



卓時檢測
TIMEWAY TESTING LABORATORY



ISO/IEC17025 Accredited Lab.

Report No: FCC 0902016-02

File reference No: 2009-04-08

Applicant: Dongguan Tangxia USmart Electronic Products Limited

Product: Laptop Computer

Model No: LB-1017

Trademark: N/A

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: April 08,2009

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.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Test Report Conclusion
Content

1.0	General Details	4
1.1	Test Lab Details	4
1.2	Applicant Details	4
1.3	Description of EUT	4
1.4	Test Uncertainty	4
1.5	Submitted Sample	4
1.6	Test Duration	4
2.0	List of Measurement Equipment	5
2.1	Conducted Emission Test	5
2.2	Radiated electromagnetic disturbance test	5
2.3	Auxiliary Equipment	5
3.0	Technical Details	7
3.1	Investigations Requested	7
3.2	Test Standards	7
4.0	Power line Conducted Emission Test	8
5.0	Radiated Disturbance Test	19
6.0	FCC ID Label	28
7.0	Photo of testing	29

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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: Laptop Computer
Manufacturer: Dongguan Tangxia USmart Electronic Products Limited
Brand Name: N/A
Model Number: LB-1017
Additional Model Number: LB-1017XX,(XXIndicate the different shell colors and with different clients)
Rating: Input: DC 19V,57W
The adapter Model No.: ADP193-32, (Made by Huntkey)
Rating: Input: 100-240V, 1.5A Max, 50/60Hz Output: 19V, 3.42A
The adapter Model No.: YJS05-1903000D (Made by SWITCHING)
Rating: Input: 100-240V, 1.5A Max, 47-63Hz Output: 19V, 3A

1.4 Submitted Sample: 1 Sample

1.5 Test Duration: 2009-02-23 to 2009-04-08

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB
Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by

A handwritten signature in black ink that reads 'Terry Tong'.

Print Name: Terry Tong

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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	830245/009	RS	2009.2.23	1 Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
LISN	NTFM8132	8132137	SCHWARZBECK	2009.2.24	1 Year
LISN	NTFM8134	8134109	SCHWARZBECK	2009.2.24	1 Year
LISN	NTFM8136	8136102	SCHWARZBECK	2009.2.24	1 Year

2.2 Radiated electromagnetic disturbance test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESCS30	830245/009	RS	2009.2.23	1 Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer(with Tracking Generator)	MS2661C	MT72089	ANRITSU	2009.2.23	1 Year
Amplifier	MH648A	M20494	ANRITSU	2009.2.24	1 Year
Bilog Antenna	CBL6101C	2576	CHASE	2009.2.23	1 Year

2.3 Auxiliary Equipment

Name	Model No.	Serial No.	Manufacturer	Cable	FCC ID/DOC
Monitor	6331-4CN	23-DNWX3	IBM	Data cable of 1.5m length unshielded and 1.8m length AC Mains cable	FCC ID
Mouse	OM860XC	HM0509	BIGCOW	Data cable of 1.5m length	FCC DOC
Monitor	FP51G	ET47604175CLO	BENQ	Data cable of 1.5m length unshielded and 1.8m length AC Mains cable	FCC DOC
External hard disk	SHE046	D090300112053	SSK	Data cable of 1.0m length	FCC DOC

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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

The report refers only to the sample tested and does not apply to the bulk.

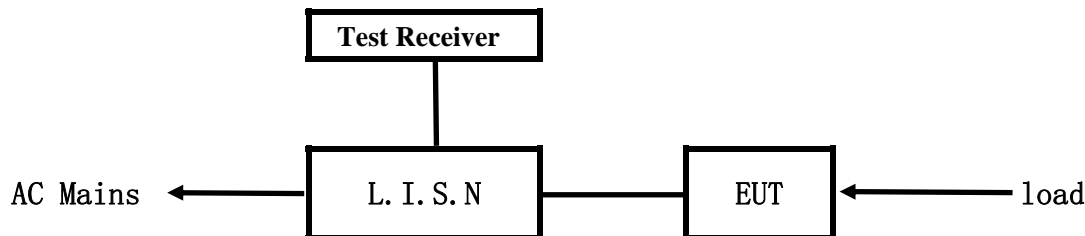
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



4.0 Conducted Power line Test

4.1 Schematics of the test



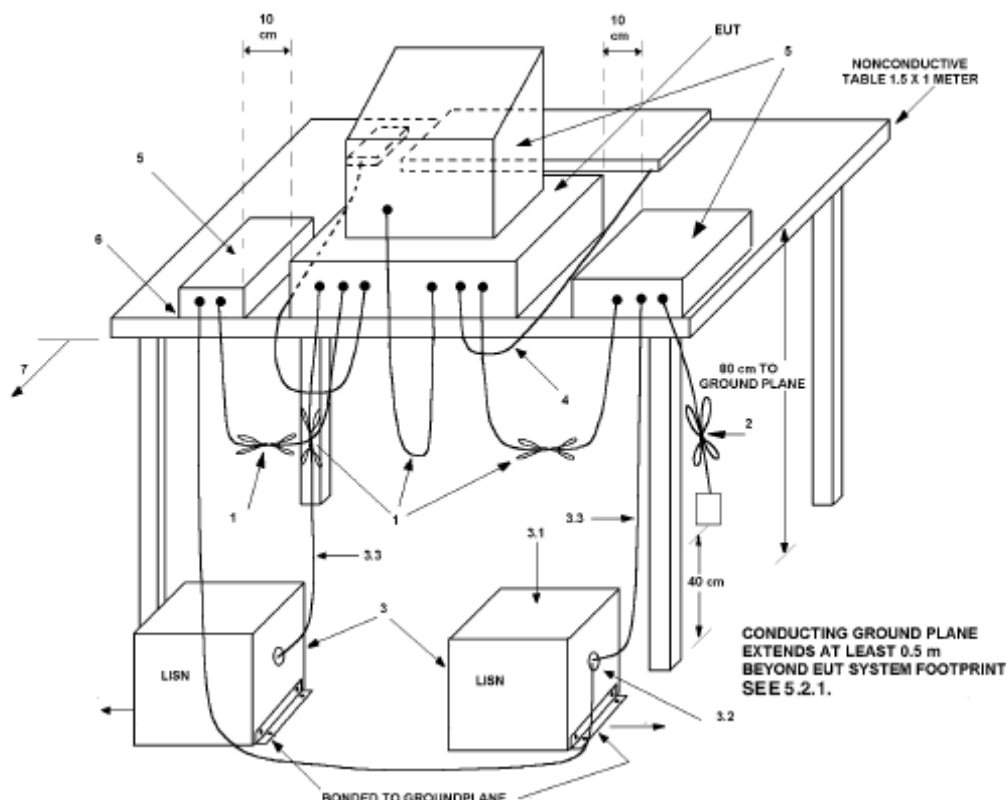
EUT: Equipment Under Test

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



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



4.3 Power line conducted Emission Limit

Frequency(MHz)	Class A Limits dB(μ V)		Class B Limits dB(μ V)	
	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,SD card and software, Running EMC test software and Ping wireless network

