



# FCC Part15B Test Report

Product Name : CDMA 1X Mobile Phone  
Model No. : HUAWEI M636  
FCC ID : QISM636

Applicant : HUAWEI TECHNOLOGIES CO., LTD.

Address : Bantian, Longgang District, Shenzhen, 518129 Guangdong,  
P. R. China

Date of Receipt : 22/03/2012  
Test Date : 23/03/2012~ 28/03/2012  
Issued Date : 06/04/2012  
Report No. : 123S066R-HP-US-P01V01  
Report Version : V1.1

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, CNAS or any agency of the Government.

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# Test Report Certification

Issued Date: 06/04/2012  
 Report No. : 123S066R-HP-US-P01V01



Product Name : CDMA 1X Mobile Phone  
 Applicant : HUAWEI TECHNOLOGIES CO., LTD.  
 Address : Bantian, Longgang District, Shenzhen, 518129  
 Guangdong, P. R. China  
 Manufacturer : HUAWEI TECHNOLOGIES CO., LTD.  
 Address : Bantian, Longgang District, Shenzhen, 518129  
 Guangdong, P. R. China  
 Model No. : HUAWEI M636  
 FCC ID : QISM636  
 EUT Voltage : DC 3.7V  
 Brand Name : HUAWEI  
 Applicable Standard : FCC Part 15 Subpart B: 2010  
 ANSI C63.4: 2009  
 Test Result : Complied  
 Performed Location : Suzhou EMC 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  
 FCC Registration Number: 800392

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 (Engineering Manager: Marlin Chen)

## Laboratory Information

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

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

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

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### **LinKou Testing Laboratory :**

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### **Suzhou 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](mailto:service@quietek.com)

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## 1. General Information

### 1.1. EUT Description

Product Name	CDMA 1X Mobile Phone
Model No.	HUAWEI M636
Hardware Version	VER.B
Software Version	M636C45B109
Device Category	Portable
<b>CDMA</b>	
Support Band	CDMA2000 1X BC0/BC1/BC15
Uplink	BC0: 824~849MHz BC1: 1850~1910MHz BC15: 1710~1755MHz
Downlink	BC0: 869~894MHz BC1: 1930~1990MHz BC15: 2110~2155MHz
Antenna Type	Internal
Type of Modulation	QPSK
Peak Antenna Gain	BC0: 2.3dBi BC1: 3.7dBi BC15: 3.2dBi
<b>GPS</b>	
Operate Frequency	1575.42MHz
Type of modulation	BPSK
Antenna Gain	-3.5 dBi
<b>Bluetooth</b>	
Bluetooth Frequency	2402~2480MHz
Bluetooth Version	V2.0
Type of modulation	FHSS
Data Rate	1Mbps(GFSK)
Antenna Gain	-5.18dBi
<b>Components</b>	
Battery #1	Manufacturer: Harbin Coslight Power Co., Ltd. M/N: HB4A1H Rated Voltage and Capacitance: 3.7V/900mAh
Battery #2	Manufacturer: BYD

	M/N: HB4A1H Rated Voltage and Capacitance: 3.7V/900mAh
Adapter #1	Manufacturer: HKA M/N: HS-050040U5 Input: 100-240V~50/60Hz 0.2A Output: 5Vdc, 400mA
Adapter #2	Manufacturer: BYD M/N: HS-050040U5 Input: 100-240V~50/60Hz 0.2A Output: 5Vdc, 400mA

**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:

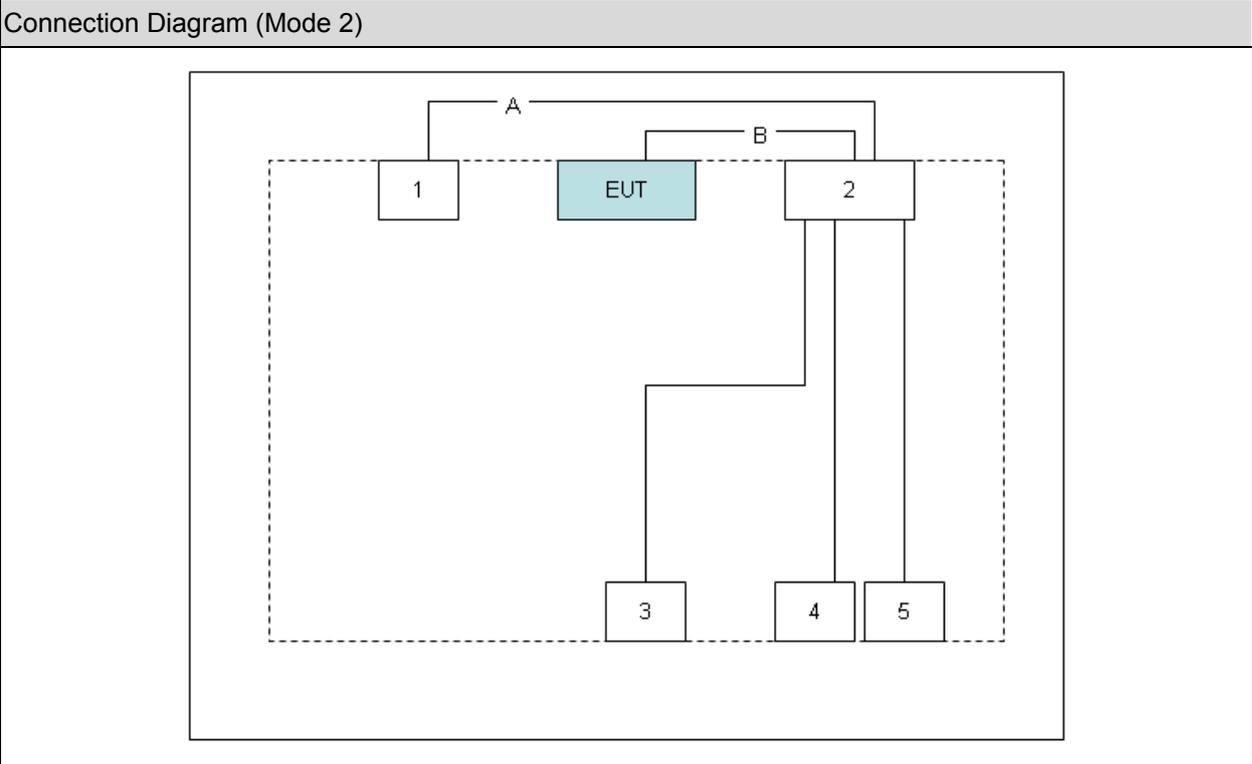
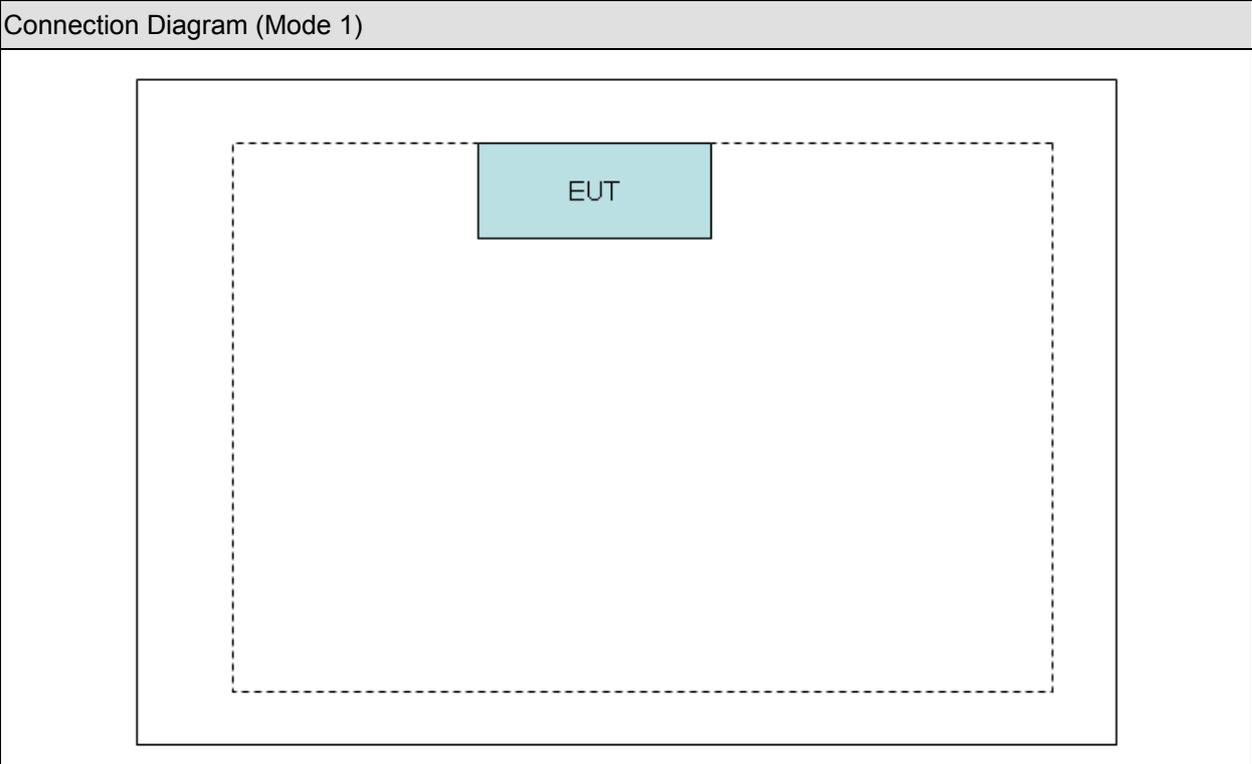
Pre Test Mode
Mode 1: Charging + Camera On
Mode 2: USB Copy
Mode 3: GPS Receive

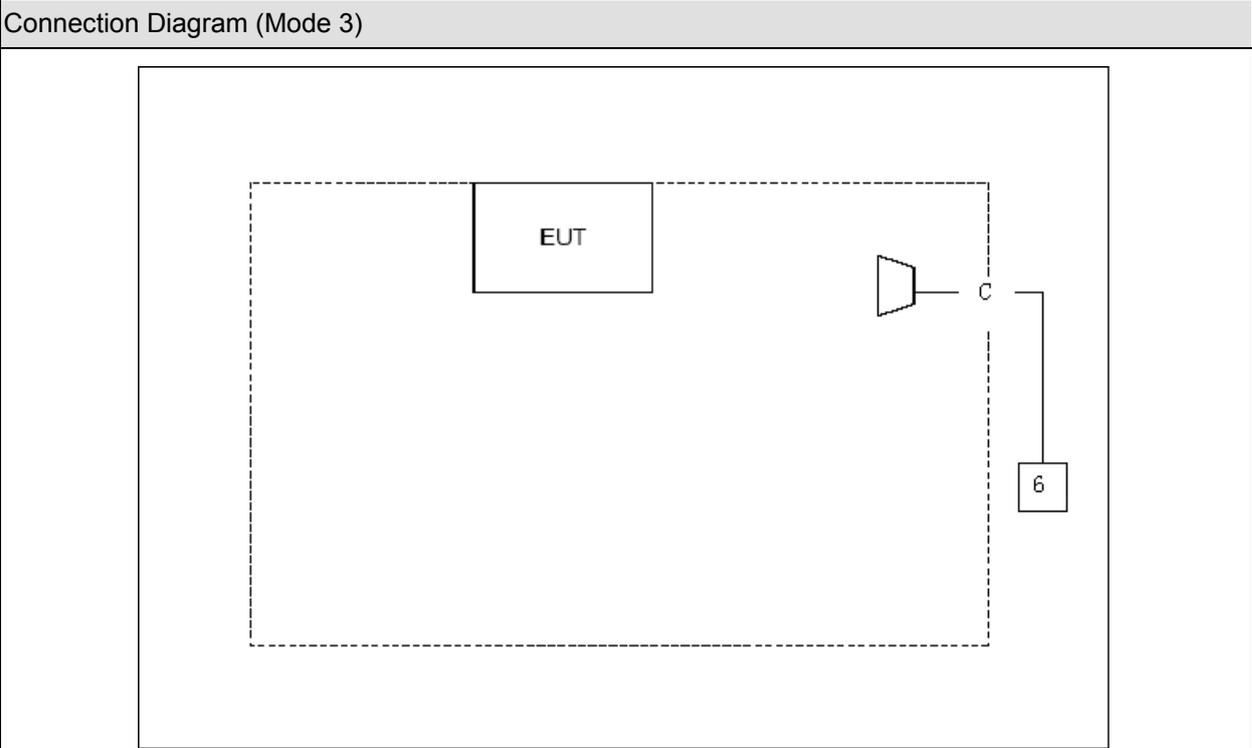
### 1.3. Tested System Details

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 LCD Monitor	Lenovo	L2361PWA	3M03896A0520853	Non-Shielded, 1.8m
2 PC	DELL	DCMF	11DMF2X	Non-Shielded, 1.8m
3 iPod	Apple	A1199	7J71085BVQ5	Power by PC
4 Microphone& Earphone	SOMIC	V85	N/A	Power by PC
5 USB Mouse	DELL	MOC5UO	10D00JL	Power by PC
6 Signal Generator	Agilent	E4438C	MY49070163	N/A

1.4. Configuration of Tested System





Signal Cable Type		Signal cable Description
A	VGA Cable	Shielded, 1.5m
B	USB Cable	Shielded, 1.2m
C	Coaxial Cable	Shielded, >5m

**1.5. EUT Exercise Software**

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	(1) Make the EUT work under the "Charging+Camera on" Mode. (2) Open the software "WINTHRAX", and then transmit data with notebook. (3) Making EUT receive signals from SG continuously.
4	Start Test.

**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 Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart B: 2010 Class B ANSI C63.4: 2009	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart B: 2010 Class B ANSI C63.4: 2009	Yes	No

## 2.2. List of Test Equipment

### Conducted Emission / TR-1

Instrument	Manufacturer	Type No.	Serial No	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100906	2013/01/13
Two-Line V-Network	R&S	ENV216	100043	2012/04/29
Two-Line V-Network	R&S	ENV216	100044	2012/09/07
Impedance Stabilization Network	Teseq GmbH	ISN T800	30306	2013/02/24
Impedance Stabilization Network	Teseq GmbH	ISN T8-Cat6	29680	2013/02/24
Impedance Stabilization Network	Teseq GmbH	ISN ST08	31281	2013/02/24
Current Probe	R&S	EZ-17	100255	2012/04/18
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2013/03/02
50ohm Termination	SHX	TF2	07081401	2012/09/22
50ohm Termination	SHX	TF2	07081402	2012/09/22
50ohm Termination	SHX	TF2	07081403	2012/09/22
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2013/01/10

### Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2012/04/23
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2012/10/18
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2013/03/02
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC2-TH	2013/01/10

### Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2012/04/23
Preamplifier	Quietek	AP-180C	CHM-0602013	2012/05/05
Preamplifier	Quietek	AP-040G	CHM-0906001	2012/05/05
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2012/10/18
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2012/06/11
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2013/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2013/03/03
Lowpass Filter	Wainwright	WLKS4500-9SS	SN2	2013/03/03

**2.3. Measurement Uncertainty**

Conducted Emission
The maximum measurement uncertainty is evaluated as $\pm 2.26\text{dB}$ .
Radiated Emission
The maximum measurement uncertainty is evaluated as $\pm 3.19\text{dB}$ .

**2.4. Test Environment**

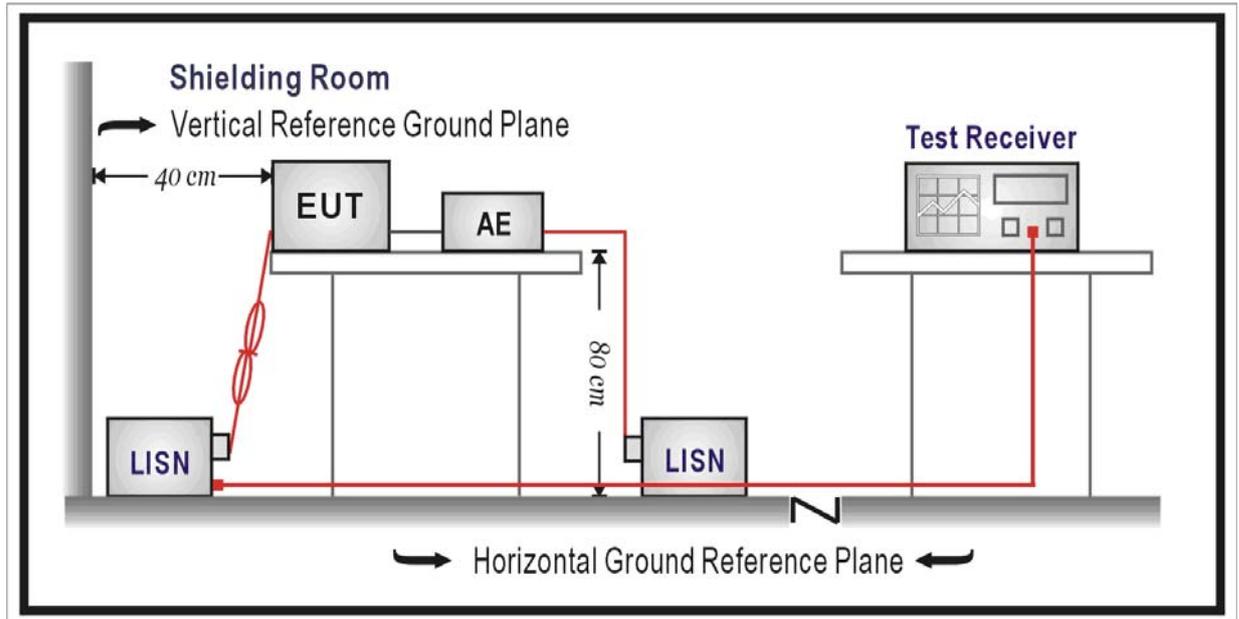
Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Radiated Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000

### 3. Conducted Emission

#### 3.1. Test Specification

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

#### 3.2. Test Setup



#### 3.3. Limit

Limits for Conducted Emission of Class B ITE		
Frequency range MHz	Limits dB(μV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

NOTE: Decreases with the logarithm of the frequency.

#### 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 50Ω / 50μH coupling impedance for the

measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a  $50\Omega / 50\mu\text{H}$  coupling impedance with  $50\Omega$  termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed on conducted measurement.

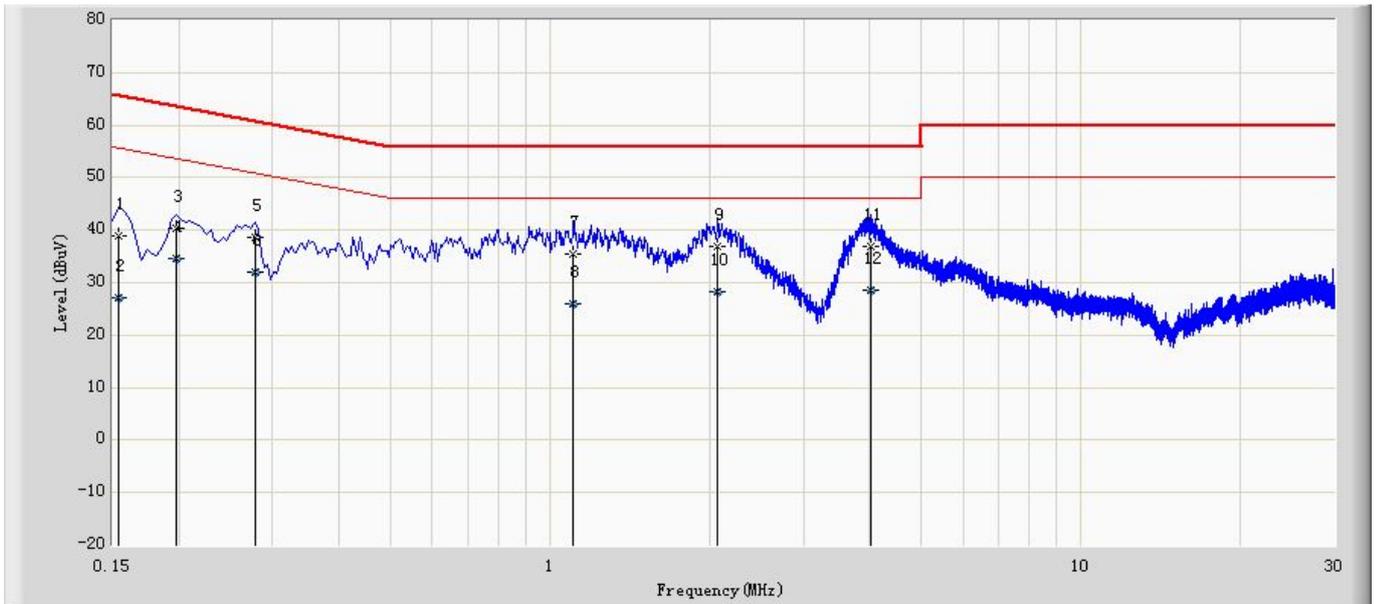
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

### **3.5. Deviation from Test Standard**

No deviation.

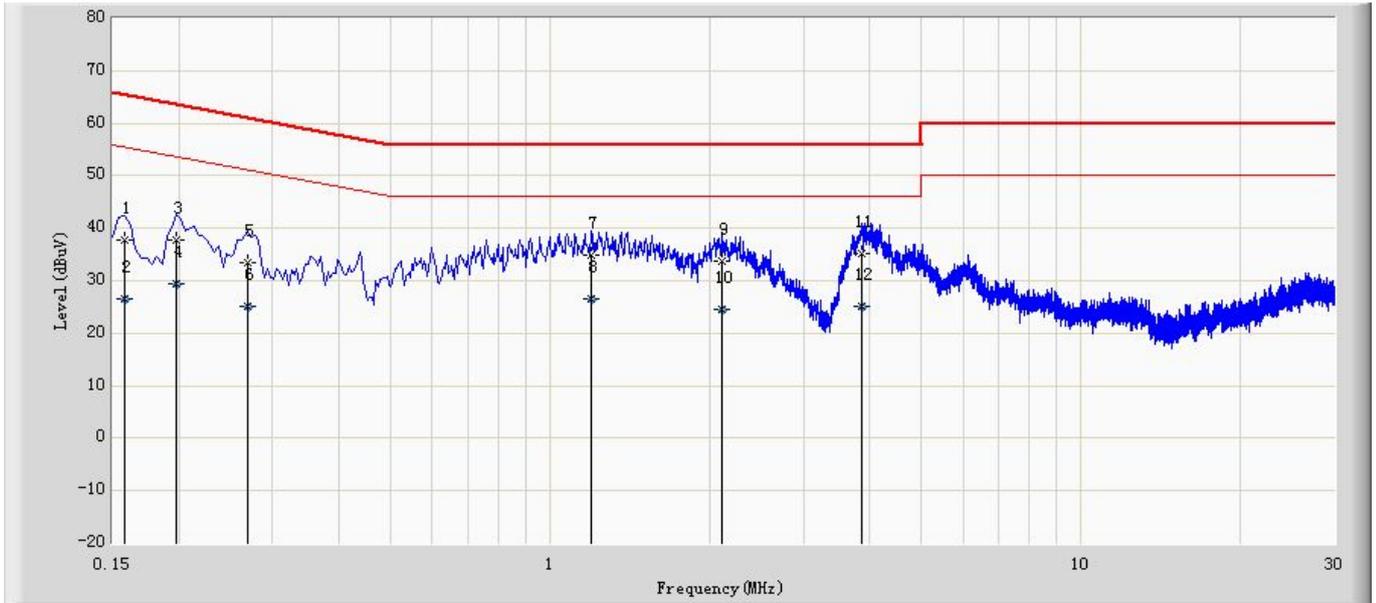
### 3.6. Test Result

Engineer: Jack	
Site: TR1	Time: 2012/03/28 - 18:35
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1: Charging + Camera On with Adapter #1	



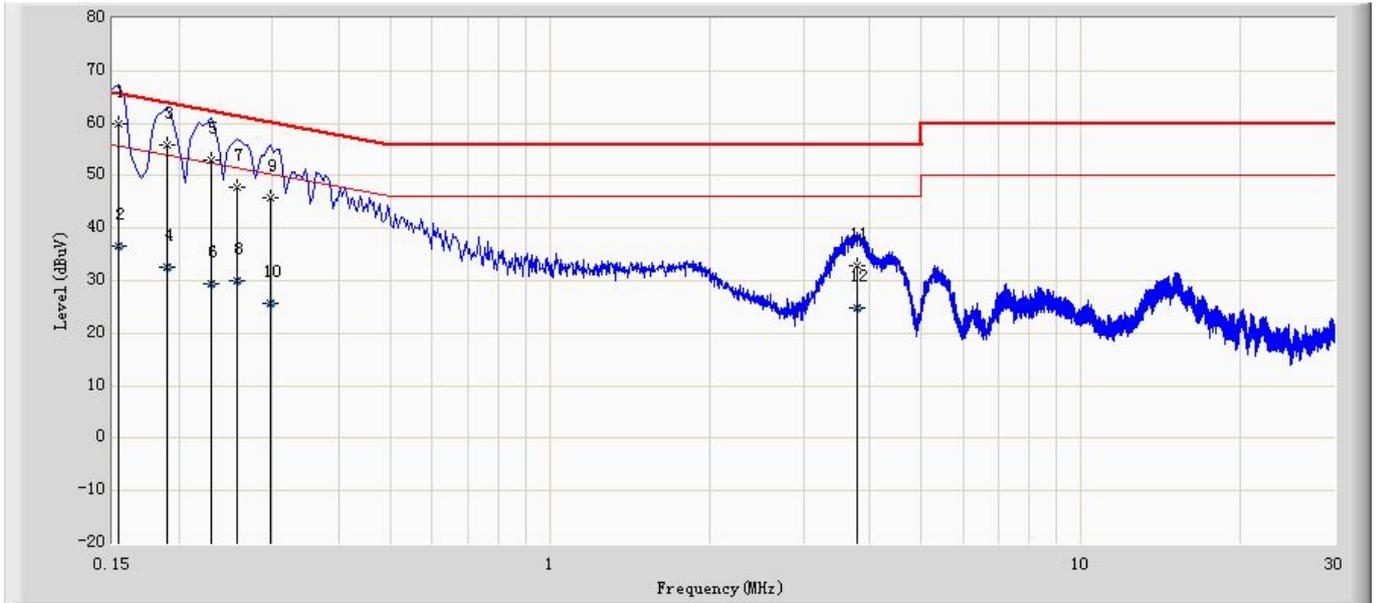
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.154	38.820	28.965	-26.962	65.781	9.855	QP
2		0.154	27.143	17.288	-28.639	55.781	9.855	AV
3		0.198	40.381	30.521	-23.313	63.694	9.860	QP
4		0.198	34.469	24.609	-19.225	53.694	9.860	AV
5		0.278	38.522	28.652	-22.353	60.875	9.871	QP
6		0.278	32.101	22.230	-18.774	50.875	9.871	AV
7		1.106	35.322	25.517	-20.678	56.000	9.805	QP
8		1.106	25.888	16.083	-20.112	46.000	9.805	AV
9		2.066	36.789	26.999	-19.211	56.000	9.790	QP
10		2.066	28.135	18.345	-17.865	46.000	9.790	AV
11		4.022	37.030	27.193	-18.970	56.000	9.837	QP
12	*	4.022	28.669	18.832	-17.331	46.000	9.837	AV

Engineer: Jack	
Site: TR1	Time: 2012/03/28 - 18:39
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1: Charging + Camera On with Adapter #1	



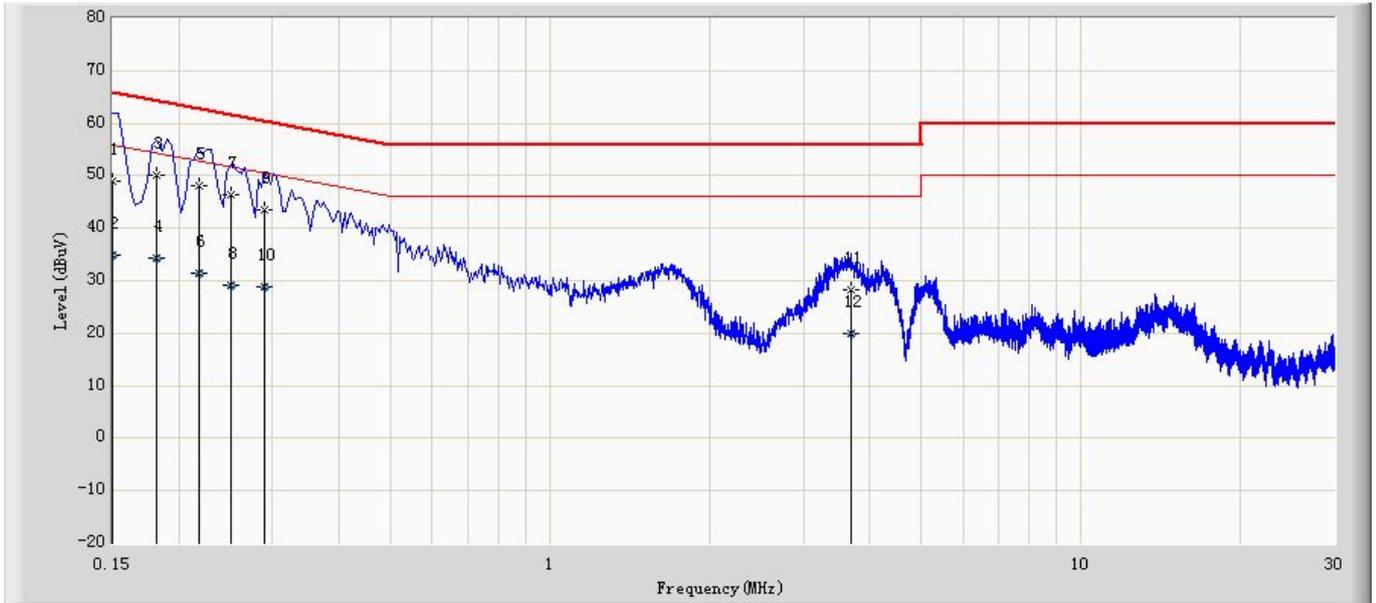
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.158	37.723	27.725	-27.846	65.568	9.998	QP
2		0.158	26.678	16.680	-28.891	55.568	9.998	AV
3		0.198	37.682	27.761	-26.012	63.694	9.922	QP
4		0.198	29.535	19.613	-24.159	53.694	9.922	AV
5		0.270	33.389	23.455	-27.729	61.118	9.935	QP
6		0.270	25.096	15.162	-26.022	51.118	9.935	AV
7		1.198	34.991	24.973	-21.009	56.000	10.018	QP
8	*	1.198	26.629	16.611	-19.371	46.000	10.018	AV
9		2.110	33.737	23.784	-22.263	56.000	9.953	QP
10		2.110	24.673	14.720	-21.327	46.000	9.953	AV
11		3.874	35.166	25.120	-20.834	56.000	10.046	QP
12		3.874	25.193	15.147	-20.807	46.000	10.046	AV

Engineer: Jack	
Site: TR1	Time: 2012/03/28 - 18:43
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1: Charging + Camera On with Adapter #2	



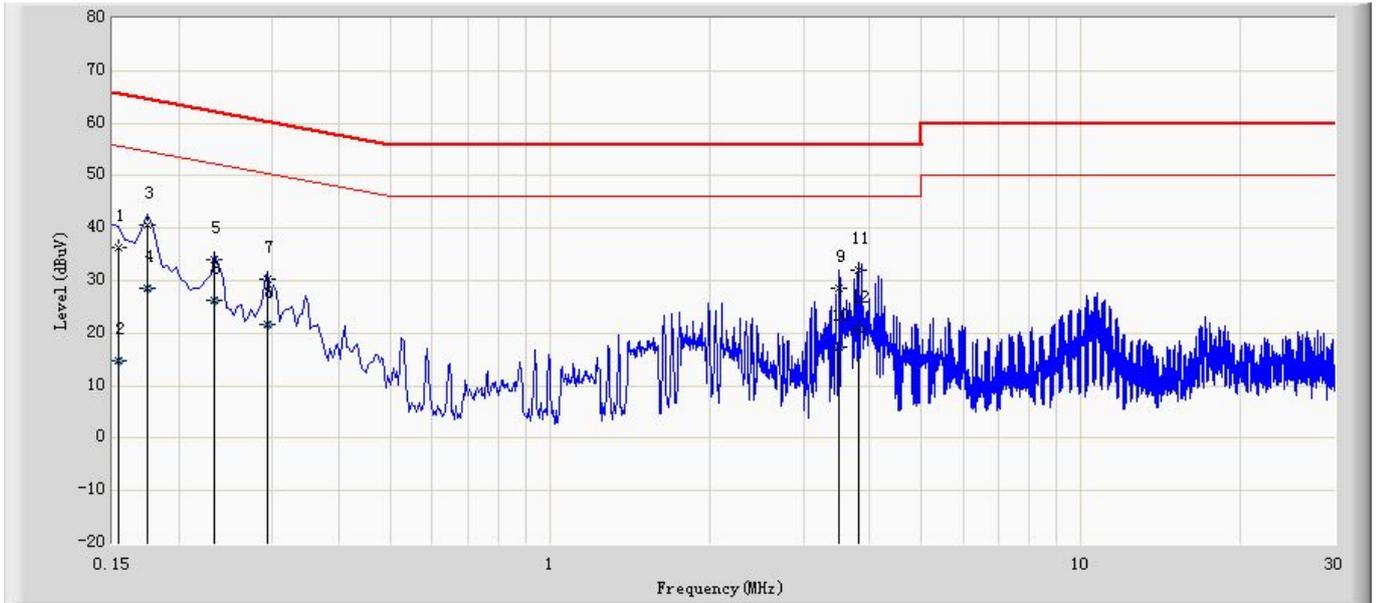
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.154	60.007	50.152	-5.775	65.781	9.855	QP
2		0.154	36.616	26.761	-19.165	55.781	9.855	AV
3		0.190	55.771	45.912	-8.266	64.037	9.858	QP
4		0.190	32.559	22.701	-21.478	54.037	9.858	AV
5		0.230	53.011	43.146	-9.439	62.450	9.864	QP
6		0.230	29.523	19.658	-22.927	52.450	9.864	AV
7		0.258	47.708	37.839	-13.788	61.496	9.868	QP
8		0.258	29.926	20.057	-21.570	51.496	9.868	AV
9		0.298	45.940	36.067	-14.358	60.298	9.874	QP
10		0.298	25.823	15.950	-24.475	50.298	9.874	AV
11		3.790	32.871	23.035	-23.129	56.000	9.836	QP
12		3.790	24.780	14.944	-21.220	46.000	9.836	AV

Engineer: Jack	
Site: TR1	Time: 2012/03/28 - 18:48
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1: Charging + Camera On with Adapter #2	



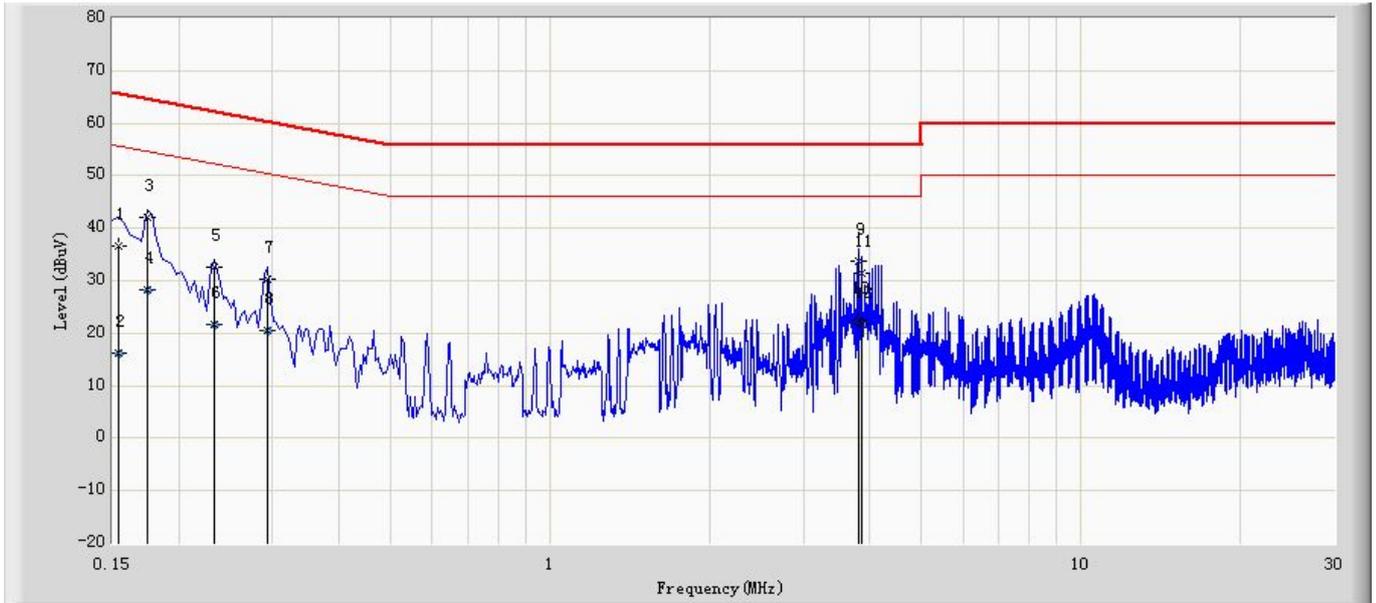
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.150	49.029	39.043	-16.971	66.000	9.985	QP
2		0.150	34.962	24.977	-21.038	56.000	9.985	AV
3	*	0.182	50.206	40.262	-14.188	64.394	9.944	QP
4		0.182	34.312	24.369	-20.082	54.394	9.944	AV
5		0.218	48.130	38.220	-14.765	62.895	9.910	QP
6		0.218	31.538	21.628	-21.357	52.895	9.910	AV
7		0.250	46.449	36.524	-15.309	61.757	9.925	QP
8		0.250	29.217	19.293	-22.540	51.757	9.925	AV
9		0.290	43.507	33.562	-17.018	60.524	9.945	QP
10		0.290	28.817	18.873	-21.707	50.524	9.945	AV
11		3.694	28.190	18.160	-27.810	56.000	10.031	QP
12		3.694	20.066	10.035	-25.934	46.000	10.031	AV

Engineer: Jack	
Site: TR1	Time: 2012/03/25 - 17:45
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2: USB Copy	



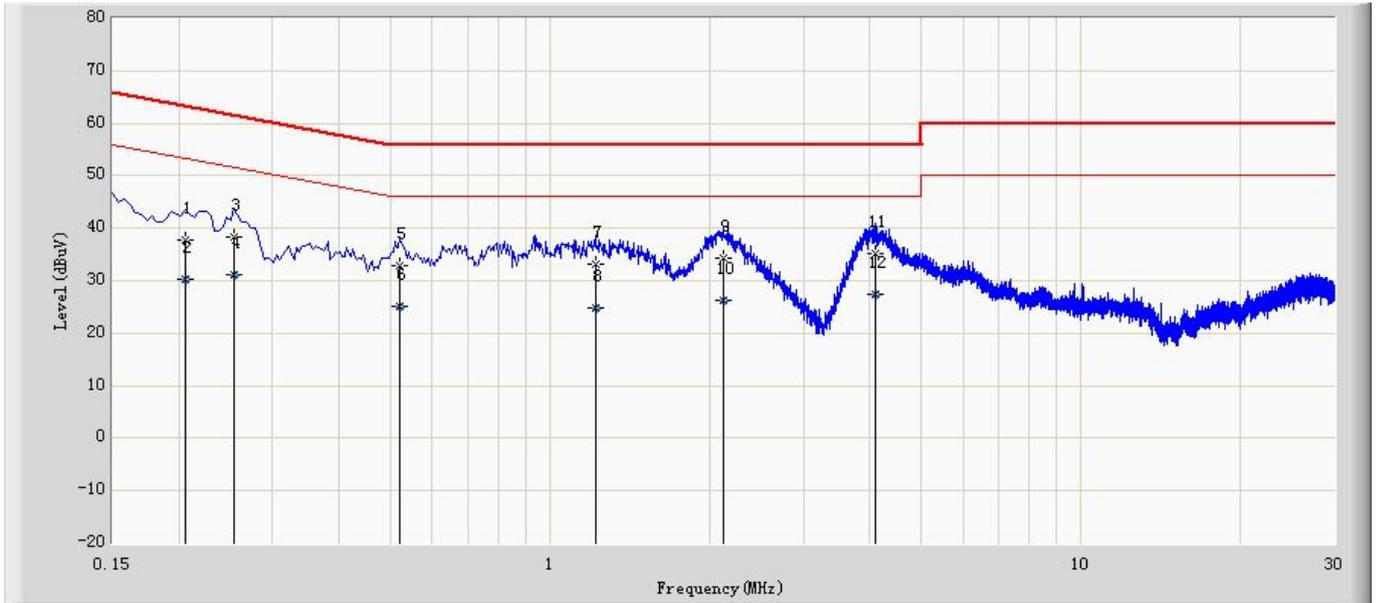
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.154	36.307	26.626	-29.474	65.781	9.681	QP
2		0.154	14.867	5.186	-40.914	55.781	9.681	AV
3		0.174	40.622	30.951	-24.145	64.767	9.671	QP
4		0.174	28.635	18.964	-26.133	54.767	9.671	AV
5		0.234	34.029	24.377	-28.277	62.307	9.652	QP
6		0.234	26.359	16.707	-25.947	52.307	9.652	AV
7		0.294	30.283	20.627	-30.127	60.411	9.656	QP
8		0.294	21.786	12.130	-28.625	50.411	9.656	AV
9		3.510	28.448	18.673	-27.552	56.000	9.775	QP
10		3.510	17.313	7.538	-28.687	46.000	9.775	AV
11	*	3.802	31.904	22.114	-24.096	56.000	9.790	QP
12		3.802	20.720	10.930	-25.280	46.000	9.790	AV

Engineer: Jack	
Site: TR1	Time: 2012/03/25 - 17:48
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2: USB Copy	



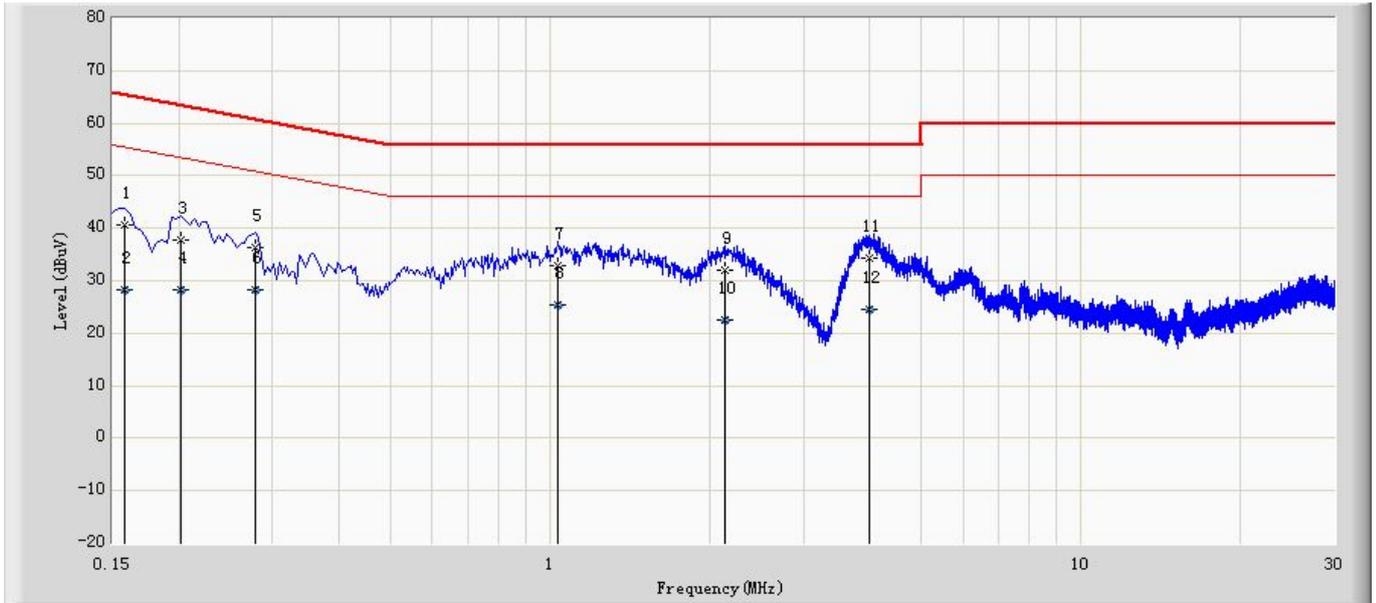
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.154	36.734	27.127	-29.047	65.781	9.607	QP
2		0.154	16.343	6.736	-39.438	55.781	9.607	AV
3		0.174	42.198	32.555	-22.569	64.767	9.642	QP
4		0.174	28.348	18.705	-26.420	54.767	9.642	AV
5		0.234	32.618	22.910	-29.689	62.307	9.708	QP
6		0.234	21.731	12.024	-30.575	52.307	9.708	AV
7		0.294	30.169	20.465	-30.242	60.411	9.704	QP
8		0.294	20.560	10.857	-29.850	50.411	9.704	AV
9	*	3.802	33.753	23.959	-22.247	56.000	9.794	QP
10		3.802	22.598	12.804	-23.402	46.000	9.794	AV
11		3.862	31.377	21.583	-24.623	56.000	9.795	QP
12		3.862	21.656	11.861	-24.344	46.000	9.795	AV

Engineer: Jack	
Site: TR1	Time: 2012/03/28 - 18:29
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: CDMA1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 3: GPS Receive	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.206	37.865	28.005	-25.500	63.365	9.861	QP
2		0.206	30.192	20.331	-23.173	53.365	9.861	AV
3		0.254	38.440	28.572	-23.185	61.625	9.868	QP
4		0.254	31.124	21.256	-20.501	51.625	9.868	AV
5		0.522	32.909	23.007	-23.091	56.000	9.902	QP
6		0.522	25.197	15.295	-20.803	46.000	9.902	AV
7		1.218	33.138	23.337	-22.862	56.000	9.801	QP
8		1.218	24.932	15.130	-21.068	46.000	9.801	AV
9		2.118	34.283	24.493	-21.717	56.000	9.790	QP
10		2.118	26.187	16.397	-19.813	46.000	9.790	AV
11		4.094	35.221	25.384	-20.779	56.000	9.837	QP
12	*	4.094	27.399	17.562	-18.601	46.000	9.837	AV

Engineer: Jack	
Site: TR1	Time: 2012/03/28 - 18:29
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: CDMA1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 3: GPS Receive	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.158	40.527	30.529	-25.041	65.568	9.998	QP
2		0.158	28.342	18.345	-27.226	55.568	9.998	AV
3		0.202	37.902	27.982	-25.626	63.528	9.919	QP
4		0.202	28.389	18.470	-25.138	53.528	9.919	AV
5		0.278	36.214	26.275	-24.662	60.875	9.939	QP
6		0.278	28.195	18.256	-22.681	50.875	9.939	AV
7		1.034	32.961	22.925	-23.039	56.000	10.036	QP
8	*	1.034	25.362	15.325	-20.638	46.000	10.036	AV
9		2.142	32.054	22.100	-23.946	56.000	9.954	QP
10		2.142	22.639	12.685	-23.361	46.000	9.954	AV
11		4.006	34.284	24.233	-21.716	56.000	10.050	QP
12		4.006	24.603	14.553	-21.397	46.000	10.050	AV

### 3.7. Test Photograph

Test Mode: Mode 1,3

Description: Front View of Conducted Emission Test Setup



Description: Side View of Conducted Emission Test Setup



Test Mode: Mode 2

Description: Front View of Conducted Emission Test Setup



Description: Side View of Conducted Emission Test Setup



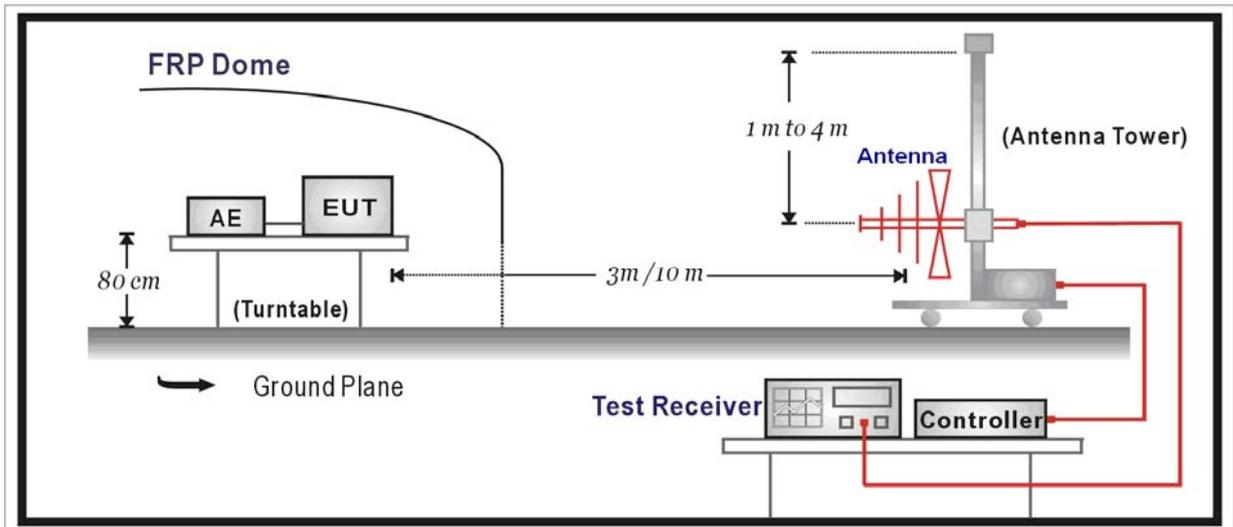
**4. Radiated Emission**

**4.1. Test Specification**

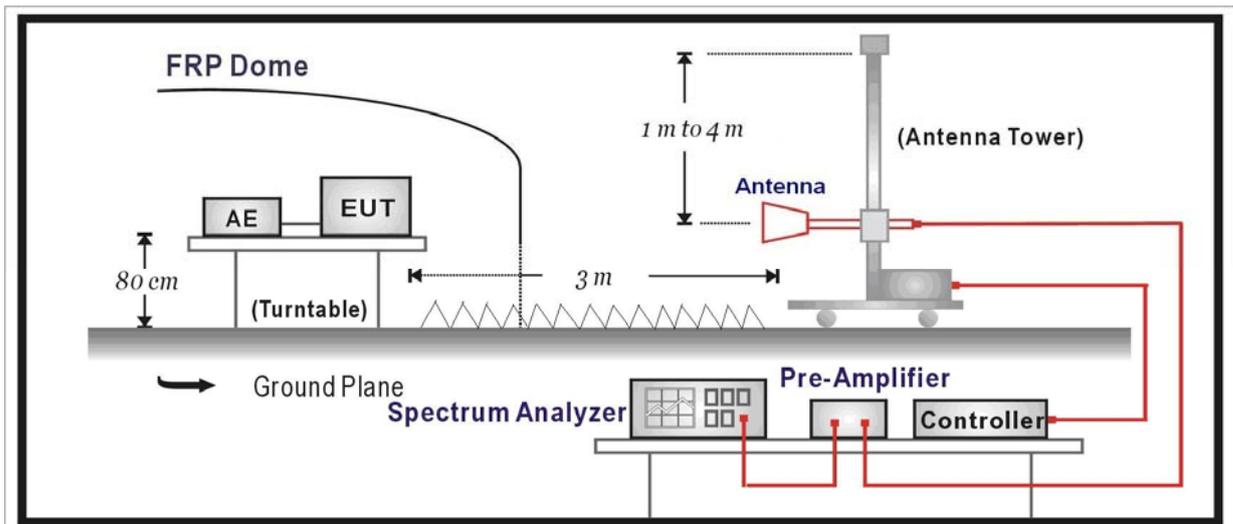
According to EMC Standard: FCC Part 15 Subpart B Class B, ANSI C63.4

**4.2. Test Setup**

Below 1GHz Test Setup:



Above 1GHz Test Setup:



**4.3. Limit**

FCC Part 15 Subpart B Paragraph 15.109		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 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.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

**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 EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

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

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	5th 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 3 meters for under 1GHz and above 1GHz.

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

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

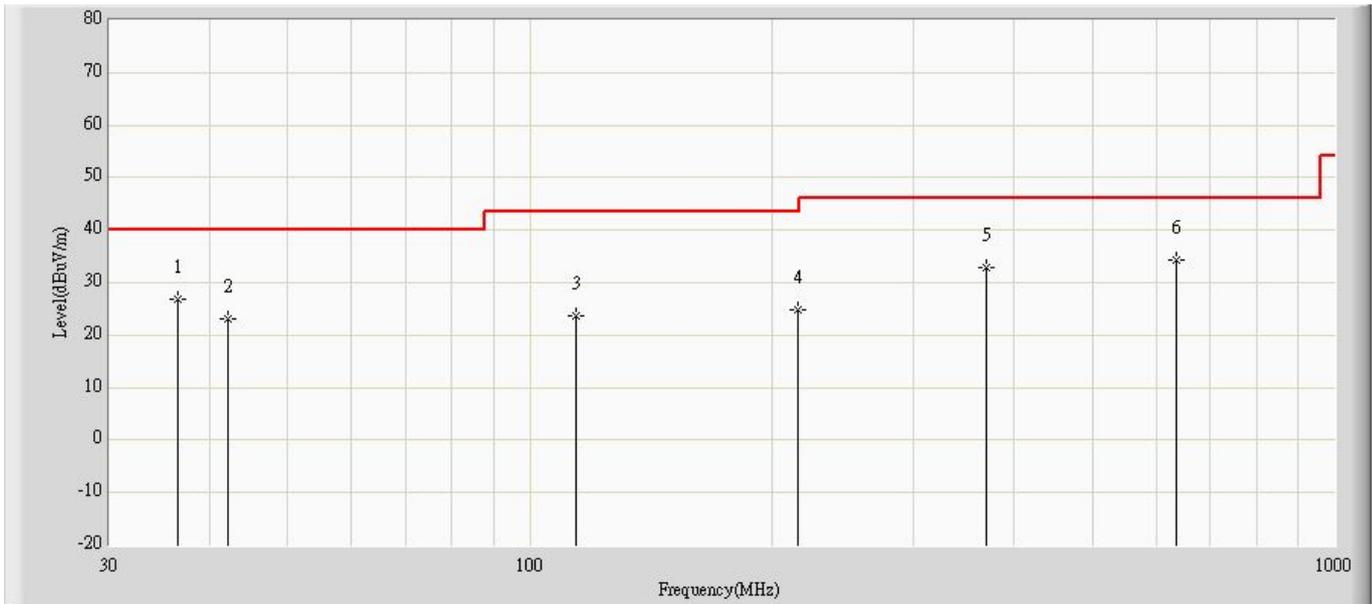
Note: When measurement above 1GHz, the horn antenna will bend down a little (as horn antenna have the narrow beamwidth) in order to find the maximum emission of EUT.

**4.5. Deviation from Test Standard**

No deviation.

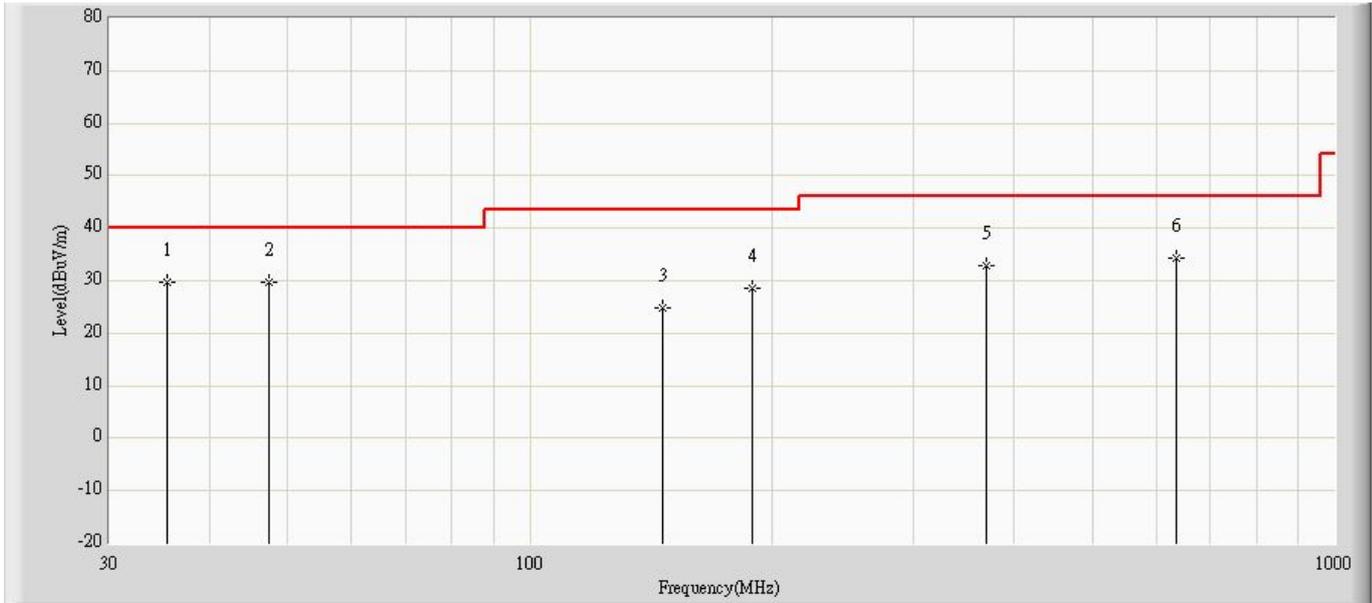
4.6. Test Result

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:12
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode1: Charging + Camera On with Adapter #1	



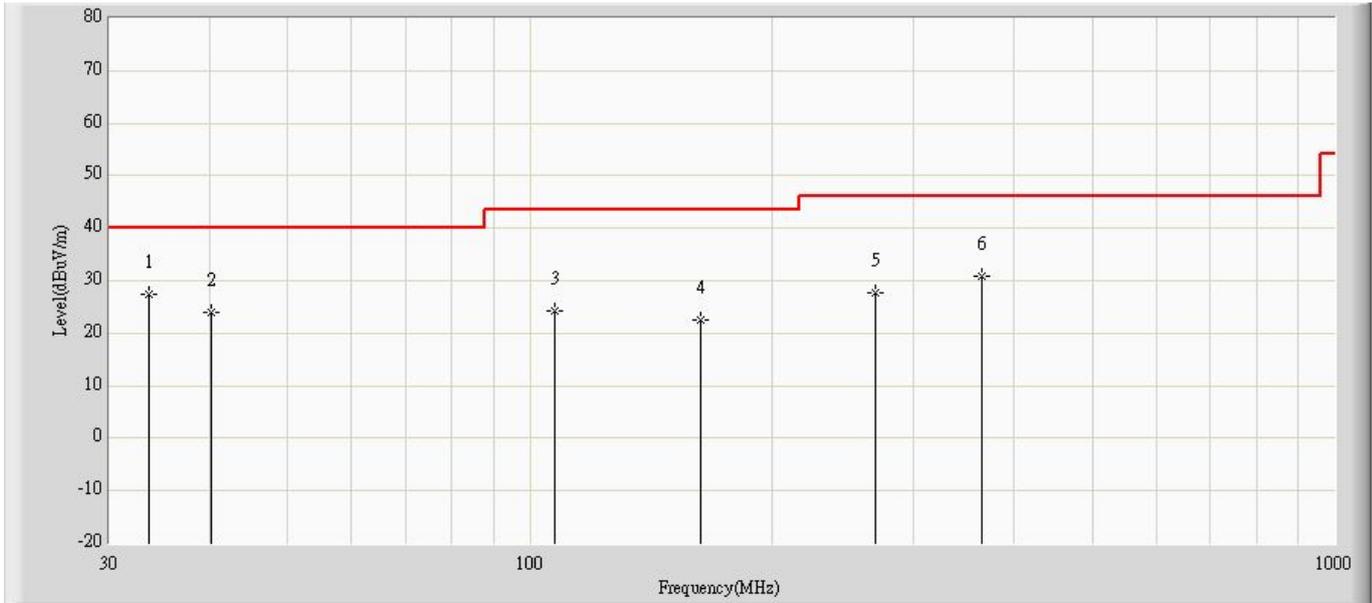
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		36.548	26.980	6.537	-13.020	40.000	20.443	QP
2		42.125	23.087	5.621	-16.913	40.000	17.466	QP
3		114.147	23.644	5.159	-19.856	43.500	18.485	QP
4		214.906	24.915	9.425	-18.585	43.500	15.490	QP
5		368.651	32.781	10.287	-13.219	46.000	22.493	QP
6	*	636.250	34.332	7.019	-11.668	46.000	27.313	QP

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:12
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode1: Charging + Camera On with Adapter #1	



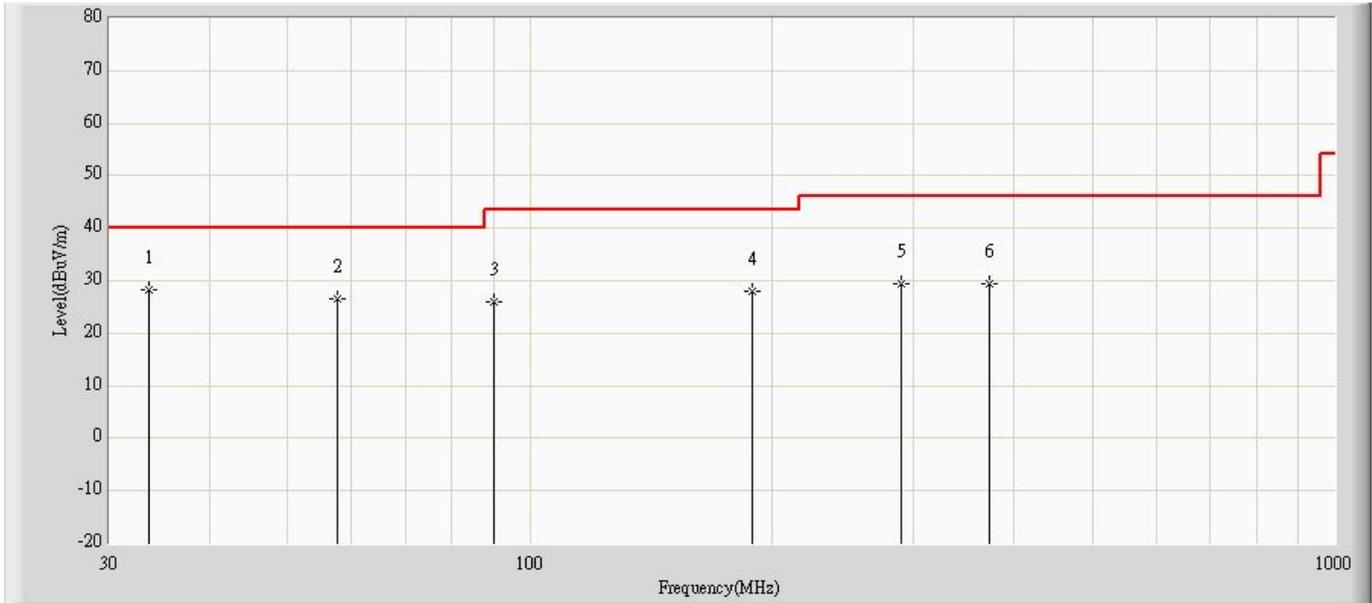
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	35.456	29.775	8.743	-10.225	40.000	21.032	QP
2		47.339	29.635	14.517	-10.365	40.000	15.118	QP
3		146.036	24.696	7.593	-18.804	43.500	17.103	QP
4		189.201	28.464	12.819	-15.036	43.500	15.645	QP
5		368.651	32.781	10.287	-13.219	46.000	22.493	QP
6		636.250	34.332	7.019	-11.668	46.000	27.313	QP

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:12
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode1: Charging + Camera On with Adapter #2	



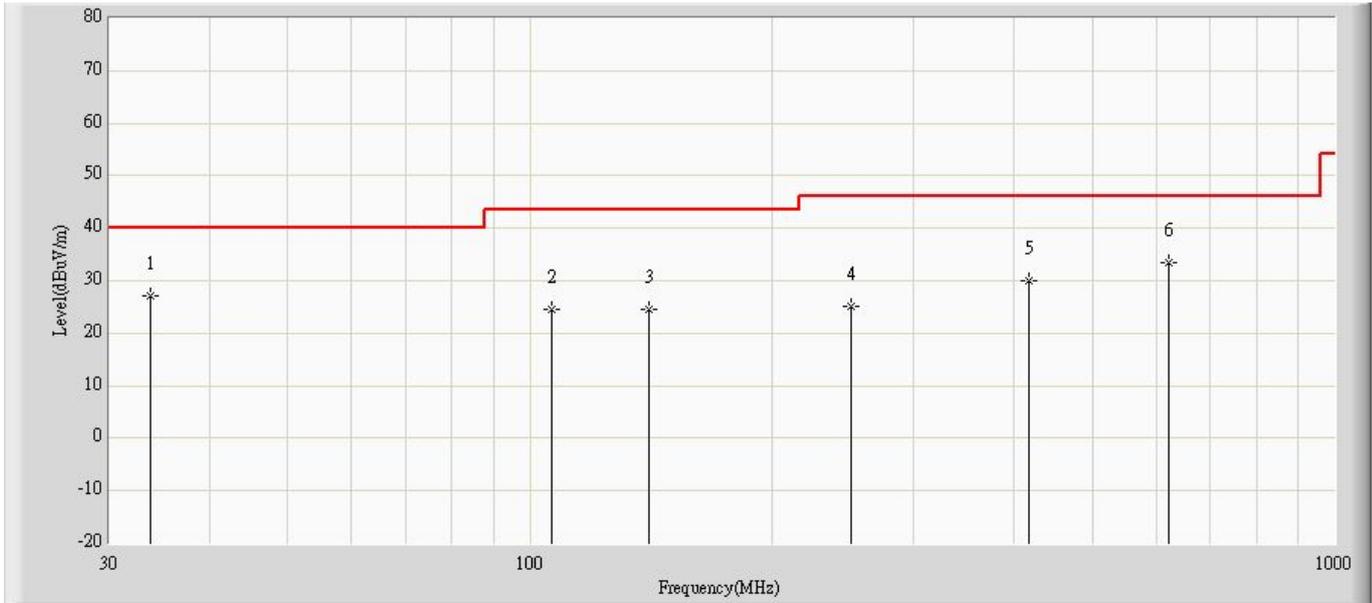
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	33.638	27.333	5.308	-12.667	40.000	22.025	QP
2		40.185	23.986	5.513	-16.014	40.000	18.474	QP
3		107.357	24.265	6.049	-19.235	43.500	18.216	QP
4		163.011	22.672	6.274	-20.828	43.500	16.397	QP
5		268.862	27.785	7.903	-18.215	46.000	19.882	QP
6		364.771	30.887	8.476	-15.113	46.000	22.410	QP

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:13
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode1: Charging + Camera On with Adapter #2	



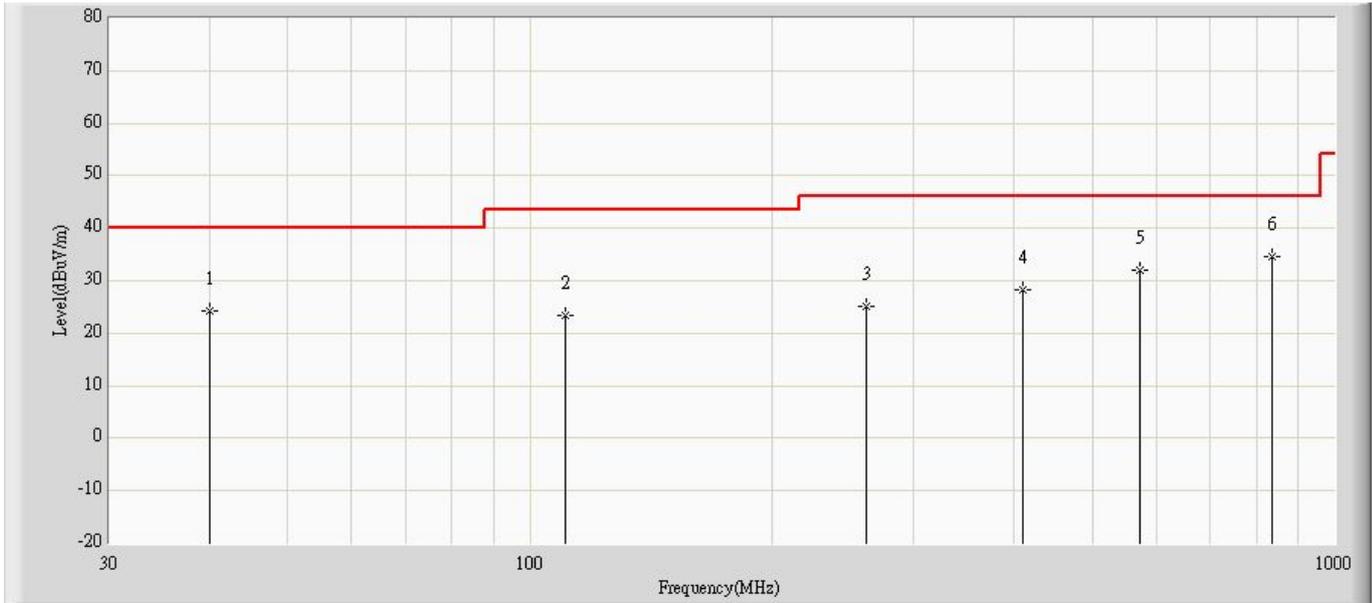
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	33.638	28.216	6.191	-11.784	40.000	22.025	QP
2		57.645	26.674	14.362	-13.326	40.000	12.312	QP
3		90.261	25.892	10.240	-17.608	43.500	15.652	QP
4		188.959	28.080	12.446	-15.420	43.500	15.634	QP
5		289.839	29.318	9.244	-16.682	46.000	20.074	QP
6		372.895	29.559	6.950	-16.441	46.000	22.609	QP

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:13
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2: USB Copy	



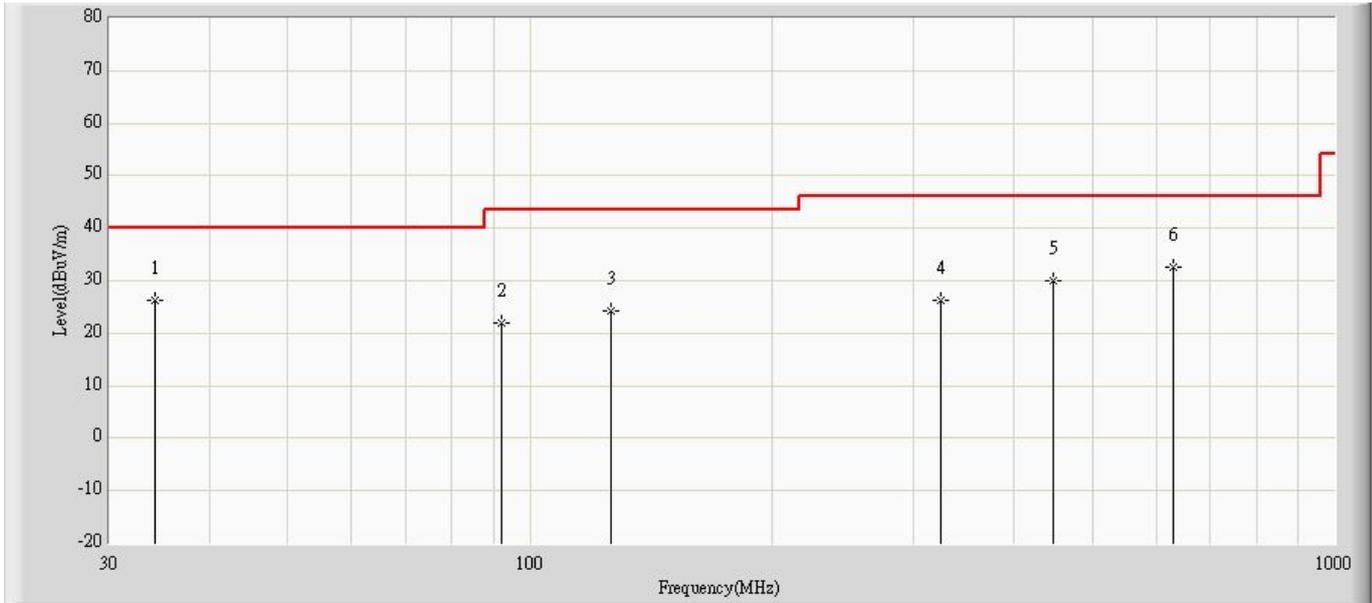
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		33.759	27.057	5.098	-12.943	40.000	21.959	QP
2		106.509	24.492	6.348	-19.008	43.500	18.144	QP
3		140.822	24.481	6.830	-19.019	43.500	17.651	QP
4		250.311	25.039	5.721	-20.961	46.000	19.318	QP
5		417.151	29.908	5.591	-16.092	46.000	24.317	QP
6	*	621.336	33.526	6.284	-12.474	46.000	27.242	QP

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:13
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2: USB Copy	



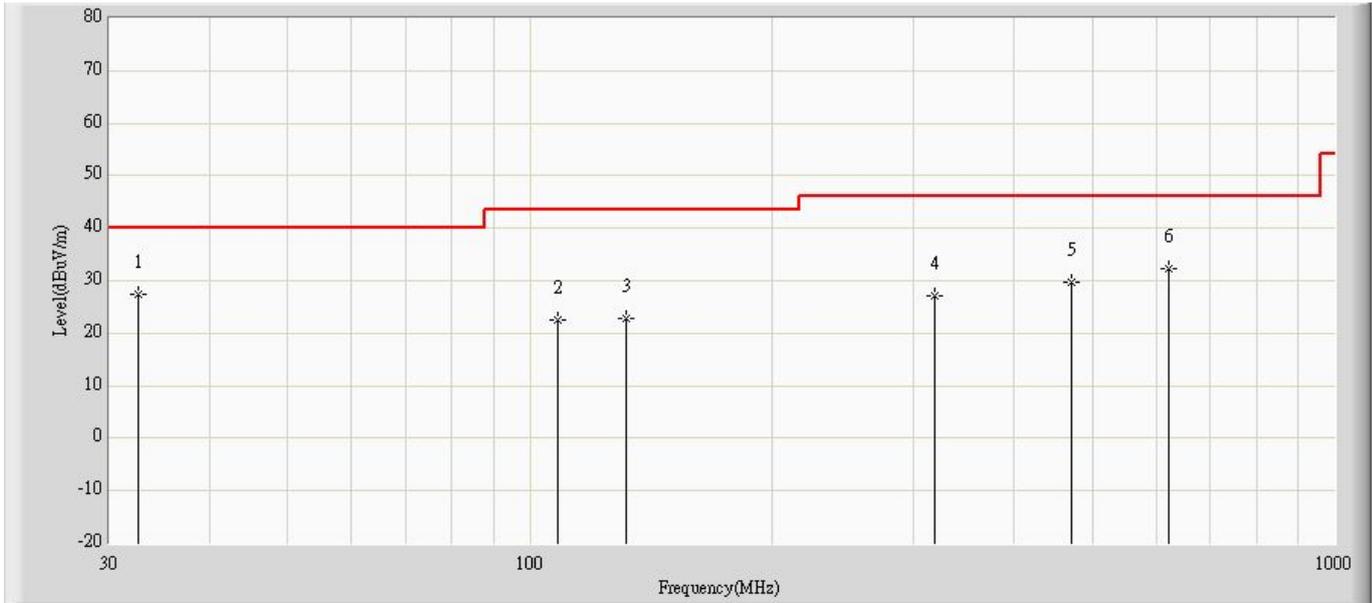
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		40.064	24.127	5.591	-15.873	40.000	18.537	QP
2		110.631	23.430	4.970	-20.070	43.500	18.460	QP
3		261.709	25.193	5.256	-20.807	46.000	19.938	QP
4		410.725	28.248	4.043	-17.752	46.000	24.205	QP
5		573.200	31.919	5.276	-14.081	46.000	26.643	QP
6	*	836.070	34.538	5.411	-11.462	46.000	29.127	QP

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:13
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 3: GPS Receive	



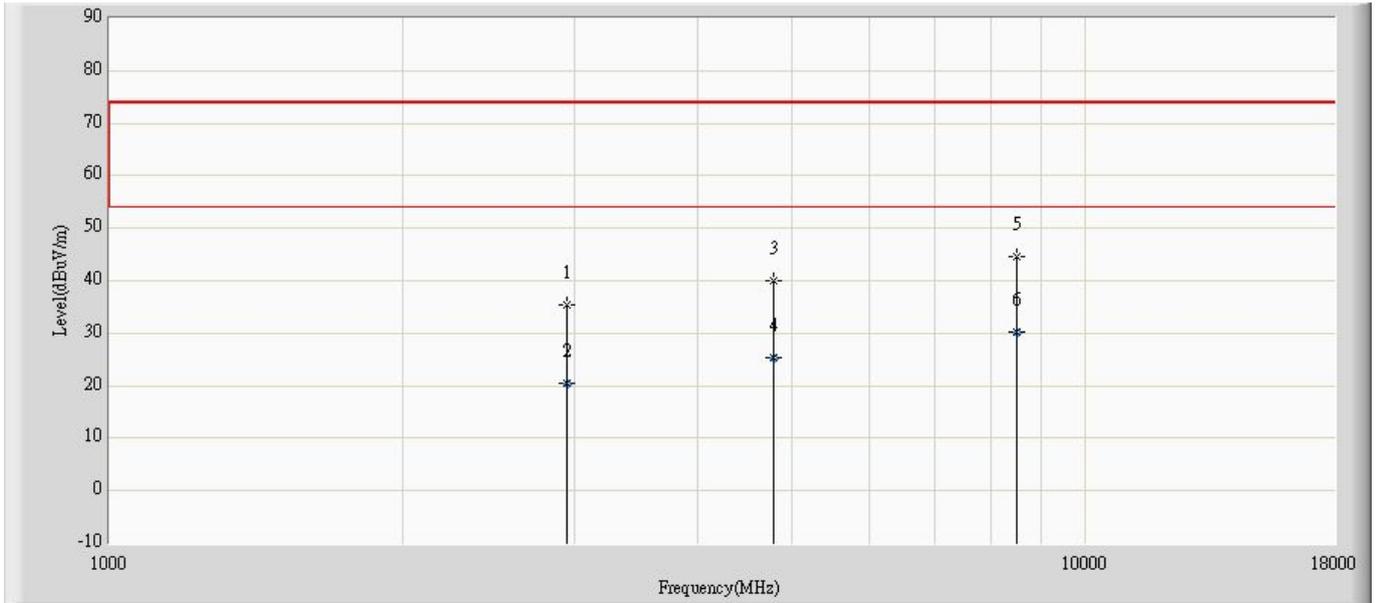
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		34.244	26.299	4.606	-13.701	40.000	21.693	QP
2		92.080	21.998	6.104	-21.502	43.500	15.894	QP
3		126.151	24.349	5.751	-19.151	43.500	18.597	QP
4		323.668	26.168	4.895	-19.832	46.000	21.274	QP
5		446.251	30.064	5.868	-15.936	46.000	24.196	QP
6	*	630.066	32.631	5.340	-13.369	46.000	27.291	QP

Engineer: Nancy	
Site: AC2	Time: 2012/03/24 - 14:13
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode 3: GPS Receive	



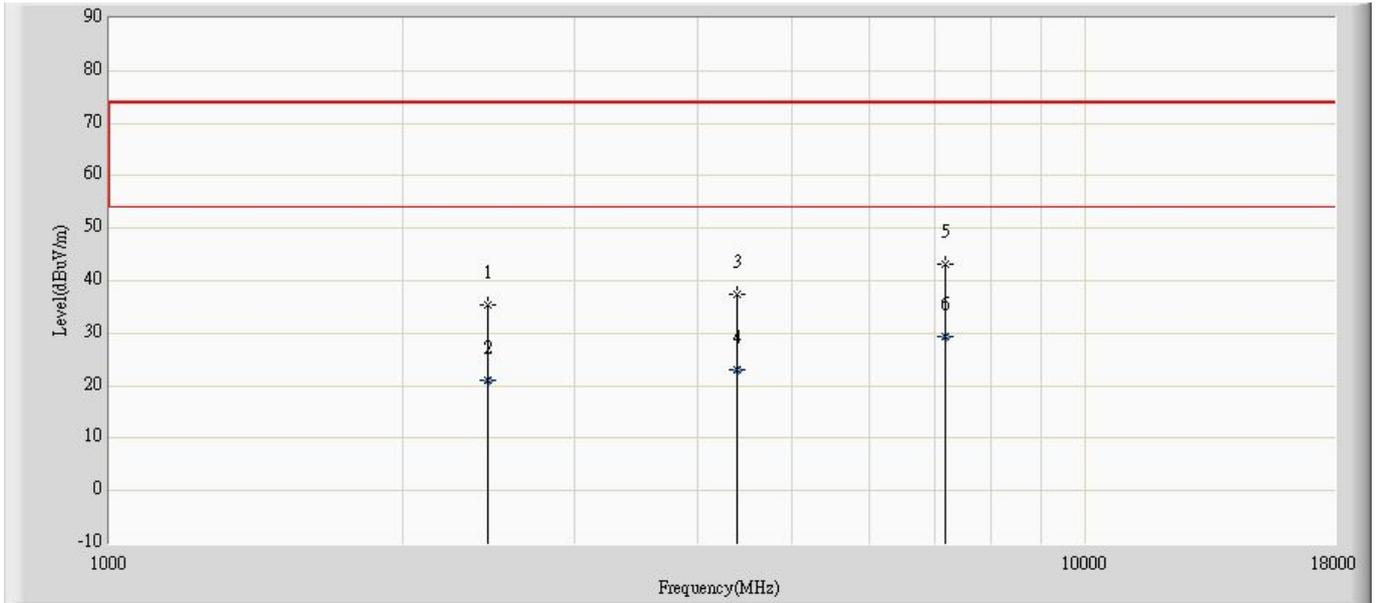
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	32.546	27.438	4.820	-12.562	40.000	22.618	QP
2		108.327	22.430	4.126	-21.070	43.500	18.304	QP
3		131.729	22.913	4.528	-20.587	43.500	18.385	QP
4		318.818	26.984	5.800	-19.016	46.000	21.184	QP
5		471.471	29.752	4.807	-16.248	46.000	24.945	QP
6		622.064	32.411	5.171	-13.589	46.000	27.240	QP

Engineer: Nancy	
Site: AC5	Time: 2012/03/24 - 14:53
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode3: GPS Receive	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		2946.500	35.537	51.771	-38.463	74.000	-16.234	PK
2		2946.500	20.490	36.724	-33.510	54.000	-16.234	AV
3		4799.500	40.036	51.824	-33.964	74.000	-11.789	PK
4		4799.500	25.281	37.069	-28.719	54.000	-11.789	AV
5		8505.500	44.646	44.639	-29.354	74.000	0.007	PK
6	*	8505.500	30.139	30.132	-23.861	54.000	0.007	AV

Engineer: Nancy	
Site: AC5	Time: 2012/03/24 - 14:54
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical
EUT: CDMA 1X Mobile Phone	Power: AC 120V/60Hz
Note: Mode3: GPS Receive	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		2445.000	35.328	51.558	-38.672	74.000	-16.230	PK
2		2445.000	21.026	37.256	-32.974	54.000	-16.230	AV
3		4391.500	37.510	50.523	-36.490	74.000	-13.013	PK
4		4391.500	22.955	35.968	-31.045	54.000	-13.013	AV
5		7179.500	43.171	47.088	-30.829	74.000	-3.918	PK
6	*	7179.500	29.407	33.324	-24.593	54.000	-3.918	AV