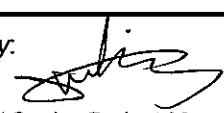



Prüfbericht-Nr.: <i>Test Report No.:</i>	17030889 001	Auftrags-Nr.: <i>Order No.:</i>	164002721	Seite 1 von 37 <i>Page 1 of 37</i>
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	22.01.2013	
Auftraggeber: <i>Client:</i>	Accesspro Electronics Co., Ltd. Room 3B27, 3F, No. 5, Sec. 5, Hsin Yi Road, Taipei 11011, Taiwan			
Prüfgegenstand: <i>Test item:</i>	Bluetooth Stereo Speaker			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	SP-310			
Auftrags-Inhalt: <i>Order content:</i>	FCC Certification			
Prüfgrundlage: <i>Test specification:</i>	FCC CFR47 Part 15: Subpart C Section 15.247 FCC CFR47 Part 15: Subpart C Section 15.207 FCC CFR47 Part 15: Subpart C Section 15.209 FCC CFR47 Part 15: Subpart C Section 15.107 FCC CFR47 Part 15: Subpart C Section 15.109			
Wareneingangsdatum: <i>Date of receipt:</i>	09.03.2013			
Prüfmuster-Nr.: <i>Test sample No.:</i>	20130121401			
Prüfzeitraum: <i>Testing period:</i>	16.03.2013 - 26.03.2013			
Ort der Prüfung: <i>Place of testing:</i>	Shenzhen Accurate Technology Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfresultat*: <i>Test result*:</i>	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
 04.06.2013 Sam Lin / Senior Project Manager		 06.06.2013 Winnie Hou / Technical Certifier		
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>
				Unterschrift <i>Signature</i>
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* 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				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

v04

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT*RESULT: Passed***5.1.2 PEAK OUTPUT POWER***RESULT: Passed***5.1.3 20dB BANDWIDTH***RESULT: Passed***5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH***RESULT: Passed***5.1.5 SPURIOUS EMISSION***RESULT: Passed***5.1.6 FREQUENCY SEPARATION***RESULT: Passed***5.1.7 NUMBER OF HOPPING FREQUENCY***RESULT: Passed***5.1.8 TIME OF OCCUPANCY***RESULT: Passed***5.1.9 CONDUCTED EMISSIONS***RESULT: Passed***5.1.10 RADIATED EMISSION***RESULT: Passed*

Contents

1.	GENERAL REMARKS	4
1.1	COMPLEMENTARY MATERIALS	4
2.	TEST SITES	4
2.1	TEST FACILITIES.....	4
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.3	TRACEABILITY	6
2.4	CALIBRATION	6
2.5	MEASUREMENT UNCERTAINTY.....	6
2.6	LOCATION OF ORIGINAL DATA.....	6
2.7	STATUS OF FACILITY USED FOR TESTING.....	6
3.	GENERAL PRODUCT INFORMATION	7
3.1	PRODUCT FUNCTION AND INTENDED USE.....	7
3.2	RATINGS AND SYSTEM DETAILS	7
3.3	INDEPENDENT OPERATION MODES	8
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS	9
3.5	SUBMITTED DOCUMENTS	9
4.	TEST SET-UP AND OPERATION MODES	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION.....	10
4.2	TEST OPERATION AND TEST SOFTWARE	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	11
4.5	TEST SETUP DIAGRAM.....	12
5.	TEST RESULTS	14
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	14
5.1.1	<i>Antenna Requirement</i>	<i>14</i>
5.1.2	<i>Peak Output Power.....</i>	<i>15</i>
5.1.3	<i>20dB Bandwidth.....</i>	<i>16</i>
5.1.4	<i>Conducted spurious emissions measured in 100kHz Bandwidth</i>	<i>17</i>
5.1.5	<i>Spurious Emission</i>	<i>26</i>
5.1.6	<i>Frequency Separation.....</i>	<i>27</i>
5.1.7	<i>Number of hopping frequency.....</i>	<i>28</i>
5.1.8	<i>Time of Occupancy.....</i>	<i>29</i>
5.1.9	<i>Conducted emissions.....</i>	<i>31</i>
5.1.10	<i>Radiated Emission.....</i>	<i>32</i>
6.	PHOTOGRAPHS OF THE TEST SET-UP	33
7.	LIST OF TABLES	37
8.	LIST OF PHOTOGRAPHS	37

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test Result

2. Test Sites

2.1 Test Facilities

Shenzhen Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Material Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China

FCC Registration No.: 752051

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
Spurious emission and Radiated emission				
Spectrum Analyzer	Agilent	E7405A	MY45115511	2014-01-07
Test Receiver	Rohde & Schwarz	ESCS30	100307	2014-01-07
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2014-01-07
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2014-01-07
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2014-01-07
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2014-01-07
Pre-Amplifier	Rohde & Schwarz	CBLU11835 40-01	3791	2014-01-07
Radio Test Suite				
Receiver	Rohde & Schwarz	ESPI	100396/003	2014-01-07
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	2014-01-07
Artificial Mains Network	Schwarzbeck	NLSK8126	8126431	2014-01-07

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, 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 basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements are $\pm 3\text{dB}$.

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix 1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Shenzhen Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Material Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, 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 EUT is a Bluetooth stereo speaker.
For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Bluetooth Stereo Speaker
Type Designation:	SP-310
FCC ID	N5MSP310

Table 3: Technical Specification of EUT

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Channel separation	1MHz
Extreme Temperature Range	-20°C to +55°C
Operation Voltage	DC3.7V via lithium Battery
Modulation	GFSK, $\pi/4$ DQPSK, 8DPSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	0dBi
RF Output Power	0.00114W (0.56dBm)

Table 4: Frequency hopping information

Technical Specification	Description
Hopping Range	Hereby we declare that the maximum frequency of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V2.1+EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).
Hopping Sequence	Example of a 79 hopping sequence in data mode: 33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73,07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56,69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43,15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,
Receiver input bandwidth	<p>The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master.</p> <p>Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.</p> <p>Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case.</p> <p>That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.</p>

3.3 Independent Operation Modes

The basic operation modes are:

- A. BT Transmitting
 - 1. Low channel
 - 2. Middle channel
 - 3. High channel
- B. BT Receiving
- C. AUX IN
- D. Charging
- E. 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
- Technical Description
- 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 with following accessories

Description	Manufacturer	Type	S/N
Notebook	Lenovo	4290-RT8	R9-FW93G
Printer	HP	HP laseriet 1015	CNFG030424
iPhone	Apple	MD235ZP/A	C8PJLWZNDTC0

4.4 Countermeasures to achieve EMC Compliance

Below two ferrite cores were added to line in cable to achieve compliance:

Item Description	Model No.	Manufacturer	Rating
Ferrite Core	DYR-50-B	Shenzhen Dongyang Co., Ltd	T22×14×13(mm)
Ferrite Core	F2 RH	MIN CI ELECTRONIC S CO., LTD.	T9.5×19.5×5(mm)



4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

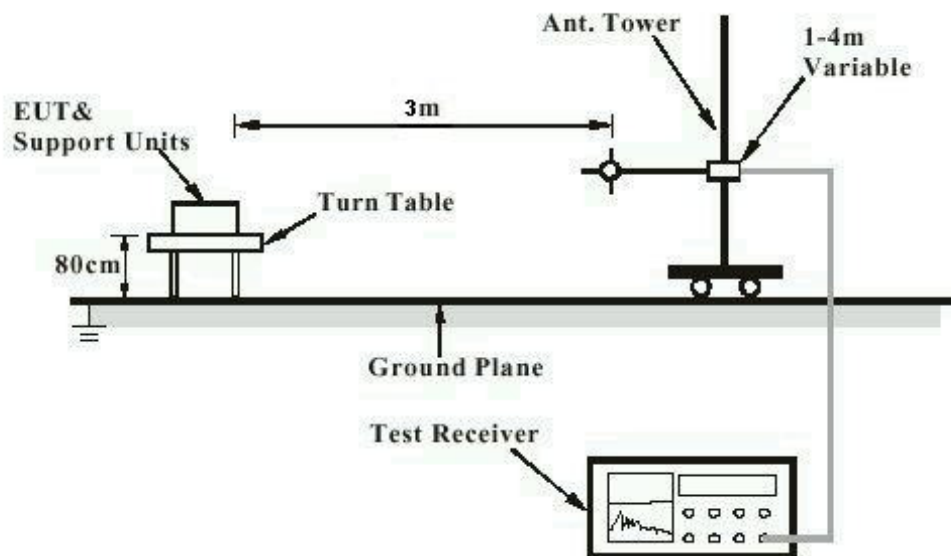


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

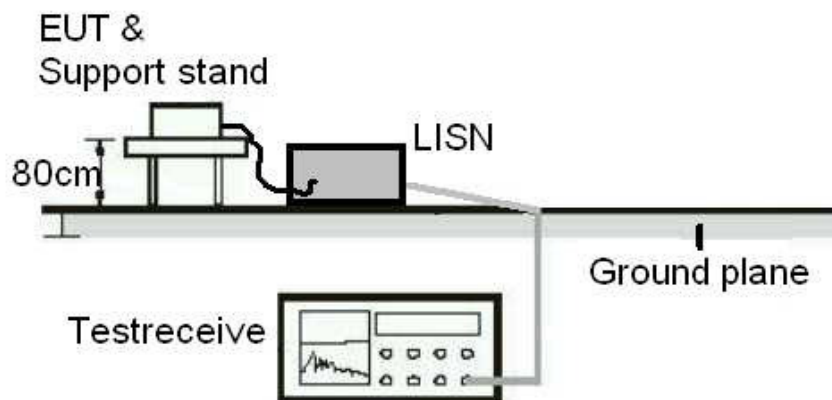
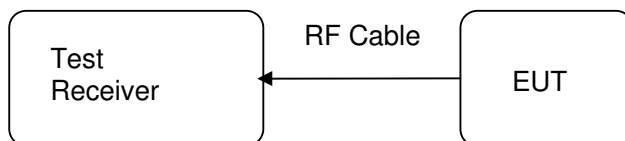


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test date	:	2013-03-26
Test standard	:	FCC Part 15.247(b)(4) and Part 15.203
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

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.

Refer to EUT photo for details.

5.1.2 Peak Output Power

RESULT:
Passed

Test date : 2013-03-26
 Test standard : FCC Part 15.247(b)(1)
 Basic standard : ANSI C63.4: 2003
 Limit : 0.125 Watt
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 25°C
 Relative humidity : 55%
 Atmospheric pressure : 101 kPa

Table 5: Test result of Peak Output Power, GFSK modulation

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	-0.46	0.00090	0.125
Middle Channel	2441	0.23	0.00105	0.125
High Channel	2480	0.56	0.00114	0.125

Remark: RBW is 1MHz

Table 6: Test result of Peak Output Power, 8DPSK modulation

Channel	Channel Frequency (MHz)	Peak Output Power		Limit (W)
		(dBm)	(W)	
Low Channel	2402	-1.81	0.00066	0.125
Middle Channel	2441	-1.02	0.00079	0.125
High Channel	2480	-0.65	0.00086	0.125

Remark: RBW is 3MHz

5.1.3 20dB Bandwidth

RESULT:
Passed

Date of testing : 2013-03-26
 Test standard : FCC Part 15.247(a)(1)
 Basic standard : ANSI C63.4: 2003
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 25°C
 Relative humidity : 55%
 Atmospheric pressure : 101 kPa

Table 7: Test result of 20dB Bandwidth, GFSK modulation

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	930	/	Pass
Mid Channel	2441	936	/	Pass
High Channel	2480	930	/	Pass

Table 8: Test result of 20dB Bandwidth, 8DPSK modulation

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1206	/	Pass
Mid Channel	2441	1206	/	Pass
High Channel	2480	1200	/	Pass

5.1.4 Conducted spurious emissions measured in 100kHz Bandwidth

RESULT:**Passed**

Date of testing : 2013-03-26
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);
In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site : Shield room

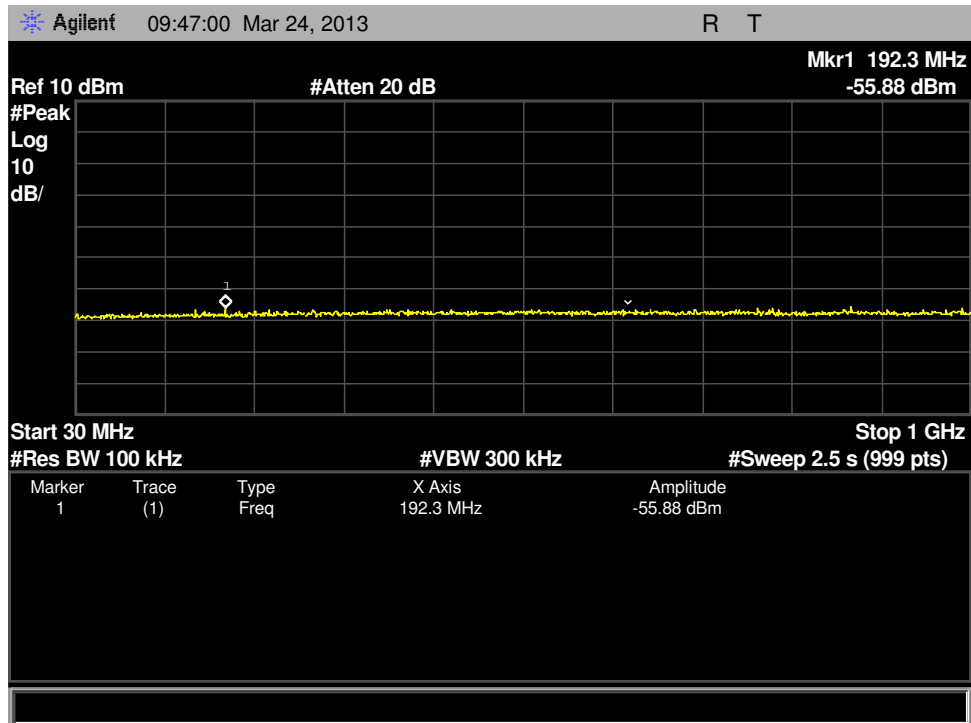
Test setup

Test Channel : Low/ High
Operation mode : A
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

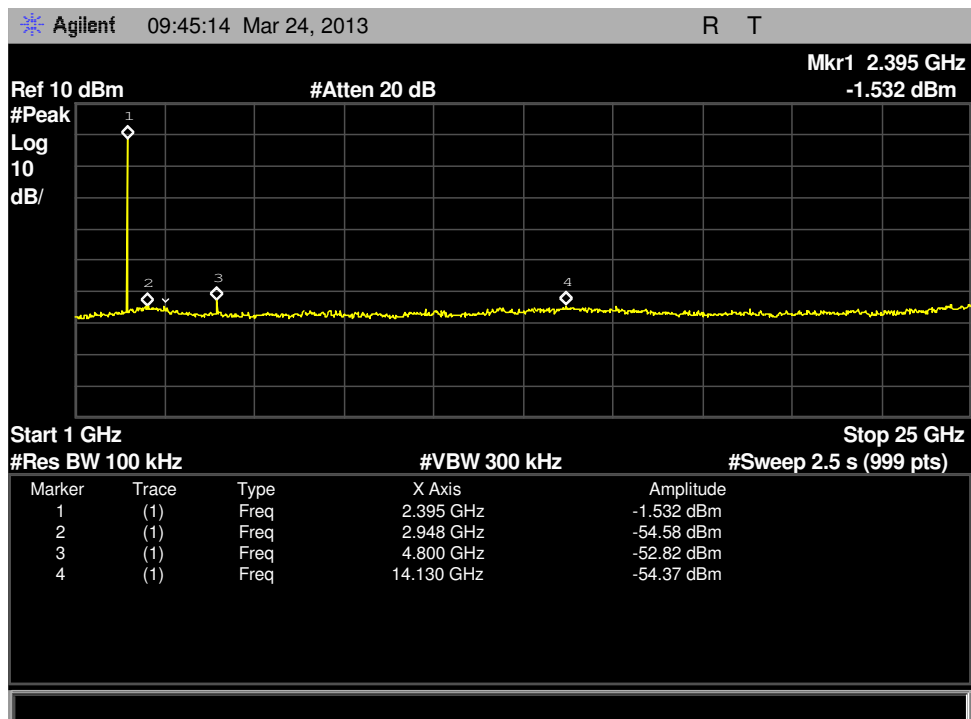
All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achieved as well.

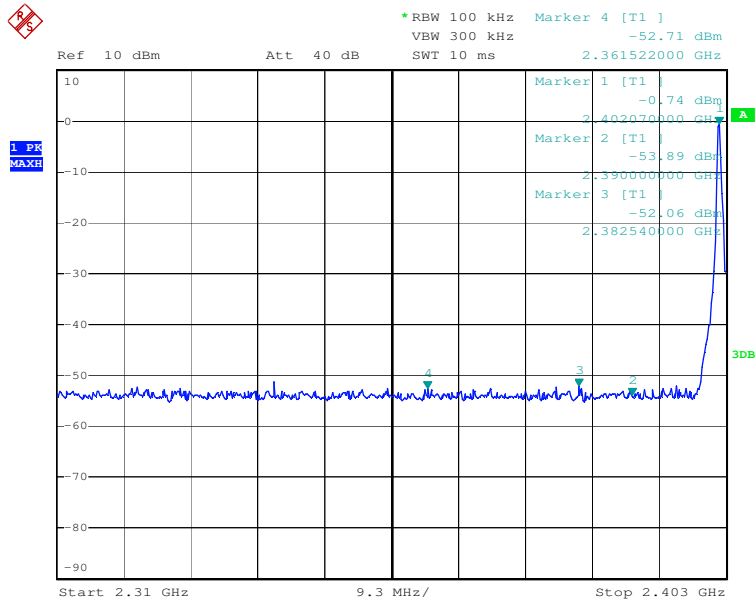
Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

Low Channel, below 1GHz

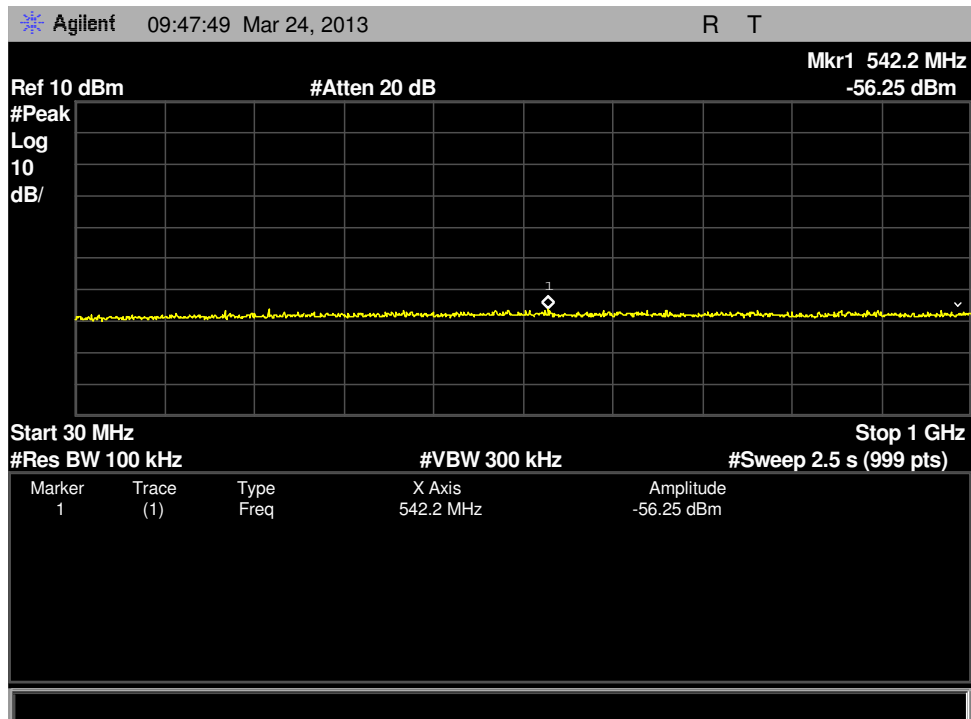


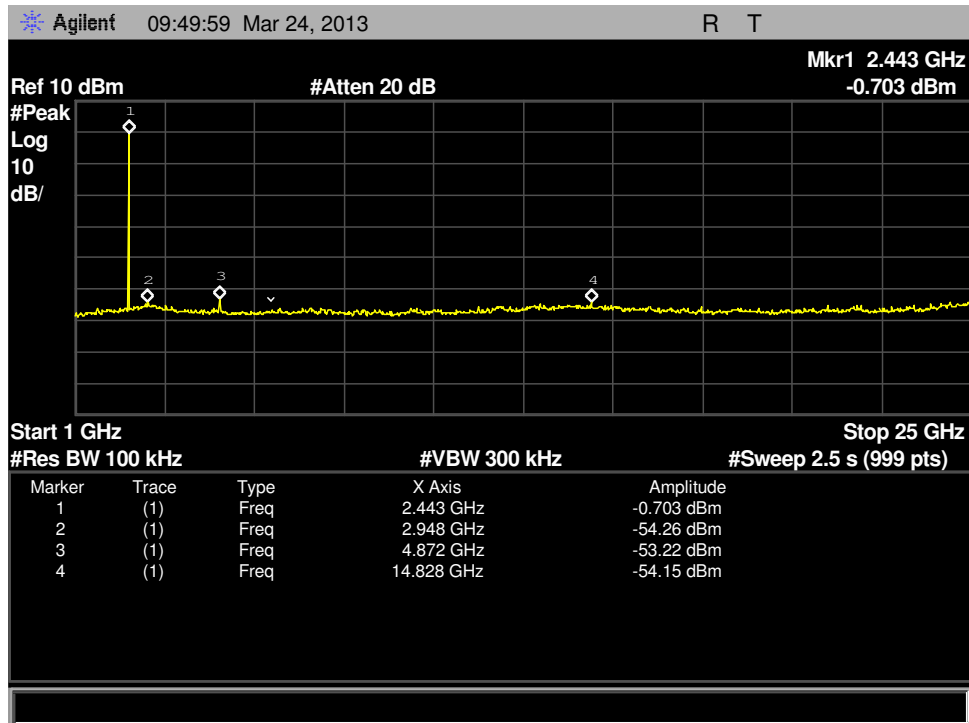
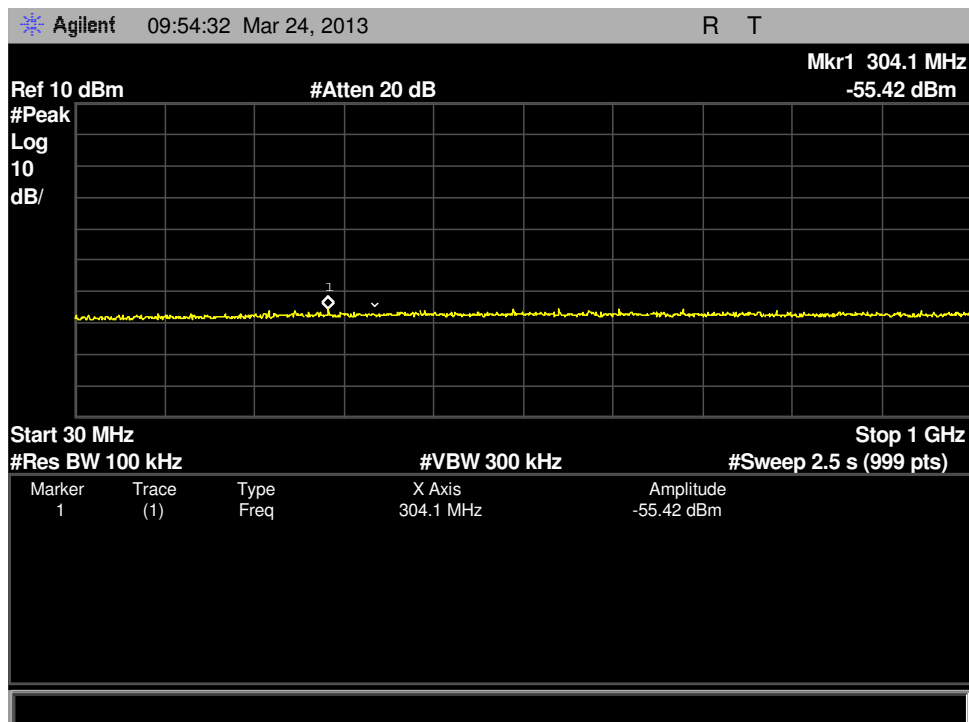
Low Channel, above 1GHz

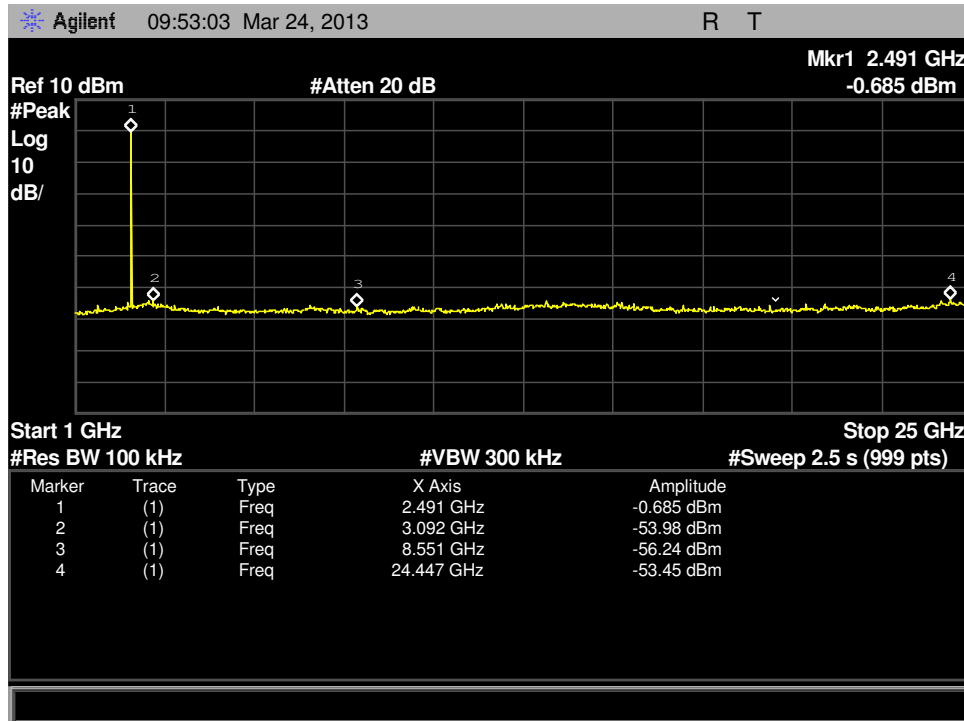
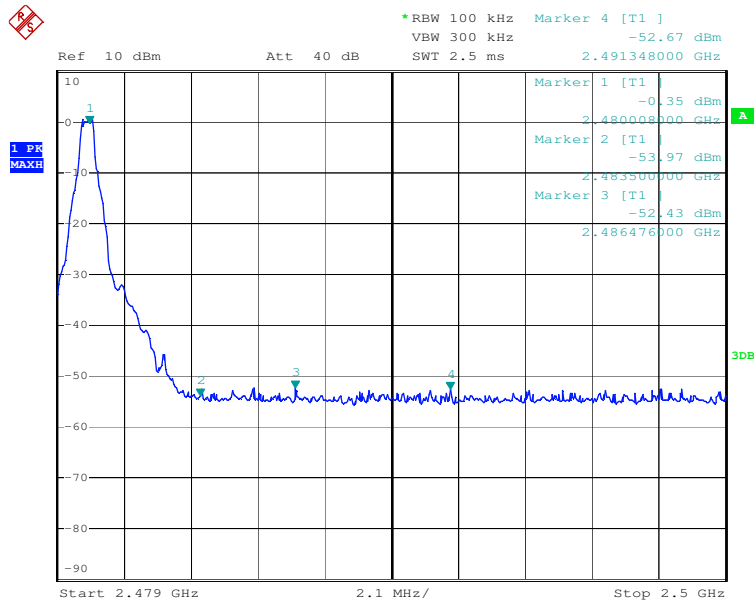


