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

Rattan Audio Table Model No.: Techno 0203

FCC ID: 2AFS4-TECHNO0203

Prepared for : Jay Trends Merchandising Inc.

Address : 9600 Meilleur Street, Suite #101 Montreal H2N 2E3,

Quebec, Canada

Prepared by : ACCURATE TECHNOLOGY CO., LTD

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Report No. : ATE20151960

Date of Test : September 14-16, 2015 Date of Report : September 21, 2015

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### **Test Report Certification**

Applicant : Jay Trends Merchandising Inc.

**EUT Description**: Rattan Audio Table

Model No. : Techno 0203

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 April 09, 2013 KDB558074 D01 DTS Meas Guidance v03 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 14-16, 2015
Date of Report :	September 21, 2015
Prepared by :	BobWarg
	(Bob Wang, Engineer)
Approved & Authorized Signer :	Lemil
	( Sean Liu. Manager)



ATC

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### 1. GENERAL INFORMATION

### 1.1.Description of Device (EUT)

EUT : Rattan Audio Table

Model Number : Techno 0203

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: SK01G-0500100U

Input: AC100-240V; 50/60Hz

Output: DC 5V; 1A

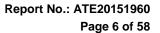
Modulation mode : GFSK

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 14-16, 2015





## 1.2. Carrier Frequency of Channels

Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channe 1	Frequeeny (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 N/A



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### 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

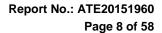
(9kHz-30MHz)

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	Туре	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	WHKX3.6/18	N/A	Jan. 11, 2015	Jan. 10, 2016
	Instruments	G-10SS			
Band Reject Filter	Wainwright	WRCG2400/2	N/A	Jan. 11, 2015	Jan. 10, 2016
	Instruments	485-2375/2510			
		-60/11SS			





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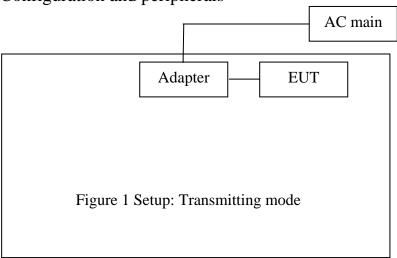
### 3. OPERATION OF EUT DURING TESTING

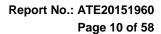
### 3.1. Operating Mode

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

Low Channel: 2402MHz Middle Channel: 2440MHz High Channel: 2480MHz

### 3.2. Configuration and peripherals

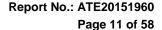






4. TEST PROCEDURES AND RESULTS

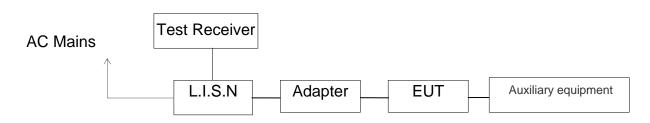
FCC Rules	<b>Description of Test</b>	Result
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated 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: Rattan Audio Table)

#### 5.2. Power Line Conducted Emission Measurement Limits

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





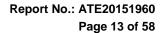
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### 5.5.Test Procedure

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: 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.



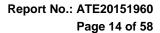


### 5.6. Power Line Conducted Emission Measurement Results

### PASS.

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

Test mode : BT EUT mode : Te			AC 120'	V/60Hz)			
MEASUREMENT			05_fin	."			
9/16/2015 4:2		Transd	Limit	Margin	Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
0.185000 0.235000 1.725000	56.00 52.00 39.10	10.5 10.6 10.9	64 62 56	8.3 10.3 16.9	QP QP QP	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT	: "JSW0	05_fin	2"			
9/16/2015 4:2							
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.185000 0.235000	45.30 39.60	10.5 10.6	54 52	9.0 12.7	AV AV	L1 L1	GND GND
1.730000	23.30	10.9	46	22.7	AV	L1	GND
MEASUREMENT	RESULT	: "JSW0	06_fir	1 "			
9/16/2015 4:3 Frequency		Trance	Timi+	Manain	Dotoston	Line	שת
MHz	dBµV	dB	dBµV	Margin dB	Detector	тше	PL
0.180000 0.230000	54.50 51.70	10.5 10.6	65 62	10.0	QP OP	N N	GND GND
2.140000	32.20	11.0	56	23.8	QΡ	N	
		_					
MEASUREMENT		: "JSW0	06_fir	12"			
9/16/2015 4:3 Frequency MHz	Level	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.185000 0.235000 0.960000	41.60 37.80 21.10	10.5 10.6 10.8	54 52 46	12.7 14.5 24.9		N N N	GND GND GND

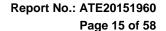




Test mode: BT communicating(AC 240V/60Hz) EUT mode: Techno 0203							
MEASUREMENT			011_fi	n"			
9/16/2015 9:20 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.180000 0.218000 0.256000	55.40 53.10 50.00	10.5 10.7 10.9	65 63 62		QP	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT	: "PIPO	011_fi	.n2"			
9/16/2015 9:2 Frequency MHz	Level	Transd dB			Detector	Line	PE
	43.00 40.40 33.50	10.5 10.7 11.5	53	11.5 12.5 12.5	AV	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT	: "PIPO	012_fi	n"			
9/16/2015 9:2	7						
Frequency MHz	Level dBµV				Detector	Line	PE
0.182000 0.216000 0.256000	53.30 51.60 48.60	10.5 10.7 10.9	64 63 62	11.1 11.4 13.0	QP	N N N	GND GND GND
MEASUREMENT RESULT: "PIPO012_fin2"							
9/16/2015 9:2 Frequency MHz			Limit dBµV		Detector	Line	PE
0.180000 0.216000 0.254000	43.40 40.40 38.00	10.5 10.7 10.8	53	11.1 12.6 13.6	AV	N N N	GND GND GND

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

The spectral diagrams are attached as below.





#### CONDUCTED EMISSION STANDARD FCC PART 15B

M/N:Techno 0203

Manufacturer:

EUT: Rattan Audio Table M/N
Manufacturer: Jay Trends Merchandising Inc.
Operating Condition: BT communicating Test Site: 1#Shielding Room

Operator: star

Test Specification: L 120V/60Hz

Report No.:ATE20151960 Comment: 9/16/2015 / 4:24:41PM Start of Test:

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

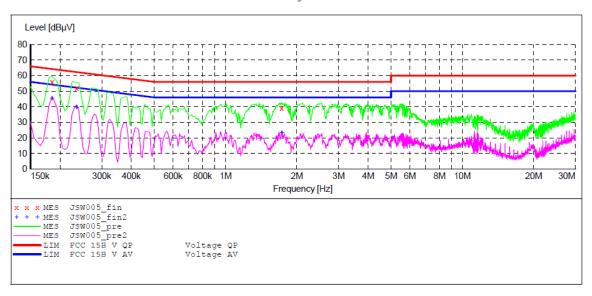
\_SUB\_STD\_VTERM2 1.70 Short Description:

Start Stop Step Detector Meas. IF Transducer

Time Bandw.

