



FCC CFR47 PART 22H and 24E

TEST REPORT

FOR

SMARTPHONE

MODEL: ST10B

FCC ID: NM8VIVIDA

REPORT NUMBER: 04T2860-1

ISSUE DATE: AUGUST 5, 2004

Prepared for
**HIGH TECH COMPUTER CORP.
1F, 6-3, BAU-CHIAN RD., HSIN TIEN
TAIPAI, TAIWAN, 231**

Prepared by
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1. TEST RESULT CERTIFICATION

COMPANY NAME: HIGH TECH COMPUTER CORP.
1F, 6-3, BAU-CHIAN RD., HSIN TIEN
TAIPAI, TAIWAN, 231

EUT DESCRIPTION: SMARTPHONE

MODEM NAME: ST10B

DATE TESTED: JULY 30, 2004

TYPE OF EQUIPMENT	INTENTIONAL RADIATOR
EQUIPMENT TYPE	LICENSED TX MODULE IN MOBILE APPLICATION
MEASUREMENT PROCEDURE	ANSI 63.4 / 2001, TIA/EIA 603
PROCEDURE	CERTIFICATION
FCC RULE	CFR 47 PART 22 Subpart H and 24 Subpart E

Compliance Certification Services, Inc. tested the above equipment for compliance with the requirement set forth in CFR 47, PART 22 Subpart H-Cellular Radiotelephone Service and 24 Subpart E-Broadband PCS. The equipment in the configuration described in this report, shows the measured emission levels emanating from the equipment do not exceed the specified limit.

Note: This document reports conditions under which testing was conducted and results of tests performed. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document.

Tested By:



CHIN PANG
EMC TECHNICIAN
COMPLIANCE CERTIFICATION SERVICES

Released For CCS By:



THU CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

2. EUT DESCRIPTION

The PDA Phone is designed for the bands transmitting of frequency range 824 ~ 849MHz and 1850 ~ 1910MHz. The EUT filed under this application has removed the camera component.

3. TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures documented on chapter 13 of ANSI C63.4 and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057.

4. TEST FACILITY

The open area test sites and conducted measurement facilities used to collect the radiated data are located at 561F Monterey Road, Morgan Hill, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5. ACCREDITATION AND LISTING

The test facilities used to perform radiated and conducted emissions tests are accredited by National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code: 200065-0 to perform Electromagnetic Interference tests according to FCC PART 15 AND CISPR 22 requirements. No part of this report may be used to claim or imply product endorsement by NVLAP or any agency of the US Government. In addition, the test facilities are listed with Federal Communications Commission (reference no: 31040/SIT (1300B3) and 31040/SIT (1300F2))

6. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

7. TEST SETUP, PROCEDURE AND RESULT

7.1. RADIATED EMISSION

Detector Setting of Spectrum Analyzer

Frequency Range (MHz)	Detector Function	Resolution Bandwidth	Video Bandwidth
30 to 1000	☒ Peak ☒ Quasi Peak	☒ 100 KHz ☒ 1 MHz	☒ 100 KHz ☒ 1 MHz

TEST PERIPHERAL

TEST PERIPHERALS				
Device Type	Manufacturer	Model Number	Serial Number	FCC ID
AC adapter	Phihong	PSC11A-050	N/A	N/A
USB MOUSE	LOGITECH	M-UA34	N/A	DZL211087
MODEM	ACEEX	1414	9013537	IFAXDM1414
PRINTER	HP	2225C	2541S41679	BS46XU2225C
Laptop	HP	Ze4205	CN25110353	DoC
AC adapter	HP	ADP-75HB	MVT0243196915	DoC

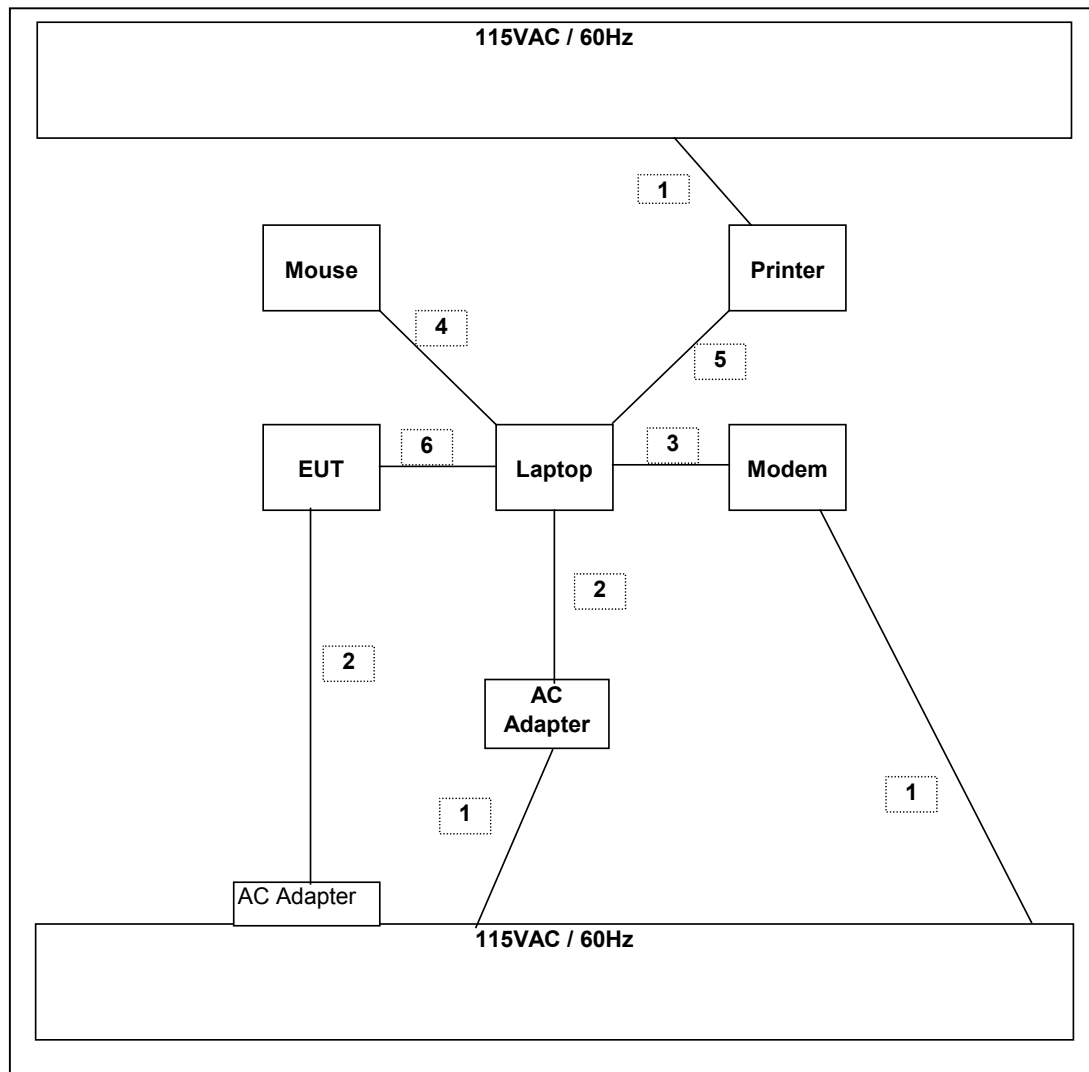
TEST EQUIPMENT

TEST EQUIPMENT LIST				
Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
EMI Receiver, 9 kHz ~ 2.9 GHz	HP	8542E	3942A00286	11/20/2004
RF Filter Section	HP	85420E	3705A00256	11/20/2004
Bilog	Sunol Sciences	JB1 Antenna	A121003	12/22/2004
EMI Test Receiver	R & S	ESHS 20	827129/006	7/17/2005
LISN, 10 kHz ~ 30 MHz	FCC	LISN-50/250-25-2	2023	10/13/2004
Line Filter	Lindgren	LMF-3489	497	CNR

I/O CABLE

TEST I / O CABLES								
Cable No	I/O Port	# of I/O Port	Connector Type	Type of Cable	Cable Length	Data Traffic	Bundled	Remark
1	AC	1	US 115V	Un-shielded	2m	No	No	N/A
2	DC	1	DC	Un-shielded	1m	No	No	N/A
3	Serial	1	DB9	Shielded	1m	Yes	No	N/A
4	USB	1	Mouse	Un-shielded	2m	Yes	No	N/A
5	Parallel	1	DB25	Shielded	2m	Yes	Yes	N/A
6	USB	1	USB	Un-shielded	2m	Yes	No	Connect EUT to Laptop

TEST SETUP



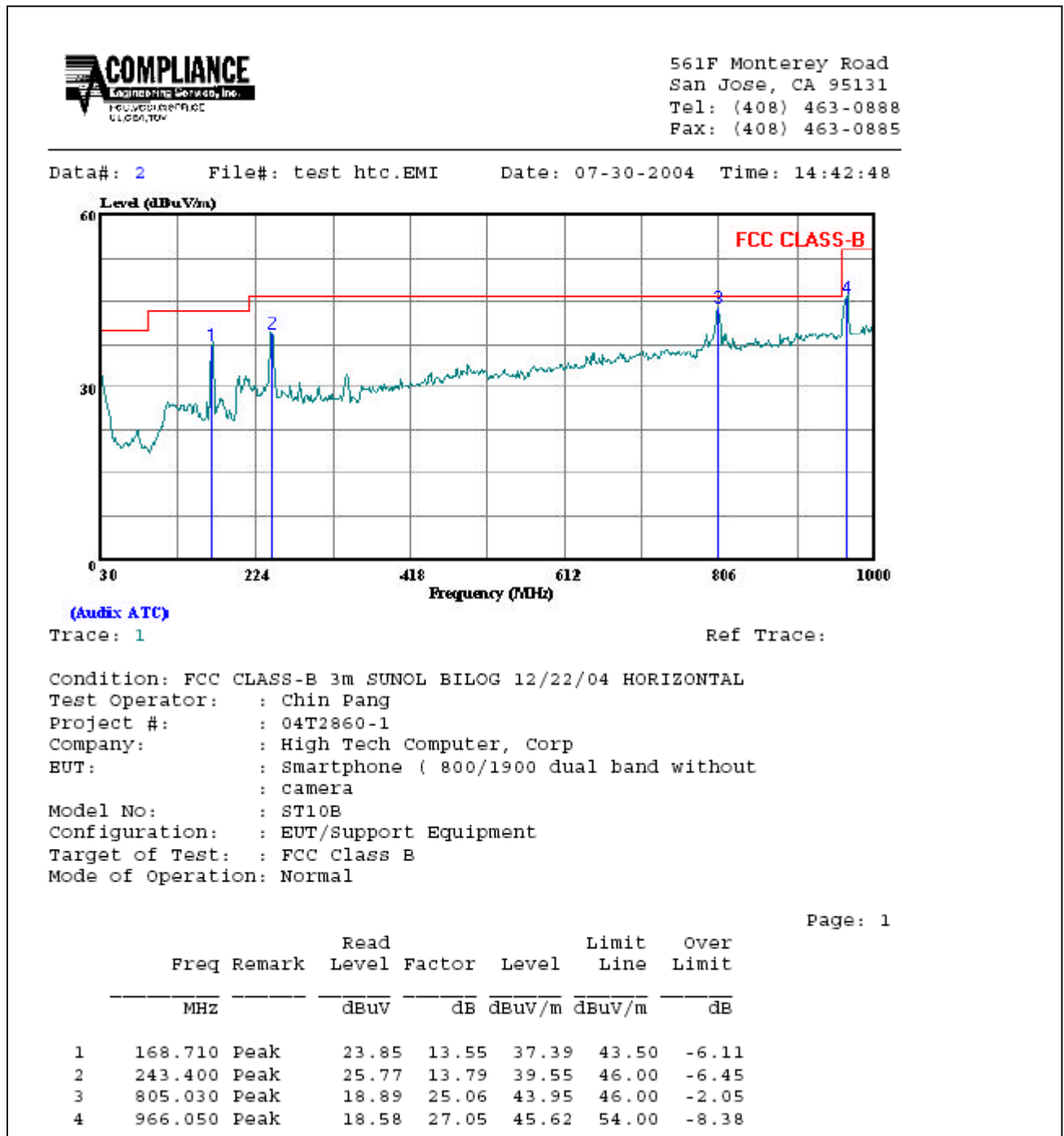
TEST PROCEDURE

1. The EUT was placed on the turn table 0.8 meter above ground inside 3 meter Anechoic Chamber.
2. Set the resolution bandwidth to 120KHz in the test receiver and select Peak function to scan the frequency below 1 GHz.
3. Shift the interference-receiving antenna located in antenna tower upwards and downwards between 1 and 4 meters above ground and find out the local peak emission on frequency domain.
4. Locate the interference-receiving antenna at the position where the local peak reach the maximum emission.
5. Rotate the turn table and stop at the angle where the measurement device has maximum reading
6. Shift the interference-receiving antenna again to detect the maximum emission of the local peak
7. If the reading of the local peak under Peak function is lower than limit by 6dB, then Quasi Peak detection is not needed and this reading should be recorded. And if it is higher than Peak limit, then the test is fail. Others, switch the receiver to Quasi Peak function, set the resolution bandwidth to 100kHz and repeat the procedures (3)~(6). If the reading is lower than limit, this reading should be recorded, otherwise, the test is fail.

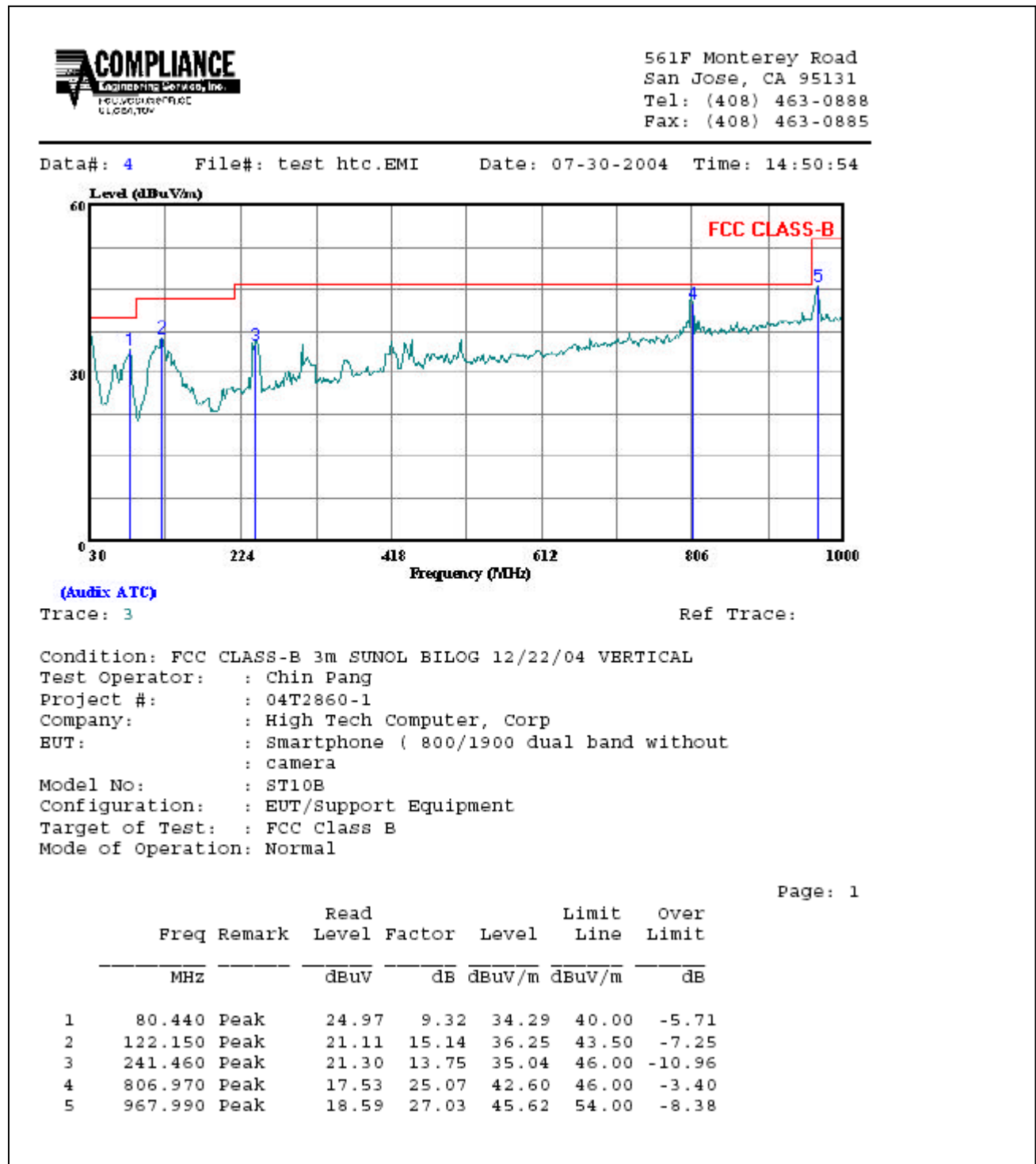
MEASUREMENT RESULT

No non-compliance noted, as shown below.

Horizontal:



Vertical:

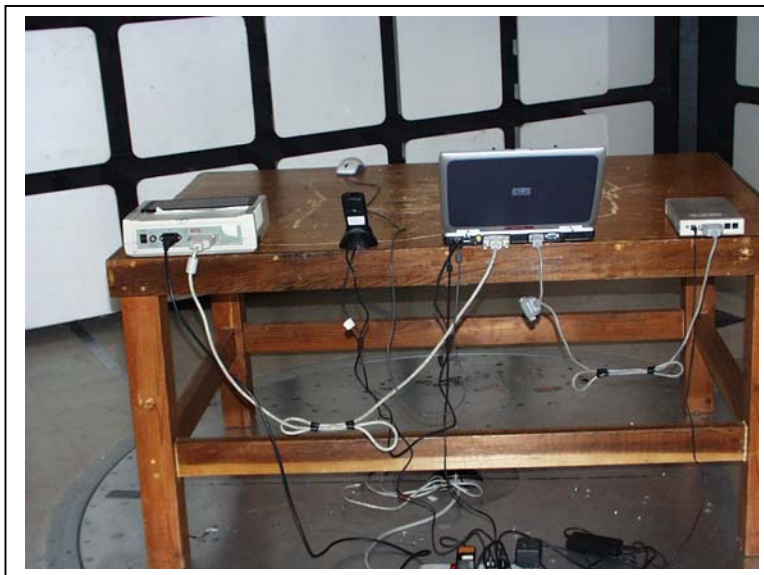


Radiated Emission photos

Front View:



Back View:



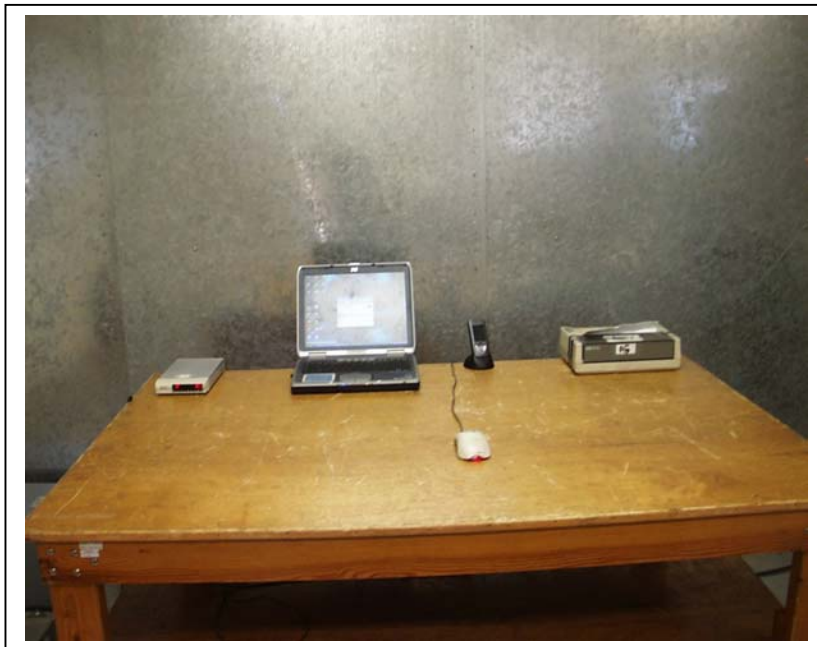
7.2. POWERLINE CONDUCTED EMISSION

Detector Function Setting of Test Receiver

Frequency Range (MHz)	Detector Function	Resolution Bandwidth	Video Bandwidth
150 KHz to 30 MHz	☒ Peak ☐ CISPR Quasi Peak	☒ 9 KHz	☒ 9 KHz

Power Line Conducted Emission photos

Front View:



Side View:



TEST PROCEDURE

1. The EUT was placed on a wooden table 40 cm from a vertical ground plane and approximately 80 cm above the horizontal ground plane on the floor. The EUT was set to transmit in a continuous mode.
2. Line conducted data was recorded for both NEUTRAL and HOT lines.

MEASUREMENT RESULT

No non-compliance noted, as shown below.

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	EN B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.78	34.38	--	--	0.00	56.00	46.00	-21.62	-11.62	L1
8.73	37.48	--	--	0.00	60.00	50.00	-22.52	-12.52	L1
14.99	35.46	--	--	0.00	60.00	50.00	-24.54	-14.54	L1
0.40	31.50	--	--	0.00	58.91	48.91	-27.41	-17.41	L2
0.90	33.82	--	--	0.00	56.00	46.00	-22.18	-12.18	L2
10.96	34.48	--	--	0.00	60.00	50.00	-25.52	-15.52	L2
6 Worst Data									

