

APPLICATION CERTIFICATION

On Behalf of  
Nicetex Electronics Ltd.

Wireless Dock for iPod  
Model No.: IS301RX

FCC ID: OYNIS301R

Prepared for : Nicetex Electronics Ltd.  
Address : Rm 1421-22, 14/F, Block A, Hi-Tech Industrial Centre,  
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Prepared by : ACCURATE TECHNOLOGY CO. LTD  
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Report Number : ATE20082471 002  
Date of Test of Rev. 2 : March 1-2, 2010  
Date of Report of Rev. 2 : March 2, 2010

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## Test Report Certification

Applicant : Nicetex Electronics Ltd.  
 Manufacturer : Mei Hua Electronics (Hui Zhou) Limited  
 EUT Description : Wireless Dock for iPod  
                   (A) MODEL NO.: IS301RX  
                   (B) SERIAL NO.: N/A  
                   (C) POWER SUPPLY: DC 8V (Adapter input)

Measurement Procedure Used:

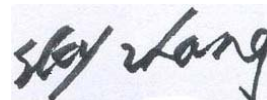
FCC Rules and Regulations Part 15 Section 15.207 and Section 15.209  
 ANSI C63.4: 2003

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 Section 15.207 and Section 15.209 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.

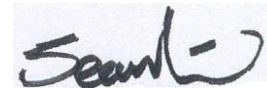
Date of Report of Rev. 2 :	March 2, 2010
Date of Test of Rev. 2 :	March 1-2, 2010
Date of original Test :	December 31, 2008 - January 7, 2009

Prepared by :



(Engineer)

Approved & Authorized Signer :



(Manager)

## 1. DESCRIPTION OF VERSION

Edition No.	Date of Rev.	Summary	Report No.
0	January 7, 2009	Original Report	ATE20082471
REV.2	March 2, 2010	Add a Power Adapter: KINGS, KSD10-080-1000	ATE20082471 002

### Remark for Rev. 2

1. This report is an additional version with original report number ATE20082471. The different with original report please see the above table of REV.2.
2. Through evaluation of the above difference, the conducted and radiated emission tests need to be re-performed. The EUT was retested on the conducted and radiated emission and the test data were recorded in this report.
3. This report is based on report of ATE20082471.

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

EUT	:	Wireless Dock for iPod
Model Number	:	IS301RX
Frequency Band	:	2400MHz-2483.5MHz
Number of Channels	:	79
Antenna Gain	:	2.39dBi Max.
Power Supply	:	DC 8V (Adapter input)
AC Adapter	:	Model: KSD10-080-1000 Input: AC 100-240V, 50-60Hz, 300mA Output: DC 8V, 1000mA
Applicant	:	Nicetex Electronics Ltd.
Address	:	Rm 1421-22, 14/F, Block A, Hi-Tech Industrial Centre, 5-21 Pak Tin Par Street, Tsuen Wan, NT, Hong Kong
Manufacturer	:	Mei Hua Electronics (Hui Zhou) Limited
Address	:	Jinlong Road (Qingxi section), Longmen, Huizhou, Guangdong, China
Date of sample received	:	February 20, 2010
Date of Test	:	March 1-2, 2010

## 2.2. 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

## 2.3. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2  
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2  
(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2  
(Above 1GHz)

### 3. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 9, 2011
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 9, 2011
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 9, 2011
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 9, 2011
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 9, 2011
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 9, 2011
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 9, 2011
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 9, 2011

## 4. OPERATION OF EUT DURING TESTING

### 4.1.Operating Mode

On

### 4.2.Configuration and peripherals

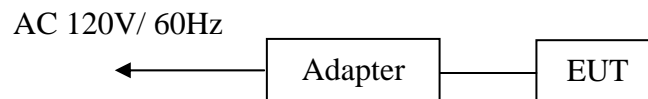


Figure 1 Setup, Operating mode: On



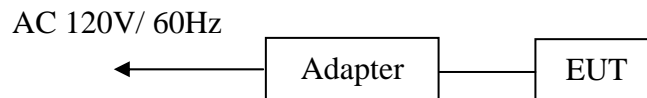
## 5. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission Test	Compliant
Section 15.209	Radiated Spurious Emission Test	Compliant