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kH 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average

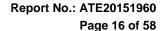


#### MEASUREMENT RESULT: "JSW005 fin"

9/16/2015							
-	cy Level Iz dBuV			Margin dB	Detector	Line	PE
111.	ιΖ ασμν	uь	ασμν	aь			
0.18500	00 56.00	10.5	64	8.3	QP	L1	GND
0.23500	00 52.00	10.6	62	10.3	QP	L1	GND
1.72500	00 39.10	10.9	56	16.9	QP	L1	GND

#### MEASUREMENT RESULT: "JSW005 fin2"

9/	16/2015 4:2	8PM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PΕ
	MHz	dΒμV	dB	dΒμV	dB			
	0.185000	45.30	10.5	54	9.0	AV	L1	GND
	0.235000	39.60	10.6	52	12.7	AV	L1	GND
	1.730000	23.30	10.9	46	22.7	AV	L1	GND





#### CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Rattan Audio Table M/N:Techno 0203

Manufacturer: Jay Trends Merchandising Inc.
Operating Condition: BT communicating Manufacturer:

Test Site: 1#Shielding Room

Operator: star

Test Specification: N 120V/60Hz

Report No.:ATE20151960 Comment: Start of Test: 9/16/2015 / 4:28:28PM

# SCAN TABLE: "V 150K-30MHz fin" Short Description: \_SUB\_S

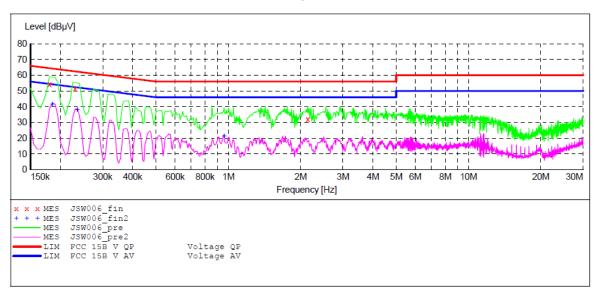
\_\_SUB\_STD\_VTERM2 1.70

Stop Step IF Start Detector Meas. Transducer

Time Bandw.

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kH 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



#### MEASUREMENT RESULT: "JSW006 fin"

0	110	/2015	4 2154
ч.	/ I h	//015	4:31PM

2/	10/2010 4:0	TEM						
	Frequency MHz	Level dBµV			Margin dB	Detector	Line	PE
	0.180000	54.50	10.5	65	10.0	OP	N	GND
	0.230000	51.70	10.6			~	N	GND
	2.140000	32.20	11.0	56	23.8	QP	N	GND

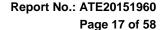
#### MEASUREMENT RESULT: "JSW006 fin2"

9/16/2015 4:3	1PM					
Frequency	Level	Transd	Limit	Margin	Detector	Line
MHz	dΒμV	dB	dΒμV	dB		
0.185000	41.60	10.5	54	12.7	AV	N
0.235000	37.80	10.6	52	14.5	AV	N
0.960000	21.10	10.8	46	24.9	AV	N

PΕ

GND GND

GND





#### CONDUCTED EMISSION STANDARD FCC PART 15B

M/N:Techno 0203

EUT: Rattan Audio Table M/N Manufacturer: Jay Trends Merchandising Inc. Operating Condition: BT communicating Test Site: 1#Shielding Room

Operator: star

Test Specification: 240V/60Hz

Report NO.:ATE20151960 Comment: 9/16/2015 / 9:22:35 Start of Test:

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

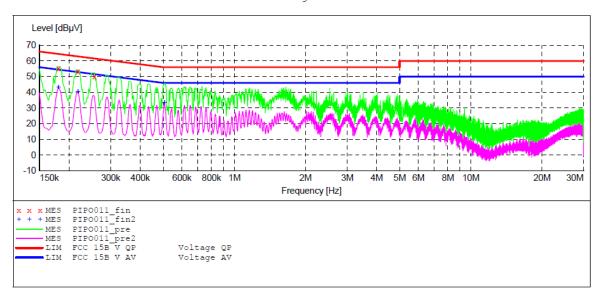
\_SUB\_STD\_VTERM2 1.70 Short Description:

Start Stop Step Detector Meas. IF Transducer

Width Bandw. Time

Frequency Frequency 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN (ESH3-Z5)

Average

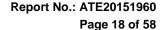


#### MEASUREMENT RESULT: "PIPO011 fin"

9/16/2015	9:24							
Frequen	су	Level	Transd	Limit	Margin	Detector	Line	PΕ
M	Ηz	dΒμV	dB	dΒμV	dB			
0.1800	00	55.40	10.5	65	9.1	QP	L1	GND
0.2180	00	53.10	10.7	63	9.8	QP	L1	GND
0.2560	00	50.00	10.9	62	11.6	QP	L1	GND

#### MEASUREMENT RESULT: "PIPO011 fin2"

9/16/2015	9:24							
Freque:	ncy MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.180	000	43.00	10.5	55	11.5	AV	L1	GND
0.218	000	40.40	10.7	53	12.5	AV	L1	GND
0.506	000	33.50	11.5	46	12.5	AV	L1	GND





#### CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Rattan Audio Table M/N:Techno 0203

Manufacturer: Jay Trends Merchandising Inc.
Operating Condition: BT communicating Test Site: 1#Shielding Room

Operator: star

Test Specification: N 240V/60Hz

Report NO.:ATE20151960 Comment: 9/16/2015 / 9:24:38 Start of Test:

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

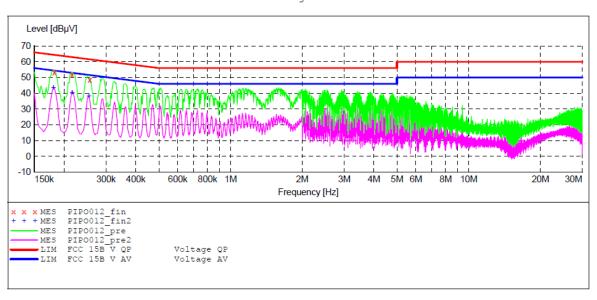
\_SUB\_STD\_VTERM2 1.70 Short Description:

Stop Start Step Detector Meas. IF Transducer

Bandw. Time

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN (ESH3-Z5)

Average



#### MEASUREMENT RESULT: "PIPO012 fin"

9/16/2015 9:27 Frequency MHz			Limit dBµV	Margin dB	Detector	Line	PE
0.182000 0.216000 0.256000	51.60	10.5 10.7 10.9	63	11.1 11.4 13.0	ÕР	N N N	GND GND GND

#### MEASUREMENT RESULT: "PIPO012 fin2"

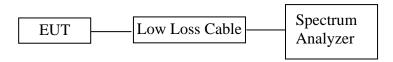
9/	16/2015	9:27							
	Frequen	су	Level	Transd	Limit	Margin	Detector	Line	PΕ
	M	Hz	dΒμV	dB	dΒμV	dB			
	0.1800	00	43.40	10.5	55	11.1	AV	N	GND
	0.2160	00	40.40	10.7	53	12.6	AV	N	GND
	0.2540	00	38.00	10.8	52	13.6	AV	N	GND



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### 6. 6DB BANDWIDTH MEASUREMENT

### 6.1.Block Diagram of Test Setup



(EUT: Rattan 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 5.1.
- 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.

