RF TEST REPORT



Report No.: 17070376-FCC-R2 V1

Supersede Report No.: N/A

Applicant	oplicant INFINIX MOBILITY LIMITED			
Product Name	Mobile phone			
Model No.	X572			
Serial No.	N/A			
Test Standard	FCC Part 15.247: 2016, ANSI C63.10: 2013			
Test Date	May 19 to June 12&21, 2017			
Issue Date	June 22, 2017			
Test Result	Pass Fail			
Equipment complied with the specification				
Equipment did no	comply with the specification			
Vera . Z	hang David Huang			
Vera Zha Test Engir				

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Test result presented in this test report is applicable to the tested sample only

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

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Test Report No.	17070376-FCC-R2 V1
Page	2 of 62

Laboratories Introduction

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In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety



Test Report No.	17070376-FCC-R2 V1
Page	3 of 62

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Tes	t Report No.	17070376-FCC-R2 V1
Pag	je	4 of 62

CONTENTS

1.	REPORT REVISION HISTORY	5
2.	CUSTOMER INFORMATION	5
 3.	TEST SITE INFORMATION	
4.		
5.	TEST SUMMARY	9
6.	MEASUREMENTS, EXAMINATION AND DERIVED RESULTS	10
6.1	ANTENNA REQUIREMENT	10
6.2	DTS (6 DB&20 DB) CHANNEL BANDWIDTH	11
6.3	MAXIMUM OUTPUT POWER	17
6.4	POWER SPECTRAL DENSITY	21
6.5	BAND-EDGE & UNWANTED EMISSIONS INTO RESTRICTED FREQUENCY BANDS	25
6.6	AC POWER LINE CONDUCTED EMISSIONS	31
6.7	RADIATED EMISSIONS & RESTRICTED BAND	37
ANI	NEX A. TEST INSTRUMENT	4 4
ANI	NEX B. EUT AND TEST SETUP PHOTOGRAPHS	45
ANI	NEX C. TEST SETUP AND SUPPORTING EQUIPMENT	57
ANI	NEX D. USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PARTLIST	61
ANI	NEX E. DECLARATION OF SIMILARITY	62



Test Report No.	17070376-FCC-R2 V1
Page	5 of 62

1. Report Revision History

Report No.	Report Version	Description	Issue Date
17070376-FCC-R2	NONE	Original	June 13, 2017
47070276 FCC D2 \/4	V1	Added the Radiated Emission	June 22, 2017
17070376-FCC-R2 V1		test data (9kHz-30MHz)	

2. Customer information

Applicant Name	INFINIX MOBILITY LIMITED	
Applicant Add	RMS 05-15, 13A/F SOUTH TOWER WORLD FINANCE CTR HARBOUR CITY 17	
	CANTON RD TST KLN HONG KONG	
Manufacturer	SHENZHEN TECNO TECHNOLOGY CO.,LTD.	
Manufacturer Add	1-4th Floor,3rd Building,Pacific Industrial Park,No.2088,Shenyan Road,Yantian	
	District,Shenzhen,Guangdong,China	

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES	
	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park	
Lab Address	South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China	
	518108	
FCC Test Site No.	718246	
IC Test Site No.	4842E-1	
Test Software of	Radiated Emission Program-To Shenzhen v2.0	
Radiated Emission		
Test Software of	E7 EMO(l	
Conducted Emission	EZ-EMC(ver.lcp-03A1)	



Test Report No.	17070376-FCC-R2 V1
Page	6 of 62

4. Equipment under Test (EUT) Information

Description of EUT: Mobile phone

Main Model: X572

Serial Model: N/A

Date EUT received: May 18, 2017

Test Date(s): May 19 to June 12&21, 2017

Equipment Category: DTS

GSM850:-3.2dBi

PCS1900:-0.29dBi

UMTS-FDD Band V: -3.2dBi
UMTS-FDD Band IV: -2.98dBi
UMTS-FDD Band II: -0.29dBi

LTE Band II: 1.7dBi

LTE Band IV: -2.98dBi

Antenna Gain:

LTE Band VII: 2.5dBi

WIFI(2.4G): 1.35dBi

WIFI(5150-5250MHz): -2.2 dBi WIFI(5250-5350MHz): -2.2 dBi WIFI(5725-5850MHz): -2.2 dBi

Bluetooth/BLE: 1.35dBi

GPS: -0.29dBi

Antenna Type: PIFA antenna



RF Operating Frequency (ies):

Max. Output Power:

Test Report No.	17070376-FCC-R2 V1
Page	7 of 62

GSM / GPRS: GMSK EGPRS: GMSK,8PSK UMTS-FDD: QPSK

LTE Band: QPSK, 16QAM

Type of Modulation: 802.11b: DSSS

802.11a/g/n20/n40: OFDM

Bluetooth: GFSK, π /4DQPSK, 8DPSK

BLE: GFSK GPS: BPSK

GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz

PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz

UMTS-FDD Band V TX: 826.4 ~ 846.6 MHz; RX: 871.4 ~ 891.6 MHz

UMTS-FDD Band IV TX:1712.4 \sim 1752.6 MHz;

RX : 2112.4 ~ 2152.6 MHz

UMTS-FDD Band II TX:1852.4 ~ 1907.6 MHz;

RX: 1932.4 ~ 1987.6 MHz

LTE Band II TX: 1850.7~ 1909.3 MHz; RX : 1930.7 ~ 1989.3 MHz

LTE Band IV TX: 1710.7 ~ 1754.3 MHz; RX : 2110.7 ~ 2154.3 MHz

LTE Band VII TX: 2502.5 \sim 2567.5 MHz; RX : 2622.5 \sim 2687.5 MHz

802.11b/g: 2412-2462 MHz (TX/RX)

802.11n20: 2412-2462MHz;5180-5320 MHz;

5745-5825 MHz; (TX/RX)

802.11n40: 2422-2452 MHz (TX/RX); 5190-5310 MHz;

5755-5795 MHz; (TX/RX)

802.11 a: 5180-5320 MHz; 5745-5825 MHz (TX/RX)

Bluetooth& BLE: 2402-2480 MHz

GPS: 1575.42 MHz

802.11b: 13.02dBm

802.11g: 10.94dBm

802.11n(20M): 11.28dBm

802.11n(40M): 11.50dBm



Test Report No.	17070376-FCC-R2 V1
Page	8 of 62

GSM 850: 124CH PCS1900: 299CH

UMTS-FDD Band V: 102CH UMTS-FDD Band IV: 202CH UMTS-FDD Band II: 277CH

WIFI :802.11b/g: 11CH Number of Channels:

WIFI:802.11a: 24CH

WIFI :802.11n20: 11CH(2.4GHz); 24CH(5GHz) WIFI :802.11n40: 9CH(2.4GHz); 12CH(5GHz)

Bluetooth: 79CH

BLE: 40CH GPS:1CH

Port: USB Port, Earphone Port

Adapter:

Model: CQ-18KX

Input: AC100-240V~50/60Hz,600mA

Output: DC 5.0V-9V,2A

DC 9V-12V,1.5A

Input Power:

Battery:

Model: BL-42AX

Spec: 3.85V,4200mAh/4300mAh (min/typ)

16.17Wh/16.55Wh (min/typ)

Limited Charge Voltage: 4.4V

Trade Name : Infinix

FCC ID: 2AIZN-X572



Test Report No.	17070376-FCC-R2 V1
Page	9 of 62

5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.247 (a)(2)	DTS (6 dB&20 dB) CHANNEL BANDWIDTH	Compliance
§15.247(b)(3)	Conducted Maximum Output Power	Compliance
§15.247(e)	Power Spectral Density	Compliance
§15.247(d)	Band-Edge & Unwanted Emissions into Restricted Frequency Bands	Compliance
§15.207 (a),	AC Power Line Conducted Emissions	Compliance
§15.205, §15.209,	Radiated Emissions & Unwanted Emissions	Compliance
§15.247(d)	(d) into Restricted Frequency Bands	

Measurement Uncertainty

Emissions		
Test Item	Description	Uncertainty
Band-Edge & Unwanted		
Emissions into Restricted		
Frequency Bands and	Confidence level of approximately 95% (in the case	
Radiated Emissions &	where distributions are normal), with a coverage	+5.6dB/-4.5dB
Unwanted Emissions	factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	
into Restricted Frequency		
Bands		
-	-	-



Test Report No.	17070376-FCC-R2 V1
Page	10 of 62

6. Measurements, Examination And Derived Results

6.1 Antenna Requirement

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has 3 antennas:

A permanently attached PIFA antenna for Bluetooth/BLE/2.4G WIFI/5G WIFI/GPS, the gain is 1.35dBi for Bluetooth/BLE/2.4G WIFI, the gain is -2.2dBi for 5G WIFI(5150-5250MHz)/ (5250-5350MHz)/ (5725-5850MHz), the gain is -0.29dBi for GPS.

A permanently attached PIFA antenna for GSM/PCS/UMTS, the gain is -3.2dBi for GSM850, -0.29dBi for PCS1900, -3.2dBi for UMTS-FDD Band V, -2.98dBi for UMTS-FDD Band IV, -0.29dBi for UMTS-FDD Band II. A permanently attached PIFA antenna for LTE Band II/IV/VII, the gain is 1.7dBi for LTE Band II, the gain is -2.98dBi for LTE Band IV, the gain is 2.5dBi for LTE Band VII.

The antenna meets up with the ANTENNA REQUIREMENT.

Result: Compliance.