## 6. CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207

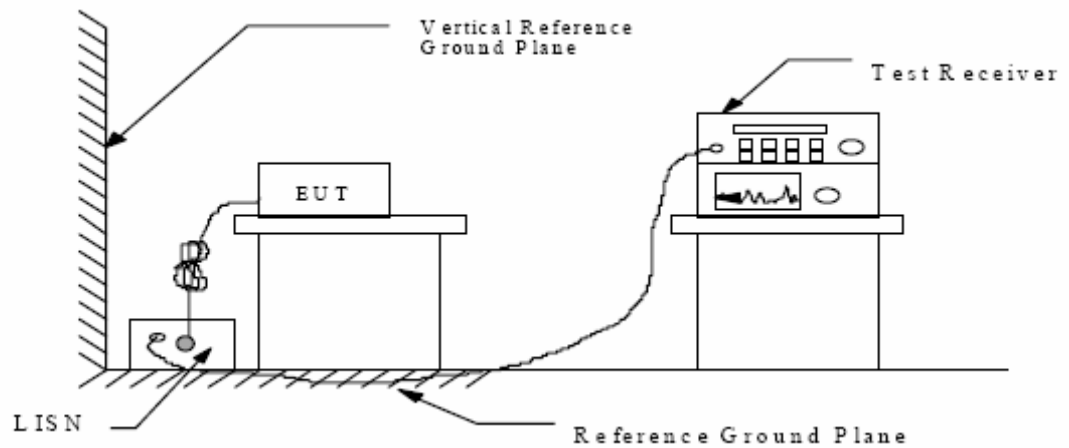
### 6.1. Block Diagram of Test Setup

#### 6.1.1. Block diagram of connection between the EUT and simulators



(EUT: Wireless Dock for iPod)

#### 6.1.2. Shielding Room Test Setup Diagram



(EUT: Wireless Dock for iPod)

### 6.2. The Emission Limit

#### 6.2.1. 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.

### 6.3.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.

#### 6.3.1.Wireless Dock for iPod (EUT)

Model Number	:	IS301RX
Serial Number	:	N/A
Manufacturer	:	Mei Hua Electronics (Hui Zhou) Limited

### 6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3.Let the EUT work in measuring mode (On) measure it.

### 6.5.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: 2003 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.

## 6.6.Power Line Conducted Emission Measurement Results

**PASS.**

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

Date of Test:	March 1, 2010	Temperature:	25°C
EUT:	Wireless Dock for iPod	Humidity:	50%
			DC 8V (Adapter input)
Model No.:	IS301RX	Power Supply:	Adapter power: AC120V/60Hz
Test Mode:	On	Test Engineer:	Joe

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.357511	38.10	11.7	59	20.7	QP	L1	GND
0.532495	32.20	12.0	56	23.8	QP	L1	GND
1.065080	30.80	11.8	56	25.2	QP	L1	GND
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.349066	19.80	11.7	49	29.2	AV	L1	GND
0.639599	15.90	11.9	46	30.1	AV	L1	GND
1.039922	13.90	11.8	46	32.1	AV	L1	GND
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.381043	31.80	11.8	58	26.5	QP	N	GND
0.720802	28.20	11.9	56	27.8	QP	N	GND
1.023480	32.30	11.8	56	23.7	QP	N	GND
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.366160	21.30	11.7	49	27.3	AV	N	GND
0.450448	15.90	11.9	47	31.0	AV	N	GND
0.644716	16.60	11.9	46	29.4	AV	N	GND