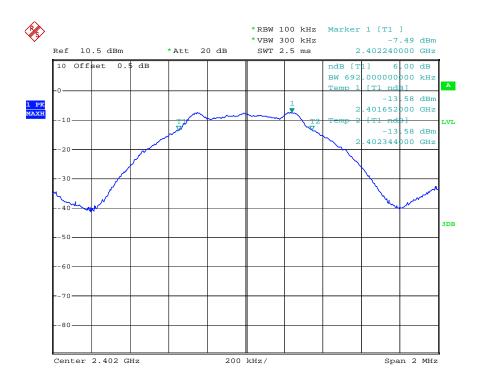
The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

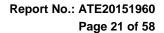


### 6.6.Test Result

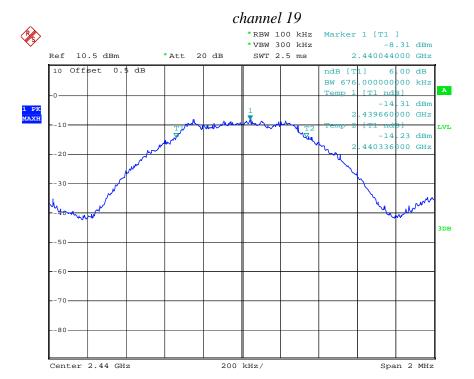
Channel	Frequency (MHz)	6 dB Bandwith (MHz)	Minimum Limit(MHz)	PASS/FAIL
0	2402	0.692	0.5	PASS
19	2440	0.676	0.5	PASS
39	2480	0.672	0.5	PASS

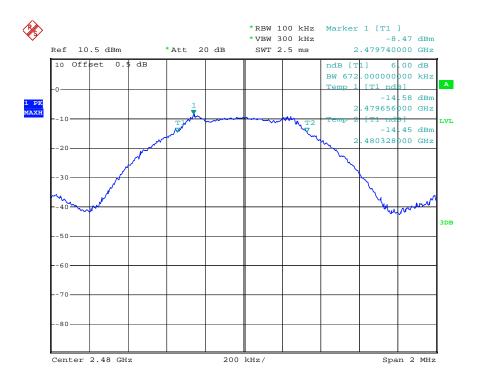
The spectrum analyzer plots are attached as below.













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### 7. MAXIMUM PEAK OUTPUT POWER

### 7.1.Block Diagram of Test Setup



(EUT: Rattan 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 6.1.
- 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

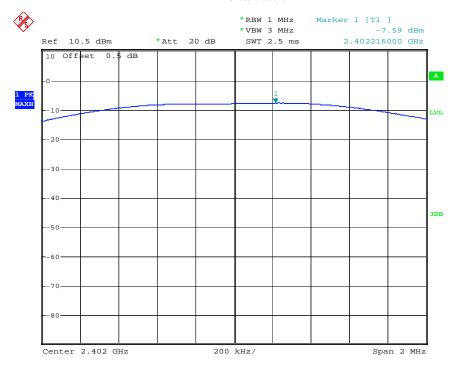
- 7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 7.5.2. Test method is options 1 from KDB558074 D01 DTS Meas Guidance v03r02
- 7.5.3.Set RBW of spectrum analyzer to 1 MHz and VBW to 3 MHz.
- 7.5.4. Measurement the maximum peak output power.



### 7.6.Test Result

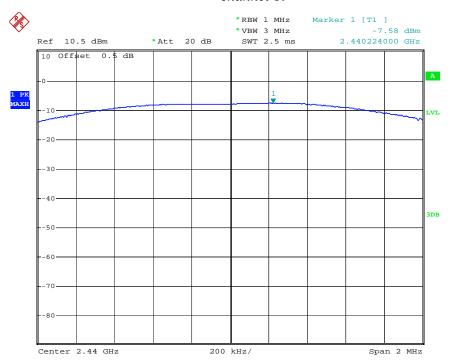
Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
0	2402	-7.59	30	PASS
19	2440	-7.58	30	PASS
39	2480	-7.63	30	PASS

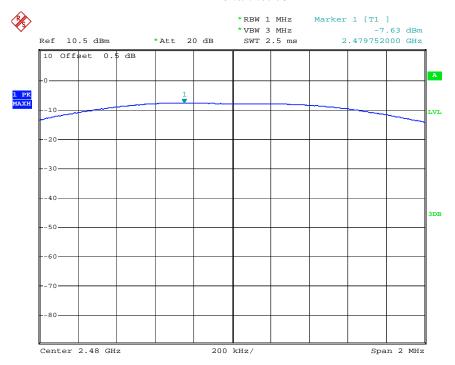
The spectrum analyzer plots are attached as below.

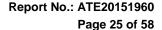




### channel 19



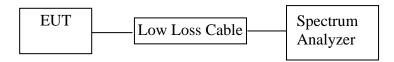






8. POWER SPECTRAL DENSITY MEASUREMENT

### 8.1.Block Diagram of Test Setup



(EUT: Rattan 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 7.1.
- 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.



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#### 8.5.Test Procedure

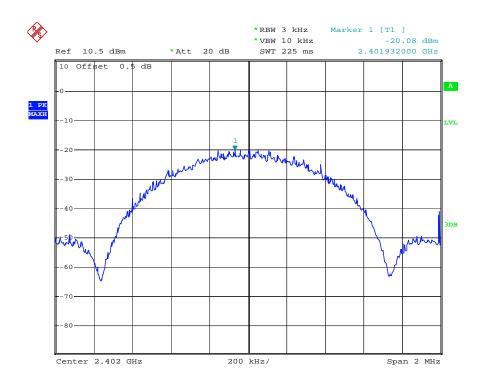
- 8.5.1.The EUT was tested according to DTS test procedure of April 09, 2013 KDB558074 D01 DTS Meas Guidance v03 for compliance to FCC 47CFR 15.247 requirements.
- 8.5.2. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 8.5.3. Measurement Procedure PKPSD:
- 8.5.4. 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 x 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.

