Report No.: SZARR190802005-01

Test Report

Client Name	:	SHENZHEN XUANCAI ELECTRONIC CO.,LTD
Address	:	F Building MAOYUAN Industrial Park,XIAWEI Industrial Zone,GUANLAN Street,LONGHUA New DISE SHENZHEN,GUANGDONG,China
Product Name	:	XCP1W-500W
Date	:	Aug. 15, 2019

Shenzhen Anbotek Compliance Laboratory Limited

Test Report

Applicant	:	SHENZHEN XUANCAI ELECTRONIC CO.,LTD
Address	:	F Building MAOYUAN Industrial Park,XIAWEI Industrial Zone, GUANLAN Street,LONGHUA New DISE SHENZHEN, GUANGDONG, China

The submitted sample and sample information was/were submitted and identified by/on the behalf of the client

Sample Name	:	XCP1W-500W
Model No.	:	1919(main test), 1919 two-tone, 1818, 1616, 2424, 2828, 3535, 4046, 2011, 2820, 1313(7.5), 1313 two-tone, 1313, 1417
Manufacturer	:	SHENZHEN XUANCAI ELECTRONIC CO.,LTD
Trade Mark	:	UANCAI
Country of Destination	:	Europe, U.S.A, China
Country of Origin	:	China
Sample Received Date	:	Aug. 01, 2019
Testing Period	:	Aug. 01, 2019 to Aug. 12, 2019
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).

Edited by Yuqin Sun Reviewed by Rose Tang Authorized Signatory Leo Li

Anbotek (SZ) Compliance Laboratory Limited * Approved *

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Test Method:

A. XRF Screening Test

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)		
	Polymers	Metals	Composite material
Cd	BL≤(70-3σ)<X <(130+3σ)≤OL	BL≤(70-3σ) <X <(130+3σ)≤OL	LOD<X <(150+3σ)≤OL
Pb	BL≤(700-3σ) <X <(1300+3σ)≤OL	BL≤(700-3σ) <X <(1300+3σ)≤OL	BL≤(500-3σ)<X <(1500+3σ)≤OL
Hg	BL≤(700-3σ)<X <(1300+3σ)≤OL	BL≤(700-3σ)<X <(1300+3σ)≤OL	BL≤(500-3σ)<X <(1500+3σ)≤OL
Br	BL≤(300-3σ)< X	N.A.	BL≤(250-3σ)< X
Cr	BL≤(700-3σ)< X	BL≤(700-3σ)< X	BL≤(500-3σ)< X

Note:

-N.A. = Not Applicable

-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(s)	Test Method	Measured Equipment(s)	MDL	Limit
Lead (Pb)	IEC 62321-5:2013	ICP-OES	2 mg/kg	1000 mg/kg
Cadmium (Cd)	IEC 62321-5:2013		2 mg/kg	100 mg/kg
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017		2 mg/kg	1000 mg/kg
Hexavalent Chromium Cr(VI)	IEC 62321-7-1:2015	UV-VIS	0.10μg/cm^2	1000 mg/kg
	IEC 62321-7-2:2017		8 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		5 mg/kg	1000 mg/kg
Phthalates (DIBP, DBP, BBP, DEHP)	IEC 62321-8:2017		50 mg/kg	1000 mg/kg

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Test Results:

Sample No.	Sample Description	Tested Items	XRF Screening Test	Chemical Test Unit (mg/kg)	Conclusion
1	PCB	Pb	BL	/	PASS
		Cd	LOD	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	X	N.D.	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
2	Yellow LED	Pb	BL	/	PASS
		Cd	LOD	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
3	Orange LED	Pb	BL	/	PASS
		Cd	LOD	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	

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Note:

- 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.
-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
-LOD= Detection limit
-MDL = Method Detection Limit
-N.A. = Not Applicable
-N.D. = Not Detected (<MDL)
-/=Not tested
-mg/kg = ppm = parts per million
- μg/cm^2 = microgramme per square centimetre
-Negative = Absence of Cr(VI) , the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.10ug/cm^2.
-Positive = Presence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is equal to or greater than 0.13ug/cm^2.

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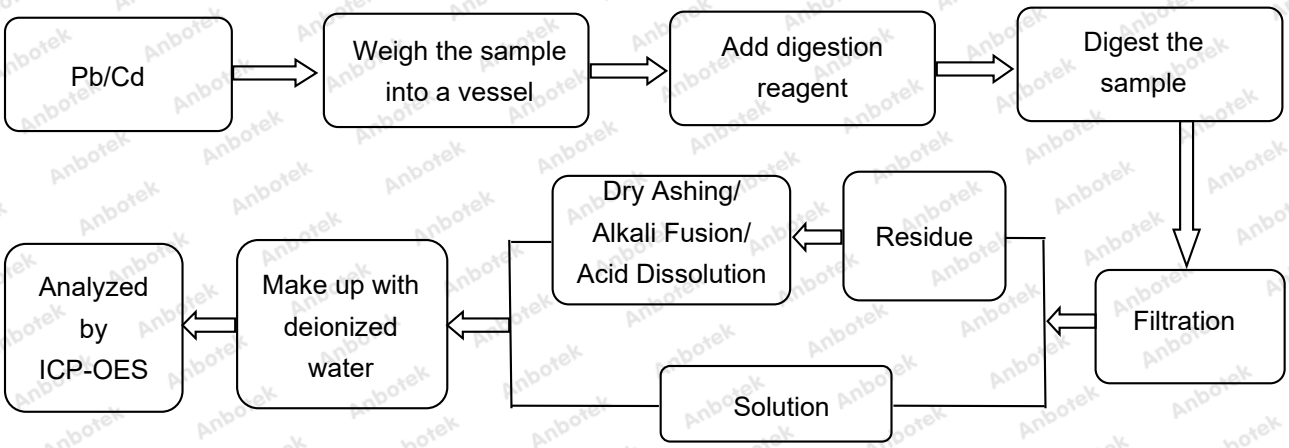
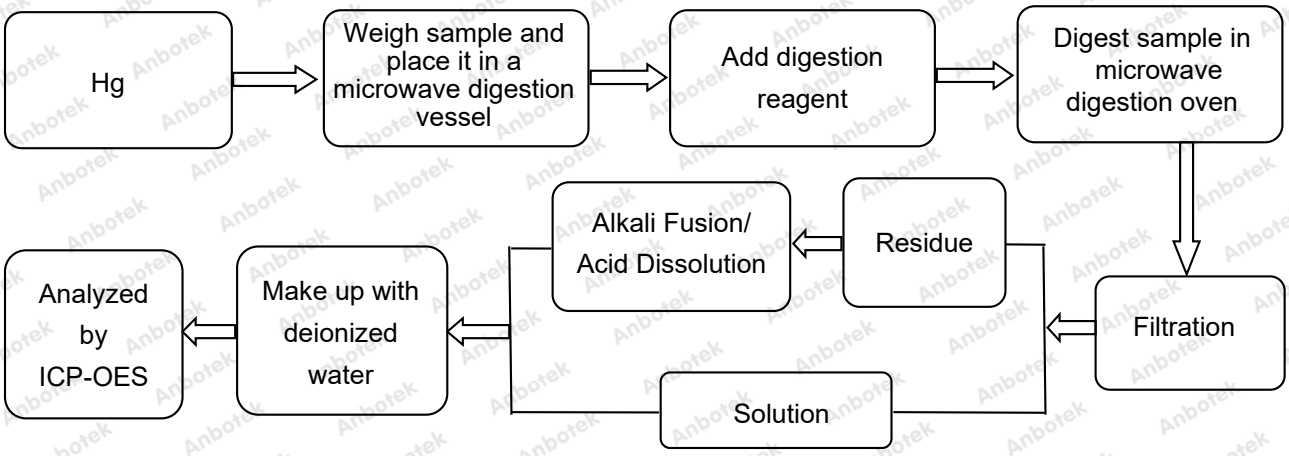
Test Process:

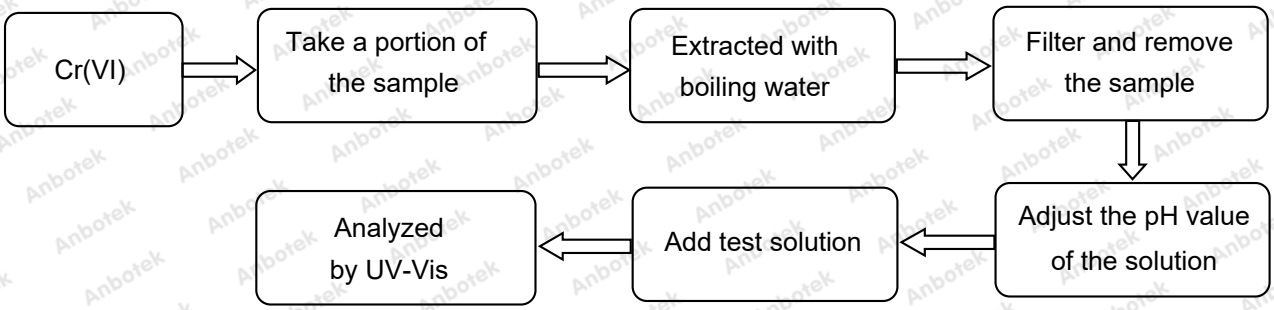
◆ **IEC 62321-5:2013**



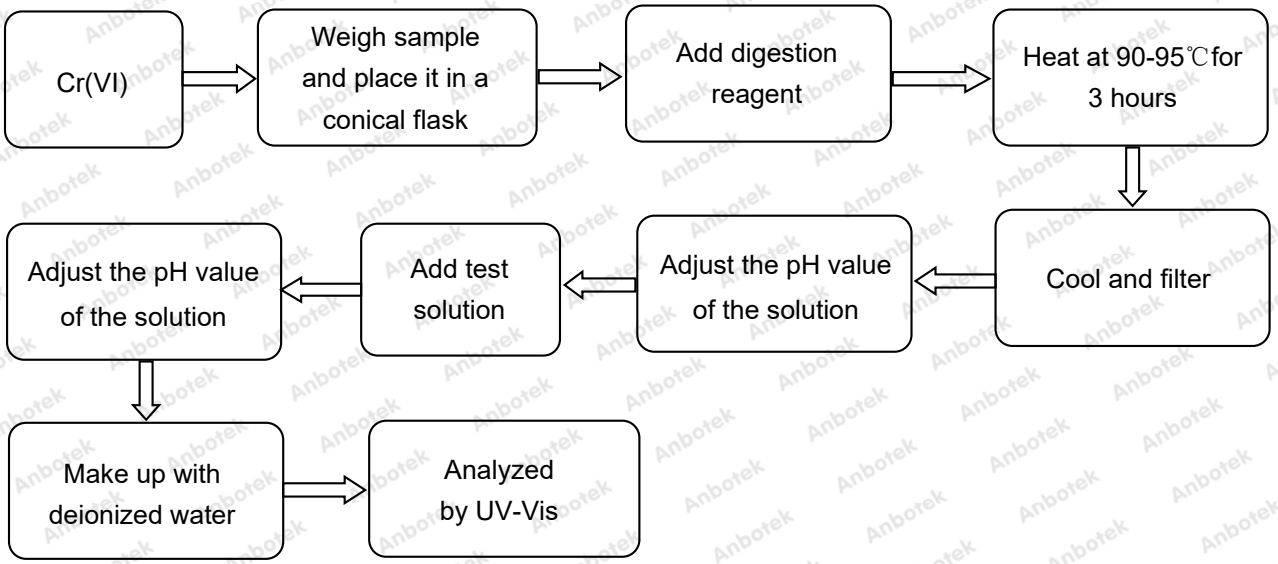
◆ **IEC 62321-4:2013+AMD1:2017**



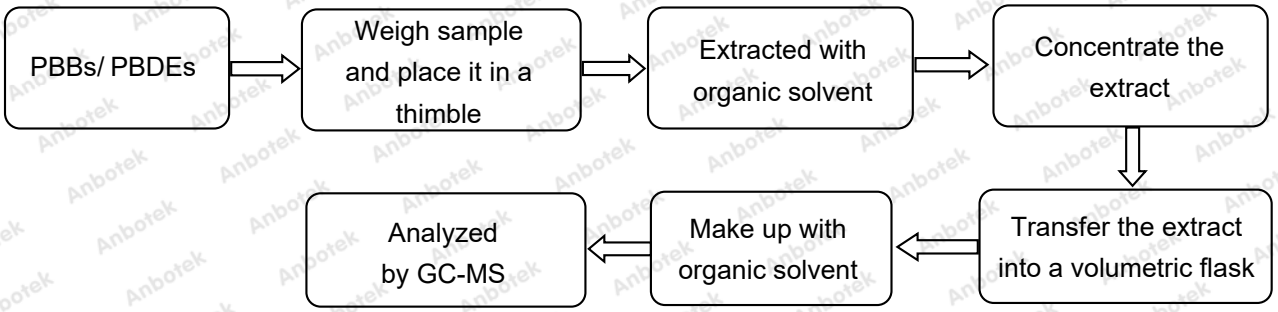
◆ **IEC 62321-7-1:2015**



