

FCC REPORT

Applicant: Star Computer Group

Address of Applicant: 2175 NORTHWEST 115TH AVE. DORAL, FL 33172, USA

Equipment Under Test (EUT)

Product Name: smart mobile phone

Model No.: E-380

ARGOM TECH

Trade mark:



FCC ID: Q34-E380

Applicable standards: FCC CFR Title 47 Part 15 Subpart B: 2011

Date of sample receipt: 30 Nov., 2012

Date of Test: 01 Dec., to 04 Dec., 2012

Date of report issued: 18 Dec., 2012

Test Result : Pass *

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

Authorized Signature:



Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

2 Version

Version No.	Date	Description
00	18 Dec., 2012	<i>Original</i>

Prepared By:



Date:

18 Dec., 2012

Report Clerk

Check By:



Date:

18 Dec., 2012

Project Engineer

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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:	Star Computer Group
Address of Applicant:	2175 NORTHWEST 115TH AVE. DORAL, FL 33172, USA
Manufacturer:	GUANGZHOU SOQOO COMMUNICATION TECHNOLOGY CO.,LTD
Address of Manufacturer:	Building B, No.2, Yiheng Road, Avenue 2, Tiantougang Industry District, Tianhe District, Guangzhou, Guangdong, China
Factory:	ragentek (huizhou) electronics co., LTD
Address of Factory:	Floor 4, Tower 2, Hangtian Science&technology Park, Zhongkai High Tech District, Huizhou, Guangdong, China

5.2 General Description of E.U.T.

Product Name:	smart mobile phone
Model No.:	E-380
Trade mark:	ARGOM TECH 
AC adapter:	Input:100-240V AC,50/60Hz 0.15A Output:5V DC MAX500mA
Power supply:	Rechargeable Li-ion Battery DC3.7V/1300mAh

5.3 Operating Modes

Operating mode	Detail description
Downloading mode	Keep the EUT in Downloading mode(Worst case)
Camera mode	Keep the EUT in Camera mode
Play mode	Keep the EUT in Play mode
Recording mode	Keep the EUT in Recording mode
FM mode	Keep the EUT in FM receiver mode
GPS mode	Keep the EUT in GPS receiver mode

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX745	N/A	DoC
DELL	MONITOR	E178FPC	N/A	DoC
DELL	KEYBOARD	SK-8115	N/A	DoC
DELL	MOUSE	MOC5UO	N/A	DoC
HP	Printer	CB495A	05257893	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	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	Apr.01 2012	Mar. 31 2013
3	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	June 04 2012	June 03 2013
4	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	May 30 2012	May. 29 2013
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
6	Coaxial Cable	CCIS	N/A	CCIS0016	Apr. 01 2012	Mar. 31 2013
7	Coaxial Cable	CCIS	N/A	CCIS0017	Apr. 01 2012	Mar. 31 2013
8	Coaxial cable	CCIS	N/A	CCIS0018	Apr. 01 2012	Mar. 31 2013
9	Coaxial Cable	CCIS	N/A	CCIS0019	Apr. 01 2012	Mar. 31 2013
10	Coaxial Cable	CCIS	N/A	CCIS0087	Apr. 01 2012	Mar. 31 2013
11	Amplifier(10KHz-1.3GHz)	HP	8447D	CCIS0003	Apr. 01 2012	Mar. 31 2013
12	Amplifier(1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	June 09 2012	June 08 2013
13	Spectrum analyzer	Rohde & Schwarz	FSP	CCIS0023	May 29 2012	May 28 2013
14	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A
15	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A

