

HomeTek Technology Inc.

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## FCC TEST REPORT FOR

APPLICANT : SMART CABLING & TRANSMISSION CORP.  
ADDRESS : 7F-1, No. 168, Lien Cheng Rd.,  
Chung-Ho City, Taipei Hsien, Taiwan, R. O. C.  
EUT : Power Supply  
MODEL NO. : PW816X-XXX



NVLAP Lab Code:200331-0

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 # : FD4A025



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PHOTOS OF EUT



HomeTek Technology Inc.

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

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# VERIFICATION

for

## FCC Part 15, Subpart B Class B

APPLICANT : SMART CABLING & TRANSMISSION CORP.  
 ADDRESS : 7F-1, No. 168, Lien Cheng Rd.,  
Chung-Ho City, Taipei Hsien, Taiwan, R. O. C.  
 Receipt Date : 01/12/2005 Final Test Date: 01/26/2005  
 EUT : Power Supply  
 MODEL NO. : PW816X-XXX

### 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 OR ANY AGENCY OF THE U. S. GOVERNMENT.
- THE TEST RESULTS ARE TRACEABLE TO THE NATIONAL OR INTERNATIONAL STANDARD.

PREPARED BY : Frankie DATE : 1/31/2005  
 FRANKIE WANG

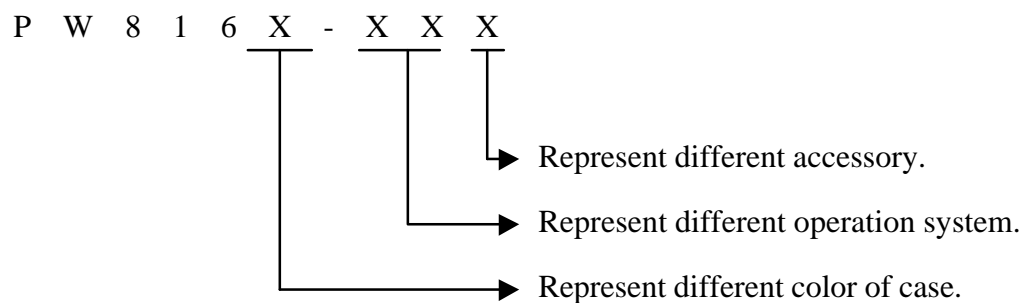
CHECK BY : Albert Tsai DATE : 1/31/2005  
 ALBERT TSAI / Senior Engineer

APPROVED BY : Tommy Rau DATE : 1/31/2005  
 TOMMY RAU / Manager

## GENERAL INFORMATION

- 1 APPLICANT : SMART CABLING & TRANSMISSION CORP.
- 2 ADDRESS : 7F-1, No. 168, Lien Cheng Rd.,  
Chung-Ho City, Taipei Hsien, Taiwan, R. O. C.
- 3 MANUFACTURER : SMART CABLING & TRANSMISSION CORP.
- 4 ADDRESS : 7F-1, No. 168, Lien Cheng Rd.,  
Chung-Ho City, Taipei Hsien, Taiwan, R. O. C.
- 5 DESCRIPTION OF EUT :
- EUT : Power Supply
- FCC ID : N/A
- Model Number : PW816X-XXX
- Serial # : N/A

5.1 The difference between series of models PW816X-XXX is shown as below:



The worst case of EMI test model is PW816 and the final test data were shown in this test report.

6 FEATURES OF EUT :

**Please refer to user manual or product specification.**

7 TEST MODE :

The EUT were investigated with two power output modes shown as below:

(1) DC 12V output mode;

(2) DC 24V output mode

The worst case of EMI test mode is (2) DC 24V output mode and the final test data were shown in this test report.



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 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)	50 /50uH/100A 150KHz ~ 30MHz	SCHWARZ BECK	NNLK 8121 8121370	OCT/2004
3	LISN (for Support Unit)	50 /50uH/10A 9KHz ~ 30MHz	ROHDE & SCHWARZ	ESH3-Z5 846128/007	FEB/2004
4	Terminator	50	N/A	N/A	NOV/2004
5	Attenuation	50 /10dB	Mini-Circuit	NAT-10 AT-002	JUL/2004
6	Cable	5.4m	SUHNER	RG-223 CON2-002	AUG/2004
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

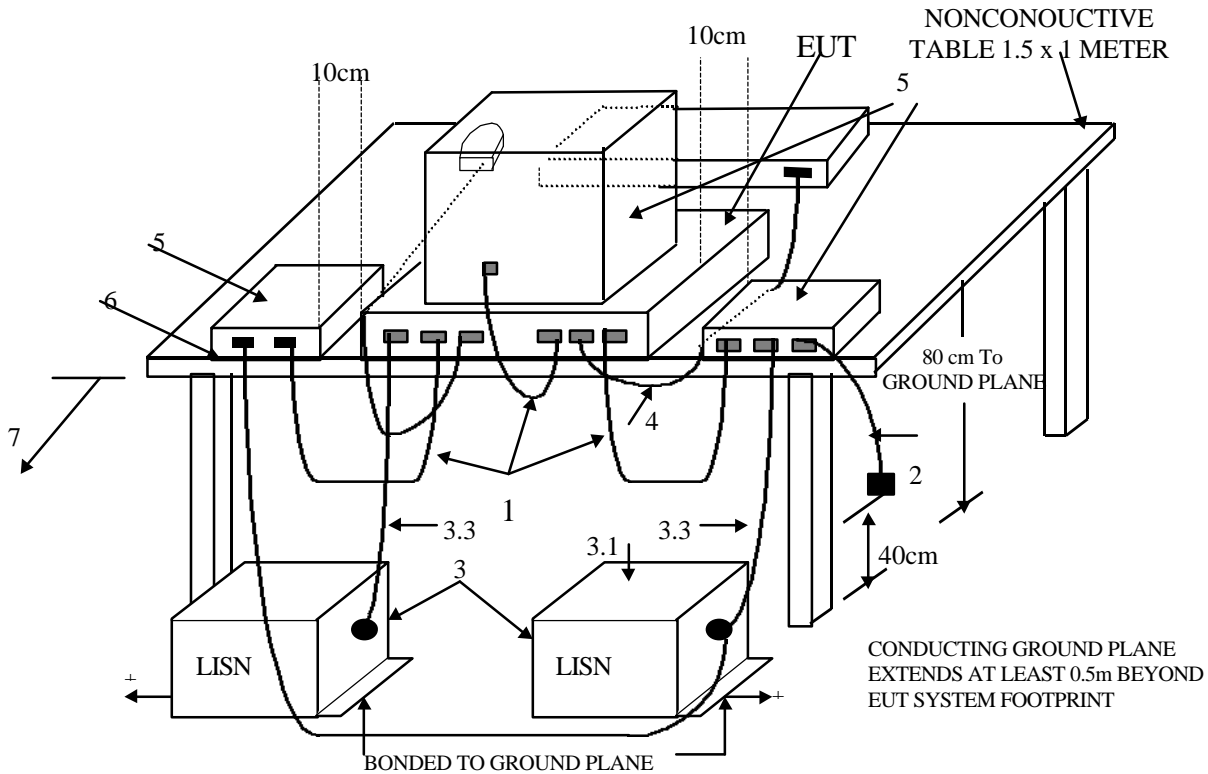
- 2.1 The EUT was tested according to **ANSI C63.4 - 2001 & CISPR 22**.
- 2.2 The EUT was placed 0.4 meter from the conducting wall of shielding room and kept at least 0.8 meter from any other grounded conducting surface.
- 2.3 The frequency range form 0.15 MHz to 30 MHz was investigated.
- 2.4 The LISN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

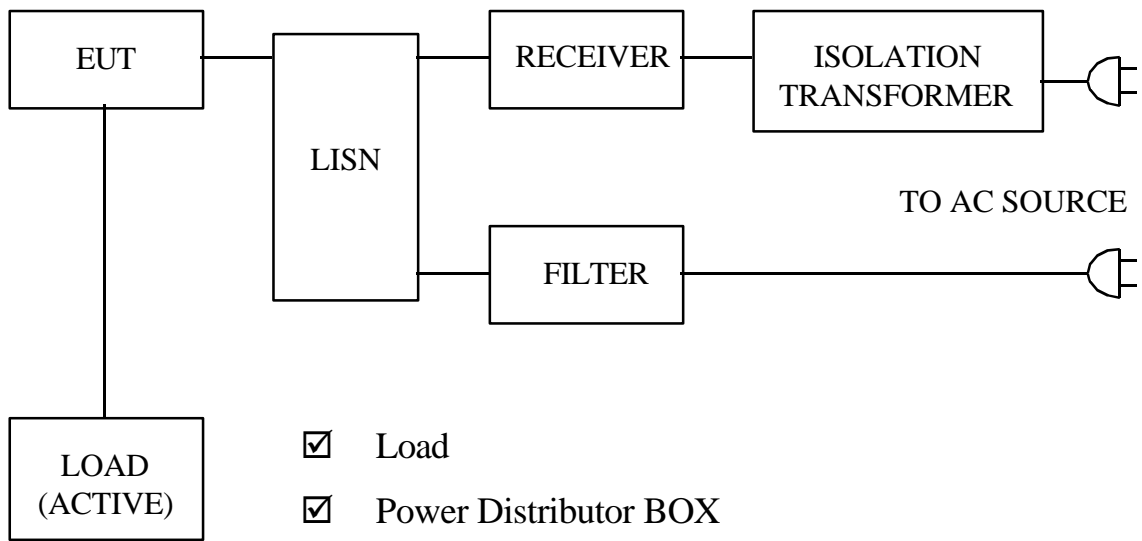
(Details for setup configuration, please refer to appendix A.)

**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, mouses, 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).

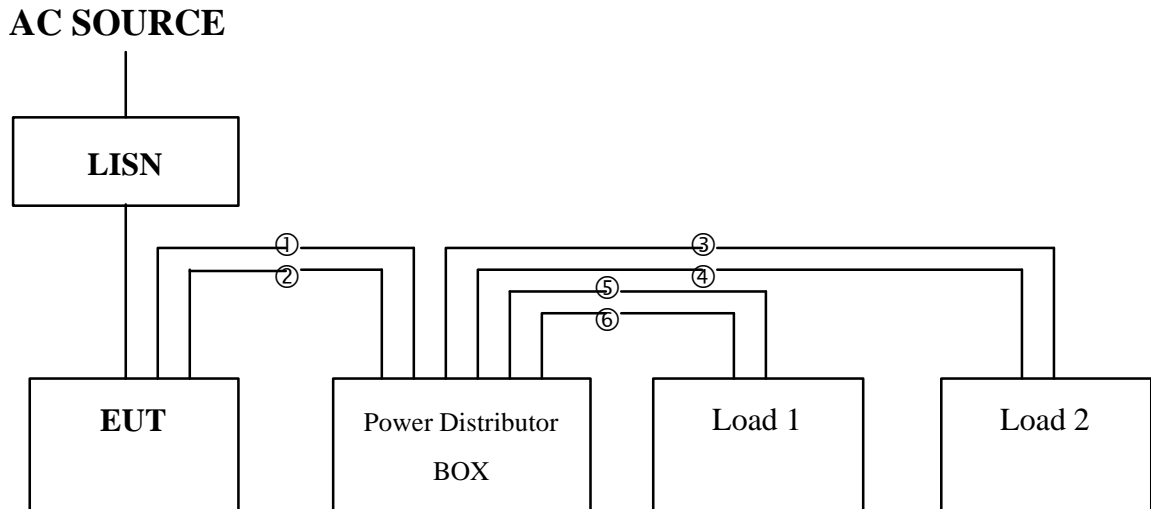
**Test Configuration  
Tabletop Equipment Conducted Emission**

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) :



- ① DC+ Power Cable x 16
- ② DC- Power Cable x 16
- ③ DC+ Power Cable x 5
- ④ DC- Power Cable x 5
- ⑤ DC+ Power Cable x 4
- ⑥ DC- Power Cable x 4

Figure 1



4.1 EUT

EUT Type : Proto Type Engineer Type Mass Production  
Condition when received : Good Damage : \_\_\_\_\_  
Device : Power Supply  
Applicant : SMART CABLING & TRANSMISSION CORP.  
Manufacturer : SMART CABLING & TRANSMISSION CORP.  
Model Number : PW816X-XXX  
Serial Number : N/A  
FCC ID : N/A  
Data Cable : N/A  
Power Cord (AC) : Un-Shielded, 1.8 m, 2 pin  
Power Cord (DC) : Un-Shielded, 1.0 m, 2 pin  
Power Supply Type : Linear

4.2 PERIPHERALS

Power Distributor BOX

Manufacturer : SMART CABLING & TRANSMISSION CORP.  
Model Number : PD009  
Serial Number : N/A  
FCC ID : N/A  
Data Cable : N/A  
Power Cord : Un-Shielded, 1.0 m



Load 1 x 2

Manufacturer : HomeTek  
Specification : DC 24V / 6R / 120W  
Power Cord : Un-Shielded, 1.0 m

Load 2

Manufacturer : HomeTek  
Specification : DC 12V / 1.5R / 120W  
Power Cord : Un-Shielded, 1.0 m

4.3 REMARK : N/A

## 5 EUT OPERATING CONDITION

- 5.1 The operation frequency of the EUT is none.
- 5.2 Configure the EUT according to the **ANSI C63.4 - 2001 & CISPR 22**.
- 5.3 Connect AC source 110V to input port of EUT.
- 5.4 DC 24V output mode:
  - EUT' s DC24V output port connect to input port of Support Unit (Power Distributor BOX).
  - DC24V output port of Support Unit (Power Distributor BOX) connect to dummy Load (6R/120W Resistor x 2 in parallel).
  - Monitor the status of output port of EUT during the test (For EMS Testing).
- 5.5 DC 12V output mode:
  - EUT' s DC12V output port connect to input port of Support Unit (Power Distributor BOX).
  - DC12V output port of Support Unit (Power Distributor BOX) connect to dummy Load (1.5R/120W Resistor).
  - Monitor the status of output port of EUT during the test (For EMS Testing).
- 5.6 **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 , 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 Result : **PASSED**

8 CONDUCTED POWER LINE TEST DATA (PAGE 1)

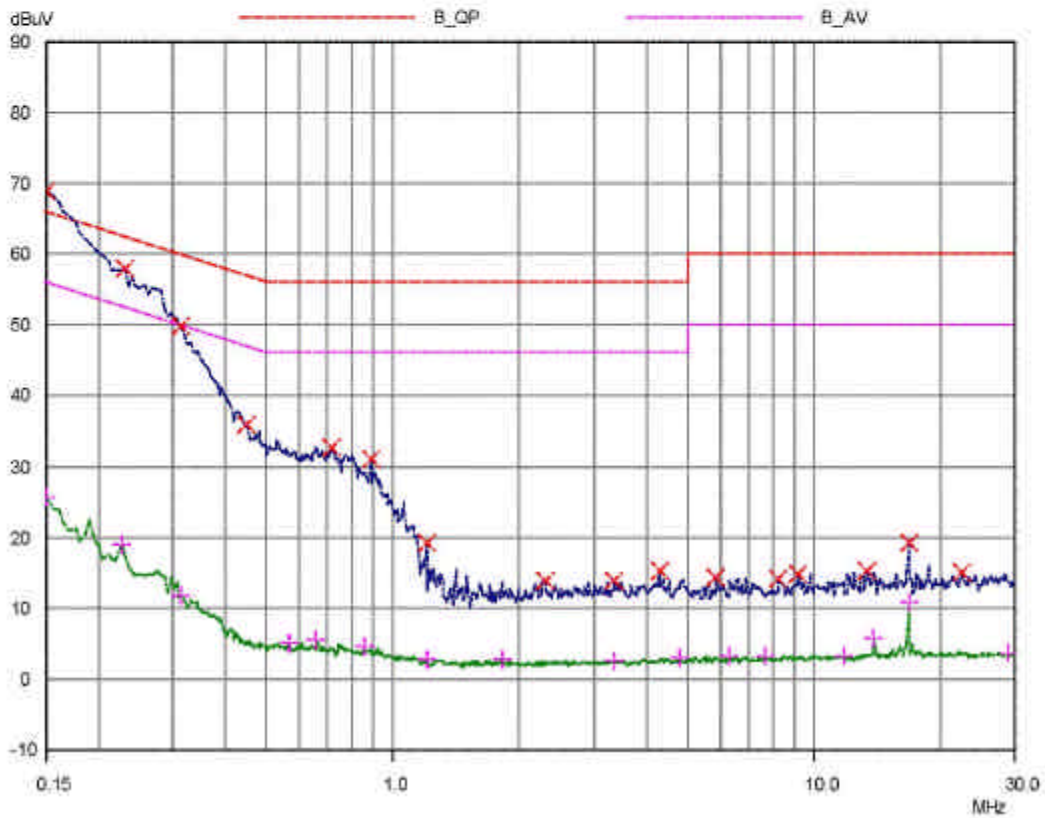
HomeTek EMC LAB. TEL :886-2-22608375

25 Jan 2005 20:15

CONDUCTED EMISSIONS

EUT: Power Supply (PW816)  
 Manuf: 4A025  
 Op Cond: LINE 1  
 Operator: GENSH  
 Test Spec: FOR CISPR22 CLASS B  
 Comment: 110V/60Hz  
 DC 24V MODE  
 Result File: 4a02511b.dat : 24V MODE

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





9 CONDUCTED POWER LINE TEST DATA (PAGE 2)

HomeTek EMC LAB TEL :886-2-22608375

25 Jan 2005 20:15

CONDUCTED EMISSIONS

EUT: Power Supply (PW816)
Manuf: 4A025
Op Cond: LINE 1
Operator: GENSIN
Test Spec: FOR CISPR22 CLASS B
Comment: 110V/50Hz
DC 24V MODE
Result File: 4a02511b.dat : 24V MODE

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 16 rows of peak search data.

