RoHS
TEST REPORT

For

LED BULB

Model No.: VT-2059

Applicant : V-TAC EXPORTS LIMITED

ROOM NO.301, KAM ON BUILDING 176A QUEENS ROAD CENTRAL, CENTRAL, HONGKONG

Manufacturer : V-TAC EXPORTS LIMITED

ROOM NO.301, KAM ON BUILDING 176A QUEENS ROAD CENTRAL, CENTRAL, HONGKONG

Issued By : Global-Standard Testing Service Co., Ltd.

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Report Number : J00.06.0013R

Issued Date : January 17, 2017

Date of Report : January 17, 2017

Note:

1. The test data and result is based on the tested sample only.
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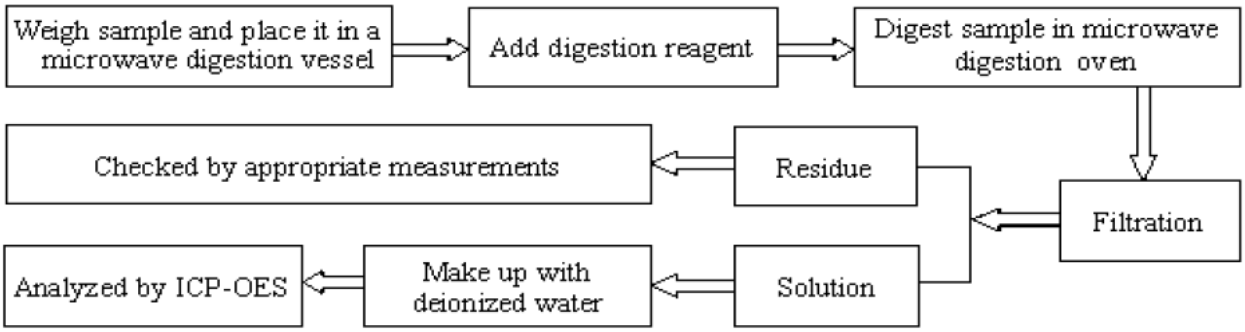
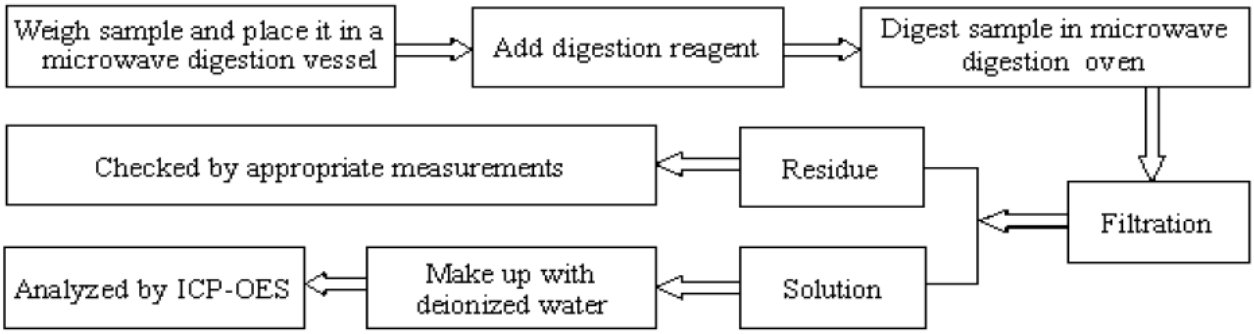
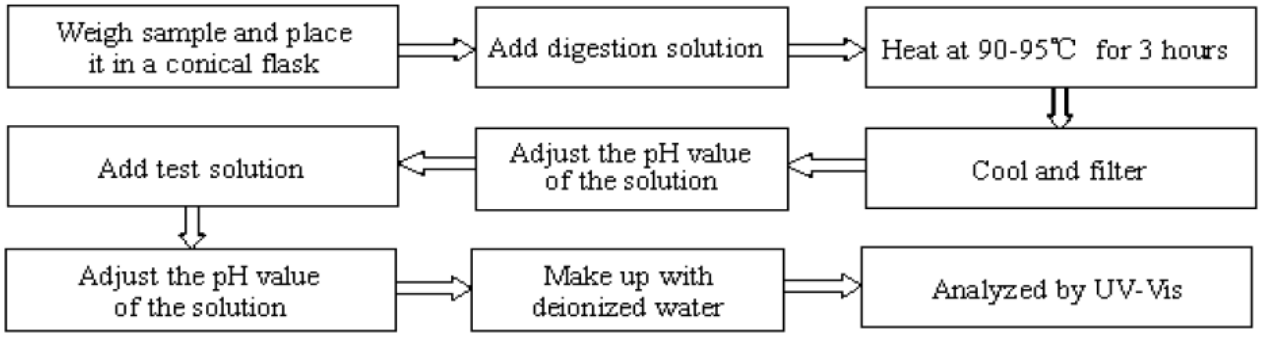
1. Lead(Pb), Cadmium(Cd)