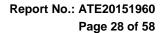


8.6.Test Result

CHANNEL NUMBER	FREQUENCY (MHz)	PSD (dBm/3KHz)	LIMIT (dBm/3KHz)	PASS/FAIL
0	2402	-20.08	8	PASS
19	2440	-20.10	8	PASS
39	2480	-20.37	8	PASS

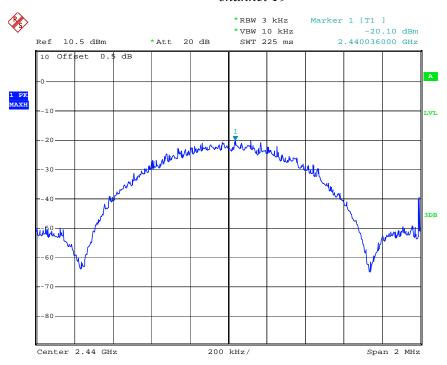
The spectrum analyzer plots are attached as below.

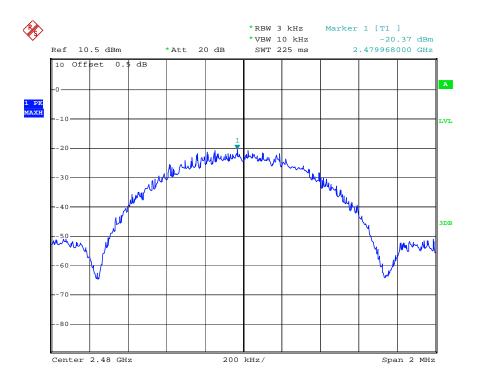






#### channel 19









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### 9. BAND EDGE COMPLIANCE TEST

### 9.1.Block Diagram of Test Setup



(EUT: Rattan 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.



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### 9.4. Operating Condition of EUT

- 9.4.1. Setup the EUT and simulator as shown as Section 8.1.
- 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.

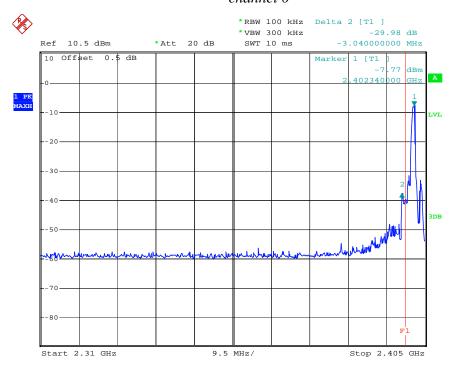
### 9.6.Test Result

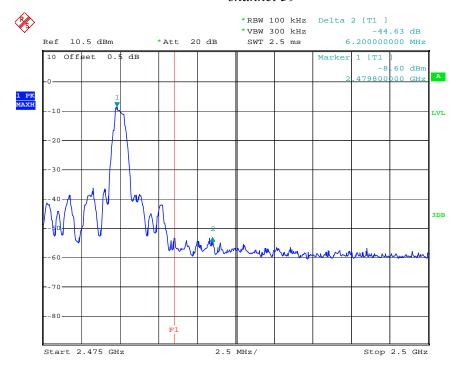
#### **Pass**

Channel	Frequency	Delta peak to band emission	Limit(dBc)
0	2399.3MHz	29.98	20
39	2486.0MHz	44.63	20



### channel 0







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### **Radiated Band Edge Result**

Date of Test:September 15, 2015Temperature:25°CEUT:Rattan Audio TableHumidity:50%Model No.:Techno 0124Power Supply:AC 120V/60HzTest Mode:TX (2402MHz) GFSKTest Engineer:Star

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	
2390.000	33.97	43.98	-7.53	26.44	36.45	54.00	74.00	-27.56	-37.55	Vertical
2400.000	53.55	63.45	-7.46	46.09	55.99	54.00	74.00	-7.91	-18.01	Vertical
2390.000	34.59	43.13	-7.53	27.06	35.60	54.00	74.00	-26.94	-38.40	Horizontal
2400.000	54.69	63.72	-7.46	47.23	56.26	54.00	74.00	-6.77	-17.74	Horizontal

Date of Test:September 14, 2015Temperature:25°CEUT:Rattan Audio TableHumidity:50%Model No.:Techno 0124Power Supply:AC 120V/60HzTest Mode:TX (2480MHz) GFSKTest Engineer:Star

Fre	equency	Reading	(dBµV/m)	Factor(dB)	Result(	dBμV/m)	Limit(dl	BμV/m)	Margi	n(dB)	Polarization
(	(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
24	483.500	42.67	51.11	-7.37	35.30	43.71	54.00	74.00	-18.70	-30.26	Vertical
25	500.000	33.46	43.94	-7.40	26.06	36.54	54.00	74.00	-27.94	-37.46	Vertical
24	483.500	40.67	50.03	-7.37	33.30	42.66	54.00	74.00	-20.70	-31.34	Horizontal
25	500.000	35.33	45.20	-7.40	27.93	37.80	54.00	74.00	-26.07	-36.20	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.



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Site: 2# Chamber

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

Job No.: STAR2015 #435 Polarization: Vertical

Standard: FCC PK Power Source: AC 120V/60Hz

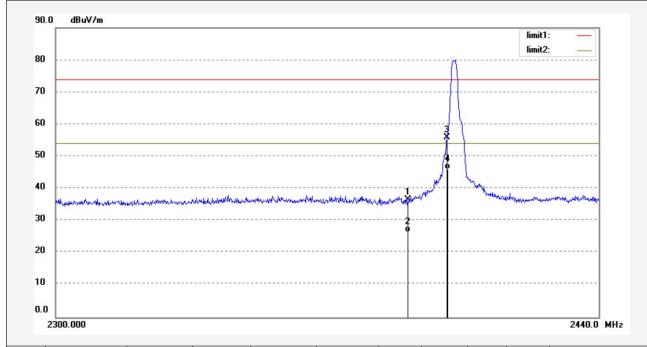
Test item: Radiation Test Date: 15/09/15/ Temp.( C)/Hum.(%) 23 C / 48 % Time: 10/46/22

EUT: Engineer Signature: Star Rattan Audio Table Mode: TX 2402MHz Distance: 3m

Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960



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	43.98	-7.53	36.45	74.00	-37.55	peak			
2	2390.000	33.97	-7.53	26.44	54.00	-27.56	AVG			
3	2400.000	63.45	-7.46	55.99	74.00	-18.01	peak			
4	2400.000	53.55	-7.46	46.09	54.00	-7.91	AVG			



Note:



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Job No.: STAR2015 #436 Polarization: Horizontal

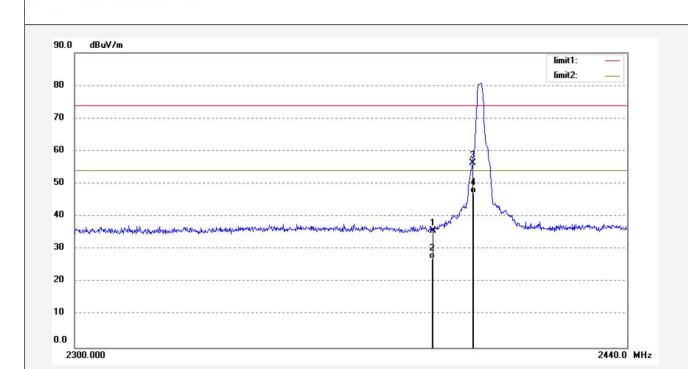
Standard: FCC PK Power Source: AC 120V/60Hz

