

TEST REPORT

<u>APPLICANT</u>	: Shanghai Baiway Electronics Co., Ltd.
<u>ADDRESS</u>	: B511, No.269, Sizhuan Road, Sijin Town, Shanghai
<u>SAMPLE DESCRIPTION</u>	: Battery capacity tester
<u>TEST ITEM NO.</u>	: TF03KH
<u>REFERENCE ITEM NO.</u>	: LY7S LY7B LY6W LY6N TD05 TD16 TH01 TK15H TR16H TF03H TF03KH TY23 TX20 TX21 TC147 TC169 TR20 TR24 TC30 TC35 MR23 MF23 RCS22 TY02K TY02B RECS300
<u>COUNTRY OF ORIGIN</u>	: China
<u>SAMPLE RECEIVED DATE</u>	: 04-Jul-2024
<u>FURTHER INFORMATION DATE</u>	: 15-Jul-2024
<u>TURN AROUND TIME</u>	: 04-Jul-2024 - 16-Jul-2024
<u>TEST SPECIFICATION</u>	: Total concentration of Lead, Cadmium, Mercury, Chromium VI, Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) in accordance with EC Directive 2011/65/EU and its amendment Directive (EU) 2015/863 (RoHS)
<u>CONCLUSION</u>	: Based on the analysis on the submitted sample(s), the test results do comply with the concentration limits as specified in Annex II to Directive 2011/65/EU and its amendment Directive (EU) 2015/863.

The reference item(s) has not been tested in current report, but according to applicant's request, the item number has also been included.

The following test item(s) was/were performed on submitted sample(s) and/or component(s) appointed by applicant.

Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins MTS Consumer Product Testing (Shanghai) Co., Ltd. ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to info.sh@cpt.eurofinscn.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins MTS Consumer Product Testing (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to info.sh@cpt.eurofinscn.com and referring to this report number.



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

Signed for and on behalf of
Eurofins MTS Consumer Product Testing (Shanghai) Co., Ltd.



Vivian Gu
Lab Director



SAMPLE PHOTO(S)



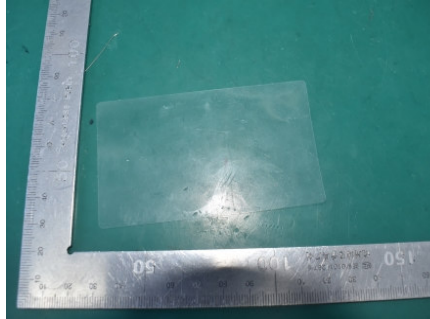
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COMPONENT PHOTO(S)



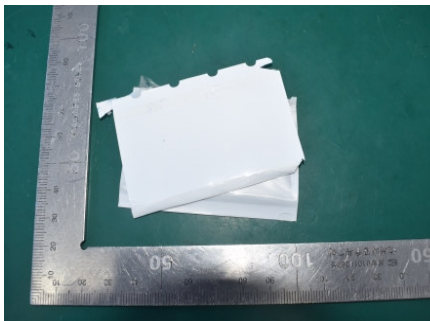
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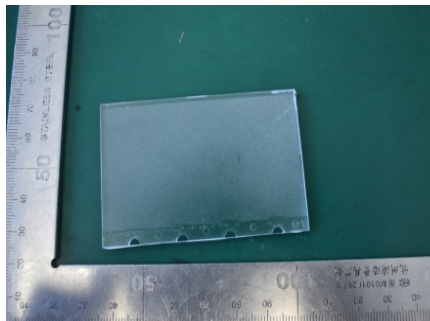
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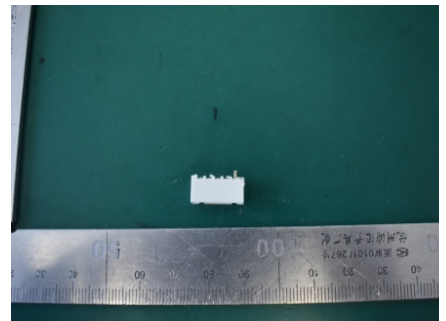
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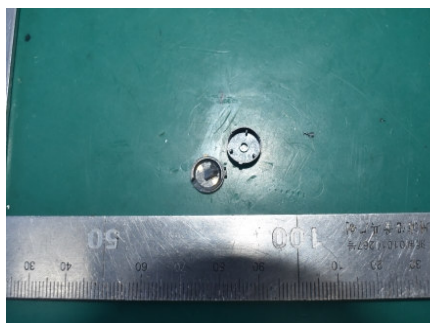
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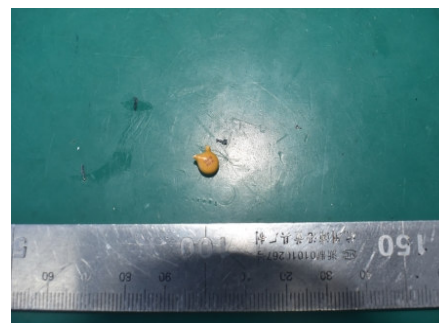
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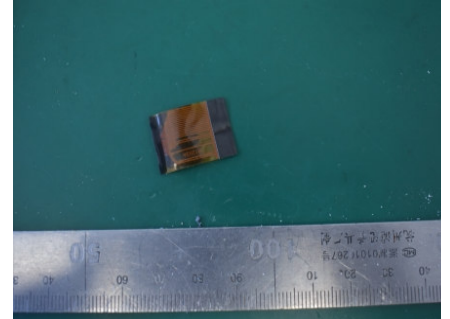
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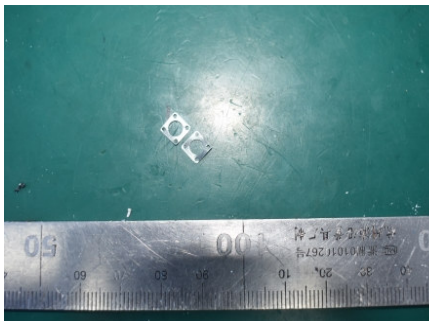
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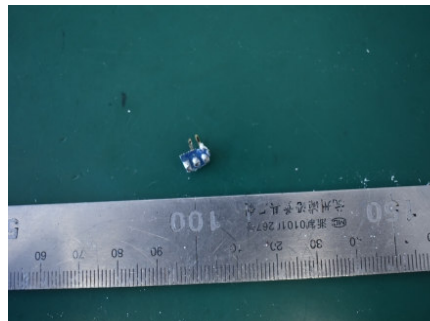
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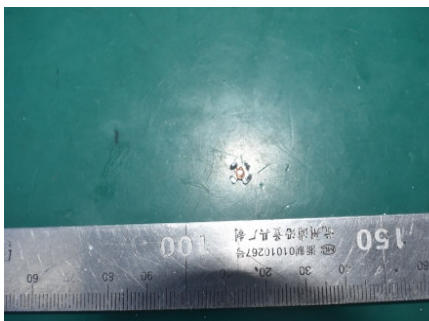
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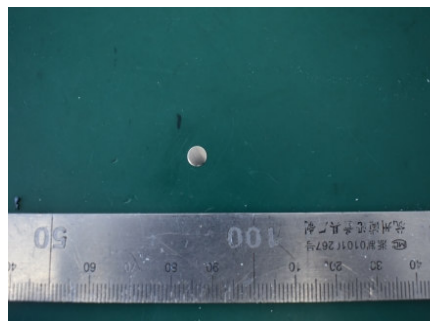
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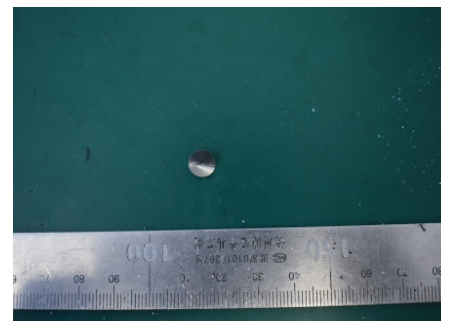
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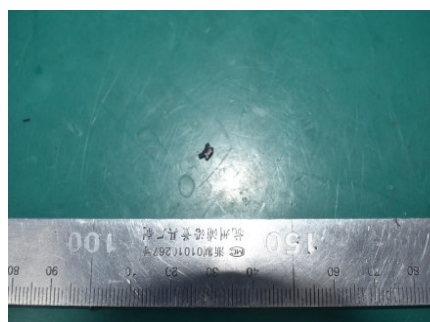
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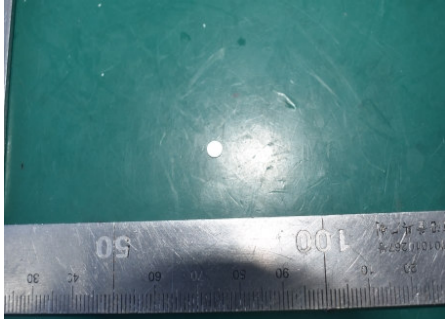
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COMPONENT PHOTO(S)



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TO BE CONTINUED

TEST RESULT

Part 1

A. Screening Test by XRF Spectroscopy

As specified by client, to analyze the contents of Lead, Cadmium, Mercury, Chromium, Bromine in the submitted sample by XRF. Screening limits in mg/kg for regulated elements in various matrices according to IEC 62321-3-1:2013

No.	Component	Test Results (mg/kg)				
		Cd	Pb	Hg	Cr	Br
		Limit (mg/kg)				
		100	1000	1000	Cr(VI): 1000	PBB:1000 PBDE:1000
1	Transparent soft plastic strip with gray coating	BL	BL	BL	BL	BL
2	Transparent plastic film	BL	BL	BL	BL	BL
3	Silver soft plastic	BL	BL	BL	BL	BL
4	White soft plastic film	BL	BL	BL	BL	BL
5	Semi transparent white plastic	BL	BL	BL	BL	BL
6	White plastic socket	BL	BL	BL	BL	NC
7	Black plastic tape adhesive paper	BL	BL	BL	BL	BL
8	Black plastic body	BL	BL	BL	BL	BL
9	White plastic insert	BL	BL	BL	BL	BL
10	Black plastic insert strip	BL	BL	BL	BL	BL
11	Black plastic shell	BL	BL	BL	BL	BL
12	Yellow plastic electrical components	BL	BL	BL	BL	BL
13	Black plastic button	BL	BL	BL	BL	BL
14	Circuit board	BL	BL	BL	BL	NC
15	Semi transparent yellow soft plastic	BL	BL	BL	BL	BL
16	Silver metal plate 1	BL	BL	BL	BL	NA
17	Tin solder	BL	BL	BL	BL	NA
18	Black metal screws	BL	BL	BL	NC	NA
19	Silver metal block	BL	BL	BL	BL	NA
20	Silver metal plate 2	BL	BL	BL	NC	NA
21	Silver metal plate 3	BL	BL	BL	BL	NA
22	Glass	BL	BL	BL	BL	NA
23	Magnet	BL	BL	BL	NC	NA
24	Silver metal screw	BL	BL	BL	NC	NA
25	Silver metal plate 3	BL	BL	BL	BL	NA

TO BE CONTINUED

TEST RESULT

Abbreviation:	Pb	denotes Lead
	Cd	denotes Cadmium
	Hg	denotes Mercury
	Cr	denotes Chromium
	Cr(VI)	denotes Chromium(VI)
	Br	denotes Bromine
	PBBs	denotes Total Polybrominated Biphenyls
	PBDEs	denotes Total Polybrominated Diphenyl Ethers
	NA	denotes Not Applicable
	NC	denotes Not Conclusive
	BL	denotes Below limit

XRF Screening limits for different materials:

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	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	/	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

Note:

BL= Below limit

X = The region where further investigation is necessary

OL = Over limit

3σ = The repeatability of the analyzer at the action level

LOD = Limit of detection

TO BE CONTINUED

TEST RESULT

B. Confirmation Test by Wet Chemistry

Tested Item(s)	Test Method	Measured Equipment	MDL
Lead (Pb) /Cadmium (Cd)	IEC 62321-5:2013	ICP-OES	10 mg/kg
Mercury (Hg)	IEC 62321-4:2013/AMD1:2017	ICP-OES	10 mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321-7-1:2015	UV-Vis	0.01µg/cm ²
	IEC 62321-7-2:2017		10 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	50 mg/kg
Polybrominated DiphenylEthers (PBDEs)			

Component No.	Boiling-water-extraction for Cr(VI) (*1)
18	Negative
20	Negative
23	Negative
24	Negative

Remark:

(*1) The screening result of Chromium (VI) was found in the inconclusive region, Thus the Chromium(VI) content in surface layer have been confirmed with reference to IEC 62321-7-1:2015.

Negative - The Cr(VI) concentration is below 0.10µg/cm².The coating is considered a non-Cr(VI) based coating.

Component No.	Test Results (mg/kg)					
	Cd	Pb	Hg	Cr (VI)	PBBs	PBDEs
	Limit (mg/kg)					
	100	1000	1000	1000	1000	1000
6	-	-	-	-	ND	ND
14	-	-	-	-	ND	ND

Note:

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

MDL = method detection limit

ND = not detected (<MDL)

mg/kg = ppm = parts per million

µg/cm² = micrograms per square centimeter

TO BE CONTINUED

TEST RESULT

Part 2

Diisobutyl phthalate (DIBP), Bis (2- ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP) and Dibutyl phthalate (DBP)

Test specification : Total concentration of Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP) , Dibutyl

phthalate (DBP) and Diisobutyl phthalate (DIBP) in accordance with EC Directive 2011/65/EU and its amendment Directive (EU) 2015/863 (RoHS)

Test method : IEC 62321-8:2017

Limit : Annex II to Directive 2011/65/EU and its amendment Directive (EU) 2015/863

Component	Test Results (%)			
	DIBP	DEHP	BBP	DBP
	Limit (%)			
	0.1%	0.1%	0.1%	0.1%
1+2+3	ND	ND	ND	ND
4+5+6	ND	ND	ND	ND
7+8+9	ND	ND	ND	ND
10+11+12	ND	ND	ND	ND
13+14+15	ND	ND	ND	ND

Note:

ND = Not Detected (<0.005%)

0.1% equals to 1000 mg/kg

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

END OF THE REPORT