FCC 47 CFR PART 15 SUBPART B

TEST REPORT

For

Applicant:	**ENJOY GROUP(HK) CO., LIMITED**
Address:	**Rm. 1305A, Fujian Dasha, Caitian Road, Futian District, Shenzhen, Guangdong, China**
Product Name:	**WCDMA Mobile Phone**
Model Name:	**S09, W63**
Brand Name:	**ENJOY**
FCC ID:	**ZHN-W63**
Report No.:	**STS131115F4**
Date of Issue:	**December 10,2013**

Issued by:	**Shenzhen Super Test Service Technology Co., Ltd.**
Address:	**No.5, Langshan 2nd Rd., North Hi-Tech Industrial park, Nanshan, Shenzhen, Guangdong, China**
Tel:	**86-755-2795 8522**
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1. VERIFICATION OF CONFORMITY

Equipment Under Test:	WCDMA Mobile Phone
Brand Name:	ENJOY
Model Number:	S09
Series Model Name:	W63
Series Model Difference description:	Only the appearance is different
FCC ID：	ZHN-W63
Applicant:	ENJOY GROUP(HK) CO., LIMITED Rm. 1305A, Fujian Dasha, Caitian Road, Futian District, Shenzhen, Guangdong, China
Manufacturer:	ENJOY GROUP(HK) CO., LIMITED Rm. 1305A, Fujian Dasha, Caitian Road, Futian District, Shenzhen, Guangdong, China
Technical Standards:	FCC Part 15 B
File Number:	STS131115F4
Date of test:	November 26,2013-December 10,2013
Deviation:	None
Condition of Test Sample:	Normal
Test Result:	PASS

The above equipment was tested by Shenzhen Super Test Service Technology Co., Ltd. for compliance with the requirements set forth in FCC Part 15 and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Tested by (+ signature): Petter Ping

Petter Ping December 10,2013

Review by (+ signature): July Wen

July Wen December 10,2013

Approved by (+ signature): Terry Yang

Terry Yang December 10,2013

2. GENERAL INFORMATION

2.1 PRODUCT INFORMATION

EUT1- Mobile Phone	
Description:	WCDMA Mobile Phone
Model Name:	S09
Brand Name:	ENJOY
Frequency Range:	GSM 850: 824.2-848.8MHz GSM1900:1850.2-1909.8MHz WCDMA Band II:1852.4-1907.6MHz WCDMA BandV:826.4-846.6MHz Bluetooth:2402-2480MHz
Hardware Version:	V1.0
Software Version:	BD79_89W_MMI_V01
EUT2- Battery	
Description:	Lithium-ion Battery
Model Name:	S09
Brand Name:	ENJOY
Manufacturer:	Shenzhen Herli Battery co.,Ltd
Capacitance:	2800 mAh
Rated Voltage:	3.7V
Charge Limit:	4.2V
EUT3 – Power Supply	
Description:	Travel Charger
Model Name:	S09
Brand Name:	ENJOY
Manufacturer:	Shenzhen Baijunda Technology Co., Ltd
Rated Input:	AC 100-240V, 50/60Hz, 0.15A
Rated Output:	DC 5V, 0.5A
Length of USB cable:	1.0m

NOTE:

1. The EUT is a model of Mobile Station (MS). It consists of **hand telephone set**, **Lithium battery, USB cable, headphone** and **Charger** as listed above.
2. Please refer to Appendix 2 for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

2.2 OBJECTIVE

Perform FCC Part 15 Subpart B tests for FCC Marking.

2.3 TEST STANDARDS AND RESULTS

Test items and the results are as bellow:

EMISSION				
Standard	**Item**		**Result**	**Remarks**
FCC 47 CFR Part 15 Subpart B (10-1-11 Edition)	§15.107	Conducted Emission	PASS	Meet Class B limit
	§15.109	Radiated Emission	PASS	Meet Class B limit

Note: 1. The test result judgment is decided by the limit of measurement standard
2. The information of measurement uncertainty is available upon the customer's request.