Low Channel, Band Edge


Date: 26.MAR.2013 10:27:31

Middle Channel, below 1GHz


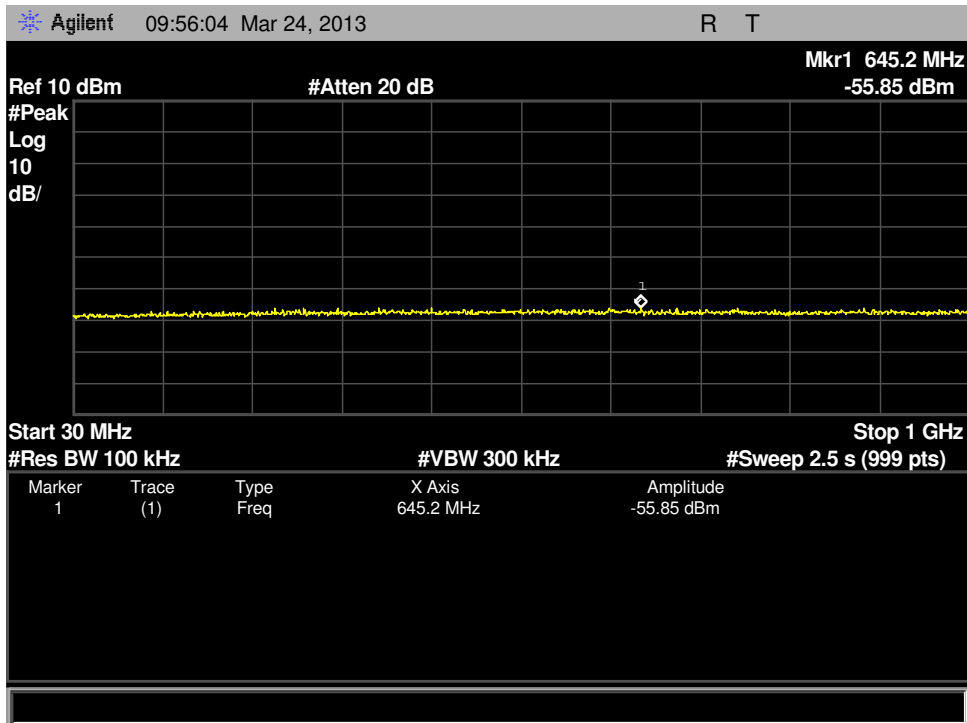
Middle Channel, above 1GHz

High Channel, below 1GHz


High Channel, above 1GHz

High Channel, Band Edge


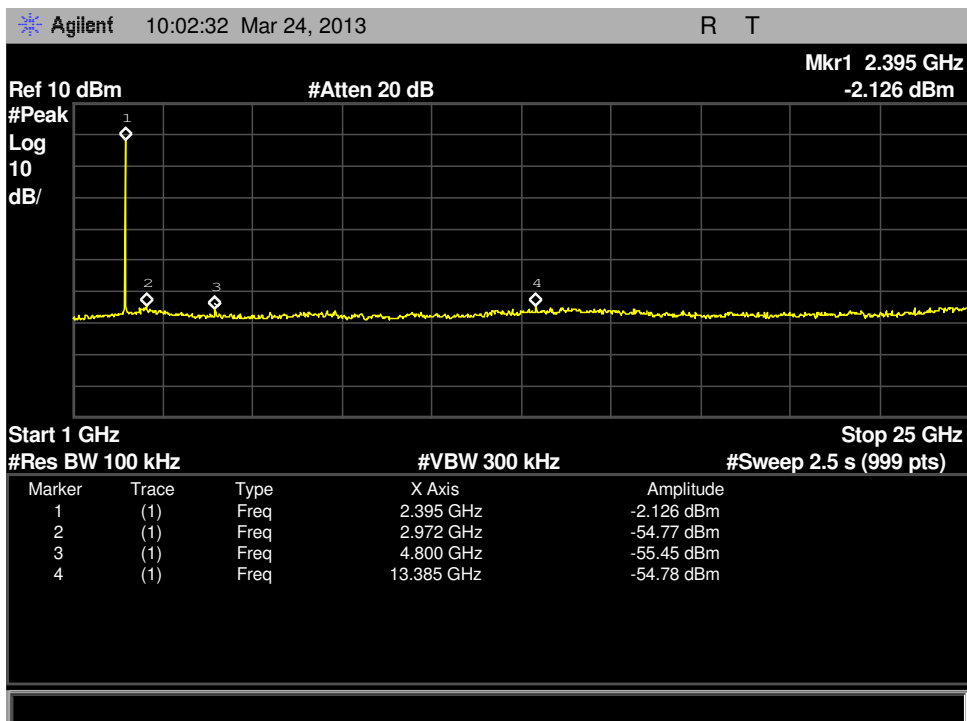
Date: 26.MAR.2013 10:31:38

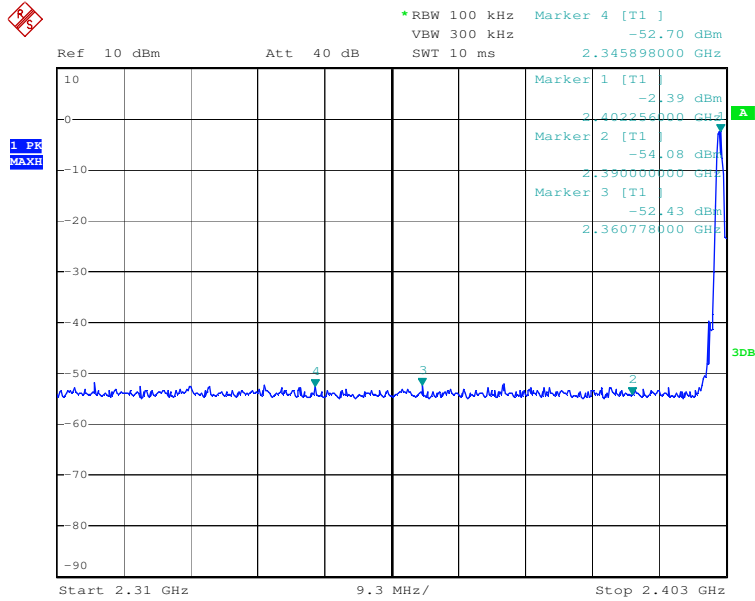
Test Plot of 100kHz Bandwidth of Frequency Band Edge, 8DPSK modulation

Low Channel, below 1GHz

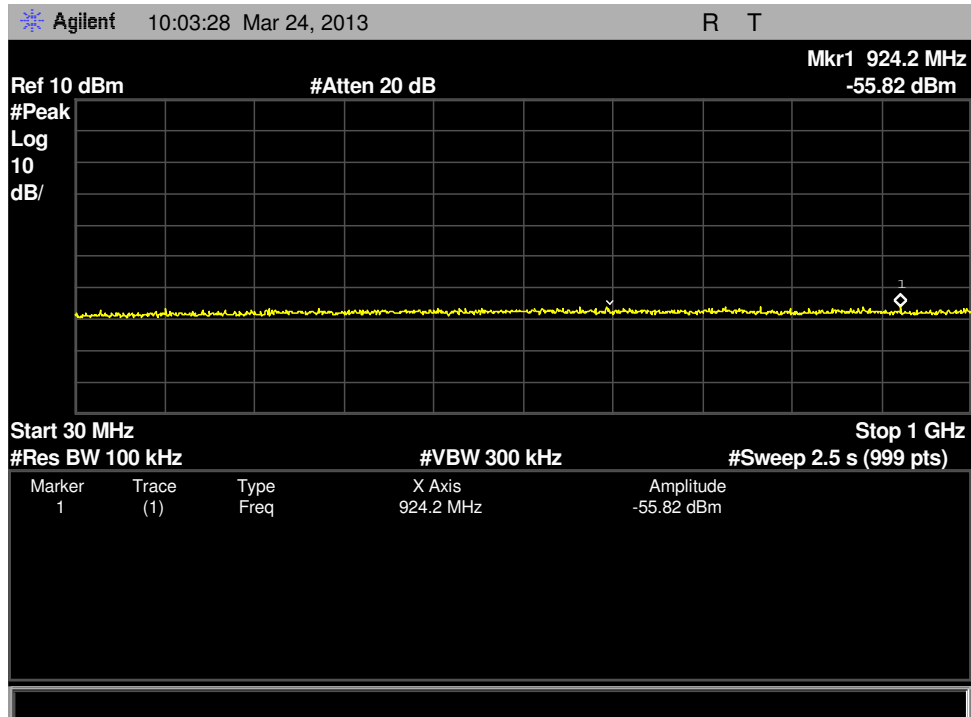


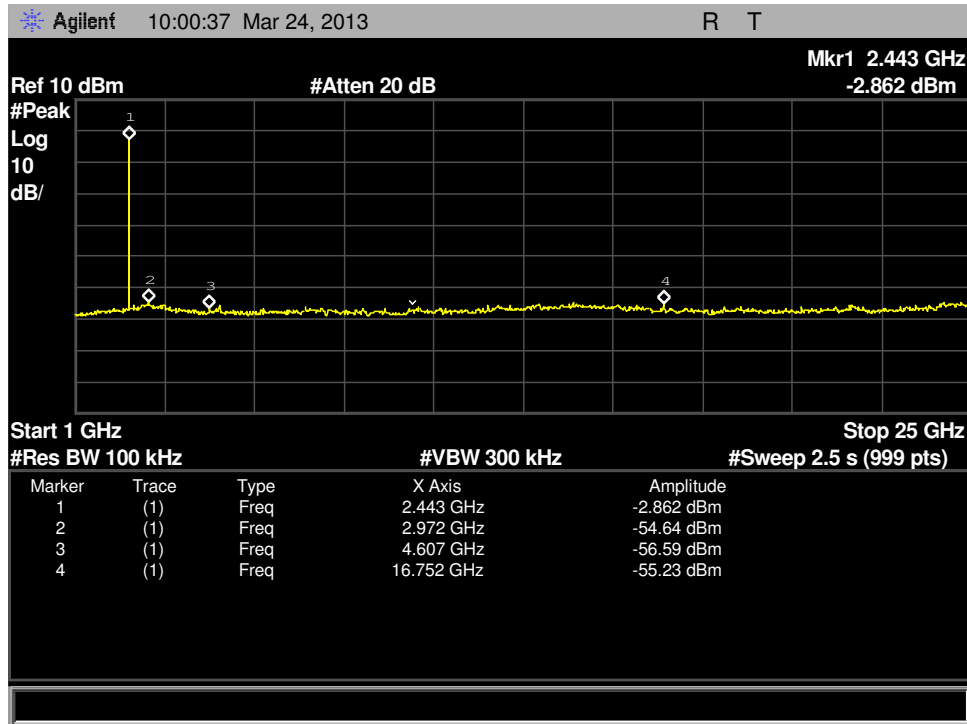
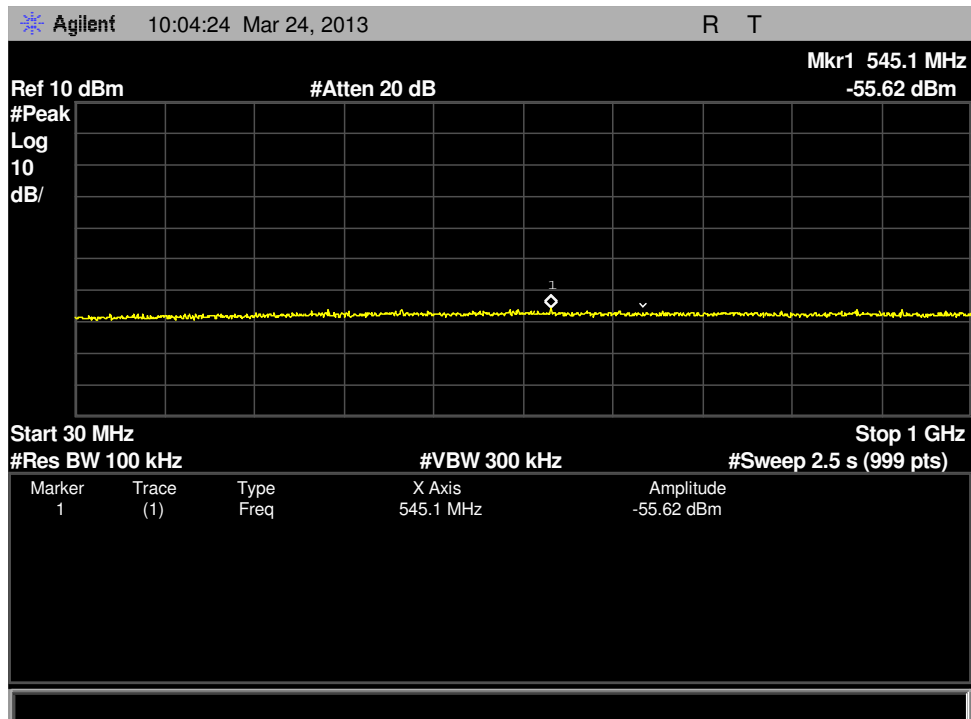
Low Channel, above 1GHz

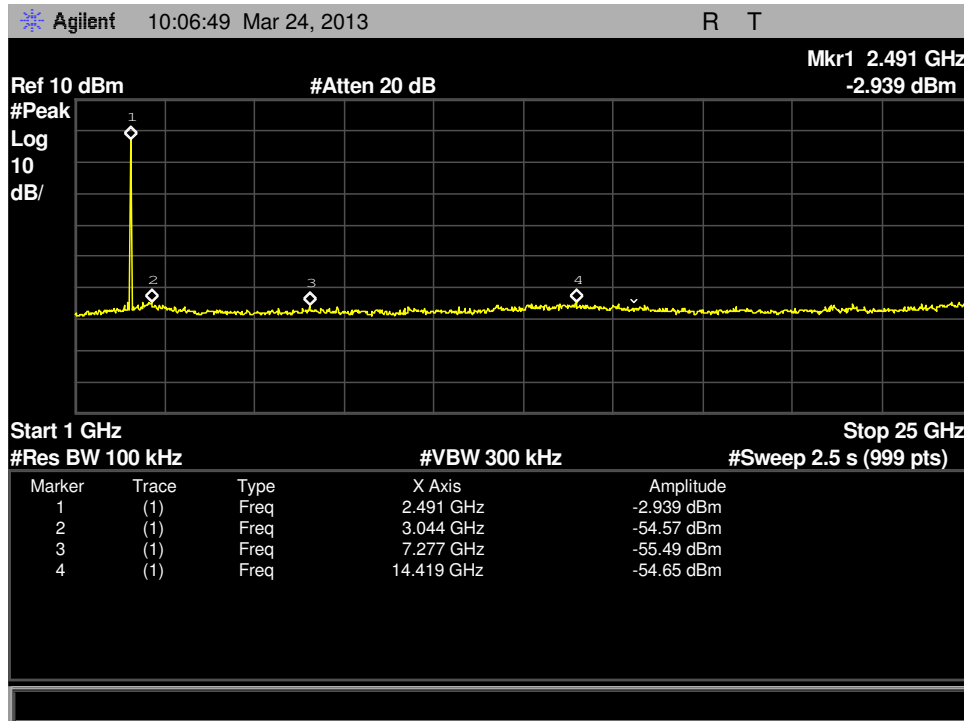
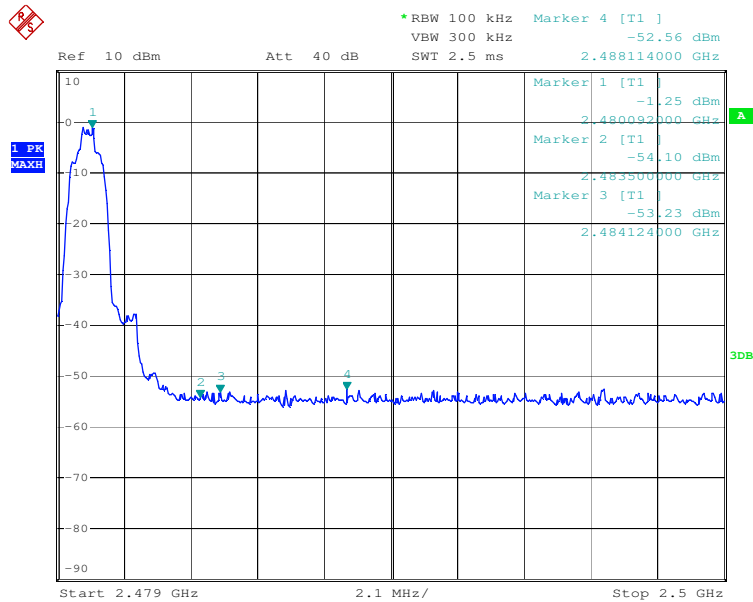


Low Channel, Band Edge


Date: 26.MAR.2013 10:28:53

Middle Channel, below 1GHz


Middle Channel, above 1GHz

High Channel, below 1GHz


High Channel, above 1GHz

High Channel, Band Edge


5.1.5 Spurious Emission

RESULT:**Passed**

Date of testing : 2013-03-16 to 2013-03-22
Test standard : FCC part 15.247(d)
FCC Part 15.205
Basic standard : ANSI C63.4: 2003
Limits : Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/ Middle/ High
Operation mode : A, C
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Remark:

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test setup photos.

Testing was carried out within frequency range 9kHz to the tenth harmonics.

For details refer to Appendix 1.

5.1.6 Frequency Separation

RESULT:
Passed

Date of testing : 2013-03-26
 Test standard : FCC part 15.247(a)(1)
 Basic standard : ANSI C63.4: 2003
 Limit : $\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth, whichever is greater

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 25°C
 Relative humidity : 55%
 Atmospheric pressure : 101 kPa

Table 9: Test result of Frequency Separation

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2480	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2479			

5.1.7 Number of hopping frequency

RESULT:**Passed**

Date of testing : 2013-03-26
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
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 10: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2400 to 2483.5 MHz	79	≥ 15	Pass

5.1.8 Time of Occupancy

RESULT:
Passed

Date of testing : 2013-03-26
 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
 Ambient temperature : 25°C
 Relative humidity : 55%
 Atmospheric pressure : 101 kPa

Table 11: Test result of Time of Occupancy, GFSK modulation

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.43	0.14	0.4	Pass
	DH3	1.72	0.28	0.4	Pass
	DH5	2.97	0.32	0.4	Pass
Mid Channel	DH1	0.43	0.14	0.4	Pass
	DH3	1.70	0.27	0.4	Pass
	DH5	2.97	0.32	0.4	Pass
High Channel	DH1	0.43	0.14	0.4	Pass
	DH3	1.70	0.27	0.4	Pass
	DH5	2.97	0.32	0.4	Pass

Table 12: Test result of Time of Occupancy, 8DPSK modulation

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.44	0.14	0.4	Pass
	DH3	1.72	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass
Mid Channel	DH1	0.45	0.14	0.4	Pass
	DH3	1.72	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass
High Channel	DH1	0.44	0.14	0.4	Pass
	DH3	1.72	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass

Note:

Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

Period = 0.4 (seconds/ channel) x 79 (channel) = 31.6 seconds

5.1.9 Conducted emissions

RESULT:**Passed**

Date of testing : 2013-03-18
Test standard : FCC Part 15.207(a)
Basic standard : ANSI C63.4: 2003
Frequency range : 0.15 – 30MHz
Limits : FCC Part 15.207(a)
Kind of test site : Shield room

Test setup

Input Voltage : AC 120V, 60Hz via AC input of Notebook
Operation Mode : D
Earthing : Not connected
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

For details refer to Appendix 1.

5.1.10 Radiated Emission

RESULT:**Passed**

Date of testing : 2013-03-26
Test standard : FCC Part 15 Per Section 15.209(a)
Frequency range : 30 - 6000MHz
Classification : Class B
Test procedure : ANSI C63.4: 2003
Kind of test site : 3m Semi-Anechoic Chamber

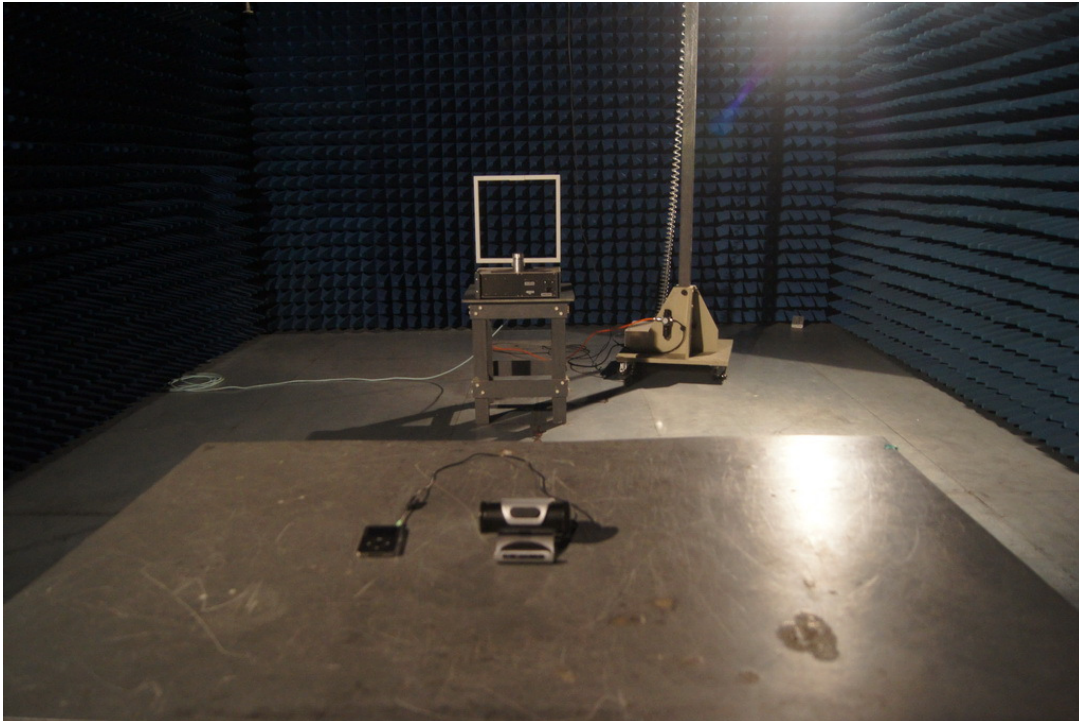
Test setup

Input Voltage : DC 3.7V
Operation mode : C, D
Earthing : Not connected
Ambient temperature : Refer to Appendix 1
Relative humidity : Refer to Appendix 1
Atmospheric pressure : Refer to Appendix 1

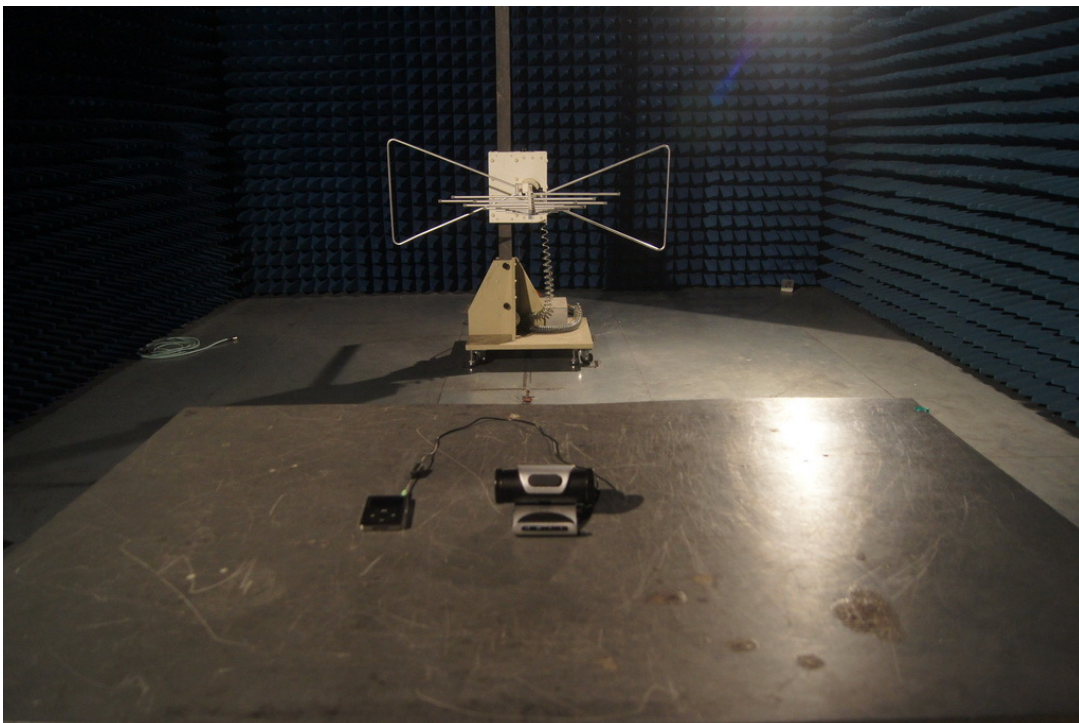
Test data refer to Appendix 1.

