



Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 1 of 14

Applicant : Guangdong Shengtena Technology Co.,Ltd.**Address** : Gounan Village Industrial Area, Gurao Town, Chaoyang District, Shantou City**The submitted sample and sample information was/were submitted and identified by/on the behalf of the client****Sample name** : Wireless headphone**Testing type /model** : E18**Additional type /model** : E15Pro, E19, E20, E21, E25, E45, E55, E65, VJ086, VJ099, VJ088, 63552, 63445, 63695, 63540, 63571, 63572, 63400, 63690, 63585, 63586, 63588, 63535, 63595, 63596, 63597**Trademark** : N/A**Manufacturer name** : Guangdong Shengtena Technology Co.,Ltd.**Address** : Gounan Village Industrial Area, Gurao Town, Chaoyang District, Shantou City**Sample received date** : Aug. 08, 2024**Testing period** : Aug. 08, 2024 to Aug. 28, 2024**Test requested** : As specified by client, to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Diisobutyl phthalate (DIBP), Dibutyl phthalate(DBP), Benzyl butyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP) in the submitted sample in accordance with the RoHS Directive 2011/65/EU and amendment Commission Delegated Directive (EU) 2015/863 with effective from 22 July 2019.**Test Method** : Please refer to the following page(s)**Test Result(s)** : Please refer to the following page(s)**Conclusion** : The test results comply with the limits of RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU.

*****FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)*****

Producer By :

(Betty Liang / Engineer)

Date: Aug. 28, 2024**Authorized Signer** :**Date: Aug. 28, 2024**

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 2 of 14

Test Method:

A. Screening test by XRF spectroscopy

XRF screening limits in mg/kg for regulated elements according to IEC 62321-3-1:2013.

Element	Limit of IEC 62321-3-1:2013. Unit (mg/kg)		MDL	
	Polymers and Metals	Composite Material	Polymers	Other material
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$	10 mg/kg	50 mg/kg
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD \leq (50-3\sigma) < X < (150+3\sigma) \leq OL$	10 mg/kg	50 mg/kg
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$	10 mg/kg	50 mg/kg
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$	10 mg/kg	50 mg/kg
Br	$BL \leq (300-3\sigma) < X$	$BL \leq (250-3\sigma) < X$	10 mg/kg	50 mg/kg

Note:

-BL = Under the XRF screening limit

-OL = Further chemical test will be conducted while result is above the screening limit

-X= The symbol "X" marks the region where further investigation is necessary

-3σ= The reproducibility of analytical instruments

-LOD= Detection limit

B. Chemical Test

Test Item	Test Method	Test Equipment	MDL	Limit
Lead (Pb)	IEC 62321-5:2013	ICP-OES	2 mg/kg	1000 mg/kg
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES	2 mg/kg	100 mg/kg
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES	2 mg/kg	1000 mg/kg
Hexavalent Chromium Cr (VI) (Metal)	IEC 62321-7-1:2015	UV-VIS	0.1 µg/cm ²	0.13 µg/cm ²
Hexavalent Chromium Cr (VI) (Nonmetal)	IEC 62321-7-2:2017	UV-VIS	8 mg/kg	1000 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	5 mg/kg	1000 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS	5 mg/kg	1000 mg/kg
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS	50mg/kg	1000 mg/kg

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 3 of 14

Test Result(s):

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
1	Black plastic shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
2	White plastic	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
3	Black sponge	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
4	Metal screws	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
5	Black material	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
6	White material	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
7	Black line	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 4 of 14

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
8	PCB	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
9	Tin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
10	Chip resistor	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
11	IC	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
12	Chip capacitors	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
13	White sponge	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
14	Speaker	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 5 of 14

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
15	White line	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
16	Red line	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
17	Metal sheet	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
18	Metal interface	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
19	Plastic buttons	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
20	Black plastic terminal	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
21	Diode	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 6 of 14

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
22	Mi Tou	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	

Tested Item(s)	Result Unit (mg/kg)					Acceptable Limit Unit (mg/kg)
	1	2	3	4	5	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	N.D.	N.D.	N.D.	/	N.D.	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	N.D.	N.D.	N.D.	/	N.D.	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	N.D.	N.D.	N.D.	/	N.D.	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	N.D.	N.D.	N.D.	/	N.D.	1000

