Certificate of Conformity

The products

EUT	**: Smart PTZ Receiver**
Trade Name	**: SC&T**
Model No.	**: PCR0XXX(X=0-9 or A-X or Blank)**

which produced by

SMART CABLING & TRANSMISSION CORP
10F, No.493, Chung-Cheng Rd., Hsin Tien City,
Taipei County, 231, Taiwan

Has been tested by Electronics Testing Center, Taiwan ETC
And was found to comply with the EMC requirements of Directive 2004/108/EC on the basis of

EN 61000-6-3:2007
IEC CISPR 16-2-3:2006
EN 50130-4:1995/A1:1998/A2:2003
EN 61000-4-2:1995/A1:1998/A2:2001
EN 61000-4-3:2006/A1:2008, EN 61000-4-4:2004
EN 61000-4-5:2006, EN 61000-4-6:2007
EN 61000-4-11:2004

Will Yauo
Signature
Will Yauo
Manager of EMC Testing Department II
Electronics Testing Center, Taiwan

Report Number : 09-05-RBF-075
Date of Issue: Jun. 01, 2009

Note: 1. The results of the Test Report relate only to the items tested.
2. The Test Report shall not be reproduced except in full, without the written approval of ETC.
3. Together with the applicant's own documented production control, the applicant (or his European authorized representative) could draw up an EC Declaration of Conformity and affix the CE marking.
4. EC Declaration of Conformity is the responsibility of the manufacturer/ importer.

ELECTRONICS TESTING CENTER, TAIWAN
NO. 34, LIN 5, DINGFU TSUEN, LINKOU
SHIANG TAIPEI COUNTY,
TAIWAN, 24442, R.O.C.

TEL:(02)26023052
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CE

EMC

TEST REPORT

Responsible Party	:	***SMART CABLING & TRANSMISSION CORP***
Manufacturer	:	***SMART CABLING & TRANSMISSION CORP***
Description of Product	:	***Smart PTZ Receiver***
Trade Name	:	***SC&T***
Model No.	:	***PCR0XXX(X=0-9 or A-X or Blank)***
Test Report File No.	:	***09-05-RBF-075***
Date Test Item Received	:	***MAY 09, 2009***
Date Test Campaign Completed	:	***MAY 25, 2009***
Date of Issue	:	***MAY 25, 2009***

Test Performed by

ELECTRONICS TESTING CENTER (ETC) , TAIWAN

NO. 34. LIN 5. DINGFU TSUEN, LINKOU SHIANG
TAIPEI COUNTY, TAIWAN, 24442, R.O.C.
TEL : (02)26023052 FAX : (02)26010910
http://www.etc.org.tw ; e-mail:emc@etc.org.tw

Note : 1. The results of the Test Report relate only to the items tested.
2. The Test Report shall not be reproduced except in full , without the written approval of ETC.

CONTENTS

1 TEST REPORT CERTIFICATION

Client	:	SMART CABLING & TRANSMISSION CORP
Address	:	10F, No.493, Chung-Cheng Rd., Hsin Tien City, Taipei County, 231, Taiwan
Manufacturer	:	SMART CABLING & TRANSMISSION CORP
Address	:	10F, No.493, Chung-Cheng Rd., Hsin Tien City, Taipei County, 231, Taiwan
EUT	:	Smart PTZ Receiver
Trade name	:	SC&T
Model No.	:	PCR0XXX(X=0-9 or A-X or Blank)
Serial Model No.	:	----
Test specifications	:	
Emission	:	IEC CISPR 16-2-3:2006 EN 61000-3-2:2006 EN 61000-3-3:1995/A1:2001/A2:2005
Immunity	:	EN 61000-4-2:1995/A1:1998/A2:2001 EN 61000-4-3:2006/A1:2008 EN 61000-4-4:2004 EN 61000-4-5:2006 EN 61000-4-6:2007 EN 61000-4-11:2004 EN 50130-4:1995/A1:1998/A2:2003
Regulations applied	:	EN 61000-6-3:2007 EN 50130-4:1995/A1:1998/A2:2003

The testing described in this report has been carried out to the best of our knowledge and ability, and our responsibility is limited to the exercise of reasonable care. This certification is not intended to relieve the sellers from their legal and/or contractual obligations. Besides, the “Comment Issues” highlight above is important information for this test report. Responsible must read carefully about the description.

Test Engineer : _____
(Tien-Lu Liao, Engineer)

Check By : _____
(Charles Wang, Supervisor)

Approve & Authorized : _____
Will Yauo, Manager
EMC Dept. II of ELECTRONICS
TESTING CENTER, TAIWAN

Laboratory Introduction: Electronics Testing Center, Taiwan is recognized, filed and mutual recognition arrangement as following:

1. ISO9002 : BSMI, TüV Product Service
2. ISO/IEC 17025 : BSMI, CNLA, DGT, NVLAP, CCIBLAC, UL, Compliance
3. EN45001 : TüV Rheinland, NEMKO, FIMKO, SGS
4. Filing : FCC, Industry Canada, VCCI
5. MRA : Australia, Hong Kong, New Zealand, Singapore, USA, Japan, Korea, China, APLAC through CNLA

2 GENERAL INFORMATIONS

2.1 Description of EUT

SMART PTZ Receiver is designed to control pan & tilt & lens devices via any transmitter systems operating on RS485 with built in PELCO D protocol. The receiver offers system designers the option of using traditional P/T/Z heads for application where it is necessary to specify a range of cameras/lens combinations, support the PTZ data control 100 sets at one time.

2.2 Related Information of EUT

Size of EUT	: 165mm × 83mm × 55mm								
Power Adapter	: I/P: 230Vac 50Hz 80mA; O/P: 12VDC 500mA								
Adapter Power Cord	: [X]	Nonshielded	[ ]	Shielded	[ ]	None,	Length:	1.9	m
DC input Power Cord	: [X]	Nonshielded	[ ]	Shielded	[ ]	None,	Length:	0.16	m
LED Connected Cable	: [X]	Nonshielded	[ ]	Shielded	[ ]	None,	Length:	0.1	m
Signal Control Cable	: [X]	Nonshielded	[ ]	Shielded	[ ]	None,	Length:	1.42	m

2.3 Tested Configuration

The EUT connected with other devices.

Following peripheral devices and interface cables were connected during the measurement:

For Conducted Emission Test and Radiated Emission Test

Device	Manufacturer	Model	Description
Smart PTZ Receiver	SMART CABLING & TRANSMISSION CORP	PCR0XXX (X=0-9 or A-X or Blank)	1.9m Unshielded AC Adapter Power Cord 0.16m Unshielded DC input cable 0.10m LED Connected Cable 1.42m Unshielded Signal Control Cable
P/T/C Controller	SMART CABLING & TRANSMISSION CORP	----	1.82m Unshielded AC Adapter Power Cord

2.4 Deviation Record

No deviations were required.

2.5 Modification Record

No modifications were required. (That is the EUT complied with the requirement as tested.)

3 SUMMARY OF TEST RESULTS

3.1 Emissions

3.1.1 Conducted Emissions

[X] – PASS (Neutral)

Minimum EMI Margin(QP) to the limit: -31.1 dB at 12.199 MHz

[X] – PASS (Line)

Minimum EMI Margin(QP) to the limit: -31.4 dB at 12.199 MHz

3.1.2 Radiated Emissions

[X] – PASS (Hor.)

