Prüfbericht-Nr.: *Test Report No.:*	**17050228 001**	**Auftrags-Nr.:** *Order No.:*	164036174	Seite 1 von 71 *Page 1 of 71*
Kunden-Referenz-Nr.: *Client Reference No.:*	N/A	**Auftragsdatum:** *Order date:*	21.05.2015	
Auftraggeber: *Client:*	Cyber Acoustics (HK) Ltd. 11 Floor, The Broadway, 54-62 Lockhart Road, Wanchai, Hong Kong, China			
Prüfgegenstand: *Test item:*	Bluetooth Wireless Speaker System			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	CA-3052BT			
Auftrags-Inhalt: *Order content:*	FCC Certification			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109 FCC KDB Publication 447498 v05r02			
Wareneingangsdatum: *Date of receipt:*	23.05.2015			
Prüfmuster-Nr.: *Test sample No.:*	A000198515-001, A000198515-002			
Prüfzeitraum: *Testing period:*	26.05.2015 - 26.06.2015			
Ort der Prüfung: *Place of testing:*	Accurate Technology Co., Ltd.			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von / *tested by:*			**kontrolliert von** / *reviewed by:*		
28.07.2015	Owen Tian/Senior Project Manager		28.07.2015	Sam Lin/Technical Certicier	
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 PEAK OUTPUT POWER
RESULT: Pass

5.1.3 20DB BANDWIDTH AND 99% BANDWIDTH
RESULT: Pass

5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH
RESULT: Pass

5.1.5 SPURIOUS EMISSION
RESULT: Pass

5.1.6 FREQUENCY SEPARATION
RESULT: Pass

5.1.7 NUMBER OF HOPPING FREQUENCY
RESULT: Pass

5.1.8 TIME OF OCCUPANCY
RESULT: Pass

5.1.9 CONDUCTED EMISSIONS
RESULT: Pass

5.1.10 RADIATED EMISSION
RESULT: Pass

6.1.1 ELECTROMAGNETIC FIELDS
RESULT: Pass

Contents

1. General Remarks

1.1 Complementary Materials

None.

2. Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd.

(FCC Registration No.: 752051)

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

The tests at the test site have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Transmitter spurious emissions & Receiver spurious emissions				
Spectrum Analyzer	Rohde & Schwarz	FSV40	101495	2016-01-09
Test Receiver	Rohde & Schwarz	ESCS30	100307	2016-01-09
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2016-01-14
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2016-01-14
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2016-01-14
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	2016-01-14
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	2016-01-09
Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	2016-01-09
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2016-01-09
RF Coaxial Cable	SUHNER	N-3m	No.8	2016-01-09
RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	2016-01-09
RF Coaxial Cable	SUHNER	N-6m	No.10	2016-01-09
RF Coaxial Cable	RESENBERGER	N-12m	No.11	2016-01-09
RF Coaxial Cable	RESENBERGER	N-0.5m	No.12	2016-01-09
Radio Spectrum Test				
Spectrum Analyzer	Rohde & Schwarz	FSV40	101495	2016-01-09
Vector Signal Generator	Rohde & Schwarz	SMBV100A	260434	2016-01-09
Signal Generator	Rohde & Schwarz	SMB100A	108362	2016-01-09
Open Switch and Control Unit	Rohde & Schwarz	OSP120 + OSP-B157	101244 + 100866	2016-01-09
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	2016-01-09
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	2016-01-09
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	2016-01-09
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	2016-01-09
Voltage Probe	Schwarzbeck	TK9416	N/A	2016-01-09
RF Current Probe	Rohde & Schwarz	EZ-17	100048	2016-01-09
8-Wire Impedance Stabilisation Network	Schwarzbeck	CAT5 8158	8158-0035	2016-01-09
RF Coaxial Cable	Suhner	N-2m	No.2	2016-01-09
RF Coaxial Cable	Suhner	N-2m	No.3	2016-01-09
RF Coaxial Cable	Suhner	N-2m	No.14	2016-01-09

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

Table 2: Measurement Uncertainty

Parameter	Uncertainty
Radio Spectrum	< ± 0.60 dB
Radiated emission of transmitter, valid up to 26.5 GHz	< ± 4.42 dB
Conducted Emission	< ± 2.23 dB
Radiated Emission	< ± 4.42 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan, Shenzhen, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUTs are Bluetooth speaker.
For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification

Technical Specification	Value
Kind of Equipment	Bluetooth Wireless Speaker System
Type Designation	CA-3052BT
FCC ID	ODL-CA3052BT
Operating Frequency band	2402 – 2480MHz
Channel separation	1MHz
Extreme Temperature Range	-40~+150℃
Operation Voltage	DC 9V (via marketed AC/DC adapter)
Modulation	FHSS (GFSK, 8DPSK, π/4DQPSK)
Bluetooth version	2.1+EDR
Antenna Gain	0dBi

3.3 Independent Operation Modes

The basic operation modes are:

A. On
   1. Bluetooth mode
      a. Tansmitting
         i. Low Channel
         ii. Middle Channel
         iii. High Channel
      b. Receiving
   2. Line in mode
B. Standby
C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2003.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Part No.	S/N	Rating
AC/DC adapter	Cyber	GPU410901000WAOO	---	Input: AC 120V, 60Hz; Output: AC 9V, 1A
Mobile Phone	HUAWEI	P7-L00	7NZMYN151S027984	---

The EUT was tested with following cables:

Interface(s)/Port(s):	Max. cable length, shielding	Cable classification
AC Mains of adapter	2 cores, non-shielded port, 3m	AC Power Input
DC power input of EUT	2 cores, non-shielded port, 3m	DC Power Input
Line in	2 cores, non-shielded port, 3m	Audio Input

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

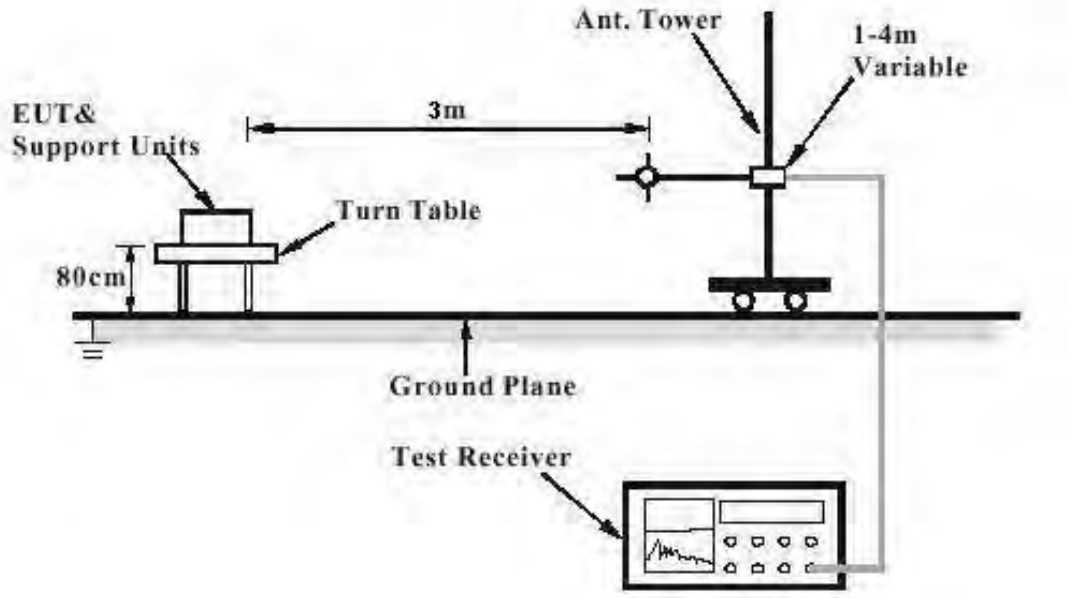


Diagram of Measurement Equipment Configuration for Conduction Measurement

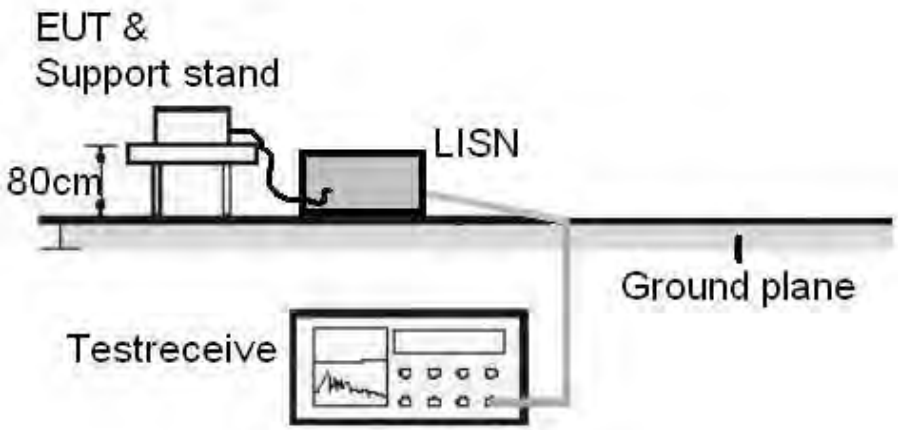
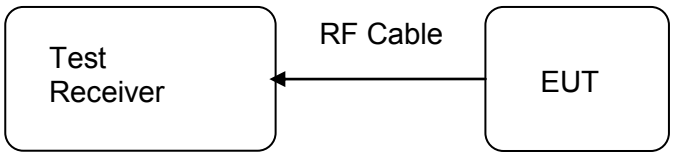


Diagram of Measurement Equipment Configuration for Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test standard	:	FCC Part 15.247(b)(4) and Part 15.203
Limit		The use of antennas with directional gains that do not exceed 6dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 0dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

5.1.2 Peak Output Power

RESULT: **Pass**

Test date	:	2015-06-23
Test standard	:	FCC Part 15.247(b)(1)
Basic standard	:	ANSI C63.4: 2003 Clause 9.1 of KDB 558074 v03r01
Limit	:	125mW
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.1.a
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

Table 4: Test result of Peak Output Power of Buletooth (BDR mode)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2402	-7.63	21
Middle Channel	2441	-7.87	21
High Channel	2480	-8.13	21

Table 5: Test result of Peak Output Power of Bluetooth (EDR mode)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2402	-7.58	21
Middle Channel	2441	-8.33	21
High Channel	2480	-8.30	21

5.1.3 20dB Bandwidth and 99% Bandwidth

RESULT: **Pass**

Date of testing	:	2015-06-23
Test standard	:	FCC Part 15.247(a)(1)
Basic standard	:	ANSI C63.4: 2003 Clause 8 of KDB 558074 v03r01
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.1.a
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

Table 6: Test result of 20dB & 99% Bandwidth of BDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2402	1.0029	1.0289
Mid Channel	2441	1.0029	1.0289
High Channel	2480	1.0029	1.0333

Table 7: Test result of 20dB & 99% Bandwidth of EDR mode

Channel	Channel Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low Channel	2402	1.0333	1.1896
Mid Channel	2441	1.0376	1.1809
High Channel	2480	1.0376	1.1852

5.1.4 Conducted Spurious Emissions measured in 100kHz Bandwidth

RESULT: **Pass**

Date of testing	:	2015-06-23
Test standard	:	FCC part 15.247(d)
Basic standard	:	ANSI C63.4: 2003
Limit	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power);
Kind of test site	:	Shield room

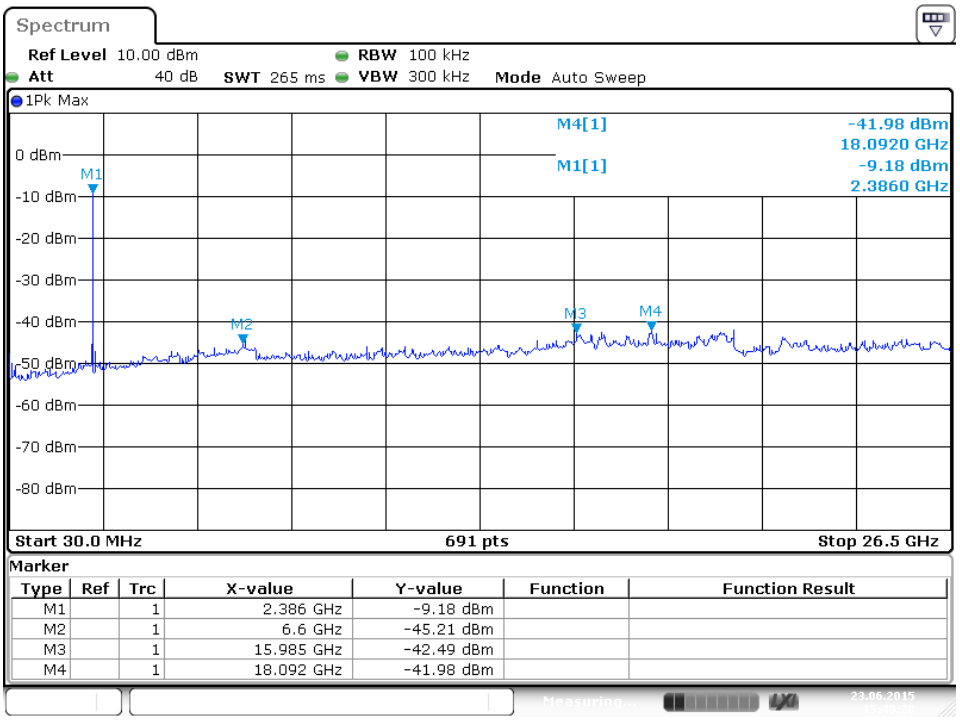
Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A.1.a
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

For details refer to following test plot.

