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CE TEST REPORT FOR

APPLICANT : SMART CABLING & TRANSMISSION CORP.

ADDRESS : 10F, No. 493, Chung-Cheng Rd.,

Hsin Tien City, Taipei 231, Taiwan, R. O. C.

Receipt Date : 08/10/2004 Final Test Date: 08/12/2004

EUT : Video Ground Loop Isolator

MODEL NO. : GL00X, GB00X (X = 1~9)

MEASUREMENT PROCEDURE USED

EN 61000-6-3 / EN61000-3-2 / EN61000-3-3 / EN 50130-4 CLASS B GIVEN IN
EUROPEAN COUNCIL DIRECTIVE 2004/108/EC

This test result of this report applies to above tested sample only.

This test report shall not be reproducing in part without written approval of HomeTek Technology Inc.

PREPARED BY :

HomeTek Technology Inc.

No. 67-9, Shir Men Road, Tu Cheng City,

Taipei Hsien. Taiwan

Report # : EB6G013



HomeTek Technology Inc.

ADDRESS: No. 67-9, Shir Men Road, Tu Cheng City,
Taipei Hsien, Taiwan

PHONE : 886-2-22608375 FAX : 886-2-22748013

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CERTIFICATE OF COMPLIANCE

EUT : Video Ground Loop Isolator
 MODEL NO. : GL00X, GB00X (X = 1-9)
 Receipt Date : 08/10/2004 Final Test Date: 08/12/2004
 REPORT # : EB6G013
 APPLICANT : SMART CABLING & TRANSMISSION CORP.
 ADDRESS : 10F, No. 493, Chung-Cheng Rd.,
Hsin Tien City, Taipei 231, Taiwan, R. O. C.

Measurement procedure used:

EMI: EN 61000-6-3 (2001): CISPR 22 Class B (1997),
 EN 61000-3-2 (2000), EN 61000-3-3 (1995) + A1 (2001)
 EMS: EN 50130-4 (1995) + A1 (1998) + A2 (2003):
 IEC 61000-4-2 (2001), IEC 61000-4-3 (2002), IEC 61000-4-4 (2004),
 IEC 61000-4-5 (2001), ENV 50141 (1993), IEC 61000-4-11 (2004)

We hereby show that:

The measurements shown in this test report were made in accordance with the procedures given in EUROPEAN COUNCIL DIRECTIVE 2004/108/EC, and the energy emitted by the equipment was found to be within the limits applicable. This product, which has been issued the test report listed as above in HomeTek Technology Inc., is based on single evaluation of one sample and confirmed to comply with the requirements of the above-mentioned EMC standard.

This test report is modified from original one (Report No. EB3H007, issued on 2004, 08, 17), test standard is update.

APPROVED BY : 

ALAIN LIN / Supervisor



DESCRIPTION OF UPGRADE OF TEST STANDARDS

Applicant: SMART CABLING & TRANSMISSION CORP.

Product Name: Video Ground Loop Isolator

Model Number: GL00X, GB00X (X = 1~9)

The test standard of this report (No. EB6G013) is updated from original one (No. EB3H007) with **EN 61000-6-3 (2001): CISPR 22 Class B (1997) / EN 61000-3-2 (2000) / EN 61000-3-3 (1995) + A1 (2001) / EN 50130-4 (1995) + A1 (1998) + A2 (2003): IEC 61000-4-2 (2001), IEC 61000-4-3 (2002), IEC 61000-4-4 (2004), IEC 61000-4-5 (2001), ENV 50141 (1993), IEC 61000-4-11 (2004)**. According to EUT's specification and operation manual, the test procedures of new version of standards are applied to EUT. Thus, we HomeTek issue a new certificate with new version of test standard.

HomeTek Inc.

19, July 2007

ALAIN LIN / Supervisor

TEST REPORT CERTIFICATION

EMC of electrical appliances

Report reference No. : EB6G013
Date of issue : JULY 19, 2007
Applicant : SMART CABLING & TRANSMISSION CORP.
Address : 10F, No. 493, Chung-Cheng Rd.,
Hsin Tien City, Taipei 231, Taiwan, R. O. C.
Manufacturer : SMART CABLING & TRANSMISSION CORP.
Type of test object : Video Ground Loop Isolator
Model/type reference : GL00X, GB00X (X = 1~9)
Rated Voltage : N/A
EUT Voltage : N/A
Test Result : Complied
Testing laboratory : HomeTek Technology Inc.
Address : No. 67-9, Shir Men Road, Tu Cheng City, Taipei Hsien,
Taiwan, R. O. C.
TEL / FAX : +886-2-22608375 / +886-2-22748013
E-mail : hometek@ms15.hinet.net
Standard : EN 61000-6-3 (2001): CISPR 22 Class B (1997),
EN 61000-3-2 (2000), EN 61000-3-3 (1995) + A1 (2001),
EN 50130-4 (1995) + A1 (1998) + A2 (2003):
IEC 61000-4-2 (2001), IEC 61000-4-3 (2002),
IEC 61000-4-4 (2004), IEC 61000-4-5 (2001),
ENV 50141 (1993), IEC 61000-4-11 (2004)

Tested by (+ signature) : *Jason Lin / Engineer* Jason Lin

Approved by (+ signature) : *Alain Lin / Supervisor* Alain Lin



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APPENDIX A

PHOTOS OF TEST CONFIGURATION

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PHOTOS OF EUT

GENERAL INFORMATION

- 1 APPLICANT : SMART CABLING & TRANSMISSION CORP.
- 2 ADDRESS : 10F, No. 493, Chung-Cheng Rd.,
Hsin Tien City, Taipei 231, Taiwan, R. O. C.
- 3 MANUFACTURER : SMART CABLING & TRANSMISSION CORP.
- 4 ADDRESS : 10F, No. 493, Chung-Cheng Rd.,
Hsin Tien City, Taipei 231, Taiwan, R. O. C.
- 5 DESCRIPTION OF EUT :
- EUT : Video Ground Loop Isolator
- Model : GL00X, GB00X (X = 1~9)
- Serial # : N/A

5.1 The difference between models GL00X, GB00X (X = 1~9) are different color of case and GB00X with BALUN for signal transmission. The circuits of these models are same, and EMI characteristic is same. The worst case of EMC test data was shown in this test report.

6 FEATURES OF EUT :

Please refer to user manual or product specification.

- 7 As EUT is passive component inside only without AC or DC power input. Thus, some test items were not applicable to this EUT.



HomeTek Technology Inc.

MODIFICATION LIST

THE FOLLOWING ACCESSORIES WERE ADDED TO THE EUT DURING TESTING :

NO MODIFICATION BY HOMETEK TECHNOLOGY INC.

CONDUCTED POWER LINE TEST

1 TEST PROCEDURE

According to **EN 61000-6-3**.

2 RESULT OF CONDUCTED EMISSION TEST

N/A (Conducted Power Line Test is not applicable to this EUT (Model : GB001)).

RADIATED EMISSION TEST

1 TEST INSTRUMENTS & FACILITIES

The following test Instruments was used during the radiated emission test :

