



ELECTROMAGNETIC COMPATIBILITY TEST REPORT

Company : AIPTEK International Inc.
Address : 3F, NO.5-1, Innovation Rd. I, Science-Based Industrial Park,
Hsinchu, Taiwan, R.O.C.
Sample Name : VIDEO PHONE
Trade Name : HYPERVPHONE, COLOR VIDEOPHONE,
DESKTOP VIDEOPHONE, HYPER VIDEOPHONE,
HYPER LIVE VIEW, LIVETALK
Model : AVP-2000M
Data Applies To : AVP-300 / 2000M
Date Received : JUN. 01, 1999
Date Tested : JUN. 01, 1999

MEASUREMENT PROCEDURE USED :

CISPR 22, CLASS B, 1996

FCC RULE PART 15, 1996

WE HEREBY CERTIFY THAT: The measurements shown in the attachment were made in accordance with the procedures indicated, and the energy emitted by the equipment was found to be within the limits applicable. We assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.

	Name	Signature	Date
Testing Engineer	C.F.Wu/NVLAP	C.F.Wu	Jun. 10, 1999
Approving Manager	Paul Y. Liao/NVLAP	Paul Y. Liao	Jun. 10, 1999

Notes :

1. This report will be invalid if duplicated or photocopied in part.
2. This report refers only to the specimen(s) submitted to test, and is invalid as separately used.
3. This report is invalid without examination stamp and signature of this institute.
4. The tested specimen(s) will be preserved for thirty days from the date issued.
5. This is a NIST/NVLAP accredited report but not constituted and endorsed by US government.



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Report No. : 500-8806-007F

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1. GENERAL INFORMATION

1.1 DESCRIPTION OF EUT & POWER

MANUFACTURER : AIPTEK International Inc.

SAMPLE NAME : VIDEO PHONE

MODEL NUMBER : AVP-2000M

POWER SUPPLY : 15VDC(from power adapter)



1.2 DESCRIPTION OF PERIPHERALS

(1) PC

MODEL NUMBER : Net Server LD PRO 6/180
SERIAL NUMBER : SG70100107
MANUFACTURER : HP CORP.
F.C.C. ID : -----
POWER CORD : Non-shielded , non-detachable , 1.8m

(2) MONITOR

MODEL NUMBER : JC-1571VMA-2
SERIAL NUMBER : 6Z01162EA
MANUFACTURER : NEC CORP.
F.C.C. ID : A3DJC-1571VMA-2
POWER CORD : Unshielded , Detachable , 1.8m

(3) KEYBOARD

PRODUCT NUMBER : E03633WLTW-C
PART NUMBER : -----
MANUFACTURER : HP CORP.
F.C.C. ID : CIGE03633

(4) MOUSE

PRODUCT NUMBER : M-S35
PART NUMBER : LZB80612792
MANUFACTURER : HP CORP.
F.C.C. ID : DZL211029

(5) MODEM

MODEL NUMBER : 4007AM
SERIAL NUMBER : A10740073303
MANUFACTURER : Hayes CORP
F.C.C. ID : BFJ4000AM

(6) PRINTER

MODEL NUMBER : 5152-002
SERIAL NUMBER : 0754365
MANUFACTURER : IBM CORP
F.C.C. ID : BKM9A85152002



(7) TELEPHONE

MODEL NUMBER : RS-802F
SERIAL NUMBER : -----
MANUFACTURER : Sweetone Corp.
F.C.C. ID : -----

(8) TELEPHONE LINE SIMULATOR

MODEL NUMBER : KY-206
SERIAL NUMBER : -----
MANUFACTURER : KUAN YUE Electric Co.,Ltd.
F.C.C. ID : -----
POWER CORD : Non-shielded , non-detachable , 1.5m

(9) VIDEO PHONE

MODEL NUMBER : AVP-100
SERIAL NUMBER : -----
MANUFACTURER : Aiptek Corp.
F.C.C. ID : -----
POWER SUPPLY : 15VDC(from power adapter)

