

FCC EMC Test Report

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.: MS02 (More models are listed in Section 2.2)

Brand Name: DOOGEE, DOOGEE Eco

FCC ID: 2AX4YMS02

Test Standards: FCC CFR Title 47 Part 15B

Date of Sample Receipt: May 25, 2026

Date of Test: May 26 to Jun. 03, 2026

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Prepared By:

Shenzhen Acote Technology Co., Ltd.

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Report Revision History

Rev.	Issue Date	Description
V00	Jun. 04, 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.
	101, F1, building 15, zhongda 365, Xincheng Road No.9, Songshanhu, Dongguan, Guangdong, China.
Website:	www.acotelabs.com
Email:	Service@acotelabs.com
Tel.:	+86-0755-2788 9963

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.:	MS02
Models of Product Family:	MS03, MS05, MS06, MS07, MS08
Description of Model Differentiation:	This product series includes a total of 6 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

Power Supply:	Rechargeable Li-ion Battery 11.10Vdc, 2000mAh
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 15B
- ANSI C63.4:2014

3.2 Test Result Summary

Report Section	Test Items	Standard Clause	Test Result
5.1	AC Power Line Conducted Emission	§15.107	Pass
5.2	Field Strength of Radiated Emission	§15.109	Pass
Remark: a) <i>Pass: The EUT complies with the essential requirements in the standard.</i> b) <i>N/A: Not applicable.</i> c) <i>The EUT belongs to Class B digital device.</i>			

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)))
Conducted Emission (9kHz ~ 150kHz)	±3.02 dB
Conducted Emission (150kHz ~ 30MHz)	±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
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
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
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805225/4	2026/08/31
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805226/4	2026/08/31
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

4 Test Configuration of EUT

4.1 Test Mode

TM 1:	Keep the EUT in Charging+Playing (for TF card) mode
TM 2:	Keep the EUT in Charging+Playing (for U disk) mode
TM 3:	Keep the EUT in Charging+Playing (for AUX) mode

4.2 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:

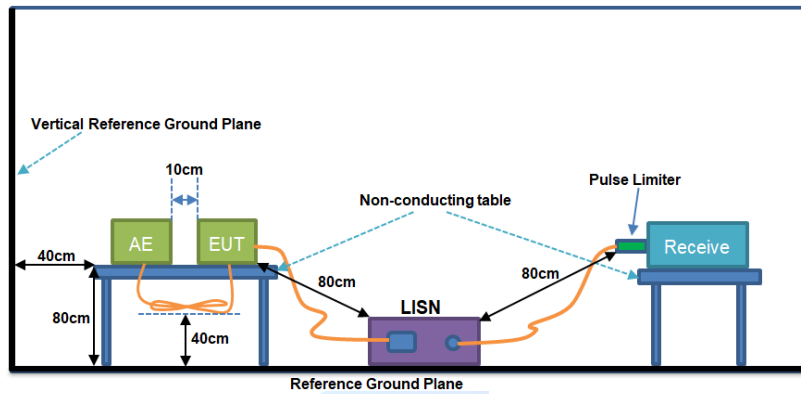
Report Section	Test Mode	Description
5.1	TM 1	Full Load
5.2	TM 1	Full Load

Note:

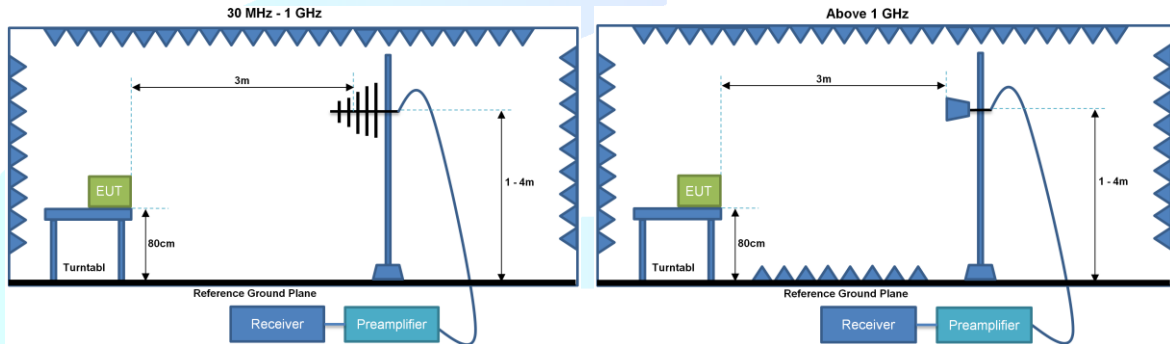
- 1) The EUT was investigated in three orthogonal orientations X, Y and Z, it was determined that Y was the worst-case of radiated field strength.

4.3 Test Setup Block

Setup 1 (Conducted Emission):



Setup 2 (Radiated Emission):



5 Technical requirements specification

5.1 AC Power Line Conducted Emission

5.1.1 Limits

Frequency (MHz)	Limit (dB μ V)			
	Class A		Class B	
	Quasi-peak	Average	Quasi-peak	Average
0.15 – 0.5	79	66	66 to 56 ^{Note 1}	56 to 46 ^{Note 1}
0.5 – 5	73	60	56	46
5 – 30	73	60	60	50
Note 1: The limit level in dB μ V decreases linearly with the logarithm of frequency.				
Note 2: The more stringent limit applies at transition frequencies.				

5.1.2 Test Procedure

- 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 C63.4.
- The EUT operates in the corresponding mode as specified in Section 4.1, based on the worst-case mode evaluated in Section 4.2.
- The phase of the LISN was set to L1.
- 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.
- The test script was executed, the measurement was performed. Save the test data.
- The phase of the LISN was set to N, and steps d) and e) were repeated.

5.1.3 Test Setup

See setup 1 in section 4.3.

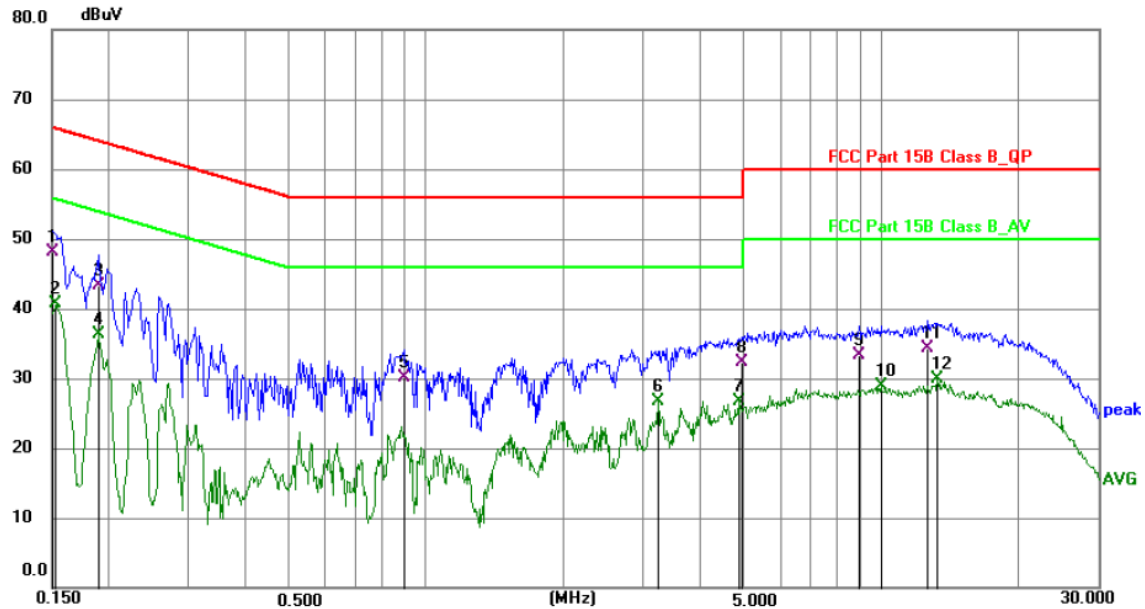
5.1.4 Test Instruments

Refer to section 3.7.

5.1.5 Test Results

Pass.

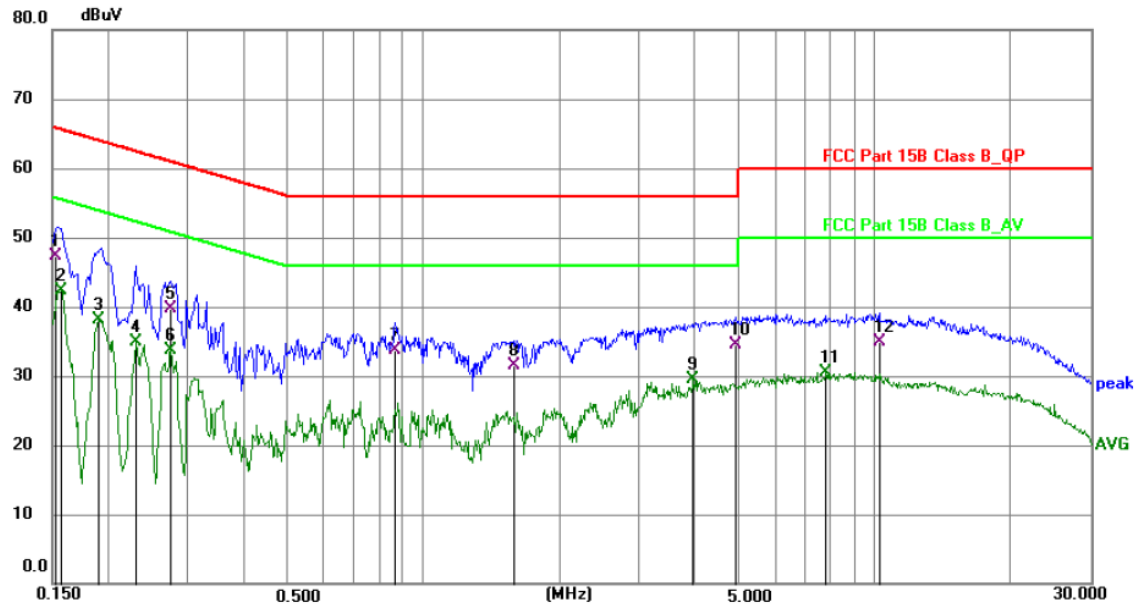
Product Name:	Portable Wireless Speaker	Model No.:	MS02
Test By:	Tom Ye	Test Mode:	TM 1
Test Frequency:	150kHz ~ 30MHz	Phase:	Line
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	38.45	9.69	48.14	66.00	-17.86	QP	P
2 *	0.1539	30.96	9.69	40.65	55.79	-15.14	AVG	P
3	0.1900	33.65	9.66	43.31	64.04	-20.73	QP	P
4	0.1900	26.64	9.66	36.30	54.04	-17.74	AVG	P
5	0.8940	20.58	9.59	30.17	56.00	-25.83	QP	P
6	3.2380	17.18	9.58	26.76	46.00	-19.24	AVG	P
7	4.8540	17.00	9.61	26.61	46.00	-19.39	AVG	P
8	4.9380	22.68	9.61	32.29	56.00	-23.71	QP	P
9	8.9460	23.66	9.65	33.31	60.00	-26.69	QP	P
10	9.9660	19.17	9.66	28.83	50.00	-21.17	AVG	P
11	12.6540	24.65	9.68	34.33	60.00	-25.67	QP	P
12	13.3340	20.21	9.68	29.89	50.00	-20.11	AVG	P

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

Product Name:	Portable Wireless Speaker	Model No.:	MS02
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	0.1539	37.56	9.69	47.25	65.79	-18.54	QP	P
2 *	0.1580	32.68	9.68	42.36	55.57	-13.21	AVG	P
3	0.1900	28.45	9.66	38.11	54.04	-15.93	AVG	P
4	0.2300	25.33	9.64	34.97	52.45	-17.48	AVG	P
5	0.2741	30.12	9.64	39.76	60.99	-21.23	QP	P
6	0.2741	24.02	9.64	33.66	50.99	-17.33	AVG	P
7	0.8620	24.12	9.59	33.71	56.00	-22.29	QP	P
8	1.5820	21.85	9.57	31.42	56.00	-24.58	QP	P
9	3.9580	20.01	9.59	29.60	46.00	-16.40	AVG	P
10	4.9180	24.85	9.61	34.46	56.00	-21.54	QP	P
11	7.7740	20.96	9.64	30.60	50.00	-19.40	AVG	P
12	10.1980	25.33	9.66	34.99	60.00	-25.01	QP	P

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

5.2 Field Strength of Radiated Emission

5.2.1 Limits

Radiated Emissions Limits (30 MHz to 1GHz)		
Frequency (MHz)	Limit (dBμV/m)	
	Class A	Class B
	Quasi-peak (3m Distance)	Quasi-peak (3m Distance)
30 – 88	49.6	40.0
88 – 216	54.0	43.5
216 – 960	56.9	46.0
960 – 1000	60.0	54.0
Note 2: The more stringent limit applies at transition frequencies.		

Radiated Emissions Limits at 3m Distance (Above 1GHz)				
Frequency	Limit (dBμV/m)			
	Class A		Class B	
	Peak	Average	Peak	Average
Above 1GHz	80	60	74	54
Note 1: The measurement bandwidth shall be 1 MHz or greater.				

5.2.2 Test Procedure

- The EUT is placed on a non-conducting table of the 3m SAC turntable, 80 cm above the ground plane. The measurement receiving antenna to EUT distance is 3 meters. The EUT was arranged in accordance with ANSI C63.4
- The EUT operates in the corresponding mode as specified in Section 4.1, based on the worst-case mode evaluated in Section 4.2.
- 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.
- The test script was executed, the measurement was performed.
- The turntable rotates 360 degrees, and the test antenna is raised and lowered within a range of 1 to 4 meters.
- 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.
- Both vertical and horizontal polarizations of the test antenna need to be tested.

5.2.3 Test Setup

See setup 2 in section 4.3.

5.2.4 Test Instruments

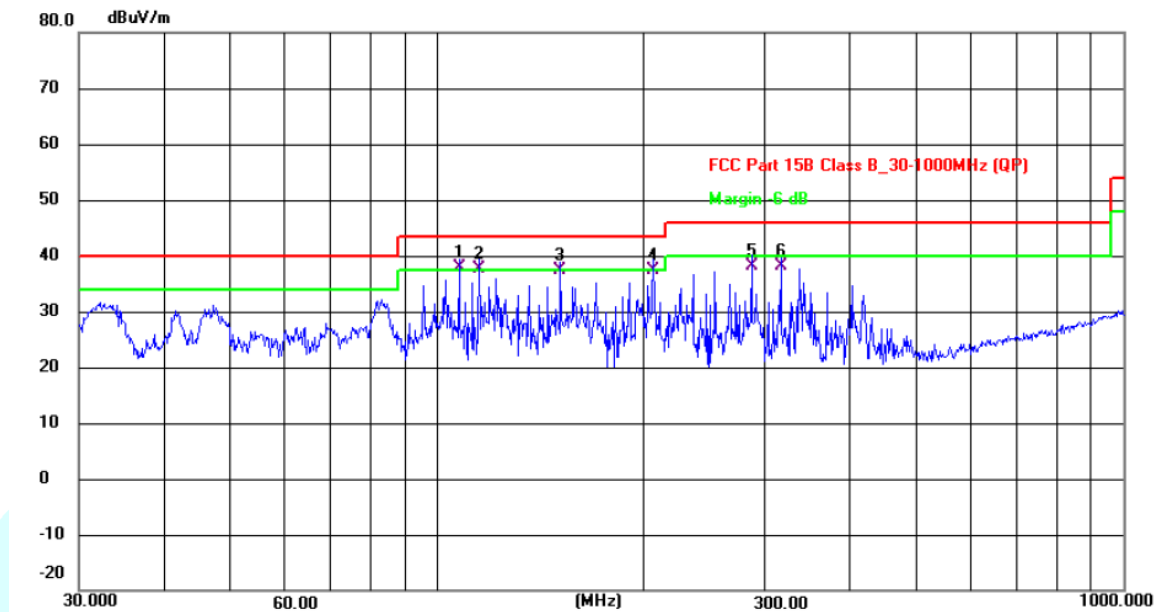
Refer to section 3.7.

5.2.5 Test Results

Pass.

1) Test Frequency Range: Below 1GHz

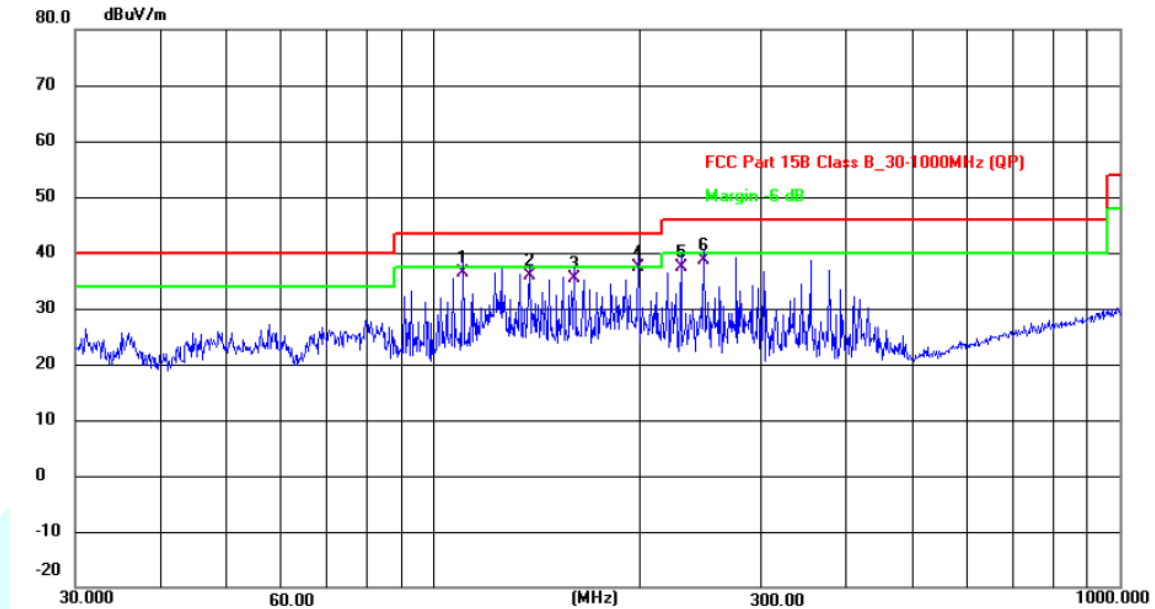
Product Name:	Portable Wireless Speaker	Model No.:	MS02
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	30MHz ~ 1GHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	107.5100	71.69	-33.84	37.85	43.50	-5.65	QP	P
2 !	114.9167	71.46	-33.78	37.68	43.50	-5.82	QP	P
3	151.0663	70.88	-33.53	37.35	43.50	-6.15	QP	P
4	206.3975	70.56	-33.13	37.43	43.50	-6.07	QP	P
5	286.9823	70.69	-32.58	38.11	46.00	-7.89	QP	P
6	316.5890	70.44	-32.41	38.03	46.00	-7.97	QP	P

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

Product Name:	Portable Wireless Speaker	Model No.:	MS02
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	30MHz ~ 1GHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		

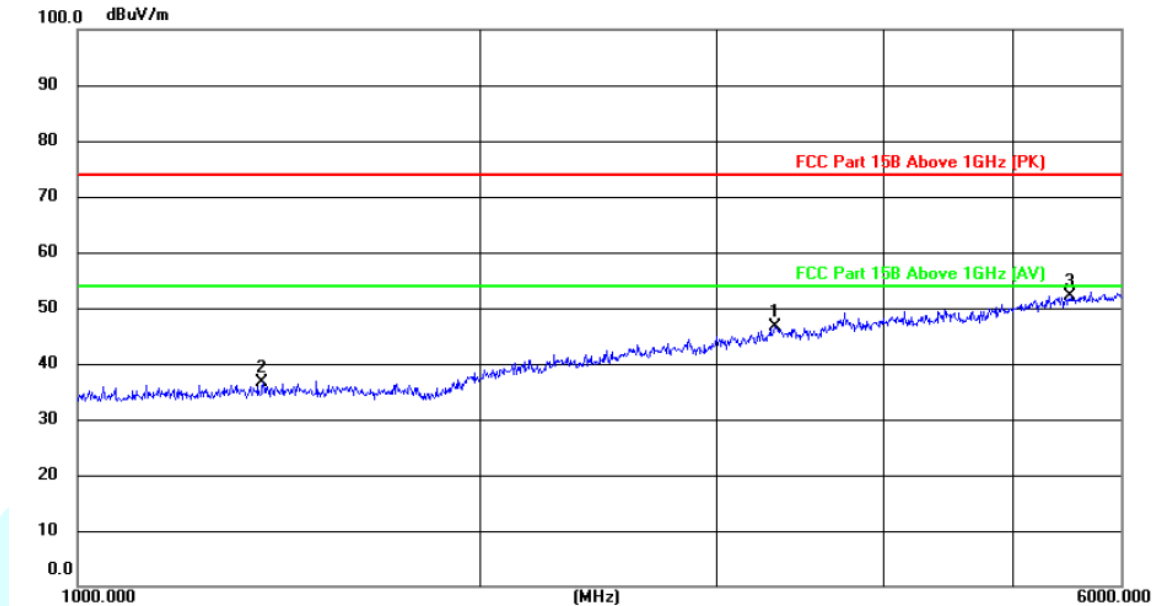


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	110.1816	70.32	-33.82	36.50	43.50	-7.00	QP	P
2	137.9028	69.41	-33.62	35.79	43.50	-7.71	QP	P
3	160.3454	68.91	-33.46	35.45	43.50	-8.05	QP	P
4 *	198.5877	70.56	-33.18	37.38	43.50	-6.12	QP	P
5	229.2930	70.36	-32.99	37.37	46.00	-8.63	QP	P
6	247.6818	71.46	-32.88	38.58	46.00	-7.42	QP	P

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

2) Test Frequency Range: Above 1GHz

Product Name:	Portable Wireless Speaker	Model No.:	MS02
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	1 ~ 6GHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		

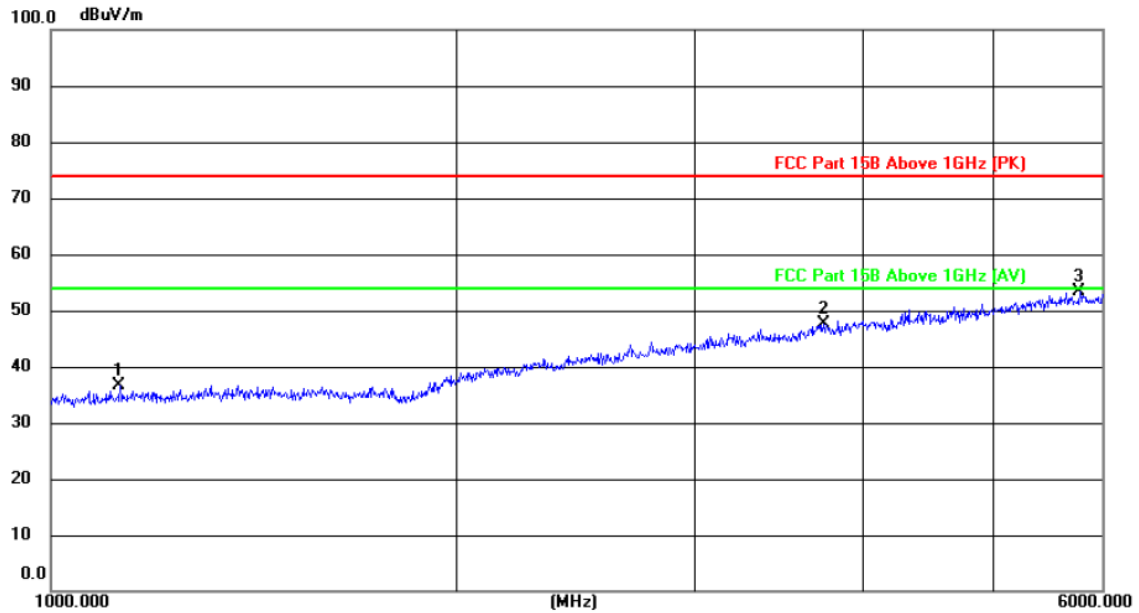


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3313.534	65.61	-18.86	46.75	74.00	-27.25	peak	P
2	1375.659	60.82	-24.17	36.65	74.00	-37.35	peak	P
3 *	5509.241	67.93	-15.78	52.15	74.00	-21.85	peak	P

Remark:

- Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).
- Since the measured peak value is lower than the average limit, the average value is not measured.

Product Name:	Portable Wireless Speaker	Model No.:	MS02
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	1 ~ 6GHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	1125.532	61.02	-24.33	36.69	74.00	-37.31	peak	P
2	3731.996	65.47	-17.80	47.67	74.00	-26.33	peak	P
3 *	5779.727	67.89	-14.52	53.37	74.00	-20.63	peak	P

Remark:

1. $Level = Read\ level + Factor$ (Antenna Factor + Cable Loss – Preamplifier Factor).
2. Since the measured peak value is lower than the average limit, the average value is not measured.

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