

EMC TEST REPORT

For

" TWinS " TWS Bluetooth Sporty Earphone Set

Model No.: BH-289

Prepared for :
Address :

Prepared By : EMTEK(DONGGUAN) CO., LTD.
Address : No.281, Guantai Road, Nancheng District, Dongguan,
Guangdong, China

Tel : +86-769-22807078
Fax: +86-769-22807079

Report Number : ED170717011E
Date of Test : July 17, 2017 to July 24, 2017
Date of Report : July 26, 2017

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Appendix I (Photos of the EUT) (3 pages)	

TEST REPORT DESCRIPTION

Applicant :
Manufacturer :
EUT : " TWInS " TWS Bluetooth Sporty Earphone Set
Model No. : BH-289
Input Rating : DC 5V from adapter, Battery 3.7V

Measurement Procedure Used:

EN 55032: 2015
EN 61000-3-2: 2014, EN 61000-3-3: 2013
EN 55020: 2007+A11: 2011+A12: 2016
(IEC 61000-4-2: 2008, IEC 61000-4-4: 2012)

The device described above is tested by EMTEK(DONGGUAN) CO., LTD. and EMTEK (SHENZHEN) CO., LTD 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 EMTEK(DONGGUAN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the EN 55032, EN61000-3-2, EN61000-3-3 and EN55020 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK(DONGGUAN) CO., LTD.

Date of Test : July 17, 2017 to July 24, 2017

Abby Li

Prepared by :

Abby Li/ Editor

Tomas Yang

Reviewer :

Tomas Yang/ Supervisor

Approved & Authorized Signer :

Sam Lv
Sam Lv/ Manager

A circular purple stamp with a checkmark in the center. The text "EMTEK(DONGGUAN) CO., LTD." is written around the top inner edge, and "TESTING" is written around the bottom inner edge. There are small asterisks on the left and right sides of the circle.

Modified Information

Version	Summary	Revision Date	Report No.
Ver.1.0	Original Report	/	ED170717011E

1. DESCRIPTION OF STANDARDS AND RESULTS (EUT)

EMISSION			
Description of Test Item	Standard	Limits	Results
Disturbance Voltage at the Mains Terminal	EN 55032: 2015	Clause 5	Pass
Radiated Disturbance	EN 55032: 2015	Clause 5	Pass
Harmonic Current Emissions	EN 61000-3-2: 2014	Class A	N/A
Voltage Fluctuation and Flicker	EN 61000-3-3: 2013	Clause 5	Pass
IMMUNITY			
Description of Test Item	Basic Standard	Performance Criteria	Results
Electrostatic Discharge (ESD)	IEC 61000-4-2: 2008	B	Pass
Electro Fast Transient (EFT)	IEC 61000-4-4: 2012	B	Pass
Immunity Against Input Interference Test (S1)	EN 55020: 2007+A11: 2011+A12: 2016	--	N/A
RF Voltages Immunity Test (S2)	EN 55020: 2007+A11: 2011+A12: 2016	Table 12, 13	N/A
Ambient Electromagnetic Fields Immunity Test (S3)	EN 55020: 2007+A11: 2011+A12: 2016	Table 17, 19	N/A
Screening Effectiveness Test (S4)	EN 55020: 2007+A11: 2011+A12: 2016	--	N/A
Keyed Carried (S5)	EN 55020: 2007+A11: 2011+A12: 2016	--	N/A
Note: N/A is an abbreviation for Not Applicable.			

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT : " TWInS " TWS Bluetooth Sporty Earphone Set

Model Number : BH-289

Trade Mark :

Power Supply for Test : AC 230V/50Hz for adapter

Operate Mode : Charging

Applicant :

Address :

Manufacturer :

Address :

Date of sample receiver : July 17, 2017

Date of Test : July 17, 2017 to July 24, 2017

2.2 Description of Support Device

Adapter : Model : YSV6-0501000
Input: AC 100-240V, 50/60Hz
Output: DC 5V, 1000mA

2.3 Description of Test Facility

Site Description
EMC Lab : Accredited by CNAS, 2015.09.24
The certificate is valid until 2018.07.03
The Laboratory has been assessed and proved to be in compliance with CNAS/CL01:2006
The Certificate Registration Number is L3150

Registered on FCC, July 06, 2016
The Certificate Number is 247565.

Registered on Industry Canada, January 13, 2017
The Certificate Number is 9444A

Name of Firm : EMTEK(DONGGUAN) CO., LTD.
Site Location : No.281, Guantai Road, Nancheng District, Dongguan, Guangdong, China

2.4 Measurement Uncertainty

Test Item	Uncertainty
Conducted Emission Uncertainty	: 2.42dB
Radiated Emission Uncertainty (3m Chamber)	: 3.45dB (30M~1GHz Polarize: H) 3.32dB (30M~1GHz Polarize: V) 3.7dB (1~18GHz Polarize: H) 3.6dB (1~18GHz Polarize: V)
Uncertainty for Flicker test	: 0.25%
Uncertainty for Harmonic test	: 0.014%
Uncertainty for test site temperature and humidity	: 0.6°C 4%

3. MEASURING DEVICES AND TEST EQUIPMENT

3.1 For Power Line Conducted Emission

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100137	May 16, 2017	1 Year
2.	L.I.S.N	Rohde & Schwarz	ENV216	100017	May 16, 2017	1 Year
3.	RF Switching Unit	CDS	RUS-M2	38401	May 16, 2017	1 Year

