FCC TEST REPORT

(PART 24)

REPORT NO.:	RF130502C07-3
MODEL NO.:	RTC-900R-WBGz-xxxx (refer to item 3.1 for more details)
FCC ID:	OHBRTC900RWBGH
RECEIVED:	May 02, 2013
TESTED:	Aug. 16 ~ Aug. 17, 2013
ISSUED:	Aug. 26, 2013

APPLICANT:	AAEON Technology Inc.
ADDRESS:	5F, No. 135, Lane 235, Pao Chiao Rd. Hsin-Tien Dist, New Taipei City, 231 Taiwan, R.O.C.

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.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130502C07-3	Original release	Aug. 26, 2013

1 CERTIFICATION

PRODUCT:	10.1" Rugged Tablet Computer
MODEL:	RTC-900R-WBGz-xxxx (refer to item 3.1 for more details)
BRAND:	AAEON
APPLICANT:	AAEON Technology Inc.
TESTED:	Aug. 16 ~ Aug. 17, 2013
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 24, Subpart E**

The above equipment (model: RTC-900R-WBGH-1110) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____ **, DATE :** Aug. 26, 2013

Pettie Chen / Senior Specialist

APPROVED BY : _____ **, DATE :** Aug. 26, 2013

Anderson Chiu / Senior Engineer

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 24 & Part 2			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
2.1046 24.232	Equivalent isotropically radiated power	PASS	Meet the requirement of limit.
2.1055 24.235	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 24.238(b)	Occupied Bandwidth	PASS	Meet the requirement of limit.
24.238(b)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 24.238	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 24.238	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -28.15dB at 3760.00MHz.

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	3.19 dB
	200MHz ~1000MHz	3.21 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	FSU 43	100115	Oct. 25, 2012	Oct. 24, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Mar. 25, 2013	Mar. 24, 2014
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-404	Dec. 22, 2012	Dec. 21, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 15, 2013	Jul. 14, 2014
Preamplifier Agilent	8449B	3008A01961	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10738	Oct. 23, 2012	Oct. 22, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Aug. 28, 2012	Aug. 27, 2013
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table BV ADT	TT100.	TT93021704	NA	NA
Turn Table Controller BV ADT	SC100.	SC93021704	NA	NA
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Communications Tester-Wireless	E5515C	MY50266653	Oct. 08, 2012	Oct. 09, 2013

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.
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 460141.
5. The IC Site Registration No. is IC7450F-4.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	10.1" Rugged Tablet Computer	
MODEL NO.	RTC-900R-WBGz-xxxx (refer to note for more details)	
POWER SUPPLY	12Vdc (Adapter) 7.4Vdc (Battery)	
MODULATION TYPE	**WCDMA, HSDPA, HSUPA**	BPSK
FREQUENCY RANGE	**WCDMA, HSDPA, HSUPA**	1852.4MHz ~ 1907.6MHz
MAX. EIRP POWER	**WCDMA**	181.970mW (22.60dBm)
EMISSION DESIGNATOR	**WCDMA**	4M18F9W
MULTI-SLOTS CLASS	10	
WCDMA RELEASE VERSION	6	
ANTENNA TYPE	PCB antenna with -1.0dBi gain	
ANTENNA CONNECTOR	I-PEX MHF	
I/O PORTS	Refer to users' manual	
DATA CABLE	0.2m shielded mini USB cable without core	
ACCESSORY DEVICES	Adapter, Battery	

NOTE:

1. The following models are provided to this EUT.

MODEL	DESCRIPTION
RTC-900R-WBGz-xxxx	z is blank or H, blank means without 3G function; H means with 3G function xxxx = SW revision, x: 0~9, ex: 1110 = rev1

* The model of the RTC-900R-WBGH-1110 was chosen for final test.

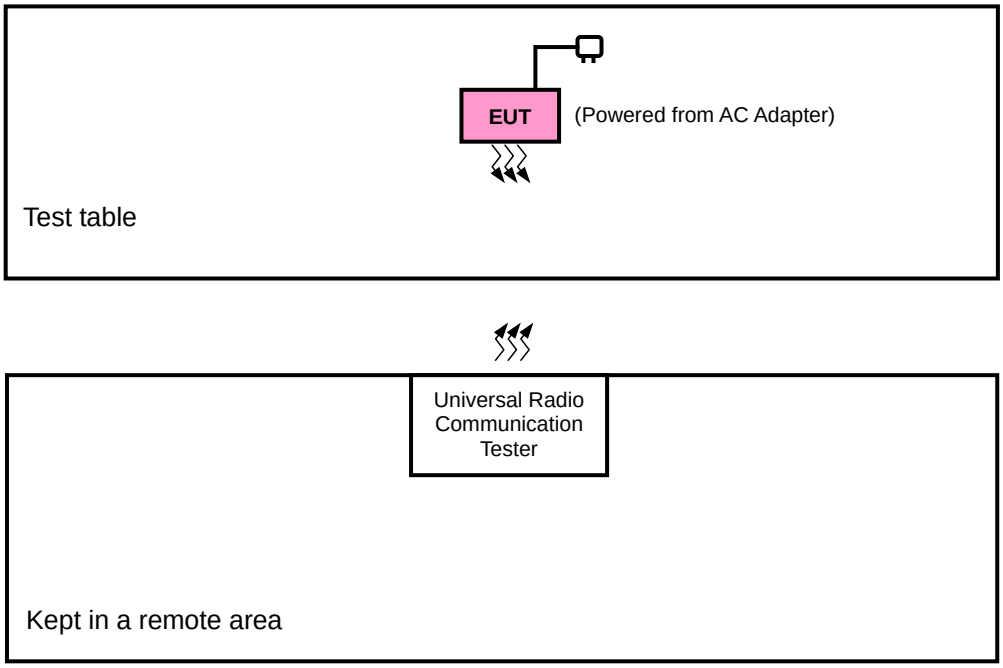
2. The EUT is powered by the following battery and adapter.

Battery	
Brand:	GLW
Model:	ATL-5148D5
Rating:	7.4Vdc, 7600mAh
Type:	Li-ion

Brand:	LI TONE ELECTRONICS CO., LTD.
Model:	LTE24E-S2-2
Input:	100-240Vac, 50-60Hz,1A
Output:	12Vdc, 2A
Power Line:	AC: 1.8m non-shielded cable without core DC: 1.9m cable without core attached on adapter

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

3.2 CONFIGURATION OF SYSTEM UNDER TEST



3.3 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	Universal Radio Communication Tester	R&S	CMU200	123112	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

NOTE:

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

3.4 TEST ITEM AND TEST CONFIGURATION

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

WCDMA MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	EIRP	9262 to 9538	9262, 9400, 9538	WCDMA
-	FREQUENCY STABILITY	9262 to 9538	9400	WCDMA
-	OCCUPIED BANDWIDTH	9262 to 9538	9262, 9400, 9538	WCDMA, HSDPA
-	BAND EDGE	9262 to 9538	9262, 9538	WCDMA, HSDPA
-	CONDCUDETED EMISSION	9262 to 9538	9262, 9400, 9538	WCDMA, HSDPA
-	RADIATED EMISSION BELOW 1 GHz	9262 to 9538	9400	WCDMA
-	RADIATED EMISSION ABOVE 1 GHz	9262 to 9538	9262, 9400, 9538	WCDMA

