FCC Test Report

APPLICANT	:	BlackBerry Limited
EQUIPMENT	:	Smartphone
BRAND NAME	:	BlackBerry
MODEL NAME	:	RHG161LW
MARKETING NAME	:	SQC100-4
FCC ID	:	L6ARHG160LW
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Certification

The product was received on Jul. 14, 2014 and testing was completed on Oct. 23, 2014. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2009 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Louis Wu

Reviewed by: Louis Wu / Manager

Jones Tsai

Approved by: Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL INC.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC471420	Rev. 01	Initial issue of report	Nov. 06, 2014

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.107	ICES003 Section 6.1	AC Conducted Emission	< 15.107 limits < ICES003 6.1 limits	PASS	Under limit 8.20 dB at 0.182 MHz
3.2	15.109	ICES003 Section 6.2	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 4.40 dB at 162.030 MHz for Quasi-Peak

1. General Description

1.1. Applicant

BlackBerry Limited
2300 University Street East, Waterloo, ON., CAN, N2K1A0

1.2. Manufacturer

FIH Mobile Limited
No.4, Mingsheng St.,Tu-Cheng Dist., New Taipei City 23679, Taiwan

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Brand Name	BlackBerry
Model Name	RHG161LW
Marketing Name	SQC100-4
IMEI	004402242681074
FCC ID	L6ARHG160LW
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/NFC WLAN 11a/b/g/n (HT20/HT40) Bluetooth v4.0 EDR/LE
HW Version	PVT 2
SW Version	BlackBerry 10.3.1.565/566
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4. Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	GSM850 : 824.2 MHz ~ 848.8 MHz GSM1900 : 1850.2 MHz ~ 1909.8MHz WCDMA Band V : 826.4 MHz ~ 846.6 MHz WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz WCDMA Band II : 1852.4 MHz ~ 1907.6 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 25 : 1850.7MHz ~ 1914.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Rx Frequency	GSM850 : 869.2 MHz ~ 893.8 MHz GSM1900 : 1930.2 MHz ~ 1989.8 MHz WCDMA Band V : 871.4 MHz ~ 891.6 MHz WCDMA Band IV : 2112.4 MHz ~ 2152.6 MHz WCDMA Band II : 1932.4 MHz ~ 1987.6 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 25 : 1930.7MHz ~ 1994.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz NFC : 13.56 MHz
Antenna Type	GSM / WCDMA : Coupling type (LDS) LTE : PIFA Antenna WLAN : PIFA Antenna Bluetooth : FPC Antenna GPS : PIFA Antenna NFC : Loop Antenna

Product Specification subjective to this standard	
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Downlink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n/ : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : π /4-DQPSK Bluetooth (3Mbps) : 8-DPSK GPS : BPSK NFC: ASK

1.5. Modification of EUT

No modifications are made to the EUT during all test items.

1.6. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	CO05-HY	03CH08-HY

1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2009

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2009 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The following tables are showing the test modes as the worst cases and recorded in this report.

Item	EUT Configuration	Test Condition		
		EMI AC	EMI RE<1G	EMI RE≥1G
1.	Charging Mode (EUT with adapter)	☒	☒	Note 1
2.	Data application transferred mode (EUT with notebook)	☒	☒	☒

Abbreviations:

- EMI AC: AC conducted emissions
- EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz
- EMI RE < 1G: EUT radiated emissions < 1GHz

Note 1: Testing for this mode is not required or not the worst case.