3.2 For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	1166.5950.03	May 16, 2017	1 Year
2.	Bilog Antenna	Schwarzbeck	VULB9163	000141	May 16, 2017	1 Year
3.	Power Amplifier	CDS	RSU-M352	818	May 16, 2017	1 Year
4.	Power Amplifier	HP	8447F	OPT H64	May 16, 2017	1 Year
5.	Color Monitor	SUNSP0	SP-140A	N/A	May 16, 2017	1 Year
6.	Single Line Filter	JIANLI	XL-3	N/A	May 16, 2017	1 Year
7.	Single Phase Power Line Filter	JIANLI	DL-2X100B	N/A	May 16, 2017	1 Year
8.	3 Phase Power Line Filter	JIANLI	DL-4X100B	N/A	May 16, 2017	1 Year
9.	DC Power Filter	JIANLI	DL-2X50B	N/A	May 16, 2017	1 Year
10.	Cable	Schwarzbeck	PLF-100	519489	May 16, 2017	1 Year
11.	Cable	Rosenberger	CIL02	A0783566	May 16, 2017	1 Year
12.	Cable	Rosenberger	RG 233/U	525178	May 16, 2017	1 Year

3.3 For Harmonic / Flicker Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power Frequency Test System	EMTEST	DPA500	U0526100506	May 16, 2017	1 Year
2.	AC Frequency Conversion Power	EMTEST	ACS 500	V526100507	May 16, 2017	1 Year
3.	PC	LENOVO	T2900D	SS12485803	May 16, 2017	1 Year

3.4 For Electrostatic Discharge Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	ESD Tester	SCHAFFNER	NSG432	1285	May 16, 2017	1 Year

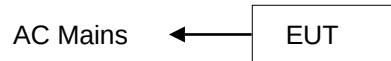
3.5 For Electrical Fast Transient/Burst Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Burst Tester	EM TEST	UCS500M6B	V0526100502	May 16, 2017	1 Year
2.	Coupling Clamp	EM TEST	HFK	0605-10	May 16, 2017	1 Year

4. POWER LINE CONDUCTED MEASUREMENT

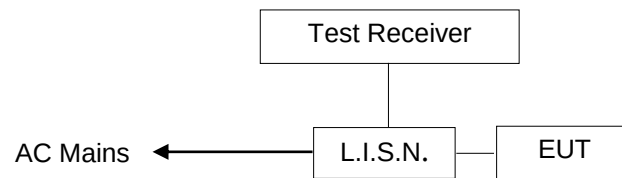
4.1 Block Diagram of Test Setup

4.1.1 Block diagram of connection between the EUT and simulators



(EUT: " TWInS " TWS Bluetooth Sporty Earphone Set)

4.1.2 Block Diagram of Test Setup



(EUT: " TWInS " TWS Bluetooth Sporty Earphone Set)

4.2 Conducted Power Line Emission Measurement Standard and Limits

4.2.1 Standard:

EN 55032: 2015

4.2.2 Limits

Frequency	At mains terminals (dB μ V)	
	Quasi-peak Level	Average Level
150KHz ~ 0.5MHz	66 ~ 56*	56 ~ 46*
0.5MHz ~ 5MHz	56	46
5.0MHz ~ 30MHz	60	50

1. At the transition frequency the lower limit applies.
2. * decreasing linearly with logarithm of the frequency.

4.3 EUT Configuration on Measurement

The configuration of the EUT is same as Section 2.1.

4.4 Operating Condition of EUT

- 4.4.1 Setup the EUT as shown in Section 4.1.
- 4.4.2 Turn on the power of all equipments.
- 4.4.3 Let the EUT work in measuring mode (Charging) and measure it.

4.5 Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground and connected to the AC mains through a Line Impedance Stabilization Network (L.I.S.N.). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission according to the EN 55032 regulations during conducted emission measurement. And the voltage probe had been used for the load terminals measurement according to the EN 55032 standard.

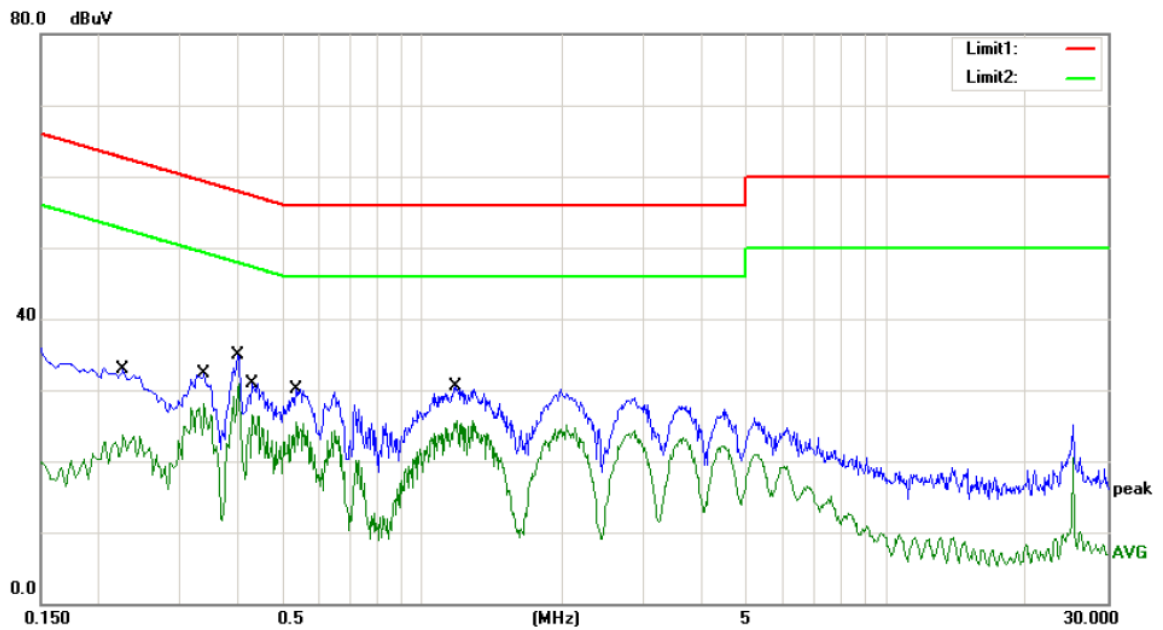
The bandwidth of the test receiver (R&S ESCI) is set at 200Hz in 9K~150KHz range and 9KHz in 150K~30MHz range.

