# **FCC RF Test Report**

APPLICANT : PAX Technology Limited

**EQUIPMENT**: Smart Mobile Payment Terminal

BRAND NAME : PAX
MODEL NAME : A920
MARKETING NAME : A920

FCC ID : V5PA920-LTE

STANDARD : FCC Part 15 Subpart C §15.225

**CLASSIFICATION**: (DXX) Low Power Communication Device Transmitter

The product was received on Nov. 08, 2017 and testing was completed on Dec. 04, 2017. We, Sporton International (Shenzhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures 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 (Shenzhen) Inc., the test report shall not be reproduced except in full.



Approved by: Eric Shih / Manager

### Sporton International (Shenzhen) Inc.

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Sporton International (Shenzhen) Inc.

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Report Version : Rev. 01

Report No.: FR7N0804D

Report Template No.: BU5-FR15CNFC Version 1.2

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- C2. Results of Radiated Emissions (9 kHz~30MHz)
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### **REVISION HISTORY**

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REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR7N0804D	Rev. 01	Initial issue of report	Dec. 25, 2017

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# **SUMMARY OF THE TEST RESULT**

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Applied Standard: 47 CFR FCC Part 15 Subpart C					
Part	FCC Rule	Description of Test Res		Remark	
3.1	15.207	AC Power Line Conducted  Emissions  Complie		Under limit 6.24 dB at 13.560MHz	
2.2	15.215(c)	20dB Spectrum Bandwidth	Complies	-	
3.2		99% OBW Spectrum Bandwidth	Complies	-	
3.3	15.225(e)	Frequency Stability Comp		-	
3.4	15.225(a)(b)(c)	Field Strength of Fundamental Emissions	Complies	Max level 71.41 dBµV/m at 13.56 MHz	
3.5	15.225(d) 15.209	Radiated Emissions	Complies	Under limit 3.55 dB at 94.99 MHz for Quasi-Peak	
3.6	15.203	Antenna Requirements	Complies	-	

Test Items	Uncertainty	Remark
AC Power Line Conducted Emissions	±2.5dB	Confidence levels of 95%
Radiated Emissions (30MHz~1000MHz)	±5.1dB	Confidence levels of 95%

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### 1. GENERAL INFORMATION

### 1.1 Applicant

### **PAX Technology Limited**

Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong

### 1.2 Manufacturer

### PAX Computer Technology (Shenzhen) Co., Ltd.

4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.

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### 1.3 Product Feature of Equipment Under Test

Product Feature				
Equipment	Smart Mobile Payment Terminal			
Brand Name	PAX			
Model Name	A920			
Marketing Name	A920			
FCC ID	V5PA920-LTE			
EUT supports Radios application	WCDMA/HSPA/ HSPA+ (16QAM uplink is not supported)/ DC-HSDPA/LTE/NFC WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth v3.0 + EDR/Bluetooth v4.0 LE			
IMEI Code	Conducted: N/A Conduction: 352110096004818 Radiation: 35210096004719			
HW Version	N/A			
SW Version	N/A			
EUT Stage	Production Unit			

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

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# 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification				
Tx/Rx Frequency Range 13.553 ~ 13.567MHz				
Channel Number	1			
20dBW	2.46 KHz			
99%OBW	2.09 KHz			
Antenna Type PCB Antenna				
Type of Modulation	ASK			

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

### 1.5 Modification of EUT

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

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# 1.6 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600156-0) and the FCC designation No. are CN5018 and CN5019.

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Test Site	Sporton International (Shenzhen) Inc.			
	1/F, 2/F, Bldg 5, Shiling Ind	dustrial Zone, Xinwei Village	e, Xili, Nanshan Shenzhen	
Test Site Location	City Guangdong Province 518055 China			
rest Site Location	TEL: +86-755-8637-9589			
	FAX: +86-755-8637-9595			
	Sporton Site No.		FCC Test Firm	
Test Site No.			Registration No.	
	TH01-SZ	CO01-SZ		
Test Engineer	Sam Zheng Peng wang		251365	
Temperature	24~26℃ 22~25℃		201300	
Relative Humidity	50~53% 50~55%			

Test Site	SPORTON International (ShenZhen) INC.			
	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse,			
<b>Test Site Location</b>	Nanshan District Shenzhen City Guangdong Province 518055 China			
	TEL: +86-755-3320-2398			
	Sporton Site No.	FCC Test Firm Registration No.		
Test Site No.	03CH01-SZ			
Test Engineer	Jeff Yao	577700		
Temperature	<b>24~25</b> ℃	577730		
Relative Humidity	48~49%			

**Note:** The test site complies with ANSI C63.4 2014 requirement.

# 1.7 Applicable Standards

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

- FCC Part 15 Subpart C §15.225
- ANSI C63.10-2013

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### 2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST

### 2.1 Descriptions of Test Mode

Investigation has been done on all the possible configurations for searching the worst cases.

The following table is a list of the test modes shown in this test report.

Test Items			
AC Power Line Conducted Emissions	Field Strength of Fundamental Emissions		
20dB Spectrum Bandwidth	Frequency Stability		
Radiated Emissions 9kHz~30MHz	Radiated Emissions 30MHz~1GHz		

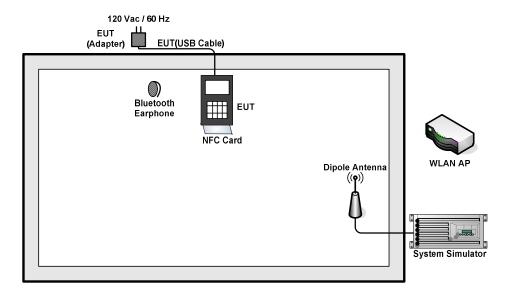
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The EUT pre-scanned in two NFC type, A, B. The worst type was recorded in this report.

Pre-scanned tests, X, Y, Z in three orthogonal panels to determine the final configuration from all possible combinations.

### 2.2 Connection Diagram of Test System

#### <AC Conducted Emissions>



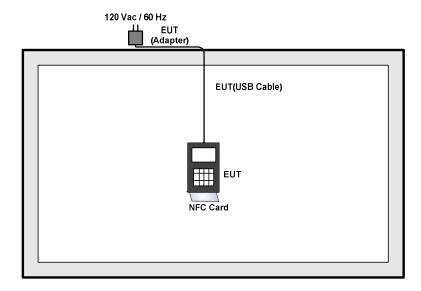
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#### < For Fundamental Emissions and Mask and Radiated Emissions Measurement >

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# 2.3 Table for Supporting Units

Support Unit	Manufacturer	Model	FCC ID
System Simulator	Anritsu	MT8820C	N/A
WLAN AP	Dlink	DIR-820L	KA2IR820LA1
Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W
Notebook	Lenovo	E540	FCC DoC
SD Card	N/A	MicroSD HC	FCC DoC
NFC Card	PAX	B Card	N/A

# 2.4 EUT Operation Test Setup

The EUT was programmed to be in continuously transmitting mode.

The ancillary equipment, NFC card, is used to make the EUT (NFC) continuously transmit at 13.56MHz and is placed around 3 cm gap to the EUT.

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### 3. TEST RESULTS

### 3.1 AC Power Line Conducted Emissions Measurement

#### 3.1.1 Limit 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.

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Frequency of Emission	Conducted Limit (dBμV)		
(MHz)	Quasi-Peak	Average	
0.15-0.5	66 to 56*	56 to 46*	
0.5-5	56	46	
5-30	60	50	

<sup>\*</sup>Decreases with the logarithm of the frequency.

### 3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.1.3 Test Procedures

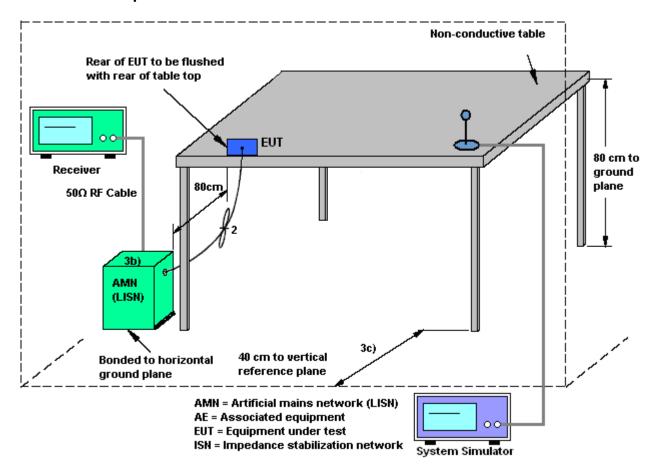
- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to 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.

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### 3.1.4 Test setup



### 3.1.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

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### 3.2 20dB and 99% OBW Spectrum Bandwidth Measurement

### 3.2.1 Limit

Intentional radiators must be designed to ensure that the 20dB and 99% emission bandwidth in the specific band 13.553~13.567MHz.

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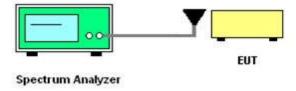
### 3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.2.3 Test Procedures

- 1. The spectrum analyzer connected via a receive antenna placed near the EUT in peak Max hold mode.
- 2. The resolution bandwidth of 1 kHz and the video bandwidth of 3 kHz were used.
- 3. Measured the spectrum width with power higher than 20dB below carrier.
- 4. Measured the 99% OBW.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Conducted Test Items

Please refer to Appendix B.

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### 3.3 Frequency Stability Measurement

#### 3.3.1 Limit

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% (100ppm) of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

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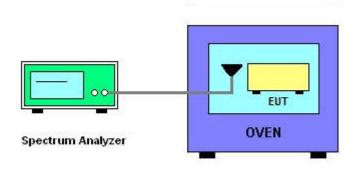
### 3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

#### 3.3.3 Test Procedures

- 1. The spectrum analyzer connected via a receive antenna placed near the EUT.
- 2. EUT have transmitted signal and fixed channelize.
- 3. Set the spectrum analyzer span to view the entire emissions bandwidth.
- 4. Set RBW = 1 kHz, VBW = 3 kHz with peak detector and maxhold settings.
- 5. The fc is declaring of channel frequency. Then the frequency error formula is  $(fc-f)/fc \times 10^6$  ppm and the limit is less than  $\pm 100$ ppm.
- 6. Extreme temperature rule is -20°C~50°C.

### 3.3.4 Test Setup



### 3.3.5 Test Result of Conducted Test Items

Please refer to Appendix B.

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### 3.4 Field Strength of Fundamental Emissions and Mask Measurement

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### 3.4.1 Limit

Rules and specifications	FCC CFR 47 Part 15 section 15.225						
Description	Compliance with the spectrum mask is tested with RBW set to 9kHz.				Compliance with the spectrum mask is tested with RBW set to 9kHz.		
From of Emission (MIII-)	Field Strength	Field Strength	Field Strength	Field Strength			
Freq. of Emission (MHz)	(µV/m) at 30m	(dBµV/m) at 30m	(dBµV/m) at 10m	(dBµV/m) at 3m			
1.705~13.110	30	29.5	48.58	69.5			
13.110~13.410	106 40.5		59.58	80.5			
13.410~13.553	334	50.5	69.58	90.5			
13.553~13.567	15848	84.0	103.08	124.0			
13.567~13.710	334	50.5	69.58	90.5			
13.710~14.010	106	40.5	59.58	80.5			
14.010~30.000	30	29.5	48.58	69.5			

### 3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

#### 3.4.3 Test Procedures

- Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the loop receiving antenna mounted antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the receiving antenna was fixed at one meter above ground to find the maximum emissions field strength.
- 4. For Fundamental emissions, use the receiver to measure QP reading.

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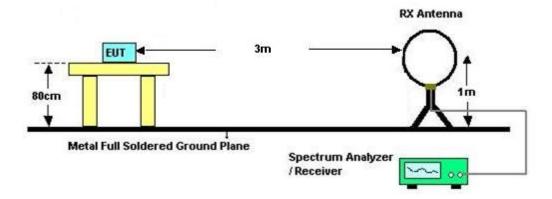
5. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

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Compliance with the spectrum mask is tested with RBW set to 9kHz.
 Note: Emission level (dBμV/m) = 20 log Emission level (μV/m).

### 3.4.4 Test Setup

For radiated emissions below 30MHz



### 3.4.5 Test Result of Field Strength of Fundamental Emissions and Mask

Please refer to Appendix C.

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### 3.5 Radiated Emissions Measurement

### 3.5.1 Limit

The field strength of any emissions which appear outside of 13.110 ~14.010MHz band shall not exceed the general radiated emissions limits.

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Frequencies	Field Strength	Measurement Distance
(MHz)	(μV/m)	(meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

### 3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.5.3 Measuring Instrument Setting

The following table is the setting of receiver.

Receiver Parameter	Setting
Attenuation	Auto
Frequency Range: 9kHz~150kHz	RBW 200Hz for QP
Frequency Range: 150kHz~30MHz	RBW 9kHz for QP
Frequency Range: 30MHz~1000MHz	RBW 120kHz for Peak

**Note:** The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

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#### 3.5.4 Test Procedures

Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable
 8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.

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- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
- In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. Antenna Requirements

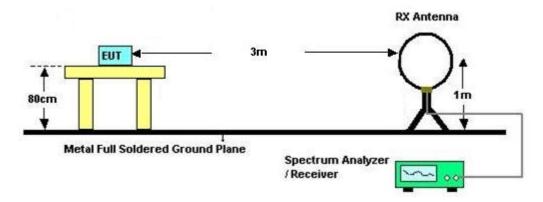
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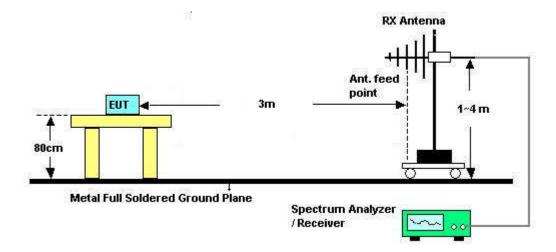
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### 3.5.5 Test Setup

For radiated emissions below 30MHz



For radiated emissions above 30MHz



### 3.5.6 Test Result of Radiated Emissions Measurement

Please refer to Appendix C.

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### 3.6 Antenna Requirements

### 3.6.1 Standard Applicable

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. 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 the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

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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 FCC rule.

### 3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

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### 4. LIST OF MEASURING EQUIPMENT

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	9kHz~40GHz	Apr. 20, 2017	Nov. 27, 2017	Apr. 19, 2018	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H201408180 3	-40~+150°C	Jul. 20, 2017	Nov. 27, 2017	Jul. 19, 2018	Conducted (TH01-SZ)
AC Power Source	Chroma	61602	6160200008 91	100Vac~250Vac	Jul. 19, 2017	Nov. 27, 2017	Jul. 18, 2018	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY5226018 5	20Hz~26.5GHz	Apr. 20, 2017	Nov. 24, 2017	Apr.19, 2018	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 14, 2017	Nov. 24, 2017	May 13, 2018	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz-2GHz	Apr. 25, 2017	Nov. 24, 2017	Apr. 24, 2018	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 20, 2017	Nov. 24, 2017	Apr.19, 2018	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-0 0101800-3 0-10P-R	1707137	1GHz~18GHz	Oct.19, 2017	Nov. 24, 2017	Oct. 18, 2018	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	6160100019 85	N/A	NCR	Nov. 24, 2017	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Nov. 24, 2017	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Nov. 24, 2017	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Jan.06, 2017	Dec. 04, 2017	Jan. 05, 2018	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Jan.05, 2017	Dec. 04, 2017	Jan. 04, 2018	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	3816/2SH	00103892	9kHz~30MHz	Jan.05, 2017	Dec. 04, 2017	Jan. 04, 2018	Conduction (CO01-SZ)

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NCR: No Calibration Required

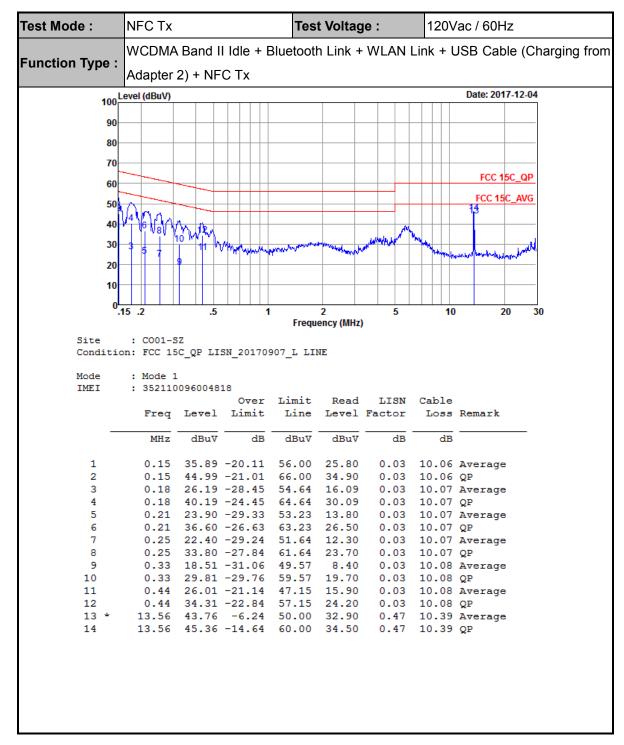
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# **Appendix A. Test Results of Conducted Emission Test**

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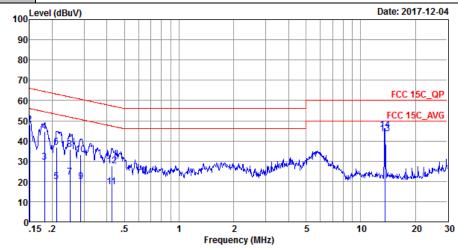
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Test Mode: NFC Tx Test Voltage: 120Vac / 60Hz WCDMA Band II Idle + Bluetooth Link + WLAN Link + USB Cable (Charging from **Function Type:** Adapter 2) + NFC Tx

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: CO01-SZ

Condition: FCC 15C\_QP LISN\_20170907\_N NEUTRAL

: Mode 1 Mode

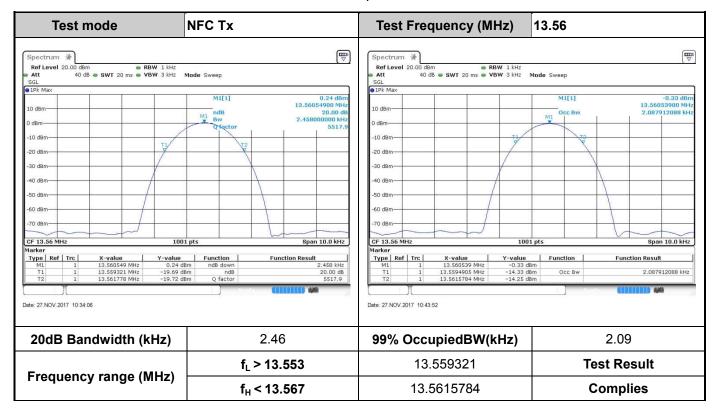
: 352110096004818 IMEI

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
-	MHz	dBu∇	dB	dBu∇	dBu∇	dB	dB	
1	0.15	32.39	-23.61	56.00	22.30	0.03	10.06	Average
2	0.15	47.79	-18.21	66.00	37.70	0.03	10.06	QP
3	0.18	29.69	-24.73	54.42	19.59	0.03	10.07	Average
4	0.18	44.80	-19.62	64.42	34.70	0.03	10.07	QP
5	0.21	19.80	-33.34	53.14	9.70	0.03	10.07	Average
6	0.21	36.80	-26.34	63.14	26.70	0.03	10.07	QP
7	0.25	22.10	-29.63	51.73	12.00	0.03	10.07	Average
8	0.25	35.90	-25.83	61.73	25.80	0.03	10.07	QP
9	0.29	19.91	-30.68	50.59	9.80	0.03	10.08	Average
10	0.29	33.31	-27.28	60.59	23.20	0.03	10.08	QP
11	0.43	17.40	-29.93	47.33	7.30	0.02	10.08	Average
12	0.43	27.50	-29.83	57.33	17.40	0.02	10.08	QP
13 *	13.56	43.38	-6.62	50.00	32.70	0.29	10.39	Average
14	13.56	45.28	-14.72	60.00	34.60	0.29	10.39	QP

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# **Appendix B. Test Results of Conducted Test Items**

B1. Test Result of 20dB Bandwidth and 99% Occupied Bandwidth



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### B2. Test Result of Frequency Stability

B3. Voltage vs.	Frequency Stability	Temperature vs. Fr	equency Stability
Voltage (Vac)	Measurement Frequency (MHz)	Temperature (℃)	Measurement Frequency (MHz)
102	13.560545	-20	13.560530
120	13.560550	-10	13.560530
138	13.560540	0	13.560535
		10	13.560540
		20	13.560540
		30	13.560530
		40	13.560530
		50	13.560530
Max.Deviation (MHz)	0.000549	Max.Deviation (MHz)	0.000540
Max.Deviation (ppm)	40.5236	Max.Deviation (ppm)	39.7861
Limit	FS < ±100 ppm	Limit	FS < ±100 ppm
Test Result	PASS	Test Result	PASS

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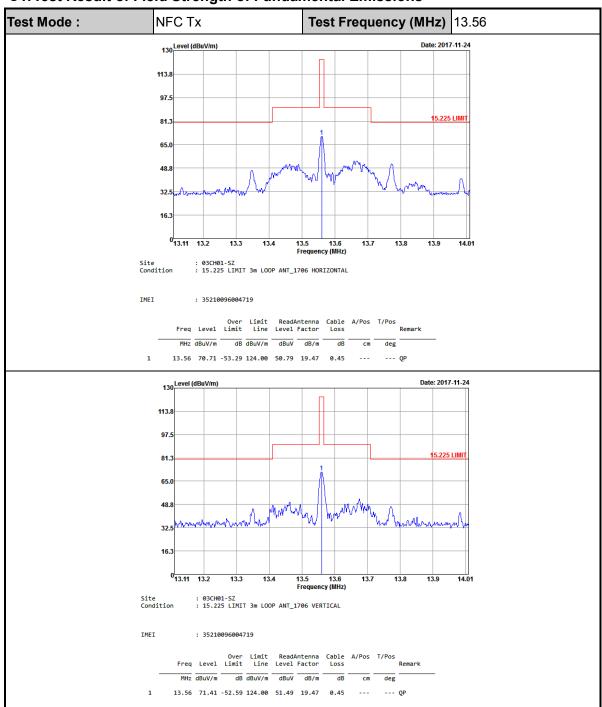
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# **Appendix C. Test Results of Radiated Test Items**

### C1. Test Result of Field Strength of Fundamental Emissions



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Report Template No.: BU5-FR15CNFC Version 1.2

### C2. Results of Radiated Spurious Emissions (9 kHz~30MHz)

		-		•					
Test Mode: NFC Tx Polarization:							izontal		
Frequency	Level	Over	Limit	Read	Antenna	Cable	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Pos	Pos	
(MHz)	( dBµV/m )	( dB )	( dBµV/m )	(dBµV)	( dB )	( dB )	( cm )	(deg)	
0.01288	49.01	-76.4	125.41	27.96	21	0.05	-	-	Average
0.06144	38.86	-72.98	111.84	18.3	20.5	0.06	-	-	Average
0.10065	48.24	-59.31	107.55	27.47	20.7	0.07	-	-	QP
0.14367	40.59	-63.87	104.46	19.91	20.6	0.08	-	-	Average
1.656	38.43	-24.79	63.22	17.7	20.57	0.16	-	-	QP
6.68	35.34	-34.66	70	14.56	20.47	0.31	-	-	QP
13.776	51.91	-18.09	70	32	19.46	0.45	-	-	QP
23.236	34.2	-35.8	70	14.38	19.25	0.57	-	-	QP
29.345	34.64	-35.36	70	14.54	19.43	0.67	-	-	QP

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Test Mode :	NEC	ΙX		Polariz	ation :	Vert	ical		
Frequency ( MHz )	Level	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level (dBµV)	Antenna Factor ( dB )	Cable Loss ( dB )	Ant Pos	Table Pos ( deg )	Remark
0.01328	47.61	-77.53	125.14	26.56	21	0.05	-	-	Average
0.07164	41.34	-69.16	110.5	20.78	20.5	0.06	-	-	Average
0.11562	40.47	-65.87	106.34	19.79	20.6	0.08	-	-	Average
0.12543	34.61	-71.03	105.64	13.93	20.6	0.08	-	-	Average
0.9344	38.23	-29.96	68.19	17.54	20.58	0.11	-	-	QP
6.566	35.24	-34.76	70	14.47	20.46	0.31	-	-	QP

#### Note:

13.672

22.282

28.935

51.36

34.24

34.74

-18.64

-35.76

-35.26

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

31.44

14.44

14.77

19.47

19.24

19.31

0.45

0.56

0.66

QΡ

QΡ

QP

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

70

70

70

3. Limit line = specific limits ( $dB\mu V$ ) + distance extrapolation factor.

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### C3. Results of Radiated Spurious Emissions (30MHz~1GHz)

Test Mode	<b>:</b>	NFC Tx		Po	olarization	:	Horizontal			
Frequency ( MHz )	Leve	Limit	Limit Line ( dBµV/m )	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
30.97	27.36	-12.64	40	31.29	27.42	0.25	31.6	-	-	Peak
94.99	35.07	-8.43	43.5	47.38	18.4	0.79	31.5	100	0	Peak
320.03	34.03	-11.97	46	42.69	20.33	2.11	31.1	-	-	Peak
426.73	33.61	-12.39	46	36.54	25.68	2.49	31.1	-	-	Peak
678.93	31.62	-14.38	46	32.03	27.57	3.22	31.2	-	-	Peak
966.05	34.47	-19.53	54	31.74	30.06	4.03	31.36	-	-	Peak

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Test Mode	de: NFC Tx Polarization:				Vertical					
Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB )	(dB)	( dB )	( cm )	(deg)	
34.85	35.86	-4.14	40	40.84	26.3	0.32	31.6	-	-	Peak
40.67	35.66	-4.34	40	45.93	21.04	0.39	31.7	-	-	Peak
94.99	39.95	-3.55	43.5	52.26	18.4	0.79	31.5	110	216	QP
203.63	29.26	-14.24	43.5	40.99	17.82	1.64	31.19	-	-	Peak
426.73	29.98	-16.02	46	32.91	25.68	2.49	31.1	-	-	Peak
640.13	32.79	-13.21	46	33.59	27.28	3.12	31.2	-	-	Peak

#### Note:

- 1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 2. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m).
- 3. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor= Level.

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