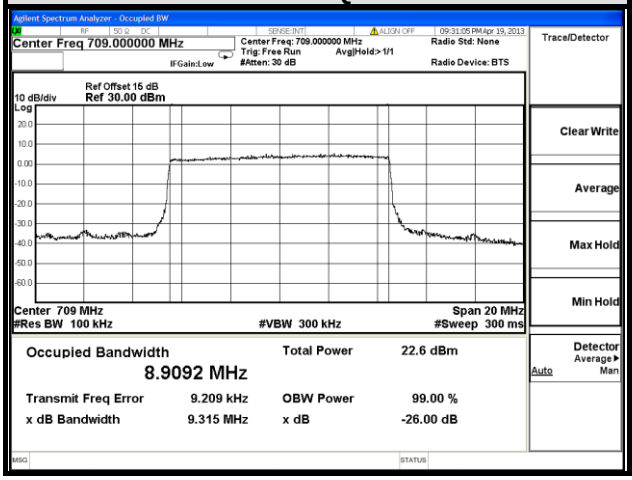
5MHz / QPSK



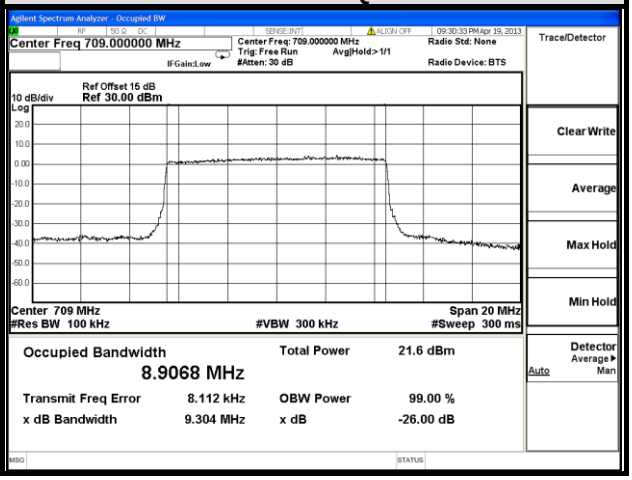
5MHz / 16QAM



10MHz / QPSK



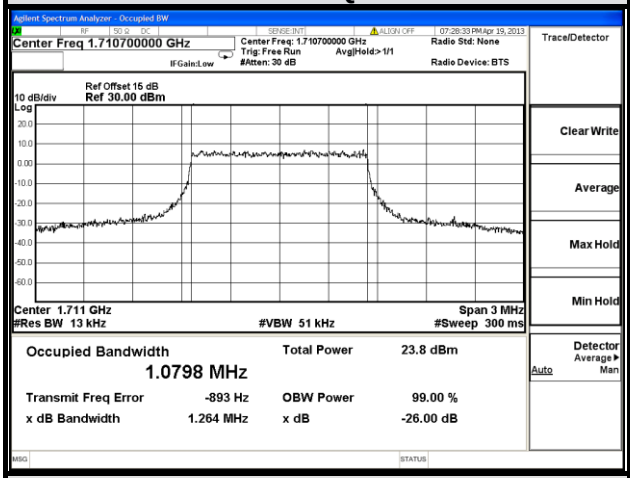
10MHz / 16QAM



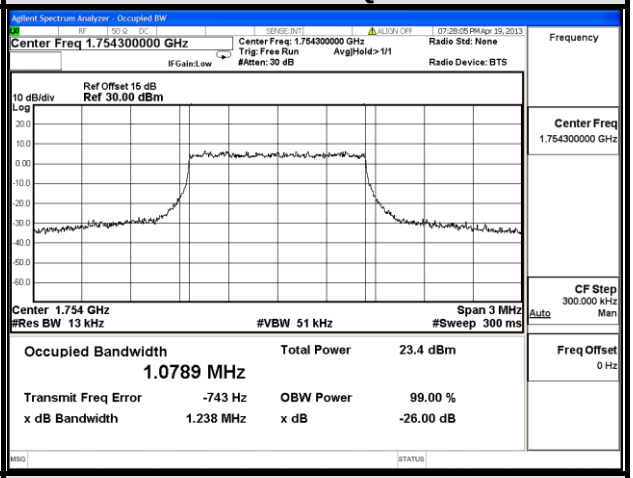
LTE BAND 4							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
19957	1710.7	1.0798	1.0792	19965	1711.5	2.6826	2.6820
20175	1732.5	1.0784	1.0774	20175	1732.5	2.6842	2.6811
20393	1754.3	1.0795	1.0789	20385	1753.5	2.6821	2.6802

SPECTRUM PLOT OF WORST VALUE

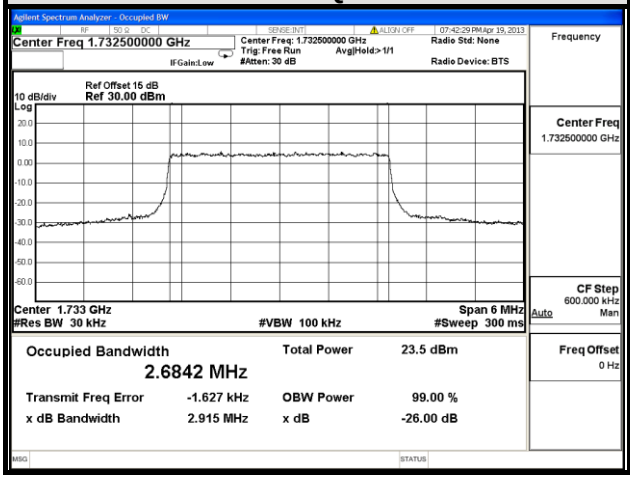
1.4MHz / QPSK



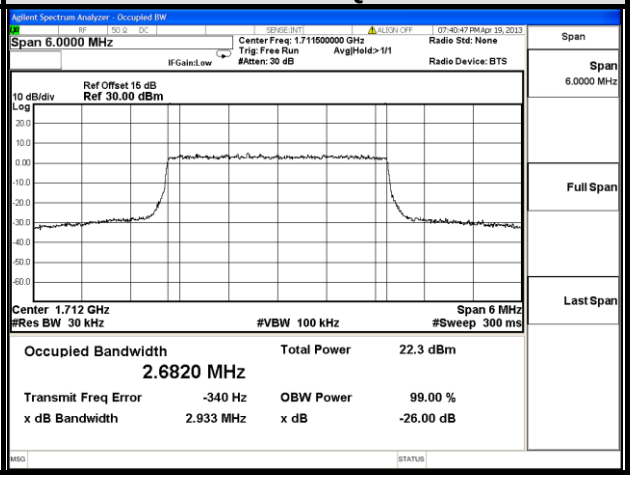
1.4MHz / 16QAM



3MHz / QPSK



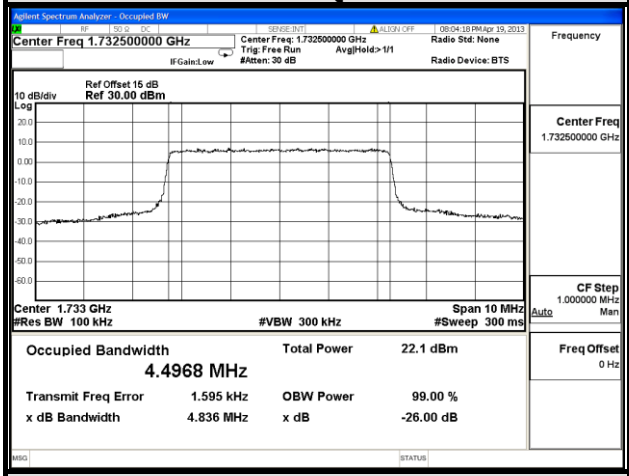
3MHz / 16QAM



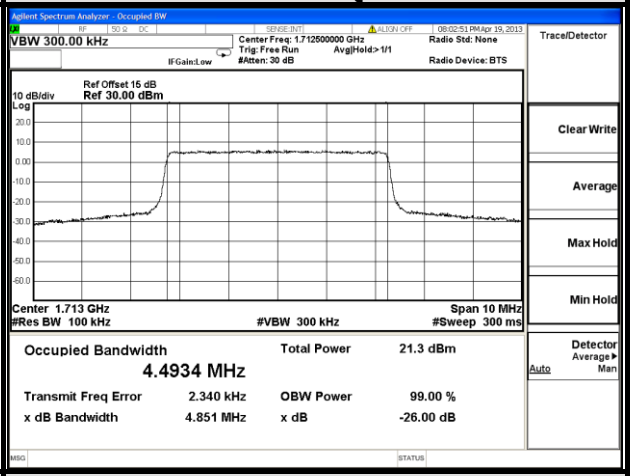
LTE BAND 4							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	4.4963	4.4934	20000	1715.0	8.9223	8.9278
20175	1732.5	4.4968	4.4924	20175	1732.5	8.9268	8.9251
20375	1752.5	4.4948	4.4915	20350	1750.0	8.9213	8.9181

SPECTRUM PLOT OF WORST VALUE

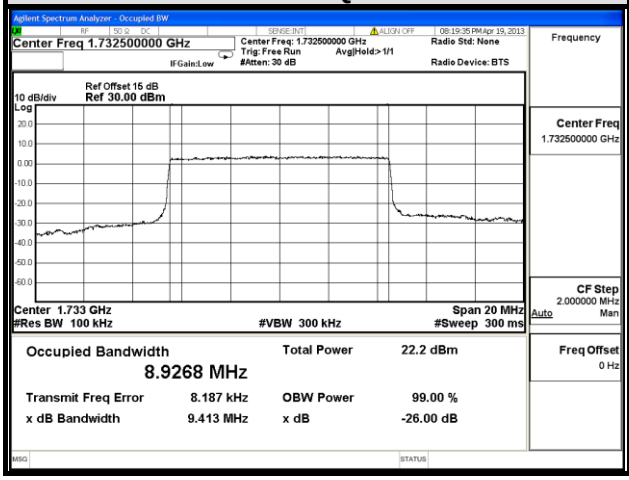
5MHz / QPSK



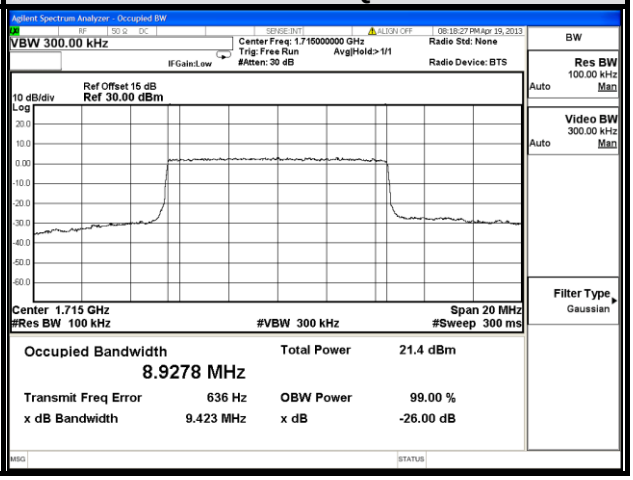
5MHz / 16QAM



10MHz / QPSK



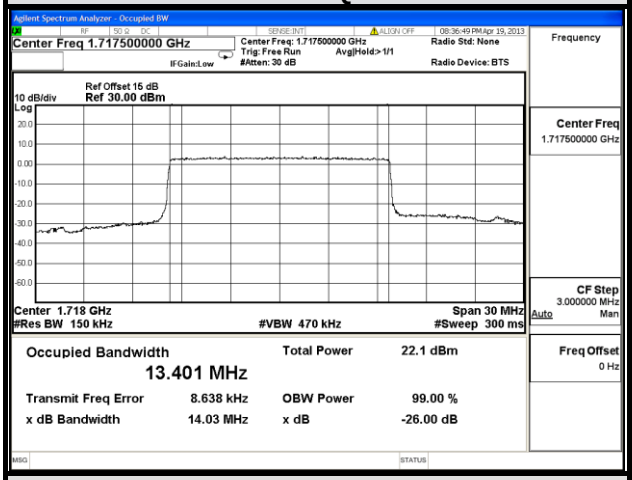
10MHz / 16QAM



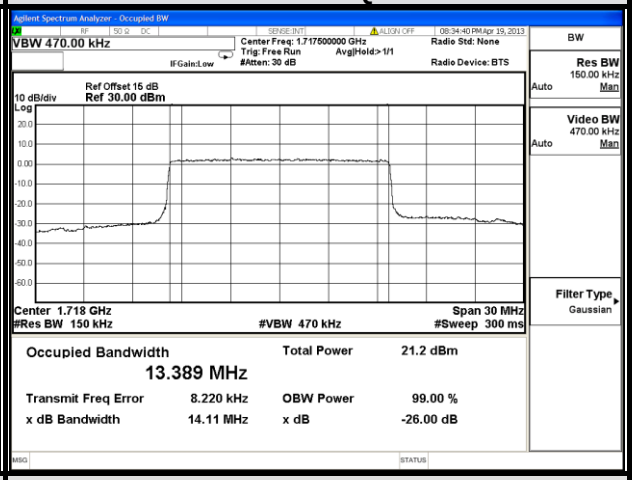
LTE BAND 4							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
20025	1717.5	13.401	13.389	20050	1720	17.849	17.856
20175	1732.5	13.382	13.388	20175	1732.5	17.843	17.854
20325	1747.5	13.381	13.370	20300	1745	17.825	17.806

