

1. RF Exposure Test Report

1.1 General Information

Client Information

Applicant: Dolphin Electronics Co., Ltd
Address of applicant: Building 8, Fuqiao No.3 Industrial Zone, Fuyong Baoan District, Shenzhen, China
Manufacturer: Dolphin Electronics Co., Ltd
Address of manufacturer: Building 8, Fuqiao No.3 Industrial Zone, Fuyong Baoan District, Shenzhen, China

Description of EUT

Product Name: Bluetooth clock speaker
Trade Name: /
Model No.: TB-BTS25
FCC ID: 2AHWMTB-BTS25
Rated Voltage: DC 5V Adapter
Frequency Range: 112-205kHz
Rated Voltage: DC 5V (Wireless output)
Rated Current: 1A (Wireless output)
Rated Power: 5W (Wireless output)

1.2 Standard Applicable

According to § 1.1307(b)(1), 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.

(a) Limits for Occupational / Controlled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Times E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	F/300	6
1500-100000	/	/	5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Times E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	F/1500	30
1500-100000	/	/	1	30

Note: f = frequency in MHz: * = Plane-wave equivalents power density

1.3 Test Conditions

Test Mode	Description	Remark
TM1	Full Load	With resistor
TM2	Full Charge	With mobile phone
Measurement Distance:	10 cm	
Test Standard:	KDB 680106 D01 V02	

1.4 Test Result

The following test data shall to demonstrate RF exposure compliance.

Test Mode: TM1 (with resistor)

Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	30% Limit (V/m)
Top	2.39	614	184.2
Bottom	2.25	614	184.2
Side 1	1.98	614	184.2
Side 2	2.21	614	184.2
Side 3	1.87	614	184.2
Side 4	1.97	614	184.2
Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	30% Limit (A/m)
Top	0.0061	1.63	0.489
Bottom	0.0057	1.63	0.489
Side 1	0.0056	1.63	0.489
Side 2	0.0054	1.63	0.489
Side 3	0.0059	1.63	0.489
Side 4	0.0057	1.63	0.489

Test Mode: TM2 (with mobile phone)

Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	30% Limit (V/m)
Top	2.27	614	184.2
Bottom	2.21	614	184.2
Side 1	2.01	614	184.2
Side 2	2.19	614	184.2
Side 3	1.97	614	184.2
Side 4	1.85	614	184.2
Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	30% Limit (A/m)
Top	0.0057	1.63	0.489
Bottom	0.0054	1.63	0.489
Side 1	0.0055	1.63	0.489
Side 2	0.0051	1.63	0.489
Side 3	0.0055	1.63	0.489
Side 4	0.0054	1.63	0.489

1.5 Test Photos

with mobile phone :



with resistor:

