TECHNICAL REPORT

卓時檢測 TIMEWAY TESTING LABORATORY

ISO/IEC17025 Accredited Lab.

Report No: FCC 1006393-03
File reference No: 2010-08-02

Applicant: Shenzhen Sinchun Electronic Co., Ltd

Product: NOTE BOOK

Model No: M5A

Trademark: saycool

Test Standards: FCC Part 15 Subpart B: 2008

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

Jack Chung

Jack Chung

Manager

Dated: Aug 02, 2010

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.

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:	Dongguan Tangxia USmart Electronic Products Limited
Address:	No.12,Lu Yi 2 Road, Tang Xia Town,Dongguan City,Guang Dong Prov.,China
Telephone:	+86-769-87911890
Fax:	+86-769-87915263

1.3 Description of EUT

Product:	NOTE BOOK
Manufacturer:	Shenzhen Sinchun Electronic Co., Ltd
Brand Name:	saycool
Model Number:	UMPC891

The adapter Model No.: XKD-C20001C 12.0-24W

Rating: Input: 100-240V~1.0A 60/50Hz ； Output: 12V-2A

1.4 Submitted Sample: 1 Sample

1.5 Test Duration: 2010-06-30-2010-08-02

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by Terry Tong

Print Name: Terry Tong

2.0 List of Measurement Equipment

2.1 Conducted Emission Test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESH3	860905/006	RS	2010.4.26	1Year
Spectrum Analyzer	ESA-L1500A	US37451154	HP	2010.4.26	1Year
PULSE LIMITER	ESH3-Z2	100281	RS	2010.4.26	1Year
LISN	ESH3-Z5	100294	RS	2010.4.26	1Year
LISN	ESH3-Z5	100253	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
Mouse	OM860XC	HM0509	BIGCOW	Data cable of 1.5m length	FCC DOC
U-disk	U208	--	Netac	--	FCC DOC
Earphone	--	--	--	Data cable of 1.0m length	--
LCD Monitor	Q5T4	--	BENQ	--	FCC DOC
SD	--	--	Kingston	--	--

3.0 Technical Details

3.1 Investigations Requested

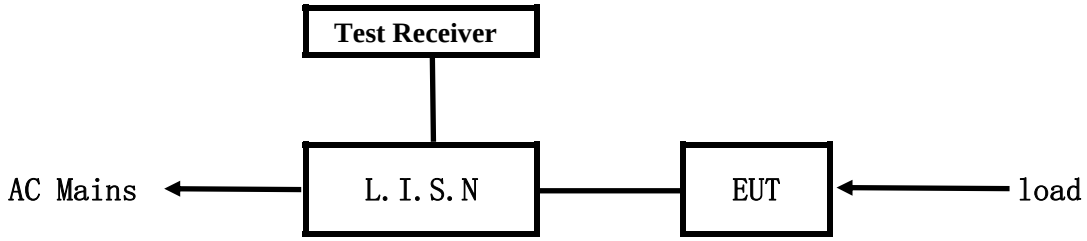
Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

3.2 Test Standards

FCC Part 15 Subpart B: 2008

4.0 Conducted Power line Test

4.1 Schematics of the test



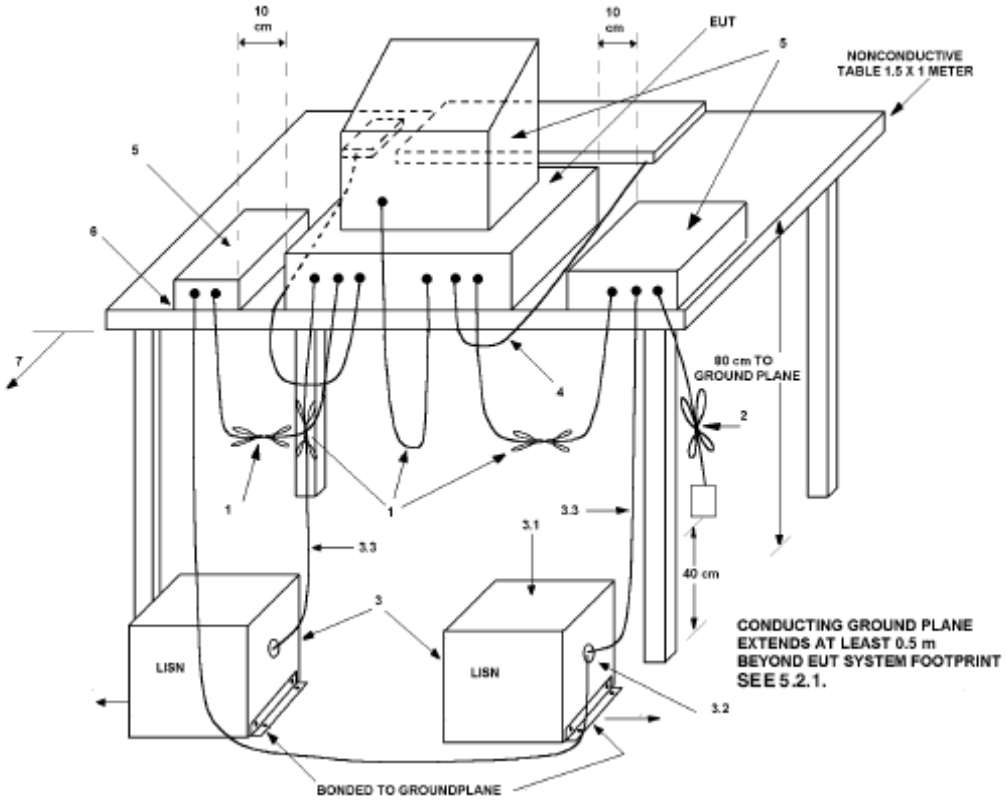
EUT: Equipment Under Test

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.