Table with 4 columns: Frequency MHz, AV Level dBuV, AV Limit dBuV, AV Delta dB. Contains 16 rows of average value search data.

\* limit exceeded

10 CONDUCTED POWER LINE TEST DATA (PAGE 3)

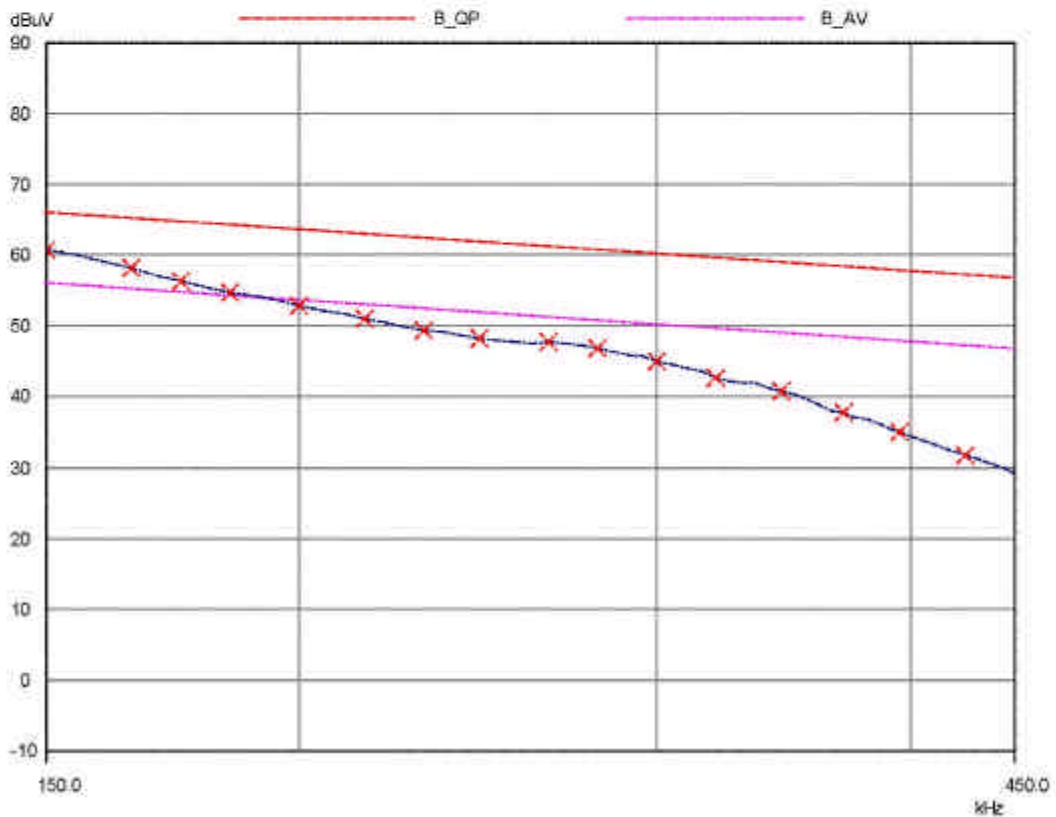
HomeTek EMC LAB. TEL :886-2-22608375

25 Jan 2005 20:17

CONDUCTED EMISSIONS

EUT: Power Supply (PW016)  
 Manuf: 4A025  
 Op Cond: LINE 1  
 Operator: GEN5N  
 Test Spec: FOR CISPR22 CLASS B  
 Comment: 110V/60Hz  
 DC 24V MODE  
 Result File: 4a02513b.dat : 24V MODE

Prescan Measurement: Detector: X QP  
 Meas Time: see scan settings  
 Subranges: 16  
 Acc Margin: 55 dB





### 11 CONDUCTED POWER LINE TEST DATA (PAGE 4)

HomeTek EMC LAB TEL :886-2-22608375

25 Jan 2005 20:17

#### CONDUCTED EMISSIONS

EUT: Power Supply (PV816)  
 Manuf: 4A025  
 Op Cond: LINE 1  
 Operator: GENSHI  
 Test Spec: FOR CISPR22 CLASS B  
 Comment: 110V/60Hz  
 DC 24V MODE  
 Result File: 4a02513b.dat : 24V MODE

Prescan Measurement:	Detector:	X QP
	Meas Time:	see scan settings
	Subranges:	16
	Acc Margin:	55 dB

#### Peak Search Results

Frequency kHz	QP Level dBuV	QP Limit dBuV	QP Delta dB
150.0	60.81	66.00	5.19
165.0	58.08	65.21	7.13
175.0	56.19	64.72	8.53
185.0	54.64	64.26	9.62
200.0	52.89	63.61	10.72
215.0	50.88	63.01	12.13
230.0	49.45	62.45	13.00
245.0	48.30	61.92	13.62
265.0	47.67	61.27	13.60
280.0	46.78	60.82	14.04
300.0	44.98	60.24	15.26
320.0	42.59	59.71	17.12
345.0	40.70	59.08	18.38
370.0	37.78	58.50	20.72
395.0	34.93	57.96	23.03
425.0	31.68	57.35	25.69

\* limit exceeded

## 12 CONDUCTED POWER LINE TEST DATA (PAGE 5)

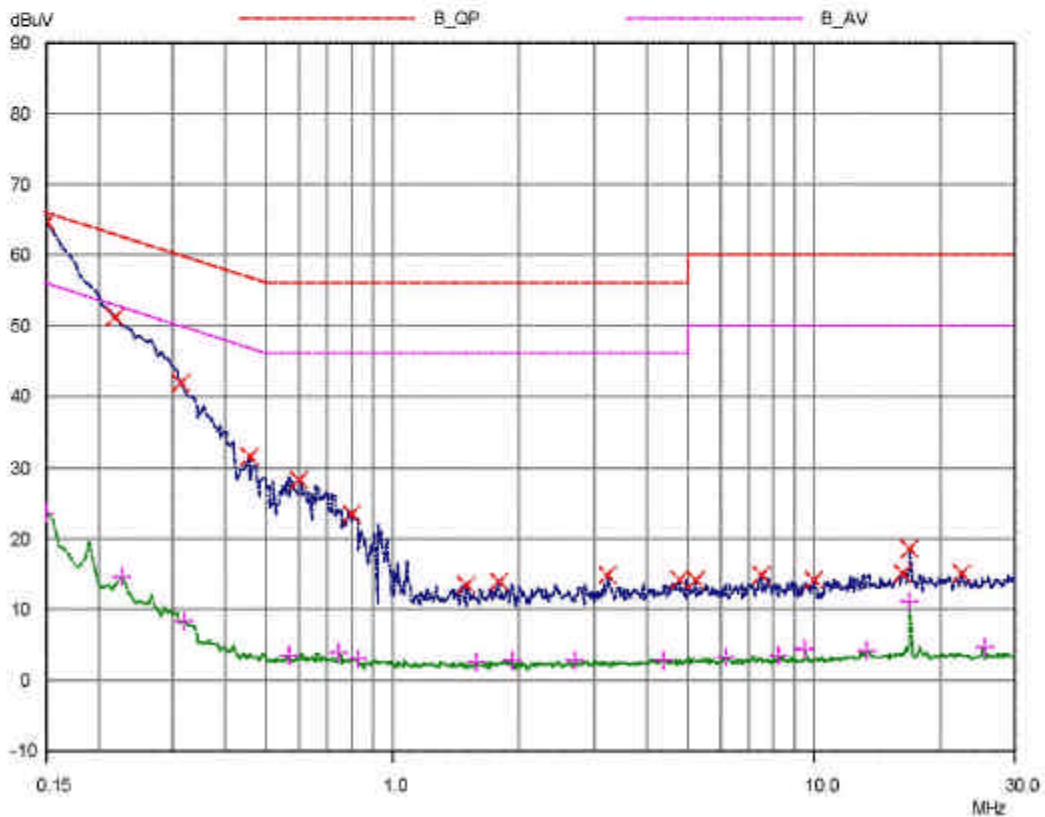
HomeTek EMC LAB. TEL :886-2-22608375

25 Jan 2005 19:09

### CONDUCTED EMISSIONS

EUT: Power Supply (PW016)  
 Manuf: 4A025  
 Op Cond: LINE 2  
 Operator: GEN5IN  
 Test Spec: FOR CISPR22 CLASS B  
 Comment: 110V/60Hz  
 DC 24V MODE  
 Result File: 4a02521b.dat : 24V MODE