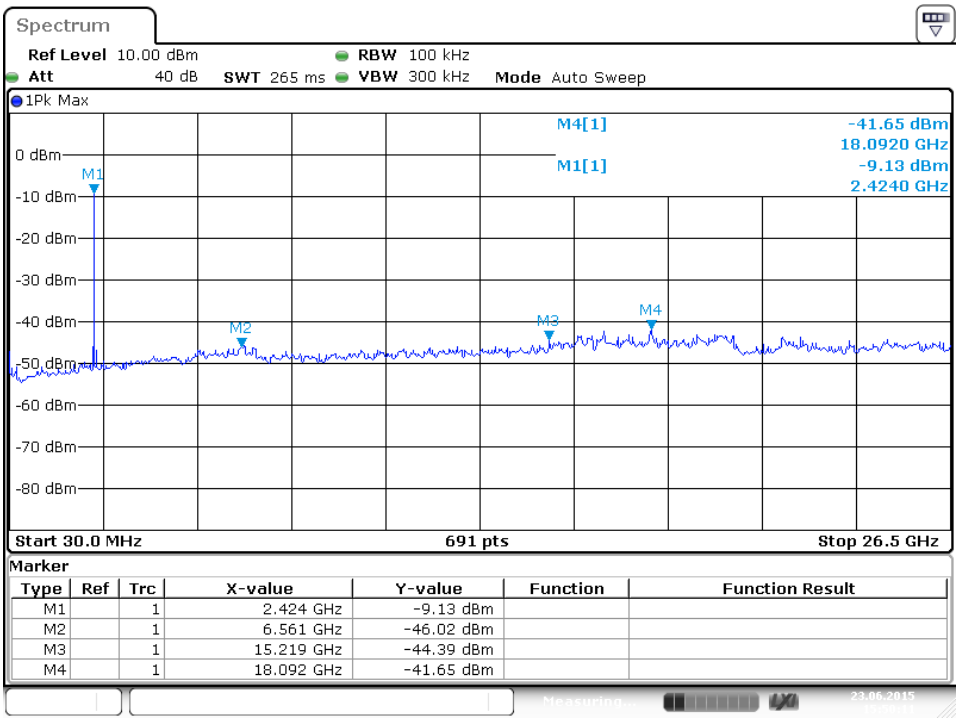
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of BDR mode

Low Channel



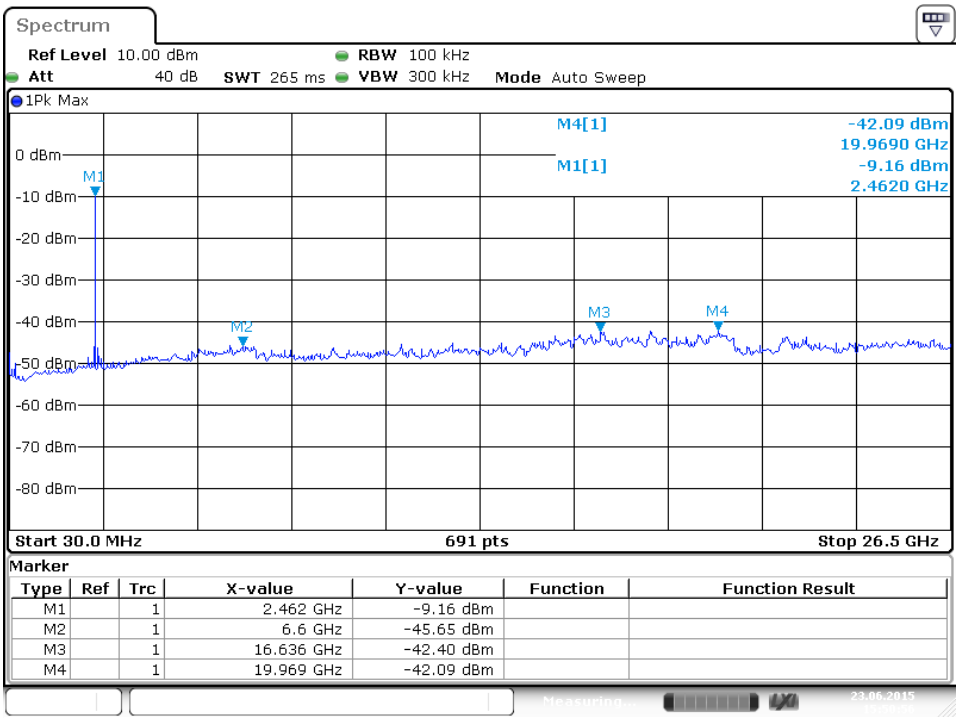
Date: 23.JUN.2015 15:49:28

Middle Channel



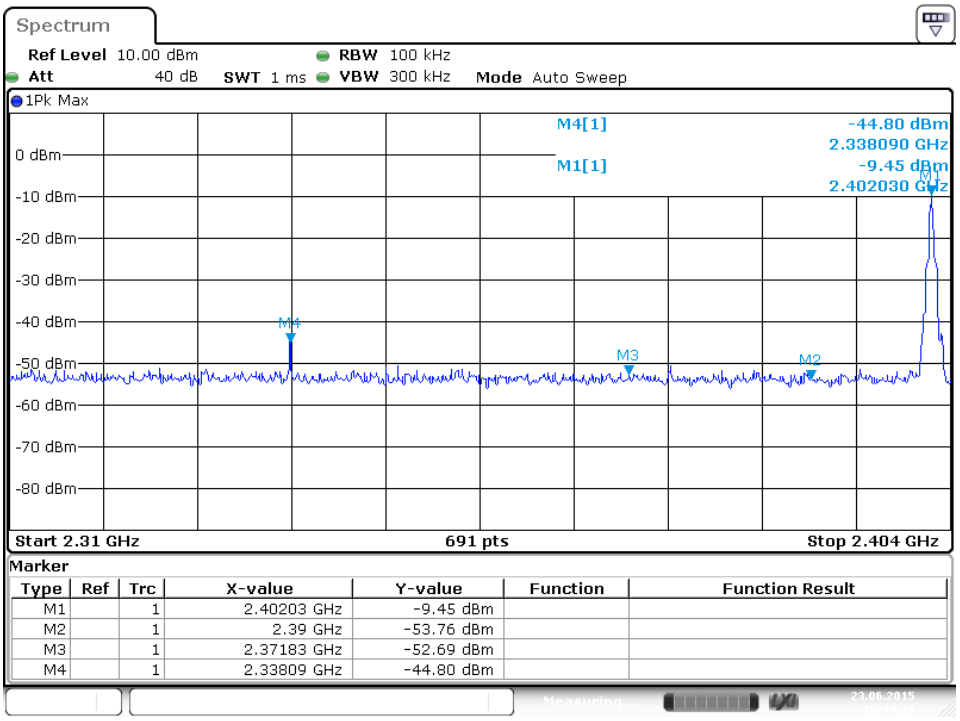
Date: 23.JUN.2015 15:50:11

High Channel

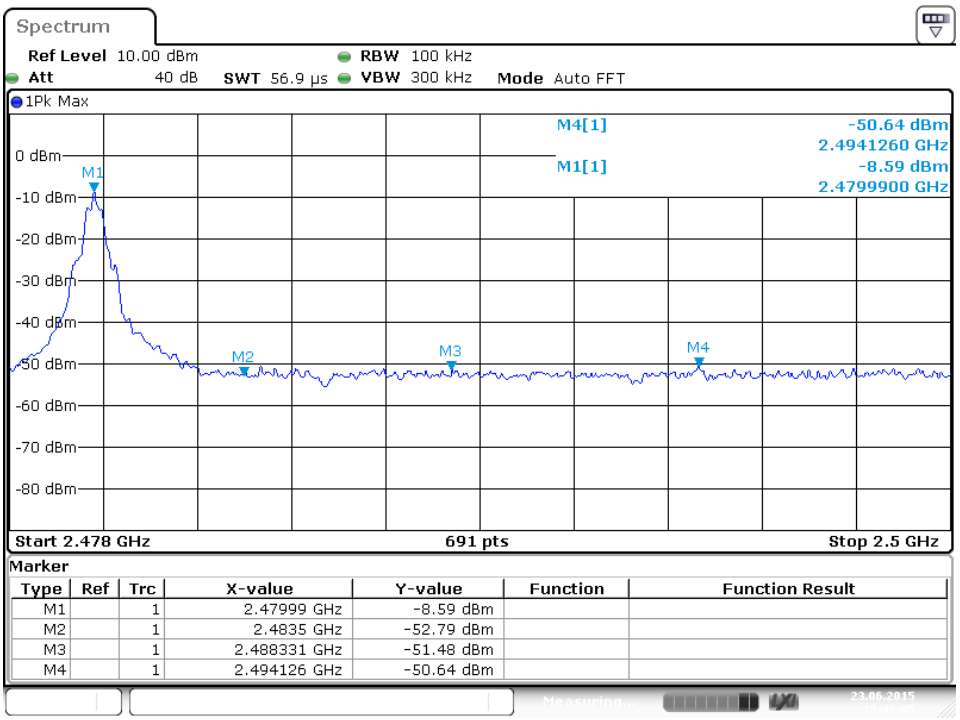


Date: 23.JUN.2015 15:50:56

Band Edge



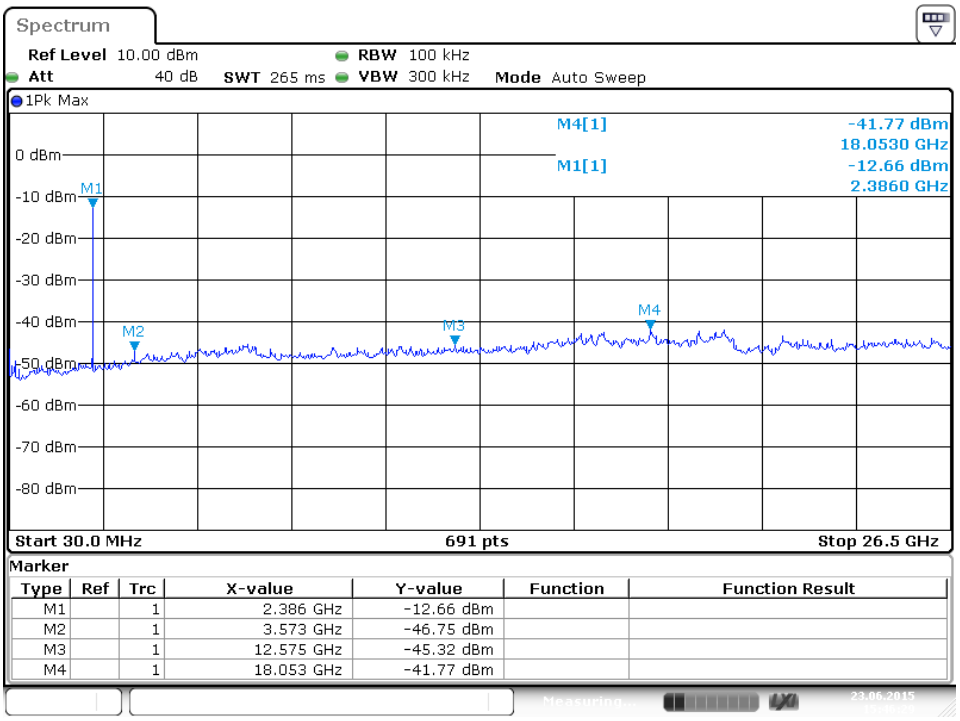
Date: 23.JUN.2015 15:44:22



Date: 23.JUN.2015 15:43:05

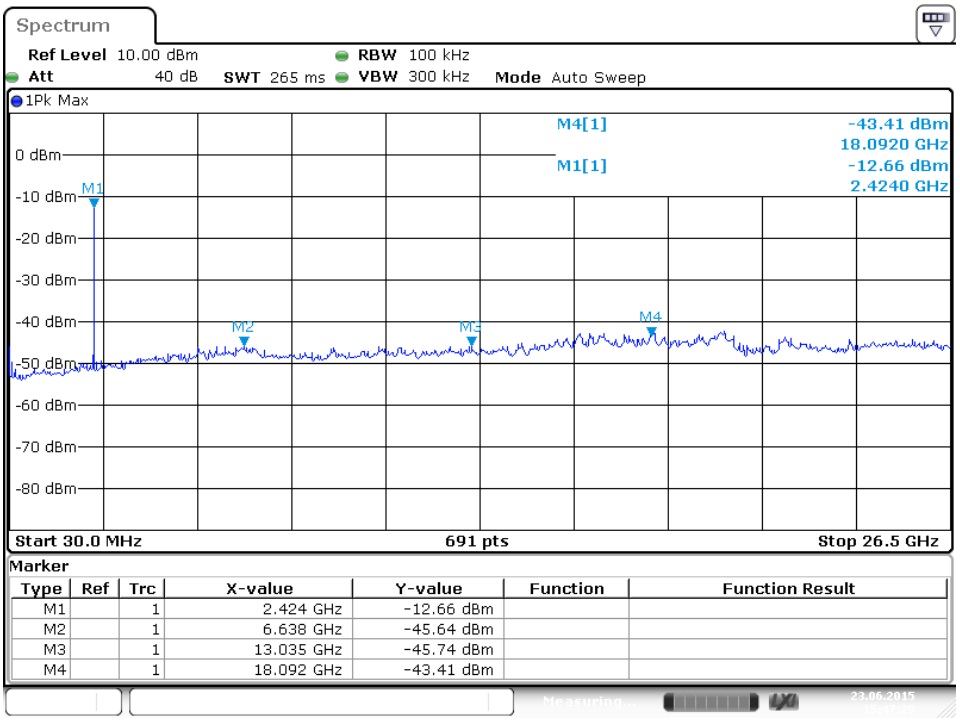
Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of EDR mode