Adaptor used for test Model No.: ADP193-32

Results: Pass

Please refer to following diagram for individual

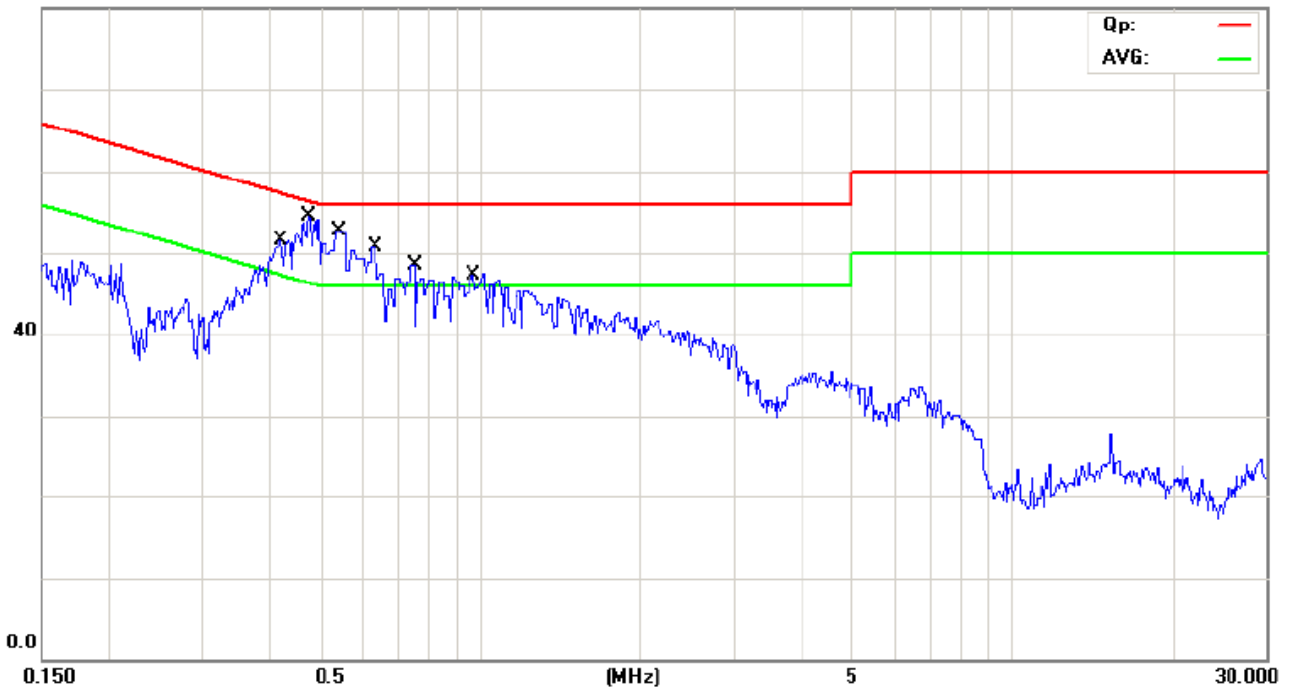
File :LB-1017

Data :#6

Date: 09/02/26/

Time: 15/30/55

80.0 dB μ V



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Line		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.4194	54.69	34.99	--	--	57.46	47.46
0.4761	39.55	24.85	--	--	56.41	46.41
0.5410	45.01	30.31	--	--	56.00	46.00
0.6290	41.61	27.41	--	--	56.00	46.00
0.7495	40.53	23.93	--	--	56.00	46.00
0.9750	40.37	28.27	--	--	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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

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

Adaptor used for test Model No.: ADP193-32

Results: Pass

Please refer to following diagram for individual

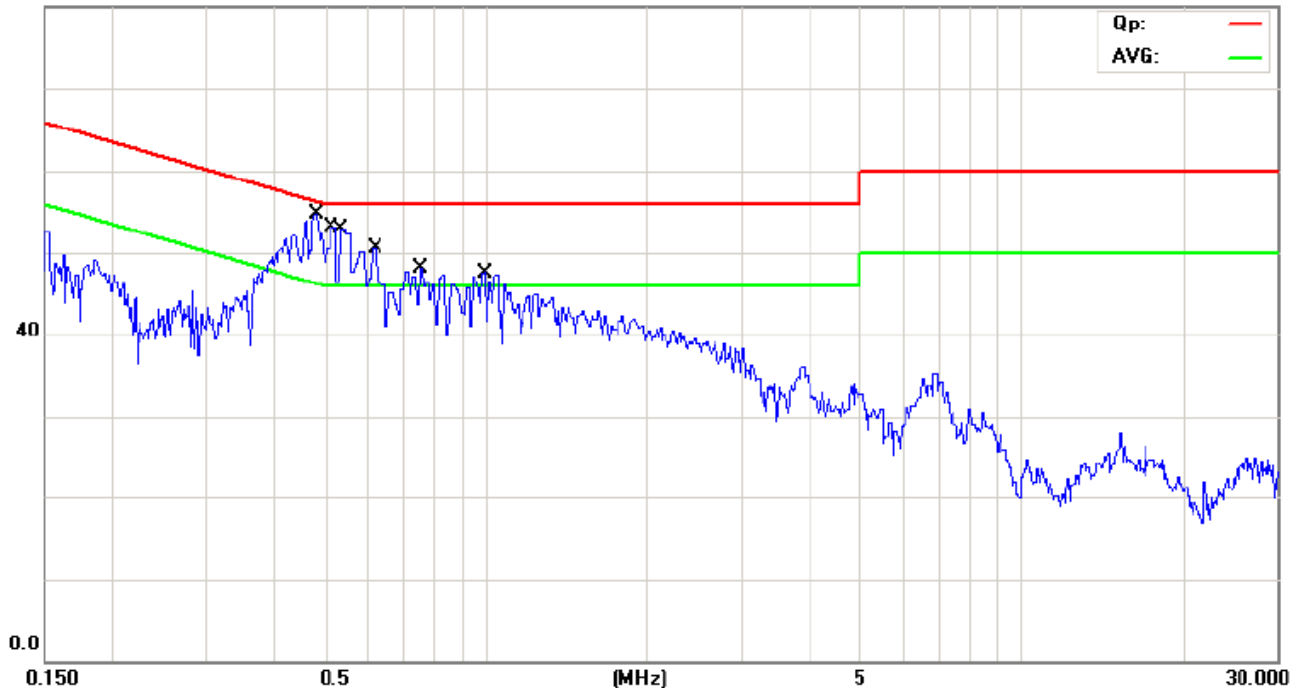
File :LB-1017

Data :#5

Date: 09/02/26/

Time: 15/22/38

80.0 dBuV



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.4790	--	--	40.05	24.35	56.36	46.36
0.5130	--	--	42.88	27.08	56.00	46.00
0.5321	--	--	44.60	28.20	56.00	46.00
0.6163	--	--	41.49	25.99	56.00	46.00
0.7466	--	--	40.33	24.03	56.00	46.00
0.9996	--	--	25.70	23.30	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.

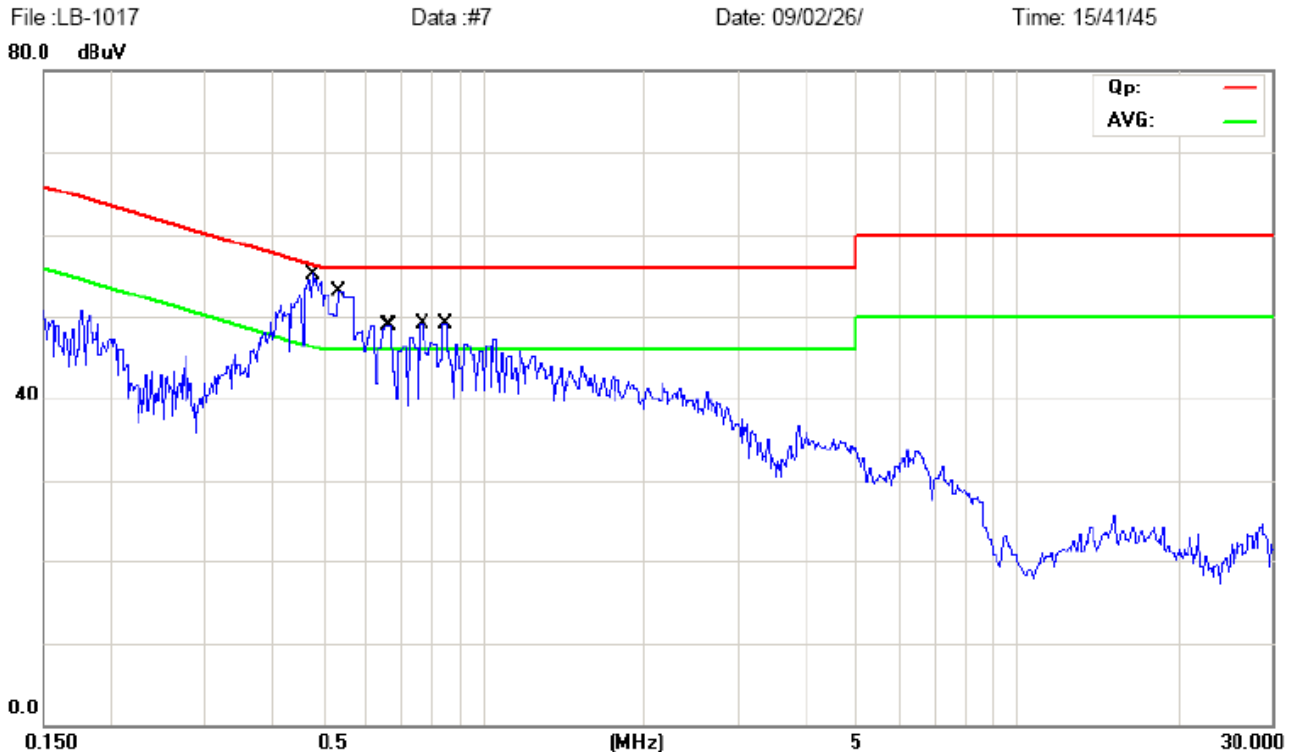
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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

EUT set Condition: Running notebook test program and Ping network
Adaptor used for test Model No.: ADP193-32
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
0.4780	50.25	24.85	--	--	56.37	46.37
0.5342	44.91	28.61	--	--	56.00	46.00
0.6673	40.25	22.75	--	--	56.00	46.00
0.7696	41.76	28.66	--	--	56.00	46.00
0.8441	41.53	28.33	--	--	56.00	46.00
0.8387	41.33	28.93	--	--	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertizing. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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