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





### 13 CONDUCTED POWER LINE TEST DATA (PAGE 6)

HomeTek EMC LAB TEL :886-2-22608375

25 Jan 2005 19:09

#### CONDUCTED EMISSIONS

EUT: Power Supply (PV816)  
 Manuf: 4A025  
 Op Cond: LINE 2  
 Operator: GENSHI  
 Test Spec: FOR CISPR22 CLASS B  
 Comment: 110V/60Hz  
 DC 24V MODE  
 Result File: 4a02521b.dat - 24V MODE

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
0.15	64.66	66.00	1.34
0.22	51.31	62.82	11.51
0.315	42.01	59.84	17.83
0.455	31.42	56.75	25.36
0.6	28.38	56.00	27.62
0.8	23.49	56.00	32.51
1.49	13.36	56.00	42.64
1.77	13.80	56.00	42.20
3.24	14.72	56.00	41.28
4.76	14.04	56.00	41.96
5.2	14.10	60.00	45.90
7.41	14.83	60.00	45.17
10.0	14.08	60.00	45.92
16.07	15.02	60.00	44.98
16.76	18.58	60.00	41.42
22.16	15.04	60.00	44.96

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB
0.15	23.55	56.00	32.45
0.225	14.89	52.63	37.74
0.32	8.39	49.71	41.32
0.565	3.45	46.00	42.55
0.745	3.91	46.00	42.09
0.82	3.04	46.00	42.96
1.57	2.47	46.00	43.53
1.91	2.72	46.00	43.28
2.71	2.74	46.00	43.26
4.33	2.88	46.00	43.12
6.16	3.24	50.00	46.76
8.24	3.56	50.00	46.42
9.52	4.47	50.00	45.53
13.16	4.20	50.00	45.80
16.76	11.05	50.00	38.95
25.11	4.69	50.00	45.31

\* 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	☑ OATS 3			JUL/2004
2	EMI TEST RECEIVER	30MHz ~ 1GHz	ROHDE & SCHWARZ	ESVS10 845165/017	SEP/2004
3	RF SPECTRUM ANALYZER	N/A	HEWLETT PACKARD	8591E 3710A06158	MAY/2004
4	PRE-AMPLIFIER	9KHz ~ 3000MHz	ADVANTEST	BB525C 90081001	SEP/2004
5	ANTENNA (BI-LOG)	25MHz ~ 2GHz	SCHAFFNER	CBL6112B S/N : 2614	MAY/2004
6	Attenuation	50 /6dB	JYE BAO	FAT-N (M-F) 001	JUL/2004
7	Cable	10m	SUHNER	RG214/U OS3-003	DEC/2004
8	Cable	14m	BELDEN	9913 OS3-001	DEC/2004
9	EMI 32 (software)	N/A	AUDIX	19991013-0923	N/A

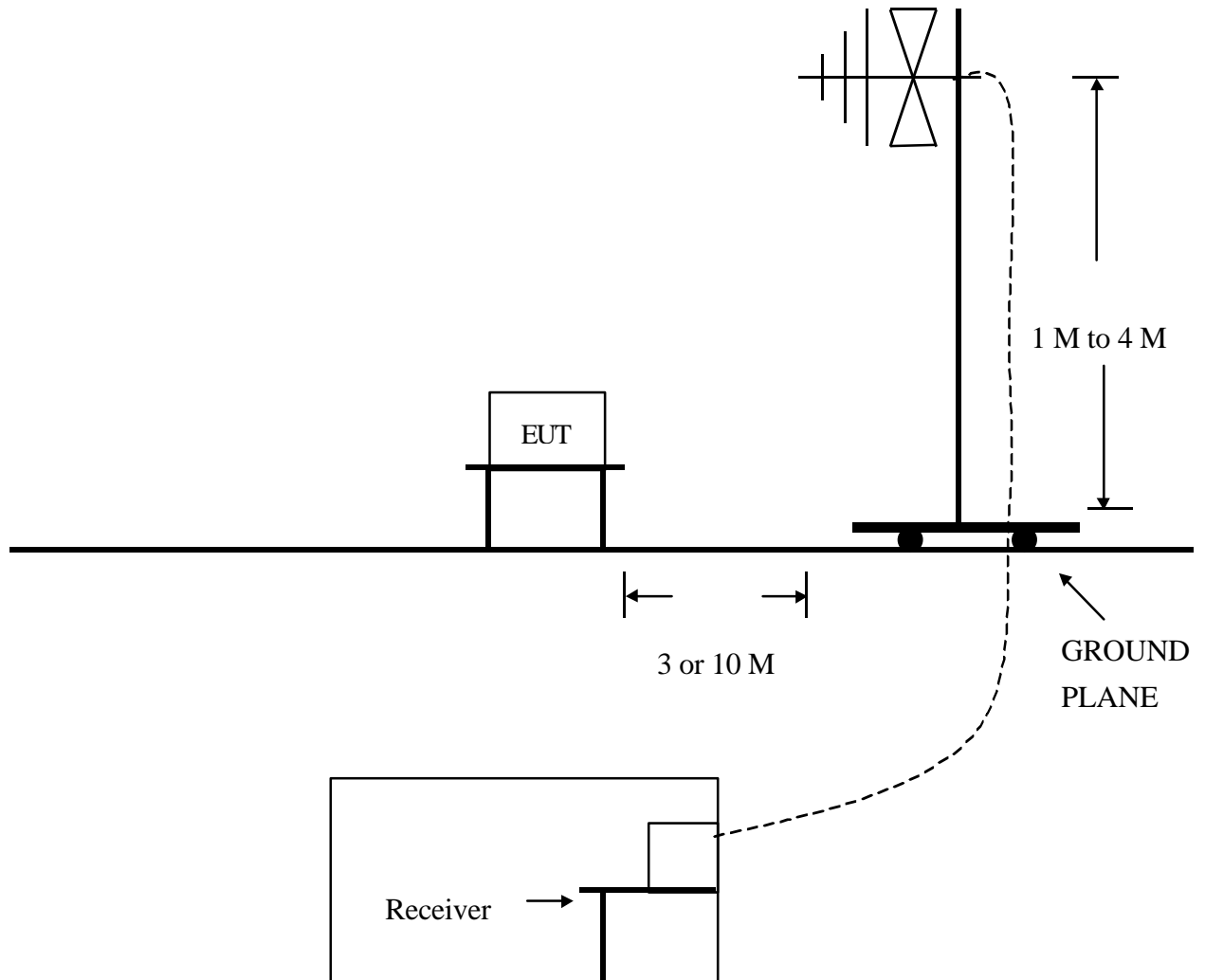
Note : Items 1 ~ 9 were calibrated within period of 1 year.

## 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 III.
- 2.3 The frequency range from 30 MHz to 1 GHz, the measurement were made at 10 meters, with a BI-log antenna.

## 3 TEST SETUP

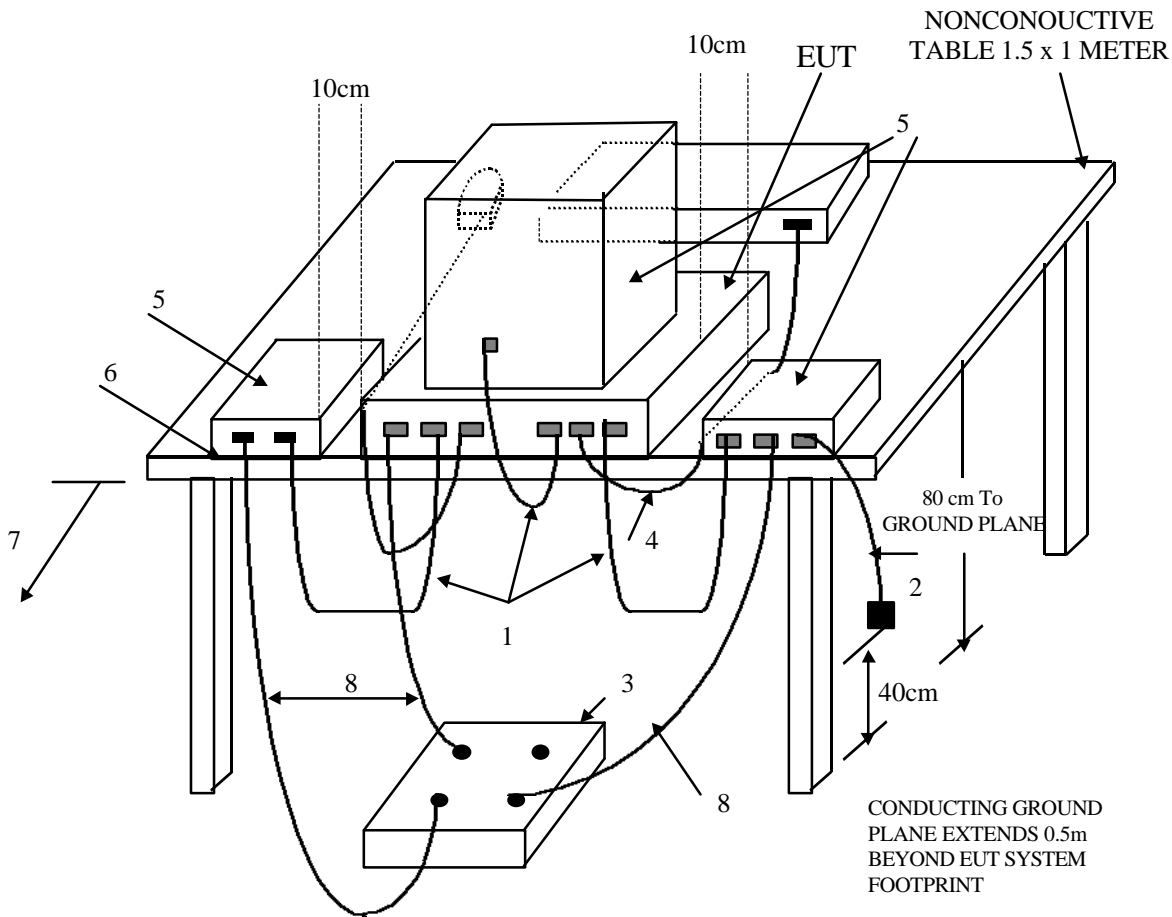
### 3.1 TEST SETUP OF OPEN SITE.