Test item: Radiation Test Date: 15/09/15/ Temp.( C)/Hum.(%) 23 C / 48 % Time: 10/47/39

EUT: Rattan Audio Table Engineer Signature: Star

Mode: TX 2402MHz Distance: 3m Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc. Report NO.:ATE20151960



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	43.13	-7.53	35.60	74.00	-38.40	peak			
2	2390.000	34.59	-7.53	27.06	54.00	-26.94	AVG			
3	2400.000	63.72	-7.46	56.26	74.00	-17.74	peak			
4	2400.000	54.69	-7.46	47.23	54.00	-6.77	AVG			





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Job No.: STAR2015 #433

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 % EUT: Rattan Audio Table

Mode: TX 2480MHz Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

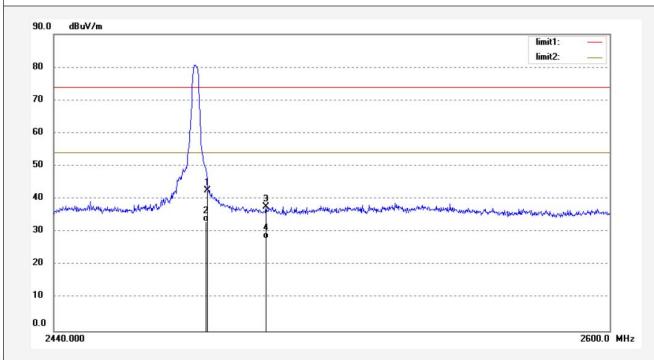
Note: Report NO.:ATE20151960

Polarization: Horizontal
Power Source: AC 120V/60Hz

Date: 15/09/15/ Time: 10/42/28

Engineer Signature: Star

Distance: 3m



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	50.03	-7.37	42.66	74.00	-31.34	peak			
2	2483.500	40.67	-7.37	33.30	54.00	-20.70	AVG			
3	2500.000	45.20	-7.40	37.80	74.00	-36.20	peak			
4	2500.000	35.33	-7.40	27.93	54.00	-26.07	AVG			



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Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 15/09/15/ Time: 10/43/43

Engineer Signature: Star

Distance: 3m

Job No.: STAR2015 #434

Standard: FCC PK

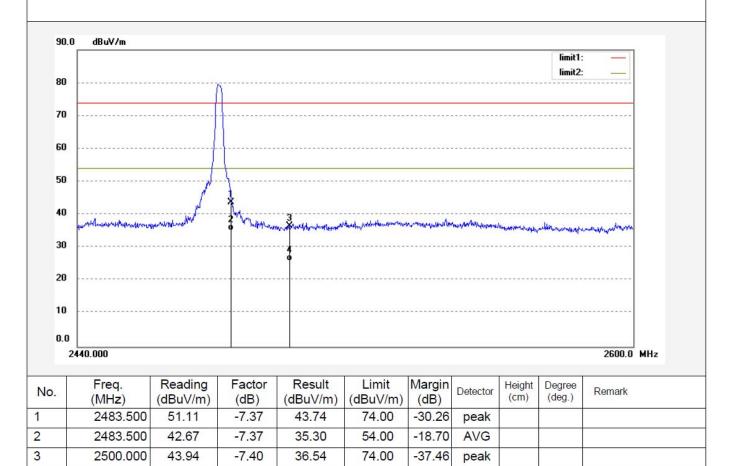
Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 % EUT: Rattan Audio Table

Mode: TX 2480MHz Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960



#### Note:

4

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

26.06

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:

54.00

-27.94

**AVG** 

Result = Reading + Corrected Factor

33.46

-7.40

3. Display the measurement of peak values.

2500.000

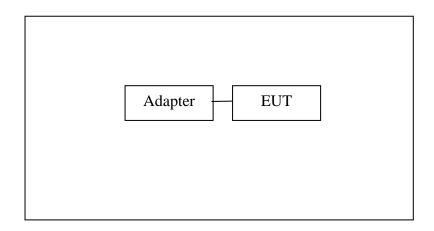


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# 10. RADIATED SPURIOUS EMISSION TEST

# 10.1.Block Diagram of Test Setup

10.1.1.Block diagram of connection between the EUT and peripherals



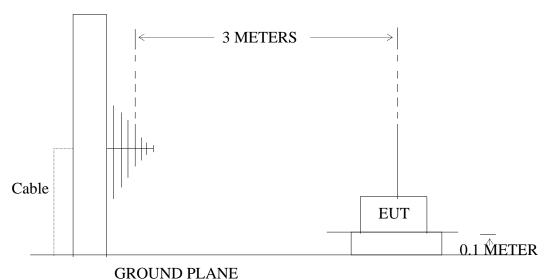
Setup: Transmitting mode

(EUT: Rattan Audio Table)

## 10.1.2.Semi-Anechoic Chamber Test Setup Diagram

## **Below 1GHz**

## ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS

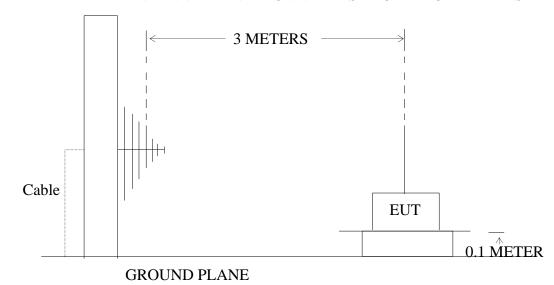




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#### Above 1GHz

#### 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).



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## 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	$\binom{2}{}$
13.36-13.41			

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

(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 Section15.209 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 9.1.
- 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 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to

<sup>&</sup>lt;sup>2</sup>Above 38.6



transmit.

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#### 10.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.1 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 C63.10: 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.





