Report No: CCIS13010000603

FCC REPORT

Applicant:	ABBA INNOVATIONS.A.S
Address of Applicant:	Calle 76 No. 52-40 Local 1 Alto Prado Barranquilla Colombia

Equipment Under Test (EUT)

Product Name:	Mobile Phone
Model No.:	S2, S3, S2i, Q3, S5, S7,Q6
Trade Mark:	Taxcel, yaddas ,airus, tellme
FCC ID:	Z87ABBAS2I
Applicable standards:	FCC CFR Title 47 Part 15 Subpart B: 2011
Date of sample receipt:	15 Jan., 2013
Date of Test:	16-24 Jan., 2013
Date of report issued:	25 Jan., 2013
Test Result :	Pass *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Bruce Zhang
Laboratory Manager

2 Version

Version No.	Date	Description
00	25 Jan., 2013	*Original*

Prepared By: Lisa chen ***Date:*** 25 Jan., 2013

Report Clerk

Check By: Joe. Zhou ***Date:*** 25 Jan., 2013

Project Engineer

3 Contents

Page

4 Test Summary

Test Item	Section in CFR 47	Result
Conducted Emission	Part15.107	Pass
Readiated Emissions	Part15.109	Pass

Pass: The EUT complies with the essential requirements in the standard.

5 General Information

5.1 Client Information

Applicant:	ABBA INNOVATIONS.A.S
Address of Applicant:	Calle 76 No. 52-40 Local 1 Alto Prado Barranquilla Colombia
Manufacturer/ Factory:	MOVICOM TECHNOLOGY CO.,LIMITED.
Address of Manufacturer/ Factory:	B, Xingheshiji Bldg. 3069, Caitian Rd., Futian District, Shenzhen, China

5.2 General Description of E.U.T.

Product Name:	Mobile Phone
Model No.:	S2, S3, S2i, Q3, S5, S7,Q6
Trade Mark:	Taxcel, yaddas ,airus, tellme
AC adapter:	Input:100-240V AC,50/60Hz 0.2A Output:5V DC MAX500mA
Power supply:	Rechargeable Li-ion Battery DC3.7V/800mAh
Remarks：	Model No. S2, S3, S2i, Q3, S5, S7 and Q6 were indentical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being the mode No. and the color of the appearance. We selected the S2i for full test.

5.3 Operating Modes

Operating mode	Detail description
Downloading mode	Keep the EUT in Downloading mode(Worst case)
FM mode	Keep the EUT in FM receiving mode
Camera mode	Keep the EUT in Camera mode
Play mode	Keep the EUT in Play mode
Recording mode	Keep the EUT in Recording mode
All modes have been tested, But the worst case mode data has been shown in this report.	

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
HP	Printer	P1007	VNFP409729	DoC
HP	PC	Pro 2000MT	N/A	DoC
HP	MONITOR	CompaqLE1851WL	515682-070	DoC
HP	KEYBOARD	SK-2880	434820-AA2	DoC
HP	MOUSE	MOC5UO	N/A	DoC

5.5 Deviation from Standards

None

5.6 Abnormalities from Standard Conditions

None.

5.7 Other Information Requested by the Customer

None.

5.8 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.:** 817957

China Certification & Inspection Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012

● **Industry Canada (IC)**

The 3m Semi-anechoic chamber of China Certification & Inspection Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

5.9 Test Location

All tests were performed at:

China Certification & Inspection Services Co., Ltd.
Address: 1st Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China
Tel: 0755-23118282
Fax: 0755-23116366

