CERTIFICATE

Issued Date: Oct. 29, 2008
Report No.: 089327R-ITUSP02V01

This is to certify that the following designated product

Product	**:**	**IPC**
Trade Name	**:**	**Radware**
Model Number	**:**	**On Demand Switch 3 (RODS3-DEFDUDC)**
		On Demand Switch 3 (RODS3-S1-DEFDUDC)
		On Demand Switch 3 (RODS3-S2-DEFDUDC)
Company Name	**:**	**Radware Ltd.**

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.

FCC CFR Title 47 Part 15 Subpart B: 2007 Class A, CISPR 22: 2005
ANSI C63.4: 2003 **ICES-003 Issue 4: 2004 Class A**

TEST LABORATORY

Vincent Lin / Manager

QuieTek No.5-22, Ruei-Shu Valley, Ruei-Ping Tsuen Lin Kou Shiang, Taipei 244 Taiwan, R.O.C.
TEL: +886-2-8601-3788 FAX: +886-2-8601-3789 Email:service@quietek.com http://www.quietek.com

Test Report

Compliance with Industry Canada Interference-Causing Equipment Standard ICES-003

Product Name ： IPC

Model No. ： On Demand Switch 3 (RODS3-DEFDUDC)
On Demand Switch 3 (RODS3-S1-DEFDUDC)
On Demand Switch 3 (RODS3-S2-DEFDUDC)

Applicant ： Radware Ltd.

Address ： 22 Raoul Wallenberg St. Tel Aviv, lsrael 69710

Date of Receipt ： 2008/09/22

Issued Date ： 2008/10/29

Report No. ： 089327R-ITUSP02V01

Version ： V2.0

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2. 1077(a)

The following equipment:

Product Name : IPC
Trade Name : Radware
Model Number : On Demand Switch 3 (RODS3-DEFDUDC)
On Demand Switch 3 (RODS3-S1-DEFDUDC)
On Demand Switch 3 (RODS3-S2-DEFDUDC)

It's herewith confirmed to comply with the requirements of FCC Part 15 Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

The result of electromagnetic emission has been evaluated by QuieTek EMC laboratory (NVLAP Lab. Code : 200533-0) and showed in the test report.
(Report No. : 089327R-ITUSP02V01)

It is understood that each unit marketed is identical to the device as tested, and any changes to the device that could adversely affect the emission characteristics will require retest.

The following importer / manufacturer is responsible for this declaration:

Company Name _____

Company Address _____

Telephone _____ Facsimile : _____

Person is responsible for marking this declaration:

_____ _____

Name (Full name) Position / Title

_____ _____

Date Legal Signature

Test Report Certification

Issued Date : 2008/10/29
Report No. : 089327R-ITUSP02V01

Product Name	:	IPC
Applicant	:	Radware Ltd.
Address	:	22 Raoul Wallenberg St. Tel Aviv, Israel 69710
Manufacturer	:	NEXCOM International Co., LTD
Model No.	:	On Demand Switch 3 (RODS3-DEFDUDC) On Demand Switch 3 (RODS3-S1-DEFDUDC) On Demand Switch 3 (RODS3-S2-DEFDUDC)
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	DC 48V
Trade Name	:	Radware
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart B: 2007 Class A CISPR 22: 2005, ANSI C63.4: 2003, ICES-003 Issue 4: 2004 Class A
Test Result	:	Complied
Performed Location	:	Quietek Corporation (Linkou Laboratory) 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

Documented By : Bear Chen
(Adm. Assistant / Bear Chen)

Reviewed By : Elvis Su
(Engineer /Elvis Su)

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://tw.quietek.com/modules/enterprise/services.php?item=100
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, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, 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: 200533-0

Testing Laboratory 1596

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	IPC
Trade Name	Radware
Model No.	On Demand Switch 3 (RODS3-DEFDUDC) On Demand Switch 3 (RODS3-S1-DEFDUDC) On Demand Switch 3 (RODS3-S2-DEFDUDC)

Component	
CPU	AMD Opteron
Power Cable*2	Non-Shielded, 3.0m
LAN Cable*5	Non-Shielded, 3.0m
Fiber Cable*3	Non-Shielded, 0.4m
Fiber Cable	Non-Shielded, 2.0m
Power Supply	ZIPPY, DMRW-6400F
DDR-RAM	DDR2/ECC/REG
HDD	5V/12V VDC, 1.5A/1.5A
LAN Card	Mekong-4SFP, 20Q0MEK4S00X1
Mother Board	NEXCOM, MEKONG-XGE

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:

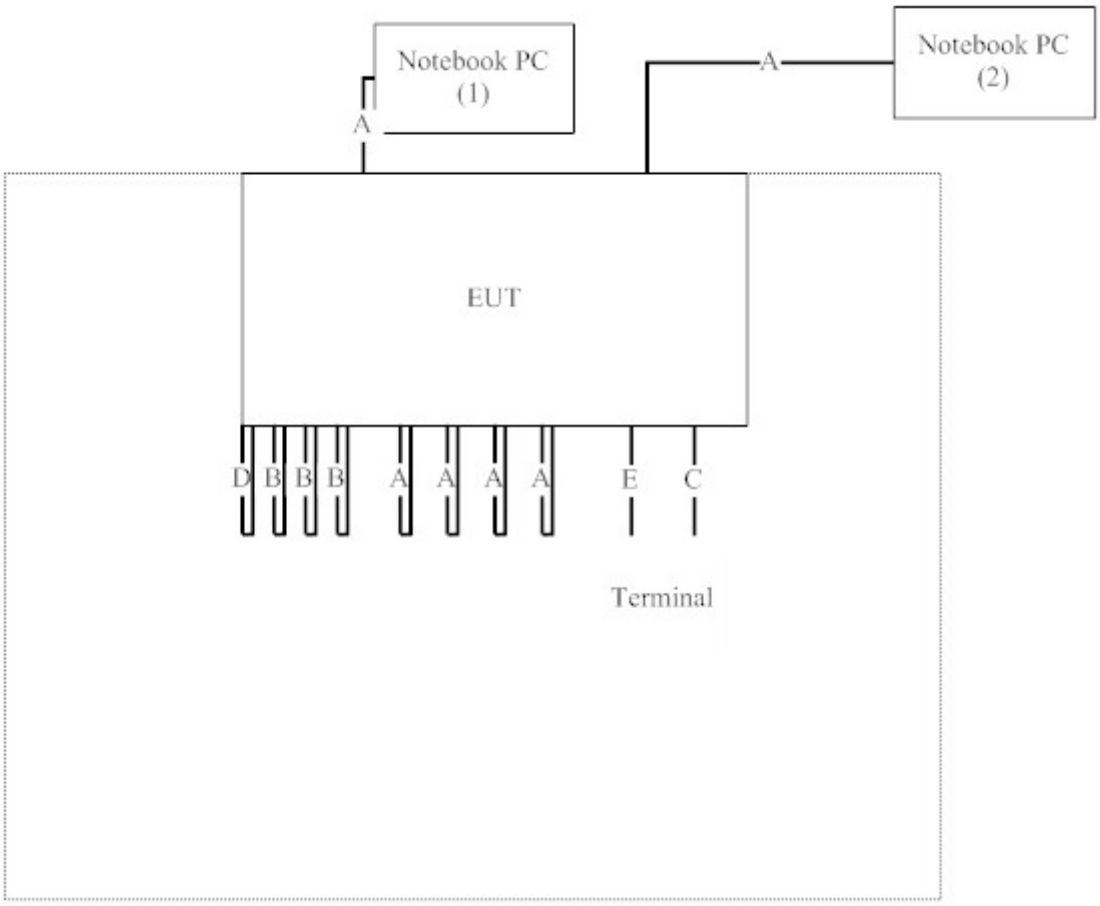
Pre-Test Mode	
Mode 1: Normal Operation	
Final Test Mode	
Emission	Mode 1: Normal Operation

1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	PPT	N/A	Non-Shielded, 1.8m
2	Notebook PC	DELL	PP04X	2D2ZM1S	Non-Shielded, 1.8m

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 3m, six PCS.
B	Fiber Cable	Non-Shielded, 0.4m, three PCS.
C	RS-232 Cable	Shielded, 1.5m
D	Fiber Cable	Non-Shielded, 2m
E	USB Cable	Shielded, 1.5m

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	Boot the PC from Hard Disk.
4	Data will communicate between personal computer and partner personal computer through EUT.
5	The personal computer's and partner computer's monitor will show the transmitting and receiving characteristics when the communication is success.
6	Repeat the above procedure (4) to (5).

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	FCC CFR Title 47 Part 15 Subpart B: 2007 Class A, ANSI C63.4: 2003	Not Applicable	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart B: 2007 Class A, ANSI C63.4: 2003	Yes	No

2.2. List of Test Equipment

Radiated Emission / Site2

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2921	2008/09/15
Broadband Horn Antenna	Schwarzbeck	BBHA9170	208	2008/07/25
EMI Test Receiver	R&S	ESCS 30	100123	2008/03/23
Horn Antenna	Schwarzbeck	BBHA9120D	305	2008/08/10
Pre-Amplifier	QTK	N/A	N/A	2008/01/03
Spectrum Analyzer	Advantest	R3162	120300652	2008/04/06

2.3. Measurement Uncertainty

Radiated Emission

The measurement uncertainty is evaluated as ± 3.19 dB.

2.4. Test Environment

Performed Item	Items	Required	Actual
Radiated Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000

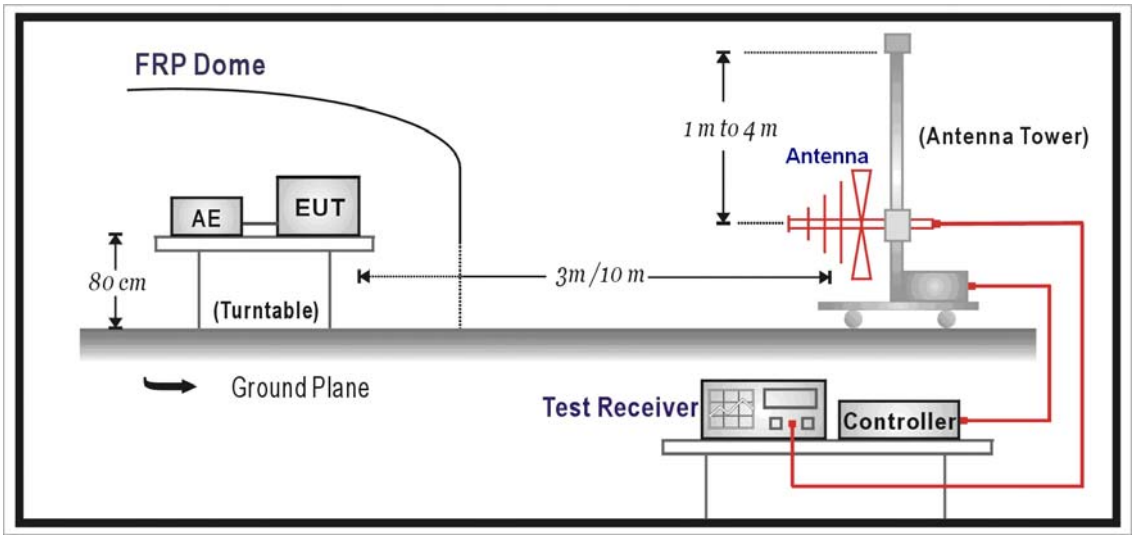
3. Radiated Emission

3.1. Test Specification

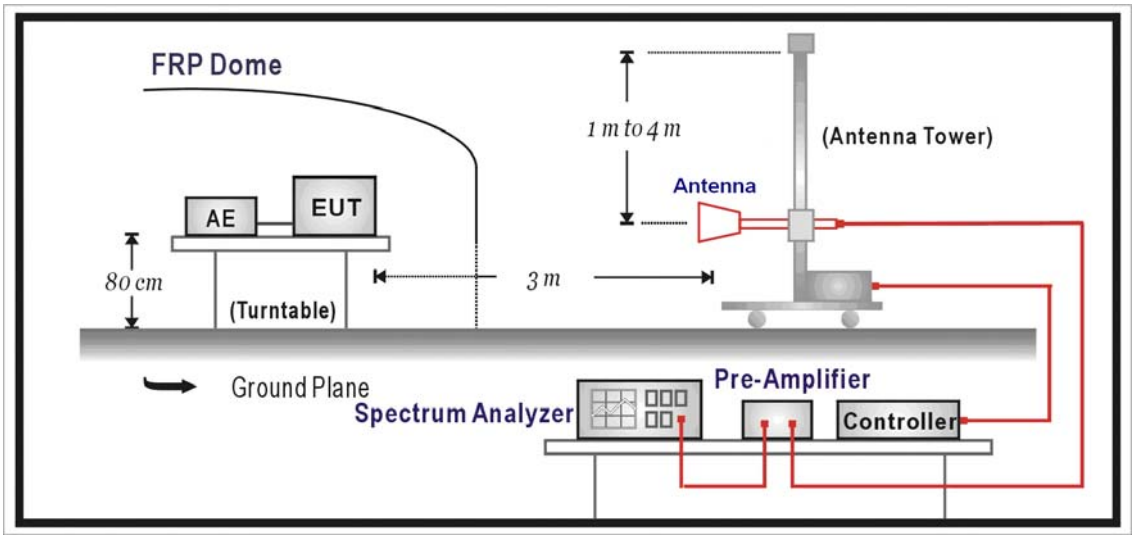
According to EMC Standard : FCC Part 15 Subpart B, ANSI C63.4

3.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



3.3. Limit

Under 1GHz test shall not exceed the following value:

Limits		
Frequency (MHz)	Distance (m)	dBuV/m
30 – 230	10	40
230 – 1000	10	47

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.

Above 1GHz test shall not exceed the following value:

FCC Part 15 Subpart B Paragraph 15.109 Limits (dBuV/m)		
Frequency (MHz)	Distance(m)	dBuV/m
30-88	10	39
88-216	10	43.5
216-960	10	46.4
Above 960	10	49.5

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.
3. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

3.4. 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 and 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.

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the folowing table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 40 GHz, whichever is lower

On any frequency or frequencies below or equal to 1000 MHz, the radiated limits shown are based on measuring equipment employing a quasi-peak detector function and above 1000 MHz, the radiated limits shown are based measuring equipment employing an average detector function.

When average radiated emission measurement are included emission measurement Above 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

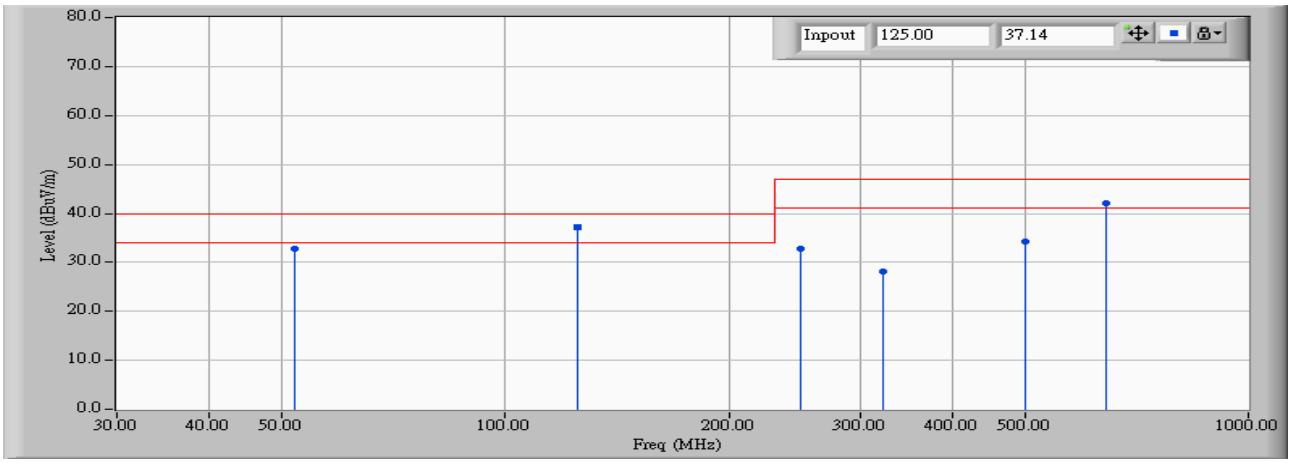
For class A, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and above 1GHz.

For class B, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and 3 meters for above 1GHz.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCS 30) is 120 kHz and above 1GHz is 1MHz.

3.5. Test Result

Site : OATS-2	**Time : 2008/10/27 - 16:10**
Limit : CISPR_A_10M_QP	**Margin : 6**
EUT : IPC	**Probe : 2007_Site2(2921) - HORIZONTAL**
Power : DC 48V	**Note : Mode 1**

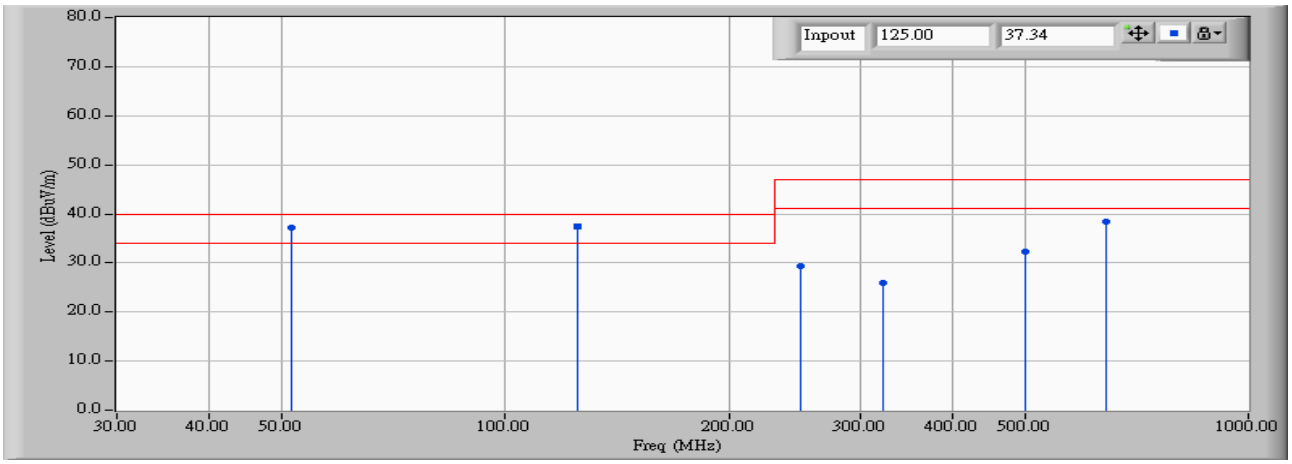


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		51.960	9.944	22.730	32.675	-7.325	40.000	QUASIPEAK
2	*	125.000	14.741	22.400	37.141	-2.859	40.000	QUASIPEAK
3		250.000	15.948	16.750	32.698	-14.302	47.000	QUASIPEAK
4		322.280	17.766	10.350	28.116	-18.884	47.000	QUASIPEAK
5		500.038	21.906	12.330	34.236	-12.764	47.000	QUASIPEAK
6		644.561	23.952	18.210	42.161	-4.839	47.000	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-2	**Time : 2008/10/27 - 16:10**
Limit : CISPR_A_10M_QP	**Margin : 6**
EUT : IPC	**Probe : 2007_Site2(2921) - VERTICAL**
Power : DC 48V	**Note : Mode 1**

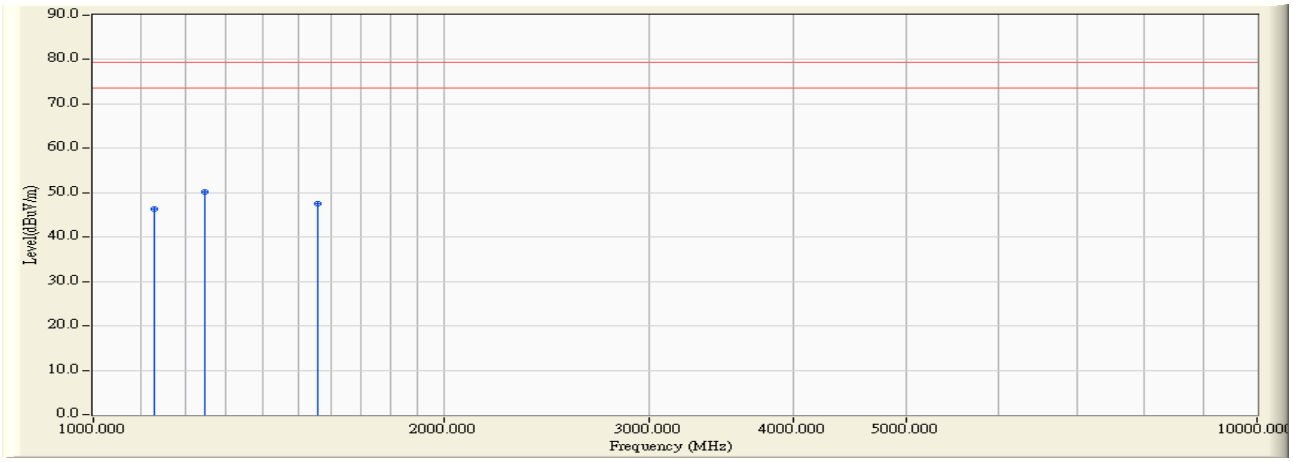


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		51.480	10.088	27.150	37.238	-2.762	40.000	QUASIPEAK
2	*	125.000	14.741	22.600	37.341	-2.659	40.000	QUASIPEAK
3		250.000	15.948	13.500	29.448	-17.552	47.000	QUASIPEAK
4		322.280	17.766	8.200	25.966	-21.034	47.000	QUASIPEAK
5		500.000	21.905	10.500	32.405	-14.595	47.000	QUASIPEAK
6		644.560	23.952	14.400	38.351	-8.649	47.000	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-2	**Time : 2008/10/28 - 00:51**
Limit : FCC_A_(Above_1G)_3M_PK	**Margin : 6**
EUT : IPC	**Probe : 9120D_1-18G_Horn - HORIZONTAL**
Power : DC 48V	**Note : MODE 1**

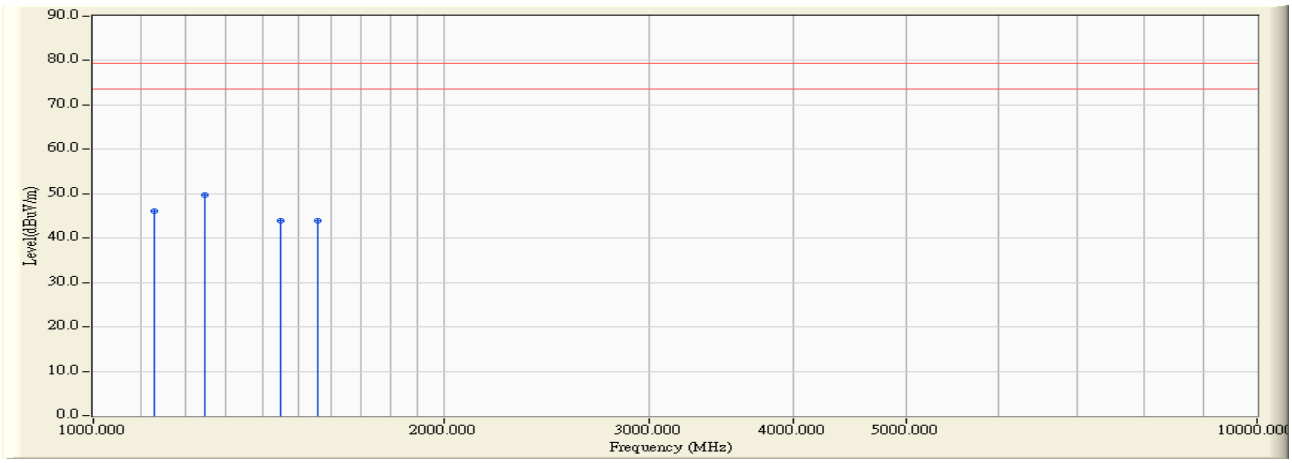


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1128.000	-6.318	52.600	46.283	-33.217	79.500	PEAK
2	*	1248.000	-5.913	56.220	50.307	-29.193	79.500	PEAK
3		1561.000	-5.014	52.610	47.596	-31.904	79.500	PEAK

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 : OATS-2	**Time : 2008/10/28 - 00:59**
Limit : FCC_A_(Above_1G)_3M_PK	**Margin : 6**
EUT : IPC	**Probe : 9120D_1-18G_Horn - VERTICAL**
Power : DC 48V	**Note : MODE 1**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1128.000	-6.318	52.350	46.033	-33.467	79.500	PEAK
2	*	1248.000	-5.913	55.600	49.687	-29.813	79.500	PEAK
3		1448.000	-5.084	49.080	43.996	-35.504	79.500	PEAK
4		1561.000	-5.014	48.900	43.886	-35.614	79.500	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

3.6. Test Photograph

Test Mode : Mode 1: Normal Operation

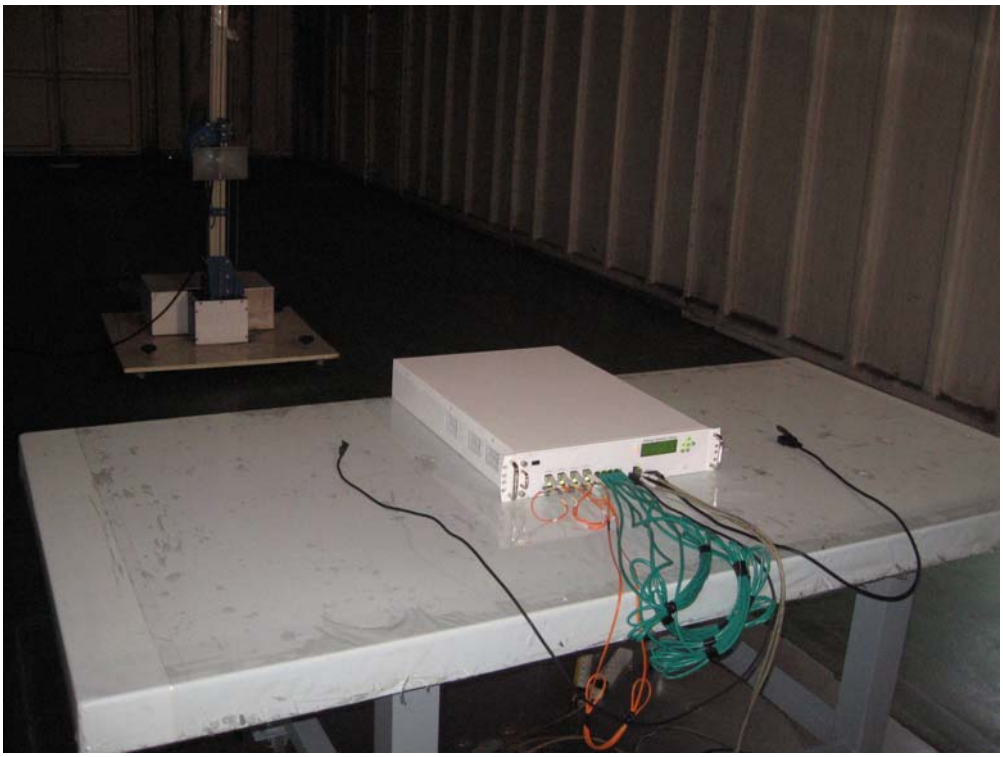
Description : Front View of Radiated Test

Test Mode : Mode 1: Normal Operation

Description : Back View of Radiated Test

Test Mode : Mode 1: Normal Operation

Description : Front View of High Frequency Radiated Test



4. Attachment

➢ EUT Photograph

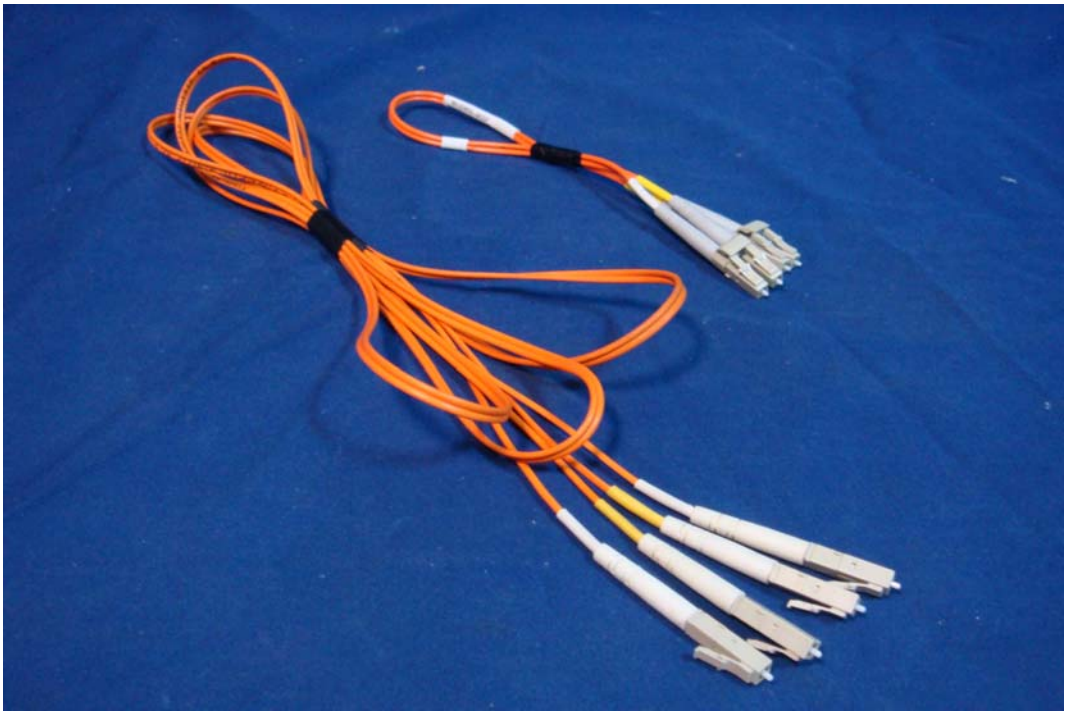
(1) EUT Photo

(2) EUT Photo

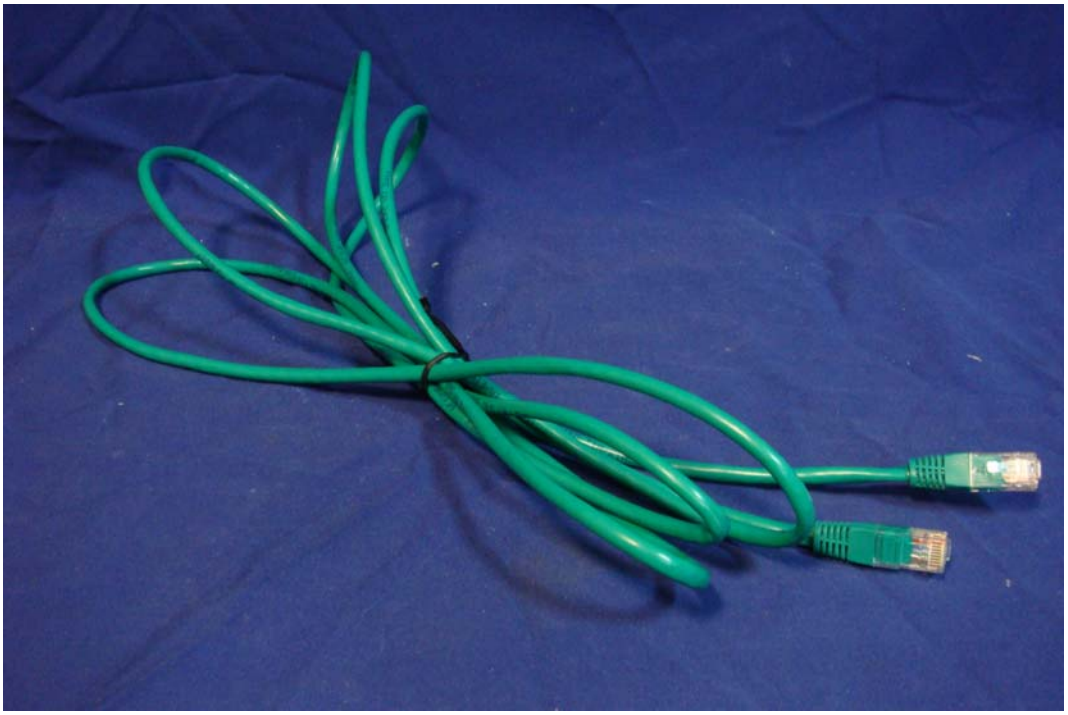
(3) EUT Photo

(4) EUT Photo

(5) EUT Photo



(6) EUT Photo



(7) EUT Photo