Test Report No.	17070376-FCC-R2 V1
Page	11 of 62

6.2 DTS (6 dB&20 dB) Channel Bandwidth

Temperature	22°C
Relative Humidity	56%
Atmospheric Pressure	1020mbar
Test date :	May 26, 2017
Tested By:	Vera Zhang

	Ι.,	D : .	
Spec	Item Requirement		Applicable
§ 15.247(a)(2)	a)	6dB BW≥ 500kHz; 20dB BW≥ 500kHz;	V
RSS Gen(4.6.1)	b)	99% BW: For FCC reference only; required by IC.	▽
Test Setup	Spectrum Analyzer EUT		
	55807	4 D01 DTS MEAS Guidance v03r03, 8.1 DTS bandwidth	
	6dB b	andwidth_	
	a) Se	t RBW = 100 kHz.	
	b) Se	t the video bandwidth (VBW) ≥ 3 × RBW.	
	c) Detector = Peak.		
	d) Trace mode = max hold.		
	e) Sweep = auto couple.		
	f) Allow the trace to stabilize.		
	g) Me	asure the maximum width of the emission that is constraine	d by the freq
Test Procedure	uencies associated with the two outermost amplitude points (upper and lower fr		
restriocedule	equencies) that are attenuated by 6 dB relative to the maximum level measure		
	d in the fundamental emission.		
	20dB bandwidth		
	C63.10 Occupied Bandwidth (OBW=20dB bandwidth)		
	1. Set RBW = 1%-5% OBW.		
	2. Set the video bandwidth (VBW) ≥ 3 x RBW.		
	3. Set the span range between 2 times and 5 times of the OBW.		
	4. Sweep time=Auto, Detector=PK, Trace=Max hold.		
	5. Once the reference level is established, the equipment is conditioned with t		
	ypical modulating signals to produce the worst-		



Test Report No.	17070376-FCC-R2 V1
Page	12 of 62

	case (i.e., the widest) bandwidth. Unless otherwise specified for an unlicensed
	wireless device, measure the bandwidth at the 20 dB levels with respect to the
	reference level.
Remark	
Result	Pass

Test Data	Yes	□ _{N/A}
Test Plot	Ves (See helow)	

Measurement result

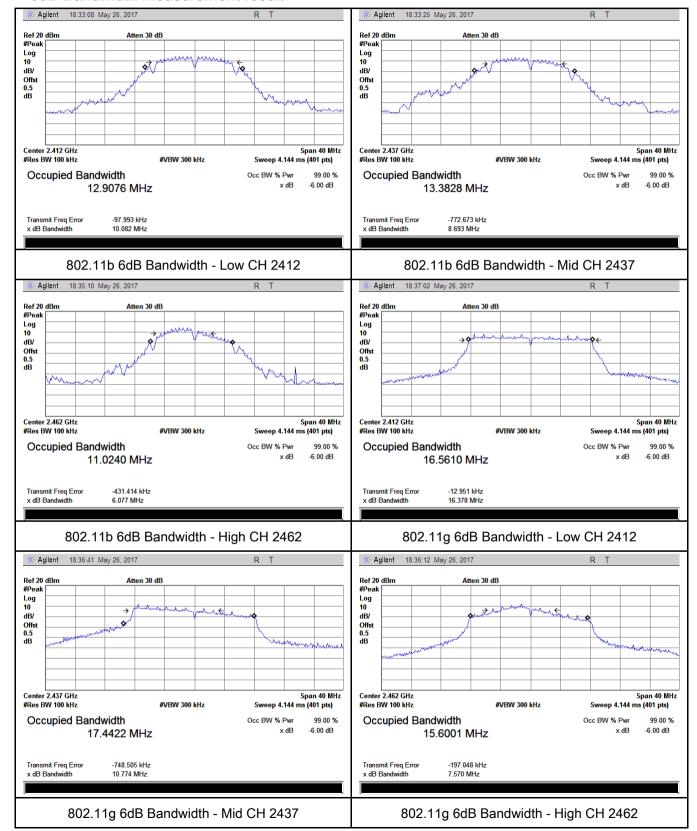
Test mode	СН	Freq (MHz)	6dB Bandwidth (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	
	Low	2412	10.082	14.893	≥ 0.5	
802.11b	Mid	2437	8.693	15.254	≥ 0.5	
	High	2462	6.077	15.146	≥ 0.5	
	Low	2412	16.378	19.224	≥ 0.5	
802.11g	Mid	2437	10.774	19.416	≥ 0.5	
	High	2462	7.570	18.198	≥ 0.5	
802.11n (20M)	Low	2412	17.674	19.580	≥ 0.5	
	Mid	2437	10.245	20.684	≥ 0.5	
	High	2462	6.409	18.896	≥ 0.5	
802.11n (40M)	Low	2422	30.173	38.556	≥ 0.5	
	Mid	2437	35.177	39.238	≥ 0.5	
	High	2452	30.196	38.448	≥ 0.5	



Test Report No.	17070376-FCC-R2 V1
Page	13 of 62

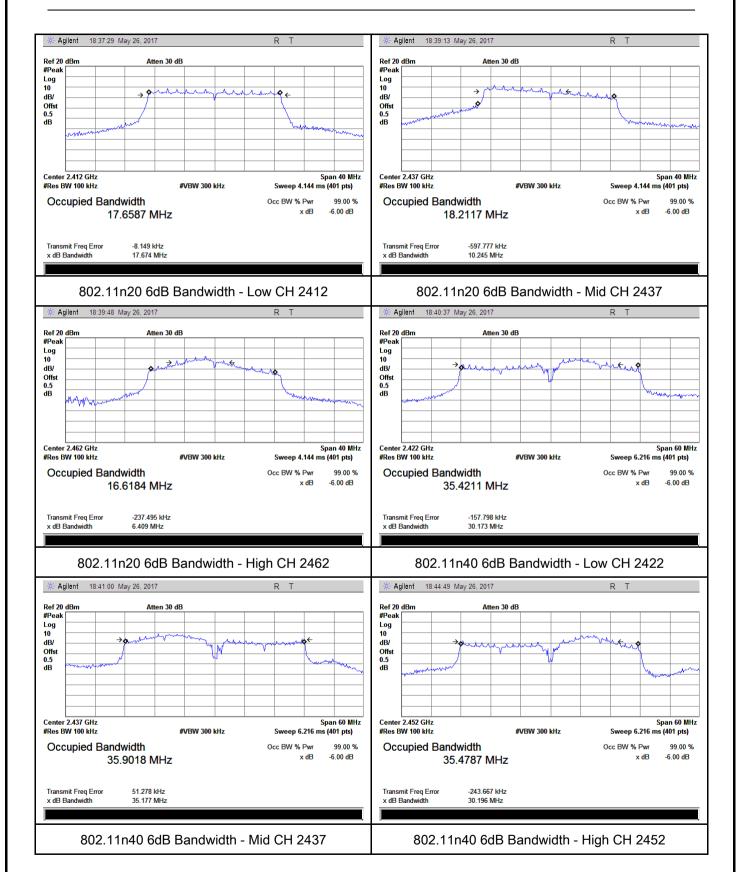
Test Plots

6dB Bandwidth measurement result





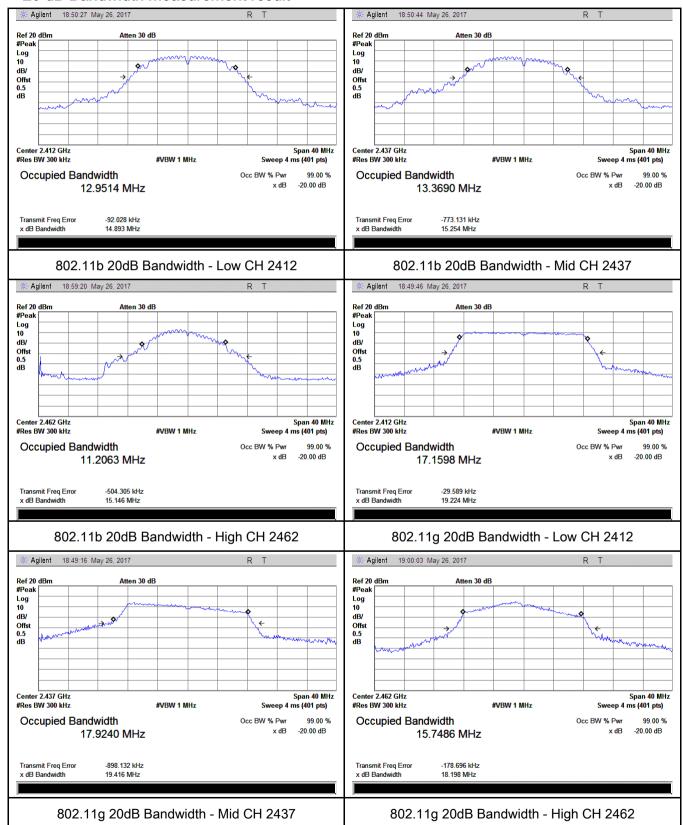
Test Report No.	17070376-FCC-R2 V1
Page	14 of 62





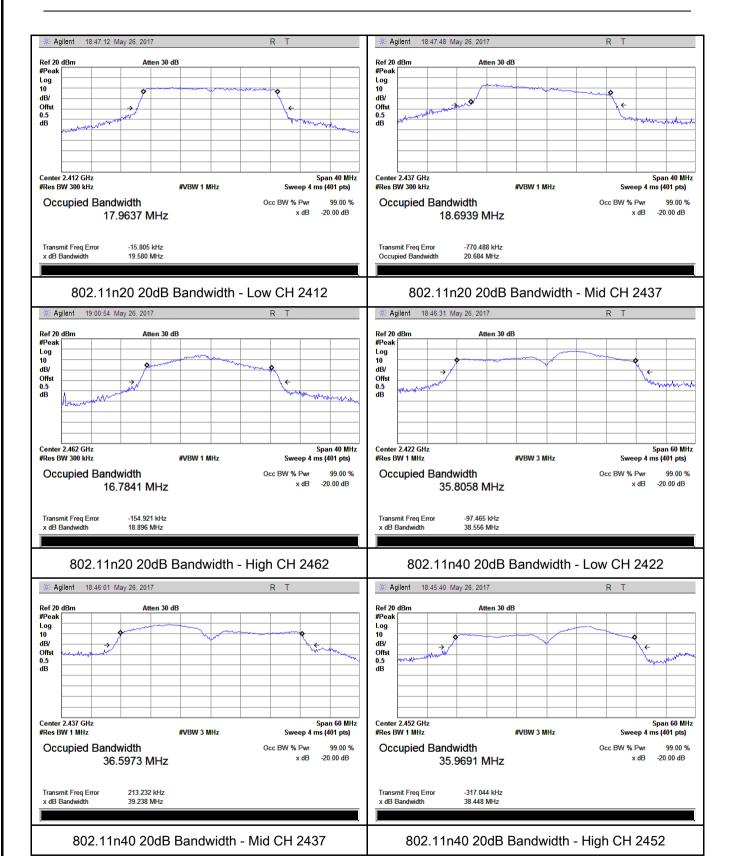
Test Report No.	17070376-FCC-R2 V1
Page	15 of 62

20 dB Bandwidth measurement result





Test Report No.	17070376-FCC-R2 V1
Page	16 of 62





Test Report No.	17070376-FCC-R2 V1
Page	17 of 62

6.3 Maximum Output Power

Temperature	22°C		
Relative Humidity	56%		
Atmospheric Pressure	1020mbar		
Test date :	May 26, 2017		
Tested By :	Vera Zhang		

Requirement(s):

Requirement(s):	Ite	Requirement	Applicable				
Spec		Аррисавіе					
	m						
	a)	FHSS in 2400-2483.5MHz with ≥ 75 channels: ≤ 1 Watt					
	b)	FHSS in 5725-5850MHz: ≤ 1 Watt					
§15.247(b)	c)	For all other FHSS in the 2400-2483.5MHz band: ≤ 0.125					
(3),RSS210		Watt.	_				
(A8.4)	d)	FHSS in 902-928MHz with ≥ 50 channels: ≤ 1 Watt					
(* 101.1)	e)	FHSS in 902-928MHz with ≥ 25 & <50 channels: ≤ 0.25					
		Watt					
	f)	DTS in 902-928MHz, 2400-2483.5MHz: ≤ 1 Watt	>				
Test Setup	Spectrum Analyzer EUT						
	558074 D01 DTS MEAS Guidance v03r03, 9.1.2 Integrated band power method						
	Maxim	num output power measurement procedure					
	- a) Set span to at least 1.5 times the OBW.						
	- b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz.						
	- c) Set VBW ≥ 3 x RBW.						
Test	-	- d) Number of points in sweep ≥ 2 × span / RBW. (This gives bin-to-bin spacing					
Procedure	≤ RBW/2, so that narrowband signals are not lost between frequency bins.)						
	- e) Sweep time = auto.						
	- f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample						
	detector mode.						
	- g) If transmit duty cycle < 98 %, use a sweep trigger with the level set to enable						
	triggering only on full power pulses. The transmitter shall operate at maximum						



Test Report No.	17070376-FCC-R2 V1
Page	18 of 62

	power control level for the entire duration of every sweep. If the EUT transmits
	continuously (i.e., with no off intervals) or at duty cycle ≥ 98 %, and if each
	transmission is entirely at the maximum power control level, then the trigger shall
	be set to "free run".
	- h) Trace average at least 100 traces in power averaging (i.e., RMS) mode.
	- i) Compute power by integrating the spectrum across the OBW of the signal
	using the instrument's band power measurement function, with band limits set
	equal to the OBW band edges. If the instrument does not have a band power
	function, sum the spectrum levels (in power units) at intervals equal to the RBW
	extending across the entire OBW of the spectrum.
Remark	
Result	Pass Fail

Test Data	Yes	□ _{N/A}
Test Plot	Yes (See below)	□ _{N/A}

Output Power measurement result

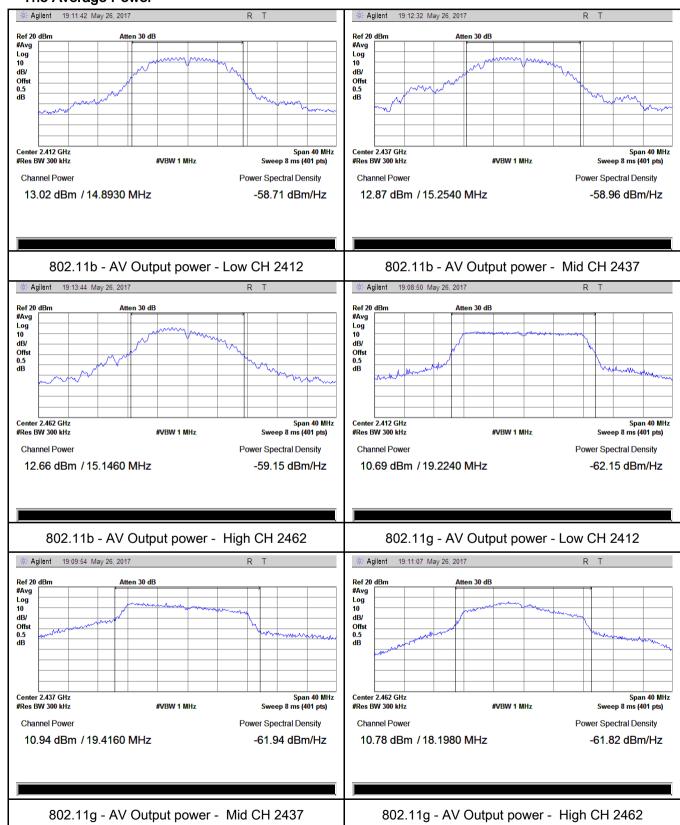
Type	Test mode	СН	Frequency	Conducted	Limit	Result
Type			(MHz)	Power (dBm)	(dBm)	Result
		Low	2412	13.02	30	Pass
	802.11b	Mid	2437	12.87	30	Pass
		High	2462	12.66	30	Pass
		Low	2412	10.69	30	Pass
	802.11g	Mid	2437	10.94	30	Pass
Output		High	2462	10.78	30	Pass
power	802.11n	Low	2412	11.05	30	Pass
_		Mid	2437	11.28	30	Pass
	(20M)	High	2462	11.22	30	Pass
	902.115	Low	2422	11.32	30	Pass
	802.11n	Mid	2437	11.50	30	Pass
	(40M)	High	2452	11.32	30	Pass



Test Report No.	17070376-FCC-R2 V1	
Page	19 of 62	

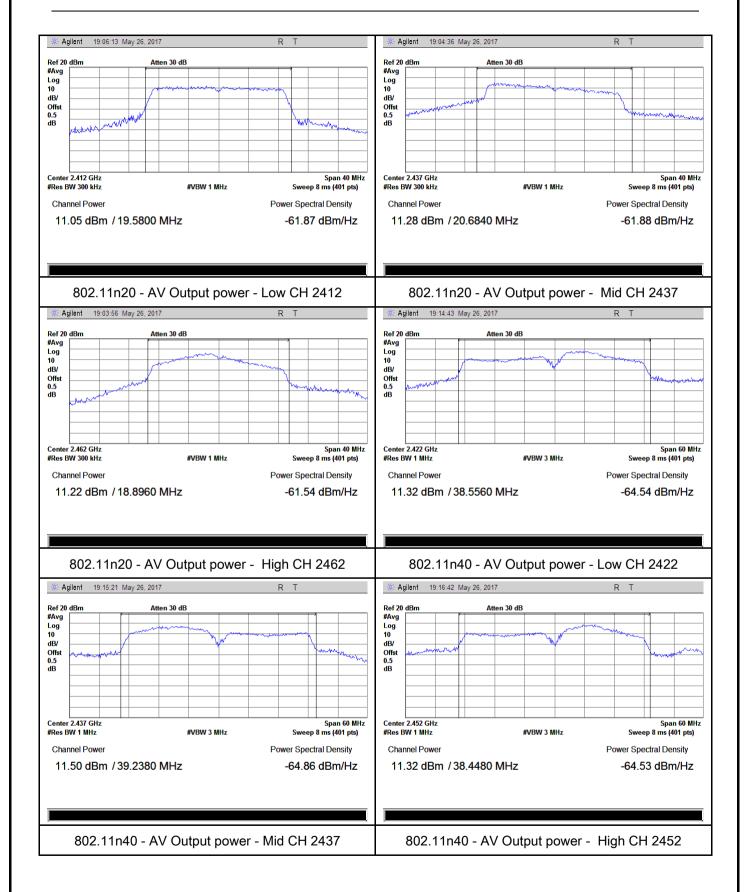
Test Plots

The Average Power





Test Report No.	17070376-FCC-R2 V1
Page	20 of 62





Test Report No.	17070376-FCC-R2 V1
Page	21 of 62

6.4 Power Spectral Density

Temperature	22°C
Relative Humidity	56%
Atmospheric Pressure	1020mbar
Test date :	May 26, 2017
Tested By:	Vera Zhang

Spec	Item	Requirement Applicable			
§15.247(e)	The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.				
Test Setup		Spectrum Analyzer EUT			
Test Procedure	power s	A D01 DTS MEAS Guidance v03r03, 10.2 power spectral density measurement procedure a) Set analyzer center frequency to DTS channel center frequency b) Set the span to 1.5 times the DTS bandwidth. c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz. d) Set the VBW ≥ 3 × RBW. e) Detector = peak. f) Sweep time = auto couple. g) Trace mode = max hold. h) Allow trace to fully stabilize. i) Use the peak marker function to determine the maximum and level within the RBW. j) If measured value exceeds limit, reduce RBW (no less than repeat.	uency.		
Remark					
Result	Pas	ss Fail			



Test Report No.	17070376-FCC-R2 V1
Page	22 of 62

Test Data	Yes	$\square_{N/A}$
Test Plot	Yes (See below)	□ _{N/A}

Power Spectral Density measurement result

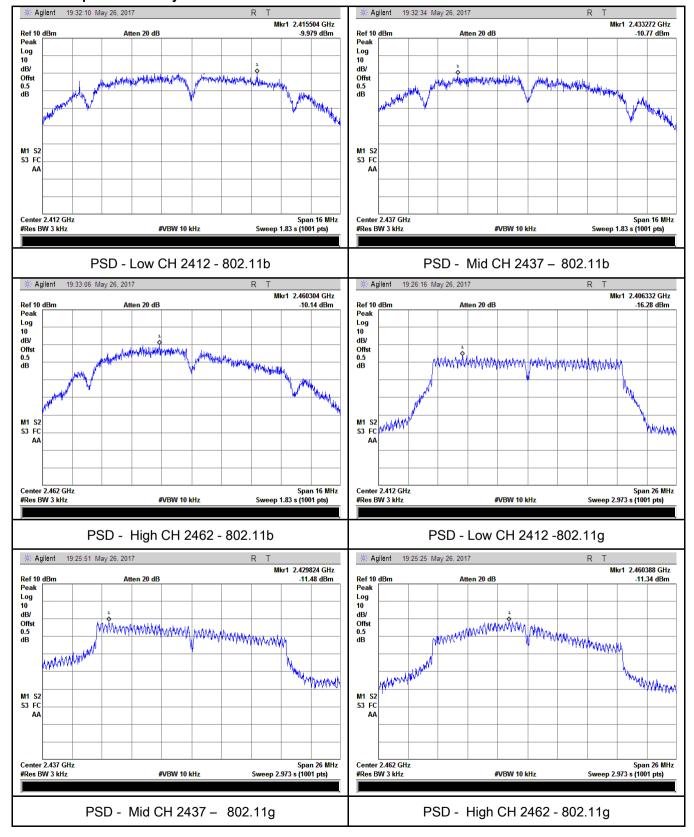
Туре	Test mode	СН	Freq	PSD	Limit	Result
			(MHz)	(dBm)	(dBm)	
		Low	2412	-9.979	8	Pass
	802.11b	Mid	2437	-10.77	8	Pass
		High	2462	-10.14	8	Pass
	802.11g	Low	2412	-16.28	8	Pass
		Mid	2437	-11.48	8	Pass
DCD		High	2462	-11.34	8	Pass
PSD	000 445	Low	2412	-15.29	8	Pass
	802.11n	Mid	2437	-11.10	8	Pass
	(20M)	High	2462	-10.20	8	Pass
	802.11n (40M)	Low	2422	-11.30	8	Pass
		Mid	2437	-12.43	8	Pass
		High	2452	-12.34	8	Pass



Test Report No.	17070376-FCC-R2 V1
Page	23 of 62

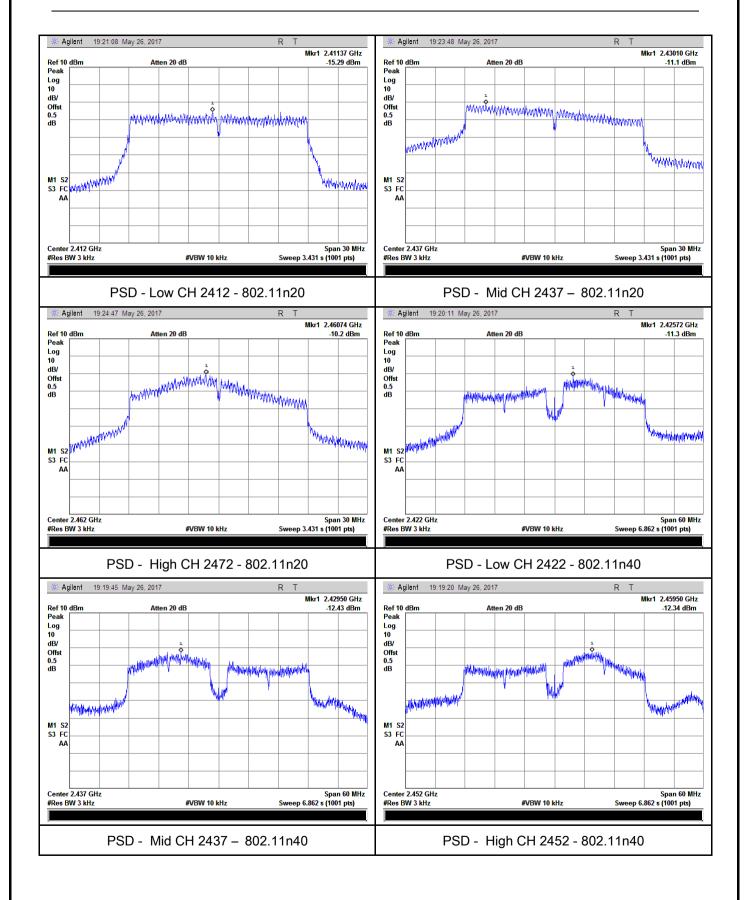
Test Plots

Power Spectral Density measurement result





Test Report No.	17070376-FCC-R2 V1
Page	24 of 62





Test Report No.	17070376-FCC-R2 V1
Page	25 of 62

6.5 Band-Edge & Unwanted Emissions into Restricted Frequency Bands

Temperature	22°C
Relative Humidity	57%
Atmospheric Pressure	1025mbar
Test date :	May 31, 2017
Tested By:	Vera Zhang

Requirement(s):

Spec	Item	Requirement	Applicable
§15.247(d)	In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.		V
Test Setup	Ant. Tower Support Units Ground Plane Test Receiver		
Test Procedure	 Radiated Method Only 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator. 2. Position the EUT without connection to measurement instrument. Put it on the Rotated table and turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range. 		



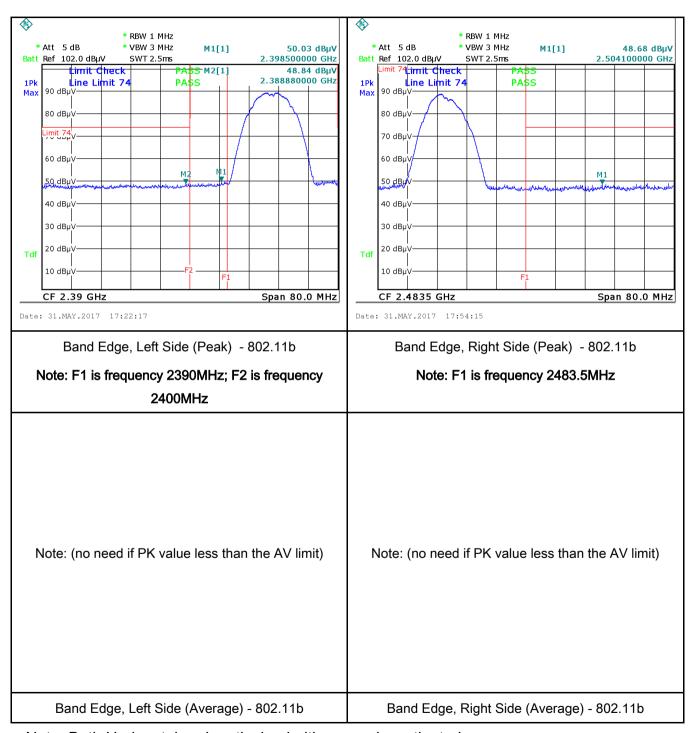
Test Report No.	17070376-FCC-R2 V1
Page	26 of 62

-	
	- 3. First, set both RBW and VBW of spectrum analyzer to 100 kHz with a
	convenient frequency span including 100kHz bandwidth from band edge,
	check the emission of EUT, if pass then set Spectrum Analyzer as below:
	a. The resolution bandwidth and video bandwidth of test receiver/spectrum
	analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz.
	b. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and
	video bandwidth is 3MHz with Peak detection for Peak measurement at
	frequency above 1GHz.
	c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the
	video bandwidth is 10Hz with Peak detection for Average Measurement as below
	at frequency above 1GHz.
	- 4. Measure the highest amplitude appearing on spectral display and set it as a
	reference level. Plot the graph with marking the highest point and edge
	frequency.
	- 5. Repeat above procedures until all measured frequencies were complete.
Remark	
Result	Pass Fail
Test Data	Yes N/A
Test Plot	Yes (See below) N/A



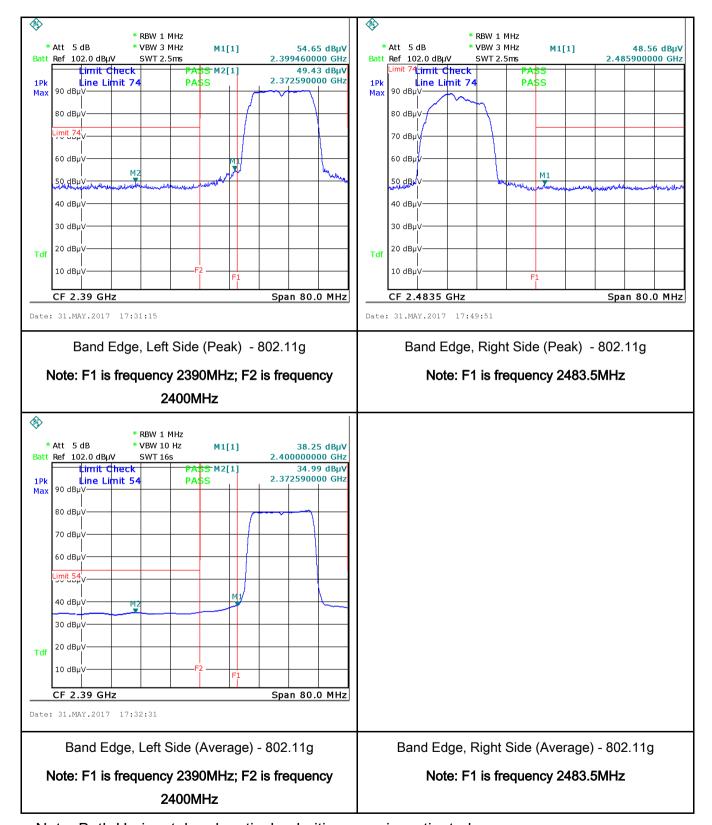
Test Report No.	17070376-FCC-R2 V1
Page	27 of 62

Test Plots Band Edge measurement result





Test Report No.	17070376-FCC-R2 V1
Page	28 of 62



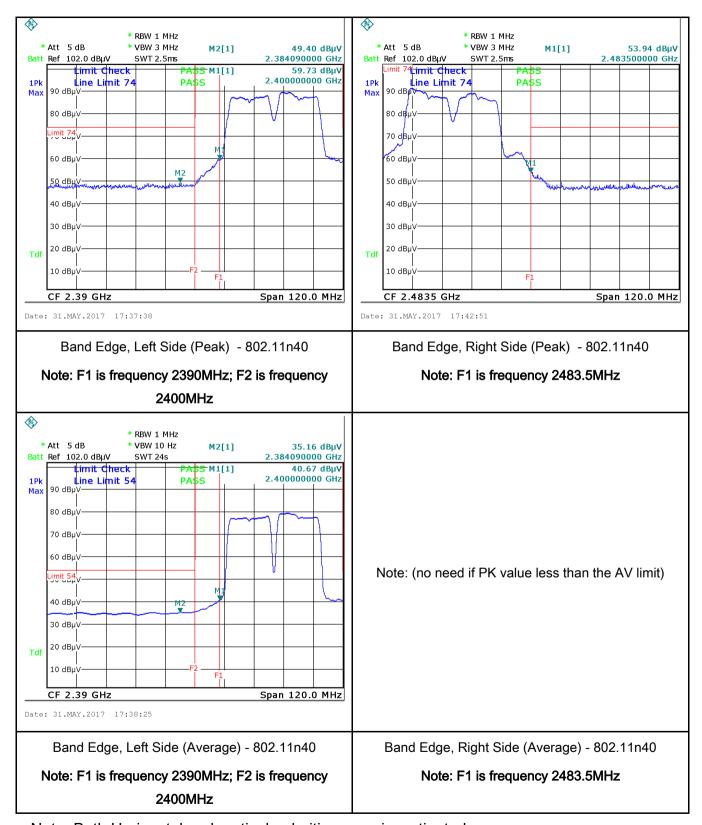


Test Report No.	17070376-FCC-R2 V1
Page	29 of 62





Test Report No.	17070376-FCC-R2 V1
Page	30 of 62





Test Report No.	17070376-FCC-R2 V1
Page	31 of 62

6.6 AC Power Line Conducted Emissions

Temperature	22°C	
Relative Humidity	57%	
Atmospheric Pressure	1025mbar	
Test date :	May 31, 2017	
Tested By :	Vera Zhang	

Requirement(s):

Spec	Item	Requirement			Applicable
47CFR§15. 207, RSS210 (A8.1)	a)	For Low-power radio-frequency devices 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, as measured using a 50 [mu] H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges. Frequency ranges Limit (dBµV)			
(A0.1)		(MHz)	QP	Average	
		0.15 ~ 0.5	66 – 56	56 – 46	
		0.5 ~ 5	56	46	
		5 ~ 30	60	50	
Test Setup	Note: 1.Support units were connected to second LISN. 2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units. 1. The EUT and supporting equipment were set up in accordance with the requirement the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.		Horizontal Ground Reference Plane cond LISN. EUT and at least 80cm		
Procedure			onnected to		



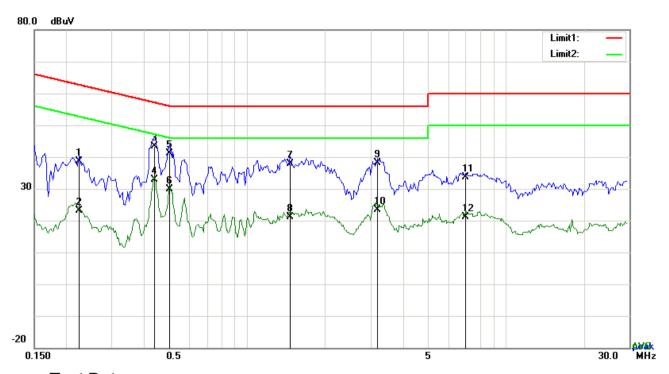
Test Plot Yes (See below)

Test Report No.	17070376-FCC-R2 V1
Page	32 of 62

	coaxial cable.
	4. All other supporting equipment were powered separately from another main supply.
	5. The EUT was switched on and allowed to warm up to its normal operating condition.
	6. A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power)
	over the required frequency range using an EMI test receiver.
	7. High peaks, relative to the limit line, The EMI test receiver was then tuned to the
	selected frequencies and the necessary measurements made with a receiver bandwidth
	setting of 10 kHz.
	8. Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power).
Remark	
Result	Pass Fail
Test Data	Yes N/A



Test Report No.	17070376-FCC-R2 V1
Page	33 of 62



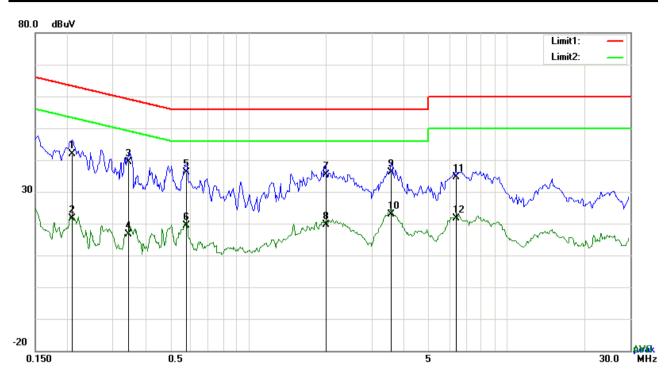
Test Data

Phase Line Plot at 120Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	L1	0.2241	28.54	QP	10.03	38.57	62.67	-24.10
2	L1	0.2241	13.03	AVG	10.03	23.06	52.67	-29.61
3	L1	0.4386	33.35	QP	10.03	43.38	57.09	-13.71
4	L1	0.4386	22.84	AVG	10.03	32.87	47.09	-14.22
5	L1	0.5010	31.04	QP	10.03	41.07	56.00	-14.93
6	L1	0.5010	19.77	AVG	10.03	29.80	46.00	-16.20
7	L1	1.4682	27.94	QP	10.04	37.98	56.00	-18.02
8	L1	1.4682	11.02	AVG	10.04	21.06	46.00	-24.94
9	L1	3.1794	27.97	QP	10.06	38.03	56.00	-17.97
10	L1	3.1794	13.44	AVG	10.06	23.50	46.00	-22.50
11	L1	6.9975	23.51	QP	10.11	33.62	60.00	-26.38
12	L1	6.9975	11.10	AVG	10.11	21.21	50.00	-28.79



Test Report No.	17070376-FCC-R2 V1
Page	34 of 62



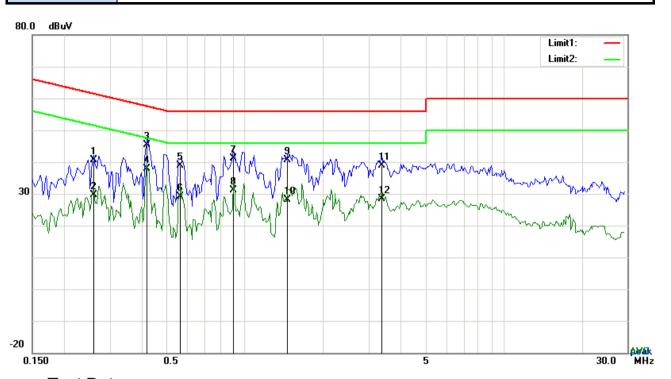
Test Data

Phase Neutral Plot at 120Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	N	0.2085	31.76	QP	10.02	41.78	63.26	-21.48
2	N	0.2085	11.65	AVG	10.02	21.67	53.26	-31.59
3	N	0.3450	29.25	QP	10.02	39.27	59.08	-19.81
4	N	0.3450	6.49	AVG	10.02	16.51	49.08	-32.57
5	N	0.5790	26.15	QP	10.02	36.17	56.00	-19.83
6	N	0.5790	9.26	AVG	10.02	19.28	46.00	-26.72
7	N	1.9908	25.30	QP	10.04	35.34	56.00	-20.66
8	N	1.9908	9.66	AVG	10.04	19.70	46.00	-26.30
9	N	3.5694	26.01	QP	10.06	36.07	56.00	-19.93
10	N	3.5694	12.81	AVG	10.06	22.87	46.00	-23.13
11	N	6.3618	24.43	QP	10.09	34.52	60.00	-25.48
12	N	6.3618	11.42	AVG	10.09	21.51	50.00	-28.49



Test Report No.	17070376-FCC-R2 V1
Page	35 of 62



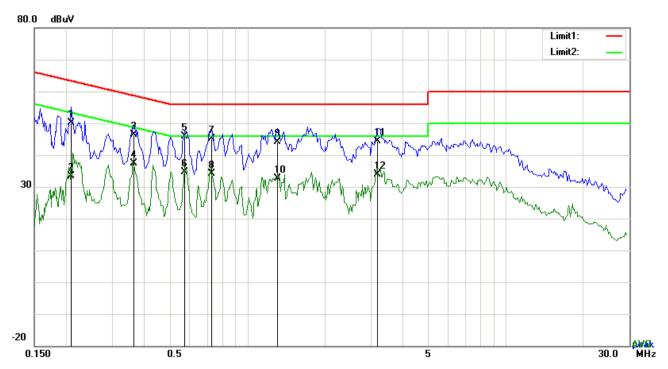
Test Data

Phase Line Plot at 240Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	L1	0.2592	30.57	QP	10.03	40.60	61.46	-20.86
2	L1	0.2592	19.58	AVG	10.03	29.61	51.46	-21.85
3	L1	0.4152	35.42	QP	10.03	45.45	57.54	-12.09
4	L1	0.4152	27.83	AVG	10.03	37.86	47.54	-9.68
5	L1	0.5634	28.73	QP	10.03	38.76	56.00	-17.24
6	L1	0.5634	19.22	AVG	10.03	29.25	46.00	-16.75
7	L1	0.9027	30.99	QP	10.03	41.02	56.00	-14.98
8	L1	0.9027	21.14	AVG	10.03	31.17	46.00	-14.83
9	L1	1.4604	30.50	QP	10.04	40.54	56.00	-15.46
10	L1	1.4604	18.04	AVG	10.04	28.08	46.00	-17.92
11	L1	3.3666	28.77	QP	10.06	38.83	56.00	-17.17
12	L1	3.3666	18.33	AVG	10.06	28.39	46.00	-17.61



Test Report No.	17070376-FCC-R2 V1
Page	36 of 62



Test Data

Phase Neutral Plot at 240Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	N	0.2085	40.10	QP	10.02	50.12	63.26	-13.14
2	N	0.2085	23.39	AVG	10.02	33.41	53.26	-19.85
3	N	0.3645	36.38	QP	10.02	46.40	58.63	-12.23
4	N	0.3645	27.26	AVG	10.02	37.28	48.63	-11.35
5	N	0.5712	35.81	QP	10.02	45.83	56.00	-10.17
6	Ν	0.5712	24.65	AVG	10.02	34.67	46.00	-11.33
7	N	0.7311	35.18	QP	10.02	45.20	56.00	-10.80
8	N	0.7311	24.02	AVG	10.02	34.04	46.00	-11.96
9	Ν	1.3161	34.14	QP	10.03	44.17	56.00	-11.83
10	N	1.3161	22.49	AVG	10.03	32.52	46.00	-13.48
11	N	3.2067	34.26	QP	10.05	44.31	56.00	-11.69
12	N	3.2067	23.94	AVG	10.05	33.99	46.00	-12.01



Test Report No.	17070376-FCC-R2 V1
Page	37 of 62

6.7 Radiated Emissions & Restricted Band

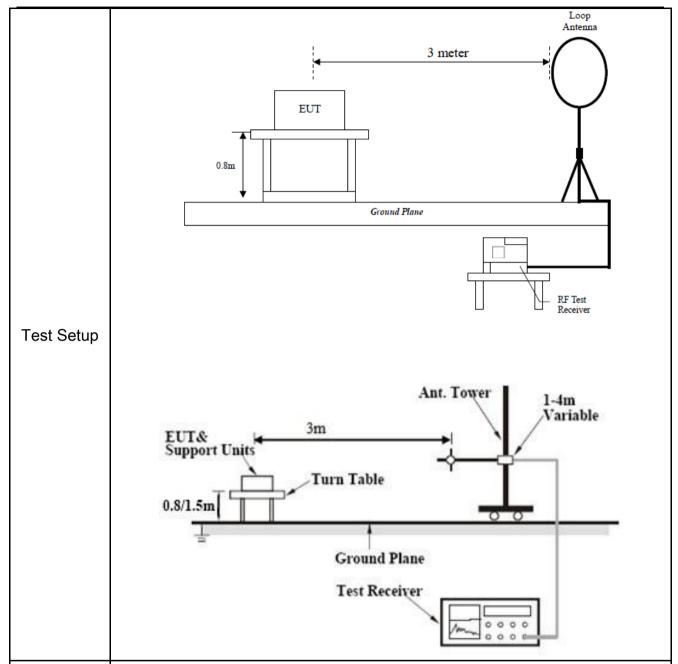
Temperature	22°C
Relative Humidity	57%
Atmospheric Pressure	1025mbar
Test date :	May 31&June 21, 2017
Tested By :	Vera Zhang

Requirement(s):

Spec	Item	Requirement	Applicable	
	a)	Except higher limit as specified else emissions from the low-power radio exceed the field strength levels specified the level of any unwanted emission the fundamental emission. The tight edges Frequency range (MHz) 0.009~0.490 0.490~1.705	o-frequency devices shall not ecified in the following table and as shall not exceed the level of	V
47CFR§15. 247(d), RSS210		1.705~30.0 30 - 88 88 - 216 216 960 Above 960	30 100 150 200 500	
(A8.5)	b)	For non-restricted band, In any 100 frequency band in which the spread modulated intentional radiator is oppower that is produced by the inter 20 dB or 30dB below that in the 10 band that contains the highest level determined by the measurement mused. Attenuation below the general is not required 20 dB down 30	>	
	c)	or restricted band, emission must a emission limits specified in 15.209	also comply with the radiated	V



Test Report No.	17070376-FCC-R2 V1
Page	38 of 62



- 1. The EUT was switched on and allowed to warm up to its normal operating condition.
- The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:

Procedure

- a. Vertical or horizontal polarization (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
- b. The EUT was then rotated to the direction that gave the maximum emission.
- c. Finally, the antenna height was adjusted to the height that gave the maximum emission.
- 3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is



Test Report No.	17070376-FCC-R2 V1
Page	39 of 62

	120 kHz for Quasiy Peak detection at frequency below 1GHz.						
	4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video						
	bandwidth is 3MHz with Peak detection for Peak measurement at frequency above						
	1GHz.						
The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the vio							
bandwidth is 10Hz with Peak detection for Average Measurement as below at							
	frequency above 1GHz.						
	5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency						
	points were measured.						
Davasaula	Different RF configuration has been evaluated but not much difference was found. The da						
Remark	presented here is the worst case data with EUT under 802.11n – HT20-2437MHz mode.						
Result	Pass Fail						
Test Data	Yes N/A						
Test Plot	Yes (See below)						

Test Result:

Test Mode:	Transmitting Mode
------------	-------------------

Frequency range: 9KHz - 30MHz

Freq.	Detection	Factor	Reading	Result	Limit@3m	Margin
(MHz)	value	value (dB/m) (dBuV/m) (d		(dBuV/m)	(dBuV/m)	(dB)
						>20
						>20

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

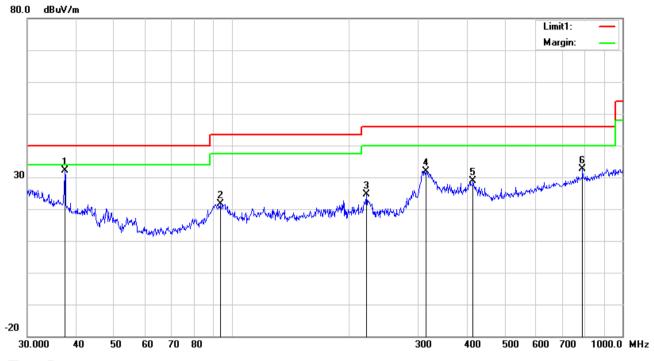
Limit line = specific limits(dBuv) + distance extrapolation factor.



Test Report No.	17070376-FCC-R2 V1
Page	40 of 62

Test Mode: Transmitting Mode

30MHz -1GHz



Test Data

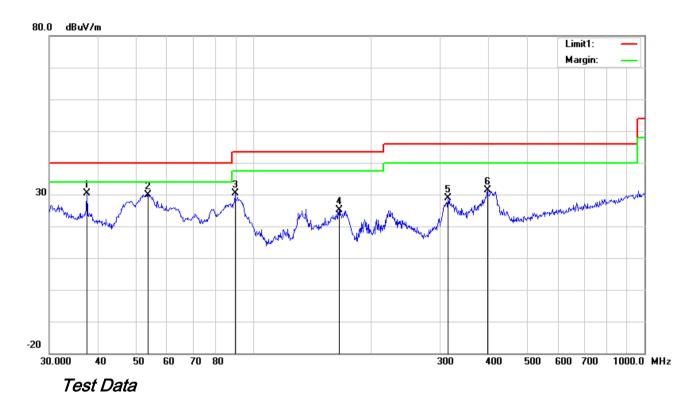
Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detect	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr
				or								ee
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	Н	37.4165	37.80	peak	15.79	22.26	0.77	32.10	40.00	-7.90	100	8
2	Н	93.7685	34.05	peak	8.90	22.32	0.98	21.61	43.50	-21.89	100	238
3	Н	221.3921	33.54	peak	11.80	22.34	1.61	24.61	46.00	-21.39	100	116
4	Ι	314.3765	38.40	peak	13.90	22.25	1.86	31.91	46.00	-14.09	100	327
5	Н	414.7223	32.80	peak	15.99	21.98	2.05	28.86	46.00	-17.14	100	54
6	Н	790.6188	29.48	peak	21.29	21.17	2.94	32.54	46.00	-13.46	100	339



Test Report No.	17070376-FCC-R2 V1
Page	41 of 62

30MHz -1GHz



Horizontal Polarity Plot @3m

No.	P/L	Frequency	Reading	Detect or	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr ee
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	٧	37.4165	36.05	peak	15.79	22.26	0.77	30.35	40.00	-9.65	100	32
2	>	53.6932	43.53	peak	7.99	22.39	0.79	29.92	40.00	-10.08	100	239
3	V	89.5900	43.66	peak	7.98	22.32	0.96	30.28	43.50	-13.22	100	77
4	٧	165.4867	33.89	peak	12.16	22.26	1.37	25.16	43.50	-18.34	200	18
5	٧	314.3765	35.33	peak	13.90	22.25	1.86	28.84	46.00	-17.16	100	120
6	٧	396.2415	35.67	peak	15.62	22.02	2.01	31.28	46.00	-14.72	100	302



Test Report No.	17070376-FCC-R2 V1
Page	42 of 62

Above 1GHz

Test Mode: Transmitting Mode	
------------------------------	--

Low Channel (2412 MHz) (b mode worst case)

Frequency (MHz)	S.A. Reading (dBµV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824	39.41	AV	V	33.8	6.86	32.69	47.38	54	-6.62
4824	38.37	AV	Н	33.8	6.86	32.69	46.34	54	-7.66
4824	48.22	PK	V	33.8	6.86	32.69	56.19	74	-17.81
4824	47.47	PK	Н	33.8	6.86	32.69	55.44	74	-18.56
17903	24.54	AV	V	45.12	11.57	32.11	49.12	54	-4.88
17903	22.23	AV	Н	45.12	11.57	32.11	46.81	54	-7.19
17903	40.36	PK	V	45.12	11.57	32.11	64.94	74	-9.06
17903	39	PK	Н	45.12	11.57	32.11	63.58	74	-10.42

Middle Channel (2437 MHz) (b mode worst case)

Frequency (MHz)	S.A. Reading (dBµV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4874	38.4	AV	V	33.6	6.82	32.71	46.11	54	-7.89
4874	39.08	AV	Н	33.6	6.82	32.71	46.79	54	-7.21
4874	48.09	PK	V	33.6	6.82	32.71	55.8	74	-18.2
4874	47.33	PK	Н	33.6	6.82	32.71	55.04	74	-18.96
17925	23.94	AV	V	45.17	11.63	32.18	48.56	54	-5.44
17925	22.52	AV	Η	45.17	11.63	32.18	47.14	54	-6.86
17925	39.37	PK	V	45.17	11.63	32.18	63.99	74	-10.01
17925	39.14	PK	Н	45.17	11.63	32.18	63.76	74	-10.24



Test Report No.	17070376-FCC-R2 V1
Page	43 of 62

High Channel (2462 MHz) (b mode worst case)

Frequency (MHz)	S.A. Reading (dBµV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924	39.9	AV	V	33.83	6.95	32.79	47.89	54	-6.11
4924	39	AV	Η	33.83	6.95	32.79	46.99	54	-7.01
4924	46.67	PK	V	33.83	6.95	32.79	54.66	74	-19.34
4924	47.3	PK	Н	33.83	6.95	32.79	55.29	74	-18.71
17914	23.39	AV	V	45.19	11.61	32.24	47.95	54	-6.05
17914	23.6	AV	Н	45.19	11.61	32.24	48.16	54	-5.84
17914	40.4	PK	V	45.19	11.61	32.24	64.96	74	-9.04
17914	39.23	PK	Н	45.19	11.61	32.24	63.79	74	-10.21

Note:

- 1, The testing has been conformed to 10*2462MHz=24,620MHz
- 2, All other emissions more than 30 dB below the limit
- 3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.



Test Report No.	17070376-FCC-R2 V1
Page	44 of 62

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
				0	
AC Line Conducted					
EMI test receiver	ESCS30	8471241027	09/16/2016	09/15/2017	~
Line Impedance	LI-125A	191106	09/24/2016	09/23/2017	~
Line Impedance	LI-125A	191107	09/24/2016	09/23/2017	~
LISN	ISN T800	34373	09/24/2016	09/23/2017	>
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71283	09/23/2016	09/22/2017	•
Transient Limiter	LIT-153	531118	08/31/2016	08/30/2017	V
RF conducted test					
Agilent ESA-E SERIES	E4407B	MY45108319	09/16/2016	09/15/2017	>
Power Splitter	1#	1#	08/31/2016	08/30/2017	<
DC Power Supply	E3640A	MY40004013	09/16/2016	09/15/2017	<
Radiated Emissions					
EMI test receiver	ESL6	100262	09/16/2016	09/15/2017	>
Positioning Controller	UC3000	MF780208282	11/18/2016	11/17/2017	>
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	08/31/2016	08/30/2017	<u>\</u>
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/23/2017	03/22/2018	\
Active Antenna (9kHz-30MHz)	AL-130	121031	10/13/2016	10/12/2017	>
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/20/2016	09/19/2017	V
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71283	09/23/2016	09/22/2017	\
Universal Radio Communication Tester	CMU200	121393	09/24/2016	09/23/2017	>



Test Report No.	17070376-FCC-R2 V1
Page	45 of 62

Annex B. EUT and Test Setup Photographs

Annex B.i. Photograph: EUT External Photo

Whole Package View



Adapter - Lable View





Test Report No.	17070376-FCC-R2 V1
Page	46 of 62

EUT - Front View



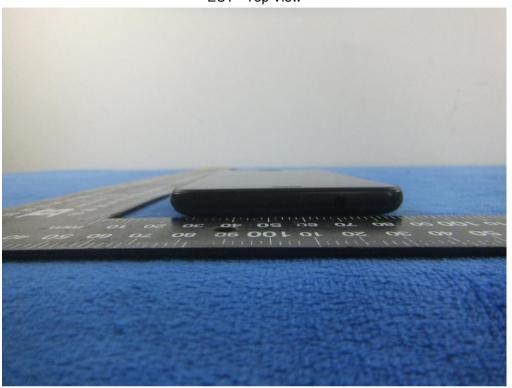
EUT - Rear View



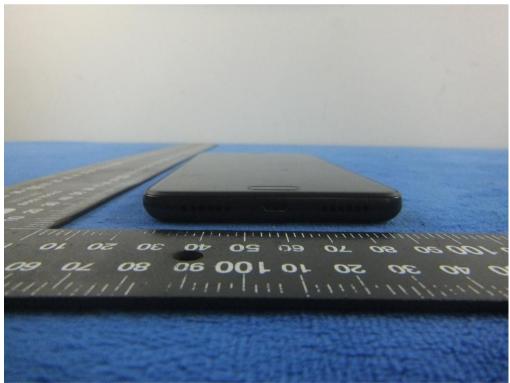


Test Report No.	17070376-FCC-R2 V1
Page	47 of 62

EUT - Top View



EUT - Bottom View





Test Report No.	17070376-FCC-R2 V1
Page	48 of 62

EUT - Left View



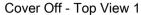
EUT - Right View





Test Report No.	17070376-FCC-R2 V1
Page	49 of 62

Annex B.ii. Photograph: EUT Internal Photo





Cover Off - Top View 2





Test Report No.	17070376-FCC-R2 V1
Page	50 of 62

Battery - Front View



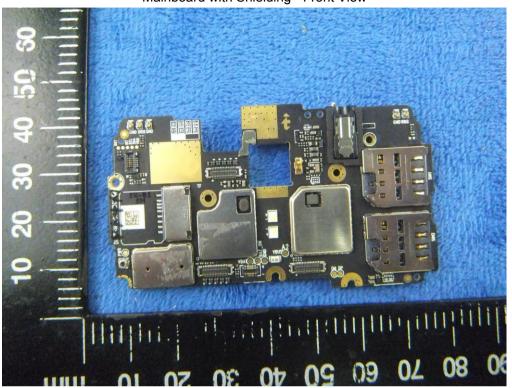
Battery - Rear View



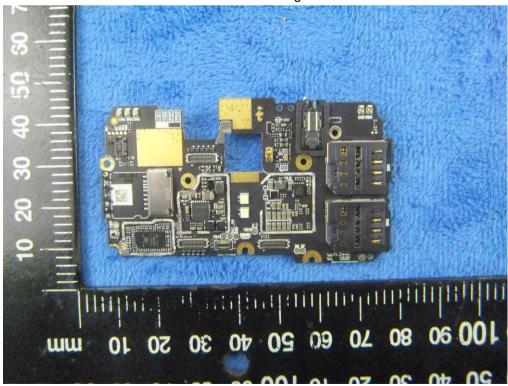


Test Report No.	17070376-FCC-R2 V1
Page	51 of 62

Mainboard with Shielding - Front View



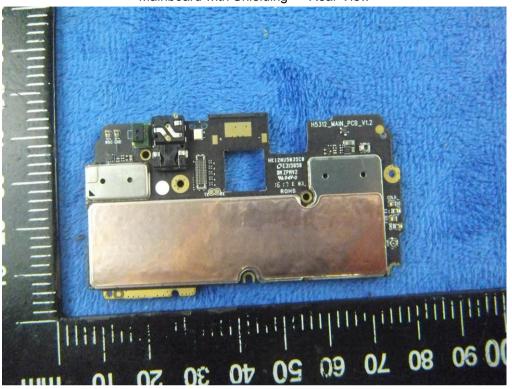
Mainboard without Shielding - Front View



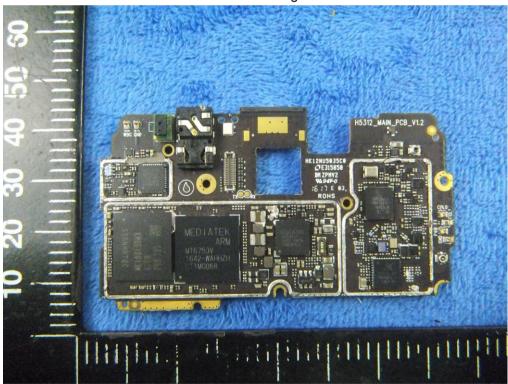


Test Report No.	17070376-FCC-R2 V1
Page	52 of 62

Mainboard with Shielding - Rear View



Mainboard without Shielding - Rear View





Test Report No.	17070376-FCC-R2 V1
Page	53 of 62

LCD - Front View



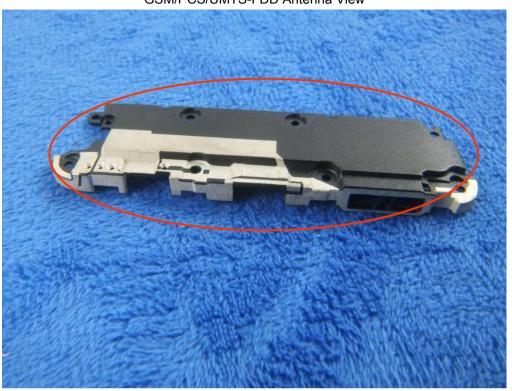
LCD - Rear View



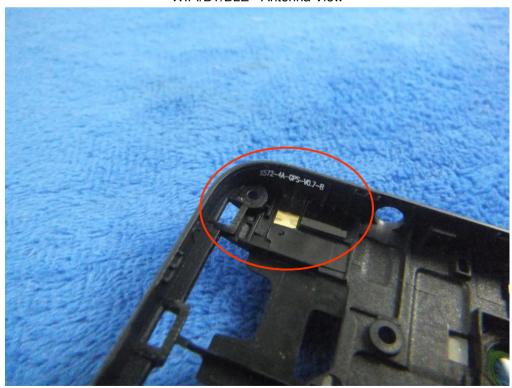


Test Report No.	17070376-FCC-R2 V1
Page	54 of 62

GSM/PCS/UMTS-FDD Antenna View



WIFI/BT/BLE - Antenna View





Test Report No.	17070376-FCC-R2 V1
Page	55 of 62

LTE - Antenna View





Test Report No.	17070376-FCC-R2 V1
Page	56 of 62

Annex B.iii. Photograph: Test Setup Photo



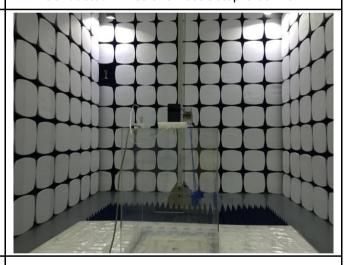
Conducted Emissions Test Setup Front View



Conducted Emissions Test Setup Side View



Radiated Spurious Emissions Test Setup Below 1GHz



Radiated Spurious Emissions Test Setup Above 1GHz

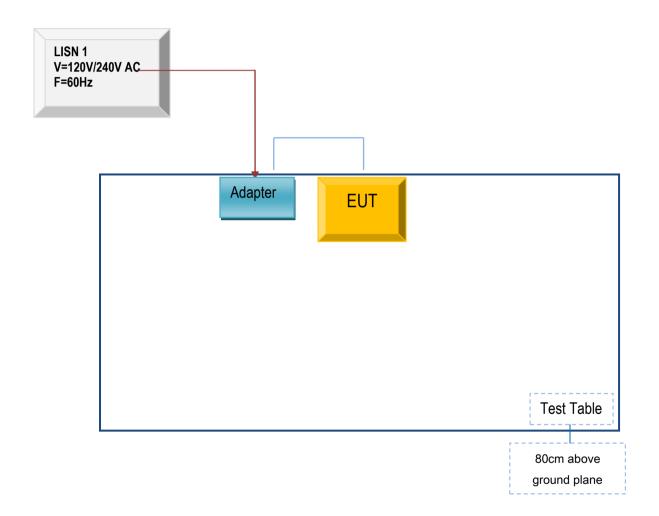


Test Report No.	17070376-FCC-R2 V1
Page	57 of 62

Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.ii. TEST SET UP BLOCK

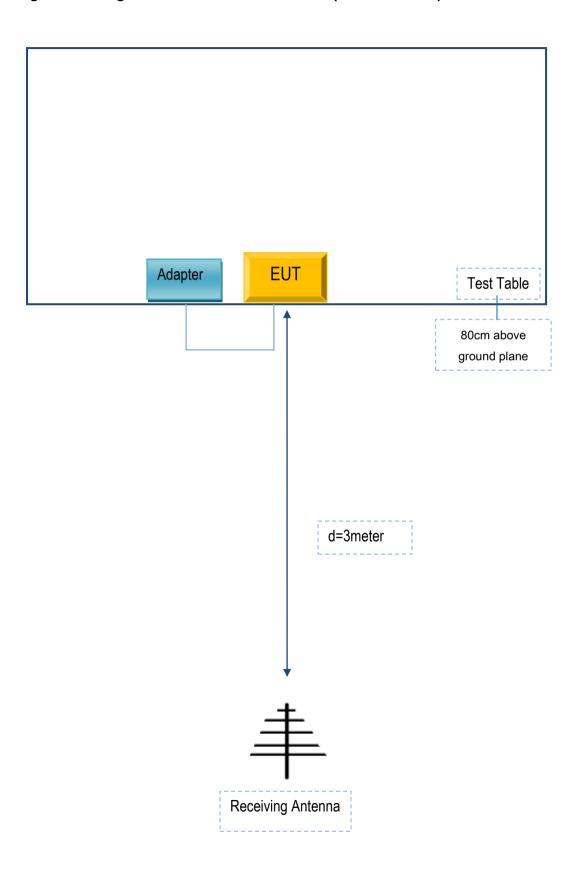
Block Configuration Diagram for AC Line Conducted Emissions





Te	est Report No.	17070376-FCC-R2 V1
Pa	age	58 of 62

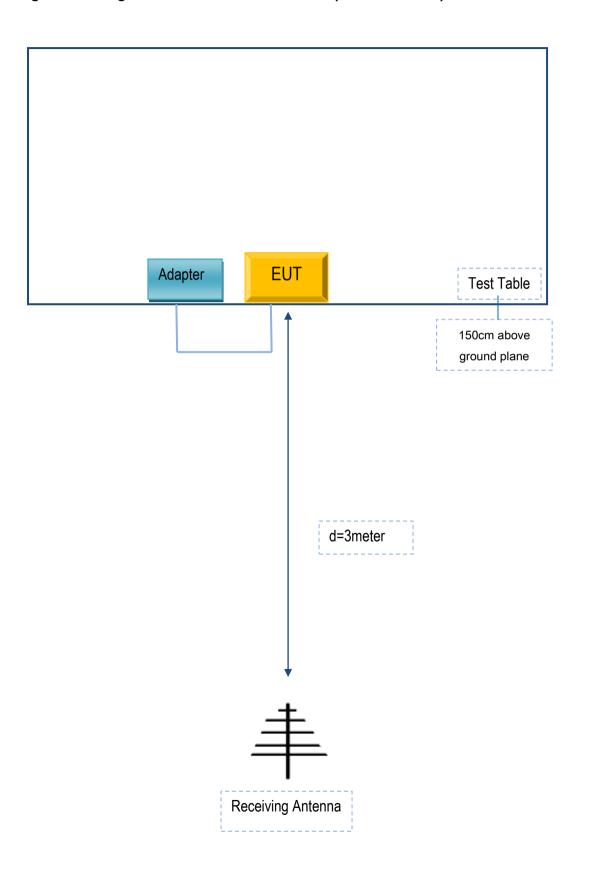
Block Configuration Diagram for Radiated Emissions (Below 1GHz).





Test Report No.	17070376-FCC-R2 V1
Page	59 of 62

Block Configuration Diagram for Radiated Emissions (Above 1GHz) .





Test Report No.	17070376-FCC-R2 V1
Page	60 of 62

Annex C. il. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Supporting Equipment:

Manufacturer	Equipment Description	Model	Serial No
INFINIX MOBILITY LIMITED	Adapter	CQ-18KX	Z20160348

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
USB Cable	Un-shielding	No	0.8m	Z20160348



Test Report No.	17070376-FCC-R2 V1
Page	61 of 62

Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see the attachment



Test Report No.	17070376-FCC-R2 V1
Page	62 of 62

Annex E. DECLARATION OF SIMILARITY

N/A