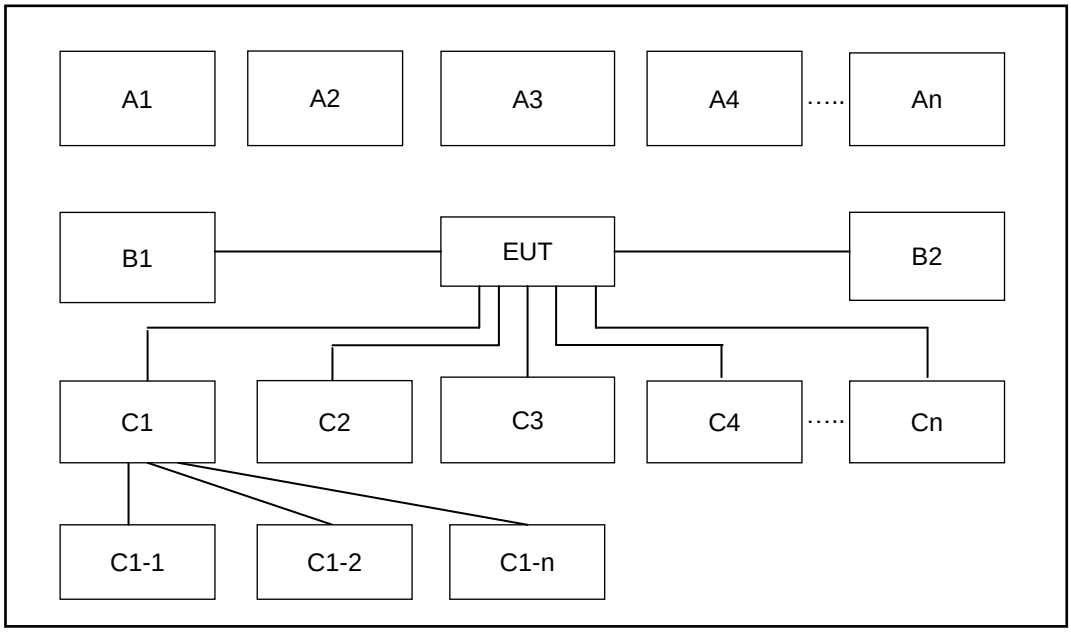
Remark: For signal above 1GHz, the worst case was test item 2.

Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1/2	Mode 1: GSM850 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + NFC On + Earphone 1 + USB Cable1 (Charging from Adapter 1) Mode 2: WCDMA Band V Idle + WLAN (5GHz) Idle + Bluetooth Idle + MPEG4 + Earphone 2 + USB Cable 2 (Charging from Adapter 2) Mode 3: LTE Band 7 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera + Earphone 3 + USB Cable 1 (Charging from Adapter 1) Mode 4: WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook) Mode 5: WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + FM Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)
Radiated Emissions < 1GHz	1/2	Mode 1: GSM850 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + NFC On + Earphone 1 + USB Cable1 (Charging from Adapter 1) Mode 2: WCDMA Band V Idle + WLAN (5GHz) Idle + Bluetooth Idle + MPEG4 + Earphone 2 + USB Cable 2 (Charging from Adapter 2) Mode 3: LTE Band 7 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera + Earphone 3 + USB Cable 1 (Charging from Adapter 1) Mode 4: WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook) Mode 5: WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + FM Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)
Radiated Emissions ≥ 1GHz	2	Mode 1: WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)

Remark:

1. The worst case of AC is mode 4; only the test data of this mode was reported.
2. The worst case of RE < 1G is mode 4; only the test data of this mode was reported.
3. Data link with Notebook means data application transferred mode between EUT and Notebook.

2.2. Connection Diagram of Test System



Conduction and Radiation Test Setup									
No.	**Wireless Station**	**Connection Type**	**Test Mode**						
			1	**2**	**3**	**4**	**5**	**-**	**-**
A1	BT Earphone	Bluetooth	X	X	X	X	X		
A2	System Simulator	GSM / WCDMA / LTE	X	X	X	X	X		
A3	GPS Station	GPS				X			
A4	AP router	WiFi	X	X	X	X	X		
No.	**Power Source**	**Connection Type**	**1**	**2**	**3**	**4**	**5**	**-**	**-**
B1	AC : 120V/60Hz	AC Power Cable	X	X	X				
No.	**Setup Peripherals**	**Connection Type**	**1**	**2**	**3**	**4**	**5**	**-**	**-**
C1	Notebook	USB cable				X	X		
C1-1	IPod	USB Cable to C1				X	X		
C1-2	AP router	RJ-45 Cable to C1				X	X		
C2	Earphone	Earphone jack	X	X	X	X	X		
C3	SD card	SD I/O interface without cable	X	X	X	X	X		

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMW 500	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	T&E	GS-50	N/A	N/A	Unshielded, 1.8 m
4.	GPS Station	T&E	GSG-54	N/A	N/A	Unshielded, 1.8 m
5.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
6.	WLAN AP	D-Link	DIR-628	KA2IR865LA1	N/A	Unshielded, 1.8 m
7.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
8.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
9.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
10.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA or LTE idle mode during the testing. The EUT was synchronized to the BCCH, and was in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between Laptop and EUT via USB cable.
2. Execute "GPS Test" to make the EUT receive continuous signals from GPS station.
3. Execute "Windows Media Player" to play MPEG4 files.
4. Turn on camera to capture images.
5. Turn on FM function to receive broadcast signal.

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

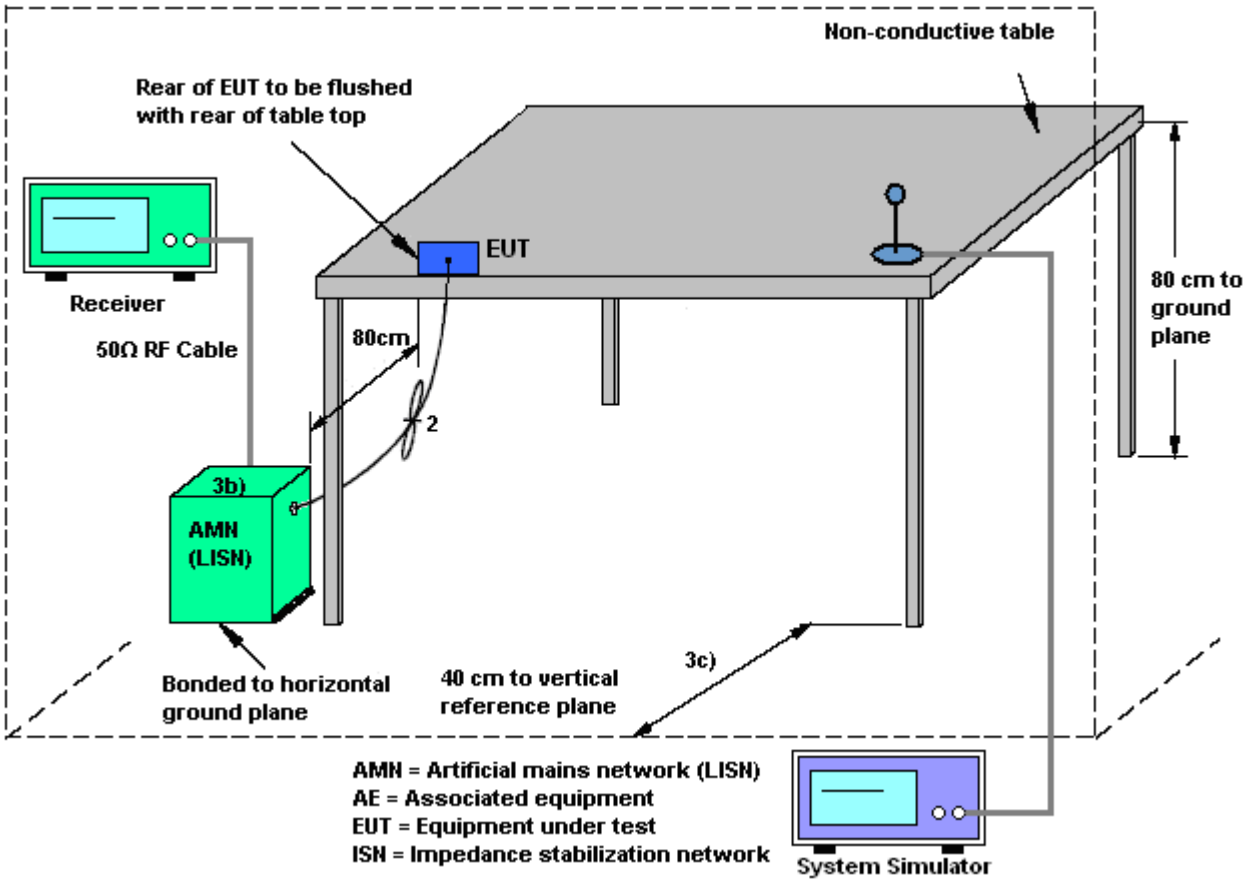
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

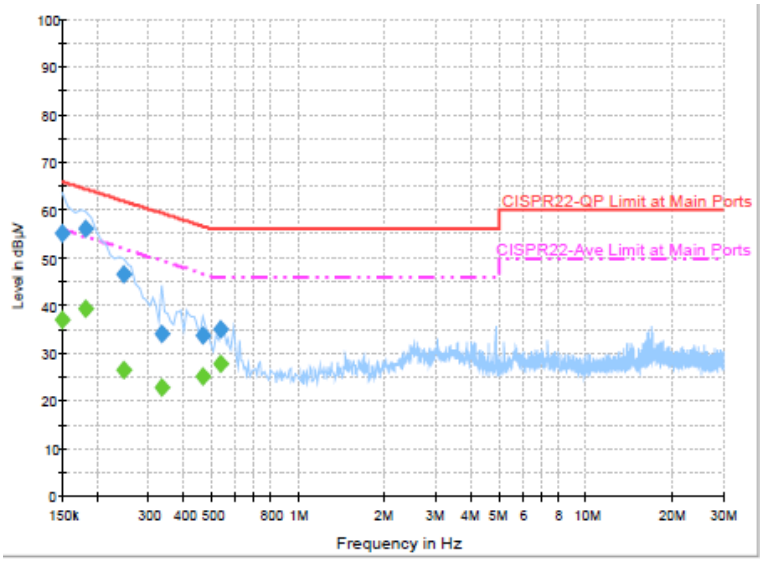
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.1.4 Test Setup



3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 4	**Temperature :**	20~22℃
Test Engineer :	Cosmo Xu	**Relative Humidity :**	46~48%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)		



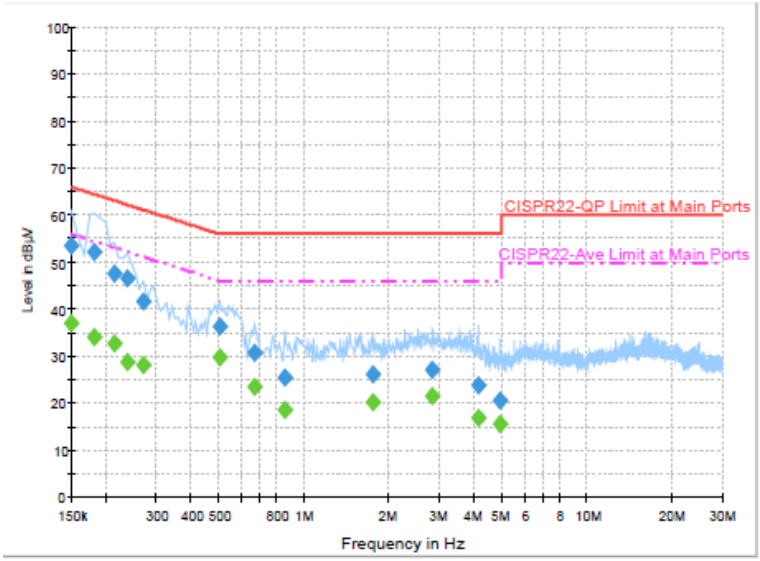
Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	55.2	Off	L1	19.3	10.8	66.0
0.182000	56.2	Off	L1	19.4	8.2	64.4
0.246000	46.4	Off	L1	19.4	15.5	61.9
0.334000	34.1	Off	L1	19.4	25.3	59.4
0.462000	33.5	Off	L1	19.4	23.2	56.7
0.534000	35.0	Off	L1	19.4	21.0	56.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	37.0	Off	L1	19.3	19.0	56.0
0.182000	39.4	Off	L1	19.4	15.0	54.4
0.246000	26.5	Off	L1	19.4	25.4	51.9
0.334000	22.7	Off	L1	19.4	26.7	49.4
0.462000	25.0	Off	L1	19.4	21.7	46.7
0.534000	27.7	Off	L1	19.4	18.3	46.0

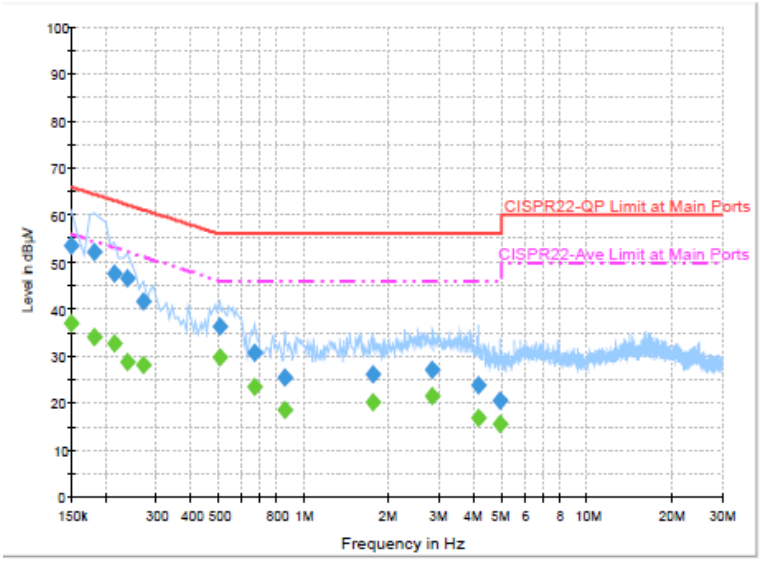
Test Mode :	Mode 4	Temperature :	20~22℃
Test Engineer :	Cosmo Xu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)		



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	53.4	Off	N	19.4	12.6	66.0
0.182000	52.2	Off	N	19.4	12.2	64.4
0.214000	47.6	Off	N	19.4	15.4	63.0
0.238000	46.6	Off	N	19.4	15.6	62.2
0.270000	41.5	Off	N	19.4	19.6	61.1
0.502000	36.2	Off	N	19.4	19.8	56.0
0.670000	30.8	Off	N	19.5	25.2	56.0
0.854000	25.5	Off	N	19.6	30.5	56.0
1.742000	26.0	Off	N	19.6	30.0	56.0
2.838000	27.2	Off	N	19.6	28.8	56.0
4.110000	23.9	Off	N	19.6	32.1	56.0
4.902000	20.6	Off	N	19.6	35.4	56.0

Test Mode :	Mode 4	Temperature :	20~22℃
Test Engineer :	Cosmo Xu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)		



Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	37.0	Off	N	19.4	19.0	56.0
0.182000	34.1	Off	N	19.4	20.3	54.4
0.214000	32.6	Off	N	19.4	20.4	53.0
0.238000	28.8	Off	N	19.4	23.4	52.2
0.270000	28.1	Off	N	19.4	23.0	51.1
0.502000	29.8	Off	N	19.4	16.2	46.0
0.670000	23.3	Off	N	19.5	22.7	46.0
0.854000	18.4	Off	N	19.6	27.6	46.0
1.742000	20.0	Off	N	19.6	26.0	46.0
2.838000	21.6	Off	N	19.6	24.4	46.0
4.110000	16.8	Off	N	19.6	29.2	46.0
4.902000	15.4	Off	N	19.6	30.6	46.0

3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2. Measuring Instruments

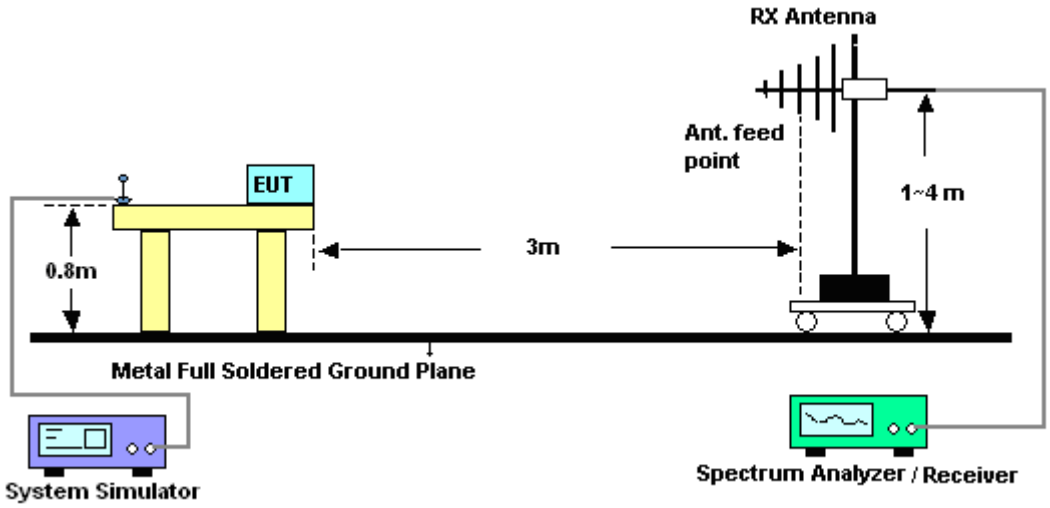
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

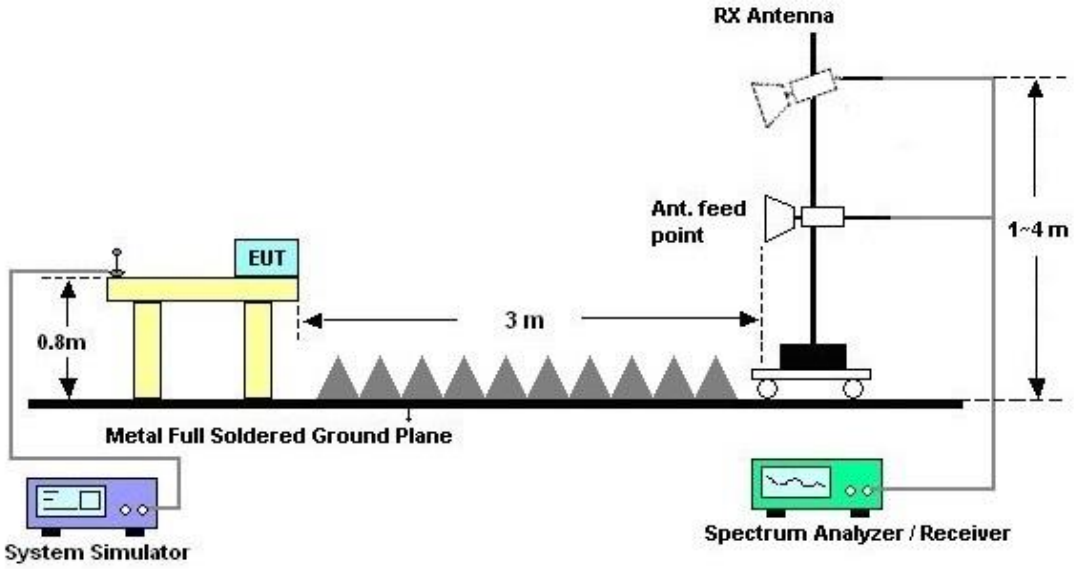
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dBμV/m) = 20 log Emission level (μV/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz

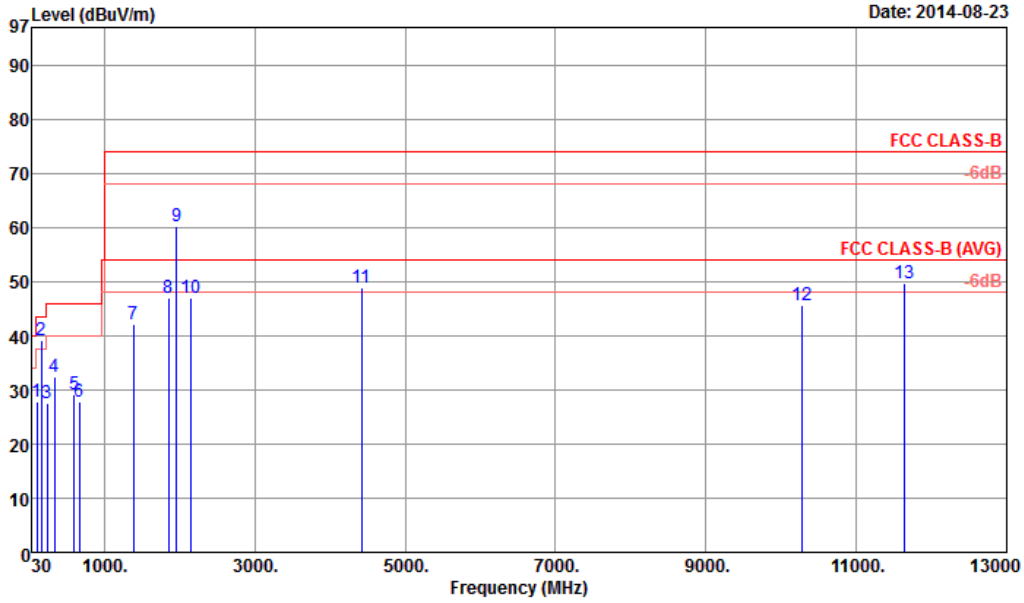


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

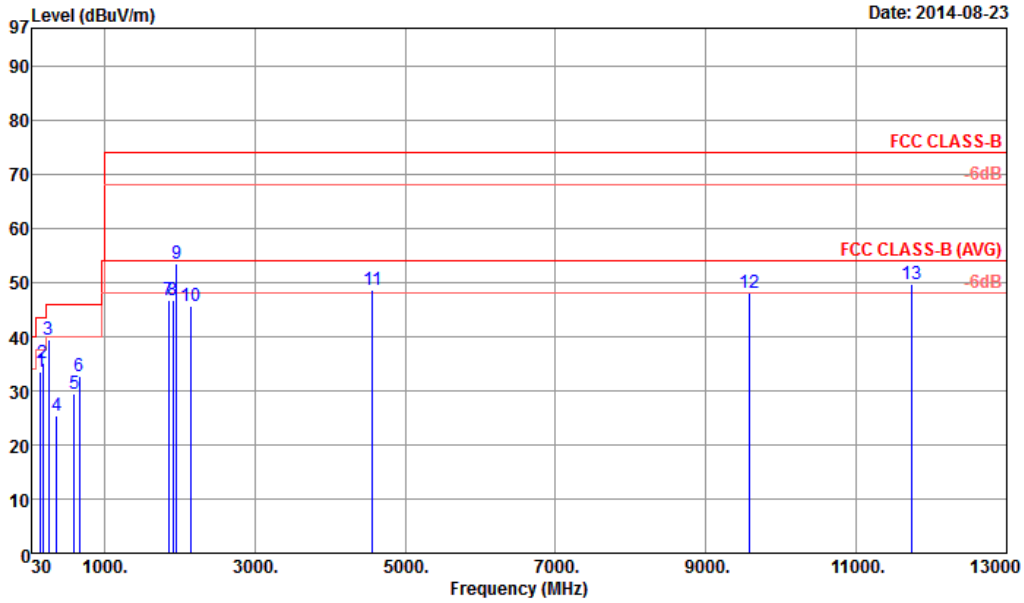
Test Mode :	Mode 4	**Temperature :**	22~24°C
Test Engineer :	Luke Chang	**Relative Humidity :**	44~45%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)		
Remark :	#9 is system simulator signal which can be ignored.		



Site : 03CH08-HY
Condition : FCC CLASS-B 3m HORN_9120D_H_140416 HORIZONTAL
Power : From System
Project : FD 471420
Memo : Mode 4

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	99.93	27.81	-15.69	43.50	47.91	10.30	1.38	31.78	---	---	Peak
2 @	162.03	39.10	-4.40	43.50	57.84	11.28	1.76	31.78	170	29	QP
3	240.06	27.50	-18.50	46.00	45.22	11.89	2.16	31.77	---	---	Peak
4 p	332.90	32.33	-13.67	46.00	46.75	14.78	2.57	31.77	---	---	Peak
5	600.30	29.06	-16.94	46.00	37.92	19.70	3.48	32.04	---	---	Peak
6	666.10	27.92	-18.08	46.00	35.94	20.33	3.69	32.04	---	---	Peak
7	1384.00	42.13	-31.87	74.00	45.91	25.33	5.43	34.54	---	---	Peak
8	1851.32	46.91	-27.09	74.00	48.76	25.88	6.30	34.03	---	---	Peak
9	1960.00	60.25			61.70	25.96	6.50	33.91	---	---	Peak
10	2156.00	47.14	-26.86	74.00	47.90	26.40	6.83	33.99	---	---	Peak
11	4416.00	49.02	-24.98	74.00	42.13	30.45	10.12	33.68	---	---	Peak
12	10270.00	45.77	-28.23	74.00	25.20	39.37	16.23	35.03	---	---	Peak
13	11634.00	49.69	-24.31	74.00	26.12	40.00	17.78	34.21	100	0	Peak

Test Mode :	Mode 4	**Temperature :**	22~24°C
Test Engineer :	Luke Chang	**Relative Humidity :**	44~45%
Test Distance :	3m	**Polarization :**	Vertical
Function Type :	WCDMA Band II Idle + WLAN (5GHz) Idle + Bluetooth Idle + GPS Rx + Earphone 1 + USB Cable 2 (Data Link with Notebook)		
Remark :	#9 is system simulator signal which can be ignored.		



Site : 03CH08-HY
Condition : FCC CLASS-B 3m HORN_9120D_V_140416 VERTICAL
Power : From System
Project : FD 471420
Memo : Mode 4

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	155.82	33.56	-9.94	43.50	51.99	11.62	1.73	31.78	---	---	Peak
2	177.96	35.13	-8.37	43.50	55.65	9.42	1.84	31.78	---	---	Peak
3 @	254.37	39.41	-6.59	46.00	55.76	13.20	2.22	31.77	151	338	Peak
4	366.50	25.31	-20.69	46.00	38.73	15.67	2.70	31.79	---	---	Peak
5	600.30	29.33	-16.67	46.00	38.19	19.70	3.48	32.04	---	---	Peak
6	666.10	32.57	-13.43	46.00	40.59	20.33	3.69	32.04	---	---	Peak
7	1850.15	46.75	-27.25	74.00	48.60	25.88	6.30	34.03	---	---	Peak
8	1910.00	46.85	-27.15	74.00	48.46	25.93	6.42	33.96	---	---	Peak
9	1960.00	53.45			54.90	25.96	6.50	33.91	---	---	Peak
10	2156.00	45.54	-28.46	74.00	46.30	26.40	6.83	33.99	---	---	Peak
11	4566.00	48.75	-25.25	74.00	41.53	30.70	10.25	33.73	---	---	Peak
12	9570.00	48.05	-25.95	74.00	28.89	38.83	15.61	35.28	---	---	Peak
13	11744.00	49.73	-24.27	74.00	26.20	39.77	17.92	34.16	100	0	Peak

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9kHz ~ 2.75GHz	Nov. 15, 2013	Aug. 21, 2014~ Oct. 22, 2014	Nov. 14, 2014	Conduction (CO05-HY)
LISN (for auxiliary equipment)	Rohde & Schwarz	ENV216	100081	9kHz ~ 30MHz	Dec. 12, 2013	Aug. 21, 2014~ Oct. 22, 2014	Dec. 11, 2014	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz ~ 30MHz	Dec. 04, 2013	Aug. 21, 2014~ Oct. 22, 2014	Dec. 03, 2014	Conduction (CO05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Aug. 21, 2014~ Oct. 22, 2014	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz – 26.5GHz	Jan. 15, 2014	Aug. 23, 2014~ Oct. 23, 2014	Jan. 14, 2015	Radiation (03CH08-HY)
Bilog Antenna	Teseq GmbH	CBL6112D	35379	30MHz~2GHz	Oct. 10, 2013	Aug. 23, 2014	Oct. 09, 2014	Radiation (03CH08-HY)
Bilog Antenna	Teseq GmbH	CBL6112D	35379	30MHz~2GHz	Sep. 27, 2014	Oct. 23, 2014	Sep. 26, 2015	Radiation (03CH08-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz~18GHz	Apr. 16, 2014	Aug. 23, 2014~ Oct. 23, 2014	Apr. 15, 2015	Radiation (03CH08-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz~40GHz	Oct. 03, 2013	Aug. 23, 2014	Oct. 02, 2014	Radiation (03CH08-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz- 40GHz	Oct. 02, 2014	Oct. 23, 2014	Oct. 01, 2015	Radiation (03CH08-HY)
Amplifier	SONOMA	310N	187231	9kHz~1GHz	May 12, 2014	Aug. 23, 2014~ Oct. 23, 2014	May 11, 2015	Radiation (03CH08-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	Jul. 07, 2014	Aug. 23, 2014~ Oct. 23, 2014	Jul. 06, 2015	Radiation (03CH08-HY)
Pre Amplifier	Agilent	8449B	3008A02665	1GHz~26.5GHz	Feb. 10, 2014	Aug. 23, 2014~ Oct. 23, 2014	Feb. 09, 2015	Radiation (03CH08-HY)
Turn Table	Chaintek	Chaintek 3000	N/A	0~360 Degree	N/A	Aug. 23, 2014~ Oct. 23, 2014	N/A	Radiation (03CH08-HY)
Antenna Mast	MF	MFA520BS	N/A	1m~4m	N/A	Aug. 23, 2014~ Oct. 23, 2014	N/A	Radiation (03CH08-HY)

5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.26**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.30**