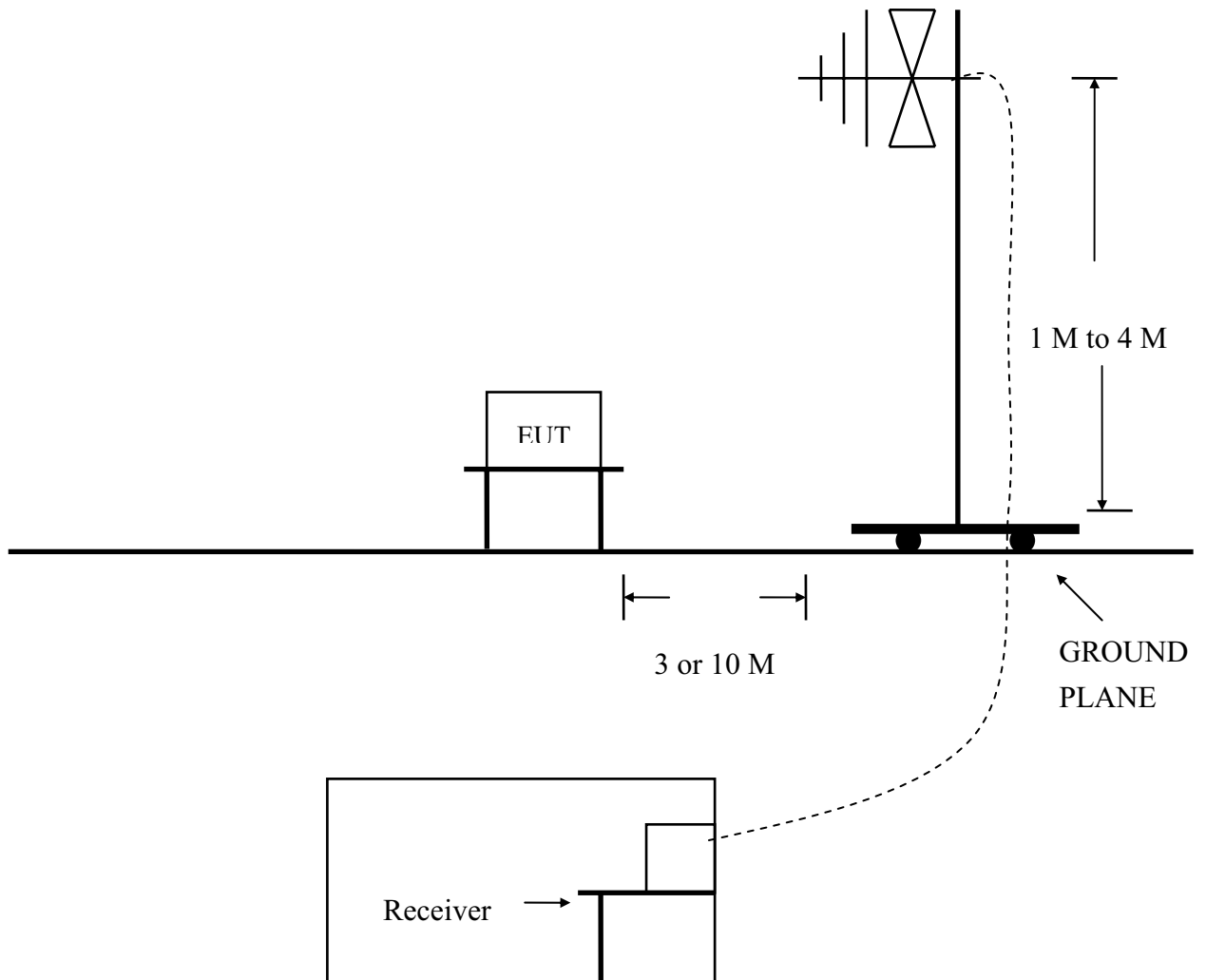
Item	Instruments /facilities	Specification	Manufacturer	Model # / S/N#	Date of Cal.
1	EMI Receiver	9KHz ~ 30MHz	ROHDE & SCHWARZ	ESHS 30 844827/007	MAR/2004
2	LISN (for EUT)	50Ω/50uH/100A 150KHz ~ 30MHz	SCHWARZ BECK	NNLK 8121 8121370	OCT/2003
3	LISN (for Support Unit)	50Ω/50uH/10A 9KHz ~ 30MHz	ROHDE & SCHWARZ	ESH3-Z5 846128/007	FEB/2004
4	Terminator	50Ω	N/A	N/A	NOV/2003
5	Attenuation	50Ω/10dB	Mini-Circuit	NAT-10 AT-002	JUL/2004
6	Cable	3m	SUHNER	RG-223 CON2-001	DEC/2003
7	ESXS-K1 (software)	Version 2.03b 9KHz ~ 30MHz	ROHDE & SCHWARZ	1082.9678.02 840.913/246	N/A

Note : Items 1 ~ 7 were calibrated within period of 1 year.

2 TEST PROCEDURE

- 2.1 The EUT was test according to **CISPR 22 Class B**.
- 2.2 The radiated test was performed at HomeTek Lab’s Open Site III.
- 2.3 The frequency range from 30 MHz to 1 GHz, the measurement were made at 10 meters, with a BI-log antenna.

3 TEST SETUP



(Details for setup configuration, please refer to appendix A.)

4 CONFIGURATION OF THE EUT

The EUT was configured according to **EN 61000-6-3**. All I/O ports were connected to the appropriate peripherals. All peripherals and cables are listed below (including internal device) :

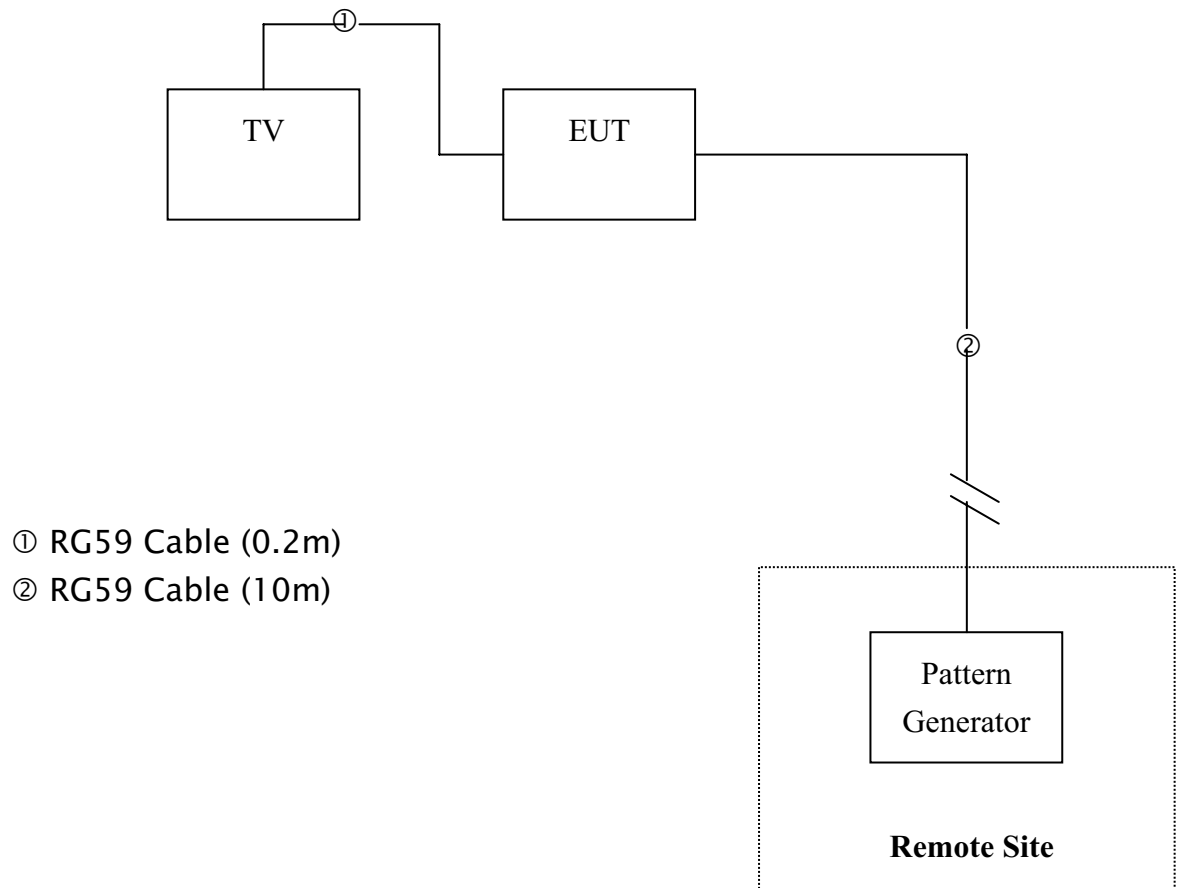


Figure 1

4.1 EUT

EUT Type : Proto Type Engineer Type Mass Production
 Condition when received : Good Damage : _____
 Device : Video Ground Loop Isolator
 Applicant : SMART CABLING & TRANSMISSION CORP.
 Manufacturer : SMART CABLING & TRANSMISSION CORP.
 Model Number : GL00X, GB00X (X = 1~9)
 Serial Number : N/A
 FCC ID : N/A
 Data Cable1 (RG59) : Shielded, 0.2 m, Metal Type Connector
 Data Cable2 (RG59) : Shielded, 10 m, Metal Type Connector
 Power Cord : N/A
 Power Supply Type : N/A

4.2 PERIPHERALS

TV

Manufacturer : TLC
 Model Number : 1419A
 Serial Number : N/A
 FCC ID : FCC DoC
 Data Cable : Shielded, 0.2 m
 Power Cord : Un-Shielded, 1.0 m



Pattern Generator (Remote Site)

Manufacturer : LEADER
Model Number : 408
Serial Number : 3037775
FCC ID : N/A
Data Cable : Shielded, 10 m
Power Cord : Un-Shielded, 1.8 m

4.3 REMARK : N/A

5 EUT OPERATING CONDITION

- 5.1 Configure the EUT according to the **EN 61000-6-3**.
- 5.2 The frequency of the EUT is none.
- 5.3 Turn on all the power of peripheral.
- 5.4 Remote pattern generator sends color bar signal to EUT.
- 5.5 Monitor the output signal of EUT during the test. (For EMS testing)
- 5.6 The photos of radiated test configuration, please refer to appendix A.**

6 LIMIT OF RADIATED EMISSION CLASS B

Frequency (MHz)	Measurement Distance	Limit (dBuV/m)
30 - 230	10 (M)	30
230 - 1000	10 (M)	37

7 RESULT OF RADIATED EMISSION TEST

- 7.1 The frequency range from 30 MHz to 1 GHz was investigated.
- 7.2 All readings below or equal 1 GHz are quasi-peak or peak values with resolution bandwidth of 120 KHz.
- 7.3 The measurements were made at 10 meters of HomeTek Lab’s open site III.
- 7.4 Temperature : 33 °C, Humidity : 55 % RH.
- 7.5 Deviation form the test standards and rules : None.
- 7.6 The radiated emission result were gained by the following method :
 Level = Reading Level + Probe Factor (Antenna Factor) + Cable Loss – Preamp Factor
 Over Limit = Level – Limit Line
- 7.7 Result : **PASSED**