6. Photographs of the Test Set-Up

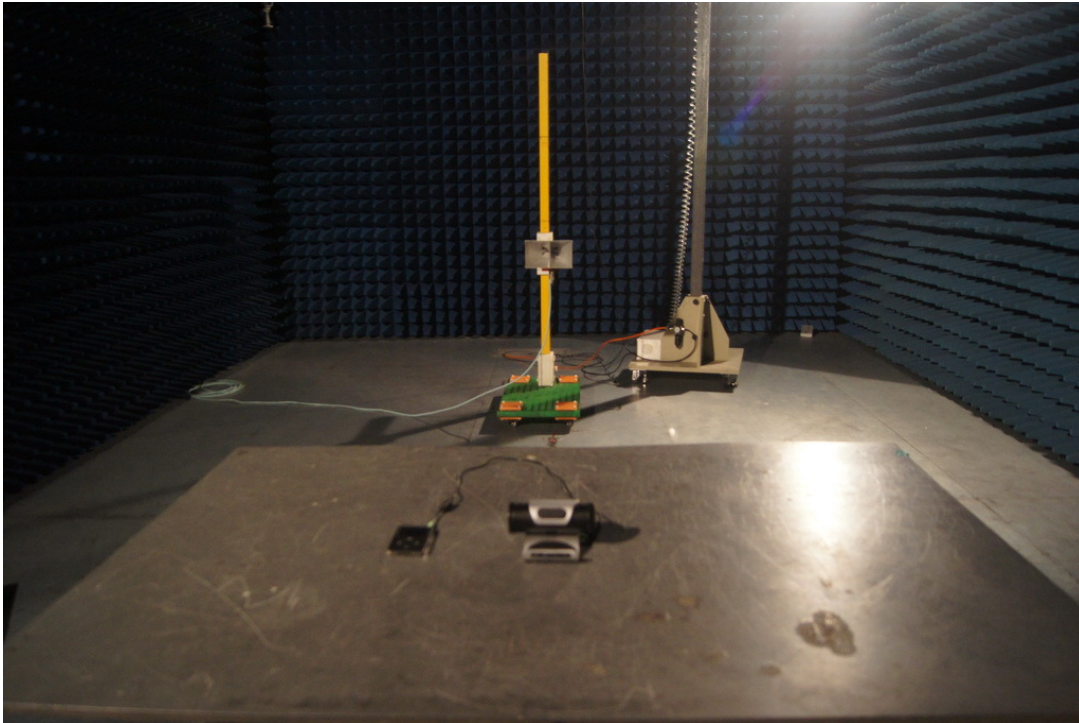
Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)



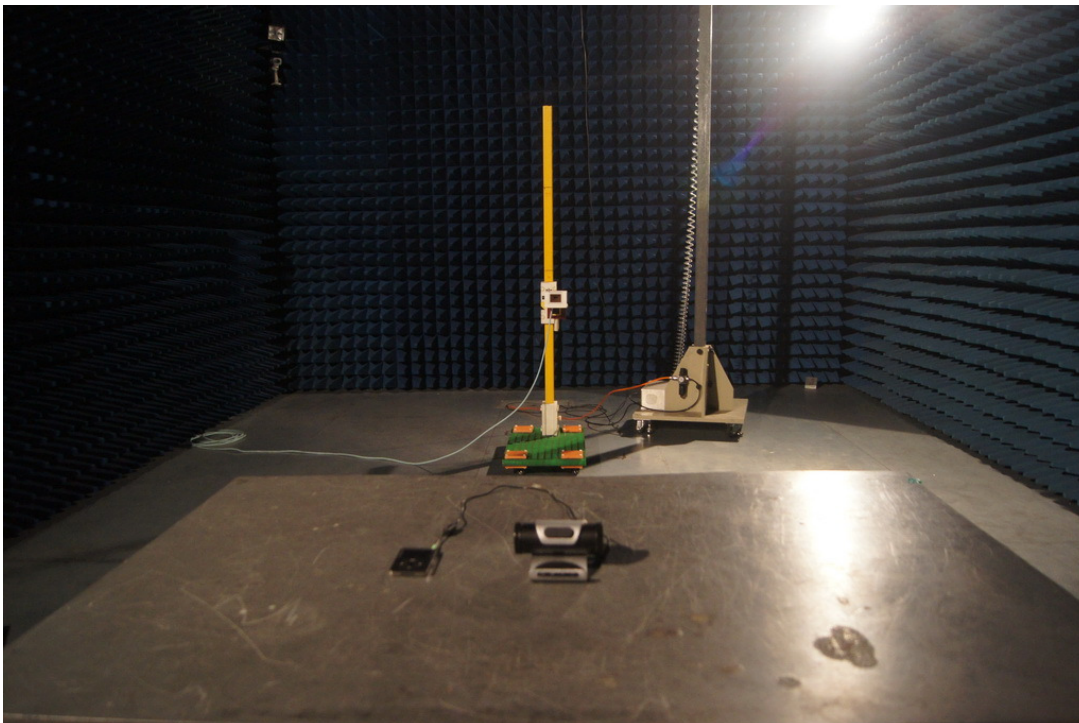
Photograph 2: Set-up for Spurious Emissions (30MHz-1GHz)



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



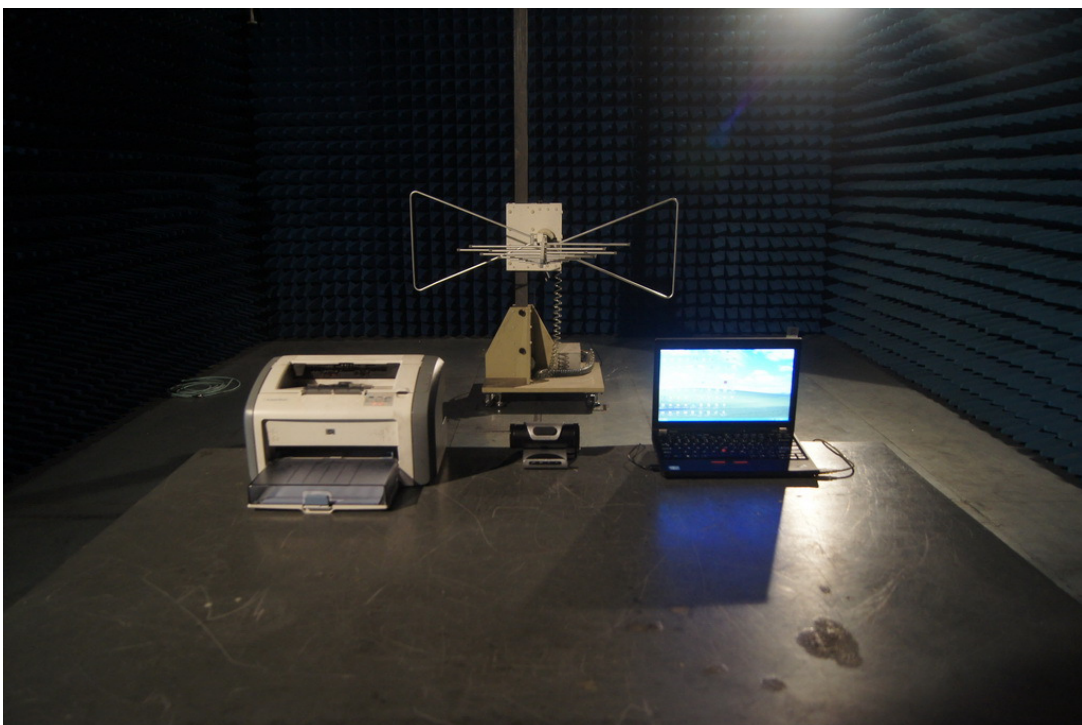
Photograph 4: Set-up for Spurious Emissions (18GHz-26GHz)



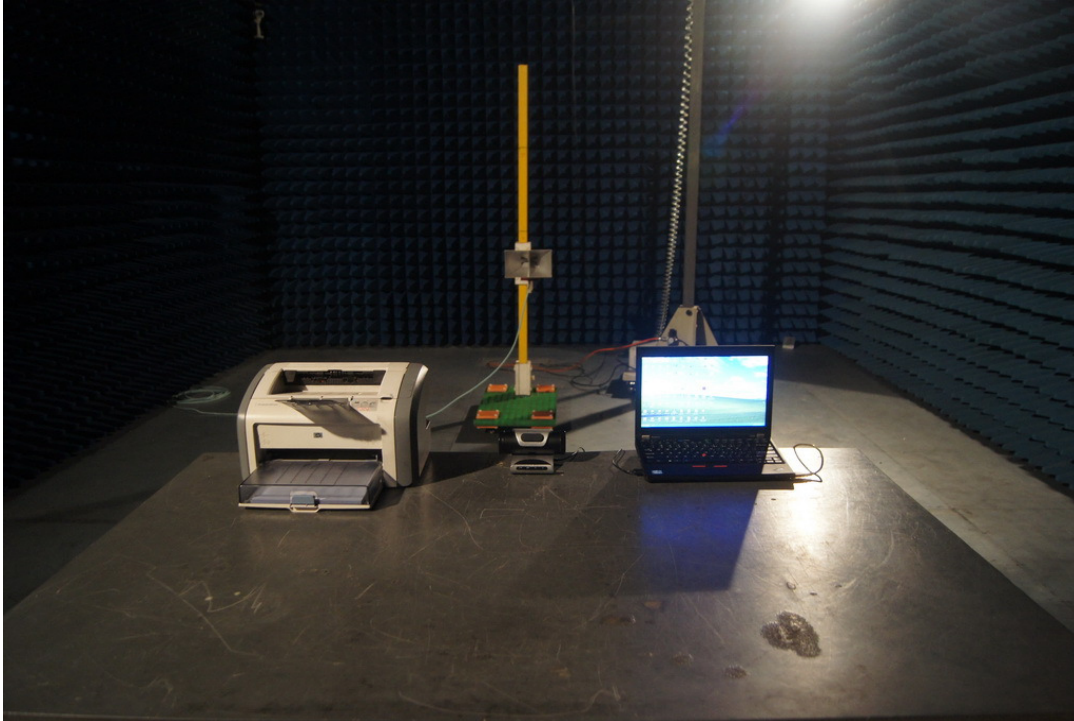
Photograph 5: Set-up for Conducted Emissions



Photograph 6: Set-up for Radiated Emissions, below 1GHz



Photograph 7: Set-up for Radiated Emissions, above 1GHz



7. List of Tables

Table 1: List of Test and Measurement Equipment	5
Table 2: Rating of EUT	7
Table 3: Technical Specification of EUT	7
Table 4: Frequency hopping information	8
Table 5: Test result of Peak Output Power, GFSK modulation	15
Table 6: Test result of Peak Output Power, 8DPSK modulation	15
Table 7: Test result of 20dB Bandwidth, GFSK modulation	16
Table 8: Test result of 20dB Bandwidth, 8DPSK modulation	16
Table 9: Test result of Frequency Separation	27
Table 10: Test result of Number of hopping frequency	28
Table 11: Test result of Time of Occupancy, GFSK modulation	29
Table 12: Test result of Time of Occupancy, 8DPSK modulation	30

8. List of Photographs

Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)	33
Photograph 2: Set-up for Spurious Emissions (30MHz-1GHz)	33
Photograph 3: Set-up for Spurious Emissions (1GHz-18GHz)	34
Photograph 4: Set-up for Spurious Emissions (18GHz-26GHz)	34
Photograph 5: Set-up for Conducted Emissions	35
Photograph 6: Set-up for Radiated Emissions, below 1GHz	35
Photograph 7: Set-up for Radiated Emissions, above 1GHz	36

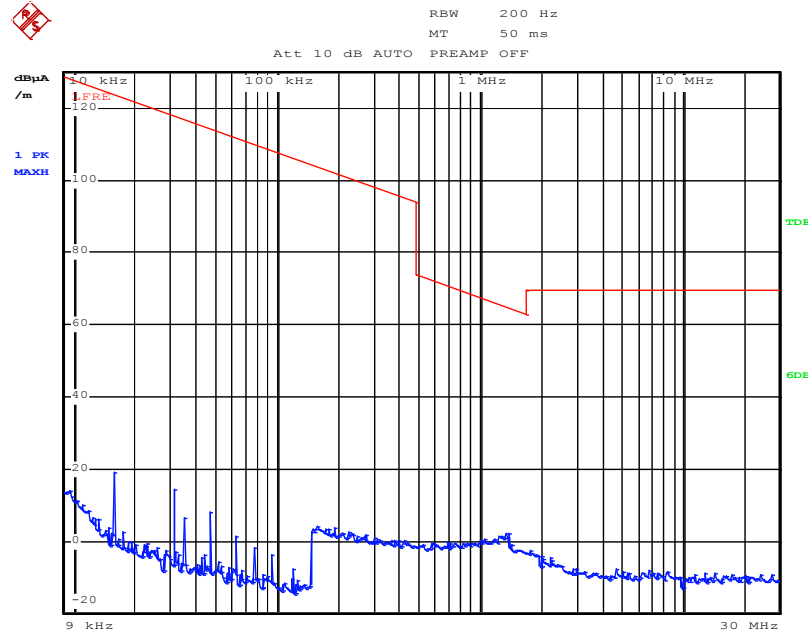
List of Figures

Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), GFSK Modulation.....	4
Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), GFSK Modulation.....	4
Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz), GFSK Modulation.....	5
Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz), GFSK Modulation.....	6
Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz – 18GHz), GFSK Modulation.....	7
Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz), GFSK Modulation.....	8
Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz – 25GHz), GFSK Modulation.....	9
Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz), GFSK Modulation.....	10
Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), GFSK Modulation.....	11
Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), GFSK Modulation.....	11
Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz), GFSK Modulation.....	12
Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz), GFSK Modulation.....	13
Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz), GFSK Modulation.....	14
Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz), GFSK Modulation.....	15
Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), GFSK Modulation.....	16
Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz), GFSK Modulation.....	17
Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), GFSK Modulation.....	18
Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), GFSK Modulation.....	18
Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz), GFSK Modulation.....	19
Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), GFSK Modulation.....	20
Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz – 18GHz), GFSK Modulation.....	21
Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz), GFSK Modulation.....	22
Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz – 25GHz), GFSK Modulation.....	23
Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz), GFSK Modulation.....	24
Figure 25: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation.....	25
Figure 26: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation.....	25

Figure 27: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation.....	26
Figure 28: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation.....	27
Figure 29: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz – 18GHz), 8DPSK Modulation.....	28
Figure 30: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation.....	29
Figure 31: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz – 25GHz), 8DPSK Modulation.....	30
Figure 32: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation.....	31
Figure 33: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation.....	32
Figure 34: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation.....	32
Figure 35: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation.....	33
Figure 36: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation.....	34
Figure 37: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz), 8DPSK Modulation.....	35
Figure 38: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation.....	36
Figure 39: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), 8DPSK Modulation.....	37
Figure 40: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation.....	38
Figure 41: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation.....	39
Figure 42: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation.....	39
Figure 43: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation.....	40
Figure 44: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation.....	41
Figure 45: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz – 18GHz), 8DPSK Modulation.....	42
Figure 46: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation.....	43
Figure 47: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz – 25GHz), 8DPSK Modulation.....	44
Figure 48: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation.....	45
Figure 49: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), GFSK Modulation.....	46
Figure 50: Test figure of spurious emissions, mode B, Vertical polarity (9kHz – 30MHz), GFSK Modulation.....	46
Figure 51: Test figure of spurious emissions, mode B, Horizontal polarity (30MHz – 1GHz), GFSK Modulation.....	47
Figure 52: Test figure of spurious emissions, mode B, Vertical polarity (30MHz – 1GHz), GFSK Modulation.....	48
Figure 53: Test figure of spurious emissions, mode B, Horizontal polarity (1GHz – 18GHz), GFSK Modulation.....	49
Figure 54: Test figure of spurious emissions, mode B, Vertical polarity (1GHz – 18GHz), GFSK Modulation.....	50
Figure 55: Test figure of spurious emissions, mode B, Horizontal polarity (18GHz – 25GHz), GFSK Modulation.....	51

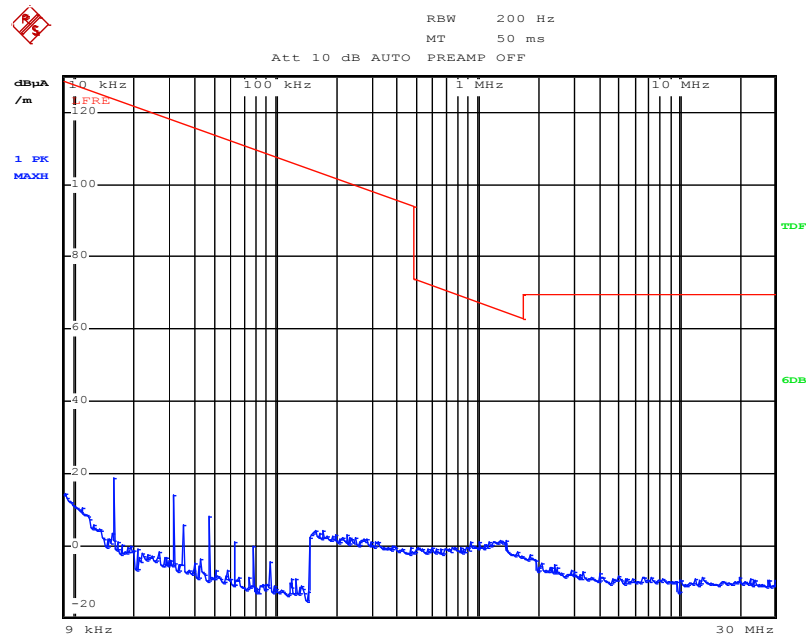
Figure 56: Test figure of spurious emissions, mode B, Vertical polarity (18GHz – 25GHz), GFSK Modulation	52
Figure 57: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation	53
Figure 58: Test figure of spurious emissions, mode B, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation	53
Figure 59: Test figure of spurious emissions, mode B, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation	54
Figure 60: Test figure of spurious emissions, mode B, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation	55
Figure 61: Test figure of spurious emissions, mode B, Horizontal polarity (1GHz – 18GHz), 8DPSK Modulation	56
Figure 62: Test figure of spurious emissions, mode B, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation	57
Figure 63: Test figure of spurious emissions, mode B, Horizontal polarity (18GHz – 25GHz), 8DPSK Modulation	58
Figure 64: Test figure of spurious emissions, mode B, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation	59
Figure 65: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, GFSK Modulation	60
Figure 66: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, GFSK Modulation	61
Figure 67: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, GFSK Modulation	62
Figure 68: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, GFSK Modulation	63
Figure 69: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, 8DPSK Modulation	64
Figure 70: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, 8DPSK Modulation	65
Figure 71: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, 8DPSK Modulation	66
Figure 72: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, 8DPSK Modulation	67
Figure 73: Test figure of Conducted emissions, Mode C, line live	68
Figure 74: Test figure of Conducted emissions, Mode C, line neutral	69
Figure 75: Test figure of Radiated emissions, Mode C, Below 1GHz, Horizontal	70
Figure 76: Test figure of Radiated emissions, Mode C, Below 1GHz, Vertical	71
Figure 77: Test figure of Radiated emissions, Mode C, Above 1GHz, Horizontal	72
Figure 78: Test figure of Radiated emissions, Mode C, Above 1GHz, Vertical	73
Figure 79: Test figure of Radiated emissions, Mode D, Below 1GHz, Horizontal	74
Figure 80: Test figure of Radiated emissions, Mode D, Below 1GHz, Vertical	75
Figure 81: Test figure of Radiated emissions, Mode D, Above 1GHz, Horizontal	76
Figure 82: Test figure of Radiated emissions, Mode D, Above 1GHz, Vertical	77

Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 14:02:07

Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 14:04:06

Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz), GFSK Modulation

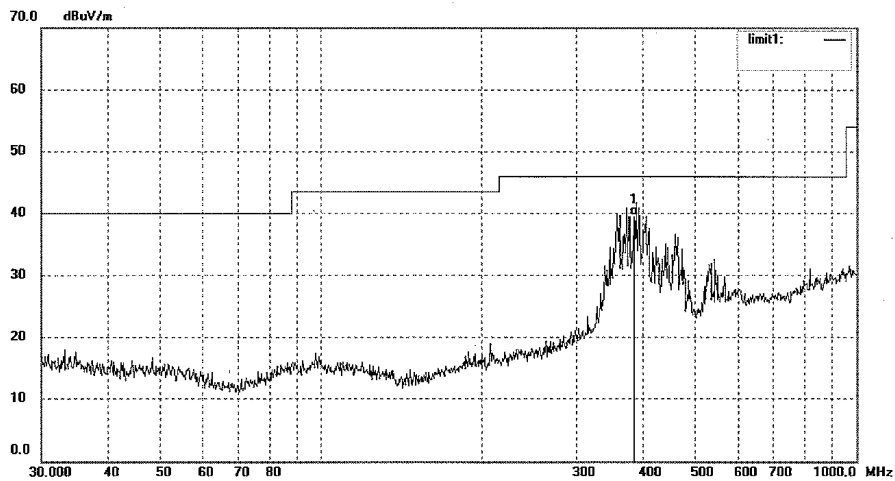


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1421	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 10/45/12
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	382.5509	46.98	-7.30	39.68	46.00	-6.32	QP			

Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

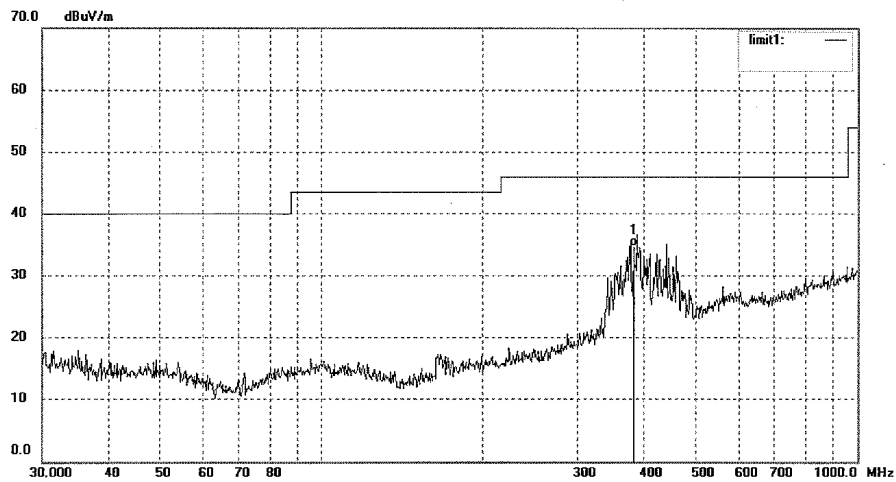
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1422	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 10/54/46
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	382.5479	42.04	-7.30	34.74	46.00	-11.26	QP			

Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz), GFSK Modulation

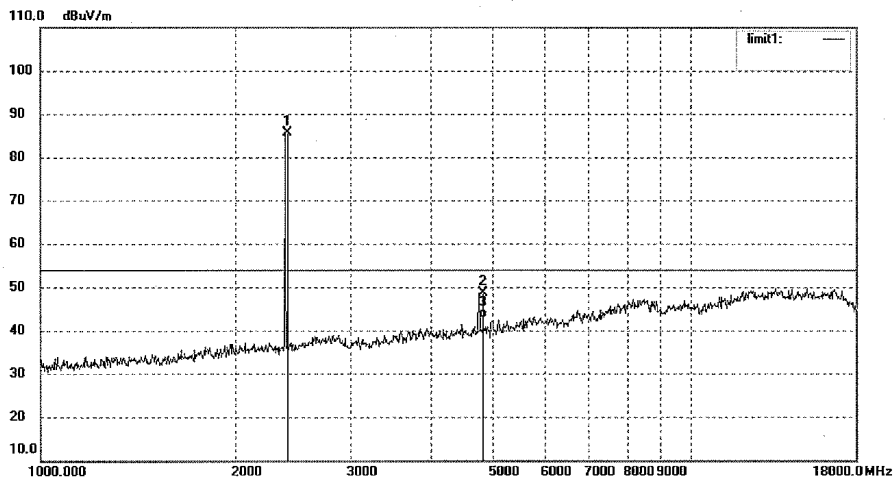


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1267	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 18:30:51
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2401.927	93.12	-7.46	85.66	/	/	peak			
2	4803.963	48.87	-0.30	48.57	74.00	-25.43	peak			
3	4803.963	43.10	-0.30	42.80	54.00	-11.20	AVG			

Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

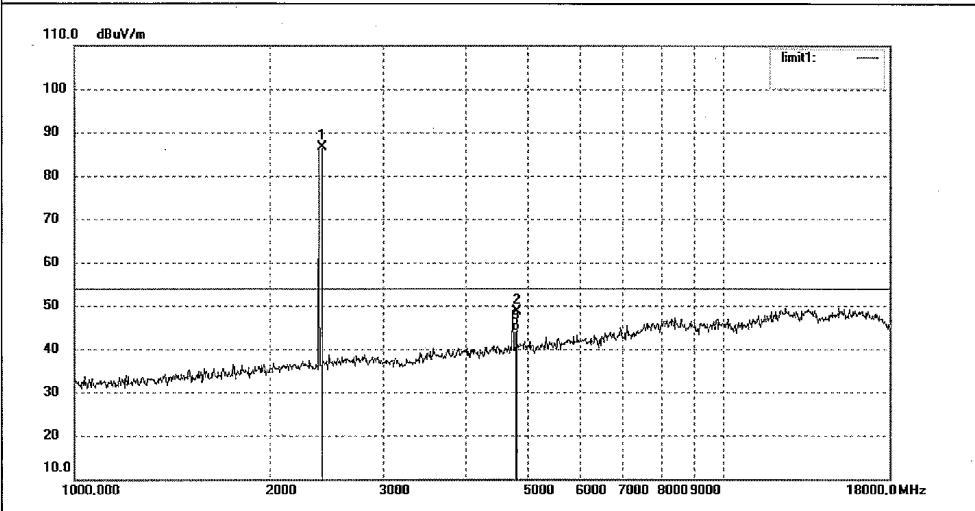
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1268	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 18:38:26
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.003	93.97	-7.45	86.52	/	/	peak			
2	4804.008	48.84	-0.30	48.54	74.00	-25.46	peak			
3	4804.008	44.49	-0.30	44.19	54.00	-9.81	AVG			

Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

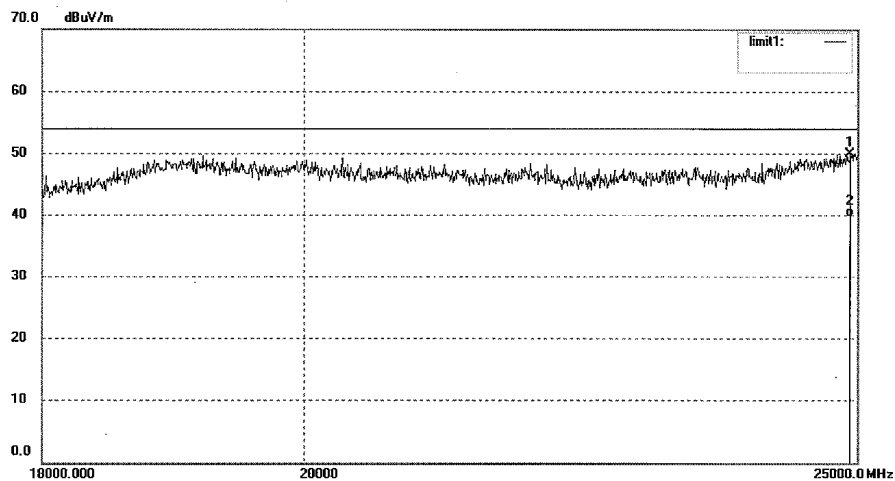
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1510	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 14/08/21
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24934.254	31.24	18.81	50.05	74.00	-23.95	peak			
2	24934.254	20.95	18.81	39.76	54.00	-14.24	AVG			

Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

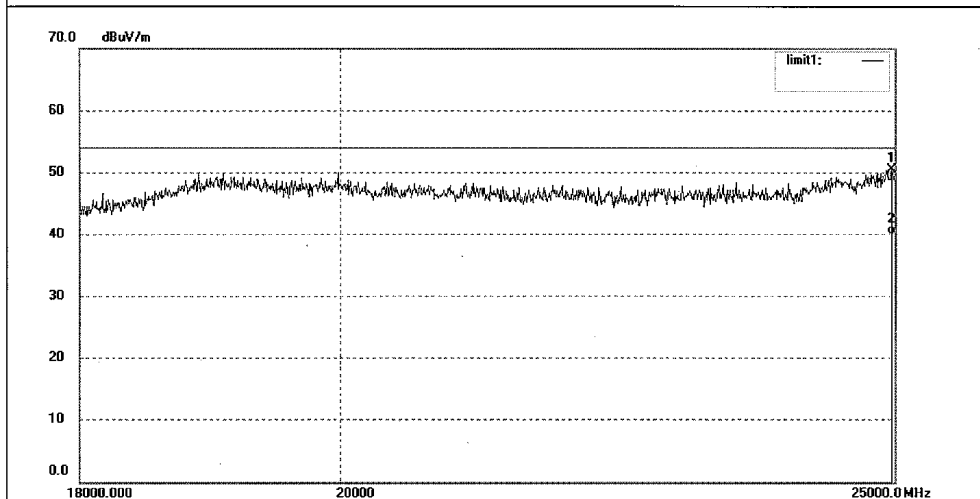
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1511
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Bluetooth Speaker
Mode: TX 2402MHz
Model: SP-310
Manufacturer: Accesspro

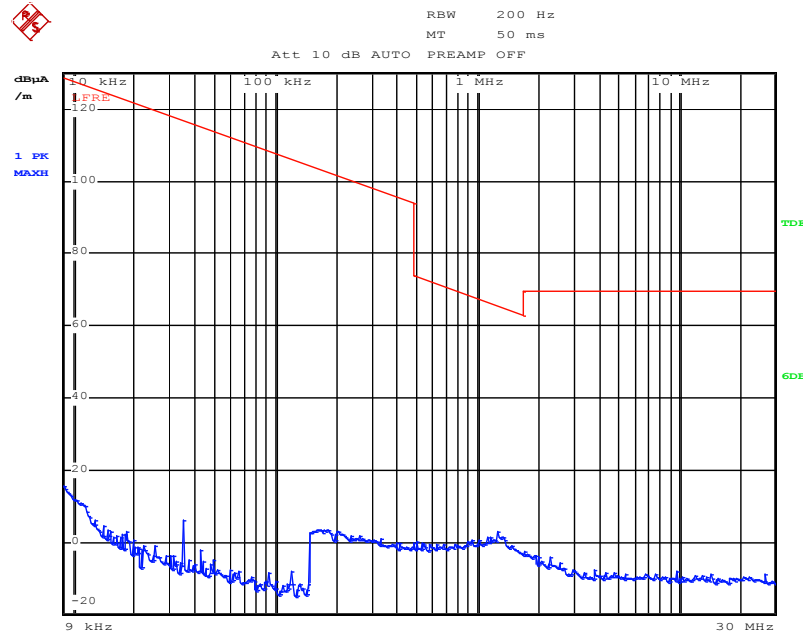
Polarization: Vertical
Power Source: DC 3.7V
Date: 13/03/22/
Time: 14/16/38
Engineer Signature: PEI
Distance: 3m

Note: BDR



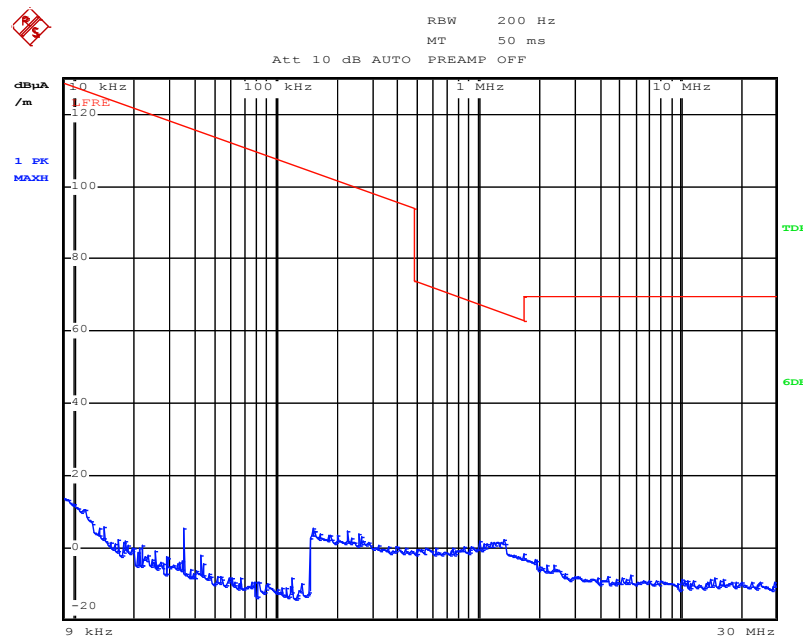
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24975.325	31.62	18.86	50.48	74.00	-23.52	peak			
2	24975.325	21.10	18.86	39.96	54.00	-14.04	AVG			

Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 15:39:27

Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 15:41:47

Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

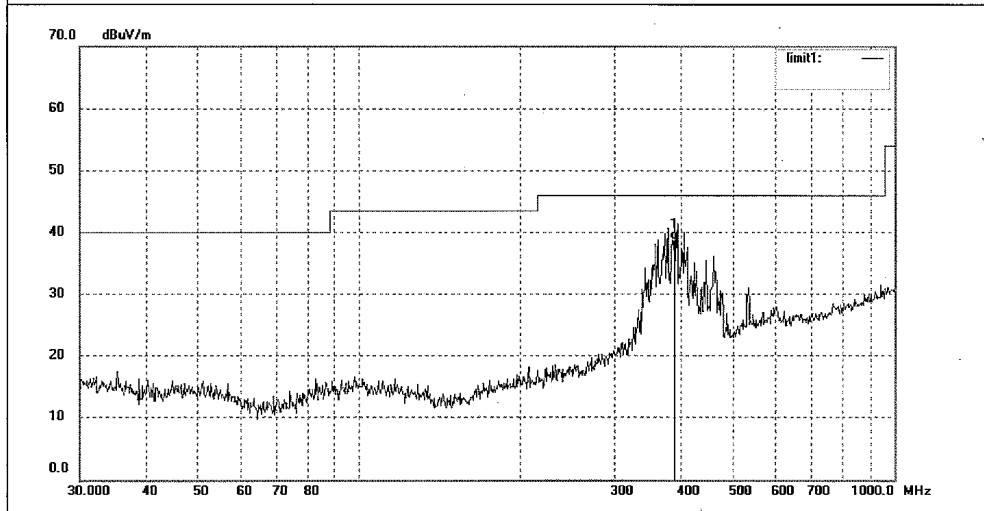
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1424	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 11/13/26
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	388.1889	46.00	-7.24	38.76	46.00	-7.24	QP			

Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz), GFSK Modulation



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.: PYH #1423

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Bluetooth Speaker

Mode: TX 2441MHz

Model: SP-310

Manufacturer: Accesspro

Polarization: Vertical

Power Source: DC 3.7V

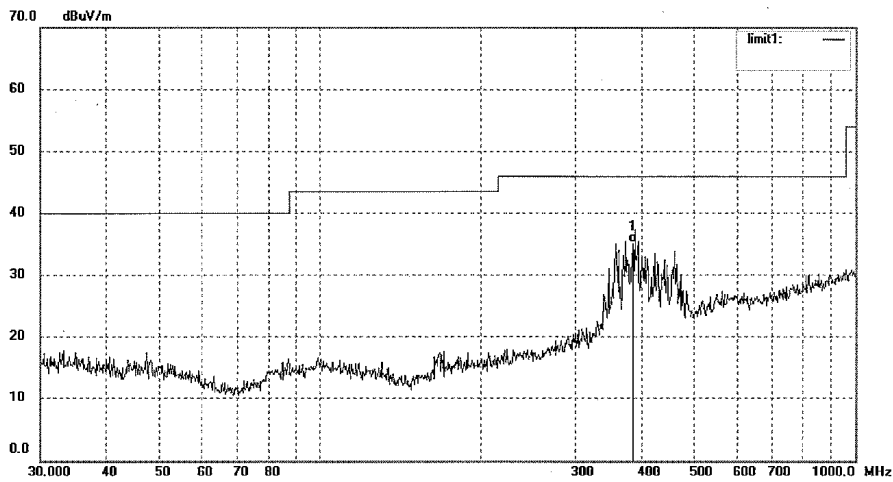
Date: 13/03/21/

Time: 11/05/12

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	382.5330	42.65	-7.30	35.35	46.00	-10.65	QP			

Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

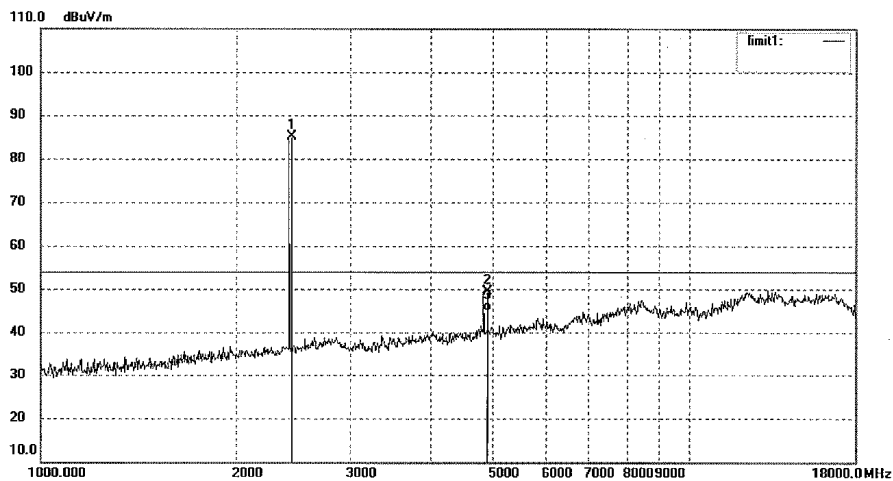
Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PYH #1271
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Speaker
Mode: TX 2441MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Horizontal
Power Source: DC 3.7V
Date: 2013/03/16
Time: 19:03:40
Engineer Signature: PEI
Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.962	92.43	-7.35	85.08	/	/	peak			
2	4881.938	49.31	0.14	49.45	74.00	-24.55	peak			
3	4881.938	44.78	0.14	44.92	54.00	-9.08	AVG			

Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

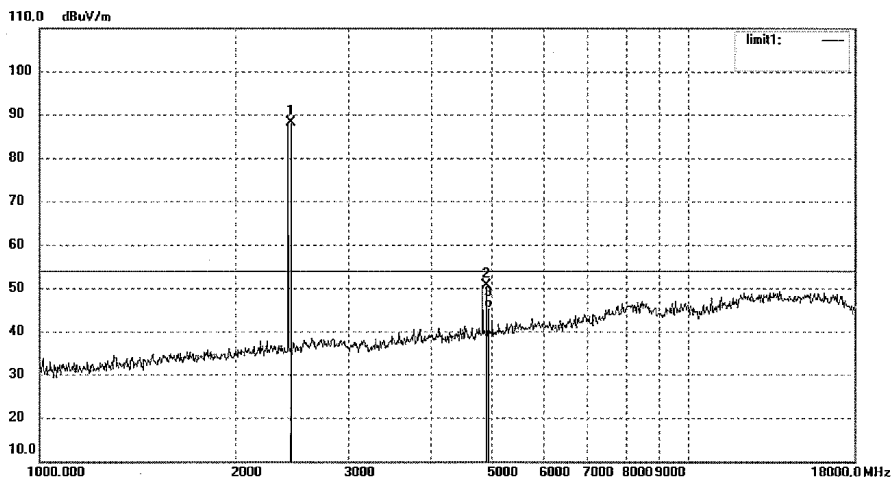
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PYH #1272	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 19:12:41
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.021	95.41	-7.35	88.06	/	/	peak			
2	4882.042	50.48	0.14	50.62	74.00	-23.38	peak			
3	4882.042	45.35	0.14	45.49	54.00	-8.51	AVG			

Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

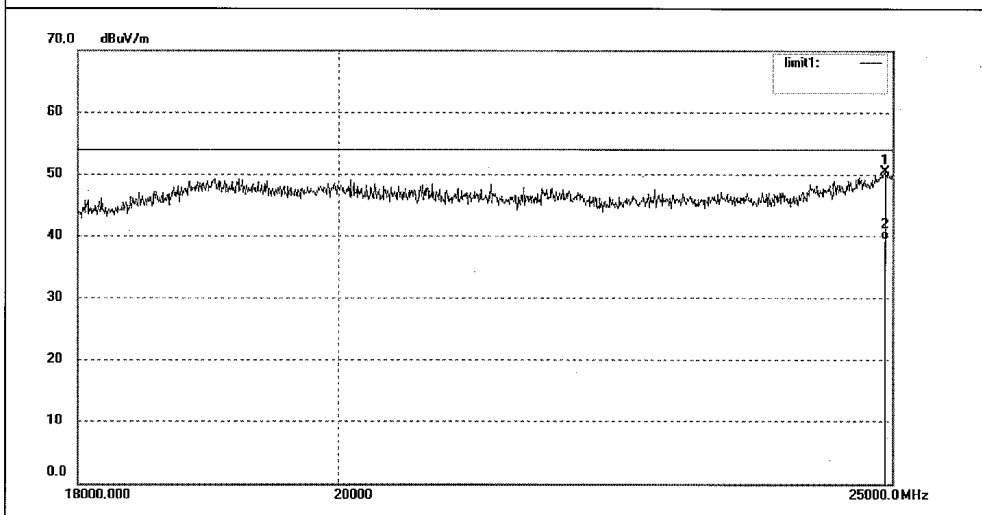
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1512	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 14/24/42
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24926.048	31.67	18.80	50.47	74.00	-23.53	peak			
2	24926.048	20.74	18.80	39.54	54.00	-14.46	AVG			

Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

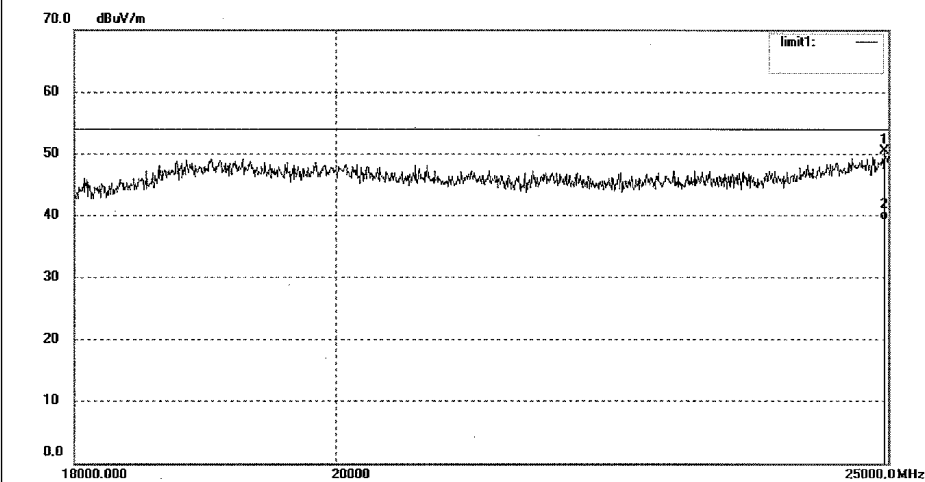
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1513
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Bluetooth Speaker
Mode: TX 2441MHz
Model: SP-310
Manufacturer: Accesspro

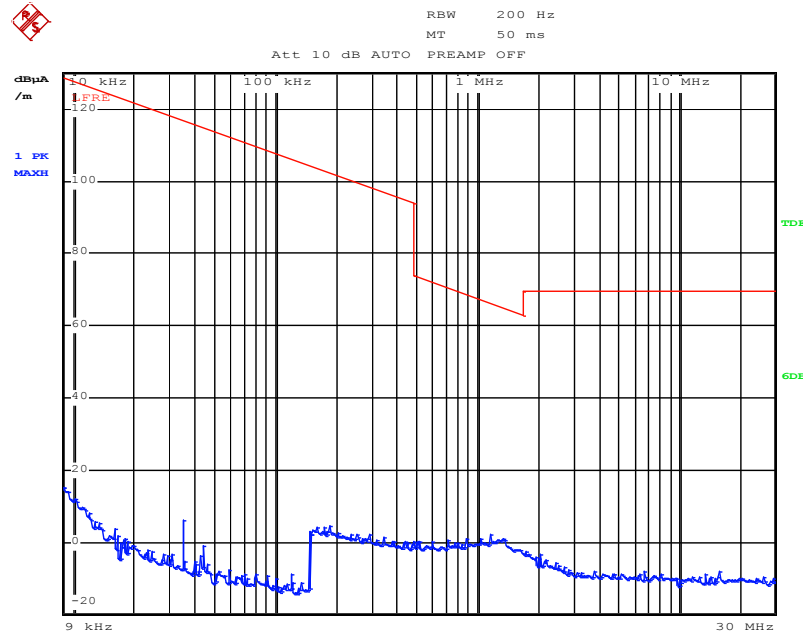
Polarization: Vertical
Power Source: DC 3.7V
Date: 13/03/22/
Time: 14/35/47
Engineer Signature: PEI
Distance: 3m

Note: BDR



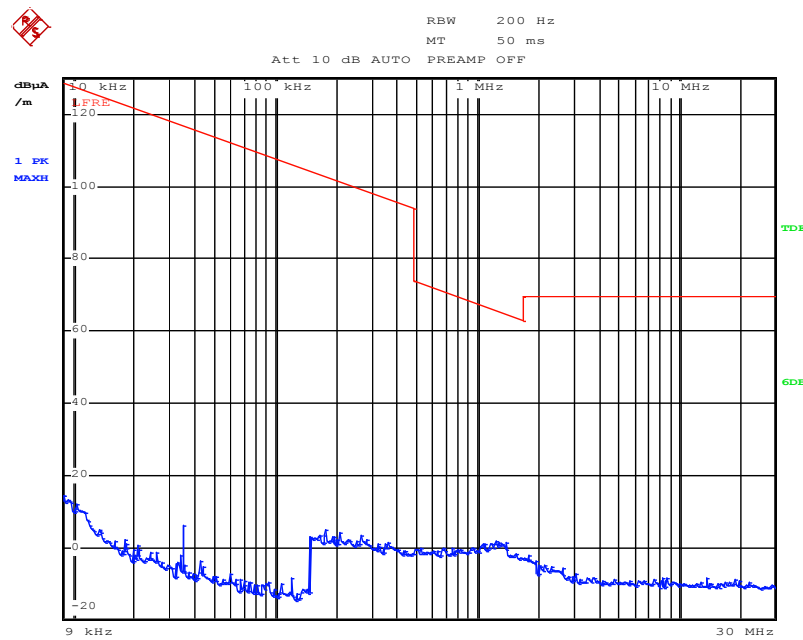
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24958.889	31.61	18.84	50.45	74.00	-23.55	peak			
2	24958.889	20.38	18.84	39.22	54.00	-14.78	AVG			

Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 15:45:51

Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 15:47:56

Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

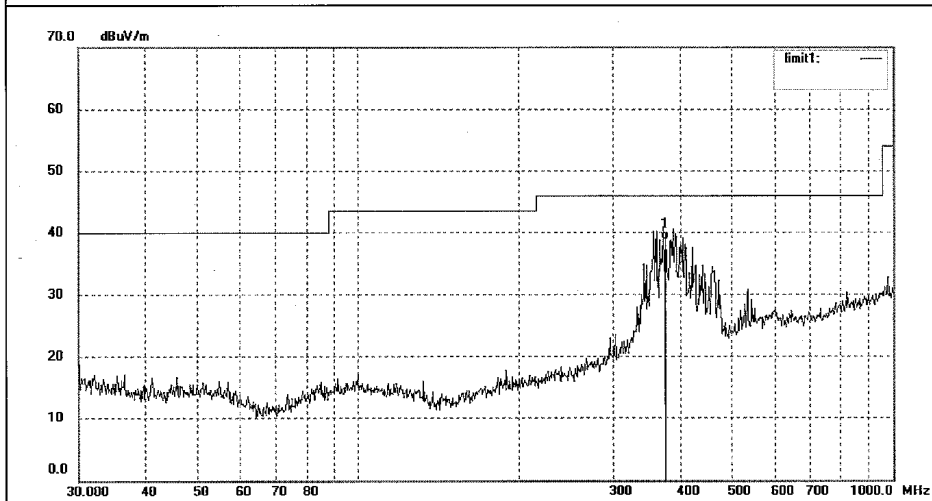
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1425
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Speaker
Mode: TX 2480MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Horizontal
Power Source: DC 3.7V
Date: 13/03/21/
Time: 11/20/58
Engineer Signature: PEI
Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	378.0641	46.18	-7.38	38.80	46.00	-7.20	QP			

Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

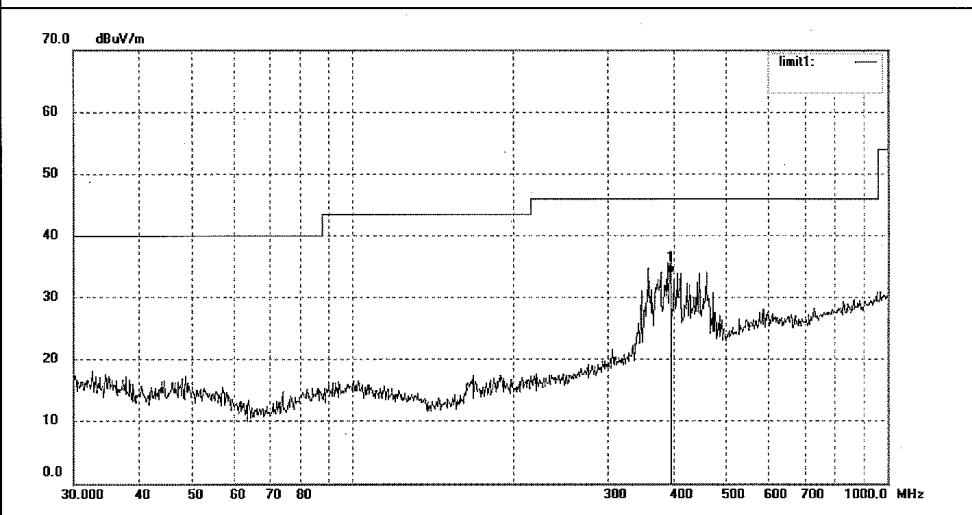
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1426	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 11/27/21
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	394.0570	40.84	-7.06	33.78	46.00	-12.22	QP			

Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

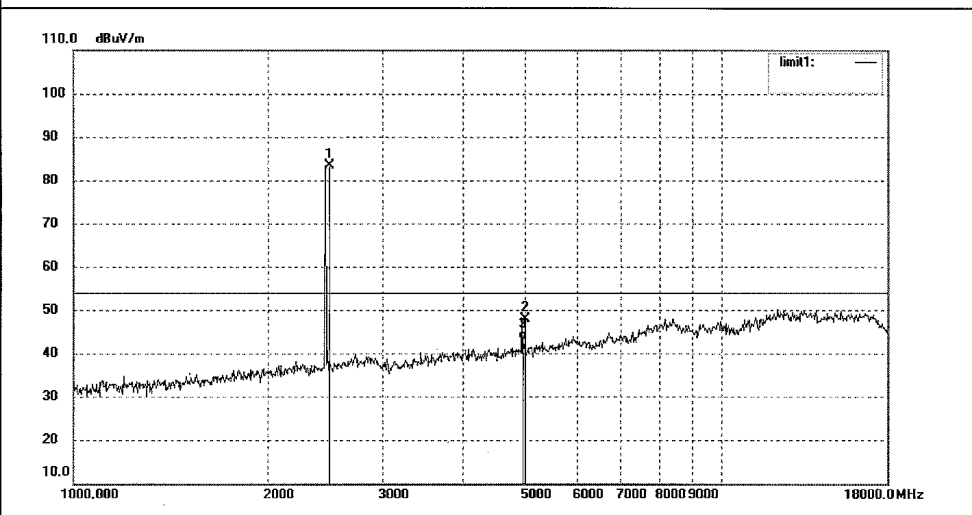
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1274	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 19:32:07
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.034	90.86	-7.37	83.49	/	/	peak			
2	4960.054	47.43	0.52	47.95	74.00	-26.05	peak			
3	4960.054	42.58	0.52	43.10	54.00	-10.90	AVG			

Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

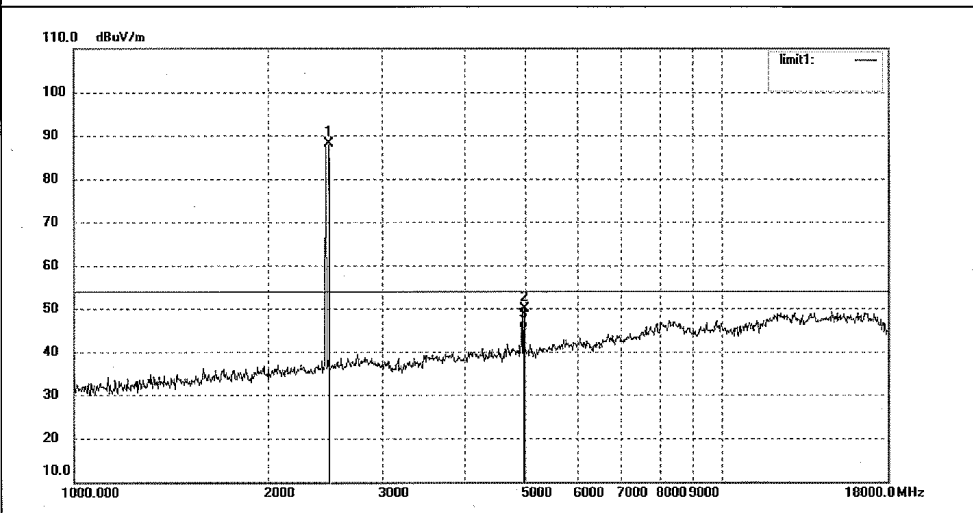
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PYH #1273	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 19:21:28
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2479.935	95.54	-7.37	88.17	/	/	peak			
2	4959.904	49.43	0.52	49.95	74.00	-24.05	peak			
3	4959.904	44.68	0.52	45.20	54.00	-8.80	AVG			

Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

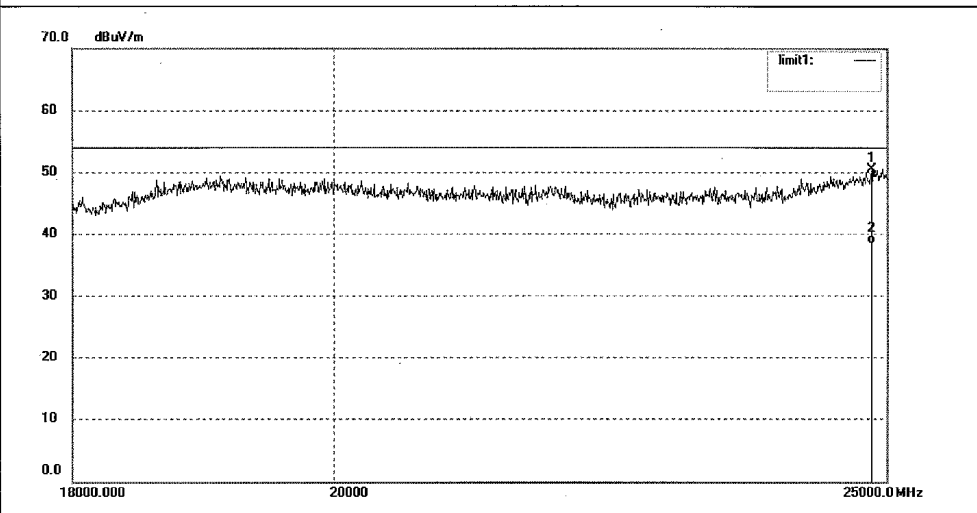
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1515	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 14/53/02
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24852.315	31.79	18.69	50.48	74.00	-23.52	peak			
2	24852.315	19.68	18.69	38.37	54.00	-15.63	AVG			

Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz), GFSK Modulation

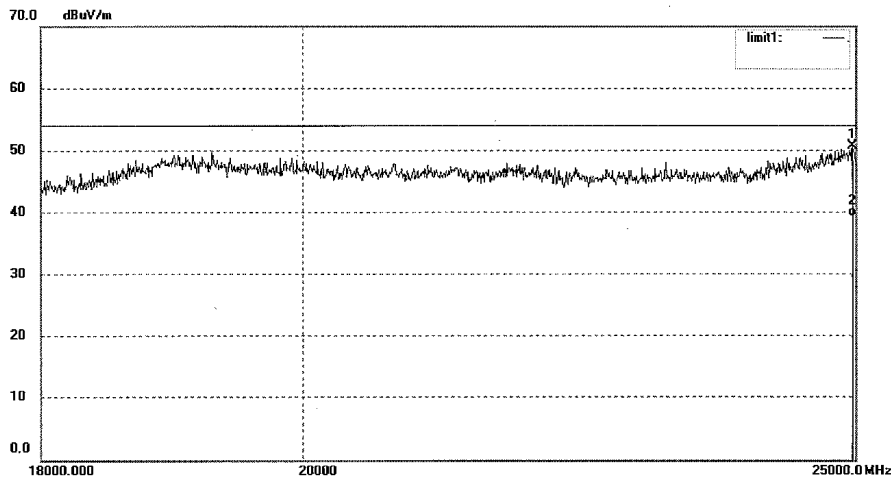


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

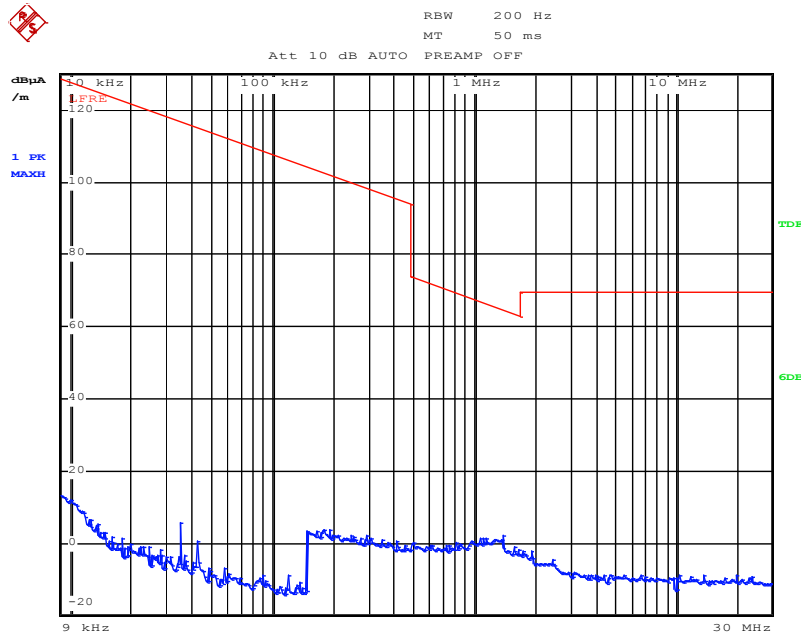
Job No.: PYH #1514	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 14/44/57
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



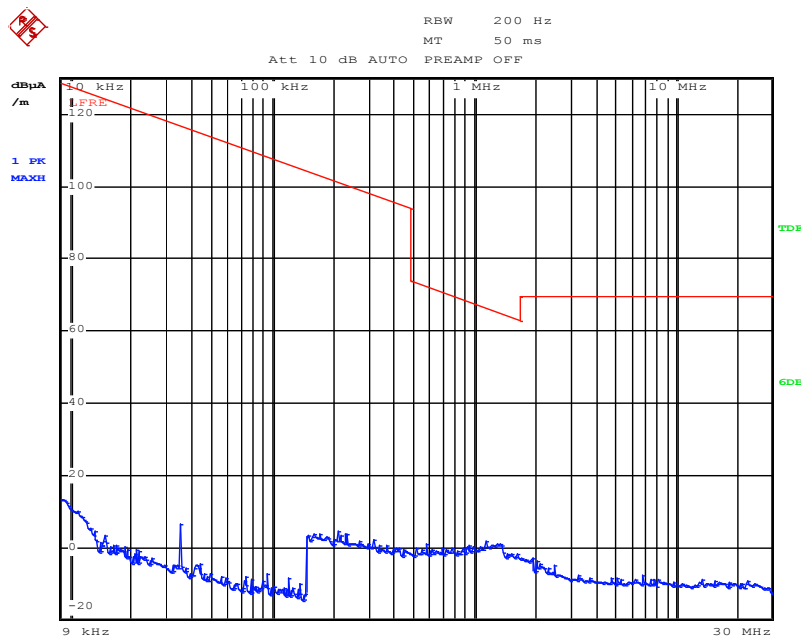
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24975.325	31.73	18.86	50.59	74.00	-23.41	peak			
2	24975.325	20.42	18.86	39.28	54.00	-14.72	AVG			

Figure 25: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 15:51:50

Figure 26: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 15:53:45

Figure 27: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation

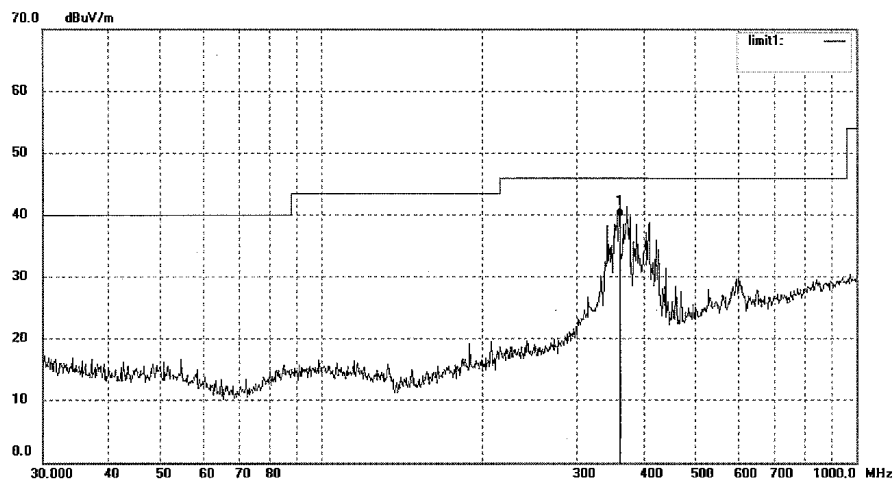


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1428	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 11/42/59
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	362.0520	47.24	-7.59	39.65	46.00	-6.35	QP			

Figure 28: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation

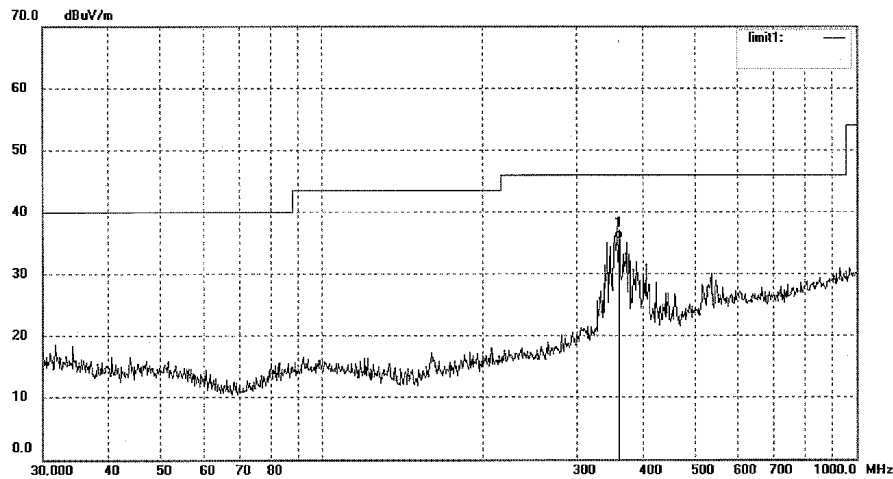


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1427	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 11/34/46
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	362.0530	43.17	-7.59	35.58	46.00	-10.42	QP			

Figure 29: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation



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.: PYH #1278

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Bluetooth Speaker

Mode: TX 2402MHz

Model: SP-310

Manufacturer: Accesspro

Polarization: Horizontal

Power Source: DC 3.7V

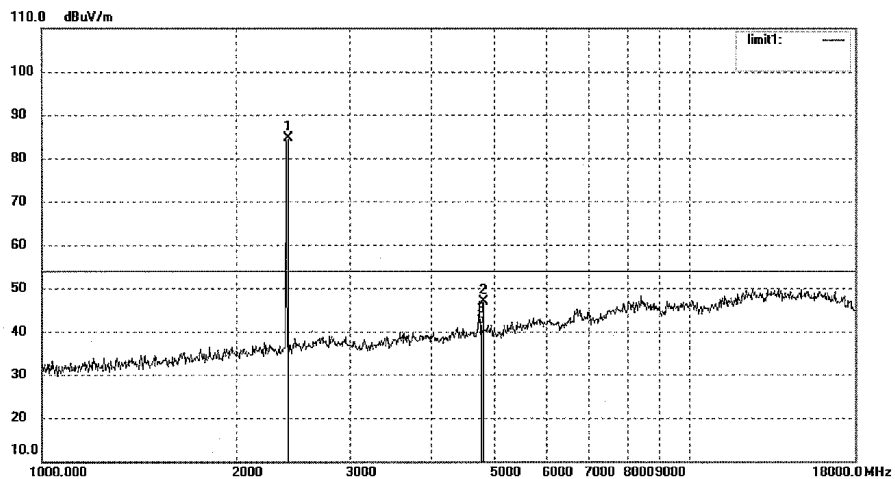
Date: 2013/03/16

Time: 20:16:15

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2401.898	92.08	-7.46	84.62	/	/	peak			
2	4803.857	47.07	-0.30	46.77	74.00	-27.23	peak			
3	4803.857	41.82	-0.30	41.52	54.00	-12.48	AVG			

Figure 30: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

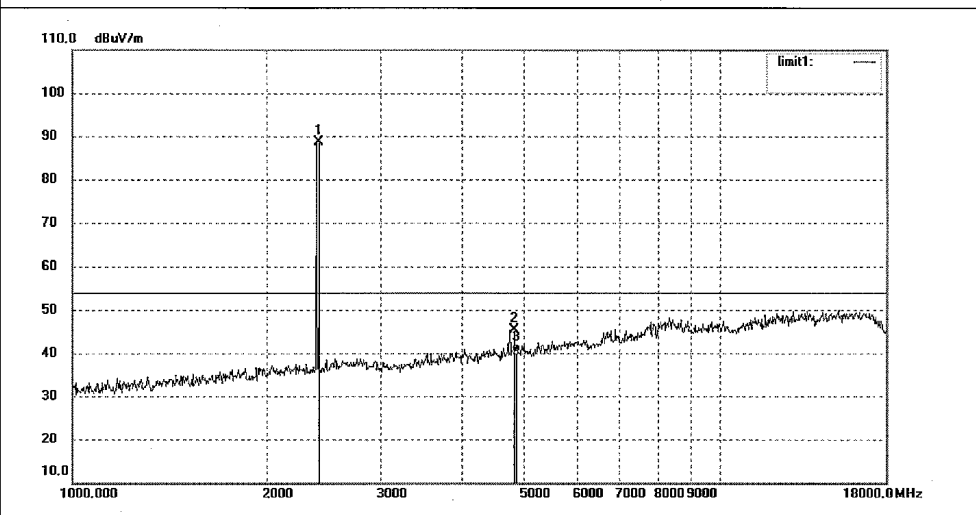
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1277	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 20:05:29
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2401.919	96.10	-7.46	88.64	/	/	peak			
2	4801.908	45.57	-0.31	45.26	74.00	-28.74	peak			
3	4801.908	40.54	-0.31	40.23	54.00	-13.77	AVG			

Figure 31: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

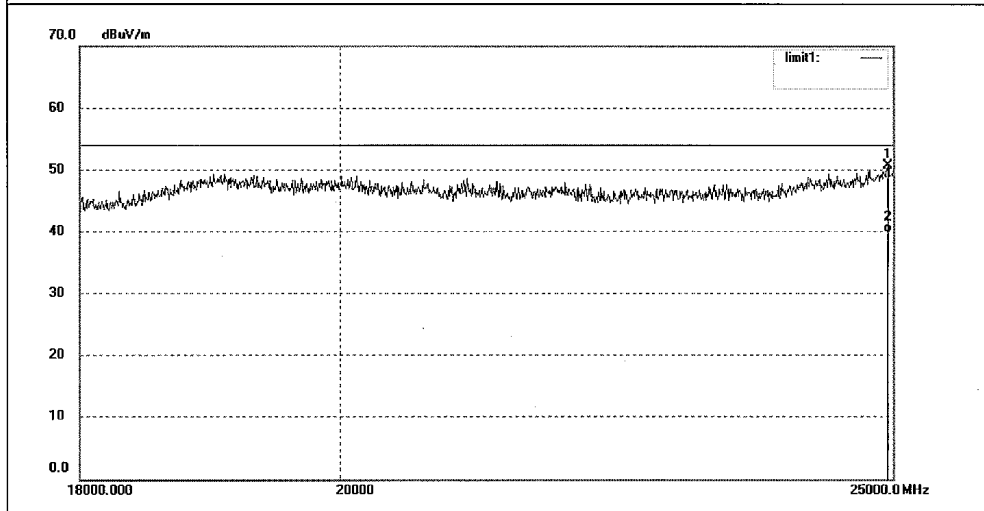
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1516	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 15/02/48
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24950.674	31.79	18.83	50.62	74.00	-23.38	peak			
2	24950.674	21.03	18.83	39.86	54.00	-14.14	AVG			

Figure 32: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

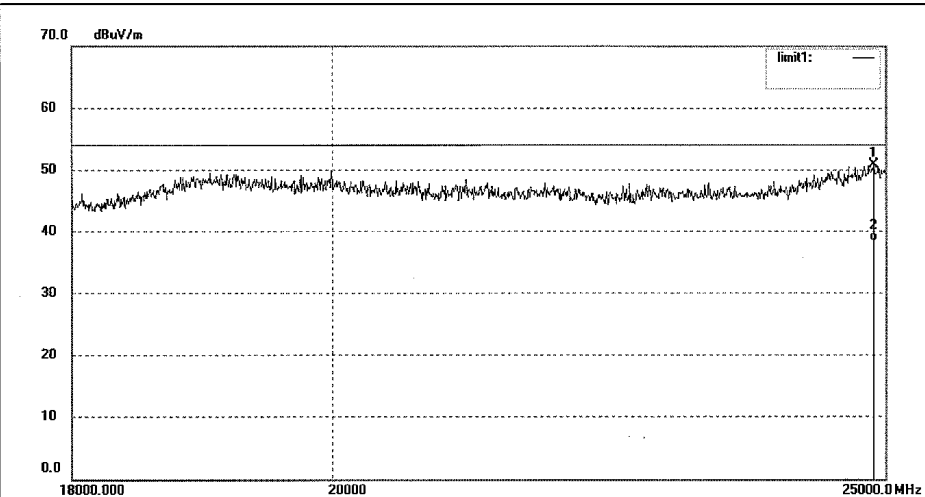
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

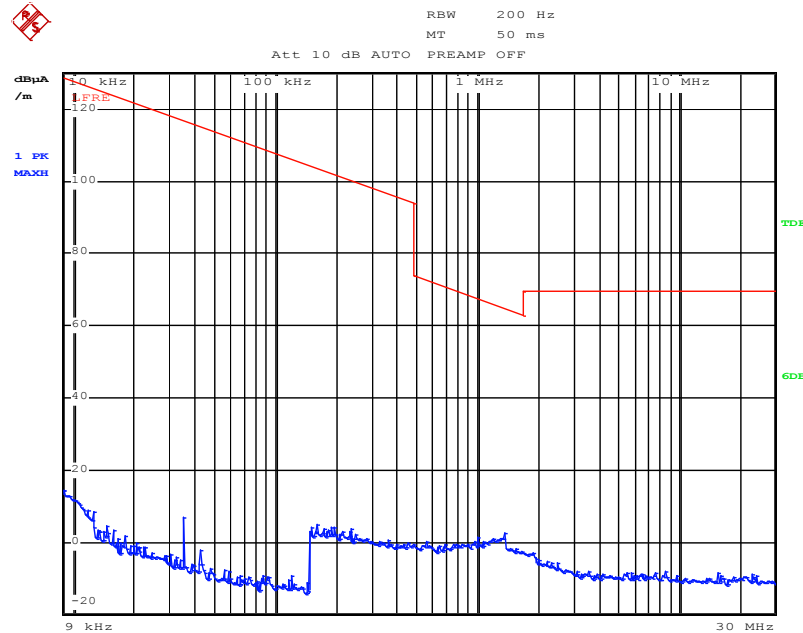
Job No.: PYH #1517	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 15/12/52
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



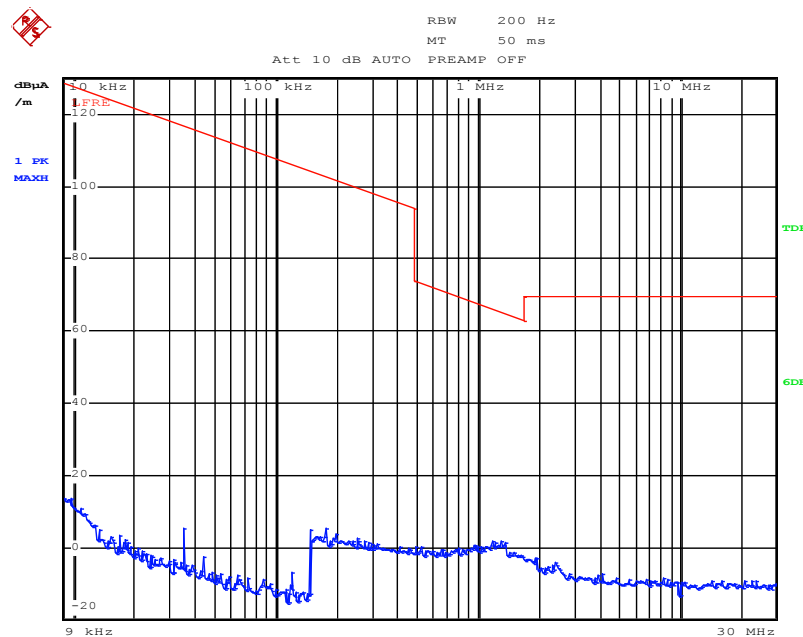
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24885.058	32.06	18.74	50.80	74.00	-23.20	peak			
2	24885.058	19.76	18.74	38.50	54.00	-15.50	AVG			

Figure 33: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 15:57:36

Figure 34: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 15:59:44

Figure 35: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

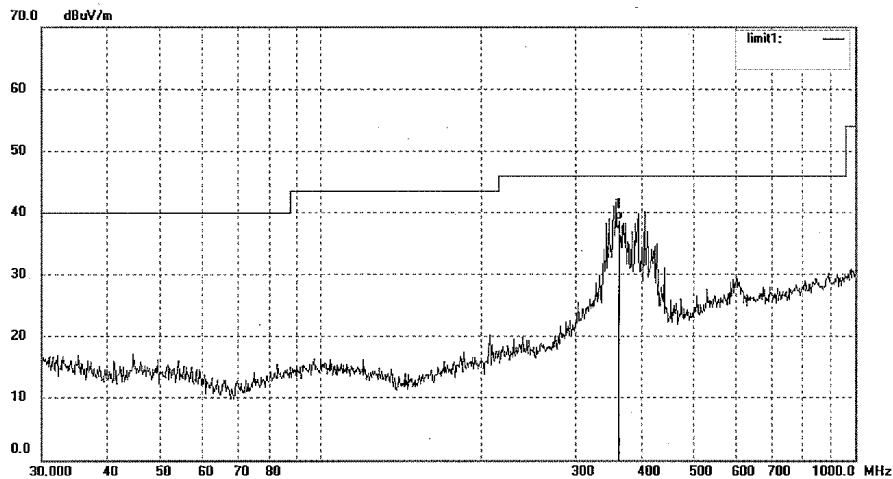
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1429	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 11/50/06
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	362.0673	46.34	-7.59	38.75	46.00	-7.25	QP			

Figure 36: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GMHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

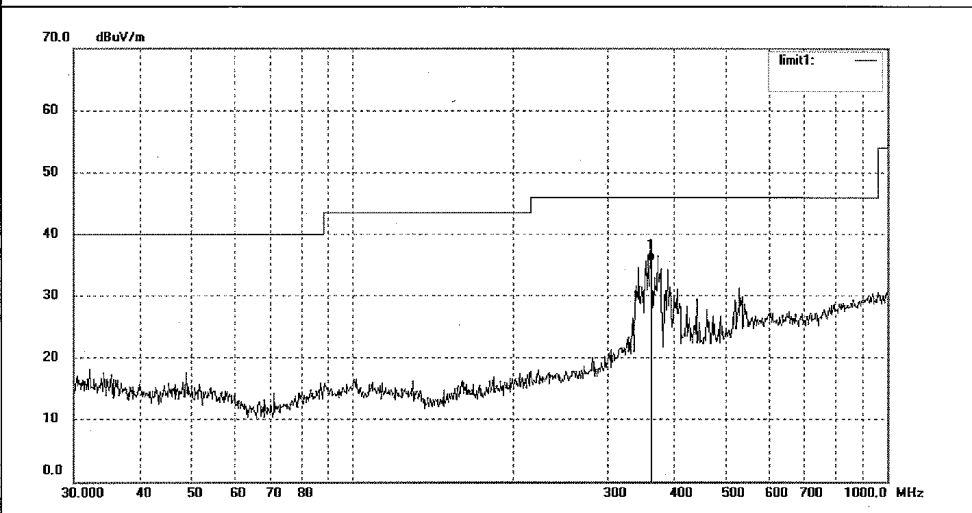
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1430	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 11/58/01
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	362.0360	43.21	-7.59	35.62	46.00	-10.38	QP			

Figure 37: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

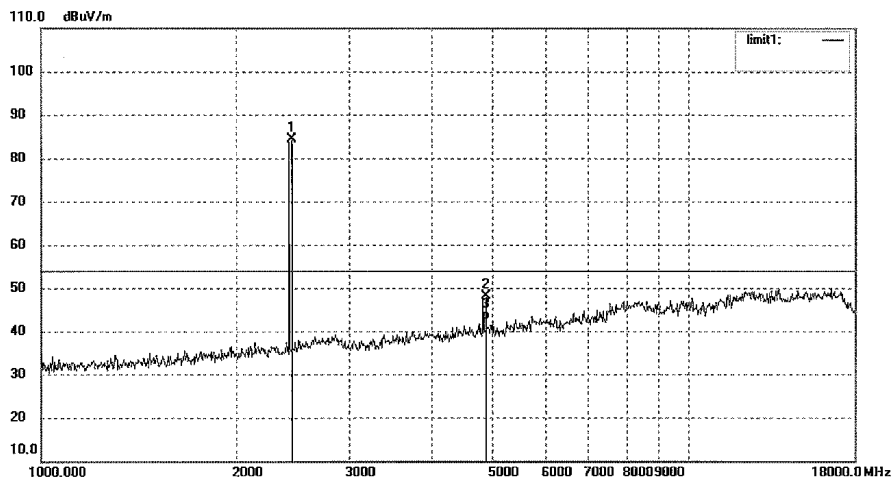
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PYH #1282	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 20:54:41
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.962	91.73	-7.35	84.38	/	/	peak			
2	4881.885	47.99	0.14	48.13	74.00	-25.87	peak			
3	4881.885	42.43	0.14	42.57	54.00	-11.43	AVG			

Figure 38: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

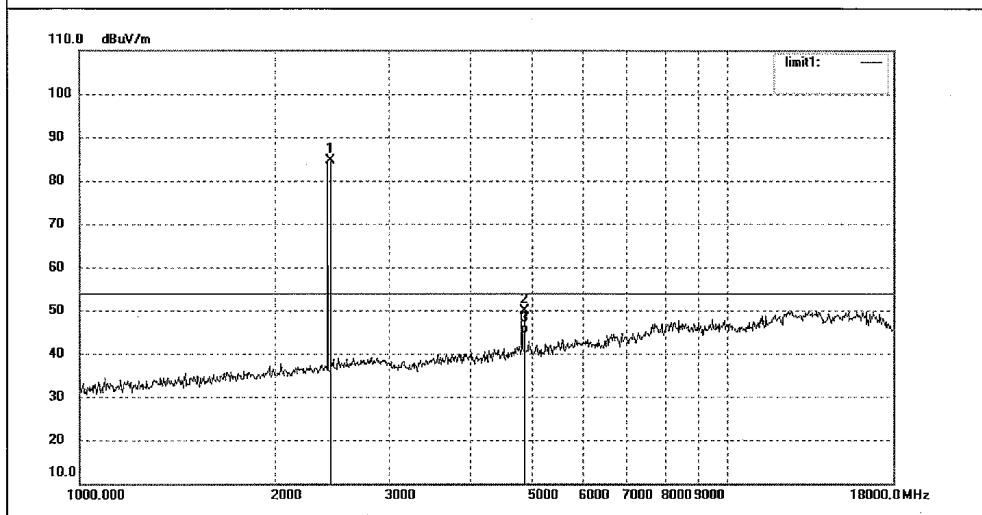
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1281	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 20:43:31
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.021	91.88	-7.35	84.53	/	/	peak			
2	4882.035	49.69	0.14	49.83	74.00	-24.17	peak			
3	4882.035	44.52	0.14	44.66	54.00	-9.34	AVG			