EUT set Condition: Running notebook test program and Ping network
Adaptor used for test Model No.: ADP193-32

Results: Pass

Please refer to following diagram for individual

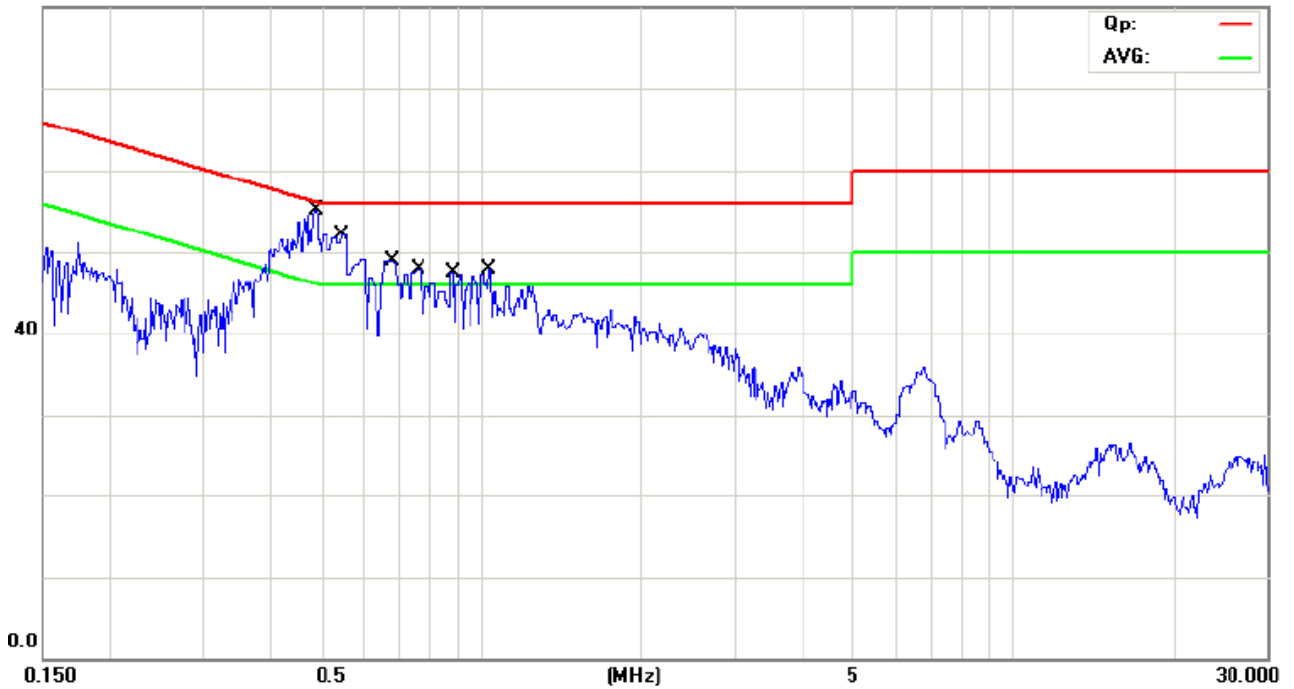
File :LB-1017

Data :#8

Date: 09/02/26/

Time: 15/52/49

80.0 dBuV



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.4874	--	--	40.36	29.06	56.21	46.21
0.5395	--	--	45.11	29.91	56.00	46.00
0.6811	--	--	39.86	23.26	56.00	46.00
0.7564	--	--	40.94	24.44	56.00	46.00
0.8805	--	--	39.47	22.87	56.00	46.00
1.0353	--	--	40.41	26.81	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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

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

Adaptor used for test Model No.: YJS05-1903000D

Working Voltage: 120V~ 60Hz

Results: Pass

Please refer to following diagram for individual

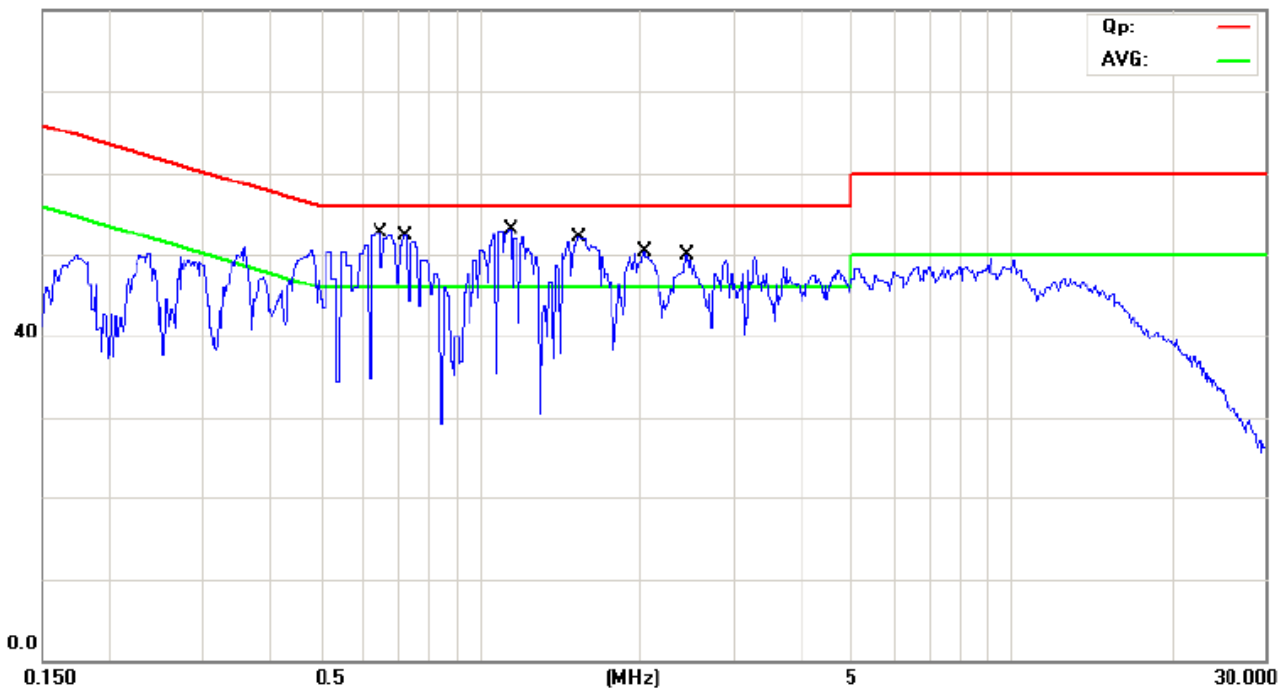
File :LB-1017

Data :#9

Date: 09/04/03/

Time: 9/46/43

80.0 dB μ V



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.6448	--	--	42.82	37.42	56.00	46.00
0.7200	--	--	48.90	34.60	56.00	46.00
1.1325	--	--	52.35	30.65	56.00	46.00
1.5471	--	--	50.12	33.12	56.00	46.00
2.0232	--	--	48.21	33.51	56.00	46.00
2.4403	--	--	47.18	33.78	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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