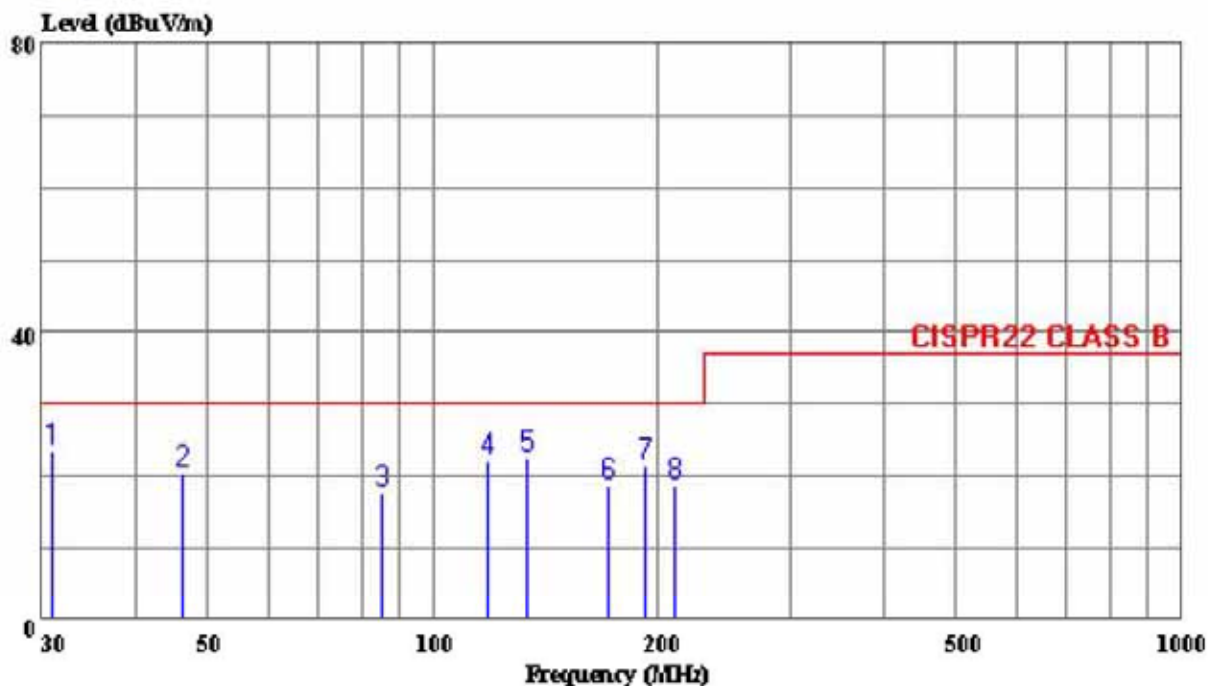


HomeTek Technology Inc.

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Data#: 1 File#: 6G013.EMI

Date: 2004-08-12 Time: 09:27:21



Trace:

Ref Trace:

Condition: CISPR22 CLASS B 10m CHASE 2614 052604 HORIZONTAL
cut : Video Ground Loop Isolator
power: N/A
memo : GB001

Page: 1

	Freq	Level	Limit	Over	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB
1	30.820	23.51	30.00	-6.49	33.78	17.10	0.83	28.20 Peak
2	46.230	20.42	30.00	-9.58	37.87	9.70	1.05	28.20 Peak
3	85.130	17.82	30.00	-12.18	36.84	7.83	1.36	28.21 Peak
4	118.247	22.21	30.00	-7.79	37.13	11.67	1.56	28.15 Peak
5	133.468	22.51	30.00	-7.49	37.90	11.08	1.64	28.10 Peak
6	170.975	18.72	30.00	-11.28	36.29	8.60	1.82	27.99 Peak
7	192.110	21.41	30.00	-8.59	38.70	8.70	1.93	27.92 Peak
8	210.374	18.75	30.00	-11.25	36.12	8.50	2.01	27.88 Peak

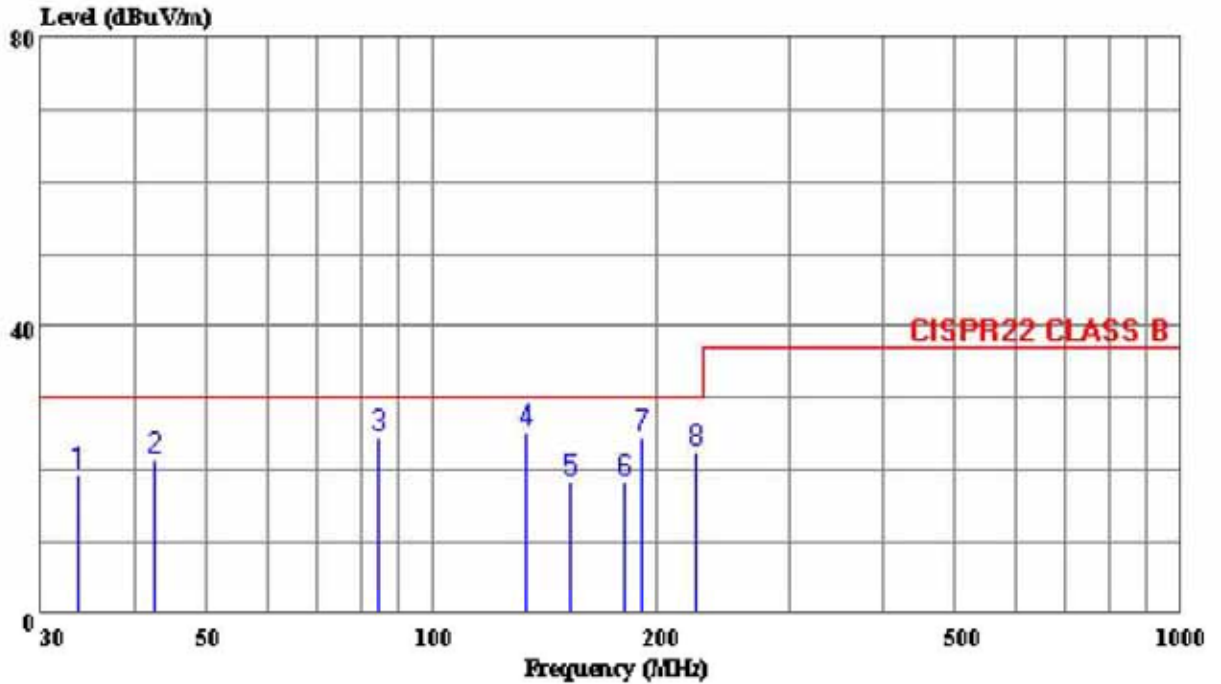


HomeTek Technology Inc.

No 67-9, Shi-Men Rd.; Tu-Chen City, Taipei County, Taiwan R.O.C. Tel:02-22608375 Fax:02-22748013

Data#: 2 File#: 6G013.EMI

Date: 2004-08-12 Time: 09:57:51



Trace:

Ref Trace:

Condition: CISPR22 CLASS B 10m CHASE 2614 052604 VERTICAL
cut : Video Ground Loop Isolator
power: N/A
memo : GB001

Page: 1

	Freq	Level	Limit	Over	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	Loss	Factor	
				dB	dBuV	dB	dB	
1	33.724	19.41	30.00	-10.59	30.41	16.32	0.88	28.20 Peak
2	42.490	21.44	30.00	-8.56	37.17	11.47	1.00	28.20 Peak
3	84.750	24.75	30.00	-5.25	43.82	7.78	1.36	28.21 Peak
4	133.489	25.14	30.00	-4.86	40.53	11.08	1.64	28.10 Peak
5	152.347	18.43	30.00	-11.57	35.33	9.41	1.73	28.05 Peak
6	180.413	18.52	30.00	-11.48	36.01	8.60	1.87	27.96 Peak
7	191.113	24.51	30.00	-5.49	41.86	8.66	1.92	27.92 Peak
8	224.170	22.52	30.00	-7.48	39.54	8.75	2.08	27.86 Peak

HARMONICS TEST

1 TEST PROCEDURE

According to **EN 61000-3-2 (2000)**.

2 RESULT OF HARMONICS TEST

N/A (This standard is not applicable to this EUT (Model : GB001)).

VOLTAGE FLUCTUATIONS TEST

1 TEST PROCEDURE

According to **EN 61000-3-3 (1995) + A1 (2001)**.

2 RESULT OF VOLTAGE FLUCTUATIONS TEST

N/A (This standard is not applicable to this EUT (Model : GB001)).

4 CONFIGURATION OF THE EUT

Same as “Conducted Power Line test”, section 4

5 EUT OPERATION CONDITION

Same as “Conducted Power Line test”, section 5

6 TEST CONDITION

6.1 Test Level :

(A) $\pm 2, 4, 8$ KV for air discharge.