Tested Item(s)	Result Unit (mg/kg)					Acceptable Limit Unit (mg/kg)
	6	7	8	9	10	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	N.D.	N.D.	N.D.	/	N.D.	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	N.D.	N.D.	N.D.	/	N.D.	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	N.D.	N.D.	N.D.	/	N.D.	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	N.D.	N.D.	N.D.	/	N.D.	1000

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 7 of 14

Tested Item(s)	Result Unit (mg/kg)						Acceptable Limit Unit (mg/kg)
	11	12	13	14	15	16	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	N.D.	N.D.	N.D.	/	N.D.	N.D.	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	N.D.	N.D.	N.D.	/	N.D.	N.D.	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	N.D.	N.D.	N.D.	/	N.D.	N.D.	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	N.D.	N.D.	N.D.	/	N.D.	N.D.	1000

Tested Item(s)	Result Unit (mg/kg)						Acceptable Limit Unit (mg/kg)
	17	18	19	20	21	22	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	/	/	N.D.	N.D.	N.D.	N.D.	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	/	/	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	/	/	N.D.	N.D.	N.D.	N.D.	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	/	/	N.D.	N.D.	N.D.	N.D.	1000

Note:

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL)

-mg/kg = ppm = parts per million

-Negative = Absence of Cr(VI) , the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.02 mg/kg with 50cm² sample surface area used.

-Positive = Presence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is equal to or greater than 0.02 mg/kg with 50cm² sample surface area used.

-#=According to the directive (2011/65/ EU), Lead is exempted as copper alloy containing up to 4% lead by weight.

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 8 of 14

Remark:

- The screening results are only used for reference.
- When conducting the test for PBBs & PBDEs, XRF was introduced to screen Br Exclusively;
- When conducting the test for Hexavalent Chromium, XRF was introduced to screen Chromium exclusively.