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

Adaptor used for test Model No.: YJS05-1903000D

Working Voltage: 120V~ 60Hz

Results: Pass

Please refer to following diagram for individual

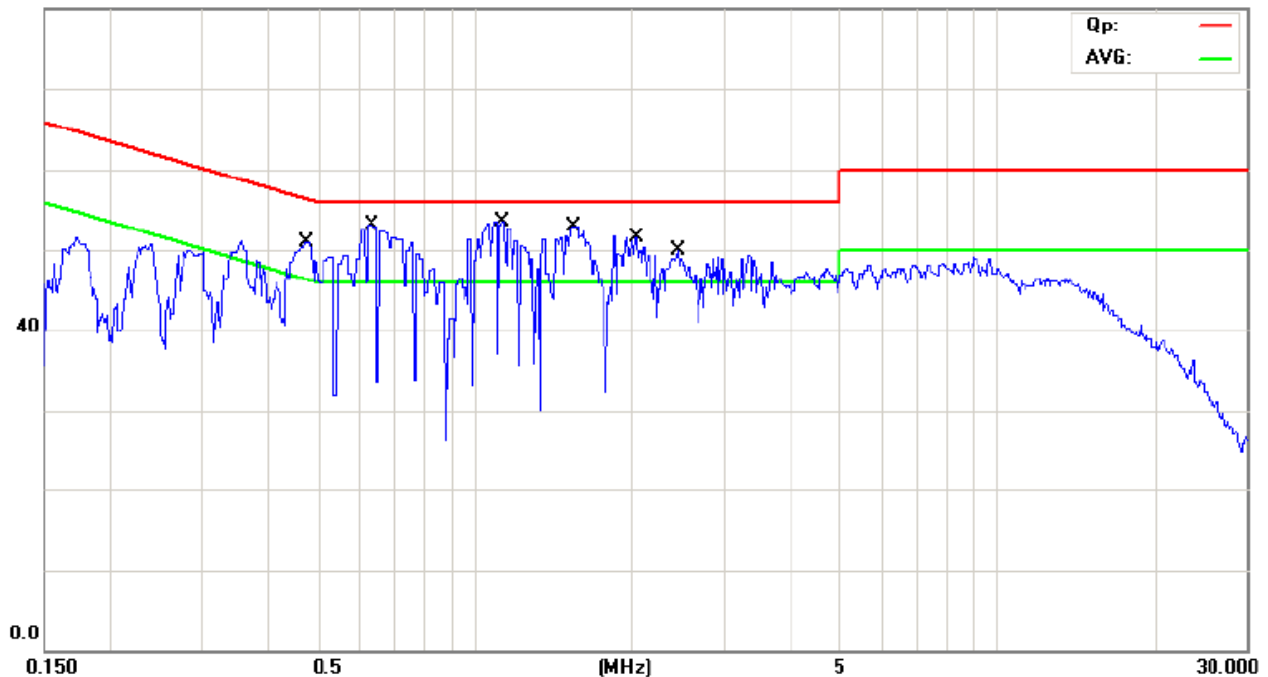
File :LB-1017

Data :#10

Date: 09/04/03/

Time: 9/53/26

80.0 dB μ V



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.4698	49.44	36.04	--	--	56.52	46.52
0.6400	50.29	33.32	--	--	56.00	46.00
1.1257	51.85	35.75	--	--	56.00	46.00
1.5496	51.92	32.42	--	--	56.00	46.00
2.0270	49.01	33.21	--	--	56.00	46.00
2.4448	47.78	28.38	--	--	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



EUT set Condition: Running notebook test program and Ping network
Adaptor used for test Model No.: YJS05-1903000D
Working Voltage: 120V~ 60Hz

Results: Pass

Please refer to following diagram for individual

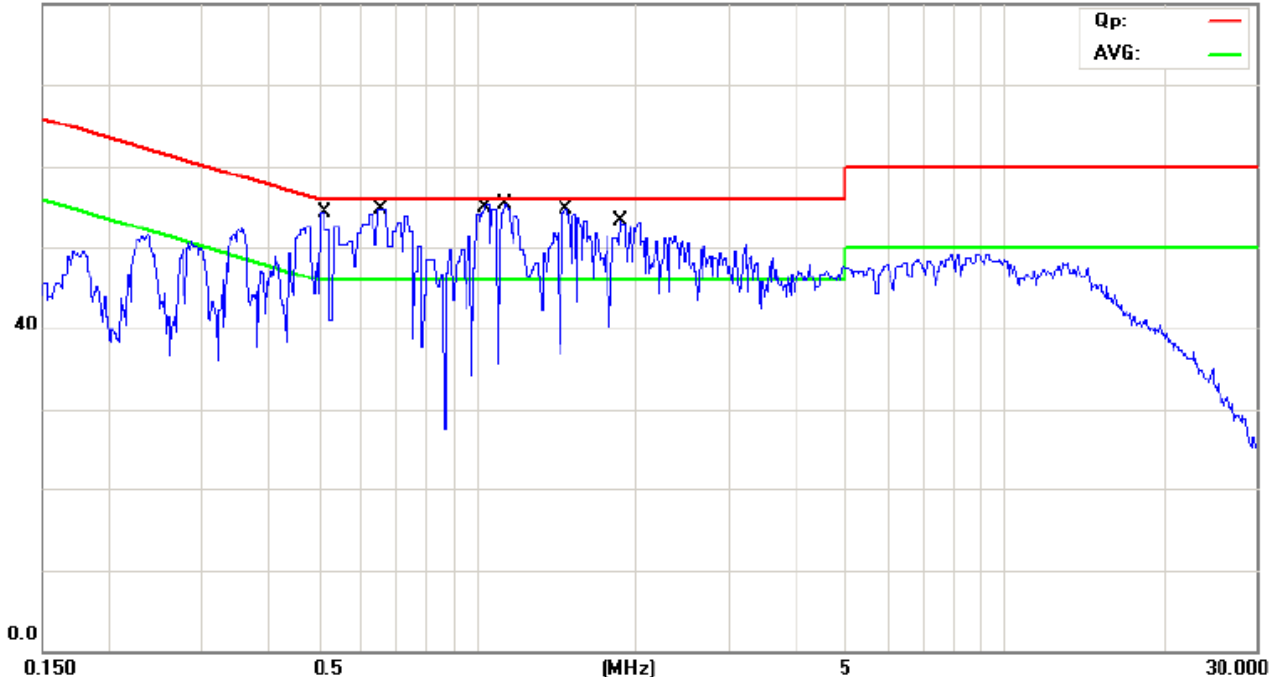
File :LB-1017

Data :#12

Date: 09/04/03/

Time: 10/06/46

80.0 dB μ V



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.5160	--	--	50.79	33.59	56.00	46.00
0.6503	--	--	54.23	34.03	56.00	46.00
1.0261	--	--	53.11	40.81	56.00	46.00
1.1278	--	--	53.05	31.95	56.00	46.00
1.4842	--	--	51.19	31.09	56.00	46.00
1.8920	--	--	48.16	28.26	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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

EUT set Condition: Running notebook test program and Ping network
Adaptor used for test Model No.: YJS05-1903000D
Working Voltage: 120V~ 60Hz

Results: Pass

Please refer to following diagram for individual

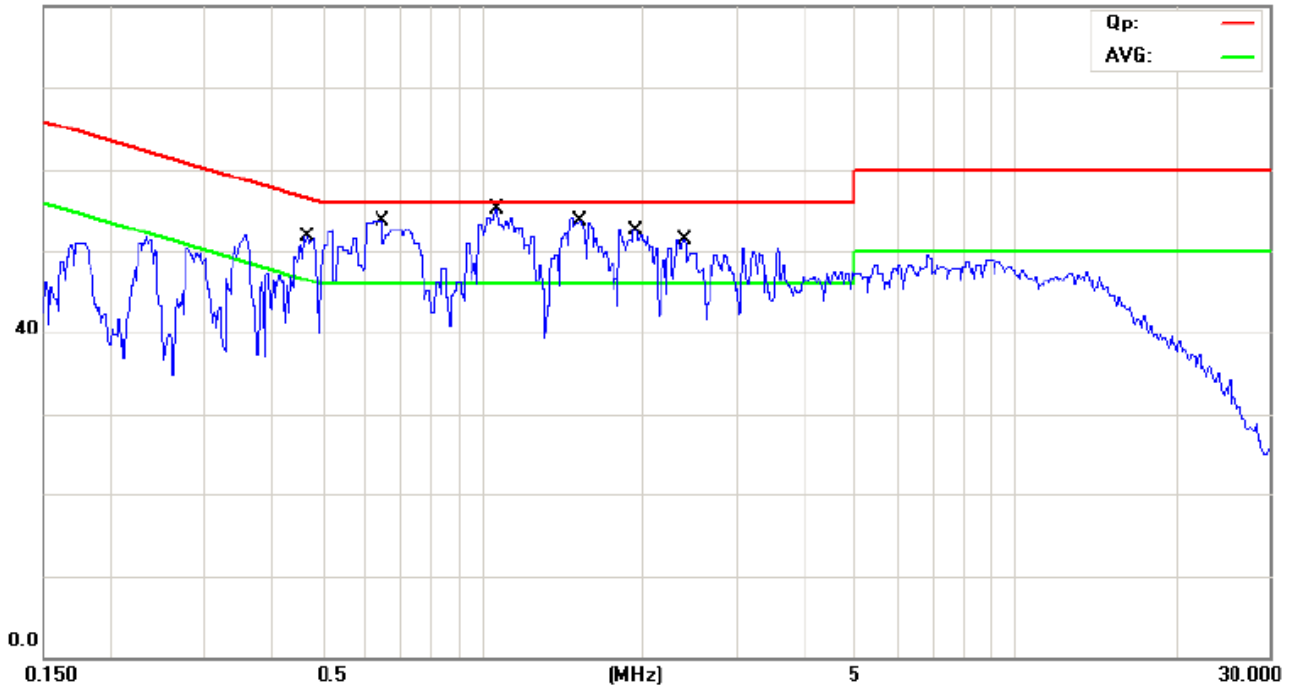
File :LB-1017

Data :#11

Date: 09/04/03/

Time: 10/01/22

80.0 dBuV



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.6385	52.52	41.02	--	--	56.00	46.00
1.0616	53.02	41.22	--	--	56.00	46.00
1.5251	53.31	35.01	--	--	56.00	46.00
1.9421	51.58	38.58	--	--	56.00	46.00
2.3706	49.55	39.84	--	--	56.00	46.00
0.4733	51.84	33.34	--	--	56.00	46.00

The report refers only to the sample tested and does not apply to the bulk.

