

Add: Unit F-G, Floor 23, Kechuang Building, Quanzhi Innovation Science and Technology Park, Shajing Town, Bao'an District, Shenzhen, Guangdong, China

Tel: (86)755-23353209

Internet: Http://www.LCS-cert.com

Report No.: LCS180828034AR

TEST REPORT

Client company

Client address

Manufacturer

Address

Report on the submitted samples said to be:

Sample Name Power bank

Trade Mark N/A

Tested Item No. 62143

Style Item No. 62140

August 28, 2018 Sample Receiving Date

August 28, 2018 ~ September 18, 2018 **Testing Period**

Results Please refer to next page(s).

Summary of Test Results:

TEST REQUEST

According to the customer's request, based on the performed tests on submitted sample, the results of lead(Pb), mercury(Hg), cadmium(Cd), hexavalent chromium(Cr^{6+}), polybrominated biphenyls(PBBs), polybrominated diphenyl(PBDEs) comply with the limits as set by EU RoHS Directive 2011/65/EU

Signed for and on behalf of LCS

Written By:

Checked by:

Approved by:

Lily Dan

Manager

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Results:

Test method:

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

Lead & Cadmium 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 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 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)

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No.	Sample	Tested Item	XRF Screening results	Chemical test results (mg/kg)	Conclusion	Date of sample submission/re submission
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/	1	
	plastic	Mercury (Hg)	BL	/	D. 00	0040 00 00
1	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/	1	
		PBDEs	BL	/	1	
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/	1	
	plastic	Mercury (Hg)	BL	/	D. 00	0040 00 00
2	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/	1	
		PBDEs	BL	/	1	
		Lead (Pb)	BL	/		
	Grey	Cadmium Content (Cd)	BL			
_	plastic	Mercury (Hg)	BL			
3	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL		PASS	2018-08-28
		PBBs	BL	/	1	
		PBDEs	BL	/	†	
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/	PASS	2018-08-28
	plastic sheet	Mercury (Hg)	BL	/		
4		Hexavalent Chromium (Cr ⁶⁺)	BL	/		
	011001	PBBs	BL	/	†	
		PBDEs	BL	/	†	
		Lead (Pb)	BL	/		
	White	Cadmium Content (Cd)	BL	/	†	
	plastic	Mercury (Hg)	BL	/	†	
5	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	011001	PBBs	BL	/	†	
		PBDEs	BL	/	1	
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/	1	
	plastic	Mercury (Hg)	BL	/	1	
6	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	on out	PBBs	BL	/	1	
		PBDEs	BL	/	†	
		Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/	1	
	metal	Mercury (Hg)	BL	/	1	
7	spring leaf	Hexavalent Chromium (Cr ⁶⁺)	X	Negative	PASS	2018-08-28
	Jermig loai	PBBs	BL	/	1	
		PBDEs	BL	/	1	

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No.	Sample	Tested Item	XRF Screening results	Chemical test results (mg/kg)	Conclusion	Date of sample submission/re submission
		Lead (Pb)	BL	/		
	Cibran	Cadmium Content (Cd)	BL	/		
	Silver	Mercury (Hg)	BL	/	DACC	2040 00 20
8	needle	Hexavalent Chromium (Cr ⁶⁺)	Х	Negative	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/		
	metal	Mercury (Hg)	BL	/	DAGO	0040 00 00
9	spring leaf	Hexavalent Chromium (Cr ⁶⁺)	Х	Negative	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/	1	
		Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/	1	
4.0	sheet	Mercury (Hg)	BL	/	D. 00	0040 00 00
10	metal	Hexavalent Chromium (Cr ⁶⁺)	Х	Negative	PASS	2018-08-28
		PBBs	BL	/	1	
		PBDEs	BL	/	-	
		Lead (Pb)	BL	/		2018-08-28
	Black	Cadmium Content (Cd)	BL	/	1	
	plastic sheet	Mercury (Hg)	BL	1	PASS	
11		Hexavalent Chromium (Cr ⁶⁺)	BL	/		
		PBBs	BL	1		
		PBDEs	BL	/	1	
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/	1	
40	plastic	Mercury (Hg)	BL	/	DA 00	0040 00 00
12	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	White	Cadmium Content (Cd)	BL	/		
40	plastic	Mercury (Hg)	BL	/	DAGO	0040 00 00
13	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/	1	
4.4	plastic	Mercury (Hg)	BL	/	DAGO	0040 00 00
14	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/	1	
		PBDEs	BL	/	1	

