Certificate of Conformity

The products

EUT : IP CABLING TRANSMISSION
Trade Name : SC&T
Model No. : IP0XX

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 Directive 2004/108/EC on the basis of

EN 55022:2006(Class B)
EN 55024:1998/A1:2001/A2:2003
EN 61000-3-2:2006
EN 61000-3-3:1995/A1:2001/A2:2005

Will Yauo

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

Report Number : 09-05-RBF-074-01
Date of Issue: Jul. 29, 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.

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CE

EMC

TEST REPORT

Responsible Party	: ***SMART CABLING & TRANSMISSION CORP***
Manufacturer	: ***SMART CABLING & TRANSMISSION CORP***
Description of Product	: ***IP CABLING TRANSMISSION***
Trade Name	: ***SC&T***
Model No.	: ***IP0XX***
Test Report File No.	: ***09-05-RBF-074-01***
Date Test Item Received	: ***May 09, 2009***
Date Test Campaign Completed	: ***Jul. 21, 2009***
Date of Issue	: ***Jul. 29, 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.
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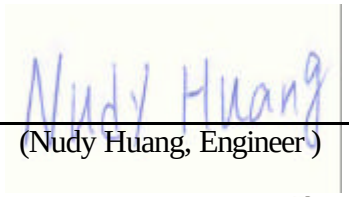
CONTENTS

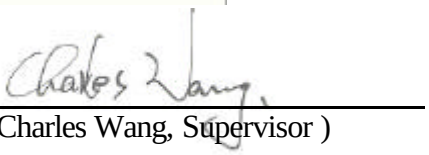
1 TEST REPORT CERTIFICATION

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	: IP CABLING TRANSMISSION
Trade name	: SC&T
Model No.	: IP0XX
Test specifications	:
Emissions	: EN 55022:2006(Class B) EN 61000-3-2:2006 EN 61000-3-3:1995/A1:2001/A2:2005
Immunity	: IEC61000-4-2:2008 IEC61000-4-3:2006/A1:2007 IEC61000-4-4:2004 IEC61000-4-5:2005 IEC61000-4-6:2008 IEC61000-4-11:2004
Regulations applied	:
Emissions	: EN 55022:2006(Class B) EN 61000-3-2:2006 EN 61000-3-3:1995/A1:2001/A2:2005
Immunity	: EN 55024:1998/A1:2001/A2:2003

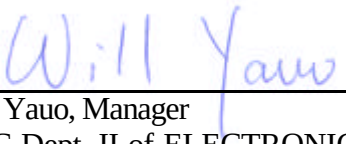
The testing described in this report has been carried out to the best of our knowledge and ability, and our responsibility is limited to the exercise of reasonable care. This certification is not intended to relieve the sellers from their legal and/or contractual obligations. Besides, the "Comment Issues"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

Test Engineer :  

(Nudy Huang, 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:

❶ ISO9002 : BSMI, TüV Product Service
❷ ISO/IEC 17025 : BSMI, CNLA, DGT, NVLAP, CCIBLAC, UL, Compliance
❸ EN45001 : TüV Rheinland, NEMKO, FIMKO, SGS
❹ Filing : FCC, Industry Canada, VCCI
❺ MRA : Australia, Hong Kong, New Zealand, Singapore, USA, Japan, Korea, China, APLAC through CNLA

2 GENERAL INFORMATIONS

2.1 Description of EUT

ITEM NO.	IP0XX
Link Cable Connector	BNC
Link Cable Distance	1800M (Max)
Link Speed	50 Mbps (Max)
Ethernet Connector	RJ-45
Ethernet Cable Distance	100M (Max)
Ethernet Speed	10M / 100Mbps
Power Supply	DC 5V / 2000mA / Regulated
Power Consumption	750mA (Max)
Dimensions (W x H x D M)	146 x 67 x 27
Weight (g)	220g
Material	Metal Black

2.2 Related Information of EUT

Size of EUT : 146 mm × 67mm × 27mm

Power Supply : AC Power: 230Vac 50Hz

Power Adaptor : [X] Nonshielded [ ] Shielded [ ] None, Length: 1.8 m

USB Line : [ ] Nonshielded [ ] Shielded [X] None, Length: ____ m

* For more detailed features, please refer to *User's Manual*.

2.3 Tested Configuration

The EUT connected with other devices.

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

Device	Model	Manufacture	Description
IP CABLING TRANSMISSION*	IP0XX	SMART CABLING & TRANSMISSION CORP	1.8m Unshielded AC Adapter Power

Remark "*" means equipment under test.

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 (Operation Mode -Neutral)
Minimum EMI Margin to the limit: -16.9 dB at 0.407 MHz
[X] – PASS (Operation Mode -Line)
Minimum EMI Margin to the limit: -18.3 dB at 0.347 MHz
[X] – PASS (Operation Mode -Neutral)
Minimum EMI Margin to the limit: -16.4 dB at 0.396 MHz
[X] – PASS (Operation Mode -Line)
Minimum EMI Margin to the limit: -16.1 dB at 0.572 MHz
[X] – PASS (Operation Mode -Neutral)
Minimum EMI Margin to the limit: -17.7 dB at 0.373 MHz
[X] – PASS (Operation Mode -Line)
Minimum EMI Margin to the limit: -17.3 dB at 0.405 MHz
[X] – PASS (Operation Mode -Neutral)
Minimum EMI Margin to the limit: -20.2 dB at 0.150 MHz
[X] – PASS (Operation Mode -Line)
Minimum EMI Margin to the limit: -22.0 dB at 0.177 MHz

3.1.2 Conducted Telecommunication ports

A. Voltage
[X] – PASS (Mode: ISN-Voltage(RJ-45))
Minimum EMI QP Margin(QP) to the limit: -7.9 dB at 23.263 MHz

B. Current
[X] – PASS (Mode: ISN-Current(RJ-45))
Minimum EMI QP Margin(QP) to the limit: -28.8 dB at 16.781 MHz

3.1.3 Radiated Emissions

[X] – PASS (Operation Mode -HOR)
Minimum EMI Margin to the limit: -4.3 dB at 513.800 MHz
[X] – PASS (Operation Mode -VER)
Minimum EMI Margin to the limit: -4.4 dB at 427.500 MHz

3.1.4 Harmonics Current Emissions

[X] –PASS

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

3.1.5 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

4 TEST DATA & RELATED INFORMATIONS

4.1 Emissions

4.1.1 Conducted Emissions Test

4.1.1.1 Conducted Emissions Test Data

Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : May 25, 2009

Test Specification	EN 55022:2006 (Class B)			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/03
LISN	EMCO	3625/2	2009/02/06	2010/02/05
LISN	Rohde & Schwarz	ESH2-Z5	2009/06/27	2010/06/26
Climatic Condition	Ambient Temperature: 25 °C		Relative Humidity: 67 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: Operation Mode Neutral

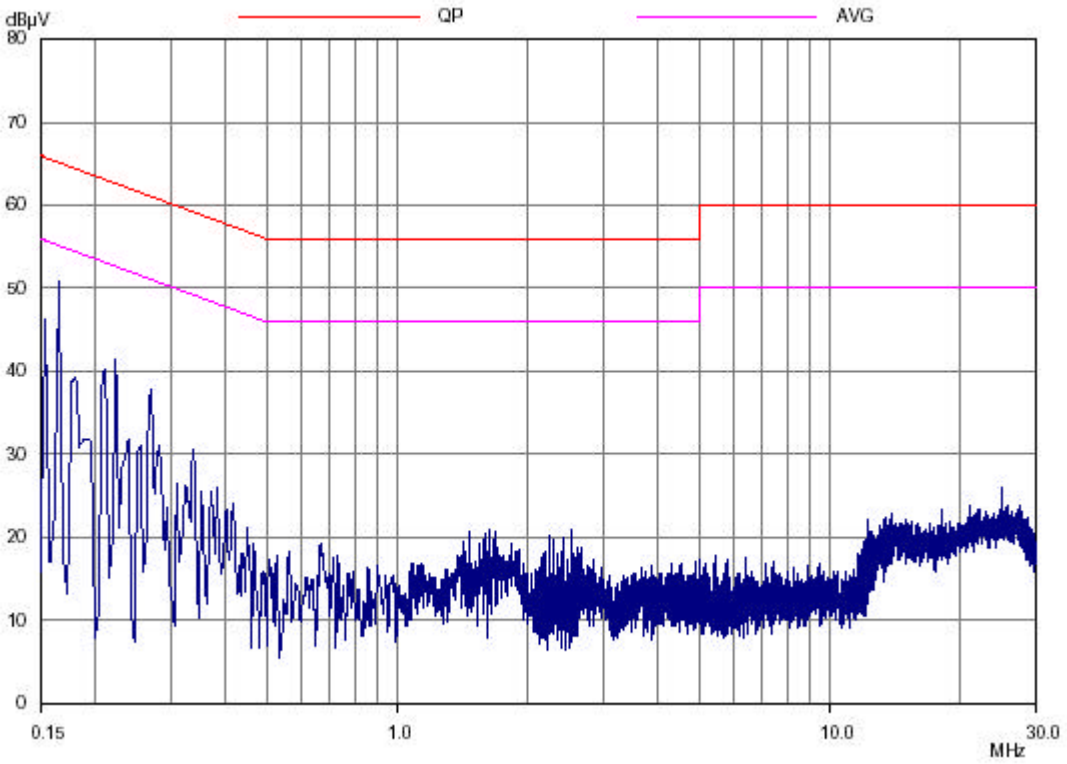
Frequency (MHz)	Meter Reading (dBμV)		Factor (dB)	Result (dBμV)		Limit (dBμV)		Margin (dBμV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.154	39.8	----	0.2	40.0	----	65.8	55.8	-25.8	----
0.173	41.2	----	0.2	41.4	----	64.8	54.8	-23.4	----
0.192	42.4	----	0.2	42.6	----	63.9	53.9	-21.3	----
0.240	39.6	----	0.2	39.8	----	62.1	52.1	-22.3	----
0.372	36.5	----	0.3	36.8	----	58.5	48.5	-21.7	----
0.407	40.5	----	0.3	40.8	----	57.7	47.7	-16.9	----

Mode: Operation Mode Line

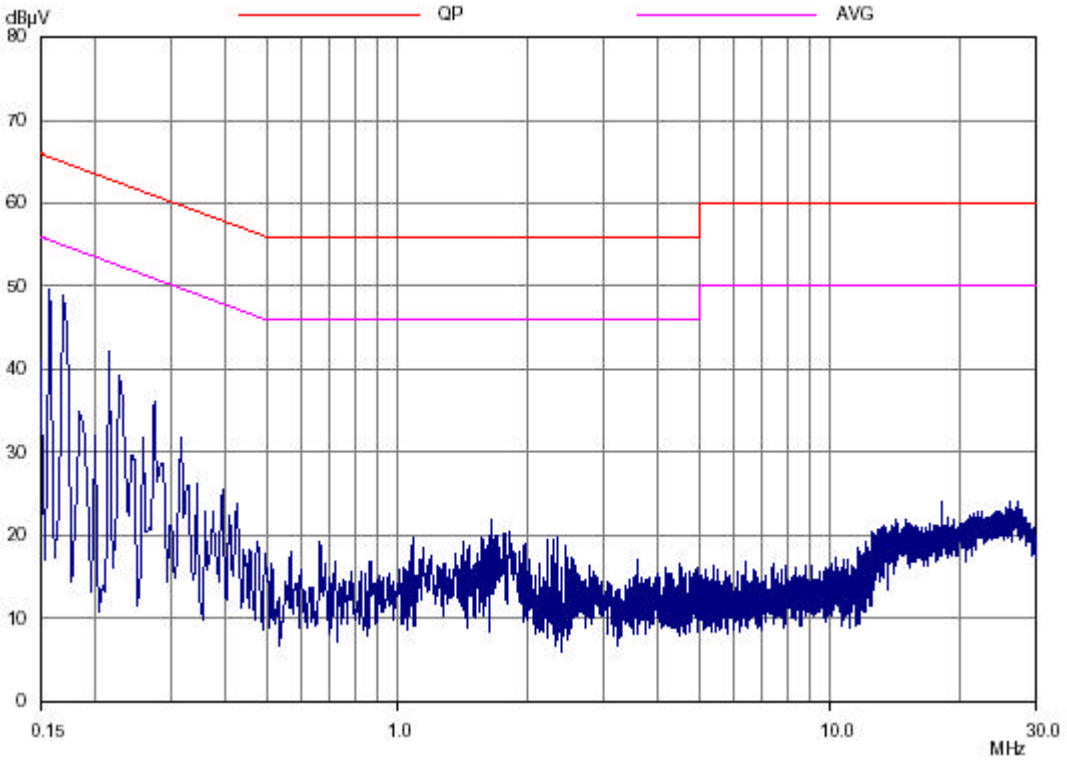
Frequency (MHz)	Meter Reading (dBμV)		Factor (dB)	Result (dBμV)		Limit (dBμV)		Margin (dBμV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.159	40.1	----	0.2	40.3	----	65.5	55.5	-25.2	----
0.165	42.3	----	0.2	42.5	----	65.2	55.2	-22.7	----
0.307	39.4	----	0.3	39.7	----	60.1	50.1	-20.4	----
0.347	40.5	----	0.3	40.8	----	59.0	49.0	-18.3	----
0.408	37.5	----	0.3	37.8	----	57.7	47.7	-19.9	----
0.572	35.4	----	0.3	35.7	----	56.0	46.0	-20.3	----

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.