(B) $\pm 2, 4, 6$ KV for contact discharge.

6.2 Number of test : 10 Discharges / Test point / Polarity / Level

6.3 Time between test : ≥ 1 sec.

6.4 Temperature : 24 °C

6.5 Humidity : 50 % RH.

7 PERFORMANCE CRITERIA

There shall be no damage, malfunction or change of status due to the conditioning. Flickering of an indicator during the application of the discharges is permissible, providing that there is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change.

The EUT shall meet the acceptance criteria for the functional test, after the conditioning.

8 TEST RESULT

Test Point	Air Discharge	Contact Discharge	Result
HCP	±2, 4, 8KV	±2, 4, 6KV	PASSED
VCP	±2, 4, 8KV	±2, 4, 6KV	PASSED
CASE	±2, 4, 8KV	±2, 4, 6KV	PASSED
I/O PORTS	±2, 4, 8KV	±2, 4, 6KV	PASSED
SCREWS	±2, 4, 8KV	±2, 4, 6KV	PASSED

There is no significant changes during the test.

9 Photos of test configuration please refer to appendix A.

RADIO FREQUENCY ELECTROMAGNETIC FIELD IMMUNITY TEST (RS)

1 TEST INSTRUMENTS & FACILITIES

Item	Instruments Facilities	Manufacturer	Model # Serial #	Data Of Cal.
1	SIGNAL GENERATOR	ROHDE & SCHWARZ	SMY02 845181/025	MAR/2004
2	AMPLIFIER	AMPLIFIER RESEARCH	100W1000M1A	N/A
3	FIELD SENSOR	AMPLIFIER RESEARCH	FP2000	AUG/2002
4	FIELD MONITOR	AMPLIFIER RESEARCH	FM2000	AUG/2002
5	RF VOLTMETER	BOONTON	9200C 361701AA	MAR/2004
6	RF PROBE	BOONTON	952001B 37082	MAR/2004
7	DIRECTION COUPLER	AMPLIFIER RESEARCH	DC6180 20521	N/A
8	ANTENNA	EMCO	3142B S/N: 1789	N/A
9	CONTROL PC	KB TECH	KB P586/133	--

Note : Items 3 ~ 4 were calibrated with two years and verified before testing.

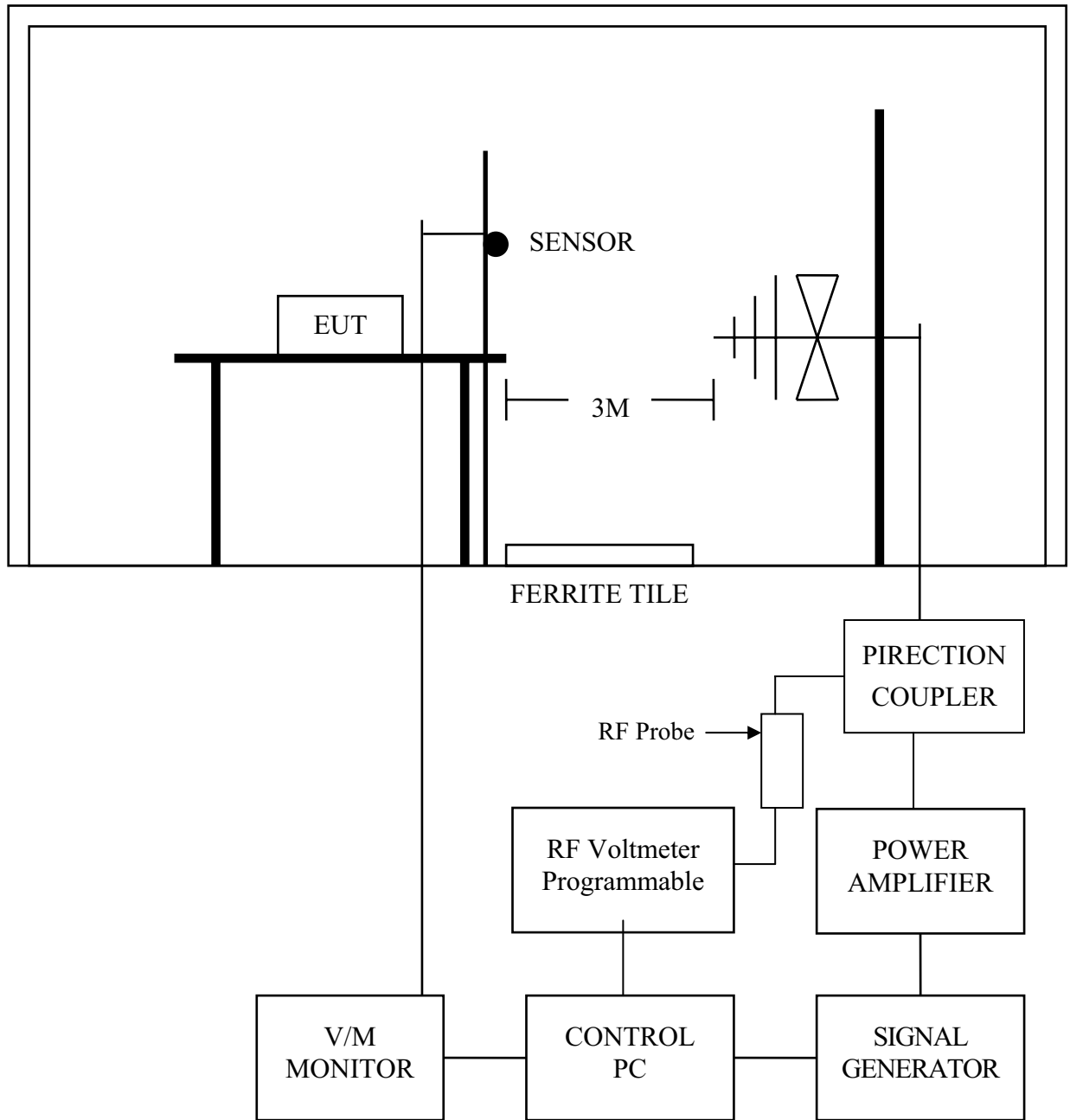
2 TEST PROCEDURE

According to **IEC 61000-4-3 (2002)**

According to **EN 50130-4 (1995) + A1 (1998) + A3 (2003)**

3 TEST SETUP

FERRITE TILE



3.1 Chamber Size :

12M x 5M x 5M

(Details for setup configuration, please refer to appendix A.)

4 CONFIGURATION OF THE EUT

Same as “Conducted Power Line test”, section 4

5 OPERATION CONDITION OF EUT

Same as “Conducted Power Line test”, section 5

6 TEST CONDITION

6.1 Frequency Range : 80 MHz ~ 1000 MHz

6.2 Field Strength : 10 V / M (1KHz 80% Sinusoidal amplitude modulation)
10 V / M (1KHz 0.5s on : 0.5s off pulse modulation)

6.3 Frequency Step : 1 %, 3 sec. / each step size

6.4 Antenna Polarity : HORIZONTAL & VERTICAL

6.5 The four sides of EUT are tested
(FRONT, REAR, RIGHT, LEFT)

6.6 Temperature : 27 °C

6.7 Humidity : 60 % RH

7 PERFORMANCE CRITERIA

There shall be no damage, malfunction or change of status due to the conditioning. Flickering of an indicator during the conditioning is permissible, providing that there is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change, and no such flickering of indicators occurs at a field strength of 3 V/m.

For components of CCTV system, where the status is monitored by observing the TV picture, then deterioration of the picture is allowed at 10 V/m, providing :

- a There is no permanent damage or change to the EUT (e.g. no corruption of memory or changes to programmable setting etc.);
- b At 3 V/m, any deterioration of the picture is so minor that the system could still be used;
- c There is no observable deterioration of the picture at 1 V/m.

The EUT shall meet the acceptance criteria for the functional test, after the conditioning.

