FCC CERTIFICATION
On Behalf of
Shenzhen New Force Communication Technology Co., Ltd.

2.45GHz Active Reader
Model No.: NFC-2411, NFC-2401, NFC-2420, NFC-2430, NFC-2440, NFC-2412, NFC-2421, NFC-2422, NFC-2431, NFC-2441

FCC ID: VM7-NFC-2411

Prepared for	:	Shenzhen New Force Communication Technology Co., Ltd.
Address	:	8061 west HongLi Rd. zhongHe Bldg.ste.110-218 Fu Ti Shenzhen, China
Prepared by	:	ACCURATE TECHNOLOGY CO. LTD
Address	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China Tel: (0755) 26503290 Fax: (0755) 26503396

Report Number	:	ATE20122446
Date of Test	:	October 24-November 10, 20112
Date of Report	:	November 12, 20112

TABLE OF CONTENTS

Description Page

Test Report Certification

Applicant	:	Shenzhen New Force Communication Technology Co., Ltd.
Manufacturer	:	Shenzhen New Force Communication Technology Co., Ltd.
EUT Description	:	2.45GHz Active Reader
		(A) MODEL NO.: NFC-2411, NFC-2401, NFC-2420, NFC-2430, NFC-2440, NFC-2412, NFC-2421, NFC-2422, NFC-2431, NFC-2441
		(B) POWER SUPPLY: 5V DC (Power By Adapter)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249
ANSI C63.4: 2009

The device described above is tested by 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 C Section15.249 limits. The measurement results are contained in this test report and 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 ACCURATE TECHNOLOGY CO. LTD.

Date of Test : October 24-November 10, 20112

Prepared by :

(Engineer)

Approved & Authorized Signer :

(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	2.45GHz Active Reader
Model Number	:	NFC-2411, NFC-2401, NFC-2420, NFC-2430, NFC-2440, NFC-2412, NFC-2421, NFC-2422, NFC-2431, NFC-2441 (Note: These samples are identical, except the model name is difference. Therefore only model NFC-2411 is tested for EMC tests.)
Power Supply	:	5V DC (Power By Adapter)
Adaptor	:	Model number: SWN006S050100C1 Input: AC 100-240V; 50/60Hz Output: DC 5V; 1A Output line: Non-shielded, Non-detachable, 1.5m
Operate Frequency	:	2401.000-2481.000MHz
Applicant	:	Shenzhen New Force Communication Technology Co., Ltd.
Address	:	8061 west HongLI Rd. zhongHe Bldg.ste.110-218 Fu Ti Shenzhen, China
Manufacturer	:	Shenzhen New Force Communication Technology Co., Ltd.
Address	:	8061 west HongLI Rd. zhongHe Bldg.ste.110-218 Fu Ti Shenzhen, China
Date of sample received	:	October 24, 2012
Date of Test	:	October 24-November 10, 20112

1.2.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 Listed by Industry Canada The Registration Number is 5077A-2 Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	:	ACCURATE TECHNOLOGY CO. LTD
Site Location	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 8, 2012	Jan. 7, 2013
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 8, 2012	Jan. 7, 2013
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 8, 2012	Jan. 7, 2013
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	Jan. 8, 2012	Jan. 7, 2013
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 8, 2012	Jan. 7, 2013
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 8, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 8, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 8, 2012	Jan. 7, 2013
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 8, 2012	Jan. 7, 2013
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 8, 2012	Jan. 7, 2013

3. SUMMARY OF TEST RESULTS

FCC Rules	**Description of Test**	**Result**
Section 15.207	Conducted Emission	Compliant
Section 15.249(a)	Fundamental and Harmonics Radiated Emission	Compliant
Section 15.249(d)	Spurious Radiated Emission	Compliant
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: “N/A” means “Not applicable”.

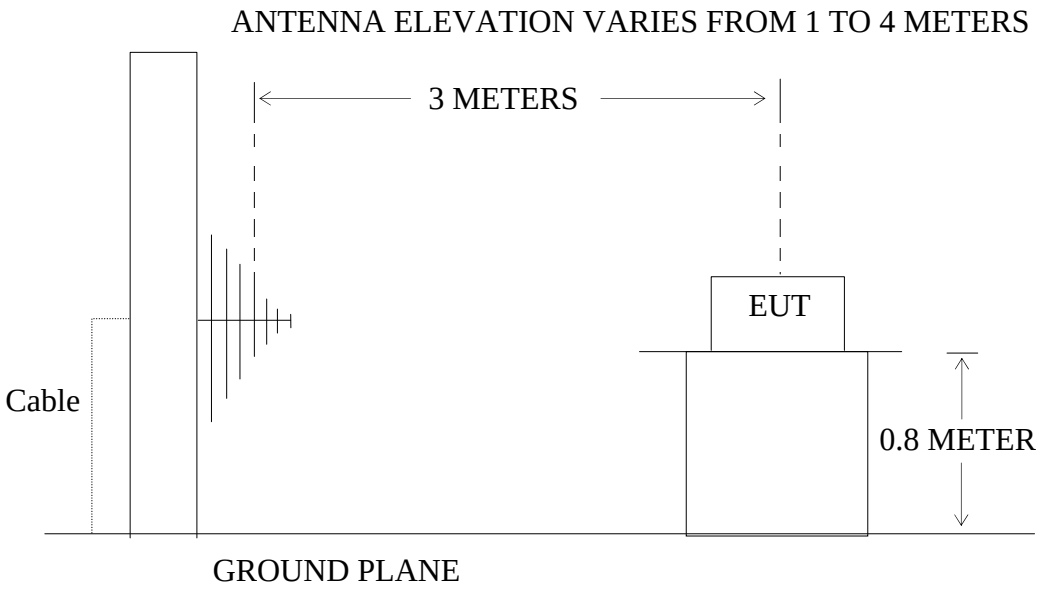
4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A)

4.1.Block Diagram of Test Setup

4.1.1.Block diagram of connection between the EUT and simulators

(EUT: 2.45GHz Active Reader)

4.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: 2.45GHz Active Reader)

4.2.The Emission Limit

4.2.1.For intentional radiators, according to section 15.249(a), operation within the frequency band of 2.4 to 2.4835GHz, the fundamental field strength shall not exceed 94 dBμV/m and the harmonics shall not exceed 54 dBμV/m.

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of harmonics (microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2.According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

4.3.Configuration of EUT on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.3.1. 2.45GHz Active Reader (EUT)

Model Number	**:**	NFC-2411
Serial Number	**:**	N/A
Manufacturer	**:**	Shenzhen New Force Communication Technology Co., Ltd.

4.4.Operating Condition of EUT

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

4.4.2.Turn on the power of all equipment.

4.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2401.000 - 2481.000 MHz MHz. We are select 2401.000MHz, 2441.000MHz, 2481.000MHz TX frequency to transmit.

4.5. 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 bi-log 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: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 25000MHz is checked.

4.6. The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2401.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2401.000	76.90	80.67	-7.46	69.44	73.21	94	114	-24.56	-40.79	Vertical
2401.000	82.00	85.92	-7.46	74.54	78.46	94	114	-19.46	-15.54	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2441.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2441.000	78.90	82.11	-7.35	71.55	74.76	94	114	-22.45	-39.24	Vertical
2441.000	81.02	85.24	-7.35	73.67	77.89	94	114	-20.33	-36.11	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2481.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2481.000	78.23	82.98	-7.37	70.86	75.61	94	114	-23.14	-38.39	Vertical
2481.000	81.28	86.02	-7.37	73.91	78.65	94	114	-20.09	-35.35	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

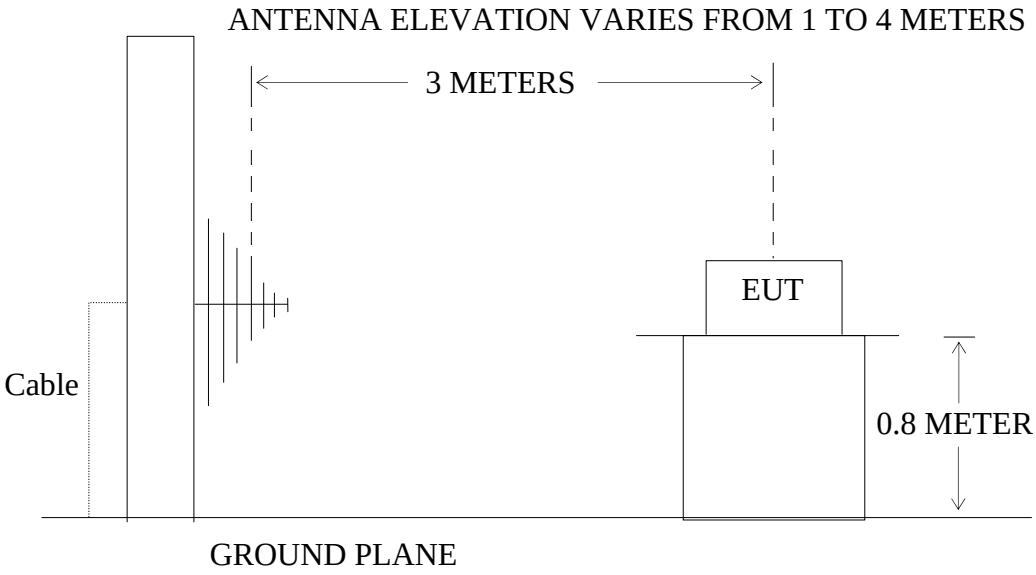
5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators

(EUT: 2.45GHz Active Reader)

5.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: 2.45GHz Active Reader)

5.2.The Emission Limit For Section 15.249(d)

5.2.1.Emission radiated outside of the specified frequency bands, except for harmonics, shall be comply with the general radiated emission limits in Section 15.209.

Radiation Emission Measurement Limits According to Section 15.209

Frequency (MHz)	Limit		
	Field Strength (microvolts/meter)	Measurement Distance (meters)	The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector.
0.009 – 0.490	2400/F(kHz)	300	

0.490 – 1.705	24000/F(kHz)	30	Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
1.705 – 30.0	30	30	
30 - 88	100	3	
88 - 216	150	3	
216 - 960	200	3	
Above 960	500	3	

5.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. 2.45GHz Active Reader (EUT)

Model Number : NFC-2411
Serial Number : N/A
Manufacturer : Shenzhen New Force Communication Technology Co., Ltd.

5.4.Operating Condition of EUT

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

5.4.2.Turn on the power of all equipment.

5.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2401.000 - 2481.000 MHz. We are select 2401.000MHz, 2441.000MHz, 2481.000MHz TX frequency to transmit.

5.5. 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: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9kHz in below 30MHz. and set at 120kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9kHz to 25GHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

5.6. The Emission Measurement Result

PASS.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2401.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

30MHz-25GHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
35.0155	21.39	15.69	37.08	40.00	-2.92	Vertical
51.1756	21.02	14.13	35.15	10.00	-4.85	
209.3924	24.41	14.33	38.74	43.50	-4.76	Horizontal
246.1237	24.91	17.19	42.10	46.00	-3.90	

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2441.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

30MHz-25GH

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
35.5112	21.39	15.57	36.96	40.00	-3.04	Vertical
50.8171	20.02	14.23	345.25	40.00	-5.75	
197.9457	21.64	14.03	35.67	43.5	-7.83	Horizontal
246.1238	22.40	17.19	39.59	46.00	-6.41	

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2481.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

30MHz-25GH

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
35.3867	21.40	15.60	37.00	40.00	-3.00	Vertical
50.4614	20.23	14.34	34.57	40.00	-5.43	
215.3616	24.00	14.62	38.62	43.50	-4.88	Horizontal
246.1237	24.81	17.19	42.00	46.00	-4.00	

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

6. BAND EDGES

6.1.The Requirement

6.1.1.Band Edge from 2400MHz to 2483.5MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

6.2.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.2.1. 2.45GHz Active Reader (EUT)

Model Number	**:**	NFC-2411
Serial Number	**:**	N/A
Manufacturer	**:**	Shenzhen New Force Communication Technology Co., Ltd.

6.3.Operating Condition of EUT

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

6.3.2.Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2401.000-2481.000MHz MHz. We are select 2401.000MHz, 2481.000MHz TX frequency to transmit.

