

APPLICATION CERTIFICATION FCC Part 15C  
On Behalf of  
Jay Trends Merchandising Inc.

Solar Audio Table  
Model No.: Techno 0124

FCC ID: 2AFS4-TECHNO0124

Prepared for : Jay Trends Merchandising Inc.  
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Report No. : ATE20151958  
Date of Test : September 9-14, 2015  
Date of Report : September 19, 2015

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## Test Report Certification

Applicant : Jay Trends Merchandising Inc.

EUT Description : Solar Audio Table

Model No. : Techno 0124

Measurement Procedure Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.247: 2014  
ANSI C63.10: 2013**

The EUT was tested according to DTS test procedure of Jun 05, 2014 KDB558074 D01 DTS Meas Guidance v03r02 for compliance to FCC 47CFR 15.247 requirements

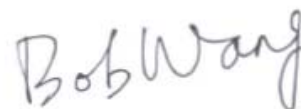
The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY 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 : September 9-14, 2015

Date of Report: September 19, 2015

Prepared by :



(Bob Wang, Engineer)

Approved & Authorized Signer :



(Sean Liu, Manager)

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

EUT	:	Solar Audio Table
Model Number	:	Techno 0124
Bluetooth version	:	Bluetooth V4.0 LE
Frequency Range	:	2402MHz-2480MHz
Number of Channels	:	40
Antenna Gain	:	0dBi
Antenna type	:	PCB Antenna
Power Supply	:	AC 120V/60Hz
Adapter	:	Model: SK02G-1000100U Input: AC100-240V; 50/60Hz Output: DC 10V; 1A
Modulation mode	:	GFSK
Applicant	:	Jay Trends Merchandising Inc.
Address	:	9600 Meilleur Street, Suite #101 Montreal H2N 2E3, Quebec, Canada
Date of sample received	:	September 2, 2015
Date of Test	:	September 9-14, 2015

## 1.2.Carrier Frequency of Channels

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

## 1.3.Special Accessory and Auxiliary Equipment

PC

Manufacturer: LENOVO

M/N: 4290-RT8

S/N: R9-FW93G 11/08

#### 1.4. 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

#### 1.5. 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)

## 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. 11, 2015	Jan. 10, 2016
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 11, 2015	Jan. 10, 2016
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 11, 2015	Jan. 10, 2016
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 11, 2015	Jan. 10, 2016
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 15, 2015	Jan. 14, 2016
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 15, 2015	Jan. 14, 2016
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 15, 2015	Jan. 14, 2016
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 15, 2015	Jan. 14, 2016
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 11, 2015	Jan. 10, 2016
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 11, 2015	Jan. 10, 2016
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 11, 2015	Jan. 10, 2016
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 11, 2015	Jan. 10, 2016



### 3. OPERATION OF EUT DURING TESTING

#### 3.1.Operating Mode

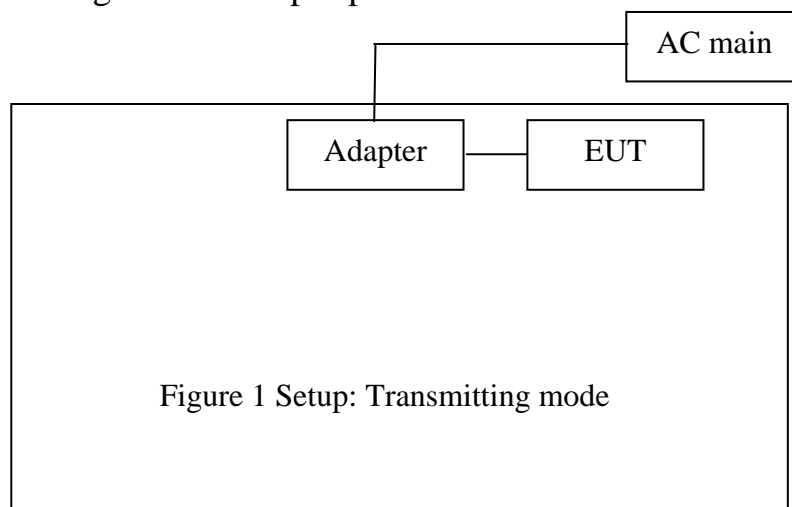
The mode is used: **BLE Transmitting mode**

Low Channel: 2402MHz

Middle Channel: 2440MHz

High Channel: 2480MHz

#### 3.2.Configuration and peripherals

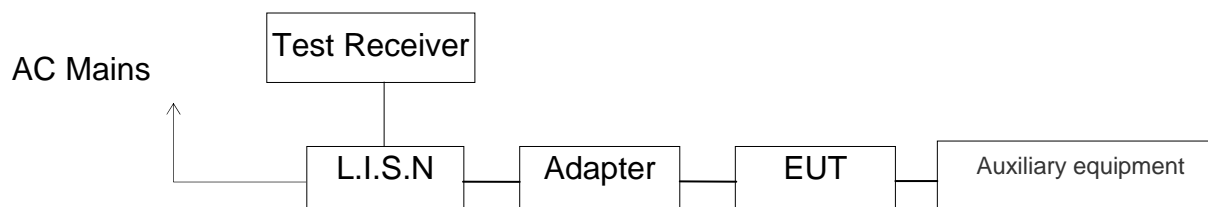


#### 4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.247(d)	Conducted Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

## 5. POWER LINE CONDUCTED MEASUREMENT

### 5.1. Block Diagram of Test Setup



(EUT: Solar Audio Table)

### 5.2. Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB( $\mu$ 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.

### 5.3. Configuration of EUT on Measurement

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.

### 5.4. 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 test mode and measure it.

### 5.5. Test Procedure

The EUT is put on the plane 0.1m 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 (R & S ESCS30) is set at 9kHz.

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

### 5.6. Power Line Conducted Emission Measurement Results

**PASS.**

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

Test mode : BT communicating(AC 120V/60Hz)

EUT mode : Techno 0124

**MEASUREMENT RESULT: "02030014\_fin"**

2015-9-14 15:37

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.870000	47.20	11.6	56	8.8	QP	N	GND
2.076500	52.20	11.7	56	3.8	QP	N	GND
3.282500	50.80	11.7	56	5.2	QP	N	GND

**MEASUREMENT RESULT: "02030014\_fin2"**

2015-9-14 15:37

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.804000	37.20	11.6	46	8.8	AV	N	GND
2.076500	42.80	11.7	46	3.2	AV	N	GND
3.282500	40.90	11.7	46	5.1	AV	N	GND

**MEASUREMENT RESULT: "02030016\_fin"**

2015-9-14 15:41

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.870000	47.20	11.6	56	8.8	QP	L1	GND
2.076500	52.20	11.7	56	3.8	QP	L1	GND
4.083500	52.40	11.8	56	3.6	QP	L1	GND

**MEASUREMENT RESULT: "02030016\_fin2"**

2015-9-14 15:41

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.872000	37.90	11.6	46	8.1	AV	L1	GND
2.144000	42.00	11.7	46	4.0	AV	L1	GND
4.083500	39.40	11.8	46	6.6	AV	L1	GND

Test mode : BT communicating(AC 240V/60Hz)								
EUT mode : Techno 0124								
<b>MEASUREMENT RESULT: "02030012_fin"</b>								
2015-9-14 15:31								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.796000	45.10	11.6	56	10.9	QP	L1	GND	
1.858000	51.20	11.7	56	4.8	QP	L1	GND	
3.251000	53.50	11.7	56	2.5	QP	L1	GND	
<b>MEASUREMENT RESULT: "02030012_fin2"</b>								
2015-9-14 15:31								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.796000	41.70	11.6	46	4.3	AV	L1	GND	
1.858000	42.50	11.7	46	3.5	AV	L1	GND	
3.386000	43.10	11.7	46	2.9	AV	L1	GND	
<b>MEASUREMENT RESULT: "02030013_fin"</b>								
2015-9-14 15:34								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.796000	48.10	11.6	56	7.9	QP	N	GND	
2.058500	51.30	11.7	56	4.7	QP	N	GND	
3.917000	54.50	11.7	56	1.5	QP	N	GND	
<b>MEASUREMENT RESULT: "02030013_fin2"</b>								
2015-9-14 15:34								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.796000	41.60	11.6	46	4.4	AV	N	GND	
2.121500	40.40	11.7	46	5.6	AV	N	GND	
3.854000	43.20	11.7	46	2.8	AV	N	GND	

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

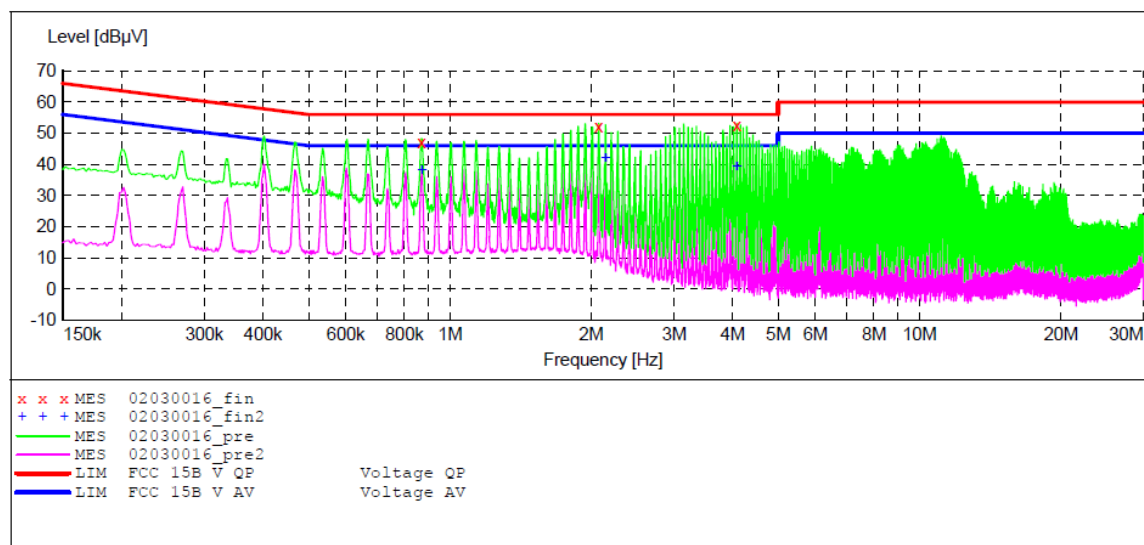
## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Solar Audio Table M/N:Techno 0124  
 Manufacturer: Jay Trends Merchandising Inc.  
 Operating Condition: BT communicating  
 Test Site: 2#Shielding Room  
 Operator: star  
 Test Specification: L 120V/60Hz  
 Comment: Report No.:ATE20151958  
 Start of Test: 2015-9-14 / 15:39:50

#### 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 4.0 kHz QuasiPeak 1.0 s 9 kHz LISN (ESH3-Z5)  
 Average



#### MEASUREMENT RESULT: "02030016\_fin"

2015-9-14 15:41

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.870000	47.20	11.6	56	8.8	QP	L1	GND
2.076500	52.20	11.7	56	3.8	QP	L1	GND
4.083500	52.40	11.8	56	3.6	QP	L1	GND

#### MEASUREMENT RESULT: "02030016\_fin2"

2015-9-14 15:41

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.872000	37.90	11.6	46	8.1	AV	L1	GND
2.144000	42.00	11.7	46	4.0	AV	L1	GND
4.083500	39.40	11.8	46	6.6	AV	L1	GND

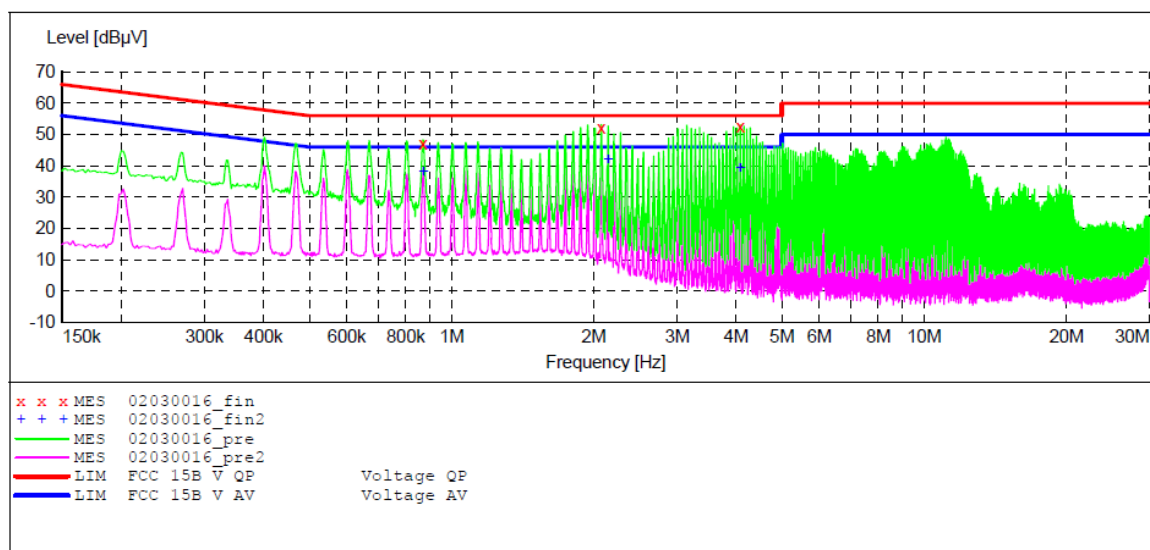
## ACCURATE TECHNOLOGY CO.,LTD

### CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Solar Audio Table M/N:Techno 0124  
 Manufacturer: Jay Trends Merchandisiong Inc.  
 Operating Condition: BT communicating  
 Test Site: 2#Shielding Room  
 Operator: star  
 Test Specification: L 120V/60Hz  
 Comment: Report No.:ATE20151958  
 Start of Test: 2015-9-14 / 15:39:50

### 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 4.0 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)  
 Average



### MEASUREMENT RESULT: "02030016\_fin"

2015-9-14 15:41

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.870000	47.20	11.6	56	8.8	QP	L1	GND
2.076500	52.20	11.7	56	3.8	QP	L1	GND
4.083500	52.40	11.8	56	3.6	QP	L1	GND

### MEASUREMENT RESULT: "02030016\_fin2"

2015-9-14 15:41

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.872000	37.90	11.6	46	8.1	AV	L1	GND
2.144000	42.00	11.7	46	4.0	AV	L1	GND
4.083500	39.40	11.8	46	6.6	AV	L1	GND