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Distance: 3m

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

Report No.: ATE20151960

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Job No.: STAR2015 #1743 Polarization: Horizontal

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz
Test item: Radiation Test Date: 2015/09/14

Temp.( C)/Hum.(%) 25 C / 55 % Time: 16:31:27

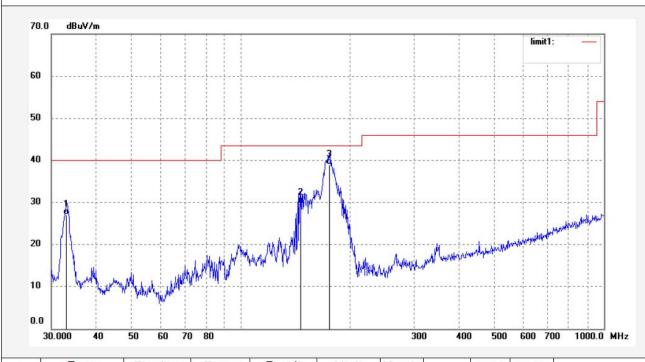
EUT: Rattan Audio Table Engineer Signature: Star

Mode: TX 2402MHz

Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report No.:ATE20151960



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.9853	44.30	-17.22	27.08	40.00	-12.92	QP			
2	146.3240	52.06	-22.27	29.79	43.50	-13.71	QP			
3	175.0404	59.70	-20.81	38.89	43.50	-4.61	QP			





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Job No.: STAR2015 #1744

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Rattan Audio Table

Mode: TX 2402MHz
Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report No.:ATE20151960

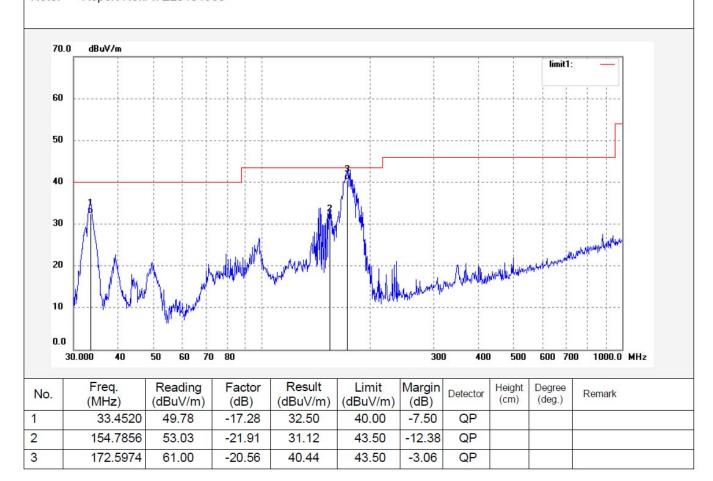
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2015/09/14 Time: 16:32:08

Engineer Signature: Star

Distance: 3m





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Job No.: STAR2015 #1745 Polarization: Vertical

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz

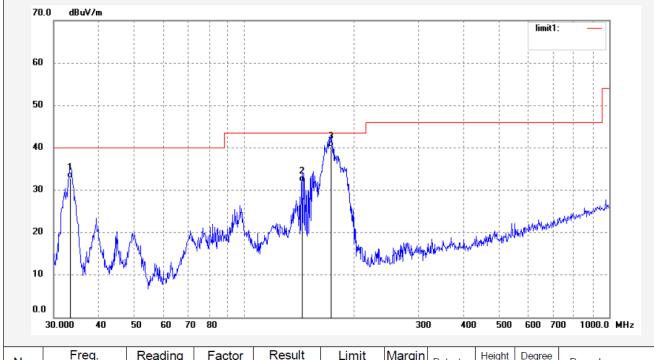
Test item: Radiation Test Date: 2015/09/14
Temp.( C)/Hum.(%) 25 C / 55 % Time: 16:32:58

EUT: Rattan Audio Table Engineer Signature: Star

Mode: TX 2440MHz Distance: 3m Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report No.:ATE20151960



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	50.00	-17.27	32.73	40.00	-7.27	QP			
2	144.2820	54.20	-22.22	31.98	43.50	-11.52	QP			
3	172.5973	60.78	-20.56	40.22	43.50	-3.28	QP			





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Job No.: STAR2015 #1746 Polarization: Horizontal

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz

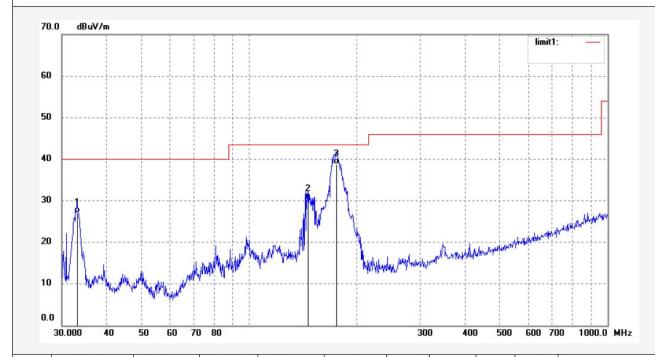
Test item: Radiation Test Date: 2015/09/14
Temp.( C)/Hum.(%) 25 C / 55 % Time: 16:34:12

EUT: Rattan Audio Table Engineer Signature: Star

Mode: TX 2440MHz Distance: 3m Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report No.:ATE20151960



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	33.1015	44.30	-17.24	27.06	40.00	-12.94	QP			
2	146.3240	52.60	-22.27	30.33	43.50	-13.17	QP			
3	175.0404	59.60	-20.81	38.79	43.50	-4.71	QP			





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Job No.: STAR2015 #1747 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Rattan Audio Table

Mode: TX 2480MHz Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report No.:ATE20151960

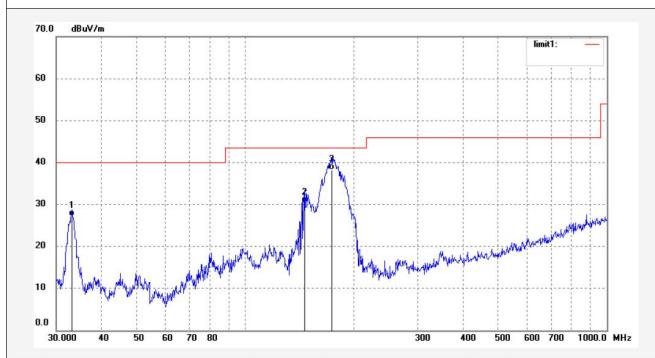
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2015/09/14 Time: 16:35:02

Engineer Signature: Star

Distance: 3m







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Job No.: STAR2015 #1748

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Rattan Audio Table

Mode: TX 2480MHz Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report No.:ATE20151960

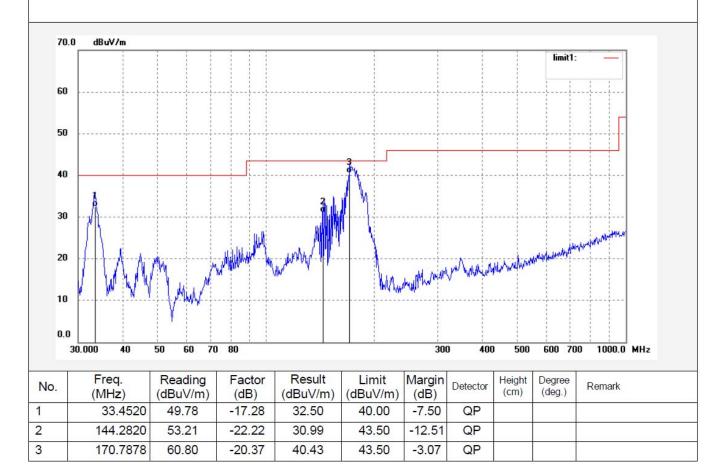
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2015/09/14 Time: 16:36:03

Engineer Signature: Star

Distance: 3m







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Job No.: star2015 #621 Polarization: Vertical