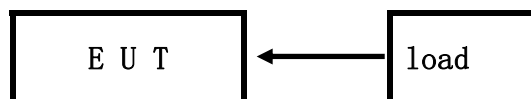
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



5.0 Radiated Disturbance Test

5.1 Schematics of the test

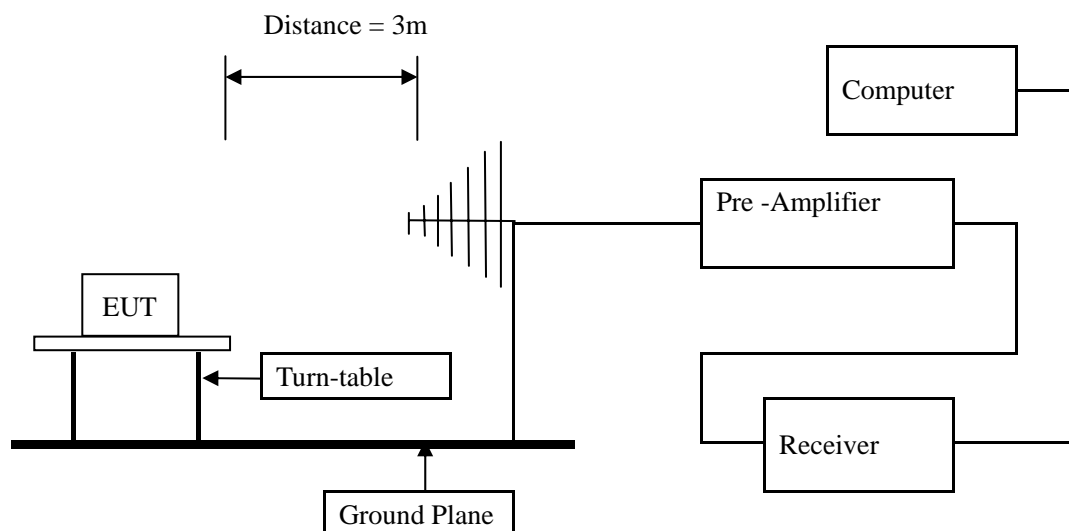


5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2003, The frequency spectrum from 30MHz to 5GHz 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

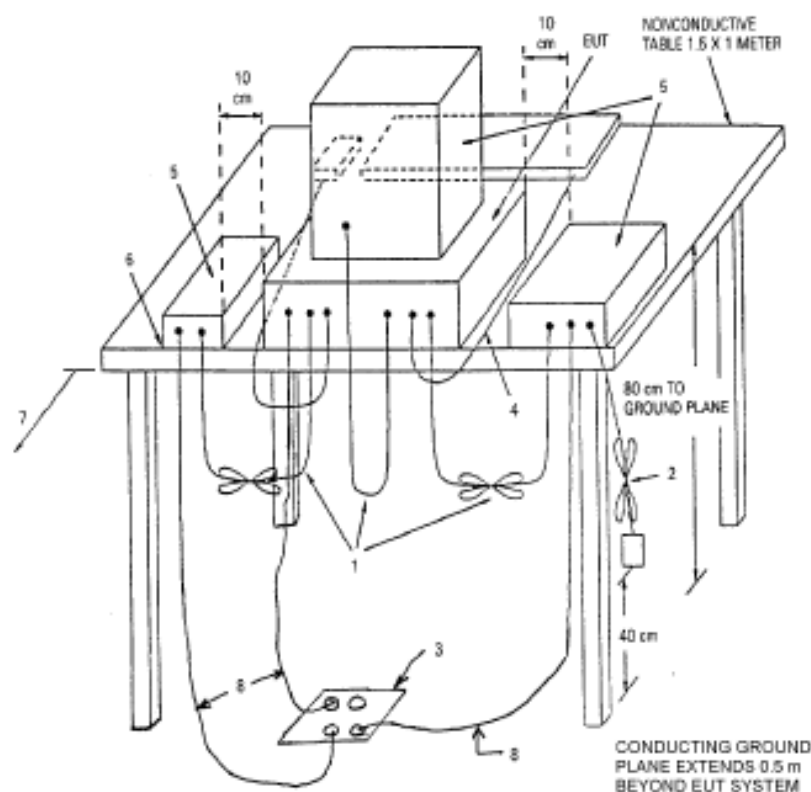
Block diagram of Test setup



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



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 5GHz 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. For the test data and plots above 1G, please refer to page 30-35 and page 40-45 of test report 0902016.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

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

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

Adaptor used for test Model No.: ADP193-32

Working Voltage: 120V~ 60Hz

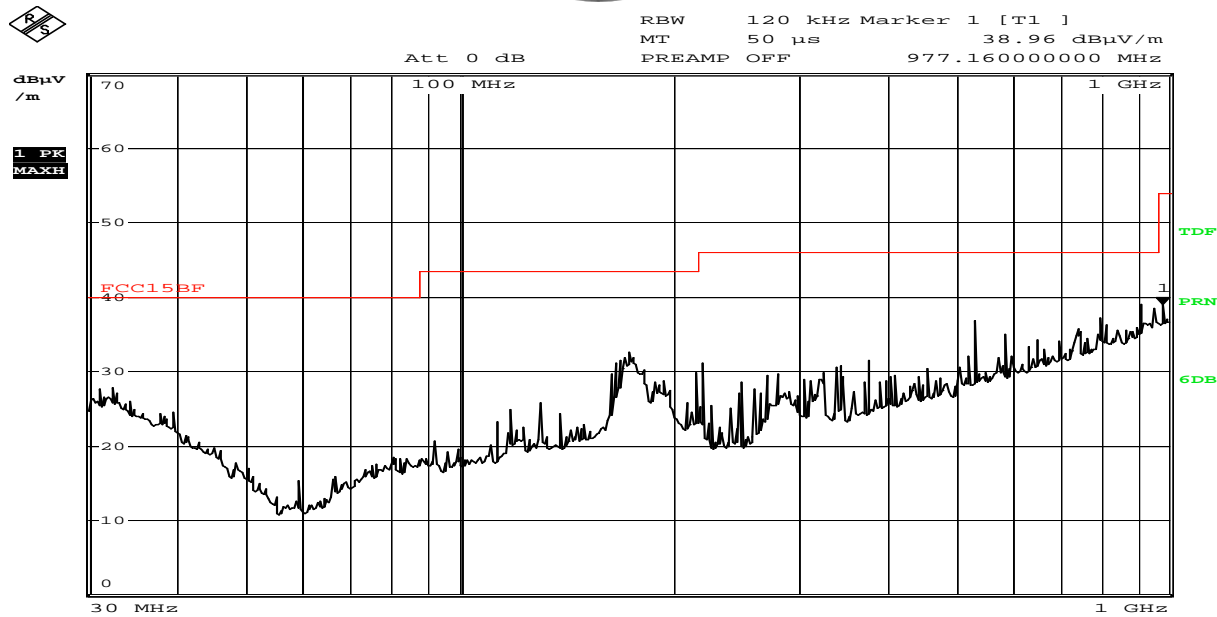
Results: PASS

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
172.88	32.41	H	43.50
912.00	39.03	H	46.00
977.16	39.10	H	46.00
130.00	30.78	V	43.50
651.23	40.02	V	46.00
977.15	40.60	V	46.00

The report refers only to the sample tested and does not apply to the bulk.