Test Report

Report No. CCTI-2024080807R

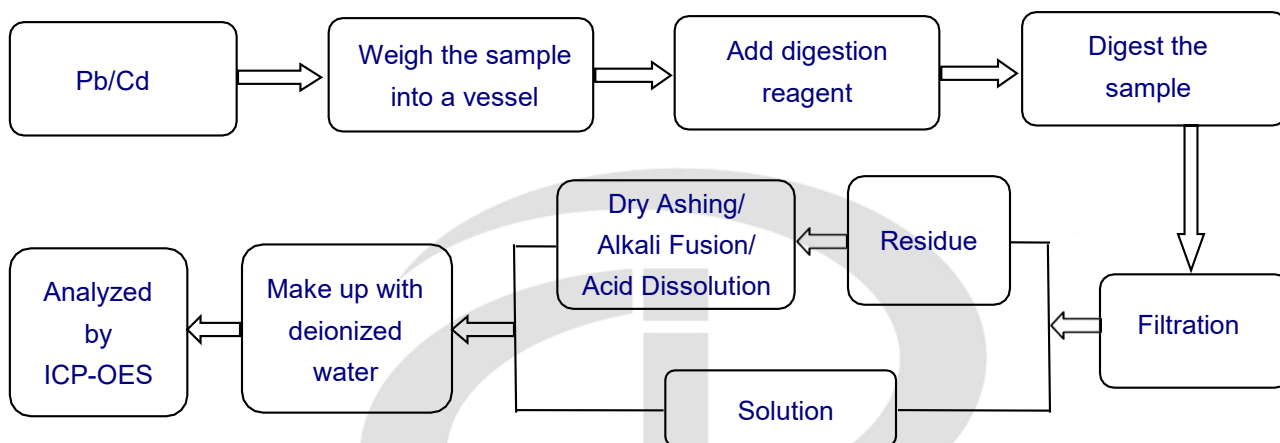
Date: Aug. 28, 2024

Page 9 of 14

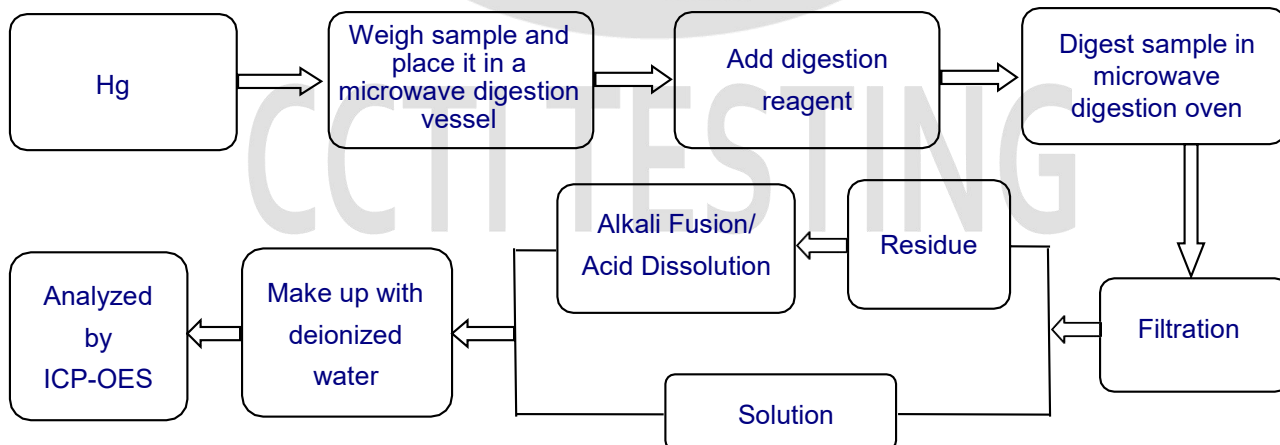
Test Process:

The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.

◆ IEC 62321-5:2013 Ed.1.0



◆ IEC 62321-4:2013+AMD1:2017 Ed.1.0



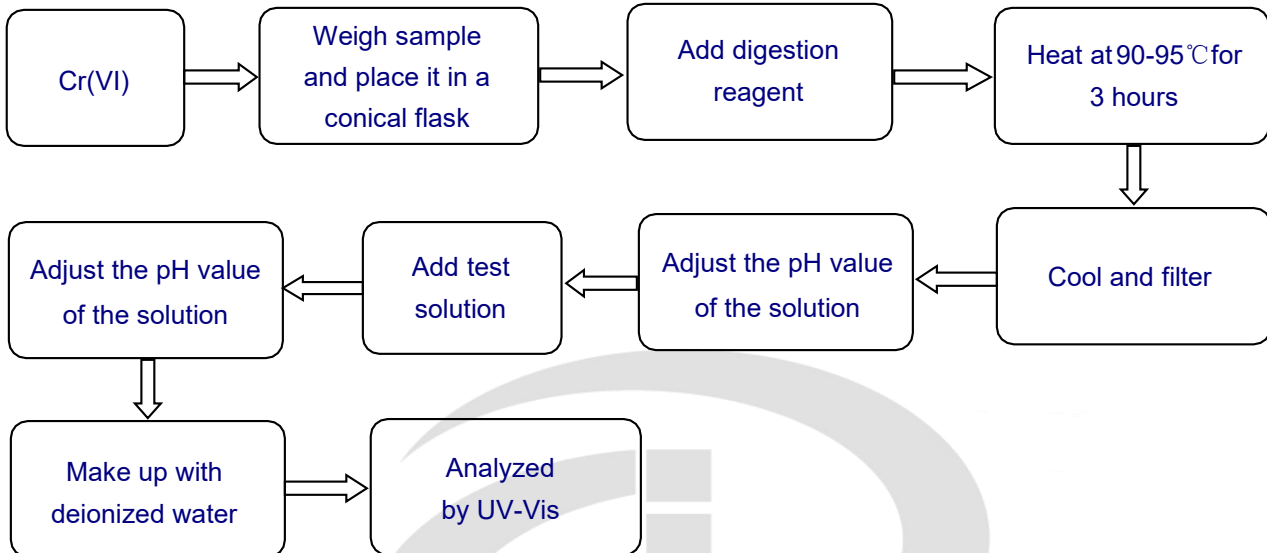
Test Report

Report No. CCTI-2024080807R

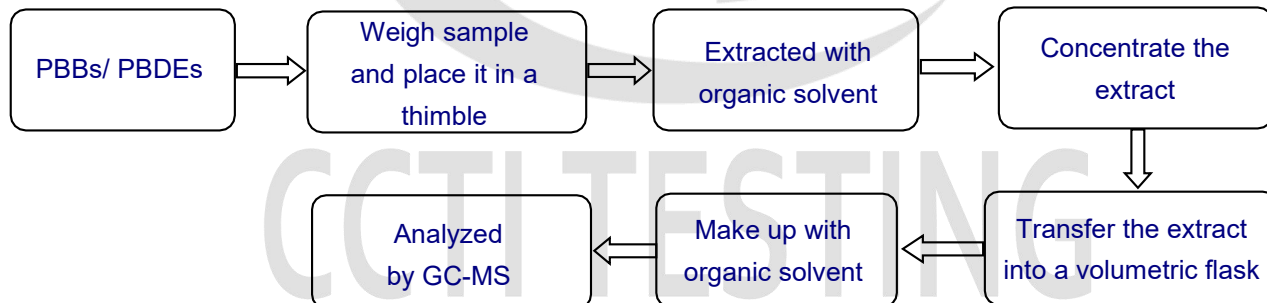
Date: Aug. 28, 2024

Page 10 of 14

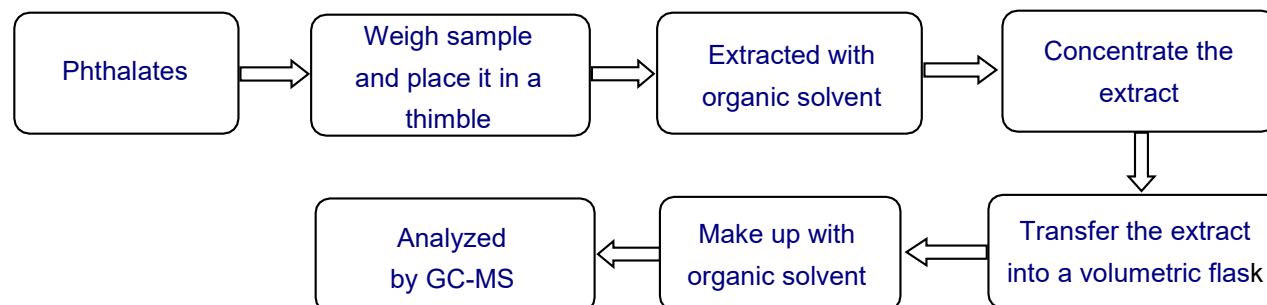
◆ IEC 62321-7-2:2017 Ed.1.0



◆ IEC 62321-6:2015 Ed.1.0



◆ IEC 62321-8:2017 Ed.1.0



Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 11 of 14

Photograph of Sample

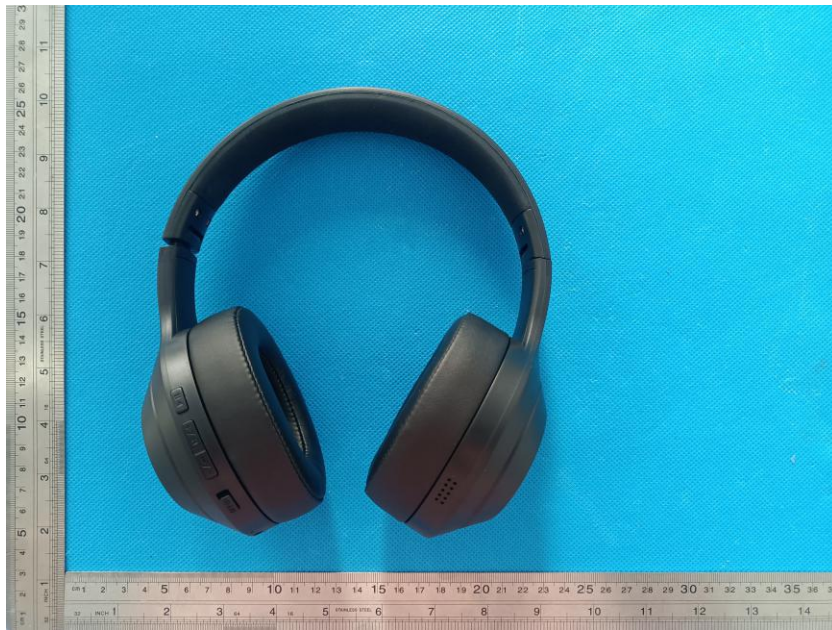


Figure 1



Figure 2

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 12 of 14

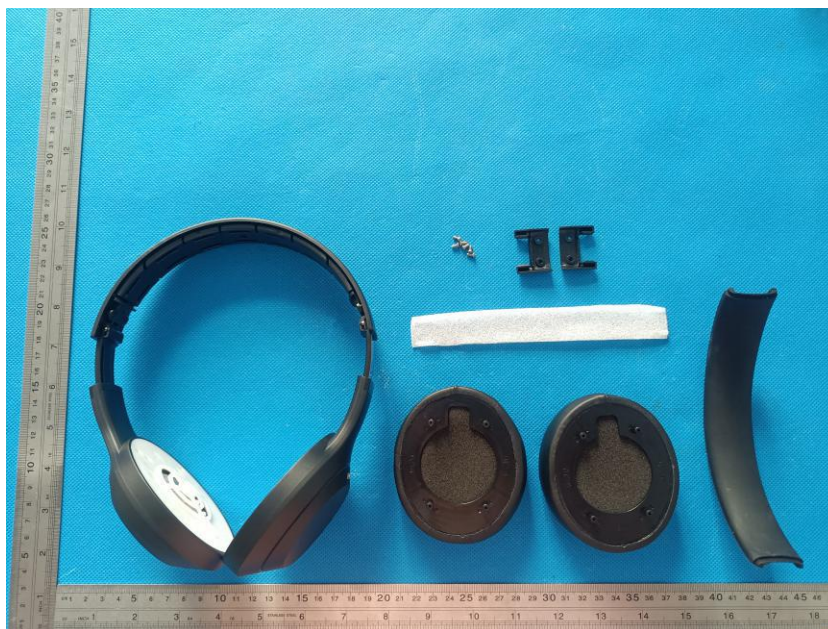


Figure 3

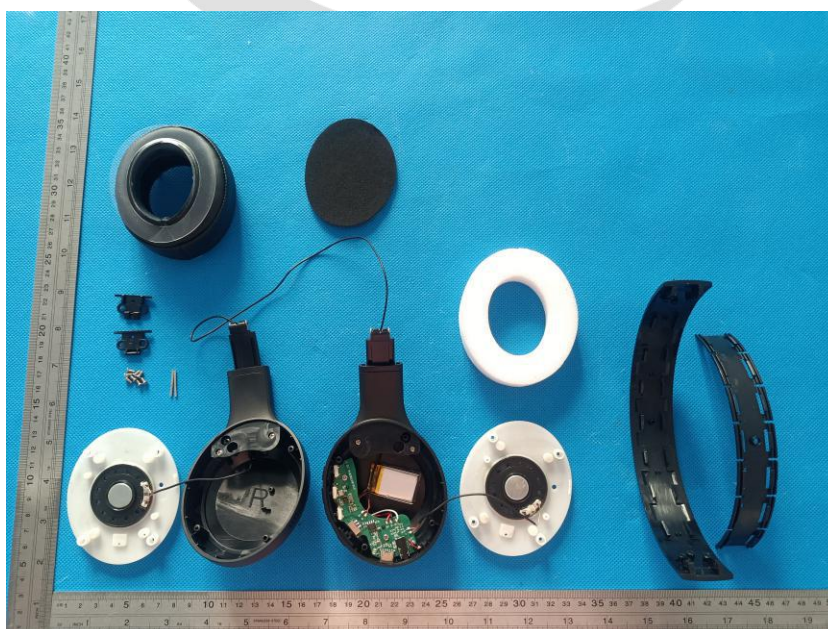


Figure 4

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 13 of 14

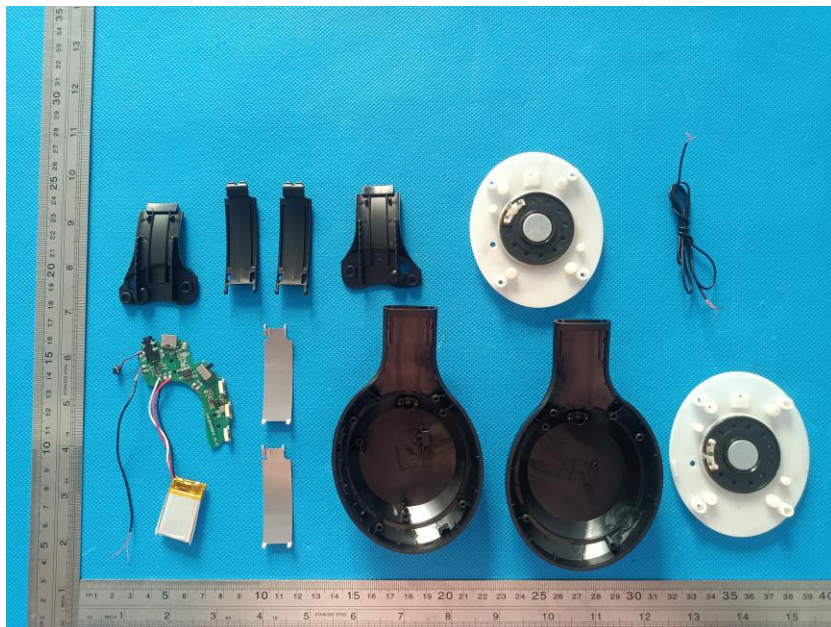


Figure 5

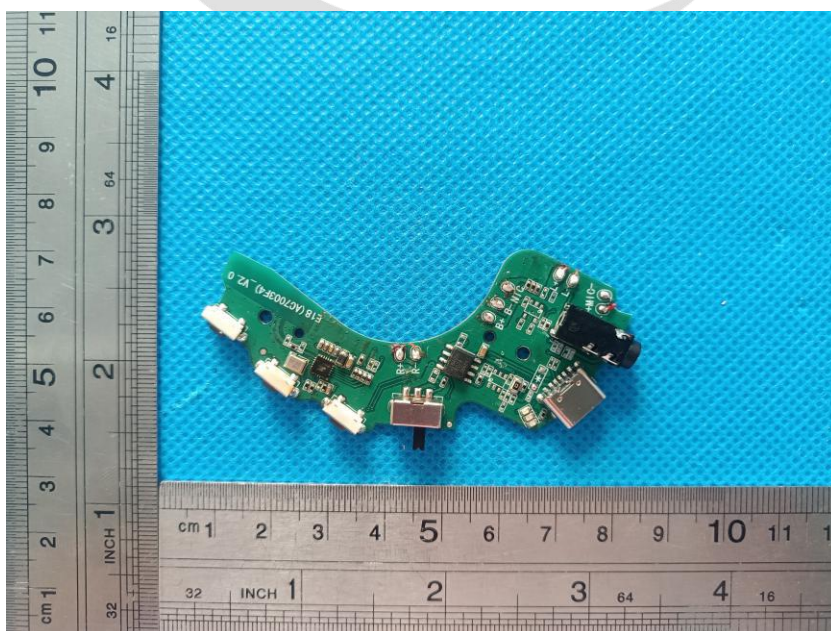


Figure 6

Test Report

Report No. CCTI-2024080807R

Date: Aug. 28, 2024

Page 14 of 14

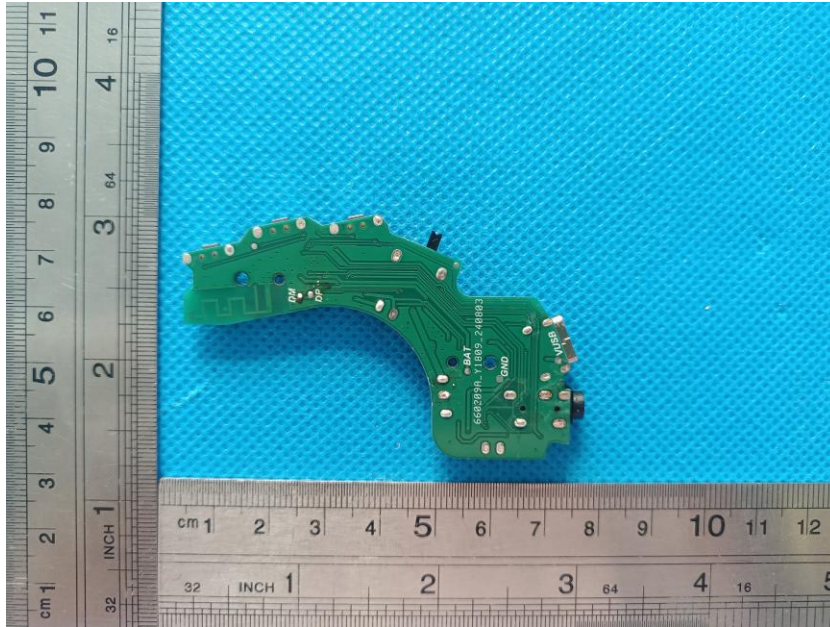


Figure 7

**** End of Report ****

CCTI TESTING

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CCTI, this report can't be reproduced except in full.