SPECTRUM PLOT OF WORST VALUE

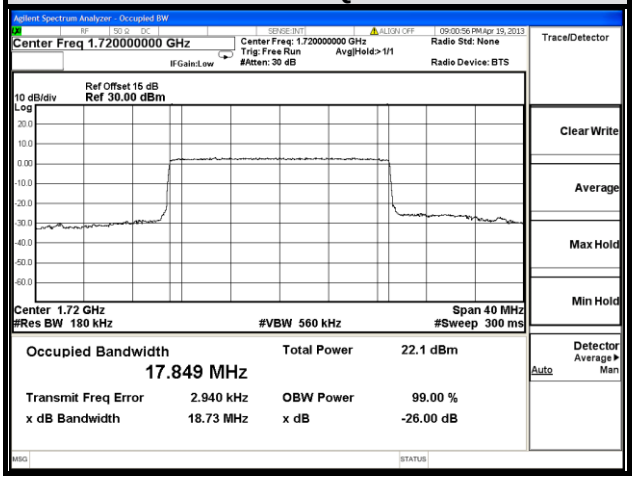
15MHz / QPSK



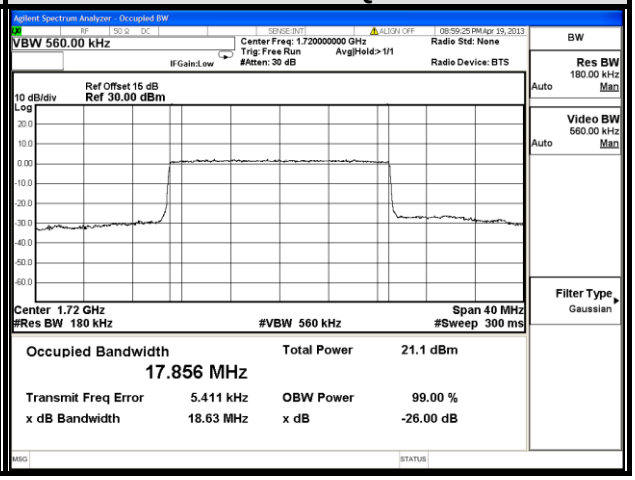
15MHz / 16QAM



20MHz / QPSK



20MHz / 16QAM

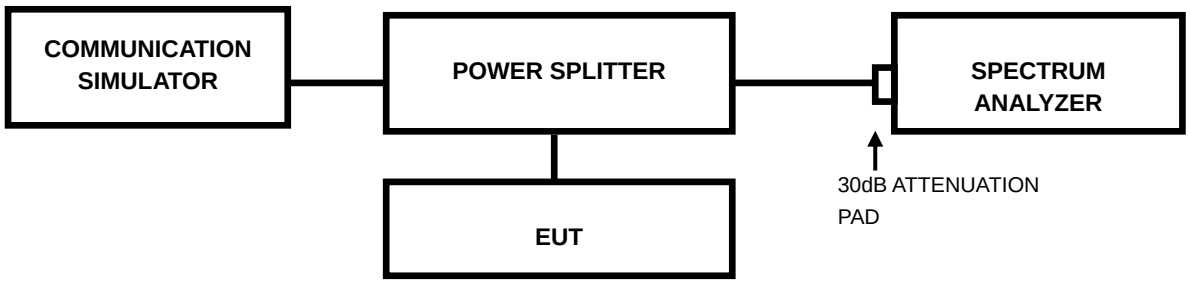


4.4 PEAK TO AVERAGE RATIO

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

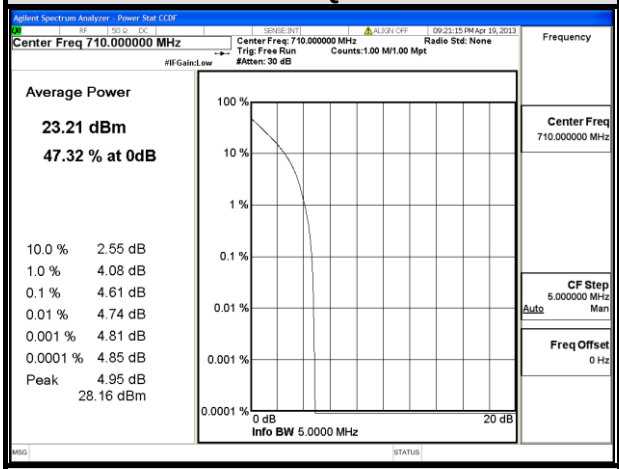
1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

4.4.4 TEST RESULTS

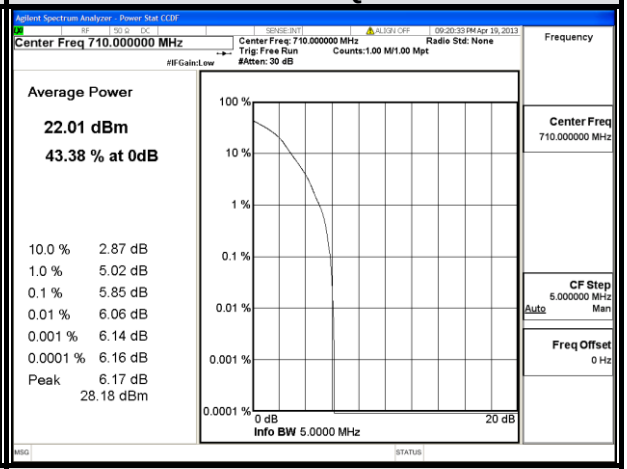
LTE BAND 17							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
23755	706.5	3.92	5.03	23780	709.0	4.05	5.15
23790	710.0	4.61	5.85	23790	710.0	4.34	5.55
23825	713.5	4.01	5.17	23800	711.0	4.58	5.74

SPECTRUM PLOT OF WORST VALUE

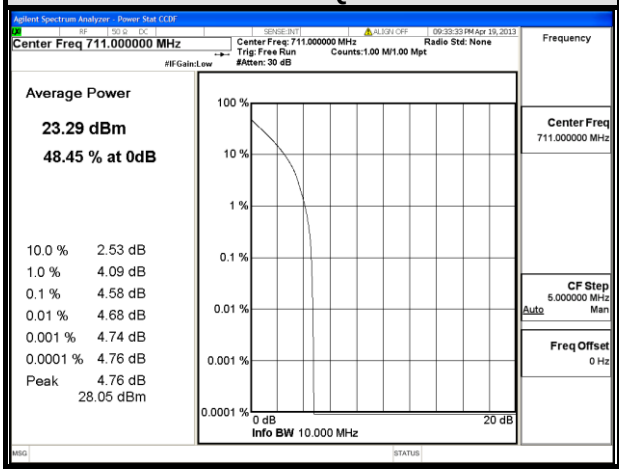
5MHz / QPSK



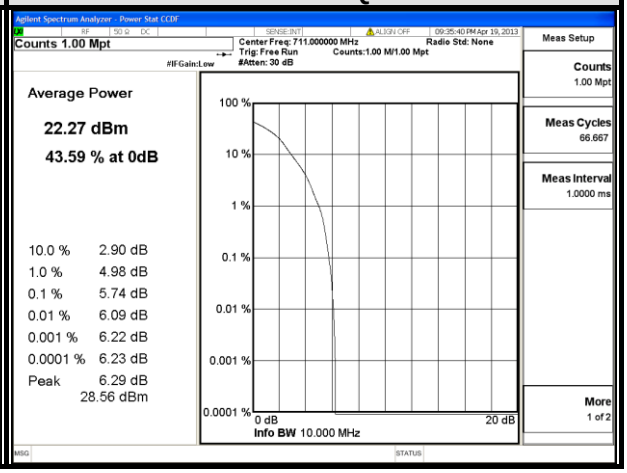
5MHz / 16QAM



10MHz / QPSK



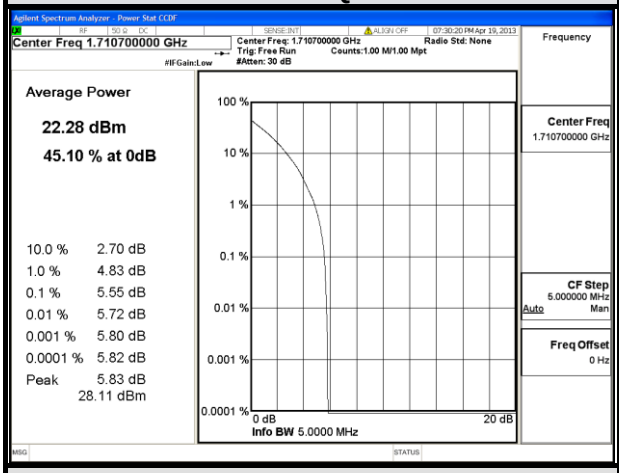
10MHz / 16QAM



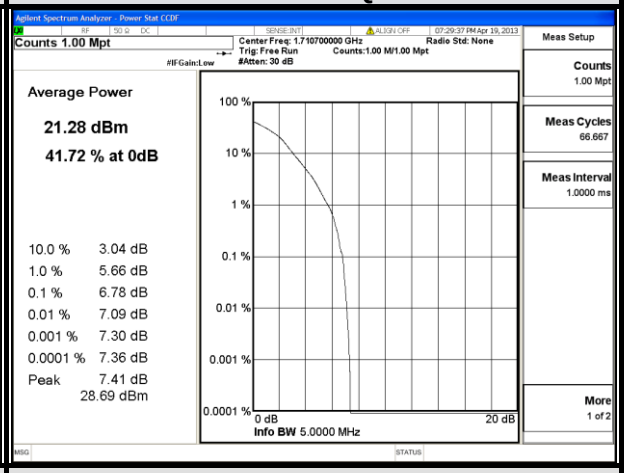
LTE BAND 4							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
19957	1710.7	5.55	6.78	19965	1711.5	5.44	6.72
20175	1732.5	5.52	6.71	20175	1732.5	5.51	6.80
20393	1754.3	5.21	6.31	20385	1753.5	5.22	6.36

SPECTRUM PLOT OF WORST VALUE

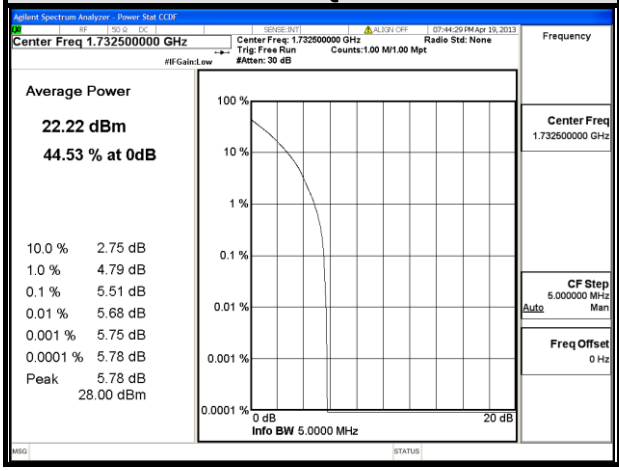
1.4MHz / QPSK



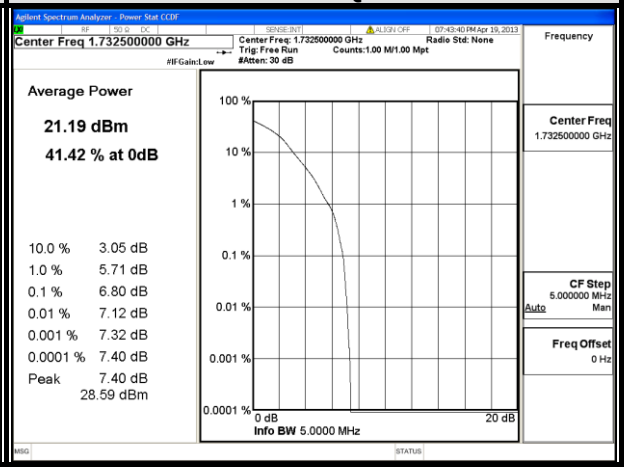
1.4MHz / 16QAM



3MHz / QPSK



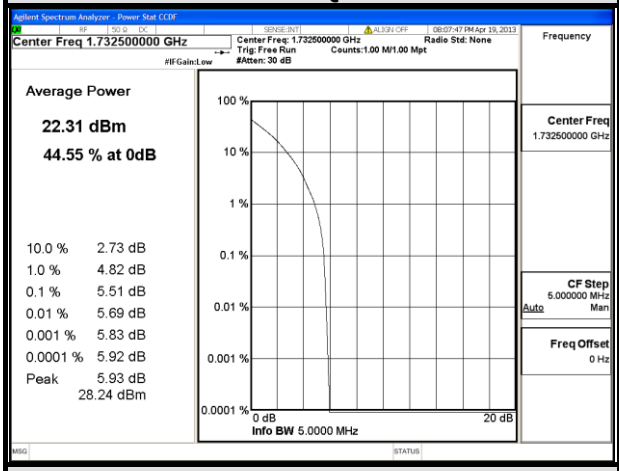
3MHz / 16QAM



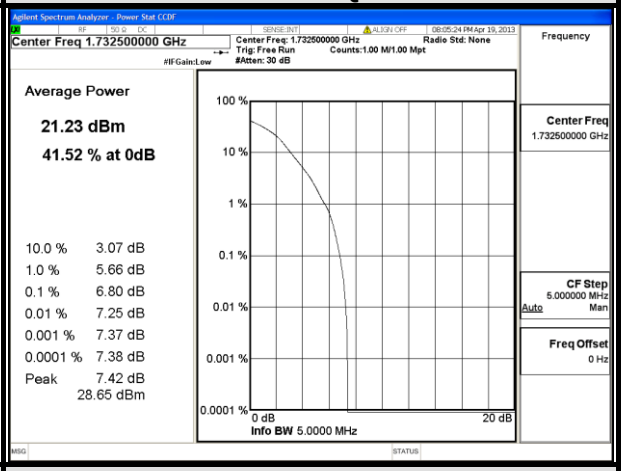
LTE BAND 4							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	5.44	6.74	20000	1715.0	5.49	6.72
20175	1732.5	5.51	6.80	20175	1732.5	5.64	6.92
20375	1752.5	5.16	6.33	20350	1750.0	5.18	6.31

