TEST REPORT

Report No.: LCS191104003AR Date: 2019.11.28 Page 1 of 26

Applicant	:	**Up-shine Lighting Co., Limited**
Address	:	**2nd Building, Dingfeng High-Tech Zone, Fuyuan 1st road, Fuyong Subdistrict, Bao'an District, Shenzhen, Guangdong, China 518103**

Report on the submitted samples said to be:

Sample Name	:	**LED Ceiling light**
Trade Mark	:	UPSHINE
Client's information	:	**N/A**
Style No.	:	**See page 2**
Testing Period	:	**November 04, 2019 ~ November 28, 2019**
Results	:	**Please refer to next page(s).**

TEST REQUEST	CONCLUSION
According to the customer's request, based on the performed tests on submitted sample, the result of Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, Dibuyl Phthalate(DBP), Benzylbutyl Phthalate(BBP), Bis(2-ethylhexyl) Phthalate(DEHP), Diispbutyl phthalate(DIBP) content comply with the limit requirement as set of RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.	**Pass**

Signed for and on behalf of LCS

Center of Testing Service * APPROVE *

Lily Dan

TEST REPORT

Model(s)：

UP-AL47-16-30W-M	UP-ALXX-YY-ZZW-NN
Reamrk： 1. All models are with similar construction. 2. For modes code: X can be anv number from A to Z, or can be any number from 0 to 9, on behalf the rated Different sizes YY represents size, "YY" can be any number from "8", "10", "12", "14" , "16"， “20”and“20”inch. Z can be any number from 0 to 9: on behalf the rated power of the lamp. N can be anv number from A to Z, or can be any number from 0-9,on behalf the rated Different design functions.	
NN: "NN" can be blank, also can be a "D", “P",“C2", "C3", “P2”, “P3”, E". The "S", the "M", "SC2", "SC2", "S4", "S4C2", "S4C3", "S5", "S5C2", "S5C3"; "D" (represents the function of Triac dimming), "C2" (represents the function of Non-dim and 2 CCT Switchable), "C3" (represents the function of Non-dim and 3 CCT Switchable),"P2" (represents the function of Triac dimming and 2 CCT Switchable), P (represents the function of Triac CCT change by Wall switch),P3 (represents the function of Triac dimming and 3 CCT Switchable), E (represents the function of Emergency), S (represents the function of Microwave sensor), M (represents the function of Microwave sensor and Emergency), SC2 (represents the function of Microwave sensor and 2 CCT Switchable), SC3 (represents the function of Microwave sensor and 3 CCT Switchable), S4 (represents the function of Remote controlled microwave sensor), S4C2 (represents the function of Remote controlled microwave sensor and 2 CCT Switchable), S4C3 (represents the function of Remote controlled microwave sensor and 3 CCT Switchable), S5 (represents the function of Microwave sensor and brightness can be adjusted by remote.), S5C2 (represents the function of Microwave sensor and brightness can be adjusted by remote and 2 CCT Switchable), S5C3 (represents the function of Microwave sensor and brightness can be adjusted by remote and 3 CCT Switchable)	

****

TEST REPORT

Results:

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

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

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr▼	Br▼		
						PBBs	PBDEs	
1	White soft plastic case	BL	BL	BL	BL	BL	BL	2019-11-04
2	White cotton pad	BL	BL	BL	BL	BL	BL	2019-11-04
3	Silver metal sliding rod (shell)	OL	OL	BL	X	/	/	2019-11-04
4	Silver metal screw (shell)	BL	BL	BL	BL	/	/	2019-11-04
5	Black soft plastic case (PCB1, CE1)	BL	BL	BL	BL	BL	BL	2019-11-04
6	Silver metal case (PCB1, CE1)	BL	BL	BL	BL	/	/	2019-11-04
7	Black soft plastic plug (PCB1, CE1)	BL	BL	BL	BL	BL	BL	2019-11-04
8	Brown wet paper (PCB1, CE1)	BL	BL	BL	BL	BL	BL	2019-11-04
9	Bright silver metal film (PCB1, CE1)	BL	BL	BL	BL	/	/	2019-11-04
10	Silver gray metal film (PCB1, CE1)	BL	BL	BL	BL	/	/	2019-11-04
11	Silver metal pin (PCB1, CE1)	BL	BL	BL	BL	/	/	2019-11-04
12	Black ceramic skeleton (PCB1, T1)	BL	BL	BL	BL	BL	BL	2019-11-04
13	White soft plastic sticker (PCB1, T1)	BL	BL	BL	BL	BL	BL	2019-11-04
14	Yellow adhesive tape (PCB1, T1)	BL	BL	BL	BL	BL	BL	2019-11-04
15	Copper metal wire (PCB1, T1)	BL	BL	BL	BL	/	/	2019-11-04
16	Transparent soft plastic sleeve (PCB1, T1)	BL	BL	BL	BL	BL	BL	2019-11-04
17	Black diode (PCB1, D2)	BL	BL	BL	BL	BL	BL	2019-11-04
18	Black diode (PCB1, D6)	BL	BL	BL	BL	X	X	2019-11-04
19	Black triode (PCB1, Q1)	BL	BL	BL	BL	BL	BL	2019-11-04
20	Red capacitor (PCB1, C2)	BL	BL	BL	BL	BL	BL	2019-11-04
21	Blue body (PCB1, MOV2)	BL	BL	BL	BL	BL	BL	2019-11-04
22	Copper metal wire (PCB1, L2)	BL	BL	BL	BL	/	/	2019-11-04

