FCC RF Test Report

APPLICANT : PAX Technology Limited EQUIPMENT : Wireless POS Terminal

BRAND NAME : PAX

MODEL NAME : PAX D220 MARKETING NAME : PAX D220

FCC ID : V5P-D2204GMA

STANDARD : FCC Part 15 Subpart C §15.225

CLASSIFICATION: (DXX) Low Power Communication Device Transmitter

The product was received on Aug. 22, 2018 and testing was completed on Oct. 11, 2018. 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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REVISION HISTORY

Report No.: FR882223D

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR882223D	Rev. 01	Initial issue of report	Dec. 06, 2018

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SUMMARY OF THE TEST RESULT

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Report Section	FCC Rule	Description of Test	Result	Remark
3.1	15.207	AC Power Line Conducted Emissions	Complies	Under limit 7.23 dB at 11.560MHz
2.2	15.215(c)	20dB Spectrum Bandwidth	Complies	-
3.2	-	99% OBW Spectrum Bandwidth	Complies	-
3.3	15.225(e)	Frequency Stability	Complies	-
3.4	15.225(a)(b)(c)	Field Strength of Fundamental Emissions	Complies	Max level 76.20 dBµV/m at 13.560 MHz
3.5	15.225(d) & 15.209	Radiated Spurious Emissions	Complies	Under limit 3.08 dB at 40.670MHz for Quasi-Peak
3.6	15.203	Antenna Requirements	Complies	-

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1. General Description

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 Wireless POS Terminal				
Brand Name	PAX			
Model Name	PAX D220			
Marketing Name	PAX D220			
FCC ID	V5P-D2204GMA			
	LTE/NFC			
EUT supports Radios application	WLAN 2.4GHz 802.11b/g/n HT20			
	Bluetooth BR/EDR/LE			
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.

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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	Loop Antenna			
Type of Modulation	ASK			

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).

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Test Site	Sporton International (Shenzhen) Inc.				
Test Site Location 1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwe Shenzhen City, Guangdong Province 518055, China TEL: +86-755-8637-9589					
Test Site No.	FAX: +86-755-8637-9595 Sporton Site No.		FCC designation No.	FCC Test Firm Registration No.	
	TH01-SZ	CO01-SZ			
Test Engineer	Sam Zheng	Xu Zhang	CNE049	227462	
Temperature	24~26℃	22~25 ℃	CN5018	337463	
Relative Humidity 50~53% 50~55%					

Test Site	Sporton International (Shenzhen) Inc.				
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan District, Shenzhen City, Guangdong Province 518055, China				
	TEL: +86-755- 3320-2398 Sporton Site No. FCC designation No. FCC Test Firm Registration No.				
Test Site No.	Sporton Site No. 03CH04-SZ	rec designation No.	rec lest rilli Registration No.		
Test Engineer	Xiaoshi Tan	CN5019	577730		
Temperature	24~25 ℃	0143019	377730		
Relative Humidity					

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.

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 four NFC type, A, B, F, V. The worst type (type B) was recorded in this report. Pre-scanned tests, X, Y, Z in three orthogonal panels to determine the final configuration (Z plane as worst plane) from all possible combinations.

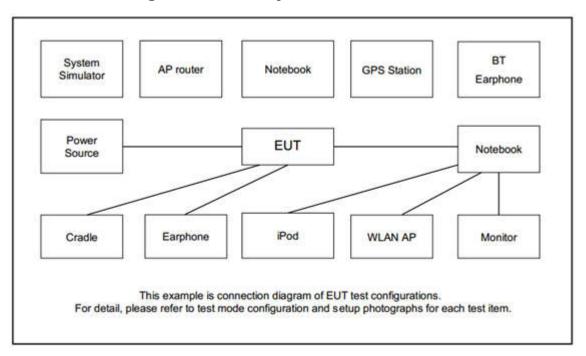
Test Cases						
AC						
Conducted	Mode 1: LTE Cat M1 Band 2 Idle + USB Cable (Charging from Adapter 1) + NFC Tx					
Emission						
Remark: For	Radiated Test Cases, The tests were performed with Adapter 1 and USB Cable.					