Actual Working Voltage and Frequency: 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

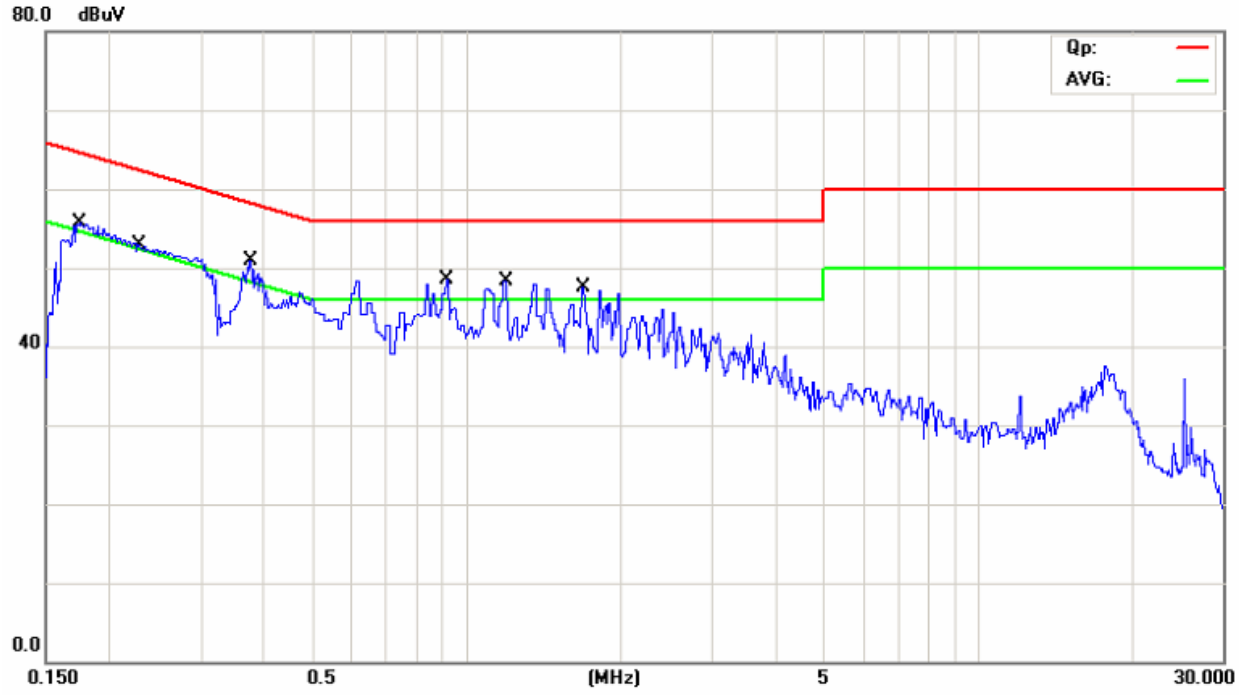
The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

A Conducted Emission on Line Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Read USB, TF card and Running EMC test software and Ping wireless network

Results: **Pass**

Please refer to following diagram for individual



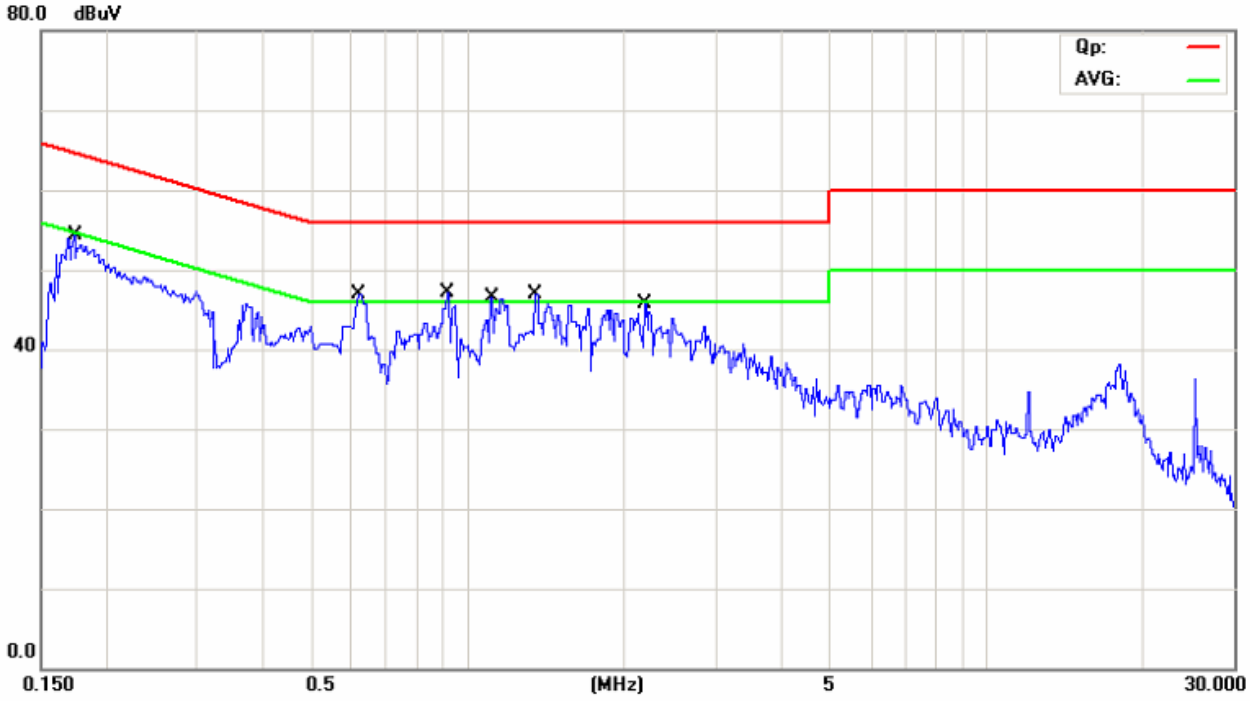
Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Line		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1753	54.35	45.57	--	--	64.71	54.71
0.2278	51.29	42.91	--	--	62.53	52.53
0.3756	49.89	40.82	--	--	58.38	48.38
0.9162	47.47	40.04	--	--	56.00	46.00
1.1861	47.21	38.09	--	--	56.00	46.00
1.6812	46.33	37.42	--	--	56.00	46.00

B **Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)**

EUT set Condition: Read USB, TF card and Running EMC test software and Ping wireless network