Figure 39: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

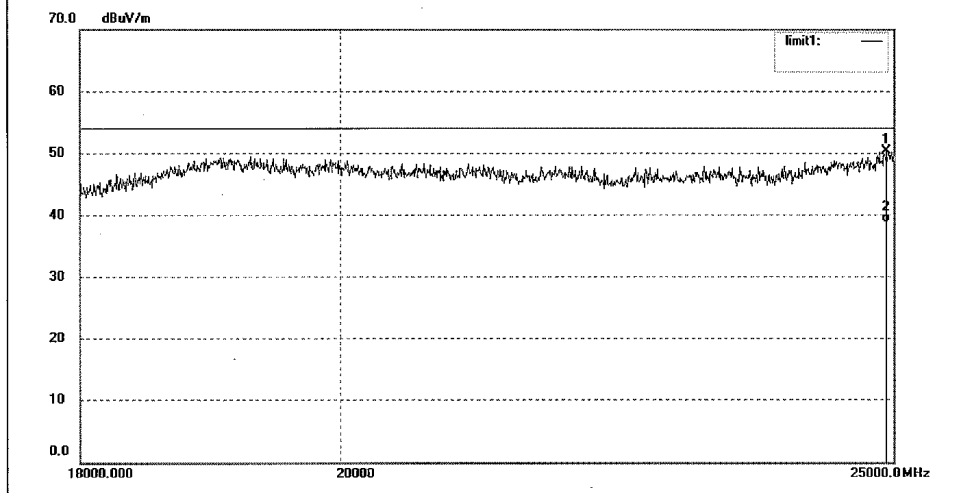
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1518	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 15/23/09
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24934.254	31.52	18.81	50.33	74.00	-23.67	peak			
2	24934.254	19.91	18.81	38.72	54.00	-15.28	AVG			

Figure 40: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

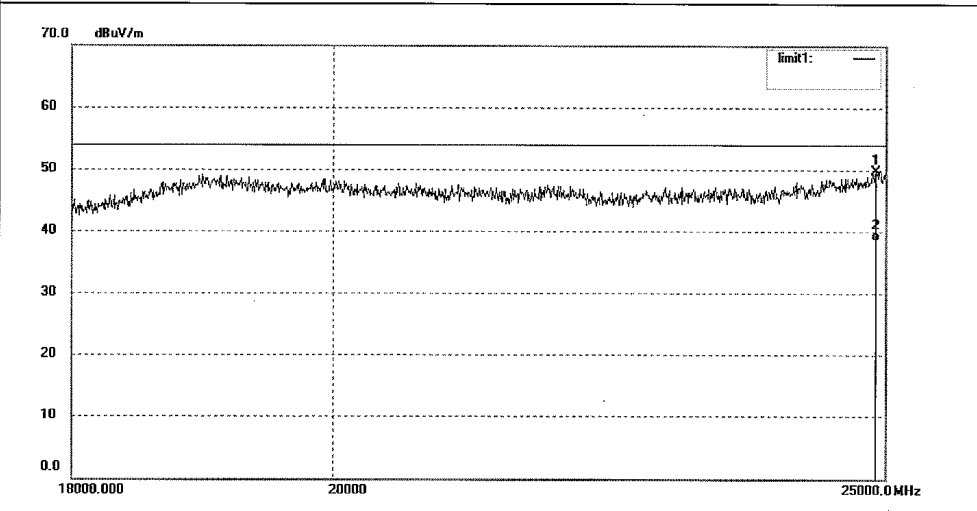
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

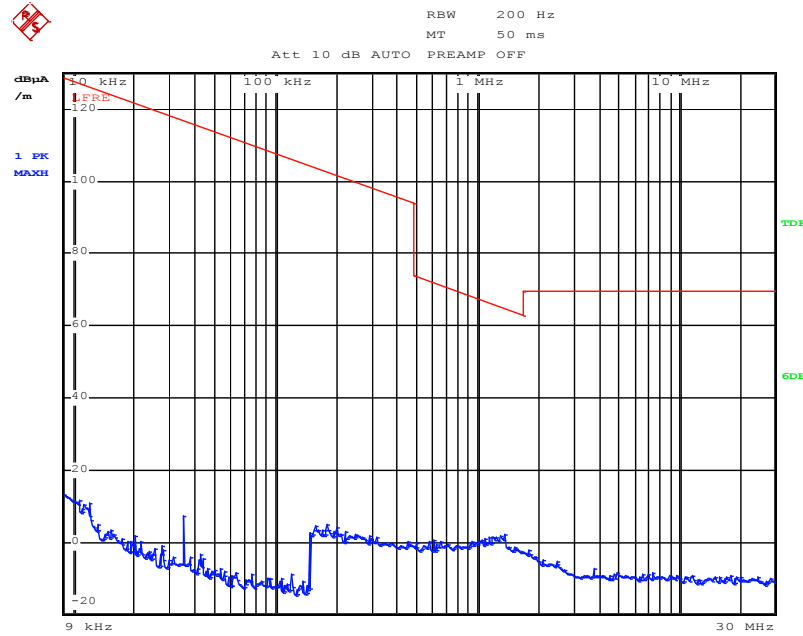
Job No.: PYH #1519	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 15/35/43
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



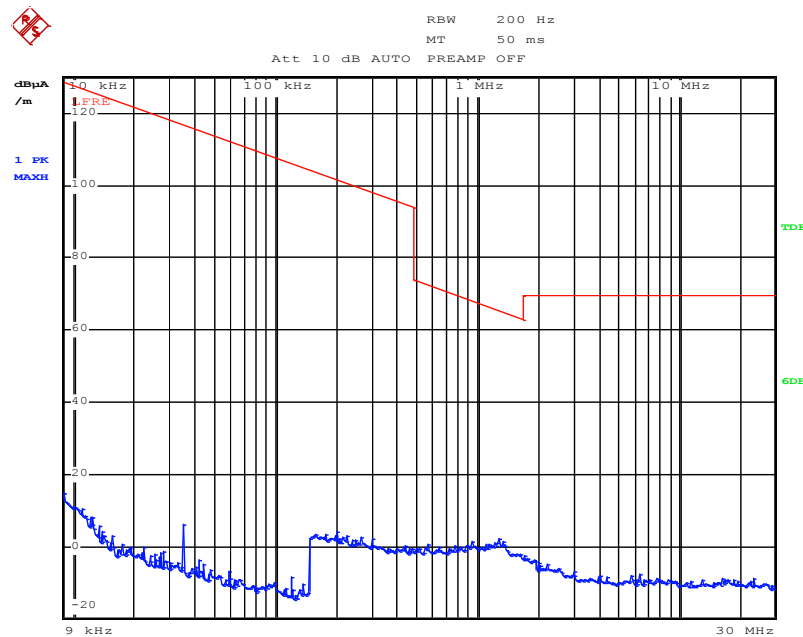
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24909.644	31.03	18.77	49.80	74.00	-24.20	peak			
2	24909.644	19.85	18.77	38.62	54.00	-15.38	AVG			

Figure 41: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 16:04:43

Figure 42: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 16:06:40

Figure 43: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

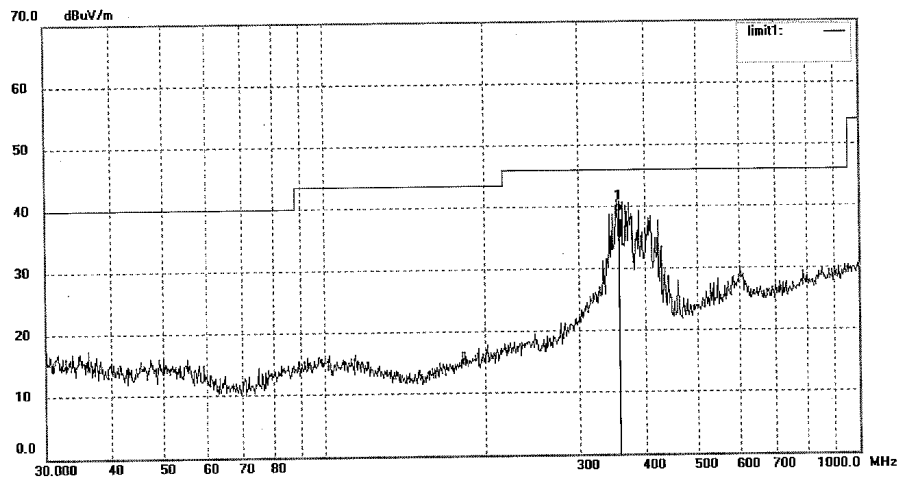
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1432
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Speaker
Mode: TX 2480MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Horizontal
Power Source: DC 3.7V
Date: 13/03/21/
Time: 12/12/08
Engineer Signature: PEI
Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	356.4471	46.75	-7.68	39.07	46.00	-6.93	QP			

Figure 44: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation



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.: PYH #1431

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Bluetooth Speaker

Mode: TX 2480MHz

Model: SP-310

Manufacturer: Accesspro

Polarization: Vertical

Power Source: DC 3.7V

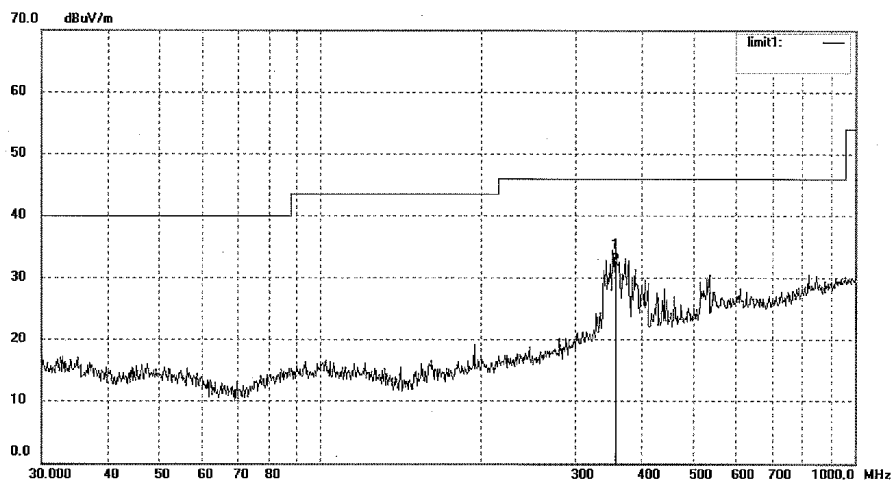
Date: 13/03/21/

Time: 12/05/05

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	356.1910	40.48	-7.68	32.80	46.00	-13.20	QP			

Figure 45: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

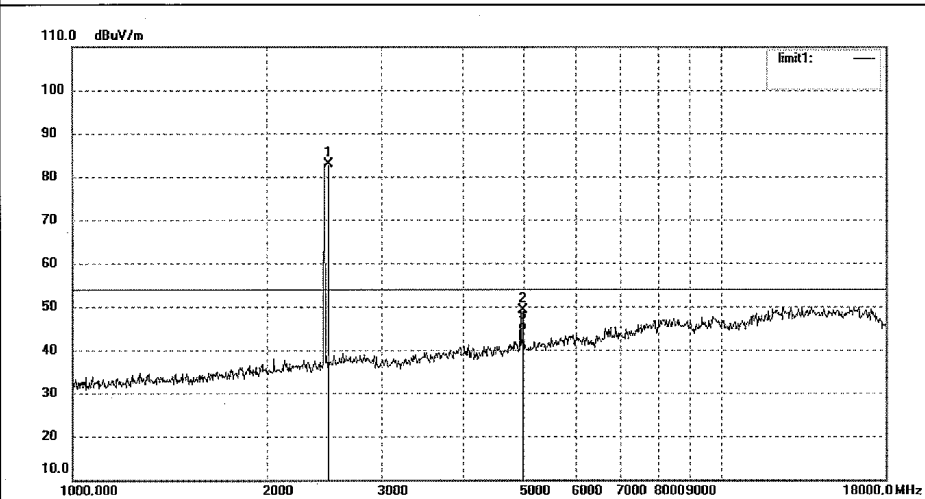
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1283	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 21:07:59
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.024	90.16	-7.37	82.79	/	/	peak			
2	4960.048	48.68	0.52	49.20	74.00	-24.80	peak			
3	4960.048	43.86	0.52	44.38	54.00	-9.62	AVG			

Figure 46: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

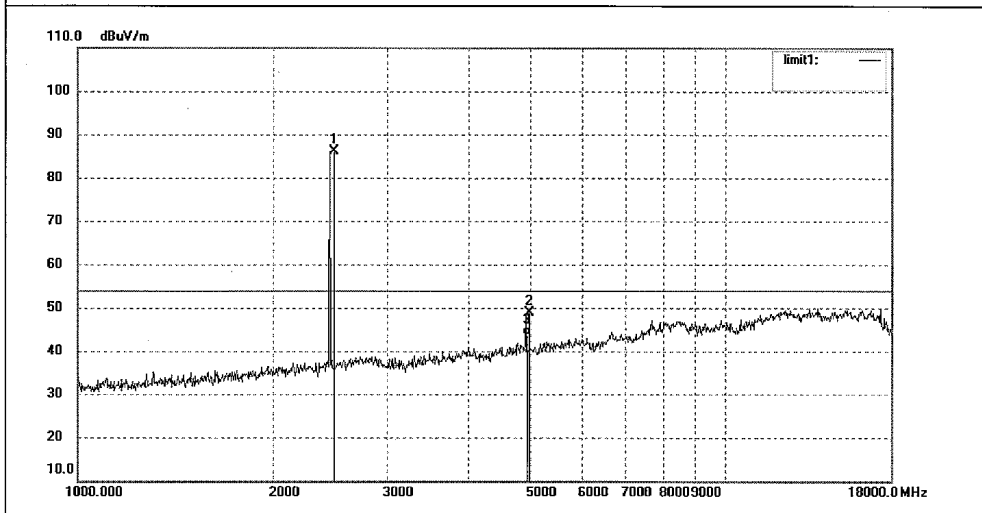
Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PYH #1284	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 21:18:00
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.010	93.53	-7.37	86.16	/	/	peak			
2	4960.020	48.43	0.52	48.95	74.00	-25.05	peak			
3	4960.020	43.01	0.52	43.53	54.00	-10.47	AVG			

Figure 47: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

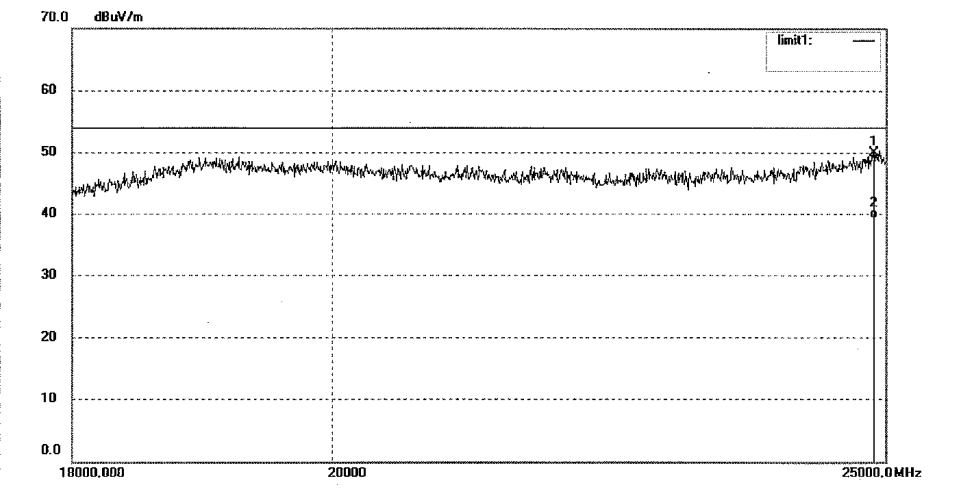
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1521	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 15/50/00
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24885.058	31.19	18.74	49.93	74.00	-24.07	peak			
2	24885.058	20.57	18.74	39.31	54.00	-14.69	AVG			

Figure 48: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

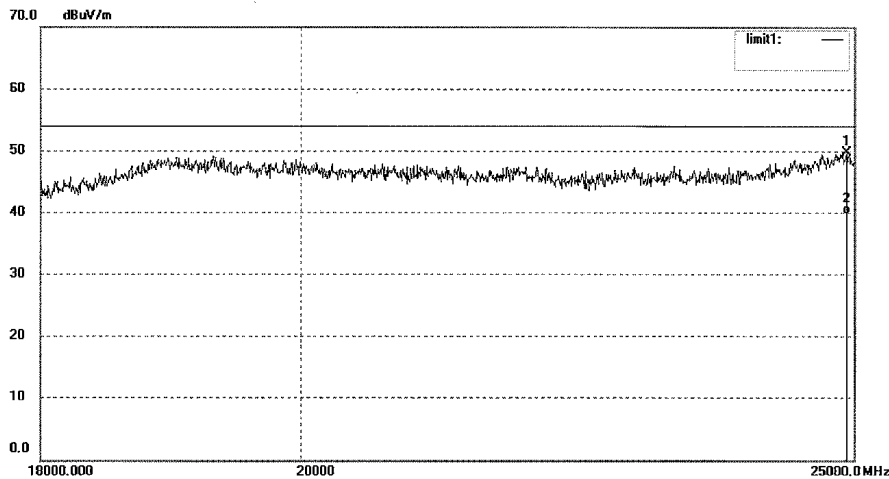
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

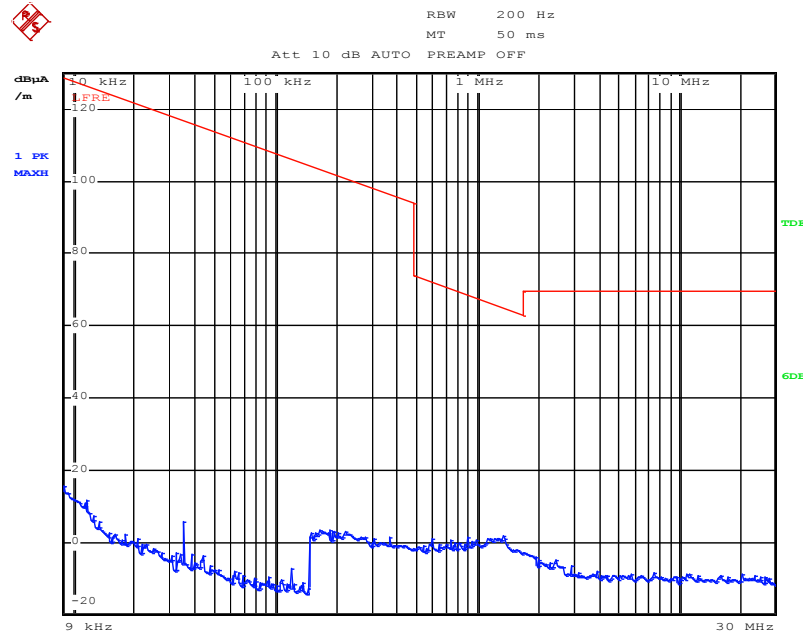
Job No.: PYH #1520	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 15/43/19
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



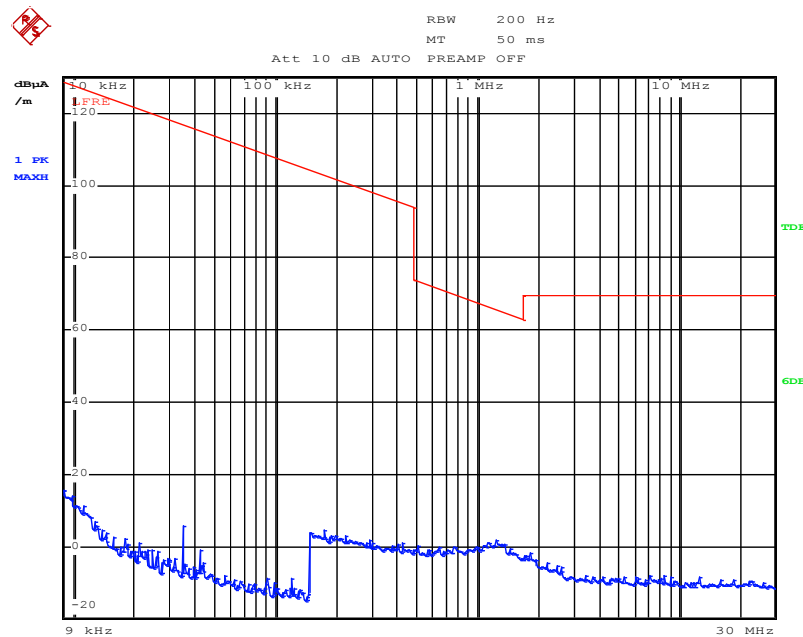
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24926.048	31.07	18.80	49.87	74.00	-24.13	peak			
2	24926.048	21.00	18.80	39.80	54.00	-14.20	AVG			

Figure 49: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 15:25:25

Figure 50: Test figure of spurious emissions, mode B, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 17.MAR.2013 15:27:25

Figure 51: Test figure of spurious emissions, mode B, Horizontal polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

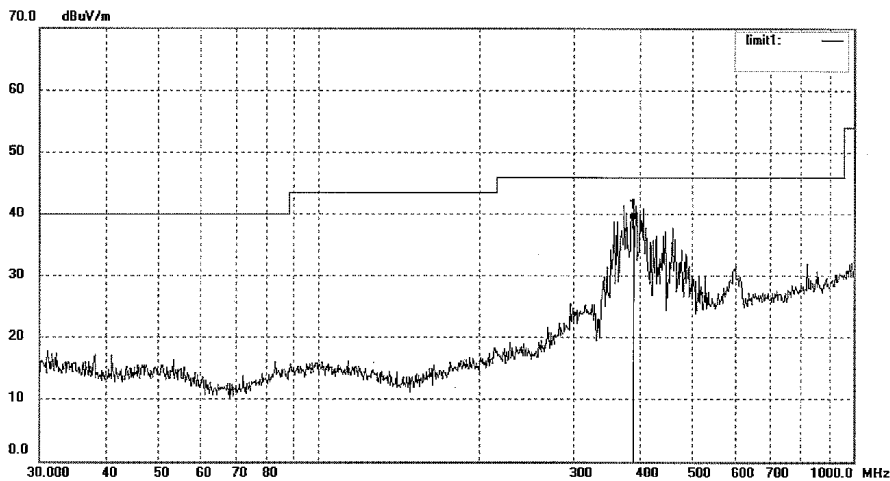
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1436
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Speaker
Mode: RX 2402MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Horizontal
Power Source: DC 3.7V
Date: 13/03/21/
Time: 12/42/22
Engineer Signature: PEI
Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	387.2565	46.11	-7.25	38.86	46.00	-7.14	QP			

Figure 52: Test figure of spurious emissions, mode B, Vertical polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

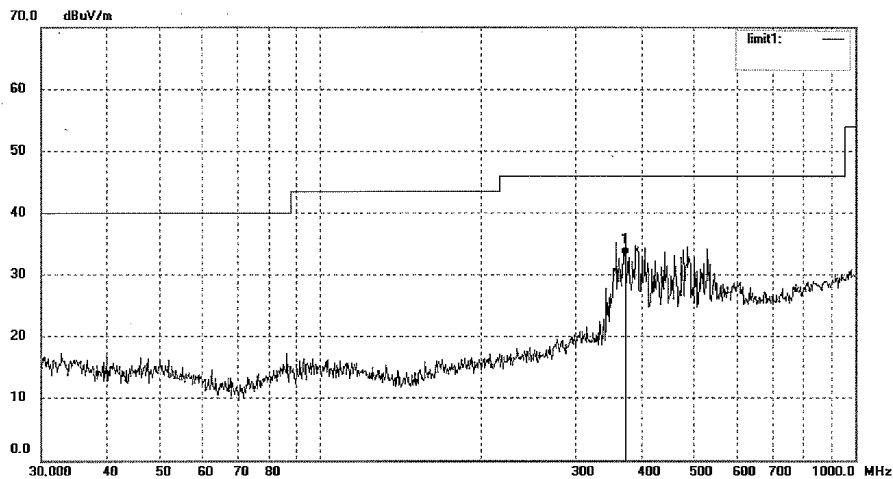
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1435
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Speaker
Mode: RX 2402MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Vertical
Power Source: DC 3.7V
Date: 13/03/21/
Time: 12/34/04
Engineer Signature: PEI
Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	371.2679	40.70	-7.48	33.22	46.00	-12.78	QP			

Figure 53: Test figure of spurious emissions, mode B, Horizontal polarity (1GHz –18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

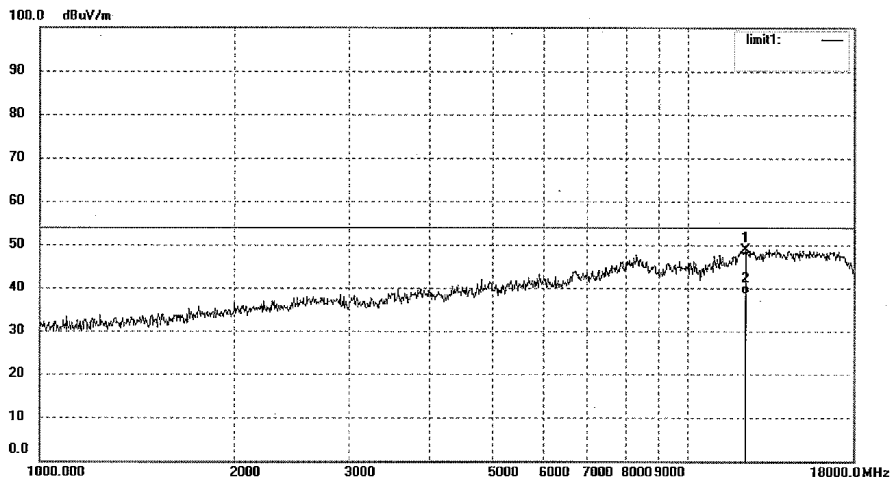
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1303
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Bluetooth Speaker
Mode: RX 2402MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Horizontal
Power Source: DC 3.7V
Date: 13/03/21/
Time: 10/10/44
Engineer Signature: PEI
Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12259.728	10.60	38.16	48.76	74.00	-25.24	peak			
2	12259.728	0.44	38.16	38.60	54.00	-15.40	AVG			

Figure 54: Test figure of spurious emissions, mode B, Vertical polarity (1GHz – 18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

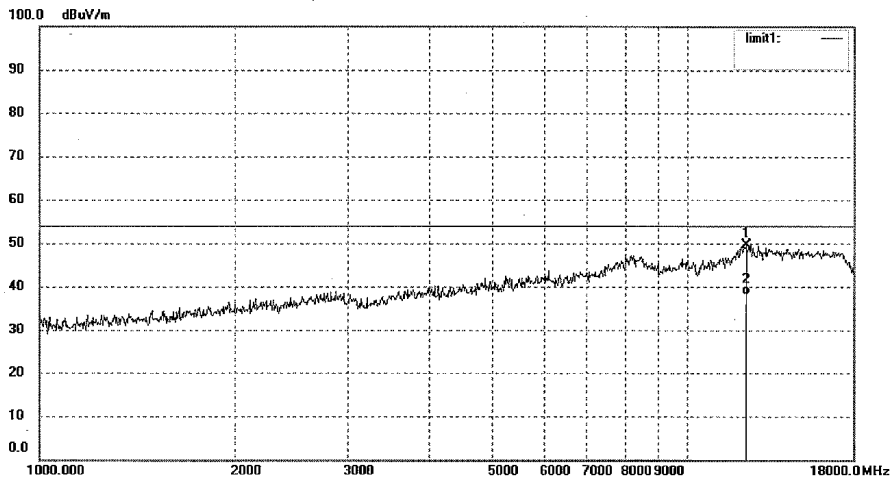
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PYH #1304	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 10/19/22
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12293.417	11.41	38.19	49.60	74.00	-24.40	peak			
2	12296.703	0.00	38.20	38.20	54.00	-15.80	AVG			