The frequency range from 150KHz to 30MHz is checked.

4.6 Measurement Results

PASS.

The frequency range from 150KHz to 30MHz is investigated. Conducted emission at both 120V & 230V is assessed. and emission at 230V represents the worst case. The worst scanning waveforms of test mode (Charging) in below a few pages.



Site site #1

Phase: **L1**

Temperature: 24

Limit: (CE)EN55032 class B_QP

Power: AC 230V/50Hz

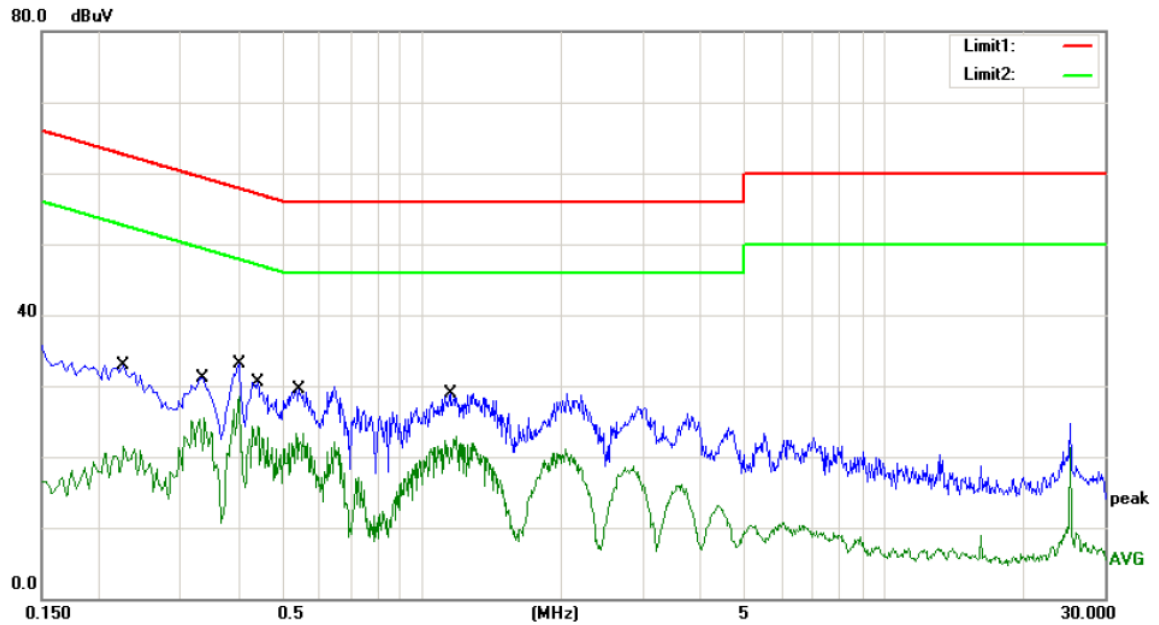
Humidity: 55 %

Mode: Charging

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2260	23.04	9.79	32.83	62.60	-29.77	QP	
2		0.2260	13.98	9.79	23.77	52.60	-28.83	AVG	
3		0.3380	22.49	9.81	32.30	59.25	-26.95	QP	
4		0.3380	18.21	9.81	28.02	49.25	-21.23	AVG	
5		0.3980	24.98	9.82	34.80	57.90	-23.10	QP	
6	*	0.3980	21.05	9.82	30.87	47.90	-17.03	AVG	
7		0.4300	21.13	9.83	30.96	57.25	-26.29	QP	
8		0.4300	16.75	9.83	26.58	47.25	-20.67	AVG	
9		0.5340	20.25	9.84	30.09	56.00	-25.91	QP	
10		0.5340	15.59	9.84	25.43	46.00	-20.57	AVG	
11		1.1780	20.67	9.84	30.51	56.00	-25.49	QP	
12		1.1780	15.92	9.84	25.76	46.00	-20.24	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Aspen



Site site #1 Phase: **N** Temperature: 24
 Limit: (CE)EN55032 class B_QP Power: AC 230V/50Hz Humidity: 55 %
 Mode: Charging
 Note:

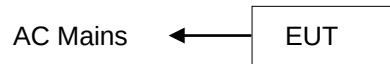
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.2260	23.20	9.79	32.99	62.60	-29.61	QP	
2		0.2260	11.73	9.79	21.52	52.60	-31.08	AVG	
3		0.3340	21.33	9.81	31.14	59.35	-28.21	QP	
4		0.3340	15.59	9.81	25.40	49.35	-23.95	AVG	
5		0.4020	23.23	9.82	33.05	57.81	-24.76	QP	
6	*	0.4020	18.62	9.82	28.44	47.81	-19.37	AVG	
7		0.4420	20.76	9.83	30.59	57.02	-26.43	QP	
8		0.4420	14.50	9.83	24.33	47.02	-22.69	AVG	
9		0.5420	19.63	9.84	29.47	56.00	-26.53	QP	
10		0.5420	13.50	9.84	23.34	46.00	-22.66	AVG	
11		1.1500	19.08	9.84	28.92	56.00	-27.08	QP	
12		1.1500	13.13	9.84	22.97	46.00	-23.03	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Aspen

5. RADIATED EMISSION MEASUREMENT

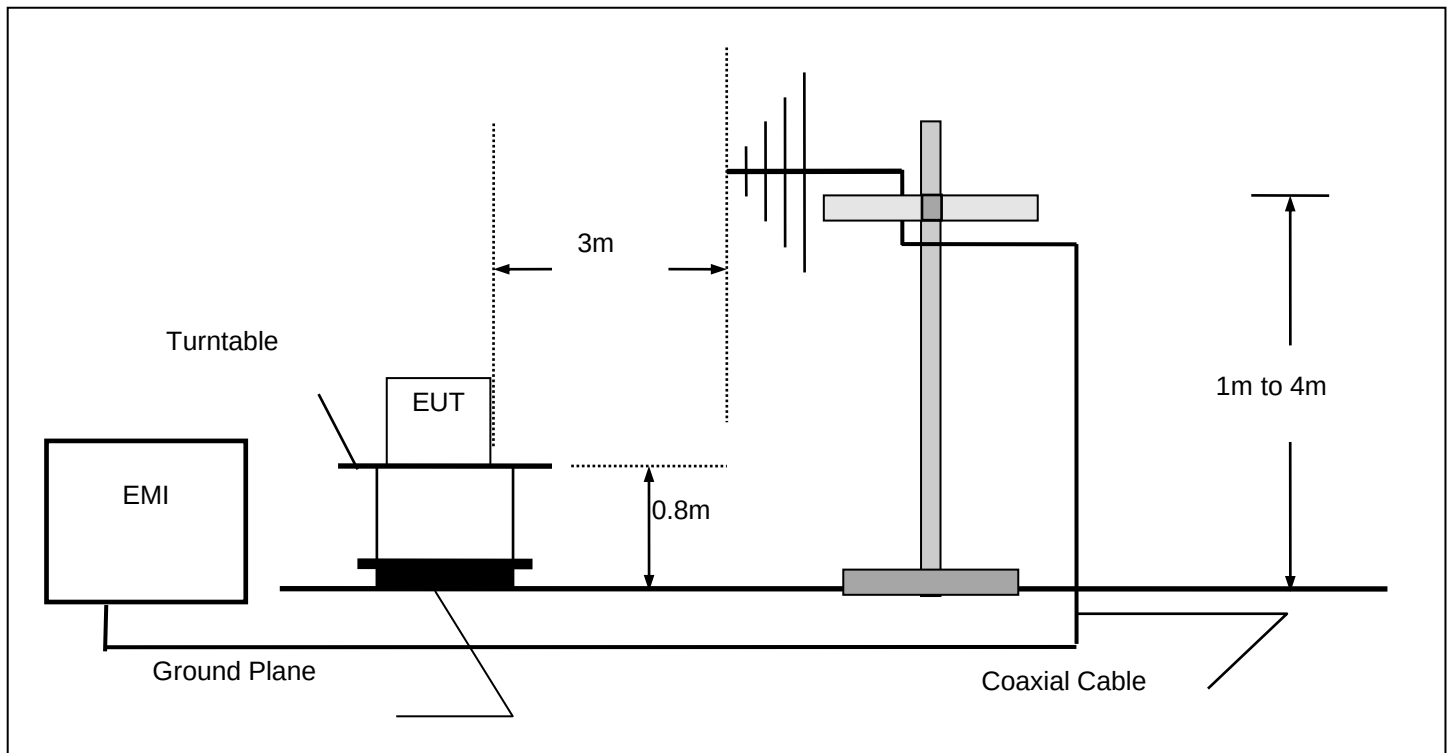
5.1 Block Diagram of Test

5.1.1 Block diagram of connection between the EUT and simulators



(EUT: " TWInS " TWS Bluetooth Sporty Earphone Set)

5.1.2 Block diagram of test setup (In chamber)



(EUT: " TWInS " TWS Bluetooth Sporty Earphone Set)

5.2 Measuring Standard

EN 55032: 2015

5.3 Radiated Emission Limits

All emanations from a device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Limits below 1GHz

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMIT (dB μ V/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Note: (1) The smaller limit shall apply at the combination point between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.

5.4 EUT Configuration on Test

The EN 55032 regulations test method must be used to find the maximum emission during radiated emission measurement.

EUT : " TWInS " TWS Bluetooth Sporty Earphone Set
Model Number : BH-289

5.5 Operating Condition of EUT

5.5.1 Turn on the power.

5.5.2 Let the EUT work in test mode (Charging) and measure it.

5.6 Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarizations of the antenna are set on test.

