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FCC TEST REPORT

Client Name : DONGGUAN CITY BLUEMAN ELECTRONIC

TECHNOLOGY CO., LTD.

No. 5, ShunXing 5th Road DaJingTon 2nd Industrial

Address : Zone, DaLang Town, Dongguan City, Guangdong

Province, China

Product Name : Bluetooth Speaker

Date : Jul. 02, 2017

Shenzhen Anbotek Compliance Laboratory Limited



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	1.1310
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TEST REPORT

Applicant : DONGGUAN CITY BLUEMAN ELECTRONIC TECHNOLOGY CO., LTD.

Manufacturer : DONGGUAN CITY BLUEMAN ELECTRONIC TECHNOLOGY CO., LTD.

Product Name : Bluetooth Speaker

Model No. : BT-Z1(main test), BT-Z8A, BT-Z8B, BT-Z9, BT-ZX(X=0-9)

Trade Mark : BLUEMAN

Input: DC 16V, 3A(Via adapter input: AC 100~240V, 50/60Hz; With DC 11.1V,

Rating(s) 2200 mAh Battery inside)

Wireless Output: 5W

USB1 Output: 5V/2.1A Max; USB2 Output: 5V/1A Max

Test Standard(s) : FCC Part 1.1310, 1.1307(b)

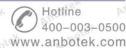
Test Method(s) : KDB680106 D01 RF Exposure Wireless Charging Apps v03

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 1.1307 & KDB680106 D01 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt:	Jun. 06, 2019
Date of Test	Jun. 06~19, 2019
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Prepared by Amborek	ntek hipotek A hotek Anbotek A
Ambout Am Product Safety	(Engineer / Oliay Yang)
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Reviewer	otek Anbote And Anbo Anbo An
	(Supervisor / Snowy Meng)
	upoc An otek Anboten Anb ok motek Ar
	Sally Zhong
Approved & Authorized Signer	"potek Vipore V Otek O'botek Viporek
	(Manager / Sally Zhang)

Shenzhen Anbotek Compliance Laboratory Limited





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1. General Information

1.1. Client Information

Applicant	:	DONGGUAN CITY BLUEMAN ELECTRONIC TECHNOLOGY CO., LTD.
Address	:	No. 5, ShunXing 5th Road DaJingTon 2nd Industrial Zone, DaLang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	DONGGUAN CITY BLUEMAN ELECTRONIC TECHNOLOGY CO., LTD.
Address	:	No. 5, ShunXing 5th Road DaJingTon 2nd Industrial Zone, DaLang Town, Dongguan City, Guangdong Province, China
Factory	:	DONGGUAN CITY BLUEMAN ELECTRONIC TECHNOLOGY CO., LTD.
Address		No. 5, ShunXing 5th Road DaJingTon 2nd Industrial Zone, DaLang Town, Dongguan City, Guangdong Province, China

1.2. Description of Device (EUT)

Product Name	:	Bluetooth Speaker	inhoo Anbotek Anbotek Anno botek																
Model No.	:	100	A, BT-Z8B, BT-Z9, BT-ZX(X=0-9) e same except the name and the appearance, so we only.)																
Trade Mark	:	BLUEMAN	otek Anbotek Anbo																
Test Power Supply	:	DC 11.1V Battery inside	abotek Anbotek Anbotek An																
Test Sample No.	:	1-2-1(Normal Sample), 1-	-2-2(Engineering Sample)																
		Operation Frequency:	BT 4.2 BDR+EDR: 2402~2480MHz Wireless Charging: 111-205KHz																
Product	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	Transfer Rate:	BT 4.2 BDR+EDR: 1/2/3 Mbits/s
Description																		Number of Channel:	BT 4.2 BDR+EDR: 79 Channels
			Modulation Type:	BT 4.2 BDR+EDR: GFSK, π/4-DQPSK, 8-DPSK Wireless Charging: ASK															
		Antenna Type:	BT 4.2 BDR+EDR: PCB Antenna Wireless Charging: Inductive loop coil Antenna																
		Antenna Gain(Peak):	BT 4.2 BDR+EDR: 0.5 dBi Wireless Charging: 0 dBi																

Remark: 1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.





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1.3. Auxiliary Equipment Used During Test

67.		0/0	V 111.	Man.	WO	N	
N/A	Anboten	Anbo	hotek	Anbore	And	Anbotek	Anbo

1.4. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
. 1	Magnetic field meter	NARDA	ELT-400	423623	Dec. 24, 2018	1 Year
tel2	E-Field Probe	Narda	EF0391	Q15221	Nov.17, 2017	3 Year
3	H-Field Probe	Narda	HF3061	Q15835	Nov.17, 2017	3 Year

1.5. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 3.9 dB (Horizontal)	potek k	Anbotek	Anbota	Ann
		Ur = 3.8 dB (Vertical)	no botek	Anbotek	Anbor	k Bu
		Anbotek Anbote	Ansobotek	Anbotek	Anbo	atek pr
Conduction Uncertainty	:	Uc = 3.4 dB	Air.	tek Anbo	ter Aup.	rek

1.6. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111, July 31, 2017.

ISED-Registration No.: 8058A-1

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A-1, June 13, 2016.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China. 518102



Hotline 400-003-0500 www.anbotek.com



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2. Measurement and Result

2.1. Requirements

According to the item 5.b) of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

- 1) Power transfer frequency is less that 1 MHz
- 2) Output power from each primary coil is less than or equal to 15 watts.
- 3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils
- 4) Client device is inserted in or placed directly in contact with the transmitter
- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)
- 6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Limits For Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
	(A) Limits for Occ	cupational/Controlled Ex	posures	•
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	1	1	f/300	6
1500-100,000	1	1	5	6
	(B) Limits for Genera	l Population/Uncontrolle	d Exposure	+
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	1	1	f/1500	30
1500-100,000	/	/	1.0	30

F=frequency in MHz

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).



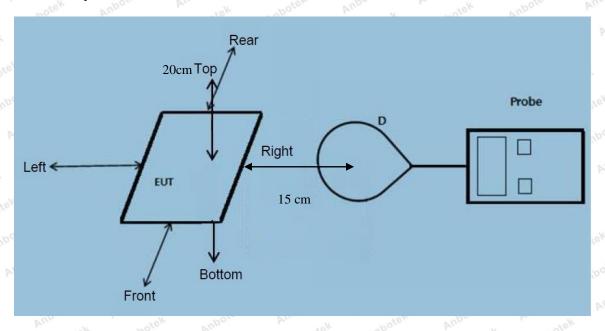
400-003-0500

^{*=}Plane-wave equivalent power density



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2.2. Test Setup



Note: Measurements should be made at 15 cm surrounding the EUT and 20cm above the top surface of the EUT.

2.3. Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at required test distance which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each
- (A, B, C, D, E) were completed. (A is the right, B is the back, C is the left, D is the front, and E is the top.)
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

2.4. Test Result

- 2.4.1. Equipment Approval Considerations item 5.b of KDB 680106 D01 v03.
- 1) Power transfer frequency is less that 1 MHz
- The device operate in the frequency range 111~205KHz
- 2) Output power from each primary coil is less than 15 watts
 - The maximum output power of the primary coil is 5W.

Shenzhen Anbotek Compliance Laboratory Limited



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- 3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils
- The transfer system including a charging system with only single primary coils is to detect and allow only between individual pairs of coils.
- 4) Client device is inserted in or placed directly in contact with the transmitter
- Client device is placed directly in contact with the transmitter.
- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)
 - The EUT is a Mobile Power Pack with Wireless Charger
- 6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.
- Conducted the measurement with the required distance and the test results please refer to the section 2.4.2



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2.4.2. Environmental evaluation and exposure limit according to FCC CFR 47 part 1.1307(b), 1.1310

Temperature:	22.6°C	Relative Humidity:	51 %
Pressure:	1012 hPa	Test Voltage:	DC 11.1V Battery inside

E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery power	Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
nbotek	Anbore	And	Anbotek	Anbo	*ek	botek	Anbote, A	up
1%	111-205	0.53	0.42	0.36	0.40	0.74	307	614
K Whose	k Aupoter	Anbe	otek h	botek	Aupole	Andhotek	Anbotek	Anbos
rek wi	otek Anbo	ien Au	otek	anbotek	Anbote	And	ek Anbotek	Anb
50%	111-205	1.26	1.28	1.31	1.38	1.24	307 Anbo	614
*upor	Al. abolek	Anboten	Anbergtek	Anbote	k Aupo	re Vu	hotek Ar	botek
Anboratek	Anbotek	Anboten	K NO	ek Ant	otek Ar	Por	an abotek	Anbotek
99%	111-205	2.27	2.16	2.20	2.38	2.42	307	614
Anbore	rek Who	lek Anb	ofer by	otek	Anbotek	Anbore	k And botek	Anbo
otek Anb	or by	botek	upoter	Anbe	anbotek	Anbot	rek Pur	ek N
Stand-by	111-205	0.34	0.52	0.49	0.75	0.64	307	614
Anbotek	Auporg	An	Anbotek	K Anbo	otek Ar	potek	inpose. Vi	botek



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H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

P1.		10+	100		- 20	200		10
Battery	Frequency	Test	Test	Test	Test	Test	Reference	Limits
V.	Range	Position	Position	Position	Position	Position	otek Limit Anbe	Test
power	(KHz)	AnbAen	A'B note	Cambot	ek D Anb	E VU	(A/m)	(A/m)
Anbo	Anbotek	Aupore	ok Pur	stek An	potek p	upor tek	nbotek	Aupole
1%	111-205	0.054	0.057	0.052	0.031	0.048	0.815	1.63
Tak Aupo,	otek Anbr	stek An'	poten P	notek	Anbotek	Anbore	Annabotek	Anb
boten K An	po rotek a	nbotek	Anbore	Andbotek	Anbote	Anbo	tek abo	rek b
50%	111-205	0.24	0.35	0.51	0.29	0.47	0.815	1.63
Anbotek	Anbo	A. anbotek	Anbote	ak Anb	otek A	hbotek P	uporg V	nbotek
Anbotek	K Anbo	anbote	K Anbo	ye An	botek	Anbotek	Anbo. otek	Anbotek
99%	111-205	0.55	0.6	0.29	0.31	0.32	0.815	1.63
otek Ant	Jotek Anbo	stek Air	nbotek	Anboten	Anbabatek	Anbotel	Anbore	ek Vi.
abotek	Anbotek A	100 ofek	Anbotek	Anbore	K Ans	lek Aup	tek Anbo	stek b
Stand-by	111-205	0.44	0.35	0.36	0.30	0.37	0.815	1.63
Annabotek	Anbotek	Aupor	K Who	lek Aup	ofer A	lo- notek	Anbotek	Anbore



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APPENDIX I -- TEST SETUP PHOTOGRAPH

Photo of MPE Measurement



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