Figure 55: Test figure of spurious emissions, mode B, Horizontal polarity (18GHz –25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

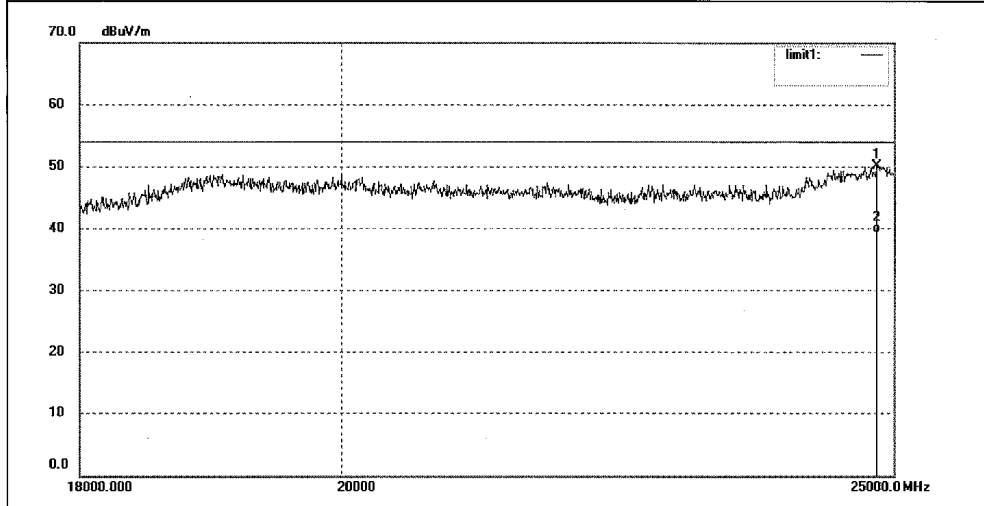
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1525	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 16/24/03
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24827.786	31.49	18.66	50.15	74.00	-23.85	peak			
2	24827.786	20.58	18.66	39.24	54.00	-14.76	AVG			

Figure 56: Test figure of spurious emissions, mode B, Vertical polarity (18GHz – 25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

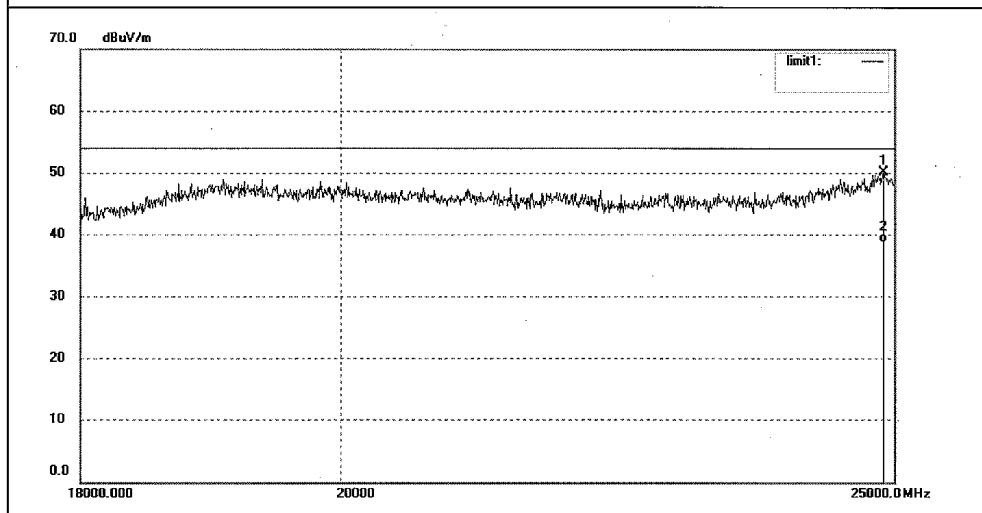
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

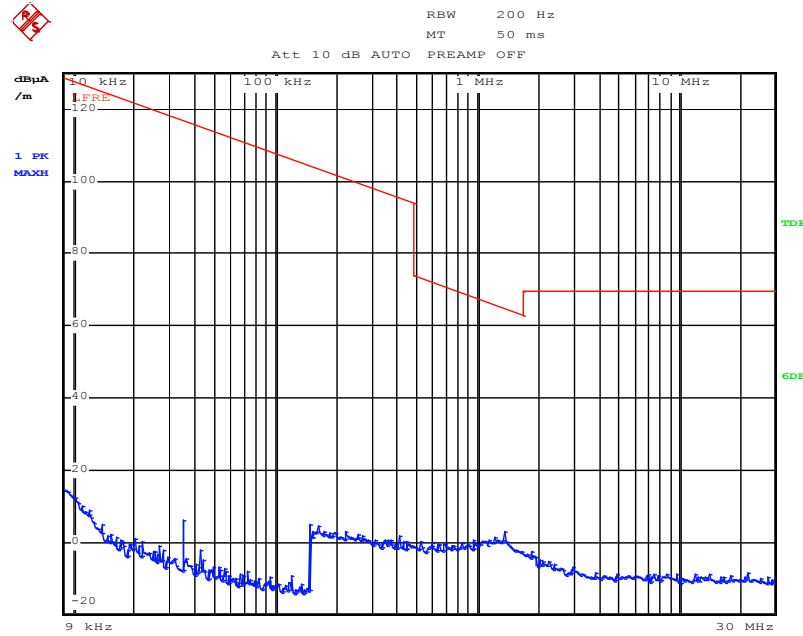
Job No.: PYH #1524	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/22/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 16/15/51
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



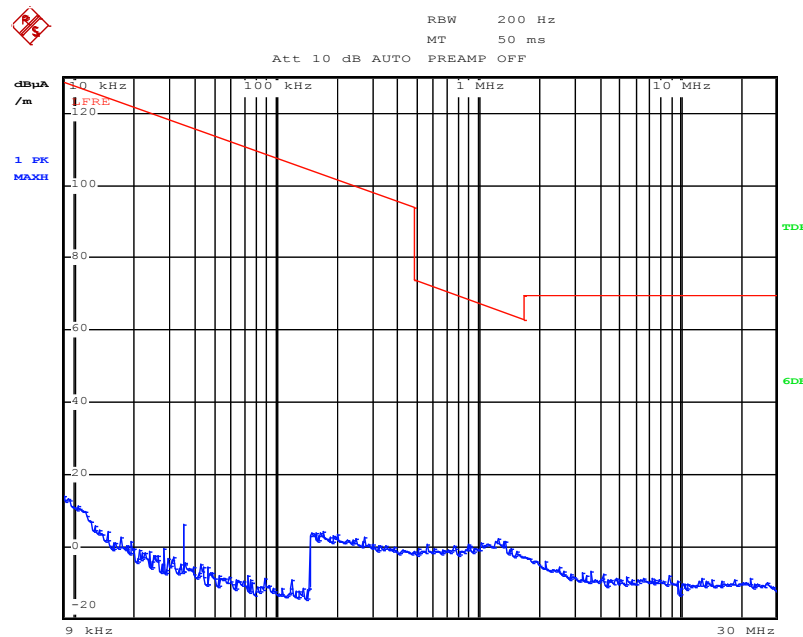
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24901.446	31.43	18.76	50.19	74.00	-23.81	peak			
2	24901.446	19.98	18.76	38.74	54.00	-15.26	AVG			

Figure 57: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 15:31:30

Figure 58: Test figure of spurious emissions, mode B, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 17.MAR.2013 15:33:27

Figure 59: Test figure of spurious emissions, mode B, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

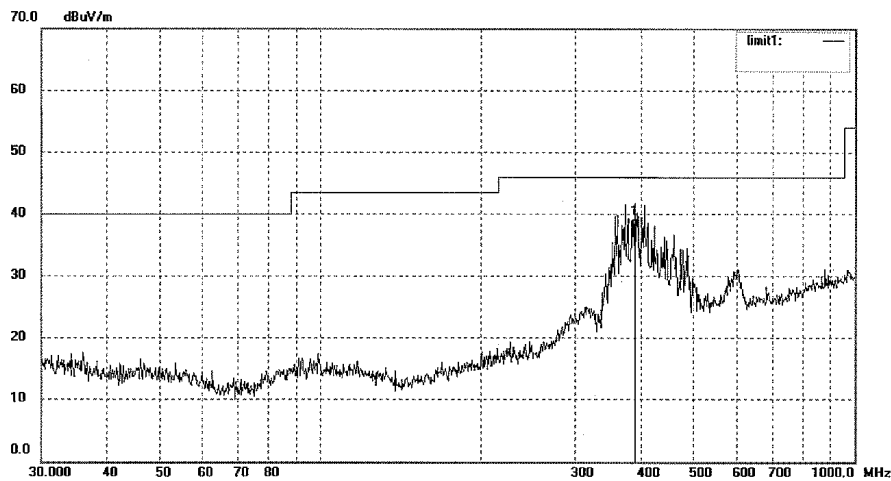
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1433	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 12/19/45
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	387.2565	45.10	-7.25	37.85	46.00	-8.15	QP			

Figure 60: Test figure of spurious emissions, mode B, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

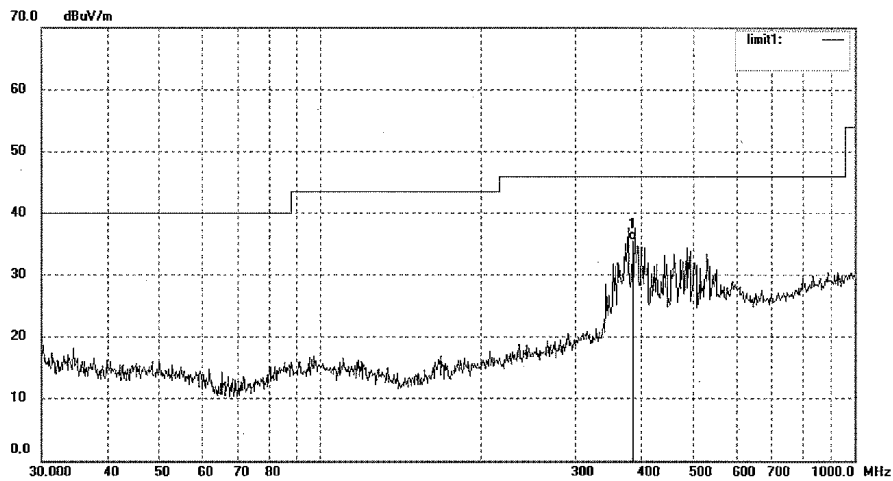
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PYH #1434	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 12/27/14
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	382.5565	42.86	-7.30	35.56	46.00	-10.44	QP			

Figure 61: Test figure of spurious emissions, mode B, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

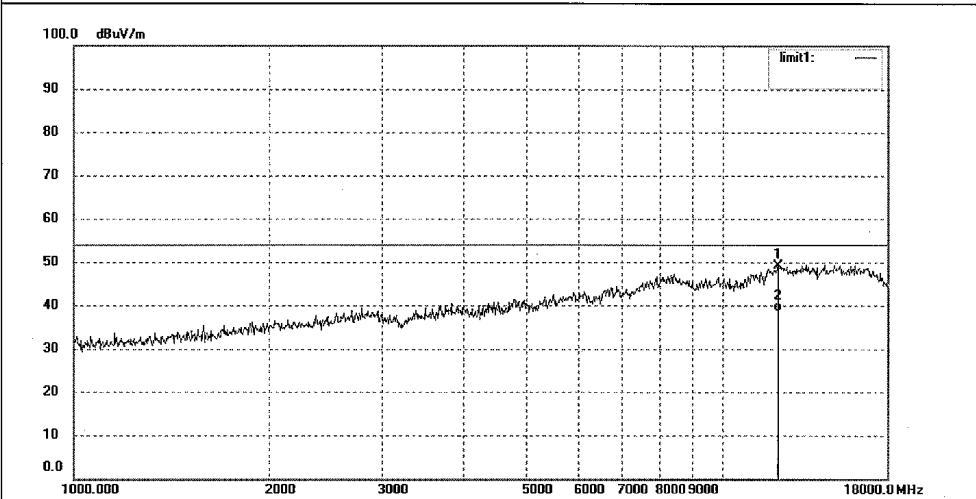
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1306	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 10/36/48
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12224.184	10.98	38.12	49.10	74.00	-24.90	peak			
2	12224.184	0.48	38.12	38.60	54.00	-15.40	AVG			

Figure 62: Test figure of spurious emissions, mode B, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

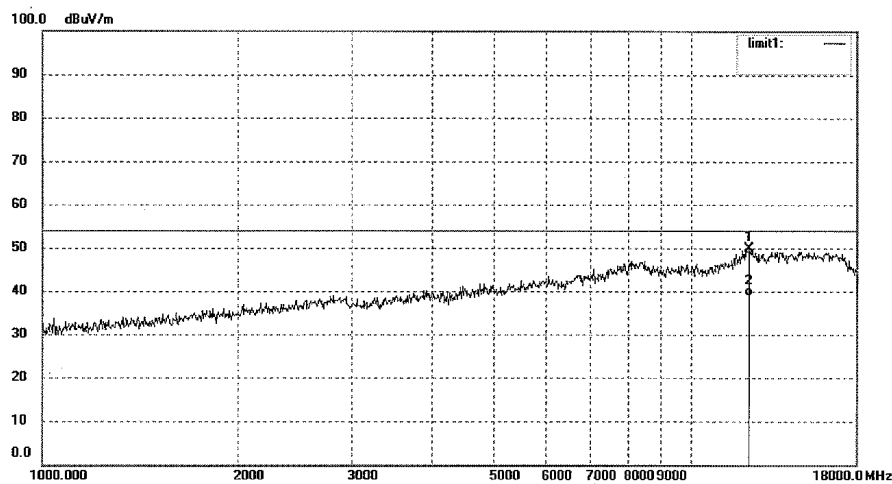
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1305	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 13/03/21/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 10/27/27
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12329.501	11.64	38.23	49.87	74.00	-24.13	peak			
2	12329.501	0.57	38.23	38.80	54.00	-15.20	AVG			

Figure 63: Test figure of spurious emissions, mode B, Horizontal polarity (18GHz –25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

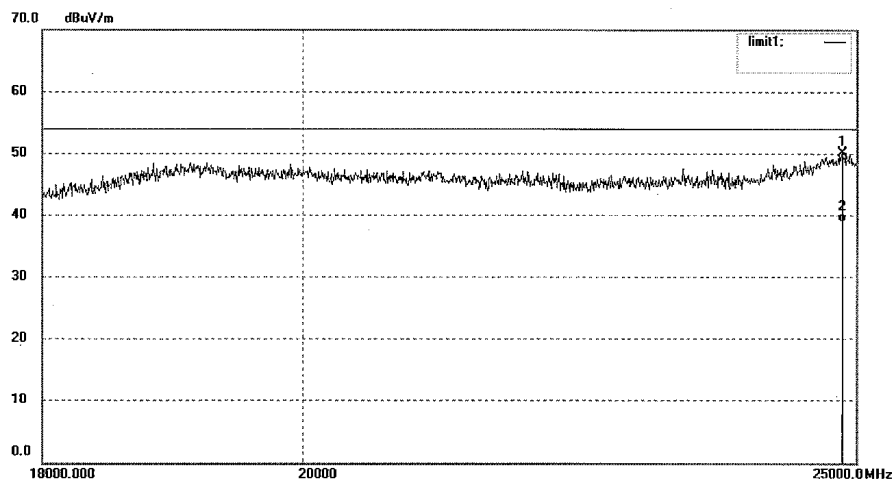
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1522
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Bluetooth Speaker
Mode: RX 2402MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Horizontal
Power Source: DC 3.7V
Date: 13/03/22/
Time: 15/59/59
Engineer Signature: PEI
Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24860.497	31.44	18.70	50.14	74.00	-23.86	peak			
2	24860.497	20.25	18.70	38.95	54.00	-15.05	AVG			

Figure 64: Test figure of spurious emissions, mode B, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

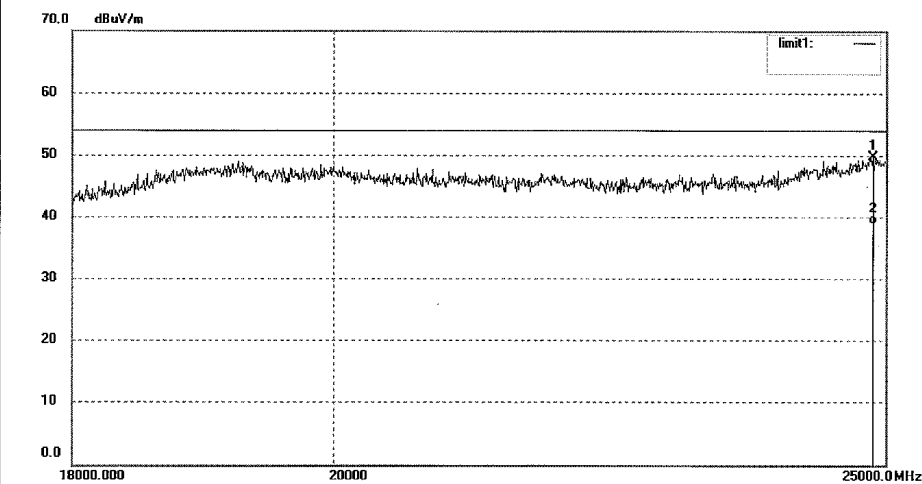
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1523
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Bluetooth Speaker
Mode: RX 2402MHz
Model: SP-310
Manufacturer: Accesspro

Polarization: Vertical
Power Source: DC 3.7V
Date: 13/03/22/
Time: 16/07/01
Engineer Signature: PEI
Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24876.868	30.99	18.73	49.72	74.00	-24.28	peak			
2	24876.868	20.18	18.73	38.91	54.00	-15.09	AVG			

Figure 65: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, GFSK Modulation

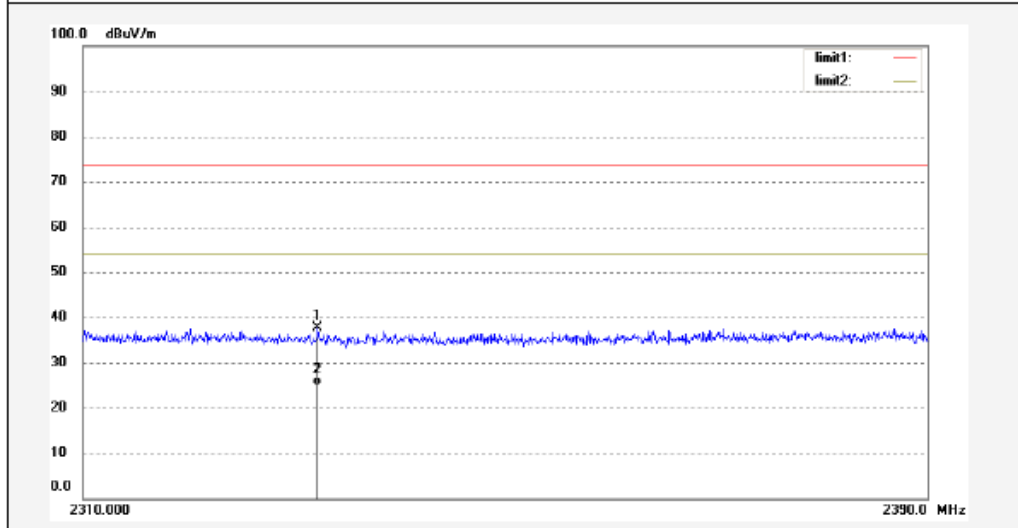


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1270	Polarization: Horizontal
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 18:54:20
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2332.012	45.39	-7.81	37.58	74.00	-36.42	peak			
2	2332.012	32.81	-7.81	25.00	54.00	-29.00	AVG			

Figure 66: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, GFSK Modulation

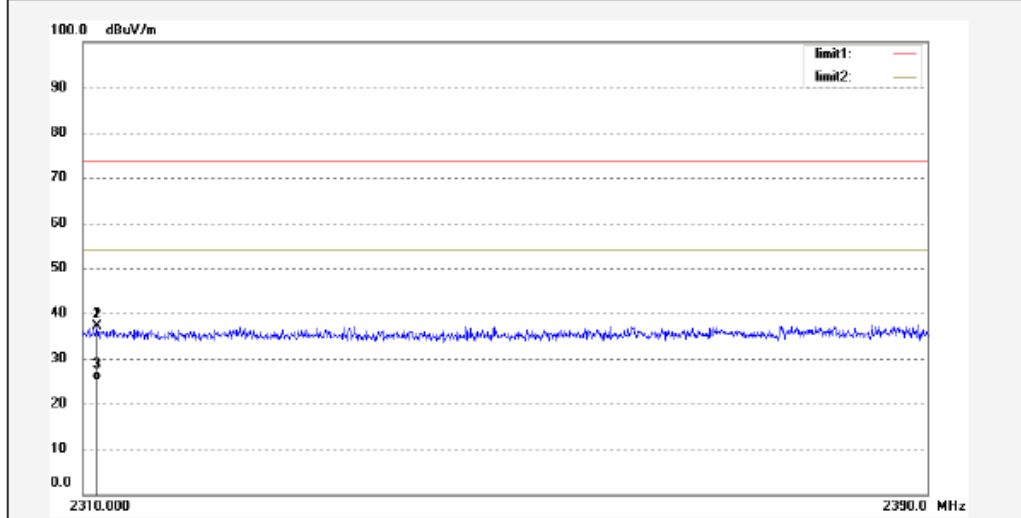


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1269	Polarization: Vertical
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 18:47:41
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2311.261	45.04	-7.81	37.23	74.00	-36.77	peak			
2	2311.261	45.04	-7.81	37.23	74.00	-36.77	peak			
3	2311.261	32.91	-7.81	25.10	54.00	-28.90	AVG			

Figure 67: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, GFSK Modulation

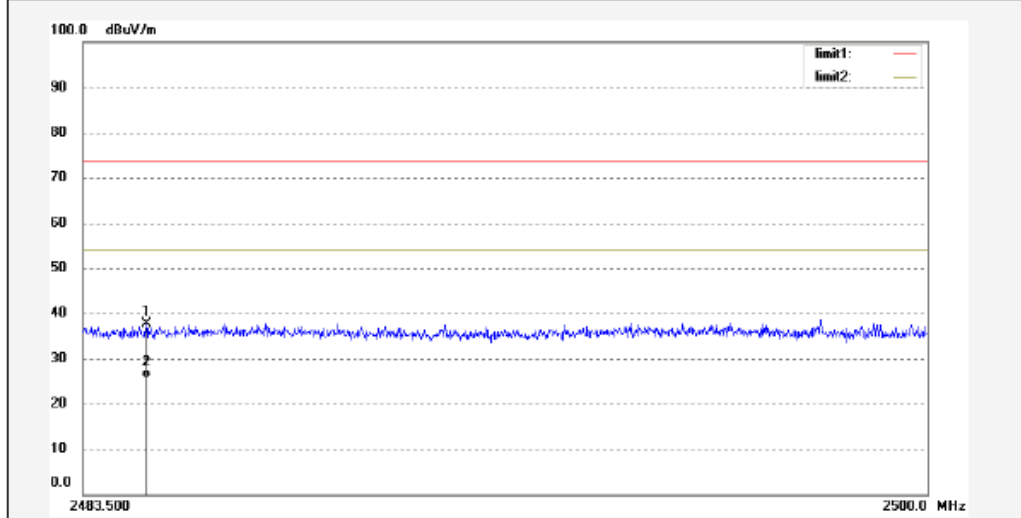


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1275	Polarization: Horizontal
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 19:40:45
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2484.736	45.06	-7.38	37.68	74.00	-36.32	peak			
2	2484.736	33.06	-7.38	25.68	54.00	-28.32	AVG			

Figure 68: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, GFSK Modulation

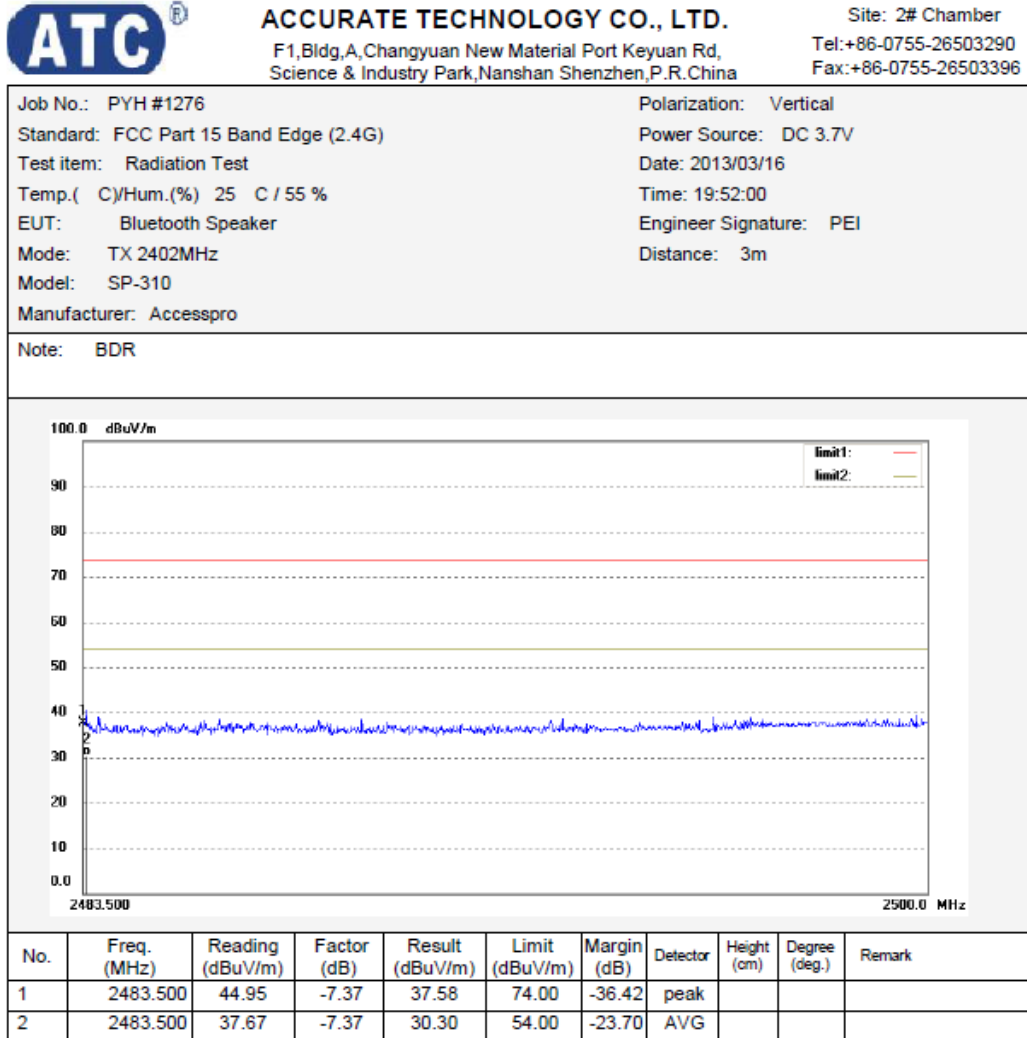


Figure 69: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, 8DPSK Modulation