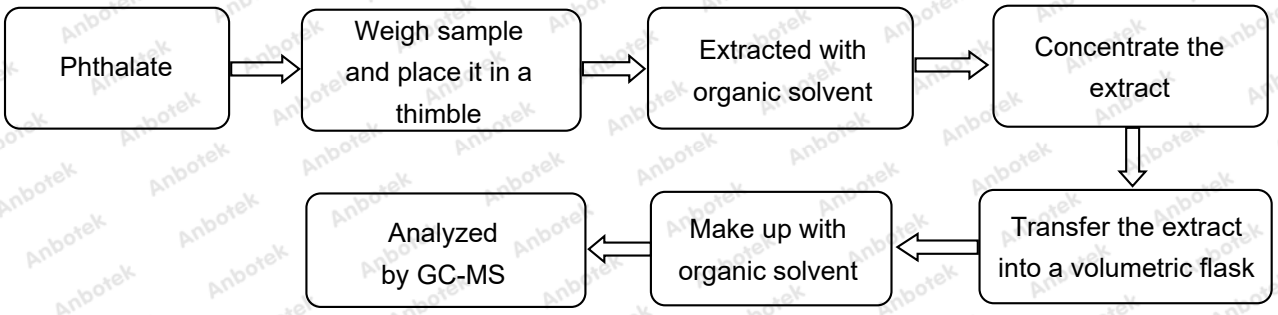
◆ **IEC 62321-7-2:2017**



◆ **IEC 62321-6:2015**



◆ **IEC 62321-8:2017**



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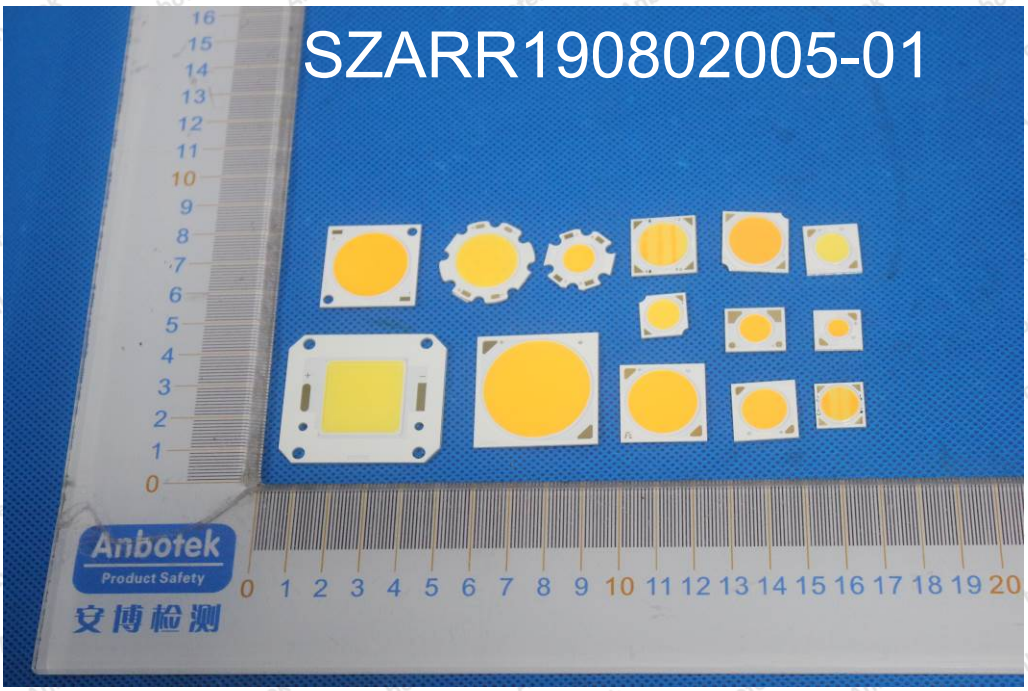
