

TEST REPORT

Applicant: Beijing Ke Yi Technology Co., Ltd.
Address: 8th Floor, Dimeng Building, Huayuan Road, Haidian District, Beijing China

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

Product name: Loona smart toy
Test model: KY004LN01
Serial model: KY004LN02, KY004LN03, KY004LN04, KY004LN05
Trade mark: Loona
Manufacturer: Beijing Ke Yi Technology Co., Ltd.
Address: 8th Floor, Dimeng Building, Huayuan Road, Haidian District, Beijing China

Sample Received Date: Sep. 30, 2022
Testing Period: Sep. 30, 2022~ Oct. 19, 2022

Test Requirement:

As specified by client, to determine the Hexabromocyclododecane (HBCDD) content in the submitted sample.

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

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

Compiled by: Pure Reviewed by: Blmar
Approved by: Mark Liao Date: 2022-11-15

Sample Description

No.	Description	No.	Description
001	White plastic shell(trunk)	002	Black plastic sheet with glue(trunk-white plastic shell)
003	White plastic mesh(trunk-white plastic shell)	004	Black foam (trunk-white plastic shell)
005	Black fabric net(trunk-white plastic shell)	006	Yellow transparent colloid(trunk-white plastic shell)
007	Black rubber button(trunk-white plastic shell)	008	Grey plastic shell(trunk)
009	Black plastic frame(large)(trunk)	010	Black plastic frame(small)(trunk)
011	Black plastic sheet(trunk)	012	Black FPC(trunk-black plastic sheet)
013	Grey plastic shell(tyre bracket)	014	Grey plastic cover(tyre bracket)
015	Light grey plastic sheet(tyre bracket)	016	White plastic ring(tyre bracket)
017	Black plastic bracket(large)(tyre bracket)	018	Light grey plastic shell(tyre bracket)
019	Beige colloid(tyre bracket-light grey plastic shell)	020	White plastic(tyre bracket-white terminal)
021	Black casing tube(tyre bracket-white terminal)	022	Red wire jacket(tyre bracket-wire rod)
023	Black wire jacket(tyre bracket-wire rod)	024	Black plastic frame(small)(tyre bracket)
025	Transparent plastic frame(tyre bracket-motor)	026	White plastic gear(tyre bracket-motor)
027	Brown body(tyre bracket-motor-brown resistor)	028	Black plastic cover(tyre bracket-motor)
029	Black rubber sheet with double-sided tape(tyre bracket-motor)	030	Carbon block(tyre bracket-motor-silvery metal sheet)
031	White plastic ring(tyre bracket-motor)	032	Blue plastic ring(tyre bracket-motor)
033	Red plastic ring(tyre bracket-motor)	034	Grey plastic ring(tyre bracket-motor)
035	Grey plastic frame(tyre bracket-motor)	036	Black solid(tyre bracket-motor)
037	White plastic(tyre bracket-motor-white terminal)	038	Red wire jacket(tyre bracket-motor-wire rod)
039	Black wire jacket(tyre bracket-motor-wire rod)	040	Grey plastic tyre(front wheel)
041	White plastic(front wheel)	042	Grey plastic hub(front wheel)
043	Grey rubber tyre(rear wheel)	044	Grey plastic shell(rear wheel)
045	Yellow colloid(rear wheel)	046	Grey plastic ring(rear wheel)
047	Grey plastic cover(rear wheel)	048	Green coating(rear wheel-motor)
049	Black casing tube(rear wheel-motor)	050	Green PCB(rear wheel-PCB (791401A-Y130))
051	Beige plastic(rear wheel-PCB (791401A-Y130)-interface)	052	Chip 1(rear wheel-PCB (791401A-Y130))

No.	Description	No.	Description
053	Chip 2(rear wheel-PCB (791401A-Y130))	054	SMD audion(rear wheel-PCB (791401A-Y130))
055	SMD capacitor(rear wheel-PCB (791401A-Y130))	056	SMD diode(rear wheel-PCB (791401A-Y130))
057	Chip 3(rear wheel-PCB (791401A-Y130))	058	SMD resistor(rear wheel-PCB (791401A-Y130))
059	Blue casing tube(rear wheel-PCB (791401A-Y130))	060	White plastic(rear wheel connection harness-terminal)
061	Black foam with glue(rear wheel connection harness-magnet ring)	062	Black wire jacket(rear wheel connection harness-wire rod)
063	White plastic gear(ear)	064	White plastic parts(ear)
065	Black plastic shell(ear)	066	Grey plastic shell(ear)
067	White plastic ring(ear-grey plastic shell)	068	White plastic bracket(ear)
069	White plastic shell(ear)	070	Transparent lamp body (ear-light-emitting diode)
071	Red wire jacket(ear-light-emitting diode-wire rod)	072	Black wire jacket(ear-light-emitting diode-wire rod)
073	White plastic(ear-motor-white terminal)	074	Red wire jacket(ear-motor-wire rod)
075	Black wire jacket(ear-motor-wire rod)	076	Black plastic cover(ear-motor)
077	Grey plastic ring(ear-motor)	078	White plastic ring(ear-motor)
079	Beige plastic rack(ear-motor)	080	Black solid(ear-motor)
081	Grey plastic shell(ear-motor)	082	Brown body(ear-motor-brown resistor)
083	White plastic frame(ear-motor)	084	Red plastic frame(ear-motor)
085	Green PCB(ear-PCB)	086	Black plastic shell(ear-PCB-R1 resistor)
087	Grey plastic(ear-PCB-R1 resistor)	088	Brown plastic(ear-PCB-R1 resistor)
089	White plastic(ear-PCB-white terminal)	090	Red wire jacket(ear-PCB-wire rod)
091	White wire jacket(ear-PCB-wire rod)	092	Black wire jacket(ear-PCB-wire rod)
093	Black coating(screen-outside screen)	094	Transparent glass screen (screen-outside screen)
095	Transparent double-sided tape(screen-inner screen)	096	Black glass(screen-inner screen)
097	Black FPC(screen)	098	Brown plastic sheet(screen-black FPC)
099	Silvery conductive cloth(screen)	100	White plastic frame(screen)
101	Frosted white plastic(screen)	102	Translucent plastic sheet(screen)
103	Black tape(screen-translucent plastic sheet)	104	White plastic sheet(screen)
105	Transparent plastic sheet(screen)	106	White tape paper(screen-transparent plastic sheet)
107	Yellow FPC(screen)	108	SMD LED(screen-yellow FPC)
109	Black foam washer(speaker-black metal screw(long))	110	Black plastic shell(speaker)

No.	Description	No.	Description
111	Black plastic frame(speaker)	112	Sound basin(speaker)
113	Transparent double-sided tape(speaker)	114	White plastic(speaker-white terminal)
115	Grey foam(speaker)	116	Red wire jacket(speaker-wire rod)
117	Black wire jacket(speaker-wire rod)	118	Silvery conductive cloth(PCB (MAIN-PCB-4.0)-silvery grey metal frame)
119	Black foam(PCB(MAIN-PCB-4.0)-silvery grey metal frame)	120	Grey colloid(PCB(MAIN-PCB-4.0)-silvery metal shell)
121	Grey glue block(PCB(MAIN-PCB-4.0))	122	Green PCB(PCB(MAIN-PCB-4.0))
123	SMD capacitor(PCB(MAIN-PCB-4.0))	124	Chip 1(PCB(MAIN-PCB-4.0))
125	Chip 2(PCB(MAIN-PCB-4.0))	126	Chip 3(PCB(MAIN-PCB-4.0))
127	SMD diode(PCB(MAIN-PCB-4.0))	128	SMD audion(PCB(MAIN-PCB-4.0))
129	Chip(PCB(MAIN-PCB-4.0)-CPU)	130	Green plastic pedestal (PCB (MAIN-PCB-4.0)-CPU)
131	SMD crystal(PCB(MAIN-PCB-4.0))	132	Black plastic((PCBMAIN-PCB-4.0)-black interface)
133	Beige plastic(PCB(MAIN-PCB-4.0)-beige interface)	134	Black FPC(PCB(XIAOKEA1-USB-DVT))
135	Silvery conductive cloth (PCB(XIAOKEA1-USB-DVT)-FPC)	136	Black plastic(PCB (XIAOKEA1-USB-DVT)-FPC- black interface)
137	Green PCB (PCB(XIAOKEA1-USB-DVT))	138	Beige plastic(PCB (XIAOKEA1-USB-DVT)- beige interface)
139	Grey plastic (PCB (XIAOKEA1-USB-DVT)-Type-C interface)	140	White SMD resistor (PCB(XIAOKEA1-USB-DVT))
141	Chip 1(PCB(XIAOKEA1-USB-DVT))	142	Chip 2(PCB(XIAOKEA1-USB-DVT))
143	White plastic(PCB (XIAOKEA1-USB-DVT)-white interface)	144	Black plastic pedestal (PCB(XIAOKEA1-USB-DVT)-button)
145	SMD crystal (PCB(XIAOKEA1-USB-DVT))	146	Chip 3(PCB(XIAOKEA1-USB-DVT))
147	Chip 4(PCB(XIAOKEA1-USB-DVT))	148	Silvery conductive cloth (PCB(XIAOKEA1-USB-DVT))
149	Black foam (PCB(XIAOKEA1-USB-DVT))	150	SMD audion(PCB(XIAOKEA1-USB-DVT))
151	Black plastic shell (PCB(MIBOT-LCD2022-7-22)-camera)	152	Lens (PCB(MIBOT-LCD2022-7-22)-camera)
153	Yellow FPC (PCB(MIBOT-LCD2022-7-22)-camera)	154	Black plastic sheet (PCB(MIBOT-LCD2022-7-22)-camera)
155	Black yellow FPC (PCB(MIBOT-LCD2022-7-22)-FPC)	156	Brown plastic sheet (PCB(MIBOT-LCD2022-7-22)-FPC)

No.	Description	No.	Description
157	Black electronic component (PCB(MIBOT-LCD2022-7-22)-FPC)	158	Transparent double-sided tape (PCB(MIBOT-LCD2022-7-22)-FPC)
159	Black rubber sleeve (PCB(MIBOT-LCD2022-7-22))	160	Green PCB(PCB(MIBOT-LCD2022-7-22))
161	Chip 1(PCB(MIBOT-LCD2022-7-22))	162	Chip 2(PCB(MIBOT-LCD2022-7-22))
163	SMD capacitor (PCB(MIBOT-LCD2022-7-22))	164	Black plastic (PCB(MIBOT-LCD2022-7-22)-black white interface)
165	White plastic (PCB(MIBOT-LCD2022-7-22)-black white interface)	166	Green PCB (PCB(MIBOT-MIC2022-7-26))
167	Black rubber sleeve with double-sided tape (PCB(MIBOT-MIC2022-7-26))	168	Black rubber sleeve (PCB(MIBOT-MIC2022-7-26-MIC))
169	Black cloth (PCB(MIBOT-MIC2022-7-26-MIC))	170	Microphone body (PCB(MIBOT-MIC2022-7-26-MIC))
171	Black wire jacket (PCB(MIBOT-MIC2022-7-26-MIC))	172	Red wire jacket (PCB(MIBOT-MIC2022-7-26-MIC))
173	SMD audion (PCB(MIBOT-MIC2022-7-26))	174	Chip 1(PCB(MIBOT-MIC2022-7-26))
175	Chip 2(PCB(MIBOT-MIC2022-7-26))	176	SMD crystal (PCB(MIBOT-MIC2022-7-26))
177	Chip 3(PCB(MIBOT-MIC2022-7-26))	178	White plastic (PCB (MIBOT-MIC2022-7-26)-white terminal)
179	Green PCB (PCB(MIBOT-MIC2022-7-26)- SMD PCB)	180	Chip(PCB(MIBOT-MIC2022-7-26)-SMD PCB)
181	SMD capacitor (PCB(MIBOT-MIC2022-7-26))	182	Chip 4(PCB(MIBOT-MIC2022-7-26))
183	Black body(charging diode)	184	Black casing tube(charging diode)
185	White plastic(charging diode-white terminal)	186	Red wire jacket(charging diode-white terminal)
187	Black foam(front wheel filling)	188	Black solid with tape with film (heat dissipation graphene)
189	Transparent double-sided tape(battery)	190	Black foam with glue(battery)
191	Black plastic jacket with lettering(battery)	192	Black plastic sheets with glue(battery)
193	Black tape(battery)	194	White tape paper(battery)
195	Black double-sided tape(battery)	196	Black PCB(battery-PCB(LPA2451))
197	Blue transparent colloid (battery-PCB(LPA2451))	198	SMD audion(battery-PCB(LPA2451))
199	Chip 1(battery-PCB(LPA2451))	200	SMD resistor(battery-PCB(LPA2451))

No.	Description	No.	Description
201	SMD crystal(battery-PCB(LPA2451))	202	Chip 2(battery-PCB(LPA2451))
203	White plastic(battery-cable-white terminal)	204	Black wire jacket(battery-cable-white terminal)
205	White wire jacket(battery-cable-white terminal)	206	Red wire jacket(battery-cable-white terminal)
207	White plastic shell(data line-USB interface)	208	White plastic(data line-USB interface)
209	Translucent colloid(data line-USB interface)	210	White encapsulation(data line-USB interface)
211	White plastic shell(data line-Type-C interface)	212	White plastic(data line-Type-C interface)
213	Blue PCB(data line-Type-C interface)	214	Blue colloid(data line-Type-C interface)
215	SMD fuse(data line-Type-C interface)	216	White encapsulation(data line-Type-C interface)
217	White plastic exterior wire jacket(data line-wire)	218	Red inner wire jacket(data line-wire rod)
219	White inner wire jacket(data line-wire rod)	220	Green inner wire jacket(data line-wire rod)
221	White rubber ring(data line-tie)	/	/

Test Result(s):

Test item(s)	Result(s), mg/kg		
	001+008+009	002+006+019	003+010+011
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	004+005+061	007+029+043	012+013+014
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	015+016+017	018+020+021	022+023+038
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	024+025+026	027+082+183	028+031+032
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	030	033+034+035	036+037+040
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	039+062+071	041+042+044	045+046+047
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	048+093	049+050+051	052+053+054
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	055+056+057	058+108+123	059+060+063
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	064+065+066	067+068+069	070+073+076
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	072+074+075	077+078+079	080+081+083
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	084+085+086	087+088+089	090+091+092
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	094+096+152	095+103+106	097+098+100
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	099+109+115	101+102+104	105+107+110
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	111+112+114	113+158+167	116+117+171
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	118+119+135	120+121+197	122+130+137
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	124+125+126	127+128+129	131+140+141
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	132+133+134	136+138+139	142+145+146
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	143+144+151	147+150+157	148+149+187
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	153+154+155	156+164+165	159+168+221
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	160+166+179	161+162+163	169+194
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	170+173+174	172+186+204	175+176+177
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	178+184+185	180+181+182	188
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	189+190+193	191+192+195	196+203+207
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	198+199+200	201+202	205+206+217
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	208+209+212	210+211+213	214+215+216
Hexabromocyclododecane (HBCDD)	N.D.	N.D.	N.D.

Test item(s)	Result(s), mg/kg		
	218+219+220		
Hexabromocyclododecane (HBCDD)	N.D.		

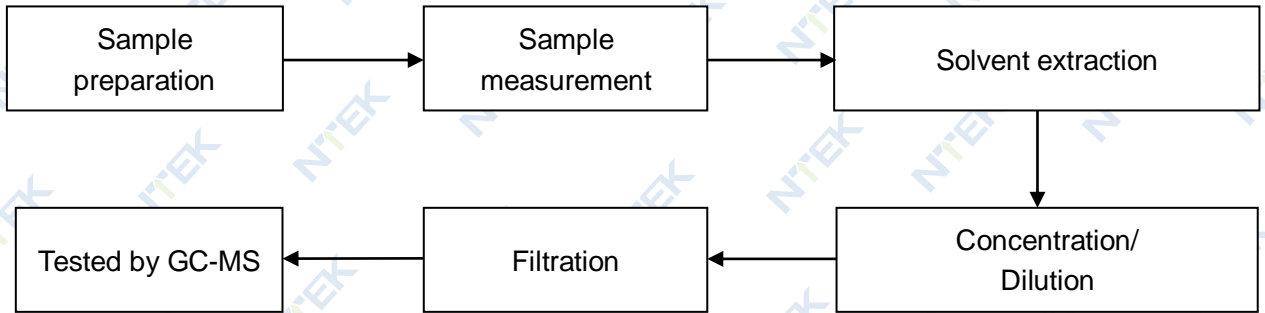
Note: 1mg/kg = 1ppm = 0.0001%
 N.D. = Not Detected (<MDL)
 MDL = Method Detection Limit

Remark: The test results in this report are only responsible for the tested samples. According to the client's statement, series models are the same material as the test models.
 The series model samples provided by customers have not been tested in this report.

Test Method:

Tested Item(s)	Test Method	Test instrument	MDL
Hexabromocyclododecane (HBCDD)	US EPA 3550C:2007& US EPA 8270D:2014	GC-MS	5mg/kg

Test Flow:



Sample photo(s):



Fig.1



Fig.2

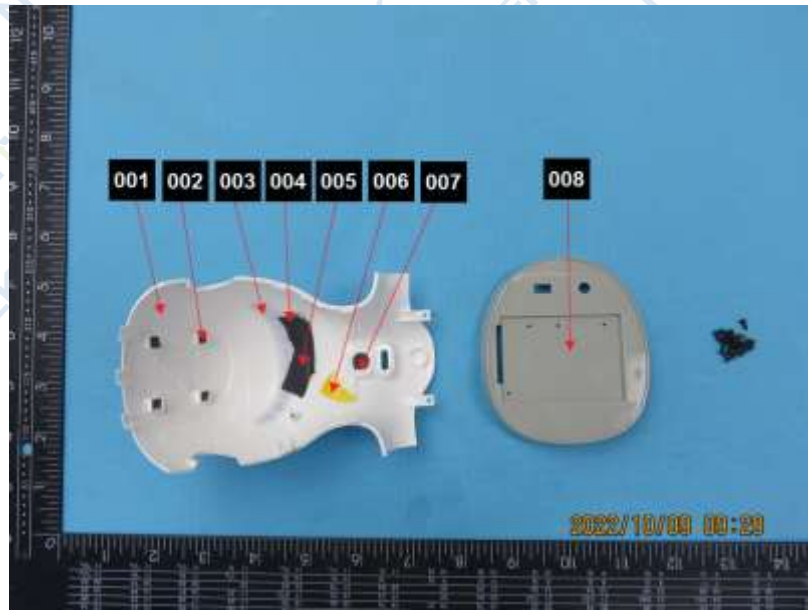


Fig.3



Fig.4



Fig.5

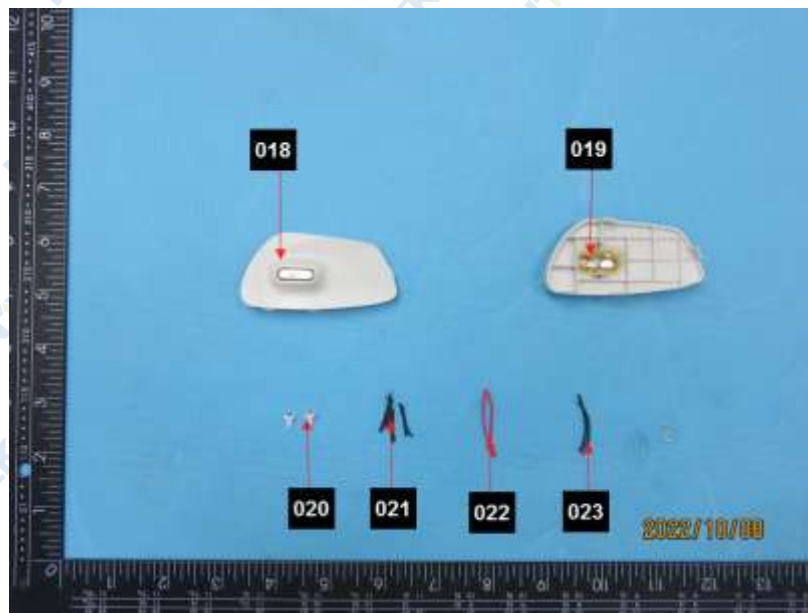


Fig.6

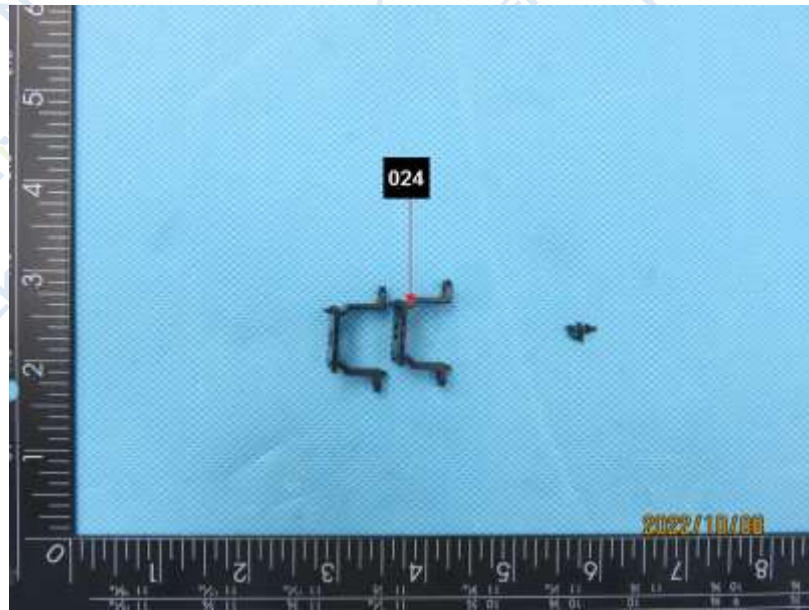


Fig.7

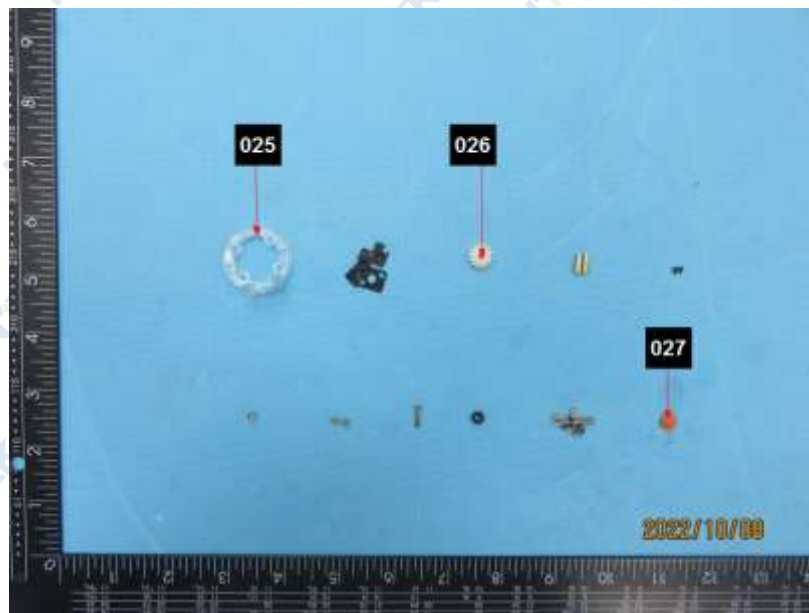


Fig.8



Fig.9

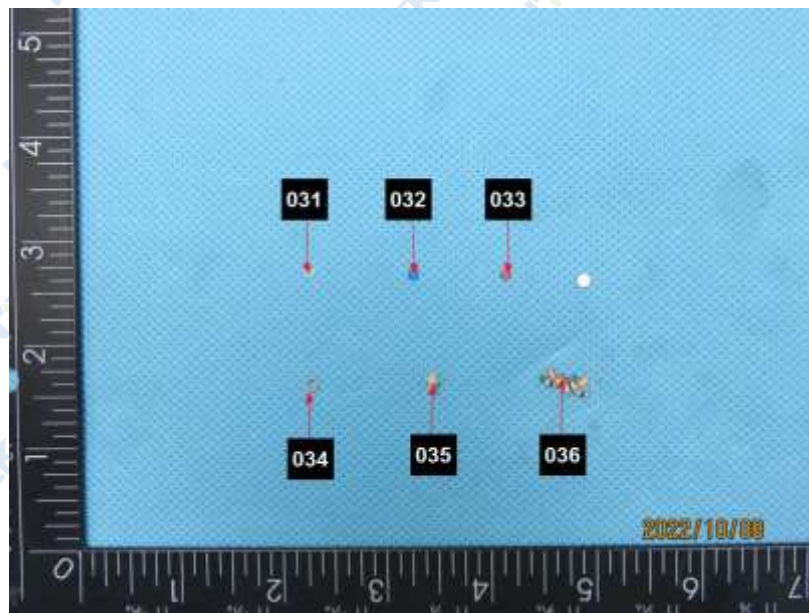


Fig.10

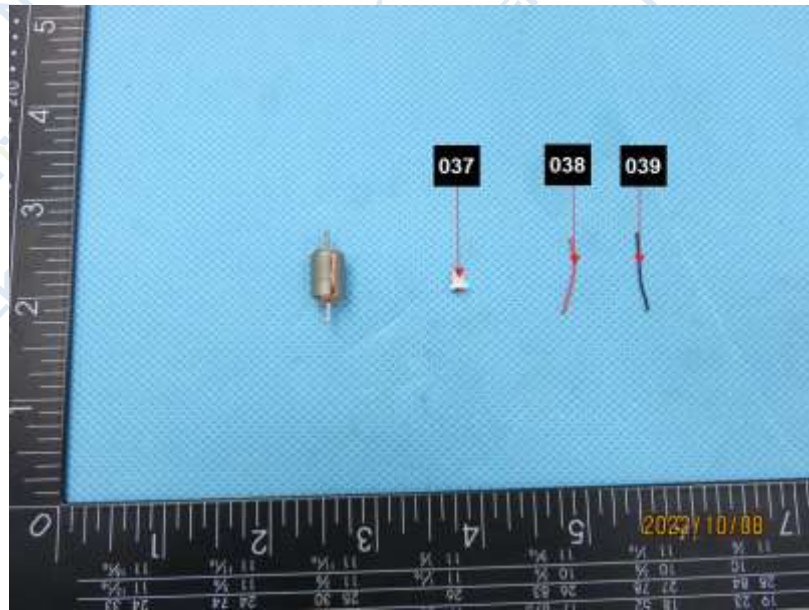


Fig.11

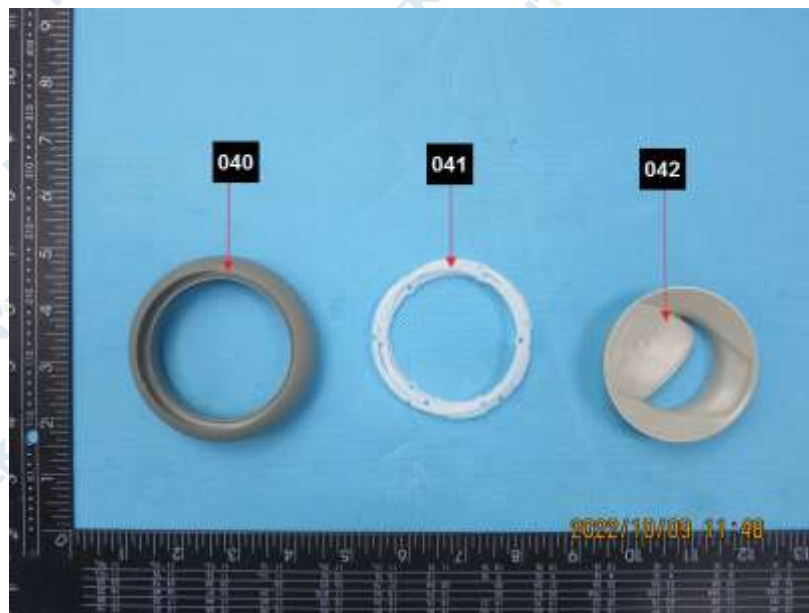


Fig.12

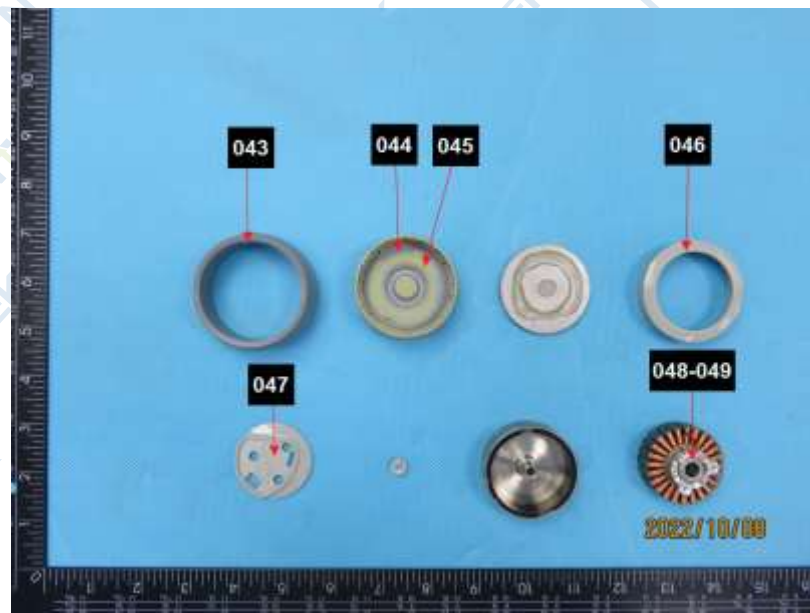


Fig.13

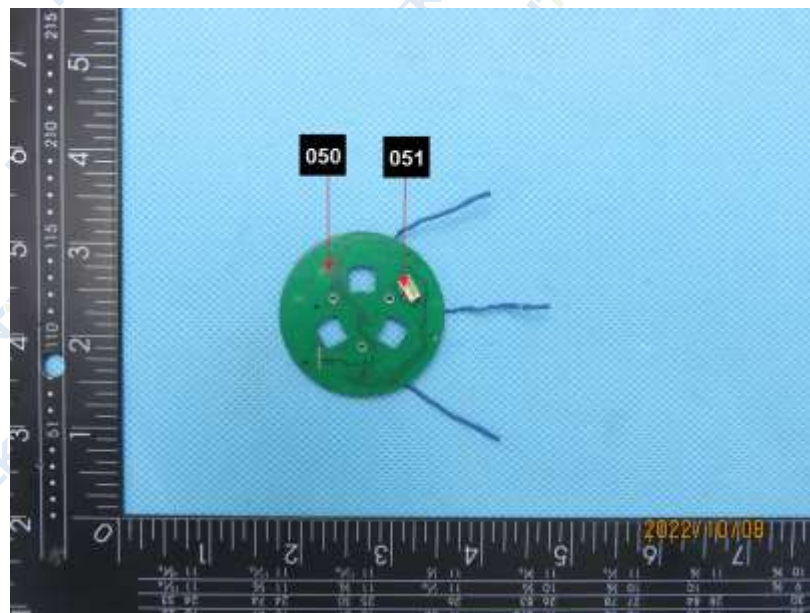


Fig.14

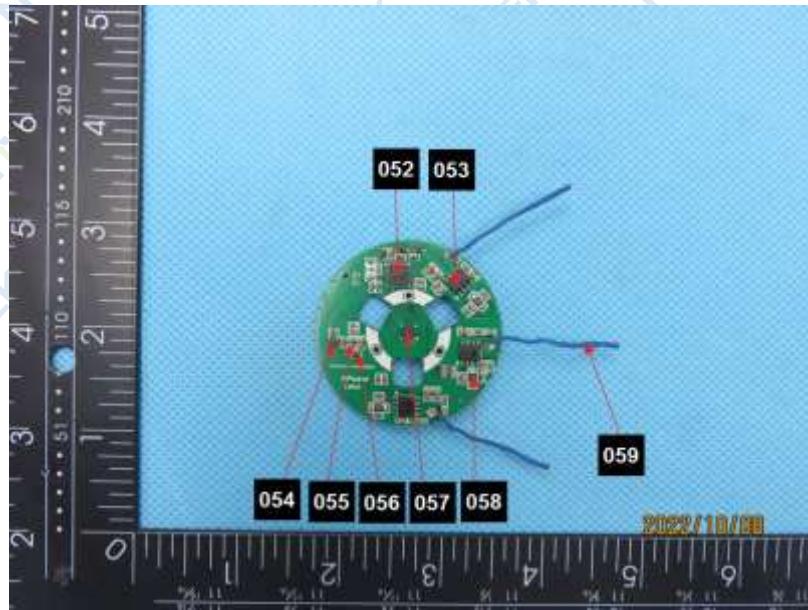


Fig.15

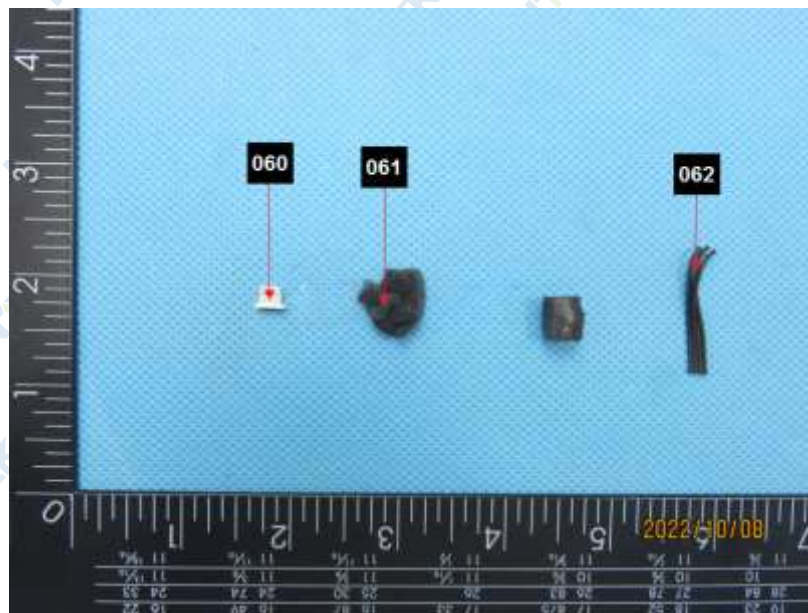


Fig.16

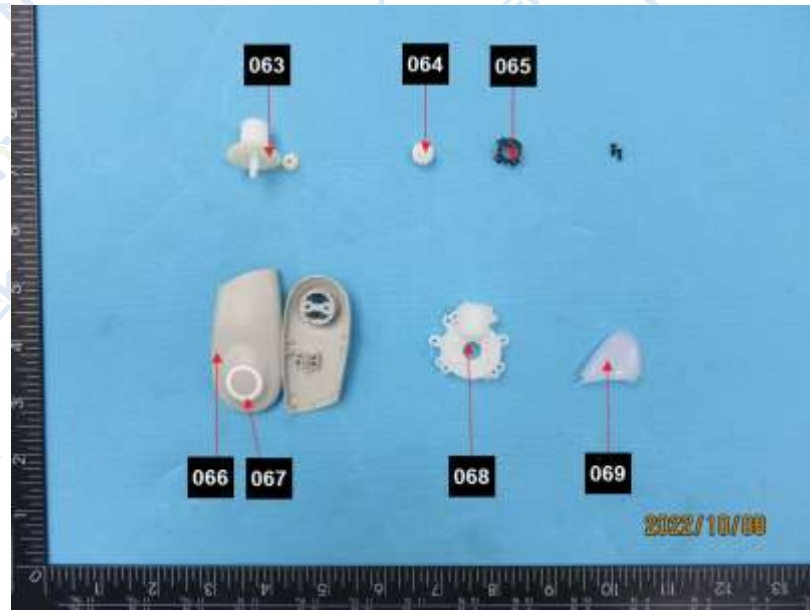


Fig.17

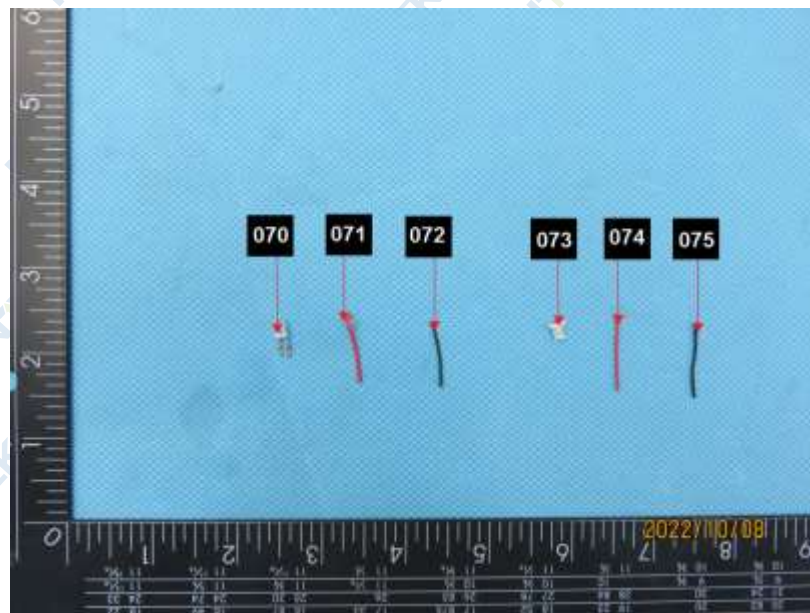


Fig.18

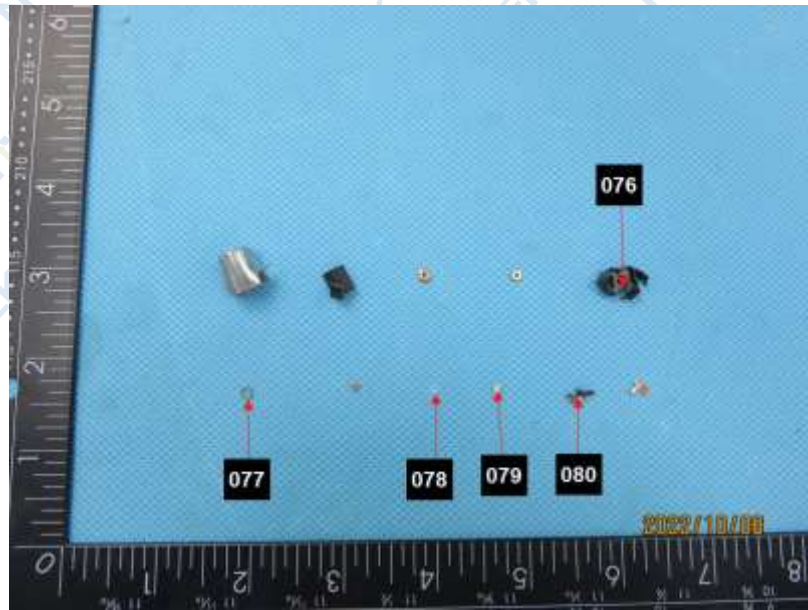


Fig.19

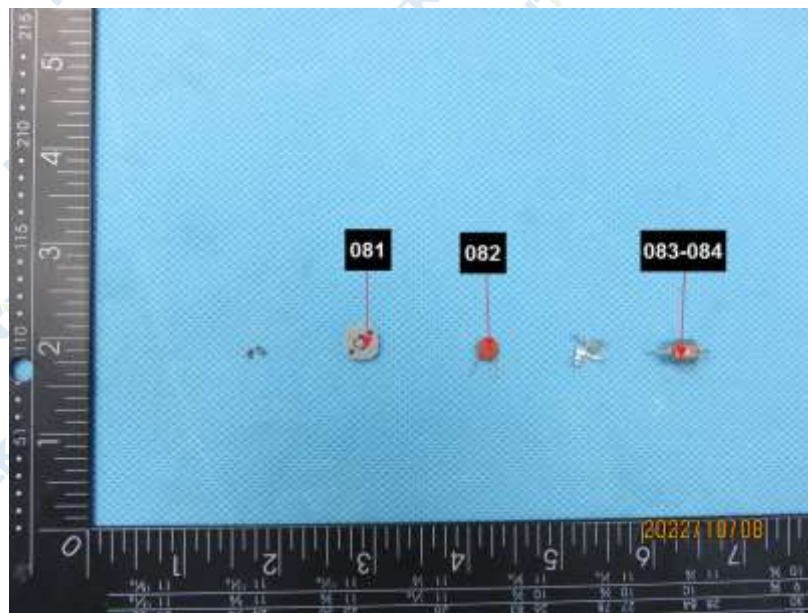


Fig.20

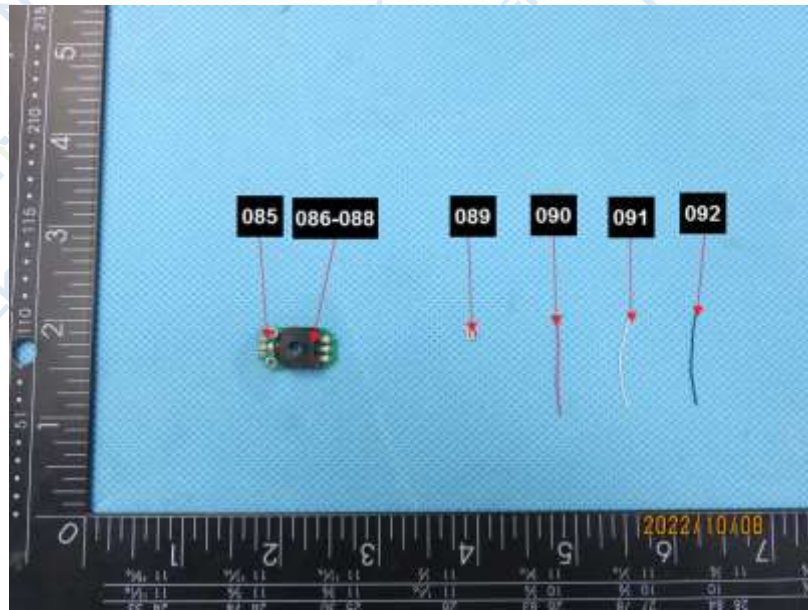


Fig.21

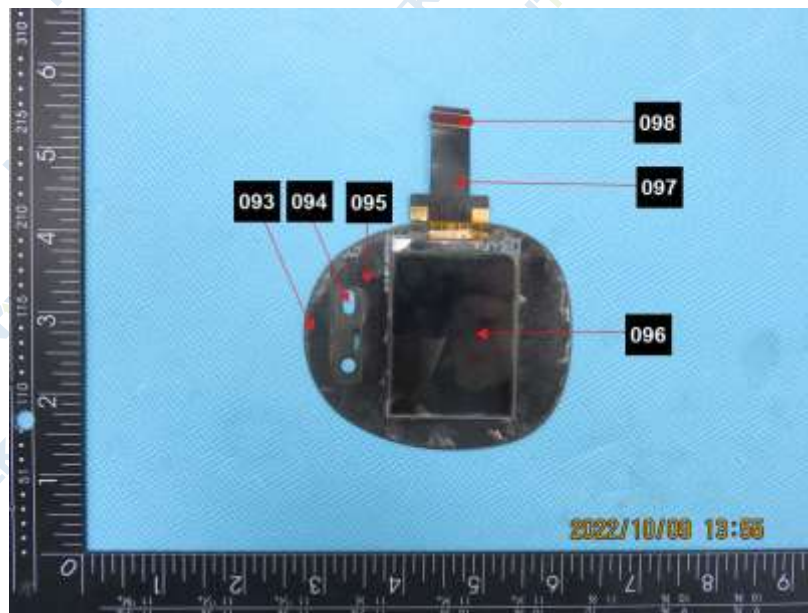


Fig.22

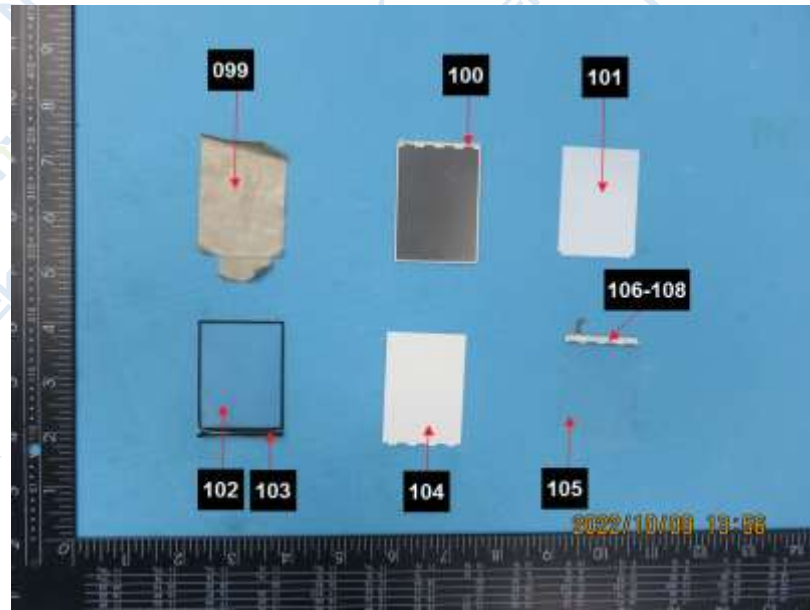


Fig.23



Fig.24

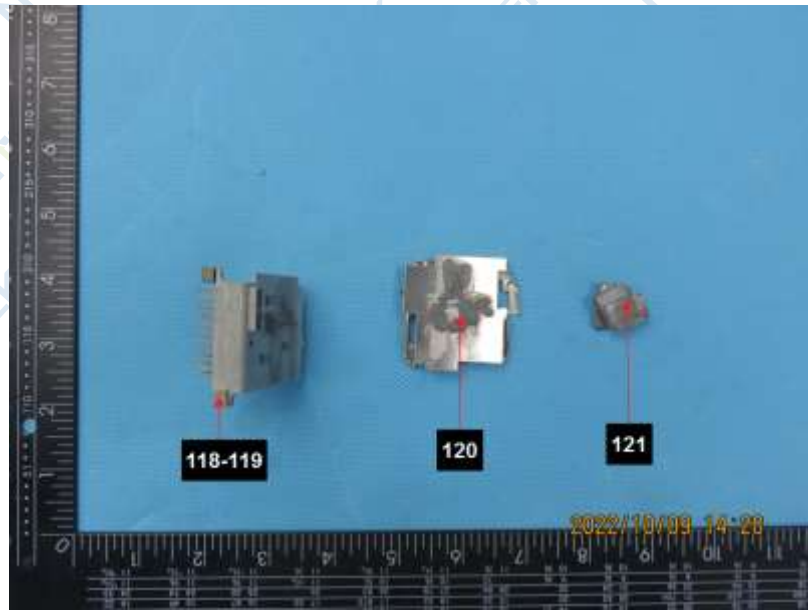


Fig.25

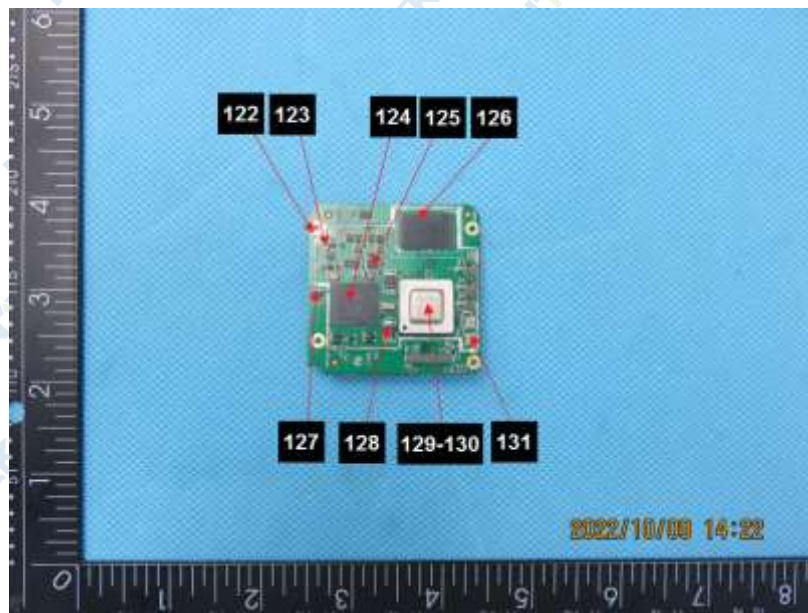


Fig.26

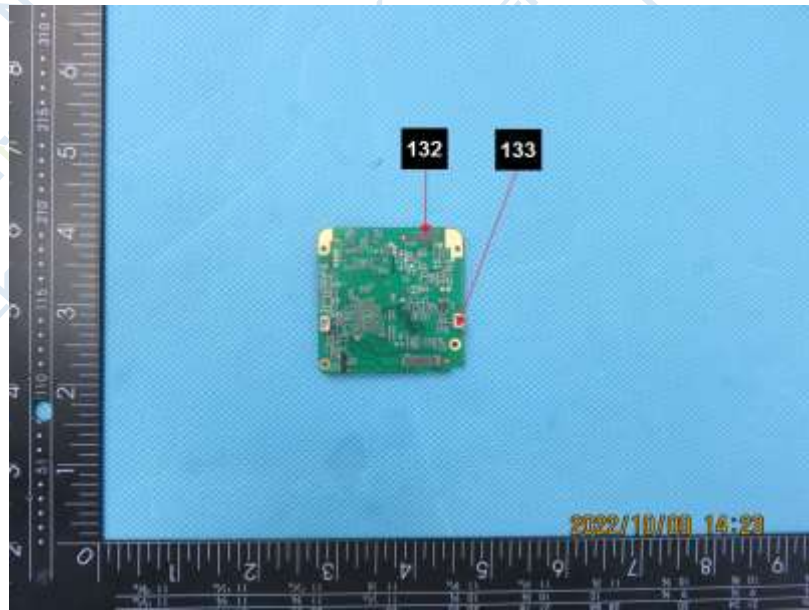


Fig.27

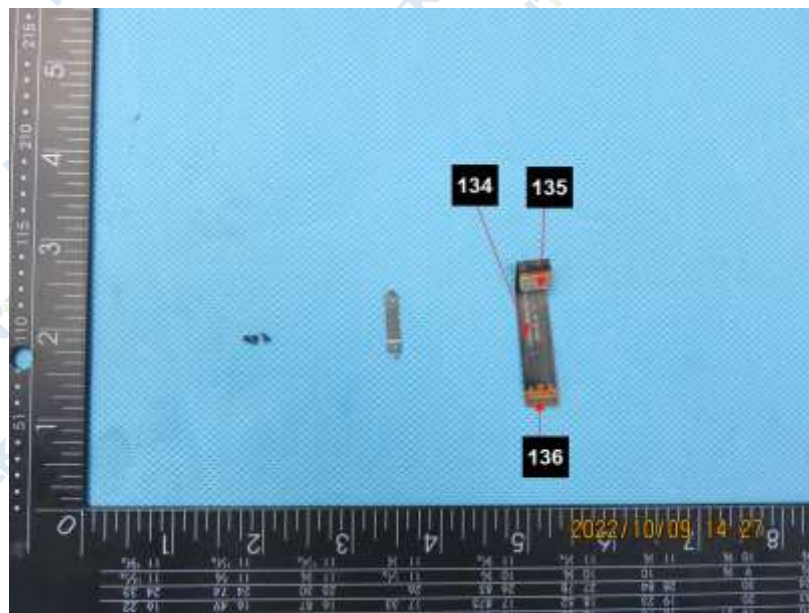


Fig.28

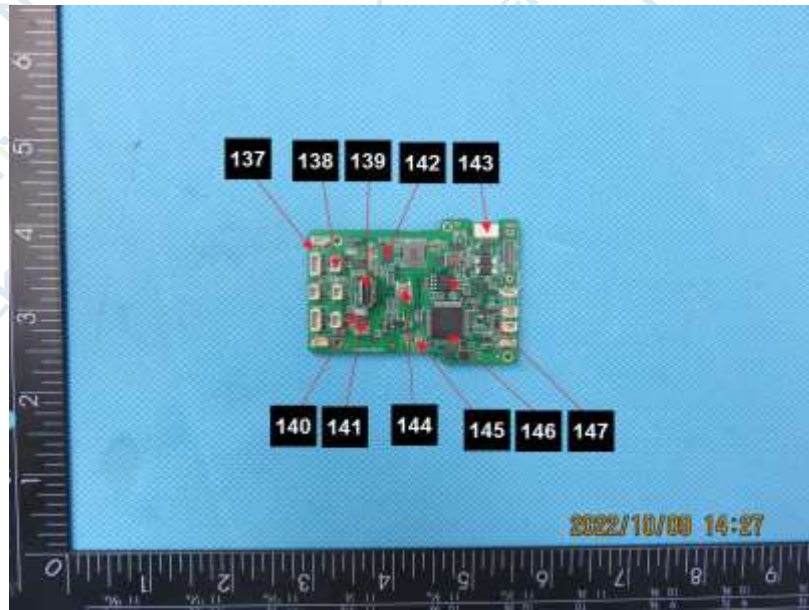


Fig.29

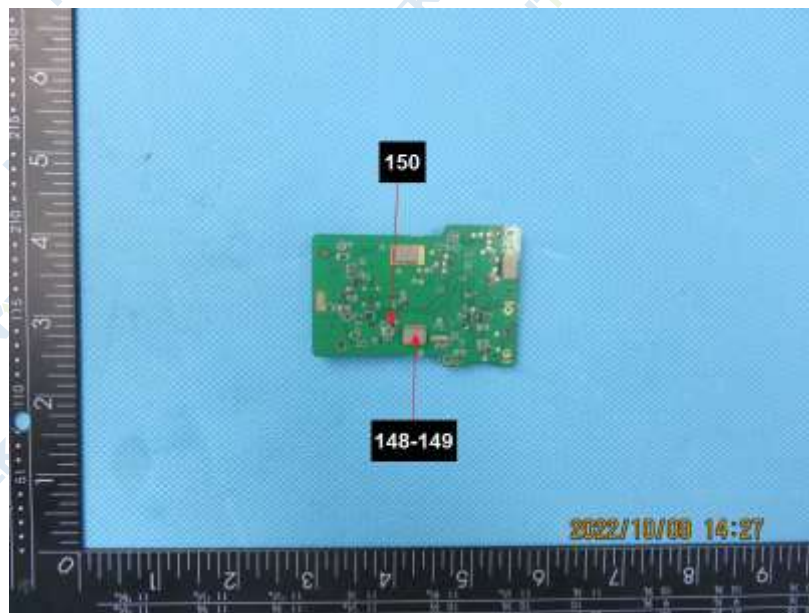


Fig.30

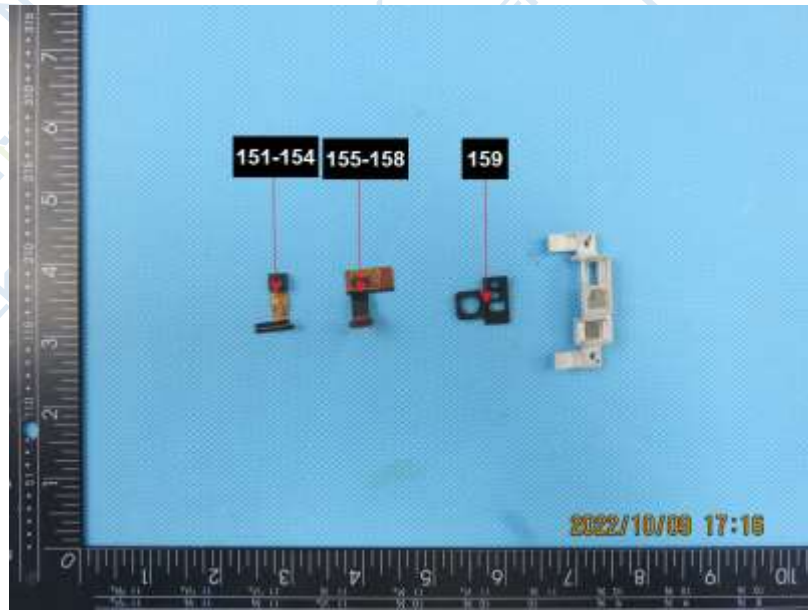


Fig.31

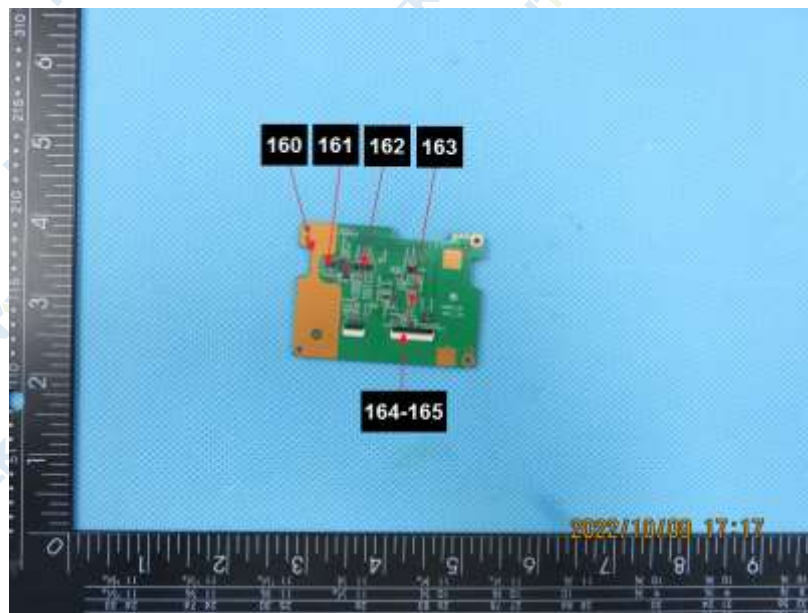


Fig.32

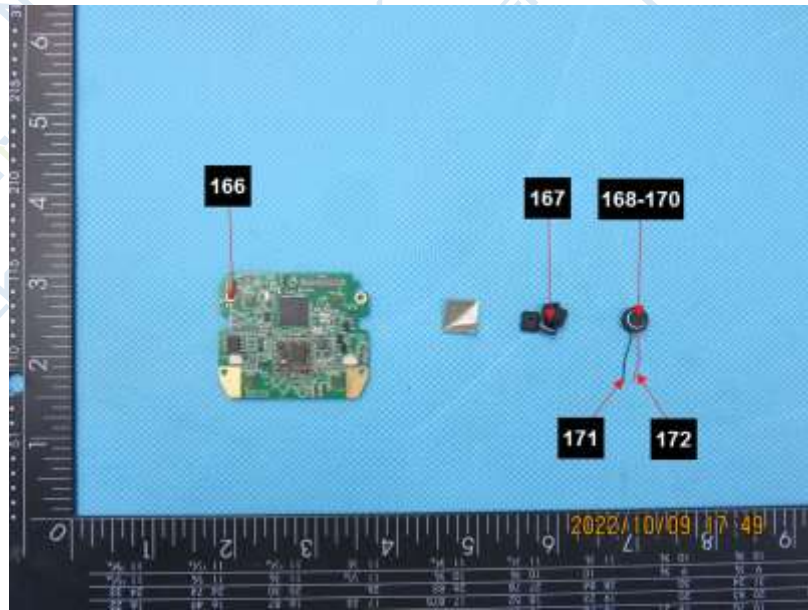


Fig.33

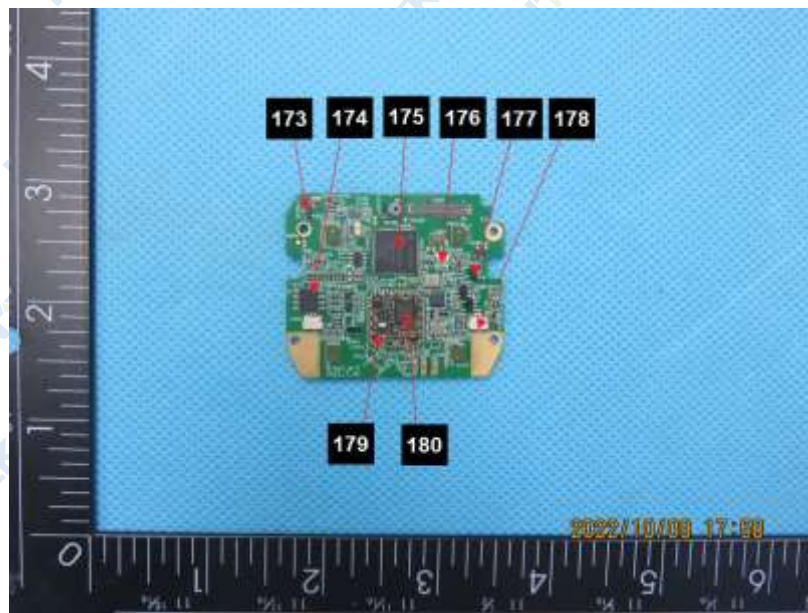


Fig.34

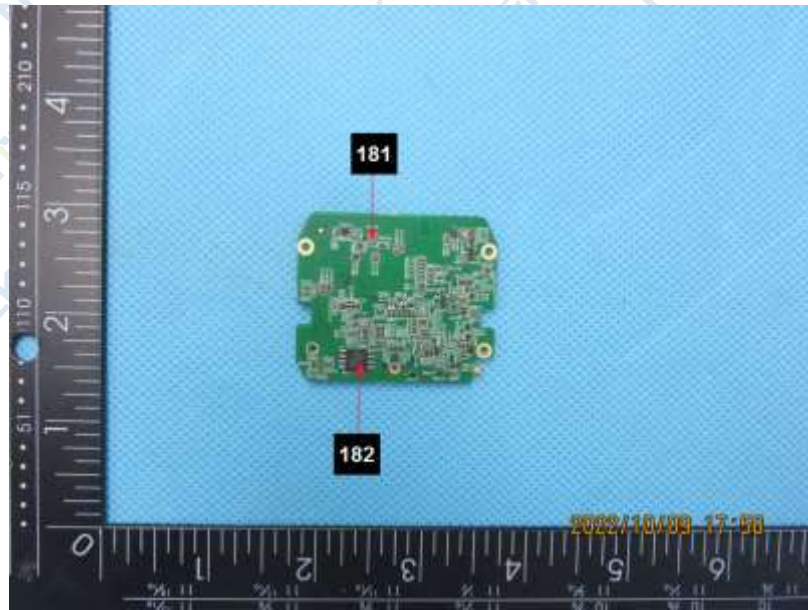


Fig.35

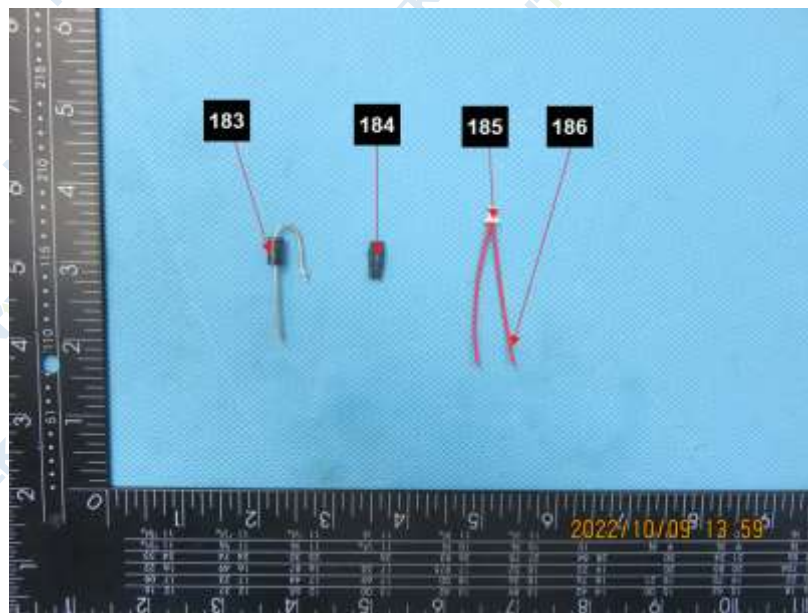


Fig.36

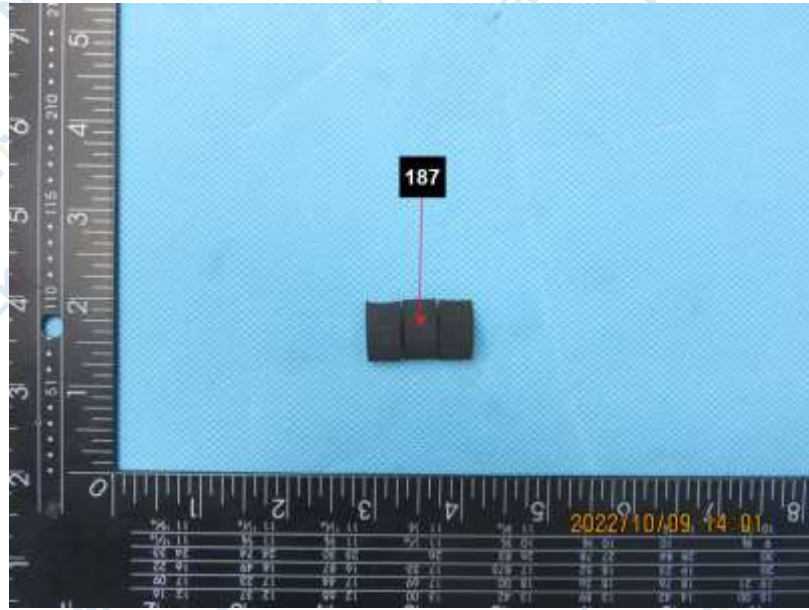


Fig.37

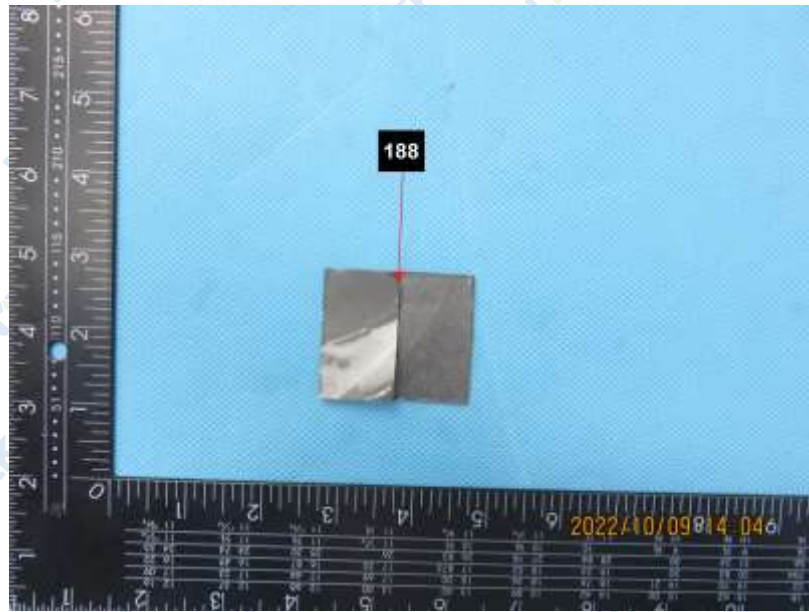


Fig.38



Fig.39

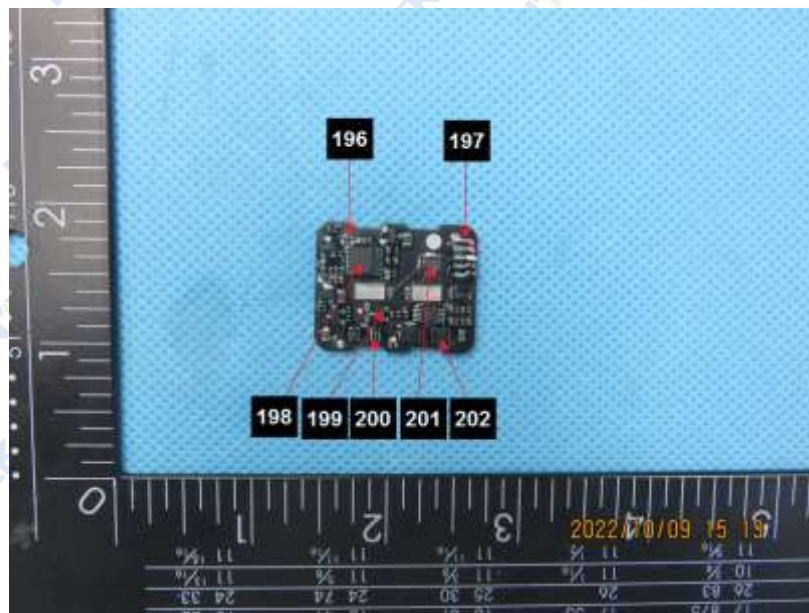


Fig.40

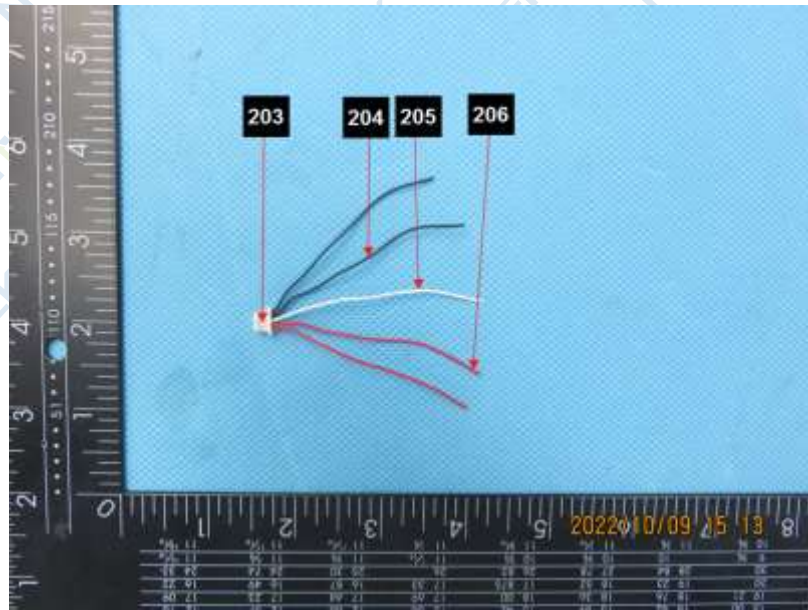


Fig.41

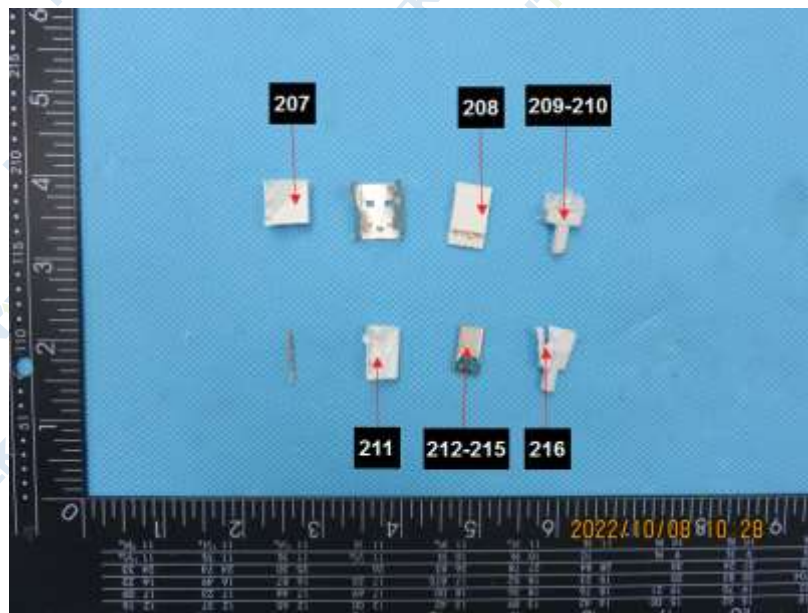


Fig.42

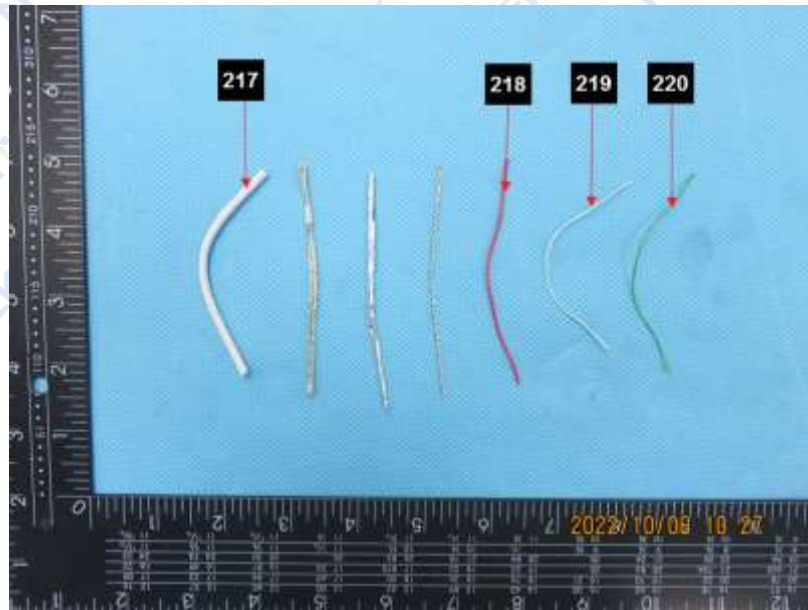


Fig.43

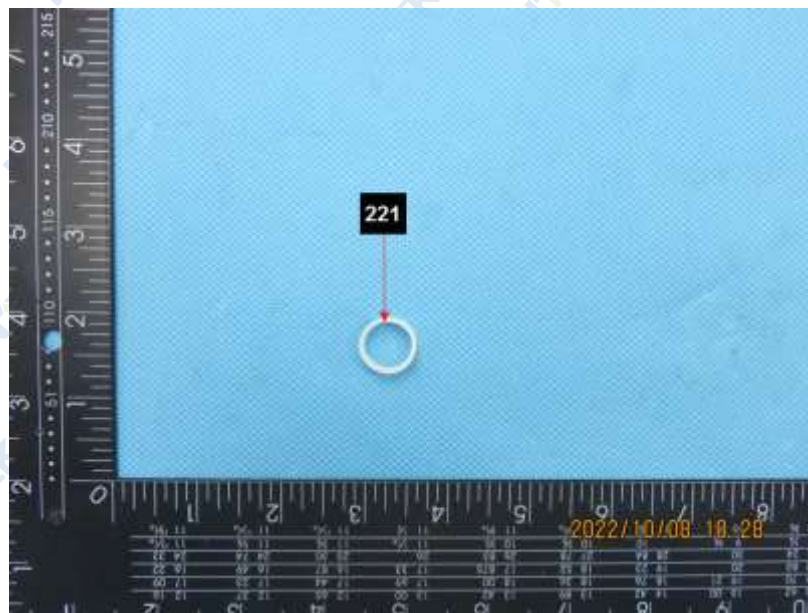


Fig.44

****End of Report****

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