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
EIRP	25deg. C, 68%RH	120Vac, 60Hz	Martin Lee
FREQUENCY STABILITY	25deg. C, 68%RH	120Vac, 60Hz	Martin Lee
OCCUPIED BANDWIDTH	25deg. C, 68%RH	120Vac, 60Hz	Martin Lee
BAND EDGE	25deg. C, 68%RH	120Vac, 60Hz	Martin Lee
CONDCUDETED EMISSION	25deg. C, 68%RH	120Vac, 60Hz	Martin Lee
RADIATED EMISSION	25deg. C, 68%RH	120Vac, 60Hz	Martin Lee

3.5 EUT OPERATING CONDITIONS

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC 47 CFR Part 2

FCC 47 CFR Part 24

ANSI/TIA/EIA-603-C 2004

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

4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile and portable stations are limited to 2 watts EIRP

4.1.2 TEST PROCEDURES

CONDUCTED POWER MEASUREMENT:

The EUT was set up for the maximum power with WCDMA 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.

EIRP MEASUREMENT:

a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 5MHz for WCDMA mode.

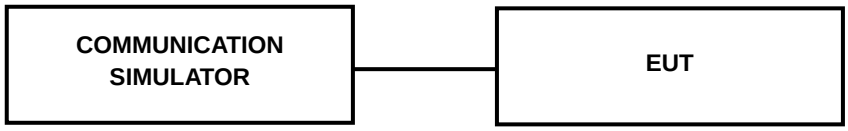
b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from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

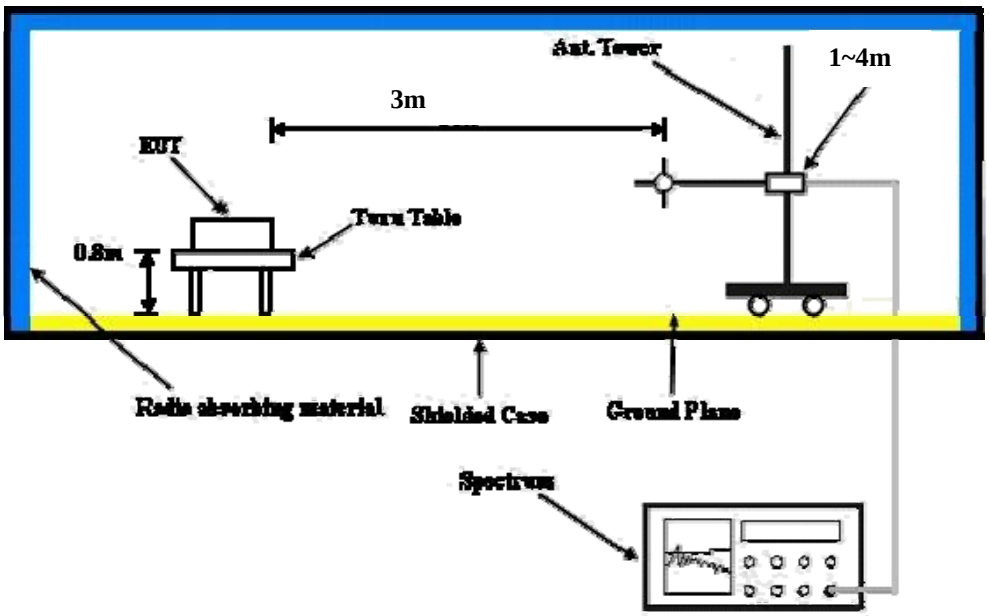
4.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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

EIRP MEASUREMENT:



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

4.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band	WCDMA II		
Channel	9262	9400	9538
Frequency (MHz)	1852.4	1880.0	1907.6
RMC 12.2K	22.64	**22.99**	22.86
HSDPA Subtest-1	21.57	21.92	21.79
HSDPA Subtest-2	19.69	20.04	19.91
HSDPA Subtest-3	18.54	18.89	18.76
HSDPA Subtest-4	18.42	18.77	18.64
HSUPA Subtest-1	21.63	21.98	21.85
HSUPA Subtest-2	20.31	20.66	20.53
HSUPA Subtest-3	20.57	20.92	20.79
HSUPA Subtest-4	20.58	20.93	20.80
HSUPA Subtest-5	21.57	21.92	21.79

EIRP POWER (dBm)

FOR WCDMA MODE:

MODE		TX channel 9262					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1852.40	-17.40	21.15	1.07	22.22	33.00	-10.78
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1852.40	-21.24	15.37	1.07	16.44	33.00	-16.56

MODE		TX channel 9400					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-17.24	21.48	1.12	**22.60**	33.00	-10.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1880.00	-19.33	16.93	1.12	18.05	33.00	-14.95

MODE		TX channel 9538					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1907.60	-18.60	20.48	1.11	21.59	33.00	-11.41
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	1907.60	-18.81	17.11	1.11	18.22	33.00	-14.78

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

4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

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

4.2.2 TEST PROCEDURE

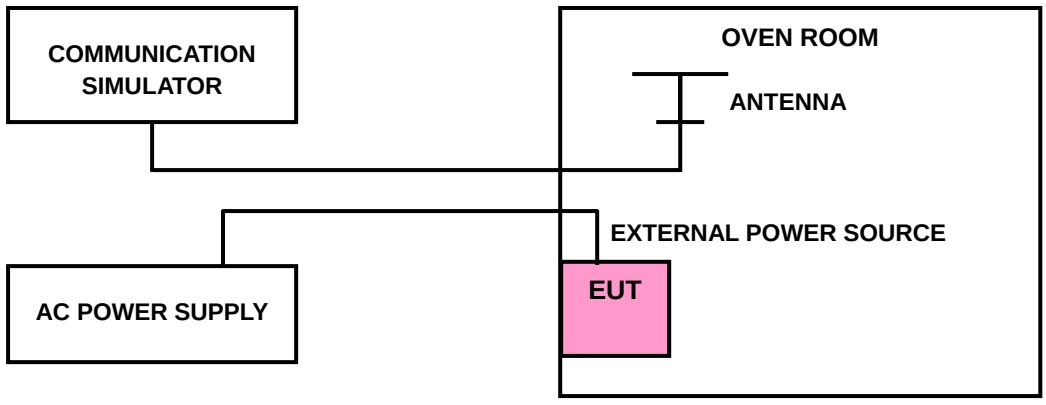
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

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

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

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

4.2.3 TEST SETUP



4.2.4 TEST RESULTS

FREQUENCY ERROR VS. VOLTAGE

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)	LIMIT (ppm)
	WCDMA	
132	-0.014	2.5
120	-0.010	2.5
108	-0.012	2.5

NOTE: The applicant defined the normal working voltage of the adapter and battery is from 108Vac to 132Vac.

FREQUENCY ERROR vs. TEMPERATURE.

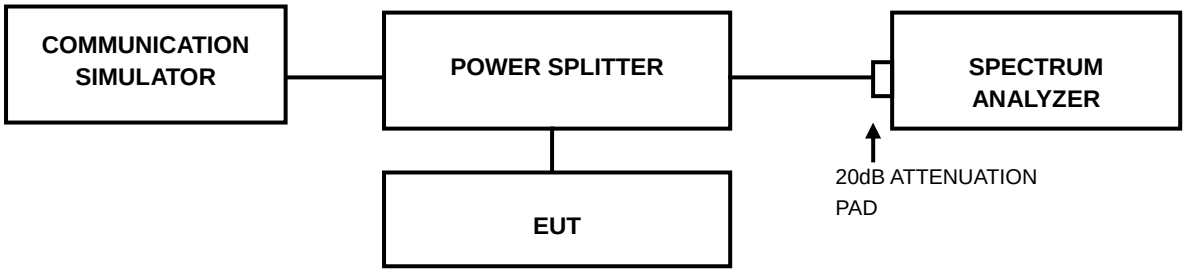
TEMP. (℃)	FREQUENCY ERROR (ppm)	LIMIT (ppm)
	WCDMA	
50	-0.018	2.5
40	-0.019	2.5
30	-0.015	2.5
20	-0.010	2.5
10	-0.012	2.5
0	-0.017	2.5
-10	-0.023	2.5
-20	-0.023	2.5

4.3 OCCUPIED BANDWIDTH MEASUREMENT

4.3.1 TEST PROCEDURES

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.3.2 TEST SETUP

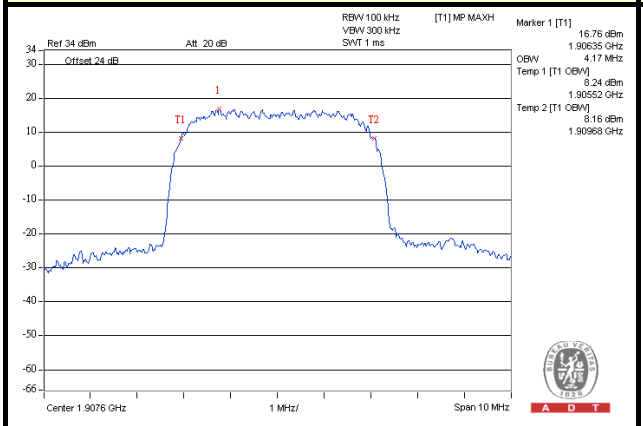


4.3.3 TEST RESULTS

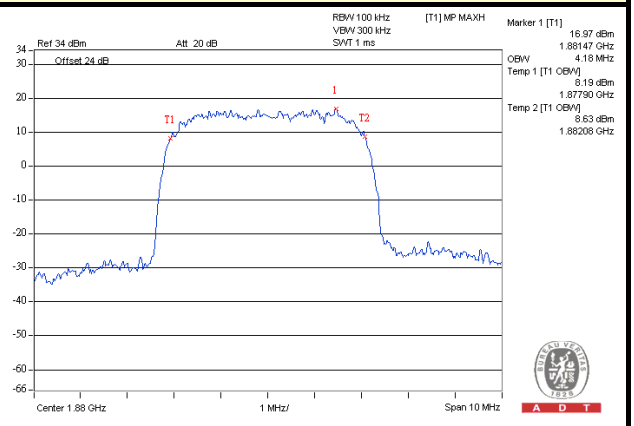
CHANNEL	FREQ. (MHz)	99% OCCUPIED BANDWIDTH (MHz)		
		WCDMA	HSDPA	HSUPA
9262	1852.4	4.15	4.15	4.15
9400	1880.0	4.17	4.18	4.18
9538	1907.6	4.17	4.15	4.15

SPECTRUM PLOT OF WORST VALUE

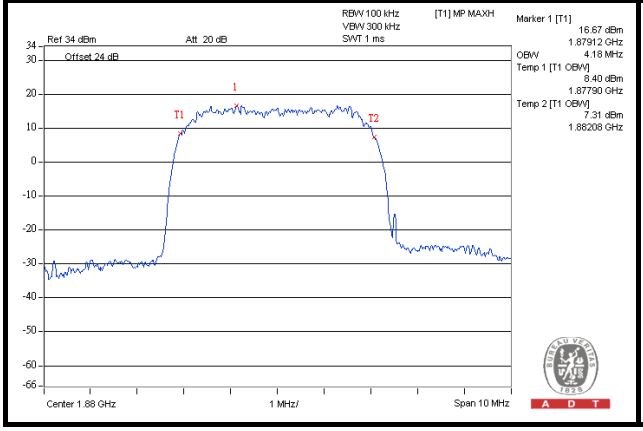
WCDMA



HSDPA



HSUPA

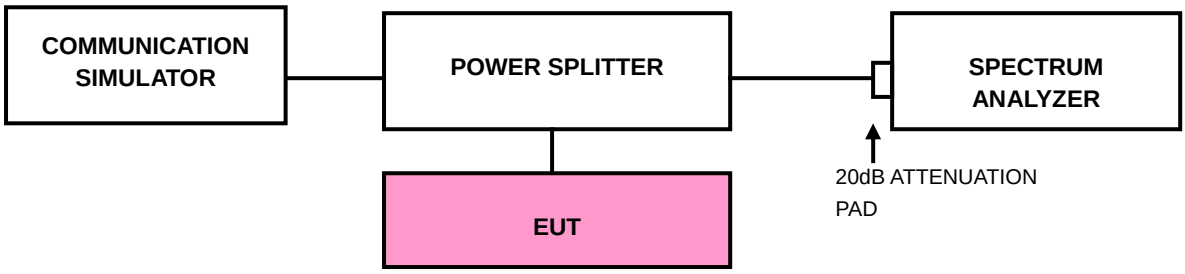


4.4 BAND EDGE MEASUREMENT

4.4.1 LIMITS OF BAND EDGE MEASUREMENT

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

4.4.2 TEST SETUP



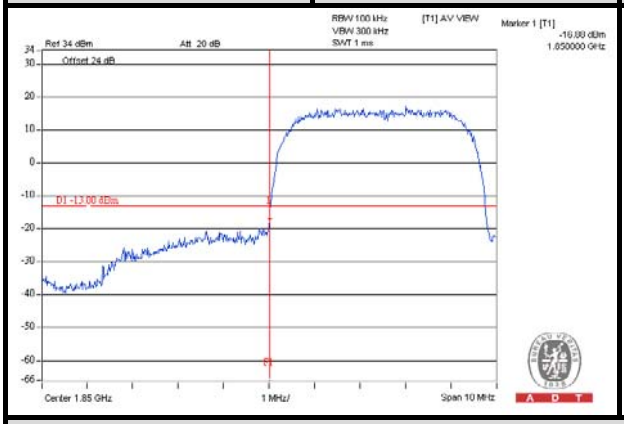
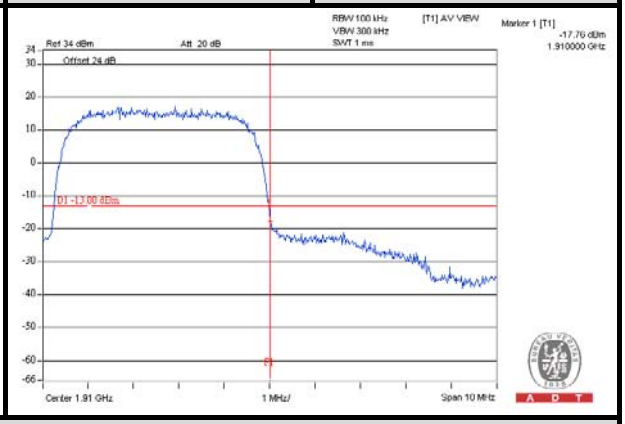
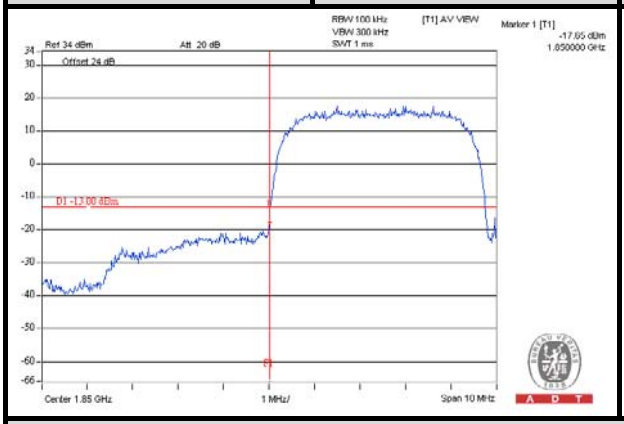
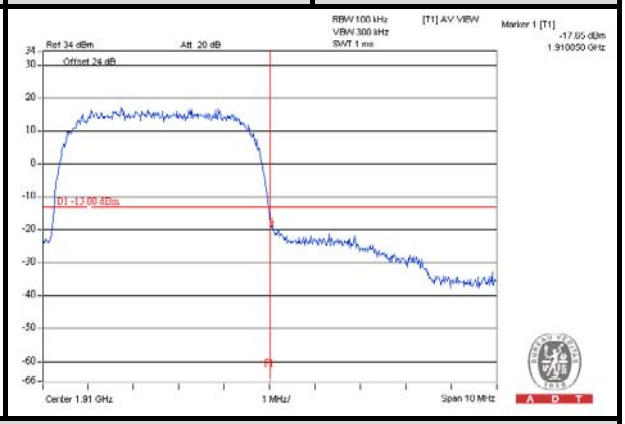
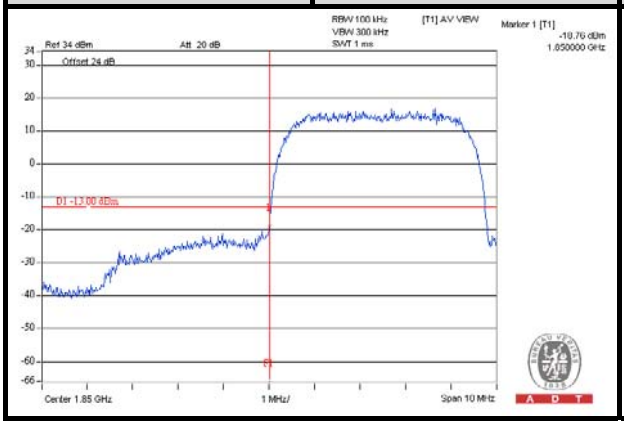
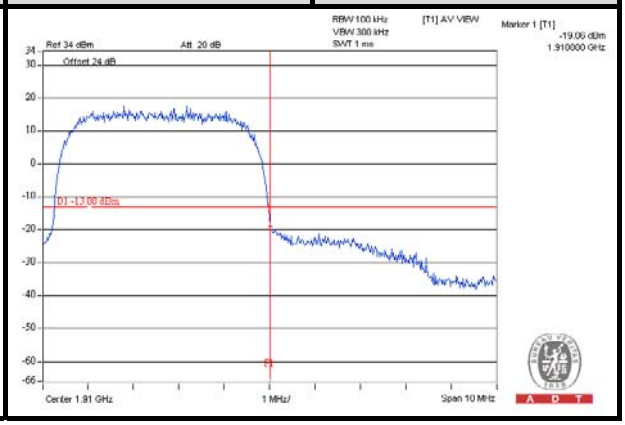
4.4.3 TEST PROCEDURES

a. All measurements were done at low and high operational frequency range.

b. The center frequency of spectrum is the band edge frequency and span is 10MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).

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

4.4.4 TEST RESULTS

WCDMA			
CHANNEL	9262	CHANNEL	9538
			
HSDPA			
CHANNEL	9262	CHANNEL	9538
			
HSUPA			
CHANNEL	9262	CHANNEL	9538
			

4.5 CONDUCTED SPURIOUS EMISSIONS

4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

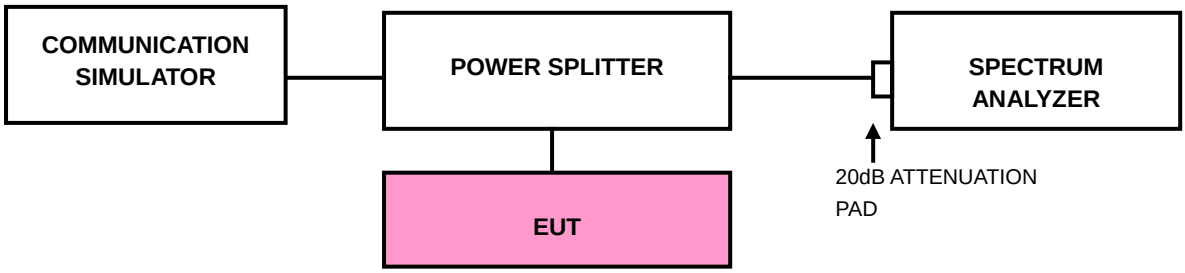
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

