

FCC RF Test Report

APPLICANT	: PAX Technology Limited
EQUIPMENT	: Smart Mini Payment Terminal
BRAND NAME	: PAX
MODEL NAME	: A60
MARKETING NAME	: A60
FCC ID	: V5PA60
STANDARD	:FCC Part 15 Subpart C §15.225
CLASSIFICATION	: (DXX) Low Power Communication Device Transmitter

The product was received on Mar. 05, 2018 and testing was completed on Jun. 08, 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.

File Shih

Approved by: Eric Shih / Manager

(R) TESTING NVLAP LAB CODE 600156-0

Sporton International (Shenzhen) Inc. 1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan Shenzhen City Guangdong Province 518055 China



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR830505D	Rev. 01	Initial issue of report	Jun. 12, 2018



SUMMARY OF THE TEST RESULT

Report Section	FCC Rule	Description of Test	Result	Remark
3.1	15.207	AC Power Line Conducted Emissions	Complies	Under limit 3.34 dB at 13.560MHz
	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 69.45 dBµV/m at 13.560 MHz
3.5	15.225(d) & 15.209	Radiated Spurious Emissions	Complies	Under limit 1.93 dB at 40.670MHz
3.6	15.203	Antenna Requirements	Complies	-



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.

1.3 Product Feature of Equipment Under Test

Product Feature				
Equipment Smart Mini Payment Terminal				
Brand Name	PAX			
Model Name	A60			
Marketing Name	A60			
FCC ID	V5PA60			
	WCDMA/HSPA/HSPA+/LTE/NFC			
EUT supports Radios application	WLAN 2.4GHz 802.11b/g/n HT20			
	Bluetooth v3.0+EDR/Bluetooth v4.0 LE			
	Conducted:355678099990230			
IMEI Code	Conduction: 355678099990115			
	Radiation: 867400020316612			
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.



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification			
Tx/Rx Frequency Range13.553 ~ 13.567MHz			
Channel Number	1		
20dBW	2.46 KHz		
99%OBW	2.20 KHz		
Antenna Type	PCB 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.



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.

Test Site	Sporton International (Shenzhen) Inc.					
	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan Shenzhen					
Test Site Location	City Guangdong Province 518055 China					
	TEL: +86-755-8637-9589	TEL: +86-755-8637-9589				
	FAX: +86-755-8637-9595					
T (0)())	Sporton Site No.		FCC Registration No.			
Test Site No.	TH01-SZ	CO01-SZ				
Test Engineer	Bet Wang	Lion Gao	054005			
Temperature	24~26° ℃ 22~25° ℃		201000			
Relative Humidity	50~53%	50~53% 50~55%				

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 CN5019.

Test Site	Sporton International (Shenzhen) Inc.			
	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse,			
Test Site Location	Nanshan District Shenzhen City Guangdong Province 518055 China			
	TEL: +86-755-3320-2398			
Toot Site No	Sporton Site No.	FCC Registration No.		
lest Site No.	03CH01-SZ			
Test Engineer Reid Huang		677720		
Temperature 24~25°C		577730		
Relative Humidity	t y 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





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		

The EUT pre-scanned in four NFC type, A, B, F, V. The worst type (type A) 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 Emission	Mode 1: WCDMA Band II Idle + Bluetooth Link + WLAN Link + USB Cable(Charging from Adapter 1) + Earphone + NFC Tx				
Remark: For Radiated Test Cases, The tests were performance with Adapter 1, Battery, Earphone and USB Cable.					



2.2 Connection Diagram of Test System



2.3 Table for Supporting Units

ltem	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	Dlink	DIR-820L	KA2IR820LA1	N/A	Unshielded,1.8m
3.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W	N/A	N/A
5.	SD Card	Samsung	MicroSD HC	FCC DoC	N/A	N/A
6.	Earphone	Apple	MC690ZP/A	N/A	Shielded, 1.0m	N/A
7.	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.



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.
- Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.



3.1.4 Test setup



3.1.5 Test Result of AC Conducted Emission

Please refer to Appendix A.



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.



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 ±100ppm.
- 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.



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 th	Compliance with the spectrum mask is tested with RBW set to 9kHz.							
Free of Emission (MHz)	Field Strength	Field Strength	Field Strength	Field Strength					
Freq. of Emission (WHZ)	(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.
- 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.
- 6. Compliance with the spectrum mask is tested with RBW set to 9kHz. Note: Emission level (dB μ V/m) = 20 log Emission level (μ V/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.



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.

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.



3.5.4 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 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.
- 3. 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



3.5.5 Test Setup

For radiated emissions above 30MHz



3.5.6 Test Result of Radiated Emissions Measurement

Please refer to Appendix C.



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.



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	Apr. 26, 2018	Apr. 18, 2019	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 26, 2017	Apr. 26, 2018	Dec. 25, 2018	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 26, 2017	Apr. 26, 2018	Dec. 25, 2018	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY522601 85	20Hz~26.5GHz	Apr. 19, 2018	Jun. 08, 2018	Apr. 18, 2019	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 13, 2018	Jun. 08, 2018	May 12, 2019	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	May 09, 2018	Jun. 08, 2018	May 08, 2019	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 19, 2018	Jun. 08, 2018	Apr. 18, 2019	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001 985	N/A	NCR	Jun. 08, 2018	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jun. 08, 2018	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jun. 08, 2018	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 26, 2017	Mar. 19, 2018	Dec. 25, 2018	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Dec. 26, 2017	Mar. 19, 2018	Dec. 25, 2018	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	3816/2SH	00103892	9kHz~30MHz	Nov. 01, 2017	Mar. 19, 2018	Oct. 31, 2018	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000 891	100Vac~250Vac	Jul. 19, 2017	Mar. 19, 2018	Jul. 18, 2018	Conduction (CO01-SZ)

NCR: No Calibration Required



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence	2 6 d D
of 95% (U = 2Uc(y))	2.008

Uncertainty of Radiated Emission Measurement (9 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence	2 0 J D
of 95% (U = 2Uc(y))	2.80B

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

Measuring Uncertainty for a Level of Confidence	4 9dD
of 95% (U = 2Uc(y))	4.00B



Appendix A. Test Results of Conducted Emission Test

Test Engineer : Lion Gao					Tem	peratu	22~25 ℃		
Test Engineer :	LION Gad	J				Rela	ative Hu	umidity :	50~55%
Test Voltage :	120Vac / 60Hz F						se :		Line
100	evel (dBuV)							Date: 2018-	03-19
100									
90									
80-									
70								FCC 15C	: OP
60								2400 150	
50	A	- 84	6 819 11 76	-				-28-130-	<u>AV0</u>
40	/\ A n	n MAA	- -	MAN TOZZ	1 petro a	they reader		- ull	
		11/11/101	1.11.194	9 21	W V	יייץ	" Maryly	walk think when he was	
30	- N (A	11/11/14							
20		N 7 1							
10									
10									
04	5 2	5	1		2	5	10	20	30
	5.2			Frequ	ency (MHz)		10	20	50
Site	: CO01-5	7							
Conditio	n: FCC 15	C_QP LI	5N_20170	907_L LI	1E				
TMET	: 867400	0203166	12						
			Over	Limit	Read	LISN	Cable		
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
								_	
1	0.41	39.61	-8.03	47.64	29.50	0.03	10.08	Average	
2	0.41	46.91	-10./3	57.64	36.80	0.03	10.08	QP 2	
3	0.47	35.90	-10.59	46.49	23.80	0.02	10.08	Average	
7	0.47	25 90	-12.25	16 00	25 00	0.02	10.00	QP Amorro do	
5	0.50	44 70	-10.10	56 00	23.00	0.02	10.00	Average	
7	0.50	37 20	-8 80	46 00	27 10	0.02	10.00	Average	
8	0.65	45.80	-10.20	56.00	35.70	0.02	10.08	OP	
9	0.71	36.70	-9.30	46.00	26.60	0.02	10.08	Average	
10	0.71	45.60	-10.40	56.00	35.50	0.02	10.08	OP	
11	0.77	35.72	-10.28	46.00	25.61	0.03	10.08	Average	
12	0.77	44.82	-11.18	56.00	34.71	0.03	10.08	QP	
13	0.83	35.13	-10.87	46.00	25.00	0.04	10.09	Average	
14	0.83	45.13	-10.87	56.00	35.00	0.04	10.09	QP -	
15	0.88	35.74	-10.26	46.00	25.60	0.05	10.09	Average	
16	0.88	45.84	-10.16	56.00	35.70	0.05	10.09	QP	
17	0.92	34.45	-11.55	46.00	24.30	0.06	10.09	Average	
18	0.92	43.95	-12.05	56.00	33.80	0.06	10.09	QP	
19	1.00	32.26	-13.74	46.00	22.10	0.07	10.09	Average	
20	1.00	42.06	-13.94	56.00	31.90	0.07	10.09	QP	
21	1.65	31.60	-14.40	46.00	21.40	0.10	10.10	Average	
22	1.65	41.80	-14.20	56.00	31.60	0.10	10.10	QP	
23 *	13.56	46.66	-3.34	50.00	35.80	0.47	10.39	Average	
24	13.56	51.36	-8.64	60.00	40.50	0.4/	10.39	QP	







Appendix B. Test Results of Conducted Test Items



B1. Test Result of 20dB Spectrum Bandwidth

Remark: Because the measured signal is CW adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.

Voltage vs. Freque	ncy Stability	Temperature vs. I	Frequency Stability	
Voltage (Vac)	Measurement	Temperature (°C)	Measurement	
voltage (vac)	Frequency (MHz)	Temperature (0)	Frequency (MHz)	
3.6	13.560210	-20	13.560180	
3.4	13.560185	-10	13.560180	
4.2	13.560190	0	13.560190	
			13.560185	
		20	13.560180	
		30	13.560180	
		40	13.560180	
		50	13.560180	
Max.Deviation (MHz)	0.000210	Max.Deviation (MHz)	0.000190	
Max.Deviation (ppm)	15.4867	Max.Deviation (ppm)	14.0118	
Limit	FS < ±100 ppm	Limit	FS < ±100 ppm	
Test Result	PASS	Test Result	PASS	

B2. Test Result of Frequency Stability



Appendix C. Test Results of Radiated Test Items



C1. Test Result of Field Strength of Fundamental Emissions

Sporton International (Shenzhen) Inc. TEL : +86-755-8637-9589 FAX : +86-755-8637-9595 FCC ID: V5PA60

Test Mode :	NFC	Тх		Polariz	ation :	Hori	zontal		
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.01517	47.71	-76.27	123.98	26.66	21	0.05	-	-	Average
0.06936	60.59	-50.19	110.78	40.03	20.5	0.06	-	-	Average
0.11523	40.7	-65.67	106.37	20.02	20.6	0.08	-	-	Average
0.13869	46.65	-58.11	104.76	25.97	20.6	0.08	-	-	Average
1.02	39.07	-28.37	67.44	18.35	20.6	0.12	-	-	QP
2.06	40.33	-29.67	70	19.6	20.55	0.18	-	-	QP
9.84	36.03	-33.97	70	15.28	20.36	0.39	-	-	QP
17.233	34.61	-35.39	70	14.52	19.59	0.5	-	-	QP
25.55	34.71	-35.29	70	14.47	19.64	0.6	-	-	QP

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

Test Mode :	NFC	Тх		Polariz	ation :				
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.03078	42.24	-75.6	117.84	21.68	20.5	0.06	-	-	Average
0.06945	55.95	-54.82	110.77	35.39	20.5	0.06	-	-	Average
0.11523	40.58	-65.79	106.37	19.9	20.6	0.08	-	-	Average
0.13884	43.13	-61.62	104.75	22.45	20.6	0.08	-	-	Average
0.68835	40.69	-30.16	70.85	20.12	20.48	0.09	-	-	QP
2.288	37.78	-32.22	70	17.05	20.54	0.19	-	-	QP
14.336	36.48	-33.52	70	16.59	19.43	0.46	-	-	QP
23.803	35.42	-34.58	70	15.44	19.4	0.58	-	-	QP
29.875	36	-34	70	15.67	19.65	0.68	-	-	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.

Test Mode : NFC Tx Polarization :						Horizontal				
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.67	27.9	-12.1	40	37.03	22.18	0.39	31.7	-	-	Peak
135.73	30.17	-13.33	43.5	41.84	18.57	1.18	31.42	-	-	Peak
176.47	34.87	-8.63	43.5	46.95	17.75	1.46	31.29	-	-	Peak
312.27	33.74	-12.26	46	43.13	19.62	2.09	31.1	-	-	Peak
419.94	41.17	-4.83	46	45.17	24.64	2.46	31.1	100	24	Peak
815.7	37.12	-8.88	46	35.87	28.91	3.64	31.3	-	-	Peak

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

Test Mode	NFC Tx				olarization	Vertical					
Frequency (MHz)	Leve (dBµV	el C L /m)(Dver .imit dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.67	38.0	7 -	1.93	40	47.2	22.18	0.39	31.7	100	276	QP
135.73	31.4	8 -1	2.02	43.5	43.15	18.57	1.18	31.42	-	-	Peak
176.47	32.4	9 -1	11.01	43.5	44.57	17.75	1.46	31.29	-	-	Peak
312.27	28.6	6 -1	7.34	46	38.05	19.62	2.09	31.1	-	-	Peak
419.94	31.7	7 -1	4.23	46	35.77	24.64	2.46	31.1	-	-	Peak
811.82	31.7	9 -1	4.21	46	30.5	28.96	3.63	31.3	-	-	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.