Minimum EMI Margin to the limit: -16.3 dB at 178.770 MHz

[X] – PASS (Ver.)

Minimum EMI Margin to the limit: -14.9 dB at 50.250 MHz

3.1.1 Harmonics Current Emissions

[X] – PASS

The harmonics current values were under the limits of the class A equipment of the EN 61000-3-2.

3.1.2 Voltage Fluctuations and Flicker

[X] – PASS

The voltage fluctuations and flicker values were under the limits of the EN 61000-3-3 requirements.

3.2 Immunity

3.2.1 Immunity Criteria

The results of all of the immunity tests performed on the EUT were evaluated according to the following criteria, and according to the manufacturer's specifications for the EUT:

Performance criterion A : The EUT continued to operate as intended. No degradation of performance or loss of function was allowed below a performance level specified by the manufacturer, when the EUT was used as intended.

Performance criterion B : The EUT continued to operate as intended after the test. No degradation of performance or loss of function was allowed below a performance level specified by the manufacturer, when the EUT was used as intended. During the test, degradation of performance was however allowed. No change of actual operating state or stored data was allowed.

Performance criterion C: Temporary loss of function was allowed, provided the function was self recoverable or could be restored by the operation of the controls.

3.2.2 Electrostatic Discharge Immunity

Requirement :Criterion B (or better)

[X] - No Degradation of Function	- Satisfies Criterion A
[ ] - Distortion of Function	- Satisfies Criterion B
[ ] - Error of Function	- Satisfies Criterion C

3.2.3 RF Radiated Fields Immunity

Requirement :Criterion A

[X] - No Degradation of Function	- Satisfies Criterion A
[ ] - Distortion of Function	- Satisfies Criterion B
[ ] - Error of Function	- Satisfies Criterion C

3.2.4 EFT/Burst Immunity

Requirement :Criterion B(or better)

[X] - No Degradation of Function	- Satisfies Criterion A
[ ] - Distortion of Function	- Satisfies Criterion B
[ ] - Error of Function	- Satisfies Criterion C

3.2.5 Surge Immunity

Requirement :Criterion B (or better)

[X]	- No Degradation of Function	- Satisfies Criterion A
[ ]	- Distortion of Function	- Satisfies Criterion B
[ ]	- Error of Function	- Satisfies Criterion C

3.2.6 RF Common Mode Immunity

Requirement :Criterion A

[X]	- No Degradation of Function	- Satisfies Criterion A
[ ]	- Distortion of Function	- Satisfies Criterion B
[ ]	- Error of Function	- Satisfies Criterion C

3.2.7 Voltage Interruptions and Voltage Dips Immunity

Requirement :Criterion C (or better)

[X]	- No Degradation of Function	- Satisfies Criterion A
[ ]	- Distortion of Function	- Satisfies Criterion B
[ ]	- Error of Function	- Satisfies Criterion C

3.2.8 Main Supply Voltage Variations:

Requirement :Criterion C (or better)

[X]	- No Degradation of Function	- Satisfies Criterion A
[ ]	- Distortion of Function	- Satisfies Criterion B
[ ]	- Error of Function	- Satisfies Criterion C

4 TEST DATA & RELATED INFORMATIONS

4.1 Emissions:

4.1.1 Conducted Emissions Test :

4.1.1.1 Conducted Emissions Test Data:

1. Operating Conditions of The EUT : Operation

Test Date : MAY 20, 2009

Test Specification	IEC CISPR 16-2-3:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/04
LISN	Kyoritsu	KNW-403D	2008/10/06	2009/10/06
LISN	Rohde & Schwarz	ESH2-Z5	2008/06/27	2009/06/27
Climatic Condition	Ambient Temperature: 26 °C		Relative Humidity: 58 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Operation Mode Neutral

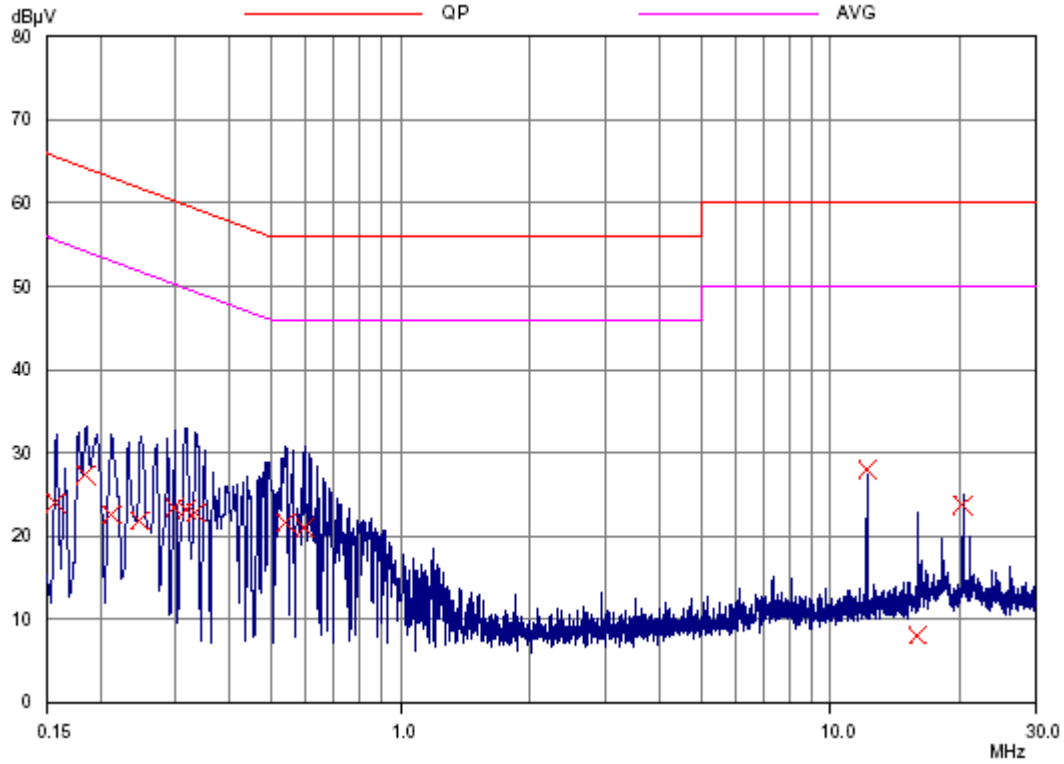
Frequency (MHz)	Meter Reading (dBμV)		Factor (dB)	Result (dBμV)		Limit (dBμV)		Margin (dBμV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.158	24.0	----	0.2	24.2	----	65.6	55.6	-41.4	----
0.185	27.3	----	0.2	27.5	----	64.3	54.3	-36.8	----
0.213	22.6	----	0.2	22.8	----	63.1	53.1	-40.3	----
0.318	23.2	----	0.3	23.5	----	59.8	49.8	-36.3	----
12.199	28.0	----	0.9	28.9	----	60.0	50.0	-31.1	----
20.332	23.7	----	1.4	25.1	----	60.0	50.0	-34.9	----

