TECHNICAL REPORT

卓時檢測 TIMEWAY TESTING LABORATORY

ISO/IEC17025 Accredited Lab.

Report No: FCC 1012146-02
File reference No: 2011-01-04

Applicant: Shenzhen Wisky Technology Co.LTD

Product: MID

Brand Name: N/A

Model No: M8XX（XX represent 01~99） 、TT-7000H、Android Tab 7、PC7049G、PC7059G

Test Standards: FCC Part 15 Subpart B: 2010

Test result: It is herewith confirmed and found to comply with the requirements set up by ANSI C63.4&FCC Part 15 regulations for the evaluation of electromagnetic compatibility

Approved By

Terry Tong

Manager

Dated: January 04, 2011

Results appearing herein relate only to the sample tested
The technical reports is issued errors and omissions exempt and is subject to withdrawal at

SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD

East 5/Block 4, Anhua Industrial Zone, No.8, Tairan Rd. Chegongmiao, FuTian District, Shenzhen, CHINA.

Tel (755) 83448688 Fax (755) 83442996

Special Statement:

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

CNAS-LAB Code: L2292

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

FCC-Registration No.: 899988

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 899988.

IC- Registration No.: IC5205A-01

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: 5205A-01.

VCCI- Registration No.: R-3015 and C-3332

The EMC Laboratory has been registered and fully described in a report filed with the (VCCI) Voluntary Control Council for Interference. The acceptance letter from the VCCI is maintained in our files. Registration IC No.: R-3015 and C-3332

Test Report Conclusion

Content

1.0 General Details

1.1 Test Lab Details

Name : SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD

Address: East 5/Block 4, Anhua Industrial Zone, No.8,Tairan Rd. CheGongMiao, FuTian District, Shenzhen, CHINA.

Telephone: (755) 83448688

Fax: (755) 83442996

1.2 Applicant Details

Applicant: Shenzhen Wisky Technology Co.LTD

Address: 1810 Block B, Zhongshen Garden, Caitian South Road, Shenzhen.

Telephone: +86-755-82514205-813

Fax: +86-755-82514206

1.3 Description of EUT

Product: MID

Manufacturer: Shenzhen Wisky Technology Co.LTD

Address: Room 1810, Block B, Zhongshen Garden, Caitian South Road, Shenzhen.

Brand Name: N/A

Model Number: M801

Additional Model Number: M8XX（XX represent 01~99） 、TT-7000H、Android Tab 7、PC7049G、PC7059G

Rating: Input: DC 5V , 2A

Remark: Just the model names and appearance colour are different.

1.4 Submitted Sample: 1 Sample

1.5 Test Duration

2010-12-14 to 2011-01-04

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by Alan geng

Print Name: Alan Geng

2.0 List of Measurement Equipment

2.1 Conducted Emission Test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESCS30	100139	RS	2010.4.26	1Year
PULSE LIMITER	ESH3-Z2	100281	RS	2010.4.26	1Year
LISN	LS16C	10010947251	AFJ	2010-5-14	1Year
LISN (Three Phase)	NSLK 8126	8126453	Schwarebeck	2010-5-14	1Year

2.2 Radiated electromagnetic disturbance test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESVD	100008	RS	2010.4.26	1Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer	8595E	3441A00893	HP	2010.4.26	1Year
Amplifier	8447D	2727A05017	HP	2010.4.26	1Year
Bilog Antenna	VULB9163	9163/340	Schwarebeck	2010.4.26	1Year
Horn Antenna	BBHA 9120D	9120D-631	Schwarebeck	2010.07.03	1Year

2.3 Auxiliary Equipment

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
U-disk	U208	--	Netac	--	FCC DOC
Earphone	--	--	--	Data cable of 1.0m length	--
TF Card	--	--	Kingston	--	--
PC	R400	--	IBM	--	--
Monitor	P2450H	--	SAMSUNG	Data cable of 1.5m length unshielded and 1.8m length AC Mains cable	FCC DOC

3.0 Technical Details

3.1 Investigations Requested

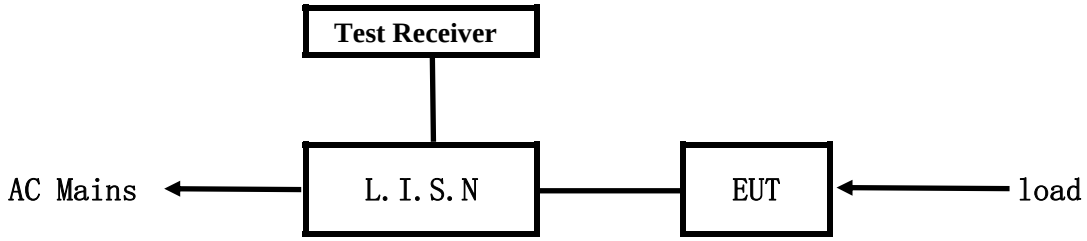
Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

3.2 Test Standards

FCC Part 15 Subpart B: 2010

4.0 Conducted Power line Test

4.1 Schematics of the test



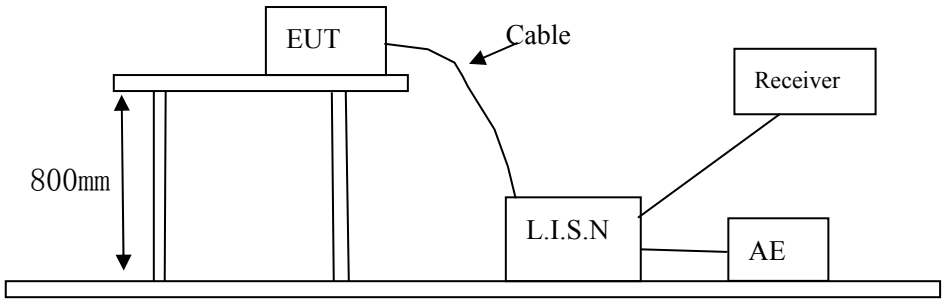
EUT: Equipment Under Test

4.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2003.The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2003.Cables and peripherals were moved to find the maximum emission levels for each frequency.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



4.3 Power line conducted Emission Limit

Frequency(MHz)	Class A Limits dB(μV)		Class B Limits dB(μV)	
	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
0.15 ～ 0.50	79.00	66.00	66.00～56.00*	56.00～46.00*
0.50 ～ 5.00	73.00	60.00	56.00	46.00
5.00 ～ 30.00	73.00	60.00	60.00	50.00

Notes: 1. *decreasing linearly with logarithm of frequency.