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No.	Sample	Tested Item	XRF Screening results	Chemical test results (mg/kg)	Conclusion	Date of sample submission/re submission
	0.1	Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/		
4.5	sheet	Mercury (Hg)	BL	/	DACC	2040 00 00
15	metal	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	(PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
	Dist	Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/		
16	plastic	Mercury (Hg)	BL	/	DACC	2010 00 20
10	sheet (PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	(PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/		2018-08-28
47	needle	Mercury (Hg)	BL	/	PASS	
17	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/		
	, ,	PBBs	BL	/		
		PBDEs	BL	/		
	0	Lead (Pb)	BL	/	PASS	2018-08-28
	Silver	Cadmium Content (Cd)	BL	/		
40	sheet	Mercury (Hg)	BL	/		
18	metal	Hexavalent Chromium (C ^{r6+})	BL	/		
	(PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
	D	Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/		
19	plastic	Mercury (Hg)	BL	/	DACC	0040 00 00
19	sheet (PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	(PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/		
20	needle	Mercury (Hg)	BL	/	PASS	2018-08-28
20	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
		PBBs	BL	/		
		PBDEs	BL			
	Dist	Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/		
21	plastic	Mercury (Hg)	BL	/	DAGG	2019 09 29
41	sheet (PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	(FODI)	PBBs	BL	/		
		PBDEs	BL	/		

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	Silver	Lead (Pb)	BL	/		
	metal	Cadmium Content (Cd)	BL	/		
20	sheet	Mercury (Hg)	BL	/	DACC	2040 00 20
22	(button	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	-PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
	Black	Lead (Pb)	BL	/		
	plastic	Cadmium Content (Cd)	BL	/		
22	sheet	Mercury (Hg)	BL	/	DACC	2010 00 20
23	(button	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	-PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
	Silver	Lead (Pb)	BL	/		
	metal	Cadmium Content (Cd)	BL	/		
0.4	sheet	Mercury (Hg)	BL	/	DACC	2040 00 20
24	(button	Hexavalent Chromium (Cr ⁶⁺)	Х	Negative	PASS	2018-08-28
	-PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
	White	Lead (Pb)	BL	/	PASS	2018-08-28
	plastic	Cadmium Content (Cd)	BL	/		
25	sheet (button -PCB1)	Mercury (Hg)	BL	/		
25		Hexavalent Chromium (C ^{r6+})	BL	/		
		PBBs	BL	/		
		PBDEs	BL	/		
	Silver	Lead (Pb)	BL	/		
	metal	Cadmium Content (Cd)	BL	/		
26	needle	Mercury (Hg)	BL	/	PASS	2018-08-28
20	(button	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
	-PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/		
27	transistor	Mercury (Hg)	BL	/	PASS	2018-08-28
21	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
		PBBs	X	N.D		
		PBDEs	X	N.D		
	Drown	Lead (Pb)	BL	1]	
	Brown Patch	Cadmium Content (Cd)	BL	1	_	
28	capacitor	Mercury (Hg)	BL	/	PASS	2018-08-28
20	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	1	FASS	2010-00-20
	(1 001)	PBBs	BL	1	_	
		PBDEs	BL	/		

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No.	Sample	Tested Item	XRF Screening results	Chemical test results (mg/kg)	Conclusion	Date of sample submission/re submission
		Lead (Pb)	BL	/		
	Black chip	Cadmium Content (Cd)	BL	/		
29	resistor	Mercury (Hg)	BL	/	PASS	2018-08-28
29	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Grey	Cadmium Content (Cd)	BL	/		
30	ceramics	Mercury (Hg)	BL	/	PASS	2018-08-28
30	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	Х	N.D	PASS	2010-00-20
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Disak IC	Cadmium Content (Cd)	BL	/		
31	Black IC	Mercury (Hg)	BL	/	PASS	2018-08-28
31	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/		
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/	PASS	2018-08-28
	Black	Cadmium Content (Cd)	BL	/		
20	diode	Mercury (Hg)	BL	/		
32	(PCB1)	Hexavalent Chromium (C ^{r6+})	BL	/		
	, ,	PBBs	BL	/		
		PBDEs	BL	/		
	_	Lead (Pb)	BL	/		
	Brown	Cadmium Content (Cd)	BL	/		
22	ceramic	Mercury (Hg)	BL	/	DACC	0040 00 00
33	capacitors (PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	(PCB1)	PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Caldar	Cadmium Content (Cd)	BL	/		
34	Solder	Mercury (Hg)	BL	/	PASS	2010 00 20
34	(PCB1)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/	1	
		PBDEs	BL	/		
1		Lead (Pb)	BL	/		
1	PCB board	Cadmium Content (Cd)	BL	/		
35	(PCB board	Mercury (Hg)	BL	/	PASS	2018-09-29
35	(FCDI)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	FASS	2018-08-28
		PBBs	X	N.D]	
		PBDEs	X	N.D		