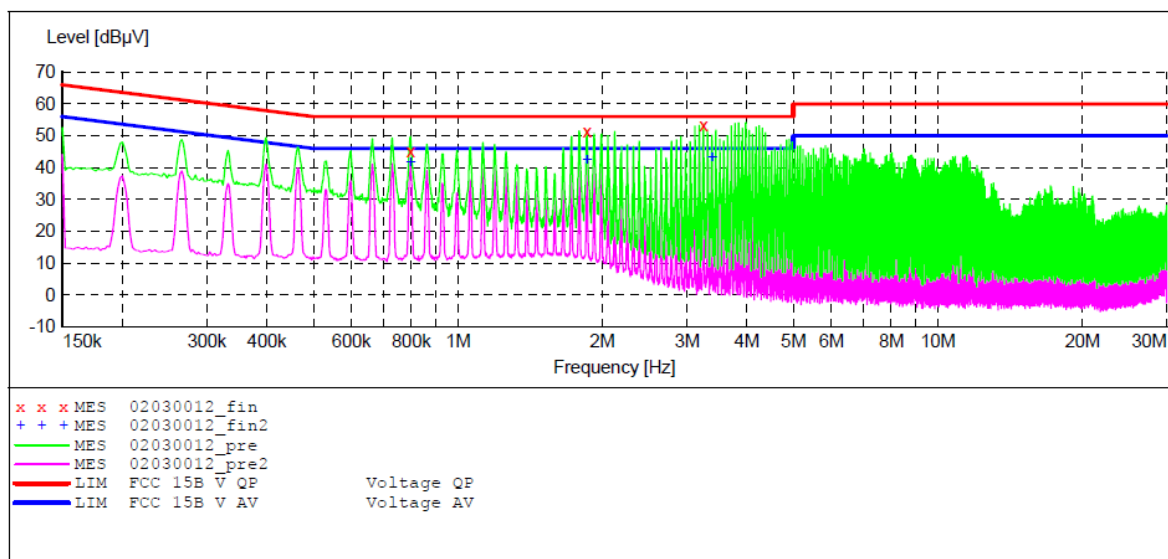
ACCURATE TECHNOLOGY CO., LTD

## CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Solar Audio Table M/N:Techno 0124  
 Manufacturer: Jay Trends Merchandising Inc.  
 Operating Condition: BT communicating  
 Test Site: 2#Shielding Room  
 Operator: star  
 Test Specification: L 240V/60Hz  
 Comment: Report No.:ATE20151958  
 Start of Test: 2015-9-14 / 15:28:54

### 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 4.0 kHz QuasiPeak 1.0 s 9 kHz LISN (ESH3-Z5)  
 Average



### MEASUREMENT RESULT: "02030012\_fin"

2015-9-14 15:31

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.796000	45.10	11.6	56	10.9	QP	L1	GND
1.858000	51.20	11.7	56	4.8	QP	L1	GND
3.251000	53.50	11.7	56	2.5	QP	L1	GND

### MEASUREMENT RESULT: "02030012\_fin2"

2015-9-14 15:31

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.796000	41.70	11.6	46	4.3	AV	L1	GND
1.858000	42.50	11.7	46	3.5	AV	L1	GND
3.386000	43.10	11.7	46	2.9	AV	L1	GND

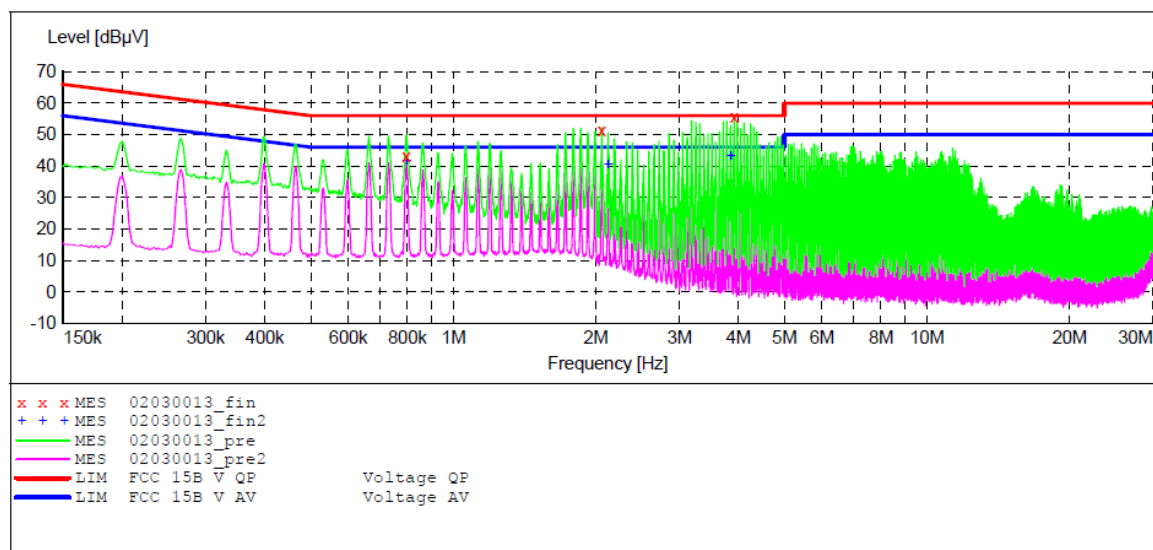
## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Solar Audio Table M/N: Techno 0124  
 Manufacturer: Jay Trends Merchandising Inc.  
 Operating Condition: BT communicating  
 Test Site: 2#Shielding Room  
 Operator: star  
 Test Specification: N 240V/60Hz  
 Comment: Report No.: ATE20151958  
 Start of Test: 2015-9-14 / 15:32:14

### 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 4.0 kHz QuasiPeak 1.0 s 9 kHz LISN (ESH3-Z5)  
 Average



### MEASUREMENT RESULT: "02030013\_fin"

2015-9-14 15:34

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.796000	48.10	11.6	56	7.9	QP	N	GND
2.058500	51.30	11.7	56	4.7	QP	N	GND
3.917000	54.50	11.7	56	1.5	QP	N	GND

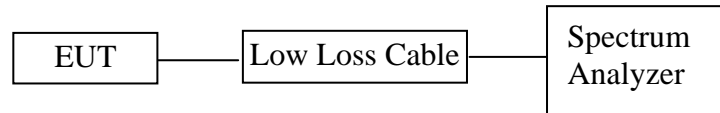
### MEASUREMENT RESULT: "02030013\_fin2"

2015-9-14 15:34

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.796000	41.60	11.6	46	4.4	AV	N	GND
2.121500	40.40	11.7	46	5.6	AV	N	GND
3.854000	43.20	11.7	46	2.8	AV	N	GND

## 6. 6DB BANDWIDTH MEASUREMENT

### 6.1. Block Diagram of Test Setup



(EUT: Solar Audio Table)

### 6.2. The Requirement For Section 15.247(a)(2)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

### 6.3. EUT Configuration on Measurement

The equipment is 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.

### 6.4. 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 TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

### 6.5. Test Procedure

6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

6.5.2. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.

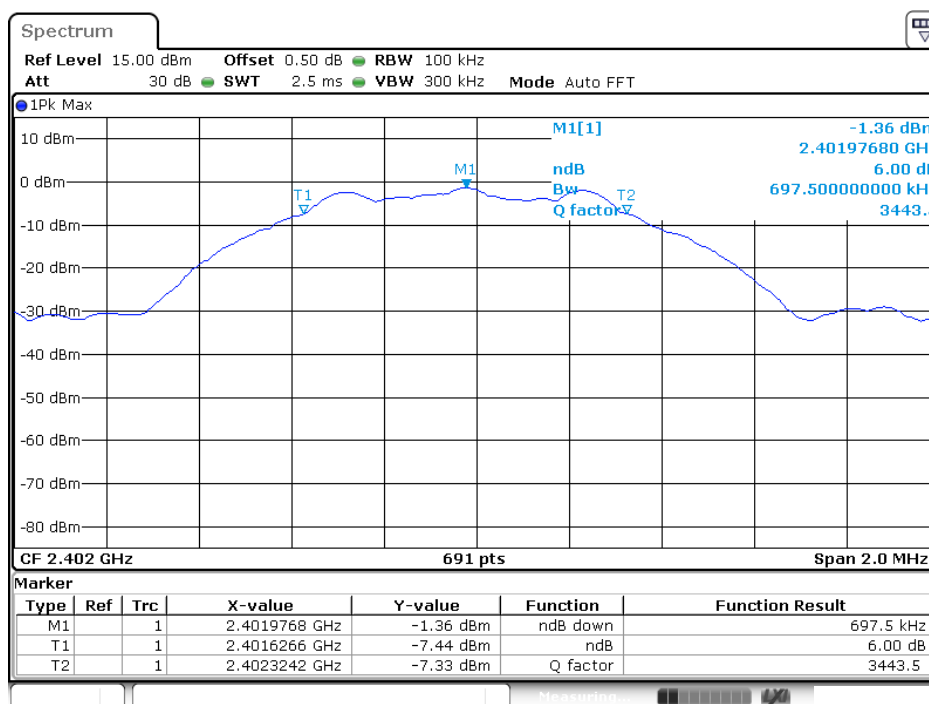
6.5.3. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

## 6.6.Test Result

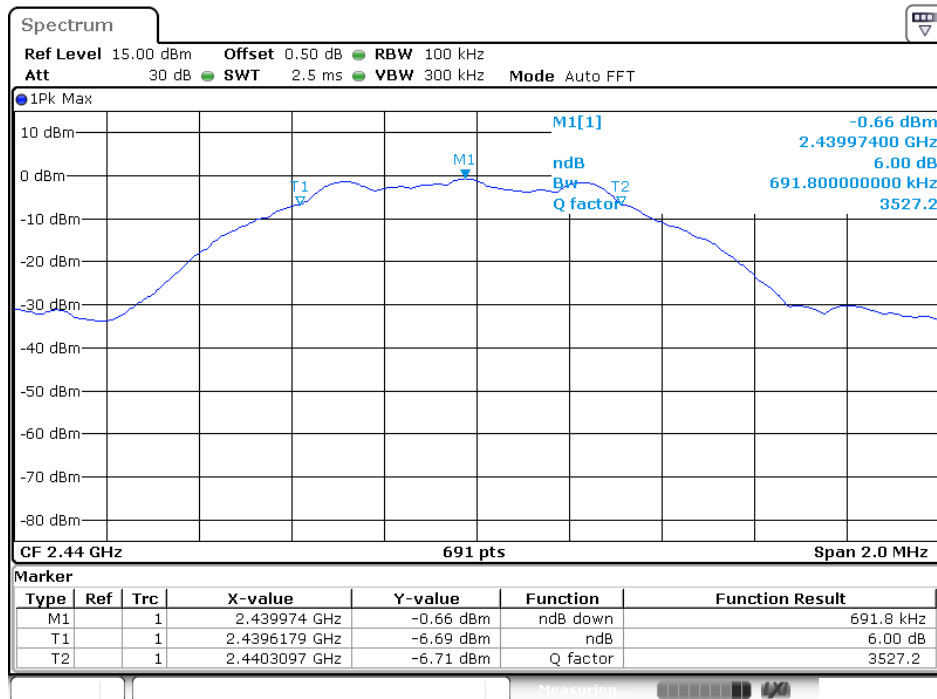
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit(MHz)	PASS/FAIL
0	2402	0.6975	0.5	PASS
19	2440	0.6918	0.5	PASS
39	2480	0.6946	0.5	PASS

The spectrum analyzer plots are attached as below.

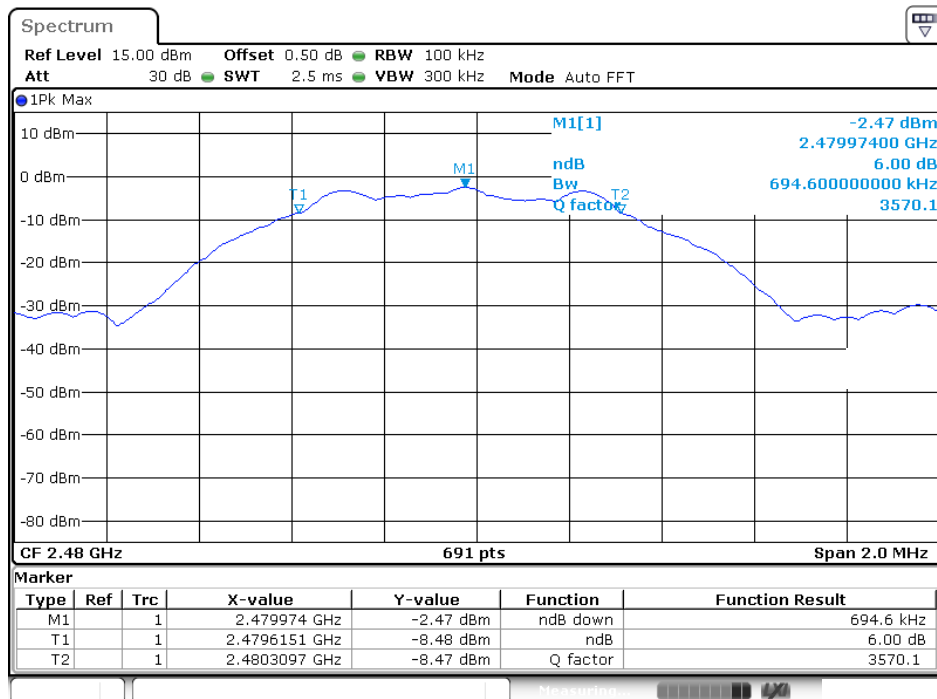
*channel 0*



## channel 19



## channel 39



## 7. MAXIMUM PEAK OUTPUT POWER

### 7.1. Block Diagram of Test Setup



(EUT: Solar Audio Table)

### 7.2. The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

### 7.3. EUT Configuration on Measurement

The 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.