2. The tighter limit shall apply at the transition frequencies

4.4 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

A: Conducted Emission on Live Terminal (150kHz to 30MHz)

EUT Operating Environment

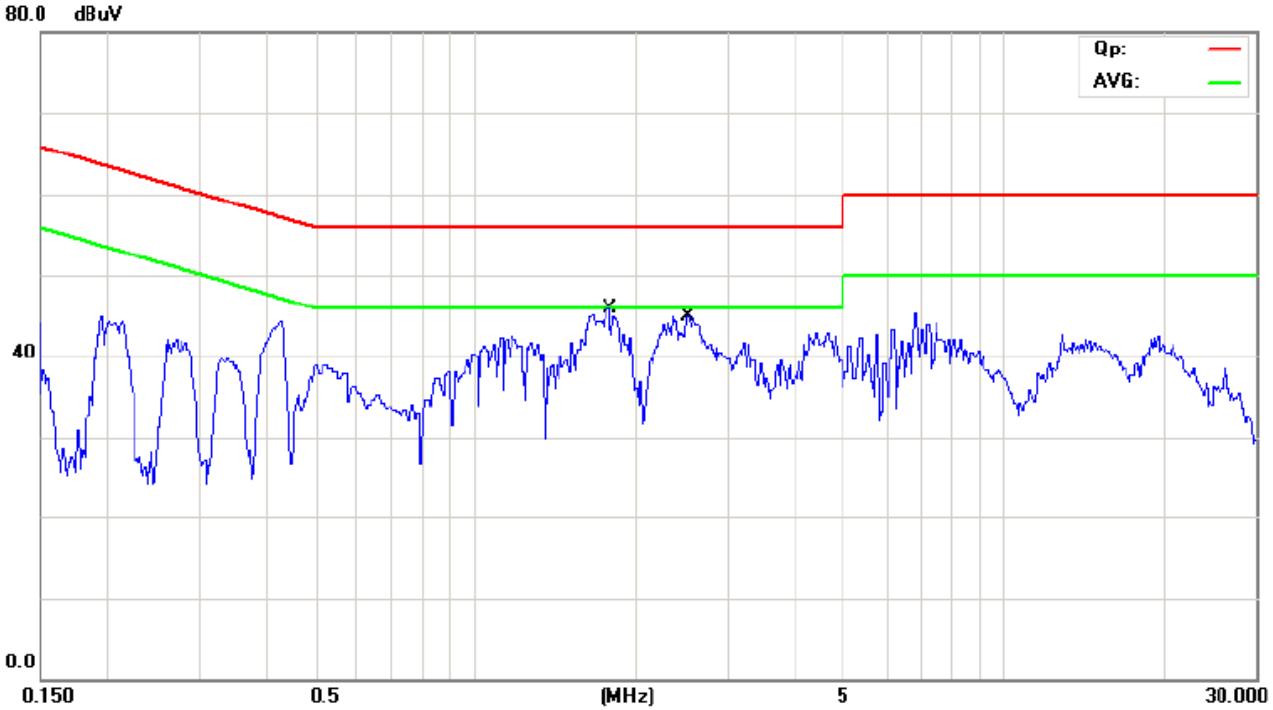
Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Reading TF Card, Running EMC Test Program and Ping Wireless Network, Full Load

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBμV)		Limit(dBμV)	
		Quasi-peak	Average	Quasi-peak	Average
1.7771	Live	39.61	29.71	56.00	46.00
2.5322	Live	40.91	27.51	56.00	46.00

B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

EUT Operating Environment

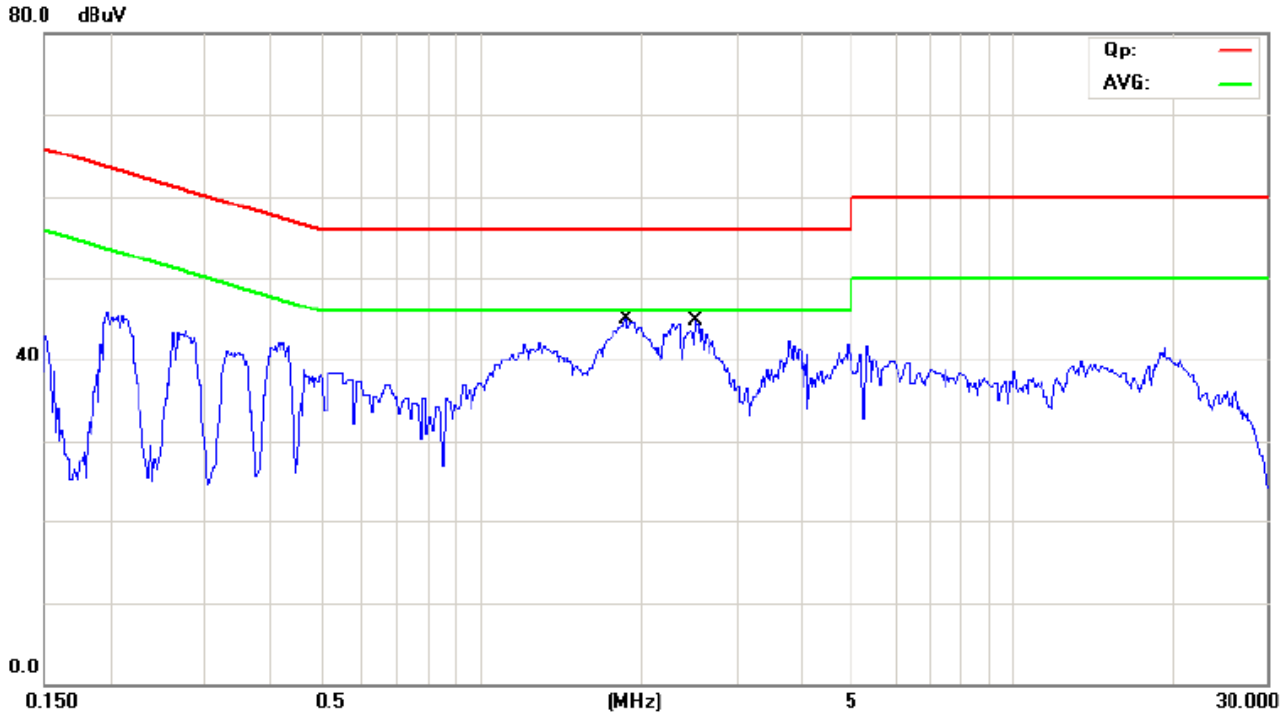
Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Reading TF Card, Running EMC Test Program and Ping Wireless Network, Full Load

