FCC 47 CFR PART 27 SUBPART L

Product Type	:	Smartphone
Applicant	:	HTC Corporation
Address	:	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan
Trade name	:	HTC
Model No.	:	PB65100
Test Specification	:	FCC 47 CFR PART 27 SUBPART L: Oct. 2008 ANSI/TIA-603-2007
Issue Date	:	Mar. 22, 2010

Issue by

A Test Lab Techno Corp.
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Taiwan Accreditation Foundation accreditation number: 1330

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Jan. 13, 2010	Initial Issue	
01	Mar. 19, 2010	Delete component list	Joyce Liao
02	Mar. 22, 2010	Remove hardware and software version. Revise applicant and manufacturer's address.	Linda Su

Verification

Issued Date: 2010/03/22

Product Type	:	Smartphone
Applicant	:	HTC Corporation
Address	:	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan
Trade Name	:	HTC
Model No.	:	PB65100
EUT Rated Voltage	:	AC 100-240V, 50-60Hz, 0.2A
Test Voltage	:	120 Vac / 60 Hz
Applicable Standard	:	FCC 47 CFR PART 27 SUBPART L: Oct. 2008 ANSI/TIA-603-2007
Test Result	:	Complied
Performed Lab.	:	A Test Lab Techno Corp. No. 140-1, Changan Street, Bade City, Taoyuan Country 334, Taiwan R.O.C. Tel：+86-3-2710188 / Fax：+86-3-2710190 Taiwan Accreditation Foundation accreditation number: 1330 http://www.atl-lab.com.tw/e-index.htm

The above equipment has been tested by A Test Lab Techno Corp., and found compliance with the requirements set forth in the Electromagnetic Compatibility Directive 2004/108/EC and technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved By	:		Reviewed By	:
(Manager)		(Miller Lee)	(Testing Engineer)	(John Cheng)

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1 General Information

1.1. EUT Description

Applicant		HTC Corporation			
Applicant Address		No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan			
Manufacturer		HTC Corporation			
Manufacturer Address		No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan			
Product Type		Smartphone			
Trade Name		HTC			
Model Number		PB65100			
Mode	**WCDMA**	**Band**	**UL Frequency (MHz)**	**DL Frequency (MHz)**	**Modulation**
		IV	1712.4 ~ 1752.6	2112.4 ~ 2152.6	QPSK
Type of Antenna		PIFA Type			
Antenna Gain (dBi)		0.11 dBi			
Max. RF Output Power		24.10 dBm / 0.257 W			
Max. EIRP		24.12 dBm / 0.258 W			

1.2. Mode of Operation

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: IDLE Mode
Mode 2: WCDMA Band IV Link

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

Tested System Details

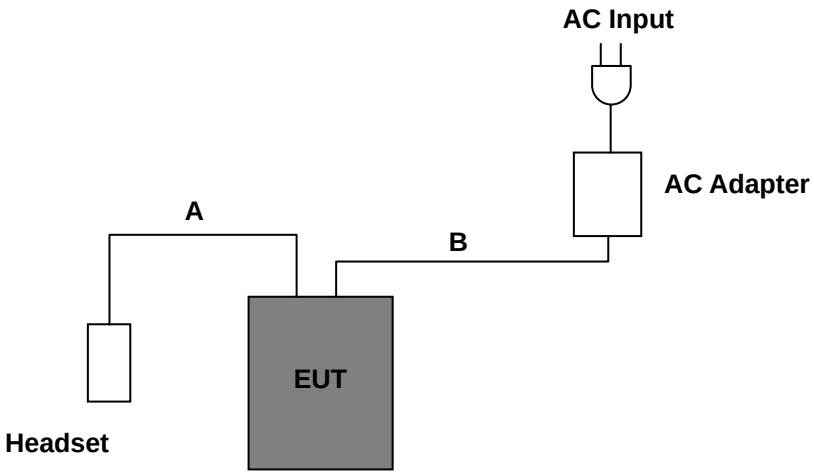
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	**Manufacturer**	**Model No.**	**Serial No.**	**Power Cord**
1.	Universal Radio Communication Tester	R&S	CMU200	109369	N/A

1.3. EUT Exercise Software

1.	Setup the EUT and Base Station (CMU200) as shown on 1.4.
2.	Turn on the power of all equipment.
3.	EUT run test program HTC SSD Test.

1.4. Configuration of Test System Details



Signal Cable Type		Signal cable Description
A	Audio Cable	Non-Shielded, 1.25m
B	AC Power Cable	Shielded, 1.18m

1.5. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	25
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

1.6. Summary of Test Result

Description	FCC Rule	IC Rule	Limit	Result
Conducted Output Power	§2.1046	N/A	N/A	Pass
Equivalent Isotropic Radiated Power	§27.50(d)(2)	RSS-139 (6.4) SRSP-513(5.1.2)	< 1 Watts	Pass
Occupied Bandwidth	§2.1049 §27.53(g)	N/A	N/A	Pass
Band Edge Measurement	§2.1051 §27.53(g)	RSS-139 (6.5)	< $43+10\log_{10}$(P[Watts])	Pass
Conducted Emission	§2.1051 §27.53(g)	RSS-139 (6.5)	< $43+10\log_{10}$(P[Watts])	Pass
Field Strength of Spurious Radiation	§2.1053 §27.53(g)	RSS-139 (6.5)	< $43+10\log_{10}$(P[Watts])	Pass
Frequency Stability for Temperature & Voltage	§2.1055 §27.54	RSS-139(6.3)	< 2.5 ppm	Pass

2 RF Output Power Test

2.1. Limit

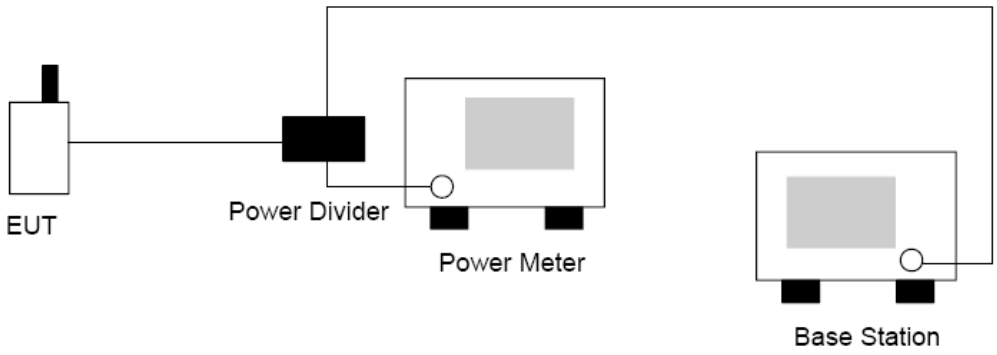
N/A

2.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	07/29/2009
WIDE BAND SENSOR	ROHDE & SCHWARZ	NRP-Z81	100017	05/17/2009
Test Site	ATL	TE02	TE02	N.C.R.

NOTE: N.C.R. = No Calibration Request.

2.3. Test Setup



2.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

1. The transmitter output was connected to power meter and base station through power divider.
2. Set base station for EUT at WCDMA Band IV, power level was set to maximum.
3. Select lowest, middle, and highest channels for each band.

HSDPA Date Devices setup

Sub-test	βc	βd	βd (SF)	βc/βd	βhs(1,2)	CM (dB)(3)	MRP (dB)(3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note

1. Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc
2. For theHS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude(EVM) with HS-DPCCH test in clause 5.13.1A and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with βhs = 30/15 *βc and Δ_{CQI} = 24/15 with βhs = 24/15*βc
3. CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
4. For subtest 2 the βc/βd ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 11/15 and βd = 15/15.

Table 1. Setup for Release 5 HSDPA

HSPA Date Devices setup

Sub-test	βc	βd	βd (SF)	βc/βd	βhs(1)	βec	βed	Bed (SF)	Bed (codes)	CM(2) (dB)	MPR (dB)	AG(4) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	βed1: 47/15 βed2: 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15(4)	15/15(4)	64	15/15(4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: ΔACK, ΔNACK and ΔCQI = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc.

Note 2: CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the βc/βd ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 10/15 and βd = 15/15.

Note 4: For subtest 5 the βc/βd ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 14/15 and βd = 15/15.

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.

Note 6: βed can not be set directly; it is set by Absolute Grant Value.

Table 2. Setup for Release 6 HSPA

2.5. Uncertainty

The measurement uncertainty is defined as for RF output power measurement is 1.2 dB.

2.6. Test Result

Product	Smartphone					
Test Item	RF Output Power					
Date of Test	12/21/2009		**Test Site**	TE02		
Bands	**Sub-Test**	**Frequency (MHz)**	**Conducted Power**		**Limit**	**Result**
			(dBm)	**(W)**		
WCDMA IV (RMC 12.2K)	-----	1712.4	23.99	0.251	N/A	-----
		1740.0	23.83	0.242	N/A	-----
		1752.6	**24.10**	**0.257**	N/A	-----
HSDPA IV	1	1712.4	23.92	0.247	N/A	-----
		1740.0	23.72	0.236	N/A	-----
		1752.6	24.10	0.257	N/A	-----
	2	1712.4	23.92	0.247	N/A	-----
		1740.0	23.68	0.233	N/A	-----
		1752.6	24.07	0.255	N/A	-----
	3	1712.4	23.59	0.229	N/A	-----
		1740.0	23.26	0.212	N/A	-----
		1752.6	23.62	0.230	N/A	-----
	4	1712.4	23.53	0.225	N/A	-----
		1740.0	23.27	0.212	N/A	-----
		1752.6	23.61	0.230	N/A	-----
HSUPA IV	1	1712.4	22.50	0.178	N/A	-----
		1740.0	22.65	0.184	N/A	-----
		1752.6	22.17	0.165	N/A	-----
	2	1712.4	20.55	0.114	N/A	-----
		1740.0	20.61	0.115	N/A	-----
		1752.6	20.20	0.105	N/A	-----
	3	1712.4	21.57	0.144	N/A	-----
		1740.0	21.68	0.147	N/A	-----
		1752.6	21.17	0.131	N/A	-----
	4	1712.4	20.52	0.113	N/A	-----
		1740.0	20.59	0.115	N/A	-----
		1752.6	20.15	0.104	N/A	-----
	5	1712.4	22.45	0.176	N/A	-----
		1740.0	22.58	0.181	N/A	-----
		1752.6	22.10	0.162	N/A	-----

Note: The testing result was used peak detector.

3 Effective Radiated Power / Equivalent Isotropic Radiated Power Test

3.1. Limit

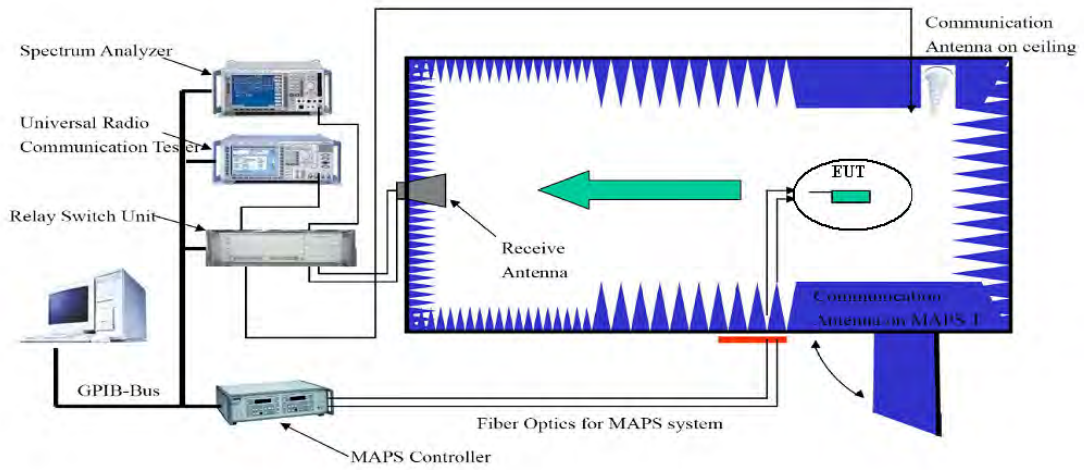
For FCC Part 27.50(d)(2): The EIRP of mobile transmitters are limited to 1 watt for 1710~1755 MHz.

3.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	07/29/2009
Spectrum Analyzer	Agilent	E4445A	MY46181814	03/06/2009
Loop Dipole	ETS-Lindgren	3127-1880	00064239	02/05/2009
Loop Dipole	ETS-Lindgren	3127-836	00064352	02/19/2009
Sleeve Dipole	ETS-Lindgren	3126-1845	00083335	03/18/2009
Sleeve Dipole	ETS-Lindgren	3126-880	00052705	11/05/2009
Circularly Polarized Communication Antennas	EMCO	3102	00051714	NCR
Antenna Positioner Controller	EMCO	2090	00052447	NCR
MAPS Positioner	EMCO	2010/2015	NA	NCR
Pattern Measurement Software	ETS-Lindgren	EMQuest™ EMQ-100	NA	NCR
Desktop Computer with Windows XP	DELL	Dell Computers	NA	NCR
Anechoic Chamber	ETS-Lindgren	AMS 8500	102165	NCR

NOTE: N.C.R. = No Calibration Request.

3.3. Test Setup



3.4. Test Procedure

The phone was tested in an anechoic chamber with a 3-axis position system that permits taking complete spherical scans of the EUT's 3-axis radiation patterns. For all tests, the phone was supported in a free space type environment, vertically oriented in the chamber. Tests were done for WCDMA IV three frequencies (1712.4, 1740.0 and 1752.6MHz) .

The measurements were made with the phone placed in a call using the CMU200 mobile station test set. The phone was weakly coupled to the test set and configured to transmit in full data rate mode.

The radiated power was measured using ETS-LINDGREN OTA Chamber in "Peak" mode. From these measurements, the software calculates the angle at which maximum radiated power occurs for each case, and the radiated power at this angle was extracted from the data.

Each individual data point in a radiated power or sensitivity measurement is referred to as the effective isotropic radiated power or effective isotropic sensitivity. That is, the desired information is how the measured quantity relates to the same quantity from an isotropic radiator. Thus, the reference measurement must relate the power received or transmitted at the EUT test equipment (spectrum analyzer or communication tester) back to the power transmitted or received at a theoretical isotropic radiator. The total path loss then, is just the difference in dB between the power transmitted or received at the isotropic radiator and that seen at the test equipment (see follow Figure 1).

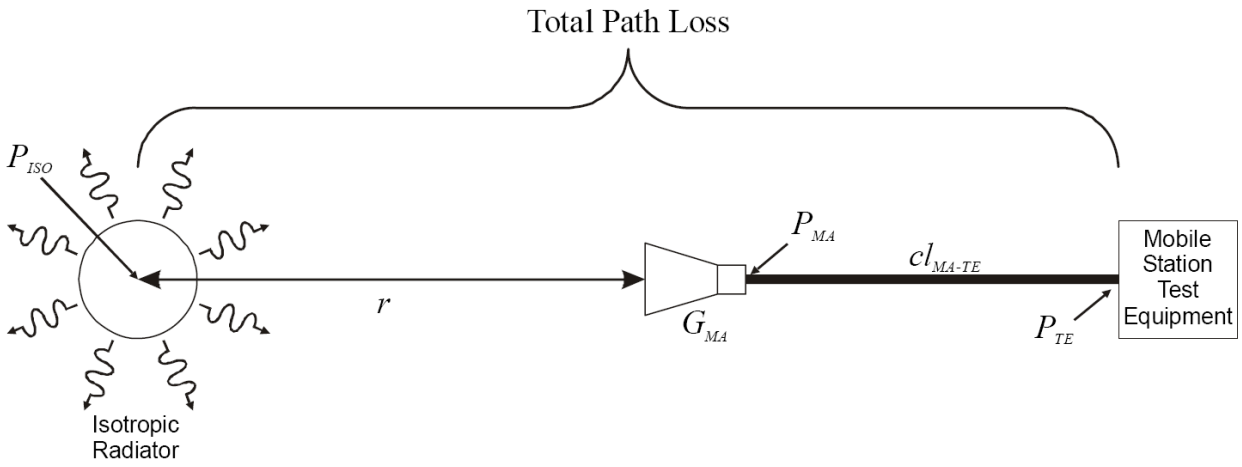


Figure 1. THEORETICAL CASE FOR DETERMINING PATH LOSS

In equation form, this becomes:

Equation 1

$$PL = P_{ISO} - P_{TE},$$

where PL is the total path loss, P_{ISO} is the power radiated by the theoretical isotropic radiator, and P_{TE} is the power received at the test equipment port. As can be seen in Figure 1, this quantity includes the range path loss due to the range length r, the gain of the measurement antenna, and any loss terms associated with the cabling, connections, amplifiers, splitters, etc. between the measurement antenna and the test equipment port.

Figure 2 shows a typical real world configuration for measuring the path loss. In this case, a reference antenna with known gain is used in place of the theoretical isotropic source. The path loss may then be determined from the power into the reference antenna by adding the gain of the reference antenna. That is:

Equation 2

$$P_{ISO} = P_{RA} + G_{RA},$$

where P_{RA} is the power radiated by reference antenna, and G_{RA} is the gain of the reference antenna, so that:

Equation 3

$$PL = P_{RA} + G_{RA} - P_{TE},$$

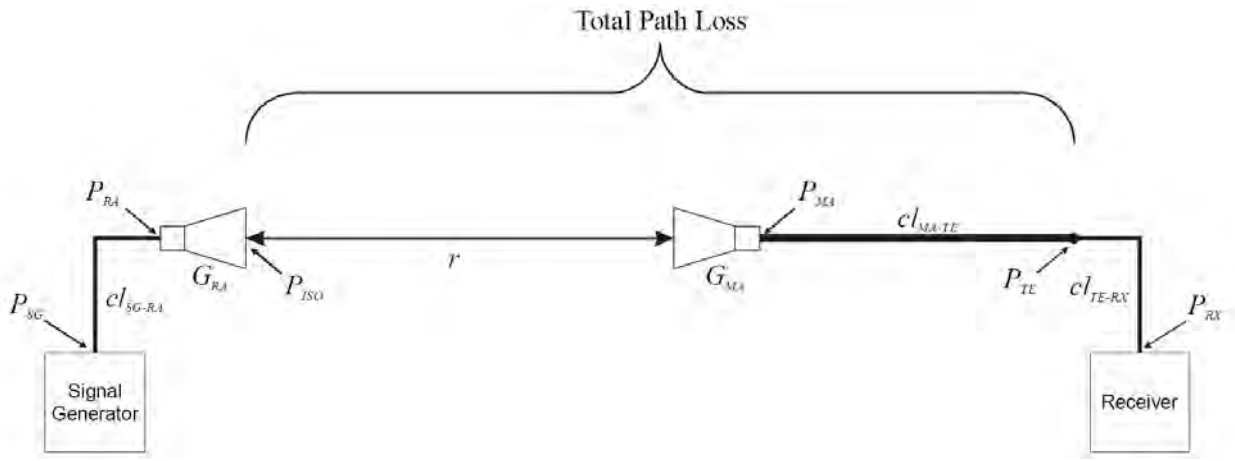


Figure 2. TYPICAL CONFIGURATION FOR MEASURING PATH LOSS

In order to determine P_{RA}, it is necessary to perform a cable reference measurement to remove the effects of the cable loss between signal generator and reference antenna, and between the test equipment port and the receiver. This establishes a reference point at the input to the reference antenna. Figure 3 illustrates the cable reference measurement configuration. Assuming the power level at the signal generator is fixed, it is easy to show that the difference between P_{RA} and P_{TE} in Figure 2 is given by:

Equation 4

$$P_{RA} - P_{TE} = P_{RX}' - P_{RX},$$

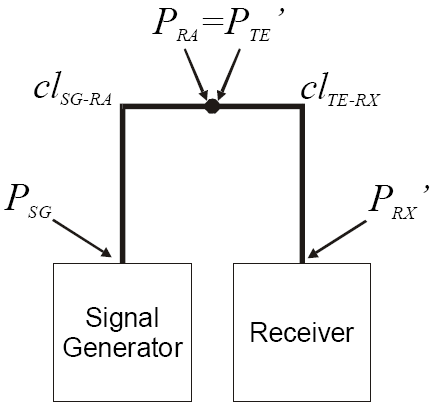


Figure 3. CABLE REFERENCE CALIBRATION CONFIGURATION

Where $P_{RX'}$ is the power measured at the receiver during the cable reference test, and P_{RX} is the power measured at the receiver during the range path loss measurement in Figure 2. Thus, the path loss is then just given by:

Equation 5

$$PL = G_{RA} + P_{RX}\text{'} - P_{RX'}$$

$$EIRP = P_t + P_L$$

P_t = Often referred to as antenna output power

3.5. Uncertainty

The measurement uncertainty is defined as for Radiated Power measurement list below:

Band	Uncertainty
PCS	1.42 dB

3.6. Test Result

Product	Smartphone						
Test Item	EIRP						
Date of Test	12/28/2009		Test Site	TC03			
Bands	Frequency (MHz)	Read Level (dBm)	Correction factor (dBm)	EIRP		Limit (W)	Result
				(dBm)	(W)		
WCDMA IV (RMC 12.2K)	1712.4	79.45	-55.40	24.05	0.254	1	Pass
	1740.0	79.48	-55.60	23.88	0.244	1	Pass
	1752.6	79.82	-55.70	**24.12**	**0.258**	1	Pass

Note: 1. EIRP = Read Level + Correction factor.

2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

4 Occupied Bandwidth Test

4.1. Limit

The Occupied Bandwidth Limit:

N/A.

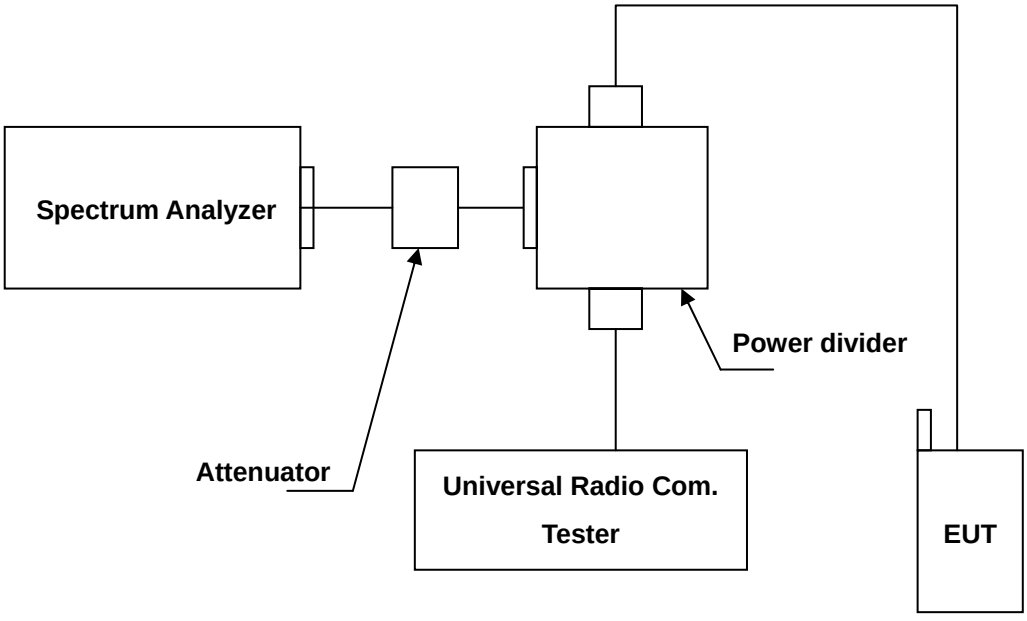
The Band Edge Limit:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) dB.

4.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	07/29/2009
Attenuator	RADIALL	R41572000	0603033073	N.C.R.
Power divider	Agilent	87302C	3239A00760	N.C.R.
Test Site	ATL	TE02	TE02	N.C.R.

4.3. Setup



4.4. Test Procedure

The measurement is made according to FCC rules part 27:

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.
3. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
4. The band edge setting:RB=47 kHz; VB=150 kHz for WCDMA Band IV.

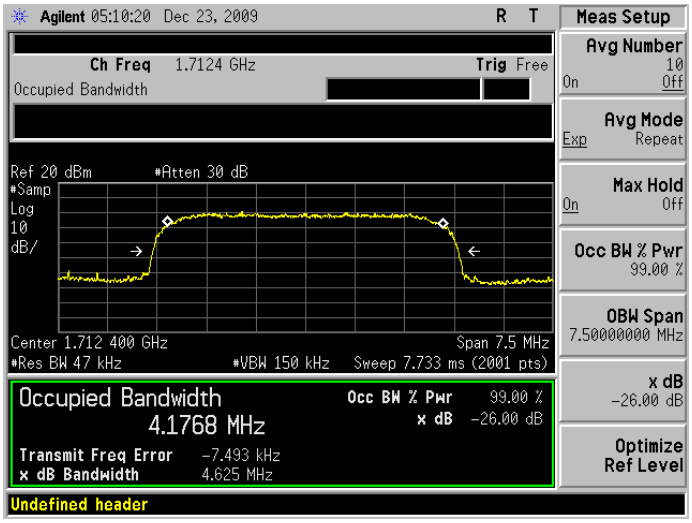
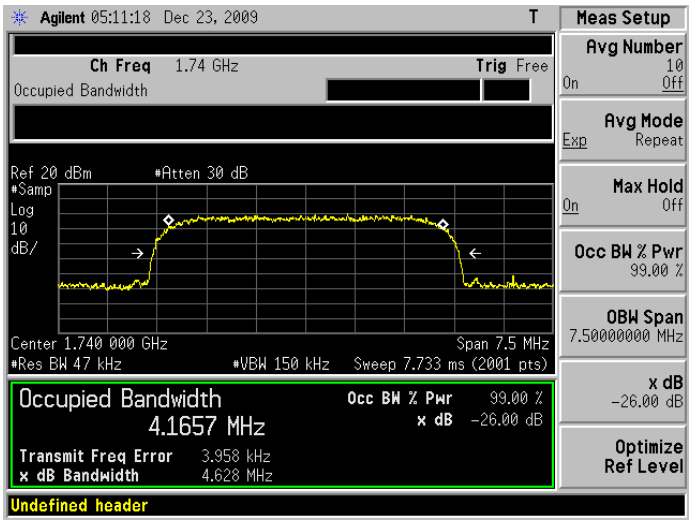
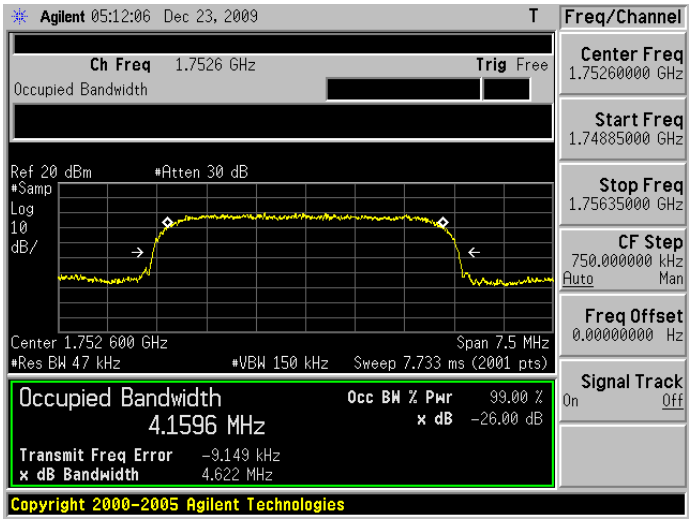
4.5. Uncertainty

The measurement uncertainty is defined as ± 10Hz

4.6. Test Result

99% Occupied Bandwidth

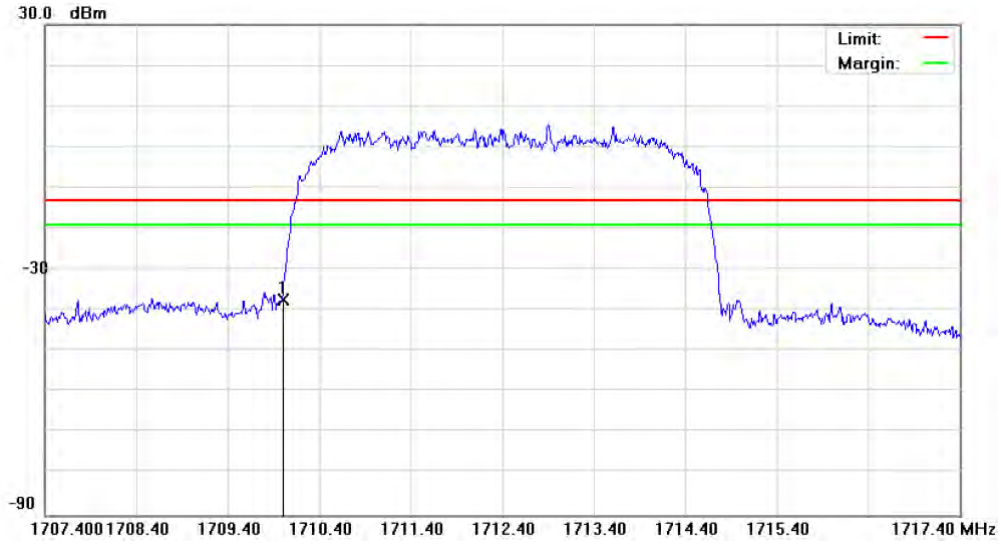
Product	Smartphone				
Test Item	Occupied Bandwidth				
Test Mode	Mode 2: WCDMA Band IV Link				
Date of Test	12/23/2009		**Test Site**	TE02	
Channel No.	**Frequency (MHz)**	**99 % Bandwidth (kHz)**	**Limit**	**Result**	**Note**
1312	1712.4	4176.8	N/A	-----	RBW:47kHz , VBW:150kHz
1450	1740.0	4165.7	N/A	-----	RBW:47kHz , VBW:150kHz
1513	1752.6	4159.6	N/A	-----	RBW:47kHz , VBW:150kHz

99% Occupied Bandwidth	
Channel 1312	
CH1450	
CH1513	

Band Edge

Product	Smartphone				
Test Item	Band Edge				
Test Mode	Mode 2: WCDMA Band IV Link				
Date of Test	12/22/2009		Test Site	TE02	
Band	**Channel**	**Frequency (MHz)**	**Band Edge (dBm)**	**Limit (dBm)**	**Result**
Lower	1312	1710.000	-37.45	-13	Pass
Higher	1513	1755.00	-36.86	-13	Pass

Lower Band



Higher Band

5 Conducted Emission Test

5.1. Limit

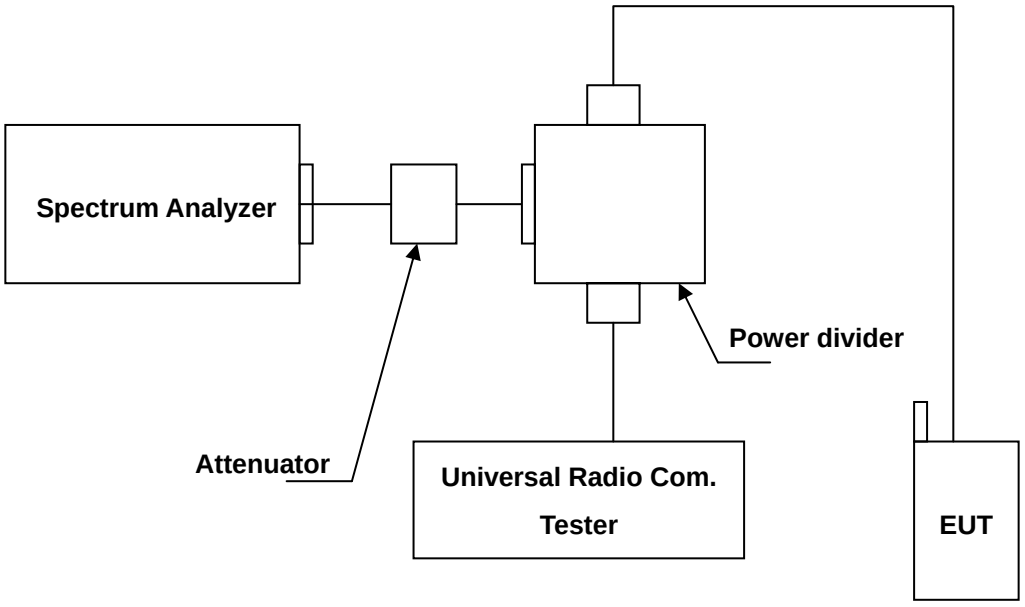
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) dB.

5.2. Test Instruments

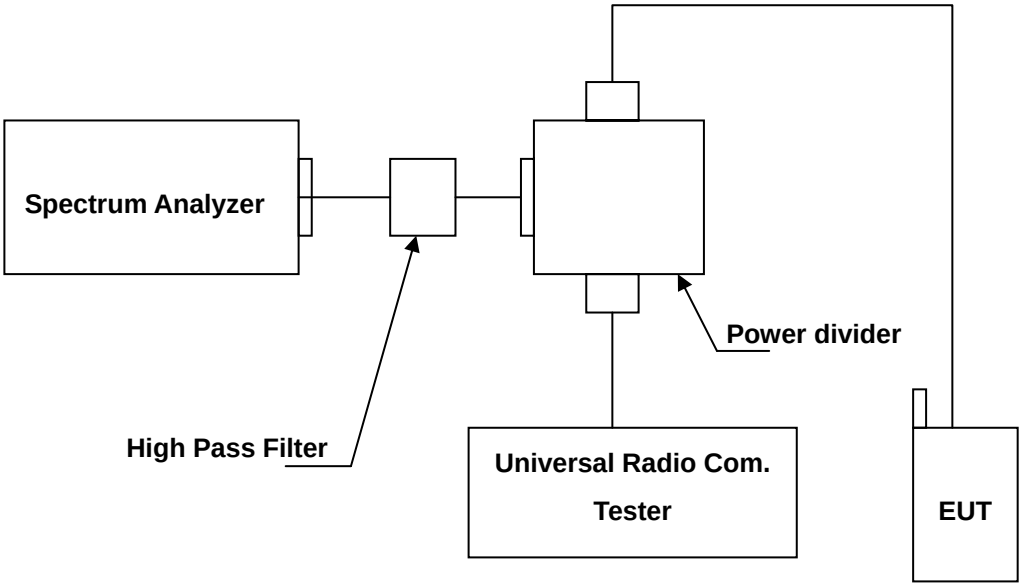
Describe	Manufacturer	Model No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	07/29/2009
Attenuator	RADIALL	R41572000	0603033073	N.C.R.
Power divider	Agilent	87302C	3239A00760	N.C.R.
Test Site	ATL	TE02	TE02	N.C.R.

5.3. Setup

Below 2.8GHz



Above 2.8GHz



5.4. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.
4. Test setting at WCDMA Band IV RB=1MHz, VB=3MHz.

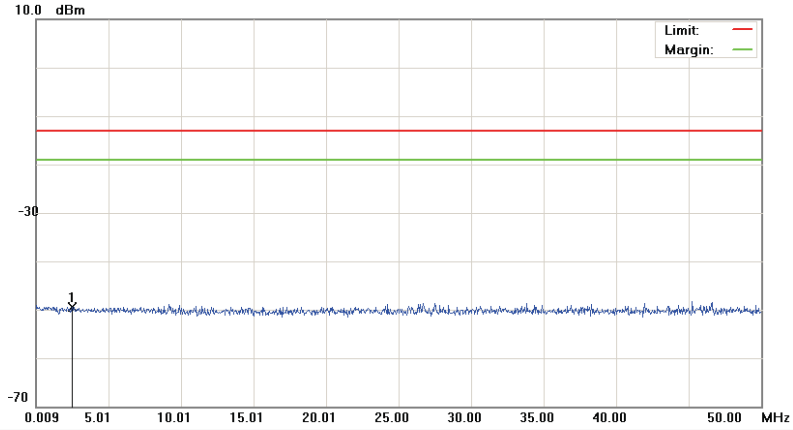
5.5. Uncertainty

The measurement uncertainty is evaluated as ± 2.24 dB.

5.6. Test Result

Product	Smartphone		
Test Item	Conducted Emission		
Mode	Mode 2: WCDMA Band IV Link		
Date of Test	12/22/2009	**Test Site**	TE02
Note: The test results see next page.			

File :CH1312 Data :#1 Date: 2009/12/22 Time: PM 08:55:53



Site: : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1312(1712.4MHz)

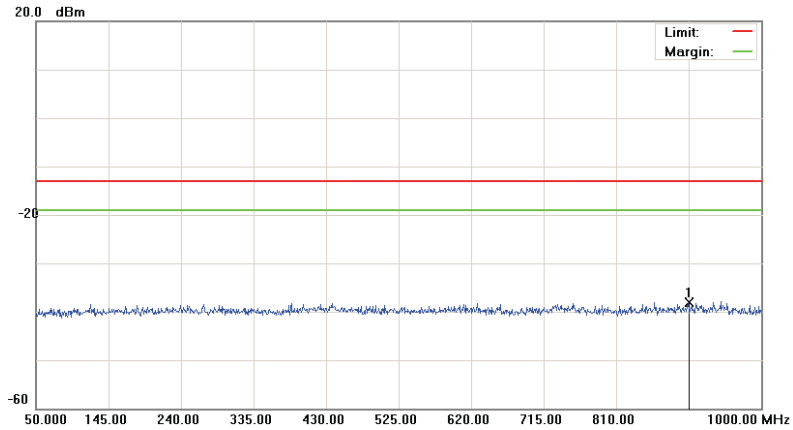
Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2.5085	-62.41	12.89	-49.52	-13.00	-36.52	peak			

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

File :CH1312 Data :#2 Date: 2009/12/22 Time: PM 08:56:18



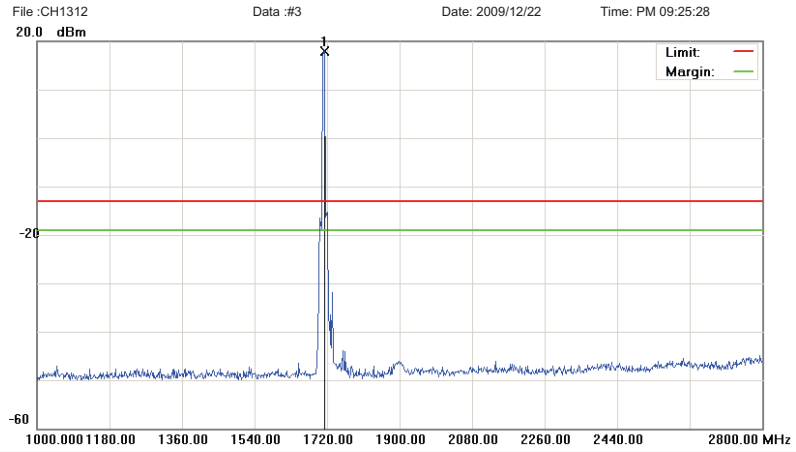
Site: : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1312(1712.4MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	904.5250	-51.25	13.23	-38.02	-13.00	-25.02	peak			

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



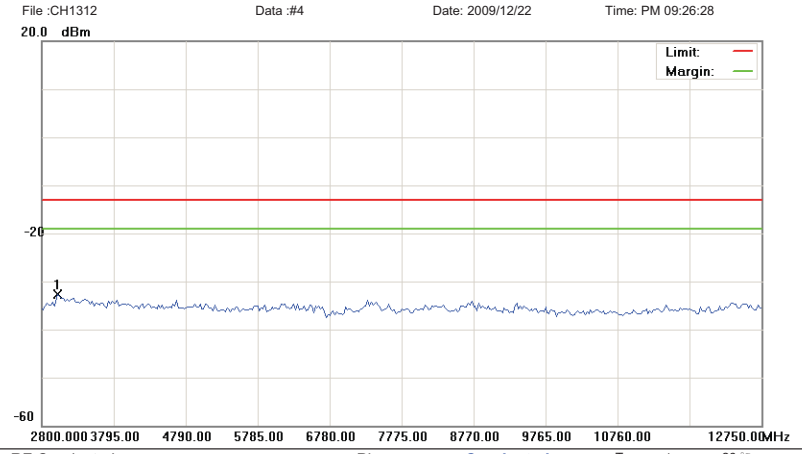
Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1312(1712.4MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1713.700	13.55	4.36	17.91	-13.00	30.91	peak			

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



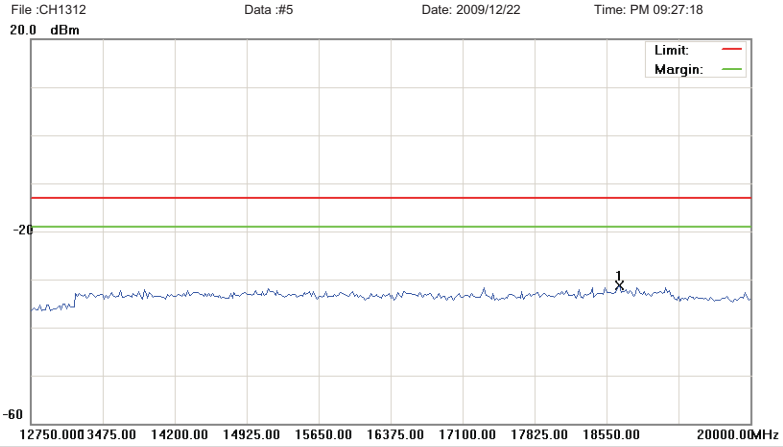
Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1312(1712.4MHz)

Phase: Conducted po
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3023.875	-38.19	5.48	-32.71	-13.00	-19.71	peak	

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



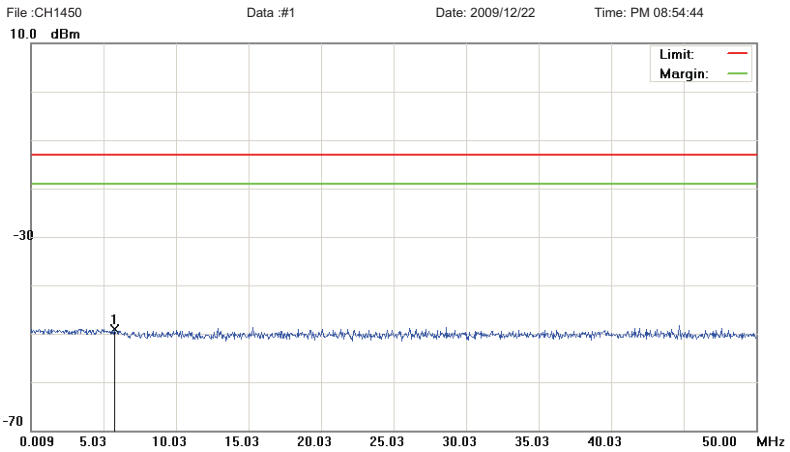
Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1312(1712.4MHz)

Phase: Conducted po
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	18676.875	-38.45	7.06	-31.39	-13.00	-18.39	peak	

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



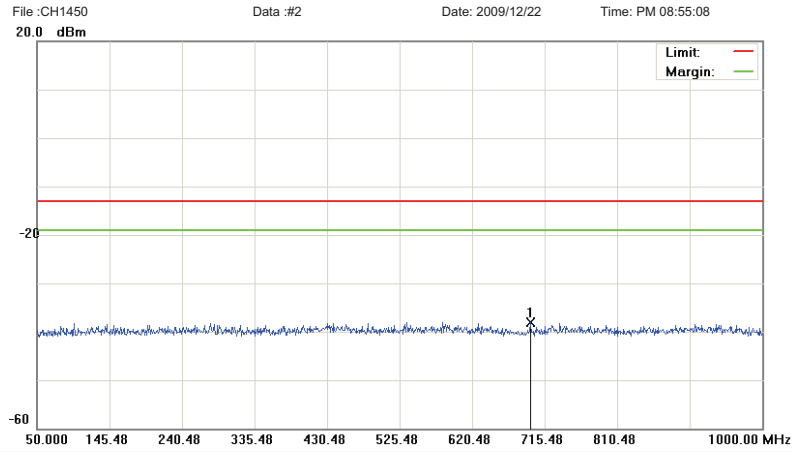
Site: : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1450(1740MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	5.7580	-62.32	13.24	-49.08	-13.00	-36.08	peak			

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



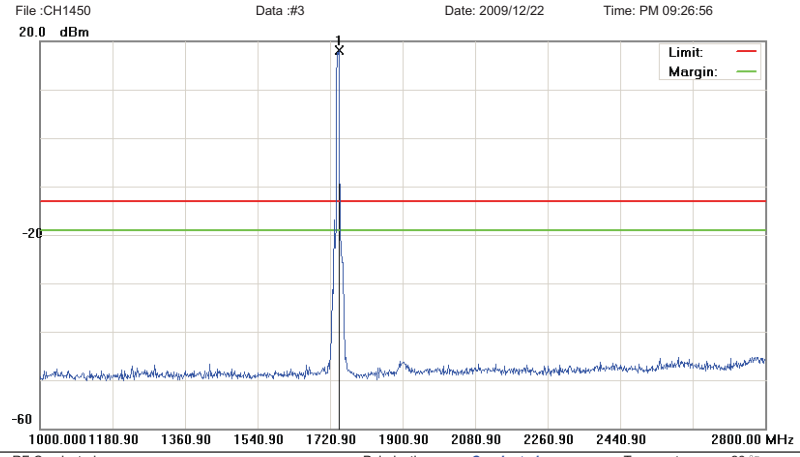
Site: : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1450(1740MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	696.4750	-51.23	13.15	-38.08	-13.00	-25.08	peak			

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



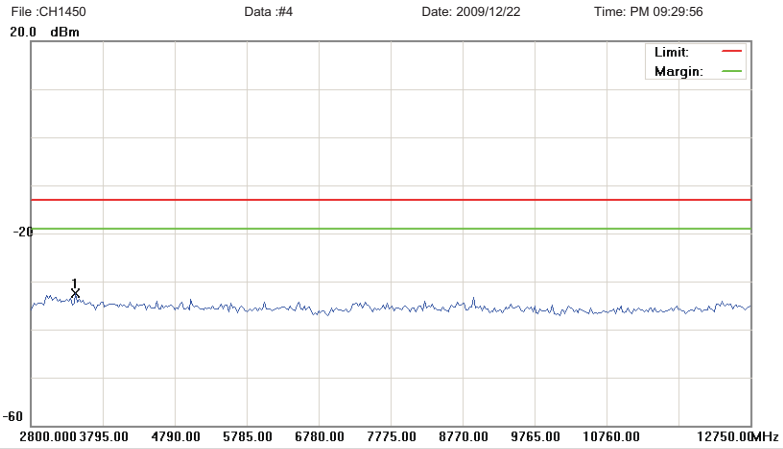
Site: : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1450(1740MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1741.600	13.44	4.67	18.11	-13.00	31.11	peak			

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



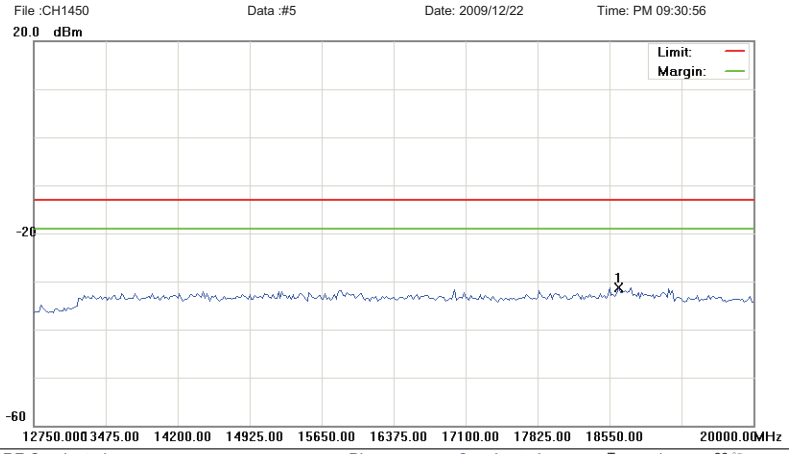
Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1450(1740MHz)

Phase: Conducted po
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3421.875	-37.60	5.06	-32.54	-13.00	-19.54	peak	

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



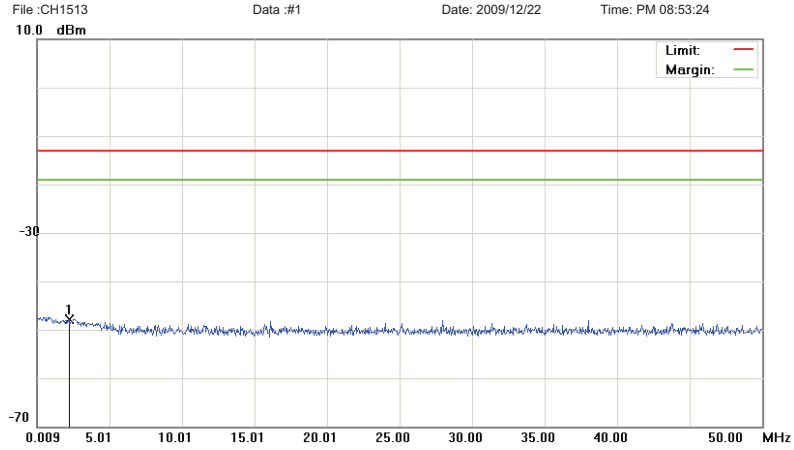
Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1450(1740MHz)

Phase: Conducted po
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	18640.625	-38.34	7.05	-31.29	-13.00	-18.29	peak	

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



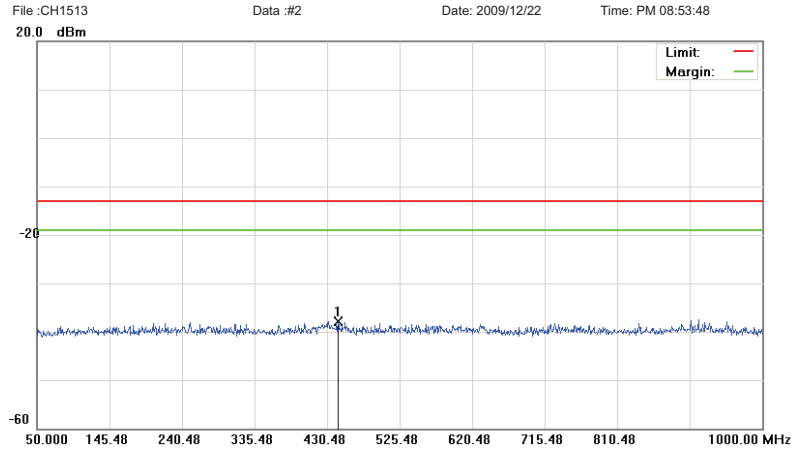
Site: : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1513(1752.6MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2.1836	-60.92	13.11	-47.81	-13.00	-34.81	peak			

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



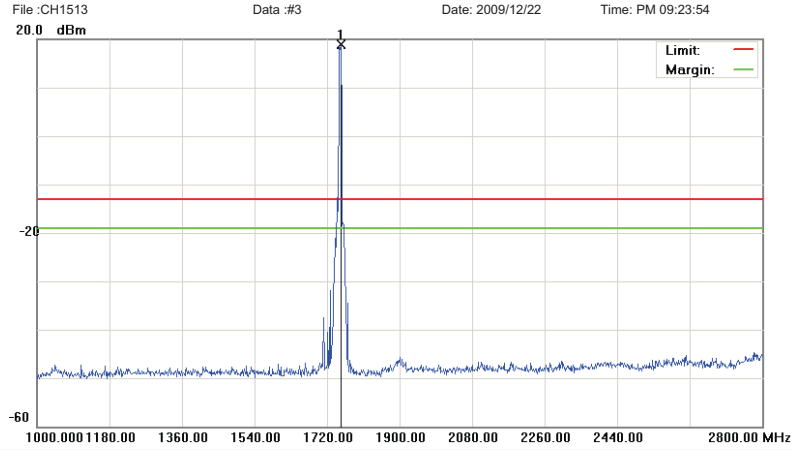
Site: : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1513(1752.6MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	444.2500	-51.03	13.22	-37.81	-13.00	-24.81	peak			

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



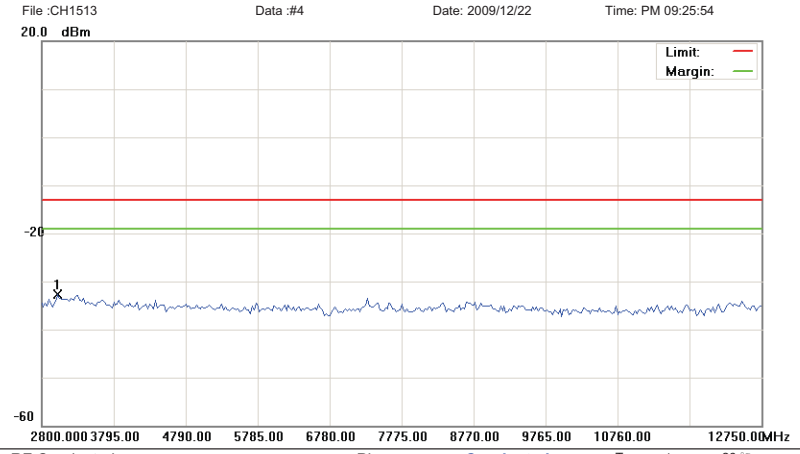
Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1513(1752.6MHz)

Polarization: Conducted po
Power: AC 120V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1754.200	14.22	4.62	18.84	-13.00	31.84	peak			

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



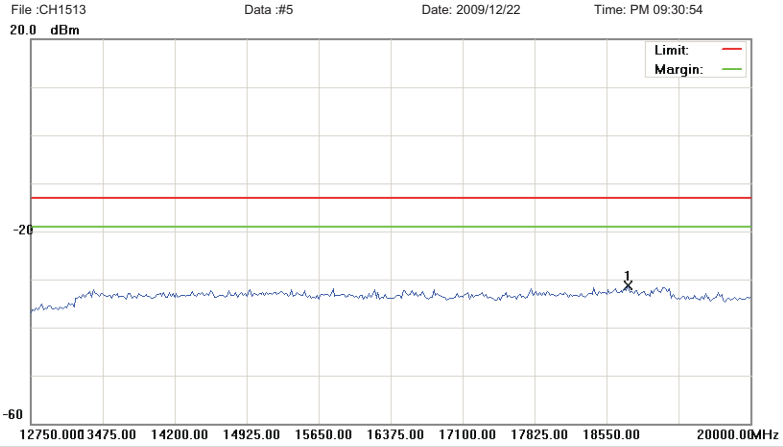
Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1513(1752.6MHz)

Phase: Conducted po
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3023.875	-38.24	5.48	-32.76	-13.00	-19.76	peak	

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



Site : RF Conducted
Limit: FCC Part 24 conducted(9k-12.75G)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: CH1513(1752.6MHz)

Phase: Conducted po
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	18767.50	-38.47	7.09	-31.38	-13.00	-18.38	peak	

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

6 Field Strength of Spurious Radiation Test

6.1. Limit

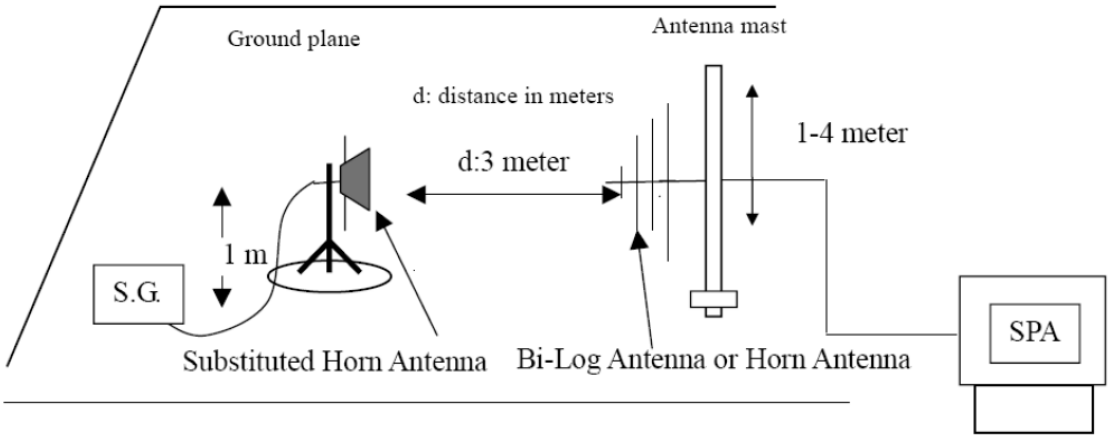
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

6.2. Test Instruments

3 Meter Chamber				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**
RF Pre-selector	Agilent	N9039A	MY46520256	01/27/2009
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/20/2009
Pre Amplifier	Agilent	8449B	3008A02237	07/01/2009
Pre Amplifier	Agilent	8447D	2944A10961	06/30/2009
Test Receiver	R&S	ESCI	100367	07/01/2009
Biconilog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	06/23/2009
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	07/01/2009
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/30/2009
Test Site	ATL	TE01	888001	08/06/2009

6.3. Setup



6.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

The equipment under test is placed inside the semi-anechoic chamber on a wooden table at the turntable center. For each spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters and the turntable is rotated 360 degrees to obtain a maximum reading on the spectrum analyzer. This is repeated for both horizontal and vertical polarizations of the receive antenna.

The equipment under test is then replaced with a substitution antenna fed by a signal generator. With the signal generator tuned to a particular spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters to obtain a maximum reading at the spectrum analyzer. The output of the signal generator is then adjusted until a reading identical to that obtained with the actual transmitter is achieved.

The power in dBm of each spurious emission is calculated by correcting the signal generator level for cable loss and gain of the substitution antenna referenced to a dipole. A fully charged battery was used for the supply voltage.

The settings of the receiver were as follows:

Units	dBm
Resolution Bandwidth	1 MHz
Video Bandwidth	Auto
Sweep Time	Auto

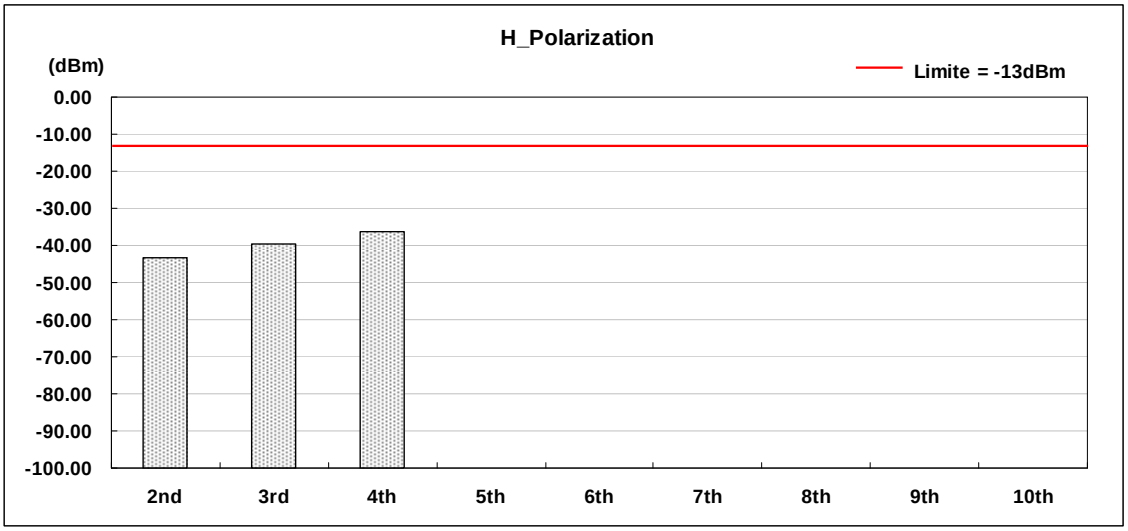
6.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.

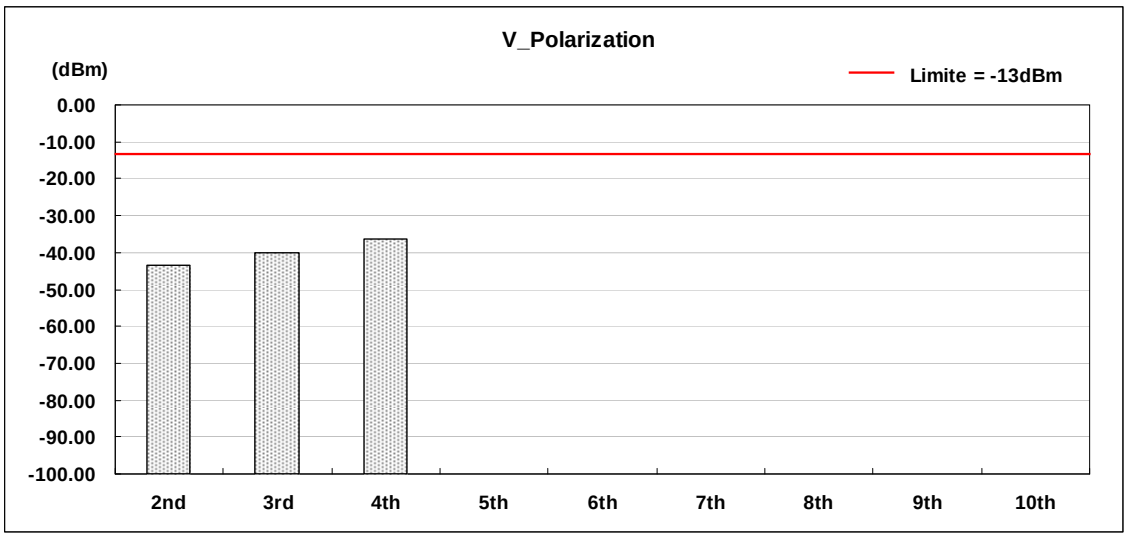
6.6. Test Result

Product	Smartphone		
Test Item	Field Strength of Spurious Radiation		
Test Mode	Mode 1: WCDMA Band IV / CH1312	Polarization	Horizontal
Date of Test	12/26/2009	Test Site	TE01

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit (dBm)	S.G Power (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dBm)	Peak Output Power (dBm)
2nd	3424.8	H	-13	-53.65	10.74	0.59	-43.50
3rd	5137.2	H	-13	-49.80	10.68	0.63	-39.75
4th	6849.6	H	-13	-46.32	10.80	0.78	-36.30
5th	8562.0	H	-13	*	*	*	*
6th	10274.4	H	-13	*	*	*	*
7th	11986.8	H	-13	*	*	*	*
8th	13699.2	H	-13	*	*	*	*
9th	15411.6	H	-13	*	*	*	*
10th	17124.0	H	-13	*	*	*	*

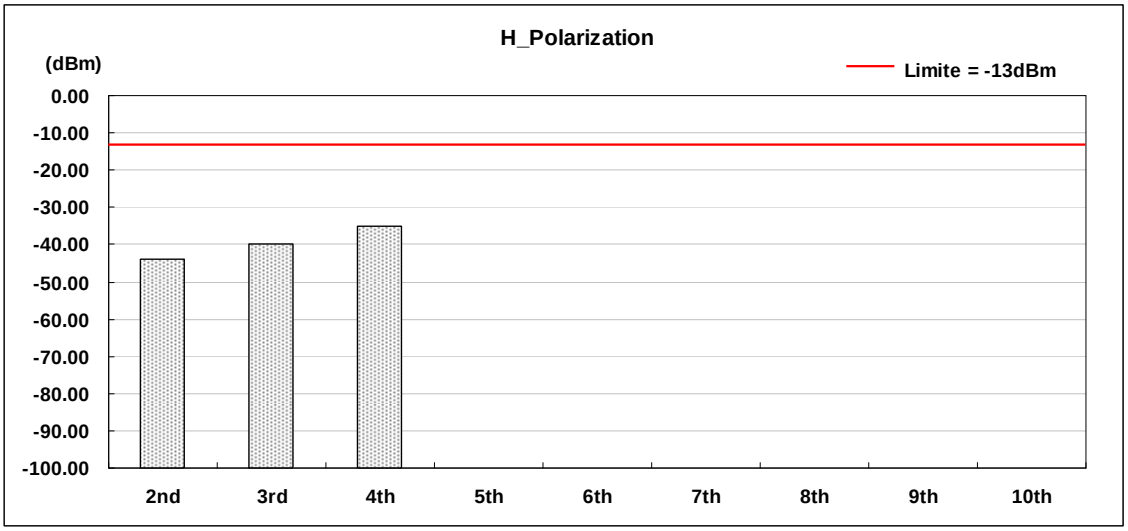


Product	Smartphone						
Test Item	Field Strength of Spurious Radiation						
Test Mode	Mode 1: WCDMA Band IV / CH1312				Polarization	Vertical	
Date of Test	12/26/2009				Test Site	TE01	
Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit (dBm)	S.G Power (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dBm)	Peak Output Power (dBm)
2nd	3424.8	V	-13	-53.54	10.74	0.59	-43.39
3rd	5137.2	V	-13	-50.05	10.68	0.63	-40.00
4th	6849.6	V	-13	-46.28	10.80	0.78	-36.26
5th	8562.0	V	-13	*	*	*	*
6th	10274.4	V	-13	*	*	*	*
7th	11986.8	V	-13	*	*	*	*
8th	13699.2	V	-13	*	*	*	*
9th	15411.6	V	-13	*	*	*	*
10th	17124.0	V	-13	*	*	*	*



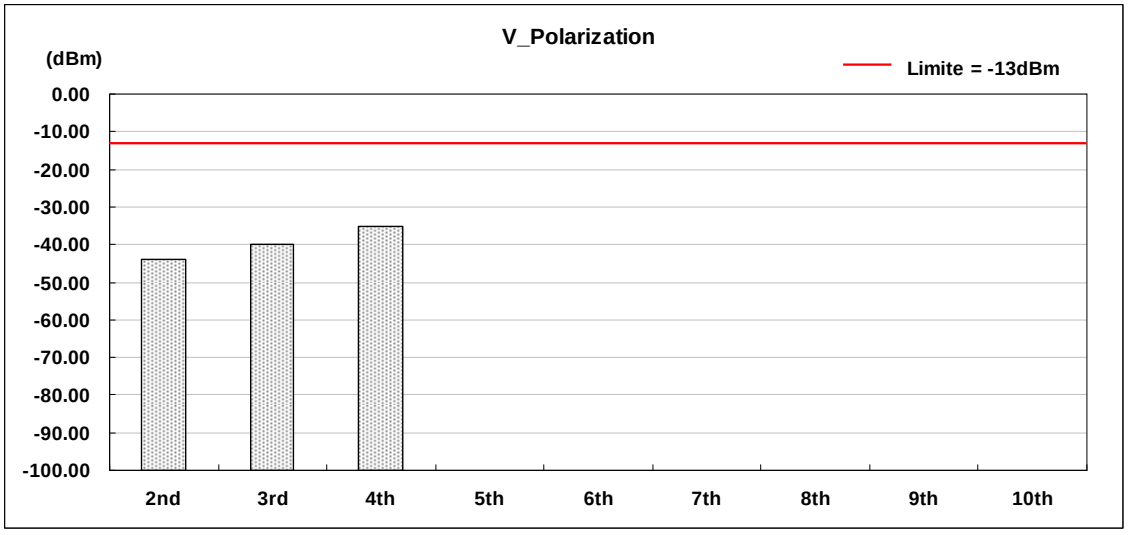
Product	Smartphone						
Test Item	Field Strength of Spurious Radiation						
Test Mode	Mode 1: WCDMA Band IV / CH1450				Polarization	Horizontal	
Date of Test	12/26/2009				Test Site	TE01	

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3480.0	H	-13	-54.13	10.74	0.59	-43.98
3rd	5220.0	H	-13	-49.84	10.68	0.63	-39.79
4th	6960.0	H	-13	-45.19	10.80	0.78	-35.17
5th	8700.0	H	-13	*	*	*	*
6th	10440.0	H	-13	*	*	*	*
7th	12180.0	H	-13	*	*	*	*
8th	13920.0	H	-13	*	*	*	*
9th	15660.0	H	-13	*	*	*	*
10th	17400.0	H	-13	*	*	*	*

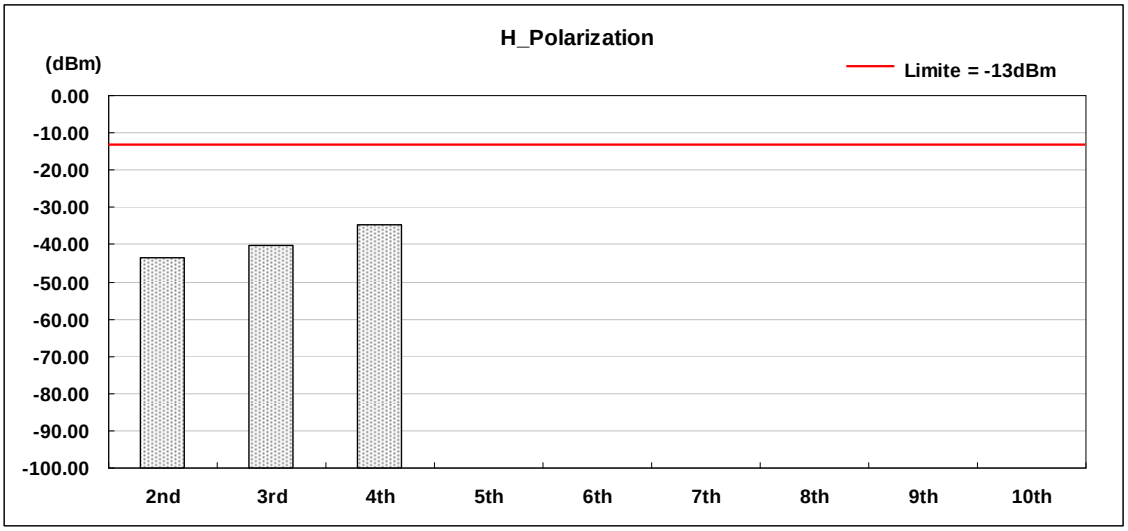


Product	Smartphone						
Test Item	Field Strength of Spurious Radiation						
Test Mode	Mode 1: WCDMA Band IV / CH1450				Polarization	Vertical	
Date of Test	12/26/2009				Test Site	TE01	

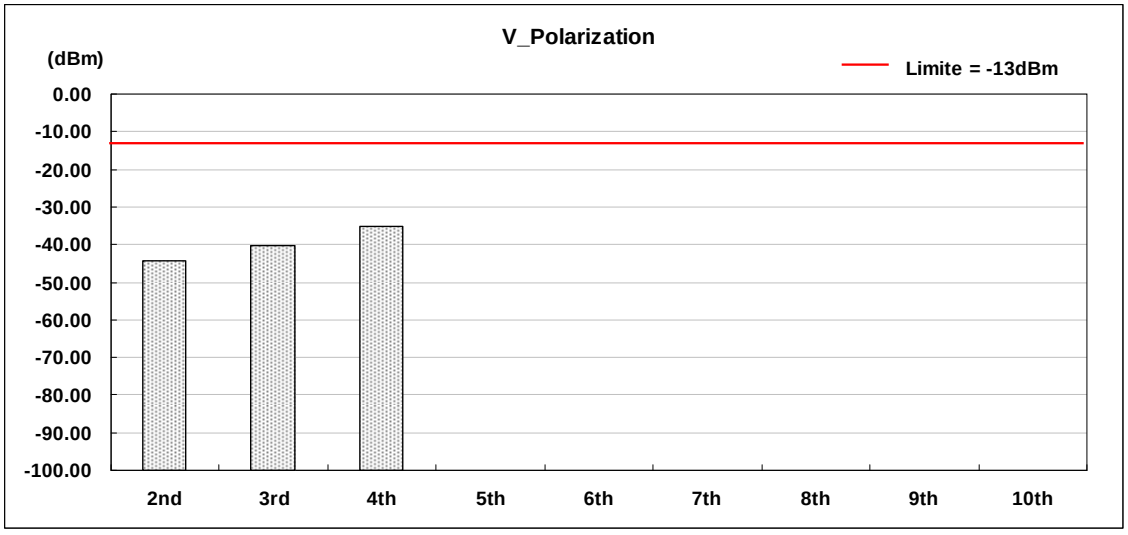
Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3480.0	V	-13	-53.97	10.74	0.59	-43.82
3rd	5220.0	V	-13	-49.86	10.68	0.63	-39.81
4th	6960.0	V	-13	-45.18	10.80	0.78	-35.16
5th	8700.0	V	-13	*	*	*	*
6th	10440.0	V	-13	*	*	*	*
7th	12180.0	V	-13	*	*	*	*
8th	13920.0	V	-13	*	*	*	*
9th	15660.0	V	-13	*	*	*	*
10th	17400.0	V	-13	*	*	*	*



Product	Smartphone						
Test Item	Field Strength of Spurious Radiation						
Test Mode	Mode 1: WCDMA Band IV / CH1513				Polarization	Horizontal	
Date of Test	12/26/2009				Test Site	TE01	
Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit (dBm)	S.G Power (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dBm)	Peak Output Power (dBm)
2nd	3505.2	H	-13	-53.85	10.74	0.59	-43.70
3rd	5257.8	H	-13	-50.24	10.68	0.63	-40.19
4th	7010.4	H	-13	-44.69	10.80	0.78	-34.67
5th	8763.0	H	-13	*	*	*	*
6th	10515.6	H	-13	*	*	*	*
7th	12268.2	H	-13	*	*	*	*
8th	14020.8	H	-13	*	*	*	*
9th	15773.4	H	-13	*	*	*	*
10th	17526.0	H	-13	*	*	*	*



Product	Smartphone						
Test Item	Field Strength of Spurious Radiation						
Test Mode	Mode 1: WCDMA Band IV / CH1513				Polarization	Vertical	
Date of Test	12/26/2009				Test Site	TE01	
Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit (dBm)	S.G Power (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dBm)	Peak Output Power (dBm)
2nd	3505.2	V	-13	-54.31	10.74	0.59	-44.16
3rd	5257.8	V	-13	-50.50	10.68	0.63	-40.45
4th	7010.4	V	-13	-45.01	10.80	0.78	-34.99
5th	8763.0	V	-13	*	*	*	*
6th	10515.6	V	-13	*	*	*	*
7th	12268.2	V	-13	*	*	*	*
8th	14020.8	V	-13	*	*	*	*
9th	15773.4	V	-13	*	*	*	*
10th	17526.0	V	-13	*	*	*	*



7 Frequency Stability (Temperature Variation) Test

7.1. Limit

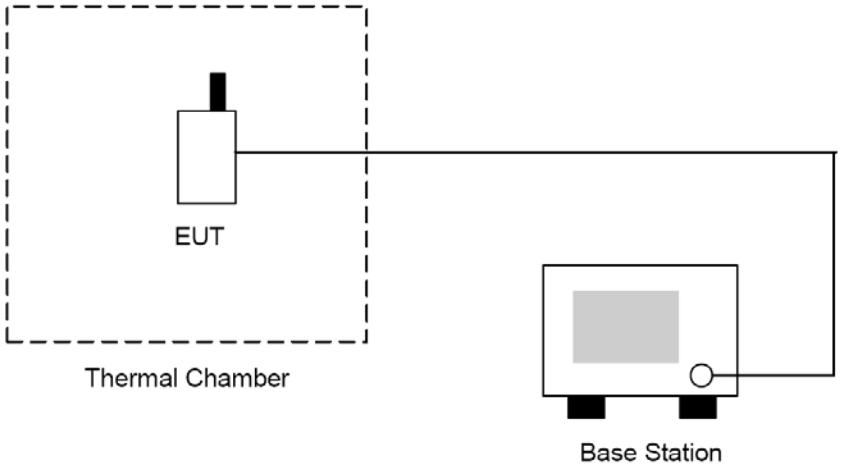
The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

7.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	07/29/2009
Test Site	ATL	TE02	TE02	N.C.R.

NOTE: N.C.R. = No Calibration Request.

7.3. Setup



7.4. Test Procedure

The measurement is made according to FCC rules part 27:

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to -30℃ and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
3. With power OFF, the temperature was raised in 10℃ steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The temperature tests were performed for the worst case.
5. Test data was recorded.

7.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Temperature Variation) measurement is ± 10Hz.

7.6. Test Result

Product	Smartphone		
Test Item	Frequency Stability (Temperature Variation)		
Test Mode	Mode 2: WCDMA Band IV Link		
Date of Test	12/25/2009	**Test Site**	TE02

Temperature (℃)	**Deviation (Hz)**	**Deviation (ppm)**	**Limit (ppm)**	**Result**
-30	19.10	0.011	±2.5	Pass
-20	19.38	0.011	±2.5	Pass
-10	20.20	0.012	±2.5	Pass
0	20.13	0.012	±2.5	Pass
10	17.31	0.010	±2.5	Pass
20	17.18	0.010	±2.5	Pass
30	16.47	0.010	±2.5	Pass
40	16.38	0.009	±2.5	Pass
50	18.13	0.010	±2.5	Pass

8 Frequency Stability (Voltage Variation) Test

8.1. Limit

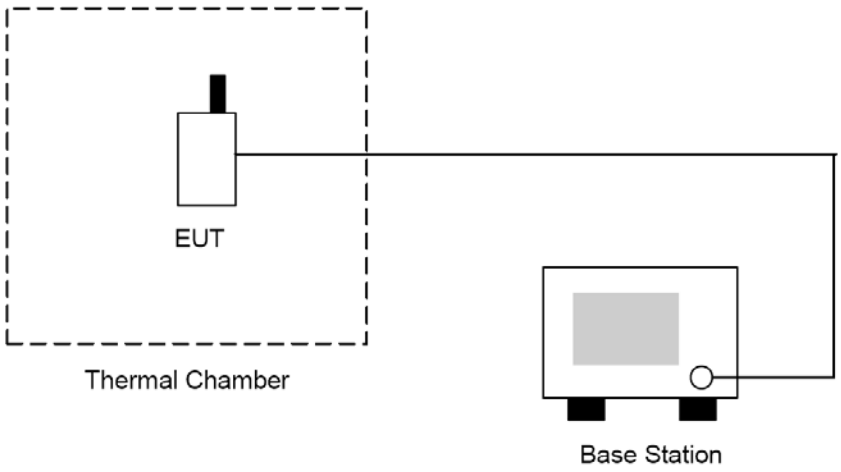
The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

8.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	07/29/2009
Test Site	ATL	TE02	TE02	N.C.R.

NOTE: N.C.R. = No Calibration Request.

8.3. Setup



8.4. Test Procedure

1. The EUT was placed in a temperature chamber at 25±5 ℃ and connected as the following section.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

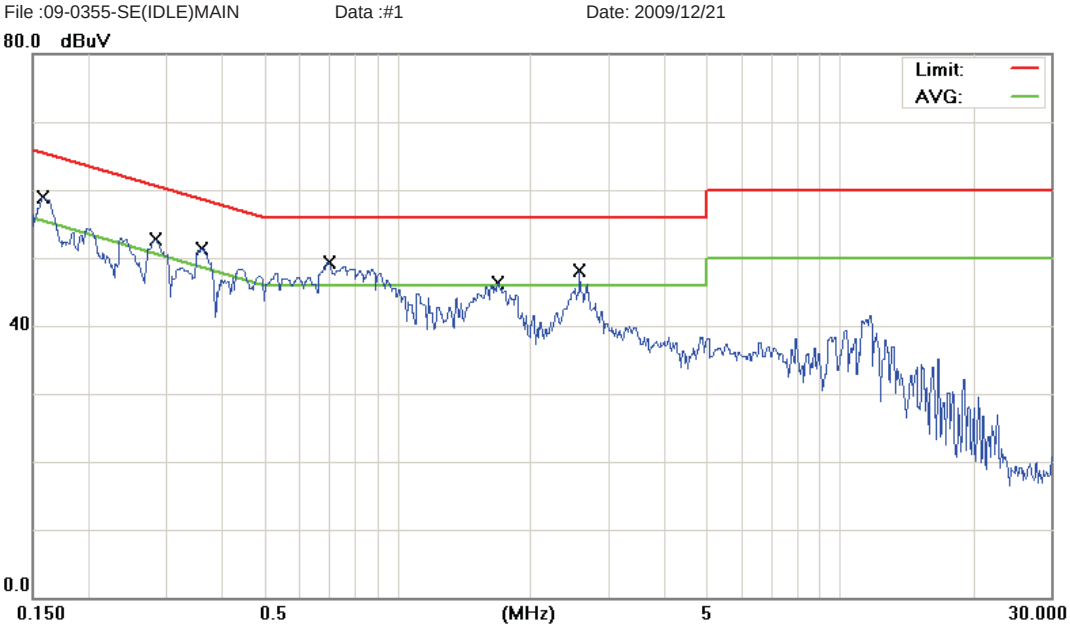
8.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Voltage Variation) measurement is ± 10Hz.

8.6. Test Result

Product	Smartphone		
Test Item	Frequency Stability (Voltage Variation)		
Test Mode	Mode 2: WCDMA Band IV Link		
Date of Test	12/25/2009	Test Site	TE02

Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
Battery full point	4.20	21.22	0.012	±2.5	Pass
Normal	3.70	23.37	0.013	±2.5	Pass
Battery cut-off point	3.40	22.40	0.013	±2.5	Pass



Site : Conducted
Phase: *L1*
Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP)
Power: AC 120V/60Hz
Humidity: 55 %

EUT: Smartphone

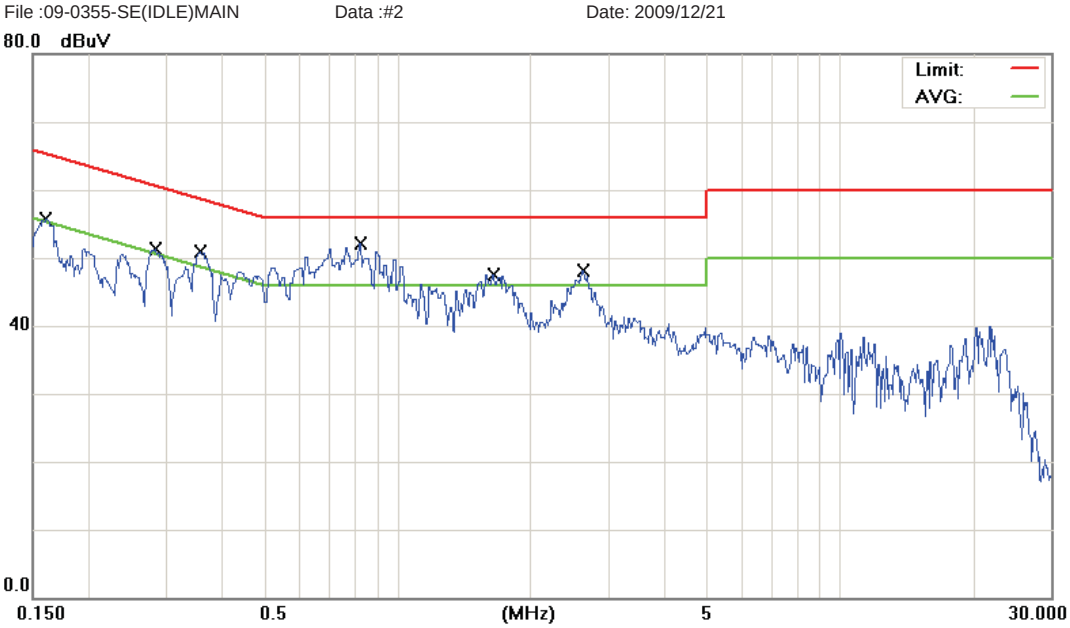
M/N: PB65100

Mode: 1

Note: Sample 1

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1577	33.48	9.73	43.21	65.58	-22.37	QP	
2		0.1577	18.39	9.73	28.12	55.58	-27.46	AVG	
3		0.2837	29.21	9.76	38.97	60.71	-21.74	QP	
4		0.2837	14.42	9.76	24.18	50.71	-26.53	AVG	
5		0.3600	27.77	9.78	37.55	58.73	-21.18	QP	
6		0.3600	13.98	9.78	23.76	48.73	-24.97	AVG	
7	*	0.6980	26.06	9.79	35.85	56.00	-20.15	QP	
8		0.6980	10.28	9.79	20.07	46.00	-25.93	AVG	
9		1.6880	22.72	9.83	32.55	56.00	-23.45	QP	
10		1.6880	9.28	9.83	19.11	46.00	-26.89	AVG	
11		2.5790	22.48	9.93	32.41	56.00	-23.59	QP	
12		2.5790	10.65	9.93	20.58	46.00	-25.42	AVG	

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



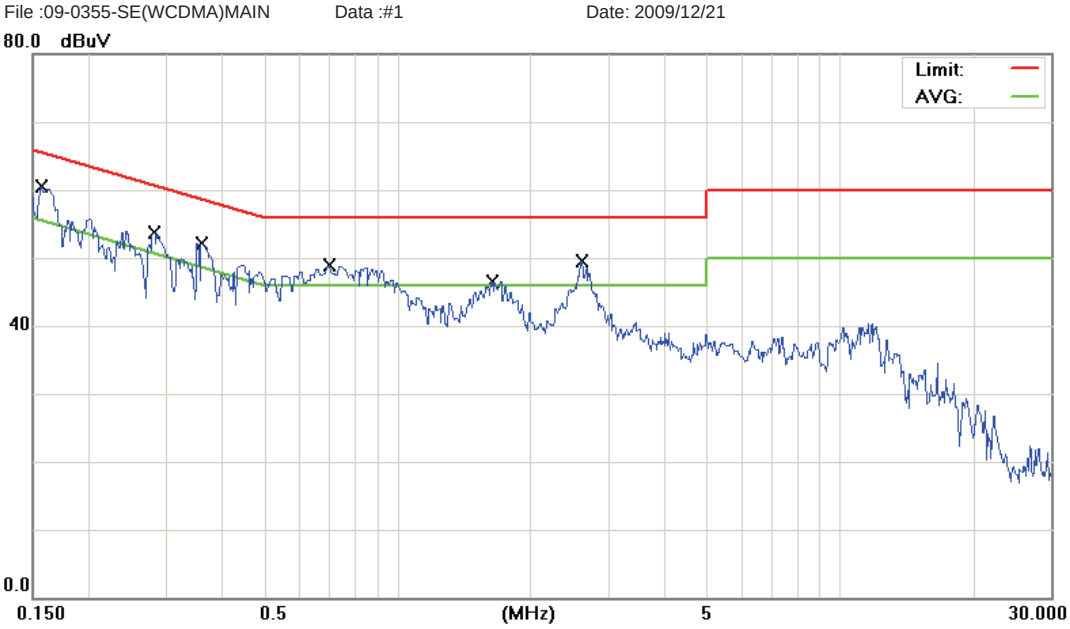
Site : Conducted
Limit: CISPR22 Class B Conduction(QP)
EUT: Smartphone
M/N: PB65100
Mode: 1
Note: Sample 1

Phase: *L2*
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1604	31.77	9.73	41.50	65.44	-23.94	QP	
2		0.1604	17.73	9.73	27.46	55.44	-27.98	AVG	
3		0.2830	27.82	9.76	37.58	60.73	-23.15	QP	
4		0.2830	17.65	9.76	27.41	50.73	-23.32	AVG	
5		0.3580	27.46	9.78	37.24	58.77	-21.53	QP	
6		0.3580	16.56	9.78	26.34	48.77	-22.43	AVG	
7	*	0.8240	25.18	9.80	34.98	56.00	-21.02	QP	
8		0.8240	13.37	9.80	23.17	46.00	-22.83	AVG	
9		1.6430	23.88	9.83	33.71	56.00	-22.29	QP	
10		1.6430	13.58	9.83	23.41	46.00	-22.59	AVG	
11		2.6150	20.10	9.93	30.03	56.00	-25.97	QP	
12		2.6150	13.36	9.93	23.29	46.00	-22.71	AVG	

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



Site : Conducted
Phase: L1
Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP)
Power: AC 120V/60Hz
Humidity: 55 %

EUT: Smartphone

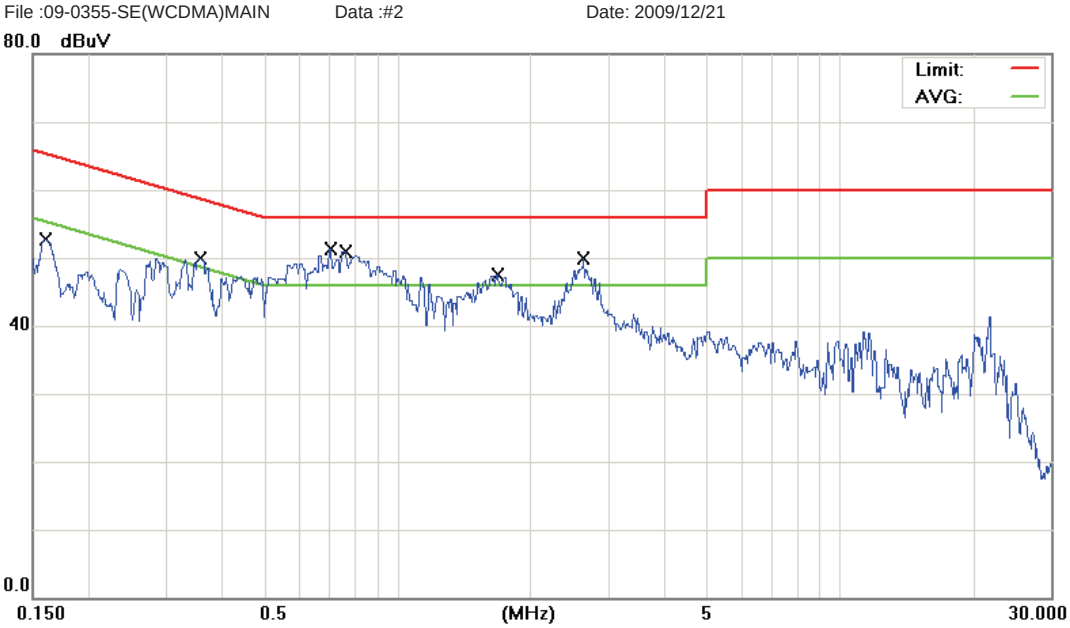
M/N: PB65100

Mode: 2

Note: Sample 1

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	29.10	9.73	38.83	65.62	-26.79	QP	
2		0.1570	15.21	9.73	24.94	55.62	-30.68	AVG	
3		0.2816	27.31	9.76	37.07	60.77	-23.70	QP	
4		0.2816	14.01	9.76	23.77	50.77	-27.00	AVG	
5		0.3614	26.75	9.78	36.53	58.70	-22.17	QP	
6		0.3614	15.64	9.78	25.42	48.70	-23.28	AVG	
7	*	0.6980	26.59	9.79	36.38	56.00	-19.62	QP	
8		0.6980	10.77	9.79	20.56	46.00	-25.44	AVG	
9		1.6340	20.37	9.83	30.20	56.00	-25.80	QP	
10		1.6340	9.48	9.83	19.31	46.00	-26.69	AVG	
11		2.5970	26.12	9.93	36.05	56.00	-19.95	QP	
12		2.5970	11.01	9.93	20.94	46.00	-25.06	AVG	

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



Site : Conducted
Phase: L2
Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP)
Power: AC 120V/60Hz
Humidity: 55 %

EUT: Smartphone

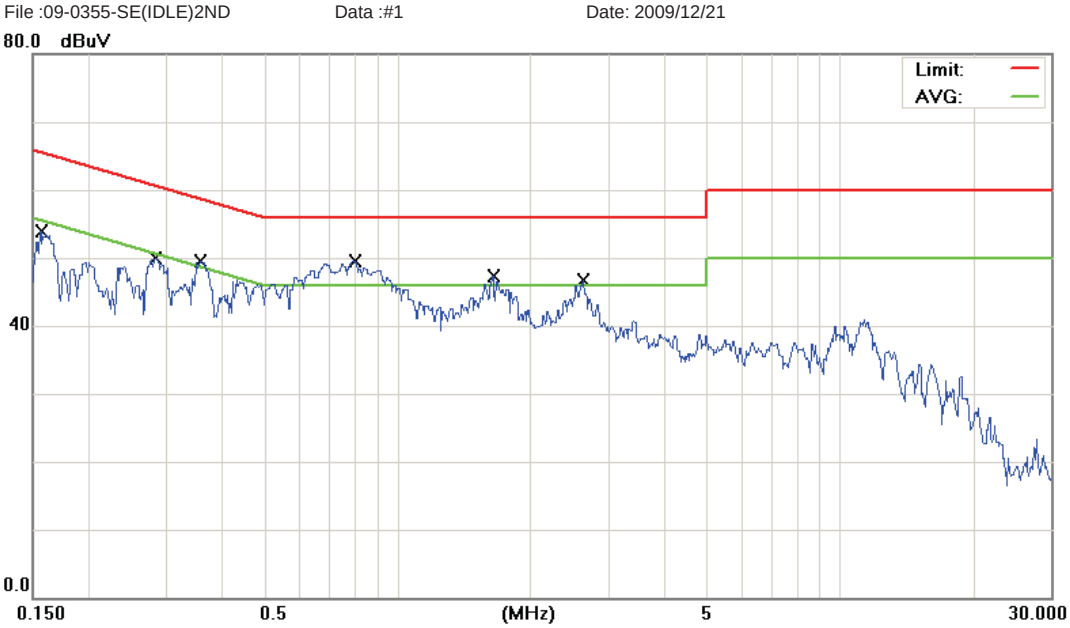
M/N: PB65100

Mode: 2

Note: Sample 1

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1598	21.45	9.73	31.18	65.47	-34.29	QP	
2		0.1598	10.09	9.73	19.82	55.47	-35.65	AVG	
3		0.3578	19.49	9.78	29.27	58.78	-29.51	QP	
4		0.3578	11.32	9.78	21.10	48.78	-27.68	AVG	
5		0.7070	22.63	9.80	32.43	56.00	-23.57	QP	
6		0.7070	15.94	9.80	25.74	46.00	-20.26	AVG	
7		0.7610	23.62	9.80	33.42	56.00	-22.58	QP	
8	*	0.7610	17.42	9.80	27.22	46.00	-18.78	AVG	
9		1.6790	20.97	9.83	30.80	56.00	-25.20	QP	
10		1.6790	13.97	9.83	23.80	46.00	-22.20	AVG	
11		2.6328	19.42	9.93	29.35	56.00	-26.65	QP	
12		2.6328	11.47	9.93	21.40	46.00	-24.60	AVG	

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



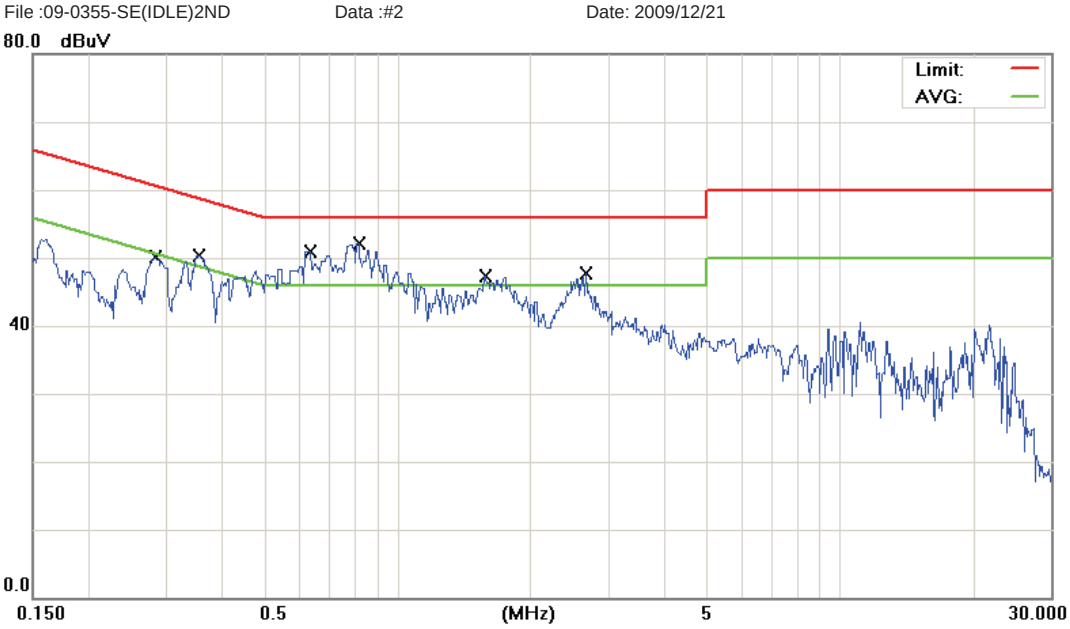
Site : Conducted
Limit: CISPR22 Class B Conduction(QP)
EUT: Smartphone
M/N: PB65100
Mode: 1
Note: Sample 2

Phase: *L1*
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1563	28.44	9.73	38.17	65.66	-27.49	QP	
2		0.1563	14.86	9.73	24.59	55.66	-31.07	AVG	
3		0.2830	27.55	9.76	37.31	60.73	-23.42	QP	
4		0.2830	14.19	9.76	23.95	50.73	-26.78	AVG	
5		0.3580	25.96	9.78	35.74	58.77	-23.03	QP	
6		0.3580	14.09	9.78	23.87	48.77	-24.90	AVG	
7	*	0.7970	26.42	9.80	36.22	56.00	-19.78	QP	
8		0.7970	13.27	9.80	23.07	46.00	-22.93	AVG	
9		1.6430	23.11	9.83	32.94	56.00	-23.06	QP	
10		1.6430	11.56	9.83	21.39	46.00	-24.61	AVG	
11		2.6240	23.49	9.93	33.42	56.00	-22.58	QP	
12		2.6240	10.39	9.93	20.32	46.00	-25.68	AVG	

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



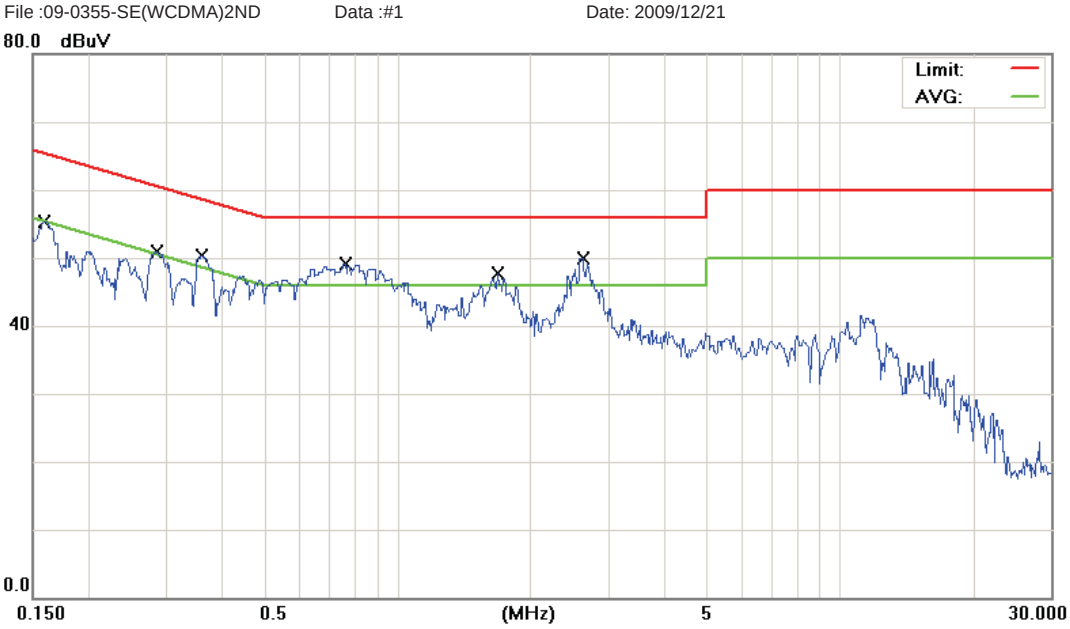
Site : Conducted
Limit: CISPR22 Class B Conduction(QP)
EUT: Smartphone
M/N: PB65100
Mode: 1
Note: Sample 2

Phase: L2
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2844	27.10	9.76	36.86	60.69	-23.83	QP	
2		0.2844	17.66	9.76	27.42	50.69	-23.27	AVG	
3		0.3558	27.90	9.78	37.68	58.83	-21.15	QP	
4		0.3558	13.74	9.78	23.52	48.83	-25.31	AVG	
5	*	0.6350	27.74	9.79	37.53	56.00	-18.47	QP	
6		0.6350	13.93	9.79	23.72	46.00	-22.28	AVG	
7		0.8150	25.55	9.80	35.35	56.00	-20.65	QP	
8		0.8150	13.76	9.80	23.56	46.00	-22.44	AVG	
9		1.5710	22.46	9.81	32.27	56.00	-23.73	QP	
10		1.5710	14.54	9.81	24.35	46.00	-21.65	AVG	
11		2.6600	21.37	9.93	31.30	56.00	-24.70	QP	
12		2.6600	12.51	9.93	22.44	46.00	-23.56	AVG	

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



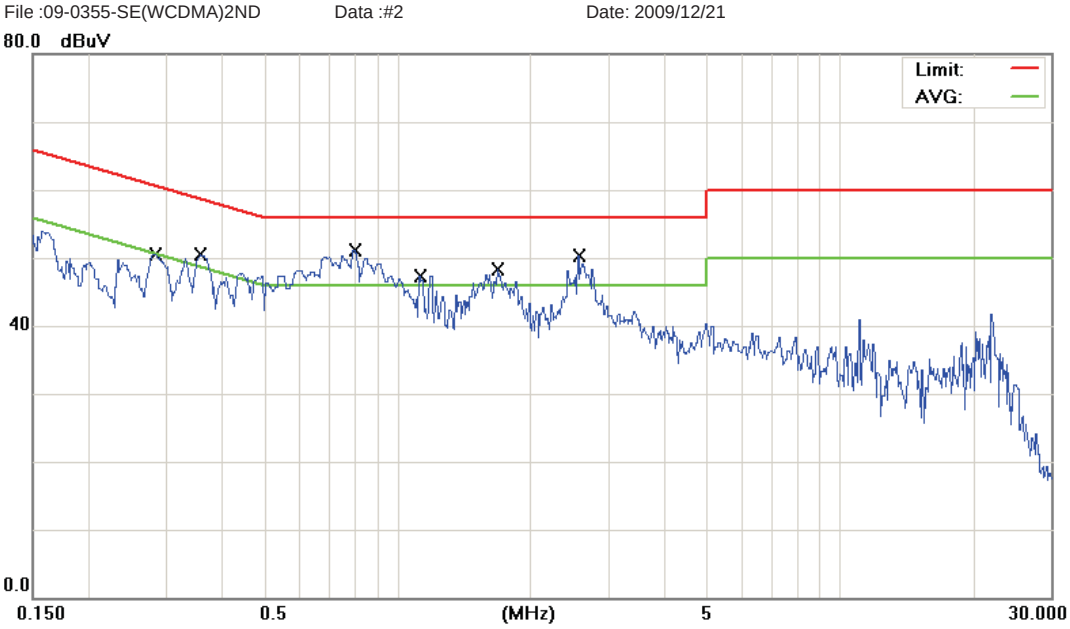
Site : Conducted
Limit: CISPR22 Class B Conduction(QP)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: Sample 2

Phase: *L1*
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1590	31.45	9.73	41.18	65.52	-24.34	QP	
2		0.1590	16.80	9.73	26.53	55.52	-28.99	AVG	
3		0.2850	27.86	9.76	37.62	60.67	-23.05	QP	
4		0.2850	14.02	9.76	23.78	50.67	-26.89	AVG	
5		0.3607	26.80	9.78	36.58	58.71	-22.13	QP	
6		0.3607	14.86	9.78	24.64	48.71	-24.07	AVG	
7	*	0.7610	26.26	9.80	36.06	56.00	-19.94	QP	
8		0.7610	13.21	9.80	23.01	46.00	-22.99	AVG	
9		1.6880	23.72	9.83	33.55	56.00	-22.45	QP	
10		1.6880	10.77	9.83	20.60	46.00	-25.40	AVG	
11		2.6150	22.78	9.93	32.71	56.00	-23.29	QP	
12		2.6150	13.69	9.93	23.62	46.00	-22.38	AVG	

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



Site : Conducted
Limit: CISPR22 Class B Conduction(QP)
EUT: Smartphone
M/N: PB65100
Mode: 2
Note: Sample 2

Phase: *L2*
Power: AC 120V/60Hz

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2837	27.88	9.76	37.64	60.71	-23.07	QP	
2		0.2837	17.56	9.76	27.32	50.71	-23.39	AVG	
3		0.3586	27.98	9.78	37.76	58.76	-21.00	QP	
4		0.3586	15.10	9.78	24.88	48.76	-23.88	AVG	
5	*	0.7970	26.38	9.80	36.18	56.00	-19.82	QP	
6		0.7970	14.53	9.80	24.33	46.00	-21.67	AVG	
7		1.1210	17.69	9.80	27.49	56.00	-28.51	QP	
8		1.1210	8.02	9.80	17.82	46.00	-28.18	AVG	
9		1.6880	25.59	9.83	35.42	56.00	-20.58	QP	
10		1.6880	13.74	9.83	23.57	46.00	-22.43	AVG	
11		2.5610	24.04	9.93	33.97	56.00	-22.03	QP	
12		2.5610	13.69	9.93	23.62	46.00	-22.38	AVG	

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

9 AC Power Conducted Emissions Test

9.1. Limit

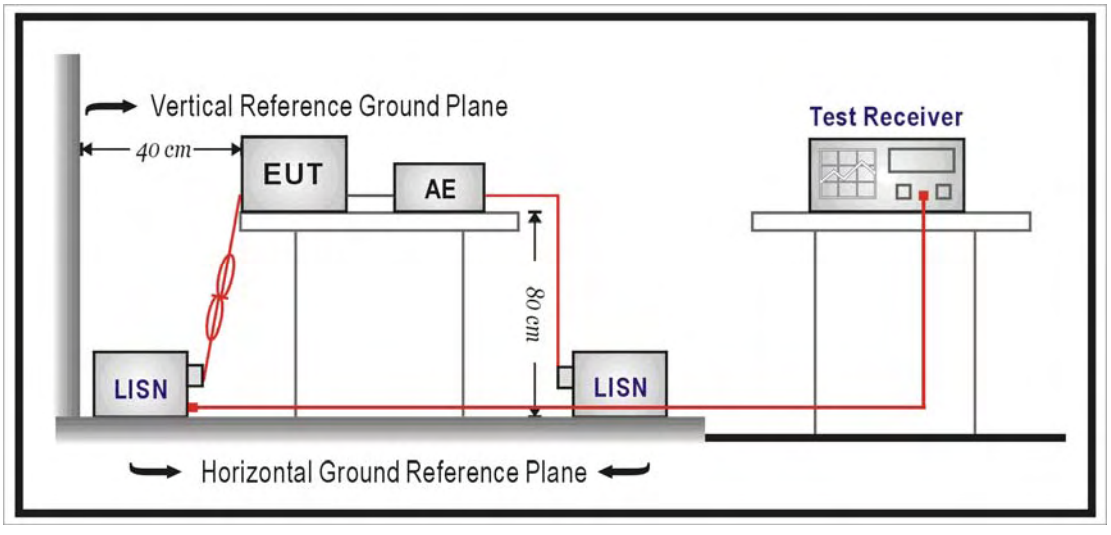
Frequency range (MHz)	Limits (dBuV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5.0	56	46
5.0 to 30	60	50

9.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date
Spectrum Analyzer	Advantest	R3132	160300103	03/10/2009
Test Receiver	R&S	ESCI	100367	06/05/2009
LISN	EMCO	3816/2 SH	00060110	06/05/2009
LISN	EMCO	3816/2 SH	00060111	06/29/2009
Transient Limiter	ELECTRO-METRICS	EM-7600	777	09/22/2009
Spectrum Analyzer	Advantest	R3132	160300103	03/10/2009
Test Site	ATL	TE02	TE02	N.C.R.

NOTE: N.C.R. = No Calibration Request.

9.3. Setup



9.4. Test Procedure

The measurement is made according to FCC rules15.207:

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in section 10.6.

9.5. Uncertainty

The measurement uncertainty is defined as for AC power conducted emission measurement is ± 2.24 dB.

9.6. Test Result

Product	Smartphone		
Test Item	Frequency Stability		
Test Mode	Mode 1: IDLE Mode Mode 2: WCDMA Band IV Link		
Date of Test	12/21/2009	**Test Site**	TE02
Note: The test results see next page.			