Low Channel



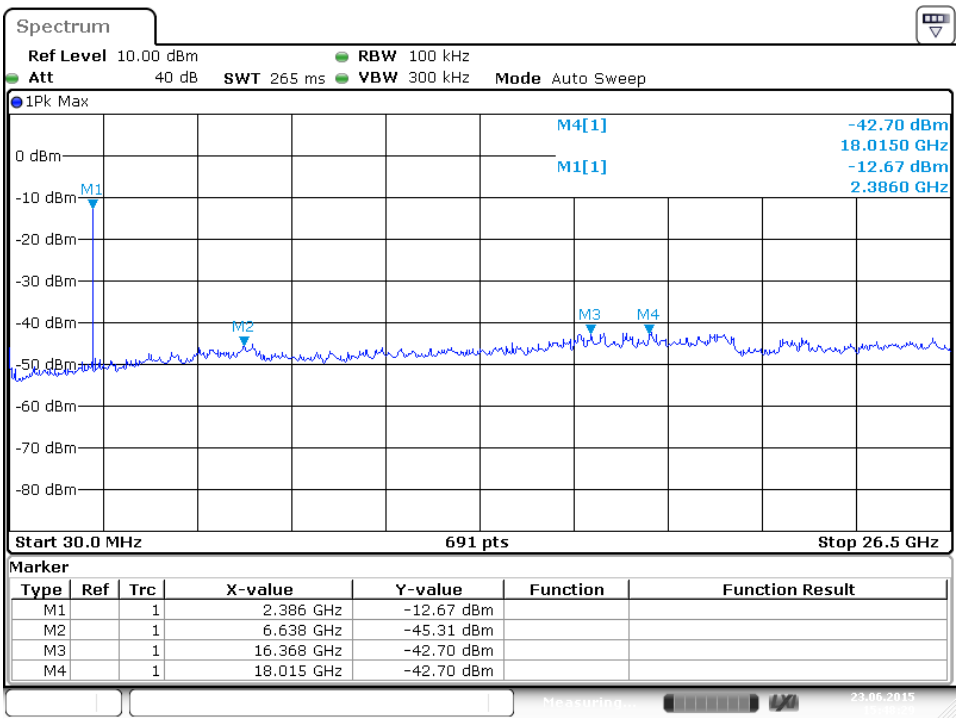
Date: 23.JUN.2015 15:46:29

Middle Channel



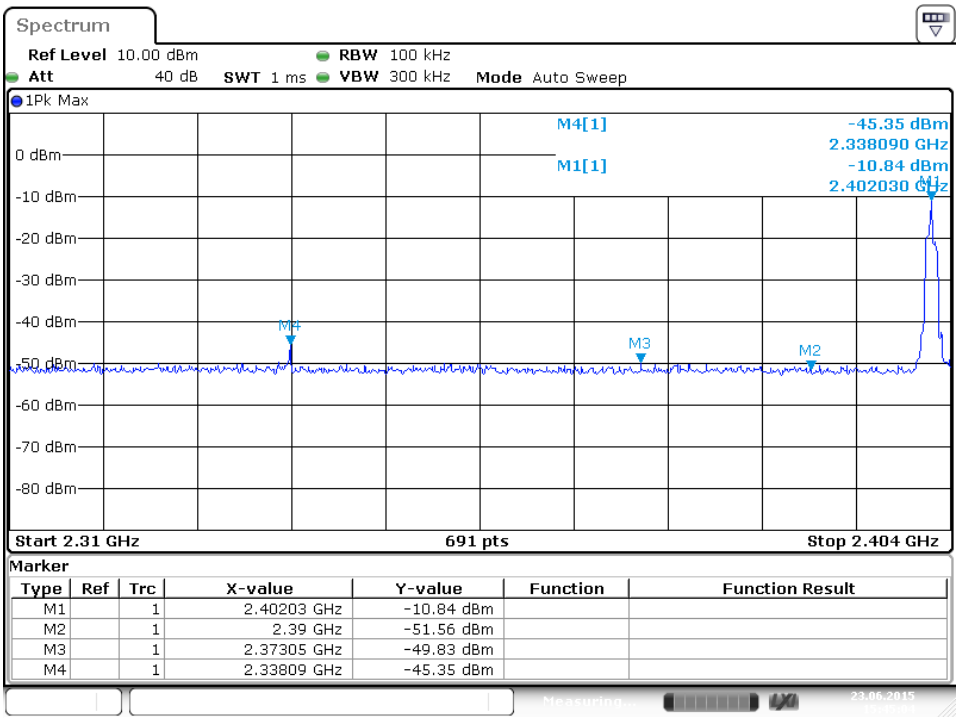
Date: 23.JUN.2015 15:47:30

High Channel

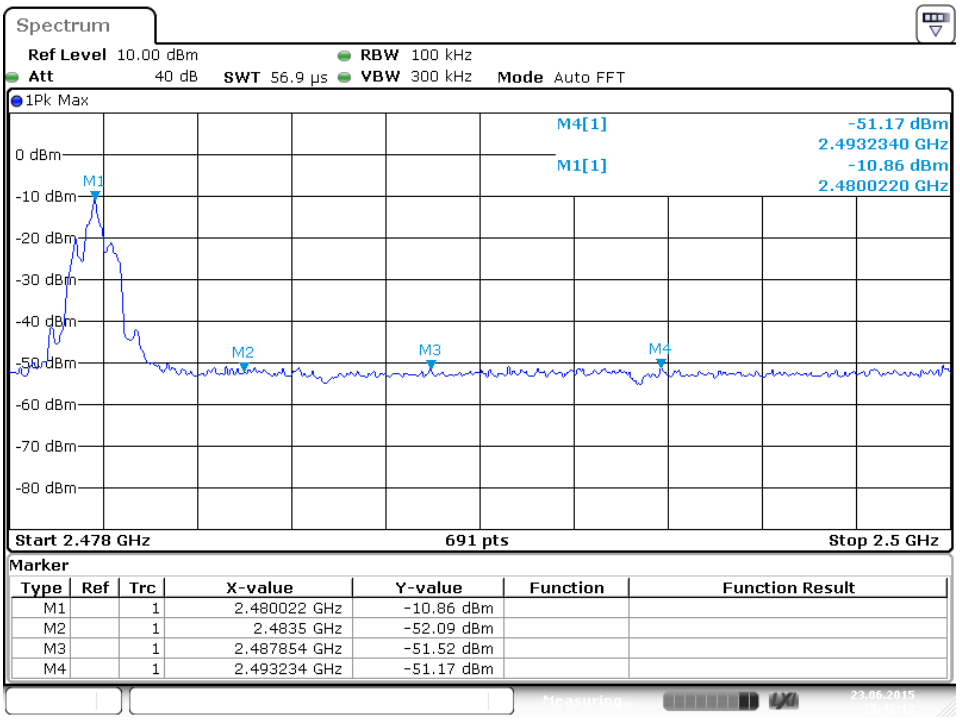


Date: 23.JUN.2015 15:48:29

Band Edge



Date: 23.JUN.2015 15:45:04



Date: 23.JUN.2015 15:42:12

5.1.5 Spurious Emission

RESULT: **Pass**

Date of testing	:	2015-06-26
Test standard	:	FCC part 15.247(d)
Basic standard	:	ANSI C63.4: 2003 Clause 11 of KDB 558074 v03r01
Limits	:	FCC part 15.209(a)
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A.1.a
Ambient temperature	:	23℃
Relative humidity	:	48%
Atmospheric pressure	:	101kPa

For details refer to following test plot.

Test Plot of Spurious Emission of transmitting

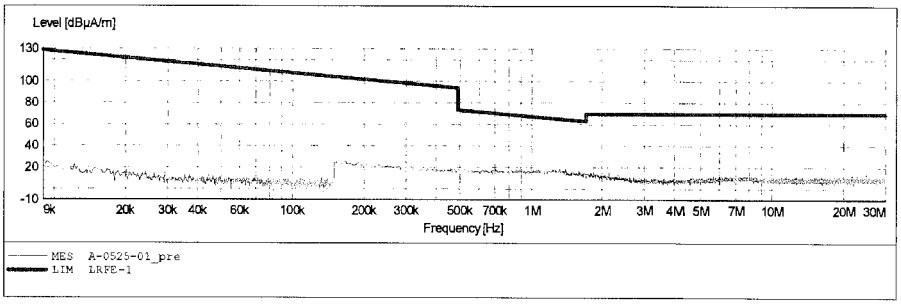
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

```
EUT:                  Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:         Cyber Acoustics (HK) Ltd.
Operating Condition:  TX 2402MHz
Test Site:            2# Chamber
Operator:             LAN
Test Specification:   AC 120V/60Hz
Comment:              X
Start of Test:        2015-5-25 /
```

SCAN TABLE: "LFRE Fin"

```
  Short Description:                _SUB_STD_VTERM2 1.70
  Start      Stop       Step       Detector  Meas.     IF       Transducer
  Frequency  Frequency  Width                Time      Bandw.
  9.0 kHz    150.0 kHz  100.0 Hz   QuasiPeak 1.0 s     200 Hz   1516M
  150.0 kHz  30.0 MHz   5.0 kHz    QuasiPeak 1.0 s     9 kHz    1516M
```



ACCURATE TECHNOLOGY CO.,LTD

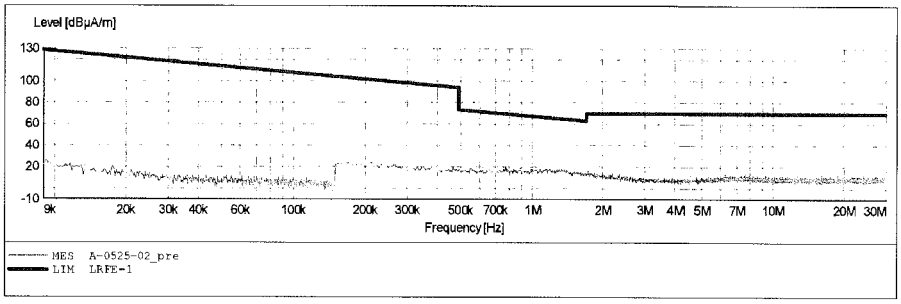
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2402MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	Y
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

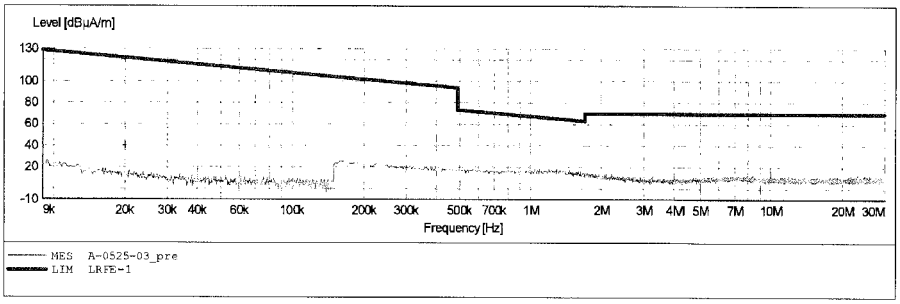
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2402MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	Z
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

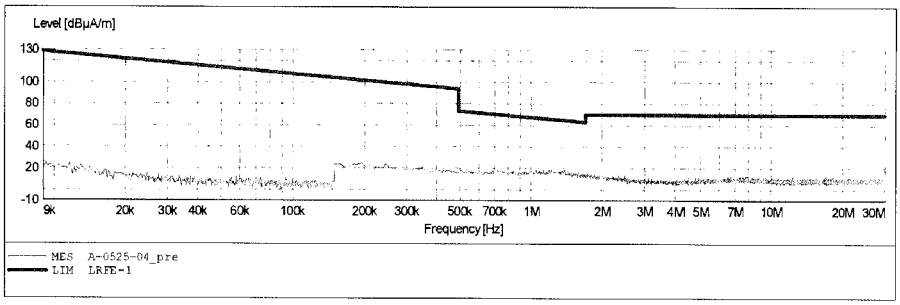
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2441MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	X
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

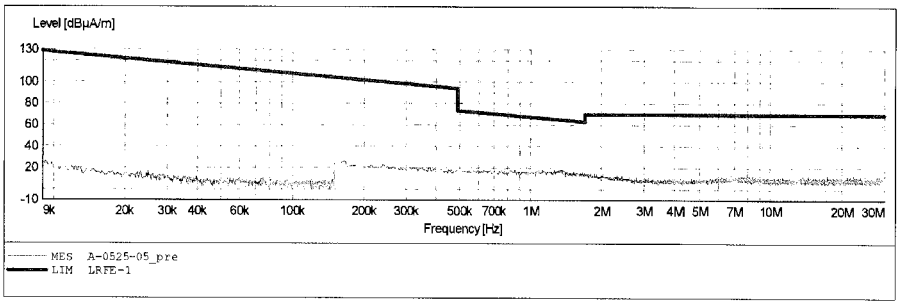
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2441MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	Y
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

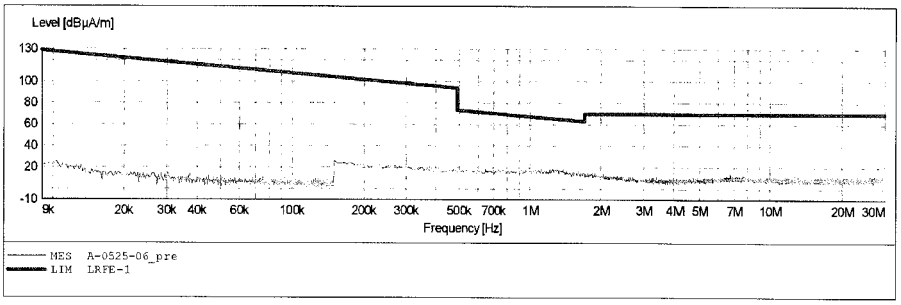
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2441MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	Z
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

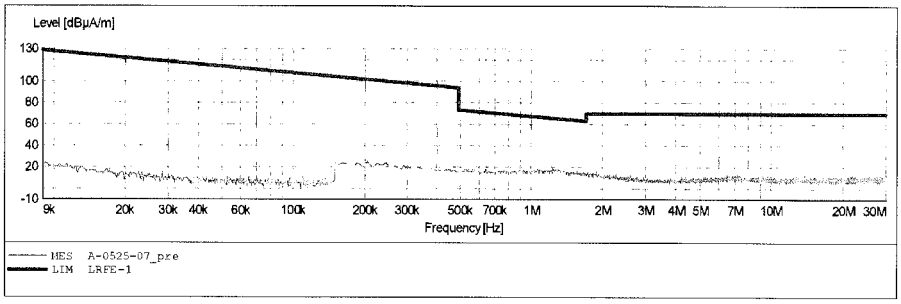
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2480MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	X
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

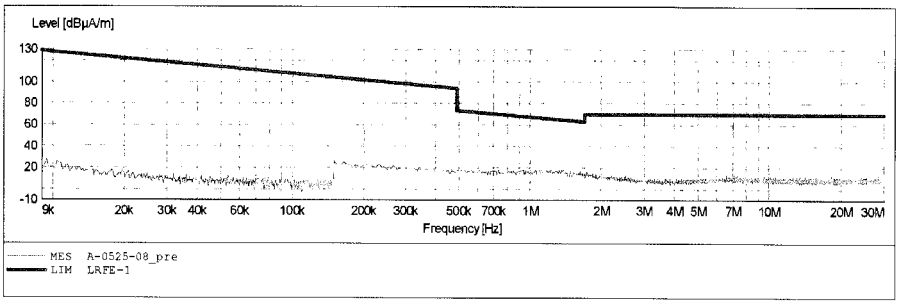
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2480MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	Y
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

