



Test Report

Product Name : Cable modem
Model No. : SM110-101
FCC ID : S7USBPB2647

Applicant : SlingMedia Inc
Address : 1051 East Hillsdale Blvd, Suite 500
Foster City, CA 94404

Date of Receipt : 2007/05/18
Issued Date : 2007/05/30
Report No. : 075L126-AVUSP03V01

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 CNLA, NVLAP, NIST or any agency of the Government.

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Test Report Certification

Issued Date : 2007/05/30

Report No. : 075L126-AVUSP03V01



Product Name : Cable modem
 Applicant : SlingMedia Inc
 Address : 1051 East Hillsdale Blvd, Suite 500 Foster City, CA 94404
 Manufacturer : SlingMedia Inc
 Model No. : SM110-101
 Rated Voltage : AC 120 V / 60 Hz
 EUT Voltage : AC 100-240V, 50/60Hz
 Trade Name : Sling
 Applicable Standard : FCC CFR Title 47 Part 15 Subpart B: 2006 ,
 CISPR 22: 2005, Part 15.111, ANSI C63.4: 2003
 Test Result : Complied
 Performed Location : Quietek Corporation (Linkou Laboratory)
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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 by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

Taiwan R.O.C.	: BSMI, DGT, CNLA
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/myalbum/>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>

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1. General Information

1.1. EUT Description

Product Name	Cable modem
Trade Name	Sling
Model No.	SM110-101

Component	
Power Adapter	MFR: KTEC, M/N: KSAFE0600350W1US Input: AC 100-240V, 50/60Hz, 0.6 A Output: DC 6V, 3.5A Cable Out: Shielded, 1.8m

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. The functions of the Cable modem of the EUT including Analog TV, S-Video, RCA and YPbPr, and the table below are the Pre-test mode for the functions.

The final test mode are the below table.

Pre-Test Mode	
MODE 1: TV NTSC System	
MODE 2: AV1 Port (S-Video)	
MODE 3: AV1 Port (RCA)	
MODE 4: AV1 Port (YPbPr)	
Final Test Mode	
Emission	MODE 1: TV NTSC System MODE 2: AV1 Port (S-Video)

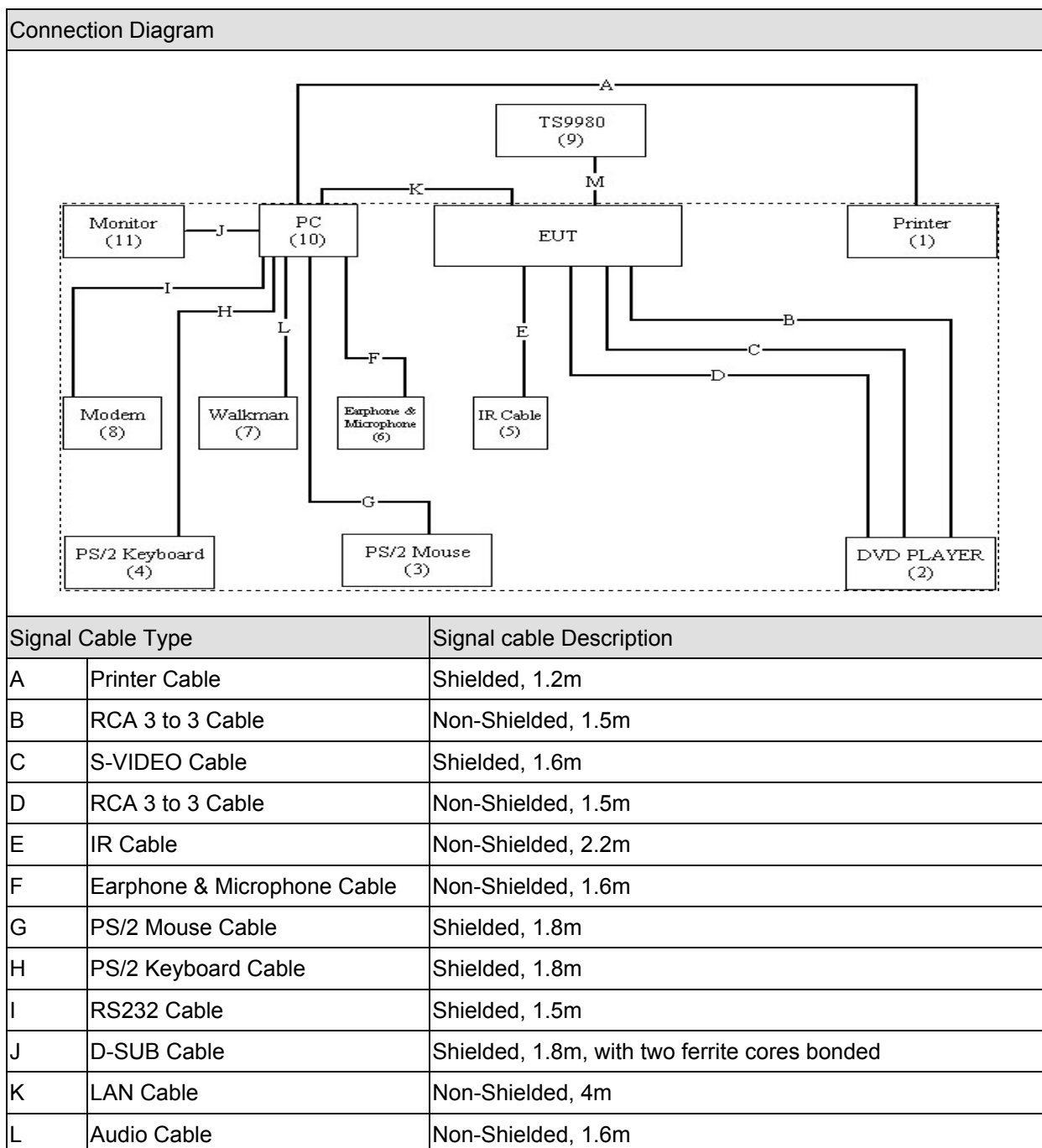
Test frequency table		
Type	System	Frequency
Analog TV	NTSC M (USA)	55.25MHz, 205.25MHz, 373.25MHz, 507.25MHz, 801.25MHz

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 Printer	EPSON	StyLus C63	FAPY094339	Non-Shielded, 1.8m
2 DVD PLAYER	Pioneer	DV-989Avi-G	FBMP000224TA	Non-Shielded, 1.8m
3 PS/2 Mouse	HP	M-S69	N/A	N/A
4 PS/2 Keyboard	COMPAQ	KB-0133	B55940MGAPK00W	N/A
5 IR Cable	ASUS	N/A	N/A	N/A
6 Microphone & Earphone	PCHOME	N/A	N/A	N/A
7 Walkman	AIWA	HS-TA164	N/A	N/A
8 Modem	ACEEX	DM-1414	0102027550	Non-Shielded, 1.8m
9 TS9980	N/A	N/A	N/A	N/A
10 PC	COMPAQ	SR1530TW	CNN5350DD8	Non-Shielded, 1.8m
11 Monitor	CMV	CT-730D	FNC122F57BA1325	Non-Shielded, 1.8m

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	The EUT will receive the RF signal source and shown it on the screen.
4	Repeat the above procedure to (3).

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
Section 15.107 Conducted Emission	FCC CFR Title 47 Part 15 Subpart B: 2006 Class B ANSI C63.4: 2003	Yes	No
Section 15.109 Radiated Emission	FCC CFR Title 47 Part 15 Subpart B: 2006 Class B ANSI C63.4: 2003	Yes	No
Section 15.111 Antenna Power Conduction	FCC CFR Title 47 Part 15 Subpart B: 2006 Class B, Part 15.111,ANSI C63.4: 2003	Yes	No

2.2. List of Test Equipment

Section 15.107 Conducted Emission / SR1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	838251/001	2007/05/01
LISN	R&S	ESH3-Z5	836679/020	2007/01/26
LISN	R&S	ESH3-Z5	836679/021	2007/02/06
Pulse Limiter	R&S	ESH3-Z2	357.88.10.52	2006/09/04
R&S TS 9980	N/A	N/A	N/A	N/A

Section 15.109 Radiated Emission / Site3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
R&S TS 9980	N/A	N/A	N/A	N/A
Bilog Antenna	Schaffner Chase	CBL6112B	2704	2006/08/09
Coaxial switch	Arnist	MP59B	6100034524	N/A
EMI Test Receiver	R&S	ESCS 30	100367	2006/08/11
Pre-Amplifier	QTK	N/A	N/A	2007/01/03
Spectrum Analyzer	Advantest	R3162	101102468	2007/04/10
Spectrum Analyzer	Advantest	R3162	01700040	2006/11/14

Section 15.111 Antenna Power Conduction / SR1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	836858/022	2006/07/21
Isolation Transformer	Erika Fiedler	D-65396 Walluf	19	N/A
R&S TS 9980	N/A	N/A	N/A	N/A

R&S TS 9980				
Instrument	Manufacturer	Type No.	Serial No	Cal. Date
100V INSERTION UNIT (100K-3G)	R&S	URV5-Z4	839313/010	2007/02/20
Audio Analyzer	R&S	UPL	100104	2007/02/07
CCVS Generator	R&S	SFF	100004	2007/02/06
DAB Signal Generator	Panasonic	VP-7664B	490099A122	2006/09/28
Harmonic Filter	R&S	ATS-OW	338990/002	2007/01/27
Line Distributor with EMI Filter	R&S	CS-LDE	1028.3481.13	N/A
MPEG II Measurement Generator	R&S	DVG	100046	2007/02/03
Power Amplifier	Bonn Elektronik	BSA1515-25	004793-03	N/A
Power Meter	R&S	NRVS	100138	2007/02/03
Signal Generator	R & S	SML03	101958	2007/02/08
Signal Generator	R&S	SMY01	100101	2007/02/08
System Panel	R&S	TS998SP	338958/002	2007/01/27
TV Test Transmitter	R&S	SFM	100023	2007/02/08
TV Test Transmitter	R&S	SFQ	100057	2007/02/08

2.3. Measurement Uncertainty

Section 15.107 Conducted Emission

The measurement uncertainty is evaluated as ± 2.26 dB.