Operation Mode Line

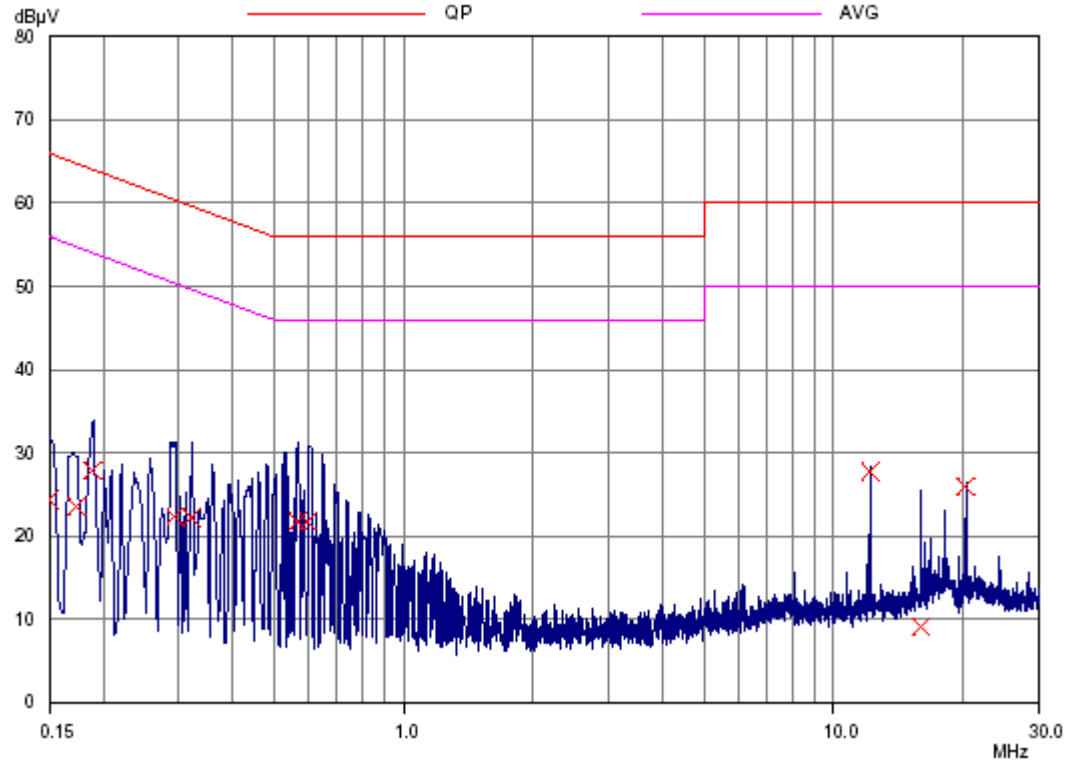
Frequency (MHz)	Meter Reading (dBμV)		Factor (dB)	Result (dBμV)		Limit (dBμV)		Margin (dBμV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.150	24.4	----	0.2	24.6	----	66.0	56.0	-41.4	----
0.173	23.5	----	0.2	23.7	----	64.8	54.8	-41.1	----
0.189	27.9	----	0.2	28.1	----	64.1	54.1	-36.0	----
0.295	22.4	----	0.2	22.6	----	60.4	50.4	-37.7	----
12.199	27.7	----	0.9	28.6	----	60.0	50.0	-31.4	----
20.332	25.9	----	1.4	27.3	----	60.0	50.0	-32.7	----

Notes: 1) Place of measurement: EMC LAB. of the ETC
2) The EUT was placed 0.8m above reference ground plane.
3) The symbol of "----" means the Q.P. value is under the limit for AVG. so, the AVG. value doesn't need to be measured.
4) The expanded uncertainty of the conducted emission tests is 2.45 dB.

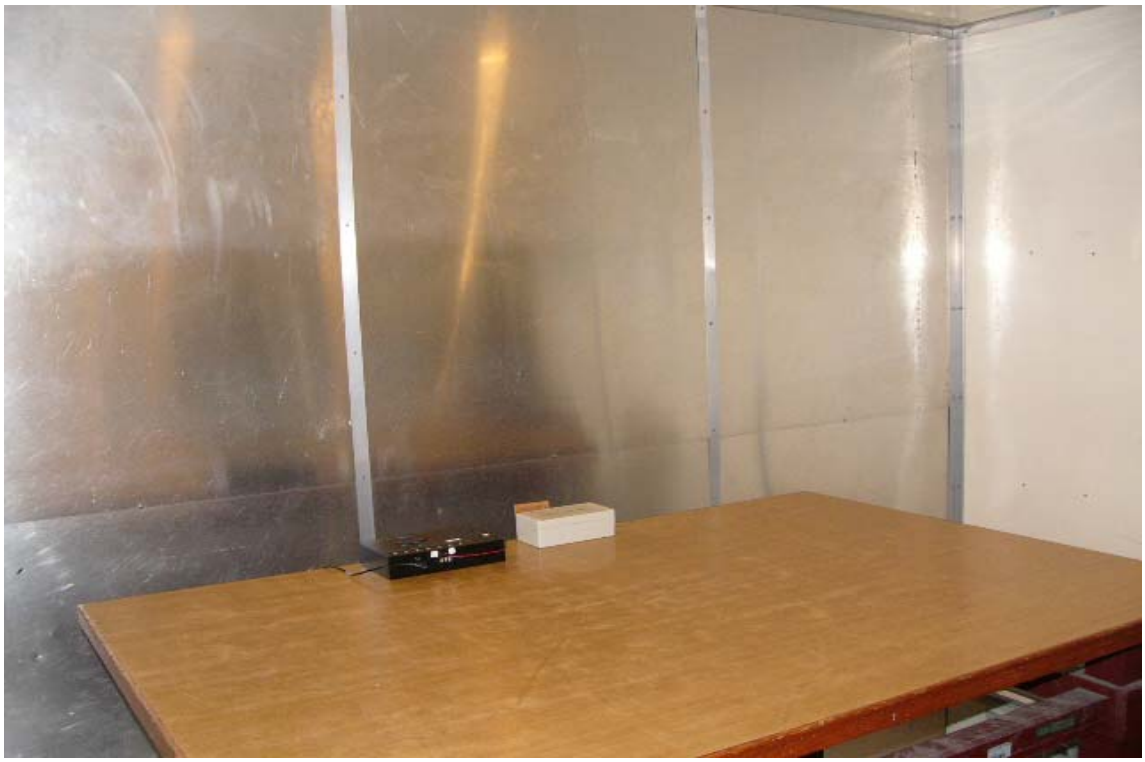
Operation Mode Neutral



Operation Mode Line



4.1.1.2 Conducted Emissions Test Setup Photos :



4.1.2 Radiated Emissions Test :

4.1.2.1 Radiated Emissions Test Data:

1. Operating Conditions of The EUT : Operation

Test Date : MAY 20, 2009

Test Specification	IEC CISPR 16-2-3:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Amplifier	HP	8447D	2009/05/07	2010/05/07
Bi-Log Antenna	Schaffner	CBL 6111(2733)	2009/05/06	2010/05/06
EMI Test Receiver	Rohde & Schwarz	ESVS30	2009/05/07	2010/05/07
Spectrum	R&S	FSP3	2009/02/27	2010/02/27
Climatic Condition	Ambient Temperature: 27 °C		Relative Humidity: 59 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: Operation Ant-Pol: Horizontal