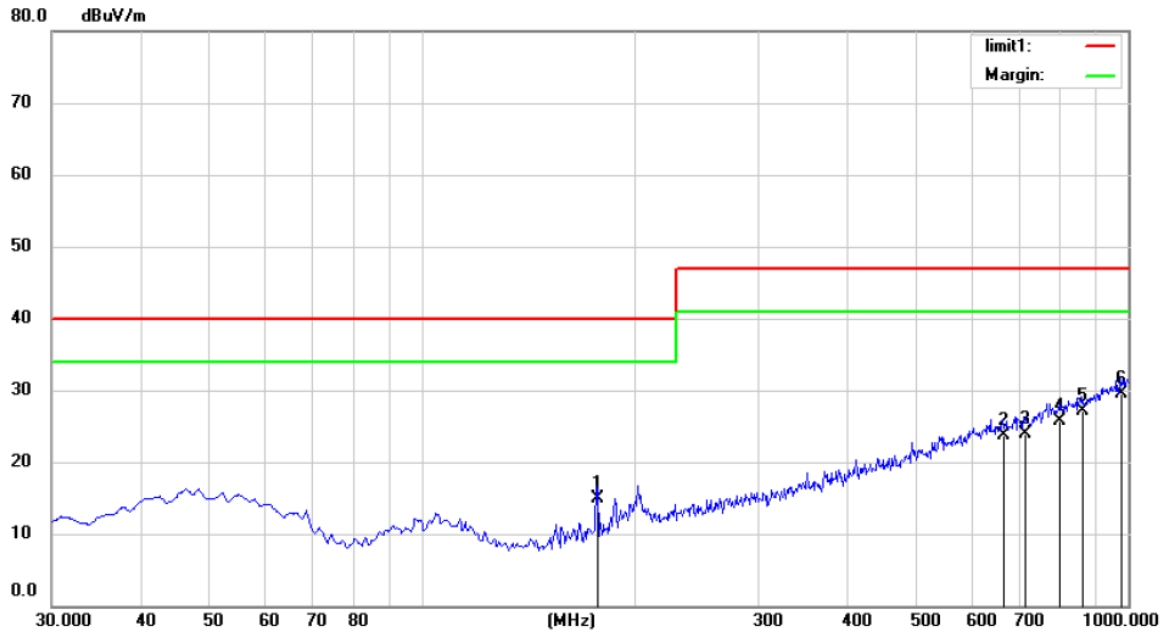
The bandwidth of the Receiver (ESCI) is set at 120kHz.

5.7 Test Results

PASS.

The frequency range from 30MHz to 1000MHz is investigated.

Radiated emission at both 120V & 230V is assessed. and emission at 230V represents the worst case. The worst scanning waveforms of test mode (Line in) in below a few pages.



Site Chamber #1

Polarization: **Horizontal**

Temperature: 26

Limit: (RE)EN55032_class B_3m

Power: AC 230V/50Hz

Humidity: 55 %

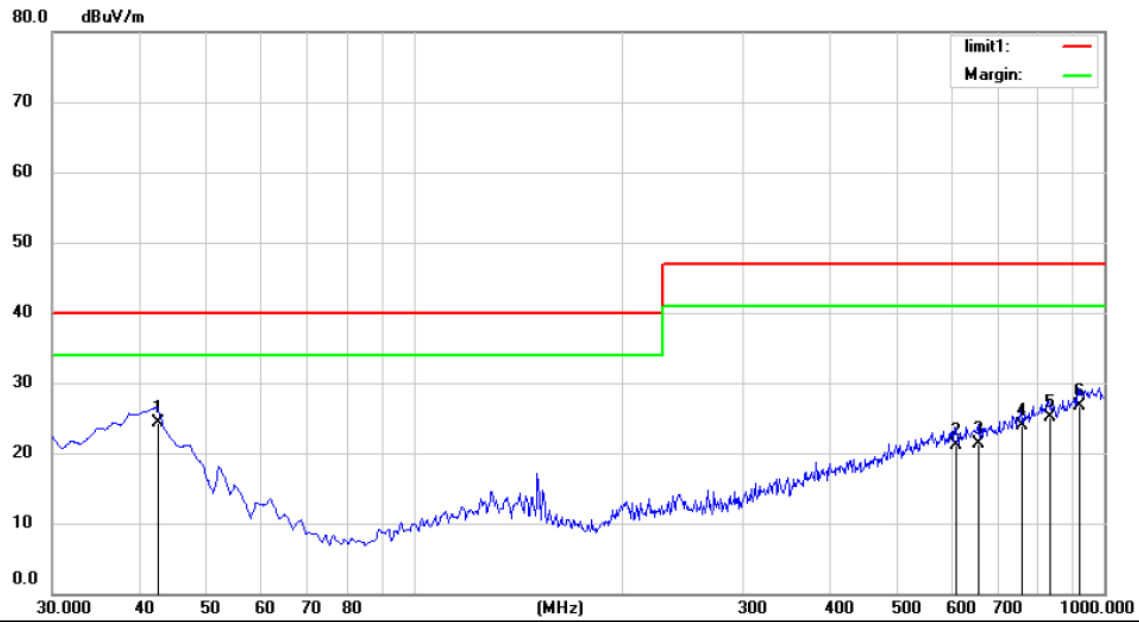
Mode:Charging

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		177.4400	34.55	-19.72	14.83	40.00	-25.17	QP		
2		664.3800	28.90	-5.15	23.75	47.00	-23.25	QP		
3		715.7900	28.12	-4.30	23.82	47.00	-23.18	QP		
4		801.1500	28.26	-2.46	25.80	47.00	-21.20	QP		
5		862.2600	28.70	-1.65	27.05	47.00	-19.95	QP		
6	*	978.6600	28.23	1.29	29.52	47.00	-17.48	QP		