8 TEST RESULT

ANT SIDE	HORIZONTAL	VERTICAL
FRONT	PASSED	PASSED
REAR	PASSED	PASSED
RIGHT	PASSED	PASSED
LEFT	PASSED	PASSED

9 **Photos of test configuration please refer to appendix A.**

ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST (EFT)

1 TEST INSTRUMENTS & FACILITIES

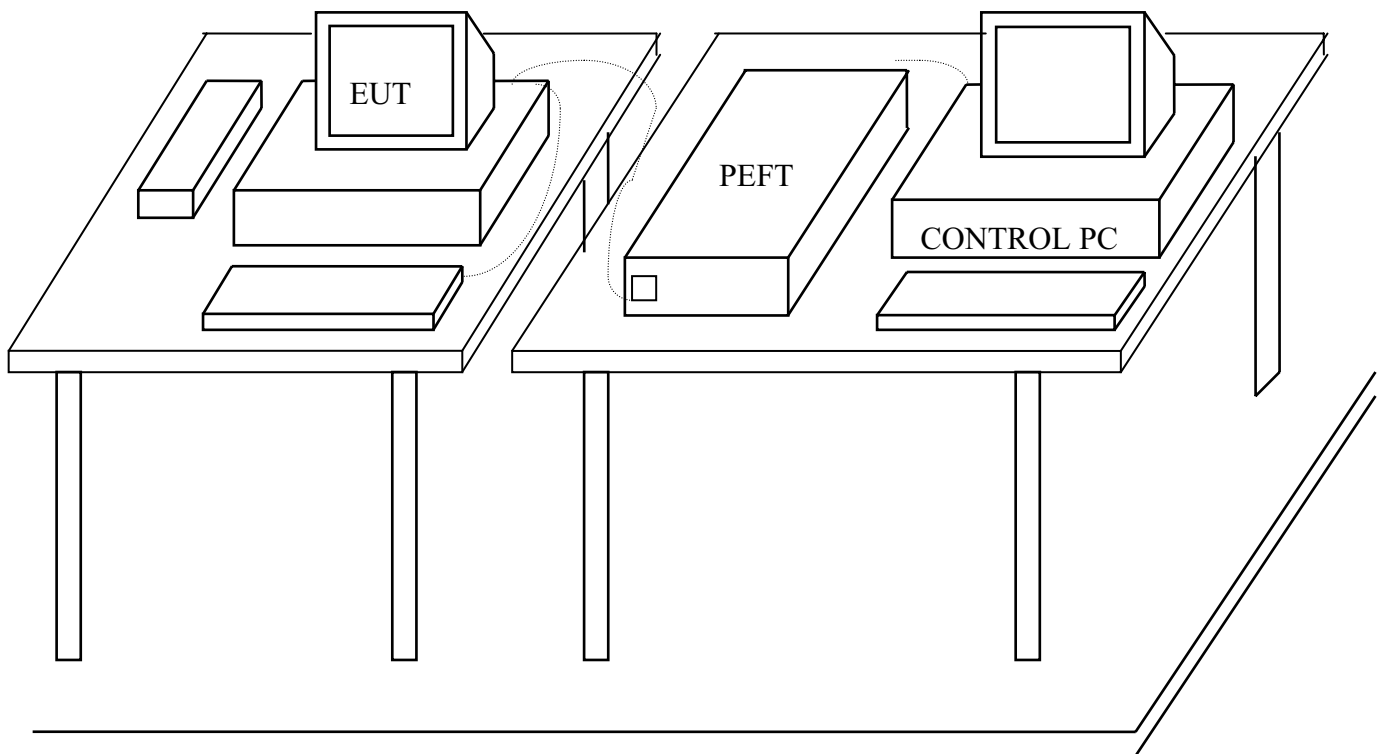
Instruments/ Facilities	Manufacturer	Model # Serial #	Data Of Cal.
BURST-TESTER	HAEFELY	PEFT/JUNIOR	FEB/2004
CONTROL PC	KB TECH	KB P586/133	--

2 TEST PROCEDURE

According to **IEC 61000-4-4 (2004)**

According to **EN 50130-4 (1995) + A1 (1998) + A2 (2003)**

3 TEST SETUP



GROUND PLANE
(Details for setup configuration, please refer to appendix A.)

4 CONFIGURATION OF THE EUT

Same as “Conducted Power Line test”, section 4

5 OPERATION CONDITION OF EUT

Same as “Conducted Power Line test”, section 5

6 TEST CONDITION

6.1 Pulse Rise time & Duration : 5 nS / 50 nS

6.2 Pulse Repetition : 5 kHz

6.3 Polarity : POSITIVE / NEGATIVE

6.4 Test Voltage of Power Line : $\pm 0.5\text{KV}$, $\pm 1\text{KV}$, $\pm 2\text{KV}$

6.5 Coupling of power line :
L, N, PE, L+N, L+PE, N+PE, L+N+PE

6.6 Test Voltage of Signal Control Line : $\pm 0.25\text{KV}$, $\pm 0.5\text{KV}$, $\pm 1\text{KV}$

6.7 Temperature : 27 °C

6.8 Humidity : 60 % RH

7 PERFORMANCE CRITERIA

There shall be no damage, malfunction or change of status due to the conditioning. Flickering of an indicator during the application of the bursts is permissible, providing that there is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change.

The EUT shall meet the acceptance criteria for the functional test, after the conditioning.

8 TEST RESULT

Power Line :

N/A (This standard is not applicable to this EUT (Model : TGP001)).

Signal Control Line :

TEST VOLTAGE	PERFORMACE CRITERIA
±0.25KV	✓
±0.5KV	✓
±1KV	✓

※The screen was flash during the test.

8.1 Model : GB001

8.2 Final Result : PASSED

8.3 Remark :

9 Photos of test configuration please refer to appendix A.

SURGE IMMUNITY TEST

1 TEST PROCEDURE

According To **IEC 61000-4-5 (2001)**

According To **EN 50130-4 (1995) + A1 (1998) + A2 (2003)**

2 RESULT OF SURGE IMMUNITY TEST

N/A (This standard is not applicable to this EUT (Model : GB001)).

IMMUNITY TEST TO CS CONDUCTED DISTURBANCE

1 TEST PROCEDURE

According To **ENV 50141 (1993)**

According To **EN 50130-4 (1995) + A1 (1998) + A2 (2003)**

2 RESULT OF IMMUNITY TEST TO CS CONDUCTED DISTURBANCE

N/A (This standard is not applicable to this EUT (Model : GB001)).

VOLTAGE DIPS, SHORT INTERRUPTIONS IMMUNITY TEST

1 TEST PROCEDURE

According To **IEC 61000-4-11 (2004)**

According To **EN 50130-4 (1995) + A1 (1998) + A2 (2003)**

2 RESULT OF VOLTAGE DIPS, SHORT INTERRUPTIONS IMMUNITY TEST

N/A (This standard is not applicable to this EUT (Model : GB001)).



HomeTek Technology Inc.

Appendix A

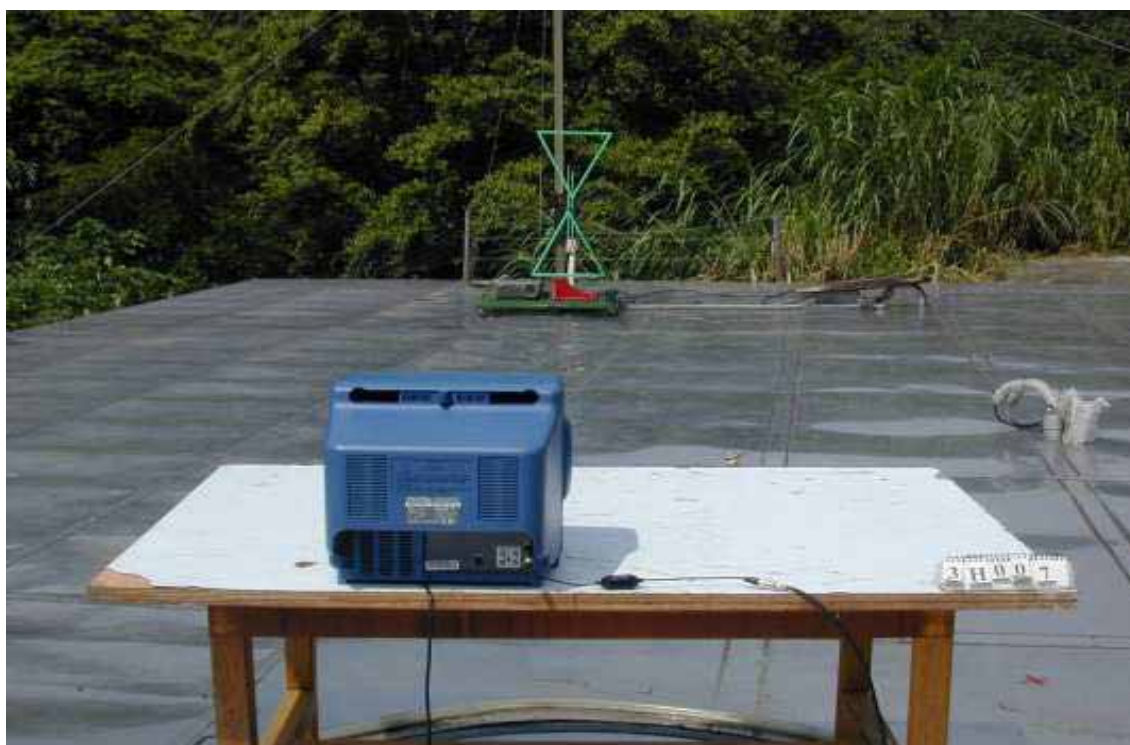
PHOTOS OF TEST CONFIGURATION

PHOTO OF RADIATED EMISSION TEST

Model : GB001



Front View



Rear View

PHOTO OF ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST (EFT)

Model : GB001



Signal Control Line Test



PHOTO OF ELECTROSTATIC DISCHARGE IMMUNITY TEST (ESD)

