



Test Report

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

Product Name : LCD TV
Basic Model No. : Z37LC6D-UM, Z37LC6D
Multi Model No. : Z37LCD4-UM, Z37LC6D, 37LC6D-UM
FCC ID : BEJZ37LC6DUM

Applicant : LG Electronics USA
Address : 1000 Sylvan Avenue Englewood Cliffs, New Jersey
United States 07632

Date of Receipt : 2008/03/10
Issued Date : 2008/05/28
Report No. : 084208R-ITUSP02V02
Reference Number : RL-8447
Version : V4.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF, NVLAP, NIST or any agency of the Government.

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Test Report Certification

Issued Date : 2008/05/28

Report No. : 084208R-ITUSP02V02



Product Name : LCD TV

Applicant : LG Electronics USA

Address : 1000 Sylvan Avenue Englewood Cliffs, New Jersey United States 07632

Manufacturer : Qisda Corporation

Basic Model No. : Z37LC6D-UM, Z37LC6D

Multi Model No. : Z37LCD4-UM, Z37LC6D, 37LC6D-UM

Rated Voltage : AC 120 V / 60 Hz

EUT Voltage : AC 120 V / 60 Hz

Trade Name : Zenith

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

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 : 
(Senior Engineering Adm. Specialist / Anita Chou)

Reviewed By : 
(Assistant Engineer / Darcy Hu)

Approved By : 
(Deputy Manager / Vincent Lin)

Laboratory Information

We , **QuietTek 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 QuietTek Corporation's Web Site : <http://tw.quietek.com/modules/enterprise/services.php?item=100>
The address and introduction of QuietTek 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



LinKou Testing Laboratory :

No. 5, 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



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



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1. General Information

1.1. EUT Description

Product Name	LCD TV
Trade Name	Zenith
Basic Model No.	Z37LC6D-UM, Z37LC6D
Multi Model No.	Z37LCD4-UM, Z37LC6D, 37LC6D-UM

Component	
Panel	AUO, T370XW02

Note:

The verification report for TV mode would be issued by LG Electronics USA. The EUT is including four models for different marketing requirement and the different of each model is shown as below:.

Model Number	Description
Z37LCD4-UM, Z37LC6D	Canada only
37LC6D-UM	Canada only -LG

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:

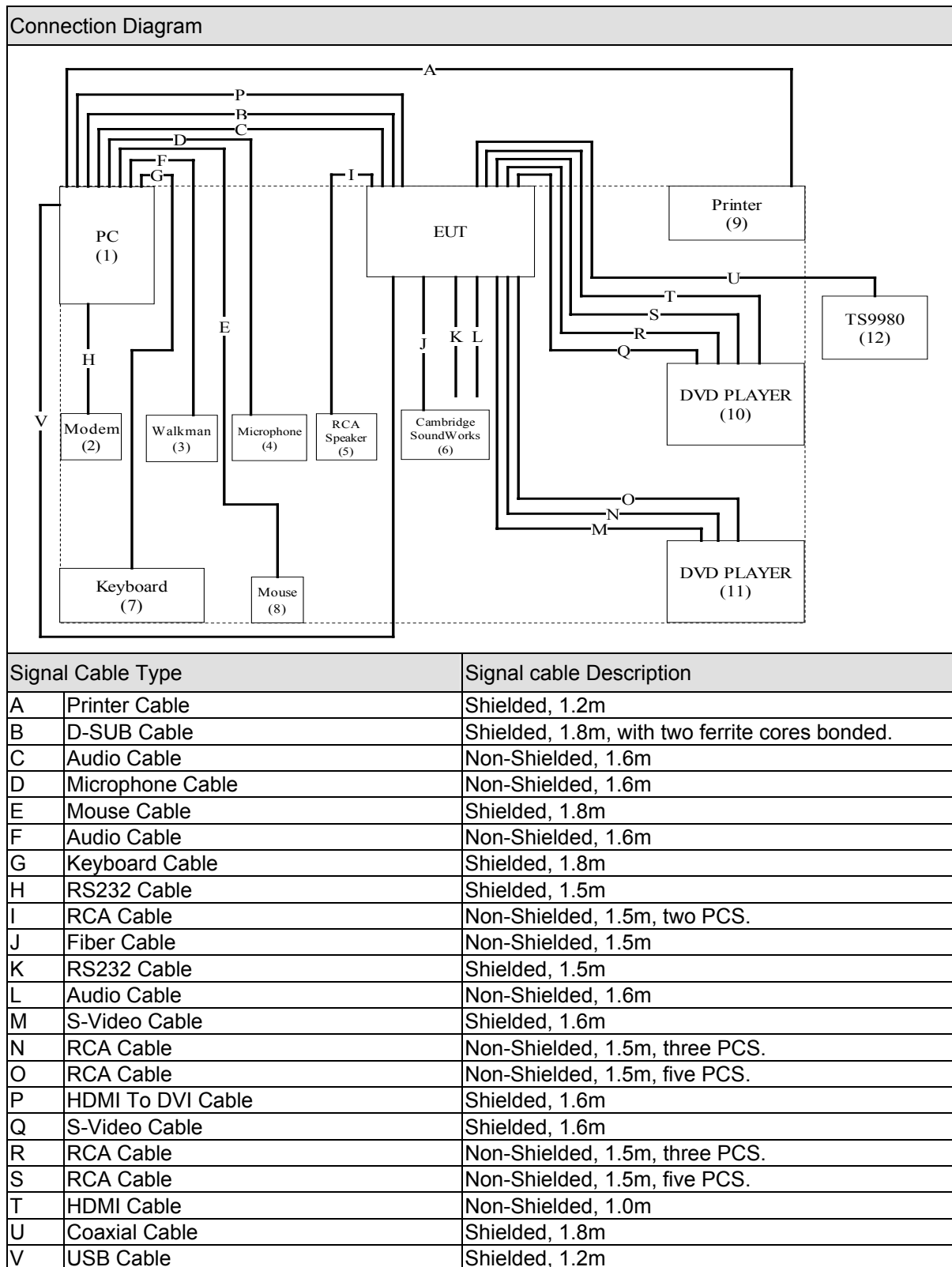
Pre-Test Mode	
Mode 1: D-SUB 1360*768/60Hz	
Mode 2: HDMI To DVI	
Mode 3: HDMI 2	
Mode 4: S-Video 1	
Mode 5: S-Video 2	
Mode 6: AV 1	
Mode 7: AV 2	
Mode 8: YPbPr 1	
Mode 9: YPbPr 2	
Mode 10: ATSC	
Final Test Mode	
Emission	Mode 1: D-SUB 1360*768/60Hz
	Mode 2: HDMI To DVI
	Mode 3: HDMI 2

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	PC	CPU	Intel	Intel(R) Pentium® 4 CPU 3.06G	Non-Shielded, 1.8m
		M/B	ASUS	P4GD1 REV1.03	
		VGA Card	ASUS	RV380LE-A334C REV1.01	
		HDD	IBM	DTLA-305020	
		DVD-ROM	ASUS	CD-S520/A5	
		S.P.S	SevenTeam	ST-460EAD-05F	
		DDR	Twin Mos	M2S9108A-PS	
2	Modem	ACEEX	DM-1414	0102027536	Non-Shielded, 1.8m
3	Walkman	AIWA	HS-TA164	N/A	N/A
4	Microphone	TENGDA	Dm-401	N/A	N/A
5	RCA Speaker	SANYO	OTTO-301A	JA03244040	Non-Shielded, 1.6m
6	Cambridge SoundWorks	Creative	S80130	AM01302400003563	Non-Shielded, 1.9m
7	Keyboard	COMPAQ	KB-0133	B55940MGAPN03C	N/A
8	Mouse	COMPAQ	M-S69	44HE	N/A
9	Printer	EPSON	StyLus C63	FAPY093590	Non-Shielded, 1.9m
10	DVD PLAYER	Pioneer	DV-989Avi-G	FEMP000538TA	Non-Shielded, 1.8m
11	DVD PLAYER	Pioneer	DV-989Avi-G	FBMP000224TA	Non-Shielded, 1.8m
12	TS9980	R&S	N/A	N/A	N/A

1.4. Configuration of Tested System



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 to operation system, setup to appropriated video resolution.
4	PC will display “video figure” on EUT.
5	Adjust the brightness and contrast to the maximum (middle) position to get the worst case reading.
6	According to user manual, change display resolution (H-sync, V-sync, interlaced or Non-interlaced) to find the worst case mode.
7	All the peripheral devices will be accessed during the test.
8	Repeat the above procedure (4) to (7).

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 B, ANSI C63.4: 2003	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart B: 2007 Class B, ANSI C63.4: 2003	Yes	No

2.2. List of Test Equipment

Conducted Emission / SR10

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	100367	2007/08/08
LISN	R&S	ENV216	100085	2008/02/14
LISN	R&S	ENV216	100086	2008/02/14
Pulse Limiter	R&S	ESH3-Z2	357.8810.52	2007/09/07

Radiated Emission / Site3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2704	2007/09/15
Broadband Horn Antenna	Schwarzbeck	BBHA9170	208	2007/07/25
EMI Test Receiver	R&S	ESCS 30	838251/001	2008/03/22
Horn Antenna	Schwarzbeck	BBHA9120D	305	2007/08/10
Pre-Amplifier	QTK	N/A	N/A	2008/01/03
Spectrum Analyzer	Advantest	R3162	101102468	2007/10/24
EMI Test Receiver	R&S	ESI 26	838786/004	2007/05/25
Pre-Amplifier	MITEQ	QMF-4D-18040 0-45-6P	925974	2008/01/03

2.3. Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.26 dB.

Radiated Emission

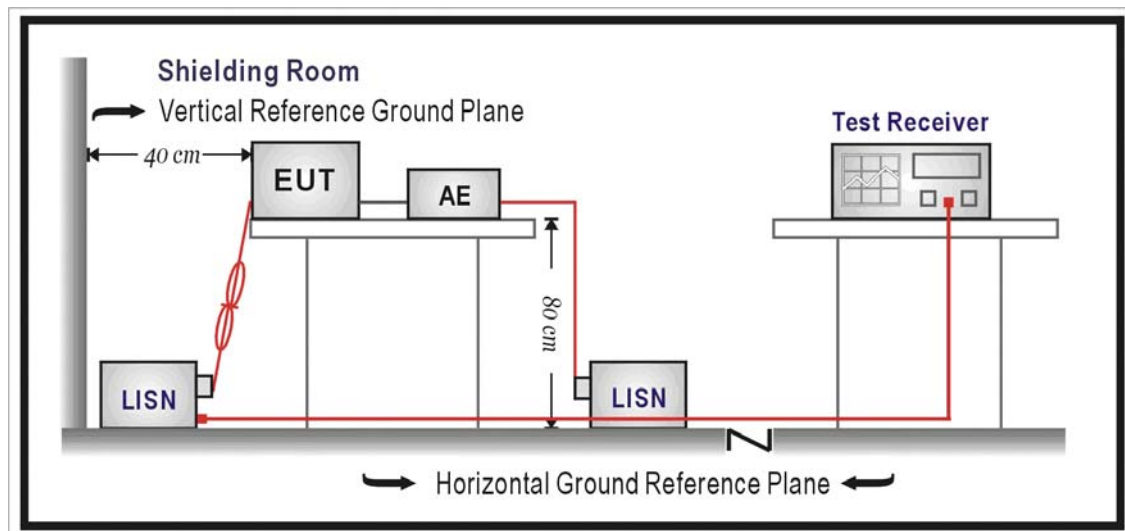
The measurement uncertainty is evaluated as ± 3.19 dB.

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

3. Conducted Emission

3.1. Test Setup



3.2. 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.

3.3. Test Procedure

The EUT was setup and tested according to ANSI C63.4, 2003.

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

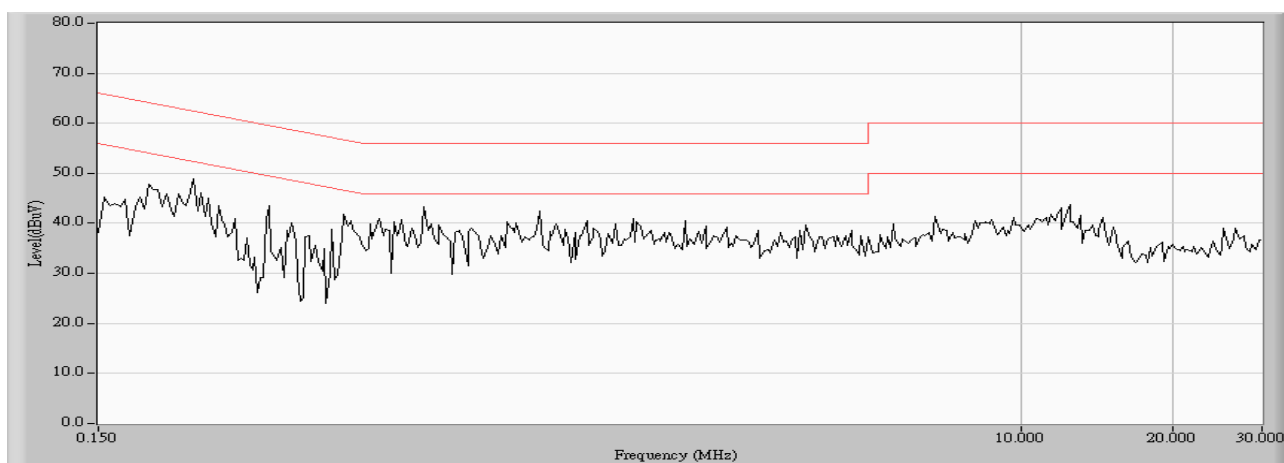
Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

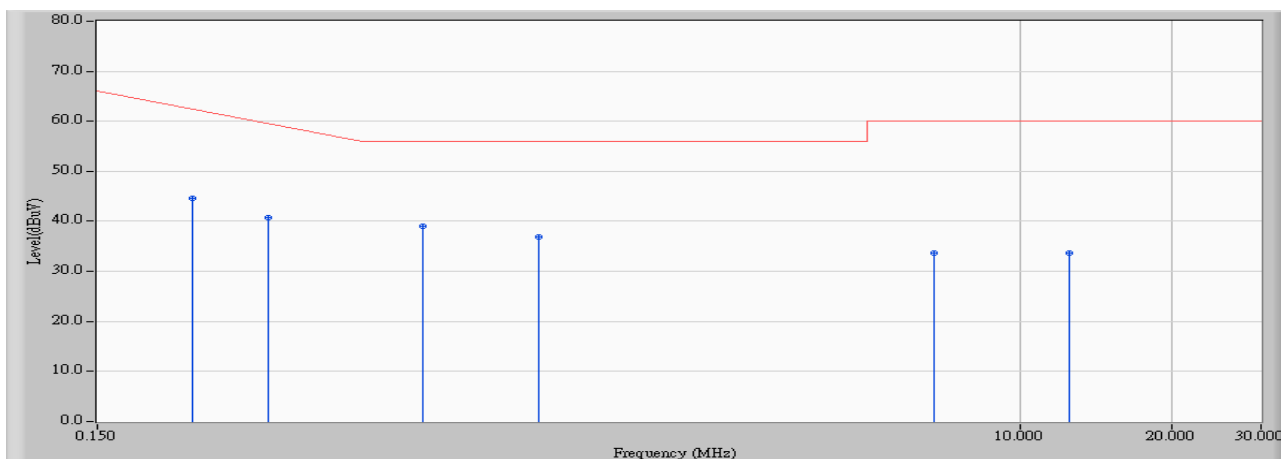
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.4. Test Result

Site : SR-10	Time : 2008/04/17 - 02:24
Limit : CISPR_B_00M_QP	Margin : 10
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 1



Site : SR-10	Time : 2008/04/17 - 02:25
Limit : CISPR_B_00M_QP	Margin : 0
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 1

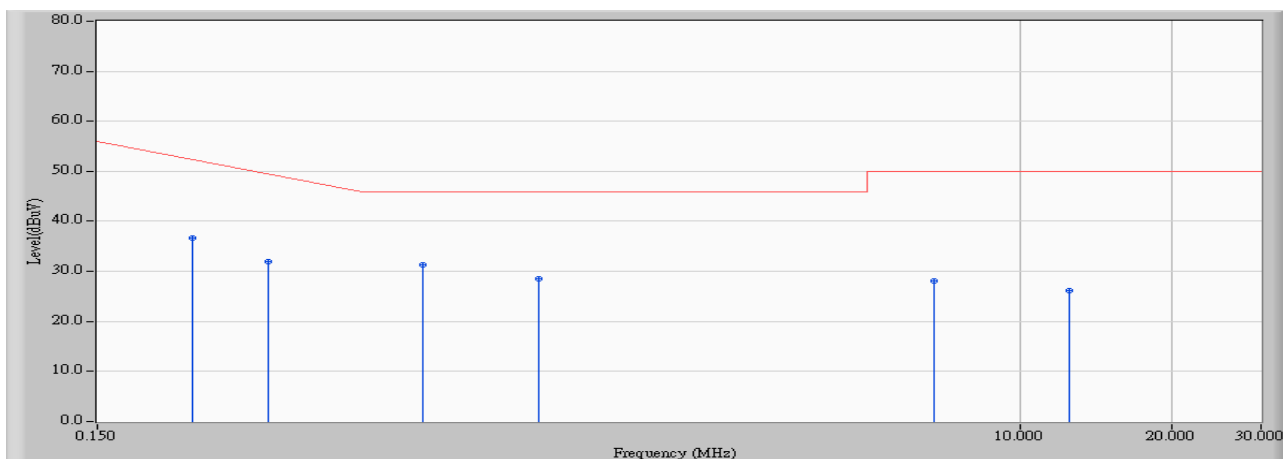


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.232	9.850	34.750	44.600	-19.057	63.657	QUASIPeAK
2		0.326	9.840	30.980	40.820	-20.151	60.971	QUASIPeAK
3	*	0.662	9.820	29.180	39.000	-17.000	56.000	QUASIPeAK
4		1.119	9.830	27.030	36.860	-19.140	56.000	QUASIPeAK
5		6.759	9.900	23.800	33.700	-26.300	60.000	QUASIPeAK
6		12.490	10.084	23.490	33.573	-26.427	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 : SR-10	Time : 2008/04/17 - 02:25
Limit : CISPR_B_00M_AV	Margin : 0
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 1

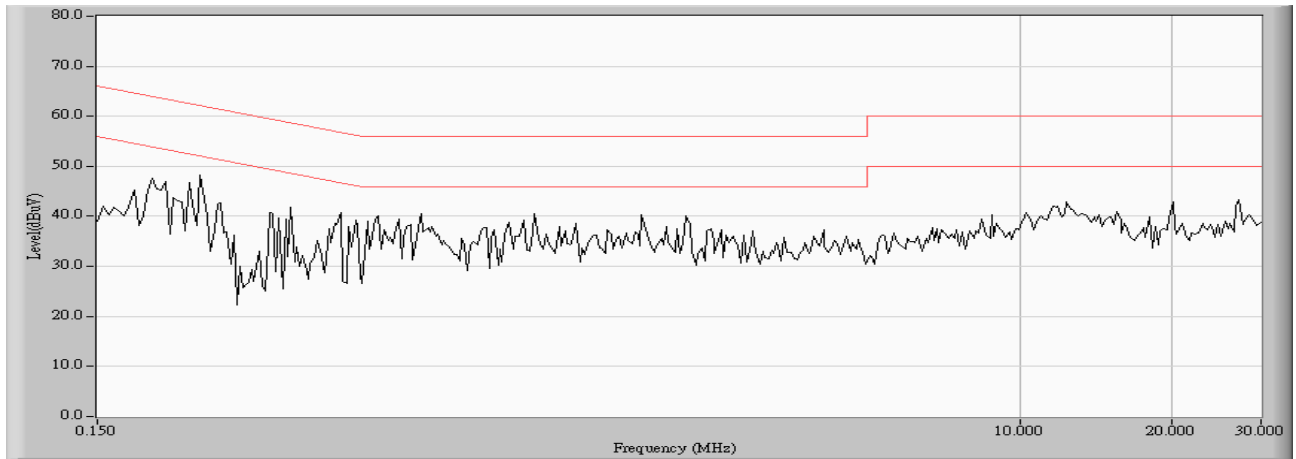


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.232	9.850	26.930	36.780	-16.877	53.657	AVERAGE
2		0.326	9.840	22.110	31.950	-19.021	50.971	AVERAGE
3	*	0.662	9.820	21.400	31.220	-14.780	46.000	AVERAGE
4		1.119	9.830	18.640	28.470	-17.530	46.000	AVERAGE
5		6.759	9.900	18.250	28.150	-21.850	50.000	AVERAGE
6		12.490	10.084	16.020	26.103	-23.897	50.000	AVERAGE

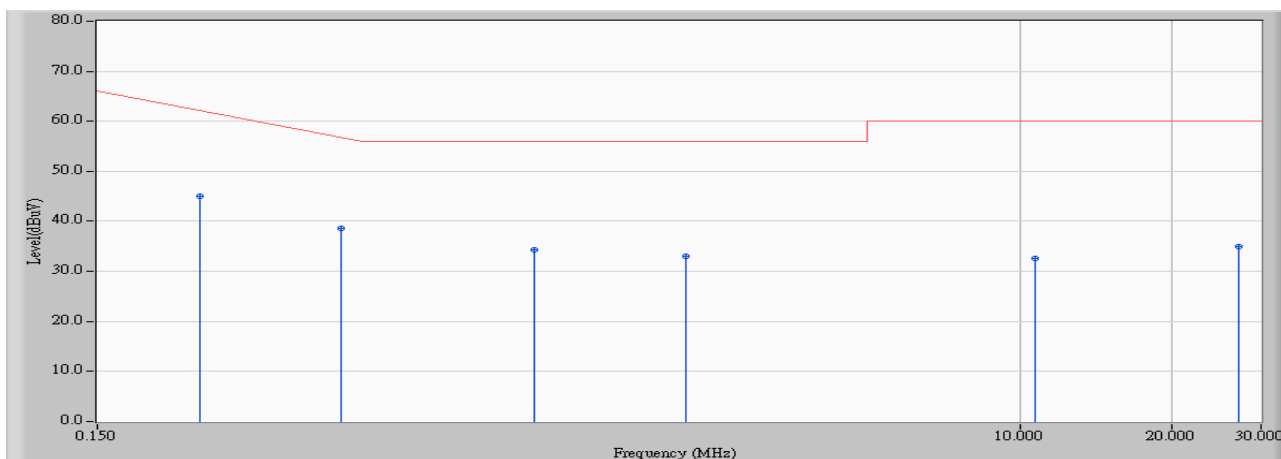
Note:

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 : SR-10	Time : 2008/04/17 - 02:27
Limit : CISPR_B_00M_QP	Margin : 10
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 1



Site : SR-10	Time : 2008/04/17 - 02:28
Limit : CISPR_B_00M_QP	Margin : 0
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 1

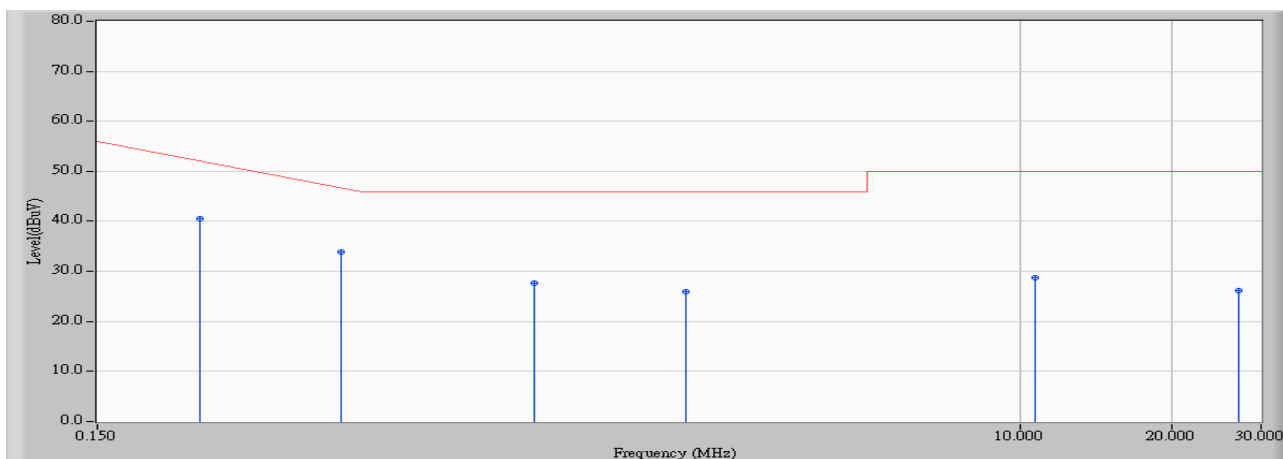


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.240	9.860	35.210	45.070	-18.359	63.429	QUASIPeAK
2		0.455	9.831	28.750	38.581	-18.705	57.286	QUASIPeAK
3		1.095	9.830	24.560	34.390	-21.610	56.000	QUASIPeAK
4		2.189	9.840	23.240	33.080	-22.920	56.000	QUASIPeAK
5		10.693	9.940	22.670	32.610	-27.390	60.000	QUASIPeAK
6		27.099	10.300	24.610	34.910	-25.090	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 : SR-10	Time : 2008/04/17 - 02:28
Limit : CISPR_B_00M_AV	Margin : 0
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 1

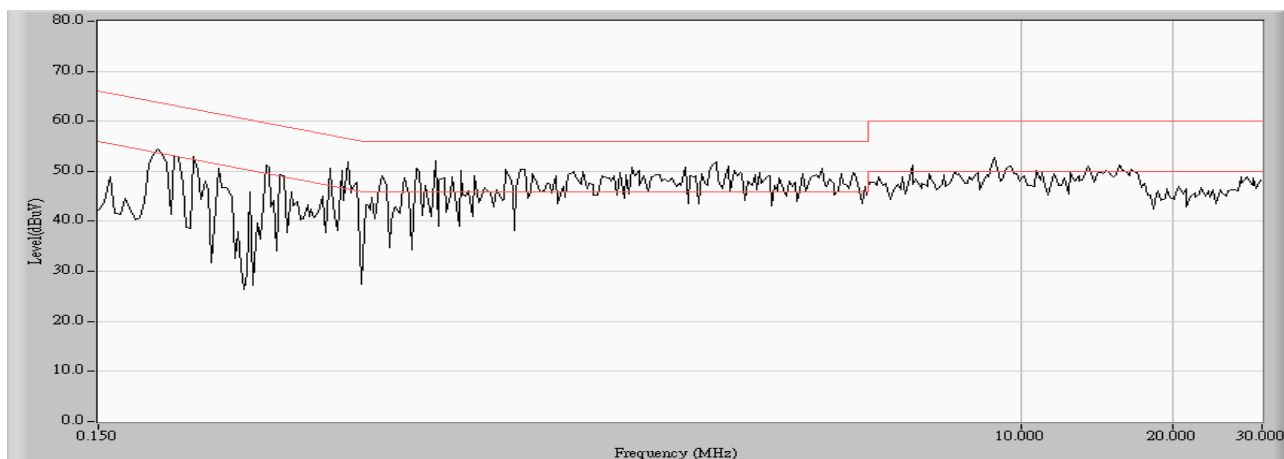


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.240	9.860	30.740	40.600	-12.829	53.429	AVERAGE
2		0.455	9.831	24.160	33.991	-13.295	47.286	AVERAGE
3		1.095	9.830	17.820	27.650	-18.350	46.000	AVERAGE
4		2.189	9.840	16.160	26.000	-20.000	46.000	AVERAGE
5		10.693	9.940	18.890	28.830	-21.170	50.000	AVERAGE
6		27.099	10.300	15.860	26.160	-23.840	50.000	AVERAGE

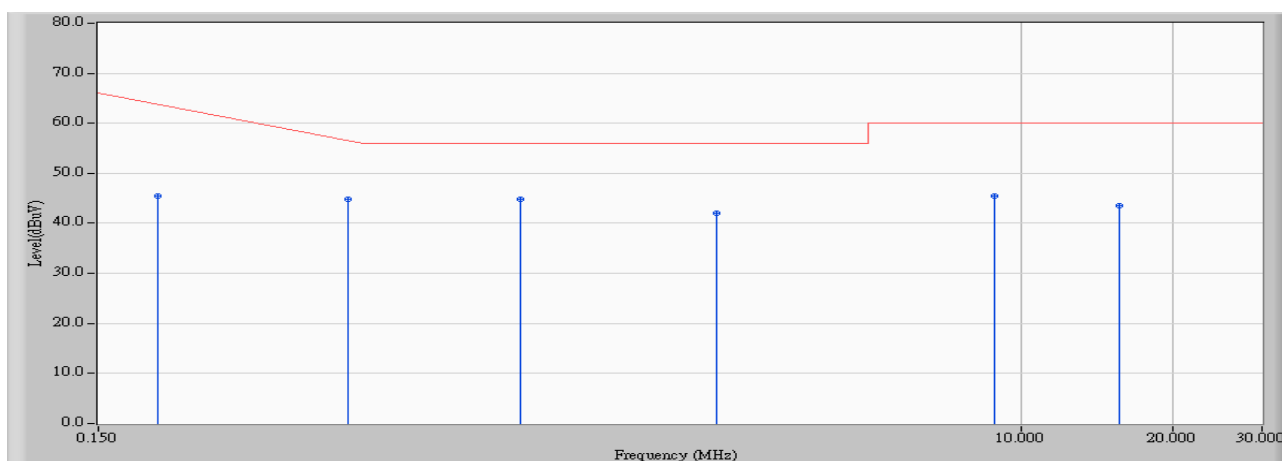
Note:

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 : SR-10	Time : 2008/05/02 - 09:35
Limit : CISPR_B_00M_QP	Margin : 10
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 2



Site : SR-10	Time : 2008/05/02 - 09:36
Limit : CISPR_B_00M_QP	Margin : 0
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 2

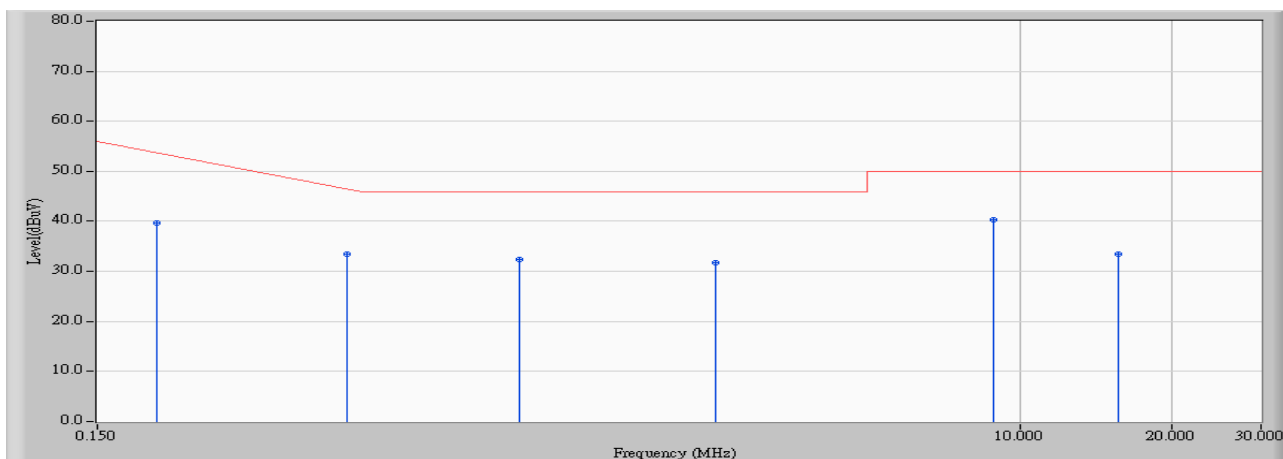


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.850	35.650	45.500	-19.157	64.657	QUASIPeAK
2		0.466	9.830	35.100	44.930	-12.041	56.971	QUASIPeAK
3	*	1.025	9.830	35.010	44.840	-11.160	56.000	QUASIPeAK
4		2.505	9.842	32.160	42.002	-13.998	56.000	QUASIPeAK
5		8.877	9.920	35.570	45.490	-14.510	60.000	QUASIPeAK
6		15.654	10.240	33.390	43.630	-16.370	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 : SR-10	Time : 2008/05/02 - 09:36
Limit : CISPR_B_00M_AV	Margin : 0
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 2

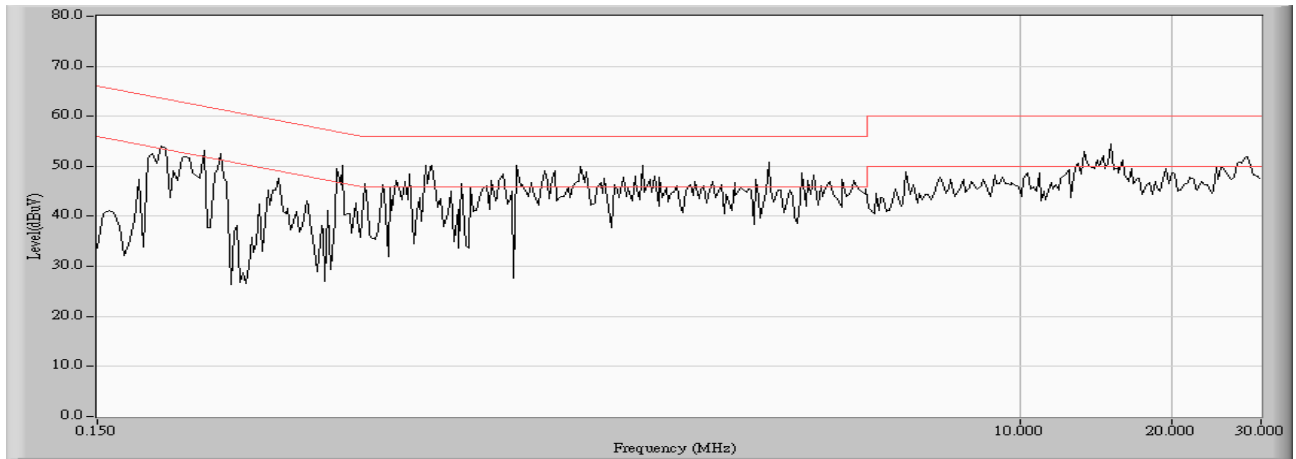


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.850	29.900	39.750	-14.907	54.657	AVERAGE
2		0.466	9.830	23.570	33.400	-13.571	46.971	AVERAGE
3		1.025	9.830	22.570	32.400	-13.600	46.000	AVERAGE
4		2.505	9.842	21.980	31.822	-14.178	46.000	AVERAGE
5	*	8.877	9.920	30.440	40.360	-9.640	50.000	AVERAGE
6		15.654	10.240	23.200	33.440	-16.560	50.000	AVERAGE

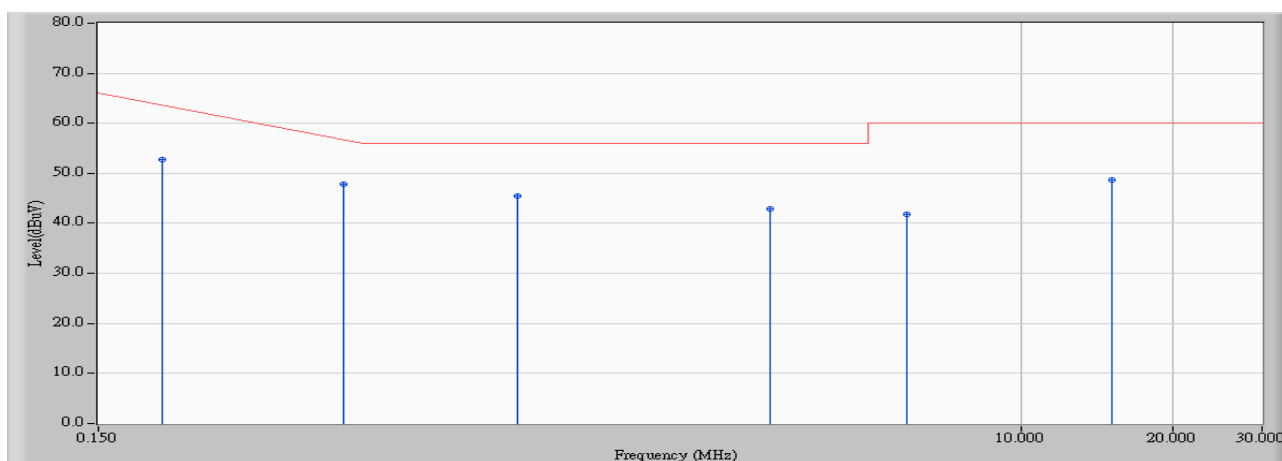
Note:

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 : SR-10	Time : 2008/05/02 - 09:37
Limit : CISPR_B_00M_QP	Margin : 10
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 2



Site : SR-10	Time : 2008/05/02 - 09:38
Limit : CISPR_B_00M_QP	Margin : 0
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 2

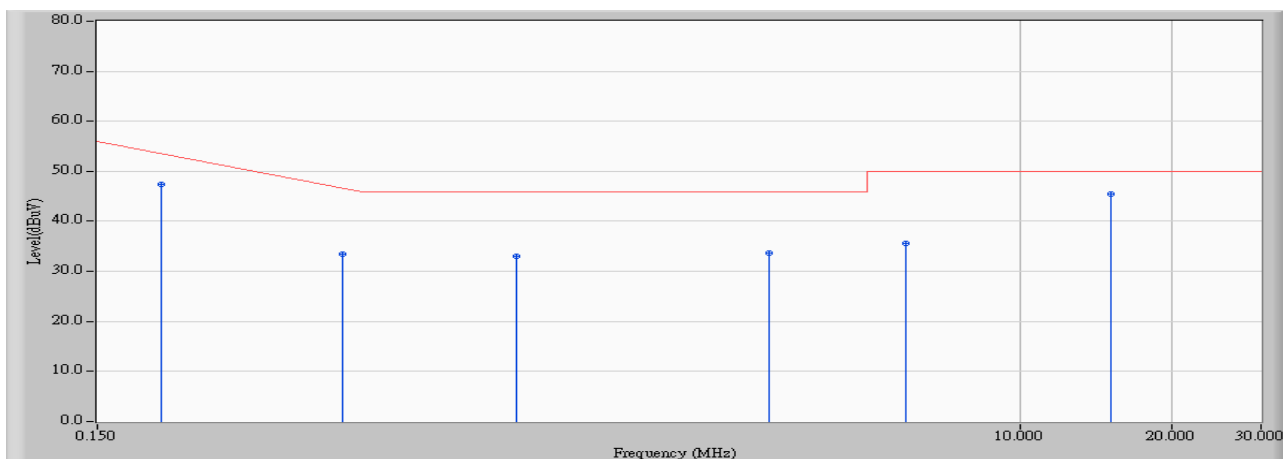


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.201	9.860	42.870	52.730	-11.813	64.543	QUASIPeAK
2	*	0.459	9.830	38.040	47.870	-9.301	57.171	QUASIPeAK
3		1.009	9.830	35.690	45.520	-10.480	56.000	QUASIPeAK
4		3.189	9.850	33.010	42.860	-13.140	56.000	QUASIPeAK
5		5.966	9.880	32.020	41.900	-18.100	60.000	QUASIPeAK
6		15.099	10.250	38.500	48.750	-11.250	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 : SR-10	Time : 2008/05/02 - 09:38
Limit : CISPR_B_00M_AV	Margin : 0
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 2

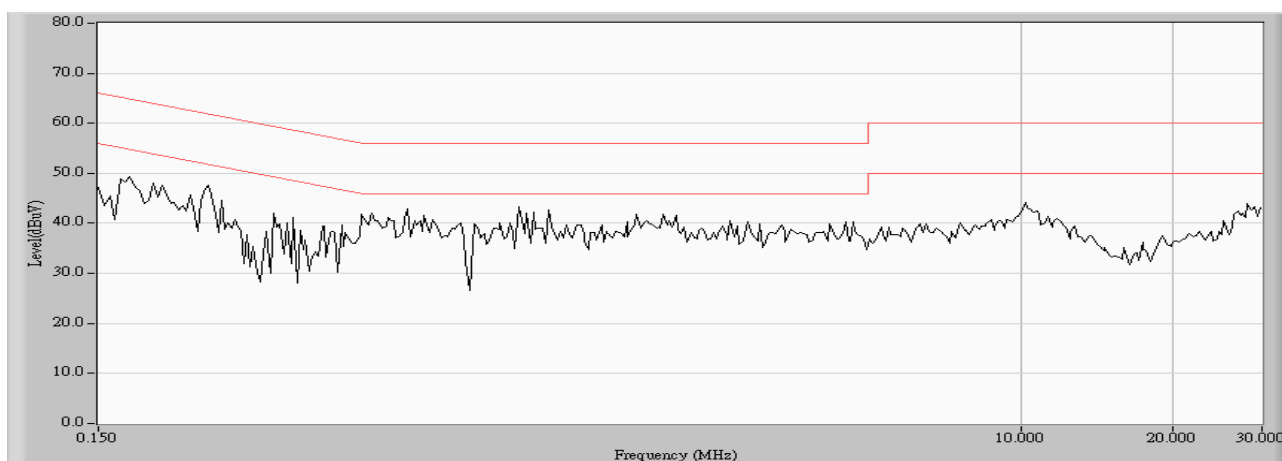


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.201	9.860	37.560	47.420	-7.123	54.543	AVERAGE
2		0.459	9.830	23.650	33.480	-13.691	47.171	AVERAGE
3		1.009	9.830	23.290	33.120	-12.880	46.000	AVERAGE
4		3.189	9.850	23.890	33.740	-12.260	46.000	AVERAGE
5		5.966	9.880	25.620	35.500	-14.500	50.000	AVERAGE
6	*	15.099	10.250	35.140	45.390	-4.610	50.000	AVERAGE

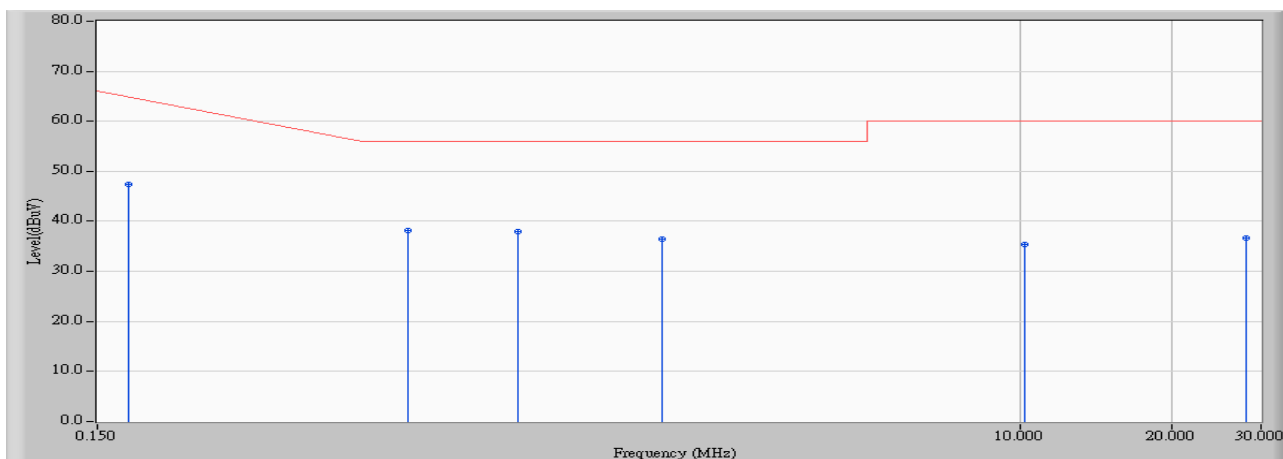
Note:

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 : SR-10	Time : 2008/04/17 - 02:31
Limit : CISPR_B_00M_QP	Margin : 10
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 3



Site : SR-10	Time : 2008/04/17 - 02:31
Limit : CISPR_B_00M_QP	Margin : 0
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 3

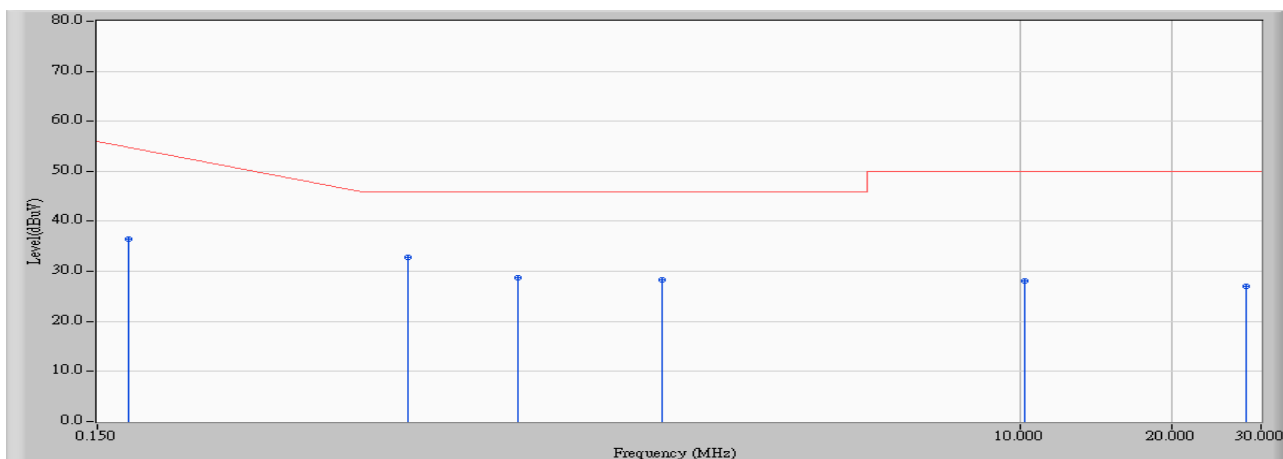


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.173	9.860	37.600	47.460	-17.883	65.343	QUASIPeAK
2	*	0.615	9.820	28.410	38.230	-17.770	56.000	QUASIPeAK
3		1.021	9.830	28.070	37.900	-18.100	56.000	QUASIPeAK
4		1.962	9.840	26.550	36.390	-19.610	56.000	QUASIPeAK
5		10.255	9.930	25.520	35.450	-24.550	60.000	QUASIPeAK
6		28.084	10.310	26.440	36.750	-23.250	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 : SR-10	Time : 2008/04/17 - 02:31
Limit : CISPR_B_00M_AV	Margin : 0
EUT : LCD TV	Probe : ENV216-L1 - Line1
Power : AC 120V/60Hz	Note : Mode 3

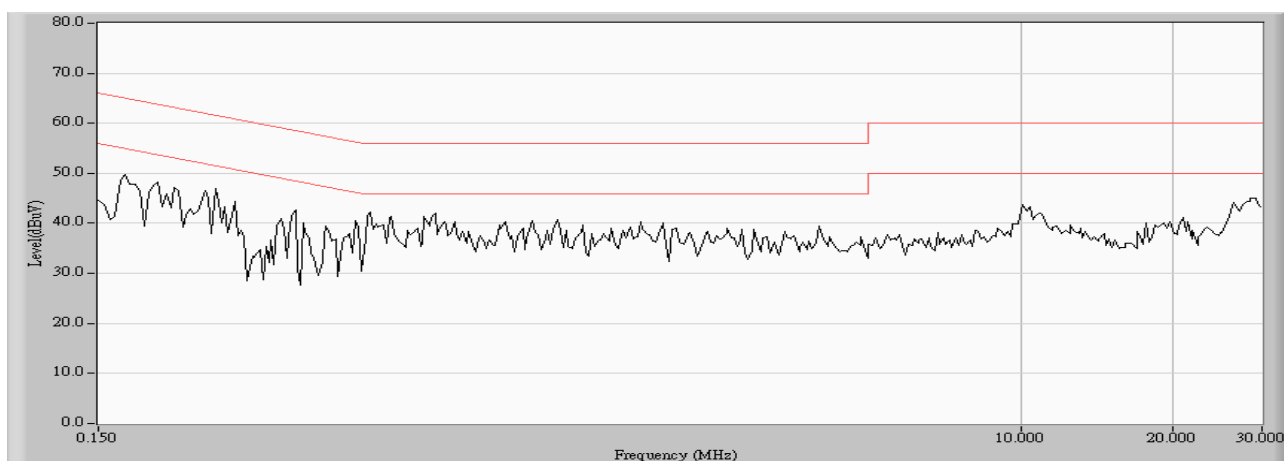


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.173	9.860	26.660	36.520	-18.823	55.343	AVERAGE
2	*	0.615	9.820	23.010	32.830	-13.170	46.000	AVERAGE
3		1.021	9.830	18.980	28.810	-17.190	46.000	AVERAGE
4		1.962	9.840	18.400	28.240	-17.760	46.000	AVERAGE
5		10.255	9.930	18.190	28.120	-21.880	50.000	AVERAGE
6		28.084	10.310	16.740	27.050	-22.950	50.000	AVERAGE

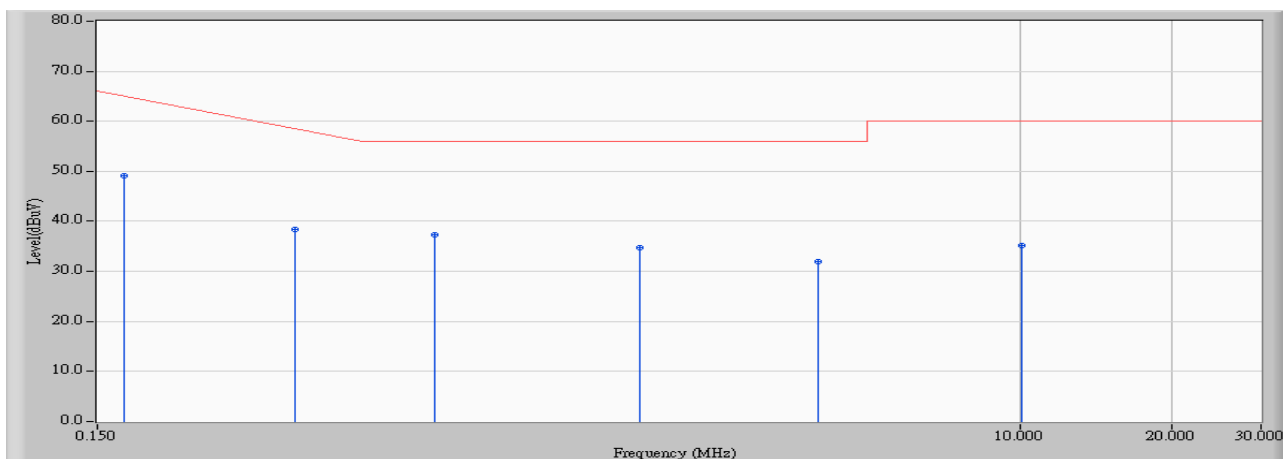
Note:

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 : SR-10	Time : 2008/04/17 - 02:33
Limit : CISPR_B_00M_QP	Margin : 10
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 3



Site : SR-10	Time : 2008/04/17 - 02:33
Limit : CISPR_B_00M_QP	Margin : 0
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 3

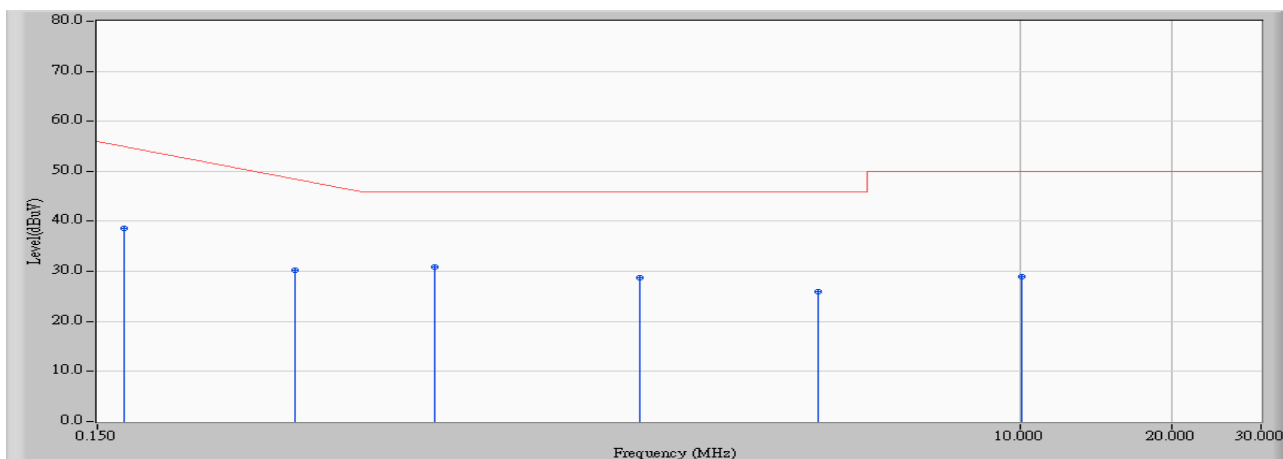


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.170	9.866	39.240	49.106	-16.323	65.429	QUASIPeAK
2		0.369	9.840	28.590	38.430	-21.313	59.743	QUASIPeAK
3		0.697	9.840	27.430	37.270	-18.730	56.000	QUASIPeAK
4		1.775	9.840	24.840	34.680	-21.320	56.000	QUASIPeAK
5		3.986	9.860	22.020	31.880	-24.120	56.000	QUASIPeAK
6		10.119	9.940	25.280	35.220	-24.780	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 : SR-10	Time : 2008/04/17 - 02:33
Limit : CISPR_B_00M_AV	Margin : 0
EUT : LCD TV	Probe : ENV216-N - Line2
Power : AC 120V/60Hz	Note : Mode 3



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.170	9.866	28.740	38.606	-16.823	55.429	AVERAGE
2		0.369	9.840	20.410	30.250	-19.493	49.743	AVERAGE
3	*	0.697	9.840	21.040	30.880	-15.120	46.000	AVERAGE
4		1.775	9.840	18.810	28.650	-17.350	46.000	AVERAGE
5		3.986	9.860	15.990	25.850	-20.150	46.000	AVERAGE
6		10.119	9.940	19.010	28.950	-21.050	50.000	AVERAGE

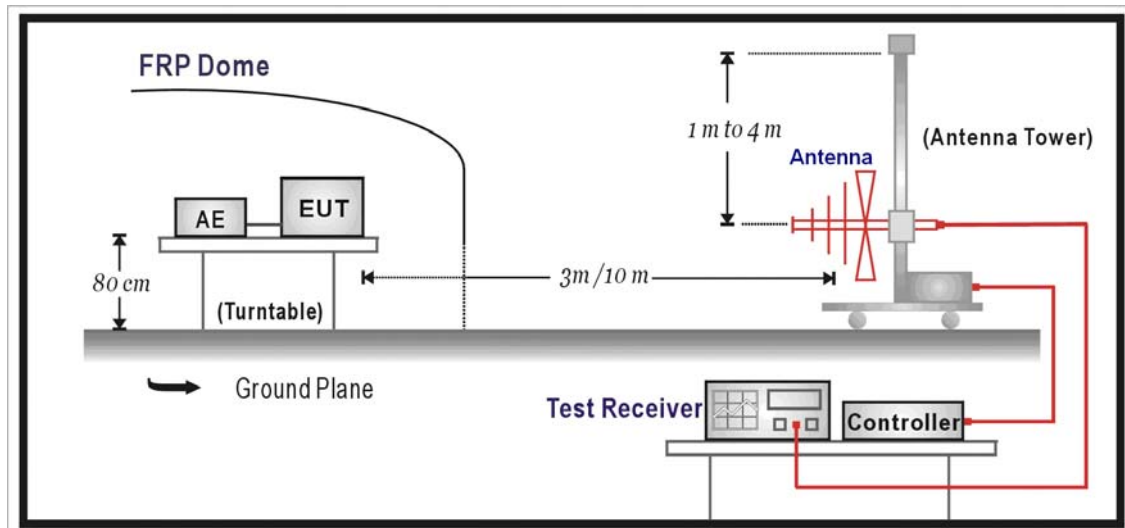
Note:

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

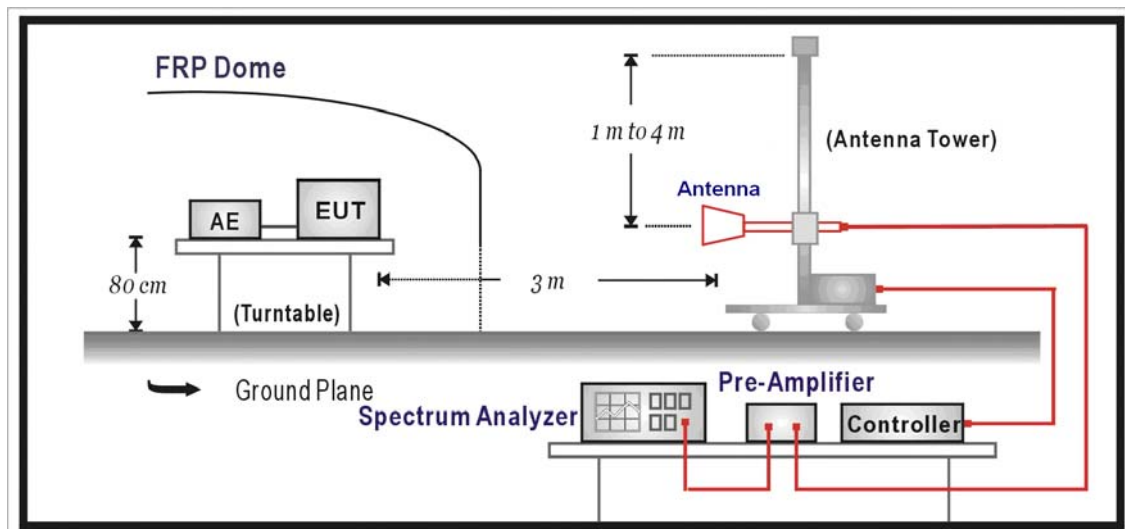
4. Radiated Emission

4.1. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.2. Limit

Under 1GHz test shall not exceed the following value:

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

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	3	40
88-216	3	43.5
216-960	3	46
Above 960	3	54

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. $E \text{ field strength (dBuV/m)} = 20 \log E \text{ field strength (uV/m)}$

4.3. Test Procedure

The EUT was setup and tested according to ANSI C63.4, 2003.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 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 following 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.

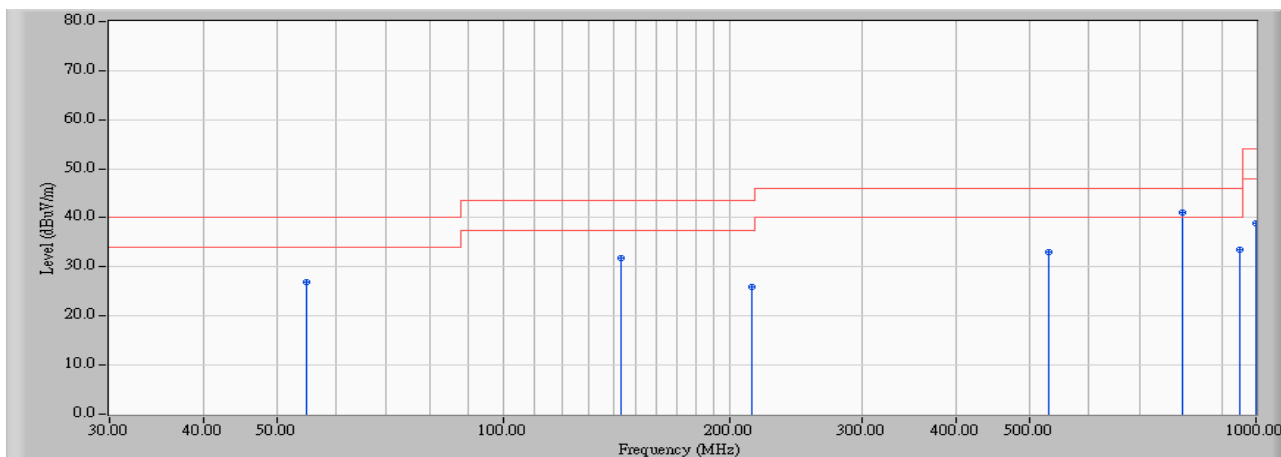
For class A, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and above 1GHz.

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.

4.4. Test Result

Site : OATS-3	Time : 2008/03/11 - 10:33
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : LCD TV	Probe : CBL6112B-(2704) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1

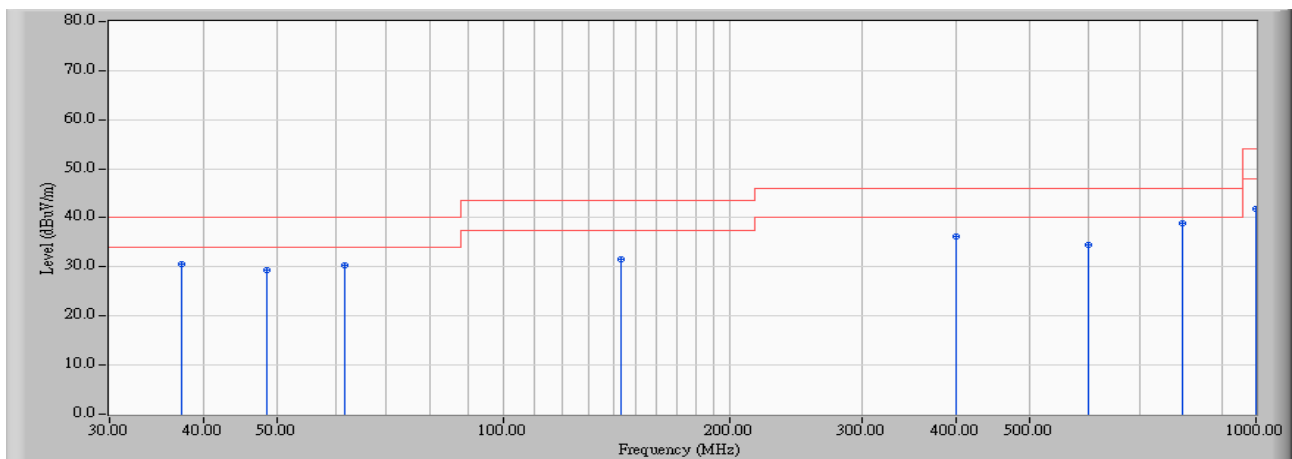


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		54.720	7.630	19.180	26.810	-13.190	40.000	QUASIPeAK
2		143.320	12.649	19.250	31.900	-11.600	43.500	QUASIPeAK
3		214.000	10.570	15.370	25.940	-17.560	43.500	QUASIPeAK
4		531.610	21.739	11.330	33.069	-12.931	46.000	QUASIPeAK
5	*	800.010	24.596	16.400	40.996	-5.004	46.000	QUASIPeAK
6		953.464	26.058	7.420	33.478	-12.522	46.000	QUASIPeAK
7		1000.000	26.291	12.510	38.801	-15.199	54.000	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-3	Time : 2008/03/11 - 09:50
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : LCD TV	Probe : CBL6112B-(2704) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1

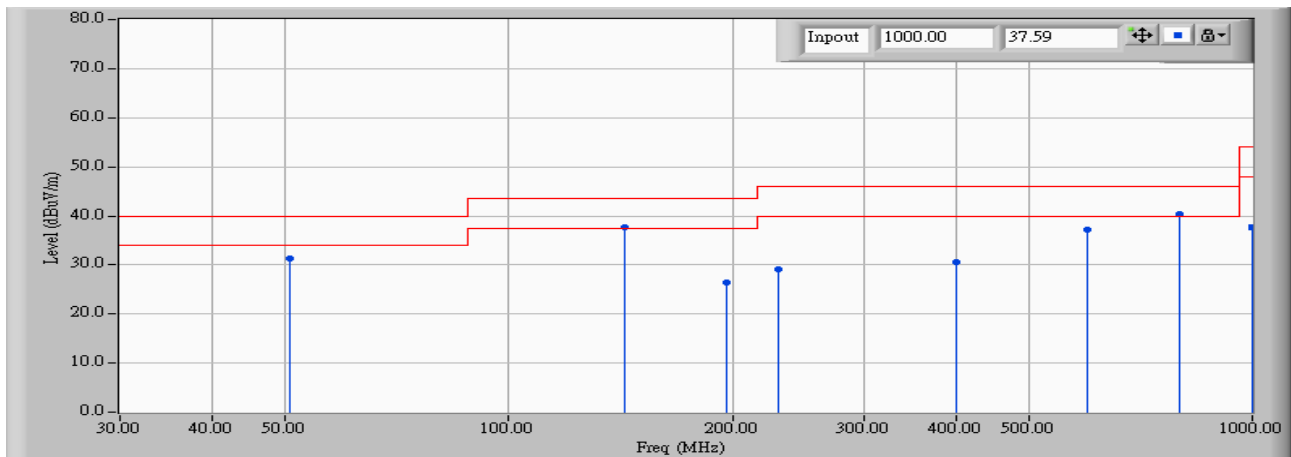


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		37.440	15.111	15.400	30.511	-9.489	40.000	QUASIPeAK
2		48.600	9.731	19.600	29.331	-10.669	40.000	QUASIPeAK
3		61.720	6.345	23.900	30.245	-9.755	40.000	QUASIPeAK
4		143.320	12.649	18.800	31.450	-12.050	43.500	QUASIPeAK
5		400.010	19.006	17.200	36.206	-9.794	46.000	QUASIPeAK
6		600.010	22.640	11.800	34.440	-11.560	46.000	QUASIPeAK
7	*	800.010	24.596	14.300	38.896	-7.104	46.000	QUASIPeAK
8		1000.000	26.291	15.600	41.891	-12.109	54.000	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-3	Time : 2008/03/10 - 14:51
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : LCD TV	Probe : CBL6112B-(2704) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 2

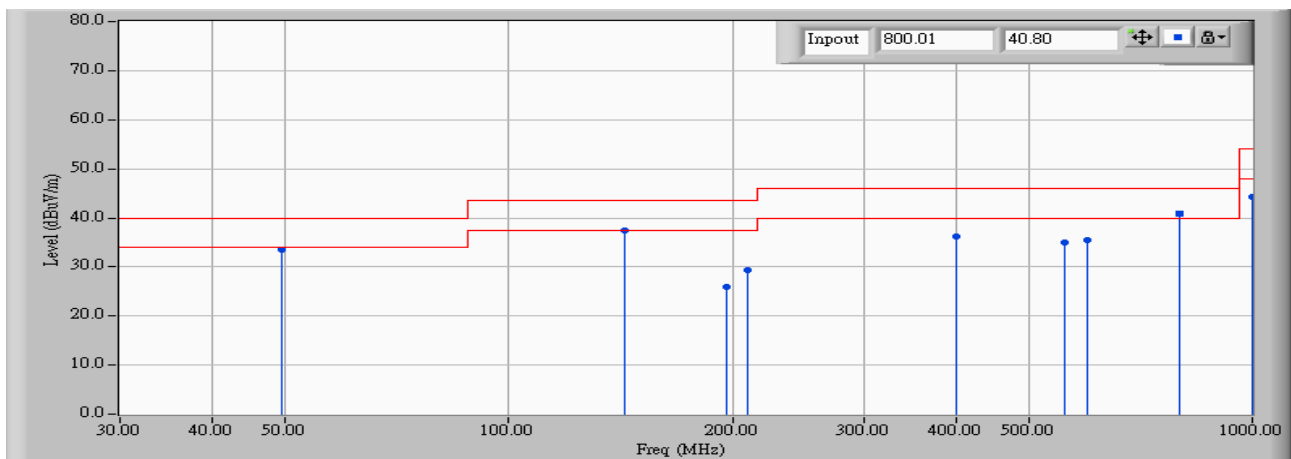


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		50.880	8.809	22.600	31.409	-8.591	40.000	QUASIPeAK
2		143.300	12.654	25.100	37.753	-5.747	43.500	QUASIPeAK
3		196.610	10.939	15.600	26.539	-16.961	43.500	QUASIPeAK
4		229.990	11.814	17.300	29.114	-16.886	46.000	QUASIPeAK
5		400.000	19.005	11.600	30.605	-15.395	46.000	QUASIPeAK
6		600.010	22.640	14.500	37.140	-8.860	46.000	QUASIPeAK
7	*	800.010	24.596	15.800	40.396	-5.604	46.000	QUASIPeAK
8		1000.000	26.291	11.300	37.591	-16.409	54.000	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-3	Time : 2008/03/10 - 14:31
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : LCD TV	Probe : CBL6112B-(2704) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 2

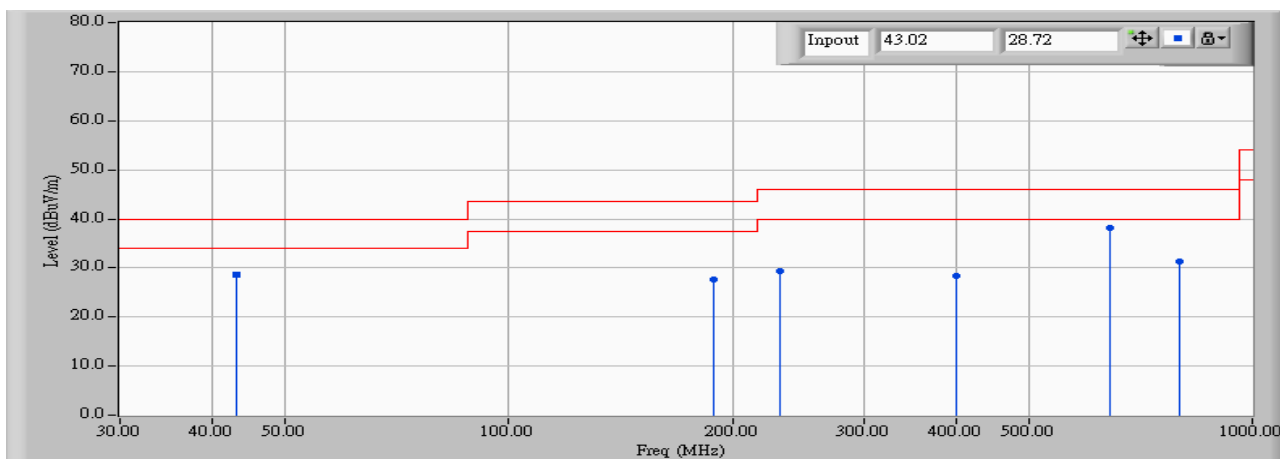


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		49.560	9.303	24.300	33.603	-6.397	40.000	QUASIPeAK
2		143.300	12.654	24.900	37.553	-5.947	43.500	QUASIPeAK
3		196.600	10.939	15.000	25.939	-17.561	43.500	QUASIPeAK
4		210.000	10.787	18.500	29.287	-14.213	43.500	QUASIPeAK
5		400.000	19.005	17.200	36.205	-9.795	46.000	QUASIPeAK
6		559.430	22.510	12.500	35.010	-10.990	46.000	QUASIPeAK
7		600.000	22.640	12.900	35.540	-10.460	46.000	QUASIPeAK
8	*	800.010	24.596	16.200	40.796	-5.204	46.000	QUASIPeAK
9		1000.000	26.291	18.000	44.291	-9.709	54.000	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-3	Time : 2008/04/17 - 06:26
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : LCD TV	Probe : 2007_(2704)_3M - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 3

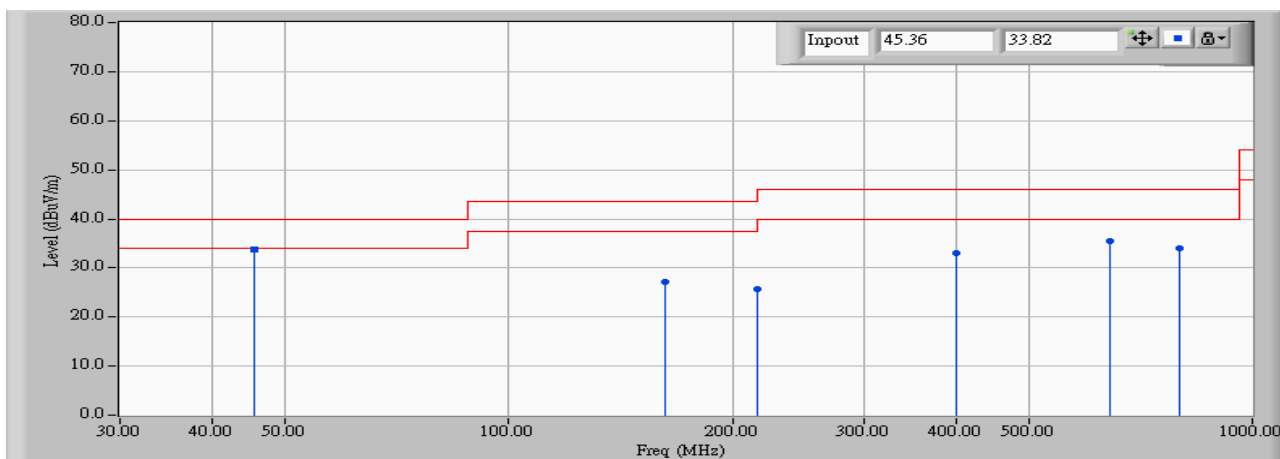


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		43.020	12.315	16.400	28.715	-11.285	40.000	QUASIPeAK
2		189.000	10.594	17.110	27.704	-15.796	43.500	QUASIPeAK
3		231.800	12.052	17.230	29.282	-16.718	46.000	QUASIPeAK
4		400.000	19.005	9.400	28.405	-17.595	46.000	QUASIPeAK
5	*	642.870	23.018	15.100	38.118	-7.882	46.000	QUASIPeAK
6		800.000	24.596	6.700	31.296	-14.704	46.000	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-3	Time : 2008/04/17 - 06:17
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : LCD TV	Probe : 2007_(2704)_3M - VERTICAL
Power : AC 120V/60Hz	Note : Mode 3

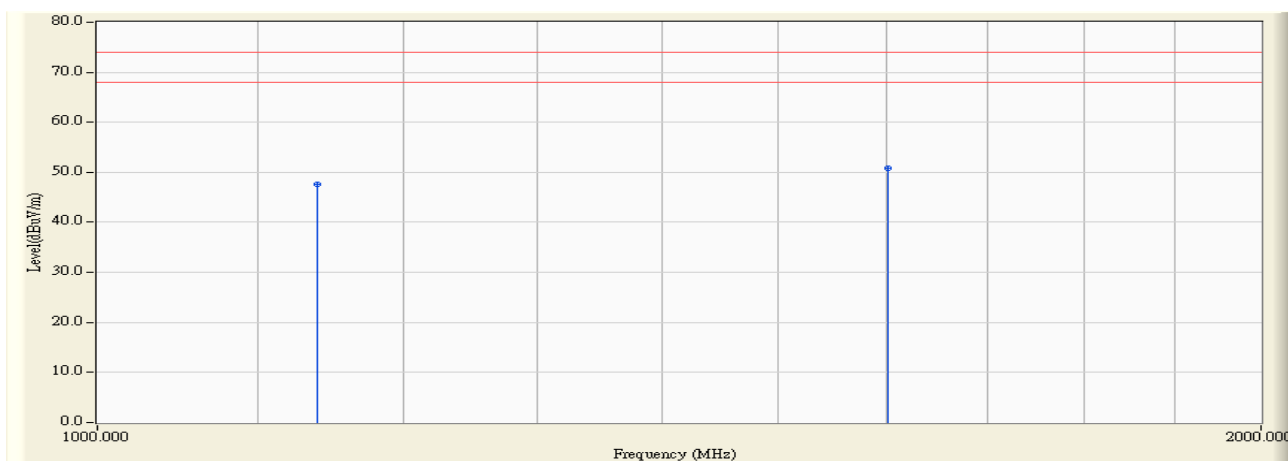


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	45.360	11.219	22.600	33.819	-6.181	40.000	QUASIPeAK
2		162.000	11.399	15.800	27.199	-16.301	43.500	QUASIPeAK
3		216.000	10.610	15.200	25.810	-20.190	46.000	QUASIPeAK
4		400.009	19.006	14.070	33.076	-12.924	46.000	QUASIPeAK
5		642.800	23.019	12.500	35.519	-10.481	46.000	QUASIPeAK
6		800.000	24.596	9.400	33.996	-12.004	46.000	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-3	Time : 2008/04/17 - 01:44
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1

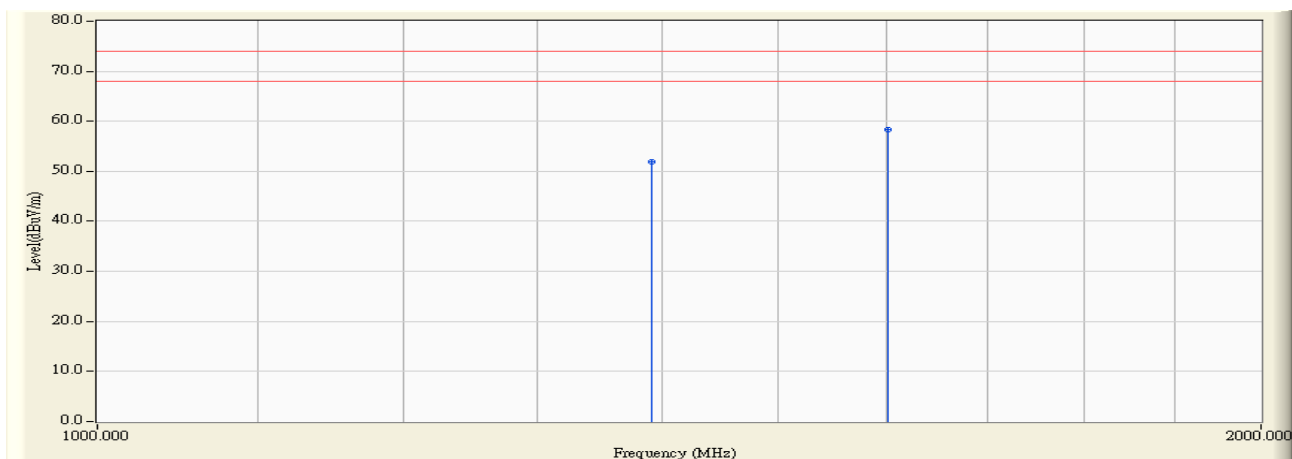


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1140.200	-6.283	53.980	47.698	-26.302	74.000	PEAK
2	*	1601.200	-4.997	55.860	50.863	-23.137	74.000	PEAK

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 : OATS-3	Time : 2008/04/17 - 01:47
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1

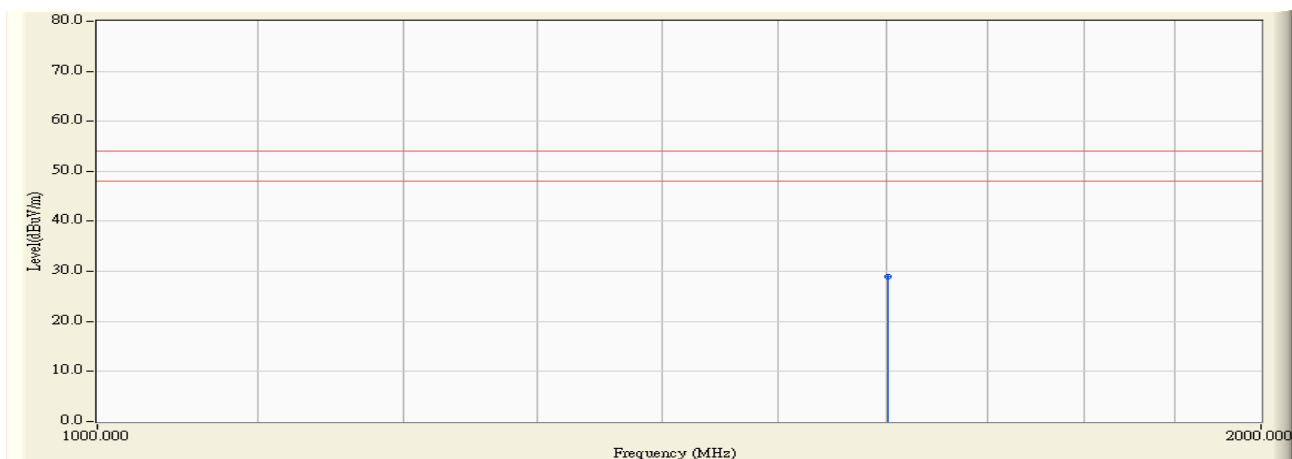


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1390.700	-5.164	57.090	51.926	-22.074	74.000	PEAK
2	*	1601.200	-4.997	63.280	58.283	-15.717	74.000	PEAK

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 : OATS-3	Time : 2008/04/17 - 01:55
Limit : FCC_B_(Above_1G)_03M_AV	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1

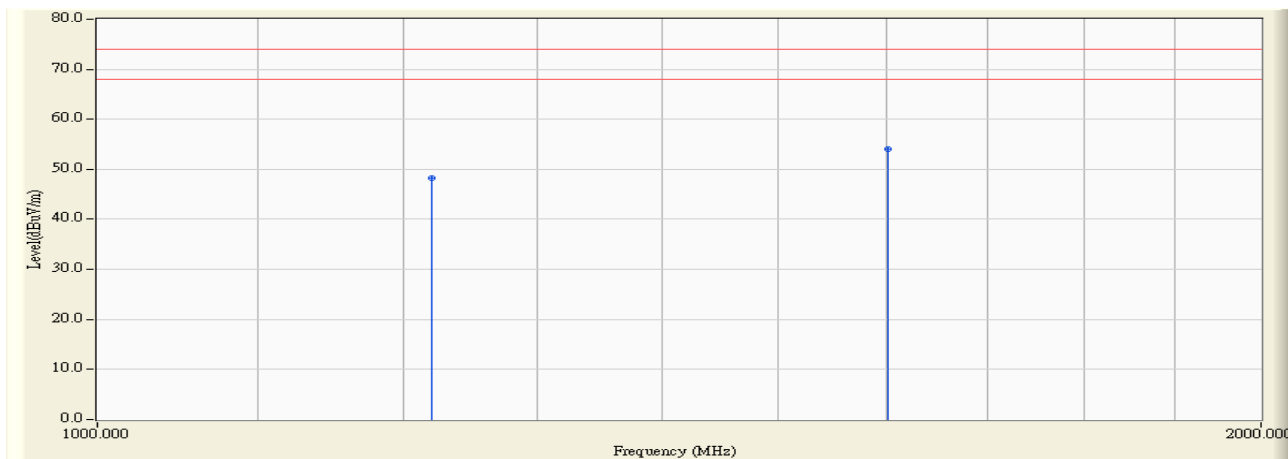


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1601.200	-4.997	34.000	29.003	-24.997	54.000	AVERAGE

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 : OATS-3	Time : 2008/04/30 - 13:47
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 2

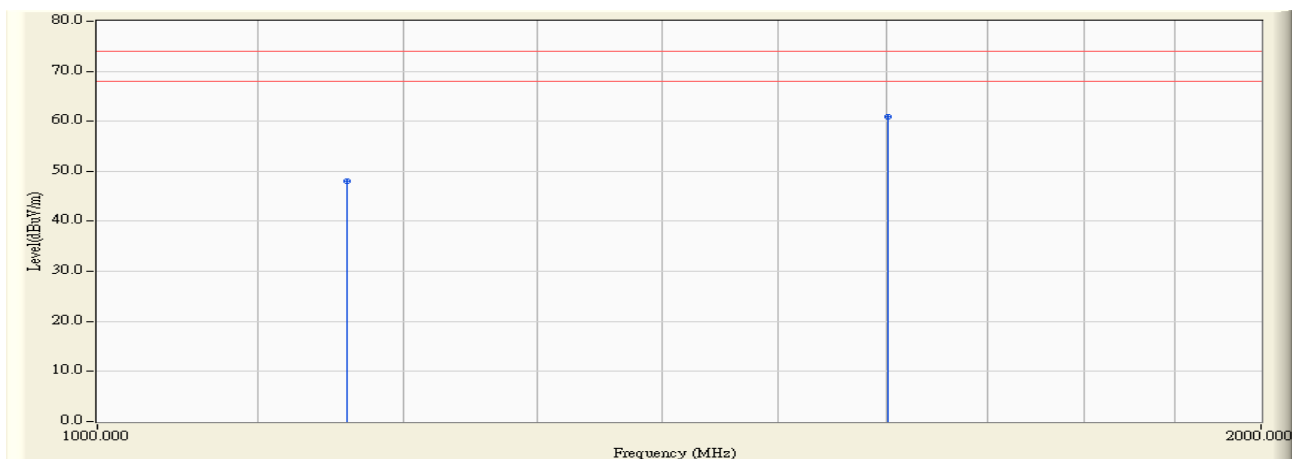


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1220.800	-6.052	54.320	48.268	-25.732	74.000	PEAK
2	*	1601.200	-4.997	58.960	53.963	-20.037	74.000	PEAK

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 : OATS-3	Time : 2008/04/30 - 13:55
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 2

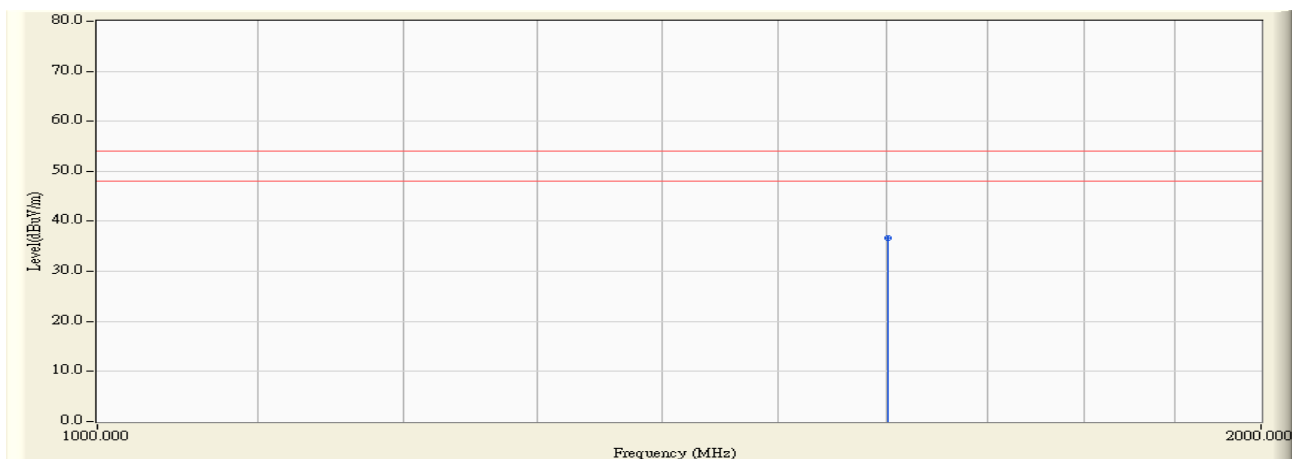


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1160.700	-6.231	54.220	47.988	-26.012	74.000	PEAK
2	*	1601.200	-4.997	65.880	60.883	-13.117	74.000	PEAK

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 : OATS-3	Time : 2008/04/30 - 14:03
Limit : FCC_B_(Above_1G)_03M_AV	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 2

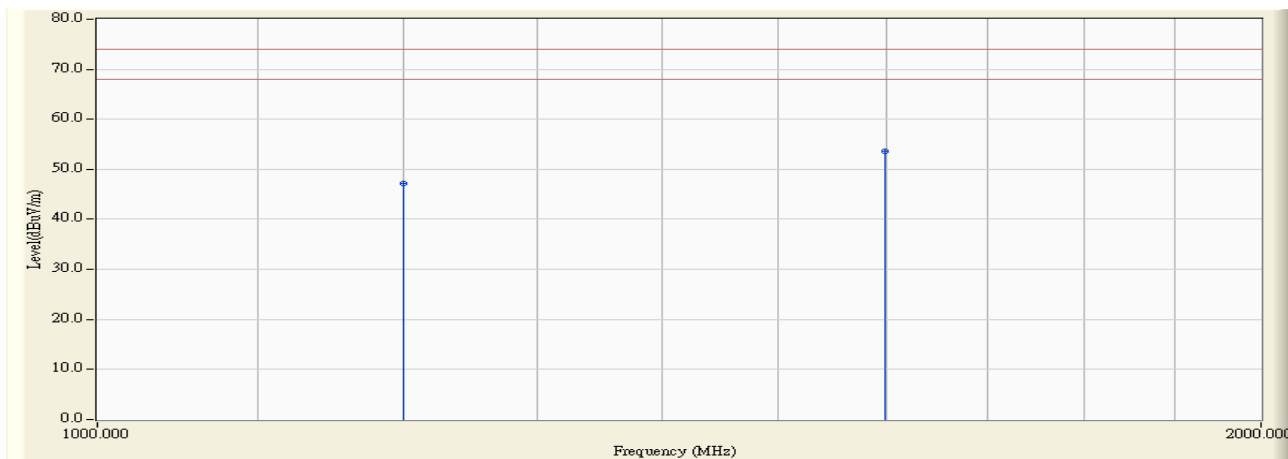


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1601.200	-4.997	41.700	36.703	-17.297	54.000	AVERAGE

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 : OATS-3	Time : 2008/04/17 - 02:01
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 3

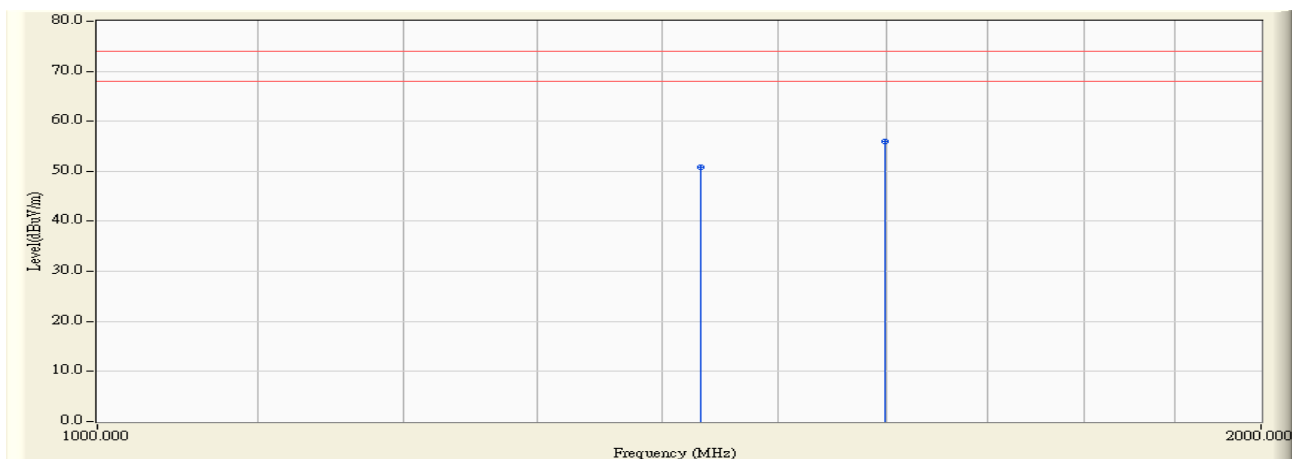


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1200.400	-6.148	53.260	47.112	-26.888	74.000	PEAK
2	*	1599.100	-5.002	58.610	53.608	-20.392	74.000	PEAK

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 : OATS-3	Time : 2008/04/17 - 02:02
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 3

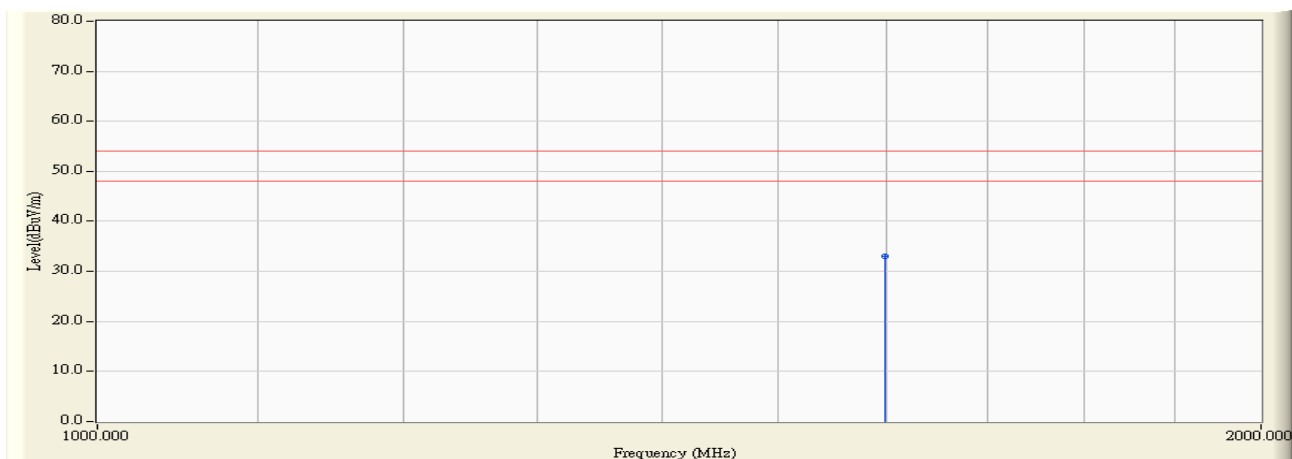


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1432.800	-5.096	56.020	50.924	-23.076	74.000	PEAK
2	*	1599.100	-5.002	60.980	55.978	-18.022	74.000	PEAK

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 : OATS-3	Time : 2008/04/17 - 02:06
Limit : FCC_B_(Above_1G)_03M_AV	Margin : 6
EUT : LCD TV	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 3



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1599.100	-5.002	38.000	32.998	-21.002	54.000	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