SPECTRUM PLOT OF WORST VALUE

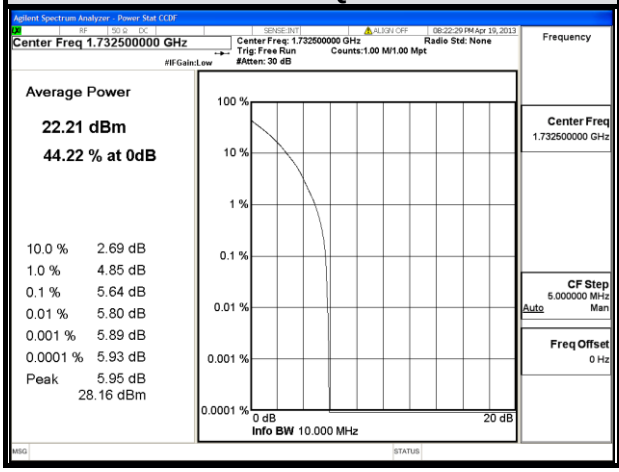
5MHz / QPSK



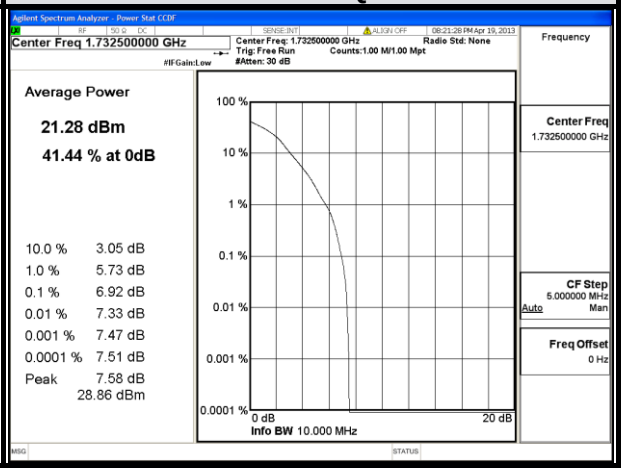
5MHz / 16QAM



10MHz / QPSK



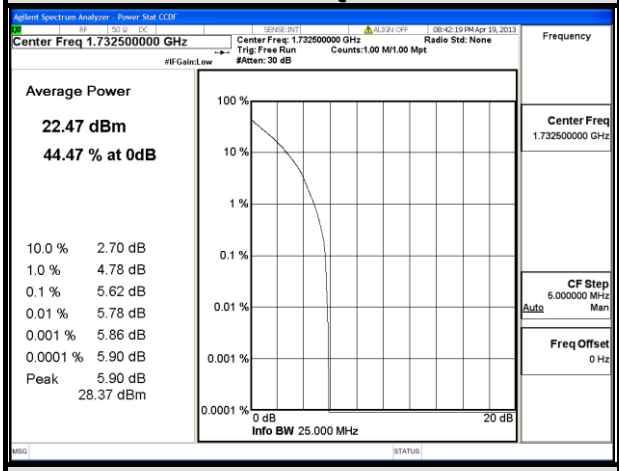
10MHz / 16QAM



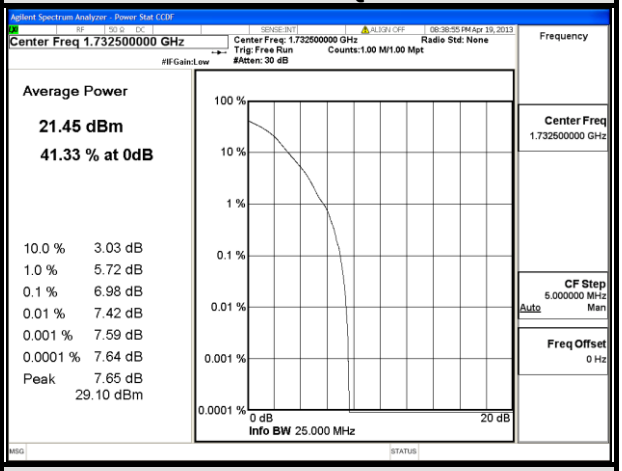
LTE BAND 4							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
20025	1717.5	5.44	6.83	20050	1720	5.56	6.74
20175	1732.5	5.62	6.98	20175	1732.5	5.66	6.86
20325	1747.5	5.24	6.38	20300	1745	5.28	6.38

SPECTRUM PLOT OF WORST VALUE

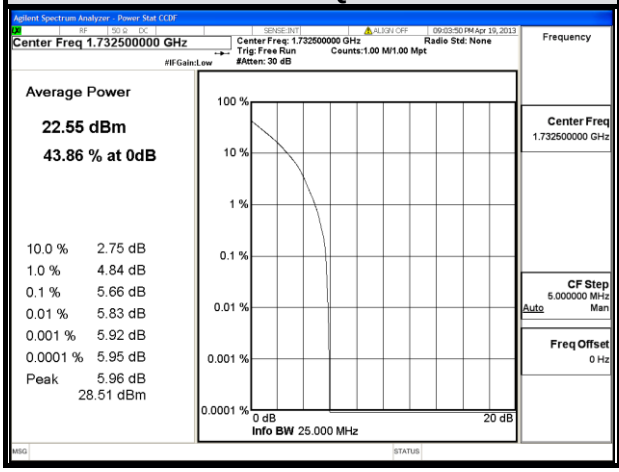
15MHz / QPSK



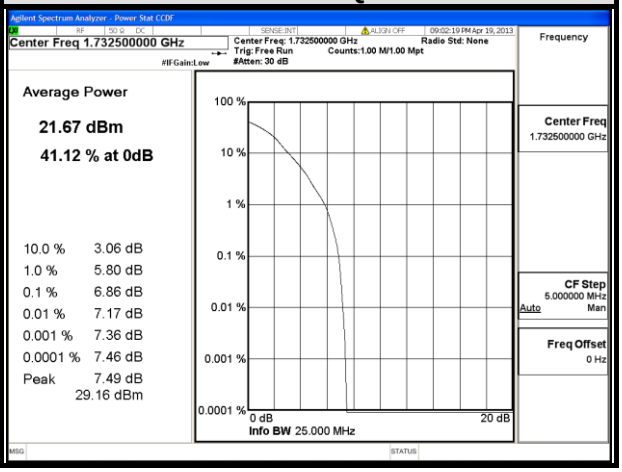
15MHz / 16QAM



20MHz / QPSK



20MHz / 16QAM



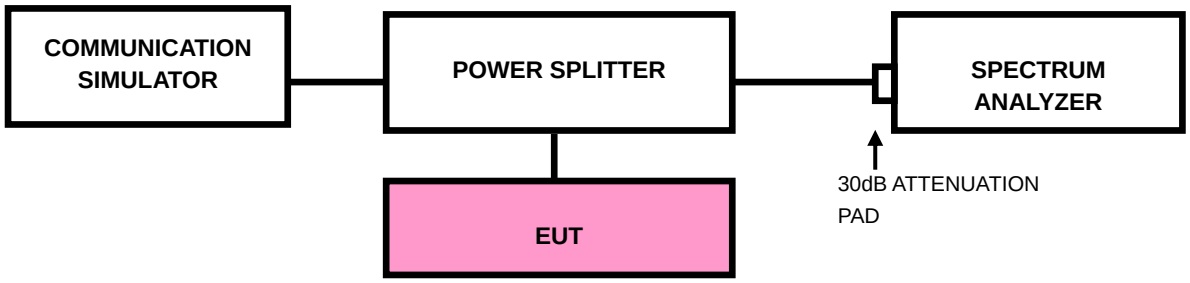
4.5 BAND EDGE MEASUREMENT

4.5.1 LIMITS OF BAND EDGE MEASUREMENT

For operations in the 704-716 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

For operations in the 1710 – 1755 MHz MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 + 10 log10(P) dB.

4.5.2 TEST SETUP



4.5.3 TEST PROCEDURES

a. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with R&S Spectrum Analyzer. All measurements were done at 2 channels (low and high operational frequency range.).

b. The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

c. The center frequency of spectrum is the band edge frequency and span is 2 MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz.

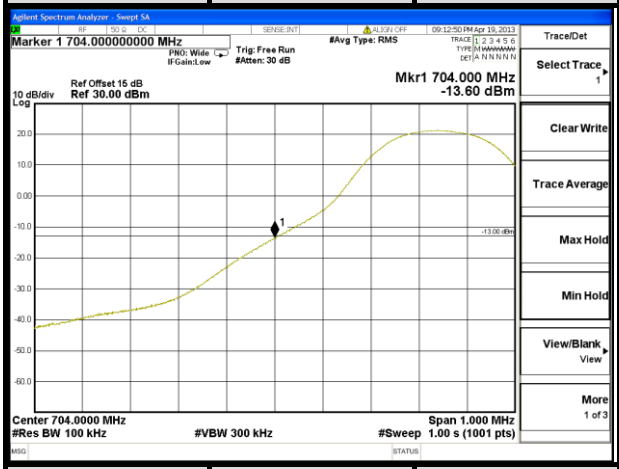
d. Record the max trace plot into the test report.

