

TEST REPORT

Applicant : Shenzhen XTAR Electronics Co., Ltd
Address : 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area, Longgang District, Shenzhen, Guangdong, China
Manufacturer : Shenzhen XTAR Electronics Co., Ltd
Manufacturer Address : 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area, Longgang District, Shenzhen, Guangdong, China
Factory : Shenzhen XTAR Electronics Co., Ltd
Factory Address : 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area, Longgang District, Shenzhen, Guangdong, China

Report on the submitted samples said to be:

Sample Name(s) : L8 BOX Battery Charging Case
Trade Mark : 
Tested Model No. : L8 BOX
Sample Received Date : October 17, 2025
Testing Period : October 17, 2025 ~ October 21, 2025
Date of Report : October 22, 2025
Testing Location : Room 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, Guangdong, China
Results : Please refer to next page(s).

TEST REQUEST	CONCLUSION
As specified by client, 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), Butylbenzyl Phthalate(BBP), Di-2-ethylhexyl Phthalate(DEHP) and Diisobutyl phthalate(DIBP) content comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.	PASS

Signed for and on behalf of LCS



Andy Yu



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

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

Test result(s):

Sample No.	Sample Description	Screening Result(s)						Date of sample submission/ Resubmission
		Cd	Pb	Hg	Cr [▼]	Br [▼]		
						PBBs	PBDEs	
1	Black hard plastic	BL	BL	BL	BL	BL	BL	2025-10-17
2	Silver hard plastic	BL	BL	BL	BL	BL	BL	2025-10-17
3	Black hard plastic	BL	BL	BL	BL	BL	BL	2025-10-17
4	Golden metal	BL	BL	BL	BL	/	/	2025-10-17
5	Black wire insulation	BL	BL	BL	BL	BL	BL	2025-10-17
6	Silver-colored wire core	BL	BL	BL	BL	/	/	2025-10-17
7	Golden metal	BL	BL	BL	BL	/	/	2025-10-17
8	Silver metal	BL	BL	BL	BL	/	/	2025-10-17
9	Black hard plastic	BL	BL	BL	BL	BL	BL	2025-10-17
10	contact pin	BL	BL	BL	BL	/	/	2025-10-17
11	Black hard plastic	BL	BL	BL	BL	BL	BL	2025-10-17
12	Golden metal	BL	BL	BL	BL	/	/	2025-10-17
13	Magnet	BL	BL	BL	BL	/	/	2025-10-17
14	Black screw	BL	BL	BL	BL	/	/	2025-10-17
15	Silver screw	BL	BL	BL	BL	/	/	2025-10-17
16	Magnet	BL	BL	BL	BL	/	/	2025-10-17
17	Golden metal	BL	BL	BL	BL	/	/	2025-10-17
18	Black hard plastic	BL	BL	BL	BL	BL	BL	2025-10-17
19	Contact pin	BL	BL	BL	BL	/	/	2025-10-17
20	Core	BL	BL	BL	BL	/	/	2025-10-17
21	Transistor	BL	BL	BL	BL	BL	BL	2025-10-17
22	IC body	BL	BL	BL	BL	BL	BL	2025-10-17
23	Lamp bead	BL	BL	BL	BL	BL	BL	2025-10-17
24	Black soft plastic	BL	BL	BL	BL	BL	BL	2025-10-17
25	Glue	BL	BL	BL	BL	BL	BL	2025-10-17
26	Black hard plastic	BL	BL	BL	BL	BL	BL	2025-10-17
27	Silver metal	BL	BL	BL	BL	/	/	2025-10-17
28	Contact pin	BL	BL	BL	BL	/	/	2025-10-17
29	Printed Circuit Board	BL	BL	BL	BL	BL	BL	2025-10-17
30	Black wire insulation	BL	BL	BL	BL	BL	BL	2025-10-17
31	Red wire insulation	BL	BL	BL	BL	BL	BL	2025-10-17



Shenzhen Southern LCS Compliance Testing Co., Ltd.

Add: Room 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, Guangdong, China

Tel: +(86) 0755-29871520 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

Sample No.	Sample Description	Screening Result(s)						Date of sample submission/ Resubmission
		Cd	Pb	Hg	Cr [▼]	Br [▼]		
						PBBs	PBDEs	
32	White wire insulation	BL	BL	BL	BL	BL	BL	2025-10-17
33	Green wire insulation	BL	BL	BL	BL	BL	BL	2025-10-17
34	Yellow wire insulation	BL	BL	BL	BL	BL	BL	2025-10-17
35	Black wire insulation	BL	BL	BL	BL	BL	BL	2025-10-17
36	Copper-colored wire core	BL	BL	BL	BL	/	/	2025-10-17

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(Unit: mg/kg).

Element	Polymers	Metals	Composite material
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$
Br	$BL \leq (300-3\sigma) < X$	N/A	$BL \leq (250-3\sigma) < X$

Remark:

- BL= Below Limit
 - OL= Over Limit
 - X= The range of needing to do further testing
 - 3σ= The reproducibility of analytical instruments
 - N/A= Not applicable
 - LOD= Detection limit
- 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 RoHS Directive 2011/65/EU with amendment (EU) 2015/863.
 - ▼=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.



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
Butylbenzyl 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.

B. EU RoHS Directive 2011/65/EU with amendment (EU) 2015/863 on DBP, BBP, DEHP & DIBP content

Test method:

Phthalates(DBP, BBP, DEHP &DIBP) Content:

Refer to IEC 62321-8:2017, by solvent extraction and analysis was performed by gas chromatography-mass spectrometer (GC-MS).

Test result(s):

1) Phthalates(DBP, BBP, DEHP &DIBP)

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg)	Limit (mg/kg)
		1+2+3+5+9+11	
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000



Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg)	Limit (mg/kg)
		18+21+22+23+24+25	
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg)	Limit (mg/kg)
		26+29+30+31+32+33	
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg)	Limit (mg/kg)
		34+35	
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

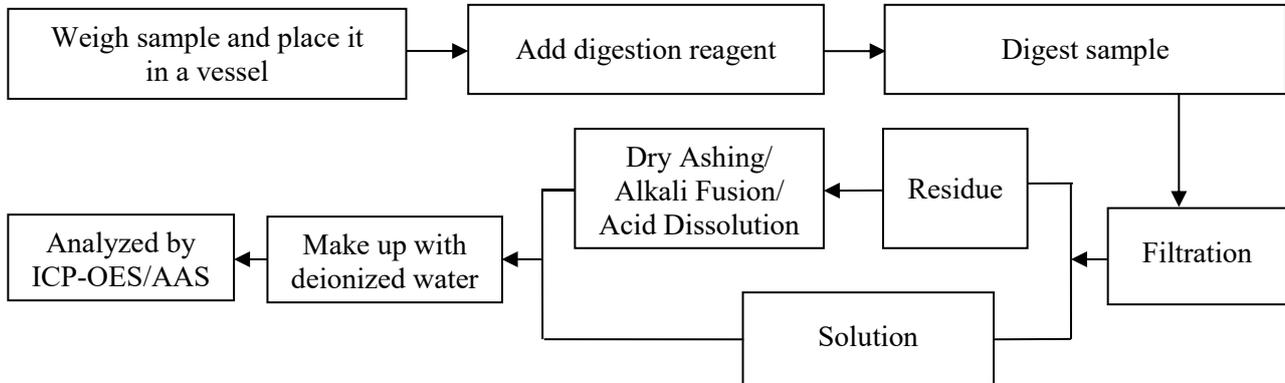
Note:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg= milligram per kilogram=ppm
- According to customer's requirement, only the appointed materials have been tested.

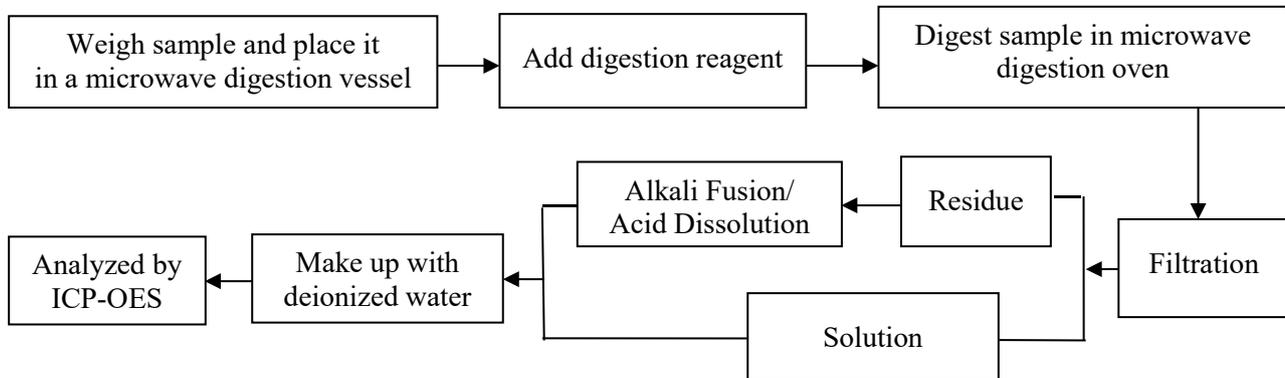


Test Process

1. Lead(Pb) & Cadmium(Cd): IEC 62321-5:2013

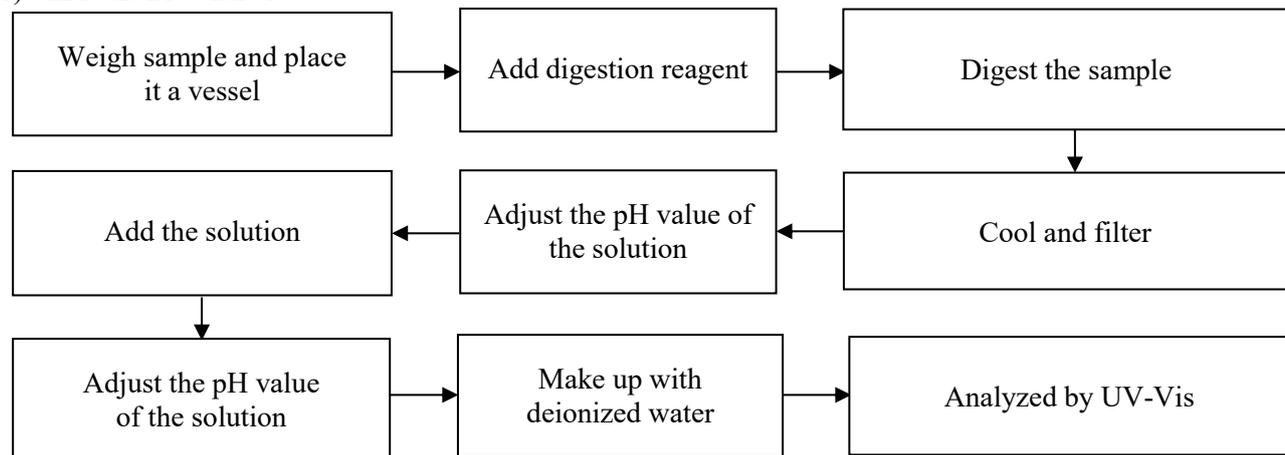


2. Mercury(Hg): IEC 62321-4:2013+AMD1:2017 CSV

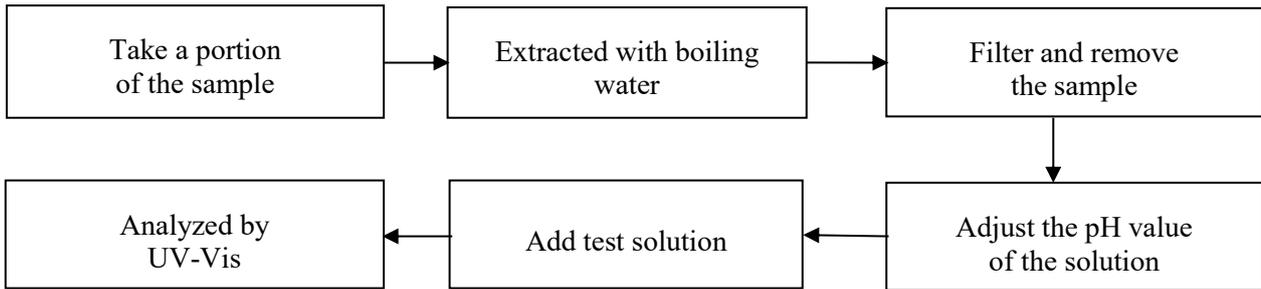


3. Hexavalent Chromium(Cr(VI))

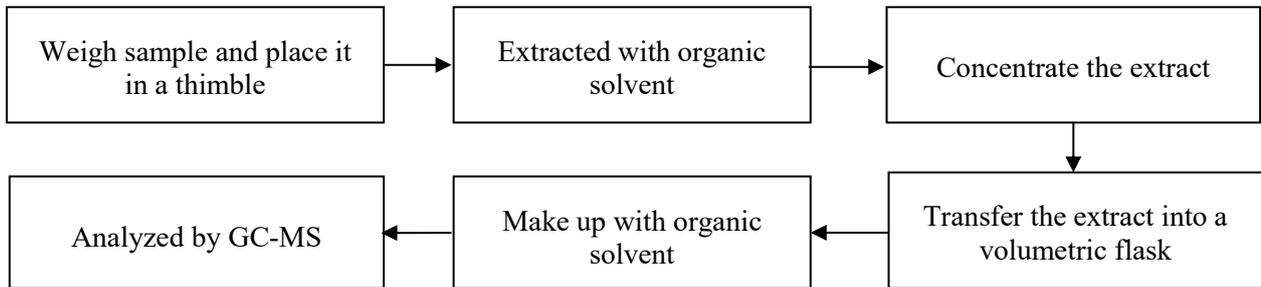
1) IEC 62321-7-2:2017



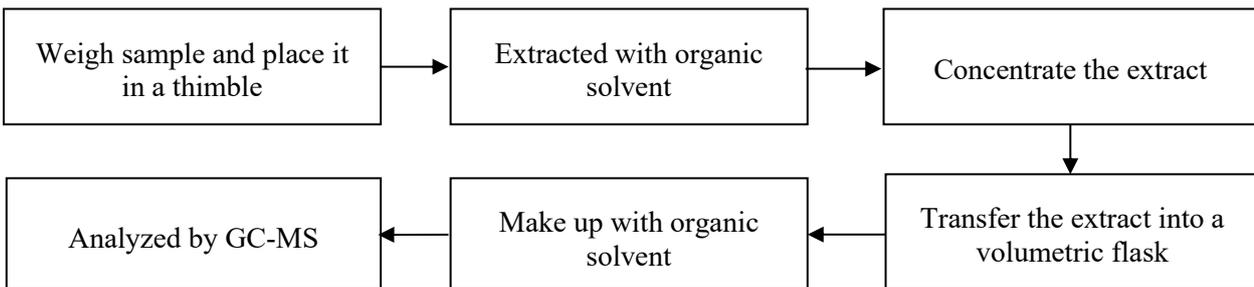
2) IEC 62321-7-1:2015



4. Polybrominated Biphenyls(PBBs) & Polybrominated Diphenyl Ethers(PBDEs) : IEC 62321-6:2015

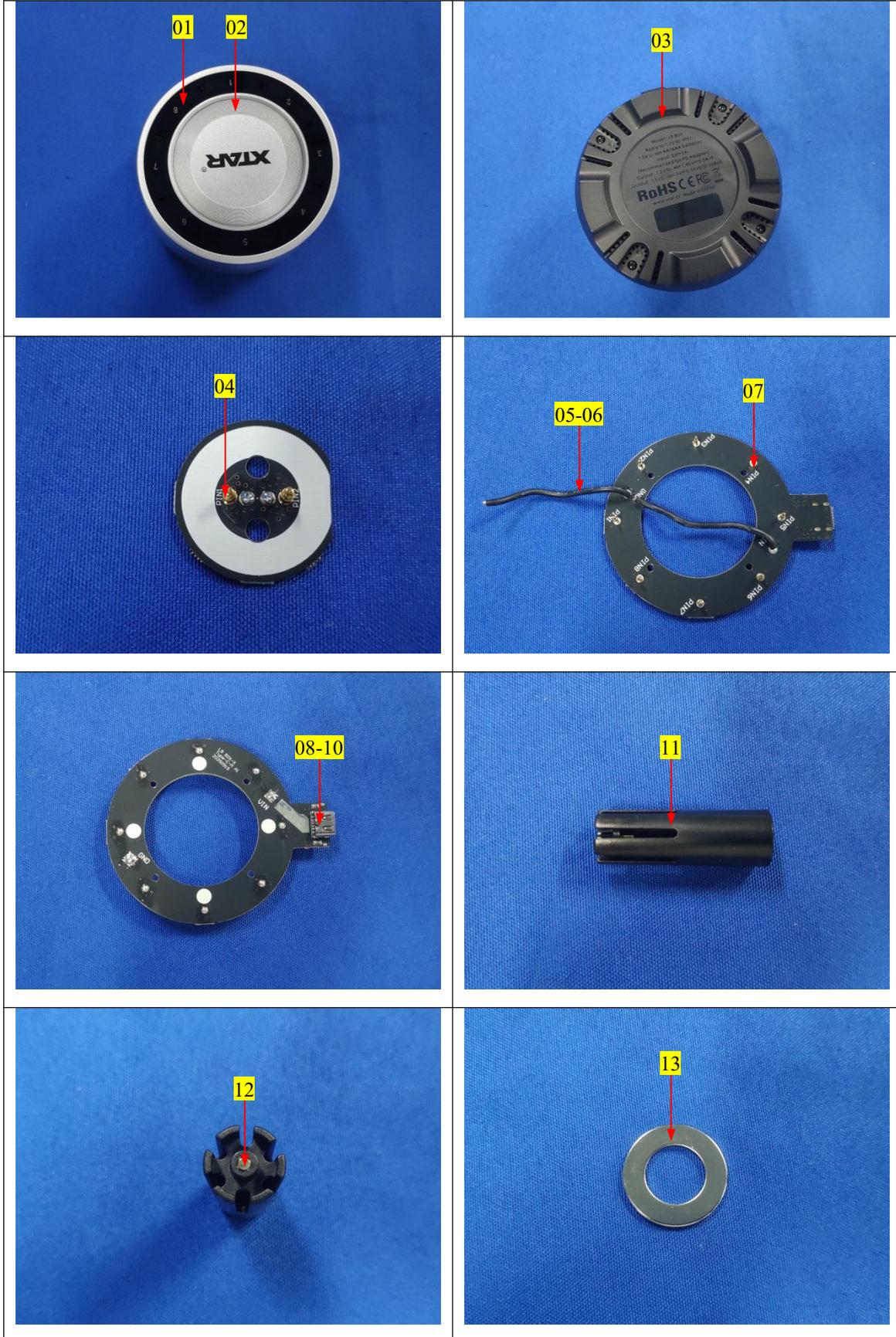


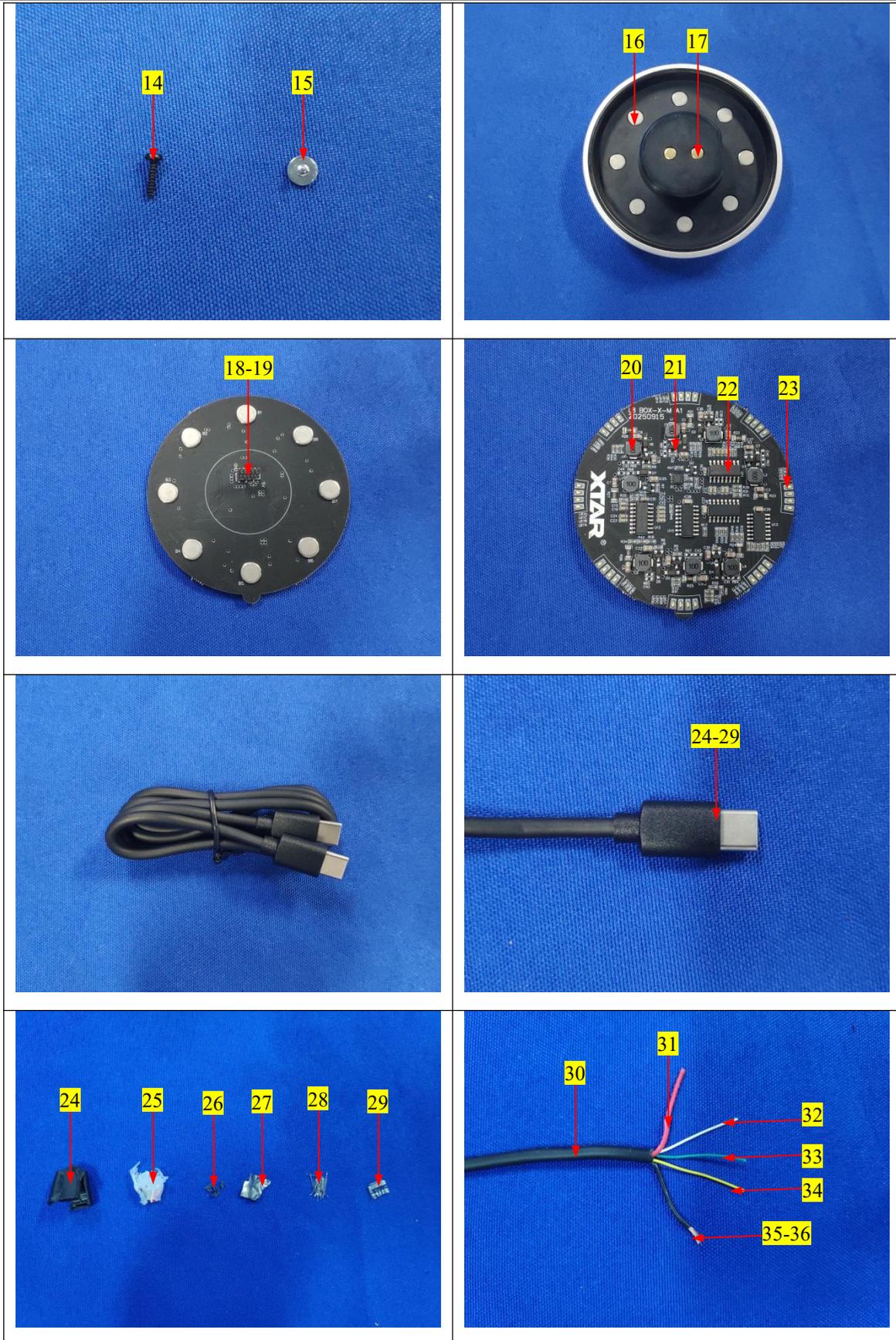
5. Phthalates(DBP, BBP, DEHP & DIBP) : IEC 62321-8:2017



The photo(s) of the sample







Statement:

1. The test report is invalid without the signature of the approver and the special seal for the company's report;
2. The company name, address and sample information shown on the report were provided by the applicant who should be responsible for the authenticity which are not verified by LCS;
3. The test results in this report are only responsible for the tested samples;
4. Without written approval of LCS, this report can't be reproduced except in full;
5. In case of any discrepancy between the corresponding Chinese and English contents in the test report, the Chinese version shall prevail.

*** End of Report ***