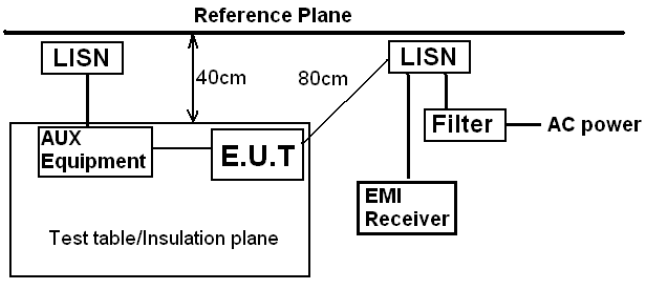
6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (dd-mm-yy)**	**Cal.Due date (dd-mm-yy)**
1	3m Semi- Anechoic Chamber	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	June 09 2012	June 08 2013
2	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	June 04 2012	June 03 2013
3	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	May 30 2012	May 29 2013
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
5	Coaxial Cable	CCIS	N/A	CCIS0016	Apr. 01 2012	Mar. 31 2013
6	Coaxial Cable	CCIS	N/A	CCIS0017	Apr. 01 2012	Mar. 31 2013
7	Coaxial cable	CCIS	N/A	CCIS0018	Apr. 01 2012	Mar. 31 2013
8	Coaxial Cable	CCIS	N/A	CCIS0019	Apr. 01 2012	Mar. 31 2013
9	Coaxial Cable	CCIS	N/A	CCIS0087	Apr. 01 2012	Mar. 31 2013
10	Amplifier(10kHz-1.3GHz)	HP	8447D	CCIS0003	Apr. 01 2012	Mar. 31 2013
11	Amplifier(1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	June 09 2012	June 08 2013
12	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Apr. 01 2012	Mar. 31 2013
13	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2012	Mar. 29 2013
14	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A
15	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A
16	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP	CCIS0023	May. 29 2012	May. 28 2013
17	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	Apr 01 2012	Mar. 31 2013
18	Loop antenna	Laplace instrument	RF300	EMC0701	Aug. 12 2012	Aug. 11 2013
19	CMU200	Rhode & Schwarz	1100.0008.02	CCIS0069	May. 29 2012	May. 28 2013

Conducted Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (dd-mm-yy)**	**Cal. Due date (dd-mm-yy)**
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	June 09 2012	June 08 2013
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	May 25 2012	May 24 2013
3	LISN	CHASE	MN2050D	CCIS0074	Apr 01 2012	Mar. 31 2013
4	Coaxial Cable	CCIS	N/A	CCIS0086	Apr. 01 2012	Mar. 31 2013
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