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

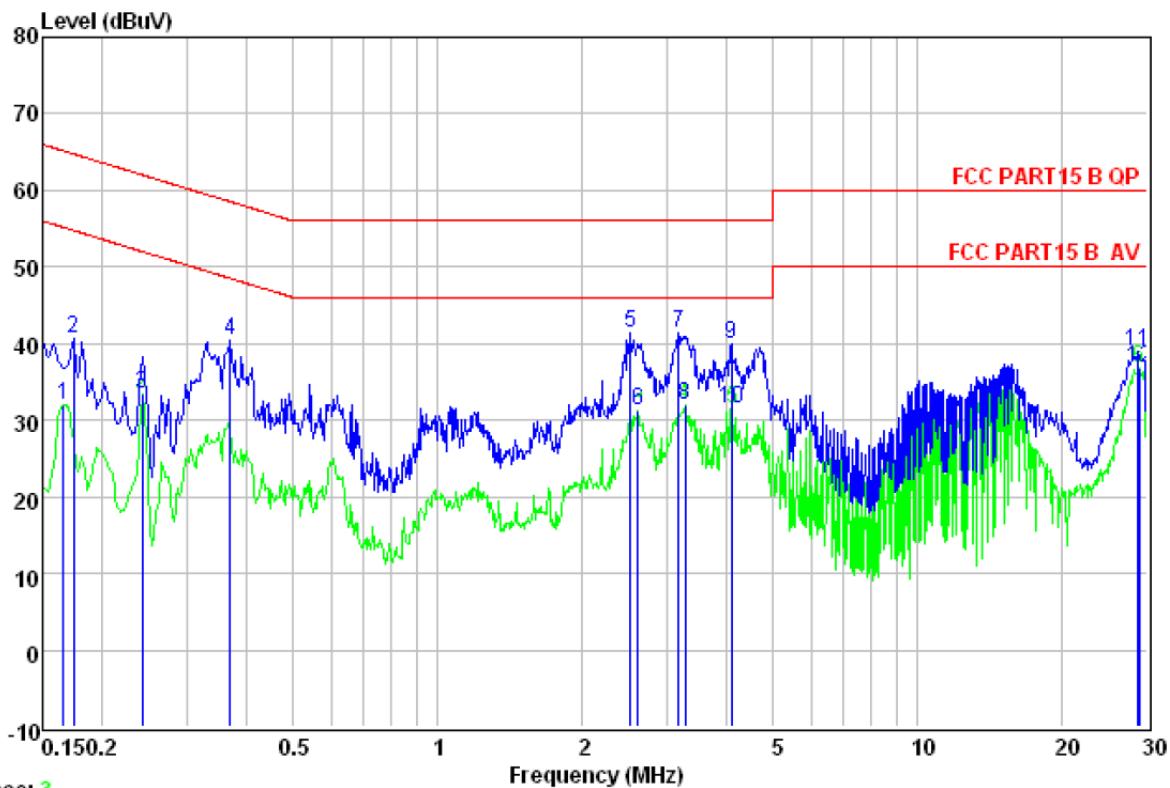
7 Test results and Measurement Data

7.1 Conducted Emissions

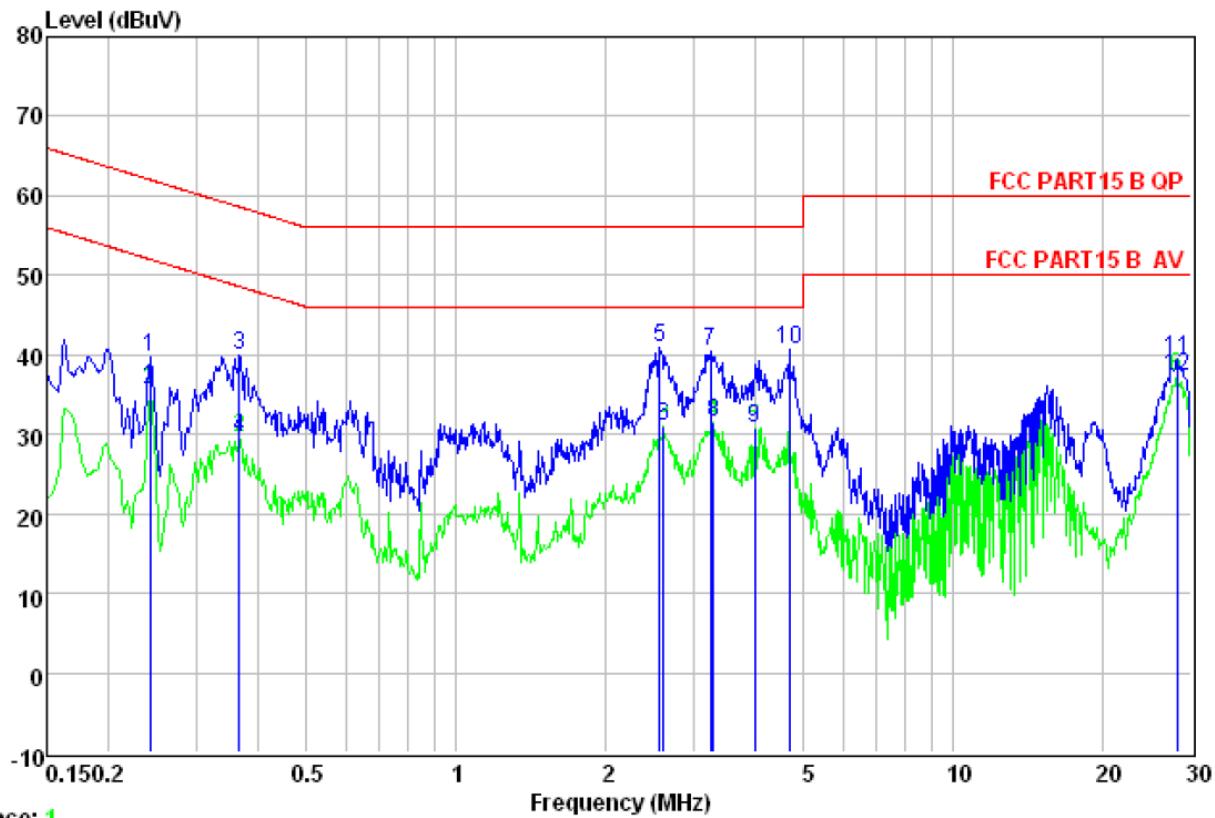
Test Requirement:	FCC Part15 B Section 15.107																
Test Method:	ANSI C63.4:2003																
Test Frequency Range:	150kHz to 30MHz																
Class / Severity:	Class B																
Receiver setup:	RBW=9kHz, VBW=30kHz																
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBμV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>0.5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table>			Frequency range (MHz)	Limit (dB μ V)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	0.5-30	60	50
Frequency range (MHz)	Limit (dB μ V)																