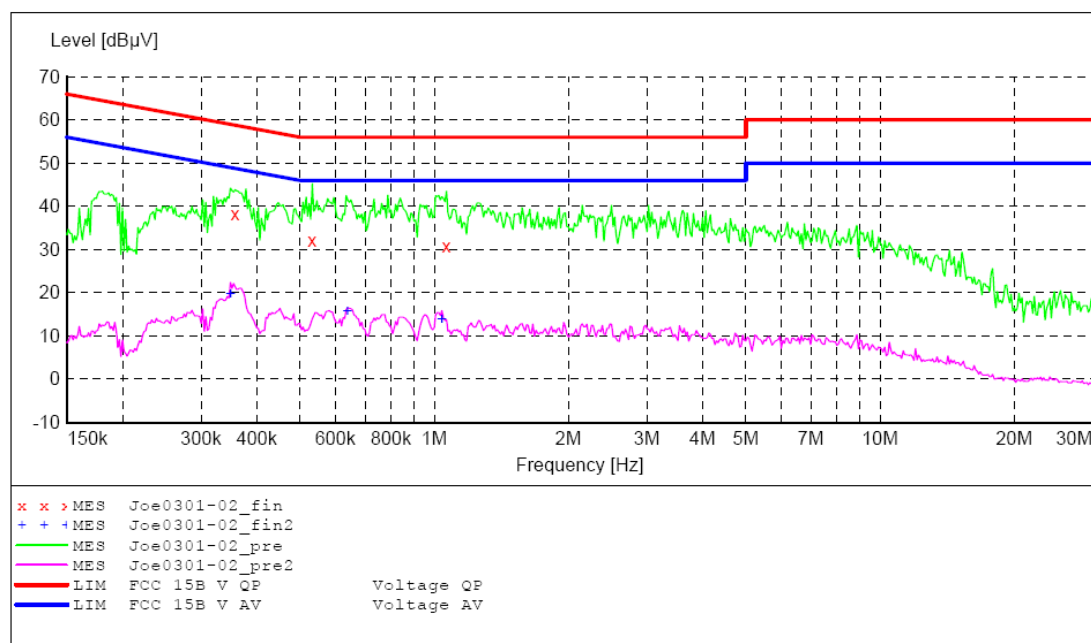
Emissions attenuated more than 20 dB below the permissible value are not reported.  
The spectral diagrams are attached as below.

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

EUT: Wireless Dock for iPod M/N:IS301RX  
 Manufacturer: Nicetex  
 Operating Condition: On  
 Test Site: 1#Shielding Room  
 Operator: Joe  
 Test Specification: L 120V/60Hz  
 Comment: Report No.:ATE20082471 002  
 Start of Test: 3/1/2010 / 8:43:32PM

**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 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average


**MEASUREMENT RESULT: "Joe0301-02\_fin"**

3/1/2010 8:46PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.357511	38.10	11.7	59	20.7	QP	L1	GND
0.532495	32.20	12.0	56	23.8	QP	L1	GND
1.065080	30.80	11.8	56	25.2	QP	L1	GND

**MEASUREMENT RESULT: "Joe0301-02\_fin2"**

3/1/2010 8:46PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.349066	19.80	11.7	49	29.2	AV	L1	GND
0.639599	15.90	11.9	46	30.1	AV	L1	GND
1.039922	13.90	11.8	46	32.1	AV	L1	GND