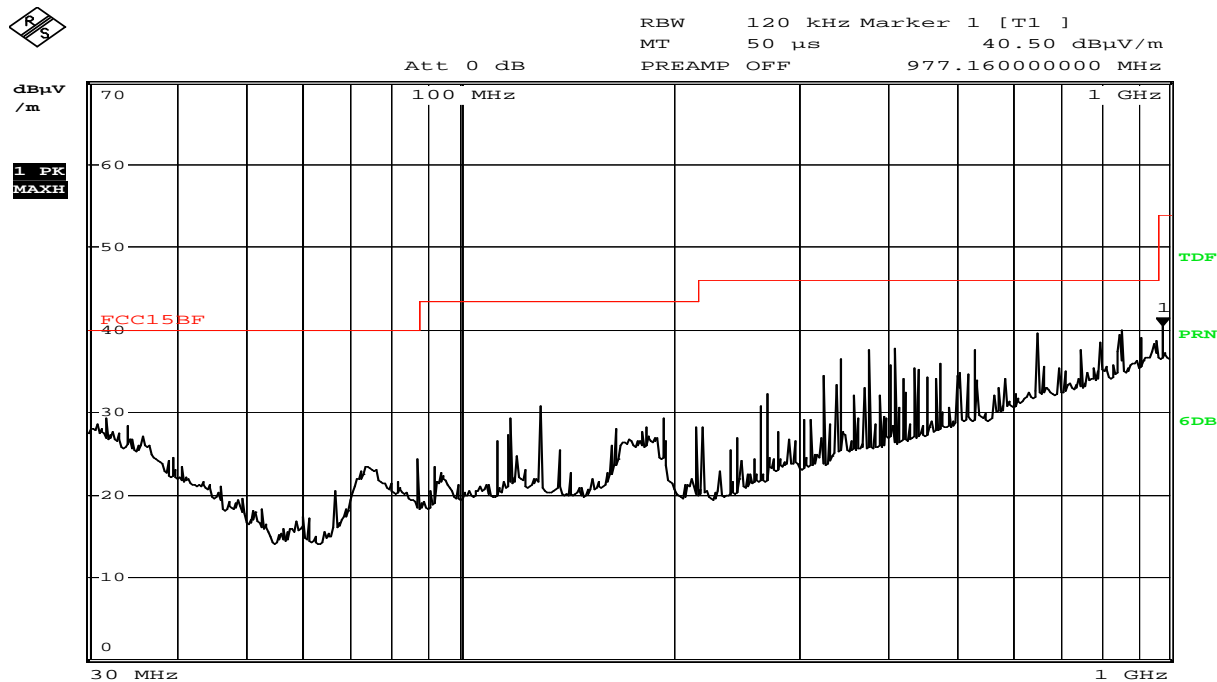
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertizing. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Comment: 12v 7AH -V charging
Date: 26.FEB.2009 10:26:42

Vertical



Comment: 12v 7AH -V charging
Date: 26.FEB.2009 10:25:45

The report refers only to the sample tested and does not apply to the bulk.
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

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

EUT set Condition: Running notebook test program and Ping network

Adaptor used for test Model No.: ADP193-32

Working Voltage: 120V~ 60Hz

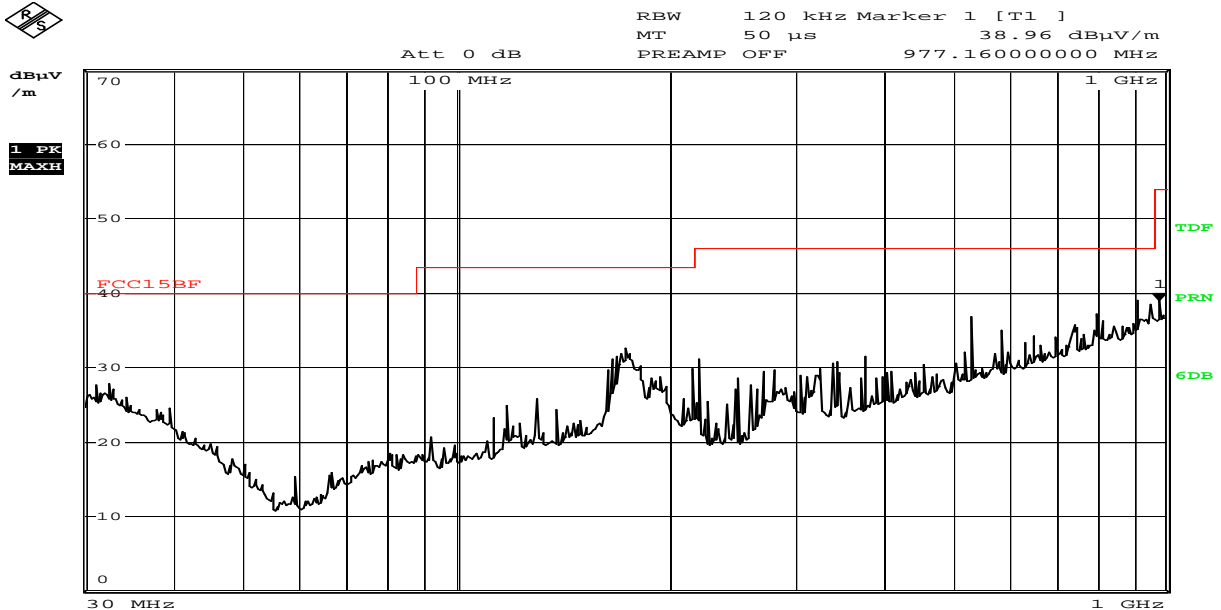
Results: PASS

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
173.10	33.74	H	43.50
531.88	37.67	H	46.00
798.04	39.51	H	46.00
117.62	31.43	V	43.50
532.02	38.76	V	43.50
173.10	42.12	V	46.00

The report refers only to the sample tested and does not apply to the bulk.

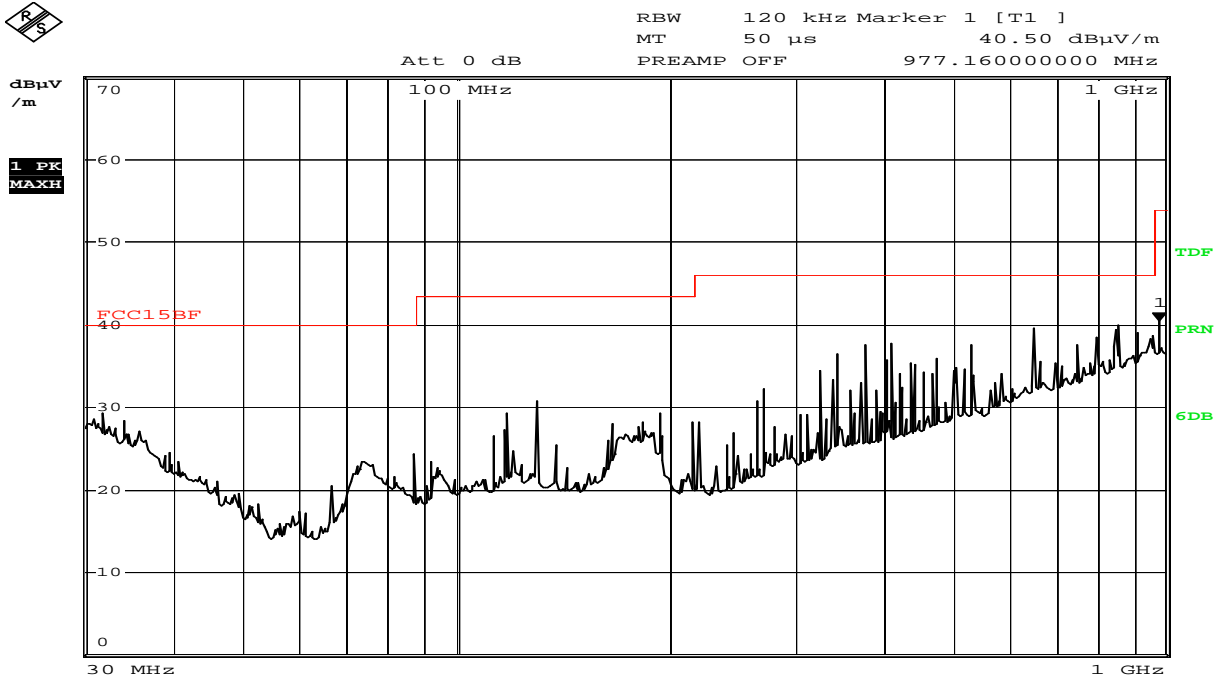
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertizing. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Comment: 12v 7AH -V charging
Date: 26.FEB.2009 10:26:42