Mode: Operation Mode Neutral



Mode: Operation Mode Line



Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : May 25, 2009

Test Specification	EN 55022:2006 (Class B)			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/03
LISN	EMCO	3625/2	2009/02/06	2010/02/05
LISN	Rohde & Schwarz	ESH2-Z5	2009/06/27	2010/06/26
Climatic Condition	Ambient Temperature: 25 °C		Relative Humidity: 67 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: Operation Mode Neutral

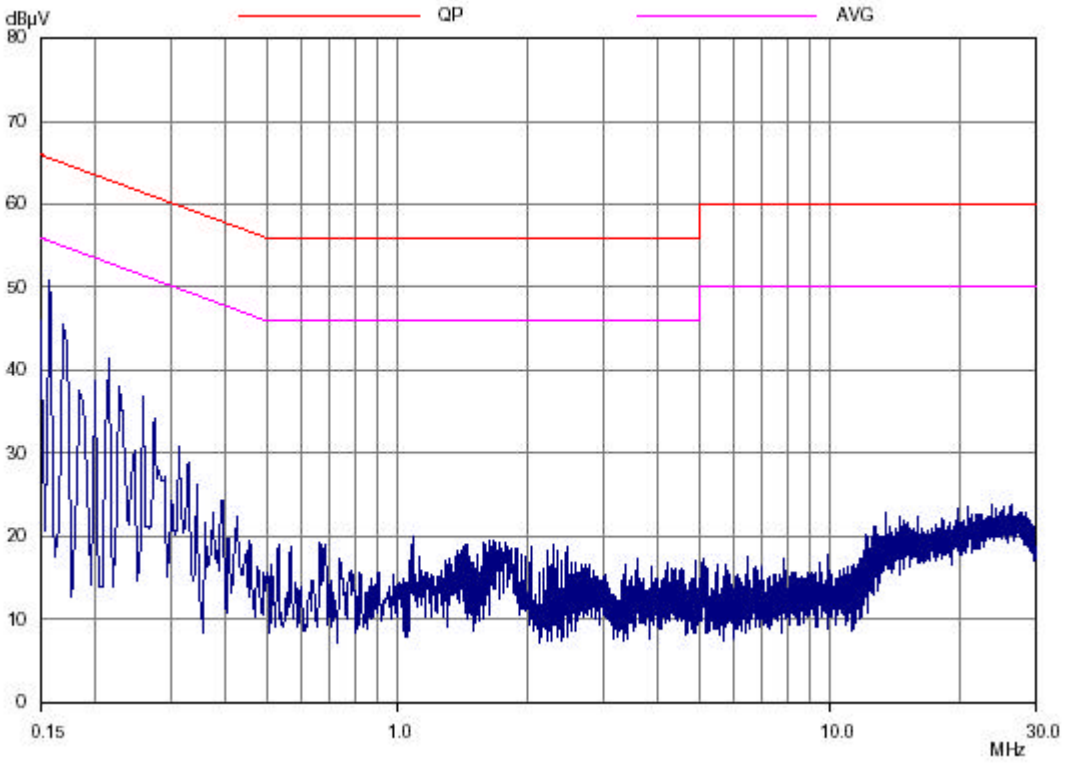
Frequency (MHz)	Meter Reading (dBµV)		Factor (dB)	Result (dBµV)		Limit (dBµV)		Margin (dBµV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.157	39.6	----	0.2	39.8	----	65.6	55.6	-25.8	----
0.170	40.5	----	0.2	40.7	----	65.0	55.0	-24.3	----
0.192	42.1	----	0.2	42.3	----	63.9	53.9	-21.6	----
0.237	38.5	----	0.2	38.7	----	62.2	52.2	-23.5	----
0.327	36.8	----	0.3	37.1	----	59.5	49.5	-22.5	----
0.396	41.2	----	0.3	41.5	----	57.9	47.9	-16.4	----

Mode: Operation Mode Line

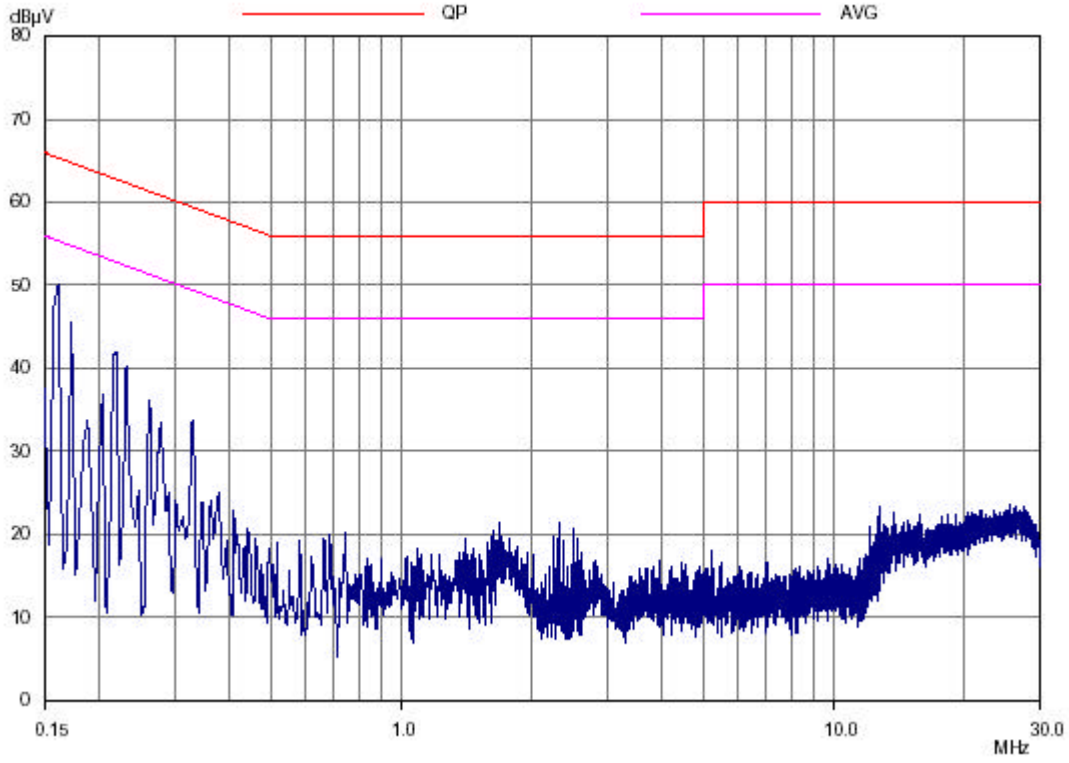
Frequency (MHz)	Meter Reading (dBµV)		Factor (dB)	Result (dBµV)		Limit (dBµV)		Margin (dBµV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.156	40.5	----	0.2	40.7	----	65.7	55.7	-25.0	----
0.177	42.6	----	0.2	42.8	----	64.6	54.6	-21.8	----
0.273	38.5	----	0.2	38.7	----	61.0	51.0	-22.3	----
0.374	40.5	----	0.3	40.8	----	58.4	48.4	-17.6	----
0.404	38.5	----	0.3	38.8	----	57.8	47.8	-19.0	----
0.572	39.6	----	0.3	39.9	----	56.0	46.0	-16.1	----

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.

Mode: Operation Mode Neutral



Mode: Operation Mode Line



Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : May 25, 2009

Test Specification	EN 55022:2006 (Class B)			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/03
LISN	EMCO	3625/2	2009/02/06	2010/02/05
LISN	Rohde & Schwarz	ESH2-Z5	2009/06/27	2010/06/26
Climatic Condition	Ambient Temperature: 25 °C		Relative Humidity: 67 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: Operation Mode Neutral

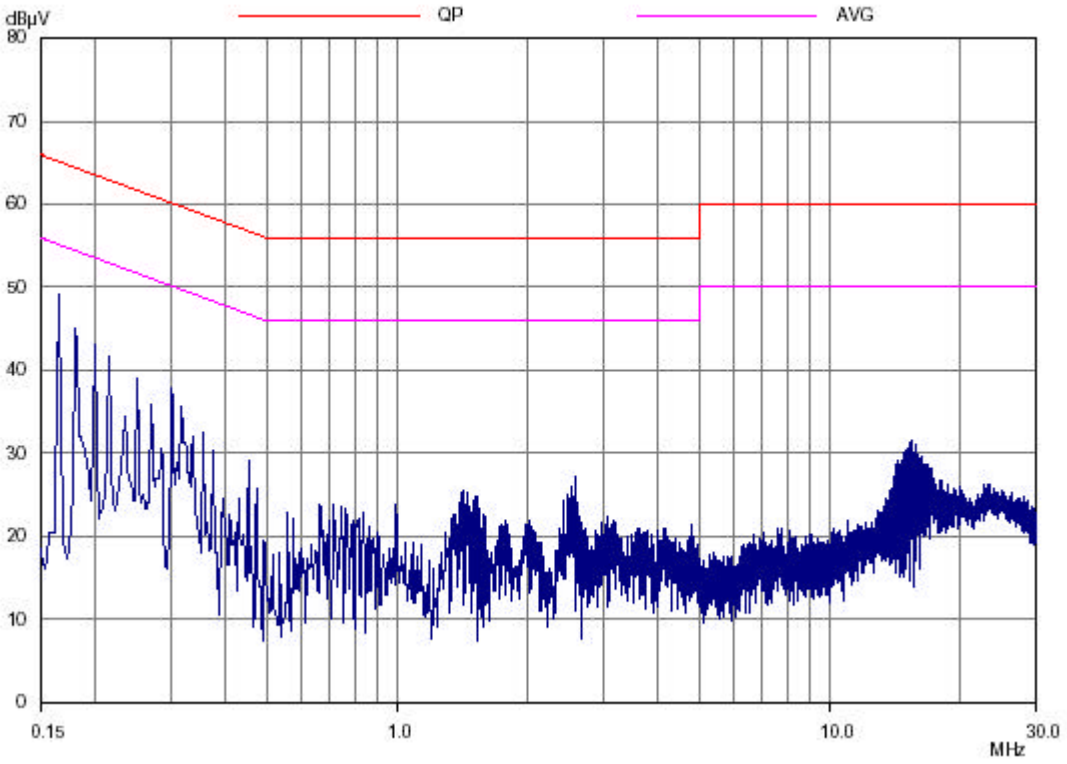
Frequency (MHz)	Meter Reading (dBµV)		Factor (dB)	Result (dBµV)		Limit (dBµV)		Margin (dBµV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.157	43.6	----	0.2	43.8	----	65.6	55.6	-21.8	----
0.167	40.5	----	0.2	40.7	----	65.1	55.1	-24.4	----
0.187	39.6	----	0.2	39.8	----	64.2	54.2	-24.4	----
0.294	38.1	----	0.2	38.3	----	60.4	50.4	-22.1	----
0.327	37.6	----	0.3	37.9	----	59.5	49.5	-21.7	----
0.373	40.4	----	0.3	40.7	----	58.4	48.4	-17.7	----

Mode: Operation Mode Line

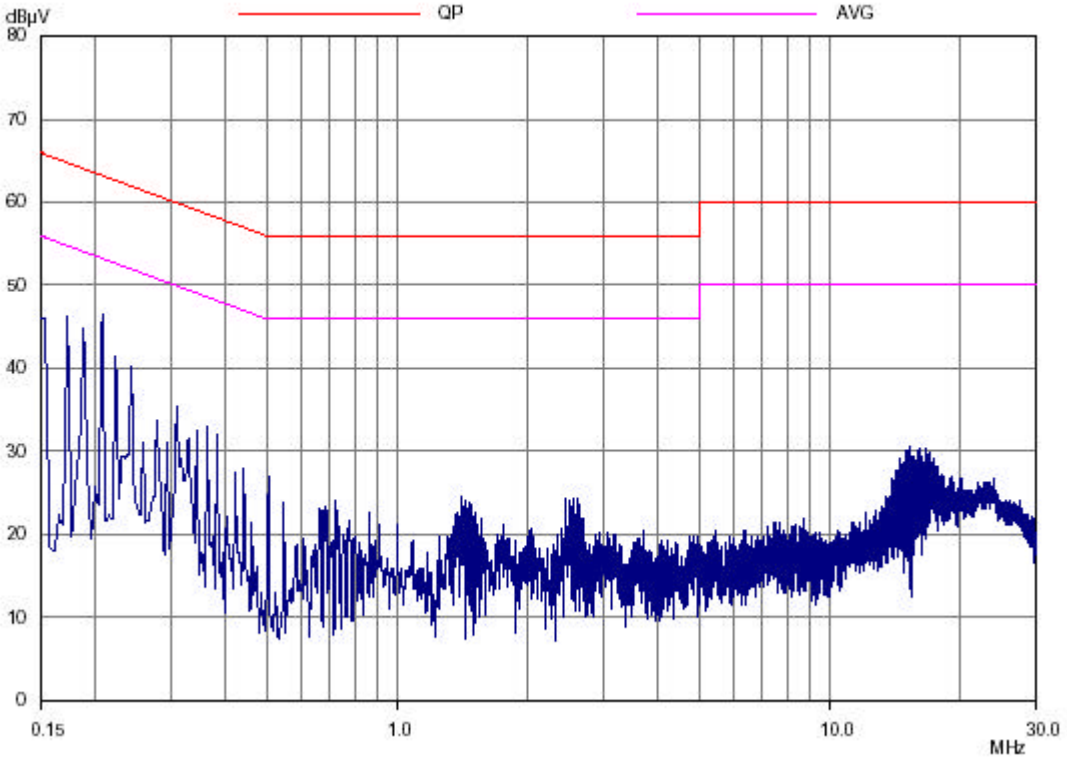
Frequency (MHz)	Meter Reading (dBµV)		Factor (dB)	Result (dBµV)		Limit (dBµV)		Margin (dBµV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.153	40.2	----	0.2	40.4	----	65.8	55.8	-25.4	----
0.163	41.8	----	0.2	42.0	----	65.3	55.3	-23.3	----
0.207	38.4	----	0.2	38.6	----	63.3	53.3	-24.7	----
0.248	39.1	----	0.2	39.3	----	61.8	51.8	-22.5	----
0.327	36.5	----	0.3	36.8	----	59.5	49.5	-22.8	----
0.405	40.2	----	0.3	40.5	----	57.8	47.8	-17.3	----

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.

Mode: Operation Mode Neutral



Mode: Operation Mode Line



Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : May 25, 2009

Test Specification	EN 55022:2006 (Class B)			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/03
LISN	EMCO	3625/2	2009/02/06	2010/02/05
LISN	Rohde & Schwarz	ESH2-Z5	2009/06/27	2010/06/26
Climatic Condition	Ambient Temperature: 25 °C		Relative Humidity: 67 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: Operation Mode Neutral

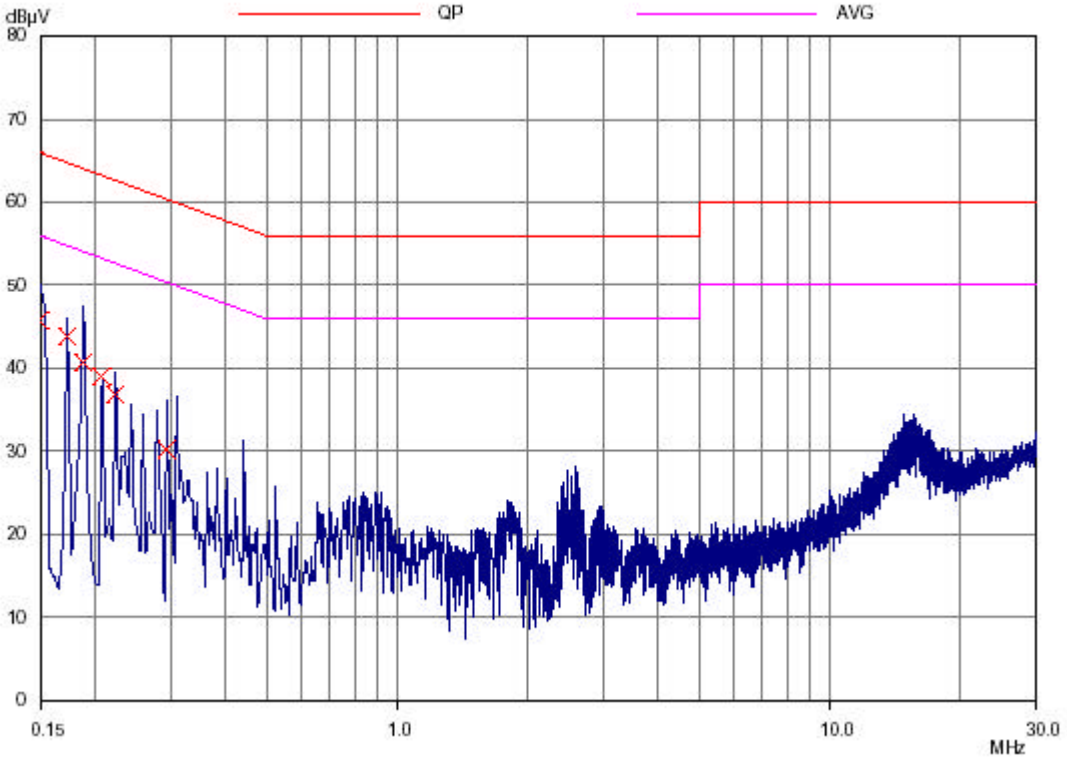
Frequency (MHz)	Meter Reading (dBµV)		Factor (dB)	Result (dBµV)		Limit (dBµV)		Margin (dBµV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.150	45.6	----	0.2	45.8	----	66.0	56.0	-20.2	----
0.173	43.8	----	0.2	44.0	----	64.8	54.8	-20.8	----
0.189	40.7	----	0.2	40.9	----	64.1	54.1	-23.2	----
0.208	39.1	----	0.2	39.3	----	63.3	53.3	-24.0	----
0.224	36.7	----	0.2	36.9	----	62.7	52.7	-25.8	----
0.294	30.2	----	0.2	30.4	----	60.4	50.4	-30.0	----

Mode: Operation Mode Line

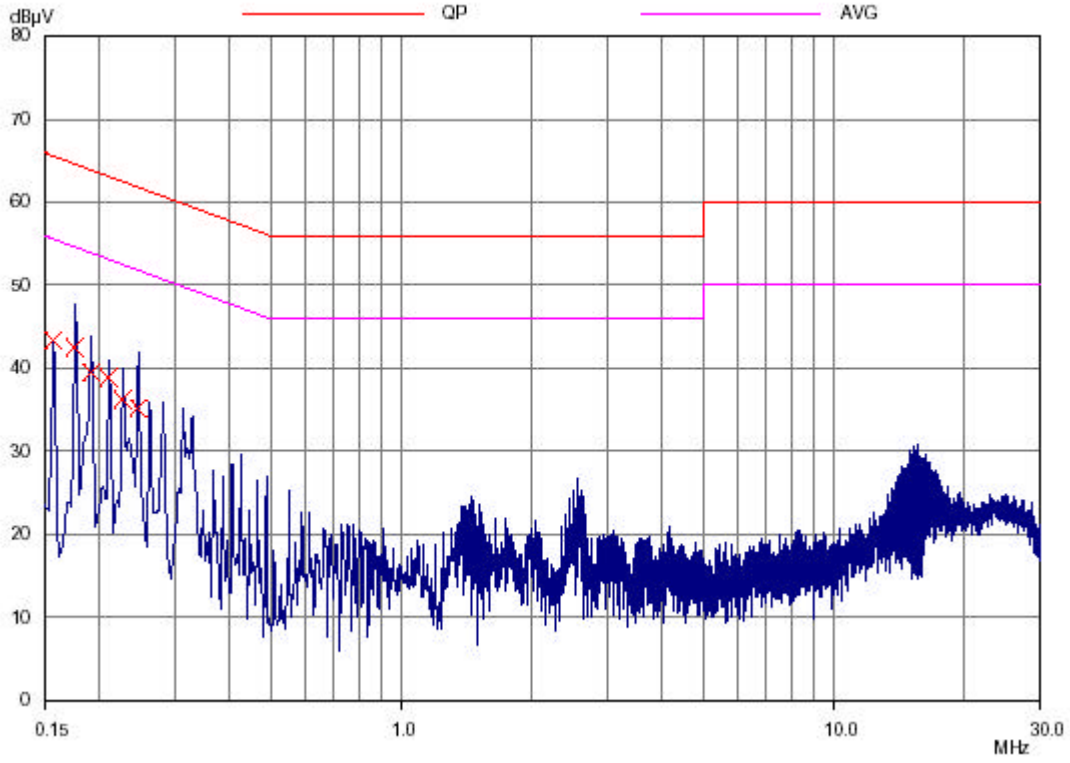
Frequency (MHz)	Meter Reading (dBµV)		Factor (dB)	Result (dBµV)		Limit (dBµV)		Margin (dBµV)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.157	43.2	----	0.2	43.4	----	65.6	55.6	-22.2	----
0.177	42.4	----	0.2	42.6	----	64.6	54.6	-22.0	----
0.192	39.5	----	0.2	39.7	----	63.9	53.9	-24.2	----
0.212	38.8	----	0.2	39.0	----	63.1	53.1	-24.1	----
0.228	36.2	----	0.2	36.4	----	62.5	52.5	-26.1	----
0.247	35.2	----	0.2	35.4	----	61.9	51.9	-26.4	----

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.

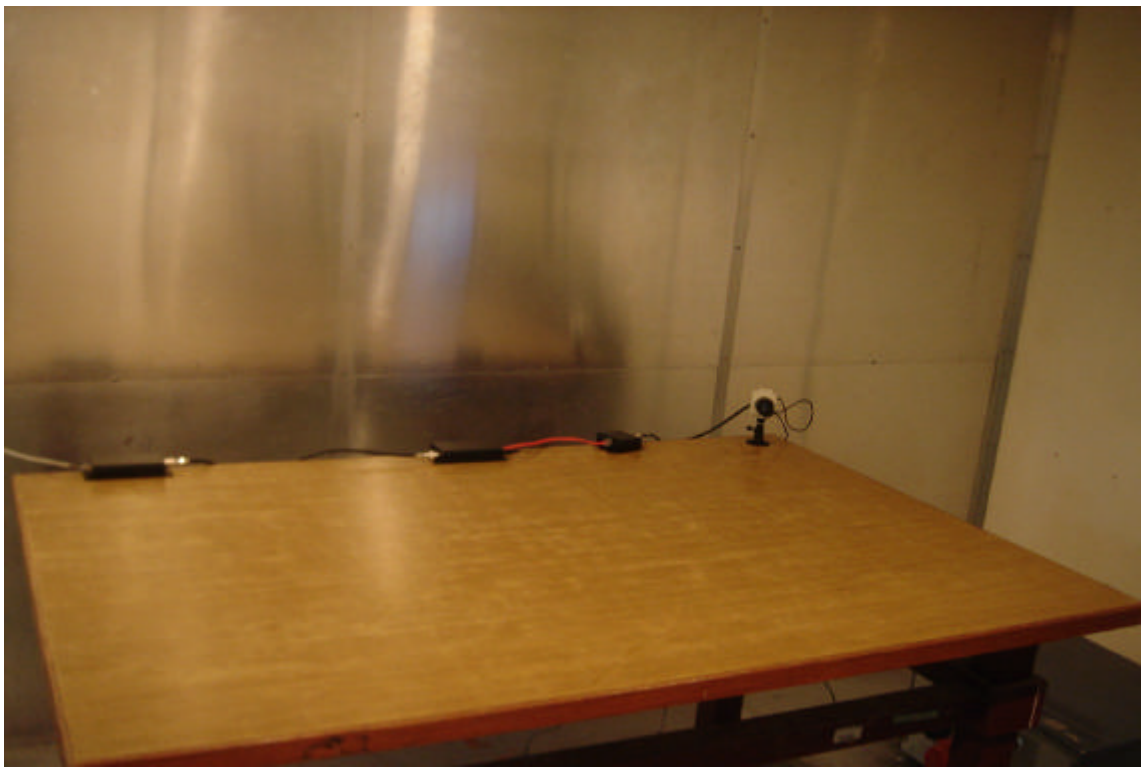
Mode: Operation Mode Neutral

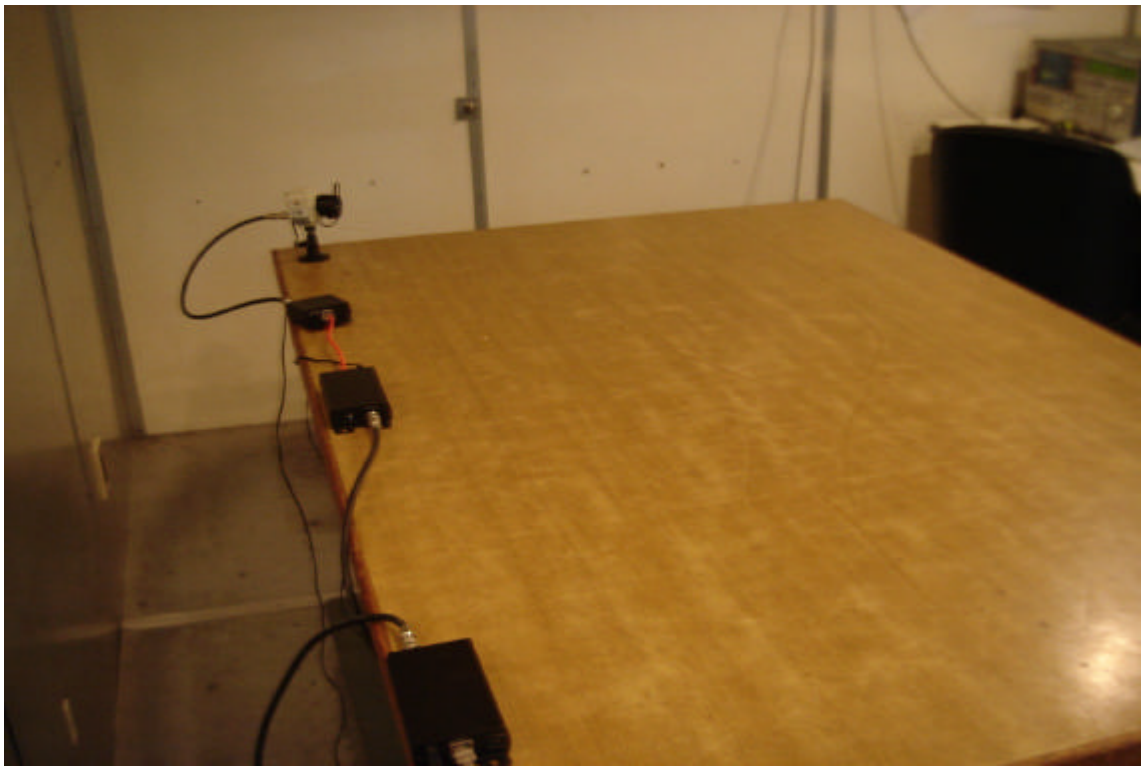


Mode: Operation Mode Line



4.1.1.2 Conducted Emissions Test Setup Photos





4.1.2 Conducted Telecommunication ports Test:

4.1.2.1 Conducted Telecommunication ports Data:

A. Voltage

1. Operating Conditions of The EUT: ISN-Voltage(RJ-45)

Test Date : May 25, 2009

Test Specification	EN 55022:2006 (Class B)			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
ISN	Rohde & Schwarz	ENYBSIN	2008/10/01	2009/09/30
ISN	Rohde & Schwarz	ESH2-Z1	2008/10/27	2009/10/26
ISN	FCC	FCC-TLISN-T2-02	2008/09/30	2009/09/29
ISN	RCC	FCC-TLISN-T4-02	2008/09/30	2009/09/29
ISN	RCC	FCC-TLISN-T8-02	2008/09/30	2009/09/29
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/03
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 62 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: ISN-Voltage(RJ-45)

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
0.937	40.2	----	0.3	40.5	----	74.0	64.0	-33.5	----
0.956	42.6	----	0.3	42.9	----	74.0	64.0	-31.1	----
1.472	38.2	----	0.4	38.6	----	74.0	64.0	-35.4	----
2.374	35.4	----	0.5	35.9	----	74.0	64.0	-38.1	----
7.024	40.8	----	0.7	41.5	----	74.0	64.0	-32.5	----
8.932	43.8	----	0.8	44.6	----	74.0	64.0	-29.4	----

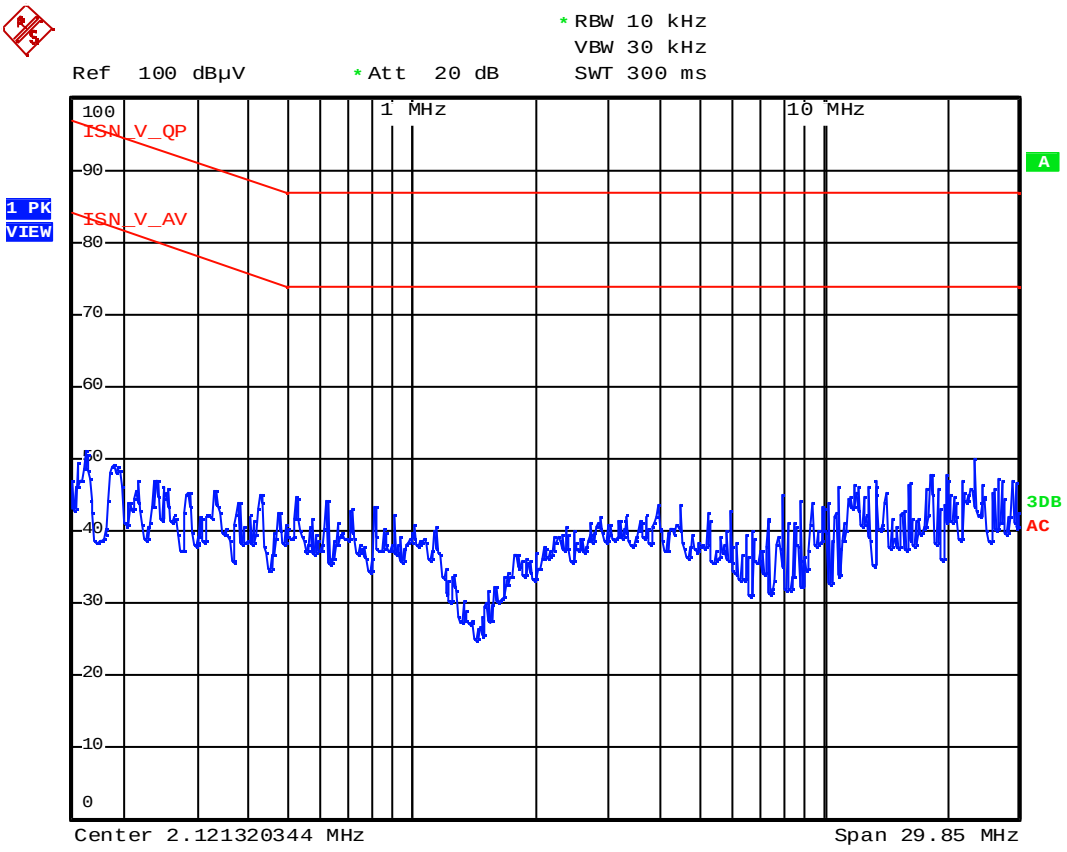
Notes: 1) Place of measurement: EMC LAB. of the ETC

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.

Mode: ISN-Voltage(RJ-45)



B. Current

1. Operating Conditions of The EUT: ISN-Current(RJ-45)

Test Date : May 25, 2009

Test Specification	EN 55022:2006 (Class B)			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
ISN	Rohde & Schwarz	ENYBSIN	2008/10/01	2009/09/30
ISN	Rohde & Schwarz	ESH2-Z1	2008/10/27	2009/10/26
ISN	FCC	FCC-TLISN-T2-02	2008/09/30	2009/09/29
ISN	RCC	FCC-TLISN-T4-02	2008/09/30	2009/09/29
ISN	RCC	FCC-TLISN-T8-02	2008/09/30	2009/09/29
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/03
Climatic Condition	Ambient Temperature: 24 °C		Relative Humidity: 62 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: ISN-Current(RJ-45)

Frequency (MHz)	Meter Reading (dBµA)		Factor (dB)	Result (dBµA)		Limit (dBµA)		Margin (dBµA)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.972	12.5	----	0.3	12.8	----	30.0	20.0	-17.2	----
1.803	13.4	----	0.5	13.9	----	30.0	20.0	-16.1	----
2.034	12.8	----	0.5	13.3	----	30.0	20.0	-16.7	----
7.272	14.6	----	0.7	15.3	----	30.0	20.0	-14.7	----
7.904	12.9	----	0.7	13.6	----	30.0	20.0	-16.4	----
8.024	14.4	----	0.7	15.1	----	30.0	20.0	-14.9	----

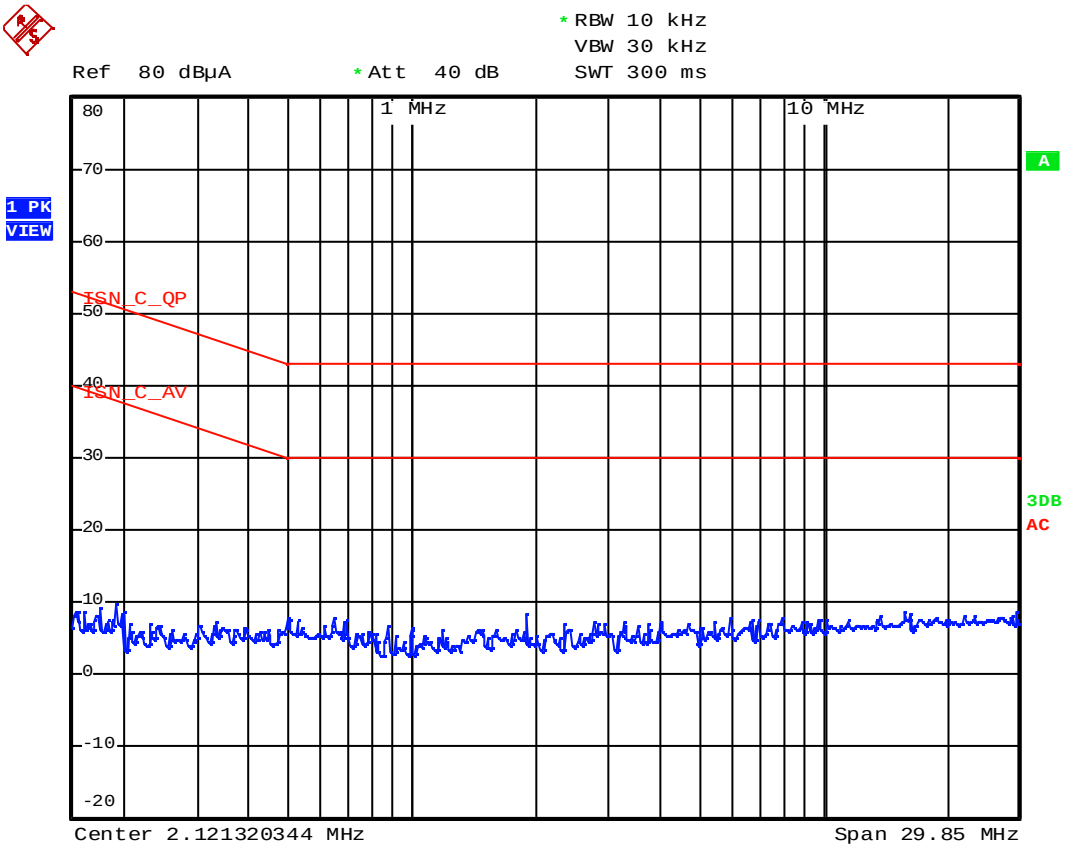
Notes: 1) Place of measurement: EMC LAB. of the ETC

2) The EUT was placed 0.8m above reference ground plane.

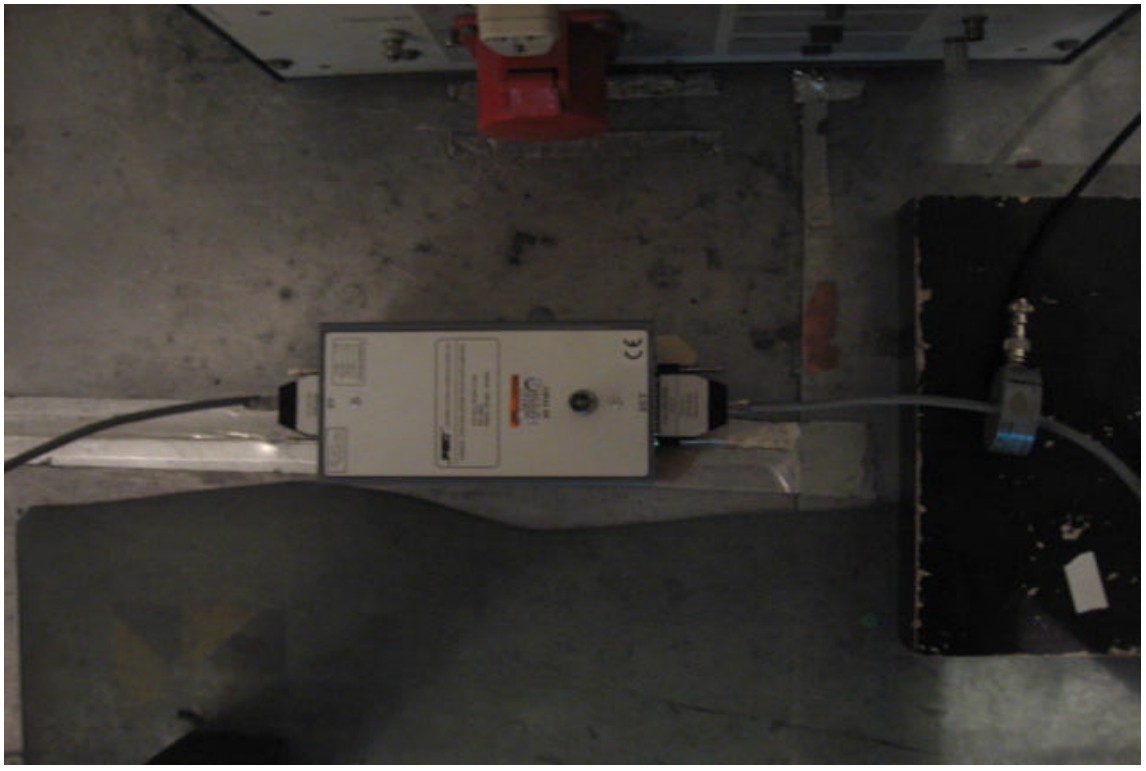
3) The symbol of "----" means the Q.P. value is under the limit for AVG. so, the AVG. value doesn't need to be measured.

4) The expanded uncertainty of the conducted emission tests is 2.45 dB.

Mode: ISN-Current(RJ-45)



4.1.2.2 Conducted Telecommunication ports Test Photos:



4.1.3 Radiated Emissions Test

4.1.3.1 Radiated Emissions Test Data

Operating Conditions of The EUT : Operation Mode

Test Date : May 25, 2009

Test Specification	EN 55022:2006 (Class B)			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Test Receiver	Rohde & Schwarz	ESCS 30	2009/02/10	2010/02/09
Amplifier	HP	8447D	2008/09/05	2009/09/04
Spectrum	Advantest	R3162	2009/02/03	2010/02/02
Bi-Log Antenna	Schaffner	CBL 6111	2009/05/06	2010/05/05
Climatic Condition	Ambient Temperature: 25 °C		Relative Humidity: 67 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode Operation Mode (HOR)

Emission **Frequency** (MHz)	**Meter Reading** (dBuV)	CORR'd **Factor** (dB)	**Results** (dBuV/m)	**Limit** (dBuV/m)	**Margins** (dB)
	HOR.		**HOR.**		
68.300	42.5	-19.4	23.1	30.0	-6.9
127.500	36.8	-12.3	24.5	30.0	-5.5
203.800	38.6	-13.4	25.2	30.0	-4.8
427.500	35.1	-5.0	30.1	37.0	-6.9
513.800	37.1	-4.4	32.7	37.0	-4.3
603.100	33.2	-3.7	29.5	37.0	-7.5

Mode : Operation Mode (VER)

Emission **Frequency** (MHz)	**Meter Reading** (dBuV)	CORR'd **Factor** (dB)	**Results** (dBuV/m)	**Limit** (dBuV/m)	**Margins** (dB)
	VER.		**VER.**		
68.300	41.9	-19.4	22.5	30.0	-7.5
127.500	36.1	-12.3	23.8	30.0	-6.2
203.800	36.5	-13.4	23.1	30.0	-6.9
427.500	37.6	-5.0	32.6	37.0	-4.4
513.800	35.0	-4.4	30.6	37.0	-6.4
603.100	34.1	-3.7	30.4	37.0	-6.6

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.

4.1.3.2 Radiated Emissions Test Setup Photos

4.1.4 Harmonics Current Emissions Test

4.1.4.1 Harmonics Current Emissions Test Data

Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	EN 61000-3-2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Hormonics-1000	EMC-Partner	Hormonics-1000	2008/12/10	2009/10/09
Climatic Condition	Ambient Temperature: 28 °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.

Date : 2009/7/21 09:38:01 V4.16

Urms =	229.9V	Freq =	50	Range:	0.5 A
Irms =	0.055A	Ipk =	0.278A	cf =	5.08
P =	5.191W	S =	12.57VA	pf =	0.413
THDi =	90.70%	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	0.0239	0.0241		21	1050	0.0091	0.0091	0.1071
2	100	0	0.0012	1.08	22	1100	0	0.001	0.0836
3	150	0.02	0.02	2.3	23	1150	0.0076	0.0076	0.0978
4	200	0	0.0013	0.43	24	1200	0	0.001	0.0767
5	250	0.0195	0.0196	1.14	25	1250	0.0062	0.0062	0.09
6	300	0	0.0013	0.3	26	1300	0	0.001	0.0708
7	350	0.0188	0.0188	0.77	27	1350	0	0.0049	0.0833
8	400	0	0.0012	0.23	28	1400	0	0.0009	0.0657
9	450	0.0178	0.0179	0.4	29	1450	0	0.0038	0.0776
10	500	0	0.0012	0.184	30	1500	0	0.0009	0.0613
11	550	0.0166	0.0167	0.33	31	1550	0	0.0029	0.0726
12	600	0	0.0012	0.1533	32	1600	0	0.0008	0.0575
13	650	0.0153	0.0153	0.21	33	1650	0	0.0022	0.0682
14	700	0	0.0012	0.1314	34	1700	0	0.0008	0.0541
15	750	0.0138	0.0139	0.15	35	1750	0	0.0018	0.0643
16	800	0	0.0011	0.115	36	1800	0	0.0007	0.0511
17	850	0.0123	0.0123	0.1324	37	1850	0	0.0017	0.0608
18	900	0	0.0011	0.1022	38	1900	0	0.0007	0.0484
19	950	0.0107	0.0107	0.1184	39	1950	0	0.0017	0.0577
20	1000	0	0.0011	0.092	40	2000	0	0.0006	0.046

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

Test Specification	EN 61000-3-2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Hormonics-1000	EMC-Partner	Hormonics-1000	2008/12/10	2009/10/09
Climatic Condition	Ambient Temperature: 28 °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.

Date : 2009/7/21 09:55:53 V4.16

Urms =	230.1V	Freq =	50	Range:	0.5 A
Irms =	0.054A	Ipk =	0.278A	cf =	5.112
P =	5.215W	S =	12.53VA	pf =	0.416
THDi =	90.60%	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	0.024	0.0241		21	1050	0.009	0.009	0.1071
2	100	0	0.0012	1.08	22	1100	0	0.001	0.0836
3	150	0.02	0.0201	2.3	23	1150	0.0074	0.0074	0.0978
4	200	0	0.0012	0.43	24	1200	0	0.0009	0.0767
5	250	0.0196	0.0196	1.14	25	1250	0.006	0.006	0.09
6	300	0	0.0012	0.3	26	1300	0	0.0009	0.0708
7	350	0.0188	0.0188	0.77	27	1350	0	0.0047	0.0833
8	400	0	0.0012	0.23	28	1400	0	0.0008	0.0657
9	450	0.0178	0.0179	0.4	29	1450	0	0.0036	0.0776
10	500	0	0.0012	0.184	30	1500	0	0.0008	0.0613
11	550	0.0166	0.0166	0.33	31	1550	0	0.0027	0.0726
12	600	0	0.0012	0.1533	32	1600	0	0.0007	0.0575
13	650	0.0152	0.0153	0.21	33	1650	0	0.002	0.0682
14	700	0	0.0011	0.1314	34	1700	0	0.0007	0.0541
15	750	0.0137	0.0138	0.15	35	1750	0	0.0017	0.0643
16	800	0	0.0011	0.115	36	1800	0	0.0006	0.0511
17	850	0.0122	0.0122	0.1324	37	1850	0	0.0016	0.0608
18	900	0	0.0011	0.1022	38	1900	0	0.0006	0.0484
19	950	0.0105	0.0106	0.1184	39	1950	0	0.0017	0.0577
20	1000	0	0.001	0.092	40	2000	0	0.0005	0.046

4.1.4.2 Harmonics Current Emissions Test Setup Photos

Model: Transmitter / Receiver

4.1.5 Voltage Fluctuations and Flicker Test

4.1.5.1 Voltage Fluctuations and Flicker Test Data

Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	EN 61000-3-3:1995/A1:2001/A2:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Hormonics-1000	EMC-Partner	Hormonics-1000	2008/12/10	2009/12/09
Climatic Condition	Ambient Temperature: 28 °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	500ms	Pass
dmax	0.00%	4.0 %	Pass
dc	0.00%	3.3 %	Pass

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

Test Specification	EN 61000-3-3:1995/A1:2001/A2:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Hormonics-1000	EMC-Partner	Hormonics-1000	2008/12/10	2009/12/09
Climatic Condition	Ambient Temperature: 28 °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	500ms	Pass
dmax	0.00%	4.0 %	Pass
dc	0.00%	3.3 %	Pass

4.1.5.2 Voltage Fluctuations and Flicker Test Setup Photos

Model: Transmitter / Receiver

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 Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-2:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Electrostatic Discharge Simulator	Noiseken	ESS2002	2008/09/18	2009/09/17
Climatic Condition	Ambient Temperature: 28 °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 : 25 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		___ kV		___ kV		2 kV		4 kV		8 kV		___ kV	
\Points\Result\Polarity	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
VCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
HCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
P1~P2, P10	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
P3~P9	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---

Note : "---"means the test could not be carrier out.

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

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-2:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Electrostatic Discharge Simulator	Noiseken	ESS2002	2008/09/18	2009/09/17
Climatic Condition	Ambient Temperature: 28 °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 : 25 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		___ kV		___ kV		2 kV		4 kV		8 kV		___ kV	
\Points\Result\Polarity	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
VCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
HCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
P1~P2, P10	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
P3~P9	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

Model: Transmitter / Receiver

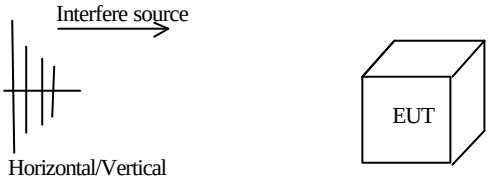
4.2.2 RF Radiated Fields Immunity Test

4.2.2.1 RF Radiated Fields Immunity Test Data

Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: 28 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			



Frequency Range: 80 MHz ~ 1000 MHz	Field Strength: 3 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

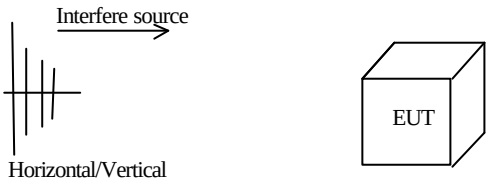
Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
80~1000	Horizontal	front	A
		rear	A
		left	A
		right	A
80~1000	Vertical	front	A
		rear	A
		left	A
		right	A

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

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: 28 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			



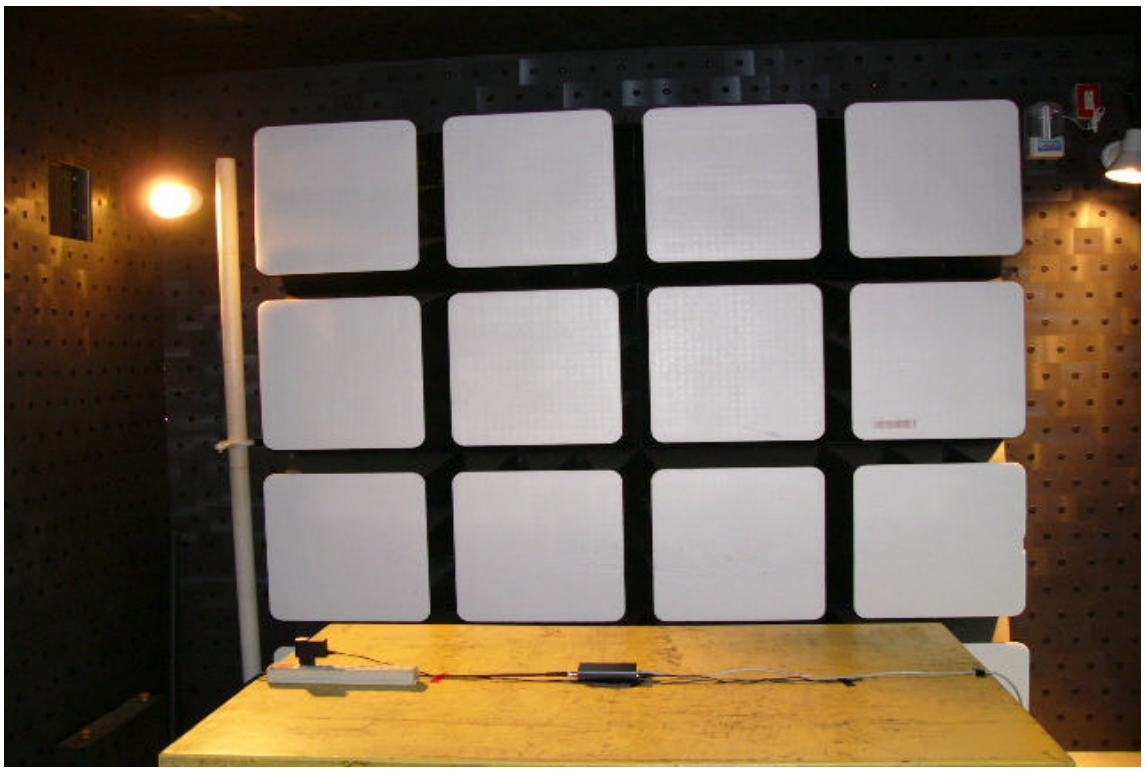
Frequency Range: 80 MHz ~ 1000 MHz	Field Strength: 3 V/m	Modulation (AM 1KHz 80%)
Sweep Rate : ≤ 1.5×10-3 decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell time : 2.9 s

Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
80~1000	Horizontal	front	A
		rear	A
		left	A
		right	A
80~1000	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

Model: Transmitter / Receiver



4.2.3 EFT/Burst Immunity Test

4.2.3.1 EFT/Burst Immunity Test Data

Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-4:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/22
Climatic Condition	Ambient Temperature: 28 °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 : 15ms /300ms		Repetition Rate : 5kHz	Test time : 1 min/each condition
\Voltage\Polarity\		1.0 kV	
\Test Point\Mode\Result\		+	-
Power Line	L	A	A
	N	A	A
	L-N	A	A
\Voltage\Polarity\		0.5 kV	
\Test Point\Mode\Result\		+	-
RJ-45 (LAN)		A	A

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

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

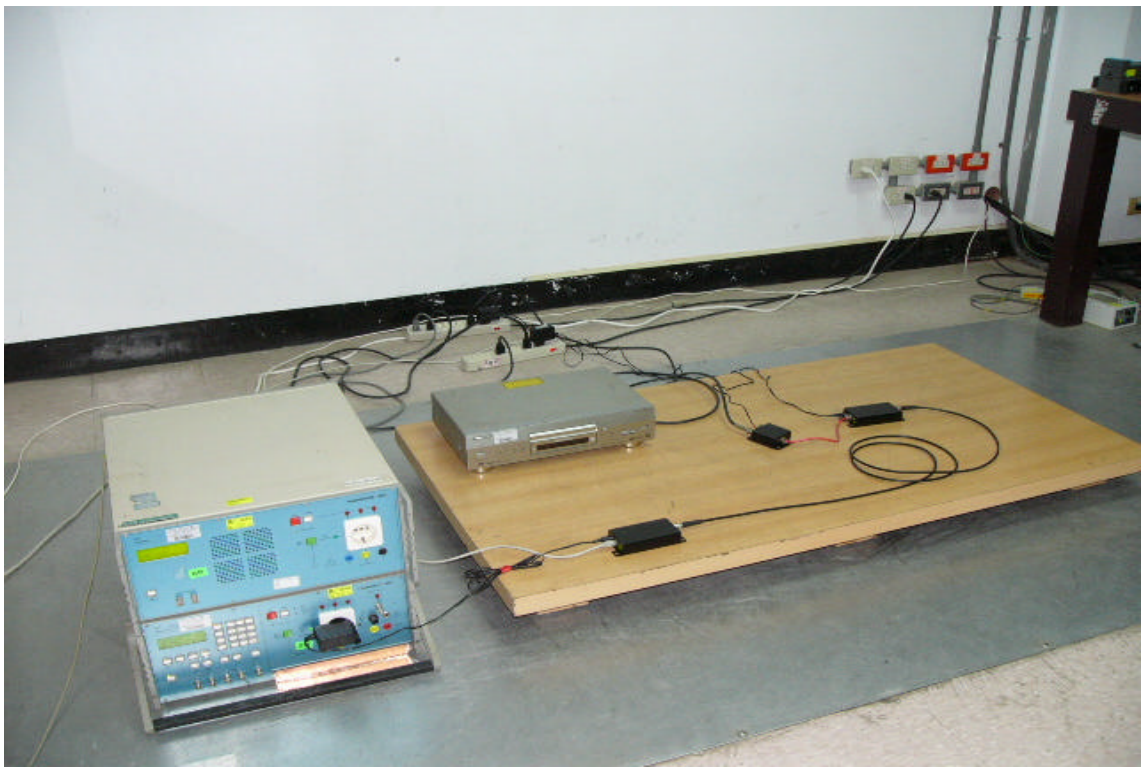
Test Specification	IEC 61000-4-4:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/22
Climatic Condition	Ambient Temperature: 28 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power: 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Pulse : 5 /50ns Burst : 15ms /300ms		Repetition Rate : 5kHz	Test time : 1 min/each condition
\Voltage\Polarity\		1.0 kV	
\Test Point\Mode\Result\		+	-
Power Line	L	A	A
	N	A	A
	L-N	A	A
\Voltage\Polarity\		0.5 kV	
\Test Point\Mode\Result\		+	-
RJ-45 (LAN)		A	A

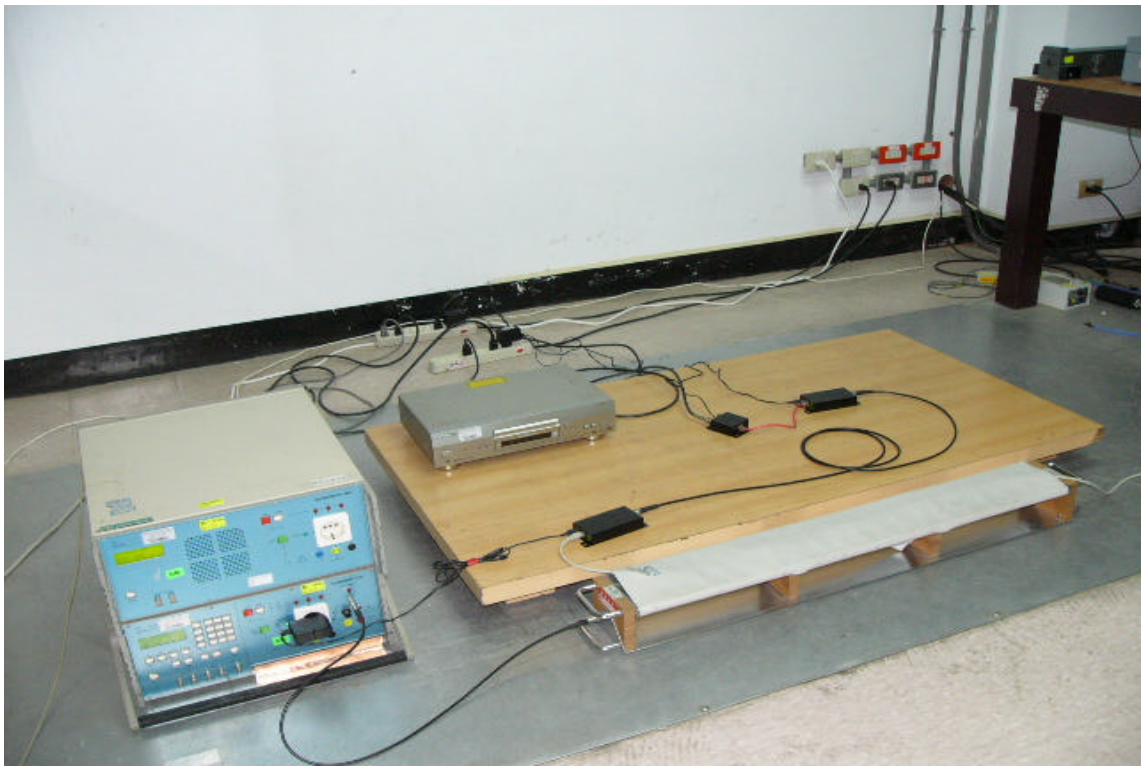
Note : "A" means the EUT function was correct during the test.

4.2.3.2 EFT/Burst Immunity Test Setup Photos

Model: Transmitter / Receiver



RJ-45



4.2.4 Surge Immunity Test

4.2.4.1 Surge Immunity Test Data

Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-5:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/22
Climatic Condition	Ambient Temperature: 28 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power: 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Waveform : 1.2/50μs(8/20μs)		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.

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

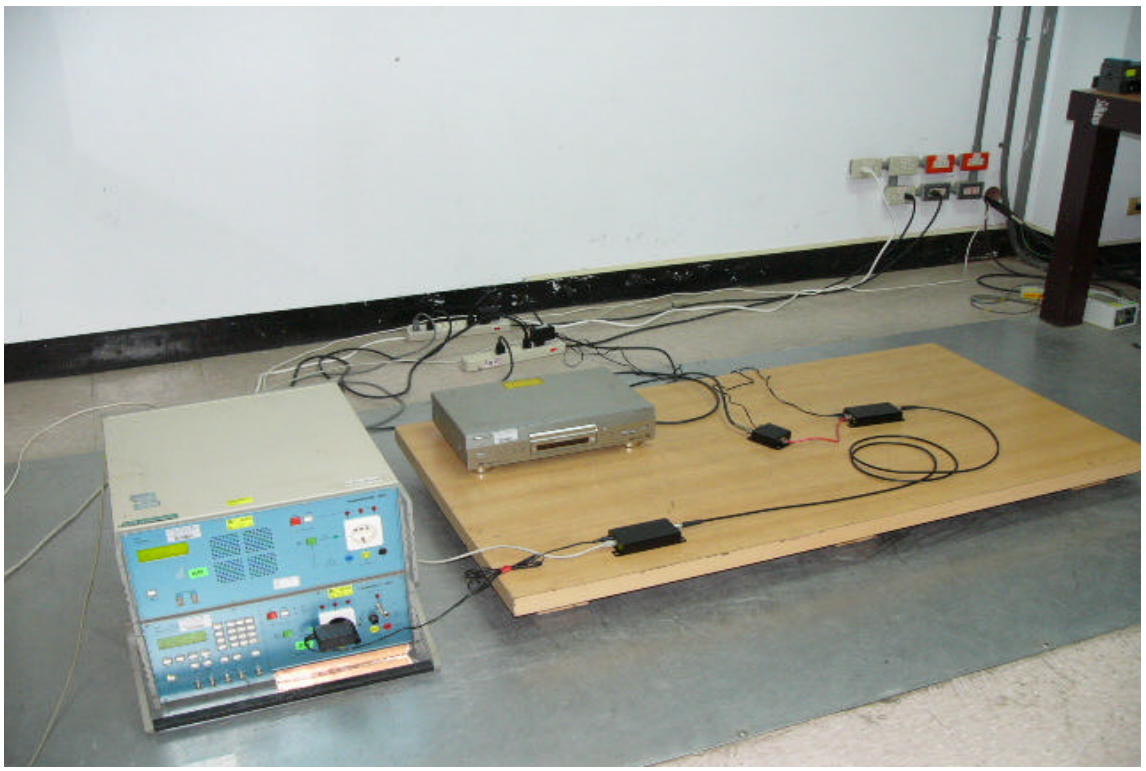
Test Specification	IEC 61000-4-5:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/22
Climatic Condition	Ambient Temperature: 28 °C Relative Humidity: 51 %RH			
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power: 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Waveform : 1.2/50μs(8/20μs)		Repetition rate : 60 sec		Times : 5 time/each condition	
\Phase \Voltage \Mode \Polarity \Result			**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

Model: Transmitter / Receiver



4.2.5 RF Common Mode Immunity Test

4.2.5.1 RF Common Mode Immunity Test Data

Operating Conditions of The EUT : Operation Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-6:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
CS TESTER	FRANKONIA	CIT-10	2008/09/24	2009/09/23
M2+3 CDN-KIT	FRANKONIA	M2+3	2008/09/19	2009/09/18
SCHAFFUER	CS-CLAMP	KEMZ801	2008/09/19	2009/09/18
Climatic Condition	Ambient Temperature: 28 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Frequency Range ：0.15 MHz ~ 80 MHz		Test Level ：3 Vrms		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		M2		A
0.15~80		RJ-45 (LAN) (CDN)		A

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

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

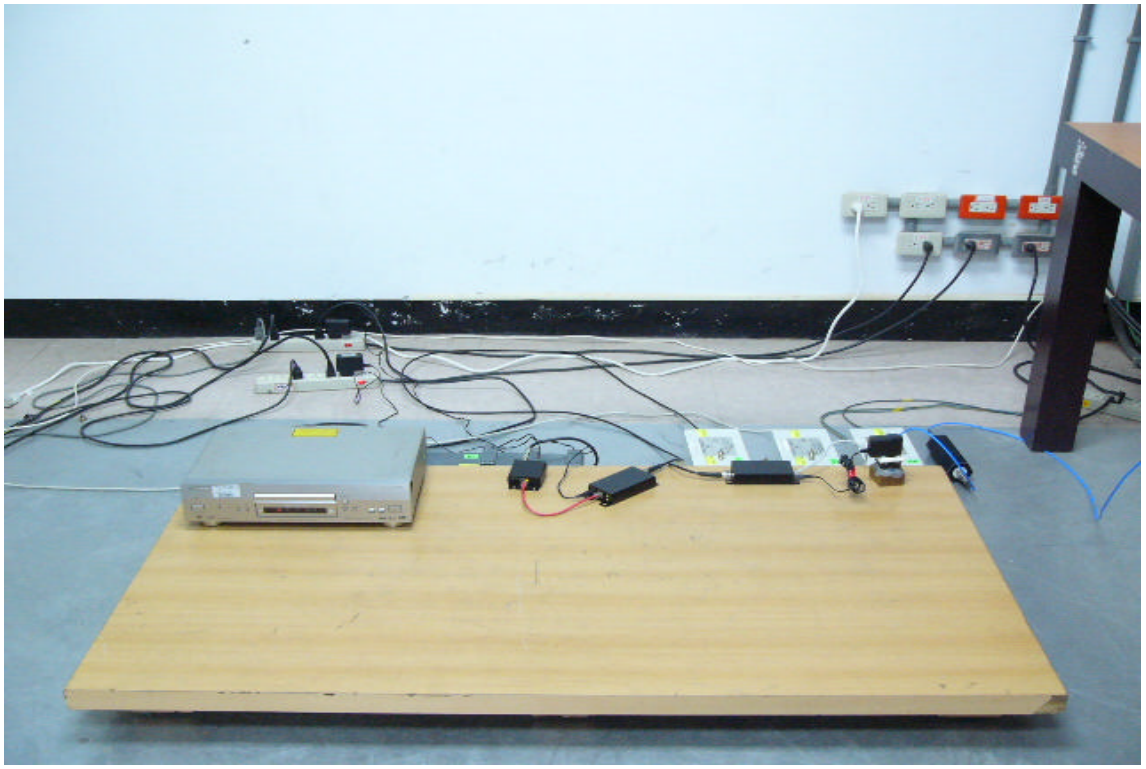
Test Specification	IEC 61000-4-6:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
CS TESTER	FRANKONIA	CIT-10	2008/09/24	2009/09/23
M2+3 CDN-KIT	FRANKONIA	M2+3	2008/09/19	2009/09/18
SCHAFFUER	CS-CLAMP	KEMZ801	2008/09/19	2009/09/18
Climatic Condition	Ambient Temperature: 28 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power : 230 Vac 50 Hz			
Test Set-up	Table-top Equipment			

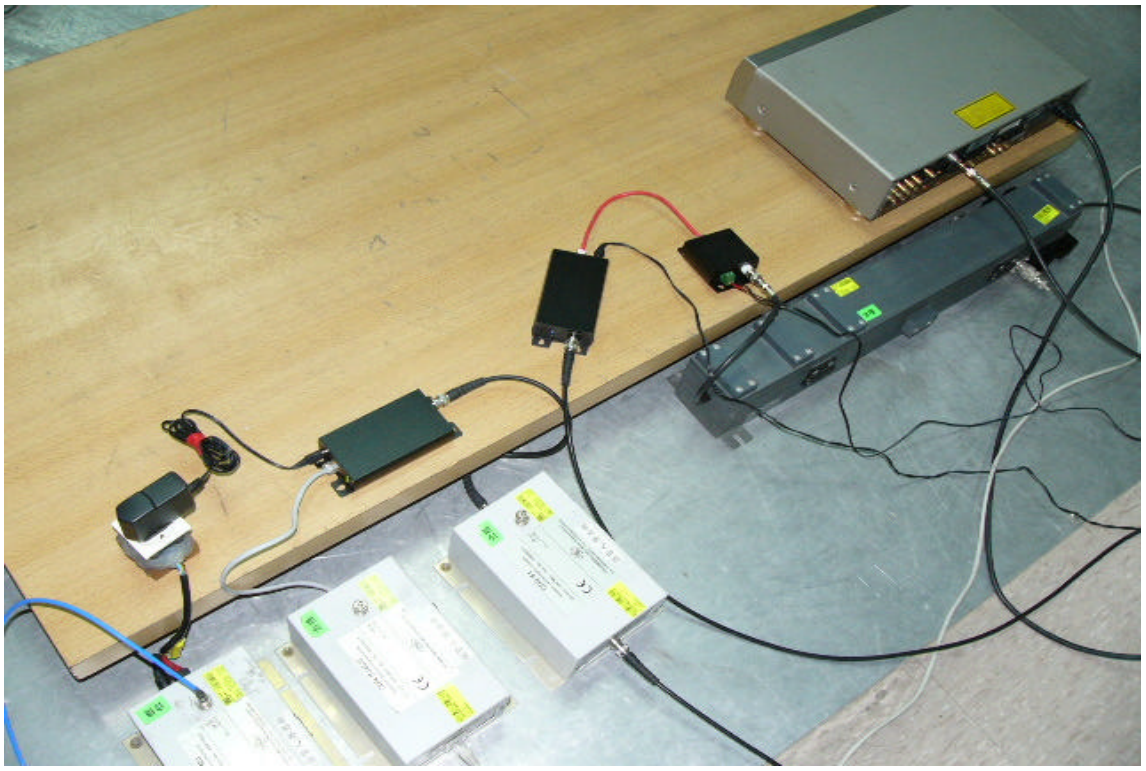
Frequency Range ：0.15 MHz ~ 80 MHz		Test Level ：3 Vrms		Modulation (AM 1kHz 80%)
Sweep Rate	：≤ 1.5×10^{-3} decades/s	Step Size ：≤ 1 % of preceding frequency value		Dwell Time ：2.9 s
Frequency Range (MHz)		Tested Line		Test Result
0.15~80		M2		A
0.15~80		RJ-45 (LAN) (CDN)		A

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

4.2.5.2 RF Common Mode Immunity Test Setup Photos

Model: Transmitter / Receiver





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 Mode

Model: Transmitter Test Date : Jul. 21, 2009

Test Specification	IEC 61000-4-11:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/22
Climatic Condition	Ambient Temperature: 28 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power: 100 Vac 60 Hz ; AC Power: 240 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test mode	Voltage dips	Durations (periods)	Interval(s)	Times	Phase	Result
Voltage interruptions	>95%	250	10	3	0°/180°	A
	>95%	300	10	3	0°/180°	A
Voltage dips in $\%U_T$	60%	0.5	10	3	0°/180°	A
	30%	25	10	3	0°/180°	A
	30%	30	10	3	0°/180°	A

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

Operating Conditions of The EUT : Operation Mode

Model: Receiver Test Date : Jul. 21, 2009

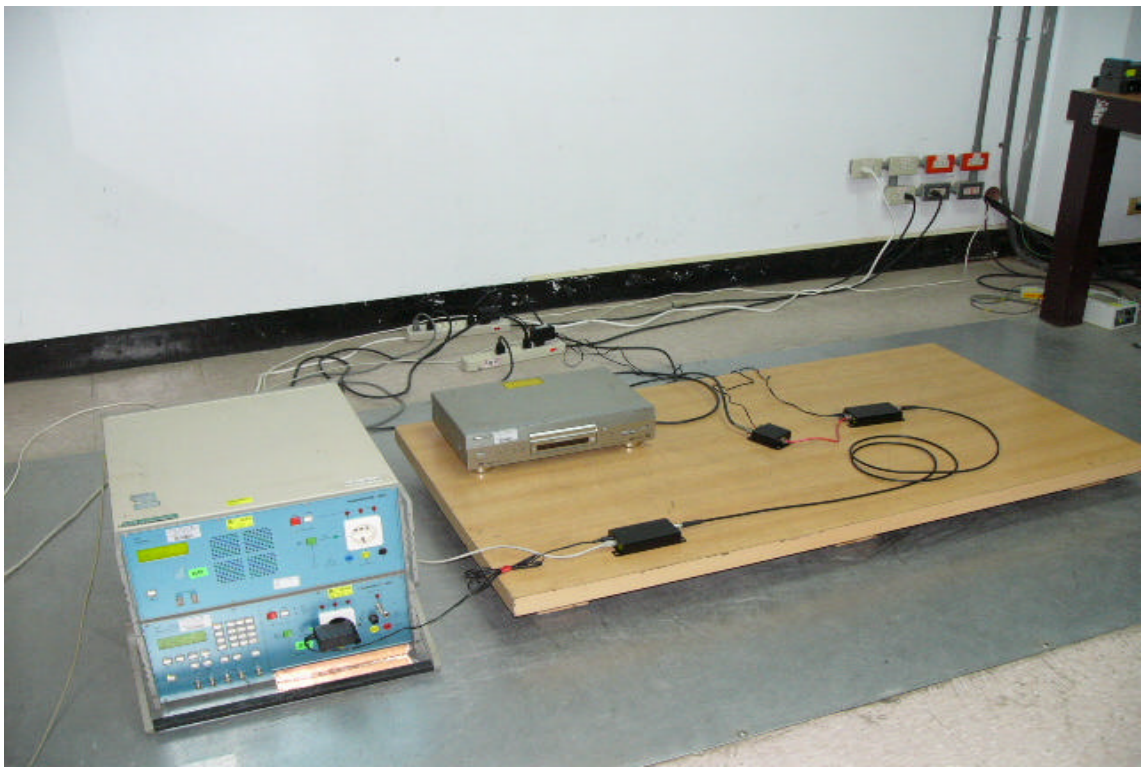
Test Specification	IEC 61000-4-11:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/22
Climatic Condition	Ambient Temperature: 28 °C		Relative Humidity: 51 %RH	
Power Supply System	AC Power: 100 Vac 60 Hz ; AC Power: 240 Vac 50 Hz			
Test Set-up	Table-top Equipment			

Test mode	Voltage dips	Durations (periods)	Interval(s)	Times	Phase	Result
Voltage interruptions	>95%	250	10	3	0°/180°	A
	>95%	300	10	3	0°/180°	A
Voltage dips in $\%U_T$	60%	0.5	10	3	0°/180°	A
	30%	25	10	3	0°/180°	A
	30%	30	10	3	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

Model: Transmitter / Receiver



CONSTRUCTED PHOTOS of EUT

1. Top View of EUT

2. Bottom View of EUT

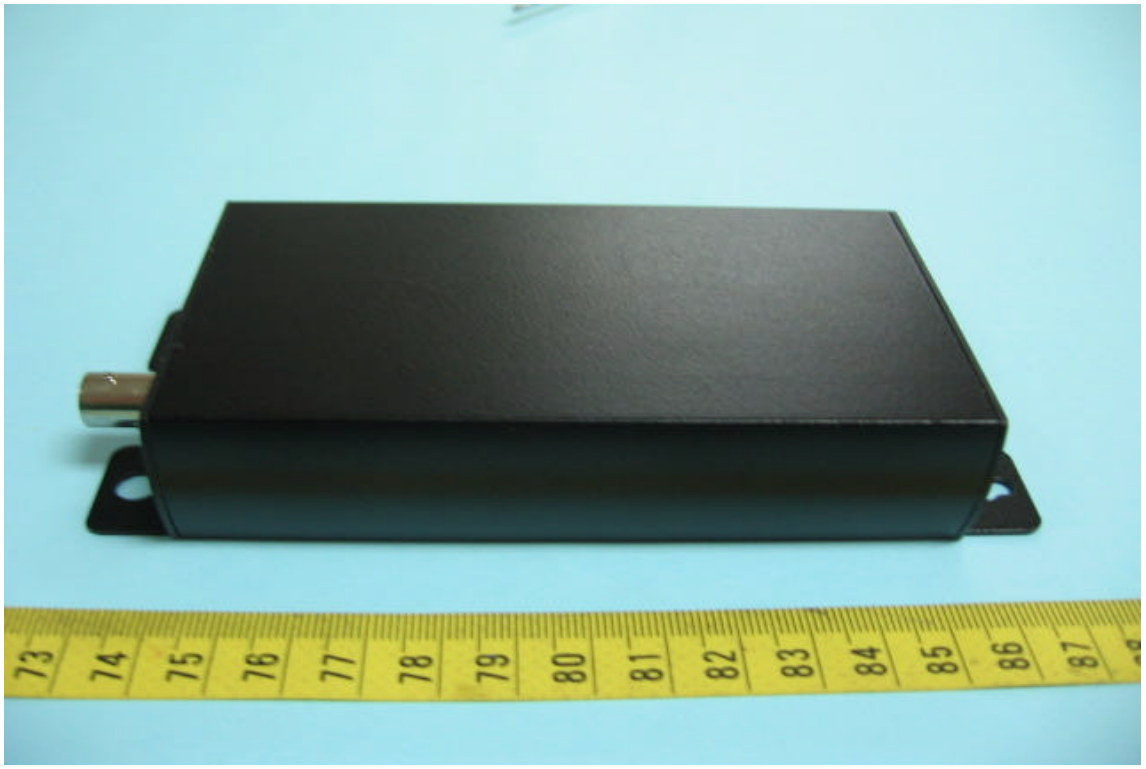
CONSTRUCTED PHOTOS of EUT

3. Front View of EUT

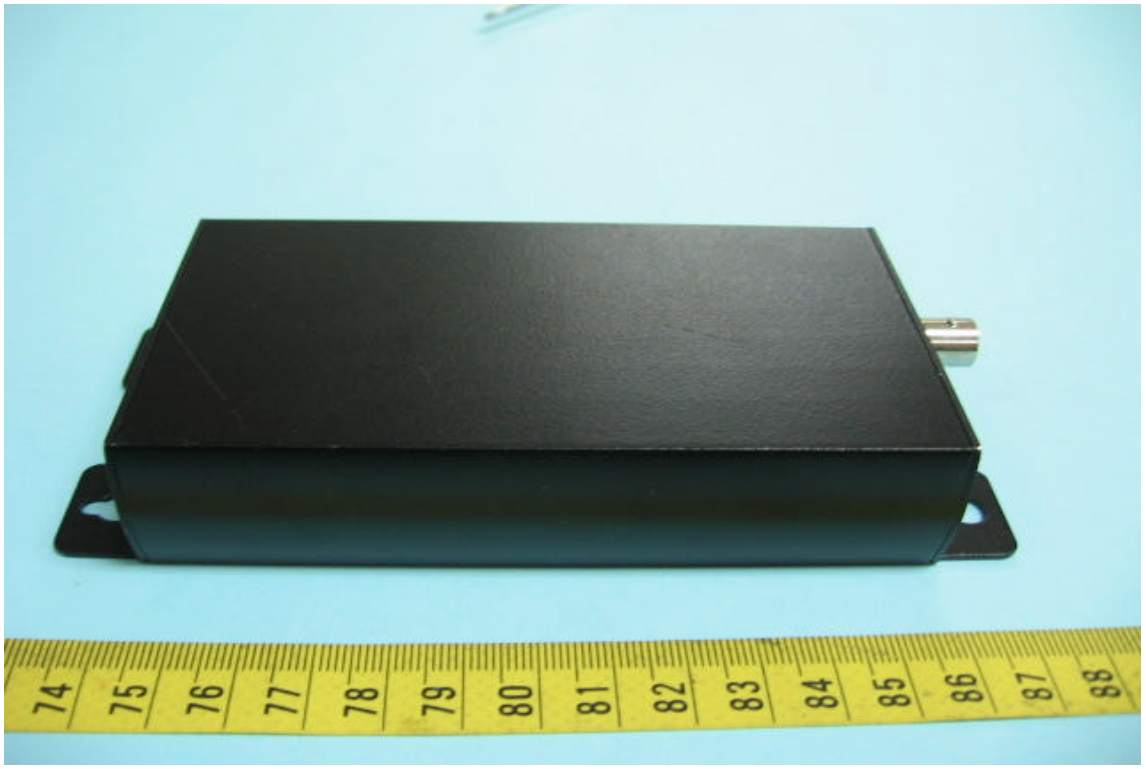
4. Rear View of EUT

CONSTRUCTED PHOTOS of EUT

5. Side View of EUT

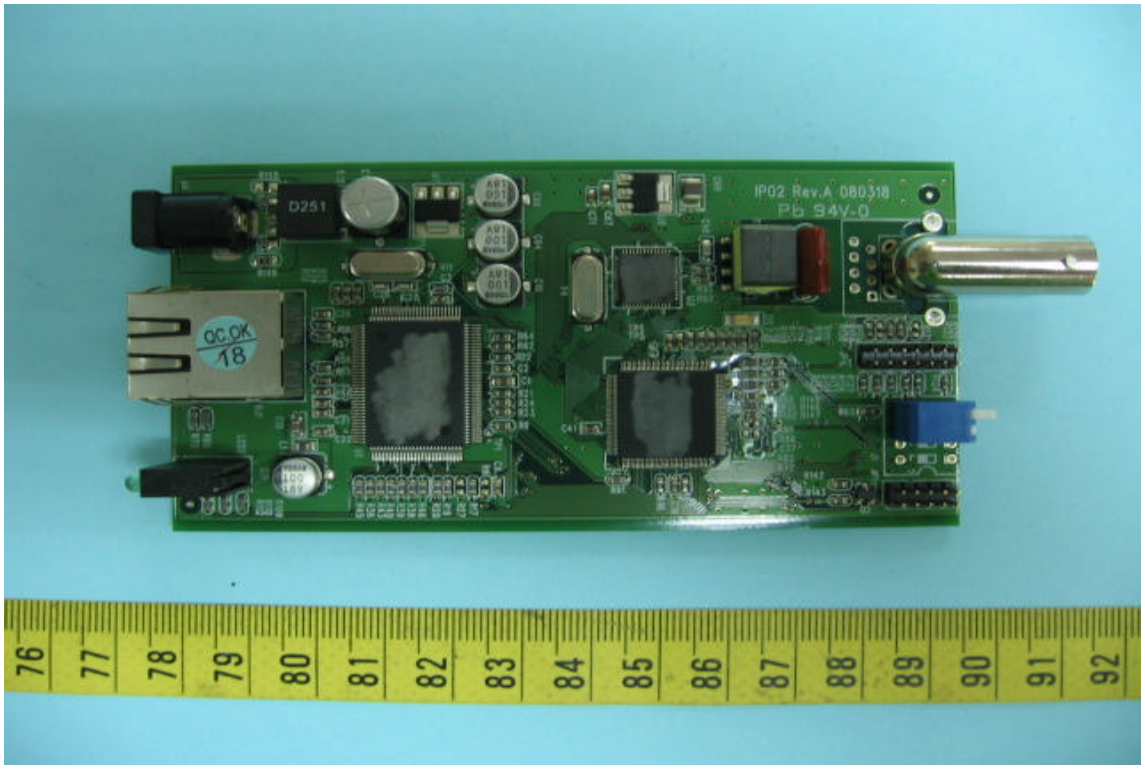


6. Side View of EUT



CONSTRUCTED PHOTOS of EUT

7. Component View of PCB



8. Solder View of PCB