6.4.Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
   RBW=1MHz, VBW=1MHz

6.5.The Measurement Result

Pass.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2401.000MHz	Test Engineer:	Pei

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	41.23	45.09	-7.81	33.51	37.28	54.00	74.00	-20.49	-36.72	Vertical
2385.857	46.58	50.07	-7.56	39.02	42.51	54.00	74.00	-14.98	-31.49	Vertical
2390.000	39.30	43.52	-7.53	31.77	35.99	54.00	74.00	-22.23	-38.01	Vertical
2310.000	40.02	44.57	-7.81	32.21	36.76	54.00	74.00	-21.79	-37.24	Horizontal
2370.088	42.39	46.75	-7.66	34.73	39.09	54.00	74.00	-19.27	-34.91	Horizontal
2390.000	41.39	45.27	-7.53	33.86	37.74	54.00	74.00	-20.14	-36.26	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60HZ
Test Mode:	TX 2481.000MHz	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	41.28	45.90	-7.37	33.91	38.53	54.00	74.00	-20.09	-35.47	Vertical
2495.912	43.28	48.71	-7.39	35.89	41.32	54.00	74.00	-18.11	-32.68	Vertical
2500.000	38.93	43.64	-7.40	31.53	36.24	54.00	74.00	-2.47	-37.76	Vertical
2483.500	41.88	45.96	-7.37	34.51	38.59	54.00	74.00	-19.49	-35.41	Horizontal
2495.912	42.28	48.11	-7.39	34.89	40.72	54.00	74.00	-19.11	-33.28	Horizontal
2500.000	38.92	44.22	-7.40	31.52	36.82	54.00	74.00	-22.48	-37.18	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

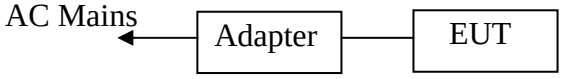
   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

7. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

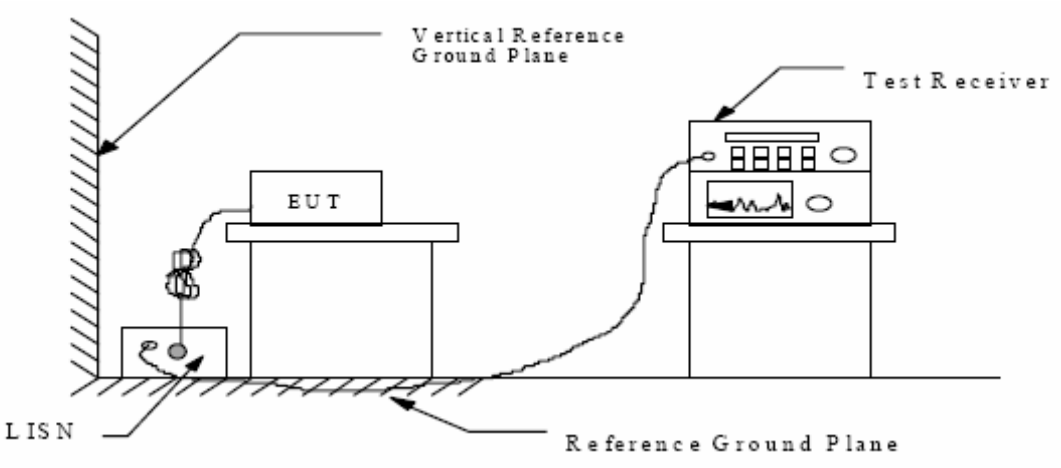
7.1.Block Diagram of Test Setup

7.1.1.Block diagram of connection between the EUT and simulators



(EUT: 2.45GHz Active Reader)

7.1.2.Shielding Room Test Setup Diagram



(EUT: 2.45GHz Active Reader)

7.2.The Emission Limit

7.2.1.Conducted Emission Measurement Limits According to Section 15.207(a)

Frequency (MHz)	Limit dB(μV)	
	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

* Decreases with the logarithm of the frequency.

7.3. Configuration of EUT on Measurement

The following equipment are installed on the Conducted Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.3.1.2.45GHz Active Reader (EUT)

Model Number	**:**	NFC-2411
Serial Number	**:**	N/A

7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3. Let the EUT work in (Tx) mode measure it.

7.5. 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: 2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

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

7.6. Power Line Conducted Emission Measurement Results

PASS.

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

Date of Test:	November 1, 2012	Temperature:	25°C
EUT:	2.45GHz Active Reader	Humidity:	50%
Model No.:	NFC-2411	Power Supply:	AC 120V/60Hz
Test Mode:	TX	Test Engineer:	Pei

Frequency (MHz)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector	Line
0.697543	45.00	56	-11.0	QP	Live
1.825557	34.70	56	-21.3	QP	
14.727440	42.50	60	-17.5	QP	
0.697543	38.40	46	-7.6	AV	
1.945964	28.90	46	-17.1	AV	
14.727440	38.40	50	-11.6	AV	
0.694763	45.50	56	-10.5	QP	Neutral
3.541537	30.60	56	-25.4	QP	
14.436394	39.90	60	-20.1	QP	
0.694763	39.00	46	-7.0	AV	
4.572455	28.40	46	-17.6	AV	
14.668765	36.20	40	-13.8	AV	

Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached as below.

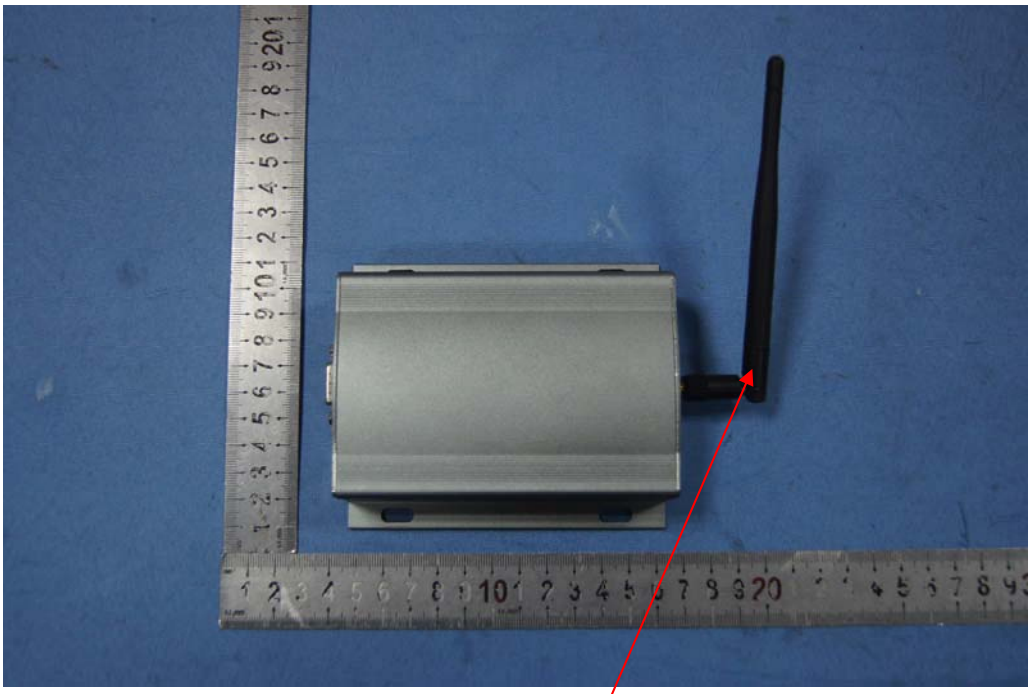
8. ANTENNA REQUIREMENT

8.1. The Requirement

8.1.1. According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2. Antenna Construction

This product use Reverse Polarity (RP-SMA) Antenna. And it is considered to meet antenna requirement of FCC. Refer to the product photo.



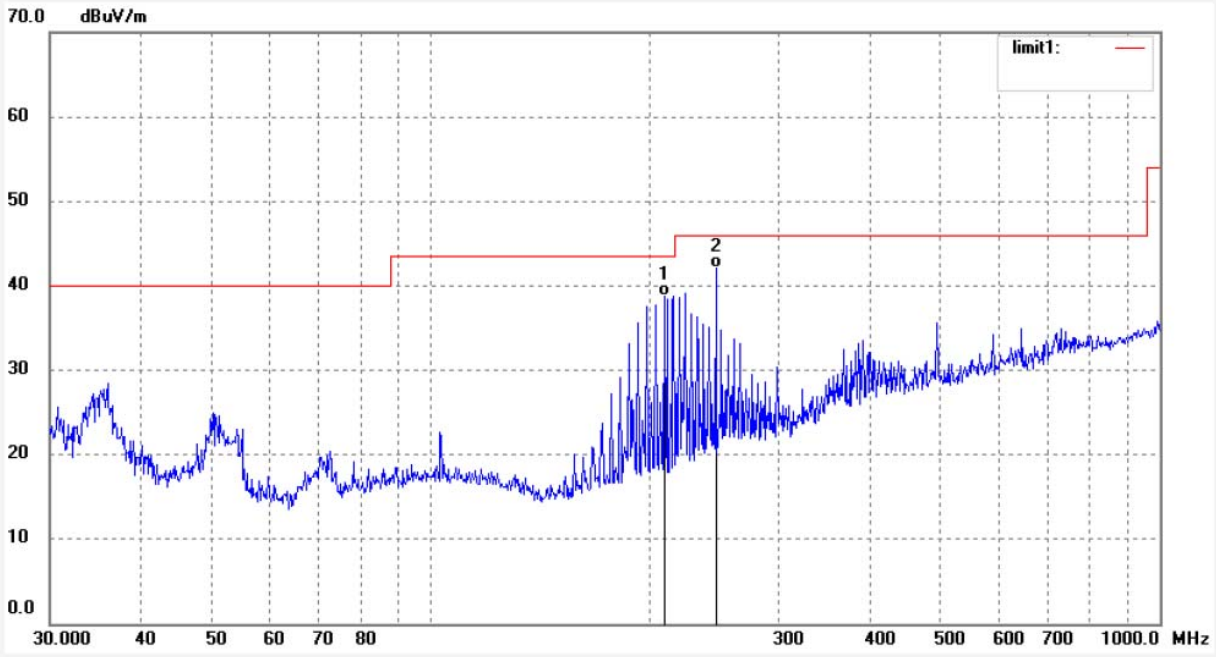
APPENDIX I
(Test Curves)

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3042
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX2401MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/11/01/
Time: 7/44/26
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	209.3924	24.41	14.33	38.74	43.50	-4.76	QP			
2	246.1237	24.91	17.19	42.10	46.00	-3.90	QP			

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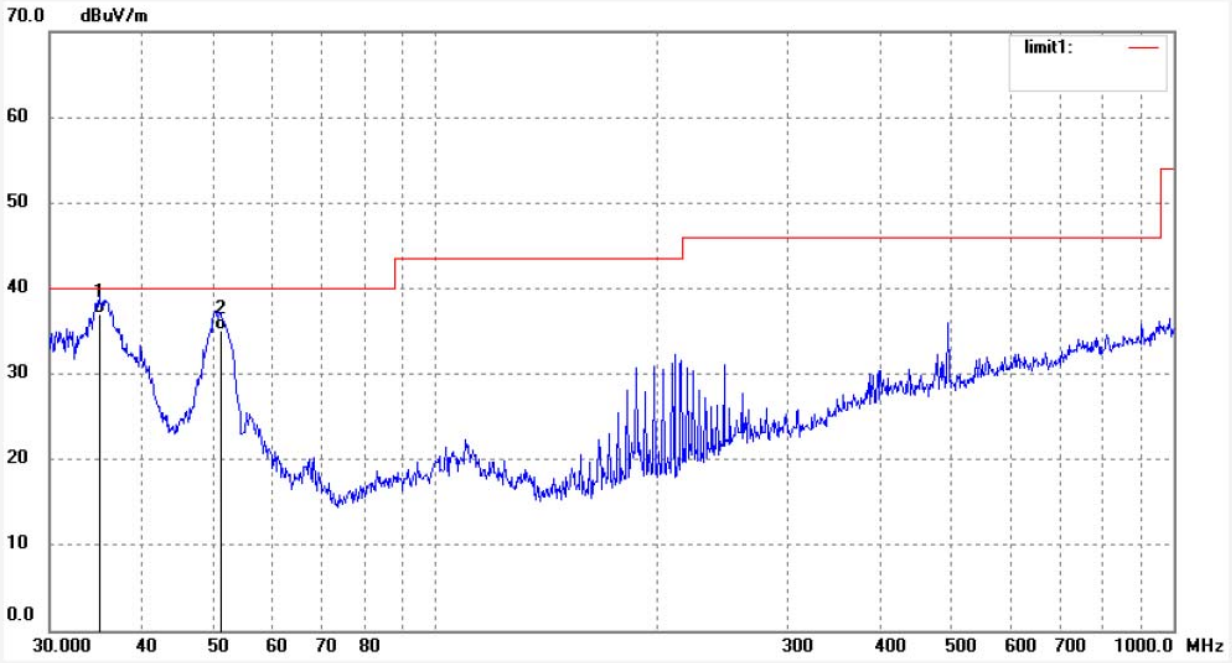
Fax:+86-0755-26503396

Job No.: STAR #3041
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX2401MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/11/01/
Time: 7/41/48
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.0155	21.39	15.69	37.08	40.00	-2.92	QP			
2	51.1756	21.02	14.13	35.15	40.00	-4.85	QP			