4.5.4 TEST RESULTS

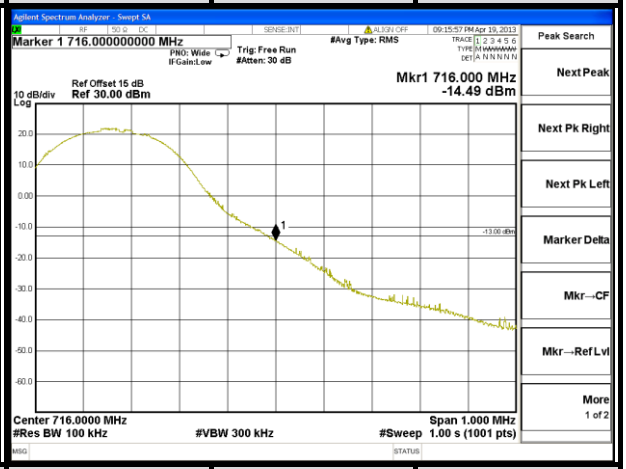
LTE BAND 17

Channel Bandwidth: 5MHz

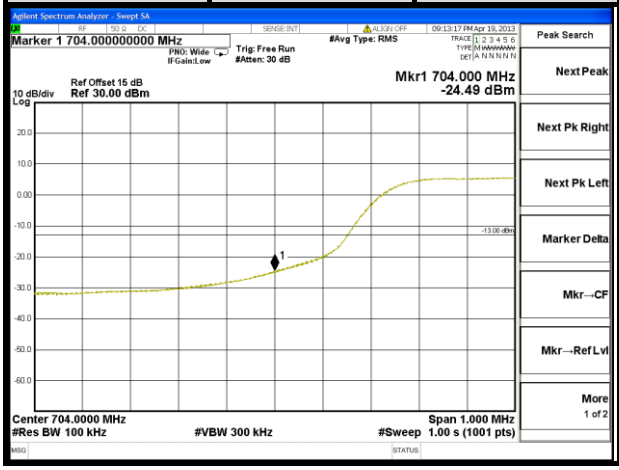
CHANNEL	23755	1 RB



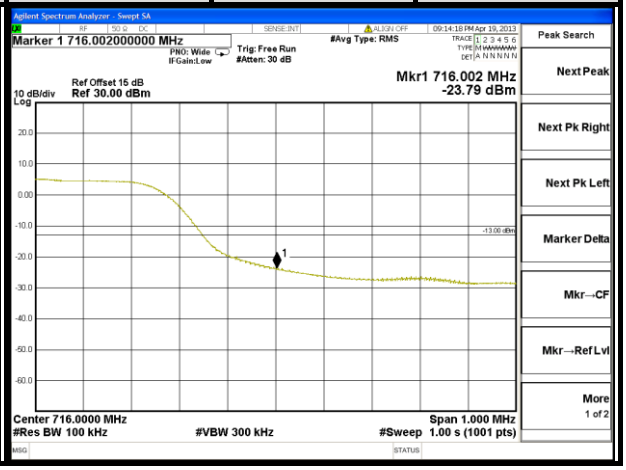
CHANNEL	23825	1 RB



CHANNEL	23755	25 RB

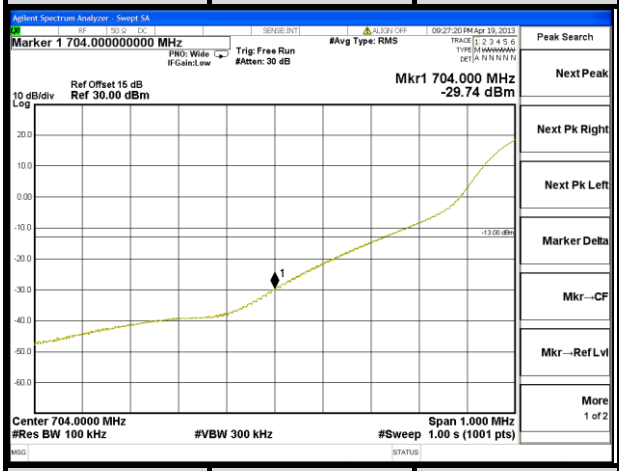


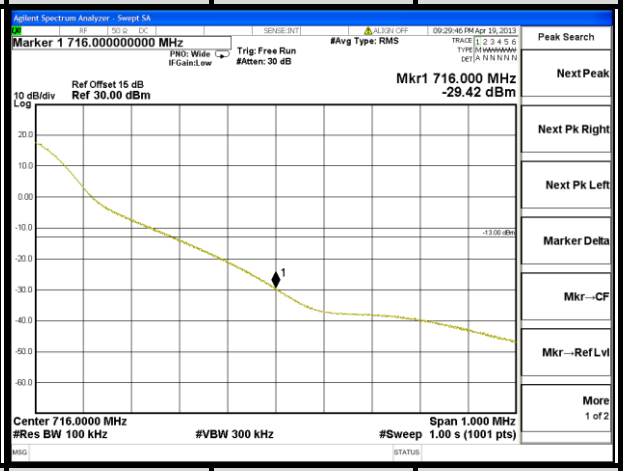
CHANNEL	23825	25 RB



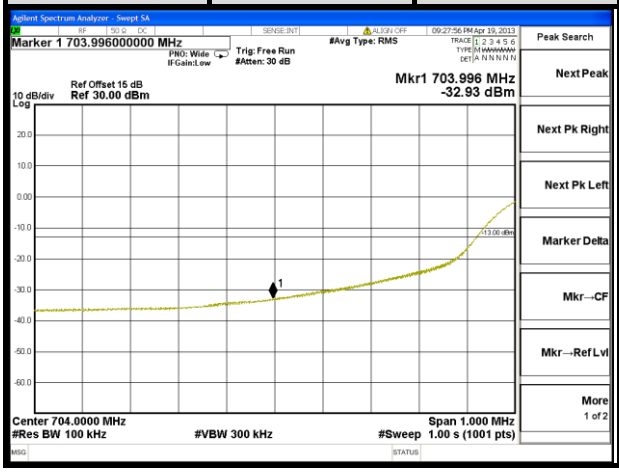
Channel Bandwidth: 10MHz

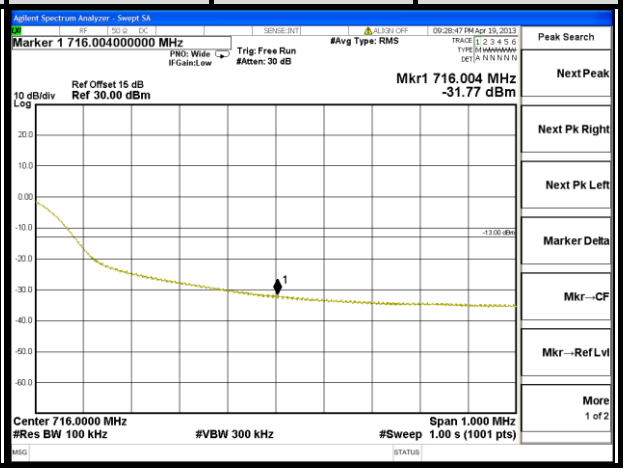
CHANNEL	23780	1 RB	CHANNEL	23800	1 RB





CHANNEL	23780	50 RB	CHANNEL	23800	50 RB

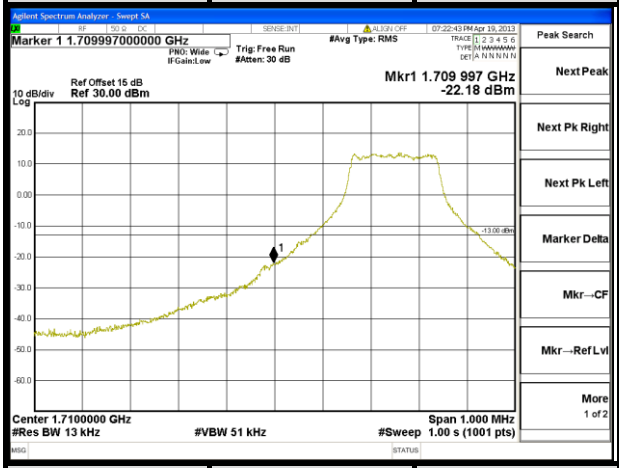


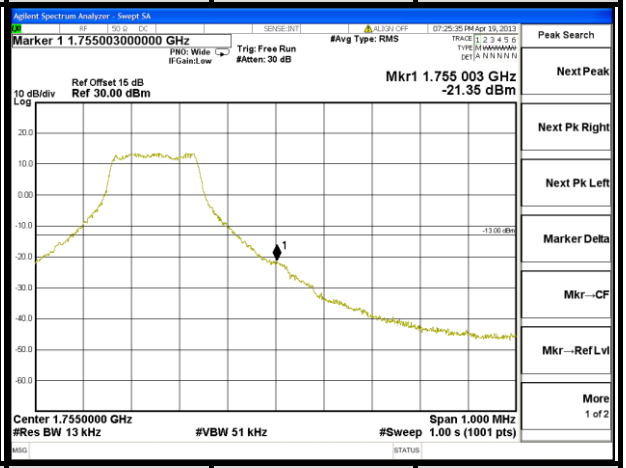


LTE BAND 4

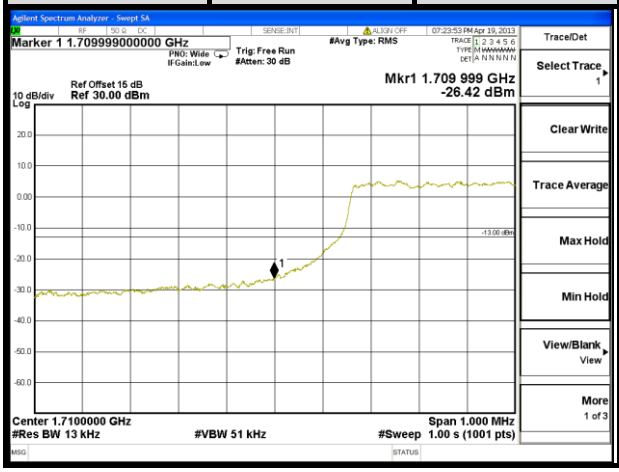
Channel Bandwidth: 1.4MHz

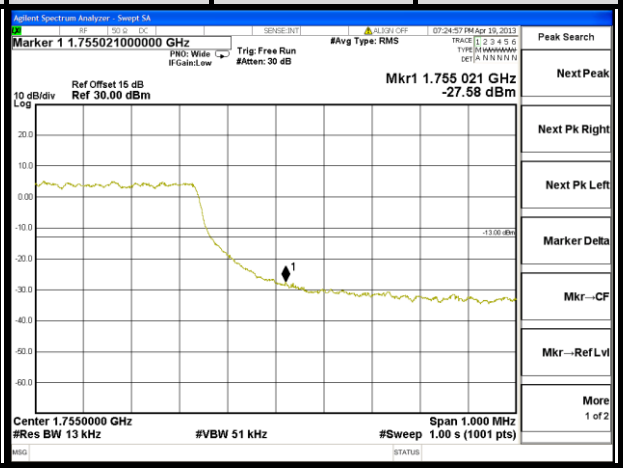
CHANNEL	19957	1 RB	CHANNEL	20393	1 RB





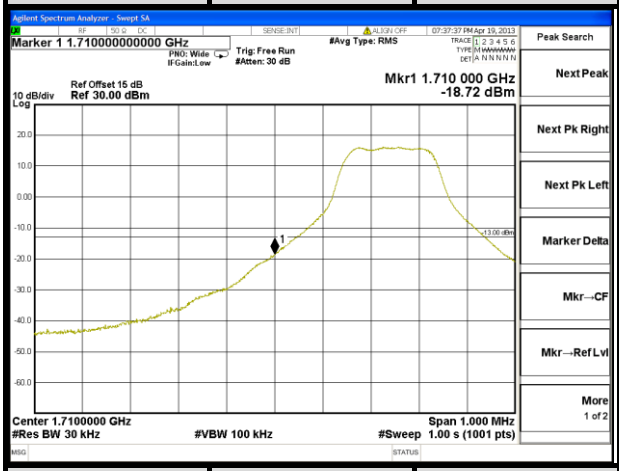
CHANNEL	19957	6 RB	CHANNEL	20393	6 RB

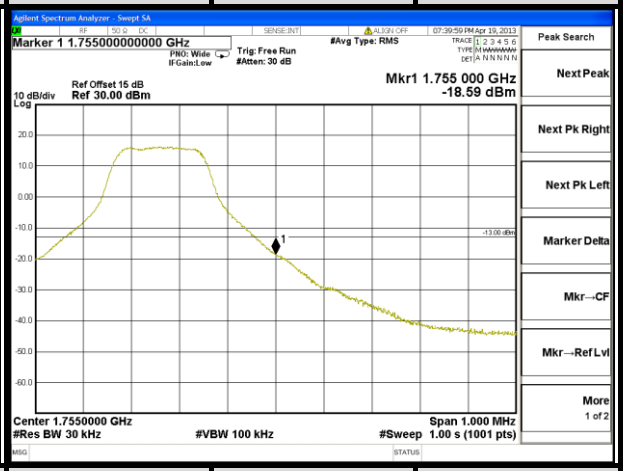




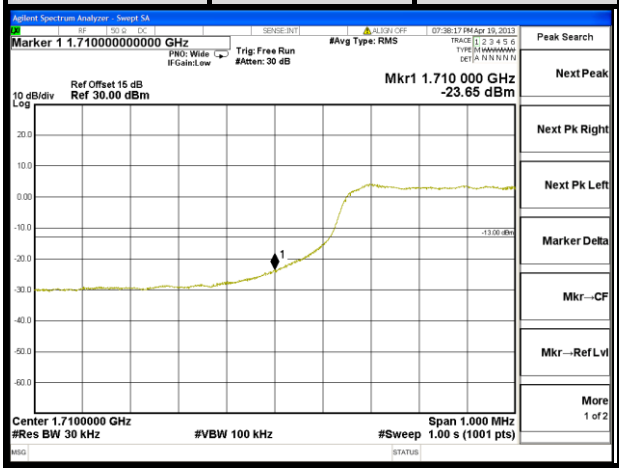
Channel Bandwidth: 3MHz

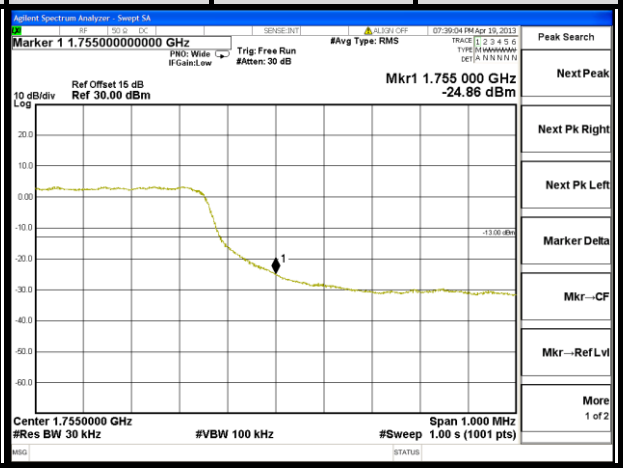
CHANNEL	19965	1 RB	CHANNEL	20385	1 RB





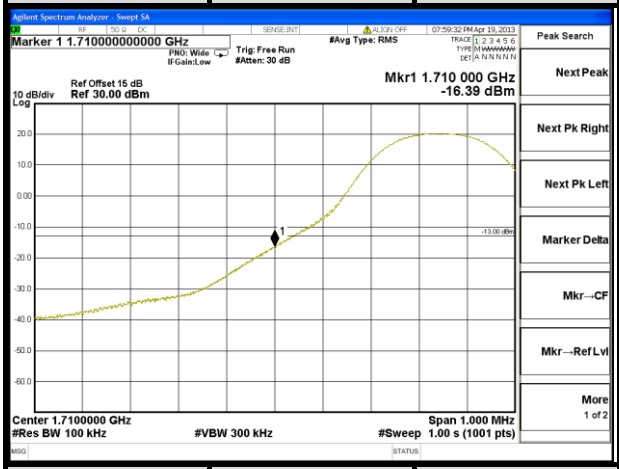
CHANNEL	19965	15 RB	CHANNEL	20385	15 RB



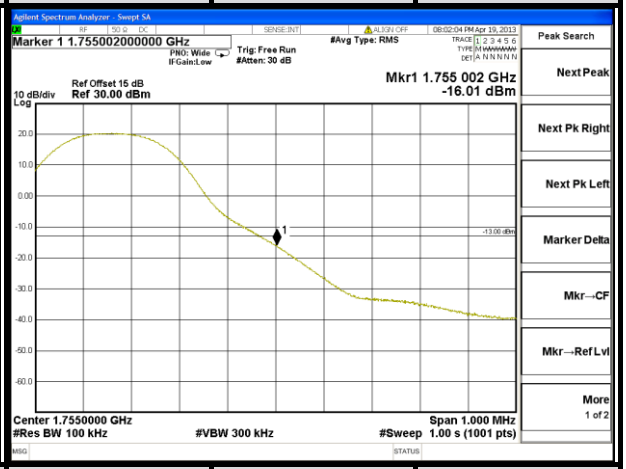


Channel Bandwidth: 5MHz

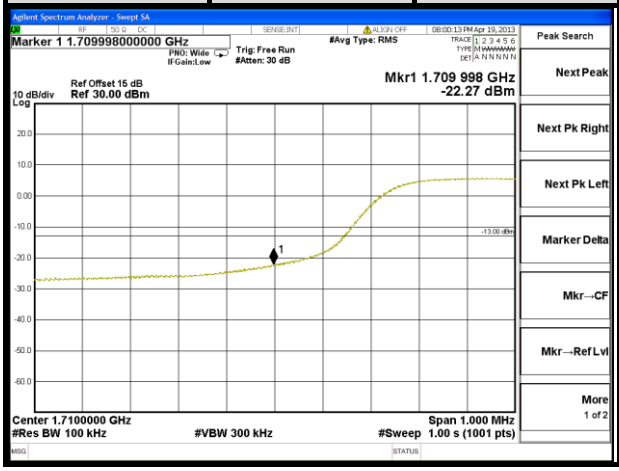
CHANNEL	19975	1 RB



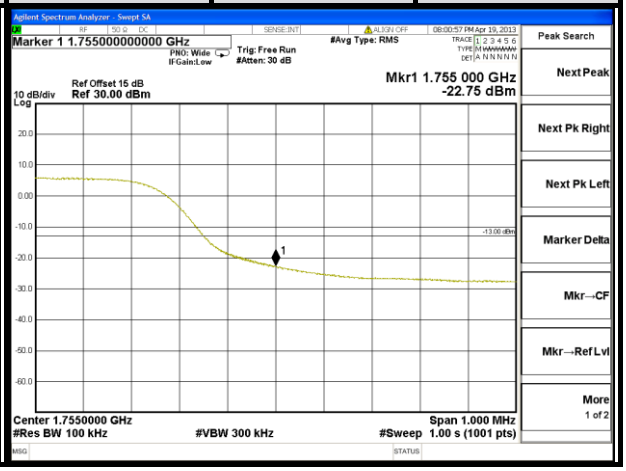
CHANNEL	20375	1 RB



CHANNEL	19975	25 RB

