

FCC DoC TEST REPORT

REPORT NO.: FD110328C10C

MODEL NO.: 8012-B1 ADSL2+ Router / Enkom A1103

RECEIVED: Mar. 28, 2011

TESTED: Apr. 15 ~ May 20, 2011

ISSUED: Dec. 27, 2011

APPLICANT: Enkom Technologies Ltd.

ADDRESS: Schellenrainstrasse 13, 6210 Sursee, Switzerland

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

LAB ADDRESS: No. 19, Hwa Ya 2nd Rd., Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan

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RELEASE CONTROL RECORD


ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	N/A	Dec. 27, 2011

1 CERTIFICATION

PRODUCT: ADSL2+ 1 Port Bridge/Router
BRAND: Enkom Technologies Ltd.
MODEL NO.: 8012-B1 ADSL2+ Router / Enkom A1103
APPLICANT: Enkom Technologies Ltd.
TESTED: Apr. 15 ~ May 20, 2011
TEST SAMPLE: ENGINEERING SAMPLE
STANDARD: **FCC Part 15, Subpart B, Class B**
CISPR 22:1997, Class B
ICES-003:2004, Class B
ANSI C63.4:2003

The above equipment (Model: 8012-B1 ADSL2+ Router / Enkom A1103) 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 : Dec. 27, 2011
Suntee Liu / Specialist

APPROVED BY :  , DATE : Dec. 27, 2011
David Liu / Senior Engineer

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications.

EMISSION			
Standard	Test Type	Result	Remarks
FCC Part 15, Subpart B, Class B	Conducted emission test	PASS	Meet the requirement of limit Minimum passing margin is -13.99dB at 0.521MHz
CISPR 22:1997, Class B ICES-003:2004, Class B	Radiated emission test (30MHz~20GHz)	PASS	Meet the requirement of limit Minimum passing margin is -1.96dB at 60.21MHz

Note: The limit for radiated test for 30-1000 MHz was performed according to CISPR 22:1997, which was specified in FCC PART 15 Subpart B 15.109(g). Also the limits of ICES-003:2004 and CISPR 22:1997 are same.

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 emission	150kHz ~ 30MHz	2.44 dB
Radiated emission	30MHz ~ 1GHz	4.12 dB
	Above 1GHz	2.26 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	ADSL2+ 1 Port Bridge/Router
MODEL NO.	8012-B1 ADSL2+ Router / Enkom A1103
POWER SUPPLY	9Vdc from adapter
DATA CABLE	NA
ACCESSORY DEVICE	Adapter

NOTE:

1. This is a duplicate report of FD110328C10. The only difference compared with original report is changing applicant, brand, model designation and product name.
2. The EUT uses following adapter.

Brand	SHENZHEN HEWEISHUN
Model	TEA09U-09060
Input Power	100-240Vac, 50/60Hz, 0.3A
Output Power	9Vdc, 600mA
Power Line	DC 1.84m non-shielded cable w/o core

3. The EUT's highest operating frequency is 240MHz.
4. The above EUT information is declared by manufacturer and for more detailed feature description, please refer to the manufacturer's specifications or user's manual.

3.2 DESCRIPTION OF TEST MODES

The EUT is designed with AC power supply of rating 100-240Vac, 50-60Hz.

For radiated emission 30MHz~1GHz evaluation, 230Vac/50Hz (for EN 55022 & AS/NZS CISPR 22) & 120Vac/60Hz (for FCC Part 15) had been covered during the pre-test. The worst radiated emission data was founded at **230Vac/50Hz** and recorded in the applied test report.

The EUT has been pre-tested under following modes, and **test mode 1** was the worst case for final test.

Test Mode	Test Condition
1	LAN 100Mbps
2	LAN 10Mbps

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.