****

TEST REPORT

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr▼	Br▼		
						PBBs	PBDEs	
23	Yellow enameled wire (PCB1, L2)	BL	BL	BL	BL	/	/	2019-11-04
24	Green ceramic ring (PCB1, L2)	BL	BL	BL	BL	BL	BL	2019-11-04
25	Black soft plastic jacket (PCB1, L1)	BL	BL	BL	BL	BL	BL	2019-11-04
26	Black ceramic column (PCB1, L1)	BL	BL	BL	BL	BL	BL	2019-11-04
27	Copper metal wire (PCB1, L1)	BL	BL	BL	BL	/	/	2019-11-04
28	Yellow soft plastic case (PCB1, CX1)	BL	BL	BL	BL	X	X	2019-11-04
29	Bright yellow sealing glue (PCB1, CX1)	BL	BL	BL	BL	X	X	2019-11-04
30	Silver plastic sheet (PCB1, CX1)	BL	BL	BL	BL	BL	BL	2019-11-04
31	Brown soft plastic case (PCB1, RF1)	BL	BL	BL	BL	BL	BL	2019-11-04
32	Black soft plastic fixture (PCB1, RF1)	BL	BL	BL	BL	BL	BL	2019-11-04
33	White cotton thread (PCB1, RF1)	BL	BL	BL	BL	BL	BL	2019-11-04
34	Black soft plastic jacket (PCB1, F1)	BL	BL	BL	BL	BL	BL	2019-11-04
35	Gray color ring body (PCB1, F1)	BL	BL	BL	BL	BL	BL	2019-11-04
36	Green soft plastic case (PCB1, J1)	BL	BL	BL	BL	X	X	2019-11-04
37	Silver metal fixture (PCB1, J1)	BL	BL	BL	BL	/	/	2019-11-04
38	Silver metal screws (PCB1, J1)	OL	BL	BL	BL	/	/	2019-11-04
39	Blue soft plastic wire (PCB1 cable)	BL	BL	BL	BL	BL	BL	2019-11-04
40	Brown soft plastic wire (PCB1 cable)	BL	BL	BL	BL	BL	BL	2019-11-04
41	Silver metal wire (PCB1 cable)	BL	BL	BL	BL	/	/	2019-11-04
42	Gold metal fixture (PCB1 cable)	OL	BL	BL	BL	/	/	2019-11-04
43	White glue	BL	BL	BL	BL	BL	BL	2019-11-04/ 2019-11-20/ 2019-11-25
44	Green PCB board (PCB1)	BL	BL	BL	BL	X	X	2019-11-04
45	Black soft plastic button (PCB2, button)	BL	BL	BL	BL	BL	BL	2019-11-04/ 2019-11-20

****

TEST REPORT

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr▼	Br▼		
						PBBs	PBDEs	
46	Silver metal plate (PCB2, button)	BL	BL	BL	BL	/	/	2019-11-04
47	Silver metal ring (PCB2, button)	BL	BL	BL	BL	/	/	2019-11-04
48	Silver metal pin (PCB2, button)	BL	BL	BL	BL	/	/	2019-11-04
49	Black soft plastic case (PCB2, button)	BL	BL	BL	BL	X	X	2019-11-04
50	Black soft plastic case (PCB2, L3)	BL	BL	BL	BL	BL	BL	2019-11-04
51	Black ceramic column (PCB2, L3)	BL	BL	BL	BL	BL	BL	2019-11-04
52	Copper metal wire (PCB2, L3)	BL	BL	BL	BL	/	/	2019-11-04
53	Black ceramic skeleton (PCB2, T)	BL	BL	BL	BL	BL	BL	2019-11-04
54	Yellow adhesive tape (PCB2, T)	BL	BL	BL	BL	BL	BL	2019-11-04
55	Brown tape (PCB2, T)	BL	BL	BL	BL	BL	BL	2019-11-04
56	Black soft plastic wire (PCB2, T)	BL	BL	BL	BL	BL	BL	2019-11-04
57	Transparent soft plastic sleeve (PCB2, T)	BL	BL	BL	BL	BL	BL	2019-11-04
58	Yellow enameled wire (PCB2, T)	BL	BL	BL	BL	/	/	2019-11-04
59	Black diode (PCB2, D2)	BL	BL	BL	BL	X	X	2019-11-04
60	Silver metal pins (PCB2, D2)	BL	BL	BL	BL	/	/	2019-11-04
61	Black capacitor (PCB2, U2)	BL	BL	BL	BL	BL	BL	2019-11-04
62	Green color ring inductor (PCB2, L1)	BL	BL	BL	BL	BL	BL	2019-11-04
63	Yellow body (PCB2, F1)	BL	BL	BL	BL	BL	BL	2019-11-04
64	Black soft plastic jacket (PCB2, R45)	BL	BL	BL	BL	BL	BL	2019-11-04
65	Gray color ring resistance (PCB2, R45)	BL	BL	BL	BL	BL	BL	2019-11-04
66	Blue capacitor (PCB2, C)	BL	BL	BL	BL	BL	BL	2019-11-04
67	White dry glue (PCB2)	BL	BL	BL	BL	BL	BL	2019-11-04
68	Black triode (PCB2, Q33)	BL	BL	BL	BL	BL	BL	2019-11-04