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2.2 Connection Diagram of Test System



2.3 Table for Supporting Units

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	NFC Card	N/A	N/A	N/A	N/A	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.

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	

^{*}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.

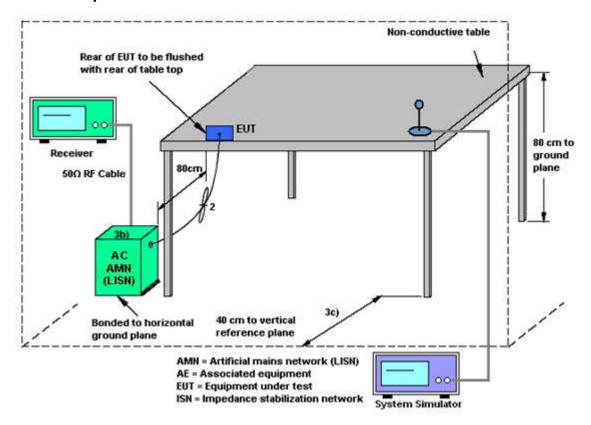
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3.1.4 Test setup



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.

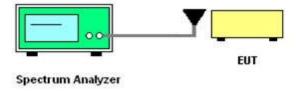
3.2.2 Measuring Instruments

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.

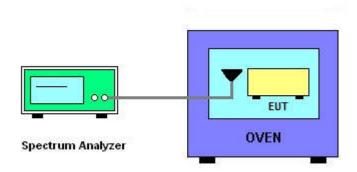
3.3.2 Measuring Instruments

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 ± 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

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.			
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.

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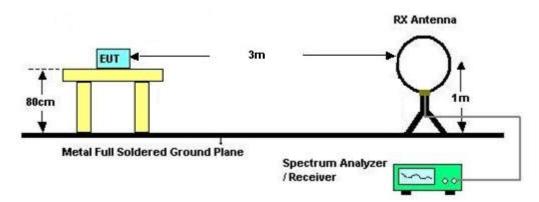
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3.4.3 Test Procedures

- 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.
- 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.
- 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.
- 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.
- 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.
- 5. 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.
- 7. 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

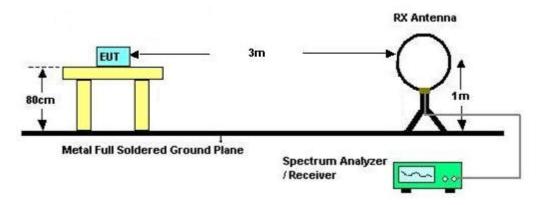
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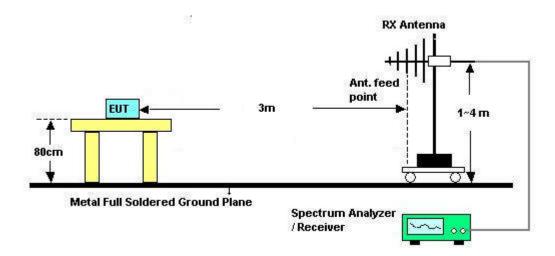
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3.5.5 Test Setup

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.

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 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. 19, 2018	Oct. 09, 2018	Apr. 18, 2019	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangrou p	LP-150U	H2014081 803	-40~+150°C	Dec. 26, 2017	Oct. 09, 2018	Dec. 25, 2018	Conducted (TH01-SZ)
DC Power Supply	GWINSTEK	AnritsuGPS-3 030D	EM882636	Max 30V	Apr. 19, 2018	Oct. 09, 2018	Apr. 18, 2019	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Apr. 19, 2018	Sep. 23, 2018~ Oct. 11, 2018	Apr. 18, 2019	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 14, 2018	Sep. 23, 2018~ Oct. 11, 2018	May 13, 2019	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	Aug. 28, 2018	Sep. 23, 2018~ Oct. 11, 2018	Aug. 27, 2019	Radiation (03CH04-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 19, 2017	Sep. 23, 2018~ Oct. 11, 2018	Oct. 18, 2018	Radiation (03CH04-SZ)
AC Power Source	Chroma	61601	61601000 1985	N/A	NCR	Sep. 23, 2018~ Oct. 11, 2018	NCR	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Sep. 23, 2018~ Oct. 11, 2018	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Sep. 23, 2018~ Oct. 11, 2018	NCR	Radiation (03CH04-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 26, 2017	Oct. 10, 2018~ Oct. 11, 2018	Dec. 25, 2018	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Dec. 26, 2017	Oct. 10, 2018~ Oct. 11, 2018	Dec. 25, 2018	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	3816/2SH	00103892	9kHz~30MHz	Nov. 01, 2017	Oct. 10, 2018~ Oct. 11, 2018	Oct. 31, 2018	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000 0891	100Vac~250Vac	Jul. 18, 2018	Oct. 10, 2018~ Oct. 11, 2018	Jul. 17, 2019	Conduction (CO01-SZ)

NCR: No Calibration Required

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5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence	2.6dB
of 95% (U = 2Uc(y))	2.000

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

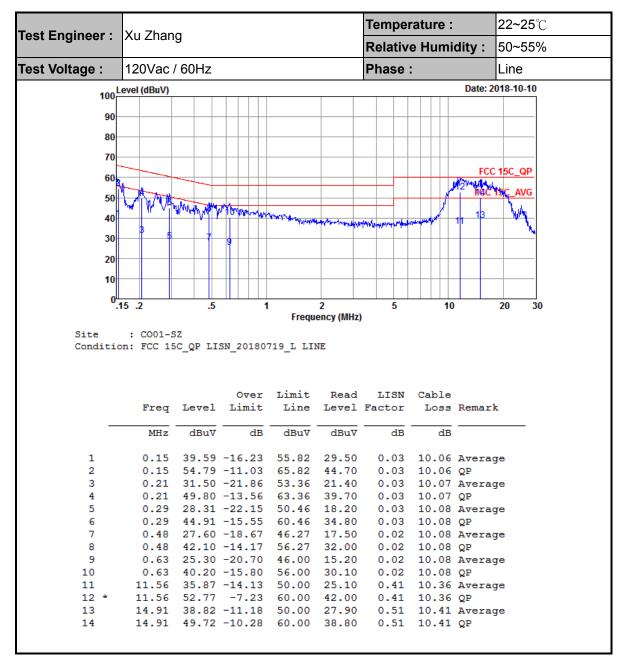
-		
	Measuring Uncertainty for a Level of Confidence	5.1dB
	of 95% (U = 2Uc(v))	5.10B

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Appendix A. Test Results of Conducted Emission Test



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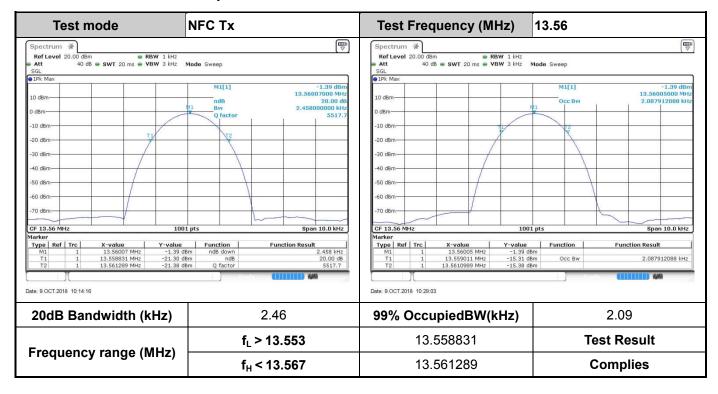
Temperature: 22~25°C Test Engineer : Xu Zhang Relative Humidity: 50~55% Test Voltage: 120Vac / 60Hz Phase: Neutral 100 Level (dBuV) Date: 2018-10-10 90 80 70 FCC 15C_QP 60 50 40 30 20 10 .15 .2 10 Frequency (MHz) Site : CO01-SZ Condition: FCC 15C QP LISN 20180719 N NEUTRAL Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark dB dBuV dBuV dBu∀ dB MHz 0.15 33.89 -22.02 55.91 23.80 0.03 10.06 Average 0.15 50.29 -15.62 65.91 40.20 0.03 10.06 QP 0.20 26.50 -26.99 53.49 16.40 0.20 44.90 -18.59 63.49 34.80 3 0.03 10.07 Average 0.03 10.07 QP 0.53 26.70 -19.30 46.00 16.60 0.02 10.08 Average 5 0.53 40.70 -15.30 56.00 30.60 0.58 28.40 -17.60 46.00 18.30 0.58 42.30 -13.70 56.00 32.20 0.02 10.08 QP 0.02 10.08 Average 0.02 10.08 QP 8 9 0.68 25.70 -20.30 46.00 15.60 0.02 10.08 Average 0.68 40.20 -15.80 56.00 30.10 11.32 33.37 -16.63 50.00 22.80 0.02 10.08 QP 0.21 10.36 Average 10 11 11.32 12 * 11.32 51.47 -8.53 60.00 40.90 0.21 10.36 QP 14.75 37.63 -12.37 50.00 26.90 14.75 49.33 -10.67 60.00 38.60 13 0.32 10.41 Average 14 0.32 10.41 QP

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Appendix B. Test Results of Conducted Test Items

B1. Test Result of 20dB Spectrum Bandwidth



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B2. Test Result of Frequency Stability

Voltage vs. Freque	ency Stability	Temperature vs.	Frequency Stability
Voltage (Vdc)	Measurement Frequency (MHz)	Temperature (°C)	Measurement Frequency (MHz)
3.6	13.560055	-20	13.560070
3.8	13.560060	-10	13.560065
4.25	13.560060	0	13.560065
		10	13.560060
		20	13.560055
		30	13.560070
		40	13.560070
		50	13.560070
Max.Deviation (MHz)	0.000060	Max.Deviation (MHz)	0.000070
Max.Deviation (ppm)	4.4248	Max.Deviation (ppm)	5.1622
Limit	FS < ±100 ppm	Limit	FS < ±100 ppm
Test Result	PASS	Test Result	PASS

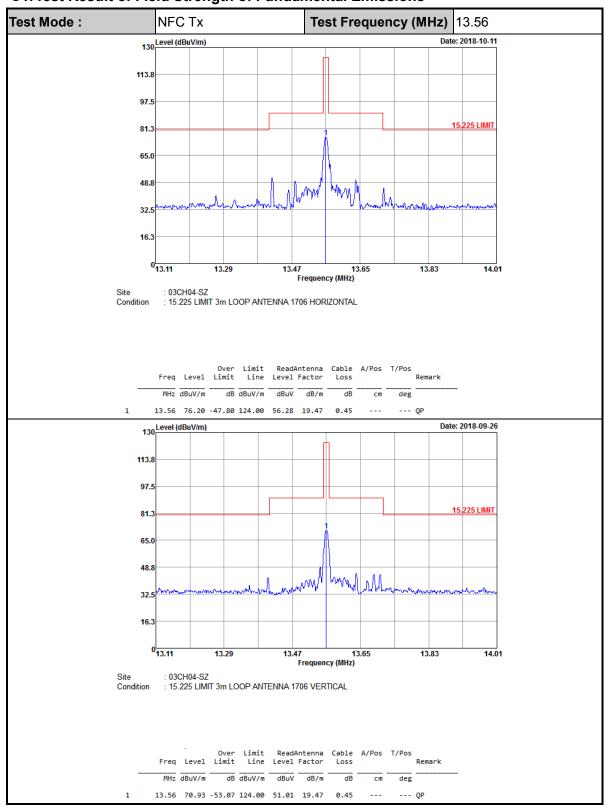
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Appendix C. Test Results of Radiated Test Items

C1. Test Result of Field Strength of Fundamental Emissions



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

Test Mode: NFC		Tx		Polariz	ation :	Hori	zontal		
Frequency (MHz)	Level	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.01022	52.81	-74.6	127.41	31.75	21	0.06	-	- -	Average
0.06576	54.76	-56.49	111.25	34.19	20.5	0.07	-	-	Average
0.09096	46.66	-61.77	108.43	25.89	20.7	0.07	-	-	QP
0.14145	41.61	-62.98	104.59	20.93	20.6	0.08	-	-	Average
0.51445	42.17	-31.21	73.38	21.66	20.41	0.1	-	-	QP
2.078	37.43	-32.57	70	16.77	20.55	0.11	-	-	QP
10.968	34.95	-35.05	70	14.23	20.3	0.42	-	-	QP
22.174	34.4	-35.6	70	14.55	19.24	0.61	-	-	QP
25.495	35.32	-34.68	70	14.97	19.65	0.7	-	-	QP

Test Mode : NFC Tx			Polarization : Vertical						
Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Ant Pos	Table Pos	Remark
(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB)	(dB)	(cm)	(deg)	
0.01441	51.42	-73.01	124.43	30.36	21	0.06	-	-	Average
0.06609	47.29	-63.91	111.2	26.72	20.5	0.07	-	-	Average
0.09222	38.15	-70.16	108.31	17.38	20.7	0.07	-	-	QP
0.1284	39.28	-66.15	105.43	18.6	20.6	0.08	-	-	Average
0.49965	41.26	-32.37	73.63	20.76	20.4	0.1	-	-	QP
2.282	36.65	-33.35	70	16.03	20.54	0.08	-	-	QP
9.128	34.73	-35.27	70	14.02	20.39	0.32	-	-	QP
18.601	33.97	-36.03	70	13.93	19.52	0.52	-	-	QP
27.725	36.06	-33.94	70	15.91	19.43	0.72	-	-	QP

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. Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
- 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 : NFC Tx			Ро	larization	Horizontal					
Frequency	Leve	el 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)	
67.83	25.73	3 -14.27	40	44.37	12.44	0.78	31.86	-	-	Peak
94.99	37.3	5 -6.15	43.5	52.62	15.45	1.03	31.75	100	75	Peak
122.15	30.3	7 -13.13	43.5	43.46	17.41	1.15	31.65	-	-	Peak
207.51	25.5	7 -17.93	43.5	40.07	15.18	1.63	31.31	-	-	Peak
787.57	31.8	1 -14.19	46	31.58	28.27	3.13	31.17	-	-	Peak
910.76	33.4	-12.6	46	32.02	29.17	3.41	31.2	-	-	Peak

Test Mode : NFC Tx				Po	larization	Vertical					
Frequency	Leve		Over .imit	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)	
30	36.2	9 -:	3.71	40	43.21	24.8	0.25	31.97	100	73	QP
40.67	36.9	2 -:	3.08	40	48.91	19.56	0.42	31.97	100	95	QP
67.83	35.7	4 -	4.26	40	54.38	12.44	0.78	31.86	-	-	Peak
101.78	34.0	7 -	9.43	43.5	48.5	16.22	1.07	31.72	-	-	Peak
149.31	31.8	-	11.7	43.5	45.11	16.98	1.26	31.55	-	-	Peak
474.26	28.4	5 -1	7.55	46	34	23.35	2.36	31.26	-	-	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 μ V/m) = 20 log Emission level (μ V/m).
- 3. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor= Level.

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