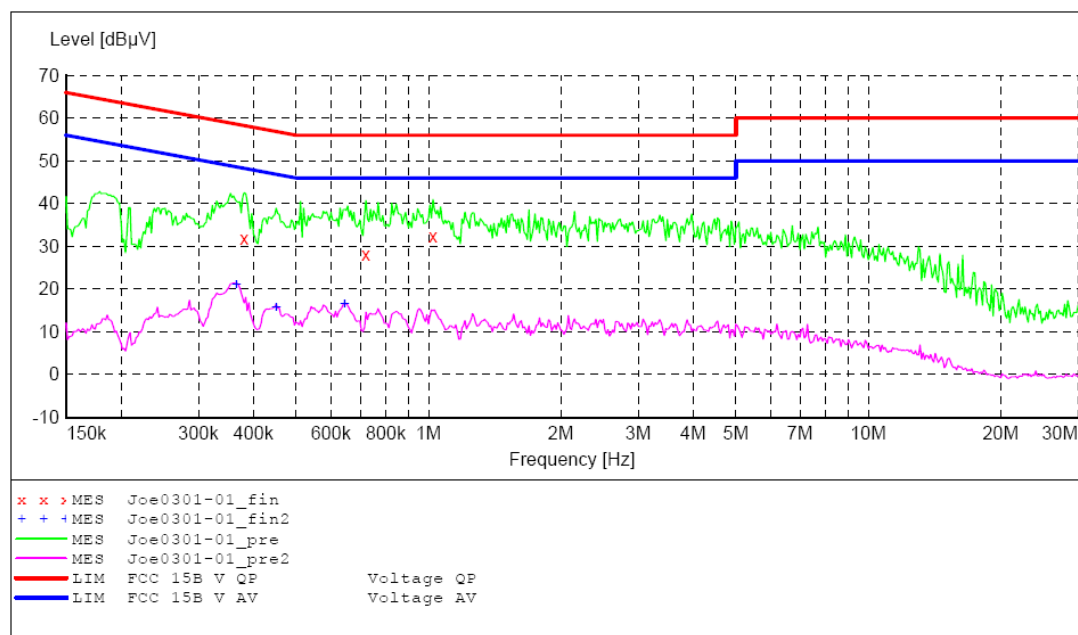
## ACCURATE TECHNOLOGY CO.,LTD

## CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Wireless Dock for iPod M/N:IS301RX  
 Manufacturer: Nicetex  
 Operating Condition: On  
 Test Site: 1#Shielding Room  
 Operator: Joe  
 Test Specification: N 120V/60Hz  
 Comment: Report No.:ATE20082471 002  
 Start of Test: 3/1/2010 / 8:39:37PM

## 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 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



## MEASUREMENT RESULT: "Joe0301-01\_fin"

3/1/2010 8:42PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.381043	31.80	11.8	58	26.5	QP	N	GND
0.720802	28.20	11.9	56	27.8	QP	N	GND
1.023480	32.30	11.8	56	23.7	QP	N	GND

## MEASUREMENT RESULT: "Joe0301-01\_fin2"

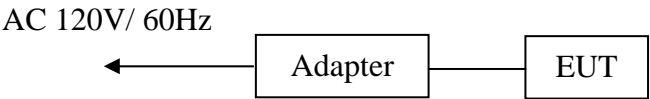
3/1/2010 8:42PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.366160	21.30	11.7	49	27.3	AV	N	GND
0.450448	15.90	11.9	47	31.0	AV	N	GND
0.644716	16.60	11.9	46	29.4	AV	N	GND

# 7. RADIATED EMISSION FOR FCC PART 15 SECTION 15.209

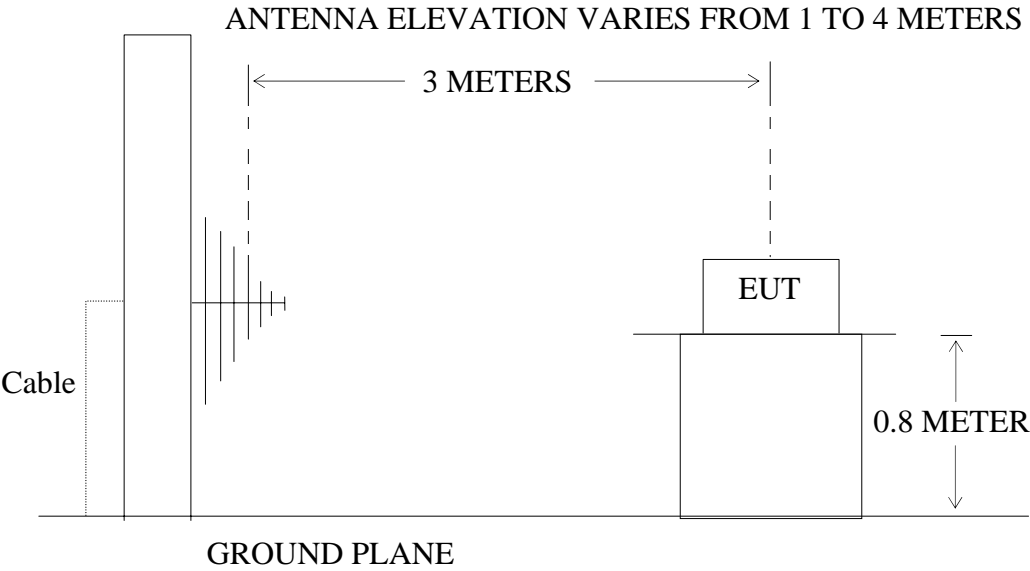
## 7.1. Block Diagram of Test Setup

### 7.1.1. Block diagram of connection between the EUT and simulators



(EUT: Wireless Dock for iPod)

