

TEST REPORT

Applicant: Shenzhen Pihai Technology Co., Ltd.
Address: Room 301, Factory No. 1, Nianshan Industrial Zone, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample name: Massage Comb
Test Sample Model: SYM-028
Manufacturer & Factory: Shenzhen Pihai Technology Co., Ltd.
Address: Room 301, Factory No. 1, Nianshan Industrial Zone, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen
Sample No.: S2604290035-1#
Sample Received Date: 2026-04-29
Testing Period: 2026-05-08~2026-06-11

Test Requirement:

As specified by the client, the contents of Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Bis-(2-ethylhexyl) Phthalate (DEHP), Benzyl Butyl Phthalate (BBP), Dibutyl Phthalate (DBP) and Diisobutyl Phthalate (DIBP) in the submitted samples were determined in accordance with the IEC 62321 series. The technical documentation was assessed against EN IEC 63000:2018 to demonstrate conformity with RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Conclusion

Pass

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

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

Compiled by:

Ruth.Li

Reviewed by:

DE-MD. deng

Approved by:

Moy Li

Date:

2026-06-29

Sample Description:

No.	Part name	Sample description	Color
001	Shell	Transparent varnish of lid	White
002		Plastic base material of lid	White
003		Plastic base material of main body	White
004		Rose gold coating of trimming	White
005		Plastic base material of trimming	White
006		Transparent rubber of tooth of a comb	White
007		White plastic of clasp	White
008		Silver metal of screw	White
009	LED	White PCB	White
010		Beige plastic of interface	White
011		Metal pin of interface	White
012		SMD LED	White
013		Silver metal of screw	White
014	Mainboard PCB	Green PCB	White
015		Black plastic of contact switch	White
016		Silver metal shell of contact switch	White
017		Metal shrapnel of contact switch	White
018		Beige plastic of interface	White
019		Metal pin of interface	White
020		SMD chip	White
021		Silver metal of screw	White
022	Charging PCB	Green PCB	White
023		Silver metal shell of type-c interface	White
024		Black plastic of type-c interface	White
025		Metal pin of type-c interface	White
026		Beige plastic of interface	White
027		Metal pin of interface	White
028		Silver metal of screw	White
029	Motor	Silver metal of eccentric wheel	White
030		Black plastic of lid	White
031		Silver metal sheet of lid	White
032		Golden metal ring of lid	White
033		Tin solder of lid	White
034		Black foam glue of stator	White
035		Silver metal shell of stator	White

No.	Part name	Sample description	Color
036	Motor	Magnet core of stator	White
037		Silver metal shaft of rotor	White
038		Silver metal sheet of rotor	White
039		Beige plastic of rotor	White
040		Black solid of rotor	White
041		Silver silicon steel sheet of rotor	White
042		Pink plastic support frame of rotor	White
043		Cupreous metal coil of rotor	White
044		Tin solder of rotor	White
045		White plastic of terminal	White
046		Metal pin of terminal	White
047		Black wire jacket of wiring harness	White
048		Red wire jacket of wiring harness	White
049		Metal wire core of wiring harness	White
050	Connection line (large)	White plastic of terminal	White
051		Metal pin of terminal	White
052		Black wire jacket of wiring harness	White
053		Metal wire core of wiring harness	White
054		White plastic of terminal	White
055		Black wire jacket of wiring harness	White
056		Metal wire core of wiring harness	White
057A*	Data line	White encapsulation of USB interface	White
058		Silver metal shell of USB interface	White
059		White plastic of USB interface	White
060		Metal pin of USB interface	White
061A*		Tin solder of USB interface	White
062		Silver metal shell of type-c interface	White
063		Black plastic of type-c interface	White
064		Metal pin of type-c interface	White
065		Green PCB of type-c interface	White
066A*		Tin solder of type-c interface	White
067A*		White wire jacket of data line	White
068A*		Red wire jacket of data line	White
069A*		Black wire jacket of data line	White
070		Metal wire core of data line	White
071	Shell	Silver coating of trimming	Black

Test Result(s):

Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers(PBDEs)

1. XRF Screening Result

No.	XRF Screening Result (mg/kg)					Conclusion
	Pb	Cd	Hg	Cr	Br	
001	BL	BL	BL	BL	BL	Pass
002	BL	BL	BL	BL	BL	Pass
003	BL	BL	BL	BL	BL	Pass
004	BL	BL	BL	BL	BL	Pass
005	BL	BL	BL	BL	BL	Pass
006	BL	BL	BL	BL	BL	Pass
007	BL	BL	BL	BL	BL	Pass
008	BL	BL	BL	BL	/	Pass
009	BL	BL	BL	BL	BL	Pass
010	BL	BL	BL	BL	BL	Pass
011	BL	BL	BL	BL	/	Pass
012	BL	BL	BL	BL	BL	Pass
013	BL	BL	BL	BL	/	Pass
014	BL	BL	BL	BL	IN	IN
015	BL	BL	BL	BL	BL	Pass
016	BL	BL	BL	IN	/	IN
017	BL	BL	BL	IN	/	IN
018	BL	BL	BL	BL	BL	Pass
019	BL	BL	BL	BL	/	Pass
020	BL	BL	BL	BL	BL	Pass
021	BL	BL	BL	IN	/	IN
022	BL	BL	BL	BL	IN	IN
023	BL	BL	BL	IN	/	IN
024	BL	BL	BL	BL	BL	Pass
025	BL	BL	BL	BL	/	Pass
026	BL	BL	BL	BL	BL	Pass
027	BL	BL	BL	BL	/	Pass
028	BL	BL	BL	IN	/	IN
029	BL	BL	BL	BL	/	Pass
030	BL	BL	BL	BL	BL	Pass
031	BL	BL	BL	BL	/	Pass
032	BL	BL	BL	BL	/	Pass
033	IN	BL	BL	BL	/	IN

No.	XRF Screening Result (mg/kg)					Conclusion
	Pb	Cd	Hg	Cr	Br	
034	BL	BL	BL	BL	IN	IN
035	BL	BL	BL	BL	/	Pass
036	BL	BL	BL	BL	/	Pass
037	BL	BL	BL	IN	/	IN
038	BL	BL	BL	BL	/	Pass
039	BL	BL	BL	BL	BL	Pass
040	BL	BL	BL	BL	BL	Pass
041	BL	BL	BL	IN	/	IN
042	BL	BL	BL	BL	BL	Pass
043	BL	BL	BL	BL	/	Pass
044	BL	BL	BL	BL	/	Pass
045	BL	BL	BL	BL	BL	Pass
046	BL	BL	BL	BL	/	Pass
047	BL	BL	BL	BL	BL	Pass
048	BL	BL	BL	BL	BL	Pass
049	BL	BL	BL	BL	/	Pass
050	BL	BL	BL	BL	BL	Pass
051	BL	BL	BL	BL	/	Pass
052	BL	BL	BL	BL	BL	Pass
053	BL	BL	BL	BL	/	Pass
054	BL	BL	BL	BL	BL	Pass
055	BL	BL	BL	BL	BL	Pass
056	BL	BL	BL	BL	/	Pass
057A	BL	BL	BL	BL	BL	Pass
058	BL	BL	BL	BL	/	Pass
059	BL	BL	BL	BL	BL	Pass
060	BL	BL	BL	BL	/	Pass
061A	BL	BL	BL	BL	/	Pass
062	BL	BL	BL	IN	/	IN
063	BL	BL	BL	BL	BL	Pass
064	BL	BL	BL	BL	/	Pass
065	BL	BL	BL	BL	IN	IN
066A	BL	BL	BL	BL	/	Pass
067A	BL	BL	BL	BL	BL	Pass
068A	BL	BL	BL	BL	BL	Pass
069A	BL	BL	BL	BL	BL	Pass

No.	XRF Screening Result (mg/kg)					Conclusion
	Pb	Cd	Hg	Cr	Br	
070	BL	BL	BL	BL	/	Pass
071	BL	BL	BL	BL	BL	Pass

2. Chemical Test Result

No.	Chemical Test Result (mg/kg)						Conclusion
	Pb	Cd	Hg	Cr(VI)	PBBs	PBDEs	
014	/	/	/	/	N.D.	N.D.	Pass
016	/	/	/	N.D.	/	/	Pass
017	/	/	/	N.D.	/	/	Pass
021	/	/	/	N.D.	/	/	Pass
022	/	/	/	/	N.D.	N.D.	Pass
023	/	/	/	N.D.	/	/	Pass
028	/	/	/	N.D.	/	/	Pass
033	58	/	/	/	/	/	Pass
034	/	/	/	/	N.D.	N.D.	Pass
037	/	/	/	N.D.	/	/	Pass
041	/	/	/	N.D.	/	/	Pass
062	/	/	/	N.D.	/	/	Pass
065	/	/	/	/	N.D.	N.D.	Pass

Bis-(2-ethylhexyl) Phthalate (DEHP), Benzyl butyl Phthalate (BBP), Dibutyl Phthalate (DBP) and Diisobutyl Phthalate(DIBP)

No.	Test Items Result (mg/kg)				Conclusion
	DEHP	BBP	DBP	DIBP	
001	N.D.	N.D.	N.D.	N.D.	Pass
002+003+005+007+010	N.D.	N.D.	N.D.	N.D.	Pass
004	N.D.	N.D.	N.D.	N.D.	Pass
006	N.D.	N.D.	N.D.	N.D.	Pass
009+014+022+065	N.D.	N.D.	N.D.	N.D.	Pass
015+018+024+026+030	N.D.	N.D.	N.D.	N.D.	Pass
034	N.D.	N.D.	N.D.	N.D.	Pass
039+042+045+050+054	N.D.	N.D.	N.D.	N.D.	Pass
040	N.D.	N.D.	N.D.	N.D.	Pass
047	N.D.	N.D.	N.D.	N.D.	Pass
048	N.D.	N.D.	N.D.	N.D.	Pass

No.	Test Items Result (mg/kg)				Conclusion
	DEHP	BBP	DBP	DIBP	
052	N.D.	N.D.	N.D.	N.D.	Pass
055	84	N.D.	N.D.	N.D.	Pass
057A	N.D.	N.D.	N.D.	N.D.	Pass
059+063	N.D.	N.D.	80	N.D.	Pass
067A	N.D.	N.D.	N.D.	N.D.	Pass
068A	N.D.	N.D.	N.D.	N.D.	Pass
069A	N.D.	N.D.	N.D.	N.D.	Pass
071	713	N.D.	N.D.	N.D.	Pass

Note:

- 1.N.D. = Not Detected (<MDL)
MDL = Method Detection Limit
1mg/kg = 1ppm =0.0001%
/=Not Regulated or Not Applicable
2. BL = Below the XRF screening limit
IN = Further chemical test will be conducted when the screening result inconclusive
OL = Further chemical test will be conducted while the result is above the screening limit.
3. For metal samples, the sample is negative for Cr(VI), if the Cr(VI) concentration is less than 0.10 $\mu\text{g}/\text{cm}^2$, the coating is considered a non- Cr(VI) based coating;
The sample is positive for Cr(VI), if the Cr(VI) concentration is greater than 0.13 $\mu\text{g}/\text{cm}^2$,
The sample coating is considered to contain Cr(VI);
The result is considered to be inconclusive, the Cr(VI) concentration is between the 0.10 $\mu\text{g}/\text{cm}^2$ and 0.13 $\mu\text{g}/\text{cm}^2$, unavoidable coating variations may influence the determination.
Because the storage condition and production date of the sample are not known, the test results of the sample of hexavalent chromium can only represent the state of hexavalent chromium in the samples tested.

Remark:

1. 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.
2. *No.057A,061A,066A,067A,068A,069A is the retest sample of the original No. 057,061,066,067,068,069, Resubmitted Date: Jun. 08, 2026.

Test Method:

1. With reference to IEC 62321-1: 2013 Ed.1.0, IEC 62321-2:2021 Ed.2.0, IEC 62321-3-1:2026 Ed.2.0.

XRF screening limits in mg/kg for regulated elements in various matrices.

Element	Limit of IEC 62321-3-1:2026 Ed.2.0 (mg/kg)		
	Polymers	Metals	Composite material
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$
Br	$BL \leq (300-3\sigma) < X$	/	$BL \leq (250-3\sigma) < X$

Note: BL= Below the XRF screening limit
 OL=Over the XRF screening limit
 X=The symbol "X" marks the region where further investigation is necessary.
 3σ =The reproducibility of analytical instruments
 LOD= Detection limit

2. Chemical Test

Test item	Test method	Test instrument	MDL	Limit ^Δ
Lead (Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES	2 mg/kg	1000 mg/kg
Cadmium (Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES	2 mg/kg	100 mg/kg
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES	2 mg/kg	1000 mg/kg
Hexavalent Chromium(Cr(VI))	IEC 62321-7-1:2015 Ed.1.0	UV-Vis	0.10 $\mu\text{g}/\text{cm}^2$	1000 mg/kg
	IEC 62321-7-2:2017 Ed.1.0		8 mg/kg	
Polybrominated Biphenyls(PBBs)	IEC 62321-12:2023 Ed.1.0	GC-MS	5 mg/kg	1000 mg/kg
Polybrominated, Diphenyl Ethers(PBDEs)	IEC 62321-12:2023 Ed.1.0	GC-MS	5 mg/kg	1000 mg/kg
Bis-(2-ethylhexyl) Phthalate (DEHP)	IEC 62321-12:2023 Ed.1.0	GC-MS	30 mg/kg	1000 mg/kg
Benzyl butyl Phthalate (BBP)	IEC 62321-12:2023 Ed.1.0	GC-MS	30 mg/kg	1000 mg/kg
Dibutyl Phthalate (DBP)	IEC 62321-12:2023 Ed.1.0	GC-MS	30 mg/kg	1000 mg/kg
Diisobutyl Phthalate (DIBP)	IEC 62321-12:2023 Ed.1.0	GC-MS	30 mg/kg	1000 mg/kg

^ΔThe limit is quoted from RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

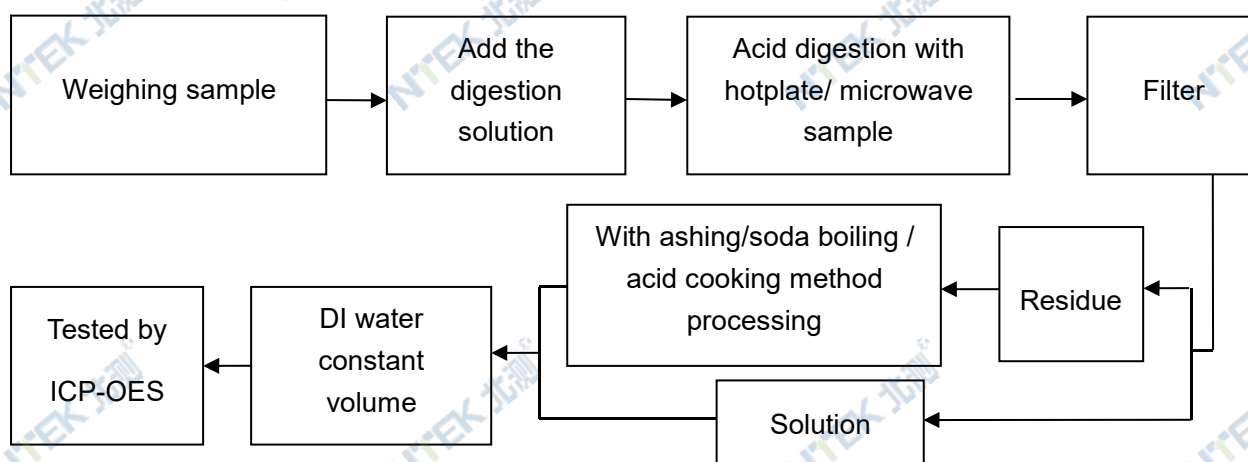
Test instrument:

Test instrument	Instrument model	Calibration effective date
EDXRF	EDX-LE Plus	2027-03-05
GC-MS	GCMS-QP2020NX	2028-05-11
GC-MS	QP-2010	2028-04-26
EDXRF	EDX 1800E	2027-03-11
ICP-OES	OPTIMA 8000	2028-05-21
UV-vis	T6	2027-05-21

Test Flow:

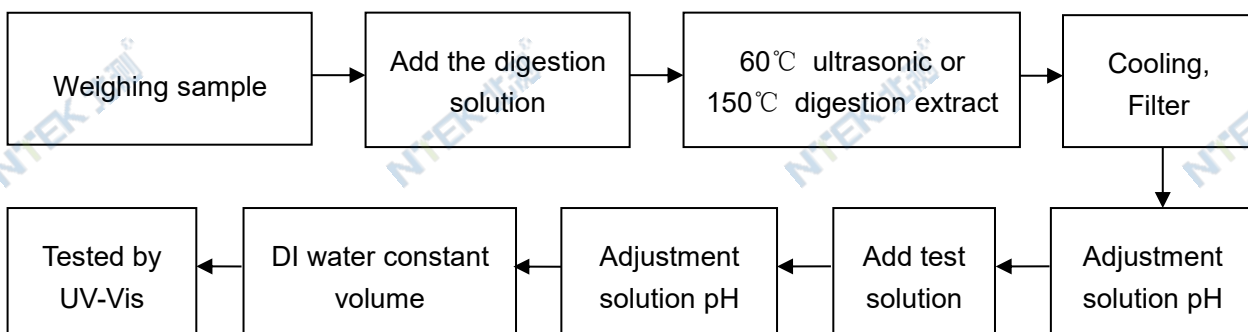
1. Lead(Pb), Cadmium(Cd), Mercury (Hg)

The sample is completely digested according to the procedure described below

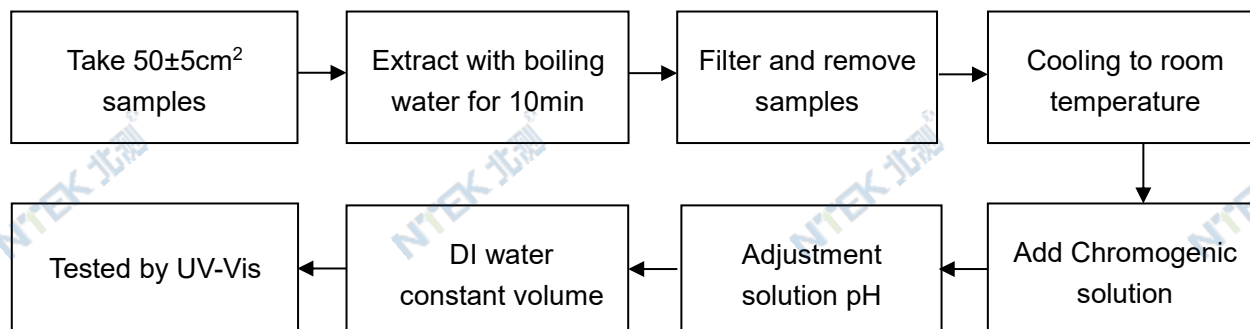


2. Hexavalent Chromium(Cr(VI))

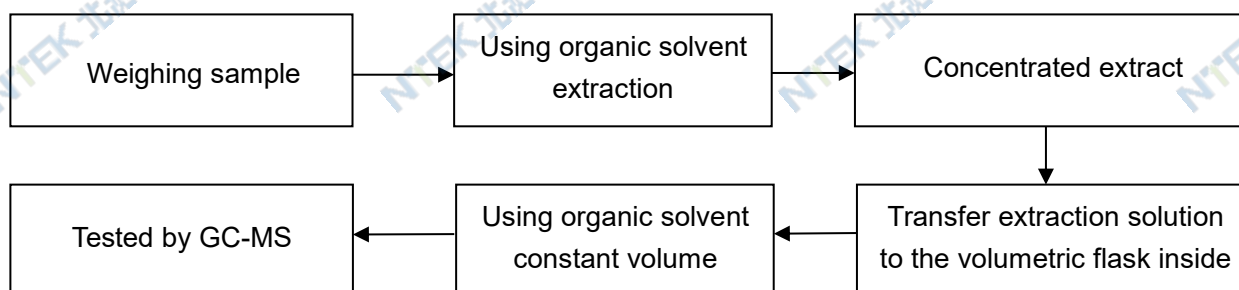
2.1 Non- metal sample(s)



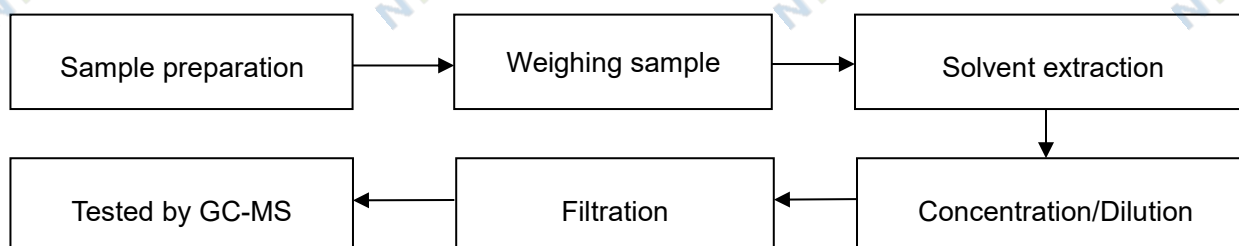
2.2 Metal sample(s)



3. PBBs/ PBDEs



4. Phthalates



Sample photo(s):

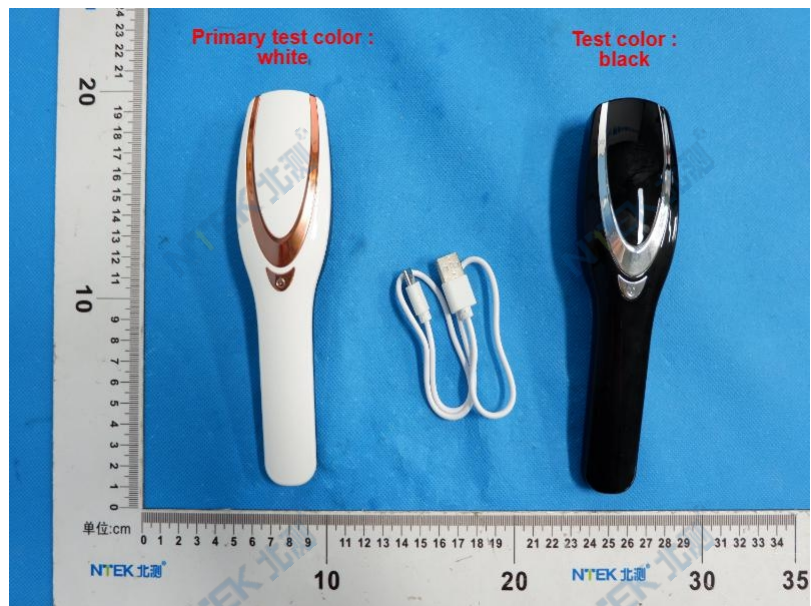


Fig.1(Finished photo)



Fig.2(Finished photo)

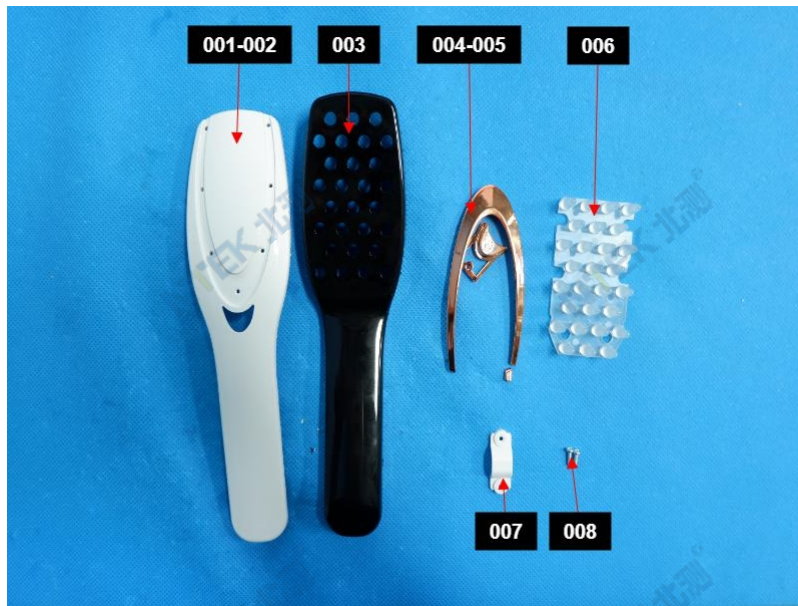


Fig.3Primary test color :white

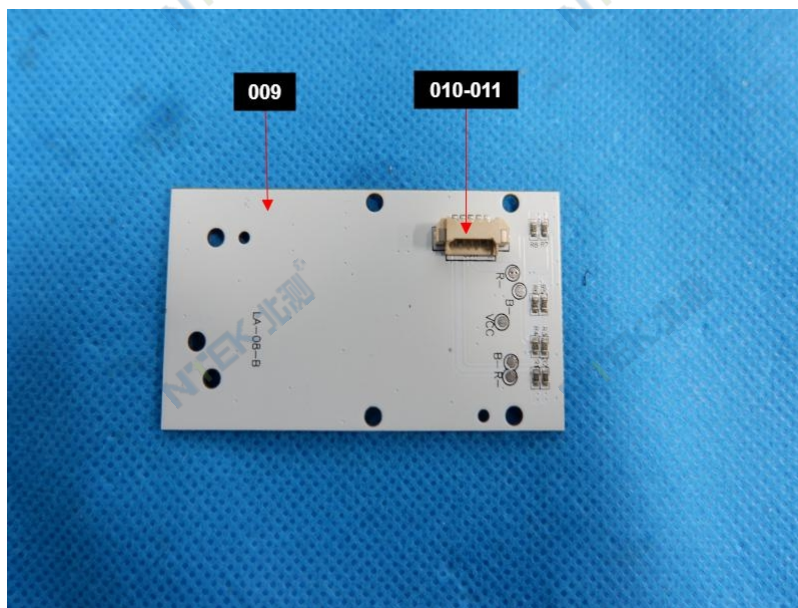


Fig.4Primary test color :white

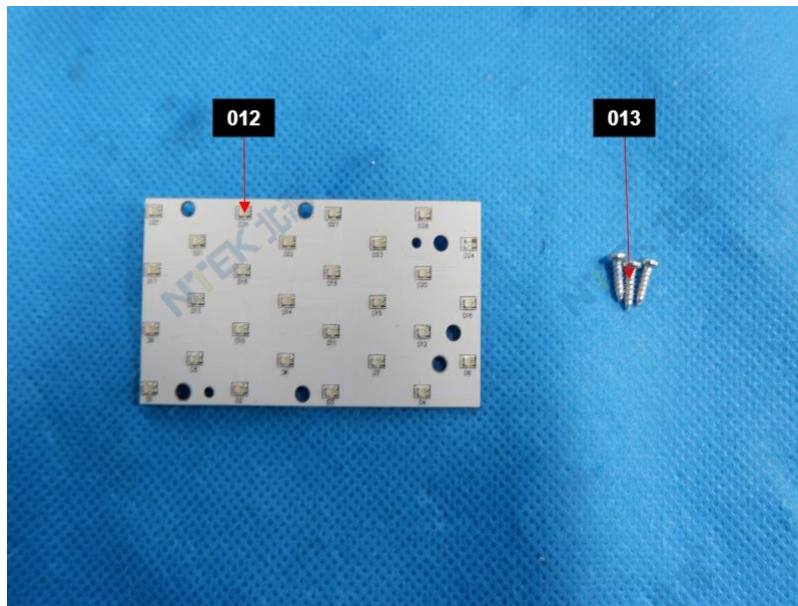


Fig.5Primary test color :white

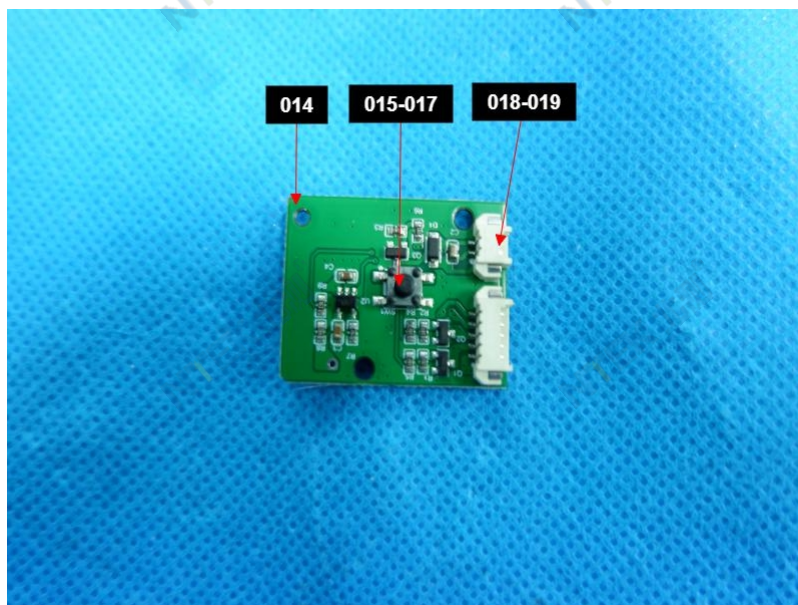


Fig.6Primary test color :white

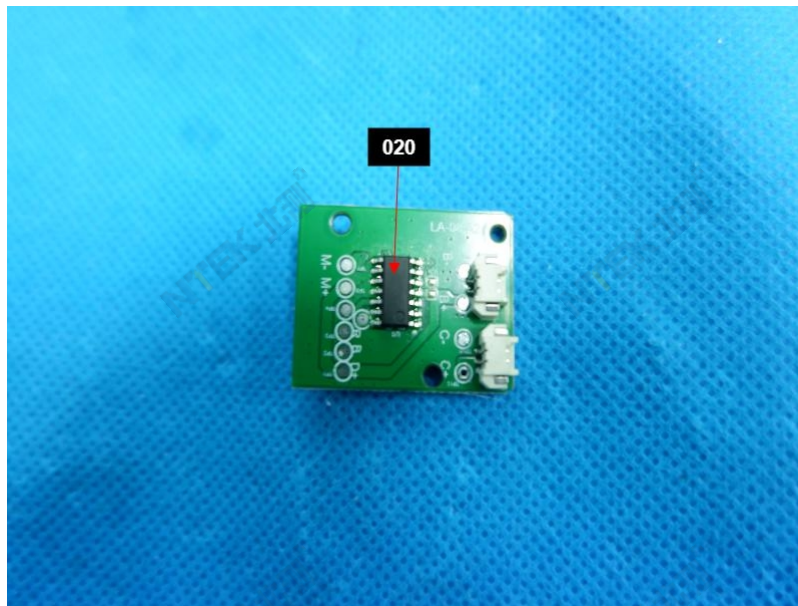


Fig.7Primary test color :white

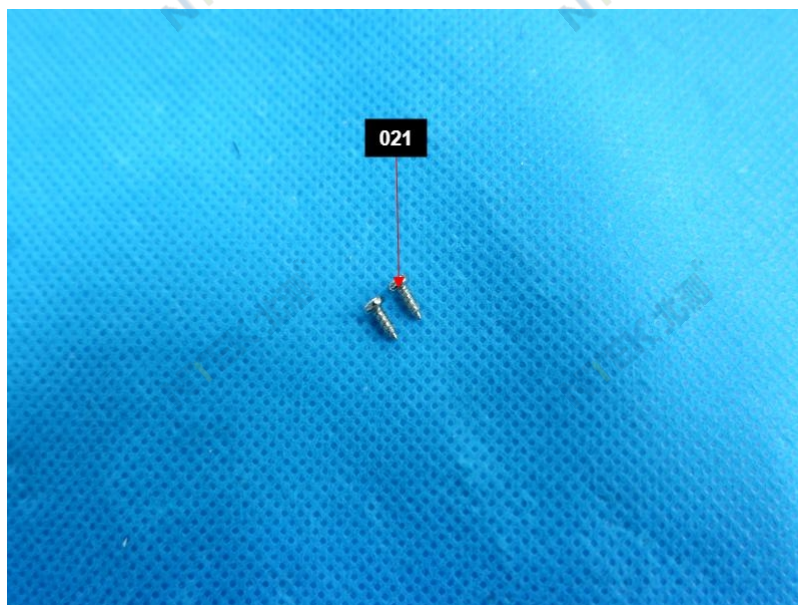


Fig.8Primary test color :white

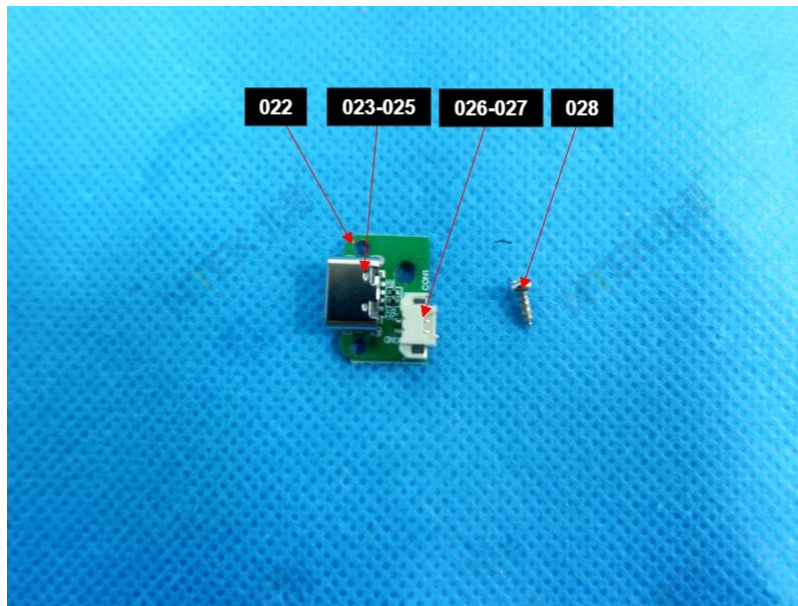


Fig.9Primary test color :white

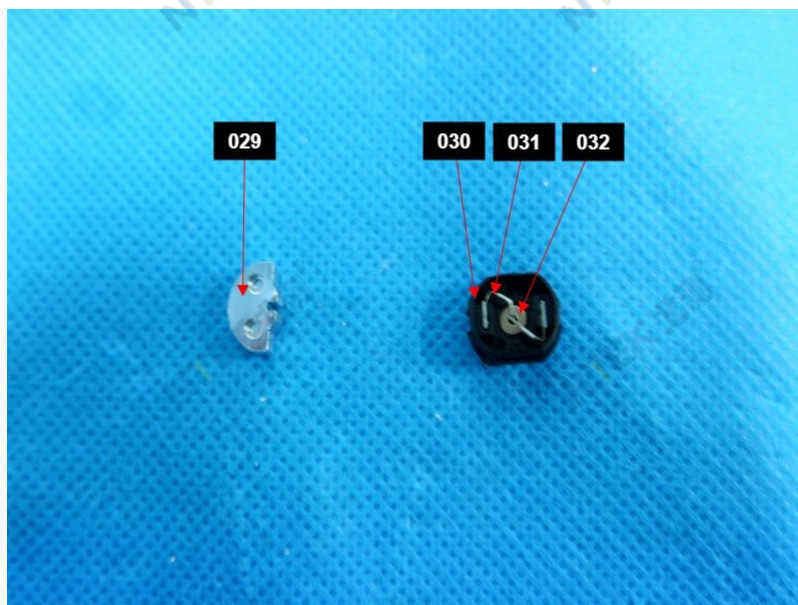


Fig.10Primary test color :white



Fig.11 Primary test color :white

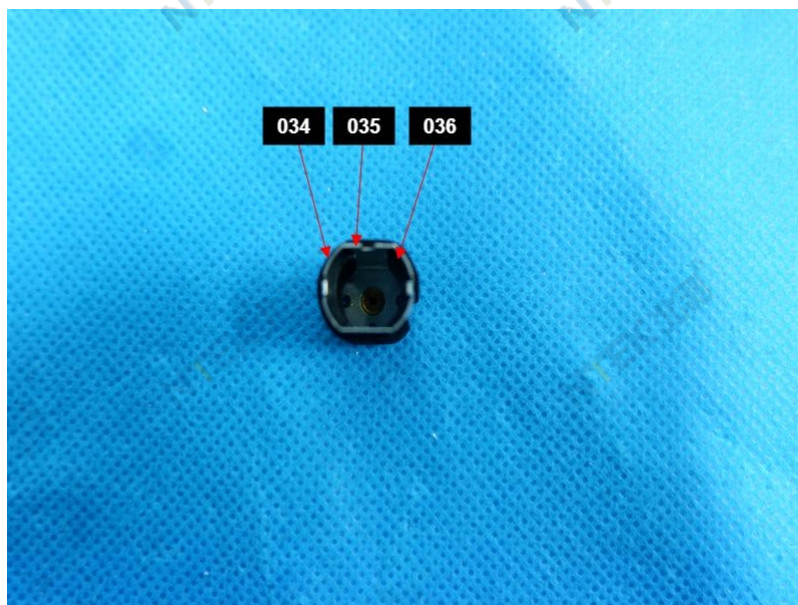


Fig.12 Primary test color :white

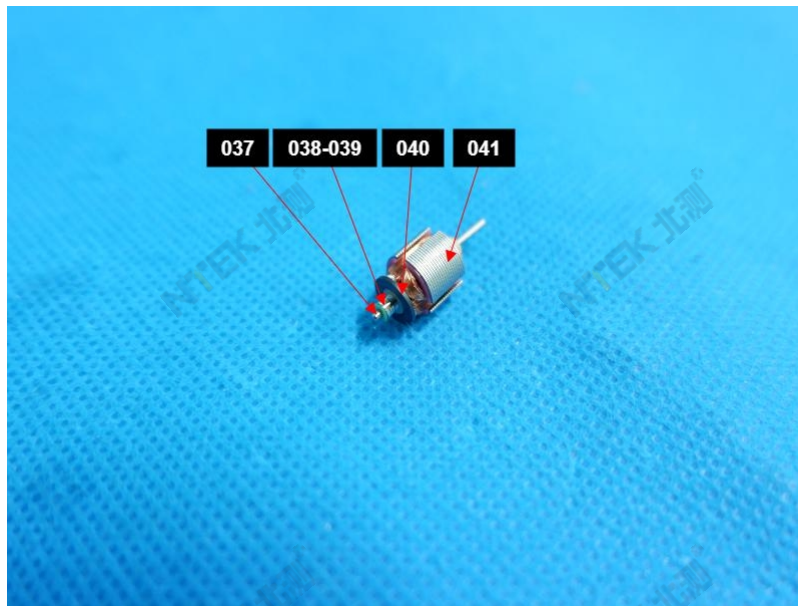


Fig.13Primary test color :white

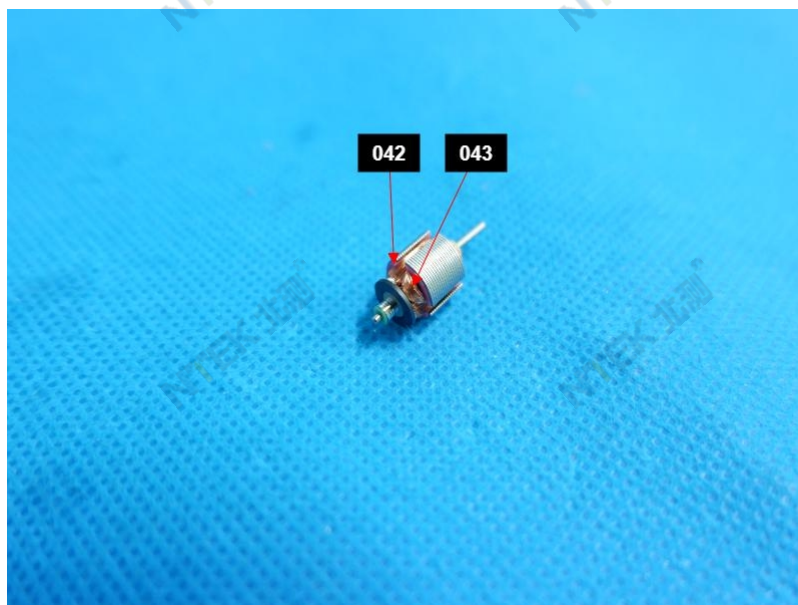


Fig.14Primary test color :white

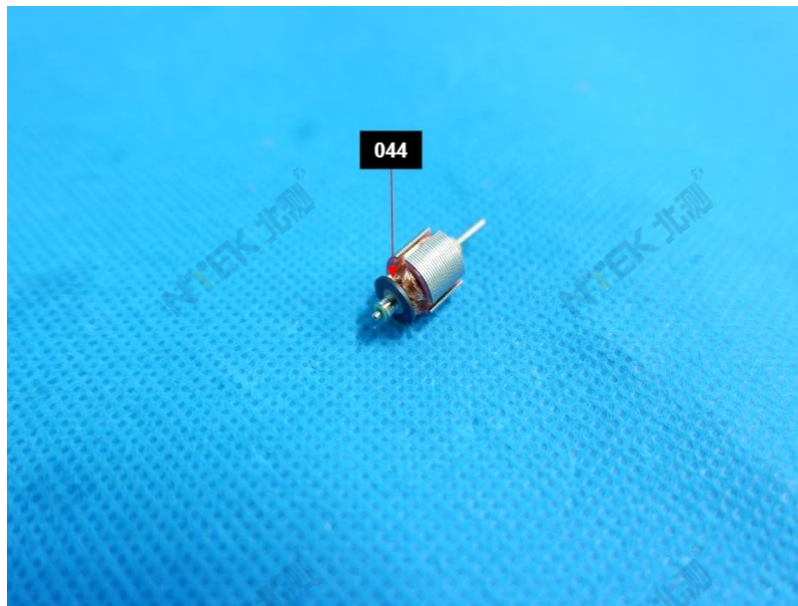


Fig.15 Primary test color :white

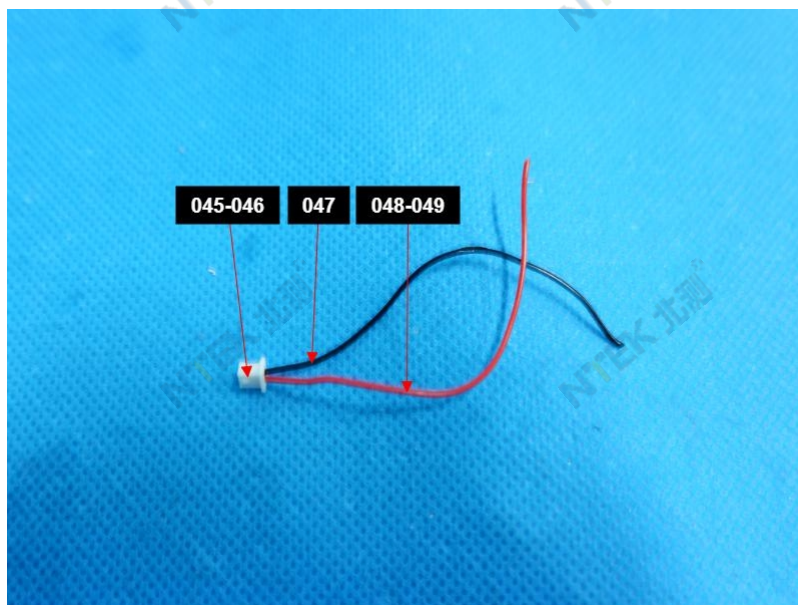


Fig.16 Primary test color :white

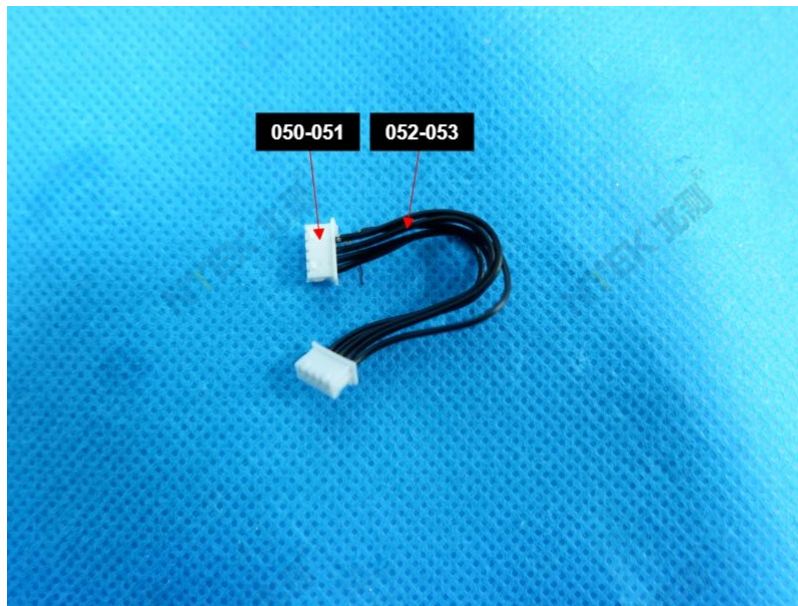


Fig.17Primary test color :white

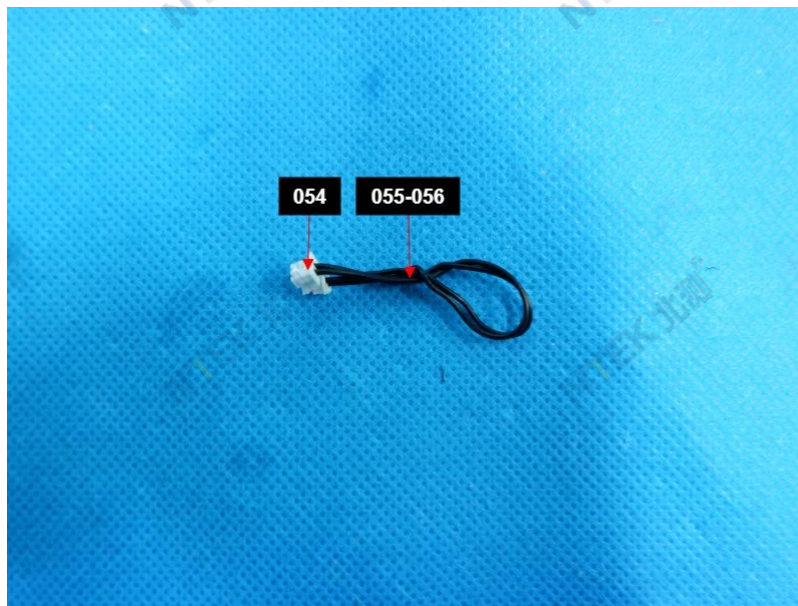


Fig.18Primary test color :white

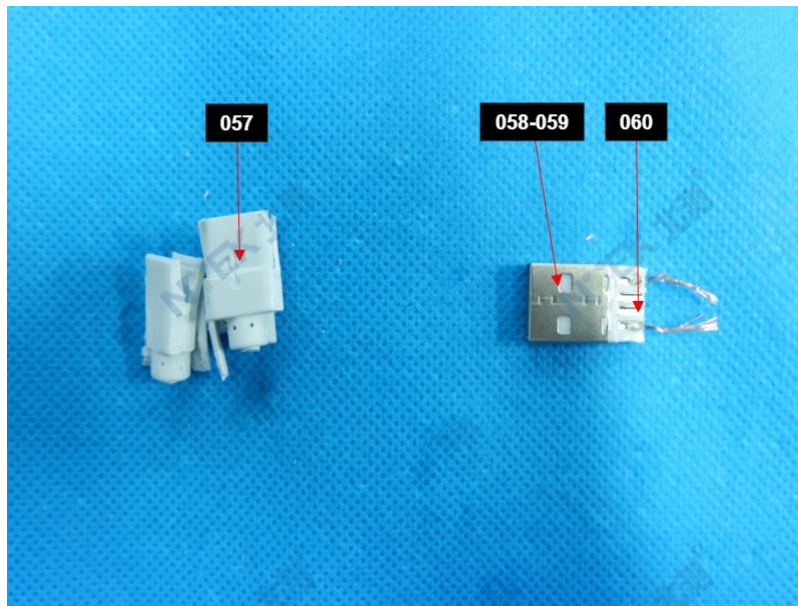


Fig.19Primary test color :white

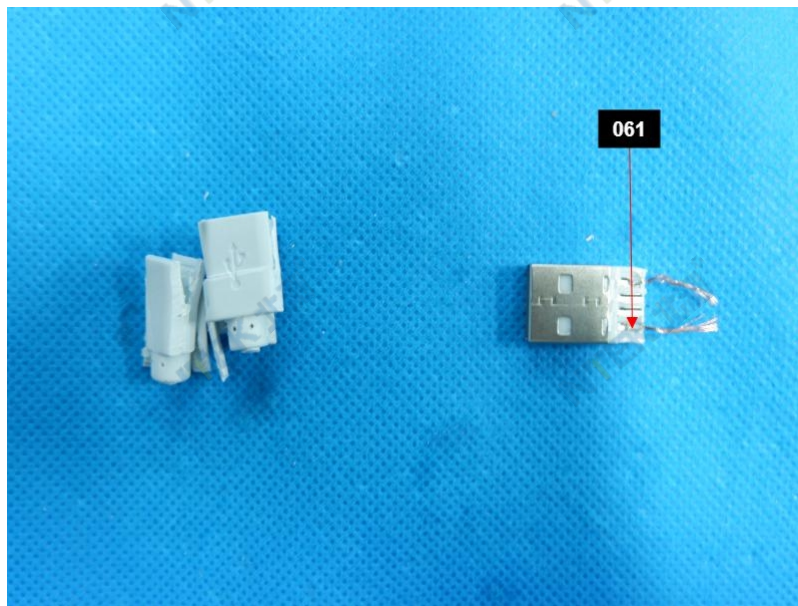


Fig.20Primary test color :white

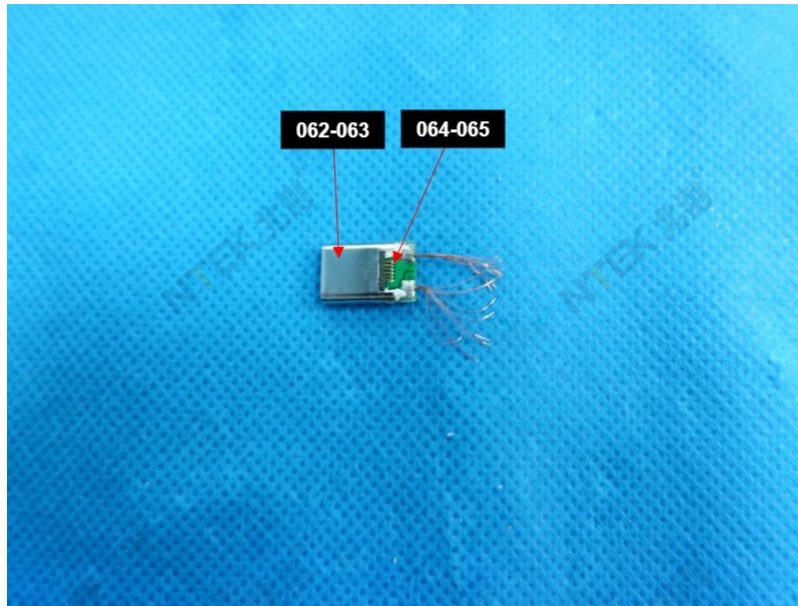


Fig.21Primary test color :white

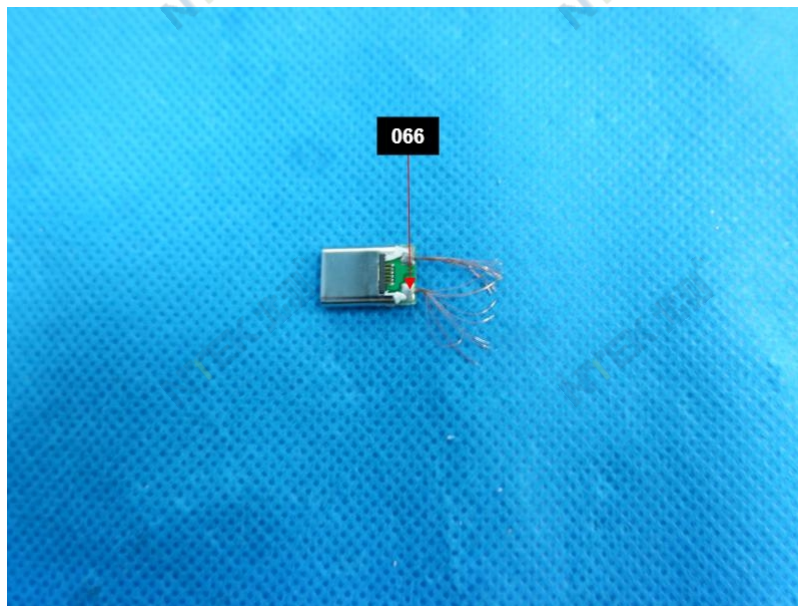


Fig.22Primary test color :white

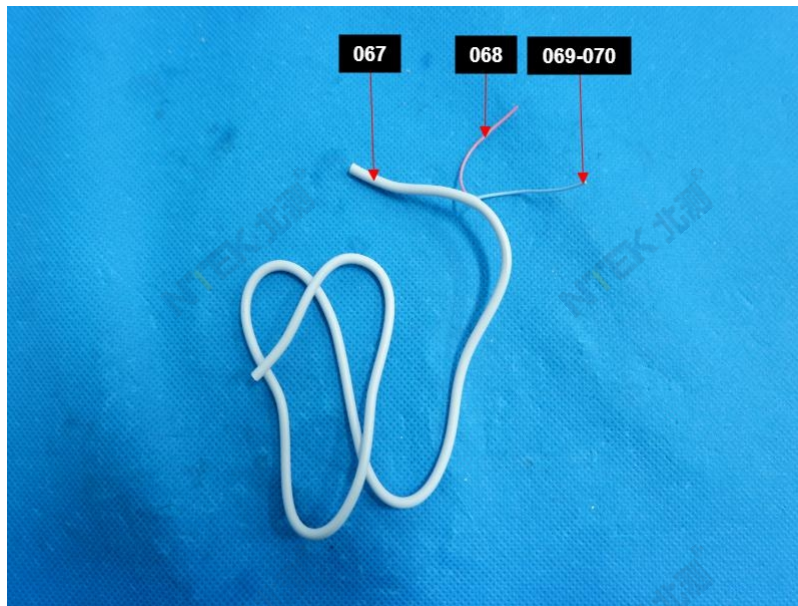


Fig.23Primary test color :white



Fig.24Test color :black

Resubmitted Sample photo(s):

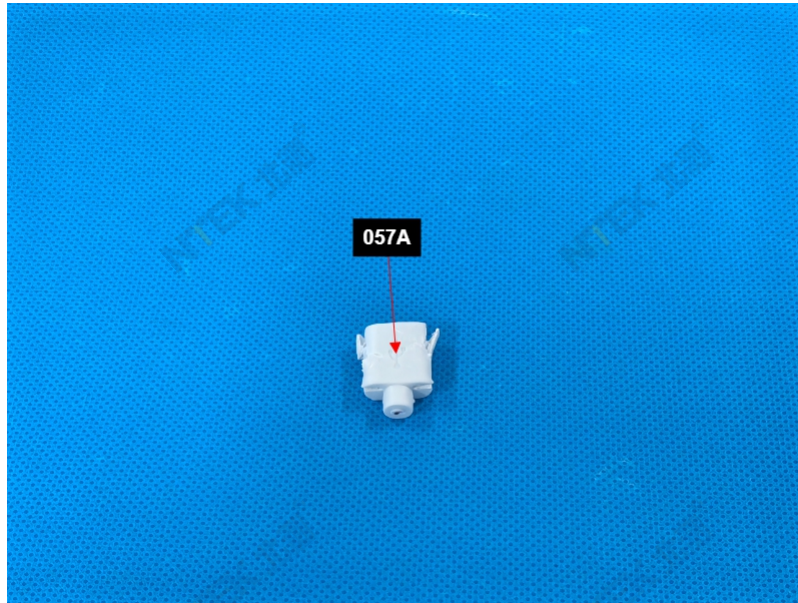


Fig.25Primary test color :white

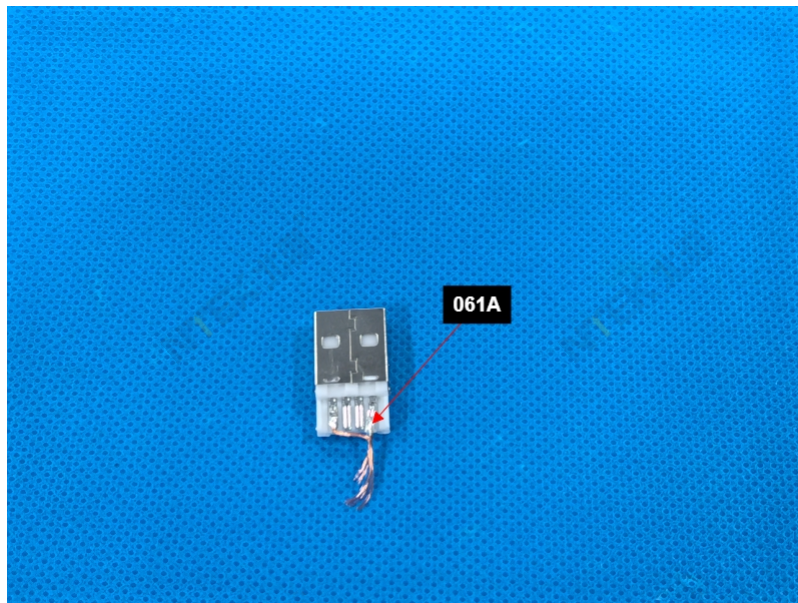


Fig.26Primary test color :white

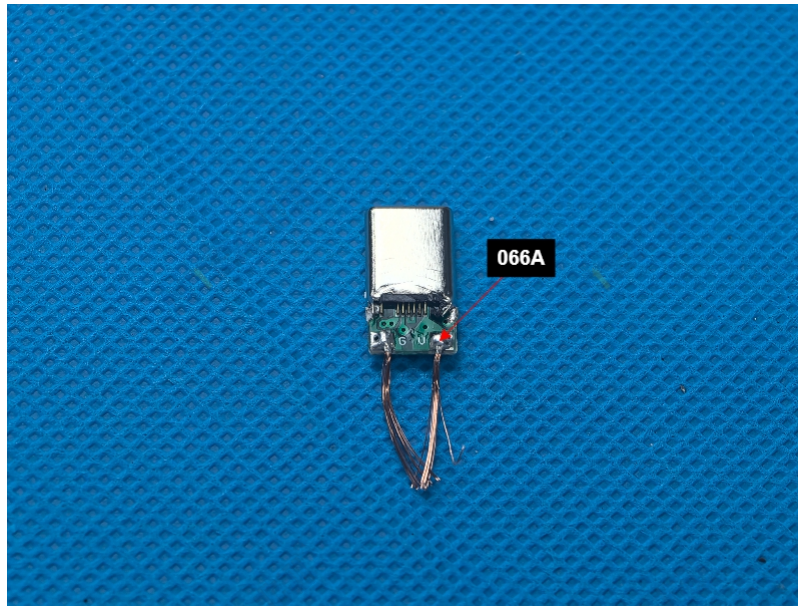


Fig.27Primary test color :white

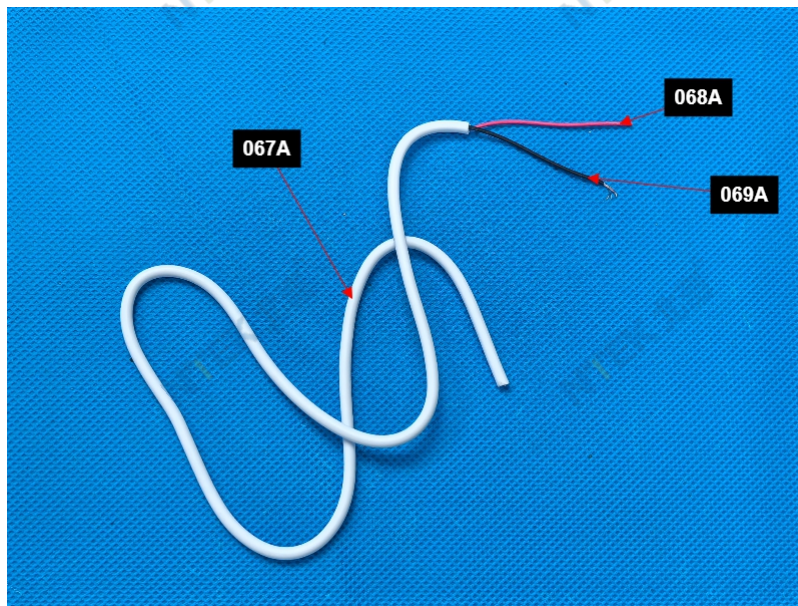


Fig.28Primary test color :white

****End of Report****

The test results or data in this report will be used only for education, scientific research, enterprise product development and internal quality control or other purposes.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of NTEK, this report can't be reproduced except in full.