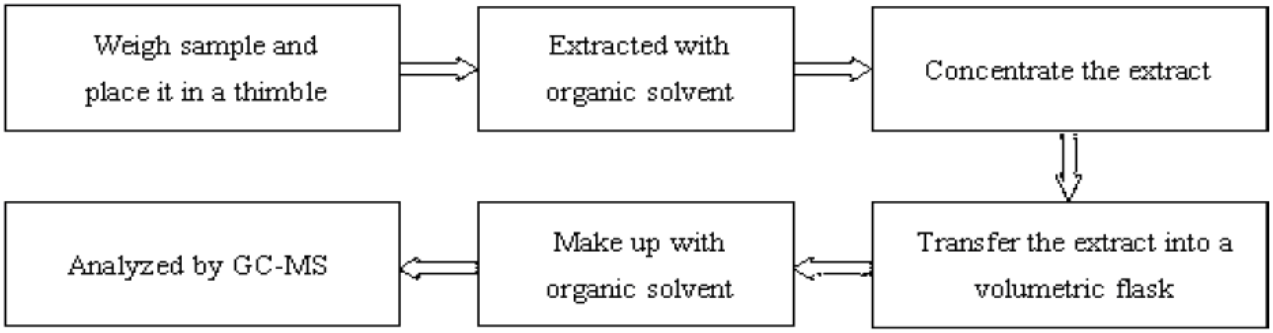
2. Mercury(Hg)



3. Hexavalent Chromium (Cr(VI))



4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers(PBDEs) , HBCDD, DBP, DEHP, BBP



Method Detection Limit (MDL) in wet chemical test

Test Items	Pb	Cd	Hg	PBBs & PBDEs
Unit	mg/kg	mg/kg	mg/kg	mg/kg
MDL	2	2	2	2

Result	:	**Pass**
Conclusion	:	An independent evaluation on the above-mentioned product(s) has been conducted pursuant to 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, and concluded that the equipment under evaluation met the legislative requirements of this directive.

Reviewed by:

Tina Sun
Manager
January 17, 2017

Test Data Summary

SAMP LE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing(mg/kg)	Chemical testing limit (mg/kg)	Conclusio n (P/F)
1	lamp base	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
2	Plastic enclosure	Cd	P	/	＜100	N.A.
		Cr	P	/	＜1000	N.A.
		Hg	P	/	＜1000	N.A.
		Pb	P	/	＜1000	N.A.
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
3	Lamp cover	Cd	P	/	＜100	N.A.
		Cr	P	/	＜1000	N.A.
		Hg	P	/	＜1000	N.A.
		Pb	P	/	＜1000	N.A.
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
4	Metal Enclosure	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	/	＜1000	N.A.
		PBDEs	D	/	＜1000	N.A.
		HBCDD	D	/	＜1000	N.A.
		DEHP	D	/	＜1000	N.A.
		DBP	D	/	＜1000	N.A.
		BBP	D	/	＜1000	N.A.

SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing(mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
5	Internal wire	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
6	Glue	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
7	LED	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
8	LED PCB	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P

SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing(mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
9	PCB of LED driver	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
10	Rectifier	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
11	Resistors	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
12	Capacitors	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P

SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing(mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
13	IC	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
14	Diodes	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
15	Inductance	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	N.D.	＜1000	P
		PBDEs	D	N.D.	＜1000	P
		HBCDD	D	N.D.	＜1000	P
		DEHP	D	N.D.	＜1000	P
		DBP	D	N.D.	＜1000	P
		BBP	D	N.D.	＜1000	P
16	Soldering tin	Cd	P	N.D.	＜100	P
		Cr	P	N.D.	＜1000	P
		Hg	P	N.D.	＜1000	P
		Pb	P	N.D.	＜1000	P
		PBBs	D	/	＜1000	N.A.
		PBDEs	D	/	＜1000	N.A.
		HBCDD	D	/	＜1000	N.A.
		DEHP	D	/	＜1000	N.A.
		DBP	D	/	＜1000	N.A.
		BBP	D	/	＜1000	N.A.

Note:
(1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) N.A. = Not Analyzed
(4) Negative = the concentration of Hexavalent Chromium extracted from 50cm^2 sample is less than the detection limit.

Appendix 1

Photo documentation

Photo 1 View: [√] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [ ] Internal	

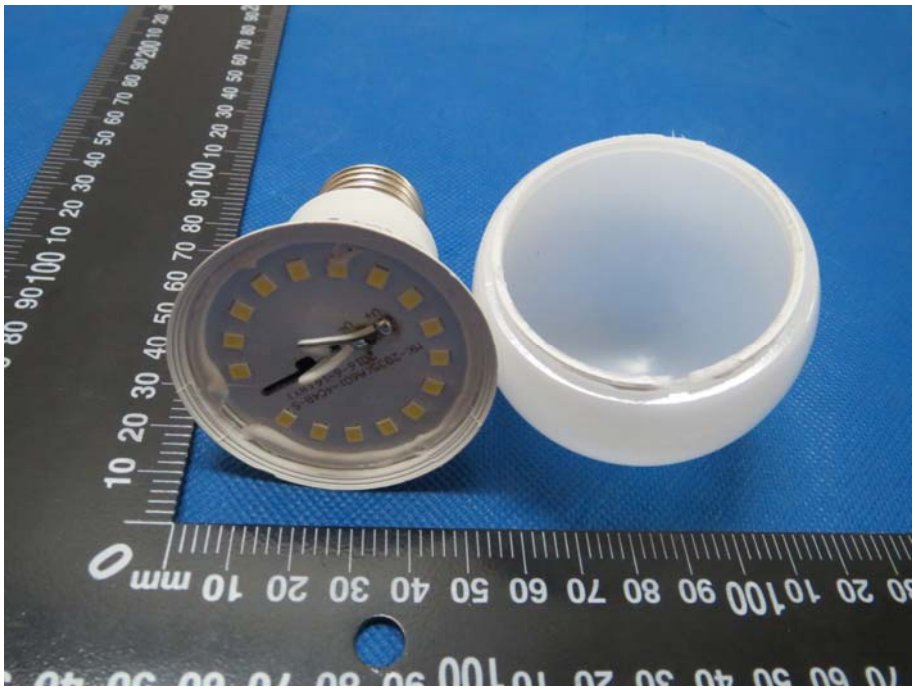
Photo 2 View: [ ] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [√] Internal	