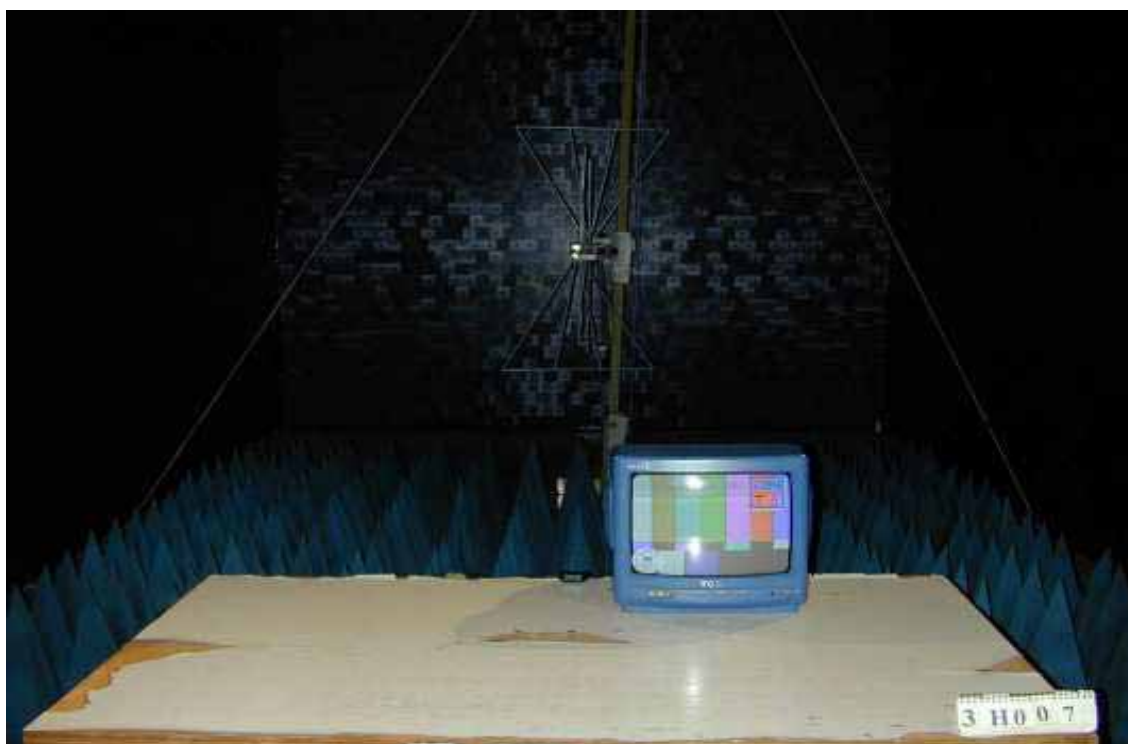
Model : GB001



Front View

**PHOTO OF RADIO FREQUENCY ELECTROMAGNETIC FILE
IMMUNITY TEST (RS)**

Model : GB001



Front View



HomeTek Technology Inc.

Appendix B

PHOTOS OF EUT

PHOTO OF EUT

Model : GB001 , GL001



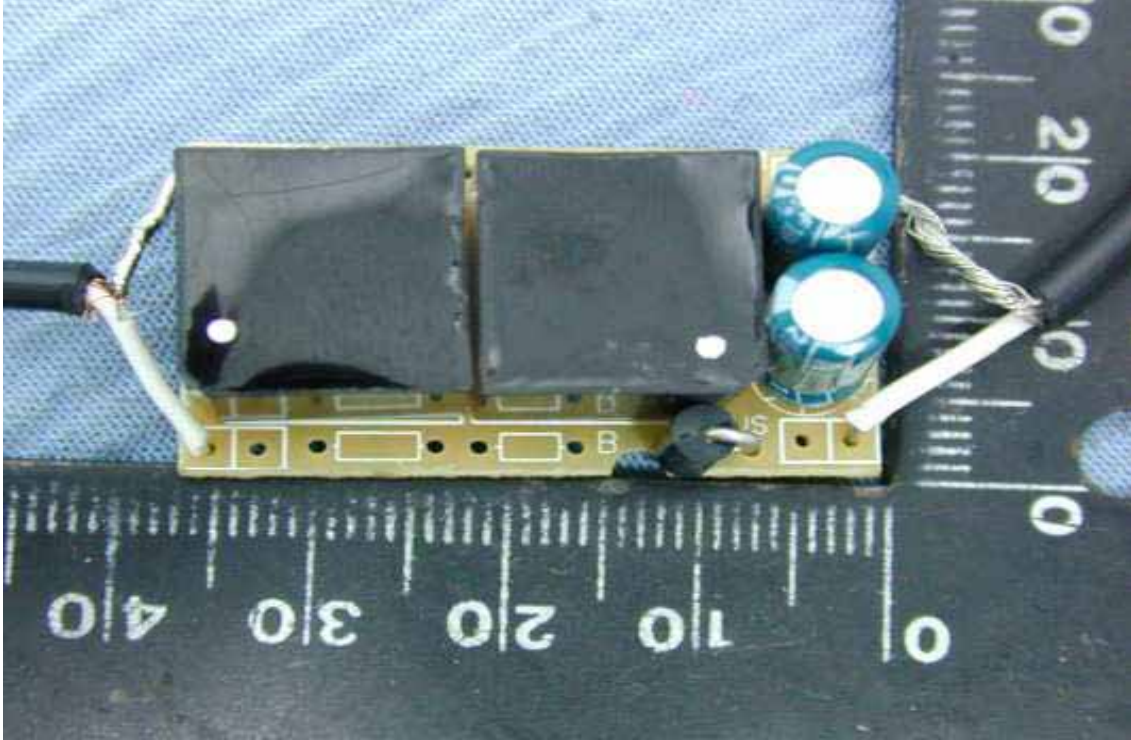
Front View of EUT



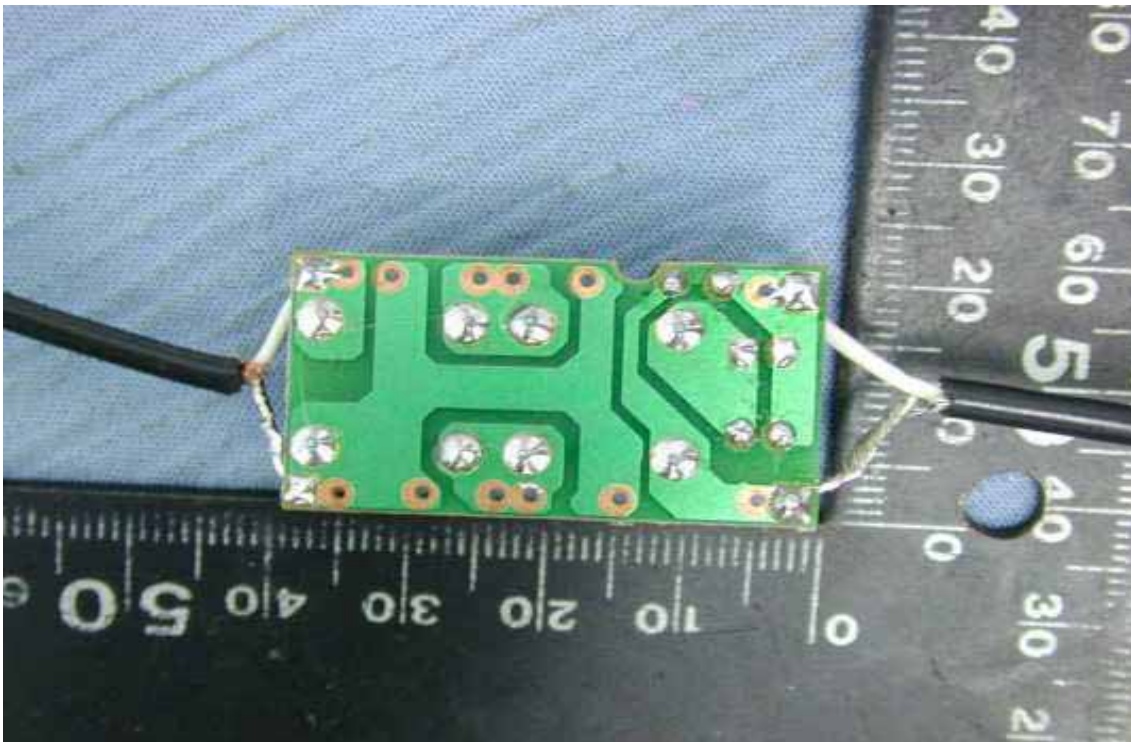
Rear View of EUT

PHOTO OF EUT

Model : GB001



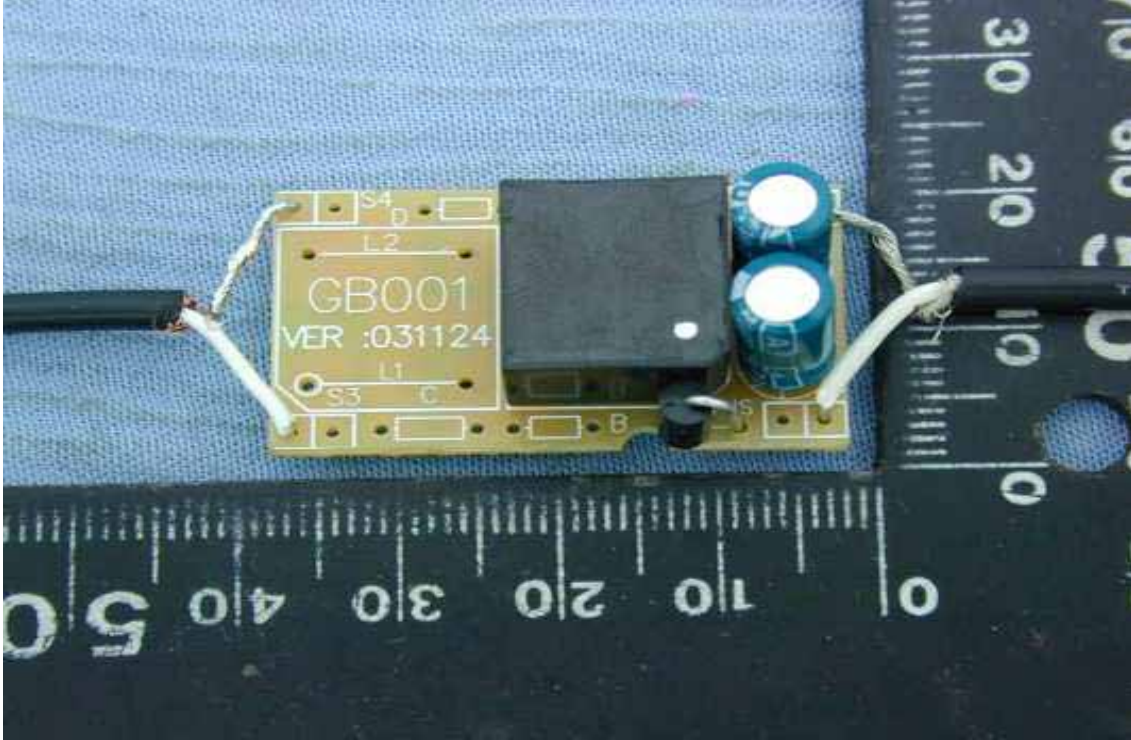
Component Side of Main Board



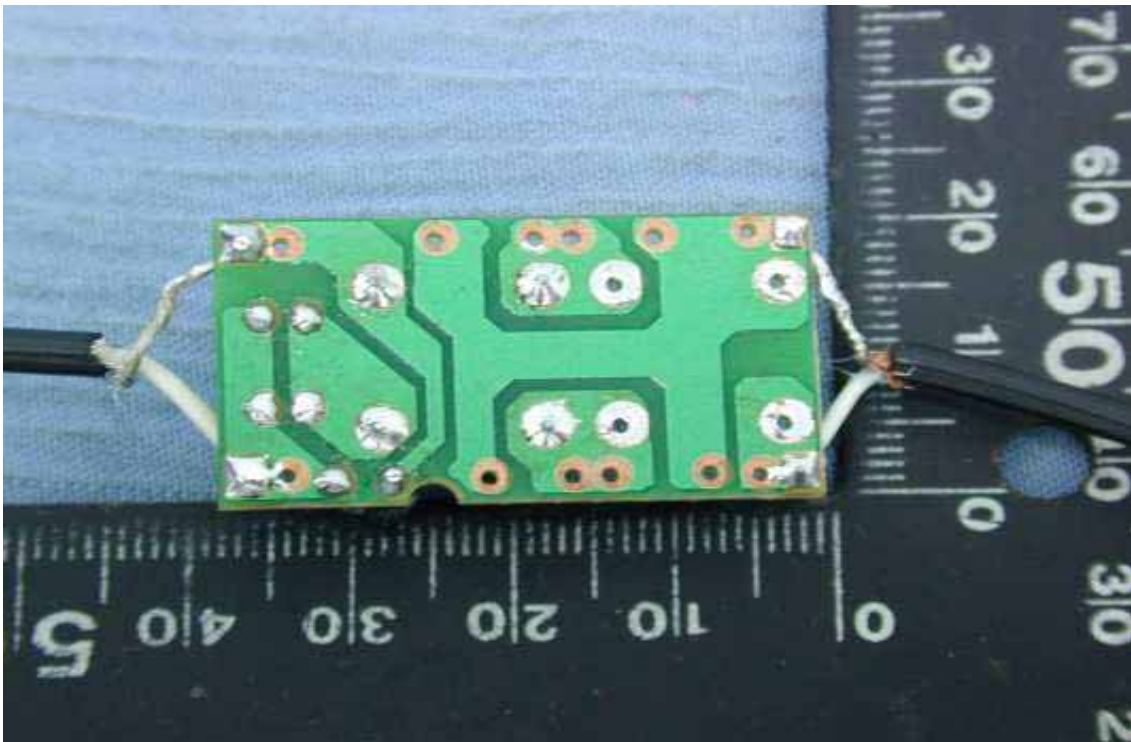
Solder Side of Main Board

PHOTO OF EUT

Model : GL001



Component Side of Main Board



Solder Side of Main Board

Declaration of Conformity

We(Manufacturer/Importer)

(company name)

(address)

declares under our sole responsibility that the product

Product name : Video Ground Loop Isolator

Model No. : GL00X, GB00X (X = 1~9)

to which this declaration relates is in conformity with the following standard(s) or other normative document(s)

- | | |
|---|---|
| <input checked="" type="checkbox"/> EN 61000-6-3 (2001) | <input checked="" type="checkbox"/> EN 50130-4 (1995)
+ A1 (1998)
+ A2 (2003) |
| <input checked="" type="checkbox"/> CISPR 22 Class B (1997) | <input checked="" type="checkbox"/> IEC 61000-4-2 (2001) |
| <input checked="" type="checkbox"/> EN 61000-3-2 (2000) | <input checked="" type="checkbox"/> IEC 61000-4-3 (2002) |
| <input checked="" type="checkbox"/> EN 61000-3-3 (1995) | <input checked="" type="checkbox"/> IEC 61000-4-4 (2004) |
| + A1 (2001) | <input checked="" type="checkbox"/> IEC 61000-4-5 (2001) |
| | <input checked="" type="checkbox"/> ENV 50141 (1993) |
| | <input checked="" type="checkbox"/> IEC 61000-4-11 (2004) |

following the provisions of 2004/108/EC Directive

Place: _____ Signature: _____

Date : _____ Full name: _____



Title: _____

EMC Laboratory Authorisation

Aut. No.: ELA 183

EMC Laboratory: **HomeTek Technology Inc.**
P.O.Box 13-131, Pan-Chiao City,
No. 67-9, Shi-Men Rd., Tu-Chen City,
Taipei Shien
Taiwan R.O.C.

Scope of
Authorization: **All CENELEC standards [ENs] for EMC that are listed on the
accompanying page, and, all of the corresponding CISPR,
IEC, and ISO EMC standards that are listed on the
accompanying page.**

Nemko has assessed the testing facilities, qualifications and testing practices and the relevant part of the organization. The above-mentioned EMC Laboratory has been validated against EN 45001 and ISO 17025 and found to be compliant. The laboratory also fulfils the conditions described in Nemko Document ELA-INFO-10. During Nemko's visit it was found that the EMC Laboratory is capable of performing tests within the Scope of Authorisation given on the accompanying page(s).

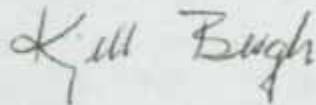
Accordingly, Nemko will accept test reports from the laboratory as a basis for attesting conformity to these EMC Standards under either the European Union EMC Directive (89/336/EEC) or, when applicable, the national standards of countries Nemko has been authorised to attest conformity with.

In order to maintain the Authorisation, the information given in the pertinent ELA-INFO-10 must be carefully followed. Nemko is to be promptly notified about any changes in the situation at the EMC Laboratory, which may affect the basis for this Authorisation. The Authorisation may be withdrawn at any time if the conditions are no longer considered to be fulfilled.

The Authorisation is valid through 31 December 2004.