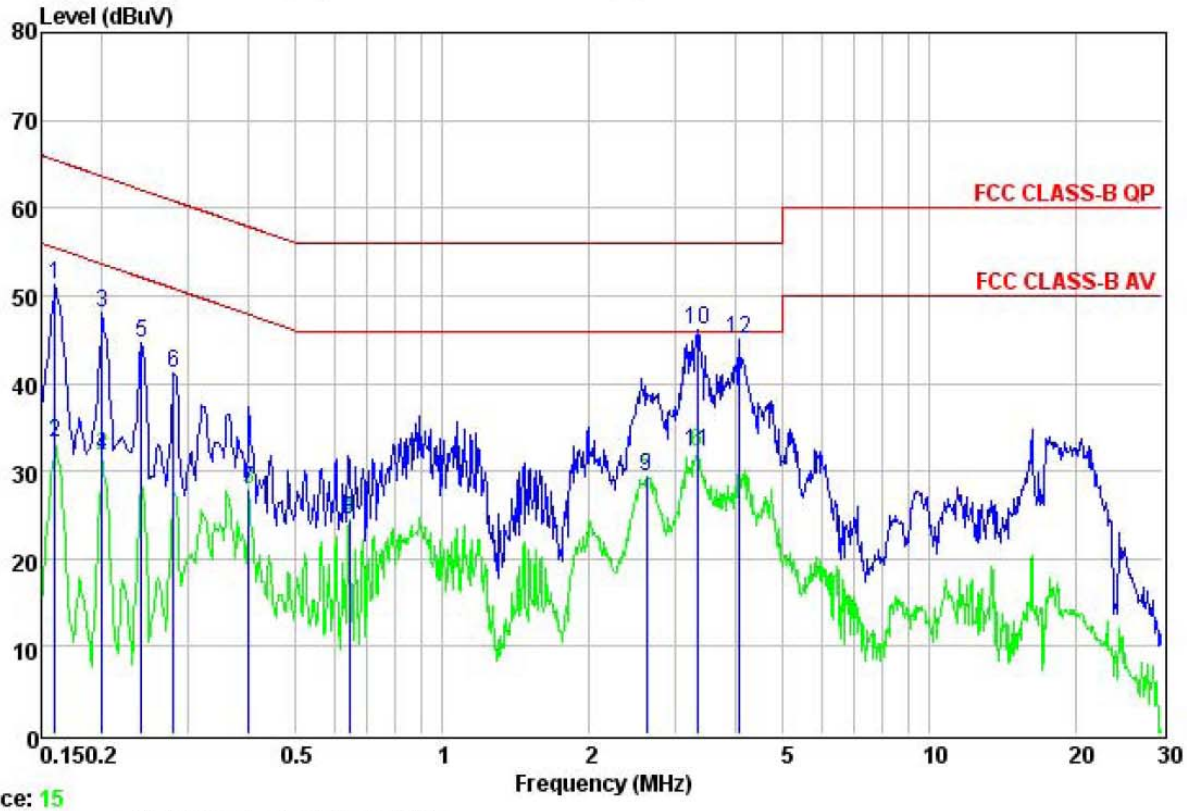
7 Test results and Measurement Data

7.1 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107
Test Method:	ANSI C63.4:2003
Test Frequency Range:	150kHz to 30MHz
Class / Severity:	Class B
Receiver setup:	RBW=9kHz, VBW=30kHz
Limit:	Frequency range (MHz) / Limit (dBμV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 0.5-30: 60 / 50
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test procedure	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). 3. 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.
Test environment:	Temp.: 23 °C Humid.: 56% Press.: 1 01kPa
Measurement Record:	Uncertainty: 3.28dB
Test Instruments:	Refer to section 6 for details
Test mode:	Pre-scan all test mode in the section 5.3, and found the bleow mode which it is worse case mode.
Test results:	Pass

Measurement data:

Line:

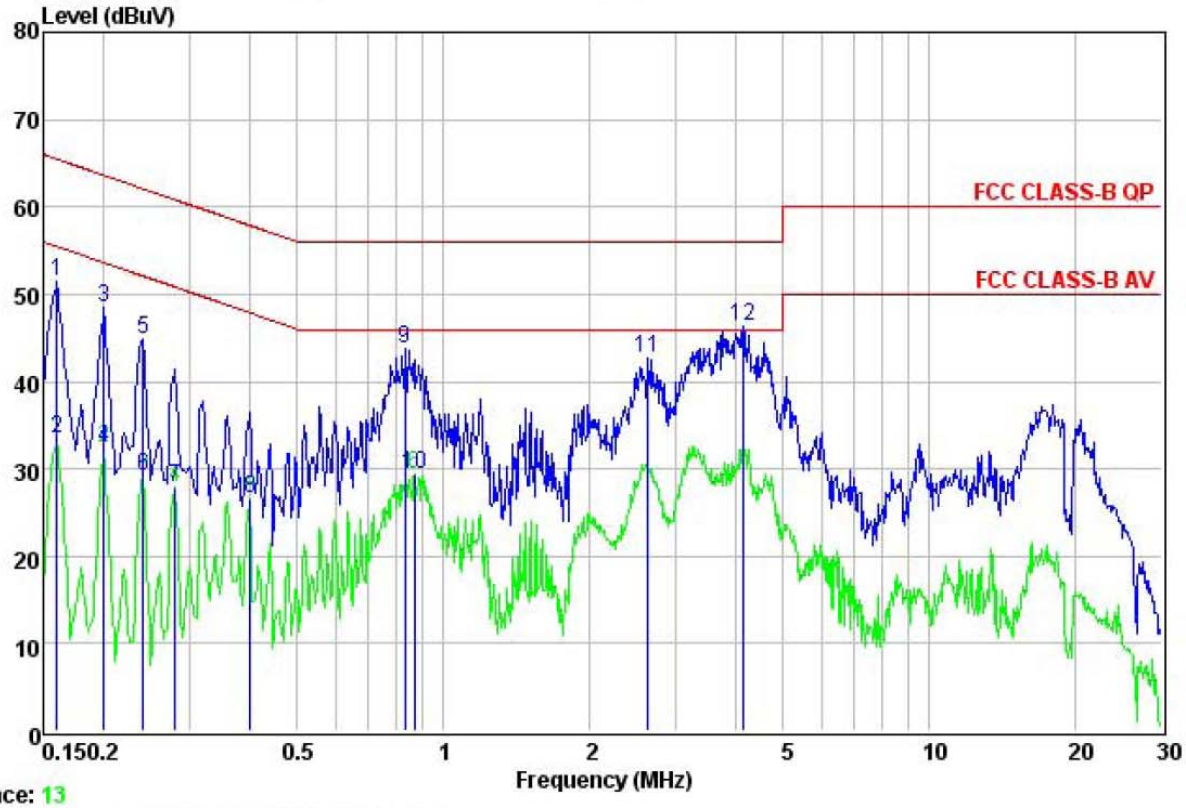


Trace: 15

Site : CCIS Conducted Test Site
Condition : FCC CLASS-B QP LISN LINE
Job No. : 0006RF
EUT : mobilephone
Test Mode : PC mode
Power Rating : AC 120V/60Hz
Environment : Temp: 23 'C Huni:56% Atmos:101KPa
Test Engineer: Joe