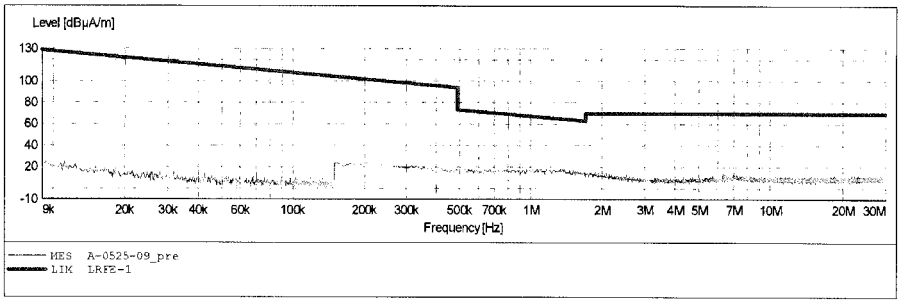
FCC Class B 3m Radiated

EUT:	Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:	Cyber Acoustics (HK) Ltd.
Operating Condition:	TX 2480MHz
Test Site:	2# Chamber
Operator:	LAN
Test Specification:	AC 120V/60Hz
Comment:	Z
Start of Test:	2015-5-25 /

SCAN TABLE: "LFRE Fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M

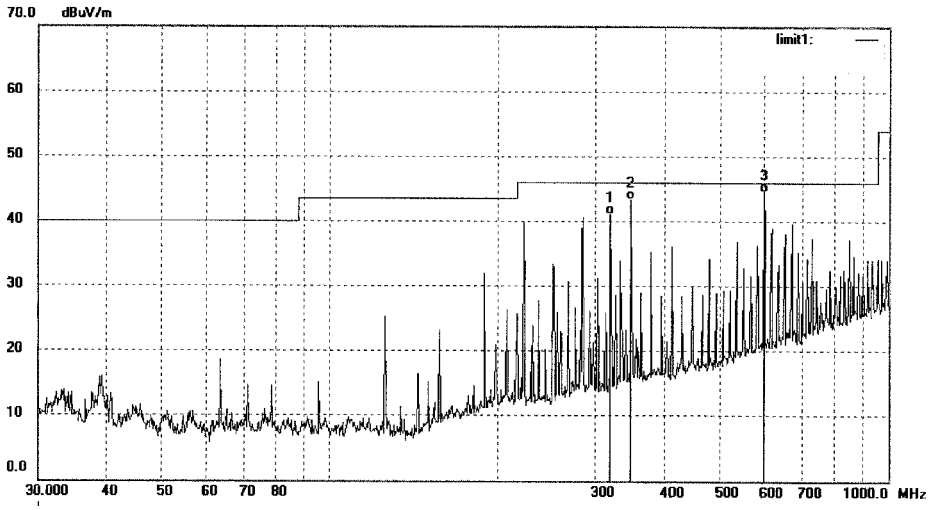


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: LAN2015 #86	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



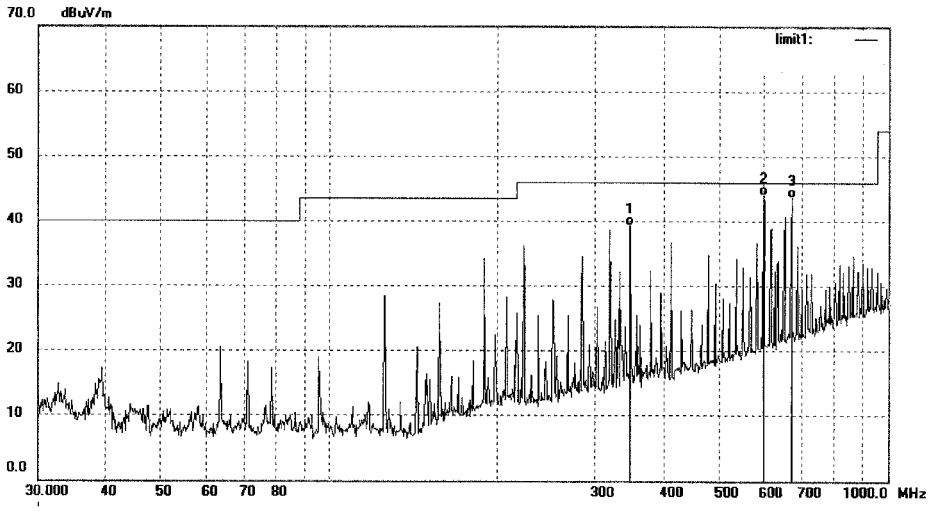
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	319.2071	56.77	-15.72	41.05	46.00	-4.95	QP			
2	347.2921	57.86	-14.61	43.25	46.00	-2.75	QP			
3	598.7066	54.16	-9.68	44.48	46.00	-1.52	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #87	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



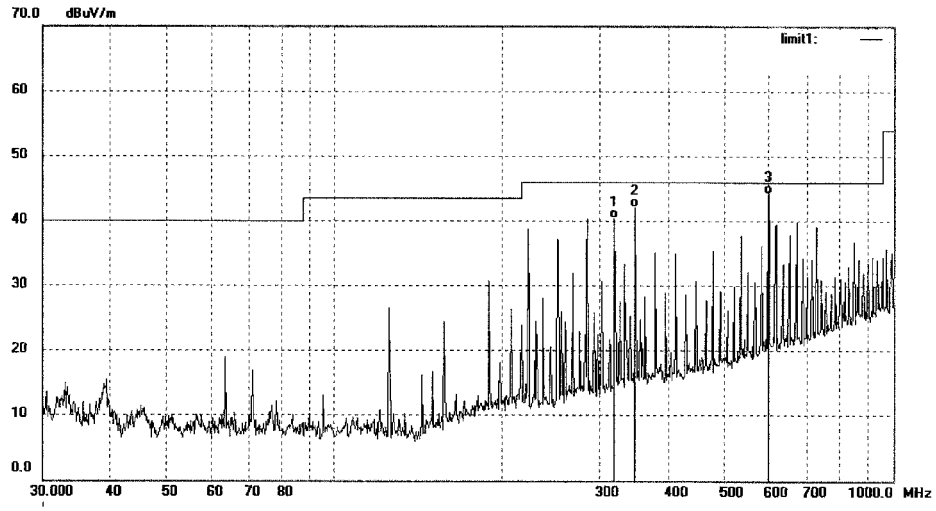
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	347.2921	53.87	-14.61	39.26	46.00	-6.74	QP			
2	598.7066	53.68	-9.68	44.00	46.00	-2.00	QP			
3	672.3103	51.79	-8.14	43.65	46.00	-2.35	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #89	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



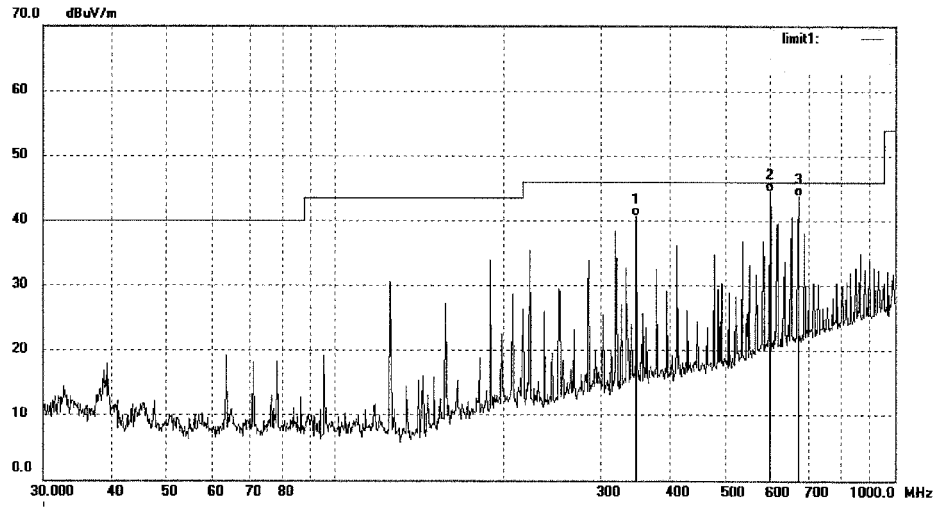
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	319.2071	56.05	-15.72	40.33	46.00	-5.67	QP			
2	347.2921	56.62	-14.61	42.01	46.00	-3.99	QP			
3	598.7066	53.95	-9.68	44.27	46.00	-1.73	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #88	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



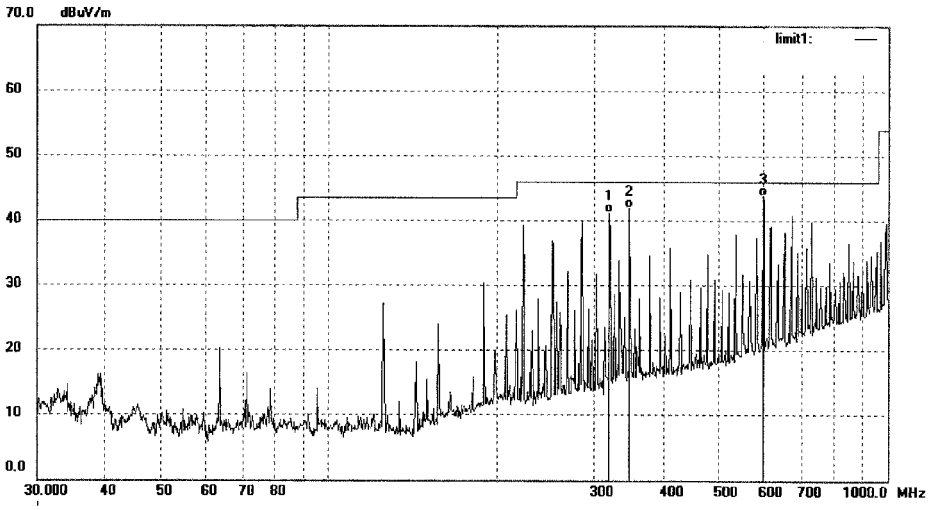
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	347.2921	55.25	-14.61	40.64	46.00	-5.36	QP			
2	598.7066	54.26	-9.68	44.58	46.00	-1.42	QP			
3	672.3103	52.00	-8.14	43.86	46.00	-2.14	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #90	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



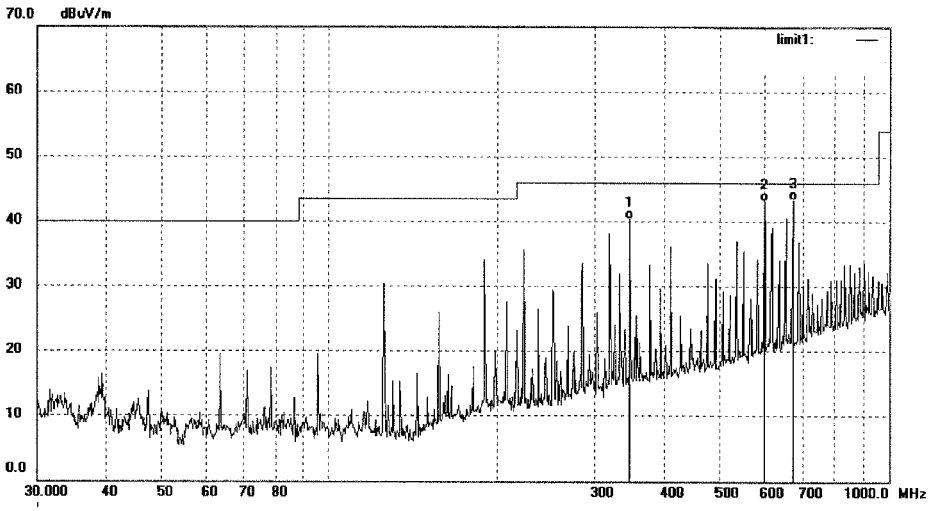
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	319.2071	56.96	-15.72	41.24	46.00	-4.76	QP			
2	347.2921	56.47	-14.61	41.86	46.00	-4.14	QP			
3	598.7066	53.54	-9.68	43.86	46.00	-2.14	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #91	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



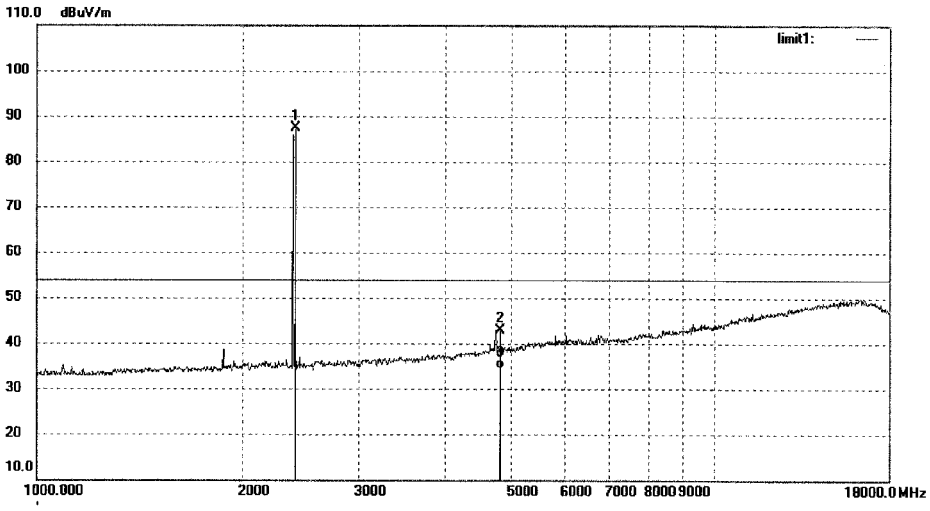
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	347.2921	54.97	-14.61	40.36	46.00	-5.64	QP			
2	598.7067	52.74	-9.68	43.06	46.00	-2.94	QP			
3	672.3104	51.37	-8.14	43.23	46.00	-2.77	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #93	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