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz

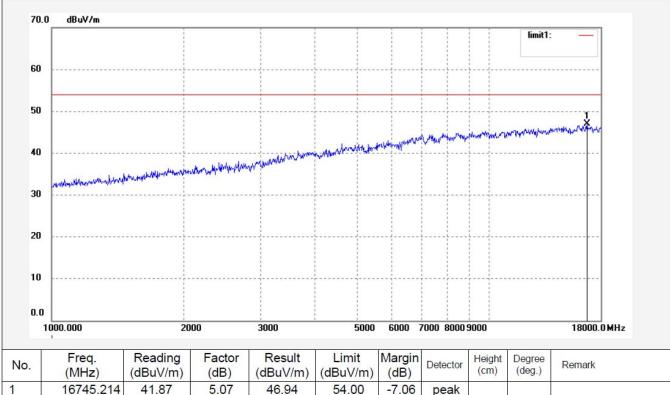
Test item: Radiation Test Date: 15/09/14/ Temp.( C)/Hum.(%) 23 C / 48 % Time: 14/01/04

EUT: Rattan Audio Table Engineer Signature: Star

Mode: TX 2402MHz Distance: 3m Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	16745.214	41.87	5.07	46.94	54.00	-7.06	peak			



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

> Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 15/09/14/ Time: 14/01/29

Engineer Signature: Star

Distance: 3m

Job No.: star2015 #622

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

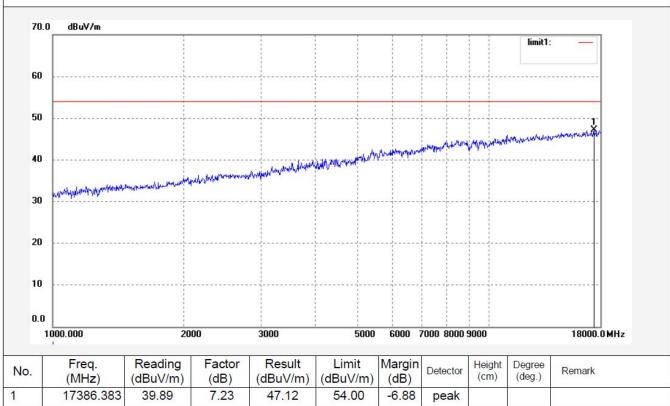
Temp.( C)/Hum.(%) 23 C / 48 % EUT: Rattan Audio Table

Mode: TX 2402MHz

Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960







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

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Job No.: star2015 #623 Polarization: Horizontal

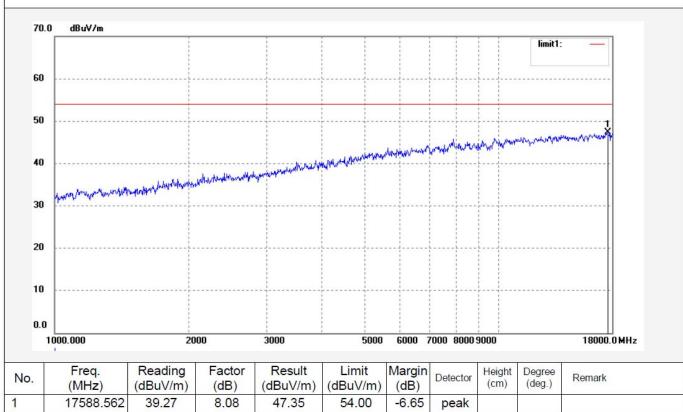
Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz Test item: Radiation Test Date: 15/09/14/

Temp.( C)/Hum.(%) 23 C / 48 % Time: 14/01/58 Rattan Audio Table

EUT: Engineer Signature: Star Mode: TX 2440MHz Distance: 3m Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960







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Job No.: star2015 #624

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 % EUT: Rattan Audio Table

Mode: TX 2440MHz

Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960

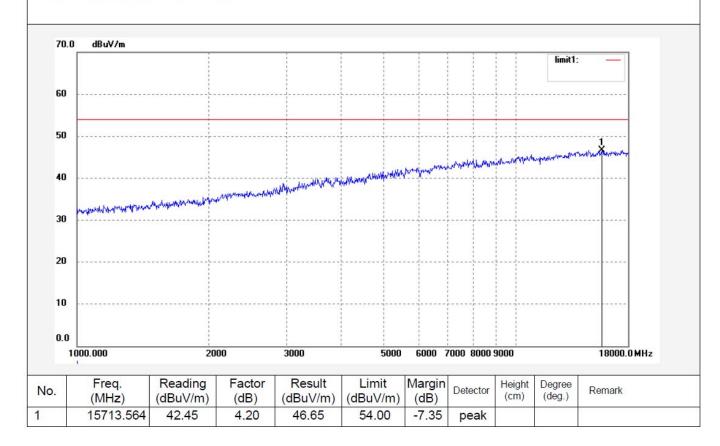
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 15/09/14/ Time: 14/02/15

Engineer Signature: Star

Distance: 3m







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Job No.: star2015 #625 Polarization: Vertic

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz

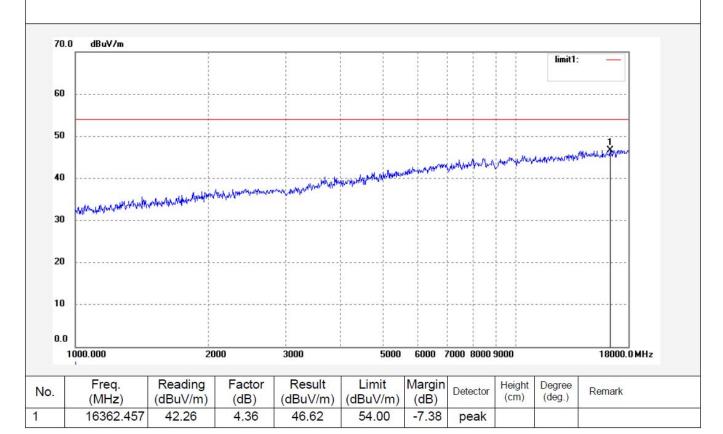
Test item: Radiation Test Date: 15/09/14/
Temp.( C)/Hum.(%) 23 C / 48 % Time: 14/02/28

EUT: Rattan Audio Table Engineer Signature: Star Mode: TX 2480MHz Distance: 3m

Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960





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Job No.: star2015 #626

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Polarization: Horizontal

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz

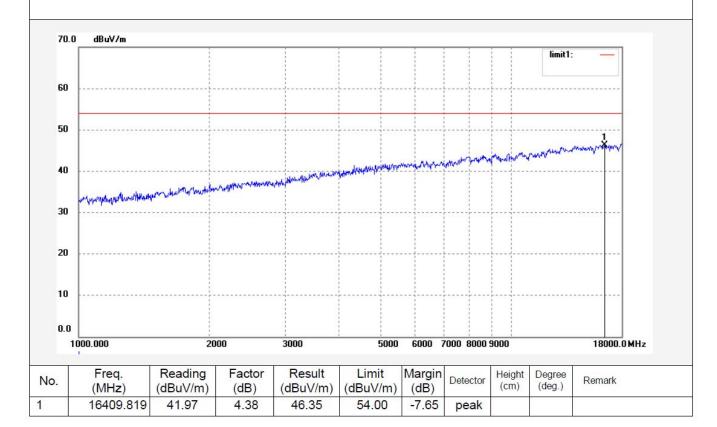
Test item: Radiation Test Date: 15/09/14/
Temp.( C)/Hum.(%) 23 C / 48 % Time: 14/02/42

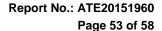
EUT: Rattan Audio Table Engineer Signature: Star

Mode: TX 2480MHz Distance: 3m Model: Techno 0203

Manufacturer: Jay Trends Merchandising Inc.

