



TEST REPORT

Applicant Name : Vanstone Electronic (Beijing) Co., Ltd.
Address : 3F No.2 Building, Aisino Corporation Park 18A, Xingshikou
Road, Haidian District, Beijing, China 100195
Report Number : SZXX1210918-48932E-EM
FCC ID: OWLV71

Test Standard (s)

FCC PART 15B, CLASS B

Sample Description

Product Type: Wireless POS Terminal
Model No.: V71
Trade Mark: Aisino
Date Received: 2021-09-18
Date of Test: 2021-10-18 to 2021-10-19
Report Date: 2021-12-08

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Approved By:

Black Ding
ECM Engineer

Candy Li
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

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Shenzhen Accurate Technology Co., Ltd.

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Test Report Declaration

Applicant : Vanstone Electronic (Beijing) Co., Ltd.
Manufacturer : Vanstone Electronic (Beijing) Co., Ltd.
Product : Wireless POS Terminal
Model No. : V71
Trade Mark : Aisino

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B Class B ANSI C63.4: 2014

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Conducted Emission (150kHz-30MHz)	FCC Part 15 Subpart B Class B	Pass
Radiated Emission (30-1000MHz)	FCC Part 15 Subpart B Class B	Pass
Radiated Emission (Above 1000MHz)	FCC Part 15 Subpart B Class B	Pass

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Product	: Wireless POS Terminal
Model No.	: V71
Rating	: AC 100-240V, 50/60Hz (The DC output line length is 1.5 meter.)
Adapter1	: Model: A18A-050100U-US2 Input: 100-240V~, 50/60Hz, Max 0.2A Output: DC 5V, 1A
Adapter2	: Model: SW-0018 Input: 100-240V~, 50/60Hz, Max 0.2A Output: DC 5V, 1A
Remark(s)	: The EUT highest operating frequency is 2690MHz, the radiated emission measurement shall be made up to 13.45GHz
Applicant	: Vanstone Electronic (Beijing) Co., Ltd.
Address	: 3F No.2 Building, Aisino Corporation Park 18A, Xingshikou Road, Haidian District, Beijing, China 100195
Manufacturer	: Vanstone Electronic (Beijing) Co., Ltd.
Address	: 3F No.2 Building, Aisino Corporation Park 18A, Xingshikou Road, Haidian District, Beijing, China 100195
Date of sample received	: September 18, 2021
Date of Test	: October 18, 2021 to October 19, 2021
Sample Number	: SZXX1210918-48932E-EM-S1

2.2. Test mode

Test mode 1: Charging+Print
Test mode 2: Data transmission

2.3. General disclaimer

1. Each test item follows test standard and with no deviation.
2. The test results presented in this report relate only to the object tested. The information supplied by the customer can affect the validity of results.

2.4. Accessory and Auxiliary Equipment

Notebook : Manufacturer: DELL
M/N: P48F
TYPE: P48F001
S/N: 6DCCRC2

Adapter for Notebook : Manufacturer: DELL
M/N: PA-10
S/N: N/A

USB Cable : Unshielded detachable
1.5m

2.5. Description of Test Facility

Name of Firm : Shenzhen Accurate Technology Co., Ltd.

Site Location : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

2.6. Measurement Uncertainty

Radiated emission expanded uncertainty (30MHz-1000MHz) : $U=4.28dB, k=2$

Radiated emission expanded uncertainty (1GHz-18GHz) : $U=4.98dB, k=2$

Conduction Emission Expanded Uncertainty (150kHz-30MHz) : $U=2.72dB, k=2$

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. For Conducted Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESPI3	100396	Dec. 24, 2020	1 Year
2.	L.I.S.N.	R & S	ENV216	101314	Dec. 25, 2020	1 Year
3.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200506474	Dec. 25, 2020	1 Year
4.	RF Coaxial Cable	Unknown	N-2m	No.2	Dec. 25, 2020	1 Year
5.	Conducted Emission Test Software: ES-K1 V1.71					

3.2. For Radiated Emission Measurement (Below 1GHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde& Schwarz	ESR	101817	Dec. 24, 2020	1 Year
2.	Amplifier	SONOMA INSTRUMENT	310 N	186131	Dec. 25, 2020	1 Year
3.	50 Coaxial Switch	Anritsu Corp	MP59B	6100237248	Dec. 25, 2020	1 Year
4.	Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan.05, 2020	3 Year
5.	RF Coaxial Cable	Unknown	N-5m	No.3	Dec. 25, 2020	1 Year
6.	RF Coaxial Cable	Unknown	N-1m	No.5	Dec. 25, 2020	1 Year
7.	Radiated Emission Test Software: EZ EMC V 1.1.4.2					

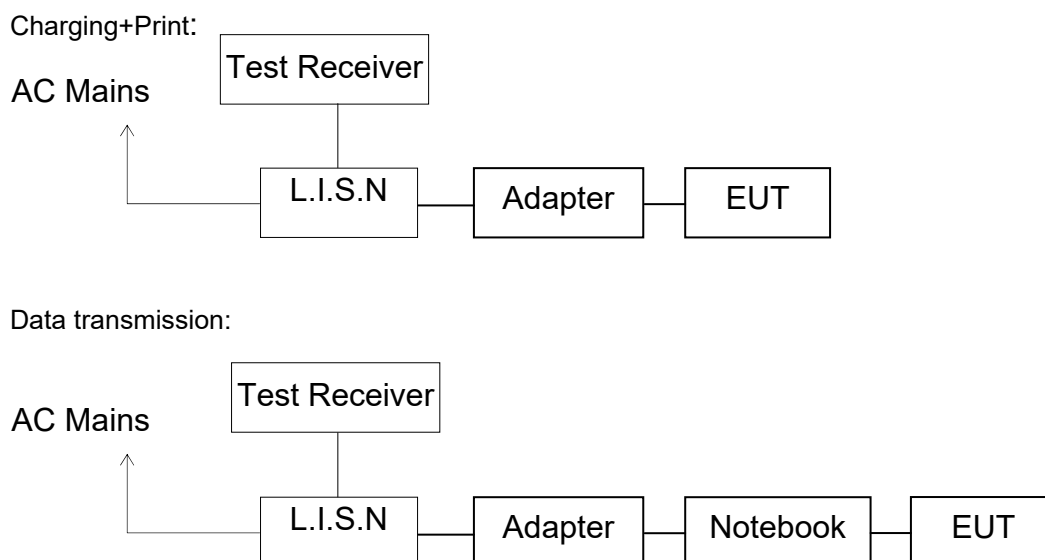
3.3. For Radiated Emission Measurement (Above 1GHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan. 05, 2020	3 Year
2.	Preamplifier	A.H. Systems, inc.	PAM-0118P	531	July 08, 2021	1 Year
3.	Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	Dec. 24, 2020	1 Year
4.	RF Coaxial Cable	Unknown	N-5m	No.4	Dec. 25, 2020	1 Year
5.	RF Coaxial Cable	Unknown	N-1m	No.6	Dec. 25, 2020	1 Year
6.	Radiated Emission Test Software: EZ EMC V 1.1.4.2					

4. CONDUCTED EMISSION MEASUREMENT

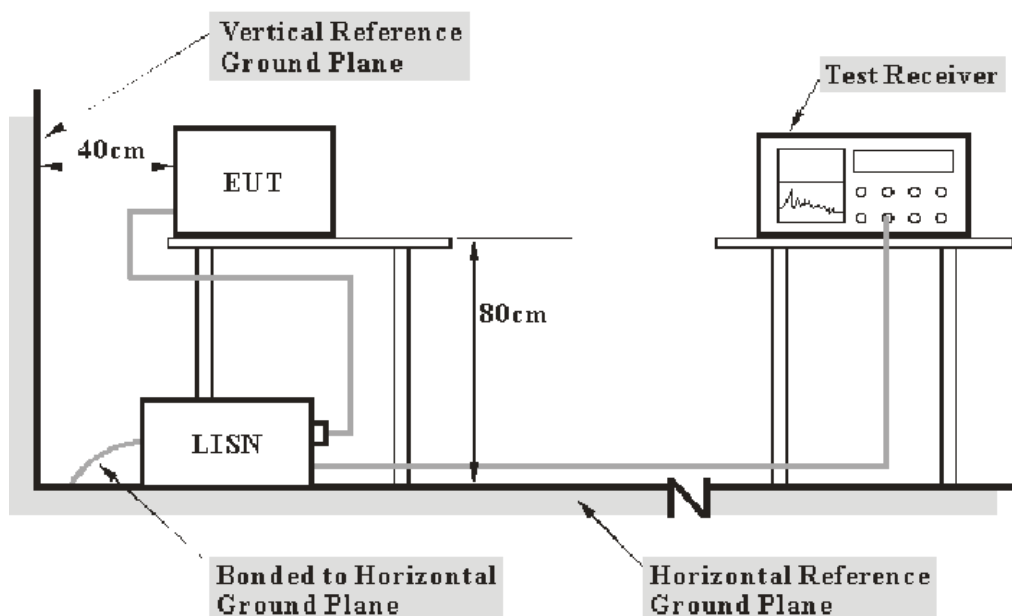
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: Wireless POS Terminal)

4.1.2. Test System Setup



- Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

4.2. Power Line Conducted Emission Measurement Limits (Class B)

Frequency (MHz)	Limit dB(μ V)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

NOTE1: The lower limit shall apply at the transition frequencies.
NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

4.3. Test mode description

Test mode 1: Charging+Print

Test mode 2: Data transmission

4.4. Manufacturer

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

4.4.1. Wireless POS Terminal (EUT)

Model Number : V71

Manufacturer : Vanstone Electronic (Beijing) Co., Ltd.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.1.

4.5.2. Turn on the power of all equipments.

4.5.3. Let the EUT work in test mode and measure it.

4.6. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2014 on Conducted Emission Measurement.

The bandwidth of test receiver is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

4.7. Data Explain

Margin = Limit (dB μ V) - Level (dB μ V)

4.8. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

All data was recorded in the Quasi-peak and average detection mode.

The spectral diagrams are attached as below.

Test mode1
For Adapter1

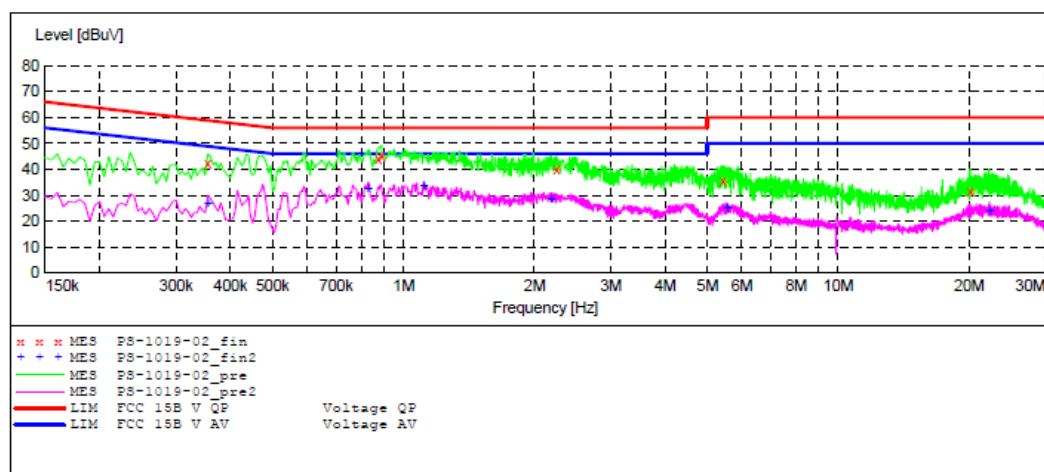
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Wireless POS Terminal M/N:V71
 Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.
 Operating Condition: Charging+Print
 Test Site: 2#Shielding Room
 Operator: Black
 Test Specification: L 120V/60Hz
 Comment: SZXX1210918-48932E-EM
 Start of Test: 2021-10-19 / 09:20:23

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz ENV216
 Average



MEASUREMENT RESULT: "PS-1019-02_fin"

2021-10-19 09:21

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.355000	41.90	10.9	59	17.1	QP	L1	GND
0.875000	43.80	11.1	56	12.2	QP	L1	GND
0.890000	45.00	11.1	56	11.0	QP	L1	GND
2.250000	39.80	11.3	56	16.2	QP	L1	GND
5.430000	35.30	11.5	60	24.7	QP	L1	GND
20.150000	31.70	11.7	60	28.3	QP	L1	GND

MEASUREMENT RESULT: "PS-1019-02_fin2"

2021-10-19 09:21

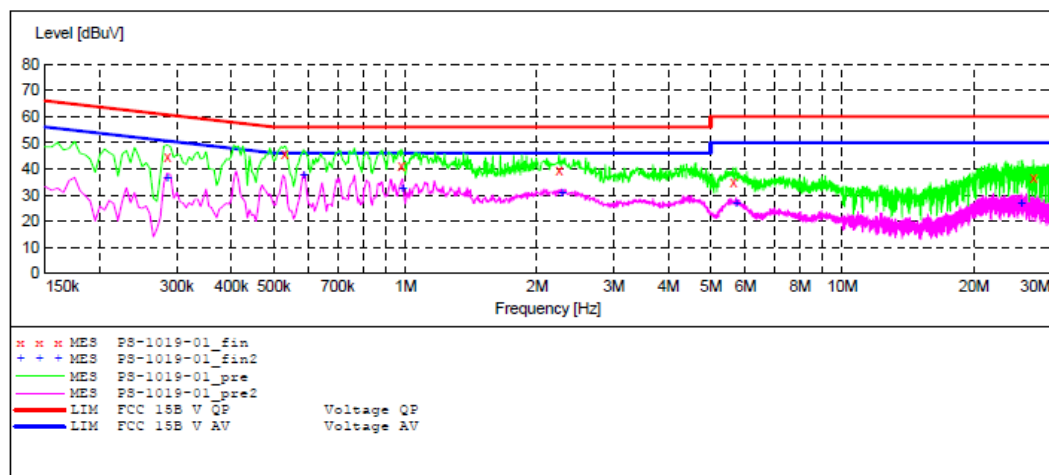
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.355000	27.10	10.9	49	21.9	AV	L1	GND
0.830000	32.80	11.1	46	13.2	AV	L1	GND
1.115000	33.50	11.2	46	12.5	AV	L1	GND
2.190000	28.90	11.3	46	17.1	AV	L1	GND
5.560000	24.90	11.5	50	25.1	AV	L1	GND
22.325000	24.10	11.7	50	25.9	AV	L1	GND

ACCURATE TECHNOLOGY CO., LTD**CONDUCTED EMISSION STANDARD FCC PART 15B**

EUT: Wireless POS Terminal M/N:V71
 Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.
 Operating Condition: Charging+Print
 Test Site: 2#Shielding Room
 Operator: Black
 Test Specification: N 120V/60Hz
 Comment: SZXX1210918-48932E-EM
 Start of Test: 2021-10-19 / 09:18:16

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz ENV216
 Average

**MEASUREMENT RESULT: "PS-1019-01_fin"**

2021-10-19 09:19

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.285000	44.30	10.9	61	16.7	QP	N	GND
0.530000	45.50	11.0	56	10.5	QP	N	GND
0.980000	41.40	11.1	56	14.6	QP	N	GND
2.250000	39.60	11.3	56	16.4	QP	N	GND
5.630000	34.80	11.5	60	25.2	QP	N	GND
27.375000	36.40	11.8	60	23.6	QP	N	GND

MEASUREMENT RESULT: "PS-1019-01_fin2"

2021-10-19 09:19

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.285000	36.80	10.9	51	14.2	AV	N	GND
0.585000	37.70	11.0	46	8.3	AV	N	GND
0.985000	32.70	11.1	46	13.3	AV	N	GND
2.280000	31.20	11.3	46	14.8	AV	N	GND
5.720000	27.10	11.5	50	22.9	AV	N	GND
25.675000	26.90	11.7	50	23.1	AV	N	GND

For Adapter2

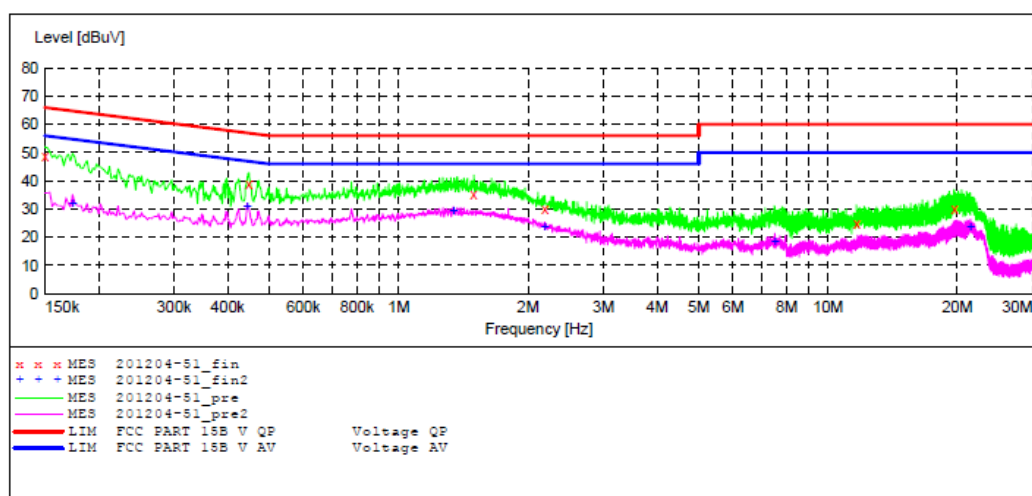
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Wireless POS Terminal M/N:V71
Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.
Operating Condition: Charging+Print
Test Site: 2#Shielding Room
Operator: Black
Test Specification: L 120V/60Hz
Comment: SZXX1210918-48932E-EM
KELI

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz ENV216
Average



MEASUREMENT RESULT: "201204-51_fin"

2021-10-20 14:22

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.150000	48.80	10.8	66	17.2	QP	L1	GND
0.448000	38.80	11.0	57	18.2	QP	L1	GND
1.496000	35.30	11.2	56	20.7	QP	L1	GND
2.190000	30.00	11.3	56	26.0	QP	L1	GND
11.635000	24.70	11.6	60	35.3	QP	L1	GND
19.650000	30.20	11.7	60	29.8	QP	L1	GND

MEASUREMENT RESULT: "201204-51_fin2"

2021-10-20 14:22

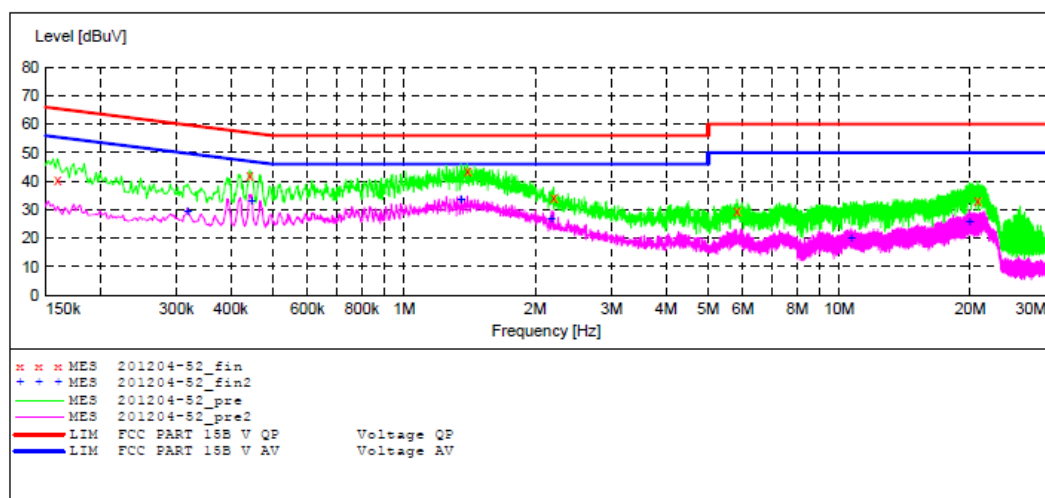
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.174000	31.90	10.8	55	23.1	AV	L1	GND
0.444000	30.90	11.0	47	16.1	AV	L1	GND
1.342000	29.50	11.2	46	16.5	AV	L1	GND
2.190000	24.00	11.3	46	22.0	AV	L1	GND
7.515000	18.40	11.5	50	31.6	AV	L1	GND
21.450000	23.70	11.7	50	26.3	AV	L1	GND

ACCURATE TECHNOLOGY CO., LTD**CONDUCTED EMISSION STANDARD FCC PART 15B**

EUT: Wireless POS Terminal M/N:V71
 Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.
 Operating Condition: Charging+Print
 Test Site: 2#Shielding Room
 Operator: Black
 Test Specification: N 120V/60Hz
 Comment: SZXX1210918-48932E-EM
 KELI

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz ENV216
 Average

**MEASUREMENT RESULT: "201204-52_fin"**

2021-10-20 14:26

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.160000	40.60	10.8	66	25.4	QP	N	GND
0.442000	41.90	11.0	57	15.1	QP	N	GND
1.398000	43.50	11.2	56	12.5	QP	N	GND
2.205000	34.40	11.3	56	21.6	QP	N	GND
5.820000	29.70	11.5	60	30.3	QP	N	GND
20.770000	33.40	11.7	60	26.6	QP	N	GND

MEASUREMENT RESULT: "201204-52_fin2"

2021-10-20 14:26

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.318000	29.70	10.9	50	20.3	AV	N	GND
0.446000	33.30	11.0	47	13.7	AV	N	GND
1.350000	33.60	11.2	46	12.4	AV	N	GND
2.180000	26.70	11.3	46	19.3	AV	N	GND
10.645000	20.20	11.6	50	29.8	AV	N	GND
19.915000	25.70	11.7	50	24.3	AV	N	GND

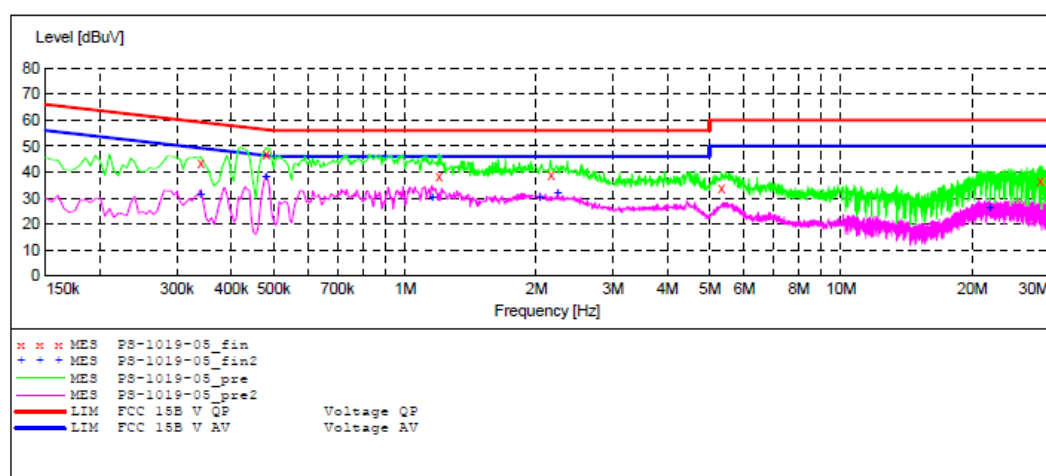
Test mode2

ACCURATE TECHNOLOGY CO.,LTD**CONDUCTED EMISSION STANDARD FCC PART 15B**

EUT: Wireless POS Terminal M/N:V71
 Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.
 Operating Condition: Data Transmission
 Test Site: 2#Shielding Room
 Operator: Black
 Test Specification: N 120V/60Hz
 Comment: SZXX1210918-48932E-EM
 Start of Test: 2021-10-19 / 09:25:41

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz ENV216
 Average

**MEASUREMENT RESULT: "PS-1019-05_fin"**

2021-10-19 09:27

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.340000	42.00	10.9	59	17.0	QP	N	GND
0.480000	47.10	11.0	56	8.9	QP	N	GND
1.195000	38.50	11.2	56	17.5	QP	N	GND
2.160000	39.10	11.3	56	16.9	QP	N	GND
5.320000	33.60	11.4	60	26.4	QP	N	GND
28.675000	36.80	11.8	60	23.2	QP	N	GND

MEASUREMENT RESULT: "PS-1019-05_fin2"

2021-10-19 09:27

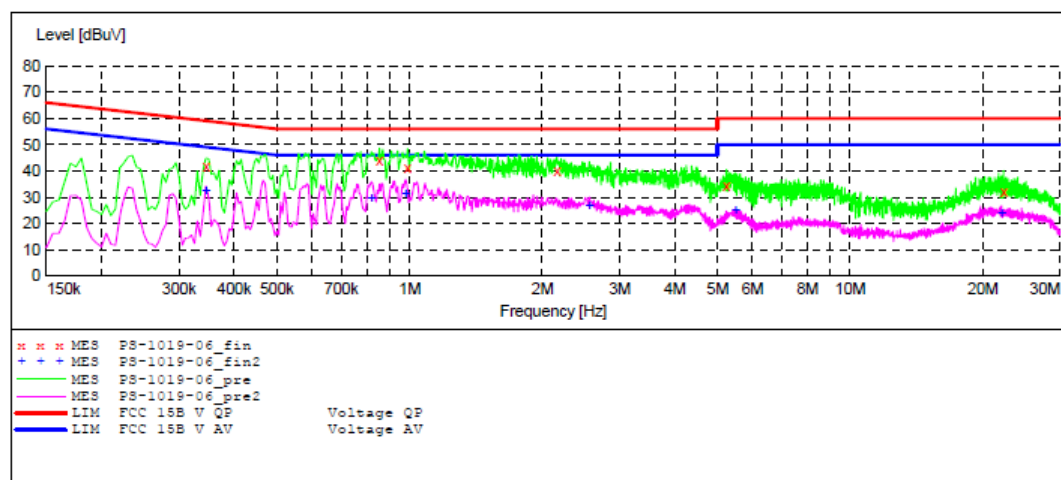
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.340000	31.50	10.9	49	17.5	AV	N	GND
0.480000	38.30	11.0	46	7.7	AV	N	GND
1.155000	30.60	11.2	46	15.4	AV	N	GND
2.040000	30.50	11.3	46	15.5	AV	N	GND
2.240000	32.00	11.3	46	14.0	AV	N	GND
21.975000	26.20	11.7	50	23.8	AV	N	GND

ACCURATE TECHNOLOGY CO., LTD**CONDUCTED EMISSION STANDARD FCC PART 15B**

EUT: Wireless POS Terminal M/N:V71
 Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.
 Operating Condition: Data Transmission
 Test Site: 2#Shielding Room
 Operator: Black
 Test Specification: L 120V/60Hz
 Comment: SZXX1210918-48932E-EM
 Start of Test: 2021-10-19 / 09:27:34

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz ENV216
 Average

**MEASUREMENT RESULT: "PS-1019-06_fin"**

2021-10-19 09:28

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.345000	40.80	10.9	59	18.2	QP	L1	GND
0.855000	44.10	11.1	56	11.9	QP	L1	GND
0.990000	41.10	11.1	56	14.9	QP	L1	GND
2.160000	40.30	11.3	56	15.7	QP	L1	GND
5.240000	34.40	11.4	60	25.6	QP	L1	GND
22.325000	32.20	11.7	60	27.8	QP	L1	GND

MEASUREMENT RESULT: "PS-1019-06_fin2"

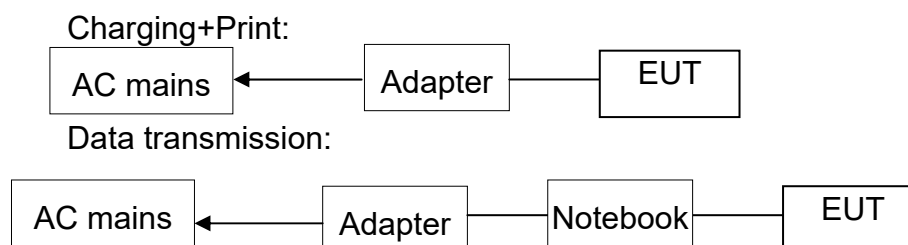
2021-10-19 09:28

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.345000	32.50	10.9	49	16.6	AV	L1	GND
0.820000	29.90	11.1	46	16.1	AV	L1	GND
0.980000	31.50	11.1	46	14.5	AV	L1	GND
2.560000	26.80	11.3	46	19.2	AV	L1	GND
5.490000	25.10	11.5	50	24.9	AV	L1	GND
22.100000	24.20	11.7	50	25.8	AV	L1	GND

5. RADIATED EMISSION MEASUREMENT

5.1. Block Diagram of Test Setup

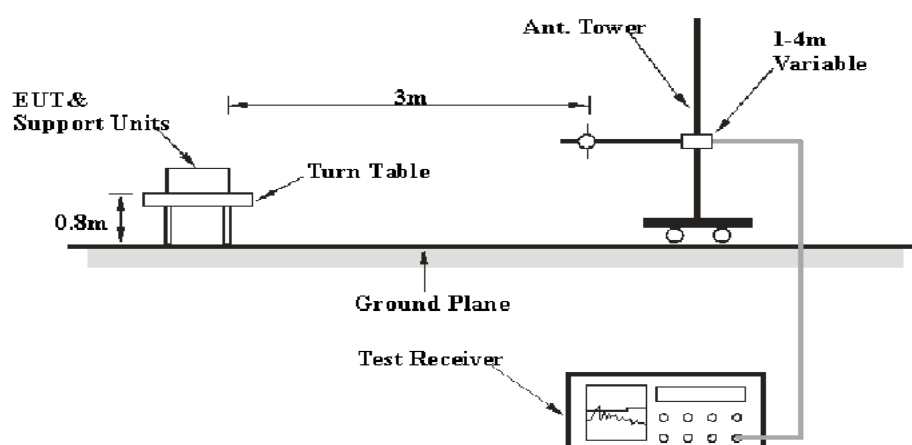
5.1.1. Block diagram of connection between the EUT and simulators



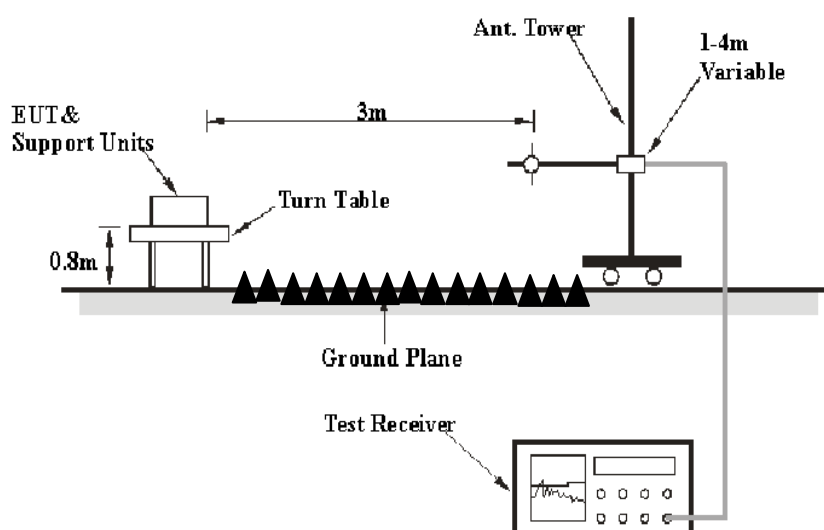
(EUT: Wireless POS Terminal)

5.1.2. Test System Setup

Below 1GHz:



Above 1GHz:



5.2. Radiated Emission Limit (Class B)

All emanations from a class B device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Below 1GHz:

Frequency MHz	Distance Meters	Field Strengths Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V/m})$
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
960-1000	3	500	54.0

Remark:

(1) Emission level $\text{dB}(\mu\text{V}) = 20 \log$ Emission level $\mu\text{V/m}$.

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument antenna and the closest point of any part of the device or system.

Above 1GHz:

Frequency MHz	Distance Meters	Field Strengths Limit($\text{dB}\mu\text{V/m}$)	
		Peak	Average
Above 1000MHz	3	74.0	54.0

5.3. Test mode description

Test mode 1: Charging+Print

Test mode 2: Data transmission

5.4. Manufacturer

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

5.5. Operating Condition of EUT

5.5.1. Setup the EUT and simulator as shown as Section 5.1.

5.5.2. Turn on the power of all equipments.

5.5.3. Let the EUT work in test mode and measure it.

5.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2014 on radiated emission measurement.

The bandwidth of the Receiver is set at 9kHz in 9kHz-30MHz, 120 kHz in 30-1000MHz, and 1MHz for above 1GHz.

The frequency range from 30MHz to 18GHz is investigated.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30.
1.705–108	1000.
108–500	2000.
500–1000	5000.
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

5.7. Data Sample

Margin (dB) = Level(dB μ v/m) - Limit (dB μ v/m)

QP = Quasi-peak Reading

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

5.8. Radiated Emission Measurement Result

PASS.

The frequency range from 30MHz to 18GHz is investigated.

The spectral diagrams are attached as below.

Test mode1

For Adapter1

Job No.: ding #2529

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Printing

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Horizontal

Power Source: AC 120V/60Hz

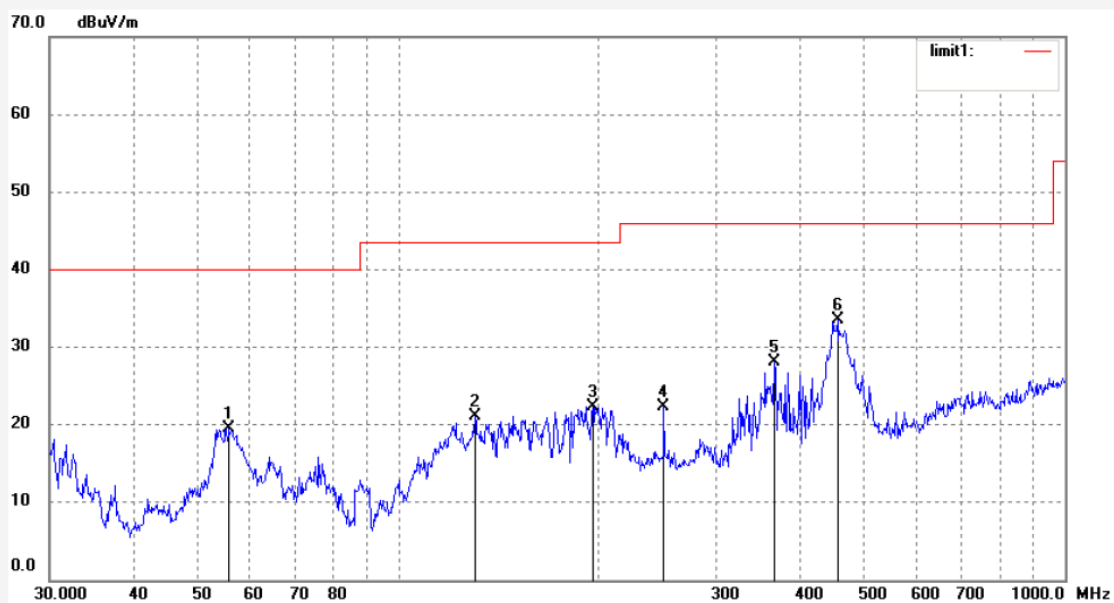
Date: 21/10/18/

Time: 13/50/57

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	55.8046	37.14	-17.60	19.54	40.00	-20.46	peak			
2	130.3788	39.94	-18.81	21.13	43.50	-22.37	peak			
3	195.8220	39.97	-17.63	22.34	43.50	-21.16	peak			
4	250.3009	38.83	-16.44	22.39	46.00	-23.61	peak			
5	366.8231	41.22	-13.11	28.11	46.00	-17.89	peak			
6	455.9057	44.13	-10.68	33.45	46.00	-12.55	peak			

Job No.: ding #2530

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Printing

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Vertical

Power Source: AC 120V/60Hz

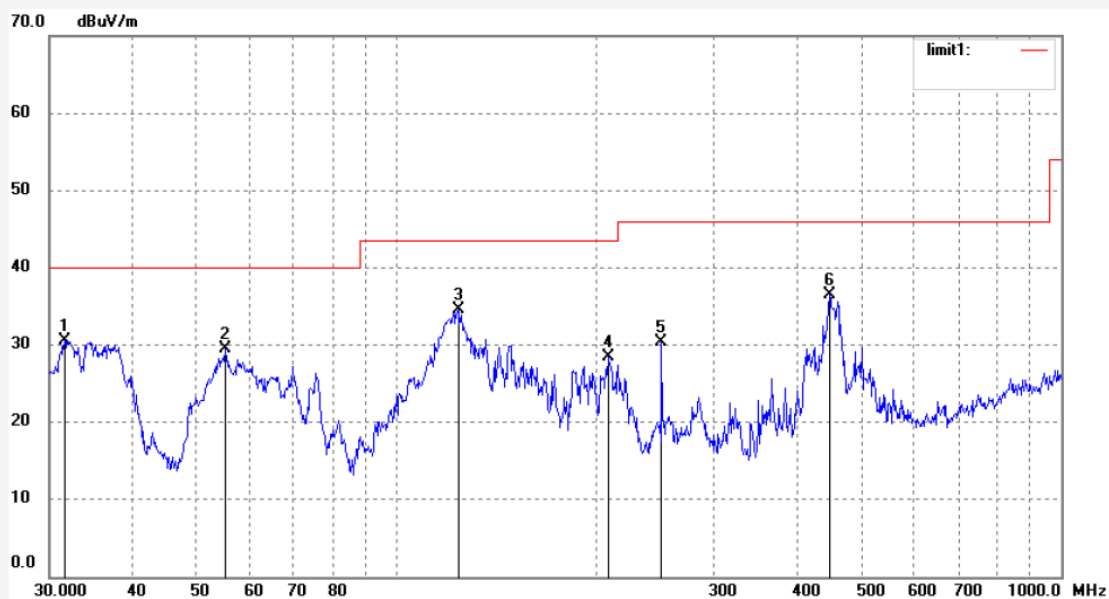
Date: 21/10/18/

Time: 13/56/06

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	31.6202	44.54	-14.04	30.50	40.00	-9.50	peak			
2	55.2207	47.14	-17.73	29.41	40.00	-10.59	peak			
3	123.6984	53.01	-18.52	34.49	43.50	-9.01	peak			
4	207.8498	45.91	-17.49	28.42	43.50	-15.08	peak			
5	250.3009	46.76	-16.44	30.32	46.00	-15.68	peak			
6	447.9821	47.14	-10.73	36.41	46.00	-9.59	peak			

Job No.: DING #2539

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Print

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Horizontal

Power Source: AC 120V/60Hz

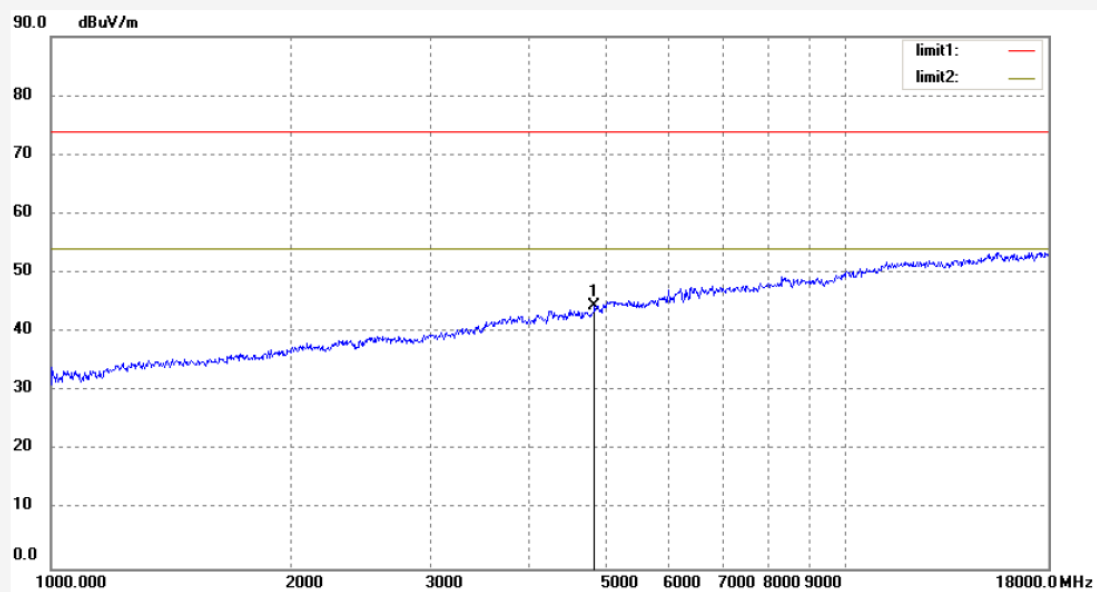
Date: 21/10/18/

Time: 10/34/59

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4824.000	41.51	2.87	44.38	74.00	-29.62	peak			

Job No.: DING #2538

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Print

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Vertical

Power Source: AC 120V/60Hz

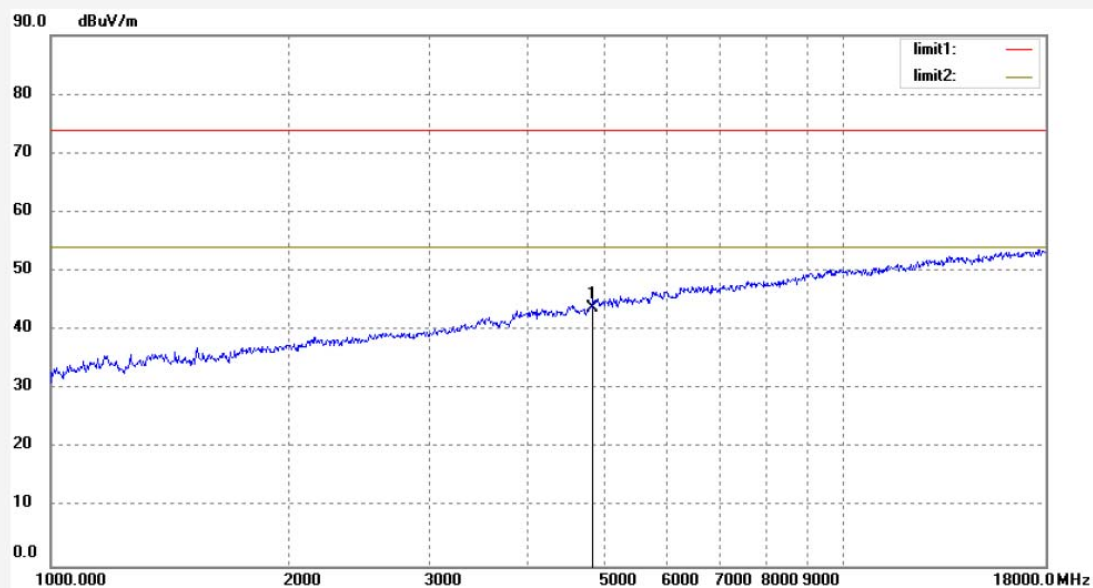
Date: 21/10/18/

Time: 10/33/24

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4824.000	40.97	2.87	43.84	74.00	-30.16	peak			

For Adapter2

Job No.: ding #2603

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Printing

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Horizontal

Power Source: AC 120V/60Hz

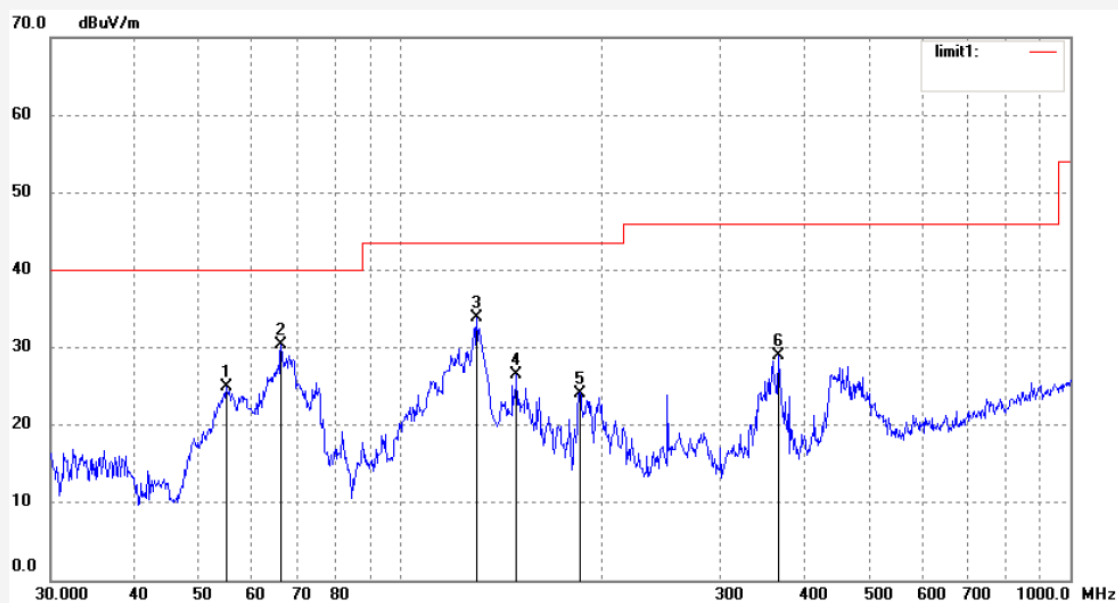
Date: 21/10/19/

Time: 12/49/16

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	54.8348	42.39	-17.39	25.00	40.00	-15.00	peak			
2	66.2660	49.97	-19.65	30.32	40.00	-9.68	peak			
3	129.9225	52.68	-18.79	33.89	43.50	-9.61	peak			
4	148.9625	46.52	-20.07	26.45	43.50	-17.05	peak			
5	185.1379	41.96	-17.81	24.15	43.50	-19.35	peak			
6	366.8231	42.01	-13.11	28.90	46.00	-17.10	peak			

Job No.: ding #2602

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Printing

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Vertical

Power Source: AC 120V/60Hz

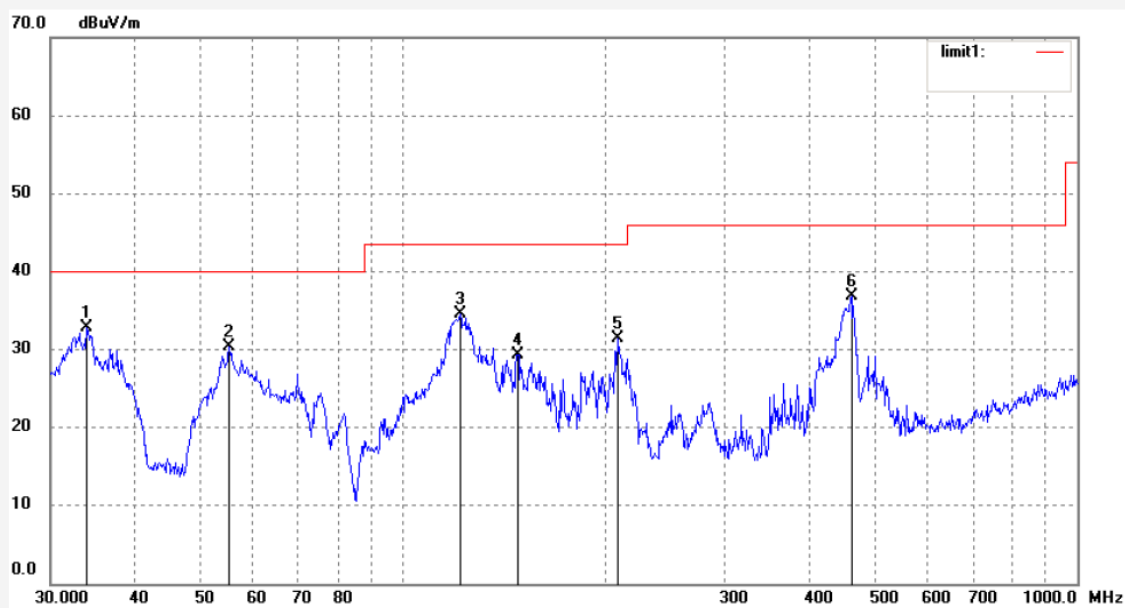
Date: 21/10/19/

Time: 12/46/06

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



Job No.: ding #2607

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Printing

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Horizontal

Power Source: AC 120V/60Hz

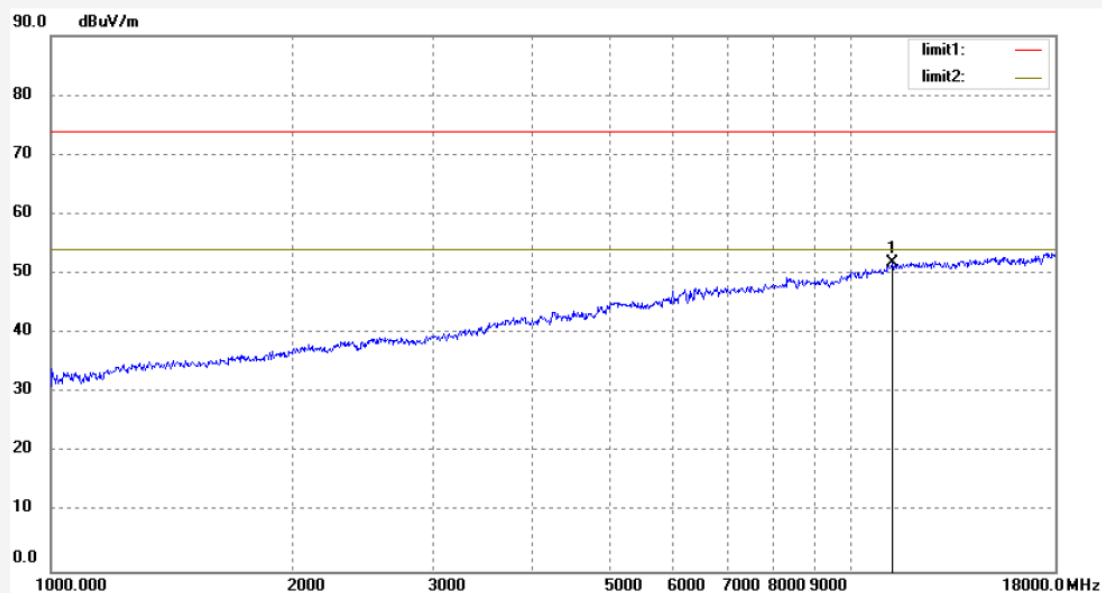
Date: 21/10/19/

Time: 13/34/59

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	11269.856	36.29	15.47	51.76	74.00	-22.24	peak			

Job No.: ding #2606

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Charging+Printing

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Vertical

Power Source: AC 120V/60Hz

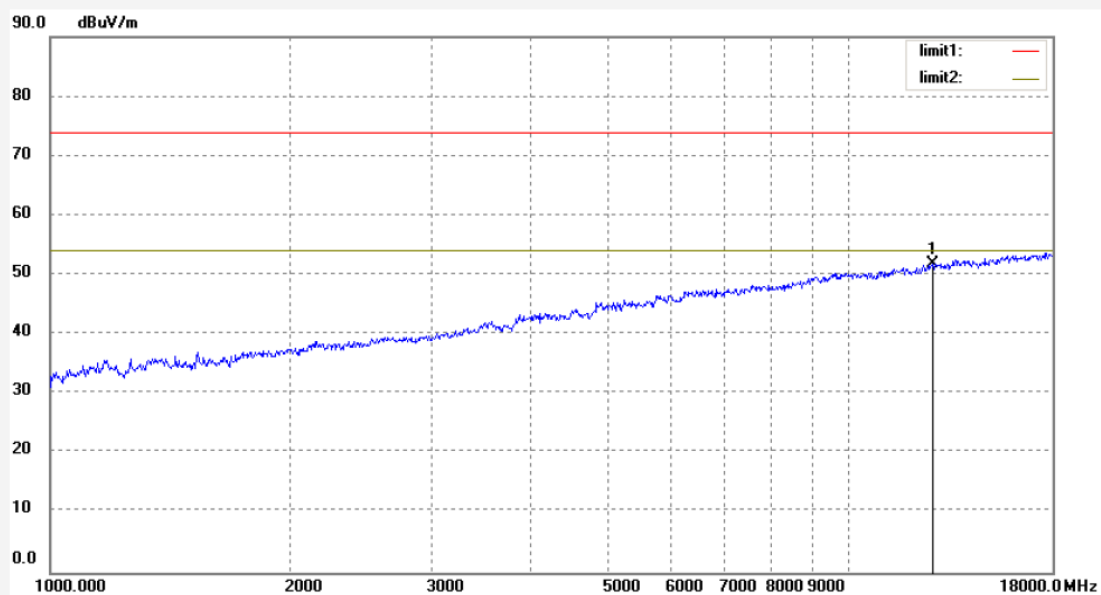
Date: 21/10/19/

Time: 13/30/24

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12724.473	35.87	15.91	51.78	74.00	-22.22	peak			

Test mode2

Job No.: DING #2528

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Data transmission

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Horizontal

Power Source: DC 5V

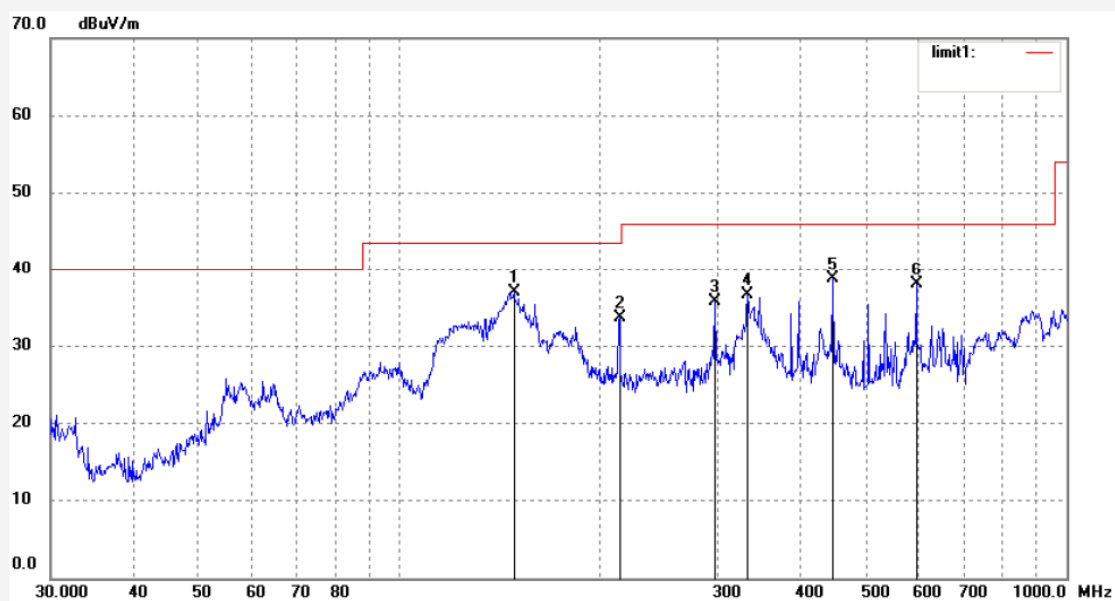
Date: 21/10/18/

Time: 15/48/26

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



Job No.: DING #2527

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Data transmission

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Vertical

Power Source: DC 5V

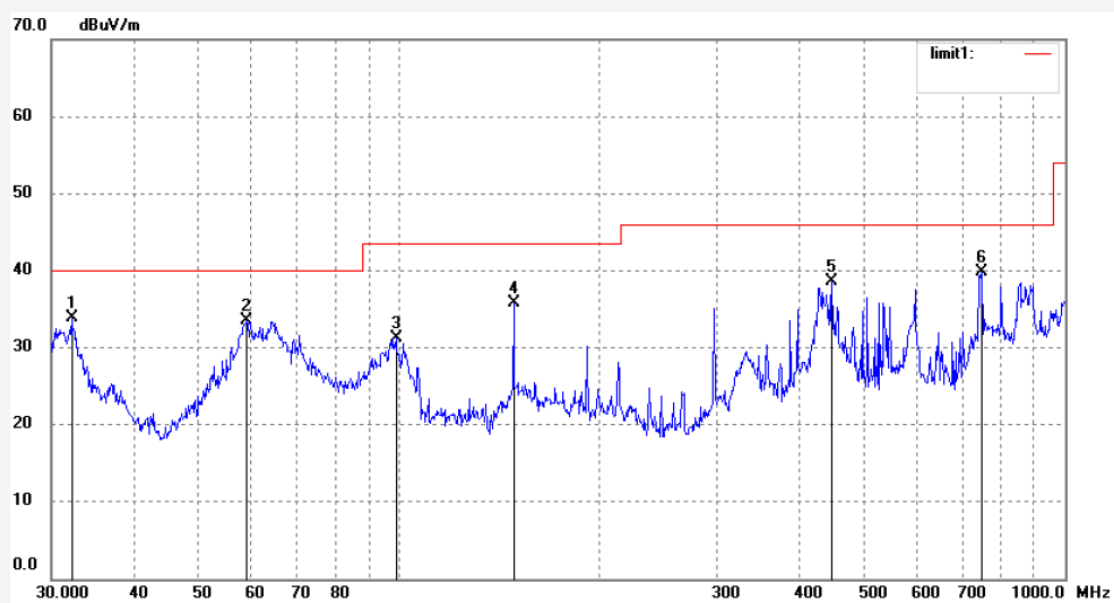
Date: 21/10/18/

Time: 15/44/38

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.1794	48.09	-14.21	33.88	40.00	-6.12	peak			
2	59.0251	51.98	-18.49	33.49	40.00	-6.51	peak			
3	98.8324	49.71	-18.49	31.22	43.50	-12.28	peak			
4	148.4410	55.85	-20.08	35.77	43.50	-7.73	peak			
5	446.4141	49.29	-10.78	38.51	46.00	-7.49	peak			
6	750.1082	45.70	-5.89	39.81	46.00	-6.19	peak			

Job No.: DING #2555

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Data transmission

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Horizontal

Power Source: DC 5V

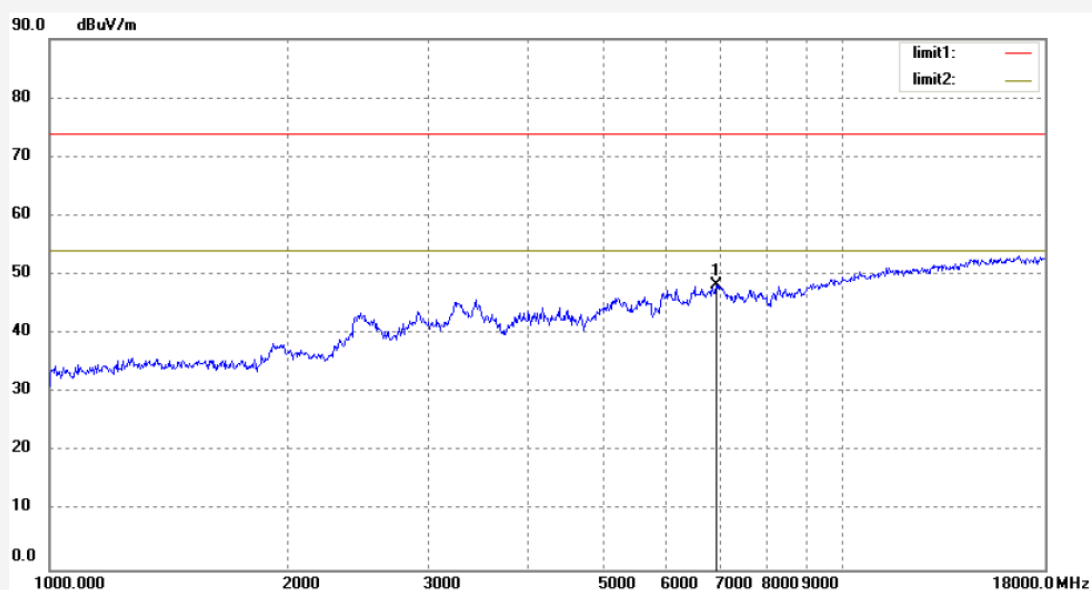
Date: 21/10/18/

Time: 10/56/46

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	6934.778	42.21	6.09	48.30	74.00	-25.70	peak			

Job No.: DING #2556

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless POS Terminal

Mode: Data transmission

Model: V71

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Polarization: Vertical

Power Source: DC 5V

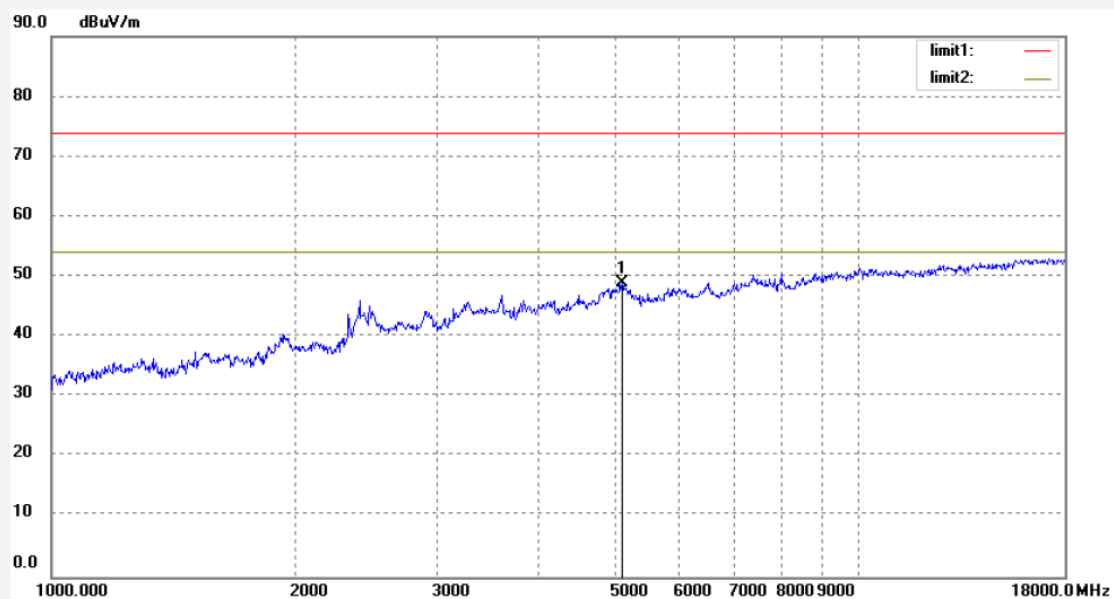
Date: 21/10/18/

Time: 10/58/10

Engineer Signature: Black

Distance: 3m

Note: Report No.:SZXX1210918-48932E-EM



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5090.007	45.51	3.38	48.89	74.00	-25.11	peak			

----- THE END OF TEST REPORT -----