Section 15.109 Radiated Emission

The measurement uncertainty is evaluated as ± 3.19 dB.

Section 15.111 Antenna Power Conduction

The measurement uncertainty is defined as ± 2.02 dB

2.4. Test Environment

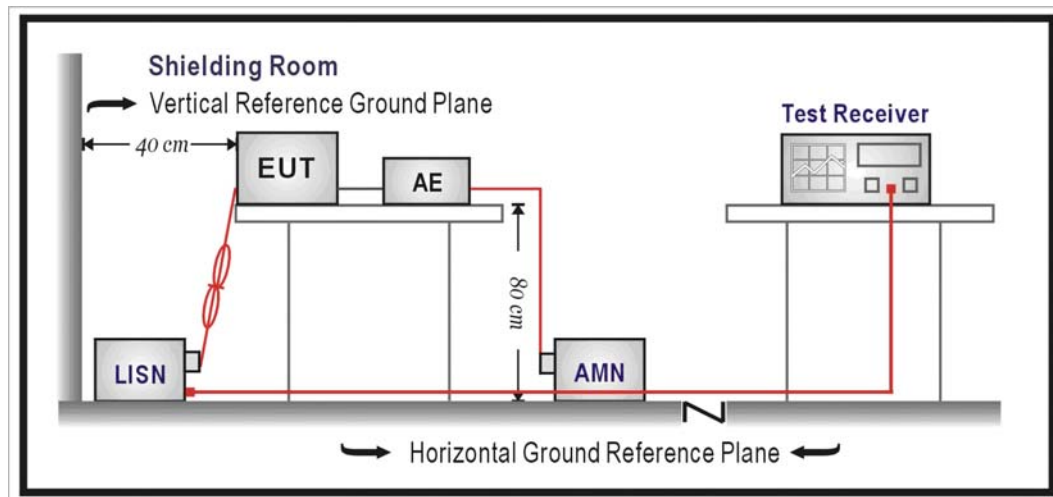
Performed Item	Items	Required	Actual
Section 15.107 Conducted Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Section 15.109 Radiated Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Section 15.111 Antenna Power Conduction	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	1060	950-1000

3. Conducted Emission

3.1. Test Specification

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

3.2. Test Setup



3.3. Limit

Limits		
Frequency (MHz)	QP (dBuV/m)	AV (dBuV/m)
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

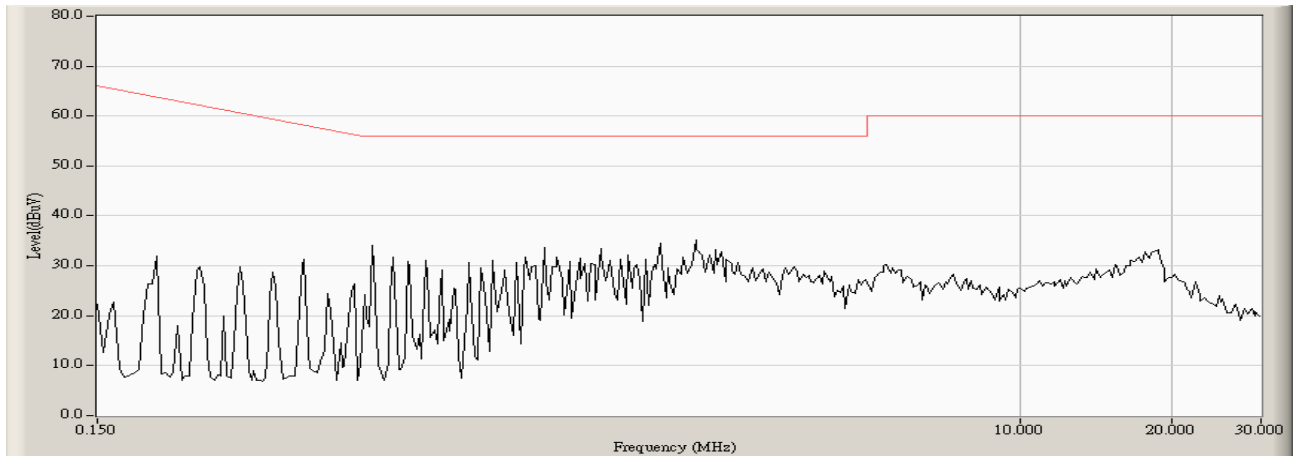
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer 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 according to ANSI C63.4: 2003 on conducted measurement.

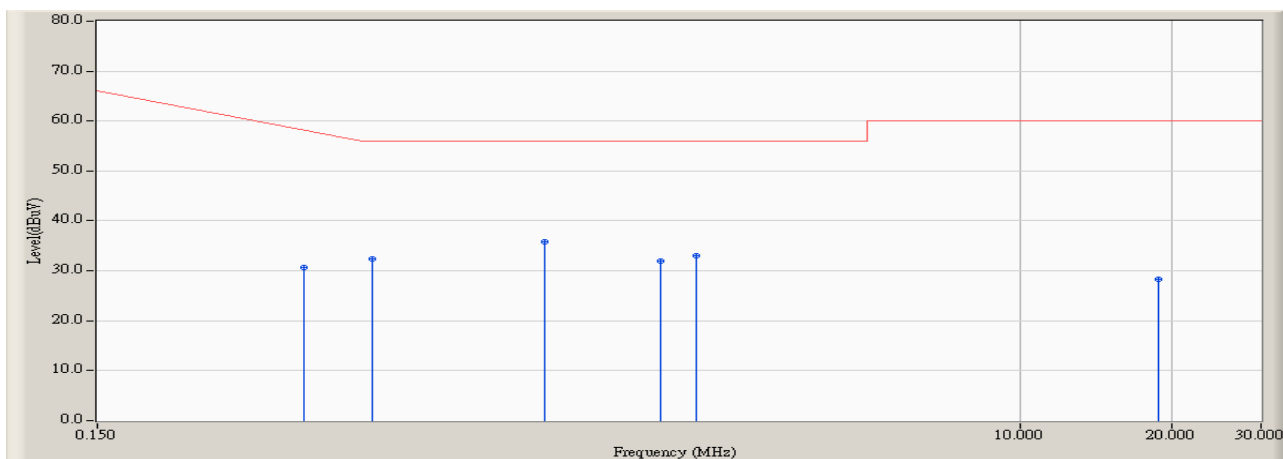
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Test Result

Site : SR-1	Time : 2007/05/25 - 01:20
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(L) - Line1
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz



Site : SR-1	Time : 2007/05/25 - 01:21
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(L) - Line1
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz

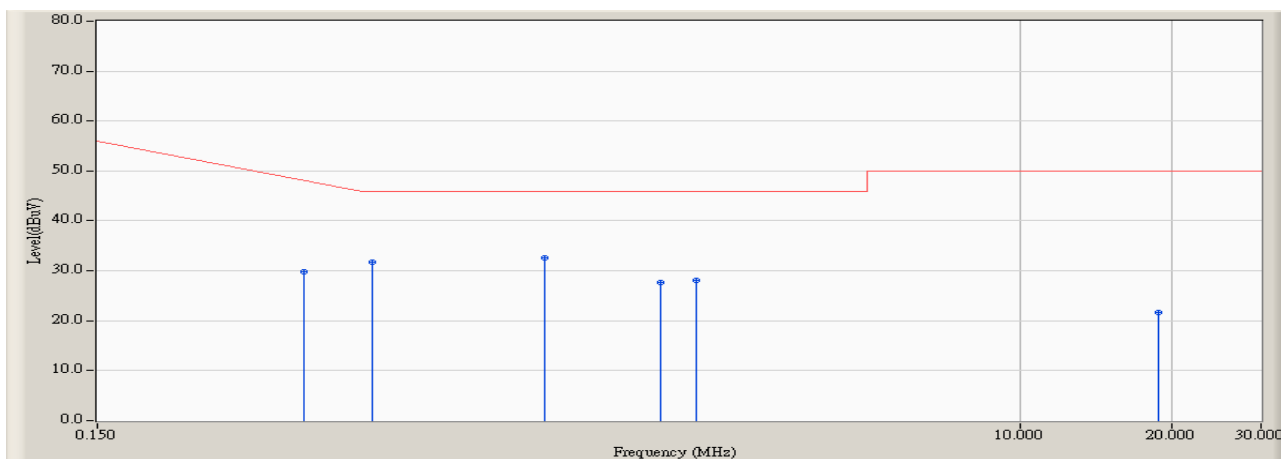


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.384	0.215	30.400	30.615	-28.699	59.314	QUASIPeAK
2		0.525	0.216	32.270	32.486	-23.514	56.000	QUASIPeAK
3	*	1.146	0.245	35.580	35.825	-20.175	56.000	QUASIPeAK
4		1.955	0.276	31.690	31.966	-24.034	56.000	QUASIPeAK
5		2.295	0.290	32.750	33.040	-22.960	56.000	QUASIPeAK
6		18.857	0.952	27.460	28.412	-31.588	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-1	Time : 2007/05/25 - 01:21
Limit : CISPR_B_00M_AV	Margin : 0
EUT : Cable modem	Probe : LISN-020(L) - Line1
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz

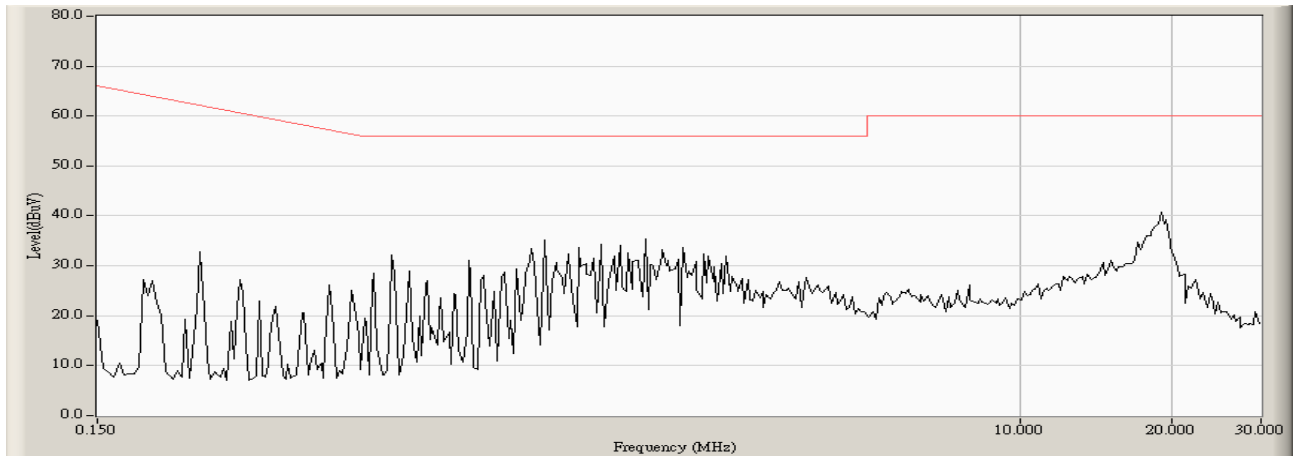


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.384	0.215	29.590	29.805	-19.509	49.314	AVERAGE
2		0.525	0.216	31.530	31.746	-14.254	46.000	AVERAGE
3	*	1.146	0.245	32.260	32.505	-13.495	46.000	AVERAGE
4		1.955	0.276	27.320	27.596	-18.404	46.000	AVERAGE
5		2.295	0.290	27.800	28.090	-17.910	46.000	AVERAGE
6		18.857	0.952	20.610	21.562	-28.438	50.000	AVERAGE

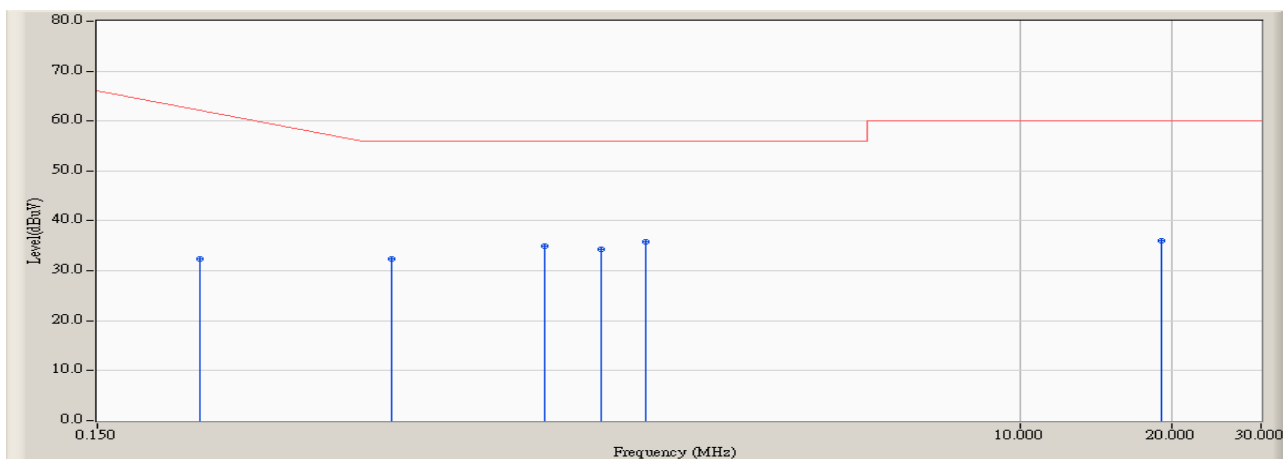
Note:

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-1	Time : 2007/05/25 - 01:21
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(N) - Line2
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz



Site : SR-1	Time : 2007/05/25 - 01:22
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(N) - Line2
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz

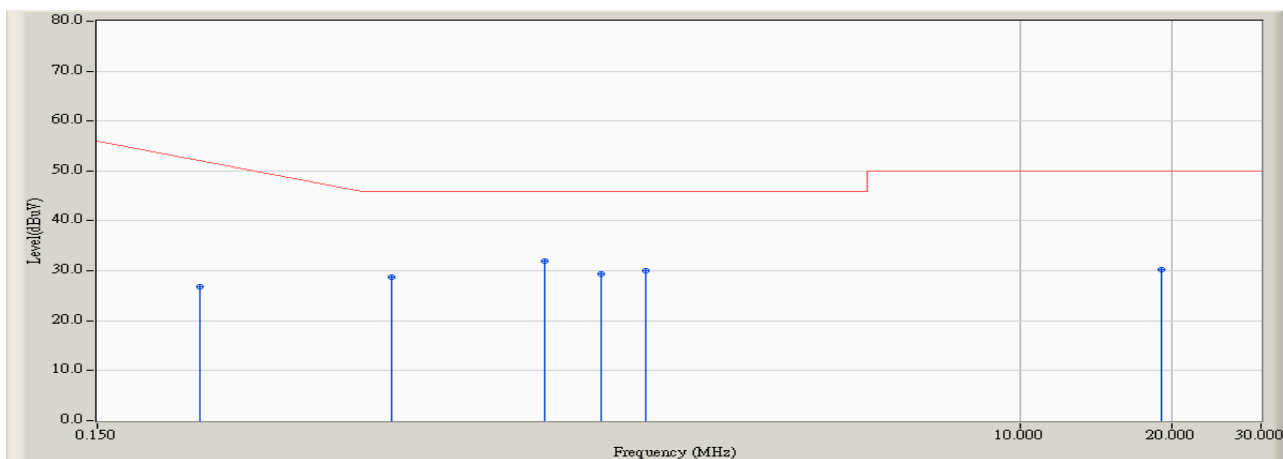


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.240	0.203	32.080	32.283	-31.146	63.429	QUASIPeAK
2		0.572	0.217	32.080	32.297	-23.703	56.000	QUASIPeAK
3		1.146	0.245	34.770	35.015	-20.985	56.000	QUASIPeAK
4		1.486	0.260	33.970	34.230	-21.770	56.000	QUASIPeAK
5	*	1.822	0.264	35.540	35.804	-20.196	56.000	QUASIPeAK
6		19.048	0.774	35.260	36.034	-23.966	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-1	Time : 2007/05/25 - 01:22
Limit : CISPR_B_00M_AV	Margin : 0
EUT : Cable modem	Probe : LISN-020(N) - Line2
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz

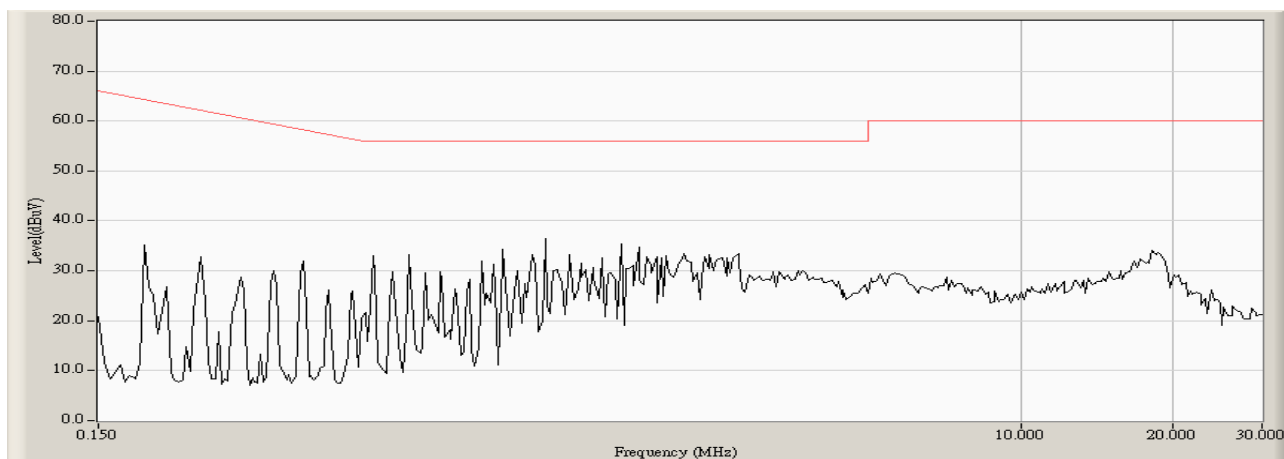


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.240	0.203	26.630	26.833	-26.596	53.429	AVERAGE
2		0.572	0.217	28.540	28.757	-17.243	46.000	AVERAGE
3	*	1.146	0.245	31.760	32.005	-13.995	46.000	AVERAGE
4		1.486	0.260	29.230	29.490	-16.510	46.000	AVERAGE
5		1.822	0.264	29.790	30.054	-15.946	46.000	AVERAGE
6		19.048	0.774	29.510	30.284	-19.716	50.000	AVERAGE

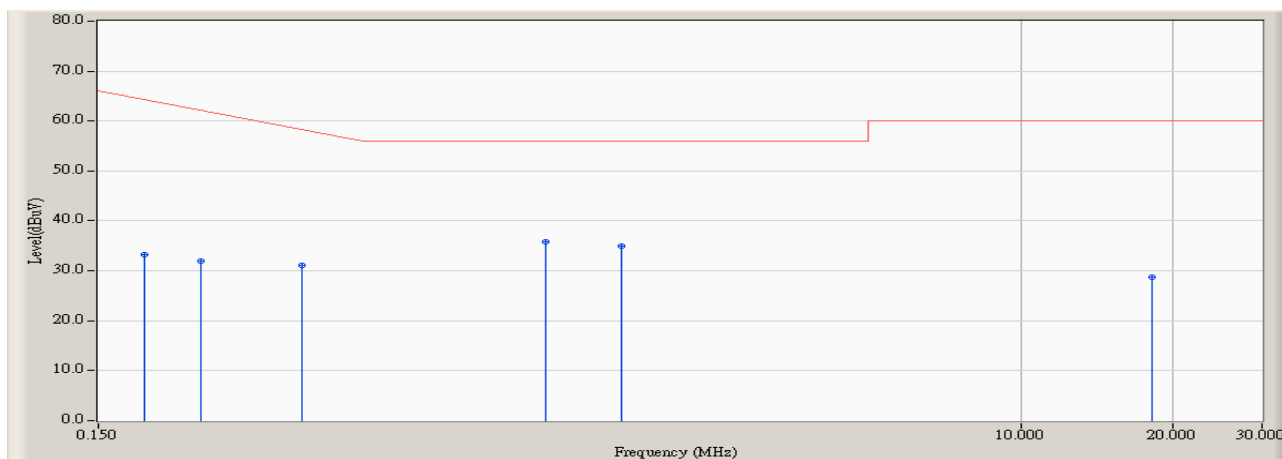
Note:

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-1	Time : 2007/05/25 - 01:17
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(L) - Line1
Power : AC 120V/60Hz	Note : Mode 2



Site : SR-1	Time : 2007/05/25 - 01:18
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(L) - Line1
Power : AC 120V/60Hz	Note : Mode 2

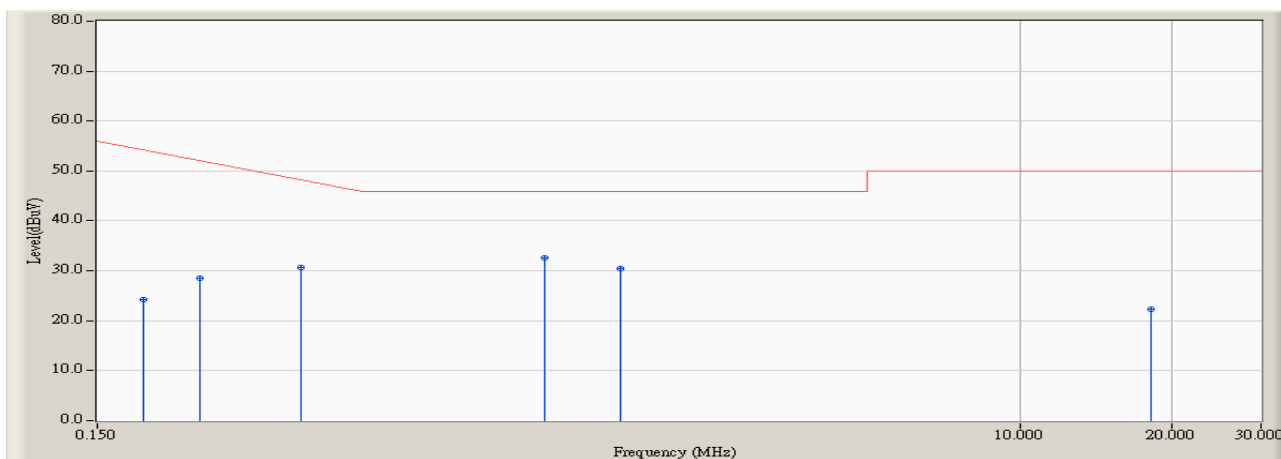


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	0.202	33.110	33.312	-31.688	65.000	QUASIPeAK
2		0.240	0.203	31.840	32.043	-31.386	63.429	QUASIPeAK
3		0.380	0.215	30.800	31.015	-28.414	59.429	QUASIPeAK
4	*	1.146	0.245	35.580	35.825	-20.175	56.000	QUASIPeAK
5		1.619	0.261	34.710	34.971	-21.029	56.000	QUASIPeAK
6		18.181	0.942	27.850	28.792	-31.208	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-1	Time : 2007/05/25 - 01:18
Limit : CISPR_B_00M_AV	Margin : 0
EUT : Cable modem	Probe : LISN-020(L) - Line1
Power : AC 120V/60Hz	Note : Mode 2

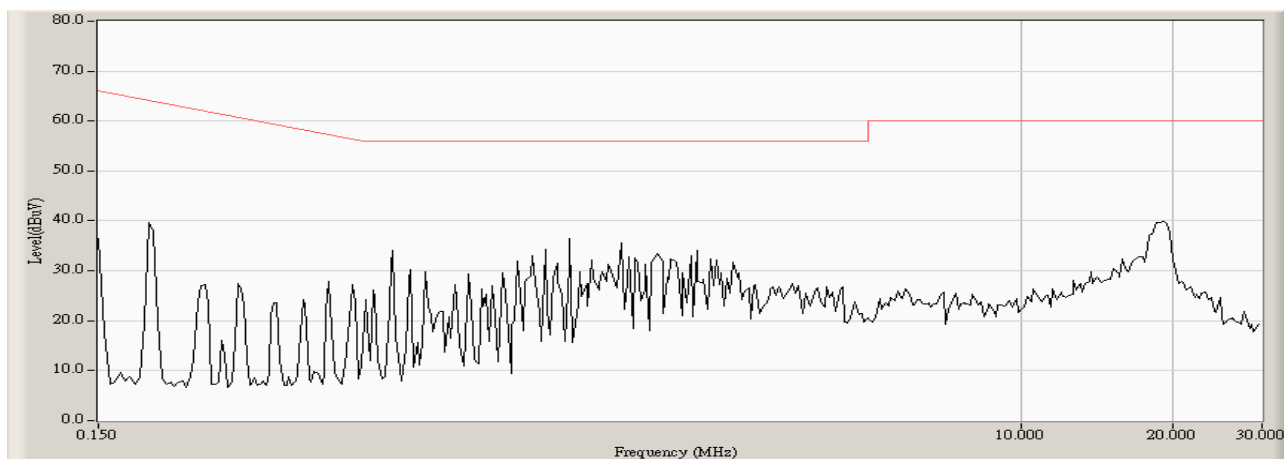


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	0.202	23.930	24.132	-30.868	55.000	AVERAGE
2		0.240	0.203	28.230	28.433	-24.996	53.429	AVERAGE
3		0.380	0.215	30.380	30.595	-18.834	49.429	AVERAGE
4	*	1.146	0.245	32.400	32.645	-13.355	46.000	AVERAGE
5		1.619	0.261	30.180	30.441	-15.559	46.000	AVERAGE
6		18.181	0.942	21.460	22.402	-27.598	50.000	AVERAGE

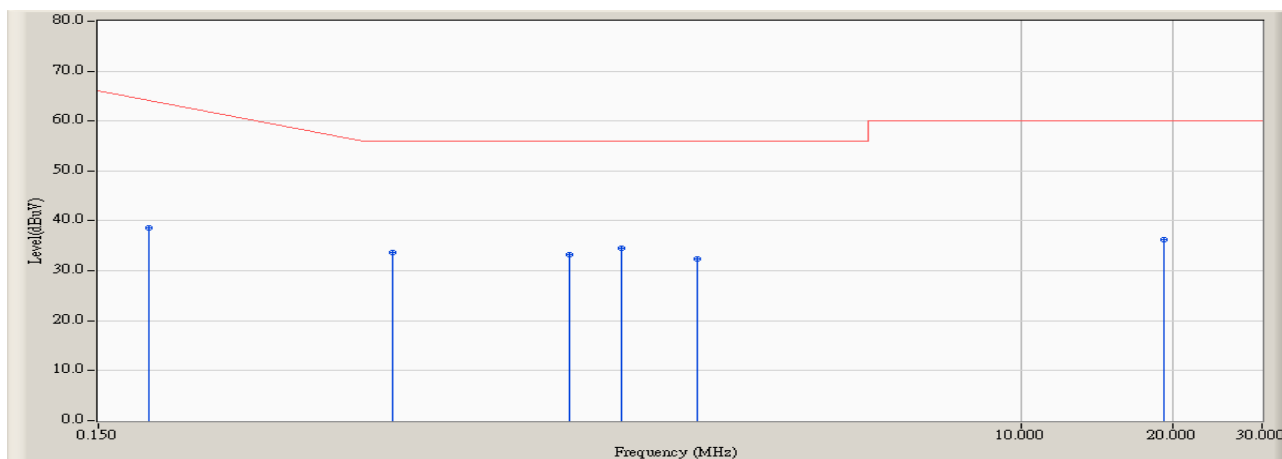
Note:

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-1	Time : 2007/05/25 - 01:18
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(N) - Line2
Power : AC 120V/60Hz	Note : Mode 2



Site : SR-1	Time : 2007/05/25 - 01:19
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Cable modem	Probe : LISN-020(N) - Line2
Power : AC 120V/60Hz	Note : Mode 2

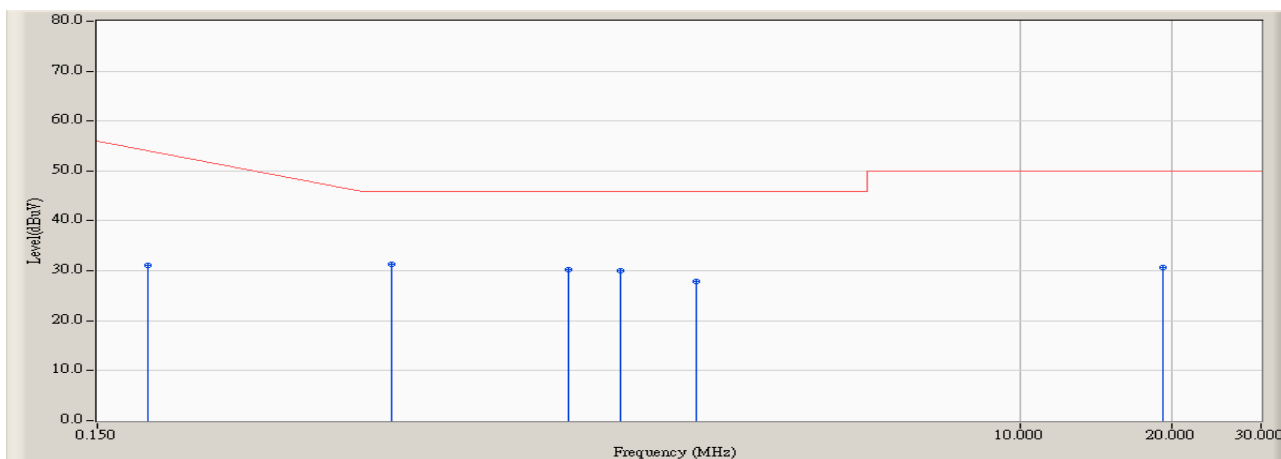


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.189	0.202	38.370	38.572	-26.314	64.886	QUASIPeAK
2		0.572	0.217	33.390	33.607	-22.393	56.000	QUASIPeAK
3		1.283	0.247	33.060	33.307	-22.693	56.000	QUASIPeAK
4	*	1.619	0.261	34.370	34.631	-21.369	56.000	QUASIPeAK
5		2.295	0.290	32.200	32.490	-23.510	56.000	QUASIPeAK
6		19.146	0.775	35.450	36.225	-23.775	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-1	Time : 2007/05/25 - 01:19
Limit : CISPR_B_00M_AV	Margin : 0
EUT : Cable modem	Probe : LISN-020(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		0.189	0.202	30.810	31.012	-23.874	54.886	AVERAGE
2	*	0.572	0.217	31.070	31.287	-14.713	46.000	AVERAGE
3		1.283	0.247	30.090	30.337	-15.663	46.000	AVERAGE
4		1.619	0.261	29.750	30.011	-15.989	46.000	AVERAGE
5		2.295	0.290	27.690	27.980	-18.020	46.000	AVERAGE
6		19.146	0.775	29.940	30.715	-19.285	50.000	AVERAGE

Note:

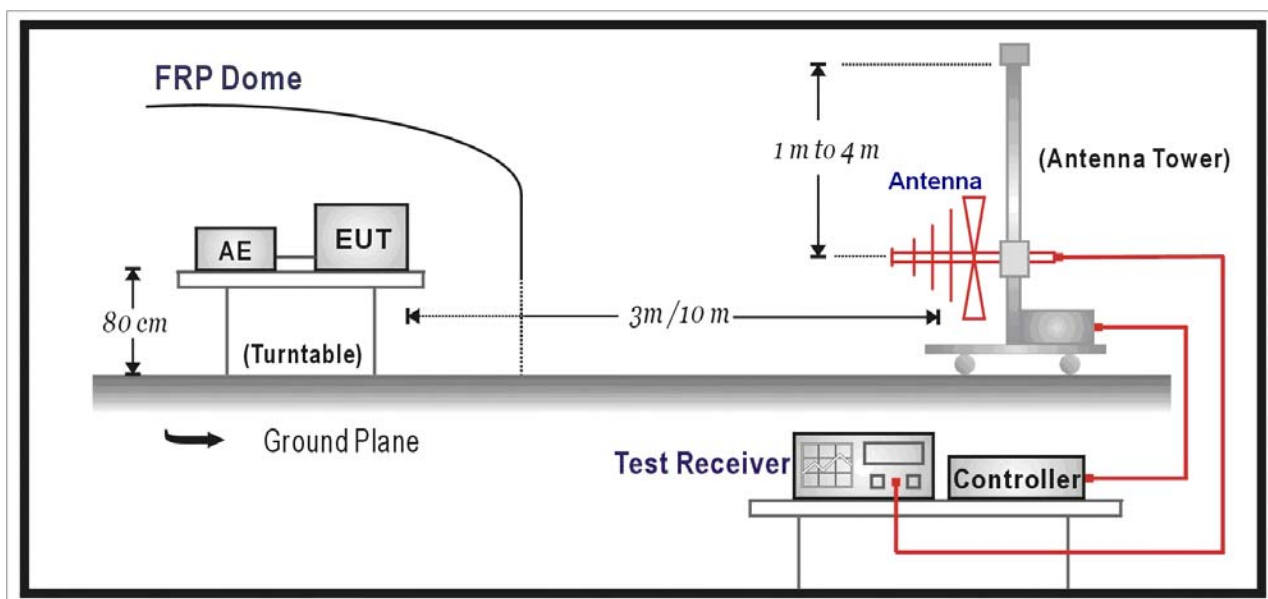
1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

4. Radiated Emission

4.1. Test Specification

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

4.2. Test Setup



4.3. Limit

Under 1GHz test shall not exceed the following value:

CISPR 22 Limits (dBuV/m)		
Frequency (MHz)	Distance (m)	dBuV/m
30 – 230	10	30
230 – 1000	10	37

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)

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
Remarks: (1)RF Voltage (dBuV) = 20 log RF Voltage (uV) (2)In the Above Table, the tighter limit applies at the band edges. (3)Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.		

4.4. 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 antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

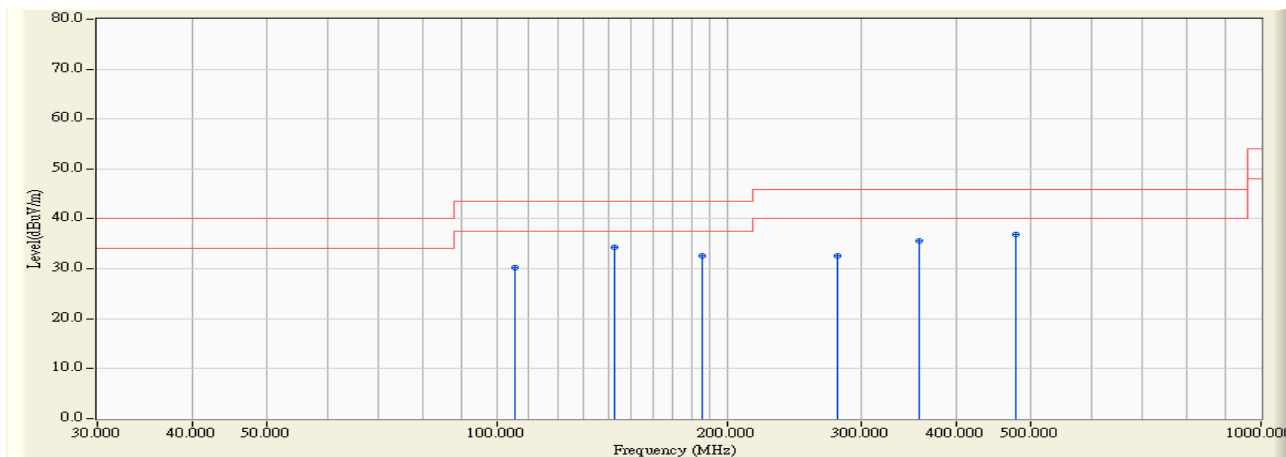
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

The EUT was positioned such that the distance from antenna to the EUT was 10 meters for the frequency under 1GHz and 3 meters for the frequency 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.

4.5. Test Result

Site : OATS-3	Time : 2007/05/25 - 14:01
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz

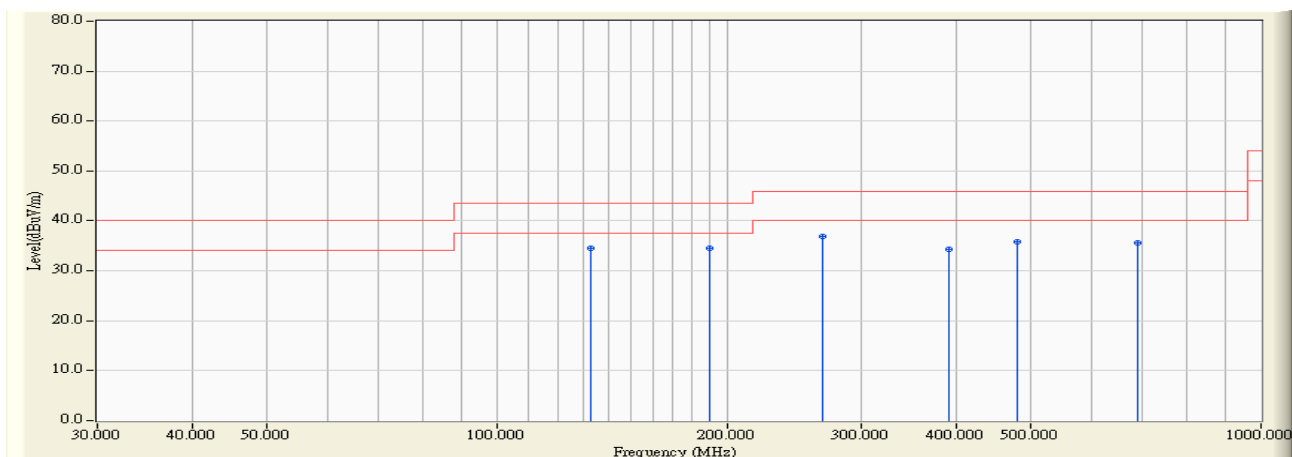


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		105.365	12.657	17.643	30.300	-13.200	43.500	QUASIPeAK
2	*	142.365	12.067	22.298	34.365	-9.135	43.500	QUASIPeAK
3		185.540	9.284	23.367	32.650	-10.850	43.500	QUASIPeAK
4		278.550	13.398	19.267	32.665	-13.335	46.000	QUASIPeAK
5		356.540	15.218	20.423	35.640	-10.360	46.000	QUASIPeAK
6		478.471	18.930	17.929	36.859	-9.141	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 : 2007/05/25 - 14:02
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz

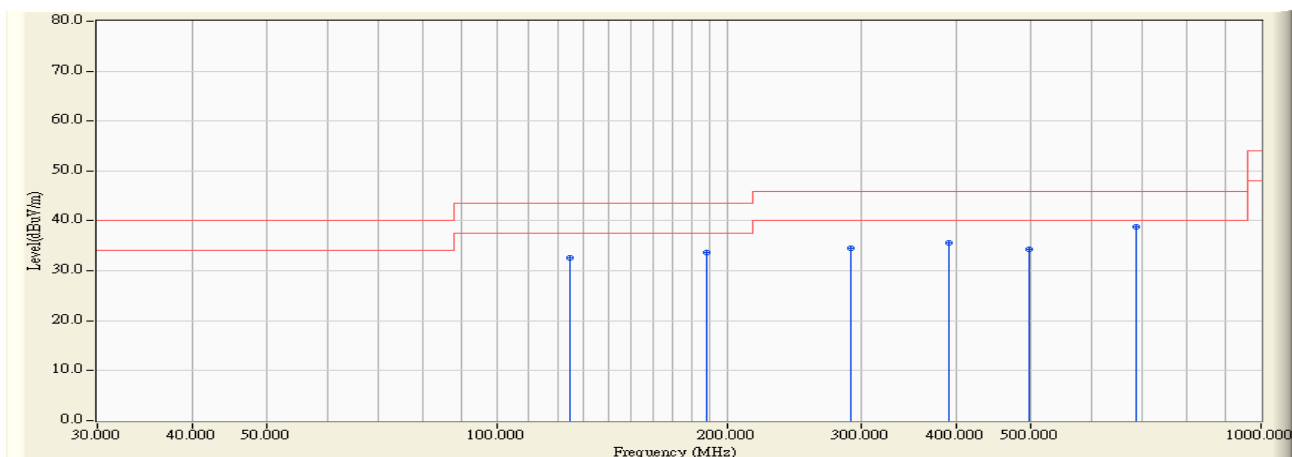


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	132.520	11.796	22.758	34.554	-8.946	43.500	QUASIPeAK
2		189.524	9.521	24.978	34.500	-9.000	43.500	QUASIPeAK
3		266.998	14.252	22.607	36.859	-9.141	46.000	QUASIPeAK
4		389.778	17.280	17.135	34.415	-11.585	46.000	QUASIPeAK
5		478.960	18.653	17.199	35.852	-10.148	46.000	QUASIPeAK
6		689.460	20.441	15.189	35.630	-10.370	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 : 2007/05/25 - 14:02
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 373.25MHz

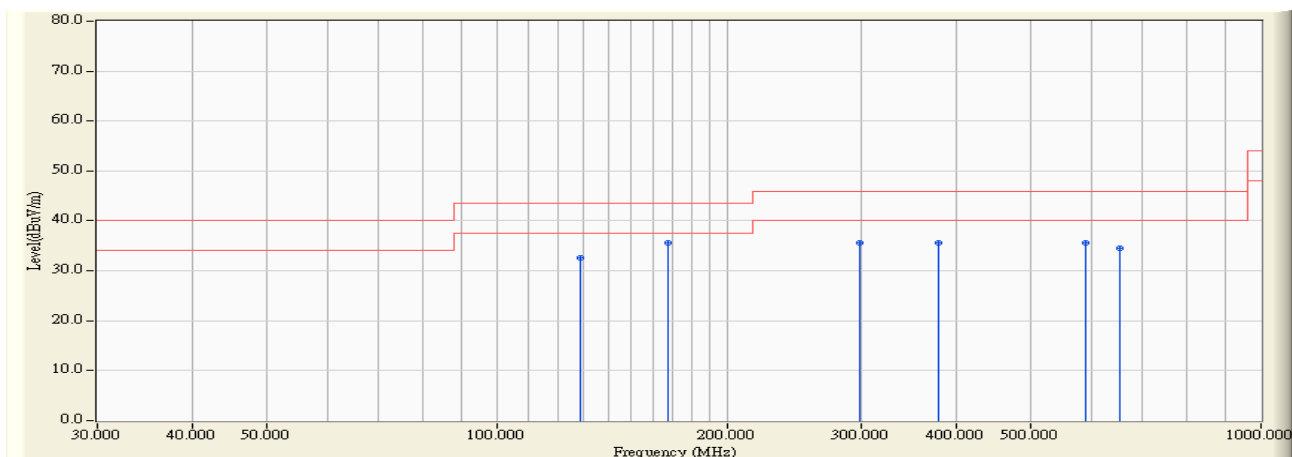


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		124.415	12.883	19.642	32.526	-10.974	43.500	QUASIPeAK
2		188.415	9.292	24.371	33.663	-9.837	43.500	QUASIPeAK
3		289.960	13.811	20.713	34.524	-11.476	46.000	QUASIPeAK
4		389.850	15.942	19.583	35.526	-10.474	46.000	QUASIPeAK
5		496.800	18.399	16.016	34.415	-11.585	46.000	QUASIPeAK
6	*	685.644	21.000	17.850	38.850	-7.150	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 : 2007/05/25 - 14:03
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 373.25MHz

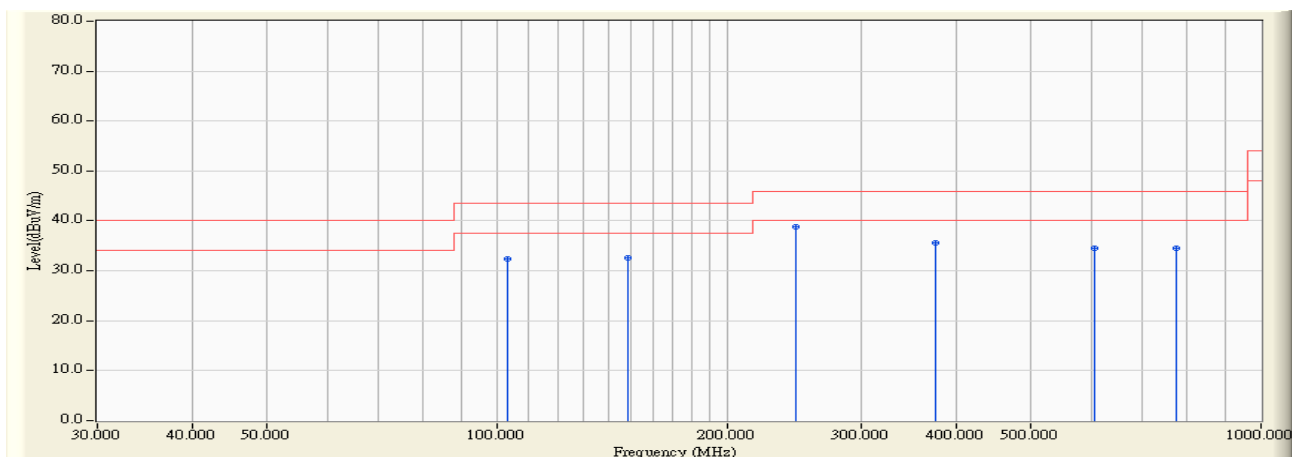


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		128.740	11.739	20.825	32.565	-10.935	43.500	QUASIPeAK
2	*	167.415	9.694	25.941	35.635	-7.865	43.500	QUASIPeAK
3		298.540	13.743	21.808	35.552	-10.448	46.000	QUASIPeAK
4		378.450	16.654	18.870	35.524	-10.476	46.000	QUASIPeAK
5		588.968	21.850	13.785	35.635	-10.365	46.000	QUASIPeAK
6		652.540	20.110	14.414	34.524	-11.476	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 : 2007/05/25 - 14:04
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 801.25MHz

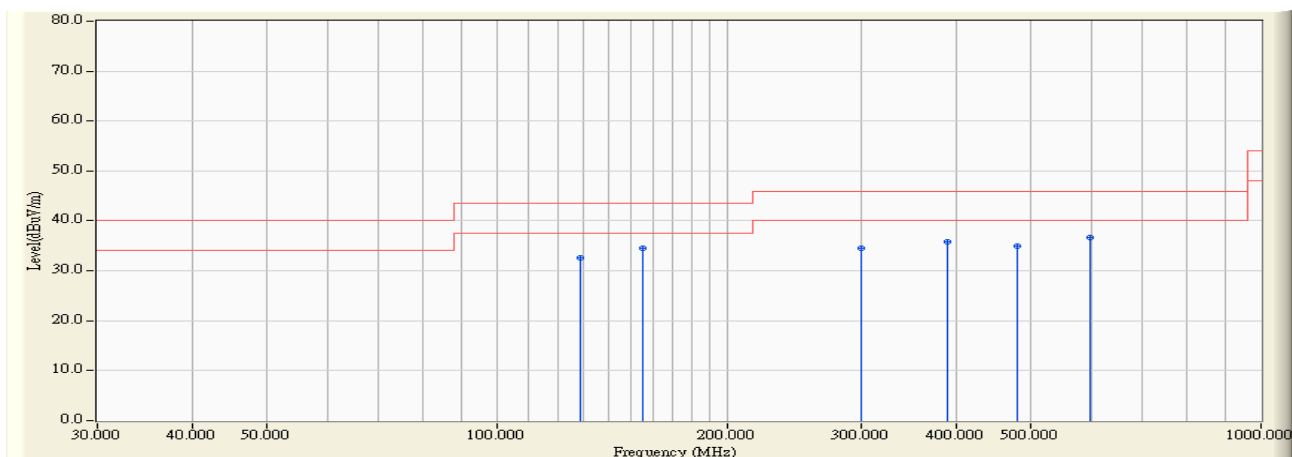


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		103.410	12.916	19.499	32.415	-11.085	43.500	QUASIPeAK
2		148.740	11.612	20.914	32.526	-10.974	43.500	QUASIPeAK
3	*	246.524	12.749	26.108	38.857	-7.143	46.000	QUASIPeAK
4		374.450	16.016	19.536	35.552	-10.448	46.000	QUASIPeAK
5		605.650	20.216	14.331	34.547	-11.453	46.000	QUASIPeAK
6		774.415	21.450	13.115	34.565	-11.435	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 : 2007/05/25 - 14:05
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 801.25MHz

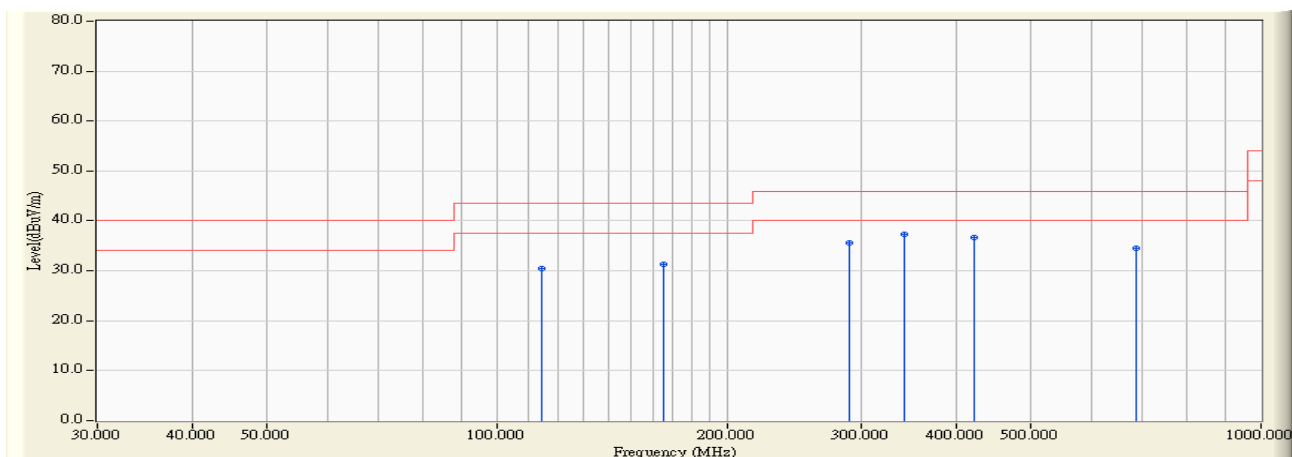


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		128.520	11.715	20.936	32.650	-10.850	43.500	QUASIPeAK
2	*	155.415	10.167	24.357	34.524	-8.976	43.500	QUASIPeAK
3		299.856	13.733	20.833	34.565	-11.435	46.000	QUASIPeAK
4		389.568	17.275	18.577	35.852	-10.148	46.000	QUASIPeAK
5		478.748	18.647	16.207	34.854	-11.146	46.000	QUASIPeAK
6		598.500	21.729	14.929	36.658	-9.342	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 : 2007/05/25 - 14:06
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 2

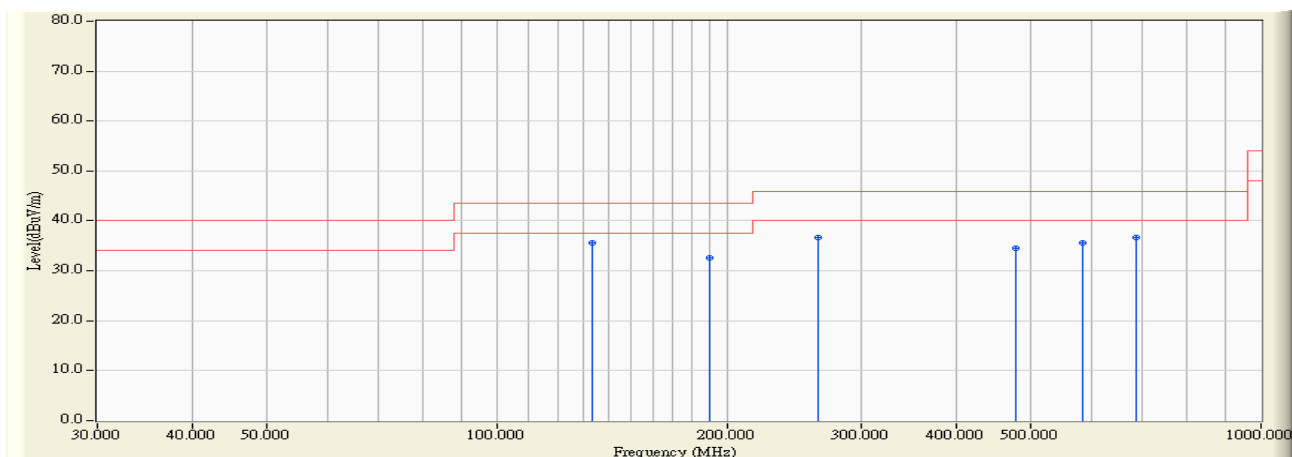


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		114.415	12.924	17.490	30.415	-13.085	43.500	QUASIPeAK
2		165.540	10.312	21.053	31.365	-12.135	43.500	QUASIPeAK
3		289.550	13.683	21.980	35.663	-10.337	46.000	QUASIPeAK
4	*	341.410	14.694	22.724	37.418	-8.582	46.000	QUASIPeAK
5		421.565	17.745	18.892	36.637	-9.363	46.000	QUASIPeAK
6		685.460	20.999	13.559	34.558	-11.442	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 : 2007/05/25 - 14:06
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Cable modem	Probe : LKCBL6112(2704)-Site3-3M - VERTICAL
Power : AC 120V/60Hz	Note : Mode 2

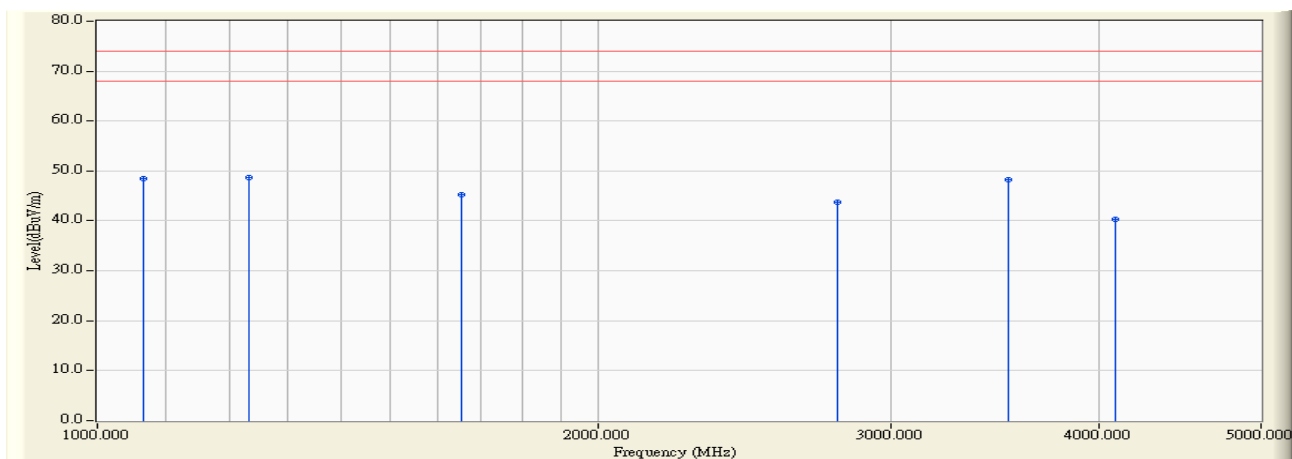


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	133.415	11.747	23.778	35.525	-7.975	43.500	QUASIPeak
2		189.660	9.528	23.124	32.652	-10.848	43.500	QUASIPeak
3		263.690	14.570	22.096	36.666	-9.334	46.000	QUASIPeak
4		478.470	18.639	15.901	34.540	-11.460	46.000	QUASIPeak
5		585.254	21.691	13.879	35.569	-10.431	46.000	QUASIPeak
6		685.362	20.299	16.364	36.663	-9.337	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 : 2007/05/25 - 13:46
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : Cable modem	Probe : HORN9120D+9170D(1~40G) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 373.25MHz

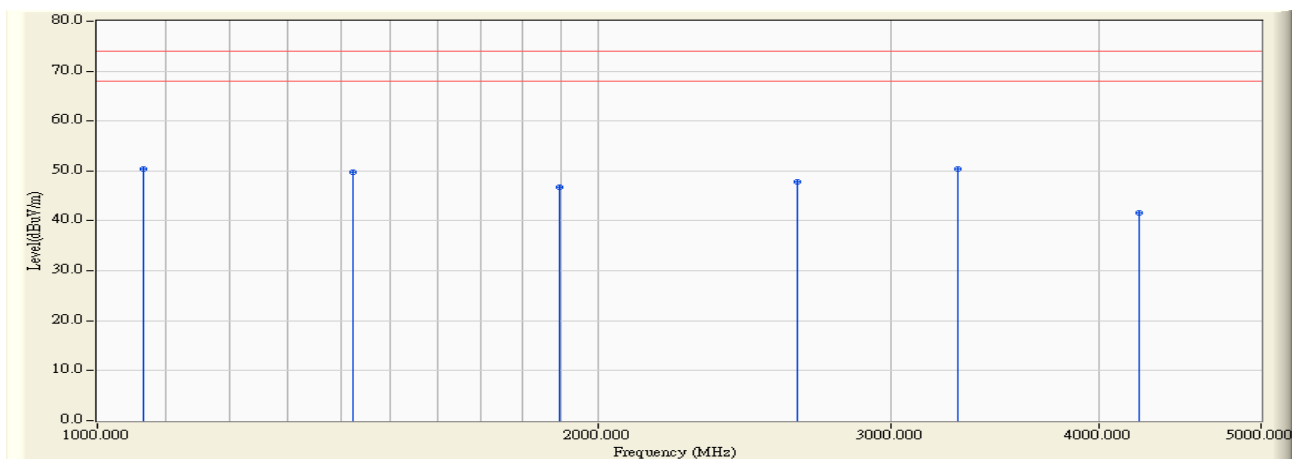


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1065.000	-6.686	55.244	48.558	-25.442	74.000	PEAK
2	*	1233.000	-6.295	55.078	48.784	-25.216	74.000	PEAK
3		1653.000	-5.495	50.845	45.350	-28.650	74.000	PEAK
4		2785.000	-1.327	44.977	43.650	-30.350	74.000	PEAK
5		3524.000	-0.165	48.414	48.250	-25.750	74.000	PEAK
6		4089.000	1.594	38.762	40.355	-33.645	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 : 2007/05/25 - 13:47
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : Cable modem	Probe : HORN9120D+9170D(1~40G) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 373.25MHz

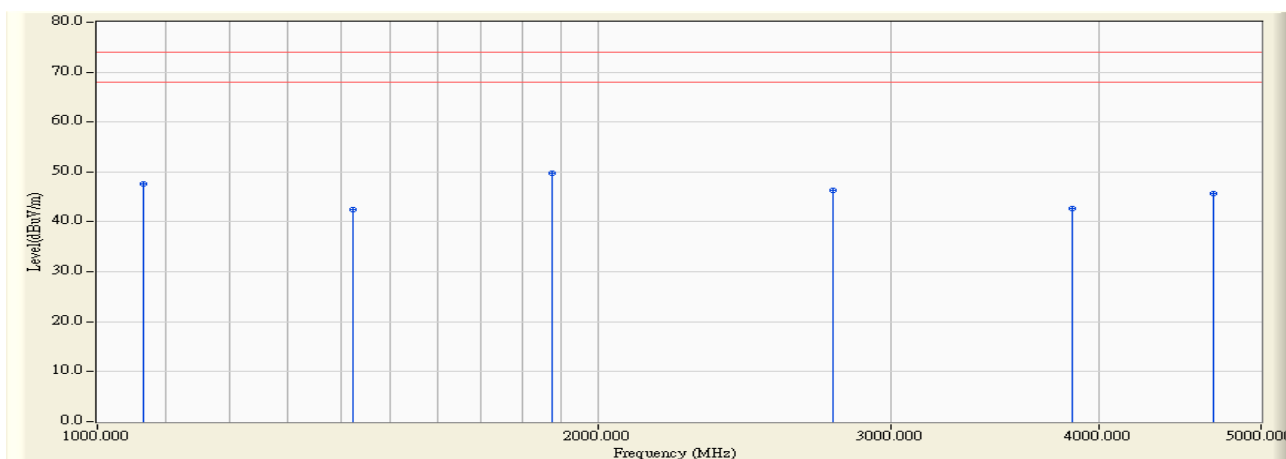


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1065.000	-6.686	57.051	50.365	-23.635	74.000	PEAK
2		1425.000	-5.463	55.119	49.657	-24.343	74.000	PEAK
3		1895.000	-4.686	51.536	46.850	-27.150	74.000	PEAK
4		2633.000	-1.656	49.513	47.857	-26.143	74.000	PEAK
5		3285.000	-0.498	50.853	50.355	-23.645	74.000	PEAK
6		4223.000	2.051	39.499	41.550	-32.450	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 : 2007/05/25 - 13:48
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : Cable modem	Probe : HORN9120D+9170D(1~40G) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 801.25MHz

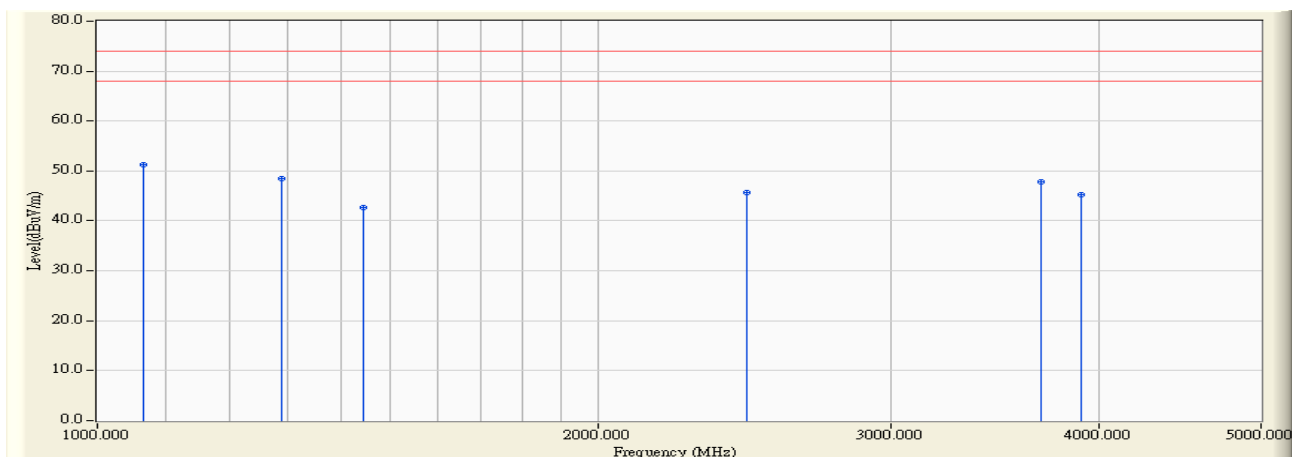


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1065.000	-6.686	54.336	47.650	-26.350	74.000	PEAK
2		1423.000	-5.461	47.821	42.360	-31.640	74.000	PEAK
3	*	1874.000	-4.812	54.496	49.683	-24.317	74.000	PEAK
4		2766.000	-1.377	47.727	46.350	-27.650	74.000	PEAK
5		3854.000	0.784	41.861	42.645	-31.355	74.000	PEAK
6		4685.000	3.250	42.415	45.665	-28.335	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 : 2007/05/25 - 13:49
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : Cable modem	Probe : HORN9120D+9170D(1~40G) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 801.25MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1065.000	-6.686	57.909	51.223	-22.777	74.000	PEAK
2		1289.000	-6.030	54.555	48.526	-25.474	74.000	PEAK
3		1445.000	-5.499	48.155	42.656	-31.344	74.000	PEAK
4		2456.000	-2.060	47.685	45.625	-28.375	74.000	PEAK
5		3689.000	0.327	47.414	47.741	-26.259	74.000	PEAK
6		3896.000	0.933	44.367	45.300	-28.700	74.000	PEAK

Note:

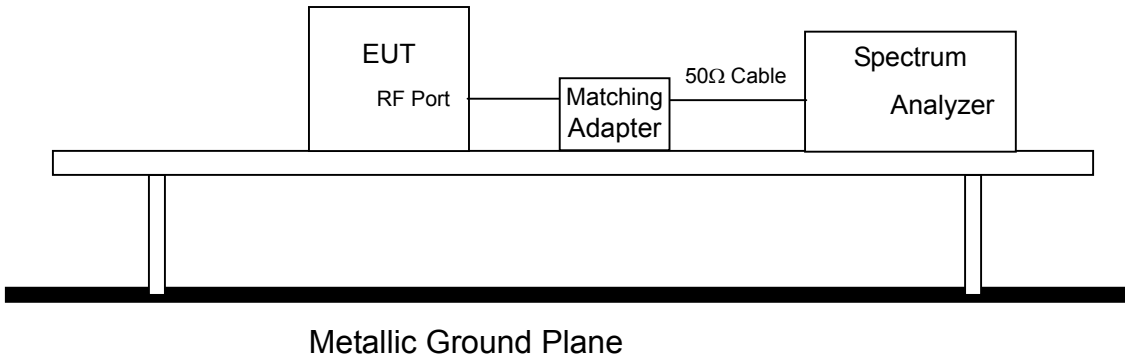
1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

5. Antenna Power Conduction

5.1. Test Specification

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

5.2. Test Setup



5.3. Limit

Limits		
Frequency (MHz)	nW	dBuV
30MHz to 960MHz	2.0	50

5.4. Test Procedure

The EUT and its simulators are placed on a table which is 0.8 meter above ground. Using an impedance-matching device, if necessary, connect a length of coaxial cable between the antenna input port of the switch and the measuring instrument.

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 limits shown are based on measuring equipment employing a CISPR quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 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.

5.5. Deviation from Test Standard

No deviation.

5.6. Test Result

Site : SR-1	Time : 2007/05/25 - 01:30
Limit : FCC30-1G_QP_00M_QP	Margin : 0
EUT : Cable modem	Probe : - Line1
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 55.25MHz

Other

		Frequency (MHz)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		42.750	13.872	-37.128	51.000	QUASIPeAK
2		86.000	14.383	-36.617	51.000	QUASIPeAK
3		173.625	15.006	-35.994	51.000	QUASIPeAK
4		248.062	15.717	-35.283	51.000	QUASIPeAK
5	*	498.437	16.897	-34.103	51.000	QUASIPeAK
6		709.562	15.810	-35.190	51.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Site : SR-1	Time : 2007/05/25 - 01:31
Limit : FCC30-1G_QP_00M_QP	Margin : 0
EUT : Cable modem	Probe : - Line1
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 373.25MHz

Other

		Frequency (MHz)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		60.625	14.624	-36.376	51.000	QUASIPeAK
2		86.625	14.675	-36.325	51.000	QUASIPeAK
3		97.937	14.713	-36.287	51.000	QUASIPeAK
4		196.312	15.538	-35.462	51.000	QUASIPeAK
5		403.375	16.383	-34.617	51.000	QUASIPeAK
6	*	628.062	24.414	-26.586	51.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Site : SR-1	Time : 2007/05/25 - 01:31
Limit : FCC30-1G_QP_00M_QP	Margin : 0
EUT : Cable modem	Probe : - Line1
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 801.25MHz

Other

		Frequency (MHz)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		37.750	13.849	-37.151	51.000	QUASIPeAK
2		53.875	16.123	-34.877	51.000	QUASIPeAK
3		108.812	14.950	-36.050	51.000	QUASIPeAK
4		218.187	14.897	-36.103	51.000	QUASIPeAK
5		232.187	15.385	-35.615	51.000	QUASIPeAK
6	*	469.000	16.716	-34.284	51.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Site : OATS-3	Time : 2007/05/25 - 13:54
Limit : FCC_15.111_1-5GHZ_00M_PK	Margin : 6
EUT : Cable modem	Probe : - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 373.25MHz

Other

		Frequency (MHz)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		1241.000	30.365	-20.635	51.000	PEAK
2		1424.000	32.650	-18.350	51.000	PEAK
3		1856.000	38.400	-12.600	51.000	PEAK
4	*	2654.000	42.364	-8.636	51.000	PEAK
5		3054.000	35.254	-15.746	51.000	PEAK
6		4247.000	32.560	-18.440	51.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.

Site : OATS-3	Time : 2007/05/25 - 13:54
Limit : FCC_15.111_1-5GHZ_00M_PK	Margin : 6
EUT : Cable modem	Probe : - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1 , NTSC 801.25MHz

Other

		Frequency (MHz)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		1352.000	34.412	-16.588	51.000	PEAK
2		1685.000	36.565	-14.435	51.000	PEAK
3	*	2154.000	40.650	-10.350	51.000	PEAK
4		2588.000	36.365	-14.635	51.000	PEAK
5		3854.000	37.500	-13.500	51.000	PEAK
6		4226.000	32.366	-18.634	51.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.