### 7.4. 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 modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

### 7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.2. Test method is options 1 from KDB558074 D01 DTS Meas Guidance v03r02

7.5.3. Set RBW of spectrum analyzer to 1 MHz and VBW to 3 MHz.

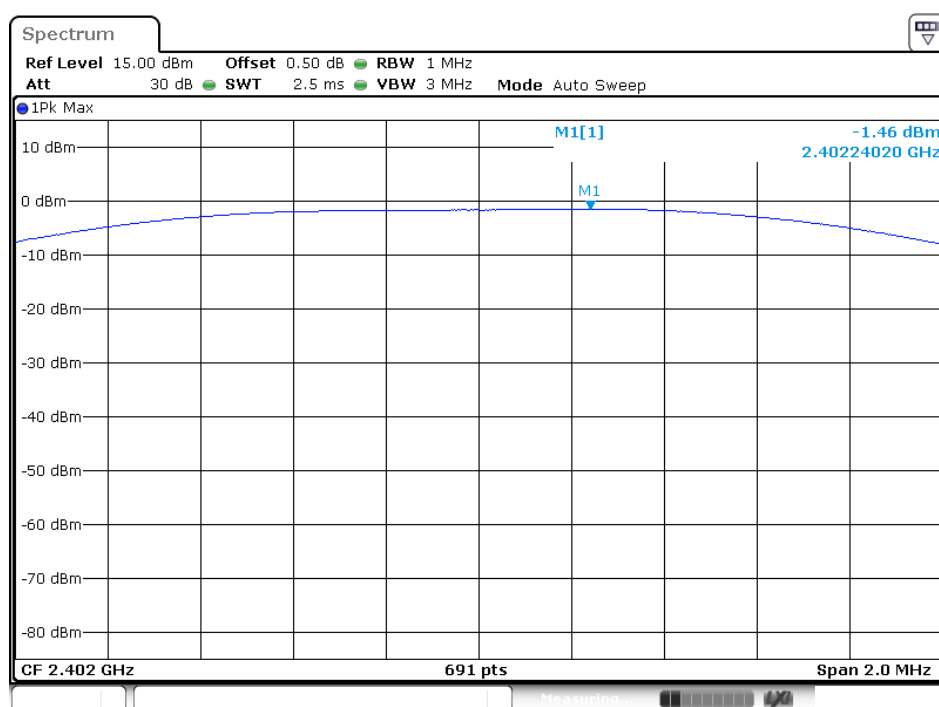
7.5.4. Measurement the maximum peak output power.

## 7.6.Test Result

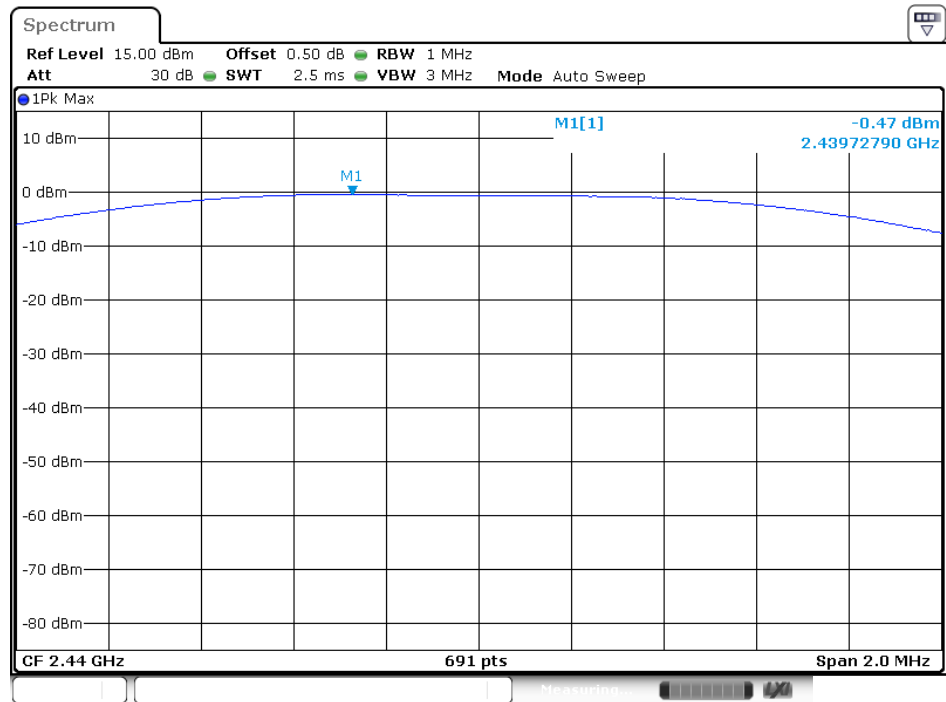
Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
0	2402	-1.46	30	PASS
19	2440	-0.47	30	PASS
39	2480	-2.14	30	PASS

The spectrum analyzer plots are attached as below.

*channel 0*

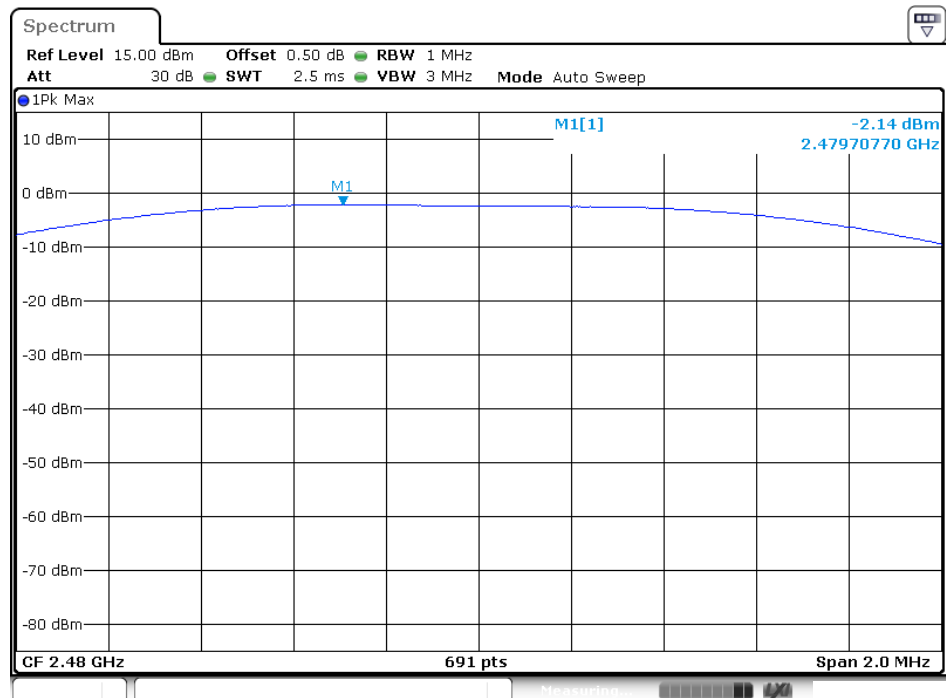


## channel 19



Date: 24.JUL.2015 09:41:46

## channel 39





## 8. POWER SPECTRAL DENSITY MEASUREMENT

### 8.1. Block Diagram of Test Setup



(EUT: Solar Audio Table)

### 8.2. The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 8.3. EUT Configuration on Measurement

The 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.

### 8.4. Operating Condition of EUT

8.4.1. Setup the EUT and simulator as shown as Section 8.1.

8.4.2. Turn on the power of all equipment.

8.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

## 8.5. Test Procedure

8.5.1. The EUT was tested according to DTS test procedure of Jun 05, 2014 KDB558074 D01 DTS Meas Guidance v03r02 for compliance to FCC 47CFR 15.247 requirements.

8.5.2. The transmitter output was connected to the spectrum analyzer through a low loss cable.

8.5.3. Measurement Procedure PKPSD:

8.5.4. This procedure must be used if maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit, and is optional if the maximum (average) conducted output power was used to demonstrate compliance.

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
4. Set the VBW  $\geq 3 \times \text{RBW}$ .
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

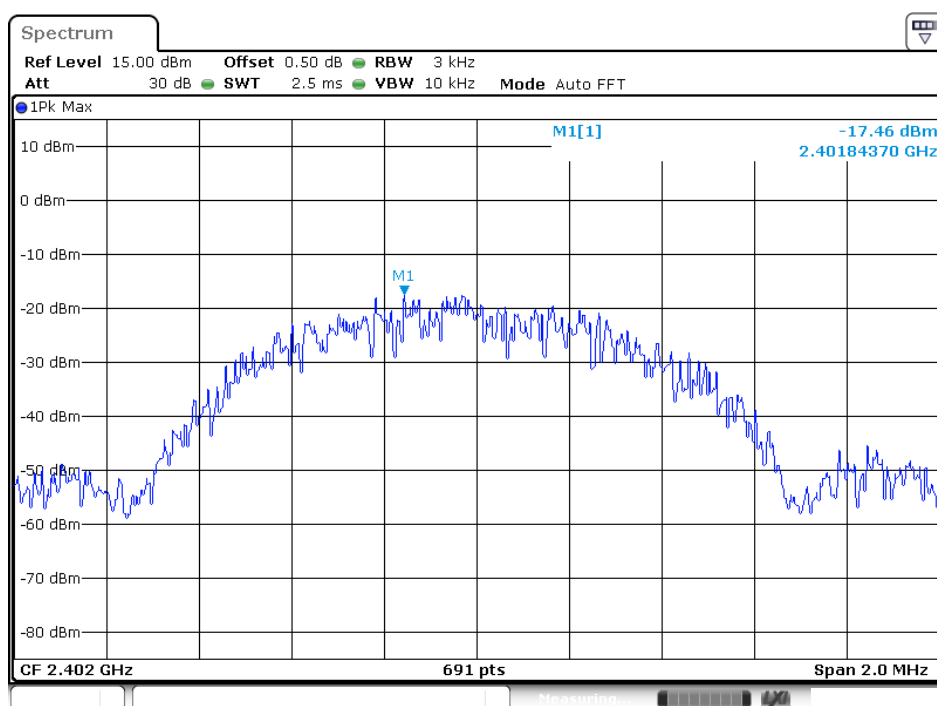
8.5.5. Measurement the maximum power spectral density.

## 8.6.Test Result

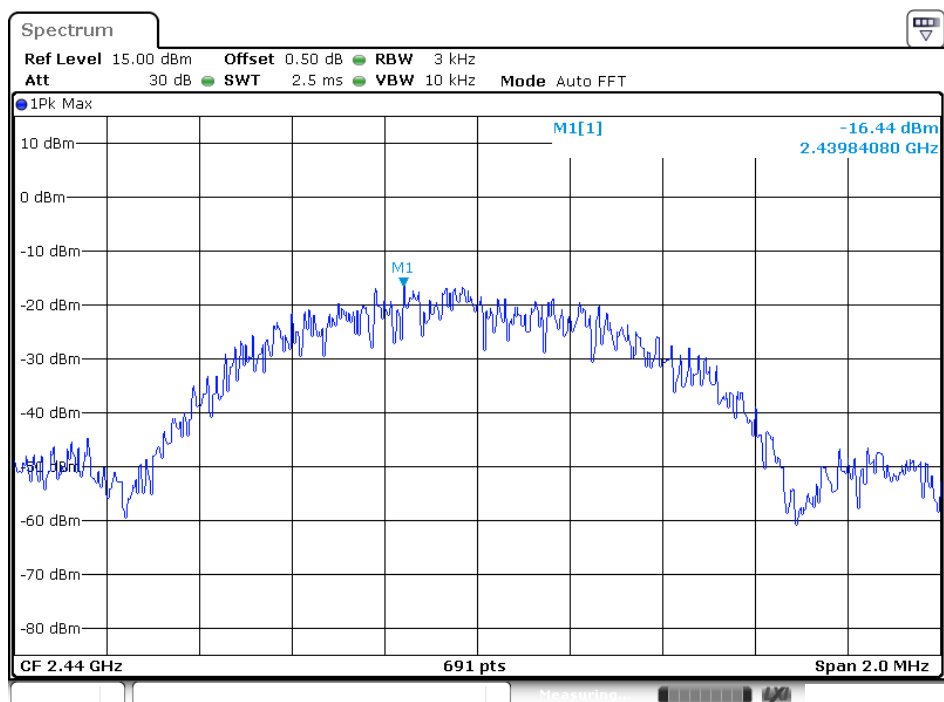
CHANNEL NUMBER	FREQUENCY (MHz )	PSD (dBm/3KHz)	LIMIT (dBm/3KHz)	PASS/FAIL
0	2402	-17.46	8	PASS
19	2440	-16.44	8	PASS
39	2480	-17.97	8	PASS

The spectrum analyzer plots are attached as below.

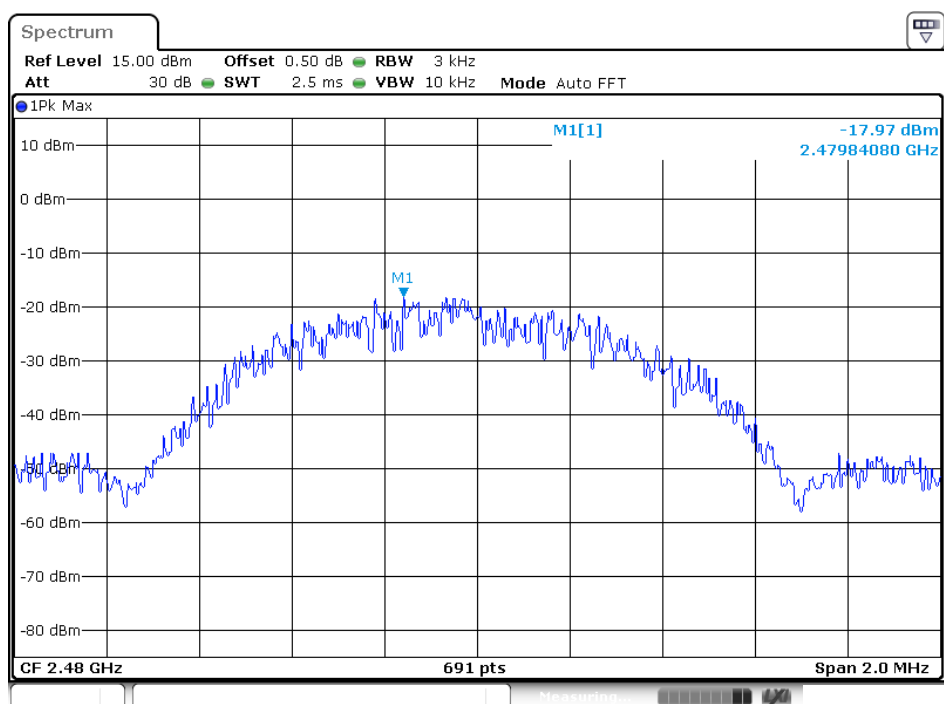
*channel 0*



channel 19



channel 39



## 9. BAND EDGE COMPLIANCE TEST

### 9.1. Block Diagram of Test Setup



(EUT: Solar Audio Table)

### 9.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

### 9.3. EUT Configuration on Measurement

The 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.