2.4 ENVIRONMENTAL CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35ºC
- Humidity: 30-60 %
- Atmospheric pressure: 86-106 kPa

3. TEST FACILITY

3.1TEST FACILITY

Test Site:	Compliance Certification Services Inc. (Kun shan) Laboratory
Location:	No.10 Weiye Rd, Innovation park, Eco&Tec,Development Zone, Kunshan City, Jiangsu, China
Description:	There is one 3m semi-anechoic an area test sites and two line conducted labs for final test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4 and CISPR 16 requirements. The FCC Registration Number is **238958.** The **CNAS** Registration Number is **CNAS L4354.**
Site Filing:	The site description is on file with the Federal Communications Commission, 7435 Oakland Mills Road, Columbia, MD 21046.
Instrument Tolerance:	All measuring equipment is in accord with ANSI C63.4:2009 and CISPR 16 requirements that meet industry regulatory agency and accreditation agency requirement.
Ground Plane:	Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.

3.2 GENERAL TEST PROCEDURES

EUT Function and Test Mode

The EUT has been tested under normal operating（TX）and standby（RX）condition.

The field strength of radiation emission was measured in the following position: EUT stand-up position (Y axis), lie-down position (X, Z axis).

The following data show only with the worst case setup.

The worst case of X axis was reported.

Based on client request, all normal using modes of the normal function were tested but only the worst test data of the worst mode is reported by this report.

4. TEST EQUIPMENT LIST

4.1 SUPPORT EQUIPMENT

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
Micro SD CARD	Kingston	1G	0907T139090	N/A	
Charger	Baijunda	S09	N/A	N/A	
Notebook	DELL	E4446A	E5430	Sheild 1.5m	

Remark:

All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.2 TEST EQUIPMENT LIST

Instrumentation: The following list contains equipment used at CCS for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10 kHz to 1.0 GHz or above.

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due	calibration interval
Spectrum Analyzer	Agilent	E4446A	MY44020154	2014-5-12	1 year
EMI Test Receiver	R&S	ESCI	1166.5950.03	2014-8-13	1 year
Pre-Amplfier	Miteq	NSP4000-NF	870629	2014-5-12	1 year
Bilog Antenna	Sunol	JB1	A110204-2	2014-5-12	1 year
Horn-antenna	SCHWARZBECK	BBHA9120D	D:266	2014-6-7	1 year
Horn-antenna	SCHWARZBECK	BBHA9170	D:171	2014-4-28	1 year
Loop-antenna	ZHINAN	ZN30900A	N/A	2014-6-7	1 year
Turn Table	CT	CT123	4165	N.C.R	1 year
Antenna Tower	CT	CTERG23	3256	N.C.R	1 year
Controller	CT	CT1OO	95637	N.C.R	1 year
EMI TEST RECEIVER	R&S	ESCI	100781	2014-3-14	1 year
V (V-LISN)	R&S	ENV216	101604	2014-5-21	1 year
Pulse Limiter	R&S	ESH3-Z2	100524	2014-9-24	1 year
Temperature Chamber	Guangzhou Gongwen	GDS-250	N/A	2014-9-24	1 year
Test Software	EZ-EMC				

NOTE: *Equipments listed above have been calibrated and are in the period of validation.*

5. 47 CFR PART 15B REQUIREMENTS

5.1 GENERAL INFORMATION

EUT Function and Test Mode

Mode 1: Idle Mode

The MS was registered to the base station simulator but no call was set up.

The EUT configuration of the emission test was **MS + Battery+ Charger.**

Mode 2: USB Mode

During the test, the MS was connected with the notebook and made the data transmission function continuously.

The EUT configuration of the emission test was **MS + Battery+ USB Cable+ Notebook.**

Note: Due to the different configuration and test, in this list only some worse mode. The worst test data of the worse mode is reported by this report.

6. LINE CONDUCTED EMISSION TEST

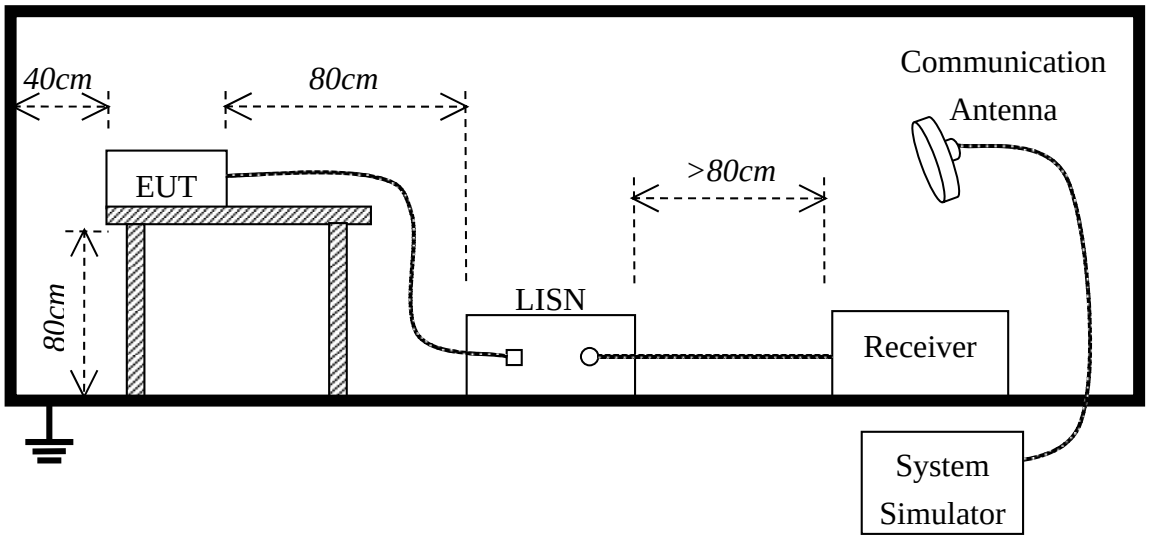
6.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz-500kHz	66-56	56-46
500kHz-5MHz	56	46
5MHz-30MHz	60	50

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

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

6.2. BLOCK DIAGRAM OF TEST SETUP



6.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per FCC Part 15 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2) Support equipment, if needed, was placed as per FCC Part 15.
3) All I/O cables were positioned to simulate typical actual usage as per FCC Part 15.
4) The EUT received DC 5V by AC/DC adapter or USB port of notebook which through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5) All support equipments received power from a second LISN supplying power of AC 120V/60Hz, if any.
6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7) Analyzer / Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.
8) During the above scans, the emissions were maximized by cable manipulation.
9) The following test mode(s) were scanned during the preliminary test:

Preliminary Conducted Emission Test				
Frequency Range Investigated		**150KHz TO 30 MHz**		
Mode of operation	**Date**	**Report No.**	**Data#**	**Worst Mode**
Idle Mode	2013-12-7	STS131115F4	1_(L, N)	☐
USB Mode	2013-12-7	STS131115F4	2_(L, N)	☒

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

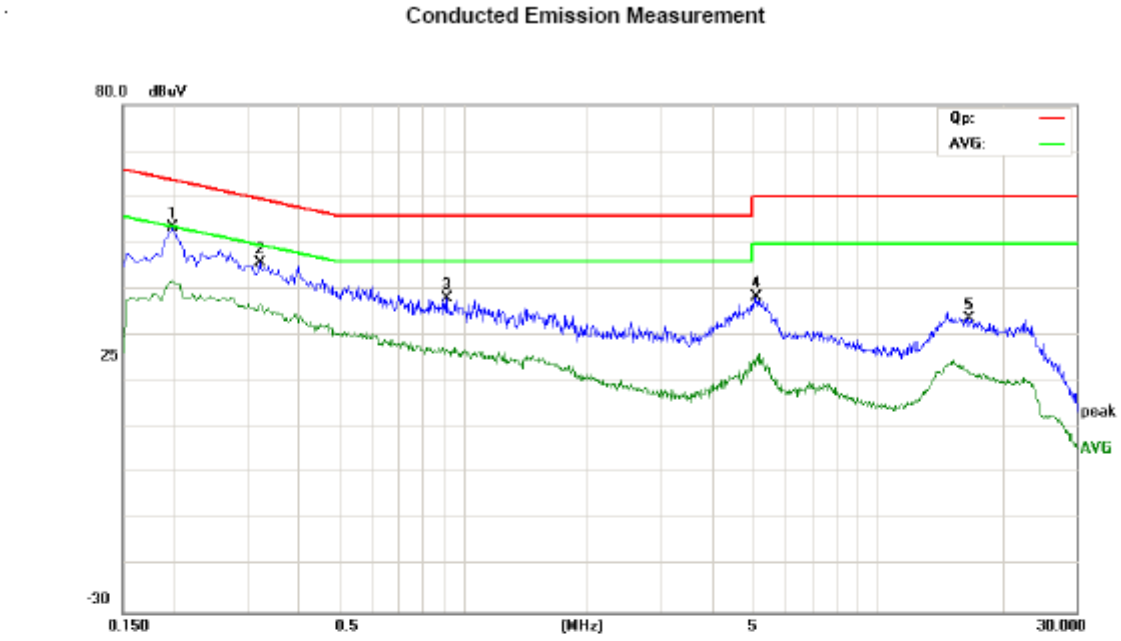
6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

EUT and support equipment was set up on the test bench as per step 9 of the preliminary test.

A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

The test data of the worst case condition(s) was reported on the Summary Data page.

6.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST



Site site #1 Phase: N Temperature: 26

Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Mobile Phone

M/N: S09

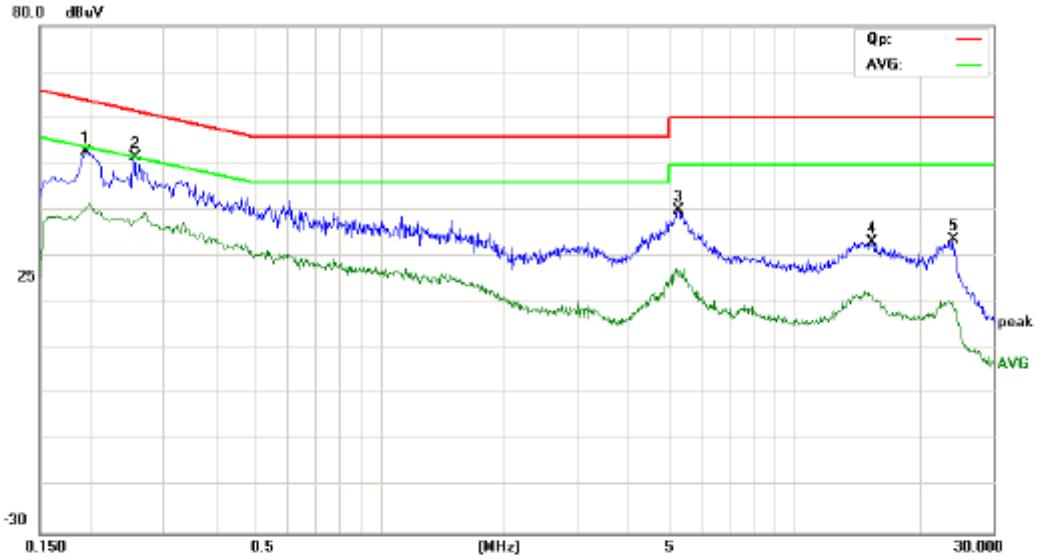
Mode: USB

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1980	41.53	11.88	53.41	63.69	-10.28	peak	
2		0.3220	34.63	11.19	45.82	59.66	-13.84	peak	
3		0.9100	28.02	10.00	38.02	56.00	-17.98	peak	
4		5.0860	26.47	11.95	38.42	60.00	-21.58	peak	
5		16.4060	24.67	9.00	33.67	60.00	-26.33	peak	

*:Maximum data x:Over limit !:over margin

Conducted Emission Measurement



Site site #1 Phase: L1 Temperature: 26

Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %

EUT: Mobile Phone

M/N: S09

Mode: USB

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1940	41.03	11.64	52.67	63.86	-11.19	peak	
2	*	0.2540	39.83	11.64	51.47	61.63	-10.16	peak	
3		5.2380	28.24	11.86	40.10	60.00	-19.90	peak	
4		15.2420	24.15	9.00	33.15	60.00	-26.85	peak	
5		23.9500	24.76	9.00	33.76	60.00	-26.24	peak	

*:Maximum data x:Over limit !:over margin

7. RADIATED EMISSION TEST

7.1. LIMITS OF RADIATED DISTURBANCES AT 3M DISTANCES FOR CLASS B

According to FCC section 15.109, except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

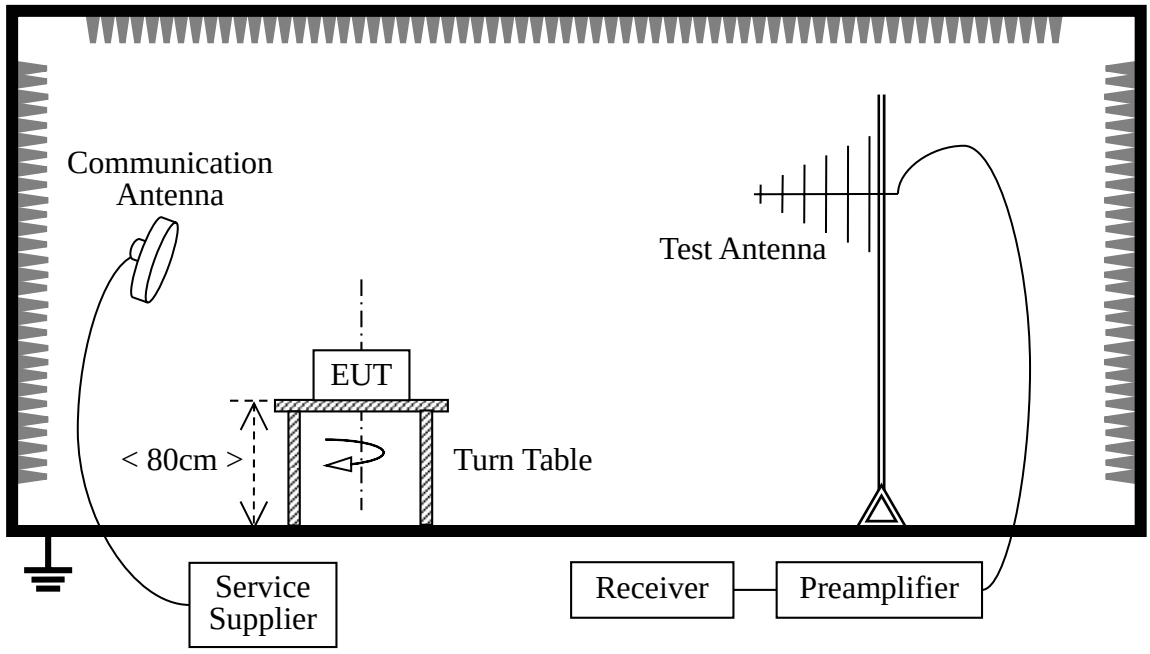
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

NOTE:

1. Field Strength (dBμV/m) = 20*log[Field Strength (μV/m)].
2. In the emission tables above, the tighter limit applies at the band edges.

7.2 TEST DESCRIPTION

Test Setup:



The EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply. The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading. During the measurement, the EUT is activated and transmitting with the other Bluetooth device (Supply by the Applicant) during the test.

For the Test Antenna:

(a) In the frequency range of 9 kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
(b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested.

Preliminary Radiated Emission Test				
Frequency Range Investigated			**30 MHz TO 1000 MHz**	
Mode of operation	**Date**	**Report No.**	**Data#**	**Worst Mode**
Idle Mode	2013-12-07	STS131115F4	1_(H, V)	☐
USB Mode	2013-12-07	STS131115F4	2_(H, V)	☒

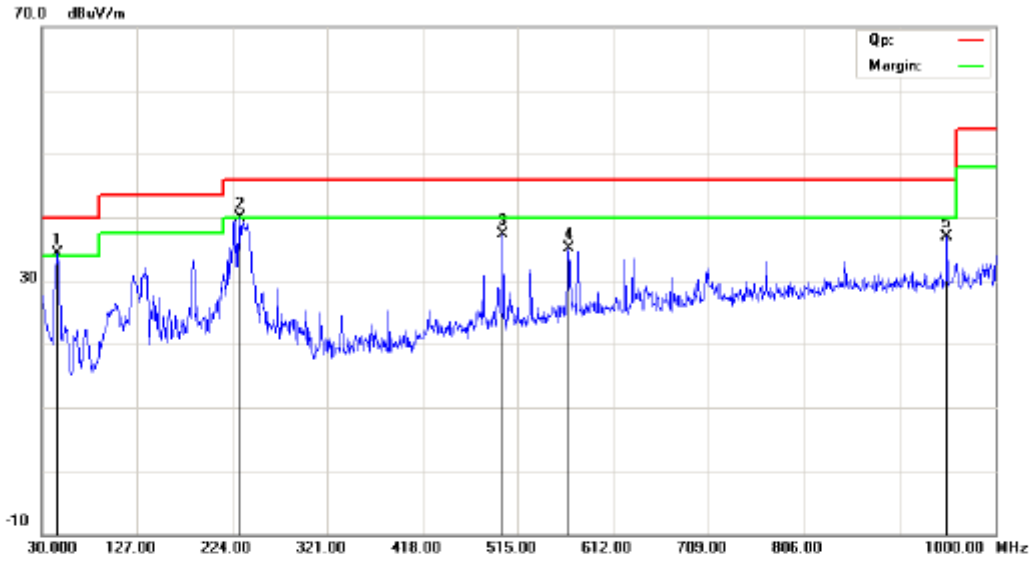
7.3 TEST RESULT

Form 9KHz to 30MHz:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Form 30MHz to 1000MHz:

Radiated Emission Measurement



Site site #1
Limit: FCC Part15 B 3M Radiation
EUT: Mobile Phone
M/N: S09
Mode: USB
Note:

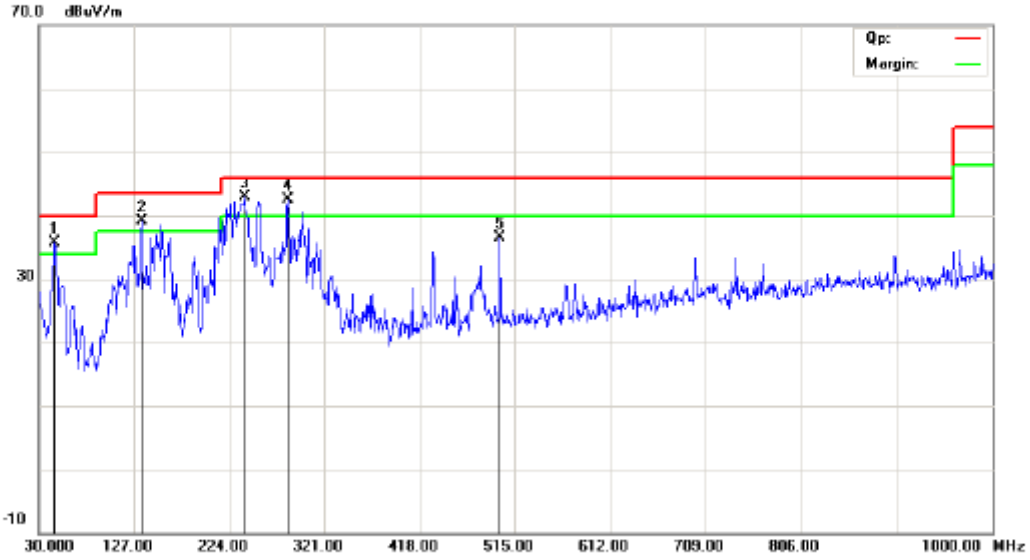
Polarization: *Vertical*
Power: Ac120V
Distance:

Temperature: 26
Humidity: 61 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	46.4900	21.31	12.91	34.22	40.00	-5.78	peak		0	
2		231.7600	23.20	16.63	39.83	46.00	-6.17	peak		0	
3		500.4500	15.86	21.40	37.26	46.00	-8.74	peak		0	
4		567.3800	12.32	22.82	35.14	46.00	-10.86	peak		0	
5		950.5300	8.94	27.92	36.86	46.00	-9.14	peak		0	

*:Maximum data x:Over limit !:over margin

Radiated Emission Measurement



Site site #1 Polarization: *Horizontal* Temperature: 26

Limit: FCC Part15 B 3M Radiation Power: Ac120V Humidity: 61 %

EUT: Mobile Phone Distance:

M/N: S09

Mode: USB

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	46.4900	22.79	12.91	35.70	40.00	-4.30	peak		0	
2	!	134.7600	21.59	17.46	39.05	43.50	-4.45	peak		0	
3	*	239.5200	25.76	17.17	42.93	46.00	-3.07	peak		0	
4	!	284.1400	23.10	19.44	42.54	46.00	-3.46	peak		0	
5		500.4500	15.07	21.40	36.47	46.00	-9.53	peak		0	

*:Maximum data x:Over limit !:over margin

Form 1000MHz to 6000MHz:

The low frequency, which started from 1000MHz to 6000MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

------END OF REPORT------