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		Lead (Pb)	BL	/		
		Cadmium Content (Cd)	BL	/		
00	Gold wire	Mercury (Hg)	BL	/	DAGO	0040 00 00
36		Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	White	Cadmium Content (Cd)	BL	/		
27	cotton	Mercury (Hg)	BL	/	DACC	2040 00 20
37	thread	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	V.II.	Cadmium Content (Cd)	BL	/		
20	Yellow	Mercury (Hg)	BL	/	PASS	2018-08-28
38	plastic film	Hexavalent Chromium (Cr ⁶⁺)	BL	/		
		PBBs	BL	/	1	
		PBDEs	BL	/		
		Lead (Pb)	BL	/		2019 09 29
	Grey ceramic sheet	Cadmium Content (Cd)	BL	/	- PASS	
00		Mercury (Hg)	BL	/		
39		Hexavalent Chromium (C ^{r6+})	BL	/		2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/		
40	sheet	Mercury (Hg)	BL	/	DACC	2018-08-28
40	metal	Hexavalent Chromium (Cr ⁶⁺)	Х	Negative	PASS	2010-00-20
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	White	Cadmium Content (Cd)	BL	/		
41	plastic	Mercury (Hg)	BL	/	PASS	2018-08-28
41	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/		
42	plastic	Mercury (Hg)	BL	/	PASS	2018-09-29
42	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	_ FASS	2018-08-28
		PBBs	BL	1	_	
		PBDEs	BL	1		

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No.	Sample	Tested Item	XRF Screening results	Chemical test results (mg/kg)	Conclusion	Date of sample submission/re submission
		Lead (Pb)	BL	/		
	O:lb.co.m	Cadmium Content (Cd)	BL	/		
43	Silver	Mercury (Hg)	BL	/	DACC	2040 00 20
43	metal	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
	screws	PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Blue	Cadmium Content (Cd)	BL	/		
44	plastic	Mercury (Hg)	BL	/	DACC	2010 00 20
44	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Green	Cadmium Content (Cd)	BL	/		
45	plastic	Mercury (Hg)	BL	/	PASS	2018-08-28
45	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/		
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/	PASS	2018-08-28
	Vallani	Cadmium Content (Cd)	BL	/		
40	Yellow	Mercury (Hg)	BL	/		
46	plastic film	Hexavalent Chromium (C ^{r6+})	BL	/		
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/		0040 00 00
47	plastic	Mercury (Hg)	BL	/	DACC	
47	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
	Cilver	Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/		
40	plastic	Mercury (Hg)	BL	/	PASS	2018-08-28
48	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
	(battery)	PBBs	BL	/		
		PBDEs	BL	/	<u></u>	
	On the state	Lead (Pb)	BL	/		
	Green	Cadmium Content (Cd)	BL	/		
49	plastic	Mercury (Hg)	BL	/	DAGG	2010 00 20
49	sheet (battery)	Hexavalent Chromium (Cr ⁶⁺)	BL		PASS	2018-08-28
	(Dattery)	PBBs	BL	/		
1		PBDEs	BL	/		

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	14/1-16	Lead (Pb)	BL	/		
	White	Cadmium Content (Cd)	BL	/		
50	plastic sheet	Mercury (Hg)	BL	/	PASS	2018-08-28
50	(battery)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
	(battery)	PBBs	BL	/		
		PBDEs	BL	/		
	\\/\b:40	Lead (Pb)	BL	/		
	White	Cadmium Content (Cd)	BL	/		
51	plastic sheet	Mercury (Hg)	BL	/	PASS	2018-08-28
31	(battery)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
	(ballery)	PBBs	BL	/		
		PBDEs	BL	/		
	0	Lead (Pb)	BL	/		
	Silver	Cadmium Content (Cd)	BL	/		2018-08-28
	metal	Mercury (Hg)	BL	/	PASS	
52	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/		
	(battery)	PBBs	BL	/		
		PBDEs	BL	/		
	0	Lead (Pb)	BL	/	PASS	2018-08-28
	Silver	Cadmium Content (Cd)	BL	/		
50	metal	Mercury (Hg)	BL	/		
53	sheet	Hexavalent Chromium (C ^{r6+})	BL	/		
	(battery)	PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Gold metal	Cadmium Content (Cd)	BL	/		
54	sheet	Mercury (Hg)	BL	/	DACC	0040 00 00
54	(battery)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Diagle towar	Cadmium Content (Cd)	BL	/		
55	Black toner	Mercury (Hg)	BL	/	DACC	2010 00 20
55	(battery)	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Black	Cadmium Content (Cd)	BL	/		
E.C.	plastic	Mercury (Hg)	BL	/	DAGG	2010 00 20
56	thread	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2018-08-28
		PBBs	BL	/		
1		PBDEs	BL	/	1	

