

FCC 47 CFR PART 15 SUBPART C TEST REPORT

For

Applicant: HUALING (H.K.) COMPANY HONGKONG

Address: FLAT/RM G 11/F, WINDSOR MANSION 29-31 CHATHAM RD

SOUTH T.S.T KOWLOON, HONG KONG

Product Name: Mobile Phone

Model Name: i225

Brand Name: iplus

FCC ID: OX8IPLUSI225

Report No.: DPH120712F04

Date of Issue: August. 08, 2012

Issued by: Super Test Service Technology Co., Ltd.

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TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY	3
2. GENERAL INFORMATION	4
2.1 PRODUCT INFORMATION	4
2.2 OBJECTIVE	5
2.3 TEST STANDARDS AND RESULTS	5
2.4 ENVIRONMENTAL CONDITIONS	5
3. TEST FACILITY	6
3.1TEST FACILITY	6
3.2 GENERAL TEST PROCEDURES	6
3.3 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS	7
4. SETUP OF EQUIPMENT UNDER TEST	8
4.1 SUPPORT EQUIPMENT	8
4.2 TEST EQUIPMENT LIST	8
5. 47 CFR Part 15C 15.249 Requirements1	10
5.1 SPURIOUS EMISSION TEST	10
5.2 BAND EDGE	19
5.3 LINE CONDUCTED EMISSION TEST	22
5.4 20dB BANDWIDTH	26
APPENDIX 1	28
PHOTOGRAPHS OF TEST SETUP	28
APPENDIX 23	30
PHOTOGRAPHS OF EUT3	30

Revision History			
Issue Date Reason for Revision			
1.0	August. 08, 2012	First edition	

1 VERIFICATION OF CONFORMITY

Equipment Under Test:	Mobile Phone
Brand Name:	iplus
Model Number:	i225
Series Model Name:	N/A
Difference description:	N/A
FCC ID:	OX8IPLUSI225
Applicant:	HUALING (H.K.) COMPANY HONGKONG
	FLAT/RM G 11/F, WINDSOR MANSION 29-31 CHATHAM RD SOUTH T.S.T KOWLOON, HONG KONG
Manufacturer:	HUALING (H.K.) COMPANY HONGKONG
	FLAT/RM G 11/F, WINDSOR MANSION 29-31 CHATHAM RD SOUTH T.S.T KOWLOON, HONG KONG
Technical Standards:	47 CFR Part 15 Subpart C
File Number:	DPH120712F04
Date of test:	July 14 ~ August. 08, 2012
Deviation: None	
Condition of Test Sample:	Normal
Test Result:	PASS

The above equipment was tested by Top-cert for compliance with the requirements set forth in FCC rules 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):

Rex Luo

Test Engineer

Approved by (+ signature):

Joe Jia

Manager

2 GENERAL INFORMATION

2.1 PRODUCT INFORMATION

Product	Mobile Phone
Trade Name	iplus
Model Number	i225
Power Supply	DC 5V by AC/DC adapter 100-240V~50/60Hz DC 3.7V by battery
Frequency Range	2402MHz -2480MHz
Modulation Type	FHSS
Antenna Type:	Internal Fixed
Channel Spacing:	1MHz
Channel Number	79(CH Low: 2402MHz, CH Mid: 2441MHz, CH High: 2480MHz)
Temperature Range	-20°C ~ 50°C

NOTE:

1. Please refer to Appendix I for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

2.2 OBJECTIVE

The objective of the report is to perform tests according to 47 CFR Part 15 Subpart C for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 15(10-1-09 Edition)	Radio Frequency Devices

2.3 TEST STANDARDS AND RESULTS

Test items and the results are as bellow:

No.	Section	Description	Result	Date of Test
1	15.249(a)	Spurious Emission	PASS	2012-07-11
2	15.249(a)	Band Edge	PASS	2012-07-20
3	15.207	Power Line Conducted Emission Test	PASS	2012-07-27

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.

2.3 ENVIRONMENTAL CONDITIONS

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

- Temperature: 15-35°C

- Humidity: 30-60 %

- Atmospheric pressure: 86-106 kPa

3 TEST FACILITY

3.1 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 C63.4:2009 and CISPR 16 requirements.
	The FCC Registration Number is 490827.
	The IC Registration Number is 46405-7103.
	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 C63.4:2009 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.

3.2 GENERAL TEST PROCEDURES

EUT Function and Test Mode

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

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.

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 C63.4:2009, 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 C63.4:2009.

3.3 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110 10.495 - 0.505 2.1735 - 2.1905 4.125 - 4.128 4.17725 - 4.17775 4.20725 - 4.20775 6.215 - 6.218 6.26775 - 6.26825 6.31175 - 6.31225 8.291 - 8.294 8.362 - 8.366 8.37625 - 8.38675 8.41425 - 8.41475 12.29 - 12.293 12.51975 - 12.52025	16.42 - 16.423 16.69475 - 16.69525 16.80425 - 16.80475 25.5 - 25.67 37.5 - 38.25 73 - 74.6 74.8 - 75.2 108 - 121.94 123 - 138 149.9 - 150.05 156.52475 - 156.52525 156.7 - 156.9 162.0125 - 167.17 167.72 - 173.2 240 - 285	399.9 - 410 608 - 614 960 - 1240 1300 - 1427 1435 - 1626.5 1645.5 - 1646.5 1660 - 1710 1718.8 - 1722.2 2200 - 2300 2310 - 2390 2483.5 - 2500 2655 - 2900 3260 - 3267 3332 - 3339 3345.8 - 3358	4.5 - 5.15 5.35 - 5.46 7.25 - 7.75 8.025 - 8.5 9.0 - 9.2 9.3 - 9.5 10.6 - 12.7 13.25 - 13.4 14.47 - 14.5 15.35 - 16.2 17.7 - 21.4 22.01 - 23.12 23.6 - 24.0 31.2 - 31.8 36.43 - 36.5
12.57675 - 12.57725 13.36 - 13.41	322 - 335.4	3600 - 4400	(²)

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

² Above 38.6

4 SETUP OF EQUIPMENT UNDER TEST

4.1 SUPPORT EQUIPMENT

Device Type	Brand	Model	Series No.	Data Cable	Power Cord
N/A	N/A	N/A	N/A	N/A	N/A

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 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	Calibration due date
1	Test Receiver	Rohde & Schwarz	ESCI	100492	2013/4/21
2	L.I.S.N.	Rohde & Schwarz	ENV216	100093	2013/4/21
3	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2013/3/14
4	Terminator	Hubersuhner	50Ω	No.1	2013/3/14
5	RF Cable	SchwarzBeck	N/A	No.1	N/A
6	Test Receiver	Rohde & Schwarz	ESPI	101202	2013/4/21
7	Test Antenna – Horn	Schwarzbeck	BBHA 9120C		2013/3/14
8	Test Antenna – Bi-Log	Schwarzbeck	VULB 9163		2013/3/14
9	Power Splitter	Weinschel	1506A	NW521	N/A
10	Spectrum Analyzer	Agilent	4408B	MY41440460	2013/4/21
11	Cable	Resenberger	N/A	NO.1	N/A
12	Cable	SchwarzBeck	N/A	NO.2	N/A
13	Cable	SchwarzBeck	N/A	NO.3	N/A
14	Signal Generator	IFR	2032	203002/100	2013/5421

15	Universal Radio Communication Tester	ROHDE&SCHWARZ	CMU200	0304789	2013/4/21
16	Telecommunication Antenna	European Antennas	PSA 75301R/170	0304213	2012/03/14
17	DC Power Supply	Good Will	GPS-3030DD	EF920938	2013/4/21
18	Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2013/4/15

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

5 47 CFR PART 15C 15.249 REQUIREMENTS

5.1 SPURIOUS EMISSION TEST

5.1.1 REQUIREMENT

According to FCC section 15.249(a):

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental (mV/m)	Field Strength of Harmonics (μV/m)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500

According to FCC section 15.209 (a), 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)
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

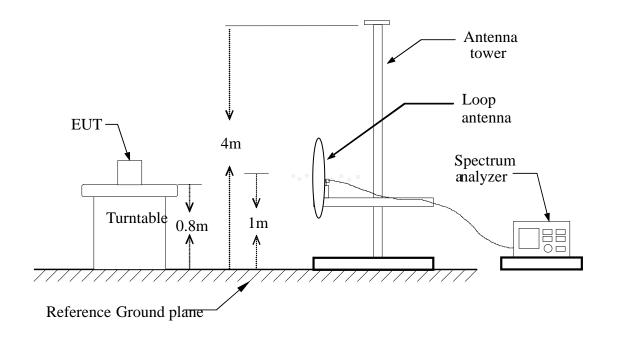
Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

In the above emission table, the tighter limit applies at the band edges.

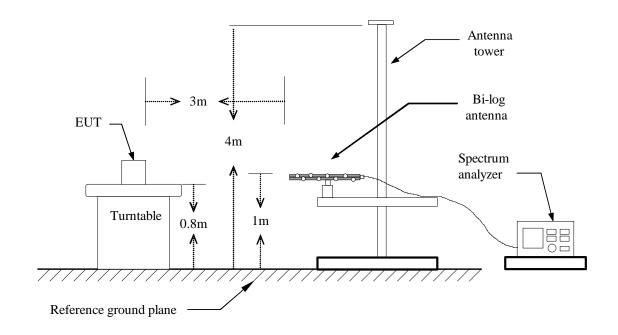
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

5.1.2 TEST DESCRIPTION

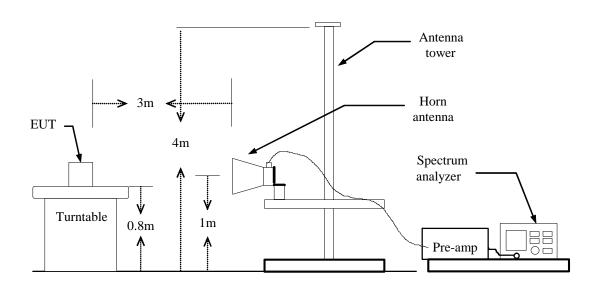
TEST SETUP:



Blow 1GHz:



Above 1GHz:



5.1.3 TEST DESCRIPTION

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Set the spectrum analyzer in the following setting as:

Below 1GHz: RBW=100 kHz / VBW=300 kHz / Sweep=AUTO

Above 1GHz:(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO

7. Repeat above procedures until the measurements for all frequencies are complete.

5.1.4 TEST RESULT

Form 9 KHz to 30MHz:

Freq.	Ant. Pol	Peak	Ant. / CL	Actual Fo	Peak	Peak
(MHz)	H/V	Reading	CF	Actual Fs	Limit	Margin
		(dBuV)	(dB)	Peak	(dBuV/m)	(dB)
				(dBuV/m)		
	Н					
	Н					
	Н					
N/A						>20
	V					
	V					
	V					
N/A						>20

Note: No test data was detected in below 30MHz.

Form 30 MHz to 1GHz:

Radiated Emission Measurement Data:#5 Date: 2012-7-11 File:i225 Time: 12:36:52 70.0 dBuV/m Limit: Margin: 60 50 40 30 20 10 0 -10.0 127.00 224.00 321.00 418.00 515.00 612.00 709.00 806.00 1000.00 MHz

Polarization:

Site site MOST 3M Limit: FCC Part15 B 3M Radiation

EUT: Phone

M/N: I225 Mode: BT Note: Power: AC 120V/60Hz

Vertical

Distance:

Temperature:

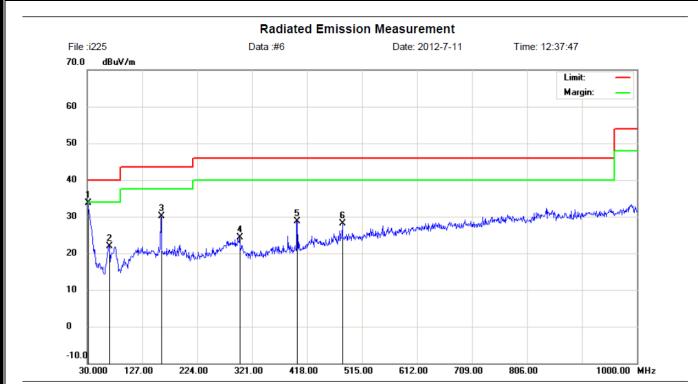
Humidity:

26

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	*	30.9700	13.36	24.05	37.41	40.00	-2.59	peak			
2		85.2900	13.94	11.31	25.25	40.00	-14.75	peak			
3		159.9800	12.71	17.30	30.01	43.50	-13.49	peak			
4		239.5200	14.71	17.17	31.88	46.00	-14.12	peak			
5		560.5900	4.59	22.71	27.30	46.00	-18.70	peak			
6		720.6400	7.92	24.71	32.63	46.00	-13.37	peak			

^{*:}Maximum data x:Over limit !:over margin



Site site MOST 3M

Limit: FCC Part15 B 3M Radiation

EUT: Phone

M/N: I225 Mode: BT Note: Polarization: Horizontal

Power: AC 120V/60Hz

Temperature: 26

Hulfilai

Humidity: 61 %

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	*	30.9700	9.61	24.05	33.66	40.00	-6.34	peak			
2		68.8000	10.29	11.61	21.90	40.00	-18.10	peak			
3		159.9800	12.71	17.30	30.01	43.50	-13.49	peak			
4		298.6900	5.00	19.30	24.30	46.00	-21.70	peak			
5		400.5400	10.07	18.71	28.78	46.00	-17.22	peak			
6		480.0800	6.48	21.70	28.18	46.00	-17.82	peak			

^{*:}Maximum data x:Over limit !:over margin

Above 1 GHz

Operation Mode: CH Low Test Date: 2012-07-11

Temperature: 20°C Humidity: 70 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Reading	Reading	CF			Limit	Limit	Margin
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	(dB)
					(dBuV/m)	(dBuV/m)			
2402.00	Н	91.48	72.93	9.08	100.56	82.01	114.00	94.00	-11.99
4805.00	Н	48.21	32.07	16.54	64.75	48.61	74.00	54.00	-5.39
N/A									>20
2402.00	V	90.55	71.67	9.08	99.63	80.75	114.00	94.00	-13.25
4805.00	V	47.39	30.51	16.54	63.93	47.05	74.00	54.00	-6.95
N/A									>20

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Spectrum setting:
 - a. Peak Setting 1GHz 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = auto.
 - b. AV Setting 1GHz- 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = *auto*.

Operation Mode: CH Mid Test Date: 2012-07-11

Temperature: 20°C Humidity: 70 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Reading	Reading	CF			Limit	Limit	Margin
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	(dB)
					(dBuV/m)	(dBuV/m)			
2441.00	Н	90.85	71.32	9.31	100.16	80.63	114.00	94.00	-13.37
4892.50	Ι	47.71	31.26	17.09	64.80	48.35	74.00	54.00	-5.65
N/A									>20
2441.00	V	89.13	69.46	9.31	98.44	78.77	114.00	94.00	-15.23
4892.50	V	46.04	29.85	17.09	63.13	46.94	74.00	54.00	-7.06
N/A									>20

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Spectrum setting:
 - a. Peak Setting 1GHz 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = auto.
 - b. AV Setting 1GHz- 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = auto.

Operation Mode: CH High Test Date: 2012-07-11

Temperature: 20°C Humidity: 70 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Reading	Reading	CF			Limit	Limit	Margin
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	(dB)
					(dBuV/m)	(dBuV/m)			
2480.00	Н	88.94	69.53	9.47	98.41	79.00	114.00	94.00	-15.00
4960.50	Н	46.25	29.31	17.49	63.74	46.80	74.00	54.00	-7.20
N/A									>20
2480.00	V	90.72	67.68	9.47	100.19	77.15	114.00	94.00	-16.85
4960.50	V	45.26	30.05	17.49	62.75	47.54	74.00	54.00	-6.46
N/A									>20

Notes:

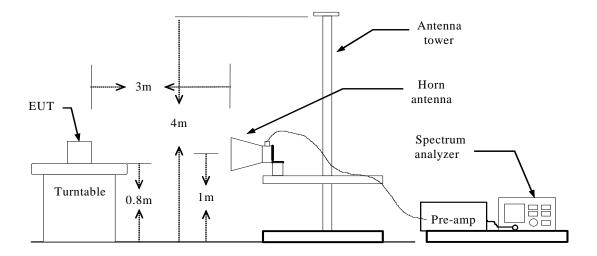
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Spectrum setting:
 - a. Peak Setting 1GHz 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = auto.
 - b. AV Setting 1GHz- 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = auto.

5.2 BAND EDGE

5.2.1 REQUIREMENT

According to FCC section 15.249(a), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.2.2 TEST DESCRIPTION

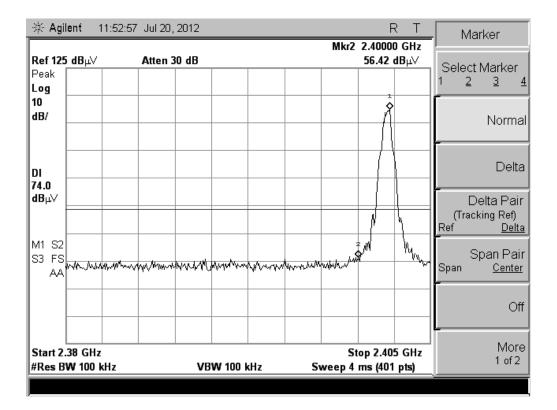


5.2.3 TEST RESULT

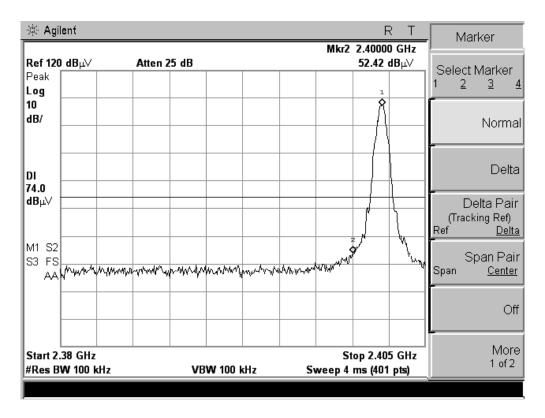
The EUT operates at CW test mode. The lowest and highest channels are tested to verify the band edge emissions.

				Test Res	Test Result Highest Emission (dBuv/m)				
Test M	/lode	Channel Marked Frequency	Limit (dBuv/m)	Ver	tical	Horizontal			
		, ,	,	Peak	Average	Peak	Average		
Dlustooth	Low Channel	2400MHz	74(Peak)	52.42	46.83	56.42	47.39		
Bluetooth	High Channel 2483.5MHz		54(Average)	52.16	45.35	53.43	45.11		

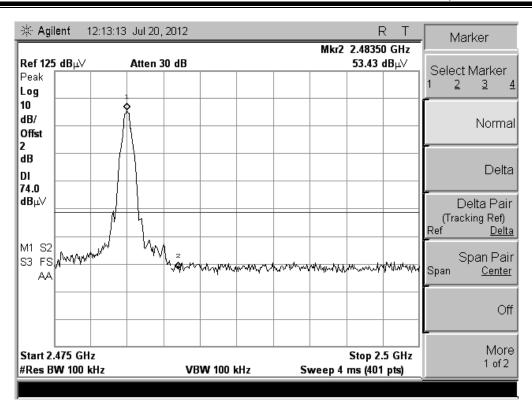
Test Plot:



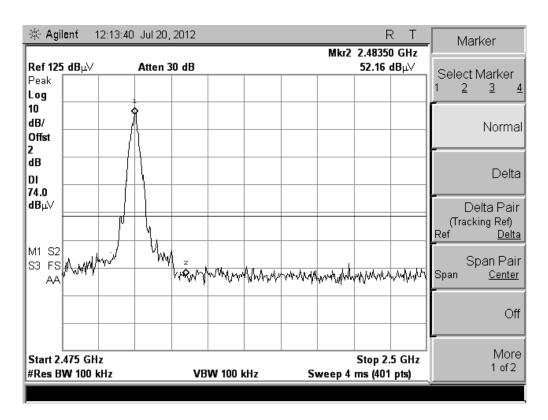
(CH Low, Horizontal, Peak)



(CH Low, Vertical, Peak)



(CH High, Horizontal, Peak)



(CH High, Vertical, Peak)

5.3 LINE CONDUCTED EMISSION TEST

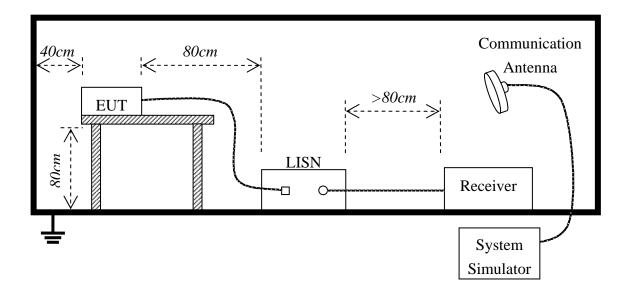
5.3.1 LIMITS OF LINE CONDUCTED EMISSION TEST

Fraguency	Maximum RF Line Voltage					
Frequency	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

5.3.2 BLOCK DIAGRAM OF TEST SETUP



5.3.3 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.

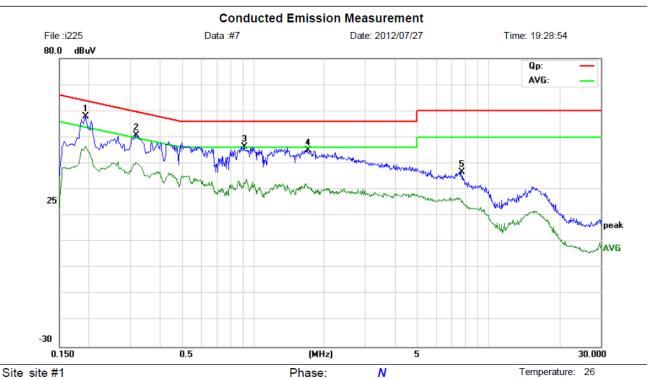
- 2) Support equipment, if needed, was placed as per FCC Part 15.
- 3) All I/O cables were positioned to simulate typical actual usage as per FCC Part 15.
- 4) The EUT received DC 5V power by AC/DC adapter which through a Line Impedance Stabilization Network (LISN) which supplied power source and was 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.

5.3.4 FINAL PROCEDURE OF LINE CONDUCTED EMISSION 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.

5.3.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST



Power: AC 120V/60Hz

Limit: FCC Part 15 Class B QP

EUT: mobile phone

M/N: i225

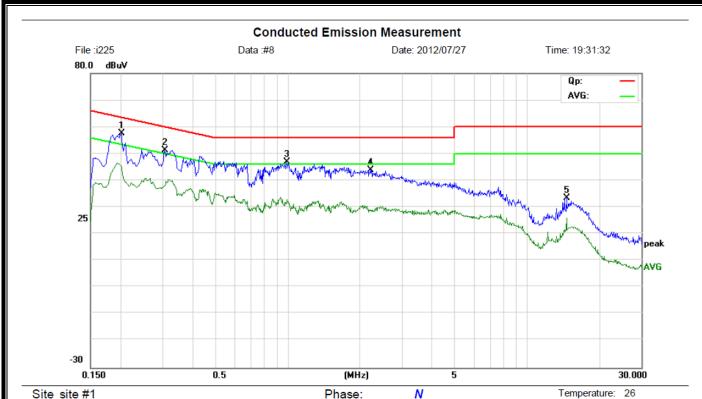
Mode: Bluetooth

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1940	46.36	11.64	58.00	63.86	-5.86	peak	
2		0.3180	39.39	11.21	50.60	59.76	-9.16	peak	
3		0.9140	36.23	10.00	46.23	56.00	-9.77	peak	
4		1.7060	35.69	9.29	44.98	56.00	-11.02	peak	
5		7.6820	26.32	10.39	36.71	60.00	-23.29	peak	

Humidity: 60 %

^{*:}Maximum data x:Over limit !:over margin



Limit: FCC Part 15 Class B QP

EUT: mobile phone

M/N: i225 Mode: Bluetooth

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2020	45.56	11.99	57.55	63.53	-5.98	peak	
2		0.3060	39.98	11.29	51.27	60.08	-8.81	peak	
3		0.9860	36.88	10.00	46.88	56.00	-9.12	peak	
4		2.2220	34.63	9.22	43.85	56.00	-12.15	peak	
5		14.6300	24.43	9.00	33.43	60.00	-26.57	peak	

Power: AC 120V/60Hz

Humidity: 60 %

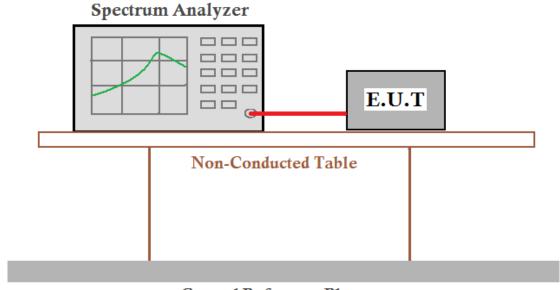
^{*:}Maximum data x:Over limit !:over margin

5.4 20DB BANDWIDTH

5.4.1 Definition

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

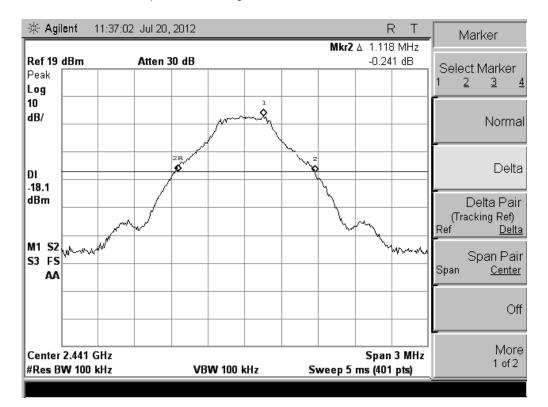
5.4.2 Test Description



Ground Reference Plane

5.4.3 Test Result

The middle channel is selected to perform testing to record the 20 dB bandwidth of the Module.



(CH Mid)

FCC ID: OX8IPLUSI225	Report No.: DPH120712F04
APPEND	IV 1
PHOTOGRAPHS OF	
THOTOGRAFIIS OF	1231 32101

CE TEST SETUP



RE TEST SETUP



FCC ID: OX8IPLUSI225		Report No.: DPH120712F04
FCC ID: OX8IPLUSI225		Report No.: DPH120712F04
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	APPENDIX 2 PHOTOGRAPHS OF EUT	
	THO TO CITAL THE OF LOT	

FRONT VIEW OF SAMPLE



BACK VIEW OF SAMPLE



LEFT VIEW OF SAMPLE



RIGHT VIEW OF SAMPLE



UP VIEW OF SAMPLE



DOWN VIEW OF SAMPLE



PHOTO OF BATTERY

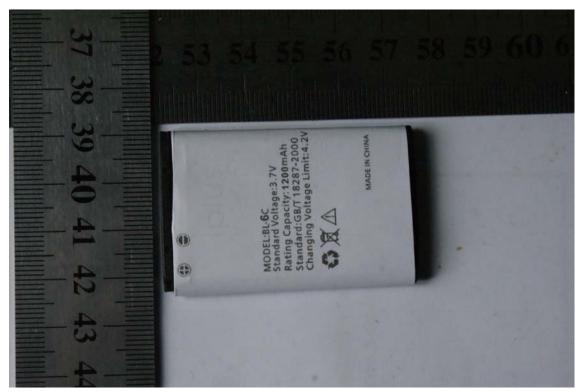


PHOTO OF EARPHONE



PHOTO OF CHARGER



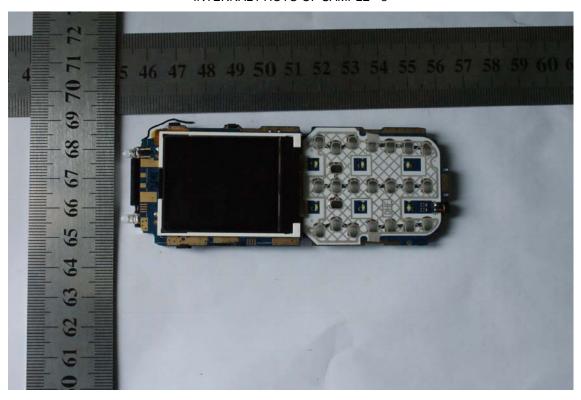
INTERNAL PHOTO OF SAMPLE - 1



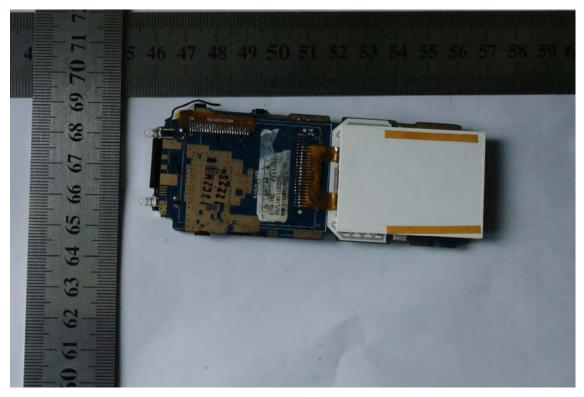
INTERNAL PHOTO OF SAMPLE -2



INTERNAL PHOTO OF SAMPLE - 3



INTERNAL PHOTO OF SAMPLE - 4



INTERNAL PHOTO OF SAMPLE - 5



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