FCC ID:X4TSCT-4VS83

Compliance Laboratory

FCC PART 15 SUBPART B
Test Report

FOR

Applicant: SUNYOUNG ELECTRONIC (SHENZHEN)Co.,LTD

Address: Room 2811,United plaza A, No.5022,Binhe Road
Futian District, Shenzhen, China

Product Name: Video Server

Model Name: SCT-4VS83, IP-0801, IP-C102, IP-D101

Brand Name: N/A

FCC ID: X4TSCT-4VS83
Date of Issue: SEP.10, 2010

Issued by: Most Technology Service Co., Ltd.
Address: No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China
Tel: 86-755-86170306
Fax: 86-755-86170310

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1. Verification of Conformity

Equipment under test:	Video Server
Brand Name:	N/A
Model Number:	SCT-4VS83, IP-0801, IP-C102, IP-D101
FCC ID:	**X4TSCT-4VS83**
Applicant:	SUNYOUNG ELECTRONIC (SHENZHEN)CO.,LTD
	Room 2811, United Plaza A,NO.5022, Binhe Road ,
	Futian District, Shenzhen, China
Manufacturer:	SUNYOUNG ELECTRONIC (SHENZHEN)CO.,LTD
	Room 2811, United Plaza A,NO.5022, Binhe Road ,
	Futian District, Shenzhen, China

Technical Standards:	FCC Part 15 Subpart B
File Number:	MOST MTQCP-05-02/02
Date of test:	September 03, 2010-September 08, 2010
Deviation:	None
Condition of Test Sample:	Normal
Test Result:	**PASS**

The above equipment was tested by Most for compliance with the requirements set forth in FCC Rules and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in the report.

Test by: candy **(candy Zhang)**

Reviewed by: key **(key Wang)**

Approved by: **(Yvette Zhou)**

2. General information

2.1 Product information

Power Adaptor	FM120010-US
Motherboard	4VS83-A1
Chip	8183

NOTE: Please refer to the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

2.2. Objective

The objective of the report is to perform tests according to FCC Part 15 Subpart B for the EUT FCC ID Certification:

NO.	Identity	Document Title
1	FCC PART15 Subpart B	Class B personal computers and peripherals.....

2.3 Test standards and results

Test items and the results are as bellow:

NO.	Section	Description	Result	Date of test
1	15.107	Conducted	Pass	2010-09-05
2	15.109	Radiated emission	Pass	2010-09-05

2.4 Measurement uncertainty

No.	Item	Uncertainty
1.	Uncertainty for Conducted Disturbance Test	1.25dB
2.	Uncertainty for Radiated Disturbance Test	3.15dB

2.5 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35 ℃
- Humidity: 30-60%
- Atmospheric pressure: 86-106kPa

3: Test facility

3.1 test facility

Test Site: Most Technology Service Co., Ltd

Location: No.5, Nangshan 2nd Rd., North Hi-tech Industrial Park, Shenzhen, Guangdong, China.

Description: There is one 3m semi-anechoic an area test sites and two line conducted labs for final test. The Open Area Test sites and the line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4-2003 and CISPR 16 requirements. The FCC Registration Number is **490827**

Site Filing: The site description is on file with the Federal Communications Commission ,7435 Oakland Mills Road, Columbia , MD 21046

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4-2003 and CISPR 16 requirements that Meet industry regulatory agency and accreditation agency requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted emission, One in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna .It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.

3.2 General Test Procedures

Test mode: The following data show only with the worst case setup

Conducted Emissions: The EUT is placed on the test table, which is 0.8 m above ground plane. According to the requirements Section 13.1.4.1 of ANSI C63.4-2003 .Conducted emissions from the EUT measured in the frequency range between 0.15MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions: The EUT is placed on a turntable, which is 0.8m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which Varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by Changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum Emissions, exploratory radiated emission measurements were made according to the requirements in section 13.1.4.1 of ANSI C63.4-2003.

Setting :

9KHZ~150KHZ	RBW 200HZ	VBW1KHZ
150KHZ~30MHZ	RBW 9KHZ	VBW 30KHZ
30MHZ~1GHZ	RBW 120KHZ	VBW 300KHZ
Above 1GHZ	RBW 1MHZ	VBW 3MHZ

4. Setup of Equipment Under Test

4.1 SUPPORT EQUIPMENT

Manufacturer	Description	Model	Serial number
Lenovo	PC	T3900	SS05750640
Lenovo	USB Driver	DTUG2 2G	
Dell	Monitor	E178FPc	78682

4.2 TEST EQUIPMENT LIST

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	100492	Mar. 06, 2010	1 Year
LISN	ROHDE&SCHWARZ	ENV216	100093	Mar. 06, 2010	1Year
EMI Test Receiver	ROHDE&SCHWARZ	ESPI	101202	Mar. 06, 2010	1 Year
Spectrum Analyzer	ANRITSU	MS2651B	6200238316	Mar. 06, 2010	1 Year
50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Mar. 06, 2010	1 Year
Bilog Antenna	Sunol	JB3	A121206	Mar. 06, 2010	1 Year
Horn Antenna	EMCO	3115	640201028-06	Mar. 06, 2010	1 Year
50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Mar. 06, 2010	1 Year
Cable	Resenberger	N/A	NO.1	Mar. 06, 2010	1 Year
Cable	SCHWARZBECK	N/A	NO.2	Mar. 06, 2010	1 Year
Cable	SCHWARZBECK	N/A	NO.3	Mar. 06, 2010	1 Year
DC Power Filter	Duoji	DL2X30B	N/A	Mar. 06, 2010	1 Year
Single phase power Line filter	Duoji	FNF 202B30	N/A	Mar. 06, 2010	1 Year
3 phase power line filter	Duoji	FNF 402B30	N/A	Mar. 06, 2010	1 Year
Test receiver	Rohde&schwarz	ESCI	100492	Mar. 06, 2010	1 Year
Coaxial switch	Anritsu Corp	MP59B	6200283933	Mar. 06, 2010	1 Year
AC power soure	KIKUSUI	AC40MA	LM003232	Mar. 06, 2010	1 Year
EMCPRO System	EM TEST	UCS-500-M4	V0648102026	Mar. 06, 2010	1 Year
Absorbing Clamp	Luthi	MDS21	3635	Mar. 06, 10	1 Year

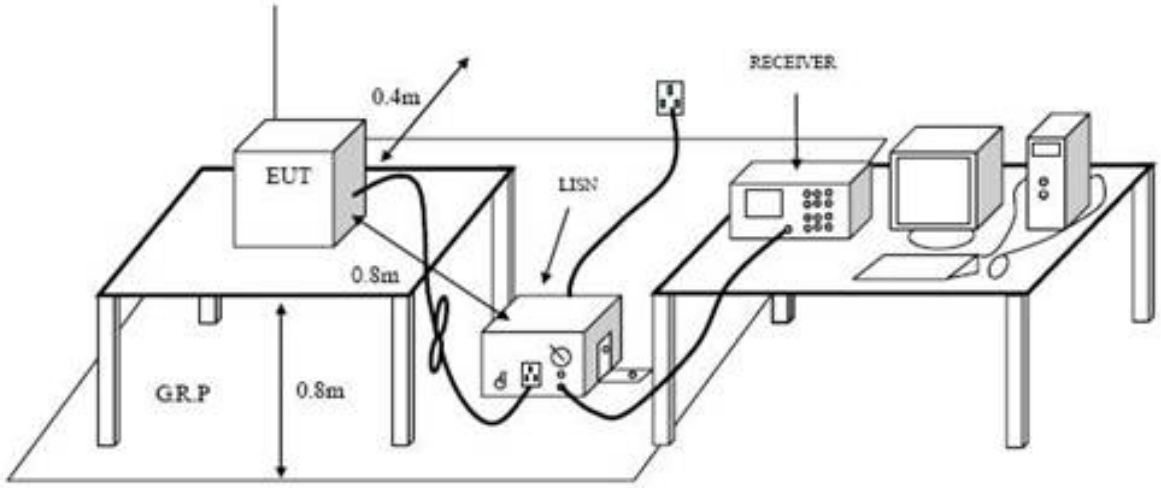
5: Test Requirements

5.1 Limits of line conducted emission test

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* the limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.
The lower limit shall apply at the transition frequency

5.2 BLOCK DIAGRAM OF TESP SETUP



5.3 preliminary procedure of line conducted emission test

1) the equipment was set up as per the test configuration to simulate typical actual usage per the user's manual.When the EUT is a tabletop system,a wooden table with a height 0.8 meters is used and is placed on the ground plane as per FCC 15(see Test Facility for the dimensions of the ground plane noo-conductive covering to insulate the EUT from the ground plane.
2) Support equipment,if needed,was placed as per FCC Part 15.
3) All I/O Cables were positioned to simulate typical actual usage as per FCC Part 15.
4) The EUT received AC120V/60Hz power through a Line Impedance Stabilization Network(LISN)which supplied power source and was grounded to the ground plane.
5) All support equipments received power from a second LISN supplying power of AC 120V/60Hz,if any.
6) The EUT Test program was started.Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer /Receiver connected to the LISN powering the EUT.The LISN hsa two monitoring points:Line1(Hot side)and Line 2(Neutral Side).Two scans were taken:one with Line 1connected to Analyzer/Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer/Receiver.
7) Analyzer /Receiver scanned form 150kHz to 30MHz for emissions in each of the test modes.
8) During the above scans,the emissions were maximized by cable manipulation.
9) The following test mode(s)were scanned during the preliminary test:

Preliminary Conducted Emission Test				
Frequency Range Investigated		**150KHz to 30MHz**		
Mode of operation	**Date**	**Report No.**	**Date#**	**Worst Mode**
Normal Working	2010-09-11	Most MTQCP-05-02/02	RM001_(L,N)	■ YES

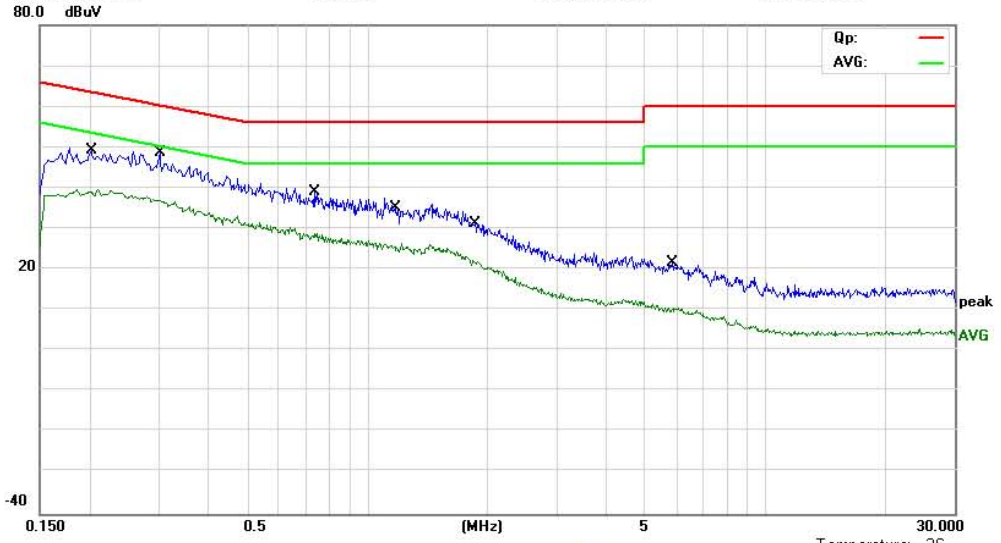
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing

5.4 Test result of line conducted emission test

Compliance Laboratory
Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement

File:SCT-4VS83 Data:#1 Date: 10/09/14/ Time: 14/17/49



Site site #1
Limit: FCC Part15 B Class B QP
EUT: Video Server
M/N: SCT-4VS83
Mode: Running
Note:

Phase: L1
Power: DC 12V Adapter From AC120V/60Hz

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure-ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2020	37.17	11.99	49.16	63.53	-14.37	QP	
2	*	0.3020	37.19	11.32	48.51	60.19	-11.68	QP	
3		0.7380	28.91	10.00	38.91	56.00	-17.09	QP	
4		1.1820	25.38	9.82	35.20	56.00	-20.80	QP	
5		1.8620	22.07	9.14	31.21	56.00	-24.79	QP	
6		5.8460	10.19	11.49	21.68	60.00	-38.32	QP	

*:Maximum data x:Over limit l:over margin

Engineer Signature: Zero

Compliance Laboratory
Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
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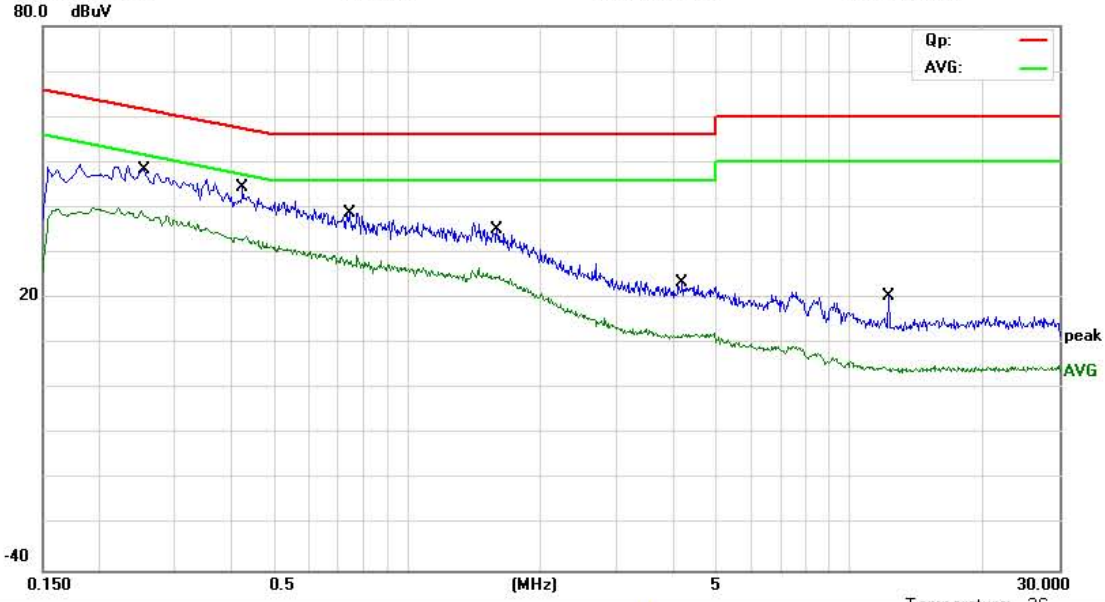
Conducted Emission Measurement

File :SCT-4VS83 Data :#2 Date: 10/09/14/ Time: 14/19/49



Site site #1
Limit: FCC Part15 B Class B QP
EUT: Video Server
M/N: SCT-4VS83
Mode: Running
Note:

Phase: N
Power: DC 12V Adapter From AC 120V/60Hz

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure-ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2540	36.65	11.64	48.29	61.63	-13.34	QP	
2	*	0.4260	33.84	10.49	44.33	57.33	-13.00	QP	
3		0.7340	28.41	10.00	38.41	56.00	-17.59	QP	
4		1.5980	25.76	9.40	35.16	56.00	-20.84	QP	
5		4.2020	12.26	11.20	23.46	56.00	-32.54	QP	
6		12.2540	11.50	9.00	20.50	60.00	-39.50	QP	

*:Maximum data x:Over limit !:over margin

Engineer Signature: Zero

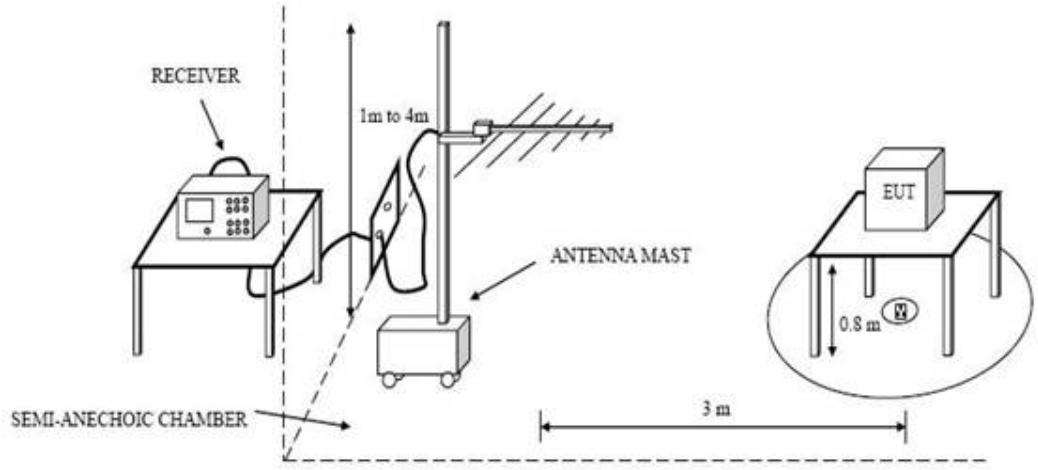
6: Test Radiated Emission Requirement

6.1 limits of radiated disturbances at 3m distances for class B

30 -88 MHz 40 dBuV/m @3M
88 - 216 MHz 43.5
216 - 960 MHz 46
ABOVE 960 MHz 54dBuV/m

Note: adjust the brightness and contrast to maximum
Emissions attenuated more than 20 dB below the permissible value are not reported.

6.2: BLOCK OF RADIATION INTERFERENCE



6.3 Preliminary radiated emission test

In the frequency range above 30MHz,Bi-log Test Antenna(30MHz to 1GHz)and Horn Test Antenna (above 1GHz)are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested.

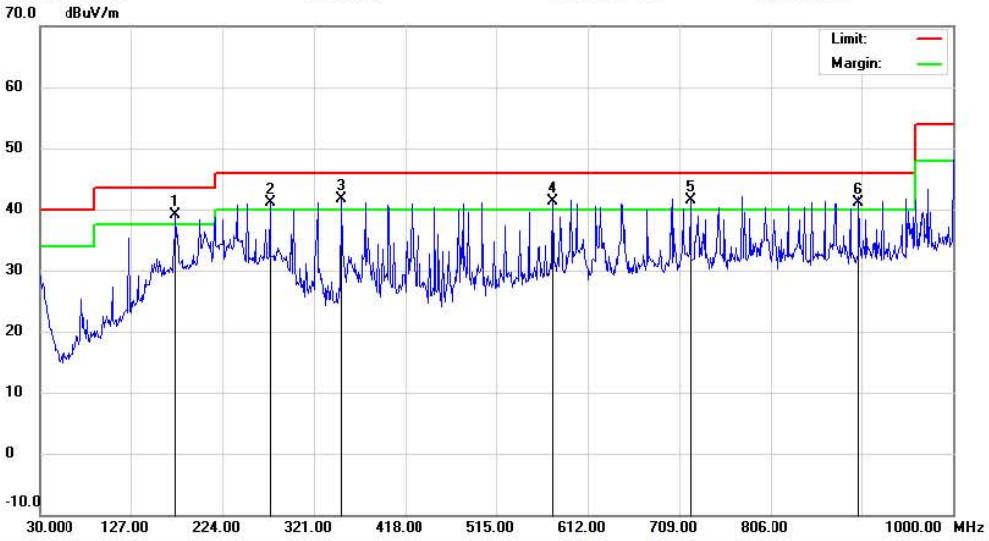
Preliminary Radiated Emission Test				
Frequency Range Investigated		**30MHz to 1000MHz**		
Mode of operation	**Date**	**Report No.**	**Date#**	**Worst Mode**
Normal Working	2010-09-11	Most MTQCP-05-02/02	RM001_(H,V)	■ YES

6.4 Test result of radiation emission test

Compliance Laboratory
Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement

File :SCT-4VS83 Data :#28 Date: 2010-9-11 Time: 9:49:00



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: Video Server
M/N: SCT-4VS83
Mode: Running
Note:

Polarization: *Horizontal*
Power: DC 12V Adapter from AC 120V/60Hz
Distance:

Temperature: 26
Humidity: 60 %

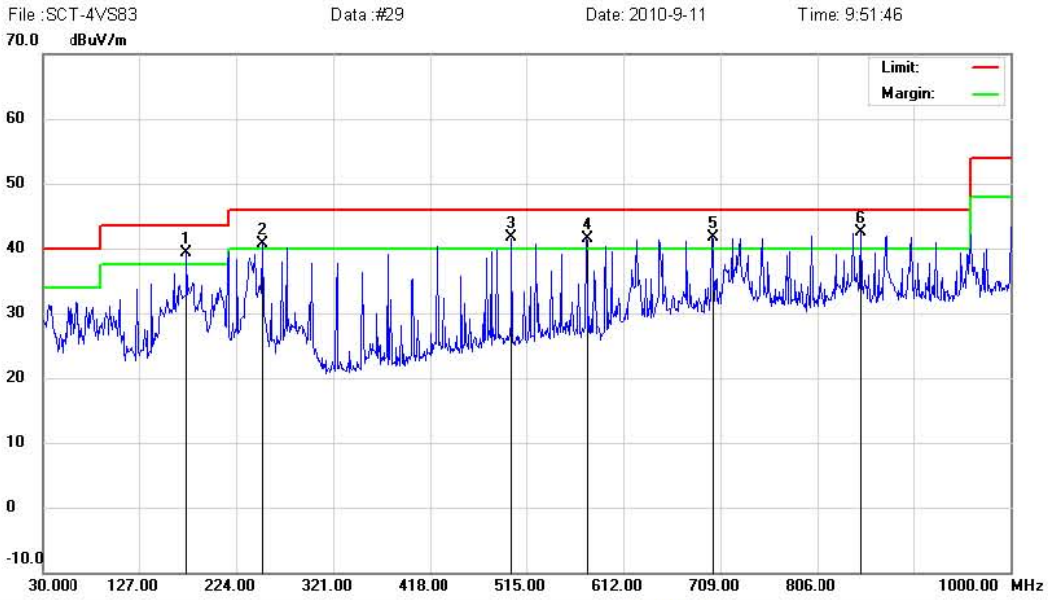
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	174.5300	22.22	16.97	39.19	43.50	-4.31	QP			
2	!	274.4400	22.01	19.17	41.18	46.00	-4.82	QP			
3	*	350.1000	23.98	17.81	41.79	46.00	-4.21	QP			
4	!	575.1400	18.59	22.80	41.39	46.00	-4.61	QP			
5	!	720.6400	16.83	24.71	41.54	46.00	-4.46	QP			
6	!	900.0900	13.67	27.40	41.07	46.00	-4.93	QP			

*:Maximum data x:Over limit !:over margin

Engineer Signature: Becon

Compliance Laboratory
Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: Video Server
M/N: SCT-4VS83
Mode: Running
Note:

Polarization: ***Vertical***
Power: DC 12V Adapter from AC 120V/60Hz
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	174.5300	22.24	16.97	39.21	43.50	-4.29	QP			
2	!	250.1900	23.28	17.40	40.68	46.00	-5.32	QP			
3	!	500.4500	20.38	21.40	41.78	46.00	-4.22	QP			
4	!	575.1400	18.79	22.80	41.59	46.00	-4.41	QP			
5	!	700.2700	17.02	24.70	41.72	46.00	-4.28	QP			
6	*	850.6200	15.45	27.10	42.55	46.00	-3.45	QP			

*:Maximum data x:Over limit !:over margin

Engineer Signature: Becon