(10) TELEPHONE

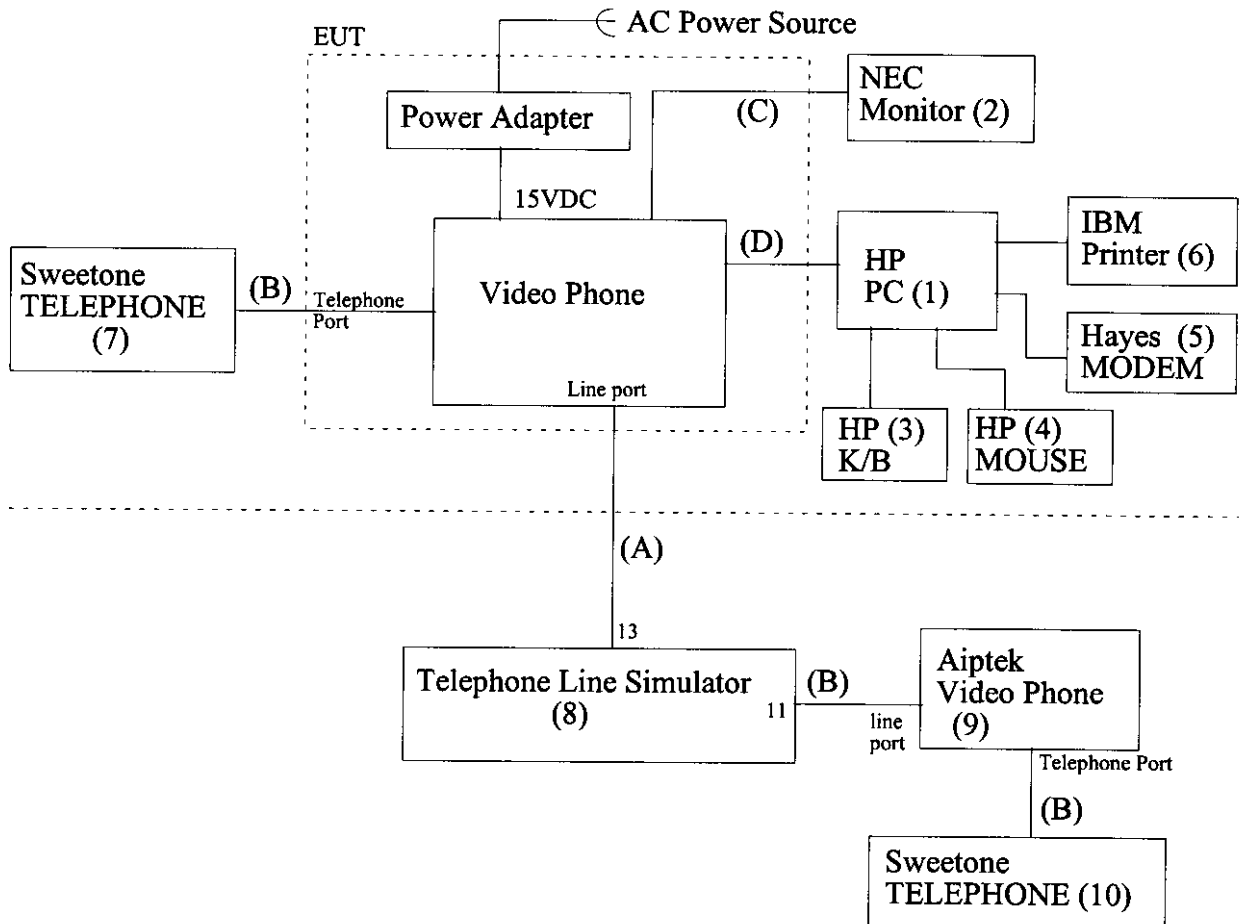
MODEL NUMBER : RS-802F
SERIAL NUMBER : -----
MANUFACTURER : Sweetone Corp.
F.C.C. ID : -----

(11) Cables

	Type	Connector	Shielded	length
(A)	Telephone line	RJ-11, plastic	No	15m
(B)	Telephone line	RJ-11, plastic	No	1.5m
(C)	VGA cable	D-sub, metal	Yes	1.5m
(D)	VGA cable with ferrite core	D-sub, metal	Yes	1.5m



1.3 EUT & PERIPHERALS SETUP DIAGRAM



The indicated numbers(1)(2)(A)-----, please refer to item 1.2



1.4 EUT OPERATING CONDITION

1. Dial "11" on EUT.
2. Lift Handset of Telephone(10).
3. Press "#1" on EUT and picture taken on Video phone(9)
will be displayed on monitor(2).

