



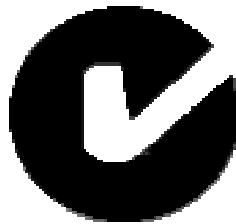
HomeTek Technology Inc.

ADDRESS: No. 67-9, Shir Men Road, Tu Cheng City,
Taipei Hsien, Taiwan, R. O. C.
PHONE : 886-2-22608375 FAX : 886-2-22748013
E - mail : hometek@ms15.hinet.net



EMI TEST REPORT FOR

APPLICANT : Smart Home Engineering Corp.
ADDRESS : 10F., No. 493, Chung-Cheng Rd.,
Hsin-Tien City, Taipei 231, Taiwan, R. O. C.
EUT : Video Distributor & Amplifier
MODEL NO. : CX816XX



MEASUREMENT PROCEDURE USED

AS/NZS CISPR 13: 2003 Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics – Limits and methods of measurement

PREPARED BY :

HomeTek Technology Inc.

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

Taipei Hsien. Taiwan, R. O. C.

Report # : AS6K043



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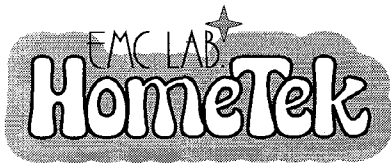
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PHOTOS OF TEST CONFIGURATION

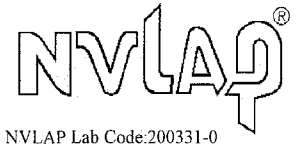
APPENDIX B

PHOTOS OF EUT



HomeTek Technology Inc.

ADDRESS: No. 67-9, Shir Men Road, Tu Cheng City, Taipei Hsien, Taiwan, R. O. C.
PHONE : 886-2-22608375 FAX : 886-2-22748013
E - mail : hometek@ms15.hinet.net



NVLAP Lab Code:200331-0

APPLICANT : Smart Home Engineering Corp.
ADDRESS : 10F., No. 493, Chung-Cheng Rd., Hsin-Tien City, Taipei 231, Taiwan, R. O. C.
Receipt Date : 03/18/2004 Final Test Date: 03/30/2004
EUT : Video Distributor & Amplifier
MODEL NO. : CX816XX

MEASUREMENT PROCEDURE USED :

AS/NZS CISPR 13: 2003 Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics – Limits and methods of measurement

- THE MAXIMUM EMISSION LEVELS WERE COMPARED TO THE CISPR 13 LIMITS BOTH RADIATED AND CONDUCTED EMISSION.
THE ABOVE DEVICE WAS TESTED BY HOMETEK TECHNOLOGY INC. TO SHOWS THE MAXIMUM EMISSION LEVEL FROM THE DEVICE.
THIS TEST RESULTS OF THIS REPORT APPLIES TO ABOVE TESTED SAMPLE ONLY.
THIS TEST REPORT SHALL NOT BE REPRODUCE IN PART WITHOUT WRITTEN APPROVAL OF HOMETEK TECHNOLOGY INC.
THE REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NVLAP, NIST OR ANY AGENCY OF THE U. S. GOVERNMENT.
THE TEST RESULTS ARE TRACEABLE TO THE NATIONAL OR INTERNATIONAL STANDARD.

This test report is a duplicate of original one (report No. AS3C030, issued on 2004, 03, 30), applicant and model No. is modified.

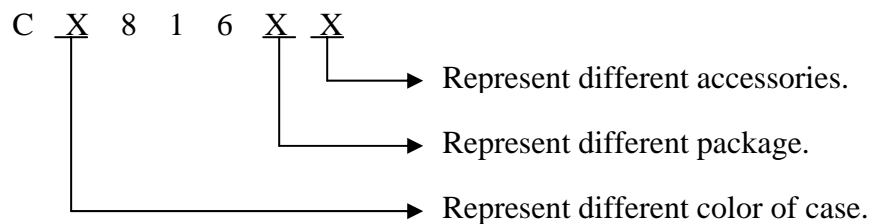
APPROVED BY : [Signature] 12/14/2007

ALAIN LIN / Assistant Manage

GENERAL INFORMATION

- 1 APPLICANT : Smart Home Engineering Corp.
- 2 ADDRESS : 10F., No. 493, Chung-Cheng Rd.,
Hsin-Tien City, Taipei 231, Taiwan, R. O. C.
- 3 MANUFACTURER : Smart Home Engineering Corp.
- 4 ADDRESS : 10F., No. 493, Chung-Cheng Rd.,
Hsin-Tien City, Taipei 231, Taiwan, R. O. C.
- 5 DESCRIPTION OF EUT :
- EUT : Video Distributor & Amplifier
- Model Number : CX816XX
- Serial # : N/A

5.1 The difference between series of models CX816XX is shown as below:



The worst case of EMI test model is CD816AP and the final test data were shown in this test report.

6 FEATURES OF EUT :

Model No. CD816AP

Video Input Channel	8
Video Output Channel	16
Video Input Level	0.8~1.2Vp-p, 75ohms
Video Bandwidth	10Hz ~ 10MHz
Power Supply	DC 12V
Power Consumption	500mA
Brightness	YES
Sharpness	YES
Dimensions (mm)	482x170x44 standard 1U Rack Panel
Weight	2.6kg
Material	Metal Black



MODIFICATION LIST

THE FOLLOWING ACCESSORIES WERE ADDED TO THE EUT DURING TESTING :

NO MODIFICATION BY HOMETEK TECHNOLOGY INC.

CONDUCTED POWER LINE TEST

1 TEST INSTRUMENTS & FACILITIES

The following test Instruments was used during the conducted 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/2003
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 ~ 6 were calibrated within period of 1 year.

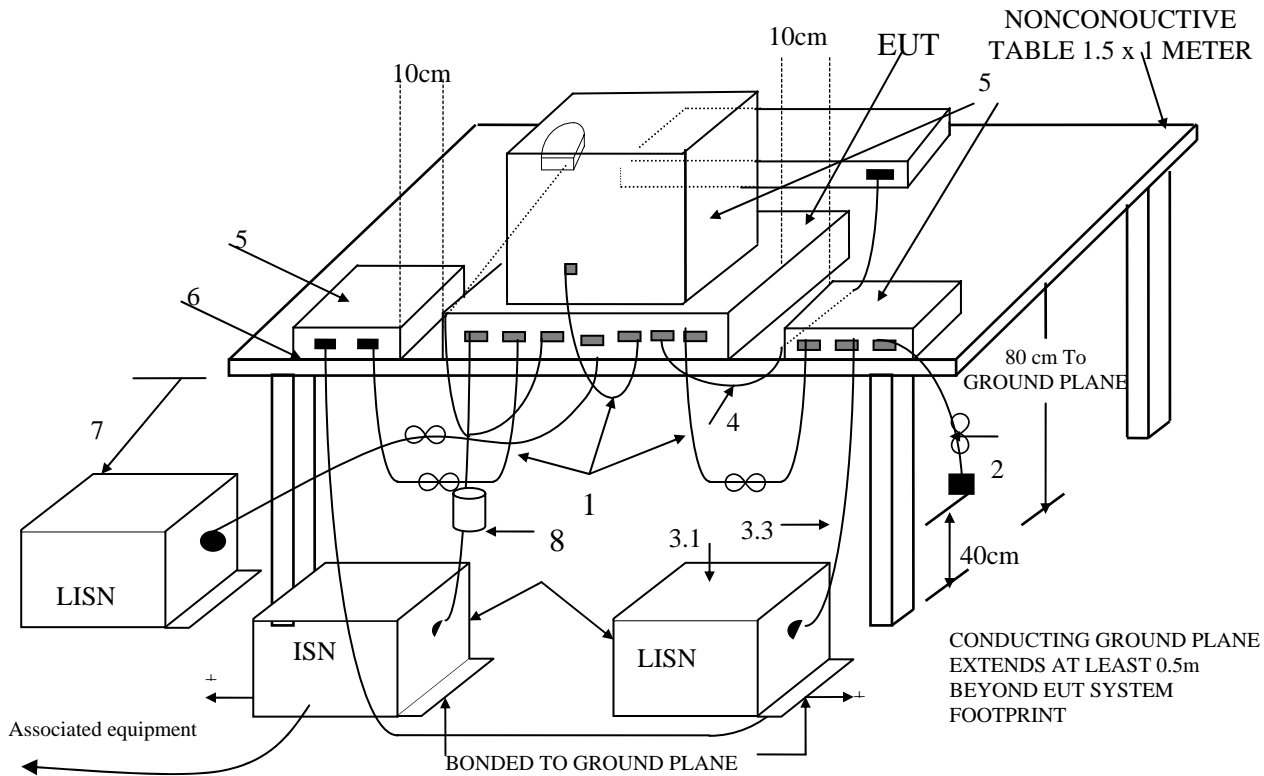
2 TEST PROCEDURE

- 2.1 The EUT was tested according to **AS/NZS CISPR 13**.
- 2.2 The EUT was placed 0.4 meter from the conducting wall of shielding room and kept at least 0.8 meter from any other grounded conducting surface.
- 2.3 The frequency range form 0.15 MHz to 30 MHz was investigated.
- 2.4 The LISN used was 50 Ohm / 50 uHenry as specified of **AS/NZS CISPR 13**.
- 2.5 All the support peripherals are connect to the other LISN.
- 2.6 Cables and peripherals were moved to find the maximum emission levels for each frequency.

3 TEST SETUP

3.1 Typical : Setup Of Conducted Test

ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE RANGE OF 9kHz TO 40 GHz AS/NZS CISPR 13



+LISNs may have to be moved to the side to meet 3.3 below.

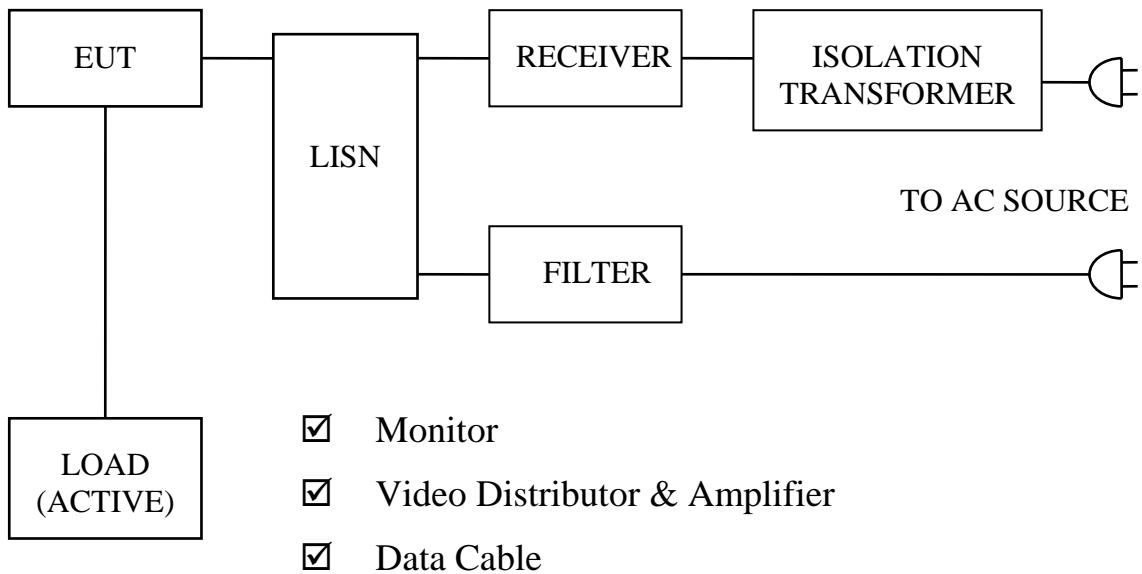
(Details for setup configuration, please refer to appendix A.)

LEGEND:

1. If cables, which hang closer than 40 cm to the horizontal metal groundplane, cannot be shortened to appropriate length, the excess shall be folded back and forth forming a bundle 30 cm to 40 cm long.
2. Excess mains cord shall be bundled in the centre or shortened to appropriate length.
3. EUT is connected to one artificial mains network (AMN). All AMNs and ISNs may alternatively be connected to a vertical reference plane or metal wall.
 - 3.1 All other units of a system are powered from a second AMN. A multiple outlet strip can be used for multiple mains cords.
 - 3.2 AMN and ISN are 80 cm from the EUT and at least 80 cm from other units and other metal planes.
 - 3.3 Mains cords and signal cables shall be positioned for their entire lengths, as far as possible, at 40 cm from the vertical reference plane.
4. Cables of hand-operated devices, such as keyboards, mice, etc., have to be placed as close as for normal usage.
5. Peripherals shall be placed at a distance of 10 cm from each other and from the controller, except for the monitor which, if this is an acceptable installation practice, shall be placed directly on the top of the controller.
6. I/O signal cable intended for external connection.
7. The end of the I/O signal cables which are not connected to an AE may be terminated, if required, using correct terminating impedance.
8. If used, the current probe shall be placed at 0.1 m from the ISN.

Test Configuration Tabletop Equipment Conducted Emission

3.2 Block Diagram Of Conducted Test



4 CONFIGURATION OF THE EUT

The EUT was configured according to **AS/NZS CISPR 13**. All I/O ports were connected to the appropriate peripherals. All peripherals and cables are listed below (including internal device) :

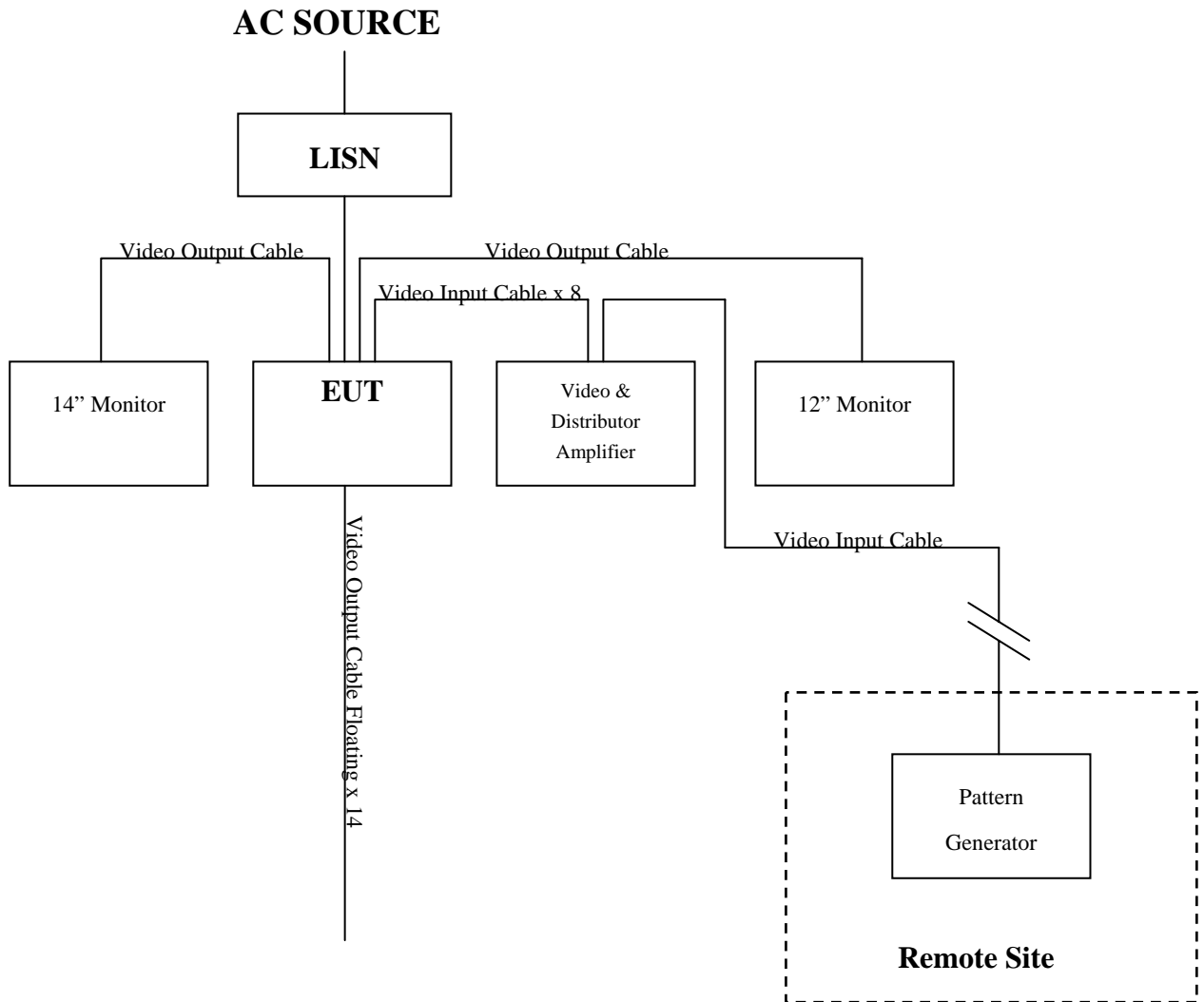


Figure 1

4.1 EUT

EUT Type : Proto Type Engineer Type Mass Production
 Condition when received : Good Damage : _____
 Device : Video Distributor & Amplifier
 Applicant : Smart Home Engineering Corp.
 Manufacturer : Smart Home Engineering Corp.
 Model Number : CX816XX
 Serial Number : N/A
 FCC ID : N/A
 Data Cable1 (Video Input) : Shielded, 1.8 m, Metal Type
 Data Cable2 (Video Input) : Shielded, 10 m, Metal Type
 Data Cable3 (Video Output) : Shielded, 1.8 m, Metal Type
 Power Cord (AC) Adapter : 2 pin
 Power Cord (DC) Adapter : Un-Shielded, 1.9 m, 2 pin
 Power Supply Type : Linear Adapter