Oslo, 28 November 2002

For Nemko AS:



Kjell Bergh, Nemko Group EMC Co-ordinator

EMC Laboratory Authorisation

Aut. No.: ELA 183

SCOPE OF AUTHORIZATION

GENERIC & PRODUCT-FAMILY STANDARDS

EN 50081-1:1992 EN 61000-6-3: 2001 IEC 61000-6-3:1996 (mod)	EN 50082-1 :1997 EN 61000-6-1:2001 IEC 61000-6-1:1997 (mod)	EN 61000-6-2:1999 IEC 61000-6-2:1999 EN 61000-6-2: 2001 IEC 61000-6-2:1999 (mod)
EN 50081-2:1993 EN 61000-6-4 : 2001 IEC 61000-6-4:1997 (mod)	EN 55014-1:1993 + A1:1997 + A2 :1999 CISPR 14:1993 + A1:1996 + A2 :1998 EN 55014-1 :2000 + A1 :2001 CISPR 14-1 :2000 + A1 :2001	EN 55014-2:1997 CISPR 14-2:1997
EN 61000-3-2:1995 + A1:1998 + A2:1998 + A14 :2000 IEC 61000-3-2:1995 + A1:1997 + A2:1998 EN 61000-3-2 :2000 IEC 61000-3-2 :2000 (mod) + A1 :2001	EN 61000-3-3 :1995 + A1 :2001 IEC 61000-3-3 :1994 + A1 :2001 EN 61000-3-11 :00 IEC 61000-3-11 :00	EN 55022:1994 + A1:1995 + A2:1997 CISPR 22:1993 + A1:1995 + A2:1996 EN 55022:1998 + A1 :2000 CISPR 22:1997 + A1 :2000
EN 55024:1998 + A1 :2001 CISPR 24:1997 + A1 :2001	EN 50091-2:1995	EN 60945:1997 IEC 60945:1996
EN 55013: 1990 + A12 :1994 + A13 :1995 + A14 :1999 CISPR 13 :1975 + A1 :1983 (mod) EN55013: 2001 CISPR 13 : 2001 (mod)		

BASIC STANDARDS

EN 61000-4-2:1995 + A1:98 IEC 61000-4-2:1995 + A1:98 EN 60801-1:1993 IEC 801.2:1991 IEC 801.2:1984	EN 61000-4-3:1996 + A1:98 IEC 61000-4-3:1995 + A1:98 IEC 801.3:1984 ENV 50140:1993 + ENV 50204:1995	EN 61000-4-4:1995 IEC 61000-4-4:1995 IEC 801.4:1990
EN 61000-4-5:1995 IEC 61000-4-5:1995 ENV 50142:1994	EN 61000-4-6:1996 IEC 61000-4-6:1996 ENV 50141:1993	EN 61000-4-8:1993 IEC 61000-4-8:1993
EN 61000-4-11:1994 IEC 61000-4-11:1994		

Oslo, 28 November 2002

Kjell Bergh, Nemko Group EMC Co-ordinator

TÜV Rheinland Taiwan Ltd.



Certificate of Appointment

for the applicant:

Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.

has been authorized to carry out EMC tests by order and under supervision of TÜV Rheinland. It has successfully demonstrated capability to conduct measurement and to process test data according to:


**European and International EMC Standards as listed in the
Scope of Authorization on the attachment to this certificate**

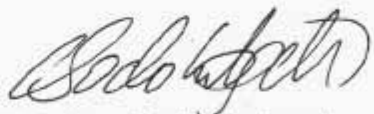
An assessment of the facility was conducted by TÜV Rheinland auditors according to the TÜV Rheinland requirements for "Test Site Approval" with reference to
ISO 17 025:1999

Certificate No. : 10012161-2004

Valid until : February 14, 2006

TÜV Rheinland Taiwan Ltd.
Taipei, December 21, 2004


Dipl.-Ing. Andreas Klinker
Certification Body


Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality



Attachment to
Certificate
of Appointment

SCOPE OF AUTHORIZATION

Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.

European Standards

EN 50081-1	EN 61000-3-2	ENV 50140
EN 50081-2	EN 61000-3-3	ENV 50141
EN 50082-1	EN 61000-6-1	ENV 50204
EN 50130-4	EN 61000-6-2	
EN 50091-2	EN 61000-6-3	
EN 55011	EN 61000-6-4	
EN 55013	EN 61000-3-11	
EN 55014-1	EN 61000-4-2	
EN 55014-2	EN 61000-4-3	
EN 55022	EN 61000-4-4	
EN 55024	EN 61000-4-5	
EN 60601-1-2	EN 61000-4-6	
EN 60801	EN 61000-4-8	
EN 60945	EN 61000-4-11	
	EN 61204-3	

International Standards

CISPR 11	IEC 61000-4-2	IEC 61000-3-2
CISPR 13	IEC 61000-4-3	IEC 61000-3-3
CISPR 14-1	IEC 61000-4-4	IEC 61000-3-11
CISPR 14-2	IEC 61000-4-5	IEC 61000-6-1
CISPR 22	IEC 61000-4-6	IEC 61000-6-2
CISPR 24	IEC 61000-4-8	IEC 61000-6-3
	IEC 61000-4-11	IEC 61000-6-4
IEC 801.2	IEC 61000-4-12	IEC 60945
IEC 801.3		
IEC 801.4		

Certificate No. : 10012161-2004

Taipei, December 21 , 2004

Dipl.-Ing. Bodo Krätzschar
Product Safety and Quality



TÜV Rheinland Taiwan Ltd.

Certificate

of

Appointment

for the applicant:

Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.

has been authorized to carry out EMC tests by order and under supervision of TÜV Rheinland. It has successfully demonstrated capability to conduct measurement and to process test data according to:

**European and International EMC Standards as listed in the
Scope of Authorization on the attachment to this certificate**

An assessment of the facility was conducted by TÜV Rheinland auditors according to the TÜV Rheinland requirements for "Test Site Approval" with reference to

ISO 17 025:1999

Certificate No. : 10012161-2006

Valid until : June 14, 2007

TÜV Rheinland Taiwan Ltd.
Taipei, April 13, 2006

A blue ink signature of Andreas Klinker.

Dipl.-Ing. Andreas Klinker
Certification Body

A blue ink signature of Bodo Kretzschmar.

Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality



Attachment to
Certificate
of Appointment

SCOPE OF AUTHORIZATION

Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.

European Standards

EN 50081-1	EN 61000-3-2	ENV 50140
EN 50081-2	EN 61000-3-3	ENV 50141
EN 50082-1	EN 61000-6-1	ENV 50204
EN 50130-4	EN 61000-6-2	
EN 50091-2	EN 61000-6-3	
EN 55011	EN 61000-6-4	
EN 55013	EN 61000-3-11	
EN 55014-1	EN 61000-4-2	
EN 55014-2	EN 61000-4-3	
EN 55022	EN 61000-4-4	
EN 55024	EN 61000-4-5	
EN 60601-1-2	EN 61000-4-6	
EN 60801	EN 61000-4-8	
EN 60945	EN 61000-4-11	
	EN 61204-3	

International Standards

CISPR 11	IEC 61000-4-2	IEC 61000-3-2
CISPR 13	IEC 61000-4-3	IEC 61000-3-3
CISPR 14-1	IEC 61000-4-4	IEC 61000-3-11
CISPR 14-2	IEC 61000-4-5	IEC 61000-6-1
CISPR 22	IEC 61000-4-6	IEC 61000-6-2
CISPR 24	IEC 61000-4-8	IEC 61000-6-3
	IEC 61000-4-11	IEC 61000-6-4
IEC 801.2	IEC 61000-4-12	IEC 60945
IEC 801.3		
IEC 801.4		

Certificate No. : 10012161-2006

Taipei, April 13, 2006


Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality



TÜV Rheinland Taiwan Ltd.

Certificate of Appointment

for the applicant:

**Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.**

has been authorized to carry out EMC tests by order and under supervision of TÜV Rheinland. It has successfully demonstrated capability to conduct measurement and to process test data according to:

**European and International EMC Standards as listed in the
Scope of Authorization on the attachment to this certificate**


An assessment of the facility was conducted by TÜV Rheinland auditors according to the TÜV Rheinland requirements for "Test Site Approval" with reference to
ISO 17025: 2005

Certificate No. : 10012161-2007

Valid until : Sept. 7, 2008

TÜV Rheinland Taiwan Ltd.
Taipei, June 20, 2007


Dipl.-Ing. Andreas Klinker
Certification Body


Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality



Attachment to
Certificate
of Appointment

SCOPE OF AUTHORIZATION

Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.

European Standards

EN 50081-1	EN 61000-3-3	ENV 50140
EN 50081-2	EN 61000-6-1	ENV 50141
EN 50082-1	EN 61000-6-2	ENV 50204
EN 50130-4	EN 61000-6-3	
EN 50091-2	EN 61000-6-4	
EN 55011	EN 61000-3-11	
EN 55013	EN 61000-4-2	
EN 55014-1	EN 61000-4-3	
EN 55014-2	EN 61000-4-4	
EN 55022	EN 61000-4-5	
EN 55024	EN 61000-4-6	
EN 60601-1-2	EN 61000-4-8	
EN 60801	EN 61000-4-11	
EN 60945	EN 61204-3	
EN 61000-3-2	EN 62040-2	

International Standards

CISPR 11	IEC 61000-4-2	IEC 61000-3-2
CISPR 13	IEC 61000-4-3	IEC 61000-3-3
CISPR 14-1	IEC 61000-4-4	IEC 61000-3-11
CISPR 14-2	IEC 61000-4-5	IEC 61000-6-1
CISPR 22	IEC 61000-4-6	IEC 61000-6-2
CISPR 24	IEC 61000-4-8	IEC 61000-6-3
	IEC 61000-4-11	IEC 61000-6-4
IEC 801.2	IEC 61000-4-12	IEC 60945
IEC 801.3		IEC 62040-2
IEC 801.4		

Certificate No. : 10012161-2007

Taipei, June 20, 2007


Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality