FCC RF Test Report
(BLE)

Applicant:	Shenzhen DOOGEE Hengtong Technology CO., LTD
Address of Applicant:	B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22, Dafu Industrial Zone, Guanlan Aobei Community, Guanlan Street, Longhua New District, Shenzhen, Guangdong China
Product Name:	Portable Wireless Speaker
Model No.:	BP05 (More models are listed in Section 2.2)
Brand Name:	DOOGEE, DOOGEE Eco
FCC ID:	2AX4YBP05
Test Standards:	FCC CFR Title 47 Part 15C (§15.247)
Date of Sample Receipt:	Jun. 01, 2026
Date of Test:	Jun. 02 to 08, 2026

Date of Report Issue:
Jun. 09, 2026

Prepared By:
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深圳市阿科特科技有限公司 测试专用章 Shenzhen Acote Technology Co., Ltd. Testing Service

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Report Revision History

Rev.	Issue Date	Description
V00	Jun. 09, 2026	Initial Release

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1 Laboratory Introduction

1.1 Laboratory Location

Company Name:	Shenzhen Acote Technology Co., Ltd.
Address of Laboratory:	Room 719, Excellence Times Building, No. 27, Xinqiao 3rd Road, Xinqiao Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong Province, China.
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1.2 Laboratory Facility

Our company's laboratory facilities have received accreditation, certification, or authorization from the following organizations:

- **FCC - Designation No.: CN1450**
  Shenzhen Acote Technology Co., Ltd. has been certified by the FCC (Federal Communications Commission) as a testing laboratory. Test Firm Registration Number: **832670**.
- **ISED - CAB Identifier: CN0202**
  Shenzhen Acote Technology Co., Ltd. is registered with ISED (Innovation, Science and Economic Development Canada) as a Conformity Assessment Body (CAB) for radio equipment testing.
- **A2LA - Accreditation Number: 7697.01**
  Shenzhen Acote Technology Co., Ltd. has been accredited by A2LA (American Association for Laboratory Accreditation) in compliance with the internationally recognized standard ISO/IEC 17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."

1.3 Announcement

Shenzhen Acote Technology Co., Ltd. tested the equipment in accordance with the requirements set forth in the test standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by Shenzhen Acote Technology Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Shenzhen Acote Technology Co., Ltd. will constitute fraud and shall nullify the document.

1.4 Disclaimer

For the information or data provided by the client in this report, the relevant results or conclusions of this report are only made for these data or information. The testing laboratory is not responsible for the authenticity and accuracy of these data or information.

2 Equipment Under Test Information

2.1 Application Information

Applicant:	Shenzhen DOOGEE Hengtong Technology CO., LTD
Address of Applicant:	B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22, Dafu Industrial Zone, Guanlan Aobei Community, Guanlan Street, Longhua New District, Shenzhen, Guangdong China
Manufacturer:	Shenzhen DOOGEE Hengtong Technology CO., LTD
Address of Manufacturer:	B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22, Dafu Industrial Zone, Guanlan Aobei Community, Guanlan Street, Longhua New District, Shenzhen, Guangdong China
Factory:	Shenzhen Xinyicheng Acoustic Electronics Co., Ltd
Address of Factory:	8F Rongshengda Industrial Park, LiaoKeng, Langxin, Shiyan, BaoAn, Shenzhen, China

2.2 Product Information

Product Name:	Portable Wireless Speaker
Model No.:	BP05
Models of Product Family:	BP04, BP06, BP07, BP08
Description of Model Differentiation:	This product series includes a total of 5 models. All models share an identical RF design, including the same RF chipset, RF circuit design, PCB layout, antenna type, antenna location, and antenna gain. The only difference is the model name.
Hardware Version:	V02
Software Version:	V01

2.3 EUT Technical Parameters

Operation Frequency:	2402MHz ~ 2480MHz
Modulation Technology:	Other Modulation
Modulation Type:	GFSK
Date Speed:	☒ 1Mbps (LE 1M PHY) ☐ 2Mbps (LE 2M PHY) ☐ 125kbps (LE Coded PHY, S=8) ☐ 500kbps (LE Coded PHY, S=2)
Channel Numbers:	40
Antenna Type:	PCB Antenna
Antenna Gain:	-0.347 dBi (declared by applicant)
Power Supply:	Rechargeable Li-ion Battery 11.10Vdc, 4000mAh
External power supply:	DC 5.0V
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3 Test Information

3.1 Test Methodology

The tests documented in this report were performed in accordance with:

- FCC CFR Title 47 Part 2
- FCC CFR Title 47 Part 15C (§15.247)
- ANSI C63.10:2020
- KDB 558074 D01 15.247 Meas Guidance v05r02

3.2 Test Result Summary

Report Section	Test Items	Standard Clause	Test Result
5.1	Antenna Requirement	§15.203 §15.247 (b)(4)	Pass
5.2	AC Power Line Conducted Emission	§15.207	Pass
5.3	Duty Cycle	ANSI C63.10-2020 Section 11.6	/
5.4	Conducted Output Power	§15.247 (b)(3)	Pass
5.5	6dB Emission Bandwidth	§15.247 (a)(2)	Pass
	99% Occupied Bandwidth	ANSI C63.10-2020 Section 6.9.3	
5.6	Power Spectral Density	§15.247 (e)	Pass
5.7	Band-edge Emission	§15.247 (d)	Pass
5.8	Conduction Spurious Emission	§15.247 (d)	Pass
5.9	Emissions in Restricted Frequency Bands	§15.205 §15.247 (d)	Pass
5.10	Emissions in Non-restricted Frequency Bands	§15.209 §15.247(d)	Pass

Remark:

a) Pass: The EUT complies with the essential requirements in the standard.

b) N/A: Not applicable.

c) The test cable insertion loss used for RF output power and other conducted measurements is provided by the applicant.

3.3 Environment of test site

Temperature:	15 ~ 35°C
Humidity:	20 ~ 75% RH
Atmospheric Pressure:	990 ~ 1010 mbar

3.4 Measurement Uncertainty

Parameter	**Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))**
Radio Frequency	±2 x 10^{-8}
RF Power, Conducted	±0.66 dB
Spurious emission, Conducted	±2.28 dB
Bandwidth, Conducted	±4%
Temperature	±0.3 °C
Voltage	±0.1 %
Humidity	±2 %
Conducted Emission (9kHz ~ 150kHz)	±3.02 dB
Conducted Emission (30MHz ~ 1000MHz)	±2.52 dB
Radiated Emission (30MHz ~ 1000MHz) (3m SAC)	±4.78 dB
Radiated Emission (1GHz ~ 6GHz) (3m SAC)	±5.16 dB
Radiated Emission (6GHz ~ 18GHz) (3m SAC)	±5.48 dB
Radiated Emission (18GHz ~ 40GHz) (3m SAC)	±5.48 dB
Note: *All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.*	

3.5 Description of Support Units

Description	Model	Manufacturer	Serial Number
Laptop	ThinkPad X1 Carbon 7th	Lenovo	PF-28E6G9 20/08
Power Adapter	U700TSA	TECNO	KX07019243B13

3.6 Additions to, Deviations, or Exclusions from the Method

None

3.7 Test Instruments List

Radiated Emission(3m SAC)				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
3m SAC	YiHeng	9m*6m*6m	20250422	2028/05/28
EMI Test Receiver	Rohde & Schwarz	ESR7	101542	2026/08/31
TRILOG Broad Band Antenna (30MHz – 1000MHz)	Schwarzbeck	VULB 9168	9168-771	2026/09/08
6dB Attenuator	SRTechnology Corporate	N-ATTENUATOR(6dB)	311248	2026/08/31
Preamplifier (30MHz – 1000MHz)	TESTEK	TK-PA06S	190014-L	2026/08/31
Broadband Horn Antenna (1GHz – 18GHz)	Gwave Technology	GHA0118A-11	20251014010	2026/11/16
Preamplifier (1GHz – 18GHz)	Gwave Technology	GWLAN008018-50	20251014010	2026/10/23
Broadband Horn Antenna (18GHz – 40GHz)	Gwave Technology	GHA180400-292F-20	20251014010	2026/11/16
Preamplifier (18GHz – 40GHz)	Gwave Technology	GWLAN018040-45	20251014010	2026/10/23
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805225/4	2026/08/31
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805226/4	2026/08/31
RF Cable (18GHz – 40GHz)	MWRFTest	UCA400-2.92M2092M-1.5M	004	2026/10/23
RF Cable (18GHz – 40GHz)	Gwave Technology	GAU3-292M292M-3000A1	20251021001-01-01	2026/10/23
RF Cable (18GHz – 40GHz)	Gwave Technology	GAU3-292M292M-600A1	20251021001-01-01	2026/10/23
High-pass filter (1GHz – 18GHz)	K&L MICROWAVE	11SH10-2000/U1800-O/O	350	2026/10/23
High-pass filter (3GHz – 18GHz)	UIY	UIYHPF3025A4T18SF	DL0019131	2026/10/23
High-pass filter (7GHz – 18GHz)	Narda	F4036A	1572	2026/10/23
Spectrum Analyzer	Rohde & Schwarz	FSP40	102129	2026/07/04
Test Software	Frad	EZ_EMC	Version: EMEC-3A1	N/A

Conducted Emission				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESR3	101763	2026/08/31
TWO-LINE V-NETWORK	Rohde & Schwarz	ENV216	101078	2026/08/31
RF Cable (9kHz – 30MHz)	REBES	WG4R-60-60-3	210305	2026/08/31
Test Software	Frad	EZ_EMC	Version: EMEC-3A1	N/A

RF Conducted Measurement				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
Spectrum Analyzer	Keysight	N9020A	MY56060179	2026/11/13
Vector Signal Generator	Agilent	N5182A	MY49060467	2026/11/13
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	123351	2026/11/13
Automatic control unit (including power sensor)	MWRFTest	MW100-RFCB	MW250722AKT-59	2026/11/13
BT/WiFi automated testing software	MWRFTest	MTS8310	Version: 2.0.0.0	N/A

4 Test Configuration of EUT

4.1 Channels Selected to Perform the Tests

Channels	Channel No.	Frequency (MHz)
Lowest	0	2402
Middle	19	2440
Highest	39	2480

4.2 Test Mode

TM 1:	Keep the EUT in continuously transmitting mode

4.3 Worst-case Configuration

The worst-case scenario for all measurements is based on an engineering evaluation made on all modulation types at different data rate. The details are as follows:

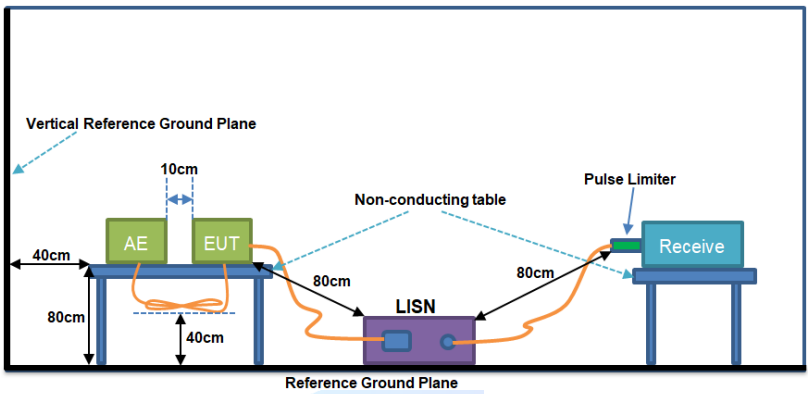
Report Section	Test Channel	Test Mode	Modulation Type
5.2	/	TM 1	1Mbps (LE 1M PHY)
5.3	L, M, H	TM 1	
5.4	L, M, H	TM 1	
5.5	L, M, H	TM 1	
5.6	L, M, H	TM 1	
5.7	L, H	TM 1	
5.8	L, M, H	TM 1	
5.9	L, H	TM 1	
5.10	L, M, H	TM 1	

Note:

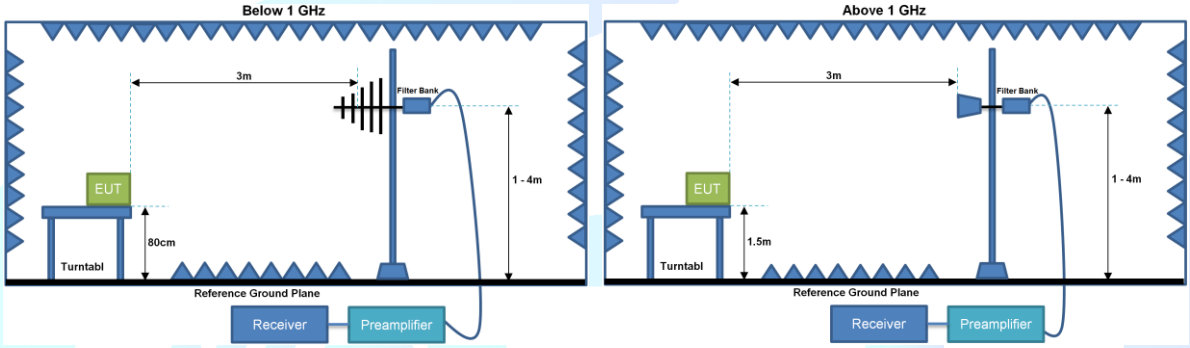
1) The EUT was investigated in three orthogonal orientations X, Y and Z, it was determined that Y was the worst-case of radiated field strength.
2) For Section 5.2, only the modulation type and the channel corresponding to the highest output power were tested.
3) For the 30 MHz to 1000 MHz range in Section 5.10, only the modulation type and the channel corresponding to the highest output power were tested.
4) For frequencies above 1 GHz in Section 5.10, measurements were performed up to the 10th harmonic of the fundamental frequency (or up to 40 GHz). Frequencies with emission levels at least 20 dB below the limit are not presented in the test report.

4.4 Test Setup Block

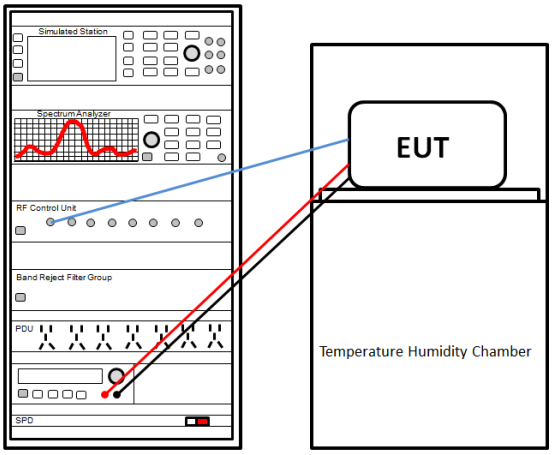
Setup 1 (Conducted Emission):



Setup 2 (Radiated Emission):



Setup 3 (MTS8310 Testing System):



5 Technical requirements specification

5.1 Antenna Requirement

5.1.1 Requirement

15.203 Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) Requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.1.2 Results

Pass.

The Bluetooth antenna is an PCB antenna which permanently attached, and the best case gain of the antenna is -0.347 dBi. See product internal photos for details.

5.2 AC Power Line Conducted Emission

5.2.1 Limits

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 Note 1	56 to 46 Note 1
0.5 – 5	56	46
5 – 30	60	50
Note 1: The limit level in dBμV decreases linearly with the logarithm of frequency. Note 2: The more stringent limit applies at transition frequencies.		

5.2.2 Test Procedure

a) The EUT was placed on a non-conductive table, 40 cm from the vertical ground plane and 80 cm from the horizontal ground plane. The EUT was arranged in accordance with ANSI C63.10.

b) The EUT was configured to operate in TM 1 mode as specified in Section 4.2. The test channels and modulation types of the EUT are described in Section 4.3.

c) The phase of the LISN was set to L1.

d) Open the test software, load the conducted emission test script, or create a new conducted emission test script, and configure the test parameters, including the test frequency range, RBW = 9kHz, VBW = 30kHz, test standard, LISN, receiver, and other related settings.

e) The test script was executed, the measurement was performed. Save the test data.

f) The phase of the LISN was set to N, and steps d) and e) were repeated.

5.2.3 Test Setup

See setup 1 in section 4.4.

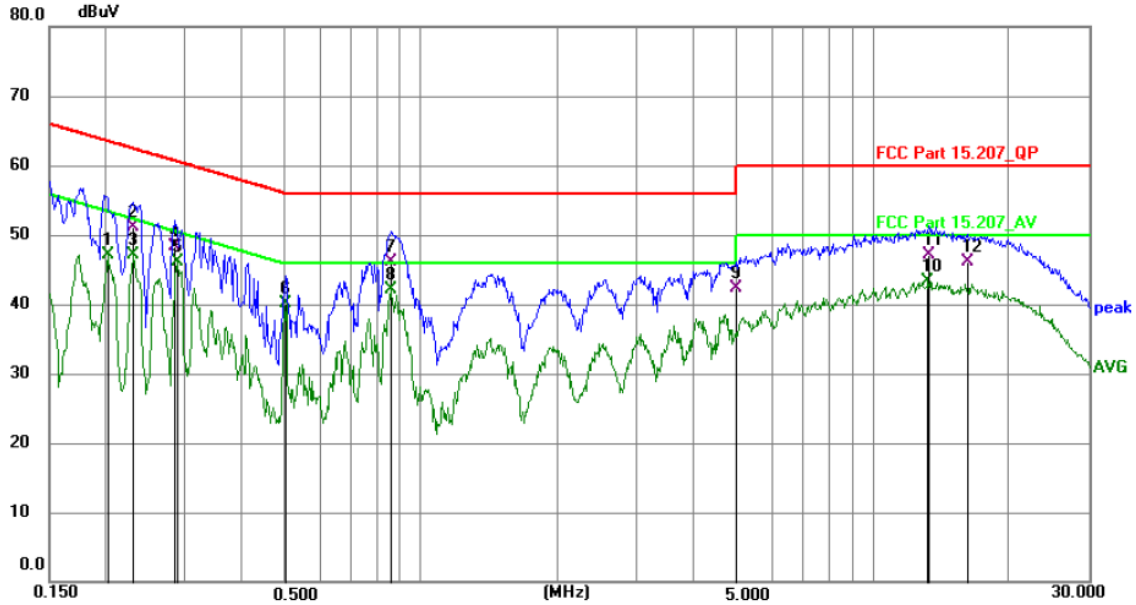
5.2.4 Test Instruments

Refer to section 3.7.

5.2.5 Test Results

Pass.

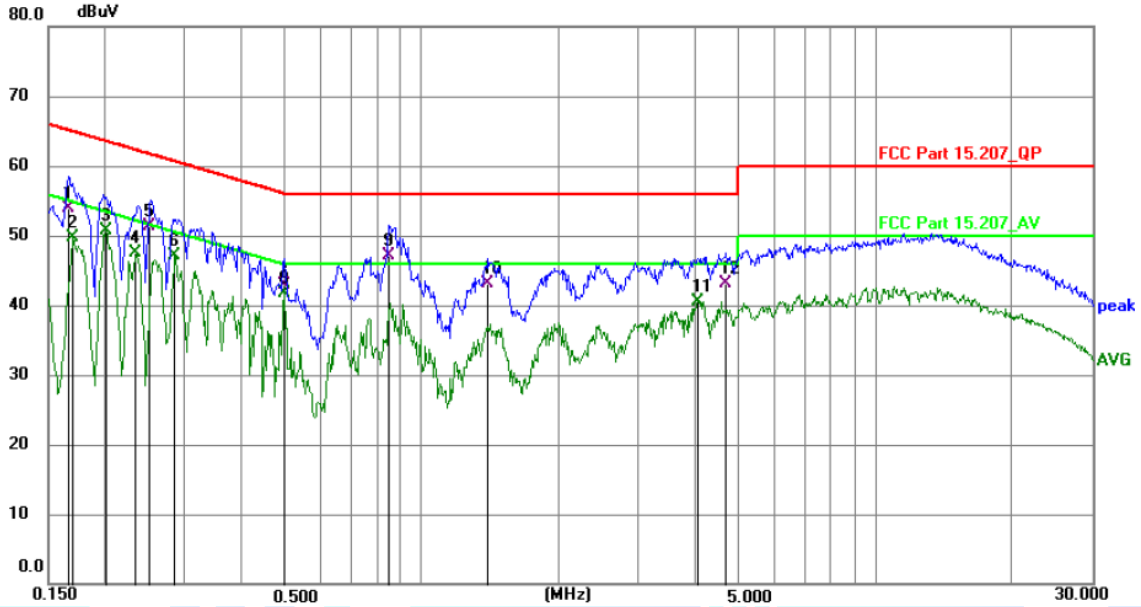
Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Tom Ye	**Test Mode:**	TM 1
Test Frequency:	150kHz ~ 30MHz	**Phase:**	Line
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2020	37.55	9.65	47.20	53.53	-6.33	AVG	P
2	0.2300	41.45	9.64	51.09	62.45	-11.36	QP	P
3	0.2300	37.52	9.64	47.16	52.45	-5.29	AVG	P
4	0.2860	38.65	9.64	48.29	60.64	-12.35	QP	P
5	0.2878	36.42	9.64	46.06	50.59	-4.53	AVG	P
6	0.5020	30.45	9.60	40.05	46.00	-5.95	AVG	P
7	0.8540	36.47	9.59	46.06	56.00	-9.94	QP	P
8 *	0.8540	32.61	9.59	42.20	46.00	-3.80	AVG	P
9	4.9940	32.63	9.61	42.24	56.00	-13.76	QP	P
10	13.2060	33.70	9.68	43.38	50.00	-6.62	AVG	P
11	13.3100	37.48	9.68	47.16	60.00	-12.84	QP	P
12	16.1940	36.45	9.70	46.15	60.00	-13.85	QP	P

Remark: *Level = Read level + LISN Factor + Cable Loss.*

Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Tom Ye	**Test Mode:**	TM 1
Test Frequency:	150kHz ~ 30MHz	**Phase:**	Neutral
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1660	44.18	9.65	53.83	65.16	-11.33	QP	P
2	0.1700	39.99	9.65	49.64	54.96	-5.32	AVG	P
3 *	0.2006	40.97	9.64	50.61	53.59	-2.98	AVG	P
4	0.2340	37.77	9.65	47.42	52.31	-4.89	AVG	P
5	0.2519	41.69	9.65	51.34	61.69	-10.35	QP	P
6	0.2860	37.55	9.64	47.19	50.64	-3.45	AVG	P
7	0.4980	33.20	9.61	42.81	56.03	-13.22	QP	P
8	0.4980	32.09	9.61	41.70	46.03	-4.33	AVG	P
9	0.8460	37.58	9.59	47.17	56.00	-8.83	QP	P
10	1.4020	33.62	9.58	43.20	56.00	-12.80	QP	P
11	4.0500	31.00	9.60	40.60	46.00	-5.40	AVG	P
12	4.6779	33.45	9.61	43.06	56.00	-12.94	QP	P

Remark: *Level = Read level + LISN Factor + Cable Loss.*

5.3 Duty Cycle

5.3.1 Limits

N/A.

5.3.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BLE test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.3.3 Test Setup

See setup 3 in section 4.4.

5.3.4 Test Instruments

Refer to section 3.7.

5.3.5 Test Results

Pass.
For detailed test data, see Appendix – BLE.

5.4 Maximum Peak Conducted Output Power

5.4.1 Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. The conducted output power limit is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.4.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BLE test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.4.3 Test Setup

See setup 3 in section 4.4.

5.4.4 Test Instruments

Refer to section 3.7.

5.4.5 Test Results

Pass.
For detailed test data, see Appendix – BLE.

5.5 6dB Emission Bandwidth and 99% Occupied Bandwidth

5.5.1 Limits

- The minimum 6 dB bandwidth shall be at least 500 kHz.
- 99% occupied bandwidth: N/A.

5.5.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BLE test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.5.3 Test Setup

See setup 3 in section 4.4.

5.5.4 Test Instruments

Refer to section 3.7.

5.5.5 Test Results

Pass.
For detailed test data, see Appendix – BLE.

5.6 Power Spectral Density

5.6.1 Limits

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

5.6.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BLE test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.6.3 Test Setup

See setup 3 in section 4.4.

5.6.4 Test Instruments

Refer to section 3.7.

5.6.5 Test Results

Pass.
For detailed test data, see Appendix – BLE.

5.7 Band-edge Emission

5.7.1 Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.7.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BLE test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.7.3 Test Setup

See setup 3 in section 4.4.

5.7.4 Test Instruments

Refer to section 3.7.

5.7.5 Test Results

Pass.
For detailed test data, see Appendix – BLE.

5.8 Conduction Spurious Emission

5.8.1 Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.8.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BLE test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.8.3 Test Setup

See setup 3 in section 4.4.

5.8.4 Test Instruments

Refer to section 3.7.

5.8.5 Test Results

Pass.
For detailed test data, see Appendix – BLE.

5.9 Emissions in Restricted Frequency Bands

5.9.1 Limits

Frequency (MHz)	Limits (dBμV/m) at 3m	Detector
30 - 88	40.0	Quasi-peak
88 - 216	43.5	Quasi-peak
216 - 960	46.0	Quasi-peak
960 - 1000	54.0	Quasi-peak
Note: The more stringent limits applies at transition frequencies.		
Frequency (MHz)	Limits (dBμV/m) at 3m	
	Average	Peake
Above 1GHz	54.0	74.

5.9.2 Test Procedure

a) The EUT is placed on a non-conducting table of the 3m SAC turntable, 80 cm above the ground plane for measurement below 1GHz, 1.5 m above the ground plane for measurement above 1GHz. The measurement receiving antenna to EUT distance is 3 meters. The EUT was arranged in accordance with ANSI C63.10.

b) The EUT is operated in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.

c) Open the test software, load the radiated emissions test script, or create a new radiated emissions test script, and configure the test parameters, including the test frequency range, RBW = 100kHz (for below 1GHz) or 1MHz (for above 1GHz), VBW = 300kHz (for below 1GHz) or 3MHz (for above 1GHz), test standard, test antenna, spectrum analyzer, and other related settings.

d) The test script was executed, the measurement was performed.

e) The turntable rotates 360 degrees, and the test antenna is raised and lowered within a range of 1 to 4 meters.

f) Use the spectrum analyzer's Max Hold function to record the maximum test trace. For frequencies below 1 GHz, mark the maximum Quasi-peak value. For frequencies above 1 GHz, mark the maximum Peak and Average values. Save the test data.

g) Both vertical and horizontal polarizations of the test antenna need to be tested.

5.9.3 Test Setup

See setup 2 in section 4.4.

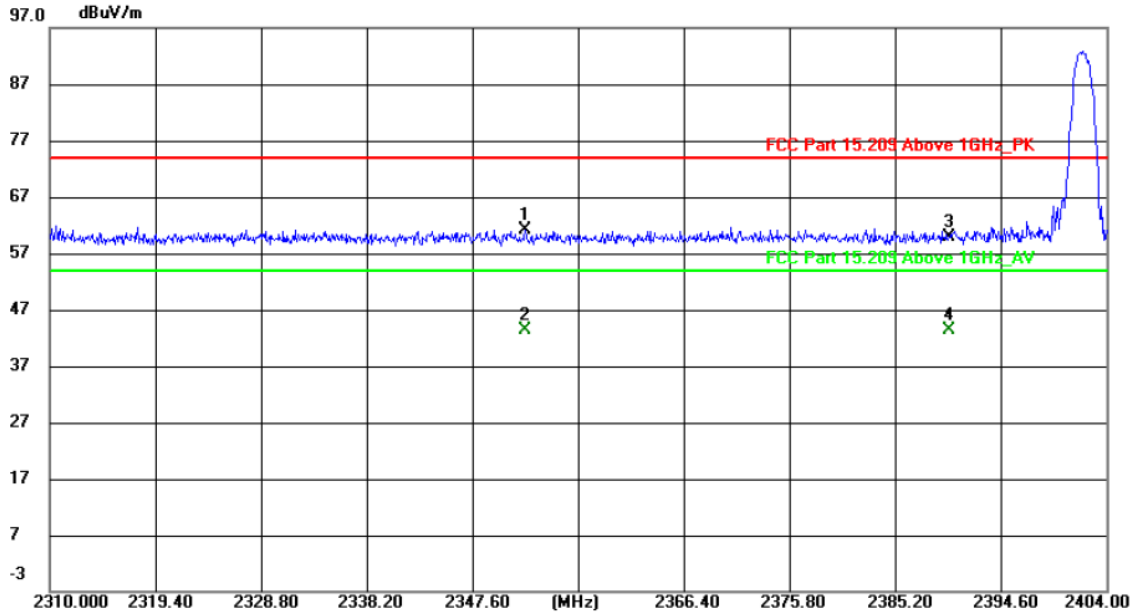
5.9.4 Test Instruments

Refer to section 3.7.

5.9.5 Test Results

Pass.

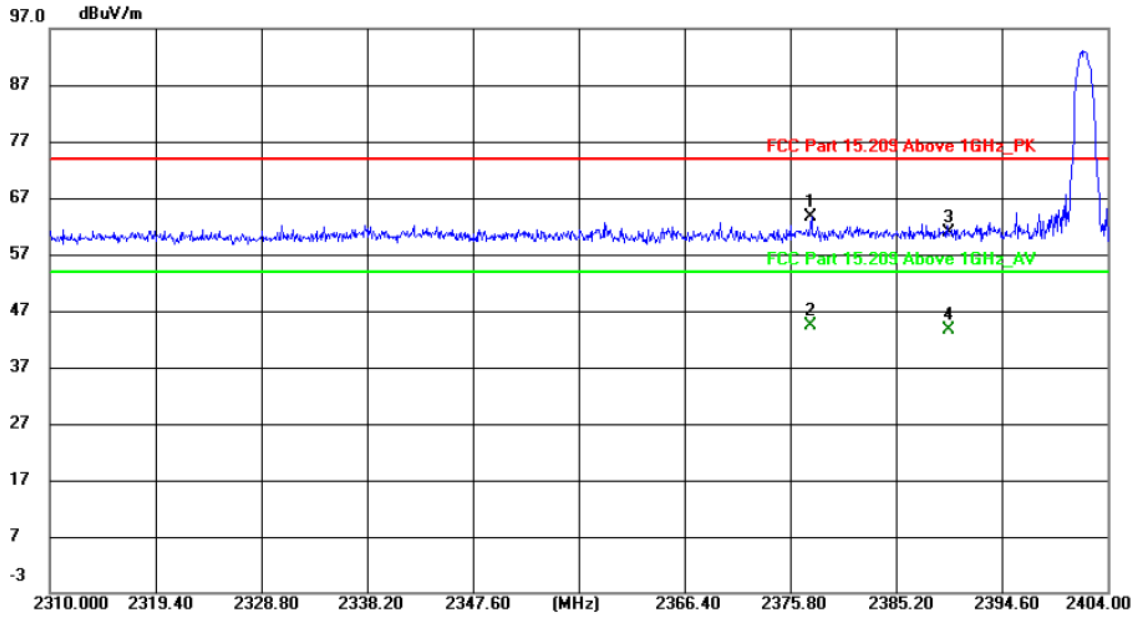
Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (LE 1M PHY)	**Polarization:**	Vertical
Test Voltage:	DC 11.10V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2352.312	28.92	32.19	61.11	74.00	-12.89	peak	P
2 *	2352.312	11.22	32.19	43.41	54.00	-10.59	AVG	P
3	2390.000	27.52	32.26	59.78	74.00	-14.22	peak	P
4	2390.000	11.06	32.26	43.32	54.00	-10.68	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

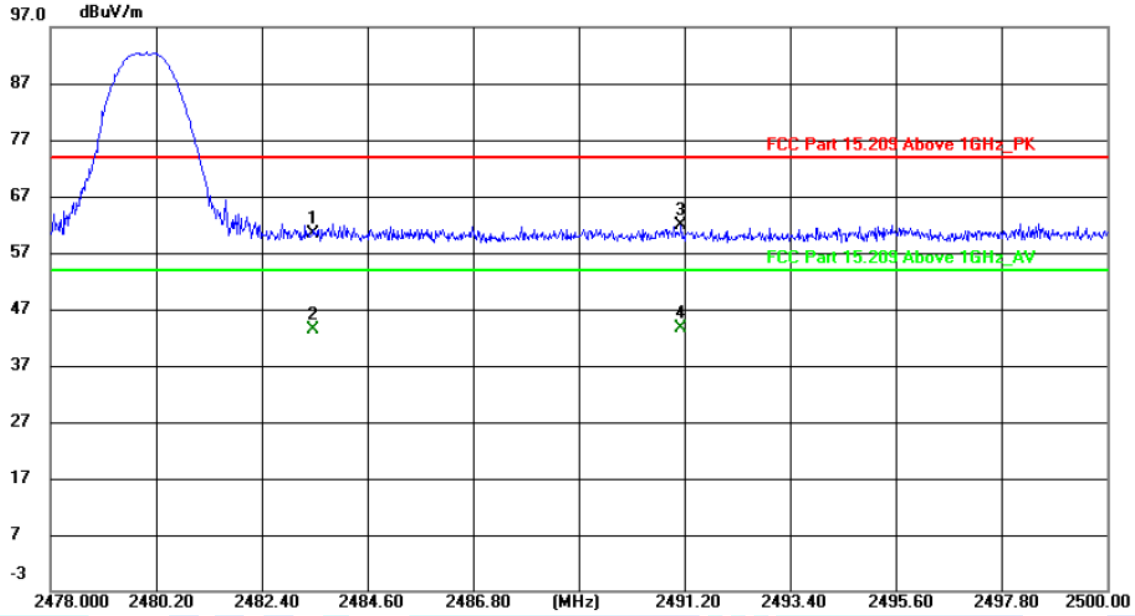
Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (LE 1M PHY)	**Polarization:**	Horizontal
Test Voltage:	DC 11.10V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2377.715	31.39	32.24	63.63	74.00	-10.37	peak	P
2 *	2377.715	12.11	32.24	44.35	54.00	-9.65	AVG	P
3	2390.000	28.61	32.26	60.87	74.00	-13.13	peak	P
4	2390.000	11.46	32.26	43.72	54.00	-10.28	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

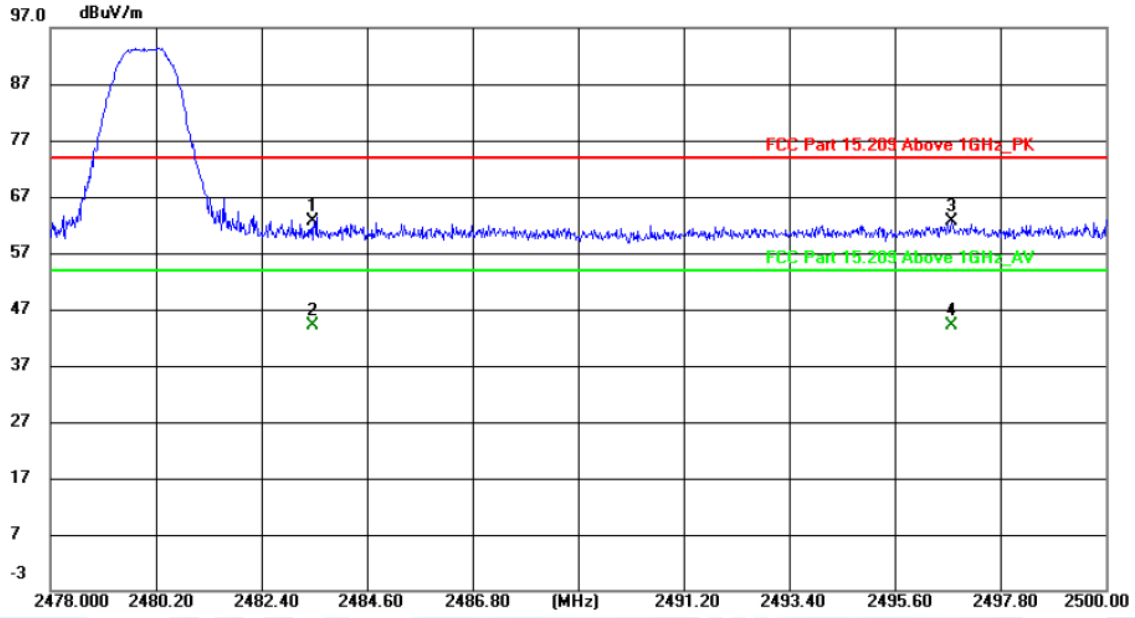
Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (LE 1M PHY)	**Polarization:**	Vertical
Test Voltage:	DC 11.10V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	28.00	32.44	60.44	74.00	-13.56	peak	P
2	2483.500	10.93	32.44	43.37	54.00	-10.63	AVG	P
3	2491.142	29.39	32.45	61.84	74.00	-12.16	peak	P
4 *	2491.142	11.20	32.45	43.65	54.00	-10.35	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (LE 1M PHY)	**Polarization:**	Horizontal
Test Voltage:	DC 11.10V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	30.10	32.44	62.54	74.00	-11.46	peak	P
2	2483.500	11.65	32.44	44.09	54.00	-9.91	AVG	P
3	2496.788	30.21	32.46	62.67	74.00	-11.33	peak	P
4 *	2496.788	11.74	32.46	44.20	54.00	-9.80	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

5.10 Emissions in Non-restricted Frequency Bands

5.10.1 Limits

Frequency (MHz)	Limits (dBμV/m) at 3m	Detector
30 - 88	40.0	Quasi-peak
88 - 216	43.5	Quasi-peak
216 - 960	46.0	Quasi-peak
960 - 1000	54.0	Quasi-peak
Note: The more stringent limits applies at transition frequencies.		
Frequency (MHz)	Limits (dBμV/m) at 3m	
	Average	Peake
Above 1GHz	54.0	74.

5.10.2 Test Procedure

a) The EUT is placed on a non-conducting table of the 3m SAC turntable, 80 cm above the ground plane for measurement below 1GHz, 1.5 m above the ground plane for measurement above 1GHz. The measurement receiving antenna to EUT distance is 3 meters. The EUT was arranged in accordance with ANSI C63.10.

b) The EUT operates according to the TM 1 mode settings in Section 4.2. The EUT test channel and modulation type settings see section 4.3.

c) Open the test software, load the radiated emissions test script, or create a new radiated emissions test script, and configure the test parameters, including the test frequency range, RBW = 100kHz (for below 1GHz) or 1MHz (for above 1GHz), VBW = 300kHz (for below 1GHz) or 3MHz (for above 1GHz), test standard, test antenna, spectrum analyzer, and other related settings.

d) The test script was executed, the measurement was performed.

e) The turntable rotates 360 degrees, and the test antenna is raised and lowered within a range of 1 to 4 meters.

f) Use the spectrum analyzer's Max Hold function to record the maximum test trace. For frequencies below 1 GHz, mark the maximum Quasi-peak value. For frequencies above 1 GHz, mark the maximum Peak and Average values. Save the test data.

g) Both vertical and horizontal polarizations of the test antenna need to be tested.

5.10.3 Test Setup

See setup 2 in section 4.4.

5.10.4 Test Instruments

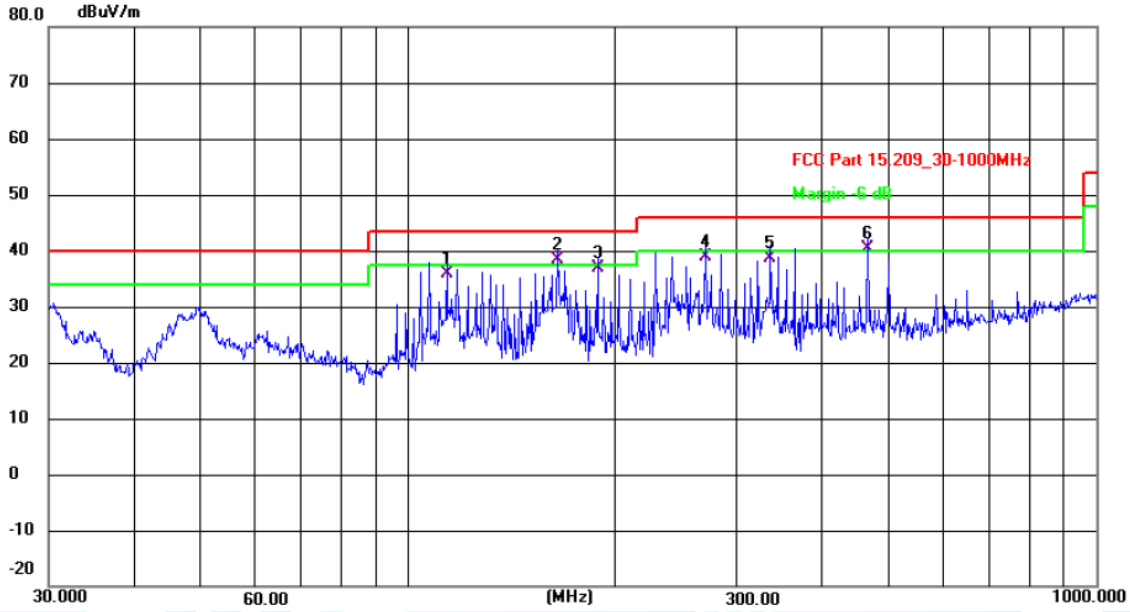
Refer to section 3.7.