4.2 PERIPHERALS

14" Monitor
 Manufacturer : YOKO
 Model Number : YK-8111
 Serial Number : N/A
 FCC ID : N/A
 Data Cable : Shielded, 1.8 m
 Power Cord : Un-Shielded, 1.8 m



12" Monitor

Manufacturer : YOKO
Model Number : YK-8102
Serial Number : N/A
FCC ID : N/A
Data Cable : Shielded, 1.8 m
Power Cord : Un-Shielded, 1.8 m

Video Distributor & Amplifier

Manufacturer : SMART CABLING
Model Number : CD108
Serial Number : N/A
FCC ID : N/A
Data Cable : Shielded, 1.8 m
Power Cord : Un-Shielded, 1.9 m

Power Adapter

Manufacturer : JELEC
Model Number : YAD-1200500E
Serial Number : N/A
FCC ID : N/A
Data Cable : N/A
Power Cord : Un-Shielded, 1.9 m



Pattern Generator (Remote Site)

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

4.3 REMARK : N/A

5 EUT OPERATING CONDITION

- 5.1 The operation frequency of the EUT is 10Hz ~ 10MHz.
- 5.2 Configure the EUT according to the **AS/NZS CISPR 13**.
- 5.3 Turn on all the power of EUT and peripheral.
- 5.4 Remote pattern generator send 1KHz audio and color bar signal to EUT.
- 5.5 The photos of conducted test configuration, please refer to appendix A.**

6 LIMIT OF CONDUCTED POWER LINE EMISSION

Frequency Range	Quasi Peak	Average
0.15 ~ 0.5 MHz	66 - 56 dBuV	56 - 46 dBuV
0.5 ~ 5 MHz	56 dBuV	46 dBuV
5 ~ 30 MHz	60 dBuV	50 dBuV

- 6.1 In the above table, the tighter limit applies at the band edges.

7 RESULT OF CONDUCTED POWER LINE TEST

- 7.1 The frequency range from 0.15 MHz to 30 MHz was investigated. All readings are quasi-peak values and average.
- 7.2 IF bandwidth : 9 kHz, Meas Time : 1 sec.
- 7.3 Temperature : 27 °C, Humidity : 60 % RH.
- 7.4 Uncertainty in conducted emission measurement : ± 3.87dB.
- 7.5 The conducted test result were gained by following procedures :
 Level = Reading Level + Insertion Loss of LISN + Cable Loss
 (All calculation were done by ESHS30 EMI test receiver.)
- 7.6 Result : **PASSED**

HomeTek EMC LAB. TEL :886-2-22608375

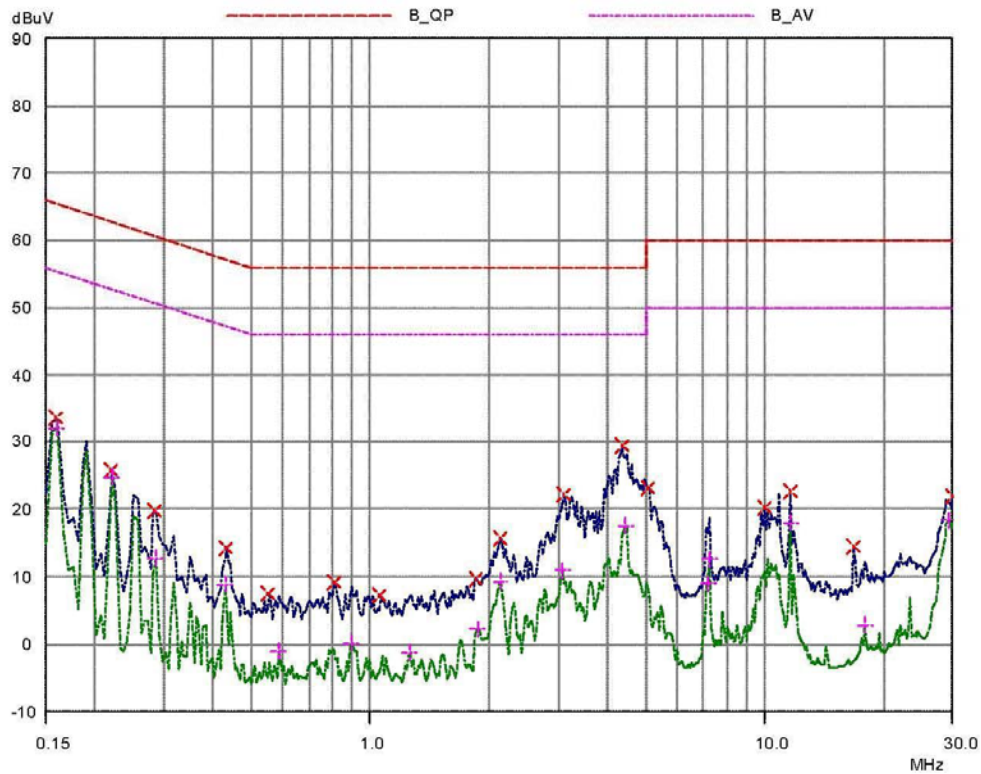
27 Mar 2004 17:18

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
 Manuf: 3C030
 Op Cond: LINE 1
 Operator: ALBERT
 Test Spec: FOR CISPR13
 Comment: 240V/50Hz
 CD816AP

Result File:

Prescan Measurement: Detectors: X PK / + AV
 Meas Time: see scan settings
 Subranges: 16
 Acc Margin: 55 dB





HomeTek EMC LAB. TEL :886-2-22608375

27 Mar 2004 17:18

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
Manuf: 3C030
Op Cond: LINE 1
Operator: ALBERT
Test Spec: FOR CISPR13
Comment: 240V/50Hz
CD816AP

Result File:

Prescan Measurement: Detectors: X PK / + AV
Meas Time: see scan settings
Subranges: 16
Acc Margin: 55 dB

Peak Search Results

Table with 4 columns: Frequency MHz, PK Level dBuV, PK Limit dBuV, PK Delta dB. Lists peak search results across various frequencies from 0.16 to 29.99 MHz.

Table with 4 columns: Frequency MHz, AV Level dBuV, AV Limit dBuV, AV Delta dB. Lists AV search results across various frequencies from 0.16 to 28.89 MHz.

* limit exceeded

HomeTek EMC LAB. TEL :886-2-22608375

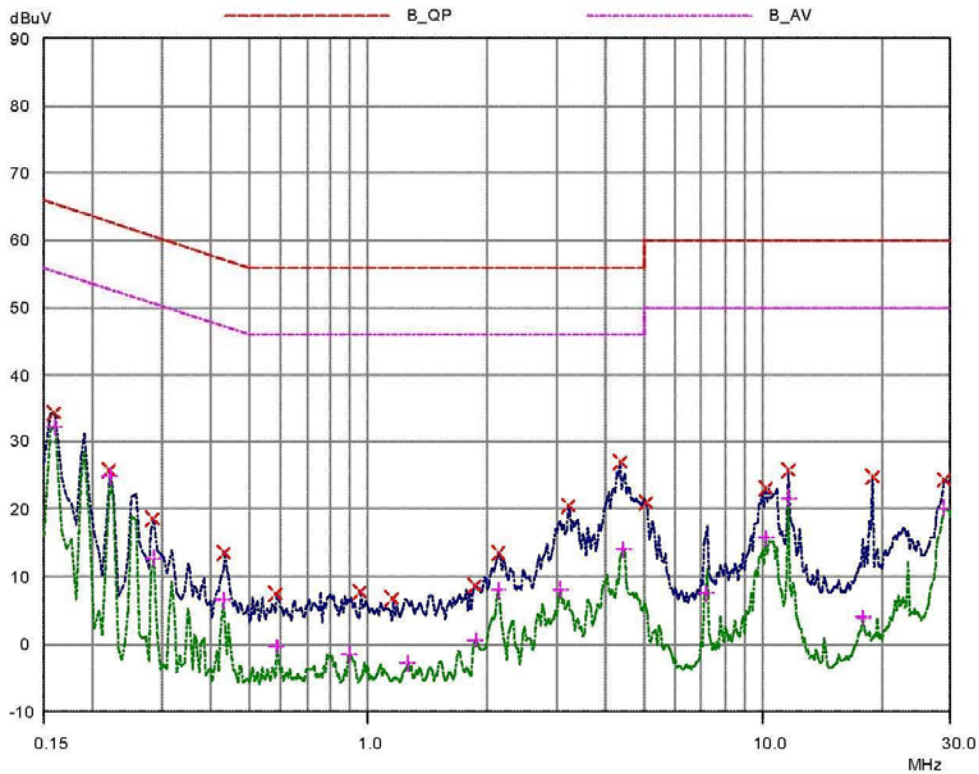
27 Mar 2004 17:11

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
 Manuf: 3C030
 Op Cond: LINE 2
 Operator: ALBERT
 Test Spec: FOR CISPR13
 Comment: 240V/50Hz
 CD816AP

Result File:

Prescan Measurement: Detectors: X PK / + AV
 Meas Time: see scan settings
 Subranges: 16
 Acc Margin: 55 dB





HomeTek EMC LAB. TEL :886-2-22608375

27 Mar 2004 17:11

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
Manuf: 3C030
Op Cond: LINE 2
Operator: ALBERT
Test Spec: FOR CISPR13
Comment: 240V/50Hz
CD816AP

Result File:

Prescan Measurement: Detectors: X PK / + AV
Meas Time: see scan settings
Subranges: 16
Acc Margin: 55 dB

Peak Search Results

Table with 4 columns: Frequency MHz, PK Level dBuV, PK Limit dBuV, PK Delta dB. Contains 18 rows of peak search data.

Table with 4 columns: Frequency MHz, AV Level dBuV, AV Limit dBuV, AV Delta dB. Contains 18 rows of AV search data.

* limit exceeded

RADIATED EMISSION TEST

1 TEST PROCEDURE

According to **AS/NZS CISPR 13**.

2 RESULT OF RADIATED EMISSION TEST

N/A (This standard is not applicable to this EUT (Model : CD816AP)).

DISTURBANCE VOLTAGE AT THE ANTENNA TERMINALS TEST

1 TEST PROCEDURE

According to **AS/NZS CISPR 13**.

2 RESULT OF DISTURBANCE VOLTAGE AT THE ANTENNA TERMINALS TEST

N/A (This standard is not applicable to this EUT (Model : CD816A)).

CLAMP 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#	Location	Date of Cal.
1	Clamp Test Site	30MHz ~ 300MHz/6m	HomeTek	Clamp #1	Clamp Test Site	N/A
2	EMI TEST RECEIVER	30MHz ~ 1GHz	ROHDE & SCHWARZ	ESVS10 845165/017	Clamp Test Site	SEP/2003
3	RF SPECTRUM ANALYZER	N/A	HEWLETT PACKARD	8591E 3710A06158	Clamp Test Site	MAY/2003
4	PRE-AMPLIFIER	100KHz ~ 1.3GHz	HP	8447D 1937A03120	Clamp Test Site	MAR/2004
5	ABSORBING CLAMP	30MHz ~ 300MHz	ROHED & SCHWARZ	MDS21 845061/004	Clamp Test Site	DEC/2003
6	EMI 32 (software)	N/A	AUDIX	19991013-09 23		N/A

Note : Items 2 ~ 5 upon which need to calibrated are with period of 1 year.

2 TEST PROCEDURE

2.1 The EUT was test according to **AS/NZS CISPR 13**.

2.2 The disturbance power test was performed at HomeTek Lab's CLAMP Test Site .

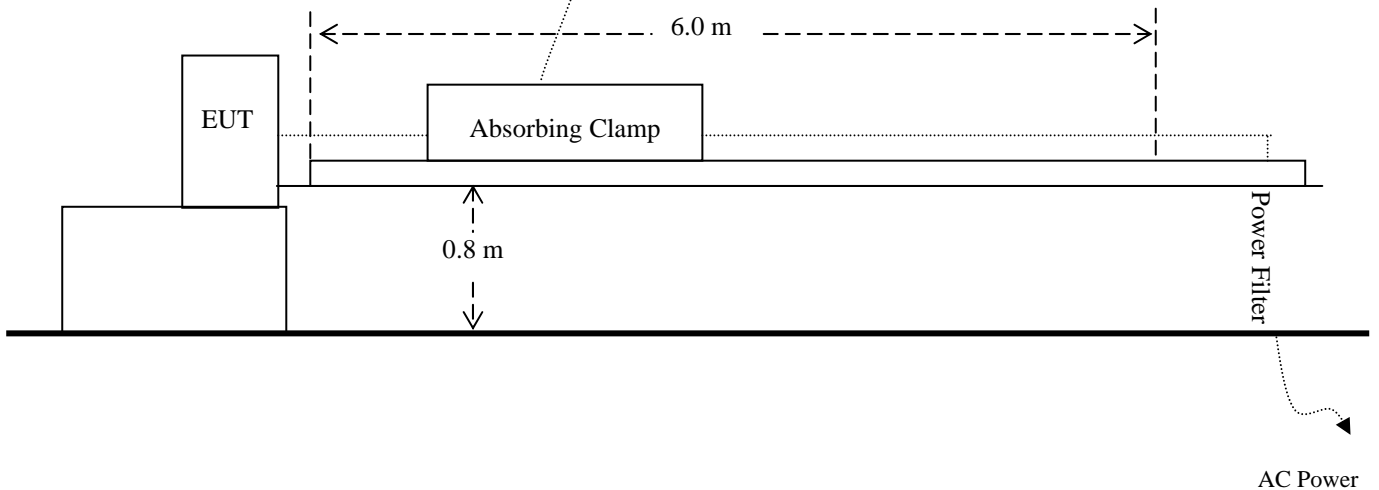
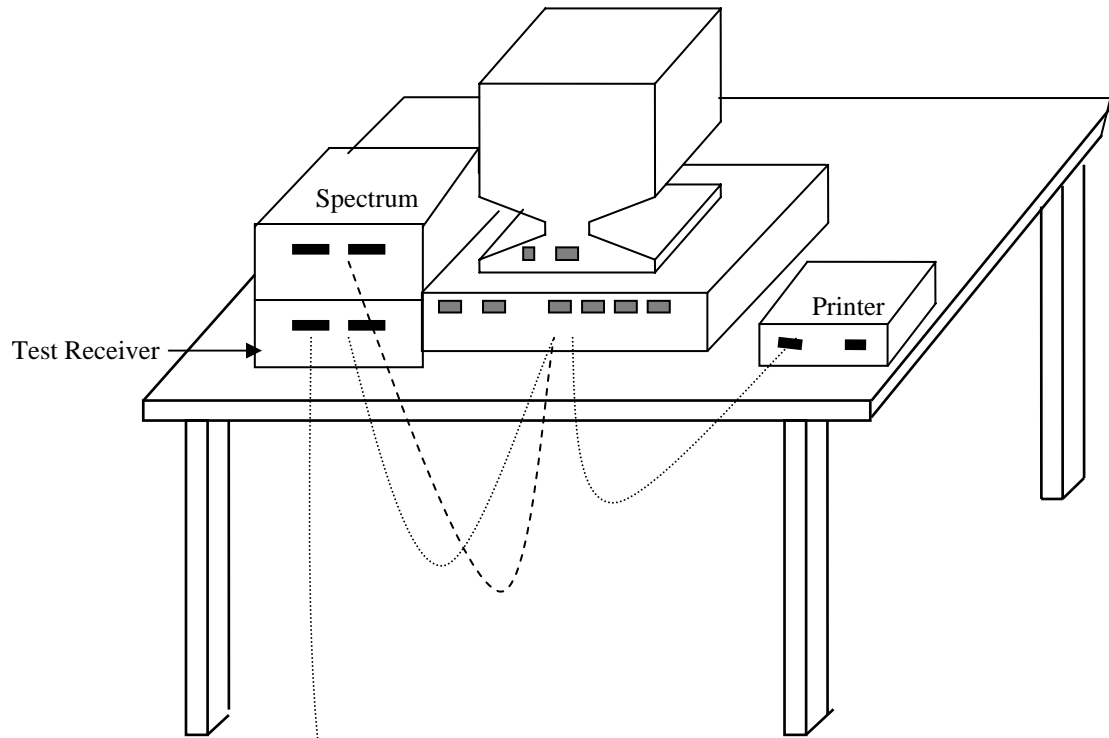
2.3 The frequency range from 30 MHz to 300 MHz, the measurement were made with absorbing clamp.

2.4 The EUT were investigated with all signal cables individually as below:

- Video Input toward EUT cable;
- Video Input toward support unit cable;
- Video output toward EUT cable;
- Video output toward support unit cable;
- AC power toward EUT cable;
- DC power toward EUT cable;
- DC power toward support unit cable

and the worst case of test data were shown in this test report.

3 TEST SETUP



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

4 CONFIGURATION OF THE EUT

Same as “Conducted Power Line test”, section 4

5 EUT OPERATING CONDITION

5.1 Same as “Conducted Power Line test”, section 5

5.2 The photos of clamp emission test configuration, please refer to appendix A.

6 LIMIT OF CLAMP EMISSION TEST :

Frequency (MHz)	Limit Values (dBpW)	
	QP	AV
30 – 300	45 - 55	35 - 45
300 – 1000	N/A	N/A

7 RESULT OF CLAMP EMISSION TEST

7.1 The frequency range from 30 MHz to 300 MHz, the measurement were made with absorbing clamp.

7.2 The disturbance power test was performed at HomeTek Lab’s CLAMP Test Site .

7.3 Temperature : 23 °C, Humidity : 55 % RH.

7.4 Test Mode : **Video Output toward EUT cable**

7.5 The clamp emission result were gained by the following method :

Level = Reading Level + Probe Factor (Antenna Factor) + Cable Loss – Preamp Factor

Over Limit = Level – Limit Line

7.6 The clamp mission test was passed at minimum margin :

30.00 MHz/ 34.22 dBuV/m, Antenna Height 5 Meter,

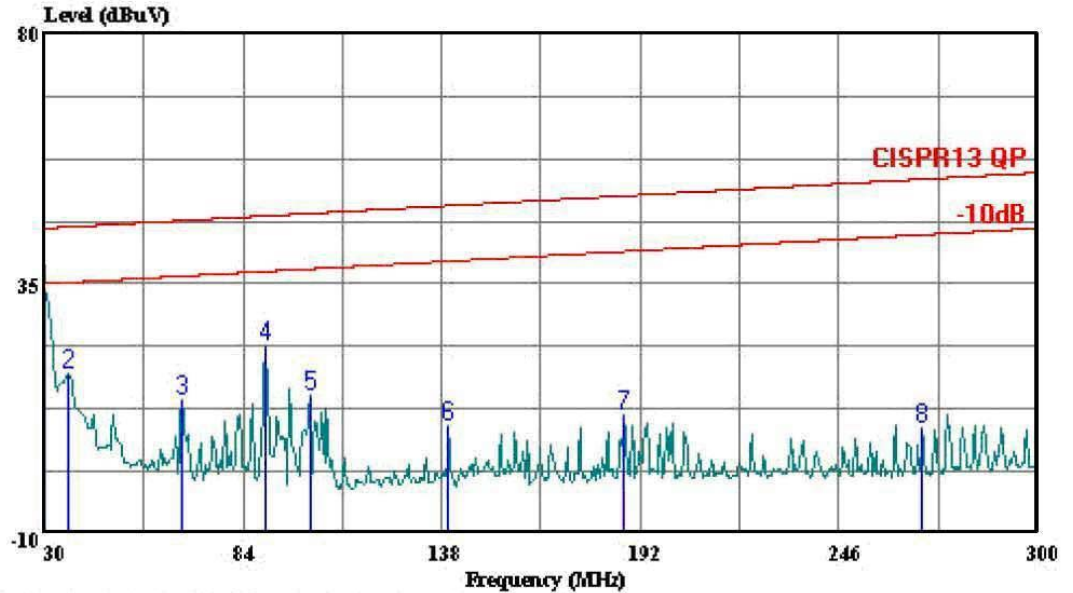
The Mode : Video Output toward EUT cable , Model : CD816AP .

7.7 Result : **PASSED**



HomeTek Technology Inc.

Data#: 23 File#: 3c030.emi Date: 2004-03-29 Time: 17:53:24



HomeTek Technology Inc. (HomeTek Technology)

Trace: 7

Ref Trace:

Condition: CISPR13 QP MDS-21 120403
eut : Video Distributor & Amplifier
power: 240V/50Hz
memo : CD816AP Video Output Toward EUT

Page:

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp	Remarks
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Factor	
			dB	dBuV	dBuV	dB	dB	dB	
1	30.000	34.22	-10.78	45.00	58.30	2.40	1.42	27.90	Peak
2	36.480	18.92	-26.32	45.24	44.74	0.44	1.57	27.83	Peak
3	67.530	14.31	-32.08	46.39	41.32	-1.45	2.18	27.74	Peak
4	89.940	23.84	-23.38	47.22	50.81	-1.70	2.51	27.78	Peak
5	102.090	14.75	-32.92	47.67	41.73	-1.88	2.67	27.78	Peak
6	139.890	9.50	-39.57	49.07	35.92	-2.10	3.18	27.51	Peak
7	187.680	11.43	-39.41	50.84	36.72	-1.70	3.66	27.25	Peak
8	268.680	8.90	-44.94	53.84	33.40	-1.88	4.51	27.13	Peak



HomeTek Technology Inc.

Appendix A

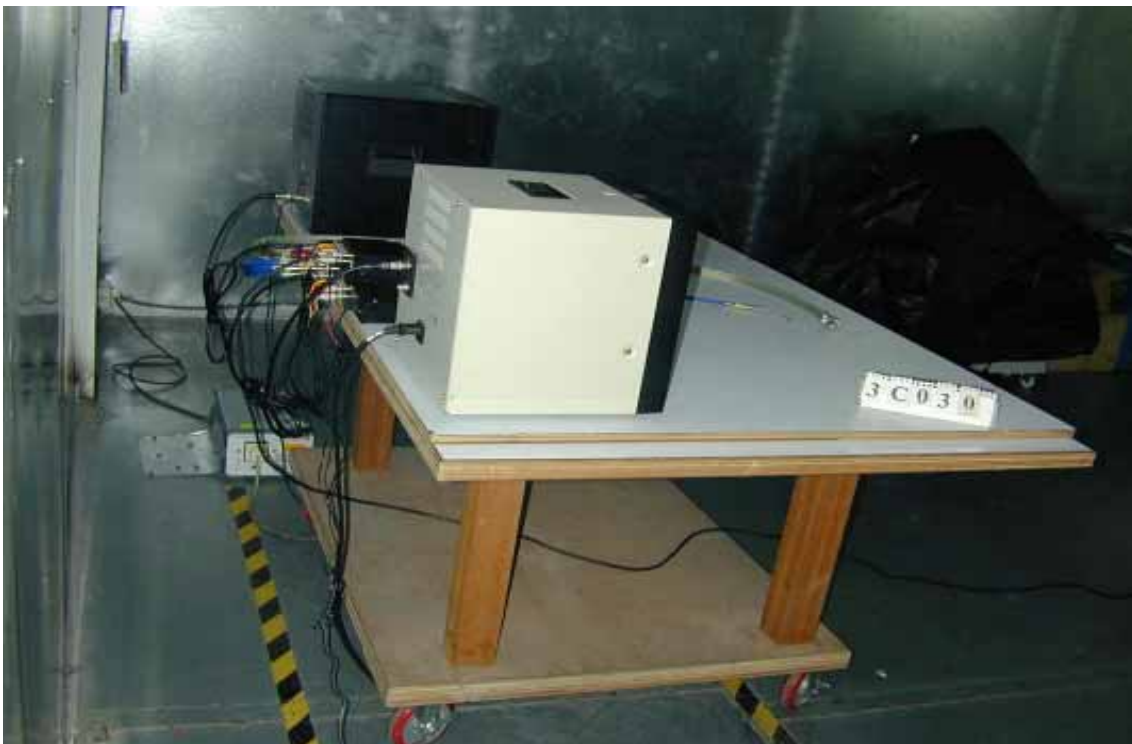
PHOTOS OF TEST CONFIGURATION

PHOTO OF CONDUCTED POWER LINE TEST

Model : CD816AP



Front View



Rear View

PHOTO OF CLAMP EMISSION TEST

Test Mode : VIDEO OUTPUT , Model : CD816AP



Front View



Rear View



HomeTek Technology Inc.

Appendix B

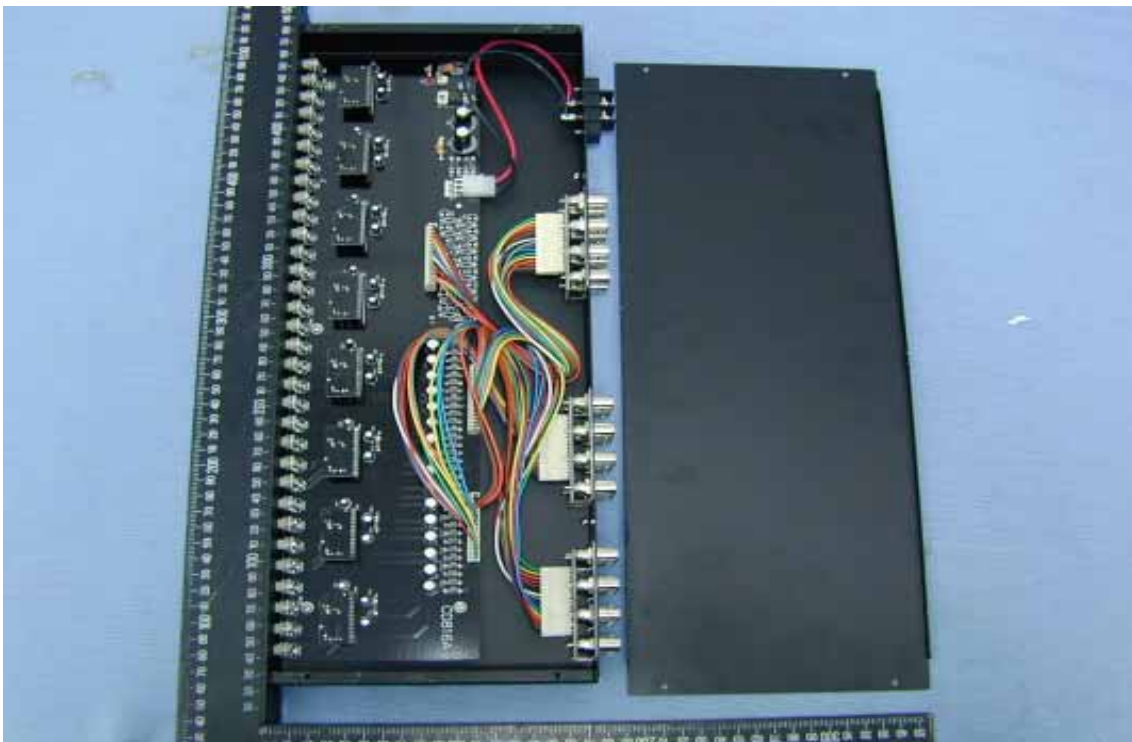
PHOTOS OF EUT

PHOTO OF EUT

Model : CD816AP



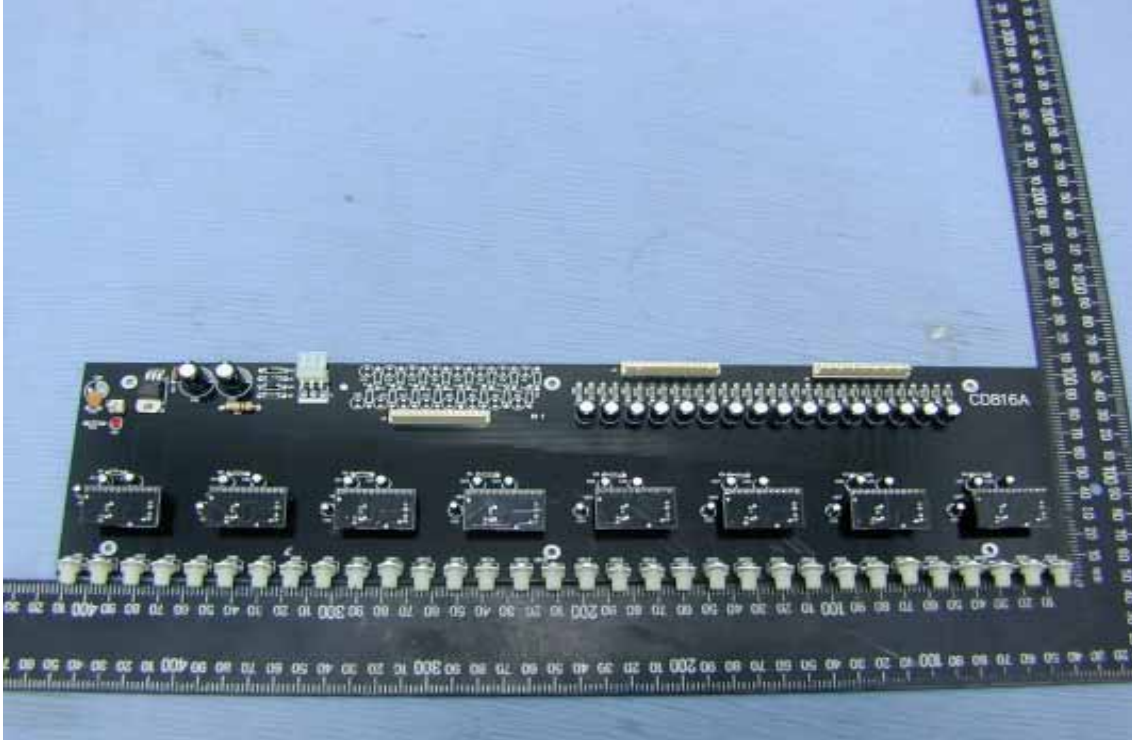
Full View of EUT



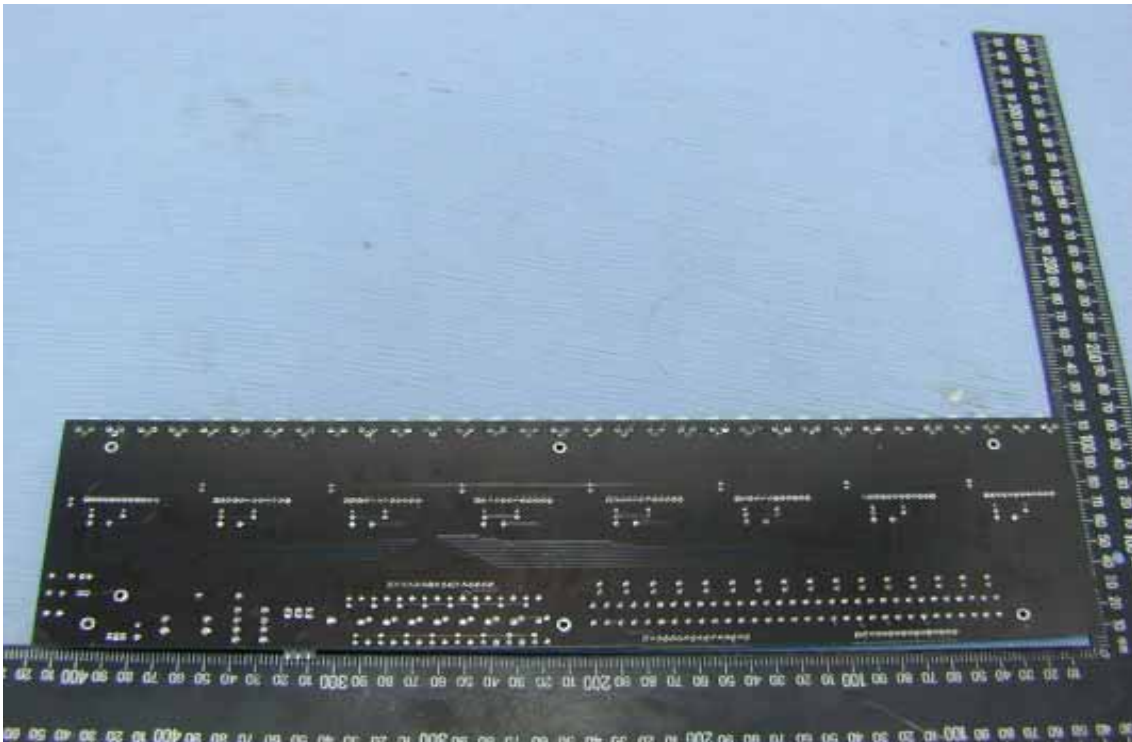
Inside View of EUT

PHOTO OF EUT

Model : CD816AP



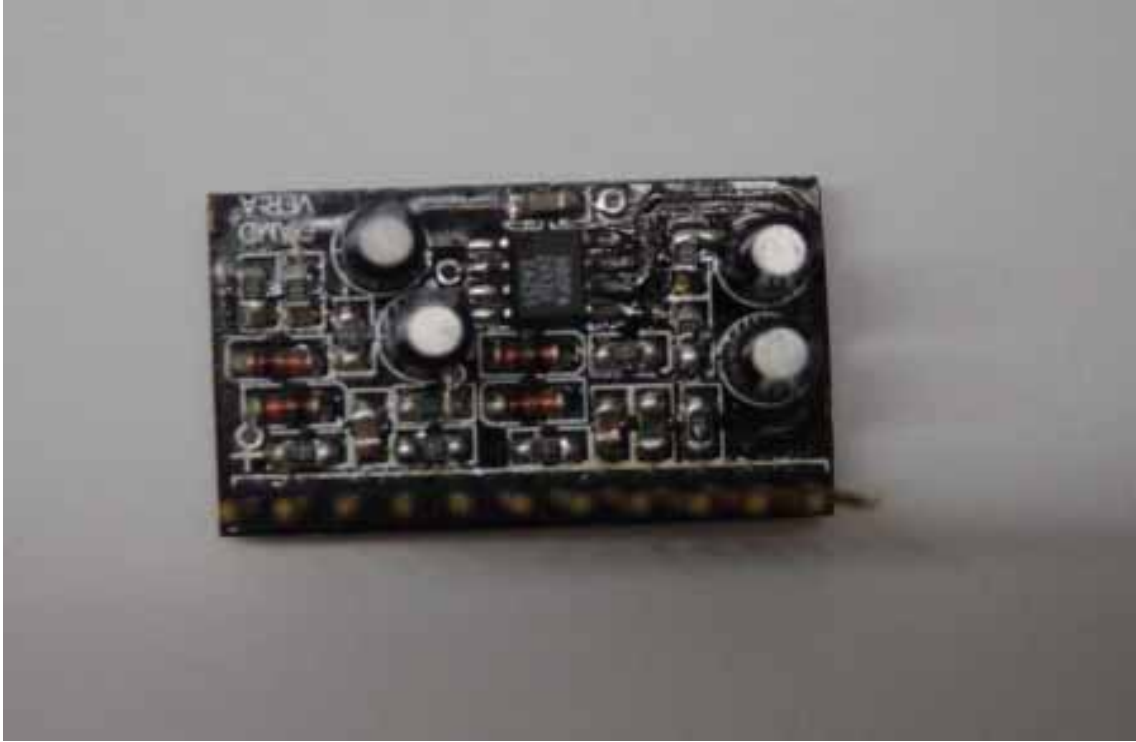
Component Side of Main Board - 1



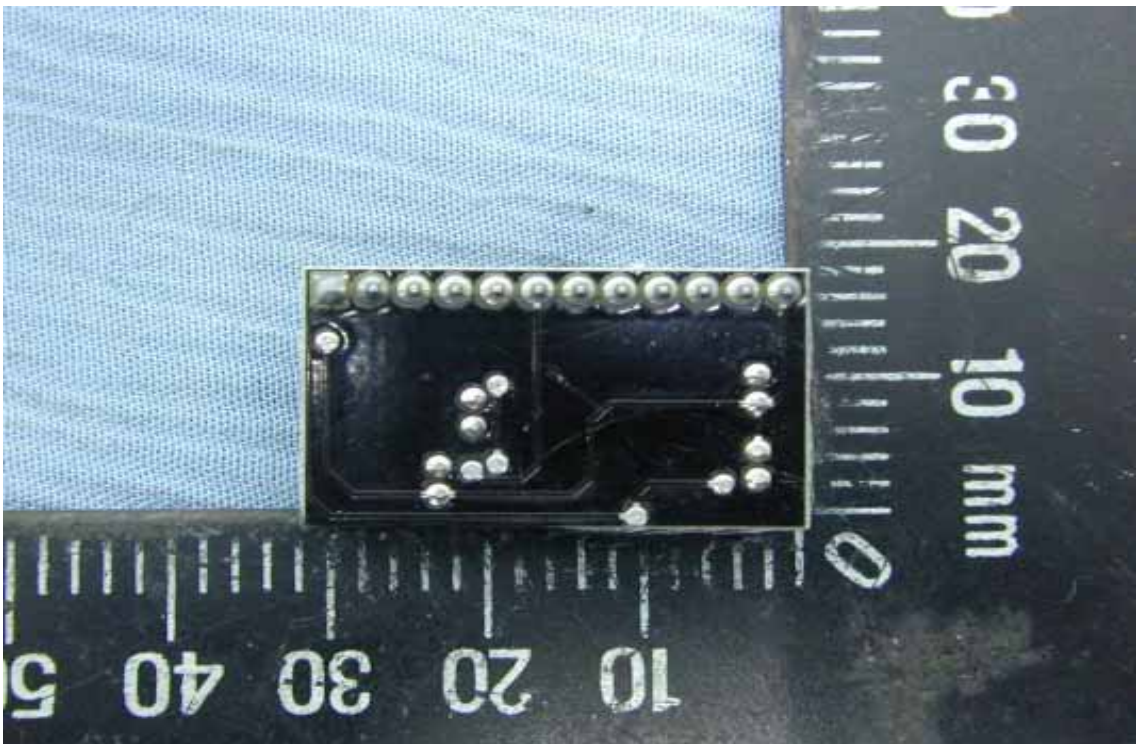
Solder Side of Main Board - 1

PHOTO OF EUT

Model : CD816AP



Component Side of Main Board - 2



Solder Side of Main Board - 2

PHOTO OF EUT

Model : CD816AP



Front View of Adaptor



Rear View of Adaptor

Declaration of Conformity

Responsible Party Name :

Address :

Phone No :

Fax No :

Declares under our sole responsibility that the product

Product Name : Video Distributor & Amplifier

Model No. : CX816XX

to which this declaration relates is in conformity with the following standards or other normative documents

AS/NZS CISPR 13: 2003 Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics – Limits and methods of measurement

Representative Person's Name : _____

Signature : _____

Date : _____

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]



ISO/IEC 17025:1999
ISO 9002:1994

Certificate of Accreditation

HOMETEK TECHNOLOGY INC.

TAIPEI SHIEN 236
TAIWAN

*is recognized by the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria set forth in NIST Handbook 150:2001,
all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:*

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

September 30, 2003

Effective through

A handwritten signature in cursive script, appearing to read "C. D. Fawon".

For the National Institute of Standards and Technology
NVLAP Lab Code: 200331-0



ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation

Revised Scope 02/05/2003

Page: 1 of 2

**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

HOMETEK TECHNOLOGY INC.

P.O Box: 13-131, Pan-Chiao City
No. 85-5 Shir Men Rd., Tu Chen City
Taipei Shien 236
TAIWAN

Mr. Grant Huang

Phone: 886-2-22608375 Fax: 886-2-22748013

E-Mail: hometek@ms15.hinet.net

NVLAP Code Designation / Description

Emissions Test Methods:

12/CIS22	IEC/CISPR 22 (1997) and EN 55022 (1998): Limits and methods of measurement of radio disturbance characteristics of information technology equipment
12/CIS22a	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment, Amendment 1:1995, and Amendment 2:1996.
12/CIS22b	CNS 13438:1997: Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment
12/F01	ANSI C63.4 (2001) - cited in FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 150 KHz to 30 MHz
12/F01b	Radiated Emissions

September 30, 2003

Effective through

For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page: 2 of 2

Revised Scope 02/05/2003

**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

HOMETEK TECHNOLOGY INC.

NVLAP Code Designation / Description

12/T51 AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement
of Information Technology Equipment

September 30, 2003

Effective through

A handwritten signature in cursive script, reading 'C. D. Lawson'.

For the National Institute of Standards and Technology

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®



ISO/IEC 17025:1999
ISO 9002:1994

Certificate of Accreditation

HOMETEK TECHNOLOGY INC.

TAIPEI SHIEN 236
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*is recognized by the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria set forth in NIST Handbook 150:2001,
all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:*

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

September 30, 2004

Effective through

A handwritten signature in black ink, appearing to read "John P. M...".

For the National Institute of Standards and Technology
NVLAP Lab Code: 200331-0

Scope of Accreditation



ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 200331-0

HOMETEK TECHNOLOGY INC.

P.O Box: 13-131, Pan-Chiao City
No. 67-9 Shir Men Rd., Tu Chen City
Taipei Shien 236
TAIWAN

Mr. Grant Huang

Phone: 886-2-22608375 Fax: 886-2-22748013

E-Mail: hometek@ms15.hinet.net

NVLAP Code Designation / Description

Emissions Test Methods:

- | | |
|-----------|--|
| 12/CIS22 | IEC/CISPR 22 (1997) and EN 55022 (1998): Limits and methods of measurement of radio disturbance characteristics of information technology equipment |
| 12/CIS22a | IEC/CISPR 22 (1993): Limits and methods of measurement of radio disturbance characteristics of information technology equipment, Amendment 1:1995, and Amendment 2:1996. |
| 12/CIS22b | CNS 13438 (1997): Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment |
| 12/FCC15b | ANSI C63.4 (2001) with FCC Method - 47 CFR Part 15, Subpart B: Unintentional Radiators |
| 12/T51 | AS/NZS CISPR 22 (2002) and AS/NZS 3548 (1997): Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment |

September 30, 2004

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National Institute of Standards and Technology

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ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

September 30, 2005

Effective through

A handwritten signature in black ink, appearing to read "Stephen P. Madh".

For the National Institute of Standards and Technology
NVLAP Lab Code: 200331-0

Scope of Accreditation



Revised Scope 04/07/2005

Page: 1 of 3

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 200331-0

HOMETEK TECHNOLOGY INC.

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Taipei Shien 236
TAIWAN

Mr. Grant Huang

Phone: 886-2-22608375 Fax: 886-2-22748013

E-Mail: hometek@ms15.hinet.net

NVLAP Code Designation / Description

Emissions Test Methods:

- | | |
|------------|--|
| 12/CIS14a | EN 55014-1 (1993), A1 (1997), A2 (1999): |
| 12/CIS14a2 | BS EN 55014-1 (2001) with A1 and A2: Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission |
| 12/CIS14b1 | AS/NZS CISPR 14-1 (2003): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission |
| 12/CIS14c | CNS 13783-1: Electromagnetic Compatibility Requirements for household appliances, electric tools and similar apparatus - Part 1: Emissions |
| 12/CIS14d | IEC/CISPR 14-1 (2001) and A1 (2001): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emissions |

September 30, 2005

Effective through

For the National Institute of Standards and Technology

Scope of Accreditation



Revised Scope 04/07/2005

Page: 2 of 3

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 200331-0

HOMETEK TECHNOLOGY INC.

<i>NVLAP Code</i>	<i>Designation / Description</i>
12/CIS14x	IEC/CISPR 14-1, Ed. 4 (2003): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
12/CIS22	IEC/CISPR 22 (1997) & EN 55022 (1998) + A1(2000): Limits and methods of measurement of radio disturbance characteristics of information technology equipment
12/CIS22a	IEC/CISPR 22 (1993) and EN 55022 (1994): Limits and methods of measurement of radio disturbance characteristics of information technology equipment, Amendment 1 (1995) and Amendment 2 (1996)
12/CIS22b	CNS 13438 (1997): Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment
12/CIS22c	IEC/CISPR 22, Fourth Edition (2003-04) & EN 55022 (1998): Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
12/FCC15b	ANSI C63.4 (2003) with FCC Method 47 CFR Part 15, Subpart B: Unintentional Radiators
12/T51	AS/NZS CISPR 22 (2002) and AS/NZS 3548 (1997): Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment

September 30, 2005

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For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
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Scope of Accreditation



Revised Scope 04/07/2005

Page: 3 of 3

**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

HOMETEK TECHNOLOGY INC.

NVLAP Code ***Designation / Description***

12/VCCIa VCCI: Agreement of Voluntary Control Council for Interference by Information
Technology Equipment - Technical Requirements: V-3/2004.04

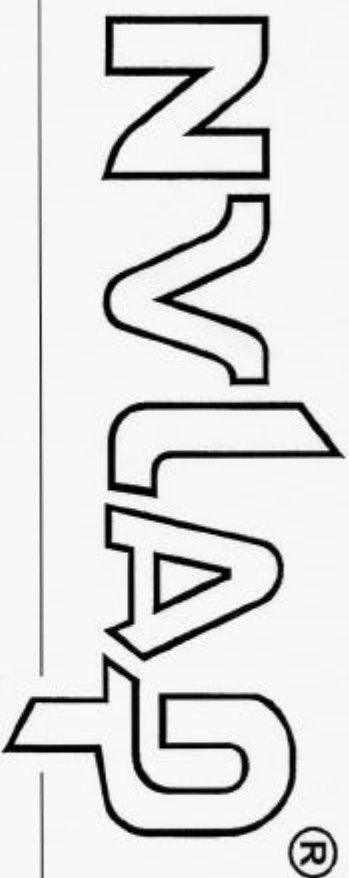
September 30, 2005

Effective through

A handwritten signature in black ink, appearing to read 'William R. Miel', written over a horizontal line.

For the National Institute of Standards and Technology

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:1999

NVLAP LAB CODE: 200331-0

HomeTek Technology Inc.

Taipei Shien 236
TAIWAN

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NIST Handbook 150:2001 and all requirements of ISO/IEC Guide 17025:1999.
Accreditation is granted for specific services, listed on the Scope of Accreditation, for:*

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

2005-10-01 through 2006-09-30

Effective dates



For the National Institute of Standards and Technology

A handwritten signature in black ink, appearing to read "Mark P. Ward".



SCOPE OF ACCREDITATION TO ISO/IEC 17025:1999

HomeTek Technology Inc.
P.O Box: 13-131, Pan-Chiao City
No. 67-9 Shir Men Rd., Tu Chen City
Taipei Shien 236
TAIWAN
Mr. Grant Huang
Phone: 886-2-22608375 Fax: 886-2-22748013
E-Mail: hometek@ms15.hinet.net

**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

NVLAP Code Designation / Description

Emissions Test Methods:

- 12/CIS14a EN 55014-1 (1993), A1 (1997), A2 (1999):
- 12/CIS14a2 BS EN 55014-1 (2001) with A1 and A2: Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
- 12/CIS14b1 AS/NZS CISPR 14-1 (2003): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
- 12/CIS14c CNS 13783-1: Electromagnetic Compatibility Requirements for household appliances, electric tools and similar apparatus - Part 1: Emissions
- 12/CIS14d IEC/CISPR 14-1 (2001) and A1 (2001): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emissions
- 12/CIS14x IEC/CISPR 14-1, Ed. 4 (2003): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
- 12/CIS22 IEC/CISPR 22 (1997) & EN 55022 (1998) + A1(2000): Limits and methods of measurement of radio disturbance characteristics of information technology equipment
- 12/CIS22a IEC/CISPR 22 (1993) and EN 55022 (1994): Limits and methods of measurement of radio disturbance characteristics of information technology equipment, Amendment 1 (1995) and Amendment 2 (1996)

2005-10-01 through 2006-09-30

Effective dates

For the National Institute of Standards and Technology



**National Voluntary
Laboratory Accreditation Program**



**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

<i>NVLAP Code</i>	<i>Designation / Description</i>
12/CIS22b	CNS 13438 (1997): Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment
12/CIS22c	IEC/CISPR 22, Fourth Edition (2003-04) & EN 55022 (1998): Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
12/FCC15b	ANSI C63.4 (2003) with FCC Method 47 CFR Part 15, Subpart B: Unintentional Radiators
12/T51a	AS/NZS CISPR 22 (2004): Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
12/VCCIa	VCCI: Agreement of Voluntary Control Council for Interference by Information Technology Equipment - Technical Requirements: V-3/2004.04

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HomeTek Technology Inc.

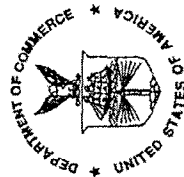
Taipei Shien 236
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is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in
NVLAP accreditation documents and all requirements of ISO/IEC 17025:2005.
Accreditation is granted for specific services, listed on the Scope of Accreditation, for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

2006-10-01 through 2007-09-30

Effective dates



Dally A. Bruce
For the National Institute of Standards and Technology



**National Voluntary
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SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

HomeTek Technology Inc.
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TAIWAN
Mr. Grant Huang
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**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

NVLAP Code Designation / Description

Emissions Test Methods:

12/CIS14a	EN 55014-1 (1993), A1 (1997), A2 (1999):
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12/CIS14c	CNS 13783-1: Electromagnetic Compatibility Requirements for household appliances, electric tools and similar apparatus - Part 1: Emissions
12/CIS14d	IEC/CISPR 14-1 (2001) and A1 (2001): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emissions
12/CIS14x	IEC/CISPR 14-1, Ed. 4 (2003): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
12/CIS22	IEC/CISPR 22 (1997) & EN 55022 (1998) + A1(2000): Limits and methods of measurement of radio disturbance characteristics of information technology equipment

2006-10-01 through 2007-09-30

Effective dates

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For the National Institute of Standards and Technology



**National Voluntary
Laboratory Accreditation Program**



**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

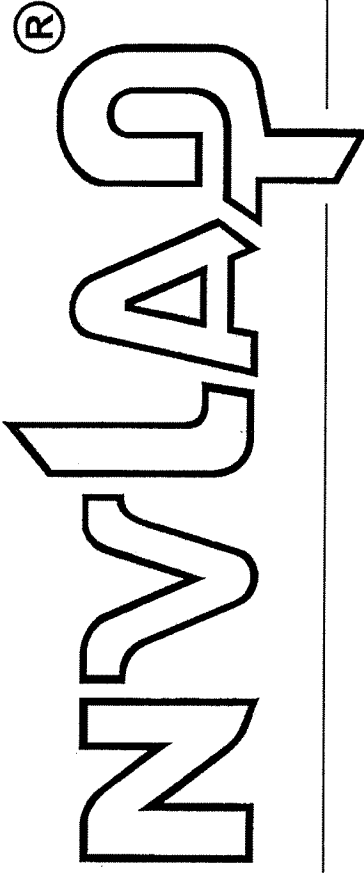
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2006-10-01 through 2007-09-30

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United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200331-0

HomeTek Technology Inc.

Taipei Shien 236

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is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated 18 June 2005).*

2007-10-01 through 2008-09-30

Effective dates



Jolly S. Buce

For the National Institute of Standards and Technology



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

HomeTek Technology Inc.

P.O Box: 13-131, Pan-Chiao City
No. 67-9 Shir Men Rd., Tu Chen City
Taipei Shien 236
TAIWAN

Mr. Grant Huang

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- 12/CIS14c CNS 13783-1: Electromagnetic Compatibility Requirements for household appliances, electric tools and similar apparatus - Part 1: Emissions
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- 12/CIS14x IEC/CISPR 14-1, Ed. 4 (2003): Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
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