Emission Frequency (MHz)	Meter Reading (dB μ V)	Corr'd Factor (dB)	Results (dB μ V/m)	Limit @10m (dB μ V/m)	Margin (dB)
129.900	25.0	-12.6	12.4	30.0	-17.6
148.530	25.3	-12.4	12.9	30.0	-17.1
178.770	27.8	-14.1	13.7	30.0	-16.3
242.220	28.2	-10.2	18.0	37.0	-19.0
500.000	---	-4.2	---	37.0	---
800.000	---	0.5	---	37.0	---

Mode: Operation Ant-Pol: Vertical

Emission Frequency (MHz)	Meter Reading (dB μ V)	Corr'd Factor (dB)	Results (dB μ V/m)	Limit @10m (dB μ V/m)	Margin (dB)
50.250	33.9	-18.8	15.1	30.0	-14.9
78.060	31.4	-17.0	14.4	30.0	-15.6
136.300	26.9	-12.5	14.4	30.0	-15.6
242.220	25.5	-10.2	15.3	37.0	-21.7
500.000	---	-4.2	---	37.0	---
800.000	---	0.5	---	37.0	---

Notes: 1) Place of Measurement: Measuring site of the ETC

2) Measurement Distance: 10 m

3) Height of table on which the EUT was placed: 0.8 m

4) Height of Receiving Antenna: 1 - 4 m

5) Remark "----" means that the emissions level is too low to be measured.

6) The expanded uncertainty of the radiated emission tests is 3.53 dB.

4.1.2.2 Radiated Emissions Test Setup Photo:

4.1.3 Harmonics Current Emissions Test :

4.1.3.1 Harmonics Current Emissions Test Data:

Operating Conditions of The EUT : Operation Mode

Test Date : MAY 24, 2009

Test Specification	EN 61000-3-2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity tester	EMC-Partner	Hormonics-1000	2008/12/10	2009/12/10
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Urms =	229.9V	Freq =	49.987	Range:	0.25 A
Irms =	0.026A	Ipk =	0.058A	cf =	2.2
P =	2.252W	S =	6.034VA	pf =	0.373
THDi =	42.90%	THDu =	0.10%	Class A	

Test - Time : 3min -100%

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	Imax [A]	Limit [A]	Order	Freq. [Hz]	Iavg [A]	Imax [A]	Limit [A]
1	50	0.0248	0.0366		21	1050	0	0.0002	0.1071
2	100	0	0.0008	1.08	22	1100	0	0	0.0836
3	150	0.0102	0.0139	2.3	23	1150	0	0.0002	0.0978
4	200	0	0.0005	0.43	24	1200	0	0	0.0767
5	250	0.0017	0.0086	1.14	25	1250	0	0.0001	0.09
6	300	0	0.0002	0.3	26	1300	0	0	0.0708
7	350	0	0.0011	0.77	27	1350	0	0.0001	0.0833
8	400	0	0.0001	0.23	28	1400	0	0	0.0657
9	450	0	0.0015	0.4	29	1450	0	0.0001	0.0776
10	500	0	0.0001	0.184	30	1500	0	0	0.0613
11	550	0	0.0007	0.33	31	1550	0	0.0001	0.0726
12	600	0	0	0.1533	32	1600	0	0	0.0575
13	650	0	0.0006	0.21	33	1650	0	0.0001	0.0682
14	700	0	0	0.1314	34	1700	0	0	0.0541
15	750	0	0.0003	0.15	35	1750	0	0.0001	0.0643
16	800	0	0	0.115	36	1800	0	0	0.0511
17	850	0	0.0003	0.1324	37	1850	0	0.0001	0.0608
18	900	0	0	0.1022	38	1900	0	0	0.0484
19	950	0	0.0003	0.1184	39	1950	0	0.0001	0.0577
20	1000	0	0	0.092	40	2000	0	0	0.046

4.1.3.2 Harmonics Current Emissions Test Setup Photos :

4.1.4 Voltage Fluctuations and Flicker Test :

4.1.4.1 Voltage Fluctuations and Flicker Test Data:

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

Test Specification	EN 61000-3-3:1995/A1:2001/A2:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity tester	EMC-Partner	Hormonics-1000	2008/12/10	2009/12/10
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

	Test Data	Limit	Pass or Fail
Plt	0.072	0.65	Pass
Pst	0.072	1.00	Pass
dt	0.00ms	500 ms	Pass
dmax	0.00%	4.0 %	Pass
dc	0.00%	3.3 %	Pass

4.1.4.2 Voltage Fluctuations and Flicker Test Setup Photos :

4.2 Immunity:

4.2.1 Electrostatic Discharge Immunity Test :

4.2.1.1 Electrostatic Discharge Immunity Test Data:

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

Test Specification	EN 61000-4-2:1995/A1:1998/A2:2001			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Noise Ken	ESD Tester	ESS-2002	2008/09/18	2009/09/18
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 51 %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Energy-Storage Capacitor : 150 pF									Contact Discharge Times : 10 times/each condition							
Discharge Resistor : 330 Ω									Air Discharge Times : 10 times/each condition							
\ Discharge Mode	**Contact Discharge**								**Air Discharge**							
\ESD Voltage	**2 kV**		**4 kV**		**6 kV**		**___ kV**		**2 kV**		**4 kV**		**8 kV**		**___ kV**	
\Points\Result\Polarity	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−
VCP	A	A	A	A	A	A	---	---	---	---	---	---	---	---	---	---
HCP	A	A	A	A	A	A	---	---	---	---	---	---	---	---	---	---
P_1-P_{10}	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---

Note : "---"means the test could not be carrier out.
" A " means the EUT function was correct during the test

TEST POINTS

4.2.1.2 Electrostatic Discharge Immunity Test Setup Photos :

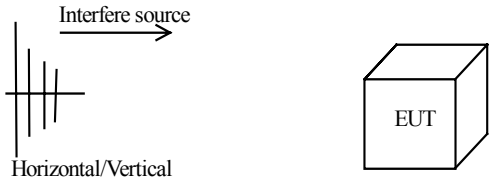
4.2.2 RF Radiated Fields Immunity Test :

4.2.2.1 RF Radiated Fields Immunity Test Data:

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

Test Specification	EN 61000-4-3:2000/A1:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/07/04	2009/07/03
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/07/04	2009/07/03
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			



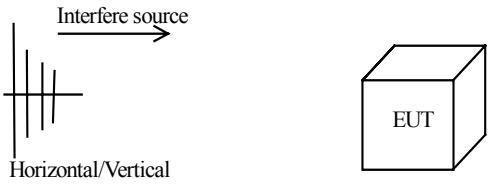
Frequency Range: 80 MHz ~ 2000 MHz		Field Strength: 10 V/m		Modulation (AM 1kHz 80%)	
Sweep Rate : ≤ 1.5×10-3 decades/s		Step Size : ≤ 1 % of preceding frequency value		Dwell time : 2.9 s	
Frequency Range (MHz)		Antenna-Polarization	Direction of Device	Test Result	
80-1000	1000-2000	Horizontal	front	A	
			rear	A	
			left	A	
			right	A	
80-1000	1000-2000	Vertical	front	A	
			rear	A	
			left	A	
			right	A	

