

TEST REPORT

Applicant : Shenzhen Atten Technology Co., Ltd.-Power Supply Branch
Address : Zone B, 5 floor, Building A, Lilan Technology Park, Phoenix street,
Guangming New District, Shenzhen, China

Report on the submitted sample said to be:

Sample name : Linear power supply
Trade Name : 安泰信/ATTEN
Model : TPR32-5A, TPR75-2A
Manufacturer : Shenzhen Atten Technology Co., Ltd.-Power Supply Branch
Address : Zone B, 5 floor, Building A, Lilan Technology Park, Phoenix street,
Guangming New District, Shenzhen, China
Test conclusion : Based on the performed tests on submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis (2-ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP), Di Iso Butyl Ortho Phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.
Testing period : Mar. 23, 2019 to Apr. 01, 2019
Date of report : Apr. 01, 2019

Testing Requested:	Results
Selected test(s) as requested by client	Pass

Prepared by:

Calvin Chen

Calvin Chen

Examine By:

Tony Mo

Tony Mo

Approved(Manager):

Maichael Ma

Maichael Ma



Testing method:

1. With reference to IEC 62321-1:2013, review was performed for the samples disjoined from the submitted articles submitted by the Applicant
2. Tests were performed for the samples indicated by the photos in the report with test methods reference to EN 62321-1:2013, Procedures for the determination of Levels of Six regulated Substances in Electrotechnical Products
 - (1) With reference to IEC 62321-3-1:2013, Screening by XRF spectorscop
 - (2) Wet Chemical Test Method
 - a. With reference to IEC 62321-5:2013, Determination of Lead & Cadmium by ICP-OES or AAS
 - b. With reference to IEC 62321-4:2013, Determination of Mercury by ICP-OES
 - c. With reference to IEC 62321-7-1:2015, Determination of Hexavalent Chromium by Spot or Colorimetic Methodcd
 - d. With reference to IEC 62321-6:2015, Derermination of PBBs and PBDEs by GC-MS
 - e. With reference to IEC 62321-8:2017, determination of DEHP, DIBP, DBP and BBP by GC-MS.

Note: The test results are related only to the tested items. The report shall not be reproduced except in full without the written approval of the testing laboratory.

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
1	Black plastic (plug)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
2	Silver metal	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
3	White plastic	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
4	Black plastic wire skin	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
5	Brown plastic wire skin	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
6	Blue plastic wire skin	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
7	Yellow green plastic wire skin	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
8	Wire core	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	-	-	-	
		DEHP	-	-	-	
		DIBP	-	-	-	
		DBP	-	-	-	
		BBP	-	-	-	

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
9	Black plastic handle	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
10	Silver metal	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
11	Screw	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
12	Metal shell	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
13	Black plastic footpad	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
14	White Plastic Shell	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
15	White plastic button	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
16	Gray plastic button	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
17	Black plastic	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
18	Silver metal	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
19	Black casing	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
20	Black plastic	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
21	Fuse	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
22	Silver Metal (Transformer)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
23	Ferrous metal	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
24	Screw	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
25	Black plastic	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
26	Yellow plastic	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
27	White plastic	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
28	Wire core	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	-	-	-	
		DEHP	-	-	-	
		DIBP	-	-	-	
		DBP	-	-	-	
		BBP	-	-	-	

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
29	Magnetic core	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL - - - - -	- - - - - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
30	Silver metal (fan frame)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
31	Black plastic	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
32	Black plastic	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
33	Metal shaft	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL IN - - - - -	- - - Negative - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
34	Wire core	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL- - - - - -	- - - - - - - - -	Comply Comply Comply Comply - - - - -	Apr. 01, 2019
35	PCB (ATX.820.0002A)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL IN IN IN IN IN	- - - - PBBs=ND PBDEs=ND ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
36	Relay (K1)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
37	Electrolytic Capacitor (C36)	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
38	Electrolytic Capacitor (C30)	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
39	Electrolytic Capacitor (C31)	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
40	Electrolytic Capacitor (C54)	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
41	Capacitor (C34)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
42	SMD capacitor	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
43	SMD resistor	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
44	Resistor (R74)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
45	Resistor (78)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
46	Diode	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
47	Triode	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
48	Triode (IC3)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
49	Silver metal radiator	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
50	IC	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
51	Tin solder	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
52	Plastic terminal	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
53	Internal wiring	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
54	PCB	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL IN IN IN IN	- - - - PBBs=ND PBDEs=ND ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
55	Capacitor	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
56	Wire terminal	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
57	IC	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
58	VGA terminal	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
59	Internal wire	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
60	PCB (ATX.820.0001A)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL IN IN IN IN IN	- - - - PBBs=ND PBDEs=ND ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
61	IC	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
62	Voltage Regulating Resistance (VR2)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
63	Buzzer	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
64	Triode	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
65	Electrolytic Capacitor (C8)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
66	Electrolytic Capacitor (C2)	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
67	SMD capacitor	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019
68	SMD resistor	Pb Cd Hg Cr(VI) Br DEHP DIBP DBP BBP	BL BL BL BL BL IN IN IN IN	- - - - - ND ND ND ND	Comply Comply Comply Comply Comply Comply Comply Comply Comply	Apr. 01, 2019

Part No.	Part Description	Restricted Substance	Results of EDXRF	Result of wet Chemical Testing (2mg/kg)	Conclusion on RoHS	Sample submitted/ Resubmitted Date
69	Diode	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
70	Triode	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	
71	Tin solder	Pb	BL	-	Comply	Apr. 01, 2019
		Cd	BL	-	Comply	
		Hg	BL	-	Comply	
		Cr(VI)	BL	-	Comply	
		Br	BL	-	Comply	
		DEHP	IN	ND	Comply	
		DIBP	IN	ND	Comply	
		DBP	IN	ND	Comply	
		BBP	IN	ND	Comply	

Remark:

- (1) (a) It is the result on total Br while test item on restricted is PBBs/PBDEs. It is the result on total Cr6+ while test item on restricted substances is Cr⁶⁺.
- (b) Results are obtained by EDXRF for primary screening ,and further chemical testing by ICP(for Cd, Pb, Hg), UV-VIS(for Cr⁶⁺) and GC\MS (for PBBs, PBDEs) is recommended to be performed , if the concentration exceeds the below warning value according to IEC 62321(unit: mg\kg)

Element	Polymer	Metal	Composite Materials
Cd	BL≤ (70-3 σ) <X<(130+3 σ) ≤OL	BL≤ (70-3 σ) <X<(130+3 σ) ≤OL	LOD<X<(150+3 σ) ≤OL
Pb	BL≤ (700-3 σ) <X<(1300+3 σ) ≤OL	BL≤ (700-3 σ) <X<(1300+3 σ) ≤OL	BL≤ (500-3 σ) <X<(1500+3 σ) ≤OL
Hg	BL≤ (700-3 σ) <X<(1300+3 σ) ≤OL	BL≤ (700-3 σ) <X<(1300+3 σ) ≤OL	BL≤ (500-3 σ) <X<(1500+3 σ) ≤OL
Br	BL≤ (300-3 σ) <X	--	BL≤ (250-3 σ) <X
Cr	BL≤ (700-3 σ) <X	BL≤ (700-3 σ) <X	BL≤ (500-3 σ) <X

(c)BL=Below Limit, OL=Over Limit, IN=Inconclusive, LOD=Limit of Detection,-=Not Regulated,

Negative = A negative test result indicated above p ositive observation was not found at the time of te sting. When the spot-test showed a negative result, the boiling-wat er-extraction procedure shall be used to verify the result.

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

- (2) (a) mg\kg=ppm=0.0001%, ND=Not Detected(<MDL)),
- (b)Unit and Method Detection Limit(MDL)in wet chemical test

Test Items	Units	MDL	EU RoHS Limit	
Pb	mg/kg	2	1000	
Cd	mg/kg	2	100	
Hg	mg/kg	2	1000	
Cr(VI)	mg/kg	0.02 mg/50 cm ² (Metal)	1000	
		2(Nonmetal)		
Br	PBBs	mg\kg	5	1000
	PBDEs	mg\kg	5	1000
DEHP	mg/kg	5	1000	
BBP	mg/kg	5	1000	
DBP	mg/kg	5	1000	
DIBP	mg/kg	5	1000	

(c) According to EN 62321, result on Cr for metal sample is shown as Positive\Negative, Negative=Absence of Cr 6+ costing, Positive=Prosence of Cr 6+ coating.

(d) ▲As declared by the client the materials fall into exemption items according to RoHS Directive 2011\65\EU recasting 2002\95\EC

Photograph of sample

POCE authenticate the photo on original report only



Photo 1



Photo 2

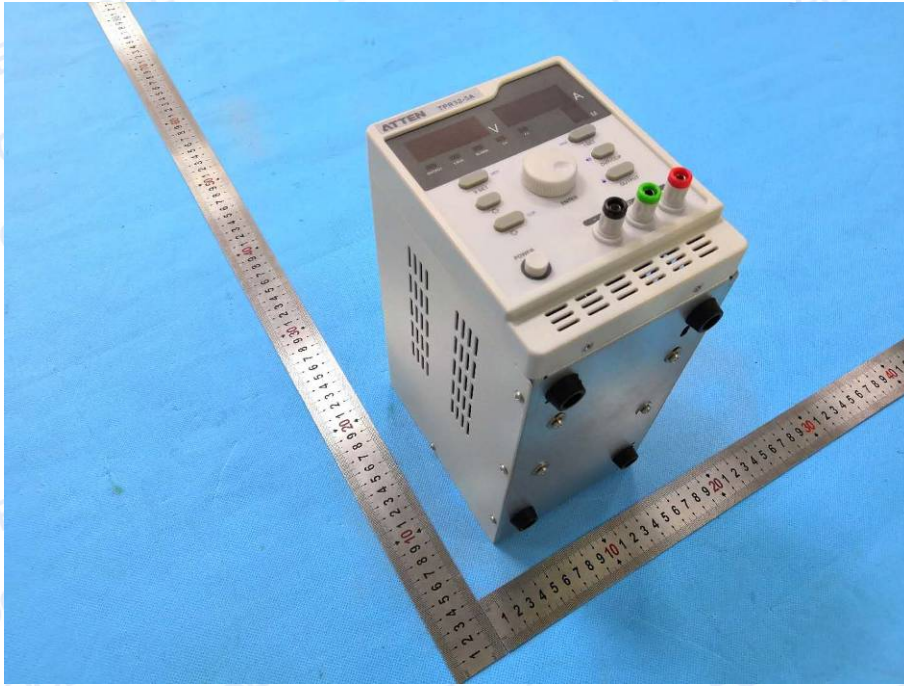


Photo 3

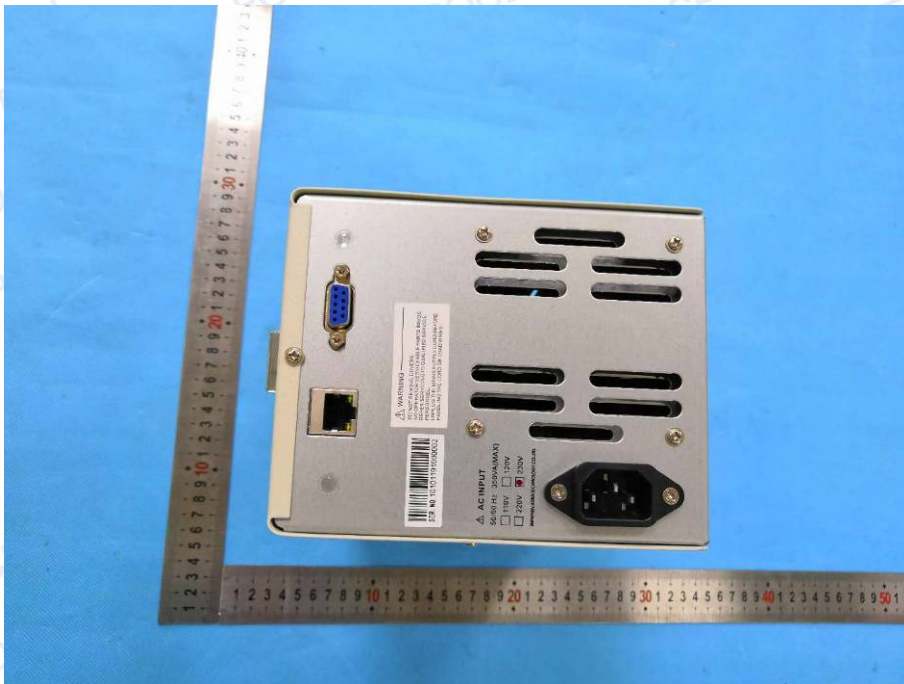


Photo 4

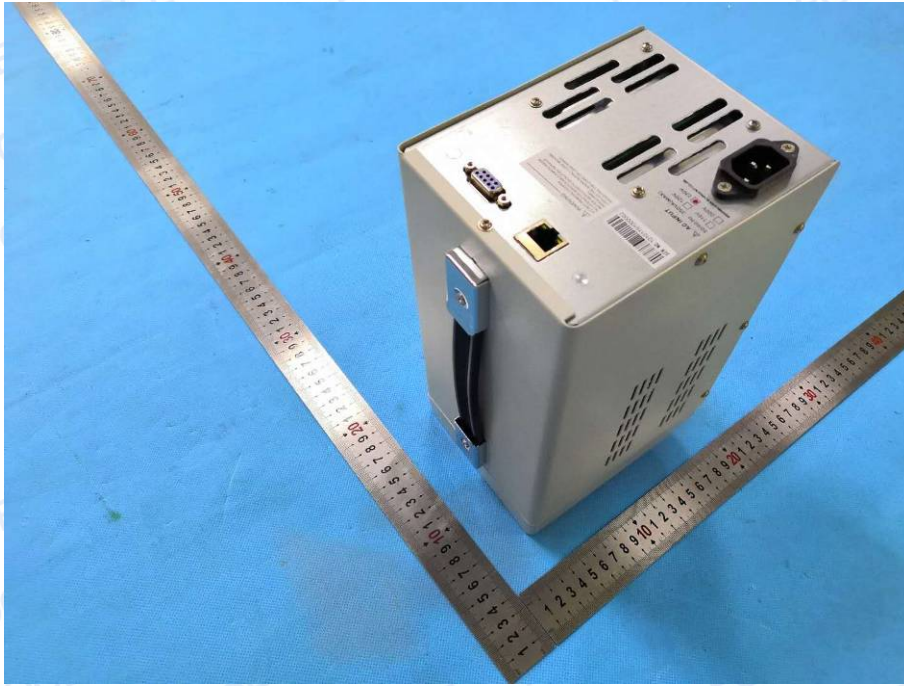


Photo 5

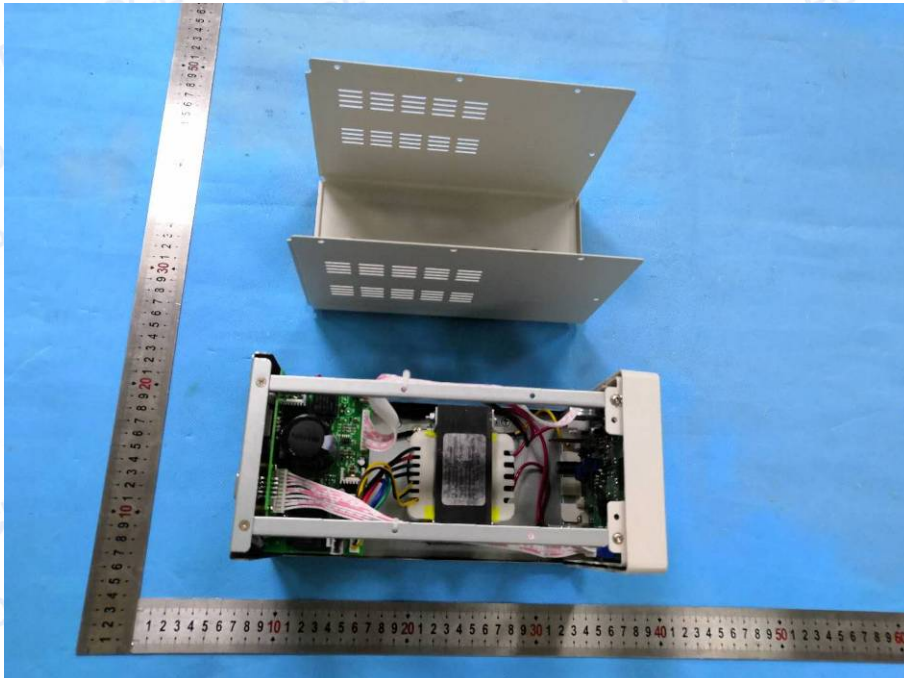


Photo 6

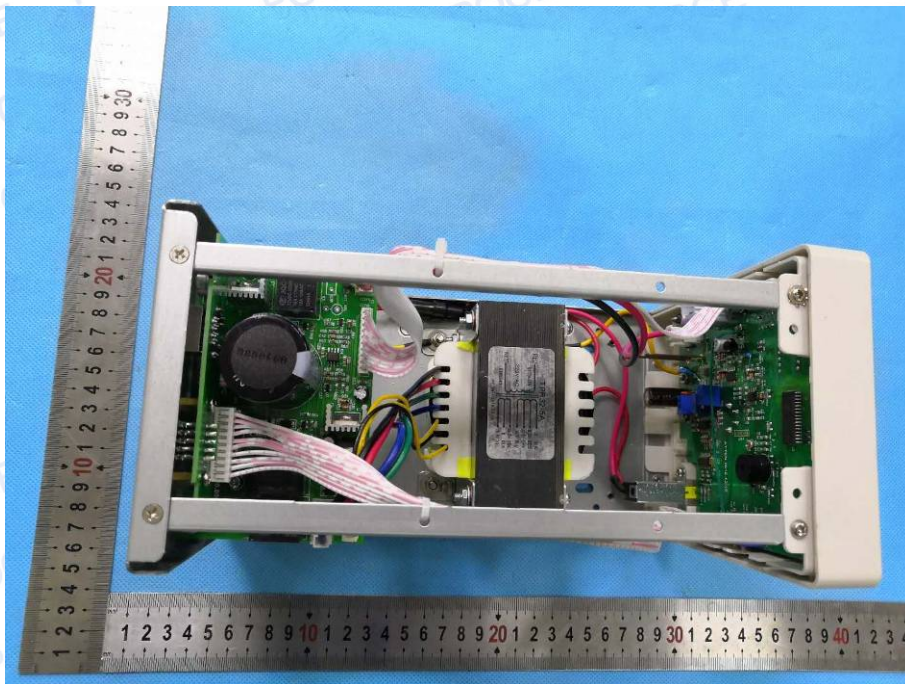


Photo 7

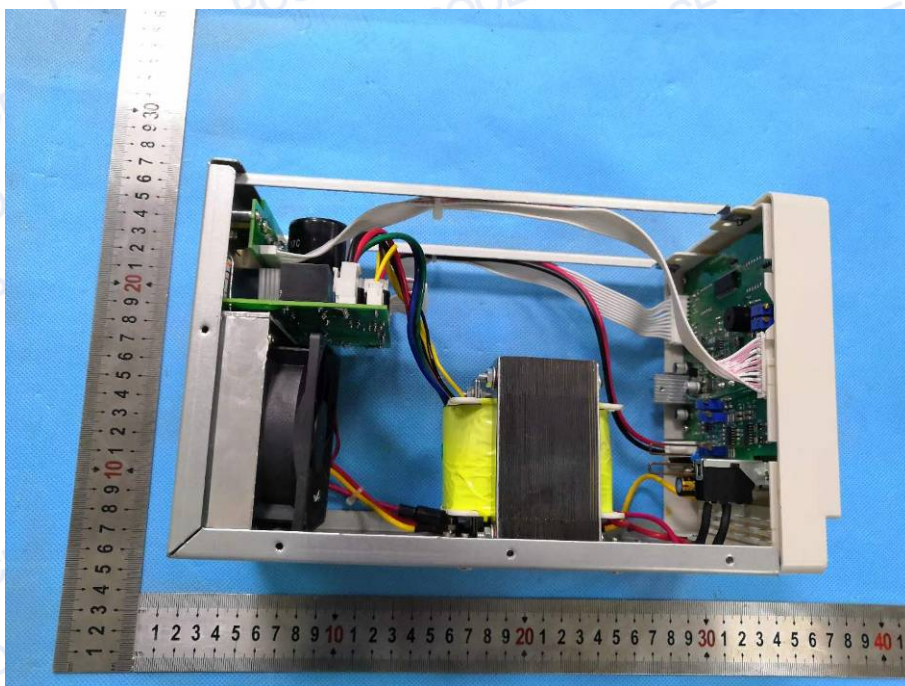


Photo 8

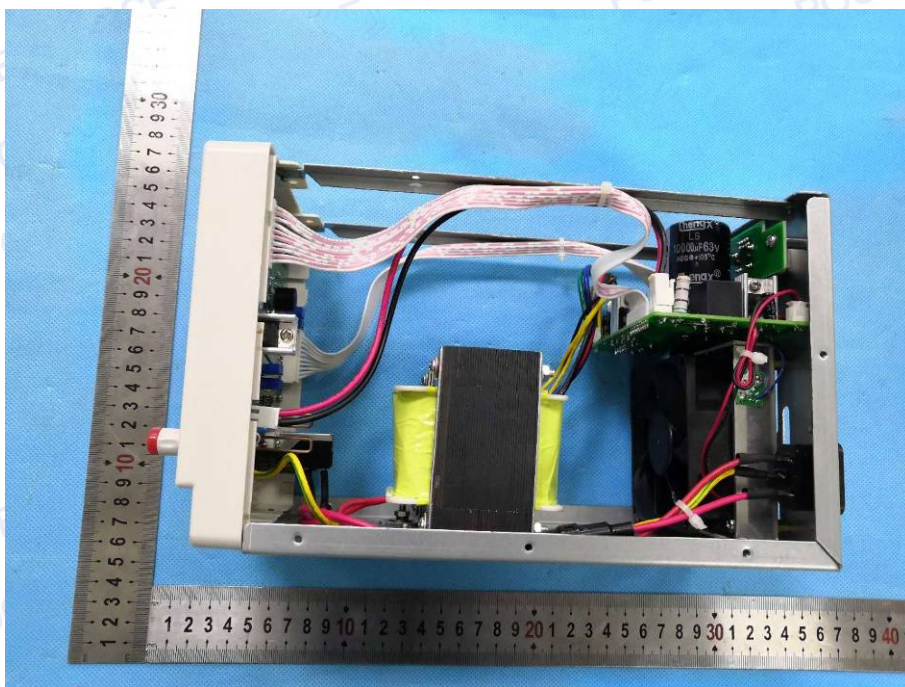


Photo 9

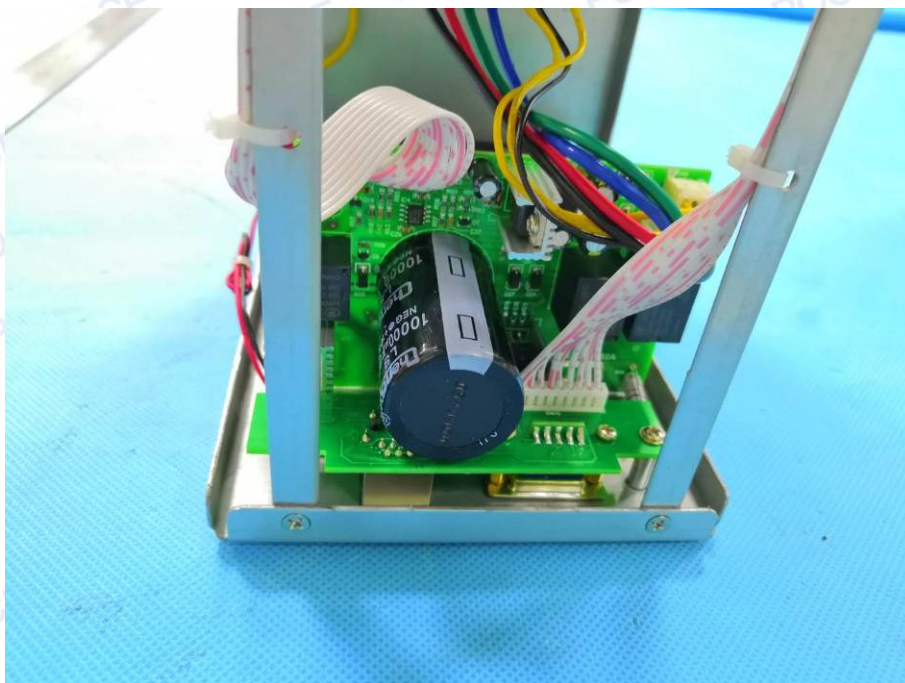


Photo 10

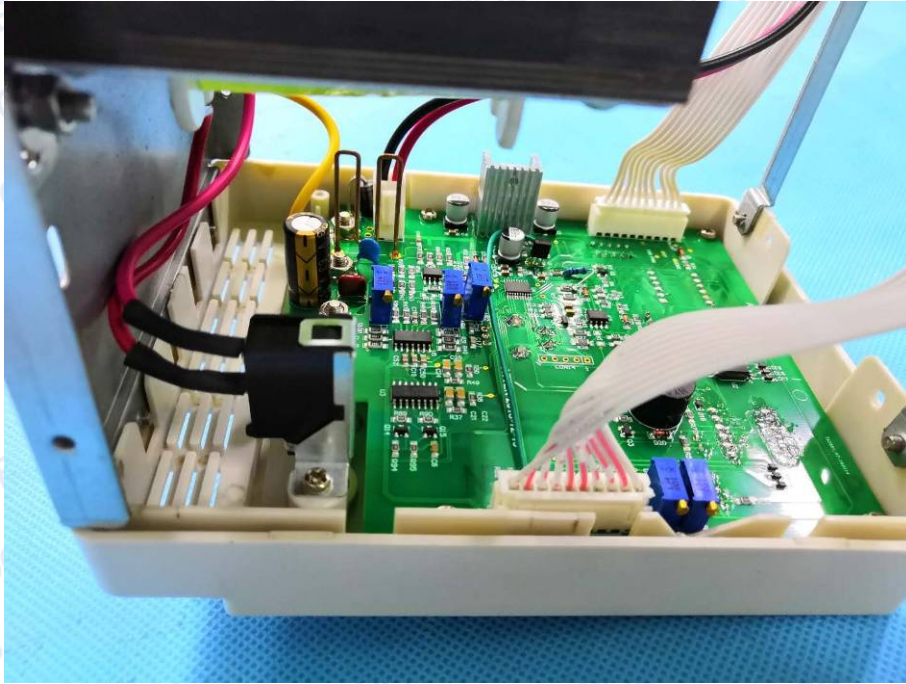


Photo 11

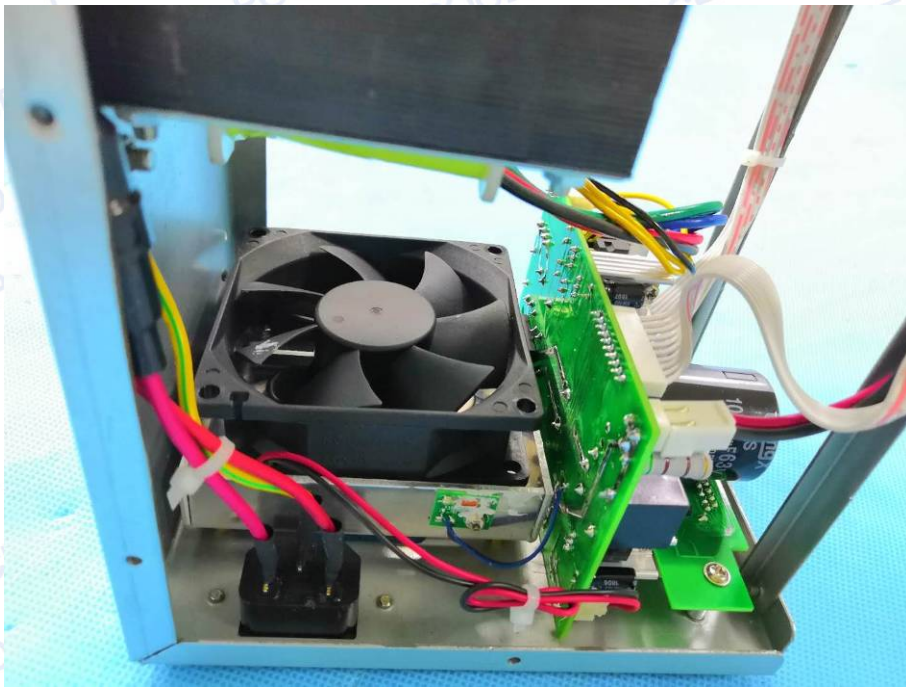


Photo 12

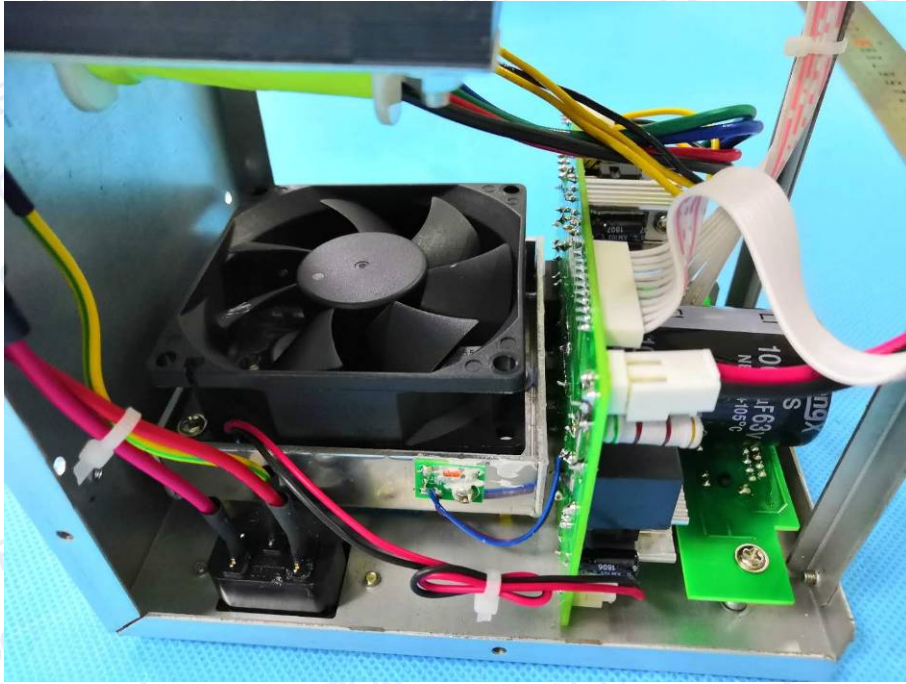


Photo 13

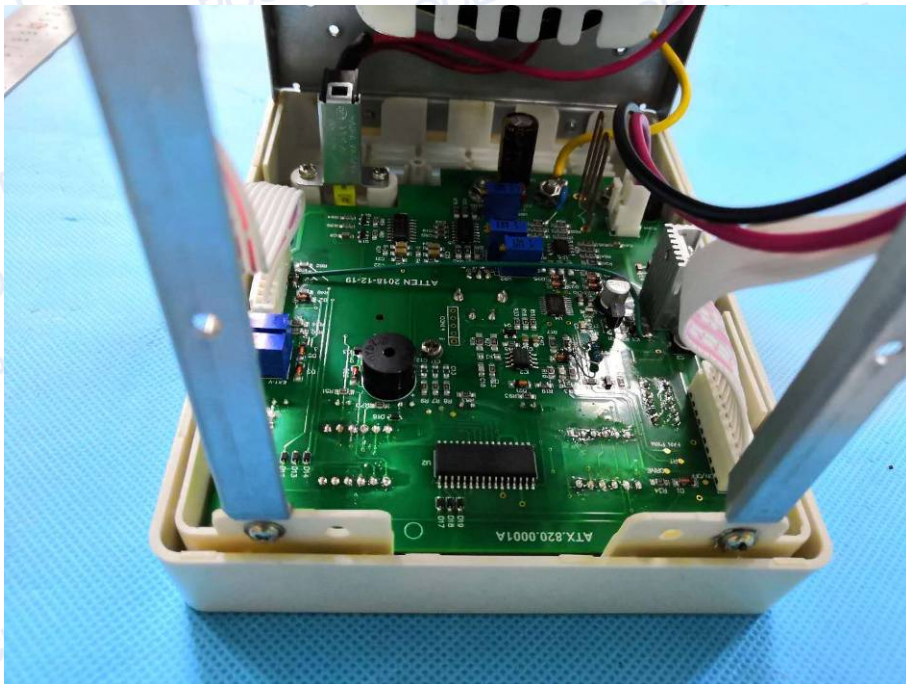


Photo 14

*****END OF REPORT*****