### 7.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Wireless Dock for iPod)

## 7.2.The Emission Limit For Section 15.209

### 7.2.1.Radiation Emission Measurement Limits According to Section 15.209.

Frequency (MHz)	Limit	
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dBμV/m)
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

## 7.3.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.

### 7.3.1.Wireless Dock for iPod (EUT)

Model Number : IS301RX  
 Serial Number : N/A  
 Manufacturer : Mei Hua Electronics (Hui Zhou) Limited

## 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 measuring mode (On) measure it.



## 7.5. 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: 2003 on radiated emission measurement.

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

The frequency range from 30MHz to 1000MHz is checked.

The final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

## 7.6.The Emission Measurement Result

**PASS.**

Date of Test:	March 2, 2010	Temperature:	25°C
EUT:	Wireless Dock for iPod	Humidity:	50%
			DC 8V (Adapter input)
Model No.:	IS301RX	Power Supply:	Adapter power: AC120V/60Hz
Test Mode:	On	Test Engineer:	Joe

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
126.8059	10.91	15.01	25.92	43.50	-17.58	Vertical
179.5179	14.70	15.78	30.48	43.50	-13.02	Vertical
208.4701	13.65	16.31	29.96	43.50	-13.54	Vertical
215.1034	13.15	16.54	29.69	43.50	-13.81	Horizontal
413.5394	12.13	23.00	35.13	46.00	-10.87	Horizontal
704.2631	7.59	26.63	34.22	46.00	-11.78	Horizontal

The spectral diagrams are attached as below display the measurement of peak values.

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



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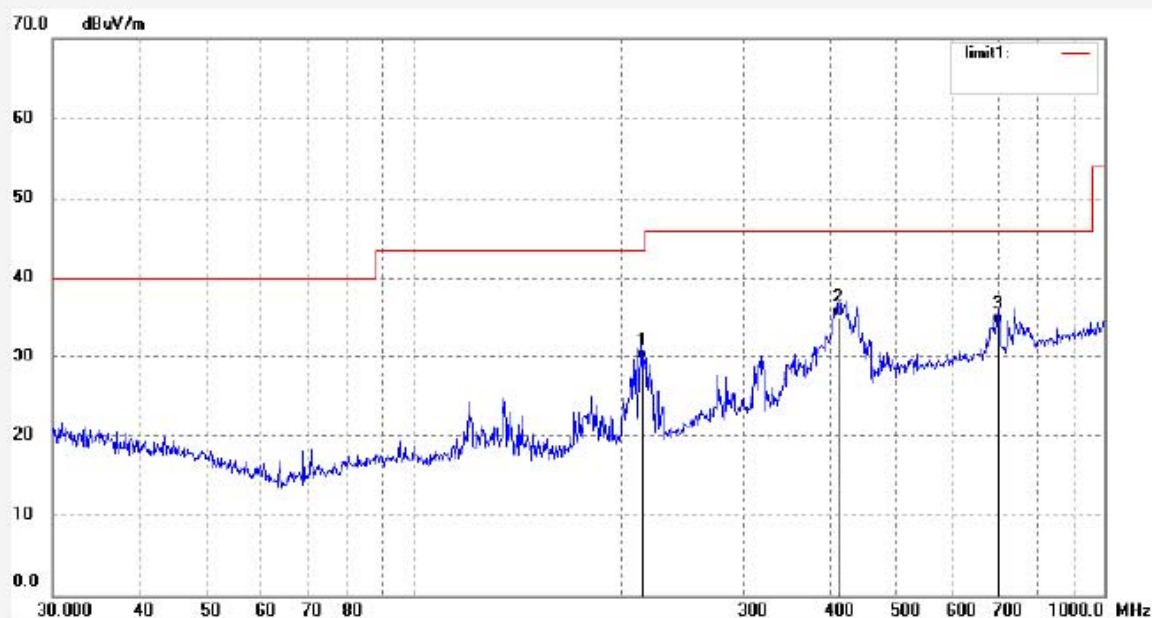
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: RTTE #4215  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 50 %  
EUT: Wireless Dock for iPod  
Mode: On  
Model: IS301RX  
Manufacturer: Nicetex

