

FCC Test Report

Product Name : WCDMA Digital Mobile Phone

Model No. : HUAWEI G350-U151

Applicant : Huawei Technologies Co., Ltd.

Address : Administration Building, Headquarters of Huawei
Technologies Co., Ltd., Bantian, Longgang District,
Shenzhen, 518129, P.R.C

Date of Receipt : 12/03/2013

Test Date : 13/03/2013~06/04/2013

Issued Date : 13/06/2013

Report No. : 133S023R-IT-US-P01V01

Report Version : V1.0



The test results relate only to the samples tested.

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

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

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : 13/06/2013
Report No. : 133S023R-IT-US-P01V01



Product Name : WCDMA Digital Mobile Phone
Applicant : Huawei Technologies Co., Ltd.
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Manufacturer : Huawei Technologies Co., Ltd.
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Model No. : HUAWEI G350-U151
Brand Name : HUAWEI
EUT Voltage : DC 3.7V
Applicable Standard : FCC Part 15 Subpart B: 2012
ANSI C63.4: 2009
ICES-003 Issue 5: 2012 Class B
Test Result : Complied
Performed Location : Suzhou EMC Laboratory
No.99 Hongye Rd., Suzhou Industrial Park Loufeng
Hi-Tech Development Zone., Suzhou, China
TEL: +86-512-62515088 / FAX: +86-512-62515098

This report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

Documented By : Alice Li
Reviewed By : Jame Yuan
Approved By : Robin Wu

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:

Taiwan R.O.C.	:	BSMI, NCC, TAF
Germany	:	TUV Rheinland
Norway	:	Nemko, DNV
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

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:

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.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

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

TABLE OF CONTENTS

Description	Page
1. General Information	5
1.1. EUT Description	5
1.2. Mode of Operation	8
1.3. Tested System Details	9
1.4. Configuration of Tested System	10
1.5. EUT Exercise Software	12
2. Technical Test.....	13
2.1. Summary of Test Result	13
2.2. List of Test Equipment	14
2.3. Measurement Uncertainty	15
3. Conducted disturbance	16
3.1. Test Specification	16
3.2. Test Setup	16
3.3. Limit.....	17
3.4. Test Procedure	17
3.5. Deviation from Test Standard	17
3.6. Test Result	18
4. Radiated disturbance	26
4.1. Test Specification	26
4.2. Test Setup	26
4.3. Limit.....	27
4.4. Test Procedure	28
4.5. Deviation from Test Standard	28
4.6. Test Result	29

1. General Information

1.1. EUT Description

Product Name	WCDMA Digital Mobile Phone
Model No.	HUAWEI G350-U151
Hardware Version	P2
Software Version for single card	G350-U151V100R001C00B118
Software Version for double card	G350-U351V100R001C00B123
Device Category	Portable
RF Exposure Environment	Uncontrolled
Antenna Type	Internal
GPS	
Class of SRD	Class 3
2G	
Support Band	GSM850/PCS1900
GPRS Class	Class 12
Uplink	GSM 850: 824~849MHz PCS 1900: 1850~1910MHz
Downlink	GSM 850: 869~894MHz PCS 1900: 1930~1990MHz
Release Version	Rel-6
Type of modulation	GMSK for GSM/GPRS; 8PSK for EDGE
Antenna Gain	GSM 850: -2.64dBi PCS1900: 0.31dBi
3G	
Support Band	WCDMA Band II/WCDMA Band V
Uplink	WCDMA Band II: 1850~1910MHz WCDMA Band V: 824~849MHz
Downlink	WCDMA Band II: 1930~1990MHz WCDMA Band V: 869~894MHz
Release Version	UMTS FDD: Rel-6
Type of modulation	QPSK
Antenna Gain	WCDMA Band II: 1.14dBi WCDMA Band V: -0.76dBi

Bluetooth	
Bluetooth Frequency	2402~2480MHz
Bluetooth Version	V2.1 + EDR
Type of modulation	FHSS
Data Rate	1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps (8DPSK)
Antenna Gain	0.41dBi
Wi-Fi	
Hotspots Function	YES
Wi-Fi Frequency	802.11b/g/n(20MHz): 2412 ~ 2462 MHz
Type of modulation	802.11b: DSSS; 802.11g/n: OFDM
Data Rate	802.11b: 1/2/5.5/11 Mbps
	802.11g: 6/9/12/18/24/36/48/54 Mbps
	802.11n: up to 150 Mbps
Antenna Gain	-1.52dBi
Components	
Headset Model Number #1	HUAWEI/ 125G#+3261# 3.5MM-2
Headset Model Number #2	HUAWEI/ MEMD1532A761009
Battery #1	Brand Name: HUAWEI M/N: HB5V1HV Rated Voltage and Capacitance: 3.8V/1950mAh S/N: YAID130X16909379
Battery #2	Brand Name: HUAWEI M/N: HB5V1HV Rated Voltage and Capacitance: 3.8V/1950mAh S/N: YQCD104916910878
Battery #3	Brand Name: HUAWEI M/N: HB5V1 Rated Voltage and Capacitance: 3.7V/1730mAh S/N: GAGD217L20001271
Battery #4	Brand Name: HUAWEI M/N: HB5V1 Rated Voltage and Capacitance: 3.7V/1730mAh S/N: CABD110L20002578
Battery #5	Brand Name: HUAWEI M/N: HB5V1 Rated Voltage and Capacitance: 3.7V/1730mAh S/N: BAACB22L24638179

Adapter #1	Brand Name: HUAWEI M/N: HW-050100U1W Input: 100-240V~50/60Hz 0.2A MAX Output: 5Vdc, 1.0A S/N: HKAD10400753
Adapter #2	Brand Name: HUAWEI M/N: HW-050100U1W Input: 100-240V~50/60Hz 0.2A MAX Output: 5Vdc, 1.0A S/N: TPACC0860553

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:

Test Mode
Mode 1: Charging + Camera On
Mode 2: FM
Mode 3: GPS Receive
Mode 4: USB Copy

Note:

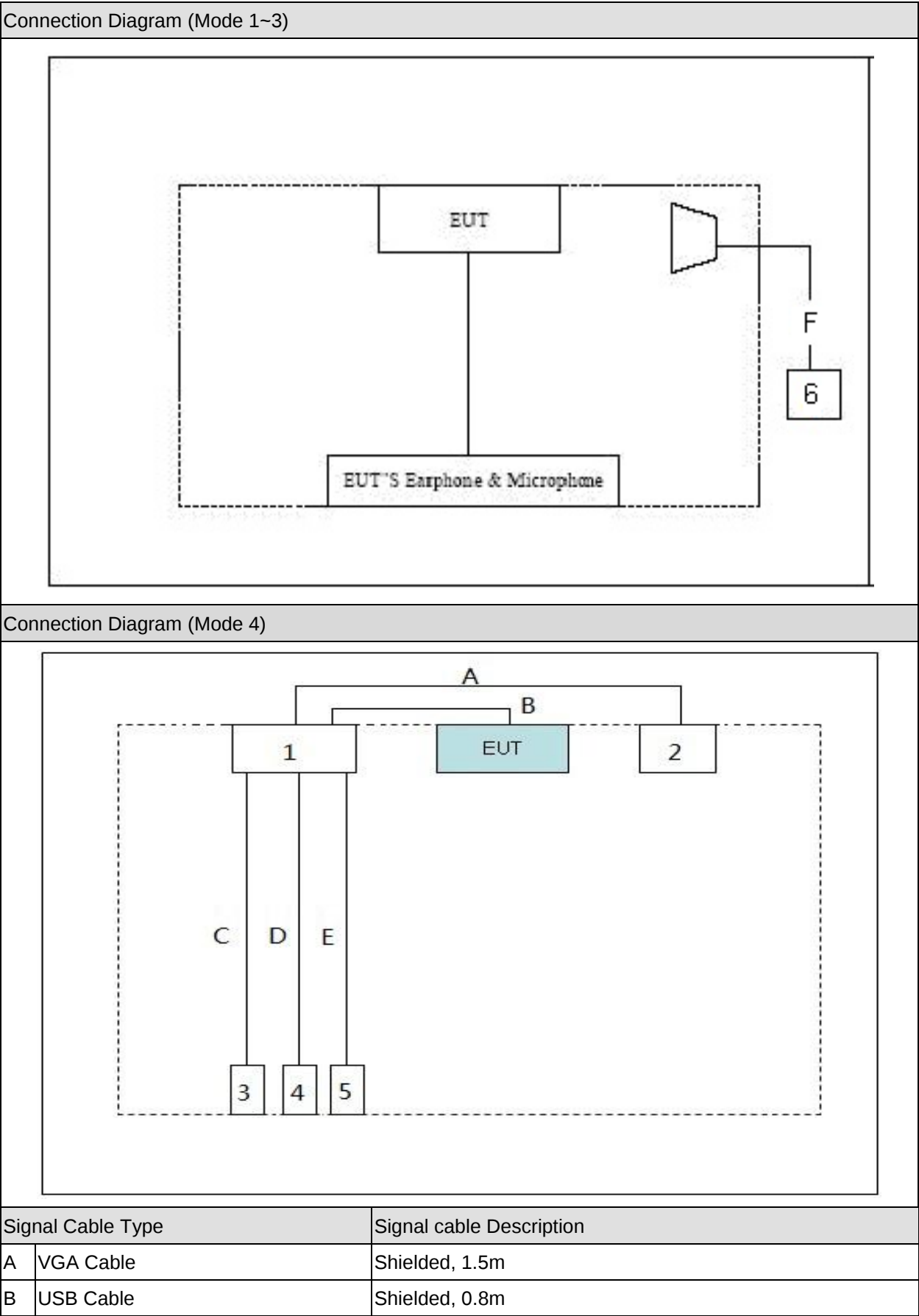
1. This test item has been evaluated two adapters, two batteries, one USB cable and one headsets presented in the report is the worst case.

1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Dell	PP19L	JH097A01	Non-Shielded, 1.8m
2	LCD Monitor	BenQ	ET-0033T	ETT8903750019	Non-Shielded, 1.8m
3	Earphone & Microphone	SOMIC	V85	N/A	N/A
4	USB Mouse	DELL	MOC5UO	10D00JJL	N/A
5	USB 3.0 Hard Disc Drive	Lenovo	F360	OA0503512400230	N/A
6	Signal Generator	Agilent	E4438C	MY49070163	N/A

1.4. Configuration of Tested System



C	Earphone & Microphone	Non-Shielded, 2.1m
D	USB Cable	Shielded, 1.8m
E	USB Cable	Shielded, 0.3m
F	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) Making EUT work under the "FM" Mode. (3) Making EUT receive signals from SG continuously (4) Open the software "WINTHRAX", and then transmit data with notebook.
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 disturbance	FCC CFR Title 47 Part 15 Subpart B: 2012 Class B ANSI C63.4: 2009 ICES-003 Issue 5: 2012 Class B	Yes	No
Radiated disturbance	FCC CFR Title 47 Part 15 Subpart B: 2012 Class B ANSI C63.4: 2009 ICES-003 Issue 5: 2012 Class B	Yes	No

2.2. List of Test Equipment

Conducted disturbance at mains terminals and telecommunication ports / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100906	2014.01.07
Two-Line V-Network	R&S	ENV216	101043	2014.03.30
Two-Line V-Network	R&S	ENV216	101044	2013.09.18
Impedance Stabilization Network	Teseq GmbH	ISN T800	30306	2014.02.20
Impedance Stabilization Network	Teseq GmbH	ISN T8-Cat6	29680	2014.02.20
Current Probe	R&S	EZ-17	100255	2014.03.30
50ohm Termination	SHX	TF2	07081401	2013.09.17
50ohm Termination	SHX	TF2	07081402	2013.09.17
50ohm Termination	SHX	TF2	07081403	2013.09.17
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2014.03.01
Coaxial Cable	Suhner	RG 223	TR1-C1	2014.03.01
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2014.01.10

Radiated disturbance / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100573	2014.03.30
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2013.10.15
Coaxial Cable	Huber+Suhner	RG 214	AC2-C	2014.03.01
Temperature/Humidity Meter	zhicheng	ZC1-2	AC2-TH	2014.01.09