	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:	<p style="text-align: center;">Reference Plane</p> <p><i>Remark</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>																
Test procedure	<ol style="list-style-type: none"> 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). They 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 refer 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 below mode which it is worse case mode.																
Test results:	Pass																

Measurement data:

Line:



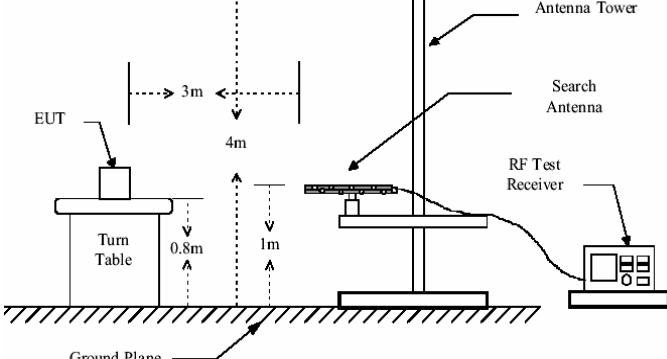
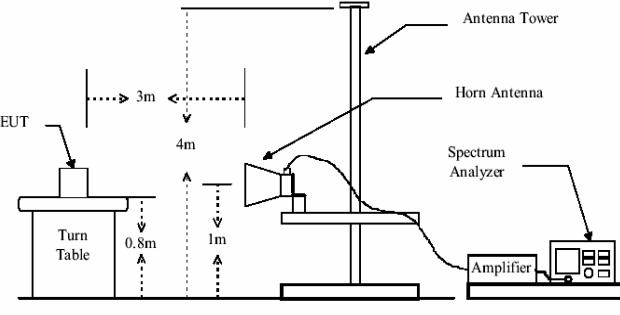
Neutral:



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:	<p>Below 1GHz</p>  <p>Above 1GHz</p> 				

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 chamber. 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.: 101kPa
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 below mode which it is worse case mode.
Test results:	Passed