Polarization: Horizontal  
Power Source: AC 120V/60Hz  
Date: 10/03/02/  
Time: 8/52/47  
Engineer Signature: Joe  
Distance: 3m

Note: Report No.: ATE20082471 002



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	215.1034	13.15	16.54	29.69	43.50	-13.81	QP			
2	413.5394	12.13	23.00	35.13	46.00	-10.87	QP			
3	704.2631	7.59	26.63	34.22	46.00	-11.78	QP			


**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.: RTTE #4216

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

EUT: Wireless Dock for iPod

Mode: On

Model: IS301RX

Manufacturer: Nicetex

Polarization: Vertical

Power Source: AC 120V/60Hz

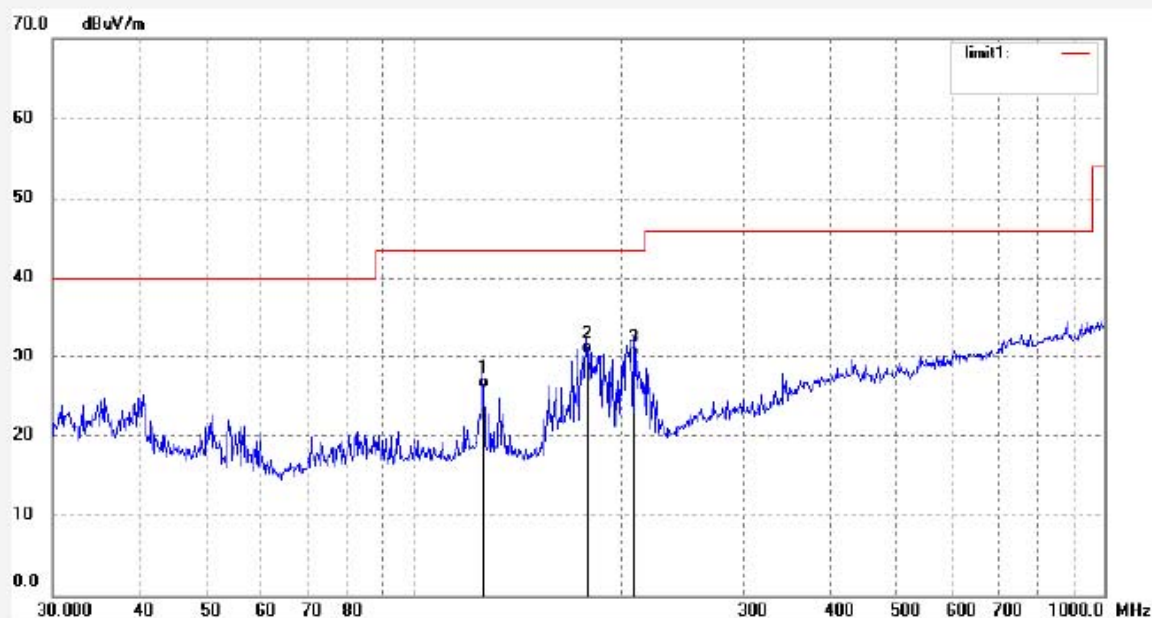
Date: 10/03/02/

Time: 8/56/05

Engineer Signature: Joe

Distance: 3m

Note: Report No.: ATE20082471 002



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	126.8059	10.91	15.01	25.92	43.50	-17.58	QP			
2	179.5179	14.70	15.78	30.48	43.50	-13.02	QP			
3	208.4701	13.65	16.31	29.96	43.50	-13.54	QP			