Results: **Pass**

Please refer to following diagram for individual



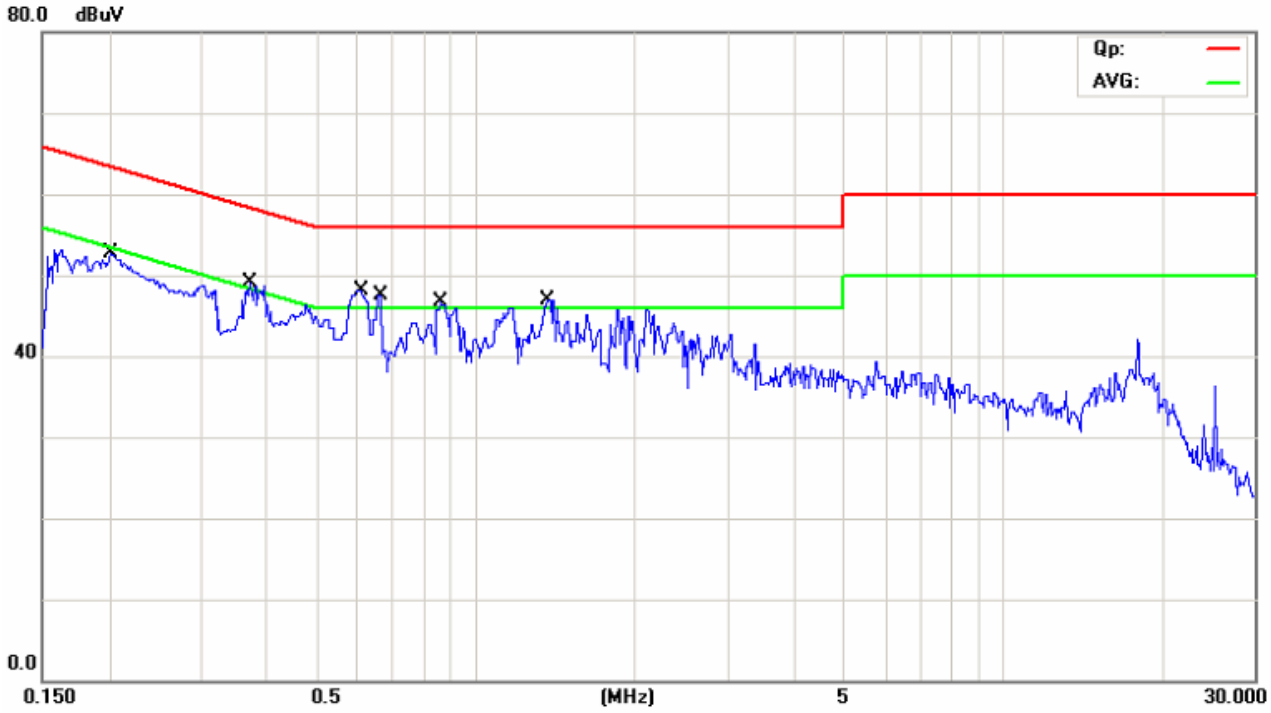
Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1736	--	--	53.25	46.39	64.79	54.79
0.6237	--	--	45.99	40.02	56.00	46.00
0.9162	--	--	46.23	38.65	56.00	46.00
1.1072	--	--	46.74	39.46	56.00	46.00
1.3550	--	--	45.97	37.06	56.00	46.00
2.1987	--	--	44.83	38.61	56.00	46.00

C Conducted Emission on Line Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Running notebook test program , Ping network and Keep Bluetooth Transmitting

Results: **Pass**

Please refer to following diagram for individual



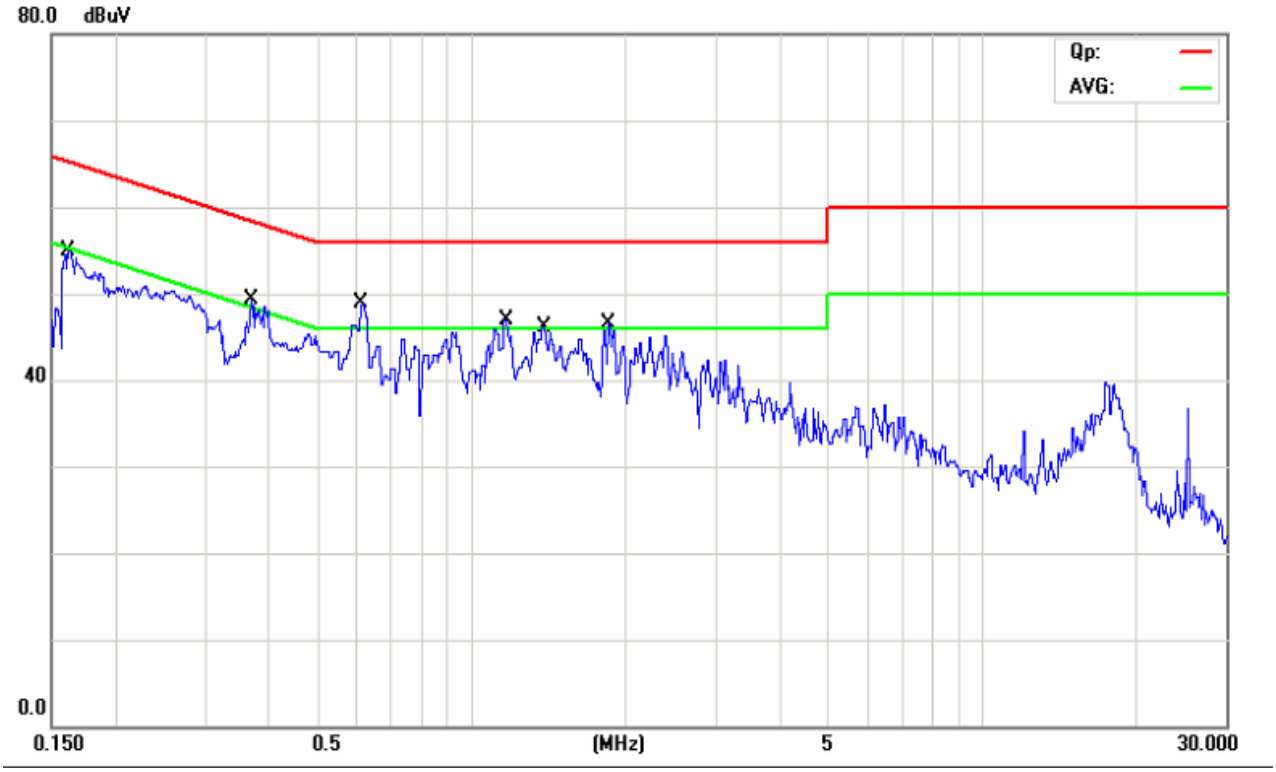
Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Line		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.2006	--	--	52.64	41.20	63.59	53.59
0.3704	--	---	49.16	39.84	58.49	48.49
0.6011	--	--	48.05	39.26	56.00	46.00
0.6573	--	---	47.54	39.15	56.00	46.00
0.8600	--	--	46.79	38.67	56.00	46.00
1.3662	--	--	46.98	38.26	56.00	46.00

D **Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)**

EUT set Condition: Running notebook test program , Ping network and Keep Bluetooth Transmitting

Results: **Pass**

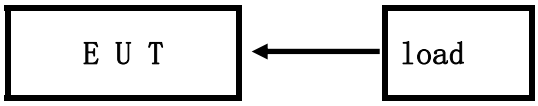
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1621	53.36	44.85	--	--	65.36	55.36
0.3687	47.56	38.79	--	--	58.53	48.53
0.6124	47.81	39.60	--	--	56.00	46.00
1.1635	45.64	36.31	--	--	56.00	46.00
1.3772	46.35	36.81	--	--	56.00	46.00
1.8500	45.02	34.21	--	--	56.00	46.00

