



A D T

FCC TEST REPORT

(PART 27)

REPORT NO.: RF130223C16-2

MODEL NO.: C6750

FCC ID: V65C6750

RECEIVED: Feb. 23, 2013

TESTED: Mar. 05, 2013 ~ Mar. 08, 2013

ISSUED: Mar. 25, 2013

APPLICANT: Kyocera Communications, Inc.

ADDRESS: 8611 Balboa Ave., San Diego, CA 92123, USA

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.



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification



A D T

TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 CERTIFICATION	5
2 SUMMARY OF TEST RESULTS.....	6
2.1 MEASUREMENT UNCERTAINTY	7
2.2 TEST SITE AND INSTRUMENTS	8
3 GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 CONFIGURATION OF SYSTEM UNDER TEST	11
3.3 DESCRIPTION OF SUPPORT UNITS.....	12
3.4 DESCRIPTION OF TEST MODES.....	12
3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS.....	15
4 TEST TYPES AND RESULTS.....	16
4.1 OUTPUT POWER MEASUREMENT	16
4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT	16
4.1.2 TEST PROCEDURES.....	16
4.1.3 TEST SETUP.....	17
4.1.4 TEST RESULTS	18
4.2 FREQUENCY STABILITY MEASUREMENT	30
4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT	30
4.2.2 TEST PROCEDURE	30
4.2.3 TEST SETUP.....	30
4.2.4 TEST RESULTS	31
4.3 OCCUPIED BANDWIDTH MEASUREMENT	33
4.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT	33
4.3.2 TEST SETUP.....	33
4.3.3 TEST PROCEDURES.....	33
4.3.4 TEST RESULTS	34
4.4 PEAK TO AVERAGE RATIO	38
4.4.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT	38
4.4.2 TEST SETUP.....	38
4.4.3 TEST PROCEDURES.....	38
4.4.4 TEST RESULTS	39
4.5 BAND EDGE MEASUREMENT	43
4.5.1 LIMITS OF BAND EDGE MEASUREMENT	43
4.5.2 TEST SETUP.....	43
4.5.3 TEST PROCEDURES.....	44
4.5.4 TEST RESULTS	45
4.6 CONDUCTED SPURIOUS EMISSIONS.....	51



A D T

4.6.1	LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	51
4.6.2	TEST PROCEDURE.....	51
4.6.3	TEST SETUP.....	51
4.6.4	TEST RESULTS	52
4.7	RADIATED EMISSION MEASUREMENT	54
4.7.1	LIMITS OF RADIATED EMISSION MEASUREMENT	54
4.7.2	TEST PROCEDURES.....	54
4.7.3	DEVIATION FROM TEST STANDARD	54
4.7.4	TEST SETUP.....	55
4.7.5	TEST RESULTS	56
5	INFORMATION ON THE TESTING LABORATORIES	76
6	APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	77



A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130223C16-2	Original release	Mar. 25, 2013



A D T

1 CERTIFICATION

PRODUCT: PDA Phone

MODEL NO.: C6750

BRAND: Kyocera

APPLICANT: Kyocera Communications, Inc.

TESTED: Mar. 05, 2013 ~ Mar. 08, 2013

TEST SAMPLE: Identical Prototype

TEST STANDARDS: FCC Part 27, Subpart C, L

FCC Part 2

ANSI C63.4-2003

The above equipment (model: C6750) 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: Mar. 25, 2013

Vera Huang / Specialist

APPROVED BY : Sam Chen , DATE: Mar. 25, 2013

Sam Chen / Assistant Manager



A D T

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

LTE BAND 4			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
2.1046 27.50(d)(4)	Equivalent isotropically radiated 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 -27.01dB at 42.96MHz.



A D T

LTE BAND 13

STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
2.1046 27.50(d)(4)	Effective radiated 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 -15.61dB at 1559.60MHz.

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.



A D T

2.2 TEST SITE AND INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUe DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100744	Apr. 19, 2012	Apr. 18, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 17, 2012	Dec. 16, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Apr. 03, 2012	Apr. 02, 2013
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.



A D T

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	PDA Phone	
MODEL NO.	C6750	
POWER SUPPLY	5Vdc (adapter or host equipment) 3.8Vdc (battery)	
MODULATION TECHNOLOGY	LTE Band 4	QPSK, 16QAM
	LTE Band 13	QPSK, 16QAM
FREQUENCY RANGE	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715.0MHz ~1750.0MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~ 1747.5MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720.0MHz ~ 1745.0MHz
	LTE Band 13 Channel Bandwidth: 5MHz	779.5MHz ~ 784.5MHz
	LTE Band 13 Channel Bandwidth: 10MHz	782MHz



A D T

EMISSION DESIGNATOR	LTE Band 4 Channel Bandwidth: 5MHz	QPSK: 4M49G7W 16QAM: 4M48W7W
	LTE Band 4 Channel Bandwidth: 10MHz	QPSK: 8M92G7W 16QAM: 8M92W7W
	LTE Band 4 Channel Bandwidth: 15MHz	QPSK: 13M3G7W 16QAM: 13M3W7W
	LTE Band 4 Channel Bandwidth: 20MHz	QPSK: 17M8G7W 16QAM: 17M8W7W
	LTE Band 13 Channel Bandwidth: 5MHz	QPSK: 4M49G7W 16QAM: 4M49W7W
	LTE Band 13 Channel Bandwidth: 10MHz	QPSK: 8M91G7W 16QAM: 8M91W7W
MAX. EIRP/ERP POWER (mW)	LTE Band 4 Channel Bandwidth: 5MHz	QPSK: 196.79mW 16QAM: 137.4mW
	LTE Band 4 Channel Bandwidth: 10MHz	QPSK: 199.07mW 16QAM: 157.04mW
	LTE Band 4 Channel Bandwidth: 15MHz	QPSK: 191.87mW 16QAM: 142.89mW
	LTE Band 4 Channel Bandwidth: 20MHz	QPSK: 207.49mW 16QAM: 141.91mW
	LTE Band 13 Channel Bandwidth: 5MHz	QPSK: 78.34mW 16QAM: 55.98mW
	LTE Band 13 Channel Bandwidth: 10MHz	QPSK: 72.28mW 16QAM: 55.21mW
CATEGORY	LTE: 3	
ANTENNA TYPE	Fixed Internal antenna	
DATA CABLE	N/A	
I/O PORTS	Refer to users' manual	
ACCESSORY DEVICES	Refer to NOTE as below	

NOTE:

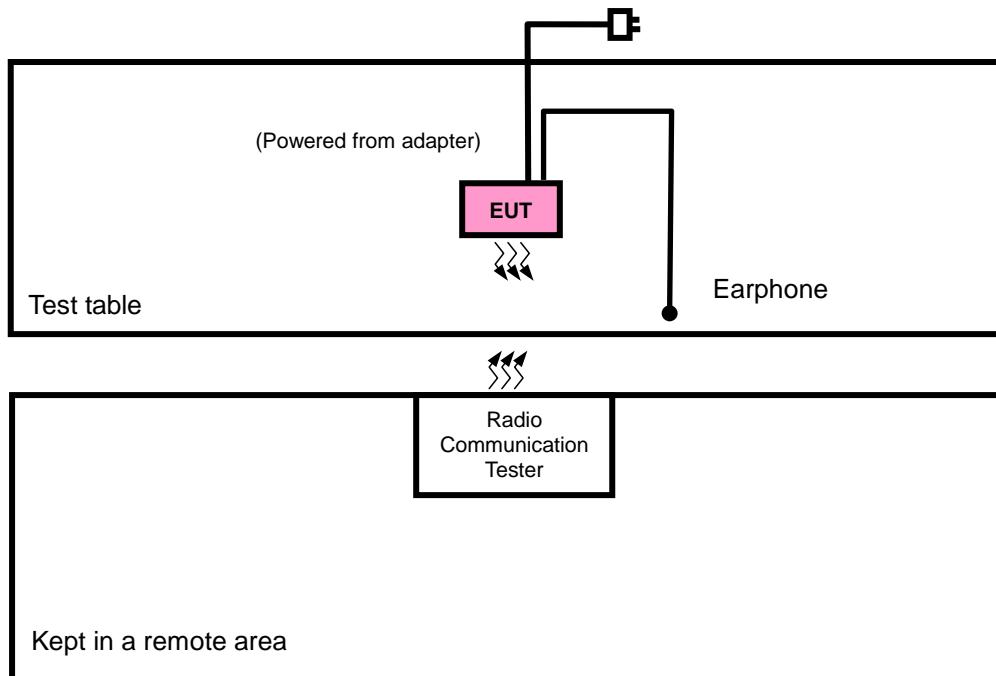
1. The EUT uses following accessories.

No.	Product	Brand	MODEL	Description
1	AC Adapter	Kyocera	SCP-39ADT	I/P: 100-240Vac, 0.2A O/P: 5Vdc, 1A
2	Li-ion Battery	Kyocera	SCP-53LBPS	Rating: 3.8Vdc, 2000mAh
3	USB cable	Kyocera	SCP-14SDC	1.1m shielded cable without core

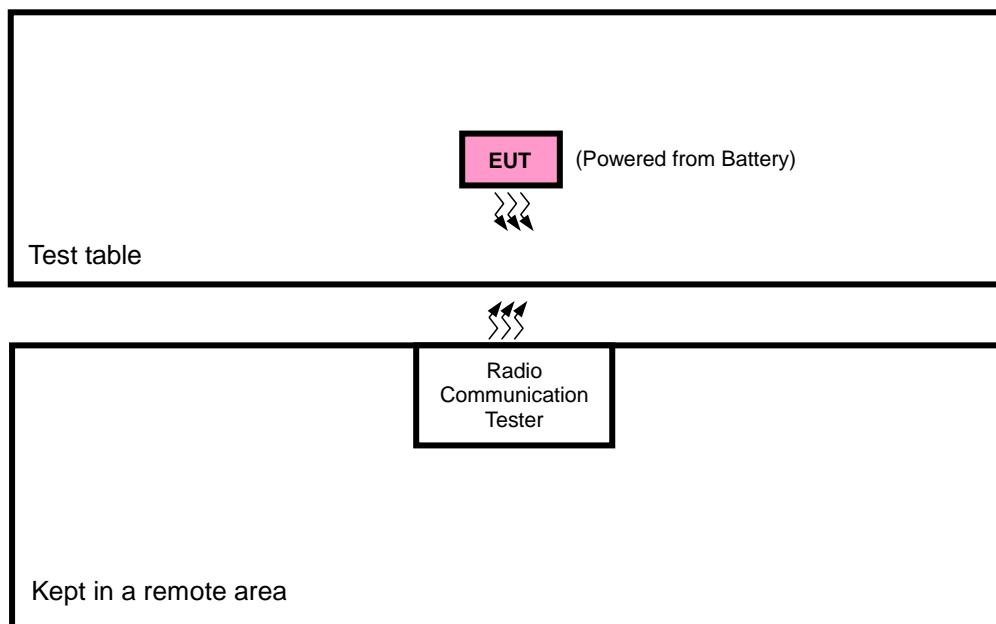
2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 CONFIGURATION OF SYSTEM UNDER TEST

<For Radiated Emission Test>



<For ERP/EIRP Test>





A D T

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	GALIEN	HF-HB04D	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.4m non-shielded cable without core.

NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 was provided by manufacturer.

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 when positioned on **Y-plane** for LTE Band 4 and **X-plane** for LTE Band 13 for ERP/EIRP and radiated emission test. Following channel(s) was (were) selected for the final test as listed below:



A D T

LTE Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19975 to 20375	19975, 20175, 20375	5MHz	QPSK	1 RB / 0 RB Offset
				16QAM	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
				16QAM	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK	1 RB / 0 RB Offset
				16QAM	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK	1 RB / 0 RB Offset
				16QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	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	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	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	19975 to 20375	19975	5MHz	QPSK	1 RB / 0 RB Offset
		20375	5MHz	QPSK	25 RB / 0 RB Offset
	20000 to 20350	20000	10MHz	QPSK	1 RB / 24 RB Offset
		20350	10MHz	QPSK	25 RB / 0 RB Offset
	20025 to 20325	20025	15MHz	QPSK	1 RB / 0 RB Offset
		20325	15MHz	QPSK	75 RB / 0 RB Offset
	20050 to 20300	20050	20MHz	QPSK	1 RB / 49 RB Offset
		20300	20MHz	QPSK	50 RB / 0 RB Offset
					1 RB / 0 RB Offset
					75 RB / 0 RB Offset
					1 RB / 74 RB Offset
					75 RB / 0 RB Offset
CONDUCTED EMISSION	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	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



A D T

LTE Band 13

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23230	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	23205 to 23255	23205, 23230, 23255	5MHz	QPSK	1 RB / 0 RB Offset
		23230	10MHz	QPSK	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
		23230	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23230	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
BAND EDGE	23205 to 23255	23255	5MHz	QPSK	1 RB / 0 RB Offset
				QPSK	25 RB / 0 RB Offset
		23205	10MHz	QPSK	1 RB / 0 RB Offset
				QPSK	50 RB / 0 RB Offset
CONDUCTED EMISSION	23205 to 23255	23230	5MHz	QPSK	1 RB / 0 RB Offset
		23230	10MHz	QPSK	1 RB / 0 RB Offset
RADIATED EMISSION	23205 to 23255	23230	5MHz	QPSK	1 RB / 0 RB Offset
		23230		QPSK	25 RB / 0 RB Offset
		23230	10MHz	QPSK	1 RB / 0 RB Offset
		23230		QPSK	50 RB / 0 RB Offset

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP/EIRP	26deg. C, 58%RH	3.8Vdc	Howard Kao
FREQUENCY STABILITY	26deg. C, 58%RH	3.8Vdc	Howard Kao
OCCUPIED BANDWIDTH	26deg. C, 58%RH	3.8Vdc	Howard Kao
PEAK TO AVERAGE RATIO	26deg. C, 58%RH	3.8Vdc	Howard Kao
BAND EDGE	26deg. C, 58%RH	3.8Vdc	Howard Kao
CONDUCTED EMISSION	26deg. C, 58%RH	3.8Vdc	Howard Kao
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu



A D T

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.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B. The test report has been issued separately.



A D T

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 698-746 MHz band are limited to 3 watts ERP

4.1.2 TEST PROCEDURES

EIRP / ERP MEASUREMENT:

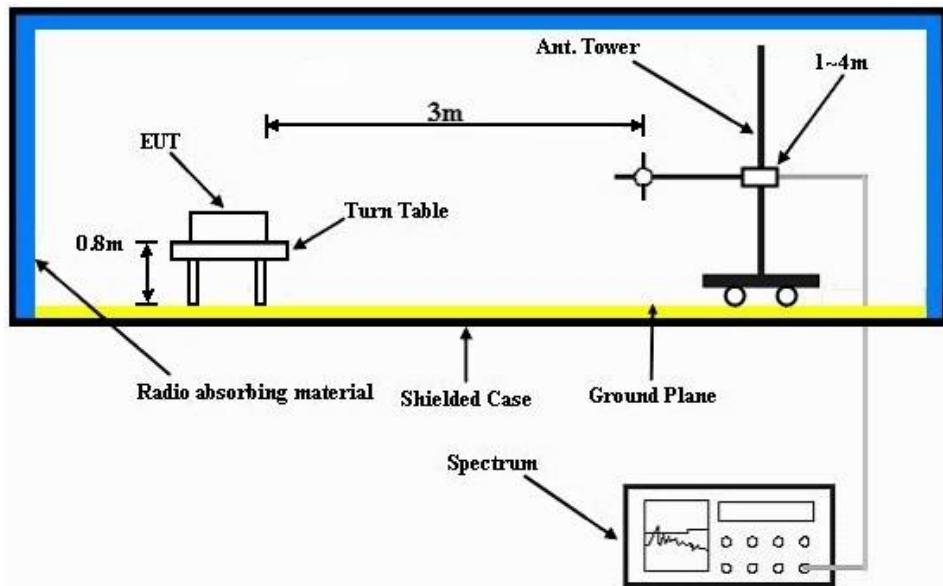
- a. All measurements were done at low, middle and high operational frequency range. RWB and VBW is 5MHz for CDMA mode and 10MHz for LTE mode.
- b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the 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 a. Record the power level of S.G
- d. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
- e. $E.R.P = E.I.R.P - 2.15 \text{ dB}$

CONDUCTED POWER MEASUREMENT:

- a. The EUT was set up for the maximum power with CDMA/LTE link data modulation and link up with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

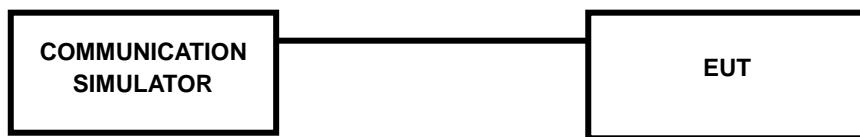
4.1.3 TEST SETUP

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).



A D T

4.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

LTE Band 4								
BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
5 MHz	QPSK	19975	1712.5	1	0	0	24.2	23.89
		20175	1732.5	1	0	0	24.2	23.97
		20375	1752.5	1	0	0	24.2	23.91
		19975	1712.5	1	12	0	24.2	23.86
		20175	1732.5	1	12	0	24.2	23.94
		20375	1752.5	1	12	0	24.2	23.88
		19975	1712.5	1	24	0	24.2	23.71
		20175	1732.5	1	24	0	24.2	23.79
		20375	1752.5	1	24	0	24.2	23.73
		19975	1712.5	12	0	1	24.2	22.84
		20175	1732.5	12	0	1	24.2	22.92
		20375	1752.5	12	0	1	24.2	22.86
		19975	1712.5	12	6	1	24.2	22.61
		20175	1732.5	12	6	1	24.2	22.69
		20375	1752.5	12	6	1	24.2	22.63
		19975	1712.5	12	13	1	24.2	22.63
		20175	1732.5	12	13	1	24.2	22.71
		20375	1752.5	12	13	1	24.2	22.65
		19975	1712.5	25	0	1	24.2	22.69
		20175	1732.5	25	0	1	24.2	22.77
		20375	1752.5	25	0	1	24.2	22.71
	16QAM	19975	1712.5	1	0	1	24.2	22.8
		20175	1732.5	1	0	1	24.2	22.88
		20375	1752.5	1	0	1	24.2	22.82
		19975	1712.5	1	12	1	24.2	22.78
		20175	1732.5	1	12	1	24.2	22.86
		20375	1752.5	1	12	1	24.2	22.8
		19975	1712.5	1	24	1	24.2	22.61
		20175	1732.5	1	24	1	24.2	22.69
		20375	1752.5	1	24	1	24.2	22.63
		19975	1712.5	12	0	2	24.2	21.78
		20175	1732.5	12	0	2	24.2	21.86
		20375	1752.5	12	0	2	24.2	21.8
		19975	1712.5	12	6	2	24.2	21.68
		20175	1732.5	12	6	2	24.2	21.76
		20375	1752.5	12	6	2	24.2	21.7
		19975	1712.5	12	13	2	24.2	21.63
		20175	1732.5	12	13	2	24.2	21.71
		20375	1752.5	12	13	2	24.2	21.65
		19975	1712.5	25	0	2	24.2	21.74
		20175	1732.5	25	0	2	24.2	21.82
		20375	1752.5	25	0	2	24.2	21.76



A D T

LTE Band 4

BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
10MHz	QPSK	20000	1715	1	0	0	24.2	23.95
		20175	1732.5	1	0	0	24.2	24.03
		20350	1750	1	0	0	24.2	23.97
		20000	1715	1	24	0	24.2	23.92
		20175	1732.5	1	24	0	24.2	24
		20350	1750	1	24	0	24.2	23.94
		20000	1715	1	49	0	24.2	23.77
		20175	1732.5	1	49	0	24.2	23.85
		20350	1750	1	49	0	24.2	23.79
		20000	1715	25	0	1	24.2	22.9
		20175	1732.5	25	0	1	24.2	22.98
		20350	1750	25	0	1	24.2	22.92
		20000	1715	25	12	1	24.2	22.67
		20175	1732.5	25	12	1	24.2	22.75
		20350	1750	25	12	1	24.2	22.69
		20000	1715	25	25	1	24.2	22.69
		20175	1732.5	25	25	1	24.2	22.77
		20350	1750	25	25	1	24.2	22.71
		20000	1715	50	0	1	24.2	22.75
		20175	1732.5	50	0	1	24.2	22.83
		20350	1750	50	0	1	24.2	22.77
	16QAM	20000	1715	1	0	1	24.2	22.86
		20175	1732.5	1	0	1	24.2	22.94
		20350	1750	1	0	1	24.2	22.88
		20000	1715	1	24	1	24.2	22.84
		20175	1732.5	1	24	1	24.2	22.92
		20350	1750	1	24	1	24.2	22.86
		20000	1715	1	49	1	24.2	22.67
		20175	1732.5	1	49	1	24.2	22.75
		20350	1750	1	49	1	24.2	22.69
		20000	1715	25	0	2	24.2	21.84
		20175	1732.5	25	0	2	24.2	21.92
		20350	1750	25	0	2	24.2	21.86
		20000	1715	25	12	2	24.2	21.74
		20175	1732.5	25	12	2	24.2	21.82
		20350	1750	25	12	2	24.2	21.76
		20000	1715	25	25	2	24.2	21.69
		20175	1732.5	25	25	2	24.2	21.77
		20350	1750	25	25	2	24.2	21.71
		20000	1715	50	0	2	24.2	21.8
		20175	1732.5	50	0	2	24.2	21.88
		20350	1750	50	0	2	24.2	21.82



A D T

LTE Band 4								
BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
15 MHz	QPSK	20025	1717.5	1	0	0	24.2	24.02
		20175	1732.5	1	0	0	24.2	24.1
		20325	1747.5	1	0	0	24.2	24.04
		20025	1717.5	1	37	0	24.2	23.99
		20175	1732.5	1	37	0	24.2	24.07
		20325	1747.5	1	37	0	24.2	24.01
		20025	1717.5	1	74	0	24.2	23.84
		20175	1732.5	1	74	0	24.2	23.92
		20325	1747.5	1	74	0	24.2	23.86
		20025	1717.5	36	0	1	24.2	22.97
		20175	1732.5	36	0	1	24.2	23.05
		20325	1747.5	36	0	1	24.2	22.99
		20025	1717.5	36	19	1	24.2	22.74
		20175	1732.5	36	19	1	24.2	22.82
		20325	1747.5	36	19	1	24.2	22.76
	16QAM	20025	1717.5	36	39	1	24.2	22.76
		20175	1732.5	36	39	1	24.2	22.84
		20325	1747.5	36	39	1	24.2	22.78
		20025	1717.5	75	0	1	24.2	22.82
		20175	1732.5	75	0	1	24.2	22.9
		20325	1747.5	75	0	1	24.2	22.84
		20025	1717.5	1	0	1	24.2	22.93
		20175	1732.5	1	0	1	24.2	23.01
		20325	1747.5	1	0	1	24.2	22.95
		20025	1717.5	1	37	1	24.2	22.91
		20175	1732.5	1	37	1	24.2	22.99
		20325	1747.5	1	37	1	24.2	22.93
		20025	1717.5	1	74	1	24.2	22.74
		20175	1732.5	1	74	1	24.2	22.82
		20325	1747.5	1	74	1	24.2	22.76
		20025	1717.5	36	0	2	24.2	21.91
		20175	1732.5	36	0	2	24.2	21.99
		20325	1747.5	36	0	2	24.2	21.93
		20025	1717.5	36	19	2	24.2	21.81
		20175	1732.5	36	19	2	24.2	21.89
		20325	1747.5	36	19	2	24.2	21.83
		20025	1717.5	36	39	2	24.2	21.76
		20175	1732.5	36	39	2	24.2	21.84
		20325	1747.5	36	39	2	24.2	21.78
		20025	1717.5	75	0	2	24.2	21.87
		20175	1732.5	75	0	2	24.2	21.95
		20325	1747.5	75	0	2	24.2	21.89



A D T

LTE Band 4

BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
20MHz	QPSK	20050	1720	1	0	0	24.2	24.08
		20175	1732.5	1	0	0	24.2	24.16
		20300	1745	1	0	0	24.2	24.1
		20050	1720	1	50	0	24.2	24.05
		20175	1732.5	1	50	0	24.2	24.13
		20300	1745	1	50	0	24.2	24.07
		20050	1720	1	99	0	24.2	23.9
		20175	1732.5	1	99	0	24.2	23.98
		20300	1745	1	99	0	24.2	23.92
		20050	1720	50	0	1	24.2	23.03
		20175	1732.5	50	0	1	24.2	23.11
		20300	1745	50	0	1	24.2	23.05
		20050	1720	50	25	1	24.2	22.8
		20175	1732.5	50	25	1	24.2	22.88
		20300	1745	50	25	1	24.2	22.82
		20050	1720	50	50	1	24.2	22.82
		20175	1732.5	50	50	1	24.2	22.9
		20300	1745	50	50	1	24.2	22.84
		20050	1720	100	0	1	24.2	22.88
		20175	1732.5	100	0	1	24.2	22.96
		20300	1745	100	0	1	24.2	22.9
	16QAM	20050	1720	1	0	1	24.2	22.99
		20175	1732.5	1	0	1	24.2	23.07
		20300	1745	1	0	1	24.2	23.01
		20050	1720	1	50	1	24.2	22.97
		20175	1732.5	1	50	1	24.2	23.05
		20300	1745	1	50	1	24.2	22.99
		20050	1720	1	99	1	24.2	22.8
		20175	1732.5	1	99	1	24.2	22.88
		20300	1745	1	99	1	24.2	22.82
		20050	1720	50	0	2	24.2	21.97
		20175	1732.5	50	0	2	24.2	22.05
		20300	1745	50	0	2	24.2	21.99
		20050	1720	50	25	2	24.2	21.87
		20175	1732.5	50	25	2	24.2	21.95
		20300	1745	50	25	2	24.2	21.89
		20050	1720	50	50	2	24.2	21.82
		20175	1732.5	50	50	2	24.2	21.9
		20300	1745	50	50	2	24.2	21.84
		20050	1720	100	0	2	24.2	21.93
		20175	1732.5	100	0	2	24.2	22.01
		20300	1745	100	0	2	24.2	21.95



A D T

LTE Band 13								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
5 MHz	QPSK	23205	779.5	1	0	0	24.1	24.06
		23230	782	1	0	0	24.1	24.01
		23255	784.5	1	0	0	24.1	23.9
		23205	779.5	1	12	0	24.1	23.99
		23230	782	1	12	0	24.1	23.94
		23255	784.5	1	12	0	24.1	23.83
		23205	779.5	1	24	0	24.1	23.56
		23230	782	1	24	0	24.1	23.51
		23255	784.5	1	24	0	24.1	23.4
		23205	779.5	12	0	1	24.1	22.93
		23230	782	12	0	1	24.1	22.88
		23255	784.5	12	0	1	24.1	22.77
		23205	779.5	12	6	1	24.1	22.86
		23230	782	12	6	1	24.1	22.81
		23255	784.5	12	6	1	24.1	22.7
	16QAM	23205	779.5	12	13	1	24.1	22.71
		23230	782	12	13	1	24.1	22.66
		23255	784.5	12	13	1	24.1	22.55
		23205	779.5	25	0	1	24.1	22.67
		23230	782	25	0	1	24.1	22.62
		23255	784.5	25	0	1	24.1	22.51
		23205	779.5	1	0	1	24.1	22.97
		23230	782	1	0	1	24.1	22.92
		23255	784.5	1	0	1	24.1	22.81
		23205	779.5	1	12	1	24.1	22.83



A D T

LTE Band 13								
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
10 MHz	QPSK	23230	782	1	0	0	24.1	24.08
		23230	782	1	24	0	24.1	24.01
		23230	782	1	49	0	24.1	23.58
		23230	782	25	0	1	24.1	22.95
		23230	782	25	12	1	24.1	22.88
		23230	782	25	25	1	24.1	22.73
		23230	782	50	0	1	24.1	22.69
	16QAM	23230	782	1	0	1	24.1	22.99
		23230	782	1	24	1	24.1	22.85
		23230	782	1	49	1	24.1	22.49
		23230	782	25	0	2	24.1	22.01
		23230	782	25	12	2	24.1	21.9
		23230	782	25	25	2	24.1	21.76
		23230	782	50	0	2	24.1	21.68



A D T

ERP (dBm)**LTE BAND 13****CHANNEL BANDWIDTH: 5MHz QPSK**

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23205	779.5	-11.65	32.24	18.44	69.82	H
	23230	782	-11.64	32.17	18.38	68.87	
	23255	784.5	-11.02	32.11	18.94	78.34	
	23205	779.5	-18.82	32.43	11.46	14.00	V
	23230	782	-17.84	32.42	12.43	17.50	
	23255	784.5	-18.03	32.46	12.28	16.90	

CHANNEL BANDWIDTH: 5MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23205	779.5	-12.61	32.24	17.48	55.98	H
	23230	782	-12.62	32.17	17.40	54.95	
	23255	784.5	-12.87	32.11	17.09	51.17	
	23205	779.5	-18.83	32.43	11.45	13.96	V
	23230	782	-17.77	32.42	12.50	17.78	
	23255	784.5	-17.79	32.46	12.52	17.86	



A D T

CHANNEL BANDWIDTH: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23230	782	-11.43	32.17	18.59	72.28	H
	23230	782	-18.89	32.42	11.38	13.74	V

CHANNEL BANDWIDTH: 10MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
X	23230	782	-12.60	32.17	17.42	55.21	H
	23230	782	-18.69	32.42	11.58	14.39	V



A D T

EIRP (dBm)**LTE BAND 4****CHANNEL BANDWIDTH: 5MHz QPSK**

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	19975	1712.5	-24.07	37.90	13.83	24.15	H
	20175	1732.5	-25.15	37.99	12.84	19.23	
	20375	1752.5	-24.83	38.31	13.48	22.28	
	19975	1712.5	-17.23	37.81	20.58	114.29	V
	20175	1732.5	-15.26	38.00	22.74	187.93	
	20375	1752.5	-15.28	38.22	22.94	196.79	

CHANNEL BANDWIDTH: 5MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	19975	1712.5	-23.68	37.90	14.22	26.42	H
	20175	1732.5	-24.75	37.99	13.24	21.09	
	20375	1752.5	-24.05	38.31	14.26	26.67	
	19975	1712.5	-16.78	37.81	21.03	126.77	V
	20175	1732.5	-16.82	38.00	21.18	131.22	
	20375	1752.5	-16.84	38.22	21.38	137.40	



A D T

CHANNEL BANDWIDTH: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	20000	1715	-23.95	37.99	14.04	25.35	H
	20175	1732.5	-24.67	37.99	13.32	21.48	
	20350	1750	-24.38	38.36	13.98	25.00	
	20000	1715	-15.21	37.91	22.70	186.21	V
	20175	1732.5	-15.01	38.00	22.99	199.07	
	20350	1750	-15.68	38.28	22.60	181.97	

CHANNEL BANDWIDTH: 10MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	20000	1715	-23.60	37.99	14.39	27.48	H
	20175	1732.5	-24.44	37.99	13.55	22.65	
	20350	1750	-24.21	38.36	14.15	26.00	
	20000	1715	-16.73	37.91	21.18	131.22	V
	20175	1732.5	-16.61	38.00	21.39	137.72	
	20350	1750	-16.32	38.28	21.96	157.04	



A D T

CHANNEL BANDWIDTH: 15MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	20025	1717.5	-23.74	37.99	14.25	26.61	H
	20175	1732.5	-24.43	37.99	13.56	22.70	
	20325	1747.5	-25.04	38.36	13.32	21.48	
	20025	1717.5	-15.15	37.91	22.76	188.80	V
	20175	1732.5	-15.86	38.00	22.14	163.68	
	20325	1747.5	-15.45	38.28	22.83	191.87	

CHANNEL BANDWIDTH: 15MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	20025	1717.5	-23.56	37.99	14.43	27.73	H
	20175	1732.5	-24.24	37.99	13.75	23.71	
	20325	1747.5	-25.01	38.36	13.35	21.63	
	20025	1717.5	-16.75	37.91	21.16	130.62	V
	20175	1732.5	-16.45	38.00	21.55	142.89	
	20325	1747.5	-16.96	38.28	21.32	135.52	



A D T

CHANNEL BANDWIDTH: 20MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	20050	1720	-23.62	37.99	14.37	27.35	H
	20175	1732.5	-23.90	37.99	14.09	25.64	
	20300	1745	-25.68	38.36	12.68	18.54	
	20050	1720	-15.08	37.91	22.83	191.87	V
	20175	1732.5	-15.33	38.00	22.67	184.93	
	20300	1745	-15.11	38.28	23.17	207.49	

CHANNEL BANDWIDTH: 20MHz 16QAM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	20050	1720	-24.57	37.99	13.42	21.98	H
	20175	1732.5	-24.72	37.99	13.27	21.23	
	20300	1745	-25.37	38.36	12.99	19.91	
	20050	1720	-16.88	37.91	21.03	126.77	V
	20175	1732.5	-16.94	38.00	21.06	127.64	
	20300	1745	-16.76	38.28	21.52	141.91	

4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

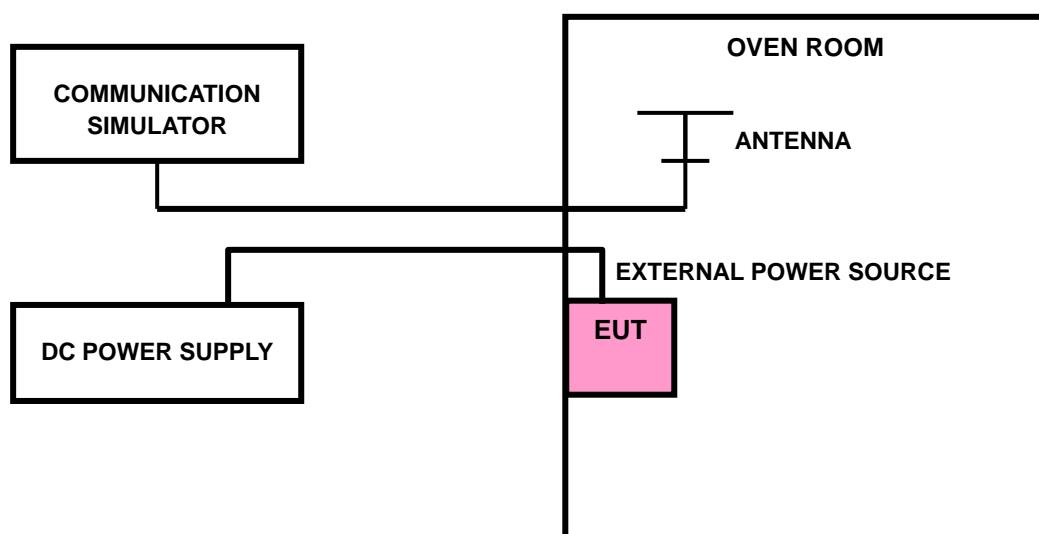
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

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 $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

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

4.2.3 TEST SETUP





A D T

4.2.4 TEST RESULTS

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)				LIMIT (ppm)	
	LTE BAND 4					
	5MHz	10MHz	15MHz	20MHz		
3.8	-0.0008	0.0019	0.0018	0.0031	2.5	
3.4	-0.0024	-0.0021	0.0056	-0.0010	2.5	
4.35	-0.0033	0.0016	0.0013	0.0024	2.5	

NOTE: The applicant defined the normal working voltage of the host equipment is from 3.4Vdc to 4.35Vdc.

TEMP. (°C)	FREQUENCY ERROR (ppm)				LIMIT (ppm)	
	LTE BAND 4					
	5MHz	10MHz	15MHz	20MHz		
-30	0.0047	-0.0008	0.0020	0.0036	2.5	
-20	-0.0013	0.0014	-0.0025	0.0036	2.5	
-10	-0.0003	0.0033	-0.0008	0.0006	2.5	
0	-0.0016	0.0012	-0.0012	0.0018	2.5	
10	0.0003	0.0020	0.0010	-0.0032	2.5	
20	0.0033	0.0040	0.0006	0.0019	2.5	
30	0.0054	-0.0017	0.0012	0.0021	2.5	
40	0.0021	-0.0027	0.0019	0.0021	2.5	
50	0.0034	0.0055	-0.0006	0.0007	2.5	
55	0.0035	0.0037	-0.0024	0.0009	2.5	



A D T

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)		LIMIT (ppm)	
	LTE BAND 13			
	5MHz	10MHz		
3.8	-0.001	-0.004	2.5	
3.4	-0.004	-0.001	2.5	
4.35	-0.003	-0.002	2.5	

NOTE: The applicant defined the normal working voltage of the host equipment is from 3.4Vdc to 4.35Vdc.

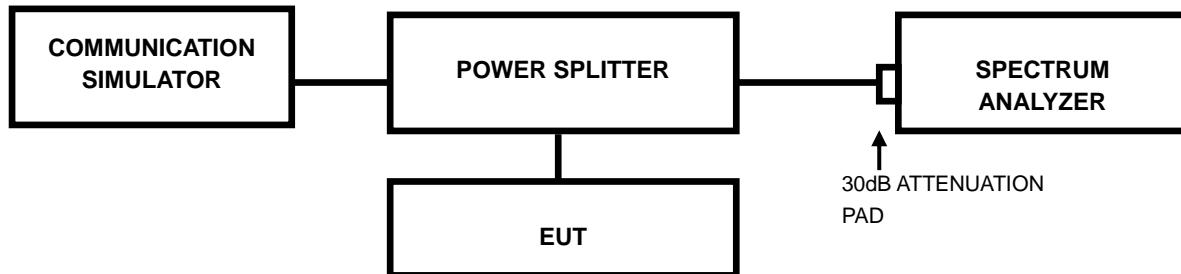
TEMP. (°C)	FREQUENCY ERROR (ppm)		LIMIT (ppm)	
	LTE BAND 13			
	5MHz	10MHz		
-30	-0.002	-0.002	2.5	
-20	0.002	-0.001	2.5	
-10	-0.003	0.005	2.5	
0	0.001	-0.002	2.5	
10	0.004	-0.001	2.5	
20	0.005	-0.003	2.5	
30	-0.002	-0.005	2.5	
40	0.004	-0.005	2.5	
50	0.003	0.003	2.5	
55	-0.006	-0.007	2.5	

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.



A D T

4.3.4 TEST RESULTS

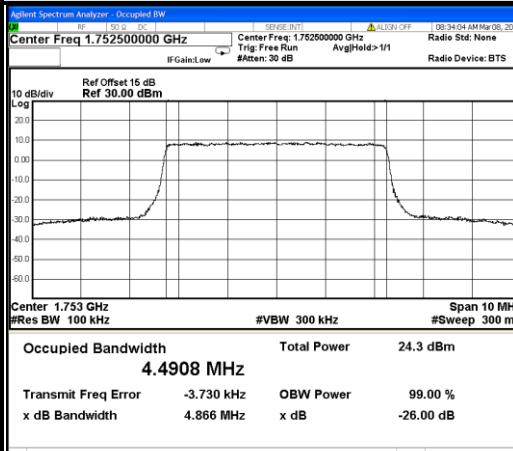
LTE BAND 4							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	4.4896	4.4859	20000	1715.0	8.9233	8.9190
20175	1732.5	4.4893	4.4852	20175	1732.5	8.9291	8.9255
20375	1752.5	4.4908	4.4867	20350	1750.0	8.9211	8.9231
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	13.378	13.367	20050	1720	17.810	17.818
20175	1732.5	13.387	13.387	20175	1732.5	17.852	17.843
20325	1747.5	13.377	13.358	20300	1745	17.806	17.809



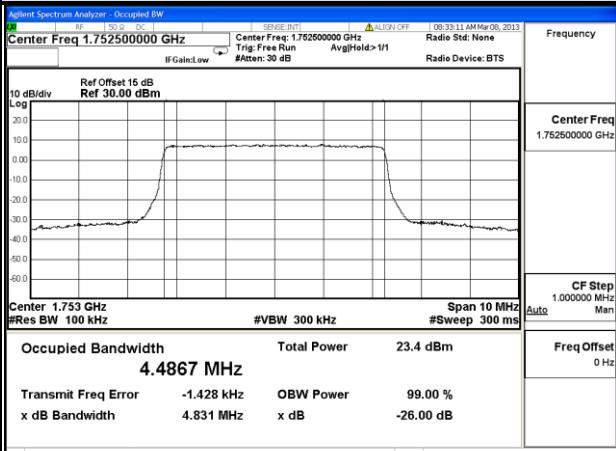
A D T

SPECTRUM PLOT OF WORST VALUE

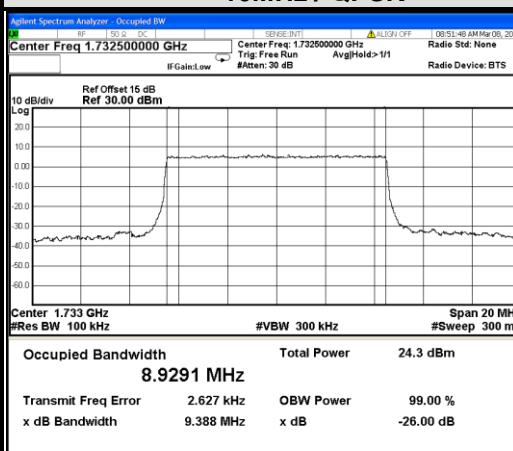
5MHz / QPSK



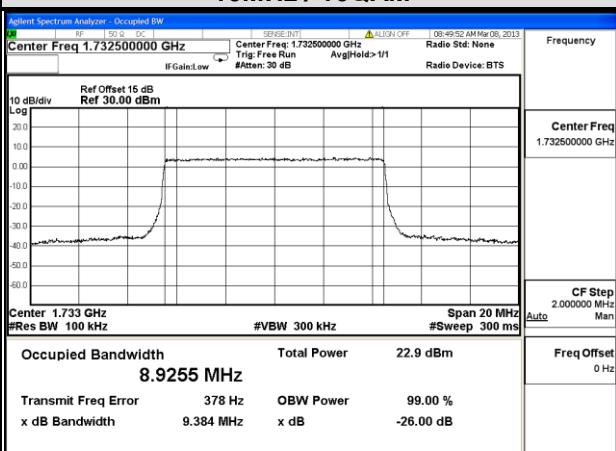
5MHz / 16QAM



10MHz / QPSK



10MHz / 16QAM

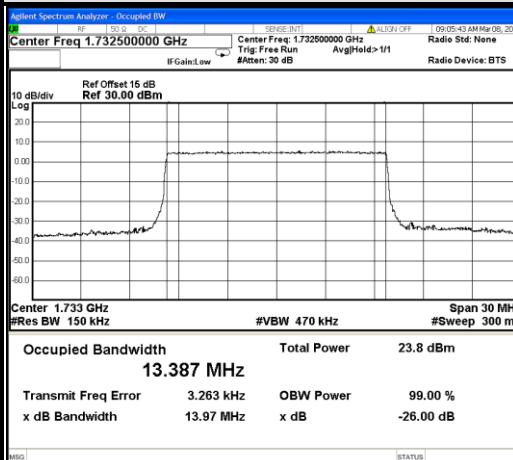




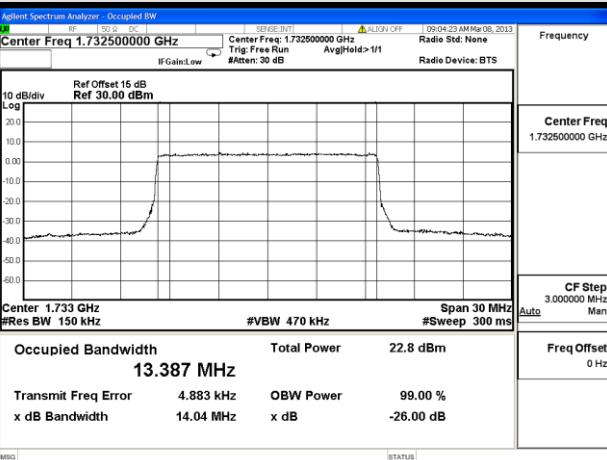
A D T

SPECTRUM PLOT OF WORST VALUE

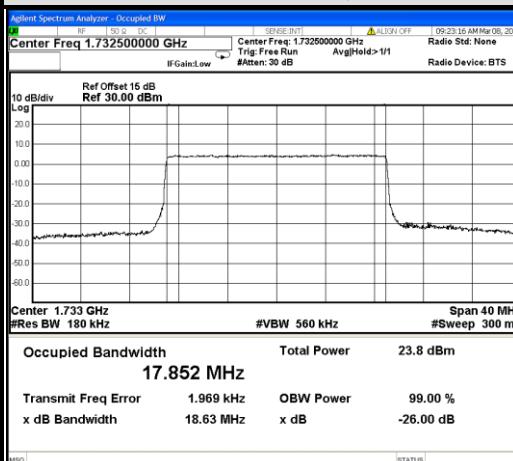
15MHz / QPSK



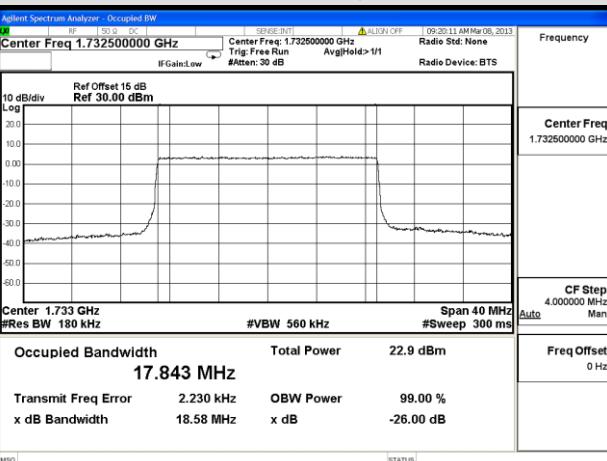
15MHz / 16QAM



20MHz / QPSK



20MHz / 16QAM





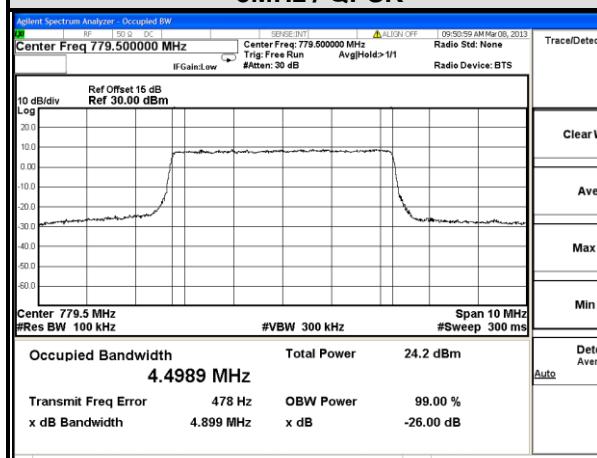
A D T

LTE BAND 13

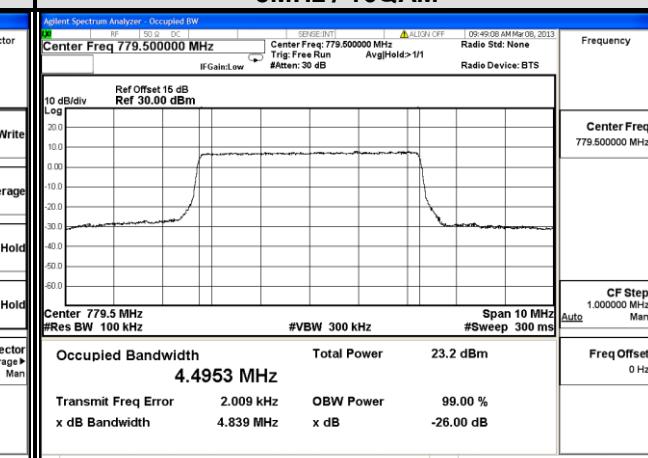
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
23205	779.5	4.4989	4.4953				
23230	782.0	4.4901	4.4872	23230	782.0	8.9198	8.9174
23255	784.5	4.4934	4.4907				

SPECTRUM PLOT OF WORST VALUE

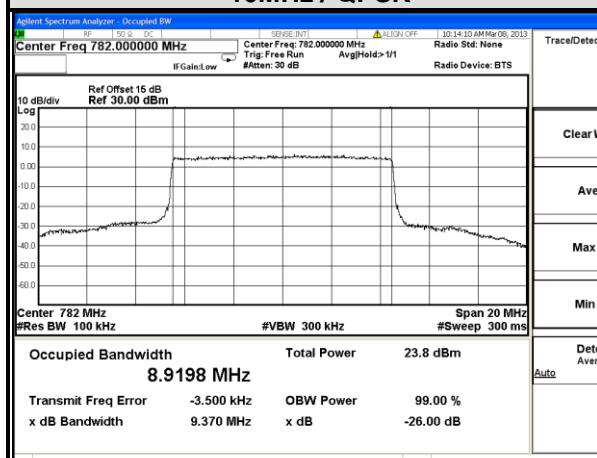
5MHz / QPSK



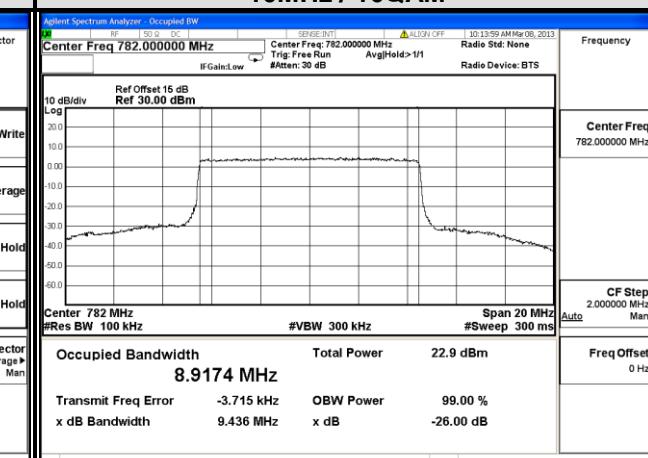
5MHz / 16QAM



10MHz / QPSK



10MHz / 16QAM

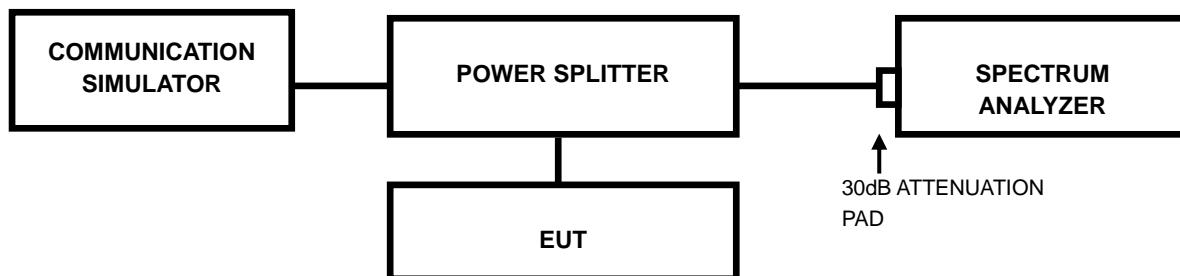


4.4 PEAK TO AVERAGE RATIO

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



A D T

4.4.4 TEST RESULTS

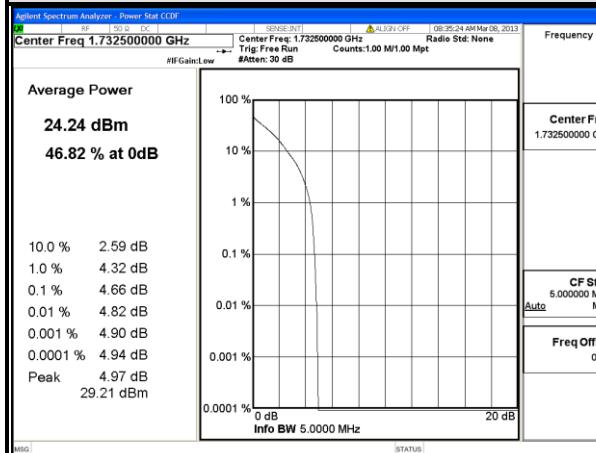
LTE BAND 4							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	3.52	4.75	20000	1715.0	3.45	4.49
20175	1732.5	4.66	5.90	20175	1732.5	4.77	5.75
20375	1752.5	4.05	5.23	20350	1750.0	3.87	4.89
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	3.63	4.74	20050	1720	3.48	4.61
20175	1732.5	4.70	5.87	20175	1732.5	4.42	5.68
20325	1747.5	3.86	4.96	20300	1745	3.97	5.24



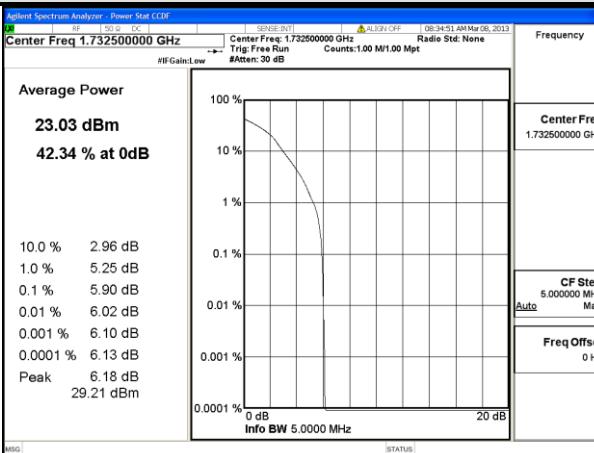
A D T

SPECTRUM PLOT OF WORST VALUE

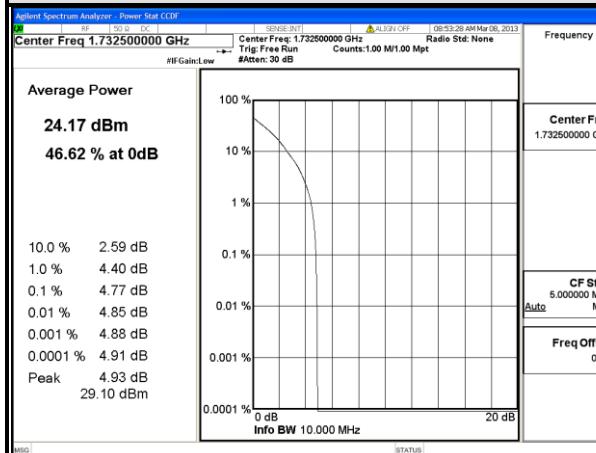
5MHz / QPSK



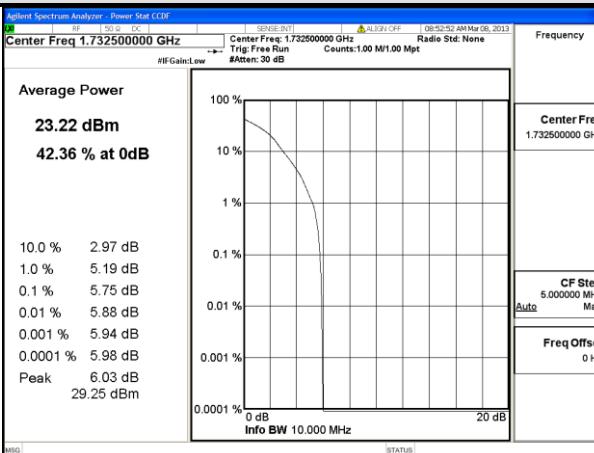
5MHz / 16QAM



10MHz / QPSK



10MHz / 16QAM

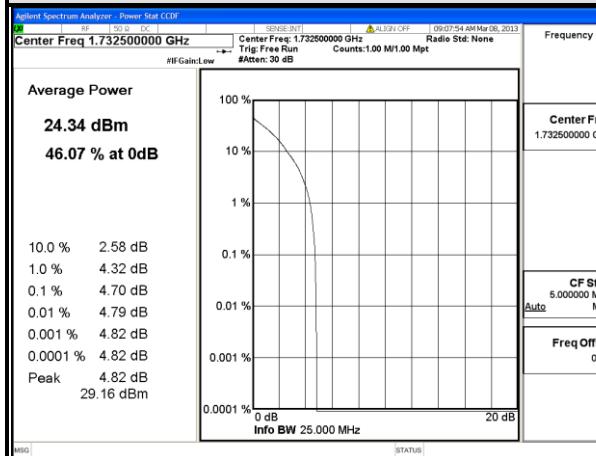




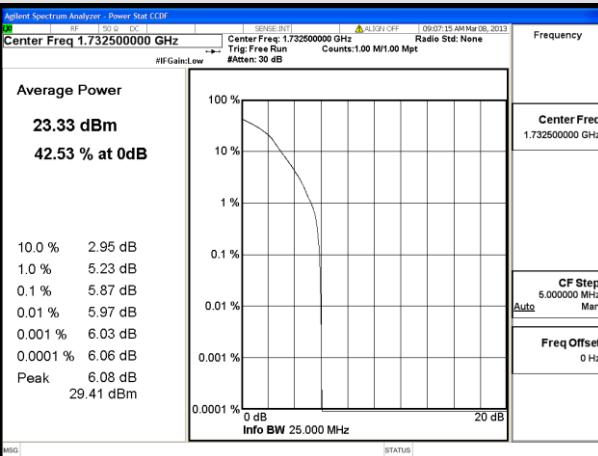
A D T

SPECTRUM PLOT OF WORST VALUE

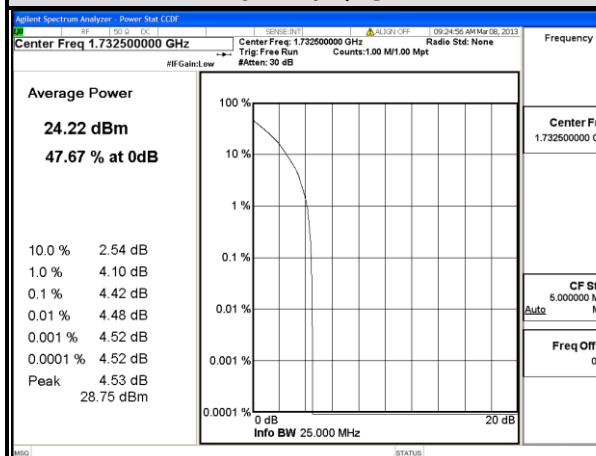
15MHz / QPSK



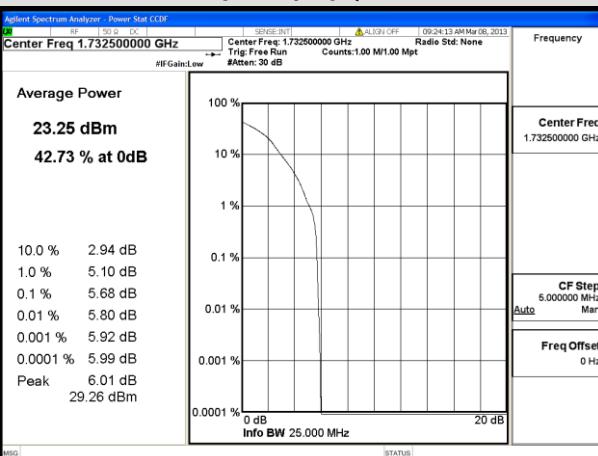
15MHz / 16QAM



20MHz / QPSK



20MHz / 16QAM

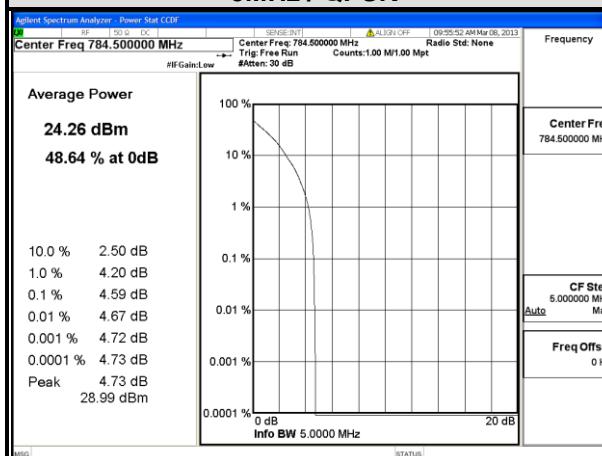
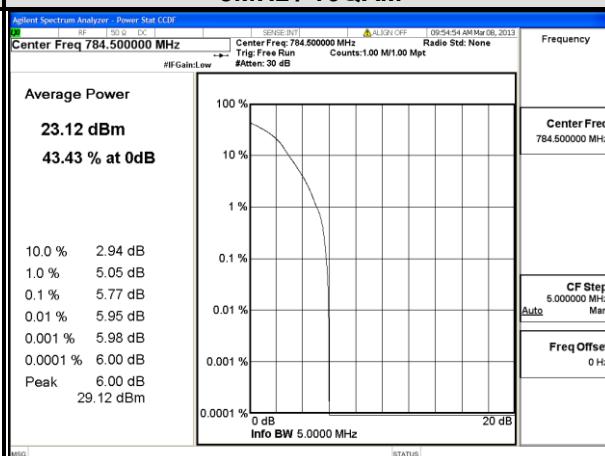
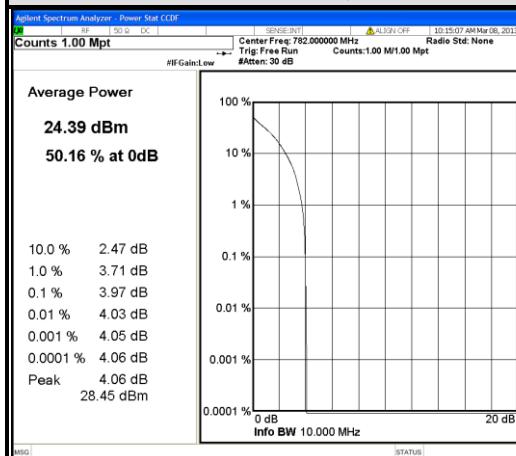
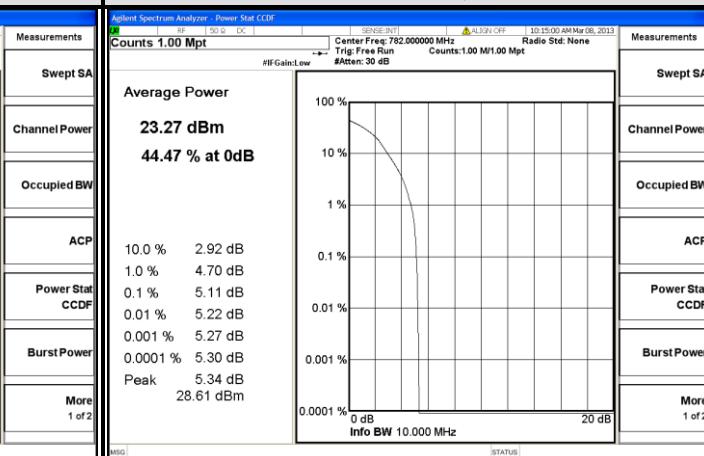




A D T

LTE BAND 13

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
23205	779.5	4.20	5.15				
23230	782.0	4.44	5.60	23230	782.0	3.97	5.11
23255	784.5	4.59	5.77				

SPECTRUM PLOT OF WORST VALUE**5MHz / QPSK****5MHz / 16QAM****10MHz / QPSK****10MHz / 16QAM**

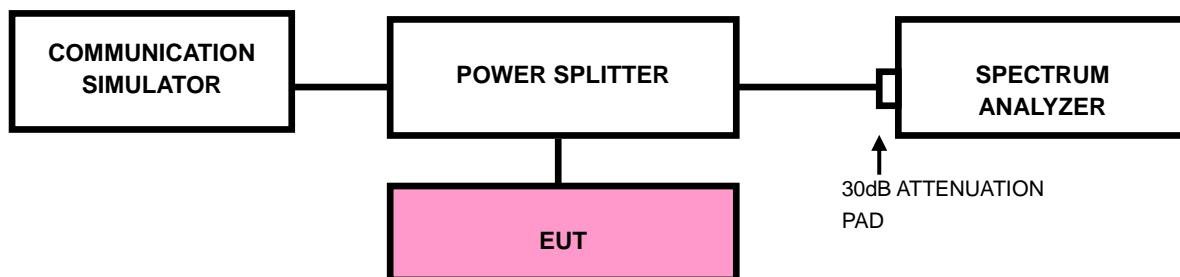
4.5 BAND EDGE MEASUREMENT

4.5.1 LIMITS OF BAND EDGE MEASUREMENT

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

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 $43 + 10 \log_{10}(P)$ dB.

4.5.2 TEST SETUP





A D T

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 5 MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).
- d. The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Channel Bandwidth 5MHz & 10MHz).
- e. The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 150kHz and VB of the spectrum is 470kHz (LTE Channel Bandwidth 15MHz).
- f. The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 180kHz and VB of the spectrum is 560kHz (LTE Channel Bandwidth 20MHz).
- g. Record the max trace plot into the test report.

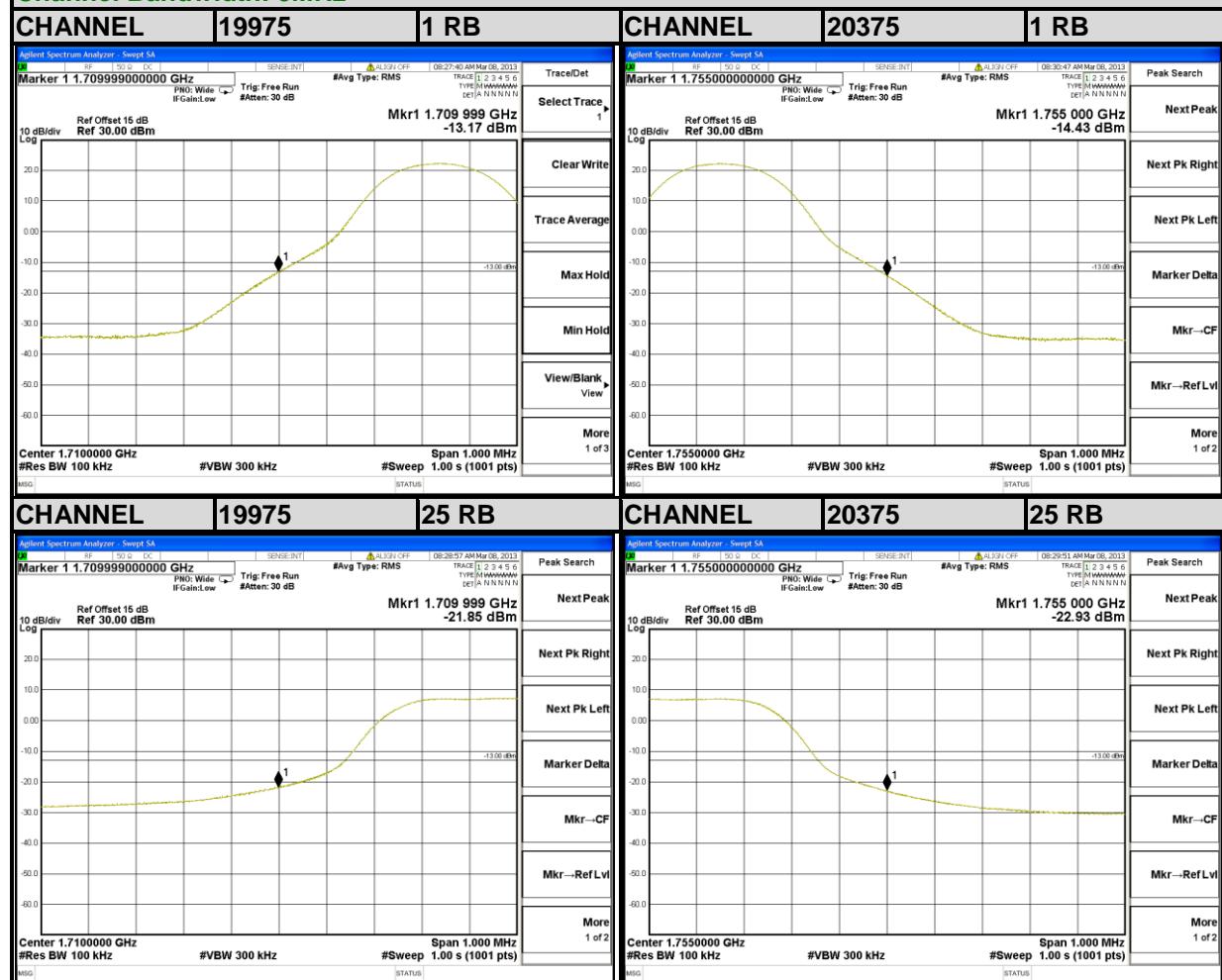


A D T

4.5.4 TEST RESULTS

LTE BAND 4

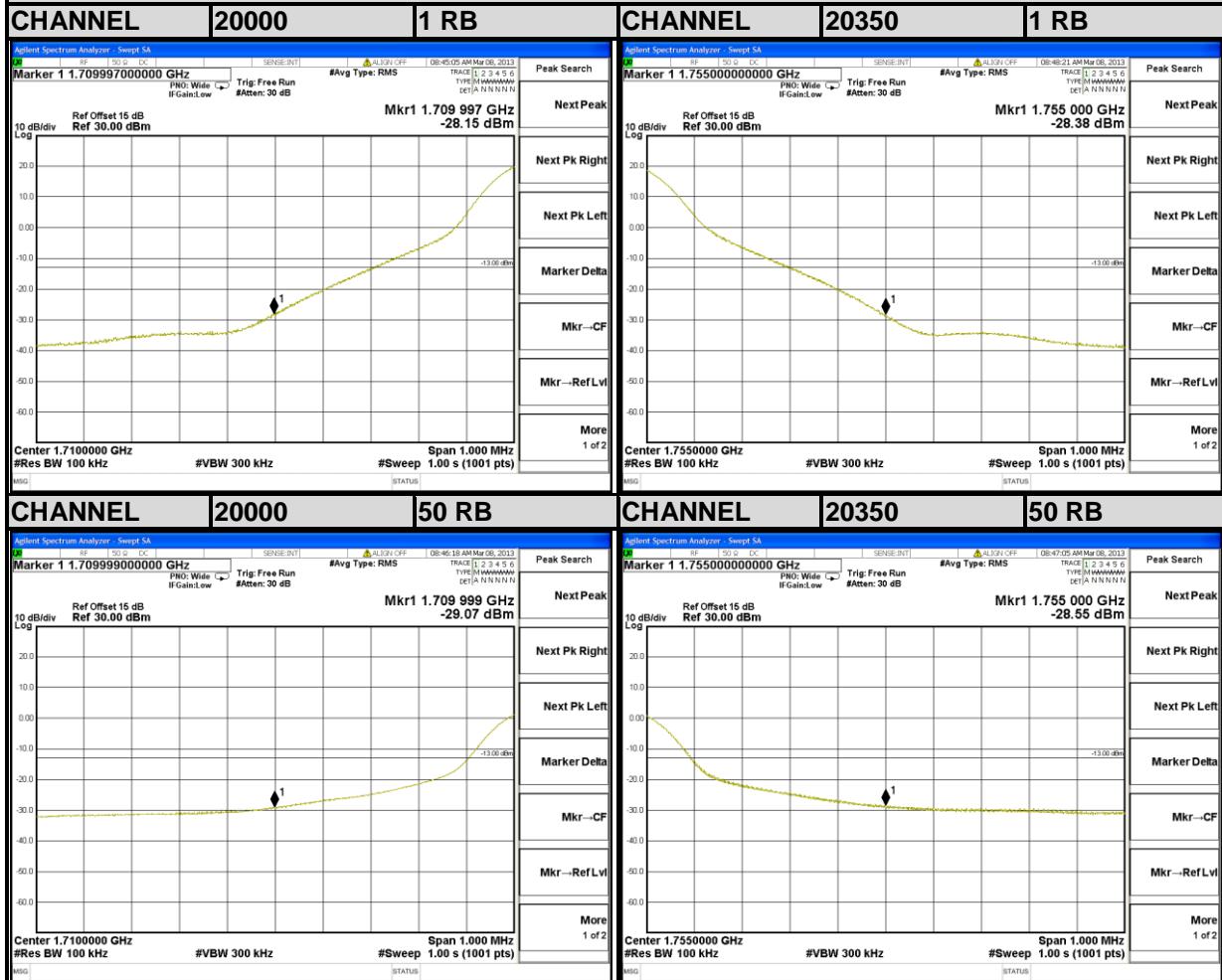
Channel Bandwidth: 5MHz





A D T

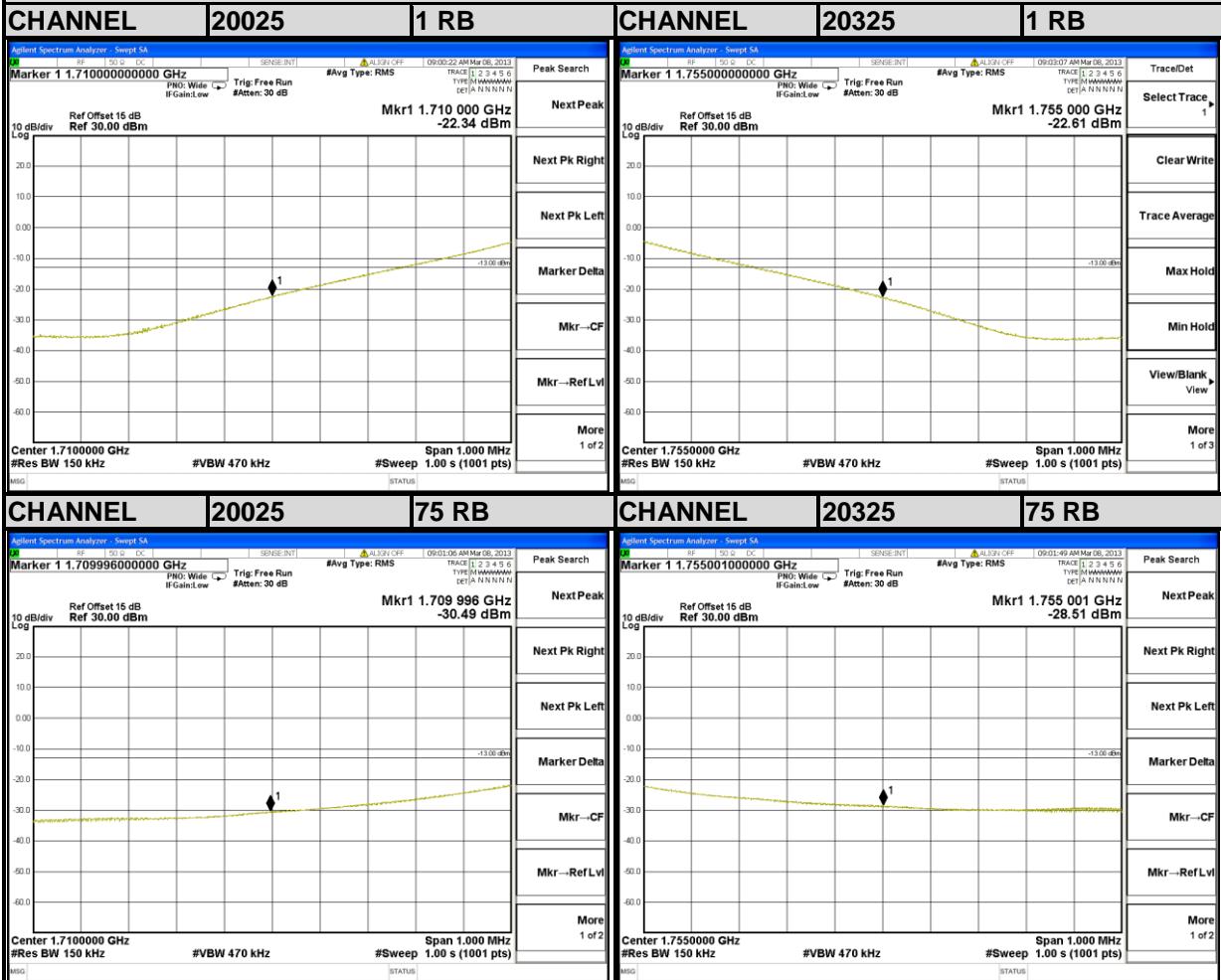
Channel Bandwidth: 10MHz





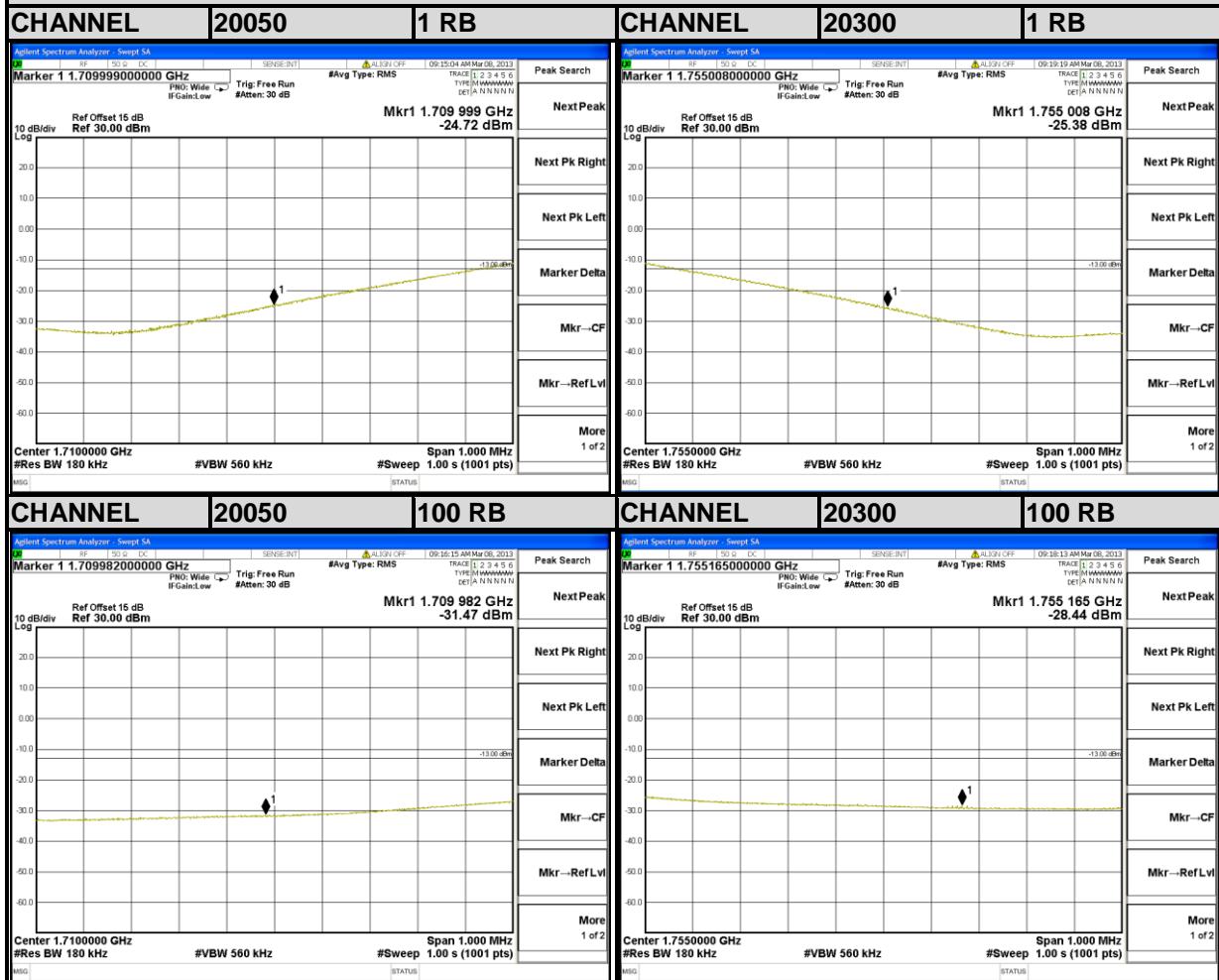
A D T

Channel Bandwidth: 15MHz





A D T

Channel Bandwidth: 20MHz



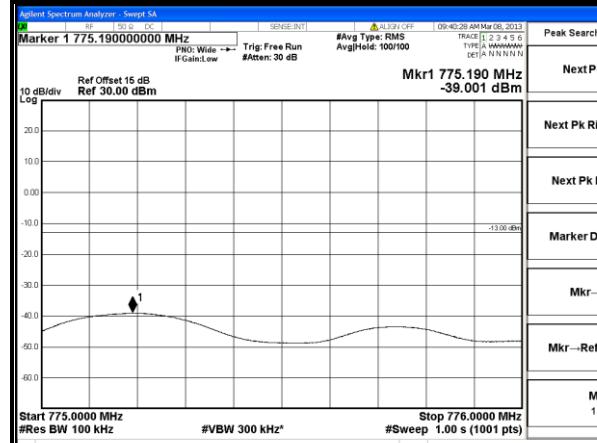
A D T

LTE BAND 13

CHANNEL BANDWIDTH: 5MHz

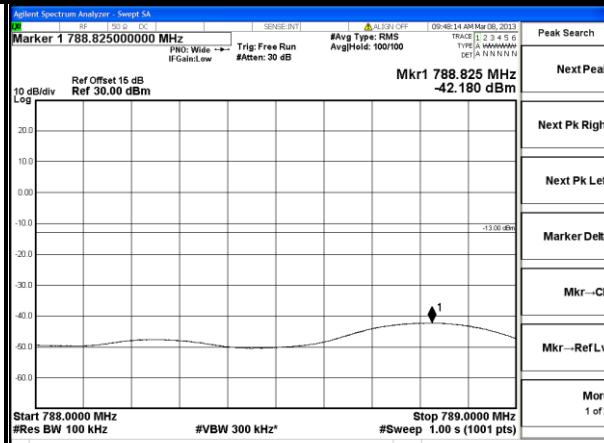
CHANNEL 23205

1RB



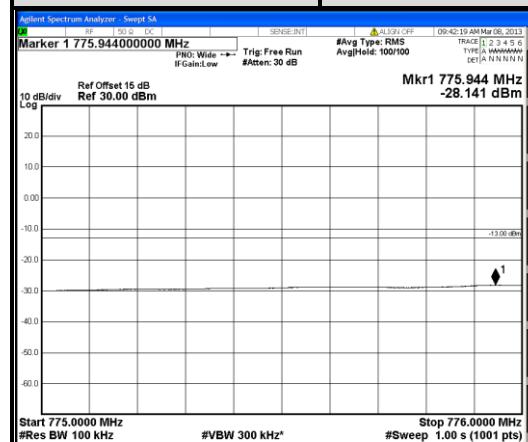
CHANNEL 23255

1RB



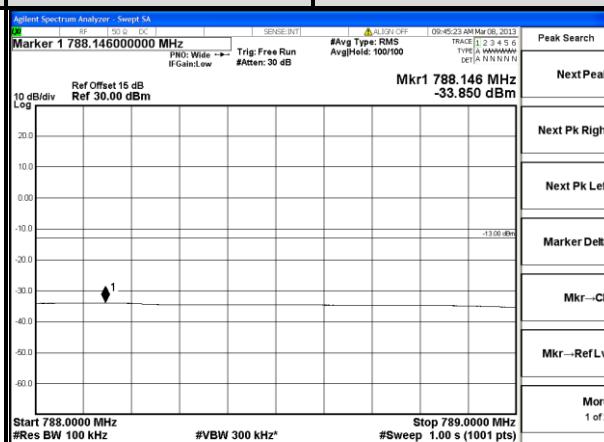
CHANNEL 23205

25RB



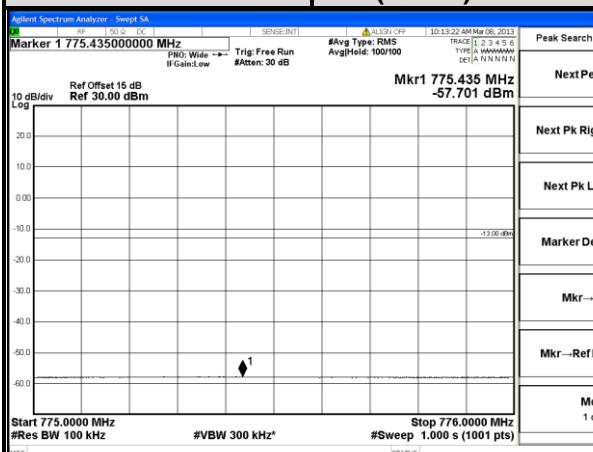
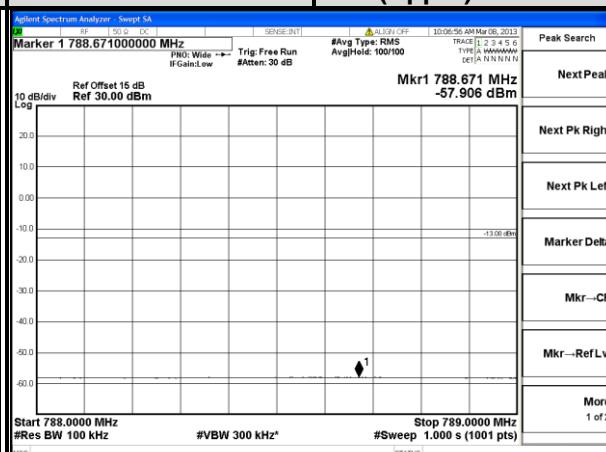
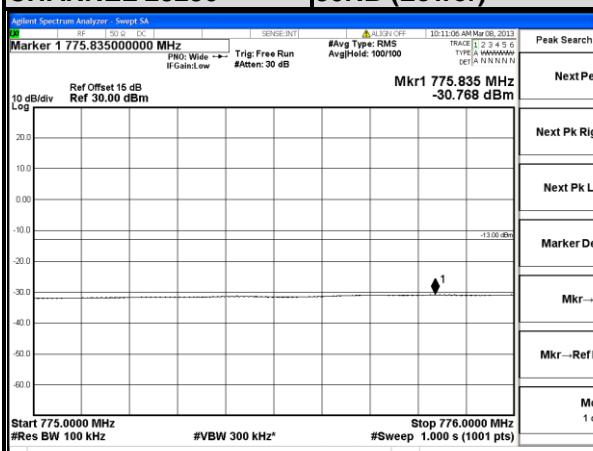
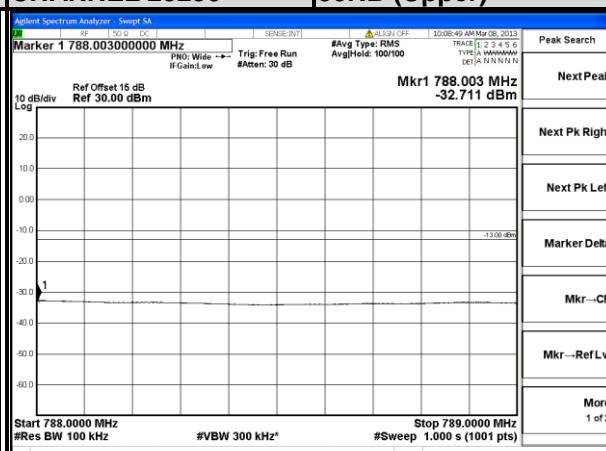
CHANNEL 23255

25RB





A D T

CHANNEL BANDWIDTH: 10MHz**CHANNEL 23230****1RB (Lower)****CHANNEL 23230****1RB (Upper)****CHANNEL 23230****50RB (Lower)****CHANNEL 23230****50RB (Upper)**

4.6 CONDUCTED SPURIOUS EMISSIONS

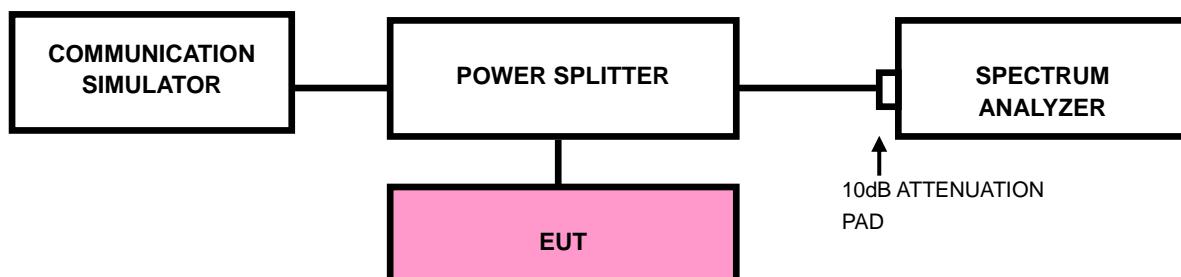
4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ 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 12 & 17 and from 30MHz to 18GHz for WCDMA & 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





A D T

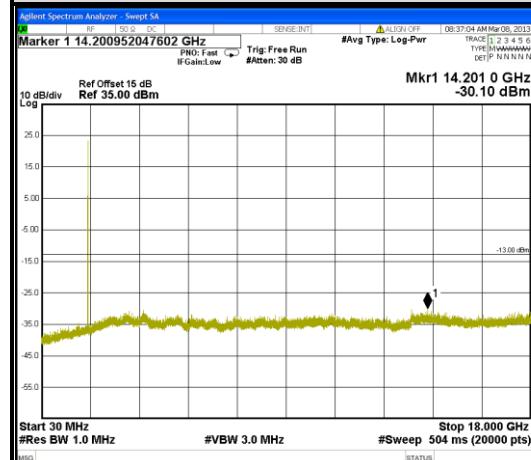
4.6.4 TEST RESULTS

LTE BAND 4

CHANNEL 20175

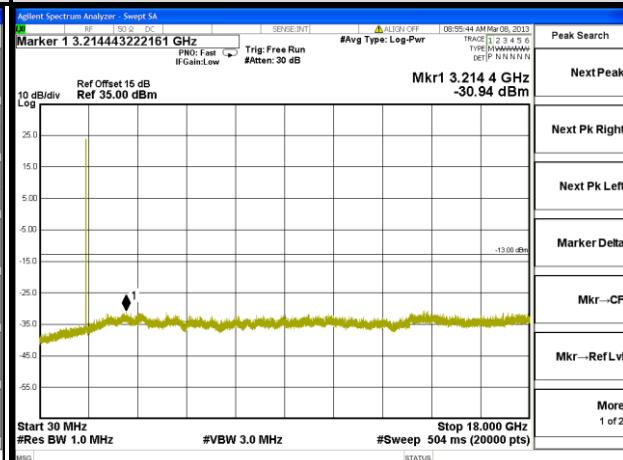
CHANNEL BANDWIDTH: 5MHz

FREQUENCY RANGE : 30MHz~18GHz



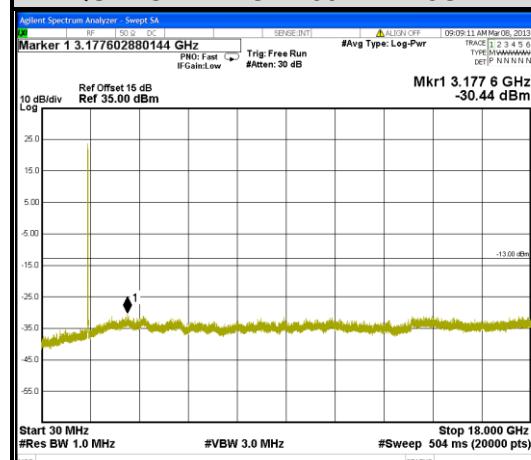
CHANNEL BANDWIDTH: 10MHz

FREQUENCY RANGE : 30MHz~18GHz



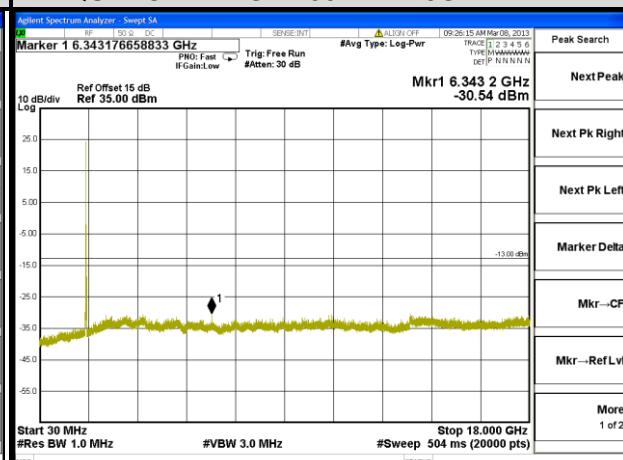
CHANNEL BANDWIDTH: 15MHz

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL BANDWIDTH: 20MHz

FREQUENCY RANGE : 30MHz~18GHz





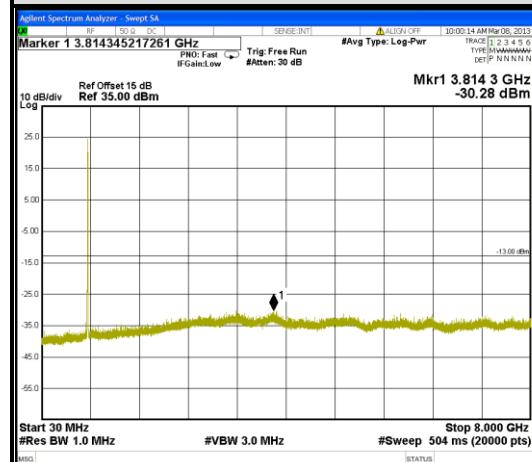
A D T

LTE BAND 13

CHANNEL 23230

CHANNEL BANDWIDTH: 5MHz

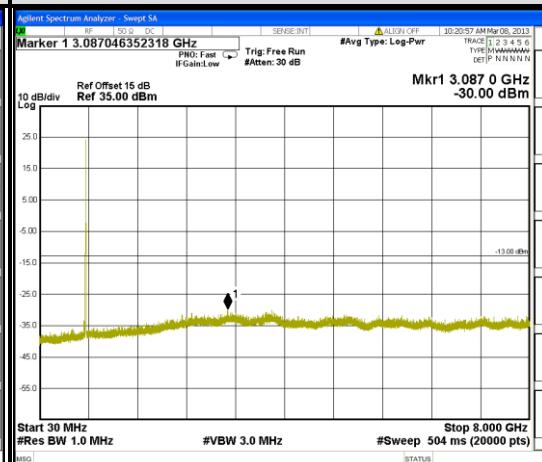
FREQUENCY RANGE : 30MHz~8GHz



Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr--CF
Mkr--RefLvl
More 1 of 2

CHANNEL BANDWIDTH: 10MHz

FREQUENCY RANGE : 30MHz~8GHz



Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr--CF
Mkr--RefLvl
More 1 of 2



A D T

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 $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

4.7.2 TEST PROCEDURES

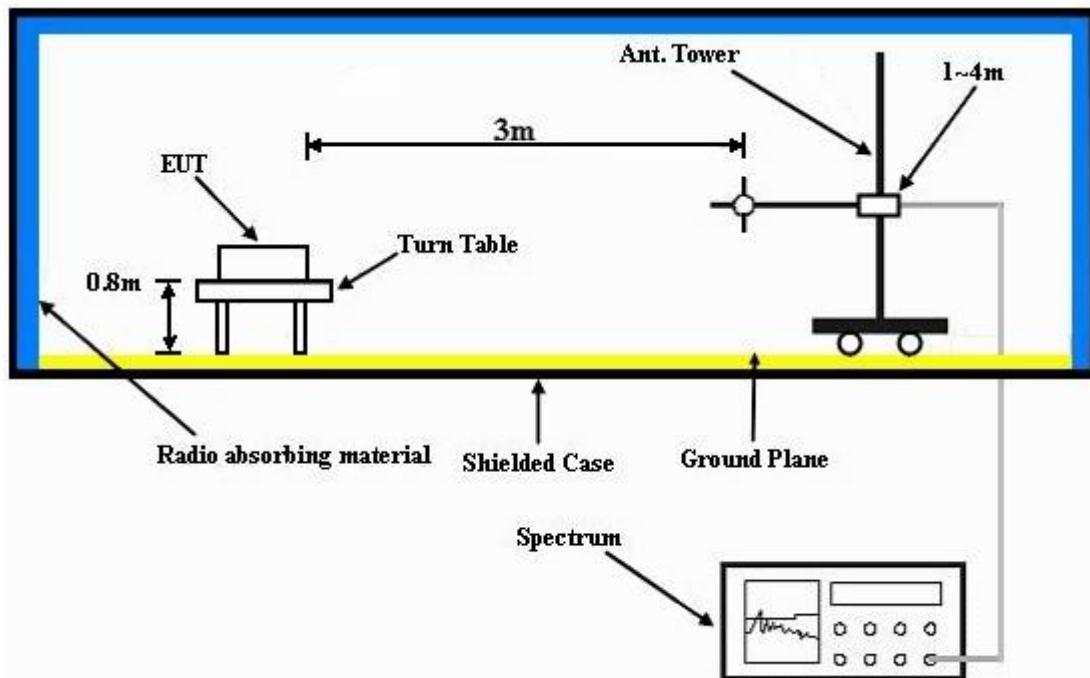
- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 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).



A D T

4.7.5 TEST RESULTS

LTE BAND 4

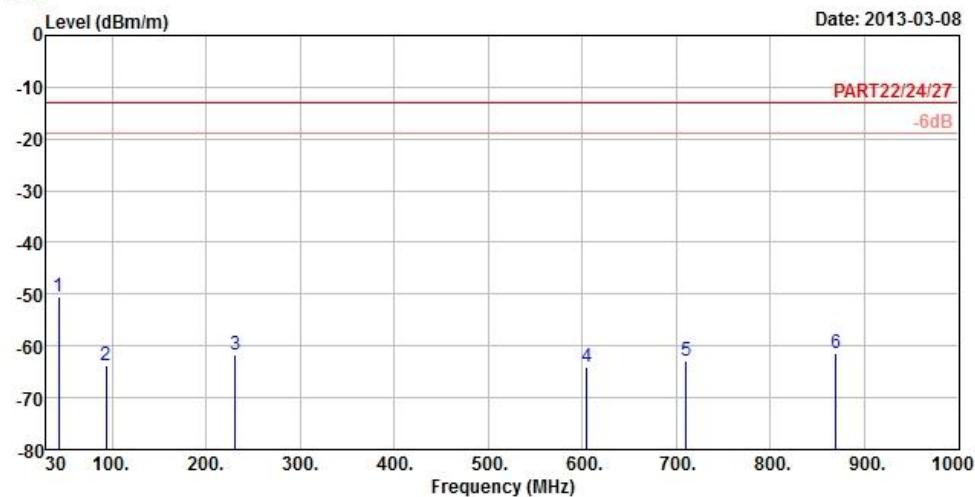
<Below 1GHz>



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 4 LF
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

	Freq	Read Level	Limit Level	Over Line	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m
1 pp	43.23	-50.35	-49.09	-13.00	-37.35	-1.26 Peak
2	93.99	-63.67	-53.16	-13.00	-50.67	-10.51 Peak
3	230.61	-61.60	-55.05	-13.00	-48.60	-6.55 Peak
4	604.50	-63.97	-63.69	-13.00	-50.97	-0.28 Peak
5	710.20	-62.93	-64.45	-13.00	-49.93	1.52 Peak
6	869.80	-61.54	-64.07	-13.00	-48.54	2.53 Peak



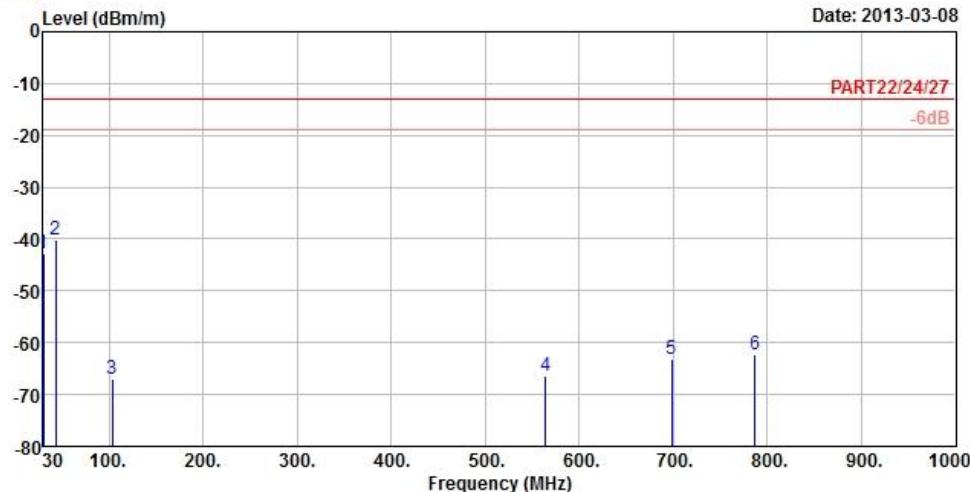
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 4 LF
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

Freq	Level	Read		Over	Factor	Remark
		Line	dBm/m			
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	30.00	-42.75	-43.82	-13.00	-29.75	1.07 Peak
2 pp	42.96	-40.01	-38.68	-13.00	-27.01	-1.33 Peak
3	103.17	-67.07	-56.61	-13.00	-54.07	-10.46 Peak
4	563.90	-66.34	-64.98	-13.00	-53.34	-1.36 Peak
5	698.30	-63.30	-64.72	-13.00	-50.30	1.42 Peak
6	787.20	-62.29	-64.33	-13.00	-49.29	2.04 Peak



A D T

<Above 1GHz>

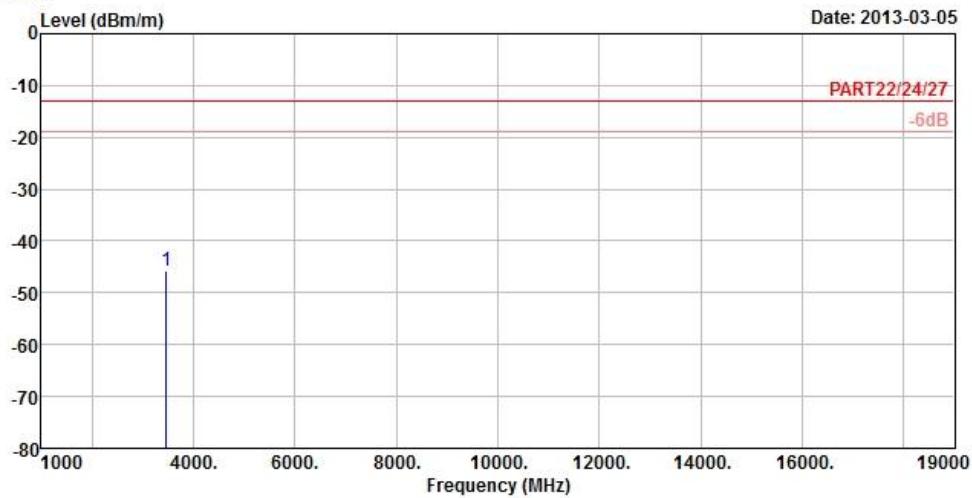
CHANNEL BANDWIDTH: 5MHz / QPSK (1RB, Offset 0)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 11



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 4_5M_QPSK(1,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

Freq	Read Level	Limit Level	Over Line	Over Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	

1 pp 3460.60 -45.67 -38.04 -13.00 -32.67 -7.63 Peak



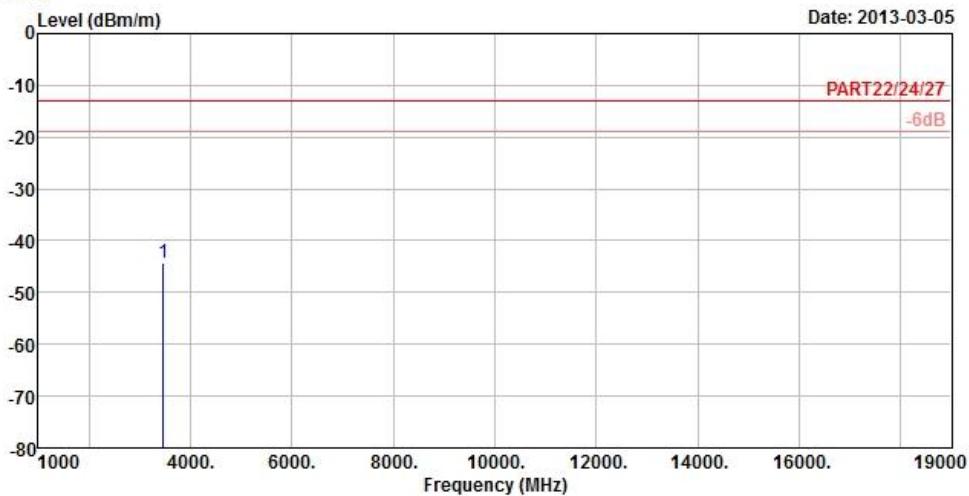
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 12



Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 4_5M_QPSK(1,0)
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : Y

Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m

1 pp 3460.60 -44.38 -36.75 -13.00 -31.38 -7.63 Peak



A D T

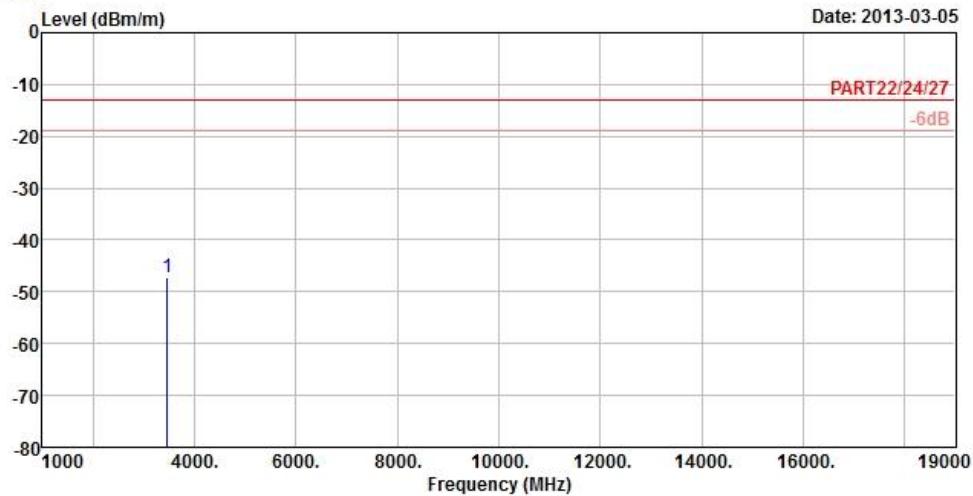
CHANNEL BANDWIDTH: 10MHz / QPSK (1RB, Offset 0)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 11



Site : 966 Chamber 5

Condition : PART22/24/27 3m HORIZONTAL

Brand/Model: G45

Remark : LTE_Band 4_10M_QPSK(1,0)

Tested by : Kay Wu

Temprature : 25°C

Humidity : 65%

Plane : Y

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3456.20	-47.18	-39.52	-13.00	-34.18	-7.66 Peak



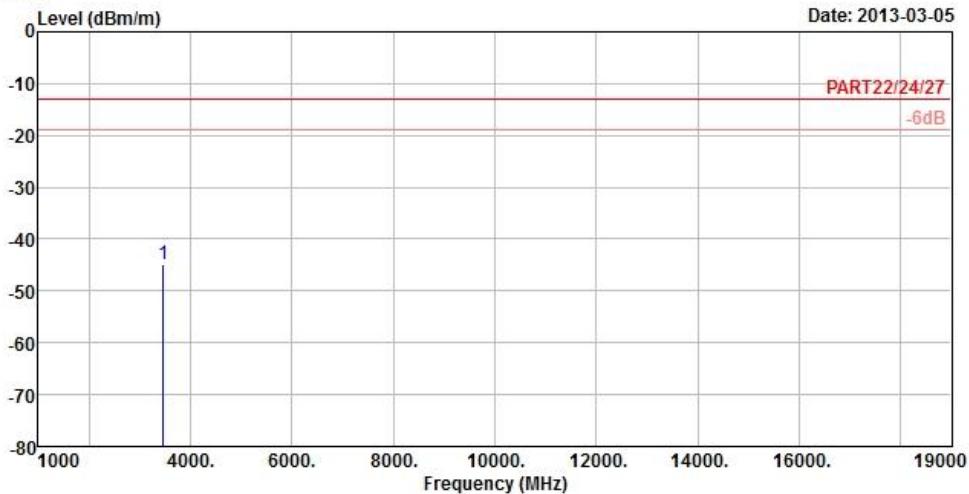
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 12



Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 4_10M_QPSK(1,0)
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : Y

	Read	Limit	Over			
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	

1 pp 3456.20 -44.86 -37.20 -13.00 -31.86 -7.66 Peak



A D T

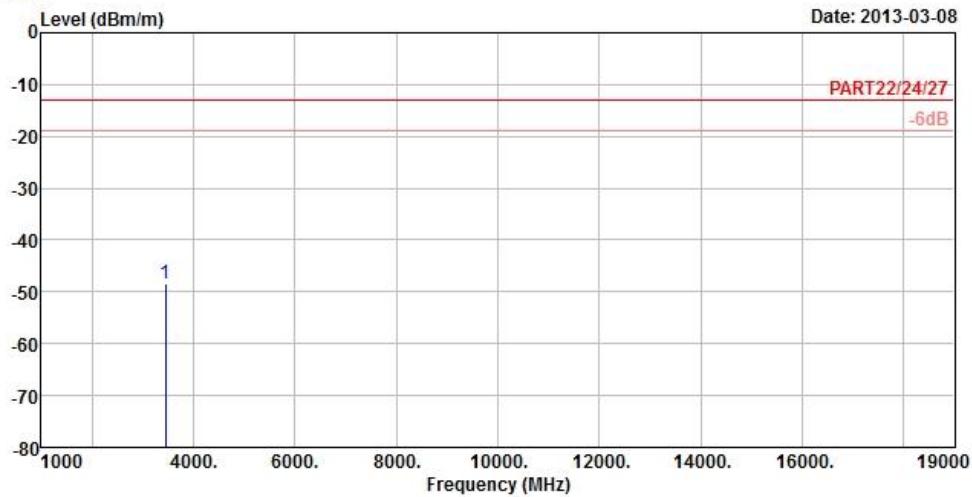
CHANNEL BANDWIDTH: 15MHz / QPSK (1RB, Offset 0)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 11



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 4_15M_QPSK(1,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

Freq MHz	Level dBm/m	Read	Limit	Over	Factor	Remark
		Level dBm	Line dBm/m	dB dB/m		
1 pp	3451.80	-48.29	-40.63	-13.00	-35.29	-7.66 Peak



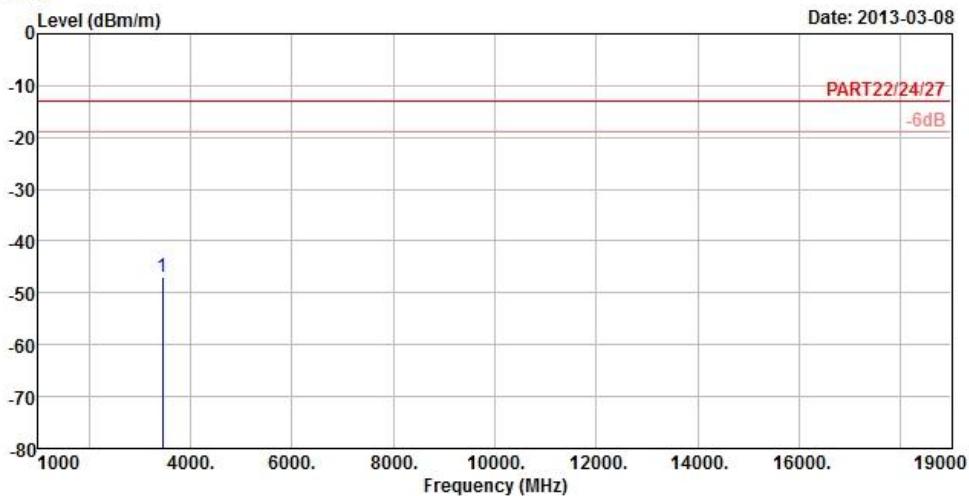
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 12



Site : 966 Chamber 5
Condition : PART22/24/27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 4_15M_QPSK(1,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m

1 pp 3451.80 -46.83 -39.17 -13.00 -33.83 -7.66 Peak



A D T

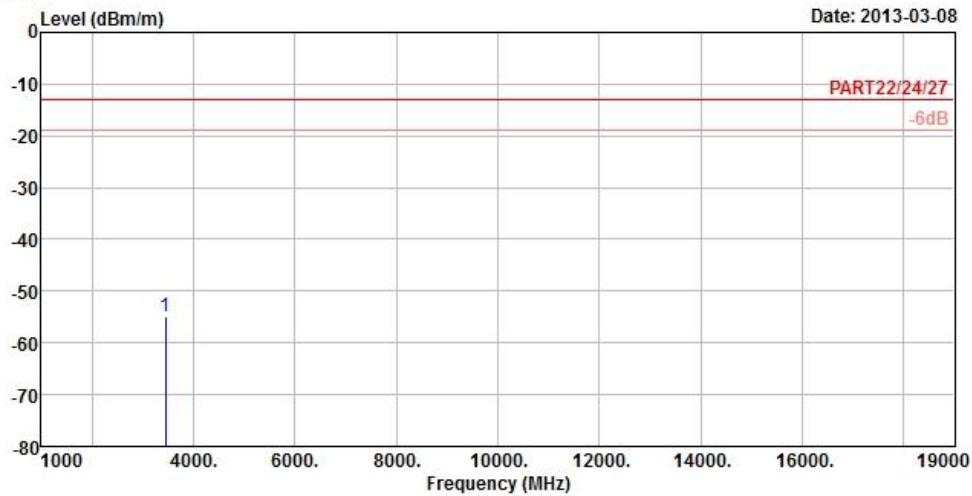
CHANNEL BANDWIDTH: 20MHz / QPSK (1RB, Offset 0)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 11



Site : 966 Chamber 5
Condition : PART22/24/27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 4_20M_QPSK(1,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m
1 pp	3447.40	-54.78	-47.12	-13.00	-41.78
					-7.66 Peak



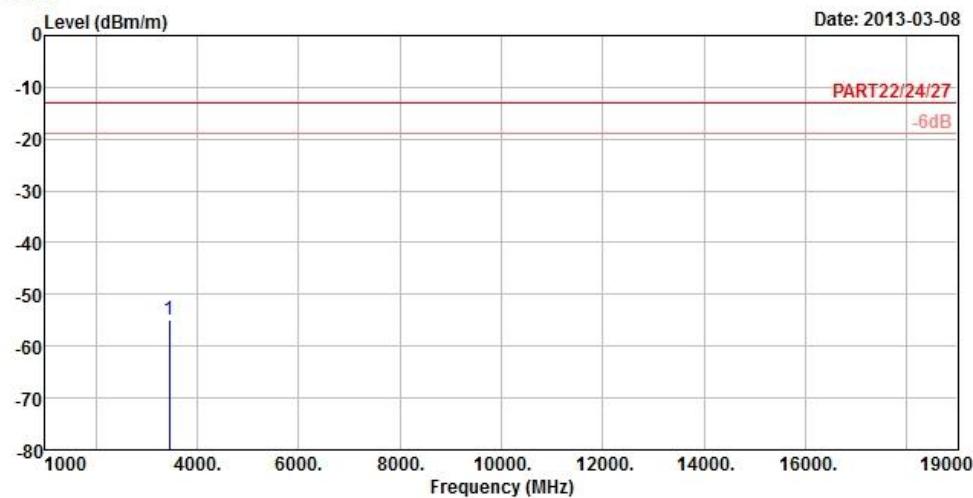
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 12



Site : 966 Chamber 5

Condition : PART22/24/27 3m VERTICAL

Brand/Model: G45

Remark : LTE_Band 4_20M_QPSK(1,0)

Tested by : Kay Wu

Temprature : 25°C

Humidity : 65%

Plane : Y

Freq	Read Level	Limit Level	Over Line	Over Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	3447.40	-55.00	-47.34	-13.00	-42.00	-7.66 Peak



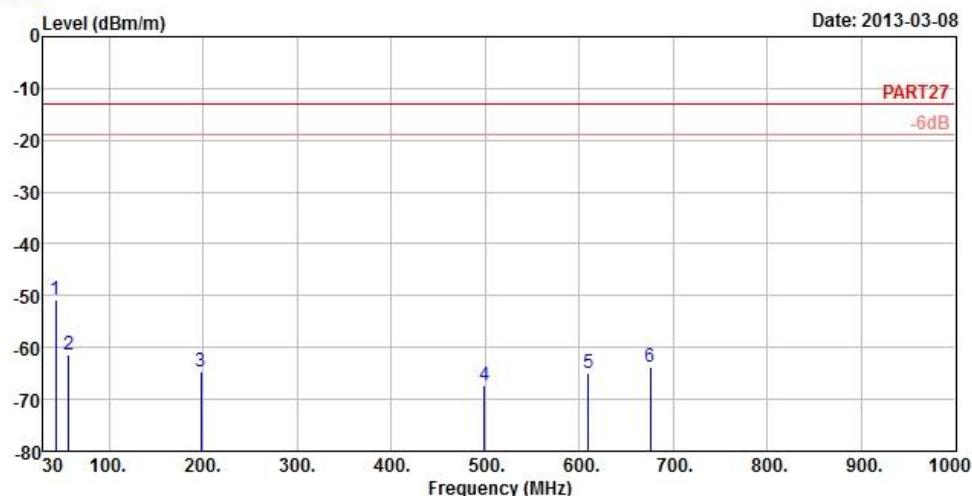
A D T

LTE BAND 13**<Below 1GHz>**

Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : PART27 3m HORIZONTAL
Brand/Model: 130116C06
Remark : LTE_Band 13 LF
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Freq	Level	Read	Limit	Over	Factor	Remark
		MHz	dBm/m	dBm		
1 pp	42.96	-50.72	-49.39	-13.00	-37.72	-1.33 Peak
2	56.73	-61.41	-55.76	-13.00	-48.41	-5.65 Peak
3	197.67	-64.73	-57.01	-13.00	-51.73	-7.72 Peak
4	498.80	-67.42	-64.28	-13.00	-54.42	-3.14 Peak
5	609.40	-64.85	-64.66	-13.00	-51.85	-0.19 Peak
6	675.90	-63.70	-64.71	-13.00	-50.70	1.01 Peak



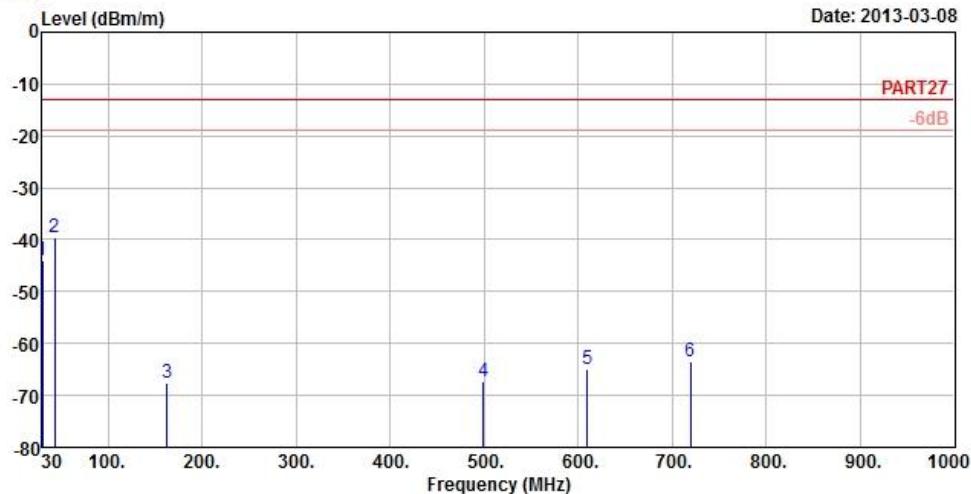
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : PART27 3m VERTICAL
Brand/Model: 130116C06
Remark : LTE_Band 13 LF
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Freq	Level	Read	Limit	Over	Factor	Remark
		MHz	dBm/m	dBm		
1	30.00	-44.10	-45.17	-13.00	-31.10	1.07 Peak
2 pp	43.50	-39.46	-38.20	-13.00	-26.46	-1.26 Peak
3	162.84	-67.75	-61.18	-13.00	-54.75	-6.57 Peak
4	498.80	-67.42	-64.28	-13.00	-54.42	-3.14 Peak
5	609.40	-64.85	-64.66	-13.00	-51.85	-0.19 Peak
6	719.30	-63.40	-64.98	-13.00	-50.40	1.58 Peak



A D T

<Above 1GHz>

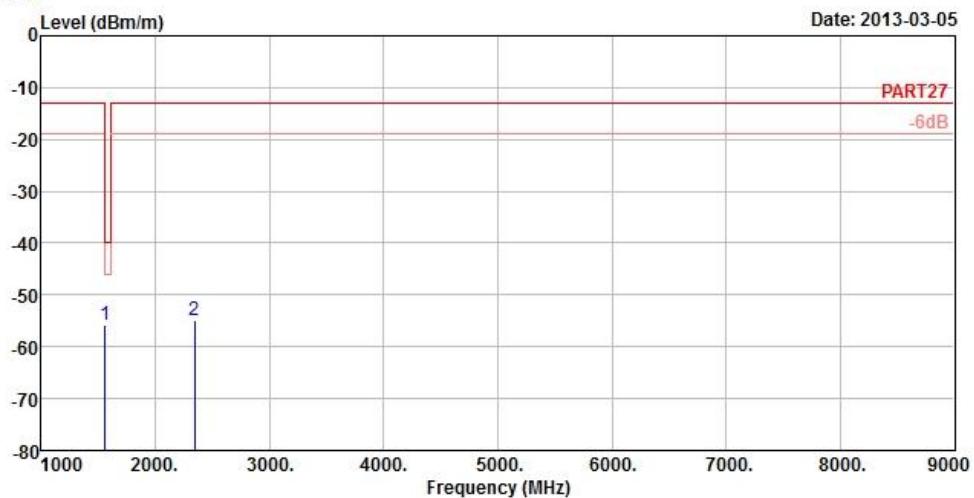
CHANNEL BANDWIDTH: 5MHz / QPSK (1RB, Offset 0)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : PART27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 13_5M_QPSK(1,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Freq	Read Level	Limit Line	Over Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m

1 pp 1559.60 -55.82 -42.55 -40.00 -15.82 -13.27 Peak
2 2339.40 -54.95 -45.56 -13.00 -41.95 -9.39 Peak



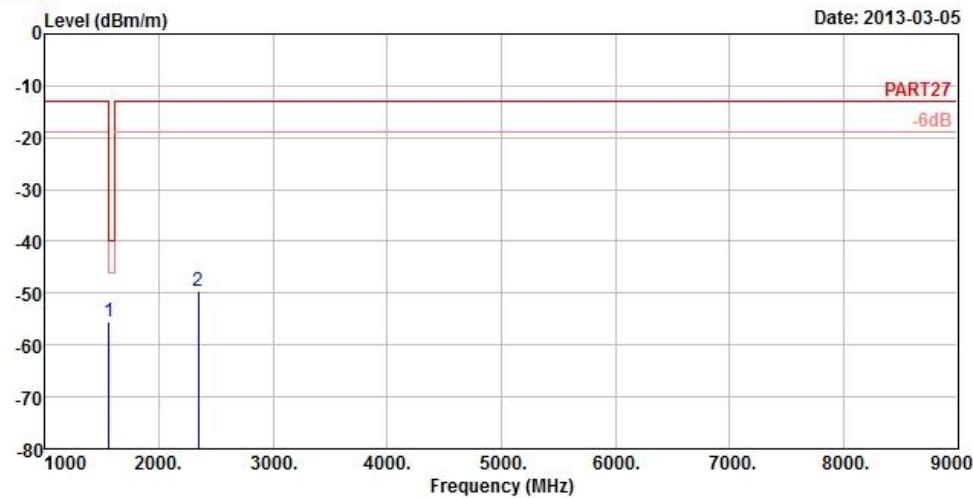
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : PART27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 13_5M_QPSK(1,0)
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : X

Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m
1 pp	1559.60	-55.61	-42.34	-40.00	-15.61 -13.27 Peak
2	2339.40	-49.57	-40.18	-13.00	-36.57 -9.39 Peak



A D T

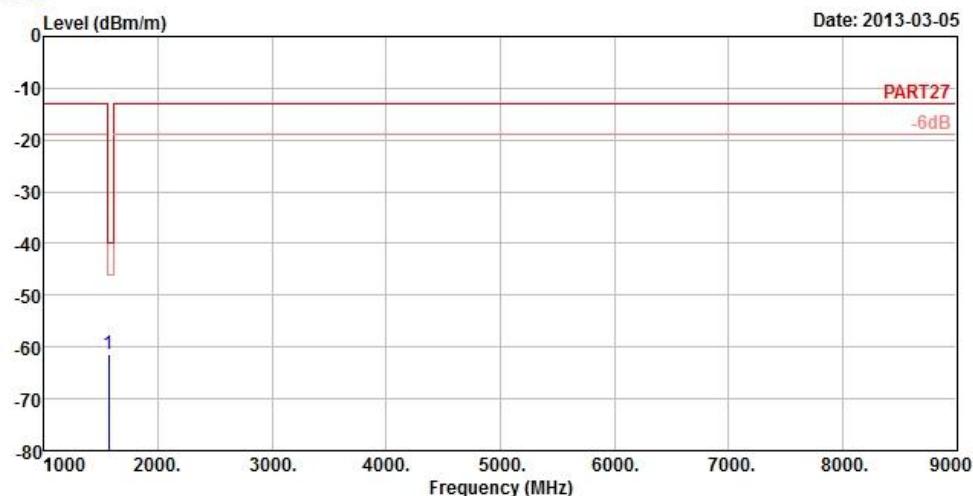
CHANNEL BANDWIDTH: 5MHz / QPSK (25RB, Offset 0)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : PART27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 13_5M_QPSK(25,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Freq	Read Level	Limit Level	Over Line	Over Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	1564.00	-61.52	-48.25	-40.00	-21.52	-13.27 Peak



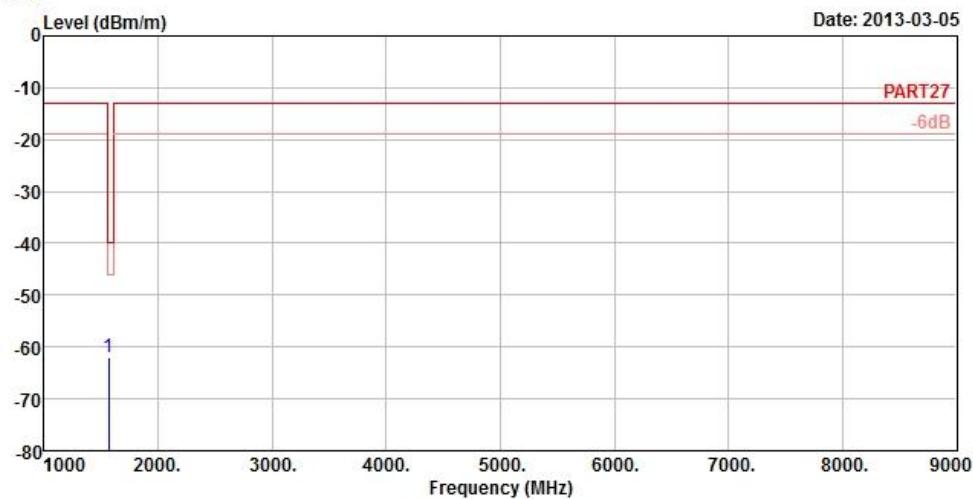
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : PART27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 13_5M_QPSK(25,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m

1 pp 1564.00 -62.05 -48.78 -40.00 -22.05 -13.27 Peak



A D T

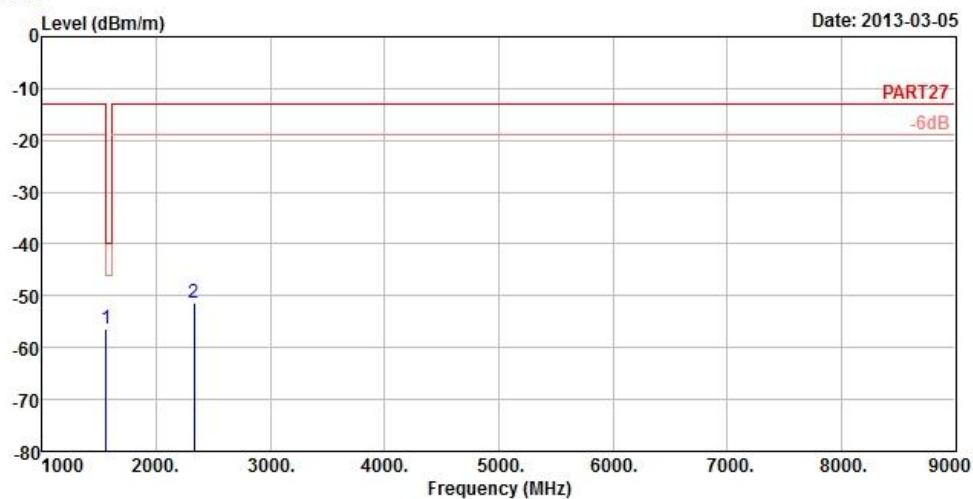
CHANNEL BANDWIDTH: 10MHz / QPSK (1RB, Offset 0)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : PART27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 13_10M_QPSK(1,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

	Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m
1	1555.20	-56.31	-43.04	-13.00	-43.31	-13.27 Peak
2 pp	2332.00	-51.35	-41.96	-13.00	-38.35	-9.39 Peak



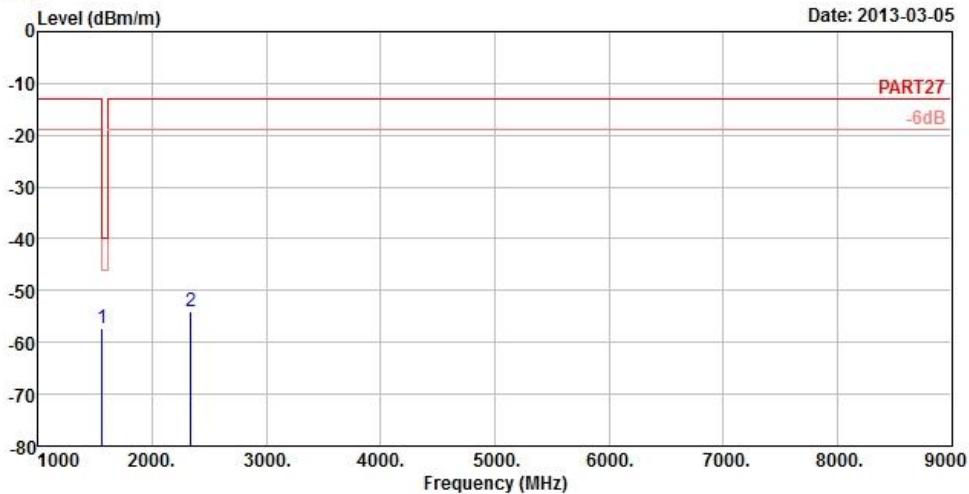
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : PART27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 13_10M_QPSK(1,0)
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : X

	Freq	Read Level	Limit Level	Over Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	1555.20	-57.21	-43.94	-13.00	-44.21	-13.27	Peak
2 pp	2332.80	-54.03	-44.64	-13.00	-41.03	-9.39	Peak



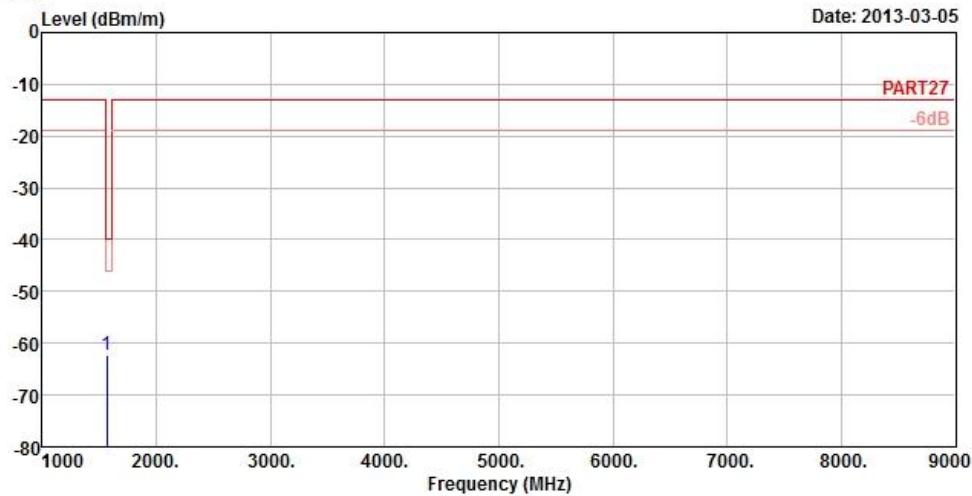
A D T

CHANNEL BANDWIDTH: 10MHz / QPSK (50RB, Offset 0)

Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : PART27 3m HORIZONTAL
Brand/Model: G45
Remark : LTE_Band 13_10M_QPSK(50,0)
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m
1 pp	1564.00	-62.31	-49.04	-40.00	-22.31 -13.27 Peak



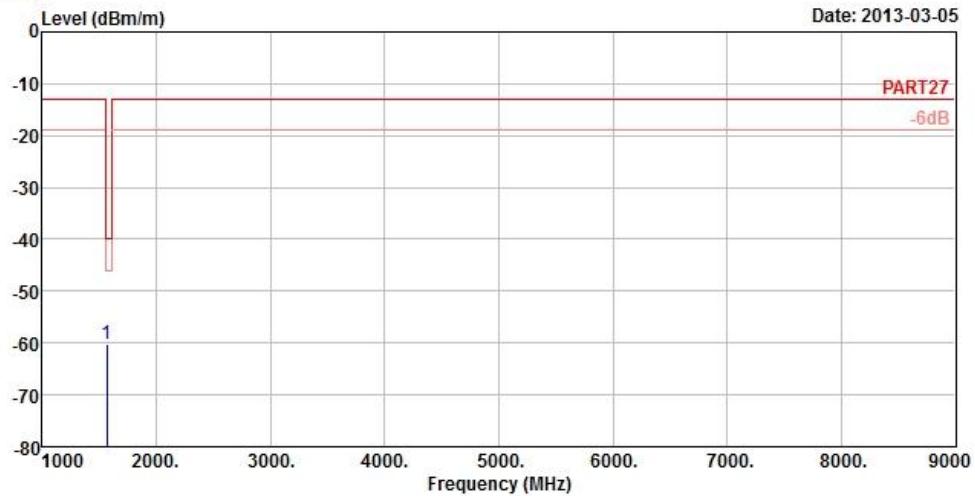
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : PART27 3m VERTICAL
Brand/Model: G45
Remark : LTE_Band 13_10M_QPSK(50,0)
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : X

Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m

1 pp 1564.00 -60.23 -46.96 -40.00 -20.23 -13.27 Peak



A D T

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.bureauveritas-adt.com

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



A D T

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---