## 9.4.Operating Condition of EUT

9.4.1.Setup the EUT and simulator as shown as Section 9.1.

9.4.2.Turn on the power of all equipment.

9.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

## 9.5.Test Procedure

Conducted Band Edge:

9.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

9.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.

9.5.3. Radiate Band Edge:

9.5.4.The EUT is placed on a turntable, which is 0.1m above the ground plane and worked at highest radiated power.

9.5.5.The turntable was rotated for 360 degrees to determine the position of maximum emission level.

9.5.6.EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

9.5.7.Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

9.5.8.RBW=1MHz, VBW=1MHz

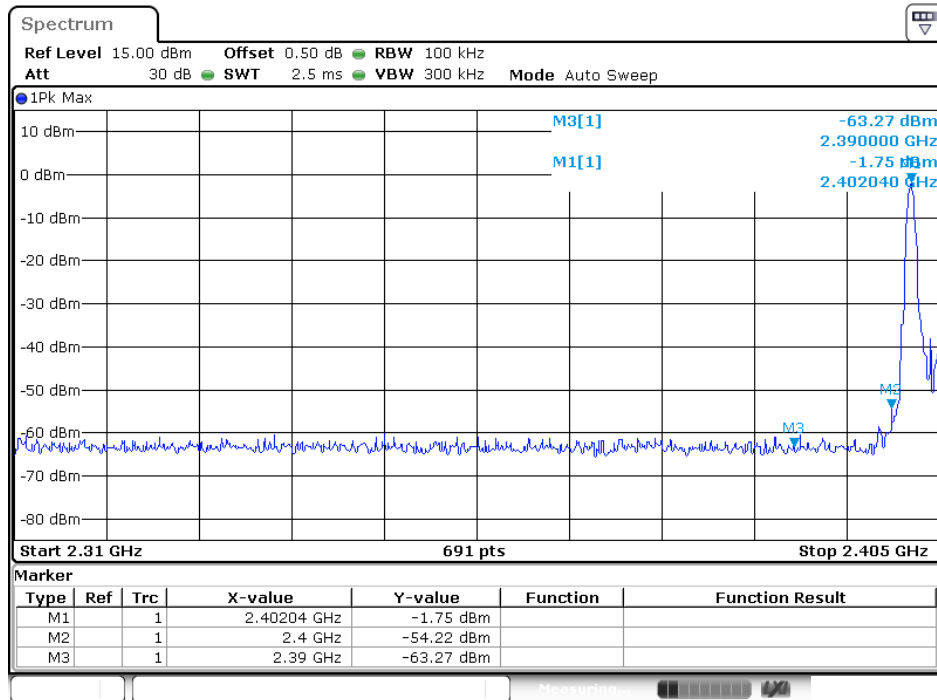
9.5.9.The band edges was measured and recorded.

## 9.6.Test Result

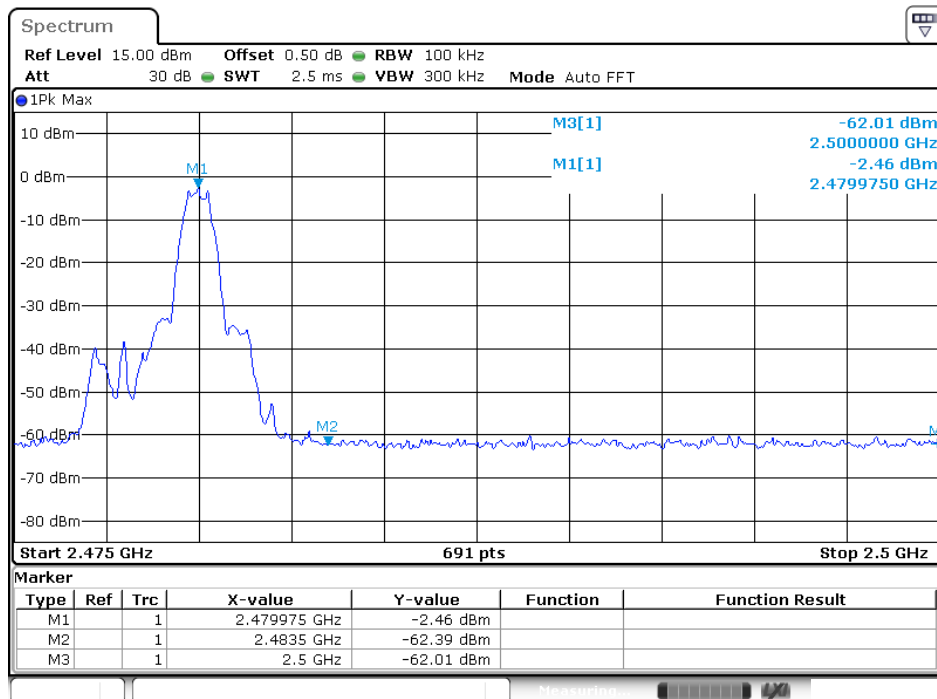
**Pass**

Channel	Frequency	Delta peak to band emission	Limit(dBc)
0	2.4GHz	52.47	20
39	2.4835GHz	59.93	20

## channel 0



## channel 39



### Radiated Band Edge Result

Date of Test:	September 14, 2015	Temperature:	25°C
EUT:	Solar Audio Table	Humidity:	50%
Model No.:	Techno 0124	Power Supply:	AC 120V/60Hz
Test Mode:	TX (2402MHz) GFSK	Test Engineer:	Star

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	
2390.000	34.90	43.36	-7.53	27.37	35.83	54.00	74.00	-26.63	-38.17	Vertical
2400.000	45.03	54.56	-7.46	37.57	47.10	54.00	74.00	-16.43	-26.90	Vertical
2390.000	34.67	43.72	-7.53	27.14	36.19	54.00	74.00	-26.86	-37.81	Horizontal
2400.000	46.89	56.51	-7.46	39.43	49.05	54.00	74.00	-14.57	-24.95	Horizontal

Date of Test:	September 14, 2015	Temperature:	25°C
EUT:	Solar Audio Table	Humidity:	50%
Model No.:	Techno 0124	Power Supply:	AC 120V/60Hz
Test Mode:	TX (2480MHz) GFSK	Test Engineer:	Star

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	
2483.500	42.69	51.82	-7.37	35.32	44.45	54.00	74.00	-18.68	-29.55	Vertical
2500.000	34.28	44.38	-7.40	26.88	36.98	54.00	74.00	-27.12	-37.02	Vertical
2483.500	40.30	48.63	-7.37	32.93	41.26	54.00	74.00	-21.07	-32.74	Horizontal
2500.000	35.61	44.38	-7.40	28.21	36.98	54.00	74.00	-25.79	-37.02	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
3. Display the measurement of peak values.



Job No.: STAR2015 #455

Standard: FCC PK

Test item: Radiation Test

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

EUT: Solar Audio Table

Mode: TX 2402MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Horizontal

Power Source: AC 120V/60Hz

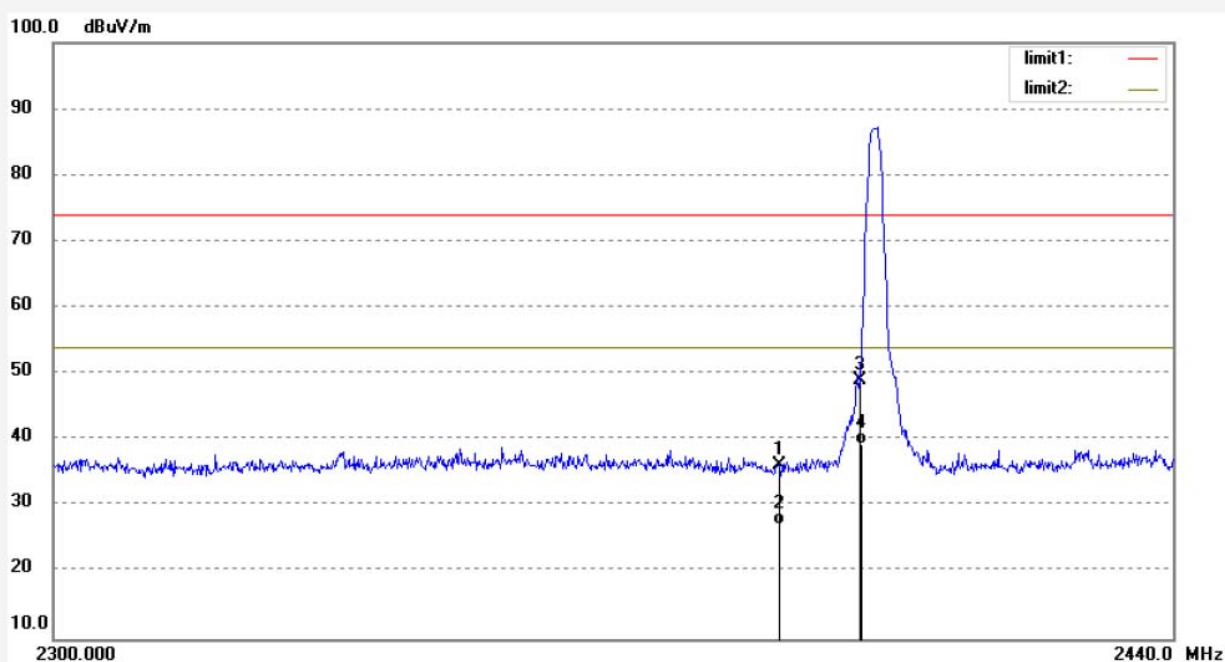
Date: 15/09/14/

Time: 18/50/14

Engineer Signature: Star

Distance: 3m

Note: Report NO.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	43.72	-7.53	36.19	74.00	-37.81	peak			
2	2390.000	34.67	-7.53	27.14	54.00	-26.86	AVG			
3	2400.000	56.51	-7.46	49.05	74.00	-24.95	peak			
4	2400.000	46.89	-7.46	39.43	54.00	-14.57	AVG			

Job No.: STAR2015 #456

Standard: FCC PK

Test item: Radiation Test

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

EUT: Solar Audio Table

Mode: TX 2402MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Vertical

Power Source: AC 120V/60Hz

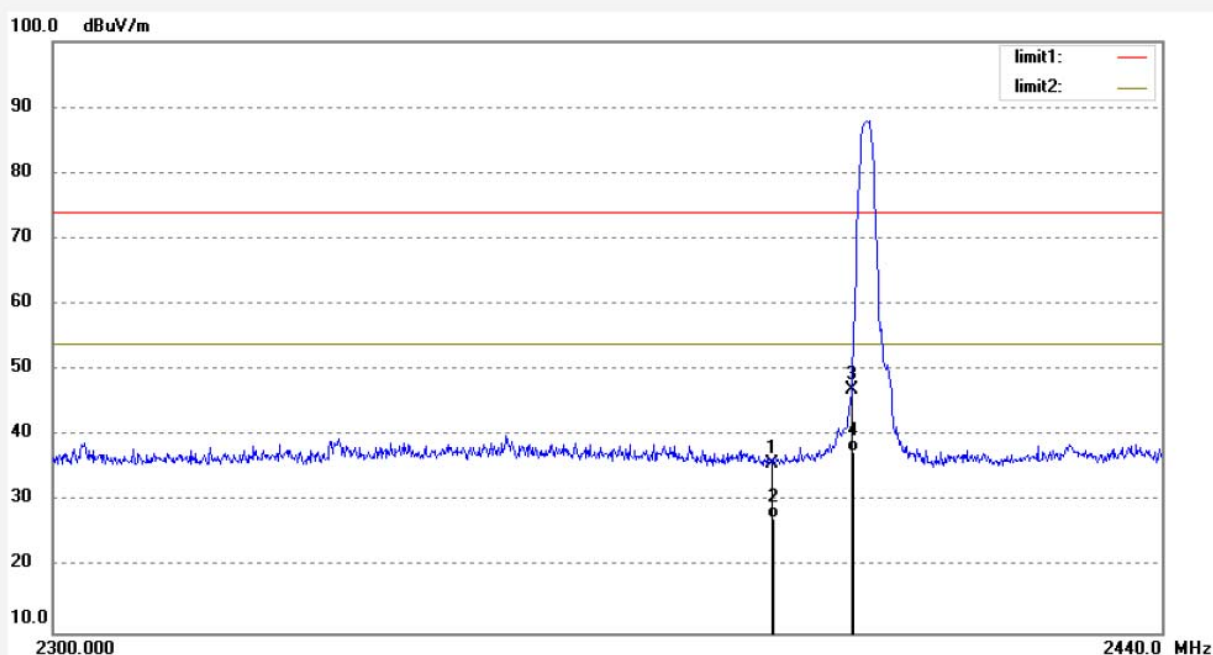
Date: 15/09/14/

Time: 18/53/16

Engineer Signature: Star

Distance: 3m

Note: Report NO.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	43.36	-7.53	35.83	74.00	-38.17	peak			
2	2390.000	34.90	-7.53	27.37	54.00	-26.63	AVG			
3	2400.000	54.56	-7.46	47.10	74.00	-26.90	peak			
4	2400.000	45.03	-7.46	37.57	54.00	-16.43	AVG			