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBμV)		Limit(dBμV)	
		Quasi-peak	Average	Quasi-peak	Average
1.8491	Neutral	39.34	30.74	56.00	46.00
2.5102	Neutral	39.50	26.60	56.00	46.00

C: Conducted Emission on Live Terminal (150kHz to 30MHz)

EUT Operating Environment

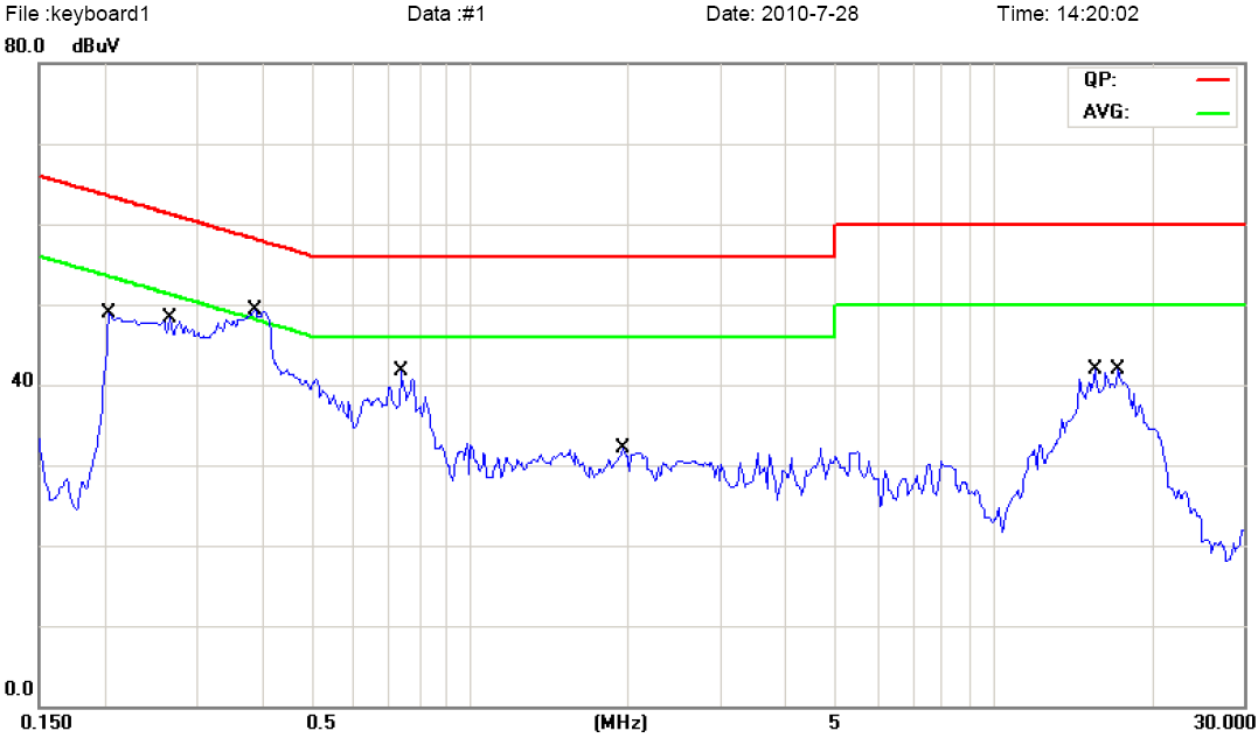
Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Data transmission (Note: EUT as a hard disk)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBμV)		Limit(dBμV)	
		Quasi-peak	Average	Quasi-peak	Average
16.925	Live	43.18	29.71	60.00	50.00
5.335	Live	34.62	27.51	60.00	50.00
3.300	Live	33.51	23.36	56.00	46.00
0.786	Live	37.91	25.16	56.00	46.00
0.411	Live	37.57	25.12	57.61	47.61
0.251	Live	39.90	22.61	61.70	51.70
0.196	Live	43.05	24.35	63.74	53.74