5.10.5 Test Results

Pass.

1) Test Frequency Range: Below 1GHz

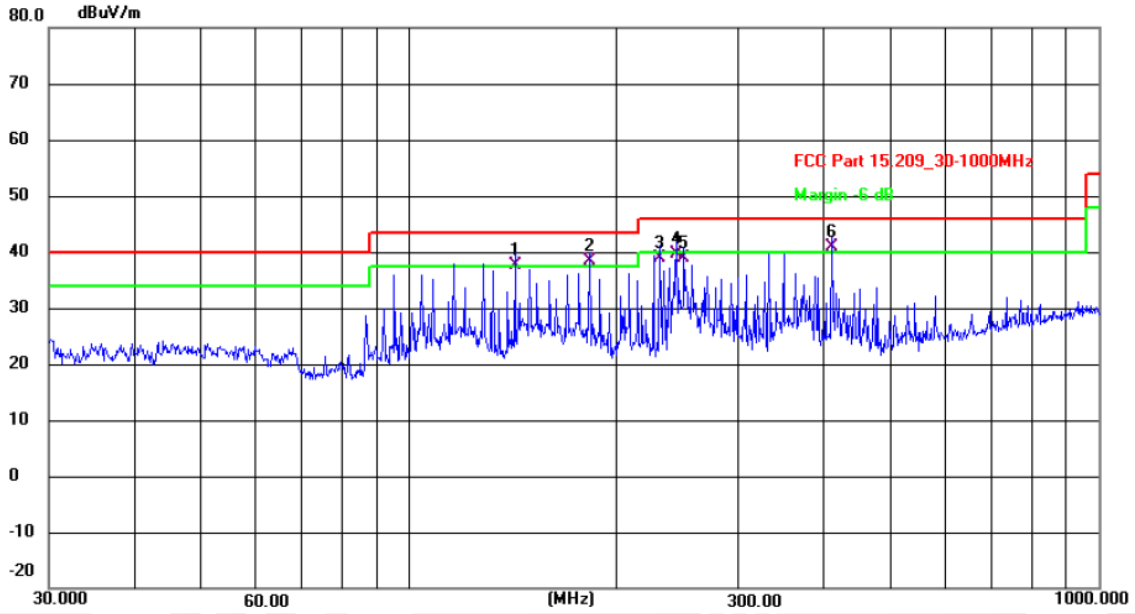
Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	30MHz ~ 1GHz	**Polarization:**	Vertical
Test Voltage:	DC 11.10V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	113.7142	69.78	-33.80	35.98	43.50	-7.52	QP	P
2 *	164.9071	71.74	-33.42	38.32	43.50	-5.18	QP	P
3	188.4122	70.11	-33.25	36.86	43.50	-6.64	QP	P
4	270.3747	71.69	-32.72	38.97	46.00	-7.03	QP	P
5	336.0350	71.05	-32.30	38.75	46.00	-7.25	QP	P
6 !	465.5994	71.82	-31.56	40.26	46.00	-5.74	QP	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

Product Name:	Portable Wireless Speaker	**Model No.:**	BP05
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	30MHz ~ 1GHz	**Polarization:**	Horizontal
Test Voltage:	DC 11.10V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 !	142.3240	71.20	-33.60	37.60	43.50	-5.90	QP	P
2 *	182.5592	71.69	-33.29	38.40	43.50	-5.10	QP	P
3	230.9067	71.98	-32.98	39.00	46.00	-7.00	QP	P
4	244.2321	72.65	-32.91	39.74	46.00	-6.26	QP	P
5	250.3010	71.73	-32.86	38.87	46.00	-7.13	QP	P
6 !	410.3824	72.66	-31.85	40.81	46.00	-5.19	QP	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

2) Test Frequency Range: Above 1GHz

Modulation Type: 1Mbps (LE 1M PHY) **Test channel:** Lowest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4804.00	64.11	-8.52	55.59	74.00	18.41	Peak	Vertical
	44.68	-8.52	36.16	54.00	17.84	Average	
	64.39	-8.52	55.87	74.00	18.13	Peak	Horizontal
	45.06	-8.52	36.54	54.00	17.46	Average	
Test channel: Middle channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4880.00	64.87	-8.05	56.82	74.00	17.18	Peak	Vertical
	45.36	-8.05	37.31	54.00	16.69	Average	
	64.76	-8.05	56.71	74.00	17.29	Peak	Horizontal
	45.74	-8.05	37.69	54.00	16.31	Average	
Test channel: Highest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4960.00	65.26	-8.29	56.97	74.00	17.03	Peak	Vertical
	45.72	-8.29	37.43	54.00	16.57	Average	
	65.14	-8.29	56.85	74.00	17.15	Peak	Horizontal
	45.71	-8.29	37.42	54.00	16.58	Average	

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

------ End of Report ------