Radiated disturbance / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2014.03.30
Preamplifier	Miteq	NSP1800-25	1364185	2014.05.03
DRG Horn	ETS-Lindgren	3117	00123988	2014.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	737	2013.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2014.03.01
Temperature/Humidity Meter	zhicheng	ZC1-2	AC5-TH	2014.01.11

2.3. Measurement Uncertainty

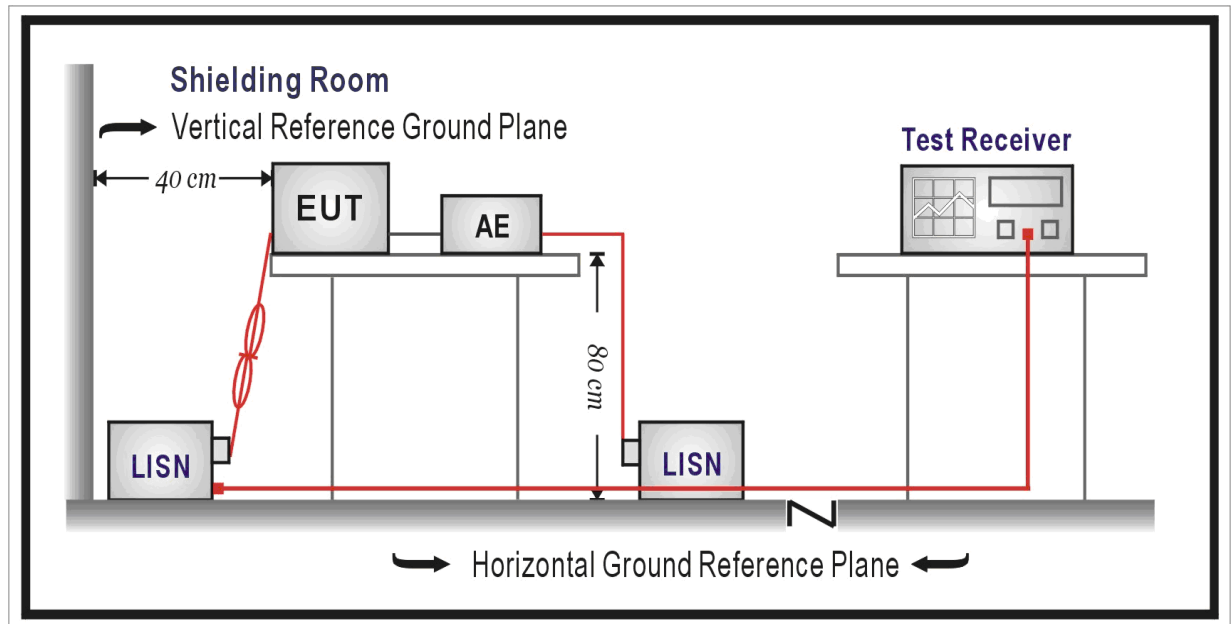
Conducted disturbance / TR1
The maximum measurement uncertainty is evaluated as: 9kHz~150kHz: 3.35dB 150kHz~30MHz:2.91dB
Radiated disturbance / AC2
The maximum measurement uncertainty is evaluated as: Horizontal: 30MHz~300MHz: 3.74dB 300MHz~1GHz: 3.20 dB Vertical: 30MHz~300MHz: 4.04 dB 300MHz~1GHz: 3.23 dB
Radiated disturbance / AC5
The maximum measurement uncertainty is evaluated as: Horizontal: 30MHz~300MHz: 3.81 dB 300MHz~1GHz: 3.12 dB 1GHz~18GHz: 5.19 dB Vertical: 30MHz~300MHz: 4.20 dB 300MHz~1GHz: 3.02 dB 1GHz~18GHz: 5.58 dB

3. Conducted disturbance

3.1. Test Specification

According to EMC Standard: FCC Part 15.107 Class B and ANSI C63.4

3.2. Test Setup



3.3. Limit

Limits for conducted disturbance of class A ITE		
Frequency range MHz	Limits dB(μV)	
	Quasi-peak	Average
0.15 to 0.50	79	66
0.50 to 30	73	60
NOTE: The lower limit shall apply at the transition frequency.		

Limits for conducted disturbance 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 1: The lower limit shall apply at the transition frequencies.		
NOTE 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

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 50Ω / 50μH coupling impedance with 50Ω 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 on conducted measurement.

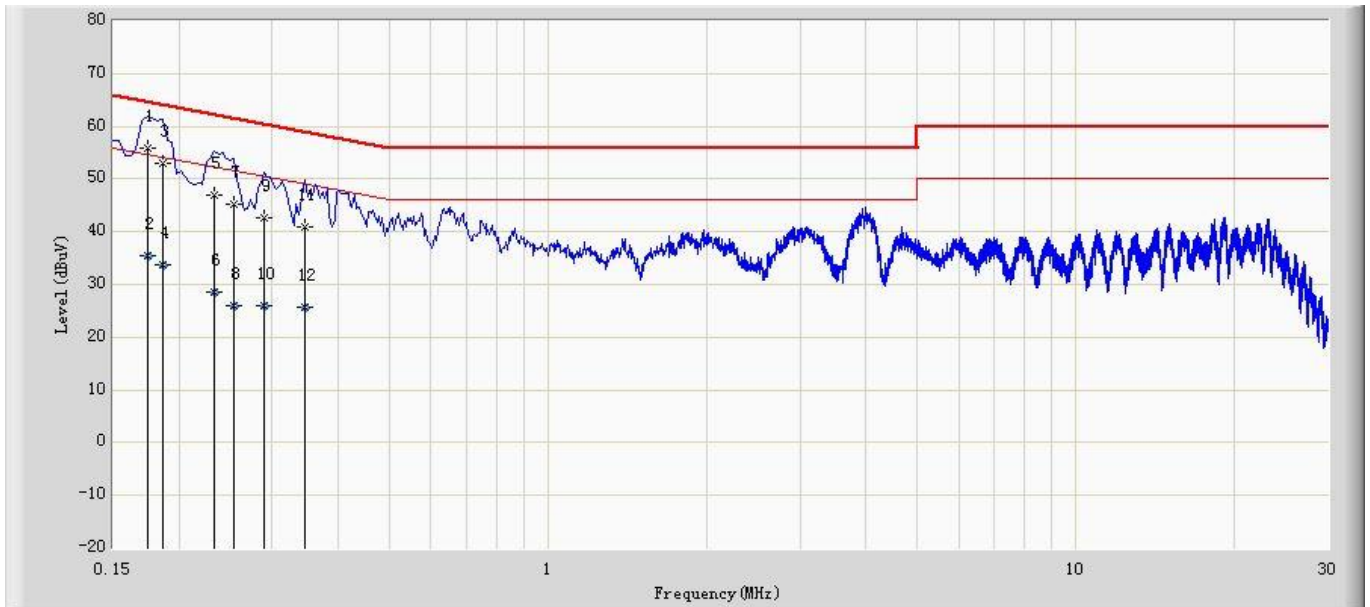
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Deviation from Test Standard

No deviation.

3.6. Test Result

Engineer: Jack	
Site: TR1	Time: 2013/04/08 - 23:10
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-N	Polarity: Neutral
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1: Charging + Camera On	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.174	55.833	46.108	-8.934	64.767	9.725	QP
2		0.174	35.574	25.849	-19.193	54.767	9.725	AV
3		0.186	52.997	43.276	-11.216	64.213	9.721	QP
4		0.186	33.770	24.049	-20.443	54.213	9.721	AV
5		0.234	46.870	37.150	-15.437	62.307	9.720	QP
6		0.234	28.556	18.836	-23.751	52.307	9.720	AV
7		0.254	45.354	35.636	-16.271	61.625	9.718	QP
8		0.254	25.842	16.124	-25.783	51.625	9.718	AV
9		0.290	42.768	33.058	-17.756	60.524	9.710	QP
10		0.290	26.081	16.371	-24.443	50.524	9.710	AV
11		0.346	40.943	31.235	-18.115	59.058	9.708	QP
12		0.346	25.690	15.982	-23.368	49.058	9.708	AV