*:Maximum data x:Over limit !:over margin

Operator: washington



Site Chamber #1

Polarization: **Vertical**

Temperature: 26

Limit: (RE)EN55032_class B_3m

Power: AC 230V/50Hz

Humidity: 55 %

Mode: Charging

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	42.6100	37.85	-13.60	24.25	40.00	-15.75	QP		
2		609.0900	28.30	-7.28	21.02	47.00	-25.98	QP		
3		658.5600	28.10	-6.72	21.38	47.00	-25.62	QP		
4		758.4700	28.40	-4.45	23.95	47.00	-23.05	QP		
5		832.1900	28.30	-3.16	25.14	47.00	-21.86	QP		
6		916.5800	28.26	-1.49	26.77	47.00	-20.23	QP		

*:Maximum data x:Over limit !:over margin

Operator: washington

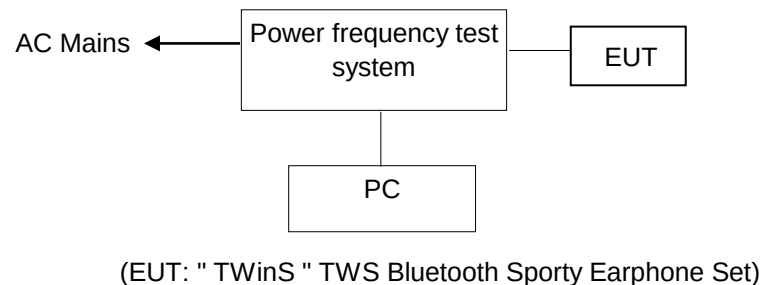
6. HARMONIC CURRENT MEASUREMENT

6.1 Block Diagram of Test Setup

6.1.1 Block diagram of connection between the EUT and simulators



6.1.2 Block Diagram of Harmonic Test Setup



6.2 Measuring Standard

EN61000-3-2: 2014 Class A Power $\leq 75W$

6.3 Operating Condition of EUT

Same as Section 4.4. except the test setup replaced by Section 6.1.

6.4 Test Results

Not Applicable.

Because power of EUT is less than 75W, according to standard EN61000-3-2, Harmonics Current is not required.

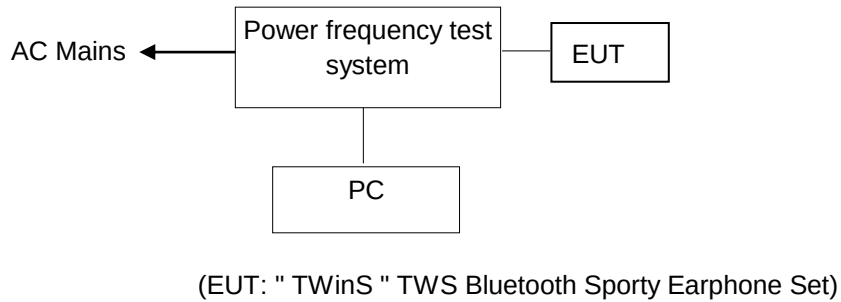
7. VOLTAGE FLUCTUATIONS & FLICKER MEASUREMENT

7.1 Block Diagram of Test Setup

7.1.1 Block diagram of connection between the EUT and simulators



7.1.2 Block Diagram of Flicker Test Setup



7.2 Measuring Standard

EN61000-3-3: 2013

7.3 Operating Condition of EUT

Same as Section 4.4 except the test setup replaced by Section 6.1.

7.4 Test Results

PASS.

Please refer to the following page.

Test Report

Report title:	Flicker
Company Name:	EMTEK
Date of test:	9:22 20.Jul 2017
Tester:	Lin
Standard used:	EN/IEC 61000-3-3 Flicker
Short time (Pst):	10 min
Observation time:	10 min (1 Flicker measurement)
Flickermeter:	230V / 50Hz
Flicker Impedance:	Zref (IEC 60725)
Customer:	.
E. U. T.:	" TWiNS " TWS Bluetooth Sporty Earphone Set

Test Result	PASS
-------------	------

Maximum Flicker results

	EUT values	Limit	Result
Pst	0.028	1.00	PASS
Plt	0.028	0.65	PASS
dc [%]	0.005	3.30	PASS
dmax [%]	0.076	4.00	PASS
dt [s]	0.000	0.50	PASS

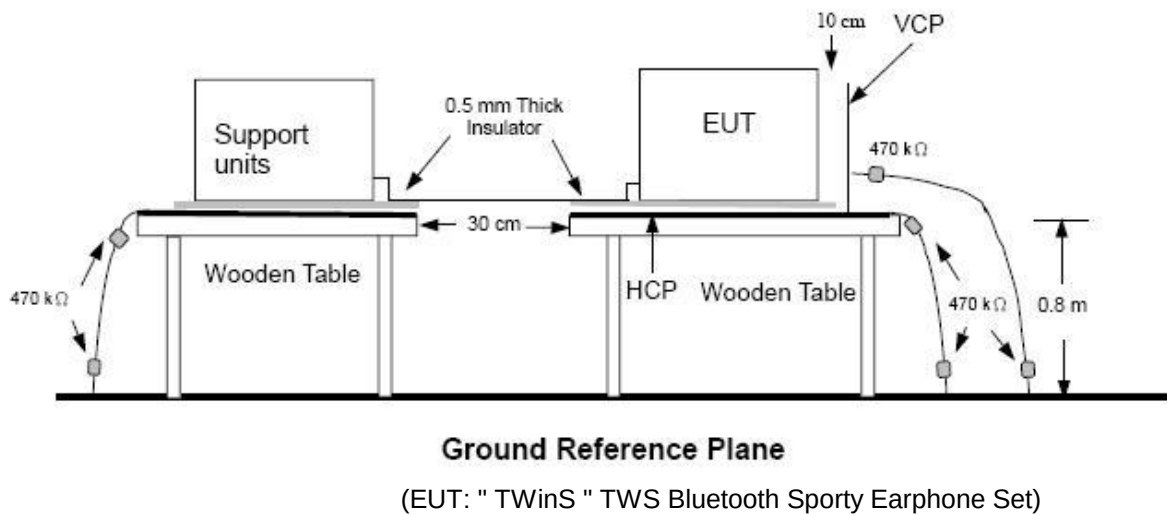
8. ELECTROSTATIC DISCHARGE TEST

8.1 Block Diagram of Test Setup

8.1.1 Block diagram of connection between the EUT and simulators



8.1.2 Block Diagram of ESD Test Setup



8.2 Test Standard

EN 55020: 2007+A11: 2011+A12: 2016
(IEC61000-4-2: 2008 (Severity Level: 2 / Contact Discharge: ± 4 KV
Severity Level: 3 / Air Discharge: ± 8 KV))

8.3 Severity Levels and Performance Criterion

8.3.1 Severity level

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1.	± 2	± 2
2.	± 4	± 4
3.	± 6	± 8
4.	± 8	± 15
X	Special	Special

9.3.2 Performance criterion: **B**

8.4 EUT Configuration

The configuration of EUT is listed in Section 2.1

8.5 Operating Condition of EUT

- 8.5.1 Setup the EUT as shown in Section 8.1.
- 8.5.2 Turn on the power of all equipments.
- 8.5.3 Let the EUT work in test mode (Charging) and measure it.

8.6 Test Procedure

8.6.1 Air Discharge:

This test is done on a non-conductive surfaces. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed

8.6.2 Contact Discharge:

All the procedure shall be same as Section 8.6.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

8.6.3 Indirect discharge for horizontal coupling plane:

At least 20 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

8.6.4 Indirect discharge for vertical coupling plane:

At least 20 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

8.7 Test Results

PASS.

Please refer to the following page.

Electrostatic Discharge Test Results

EMTEK(DONGGUAN) CO., LTD.

Applicant : .	Test Date : July 20, 2017
EUT : " TWInS " TWS Bluetooth Sporty Earphone Set	Temperature : 22°C
M/N : BH-289	Humidity : 50%
Power Supply : AC 230V/50Hz	Test Engineer: YE
Test Mode : Charging	Criterion : B

Air Discharge: $\pm 2, 4, 8$ KV
Contact Discharge: $\pm 2, 4$ KV # For each point positive 10 times and negative 10 times

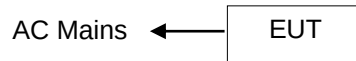
Location	Kind A-Air Discharge C-Contact Discharge	Result
Slot of the EUT 10 points	A	PASS
I/O Port 1 point	A, C	PASS
HCP	C	PASS
VCP	C	PASS
Remark :	Test Equipment : ESD Tester (TESEQ AG, NSG437)	

Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

9. ELECTRICAL FAST TRANSIENT/BURST TEST

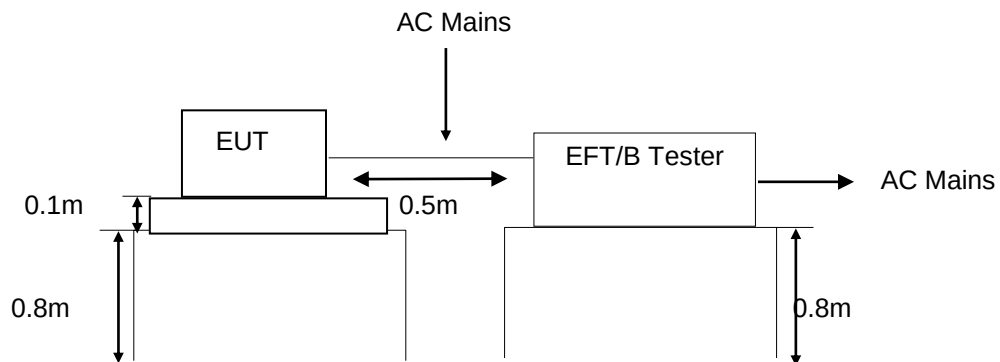
9.1 Block Diagram of Test Setup

9.1.1 Block Diagram of connection between the EUT and simulators



(EUT: " TWInS " TWS Bluetooth Sporty Earphone Set)

9.1.2 Block Diagram of EFT Test Setup



(EUT: " TWInS " TWS Bluetooth Sporty Earphone Set)

9.2 Test Standard

EN 55020: 2007+A11: 2011+A12: 2016
(IEC 61000-4-4: 2012, Severity Level, Level 2: 1KV)