Photograph of Sample



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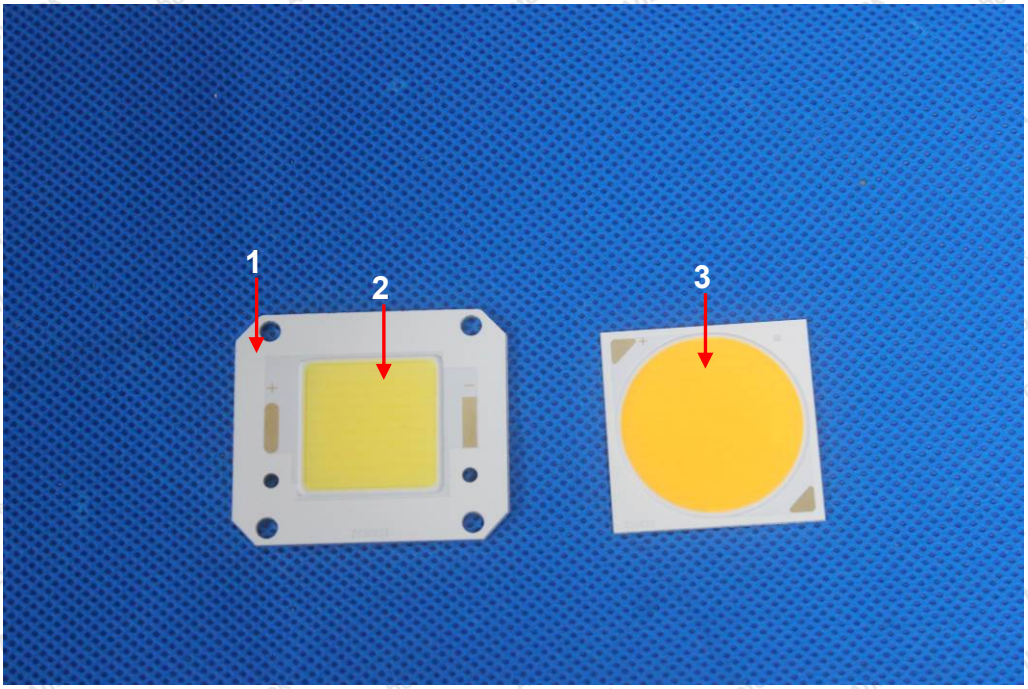
Photo(s) of the tested component(s)



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