Engineer: Jack

Site: TR1

Time: 2013/04/08 - 23:10

Limit: FCC_Part15.107_CE_AC Power_ClassB

Margin: 0

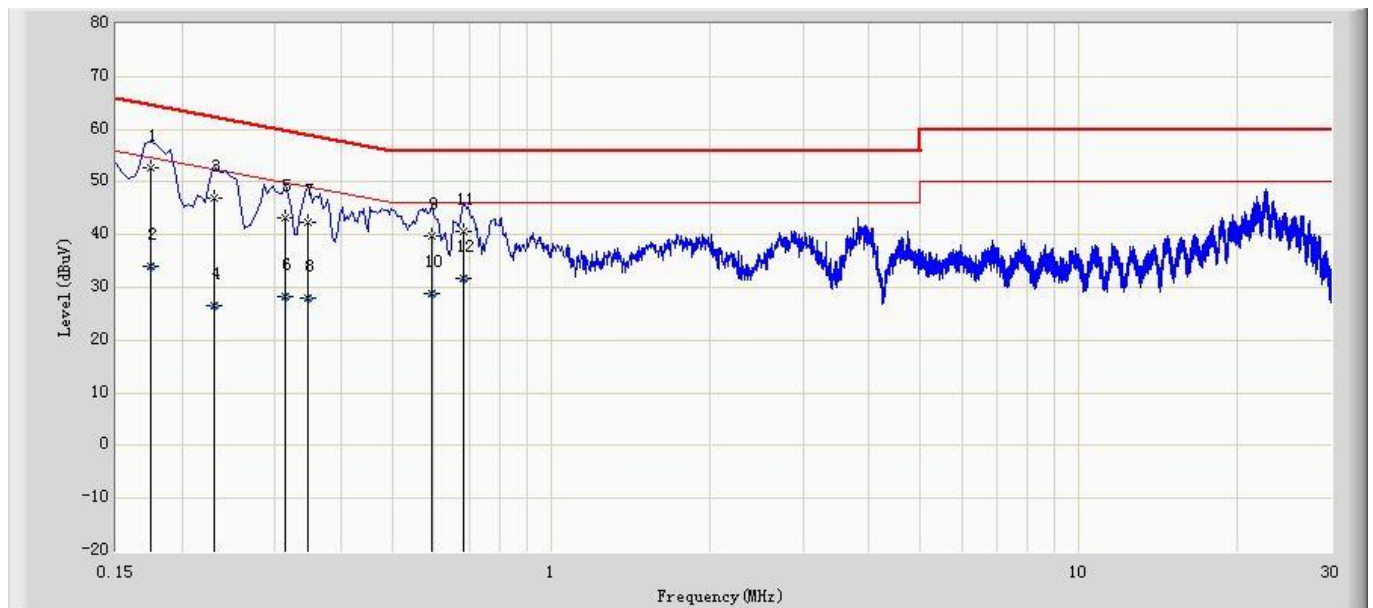
Probe: ENV216-L1

Polarity: Line

EUT: WCDMA Digital Mobile Phone

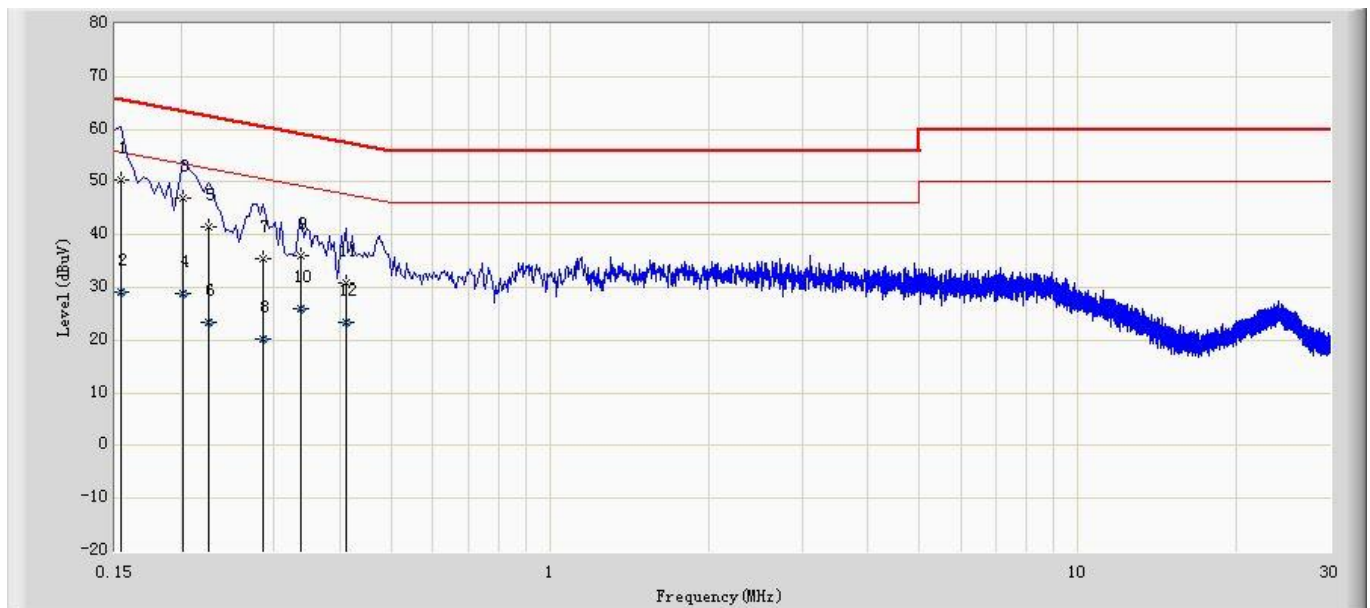
Power: AC 120V/60Hz

Note: Mode 1: Charging + Camera On



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.174	52.561	42.841	-12.206	64.767	9.720	QP
2		0.174	33.934	24.214	-20.833	54.767	9.720	AV
3		0.230	47.004	37.294	-15.446	62.450	9.710	QP
4		0.230	26.635	16.925	-25.815	52.450	9.710	AV
5		0.314	43.337	33.637	-16.527	59.864	9.700	QP
6		0.314	28.357	18.657	-21.507	49.864	9.700	AV
7		0.346	42.483	32.783	-16.575	59.058	9.700	QP
8		0.346	27.937	18.237	-21.121	49.058	9.700	AV
9		0.594	39.872	30.177	-16.128	56.000	9.695	QP
10		0.594	28.905	19.210	-17.095	46.000	9.695	AV
11		0.682	40.641	30.951	-15.359	56.000	9.690	QP
12		0.682	31.821	22.131	-14.179	46.000	9.690	AV

Engineer: Jack	
Site: TR1	Time: 2013/04/08 - 23:10
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-N	Polarity: Neutral
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2: FM	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.154	50.349	40.616	-15.432	65.781	9.733	QP
2		0.154	29.022	19.289	-26.759	55.781	9.733	AV
3		0.202	46.992	37.272	-16.536	63.528	9.720	QP
4		0.202	28.884	19.164	-24.644	53.528	9.720	AV
5		0.226	41.535	31.815	-21.060	62.595	9.720	QP
6		0.226	23.271	13.551	-29.324	52.595	9.720	AV
7		0.286	35.401	25.691	-25.239	60.640	9.710	QP
8		0.286	20.150	10.440	-30.490	50.640	9.710	AV
9		0.338	35.908	26.198	-23.344	59.252	9.710	QP
10		0.338	25.861	16.151	-23.391	49.252	9.710	AV
11		0.410	30.894	21.187	-26.754	57.648	9.707	QP
12		0.410	23.490	13.783	-24.158	47.648	9.707	AV

Engineer: Jack

Site: TR1

Time: 2013/04/08 - 23:10

Limit: FCC_Part15.107_CE_AC Power_ClassB

Margin: 0

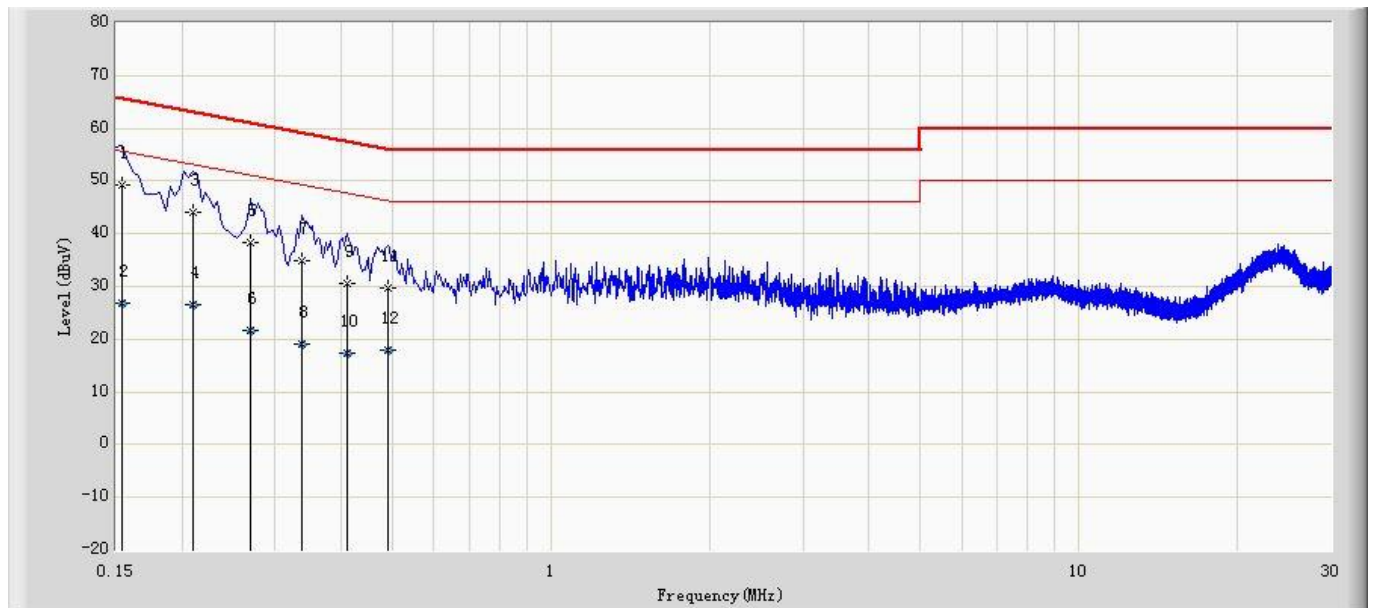
Probe: ENV216-L1

Polarity: Line

EUT: WCDMA Digital Mobile Phone

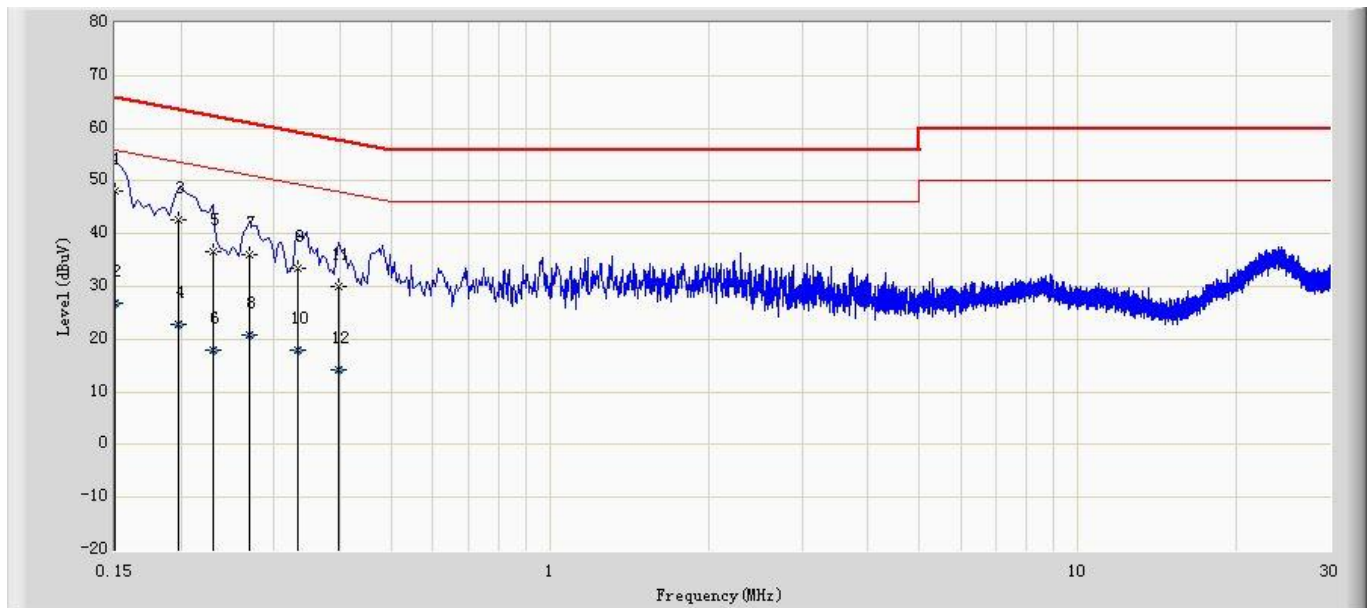
Power: AC 120V/60Hz

Note: Mode 2: FM



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.154	49.127	39.394	-16.654	65.781	9.733	QP
2		0.154	26.954	17.221	-28.827	55.781	9.733	AV
3		0.210	44.110	34.400	-19.095	63.205	9.710	QP
4		0.210	26.584	16.874	-26.621	53.205	9.710	AV
5		0.270	38.412	28.709	-22.706	61.118	9.703	QP
6		0.270	21.743	12.040	-29.375	51.118	9.703	AV
7		0.338	34.782	25.082	-24.470	59.252	9.700	QP
8		0.338	19.220	9.520	-30.032	49.252	9.700	AV
9		0.410	30.446	20.743	-27.202	57.648	9.703	QP
10		0.410	17.425	7.722	-30.223	47.648	9.703	AV
11		0.490	29.817	20.117	-26.351	56.168	9.700	QP
12		0.490	18.066	8.366	-28.102	46.168	9.700	AV

Engineer: Jack	
Site: TR1	Time: 2013/04/08 - 23:11
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-L1	Polarity: Line
EUT: WCDMA Digital 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	*	0.150	48.245	38.509	-17.755	66.000	9.736	QP
2		0.150	26.882	17.146	-29.118	56.000	9.736	AV
3		0.198	42.660	32.950	-21.034	63.694	9.710	QP
4		0.198	22.713	13.003	-30.981	53.694	9.710	AV
5		0.230	36.524	26.814	-25.926	62.450	9.710	QP
6		0.230	18.028	8.318	-34.422	52.450	9.710	AV
7		0.270	36.003	26.300	-25.115	61.118	9.703	QP
8		0.270	20.893	11.190	-30.225	51.118	9.703	AV
9		0.334	33.315	23.615	-26.036	59.351	9.700	QP
10		0.334	17.913	8.213	-31.438	49.351	9.700	AV
11		0.398	30.051	20.348	-27.844	57.895	9.703	QP
12		0.398	14.100	4.397	-33.795	47.895	9.703	AV