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.160	40.26	10.24	0.78	51.28	65.47	-14.19	QP
2	0.160	22.13	10.24	0.78	33.15	55.47	-22.32	Average
3	0.200	37.00	10.21	0.76	47.97	63.62	-15.65	QP
4	0.200	20.87	10.21	0.76	31.84	53.62	-21.78	Average
5	0.240	33.70	10.23	0.75	44.68	62.08	-17.40	QP
6	0.280	30.24	10.25	0.74	41.23	60.81	-19.58	QP
7	0.400	16.95	10.28	0.72	27.95	47.86	-19.91	Average
8	0.644	13.48	10.20	0.77	24.45	46.00	-21.55	Average
9	2.622	18.13	10.28	0.94	29.35	46.00	-16.65	Average
10	3.328	34.87	10.29	0.90	46.06	56.00	-9.94	QP
11	3.328	21.07	10.29	0.90	32.26	46.00	-13.74	Average
12	4.049	33.92	10.29	0.89	45.10	56.00	-10.90	QP

Neutral:



Trace: 13

Site : CCIS Conducted Test Site
Condition : FCC CLASS-B QP LISN NEUTRAL
Job No. : 0006RF
EUT : mobilephone
Test Mode : PC mode
Power Rating : AC 120V/60Hz
Environment : Temp: 23 'C Huni:56% Atmos:101KPa
Test Engineer: Joe

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.160	40.38	10.26	0.78	51.42	65.47	-14.05	QP
2	0.160	22.52	10.26	0.78	33.56	55.47	-21.91	Average
3	0.200	37.53	10.23	0.76	48.52	63.62	-15.10	QP
4	0.200	21.40	10.23	0.76	32.39	53.62	-21.23	Average
5	0.240	33.87	10.23	0.75	44.85	62.08	-17.23	QP
6	0.240	18.19	10.23	0.75	29.17	52.08	-22.91	Average
7	0.280	16.95	10.24	0.74	27.93	50.81	-22.88	Average
8	0.400	15.56	10.26	0.72	26.54	47.86	-21.32	Average
9	0.830	32.83	10.18	0.82	43.83	56.00	-12.17	QP
10	0.871	18.34	10.18	0.84	29.36	46.00	-16.64	Average
11	2.636	31.45	10.27	0.94	42.66	56.00	-13.34	QP
12	4.136	35.24	10.28	0.89	46.41	56.00	-9.59	QP

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

7.2 Radiated Emission

Test Requirement:	FCC Part15 B Section 15.109
Test Method:	ANSI C63.4:2003
Test Frequency Range:	30MHz to 6000MHz
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)

Receiver setup:

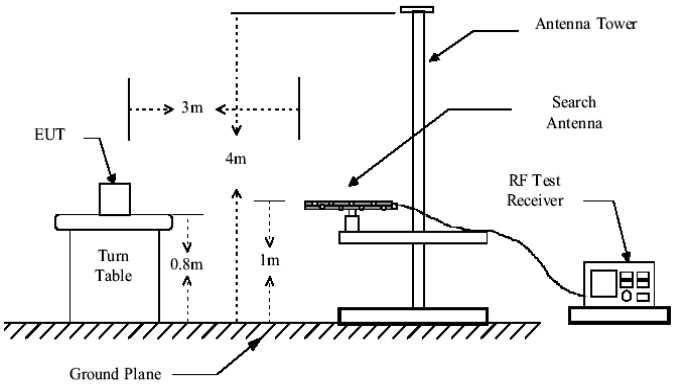
Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	100kHz	300kHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	Peak	1MHz	10Hz	Average Value

Limit:

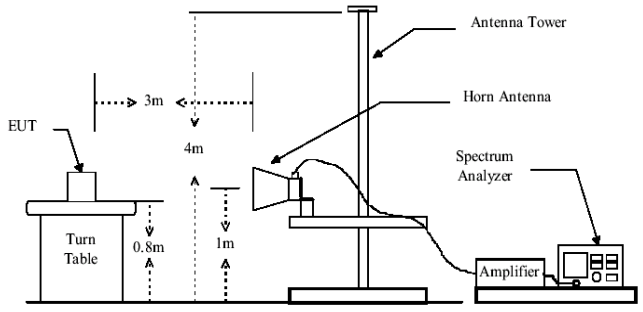
Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

Test setup:

Below 1GHz



Above 1GHz

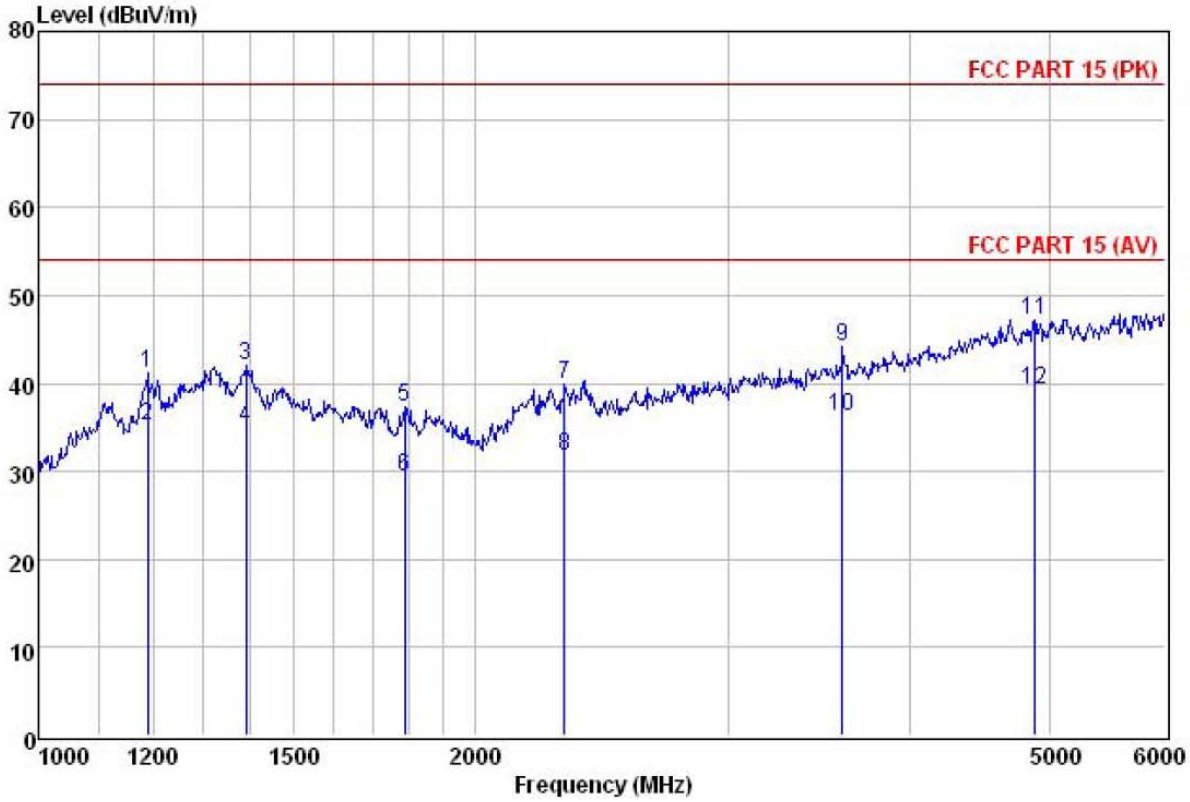


Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test environment:	Temp.: 25 °C Humid.: 55% Press.: 1 01kPa
Measurement Record:	Uncertainty: 4.88dB
Test Instruments:	Refer to section 6 for details
Test mode:	Pre-scan all test mode in the section 5.3, and found the bleow mode which it is worse case mode.
Test results:	Passed

Measurement Data

Above 1GHz

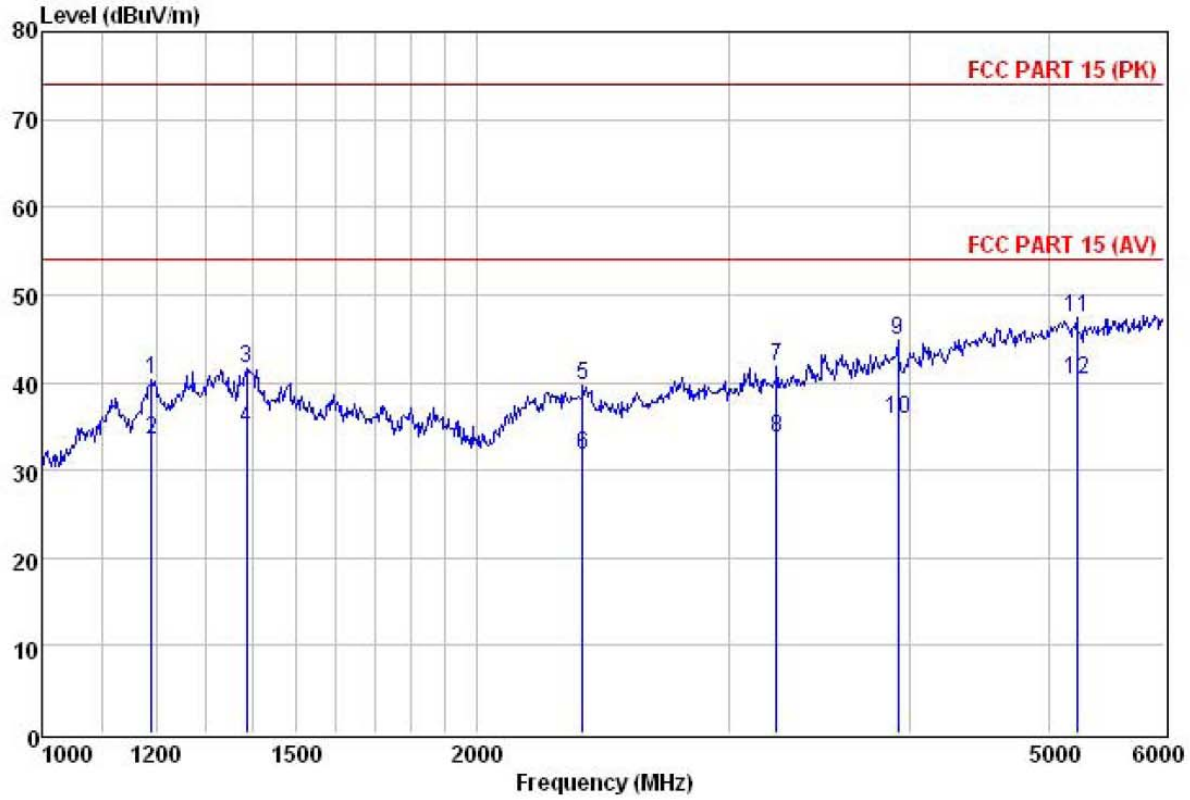
Horizontal:



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(>1GHZ) HORIZONTAL
Job No. : 0006RF
EUT : mobilephone
Test mode : PC mode
Power Rating : AC 120V/60Hz
Environment : Temp:25℃ Huni:55% Atmos:101Kpa
Test Engineer: Joe

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1189.557	32.44	24.88	2.59	18.65	41.26	74.00	-32.74	Peak
2	1189.557	26.44	24.88	2.59	18.65	35.26	54.00	-18.74	Average
3	1390.389	35.01	25.50	2.87	21.39	41.99	74.00	-32.01	Peak
4	1390.389	28.01	25.50	2.87	21.39	34.99	54.00	-19.01	Average
5	1790.088	37.72	25.27	3.31	28.98	37.32	74.00	-36.68	Peak
6	1790.088	29.72	25.27	3.31	28.98	29.32	54.00	-24.68	Average
7	2309.758	38.42	27.98	3.75	30.33	39.82	74.00	-34.18	Peak
8	2309.758	30.42	27.98	3.75	30.33	31.82	54.00	-22.18	Average
9	3592.271	37.82	29.16	4.95	27.75	44.18	74.00	-29.82	Peak
10	3592.271	29.82	29.16	4.95	27.75	36.18	54.00	-17.82	Average
11	4875.384	33.77	31.57	5.91	24.01	47.24	74.00	-26.76	Peak
12	4875.384	25.77	31.57	5.91	24.01	39.24	54.00	-14.76	Average

Vertical:

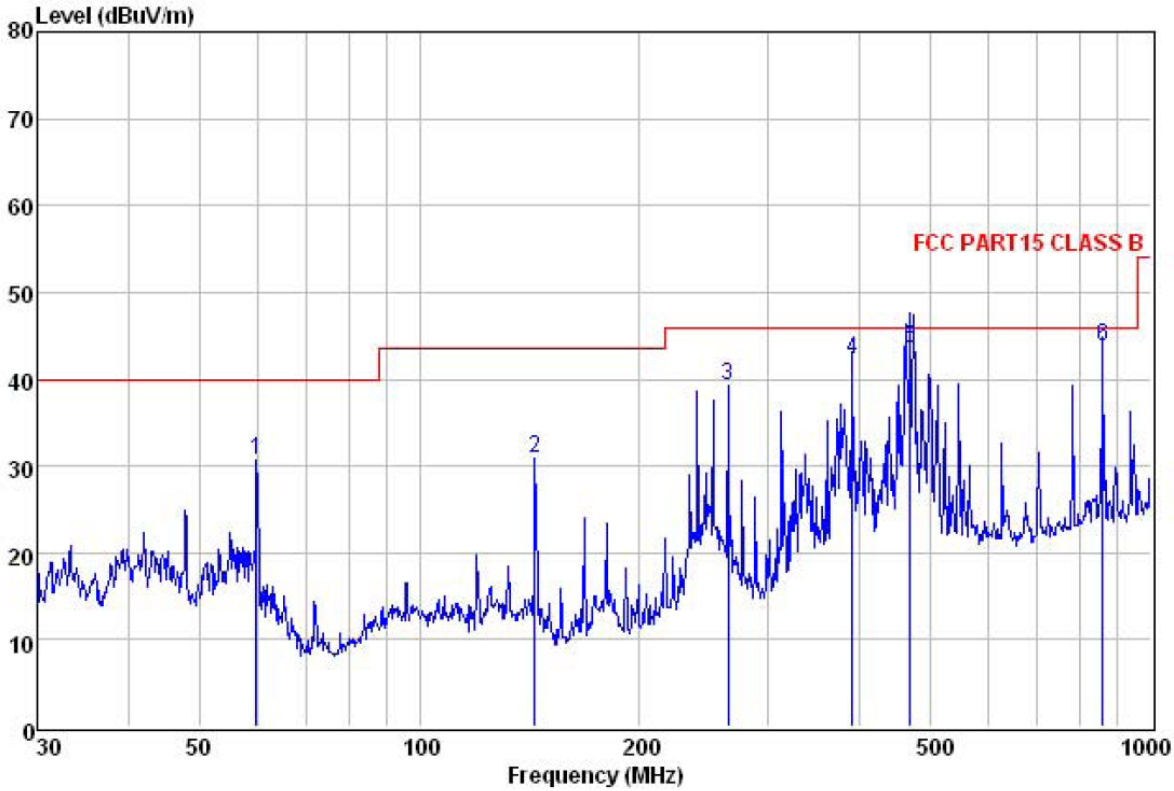


Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(>1GHZ) VERTICAL
Job No. : 0006RF
EUT : mobilephone
Test mode : PC mode
Power Rating : AC 120V/60Hz
Environment : Temp:25'C Huni:55% Atmos:101Kpa
Test Engineer: Joe

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1192.173	31.60	24.88	2.59	18.65	40.42	74.00	-33.58	Peak
2	1192.173	24.60	24.88	2.59	18.65	33.42	54.00	-20.58	Average
3	1387.338	34.68	25.50	2.86	21.39	41.65	74.00	-32.35	Peak
4	1387.338	27.68	25.50	2.86	21.39	34.65	54.00	-19.35	Average
5	2371.468	38.40	27.65	3.80	30.15	39.70	74.00	-34.30	Peak
6	2371.468	30.40	27.65	3.80	30.15	31.70	54.00	-22.30	Average
7	3232.701	37.53	28.62	4.62	29.00	41.77	74.00	-32.23	Peak
8	3232.701	29.53	28.62	4.62	29.00	33.77	54.00	-20.23	Average
9	3922.282	36.73	29.77	5.23	26.83	44.90	74.00	-29.10	Peak
10	3922.282	27.73	29.77	5.23	26.83	35.90	54.00	-18.10	Average
11	5219.037	33.24	31.83	6.12	23.86	47.33	74.00	-26.67	Peak
12	5219.037	26.24	31.83	6.12	23.86	40.33	54.00	-13.67	Average