D: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

EUT Operating Environment

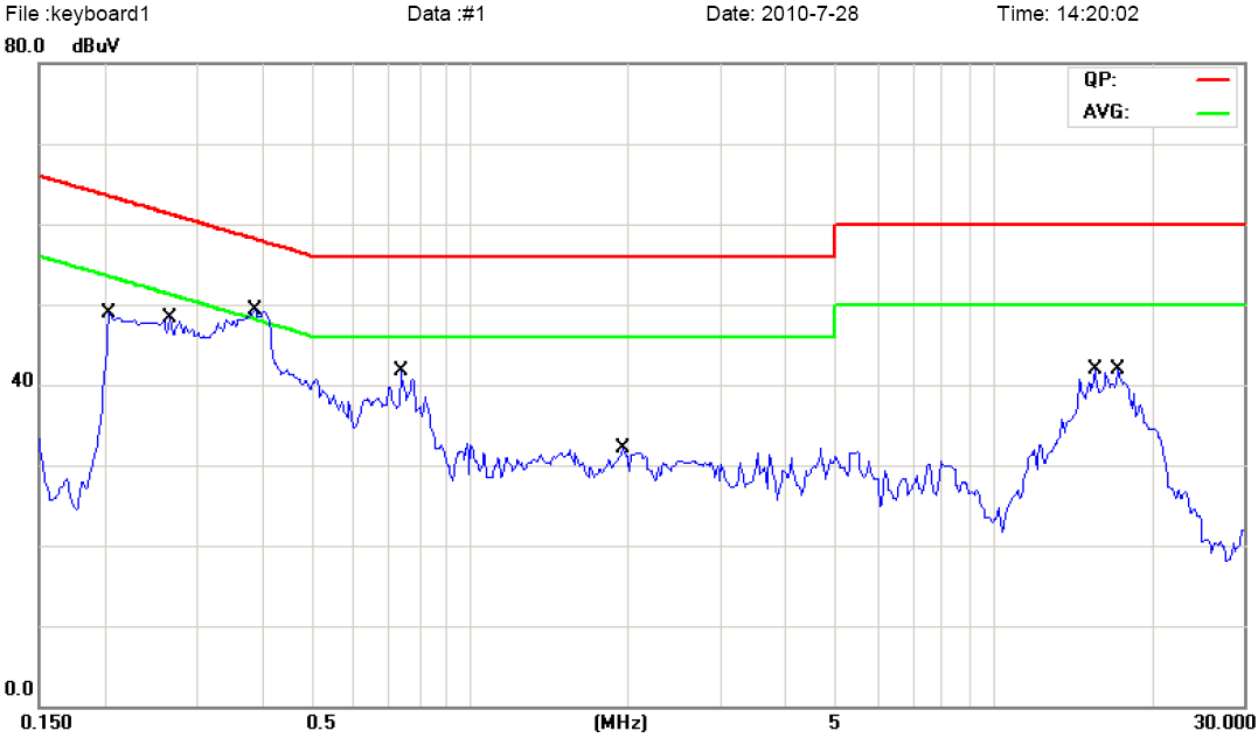
Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Data transmission (Note: EUT as a hard disk)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBμV)		Limit(dBμV)	
		Quasi-peak	Average	Quasi-peak	Average
0.383	Neutral	45.29	30.74	58.10	48.10
0.735	Neutral	32.00	25.61	56.00	46.00
17.203	Neutral	41.81	28.98	60.00	50.00
15.574	Neutral	41.87	31.05	60.00	50.00
0.204	Neutral	48.87	35.64	63.41	53.41
0.267	Neutral	48.36	36.87	61.20	51.20
1.958	Neutral	32.07	26.64	56.00	46.00

5.0 Radiated Disturbance Test

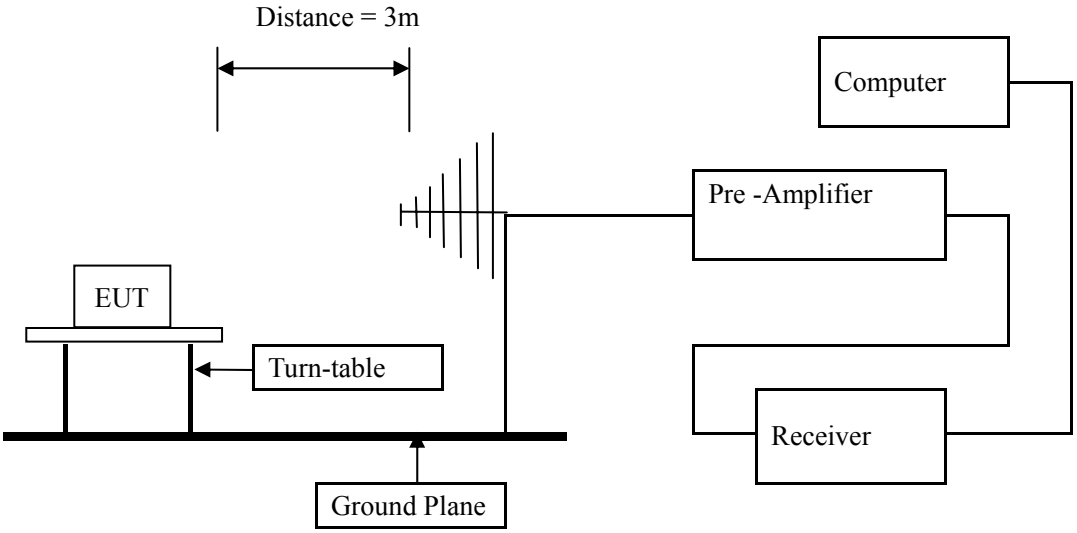
5.1 Schematics of the test

5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2003, The frequency spectrum from 30MHz to 10GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak 0values with a resolution bandwidth of 120KHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



5.3 Radiated Emission Limit

Frequency Range (MHz)	Distance (m)	Field strength (dB μ V/m)
30-88	3	40.00
88-216	3	43.50
216-960	3	46.00
Above 960	3	54.00

Note: The lower limit shall apply at the transition frequencies

5.4 Test result

The frequency spectrum from 30MHz to 1GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.

A: Radiated Disturbance (30MHz----1000MHz)

EUT Operating Environment

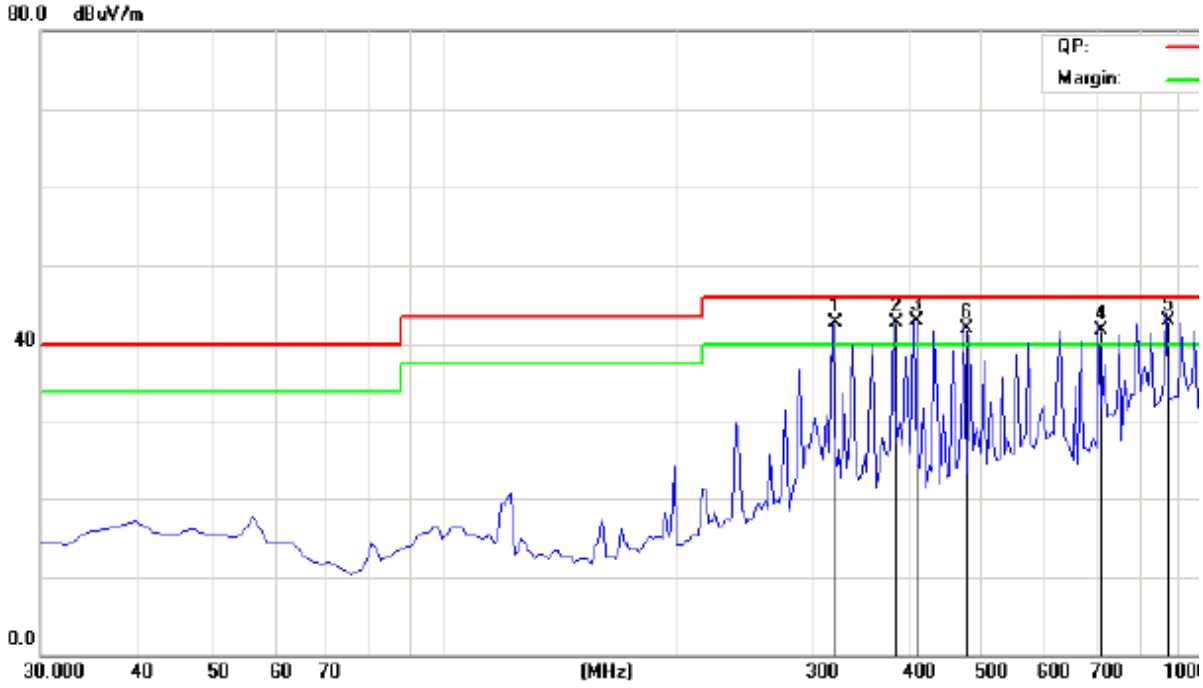
Temperature: 25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Reading TF Card, Running EMC Test Program and Ping Wireless Network, Full Load

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
321.000	42.79	H	46.00
386.475	42.76	H	46.00
410.725	42.89	H	46.00
716.275	41.77	H	46.00
876.325	42.86	H	46.00
478.625	41.84	H	46.00

B: Radiated Disturbance (30MHz----1000MHz)

EUT Operating Environment

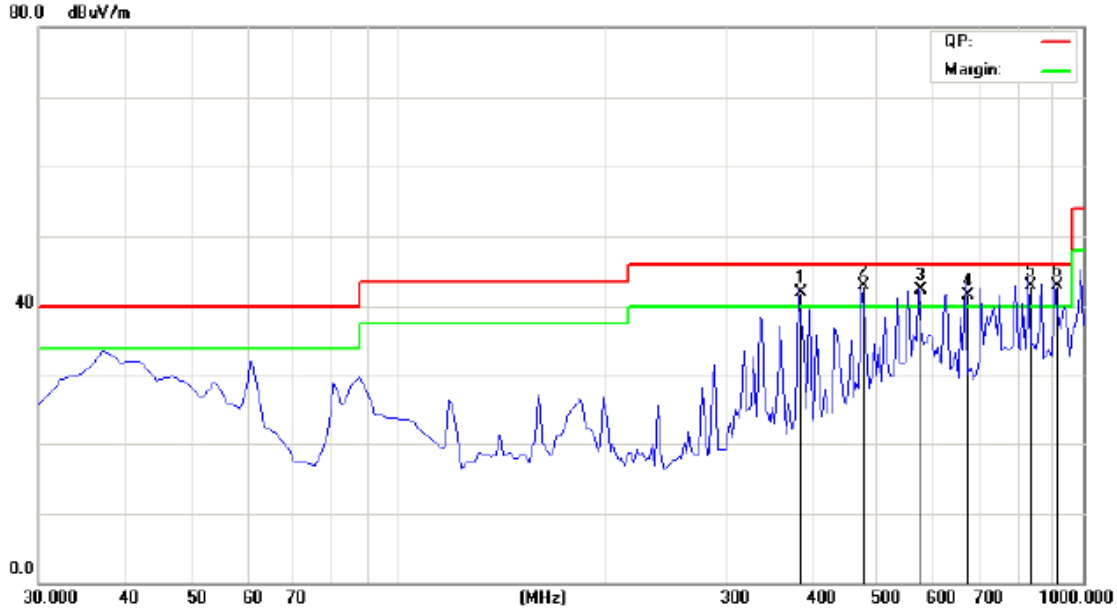
Temperature:25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Reading TF Card, Running EMC Test Program and Ping Wireless Network, Full Load

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
386.475	41.98	V	46.00
478.625	42.82	V	46.00
580.475	42.21	V	46.00
677.475	41.57	V	46.00
837.525	42.85	V	46.00
915.125	42.83	V	46.00

C: Radiated Disturbance (1000MHz----10000MHz)

EUT Operating Environment

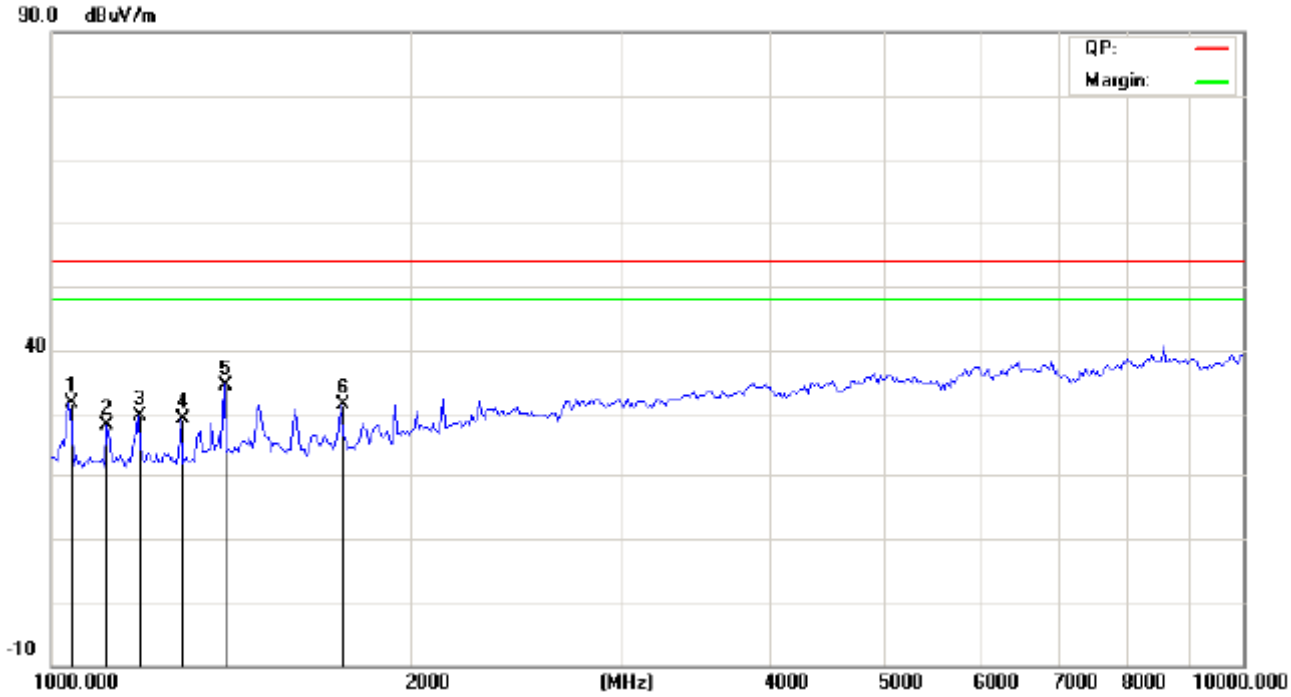
Temperature: 25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Reading TF Card and Running EMC Test Program, Full Load

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
1036.106	31.65(PK)	H	54(AV)
1112.012	28.12(PK)	H	54(AV)
1180.713	29.66(PK)	H	54(AV)
1288.528	29.20(PK)	H	54(AV)
1396.752	34.50(PK)	H	54(AV)
1747.768	31.26(PK)	H	54(AV)

Note: Due to the PK final radiated level less than the AV limit, so necessary take down the AV final radiated level

D: Radiated Disturbance (1000MHz----10000MHz)

EUT Operating Environment

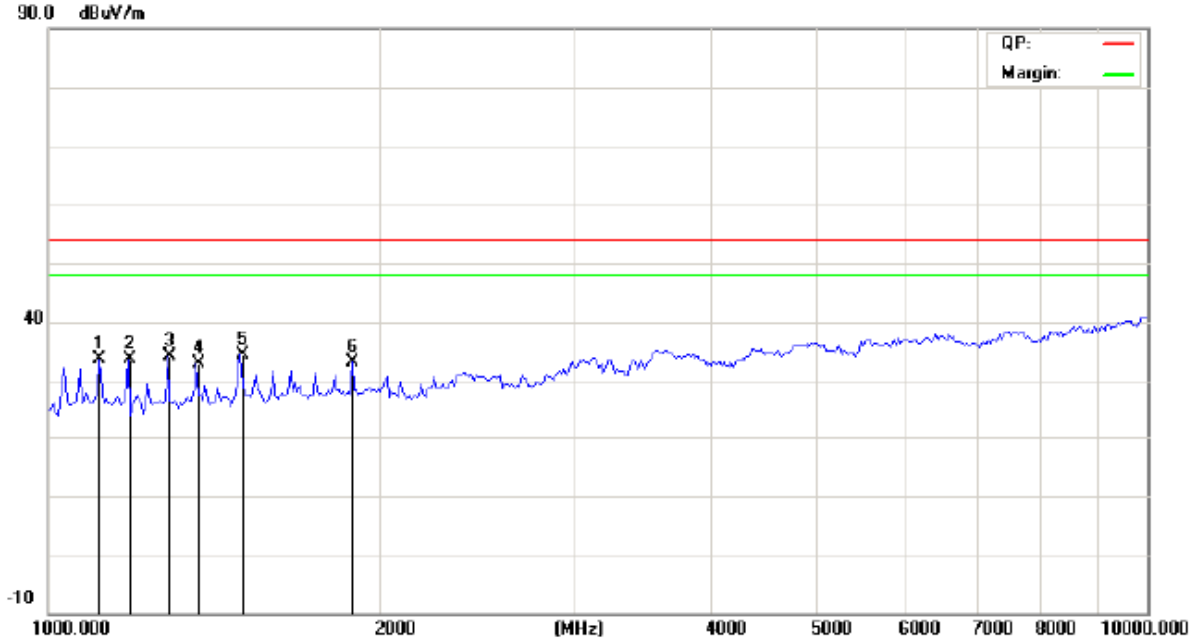
Temperature:25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Reading TF Card and Running EMC Test Program, Full Load

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
1112.017	33.62(PK)	V	54(AV)
1180.825	33.66(PK)	V	54(AV)
1288.862	34.20(PK)	V	54(AV)
1362.681	32.92(PK)	V	54(AV)
1493.994	34.47(PK)	V	54(AV)
1890.397	33.20(PK)	V	54(AV)

Note: Due to the PK final radiated level less than the AV limit, so necessary take down the AV final radiated level

E: Radiated Disturbance (30MHz----1000MHz)

EUT Operating Environment

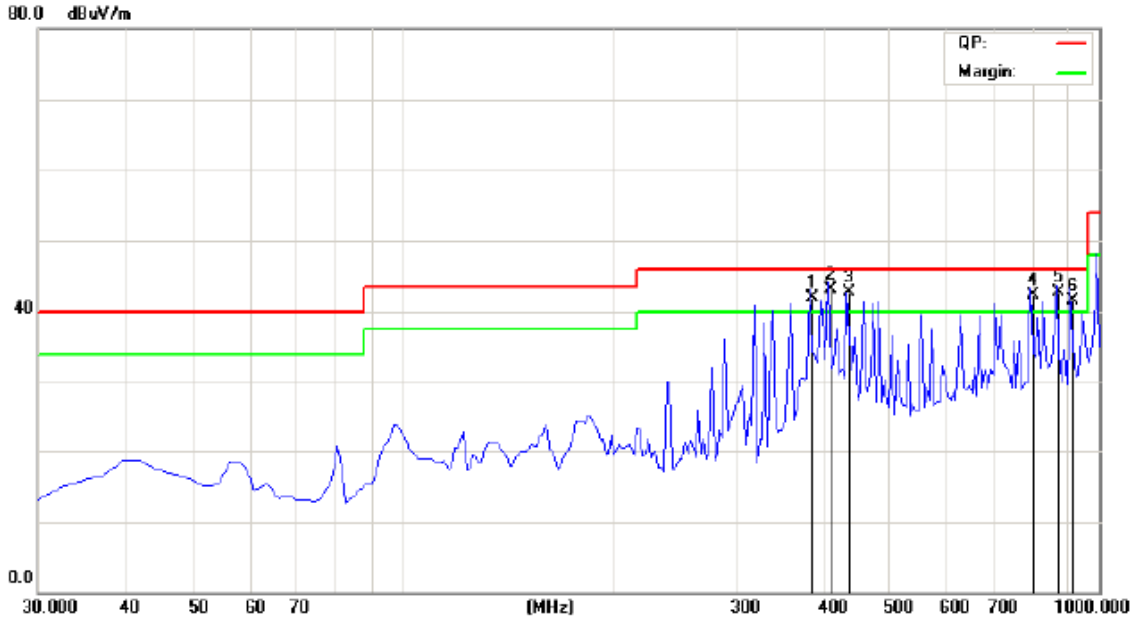
Temperature: 25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Data transmission (Note: EUT as a hard disk)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
386.475	41.86	H	46.00
410.725	43.08	H	46.00
434.975	42.63	H	46.00
796.300	42.37	H	46.00
876.325	42.70	H	46.00
915.125	41.52	H	46.00

F: Radiated Disturbance (30MHz----1000MHz)

EUT Operating Environment

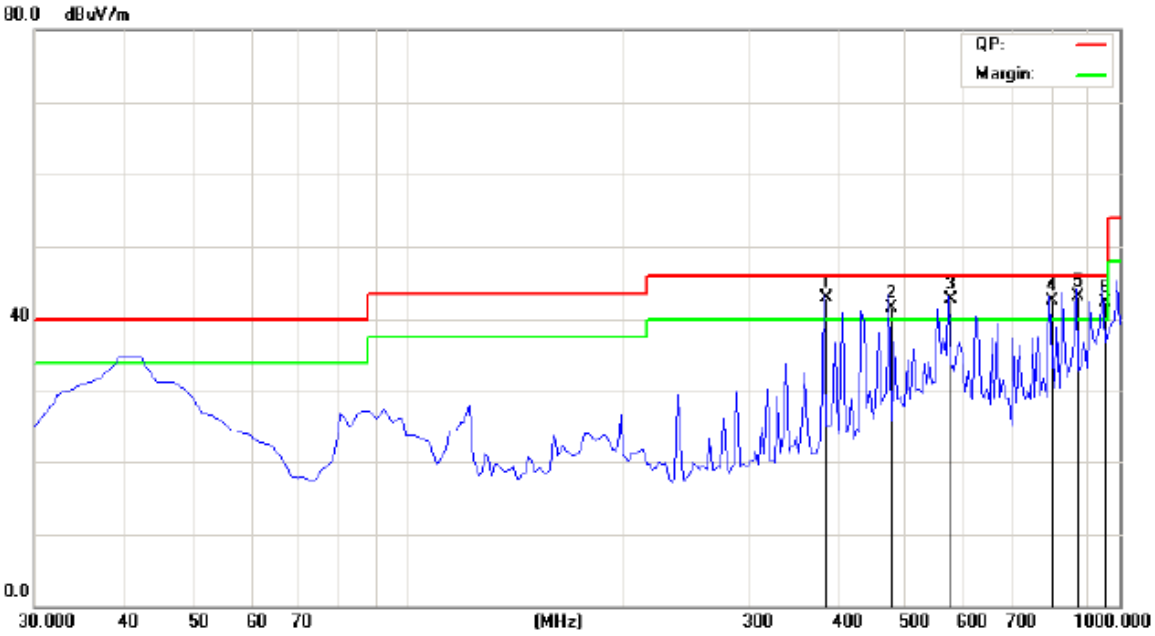
Temperature:25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Data transmission (Note: EUT as a hard disk)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
386.475	42.84	V	46.00
478.625	41.58	V	46.00
580.475	42.65	V	46.00
796.300	42.58	V	46.00
876.325	43.14	V	46.00
956.350	42.28	V	46.00

G: Radiated Disturbance (1000MHz----10000MHz)

EUT Operating Environment

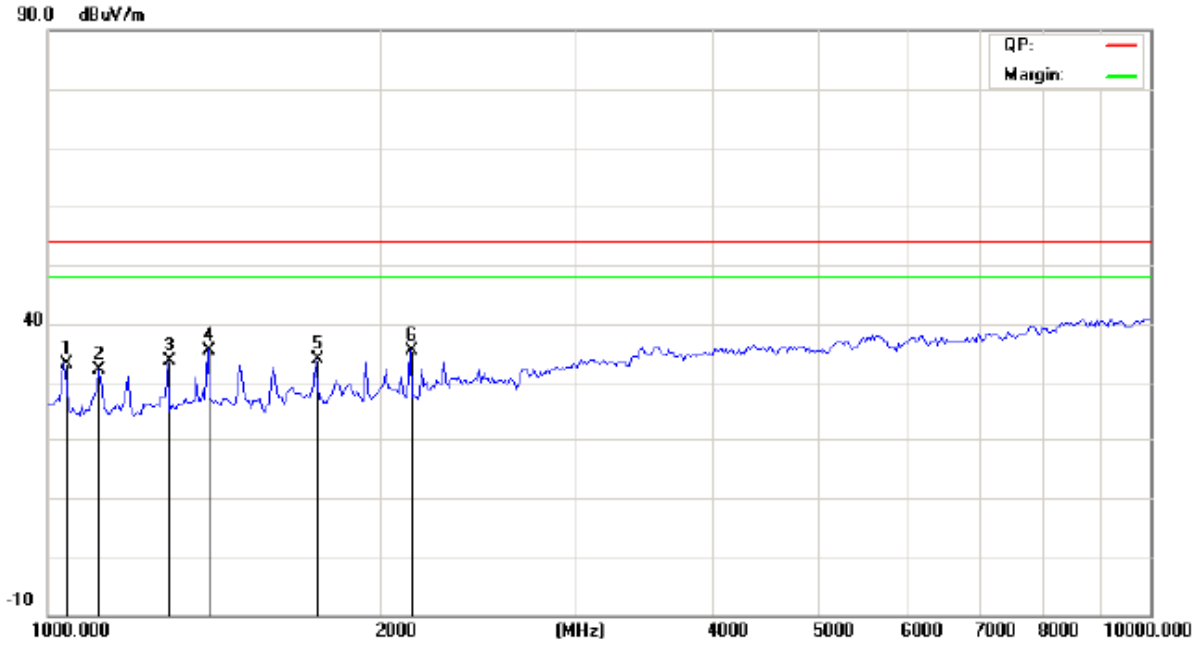
Temperature: 25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Data transmission (Note: EUT as a hard disk)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
1036.072	33.15(PK)	H	54.00(AV)
1111.967	32.12(PK)	H	54.00(AV)
1288.577	33.70(PK)	H	54.00(AV)
1396.793	35.50(PK)	H	54.00(AV)
1747.773	33.76(PK)	H	54.00(AV)
2136.273	35.44(PK)	H	54.00(AV)