5.0 Radiated Disturbance Test

5.1 Schematics of the test

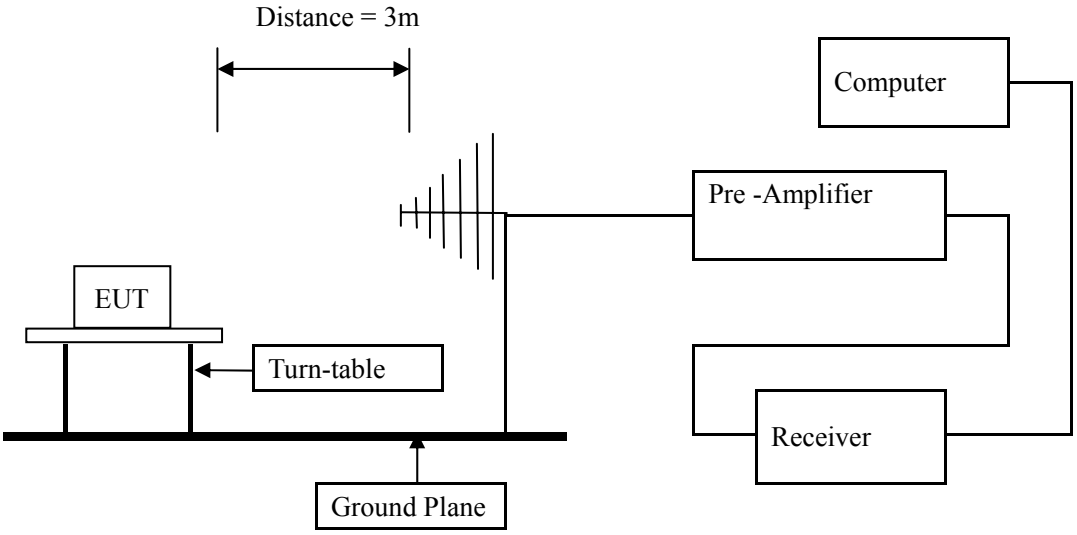


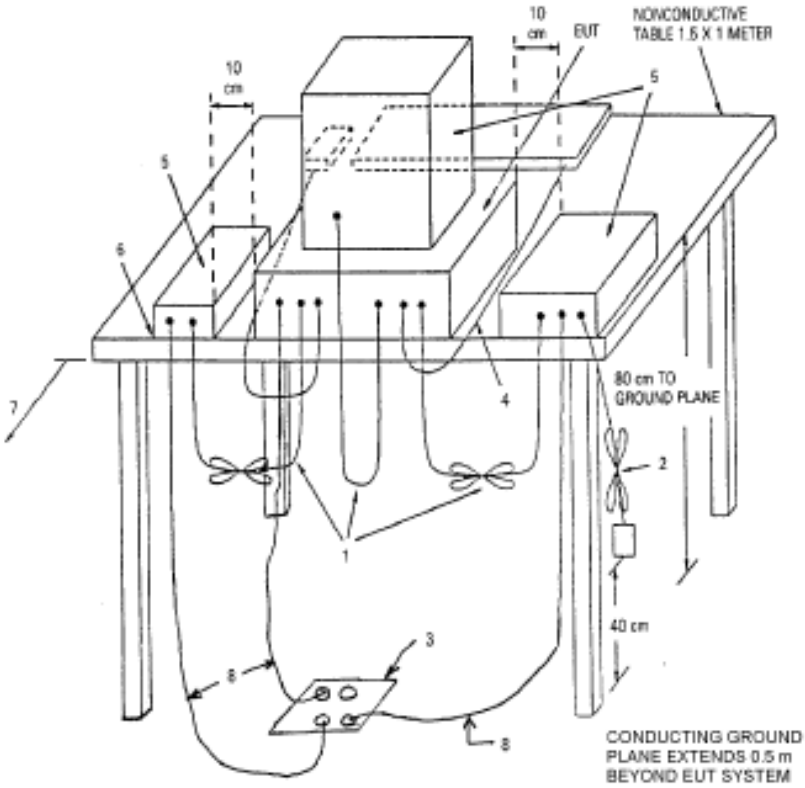
5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2003, The frequency spectrum from 30MHz to 18GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK

Actual Working Voltage and Frequency: 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 18GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120KHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK. Measurements were made at 3 meters.

Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal (30MHz----1000MHz)

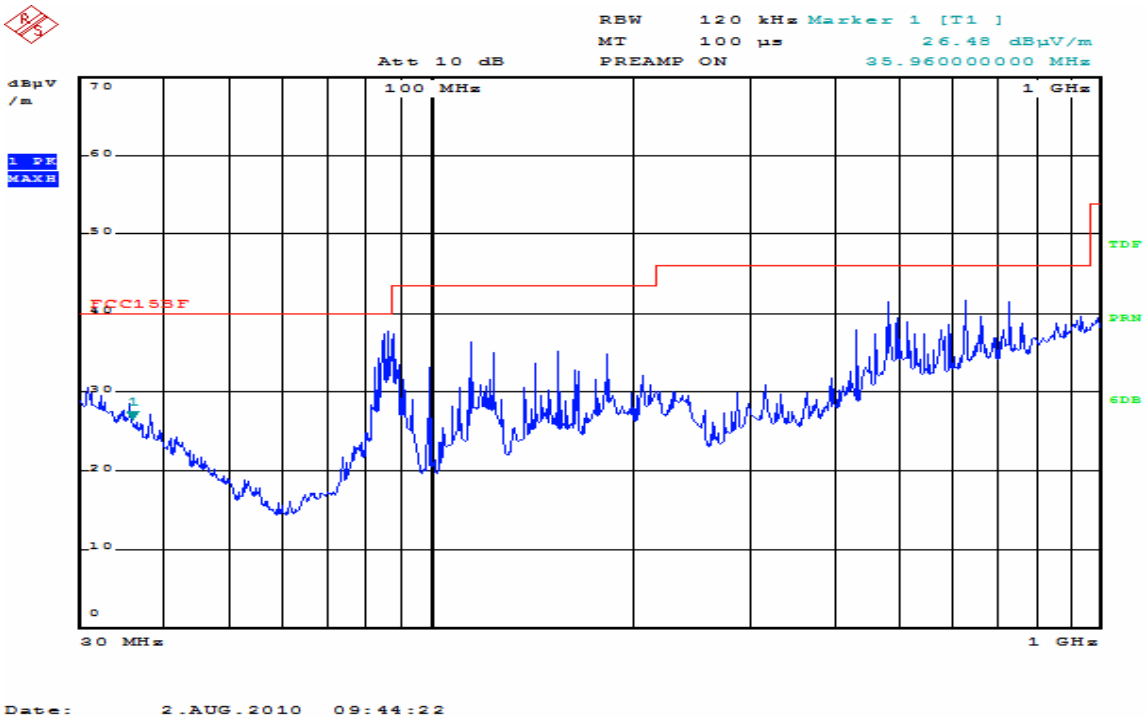
EUT set Condition: Read USB, TF card and Running EMC test software and Ping wireless network