### 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 III.

**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 III.
- 7.5 Temperature : 33 , 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 32.03 MHz/ 23.16 dBuV/m, Antenna Height 1.0 Meter,  
Turn Table 90 degree, The Mode : DC 24V output mode , Model : PW816.
- 7.9 Result : **PASSED**

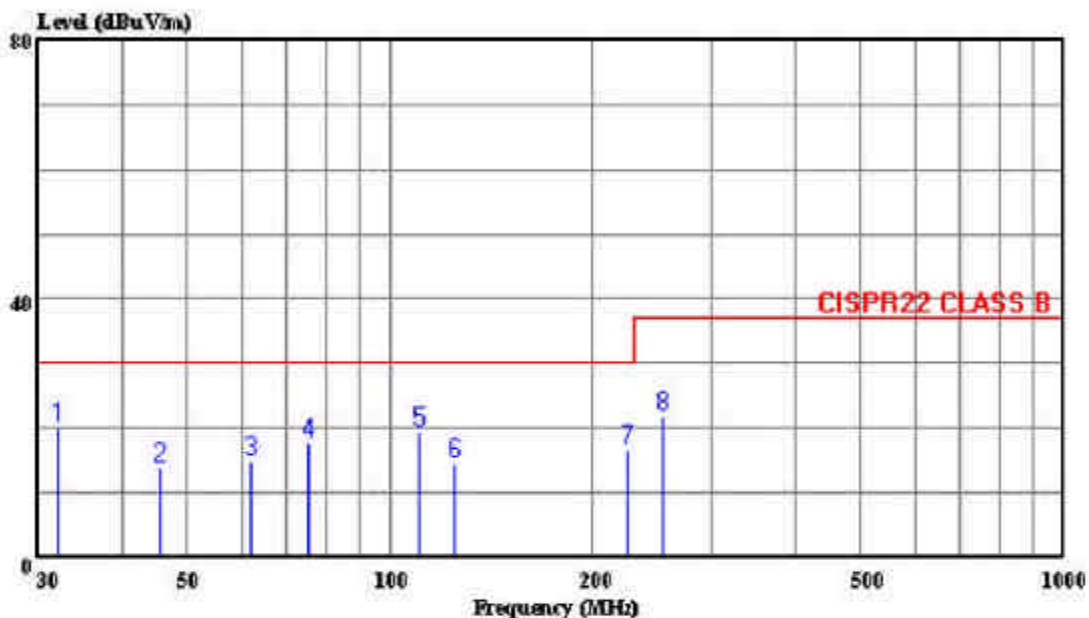


HomeTek Technology Inc.

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

Data#: 2 File#: 4A025.emi

Date: 2005-01-18 Time: 10:35:33



Traces:

Ref Traces:

Condition: CISPR22 CLASS B 10m CHASE 2614 052504 HORIZONTAL  
cut : Power Supply (PWS16)  
power: 110V/50Hz  
memo : 24V MODE

Page: 1

	Freq	Level	Limit	Over	Read	Antenna	Cable	Preamp	Remark
	MHz	dBuV/m	dBuV/m	dB	Level	Factor	Loss	Factor	
					dBuV	dB/m	dB	dB	
1	32.104	20.16	30.00	-9.84	32.52	16.74	0.79	29.89	Peak
2	45.362	13.76	30.00	-16.24	32.42	10.33	0.91	29.89	Peak
3	62.054	14.85	30.00	-15.15	37.81	5.67	1.04	29.67	Peak
4	75.462	17.58	30.00	-12.42	39.52	6.37	1.14	29.45	Peak
5	110.268	19.41	30.00	-10.59	35.62	11.51	1.38	29.10	Peak
6	124.510	14.71	30.00	-15.29	30.87	11.56	1.46	29.18	Peak
7	224.316	16.47	30.00	-13.53	35.27	8.75	2.05	29.59	Peak
8	254.637	21.83	37.00	-15.17	37.15	12.00	2.25	29.56	Peak

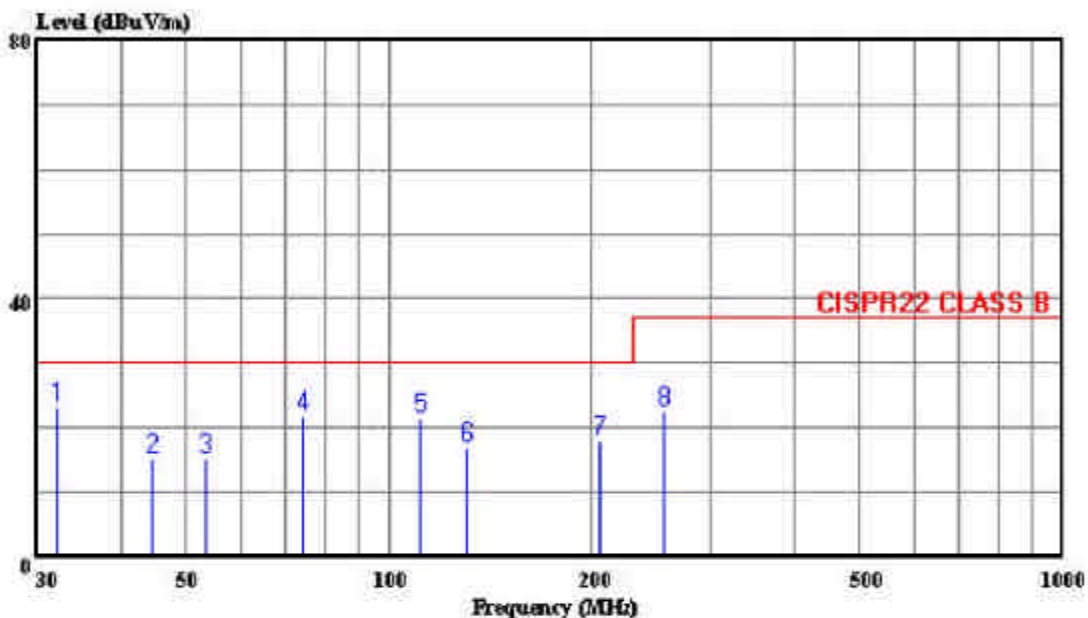


HomeTek Technology Inc.

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

Data#: 1 File#: 4A025.emi

Date: 2005-01-18 Time: 10:00:38



Traces:

Ref Trace:

Condition: CISPR22 CLASS B 10m CHASE 2614 052604 VERTICAL  
cut : Power Supply (PW816)  
power: 110V/60Hz  
memo : 24V MODE

Page: 1

	Freq	Level	Limit	Over	Read	Antenna	Cable	Presamp	
	MHz	dBUV/m	Line	Limit	Level	Factor	Loss	Factor	Remark
			dB	dB	dB	dB/m	dB	dB	
1	32.034	23.16	30.00	-6.84	35.53	16.74	0.79	29.89	Peak
2	44.632	15.09	30.00	-14.91	33.28	10.80	0.90	29.89	Peak
3	53.157	15.22	30.00	-14.78	37.25	6.82	0.97	29.82	Peak
4	74.628	21.80	30.00	-8.20	43.84	6.29	1.13	29.46	Peak
5	111.035	21.32	30.00	-8.68	37.52	11.52	1.38	29.10	Peak
6	150.641	16.84	30.00	-13.16	33.24	11.32	1.49	29.22	Peak
7	205.332	18.08	30.00	-11.92	37.15	8.62	1.93	29.61	Peak
8	255.232	22.40	37.00	-14.60	37.62	12.08	2.26	29.56	Peak



## **SAMPLE OF FCC LABEL**

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.



HomeTek Technology Inc.

## **Appendix A**

# **PHOTOS OF TEST CONFIGURATION**



HomeTek Technology Inc.

## PHOTO OF CONDUCTED POWER LINE TEST

Test Mode : DC 24V MOE , Model: PW816



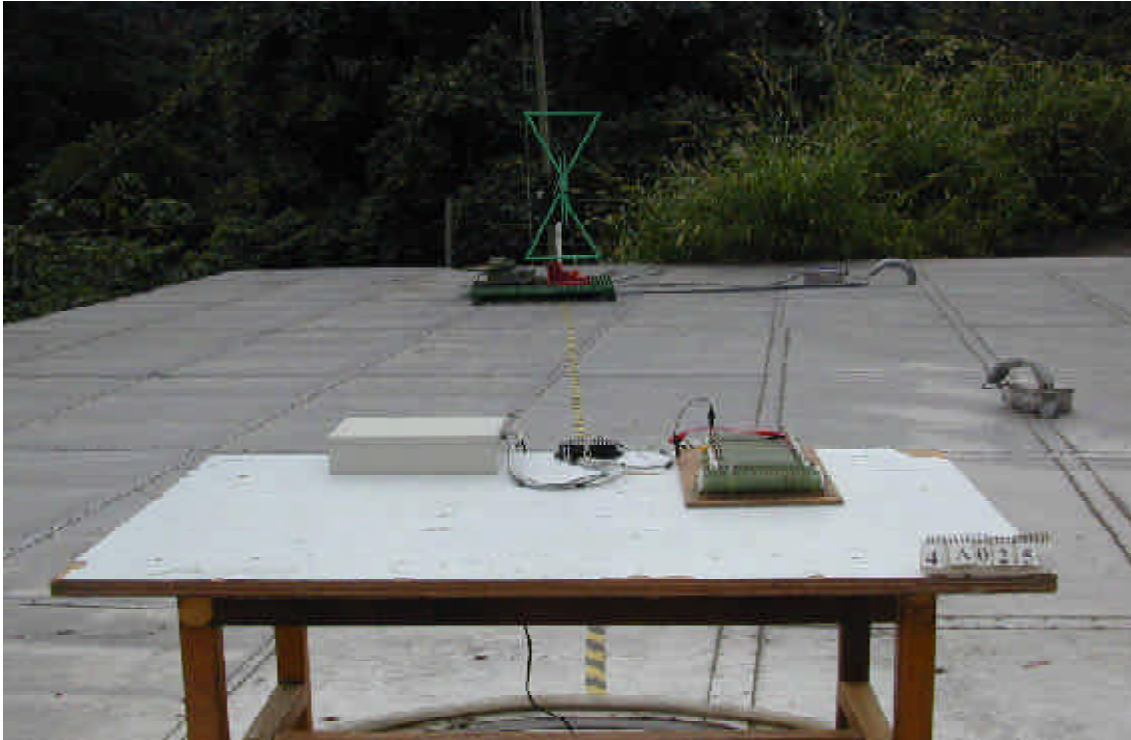
Front View



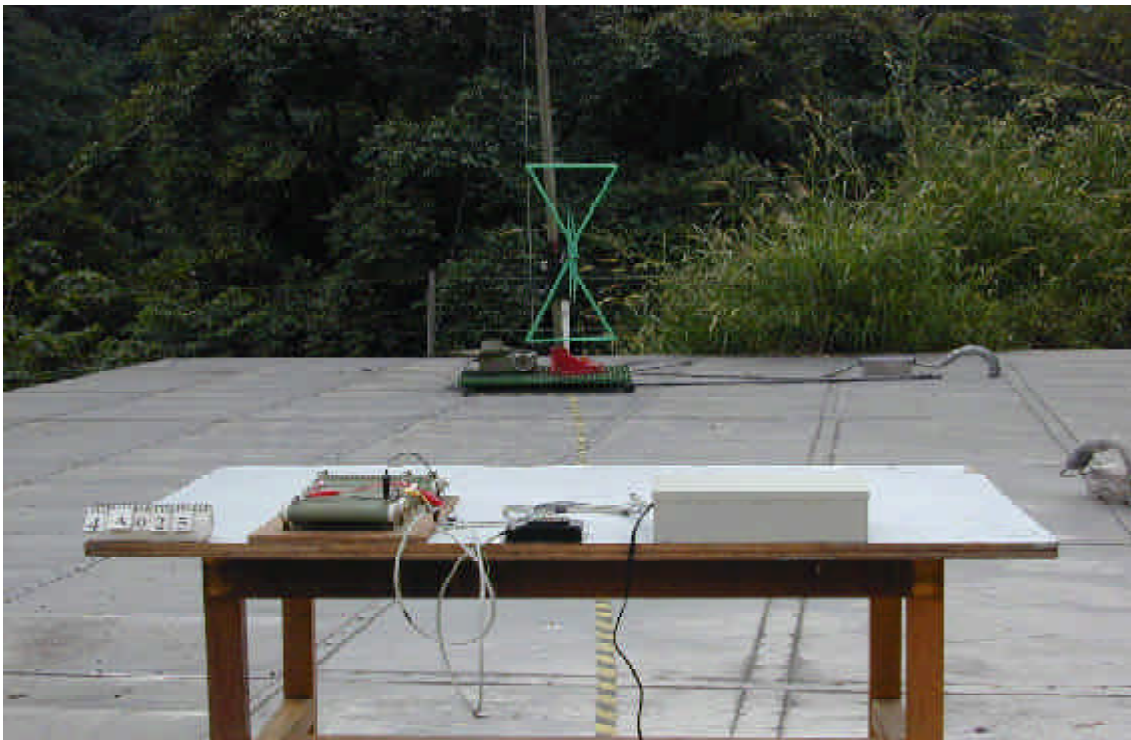
Rear View

## PHOTO OF RADIATED EMISSION TEST

Test Mode : DC 24V MOE , Model: PW816



Front View



Rear View



HomeTek Technology Inc.

## **Appendix B**

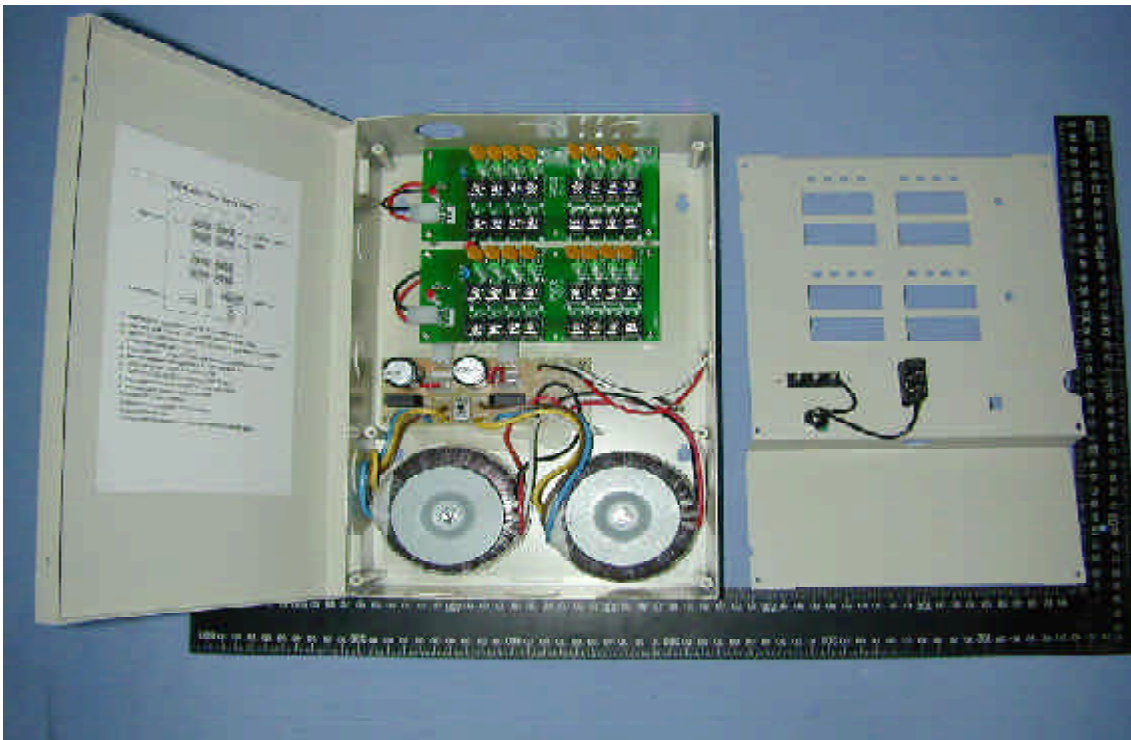
# **PHOTOS OF EUT**

### PHOTO OF EUT

Model : PW816



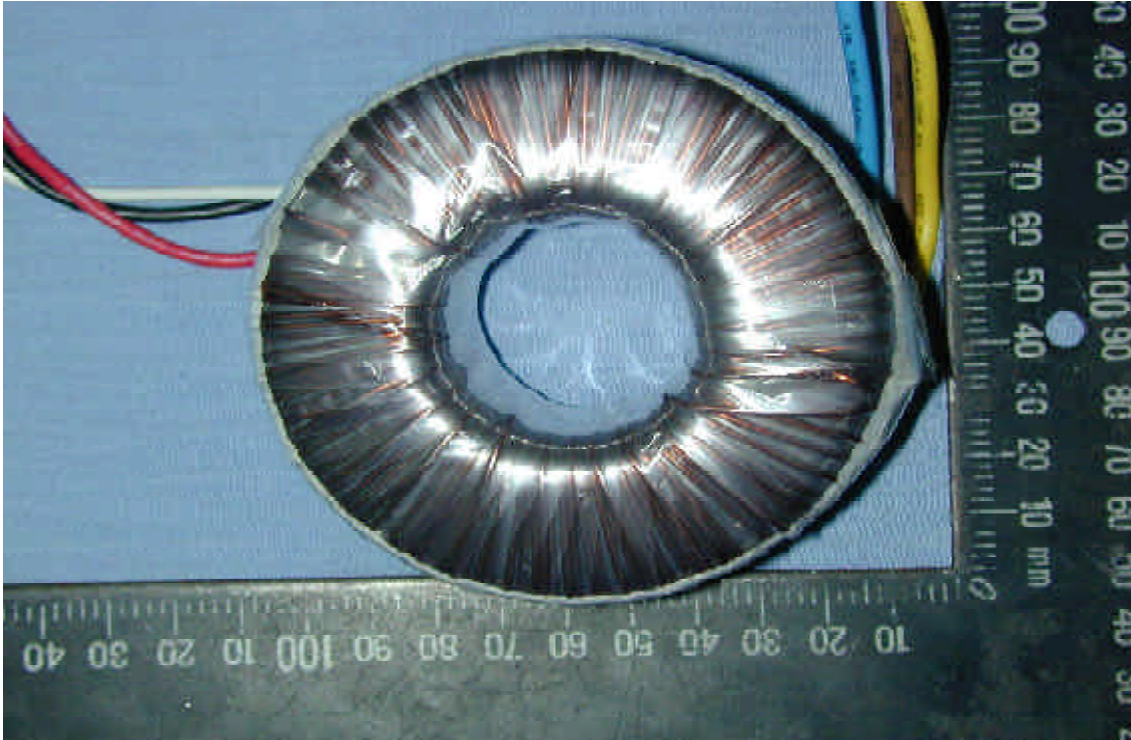
Full View of EUT



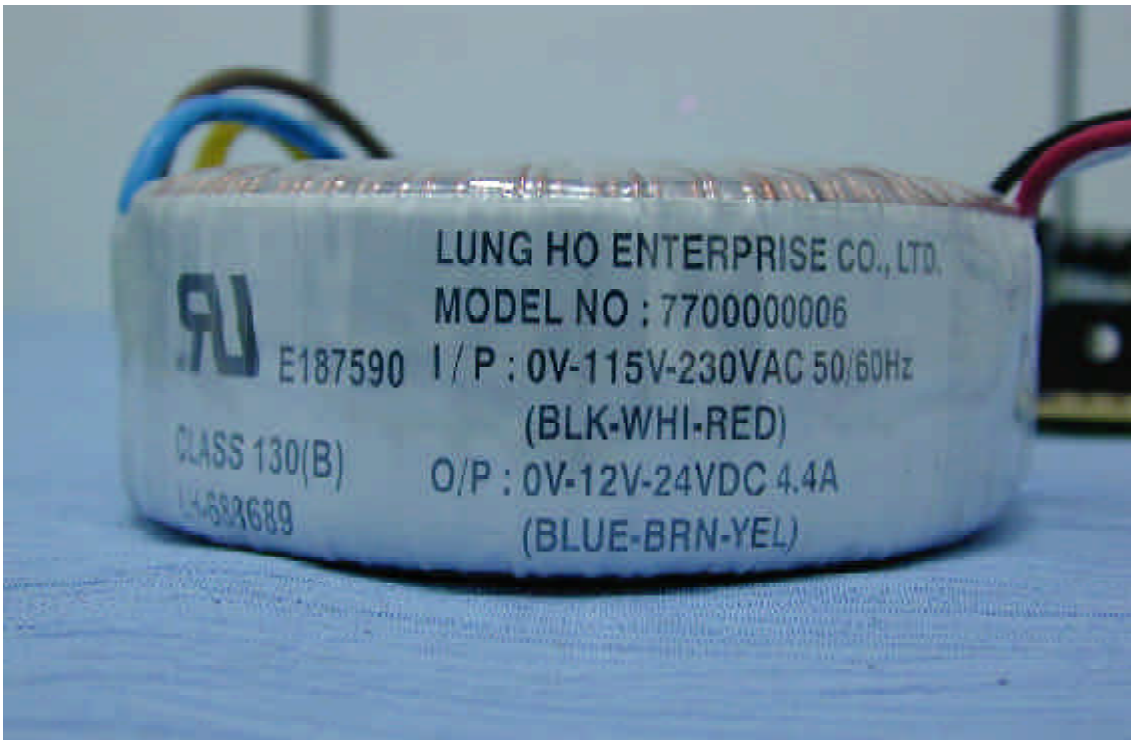
Inside View of EUT

### PHOTO OF EUT

Model : PW816



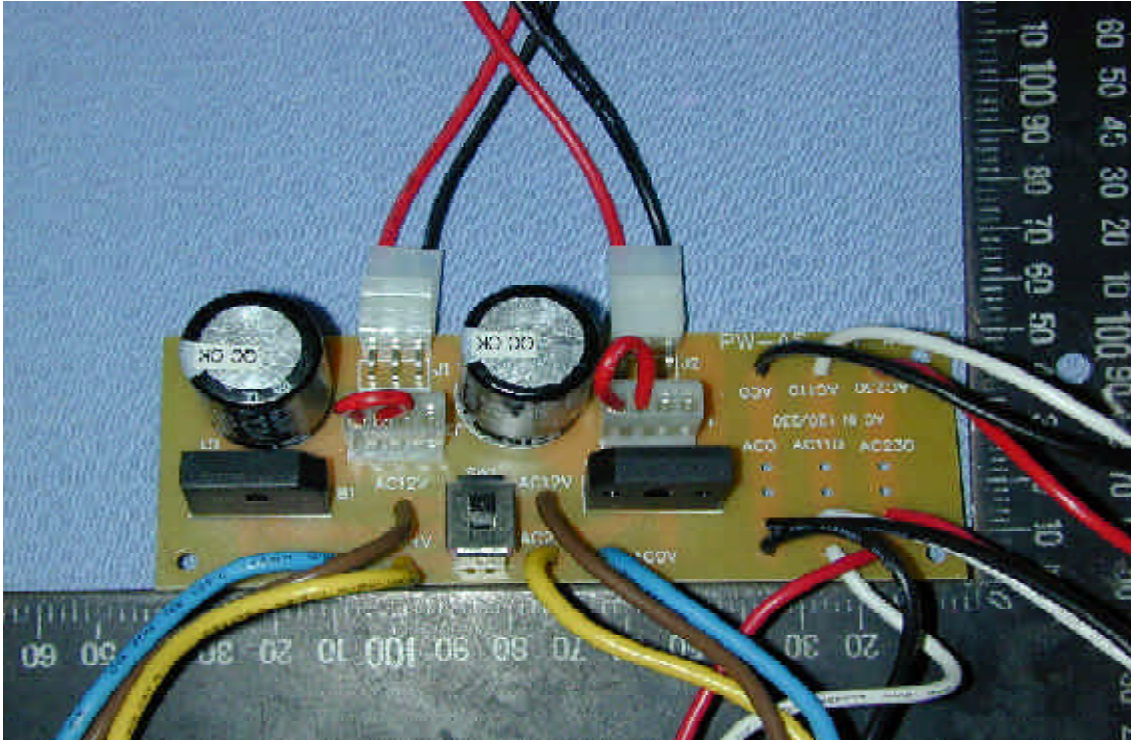
Full View of Transformer



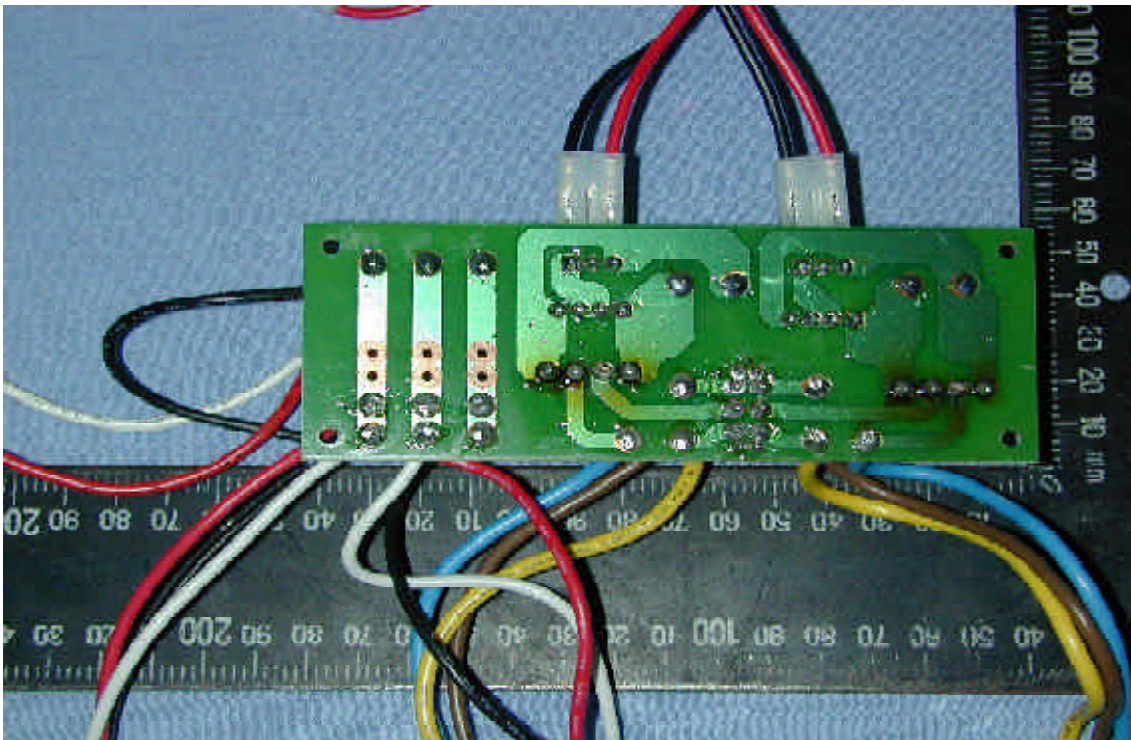
Full View of Transformer

### PHOTO OF EUT

Model : PW816X-XXX



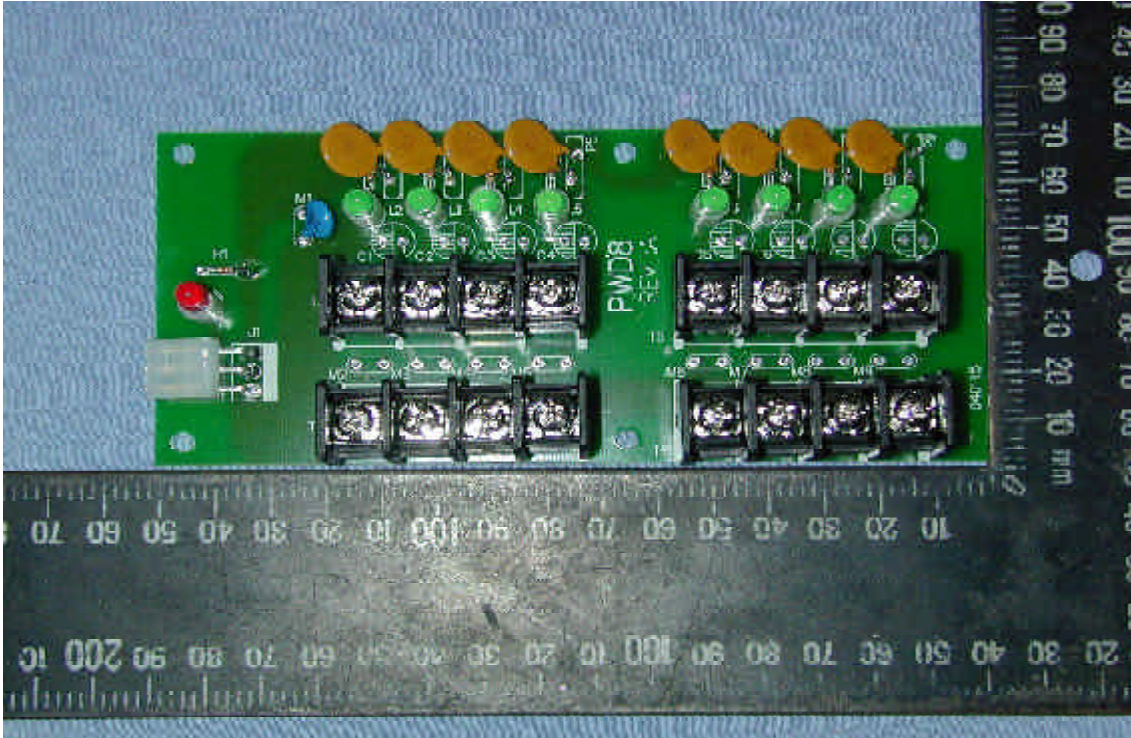
Component Side of Main Board - 1



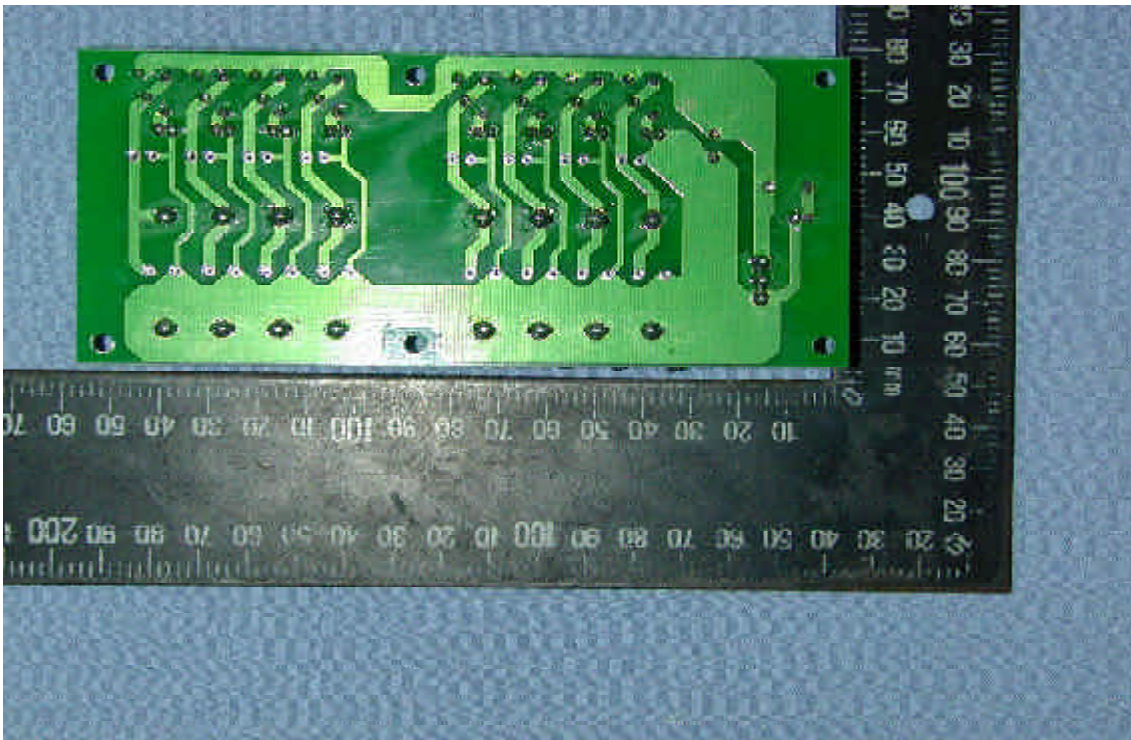
Solder Side of Main Board - 1

### PHOTO OF EUT

Model : PW816X-XXX



Component Side of Main Board - 2



Solder Side of Main Board - 2

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



### ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 200331-0

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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/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/FCC15b	ANSI C63.4 (2001) with FCC Method 47 CFR Part 15, Subpart B: Unintentional Radiators

September 30, 2005

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National Institute  
of Standards and Technology



National Voluntary  
Laboratory Accreditation Program

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Page: 2 of 2

**ELECTROMAGNETIC COMPATIBILITY  
AND TELECOMMUNICATIONS**

**NVLAP LAB CODE 200331-0**

**HOMETEK TECHNOLOGY INC.**

*NVLAP Code    Designation / Description*

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*

A handwritten signature in black ink, appearing to read 'William R. Miel'.

*For the National Institute of Standards and Technology*