Below 1GHz

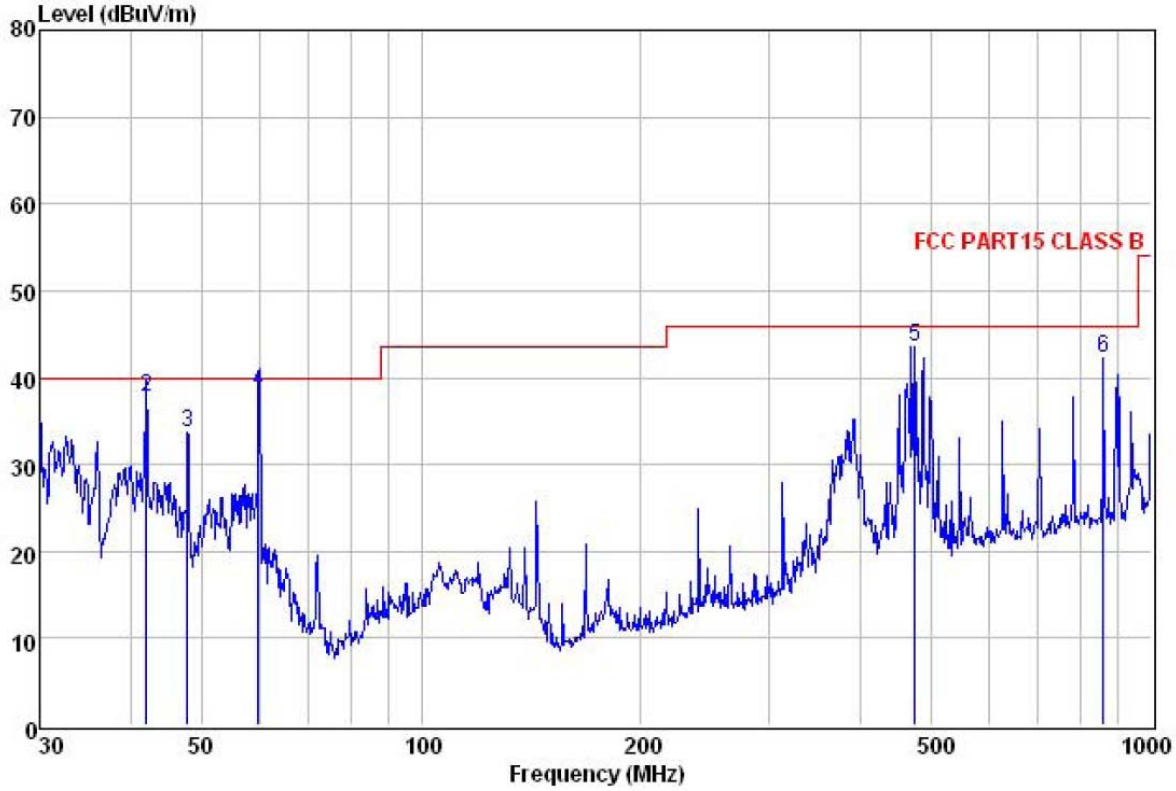
Horizontal:



Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163(2012.4.1) HORIZONTAL
Job NO. : 0006RF
EUT : mobilephone
Test mode : pc mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5'C Huni:55%
Test Engineer: Joe

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	59.859	45.70	12.71	1.38	29.19	30.60	40.00	-9.40	QP
2	143.830	49.48	8.22	2.44	29.32	30.82	43.50	-12.68	QP
3	263.819	53.71	12.17	2.85	29.55	39.18	46.00	-6.82	QP
4	390.723	54.08	14.87	3.08	29.86	42.17	46.00	-3.83	QP
5	468.876	54.95	15.83	3.36	30.52	43.62	46.00	-2.38	QP
6	860.035	49.19	20.69	4.10	30.24	43.74	46.00	-2.26	QP

Vertical:



Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163(2012.4.1) VERTICAL
Job NO. : 0006RF
EUT : mobilephone
Test mode : pc mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5'C Huni:55%
Test Engineer: Joe

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	30.000	50.59	12.33	0.72	26.27	37.37	40.00	-2.63	QP
2	42.007	50.38	13.57	1.24	27.48	37.71	40.00	-2.29	QP
3	47.826	47.06	13.38	1.27	28.08	33.63	40.00	-6.37	QP
4	59.859	53.45	12.71	1.38	29.19	38.35	40.00	-1.65	QP
5	473.835	54.81	15.95	3.40	30.52	43.64	46.00	-2.36	QP
6	860.035	47.65	20.69	4.10	30.24	42.20	46.00	-3.80	QP

8 Test Setup Photo

Radiated Emission