Results: **Pass**

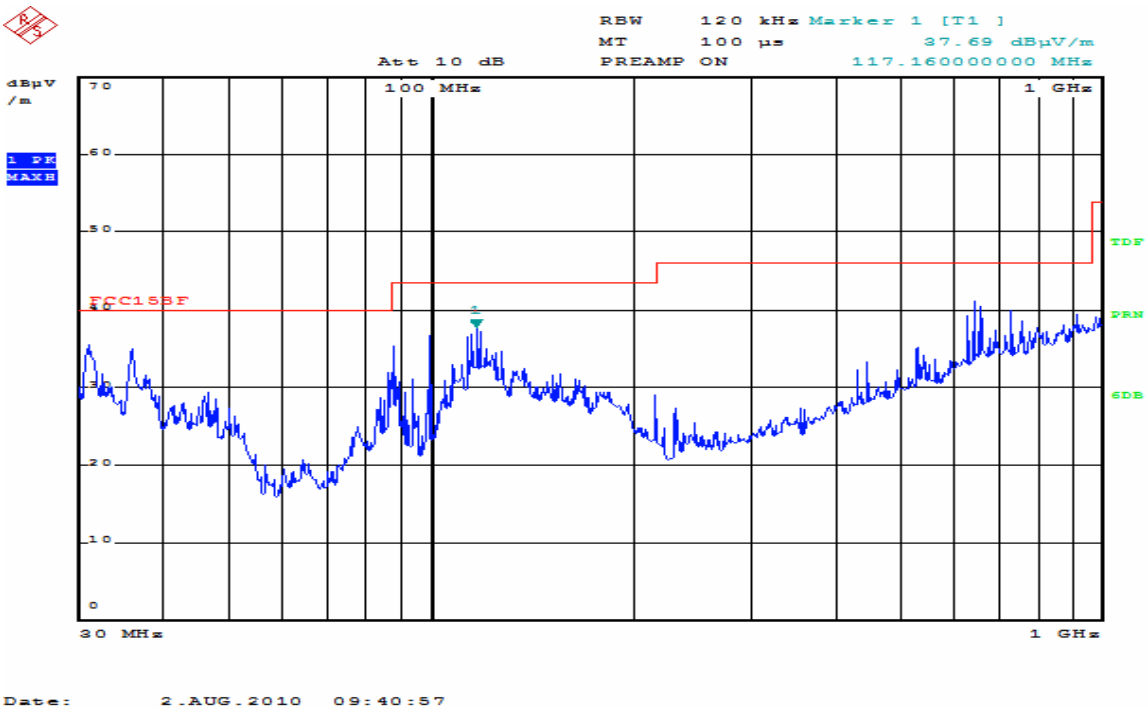
Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
86.36	30.19	H	40.00
115.64	24.83	H	43.50
481.00	33.74	H	46.00
35.96	30.12	V	40.00
99.56	38.35	V	43.50
117.16	30.87	V	43.50

Test Figure:

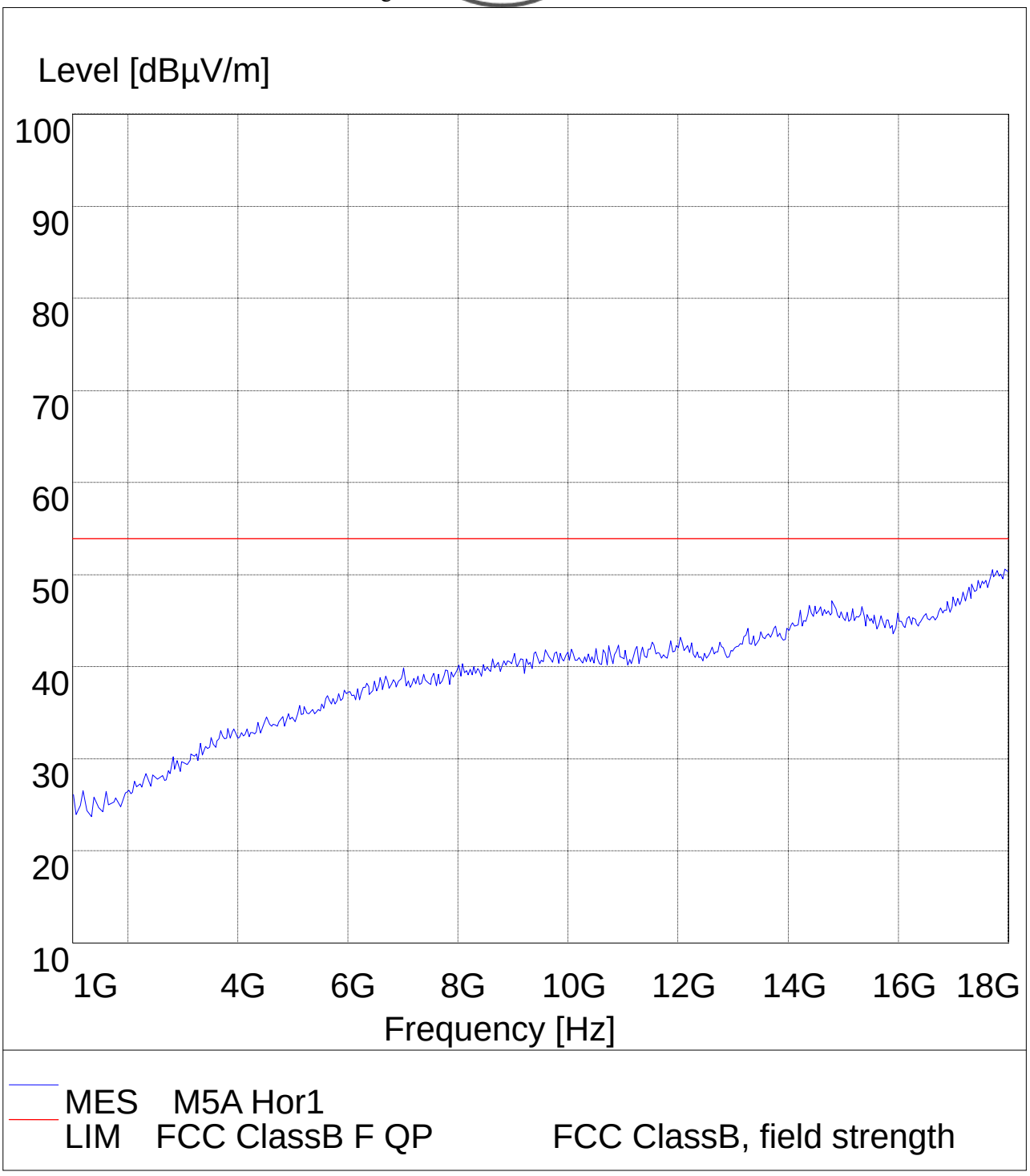
H



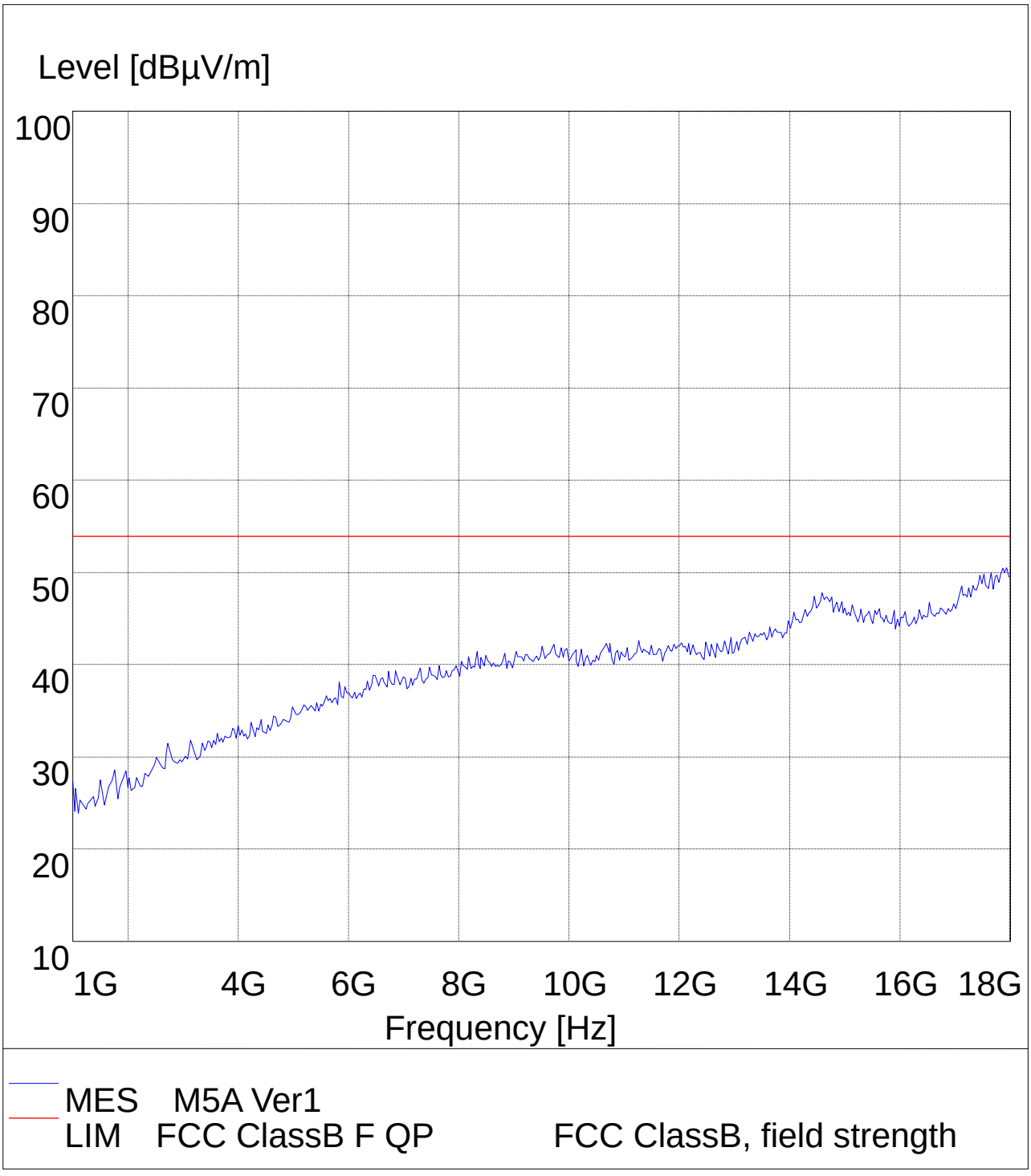
V



Test Figure: Horizontal



Test Figure: Vertical



Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal (30MHz----1000MHz)

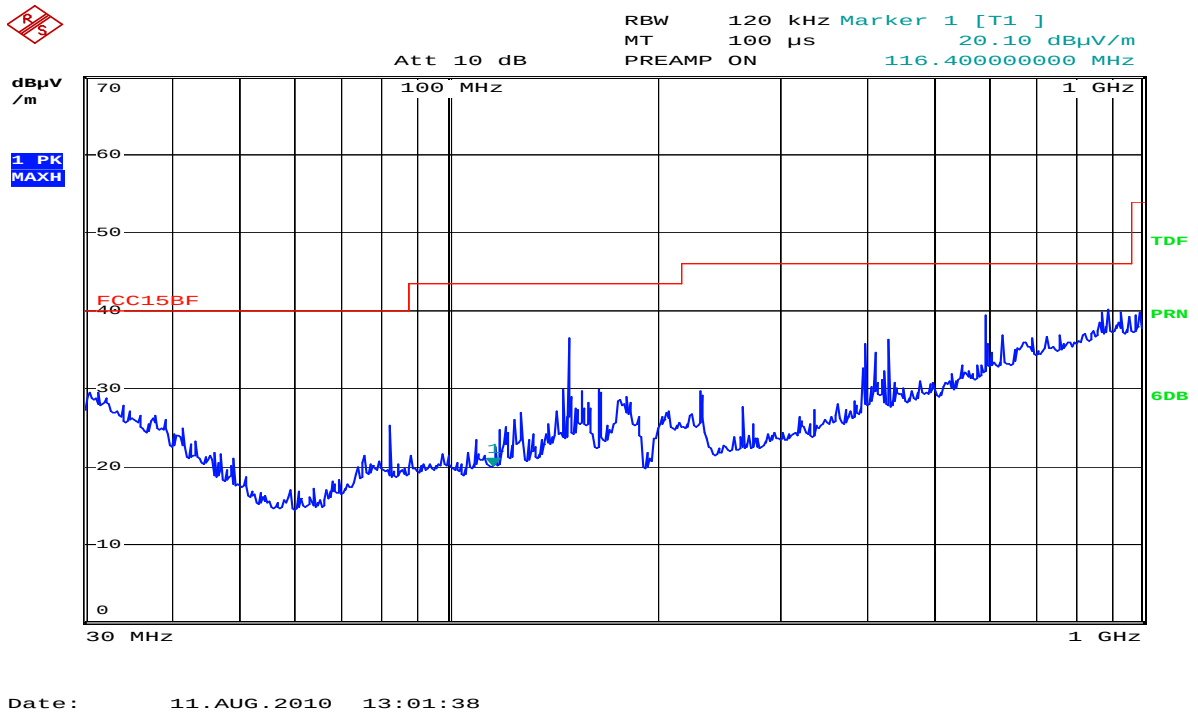
EUT set Condition: Running notebook test program , Ping network and Keep Bluetooth Transmitting