Vertical



Comment: 12v 7AH -V charging
Date: 26.FEB.2009 10:25:45

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

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

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

Adaptor used for test Model No.: YJS05-1903000D

Working Voltage: 120V~ 60Hz

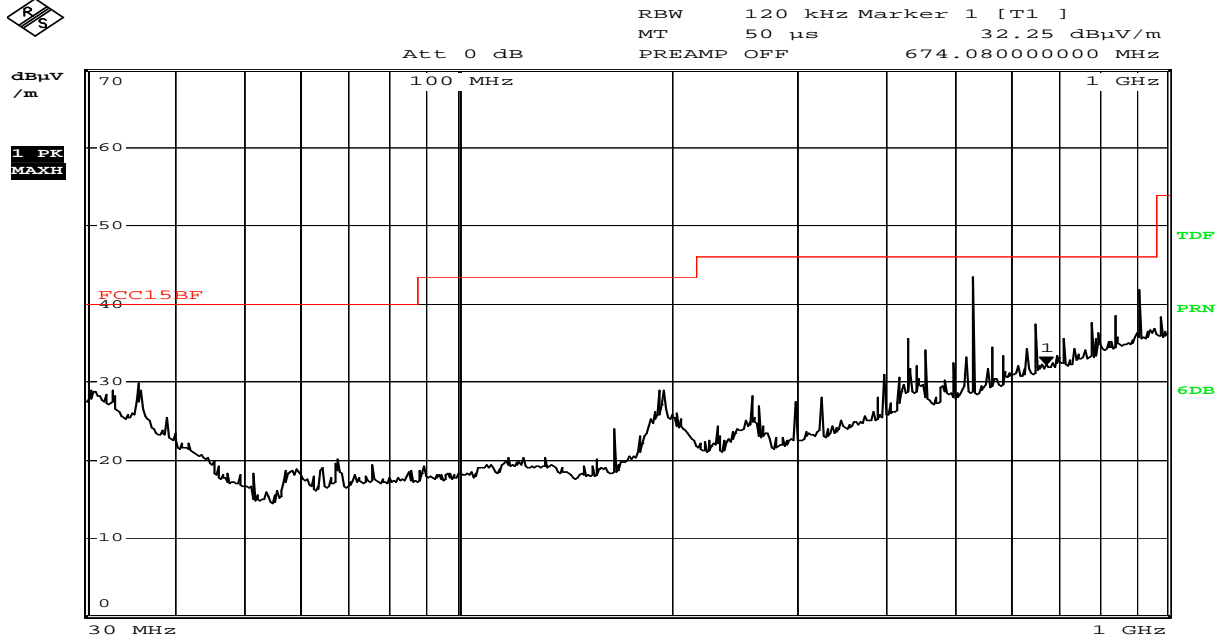
Results: PASS

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
531.96	44.4	H	46.00
912.04	42.8	H	46.00
36.08	36.8	V	40.00
432.24	39.8	V	46.00
532.00	41.3	V	46.00

The report refers only to the sample tested and does not apply to the bulk.

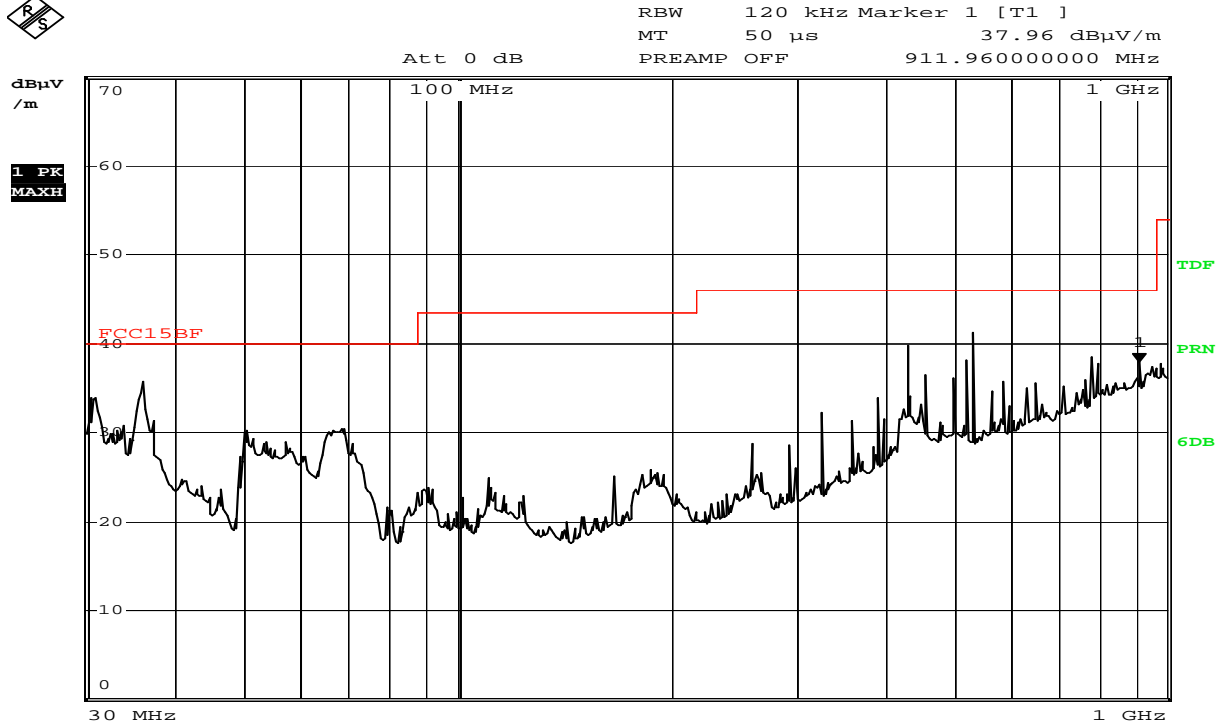
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Date: 3.APR.2009 10:43:40

Vertical



Date: 3.APR.2009 10:46:42

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

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

EUT set Condition: Running notebook test program and Ping network

Adaptor used for test Model No.: YJS05-1903000D

Working Voltage: 120V~ 60Hz

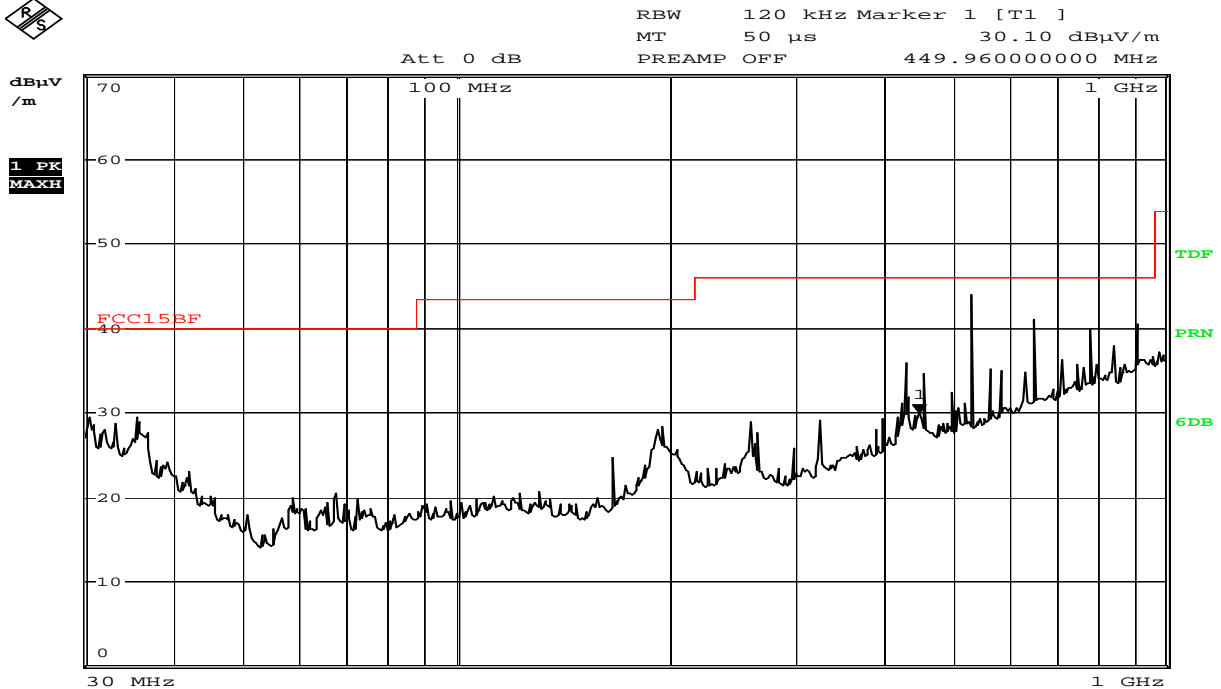
Results: PASS

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
532.00	45.1	H	46.00
651.44	42.2	H	46.00
912.00	40.6	H	46.00
35.52	37.64	V	40.00
432.20	42.8	V	46.00
532.00	44.6	V	46.00
781.72	41.4	V	46.00

The report refers only to the sample tested and does not apply to the bulk.

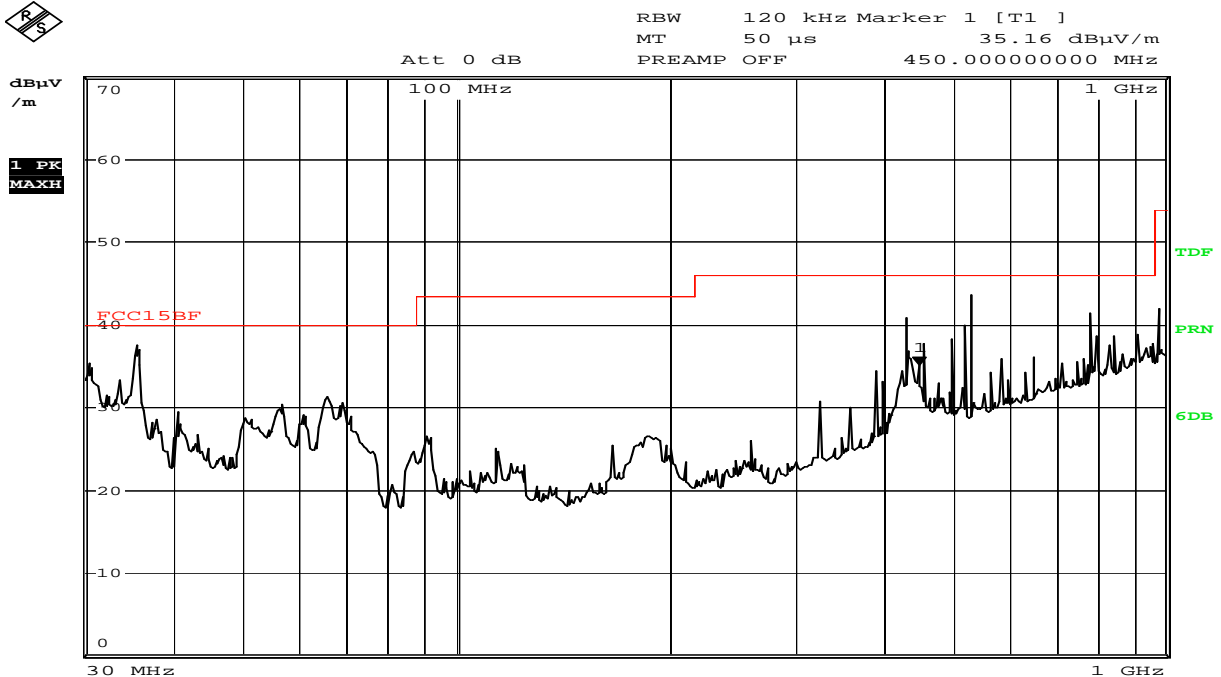
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertizing. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Date: 3.APR.2009 10:40:46

Vertical



Date: 3.APR.2009 10:38:49

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



6.0 FCC ID Label

FCC ID: **W7TUS**

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:



FCC ID Label Location

The report refers only to the sample tested and does not apply to the bulk.

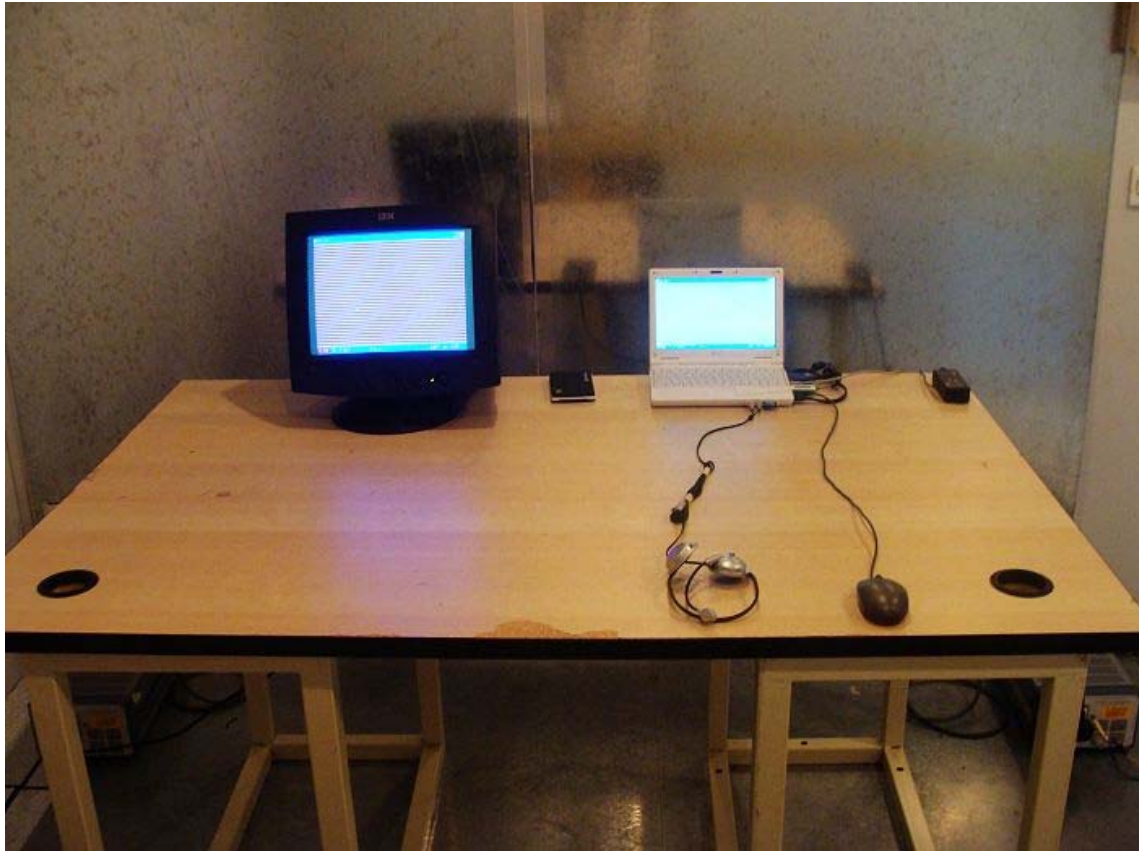
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer. Supplier or other persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



- 7.0 Photo of testing
- 7.1 Conducted test View--

AC Mains

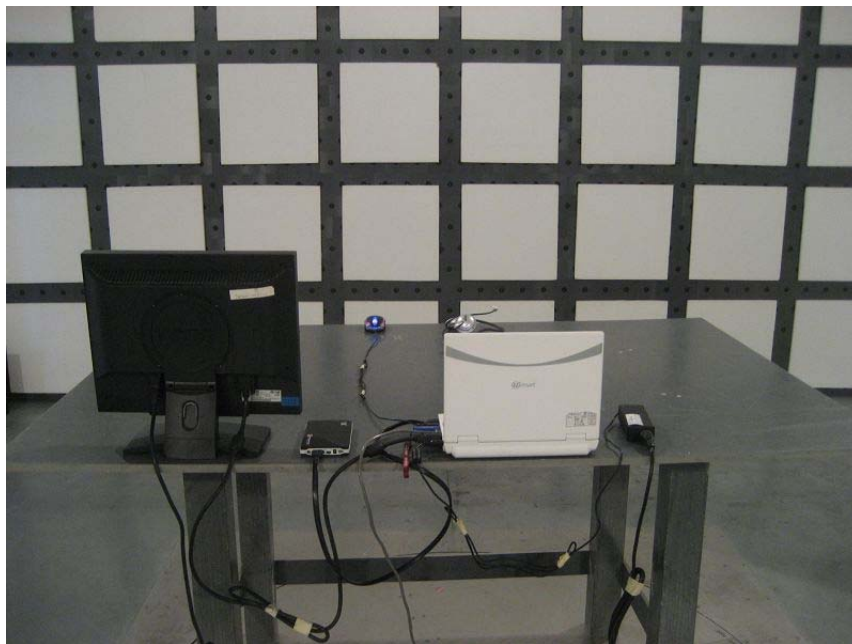
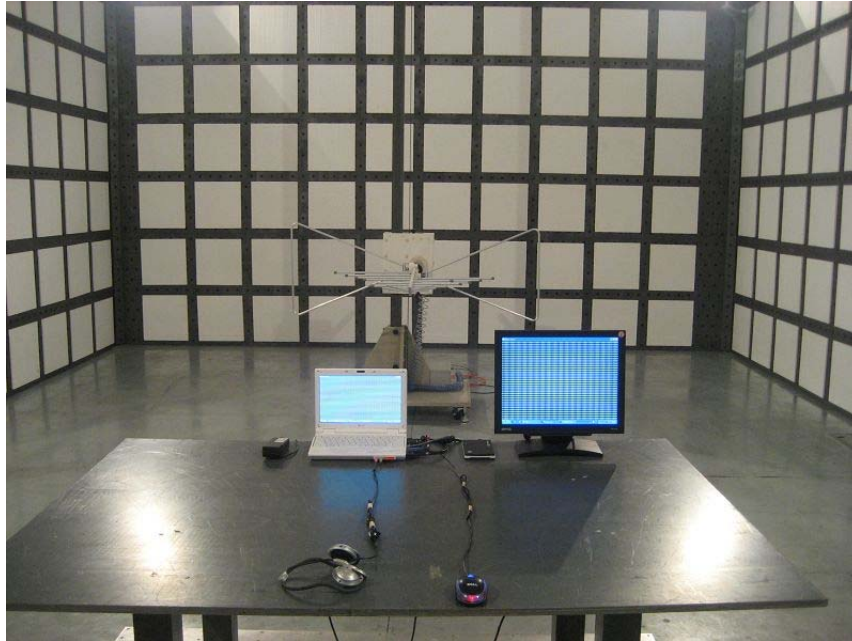


The report refers only to the sample tested and does not apply to the bulk.
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



7.2 Radiated emission test view--

Playing



-End of the report-

The report refers only to the sample tested and does not apply to the bulk.
This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.