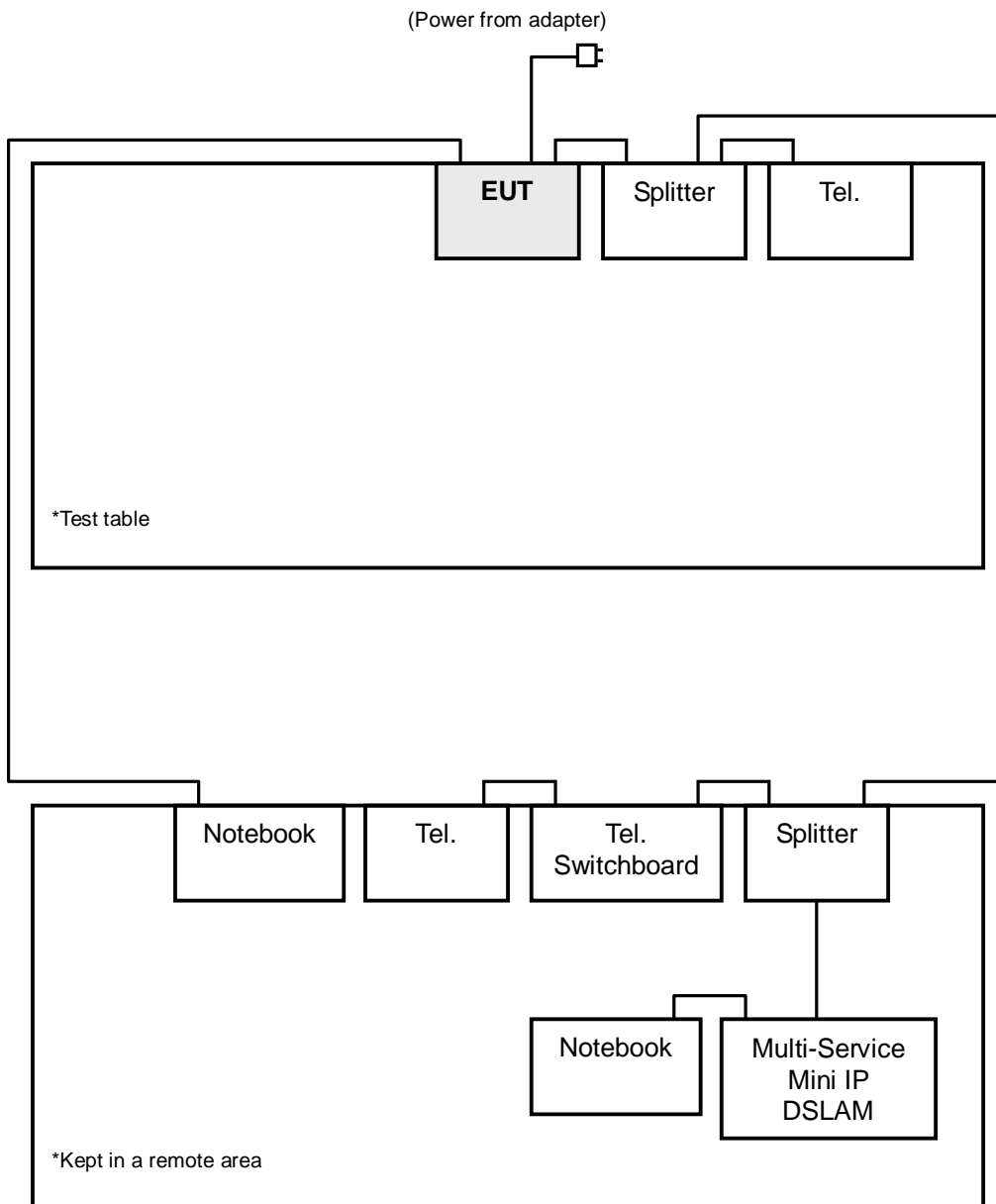
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	TELEPHONE	WONDER	WD-303	1F01017	NA
2	SPLITTER	NA	NA	NA	NA
3	TELEPHONE	WONDER	WD-303	5C17DA03132	NA
4	NOTEBOOK	DELL	PP18L	D1T5W1S 28407620224	QDS-BRCM1019
5	NOTEBOOK	DELL	D830	4C53R1S	E2K4965AGNM
6	MULTI-SERVICE MINI IP DSLAM	ZyXEL	IES-1000	S0700Z21012913	NA
7	TELEPHONE SWITCHBOARD	DLT	TC-104H	T3-020003	NA
8	SPLITTER	NA	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1m non-shielded RJ11 cable
3	1m non-shielded RJ11 cable
4	10m non-shielded RJ45 cable
5	3m non-shielded RJ45 cable
6	1.8m non-shielded cable, RJ11 connector, w/o core
7	1.8m non-shielded cable, RJ11 connector, w/o core
8	10m non-shielded cable, RJ11 connector, w/o core

NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Items 3-8 acted as communication partners.
3. Items 2 and 8 were provided by the client.

3.4 CONFIGURATION OF SYSTEM UNDER TEST



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

TEST STANDARD:

FCC Part 15, Subpart B (section: 15.107)

CISPR 22: 1997 (section 5)

ICES-003: 2004 (Class A: section 5.2)
(Class B: section 5.3)

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15-0.5	79	66	66-56	56-46
0.5-5	73	60	56	46
5-30	73	60	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.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 30, 2010	Nov. 29, 2011
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 30, 2010	Dec. 29, 2011
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Jun. 28, 2010	Jun. 27, 2011
V-LISN SCHWARZBECK	NNBL 8226-2	8226-142	Jul. 12, 2010	Jul. 11, 2011
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 1.
 3. The VCCI Site Registration No. is C-2040.

4.1.3 TEST PROCEDURES

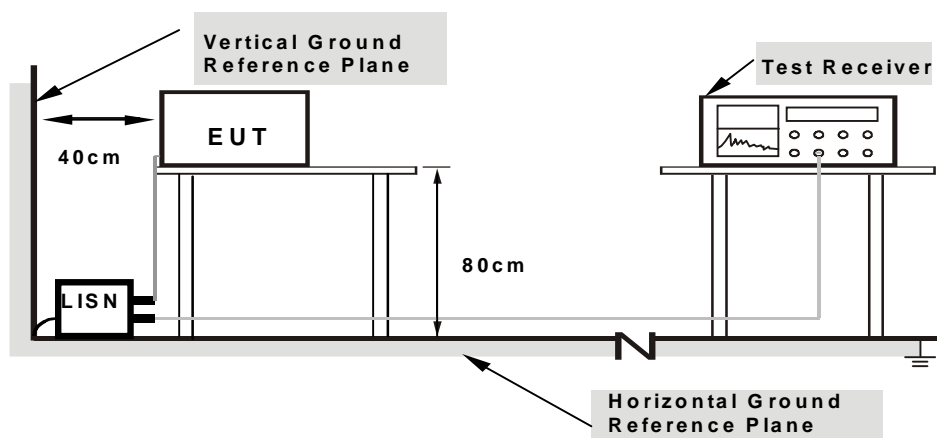
The basic test procedure was in accordance with ANSI C63.4:2003 (section 7) and CISPR 22 (section 9).

- 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 150 kHz to 30 MHz was searched. Emission levels under Limit - 20dB was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 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 cm from other units and other metal planes

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

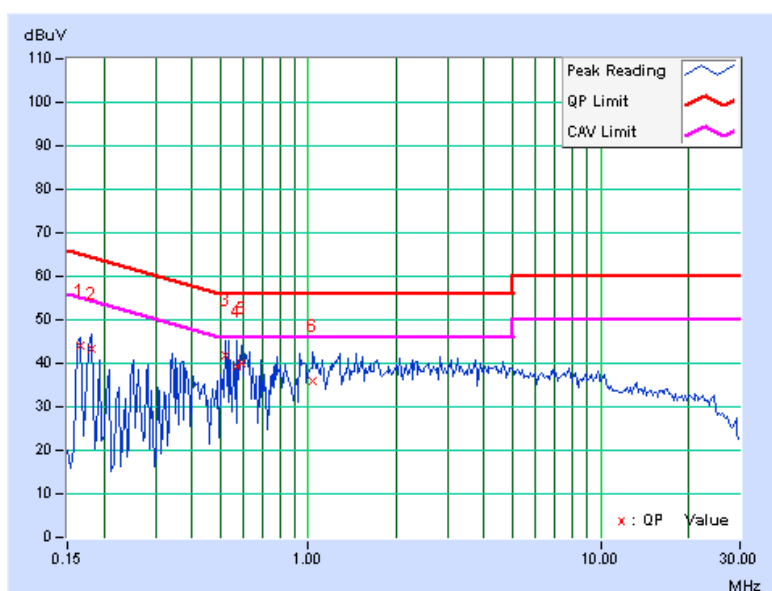
- a. The EUT linked with the telephone.
- b. The EUT linked with the notebooks & telephone, which acted as communication partners.

4.1.7 TEST RESULTS

INPUT POWER	120 Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 65% RH, 982 hPa	PHASE	Line 1
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.166	0.14	44.09	-	44.23	-	65.18	55.18	-20.94	-
2	0.181	0.14	43.08	-	43.22	-	64.43	54.43	-21.21	-
3	0.521	0.16	41.85	-	42.01	-	56.00	46.00	-13.99	-
4	0.572	0.16	38.98	-	39.14	-	56.00	46.00	-16.86	-
5	0.591	0.16	39.99	-	40.15	-	56.00	46.00	-15.85	-
6	1.039	0.19	35.78	-	35.97	-	56.00	46.00	-20.03	-

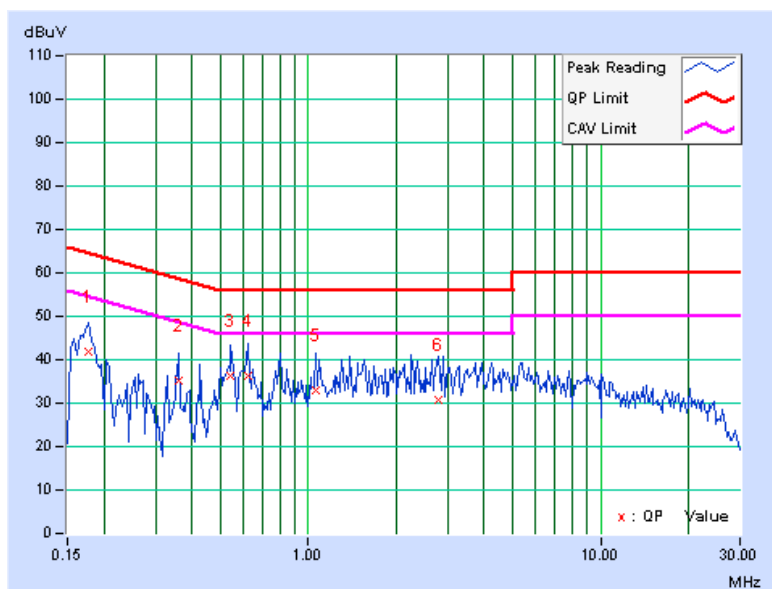
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



INPUT POWER	120 Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 65% RH, 982 hPa	PHASE	Line 2
TESTED BY	Scott Yang		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.13	41.70	-	41.83	-	64.61	54.61	-22.78	-
2	0.361	0.14	34.91	-	35.05	-	58.71	48.71	-23.66	-
3	0.545	0.15	36.09	-	36.24	-	56.00	46.00	-19.76	-
4	0.619	0.15	35.98	-	36.13	-	56.00	46.00	-19.87	-
5	1.059	0.18	32.63	-	32.81	-	56.00	46.00	-23.19	-
6	2.789	0.26	30.64	-	30.90	-	56.00	46.00	-25.10	-

- 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.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD:

FCC Part 15, Subpart B (section: 15.109)

CISPR 22: 1997 (section 6)

**ICES-003: 2004 (Class A: section 5.4)
(Class B: section 5.5)**

Frequency (MHz)	Class A (at 10m)	Class B (at 10m)
	Quasi-peak (dBuV/m)	Quasi-peak (dBuV/m)
30-230	40	30
230-1000	47	37

NOTE: The limit for radiated test was performed according to CISPR 22:1997, which was specified in FCC PART 15B 15.109(g). Also the limits of CISPR 22:1997 is same.

Frequency (MHz)	Class A (at 3m)		Class B (at 3m)	
	Peak (dBuV/m)	Average (dBuV/m)	Peak (dBuV/m)	Average (dBuV/m)
Above 1000	80	60	74	54

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
 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.

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

4.2.2 TEST INSTRUMENTS

Frequency range 30MHz~1GHz

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100186	Nov. 29, 2010	Nov. 28, 2011
Test Receiver ROHDE & SCHWARZ	ESI7	836697/012	Dec. 10, 2010	Dec. 09, 2011
Spectrum Analyzer Agilent	E4446A	MY48250266	Aug. 11, 2010	Aug. 10, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-148	Apr. 13, 2011	Apr. 12, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-149	Apr. 13, 2011	Apr. 12, 2012
HORN Antenna EMCO	3115*	5623	Jul. 13, 2010	Jul. 12, 2011
Preamplifier Agilent	8447D	2944A10636	Dec. 02, 2010	Dec. 01, 2011
Preamplifier Agilent	8447D	2944A10637	Dec. 02, 2010	Dec. 01, 2011
Preamplifier Agilent	8449B	3008A01959	Nov. 03, 2010	Nov. 02, 2011
RF signal cable Woken	8D-FB	Cable-Hych1-01	Nov. 06, 2010	Nov. 05, 2011
RF signal cable Woken	8D-FB	Cable-Hych1-02	Nov. 06, 2010	Nov. 05, 2011
Software ADT	ADT_Radiated_ V 7.7.03.6	NA	NA	NA
Antenna Tower(V)	MFA-440	9707	NA	NA
Antenna Tower(H)	MFA-440	970705	NA	NA
Turn Table	DS430	50303	NA	NA
Controller	MF7802	074	NA	NA
Controller	MF7802	08093	NA	NA
RF signal cable EAST COST Microwave	HP 160S-29	NA	Nov. 04, 2010	Nov. 03, 2011

- 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 1.
 3. The FCC Site Registration No. is 477732.
 4. The IC Site Registration No. is IC 7450F-1.
 5. The VCCI Site Registration No. is R-1893, G-113.

Frequency range above 1GHz

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	Feb. 14, 2011	Feb. 13, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Aug. 02, 2010	Aug. 01, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Apr. 14, 2011	Apr. 13, 2012
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-404	Dec. 28, 2010	Dec. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170242	Jan. 04, 2011	Jan. 03, 2012
Preamplifier Agilent	8447D	2944A10629	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8449B	3008A01959	Nov. 03, 2010	Nov. 02, 2011
RF signal cable HUBER+SUHNER	SUCOFLEX 104	23636/6	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNER	SUCOFLEX 104	283402/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA	NA
Turn Table ADT.	TT100.	TT93021702	NA	NA
Controller ADT.	SC100.	SC93021702	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 2.
 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 686814.
 5. The IC Site Registration No. is IC 7450F-2.
 6. The VCCI Site Registration No. is G-18.

4.2.3 TEST PROCEDURES

The basic test procedure was in accordance with ANSI C63.4:2003 (section 8) and CISPR 22 (section 10).

Frequency range 30MHz~1GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from 1 meter to 4 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-Peak (QP) detection at frequency below 1 GHz.

Frequency range above 1GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. 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 height of antenna can be varied from 1 meter to 4 meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect 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 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 and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

NOTE:

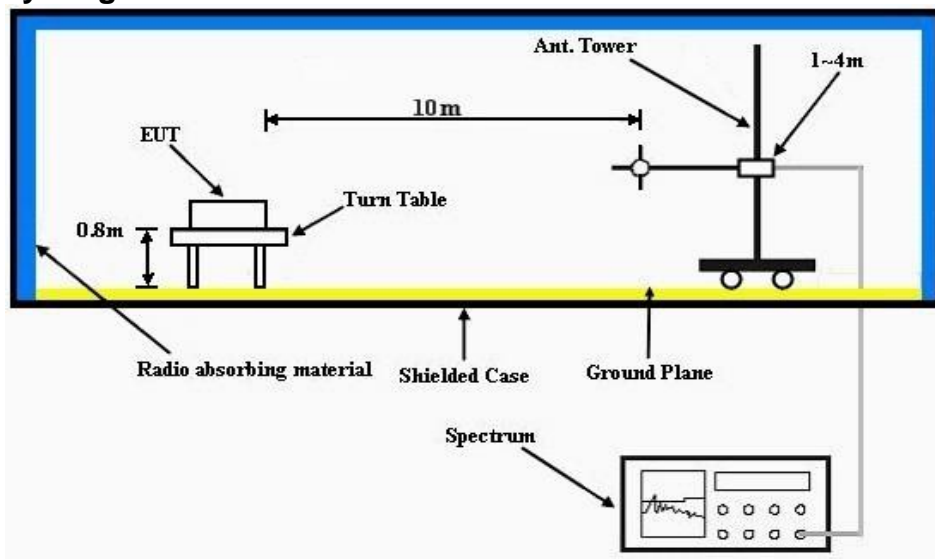
1. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3 MHz for Peak (PK) detection at frequency above 1 GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average (AV) detection at frequency above 1 GHz.
2. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.

4.2.4 DEVIATION FROM TEST STANDARD

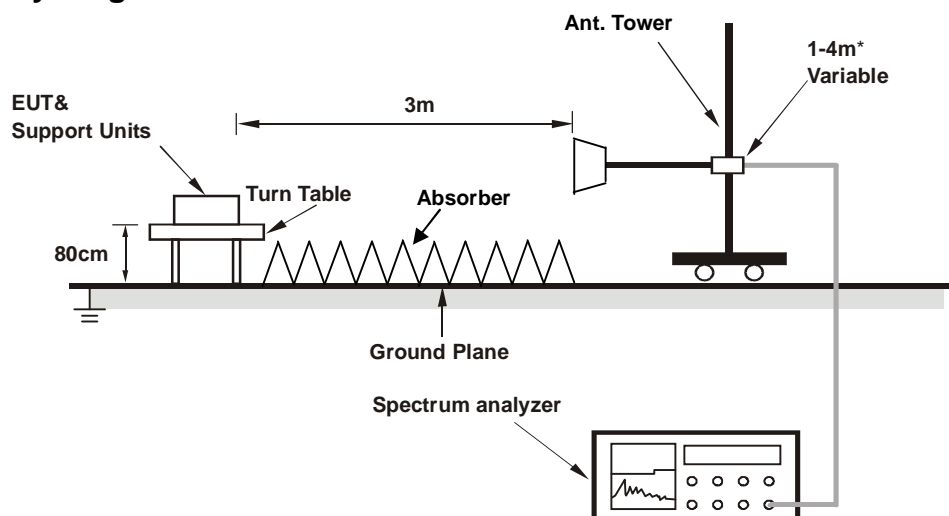
No deviation.

4.2.5 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



* : depends on the EUT height and the antenna 3dB beamwidth both, refer to section 8.3.1.2 of ANSI C63.4:2003

For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

4.2.6 EUT OPERATING CONDITIONS

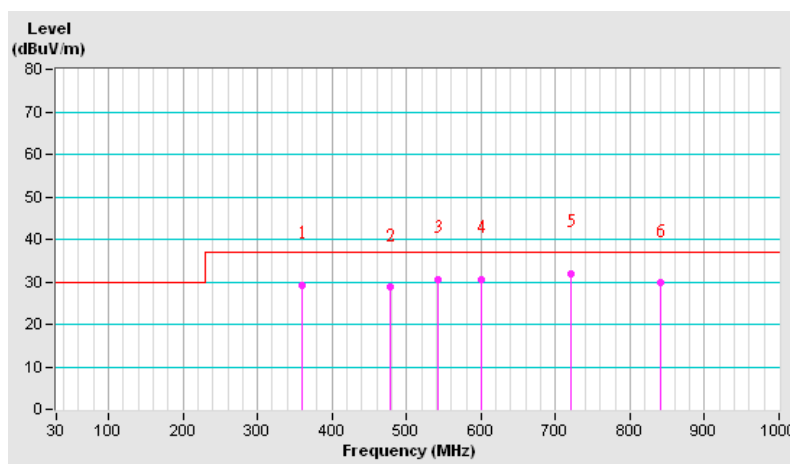
Same as 4.1.6.

4.2.7 TEST RESULTS

DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak , 120 kHz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	25 deg. C, 63% RH, 982 hPa	TESTED BY	Peter Lin

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	360.46	29.16 QP	37.00	-7.84	3.00 H	341	11.75	17.41
2	479.04	28.67 QP	37.00	-8.33	3.00 H	196	8.33	20.34
3	541.24	30.60 QP	37.00	-6.40	2.50 H	36	8.46	22.13
4	599.56	30.51 QP	37.00	-6.49	2.00 H	102	6.53	23.98
5	720.08	31.89 QP	37.00	-5.11	1.00 H	235	6.27	25.62
6	840.60	29.72 QP	37.00	-7.28	3.50 H	209	1.94	27.78

