

**Test Result:
GFSK(1Mbps)**

Test channel	Frequency	Reading level(dBm)	Conducted Output Power (dBm)	Limit
	MHz			dBm
CH 00	2402	2.945	5.745	30
CH 39	2441	2.686	5.486	30
CH 78	2480	2.596	5.396	30

Note: 1 watt=30dBm.

The channel separation > bandwidth.

Cable lose=2.8dB

 $\pi/4$ -DQPSK(2Mbps)

Test channel	Frequency	Reading level(dBm)	Conducted Output Power (dBm)	Limit
	MHz			dBm
CH 00	2402	0.954	3.754	20.96
CH 39	2441	1.079	3.879	20.96
CH 78	2480	0.858	3.658	20.96

Note: 0.125 watt=20.96dBm.

The channel separation > 2/3 bandwidth.

Cable lose=2.8dB

8-DPSK (3Mbps)

Test channel	Frequency	Reading level(dBm)	Conducted Output Power (dBm)	Limit
	MHz			dBm
CH 00	2402	0.724	3.524	20.96
CH 39	2441	0.615	3.415	20.96
CH 78	2480	0.401	3.201	20.96

Note: 0.125 watt=20.96dBm.

The channel separation > 2/3 bandwidth.

Cable lose=2.8dB

3.11 Antenna equipment

Standard requirement

15.203 requirement:

For intentional device. According to 15.203. an intentional radiator shall be designed to Ensure that no antenna other than that furnished by the responsible party shall be used with the device.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz bands that are used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna

The external antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 1dBi.

Test result: The unit does meet the FCC requirements.

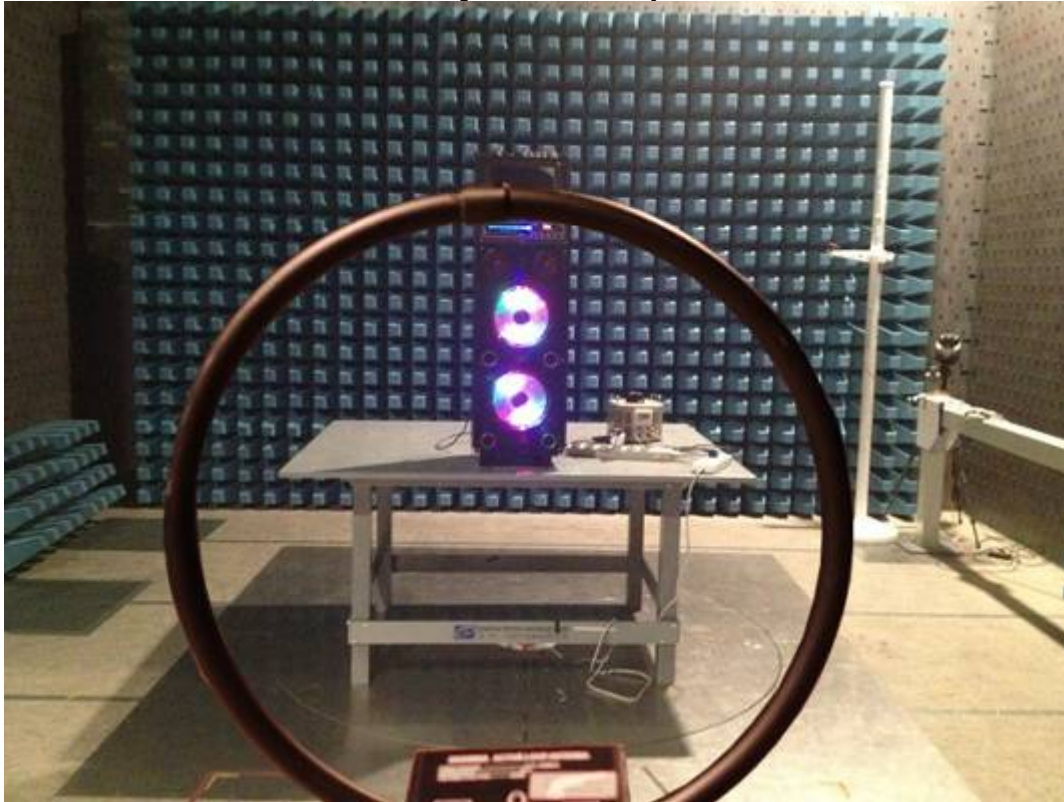
4 APPENDIX

4.1 Photographs of the Test Arrangement

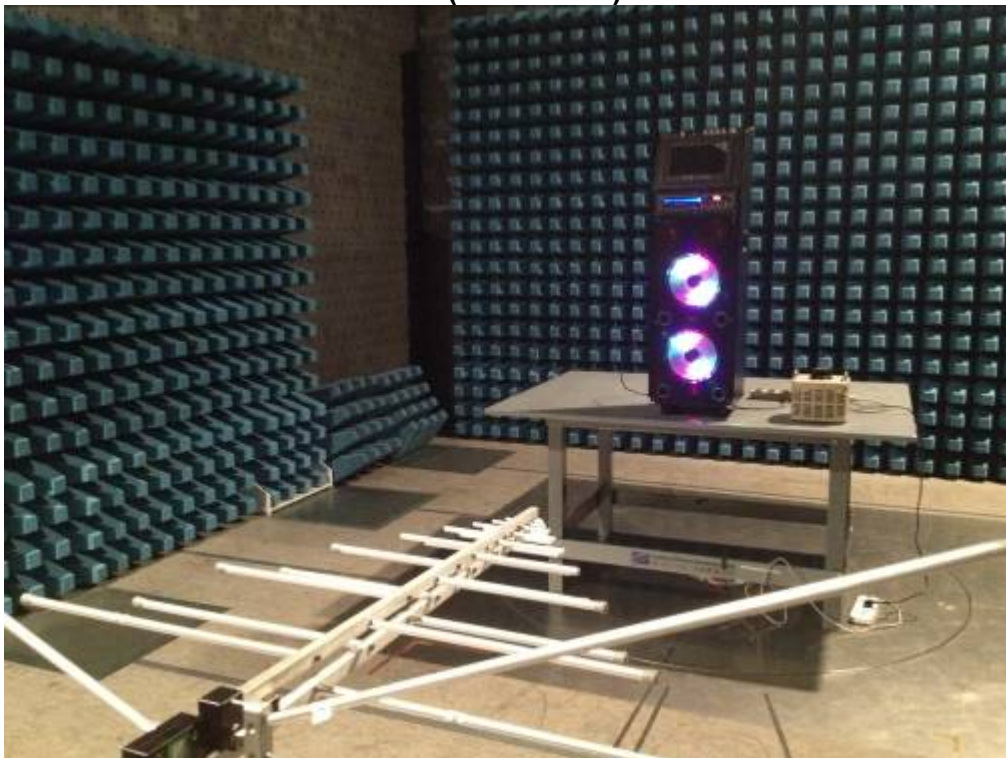
Conducted Emissions

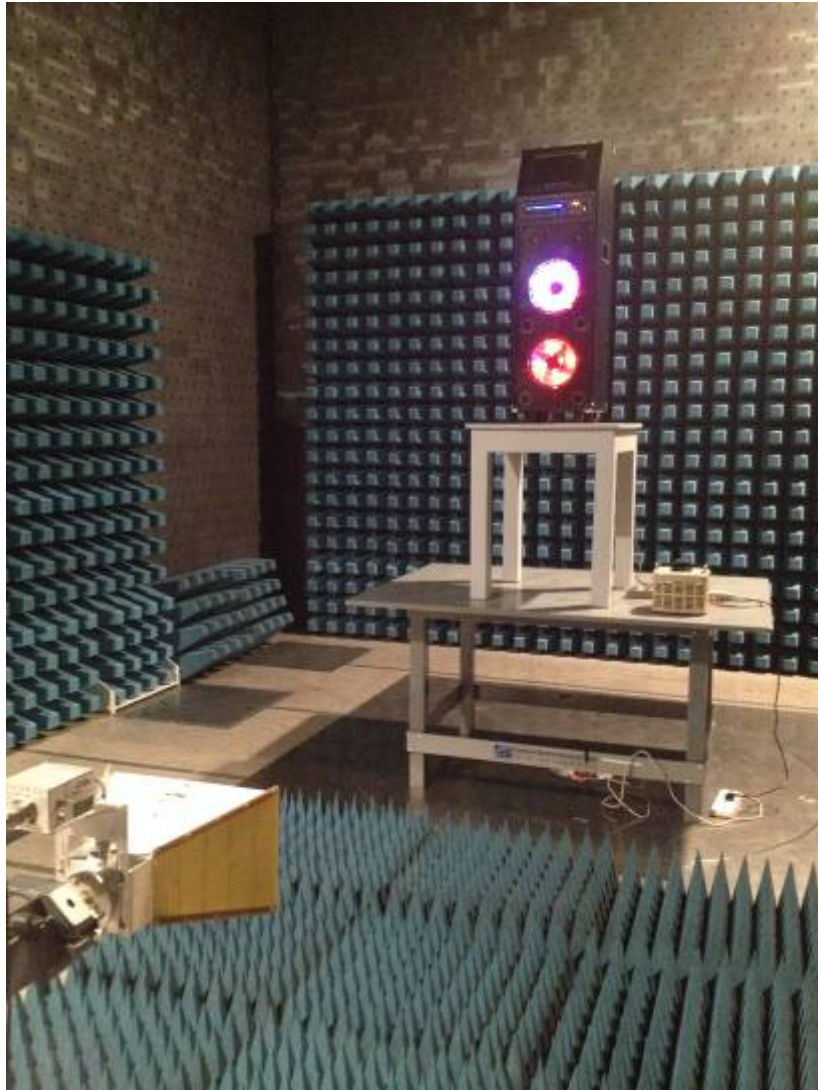


Re, Tested by Active Loop Antenna



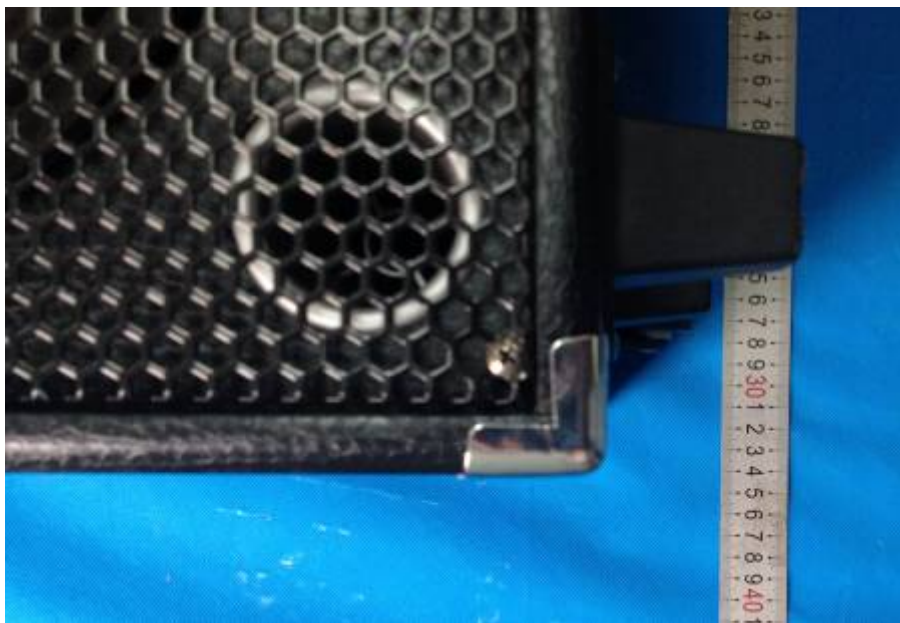
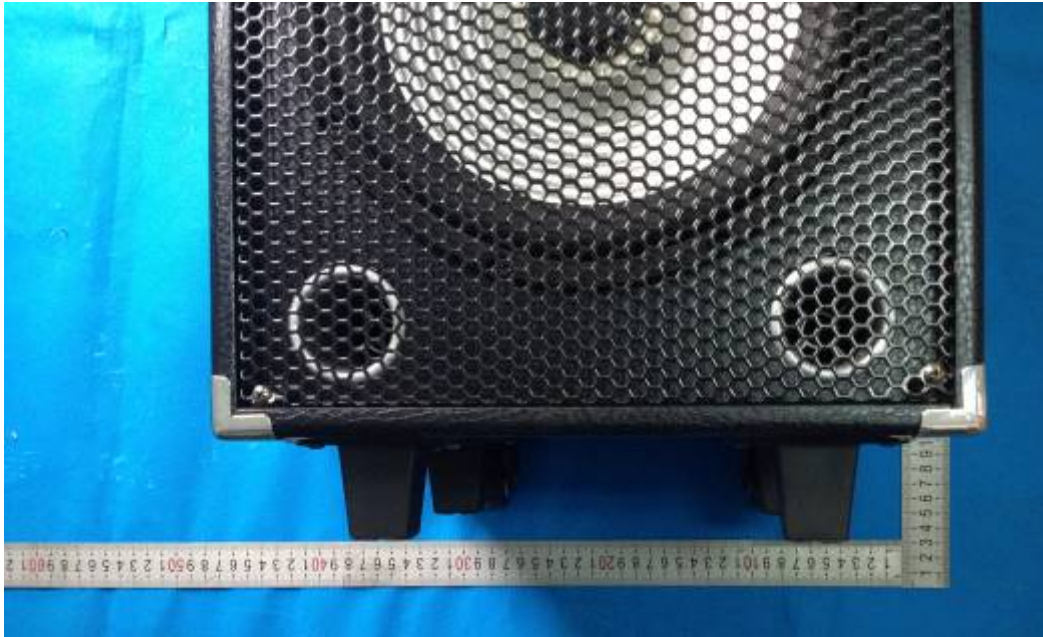
Re (30M-1GHz)

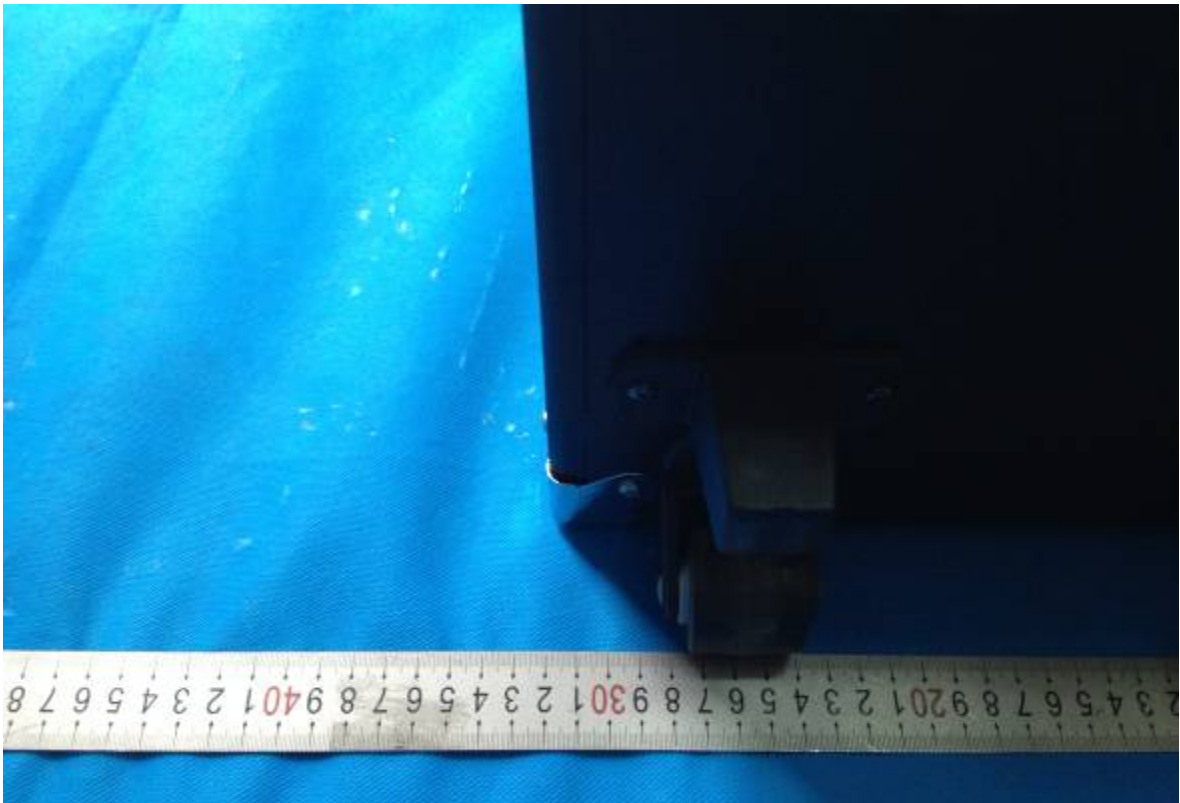


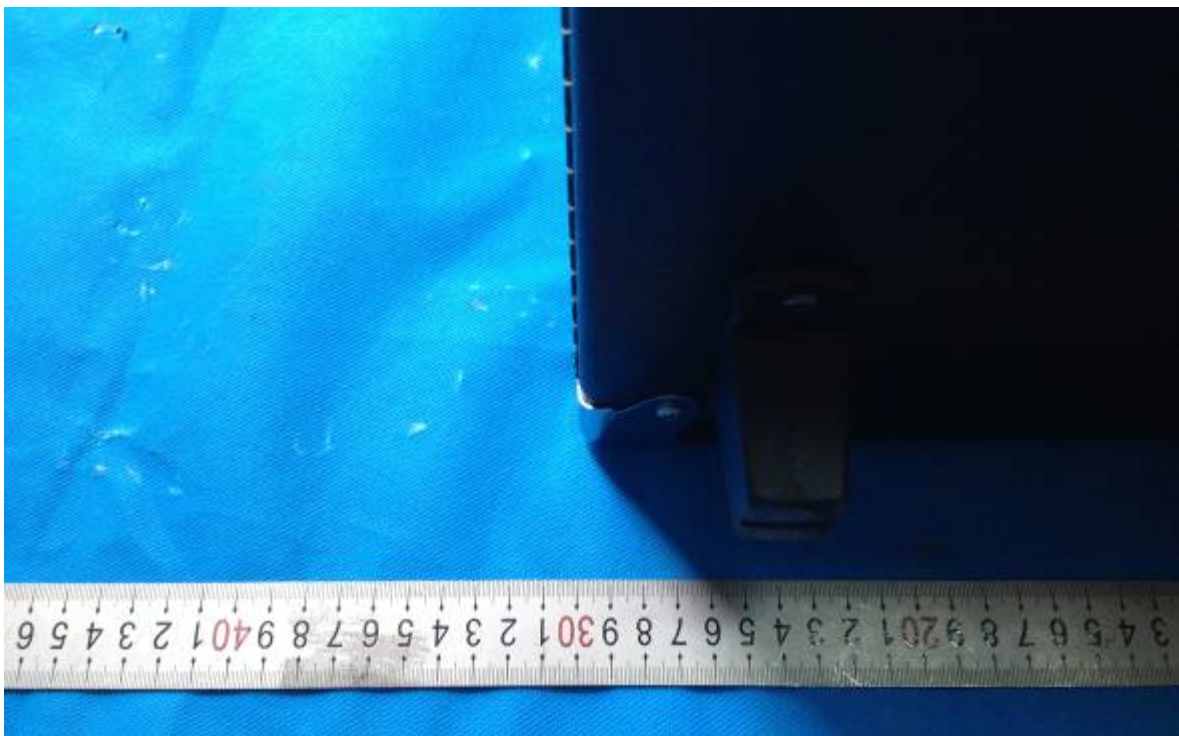
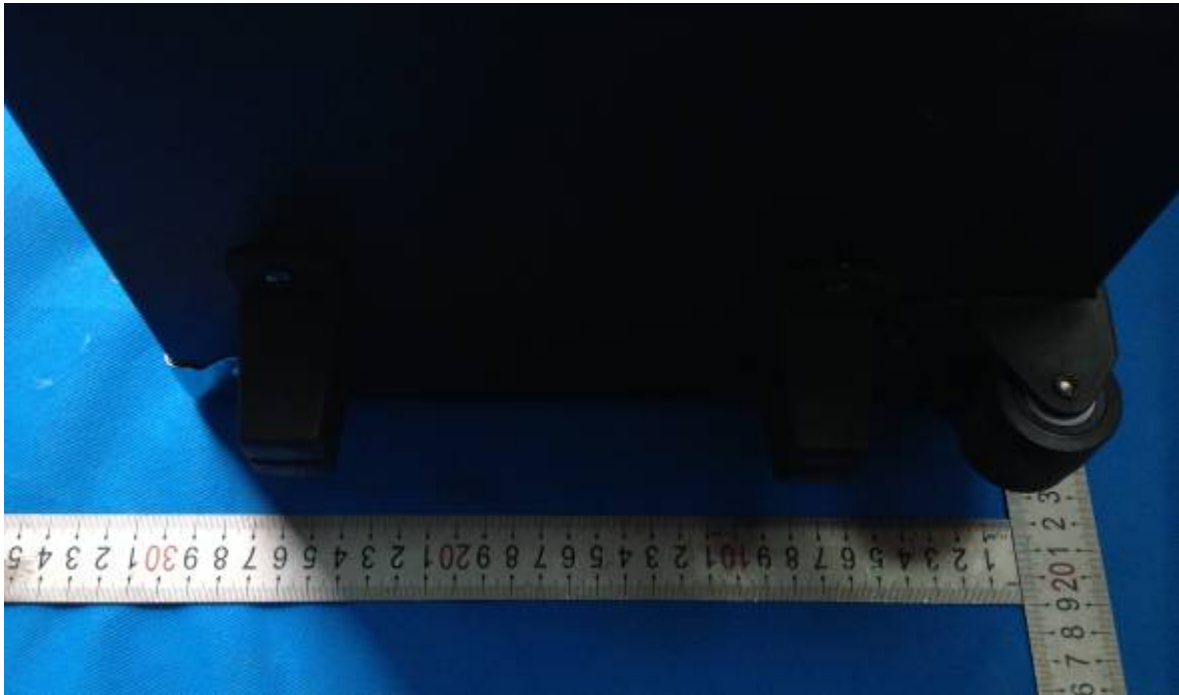
Re (Above1GHz)

4.2 Photographs of EUT Constructional Details

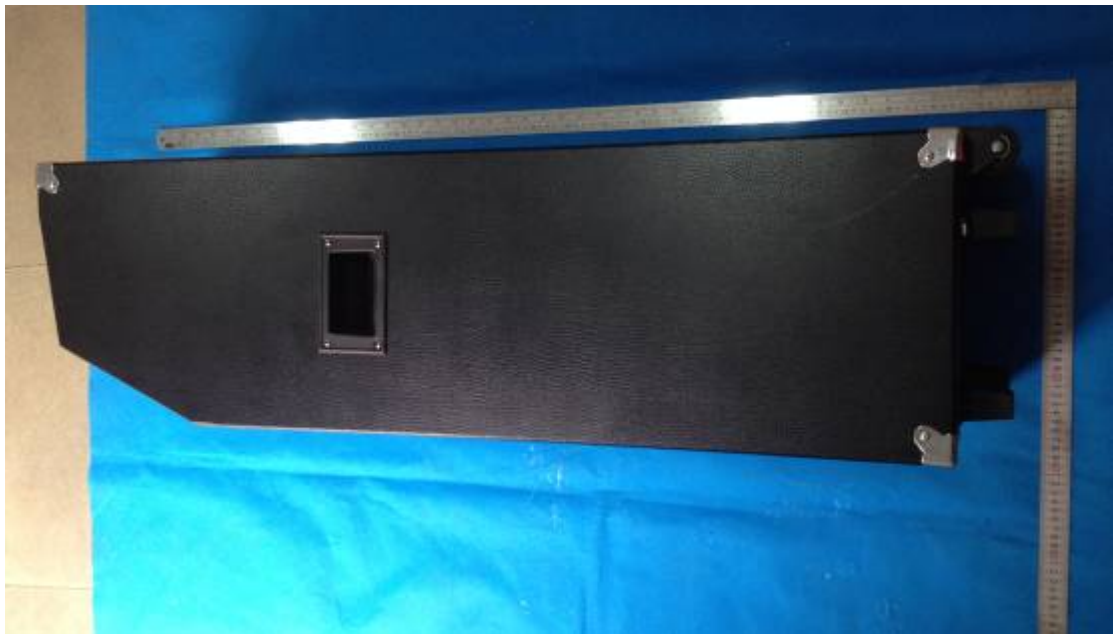
QS-102032





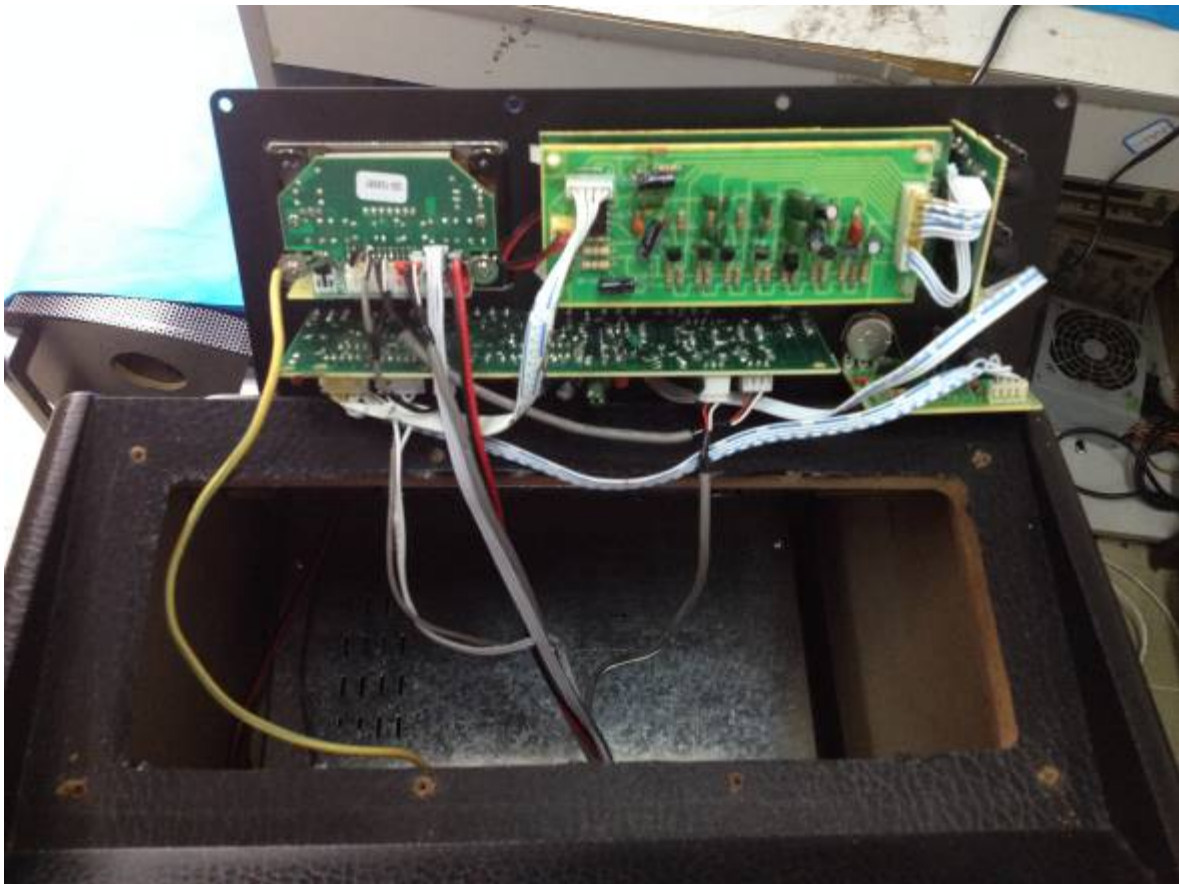




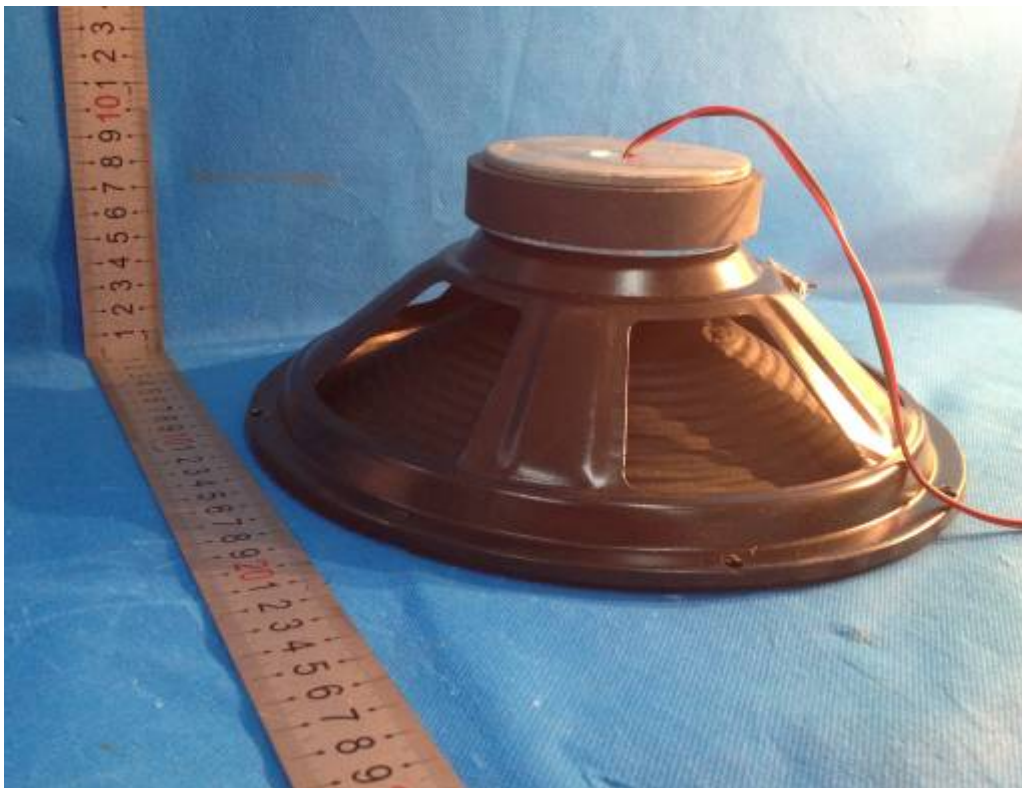
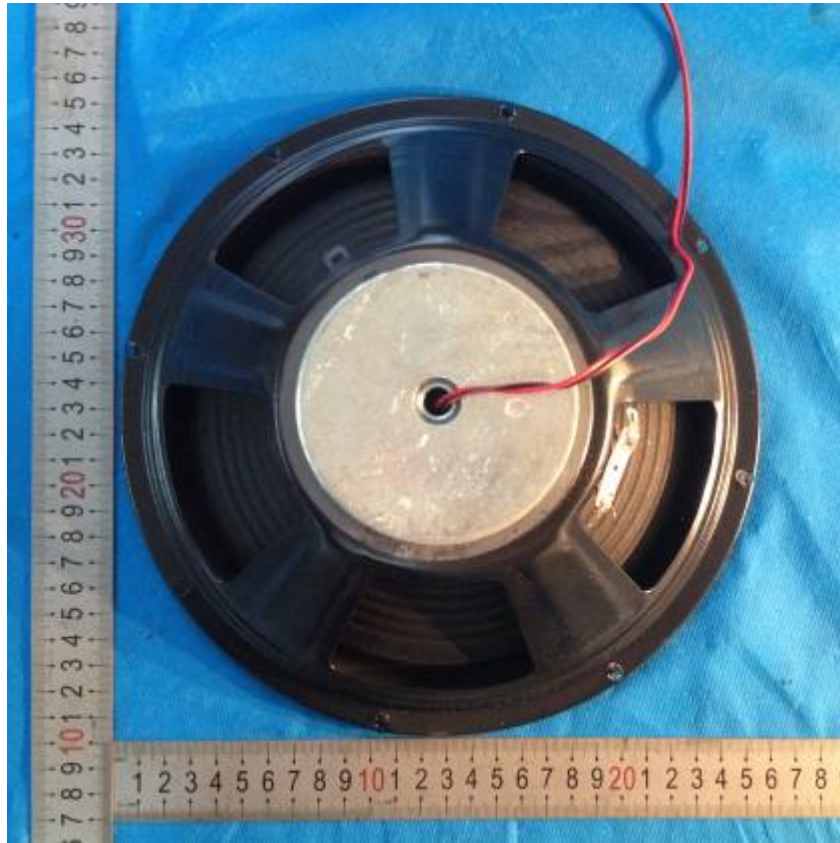


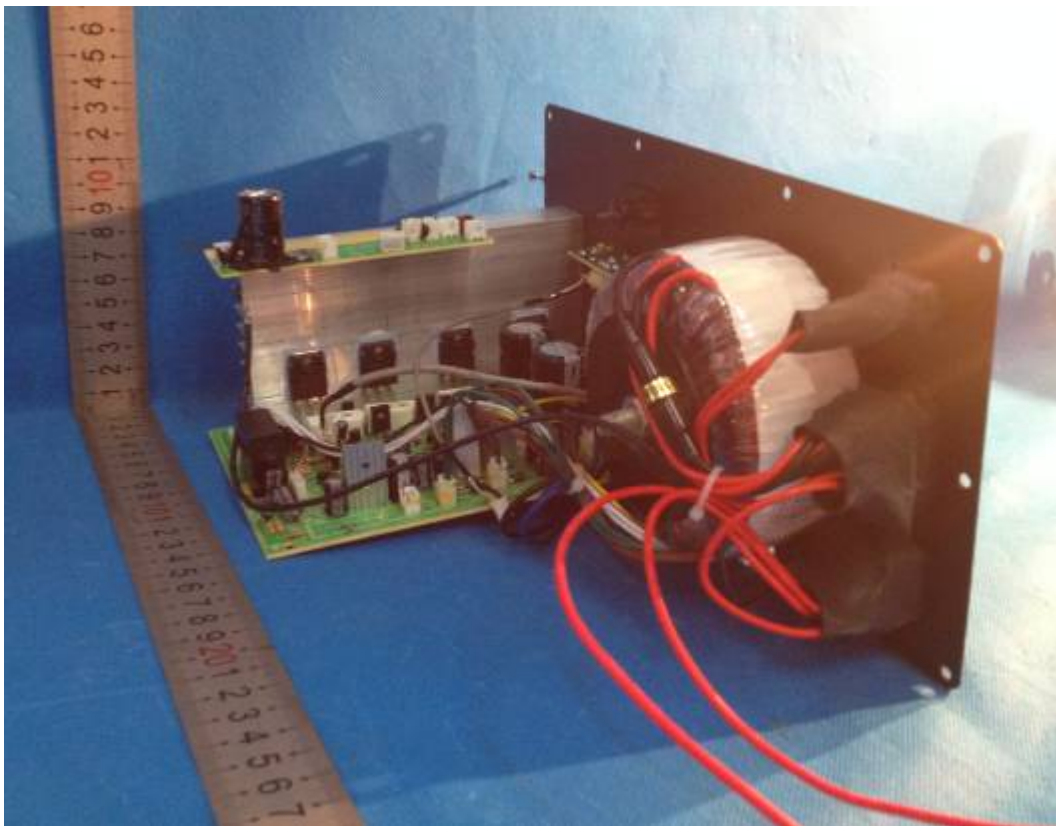


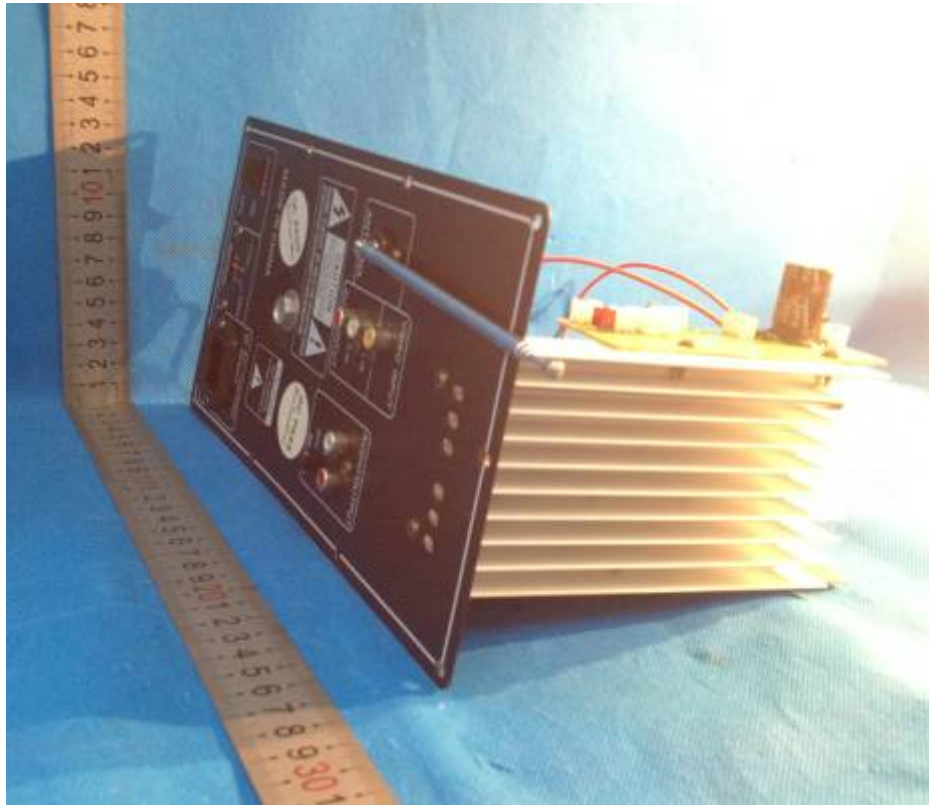


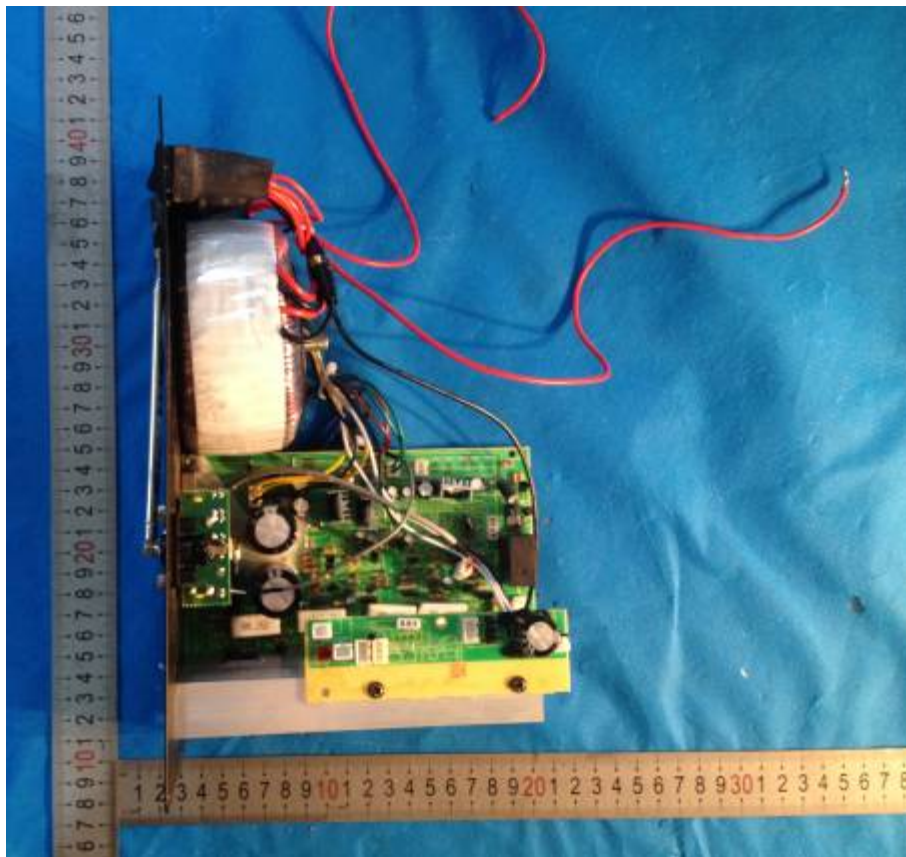
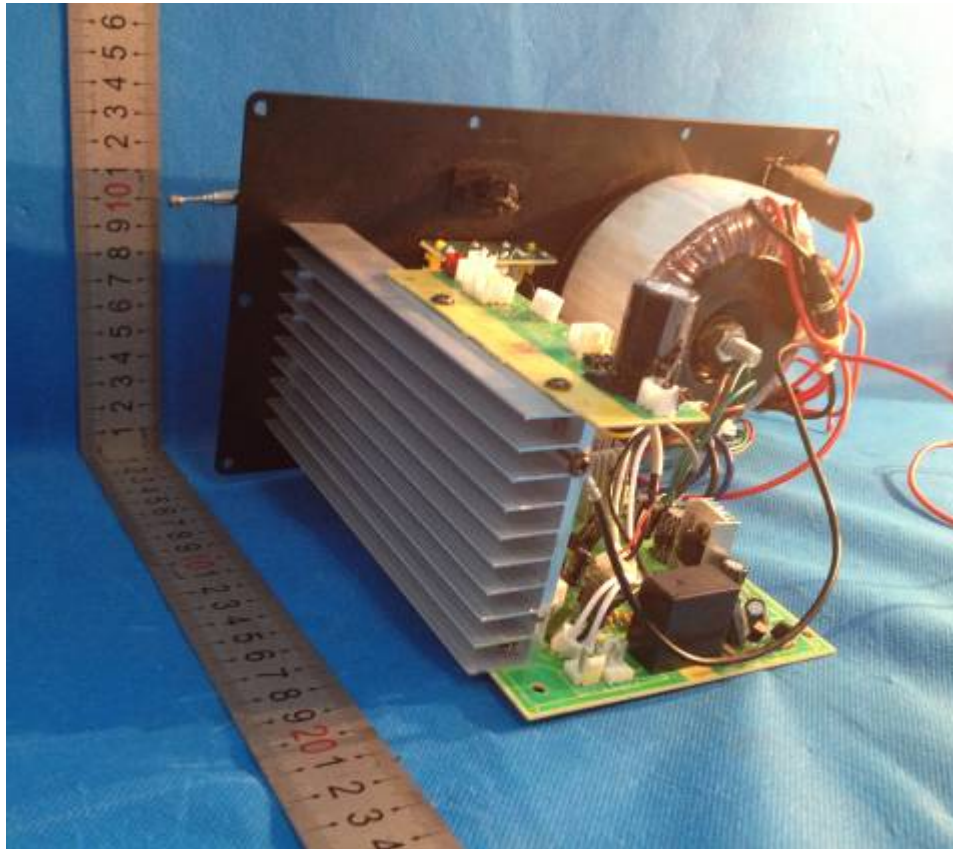


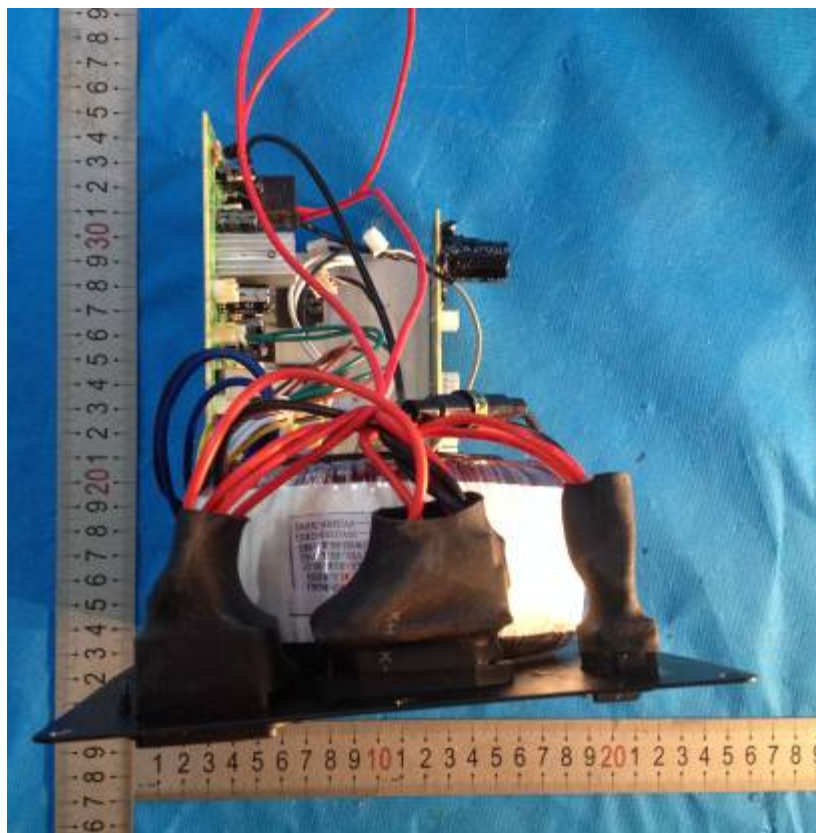
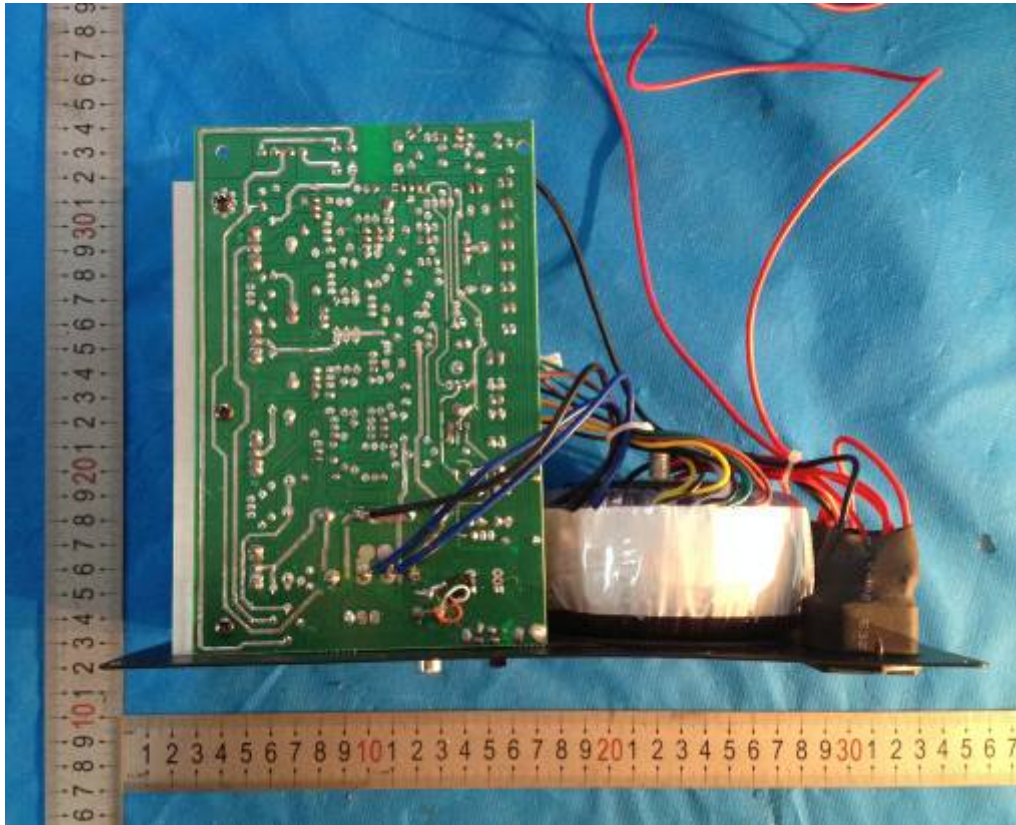


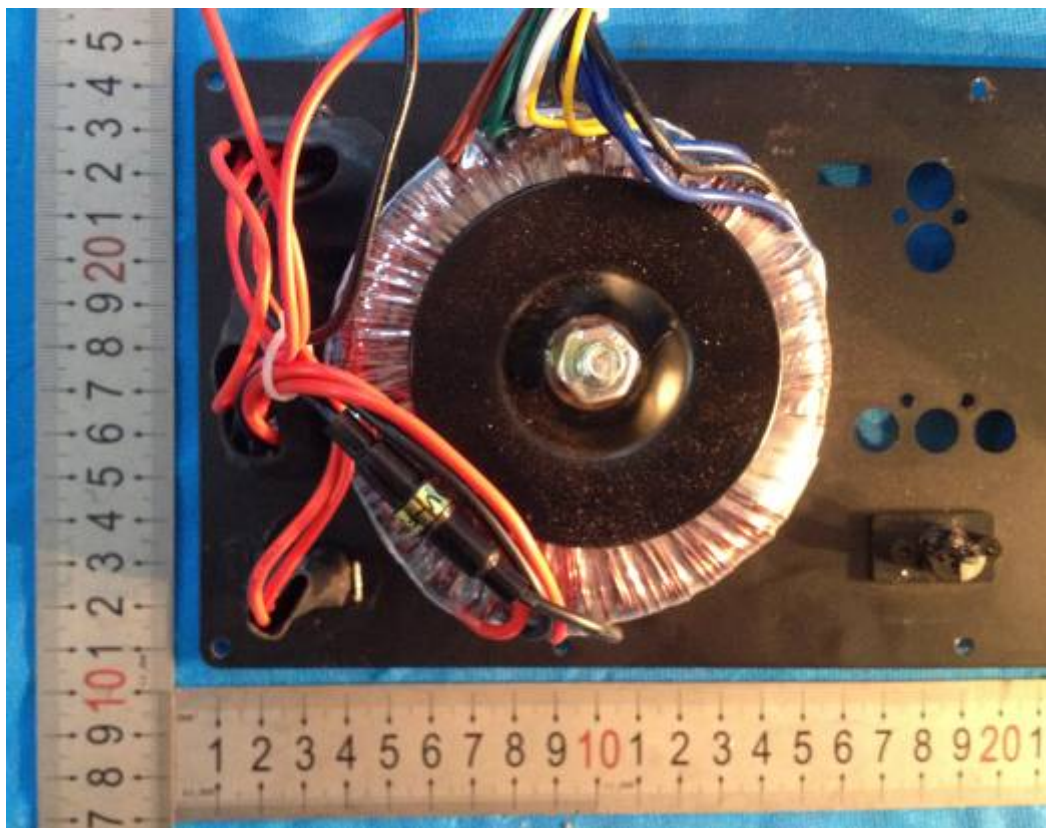
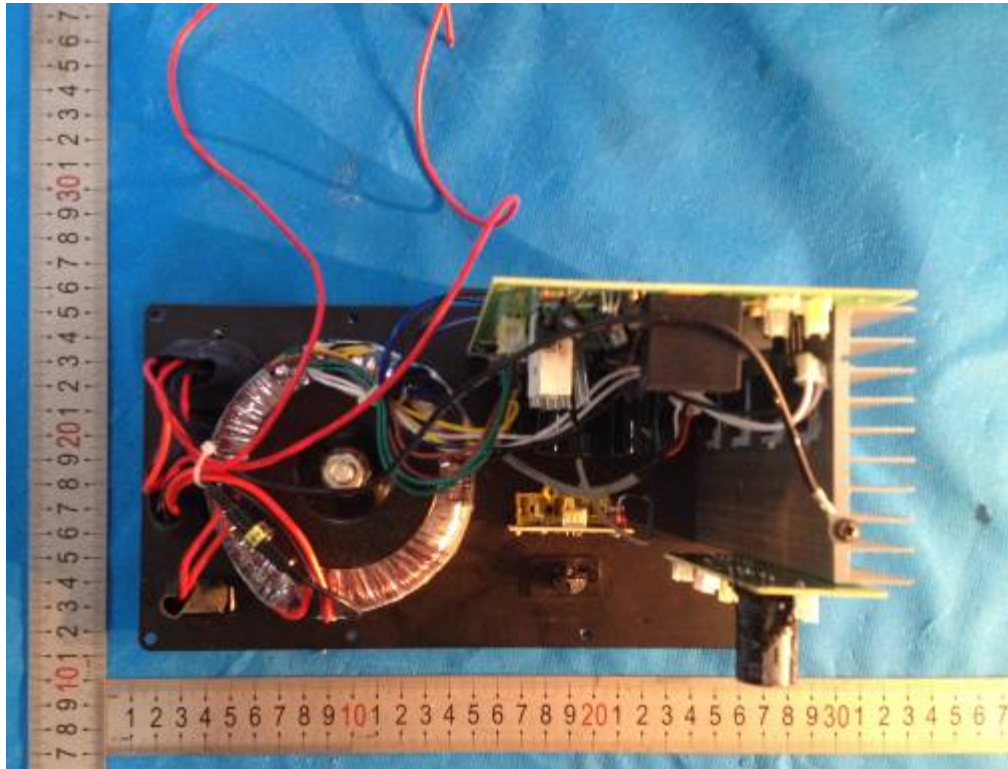


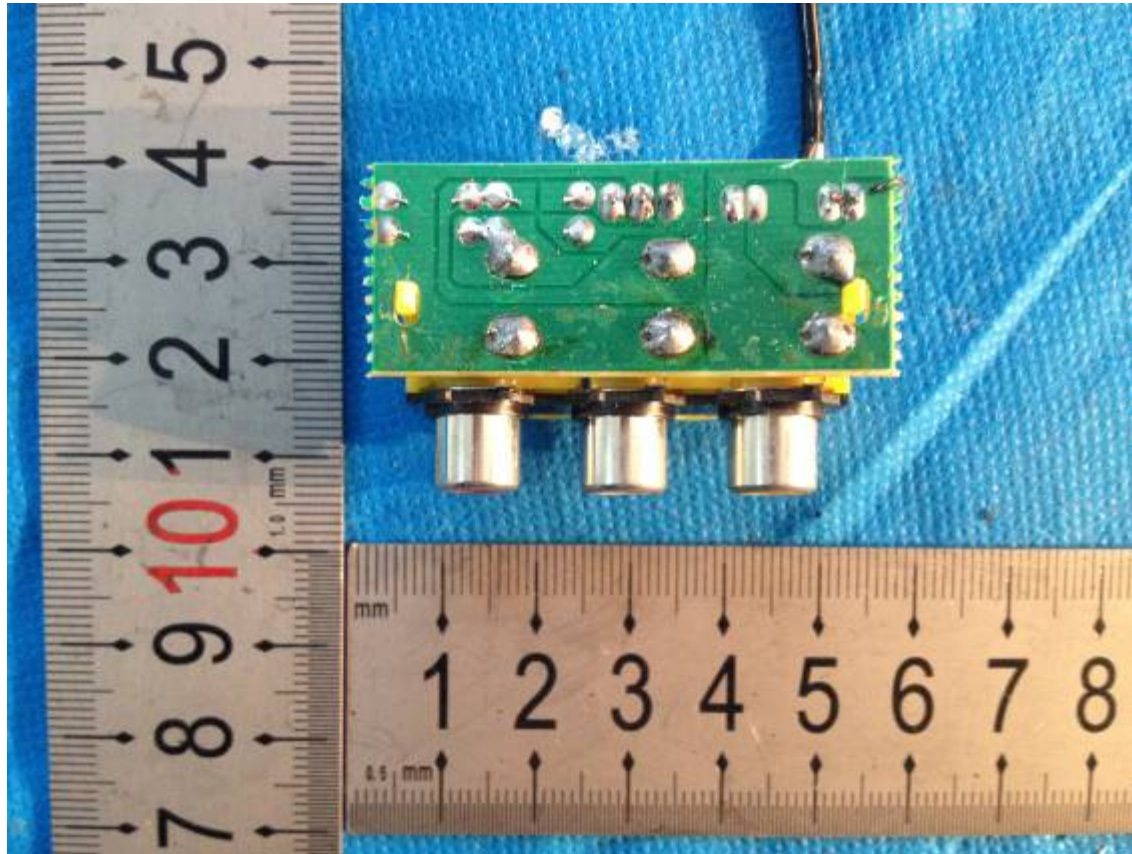
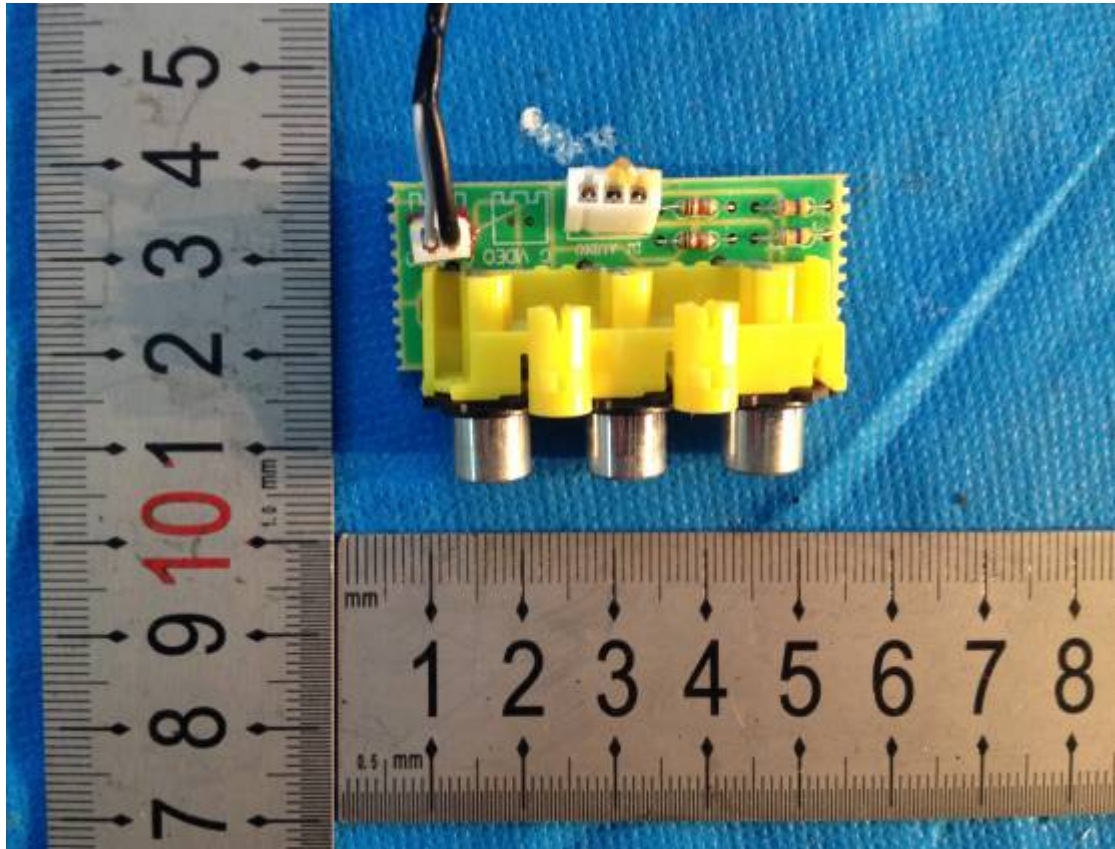


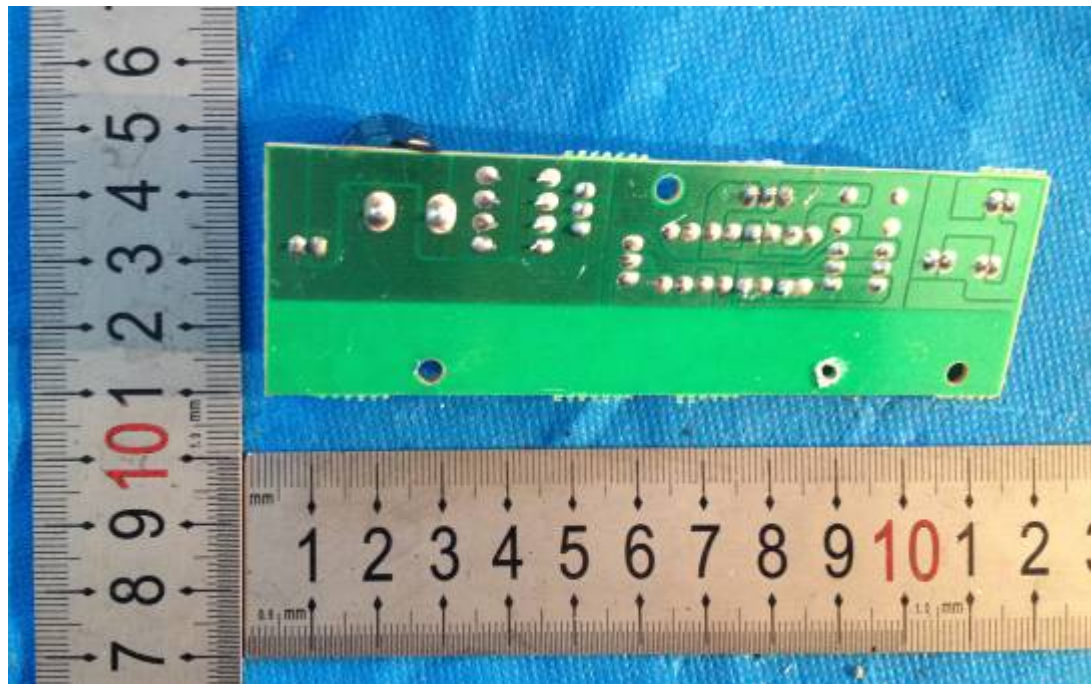
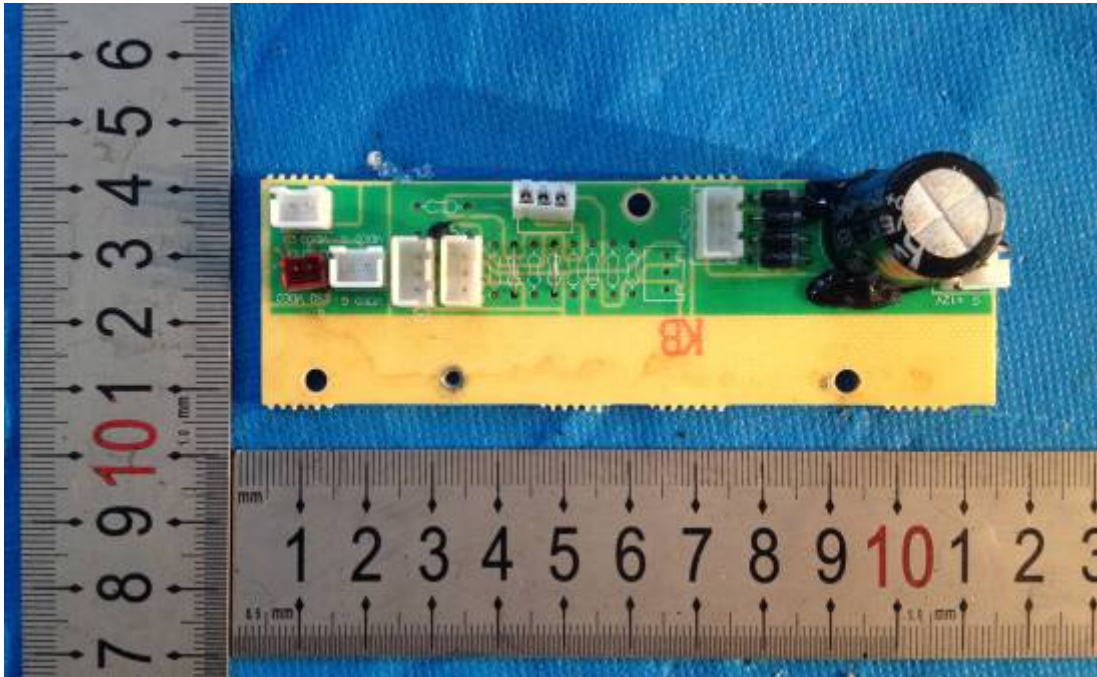


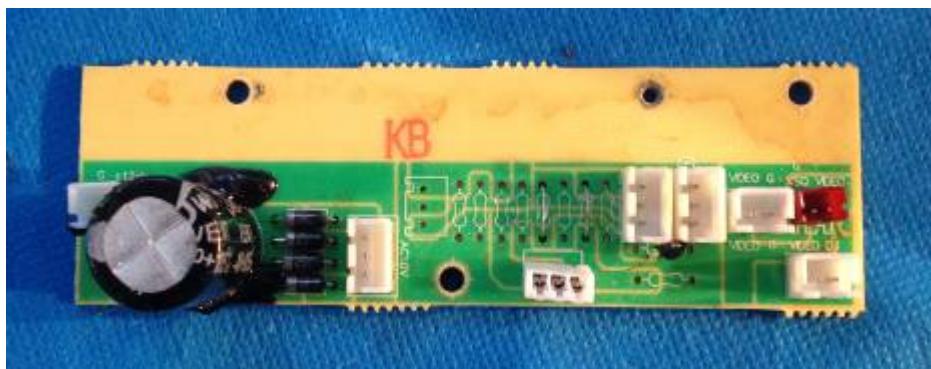
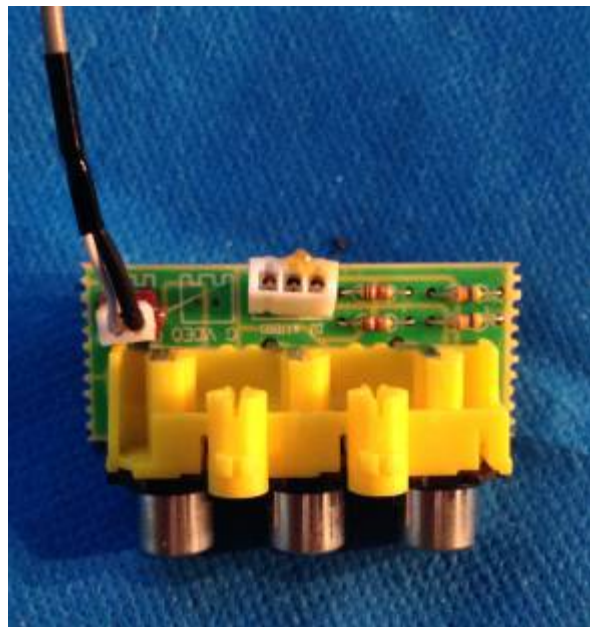
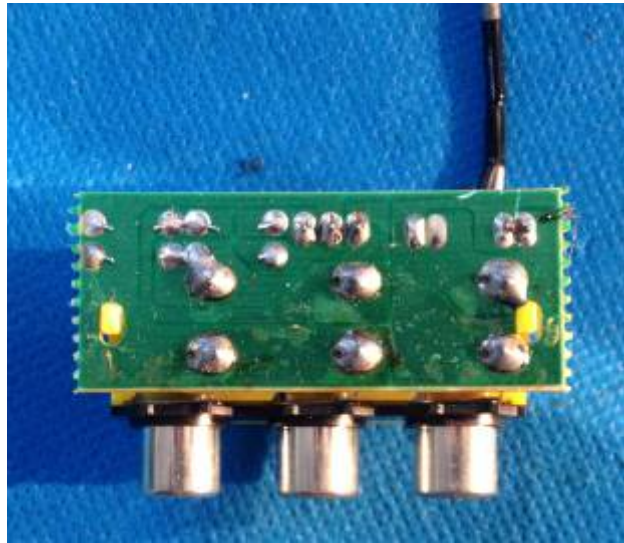


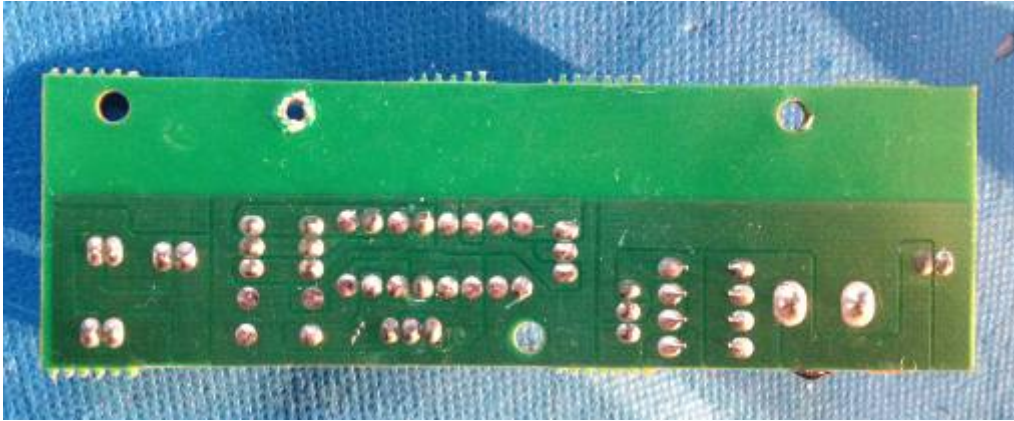


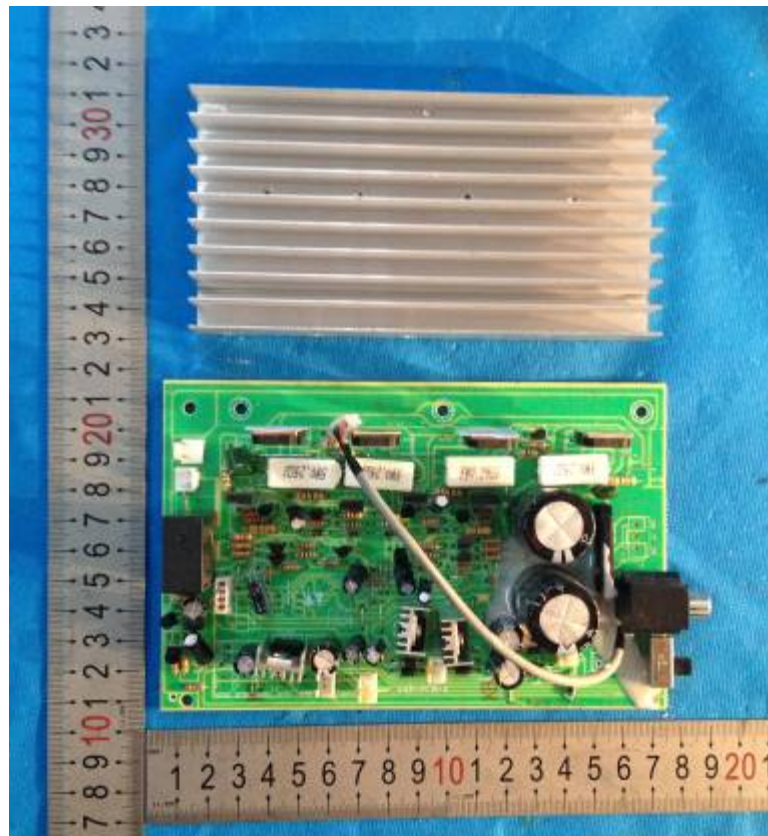
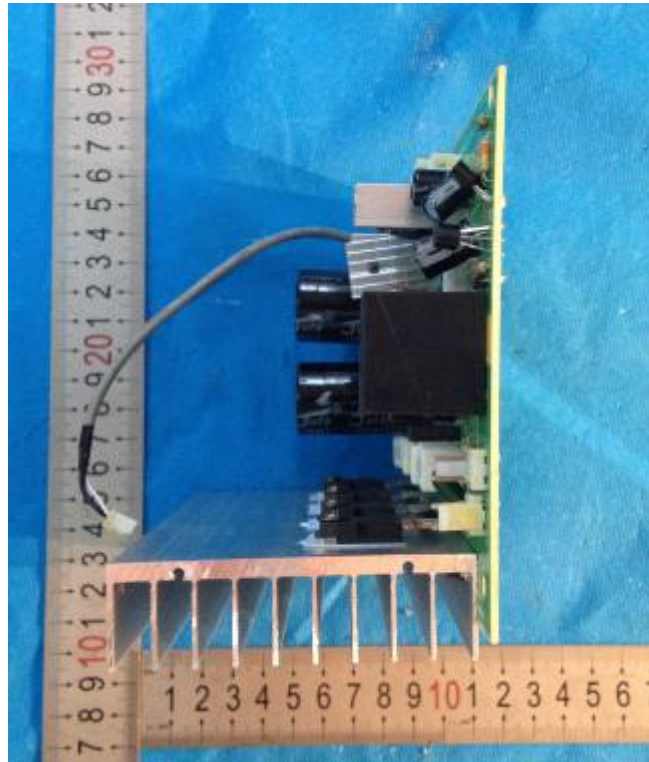


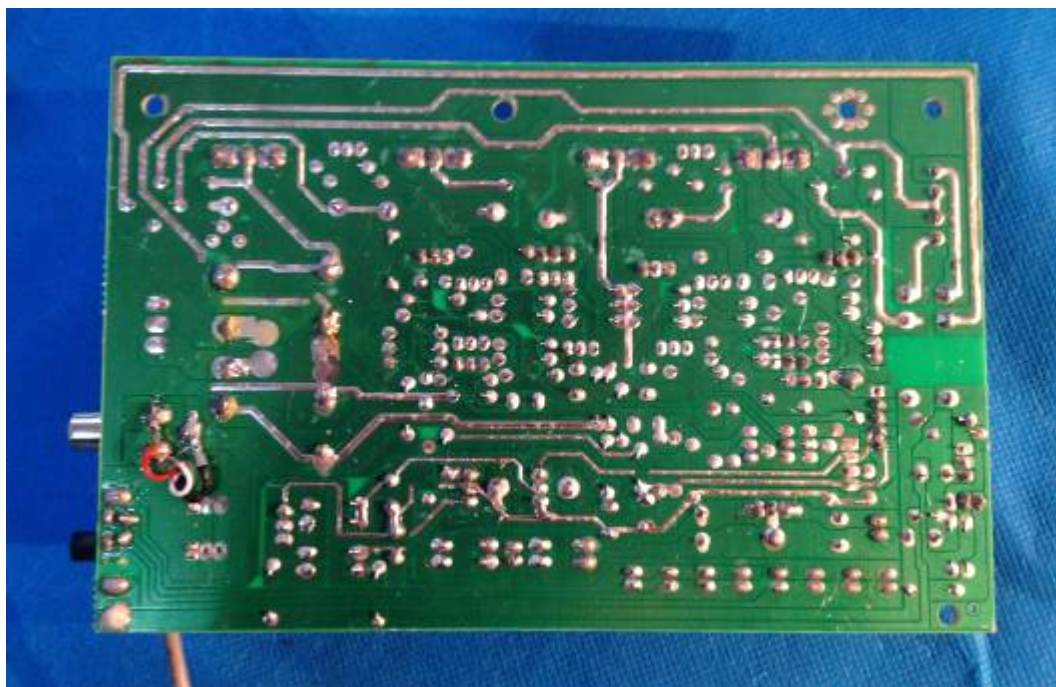


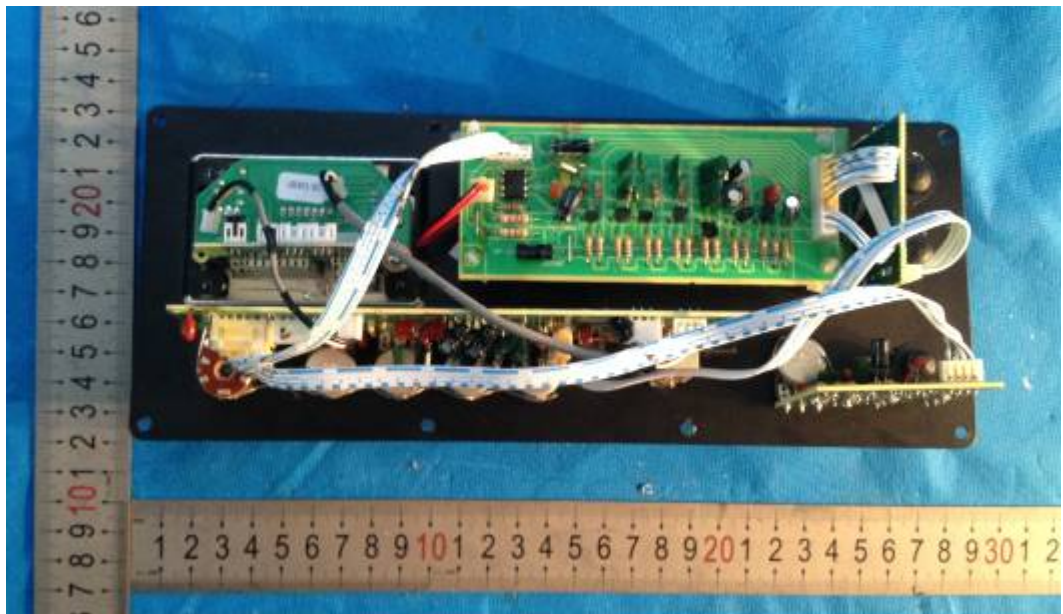


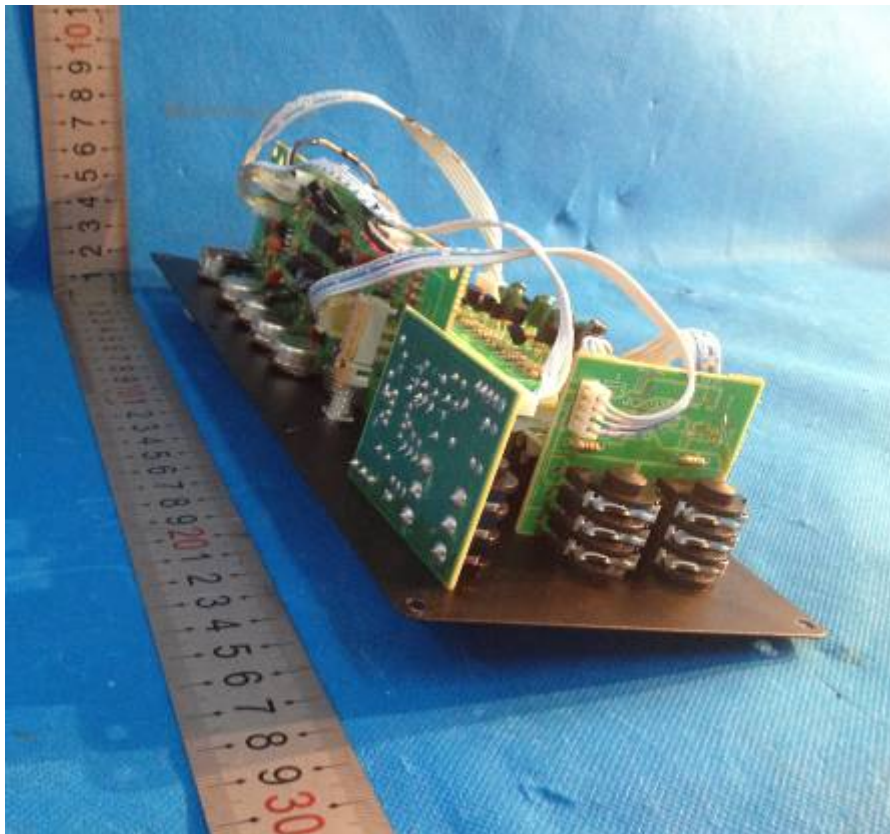
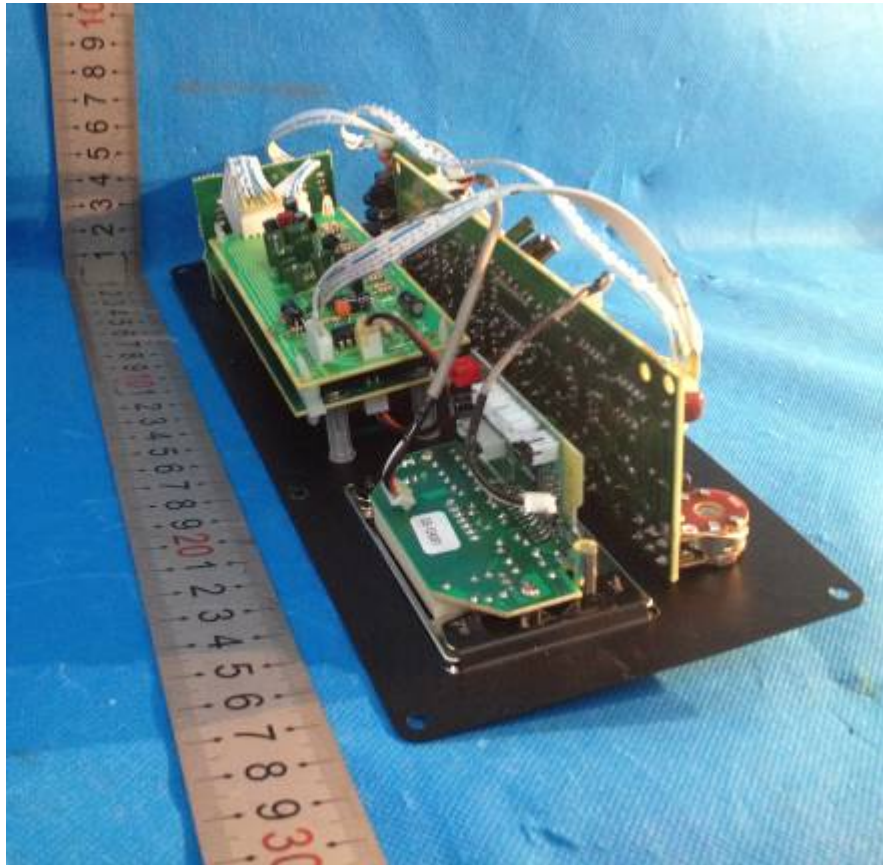


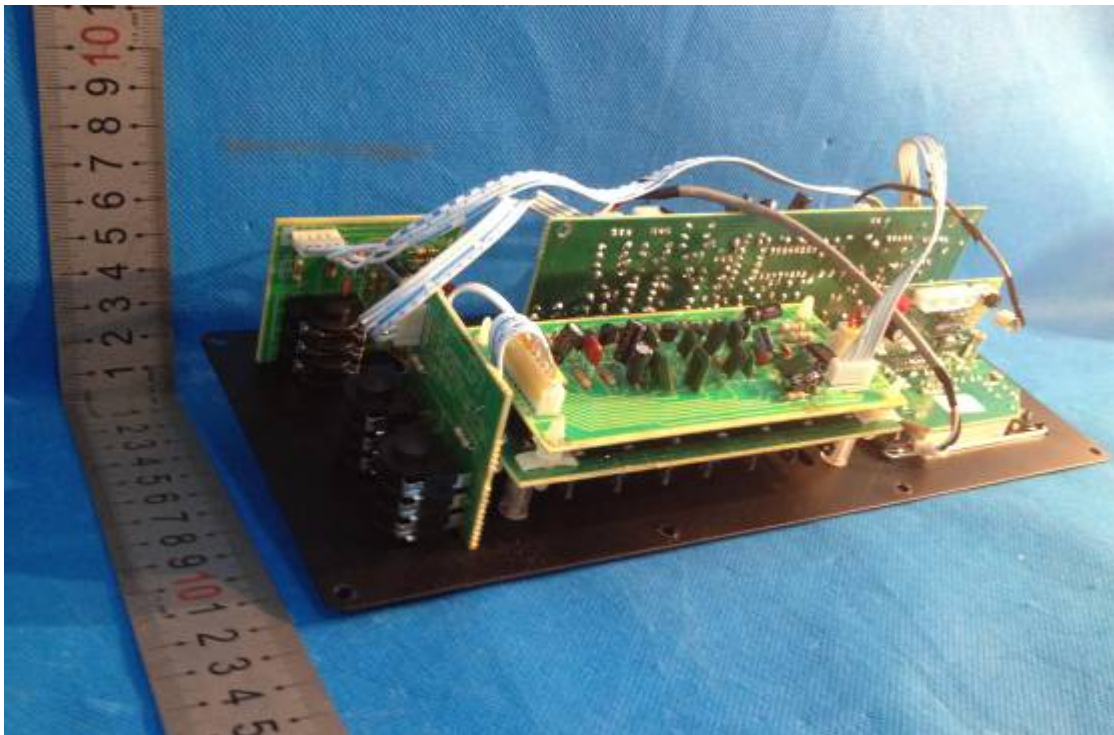
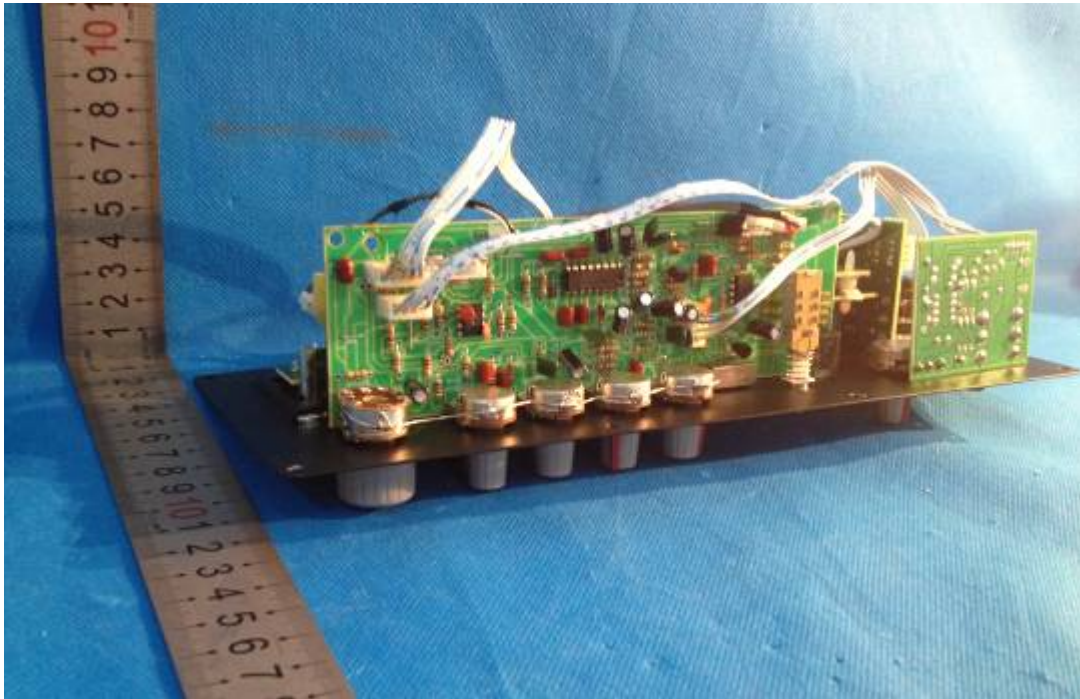


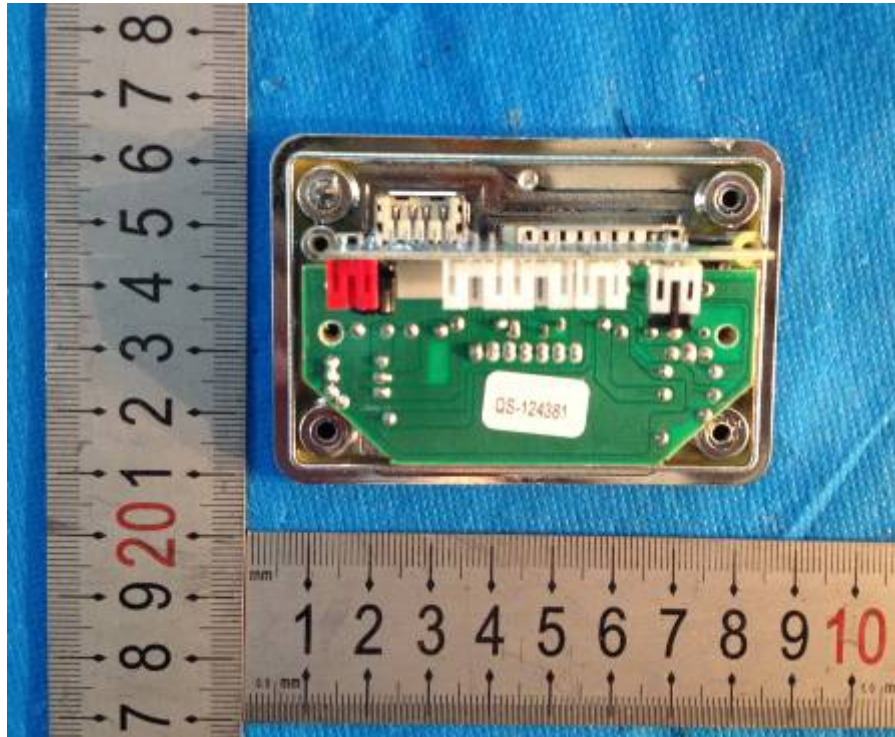


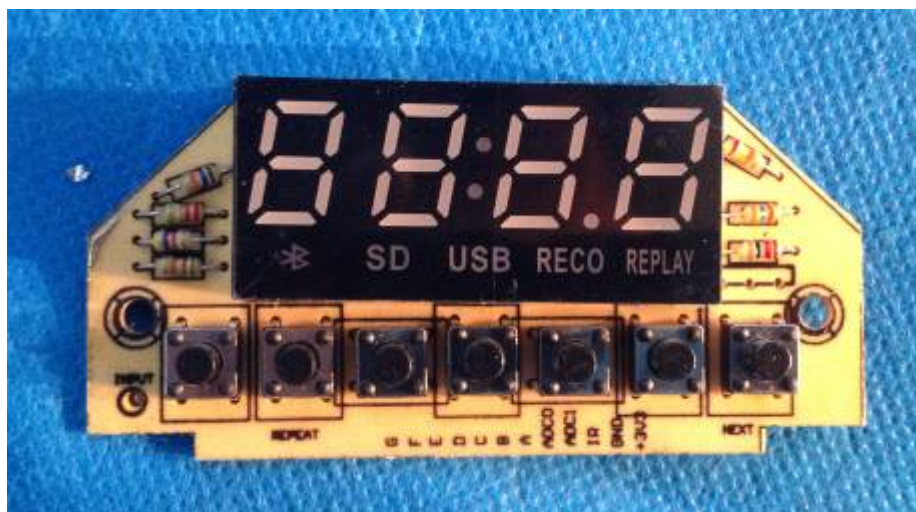


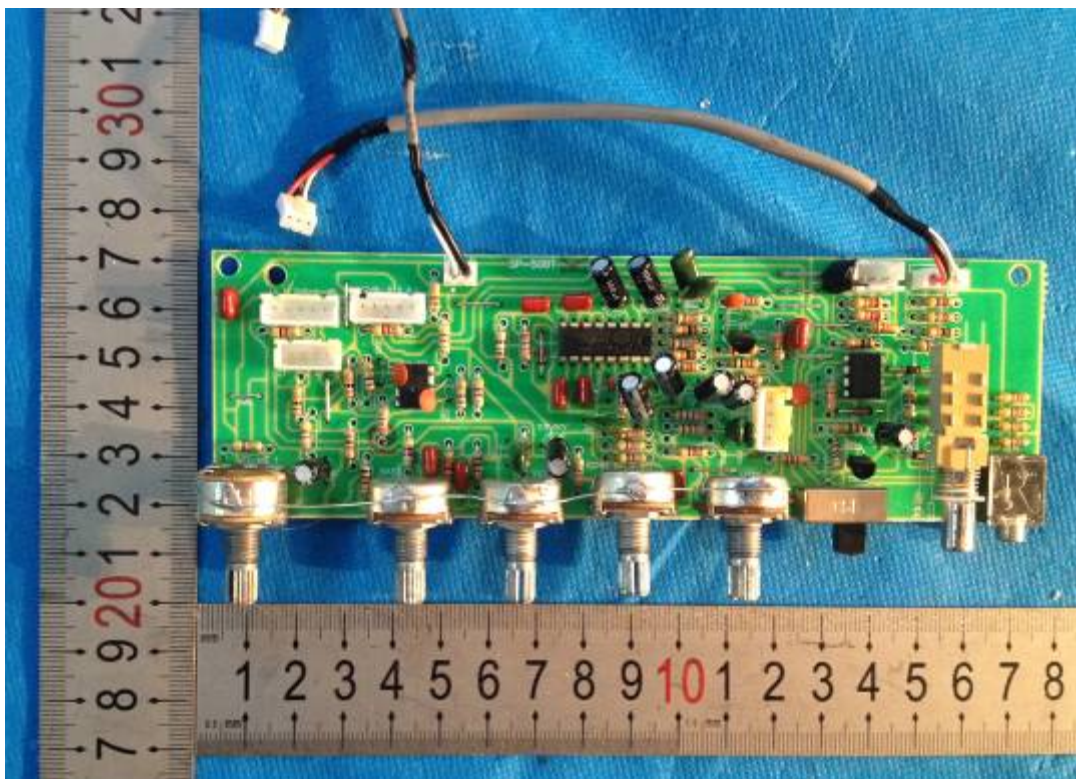


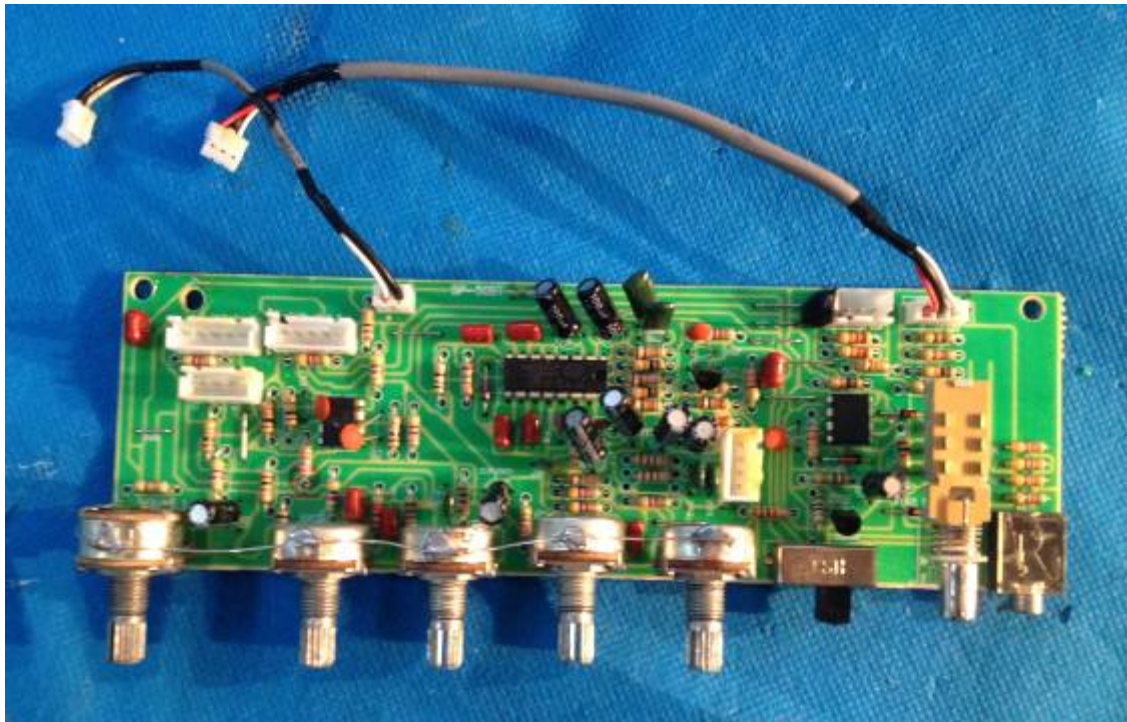
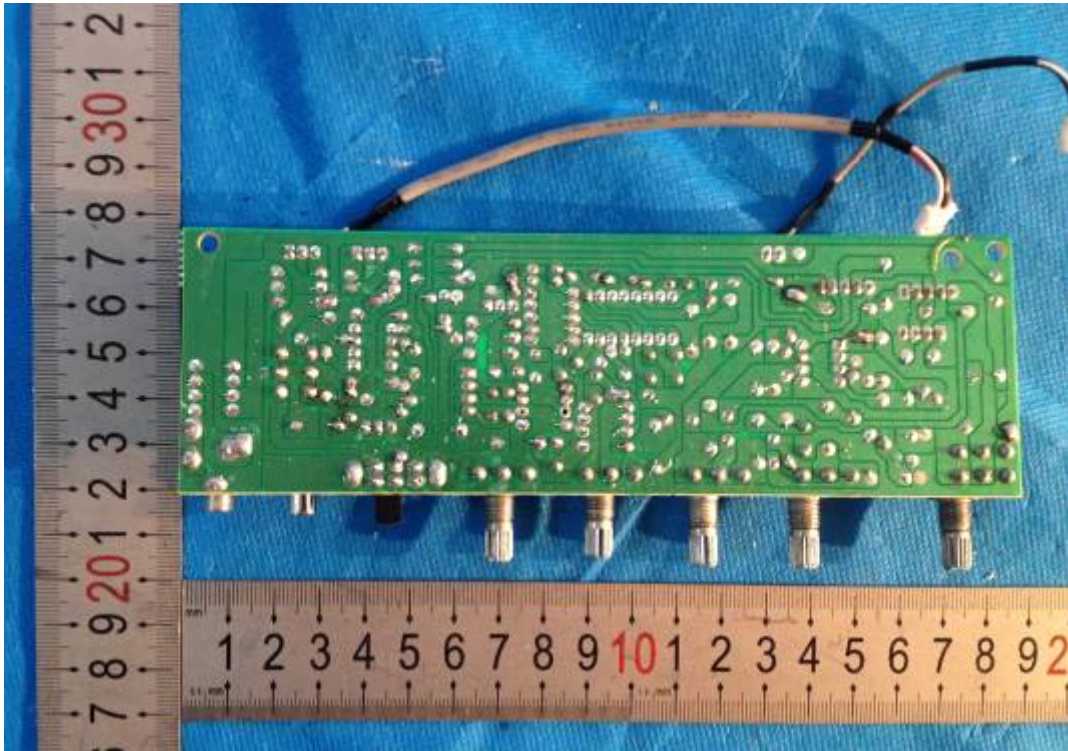


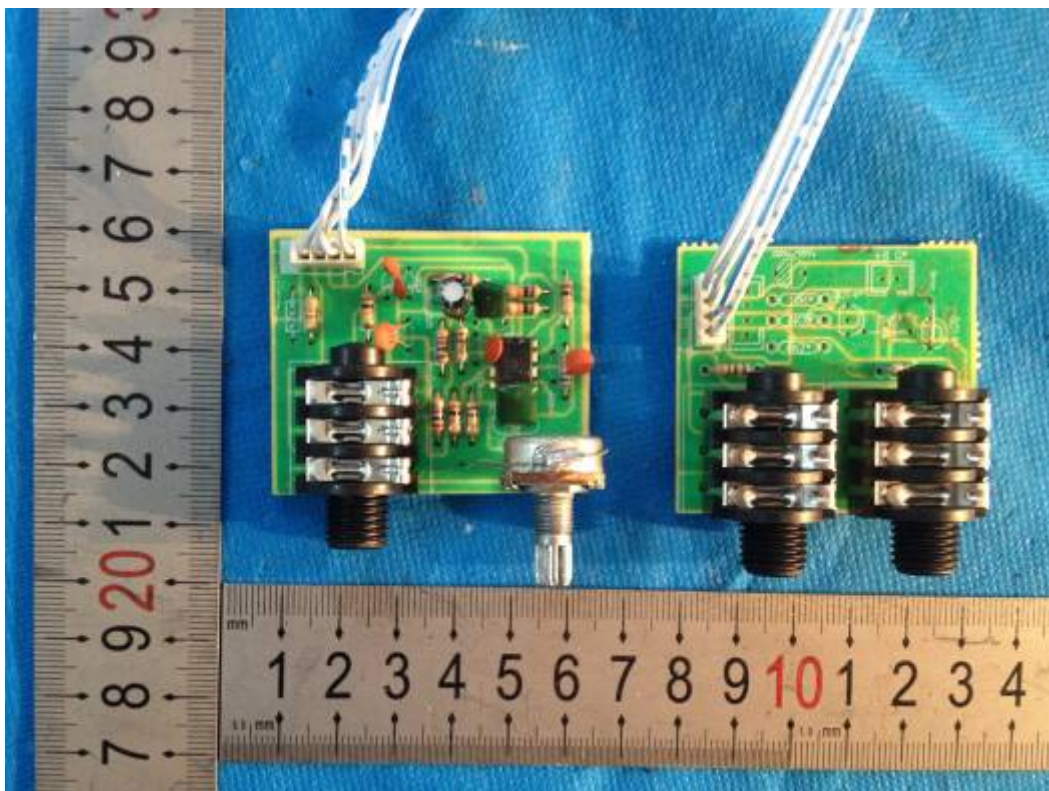
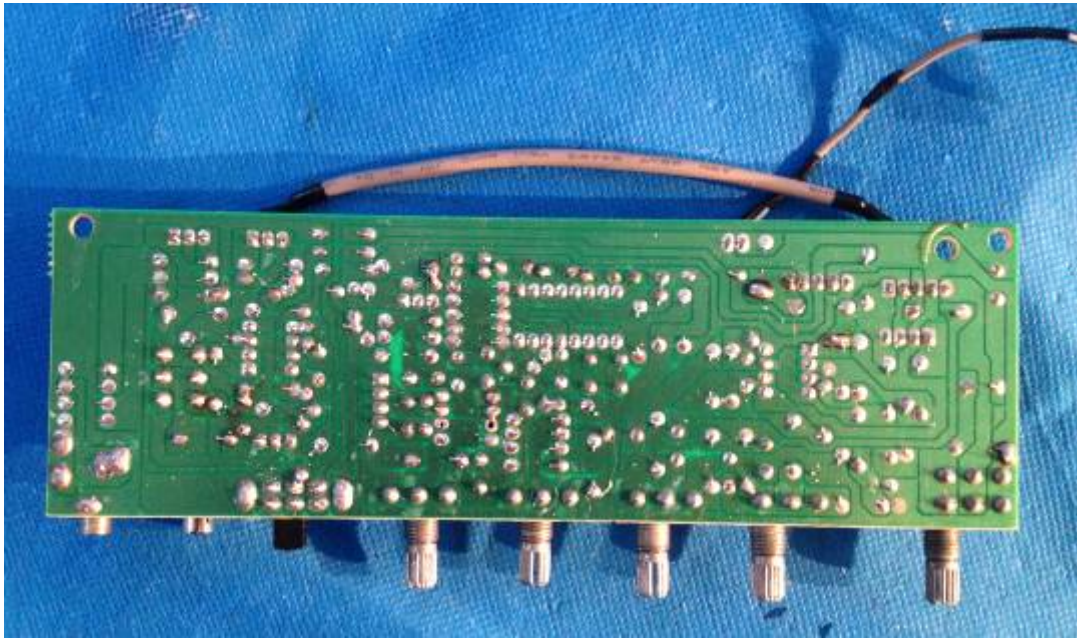


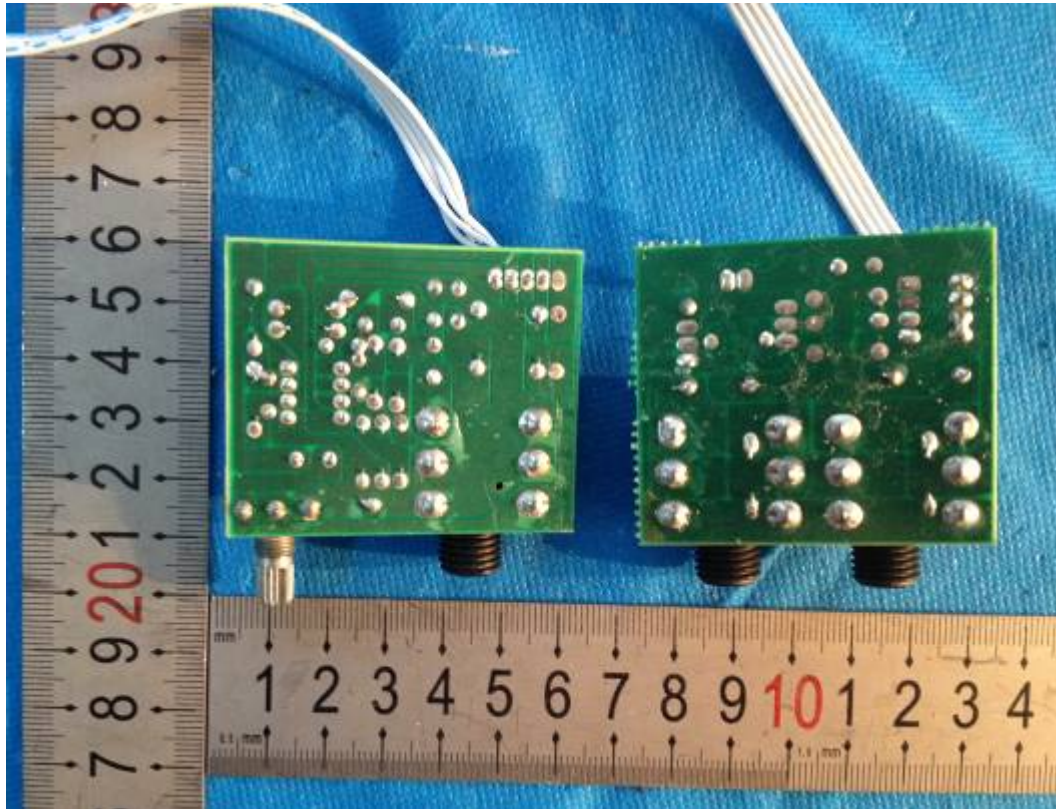


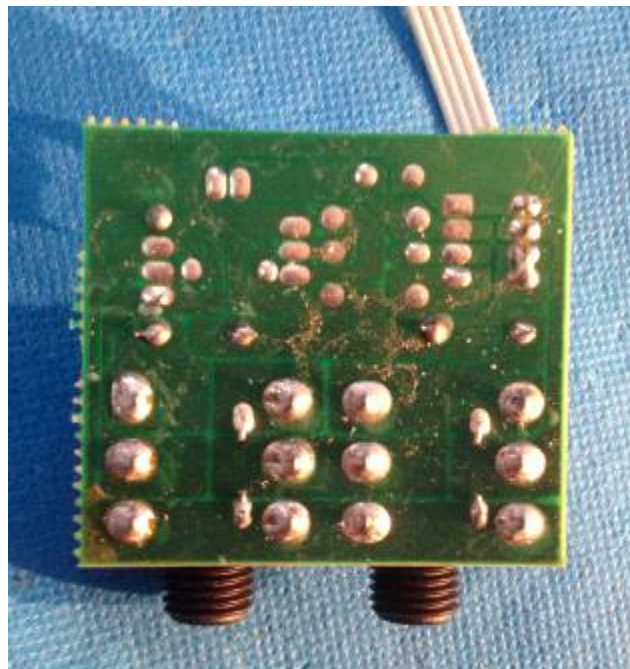
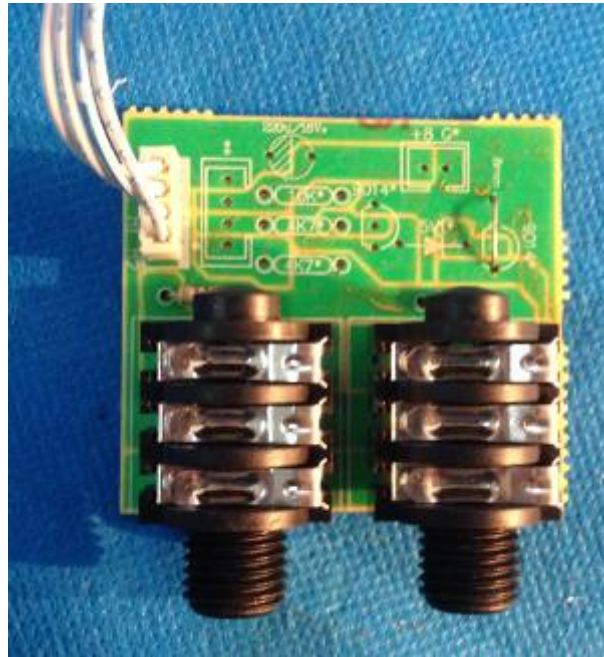


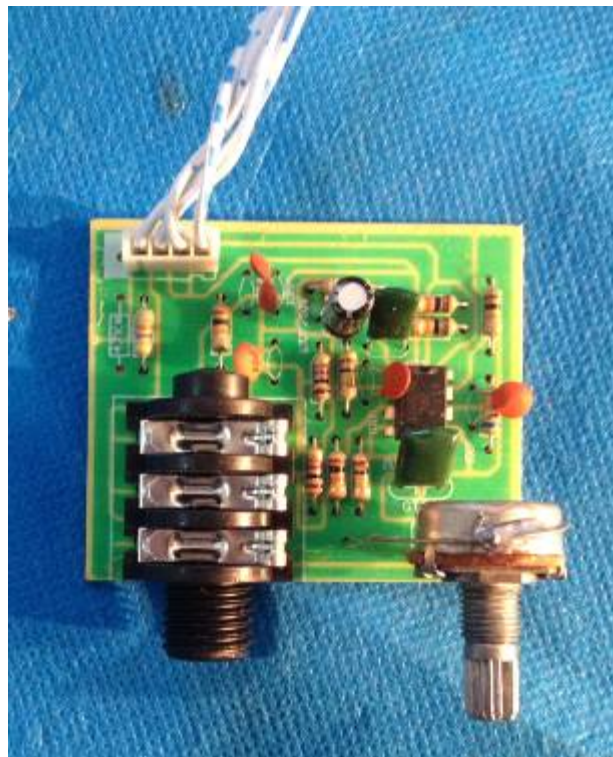
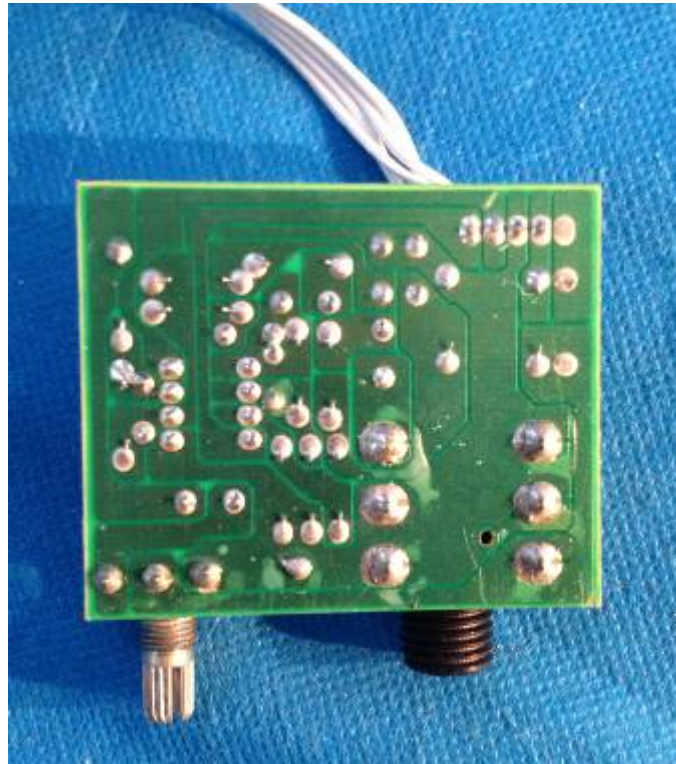


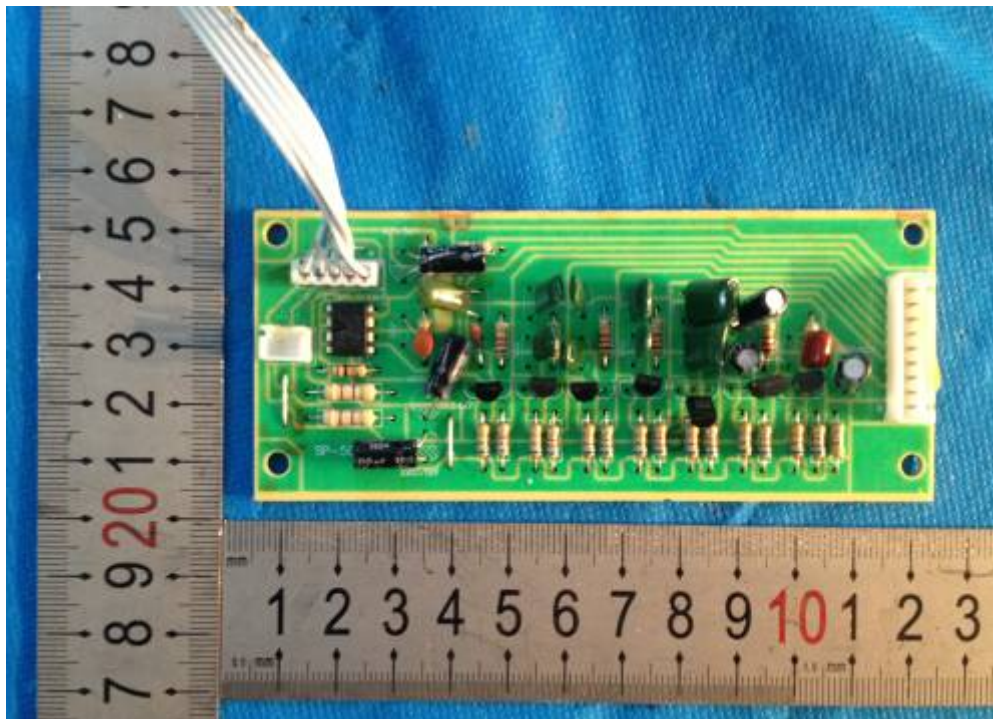
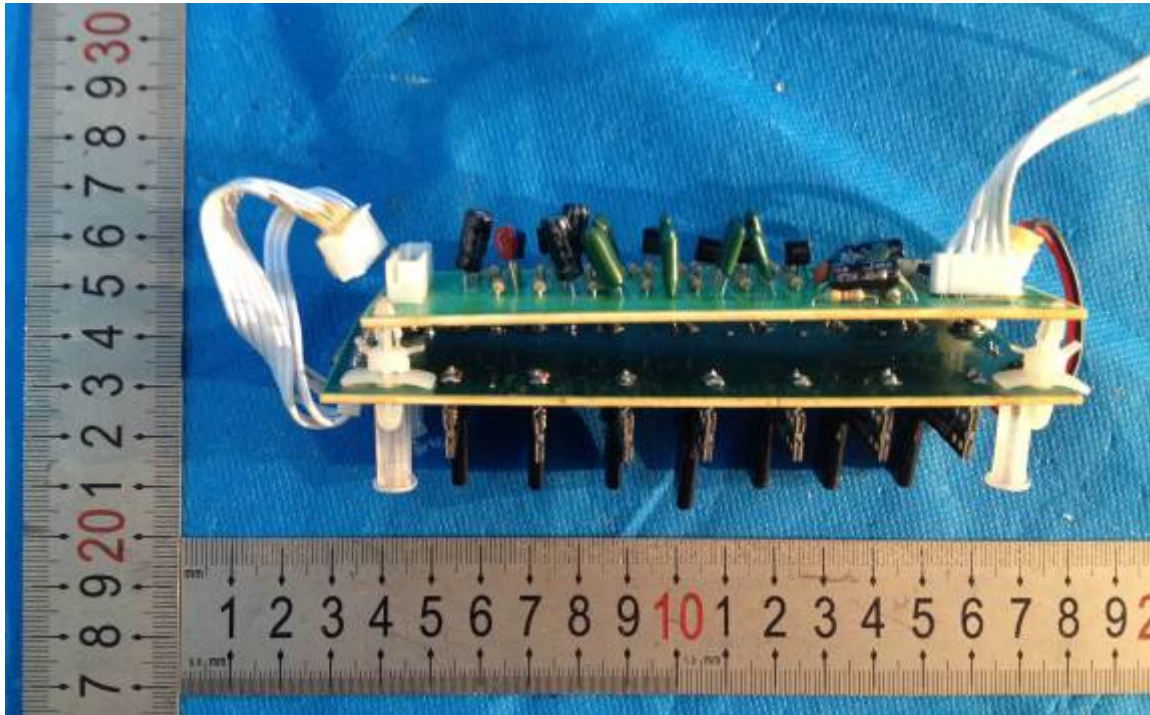


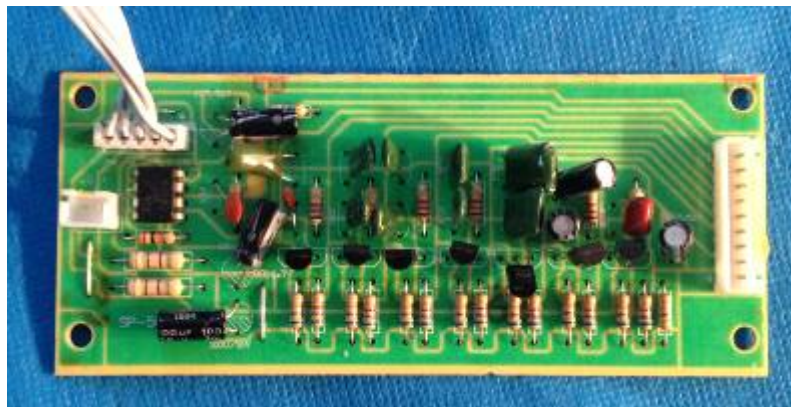
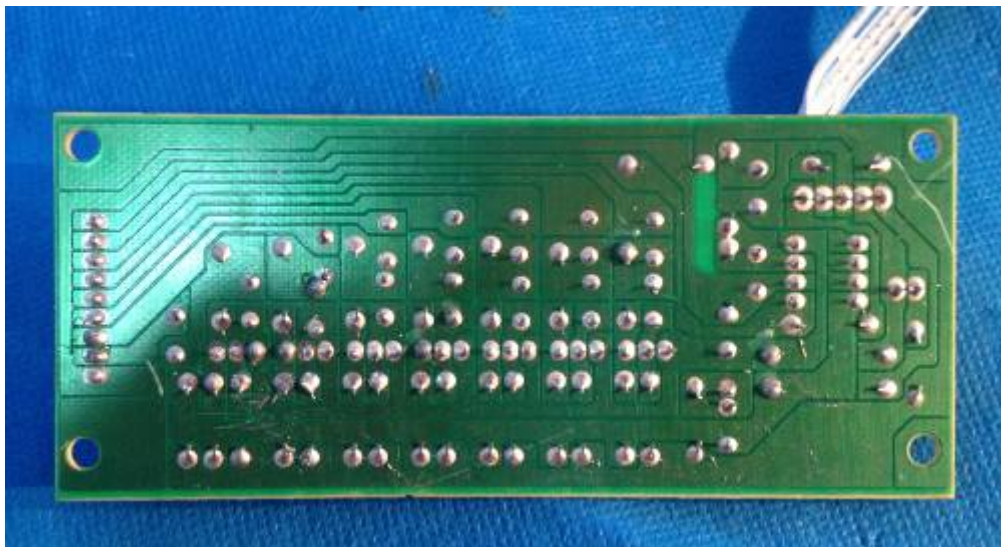
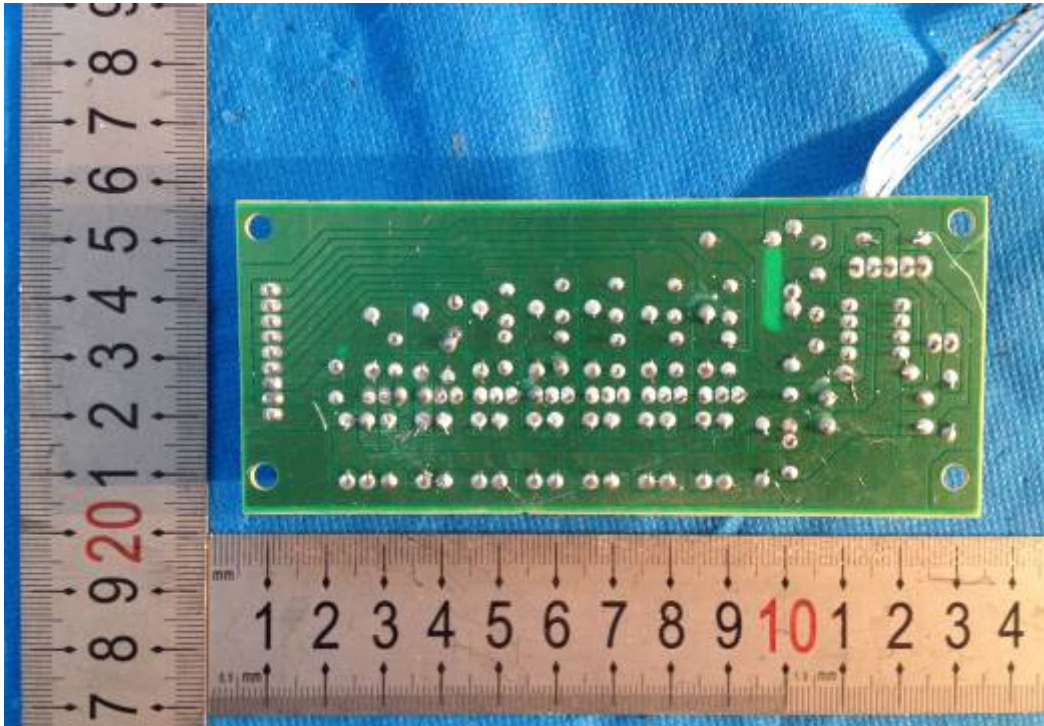


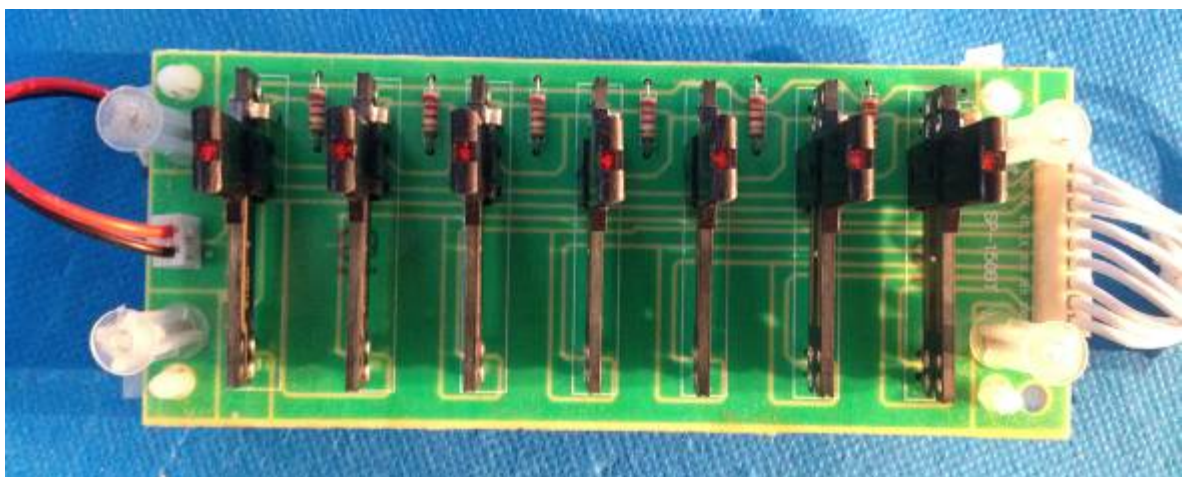
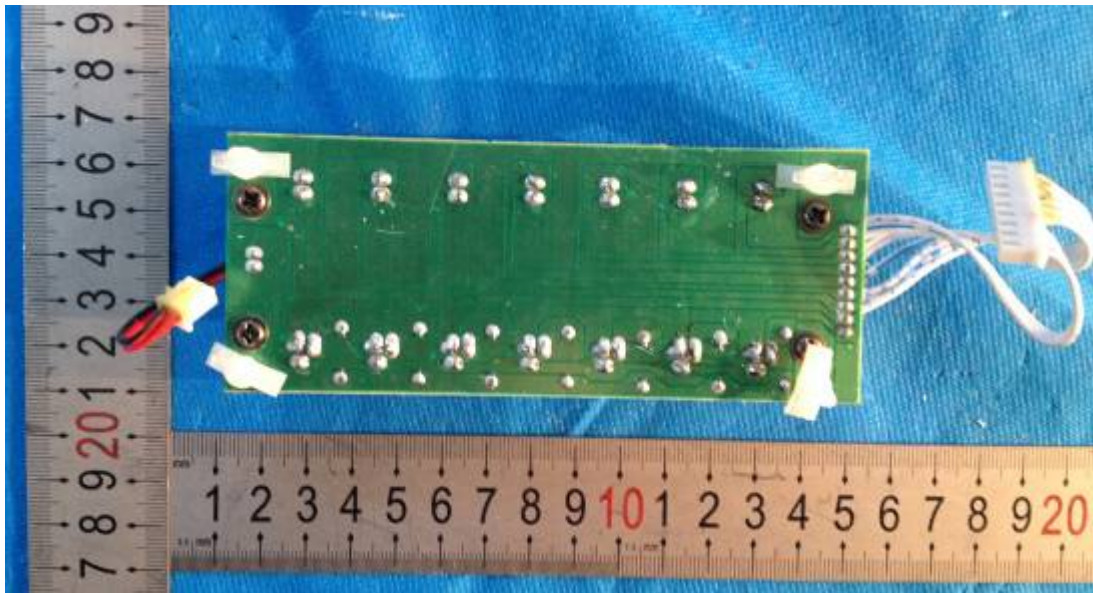
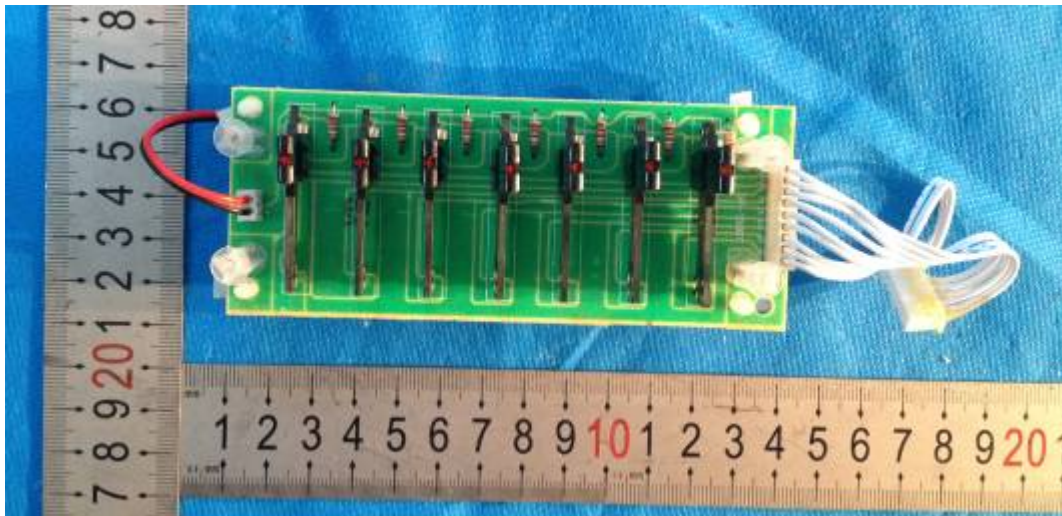


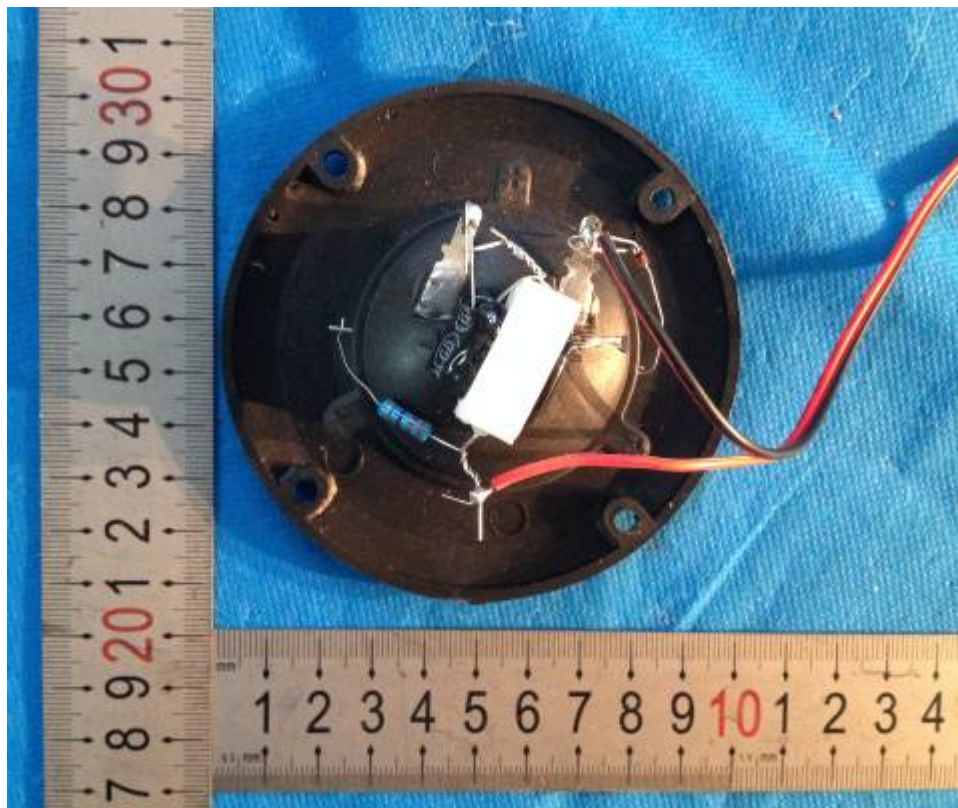
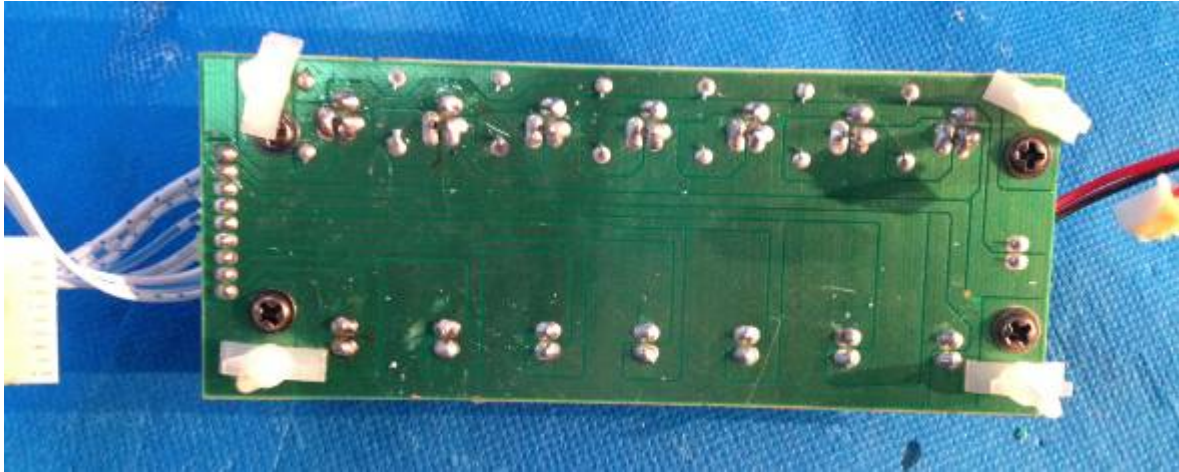


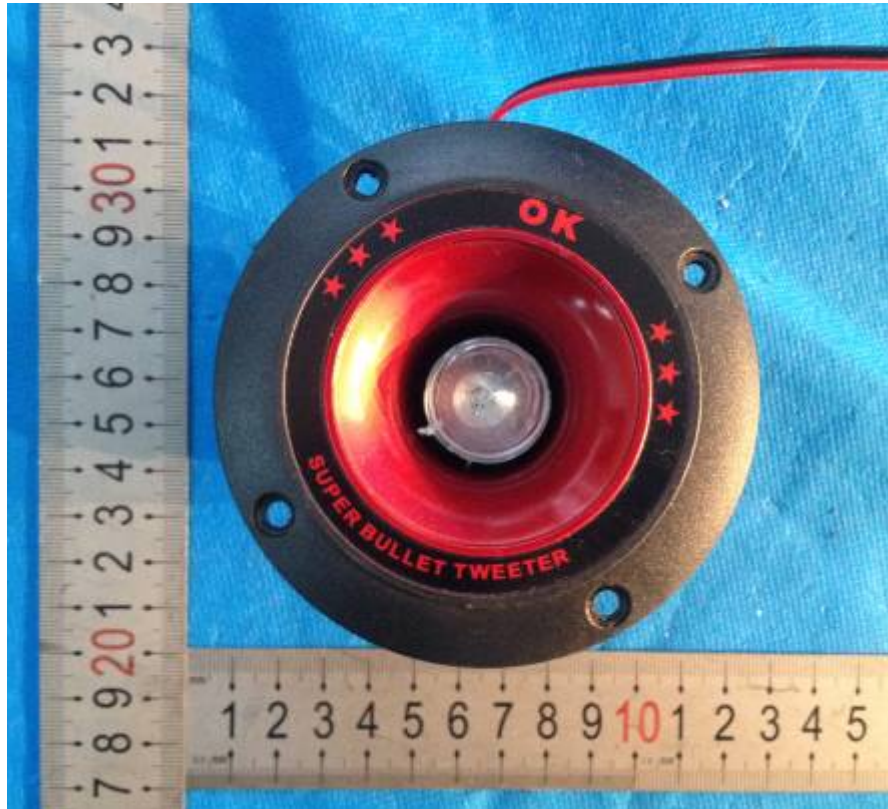


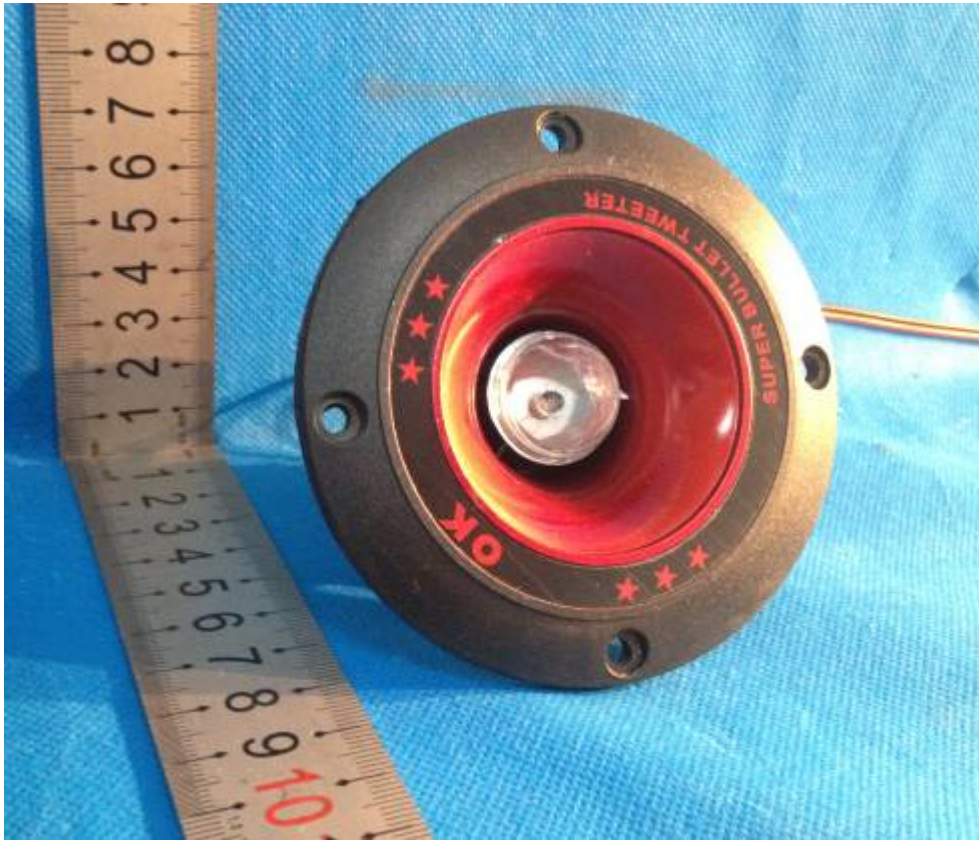


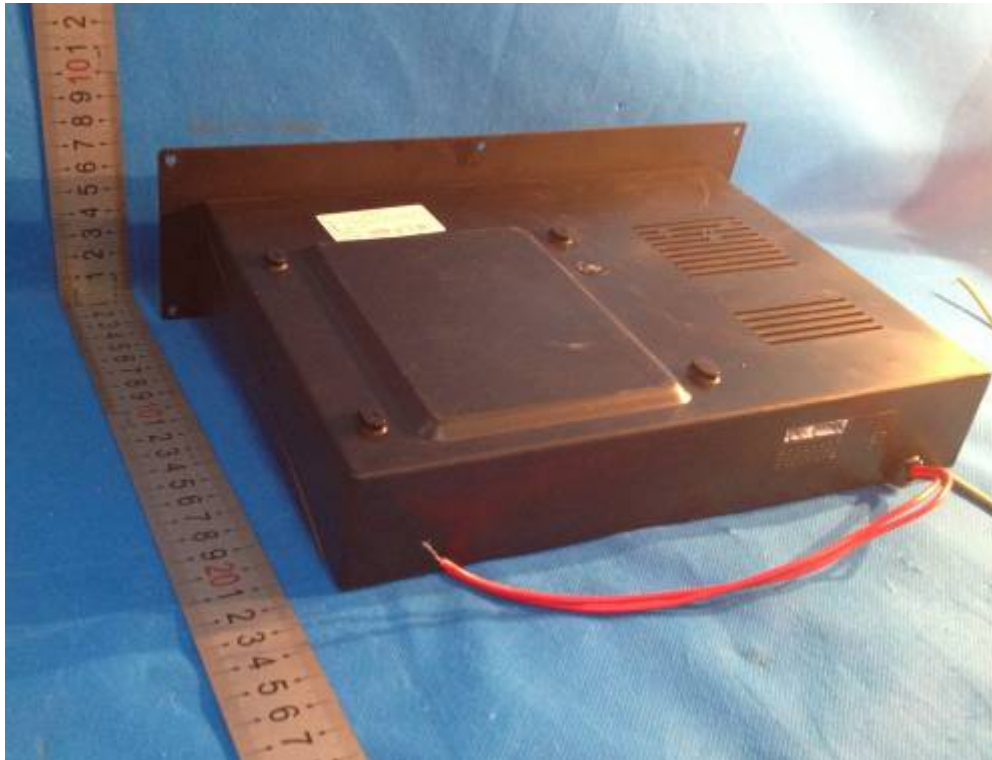


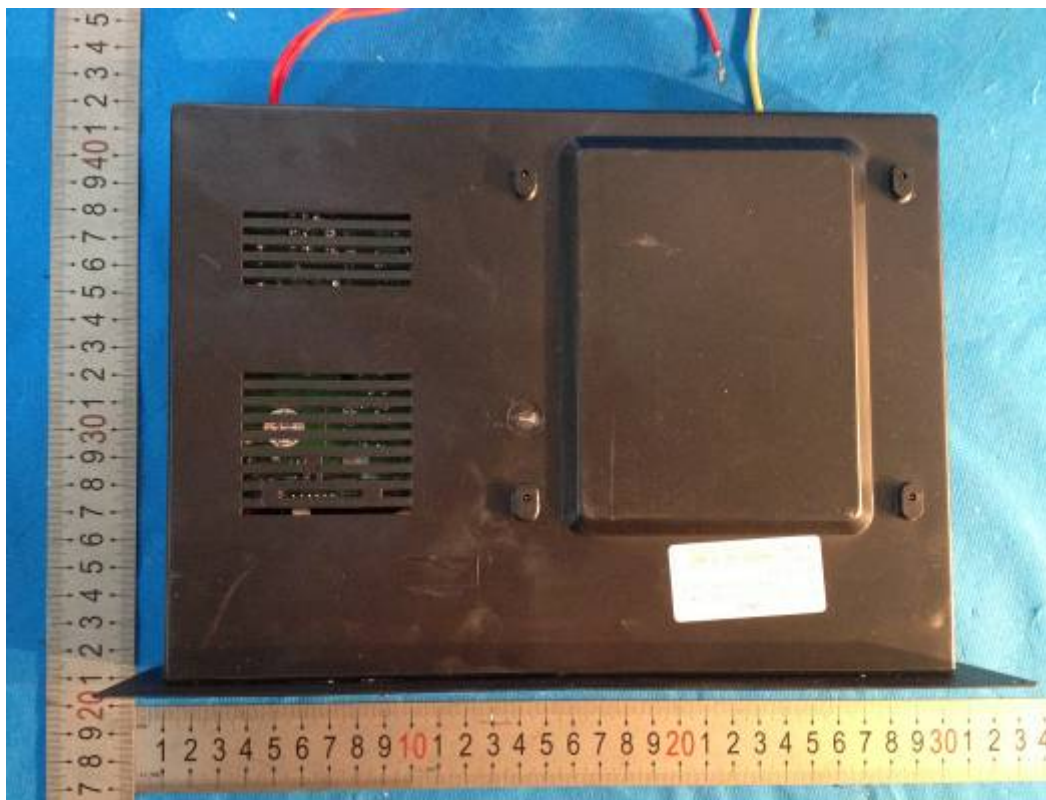
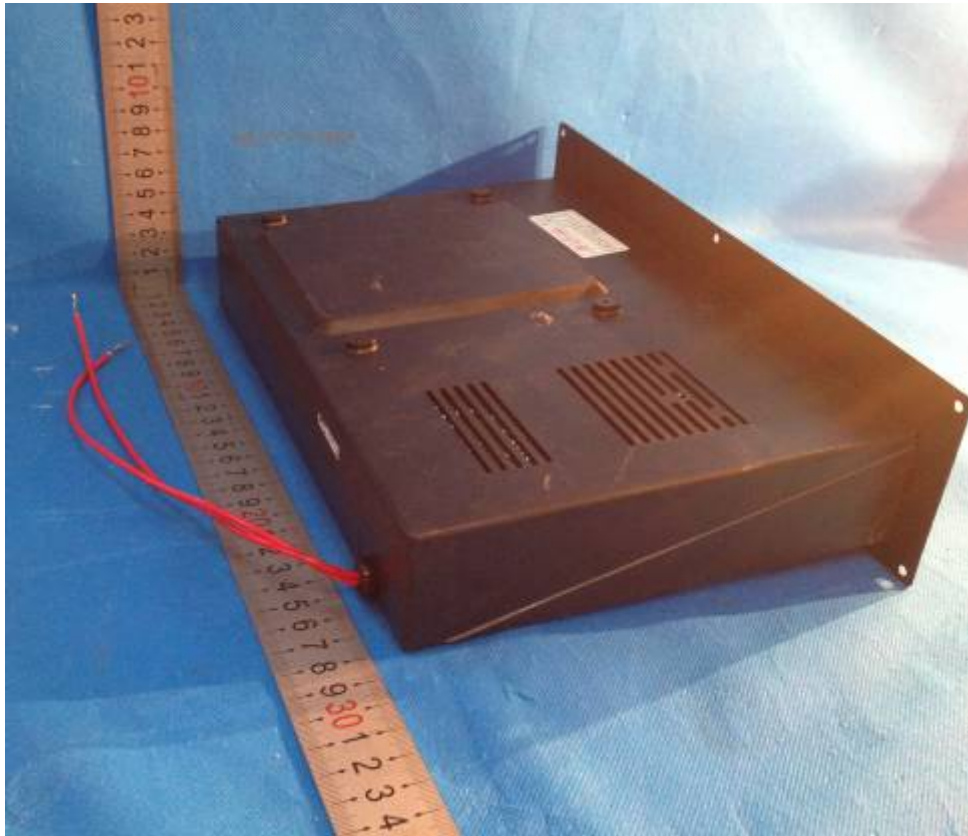


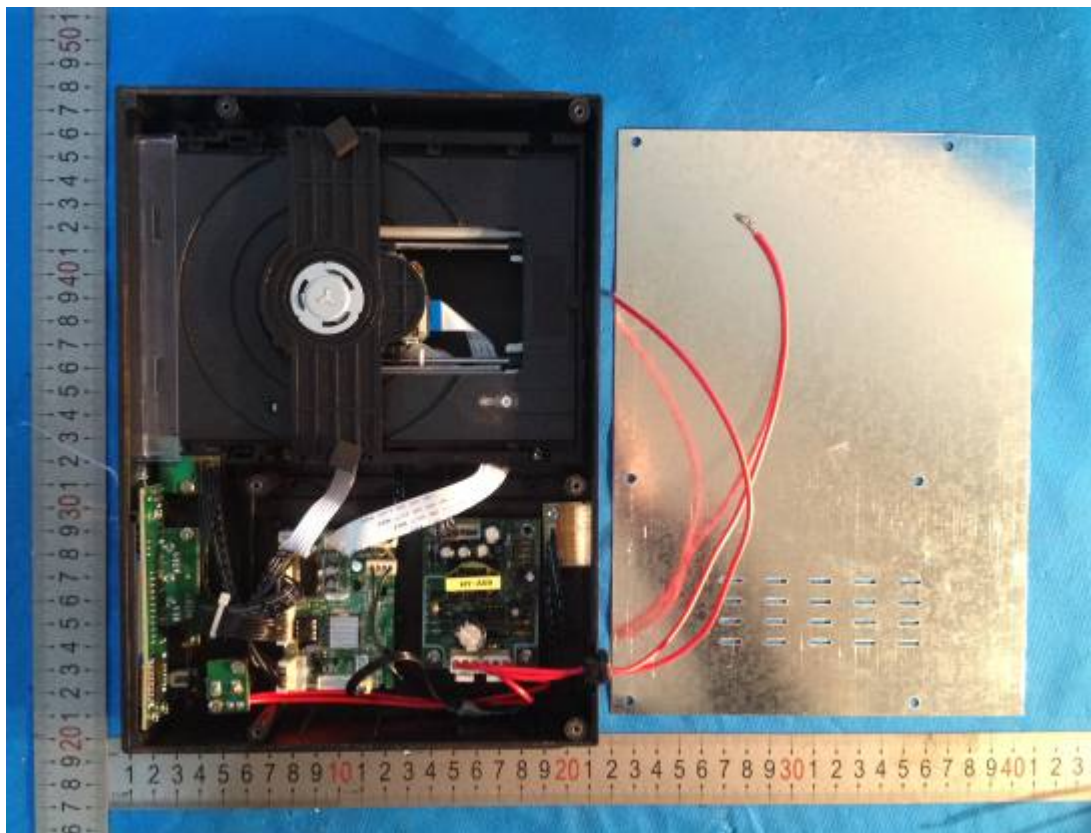
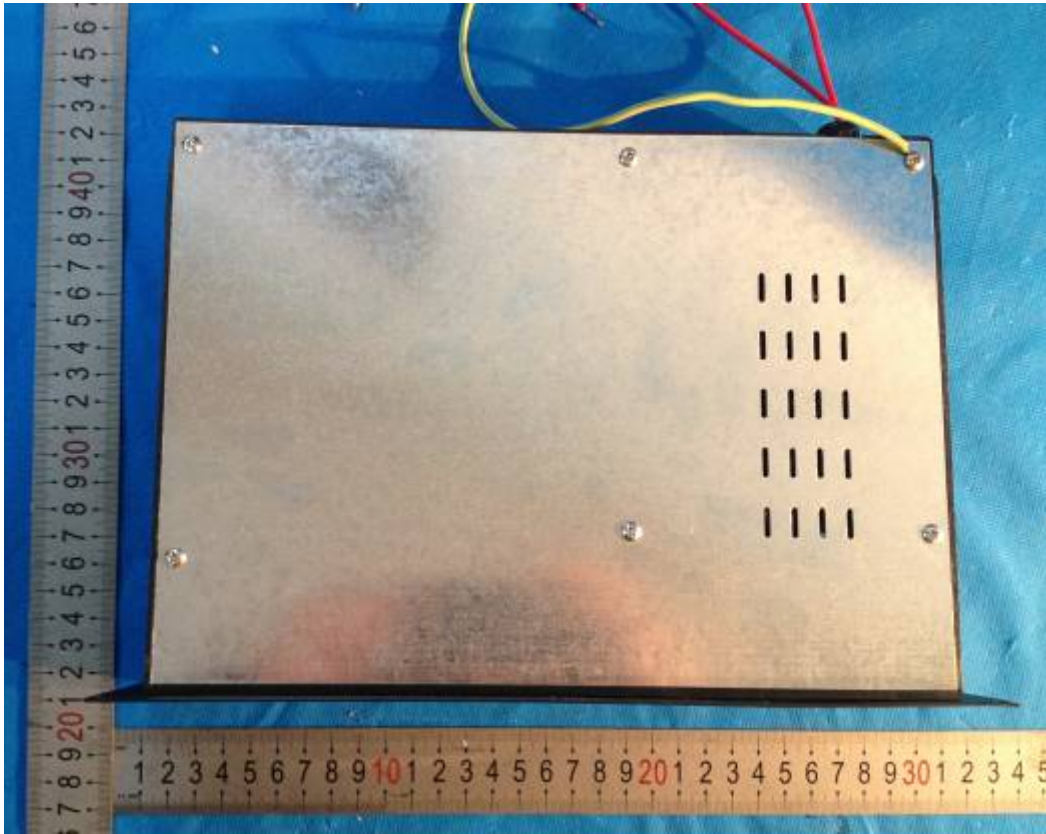


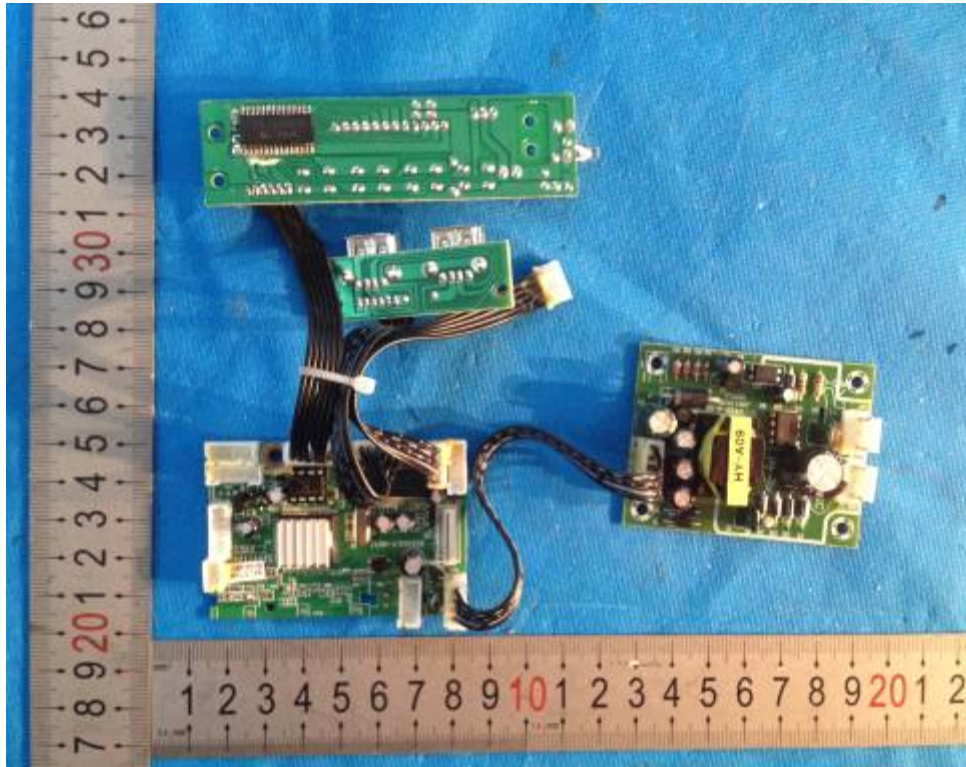


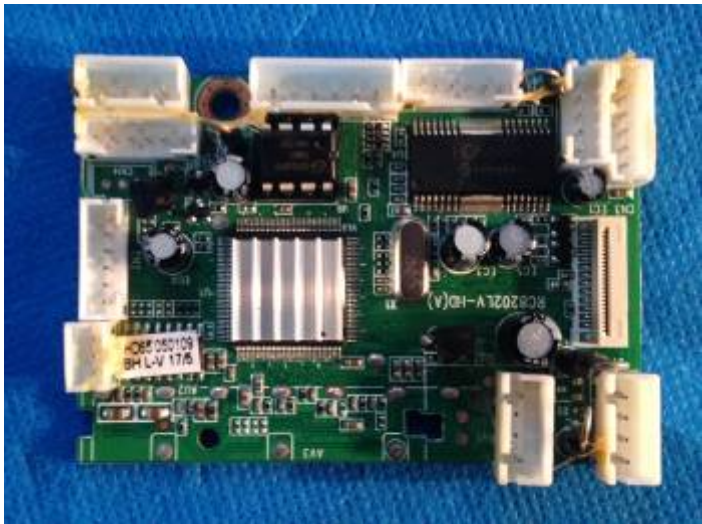
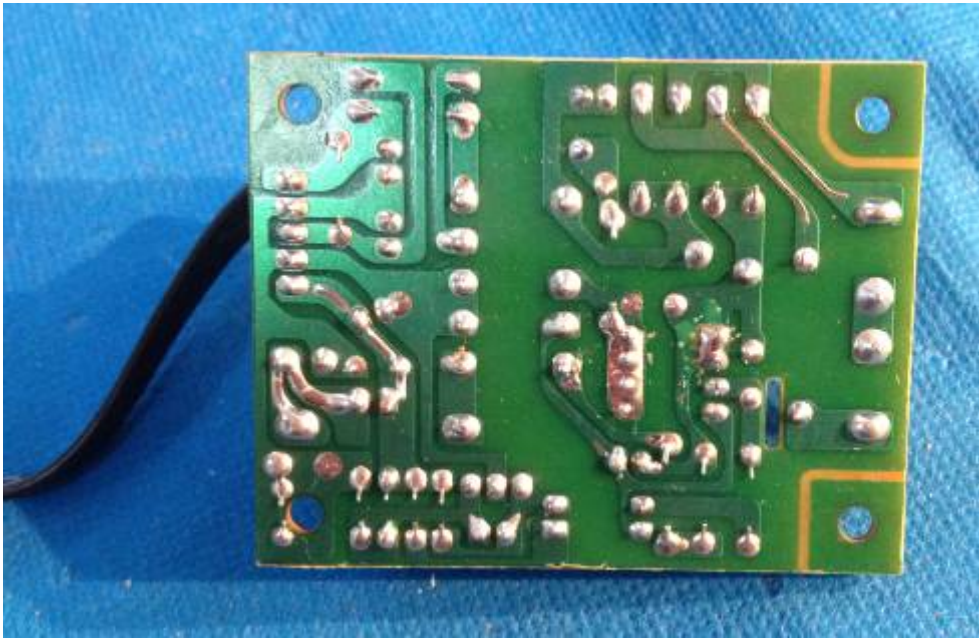


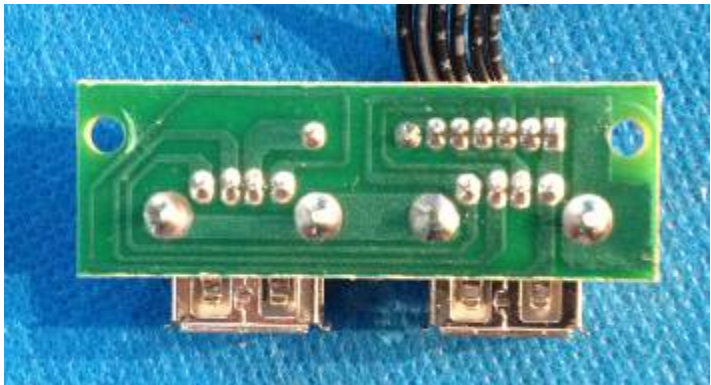
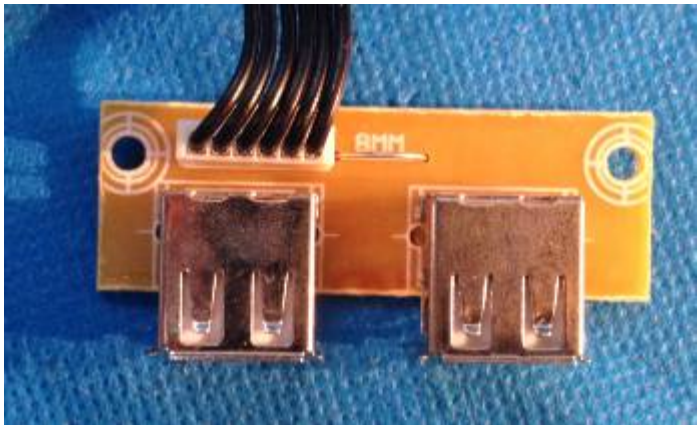
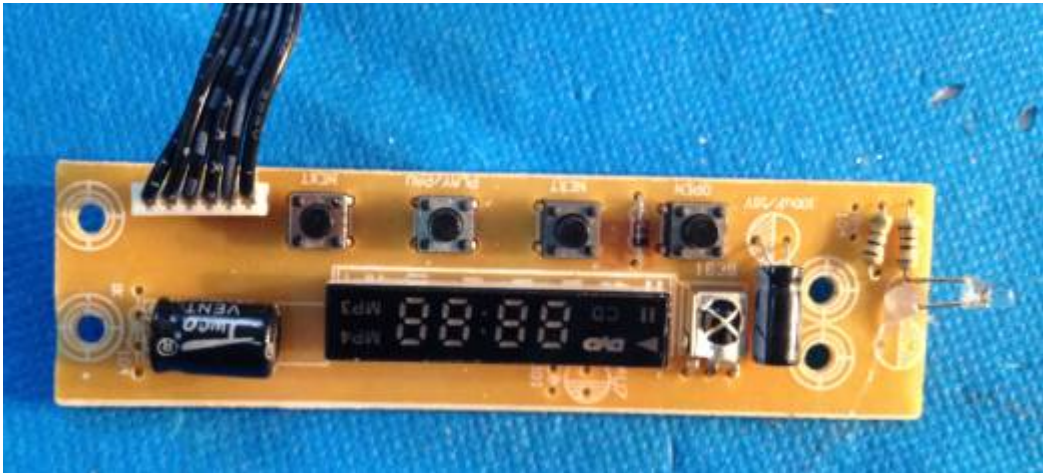
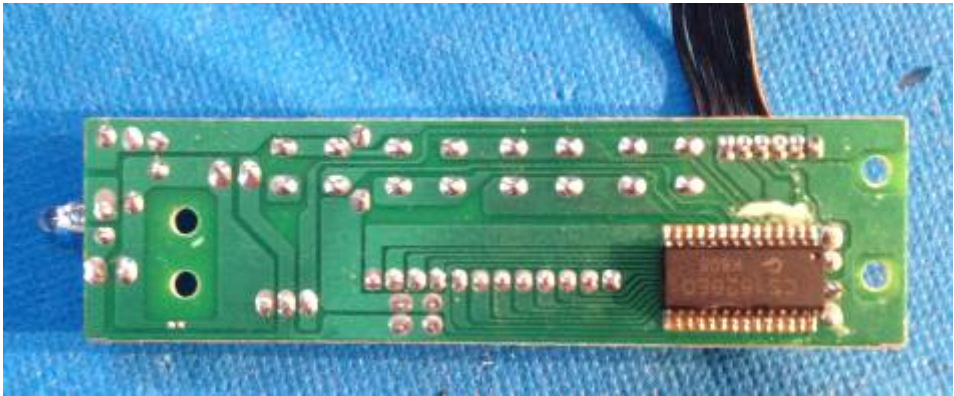


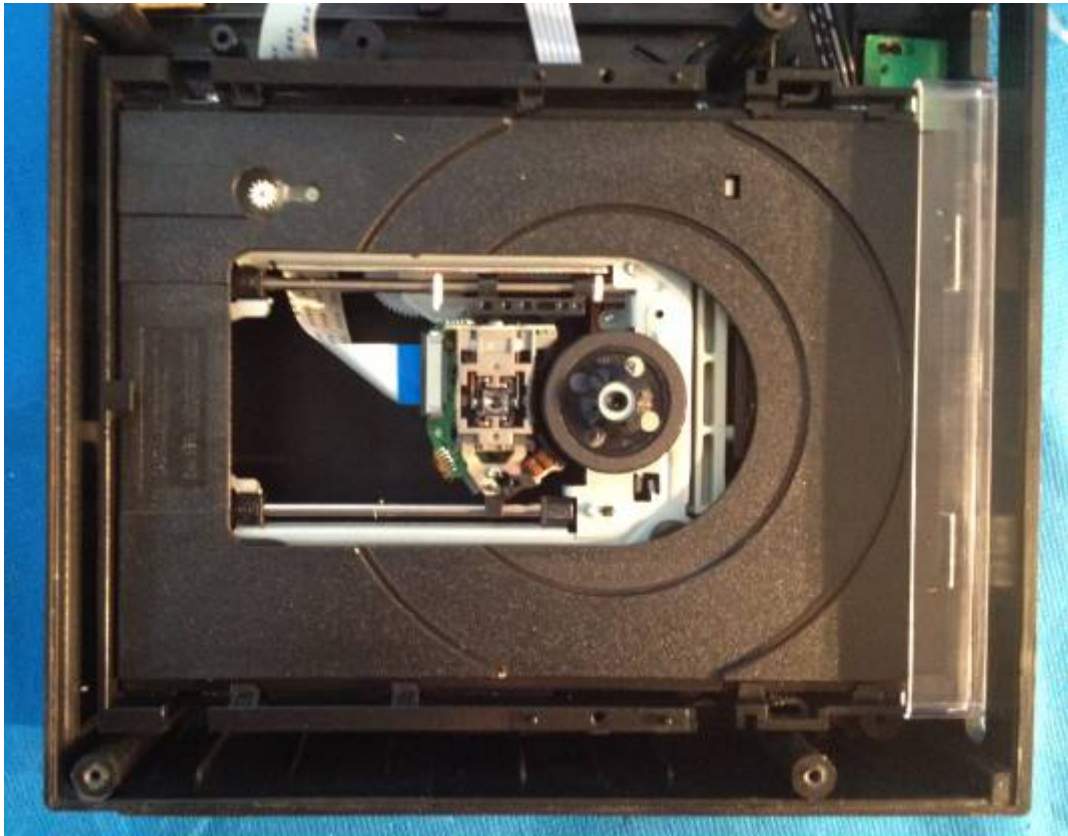








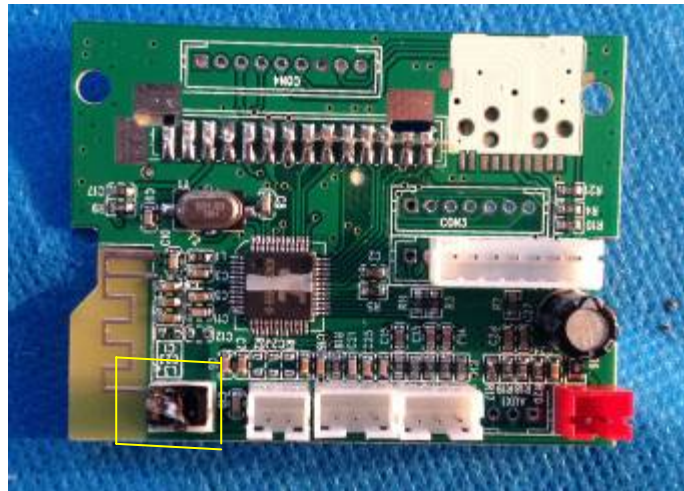
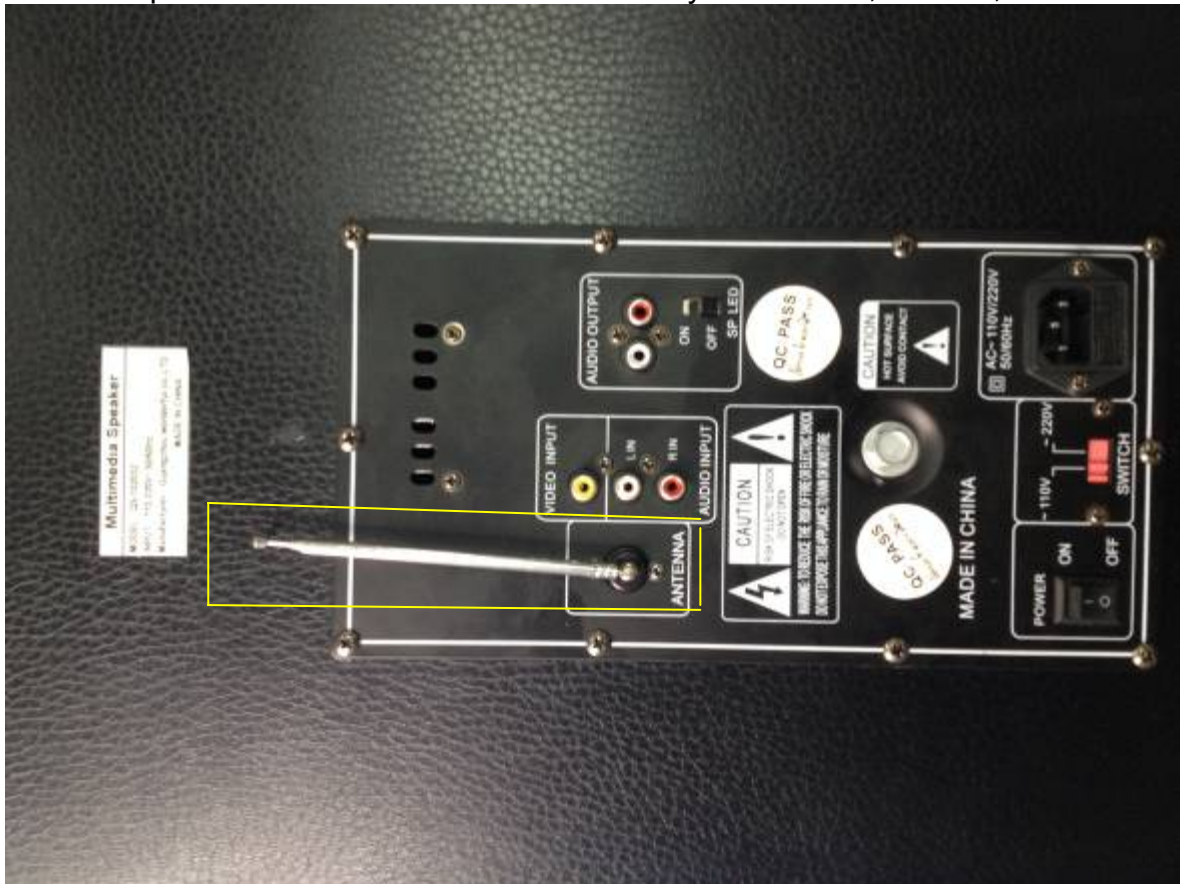


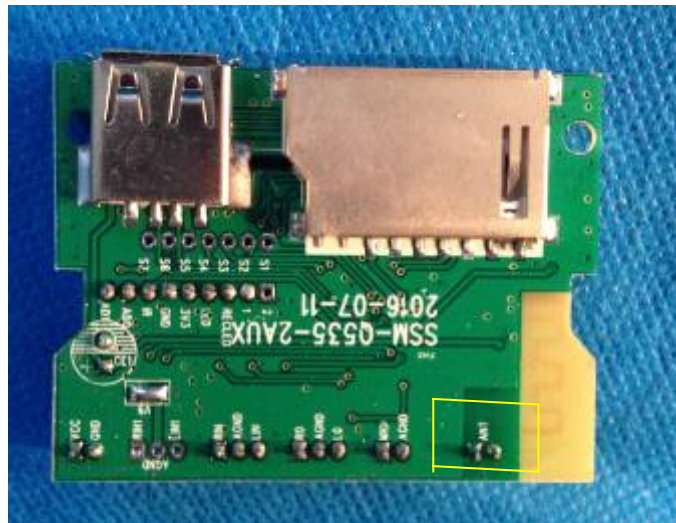


4.3 Antenna Photo

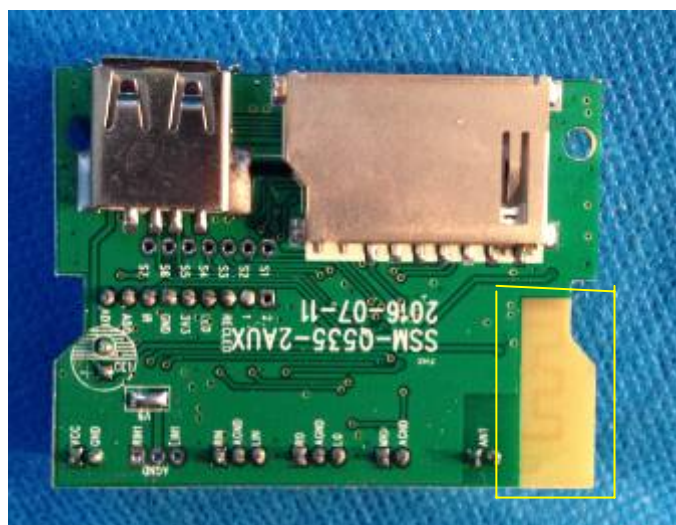
External FM Antenna

One simple retractable rod antenna without any connectors, 350mm, 3/25 wave





Internal BT Antenna
Fixed in the PCB, 14mm, 1/9 wave



5 EQUIPMENTS USED DURING TEST

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
1	Antenna	R & S	HF906	/	2016-5-10	2017-5-10
2	3m Semi-anechoic Chamber	ABLATROSS	SAC-3	/	2016-5-10	2017-5-10
3	EMI Receiver	R & S	ESCI-3	/	2016-5-10	2017-5-10
4	Active loop antenna	BJ 2nd Factory	ZN30900A	EMC6001	2016-9-24	2019-9-24
5	Horn Antenna	A-INFOMW	JXTXLB-10180-N	ITL-110	2015-1-24	2018-1-24
6	Pre Amplifier	HP	8447F	ITL-116	2016-1-19	2017-1-19
7	Spectrum Analyzer	Rohde & Schwarz	FSP30	EMC0001	2016-3-24	2017-3-24
8	EMI Test Receiver	Rohde & Schwarz	ESCI	EMC1002	2016-3-24	2017-3-24
9	Shielding room	DG ZongZhou	ZW-391 7x3.9x3 m	EMC1001	2014-5-28	2017-5-28
10	LISN	AFJ	LS16C	EMC1003	2016-1-20	2017-1-20
11	Audio signal generator	HK LONGWEI	TAG-101	EMC0010	2015-10-23	2016-10-23
12	LISN	Rohde & Schwarz	ESH2-Z5	1.005	2016-5-10	2017-5-10
13	Spectrum analyzer	Agilent	E4407B	RF0001	2015-10-25	2016-10-25
14	Test receiver	R & S	ESCI	RF0002	2015-10-25	2016-10-25
15	Bilog antenna	TESEQ	CBL6111D	RF0003	2015-11-25	2016-11-25
16	Horn antenna	Schwarzbeck	BBHA 9120D	RF0004	2016-3-6	2017-3-6
17	Horn antenna	Schwarzbeck	BBHA 9170	RF0005	2016-3-6	2017-3-6
18	50Ω Coaxial switch	Anritsu	MP59B	RF0006	2016-3-6	2017-3-6
19	PreAmplifier	Agilent	8449B	RF0007	2015-10-25	2016-10-25
20	Loop Antenna	ARA	PLA-1030/B	RF0008	2016-6-8	2017-6-8
21	Low frequency cable	EM	R01	RF0009	2015-11-5	2016-11-5
22	High frequency cable	Schwarzbeck	AK9515H	RF0010	N/A	N/A
23	USB RF power sensor	DARE	RPR3006W	RF0011	2015-10-25	2016-10-25
24	Spectrum Analyzer	Agilent	E4407B	RF0012	2015-10-25	2016-10-25
25	Sugnal Analyzer	Agilent	N9020A	RF0013	2015-11-18	2016-11-18

End of report