9.3 Severity Levels and Performance Criterion

9.3.1 Severity level

Open circuit output test voltage and repetition rate of the impulses				
Level	On power port, PE		On I/O (Input/Output) Signal data and control ports	
	Voltage peak KV	Repetition rate KHz	Voltage peak KV	Repetition rate KHz
1.	0.5 KV	5 or 100	0.25 KV	5 or 100
2.	1 KV	5 or 100	0.5 KV	5 or 100
3.	2 KV	5 or 100	1 KV	5 or 100
4.	4 KV	5 or 100	2 KV	5 or 100
X	Special	Special	Special	Special
NOTE 1 Use of 5 KHz repetition rates is traditional; however, 100 KHz is closer to reality. Product committees should determine which frequencies are relevant for specific products or product types.				
NOTE 2 With some products, there may be no clear distinction, between power ports and I/O ports, in which case it is up to product committees to make this determination for test purposes.				
“X” is an open level. The level has to be specified in the dedicated equipment specification.				

9.3.2 Performance criterion: **B**

9.4 EUT Configuration

The configuration of EUT are listed in Section 2.1.

9.5 Operating Condition of EUT

9.5.1 Setup the EUT as shown in Section 9.1.

9.5.2 Turn on the power of all equipments.

9.5.3 Let the EUT work in test mode (Charging) and measure it.

9.6 Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

9.6.1 For input and output AC power ports:

The EUT is connected to the power mains by using a coupling device which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration of the test is 2 mins.

9.6.2 For signal lines and control lines ports:

No I/O ports. It's unnecessary to test.

9.7 Test Results

PASS.

Please refer to the following page.

Electrical Fast Transient/Burst Test Results

EMTEK(DONGGUAN) CO., LTD.

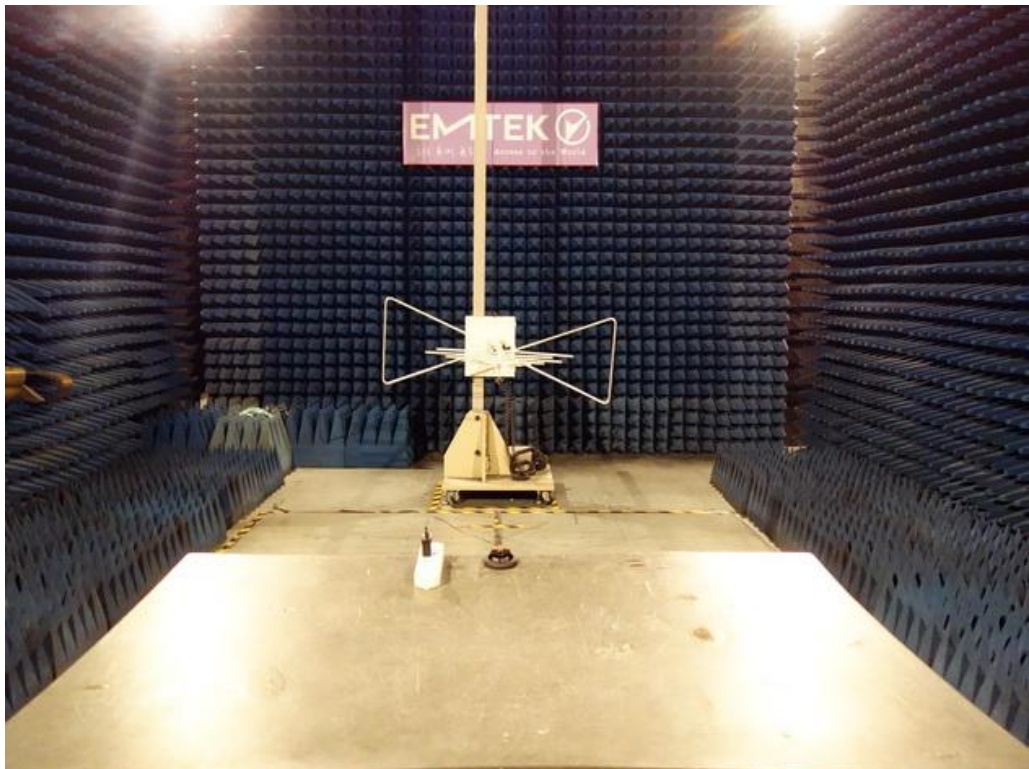
Standard :	☒ IEC 61000-4-4 ☐ EN 61000-4-4	Result : ☒ PASS / ☐ FAIL	
Applicant : _____ EUT : " TWinS " TWS Bluetooth Sporty Earphone Set M/N : BH-289 Input Voltage: AC 230V/50Hz Criterion : B Ambient Condition : 25 °C 50% RH			
Operation Mode : Charging			
Line : ☒ AC Mains		Line : ☐ Signal ☐ I/O Cable	
Coupling : ☒ Direct		Coupling : ☐ Capacitive	
Test Time : 120s			
Line	Test Voltage	Result (+)	Result (-)
L	1KV	PASS	PASS
N	1KV	PASS	PASS
PE			
L、N	1KV	PASS	PASS
L、PE			
N、PE			
L、N、PE			
Signal Line			
DC Line			
Note:			
Test Equipment		Burst Tester Model : UCS500M6B	

10. PHOTOGRAPH

10.1 Photo of Conducted Emission Measurement



10.2 Photo of Radiation Emission Measurement



10.3 Photo of Harmonic/Flicker Measurement



10.4 Photo of Electrostatic Discharge Test



10.5 Photo of Electrical Fast Transient /Burst Test



APPENDIX I (PHOTOS OF EUT)