****

TEST REPORT

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr▼	Br▼		
						PBBs	PBDEs	
69	Black diode (PCB2, D5)	BL	BL	BL	BL	X	X	2019-11-04
70	Black capacitor (PCB2, U6)	BL	BL	BL	BL	X	X	2019-11-04
71	Black SMD IC (PCB2, U4)	BL	BL	BL	BL	BL	BL	2019-11-04
72	Black body (PCB2, BD1)	BL	BL	BL	BL	X	X	2019-11-04
73	Brown chip capacitor (PCB2, C19)	BL	BL	BL	BL	BL	BL	2019-11-04
74	Green PCB board (PCB2)	BL	BL	BL	BL	X	X	2019-11-04
75	Red soft plastic wire (PCB2 cable)	BL	BL	BL	BL	BL	BL	2019-11-04
76	Black triode (PCB3, Q3)	BL	BL	BL	BL	BL	BL	2019-11-04
77	Black diode (PCB3, D1)	BL	BL	BL	BL	X	X	2019-11-04
78	Gray soft plastic case (PCB3, J1)	BL	BL	BL	BL	BL	BL	2019-11-04
79	Silver metal plate (PCB3, J1)	BL	BL	BL	BL	/	/	2019-11-04
80	Black soft plastic case (PCB3, K1)	BL	BL	BL	BL	X	X	2019-11-04
81	Silver metal plate (PCB3, K1)	BL	BL	BL	BL	/	/	2019-11-04
82	Copper metal sheet (PCB3, K1)	BL	BL	BL	BL	/	/	2019-11-04
83	Copper metal wire (PCB3, K1)	BL	OL	BL	BL	/	/	2019-11-04
84	White dry glue (PCB3)	BL	BL	BL	BL	BL	BL	2019-11-04
85	Red glass diode (PCB, ZD1)	BL	BL	BL	BL	BL	BL	2019-11-04
86	Black body (PCB3, BD1)	BL	BL	BL	BL	BL	BL	2019-11-04
87	Gray color ring body (PCB3, FR1)	BL	BL	BL	BL	BL	BL	2019-11-04
88	Red capacitor (PCB3, CB1)	BL	BL	BL	BL	BL	BL	2019-11-04
89	Green PCB board (PCB3)	BL	BL	BL	BL	X	X	2019-11-04
90	White soft plastic interface (small PCB)	BL	BL	BL	BL	BL	BL	2019-11-04
91	Black chip capacitor (small PCB)	BL	BL	BL	BL	BL	BL	2019-11-04
92	Black patch IC (small PCB)	BL	BL	BL	BL	BL	BL	2019-11-04

****

TEST REPORT

Seq. No.	Tested Part(s)	Results						Date of sample submission/resubmission
		Cd	Pb	Hg	Cr▼	Br▼		
						PBBs	PBDEs	
93	Black body (small PCB)	BL	BL	BL	BL	BL	BL	2019-11-04
94	Silver metal case	BL	BL	BL	BL	/	/	2019-11-04
95	Black PCB board	BL	BL	BL	BL	X	X	2019-11-04
96	Golden metal rod	OL	OL	BL	X	/	/	2019-11-04
97	White soft plastic fixture (transfer interface)	BL	BL	BL	BL	BL	BL	2019-11-04
98	Silver metal fixture (transfer interface)	BL	BL	BL	X	/	/	2019-11-04
99	Gray soft plastic wire (LED cable)	BL	BL	BL	BL	BL	BL	2019-11-04
100	Pink soft plastic wire (LED cable)	BL	BL	BL	BL	BL	BL	2019-11-04
101	White soft plastic wire (LED cable)	BL	BL	BL	BL	BL	BL	2019-11-04
102	Silver metal wire (LED cable)	BL	BL	BL	BL	/	/	2019-11-04
103	Silver metal plate (LED light board)	BL	BL	BL	BL	/	/	2019-11-04
104	White soft plastic sheet (LED light board)	BL	BL	BL	BL	BL	BL	2019-11-04
105	Silver solder joint (LED light board)	BL	BL	BL	BL	/	/	2019-11-04
106	Transparent soft plastic lamp head (LED light board)	BL	BL	BL	BL	X	X	2019-11-04
107	Yellow soft plastic lamp head (LED light board)	BL	BL	BL	BL	BL	BL	2019-11-04
108	Translucent soft plastic lampshade	BL	BL	BL	BL	BL	BL	2019-11-04
109	White soft plastic plug	BL	BL	BL	BL	BL	BL	2019-11-04
110	Silver metal screws (accessory)	BL	BL	BL	BL	/	/	2019-11-04
111	White soft plastic buckle (accessory)	BL	BL	BL	BL	BL	BL	2019-11-04
112	Gray soft plastic fixtures (accessory)	BL	BL	BL	BL	BL	BL	2019-11-04

****

TEST REPORT

Note:

(1) 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	BL≤70-3σ<X <130+3σ≤OL	BL≤50-3σ<X <150+3σ≤OL
Pb	mg/kg	BL≤700-3σ<X <1300+3σ≤OL	BL≤700-3σ<X <1300+3σ≤OL	BL≤500-3σ<X <1500+3σ≤OL
Hg	mg/kg	BL≤700-3σ<X <1300+3σ≤OL	BL≤700-3σ<X <1300+3σ≤OL	BL≤500-3σ<X <1500+3σ≤OL
Cr	mg/kg	BL≤700-3σ<X	BL≤700-3σ<X	BL≤500-3σ<X
Br	mg/kg	BL≤300-3σ<X	--	BL≤250-3σ<X

Note:

BL = Below Limit
OL = Over Limit
X = Inconclusive

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

(3) The maximum permissible limit is quoted from the document 2015/863/EC amending RoHS directive 2011/65/EU:

(4) ▼=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

****

TEST REPORT

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
Dibuyl Phthalate(DBP)	1000
Benzylbutyl Phthalate(BBP)	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	1000
Diispbutyl 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.

****

TEST REPORT

B. EU RoHS Directive 2011/65/EU and its amendment Directives 2015/863/EU on Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, DBP, BBP, DEHP, DIBP content.

Test method:

Lead(Pb) & Cadmium(Cd) 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(Hg) 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(Cr(VI)) 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)

BBP DBP DEHP & DIBP Content:

With reference to IEC 62321-8:2017, by solvent extraction and analysis was performed by gas chromatographic-mass spectrometer (GC-MS)

1) The test results of Lead (Pb) and Cadmium (Cd)

Item	Unit	MDL	Results			Limit
			(3)	(83)	(96)	
Lead Content (Pb)	mg/kg	5	N.D.	N.D.	21723#3	1000

Item	Unit	MDL	Results				Limit
			(3)	(83)	(42)	(96)	
Cadmium Content (Cd)	mg/kg	5	N.D.	N.D.	N.D.	N.D.	100

2) The test results of Hexavalent Chromium (Cr^{6+})(metal)

Item	Unit	MDL	Results			Limit
			(3)	(96)	(98)	
Hexavalent Chromium(Cr(VI))▼	ug/cm^2	0.10	N.D.	N.D.	N.D.	-

****

TEST REPORT

Note:

- MDL = Method Detection Limit
- /= Not apply
- LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 μg/cm^2
- ▼ = a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13ug/cm^2. The sample coating is considered to contain Cr(VI)
  b. The sample is negative for Cr(VI) if Cr(VI) is N.D.(concentration less than 0.10ug/cm^2). The sample coating is considered a non- Cr(VI) based coating
  c. The result between 0.10μg/cm^2 and 0.13μg/cm^2 is considered to be inconclusive, unavoidable coating variations may influence the determination
- Information on storage conditions and production date of the tested samples is unavailable and thus Cr(VI) results represent status of the sample at the time of testing
- mg/kg = ppm=parts per million
- N.D.=Not Detected(<MDL or LOQ)

#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).

#5 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.

#7 According to the statement provided by the customer, according to RoHS directive 2011/65/EU and its Amendments，Lead is exempted in steel for machining purposes and in galvanised steel containing up to 0.35% (3500ppm) by weight.

- Flow chart appendix is included.
- Photo appendix is included.

****

TEST REPORT

3) The test results of DBP、BBP、DEHP & DIBP

Item	Unit	MDL	Results	Limit
			2+12+17+18+19+20	
Dibuyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			21+24+26+33+35+36	
Dibuyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			44+49+51+53+59+61	
Dibuyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			62+63+65+66+68+69	
Dibuyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

****

TEST REPORT

Item	Unit	MDL	Results	Limit
			70+71+72+73+76+77	
Dibuyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			87+86+85+88+89+91	
Dibuyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results	Limit
			92+93+95+74	
Dibuyl Phthalate(DBP)	mg/kg	600	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	600	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	600	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	600	N.D.	1000

Item	Unit	MDL	Results				Limit
			1	5	7	8	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

****

TEST REPORT

Item	Unit	MDL	Results				Limit
			13	14	16	25	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

Item	Unit	MDL	Results				Limit
			28	29	30	31	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

Item	Unit	MDL	Results				Limit
			32	34	39	40	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	105	854	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

Item	Unit	MDL	Results				Limit
			50	54	55	56	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	135	510	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

****

TEST REPORT

Item	Unit	MDL	Results				Limit
			57	64	67	75	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

Item	Unit	MDL	Results				Limit
			78	80	84	90	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

Item	Unit	MDL	Results				Limit
			97	99	100	101	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	327	509	532	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

****

TEST REPORT

Item	Unit	MDL	Results				Limit
			104	106	107	108	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	1000

Item	Unit	MDL	Results					Limit
			109	111	112	43	45	
Dibuyl Phthalate(DBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl Phthalate(BBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	396	1000
Diispbutyl phthalate(DIBP)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	1000

****

TEST REPORT

4) The test results of PBBs & PBDEs

Item	Unit	MDL	Results				Limit
			(18)	(28)	(29)	(36)	
Polybrominated Biphenyls (PBBs)							
Monobromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000
Polybrominated Diphenylethers (PBDEs)(Mon-Deca)							
Monobromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000

****

TEST REPORT

Item	Unit	MDL	Results				Limit
			(44)	(49)	(59)	(69)	
Polybrominated Biphenyls (PBBs)							
Monobromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000
Polybrominated Diphenylethers (PBDEs)(Mon-Deca)							
Monobromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000

TEST REPORT

Item	Unit	MDL	Results				Limit
			(70)	(72)	(74)	(77)	
Polybrominated Biphenyls (PBBs)							
Monobromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000
Polybrominated Diphenylethers (PBDEs)(Mon-Deca)							
Monobromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000

TEST REPORT

Item	Unit	MDL	Results				Limit
			(80)	(89)	(95)	(106)	
Polybrominated Biphenyls (PBBs)							
Monobromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000
Polybrominated Diphenylethers (PBDEs)(Mon-Deca)							
Monobromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Dibromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tribromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Tetrabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Pentabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Hexabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Heptabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Octabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl ether	mg/kg	5	N.D.	N.D.	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	N.D.	N.D.	1000

Remark:

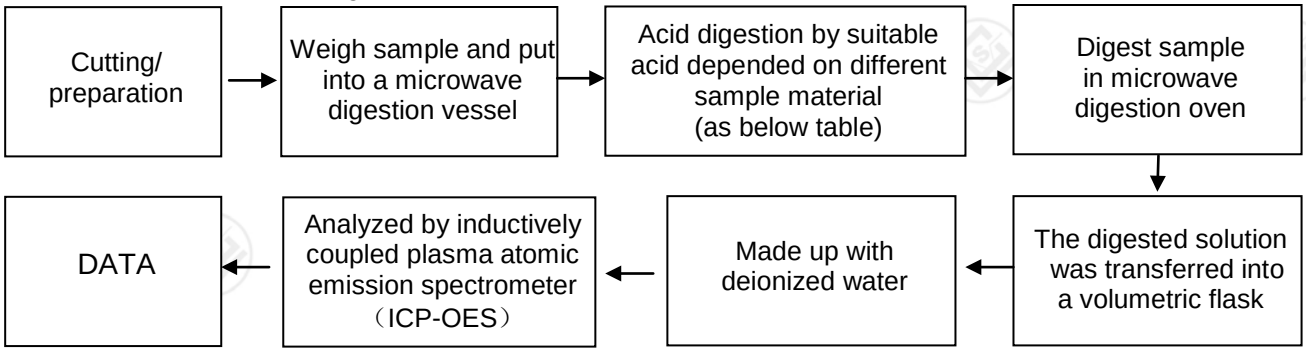
- mg/kg = ppm
- N.D. = Not detected
- MDL=Method detected limited
- Flow chart appendix is included
- Photo appendix is included.

****

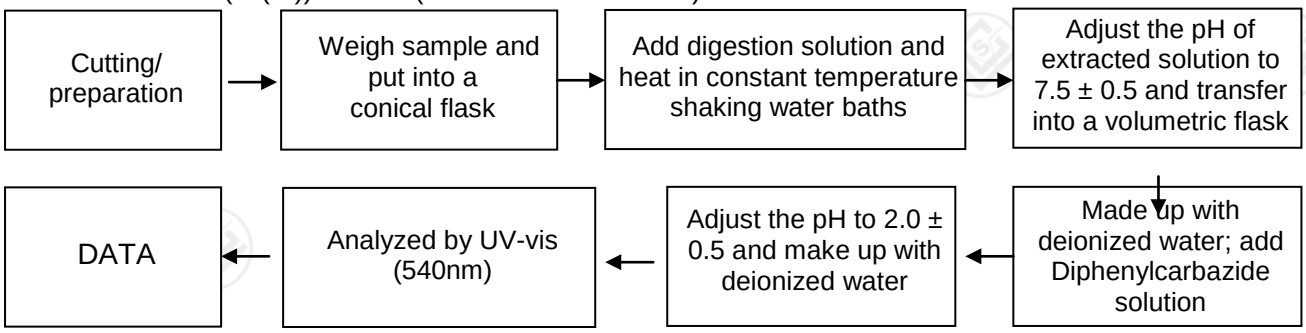
TEST REPORT

Appendix

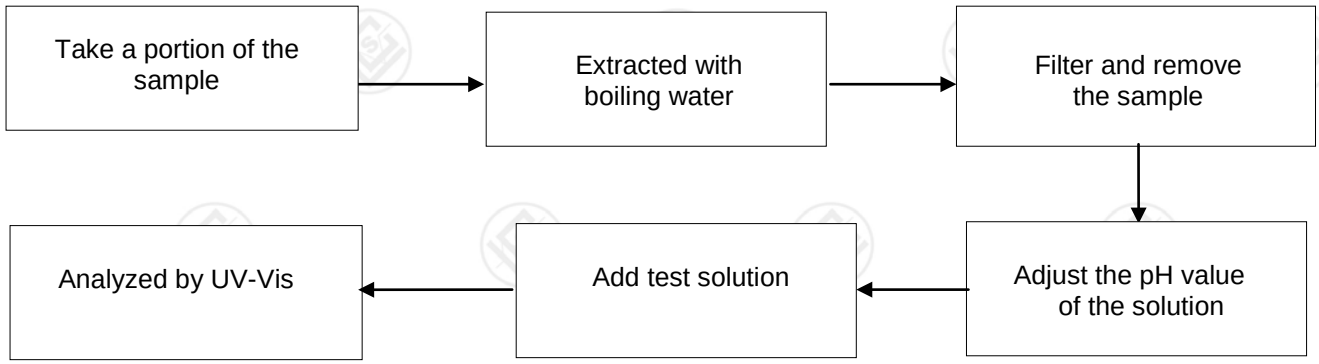
1. Test Flow chart for Cd/Pb /Hg content



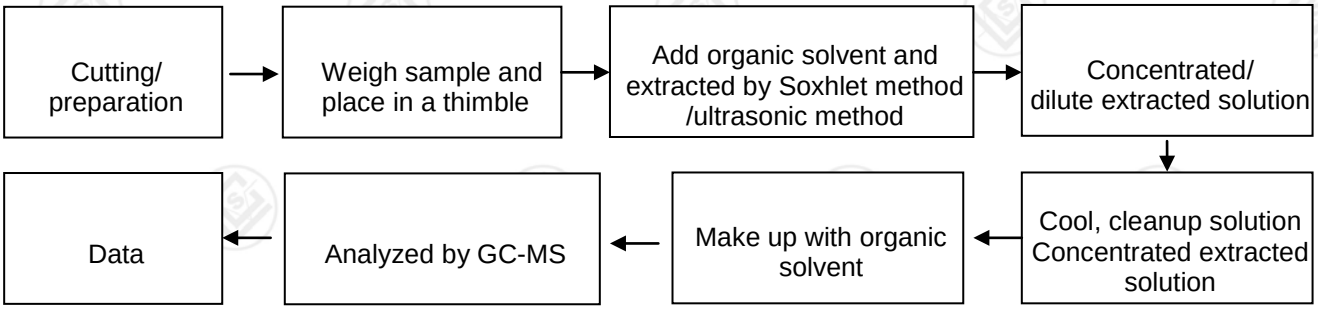
2. Test Flowchart for(Cr(VI)) content (For non-metal material)



Test Flowchart for (Cr(VI)) content (For metal material)



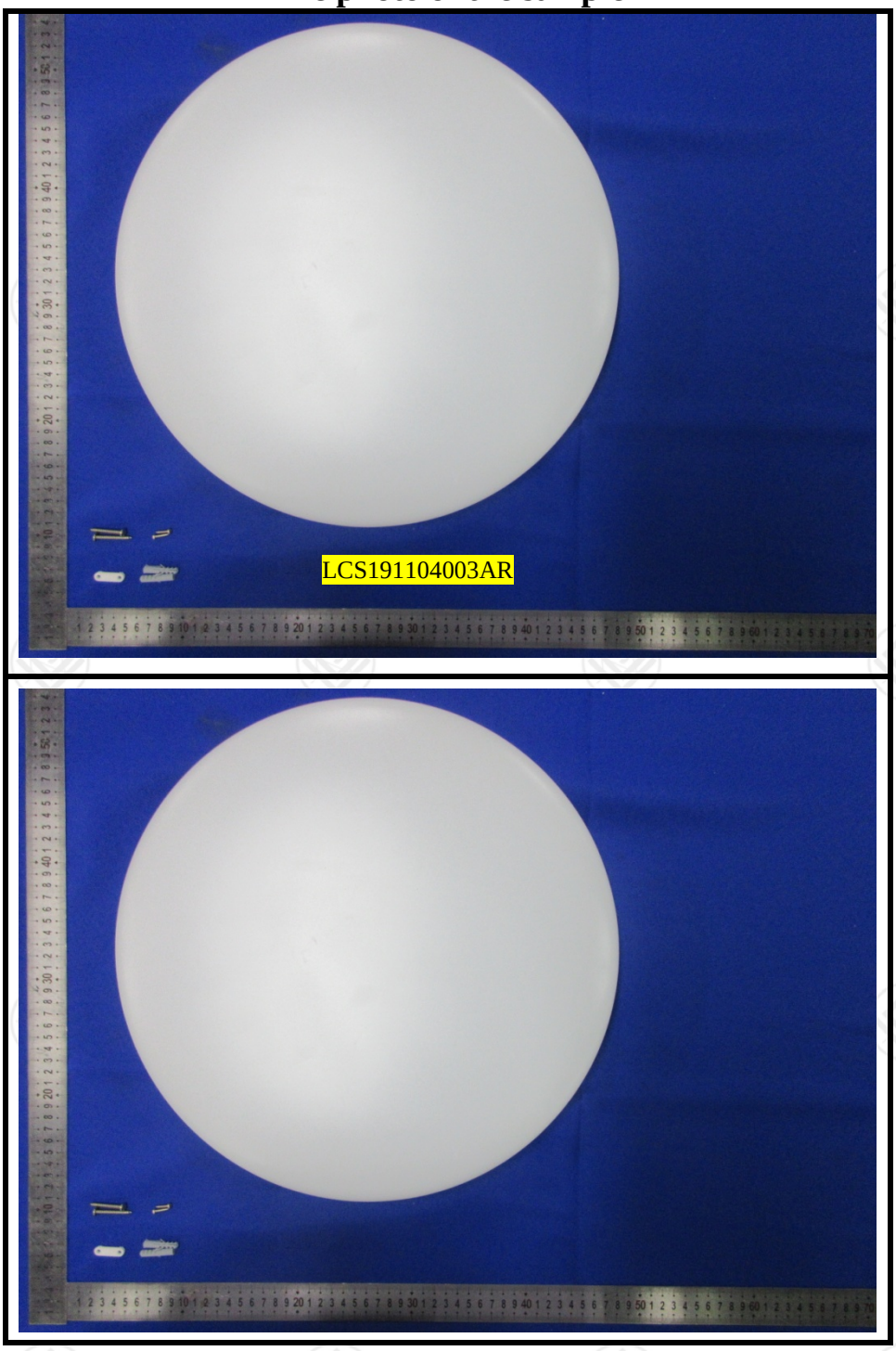
3. Test Flow chart for PBBs & PBDEs & DBP & BBP & DEHP & DIBP content



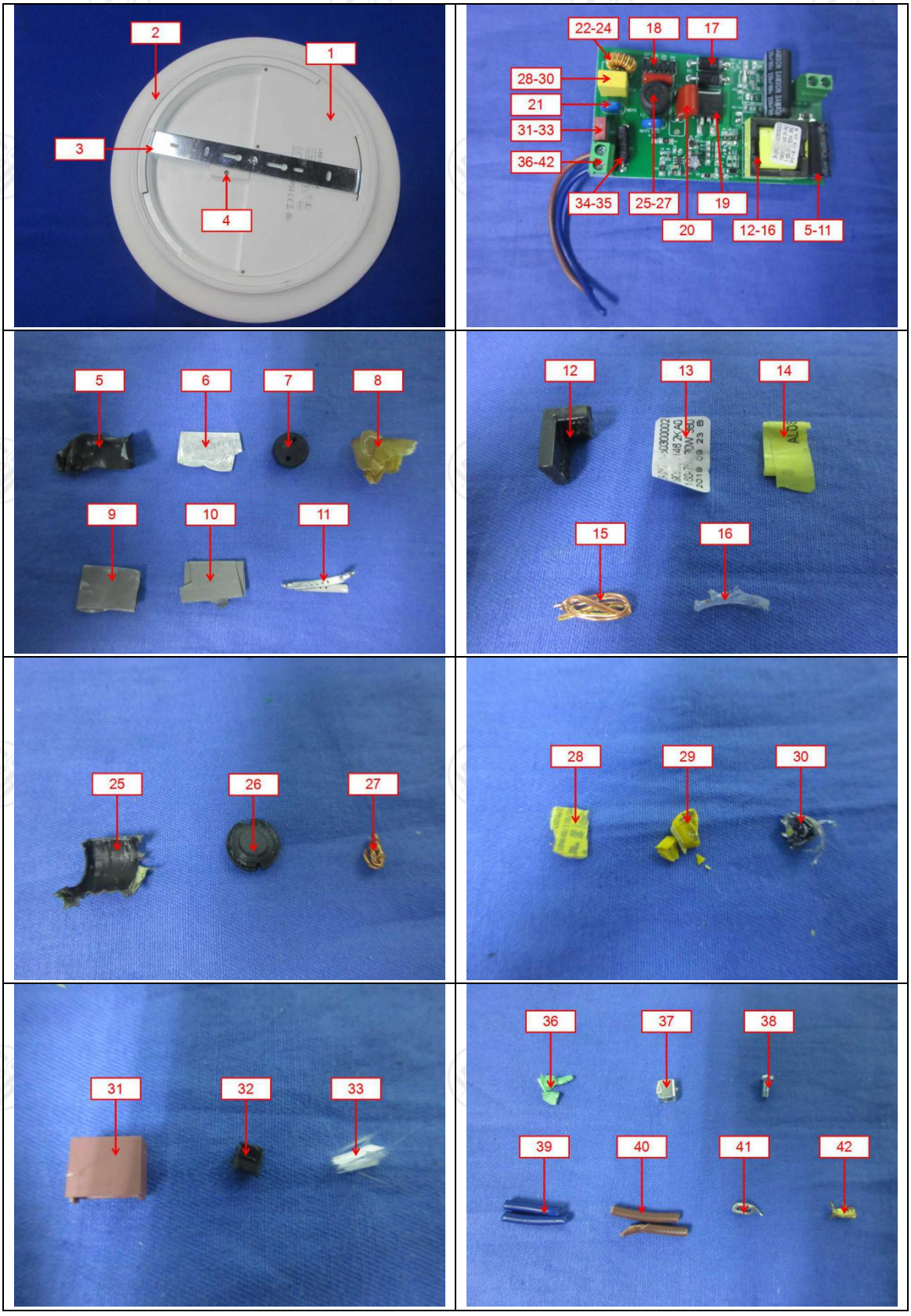
****

TEST REPORT

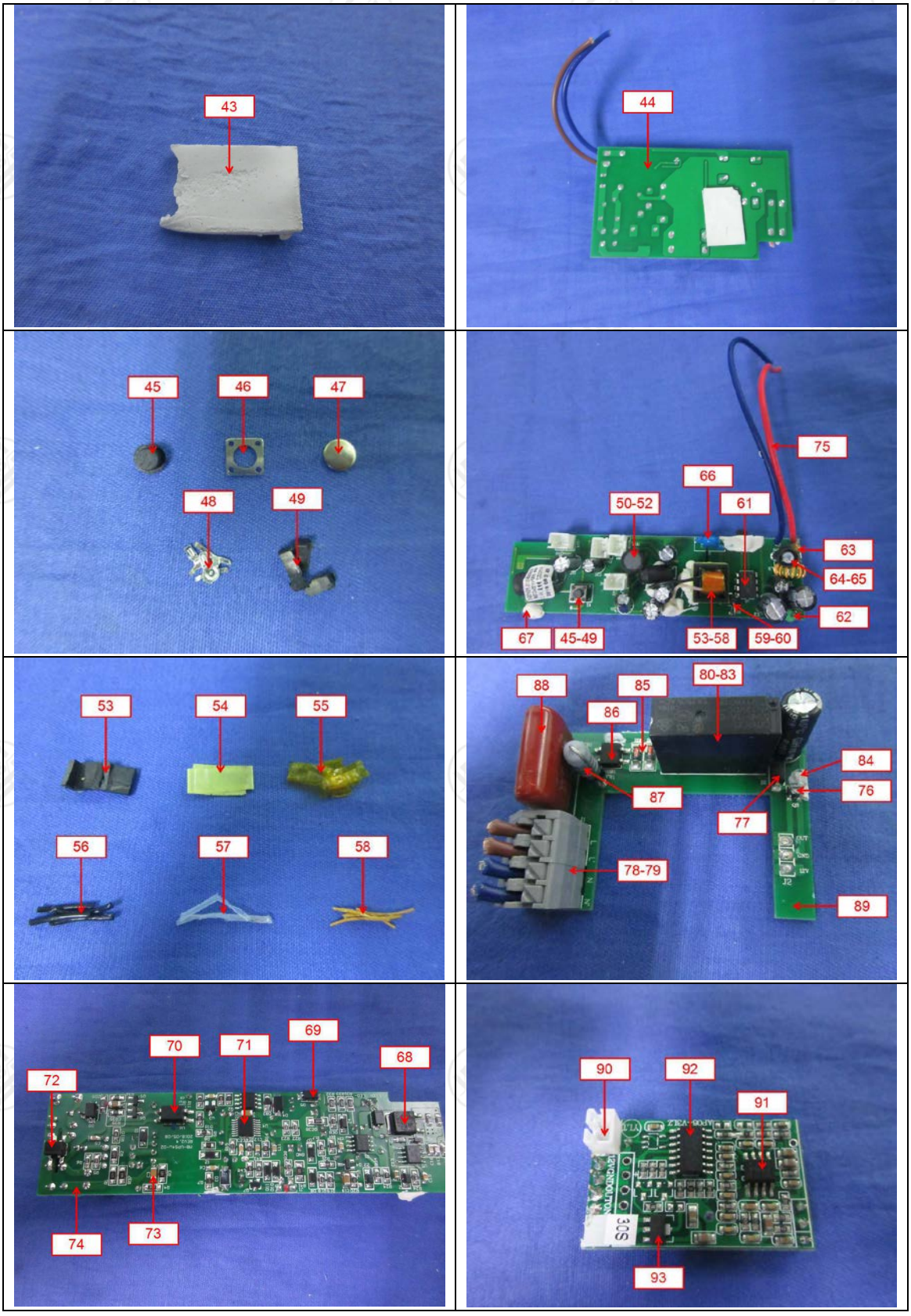
The photo of the sample



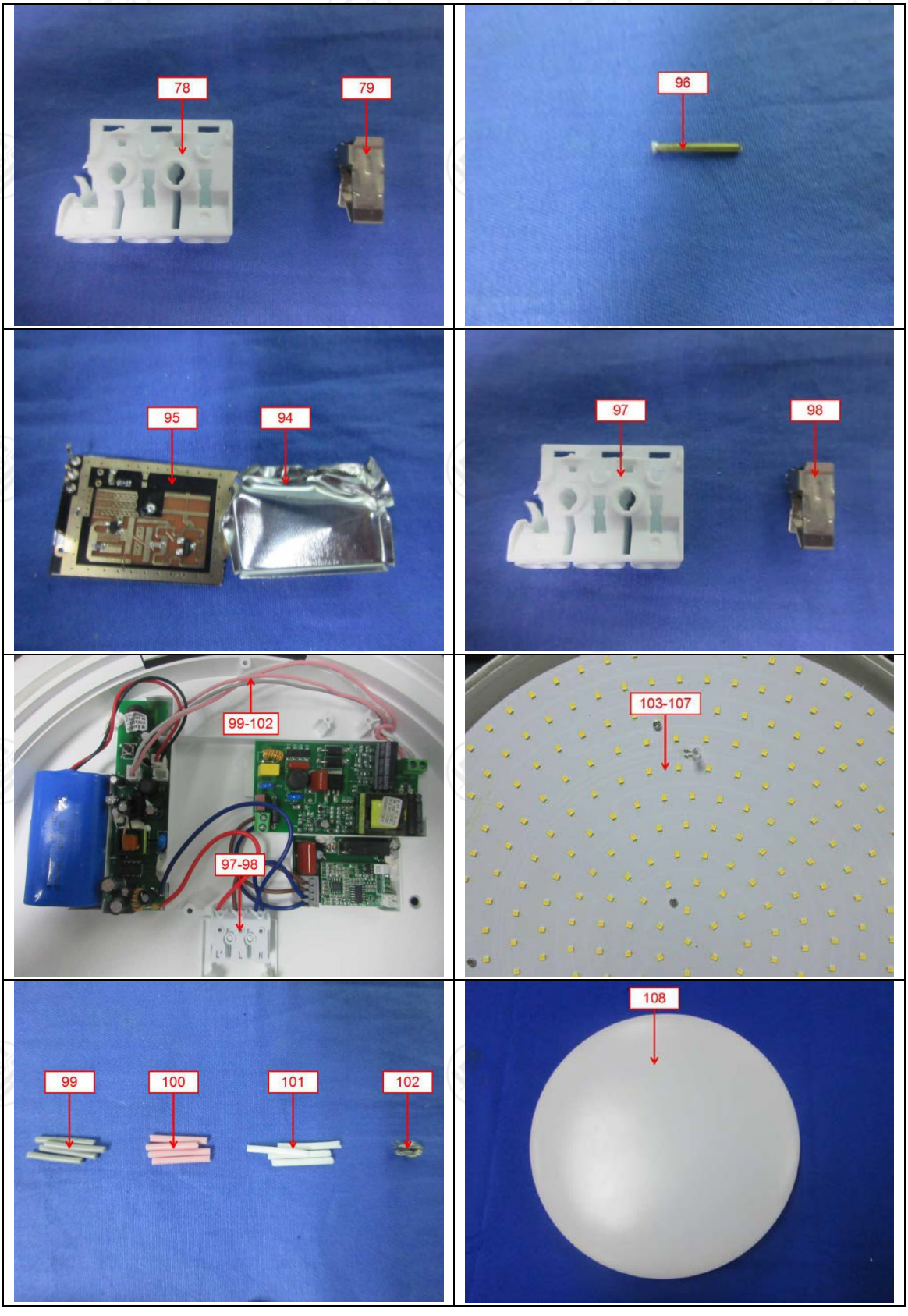
TEST REPORT


2
1
3
4
22-24
18
17
28-30
21
31-33
36-42
34-35
25-27
19
20
12-16
5-11
5
6
7
8
9
10
11
12
13
14
15
16
25
26
27
28
29
30
31
32
33
36
37
38
39
40
41
42

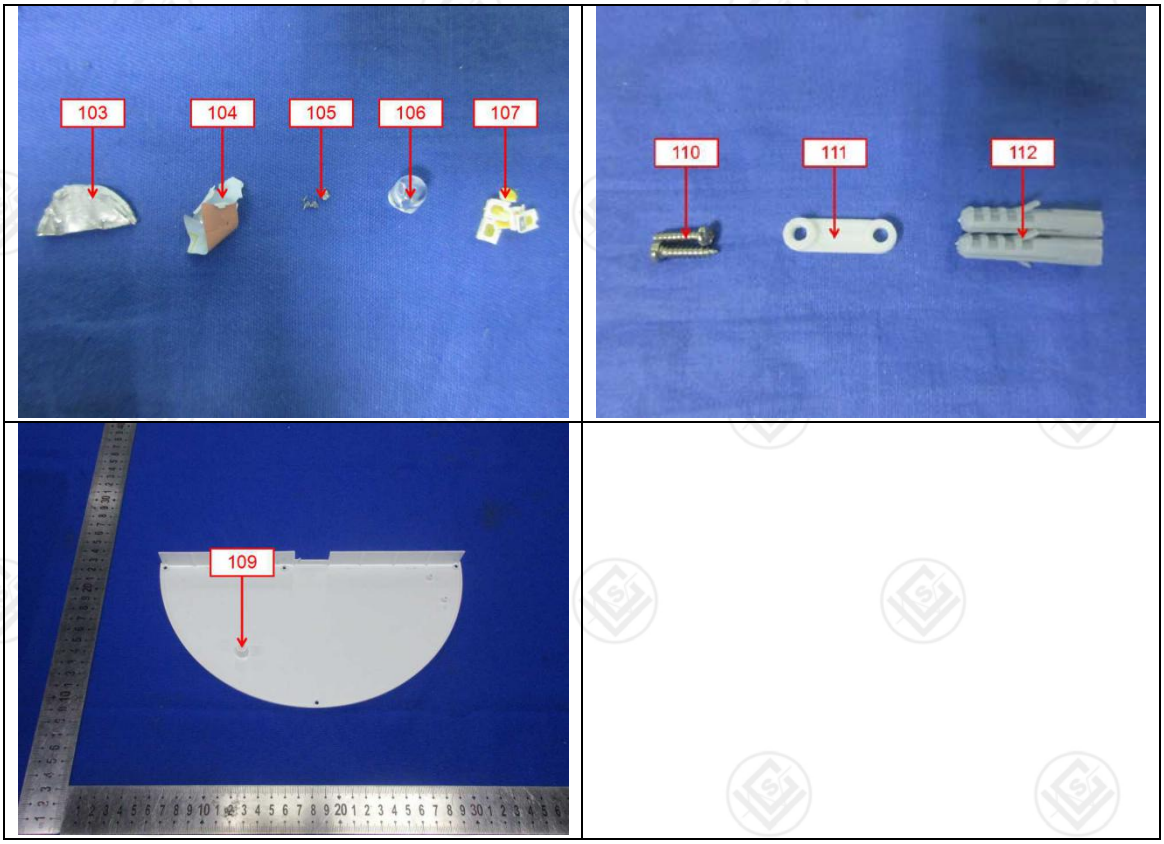
TEST REPORT


43
44
45
46
47
48
49
75
66
50-52
61
63
64-65
62
67
45-49
53-58
59-60
53
54
55
56
57
58
88
85
80-83
86
84
87
76
77
78-79
89
70
71
69
68
72
74
73
90
92
91
93

TEST REPORT



TEST REPORT



********** End of Report **********

Statement:

1. The test report is considered invalidated without approval signature, special seal on the perforation.
2. The result(s) shown in this report refer only to the sample(s) tested.
3. Without written approval of LCS, this report can't be reproduced except in full.
4. The sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which LCS hasn't verified.
5. In case of any discrepancy between the English version and Chinese version of the testing reports(if generated), the Chinese version shall prevail.