



TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 1 of 13

Applicant : Shenzhen Wesion Technology Co., Ltd.
Address : D#2101A, Caifugang Building, Baoyuan Road, Xixiang Street, Bao'an District, Shenzhen, China

Report on the submitted samples said to be:

Sample Name : Tone2 Pro
Trade Mark : Khadas
Style No. : Tone2 Pro
Testing Period : December 30, 2020 ~ January 07, 2021
Results : Please refer to next page(s).

TEST REQUEST	CONCLUSION
According to the customer's request, based on the performed tests on submitted sample, the result of Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), PBBs, PBDEs, Dibutyl Phthalate(DBP), Benzylbutyl Phthalate(BBP), Bis(2-ethylhexyl) Phthalate(DEHP), Diisobutyl phthalate(DIBP) content comply with the limit requirement as set of RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.	Pass

Signed for and on behalf of LCS





TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 2 of 13

Results:

A.EU RoHS Directive 2011/65/EU and its amendment directives on XRF

Test method: With reference to IEC 62321-3-1:2013, Screening by X-ray Fluorescence Spectroscopy (XRF)

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr ^v	Br ^v		
						PBBs	PBDEs	
1	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
2	Gold coated silver metal shell	BL	BL	BL	BL	/	/	2020-12-30
3	Black coated silver metal shell	BL	BL	BL	BL	/	/	2020-12-30
4	Golden metal shell	BL	BL	BL	BL	/	/	2020-12-30
5	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
6	Red plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
7	Gold metal pins	BL	BL	BL	BL	/	/	2020-12-30
8	White plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
9	Orange plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
10	Black plastic pad with glue	BL	BL	BL	BL	BL	BL	2020-12-30
11	Silver metal screws	BL	BL	BL	BL	/	/	2020-12-30
12	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
13	Silver metal screws	BL	BL	BL	BL	/	/	2020-12-30
14	White plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
15	Gray thermal pad	BL	BL	BL	BL	BL	BL	2020-12-30
16	Black metal screws	BL	BL	BL	BL	/	/	2020-12-30
17	Silver metal shell	BL	BL	BL	BL	/	/	2020-12-30
18	Black plastic pad with glue	BL	BL	BL	BL	BL	BL	2020-12-30
19	Silver metal shell	BL	BL	BL	BL	/	/	2020-12-30
20	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
21	Silver metal pins	BL	BL	BL	BL	/	/	2020-12-30
22	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
23	Silver metal sheet	BL	BL	BL	BL	/	/	2020-12-30
24	Golden metal piece	BL	BL	BL	BL	/	/	2020-12-30
25	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
26	Silver metal sheet	BL	BL	BL	BL	/	/	2020-12-30



TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 3 of 13

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr ^v	Br ^v		
						PBBs	PBDEs	
27	Golden metal piece	BL	BL	BL	BL	/	/	2020-12-30
28	Silver body	BL	BL	BL	BL	BL	BL	2020-12-30
29	Black body	BL	BL	BL	BL	BL	BL	2020-12-30
30	Silver metal body	BL	BL	BL	BL	/	/	2020-12-30
31	White body	BL	BL	BL	BL	BL	BL	2020-12-30
32	Yellow chip capacitor	BL	BL	BL	BL	BL	BL	2020-12-30
33	Black body IC	BL	BL	BL	BL	BL	BL	2020-12-30
34	Black chip resistor	BL	BL	BL	BL	BL	BL	2020-12-30
35	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
36	Gray plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
37	Silver metal pins	BL	BL	BL	BL	/	/	2020-12-30
38	Gray plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
39	Silver metal shell	BL	BL	BL	BL	/	/	2020-12-30
40	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
41	Silver metal sheet	BL	BL	BL	BL	/	/	2020-12-30
42	Black PCB board	BL	BL	BL	BL	BL	BL	2020-12-30
43	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
44	Metal metal needle	BL	BL	BL	BL	/	/	2020-12-30
45	Silver solder joint	BL	BL	BL	BL	/	/	2020-12-30
46	White plastic leather	BL	BL	BL	BL	BL	BL	2020-12-30
47	Silver plastic sheet	BL	BL	BL	BL	BL	BL	2020-12-30
48	White cloth strip	BL	BL	BL	BL	BL	BL	2020-12-30
49	White plastic leather	BL	BL	BL	BL	BL	BL	2020-12-30
50	Green plastic leather	BL	BL	BL	BL	BL	BL	2020-12-30
51	Red plastic leather	BL	BL	BL	BL	BL	BL	2020-12-30
52	Blue plastic leather	BL	BL	BL	BL	BL	BL	2020-12-30
53	Silver tinsel	BL	BL	BL	BL	/	/	2020-12-30
54	White plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
55	Silver metal shell	BL	BL	BL	BL	/	/	2020-12-30
56	Black plastic shell	BL	BL	BL	BL	BL	BL	2020-12-30
57	Silver metal pins	BL	BL	BL	BL	/	/	2020-12-30



TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 4 of 13

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr [▼]	Br [▼]		
						PBBs	PBDEs	
58	Red coated silver metal shell	BL	BL	BL	BL	/	/	2020-12-30
59	Blue coated silver metal shell	BL	BL	BL	BL	/	/	2020-12-30

Note:

- Results were obtained by XRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) are recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013.

Element	Unit	Non-metal	Metal	Composite Material
Cd	mg/kg	BL≤70-3σ<X <130+3σ≤OL	BL≤70-3σ<X <130+3σ≤OL	BL≤50-3σ<X <150+3σ≤OL
Pb	mg/kg	BL≤700-3σ<X <1300+3σ≤OL	BL≤700-3σ<X <1300+3σ≤OL	BL≤500-3σ<X <1500+3σ≤OL
Hg	mg/kg	BL≤700-3σ<X <1300+3σ≤OL	BL≤700-3σ<X <1300+3σ≤OL	BL≤500-3σ<X <1500+3σ≤OL
Cr	mg/kg	BL≤700-3σ<X	BL≤700-3σ<X	BL≤500-3σ<X
Br	mg/kg	BL≤300-3σ<X	--	BL≤250-3σ<X

Note:

- BL = Below Limit
- OL = Over Limit
- X = Inconclusive

- The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition.
- The maximum permissible limit is quoted from the document 2015/863/EC amending RoHS directive 2011/65/EU:
- ▼=For restricted substances PBBs and PBDEs, the results show the total Br content; The restricted substance was Cr(VI), and the results showed the total Cr content



TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 5 of 13

RoHS Restricted Substances	Maximum Concentration Value (mg/kg) (by weight in homogenous materials)
Cadmium (Cd)	100
Lead (Pb)	1000
Mercury (Hg)	1000
Hexavalent Chromium (Cr(VI))	1000
Polybrominated biphenyls (PBBs)	1000
Polybrominated diphenylethers (PBDEs)	1000
Dibutyl Phthalate(DBP)	1000
Benzylbutyl Phthalate(BBP)	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	1000
Diisobutyl phthalate(DIBP)	1000

Disclaimers:

This XRF Screening report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes.

The result shown in this XRF screening report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.



TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 6 of 13

B. EU RoHS Directive 2011/65/EU and its amendment Directives 2015/863/EU on Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, DBP, BBP, DEHP, DIBP content.

Test method:

Lead(Pb) & Cadmium(Cd) Content:

With reference to IEC 62321-5:2013, by acid digestion and analysis was performed by inductively coupled plasma atomic emission spectrometer (ICP-OES)

Mercury(Hg) Content:

With reference to IEC 62321-4:2013+AMD1:2017 CSV, by acid digestion and analysis was performed by inductively coupled plasma atomic emission spectrometer (ICP-OES)

Hexavalent Chromium(Cr(VI)) Content:

With reference to IEC 62321-7-1:2015 or IEC 62321-7-2:2017, by alkaline digestion and analysis was performed by UV-visible spectrophotometer (UV-Vis)

PBBs & PBDEs Content:

With reference to IEC 62321-6:2015, by solvent extraction and analysis was performed by gas chromatographic-mass spectrometer (GC-MS)

BBP DBP DEHP & DIBP Content:

With reference to IEC 62321-8:2017, by solvent extraction and analysis was performed by gas chromatographic-mass spectrometer (GC-MS)

1) The test results of DBP、BBP、DEHP & DIBP

Item	Unit	MDL	Results				Limit
			49	50	51	52	
Dibutyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000



TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 7 of 13

Item	Unit	MDL	Results	Limit
			1+5+6+8+9+10	
Dibutyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			12+14+15+18+20+22	
Dibutyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			25+28+29+31+32+33	
Dibutyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	600	N.D.	1000



TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 8 of 13

Item	Unit	MDL	Results	Limit
			34+35+36+38+40+42	
Dibutyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			43+46+47+48+54+56	
Dibutyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Remark:

- mg/kg = ppm
- N.D. = Not detected
- MDL=Method detected limited
- Flow chart appendix is included
- Photo appendix is included.



TEST REPORT

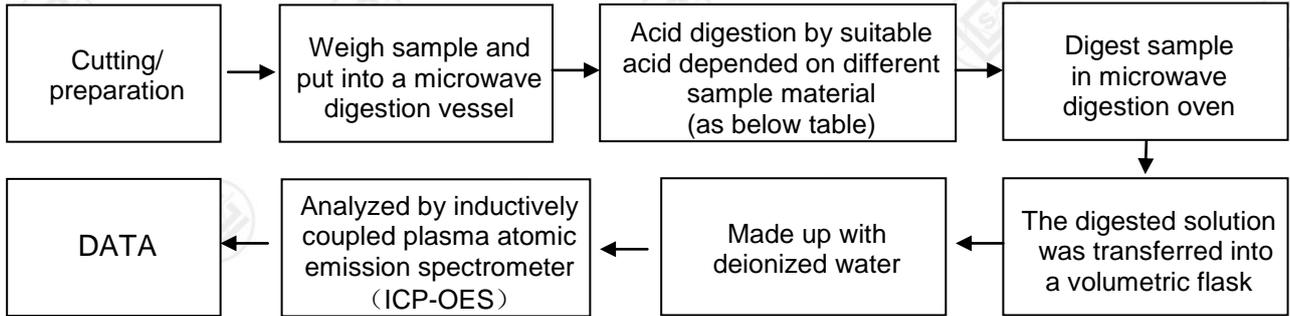
Report No.: LCS201228087AR

Date: 2021.01.07

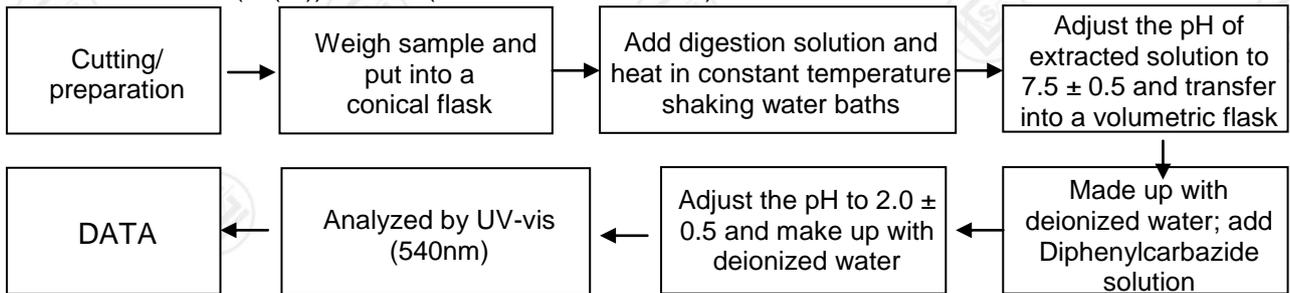
Page 9 of 13

Appendix

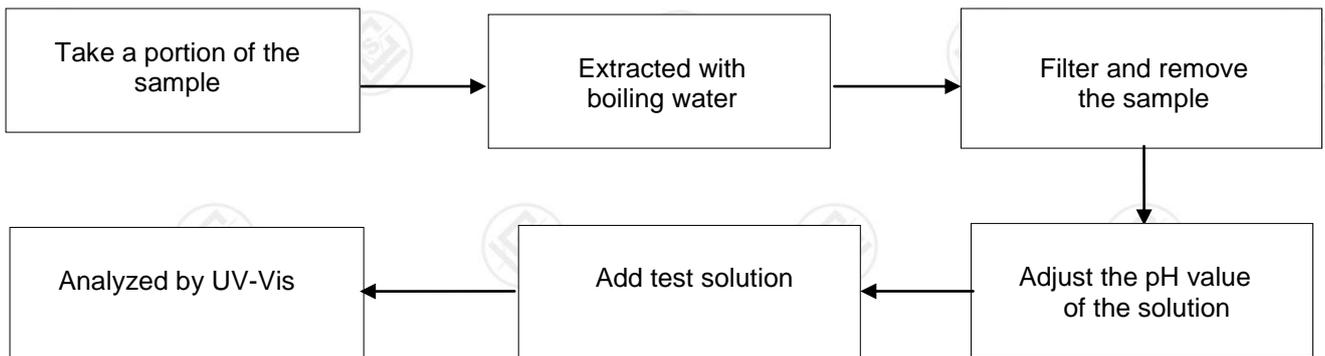
1. Test Flow chart for Cd/Pb /Hg content



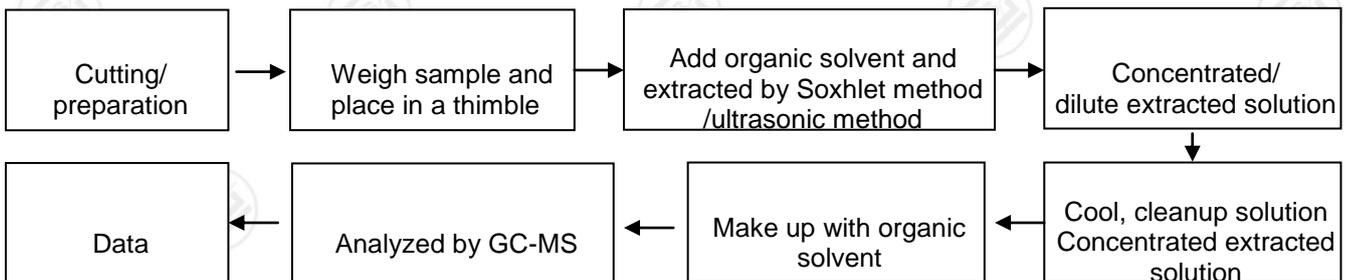
2. Test Flowchart for (Cr(VI)) content (For non-metal material)



Test Flowchart for (Cr(VI)) content (For metal material)



3. Test Flow chart for PBBs & PBDEs & DBP & BBP & DEHP & DIBP content





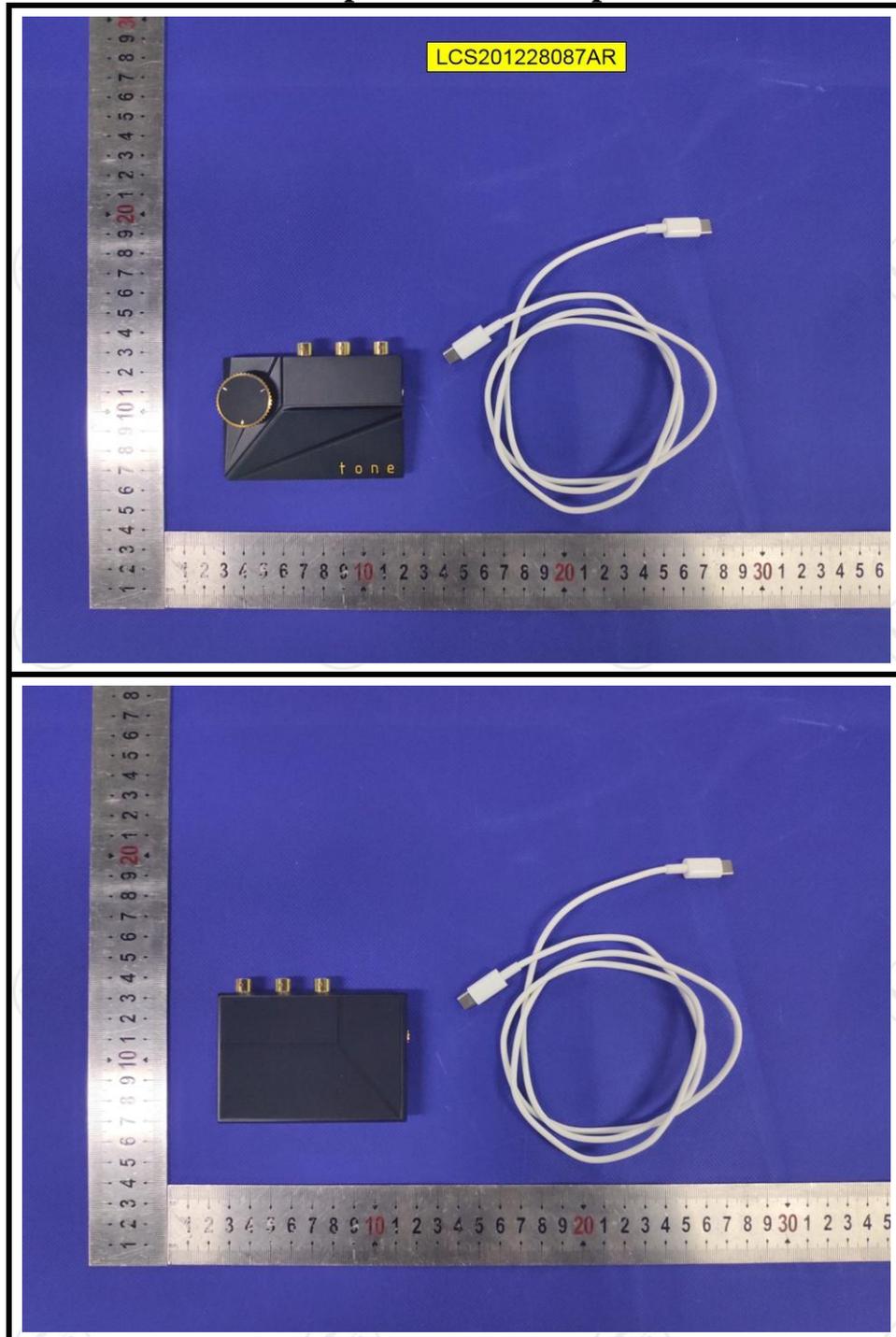
TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 10 of 13

The photo of the sample



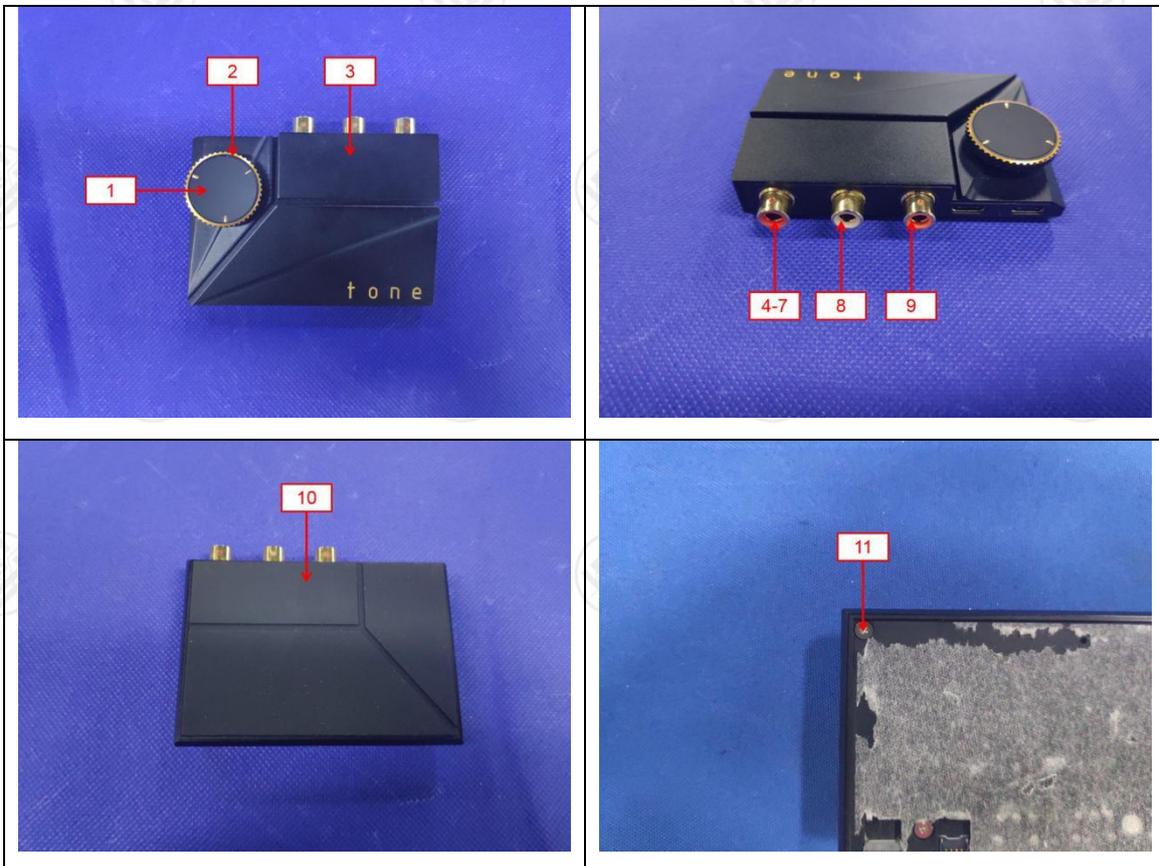
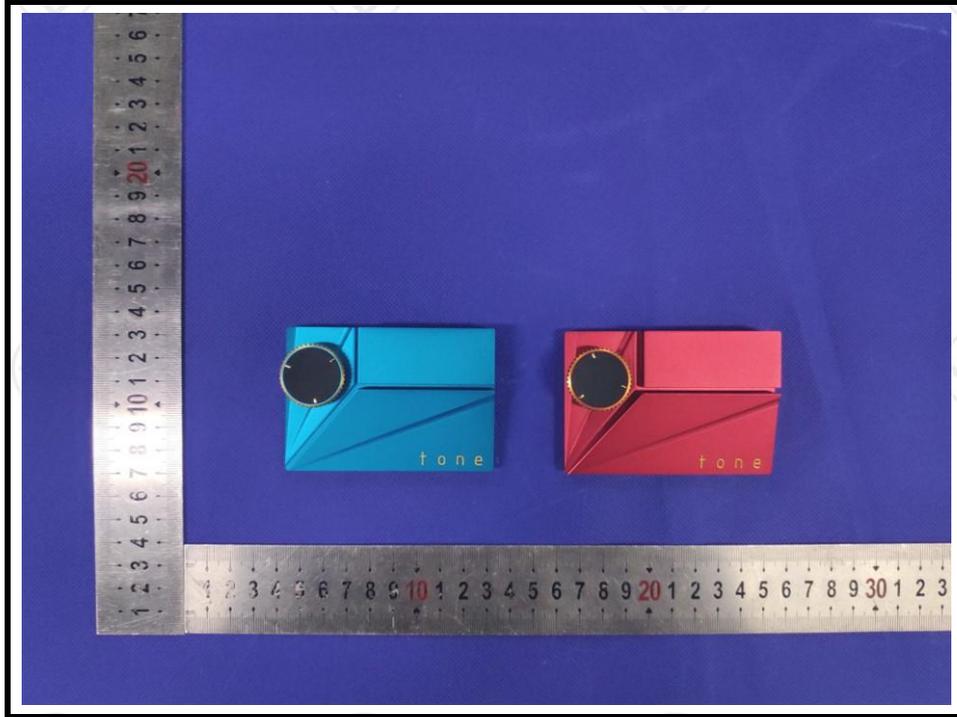


TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 11 of 13



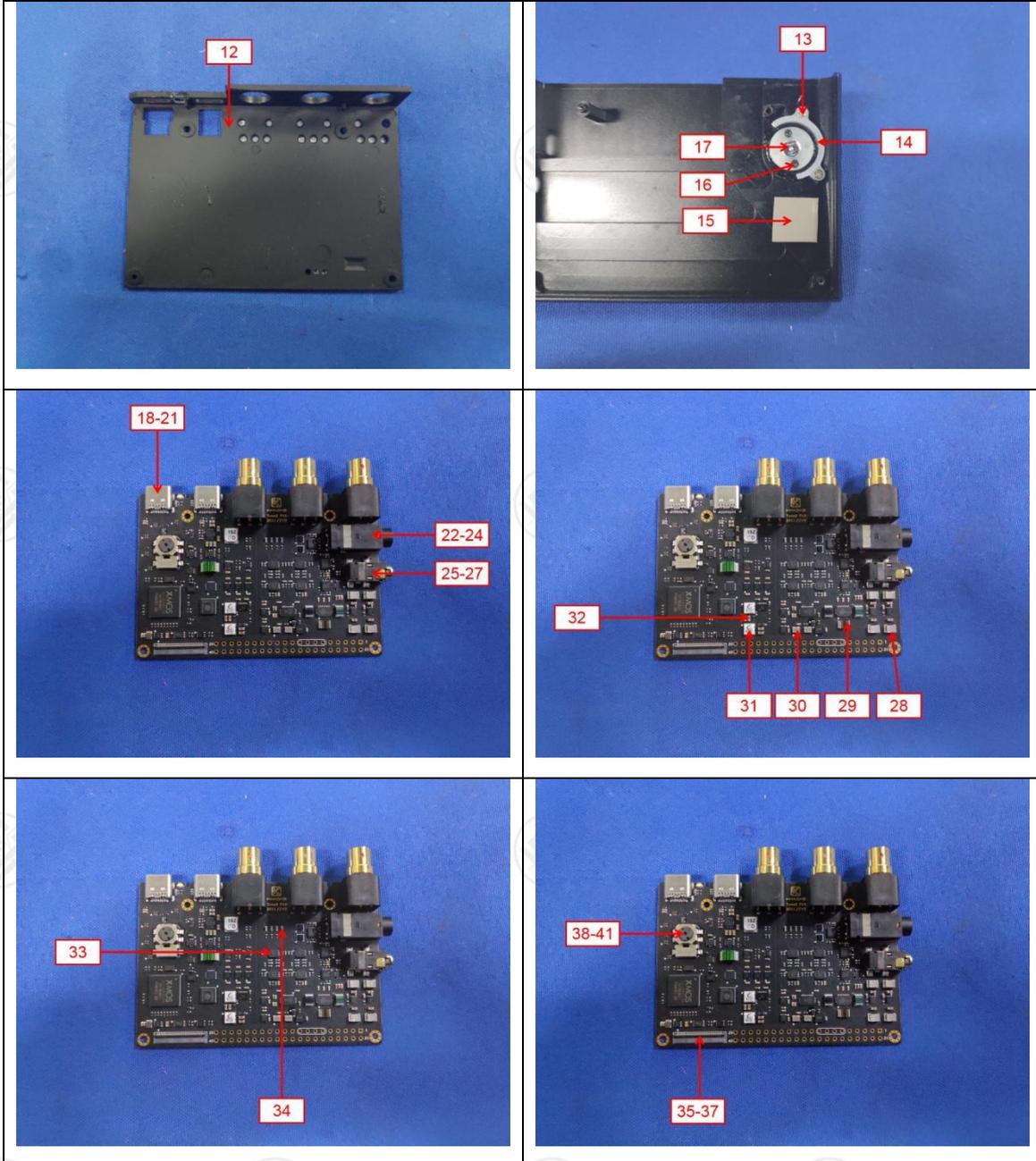


TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 12 of 13



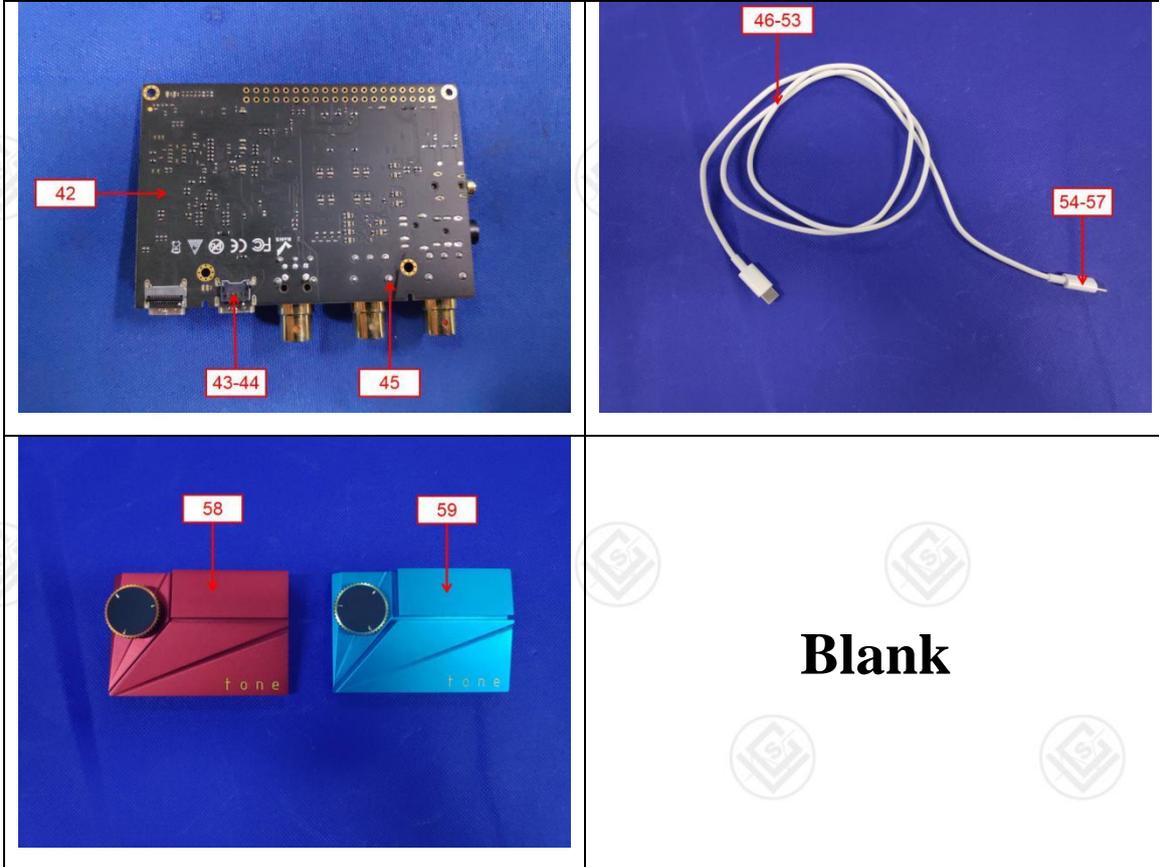


TEST REPORT

Report No.: LCS201228087AR

Date: 2021.01.07

Page 13 of 13



***** End of Report *****

Statement:

1. The test report is considered invalidated without approval signature, special seal on the perforation.
2. The result(s) shown in this report refer only to the sample(s) tested.
3. Without written approval of LCS, this report can't be reproduced except in full.
4. The sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which LCS hasn't verified.
5. In case of any discrepancy between the English version and Chinese version of the testing reports(if generated), the Chinese version shall prevail.