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No.	Sample	Tested Item	XRF Screening results	Chemical test results (mg/kg)	Conclusion	Date of sample submission/re submission
		Lead (Pb)	BL	/		
	Red plastic	Cadmium Content (Cd)	BL	/	PASS	2018-08-28
57	wire	Mercury (Hg)	BL	/		
37	WIIC	Hexavalent Chromium (Cr ⁶⁺)	BL	/		
		PBBs	BL	/		
		PBDEs	BL	/		
		Lead (Pb)	BL	/		
	Blue	Cadmium Content (Cd)	BL	/		
58	plastic	Mercury (Hg)	BL	/	PASS	2018-08-28
36	sheet	Hexavalent Chromium (Cr ⁶⁺)	BL	/	PASS	2010-00-20
		PBBs	BL	/		
		PBDEs	BL	1		

Note:

i 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</x 	BL≤70-3σ <x <130+3σ≤OL</x 	BL≤50-3σ <x <150+3σ≤OL</x
Pb	mg/kg	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤500-3σ <x <1500+3σ≤OL</x
Hg	mg/kg	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤700-3σ <x <1300+3σ≤OL</x 	BL≤500-3σ <x <1500+3σ≤OL</x
Cr	mg/kg	BL≤700-3σ <x< td=""><td>BL≤700-3σ<x< td=""><td>BL≤500-3σ<x< td=""></x<></td></x<></td></x<>	BL≤700-3σ <x< td=""><td>BL≤500-3σ<x< td=""></x<></td></x<>	BL≤500-3σ <x< td=""></x<>
Br	mg/kg	BL≤300-3σ <x< td=""><td>-</td><td>BL≤250-3σ<x< td=""></x<></td></x<>	-	BL≤250-3σ <x< td=""></x<>

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Note:

BL = Below Limit
OL = Over Limit
X = Inconclusive

ii The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition.

iii The maximum permissible limit is quoted from the document 2005/618/EC amending RoHS directive 2011/65/EU:

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

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.

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Note:

- Negative = Absence of Cr(VI) on the tested areas
- MDL = Method Detection Limit
- N/A = Not apply
- /= Undetected
- mg/kg = ppm
- ** = Spot-test:

Negative = Absence of Cr(VI) coating/ surface layer, Positive = Presence of Cr(VI) coating/ surface layer; (The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed)

Boiling-water-extraction:

Negative = Absence of Cr(VI) coating/ surface layer, Positive = Presence of Cr(VI) coating/ surface layer; (The detected concentration in boiling- water-extraction solution is equal or greater than 0.02 mg/kg with $50cm^2$ sample surface areas.)

- # =

Positive indicates the presence of Cr(W) on the tested areas and result be regarded as conflict with RoHS requirement.

Negative indicates the absence of Cr(VI) on the tested areas and result be regarded as no conflict with RoHS requirement.

- #1 According to RoHS directive 2011/65/EU and its amendments, Lead is exempted in glass of cathode ray tubes, electronic components and fluorescent tubes.
- #2 According to RoHS directive 2011/65/EU and its amendments, Lead is exempted in electronic ceramic parts (e.g. piezoelectronic devices).
- #3 According to RoHS directive 2011/65/EU and its amendments, Lead is exempted as an alloying element in Copper containing up to 4% (40000ppm) by weight.
- #4 According to RoHS directive 2011/65/EU and its amendments, Lead is exempted in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).
- 45 According to the statement provided by the customer, according to RoHS directive 2011/65/EU and its amendments, Lead is exempted as an alloying element in Aluminum containing up to 0.4% (4000ppm) by weight.
- #6 According to the statement provided by the customer, according to RoHS directive 2011/65/EU and its amendments, Cadmium and its compounds in electrical contact is exempted.
- Flow chart appendix is included.

Photo appendix is included.

