CERTIFICATE

Issued Date: Feb. 08, 2011
Report No.: 10B464R-ITUSP02V02

This is to certify that the following designated product

Product	**: Network Camera**
Trade name	**: VIVOTEK**
Model Number	**: IP8151P**
Company Name	**: VIVOTEK INC.**

This product, which has been issued the test report listed as above in QuieTek Laboratory, is based on a single evaluation of one sample and confirmed to comply with the requirements of the following EMC standard.

EN 55022: 2006+A1: 2007
EN 55024: 1998+A1: 2001+A2: 2003
EN 61000-3-2: 2006+A2: 2009
EN 61000-3-3: 2008

TEST LABORATORY

Vincent Lin / Manager

QuieTek No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL:+886-2-8601-3788 FAX:+886-2-8601-3789 Email:service@quietek.com http://www.quietek.com

Test Report

Product Name : Network Camera

Model No. : IP8151P

Applicant : VIVOTEK INC.

Address : 6F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City, 235, Taiwan, R.O.C.

Date of Receipt : 2010/11/25

Issued Date : 2011/02/08

Report No. : 10B464R-ITCEP11V04

Report Version : V1.0

CE

Declaration of Conformity

We herewith confirm the following designated products to comply with the requirements set out in the Council Directive on the approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive (2004/108/EC) with applicable standards listed below.

Product	:	Network Camera
Trade name	:	VIVOTEK
Model Number	:	IP8151P
Applicable Harmonized Standards under Directive 2004/108/EC	:	EN 55022: 2006+A1: 2007, Class B EN 55024: 1998+A1: 2001+A2: 2003 EN 61000-3-2:2006+A2: 2009 EN 61000-3-3: 2008

Company Name : _____

Company Address : _____

Telephone : _____ Facsimile : _____

Person in responsible for marking this declaration:

_____ _____

Name (Full Name) Title/ Department

_____ _____

Date Legal Signature

Accredited by NVLAP, TAF-CNLA, DNV, TUV, Nemko

Date: Feb. 08, 2011
QTK No.: 10B464R-ITCEP11V04

CE

Statement of Conformity

This statement is to certify that the designated product below.

Product	:	Network Camera
Trade name	:	VIVOTEK
Model Number	:	IP8151P
Company Name	:	VIVOTEK INC.
Applicable Standards	:	EN 55022: 2006+A1: 2007, Class B
		EN 55024: 1998+A1: 2001+A2: 2003
		EN 61000-3-2:2006+A2: 2009
		EN 61000-3-3:2008

One sample of the designated product has been tested and evaluated in our laboratory to find in compliance with the applicable standards above. The issued test report(s) show(s) it in detail.

Report Number : 10B464R-ITCEP11V04

TEST LABORATORY

Vincent Lin / Manager

The verification is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. Logo.

Quietek Corporation / No.5-22, Ruei-Shu Valley, Ruei-Ping Tsuen Lin Kuo Shiang, Taipei, 244 Taiwan, R.O.C.
Tel: 866-2-8601-3788, Fax: +886-2-8601-3789, E-mail: service@quietek.com

Test Report Certification

Issued Date : 2011/02/08
Report No. : 10B464R-ITCEP11V04

QuieTek

Product Name	:	Network Camera
Applicant	:	VIVOTEK INC.
Address	:	6F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City, 235, Taiwan, R.O.C.
Manufacturer	:	VIVOTEK INC.
Model No.	:	IP8151P
EUT Rated Voltage	:	AC 24V
EUT Test Voltage	:	AC 230 V / 50 Hz
Trade Name	:	VIVOTEK
Applicable Standard	:	EN 55022: 2006+A1: 2007, Class B EN 55024: 1998+A1: 2001+A2: 2003 EN 61000-3-2:2006+A2: 2009 EN 61000-3-3:2008 AS/NZS CISPR 22: 2009
Test Result	:	Complied
Performed Location	:	Quietek Corporation (Linkou Laboratory) No. 5-22, Rueishu Keng, Linkou Dist., New Taipei City 24451, Taiwan. R.O.C. TEL:+866-2-8601-3788 / FAX:+886-2-8601-3789

Documented By : Joanne Lin
(Adm. Specialist / Joanne Lin)

Reviewed By : kevin ker
(Engineer / Kevin ker)

Approved By :
(Manager / Vincent Lin)

Laboratory Information

We , **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scopes:

Taiwan R.O.C.	**:**	**BSMI, NCC, TAF**
Germany	**:**	**TUV Rheinland**
Norway	**:**	**Nemko, DNV**
USA	**:**	**FCC, NVLAP**
Japan	**:**	**VCCI**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

NVLAP Lab Code : 200347-0

Testing Laboratory 1313

LinKou Testing Laboratory :
No. 5-22, Rueishu Keng, Linkou Dist., New Taipei City 24451, Taiwan. R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

NVLAP Lab Code: 200533-0

Testing Laboratory 0914

Suzhou (China) Testing Laboratory :
No. 99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., Suzhou,China.
TEL : +86-512-6251-5088 / FAX : +86-512-6251-5098 E-Mail : service@quietek.com

NVLAP Lab Code : 200743-0

Testing Laboratory 1596

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1. General Information

1.1. EUT Description

Product Name	Network Camera
Trade Name	VIVOTEK
Model No.	IP8151P

Component	
Power Adapter	MFR: ENG, M/N: 3A-183WP12 Input: AC 100-240V, 50-60Hz, 0.6A Output: DC 12V, 1.5A Cable Out: Non-Shielded, 1.6m

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre-Test Mode	
Mode 1: Adapter Mode Mode 2: AC 24V Mode Mode 3: PoE Mode	
Final Test Mode	
Emission	Mode 1: Adapter Mode Mode 2: AC 24V Mode Mode 3: PoE Mode
Immunity	Mode 1: Adapter Mode Mode 2: AC 24V Mode Mode 3: PoE Mode

1.3. Tested System Details

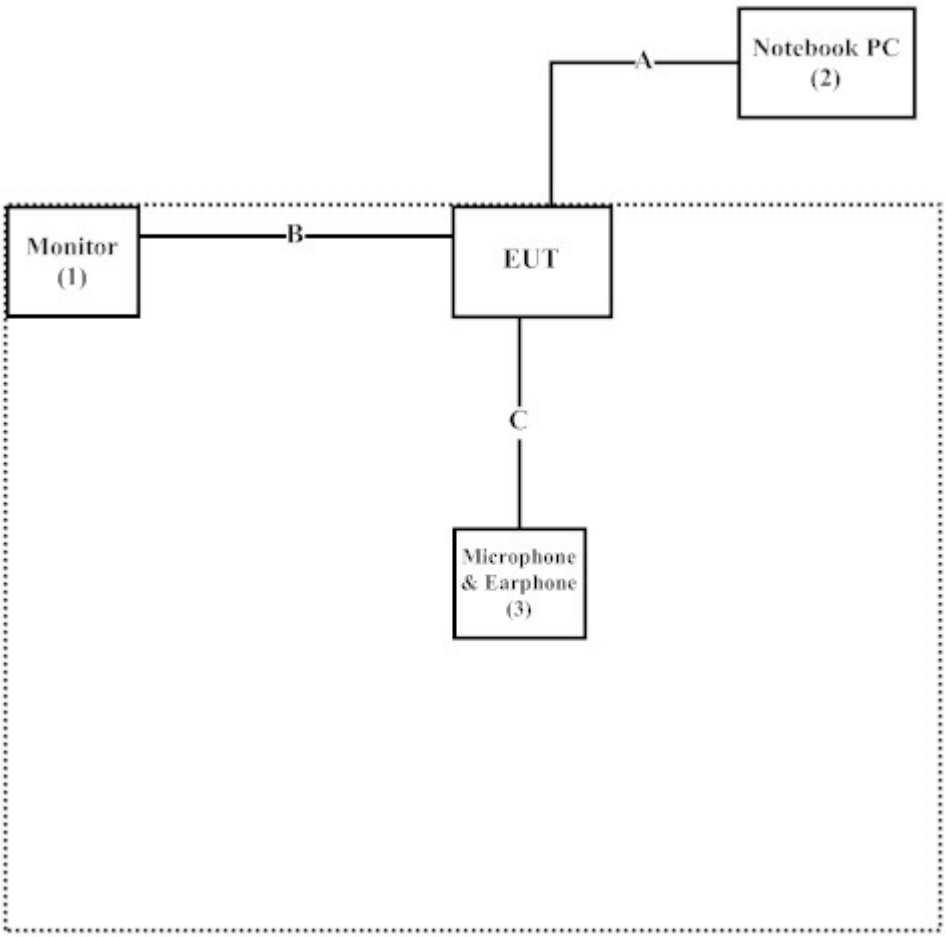
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Test Mode		Mode 1 & Mode 2			
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Monitor (EMI)	SONY	PVM-14M2U	2105742	Non-Shielded, 1.8m
	Monitor (EMS)	SONY	LMPV1410	N/A	Non-Shielded, 1.8m
2	Notebook PC	DELL	D630	00144-023-351-283	Non-Shielded, 1.8m
3	Microphone & Earphone	Ergotech	ET-E201	N/A	N/A

Test Mode		Mode 3			
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Monitor (EMI)	SONY	PVM-14M2U	2105742	Non-Shielded, 1.8m
	Monitor (EMS)	SONY	LMPV1410	N/A	Non-Shielded, 1.8m
2	Notebook PC	DELL	D630	00144-023-351-283	Non-Shielded, 1.8m
3	PoE	LINKSYS	WAPPoE12	N/A	Non-Shielded, 1.8m
4	Microphone & Earphone	Ergotech	ET-E201	N/A	N/A

1.4. Configuration of Tested System

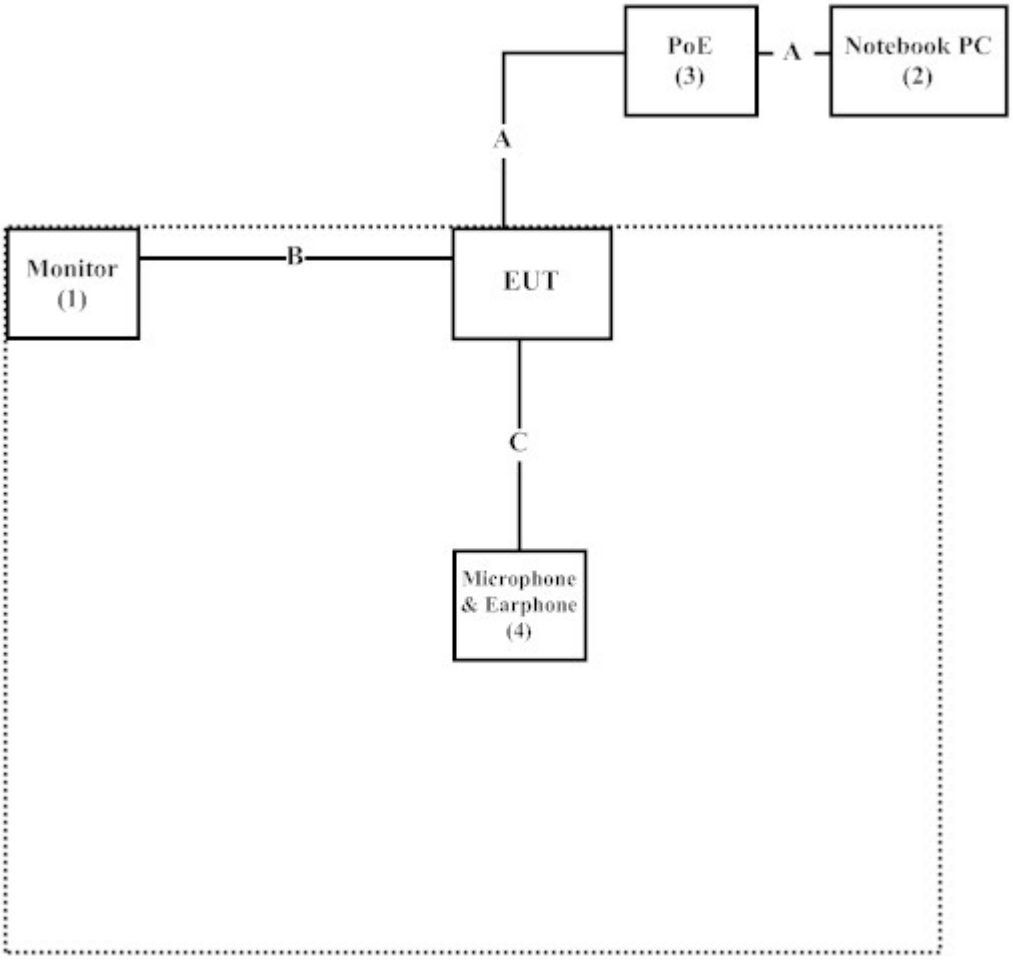
Test Mode	Mode 1 & Mode 2
Connection Diagram	



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 6m
B	Coaxial Cable	Shielded, 6m
C	Microphone & Earphone Cable	Non-Shielded, 1.6m

Test Mode	Mode 3

Connection Diagram



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 6m, two PCS.
B	Coaxial Cable	Shielded, 6m
C	Microphone & Earphone Cable	Non-Shielded, 1.6m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.4.
2	Turn on the power of all equipment.
3	The EUT will start to operate and display the video figure from the signal source.
4	The EUT will display “video figure” on monitor.
5	Repeat the above procedure (3) to (4).

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

Emission			
Performed Item	Normative References	Test Performed	Deviation
Conducted Emission	EN 55022: 2006+A1: 2007 AS/NZS CISPR 22: 2009	Yes	No
Impedance Stabilization Network	EN 55022: 2006+A1: 2007 AS/NZS CISPR 22: 2009	Yes	No
Radiated Emission	EN 55022: 2006+A1: 2007 AS/NZS CISPR 22: 2009	Yes	No
Power Harmonics	EN 61000-3-2:2006+A2: 2009	Yes	No
Voltage Fluctuation and Flicker	EN 61000-3-3:2008	Yes	No

Immunity			
Performed Item	Normative References	Test Performed	Deviation
Electrostatic Discharge	IEC 61000-4-2: 2008	Yes	No
Radiated susceptibility	IEC 61000-4-3: 2008	Yes	No
Electrical fast transient/burst	IEC 61000-4-4: 2004	Yes	No
Surge	IEC 61000-4-5: 2005	Yes	No
Conducted susceptibility	IEC 61000-4-6: 2008	Yes	No
Power frequency magnetic field	IEC 61000-4-8: 2009	Yes	No
Voltage dips and interruption	IEC 61000-4-11: 2004	Yes	No

2.2. List of Test Equipment

Conducted Emission / SR1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	100366	2010/10/29
LISN	R&S	ENV4200	833209/007	2010/08/14
LISN	R&S	ENV216	100085	2010/02/17
Pulse Limiter	R&S	ESH3-Z2	357.88.10.52	2010/09/10

Impedance Stabilization Network / SR1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Capacitive Voltage Probe	Schaffner	CVP2200A	18331	2010/11/16
EMI Test Receiver	R&S	ESCS 30	100366	2010/10/29
LISN	R&S	ENV216	100085	2010/02/17
LISN	R&S	ENV4200	833209/007	2010/08/14
Pulse Limiter	R&S	ESH3-Z2	357.88.10.52	2010/09/10
RF Current Probe	FCC	F-65 10KHz~1GHz	198	2010/11/13
BALANCED TELECOM ISN	FCC	FCC-TLISN-T2-02	20316	2010/11/22
BALANCED TELECOM ISN	FCC	FCC-TLISN-T4-02	20317	2010/11/22
BALANCED TELECOM ISN	FCC	FCC-TLISN-T8-02	20319	2010/11/22

Radiated Emission / Site1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2918	2010/08/01
Broadband Horn Antenna	Schwarzbeck	BBHA9170	209	2010/07/25
EMI Test Receiver	R&S	ESCS 30	100121	2010/11/25
Horn Antenna	Schwarzbeck	BBHA9120D	305	2010/08/26
Pre-Amplifier	QTK	N/A	N/A	2010/08/01
Spectrum Analyzer	Advantest	R3162	100803482	2010/11/10

Radiated Emission / 9x6x6_Chamber

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Spectrum Analyzer (9K-26.5GHz)	Agilent	E4408B	MY45102743	2010/08/12
Horn Antenna	Schwarzbeck	9120D	576	2010/10/21
Pre-Amplifier	QuieTek	AP-180C	CHM/071920	2010/08/01

Power Harmonics / SR3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
AC Power Source(Harmonic)	Schaffner	NSG 1007	HK54148	2010/08/11
IEC1000-4-X Analyzer(Flicker)	Schaffner	CCN 1000-1	X7 1887	2010/08/11

Voltage Fluctuation and Flicker / SR3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
AC Power Source(Harmonic)	Schaffner	NSG 1007	HK54148	2010/08/11
IEC1000-4-X Analyzer(Flicker)	Schaffner	CCN 1000-1	X7 1887	2010/08/11

Electrostatic Discharge / SR6

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
ESD Simulator System	Noiseken	TC-815R	ESS0929097	2010/07/06
Horizontal Coupling Plane(HCP)	QuieTek	HCP AL50	N/A	N/A
Vertical Coupling Plane(VCP)	QuieTek	VCP AL50	N/A	N/A

Radiated susceptibility / CB5

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
AF-BOX	R&S	AF-BOX ACCUST	100007	N/A
Audio Analyzer	R&S	UPL 16	100137	2010/04/15
Biconilog Antenna	EMCO	3149	00071675	N/A
Directional Coupler	A&R	DC 6180	22735	N/A
Dual Microphone Supply	B&K	5935	2426784	2010/04/16
Mouth Simulator	B&K	4227	2439692	2010/04/16
Power Amplifier	A&R	30S1G3	309453	N/A
Power Amplifier	A&R	100W10000M7	A285000010	N/A
Power Amplifier	SCHAFFNER	CBA9413B	4020	N/A
Power Amplifier	AR	75A250A	0325371	N/A
Power Meter	R&S	NRVD(P.M)	100219	2010/04/16
Pre-Amplifier	A&R	150A220	23067	N/A
Probe Microphone	B&K	4182	2278070	2010/04/16
Signal Generator	R&S	SML03	103330	2010/09/08

Electrical fast transient/burst / SR6

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMC immunity system	Thermo	EMCPRO PLUS	0411225	2010/03/10

Surge / SR6

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMC immunity system	Thermo	EMCPRO PLUS	0411225	2010/03/10

Conducted susceptibility / SR6

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Schaffner NSG 2070 RF-Generator	Schaffner	N/A	N/A	2010/04/21

Power frequency magnetic field / SR3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Induction Coil Interface	Schaffner	INA 2141	6002	N/A
Magnetic Loop Coil	Schaffner	INA 702	160	N/A
Triaxial ELF Magnetic Field Meter	F.B.BELL	4090	114135	2010/03/27

Voltage dips and interruption / SR6

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMC immunity system	Thermo	EMCPRO PLUS	0411225	2010/03/10

Schaffner NSG 2070 RF-Generator				
Instrument	Manufacturer	Type No.	Serial No	Cal. Date
CDN	Schaffner	CAL U100A	20405	N/A
CDN	Schaffner	TRA U150	20454	N/A
CDN M016S	Schaffner	CAL U100A	20410	N/A
CDN M016S	Schaffner	TRA U150	21167	N/A
CDN T002	Schaffner	CAL U100	20491	N/A
CDN T002	Schaffner	TRA U150	21169	N/A
CDN T400	Schaffner	CAL U100	17735	N/A
CDN T400	Schaffner	TRA U150	21166	N/A
Coupling Decoupling Network	Schaffner	CDN M016S	20823	2010/04/02
Coupling Decoupling Network	Schaffner	CDN T002	19018	2010/04/02
Coupling Decoupling Network	Schaffner	CDN T400	21226	2010/04/02
EM-CLAMP	Schaffner	KEMZ 801	21024	2010/04/02

2.3. Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.26 dB.

Impedance Stabilization Network

The measurement uncertainty is evaluated as ± 2.26 dB.

Radiated Emission

The measurement uncertainty is evaluated as ± 3.19 dB.

Electrostatic Discharge

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in ESD testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant ESD standards. The immunity test signal from the ESD system meet the required specifications in IEC 61000-4-2 through the calibration report with the calibrated uncertainty for the waveform of voltage and timing as being 1.0 % and 0.1%.

Radiated susceptibility

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in RS testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant RS standards. The immunity test signal from the RS system meet the required specifications in IEC 61000-4-3 through the calibration for the uniform field strength and monitoring for the test level with the uncertainty evaluation report for the electrical filed strength as being 3.57 dB.

Electrical fast transient/burst

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in EFT/Burst testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant EFT/Burst standards. The immunity test signal from the EFT/Burst system meet the required specifications in IEC 61000-4-4 through the calibration report with the calibrated uncertainty for the waveform of voltage, frequency and timing as being 4 %, and 2.5%.

Surge

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in Surge testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant Surge standards. The immunity test signal from the Surge system meet the required specifications in IEC 61000-4-5 through the calibration report with the calibrated uncertainty for the waveform of voltage and timing as being 3.5 % and 0.1%.

Conducted susceptibility

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in CS testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant CS standards. The immunity test signal from the CS system meet the required specifications in IEC 61000-4-6 through the calibration for unmodulated signal and monitoring for the test level with the uncertainty evaluation report for the injected modulated signal level through CDN and EM Clamp/Direct Injection as being 2.0 dB and 2.61 dB.

Power frequency magnetic field

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in PFM testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant PFM standards. The immunity test signal from the PFM system meet the required specifications in IEC 61000-4-8 through the calibration report with the calibrated uncertainty for the Gauss Meter to verify the output level of magnetic field strength as being 2.0 %.

Voltage dips and interruption

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in DIP testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant DIP standards. The immunity test signal from the DIP system meet the required specifications in IEC 61000-4-11 through the calibration report with the calibrated uncertainty for the waveform of voltage and timing as being 3.5 % and 0.1%.

2.4. Test Environment

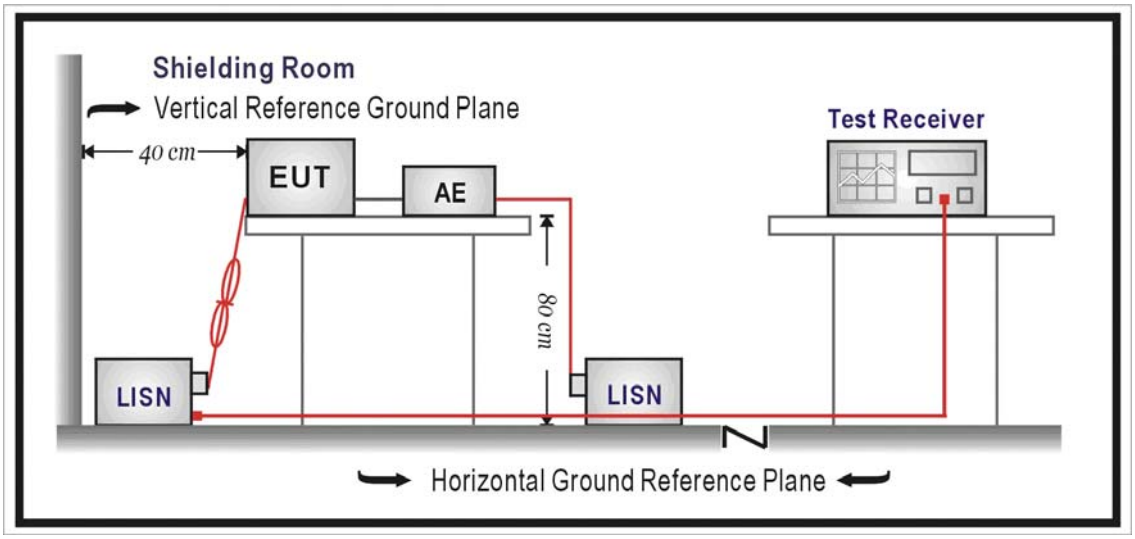
Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Impedance Stabilization Network	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Radiated Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Electrostatic Discharge	Temperature (°C)	15-35	20
	Humidity (%RH)	30-60	50
	Barometric pressure (mbar)	860-1060	950-1000
Radiated susceptibility	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Electrical fast transient/burst	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Surge	Temperature (°C)	15-35	20
	Humidity (%RH)	10-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Conducted susceptibility	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Power frequency magnetic field	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Voltage dips and interruption	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission (Main Terminals)

3.1. Test Specification

According to EMC Standard : EN 55022 and AS/NZS CISPR 22

3.2. Test Setup



3.3. Limit

Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

3.4. Test Procedure

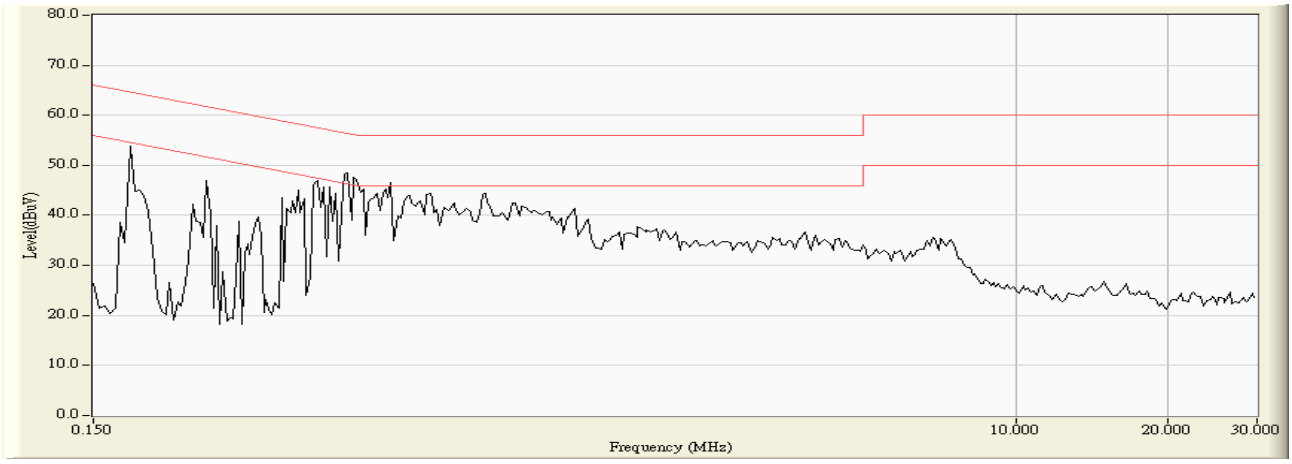
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.
(Please refers to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Deviation from Test Standard

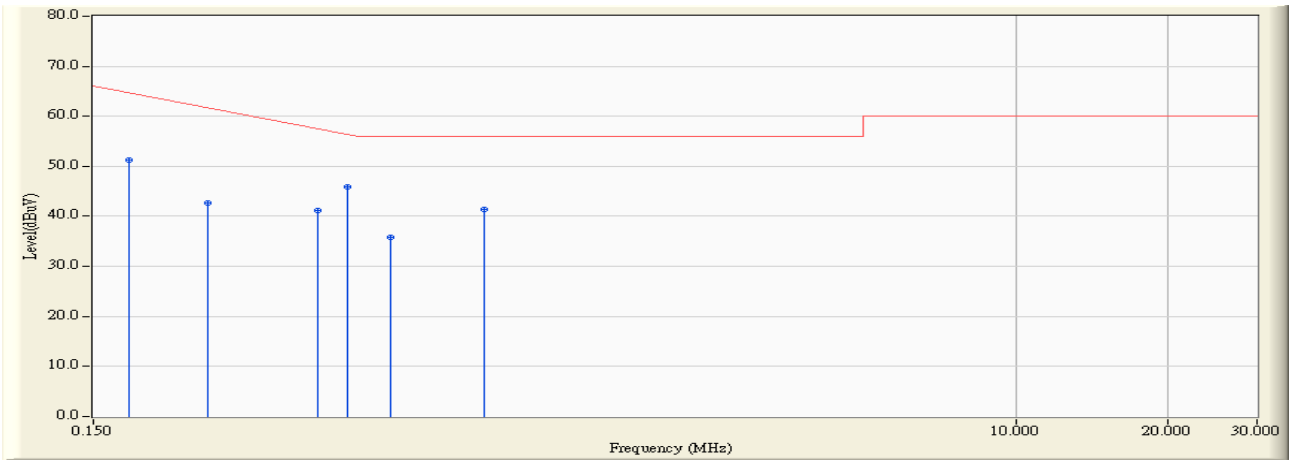
No deviation.

3.6. Test Result

Site : SR_1	**Time : 2011/01/22 - 00:41**
Limit : CISPR_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ENV_216_L1 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1**



Site : SR_1	**Time : 2011/01/22 - 00:42**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_L1 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1**

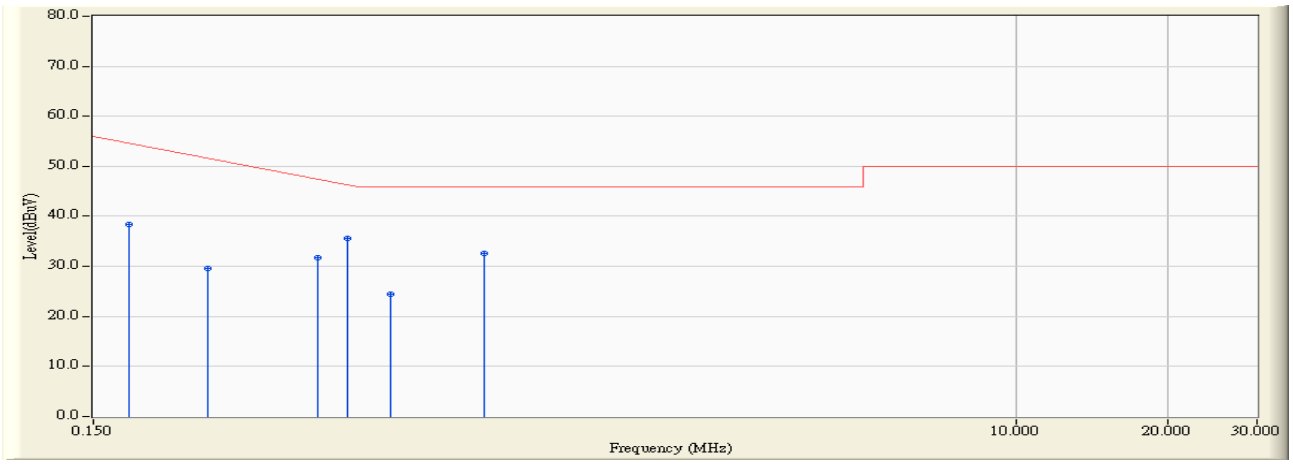


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.177	9.790	41.530	51.320	-13.909	65.229	QUASIPEAK
2		0.252	9.790	32.980	42.770	-20.316	63.086	QUASIPEAK
3		0.416	9.790	31.370	41.160	-17.240	58.400	QUASIPEAK
4	*	0.478	9.790	36.210	46.000	-10.629	56.629	QUASIPEAK
5		0.580	9.790	26.060	35.850	-20.150	56.000	QUASIPEAK
6		0.892	9.800	31.640	41.440	-14.560	56.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 00:42**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_L1 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1**

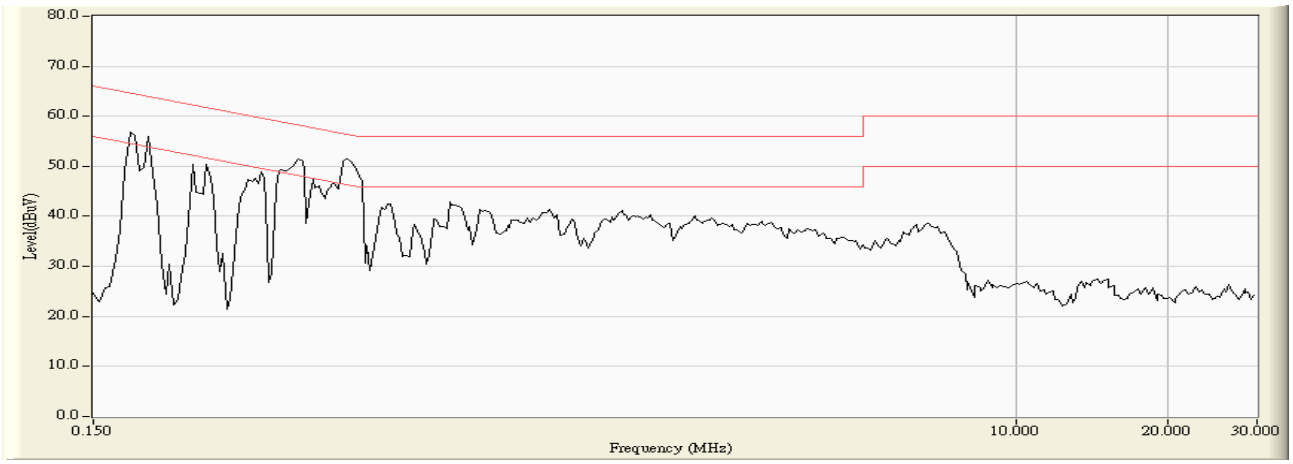


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.177	9.790	28.570	38.360	-16.869	55.229	AVERAGE
2		0.252	9.790	19.880	29.670	-23.416	53.086	AVERAGE
3		0.416	9.790	21.900	31.690	-16.710	48.400	AVERAGE
4	*	0.478	9.790	25.810	35.600	-11.029	46.629	AVERAGE
5		0.580	9.790	14.560	24.350	-21.650	46.000	AVERAGE
6		0.892	9.800	22.880	32.680	-13.320	46.000	AVERAGE

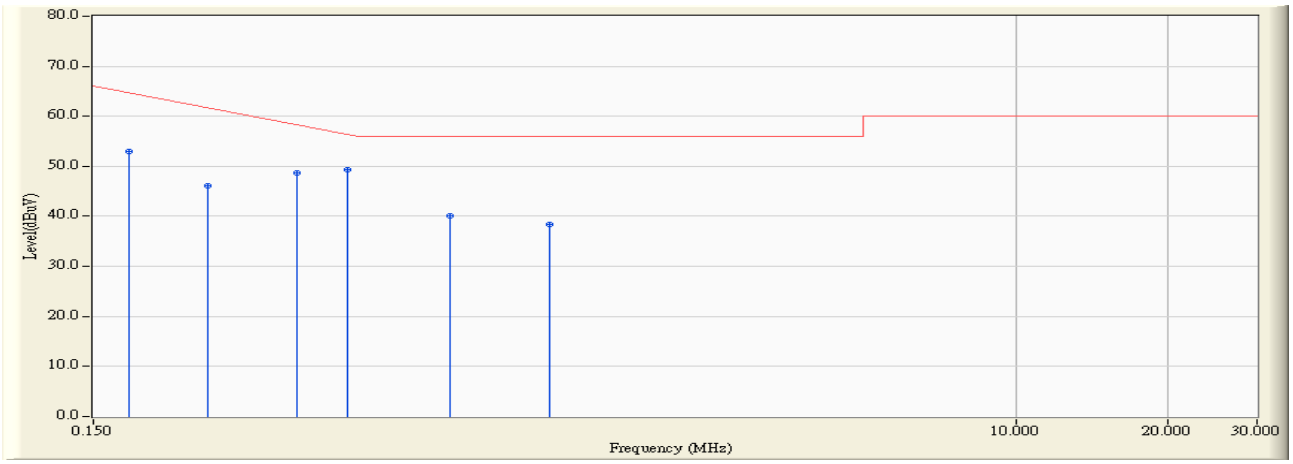
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 00:45**
Limit : CISPR_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ENV_216_N - Line2**
Power : AC 230V/50Hz	**Note : Mode 1**



Site : SR_1	**Time : 2011/01/22 - 00:46**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_N - Line2**
Power : AC 230V/50Hz	**Note : Mode 1**

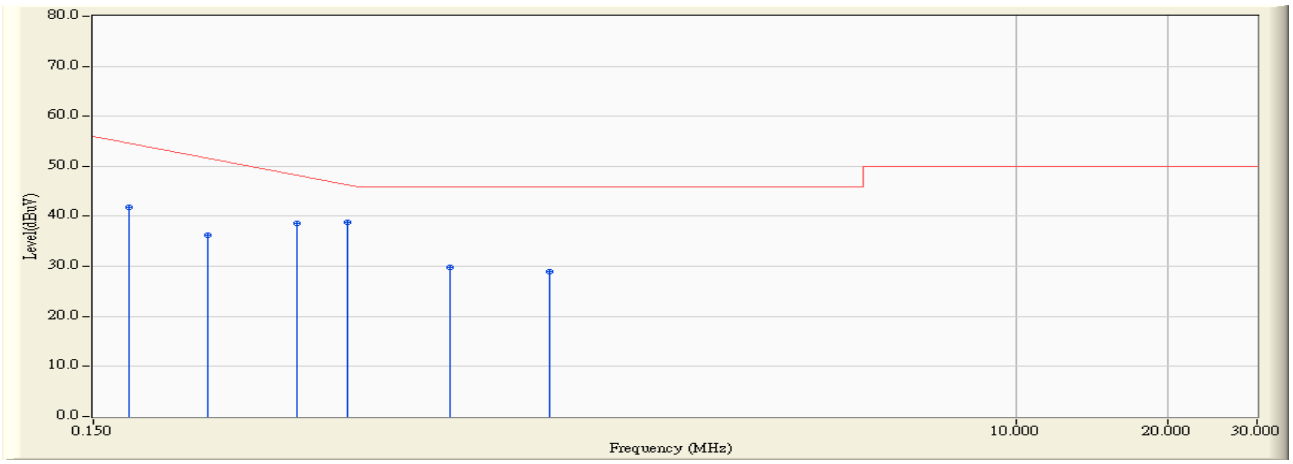


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.177	9.780	43.230	53.010	-12.219	65.229	QUASIPEAK
2		0.252	9.780	36.250	46.030	-17.056	63.086	QUASIPEAK
3		0.380	9.790	38.930	48.720	-10.709	59.429	QUASIPEAK
4	*	0.478	9.790	39.640	49.430	-7.199	56.629	QUASIPEAK
5		0.763	9.790	30.280	40.070	-15.930	56.000	QUASIPEAK
6		1.197	9.790	28.560	38.350	-17.650	56.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 00:46**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_N - Line2**
Power : AC 230V/50Hz	**Note : Mode 1**

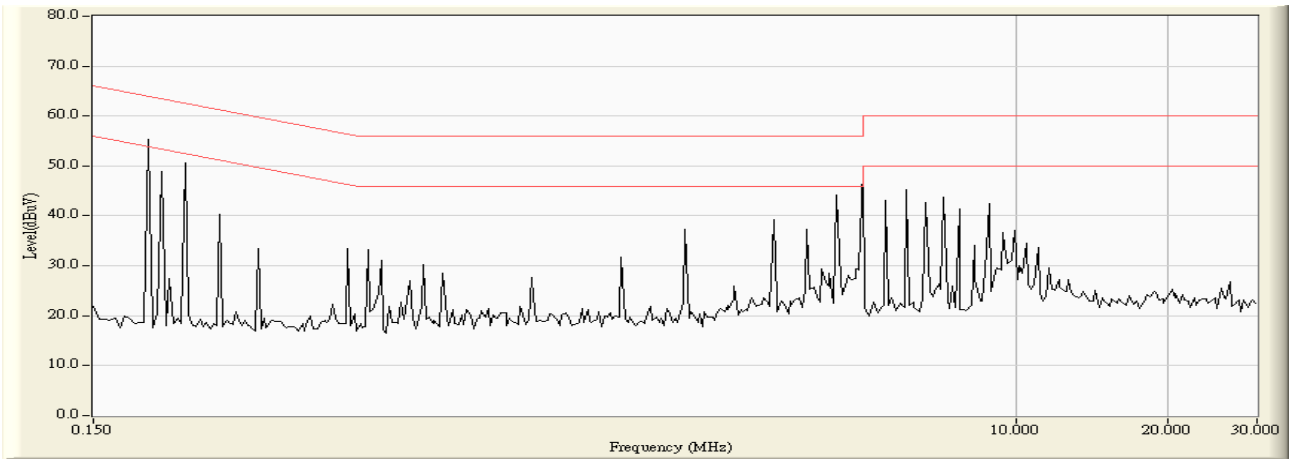


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.177	9.780	32.120	41.900	-13.329	55.229	AVERAGE
2		0.252	9.780	26.570	36.350	-16.736	53.086	AVERAGE
3		0.380	9.790	28.830	38.620	-10.809	49.429	AVERAGE
4	*	0.478	9.790	29.020	38.810	-7.819	46.629	AVERAGE
5		0.763	9.790	19.960	29.750	-16.250	46.000	AVERAGE
6		1.197	9.790	19.100	28.890	-17.110	46.000	AVERAGE

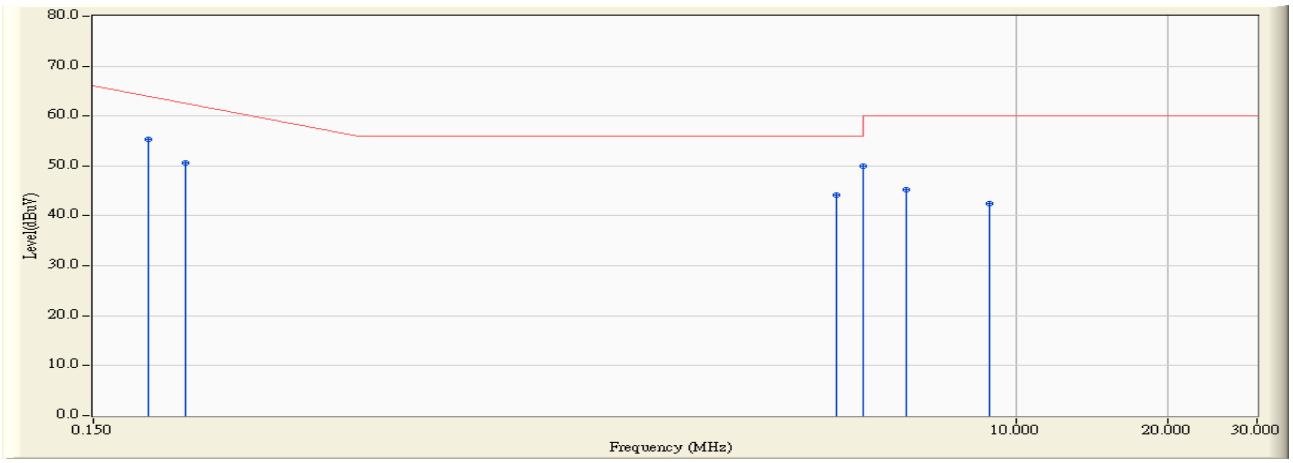
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:00**
Limit : CISPR_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ENV_216_L1 - Line1**
Power : AC 24V	**Note : Mode 2**



Site : SR1	**Time : 2011/02/08 - 16:00**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_L1 - Line1**
Power : AC 24V	**Note : Mode 2**

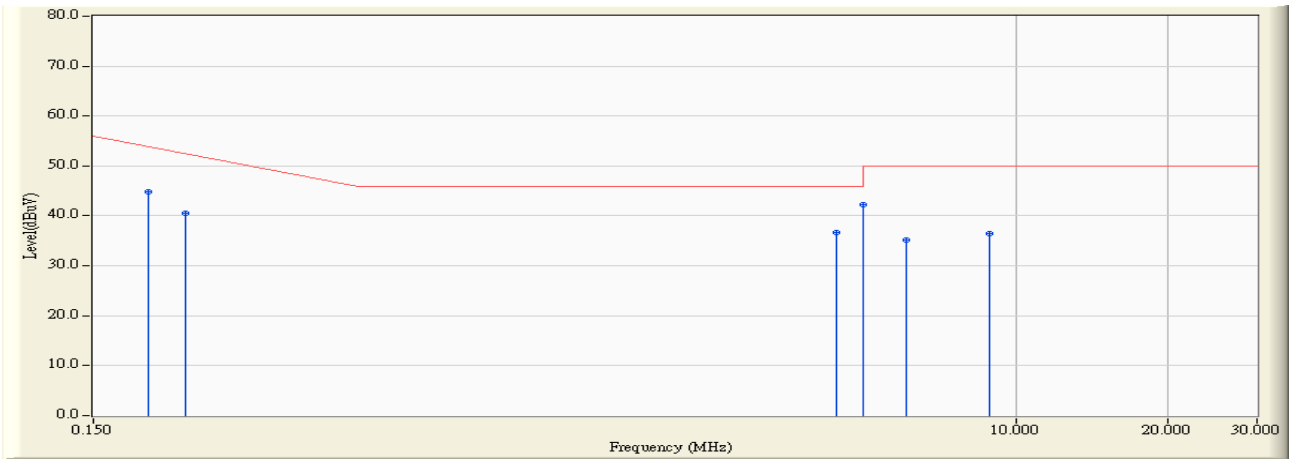


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	9.790	45.558	55.348	-9.423	64.771	QUASIPEAK
2		0.228	9.790	40.875	50.665	-13.106	63.771	QUASIPEAK
3		4.423	9.820	34.388	44.208	-11.792	56.000	QUASIPEAK
4	*	4.978	9.830	40.058	49.888	-6.112	56.000	QUASIPEAK
5		6.084	9.840	35.461	45.301	-14.699	60.000	QUASIPEAK
6		8.849	9.870	32.603	42.473	-17.527	60.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:00**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_L1 - Line1**
Power : AC 24V	**Note : Mode 2**

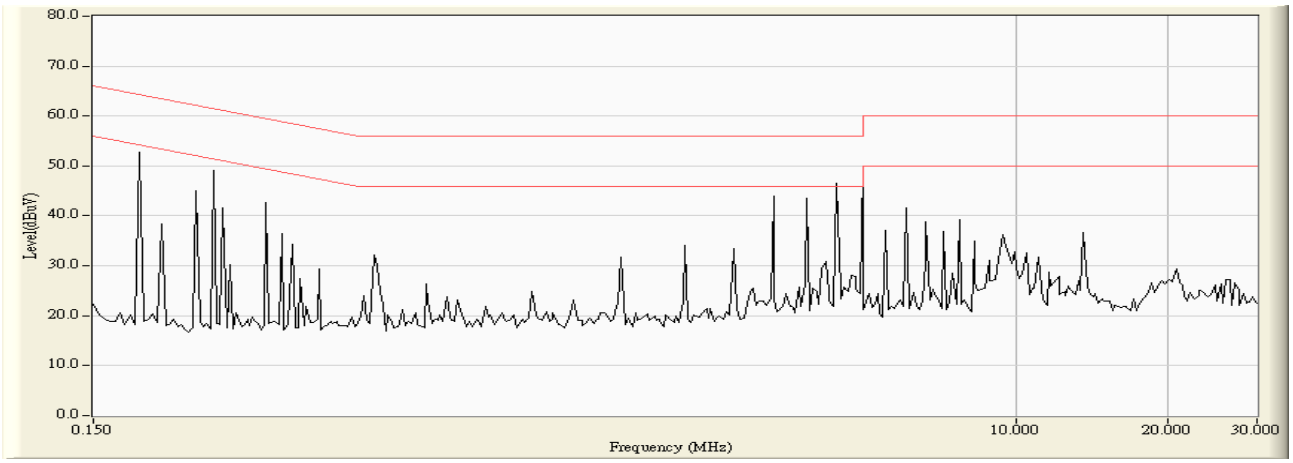


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	9.790	34.958	44.748	-10.023	54.771	AVERAGE
2		0.228	9.790	30.775	40.565	-13.206	53.771	AVERAGE
3		4.423	9.820	26.788	36.608	-9.392	46.000	AVERAGE
4	*	4.978	9.830	32.358	42.188	-3.812	46.000	AVERAGE
5		6.084	9.840	25.361	35.201	-14.799	50.000	AVERAGE
6		8.849	9.870	26.503	36.373	-13.627	50.000	AVERAGE

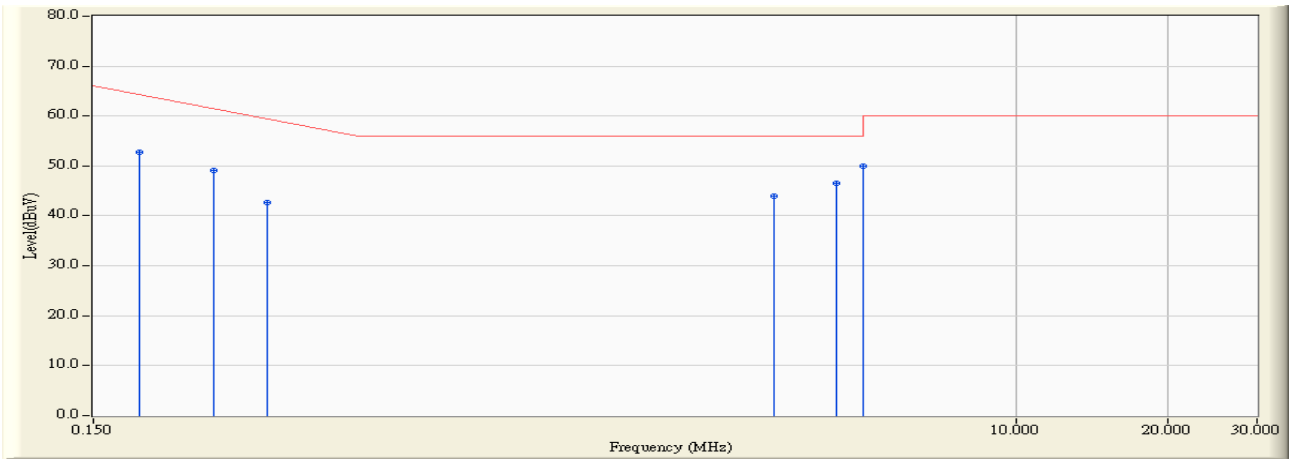
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:03**
Limit : CISPR_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ENV_216_N - Line2**
Power : AC 24V	**Note : Mode 2**



Site : SR1	**Time : 2011/02/08 - 16:03**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_N - Line2**
Power : AC 24V	**Note : Mode 2**

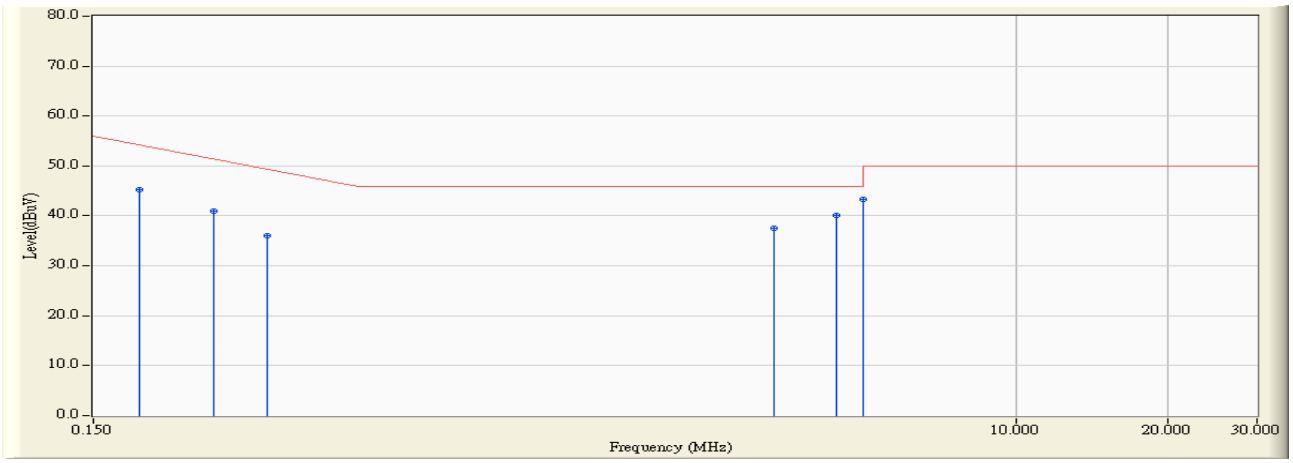


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	9.780	43.037	52.817	-12.183	65.000	QUASIPEAK
2		0.259	9.780	39.351	49.131	-13.755	62.886	QUASIPEAK
3		0.330	9.790	32.864	42.654	-18.203	60.857	QUASIPEAK
4		3.318	9.810	34.228	44.038	-11.962	56.000	QUASIPEAK
5		4.423	9.830	36.803	46.633	-9.367	56.000	QUASIPEAK
6	*	4.978	9.830	40.156	49.986	-6.014	56.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:03**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV_216_N - Line2**
Power : AC 24V	**Note : Mode 2**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	9.780	35.437	45.217	-9.783	55.000	AVERAGE
2		0.259	9.780	31.251	41.031	-11.855	52.886	AVERAGE
3		0.330	9.790	26.264	36.054	-14.803	50.857	AVERAGE
4		3.318	9.810	27.628	37.438	-8.562	46.000	AVERAGE
5		4.423	9.830	30.203	40.033	-5.967	46.000	AVERAGE
6	*	4.978	9.830	33.556	43.386	-2.614	46.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : Front View of Conducted Test

Test Mode : Mode 1: Adapter Mode

Description : Back View of Conducted Test

Test Mode　: Mode 2: AC 24V Mode

Description　: Front View of Conducted Test

Test Mode　: Mode 2: AC 24V Mode

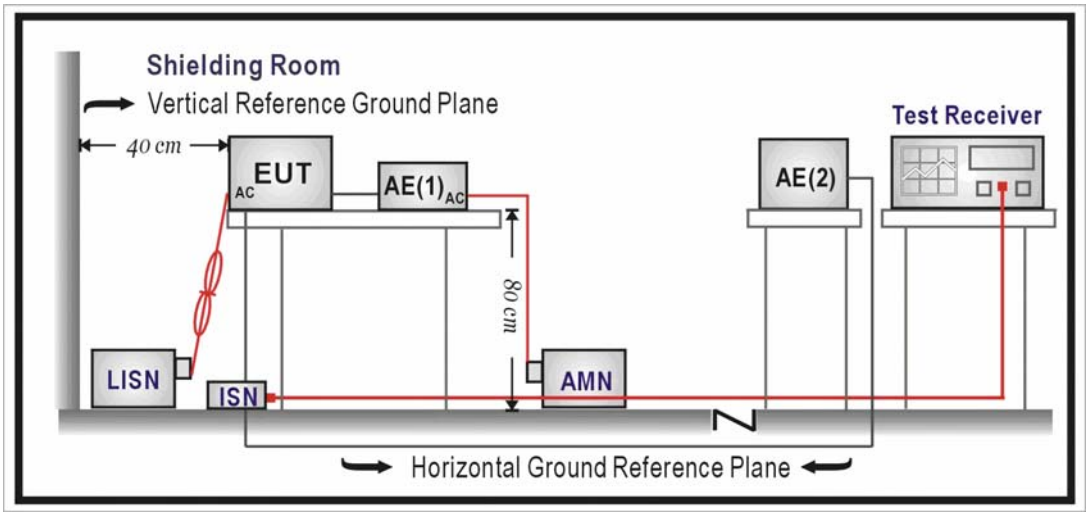
Description　: Back View of Conducted Test

4. Conducted Emissions (Telecommunication Ports)

4.1. Test Specification

According to EMC Standard : EN 55022 and AS/NZS CISPR 22

4.2. Test Setup



4.3. Limit

Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	84 – 74	74 – 64
0.50 - 30	74	64

Remarks:

The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz~0.50 MHz.

4.4. Test Procedure

Telecommunication Port:

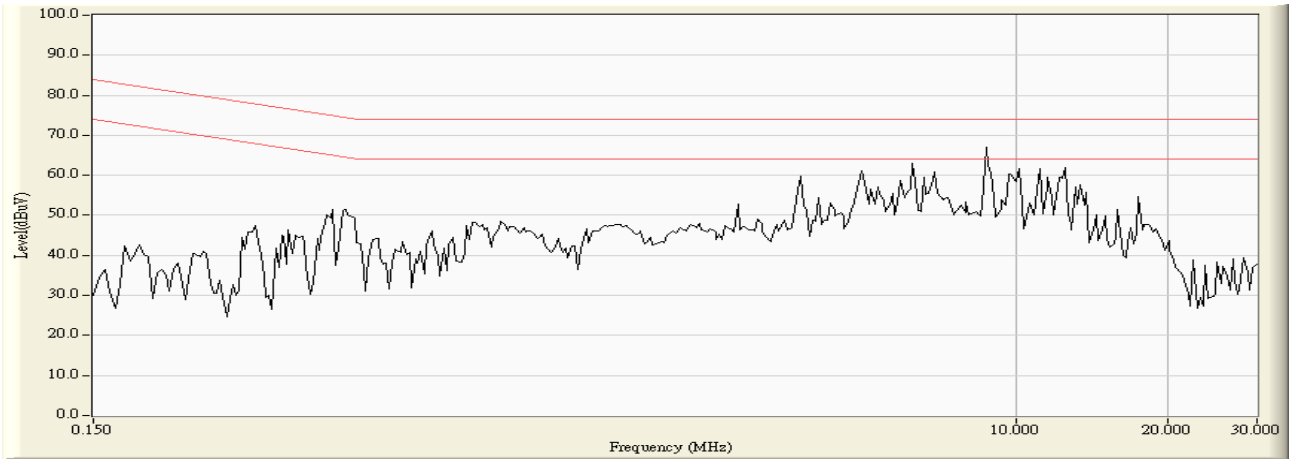
The mains voltage shall be supplied to the EUT via the LISN when the measurement of telecommunication port is performed. The common mode disturbances at the telecommunication port shall be connected to the ISN, which is 150 ohm impedance.
Both alternative cables are tested related to the LCL requested. The measurement range is from 150kHz to 30MHz. The bandwidth of measurement is set to 9kHz.
The 75dB LCL ISN is used for cat. 6 cable, the 65dB LCL ISN is used for cat. 5 cable, 55dB LCL ISN is used for cat. 3.

4.5. Deviation from Test Standard

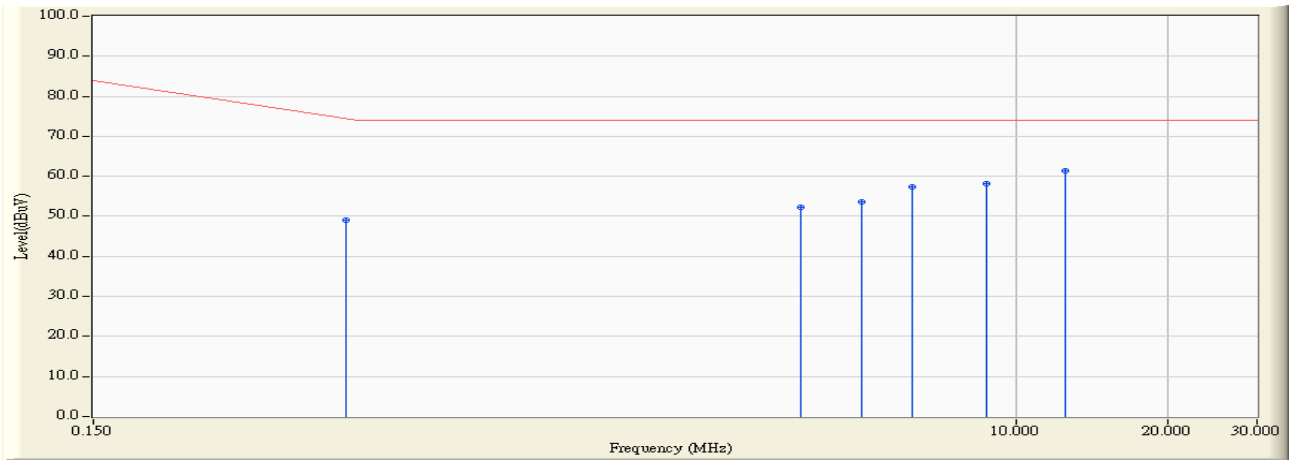
No deviation.

4.6. Test Result

Site : SR_1	**Time : 2011/01/22 - 00:50**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 10Mbps**



Site : SR_1	**Time : 2011/01/22 - 00:52**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 10Mbps**

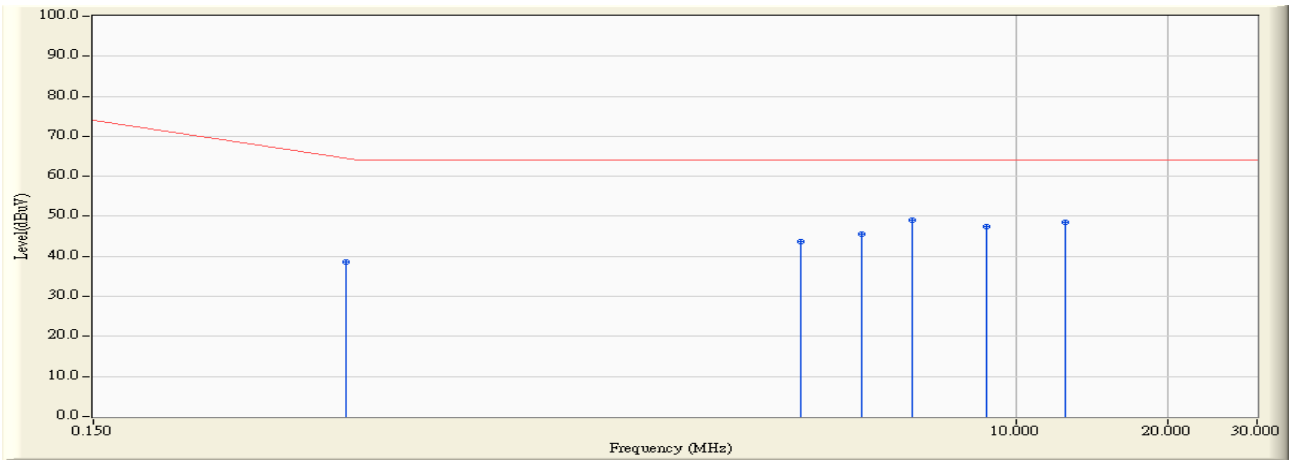


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.474	9.991	39.150	49.141	-25.602	74.743	QUASIPEAK
2		3.748	9.990	42.420	52.410	-21.590	74.000	QUASIPEAK
3		4.947	9.980	43.650	53.630	-20.370	74.000	QUASIPEAK
4		6.252	9.976	47.420	57.396	-16.604	74.000	QUASIPEAK
5		8.752	9.968	48.100	58.068	-15.932	74.000	QUASIPEAK
6	*	12.502	10.073	51.360	61.433	-12.567	74.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 00:52**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 10Mbps**

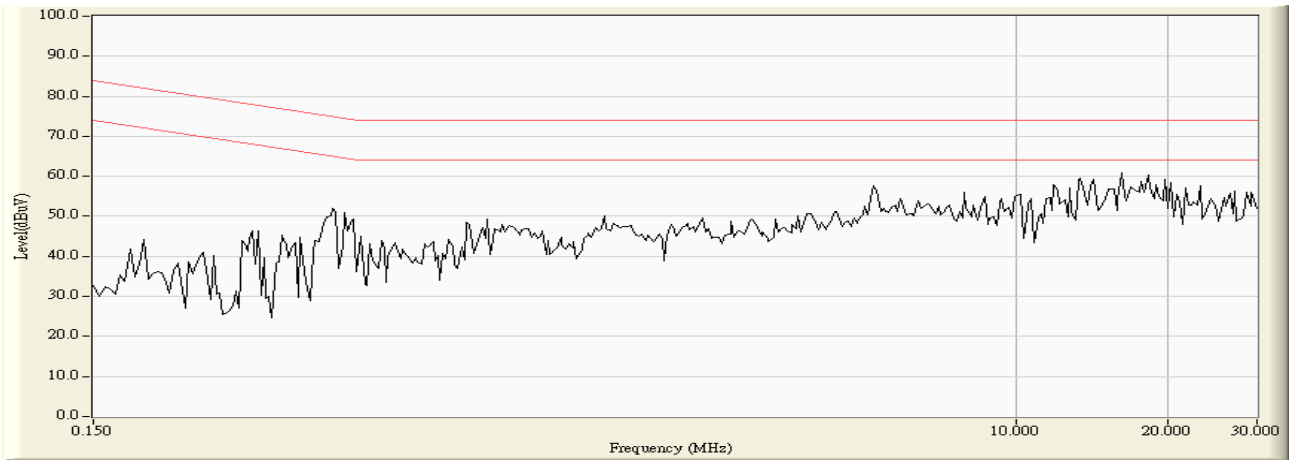


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.474	9.991	28.730	38.721	-26.022	64.743	AVERAGE
2		3.748	9.990	33.840	43.830	-20.170	64.000	AVERAGE
3		4.947	9.980	35.580	45.560	-18.440	64.000	AVERAGE
4	*	6.252	9.976	39.000	48.976	-15.024	64.000	AVERAGE
5		8.752	9.968	37.550	47.518	-16.482	64.000	AVERAGE
6		12.502	10.073	38.380	48.453	-15.547	64.000	AVERAGE

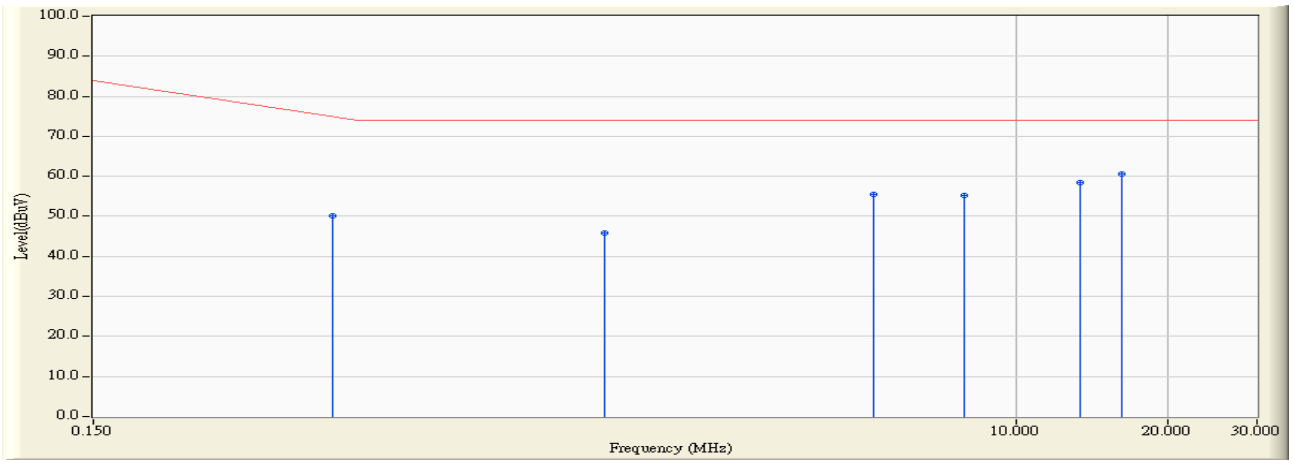
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 00:52**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 100Mbps**



Site : SR_1	**Time : 2011/01/22 - 00:53**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 100Mbps**

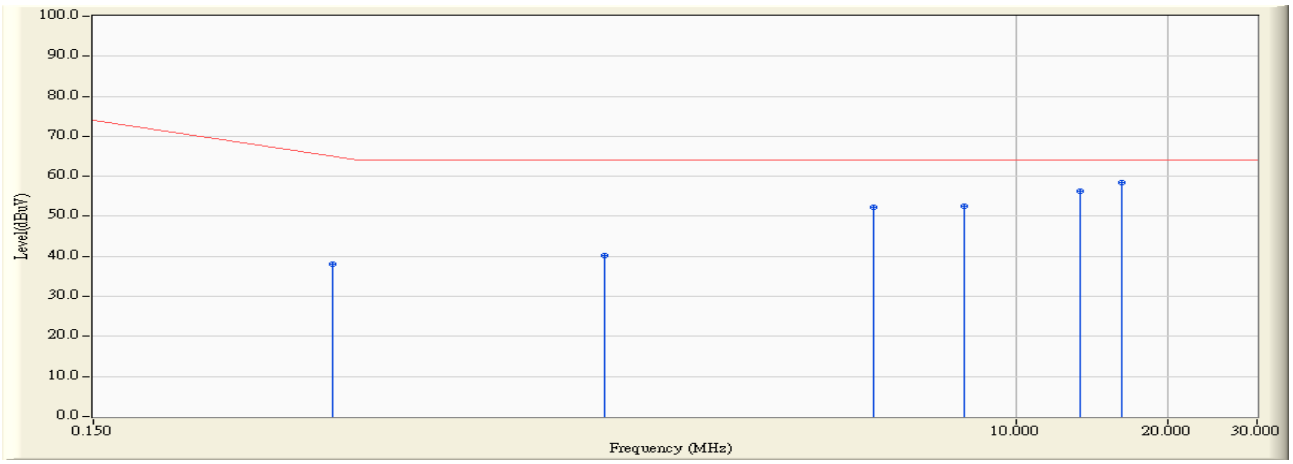


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.447	10.000	40.080	50.080	-25.434	75.514	QUASIPEAK
2		1.541	9.990	35.840	45.830	-28.170	74.000	QUASIPEAK
3		5.236	9.980	45.490	55.470	-18.530	74.000	QUASIPEAK
4		7.923	9.970	45.280	55.250	-18.750	74.000	QUASIPEAK
5		13.420	10.150	48.320	58.470	-15.530	74.000	QUASIPEAK
6	*	16.228	10.130	50.350	60.480	-13.520	74.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 00:53**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 100Mbps**

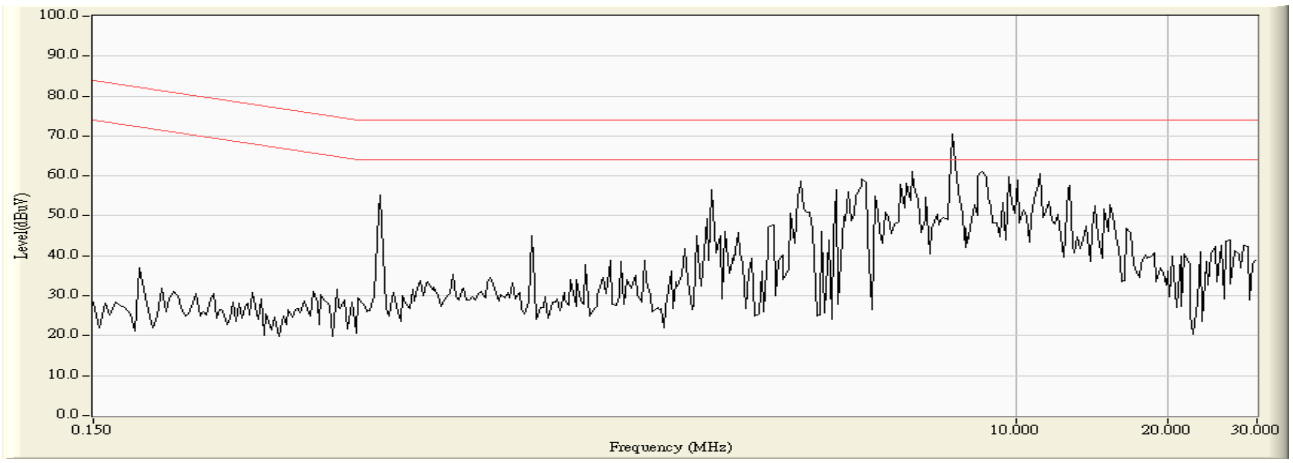


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.447	10.000	28.140	38.140	-27.374	65.514	AVERAGE
2		1.541	9.990	30.170	40.160	-23.840	64.000	AVERAGE
3		5.236	9.980	42.390	52.370	-11.630	64.000	AVERAGE
4		7.923	9.970	42.460	52.430	-11.570	64.000	AVERAGE
5		13.420	10.150	46.110	56.260	-7.740	64.000	AVERAGE
6	*	16.228	10.130	48.210	58.340	-5.660	64.000	AVERAGE

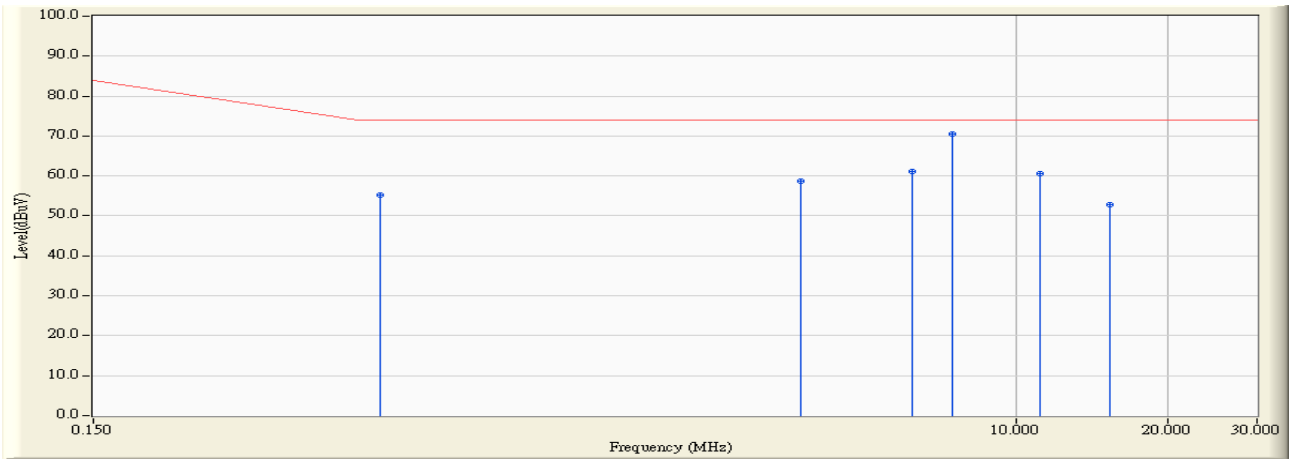
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:12**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 24V	**Note : Mode 2, ISN 10Mbps**



Site : SR1	**Time : 2011/02/08 - 16:12**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 24V	**Note : Mode 2, ISN 10Mbps**

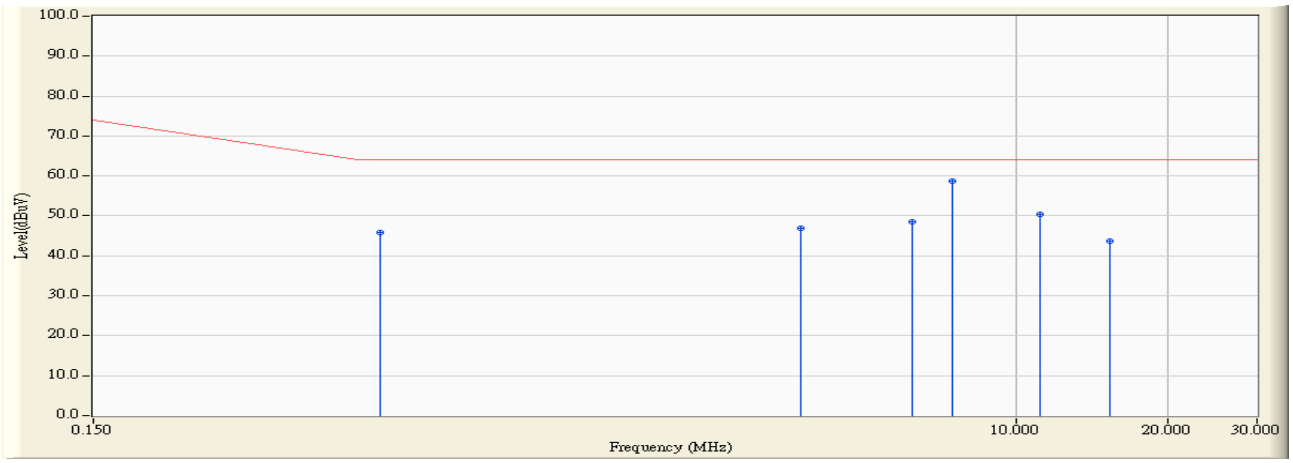


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.552	9.990	45.358	55.348	-18.652	74.000	QUASIPEAK
2		3.752	9.990	48.628	58.618	-15.382	74.000	QUASIPEAK
3		6.252	9.976	51.055	61.031	-12.969	74.000	QUASIPEAK
4	*	7.502	9.970	60.466	70.436	-3.564	74.000	QUASIPEAK
5		11.197	9.964	50.659	60.623	-13.377	74.000	QUASIPEAK
6		15.326	10.140	42.790	52.930	-21.070	74.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:12**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 24V	**Note : Mode 2, ISN 10Mbps**

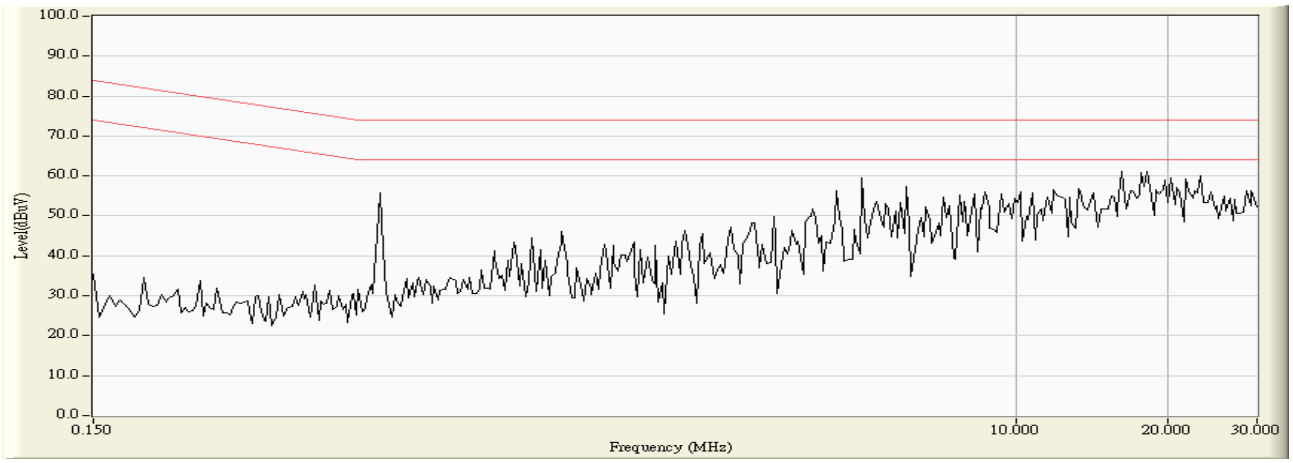


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.552	9.990	35.758	45.748	-18.252	64.000	AVERAGE
2		3.752	9.990	37.028	47.018	-16.982	64.000	AVERAGE
3		6.252	9.976	38.455	48.431	-15.569	64.000	AVERAGE
4	*	7.502	9.970	48.866	58.836	-5.164	64.000	AVERAGE
5		11.197	9.964	40.559	50.523	-13.477	64.000	AVERAGE
6		15.326	10.140	33.690	43.830	-20.170	64.000	AVERAGE

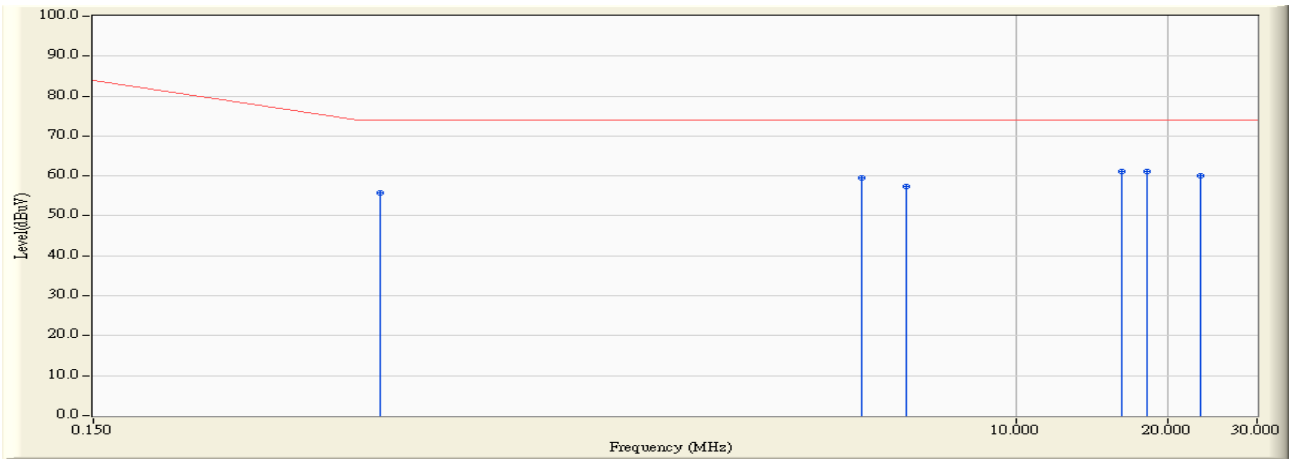
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:15**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 24V	**Note : Mode 2, ISN 100Mbps**



Site : SR1	**Time : 2011/02/08 - 16:15**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 24V	**Note : Mode 2, ISN 100Mbps**

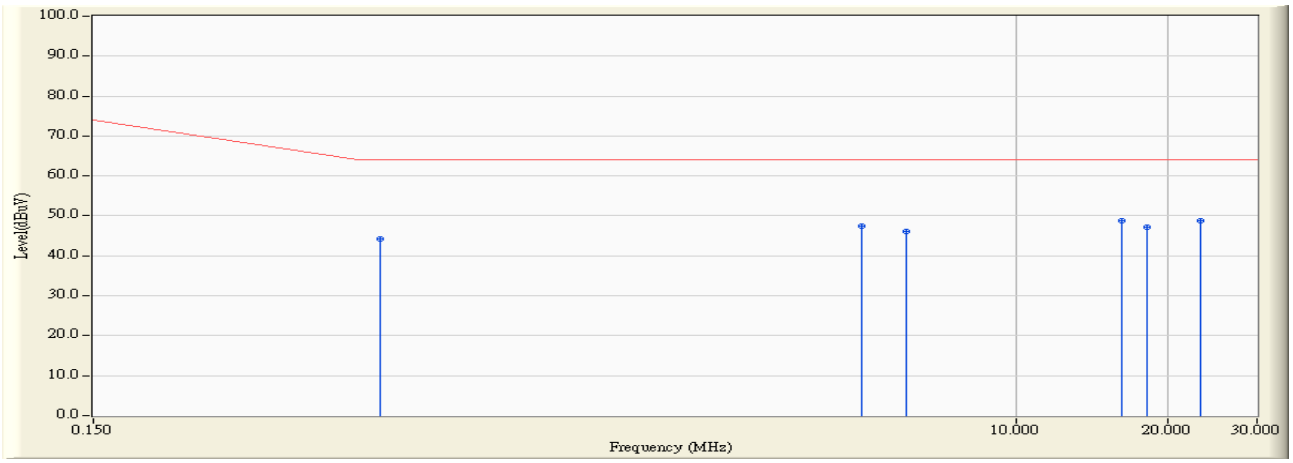


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.552	9.990	45.749	55.739	-18.261	74.000	QUASIPEAK
2		4.974	9.980	49.592	59.572	-14.428	74.000	QUASIPEAK
3		6.080	9.980	47.438	57.418	-16.582	74.000	QUASIPEAK
4		16.228	10.130	50.865	60.995	-13.005	74.000	QUASIPEAK
5	*	18.244	10.120	50.879	60.999	-13.001	74.000	QUASIPEAK
6		23.130	10.100	49.846	59.946	-14.054	74.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	**Time : 2011/02/08 - 16:15**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ISN_T4 - Line1**
Power : AC 24V	**Note : Mode 2, ISN 100Mbps**

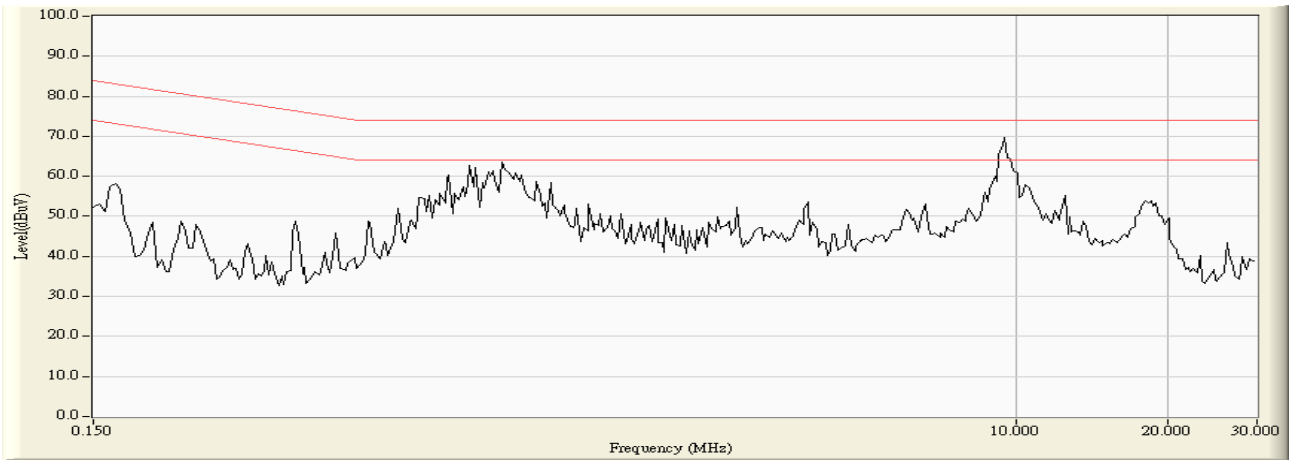


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.552	9.990	34.149	44.139	-19.861	64.000	AVERAGE
2		4.974	9.980	37.492	47.472	-16.528	64.000	AVERAGE
3		6.080	9.980	36.238	46.218	-17.782	64.000	AVERAGE
4	*	16.228	10.130	38.765	48.895	-15.105	64.000	AVERAGE
5		18.244	10.120	37.179	47.299	-16.701	64.000	AVERAGE
6		23.130	10.100	38.746	48.846	-15.154	64.000	AVERAGE

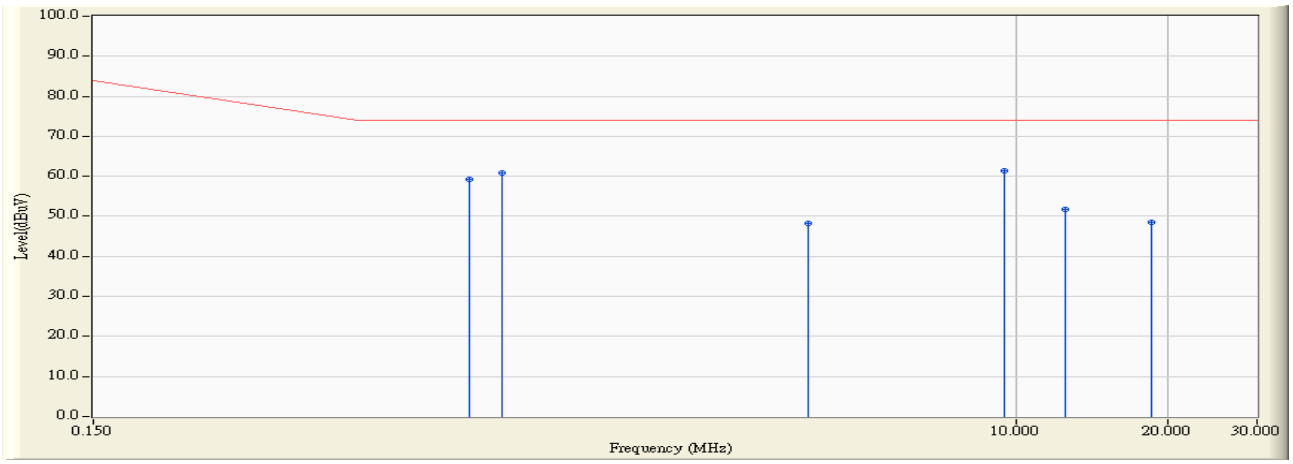
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 01:24**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : CVP-2200A - Line1**
Power : AC 230V/50Hz	**Note : Mode 3, ISN 10Mbps**



Site : SR_1	**Time : 2011/01/22 - 01:26**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : CVP-2200A - Line1**
Power : AC 230V/50Hz	**Note : Mode 3, ISN 10Mbps**

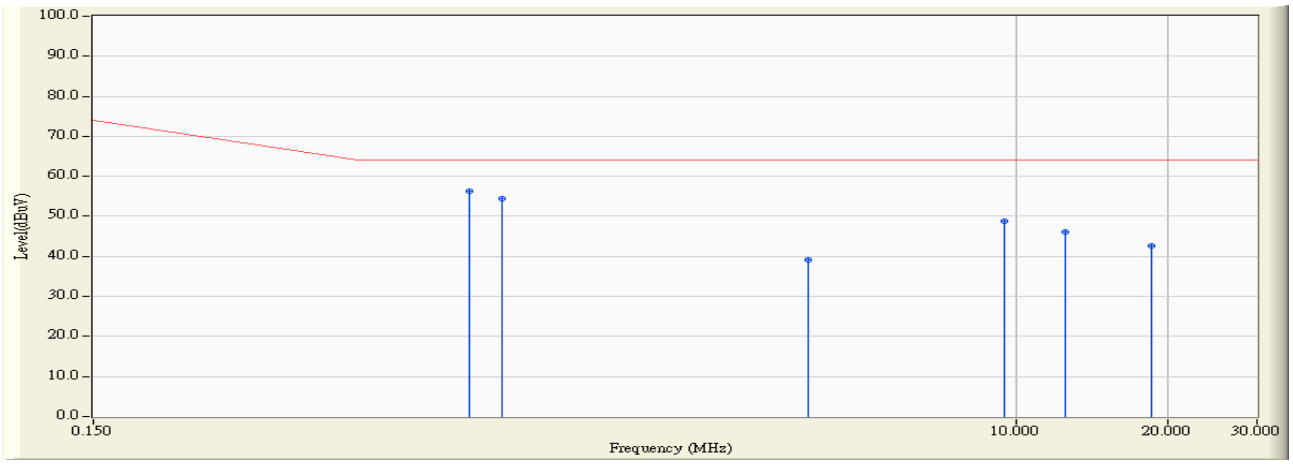


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.830	20.200	39.070	59.270	-14.730	74.000	QUASIPEAK
2		0.963	20.200	40.610	60.810	-13.190	74.000	QUASIPEAK
3		3.892	20.200	27.980	48.180	-25.820	74.000	QUASIPEAK
4	*	9.478	20.200	41.250	61.450	-12.550	74.000	QUASIPEAK
5		12.502	20.323	31.480	51.803	-22.197	74.000	QUASIPEAK
6		18.611	20.400	28.220	48.620	-25.380	74.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 01:26**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : CVP-2200A - Line1**
Power : AC 230V/50Hz	**Note : Mode 3, ISN 10Mbps**

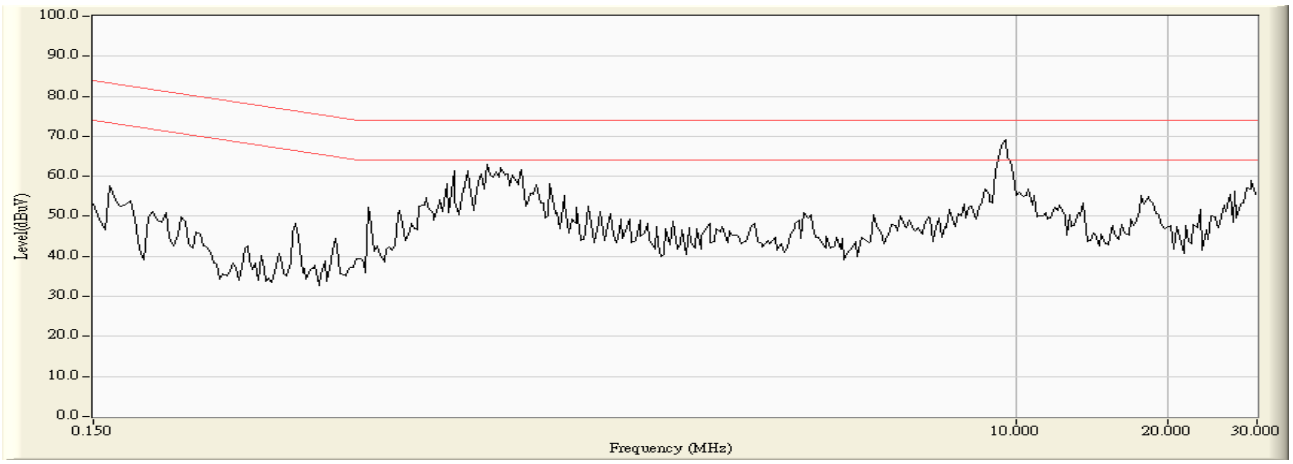


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.830	20.200	36.110	56.310	-7.690	64.000	AVERAGE
2		0.963	20.200	34.250	54.450	-9.550	64.000	AVERAGE
3		3.892	20.200	19.020	39.220	-24.780	64.000	AVERAGE
4		9.478	20.200	28.510	48.710	-15.290	64.000	AVERAGE
5		12.502	20.323	25.810	46.133	-17.867	64.000	AVERAGE
6		18.611	20.400	22.110	42.510	-21.490	64.000	AVERAGE

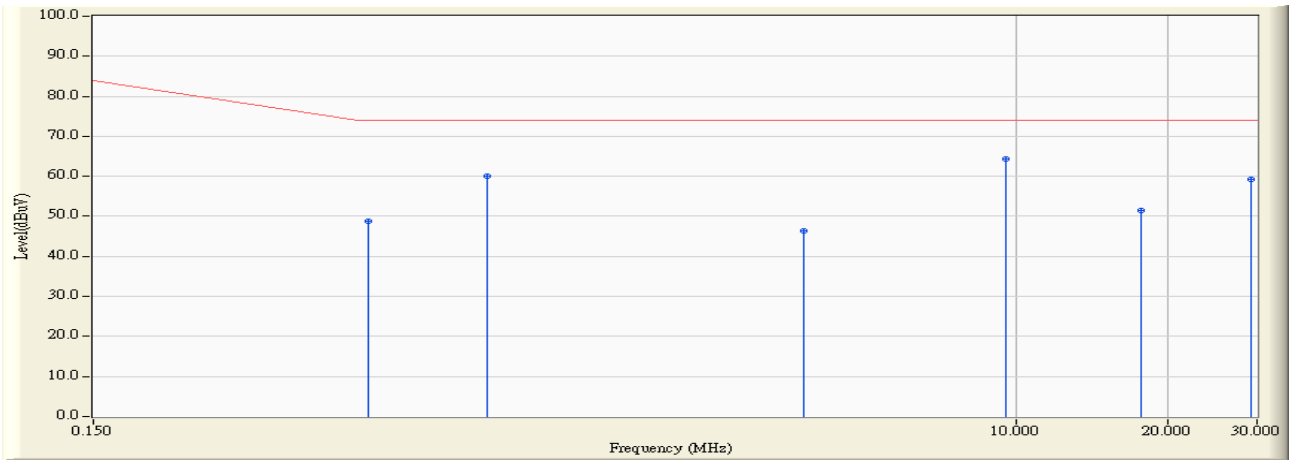
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 01:27**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : CVP-2200A - Line1**
Power : AC 230V/50Hz	**Note : Mode 3, ISN 100Mbps**



Site : SR_1	**Time : 2011/01/22 - 01:28**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : CVP-2200A - Line1**
Power : AC 230V/50Hz	**Note : Mode 3, ISN 100Mbps**

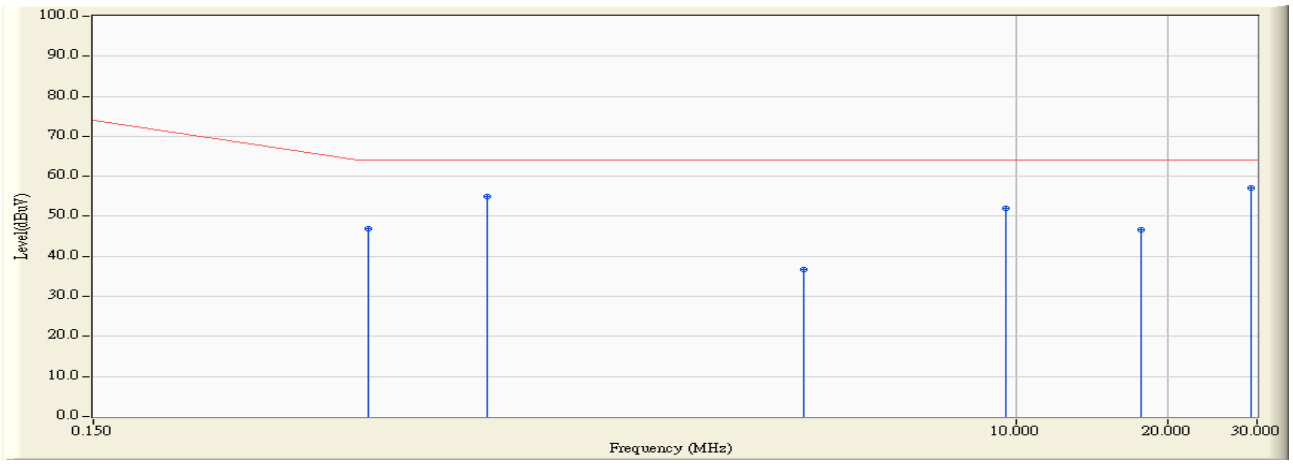


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.525	20.200	28.460	48.660	-25.340	74.000	QUASIPEAK
2		0.900	20.200	39.940	60.140	-13.860	74.000	QUASIPEAK
3		3.802	20.200	26.120	46.320	-27.680	74.000	QUASIPEAK
4	*	9.572	20.200	44.110	64.310	-9.690	74.000	QUASIPEAK
5		17.693	20.400	31.010	51.410	-22.590	74.000	QUASIPEAK
6		29.236	20.400	38.910	59.310	-14.690	74.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR_1	**Time : 2011/01/22 - 01:28**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : CVP-2200A - Line1**
Power : AC 230V/50Hz	**Note : Mode 3, ISN 100Mbps**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.525	20.200	26.630	46.830	-17.170	64.000	AVERAGE
2		0.900	20.200	34.860	55.060	-8.940	64.000	AVERAGE
3		3.802	20.200	16.490	36.690	-27.310	64.000	AVERAGE
4		9.572	20.200	31.820	52.020	-11.980	64.000	AVERAGE
5		17.693	20.400	26.380	46.780	-17.220	64.000	AVERAGE
6	*	29.236	20.400	36.730	57.130	-6.870	64.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

4.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : Front View of ISN Test

Test Mode : Mode 1: Adapter Mode

Description : Back View of ISN Test

Test Mode　: Mode 2: AC 24V Mode

Description　: Front View of ISN Test

Test Mode　: Mode 2: AC 24V Mode

Description　: Back View of ISN Test

Test Mode : Mode 3: PoE Mode

Description : Front View of ISN Test

Test Mode : Mode 3: PoE Mode

Description : Back View of ISN Test

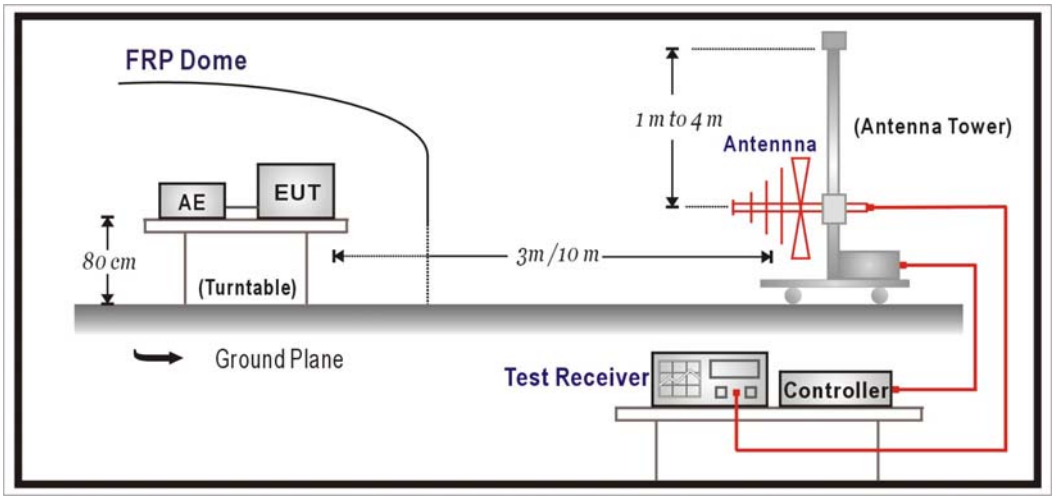
5. Radiated Emission

5.1. Test Specification

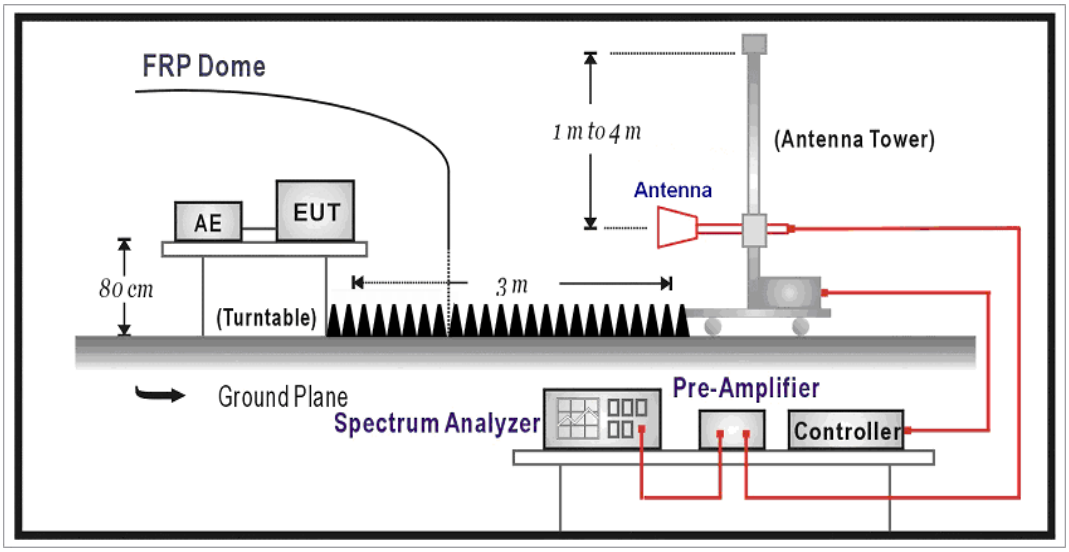
According to EMC Standard : EN 55022 and AS/NZS CISPR 22

5.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



5.3. Limit

Limits		
Frequency (MHz)	Distance (m)	dBuV/m
30 – 230	10	30
230 – 1000	10	37

Limits			
Frequency (GHz)	Distance (m)	Peak (dBuV/m)	Average (dBuV/m)
1 – 3	3	70	50
3 – 6	3	74	54

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 6 GHz, whichever is lower

5.4. Test Procedure

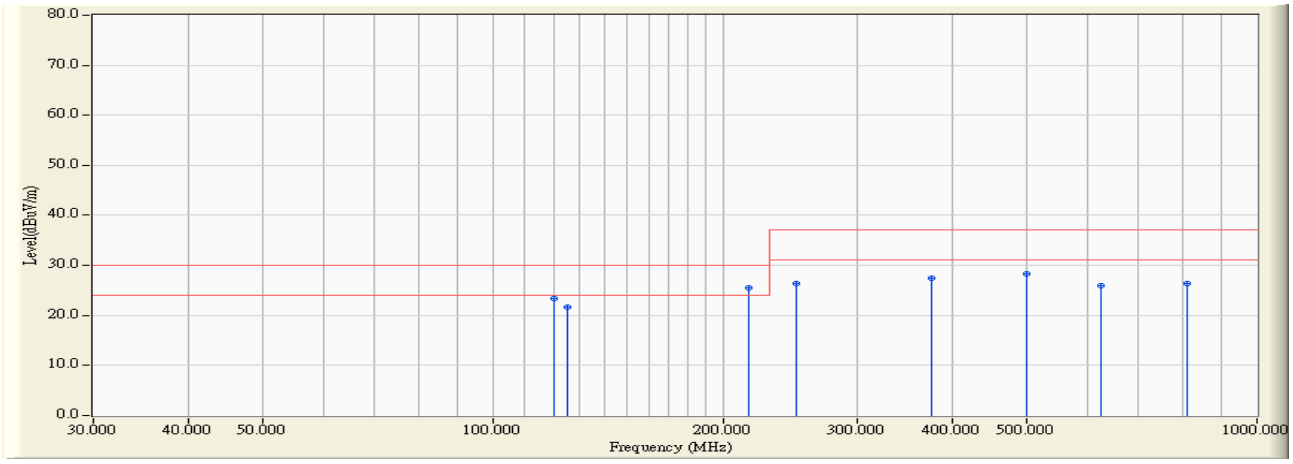
The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
The EUT was positioned such that the distance from antenna to the EUT was 3/10 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.
Radiated emissions were invested over the frequency range from 30MHz to1GHz using a receiver bandwidth of 120kHz and above 1GHz using a receiver bandwidth of 1MHz.
30MHz to1GHz Radiated was performed at an antenna to EUT distance of 10 meters.
Above1GHz Radiated was performed at an antenna to EUT distance of 3 meters.
It is placed with absorb on the ground between EUT and Antenna.

5.5. Deviation from Test Standard

No deviation.

5.6. Test Result

Site : OATS-1	**Time : 2011/01/21 - 17:28**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_0811 - HORIZONTAL**
Power : AC 230V/50Hz	**Note : Mode 1**

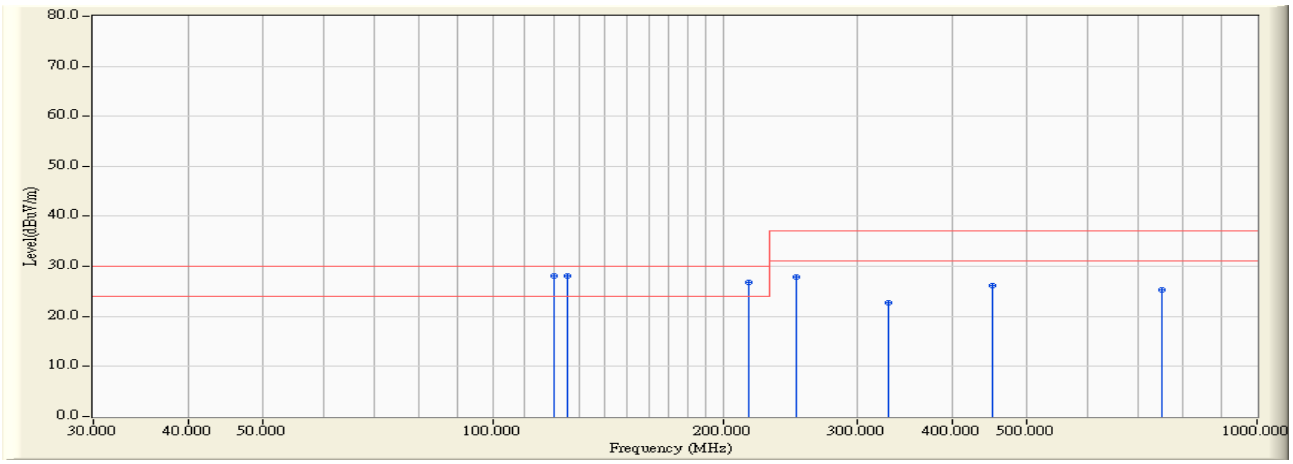


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		119.995	13.396	9.900	23.296	-6.704	30.000	QUASIPEAK
2		125.000	13.570	8.000	21.570	-8.430	30.000	QUASIPEAK
3	*	215.991	10.571	14.900	25.471	-4.529	30.000	QUASIPEAK
4		249.996	14.388	12.000	26.388	-10.612	37.000	QUASIPEAK
5		375.000	18.312	9.200	27.511	-9.489	37.000	QUASIPEAK
6		500.000	20.812	7.500	28.312	-8.688	37.000	QUASIPEAK
7		625.000	22.870	3.000	25.870	-11.130	37.000	QUASIPEAK
8		810.500	24.848	1.600	26.448	-10.552	37.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-1	**Time : 22011/01/21 - 17:09**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_0811 - VERTICAL**
Power : AC 230V/50Hz	**Note : Mode 1**

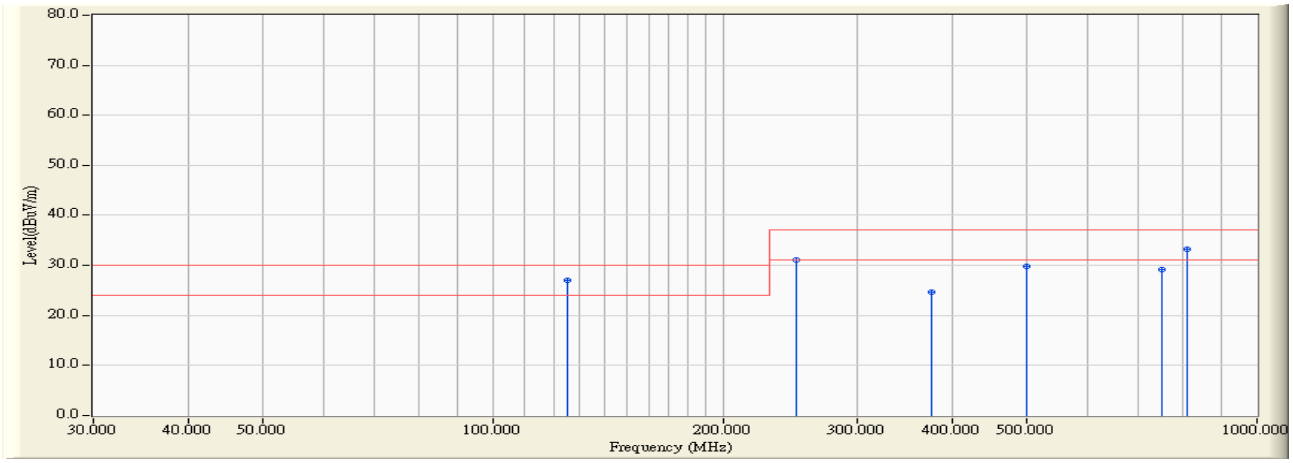


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		119.993	13.396	14.600	27.996	-2.004	30.000	QUASIPEAK
2	*	125.000	13.570	14.500	28.070	-1.930	30.000	QUASIPEAK
3		215.992	10.571	16.200	26.771	-3.229	30.000	QUASIPEAK
4		249.995	14.388	13.600	27.988	-9.012	37.000	QUASIPEAK
5		330.060	16.849	5.800	22.649	-14.351	37.000	QUASIPEAK
6		449.986	19.958	6.300	26.258	-10.742	37.000	QUASIPEAK
7		750.000	24.405	1.000	25.405	-11.595	37.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-1	**Time : 2010/12/03 -**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_0811 - HORIZONTAL**
Power : AC 24V	**Note : Mode 2**

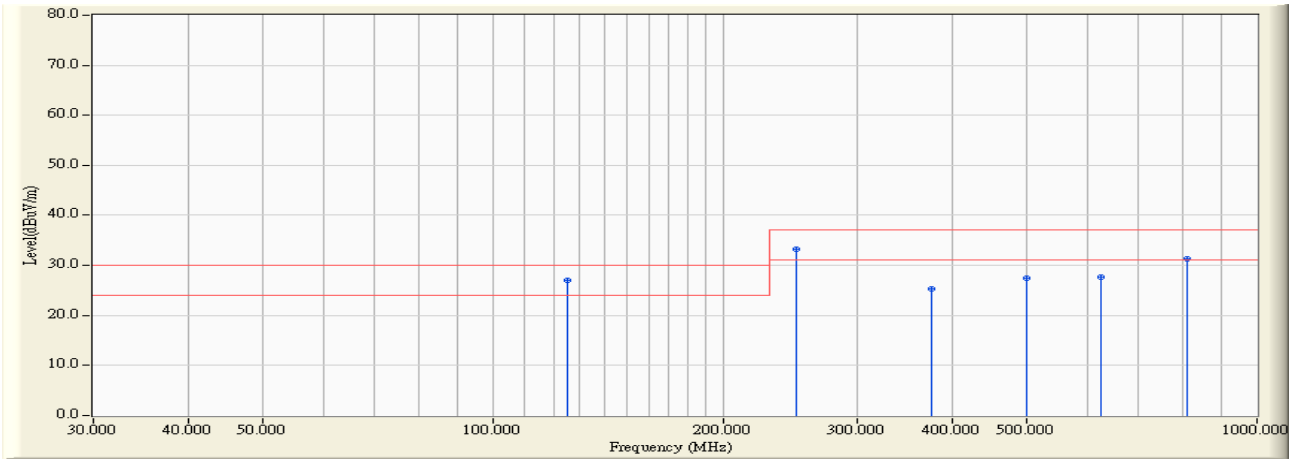


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	125.000	13.570	13.400	26.970	-3.030	30.000	QUASIPEAK
2		250.000	14.388	16.800	31.188	-5.812	37.000	QUASIPEAK
3		375.000	18.312	6.400	24.711	-12.289	37.000	QUASIPEAK
4		500.000	20.812	9.000	29.812	-7.188	37.000	QUASIPEAK
5		750.000	24.405	4.800	29.205	-7.795	37.000	QUASIPEAK
6		810.000	24.832	8.500	33.333	-3.667	37.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-1	**Time : 2010/12/03 -**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_0811 - VERTICAL**
Power : AC 24V	**Note : Mode 2**

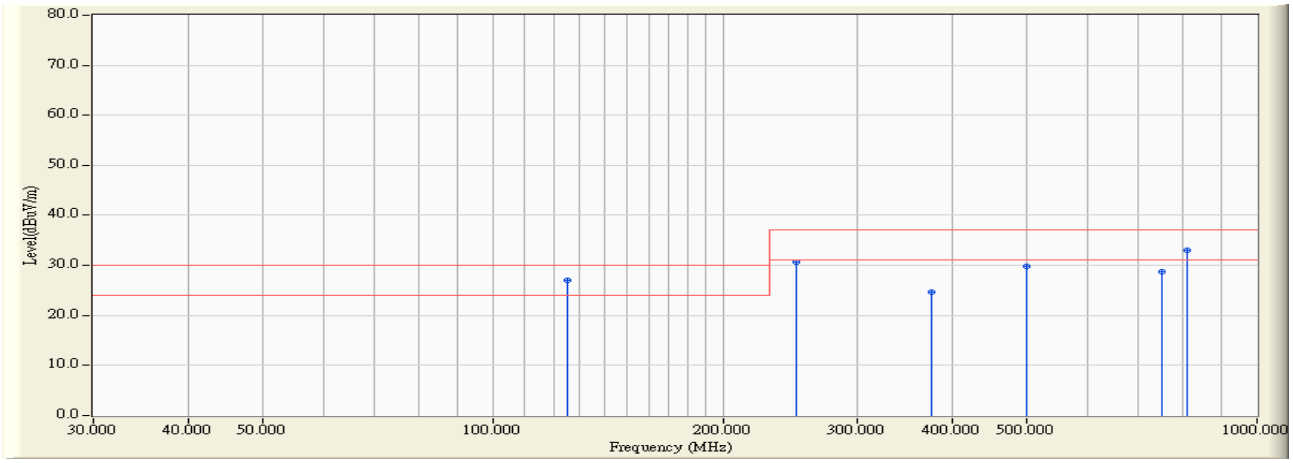


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	125.000	13.570	13.400	26.970	-3.030	30.000	QUASIPEAK
2		250.000	14.388	18.800	33.188	-3.812	37.000	QUASIPEAK
3		375.000	18.312	6.900	25.211	-11.789	37.000	QUASIPEAK
4		500.000	20.812	6.600	27.412	-9.588	37.000	QUASIPEAK
5		625.000	22.870	4.900	27.770	-9.230	37.000	QUASIPEAK
6		810.000	24.832	6.400	31.233	-5.767	37.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-1	**Time : 2010/12/03 -**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_0811 - HORIZONTAL**
Power : AC 230V/50Hz	**Note : Mode 3**

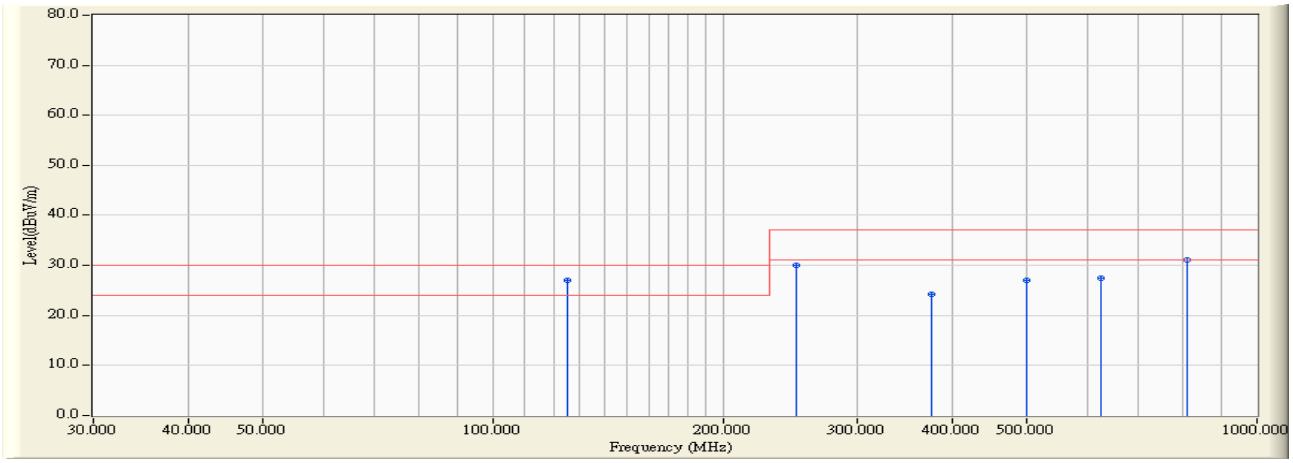


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	125.000	13.570	13.400	26.970	-3.030	30.000	QUASIPEAK
2		250.000	14.388	16.300	30.688	-6.312	37.000	QUASIPEAK
3		375.000	18.312	6.300	24.611	-12.389	37.000	QUASIPEAK
4		500.000	20.812	8.900	29.712	-7.288	37.000	QUASIPEAK
5		750.000	24.405	4.300	28.705	-8.295	37.000	QUASIPEAK
6		810.000	24.832	8.200	33.033	-3.967	37.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-1	**Time : 2010/12/03 -**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_0811 - VERTICAL**
Power : AC 230V/50Hz	**Note : Mode 3**

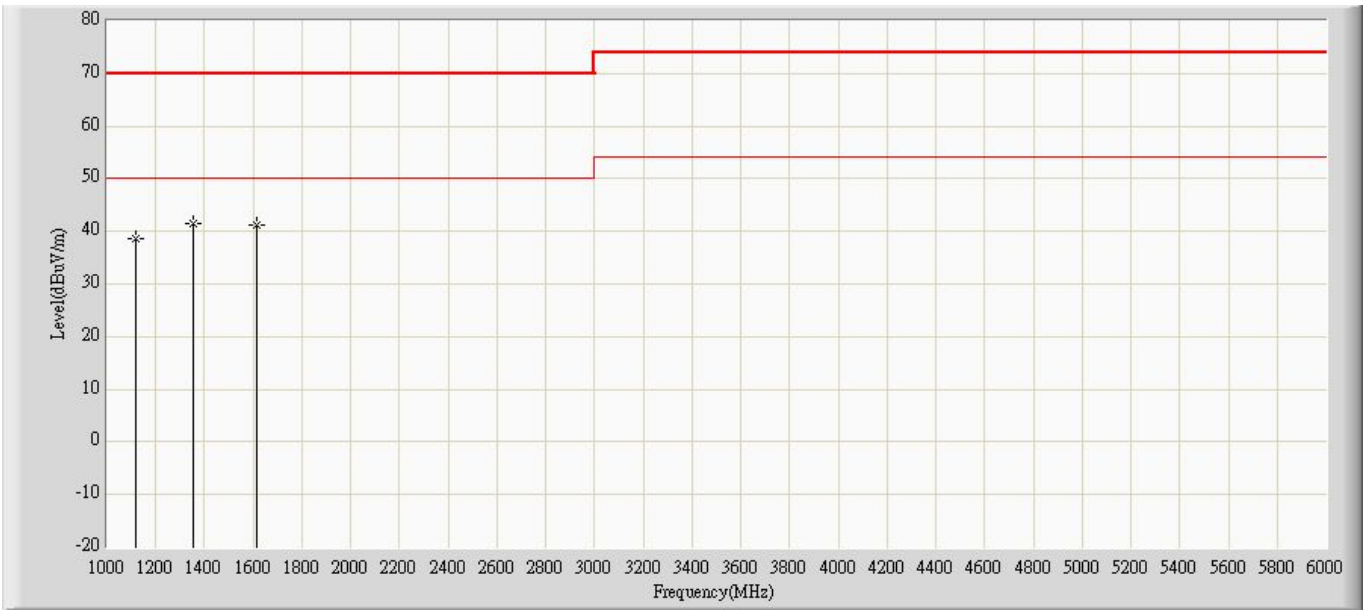


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	125.000	13.570	13.400	26.970	-3.030	30.000	QUASIPEAK
2		250.000	14.388	15.600	29.988	-7.012	37.000	QUASIPEAK
3		375.000	18.312	6.000	24.311	-12.689	37.000	QUASIPEAK
4		500.000	20.812	6.200	27.012	-9.988	37.000	QUASIPEAK
5		625.000	22.870	4.500	27.370	-9.630	37.000	QUASIPEAK
6		810.000	24.832	6.200	31.033	-5.967	37.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site: 9x6x6_Chamber	**Time: 2010/12/03 - 00:22**
Limit: EN55022_B_(Above_1G)	**Margin: 0**
Probe: 9120D_1-18G_Horn	**Polarity: Horizontal**
EUT: Network Camera	**Power: AC 230V/50Hz**
Note: Mode 1	

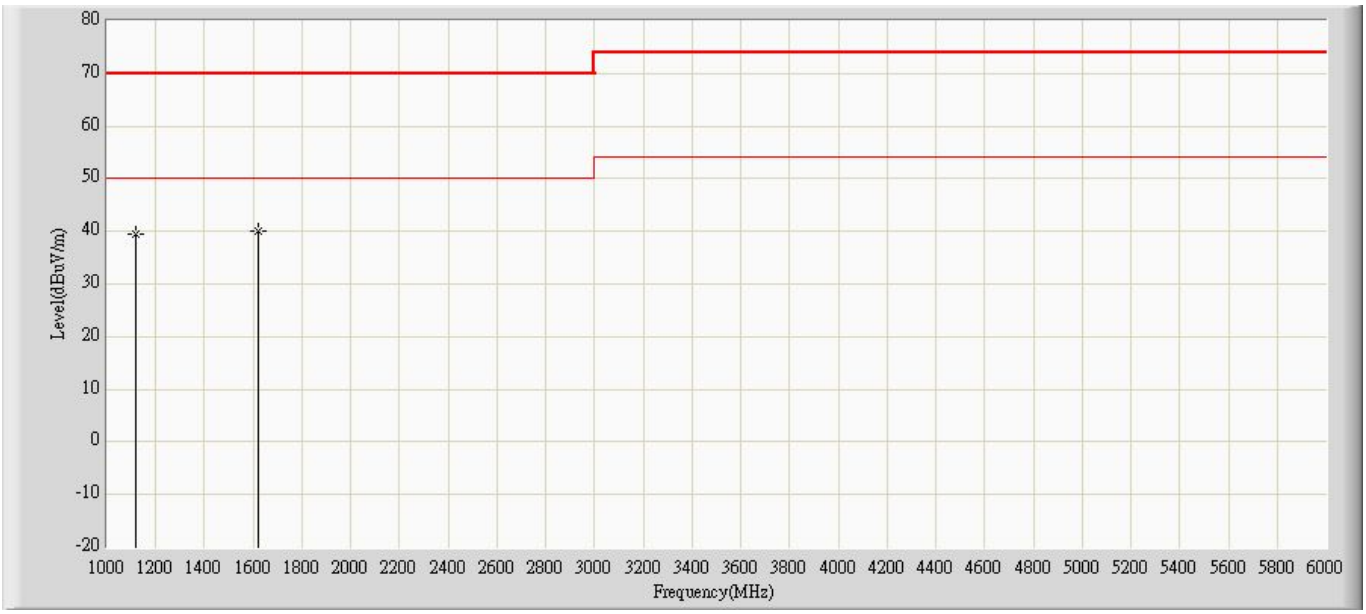


		Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		1120.240	38.683	44.840	-31.317	70.000	-6.157	PK
2	*	1350.701	41.367	46.670	-28.633	70.000	-5.303	PK
3		1611.222	41.224	45.680	-28.776	70.000	-4.456	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: 9x6x6_Chamber	**Time: 2010/12/03 - 00:09**
Limit: EN55022_B_(Above_1G)	**Margin: 0**
Probe: 9120D_1-18G_Horn	**Polarity: Vertical**
EUT: Network Camera	**Power: AC 230V/50Hz**
Note: Mode 1	

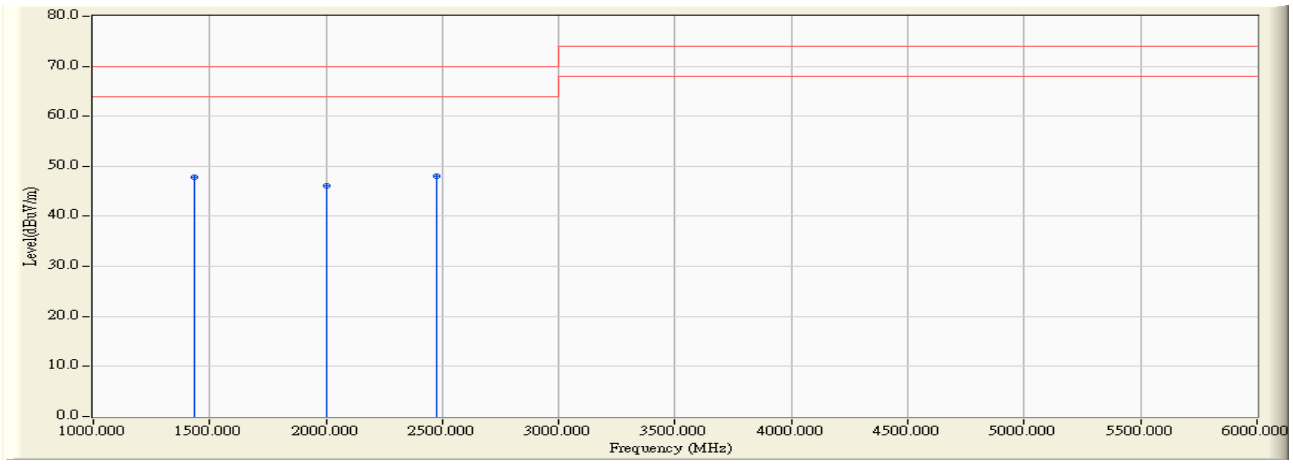


		Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		1120.240	39.523	45.680	-30.477	70.000	-6.157	PK
2		1619.238	40.046	44.480	-29.954	70.000	-4.433	PK
3	*	1621.242	40.052	44.480	-29.948	70.000	-4.428	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site : 9x6x6_Chamber	**Time : 2010/12/13 - 17:32**
Limit : CISPR_22_B_(Above_1G)_03M_PK	**Margin : 6**
EUT : Network Camera	**Probe : 9120D_1-18G_Horn - Horizontal**
Power : AC 24V	**Note : Mode 2**

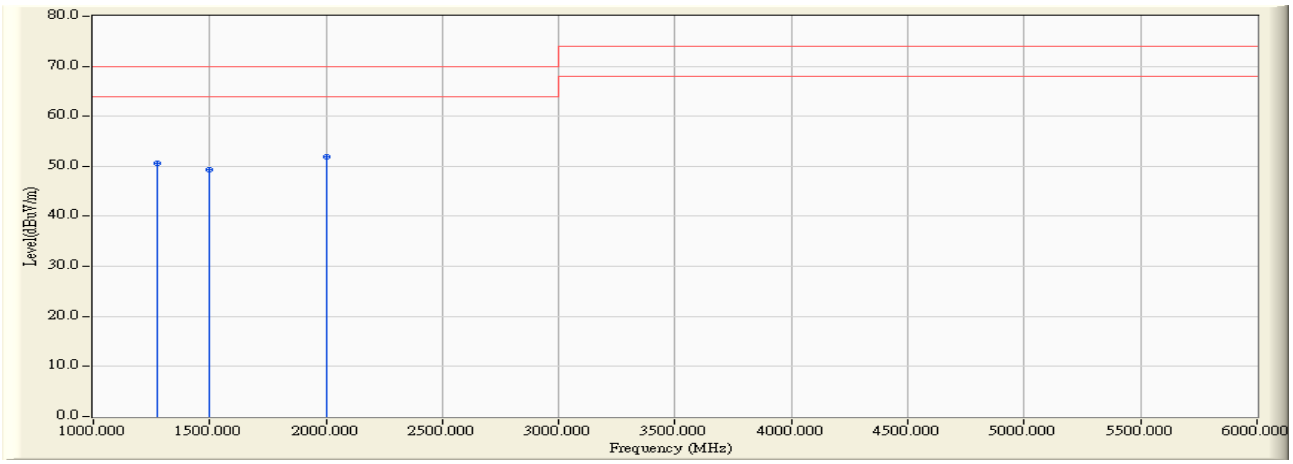


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1437.000	-5.890	53.790	47.901	-22.099	70.000	PEAK
2		2000.000	-1.985	48.030	46.044	-23.956	70.000	PEAK
3	*	2475.000	-1.436	49.450	48.015	-21.985	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : 9x6x6_Chamber	**Time : 2010/12/13 - 17:39**
Limit : CISPR_22_B_(Above_1G)_03M_PK	**Margin : 6**
EUT : Network Camera	**Probe : 9120D_1-18G_Horn - VERTICAL**
Power : AC 24V	**Note : Mode 2**

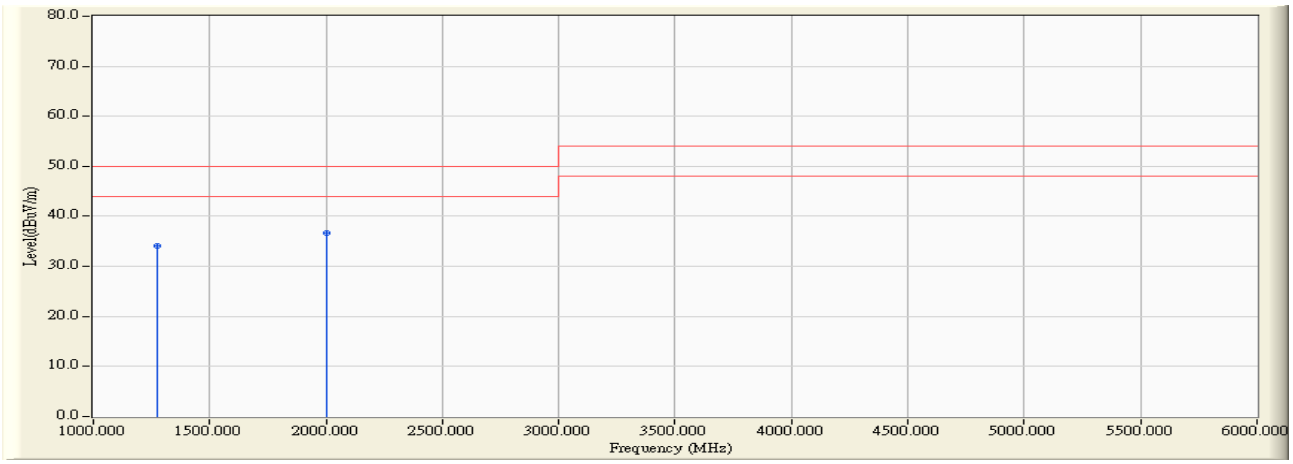


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1275.000	-6.552	57.080	50.528	-19.472	70.000	PEAK
2		1500.000	-5.397	54.810	49.413	-20.587	70.000	PEAK
3	*	2000.000	-1.985	53.790	51.804	-18.196	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : 9x6x6_Chamber	**Time : 2010/12/13 - 17:39**
Limit : CISPR_22_B_(Above_1G)_03M_AV	**Margin : 6**
EUT : Network Camera	**Probe : 9120D_1-18G_Horn - VERTICAL**
Power : AC 24V	**Note : Mode 2**

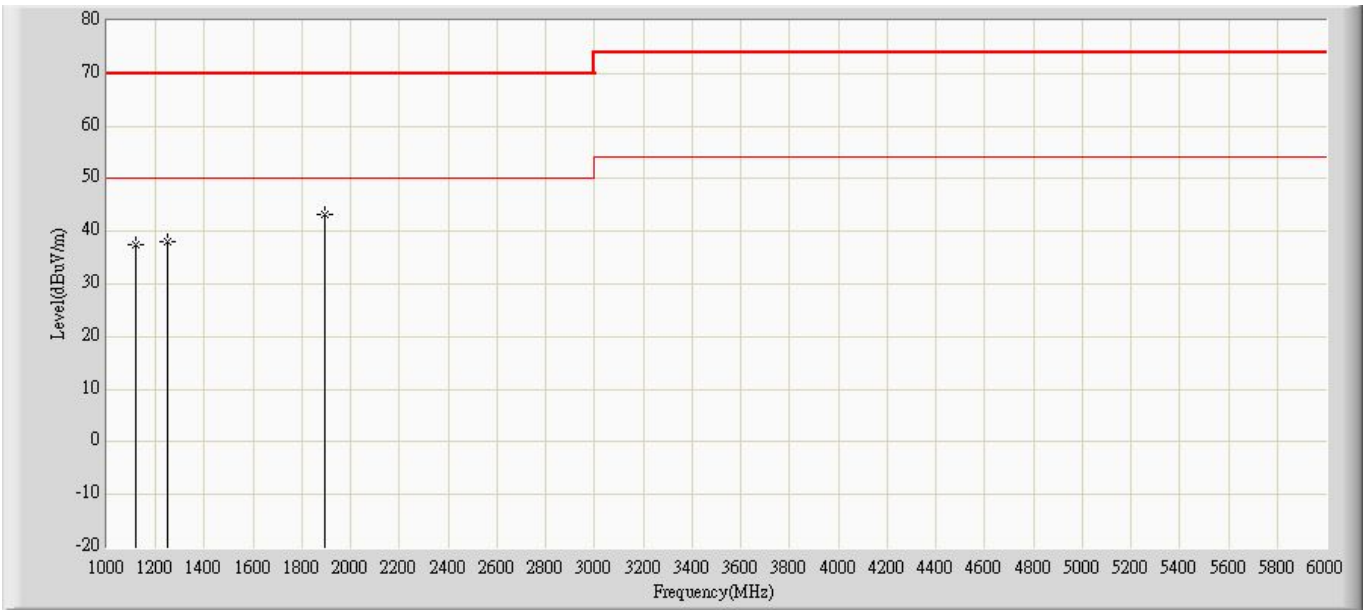


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1275.000	-6.552	40.620	34.068	-15.932	50.000	AVERAGE
2	*	2000.000	-1.985	38.670	36.684	-13.316	50.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site: 9x6x6_Chamber	**Time: 2010/12/03 - 00:35**
Limit: EN55022_B_(Above_1G)	**Margin: 0**
Probe: 9120D_1-18G_Horn	**Polarity: Horizontal**
EUT: Network Camera	**Power: AC 230V/50Hz**
Note: Mode 3	

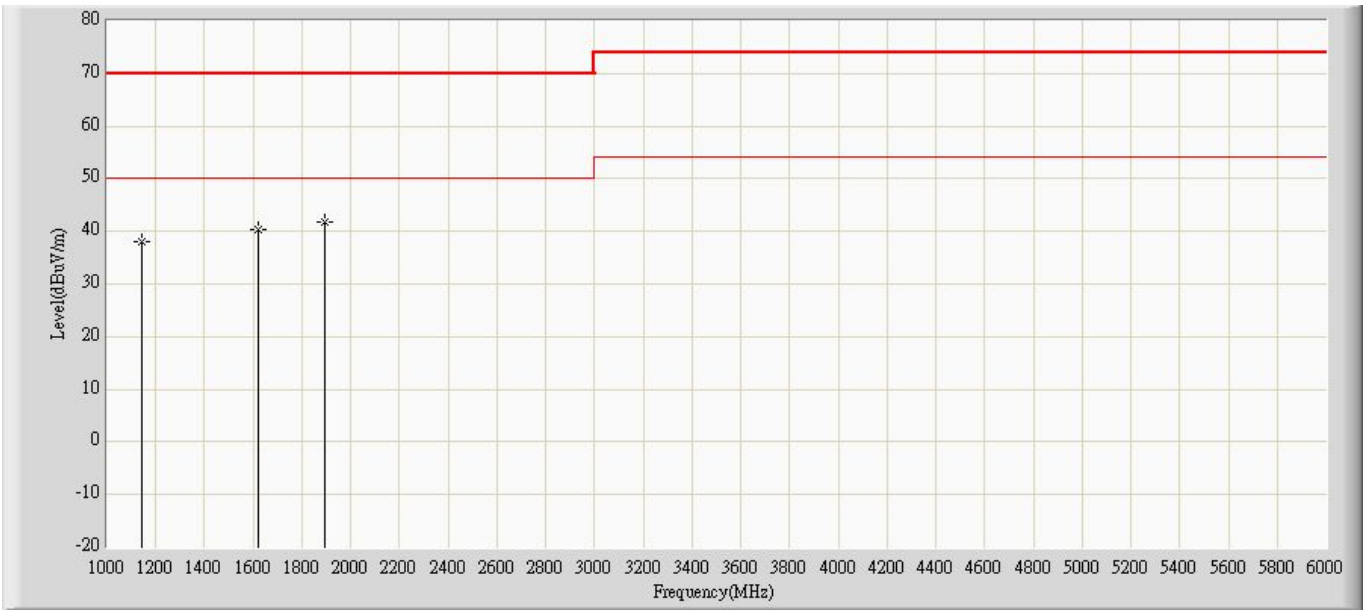


		Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		1120.240	37.573	43.730	-32.427	70.000	-6.157	PK
2		1250.501	38.179	43.850	-31.821	70.000	-5.671	PK
3	*	1891.783	43.273	47.260	-26.727	70.000	-3.988	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: 9x6x6_Chamber	**Time: 2010/12/03 - 00:40**
Limit: EN55022_B_(Above_1G)	**Margin: 0**
Probe: 9120D_1-18G_Horn	**Polarity: Vertical**
EUT: Network Camera	**Power: AC 230V/50Hz**
Note: Mode 3	



		Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		1140.280	38.125	44.200	-31.875	70.000	-6.075	PK
2		1621.242	40.252	44.680	-29.748	70.000	-4.428	PK
3	*	1891.783	41.703	45.690	-28.297	70.000	-3.988	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

5.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

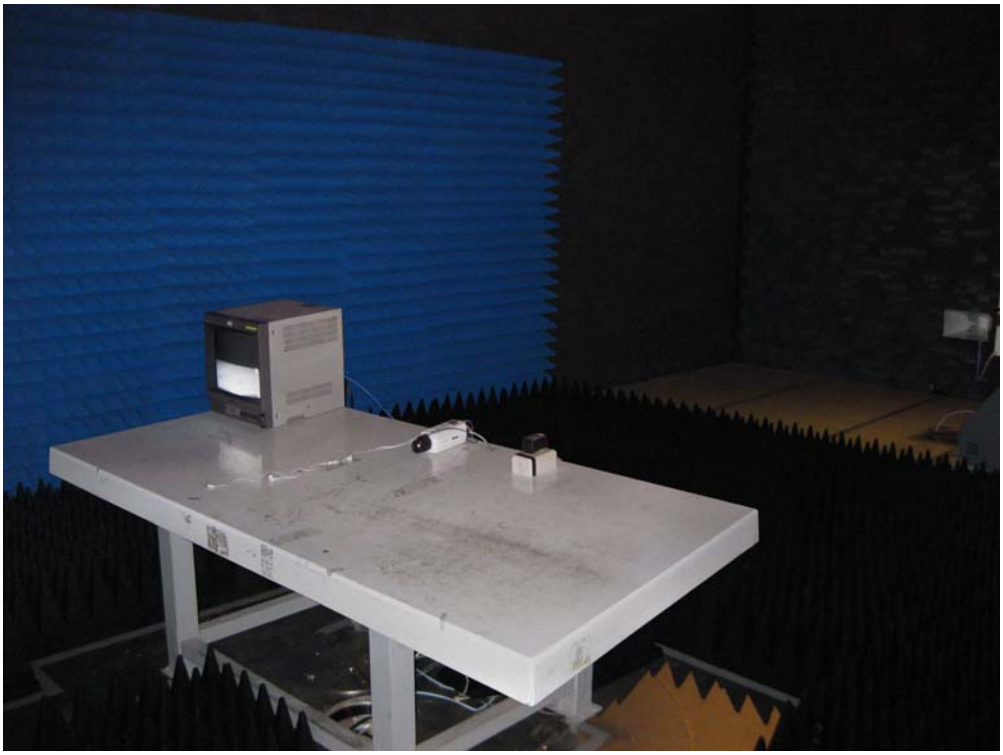
Description : Front View of Radiated Test

Test Mode : Mode 1: Adapter Mode

Description : Back View of Radiated Test

Test Mode　: Mode 1: Adapter Mode

Description　: Front View of High Frequency Radiated Test



Test Mode　: Mode 2: AC 24V Mode

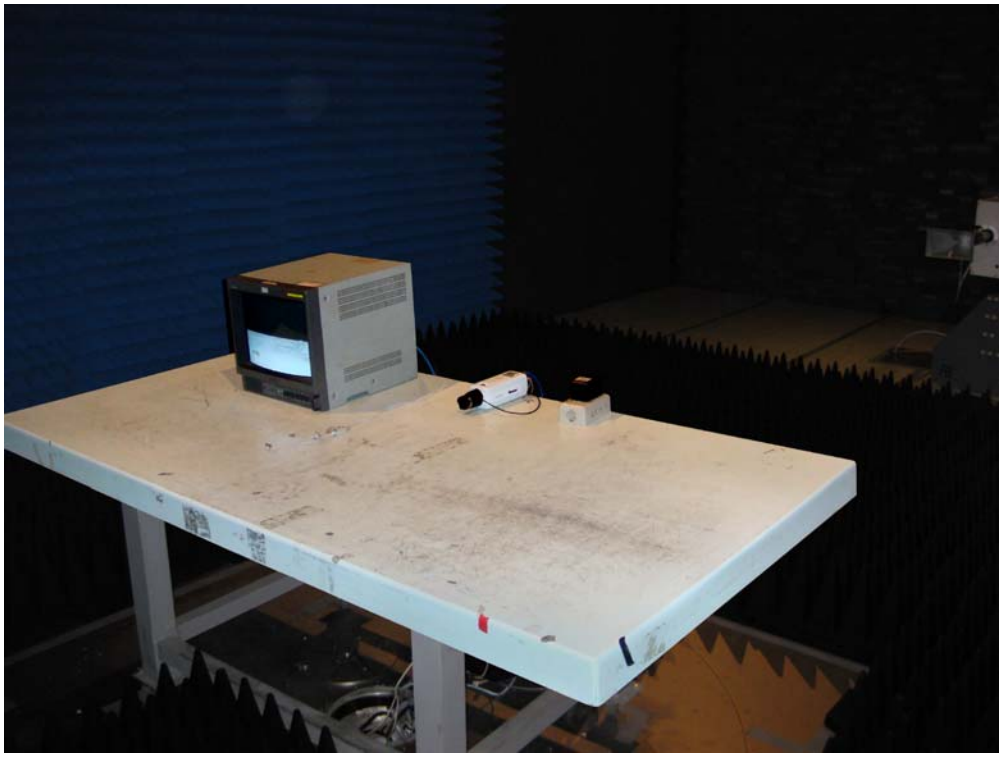
Description　: Front View of Radiated Test

Test Mode : Mode 2: AC 24V Mode

Description : Back View of Radiated Test

Test Mode : Mode 2: AC 24V Mode

Description : Front View of High Frequency Radiated Test



Test Mode　: Mode 3: PoE Mode

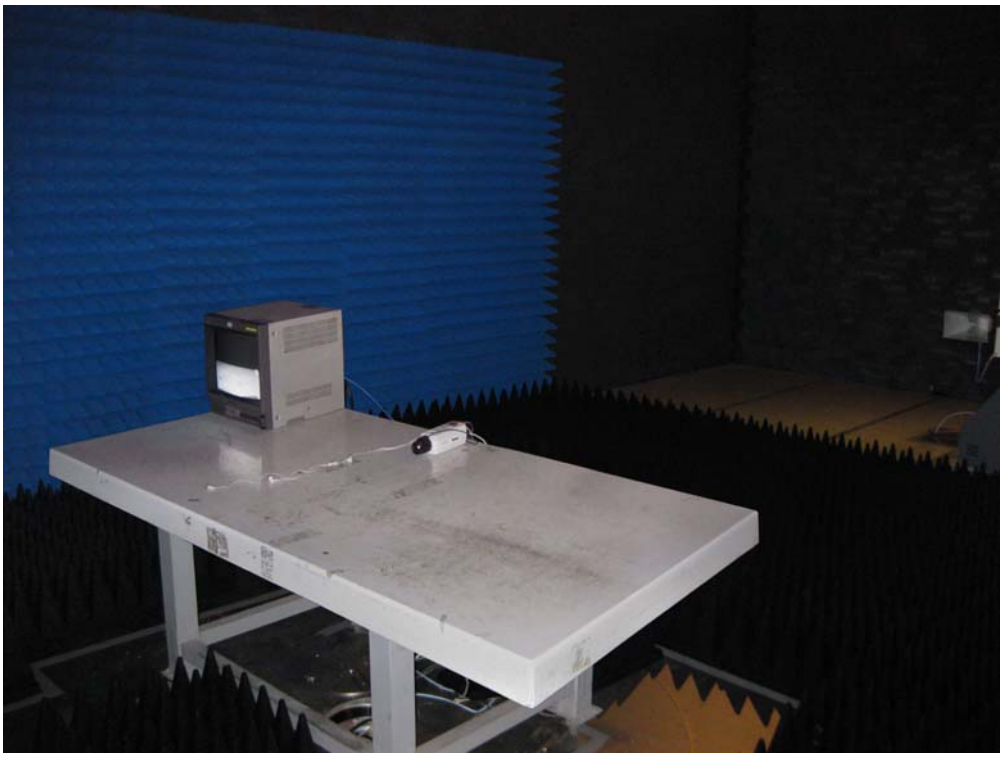
Description　: Front View of Radiated Test

Test Mode　: Mode 3: PoE Mode

Description　: Back View of Radiated Test

Test Mode : Mode 3: PoE Mode

Description : Front View of High Frequency Radiated Test

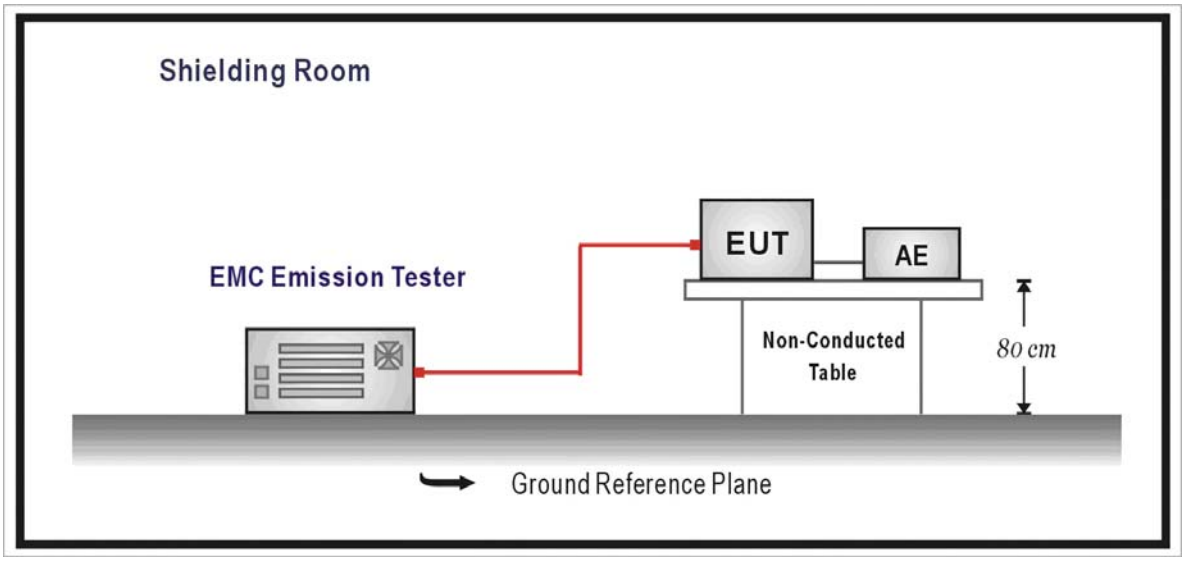


6. Harmonic Current Emission

6.1. Test Specification

According to EMC Standard : EN 61000-3-2

6.2. Test Setup



6.3. Limit

(a) Limits of Class A Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current A	Harmonics Order n	Maximum Permissible harmonic current A
Odd harmonics		Even harmonics	
3	2.30	2	1.08
5	1.14	4	0.43
7	0.77	6	0.30
9	0.40	8 ≤ n ≤ 40	0.23 * 8/n
11	0.33		
13	0.21		
15 ≤ n ≤ 39	0.15 * 15/n		

(b) Limits of Class B Harmonics Currents

For Class B equipment, the harmonic of the input current shall not exceed the maximum permissible values given in table that is the limit of Class A multiplied by a factor of 1.5.

(c) Limits of Class C Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current Expressed as a percentage of the input current at the fundamental frequency %
2	2
3	30 · λ*
5	10
7	7
9	5
11 ≤ n ≤ 39 (odd harmonics only)	3
∗λ is the circuit power factor	

(d) Limits of Class D Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current per watt mA/W	Maximum Permissible harmonic current A
3	3.4	2.30
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
11 ≤ n ≤ 39 (odd harmonics only)	3.85/n	See limit of Class A

6.4. Test Procedure

The EUT is supplied in series with power analyzer from a power source having the same normal voltage and frequency as the rated supply voltage and the equipment under test. And the rated voltage at the supply voltage of EUT of 0.94 times and 1.06 times shall be performed.

6.5. Deviation from Test Standard

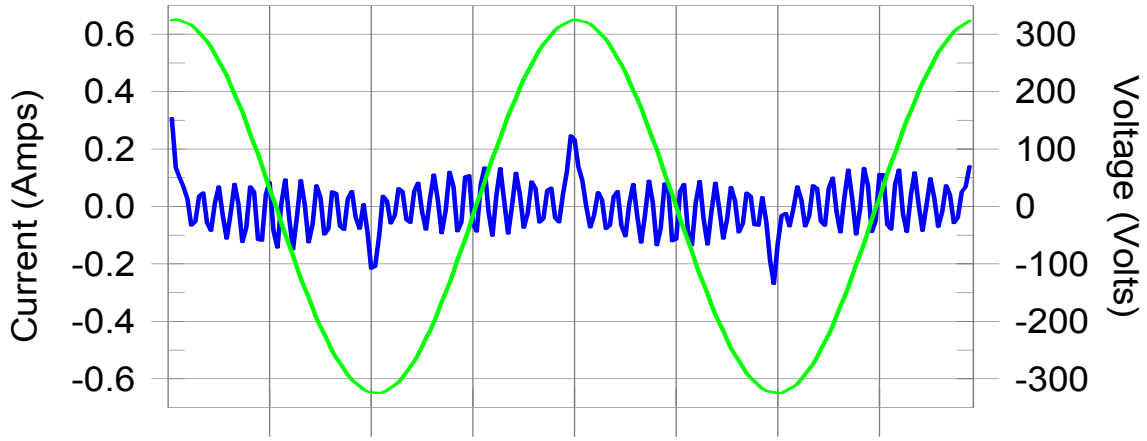
No deviation.

6.6. Test Result

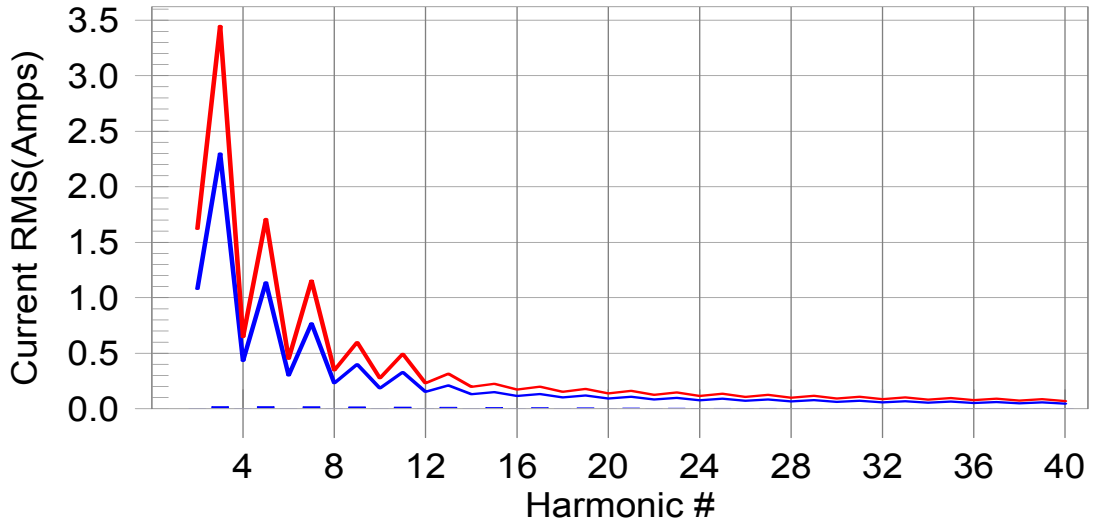
Product	Network Camera		
Test Item	Power Harmonics		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/27	Test Site	No.3 Shielded Room

Test Result: Pass Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line European Limits



Test result: Pass Worst harmonic was #15 with 7.78% of the limit.

Test Result: Pass Source qualification: Normal

THC(A): 0.05 I-THD(%): 179.94 POHC(A): 0.011 POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	229.63	Frequency(Hz):	50.00
I_Peak (Amps):	0.335	I_RMS (Amps):	0.087
I_Fund (Amps):	0.026	Crest Factor:	3.864
Power (Watts):	4.7	Power Factor:	0.238

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.001	1.080	0.0	0.001	1.620	0.04	Pass
3	0.020	2.300	0.9	0.020	3.450	0.58	Pass
4	0.001	0.430	0.1	0.001	0.645	0.10	Pass
5	0.019	1.140	1.7	0.019	1.710	1.13	Pass
6	0.001	0.300	0.2	0.001	0.450	0.21	Pass
7	0.018	0.770	2.3	0.018	1.155	1.58	Pass
8	0.001	0.230	0.3	0.001	0.345	0.22	Pass
9	0.017	0.400	4.1	0.017	0.600	2.80	Pass
10	0.001	0.184	0.4	0.001	0.276	0.29	Pass
11	0.015	0.330	4.6	0.015	0.495	3.09	Pass
12	0.001	0.153	0.5	0.001	0.230	0.38	Pass
13	0.013	0.210	6.4	0.014	0.315	4.32	Pass
14	0.001	0.131	0.5	0.001	0.197	0.42	Pass
15	0.012	0.150	7.8	0.012	0.225	5.26	Pass
16	0.001	0.115	0.6	0.001	0.173	0.48	Pass
17	0.010	0.132	7.5	0.010	0.199	5.07	Pass
18	0.001	0.102	0.7	0.001	0.153	0.56	Pass
19	0.008	0.118	7.0	0.008	0.178	4.74	Pass
20	0.001	0.092	0.7	0.001	0.138	0.57	Pass
21	0.007	0.107	6.3	0.007	0.161	4.28	Pass
22	0.001	0.084	0.8	0.001	0.125	0.60	Pass
23	0.005	0.098	5.6	0.006	0.147	3.78	Pass
24	0.001	0.077	0.8	0.001	0.115	0.63	Pass
25	0.004	0.090	4.8	0.004	0.135	3.25	Pass
26	0.001	0.071	0.8	0.001	0.106	0.63	Pass
27	0.003	0.083	4.1	0.004	0.125	2.80	Pass
28	0.001	0.066	0.8	0.001	0.099	0.62	Pass
29	0.003	0.078	3.5	0.003	0.116	2.42	Pass
30	0.001	0.061	0.8	0.001	0.092	0.69	Pass
31	0.002	0.073	3.1	0.002	0.109	2.14	Pass
32	0.000	0.058	0.8	0.001	0.086	0.63	Pass
33	0.002	0.068	2.8	0.002	0.102	1.95	Pass
34	0.000	0.054	0.8	0.001	0.081	0.62	Pass
35	0.002	0.064	2.6	0.002	0.096	1.83	Pass
36	0.000	0.051	0.8	0.000	0.077	0.63	Pass
37	0.002	0.061	2.5	0.002	0.091	1.73	Pass
38	0.000	0.048	0.8	0.000	0.073	0.60	Pass
39	0.001	0.058	2.4	0.001	0.087	1.65	Pass
40	0.000	0.046	0.8	0.000	0.069	0.66	Pass

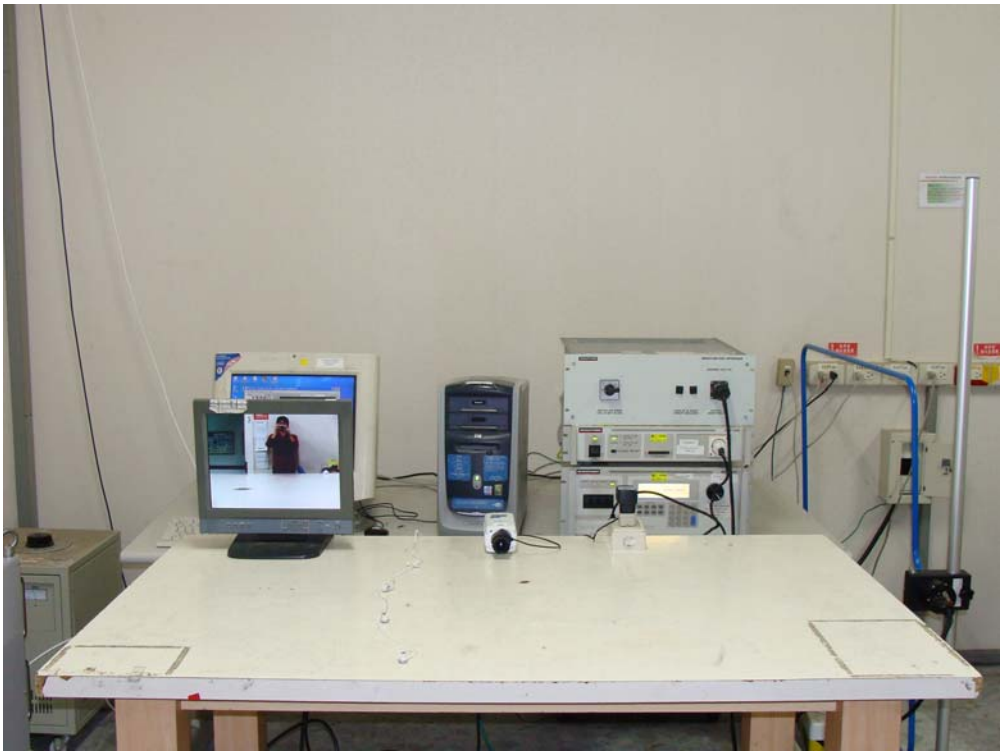
1.Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.

2:According to EN61000-3-2 paragraph 7 the note 1 and 2 are valid for all applications having an active input power >75W. Others the result should be pass.

6.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : Power Harmonics Test Setup

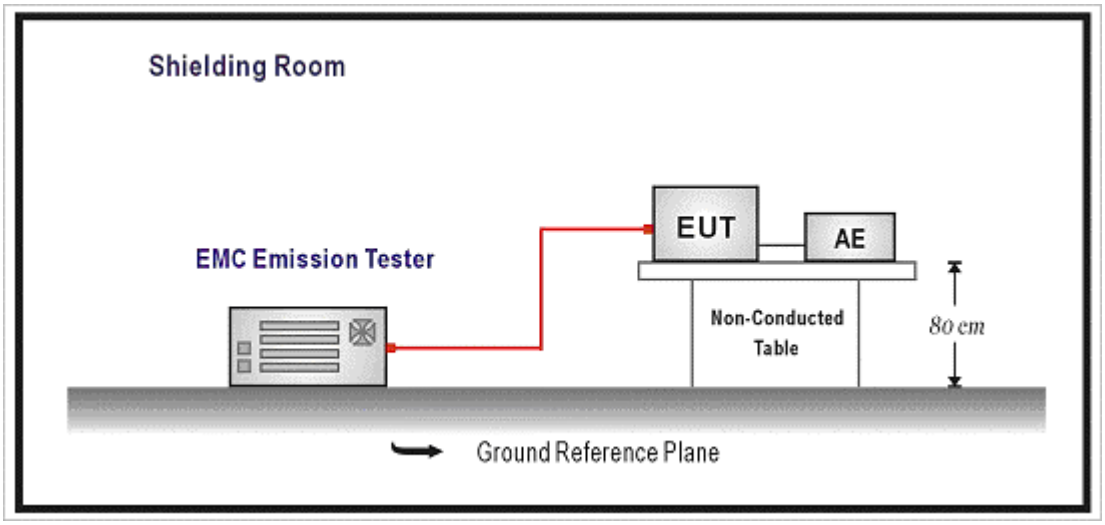


7. Voltage Fluctuation and Flicker

7.1. Test Specification

According to EMC Standard : EN 61000-3-3

7.2. Test Setup



7.3. Limit

The following limits apply:

- the value of P_{st} shall not be greater than 1.0;
- the value of P_{lt} shall not be greater than 0.65;
- the value of d(t) during a voltage change shall not exceed 3.3 % for more than 500 ms;
- the relative steady-state voltage change, d_c, shall not exceed 3.3 %;
- the maximum relative voltage change, d_{max}, shall not exceed;

a) 4 % without additional conditions;

b) 6 % for equipment which is:

- switched manually, or
- switched automatically more frequently than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds), or manual restart, after a power supply interruption.

NOTE The cycling frequency will be further limited by the P_{st} and P_{1t} limit.

For example: a d_{max} of 6%producing a rectangular voltage change characteristic twice per hour will give a P_{1t} of about 0.65.

c) 7 % for equipment which is:
- attended whilst in use (for example: hair dryers, vacuum cleaners, kitchen equipment such as mixers, garden equipment such as lawn mowers, portable tools such as electric drills), or
- switched on automatically, or is intended to be switched on manually, no more than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds) or manual restart, after a power supply interruption.

P_{st} and P_{1t} requirements shall not be applied to voltage changes caused by manual switching.

7.4. Test Procedure

The EUT is supplied in series with power analyzer from a power source having the same normal voltage and frequency as the rated supply voltage and the equipment under test. And the rated voltage at the supply voltage of EUT of 0.94 times and 1.06 times shall be performed.

7.5. Deviation from Test Standard

No deviation.

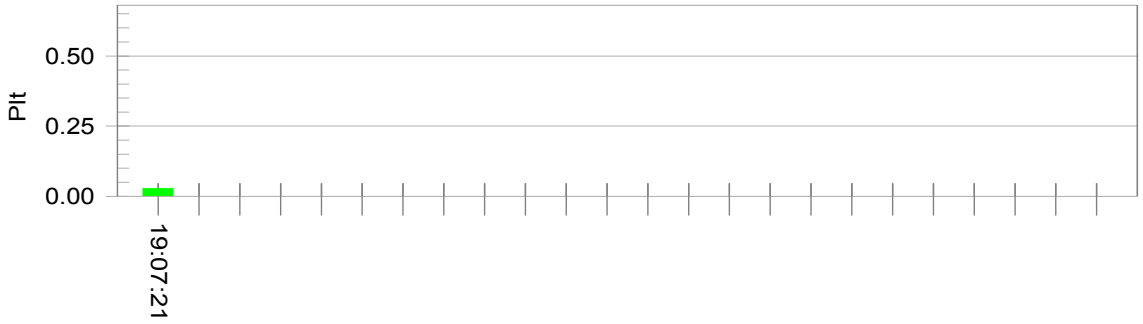
7.6. Test Result

Product	Network Camera		
Test Item	Voltage Fluctuation and Flicker		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/27	Test Site	No.3 Shielded Room

Test Result: Pass Status: Test Completed

Pst_1 and limit line European Limits

Plt and limit line



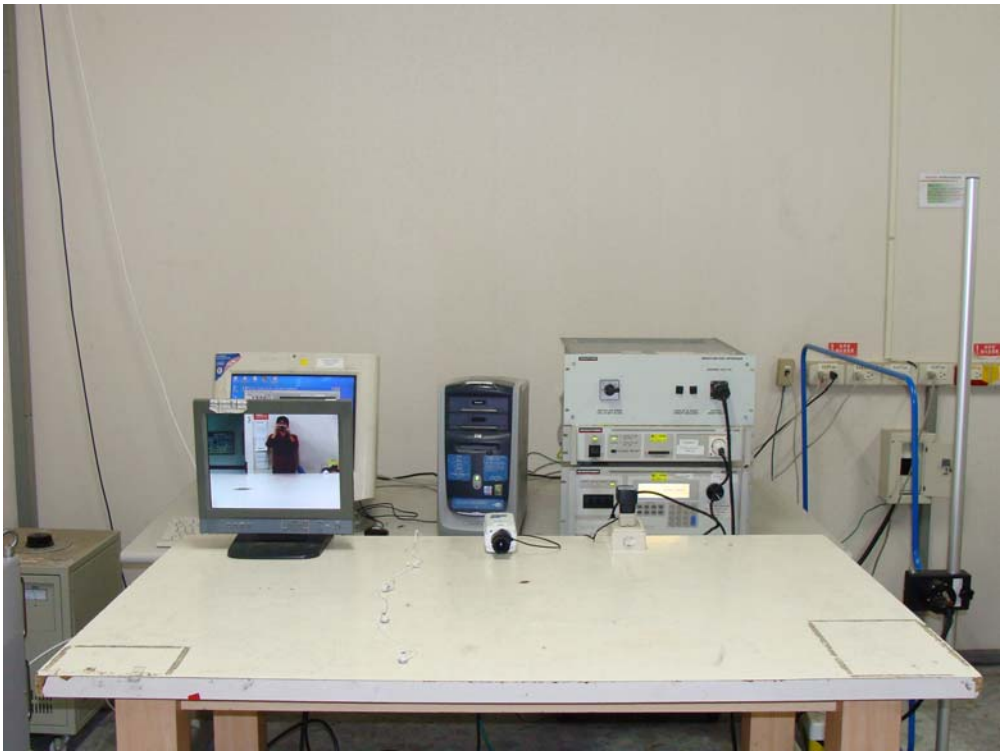
Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.55			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.064	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.028	Test limit:	0.650	Pass

7.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : Flicker Test Setup

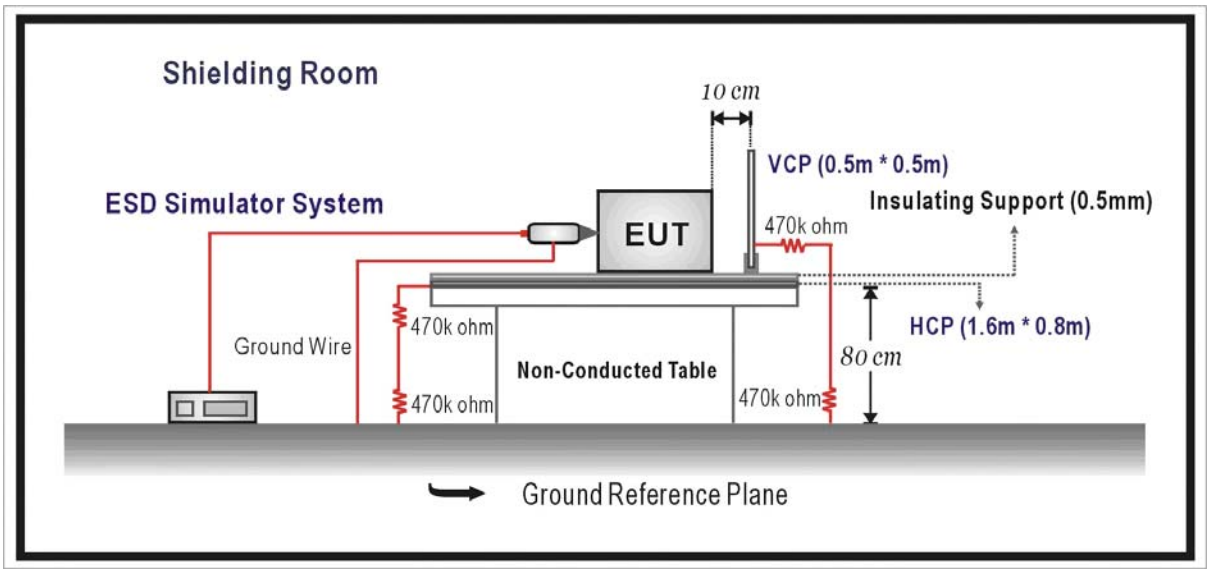


8. Electrostatic Discharge

8.1. Test Specification

According to Standard : IEC 61000-4-2

8.2. Test Setup



8.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Electrostatic Discharge	kV(Charge Voltage)	±8 Air Discharge ±4 Contact Discharge	B

8.4. Test Procedure

Direct application of discharges to the EUT:

Contact discharge was applied only to conductive surfaces of the EUT.

Air discharges were applied only to non-conductive surfaces of the EUT.

During the test, it was performed with single discharges. For the single discharge time between successive single discharges will be keep longer 1 second. It was at least ten single discharges with positive and negative at the same selected point.

The selected point, which was performed with electrostatic discharge, was marked on the red label of the EUT.

Indirect application of discharges to the EUT:

Vertical Coupling Plane (VCP):

The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least ten single discharges with positive and negative at the same selected point.

Horizontal Coupling Plane (HCP):

The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least ten single discharges with positive and negative at the same selected point.

8.5. Deviation from Test Standard

No deviation.

8.6. Test Result

Product	Network Camera		
Test Item	Electrostatic Discharge		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/28	Test Site	No.6 Shielded Room

Item	Amount of Discharge	Voltage	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+8kV	B	B	Pass
	10	-8kV	B	B	Pass
Contact Discharge	25	+4kV	B	B	Pass
	25	-4kV	B	B	Pass
Indirect Discharge (HCP)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Front)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Left)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Back)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Right)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☒ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied at least total 200 discharges at a minimum of four test points.

Product	Network Camera		
Test Item	Electrostatic Discharge		
Test Mode	Mode 2: AC 24V Mode		
Date of Test	2011/01/28	Test Site	No.6 Shielded Room

Item	Amount of Discharge	Voltage	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+8kV	B	B	Pass
	10	-8kV	B	B	Pass
Contact Discharge	25	+4kV	B	B	Pass
	25	-4kV	B	B	Pass
Indirect Discharge (HCP)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Front)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Left)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Back)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Right)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☒ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied at least total 200 discharges at a minimum of four test points.

Product	Network Camera		
Test Item	Electrostatic Discharge		
Test Mode	Mode 3: PoE Mode		
Date of Test	2011/01/28	Test Site	No.6 Shielded Room

Item	Amount of Discharge	Voltage	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+8kV	B	B	Pass
	10	-8kV	B	B	Pass
Contact Discharge	25	+4kV	B	B	Pass
	25	-4kV	B	B	Pass
Indirect Discharge (HCP)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Front)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Left)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Back)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass
Indirect Discharge (VCP Right)	25	+4kV	B	A	Pass
	25	-4kV	B	A	Pass

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☒ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied at least total 200 discharges at a minimum of four test points.

8.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : ESD Test Setup

Test Mode : Mode 2: AC 24V Mode

Description : ESD Test Setup

Test Mode　: Mode 3: PoE Mode

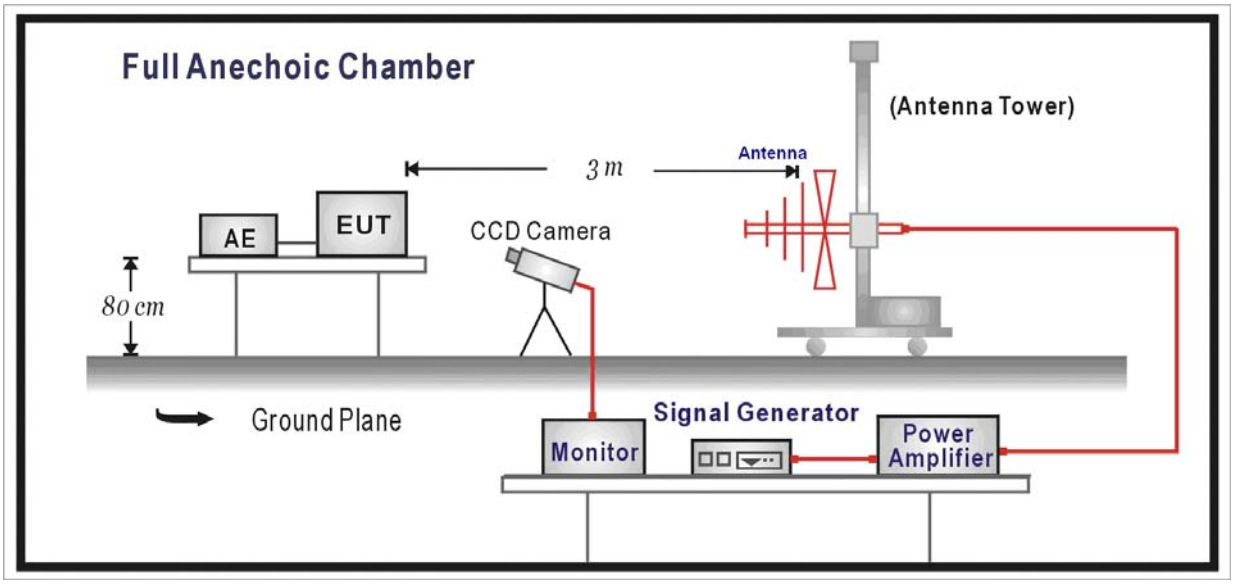
Description　: ESD Test Setup

9. Radiated Susceptibility

9.1. Test Specification

According to Standard : IEC 61000-4-3

9.2. Test Setup



9.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Radio-Frequency	MHz	80-1000	A
	Electromagnetic Field	V/m(Un-modulated, rms)	3	
	Amplitude Modulated	% AM (1kHz)	80	

9.4. Test Procedure

The EUT and load, which are placed on a table that is 0.8 meter above ground, are placed with one coincident with the calibration plane such that the distance from antenna to the EUT was 3 meters.
Both horizontal and vertical polarization of the antenna and four sides of the EUT are set on measurement.
In order to judge the EUT performance, a CCD camera is used to monitor EUT screen.

All the scanning conditions are as follows:

	Condition of Test	Remarks
1.	Field Strength	3 V/m Level 2
2.	Radiated Signal	AM 80% Modulated with 1kHz
3.	Scanning Frequency	80MHz - 1000MHz
4	Dwell Time	3 Seconds
5.	Frequency step size Δf :	1%
6.	The rate of Swept of Frequency	1.5 x 10^{-3} decades/s

9.5. Deviation from Test Standard

No deviation.

9.6. Test Result

Product	Network Camera		
Test Item	Radiated susceptibility		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/27	Test Site	Chamber5

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	FRONT	H	3	A	A	PASS
80-1000	FRONT	V	3	A	A	PASS
80-1000	BACK	H	3	A	A	PASS
80-1000	BACK	V	3	A	A	PASS
80-1000	RIGHT	H	3	A	A	PASS
80-1000	RIGHT	V	3	A	A	PASS
80-1000	LEFT	H	3	A	A	PASS
80-1000	LEFT	V	3	A	A	PASS
80-1000	UP	H	3	A	A	PASS
80-1000	UP	V	3	A	A	PASS
80-1000	DOWN	H	3	A	A	PASS
80-1000	DOWN	V	3	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ There was no observable degradation in performance.
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Radiated susceptibility		
Test Mode	Mode 2: AC 24V Mode		
Date of Test	2011/01/27	Test Site	Chamber5

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	FRONT	H	3	A	A	PASS
80-1000	FRONT	V	3	A	A	PASS
80-1000	BACK	H	3	A	A	PASS
80-1000	BACK	V	3	A	A	PASS
80-1000	RIGHT	H	3	A	A	PASS
80-1000	RIGHT	V	3	A	A	PASS
80-1000	LEFT	H	3	A	A	PASS
80-1000	LEFT	V	3	A	A	PASS
80-1000	UP	H	3	A	A	PASS
80-1000	UP	V	3	A	A	PASS
80-1000	DOWN	H	3	A	A	PASS
80-1000	DOWN	V	3	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ There was no observable degradation in performance.
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Radiated susceptibility		
Test Mode	Mode 3: PoE Mode		
Date of Test	2011/01/27	Test Site	Chamber5

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	FRONT	H	3	A	A	PASS
80-1000	FRONT	V	3	A	A	PASS
80-1000	BACK	H	3	A	A	PASS
80-1000	BACK	V	3	A	A	PASS
80-1000	RIGHT	H	3	A	A	PASS
80-1000	RIGHT	V	3	A	A	PASS
80-1000	LEFT	H	3	A	A	PASS
80-1000	LEFT	V	3	A	A	PASS
80-1000	UP	H	3	A	A	PASS
80-1000	UP	V	3	A	A	PASS
80-1000	DOWN	H	3	A	A	PASS
80-1000	DOWN	V	3	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

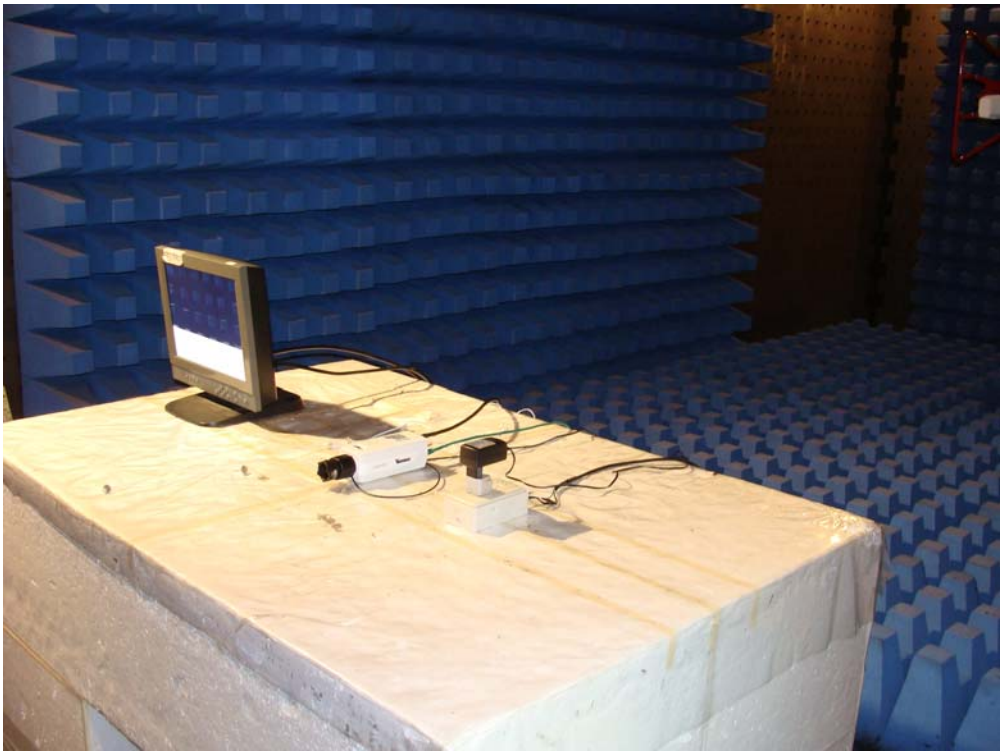
☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ There was no observable degradation in performance.
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.

☒ No false alarms or other malfunctions were observed during or after the test.

9.7. Test Photograph

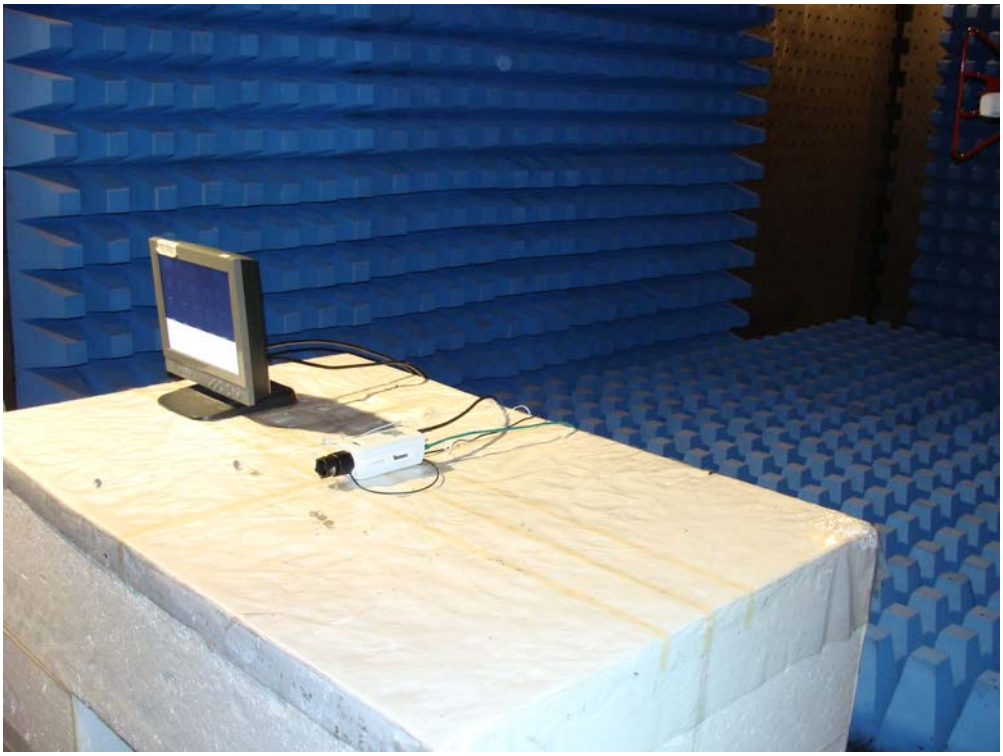
Test Mode : Mode 1: Adapter Mode

Description : Radiated Susceptibility Test Setup



Test Mode : Mode 2: AC 24V Mode

Description : Radiated Susceptibility Test Setup



Test Mode : Mode 3: PoE Mode

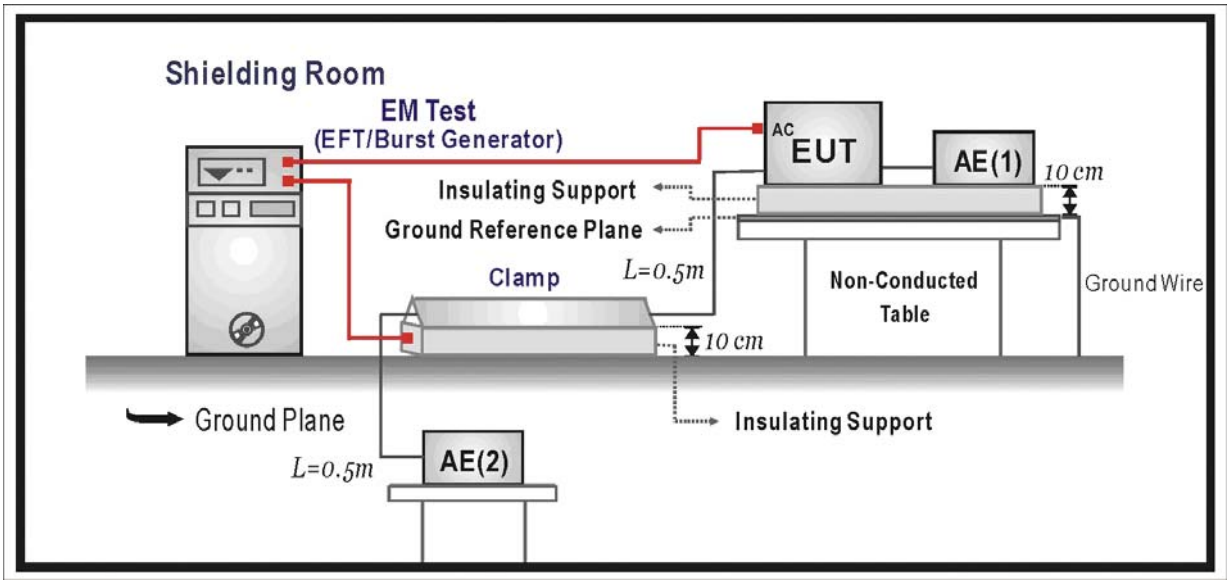
Description : Radiated Susceptibility Test Setup

10. Electrical Fast Transient/Burst

10.1. Test Specification

According to Standard : IEC 61000-4-4

10.2. Test Setup



10.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
I/O and communication ports				
	Fast Transients Common Mode	kV (Peak) Tr/Th ns Rep. Frequency kHz	±0.5 5/50 5	B
Input DC Power Ports				
	Fast Transients Common Mode	kV (Peak) Tr/Th ns Rep. Frequency kHz	±0.5 5/50 5	B
Input AC Power Ports				
	Fast Transients Common Mode	kV (Peak) Tr/Th ns Rep. Frequency kHz	±1 5/50 5	B

10.4. Test Procedure

The EUT is placed on a table that is 0.8 meter height. A ground reference plane is placed on the table, and uses a 0.1m insulation between the EUT and ground reference plane.
The minimum area of the ground reference plane is 1m*1m, and 0.65mm thick min, and projected beyond the EUT by at least 0.1m on all sides.

Test on I/O and communication ports:
The EFT interference signal is through a coupling clamp device couples to the signal and control lines of the EUT with burst noise for 1minute.

Test on power supply ports:
The EUT is connected to the power mains through a coupling device that directly couples the EFT/B interference signal.
Each of the Line and Neutral conductors is impressed with burst noise for 1 minute.

The length of the signal and power lines between the coupling device and the EUT is 0.5m.

10.5. Deviation from Test Standard

No deviation.

10.6. Test Result

Product	Network Camera		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/25	Test Site	No.6 Shielded Room

Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	1kV	60	Direct	B	B	PASS
LAN	±	0.5 kV	60	Clamp	B	B	PASS
Coaxial	±	0.5 kV	60	Clamp	B	B	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☐ Meet criteria A : Operate as intended during and after the test
☒ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 2: AC 24V Mode		
Date of Test	2011/01/25	Test Site	No.6 Shielded Room

Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	1kV	60	Direct	B	B	PASS
LAN	±	0.5 kV	60	Clamp	B	B	PASS
Coaxial	±	0.5 kV	60	Clamp	B	B	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☐ Meet criteria A : Operate as intended during and after the test
☒ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 3: PoE Mode		
Date of Test	2011/01/25	Test Site	No.6 Shielded Room

Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
LAN	±	0.5 kV	60	Clamp	B	B	PASS
Coaxial	±	0.5 kV	60	Clamp	B	B	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☐ Meet criteria A : Operate as intended during and after the test
☒ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

10.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : EFT/B Test Setup

Test Mode : Mode 1: Adapter Mode

Description : EFT/B Test Setup - Clamp

Test Mode　: Mode 2: AC 24V Mode

Description　: EFT/B Test Setup

Test Mode　: Mode 2: AC 24V Mode

Description　: EFT/B Test Setup - Clamp

Test Mode : Mode 3: PoE Mode

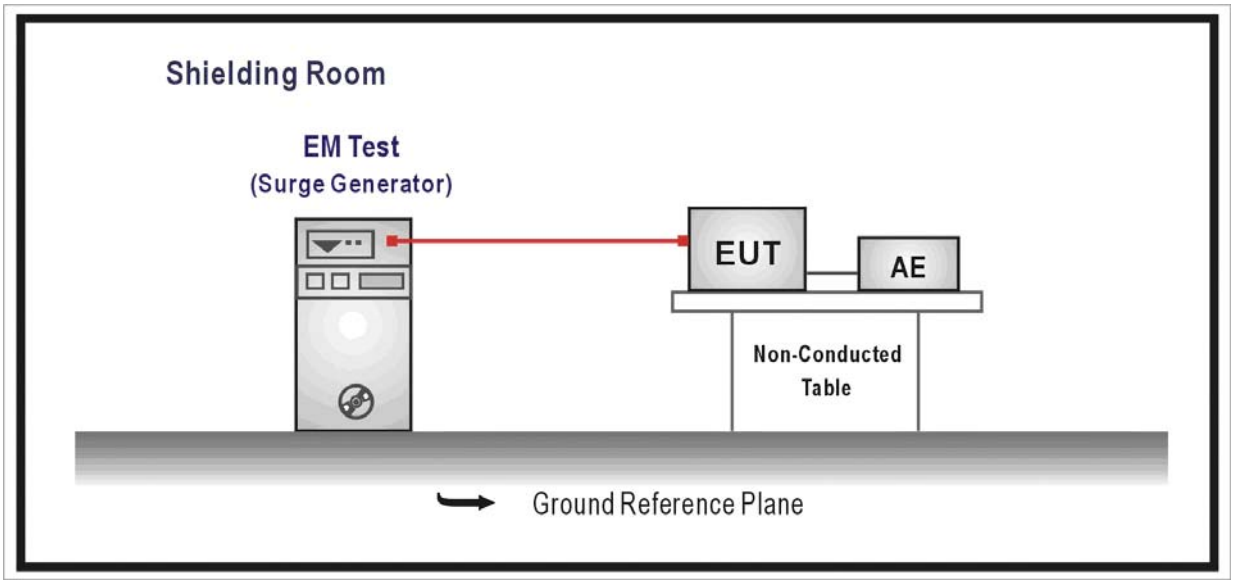
Description : EFT/B Test Setup - Clamp

11. Surge

11.1. Test Specification

According to Standard : IEC 61000-4-5

11.2. Test Setup



11.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports(See 1) and 2))				
	Surges Line to Ground	Tr/Th us kV	1.2/50 (8/20) ± 1	B
Input DC Power Ports				
	Surges Line to Ground	Tr/Th us kV	1.2/50 (8/20) ± 0.5	B
AC Input and AC Output Power Ports				
	Surges Line to Line Line to Ground	Tr/Th us kV kV	1.2/50 (8/20) ± 1 ± 2	B

Notes:

1) Applicable only to ports which according to the manufacturer's may directly to outdoor cables.
2) Where normal functioning cannot be achieved because of the impact of the CDN on the EUT, no immunity test shall be required.

11.4. Test Procedure

The EUT and its load are placed on a table that is 0.8 meter above a metal ground plane measured 1m*1m min. and 0.65mm thick min. And projected beyond the EUT by at least 0.1m on all sides. The length of power cord between the coupling device and the EUT shall be 2m or less.

For Input and Output AC Power or DC Input and DC Output Power Ports:

The EUT is connected to the power mains through a coupling device that directly couples the Surge interference signal.

The surge noise shall be applied synchronized to the voltage phase at 0^0, 90^0, 180^0, 270^0 and the peak value of the a.c. voltage wave. (Positive and negative)

Each of Line-Earth and Line-Line is impressed with a sequence of five surge voltages with interval of 1 min.

11.5. Deviation from Test Standard

No deviation.

11.6. Test Result

Product	Network Camera		
Test Item	Surge		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/25	Test Site	No.6 Shielded Room

Inject Line	Polarity	Angle	Voltage kV	Time Interval (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	0	1kV	60	Direct	B	A	PASS
L-N	±	90	1kV	60	Direct	B	A	PASS
L-N	±	180	1kV	60	Direct	B	A	PASS
L-N	±	270	1kV	60	Direct	B	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Surge		
Test Mode	Mode 2: AC 24V Mode		
Date of Test	2011/01/25	Test Site	No.6 Shielded Room

Inject Line	Polarity	Angle	Voltage kV	Time Interval (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	0	1kV	60	Direct	B	A	PASS
L-N	±	90	1kV	60	Direct	B	A	PASS
L-N	±	180	1kV	60	Direct	B	A	PASS
L-N	±	270	1kV	60	Direct	B	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test.

11.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : SURGE Test Setup

Test Mode : Mode 2: AC 24V Mode

Description : SURGE Test Setup

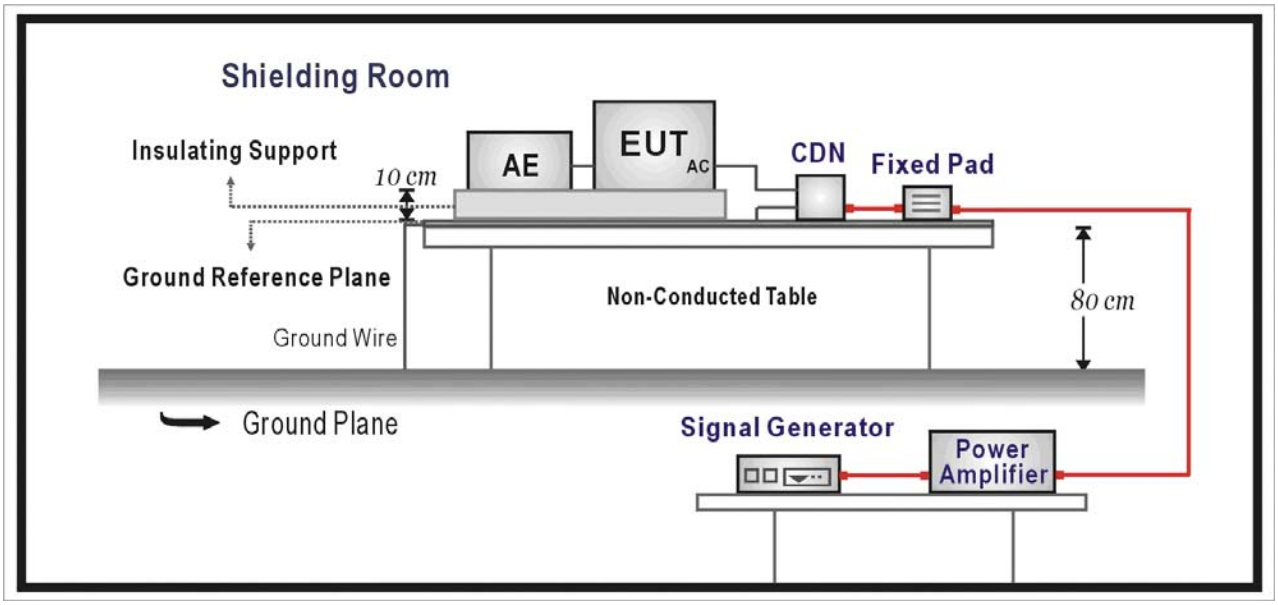
12. Conducted Susceptibility

12.1. Test Specification

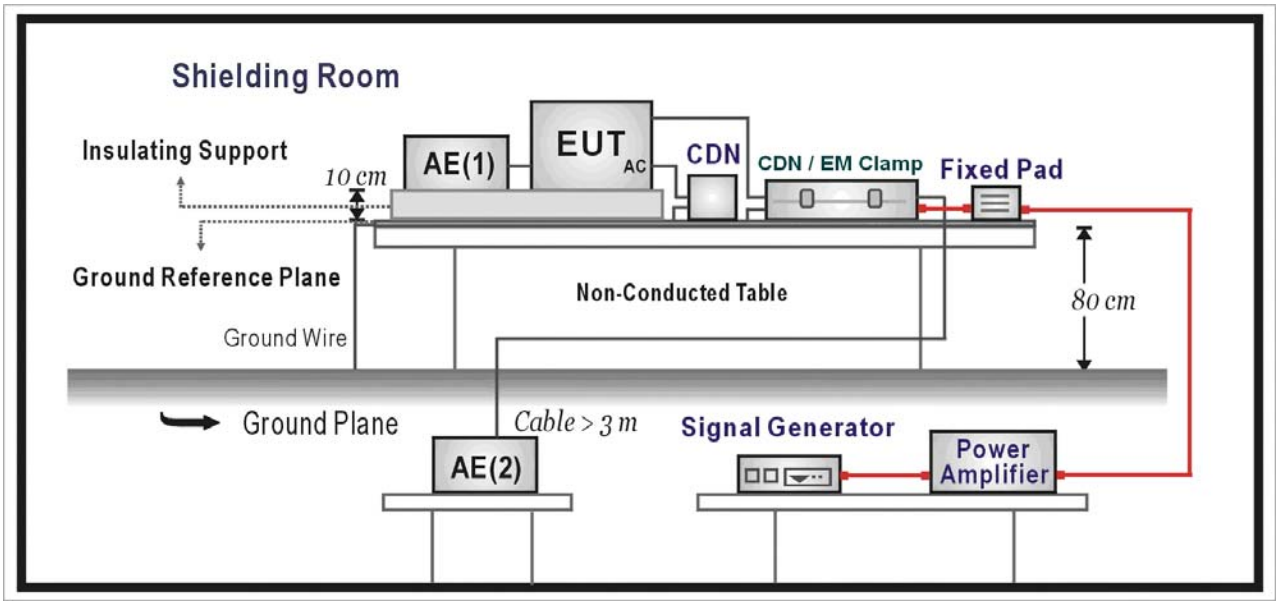
According to Standard : IEC 61000-4-6

12.2. Test Setup

CDN Test Mode



EM Clamp Test Mode



12.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports				
	Radio-Frequency Continuous Conducted	MHz V (rms, Un-modulated) % AM (1kHz)	0.15-80 3 80	A
Input DC Power Ports				
	Radio-Frequency Continuous Conducted	MHz V (rms, Un-modulated) % AM (1kHz)	0.15-80 3 80	A
Input AC Power Ports				
	Radio-Frequency Continuous Conducted	MHz V (rms, Un-modulated) % AM (1kHz)	0.15-80 3 80	A

12.4. Test Procedure

The EUT are placed on a table that is 0.8 meter height, and a Ground reference plane on the table, EUT are placed upon table and use a 10cm insulation between the EUT and Ground reference plane.
For Signal Ports and Telecommunication Ports
The disturbance signal is through a coupling and decoupling networks (CDN) or EM-clamp device couples to the signal and Telecommunication lines of the EUT.
For Input DC and AC Power Ports
The EUT is connected to the power mains through a coupling and decoupling networks for power supply lines. And directly couples the disturbances signal into EUT.
Used CDN-M2 for two wires or CDN-M3 for three wires.

All the scanning conditions are as follows:

	Condition of Test	Remarks
1.	Field Strength	130dBuV(3V) Level 2
2.	Radiated Signal	AM 80% Modulated with 1kHz
3.	Scanning Frequency	0.15MHz – 80MHz
4	Dwell Time	3 Seconds
5.	Frequency step size Δf :	1%
6.	The rate of Swept of Frequency	1.5 x 10^{-3} decades/s

12.5. Deviation from Test Standard

No deviation.

12.6. Test Result

Product	Network Camera		
Test Item	Conducted susceptibility		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/27	Test Site	No.6 Shielded Room

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	130 (3V)	CDN	AC IN	A	A	PASS
0.15~80	130 (3V)	CDN	LAN	A	A	PASS
0.15~80	130 (3V)	Clamp	Coaxial	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Network Camera		
Test Item	Conducted susceptibility		
Test Mode	Mode 2: AC 24V Mode		
Date of Test	2011/01/27	Test Site	No.6 Shielded Room

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	130 (3V)	CDN	AC IN	A	A	PASS
0.15~80	130 (3V)	CDN	LAN	A	A	PASS
0.15~80	130 (3V)	Clamp	Coaxial	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Network Camera		
Test Item	Conducted susceptibility		
Test Mode	Mode 3: PoE Mode		
Date of Test	2011/01/27	Test Site	No.6 Shielded Room

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	130 (3V)	Clamp	Coaxial	A	A	PASS
0.15~80	130 (3V)	Clamp	LAN	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

12.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : Conducted Susceptibility Test Setup

Test Mode : Mode 1: Adapter Mode

Description : Conducted Susceptibility Test Setup - CDN

Test Mode　: Mode 2: AC 24V Mode

Description　: Conducted Susceptibility Test Setup

Test Mode　: Mode 2: AC 24V Mode

Description　: Conducted Susceptibility Test Setup - CDN

Test Mode　: Mode 3: PoE Mode

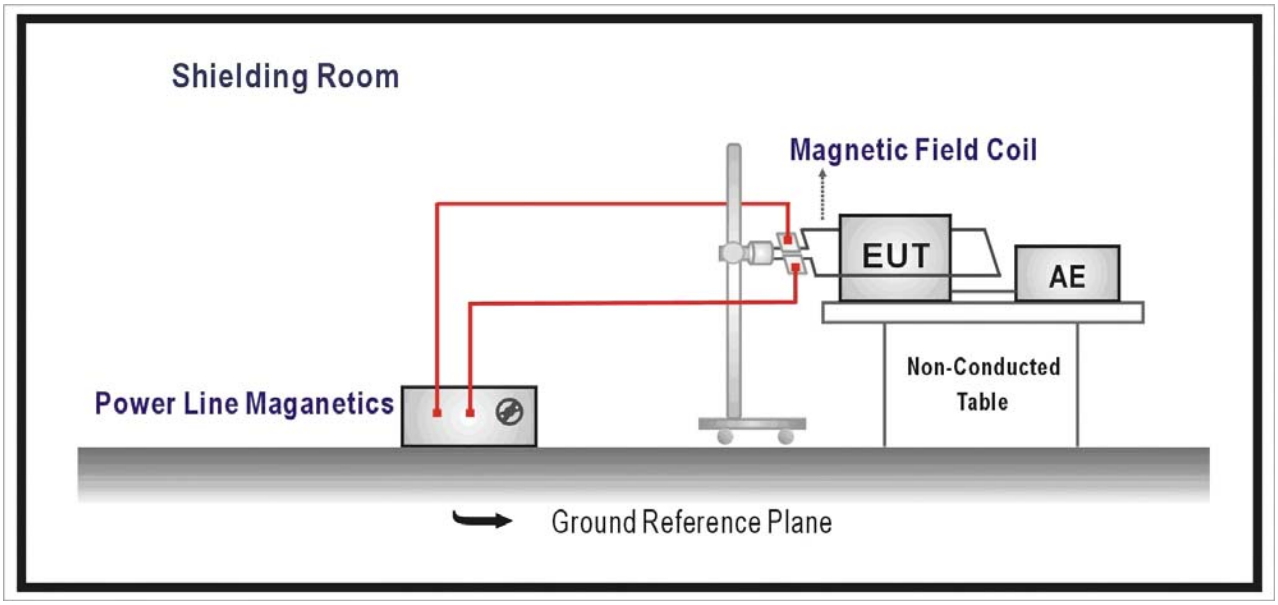
Description　: Conducted Susceptibility Test Setup - Clamp

13. Power Frequency Magnetic Field

13.1. Test Specification

According to Standard : IEC 61000-4-8

13.2. Test Setup



13.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Power-Frequency Magnetic Field	Hz A/m (r.m.s.)	50 1	A

13.4. Test Procedure

The EUT and its load are placed on a table which is 0.8 meter above a metal ground plane measured at least 1m*1m min. The test magnetic field shall be placed at central of the induction coil.

The test magnetic Field shall be applied 10 minutes by the immersion method to the EUT. And the induction coil shall be rotated by 90° in order to expose the EUT to the test field with different orientation (X, Y, Z Orientations).

13.5. Deviation from Test Standard

No deviation.

13.6. Test Result

Product	Network Camera		
Test Item	Power frequency magnetic field		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/27	Test Site	No.3 Shielded Room

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	PASS
Y Orientation	50	1	A	A	PASS
Z Orientation	50	1	A	A	PASS

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Network Camera		
Test Item	Power frequency magnetic field		
Test Mode	Mode 2: AC 24V Mode		
Date of Test	2011/01/27	Test Site	No.3 Shielded Room

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	PASS
Y Orientation	50	1	A	A	PASS
Z Orientation	50	1	A	A	PASS

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Network Camera		
Test Item	Power frequency magnetic field		
Test Mode	Mode 3: PoE Mode		
Date of Test	2011/01/27	Test Site	No.3 Shielded Room

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	PASS
Y Orientation	50	1	A	A	PASS
Z Orientation	50	1	A	A	PASS

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

13.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

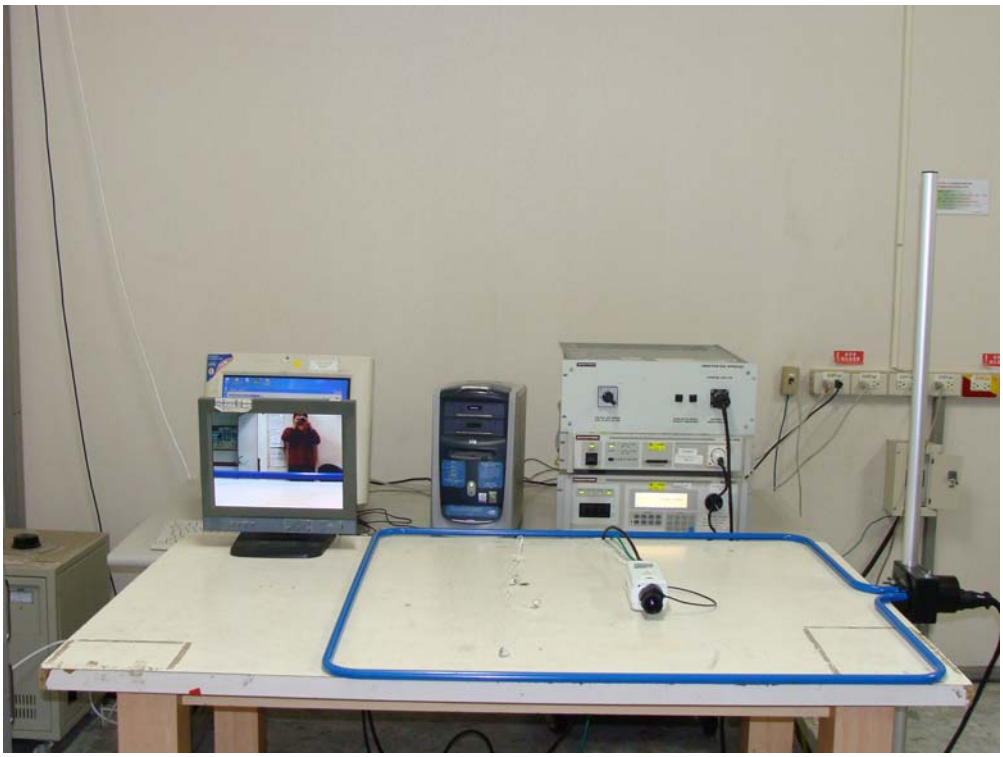
Description : Power Frequency Magnetic Field Test Setup

Test Mode : Mode 2: AC 24V Mode

Description : Power Frequency Magnetic Field Test Setup

Test Mode : Mode 3: PoE Mode

Description : Power Frequency Magnetic Field Test Setup

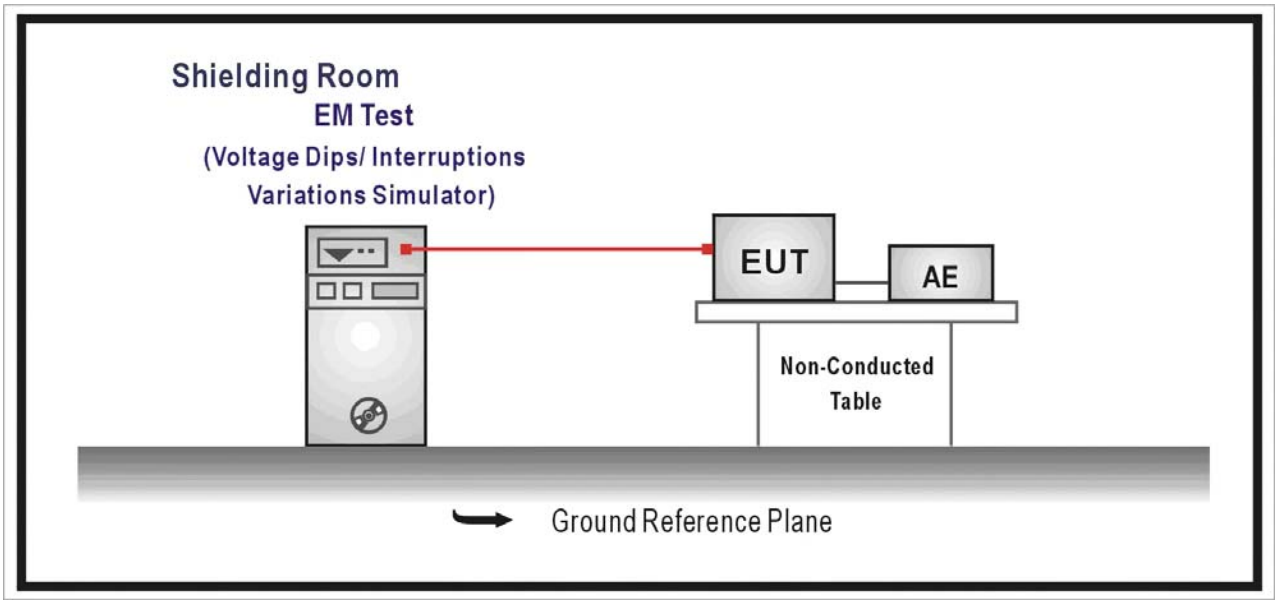


14. Voltage Dips and Interruption

14.1. Test Specification

According to Standard : IEC 61000-4-11

14.2. Test Setup



14.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Input AC Power Ports				
	Voltage Dips	% Reduction Period	30 25	C
		% Reduction Period	>95 0.5	B
	Voltage Interruptions	% Reduction Period	> 95 250	C

14.4. Test Procedure

The EUT and its load are placed on a table which is 0.8 meter above a metal ground plane measured 1m*1m min. And 0.65mm thick min. And projected beyond the EUT by at least 0.1m on all sides. The power cord shall be used the shortest power cord as specified by the manufacturer.

For Voltage Dips/ Interruptions test:

The selection of test voltage is based on the rated power range. If the operation range is large than 20% of lower power range, both end of specified voltage shall be tested. Otherwise, the typical voltage specification is selected as test voltage.

The EUT is connected to the power mains through a coupling device that directly couples to the Voltage Dips and Interruption Generator.

The EUT shall be tested for 30% voltage dip of supplied voltage and duration 25 Periods, for 95% voltage dip of supplied voltage and duration 0.5 Periods with a sequence of three voltage dips with intervals of 10 seconds, and for 95% voltage interruption of supplied voltage and duration 250 Periods with a sequence of three voltage interruptions with intervals of 10 seconds.

Voltage phase shifting are shall occur at 0^0, 45^0, 90^0 ,135^0 ,180^0 ,225^0, 270^0 ,315^0 of the voltage.

14.5. Deviation from Test Standard

No deviation.

14.6. Test Result

Product	Network Camera		
Test Item	Voltage dips and interruption		
Test Mode	Mode 1: Adapter Mode		
Date of Test	2011/01/25	Test Site	No.6 Shielded Room

Voltage Dips and Interruption Reduction(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
30	0	25	C	A	PASS
30	45	25	C	A	PASS
30	90	25	C	A	PASS
30	135	25	C	A	PASS
30	180	25	C	A	PASS
30	225	25	C	A	PASS
30	270	25	C	A	PASS
30	315	25	C	A	PASS
>95	0	0.5	B	A	PASS
>95	45	0.5	B	A	PASS
>95	90	0.5	B	A	PASS
>95	135	0.5	B	A	PASS
>95	180	0.5	B	A	PASS
>95	225	0.5	B	A	PASS
>95	270	0.5	B	A	PASS
>95	315	0.5	B	A	PASS
>95	0	250	C	B	PASS
>95	45	250	C	B	PASS
>95	90	250	C	B	PASS
>95	135	250	C	B	PASS
>95	180	250	C	B	PASS
>95	225	250	C	B	PASS
>95	270	250	C	B	PASS
>95	315	250	C	B	PASS

☒ Meet criteria A: Operate as intended during and after the test
☒ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ The nominal voltage of EUT is 230V.
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

14.7. Test Photograph

Test Mode : Mode 1: Adapter Mode

Description : Voltage Dips Test Setup

15. Attachment

➢ EUT Photograph

(1) EUT Photo

(2) EUT Photo

(3) EUT Photo

(4) EUT Photo

(5) EUT Photo

(6) EUT Photo

(7) EUT Photo


SWITCH-MODE
POWER SUPPLY
MODEL: 3A-183WP12
INPUT:100-240V~, 50-60Hz,0.6A
OUTPUT: 12V ⎓ 1.5A
FOR I.T.E. USE ONLY
Intertek
LISTED
E163743
8F35
EFFICIENCY LEVEL V
LPS
1021 A
RoHS
MADE IN CHINA