4.5.2 TEST PROCEDURE

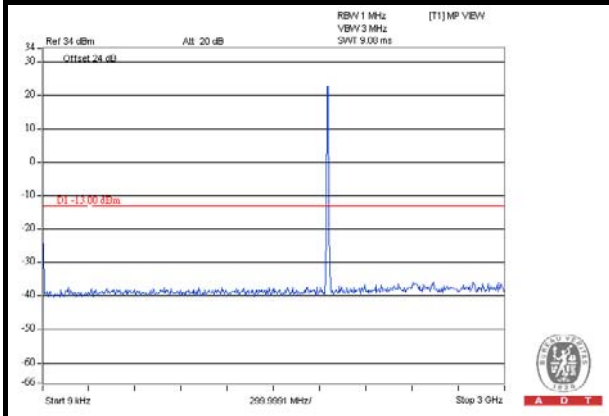
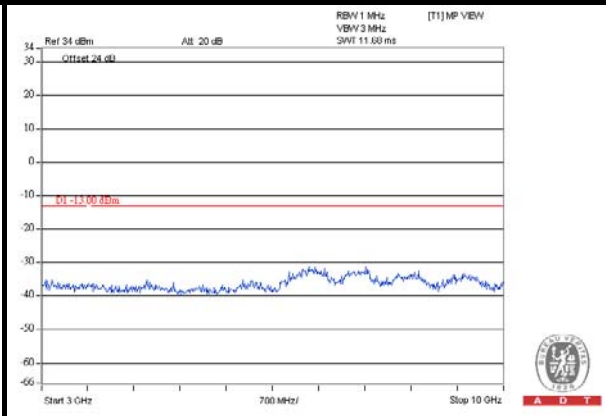
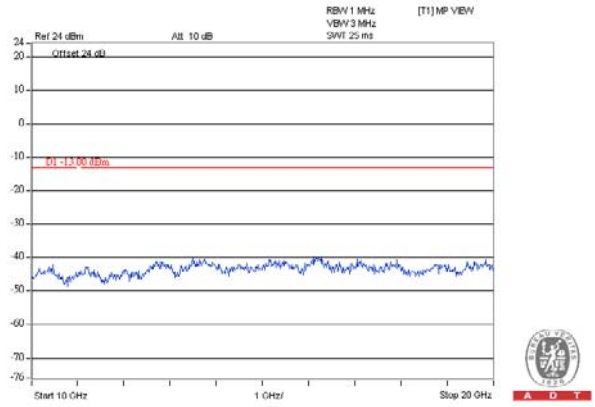
a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.

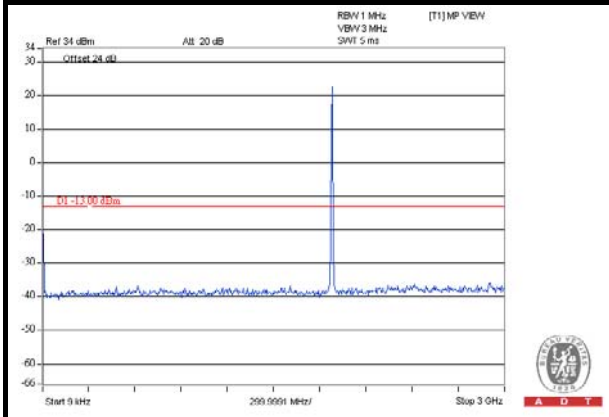
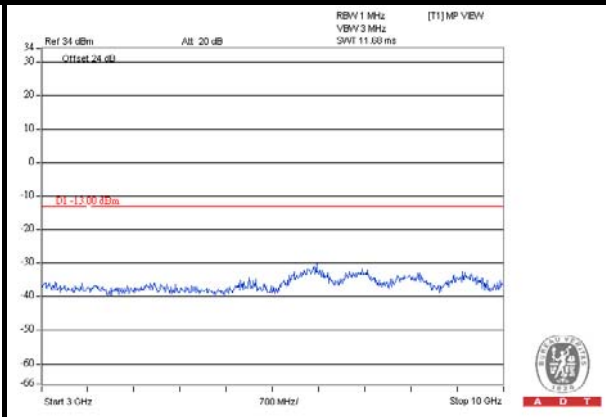
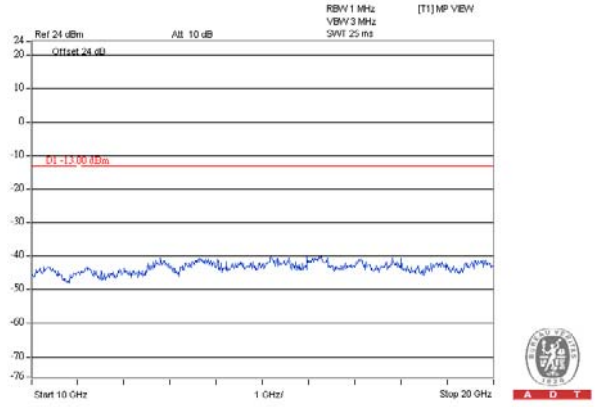
b. Measuring frequency range is from 9kHz to 20GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

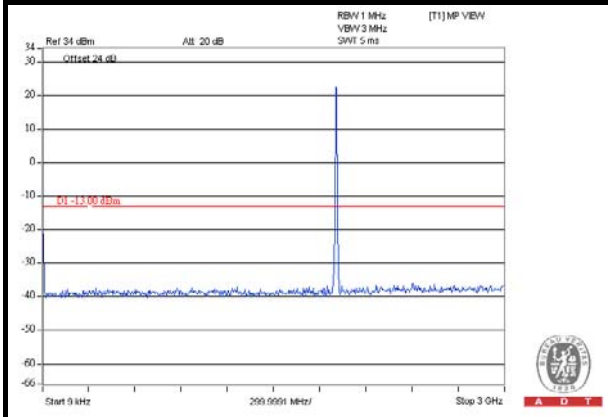
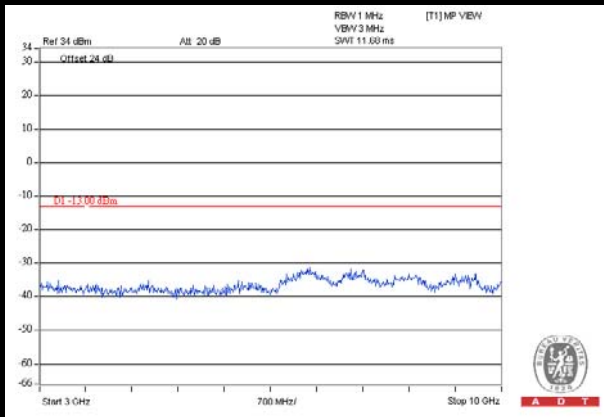
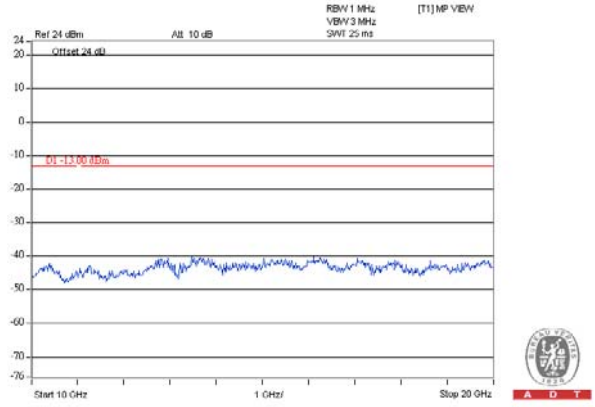
4.5.3 TEST SETUP

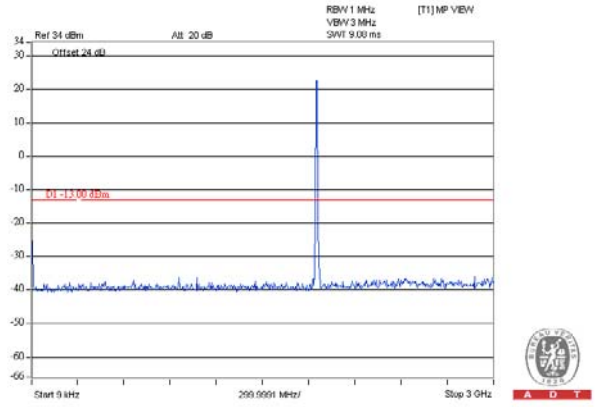
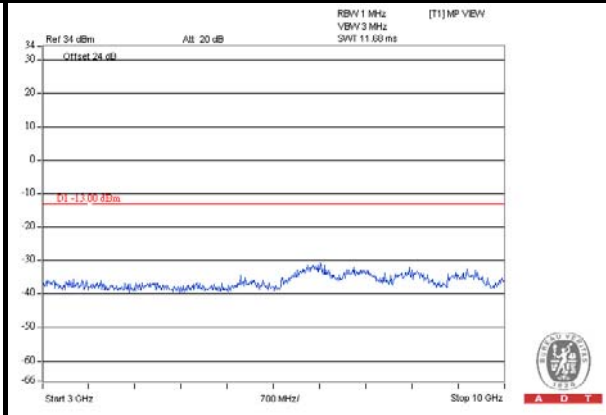
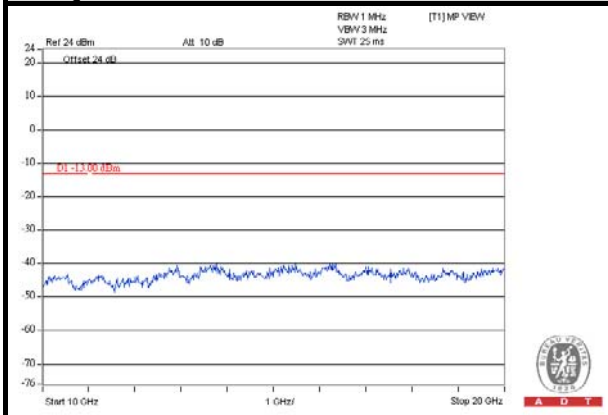


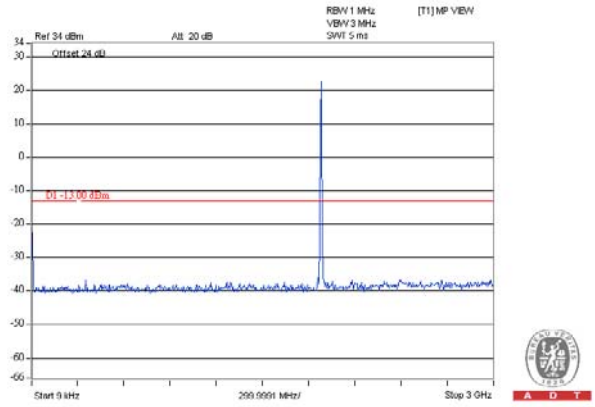
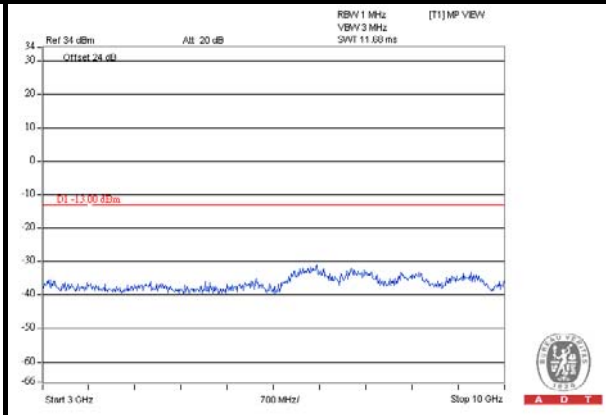
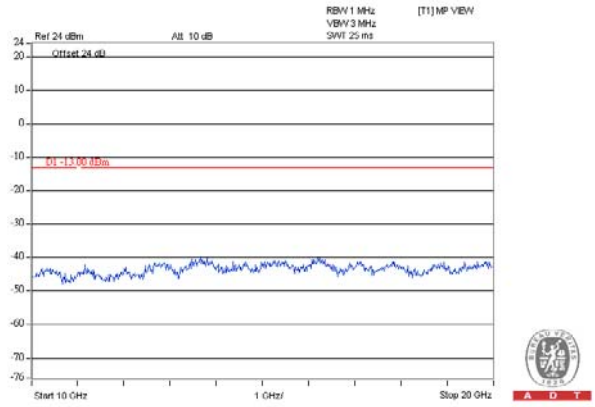
4.5.4 TEST RESULTS

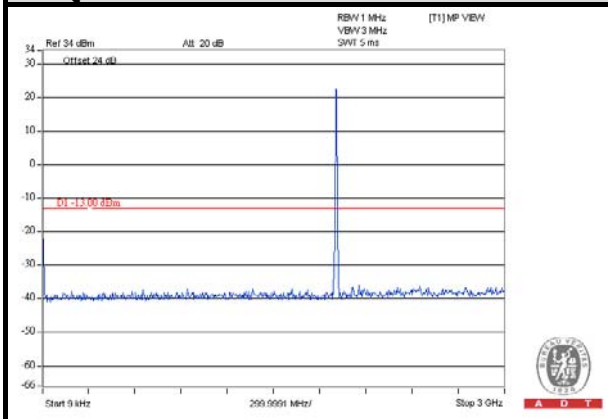
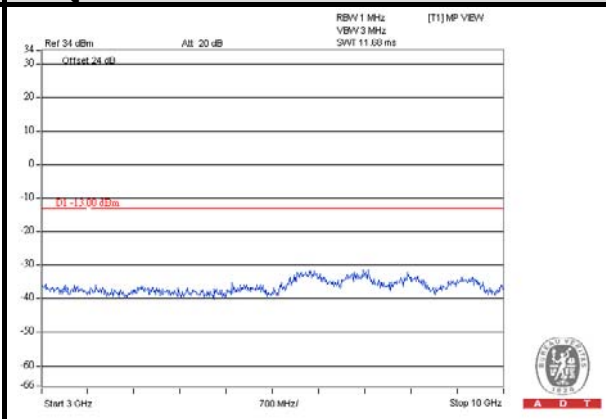
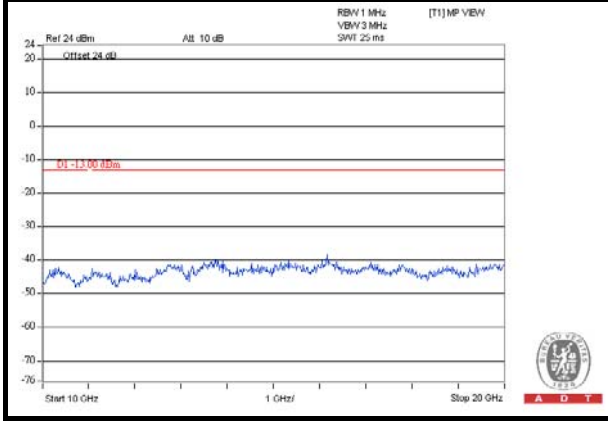
WCDMA	
CHANNEL 9262	
FREQUENCY RANGE : 9kHz~3GHz	**FREQUENCY RANGE : 3GHz~10GHz**
	
FREQUENCY RANGE : 10GHz~20GHz	
	

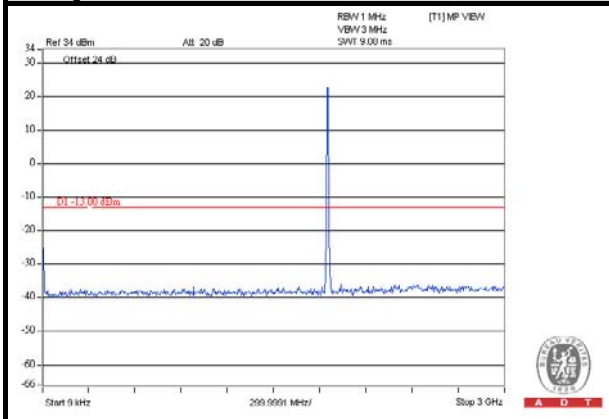
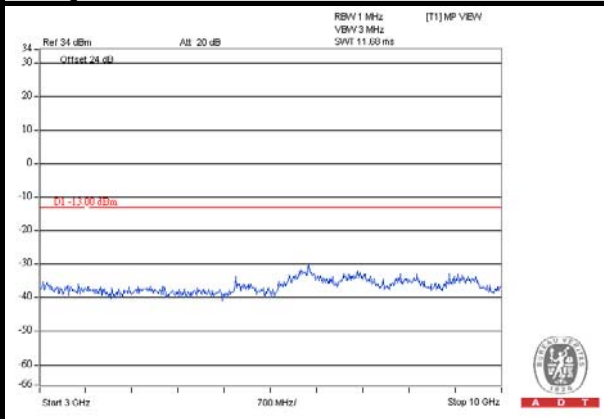
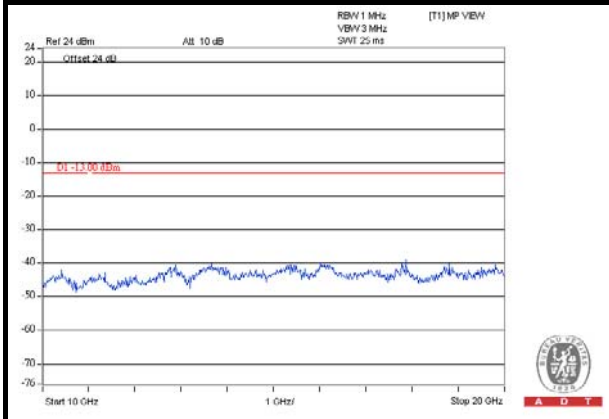
WCDMA	
CHANNEL 9400	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

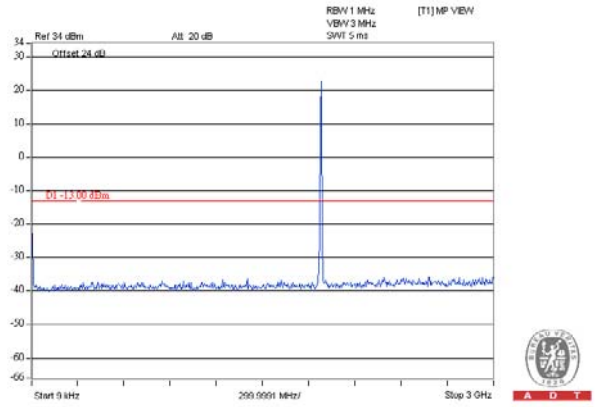
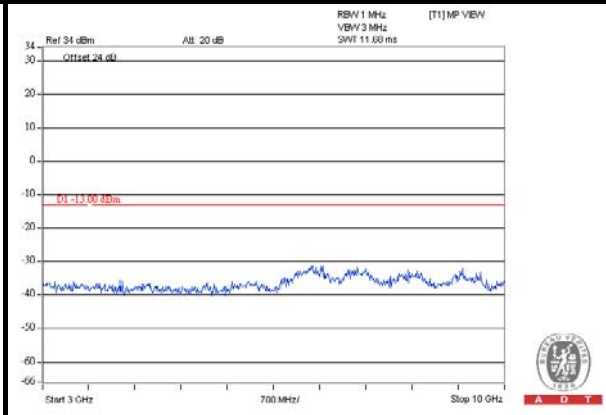
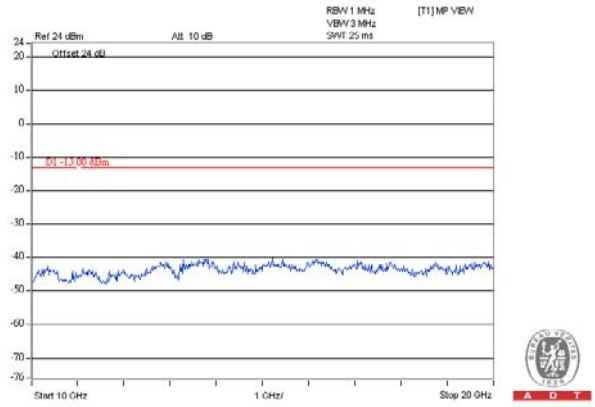
WCDMA	
CHANNEL 9538	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

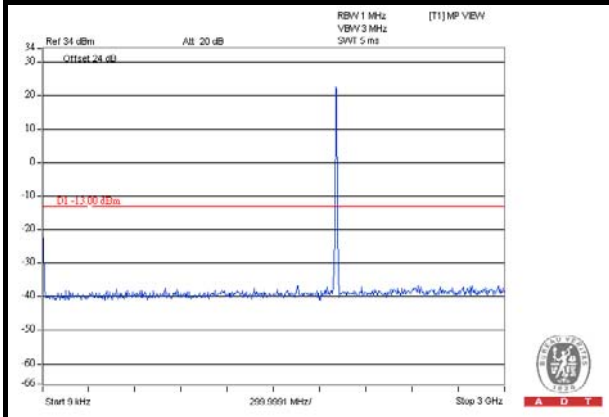
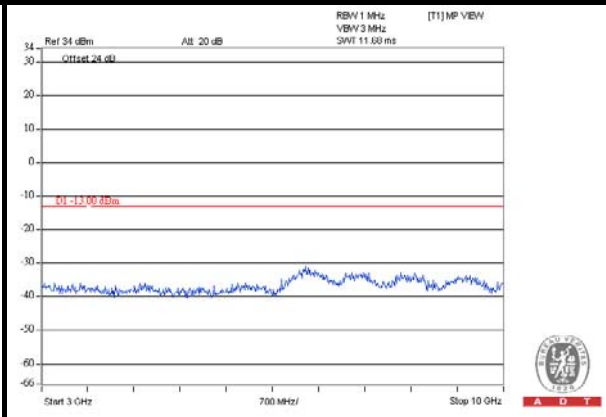
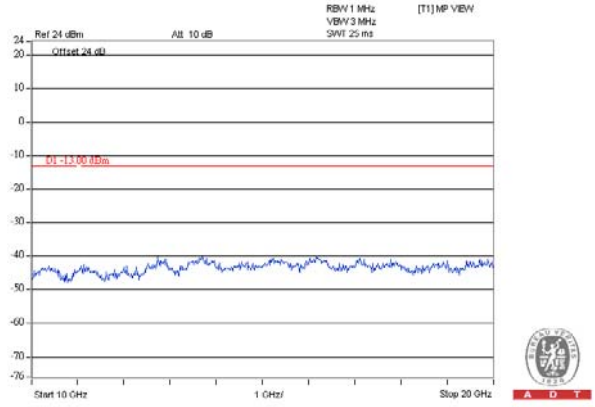
HSDPA	
CHANNEL 9262	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

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

HSDPA	
CHANNEL 9538	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

HSUPA	
CHANNEL 9262	
FREQUENCY RANGE : 9kHz~3GHz	FREQUENCY RANGE : 3GHz~10GHz
	
FREQUENCY RANGE : 10GHz~20GHz	
	

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

HSUPA	
CHANNEL 9538	
FREQUENCY RANGE : 9kHz~3GHz	**FREQUENCY RANGE : 3GHz~10GHz**
	
FREQUENCY RANGE : 10GHz~20GHz	
	

4.6 RADIATED EMISSION MEASUREMENT

4.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

4.6.2 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.

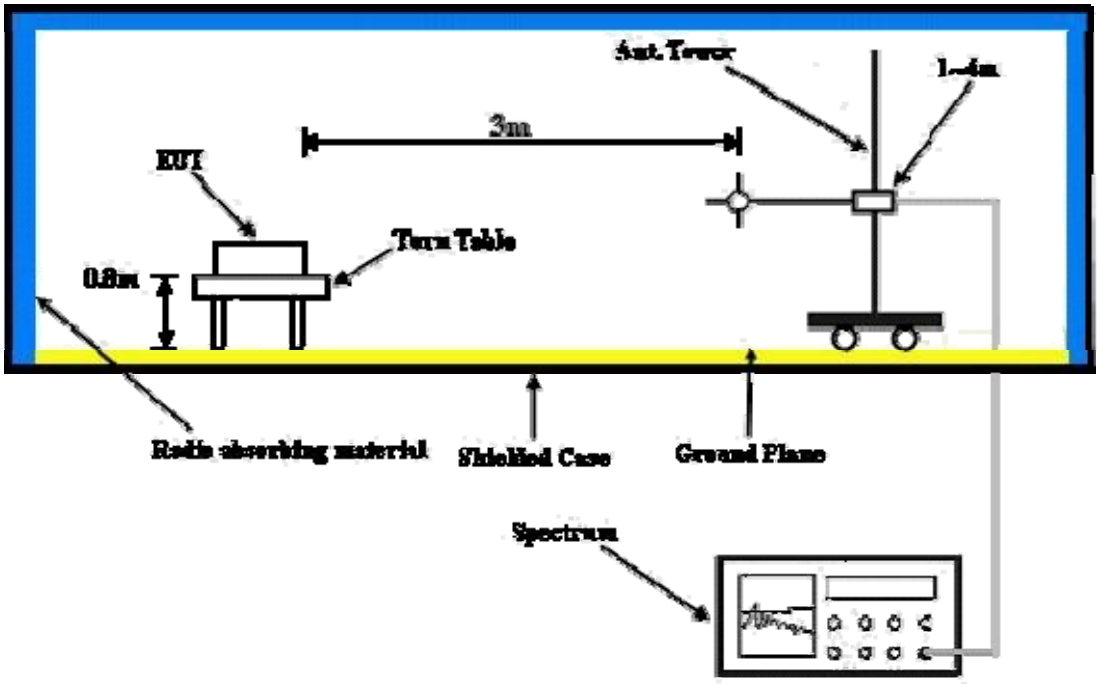
d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power - 2.15dBi.

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

4.6.3 DEVIATION FROM TEST STANDARD

No deviation

4.6.4 TEST SETUP



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

4.6.5 TEST RESULTS

Below 1GHz
WCDMA

MODE	TX channel 9400	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	INPUT POWER	120Vac, 60Hz
TESTED BY	Martin Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	47.46	-57.92	-45.62	-10.16	-55.78	-13.00	-42.78
2	107.60	-48.76	-55.01	0.58	-54.43	-13.00	-41.43
3	148.34	-42.62	-45.72	-0.19	-45.91	-13.00	-32.91
4	218.18	-38.91	-50.56	5.45	-45.11	-13.00	-32.11
5	301.60	-43.83	-52.84	5.14	-47.70	-13.00	-34.70
6	386.96	-48.49	-53.50	5.24	-48.26	-13.00	-35.26
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	86.26	-43.21	-47.77	0.09	-47.68	-13.00	-34.68
2	144.46	-50.68	-50.90	-0.25	-51.15	-13.00	-38.15
3	185.20	-42.77	-47.46	3.58	-43.88	-13.00	-30.88
4	222.06	-43.35	-51.06	5.45	-45.61	-13.00	-32.61
5	332.64	-51.99	-57.09	5.18	-51.91	-13.00	-38.91
6	379.20	-58.02	-62.15	5.25	-56.90	-13.00	-43.90

REMARKS:

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

Above 1GHz

WCDMA

MODE	Channel 9262	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	INPUT POWER	120Vac, 60Hz
TESTED BY	Martin Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3704.80	-61.78	-55.85	7.15	-48.70	-13.00	-35.70
2	5557.20	-67.60	-55.69	6.78	-48.91	-13.00	-35.91
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3704.80	-54.25	-48.50	7.15	-41.35	-13.00	-28.35
2	5557.20	-67.27	-56.40	6.78	-49.62	-13.00	-36.62

REMARKS:

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

MODE	Channel 9400	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	**INPUT POWER**	120Vac, 60Hz
TESTED BY	Martin Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	3760.00	-55.85	-49.79	7.10	-42.69	-13.00	-29.69
2	5640.00	-67.44	-55.42	6.77	-48.65	-13.00	-35.65
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	**3760.00**	**-54.12**	**-48.25**	**7.10**	**-41.15**	**-13.00**	**-28.15**
2	5640.00	-68.25	-57.20	6.77	-50.43	-13.00	-37.43

REMARKS:

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

MODE	Channel 9538	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	**INPUT POWER**	120Vac, 60Hz
TESTED BY	Martin Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	3815.20	-56.61	-50.44	7.06	-43.38	-13.00	-30.38
2	5722.80	-68.09	-55.93	6.74	-49.19	-13.00	-36.19
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	3815.20	-55.46	-49.47	7.06	-42.41	-13.00	-29.41
2	5722.80	-69.03	-57.77	6.74	-51.03	-13.00	-38.03

REMARKS:

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

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

6 INFORMATION ON THE TESTING LABORATORIES

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

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

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.

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

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

---END---