FCC 47 CFR PART 15 SUBPART B

TEST REPORT

For

Applicant: **Sociedad Importadora Italiana Ltda.**

Address: **Av Nueva Costanera 3848, Depot24, Vitacura, Santiago - Chile**

Product Name: **GSM Mobile Phone**

Model Name: **HKM650**

Brand Name: **HKM**

FCC ID: **X77HKM650**

Report No.: **STS100808F1**

Date of Issue: **August. 20, 2010**

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**

Fax: **86-755-2795 8022**

TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY

Equipment Under Test:	GSM Mobile Phone
Brand Name:	HKM
Model Number:	HKM650
Series Model Name:	N/A
Series Model Difference description:	N/A
FCC ID:	X77HKM650
Applicant:	Sociedad Importadora Italiana Ltda. Av Nueva Costanera 3848, Depto 24, Vitacura, Santiago - Chile
Manufacturer:	Shenzhen Smart Industrial Co., Ltd. Room 7A12, 7th Floor, Jingze Building, Shennan East Road, Luohu District, Shenzhen, China
Technical Standards:	FCC Part 15 B
File Number:	STS100808F1
Date of test:	August. 18 ~ August. 20, 2010
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 August. 20, 2010

Review by (+ signature):

July Wen August. 20, 2010

Approved by (+ signature): Teo Yang

Terry Yang August. 20, 2010

2. GENERAL INFORMATION

2.1 PRODUCT INFORMATION

EUT1- Mobile Phone	
Description:	GSM Mobile Phone
Model Name:	HKM650
Serial No.:	N/A
Model Difference description:	N/A
IMEI No.:	359946036293190/ 359946036293208
Frequency:	GSM 850MHz/1900MHz
Hardware Version:	9t007mbv1.0
Software Version:	GT007_PCB01_gprs_MT6223P_S00.GT007_V1_7
EUT2- Battery	
Description:	Lithium-ion Battery
Model Name:	BL-5C
Brand Name:	N/A
Manufacturer:	Shenzhen Baoweiyu Electronics Co., Ltd.
Capacitance:	650 mAh
Rated Voltage:	3.7V
Charge Limit:	4.2V
EUT3 – Power Supply	
Description:	Travel Charger
Model Name:	N/A
Brand Name:	N/A
Manufacturer:	Guangdong Weiliwang Electronic Co., Ltd.
Rated Input:	AC 100-240V, 50/60HZ 150mA
Rated Output:	DC 5.0V, 500mA
Length USB cable:	1.00m

NOTE:

1. The EUT is a model of GSM Portable Mobile Station (MS). It consists of **hand telephone set**, **Lithium battery, headphone, USB cable** 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 (10-1-05 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

Test Site:	Most Technology Service Co., Ltd.
Location:	No.5, Langshan 2nd Rd., North Hi-Tech Industrial park, Nanshan, Shenzhen, Guangdong, 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 **490827.** The **CNAS** Registration Number is **CNAS L3573.**
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 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

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4:2003,Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4:2003.

4 SETUP OF EQUIPMENT UNDER TEST

4.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

4.2 SUPPORT EQUIPMENT

Device Type	Brand	Model	Series No.	Data Cable	Power Cable
Notebook	ASUS	Eee PC 1005HA	N/A	N/A	N/A
Adapter	ASUS	AS1288U	N/A	N/A	1.8M Un-Shielded

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.

4.3 TEST EQUIPMENT LIST

Instrumentation: The following list contains equipment used at MOST 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.

No.	Equipment	Manufacturer	Model No.	S/N	Calculator due date
1	Test Receiver	Rohde & Schwarz	ESCI	100492	2011/03/14
2	L.I.S.N.	Rohde & Schwarz	ENV216	100093	2011/03/14
3	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2011/03/14
4	Terminator	Hubersuhner	50Ω	No.1	2011/03/14
5	RF Cable	SchwarzBeck	N/A	No.1	2011/03/14
6	Test Receiver	Rohde & Schwarz	ESPI	101202	2011/03/14
7	Bilog Antenna	Sunol	JB3	A121206	2011/03/14
8	Test Antenna - Horn	Schwarzbeck	BBHA 9120C	--	2011/03/14
9	Test Antenna - LOOP	Schwarzbeck	VULB 9163	--	2011/03/14
10	Cable	Resenberger	N/A	NO.1	2011/03/14
11	Cable	SchwarzBeck	N/A	NO.2	2011/03/14
12	Cable	SchwarzBeck	N/A	NO.3	2011/03/14
13	DC Power Filter	DuoJi	DL2×30B	N/A	2011/03/14
14	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	2011/03/14
15	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	2011/03/14
16	Test Receiver	Rohde & Schwarz	ESCI	100492	2011/03/14
17	Absorbing Clamp	Luthi	MDS21	3635	2011/03/14
18	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2011/03/14
19	AC Power Source	Kikusui	AC40MA	LM003232	2011/03/14
20	Test Analyzer	Kikusui	KHA1000	LM003720	2011/03/14
21	Line Impendence Network	Kikusui	LIN40MA-PCR-L	LM002352	2011/03/14
22	ESD Tester	Kikusui	KES4021	LM003537	2011/03/14
23	EMCPRO System	EM Test	UCS-500-M4	V0648102026	2011/03/14
24	Signal Generator	IFR	2032	203002/100	2011/03/14
25	Amplifier	A&R	150W1000	301584	2011/03/14
26	CDN	FCC	FCC-801-M2-25	47	2011/03/14
27	CDN	FCC	FCC-801-M3-25	107	2011/03/14
28	EM Injection Clamp	FCC	F-203I-23mm	403	2011/03/14
29	RF Cable	MIYAZAKI	N/A	No.1/No.2	2011/03/14
30	Universal Radio Communication Tester	ROHDE&SCHWARZ	CMU200	0304789	2011/03/14
31	Telecommunication Antenna	European Antennas	PSA 75301R/170	0304213	2011/03/14

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

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

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: Call Mode

Before the measurement, the lithium battery was completely discharge.

During the measurement, the lithium battery and the charger were installed, and the MS were in charging state. A communication link was established between the MS and a System Simulator (SS). The MS operated at GSM 850/1900MHz mid ARFCN and maximum output power.

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

Mode 3: GPRS Mode

During the test, the MS was playing the GPRS function continuously.

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

Mode 4: MP3/MP4 Mode

During the test, the MS was playing the MP3/MP4 function continuously.

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

Mode 5: 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** (ASUS, Model: Eee PC 1005HA).

Mode 6: FM Mode

During the test, the MS was playing the FM function continuously.

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

Mode 7: Flash Light Mode

During the test, the MS was playing the Flash Light function continuously.

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

6. LINE CONDUCTED EMISSION TEST

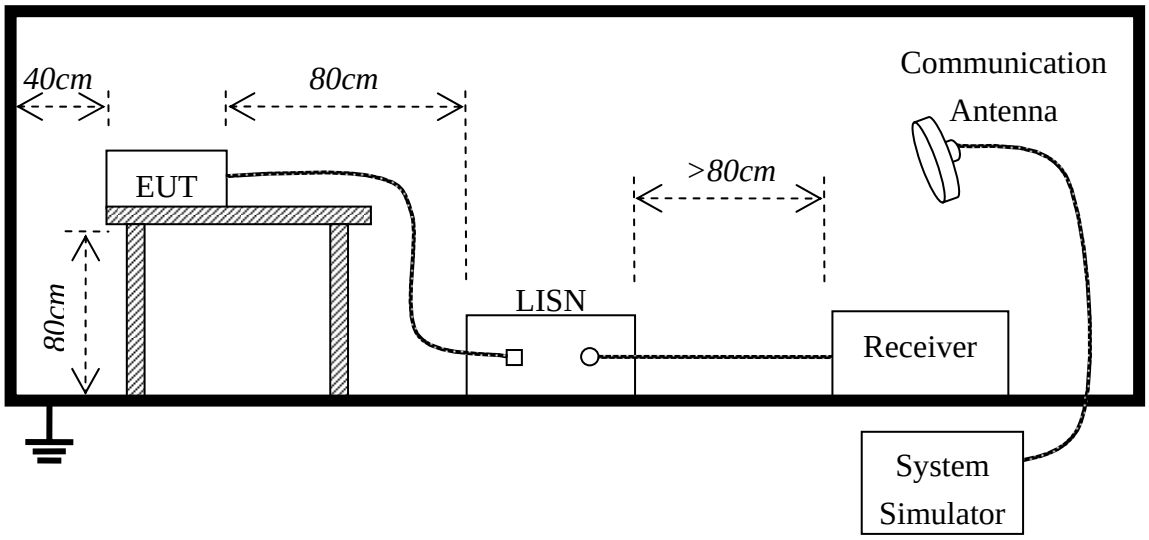
6.1. LIMITS OF LINE CONDUCTED EMISSION TEST

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 AC120V/60Hz power 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	2010-08-19	STS100808F1	HKM650_1_(L, N)	☐
Call Mode	2010-08-19	STS100808F1	HKM650_2_(L, N)	☐
GPRS Mode	2010-08-19	STS100808F1	HKM650_3_(L, N)	☐
MP3/MP4 Mode	2010-08-19	STS100808F1	HKM650_4_(L, N)	☒
USB Mode	2010-08-19	STS100808F1	HKM650_5_(L, N)	☐
FM Mode	2010-08-19	STS100808F1	HKM650_6_(L, N)	☐
Flash Light Mode	2010-08-19	STS100808F1	HKM650_7_(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.

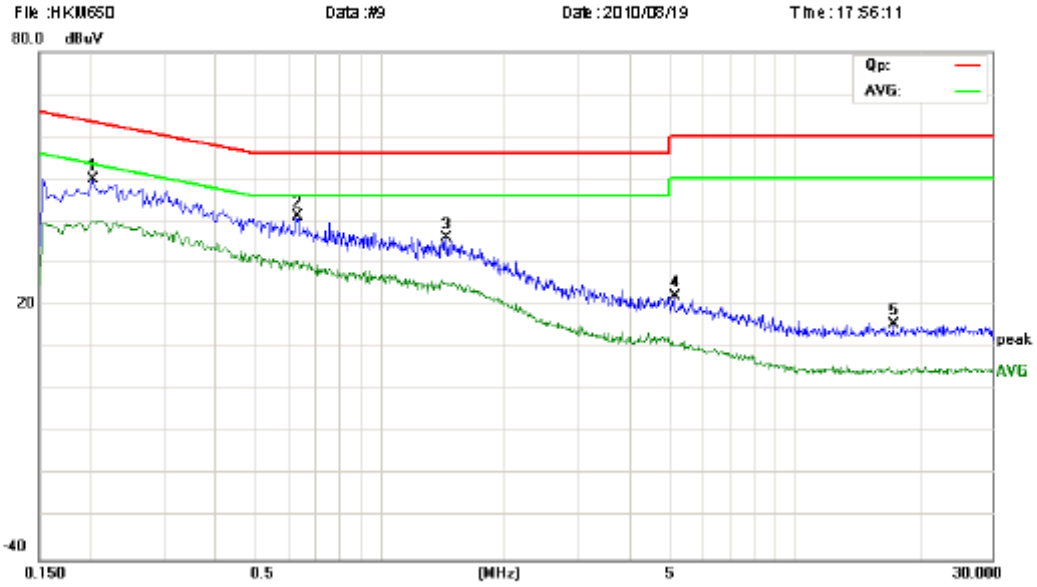
A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level 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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



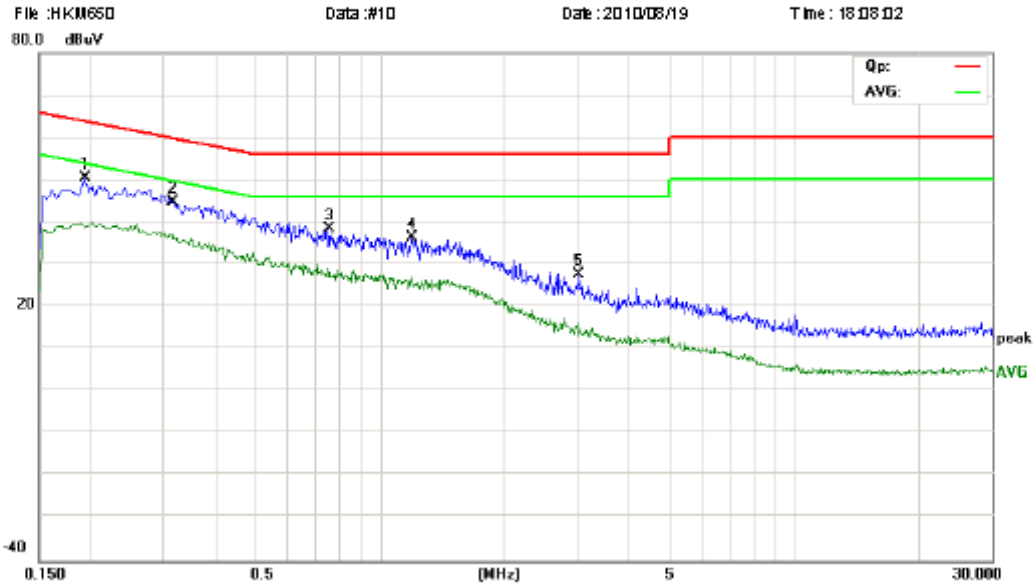
Site site #1 Phase: L1 Temperature: 26
Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %
EUT: GSM Mobile Phone
M/N: HKM650
Mode: Idle
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2020	37.95	11.99	49.94	63.53	-13.59	peak	
2		0.6300	31.19	10.00	41.19	56.00	-14.81	peak	
3		1.4380	26.45	9.56	36.01	56.00	-19.99	peak	
4		5.1300	10.38	11.92	22.30	60.00	-37.70	peak	
5		17.3460	6.65	9.00	15.65	60.00	-44.35	peak	

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



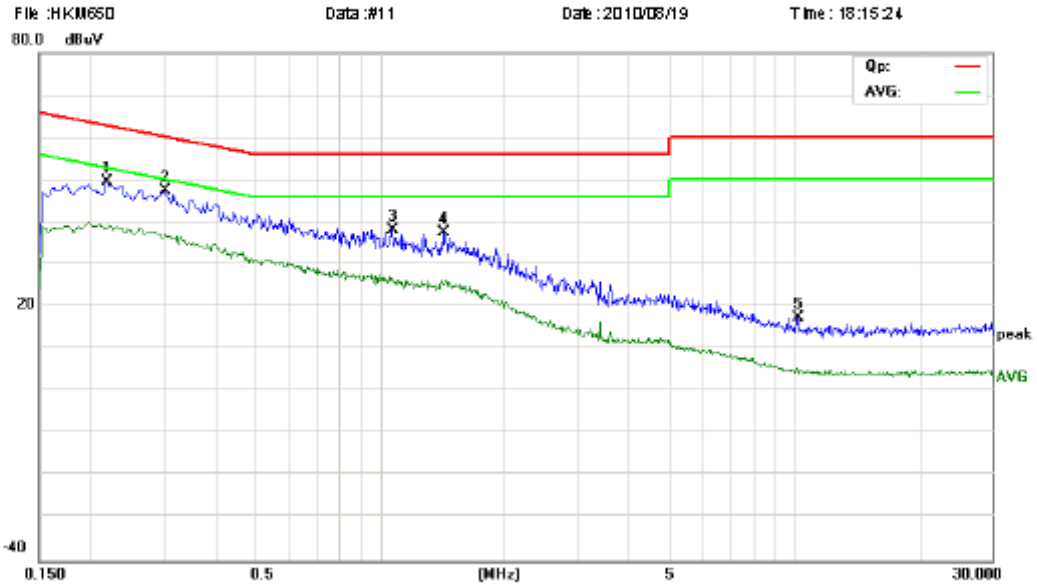
Site site #1 Phase: N Temperature: 26
Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %
EUT: GSM Mobile Phone
M/N: HKM650
Mode: Idle
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1940	38.85	11.64	50.49	63.86	-13.37	peak	
2		0.3140	33.66	11.24	44.90	59.86	-14.96	peak	
3		0.7500	28.32	10.00	38.32	56.00	-17.68	peak	
4		1.1860	26.52	9.81	36.33	56.00	-19.67	peak	
5		2.9980	17.67	10.00	27.67	56.00	-28.33	peak	

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



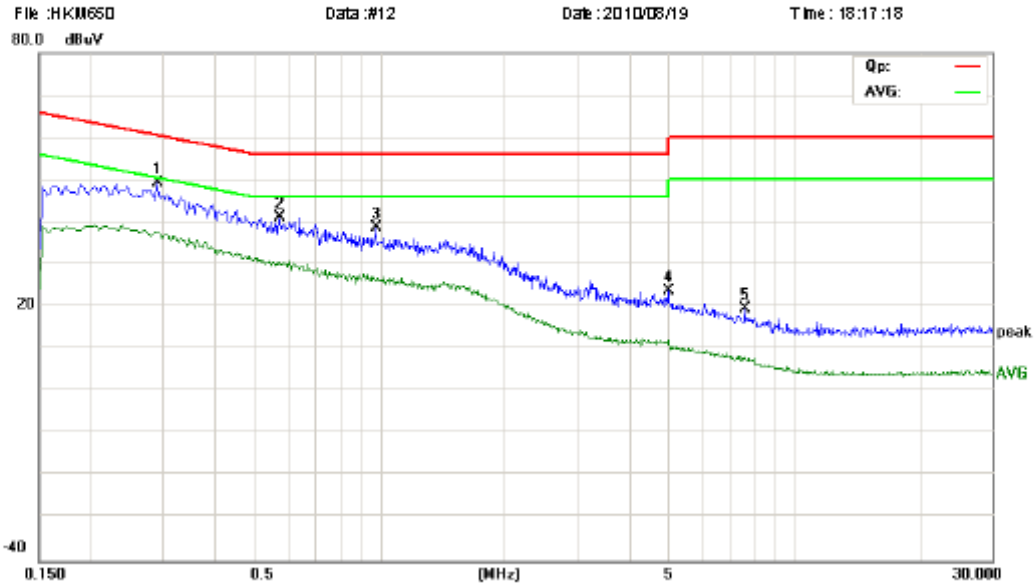
Site site #1 Phase: N Temperature: 26
Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %
EUT: GSM Mobile Phone
M/N: HKM650
Mode: MP3/MP4
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2180	37.65	11.88	49.53	62.89	-13.36	peak	
2	*	0.3020	36.28	11.32	47.60	60.19	-12.59	peak	
3		1.0700	28.18	9.93	38.11	56.00	-17.89	peak	
4		1.4220	28.03	9.58	37.61	56.00	-18.39	peak	
5		10.1740	8.47	9.00	17.47	60.00	-42.53	peak	

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



Site site #1 Phase: L1 Temperature: 26

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

EUT: GSM Mobile Phone

M/N: HKM650

Mode: MP3/MP4

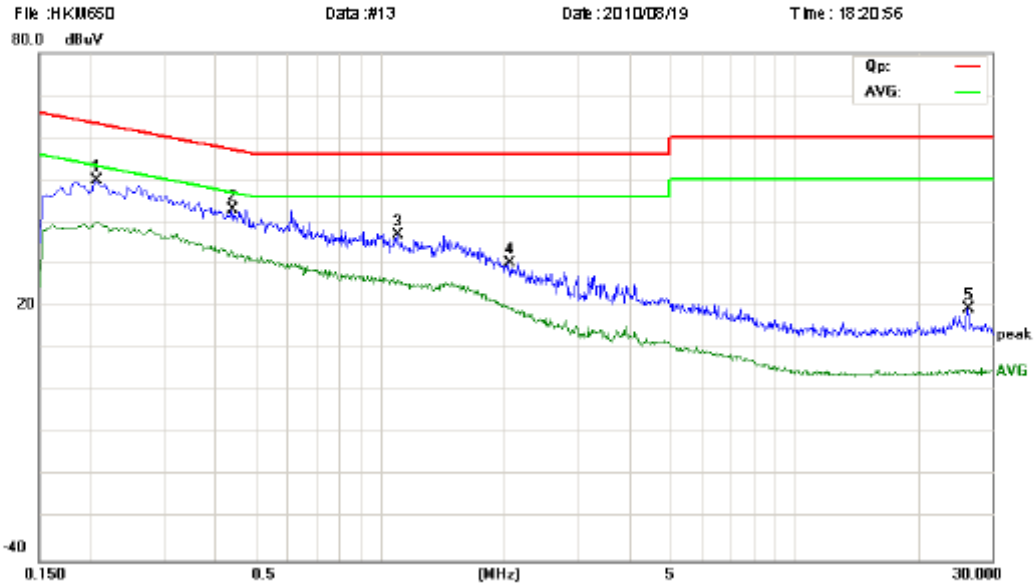
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2900	37.71	11.40	49.11	60.52	-11.41	peak	
2		0.5700	31.10	10.00	41.10	56.00	-14.90	peak	
3		0.9740	28.65	10.00	38.65	56.00	-17.35	peak	
4		4.9780	11.67	11.98	23.65	56.00	-32.35	peak	
5		7.5700	9.15	10.46	19.61	60.00	-40.39	peak	

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



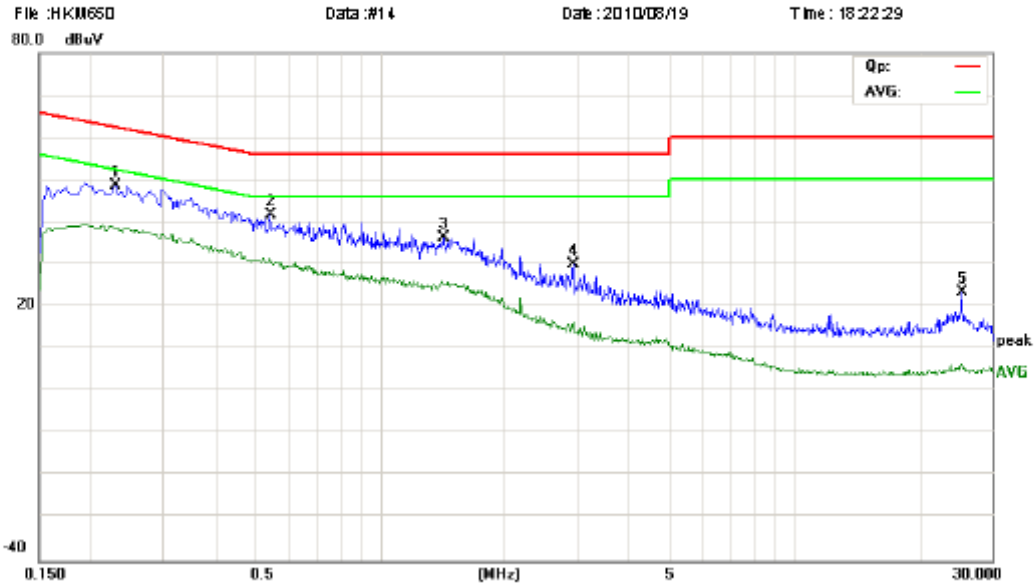
Site site #1 Phase: L1 Temperature: 26
Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %
EUT: GSM Mobile Phone
M/N: HKM650
Mode: FM
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2060	37.99	11.96	49.95	63.37	-13.42	peak	
2		0.4380	32.63	10.41	43.04	57.10	-14.06	peak	
3		1.0980	27.18	9.90	37.08	56.00	-18.92	peak	
4		2.0540	21.39	9.05	30.44	56.00	-25.56	peak	
5		26.1820	10.57	9.00	19.57	60.00	-40.43	peak	

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



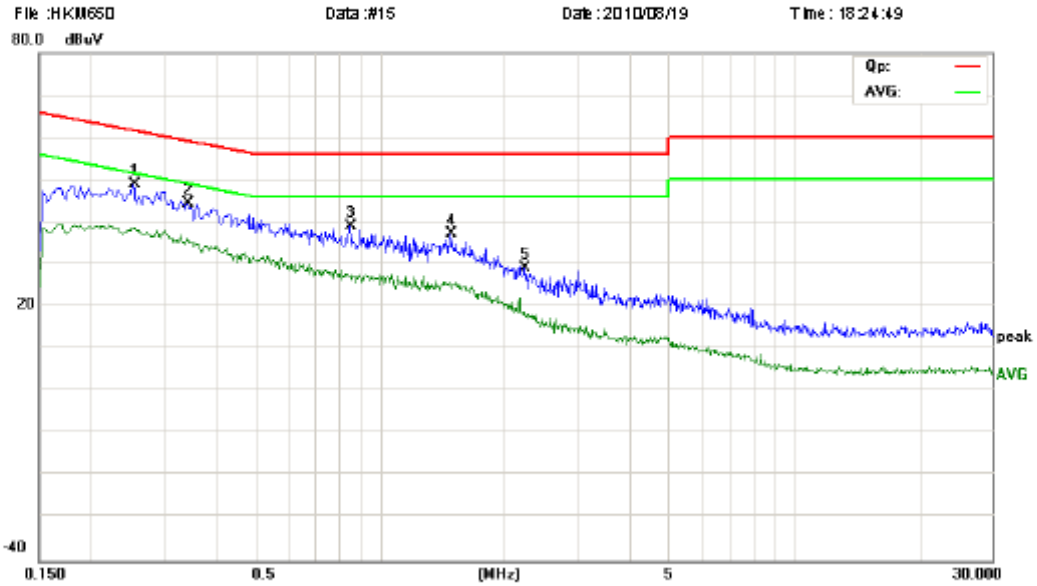
Site site #1 Phase: N Temperature: 26
Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %
EUT: GSM Mobile Phone
M/N: HKM650
Mode: FM
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2300	36.83	11.80	48.63	62.45	-13.82	peak	
2		0.5420	31.61	10.00	41.61	56.00	-14.39	peak	
3		1.4220	26.77	9.58	36.35	56.00	-19.65	peak	
4		2.9180	20.11	9.92	30.03	56.00	-25.97	peak	
5		25.3860	14.39	9.00	23.39	60.00	-36.61	peak	

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



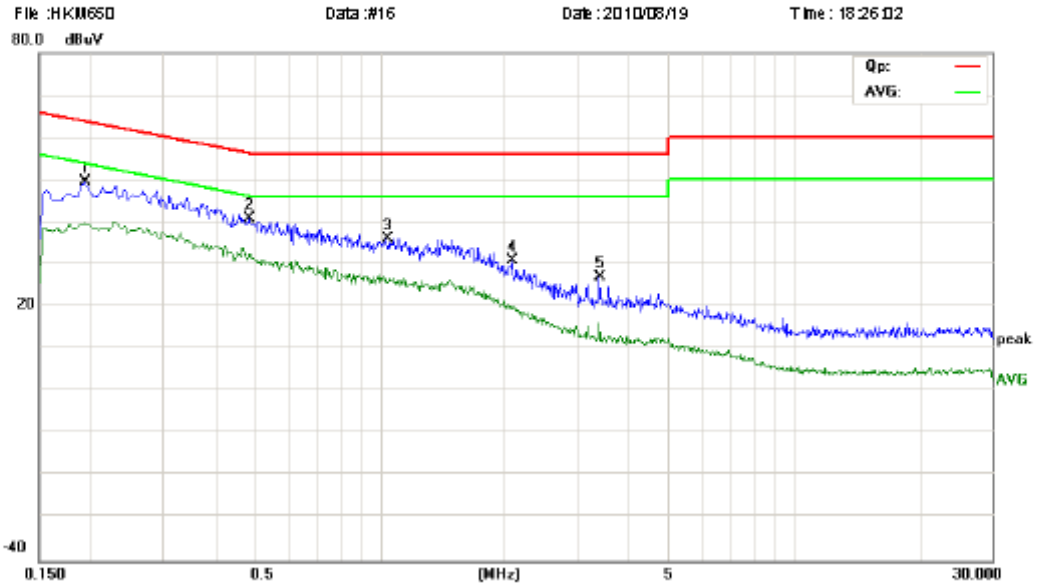
Site site #1 Phase: N Temperature: 26
Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %
EUT: GSM Mobile Phone
M/N: HKM650
Mode: FLASH LIGHT
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2540	37.31	11.64	48.95	61.63	-12.68	peak	
2		0.3420	33.27	11.05	44.32	59.15	-14.83	peak	
3		0.8460	28.92	10.00	38.92	56.00	-17.08	peak	
4		1.4780	27.80	9.52	37.32	56.00	-18.68	peak	
5		2.2300	19.81	9.23	29.04	56.00	-26.96	peak	

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



Site site #1 Phase: L1 Temperature: 26
Limit: FCC Part15 B Class B QP Power: AC 120V/60Hz Humidity: 60 %
EUT: GSM Mobile Phone
M/N: HKM650
Mode: FLASH LIGHT
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1940	37.96	11.64	49.60	63.86	-14.26	peak	
2		0.4820	30.66	10.12	40.78	56.30	-15.52	peak	
3		1.0420	26.07	9.96	36.03	56.00	-19.97	peak	
4		2.0780	21.73	9.08	30.81	56.00	-25.19	peak	
5		3.3660	16.72	10.37	27.09	56.00	-28.91	peak	

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

7. RADIATED EMISSION TEST

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

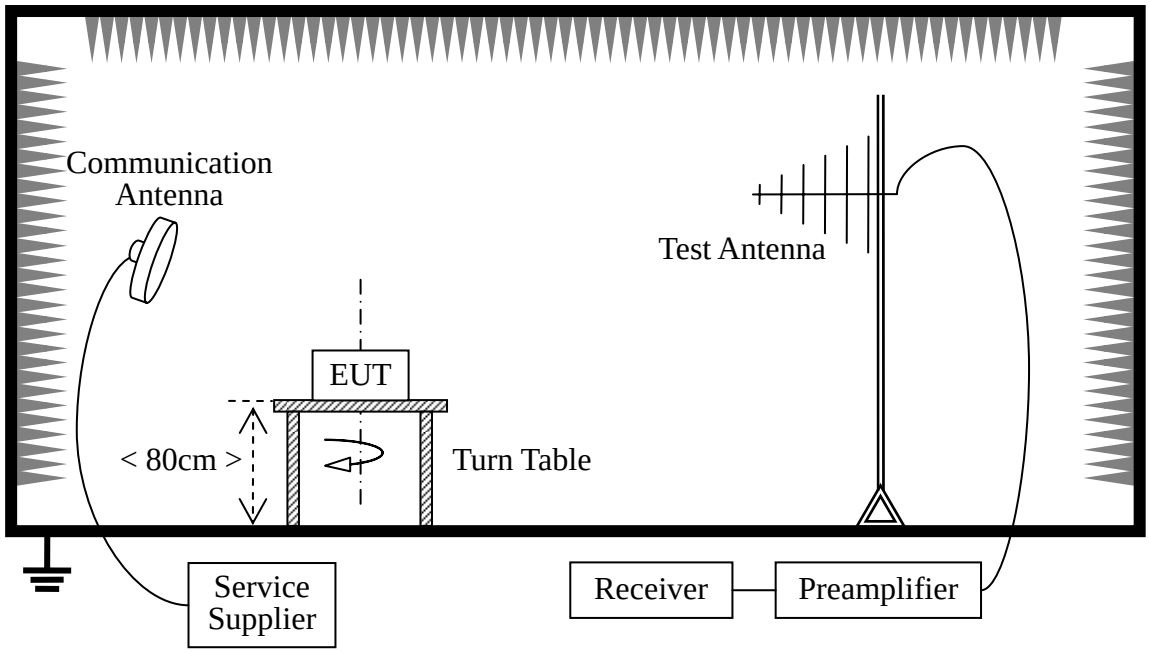
According to FCC section 15.109, except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

For frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 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 for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

7.2 TEST DESCRIPTION

Test Setup:



The EUT is powered by the Battery. 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	2010-08-19	STS100808F1	HKM650_1_(H, V)	☐
Call Mode	2010-08-19	STS100808F1	HKM650_2_(H, V)	☐
GPRS Mode	2010-08-19	STS100808F1	HKM650_3_(H, V)	☐
MP3/MP4 Mode	2010-08-19	STS100808F1	HKM650_4_(H, V)	☐
USB Mode	2010-08-19	STS100808F1	HKM650_5_(H, V)	☐
FM Mode	2010-08-19	STS100808F1	HKM650_6_(H, V)	☒
Flash Light Mode	2010-08-19	STS100808F1	HKM650_6_(H, V)	☐

7.3 TEST RESULT

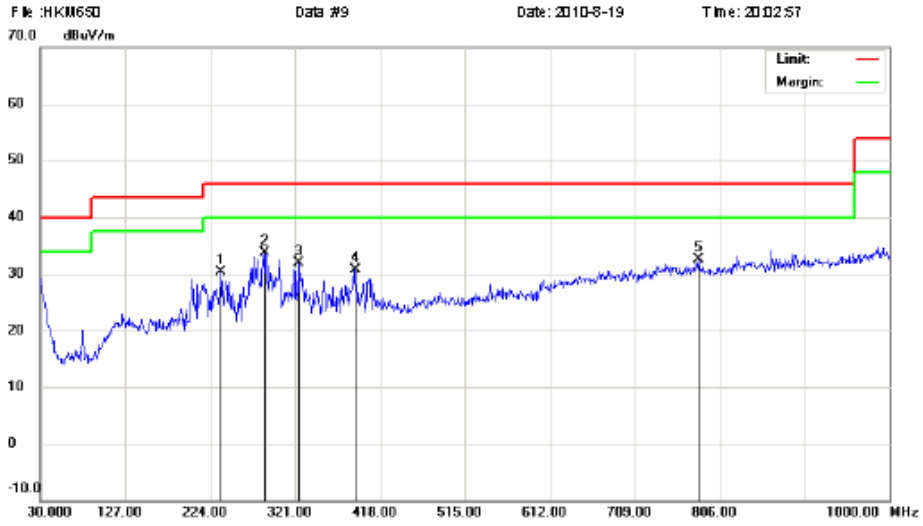
Below 30MHz

All spurious emission was under limit 20dB more.

30MHz to 1000MHz

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: Idle
Note:

Polarization: *Horizontal*
Power: AC 120V/60Hz

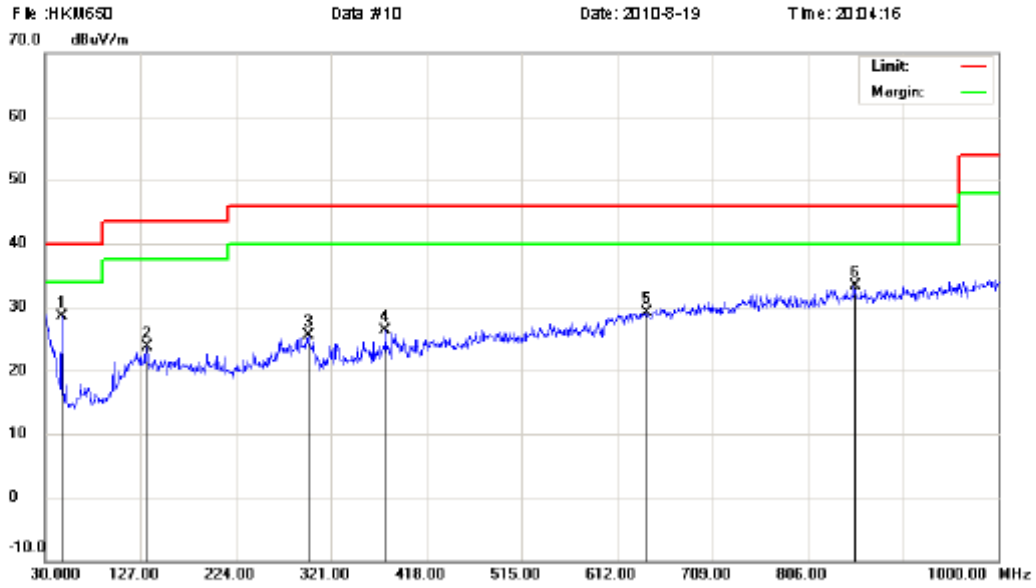
Temperature: 25
Humidity: 60 %
Distance:

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		236.6100	13.29	16.97	30.26	46.00	-15.74	peak			
2	*	286.0799	14.20	19.44	33.64	46.00	-12.36	peak			
3		325.8500	14.88	17.00	31.88	46.00	-14.12	peak			
4		388.9000	12.49	18.28	30.77	46.00	-15.23	peak			
5		781.7500	6.43	26.16	32.59	46.00	-13.41	peak			

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: Idle
Note:

Polarization: *Vertical*
Power: AC 120V/60Hz

Temperature: 25
Humidity: 60 %

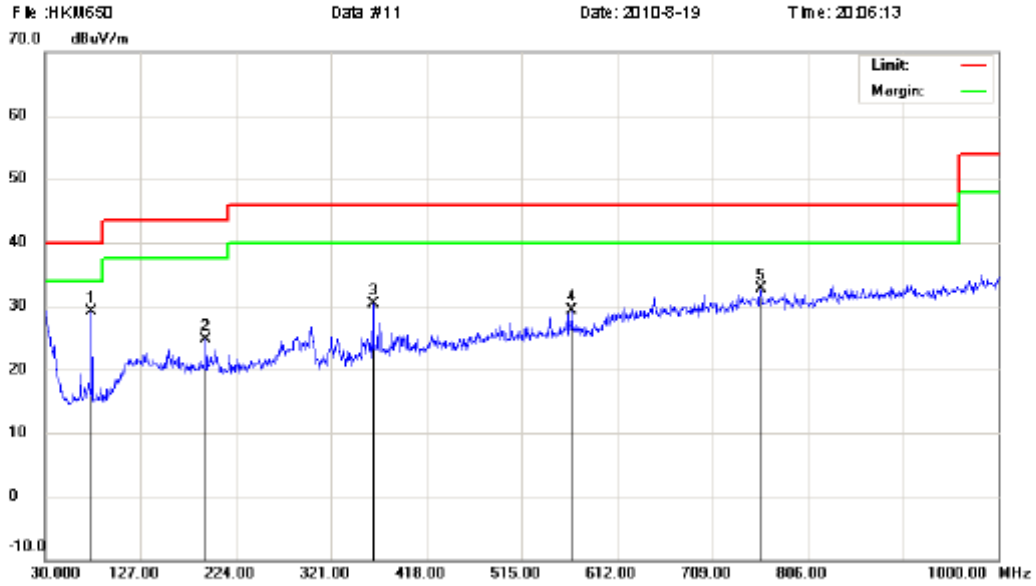
Distance:

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	*	47.4600	16.08	12.47	28.55	40.00	-11.45	peak			
2		132.8200	6.12	17.56	23.68	43.50	-19.82	peak			
3		297.7200	6.12	19.30	25.42	46.00	-20.58	peak			
4		376.2900	8.02	18.21	26.23	46.00	-19.77	peak			
5		642.0700	5.06	24.02	29.08	46.00	-16.92	peak			
6		853.5300	6.13	27.13	33.26	46.00	-12.74	peak			

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: MP3/MP4
Note:

Polarization: *Vertical*
Power: AC 120V/60Hz

Temperature: 25
Humidity: 60 %

Distance:

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	*	77.5300	17.63	11.52	29.15	40.00	-10.85	peak			
2		193.9299	7.89	16.80	24.69	43.50	-18.81	peak			
3		363.6800	12.13	18.26	30.39	46.00	-15.61	peak			
4		566.4099	6.45	22.79	29.24	46.00	-16.76	peak			
5		758.4699	6.99	25.63	32.62	46.00	-13.38	peak			

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement

Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: MP3/MP4
Note:

Polarization: *Horizontal*
Power: AC 120V/60Hz

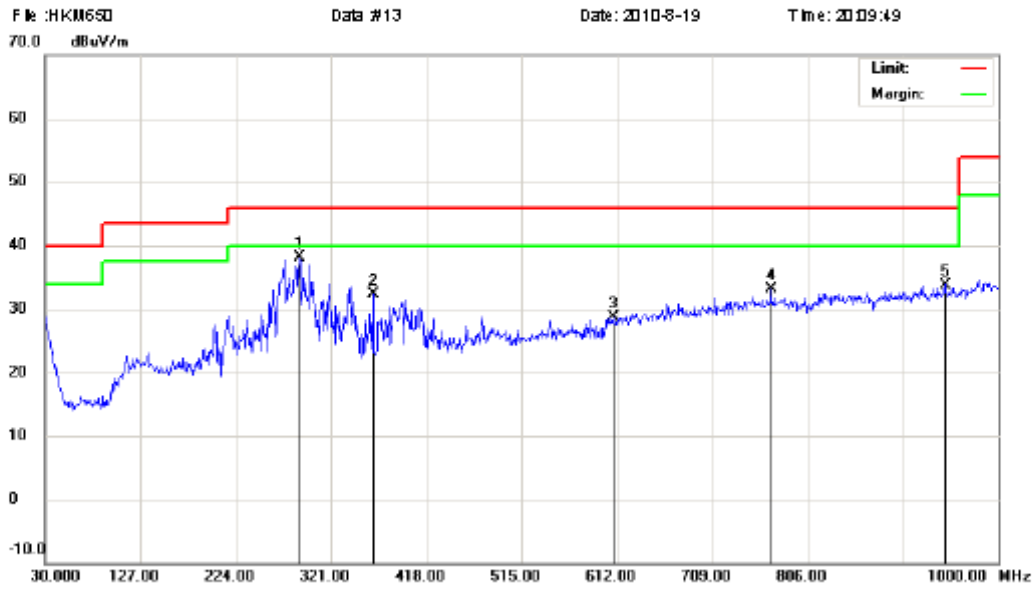
Temperature: 25
Humidity: 60 %
Distance:

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		285.1099	13.90	19.45	33.35	46.00	-12.65	peak			
2		406.3599	10.87	18.88	29.75	46.00	-16.25	peak			
3		544.1000	5.72	22.28	28.00	46.00	-18.00	peak			
4		723.5500	7.01	24.74	31.75	46.00	-14.25	peak			
5	*	882.6300	6.35	27.13	33.48	46.00	-12.52	peak			

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: FM
Note:

Polarization: *Horizontal*
Power: AC 120V/60Hz
Distance:

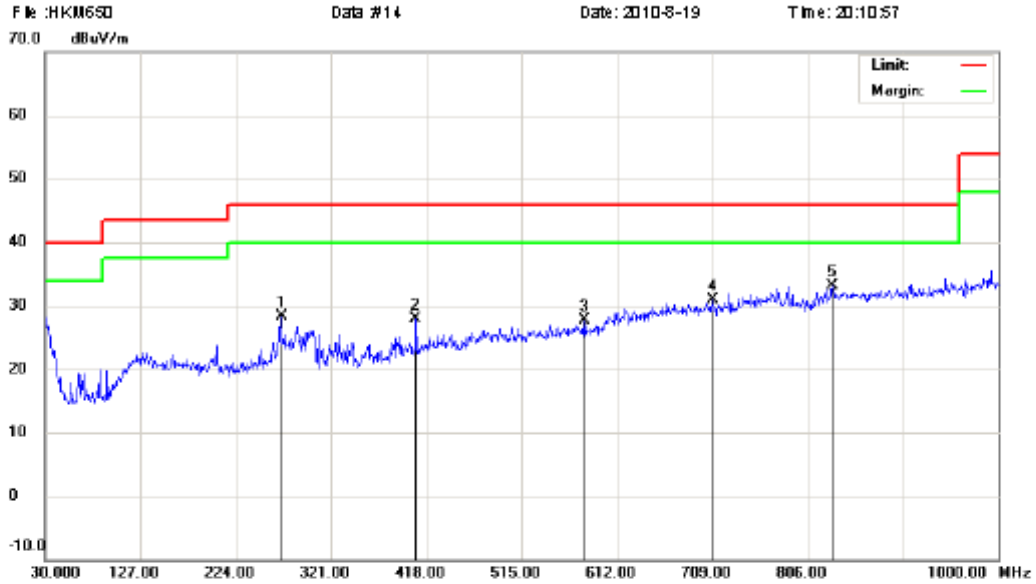
Temperature: 25
Humidity: 60 %

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	*	288.9900	18.60	19.41	38.01	46.00	-7.99	peak			
2		363.6800	14.05	18.26	32.31	46.00	-13.69	peak			
3		608.1200	5.43	23.20	28.63	46.00	-17.37	peak			
4		768.1700	7.23	25.86	33.09	46.00	-12.91	peak			
5		945.6800	6.07	27.73	33.80	46.00	-12.20	peak			

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: FM
Note:

Polarization: *Vertical*
Power: AC 120V/60Hz

Temperature: 25
Humidity: 60 %

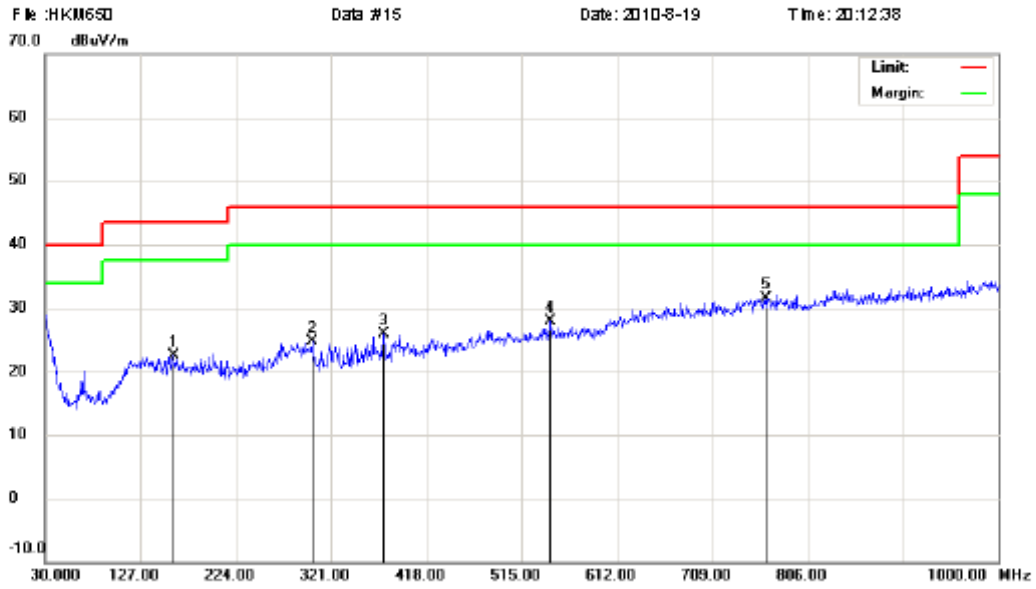
Distance:

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		269.5900	9.37	18.85	28.22	46.00	-17.78	peak			
2		407.3299	8.97	18.94	27.91	46.00	-18.09	peak			
3		578.0500	4.94	22.86	27.80	46.00	-18.20	peak			
4		708.0300	6.22	24.68	30.90	46.00	-15.10	peak			
5	*	831.2199	6.08	27.02	33.10	46.00	-12.90	peak			

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: Flash Light
Note:

Polarization: *Vertical*
Power: AC 120V/60Hz

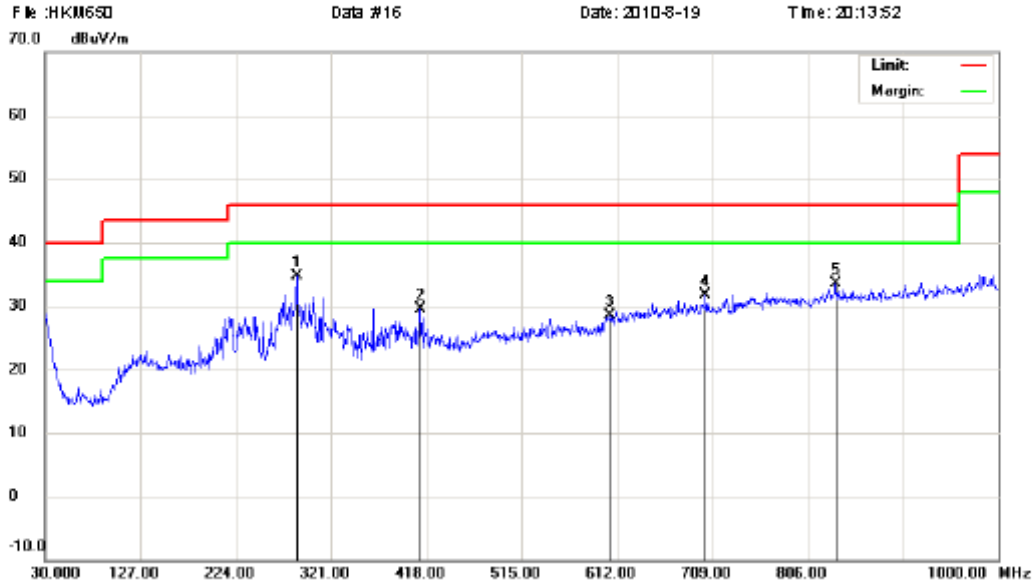
Temperature: 25
Humidity: 60 %
Distance:

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		159.9800	5.23	17.30	22.53	43.50	-20.97	peak			
2		301.6000	5.85	18.87	24.72	46.00	-21.28	peak			
3		374.3500	7.58	18.24	25.82	46.00	-20.18	peak			
4		544.1000	5.57	22.28	27.85	46.00	-18.15	peak			
5	*	763.3200	5.80	25.73	31.53	46.00	-14.47	peak			

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

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement



Site site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: GSM Mobile Phone
M/N: HKM650
Mode: Flash Light
Note:

Polarization: *Horizontal*
Power: AC 120V/60Hz

Temperature: 25
Humidity: 60 %

Distance:

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	*	286.0799	15.18	19.44	34.62	46.00	-11.38	peak			
2		411.2100	10.40	19.18	29.58	46.00	-16.42	peak			
3		604.2400	5.27	23.17	28.44	46.00	-17.56	peak			
4		702.2100	7.12	24.68	31.80	46.00	-14.20	peak			
5		834.1300	6.45	27.08	33.53	46.00	-12.47	peak			

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