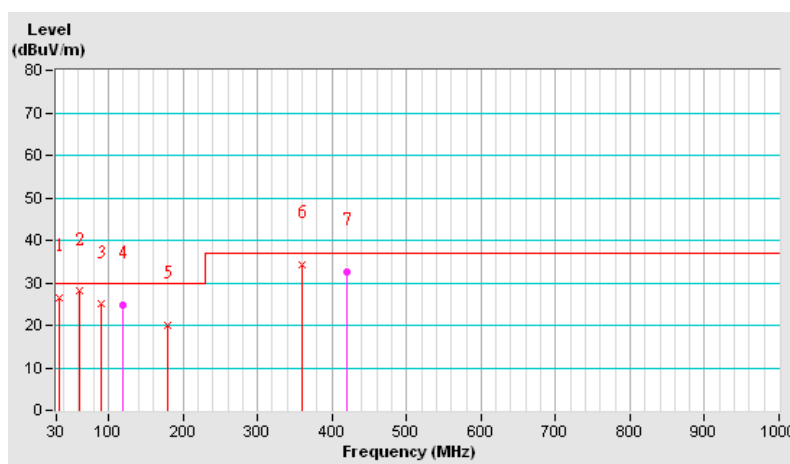
- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.



DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak , 120 kHz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	25 deg. C, 63% RH, 982 hPa	TESTED BY	Peter Lin

ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	34.63	26.38 QP	30.00	-3.62	1.00 V	245	12.58	13.80
2	60.21	28.04 QP	30.00	-1.96	1.00 V	94	14.56	13.48
3	90.35	24.96 QP	30.00	-5.04	1.50 V	228	14.74	10.22
4	119.42	24.79 QP	30.00	-5.21	1.00 V	224	12.07	12.71
5	180.17	20.01 QP	30.00	-9.99	1.00 V	322	6.75	13.26
6	359.99	34.35 QP	37.00	-2.65	1.00 V	68	16.46	17.89
7	420.72	32.58 QP	37.00	-4.42	1.00 V	198	13.03	19.55

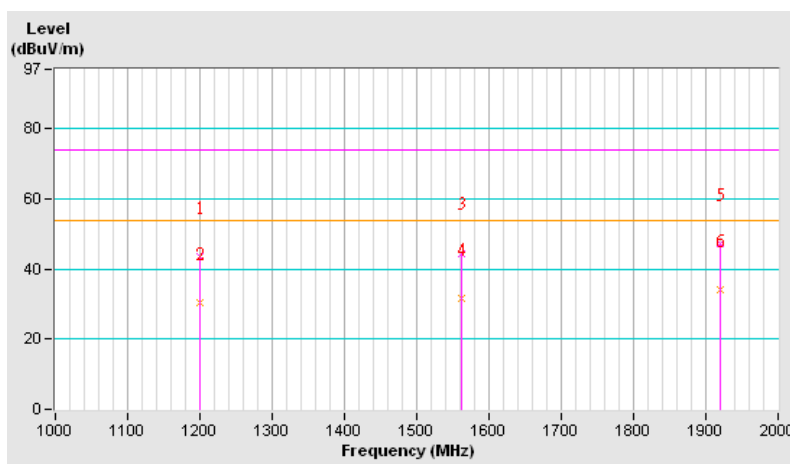
- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.



INPUT POWER	120 Vac, 60 Hz	FREQUENCY RANGE	1-2 GHz
ENVIRONMENTAL CONDITIONS	22 deg. C, 65% RH, 982 hPa	DETECTOR FUNCTION & BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Whisky Chang		

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	1199.92	43.42 PK	74.00	-30.58	1.16 H	189	15.07	28.35
2	1199.92	30.38 AV	54.00	-23.62	1.16 H	189	2.03	28.35
3	1561.03	44.55 PK	74.00	-29.45	1.00 H	119	15.22	29.34
4	1561.03	31.48 AV	54.00	-22.52	1.00 H	119	2.15	29.34
5	1920.96	47.40 PK	74.00	-26.60	1.50 H	331	17.07	30.33
6	1920.96	34.02 AV	54.00	-19.98	1.50 H	331	3.69	30.33

- 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.





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.

Copies of accreditation and authorization 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

Email: service@adt.com.tw

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 – MODIFICATION RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

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

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