



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

FCC 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



Accredited by the National Voluntary Laboratory Accreditation Program
for the specific scope of accreditation under Lab Code 200331-0

MEASUREMENT PROCEDURE USED

FCC RULES AND CISPR 22 (DOCKET NO. 92-152, SEP. 1993) AND FCC / ANSI C63.4-2001

PREPARED BY :

HomeTek Technology Inc.

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

Taipei Hsien. Taiwan, R. O. C.

Report # : FD6K043



TABLE OF CONTENTS..... 2

CERTIFICATION..... 3

GENERAL INFORMATION..... 4

MODIFICATION LIST..... 6

CONDUCTED POWER LINE TEST 7

 1 TEST INSTRUMENTS & FACILITIES..... 7

 2 TEST PROCEDURE..... 7

 3 TEST SETUP 8

 4 CONFIGURATION OF THE EUT 10

 5 EUT OPERATING CONDITION..... 14

 6 LIMIT OF CONDUCTED POWER LINE EMISSION CLASS B..... 14

 7 RESULT OF CONDUCTED POWER LINE TEST..... 14

RADIATED EMISSION TEST..... 19

 1 TEST INSTRUMENTS & FACILITIES..... 19

 2 TEST PROCEDURE..... 20

 3 TEST SETUP 20

 4 CONFIGURATION OF THE EUT 22

 5 EUT OPERATING CONDITION..... 22

 6 LIMIT OF RADIATED EMISSION CLASS B 22

 7 RESULT OF RADIATED EMISSION TEST..... 23

SAMPLE OF FCC DOC LABEL 1 26

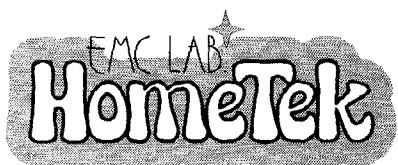
SAMPLE OF FCC DOC LABEL 2 26

APPENDIX A

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



CERTIFICATION

for
FCC Part 15, Subpart B Class B

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 :

FCC RULES AND CISPR 22 (DOCKET NO. 92-152, SEP. 1993)
AND FCC / ANSI C63.4-2001

TEST PROCEDURE AND DATA ARE TRACEABLE TO NIST/USA,
TL or NML/TAIWAN.

- THE MAXIMUM EMISSION LEVELS WERE COMPARED TO THE CISPR 22 CLASS B 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. FD3C030, issued on 2004, 03, 30),
applicant and model No. is modified.

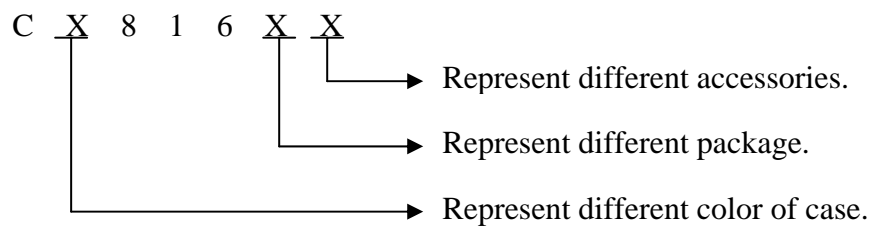
APPROVED BY : Alain Lin 12/25/2007

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
- FCC ID : N/A
- 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 CD816A 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

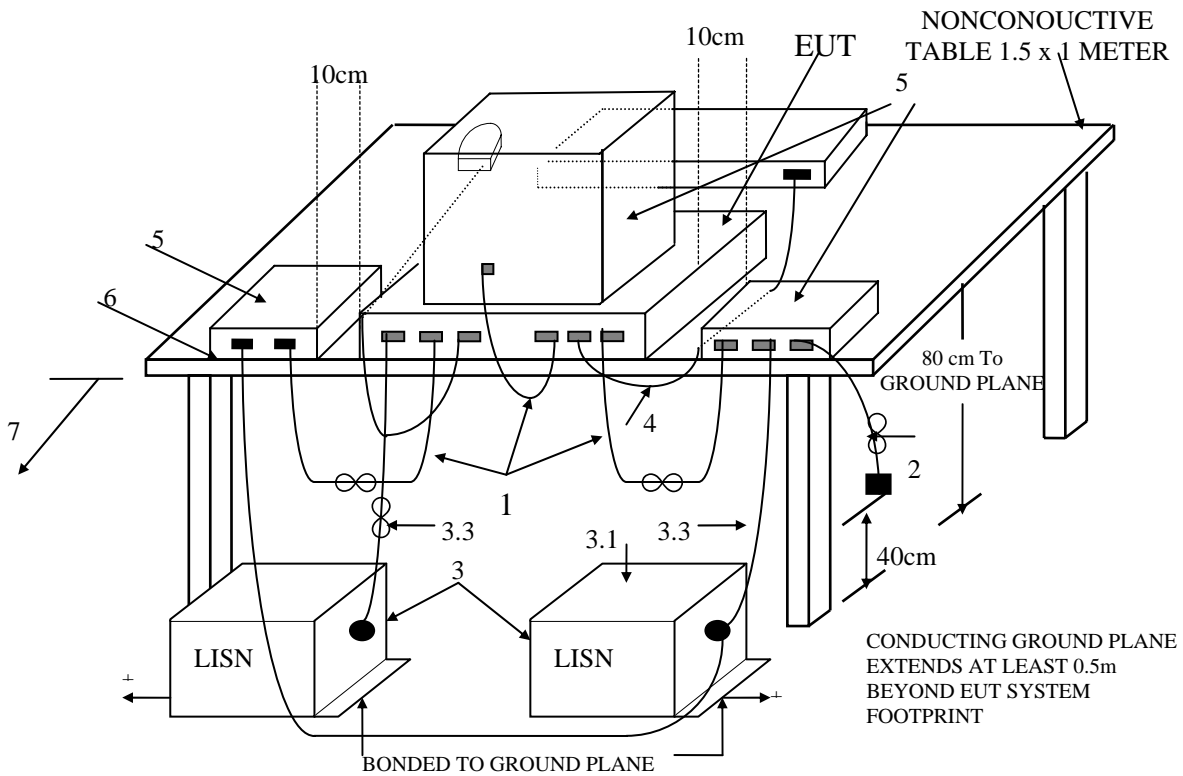
- 2.1 The EUT was tested according to **ANSI C63.4 - 2001 & CISPR 22**.
- 2.2 The EUT was placed 0.4 meter from the conducting wall of shielding room and kept at least 0.8 meter from any other grounded conducting surface.
- 2.3 The frequency range form 0.15 MHz to 30 MHz was investigated.
- 2.4 The LISN used was 50 Ohm / 50 uHenry as specified by Section 5.1 of **ANSI C63.4 - 2001**.
- 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

ANSI C63.4-2001



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

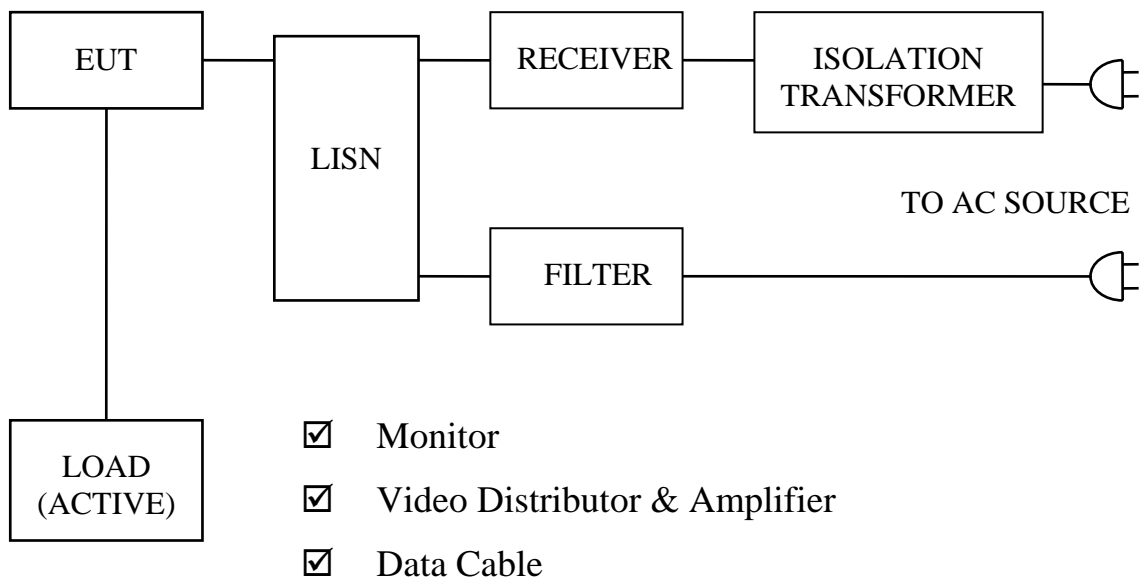
(Details for setup configuration, please refer to appendix A.)

LEGEND:

1. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 to 40 cm long, hanging approximately in the middle between ground plane and table.
2. I/O cables that are connected to a peripheral shall be bundled in center. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1m.
3. EUT connected to one LISN. Unused LISN connectors shall be terminated in 50 Ω. LISN can be placed on top of, or immediately beneath, ground plane.
 - 3.1 All other equipment powered from second LISN.
 - 3.2 Multiple outlet strip can be used for multiple power cords of non-EUT equipment.
 - 3.3 LISN at least 80 cm from nearest part of EUT chassis.
4. Cables of hand-operated devices, such as keyboards, mice, etc., have to be placed as close as possible to the host.
5. Non-EUT components being tested.
6. Rear of EUT, including peripherals, shall be all aligned and flush with rear of tabletop.
7. Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the floor ground plane (see 5.2).

**Test Configuration
Tabletop Equipment Conducted Emission**

3.2 Block Diagram Of Conducted Test



4 CONFIGURATION OF THE EUT

The EUT was configured according to **ANSI C63.4 - 2001 & CISPR 22**. All I/O ports were connected to the appropriate peripherals. All peripherals and cables are listed below (including internal device) :

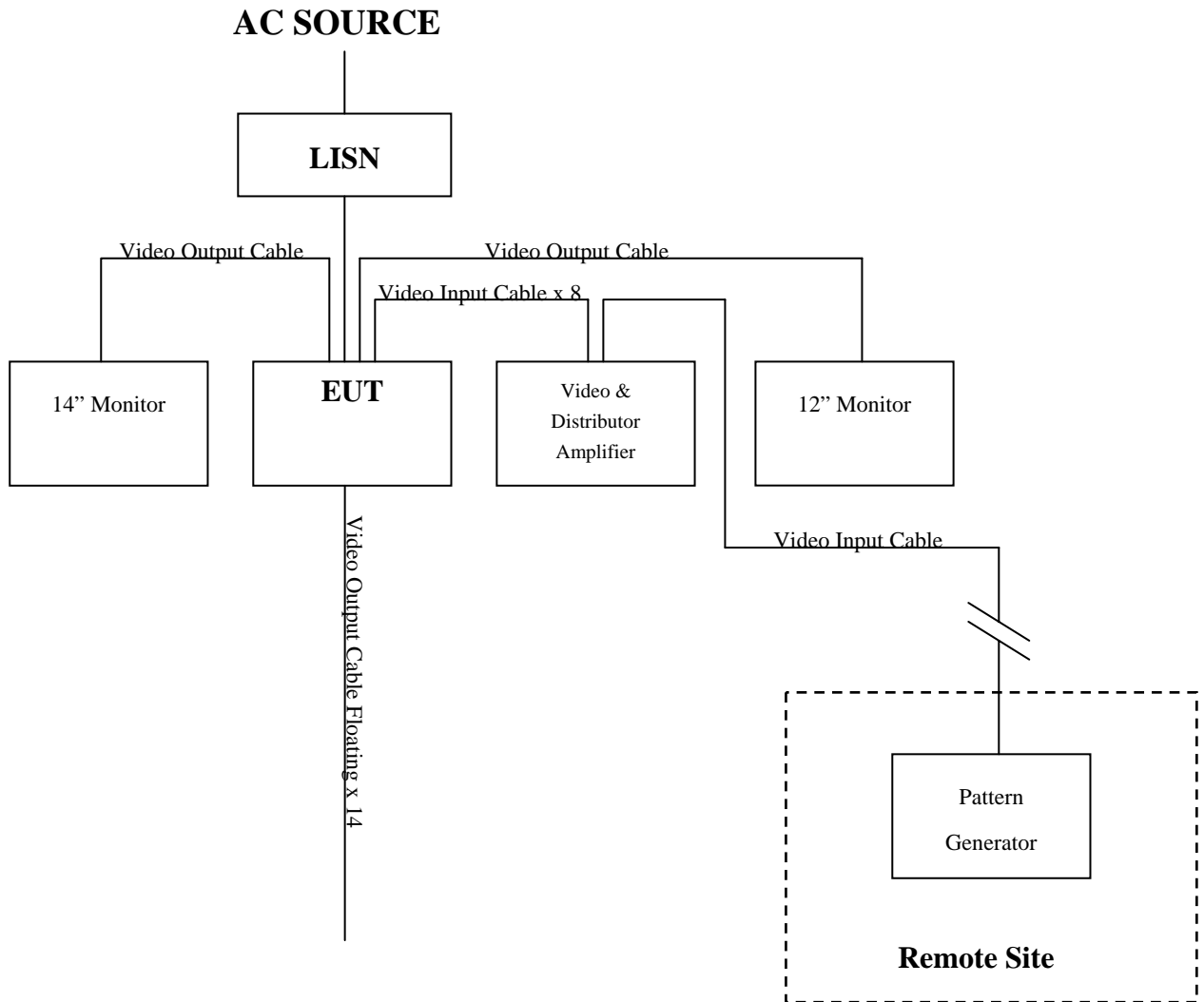


Figure 1



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-1200500C
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 **ANSI C63.4 - 2001 & CISPR 22**.
- 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 CLASS B

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 Deviations from the test standards and rules : None
- 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 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.)
- 7.7 Result : **PASSED**

HomeTek EMC LAB. TEL :886-2-22608375

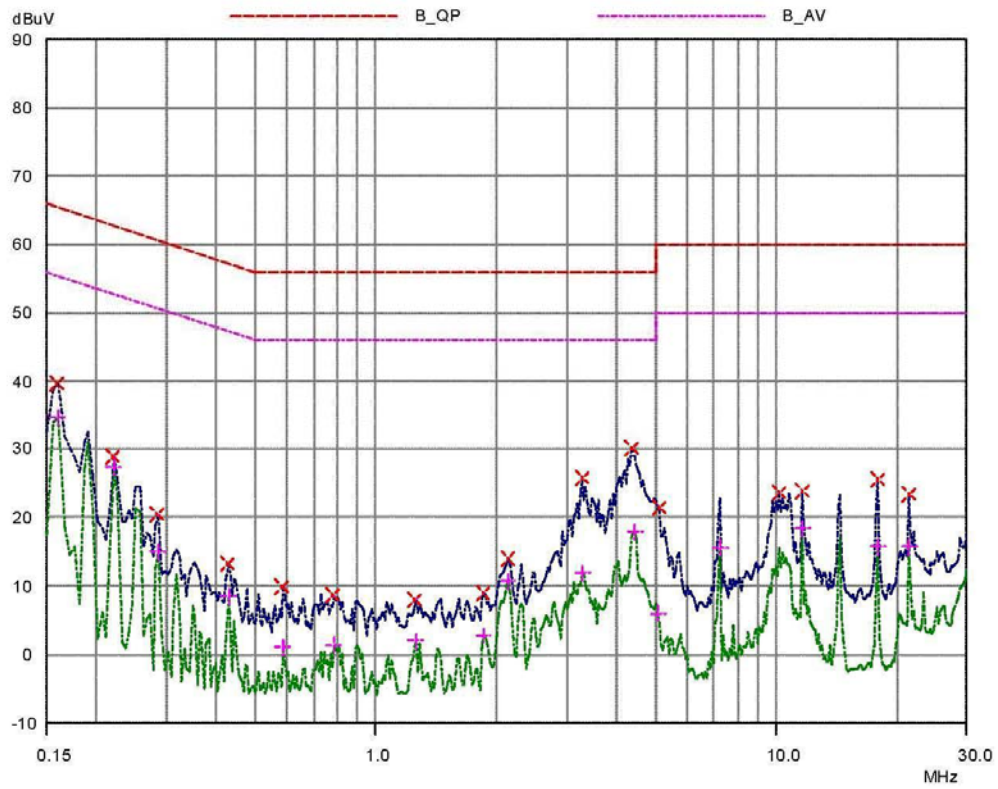
27 Mar 2004 16:17

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
 Manuf: 3C030
 Op Cond: LINE 1
 Operator: ALBERT
 Test Spec: FOR CISPR22 CLASS B
 Comment: 110V/60Hz
 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 16:17

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
Manuf: 3C030
Op Cond: LINE 1
Operator: ALBERT
Test Spec: FOR CISPR22 CLASS B
Comment: 110V/60Hz
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 21.46 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 21.46 MHz.

* limit exceeded

HomeTek EMC LAB. TEL :886-2-22608375

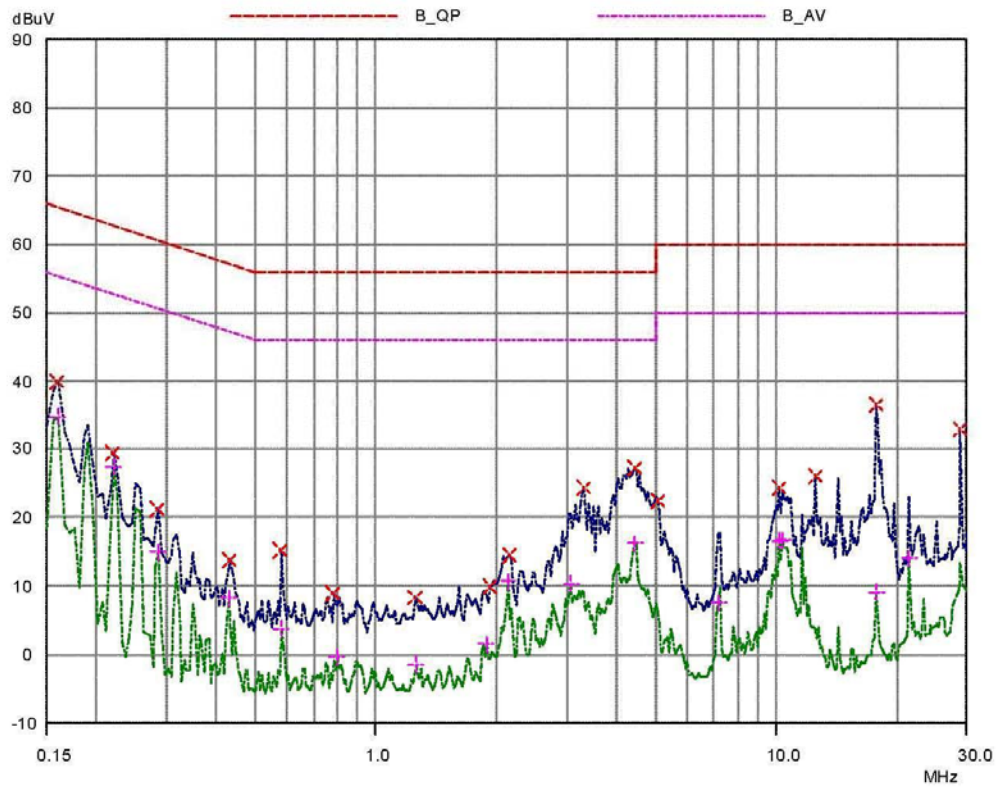
27 Mar 2004 16:28

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
 Manuf: 3C030
 Op Cond: LINE 2
 Operator: ALBERT
 Test Spec: FOR CISPR22 CLASS B
 Comment: 110V/60Hz
 CD818AP

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 16:28

CONDUCTED EMISSIONS

EUT: Video Distributor & Amplifier
 Manuf: 3C030
 Op Cond: LINE 2
 Operator: ALBERT
 Test Spec: FOR CISPR22 CLASS B
 Comment: 110V/60Hz
 CD818AP

Result File:

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

Peak Search Results

Frequency MHz	PK Level dBuV	PK Limit dBuV	PK Delta dB
0.16	40.02	65.46	25.44
0.22	29.42	62.82	33.40
0.285	21.21	60.67	39.46
0.43	13.83	57.25	43.42
0.58	15.18	56.00	40.82
0.785	8.99	56.00	47.01
1.255	8.34	56.00	47.66
1.92	9.87	56.00	46.13
2.15	14.45	56.00	41.55
3.305	24.41	56.00	31.59
4.41	27.21	56.00	28.79
5.04	22.45	60.00	37.55
10.14	24.28	60.00	35.72
12.52	26.11	60.00	33.89
17.82	38.54	60.00	23.46
28.68	32.91	60.00	27.09

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB
0.16	34.86	55.46	20.60
0.22	27.44	52.82	25.38
0.285	14.95	50.67	35.72
0.425	8.26	47.35	39.09
0.58	3.85	46.00	42.15
0.8	-0.41	46.00	46.41
1.255	-1.41	46.00	47.41
1.89	1.54	46.00	44.46
2.14	10.67	46.00	35.33
3.055	10.29	46.00	35.71
4.41	16.22	46.00	29.78
7.14	7.61	50.00	42.39
10.17	16.53	50.00	33.47
10.36	16.65	50.00	33.35
17.82	9.12	50.00	40.88
21.46	14.00	50.00	36.00

* limit exceeded

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	<input checked="" type="checkbox"/> OATS 3			JUL/2003
2	EMI TEST RECEIVER	20Hz ~ 26.5GHz	ROHDE & SCHWARZ	ESMI 845442/006	JAN/2004
3	PRE-AMPLIFIER	9KHz ~ 3000MHz	ADVANTEST	BB525C 90081001	OCT/2003
4	ANTENNA (BI-LOG)	25MHz ~ 2GHz	SCHAFFNER	CBL6112B S/N : 2611	MAY/2003
5	ANTENNA (DIPOLE)	30 ~ 300MHz	ROHDE & SCHWARZ	HZ-12 842899/0008	JUL/2003
6	ANTENNA (DIPOLE)	300 ~ 1000MHz	ROHDE & SCHWARZ	HZ-13 842007/0004	JUL/2003
7	Attenuation	50Ω/10dB	Mini-Circuit	NAT-10 AT-001	JUL/2003
8	Cable	10m	SUHNER	RG214/U OS3-003	DEC/2003
9	Cable	14m	BELDEN	9913 OS3-001	DEC/2003
10	EMI 32 (software)	N/A	AUDIX	19991013-0923	N/A

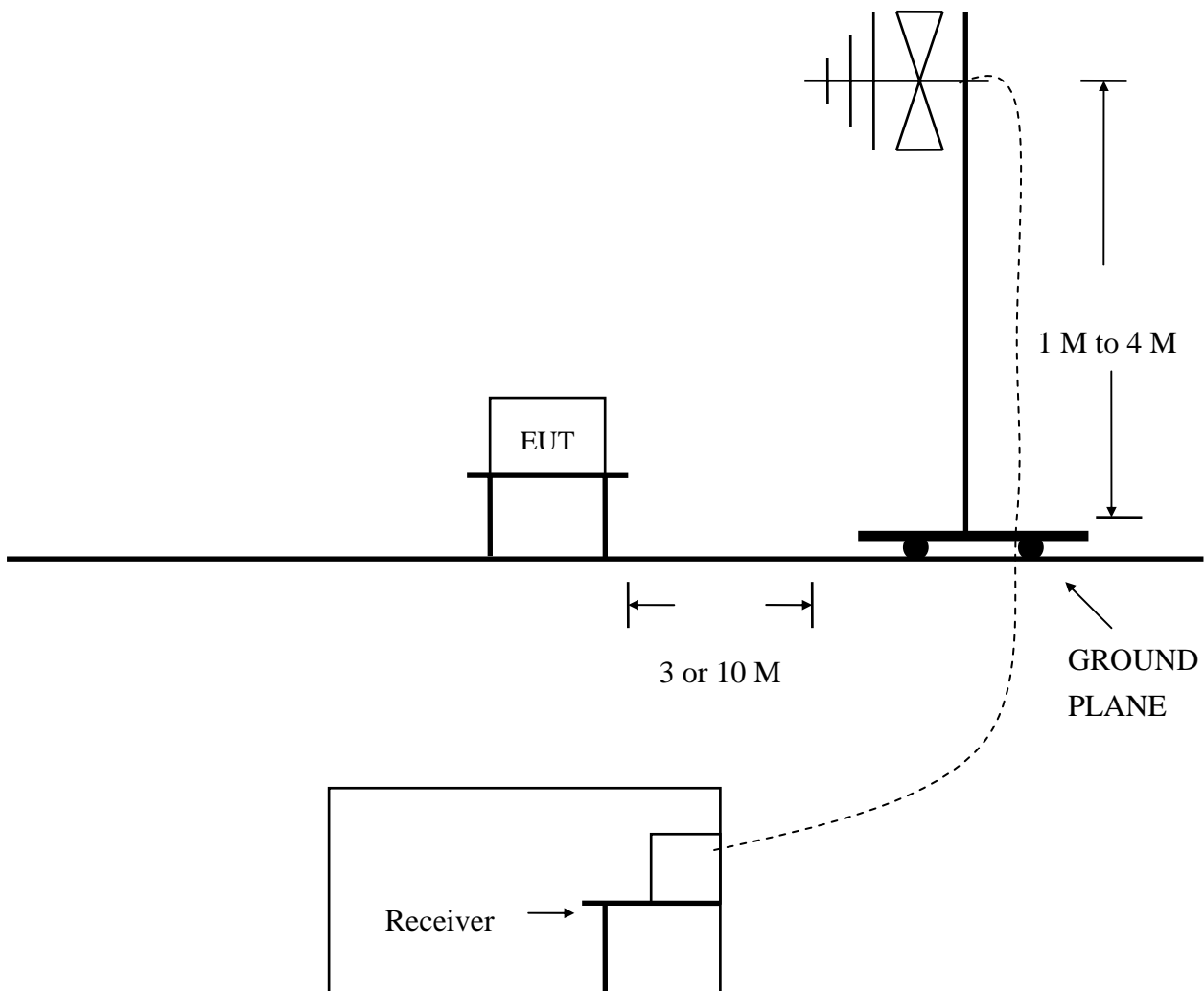
Note : Items 1 ~ 9 were calibrated within period of 1 year.

2 TEST PROCEDURE

- 2.1 The EUT was test according to **ANSI C63.4 - 2001 & CISPR 22**.
- 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

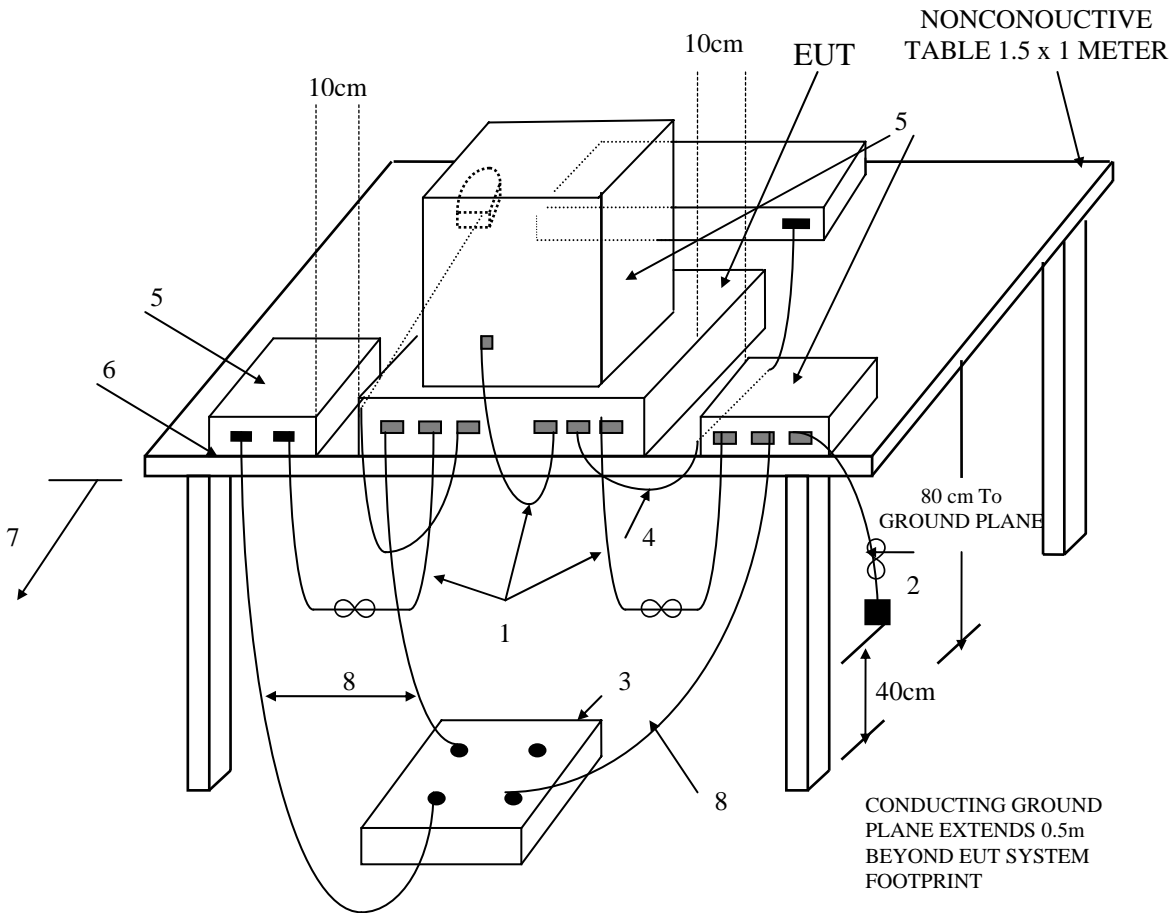
3.1 TEST SETUP OF OPEN SITE.



3.2 TEST SETUP OF EUT

ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE RANGE OF 9kHz TO 40 GHz

ANSI
C63.4-2001



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

LEGEND:

1. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 to 40 cm long, hanging approximately in the middle between ground plane and table.
2. I/O cables that are connected to a peripheral shall be bundled in center. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1m.
3. If LISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the ground plane with the receptacle flush with the ground plane.
4. Cables of hand-operated devices, such as keyboards, mice, etc., have to be placed as close as possible to the controller.
5. Non-EUT components of EUT system being tested.
6. The rear of all components of the system under test shall be located flush with the rear of the table.
7. No vertical conducting wall used.
8. Power cords drape to the floor and are routed over to receptacle.

Test Configuration
Tabletop Equipment Radiated Emission

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 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.

5.3 The photos of radiated test configuration, please refer to appendix A.

6 LIMIT OF RADIATED EMISSION CLASS B

CISPR 22

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

6.1 The tighter limit shall apply at the edge between two frequency bands.

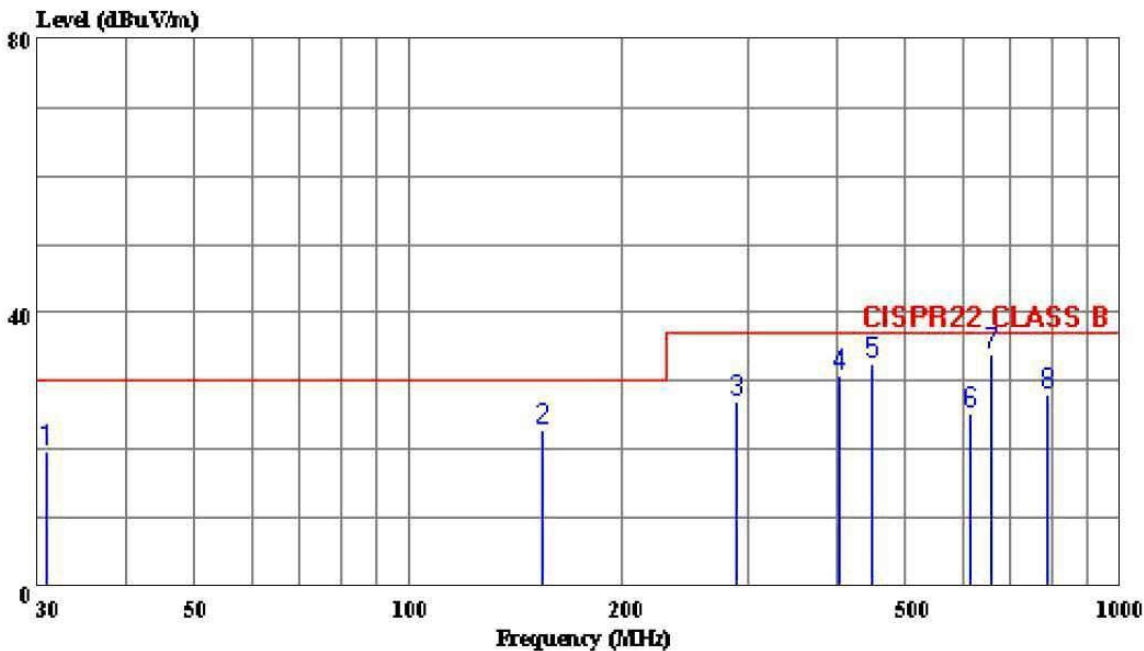
6.2 Measurement distance in meters between the measuring instrument antenna and the closed point of any part of the EUT or peripherals.

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 All readings above 1 GHz are average or peak values with resolution bandwidth of 1 MHz
- 7.4 The measurements were made at 10 meters of HomeTek Lab's open site 3.
- 7.5 Temperature : 33 °C, Humidity : 55 % RH.
- 7.6 Deviation form the test standards and rules : None
- 7.7 The radiation emission result were gained by the following method :
Level = Reading Level + Probe Factor (Antenna Factor) + Cable Loss – Preamp Factor
Over Limit = Level – Limit Line
- 7.8 The radiated mission test was passed at minimum margin :
Vertical 831.54 MHz/ 34.52 dBuV/m, Antenna Height 2 Meter,
Turn Table 180 degree, Model : CD816AP .
- 7.1 Result : **PASSED**



Data#: 2 File#: 3C030.EMI Date: 2004-03-29 Time: 17:26:16



Trace:

Ref Trace:

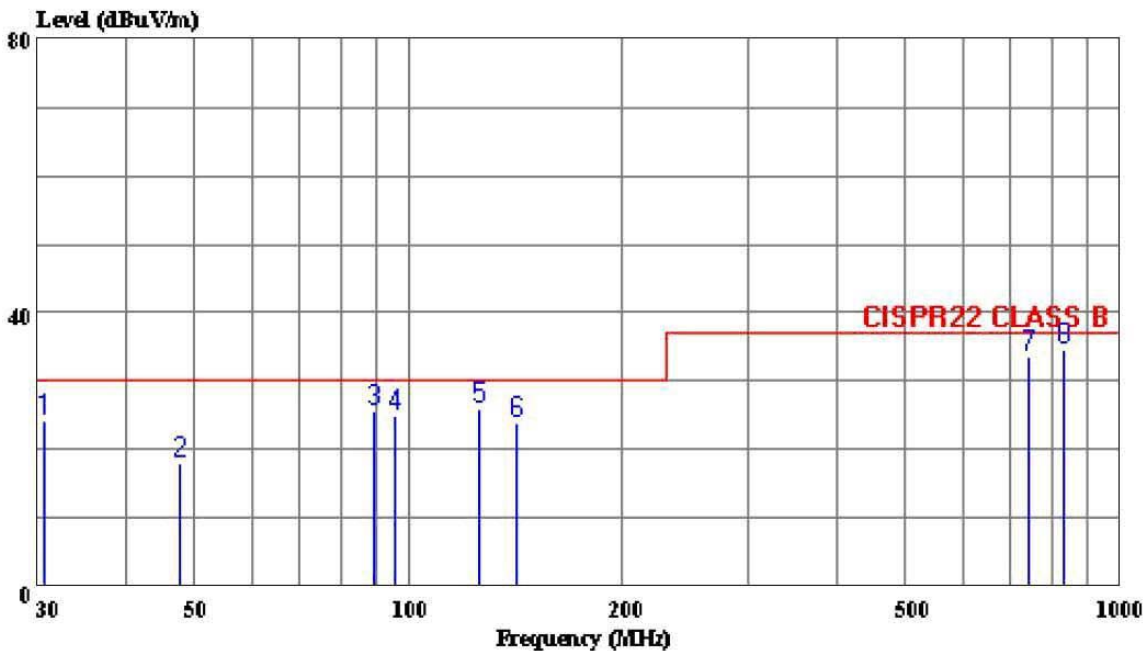
Condition: CISPR22 CLASS B 10m CHASE 2611 052703 HORIZONTAL
eut : Video Distributor & Amplifier
power: 110V/60Hz
memo : CD816AP ALL CABLE

Page: 1

	Freq	Level	Limit	Over	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB
1	30.950	19.85	30.00	-10.15	30.00	17.21	0.84	28.20 Peak
2	154.320	22.80	30.00	-7.20	40.00	9.10	1.74	28.04 Peak
3	289.110	27.01	37.00	-9.99	40.00	12.38	2.39	27.76 Peak
4	403.150	30.70	37.00	-6.30	40.00	15.52	2.88	27.70 Peak
5	449.230	32.50	37.00	-4.50	41.00	15.90	3.07	27.47 Peak
6	615.389	25.37	37.00	-11.63	30.00	18.37	3.73	26.73 Peak
7	659.230	34.03	37.00	-2.97	38.00	18.75	3.86	26.58 Peak
8	790.320	27.88	37.00	-9.12	30.00	19.70	4.42	26.24 Peak



Data#: 1 File#: 3C030.EMI Date: 2004-03-29 Time: 17:24:16



Trace:

Ref Trace:

Condition: CISPR22 CLASS B 10m CHASE 2611 052703 VERTICAL
eut : Video Distributor & Amplifier
power: 110V/60Hz
memo : CD816AP ALL CABLE

Page: 1

	Freq	Level	Limit	Over	Read	Antenna	Cable	Preamp	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	
1	30.590	24.17	30.00	-5.83	34.00	17.54	0.83	28.20	Peak
2	47.690	17.94	30.00	-12.06	37.00	8.07	1.07	28.20	Peak
3	88.970	25.68	30.00	-4.32	44.00	8.50	1.39	28.21	Peak
4	95.630	24.78	30.00	-5.22	42.00	9.55	1.44	28.21	Peak
5	125.320	26.14	30.00	-3.86	41.00	11.68	1.60	28.13	Peak
6	141.970	23.85	30.00	-6.15	40.00	10.25	1.68	28.08	Peak
7	745.260	33.52	37.00	-3.48	36.00	19.64	4.21	26.34	Peak
8	831.540	34.52	37.00	-2.48	36.00	20.00	4.55	26.03	Peak

SAMPLE OF FCC DoC LABEL 1

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions: (1)
This device may not cause harmful interference. And (2)
this device must accept any interference received, including
interference that may cause undesired operation.

SAMPLE OF FCC DoC LABEL 2





HomeTek Technology Inc.

Appendix A

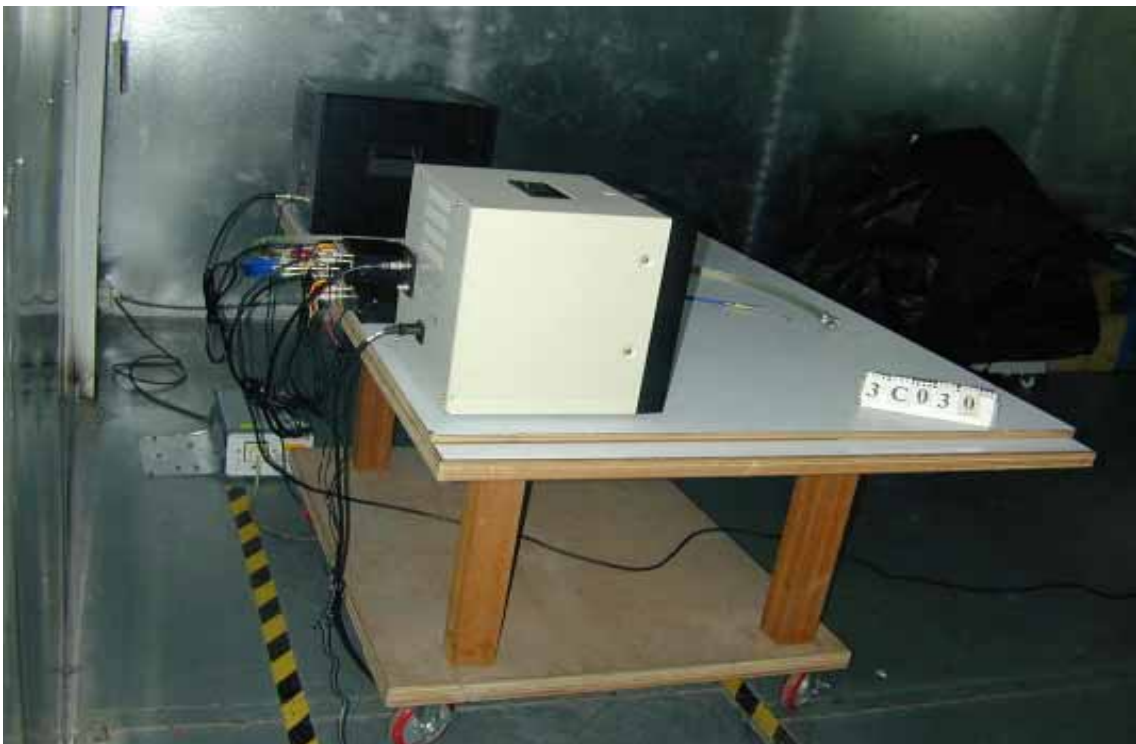
PHOTOS OF TEST CONFIGURATION

PHOTO OF CONDUCTED POWER LINE TEST

Model : CD816AP



Front View



Rear View

PHOTO OF RADIATED EMISSION TEST

Model : CD816AP



Front View



Rear View



HomeTek Technology Inc.

Appendix B

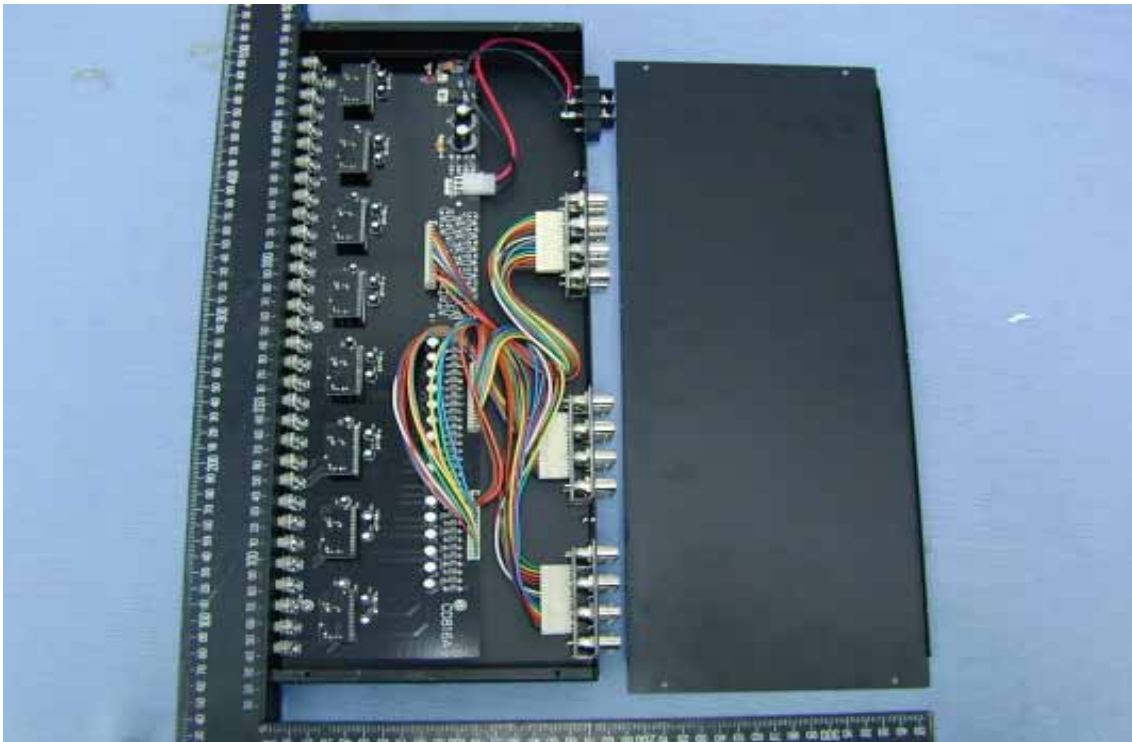
PHOTOS OF EUT

PHOTO OF EUT

Model : CD816AP



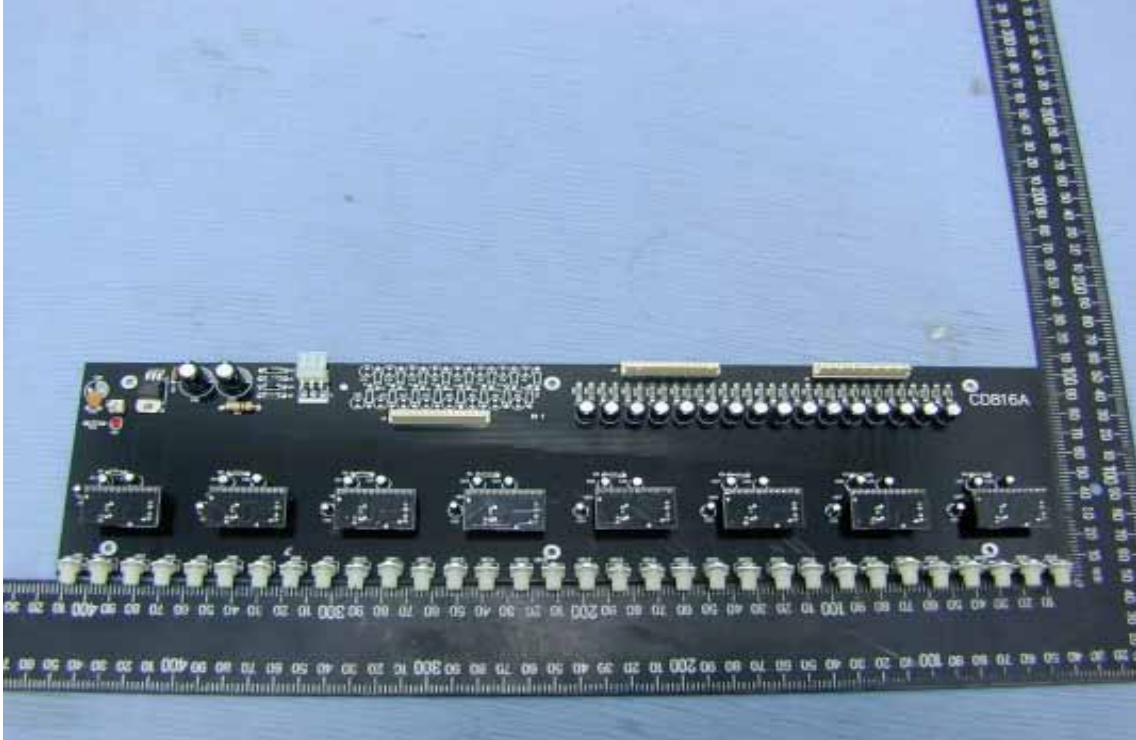
Full View of EUT



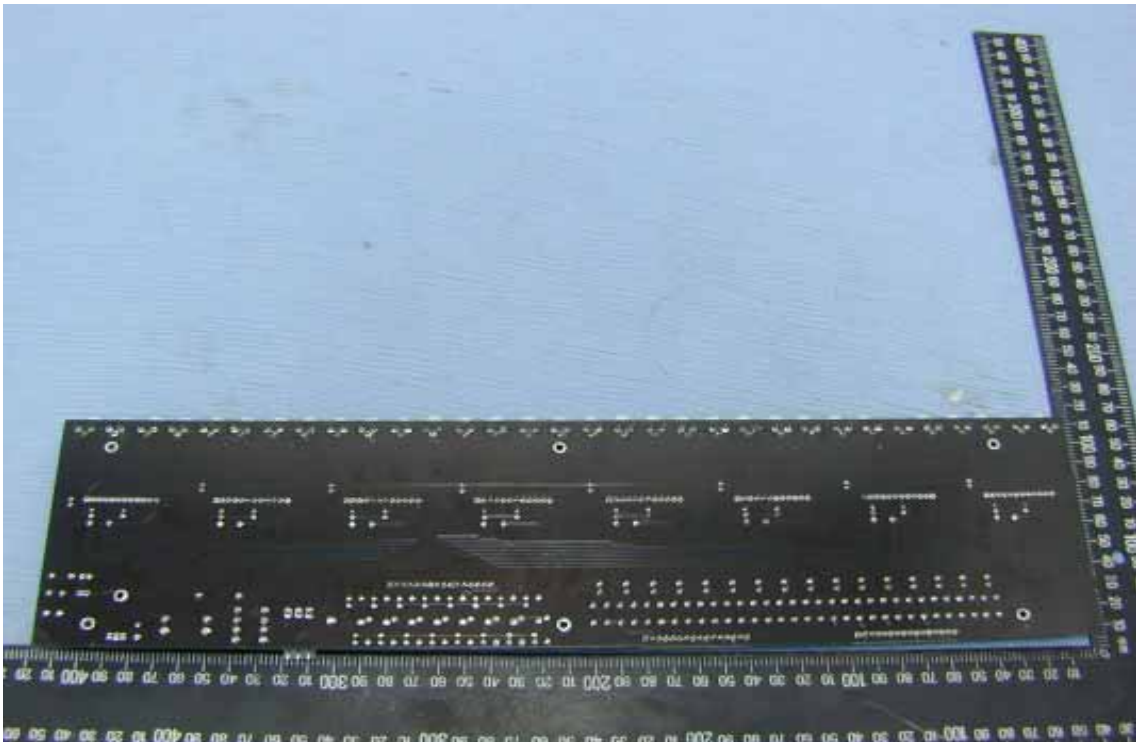
Inside View of EUT

PHOTO OF EUT

Model : CD816AP



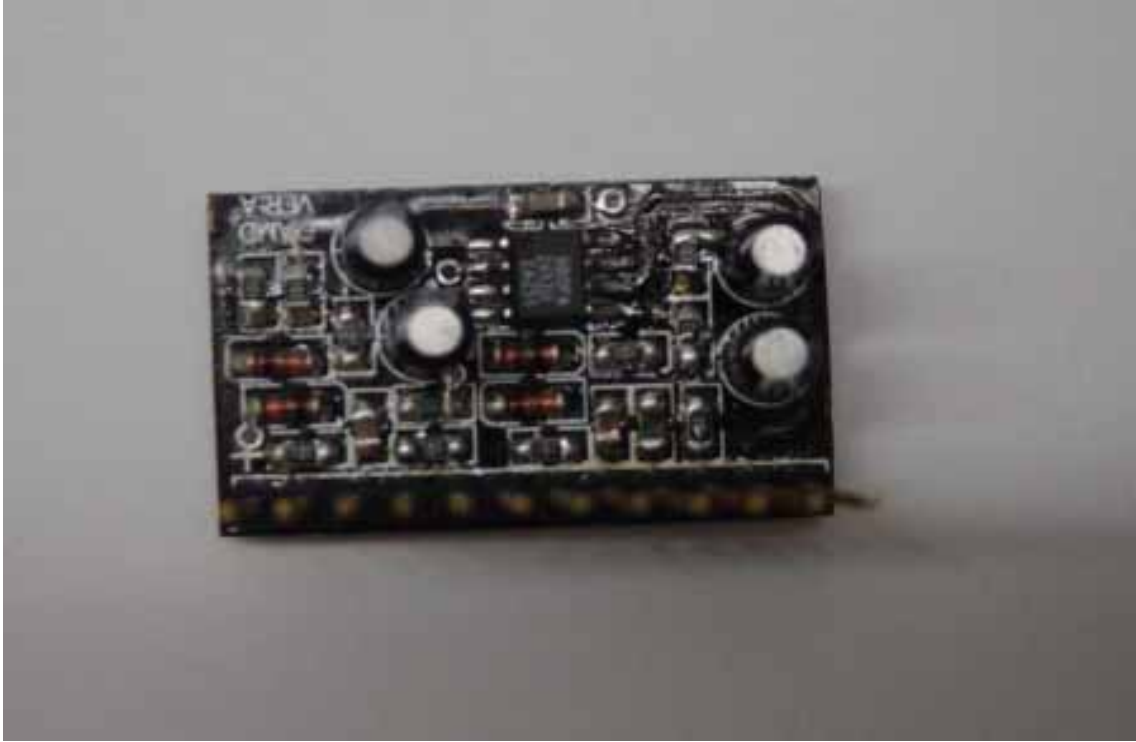
Component Side of Main Board - 1



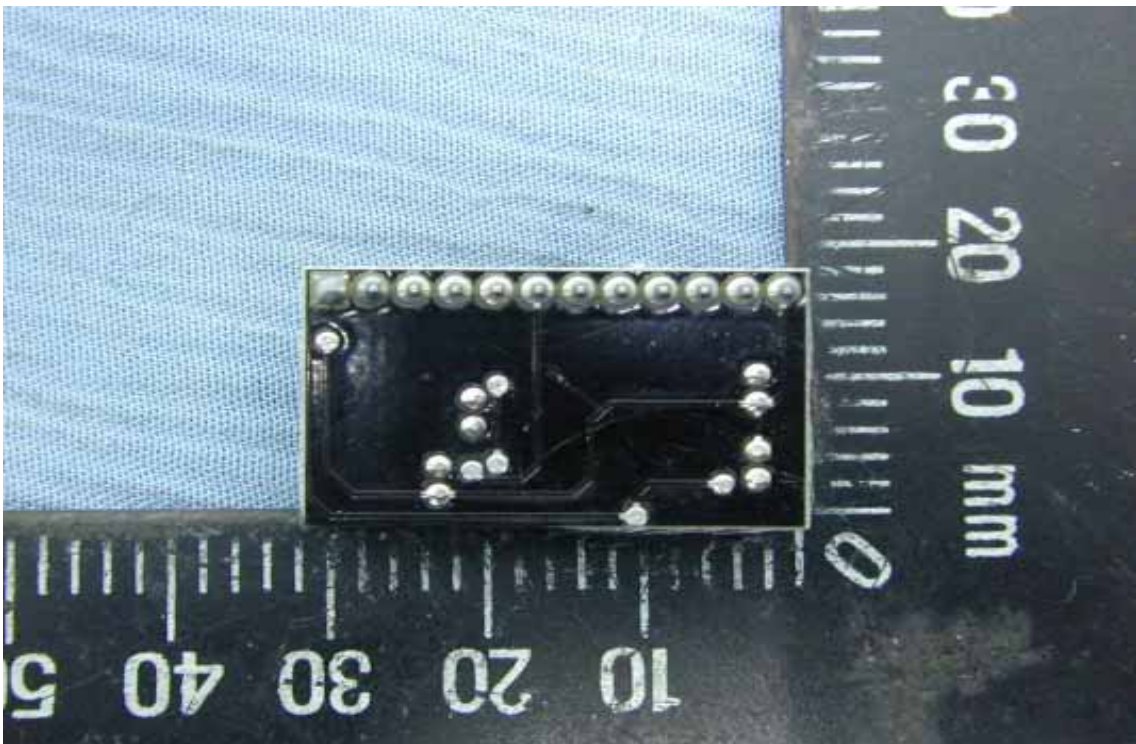
Solder Side of Main Board - 1

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 black ink, 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, appearing to read '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
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, 2004

Effective through

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

Effective through

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
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, 2005

Effective through

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

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.

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/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

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



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. McEl'.

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

*is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in
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 "John 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

2005-10-01 through 2006-09-30

Effective dates

For the National Institute of Standards and Technology

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200331-0

HomeTek Technology Inc.

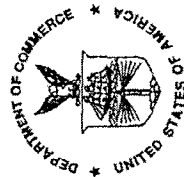
Taipei Shien 236
TAIWAN

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
Laboratory Accreditation Program**



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
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

2006-10-01 through 2007-09-30

Effective dates

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



**National Voluntary
Laboratory Accreditation Program**



**ELECTROMAGNETIC COMPATIBILITY
AND TELECOMMUNICATIONS**

NVLAP LAB CODE 200331-0

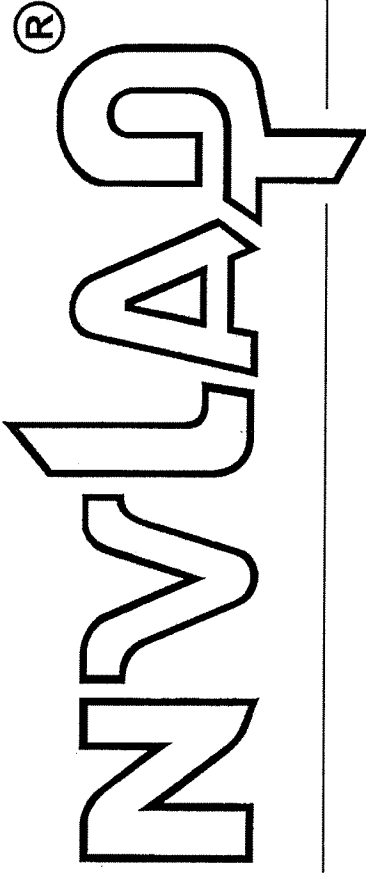
<i>NVLAP Code</i>	<i>Designation / Description</i>
12/CIS22a	IEC/CISPR 22 (1993) and EN 55022 (1994): Limits and methods of measurement of radio disturbance characteristics of information technology equipment, Amendment 1 (1995) and Amendment 2 (1996)
12/CIS22b	CNS 13438 (1997): Limits and Methods of 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/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-3/2005.04

2006-10-01 through 2007-09-30

Effective dates

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 17025:2005

NVLAP LAB CODE: 200331-0

HomeTek Technology Inc.

Taipei Shien 236

TAIWAN

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

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 - Requiements 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

2007-10-01 through 2008-09-30

Effective dates

Sally S. Bruce

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/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/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-3/2005.04

2007-10-01 through 2008-09-30

Effective dates

For the National Institute of Standards and Technology