FCC TEST REPORT
(CO-LOCATED)

REPORT NO.: RF981201L21-1

MODEL NO.: ETR9350 (refer to item 3.1 for more details)

RECEIVED: Dec. 01, 2009

TESTED: Dec. 03 ~ Dec. 09, 2009

ISSUED: Dec. 11, 2009

APPLICANT: Senao Networks Inc.

ADDRESS: 3F, No. 529, Chung Cheng Rd., Hsintien, Taipei, Taiwan, R.O.C.

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

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang, Taipei Hsien 244, 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.

TABLE OF CONTENTS

1. CERTIFICATION

PRODUCT: Wireless-N Pocket AP/Router

MODEL: ETR9350 (refer to item 3.1 for more details)

BRAND: EnGenius (refer to item 3.1 for more details)

APPLICANT: Senao Networks Inc.

TEST SAMPLE: ENGINEERING SAMPLE

TESTED: Dec. 03 ~ Dec. 09, 2009

STANDARDS: **FCC Part 15, Subpart C (Section 15.247)**
ANSI C63.4-2003

The above equipment (Model: ETR9350) 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	: Polly Chien Polly Chien / Specialist	**, DATE :**	Dec. 11, 2009
TECHNICAL ACCEPTANCE Responsible for RF	: Long Chen Long Chen / Senior Engineer	**, DATE :**	Dec. 11, 2009
APPROVED BY	: Gary Chang Gary Chang / Assistant Manager	**, DATE :**	Dec. 11, 2009

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -2.86dB at 18.242MHz.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -1.7dB at 138.78MHz.

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	3.34 dB
	200MHz ~1000MHz	3.35 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.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless-N Pocket AP/Router
MODEL NO.	ETR9350 (Refer to note for more detail)
FCC ID	U2M-TR9350
POWER SUPPLY	100-240Vac
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b:11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 300Mbps
OPERATING FREQUENCY	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz)
OUTPUT POWER	417.9mW
ANTENNA TYPE	PCB antenna with 2dBi gain
ANTENNA CONNECTOR	IPEX
I/O PORTS	RJ45, USB
DATA CABLE	0.5m non-shielded cable without core
POWER CABLE	1m non-shielded AC cable without core

NOTE:

1. All models are electrically identical, different brand and model names are for marketing purpose.

Brand Name	Model Name
EnGenius	ETR9350
	ESR9330
	ESR9360
Sitecom	WL-357

2. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	1TX
802.11n (20MHz)	2TX
802.11n (40MHz)	2TX

3. USB port of EUT can support 3G Mobile USB dongle, we choice 3 typical dongle which have been sold to the market to confirm inter-modulation between 3G Mobile and 802.11 n.
4. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 DESCRIPTION OF TEST MODES

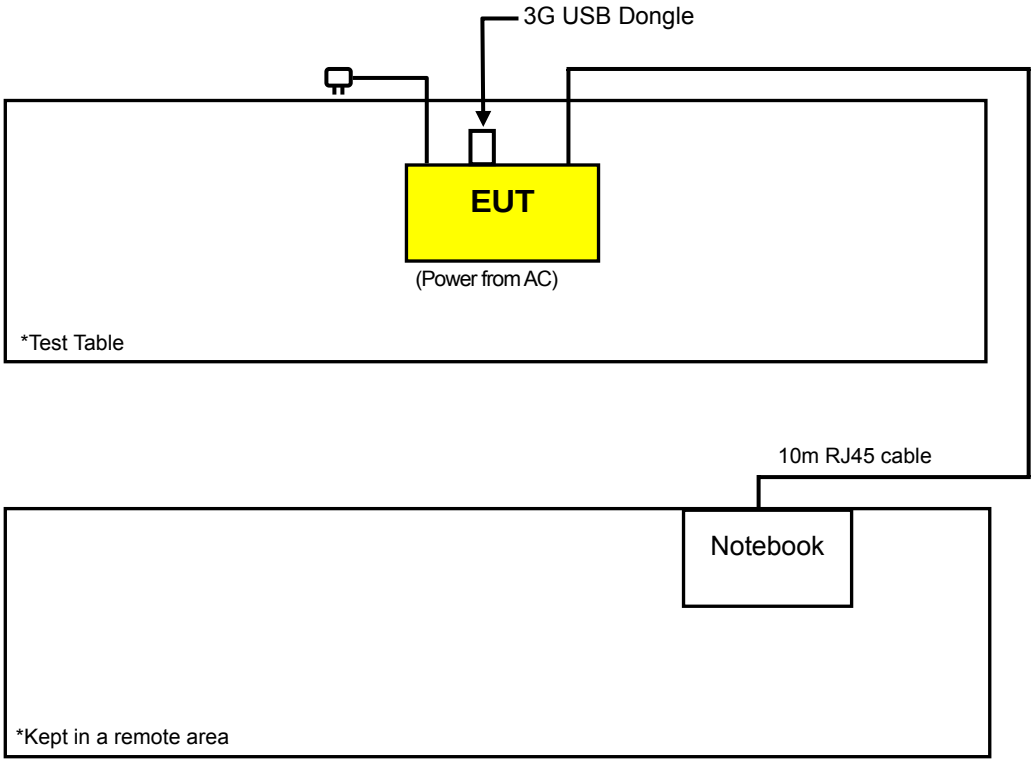
11 channels are provided for 802.11b, 802.11g and 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412MHz	7	2442MHz
2	2417MHz	8	2447MHz
3	2422MHz	9	2452MHz
4	2427MHz	10	2457MHz
5	2432MHz	11	2462MHz
6	2437MHz		

7 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2422MHz	5	2442MHz
2	2427MHz	6	2447MHz
3	2432MHz	7	2452MHz
4	2437MHz		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE≥1G	RE<1G	CE	
A	√	√	√	3G USB Dongle Model: 888U (FCC ID: N7NC888)
B	√	√	√	3G USB Dongle Model: E176 (FCC ID: QISE176)
C	√	√	√	3G USB Dongle Model: MD300 (FCC ID: PY7F3232021)

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz

CE: Conducted Emission Measurement

NOTE: Test modes as below are composed of the max output power channel of each band.