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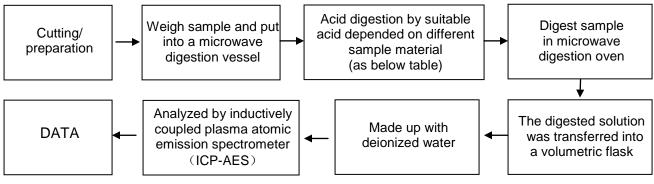
Tel: (86)755-23353209 Internet: Http://www.LCS-cert.com

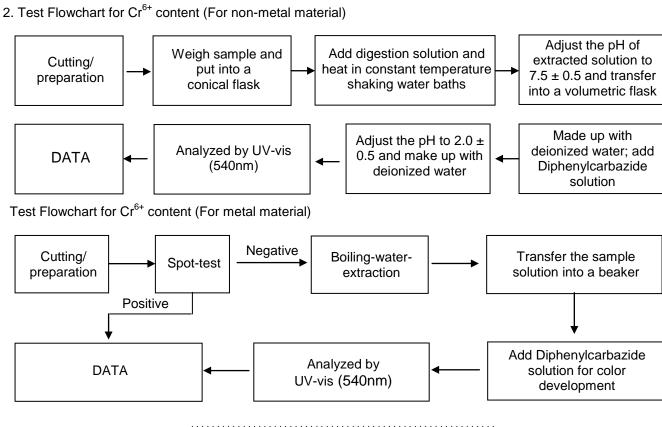
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AppendixI

Test Flow chart

1. Test Flow chart for Cd / Pb /Hg content These samples were dissolved totally by pre-conditioning method according to below flow chart.





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Data

Shenzhen LCS Compliance Testing Laboratory Ltd.

Analyzed by GC-MS

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Make up with organic

solvent

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Concentrated extracted

solution

3. Test Flowchart for PBBs & PBDEs content Cutting/ preparation Weigh sample and place in a thimble Add organic solvent and extracted by Soxhlet method /ultrasonic method Concentrated/ dilute extracted solution Cool, cleanup solution

AppendixIIPhotograph of Sample



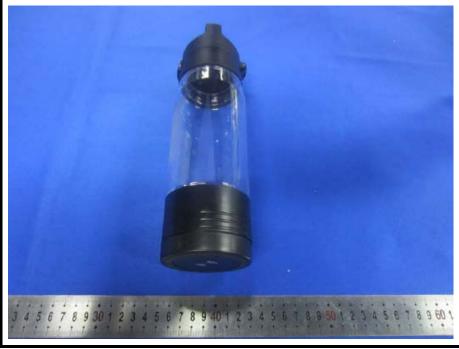
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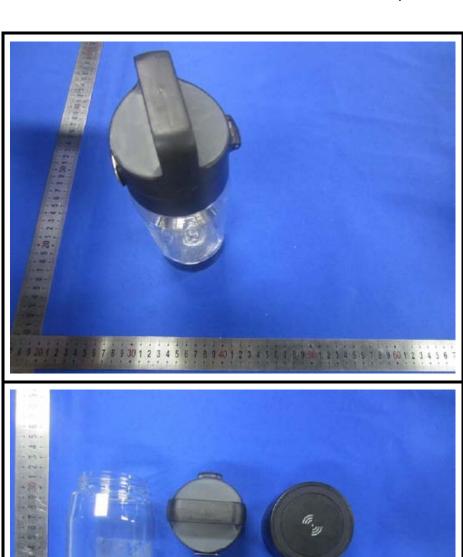


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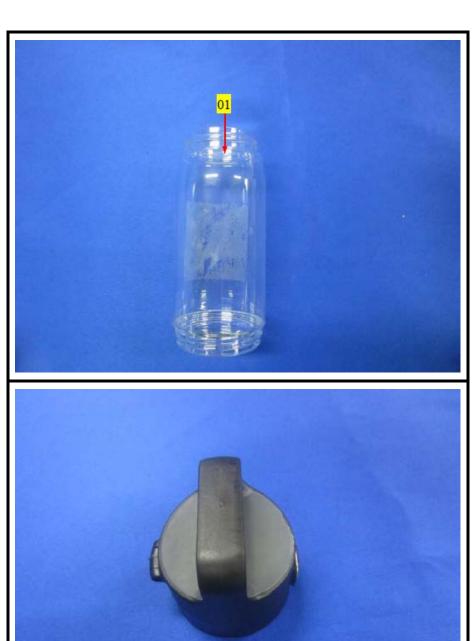


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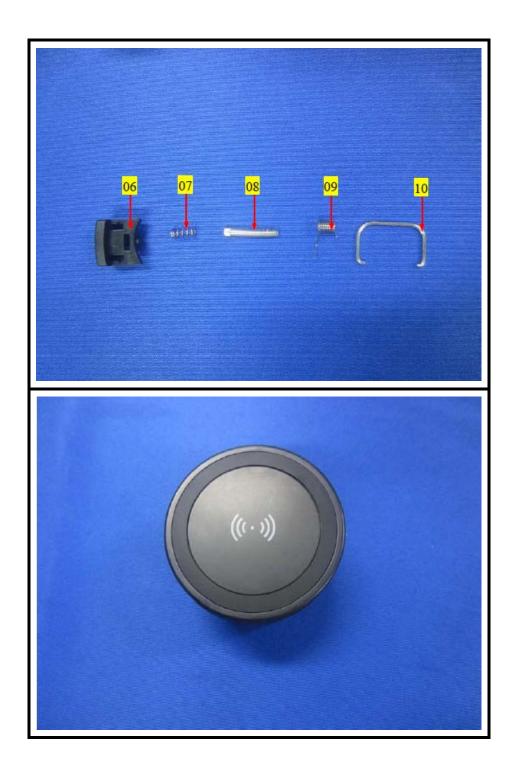


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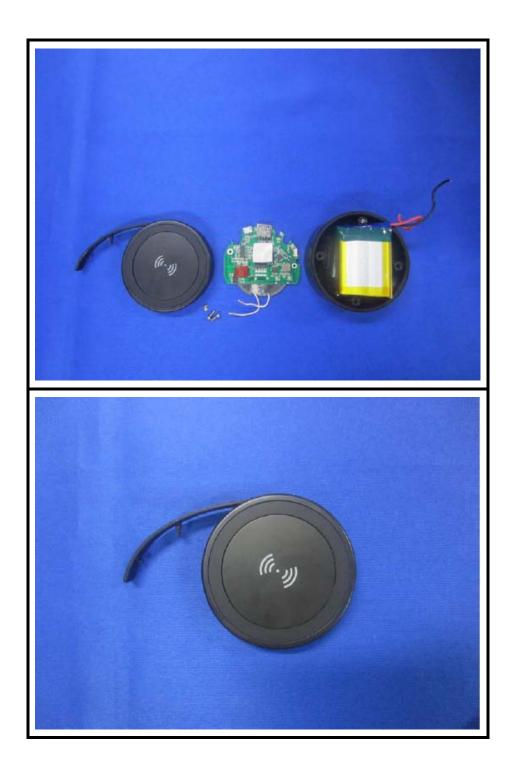


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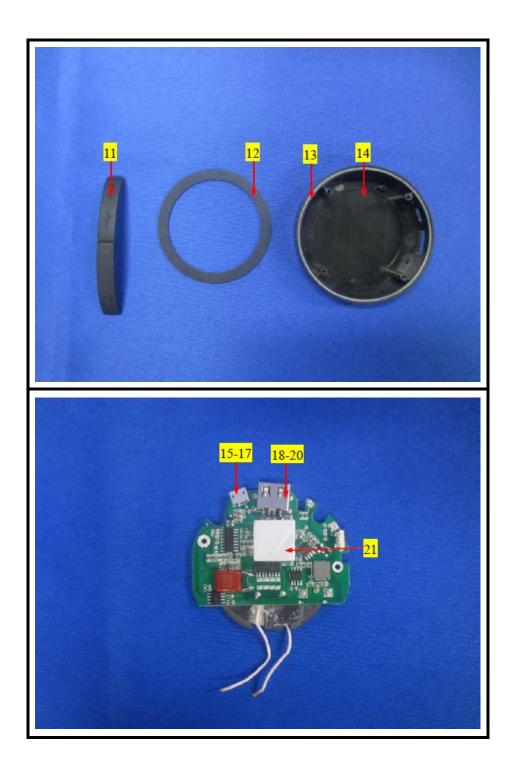


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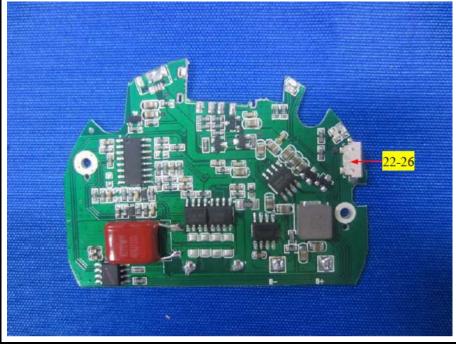
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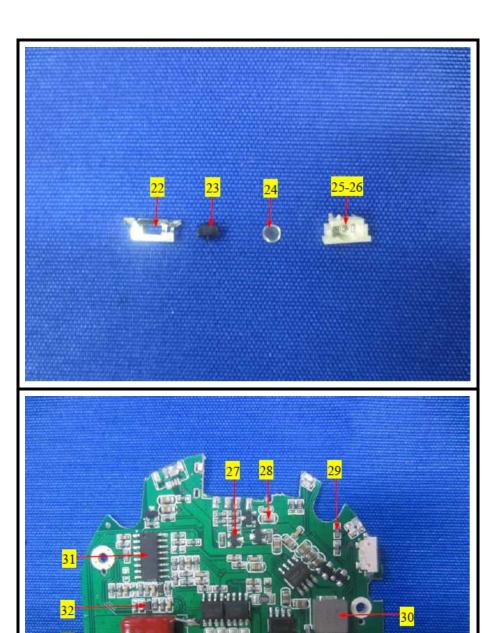


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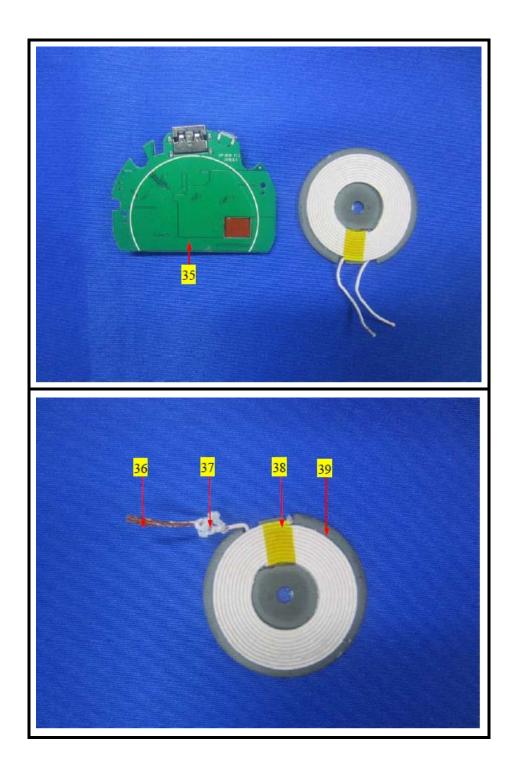


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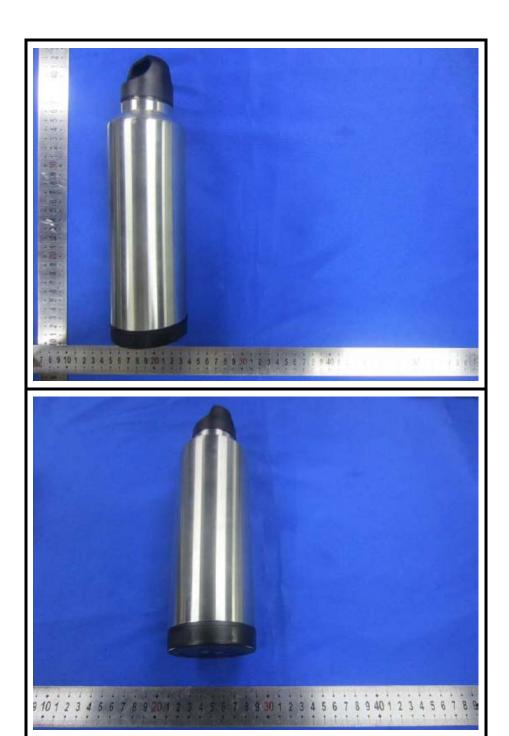


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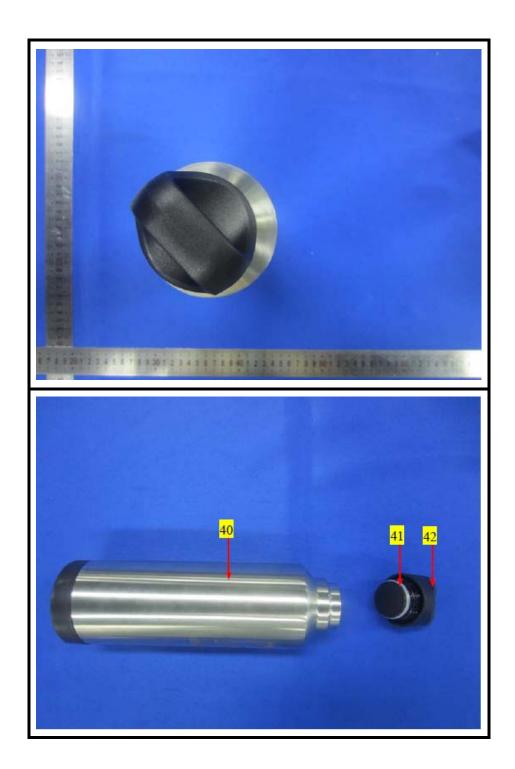


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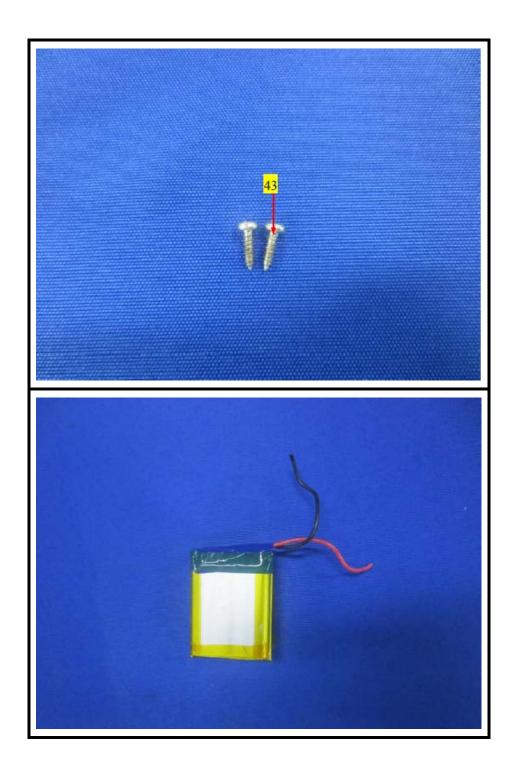


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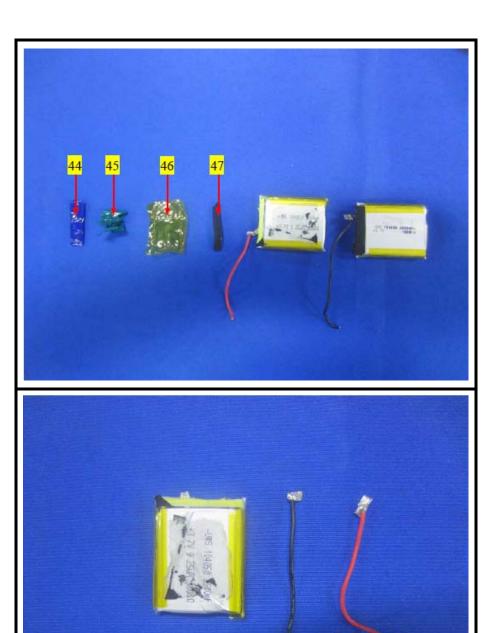


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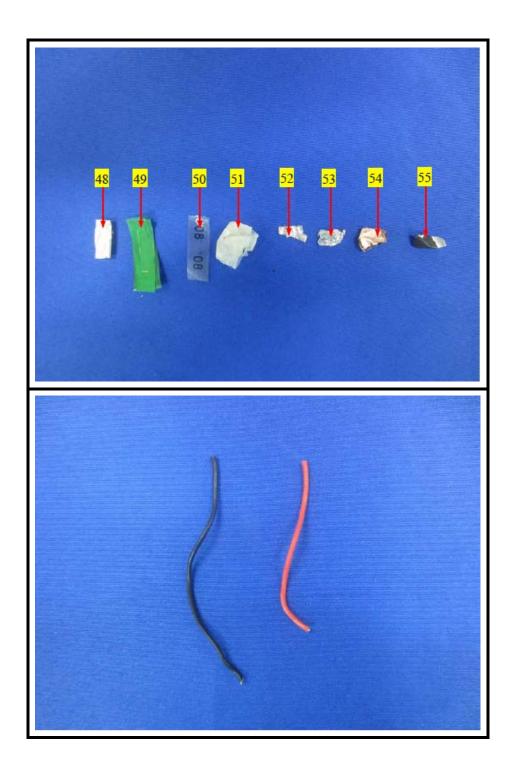


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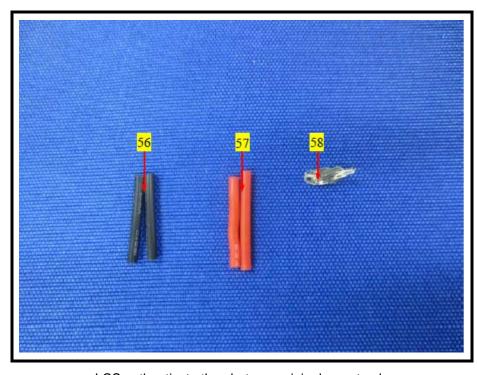


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