

Test Report

Report No.: ELE2505C09749

Date: Jun. 12, 2025

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Applicant: Shenzhen BAOWODA Technology Co., Ltd.
Address: Floor 3, Building 9, Nanyu Industrial Park, Langkou Community, Dalang Street, Longhua District, Shenzhen 518109 Guangdong P.R.China

The following sample was submitted and identified by/on behalf of the client as:

Product Name: Combined Gas & Carbon Monoxide Alarm

Model No.: CG01

Trade Mark:



Manufacturer: Shenzhen BAOWODA Technology Co., Ltd.

Address: Floor 3, Building 9, Nanyu Industrial Park, Langkou Community Dalang Street,
Longhua District, Shenzhen Guangdong P.R.

Sample Received Date: 2025.5.29; 2025.6.10

Testing Period: 2025.5.29—2025.6.6;
2025.6.10—2025.6.12

Test Method: Please refer to the following page(s).

Test Result(s): Please refer to the following page(s).

Test Requested

As specified by client, according to RoHS Directive 2011/65/EU with amendment (EU) 2015/863, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr (VI)), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), Phthalates (DBP, BBP, DEHP, DIBP) in the tested materials of the submitted sample(s).

Result

Pass

Signed for and on behalf of
Shenzhen Element Testing Co., Ltd.

Noel Yin

Noel Yin
Technical Manager



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Tested Result:
1. Screening Result

With reference to IEC 62321-3-1:2013, by XRF

Spec. No.	Specimen Description:	Results						Date of sample submission /Resubmission
		Pb	Cd	Hg	Cr▼	Br▼		
						PBB	PBDE	
1	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03
2	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03
3	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
4	Silvery metal screw	BL	BL	BL	X	NA	NA	2025-06-03 2025-06-06
5	Silvery adhesive plastic with black printing	BL	BL	BL	BL	BL	BL	2025-06-03
6	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
7	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03
8	Golden metal	BL	BL	BL	BL	NA	NA	2025-06-03
9	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
10	Black plastic jacket	BL	BL	BL	BL	BL	BL	2025-06-03
11	Red plastic jacket	BL	BL	BL	BL	BL	BL	2025-06-03
12	Silvery metal wire core	BL	BL	BL	BL	NA	NA	2025-06-03
13	White plastic	BL	BL	BL	BL	BL	BL	2025-06-03
14	White plastic	BL	BL	BL	BL	BL	BL	2025-06-03
15	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
16	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
17	Coppery metal	BL	BL	BL	BL	NA	NA	2025-06-03
18	Black ceramic	BL	BL	BL	BL	BL	BL	2025-06-03
19	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03

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Spec. No.	Specimen Description:	Results						Date of sample submission /Resubmission
		Pb	Cd	Hg	Cr▼	Br▼		
						PBB	PBDE	
20	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
21	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03
22	Black electronic components	BL	BL	BL	BL	BL	BL	2025-06-03
23	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
24	Black paper	BL	BL	BL	BL	BL	BL	2025-06-03
25	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03
26	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
27	Green plastic	BL	BL	BL	BL	BL	BL	2025-06-03
28	Brown paper	BL	BL	BL	BL	BL	BL	2025-06-03
29	Beige plastic	BL	BL	BL	BL	BL	BL	2025-06-03
30	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03
31	Silvery metal	BL	BL	BL	BL	NA	NA	2025-06-03
32	Silvery metal	BL	BL	BL	X	NA	NA	2025-06-03 2025-06-06
33	Beige plastic	BL	BL	BL	BL	BL	BL	2025-06-03
34	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-03
35	Black adhesive plastic	BL	BL	BL	BL	BL	BL	2025-06-03
36	Transparent glass with black coating	BL	BL	BL	BL	BL	BL	2025-06-03
37	Black adhesive plastic	BL	BL	BL	BL	BL	BL	2025-06-03
38	Silvery plastic	BL	BL	BL	BL	BL	BL	2025-06-03
39	Silvery plastic	BL	BL	BL	BL	BL	BL	2025-06-03
40	White plastic	BL	BL	BL	BL	BL	BL	2025-06-03

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Spec. No.	Specimen Description:	Results						Date of sample submission /Resubmission
		Pb	Cd	Hg	Cr▼	Br▼		
						PBB	PBDE	
41	White plastic	BL	BL	BL	BL	BL	BL	2025-06-03
42	Transparent plastic	BL	BL	BL	BL	BL	BL	2025-06-03
43	White plastic	BL	BL	BL	BL	BL	BL	2025-06-03
44	Silvery metal	BL	BL	BL	X	NA	NA	2025-06-03 2025-06-06
45	Yellow FPC	BL	BL	BL	BL	BL	BL	2025-06-03
46	Yellow LED	BL	BL	BL	BL	BL	BL	2025-06-03
47	Blue PCB	BL	BL	BL	BL	BL	BL	2025-06-03
48	Black electronic components	BL	BL	BL	BL	BL	BL	2025-06-03
49	Black electronic components	BL	BL	BL	BL	BL	BL	2025-06-03
50	Blue PCB	BL	BL	BL	BL	X	X	2025-06-03 2025-06-06
51	Black plastic	BL	BL	BL	BL	BL	BL	2025-06-11
52 ^③	Silvery metal	OL	BL	BL	BL	NA	NA	2025-06-11 2025-06-12

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2. Test result for Chemical Confirmation

(1) The test results of Lead (Pb)

With reference to IEC 62321-5:2013, by acid digestion and analysis was performed by inductively coupled plasma atomic emission spectrometer (ICP-OES)

Item	Unit	MDL	Results	Limit
			52 ^③	
Lead Content (Pb)	mg/kg	2	2.69x10 ⁴	1000

(2) The test results of Hexavalent Chromium (Cr(VI))

With reference to IEC 62321-7-1:2015, by visible spectrophotometer (Vis)

Item	Unit	MDL	Results			Limit
			4	32	44	
Hexavalent Chromium (Cr (VI)) [#]	ug/cm ²	0.10	ND	ND	ND	-

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(3) The test results of PBB & PBDE

With reference to IEC 62321-6:2015, by solvent extraction and analysis was performed by gas chromatographic-mass spectrometer (GC-MS)

Item	Unit	MDL	Results	Limit
			50	
Polybrominated Biphenyls (PBB)				
Monobromobiphenyl	mg/kg	5	ND	
Dibromobiphenyl	mg/kg	5	ND	
Tribromobiphenyl	mg/kg	5	ND	
Tetrabromobiphenyl	mg/kg	5	ND	
Pentabromobiphenyl	mg/kg	5	ND	
Hexabromobiphenyl	mg/kg	5	ND	
Heptabromobiphenyl	mg/kg	5	ND	
Octabromobiphenyl	mg/kg	5	ND	
Nonabromodiphenyl	mg/kg	5	ND	
Decabromodiphenyl	mg/kg	5	ND	
Total content	mg/kg	/	ND	1000
Polybrominated Diphenyl Ethers (PBDE)				
Monobromodiphenyl ether	mg/kg	5	ND	
Dibromodiphenyl ether	mg/kg	5	ND	
Tribromodiphenyl ether	mg/kg	5	ND	
Tetrabromodiphenyl ether	mg/kg	5	ND	
Pentabromodiphenyl ether	mg/kg	5	ND	
Hexabromodiphenyl ether	mg/kg	5	ND	
Heptabromodiphenyl ether	mg/kg	5	ND	
Octabromodiphenyl ether	mg/kg	5	ND	
Nonabromodiphenyl ether	mg/kg	5	ND	
Decabromodiphenyl ether	mg/kg	5	ND	
Total content	mg/kg	/	ND	1000

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(4) The test results of DBP, BBP, DEHP and DIBP

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

Item	Unit	MDL	Results		Limit
			1+5+35+37	2+7+13+14+43	
Dibutyl Phthalate (DBP)	mg/kg	250	ND	ND	1000
Benzylbutyl Phthalate (BBP)	mg/kg	250	ND	ND	1000
Bis(2-ethylhexyl) Phthalate (DEHP)	mg/kg	250	ND	ND	1000
Diisobutyl phthalate (DIBP)	mg/kg	250	ND	ND	1000

Item	Unit	MDL	Results		Limit
			10+11	19	
Dibutyl Phthalate (DBP)	mg/kg	250	ND	ND	1000
Benzylbutyl Phthalate (BBP)	mg/kg	250	ND	ND	1000
Bis(2-ethylhexyl) Phthalate (DEHP)	mg/kg	250	ND	ND	1000
Diisobutyl phthalate (DIBP)	mg/kg	250	ND	ND	1000

Item	Unit	MDL	Results		Limit
			27	38+39+40+41+42	
Dibutyl Phthalate (DBP)	mg/kg	250	ND	ND	1000
Benzylbutyl Phthalate (BBP)	mg/kg	250	ND	ND	1000
Bis(2-ethylhexyl) Phthalate (DEHP)	mg/kg	250	ND	ND	1000
Diisobutyl phthalate (DIBP)	mg/kg	250	ND	ND	1000

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Item	Unit	MDL	Results		Limit
			21+24+25+28+29	30+33+34	
Dibutyl Phthalate (DBP)	mg/kg	250	ND	ND	1000
Benzylbutyl Phthalate (BBP)	mg/kg	250	ND	ND	1000
Bis(2-ethylhexyl) Phthalate (DEHP)	mg/kg	250	ND	ND	1000
Diisobutyl phthalate (DIBP)	mg/kg	250	ND	ND	1000

Item	Unit	MDL	Results		Limit
			45+46+47+50	51	
Dibutyl Phthalate (DBP)	mg/kg	250	ND	ND	1000
Benzylbutyl Phthalate (BBP)	mg/kg	250	ND	ND	1000
Bis(2-ethylhexyl) Phthalate (DEHP)	mg/kg	250	ND	ND	1000
Diisobutyl phthalate (DIBP)	mg/kg	250	ND	ND	1000

Note:

- (1) Results were obtained by XRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), Vis (for Cr (VI)) and GC-MS (for PBB, PBDE) 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	$BL \leq 70 - 3\sigma < X < 130 + 3\sigma \leq OL$	$BL \leq 70 - 3\sigma < X < 130 + 3\sigma \leq OL$	$LOD < X < 150 + 3\sigma \leq OL$
Pb	mg/kg	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 500 - 3\sigma < X < 1500 + 3\sigma \leq OL$
Hg	mg/kg	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 500 - 3\sigma < X < 1500 + 3\sigma \leq OL$
Cr	mg/kg	$BL \leq 700 - 3\sigma < X$	$BL \leq 700 - 3\sigma < X$	$BL \leq 500 - 3\sigma < X$
Br	mg/kg	$BL \leq 300 - 3\sigma < X$	NA	$BL \leq 250 - 3\sigma < X$

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- (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) 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 is required to obtain quantitative data.
- (4) The maximum permissible limit is quoted from the document 2015/863/EC amending RoHS directive 2011/65/EU:
- (5) ▼=For restricted substances PBB and PBDE, the results show the total Br content; The restricted substance was Cr (VI), and the results showed the total Cr content
- (6) BL =Below Limit
LOD = Limits of detection
OL =Over Limit
X =Inconclusive
3σ= The reproducibility of analytical instruments
NA= Not applicable
MDL = Method Detection Limit
mg/kg = ppm=parts per million
ND=Not Detected (<MDL or LOQ)
- (7) # = a. The sample is positive for Cr (VI) if the Cr (VI) concentration is greater than 0.13ug/cm². The sample coating is considered to contain Cr (VI)
b. The sample is negative for Cr (VI) if Cr (VI) is ND (concentration less than 0.10ug/cm²). The sample coating is considered a non- Cr (VI) based coating
c. The result between 0.10μg/cm² and 0.13μg/cm² is considered to be inconclusive, unavoidable coating variations may influence the determination
- (8) Information on storage conditions and production date of the tested samples is unavailable and this Cr (VI) results represent status of the sample at the time of testing
- (9) According to the client's statement,
^①RoHS Exemption: 6(a)-I an alloying element in steel for machining purposes containing up to 0.35 % lead by weight and in galvanized steel containing up to 0.20 % lead by weight.
^②RoHS Exemption: 6(b)-II Aluminum alloy for machining purposes containing up to 0.4% lead by weight.
^③RoHS Exemption: 6(c), Copper alloy containing up to 4 % lead by weight.
^④RoHS Exemption: 7(c)-I, Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezoelectronic devices, or in a glass or ceramic matrix compound
- (10) ^(R)=Re-submitted sample.
- (11) The test report is only used for the purpose of customer research, teaching, internal quality control, product development and other purposes, and is for internal reference only.
- (12) Only selected materials were tested as per client's requirement.

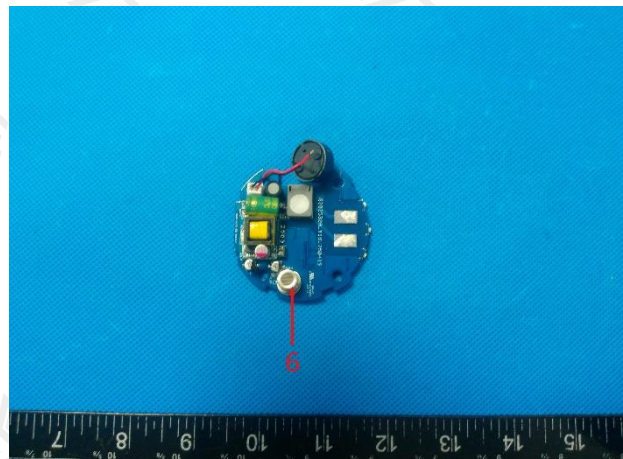
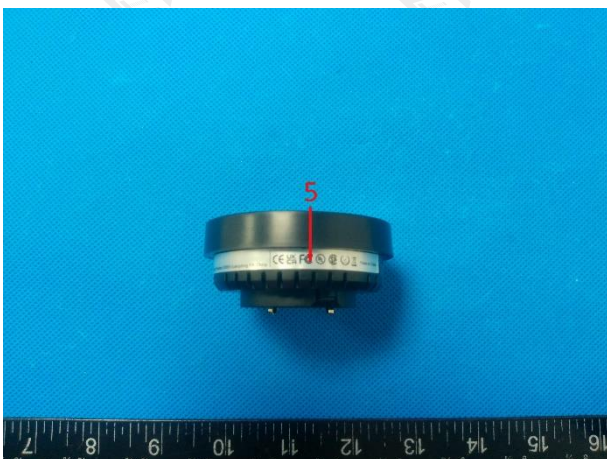
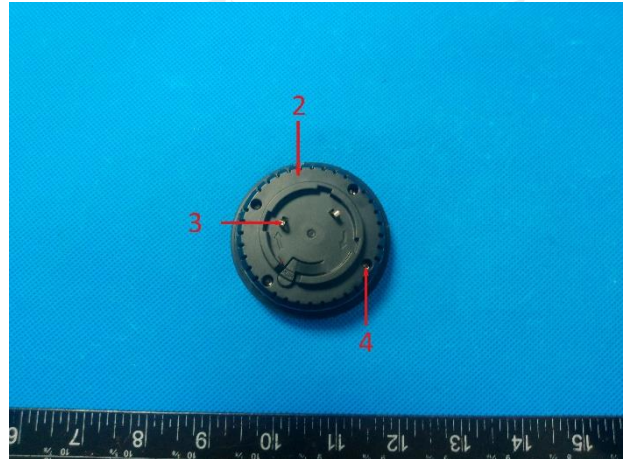
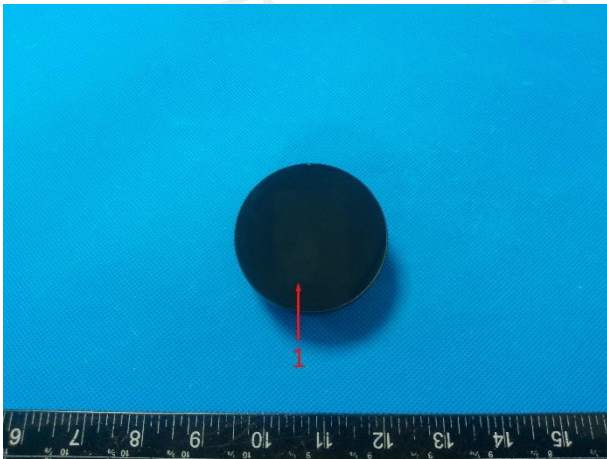
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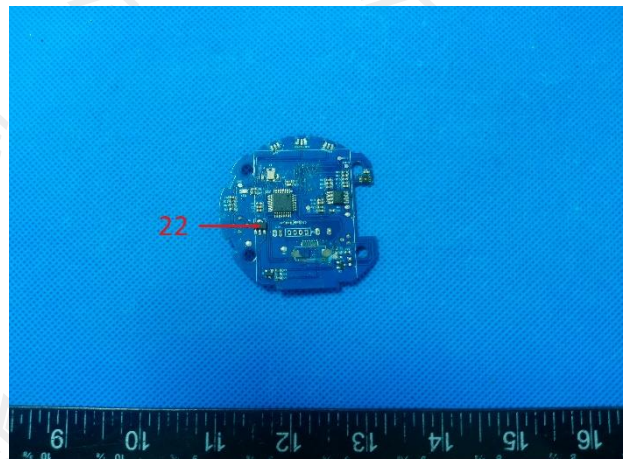
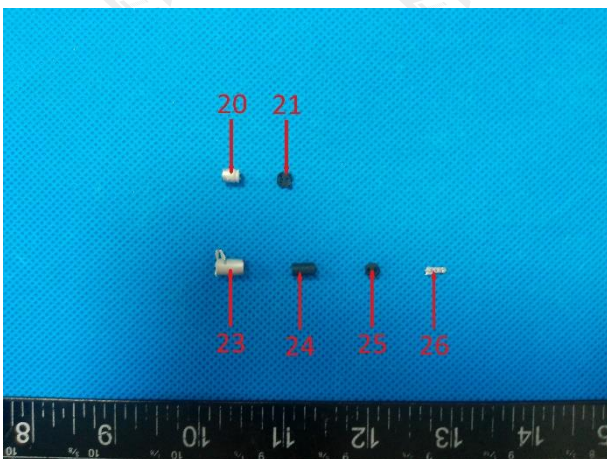
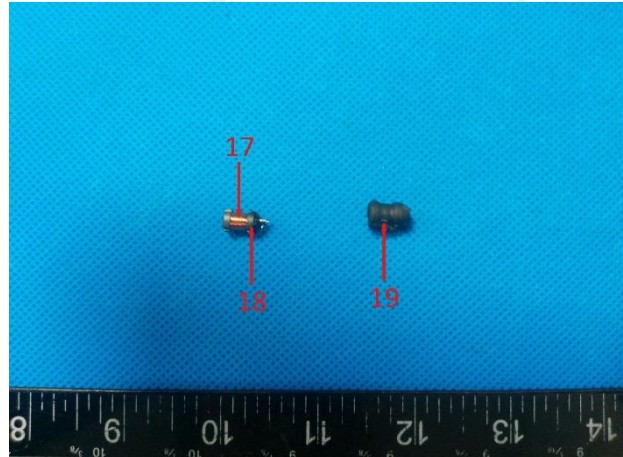
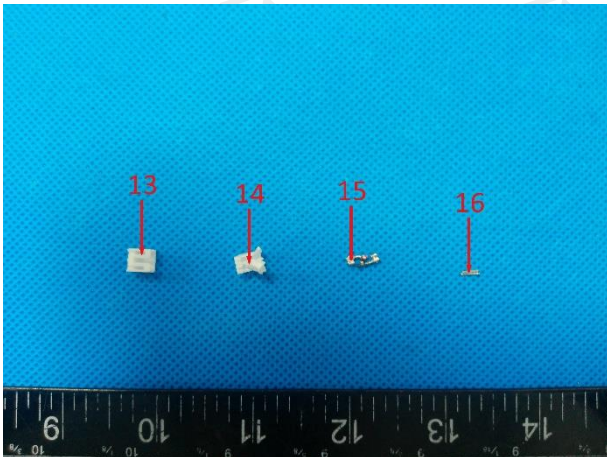
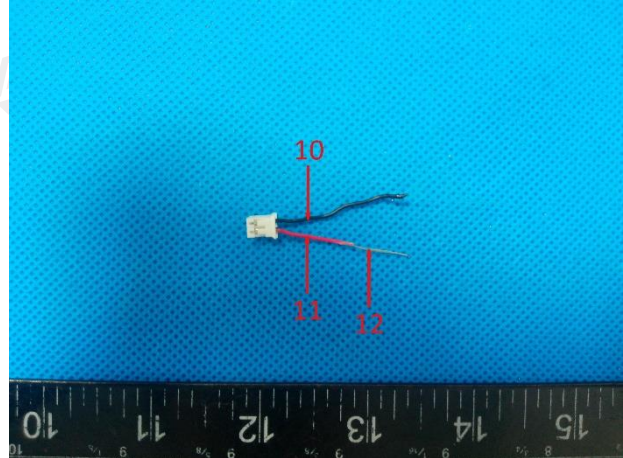
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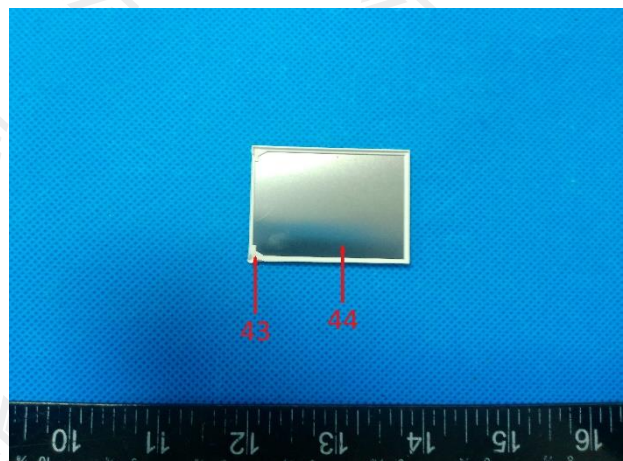
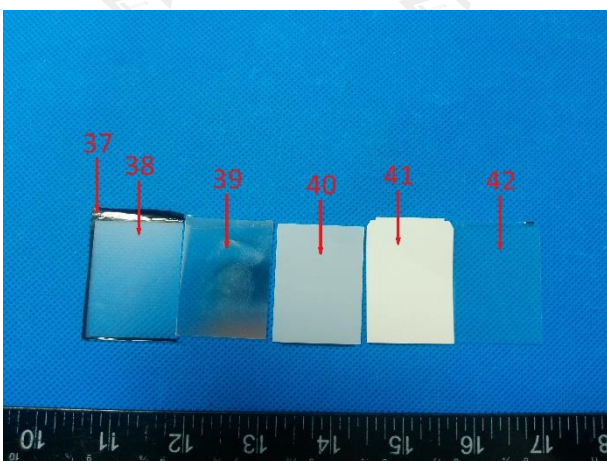
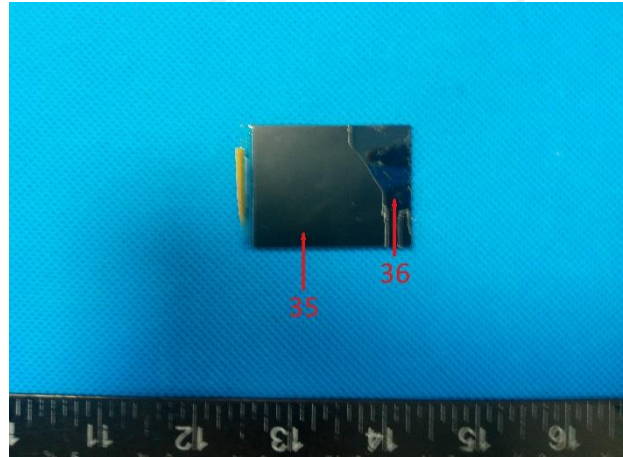
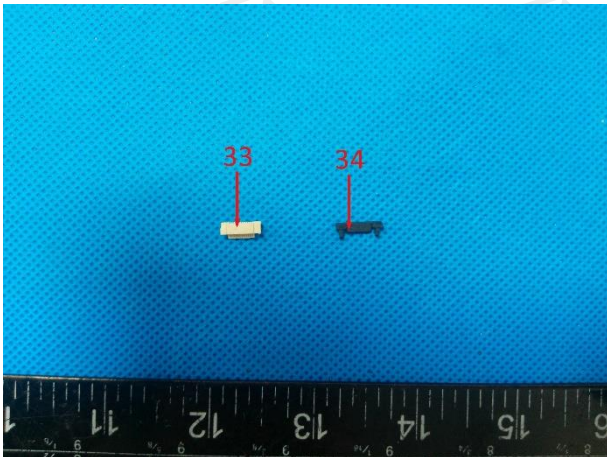
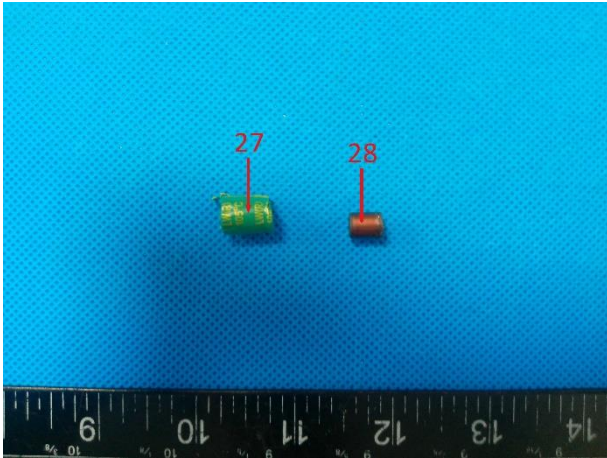
Photo(s) of the sample(s)



Photo(s) of the sample(s)



Photo(s) of the sample(s)



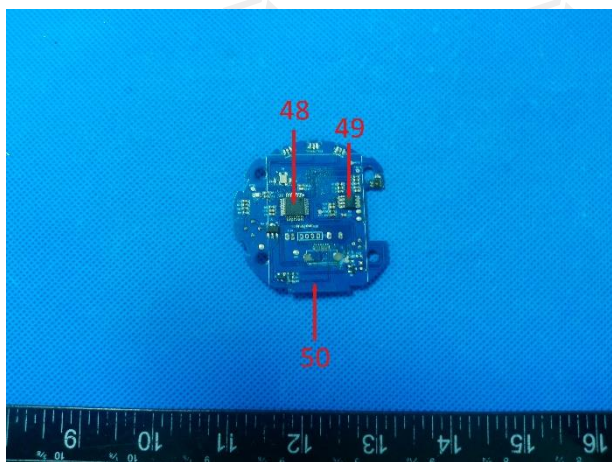
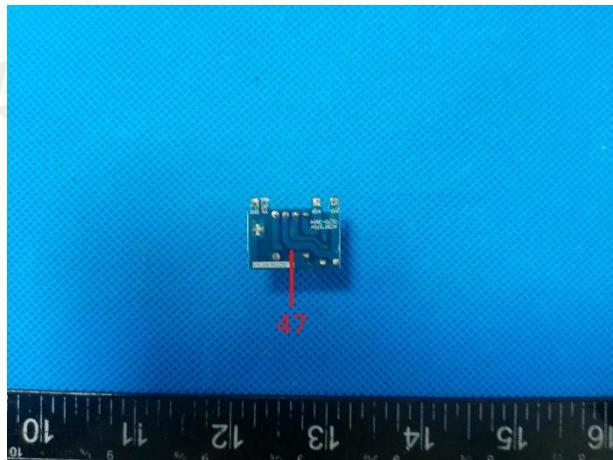
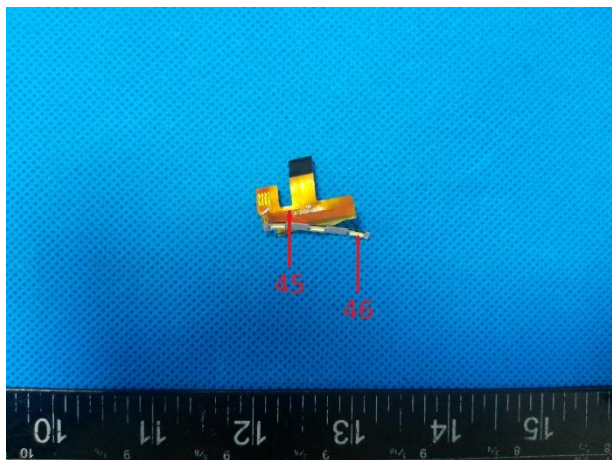
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Photo(s) of the sample(s)



*** End of Report ***

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