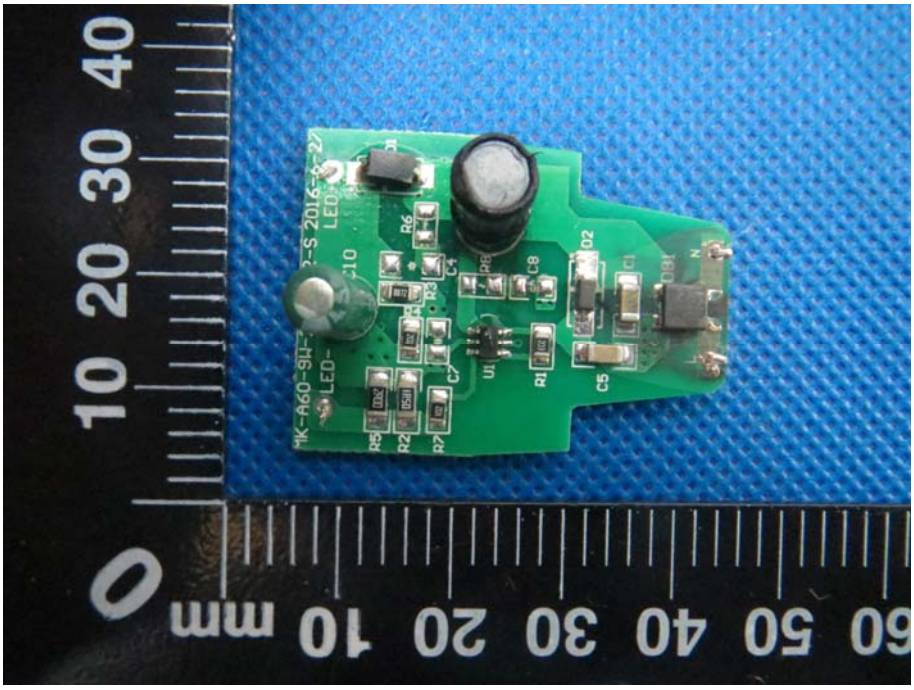
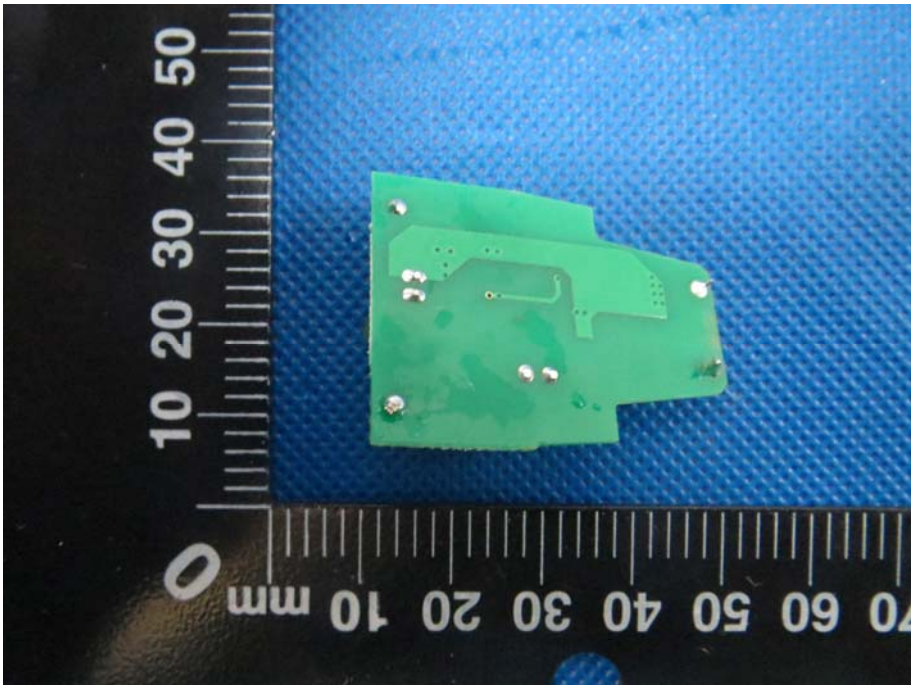
Photo 3 View: [ ] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [√] Internal	

Photo 4 View: [ ] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [√] Internal	

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