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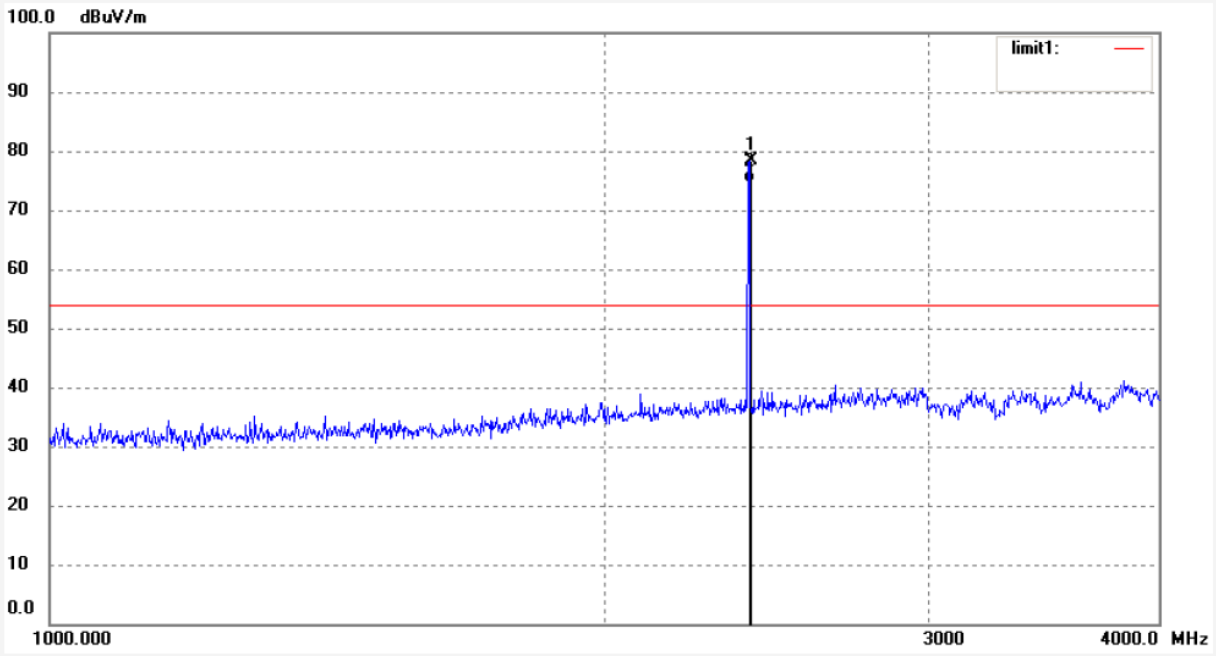
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3054	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 9/04/00
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2401MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2401.000	85.92	-7.46	78.46	114.00	-15.54	peak			
2	2401.000	82.00	-7.46	74.54	94.00	-19.46	AVG			

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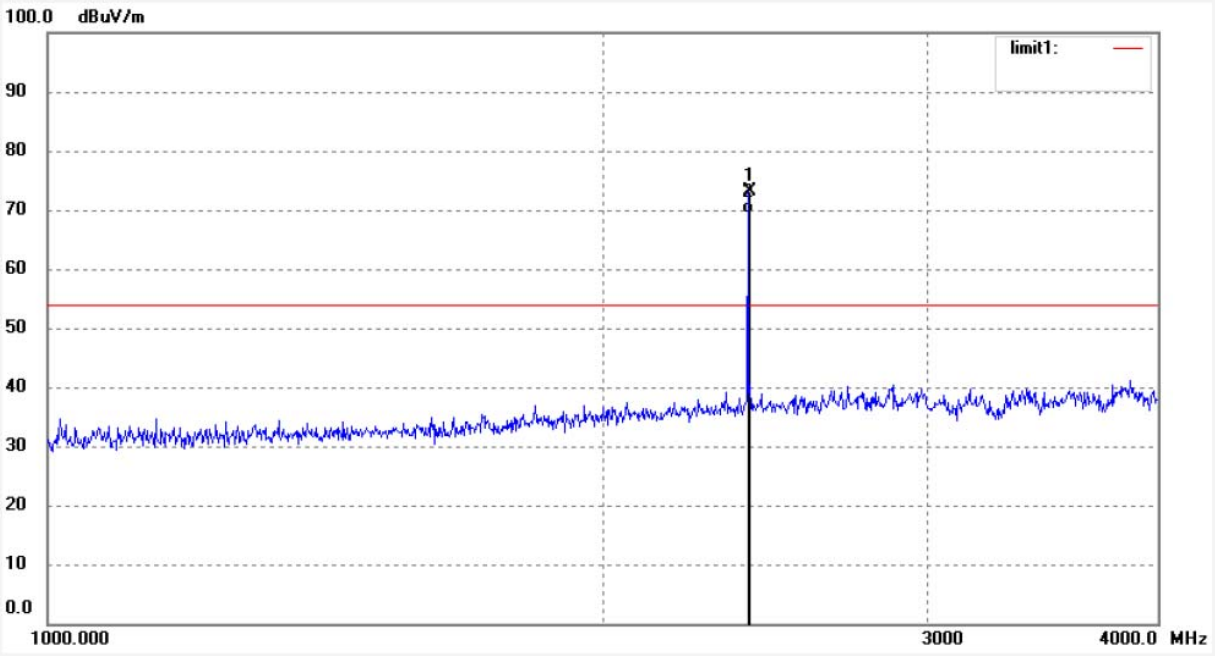
Job No.: STAR #3053
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX2401MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/11/01/
Time: 9/02/22
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2401.000	80.67	-7.46	73.21	114.00	-40.79	peak			
2	2401.000	76.90	-7.46	69.44	94.00	-24.56	AVG			

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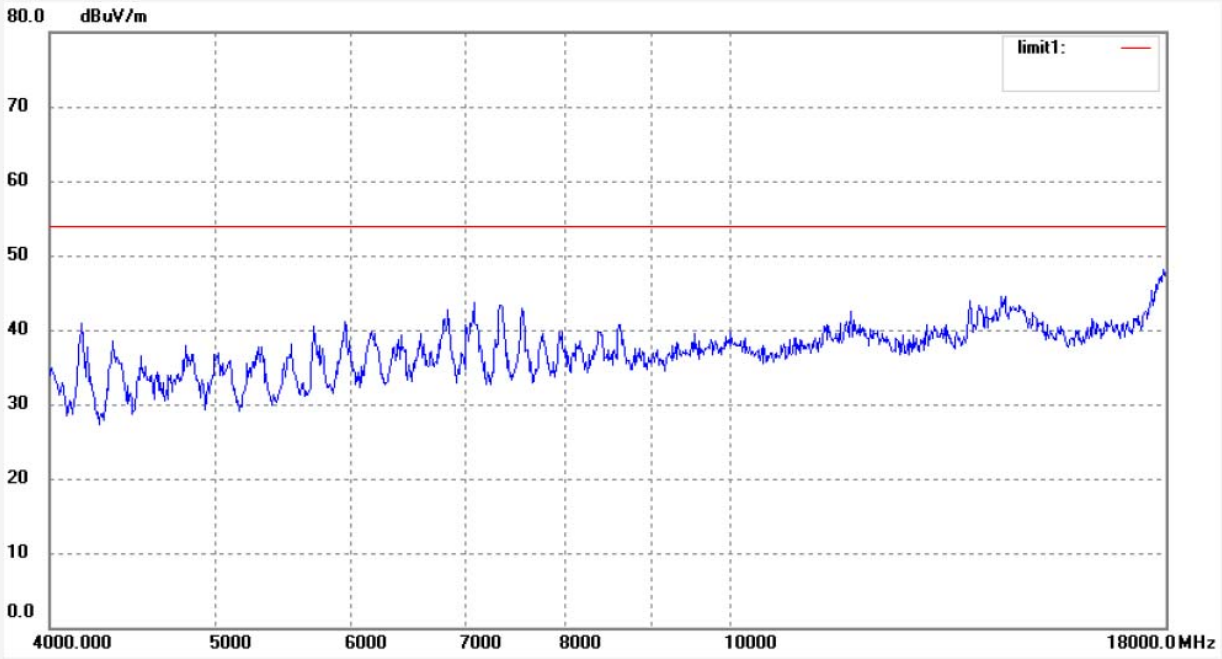
Job No.: STAR #3079	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 10/24/59
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2401MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

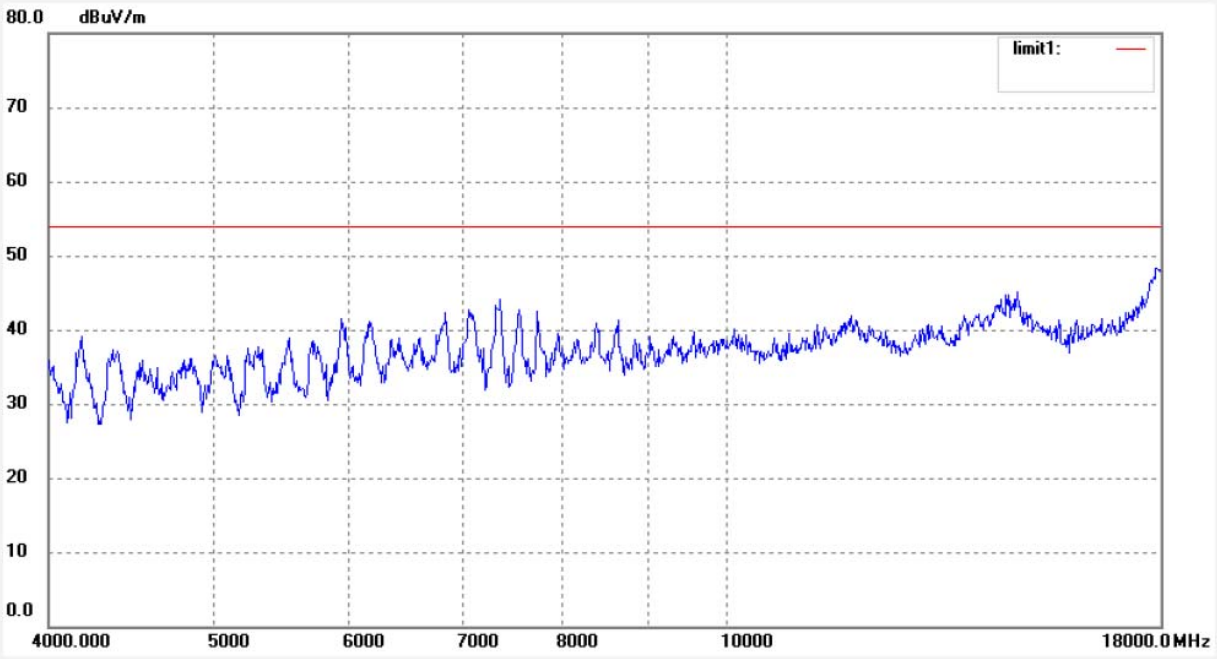


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3078	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 10/20/41
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2401MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

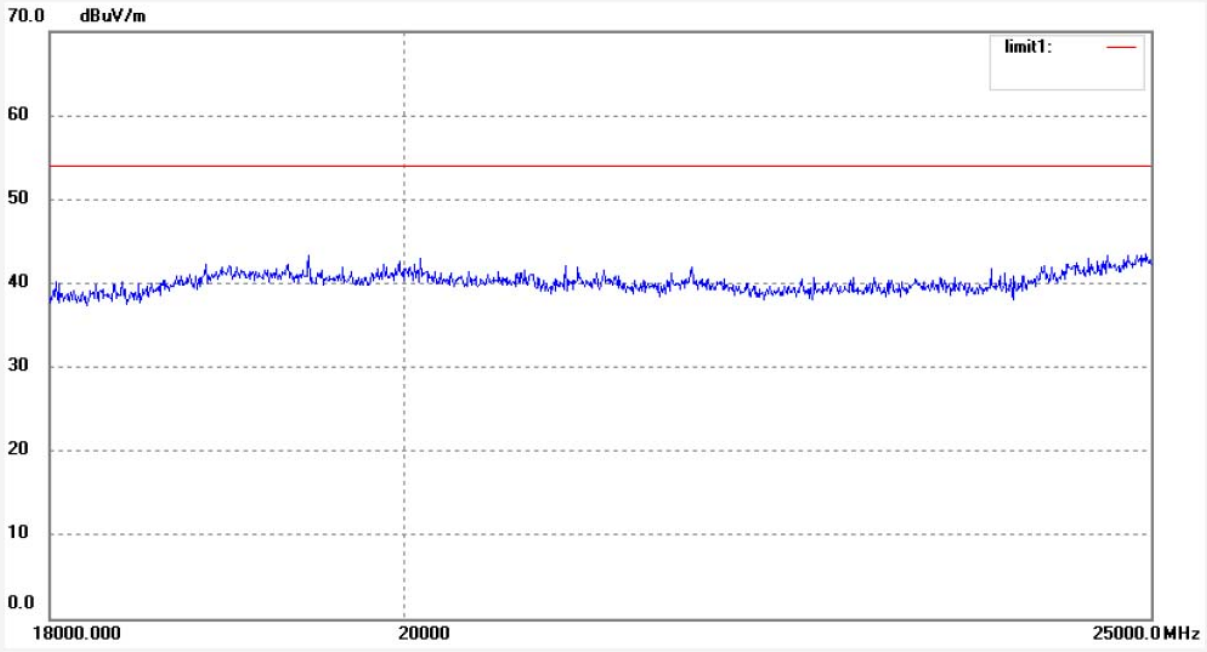


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: star #2546	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/10/31/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 12/26/14
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX 2401MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