Job No.: STAR2015 #457

Standard: FCC PK

Test item: Radiation Test

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

EUT: Solar Audio Table

Mode: TX 2480MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Vertical

Power Source: AC 120V/60Hz

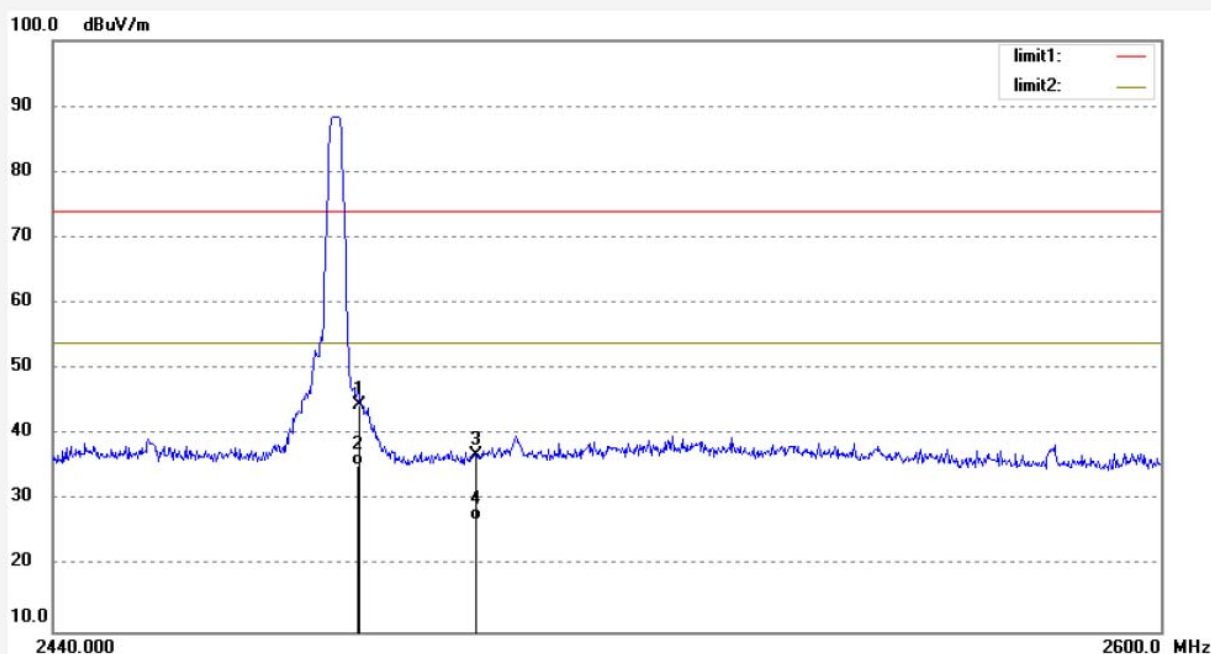
Date: 15/09/14/

Time: 18/57/40

Engineer Signature: Star

Distance: 3m

Note: Report NO.:ATE20151958



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	51.82	-7.37	44.45	74.00	-29.55	peak			
2	2483.500	42.69	-7.37	35.32	54.00	-18.68	AVG			
3	2500.000	44.38	-7.40	36.98	74.00	-37.02	peak			
4	2500.000	34.28	-7.40	26.88	54.00	-27.12	AVG			



Job No.: STAR2015 #458

Standard: FCC PK

Test item: Radiation Test

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

EUT: Solar Audio Table

Mode: TX 2480MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Horizontal

Power Source: AC 120V/60Hz

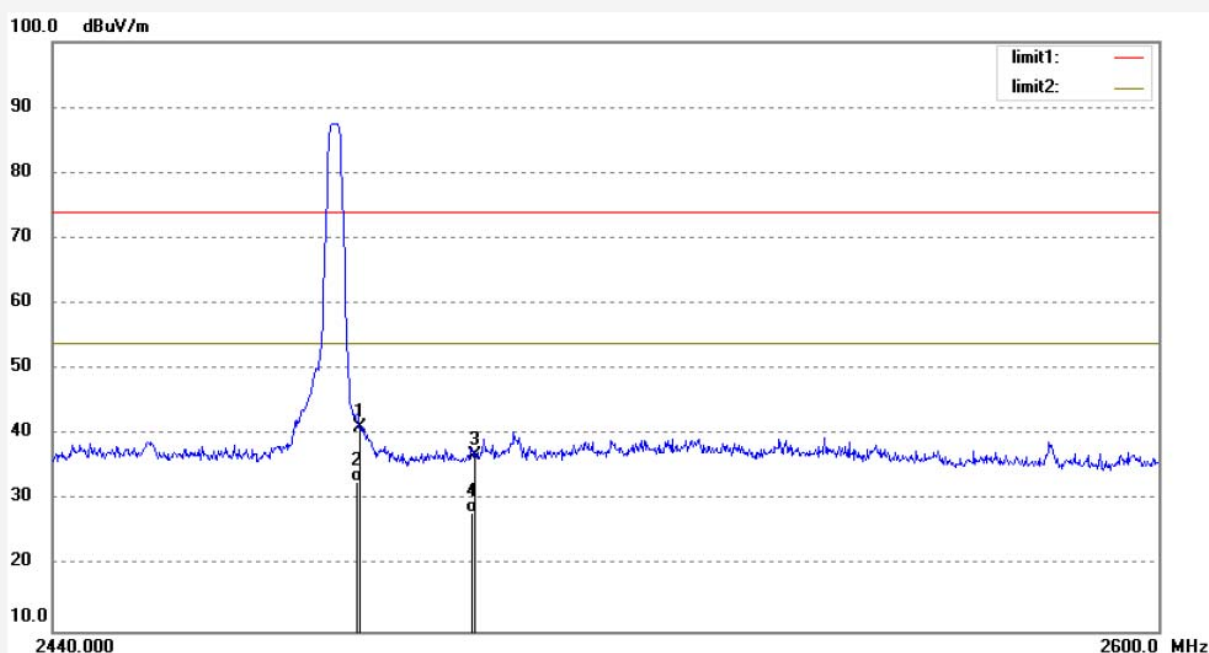
Date: 15/09/14/

Time: 19/02/31

Engineer Signature: Star

Distance: 3m

Note: Report NO.:ATE20151958



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	48.63	-7.37	41.26	74.00	-32.74	peak			
2	2483.500	40.30	-7.37	32.93	54.00	-21.07	AVG			
3	2500.000	44.38	-7.40	36.98	74.00	-37.02	peak			
4	2500.000	35.61	-7.40	28.21	54.00	-25.79	AVG			

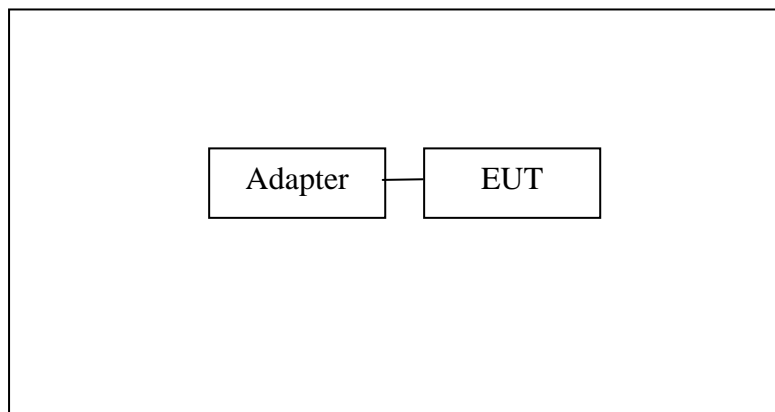
Note:

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
3. Display the measurement of peak values.

## 10.RADIATED SPURIOUS EMISSION TEST

### 10.1.Block Diagram of Test Setup

#### 10.1.1.Block diagram of connection between the EUT and peripherals



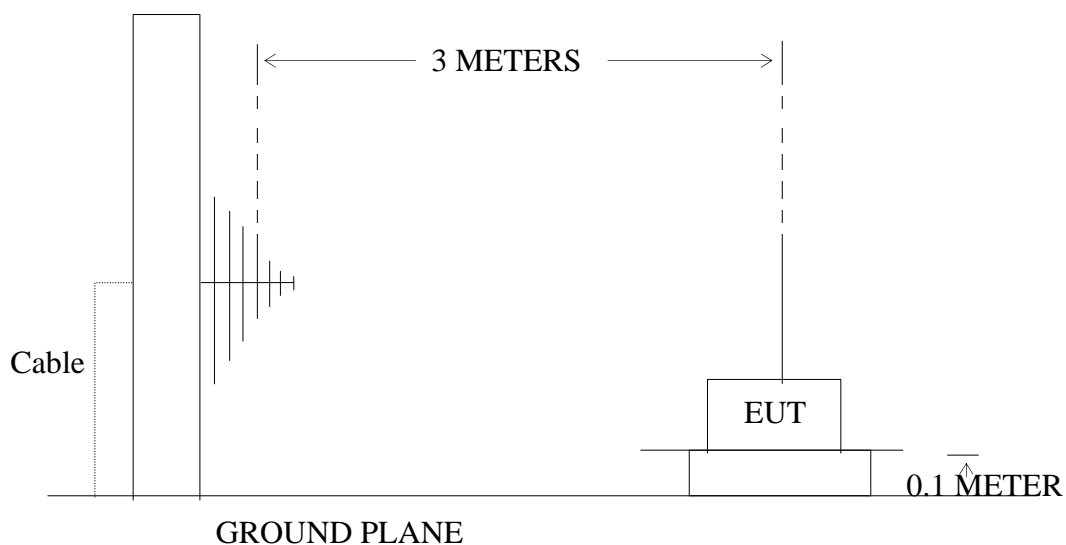
Setup: Transmitting mode

(EUT: Solar Audio Table)

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

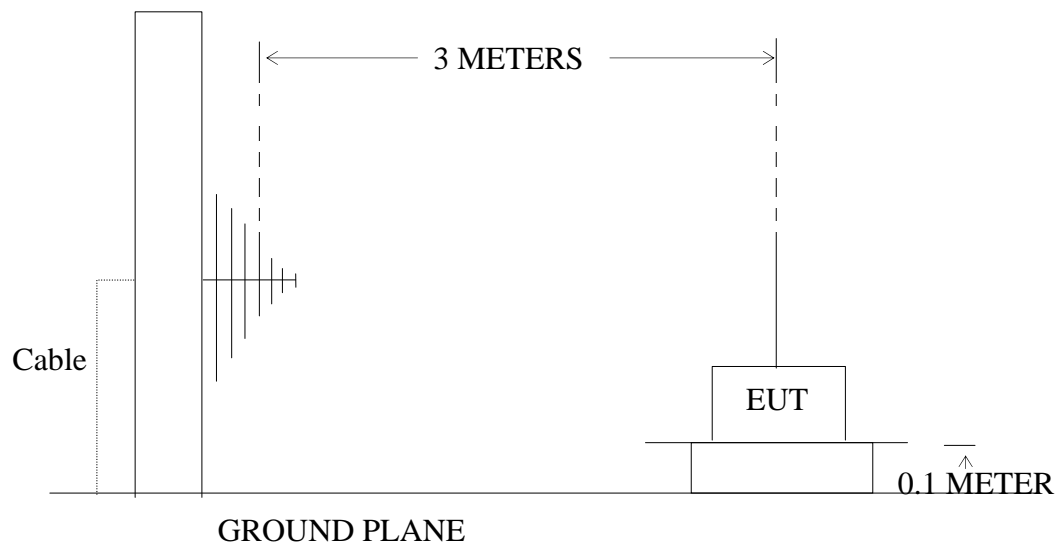
**Below 1GHz**

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



**Above 1GHz**

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



**10.2.The Limit For Section 15.247(d)**

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

### 10.3.Restricted bands of operation

#### 10.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

<sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510

<sup>2</sup>Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

### 10.4.Configuration of EUT on Measurement

The 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.

### 10.5.Operating Condition of EUT

10.5.1.Setup the EUT and simulator as shown as Section 10.1.

10.5.2.Turn on the power of all equipment.

10.5.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to

transmit.

## 10.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.1 meter high above ground(Below 1GHz). The EUT and its simulators are placed on a turntable, which is 0.1 meter high above ground(Above 1GHz). 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 EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

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

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

The final measurement in band 9-90 kHz, 110-490 kHz 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.

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

## 10.7.The Field Strength of Radiation Emission Measurement Results

**PASS.**

**Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.**

**2. \*: Denotes restricted band of operation.**

**3. The radiation emissions from 18-25GHz are not reported, because the test values lower than the limits of 20dB.**





## ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2015 #1755

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Solar Aduio Table

Mode: TX 2402MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Horizontal

Power Source: AC 120V/60Hz

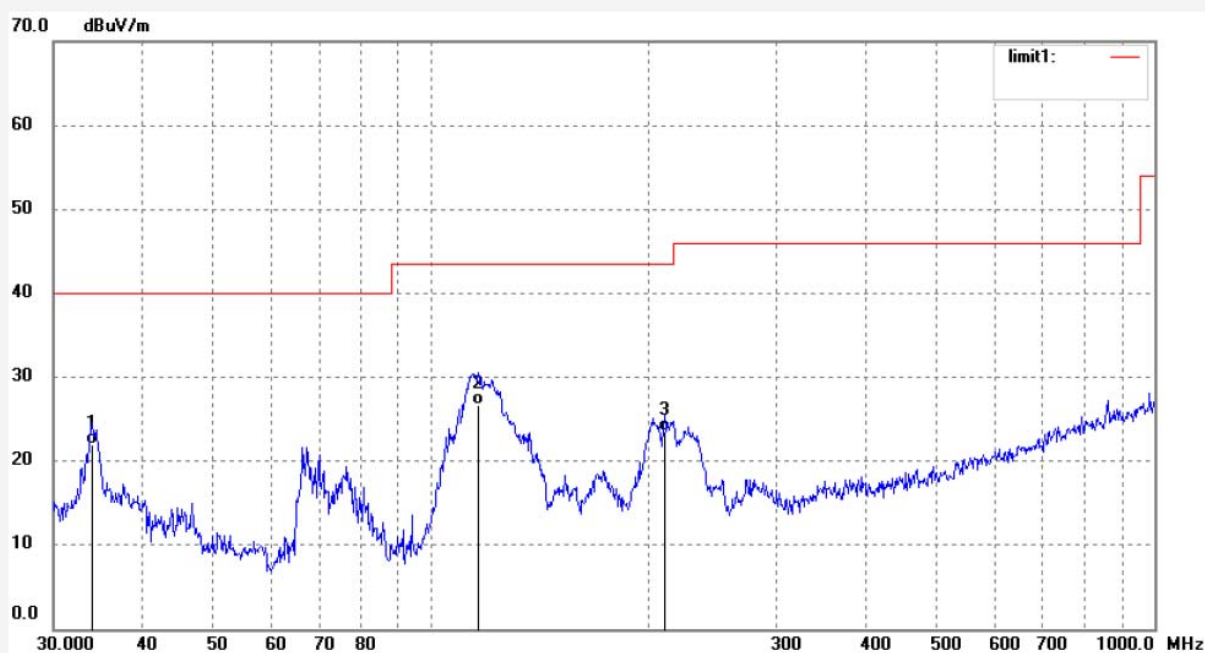
Date: 2015/09/14

Time: 16:48:28

Engineer Signature: Star

Distance: 3m

Note: Report No.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	33.9256	39.29	-17.36	21.93	40.00	-18.07	QP			
2	116.0391	48.00	-21.23	26.77	43.50	-16.73	QP			
3	210.1294	42.00	-18.47	23.53	43.50	-19.97	QP			



## ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: STAR2015 #1756

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Solar Aduio Table

Mode: TX 2402MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandisiong Inc.