Note: Report NO.:ATE20151960

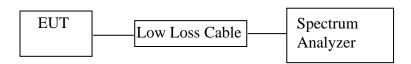






## 11. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

## 11.1.Block Diagram of Test Setup



(EUT: Rattan 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.



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# 11.4. Operating Condition of EUT

- 11.4.1.Setup the EUT and simulator as shown as Section 10.1.
- 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.

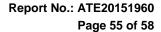
## 11.5.Test Procedure

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

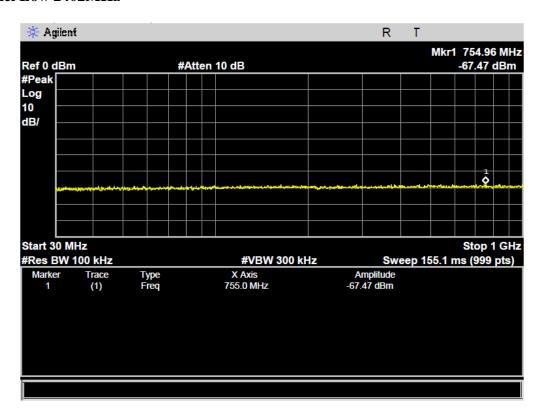
Pass.

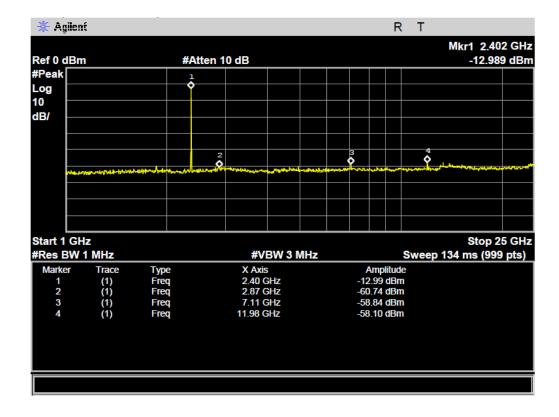
The spectrum analyzer plots are attached as below.



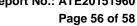


#### **BLE Channel Low 2402MHz**



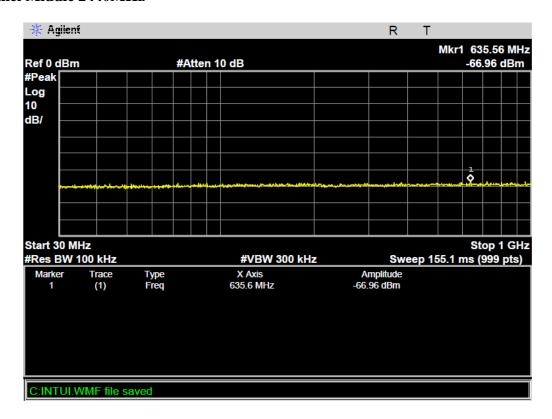


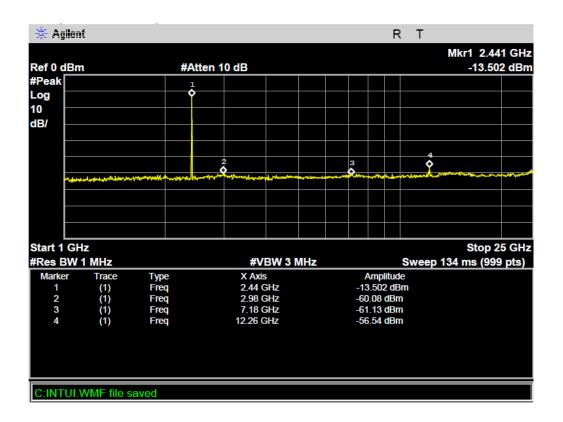


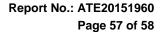




#### **BLE Channel Middle 2440MHz**

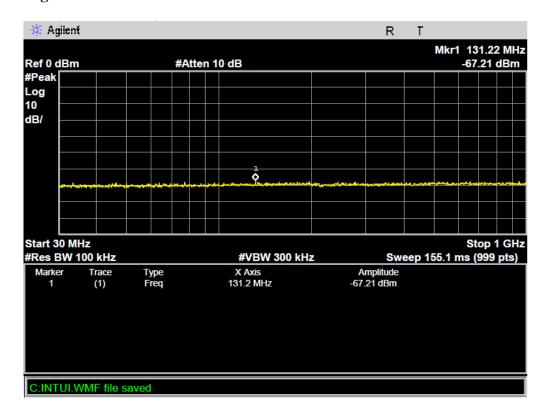


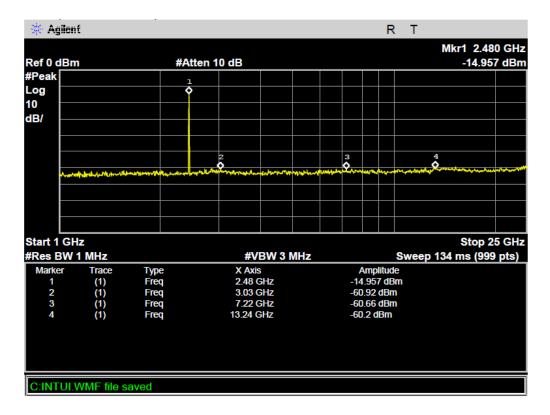


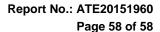




## **BLE Channel High 2480MHz**









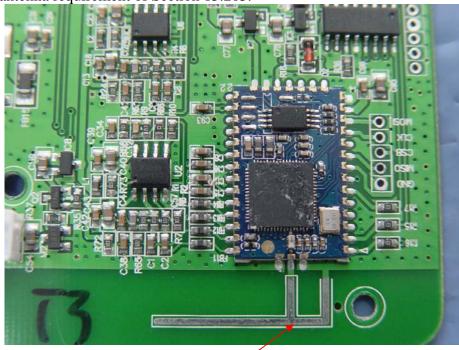
12.ANTENNA REQUIREMENT

# 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 0 dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna