

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 : 06/23/2005 Final Test Date: 07/13/2005
EUT : Twisted Pair Transmission
MODEL NO. : TTP111XXX, TTP414XXX, TDP414XXX

MEASUREMENT PROCEDURE USED

EN 61000-6-3 CLASS B / EN61000-3-2 / EN61000-3-3 / EN 50130-4 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.

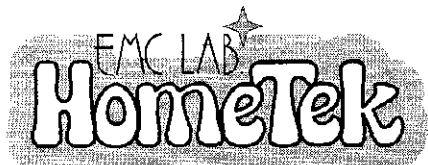
PREPARED BY :

HomeTek Technology Inc.

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

Taipei Hsien. Taiwan

Report # : EB6J029



HomeTek Technology Inc.

ADDRESS: No. 67-9, Shir Men Road, Tu Cheng City,
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CERTIFICATE OF COMPLIANCE

EUT : Twisted Pair Transmission
MODEL NO. : TTP111XXX, TTP414XXX, TDP414XXX
Receipt Date : 06/23/2005 Final Test Date: 07/13/2005
REPORT # : EB6J029
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) + A11 (2004): CISPR 22 Class B (1997),

EN 61000-3-2 (2006), 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 a duplicate of original one (Report No. EB6G014, issued on 2007, 07, 31), test standard is updated.

APPROVED BY :  11/6/2007

ALAIN LIN / Assistant Manage

DESCRIPTION OF UPGRADE OF TEST STANDARDS

Applicant: SMART CABLING & TRANSMISSION CORP.

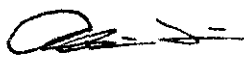
Product Name: Twisted Pair Transmission

Model Number: TTP111XXX, TTP414XXX, TDP414XXX

The test standard of this report (No. EB6J029) is updated from original one (No. EB6G014) with the procedures given in **EUROPEAN COUNCIL DIRECTIVE 2004/108/EC** and the measurement procedure used **EN 61000-6-3 (2001) + A11 (2004): CISPR 22 Class B (1997) / EN 61000-3-2 (2006) / 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.

November, 06, 2007



ALAIN LIN / Assistant Manager

TEST REPORT CERTIFICATION

EMC of electrical appliances

Report reference No. : EB6J029
Date of issue : NOV., 06, 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 : Twisted Pair Transmission
Model/type reference : TTP111XXX, TTP414XXX, TDP414XXX
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) + A11 (2004): CISPR 22 Class B (1997),
EN 61000-3-2 (2006), 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



Approved by (+ signature) :
Alain Lin / Assistant Manager



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APPENDIX A

PHOTOS OF TEST CONFIGURATION

APPENDIX B

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 : Twisted Pair Transmission
- Model : TTP111XXX, TTP414XXX, TDP414XXX
- Serial # : N/A

5.1 The difference between series of models TTP111XXX, TTP414XXX, TDP414XXX are as shown below:

- (1) The first “X” represent different color.
- (2) The second “X” represent different packing box.
- (3) The third “X” represent different accessory.

The PCB layout is same. The worst case of EMC test data were shown in this test report.

6 FEATURES OF EUT :

Please refer to user manual or product specification.



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).

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	OPEN AREA TEST SITE	☑ OATS 3			JUL/2004
2	EMI TEST RECEIVER	20Hz ~ 26.5GHz	ROHDE & SCHWARZ	ESMI 845442/006	JAN/2005
3	PRE-AMPLIFIER	9KHz ~ 3000MHz	ADVANTEST	BB525C 90081001	SEP/2004
4	ANTENNA (BI-LOG)	25MHz ~ 2GHz	SCHAFFNER	CBL6112B S/N : 2611	JUN/2005
5	Attenuation	50 Ω /6dB	JYE BAO	FAT-N (M-F) 001	JUL/2004
6	Cable	10m	SUHNER	RG214/U OS3-003	DEC/2004
7	Cable	14m	BELDEN	9913 OS3-001	DEC/2004
8	EMI 32 (software)	N/A	AUDIX	19991013-0923	N/A

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

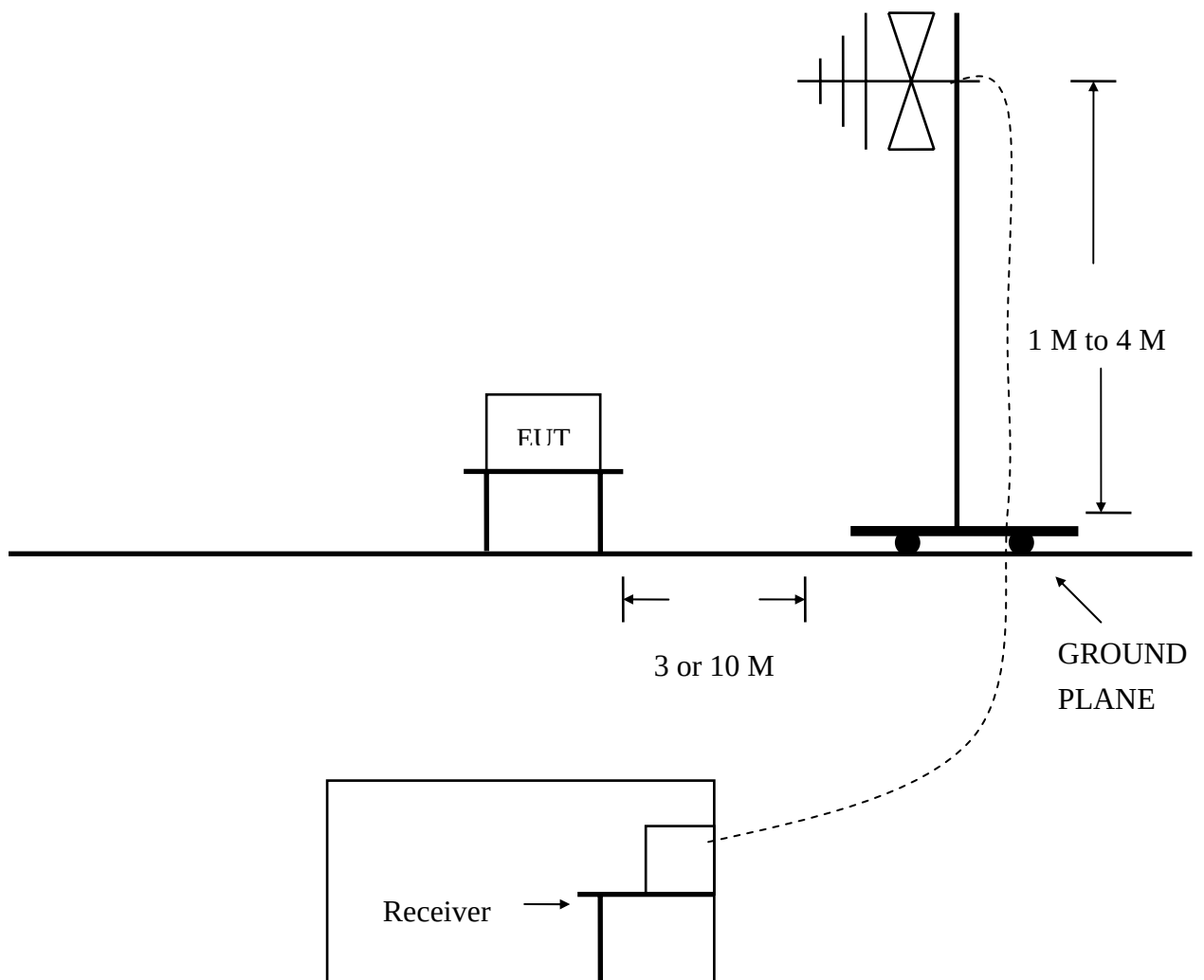
2 TEST PROCEDURE

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 3.

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) :

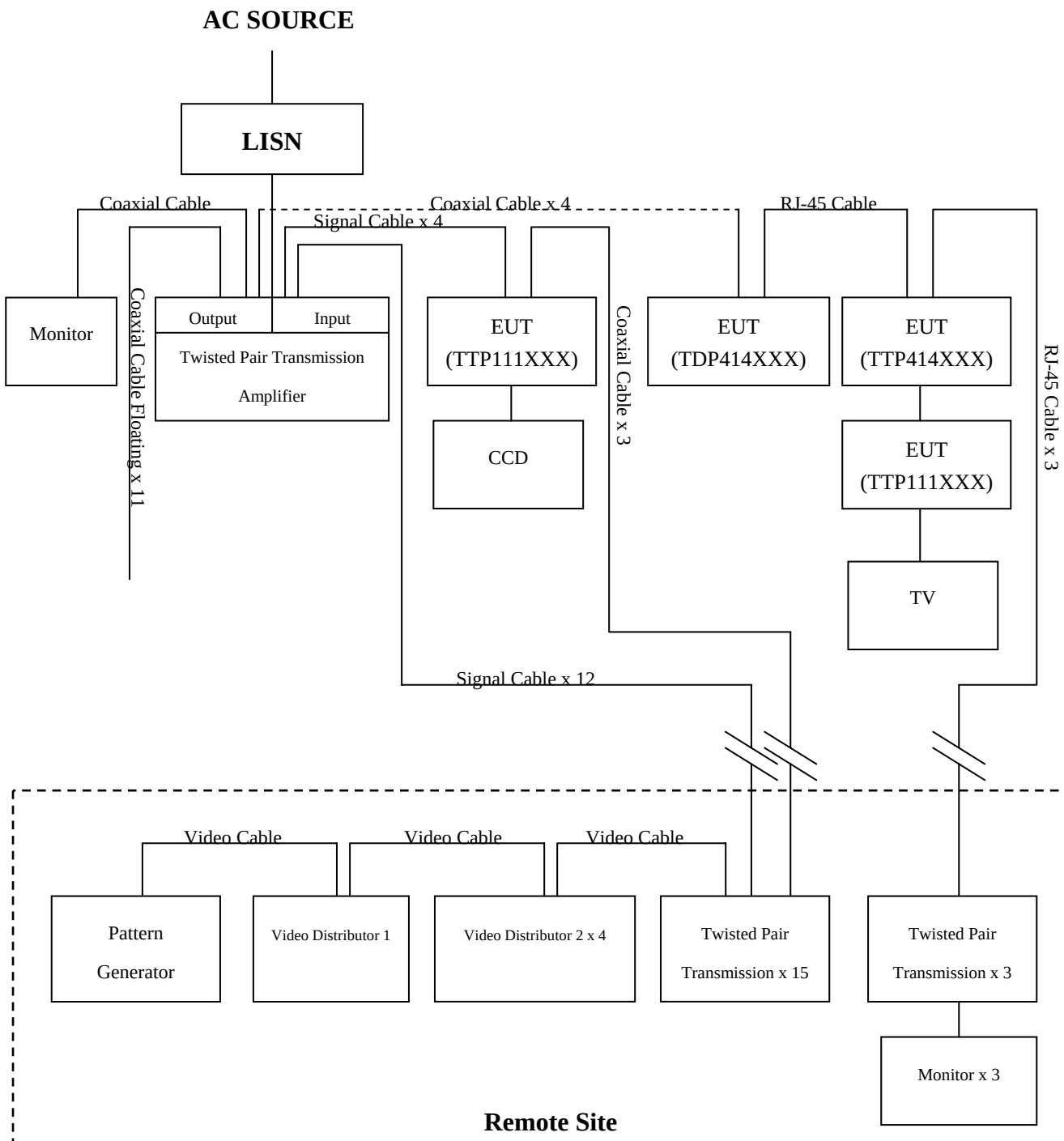


Figure 1

4.1 EUT

EUT Type : ☐Proto Type ☒Engineer Type ☐Mass Production

Condition when received : ☒Good ☐Damage : _____

Device : Twisted Pair Transmission

Applicant : SMART CABLING & TRANSMISSION CORP.

Manufacturer : SMART CABLING & TRANSMISSION CORP.

Model Number : TTP111XXX, TTP414XXX, TDP414XXX

Serial Number : N/A

FCC ID : N/A

Model No. TTP111XXX

● BNC Port : Metal Type Connector

● Signal Cable : Un-Shielded, 1.8 m, Plastics Type Connector

Model No. TDP414XXX

● Coaxial Cable x 4 : Shielded, 2.0 m, Metal Type Connector
(BNC Port)

● RJ-45 Cable : Un-Shielded, 1.8 m, Plastics Type Connector

Power Cord : N/A

Model No. TTP414XXX

● RJ-45 Cable x 4 : Un-Shielded, 10 m, Plastics Type Connector

● RJ-45 Cable : Un-Shielded, 1.8 m, Plastics Type Connector

Power Cord : N/A

4.2 PERIPHERALS

☒ Monitor

Manufacturer	: SONI
Model Number	: MT14A
Serial Number	: N/A
FCC ID	: N/A
Data Cable	: Shielded, 2.0 m
Power Cord	: Un-Shielded, 1.8 m

☒ CCD

Manufacturer	: ADDVTSUAL
Model Number	: AD1464KC
Serial Number	: N/A
FCC ID	: N/A
Data Cable	: Un-Shielded, 1.8 m
Power Cord	: Un-Shielded, 1.8 m

☒ TV

Manufacturer	: TCL
Model Number	: 1419A
Serial Number	: N/A
FCC ID	: N/A
Data Cable	: Un-Shielded, 1.8 m
Power Cord	: Un-Shielded, 1.8 m

☒ Twisted Pair Transmission x 5

Manufacturer : SMART CABLING
Model Number : TTP111XXX
Serial Number : N/A
FCC ID : N/A
Data Cable 1 : Un-Shielded, 1.8 m
Data Cable 2 : Un-Shielded, 10 m
Power Cord : N/A

☒ Twisted Pair Transmission

Manufacturer : SMART CABLING
Model Number : TTP414XXX
Serial Number : N/A
FCC ID : N/A
Data Cable 1 : Un-Shielded, 1.8 m
Data Cable 2 : Un-Shielded, 10 m
Power Cord : N/A

☒ Twisted Pair Transmission

Manufacturer : SMART CABLING
Model Number : TDP414XXX
Serial Number : N/A
FCC ID : N/A
Data Cable : Un-Shielded, 1.8 m
Power Cord : N/A

☒ Twisted Pair Transmission Amplifier

Manufacturer : SMART CABLING
Model Number : TPA016
Serial Number : N/A
FCC ID : N/A
Data Cable 1 : Shielded, 2.0 m
Data Cable 2 : Un-Shielded, 1.8 m
Power Cord : Un-Shielded, 1.8 m

☒ Twisted Pair Transmission x 18 (Remote Site)

Manufacturer : SMART CABLING
Model Number : TTP111XXX
Serial Number : N/A
FCC ID : N/A
Data Cable : Un-Shielded, 10 m
Power Cord : N/A

☒ Video Distributor x 5 (Remote Site)

Manufacturer : CS Lilin
Model Number : PIH-6002
Serial Number : N/A
FCC ID : N/A
Data Cable : Shielded, 1.8 m
Power Cord : Un-Shielded, 1.8 m



☒ Pattern Generator (Remote Site)

Manufacturer : LEADER

Model Number : 408

Serial Number : N/A

FCC ID : N/A

Data Cable : Shielded, 2.0 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 EUT and peripheral.
- 5.4 Remote pattern generator sends color bar signal to EUT.
- 5.5 Observe the output signal of EUT during the test. (For EMS testing)
- 5.6 The radiated emission in the frequency range from 30 MHz - 1000 MHz was test in a horizontal and vertical polarization at HomeTek Lab's open site 3.
- 5.7 **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

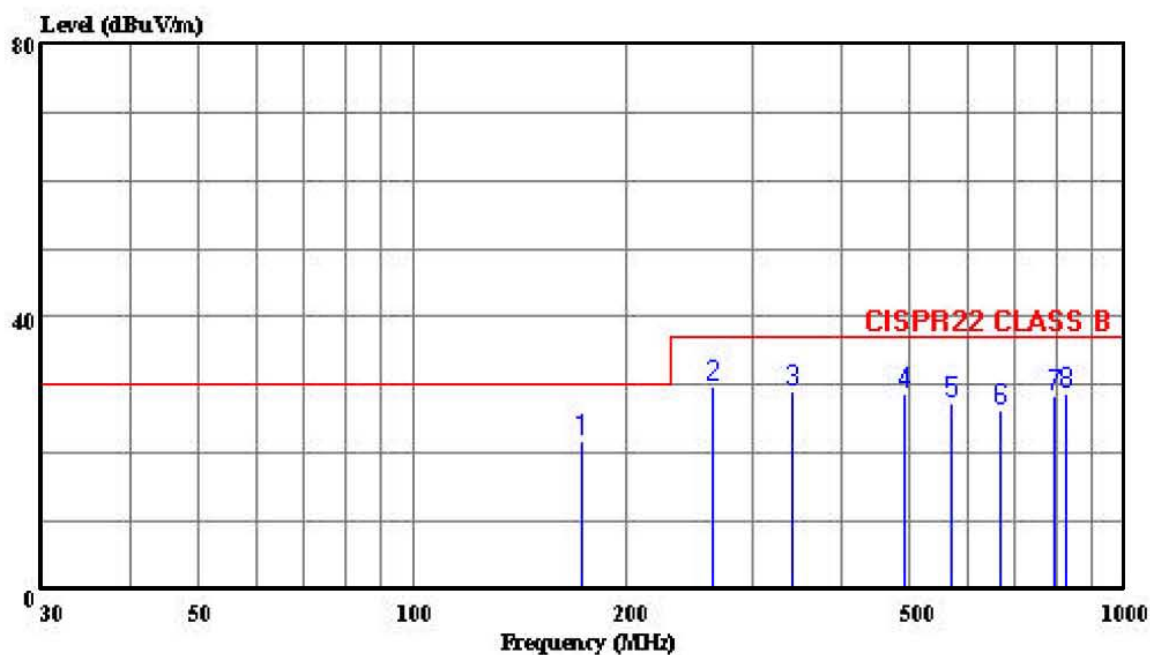
7 RESULT OF RADIATED EMISSION TEST

- 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 3.
- 7.4 Temperature : 29 °C, Humidity : 63 % 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**

8 RADIATED EMISSION TEST DATA (PAGE 1)

Data#: 2 File#: 4f051.emi

Date: 2005-07-06 Time: 10:53:01



Trace:

Ref Trace:

Condition: CISPR22 CLASS B 10m CHASE 2611 060705 HORIZONTAL

cut : Twisted Pair Transmission

power: 230V/50Hz

memo : TTP414XXX

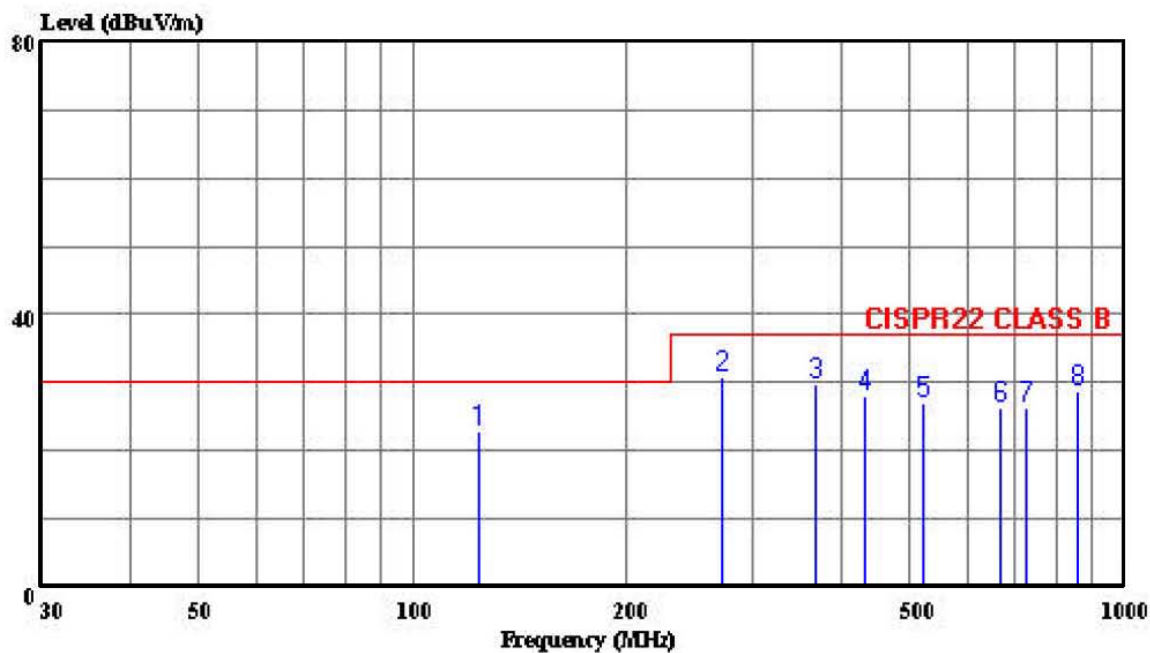
Page: 1

	Freq	Level	Limit	Over	ReadAntenna	Cable	Preamp	
	MHz	dBUV/m	dBUV/m	Limit	Level	Factor	Loss	Factor Remark
				dB	dBUV	dB/m	dB	dB
1	172.973	21.98	30.00	-8.02	41.29	8.42	1.73	29.47 Peak
2	263.700	29.78	37.00	-7.22	44.39	12.64	2.31	29.56 Peak
3	340.433	29.25	37.00	-7.75	41.70	14.17	2.72	29.34 Peak
4	491.927	28.91	37.00	-8.09	36.71	17.23	3.47	28.50 Peak
5	572.487	27.22	37.00	-9.78	33.05	18.59	3.73	28.14 Peak
6	668.407	26.23	37.00	-10.77	31.35	18.94	4.02	28.07 Peak
7	795.413	28.29	37.00	-8.71	30.72	20.11	4.55	27.09 Peak
8	830.507	28.62	37.00	-8.38	30.54	20.46	4.66	27.04 Peak

9 RADIATED EMISSION TEST DATA (PAGE 2)

Data#: 1 File#: 4f051.emi

Date: 2005-07-06 Time: 10:26:48



Trace:

Ref Trace:

Condition: CISPR22 CLASS B 10m CHASE 2611 060705 VERTICAL
 eut : Twisted Pair Transmission
 power: 230V/50Hz
 memo : TTP414XXX

Page: 1

	Freq	Level	Limit	Over	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss	Factor Remark
			dBuV/m	dB	dBuV	dB/m	dB	dB
1	123.740	22.97	30.00	-7.03	39.11	11.58	1.45	29.18 Peak
2	272.073	30.77	37.00	-6.23	45.22	12.74	2.36	29.55 Peak
3	368.967	29.81	37.00	-7.19	41.20	14.99	2.84	29.22 Peak
4	432.947	28.01	37.00	-8.99	37.55	16.20	3.14	28.88 Peak
5	522.380	27.10	37.00	-9.90	34.00	17.88	3.58	28.36 Peak
6	667.320	26.31	37.00	-10.69	31.43	18.94	4.02	28.07 Peak
7	728.027	26.19	37.00	-10.81	30.11	19.67	4.24	27.83 Peak
8	858.180	28.85	37.00	-8.15	30.46	20.68	4.75	27.03 Peak

HARMONICS TEST

1 TEST PROCEDURE

According to **EN 61000-3-2 (2006)**.

2 RESULT OF HARMONICS TEST

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

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).

ELECTROSTATIC DISCHARGE IMMUNITY TEST (ESD)

1 TEST INSTRUMENTS & FACILITIES

Instruments/ Facilities	Manufacturer	Model # Serial #	Data Of Cal.
ESD TESTER	NOISEKEN	ESS-100L (A)	OCT/2004
VCP	HOMETEK	--	--

2 TEST PROCEDURE

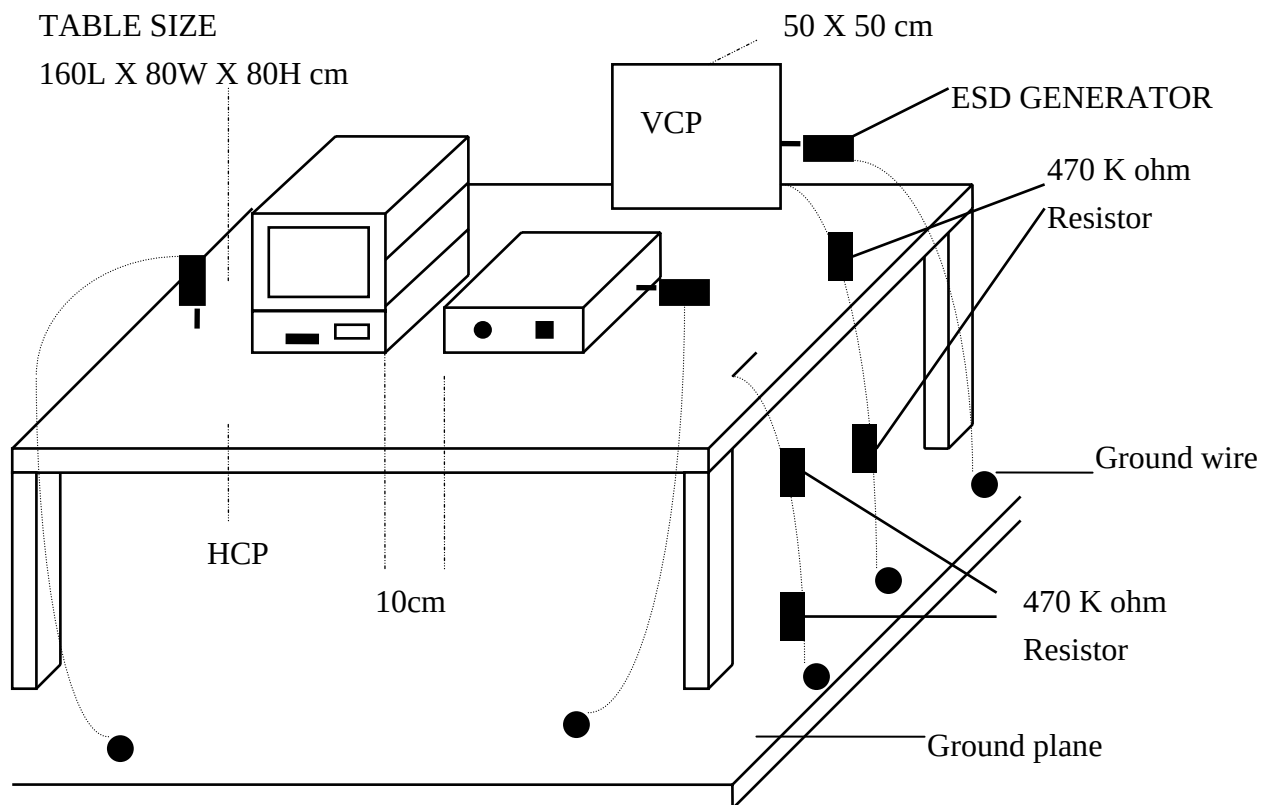
According to **IEC 61000-4-2 (2001)**

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

3 TEST SETUP

TABLE SIZE

160L X 80W X 80H cm



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

4 CONFIGURATION OF THE EUT

Same as “Radiated Emission test”, section 4

5 EUT OPERATION CONDITION

Same as “Radiated Emission test”, section 5

6 TEST CONDITION

6.1 Test Level :

(A) ± 2 , ± 4 , ± 8 KV for air discharge.

(B) ± 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 : 47 % 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	---	$\pm 2, \pm 4, \pm 6\text{KV}$	PASSED
VCP	---	$\pm 2, \pm 4, \pm 6\text{KV}$	PASSED
CASE	$\pm 2, \pm 4, \pm 8\text{KV}$	$\pm 2, \pm 4, \pm 6\text{KV}$	PASSED
I/O PORTS	$\pm 2, \pm 4, \pm 8\text{KV}$	$\pm 2, \pm 4, \pm 6\text{KV}$	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	HP	8648B	FEB/2007
2	POWER SENSOR	BOONTON	51011-EMC	SEP/2006
3	POWER METER	BOONTON	4231A-01	SEP/2006
4	FIELD PROBE	HOLADAY	HI-6005	NOV/2006
5	AMPLIFIER	SCHAFFNER	CBA9428	N/A
6	ANTENNA	SCHAFFNER	CBL6141A	N/A

Note : Items 1 ~ 4 were calibrated with two years and verified before testing.

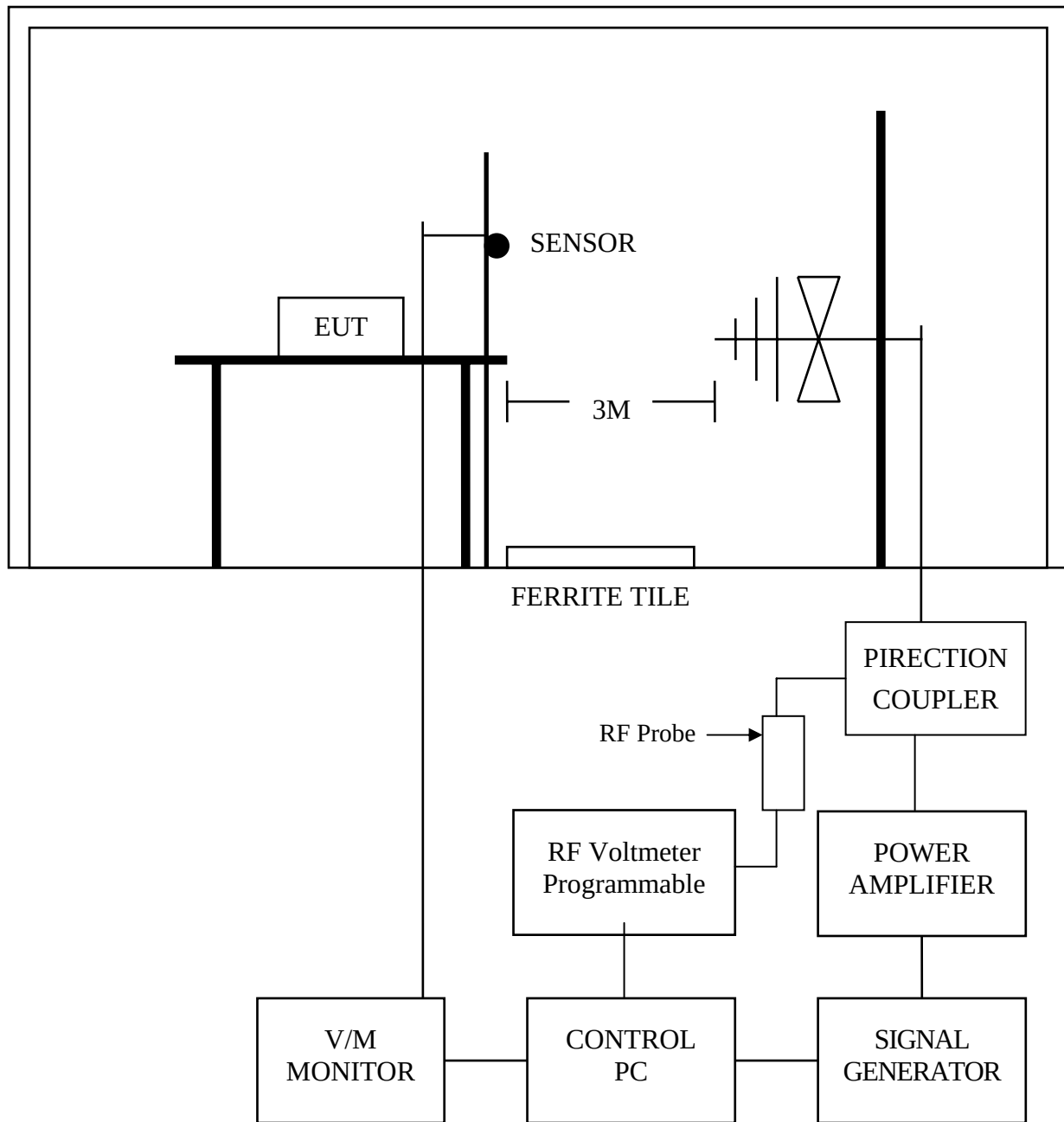
2 TEST PROCEDURE

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 “Radiated Emission test”, section 4

5 OPERATION CONDITION OF EUT

Same as “Radiated Emission test”, section 5

6 TEST CONDITION

6.1 Frequency Range : 80 MHz ~ 2000 MHz

6.2 Filed 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 : 61 % 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

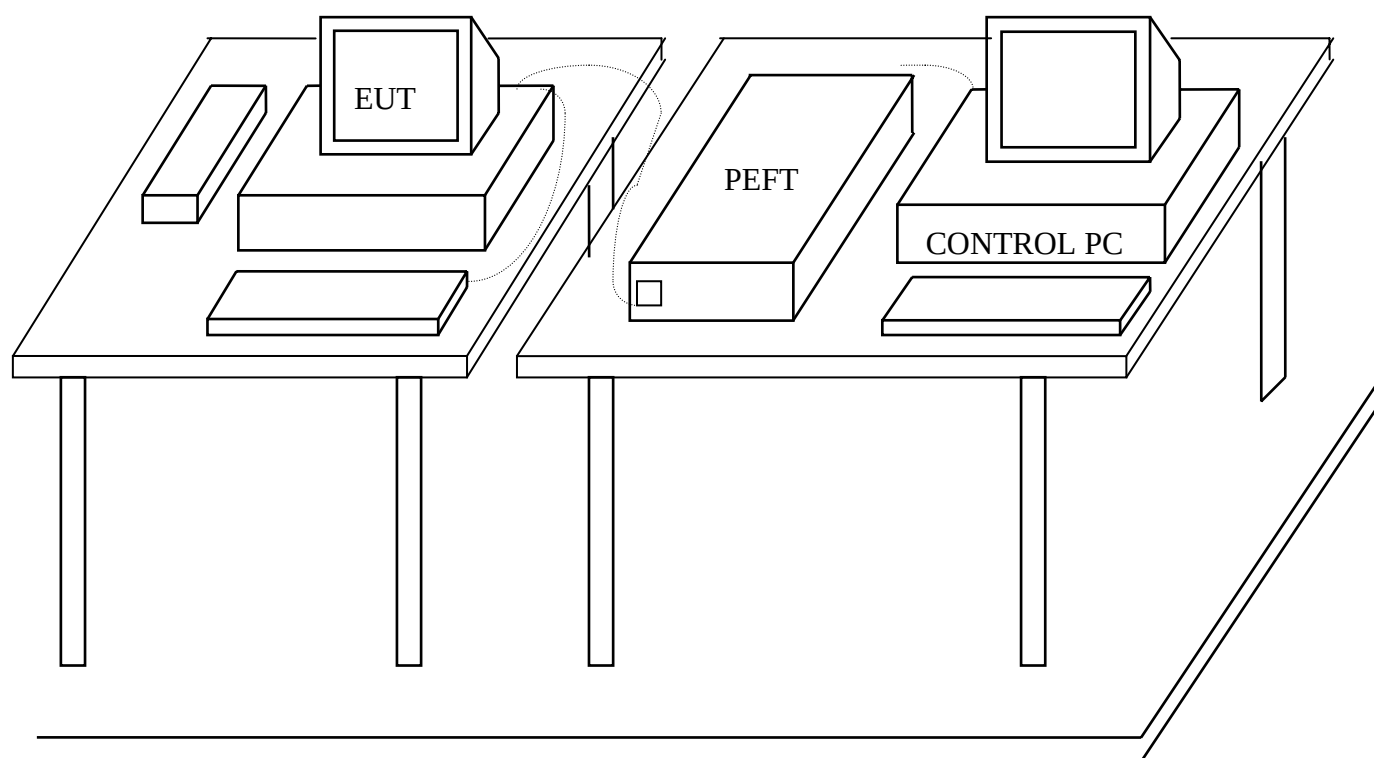
Instruments/ Facilities	Manufacturer	Model # Serial #	Data Of Cal.
BURST-TESTER	HAEFELY	PEFT/JUNIOR	FEB/2005
CONTROL PC	KB TECH	KB P586/133	--

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 : 26 °C

6.8 Humidity : 57 % 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).

Signal Control Line :

TEST VOLTAGE	PERFORMACE CRITERIA
$\pm 0.25\text{KV}$	✓
$\pm 0.5\text{KV}$	✓
$\pm 1\text{KV}$	✓

8.1 Final Result : PASSED

8.2 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).

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).

VOLTAGE DIPS, SHORT INTERRUPTIONS IMMUNITY TEST AND MAIN SUPPLY VARIATIONS

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 AND MAIN SUPPLY VARIATIONS

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



HomeTek Technology Inc.

Appendix A

PHOTOS OF TEST CONFIGURATION

PHOTO OF RADIATED EMISSION TEST



Front View



Rear View

PHOTO OF ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST



PHOTO OF ELECTROSTATIC DISCHARGE IMMUNITY TEST (ESD)



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





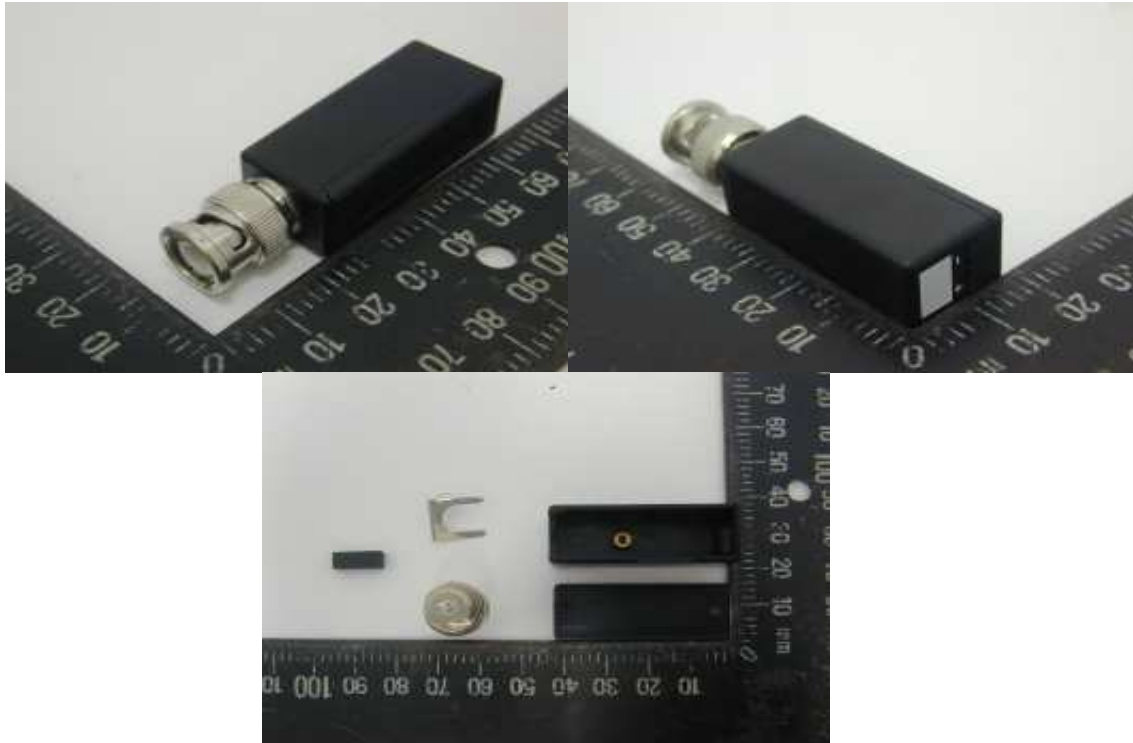
HomeTek Technology Inc.

Appendix B

PHOTOS OF EUT

PHOTO OF EUT

Model : TTP111XXX



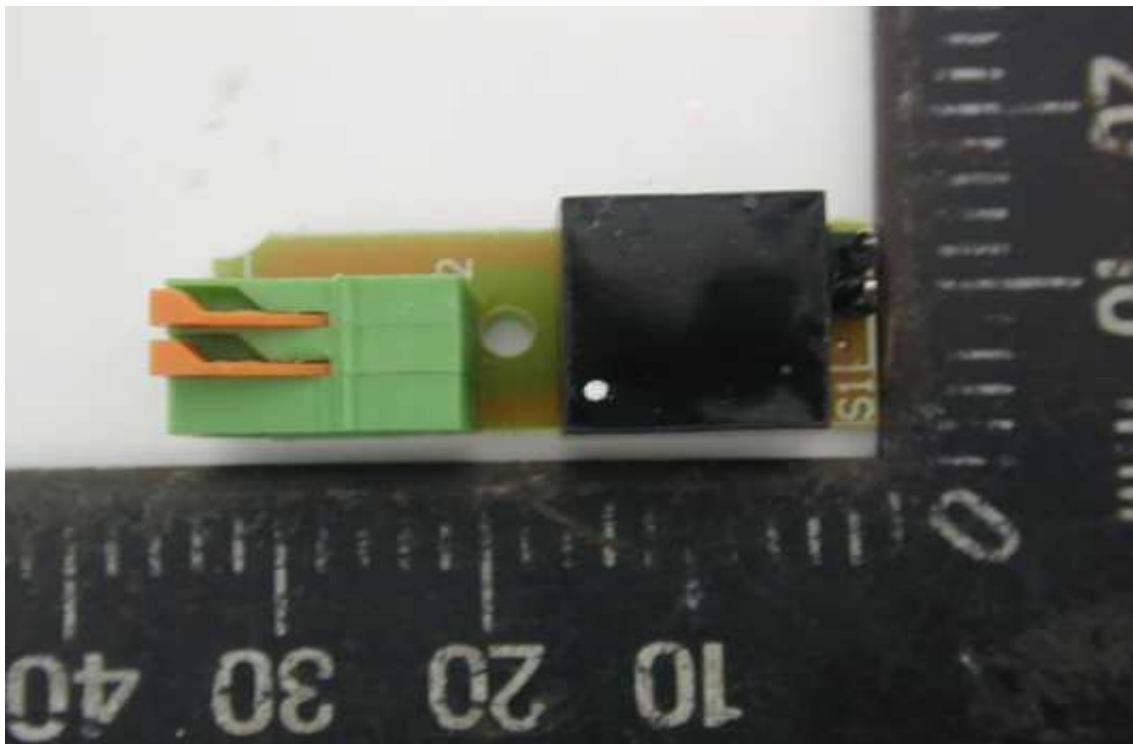
Full View of EUT



Case Inside View of EUT

PHOTO OF EUT

Model : TTP111XXX



Component Side of Main Board



Solder Side of Main Board

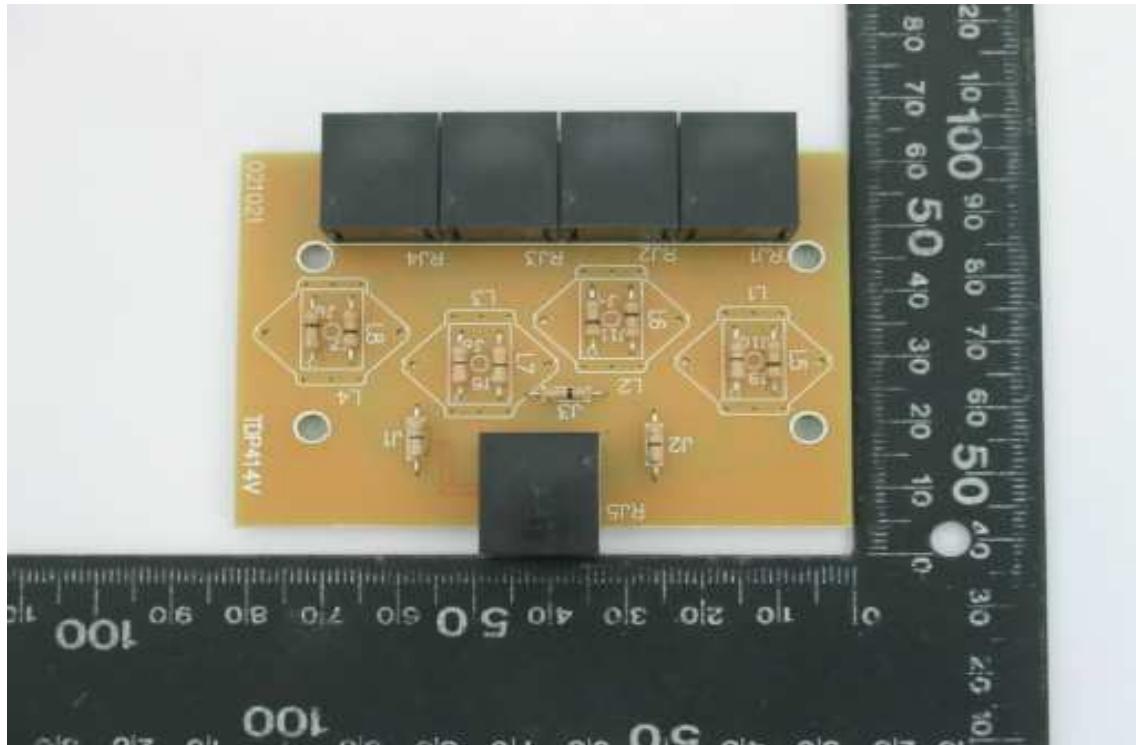
PHOTO OF EUT

Model : TTP414XXX

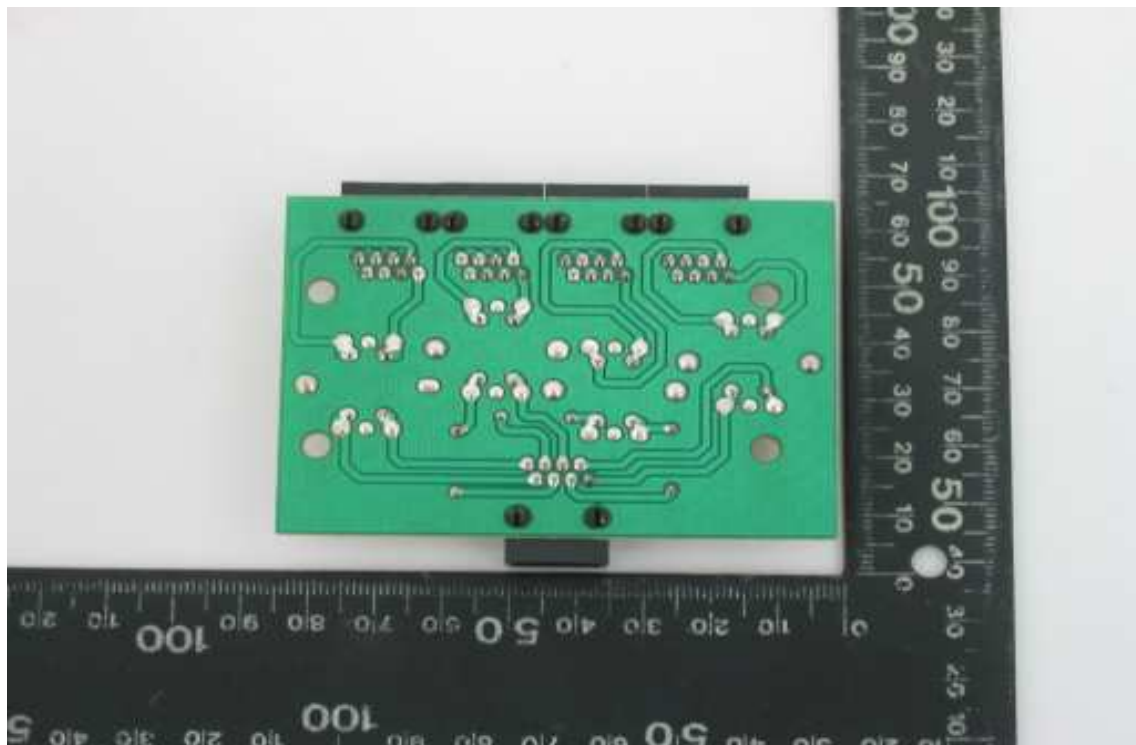


PHOTO OF EUT

Model : TTP414XXX



Component Side of Main Board



Solder Side of Main Board



HomeTek Technology Inc.

PHOTO OF EUT

Model : TDP414XXX

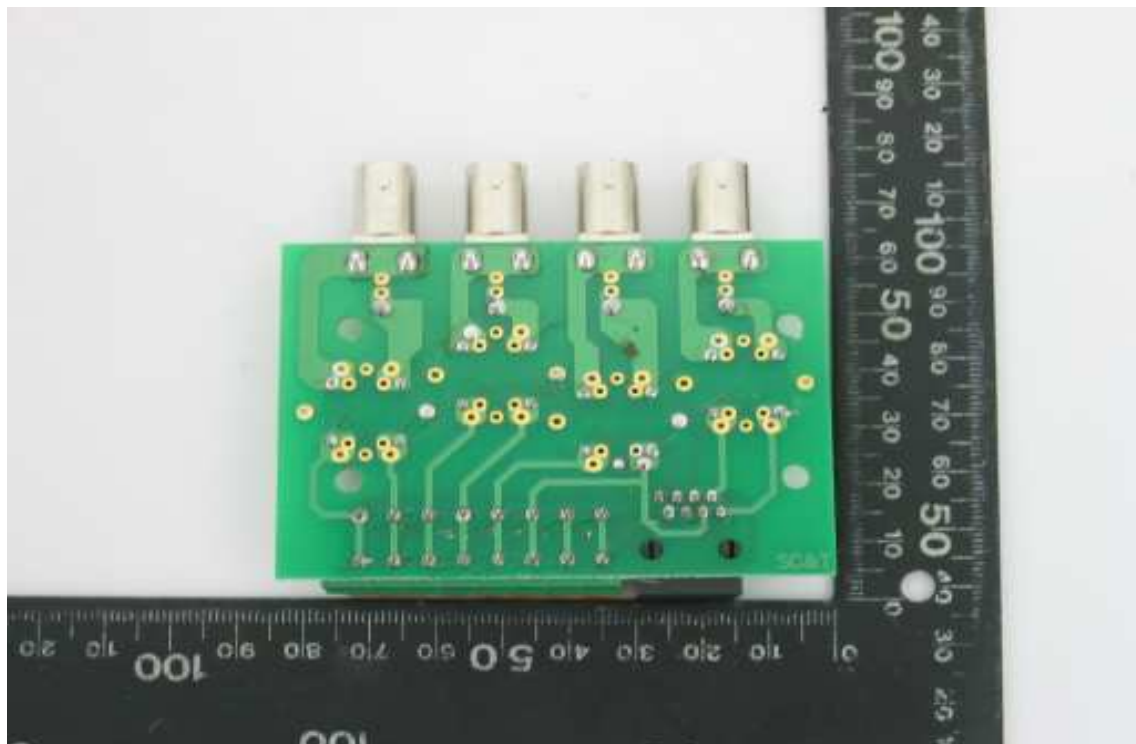


PHOTO OF EUT

Model : TDP414XXX



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 : Twisted Pair Transmission

Model No. : TTP111XXX, TTP414XXX, TDP414XXX

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

☒ EN 61000-6-3 (2001)
+ A11 (2004)

☒ CISPR 22 Class B (1997)

☒ EN 61000-3-2 (2006)

☒ 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)

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).

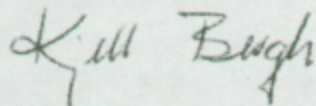
Accordingly, Nemko will accept test reports from the laboratory as a basis for attesting conformity to these EMC Standards under either the European Union EMC Directive (89/336/EEC) or, when applicable, the national standards of countries Nemko has been authorised to attest conformity with.

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 + A13:1996 + 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. : 10012161-2006

Valid until : June 14, 2007

TÜV Rheinland Taiwan Ltd.
Taipei, April 13, 2006


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 61000-4-12	IEC 60945
IEC 801.2		
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**

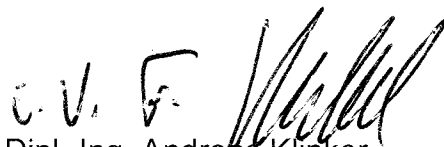
An assessment of the facility was conducted by TÜV Rheinland auditors according
to the TÜV Rheinland requirements for "Test Site Approval" with reference to

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