1.5 DESCRIPTION OF TEST SITE

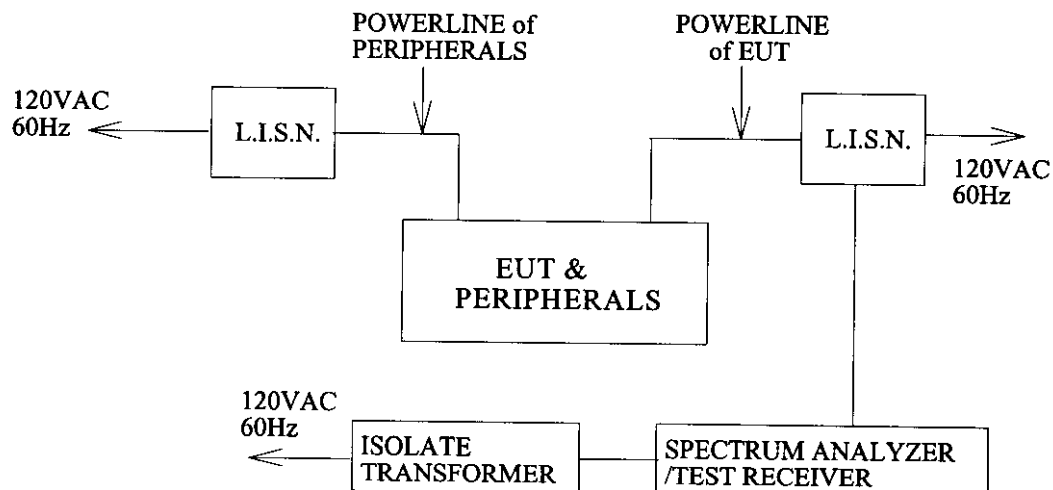
SITE DESCRIPTION	: FCC certificate NO. :31040/SIT DNV certificate NO. : 510-96-1016 TUV certificate NO. :I9664582-9610 Lloyd's certificate NO. :LA003 BCIQ certificate NO. :SL2-IN-E-02 NVLAP Lab code : 200118-0 CNLA certificate NO. :CNLA-ZL97018 VCCI certificate NO. : R-706, C-650
NAME OF SITE	: Electronics Research & Service Organization Industrial Technology Research Institute
SITE LOCATION	: K500, 195-4 , sec. 4, Chung Hsing Rd., Chu-Tung Chen. Hsin-Chu, Taiwan 31015 R.O.C.



2.1 TEST EQUIPMENTS

The following test equipments are used during the conducted powerline tests :

2.2 TEST SETUP





2.3 CONDUCTED POWER LINE EMISSION LIMIT

FREQUENCY (MHz)	MAXIMUM RF LINE VOLTAGE (dB μ V)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56	56-46
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

2.4 TEST PROCEDURE

The test procedure is performed in a 12ft $\times$ 12ft $\times$ 8ft(L $\times$ W $\times$ H) shielded room. the EUT along with its peripherals were placed on a 1.0m(W) $\times$ 1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chasis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chasis ground also bounded to the horizontal ground plane of shielded room. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

2.5 UNCERTAINTY OF CONDUCTED EMISSION

The uncertainty of conducted emission is ± 1.36 dB.



2.6 LINE CONDUCTED RF VOLTAGE MEASUREMENT

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported below are more than 20 dB below the prescribed limits.

All readings are Quasi-peak values.

Temperature : 25°C

Humidity : 50 % RH

FREQUENCY (MHz)	READING(dB μ V)				LIMITS (dB μ V)	
	ONE END & GRD'D		THE OTHER END & GRD'D			
	Q.P.	Ave.	Q.P.	Ave.	Q.P.	Ave.
0.150	44.94	*	*	*	66.00	56.00
0.167	*	*	45.95	*	65.12	55.12
0.187	46.05	*	*	*	64.15	54.15
0.302	43.08	*	*	*	60.19	50.19
0.312	*	*	44.08	*	59.93	49.93
0.502	42.10	*	*	*	56.00	46.00
0.518	*	*	43.70	*	56.00	46.00
0.712	*	*	42.92	*	56.00	46.00
1.088	*	*	44.34	*	56.00	46.00
1.552	43.46	*	44.76	*	56.00	46.00
3.135	47.30	36.60	49.40	38.60	56.00	46.00
4.269	*	*	45.41	*	56.00	46.00
4.315	43.21	*	*	*	56.00	46.00
6.285	38.92	*	*	*	60.00	50.00
6.319	*	*	43.02	*	60.00	50.00
8.148	33.74	*	*	*	60.00	50.00
8.592	*	*	38.94	*	60.00	50.00
21.600	*	*	35.08	*	60.00	50.00
30.000	*	*	*	*	60.00	50.00