Note : " A " means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

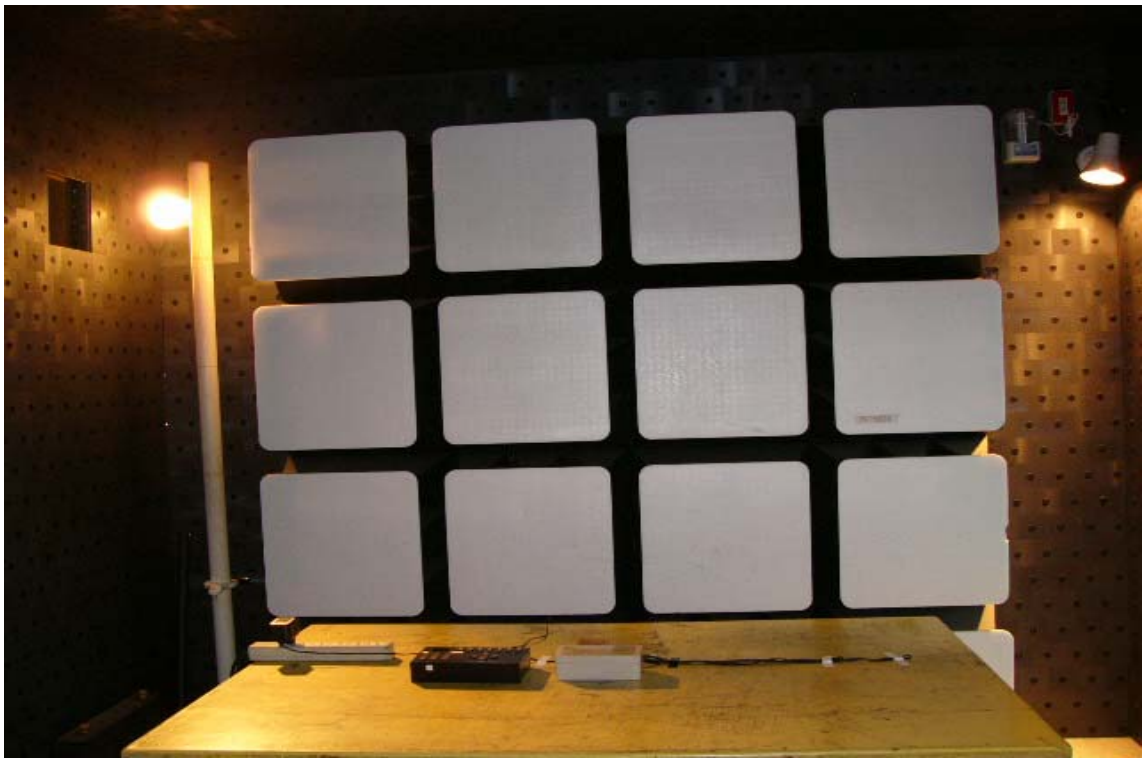
Test Specification	EN 61000-4-3:2000/A1:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/07/04	2009/07/03
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/07/04	2009/07/03
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			



Frequency Range: 80 MHz ~ 2000 MHz		Field Strength: 10 V/m		Pulse 1Hz(0.5s: on; 0.5s: off)	
Sweep Rate : ≤ 1.5×10-3 decades/s		Step Size : ≤ 1 % of preceding frequency value		Dwell time : 3.0 s	
Frequency Range (MHz)		Antenna-Polarization	Direction of Device	Test Result	
80-1000	1000-2000	Horizontal	front	A	
			rear	A	
			left	A	
			right	A	
80-1000	1000-2000	Vertical	front	A	
			rear	A	
			left	A	
			right	A	

Note : " A " means the EUT function was correct during the test .

4.2.2.2 RF Radiated Fields Immunity Test Setup Photos :



4.2.3 EFT/Burst Immunity Test :

4.2.3.1 EFT/Burst Immunity Test Data:

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

Test Specification	EN 61000-4-4:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 51 %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Pulse :5/50ns Burst :15m/300ms		Repetition Rate: 5kHz	Test time: 1 min/each condition
\Voltage\Polarity\		2.0kV	
\Test Point\Mode\Result\		+	-
Power Line	L	A	A
	N	A	A
	L-N	A	A

Note : " A " means the EUT function was correct during the test .

4.2.3.2 EFT/Burst Immunity Test Setup Photos :

4.2.4 Surge Immunity Test :

4.2.4.1 Surge Immunity Test Data:

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

Test Specification	EN 61000-4-5:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: 24 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

			Repetition rate : 60 sec		Times : 5 time/each condition	
\Voltage \Mode \Polarity \Result		\Phase	**0°**	**90°**	**180°**	**270°**
0.5kV	L – N	+	A	A	A	A
		–	A	A	A	A
1.0kV	L – N	+	A	A	A	A
		–	A	A	A	A

Note : " A " means the EUT function was correct during the test

4.2.4.2 Surge Immunity Test Setup Photos :

4.2.5 RF Common Mode Immunity Test :

4.2.5.1 RF Common Mode Immunity Test Data:

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

Test Specification	EN 61000-4-6:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
CS Tester M2+3 CDN-KIT	FRANKONIA FRANKONIA	CIT-10 M2+3	2008/09/24 2008/09/19	2009/09/24 2009/09/19
Climatic Condition	Ambient Temperature: 26 °C Relative Humidity: 56 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Frequency Range : 0.15 MHz ~ 100 MHz	Field Strength : 10 V/m	Modulation (AM 1kHz 80%)
Sweep Rate : ≤ 1.5×10^{-3} decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell Time : 2.9 s

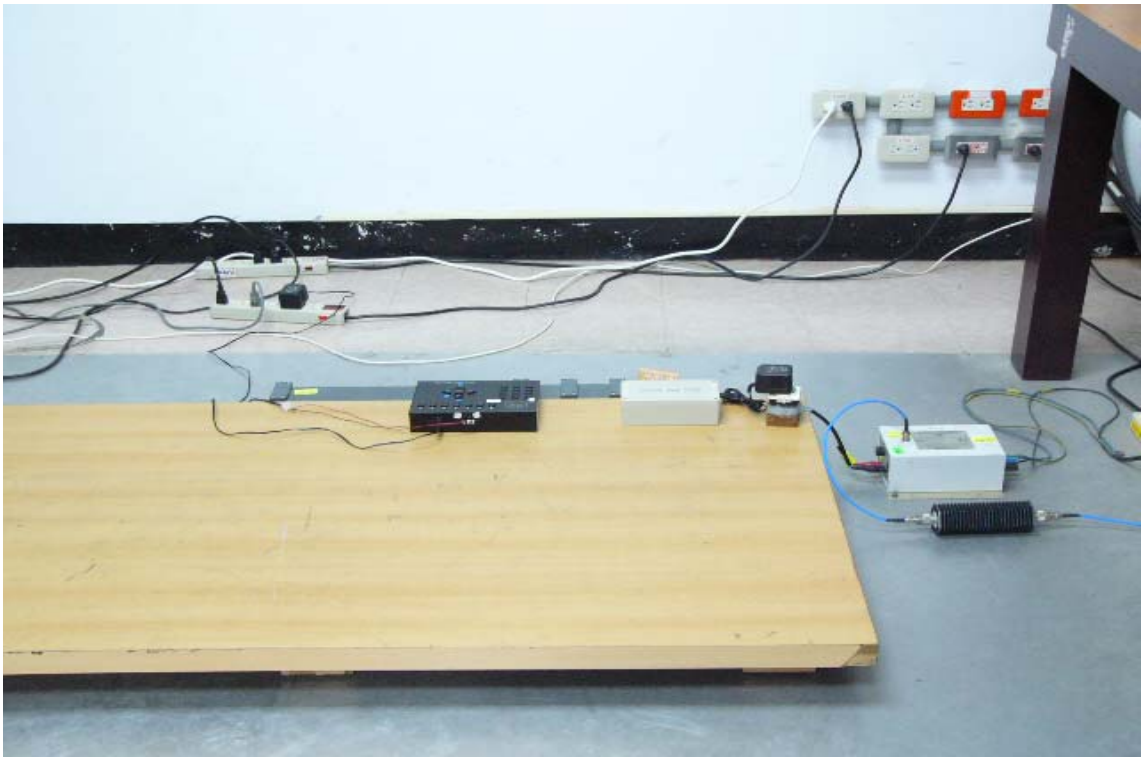
Frequency Range (MHz)	Tested Line	Test Result
0.15~80	Power Line (M2)	A

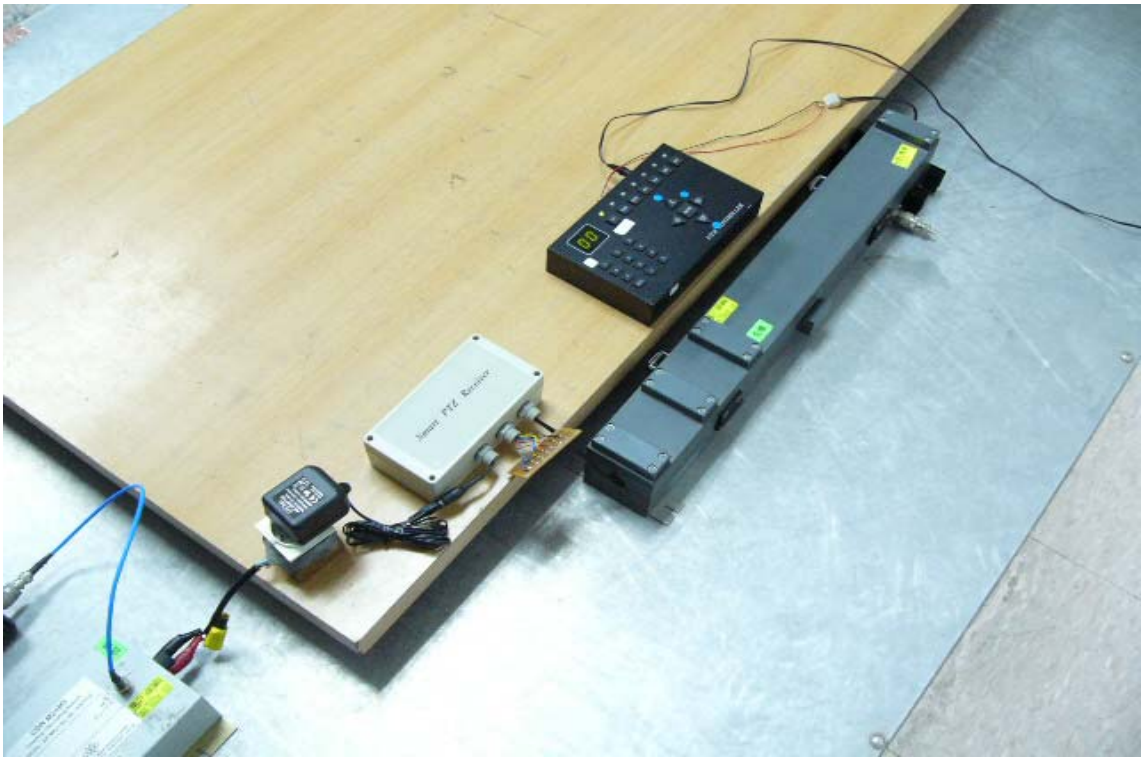
Frequency Range : 0.15 MHz ~ 100 MHz	Field Strength : 10 V/m	Pulse 1Hz(0.5s: on; 0.5s: off)
Sweep Rate : ≤ 1.5×10^{-3} decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell Time : 3.0 s

Frequency Range (MHz)	Tested Line	Test Result
0.15~80	Power Line (M2)	A

Note : " A " means the EUT function was correct during the test .

4.2.5.2 RF Common Mode Immunity Test Setup Photos :





4.2.6 Voltage Interruptions and Voltage Dips Immunity Test :

4.2.6.1 Voltage Interruptions and Voltage Dips Immunity Test Data:

Operating Conditions of The EUT : Operation

Test Date : MAY 24, 2009

Test Specification	EN 61000-4-11:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: 23 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test mode	Voltage dips	Durations (Periods)				Interval(s)	Times	Phase	Result
Voltage interruptions	100%	(1) 0.5	(2) 1	(3) 5		10	12	0°/180°	A
Voltage interruptions	60%	(1) 0.5	(2) 1.0	(3) 5.0	(4) 10.0	10	12	0°/180°	A
Voltage interruptions	30%	(1) 0.5	(2) 1.0	(3) 5.0	(4) 10.0	10	12	0°/180°	A

Note : " A" means the EUT function was correct during the test

4.2.6.2 Voltage Interruptions and Voltage Dips Immunity Test Setup Photos:

4.2.7 Main Supply Voltage Variations :

4.2.7.1 Main Supply Voltage Variations Test Data:

Operating Conditions of The EUT : Operating Mode

Test Date : MAY 24, 2009

Test Specification	EN 50130-4:1995+A1:1998+A2:2003			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: 23 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

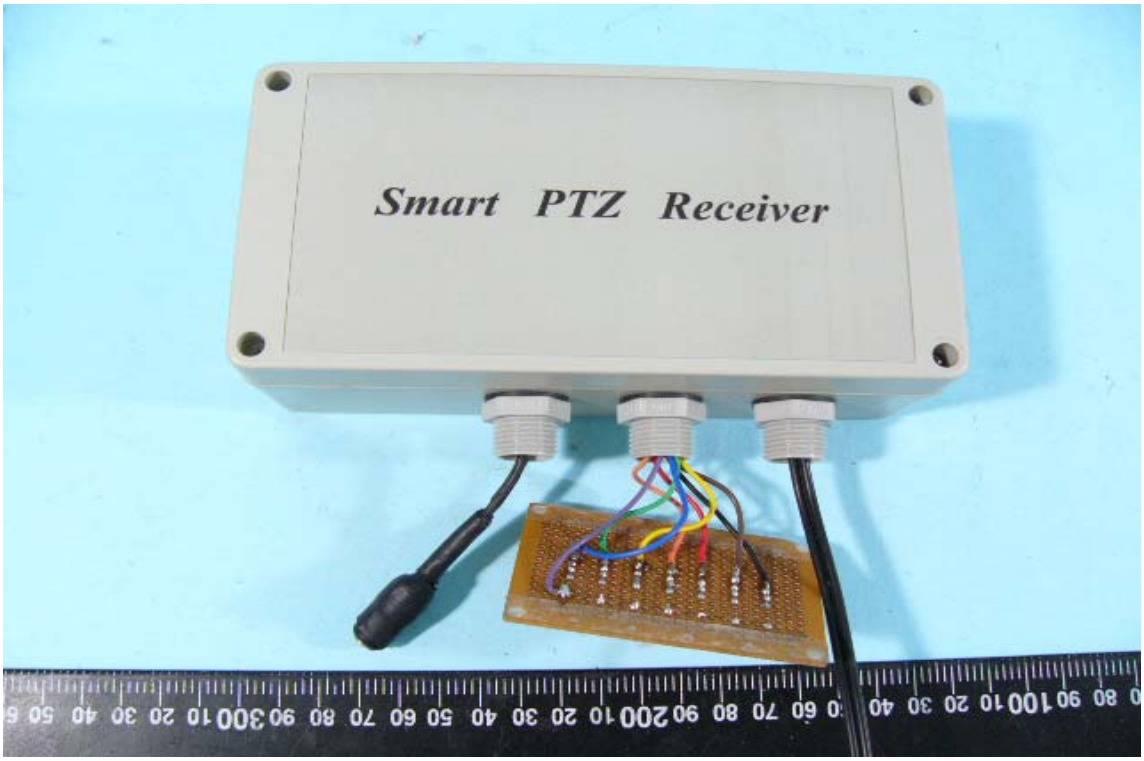
Test mode	Voltage Variations	Result
Supply Voltage Max	Unom+10%=230+23=253.0	A
Supply Voltage Min	Unom-15%=230-34.5=195.5	A

Note : " A" means the EUT function was correct during the test

4.2.7.2 Main Supply Voltage Variations Test Setup Photos:

CONSTRUCTED PHOTOS of EUT

1. Total View of EUT



2. Top View of EUT

CONSTRUCTED PHOTOS of EUT

3. Side View of EUT

4. Side View of EUT

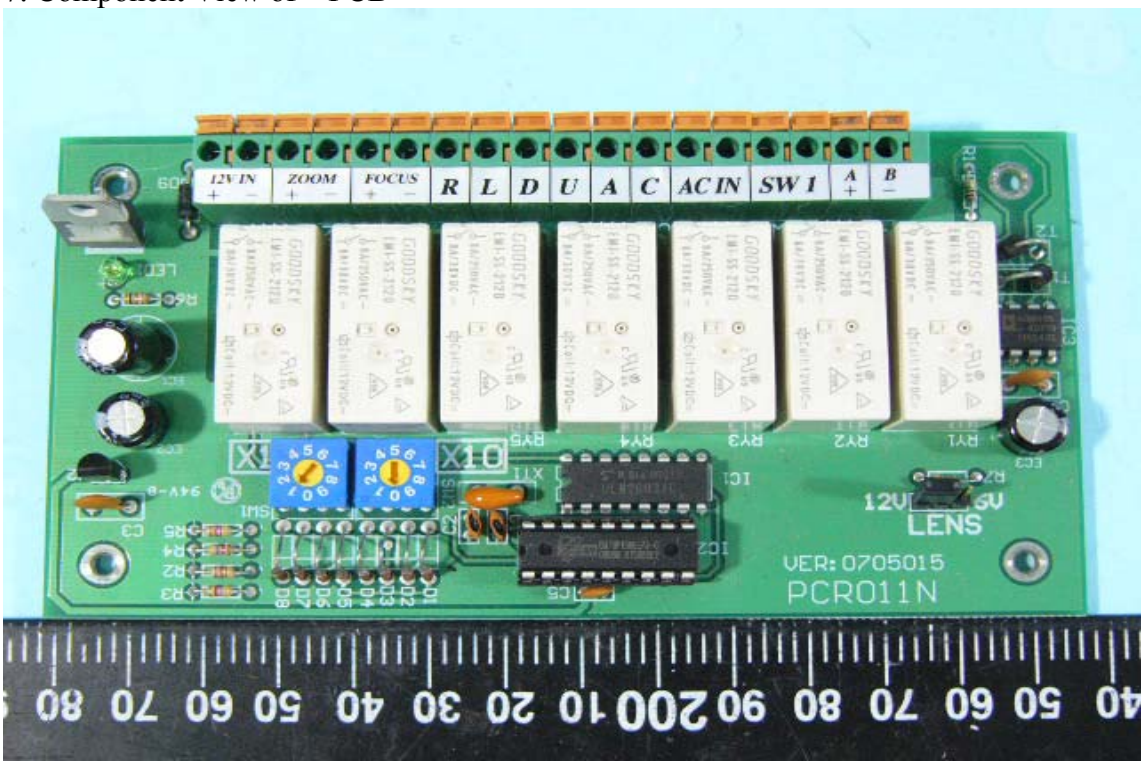
CONSTRUCTED PHOTOS of EUT

5. Bottom View of EUT

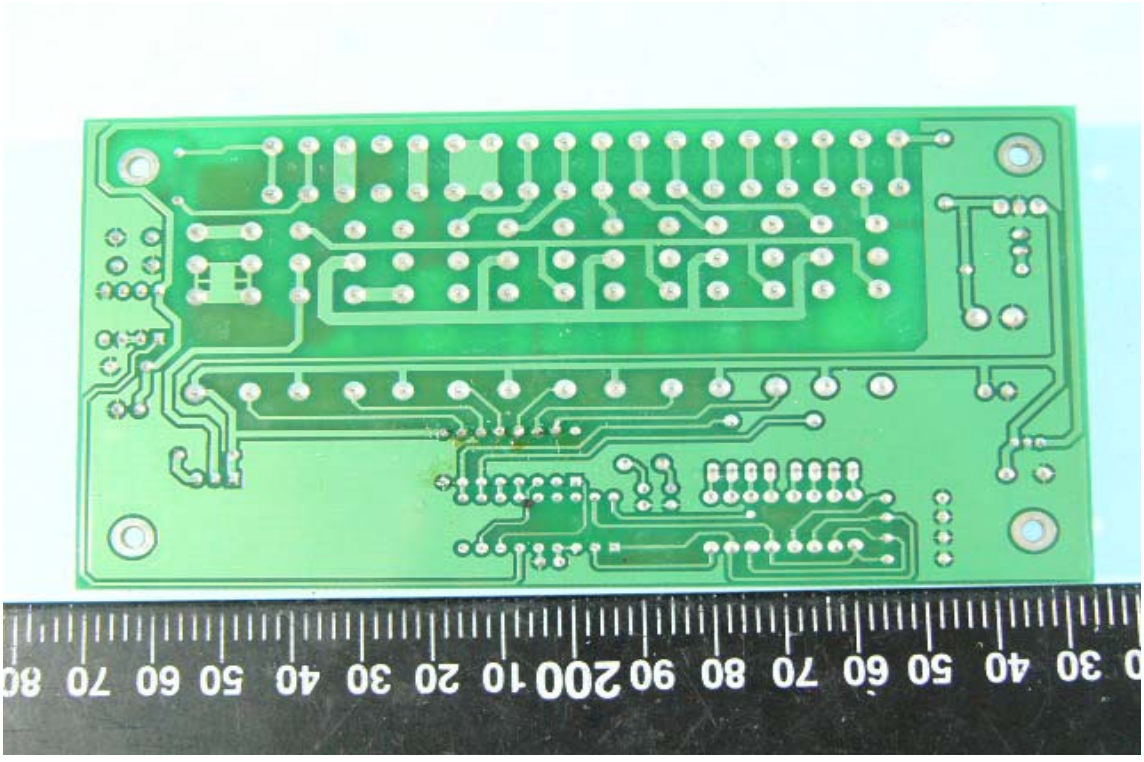
6. Internal View of EUT

CONSTRUCTED PHOTOS of EUT

7. Component View of PCB



8. Solder View of PCB



CONSTRUCTED PHOTOS of EUT

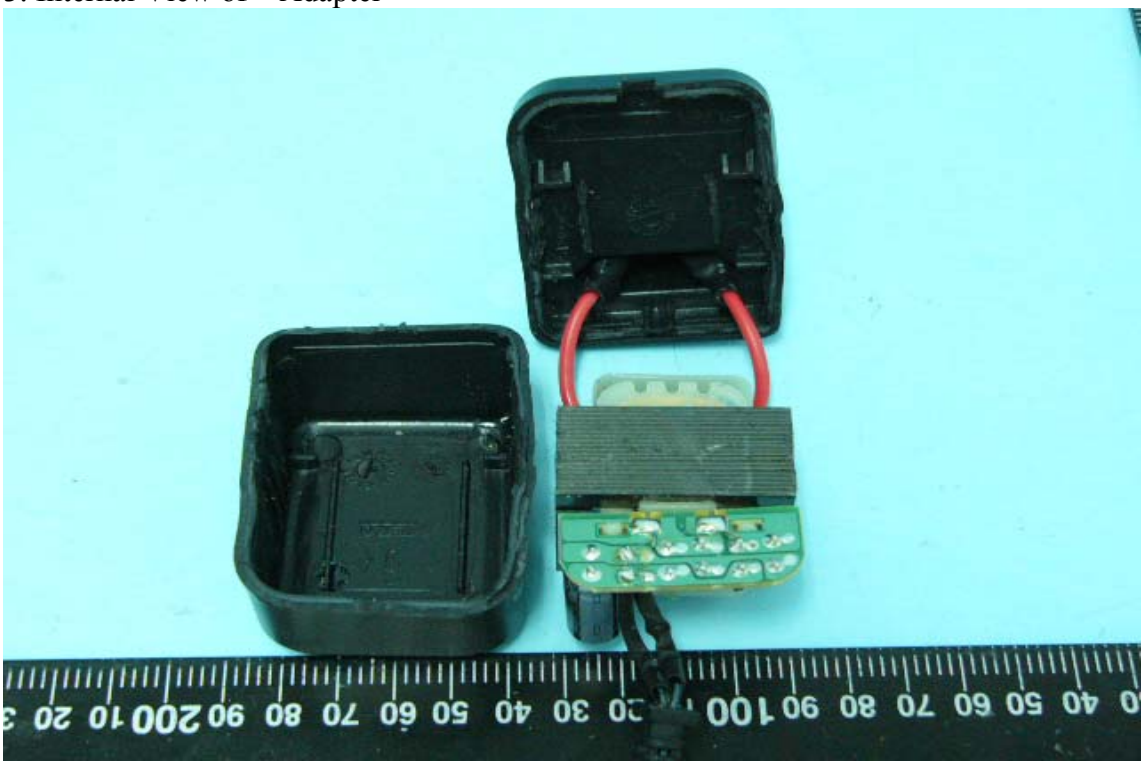
Adapter

1. Top View of Adapter

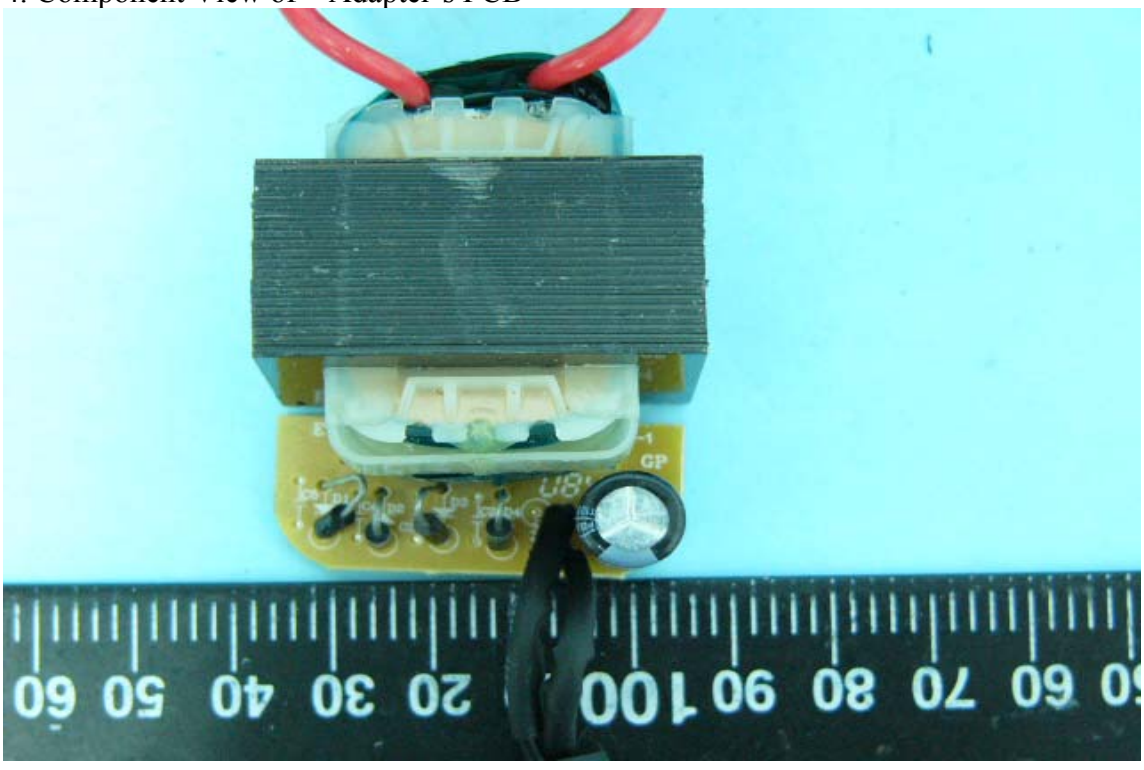
2. Bottom View of Adapter

CONSTRUCTED PHOTOS of EUT

3. Internal View of Adapter



4. Component View of Adapter's PCB



CONSTRUCTED PHOTOS of EUT

5. Solder View of Adapter'S PCB