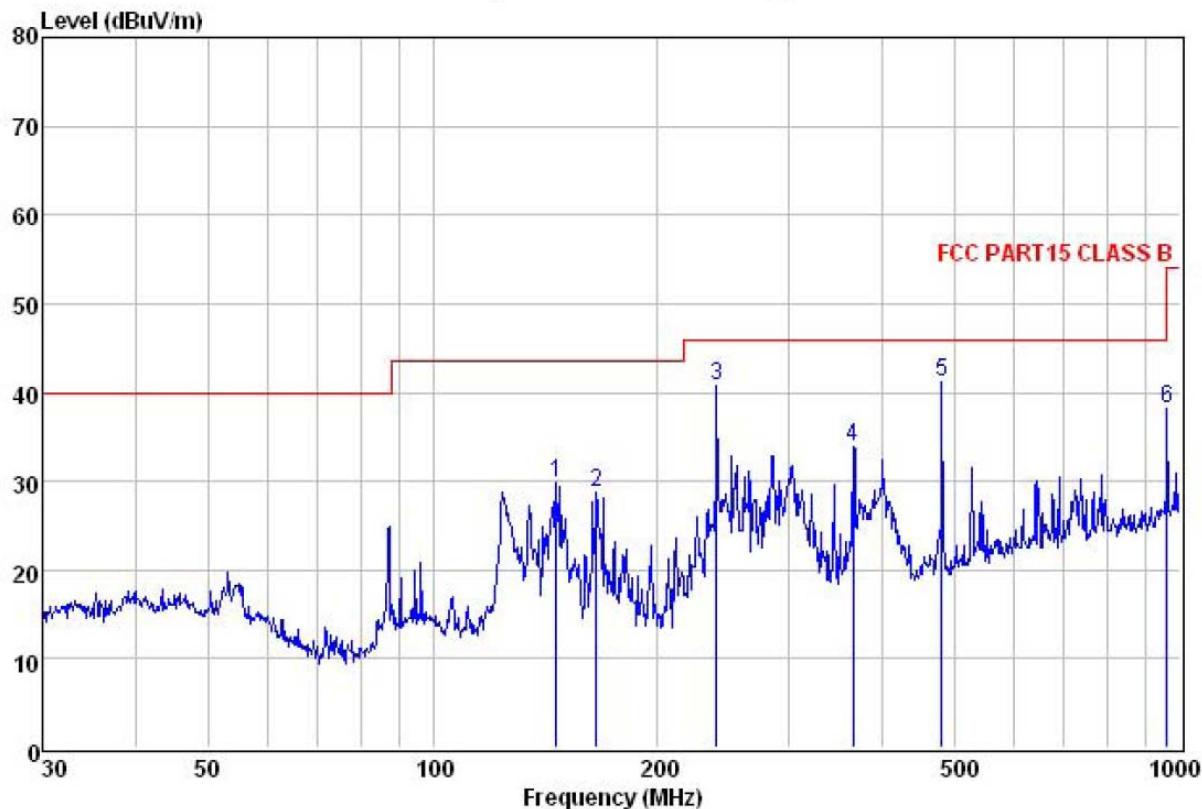
Remark:

1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.

Measurement Data

Below 1GHz

Horizontal:



Site : 3m chamber

Condition : FCC PART15 CLASS B 3m VULB9163(2012.4.1) HORIZONTAL

Job No. : 280RF

EUT : Smart mobile phone

Model : E-380

Test mode : Downloading mode

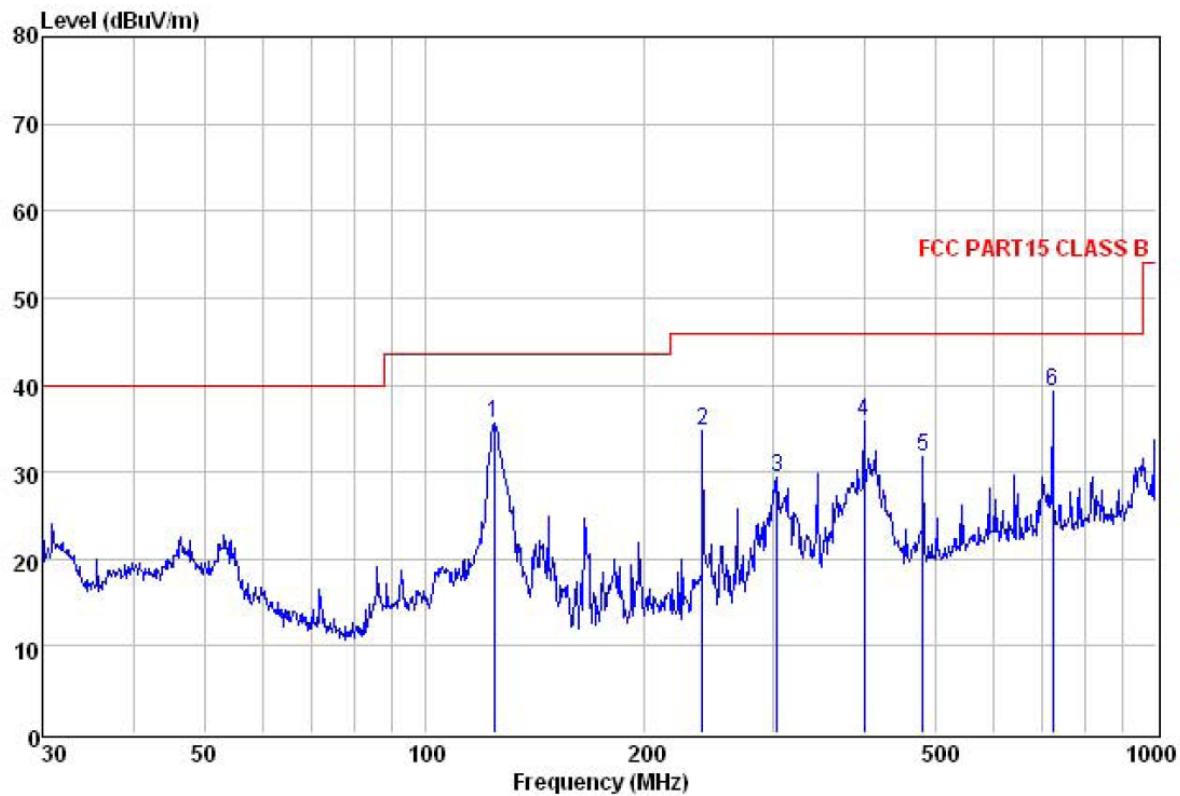
Power Rating : AC 120V/60Hz

Environment : Temp:25°C Humi:55% Atmos:101Kpa

Test Engineer: Winner

Freq	Read	Antenna	Cable	Preamp	Limit		Over	Remark
					Level	Factor		
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	146.374	48.33	8.23	2.47	29.28	29.75	43.50	-13.75 QP
2	165.487	46.58	8.82	2.62	29.33	28.69	43.50	-14.81 QP
3	239.987	55.51	12.09	2.82	29.64	40.78	46.00	-5.22 QP
4	365.539	46.17	14.48	3.09	29.75	33.99	46.00	-12.01 QP
5	480.528	52.19	16.07	3.46	30.52	41.20	46.00	-4.80 QP
6	962.162	42.42	21.49	4.27	29.90	38.28	54.00	-15.72 QP

Vertical:

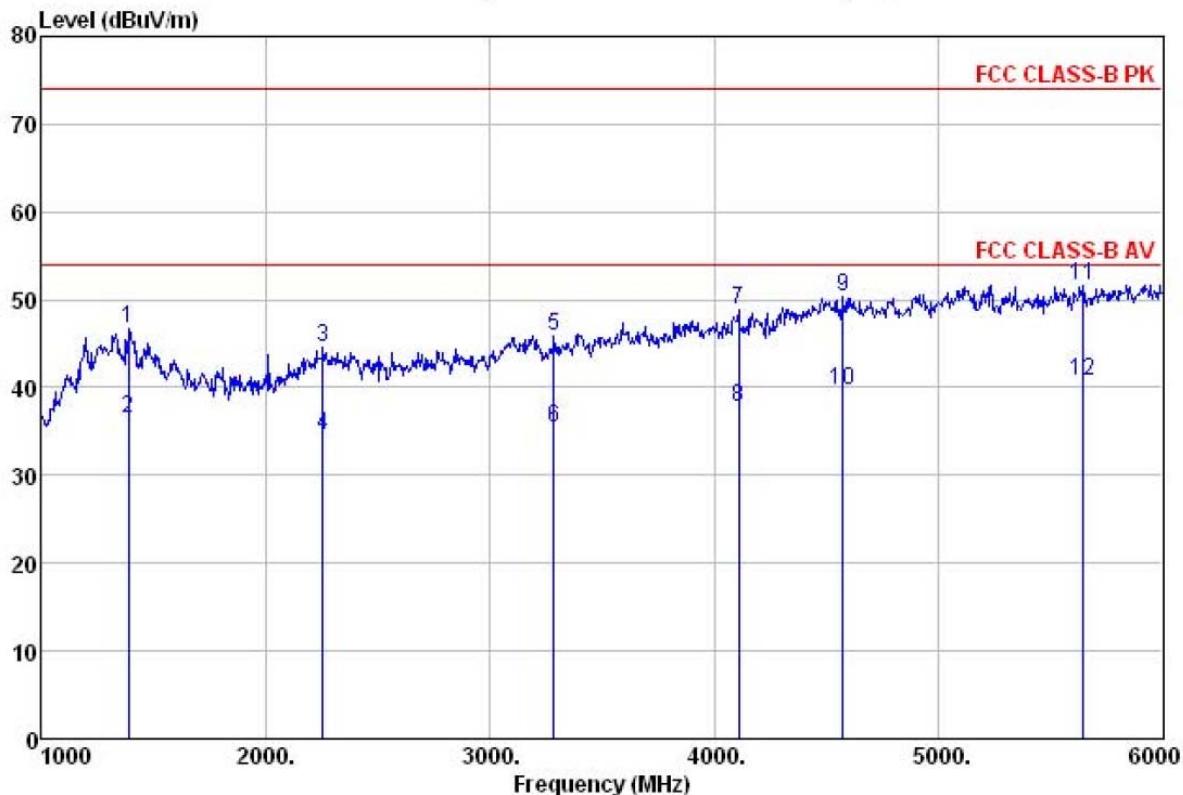


Site : 3m chamber
 Condition : FCC PART15 CLASS B 3m VULB9163 (2012.4.1) VERTICAL
 Job No. : 280RF
 EUT : Smart mobile phone
 Model : E-380
 Test mode : Downloading mode
 Power Rating : AC 120V/60Hz
 Environment : Temp:25°C Huni:55% Atmos:101Kpa
 Test Engineer: Winner

Freq	ReadAntenna		Cable	Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor	Level	Line	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	124.569	53.25	9.80	2.22	29.62	35.65	43.50 -7.85 QP
2	239.987	49.40	12.09	2.82	29.64	34.67	46.00 -11.33 QP
3	303.544	42.86	13.11	2.95	29.45	29.47	46.00 -16.53 QP
4	399.030	47.67	15.06	3.08	29.89	35.92	46.00 -10.08 QP
5	480.528	42.76	16.07	3.46	30.52	31.77	46.00 -14.23 QP
6	721.726	46.48	19.10	4.26	30.55	39.29	46.00 -6.71 QP

Above 1GHz

Horizontal:



Site : 3m chamber

Condition : FCC CLASS-B PK 3m BBHA9120(>1GHZ) HORIZONTAL

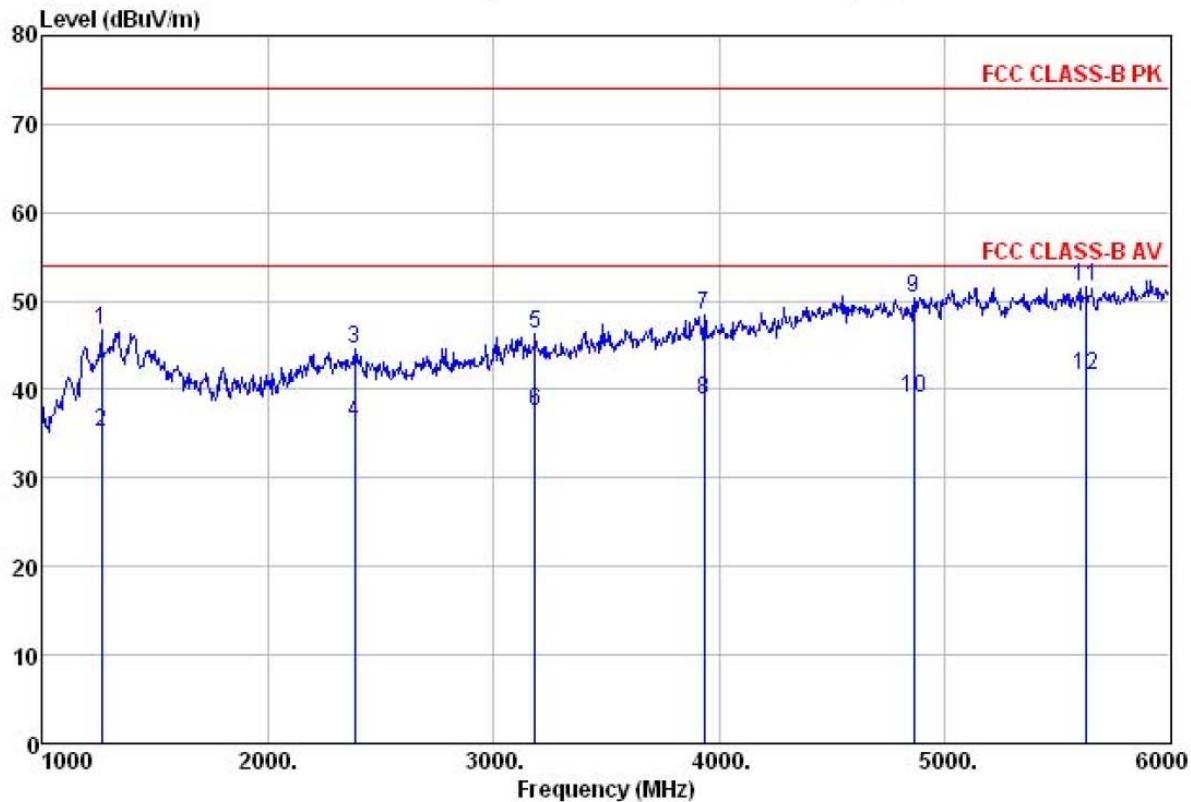
Job No. : 280RF

Test mode : downloading mode

Test Engineer: Joe

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark
	MHz	Level	Factor	Loss	Level	Line	
1	1385.000	39.68	25.50	2.86	21.39	46.65	74.00 -27.35 Peak
2	1385.000	29.42	25.50	2.86	21.39	36.39	54.00 -17.61 Average
3	2255.000	43.32	28.02	3.72	30.50	44.56	74.00 -29.44 Peak
4	2255.000	33.42	28.02	3.72	30.50	34.66	54.00 -19.34 Average
5	3285.000	41.46	28.41	4.66	28.71	45.82	74.00 -28.18 Peak
6	3285.000	30.95	28.41	4.66	28.71	35.31	54.00 -18.69 Average
7	4110.000	39.60	30.06	5.38	26.29	48.75	74.00 -25.25 Peak
8	4110.000	28.67	30.06	5.38	26.29	37.82	54.00 -16.18 Average
9	4575.000	38.14	30.92	5.72	24.43	50.35	74.00 -23.65 Peak
10	4575.000	27.46	30.92	5.72	24.43	39.67	54.00 -14.33 Average
11	5645.000	36.97	32.13	6.37	23.83	51.64	74.00 -22.36 Peak
12	5645.000	25.98	32.13	6.37	23.83	40.65	54.00 -13.35 Average

Vertical:



Site : 3m chamber

Condition : FCC CLASS-B PK 3m BBHA9120(>1GHZ) VERTICAL

Job No. : 280RF

Test mode : downloading moe

Test Engineer: Joe

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark	
	MHz	Level	Factor	Loss	Level	Line		
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	1260.000	37.90	25.50	2.69	19.42	46.67	74.00	-27.33 Peak
2	1260.000	26.47	25.50	2.69	19.42	35.24	54.00	-18.76 Average
3	2385.000	43.41	27.58	3.81	30.15	44.65	74.00	-29.35 Peak
4	2385.000	35.13	27.58	3.81	30.15	36.37	54.00	-17.63 Average
5	3185.000	42.12	28.76	4.55	29.20	46.23	74.00	-27.77 Peak
6	3185.000	33.50	28.76	4.55	29.20	37.61	54.00	-16.39 Average
7	3935.000	40.23	29.78	5.23	26.80	48.44	74.00	-25.56 Peak
8	3935.000	30.55	29.78	5.23	26.80	38.76	54.00	-15.24 Average
9	4865.000	36.98	31.57	5.91	24.03	50.43	74.00	-23.57 Peak
10	4865.000	25.64	31.57	5.91	24.03	39.09	54.00	-14.91 Average
11	5630.000	36.90	32.11	6.35	23.82	51.54	74.00	-22.46 Peak
12	5630.000	27.05	32.11	6.35	23.82	41.69	54.00	-12.31 Average