Note: Due to the PK final radiated level less than the AV limit, so necessary take down the AV final radiated level

H: Radiated Disturbance (1000MHz----10000MHz)

EUT Operating Environment

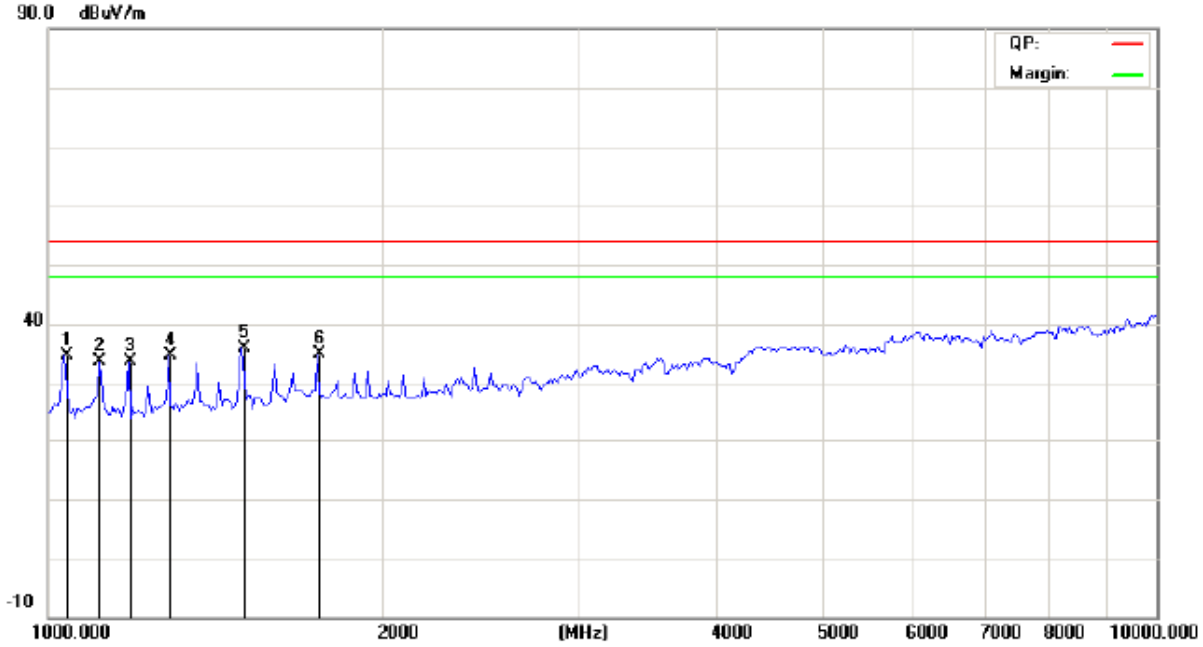
Temperature:25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Data transmission (Note: EUT as a hard disk)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
1036.156	34.65 (PK)	V	54.00 (AV)
1111.983	33.62 (PK)	V	54.00 (AV)
1180.756	33.66 (PK)	V	54.00 (AV)
1288.606	34.70 (PK)	V	54.00 (AV)
1494.052	35.95 (PK)	V	54.00 (AV)
1747.758	34.76 (PK)	V	54.00 (AV)

Note: Due to the PK final radiated level less than the AV limit, so necessary take down the AV final radiated level

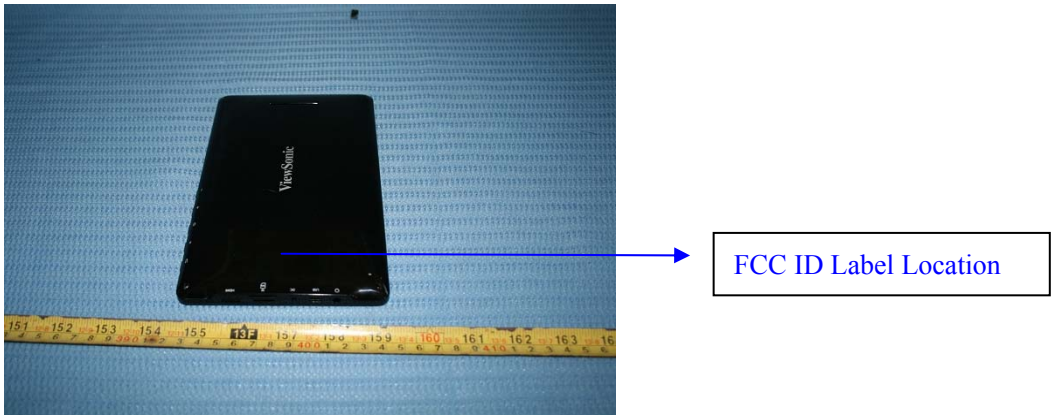
6.0 FCC Label

FCC ID: Y5KM801

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Mark Location: On the product body



Appendix:

Conducted Emission

Radiated Emission Test View:

NOTE: For the product photos, please see test report TW1012246-01

-End of the report-