Results: **Pass**

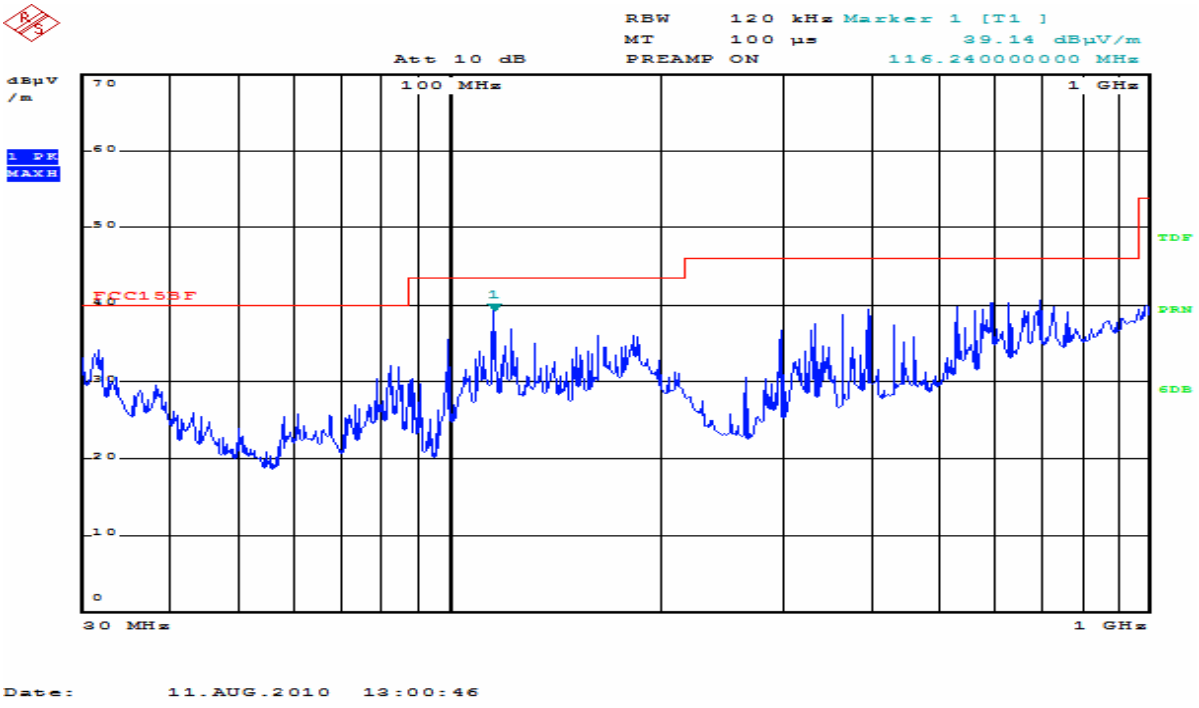
Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
158.62	29.54	H	43.50
399.65	26.89	H	46.00
598.38	28.41	H	46.00
99.85	31.25	V	43.50
116.40	30.85	V	43.50
398.46	31.67	V	46.00

Test Figure:

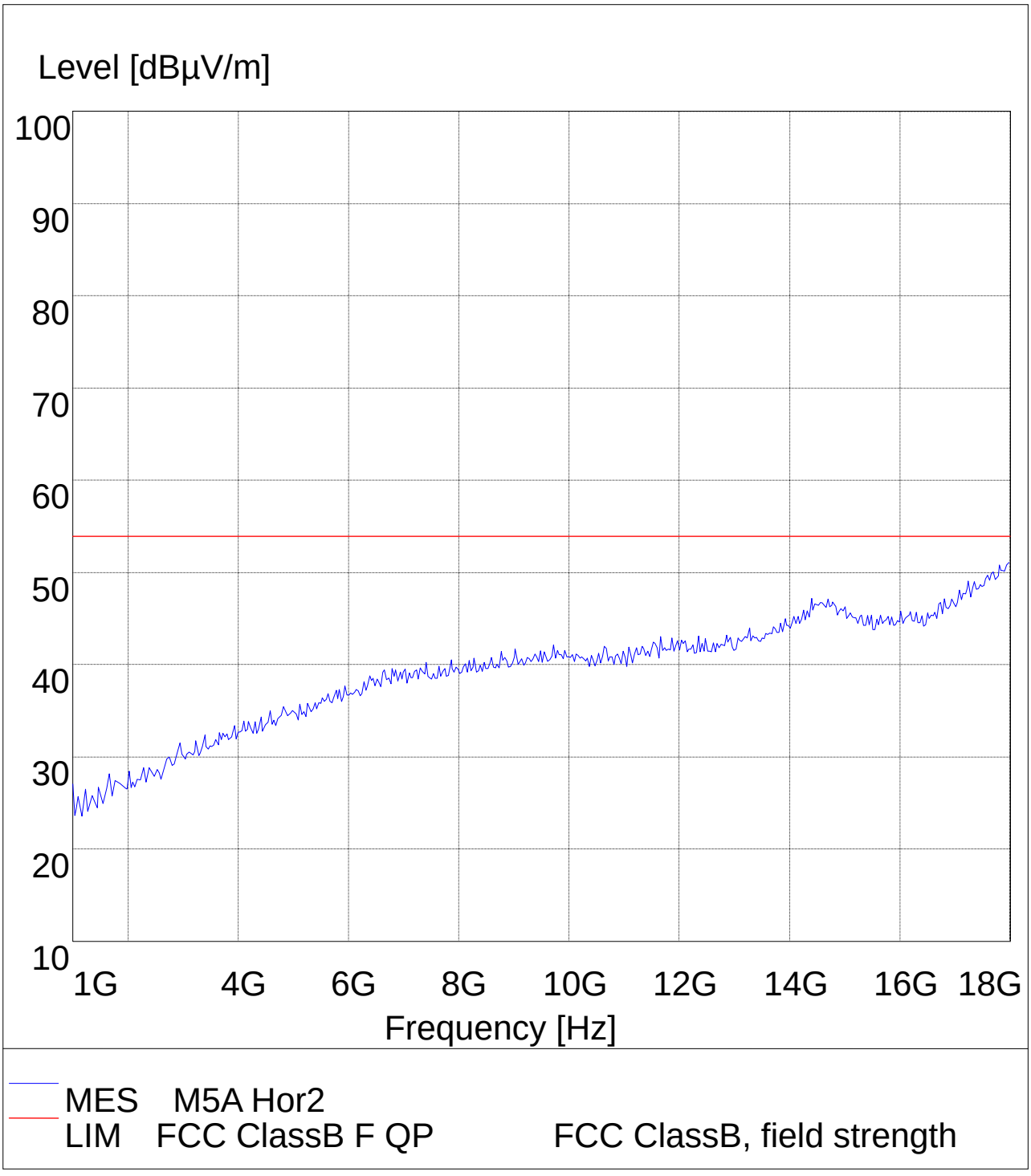
H



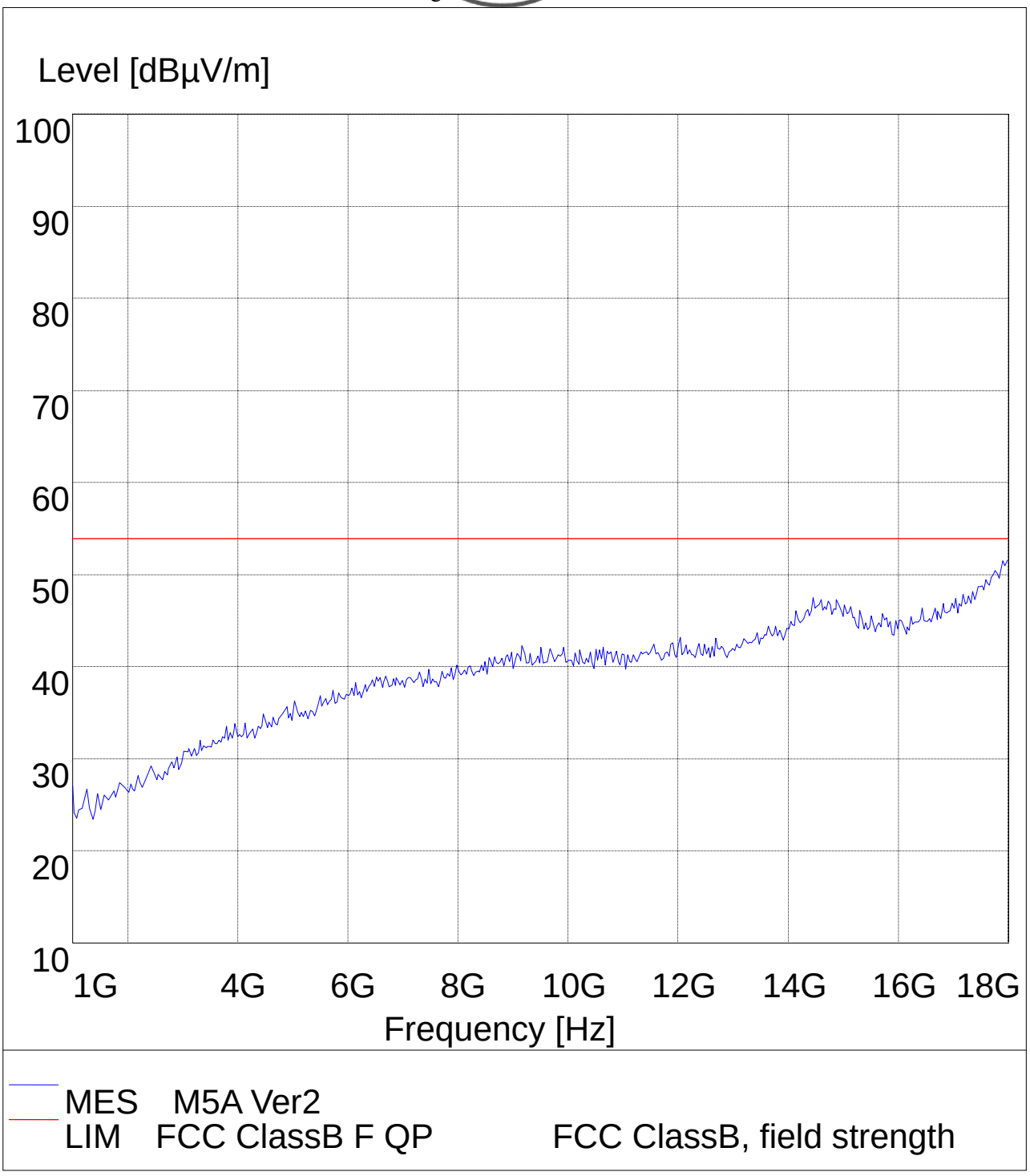
V



Test Figure: Horizontal



Test Figure: Vertical



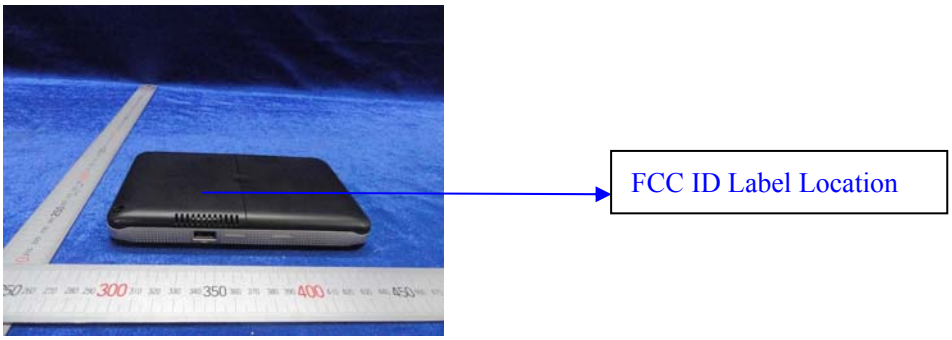
6.0 FCC ID Label

FCC ID: YG6M5A

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:



7.0 Photo of testing

7.1 Conducted test View--
Please refer to report EMC1006393-02

7.2 Radiated emission test view--
Please refer to report EMC1006393-02

-End of the report-