REMARKS : 1. * Undetectable or the Q.P.values is lower than the limits of Ave



3. RADIATED EMISSION TEST

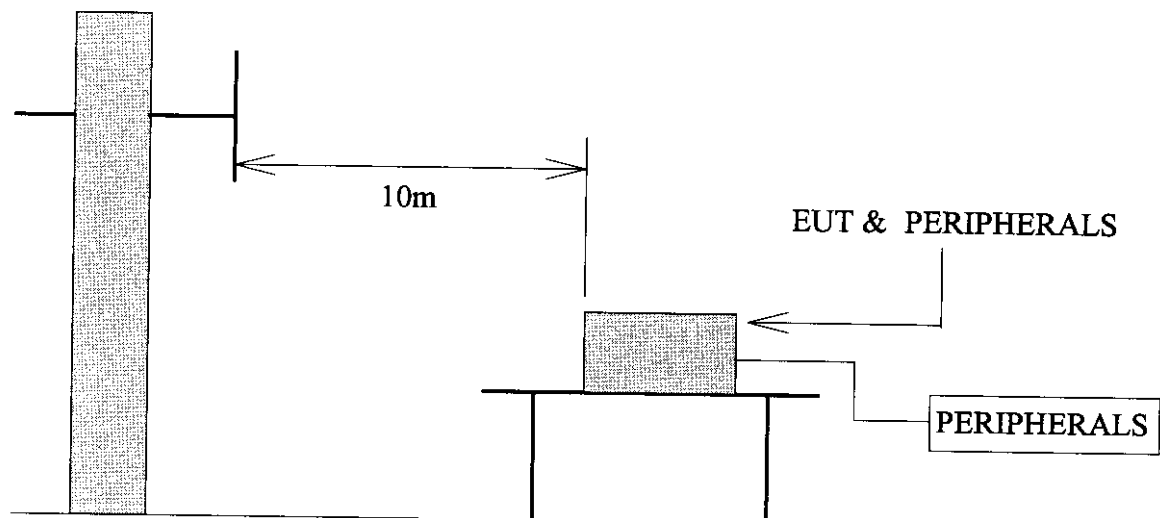
3.1 TEST EQUIPMENTS

The following test equipments are utilized in making the measurements contained in this report.

MANUFACTURER OR TYPE	MODEL NO	SERIAL NO	DATE OF CALIBRATION
CHASE BI-LOG ANTENNA	CBL6111A	1546	MAY.23, 1999
R/S TEST RECEIVER	ESMI	842088/005 841978/008	MAY.03, 1999
OPEN SITE	-----	No.2	AUG. 18, 1998

3.2 TEST SETUP

The diagram below shows the test setup which is utilized to make these measurements.



Antenna Elevation Variable



3.3 RADIATION LIMIT

All emanation from a class B computing device or system , including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below :

FREQUENCY (MHz)	DISTANCE (METERS)	FIELD STRENGTHS(dB μ V/M)	
		CLASS A	CLASS B
30—230	10	40	30
230—1000	10	47	37

Note : (1)The tighter limit shall apply at the edge between two frequency bands.

(2)Distance refers to the distance in meters between the measuring instrument antenna and the closest point of any part of the device or system.

3.4 TEST PROCEDURE

The devices under test were placed on a rotatable table top 0.8 meter above ground. The table was rotated 360 degrees to determine the position of the highest radiation. EUT is set 10 meters from the interference receiving antenna which is mounted on the top of a variable height mast. The antenna height is varied between one meter and four meters above ground to find the maximum value of the field strength Both horizontal polarization and vertical polarization of the antenna are set to make the measurement. The bandwidth setting on the E.M.I. meter (R/S TEST RECEIVER ESMI) is 120 KHz. The levels are quasi peak value readings. The frequency spectrum from 30MHz to 1000MHz was investigated.

3.5 UNCERTAINTY OF RADIATED EMISSION

The uncertainty of radiated emission is ± 2.72 dB.



3.6 RADIATED RF NOISE MEASUREMENT

The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported below are more than 20 dB below the prescribed limits.

All readings are quasi-peak values.

Temperature : 25°C

Humidity : 75 % RH

FREQ- UENCY (MHz)	ANTENNA FACTOR (dB)	CABLE LOSS (dB)	METER READING AT10m(dB μ V/M)		LIMITS (dB μ V/M)	EMISSION LEVEL AT10m(dB μ V/M)	
			HORIZON- TAL	VERTICAL		HORIZON- TAL	VERTICAL
30.00	19.50	1.06	*	*	30.00	*	*
162.00	10.68	2.38	11.60	*	30.00	24.66	*
190.91	9.15	2.57	4.00	11.80	30.00	15.72	23.52
200.46	9.37	2.63	11.20	15.40	30.00	23.20	27.40
211.21	10.08	2.71	*	14.60	30.00	*	27.39
216.00	10.40	2.74	11.60	14.40	30.00	24.74	27.54
250.70	12.66	2.97	3.90	7.80	37.00	19.53	23.43
457.16	17.62	4.19	4.30	*	37.00	26.11	*
516.15	19.74	4.48	11.00	*	37.00	35.22	*
545.64	20.78	4.63	4.40	*	37.00	29.81	*
572.75	21.73	4.76	2.70	7.30	37.00	29.19	33.79
1000.00	24.86	6.80	*	*	37.00	*	*

REMARKS : 1. * Undetectable

2. Emission level (dB μ V/M) = Antenna Factor (dB) + Cable loss (dB)
+ Meter Reading (dB μ V/M).

3. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.