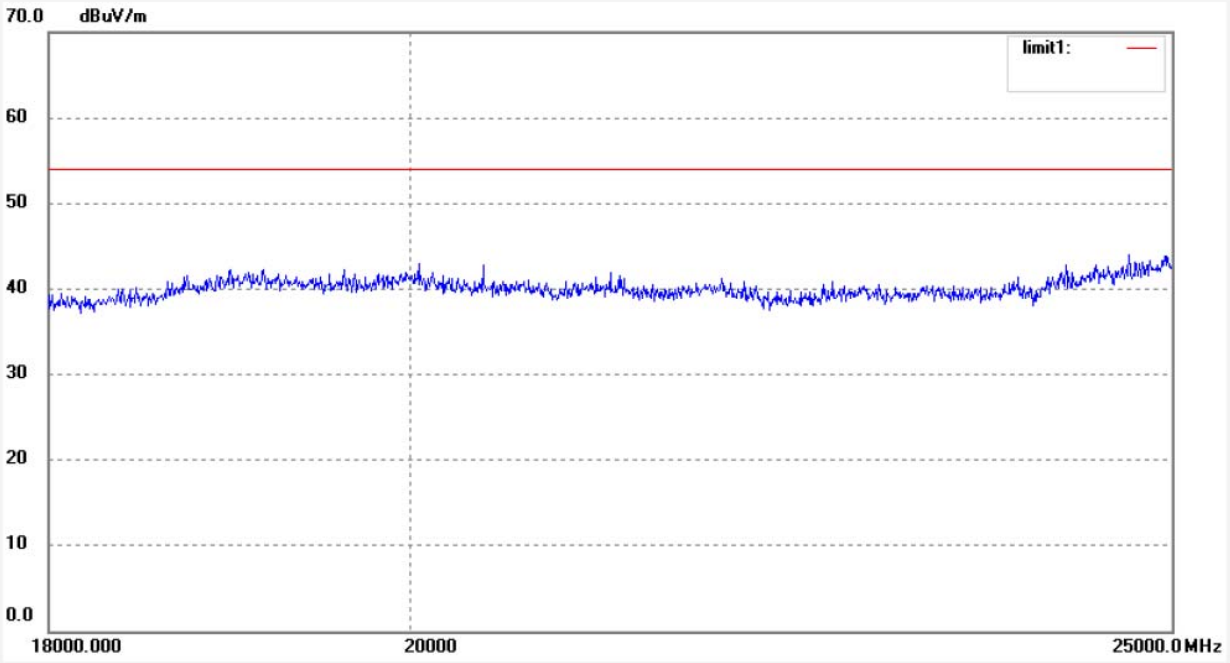


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: star #2545	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/10/31/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 12/24/29
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX 2401MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

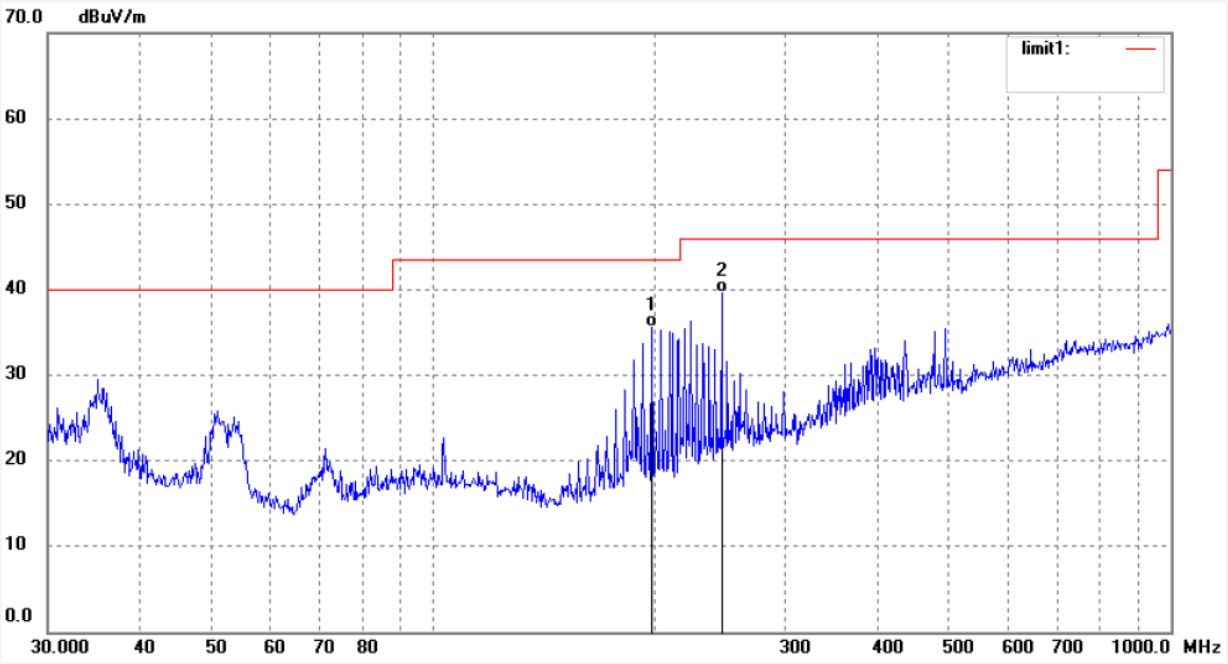


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3043	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 7/47/03
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2441MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

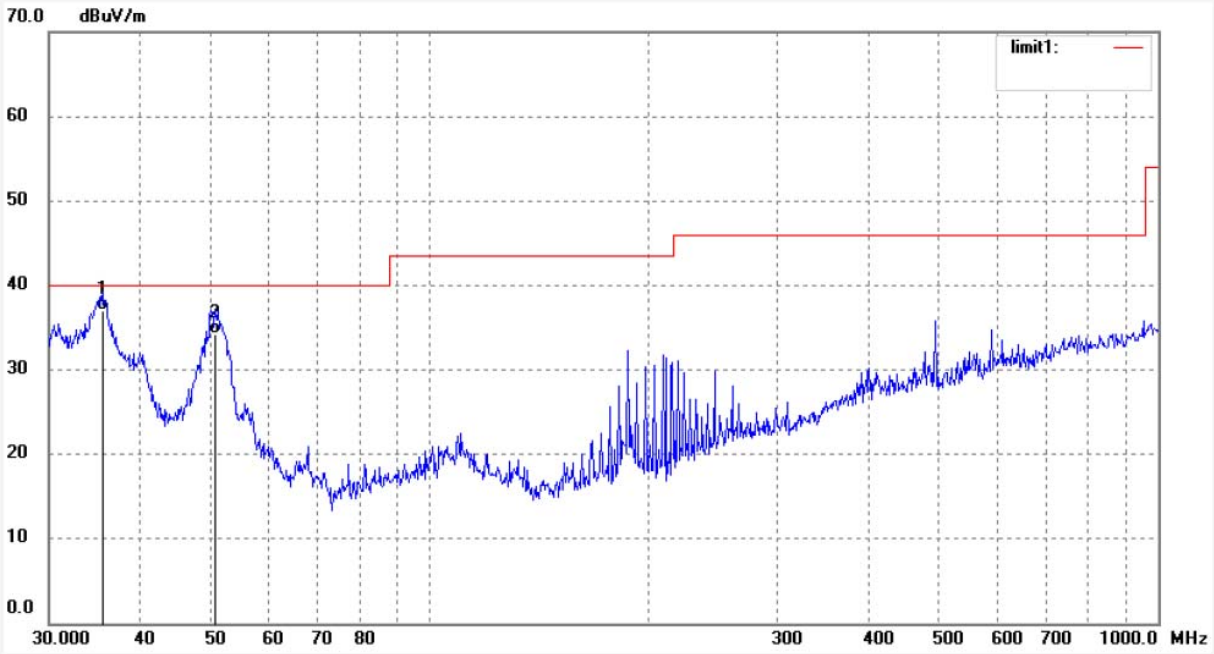


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	197.9457	21.64	14.03	35.67	43.50	-7.83	QP			
2	246.1238	22.40	17.19	39.59	46.00	-6.41	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3044	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 7/50/32
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2441MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446



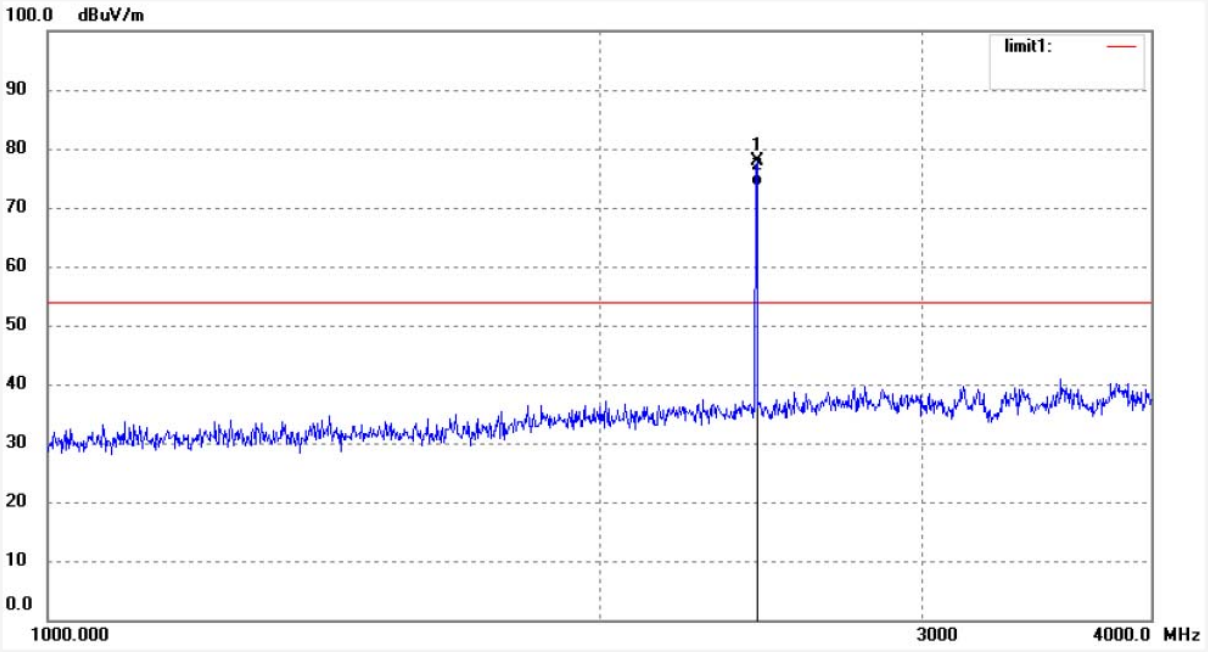
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.5112	21.39	15.57	36.96	40.00	-3.04	QP			
2	50.8171	20.02	14.23	34.25	40.00	-5.75	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3055
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX2441MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/11/01/
Time: 9/07/42
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	85.24	-7.35	77.89	114.00	-36.11	peak			
2	2441.000	81.02	-7.35	73.67	94.00	-20.33	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
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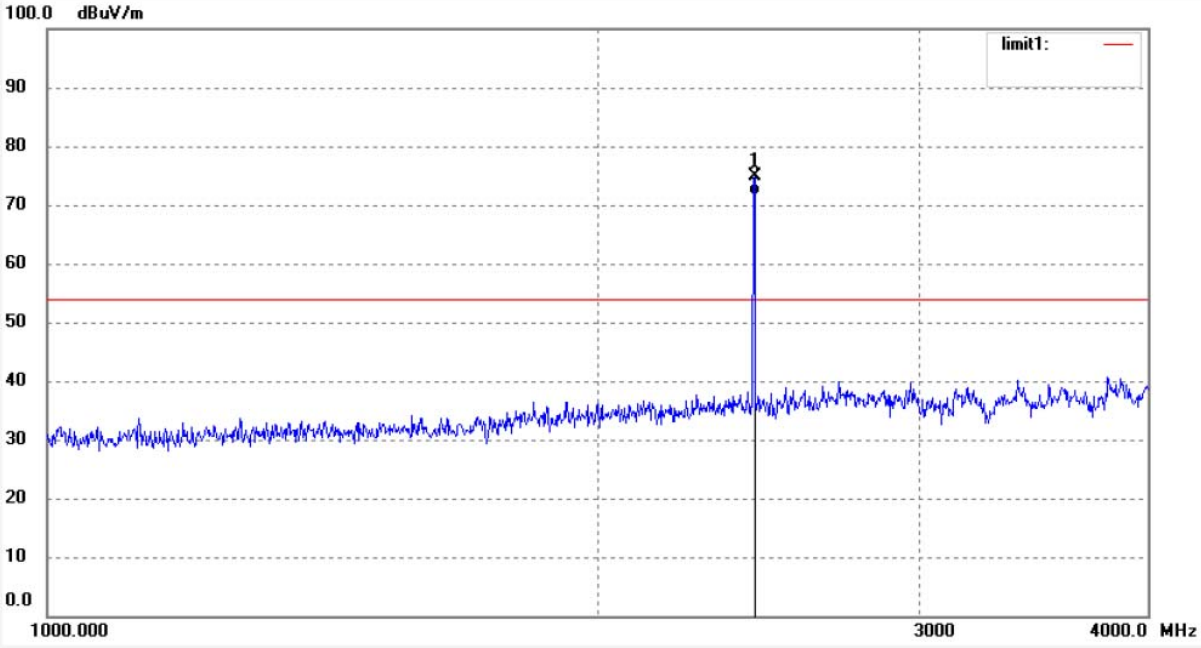
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3056
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX2441MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/11/01/
Time: 9/10/37
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446

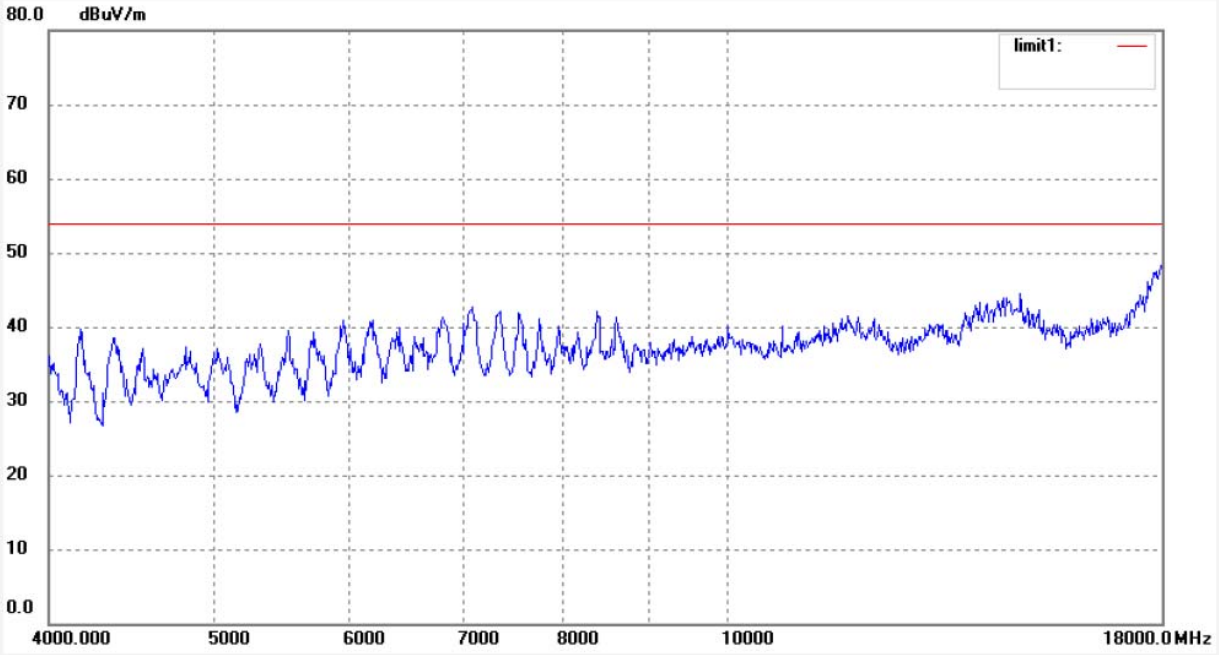


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	82.11	-7.35	74.76	114.00	-39.24	peak			
2	2441.000	78.90	-7.35	71.55	94.00	-22.45	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3080	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 10/26/09
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2441MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

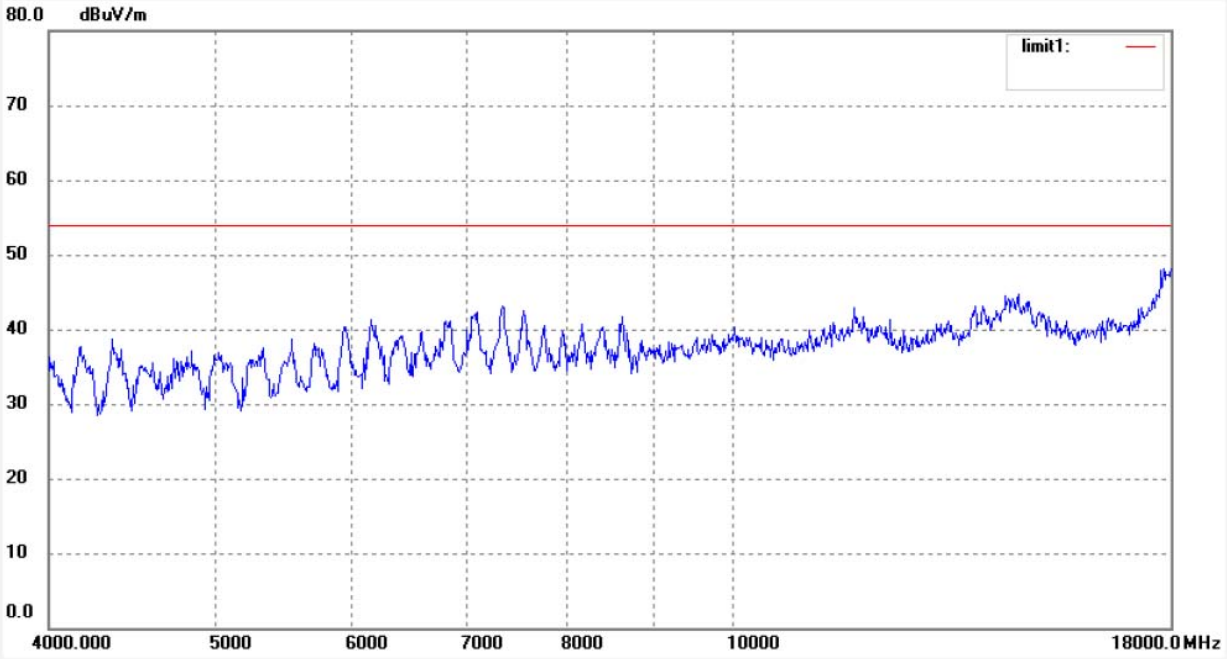


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3081	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 10/30/23
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2441MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

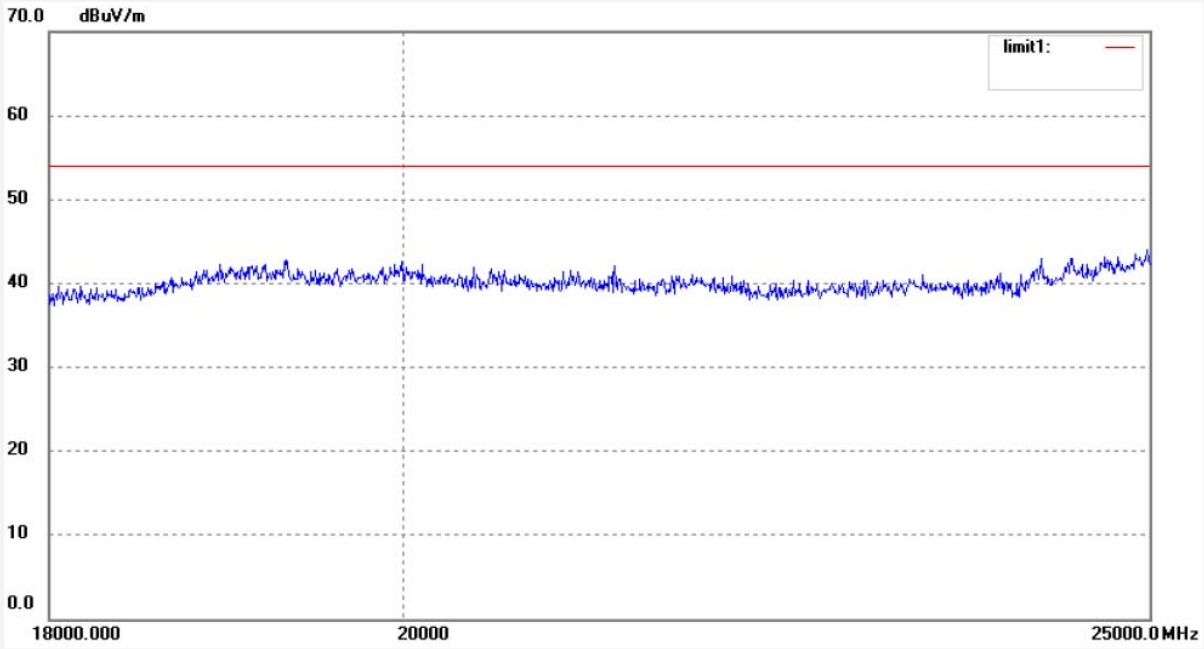


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: star #2547	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/10/31/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 12/30/57
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

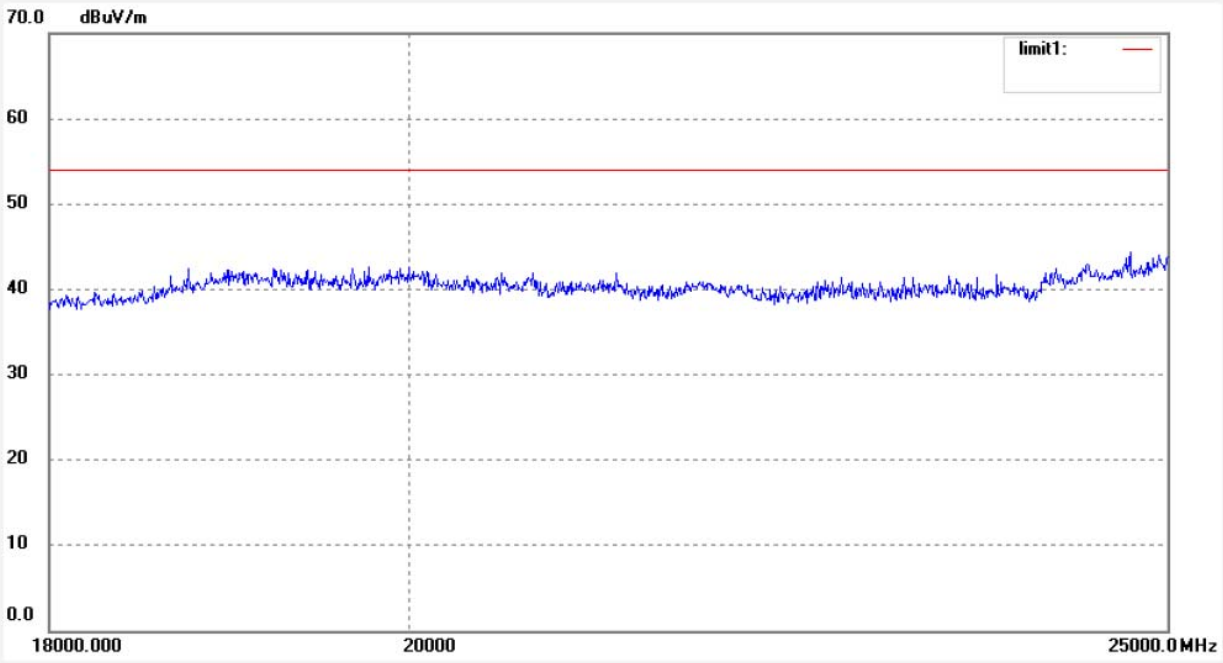


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: star #2548	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/10/31/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 12/34/06
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

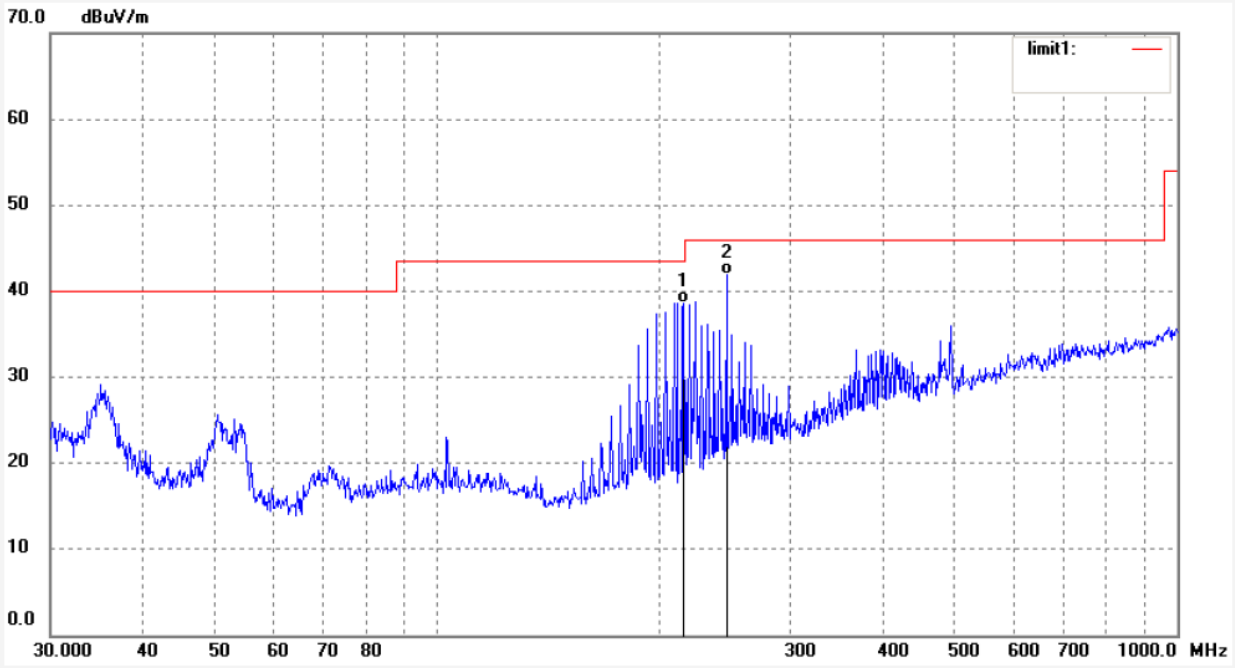


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3045	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 7/52/39
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2481MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	215.3616	24.00	14.62	38.62	43.50	-4.88	QP			
2	246.1237	24.81	17.19	42.00	46.00	-4.00	QP			

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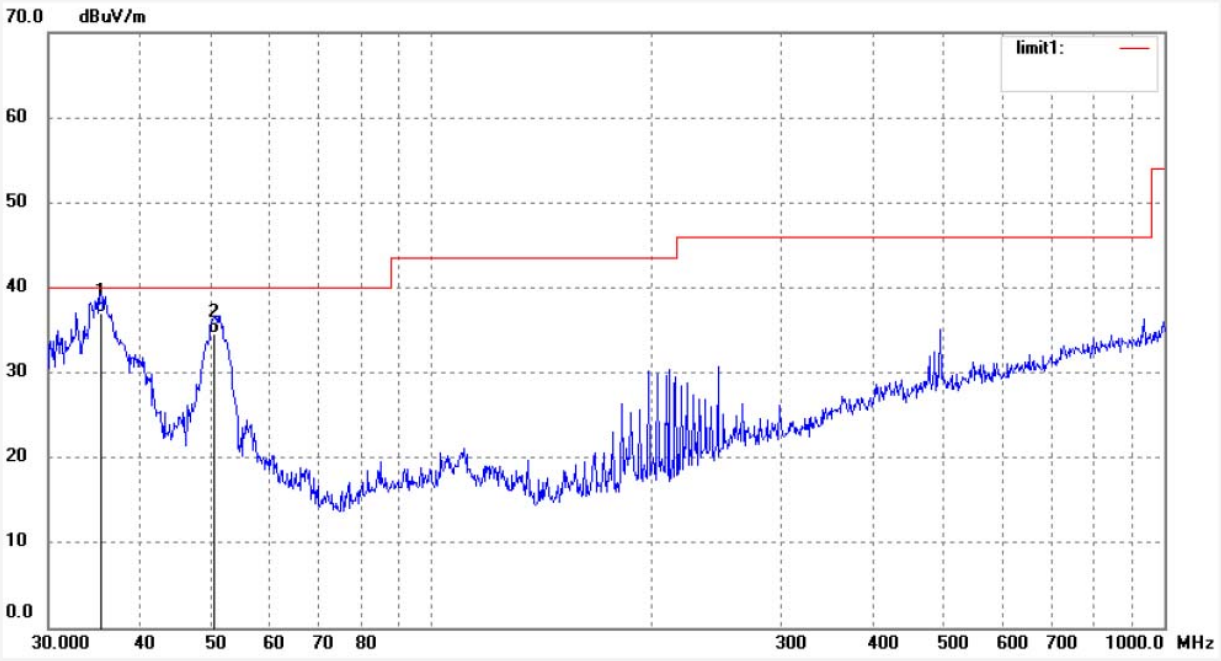
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3046	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 7/55/08
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2481MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446



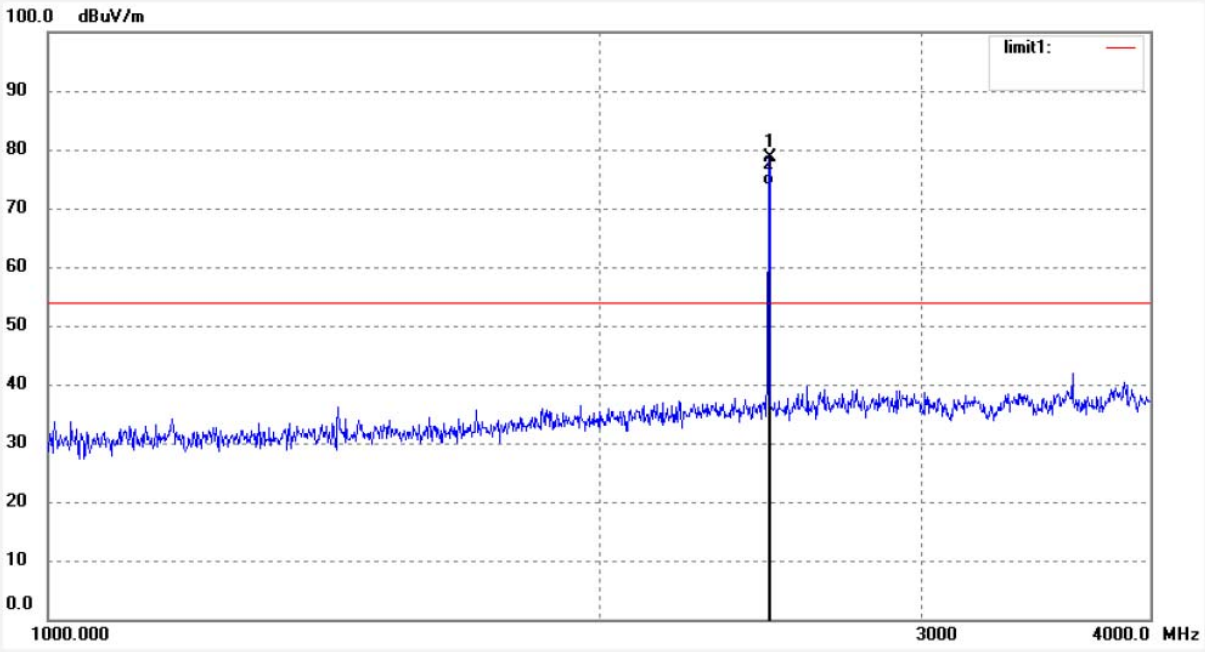
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.3867	21.40	15.60	37.00	40.00	-3.00	QP			
2	50.4614	20.23	14.34	34.57	40.00	-5.43	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3058
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX2481MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/11/01/
Time: 9/16/10
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



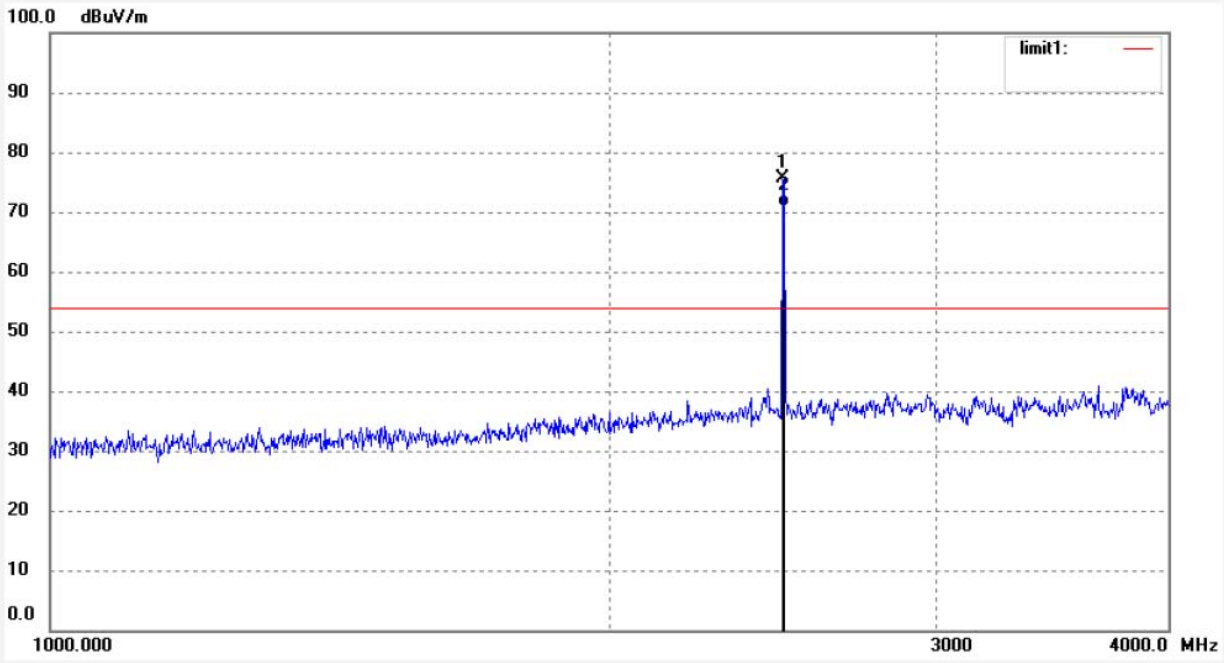
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2481.000	86.02	-7.37	78.65	114.00	-35.35	peak			
2	2481.000	81.28	-7.37	73.91	94.00	-20.09	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3057
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX2481MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/11/01/
Time: 9/12/25
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446

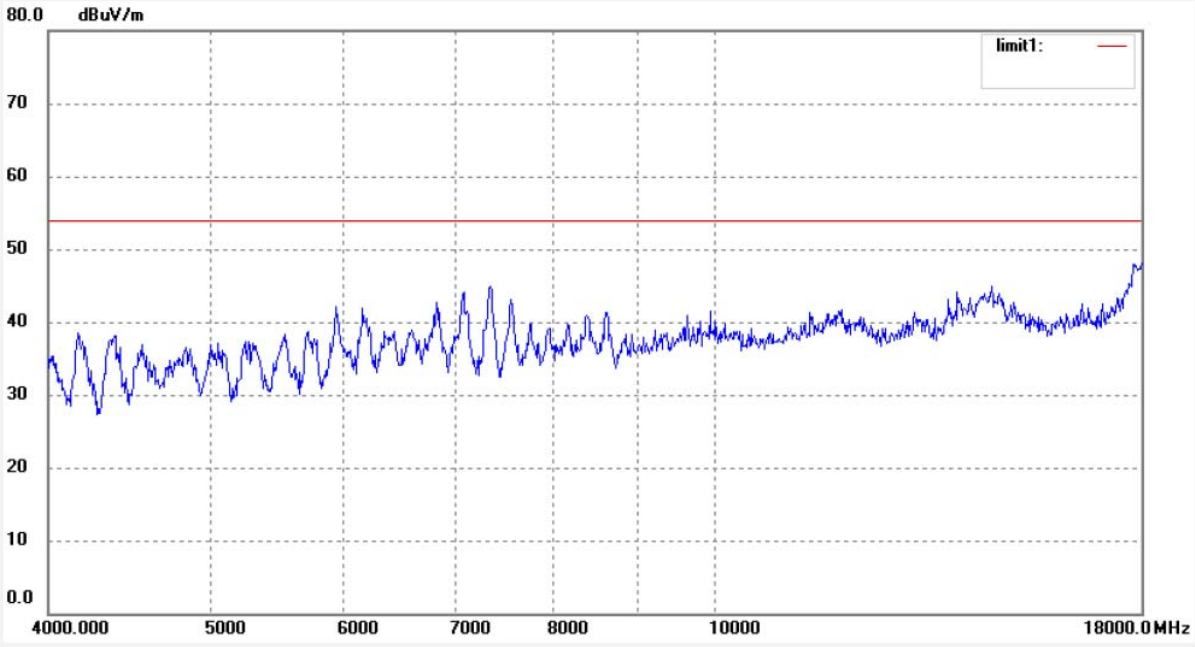


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2481.000	82.98	-7.37	75.61	114.00	-38.39	peak			
2	2481.000	78.23	-7.37	70.86	94.00	-23.14	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3083	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 10/38/58
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2481MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

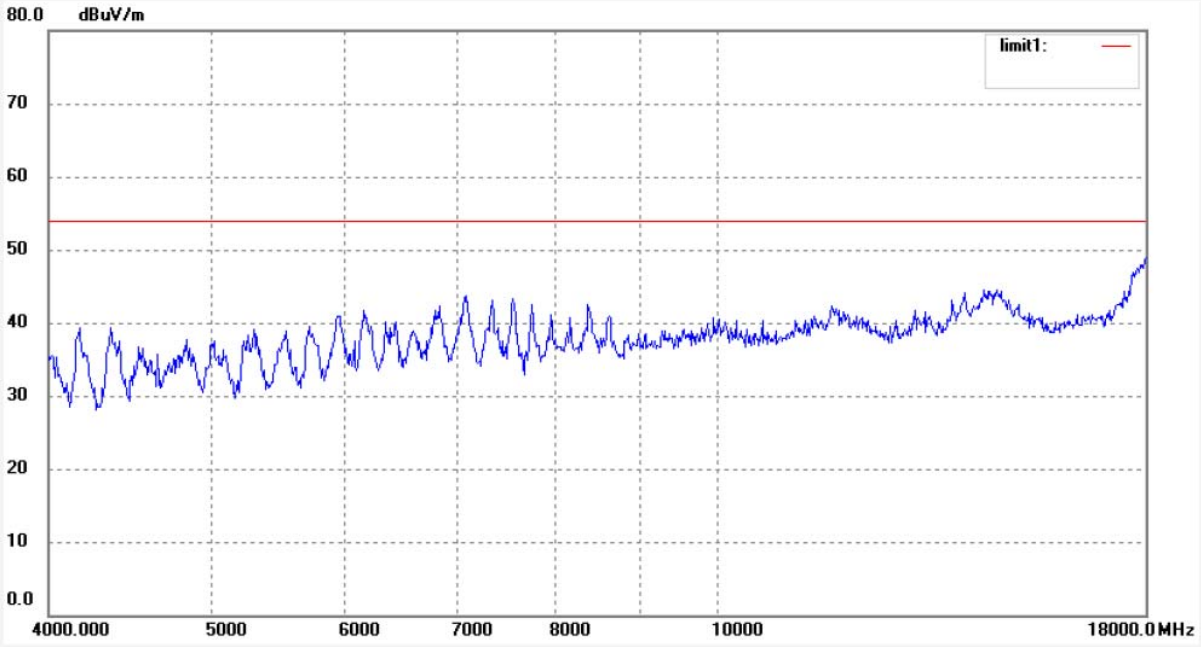


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3082	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/11/01/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 10/33/44
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX2481MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

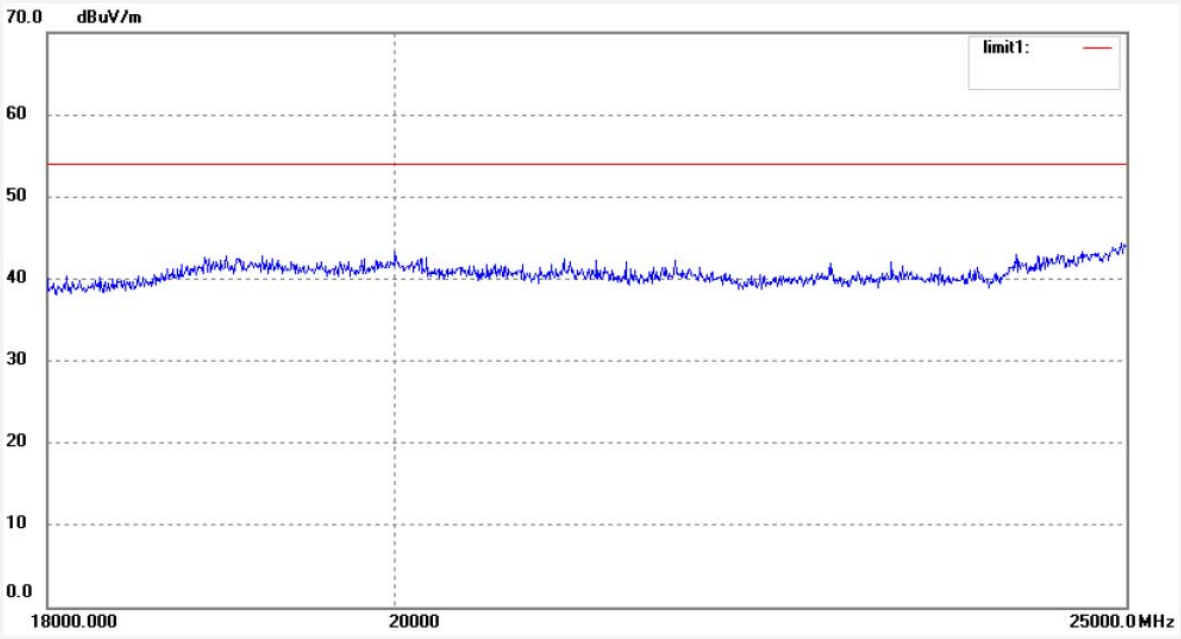


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: star #2550	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/10/31/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 12/41/36
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX 2481MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446

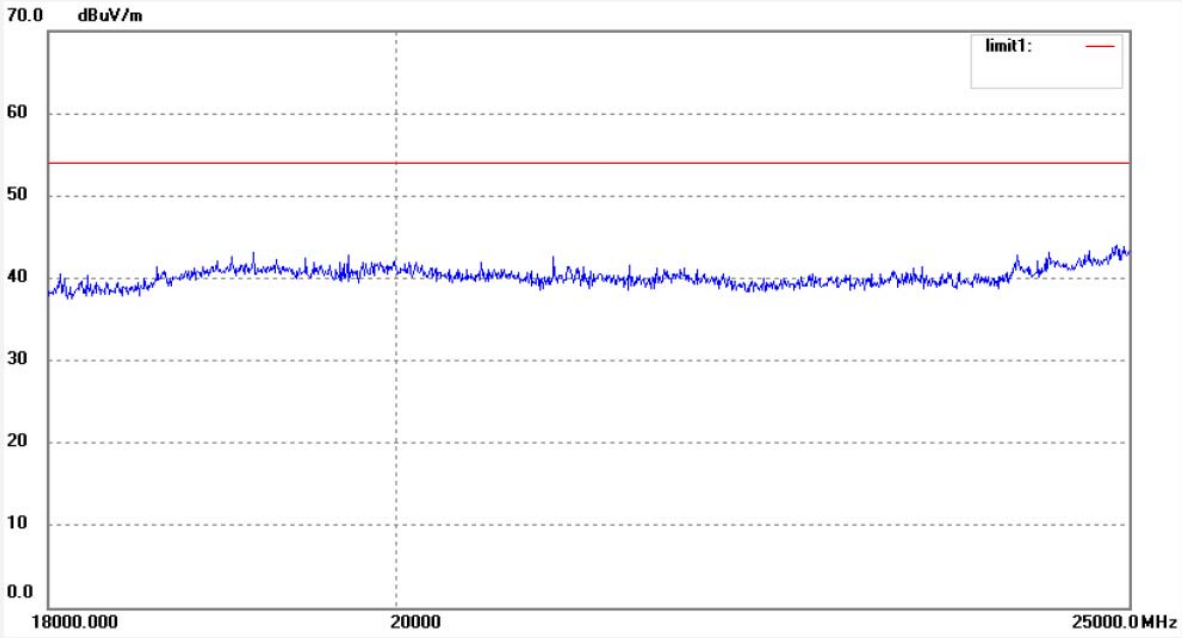


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: star #2549	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/10/31/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 12/39/01
EUT: 2.45GHz Active Reader	Engineer Signature:
Mode: TX 2481MHz	Distance: 3m
Model: NFC-2411	
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.	

Note: Report No.:ATE20122446



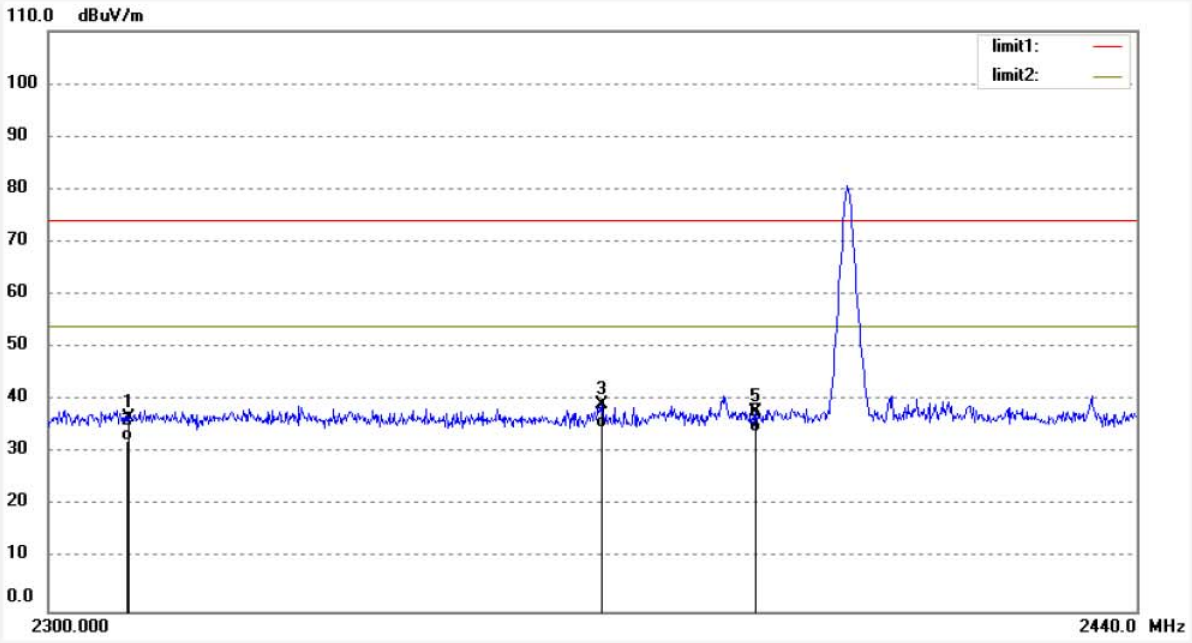
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3165
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX 2401MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/11/02/
Time: 9/08/58
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



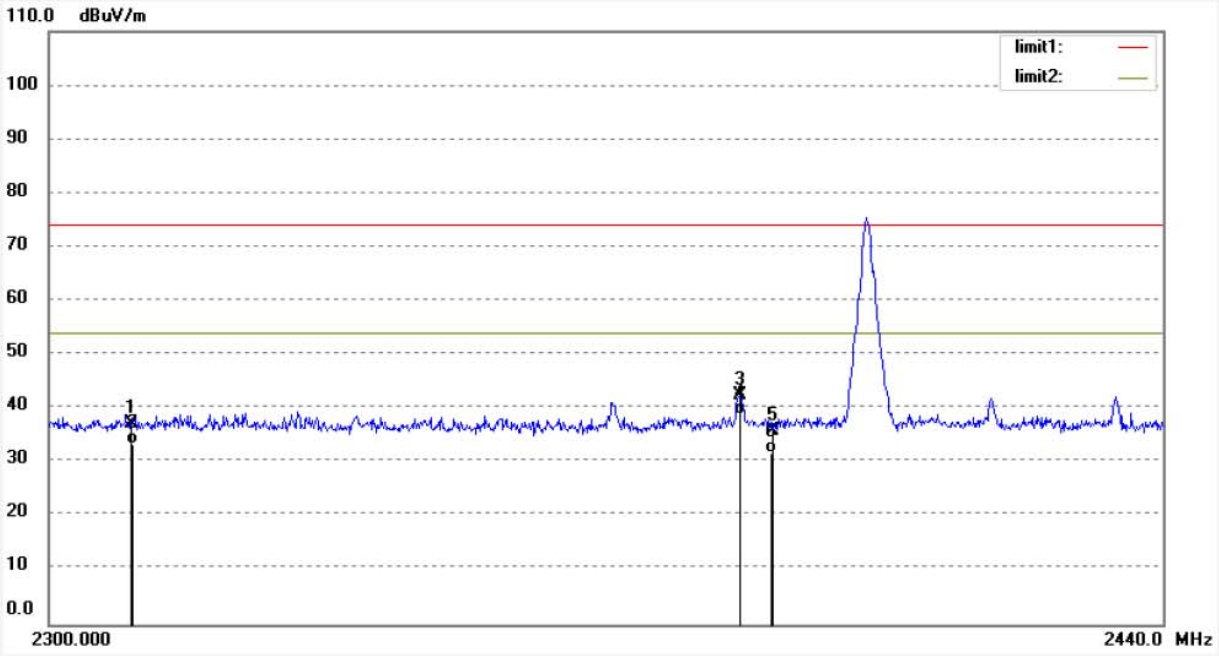
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	44.57	-7.81	36.76	74.00	-37.24	peak			
2	2310.000	40.02	-7.81	32.21	54.00	-21.79	AVG			
3	2370.088	46.75	-7.66	39.09	74.00	-34.91	peak			
4	2370.088	42.39	-7.66	34.73	54.00	-19.27	AVG			
5	2390.000	45.27	-7.53	37.74	74.00	-36.26	peak			
6	2390.000	41.39	-7.53	33.86	54.00	-20.14	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3164
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX 2401MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/11/02/
Time: 9/05/42
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	45.09	-7.81	37.28	74.00	-36.72	peak			
2	2310.000	41.32	-7.81	33.51	54.00	-20.49	AVG			
3	2385.857	50.07	-7.56	42.51	74.00	-31.49	peak			
4	2385.857	46.58	-7.56	39.02	54.00	-14.98	AVG			
5	2390.000	43.52	-7.53	35.99	74.00	-38.01	peak			
6	2390.000	39.30	-7.53	31.77	54.00	-22.23	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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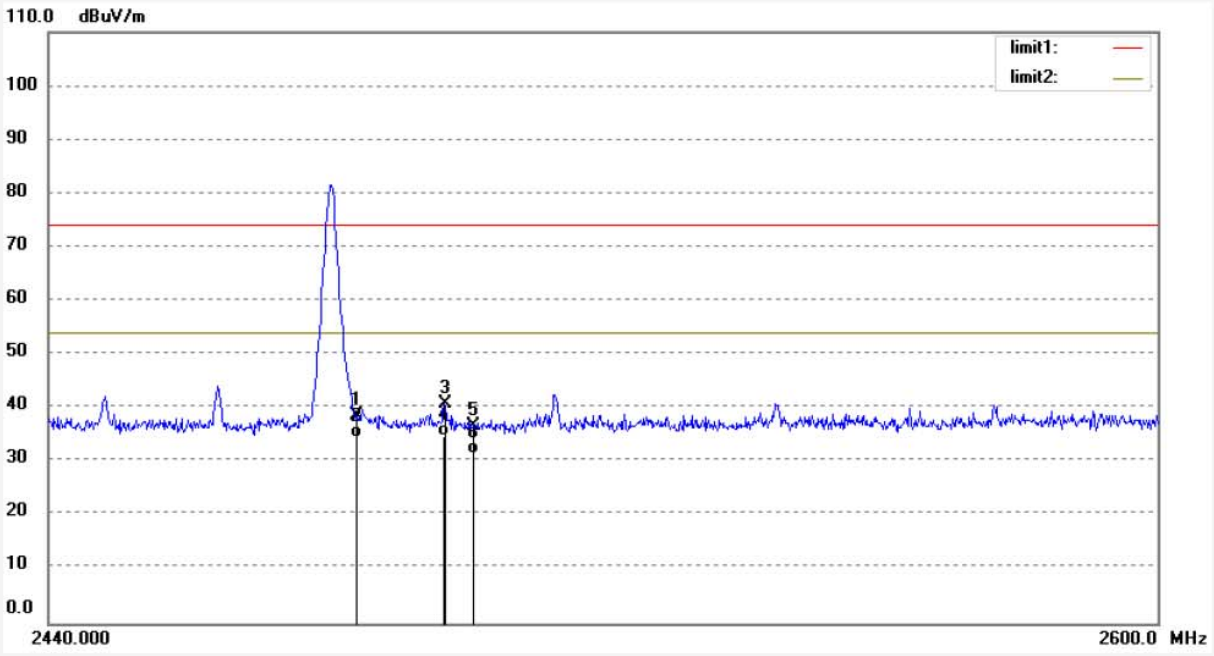
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3166
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX 2481MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/11/02/
Time: 9/12/32
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



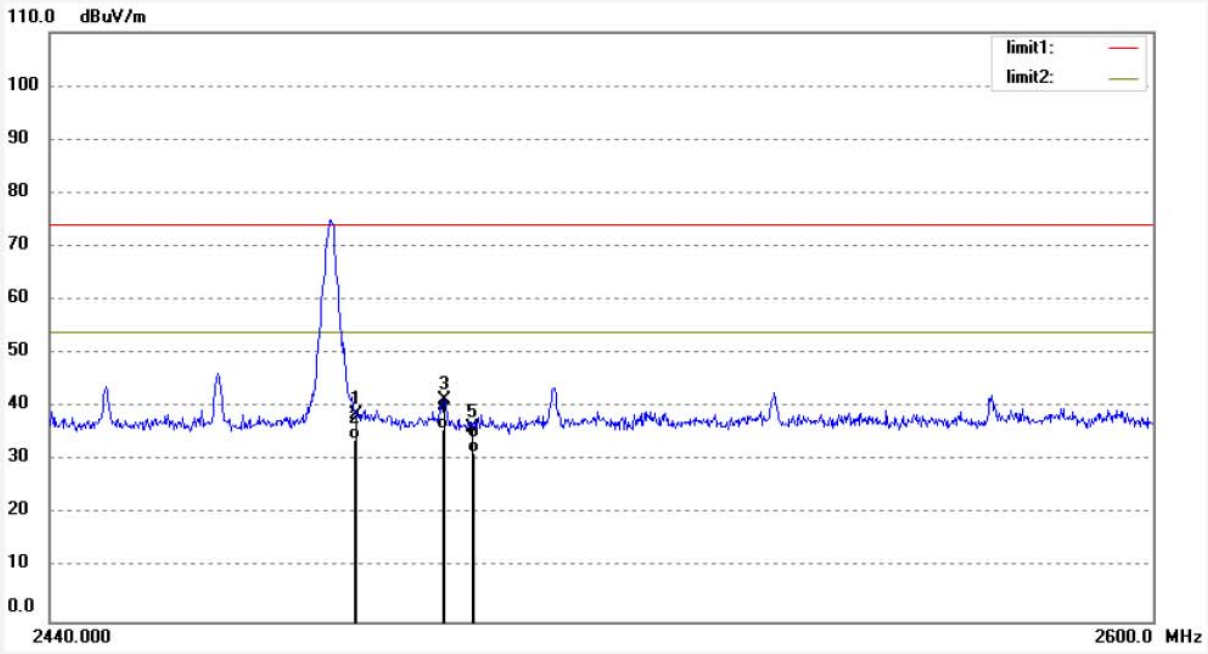
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.96	-7.37	38.59	74.00	-35.41	peak			
2	2483.500	41.88	-7.37	34.51	54.00	-19.49	AVG			
3	2495.912	48.11	-7.39	40.72	74.00	-33.28	peak			
4	2495.912	42.28	-7.39	34.89	54.00	-19.11	AVG			
5	2500.000	44.22	-7.40	36.82	74.00	-37.18	peak			
6	2500.000	38.92	-7.40	31.52	54.00	-22.48	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR #3167
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: 2.45GHz Active Reader
Mode: TX 2481MHz
Model: NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/11/02/
Time: 9/16/57
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20122446



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.90	-7.37	38.53	74.00	-35.47	peak			
2	2483.500	41.28	-7.37	33.91	54.00	-20.09	AVG			
3	2495.912	48.71	-7.39	41.32	74.00	-32.68	peak			
4	2495.912	43.28	-7.39	35.89	54.00	-18.11	AVG			
5	2500.000	43.64	-7.40	36.24	74.00	-37.76	peak			
6	2500.000	38.93	-7.40	31.53	54.00	-22.47	AVG			

ACCURATE TECHNOLOGY CO.,LTD

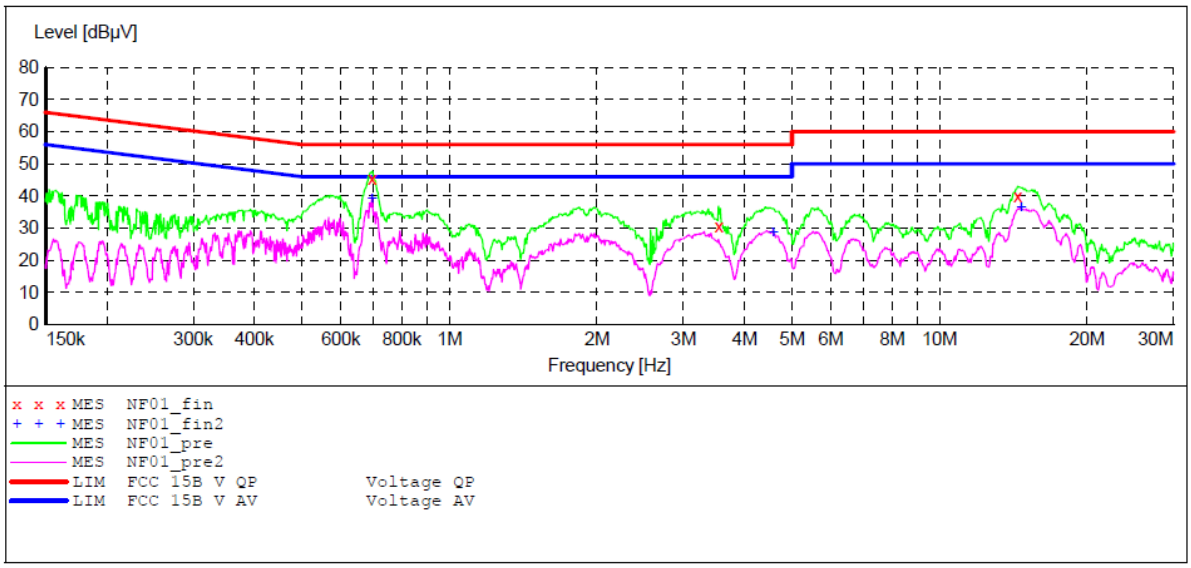
CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: 2.45GHz Active Reader M/N:NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.
Operating Condition: ON
Test Site: 1#Shielding Room
Operator: Star
Test Specification: N 120V/60Hz
Comment: Report No.:ATE20122446
Start of Test: 11/1/2012 / 11:06:22AM

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

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	0.8 %	QuasiPeak Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "NF01_fin"

11/1/2012 11:08AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.694763	45.50	11.9	56	10.5	QP	N	GND
3.541537	30.60	11.5	56	25.4	QP	N	GND
14.436394	39.90	11.2	60	20.1	QP	N	GND

MEASUREMENT RESULT: "NF01_fin2"

11/1/2012 11:08AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.694763	39.00	11.9	46	7.0	AV	N	GND
4.572455	28.40	11.5	46	17.6	AV	N	GND
14.668765	36.20	11.2	50	13.8	AV	N	GND

ACCURATE TECHNOLOGY CO.,LTD

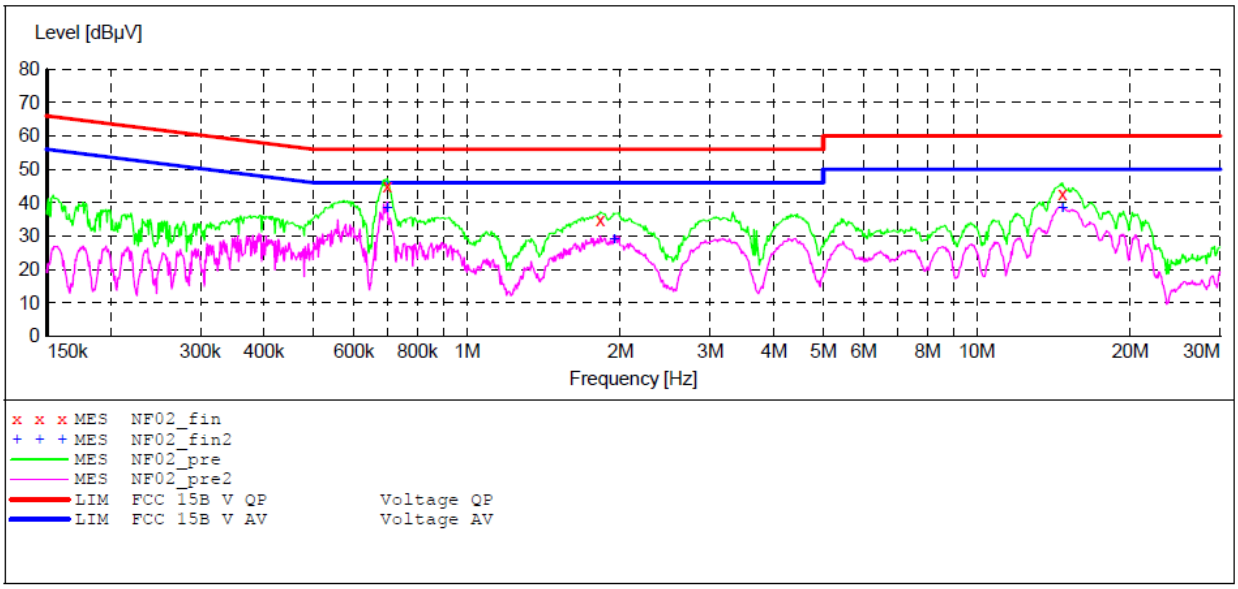
CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: 2.45GHz Active Reader M/N:NFC-2411
Manufacturer: Shenzhen New Force Communication Technology Co., Ltd.
Operating Condition: ON
Test Site: 1#Shielding Room
Operator: Star
Test Specification: L 120V/60Hz
Comment: Report No.:ATE20122446
Start of Test: 11/1/2012 / 11:09:02AM

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

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	0.8 %	QuasiPeak Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "NF02_fin"

11/1/2012 11:11AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.697543	45.00	11.9	56	11.0	QP	L1	GND
1.825557	34.70	11.7	56	21.3	QP	L1	GND
14.727440	42.50	11.2	60	17.5	QP	L1	GND

MEASUREMENT RESULT: "NF02_fin2"

11/1/2012 11:11AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.697543	38.40	11.9	46	7.6	AV	L1	GND
1.945964	28.90	11.7	46	17.1	AV	L1	GND
14.727440	38.40	11.2	50	11.6	AV	L1	GND