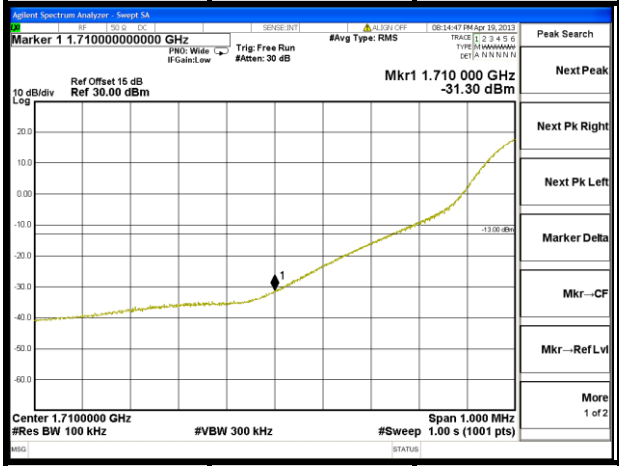


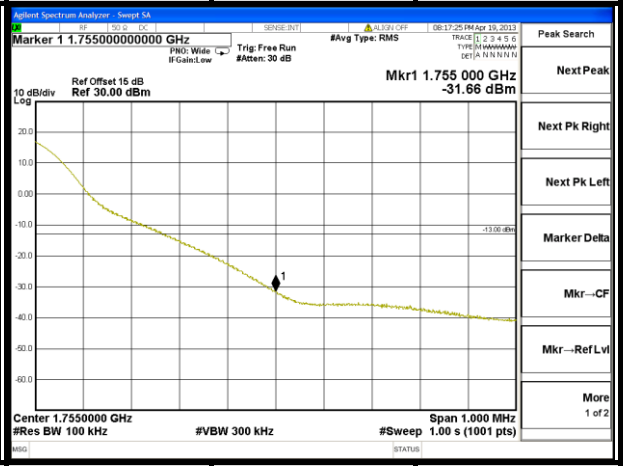
CHANNEL	20375	25 RB



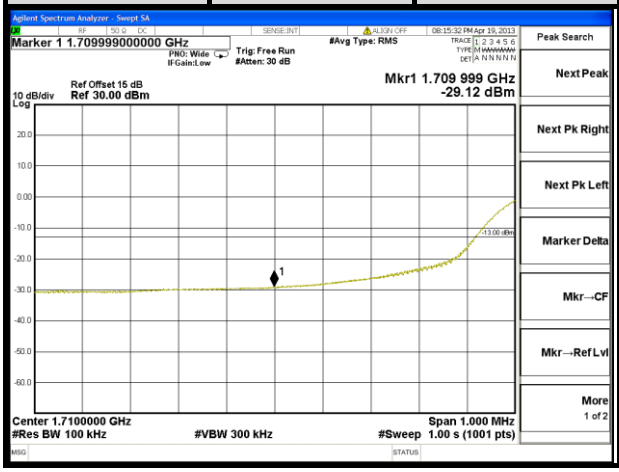
Channel Bandwidth: 10MHz

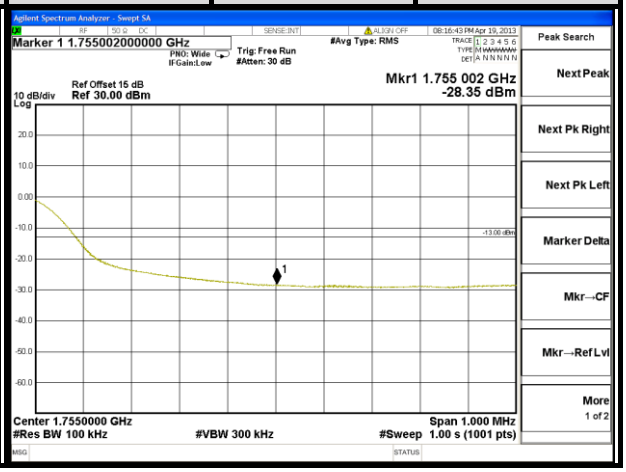
CHANNEL	20000	1 RB	CHANNEL	20350	1 RB





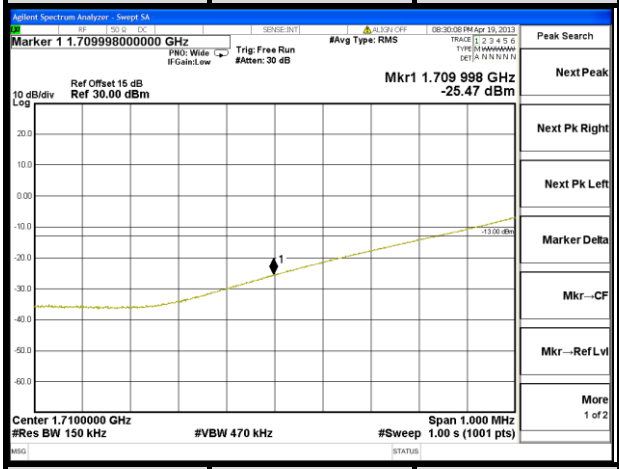
CHANNEL	20000	50 RB	CHANNEL	20350	50 RB



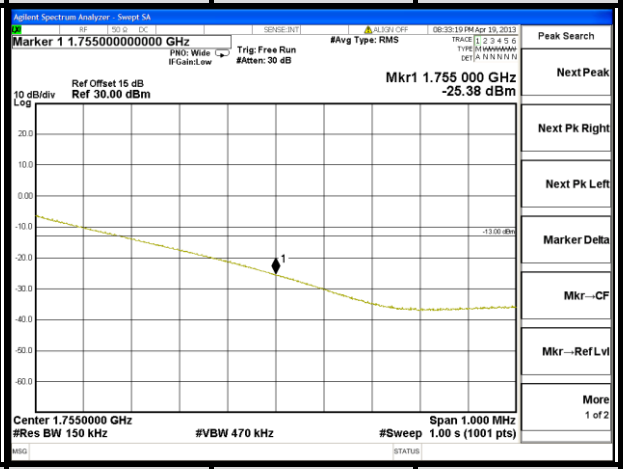


Channel Bandwidth: 15MHz

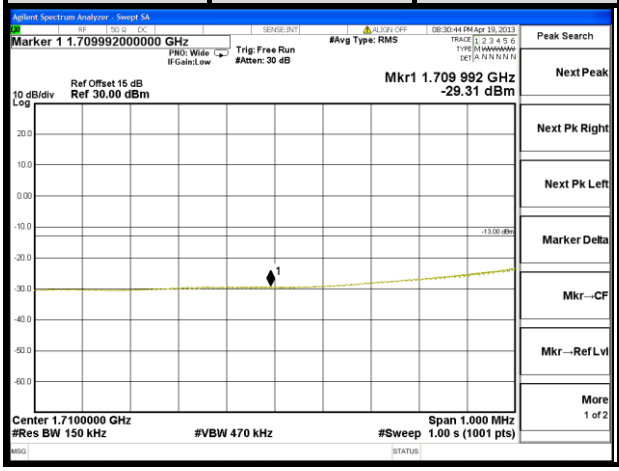
CHANNEL	20025	1 RB



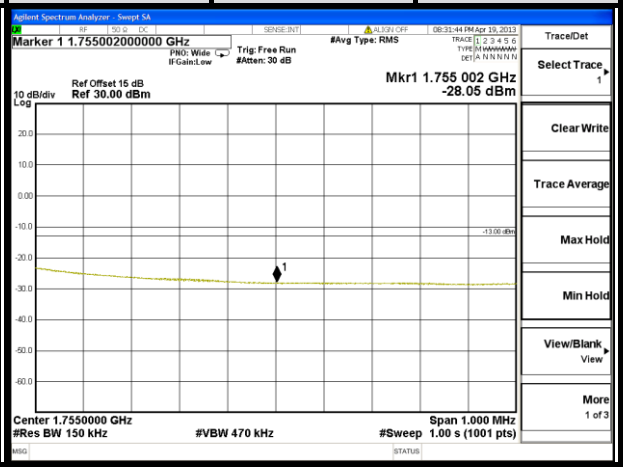
CHANNEL	20325	1 RB



CHANNEL	20025	75 RB

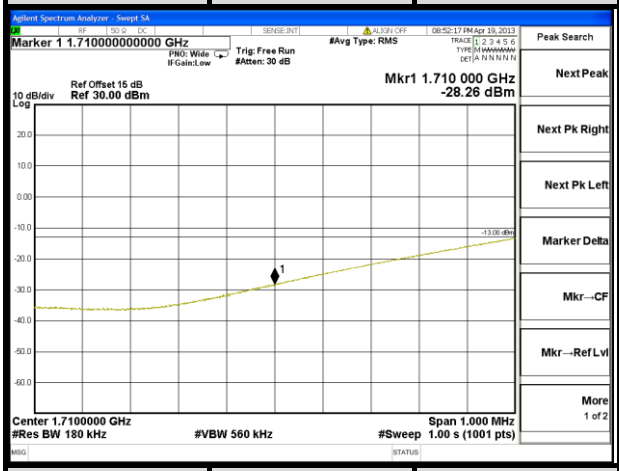


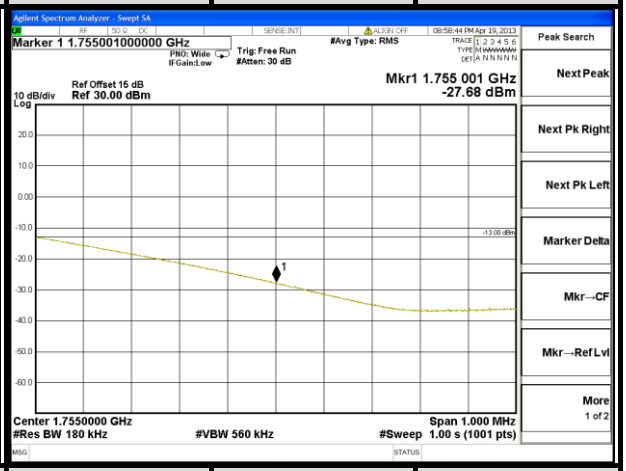
CHANNEL	20325	75 RB



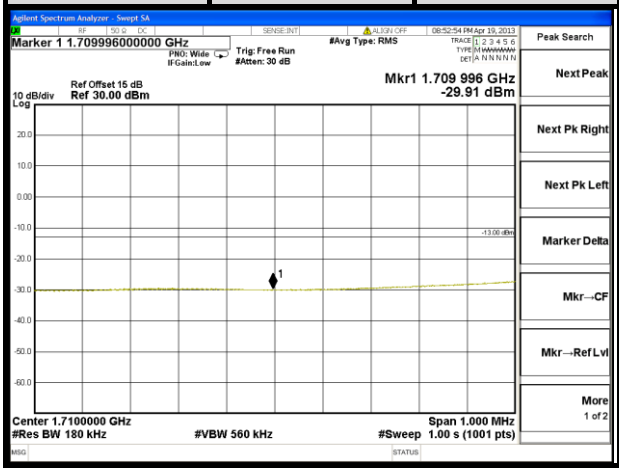
Channel Bandwidth: 20MHz

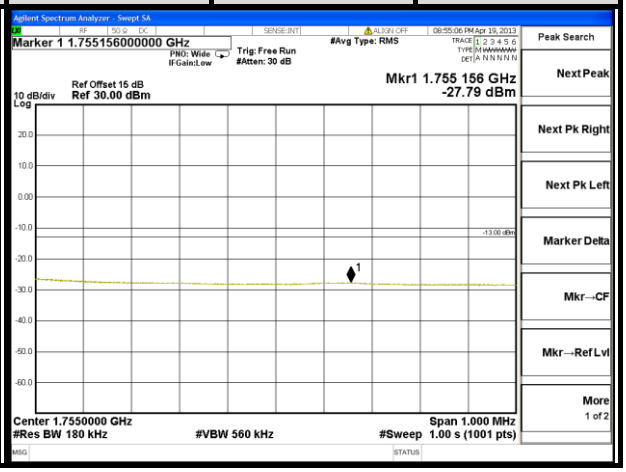
CHANNEL	20050	1 RB	CHANNEL	20300	1 RB





CHANNEL	20050	100 RB	CHANNEL	20300	100 RB





4.6 CONDUCTED SPURIOUS EMISSIONS

4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

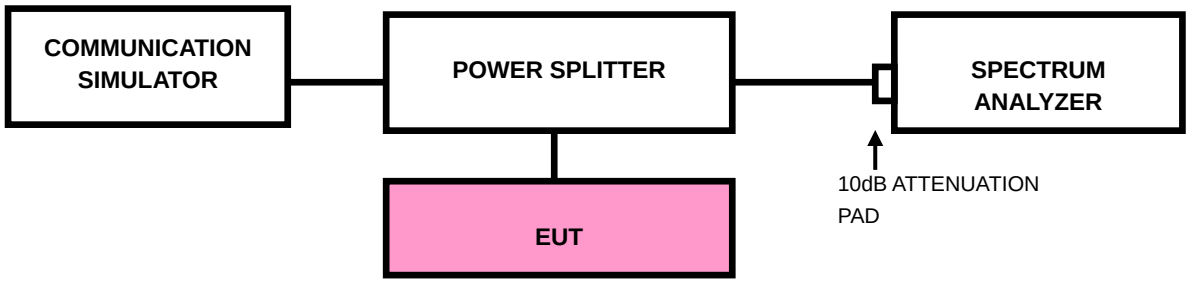
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

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.

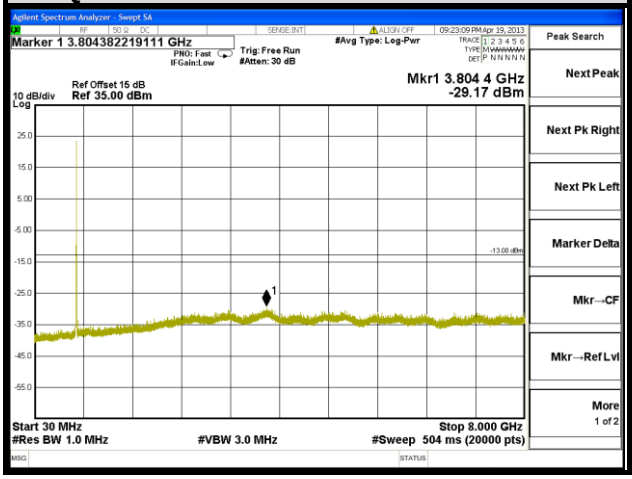
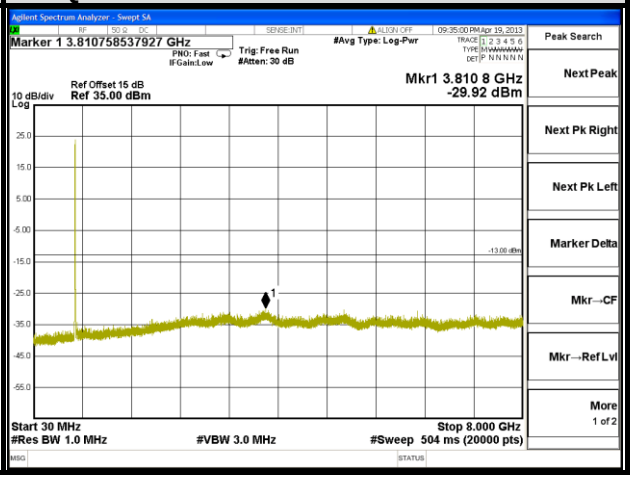
b. Measuring frequency range is from 30 MHz to 8GHz for LTE Band 17 and from 30MHz to 18GHz for LTE Band 4. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.

4.6.3 TEST SETUP

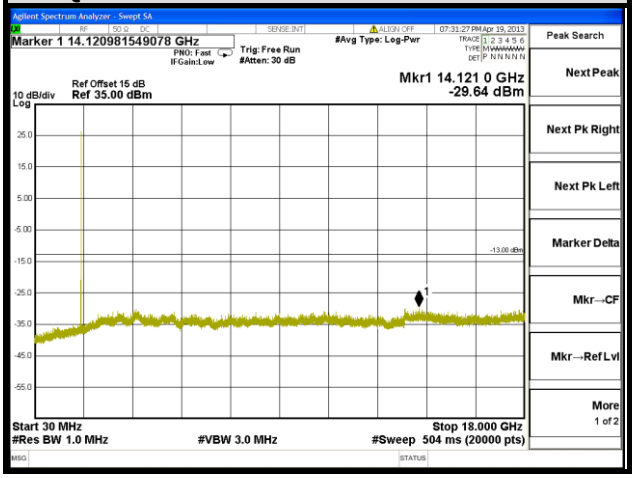
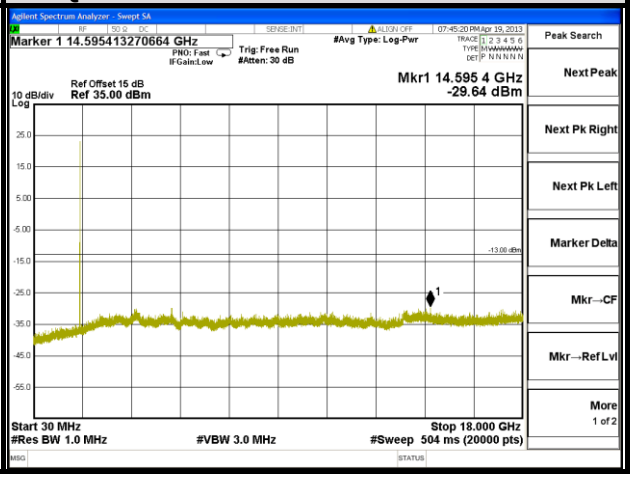


4.6.4 TEST RESULTS

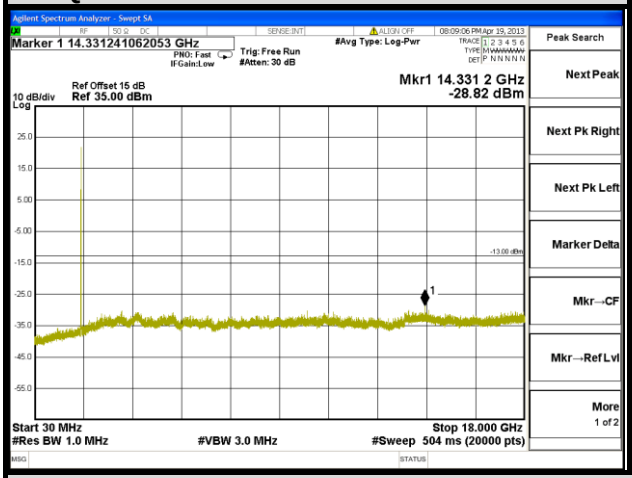
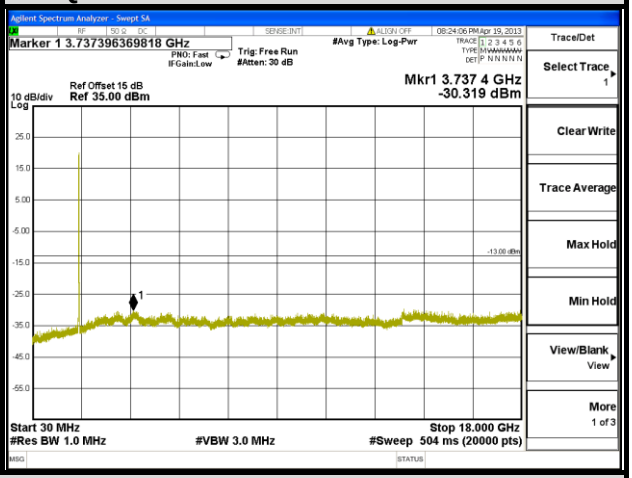
LTE BAND 17

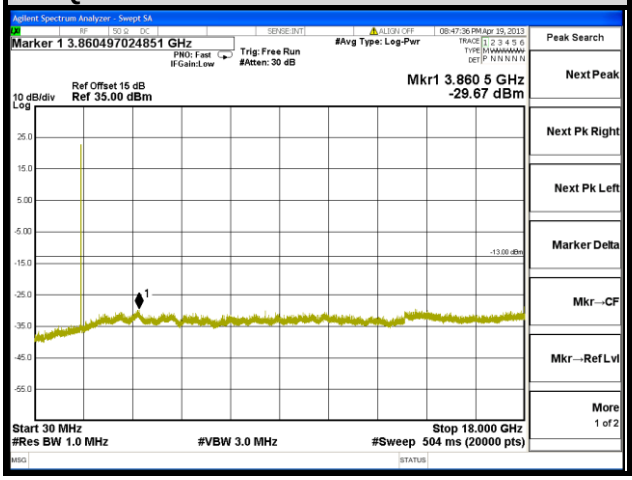
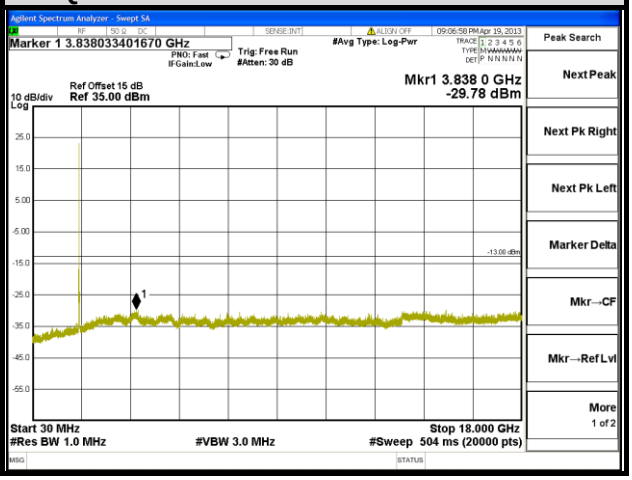
CHANNEL 23790	
Channel Bandwidth: 5MHz	**Channel Bandwidth: 10MHz**
FREQUENCY RANGE : 30MHz~8GHz	**FREQUENCY RANGE : 30MHz~8GHz**
	

LTE BAND 4

CHANNEL 20175	
Channel Bandwidth: 1.4MHz	**Channel Bandwidth: 3MHz**
FREQUENCY RANGE : 30MHz~18GHz	**FREQUENCY RANGE : 30MHz~18GHz**
	

LTE BAND 4

CHANNEL 20175	
Channel Bandwidth: 5MHz	**Channel Bandwidth: 10MHz**
FREQUENCY RANGE : 30MHz~18GHz	**FREQUENCY RANGE : 30MHz~18GHz**
	

CHANNEL 20175	
Channel Bandwidth: 15MHz	**Channel Bandwidth: 20MHz**
FREQUENCY RANGE : 30MHz~18GHz	**FREQUENCY RANGE : 30MHz~18GHz**
	

4.7 RADIATED EMISSION MEASUREMENT

4.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

4.7.2 TEST PROCEDURES

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

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

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

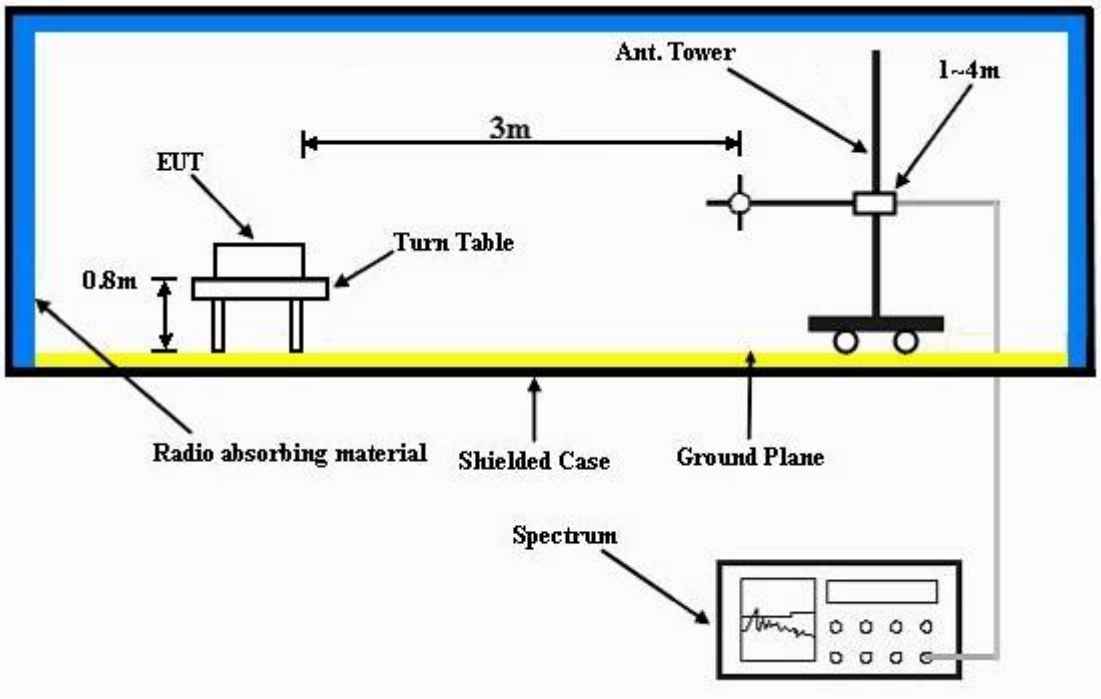
d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.7.3 DEVIATION FROM TEST STANDARD

No deviation

4.7.4 TEST SETUP



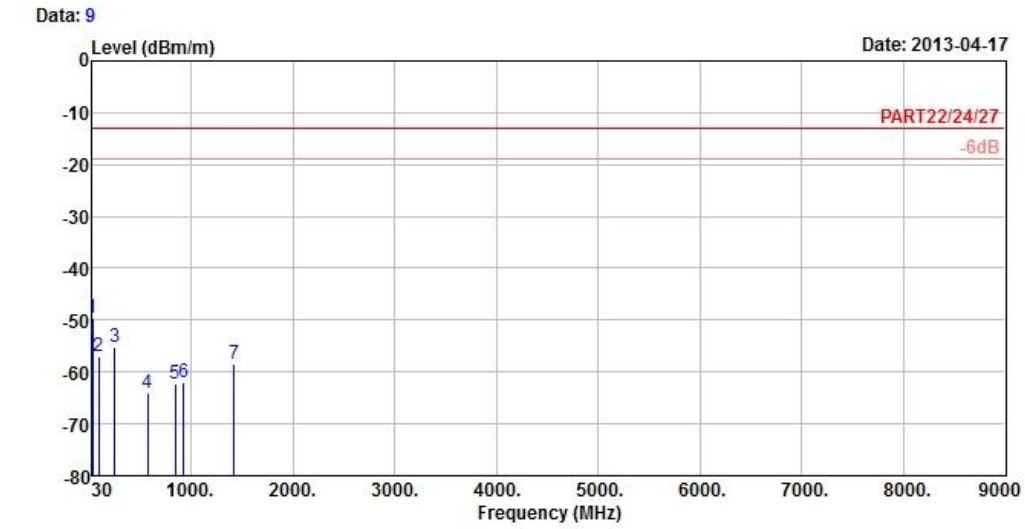
For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.7.5 TEST RESULTS

LTE BAND 17

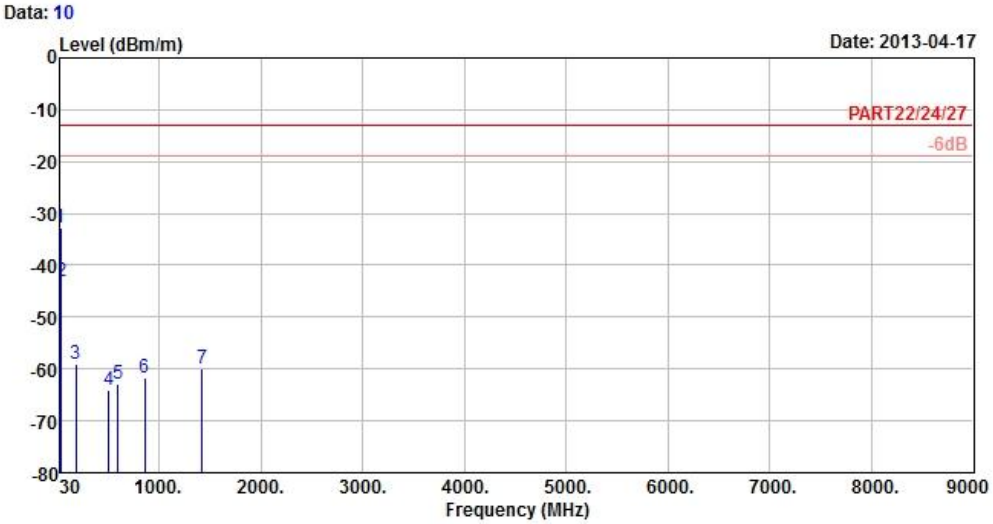
CHANNEL BANDWIDTH: 5MHZ / QPSK

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 17_5M_(QPSK 1,24) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : X
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	33.24	-49.47	-48.36	-13.00	-36.47	-1.11	Peak
2	95.34	-57.00	-46.51	-13.00	-44.00	-10.49	Peak
3	250.86	-55.20	-49.51	-13.00	-42.20	-5.69	Peak
4	576.50	-64.07	-63.05	-13.00	-51.07	-1.02	Peak
5	841.80	-62.30	-64.67	-13.00	-49.30	2.37	Peak
6	930.00	-62.13	-65.42	-13.00	-49.13	3.29	Peak
7	1424.40	-58.45	-45.93	-13.00	-45.45	-12.52	Peak



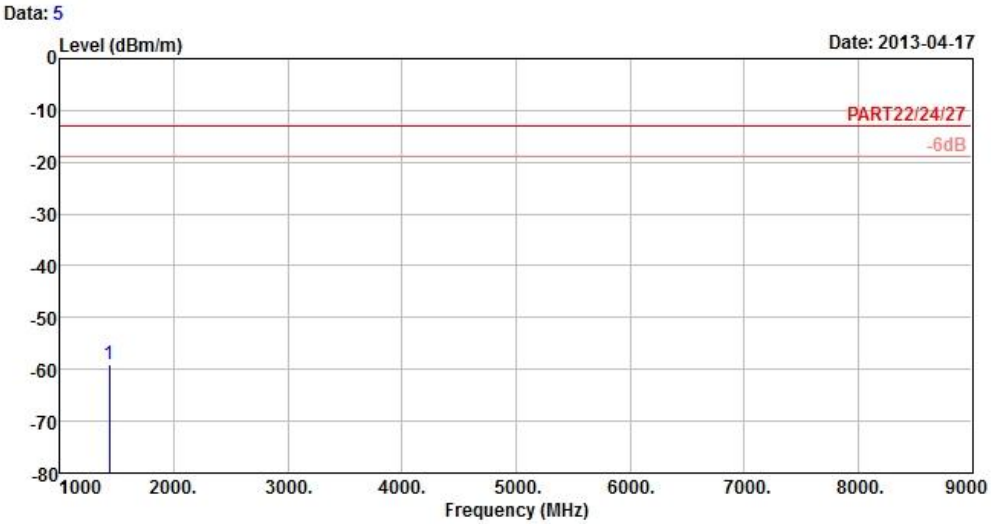
Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 17_5M_(QPSK 1,24) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : X
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	33.24	-32.78	-31.67	-13.00	-19.78	-1.11	Peak
2	41.07	-43.05	-41.59	-13.00	-30.05	-1.46	Peak
3	180.66	-59.10	-53.43	-13.00	-46.10	-5.67	Peak
4	502.30	-64.16	-61.12	-13.00	-51.16	-3.04	Peak
5	596.80	-62.83	-62.37	-13.00	-49.83	-0.46	Peak
6	858.60	-61.56	-64.02	-13.00	-48.56	2.46	Peak
7	1424.40	-59.86	-47.34	-13.00	-46.86	-12.52	Peak

LTE BAND 17

CHANNEL BANDWIDTH: 10MHZ / QPSK

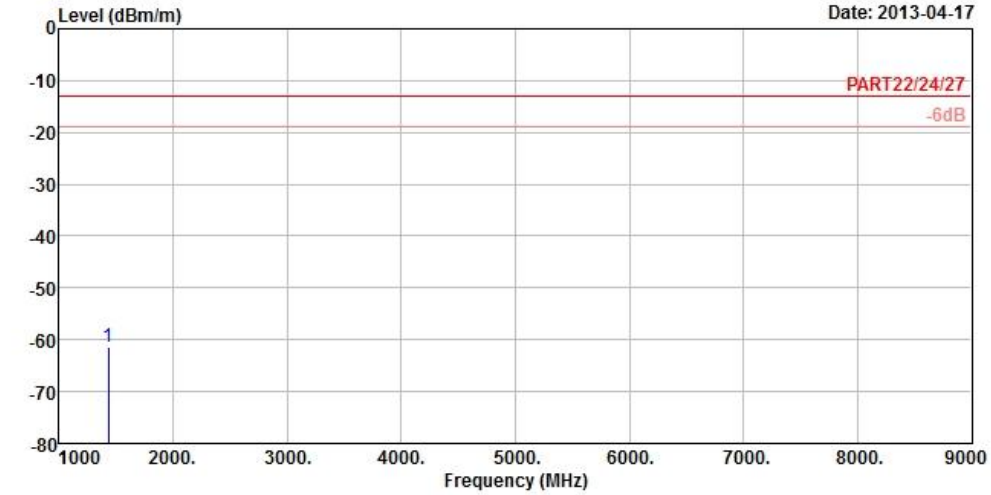
Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 17_10M_(QPSK 1,49) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : X
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	1428.80	-59.13	-46.61	-13.00	-46.13	-12.52	Peak

Data: 6

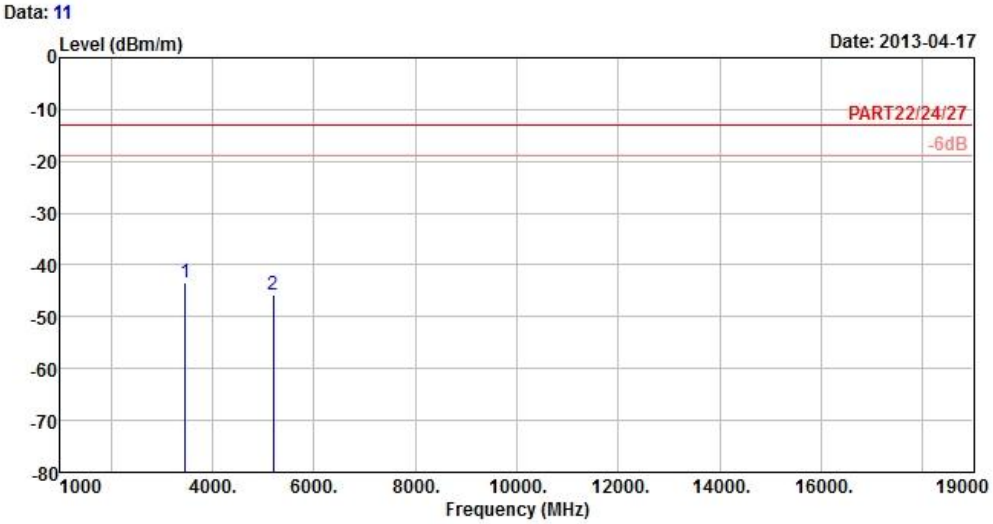


Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 17_10M_(QPSK 1,49) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : X
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	1428.80	-61.42	-48.90	-13.00	-48.42	-12.52	Peak

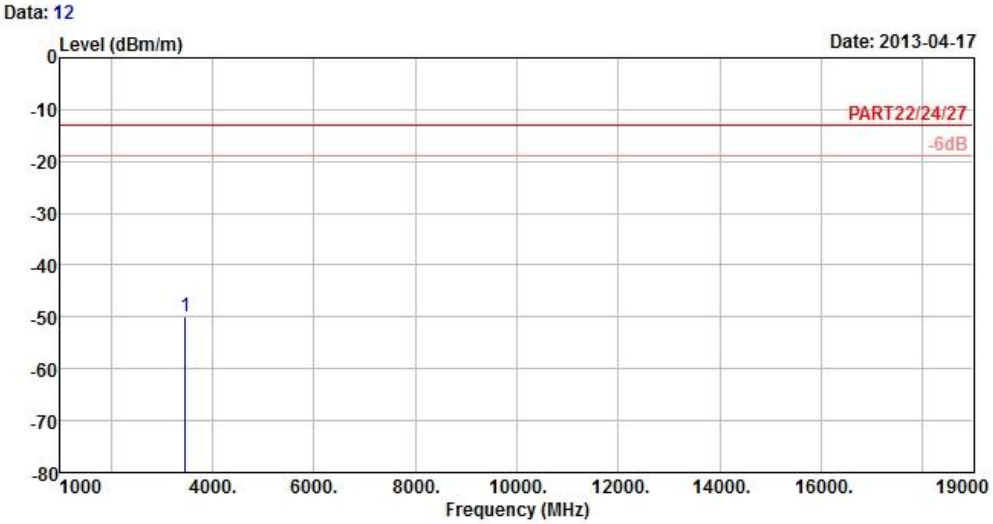
LTE BAND 4
CHANNEL BANDWIDTH: 1.4MHZ / QPSK

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 4_1.4M_(QPSK 1,2) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3464.80	-43.51	-35.88	-13.00	-30.51	-7.63	Peak
2	5197.20	-45.88	-44.80	-13.00	-32.88	-1.08	Peak

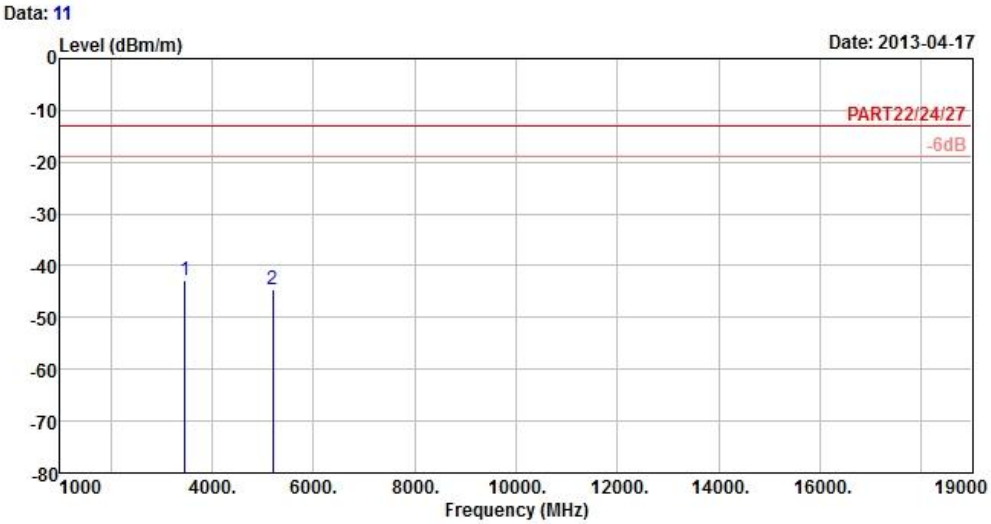


Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 4_1.4M_(QPSK 1,2) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3464.80	-49.77	-42.14	-13.00	-36.77	-7.63	Peak

LTE BAND 4
CHANNEL BANDWIDTH: 3MHZ / QPSK

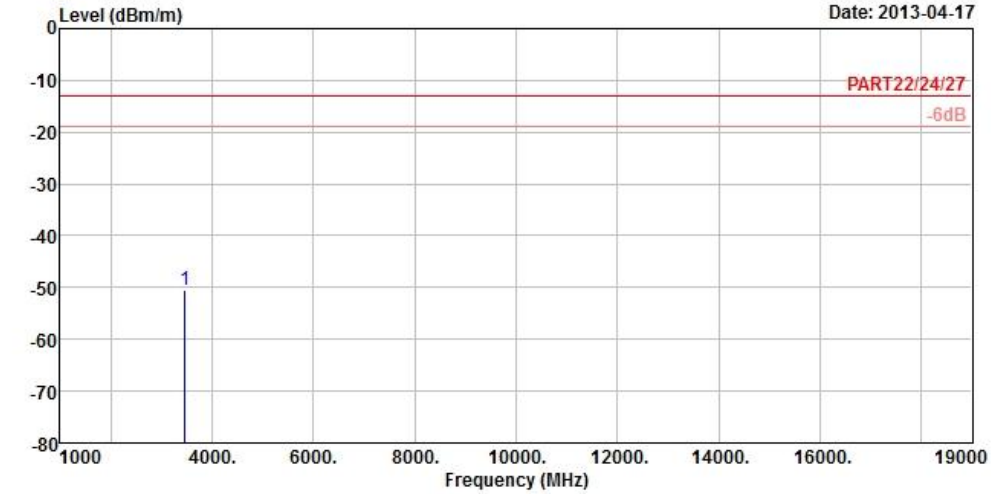
Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 4_3M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3464.00	-42.86	-35.23	-13.00	-29.86	-7.63	Peak
2	5196.00	-44.52	-43.44	-13.00	-31.52	-1.08	Peak

Data: 12

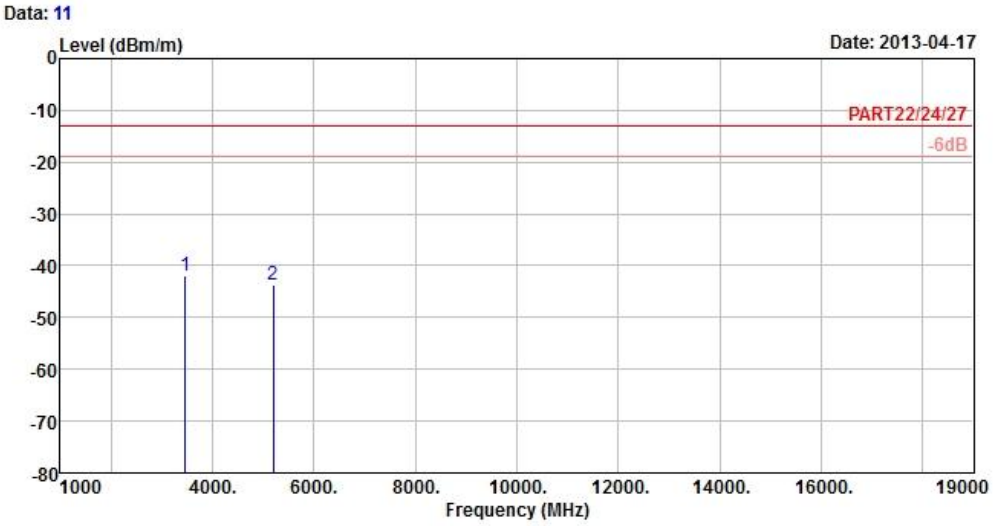


Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 4_3M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3464.00	-50.60	-42.97	-13.00	-37.60	-7.63	Peak

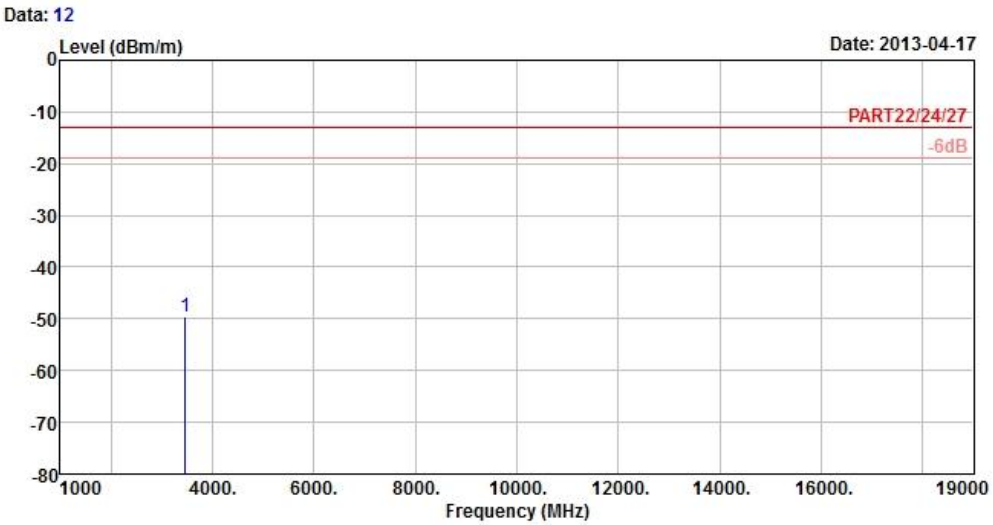
LTE BAND 4
CHANNEL BANDWIDTH: 5MHZ / QPSK

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 4_5M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3460.60	-41.98	-34.35	-13.00	-28.98	-7.63	Peak
2	5190.90	-43.82	-42.74	-13.00	-30.82	-1.08	Peak

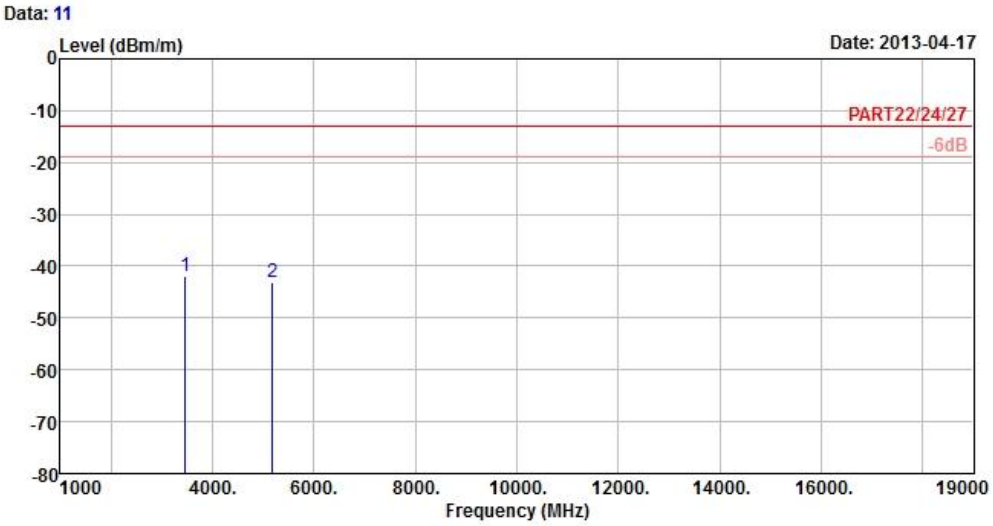


Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 4_5M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3460.60	-49.56	-41.93	-13.00	-36.56	-7.63	Peak

LTE BAND 4
CHANNEL BANDWIDTH: 10MHZ / QPSK

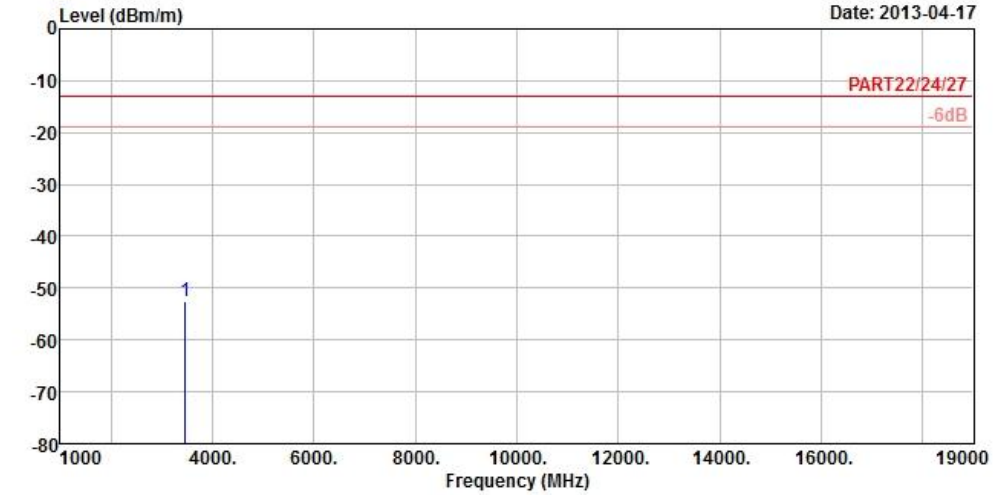
Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 4_10M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3456.20	-41.81	-34.15	-13.00	-28.81	-7.66	Peak
2	5184.30	-43.05	-41.91	-13.00	-30.05	-1.14	Peak

Data: 12

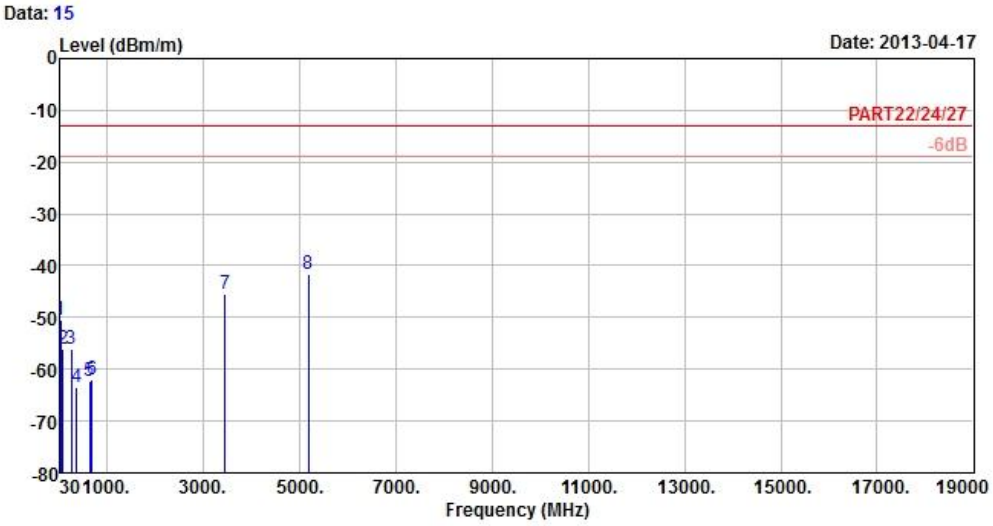


Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 4_10M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3456.20	-52.55	-44.89	-13.00	-39.55	-7.66	Peak

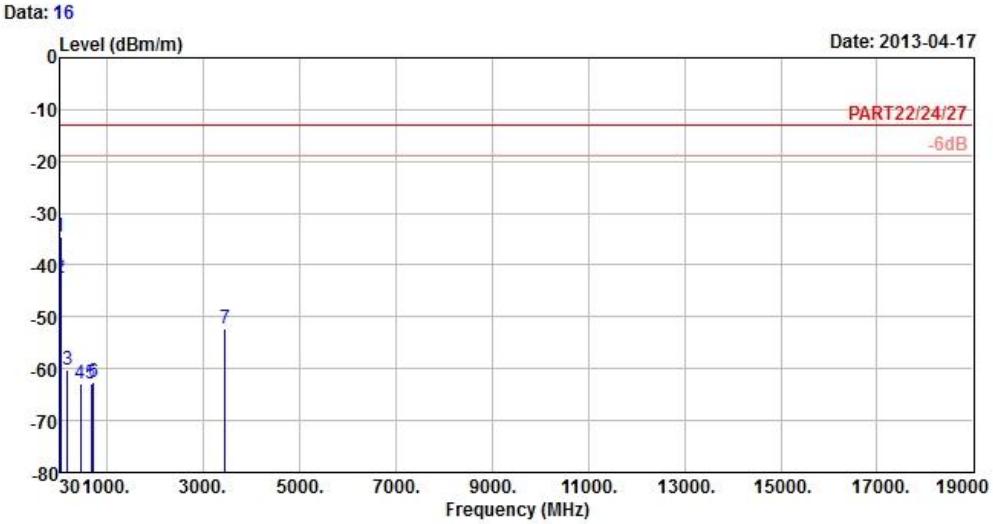
LTE BAND 4
CHANNEL BANDWIDTH: 15MHZ / QPSK

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 4_15M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	31.62	-50.46	-50.07	-13.00	-37.46	-0.39	Peak
2	90.48	-56.12	-45.54	-13.00	-43.12	-10.58	Peak
3	255.45	-55.95	-50.20	-13.00	-42.95	-5.75	Peak
4	371.40	-63.53	-57.68	-13.00	-50.53	-5.85	Peak
5	635.30	-62.32	-62.60	-13.00	-49.32	0.28	Peak
6	693.40	-62.10	-63.43	-13.00	-49.10	1.33	Peak
7	3451.80	-45.43	-37.77	-13.00	-32.43	-7.66	Peak
8 pp	5177.70	-41.63	-40.49	-13.00	-28.63	-1.14	Peak

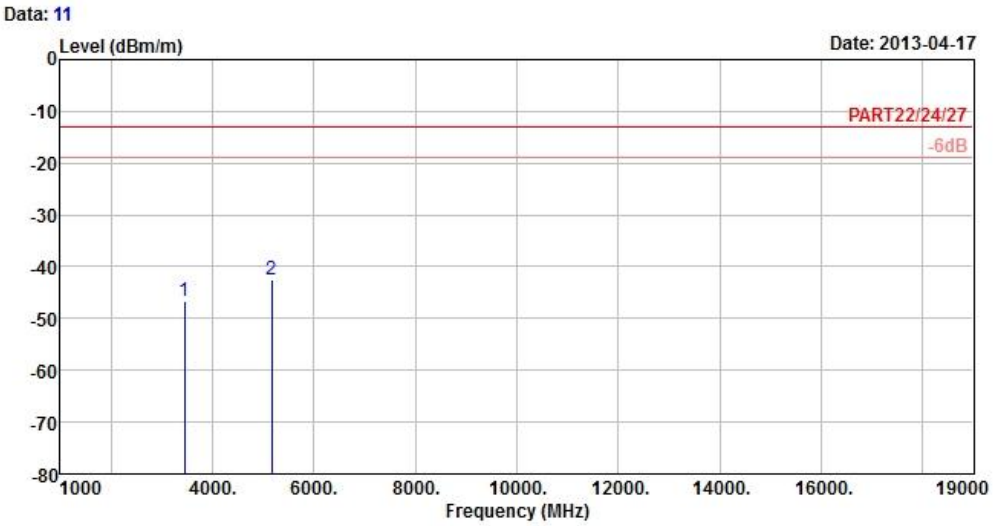


Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 4_15M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	31.08	-34.57	-34.91	-13.00	-21.57	0.34	Peak
2	41.61	-42.43	-41.04	-13.00	-29.43	-1.39	Peak
3	185.52	-60.16	-53.92	-13.00	-47.16	-6.24	Peak
4	455.40	-62.85	-58.63	-13.00	-49.85	-4.22	Peak
5	668.20	-62.84	-63.71	-13.00	-49.84	0.87	Peak
6	717.90	-62.70	-64.27	-13.00	-49.70	1.57	Peak
7	3451.80	-52.25	-44.59	-13.00	-39.25	-7.66	Peak

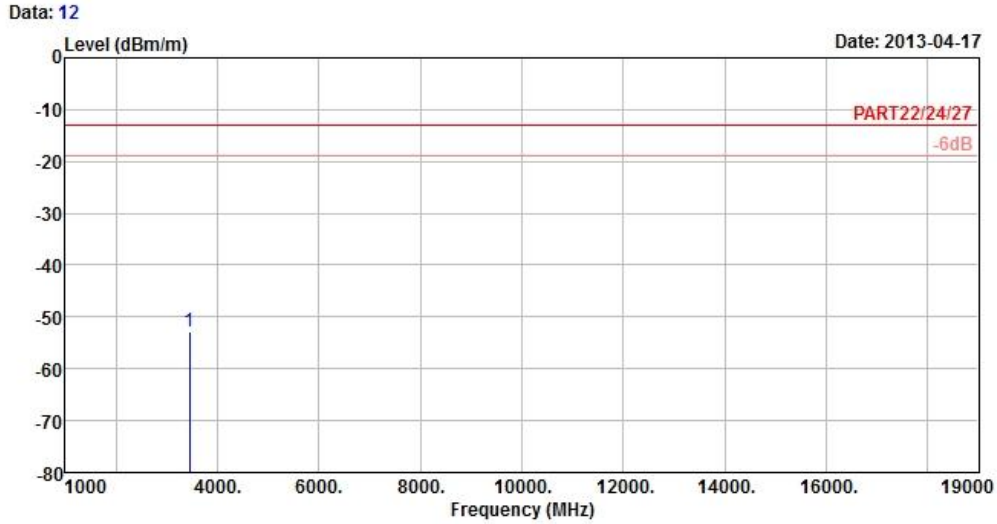
LTE BAND 4
CHANNEL BANDWIDTH: 20MHZ / QPSK

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: K005
Remark : Band 4_20M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3447.40	-46.68	-39.02	-13.00	-33.68	-7.66	Peak
2 pp	5171.10	-42.38	-41.24	-13.00	-29.38	-1.14	Peak



Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: K005
Remark : Band 4_20M_(QPSK 1,0) Link
Tested by : Johnson Liao
Temprature : 25℃
Humidity : 65%
Plane : Y
IMEI : 356239051102428

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3447.40	-52.71	-45.05	-13.00	-39.71	-7.66	Peak

5 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:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com
Web Site: www.adt.com.tw

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

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

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

---END---