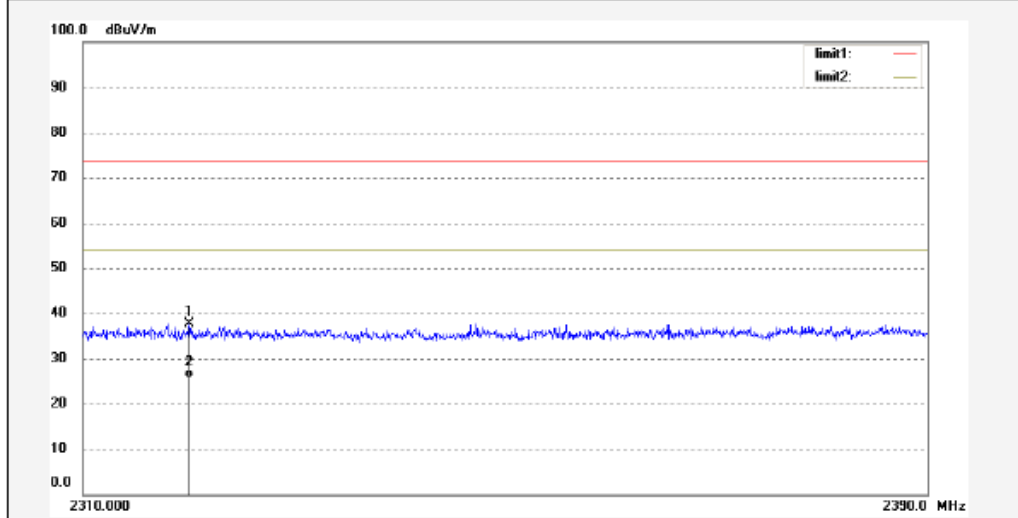


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1279	Polarization: Horizontal
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 20:27:02
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2319.951	45.52	-7.81	37.71	74.00	-36.29	peak			
2	2319.951	33.50	-7.81	25.69	54.00	-28.31	AVG			

Figure 70: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, 8DP SK Modulation

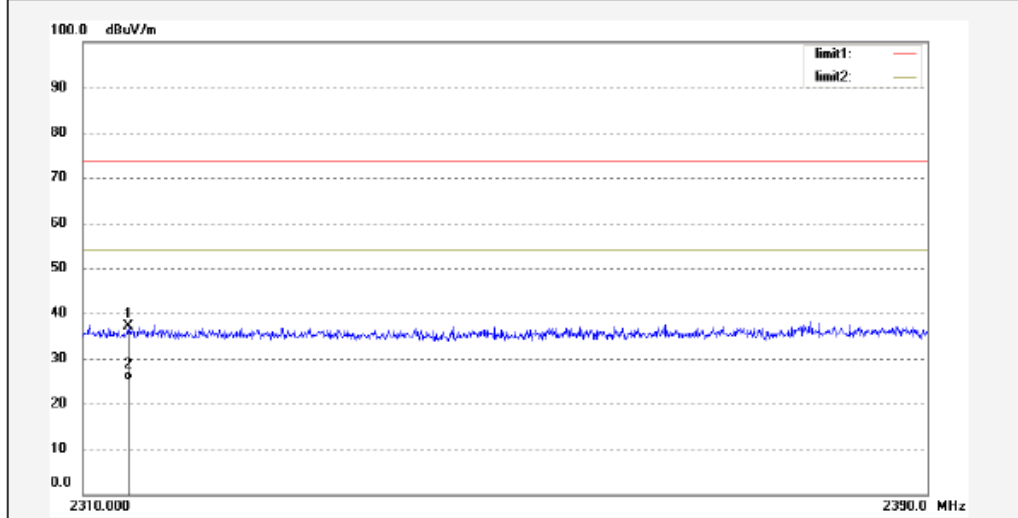


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1280	Polarization: Vertical
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 20:34:02
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2314.259	44.89	-7.81	37.08	74.00	-36.92	peak			
2	2314.259	33.00	-7.81	25.19	54.00	-28.81	AVG			

Figure 71: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, 8DPSK Modulation

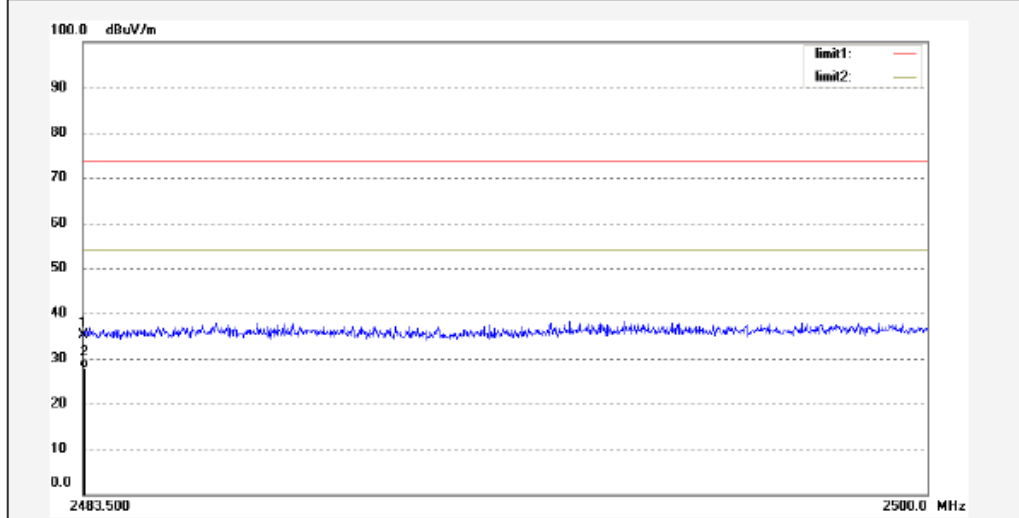


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1286	Polarization: Horizontal
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 21:31:03
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



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	42.60	-7.37	35.23	74.00	-38.77	peak			
2	2483.500	35.27	-7.37	27.90	54.00	-26.10	AVG			

Figure 72: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, 8DPSK Modulation

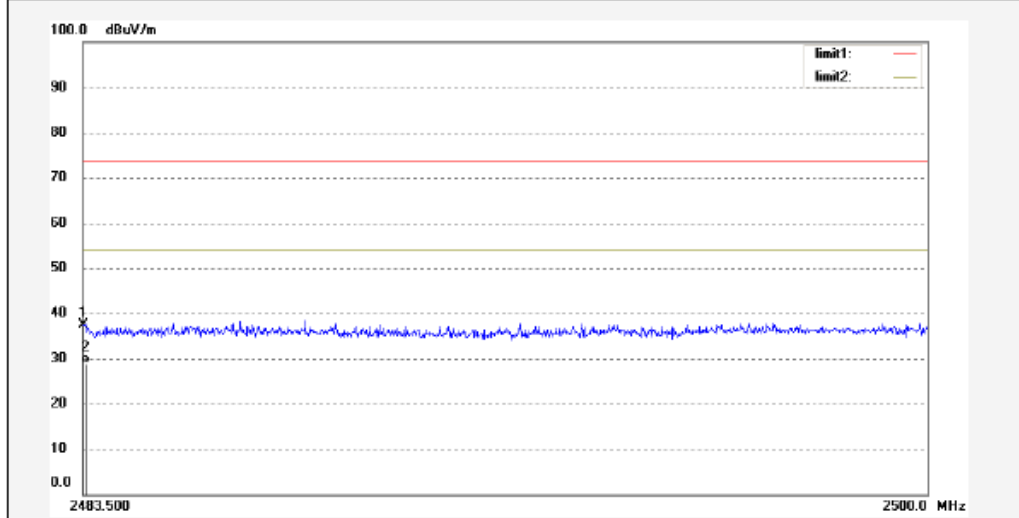


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: PYH #1285	Polarization: Vertical
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/16
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 21:29:51
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note: EDR



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	44.65	-7.37	37.28	74.00	-36.72	peak			
2	2483.500	36.17	-7.37	28.80	54.00	-25.20	AVG			

Figure 73: Test figure of Conducted emissions, Mode C, line live

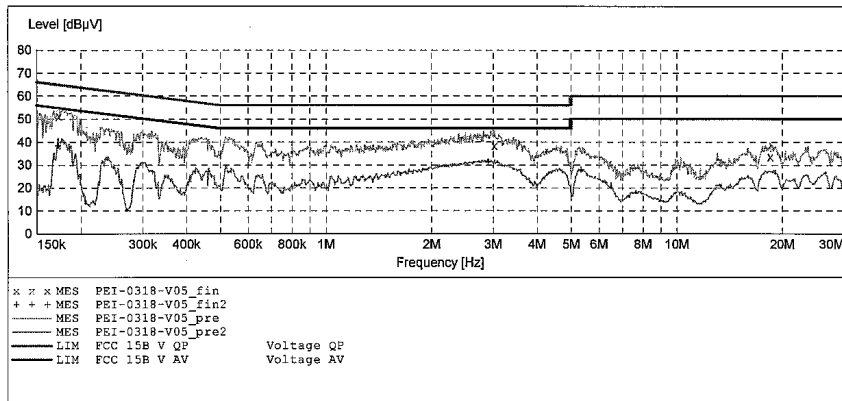
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth Speaker M/N:SP-310
 Manufacturer: Accesspro
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: PEI
 Test Specification: L 120V/60Hz
 Comment:
 Start of Test: 3/18/2013 / 8:31:16AM

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

Short Description: SUB STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "PEI-0318-V05_fin"

3/18/2013 8:33AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.173183	51.30	11.2	65	13.5	QP	L1	GND
3.030938	38.30	11.4	56	17.7	QP	L1	GND
18.490511	33.50	11.5	60	26.5	QP	L1	GND

MEASUREMENT RESULT: "PEI-0318-V05_fin2"

3/18/2013 8:33AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.172493	38.40	11.2	55	16.4	AV	L1	GND
2.912325	31.30	11.4	46	14.7	AV	L1	GND
5.342742	27.90	11.4	50	22.1	AV	L1	GND

Figure 74: Test figure of Conducted emissions, Mode C, line neutral

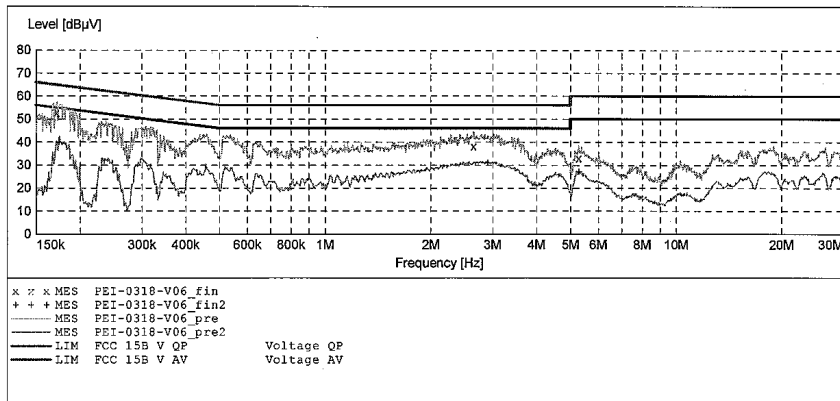
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth Speaker M/N:SP-310
 Manufacturer: Accesspro
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: PEI
 Test Specification: N 120V/60Hz
 Comment:
 Start of Test: 3/18/2013 / 8:33:51AM

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

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "PEI-0318-V06_fin"

3/18/2013 8:35AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.171806	52.80	11.2	65	12.1	QP	N	GND
2.646249	38.10	11.4	56	17.9	QP	N	GND
5.279139	32.90	11.4	60	27.1	QP	N	GND

MEASUREMENT RESULT: "PEI-0318-V06_fin2"

3/18/2013 8:35AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174571	39.70	11.2	55	15.0	AV	N	GND
2.912325	30.80	11.4	46	15.2	AV	N	GND
5.279139	27.10	11.4	50	22.9	AV	N	GND

Figure 75: Test figure of Radiated emissions, Mode C, Below 1GHz, Horizontal



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.: PYH #1555

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Bluetooth Speaker

Mode: Aux in

Model: SP-310

Manufacturer: Accesspro

Polarization: Horizontal

Power Source: DC 3.7V

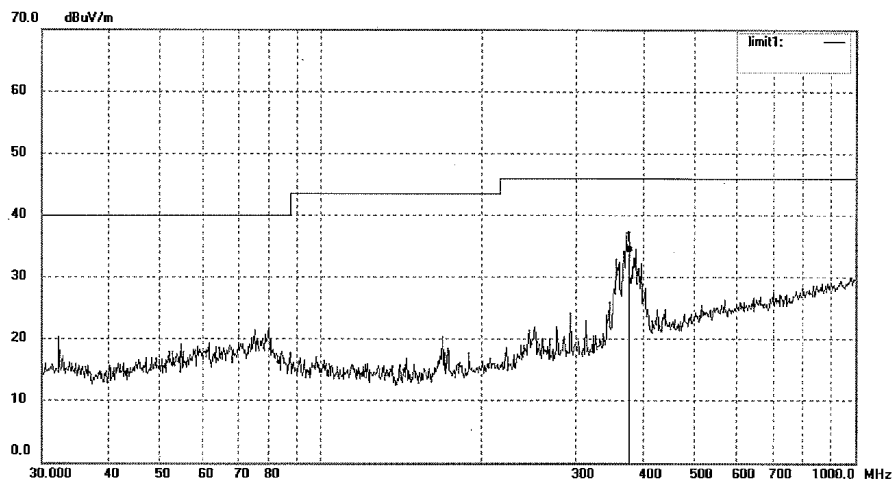
Date: 2013/03/26

Time: 2:54:15

Engineer Signature: PEI

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	375.9907	41.23	-7.41	33.82	46.00	-12.18	QP			

Figure 76: Test figure of Radiated emissions, Mode C, Below 1GHz, Vertical



ACCURATE TECHNOLOGY CO., LTD.

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

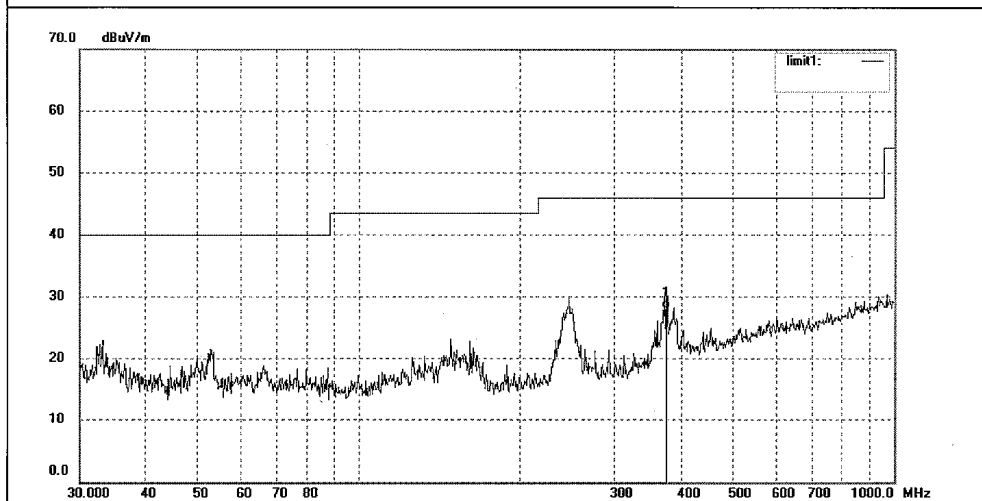
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1555	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/26
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 2:54:15
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: Aux in	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	377.8221	35.51	-7.38	28.13	46.00	-17.87	QP			

Figure 77: Test figure of Radiated emissions, Mode C, Above 1GHz, Horizontal



ACCURATE TECHNOLOGY CO., LTD.

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

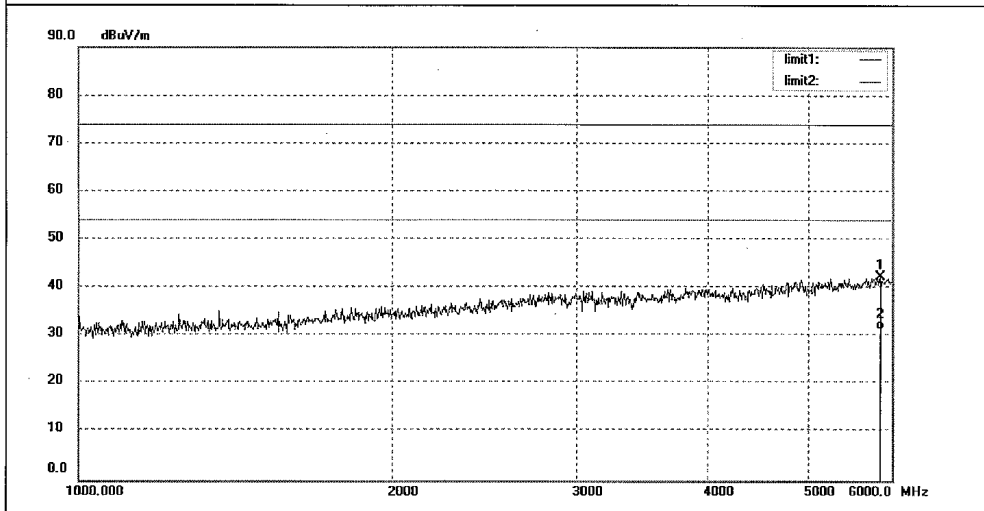
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1550	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/26
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 2:05:17
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: Aux in	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5850.478	40.36	1.96	42.32	74.00	-31.68	peak			
2	5850.478	29.48	1.96	31.44	54.00	-22.56	AVG			

Figure 78: Test figure of Radiated emissions, Mode C, Above 1GHz, Vertical



ACCURATE TECHNOLOGY CO., LTD.

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

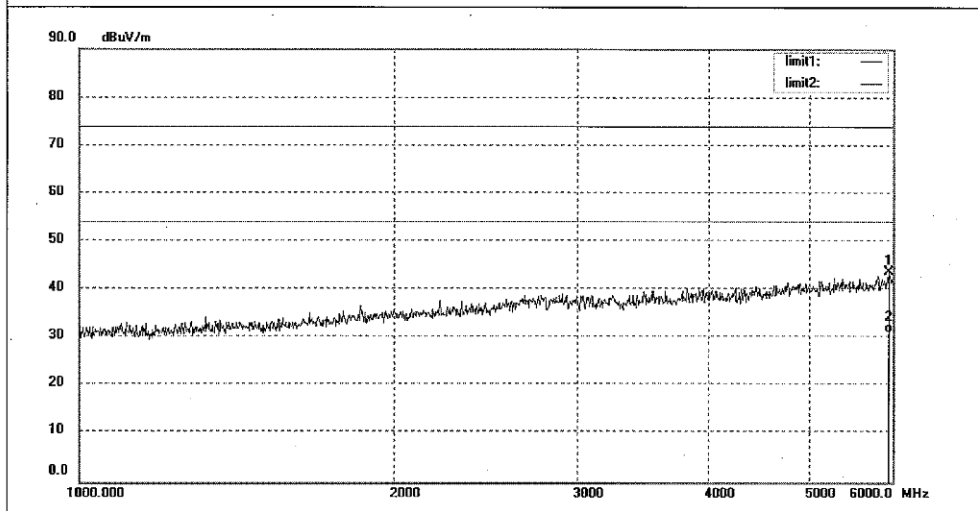
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1551	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2013/03/26
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 2:15:49
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: Aux in	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5946.166	41.57	2.10	43.67	74.00	-30.33	peak			
2	5946.166	29.13	2.10	31.23	54.00	-22.77	AVG			

Figure 79: Test figure of Radiated emissions, Mode D, Below 1GHz, Horizontal



ACCURATE TECHNOLOGY CO., LTD.

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

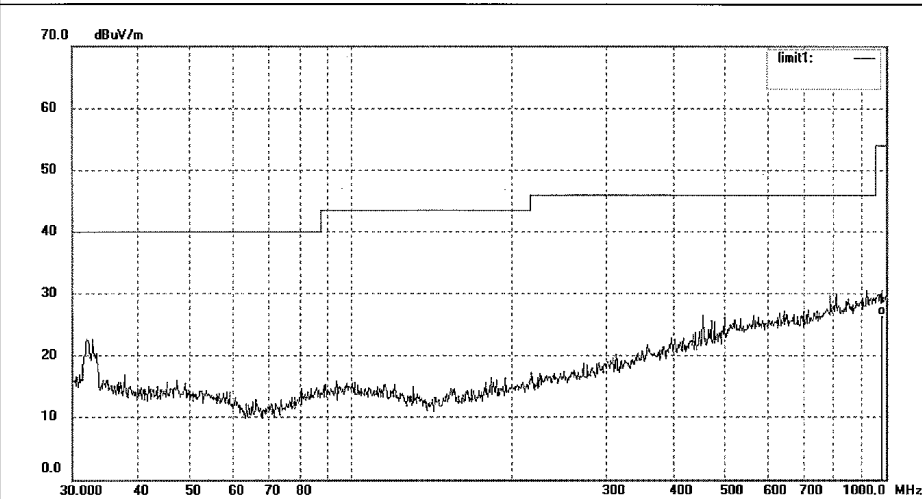
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1559	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 2013/03/26
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 3:32:42
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: Charging	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	986.0440	23.93	2.65	26.58	54.00	-27.42	QP			

Figure 80: Test figure of Radiated emissions, Mode D, Below 1GHz, Vertical



ACCURATE TECHNOLOGY CO., LTD.

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

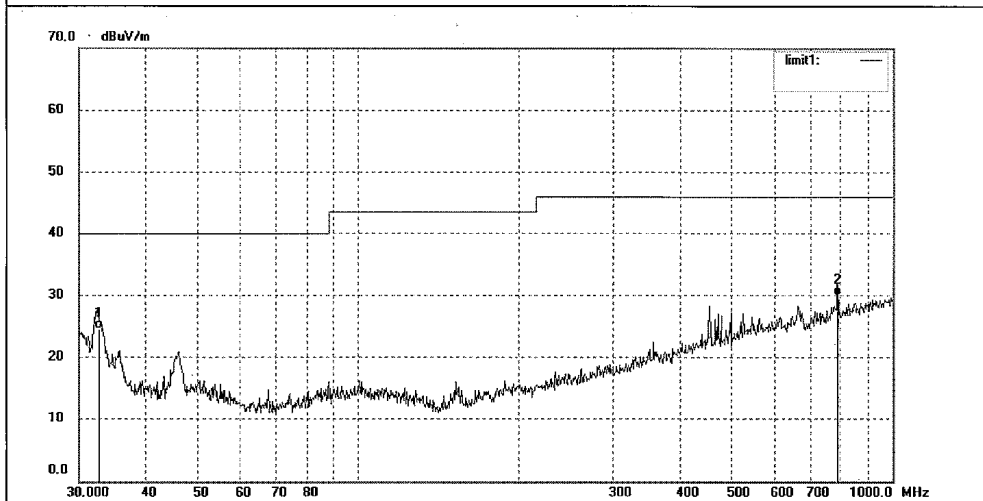
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1558	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 2013/03/26
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 3:23:28
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: Charging	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	33.0108	35.80	-11.23	24.57	40.00	-15.43	QP			
2	798.4685	30.11	-0.01	30.10	46.00	-15.90	QP			

Figure 81: Test figure of Radiated emissions, Mode D, Above 1GHz, Horizontal



ACCURATE TECHNOLOGY CO., LTD.

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

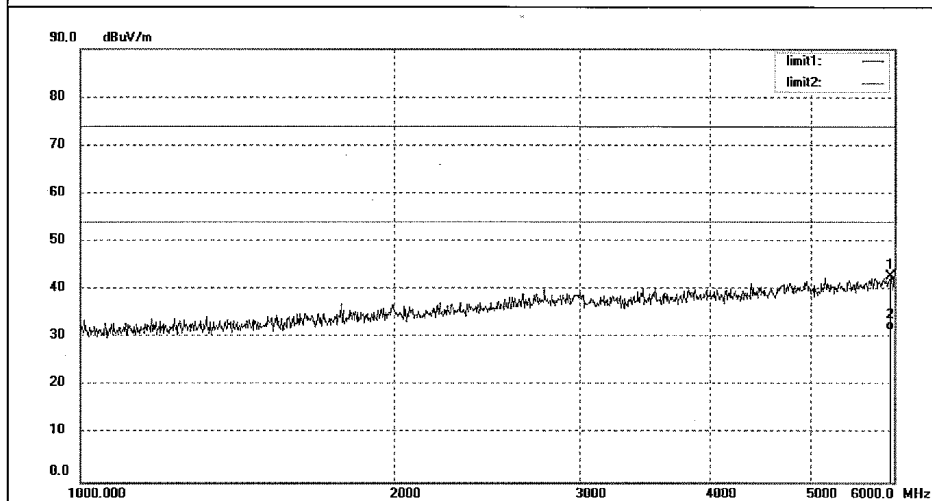
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1537	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 2013/03/25
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 23:56:10
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: Charging	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5956.894	40.73	2.14	42.87	74.00	-31.13	peak			
2	5956.894	29.42	2.14	31.56	54.00	-22.44	AVG			

Figure 82: Test figure of Radiated emissions, Mode D, Above 1GHz, Vertical



ACCURATE TECHNOLOGY CO., LTD.

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

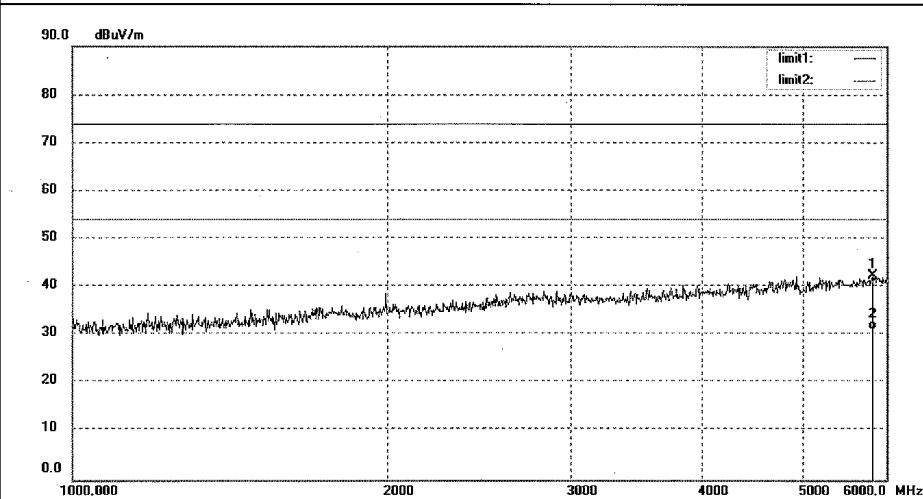
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PYH #1536	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 2013/03/25
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 23:47:46
EUT: Bluetooth Speaker	Engineer Signature: PEI
Mode: Charging	Distance: 3m
Model: SP-310	
Manufacturer: Accesspro	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5818.926	40.37	1.97	42.34	74.00	-31.66	peak			
2	5823.007	29.23	1.97	31.20	54.00	-22.80	AVG			