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ 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 (if EUT with antenna diversity architecture).

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

EUT CONFIGURE MODE	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	AXIS
A	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4182	OFDM -	BPSK QPSK	7.2 -	Y
	802.11n (20MHz) + WCDMA1900	2412~2462 1852.4-1907.6	1 to 11 9262 to 9538	6 + 9262	OFDM -	BPSK QPSK	7.2 -	Y
B	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4132	OFDM -	BPSK QPSK	7.2 -	Y
C	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4182	OFDM -	BPSK QPSK	7.2 -	Y

RADIATED EMISSION TEST (BELOW 1GHz):

☒ 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 (if EUT with antenna diversity architecture).

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

EUT CONFIGURE MODE	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	AXIS
A	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4182	OFDM -	BPSK QPSK	7.2 -	Y
	802.11n (20MHz) + WCDMA1900	2412~2462 1852.4-1907.6	1 to 11 9262 to 9538	6 + 9262	OFDM -	BPSK QPSK	7.2 -	Y
B	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4132	OFDM -	BPSK QPSK	7.2 -	Y
C	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4182	OFDM -	BPSK QPSK	7.2 -	Y

CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT CONFIGURE MODE	MODE	FREQ. RANGE (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4182	OFDM -	BPSK QPSK	7.2 -
	802.11n (20MHz) + WCDMA1900	2412~2462 1852.4-1907.6	1 to 11 9262 to 9538	6 + 9262	OFDM -	BPSK QPSK	7.2 -
B	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4132	OFDM -	BPSK QPSK	7.2 -
C	802.11n (20MHz) + WCDMA850	2412~2462 826.4-846.6	1 to 11 4132 to 4233	6 + 4182	OFDM -	BPSK QPSK	7.2 -

3.3 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 Part 15, Subpart C (Section 15.247)
ANSI C63.4-2003

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 (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	PP05L	12130898320	E2K24CLNS
2	3G USB DONGLE	Sierra Aircard	888U	NA	N7NC888
3	3G USB DONGLE	HUAWEI	E176	NA	QISE176
4	3G USB DONGLE	Sony Ericsson	MD300	NA	PY7F3232021

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m RJ45 cable.
2	NA
3	NA
4	NA

NOTE: 1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 acted as a communication partner to transfer data.
3. Items 2-4 were provided by client.

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	100033	Jul. 06, 2009	Jul. 05, 2010
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100076	May 26, 2009	May 25, 2010
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 27, 2009	Apr. 26, 2010
HORN Antenna SCHWARZBECK	9120D	9120D-209	Jul. 01, 2009	Jun. 30, 2010
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 25, 2008	Dec. 24, 2009
Preamplifier Agilent	8447D	2944A10633	Nov. 10, 2009	Nov. 09, 2010
Preamplifier Agilent	8449B	3008A01964	Nov. 09, 2009	Nov. 08, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	238141/4	May 13, 2009	May 12, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	12738/6	May 13, 2009	May 12, 2010
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100.	TT93021703	NA	NA
Turn Table Controller ADT.	SC100.	SC93021703	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Chamber 3.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 988962.

5. The IC Site Registration No. is IC 7450F-3.

4.1.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

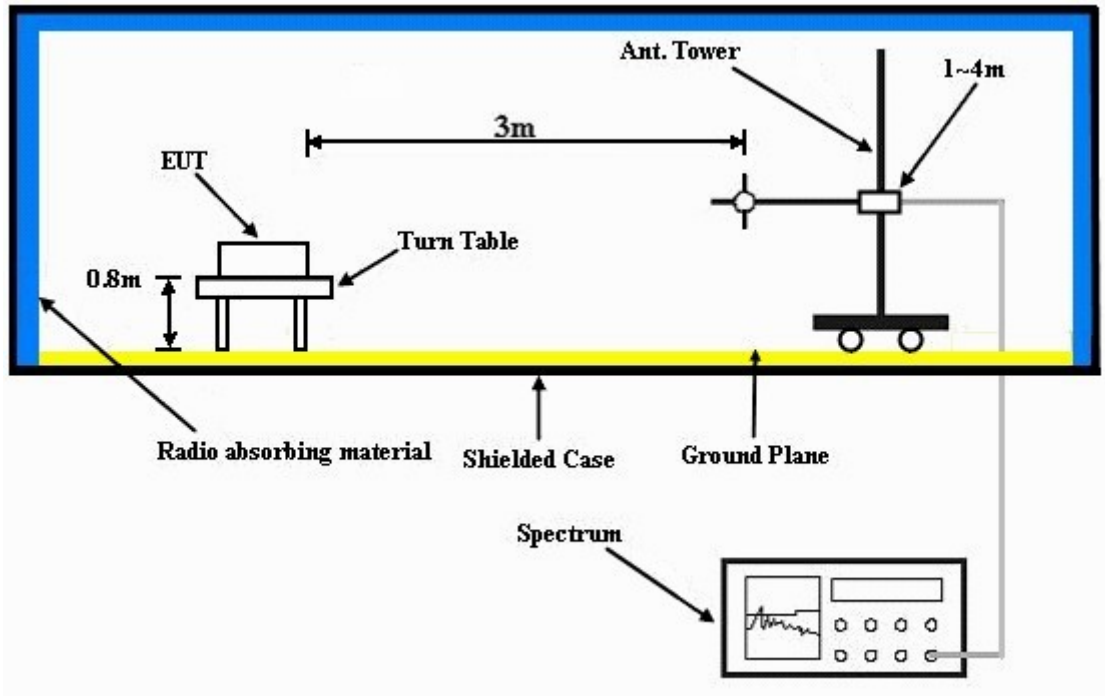
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



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

4.1.6 EUT OPERATING CONDITIONS

a. Placed the EUT on the testing table.
b. Prepared notebook systems to act as a communication partner and placed them outside of testing area.
c. The communication partners connected with EUT via a RJ45 cable and run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The necessary accessories enable the EUT in full functions.

4.1.7 TEST RESULTS

802.11n (20MHz) + WCDMA850

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4182	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**A**		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	48.9 PK	82.2	-33.3	1.03 H	25	20.44	28.47
2	*2437.00	105.3 PK			1.29 H	295	74.66	30.60
3	*2437.00	94.9 AV			1.29 H	295	64.25	30.60
4	2509.20	57.0 PK	82.2	-25.2	1.08 H	211	26.13	30.84
5	3345.60	63.5 PK	82.2	-18.7	1.09 H	248	30.99	32.49
6	4874.00	54.2 PK	74.0	-19.8	1.06 H	135	18.04	36.12
7	4874.00	39.1 AV	54.0	-14.9	1.06 H	135	3.01	36.12

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 1, point 4 and point 5 is defined as per 22.917. Since these frequencies are harmonics of WCDMA.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4182	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**A**		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	52.0 PK	82.2	-30.2	1.00 V	51	23.49	28.47
2	*2437.00	99.3 PK			1.60 V	206	68.71	30.60
3	*2437.00	89.2 AV			1.60 V	206	58.58	30.60
4	2509.20	54.0 PK	82.2	-28.2	1.08 V	2	23.14	30.84
5	3345.60	57.4 PK	82.2	-24.8	1.09 V	11	24.88	32.49
6	4874.00	60.0 PK	74.0	-14.0	1.08 V	233	23.91	36.12
7	4874.00	44.5 AV	54.0	-9.5	1.08 V	233	8.40	36.12

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 1, point 4 and point 5 is defined as per 22.917. Since these frequencies are harmonics of WCDMA.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4132	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**B**		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1652.80	43.7 PK	82.2	-38.5	1.01 H	315	15.25	28.43
2	*2437.00	105.4 PK			1.31 H	296	74.82	30.60
3	*2437.00	95.0 AV			1.31 H	296	64.43	30.60
4	2479.20	48.7 PK	82.2	-33.5	1.06 H	59	17.91	30.74
5	4874.00	54.1 PK	74.0	-19.9	1.01 H	66	18.02	36.12
6	4874.00	38.9 AV	54.0	-15.1	1.01 H	66	2.80	36.12

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 1 and point 4 are defined as per 22.917.
   Since these frequencies are harmonics of WCDMA.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4132	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**B**		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1652.80	51.5 PK	82.2	-30.7	1.04 V	216	23.04	28.43
2	*2437.00	99.5 PK			1.58 V	209	68.93	30.60
3	*2437.00	89.3 AV			1.58 V	209	58.74	30.60
4	2479.20	47.9 PK	82.2	-34.3	1.03 V	81	17.17	30.74
5	4874.00	60.6 PK	74.0	-13.4	1.01 V	215	24.44	36.12
6	4874.00	45.1 AV	54.0	-8.9	1.01 V	215	8.99	36.12

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 1 and point 4 are defined as per 22.917.
   Since these frequencies are harmonics of WCDMA.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4182	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	TESTED BY	Match Tsui
TEST MODE	C		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	49.6 PK	82.2	-32.6	1.03 H	244	21.12	28.47
2	*2437.00	104.8 PK			1.30 H	296	74.21	30.60
3	*2437.00	94.4 AV			1.30 H	296	63.83	30.60
4	2509.20	48.3 PK	82.2	-33.9	1.03 H	61	17.47	30.84
5	4874.00	54.5 PK	74.0	-19.5	1.01 H	129	18.36	36.12
6	4874.00	39.5 AV	54.0	-14.5	1.01 H	129	3.33	36.12

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 1 and point 4 are defined as per 22.917.
   Since these frequencies are harmonics of WCDMA.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4182	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**C**		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	55.1 PK	82.2	-27.1	1.01 V	56	26.57	28.47
2	*2437.00	98.9 PK			1.61 V	194	68.32	30.60
3	*2437.00	88.8 AV			1.61 V	194	58.15	30.60
4	2509.20	46.9 PK	82.2	-35.3	1.03 V	24	16.02	30.84
5	4874.00	60.4 PK	74.0	-13.6	1.08 V	223	24.24	36.12
6	4874.00	44.9 AV	54.0	-9.1	1.08 V	223	8.73	36.12

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 1 and point 4 are defined as per 22.917.
   Since these frequencies are harmonics of WCDMA.

802.11n (20MHz) + CDMA1900

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 9262	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	TESTED BY	Match Tsui
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*1852.40	120.9 PK			1.46 H	320	92.11	28.79
2	*2437.00	105.0 PK			1.28 H	294	74.44	30.60
3	*2437.00	94.7 AV			1.28 H	294	64.09	30.60
4	3704.80	63.8 PK	82.2	-18.4	1.09 H	180	30.47	33.35
5	4874.00	54.4 PK	74.0	-19.6	1.02 H	115	18.26	36.12
6	4874.00	39.3 AV	54.0	-14.7	1.02 H	115	3.14	36.12
7	5557.20	49.8 PK	82.2	-32.4	1.03 H	26	12.30	37.46

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 4 and point 7 are defined as per 24.238.
Since these frequencies are harmonics of WCDMA.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 9262	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**A**		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*1852.40	118.0 PK			1.13 V	353	89.22	28.79
2	*2437.00	99.5 PK			1.58 V	204	68.88	30.60
3	*2437.00	89.3 AV			1.58 V	204	58.65	30.60
4	3704.80	70.5 PK	82.2	-11.7	1.06 V	212	37.15	33.35
5	4874.00	59.7 PK	74.0	-14.3	1.09 V	234	23.56	36.12
6	4874.00	44.3 AV	54.0	-9.7	1.09 V	234	8.13	36.12
7	5557.20	54.0 PK	82.2	-28.2	1.09 V	136	16.50	37.46

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The limit value of point 4 and point 7 are defined as per 24.238.
   Since these frequencies are harmonics of WCDMA.

BELOW 1GHz DATA：

802.11n (20MHz) + WCDMA850

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4182	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	TESTED BY	Match Tsui
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 10 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	127.11	39.7 QP	43.5	-3.8	1.50 H	256	27.78	11.89
2	189.33	38.0 QP	43.5	-5.5	1.00 H	178	26.91	11.05
3	317.65	36.1 QP	46.0	-9.9	1.00 H	232	21.57	14.51
4	500.42	35.8 QP	46.0	-10.2	1.50 H	223	15.33	20.44
5	640.41	34.8 QP	46.0	-11.2	1.00 H	208	11.24	23.53
6	768.73	34.2 QP	46.0	-11.8	1.00 H	118	8.50	25.69
7	*836.40	119.9 PK			1.00 H	131	93.26	26.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.23	34.3 QP	40.0	-5.7	1.00 V	10	21.22	13.09
2	68.79	36.9 QP	40.0	-3.1	1.50 V	142	23.72	13.22
3	127.11	37.6 QP	43.5	-5.9	1.00 V	355	25.70	11.89
4	249.60	33.7 QP	46.0	-12.3	1.00 V	265	19.85	13.80
5	383.76	34.6 QP	46.0	-11.4	1.00 V	148	17.21	17.36
6	500.42	35.2 QP	46.0	-10.8	1.00 V	142	14.76	20.44
7	*836.40	114.6 PK			1.54 V	45	87.94	26.68

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4132	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**B**		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	127.11	39.3 QP	43.5	-4.2	2.00 H	70	27.46	11.89
2	138.78	41.7 QP	43.5	-1.8	2.00 H	220	28.87	12.82
3	189.33	36.8 QP	43.5	-6.8	1.00 H	220	25.69	11.05
4	317.65	37.2 QP	46.0	-8.8	1.00 H	211	22.69	14.51
5	500.42	35.2 QP	46.0	-10.9	1.50 H	229	14.72	20.44
6	640.41	36.5 QP	46.0	-9.5	1.00 H	214	12.97	23.53
7	*826.40	119.0 PK			1.00 H	132	92.51	26.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	66.84	37.2 QP	40.0	-2.8	1.00 V	325	24.05	13.14
2	127.11	37.5 QP	43.5	-6.0	1.00 V	343	25.57	11.89
3	249.60	34.2 QP	46.0	-11.9	1.00 V	274	20.35	13.80
4	383.76	34.7 QP	46.0	-11.3	1.00 V	196	17.30	17.36
5	500.42	36.1 QP	46.0	-9.9	1.00 V	151	15.68	20.44
6	640.41	33.4 QP	46.0	-12.6	1.00 V	271	9.84	23.53
7	*826.40	114.8 PK			1.52 V	53	88.29	26.50

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 4182	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	**TESTED BY**	Match Tsui
TEST MODE	**C**		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	138.78	40.4 QP	43.5	-3.2	2.00 H	238	27.53	12.82
2	175.72	35.9 QP	43.5	-7.6	2.00 H	220	22.78	13.13
3	302.10	31.3 QP	46.0	-14.7	1.00 H	202	17.45	13.82
4	500.42	35.0 QP	46.0	-11.0	1.50 H	226	14.54	20.44
5	702.62	36.5 QP	46.0	-9.5	1.00 H	211	11.48	25.06
6	794.01	41.1 QP	46.0	-4.9	1.00 H	46	15.15	25.96
7	*836.40	120.1 PK			1.77 H	42	93.45	26.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	45.45	34.4 QP	40.0	-5.6	1.00 V	10	20.24	14.14
2	136.84	37.1 QP	43.5	-6.4	1.00 V	310	24.39	12.67
3	383.76	31.6 QP	46.0	-14.4	1.00 V	199	14.25	17.36
4	500.42	33.0 QP	46.0	-13.0	1.00 V	139	12.57	20.44
5	702.62	35.2 QP	46.0	-10.8	1.00 V	10	10.18	25.06
6	794.01	40.9 QP	46.0	-5.1	1.00 V	340	14.94	25.96
7	*836.40	117.1 PK			1.59 V	44	90.41	26.68

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

802.11n (20MHz) + WCDMA1900

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	CH 6 + CH 9262	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 1006 hPa	TESTED BY	Match Tsui
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	**138.78**	**41.8 QP**	**43.5**	**-1.7**	**2.00 H**	**256**	**28.97**	**12.82**
2	255.44	39.5 QP	46.0	-6.5	1.00 H	49	25.68	13.82
3	500.42	36.2 QP	46.0	-9.8	1.50 H	220	15.80	20.44
4	576.25	36.5 QP	46.0	-9.5	1.50 H	103	14.55	21.96
5	640.41	36.2 QP	46.0	-9.8	1.00 H	211	12.67	23.53
6	897.05	37.3 QP	46.0	-8.7	1.50 H	250	9.42	27.85
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	66.84	36.6 QP	40.0	-3.4	1.00 V	313	23.48	13.14
2	127.11	38.1 QP	43.5	-5.4	1.00 V	334	26.23	11.89
3	255.44	35.6 QP	46.0	-10.4	1.00 V	64	21.76	13.82
4	383.76	33.4 QP	46.0	-12.6	1.00 V	199	16.02	17.36
5	500.42	35.5 QP	46.0	-10.5	1.00 V	145	15.07	20.44
6	700.68	34.2 QP	46.0	-11.9	1.00 V	10	9.10	25.04

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Sep. 24, 2009	Sep. 23, 2010
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 31, 2008	Dec. 30, 2009
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Dec. 29, 2008	Dec. 28, 2009
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jul. 29, 2009	Jul. 28, 2010
Software ADT	ADT_Cond_ V7.3.7	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 Shielded Room 2.
3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

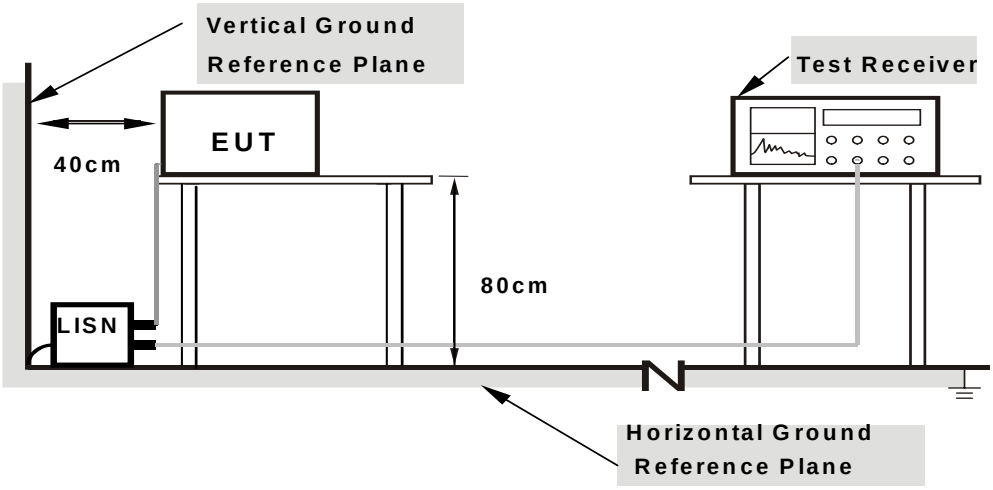
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

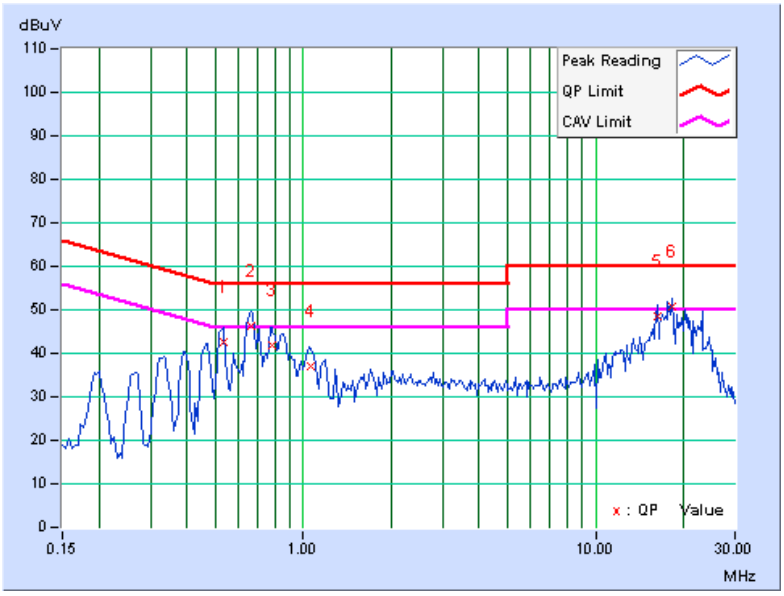
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: 802.11n (20MHz) + WCDMA850

CHANNEL	CH 6 + CH 4182	PHASE	Line 1
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.533	0.15	42.51	-	42.66	-	56.00	46.00	-13.34	-
2	0.666	0.15	46.09	32.26	46.24	32.41	56.00	46.00	-9.76	-13.59
3	0.779	0.16	41.79	-	41.95	-	56.00	46.00	-14.05	-
4	1.059	0.17	37.02	-	37.19	-	56.00	46.00	-18.81	-
5	16.227	0.58	48.11	-	48.69	-	60.00	50.00	-11.31	-
6	**18.242**	**0.63**	**50.07**	**46.51**	**50.70**	**47.14**	**60.00**	**50.00**	**-9.30**	**-2.86**

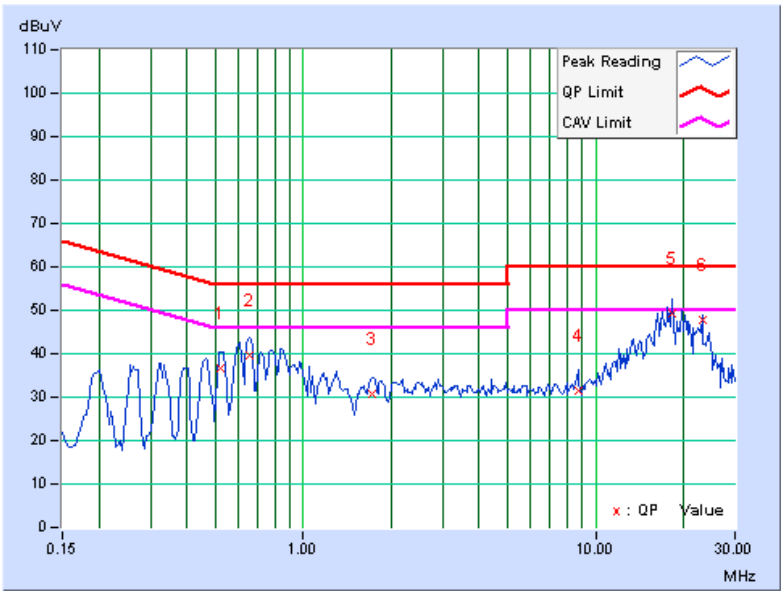
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



CHANNEL	CH 6 + CH 4182	PHASE	Line 2
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.521	0.15	36.41	-	36.56	-	56.00	46.00	-19.44	-
2	0.654	0.16	39.61	-	39.77	-	56.00	46.00	-16.23	-
3	1.715	0.19	30.71	-	30.90	-	56.00	46.00	-25.10	-
4	8.719	0.46	31.08	-	31.54	-	60.00	50.00	-28.46	-
5	18.242	0.77	48.65	-	49.42	-	60.00	50.00	-10.58	-
6	23.129	0.80	46.98	-	47.78	-	60.00	50.00	-12.22	-

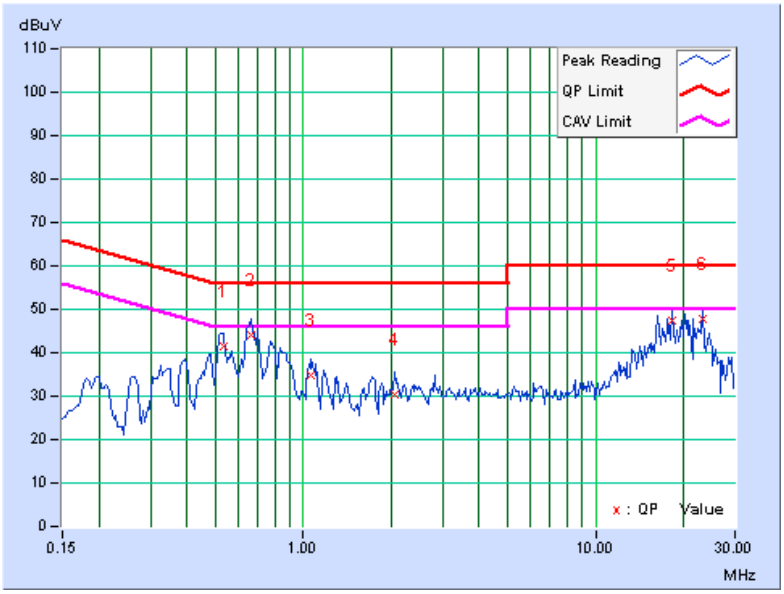
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



CHANNEL	CH 6 + CH 4132	PHASE	Line 1
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.533	0.15	41.24	-	41.39	-	56.00	46.00	-14.61	-
2	0.666	0.15	43.99	-	44.14	-	56.00	46.00	-11.86	-
3	1.066	0.17	34.73	-	34.90	-	56.00	46.00	-21.10	-
4	2.059	0.19	30.28	-	30.47	-	56.00	46.00	-25.53	-
5	18.246	0.63	46.62	-	47.25	-	60.00	50.00	-12.75	-
6	23.129	0.65	47.22	-	47.87	-	60.00	50.00	-12.13	-

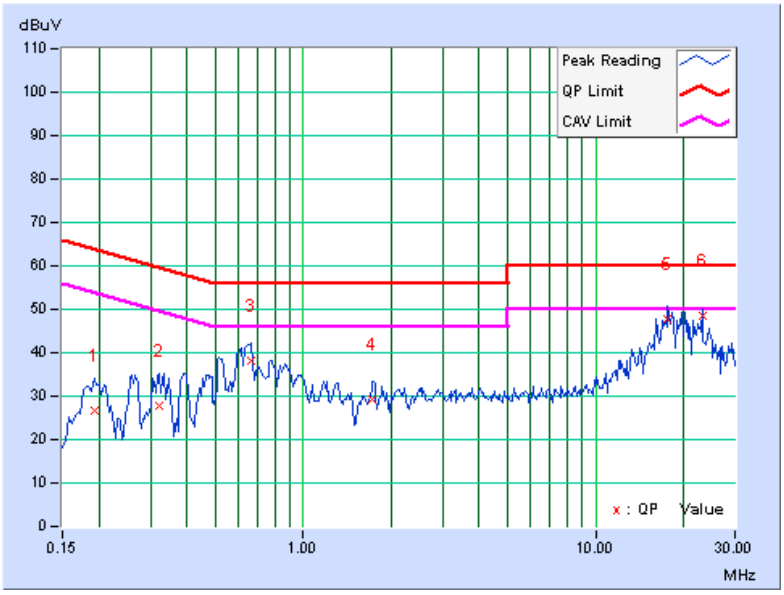
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



CHANNEL	CH 6 + CH 4132	PHASE	Line 2
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.13	26.36	-	26.49	-	63.91	53.91	-37.42	-
2	0.322	0.14	27.69	-	27.83	-	59.66	49.66	-31.83	-
3	0.662	0.16	37.88	-	38.04	-	56.00	46.00	-17.96	-
4	1.730	0.19	29.21	-	29.40	-	56.00	46.00	-26.60	-
5	17.695	0.75	46.96	-	47.71	-	60.00	50.00	-12.29	-
6	23.129	0.80	47.58	-	48.38	-	60.00	50.00	-11.62	-

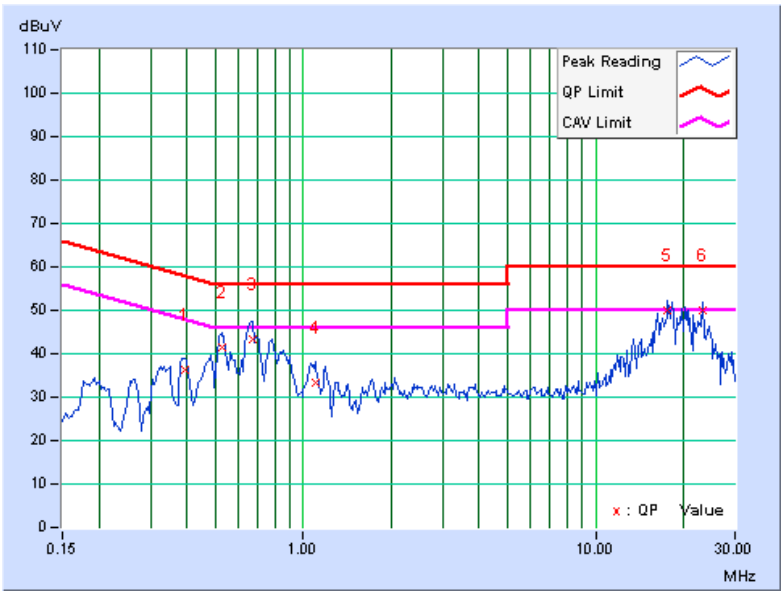
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



CHANNEL	CH 6 + CH 4182	PHASE	Line 1
TEST MODE	C		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.392	0.14	36.09	-	36.23	-	58.02	48.02	-21.79	-
2	0.525	0.15	41.18	-	41.33	-	56.00	46.00	-14.67	-
3	0.670	0.15	43.32	-	43.47	-	56.00	46.00	-12.53	-
4	1.102	0.17	33.29	-	33.46	-	56.00	46.00	-22.54	-
5	17.695	0.62	49.25	-	49.87	-	60.00	50.00	-10.13	-
6	23.129	0.65	49.34	-	49.99	-	60.00	50.00	-10.01	-

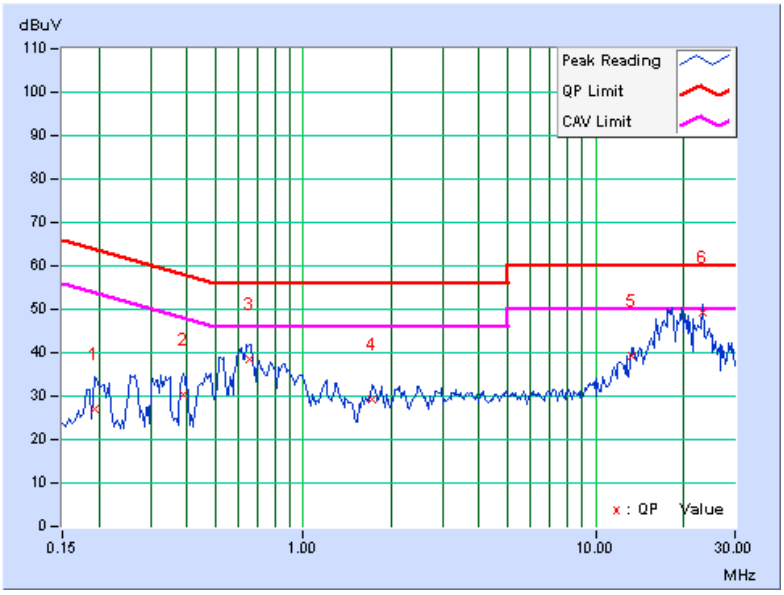
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



CHANNEL	CH 6 + CH 4182	PHASE	Line 2
TEST MODE	C		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.13	26.76	-	26.89	-	63.91	53.91	-37.02	-
2	0.388	0.15	30.11	-	30.26	-	58.10	48.10	-27.84	-
3	0.658	0.16	38.18	-	38.34	-	56.00	46.00	-17.66	-
4	1.727	0.19	29.13	-	29.32	-	56.00	46.00	-26.68	-
5	13.359	0.61	38.52	-	39.13	-	60.00	50.00	-20.87	-
6	23.129	0.80	48.46	-	49.26	-	60.00	50.00	-10.74	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

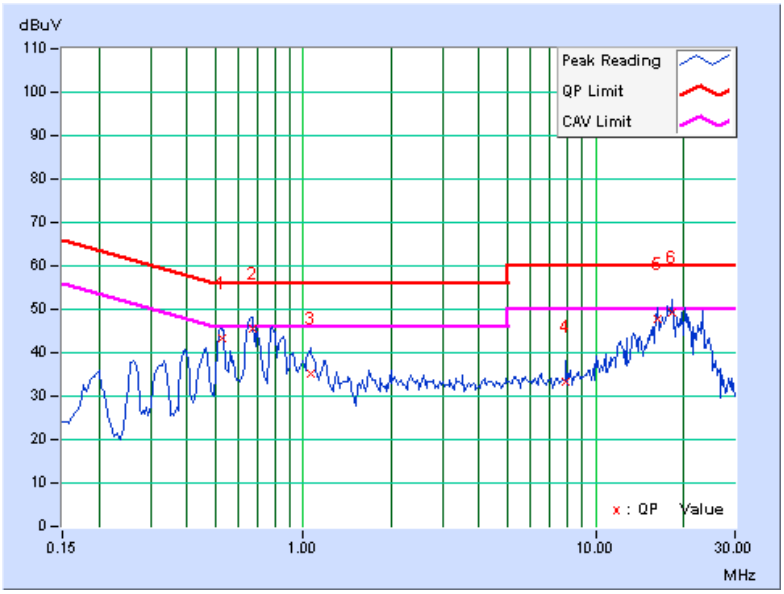


802.11n (20MHz) + WCDMA1900

CHANNEL	CH 6 + CH 9262	PHASE	Line 1
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.525	0.15	43.16	-	43.31	-	56.00	46.00	-12.69	-
2	0.670	0.15	45.27	-	45.42	-	56.00	46.00	-10.58	-
3	1.055	0.17	35.19	-	35.36	-	56.00	46.00	-20.64	-
4	7.922	0.38	33.08	-	33.46	-	60.00	50.00	-26.54	-
5	16.227	0.58	47.31	-	47.89	-	60.00	50.00	-12.11	-
6	18.242	0.63	48.73	-	49.36	-	60.00	50.00	-10.64	-

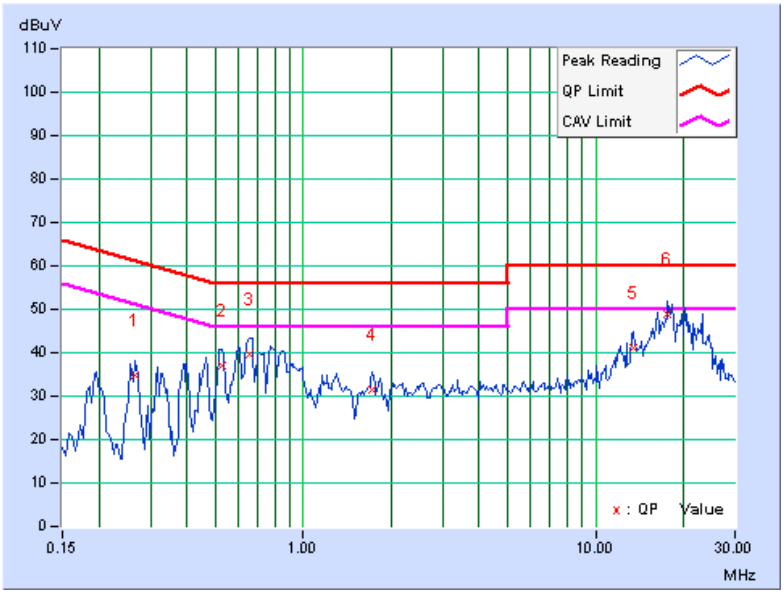
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



CHANNEL	CH 6 + CH 9262	PHASE	Line 2
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.267	0.14	34.52	-	34.66	-	61.20	51.20	-26.55	-
2	0.525	0.15	37.00	-	37.15	-	56.00	46.00	-18.85	-
3	0.658	0.16	39.35	-	39.51	-	56.00	46.00	-16.49	-
4	1.723	0.19	31.29	-	31.48	-	56.00	46.00	-24.52	-
5	13.480	0.61	40.46	-	41.07	-	60.00	50.00	-18.93	-
6	17.691	0.75	48.26	-	49.01	-	60.00	50.00	-10.99	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



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 by the following approval agencies according to ISO/IEC 17025.

USA	FCC, NVLAP
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. 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: 886-3-3185050

Web Site: www.adt.com.tw

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---