

Measurement and Test Report

For

Shenzhen Keithy Innovation Technology Co., Ltd.

**15C(1588), Block C Electronic Technology Building, Huafa North Road,
Futian Shenzhen China**

FCC Rule(s):	<u>KDB 680106 D01 V03</u>
Product Description:	<u>Flame LED Bluetooth speaker</u>
Tested Model:	<u>Alpha</u>
Report No.:	<u>WTX19X08053901W-3</u>
Tested Date:	<u>2019-08-05 to 2019-08-20</u>
Issued Date:	<u>2019-08-20</u>
Tested By:	<u>Ray Yang / Engineer</u> 
Reviewed By:	<u>Silin Chen / EMC Manager</u> 
Approved & Authorized By:	<u>Jandy So / PSQ Manager</u> 
Prepared By:	<p>Shenzhen SEM Test Technology Co., Ltd. 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C. (518101)</p>
Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn	

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permission by Shenzhen SEM Test Technology Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Shenzhen Keithy Innovation Technology Co., Ltd.
Address of applicant: 15C(1588), Block C Electronic Technology Building,
Huafa North Road, Futian Shenzhen China

Manufacturer: Shenzhen Keithy Innovation Technology Co., Ltd.
Address of manufacturer: 15C(1588), Block C Electronic Technology Building,
Huafa North Road, Futian Shenzhen China

General Description of EUT	
Product Name:	Flame LED Bluetooth speaker
Trade Name:	/
Model No.:	Alpha
Adding Model(s):	Beta, Delta, Omega
<i>Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model Alpha, but the circuit and the electronic construction do not change, declared by the manufacturer.</i>	

Technical Characteristics of EUT	
Wireless Charger Transmit Frequency Range:	110~205kHz
Modulation Type:	ASK
Antenna Type:	Coil Antenna
Rated Voltage:	WPT Input: DC5V/2A 9V/1.8A Max WPT Output: DC5V-9V/1.67A Max
Rated Current:	WPT Output: 1.67A Max.
Rated Power:	10W/7.5W/5W

2. RF Exposure Test Report

2.1 Standard Applicable

According to § 1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

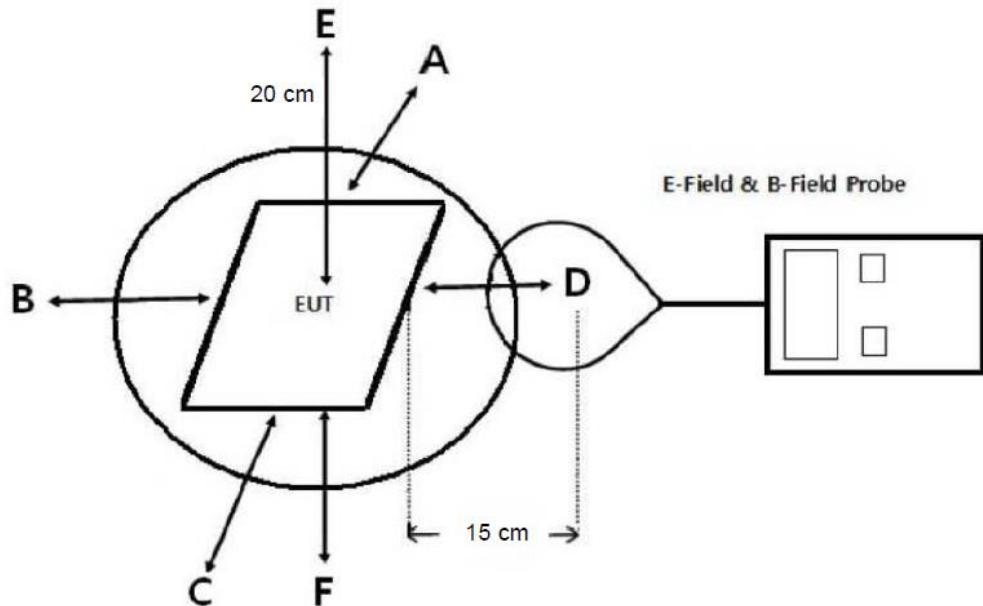
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled 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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

2.2 Test Conditions

Test Mode	Description	Remark	Power Supply Mode
TM1	Working	Connect to wireless load	DC 5V (with a adapter input AC 120V/60Hz)
TM2	Working	Connect to wireless load	DC 9V (with a adapter input AC 120V/60Hz)
Measurement Distance:		15 cm	

2.3 Test Procedure



- The measurement probe was placed at test distance(15 cm for A,B,C,D,F and 20 cm for E) which is between the edge of the charger and the geometric center of probe.
- The highest emission level was recorded at the measurement points(A, B, C, D, E, F).
- The EUT was measured according to the distance of KDB 680106 D01 V03.

2.4 Test Result

The EUT dose comply with item 5.2 of KDB 680106 D01V03

- Power transfer frequency is less than 1 MHz
Yes, the device operate in the frequency range from 110kHz to 205kHz.
- Output power from each primary coil is less than 15 watts
Yes, the maximum output power of the primary coil is less than 15W.
- 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
Yes, the client device includes only single primary coils.
- Client device is inserted in or placed directly in contact with the transmitter
Yes, Client device is placed directly in contact with the transmitter.
- Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
Yes, It is mobile exposure conditions only.

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.

Yes, The EUT field strength levels are less than 50% of the MPE limit, refer to test TM1, TM2 list, and the coils can't transmitted simultaneous.

Test Mode: TM1

Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Top	5.96	614	307
Bottom	6.25	614	307
Side 1	6.47	614	307
Side 2	7.58	614	307
Side 3	5.76	614	307
Side 4	6.97	614	307

Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m)
Top	0.352	1.63	0.815
Bottom	0.437	1.63	0.815
Side 1	0.225	1.63	0.815
Side 2	0.447	1.63	0.815
Side 3	0.582	1.63	0.815
Side 4	0.367	1.63	0.815

Test Mode: TM2

Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Top	7.45	614	307
Bottom	7.84	614	307
Side 1	7.52	614	307
Side 2	7.88	614	307
Side 3	7.65	614	307
Side 4	7.52	614	307

Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m)
Top	0.435	1.63	0.815
Bottom	0.427	1.63	0.815
Side 1	0.416	1.63	0.815
Side 2	0.434	1.63	0.815
Side 3	0.512	1.63	0.815
Side 4	0.438	1.63	0.815

2.4 Test Photos



***** END OF REPORT *****