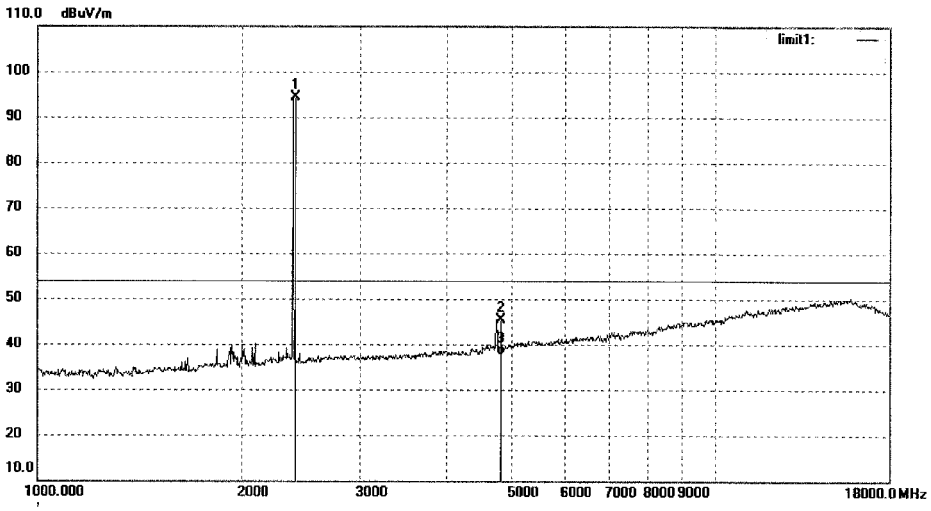
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	95.41	-7.96	87.45	/	/	peak			
2	4804.024	45.26	-2.29	42.97	74.00	-31.03	peak			
3	4804.024	36.74	-2.29	34.45	54.00	-19.55	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #92	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



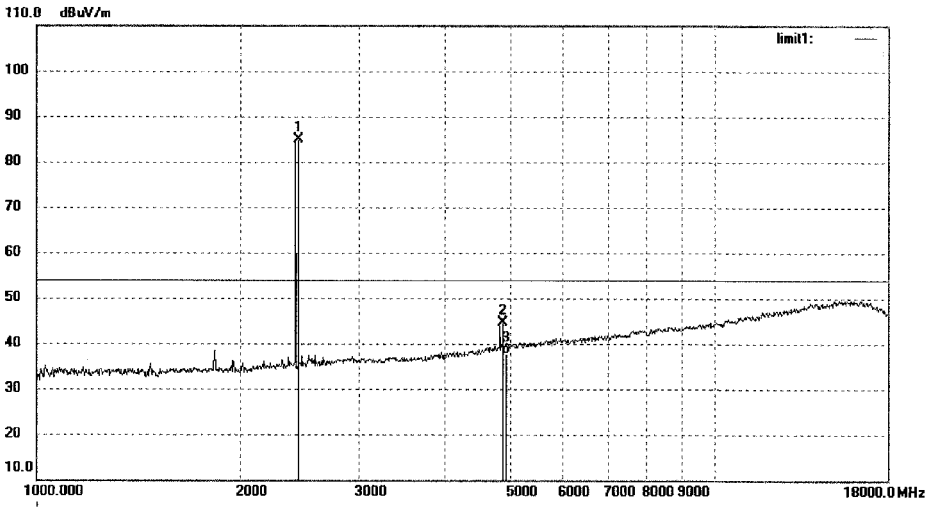
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	102.27	-7.96	94.31	/	/	peak			
2	4804.017	47.70	-2.29	45.41	74.00	-28.59	peak			
3	4804.017	39.85	-2.29	37.56	54.00	-16.44	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #97	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	92.65	-7.86	84.79	/	/	peak			
2	4882.019	46.67	-2.03	44.64	74.00	-29.36	peak			
3	4882.019	39.73	-2.03	37.70	54.00	-16.30	AVG			

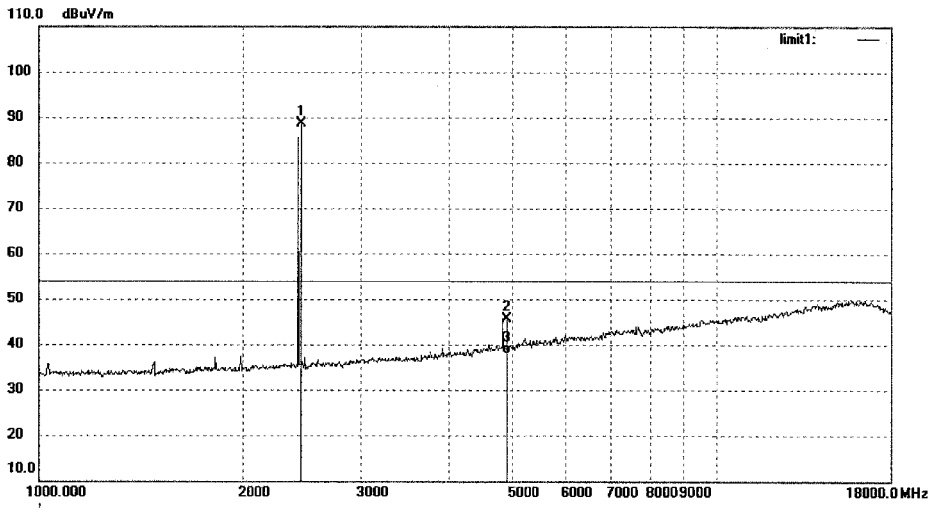
ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: LAN2015 #96
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Wireless Speaker System
Mode: TX 2441MHz
Model: CA-3052BT
Manufacturer: Cyber Acoustics (HK) Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 15/06/26/
Time:
Engineer Signature:
Distance: 3m

Note:



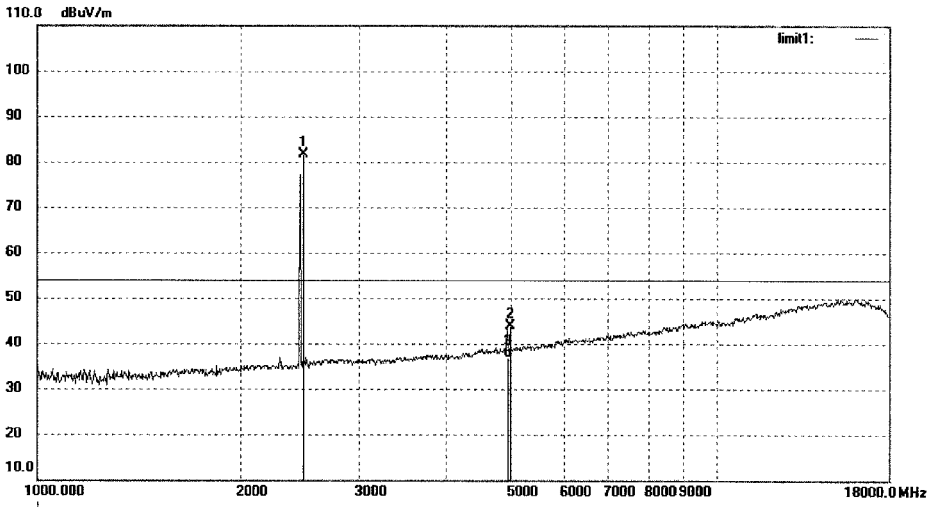
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	96.49	-7.86	88.63	/	/	peak			
2	4882.027	47.54	-2.03	45.51	74.00	-28.49	peak			
3	4882.027	40.03	-2.03	38.00	54.00	-16.00	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #98	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



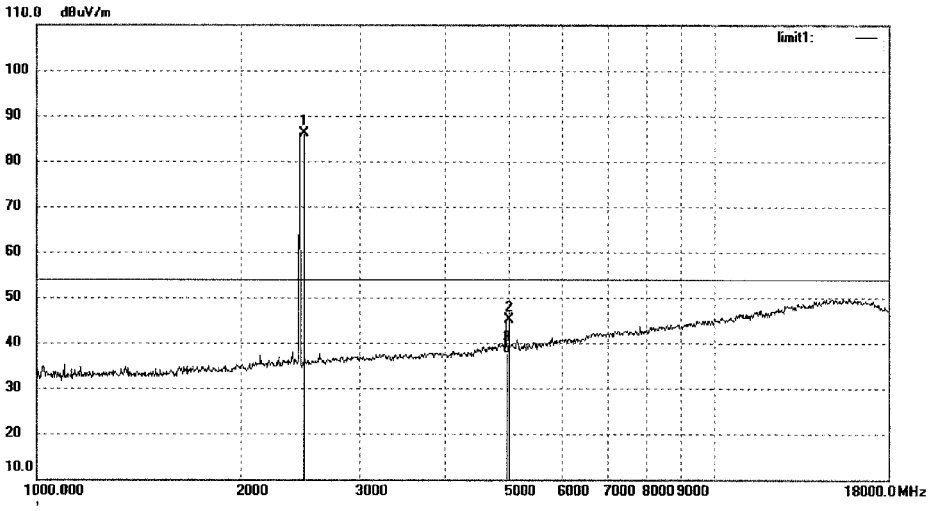
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	89.42	-7.76	81.66	/	/	peak			
2	4960.021	45.75	-1.76	43.99	74.00	-30.01	peak			
3	4960.021	38.75	-1.76	36.99	54.00	-17.01	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #99	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



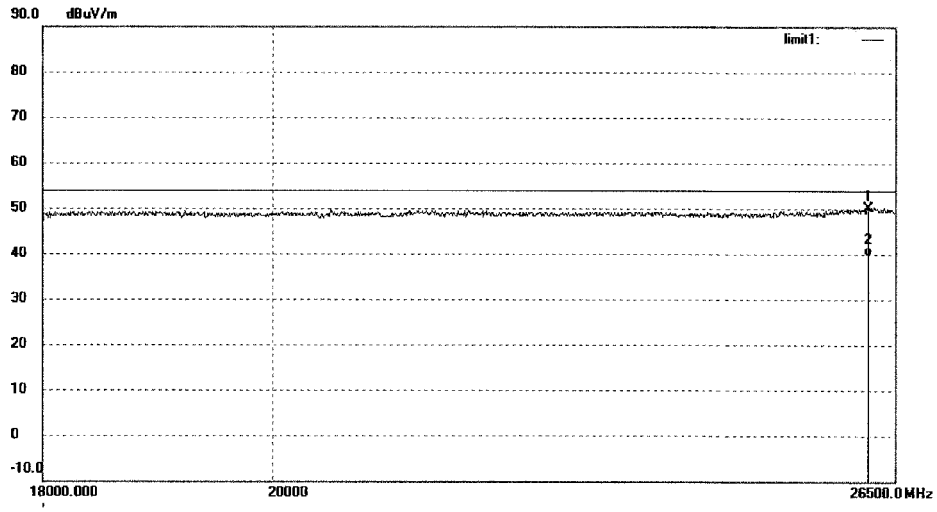
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	93.77	-7.76	86.01	/	/	peak			
2	4960.025	47.01	-1.76	45.25	74.00	-28.75	peak			
3	4960.025	39.35	-1.76	37.59	54.00	-16.41	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #102	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



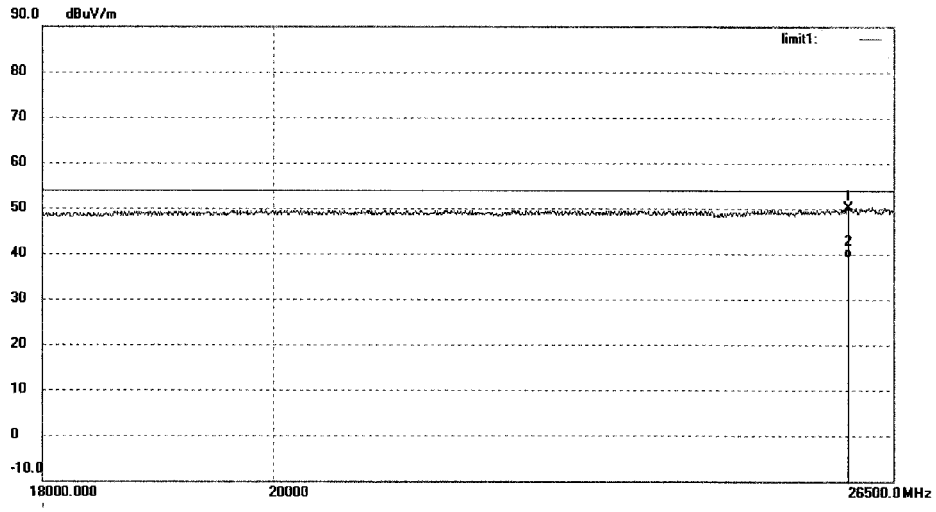
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26183.534	39.29	10.95	50.24	74.00	-23.76	peak			
2	26183.534	28.72	10.95	39.67	54.00	-14.33	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #103	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



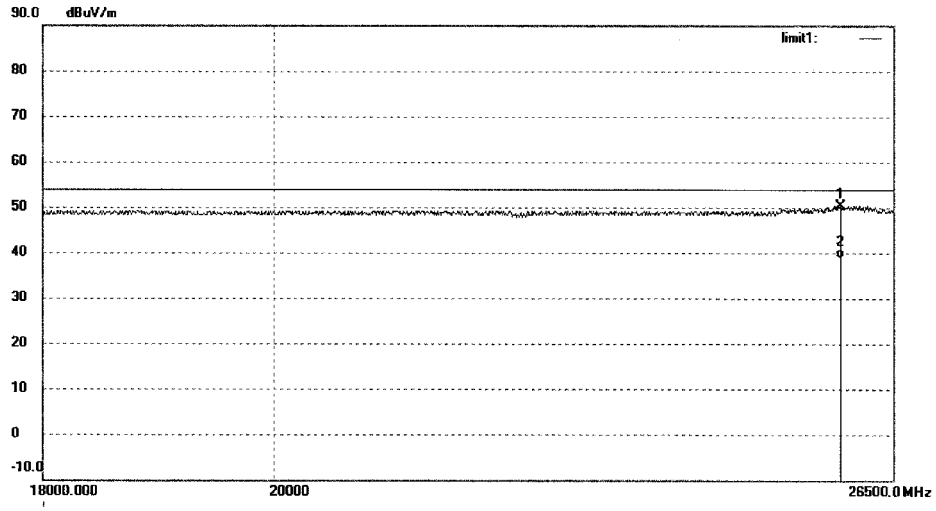
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25961.241	39.34	10.91	50.25	74.00	-23.75	peak			
2	25961.241	28.17	10.91	39.08	54.00	-14.92	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #105	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



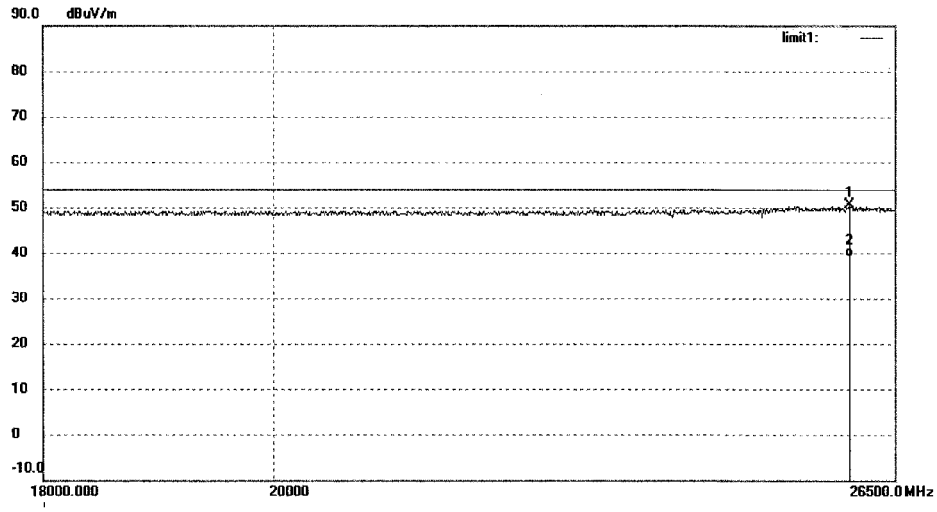
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25870.847	39.51	10.90	50.41	74.00	-23.59	peak			
2	25870.847	27.99	10.90	38.89	54.00	-15.11	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #104	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2441MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



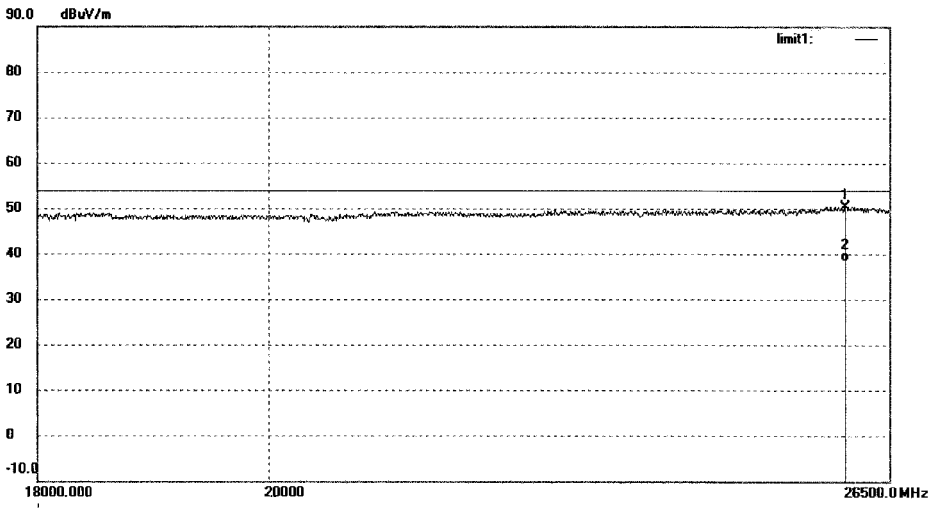
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25971.304	39.67	10.91	50.58	74.00	-23.42	peak			
2	25971.304	28.25	10.91	39.16	54.00	-14.84	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #106	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



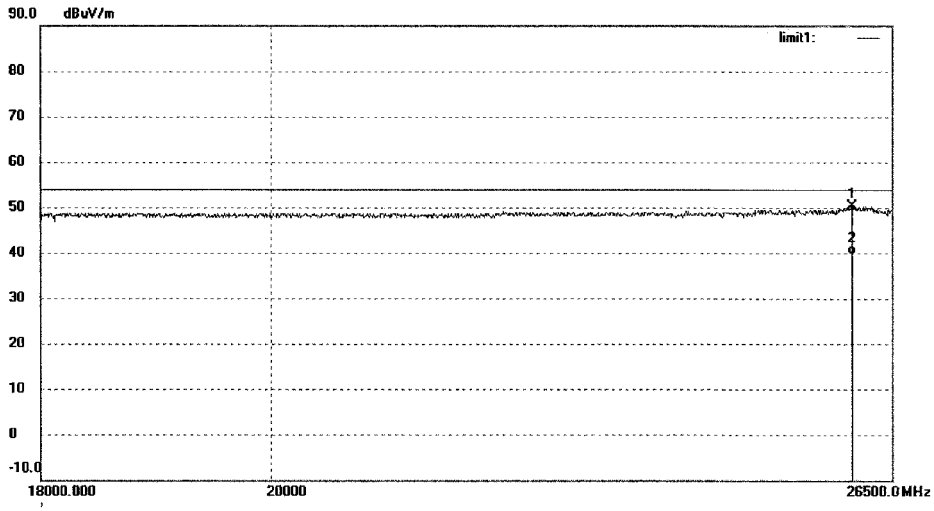
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25981.371	39.58	10.91	50.49	74.00	-23.51	peak			
2	25981.371	27.45	10.91	38.36	54.00	-15.64	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #107	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26031.765	39.54	10.92	50.46	74.00	-23.54	peak			
2	26031.765	28.73	10.92	39.65	54.00	-14.35	AVG			

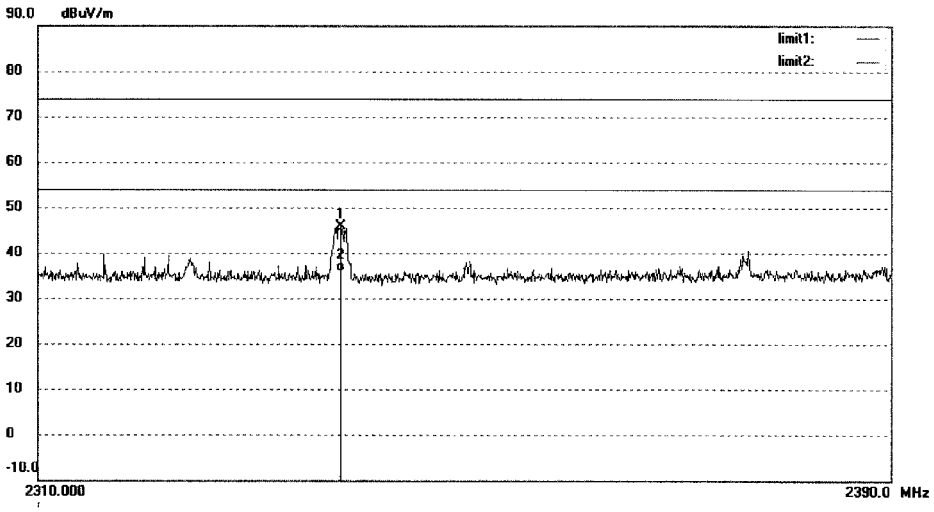
Test Plot of Frequency Band Edge

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #94	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



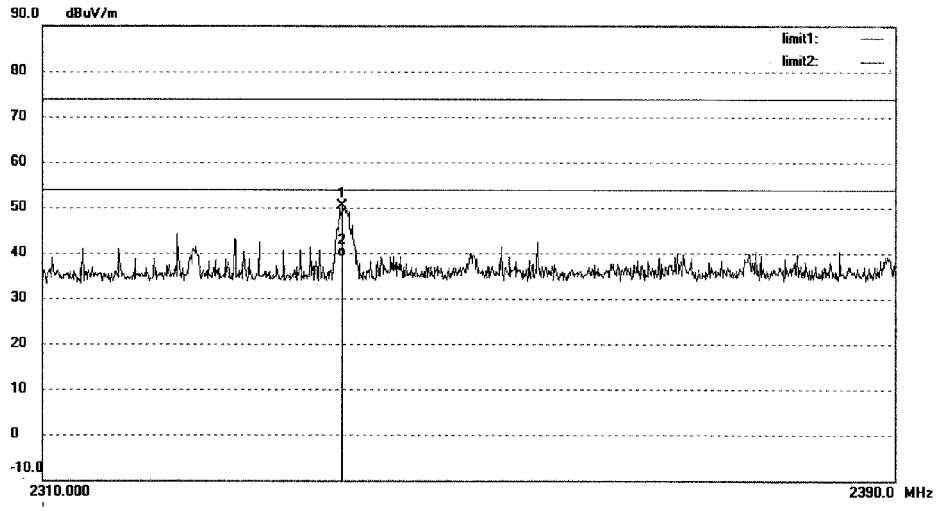
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2338.145	54.03	-8.13	45.90	74.00	-28.10	peak			
2	2338.145	43.96	-8.13	35.83	54.00	-18.17	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #95	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2402MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2337.826	58.59	-8.13	50.46	74.00	-23.54	peak			
2	2337.826	47.22	-8.13	39.09	54.00	-14.91	AVG			

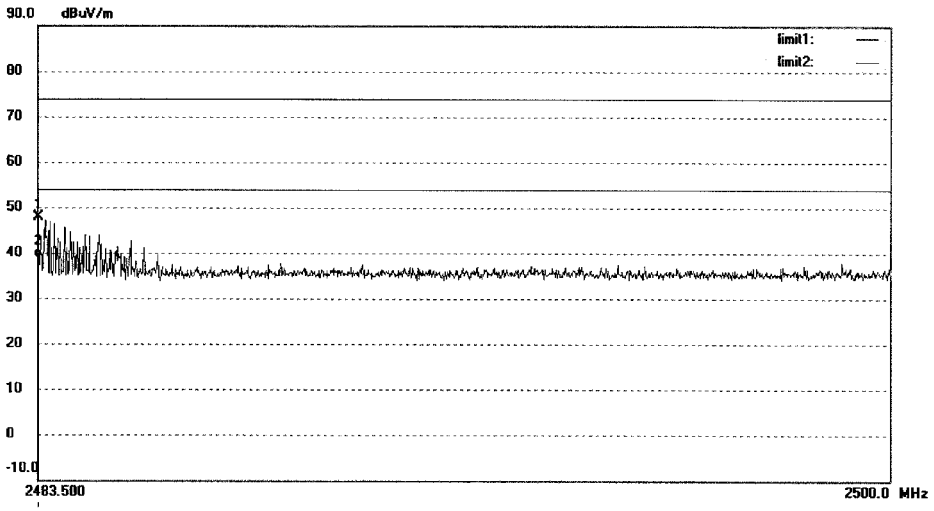
ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: LAN2015 #101
Standard: FCC (Band Edge)
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Wireless Speaker System
Mode: TX 2480MHz
Model: CA-3052BT
Manufacturer: Cyber Acoustics (HK) Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 15/06/26/
Time:
Engineer Signature:
Distance: 3m

Note:



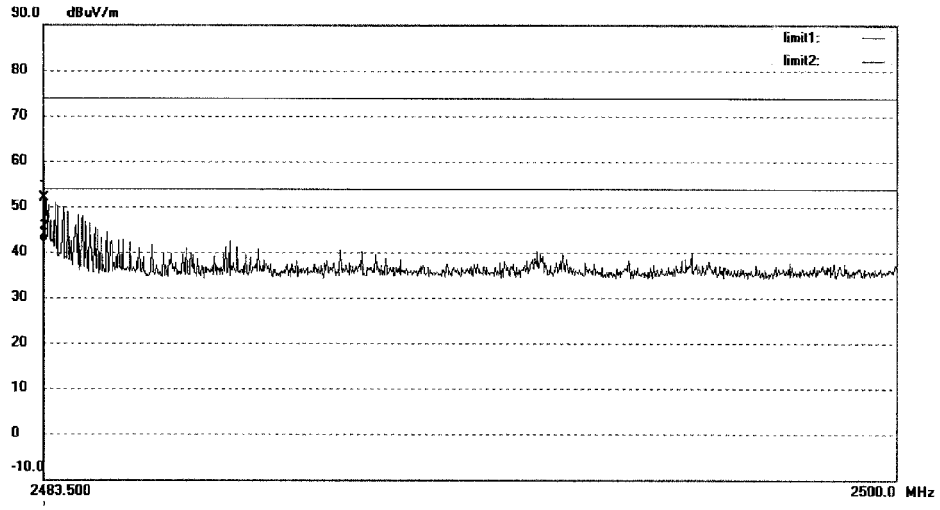
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	55.71	-7.76	47.95	74.00	-26.05	peak			
2	2483.500	46.62	-7.76	38.86	54.00	-15.14	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #100	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/26/
Temp.(C)/Hum.(%) 25 C / 55 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



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	59.67	-7.76	51.91	74.00	-22.09	peak			
2	2483.500	49.89	-7.76	42.13	54.00	-11.87	AVG			

5.1.6 Frequency Separation

RESULT: **Pass**

Date of testing	:	2015-06-23
Test standard	:	FCC part 15.247(a)(1)
Basic standard	:	ANSI C63.4: 2003
Limit	:	≥ 25kHz or two-thirds of 20dB bandwidth, whichever is greater
Kind of test site	:	Shield room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.1.a
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

Table 8: Test result of Frequency Separation

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1.0029	≥ 25kHz or two-thirds of 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1.0029	≥ 25kHz or two-thirds of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2479	1.0029	≥ 25kHz or two-thirds of 20dB bandwidth	Pass
Adjacency Channel	2480			

5.1.7 Number of hopping frequency

RESULT: **Pass**

Date of testing	:	2015-06-23
Test standard	:	FCC part 15.247(a)(1)(iii)
Basic standard	:	ANSI C63.4: 2003
Limits	:	≥ 15 non-overlapping channels
Kind of test site	:	Shield room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.1.a
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

Table 9: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2402 to 2480MHz	79	≥15	Pass

5.1.8 Time of Occupancy

RESULT: **Pass**

Date of testing	:	2015-06-23
Test standard	:	FCC part 15.247(a)(1)(iii)
Basic standard	:	ANSI C63.4: 2003
Limits	:	0.4s
Kind of test site	:	Shield room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A.1.a
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

Table 10: Test result of Time of Occupancy

Mode	Packet Type	Channel Frequency (MHz)	Packet Duration [ms]	Number of Hops per Channel	Dwell Time (ms)	Limit [ms]
BDR	DH1	2402	0.5072	293	148.6096	400
		2441	0.5072	285	144.5520	400
		2480	0.5217	289	150.7713	400
	DH3	2402	1.7826	161	286.9986	400
		2441	1.7971	162	291.1302	400
		2480	1.7826	159	283.4334	400
	DH5	2402	3.0435	105	319.5675	400
		2441	3.0652	114	349.4328	400
		2480	3.0435	125	380.4375	400
EDR	DH1	2402	0.5217	301	157.0317	400
		2441	0.5145	300	154.3500	400
		2480	0.5217	305	159.1185	400
	DH3	2402	1.7826	162	288.7812	400
		2441	1.7971	160	287.5360	400
		2480	1.7971	162	291.1302	400
	DH5	2402	3.0435	100	304.3500	400
		2441	3.0652	99	303.4548	400
		2480	3.0652	100	306.5200	400

5.1.9 Conducted emissions

RESULT: **Pass**

Date of testing	:	2015-06-26
Test standard	:	FCC Part 15.107 (a)
Basic standard	:	ANSI C63.4: 2003
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.107(a)
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC 120V, 60Hz
Operation Mode	:	A
Earthing	:	Not Connected
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

For details refer to following test plot.

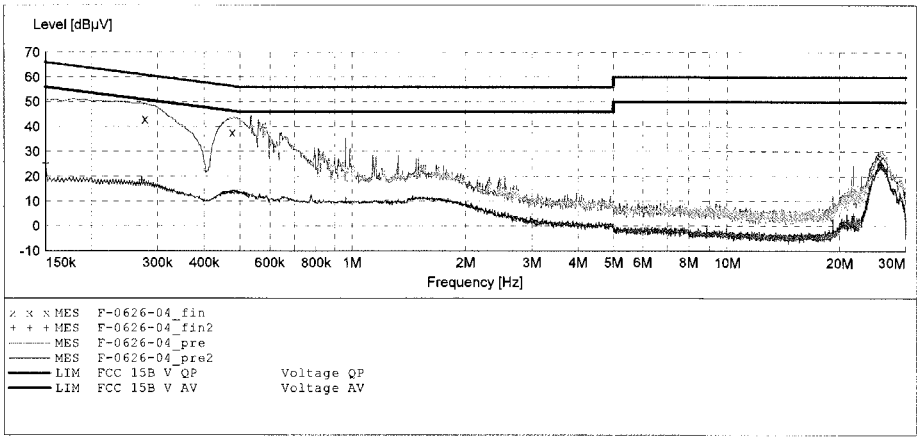
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

```
EUT:                  Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:         Cyber Acoustics (HK) Ltd.
Operating Condition:  Bluetooth Playing
Test Site:            1#Shielding Room
Operator:             LAN
Test Specification:   L 120V/60Hz
Comment:              Mains Port
Start of Test:        2015-6-26 /
```

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

```
  Short Description:           _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF       Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   4.5 kHz   QuasiPeak 1.0 s     9 kHz    NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "F-0626-04_fin"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.278000	43.10	10.9	61	17.8	QP	L1	GND
0.476000	37.70	11.4	56	18.7	QP	L1	GND
25.697000	26.70	12.0	60	33.3	QP	L1	GND

MEASUREMENT RESULT: "F-0626-04_fin2"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	25.10	10.3	56	30.9	AV	L1	GND
0.272000	18.30	10.9	51	32.8	AV	L1	GND
25.800500	24.80	12.0	50	25.2	AV	L1	GND

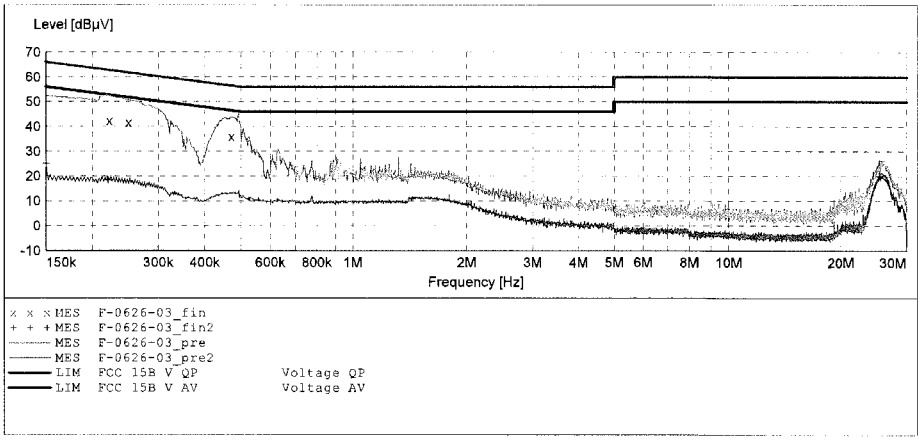
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

```
EUT:                  Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:         Cyber Acoustics (HK) Ltd.
Operating Condition:  Bluetooth Playing
Test Site:            1#Shielding Room
Operator:             LAN
Test Specification:   N 120V/60Hz
Comment:              Mains Port
Start of Test:        2015-6-26 /
```

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

```
  Short Description:            _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF       Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   4.5 kHz   QuasiPeak 1.0 s     9 kHz    NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "F-0626-03_fin"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.222000	42.30	10.7	63	20.4	QP	N	GND
0.250000	41.60	10.8	62	20.2	QP	N	GND
0.472000	35.90	11.4	57	20.6	QP	N	GND

MEASUREMENT RESULT: "F-0626-03_fin2"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	25.00	10.3	56	31.0	AV	N	GND
0.220000	18.20	10.7	53	34.6	AV	N	GND
25.449500	20.00	12.0	50	30.0	AV	N	GND

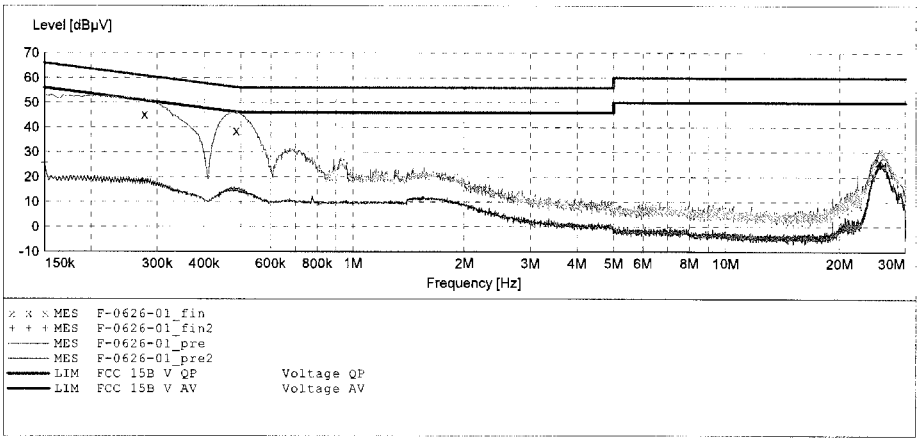
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

```
EUT:                  Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:         Cyber Acoustics (HK) Ltd.
Operating Condition:  Line in
Test Site:            1#Shielding Room
Operator:             LAN
Test Specification:   L 120V/60Hz
Comment:              Mains Port
Start of Test:        2015-6-26 /
```

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

```
  Short Description:            _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF       Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   4.5 kHz   QuasiPeak 1.0 s     9 kHz    NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "F-0626-01_fin"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.278000	45.30	10.9	61	15.6	QP	L1	GND
0.486000	38.70	11.5	56	17.5	QP	L1	GND
25.521500	26.50	12.0	60	33.5	QP	L1	GND

MEASUREMENT RESULT: "F-0626-01_fin2"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	25.70	10.3	56	30.3	AV	L1	GND
0.274000	18.30	10.9	51	32.7	AV	L1	GND
25.733000	24.80	12.0	50	25.2	AV	L1	GND

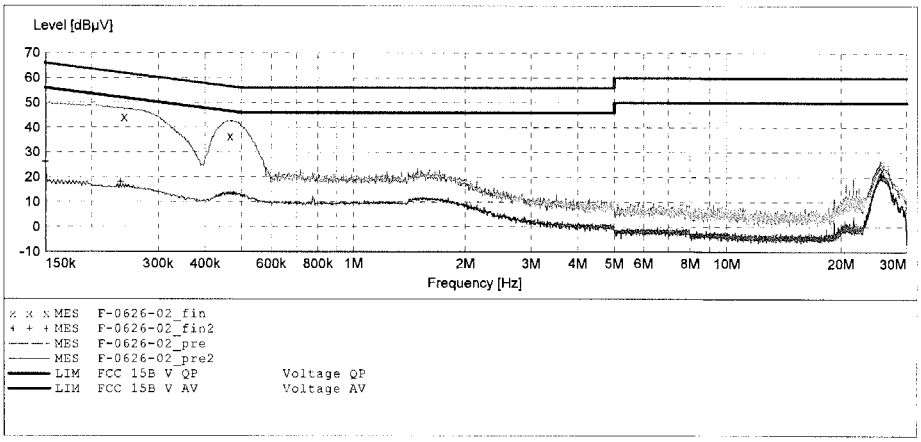
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

```
EUT:                  Bluetooth Wireless Speaker System M/N:CA-3052BT
Manufacturer:         Cyber Acoustics (HK) Ltd.
Operating Condition:  Line in
Test Site:            1#Shielding Room
Operator:             LAN
Test Specification:   N 120V/60Hz
Comment:              Mains Port
Start of Test:        2015-6-26 /
```

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

```
  Short Description:            _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF       Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   4.5 kHz   QuasiPeak 1.0 s     9 kHz    NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "F-0626-02_fin"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.244000	44.30	10.8	62	17.7	QP	N	GND
0.466000	36.50	11.4	57	20.1	QP	N	GND
25.760000	23.00	12.0	60	37.0	QP	N	GND

MEASUREMENT RESULT: "F-0626-02_fin2"

2015-6-26

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	26.00	10.3	56	30.0	AV	N	GND
0.238000	18.00	10.8	52	34.2	AV	N	GND
25.670000	20.50	12.0	50	29.5	AV	N	GND

5.1.10 Radiated Emission

RESULT: **Pass**

Date of testing	:	2015-06-10
Test standard	:	FCC Part 15.109 (a)
Test procedure	:	ANSI C63.4: 2003
Frequency range	:	30 - 5000MHz *
Equipment Classification	:	Class B
Limits	:	FCC Part 15.109(a)
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	AC 120V, 60Hz
Operation mode	:	A.2
Earthing	:	Not connected
Ambient temperature	:	23℃
Relative humidity	:	48%
Atmospheric pressure	:	101kPa

*- The EUT's highest frequency generated and used is 1000MHz, hence the highest scan frequency is up to 5GHz only.

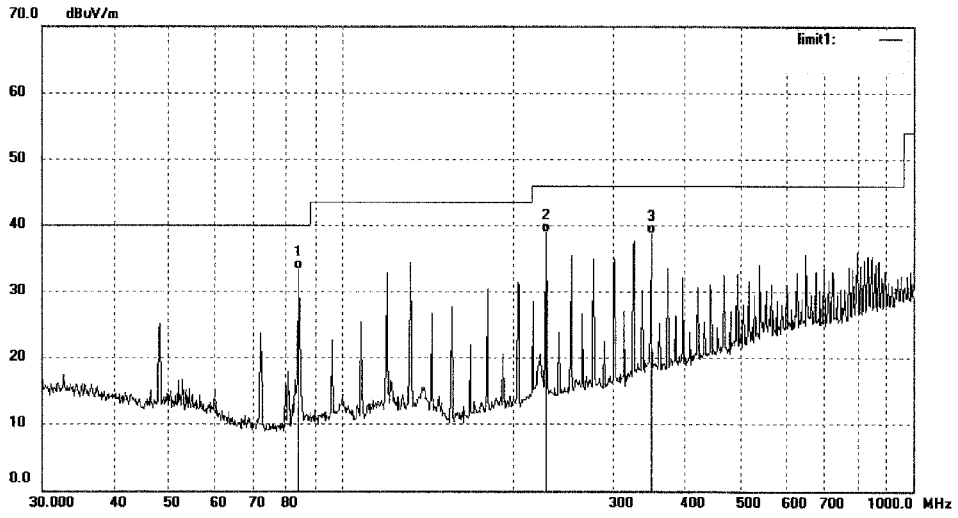
For details refer to following test plot.

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #1418	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/10/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: Line in	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



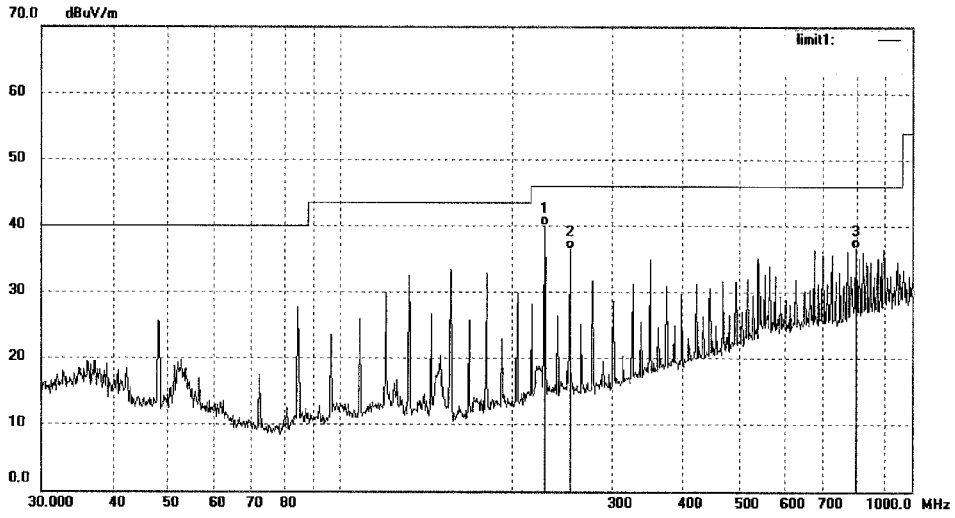
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	84.1099	48.89	-15.59	33.30	40.00	-6.70	QP			
2	228.4903	50.33	-11.35	38.98	46.00	-7.02	QP			
3	349.2500	46.50	-7.77	38.73	46.00	-7.27	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #1417	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/10/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: Line in	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



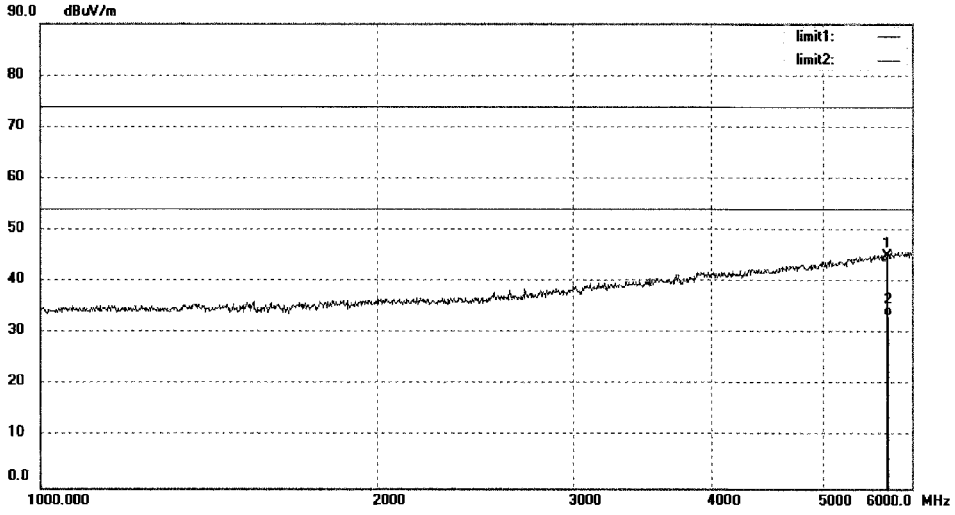
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	228.4903	51.27	-11.35	39.92	46.00	-6.08	QP			
2	252.9482	47.28	-10.76	36.52	46.00	-9.48	QP			
3	796.1829	36.66	-0.06	36.60	46.00	-9.40	QP			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #1424	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/10/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: Line in	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



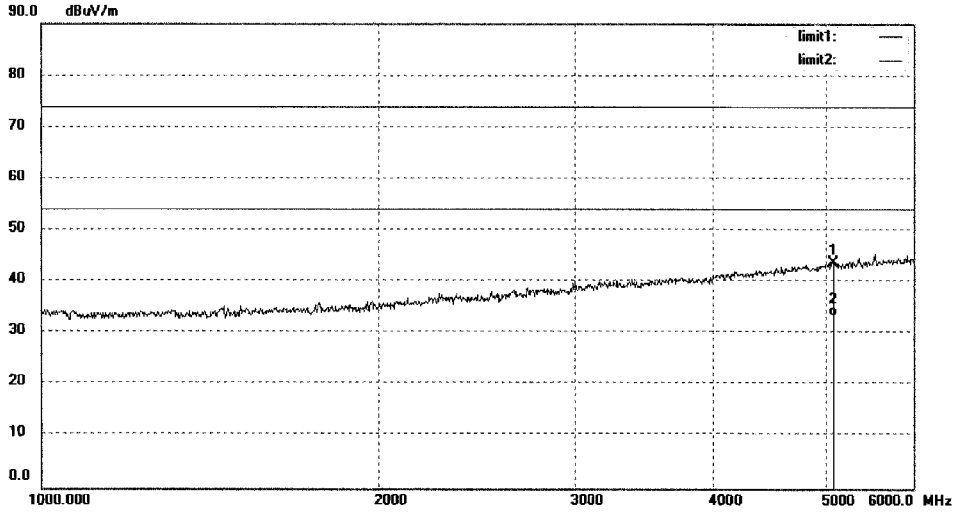
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5696.195	43.92	1.13	45.05	74.00	-28.95	peak			
2	5696.195	32.35	1.13	33.48	54.00	-20.52	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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.: LAN2015 #1423	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/06/10/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth Wireless Speaker System	Engineer Signature:
Mode: Line in	Distance: 3m
Model: CA-3052BT	
Manufacturer: Cyber Acoustics (HK) Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5079.058	43.46	0.41	43.87	74.00	-30.13	peak			
2	5079.058	33.08	0.41	33.49	54.00	-20.51	AVG			

6. Safety Human exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

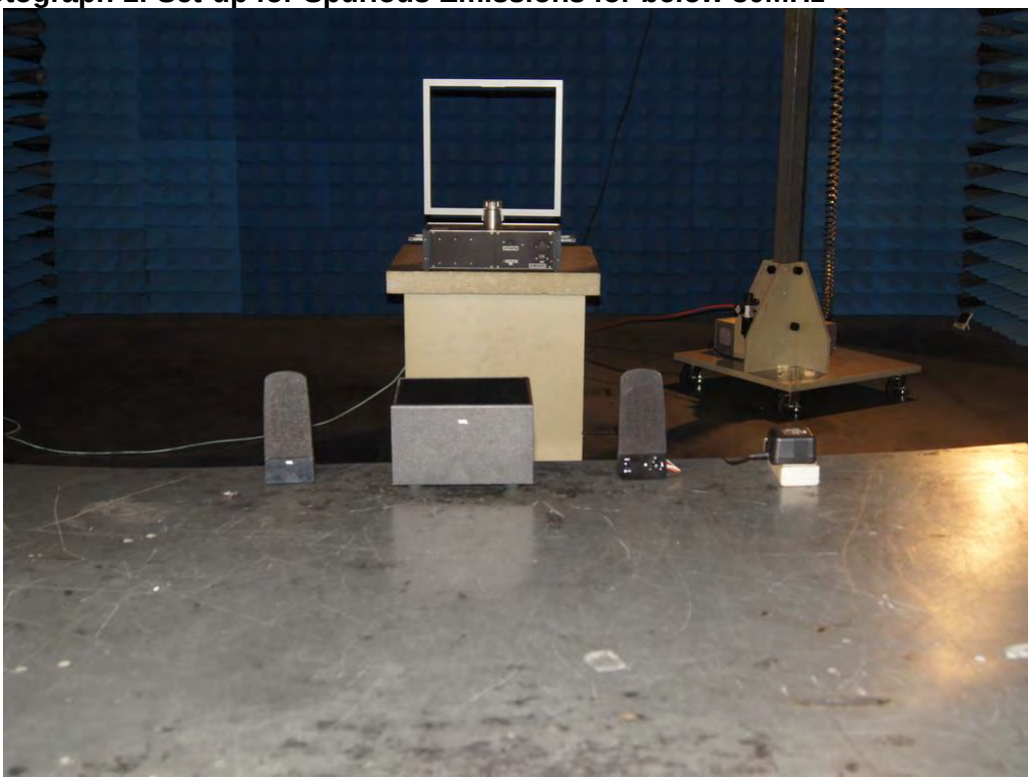
RESULT: **Pass**

Test standard : FCC KDB Publication 447498 v05r02

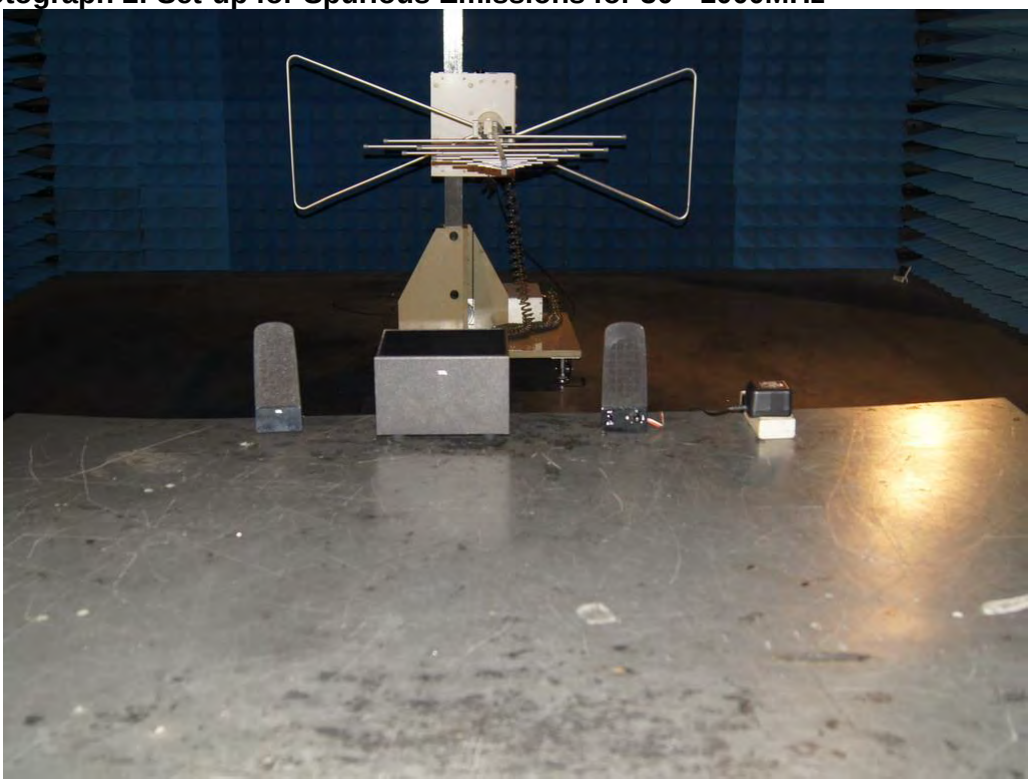
Since maximum radiated power of the transmitter is 0.175mW(-7.58dBm)<96mW, and the distance from EUT to human is 50mm, hence the EUT is exclueded from SAR evaluation according to FCC KDB publication 447498 D01 General RF Exposure Guidance v05r02.

7. Photographs of the Test Set-Up

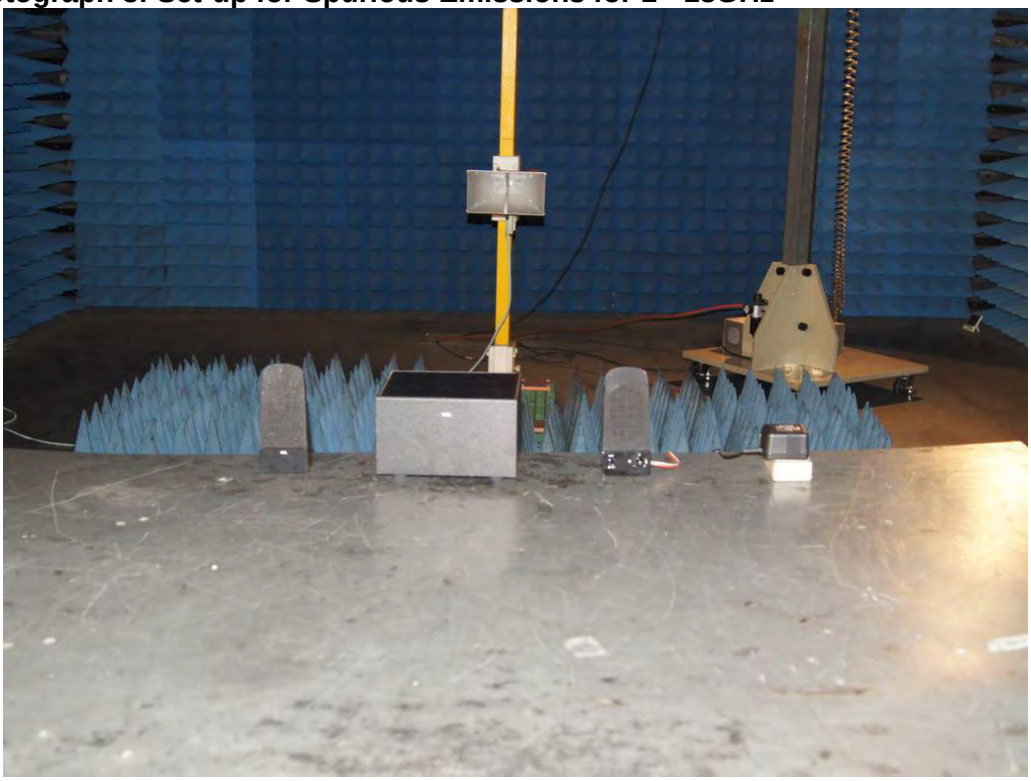
Photograph 1: Set-up for Spurious Emissions for below 30MHz



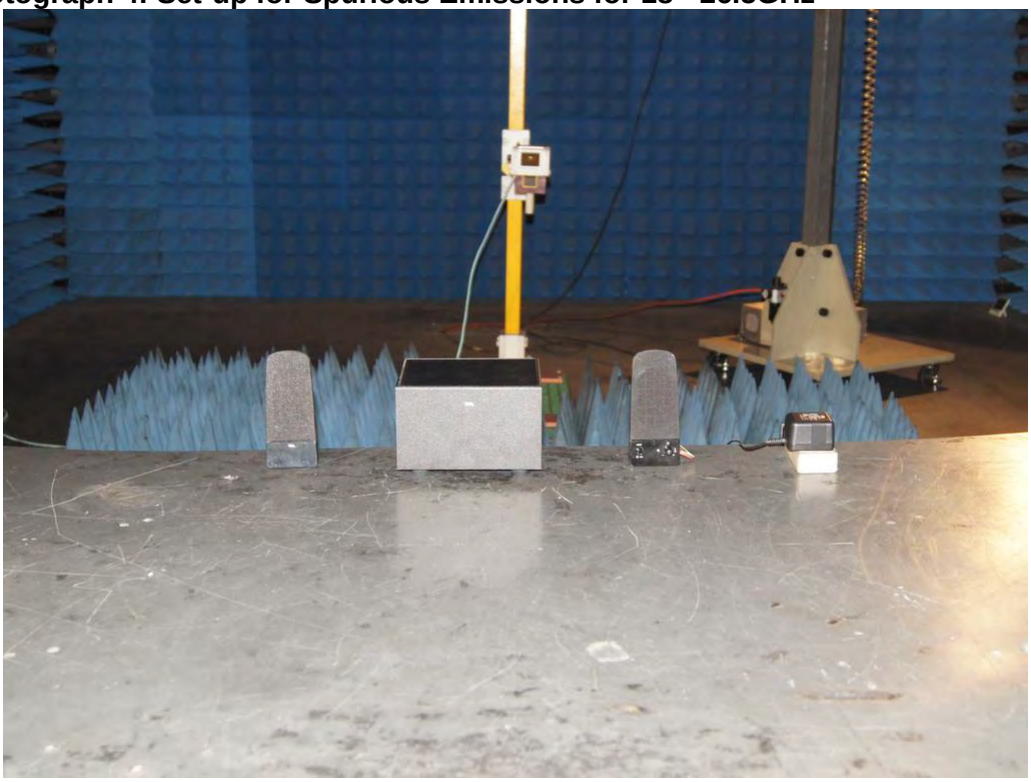
Photograph 2: Set-up for Spurious Emissions for 30 - 1000MHz



Photograph 3: Set-up for Spurious Emissions for 1 - 18GHz



Photograph 4: Set-up for Spurious Emissions for 18 - 26.5GHz



8. List of Tables

9. List of Photographs