Engineer: Jack

Site: TR1

Time: 2013/04/08 - 23:11

Limit: FCC_Part15.107_CE_AC Power_ClassB

Margin: 0

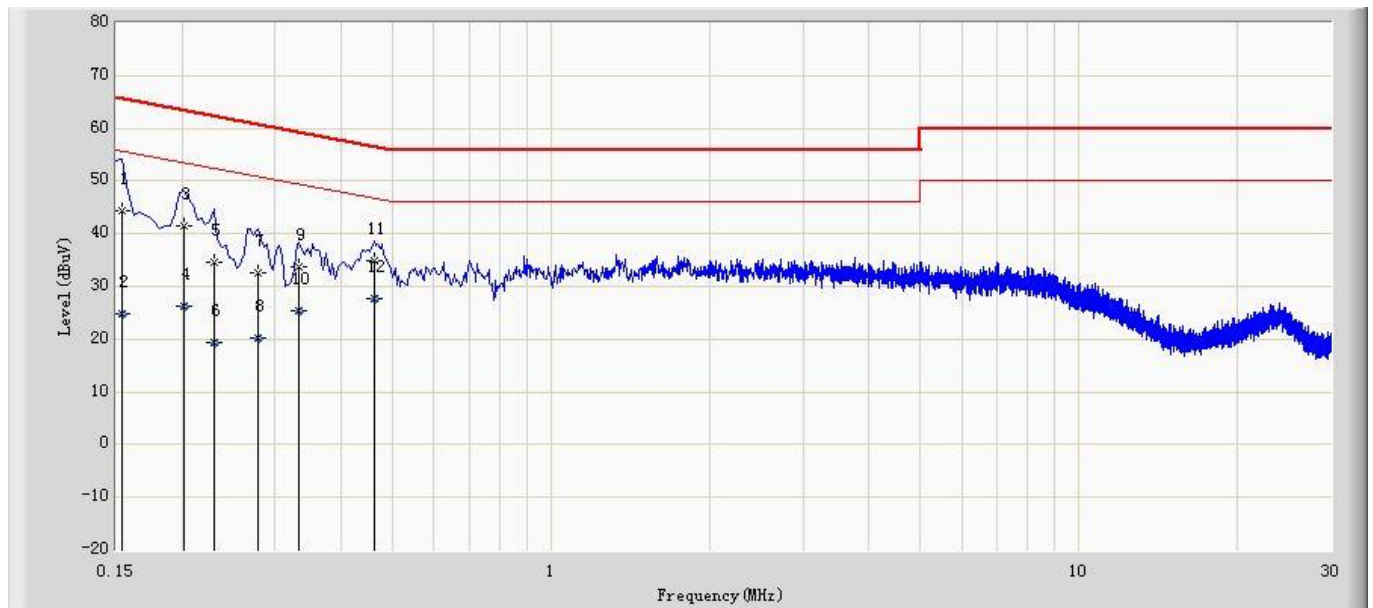
Probe: ENV216-N

Polarity: Neutral

EUT: WCDMA Digital Mobile Phone

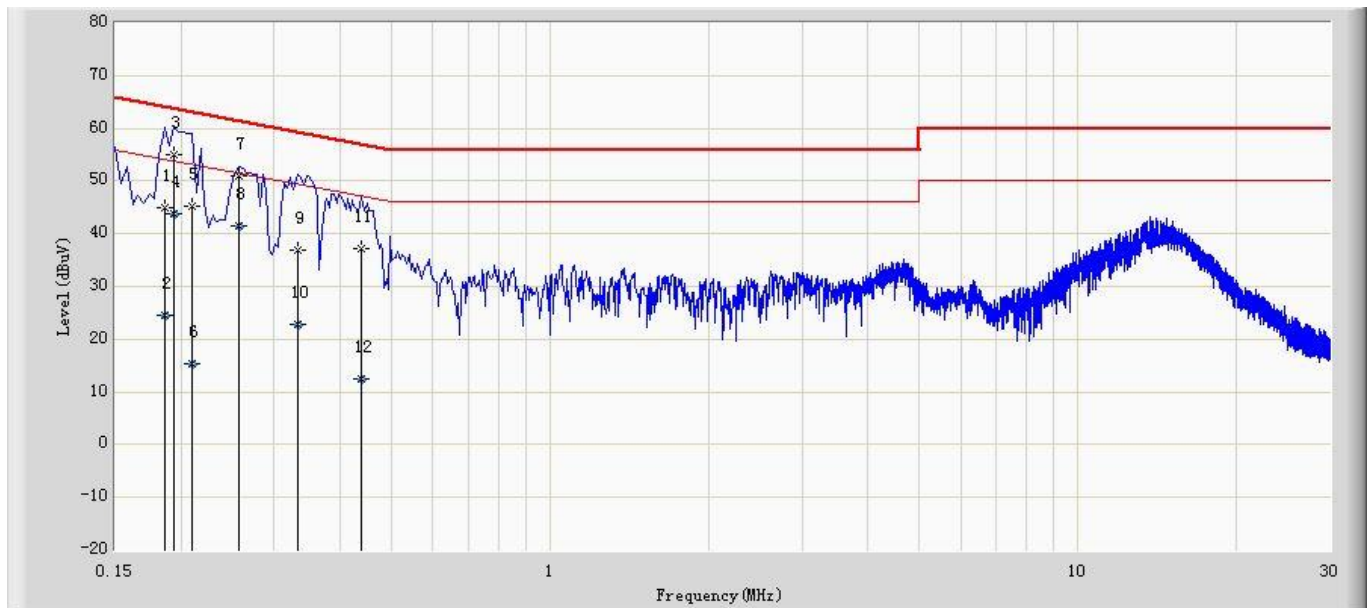
Power: AC 120V/60Hz

Note: Mode 3: GPS Receive



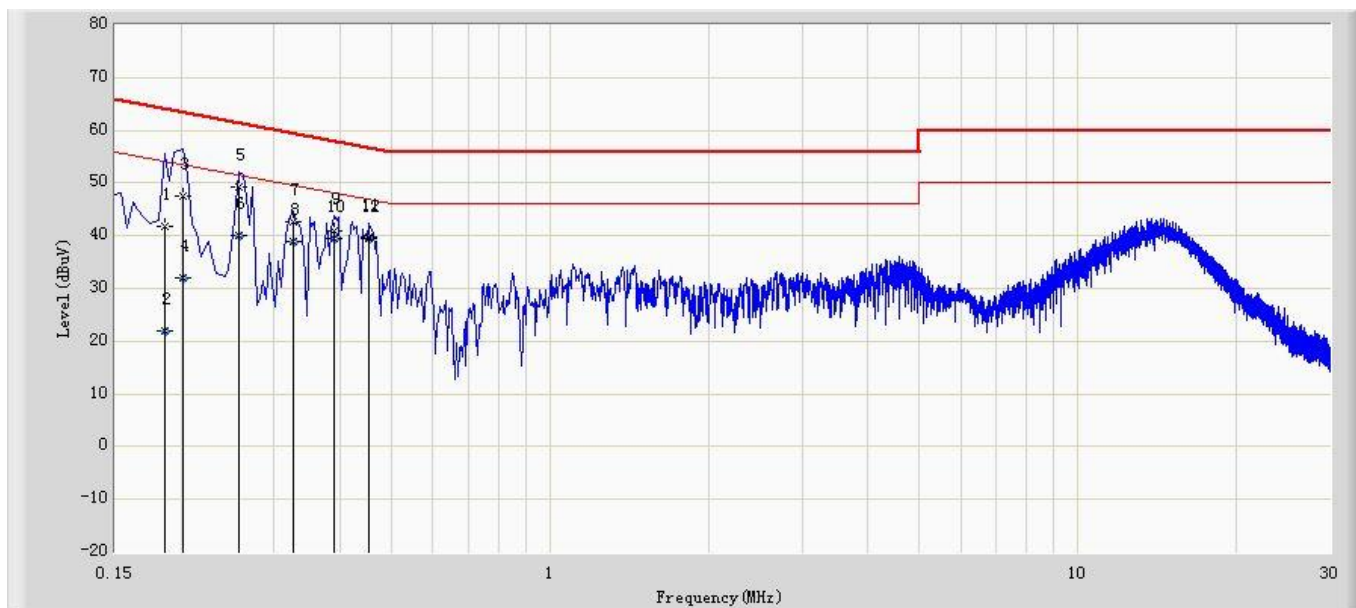
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.154	44.301	34.568	-21.480	65.781	9.733	QP
2		0.154	24.858	15.125	-30.923	55.781	9.733	AV
3		0.202	41.423	31.703	-22.105	63.528	9.720	QP
4		0.202	26.385	16.665	-27.143	53.528	9.720	AV
5		0.230	34.550	24.830	-27.900	62.450	9.720	QP
6		0.230	19.326	9.606	-33.124	52.450	9.720	AV
7		0.278	32.600	22.890	-28.275	60.875	9.710	QP
8		0.278	20.104	10.394	-30.771	50.875	9.710	AV
9		0.334	33.667	23.957	-25.684	59.351	9.710	QP
10		0.334	25.487	15.777	-23.864	49.351	9.710	AV
11		0.462	34.970	25.270	-21.687	56.657	9.700	QP
12	*	0.462	27.705	18.005	-18.952	46.657	9.700	AV

Engineer: Jack	
Site: TR1	Time: 2013/04/08 - 23:11
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-L1	Polarity: Line
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 4: USB Copy	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.186	45.057	35.345	-19.156	64.213	9.712	QP
2		0.186	24.509	14.797	-29.704	54.213	9.712	AV
3	*	0.194	54.928	45.218	-8.936	63.864	9.710	QP
4		0.194	43.715	34.005	-10.149	53.864	9.710	AV
5		0.210	45.340	35.630	-17.865	63.205	9.710	QP
6		0.210	15.415	5.705	-37.790	53.205	9.710	AV
7		0.258	50.874	41.167	-10.622	61.496	9.707	QP
8		0.258	41.414	31.707	-10.082	51.496	9.707	AV
9		0.334	36.786	27.086	-22.565	59.351	9.700	QP
10		0.334	22.927	13.227	-26.424	49.351	9.700	AV
11		0.438	37.216	27.516	-19.884	57.100	9.700	QP
12		0.438	12.510	2.810	-34.590	47.100	9.700	AV

Engineer: Jack	
Site: TR1	Time: 2013/04/08 - 23:11
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216-N	Polarity: Neutral
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 4: USB Copy	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.186	41.725	32.004	-22.488	64.213	9.721	QP
2		0.186	21.931	12.210	-32.282	54.213	9.721	AV
3		0.202	47.519	37.799	-16.009	63.528	9.720	QP
4		0.202	31.891	22.171	-21.637	53.528	9.720	AV
5		0.258	49.181	39.464	-12.315	61.496	9.717	QP
6		0.258	40.159	30.442	-11.337	51.496	9.717	AV
7		0.326	42.570	32.860	-16.982	59.552	9.710	QP
8		0.326	38.795	29.085	-10.757	49.552	9.710	AV
9		0.390	40.907	31.207	-17.157	58.064	9.700	QP
10		0.390	39.343	29.643	-8.721	48.064	9.700	AV
11		0.454	39.808	30.106	-16.994	56.802	9.702	QP
12	*	0.454	39.379	29.677	-7.423	46.802	9.702	AV

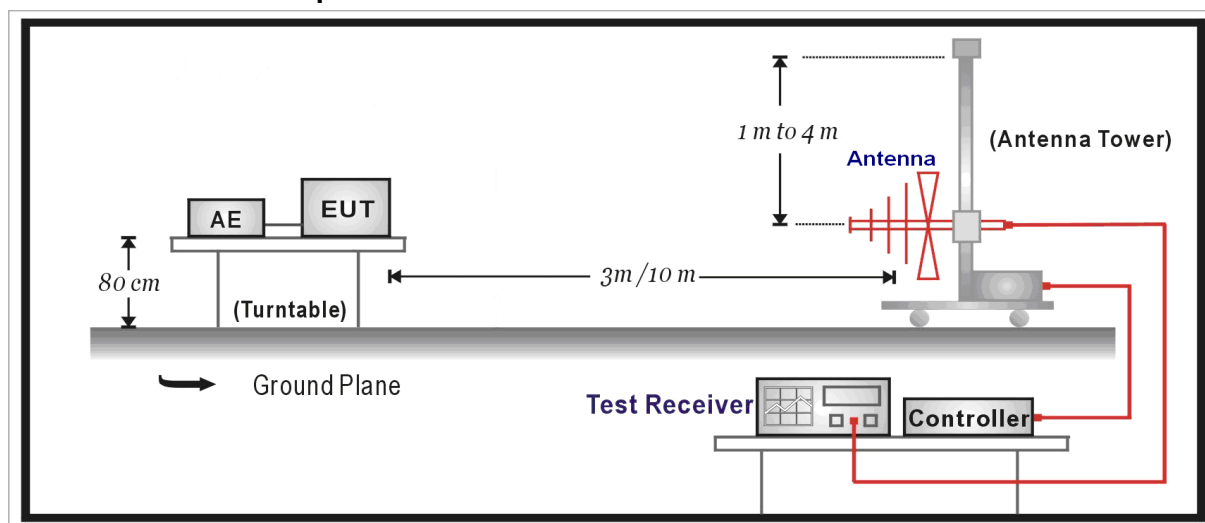
4. Radiated disturbance

4.1. Test Specification

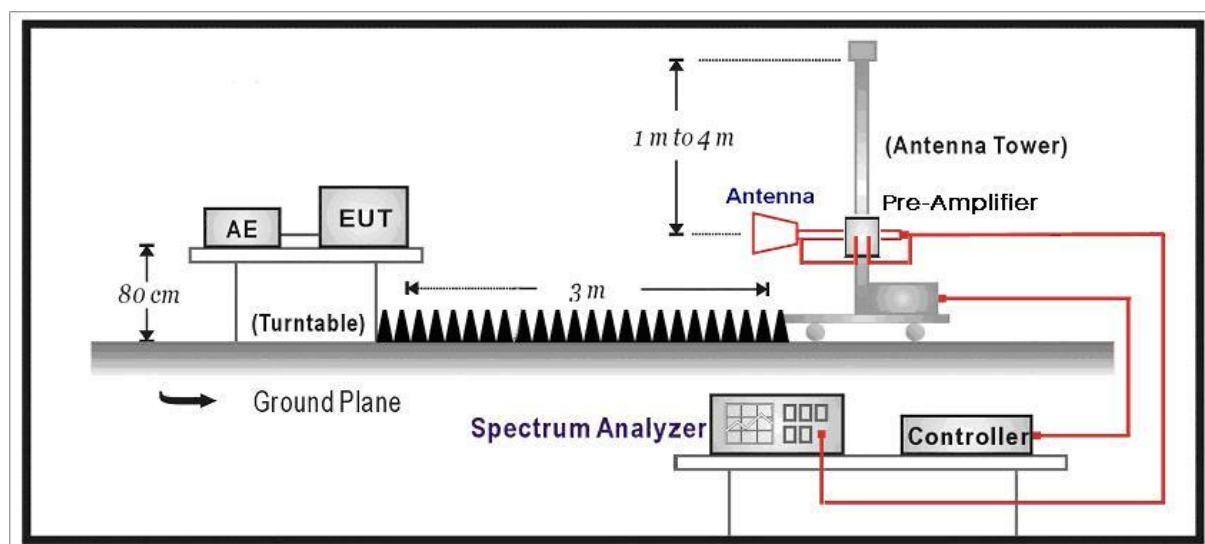
According to EMC Standard: FCC Part 15.109 Class B and ANSI C63.4

4.2. Test Setup

Below 1GHz Test Setup



Above 1GHz Test Setup



4.3. Limit

Limits for Radiated disturbance of class A ITE at a measuring distance of 10m	
Frequency of Emission (MHz)	Field Strength dB(μV/m)
30 to 88	39
88 to 216	43.5
216 to 960	46.4
Above 960	49.5
NOTE: The lower limit shall apply at the transition frequency.	

Limits for Radiated disturbance of class B ITE at a measuring distance of 3m	
Frequency of Emission (MHz)	Field Strength dB(μV/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960	54
NOTE: The lower limit shall apply at the transition frequency.	

4.4. Test Procedure

The EUT and its simulators are placed on a turntable which is 0.8 meter above ground. The turntable 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 changed during radiated measurement.

The bandwidth below 1GHz setting on the receiver is 120kHz and above 1GHz is 1MHz.

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 to 108	1000
108 to 500	2000
500 to 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

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

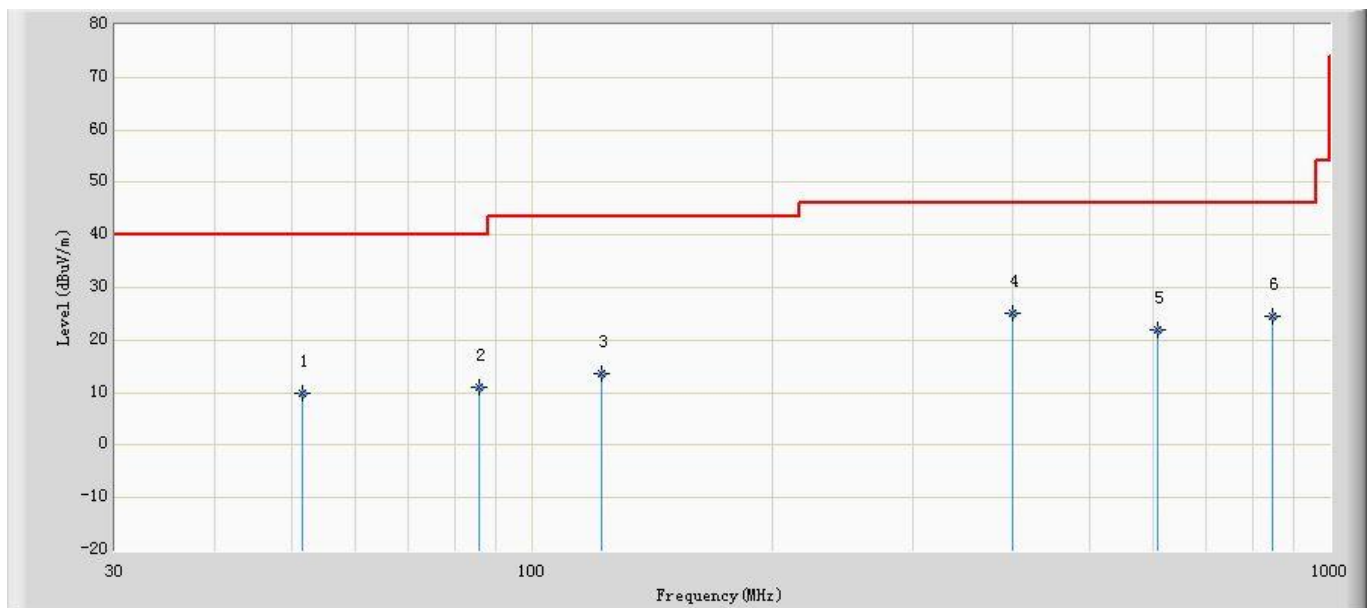
When average radiated emission measurement are included emission measurement Above 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

4.5. Deviation from Test Standard

No deviation.

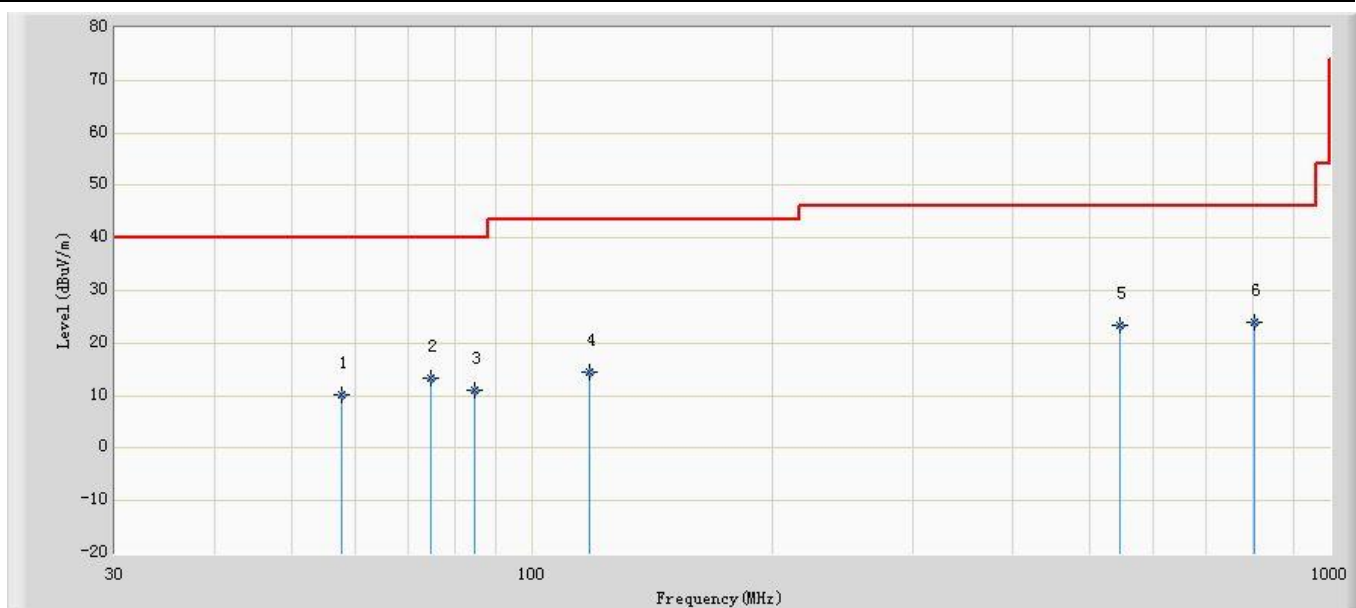
4.6. Test Result

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:22
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1: Charging + Camera on	



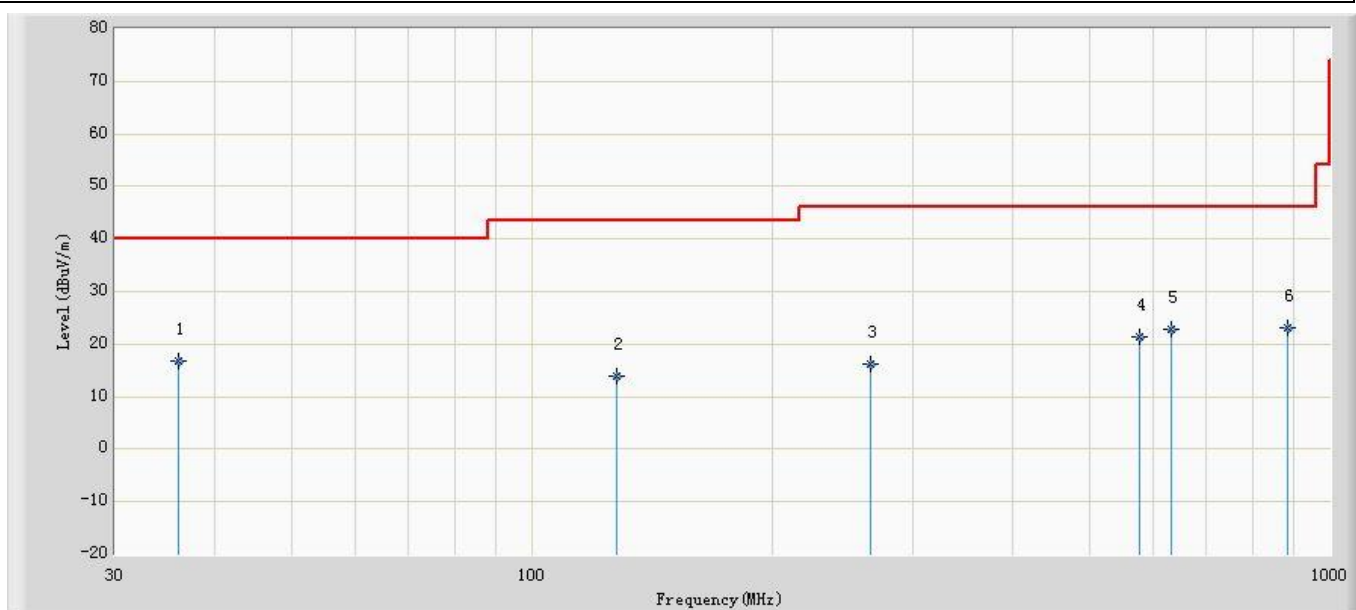
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		51.470	9.785	1.054	-30.215	40.000	8.731	QP
2		85.650	11.020	1.840	-28.980	40.000	9.181	QP
3		122.241	13.710	0.154	-29.790	43.500	13.557	QP
4	*	400.005	25.083	6.870	-20.917	46.000	18.213	QP
5		608.005	21.973	0.274	-24.027	46.000	21.699	QP
6		845.622	24.586	1.021	-21.414	46.000	23.565	QP

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:23
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1: Charging + Camera on	



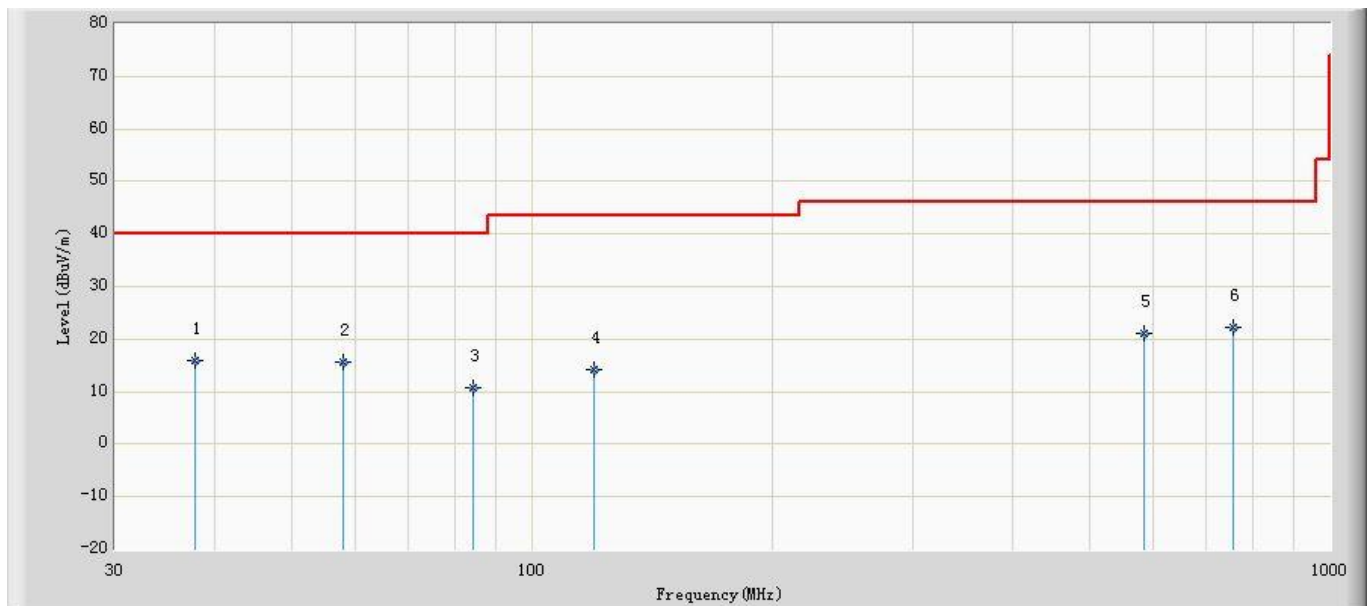
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		57.650	10.040	2.320	-29.960	40.000	7.720	QP
2		74.800	13.276	5.710	-26.724	40.000	7.566	QP
3		84.651	11.018	2.051	-28.982	40.000	8.967	QP
4		117.810	14.424	0.841	-29.076	43.500	13.583	QP
5		544.600	23.447	2.041	-22.553	46.000	21.405	QP
6	*	803.843	23.860	0.710	-22.140	46.000	23.150	QP

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:23
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2: FM	



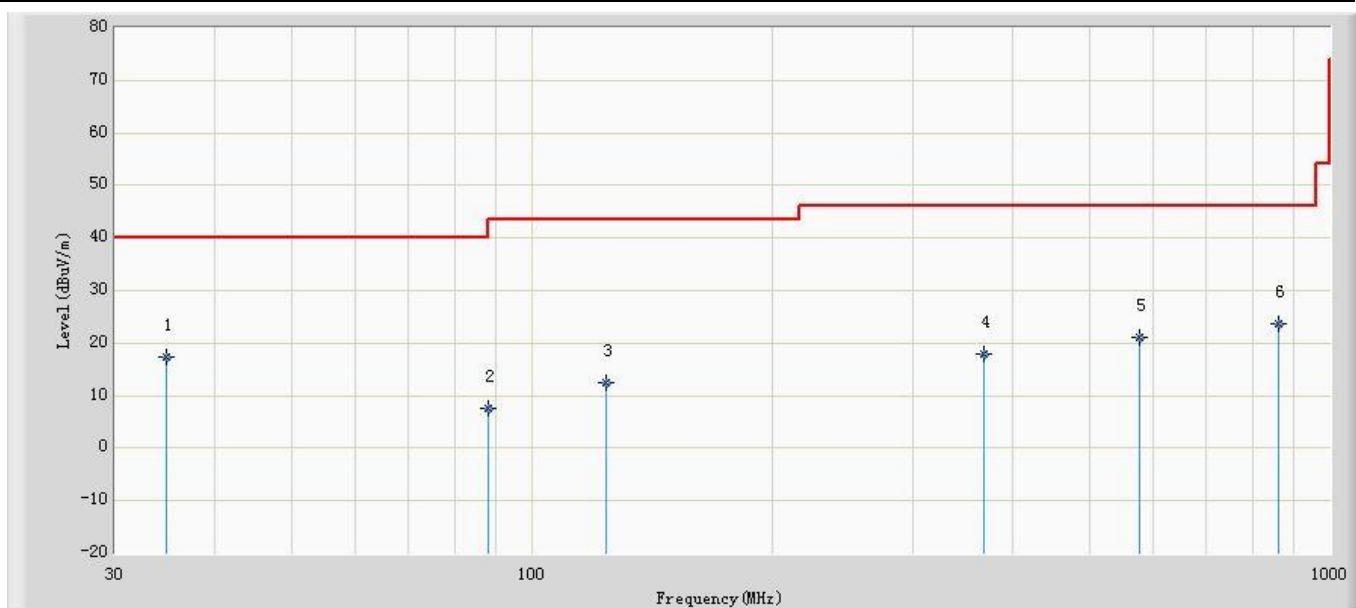
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		36.011	16.675	0.710	-23.325	40.000	15.965	QP
2		127.840	13.991	0.741	-29.509	43.500	13.250	QP
3		265.610	16.142	1.021	-29.858	46.000	15.121	QP
4		576.024	21.379	-0.240	-24.621	46.000	21.619	QP
5		631.840	22.814	1.054	-23.186	46.000	21.760	QP
6	*	886.400	23.213	-0.540	-22.787	46.000	23.753	QP

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:24
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2: FM	



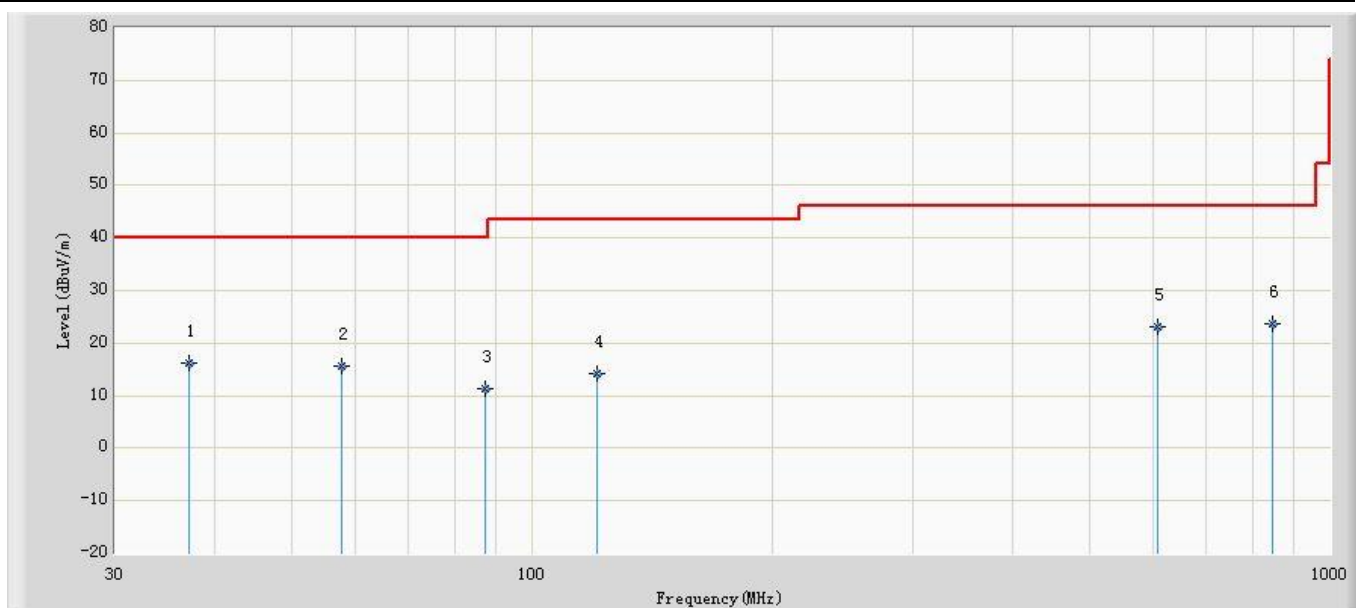
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		37.841	16.023	1.100	-23.977	40.000	14.923	QP
2		57.950	15.609	7.940	-24.391	40.000	7.669	QP
3		84.312	10.739	1.844	-29.261	40.000	8.895	QP
4		119.510	14.095	0.440	-29.405	43.500	13.655	QP
5		585.100	21.100	-0.540	-24.900	46.000	21.640	QP
6	*	756.950	22.327	-0.541	-23.673	46.000	22.868	QP

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:24
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 3: GPS Receive	



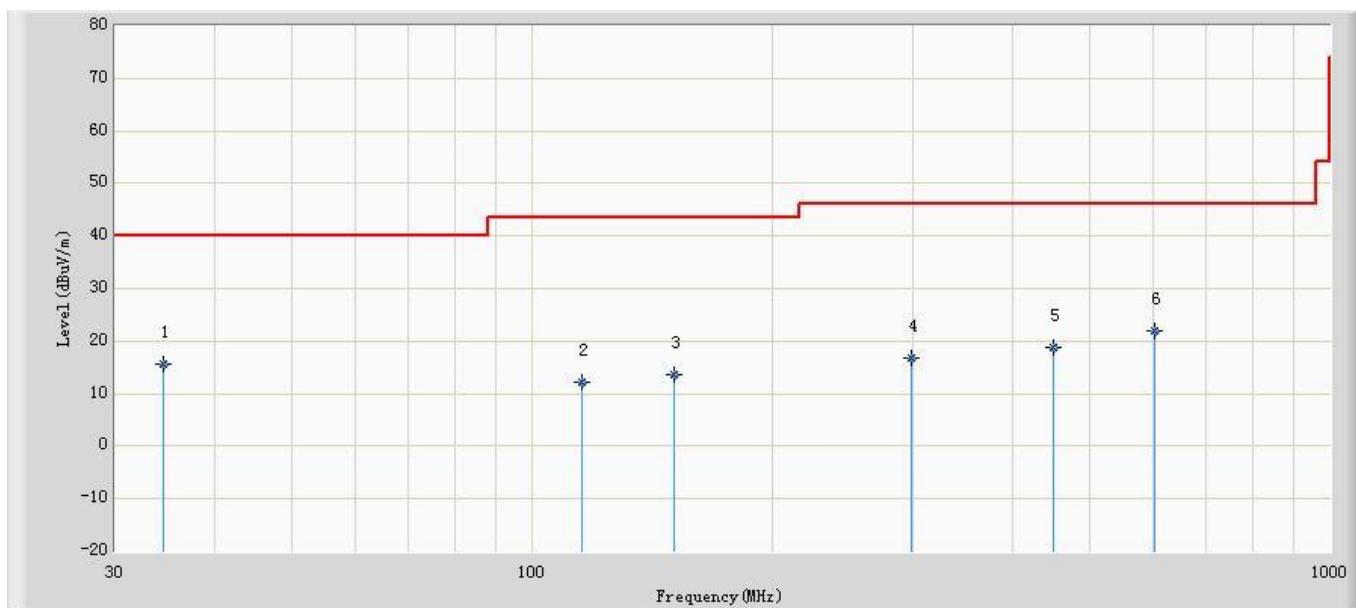
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		34.854	17.366	0.741	-22.634	40.000	16.625	QP
2		87.945	7.627	-2.051	-32.373	40.000	9.678	QP
3		123.840	12.350	-1.120	-31.150	43.500	13.470	QP
4		368.840	17.905	0.612	-28.095	46.000	17.293	QP
5		576.012	21.078	-0.541	-24.922	46.000	21.619	QP
6	*	863.410	23.758	0.100	-22.242	46.000	23.658	QP

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:24
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 3: GPS Receive	



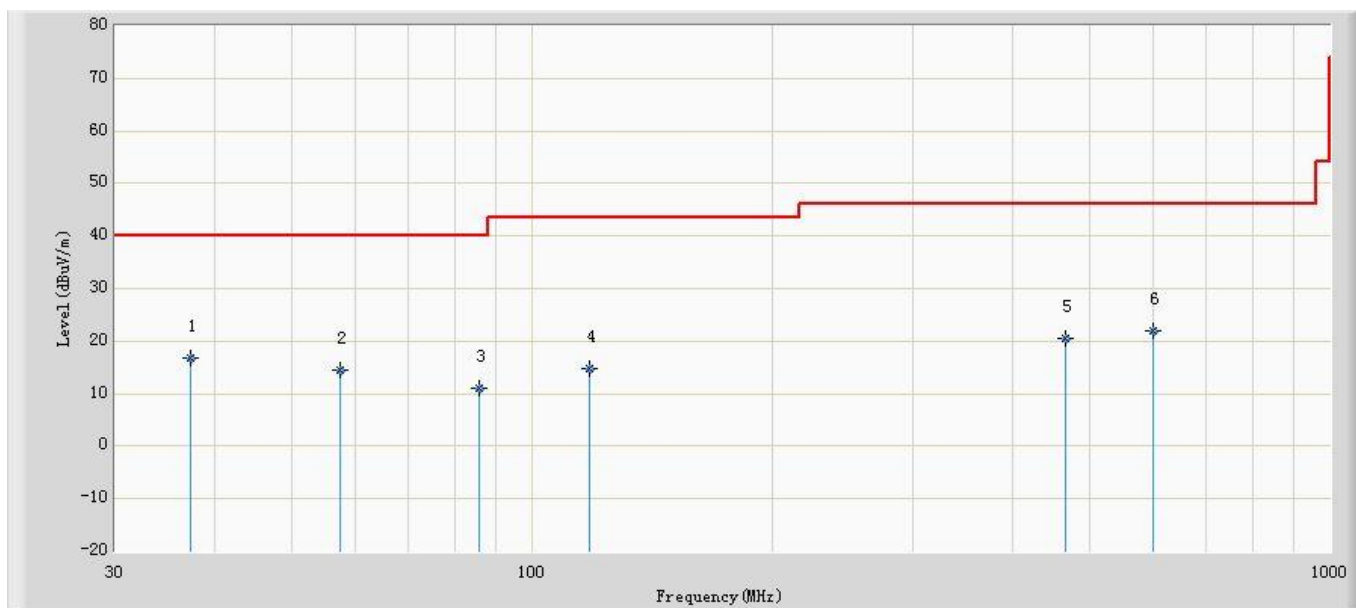
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		37.160	16.152	0.841	-23.848	40.000	15.311	QP
2		57.650	15.561	7.841	-24.439	40.000	7.720	QP
3		87.416	11.421	1.854	-28.579	40.000	9.567	QP
4		120.854	14.065	0.430	-29.435	43.500	13.635	QP
5		608.004	23.209	1.510	-22.791	46.000	21.699	QP
6	*	848.320	23.693	0.100	-22.307	46.000	23.592	QP

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:25
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 4: USB Copy	



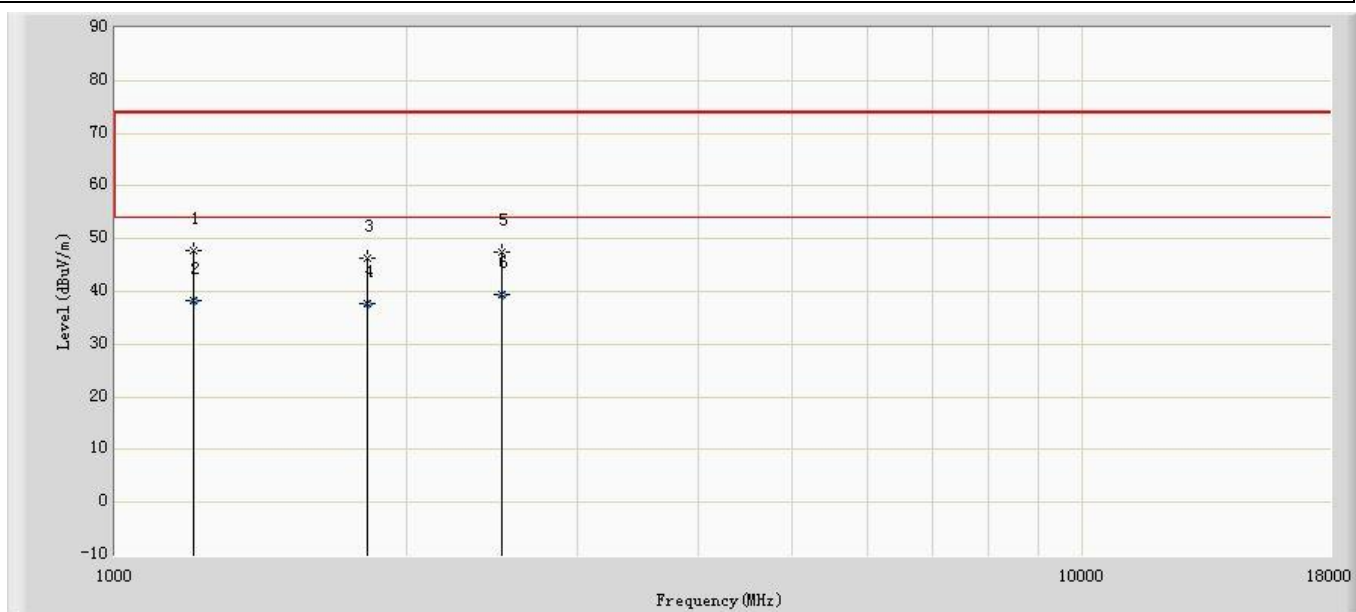
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		34.510	15.770	-1.051	-24.230	40.000	16.820	QP
2		115.500	12.240	-1.240	-31.260	43.500	13.480	QP
3		150.612	13.603	1.810	-29.897	43.500	11.793	QP
4		299.041	16.741	1.510	-29.259	46.000	15.231	QP
5		450.612	18.789	-0.541	-27.211	46.000	19.330	QP
6	*	602.440	22.090	0.410	-23.910	46.000	21.680	QP

Engineer: Brgant	
Site: AC2	Time: 2013/04/08 - 21:26
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 4: USB Copy	



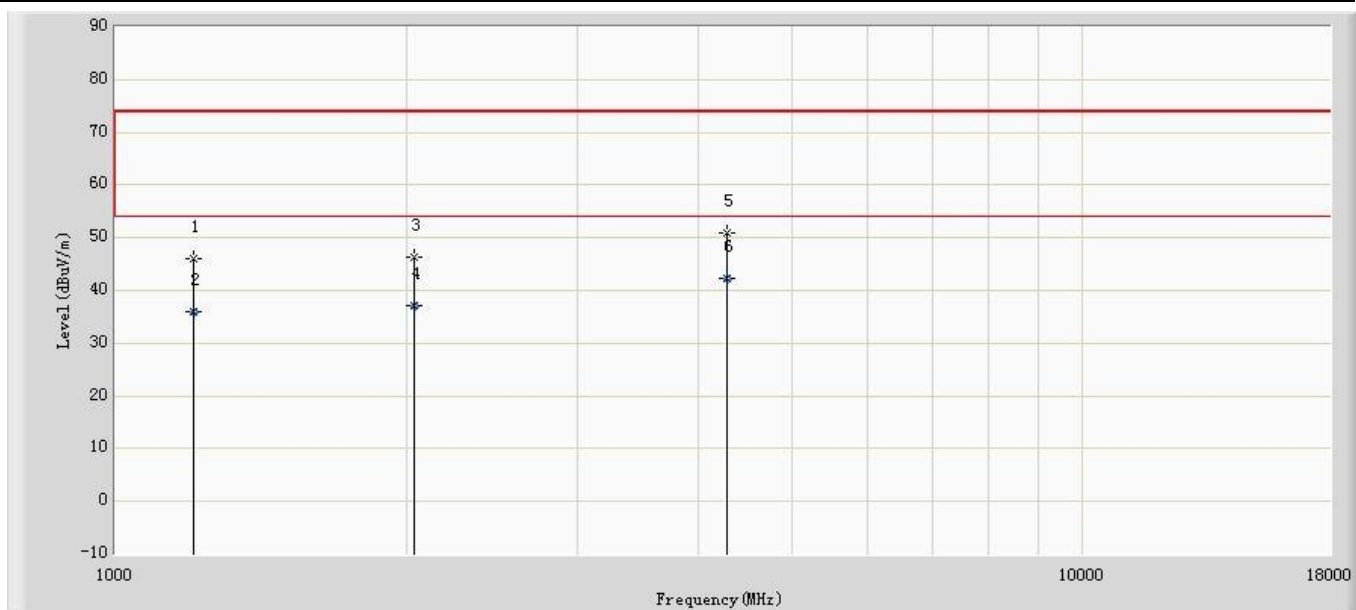
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	37.384	16.723	1.540	-23.277	40.000	15.183	QP
2		57.500	14.487	6.742	-25.513	40.000	7.745	QP
3		85.645	10.921	1.742	-29.079	40.000	9.180	QP
4		118.041	14.633	1.041	-28.867	43.500	13.592	QP
5		466.645	20.487	0.871	-25.513	46.000	19.616	QP
6		599.641	22.083	0.410	-23.917	46.000	21.673	QP

Engineer: Brgant	
Site: AC5	Time: 2013/04/08 - 22:05
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1:Charging+Camera on	



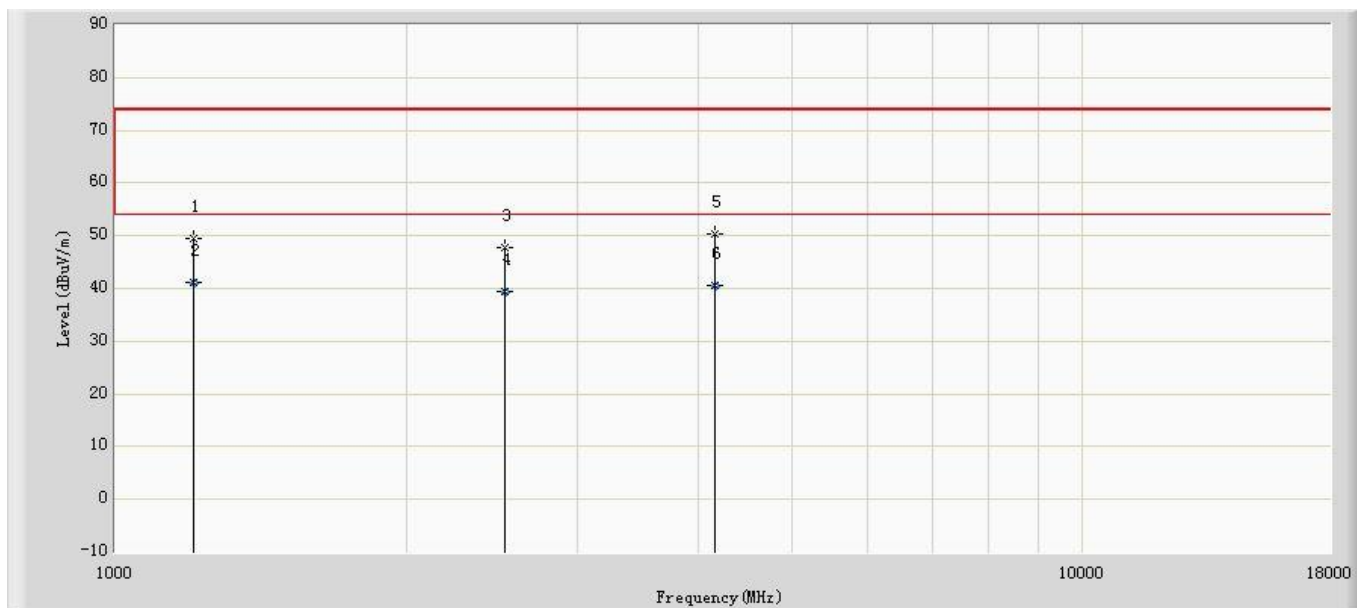
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1204.000	47.877	53.715	-26.123	74.000	-5.838	PK
2		1204.640	38.221	44.057	-15.779	54.000	-5.836	AV
3		1824.500	46.277	50.354	-27.723	74.000	-4.077	PK
4		1824.795	37.764	41.841	-16.236	54.000	-4.078	AV
5		2513.000	47.433	48.934	-26.567	74.000	-1.501	PK
6	*	2513.640	39.395	40.894	-14.605	54.000	-1.499	AV

Engineer: Brgant	
Site: AC5	Time: 2013/04/08 - 22:05
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 1:Charging+Camera on	



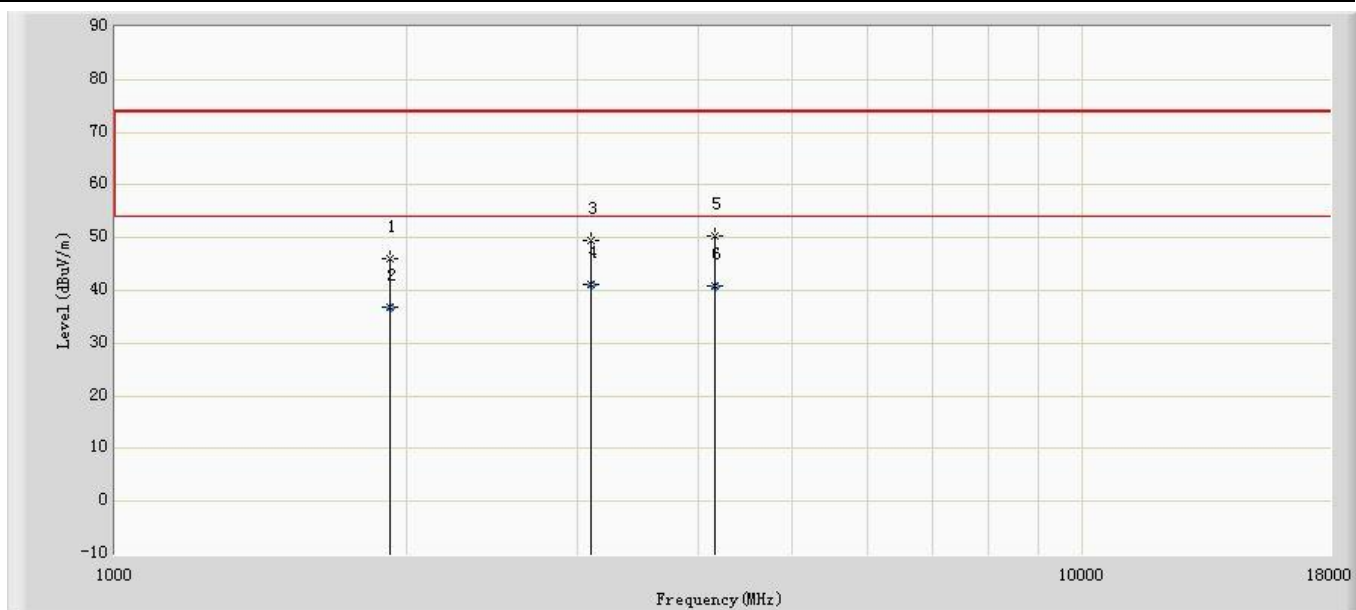
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1204.000	45.980	51.818	-28.020	74.000	-5.838	PK
2		1204.840	35.975	41.810	-18.025	54.000	-5.836	AV
3		2037.000	46.288	49.921	-27.712	74.000	-3.633	PK
4		2037.600	37.170	40.800	-16.830	54.000	-3.630	AV
5		4289.500	51.052	47.734	-22.948	74.000	3.318	PK
6	*	4289.970	42.234	38.914	-11.766	54.000	3.319	AV

Engineer: Brgant	
Site: AC5	Time: 2013/04/08 - 22:05
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2:FM	



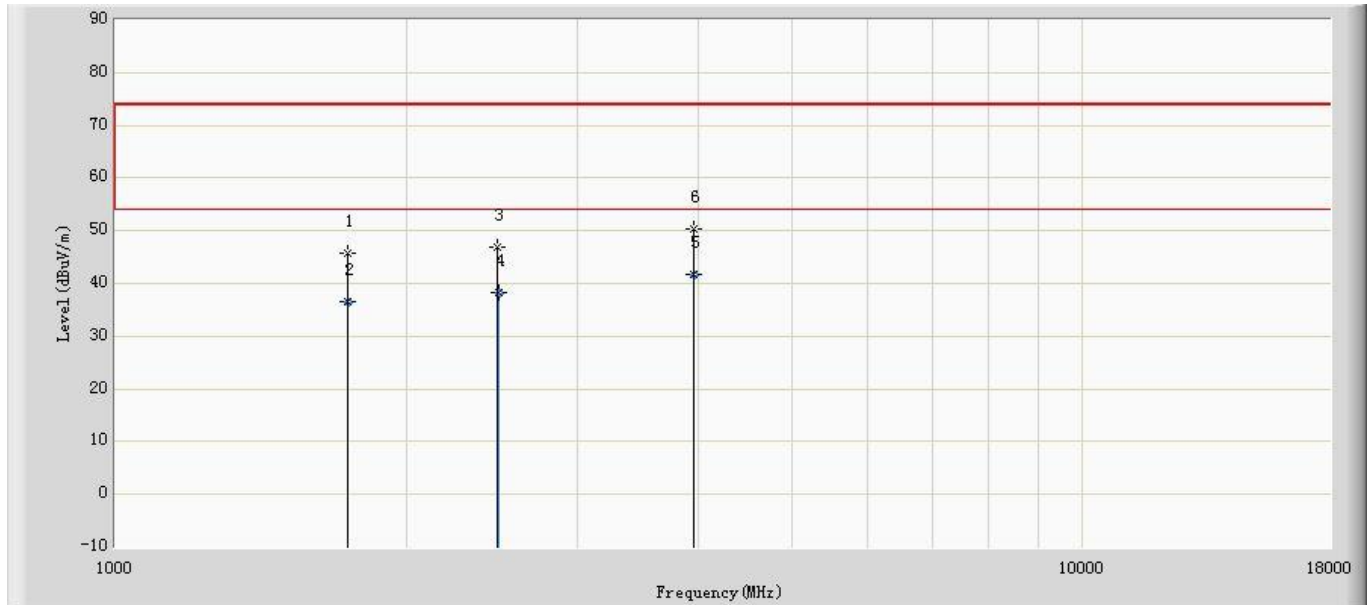
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1204.000	49.440	55.278	-24.560	74.000	-5.838	PK
2	*	1204.840	41.006	46.841	-12.994	54.000	-5.836	AV
3		2530.000	47.627	49.071	-26.373	74.000	-1.444	PK
4		2530.420	39.319	40.762	-14.681	54.000	-1.443	AV
5		4170.500	50.342	47.480	-23.658	74.000	2.862	PK
6		4170.561	40.483	37.620	-13.517	54.000	2.862	AV

Engineer: Brgant	
Site: AC5	Time: 2013/04/08 - 22:05
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: WCDMA Digital Mobile Phone	Power: AC 120V/60Hz
Note: Mode 2:FM	



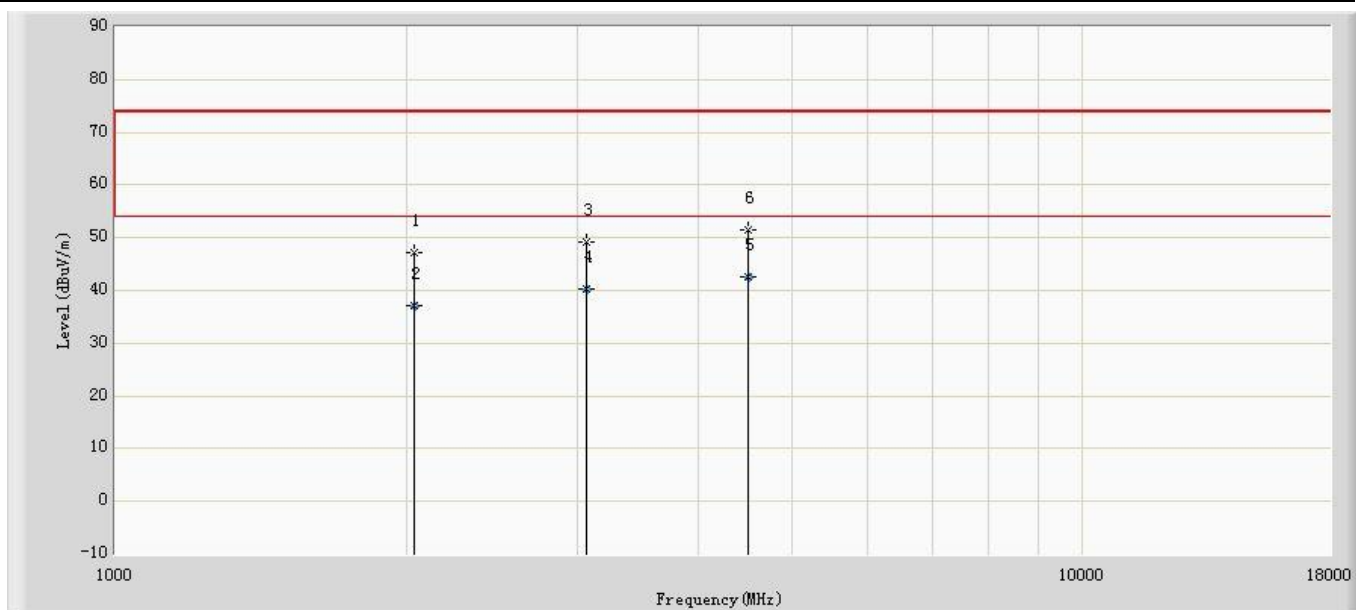
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1926.500	45.908	49.830	-28.092	74.000	-3.922	PK
2		1926.645	36.920	40.842	-17.080	54.000	-3.922	AV
3		3108.000	49.452	49.183	-24.548	74.000	0.269	PK
4	*	3108.650	41.014	40.743	-12.986	54.000	0.271	AV
5		4170.500	50.368	47.506	-23.632	74.000	2.862	PK
6		4170.564	40.758	37.895	-13.242	54.000	2.862	AV

Engineer: Brgant	
Site: AC5	Time: 2013/04/08 - 22:06
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: WCDMA Digital 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		1739.500	45.854	50.031	-28.146	74.000	-4.177	PK
2		1740.054	36.663	40.840	-17.337	54.000	-4.176	AV
3		2487.500	46.800	48.394	-27.200	74.000	-1.594	PK
4		2487.654	38.247	39.841	-15.753	54.000	-1.593	AV
5	*	3966.412	41.683	39.541	-12.317	54.000	2.143	AV
6		3966.500	50.366	48.223	-23.634	74.000	2.143	PK

Engineer: Brgant	
Site: AC5	Time: 2013/04/08 - 22:06
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: WCDMA Digital 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		2037.000	47.170	50.803	-26.830	74.000	-3.633	PK
2		2037.451	37.110	40.741	-16.890	54.000	-3.631	AV
3		3074.000	49.066	48.823	-24.934	74.000	0.243	PK
4		3074.221	40.248	40.005	-13.752	54.000	0.243	AV
5	*	4510.410	42.662	38.410	-11.338	54.000	4.253	AV
6		4510.500	51.432	47.179	-22.568	74.000	4.253	PK

The End