Polarization: Vertical

Power Source: AC 120V/60Hz

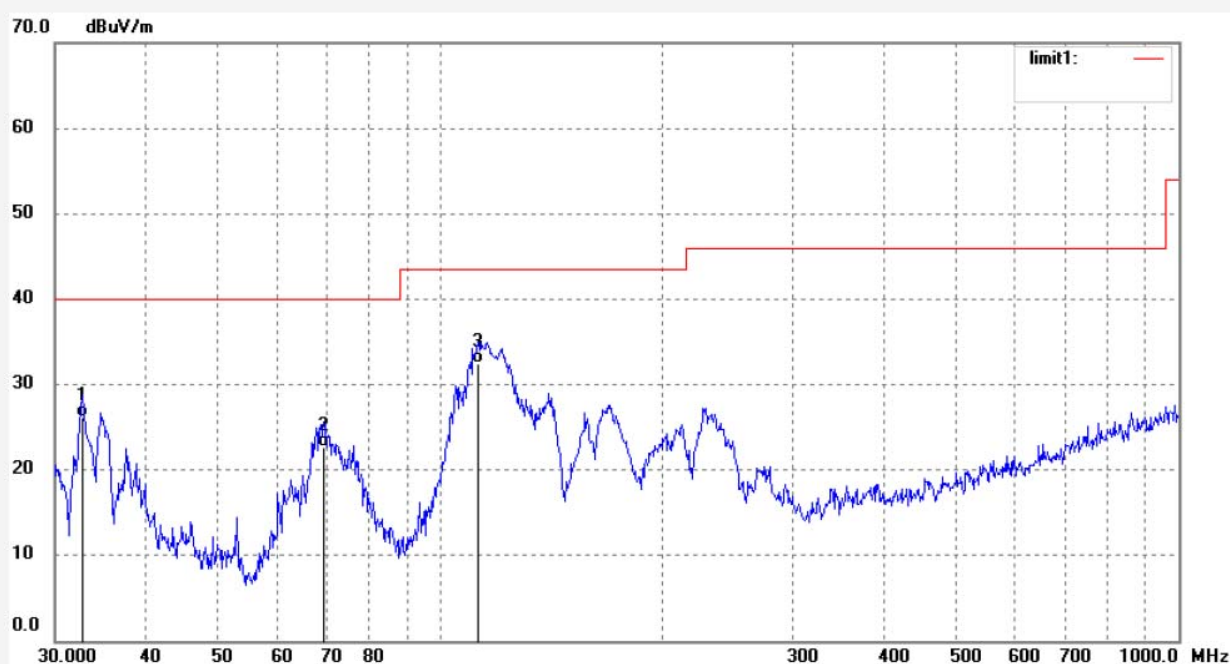
Date: 2015/09/14

Time: 16:49:26

Engineer Signature: Star

Distance: 3m

Note: Report No.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.7542	43.28	-17.19	26.09	40.00	-13.91	QP			
2	69.4733	45.58	-22.84	22.74	40.00	-17.26	QP			
3	112.4270	53.61	-21.13	32.48	43.50	-11.02	QP			

Job No.: STAR2015 #1757

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Solar Aduio Table

Mode: TX 2440MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandisiong Inc.

Polarization: Vertical

Power Source: AC 120V/60Hz

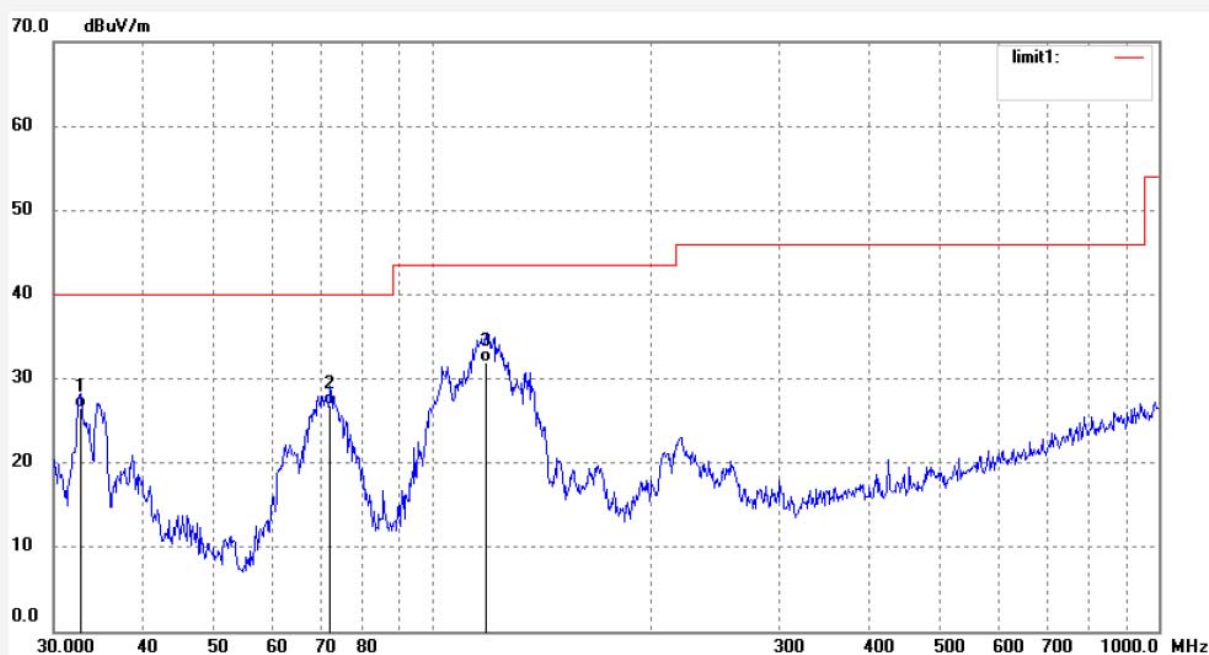
Date: 2015/09/14

Time: 16:50:33

Engineer Signature: Star

Distance: 3m

Note: Report No.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.6394	43.64	-17.17	26.47	40.00	-13.53	QP			
2	72.2111	49.83	-22.97	26.86	40.00	-13.14	QP			
3	118.5113	53.29	-21.28	32.01	43.50	-11.49	QP			



Job No.: STAR2015 #1758

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Solar Aduio Table

Mode: TX 2440MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandisiong Inc.

Polarization: Horizontal

Power Source: AC 120V/60Hz

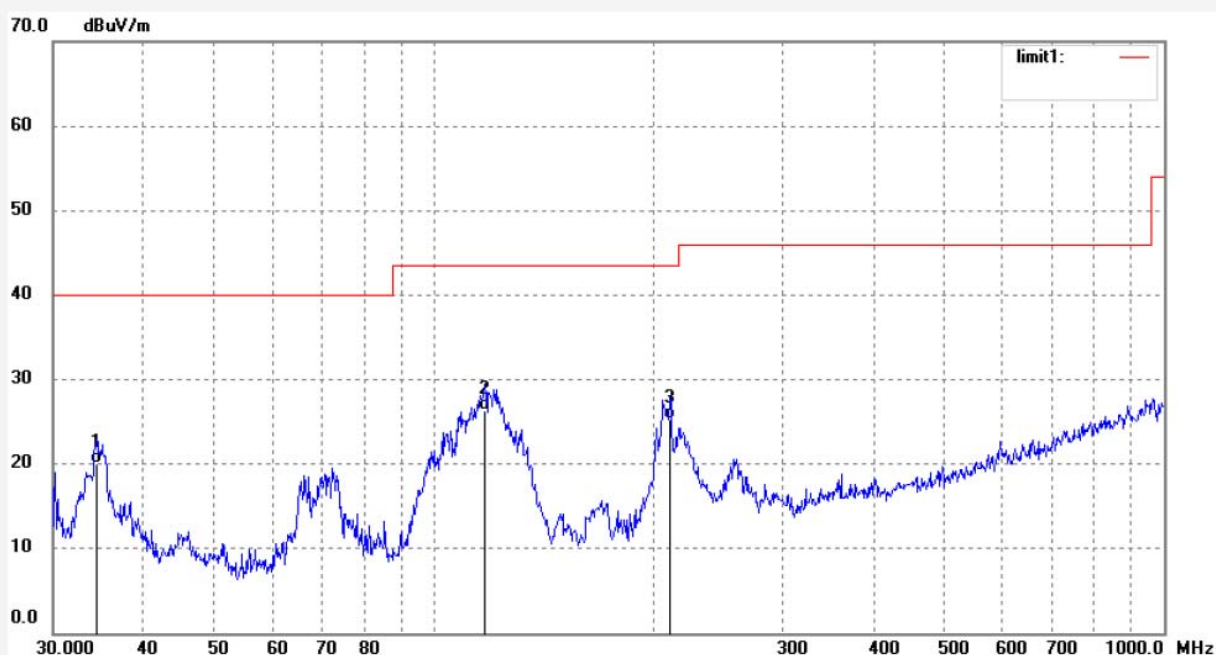
Date: 2015/09/14

Time: 16:51:58

Engineer Signature: Star

Distance: 3m

Note: Report No.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	34.4059	37.45	-17.42	20.03	40.00	-19.97	QP			
2	117.2687	47.68	-21.26	26.42	43.50	-17.08	QP			
3	210.1294	43.77	-18.47	25.30	43.50	-18.20	QP			



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2015 #1759

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Solar Aduio Table

Mode: TX 2480MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandisiong Inc.

Polarization: Horizontal

Power Source: AC 120V/60Hz

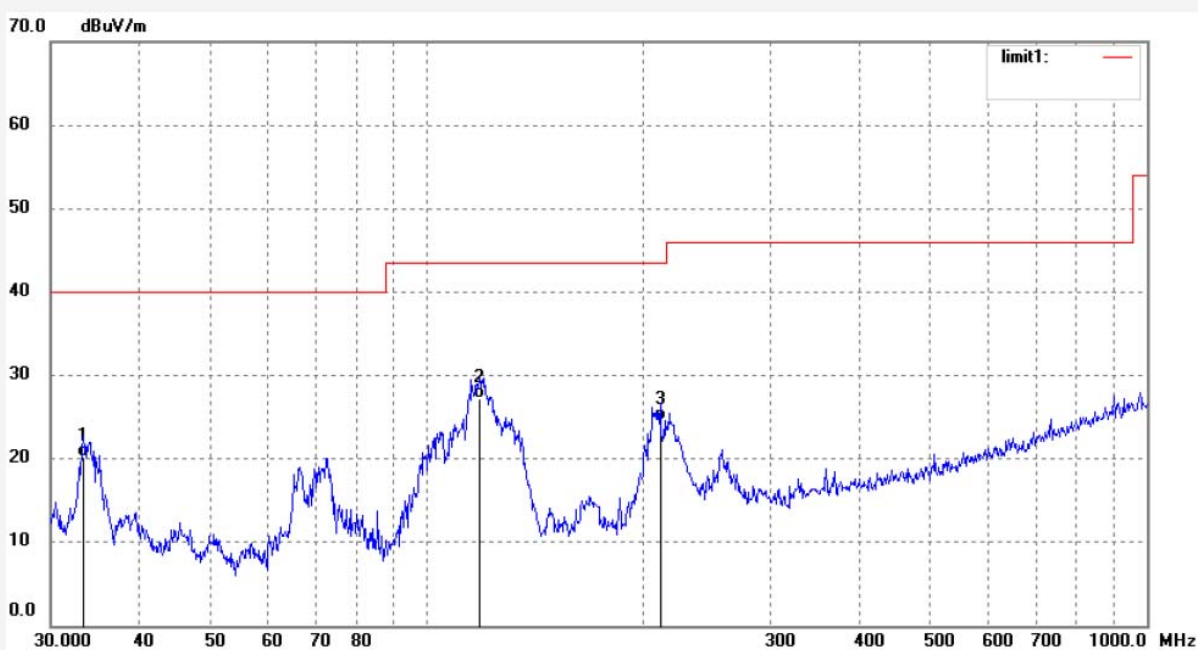
Date: 2015/09/14

Time: 16:53:19

Engineer Signature: Star

Distance: 3m

Note: Report No.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	33.3348	37.55	-17.27	20.28	40.00	-19.72	QP			
2	118.5113	48.47	-21.28	27.19	43.50	-16.31	QP			
3	210.8689	43.08	-18.46	24.62	43.50	-18.88	QP			

Job No.: STAR2015 #1760

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Solar Aduio Table

Mode: TX 2480MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandisiong Inc.

Polarization: Vertical

Power Source: AC 120V/60Hz

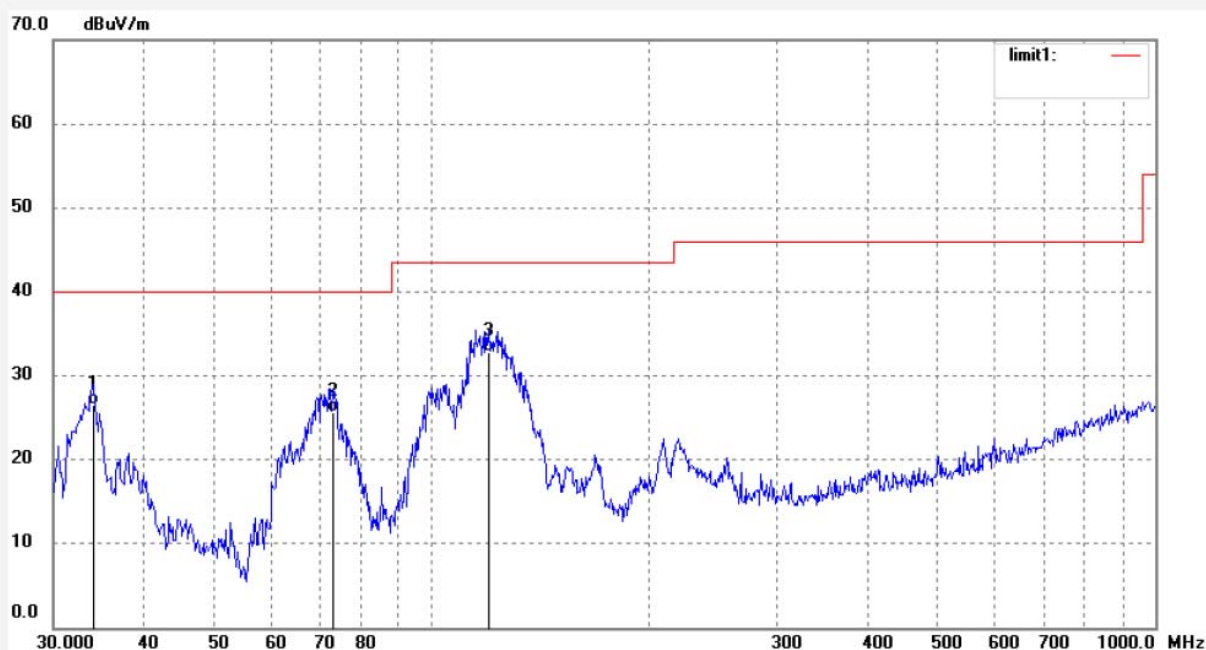
Date: 2015/09/14

Time: 16:54:09

Engineer Signature: Star

Distance: 3m

Note: Report No.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	34.0449	43.86	-17.37	26.49	40.00	-13.51	QP			
2	73.2330	48.60	-23.03	25.57	40.00	-14.43	QP			
3	119.7672	54.22	-21.32	32.90	43.50	-10.60	QP			





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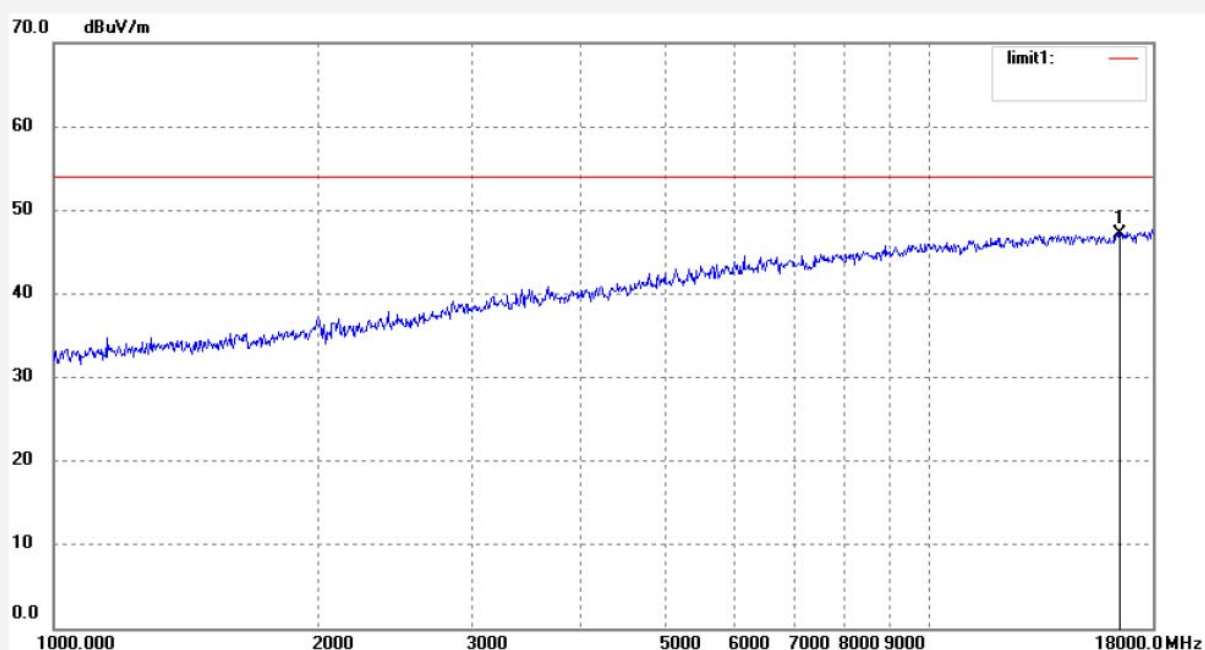
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: star2015 #609  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: Solar Audio Table  
Mode: TX 2402MHz  
Model: Techno 0124  
Manufacturer: Jay Trends Merchandising Inc.

Polarization: Horizontal  
Power Source: AC 120V/60Hz  
Date: 15/09/14/  
Time: 13/46/27  
Engineer Signature: Star  
Distance: 3m

Note: Report NO.:ATE20151958

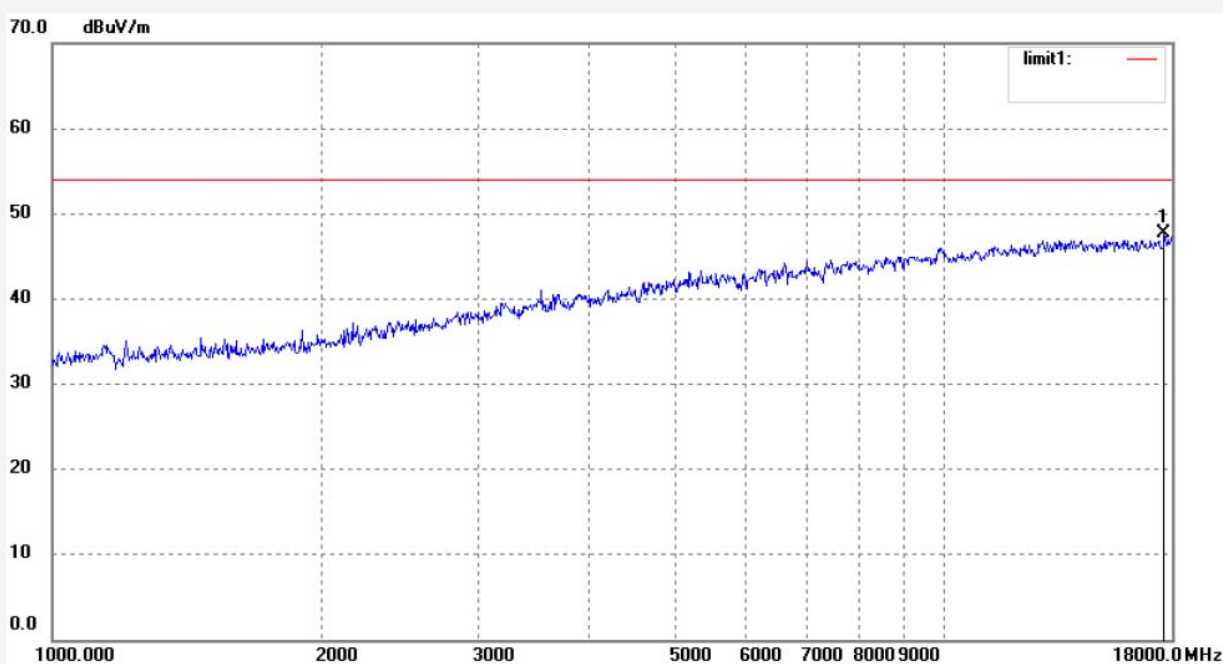


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	16504.954	42.80	4.43	47.23	54.00	-6.77	peak			

Job No.: star2015 #610  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: Solar Audio Table  
Mode: TX 2402MHz  
Model: Techno 0124  
Manufacturer: Jay Trends Merchandising Inc.

Polarization: Vertical  
Power Source: AC 120V/60Hz  
Date: 15/09/14/  
Time: 13/47/57  
Engineer Signature: Star  
Distance: 3m

Note: Report NO.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	17639.473	39.31	8.31	47.62	54.00	-6.38	peak			





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Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2015 #611

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Solar Audio Table

Mode: TX 2440MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Vertical

Power Source: AC 120V/60Hz

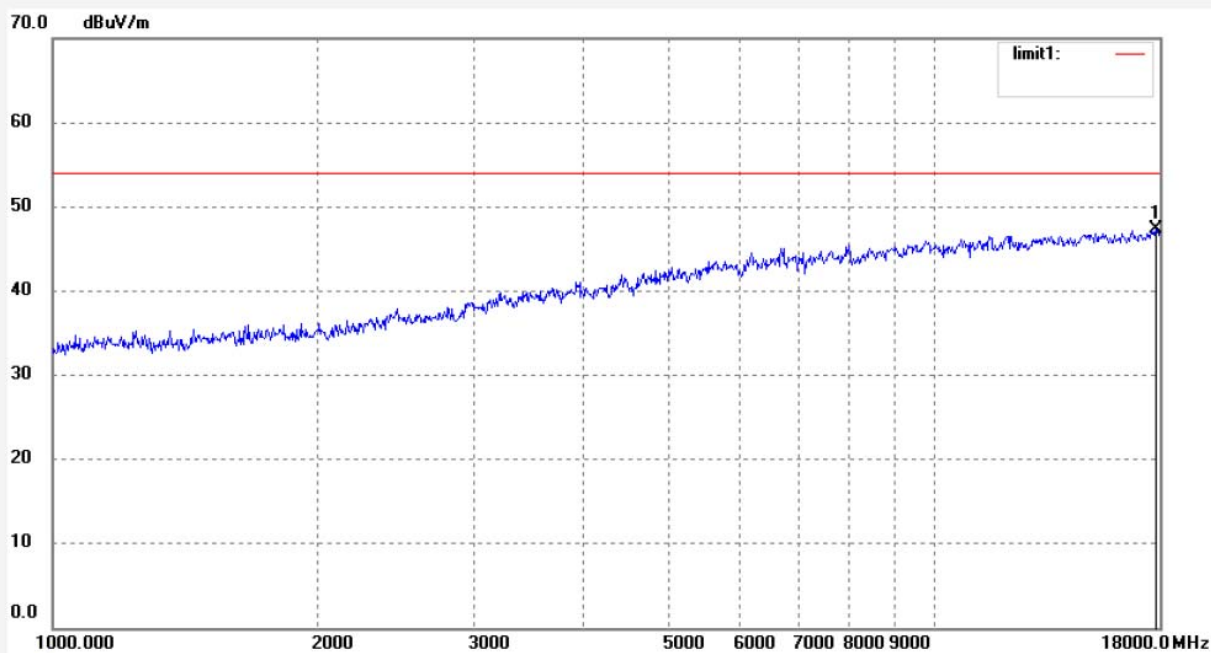
Date: 15/09/14/

Time: 13/49/41

Engineer Signature: Star

Distance: 3m

Note: Report NO.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	17793.091	38.26	9.02	47.28	54.00	-6.72	peak			



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Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2015 #612

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Solar Audio Table

Mode: TX 2440MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Horizontal

Power Source: AC 120V/60Hz

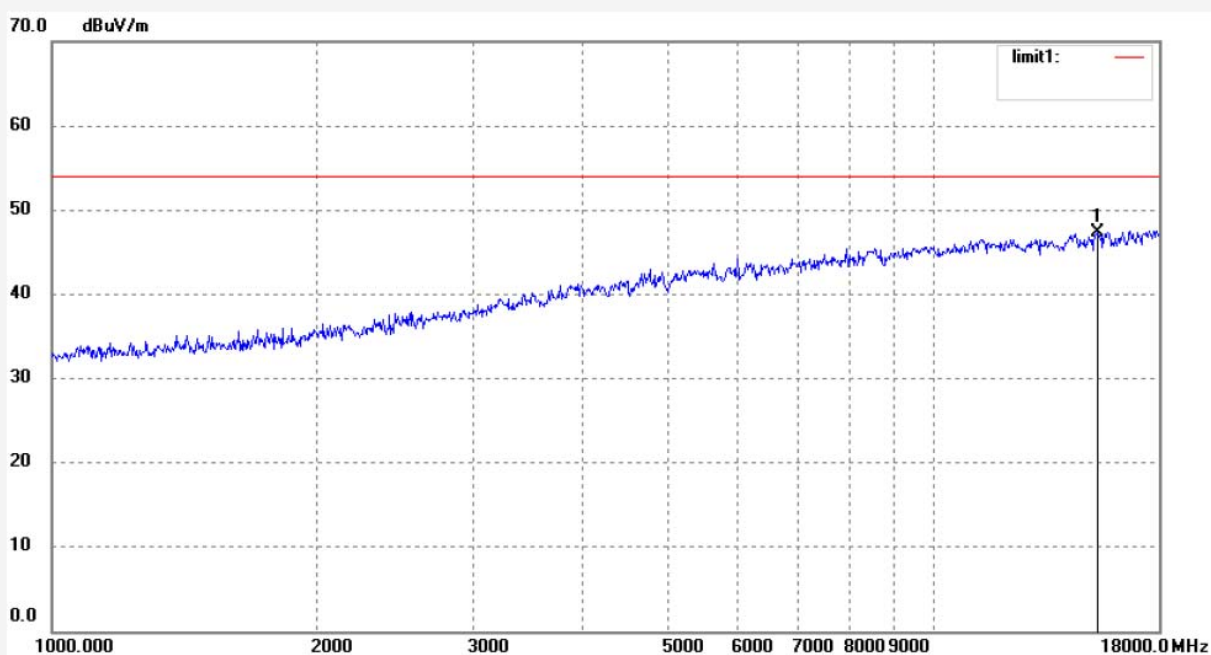
Date: 15/09/14/

Time: 13/51/12

Engineer Signature: Star

Distance: 3m

Note: Report NO.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	15310.072	42.78	4.54	47.32	54.00	-6.68	peak			



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Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2015 #613

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Solar Audio Table

Mode: TX 2480MHz

Model: Techno 0124

Manufacturer: Jay Trends Merchandising Inc.

Polarization: Horizontal

Power Source: AC 120V/60Hz

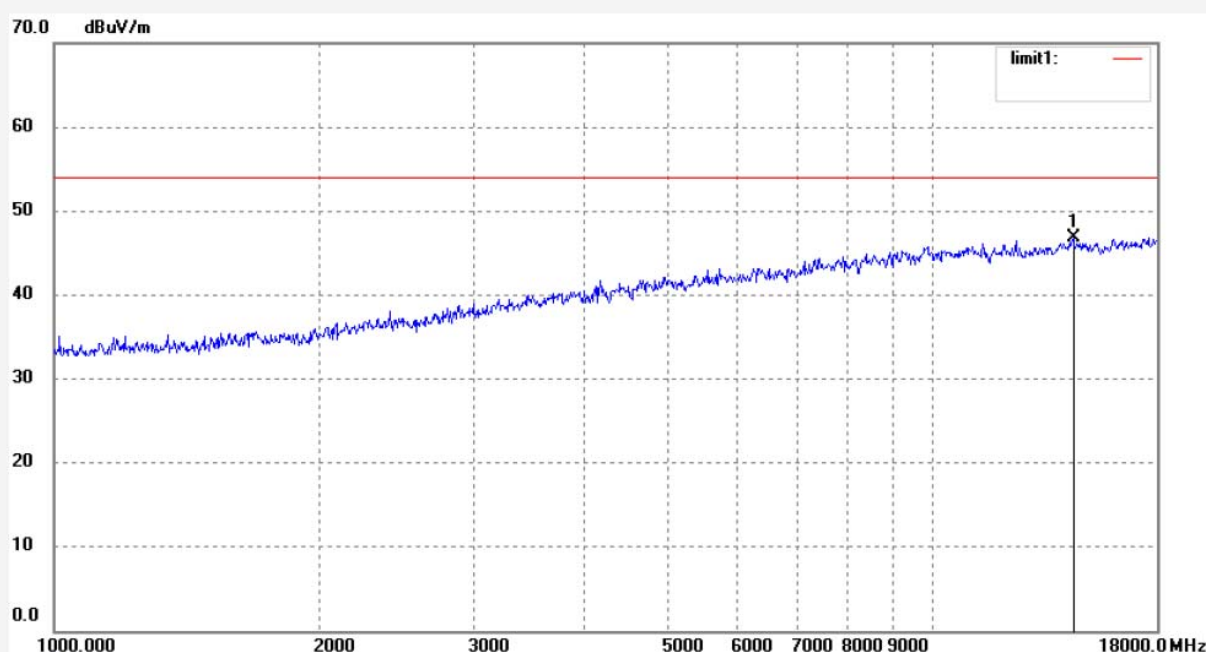
Date: 15/09/14/

Time: 13/52/54

Engineer Signature: Star

Distance: 3m

Note: Report NO.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	14450.131	40.56	6.25	46.81	54.00	-7.19	peak			



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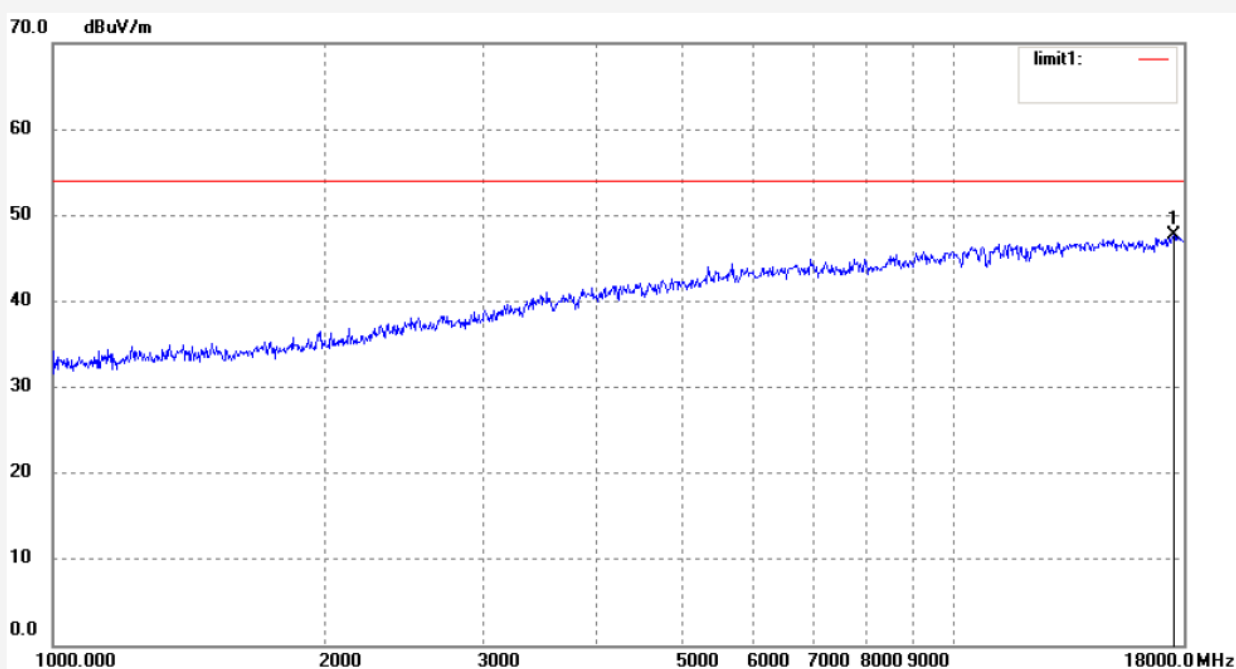
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: star2015 #614  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: Solar Audio Table  
Mode: TX 2480MHz  
Model: Techno 0124  
Manufacturer: Jay Trends Merchandising Inc.

Polarization: Vertical  
Power Source: AC 120V/60Hz  
Date: 15/09/14/  
Time: 13/55/03  
Engineer Signature: Star  
Distance: 3m

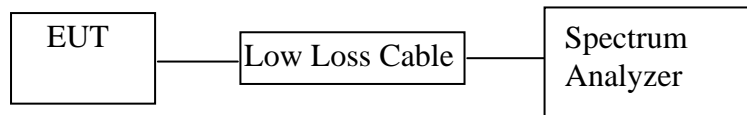
Note: Report NO.:ATE20151958



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	17537.798	39.85	7.83	47.68	54.00	-6.32	peak			

## 11.CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

### 11.1.Block Diagram of Test Setup



(EUT: Solar Audio Table)

### 11.2.The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

### 11.3.EUT Configuration on Measurement

The equipment is 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.

### 11.4.Operating Condition of EUT

11.4.1.Setup the EUT and simulator as shown as Section 11.1.

11.4.2.Turn on the power of all equipment.

11.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

## 11.5. Test Procedure

11.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

11.5.2. Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz

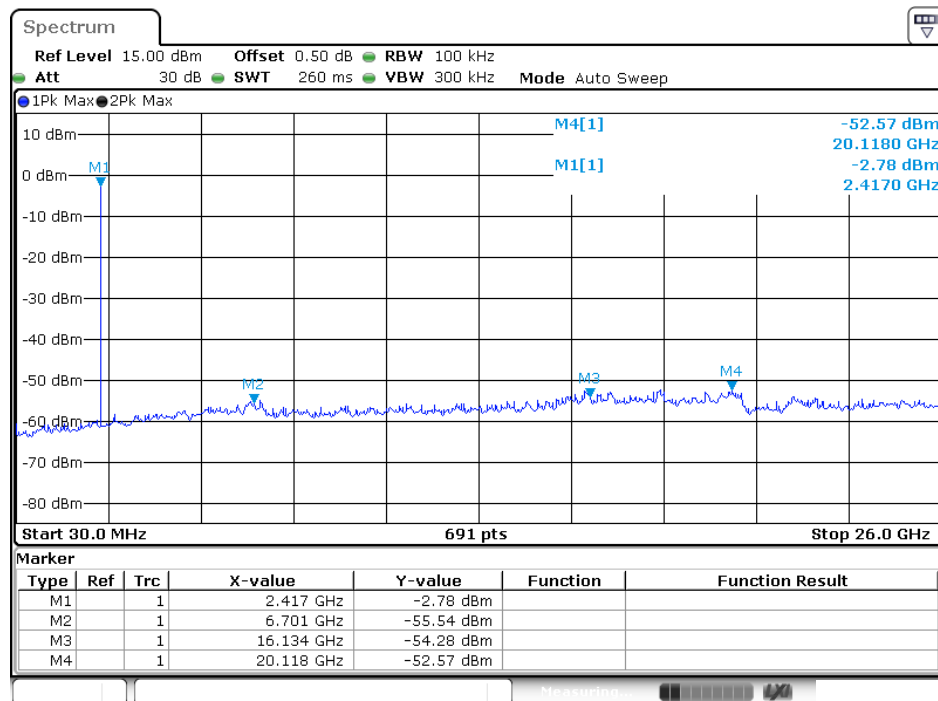
11.5.3. The Conducted Spurious Emission was measured and recorded.

## 11.6. Test Result

**Pass.**

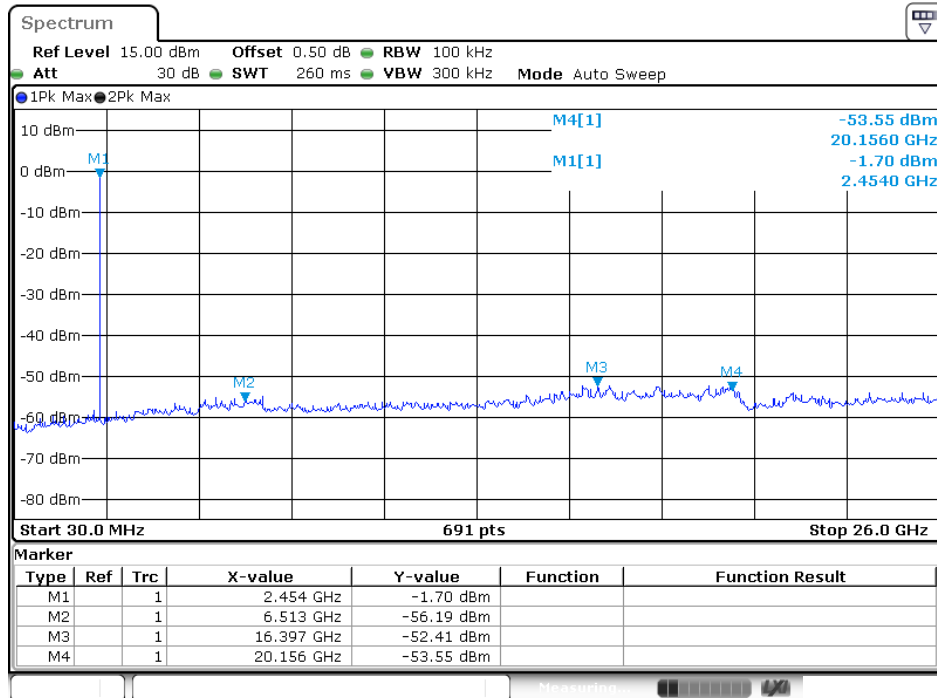
The spectrum analyzer plots are attached as below.

### BLE Channel Low 2402MHz

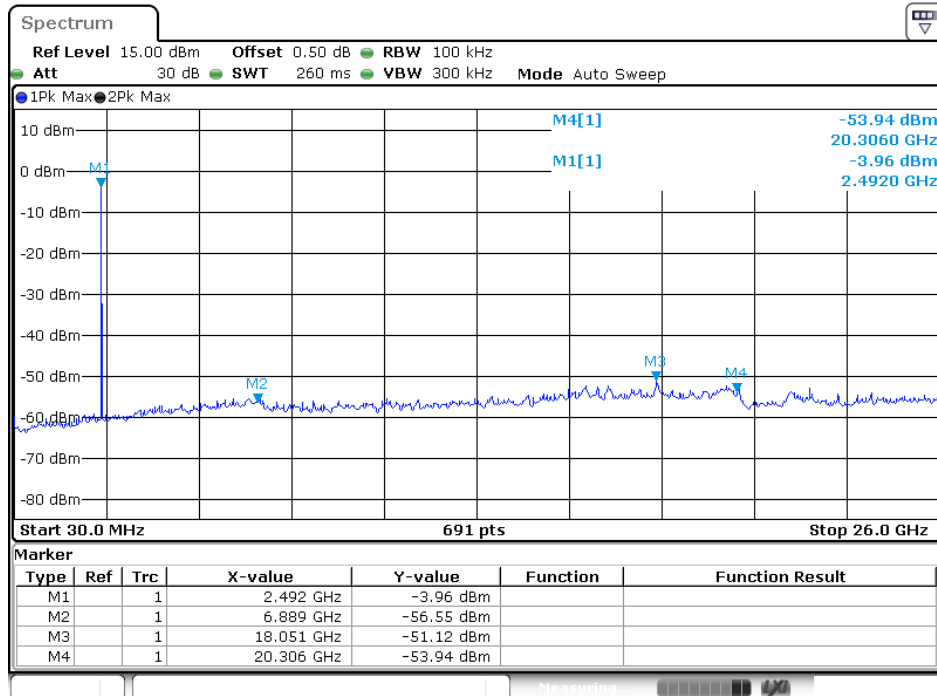




## BLE Channel Middle 2440MHz



## BLE Channel High 2480MHz



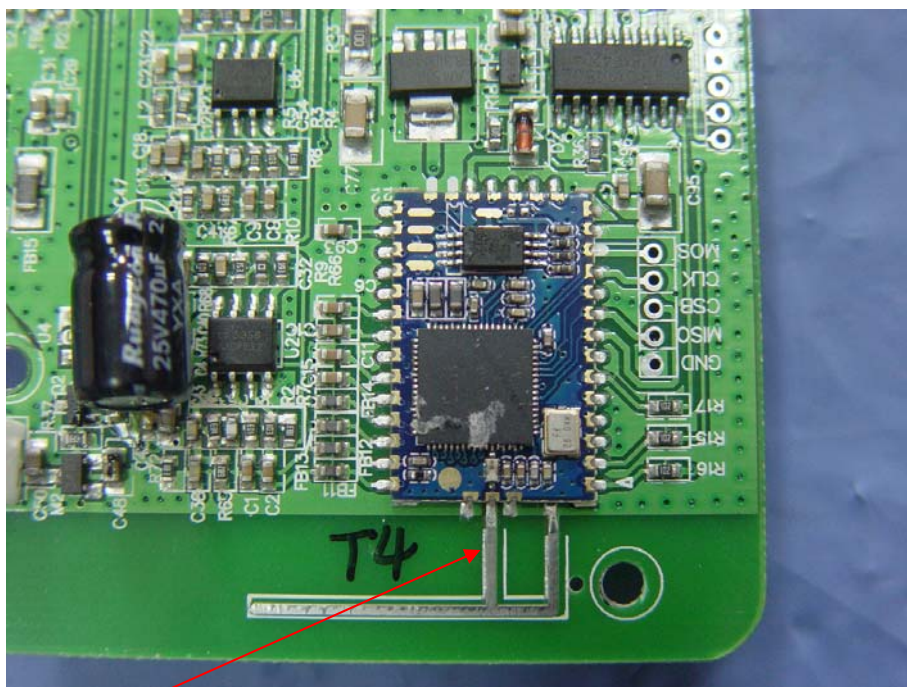
## 12.ANTENNA REQUIREMENT

### 12.1.The Requirement

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.

### 12.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



**Antenna**