



Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 1 of 13

Applicant: SUZHOU CREATION SPACE INTELLIGENT TECHNOLOGY CO.,LTD.

Contact information: 2nd Floor of No.2 Workshop, No.50 Weiting Tonghe Road, Suzhou Industrial Park

The following sample(s) was (were) submitted and identified by client as:

Sample Description : Lithium battery electric screwdriver
Model No. : ZPJ1802A
Sample Received Date : Jul. 01, 2019
Testing Period : From Jul. 01, 2019 to Jul. 10, 2019
Test Request : Please refer to next page(s).
Test Result(s) : Please refer to next page(s).

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

Prepared by

Sammy Lin
Engineer

Checked by

Emily Wang
Supervisor

Approved by

Collin Zhou
Manager



Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 2 of 13

Summary of test results:

TEST REQUEST

CONCLUSION

(1) RoHS Directive 2011/65/EU and its subsequent amendments & Directive (EU) 2015/863

Lead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)),
Polybrominated Biphenyls (PBBs) and Polybrominated DiphenylEthers (PBDEs),
Phthalates (DBP, BBP, DEHP, DIBP)

PASS



Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 3 of 13

Test Material List

Material No.	Description
1	Black plastic
2	Black plastic(Button)
3	Transparent plastic(front)
4	Black sponge
5	Red wire
6	Black wire
7	Silvery metal
8	Light black metal
9	Gray metal
10	Yellow body(led, PCB)
11	Green PCB
12	Silvery metal(cover, switch, PCB)
13	Golden metal(button, switch, PCB)
14	Brown body(capacitor, PCB)
15	Black body(ic, PCB)
16	Black body(resistor, PCB)
17	Silvery solder(PCB)
18	Silvery metal(shell, USB socket, PCB)
19	Black plastic(pin holder, USB socket, PCB)
20	Black body(triode, PCB)
21	Black body(diode, PCB)
22	Silvery metal(motor)
23	Gold metal(motor)
24	Light silver metal(motor)
25	Black plastic(motor)
26	Winding(motor)

ShenZhen SJS Testing Technology Co., Ltd.

3rd Floor, Building A, Hongfenghua Internet Creative Park, Huangtian Community, Hangcheng Street, Baoan District, Shenzhen, China

Telephone: +86 (0) 755 2778 4461

Fax: +86 (0) 755 2778 4461

E-Mail: service@sjslab.com



Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 4 of 13

Material No.	Description
27	Red wire(motor)
28	Black wire(motor)

Test Result(s):

(1) Lead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls (PBBs) and Polybrominated DiphenylEthers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP)

Lead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI))

Test Method: With reference to IEC 62321-5: 2013, IEC62321-4: 2013+A1:2017, IEC 62321-7-1: 2015 or IEC 62321-7-2: 2017, was analyzed by Ultraviolet-visible Spectrometry (UV-Vis).

No.	EDXRF Result ⁽¹⁾					Chemical Result ⁽²⁾ (mg/kg)	Remark ⁽³⁾	Conclusion
	Pb	Cd	Hg	Cr	Br			
1	BL	BL	BL	BL	BL	--	--	Pass
2	BL	BL	BL	BL	BL	--	--	Pass
3	BL	BL	BL	BL	BL	--	--	Pass
4	BL	BL	BL	BL	BL	--	--	Pass
5	BL	BL	BL	BL	BL	--	--	Pass
6	BL	BL	BL	BL	BL	--	--	Pass
7	BL	BL	BL	BL	BL	--	--	Pass
8	BL	BL	BL	BL	NA	--	--	Pass
9	BL	BL	BL	BL	NA	--	--	Pass
10	BL	BL	BL	BL	BL	--	--	Pass
11	BL	BL	BL	BL	X	PBBs: N.D. PBDEs: N.D.	--	Pass
12	BL	BL	BL	BL	NA	--	--	Pass
13	BL	BL	BL	BL	NA	--	--	Pass
14	BL	BL	BL	BL	BL	--	--	Pass
15	BL	BL	BL	BL	BL	--	--	Pass
16	BL	BL	BL	BL	BL	--	--	Pass
17	BL	BL	BL	BL	NA	--	--	Pass
18	BL	BL	BL	BL	NA	--	--	Pass
19	BL	BL	BL	BL	BL	--	--	Pass
20	BL	BL	BL	BL	BL	--	--	Pass

ShenZhen SJS Testing Technology Co., Ltd.

3rd Floor, Building A, Hongfenghua Internet Creative Park, Huangtian Community, Hangcheng Street, Baoan District, Shenzhen, China

Telephone: +86 (0) 755 2778 4461

Fax: +86 (0) 755 2778 4461

E-Mail: service@sjslab.com



Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 5 of 13

No.	EDXRF Result ⁽¹⁾					Chemical Result ⁽²⁾ (mg/kg)	Remark ⁽³⁾	Conclusion
	Pb	Cd	Hg	Cr	Br			
21	BL	BL	BL	BL	BL	--	--	Pass
22	BL	BL	BL	BL	BL	--	--	Pass
23	BL	BL	BL	BL	BL	--	--	Pass
24	BL	BL	BL	BL	BL	--	--	Pass
25	BL	BL	BL	BL	BL	--	--	Pass
26	BL	BL	BL	BL	BL	--	--	Pass
27	BL	BL	BL	BL	BL	--	--	Pass
28	BL	BL	BL	BL	BL	--	--	Pass

Remark:

(1) ① Results are obtained by EDXRF for primary screening, and further wet chemical testing by ICP-OES (for Cd,

Pb, Hg), UV-VIS (for Cr(VI)) and GC/MS (for PBBs, PBDEs) is recommended to be performed, if an inconclusive result was found (as "X" in below table) (unit: mg/kg).

② OL = Over Limit, BL = Below Limit, X = Inconclusive, NA = Not Applicable.

③ The EDXRF screening test for RoHS elements - The reading may be different to the actual content in the sample be of non-uniformity composition.

Element	Polymer	Metal	Composite Materials
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
Pb	L $\leq (700-3\sigma) < X < (1300+3\sigma) \leq$ OL	BL $\leq (700-3\sigma) < X < (1300+3\sigma)$ \leq OL	BL $\leq (500-3\sigma) < X$ $< (1500+3\sigma) \leq$ OL
Hg	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
Br	BL $\leq (300-3\sigma) < X$	NA	BL $\leq (250-3\sigma) < X$
Cr	BL $\leq (700-3\sigma) < X$	BL $\leq (700-3\sigma) < X$	BL $\leq (500-3\sigma) < X$

Units and limits in EU RoHS Directive 2011/65/EU:

Element	Pb	Cd	Hg	Cr(VI)	PBBs(single)	PBDEs(single)
---------	----	----	----	--------	--------------	---------------

ShenZhen SJS Testing Technology Co., Ltd.

3rd Floor, Building A, Hongfenghua Internet Creative Park, Huangtian Community, Hangcheng Street, Baoan District, Shenzhen, China

Telephone: +86 (0) 755 2778 4461

Fax: +86 (0) 755 2778 4461

E-Mail: service@sjslab.com



Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 6 of 13

Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit	1000	1000	1000	1000	1000	1000

(2) ① mg/kg = ppm = 0.0001%, N.D. = Not Detected (Less than RL).

② Unit and RL (Report limit) in wet chemical test.

Element	Pb	Cd	Hg	Cr(VI)	PBBs(single)	PBDEs(single)
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit	2	2	2	2	5	5

③ According to IEC 62321-7-1:2015, result on Cr(VI) for metal sample is shown as Positive/Negative.

Negative = Absence of Cr(VI) coating, Positive = Presence of Cr(VI) coating.

Storage condition and production date of the tested sample are unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.

④ According to IEC 62321-3-1:2013, this column represents the results of wet chem test.

(3) This column represents the exempted decoration of material or other related testing sample' s information.

(2) Phthalates (DBP, BBP, DEHP, DIBP) content

Test Method: IEC 62321-8: 2017, analyzed by gas chromatographic- mass spectrometer (GC-MS).

Substances	DBP	BBP	DEHP	DIBP	Conclusion
CAS No.	84-74-2	85-68-7	117-81-7	84-69-5	
Limit (mg/kg)	1000	1000	1000	1000	
RL (mg/kg)	30	30	30	30	
Material No.	Result (mg/kg)				
1	N.D.	N.D.	N.D.	N.D.	PASS
2	N.D.	N.D.	N.D.	N.D.	PASS
3	N.D.	N.D.	N.D.	N.D.	PASS
4	N.D.	N.D.	N.D.	N.D.	PASS
5	N.D.	N.D.	N.D.	N.D.	PASS
6	N.D.	N.D.	N.D.	N.D.	PASS
19	N.D.	N.D.	N.D.	N.D.	PASS
25	N.D.	N.D.	N.D.	N.D.	PASS

Note: 1. mg/kg = milligram per kilogram (ppm).

2. RL = report limit.

ShenZhen SJS Testing Technology Co., Ltd.

3rd Floor, Building A, Hongfenghua Internet Creative Park, Huangtian Community, Hangcheng Street, Baoan District, Shenzhen, China

Telephone: +86 (0) 755 2778 4461

Fax: +86 (0) 755 2778 4461

E-Mail: service@sjslab.com



Test Report

Report No.: SJS20190700200R01

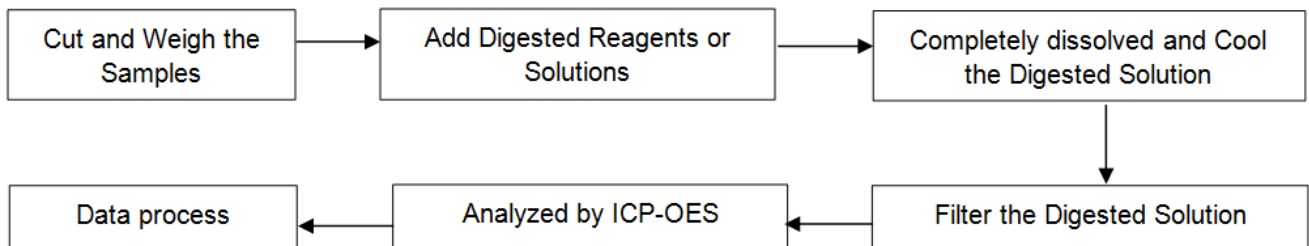
Date: Jul. 10, 2019

Page 7 of 13

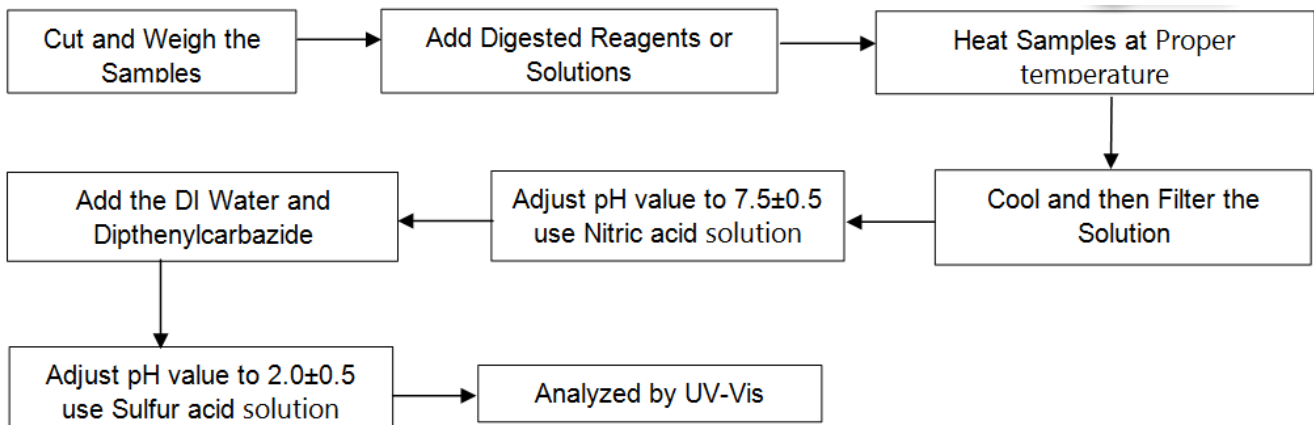
3. N.D.=not detected(less than RL).

Test Process Flow

1. Lead, Cadmium, Mercury



2. Hexavalent Chromium (Non-metal)





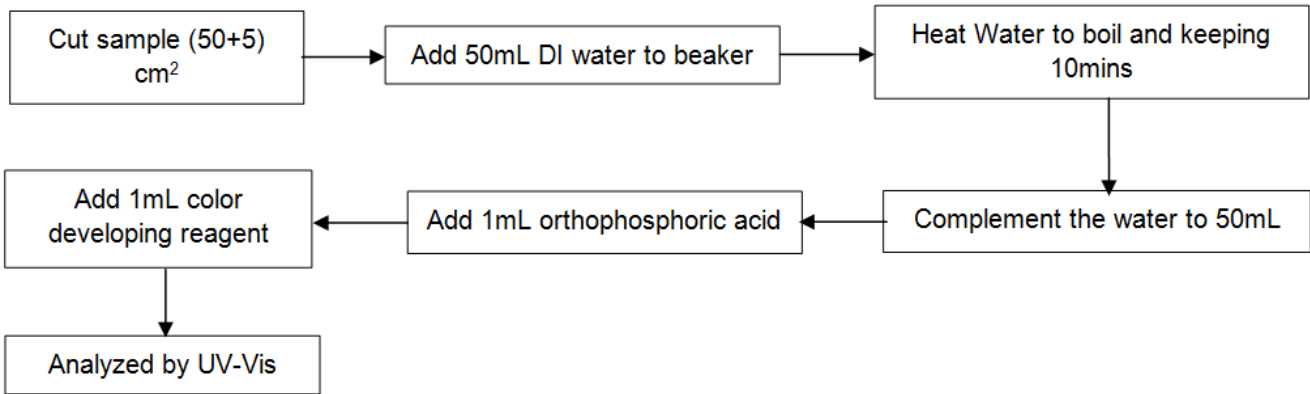
Test Report

Report No.: SJS20190700200R01

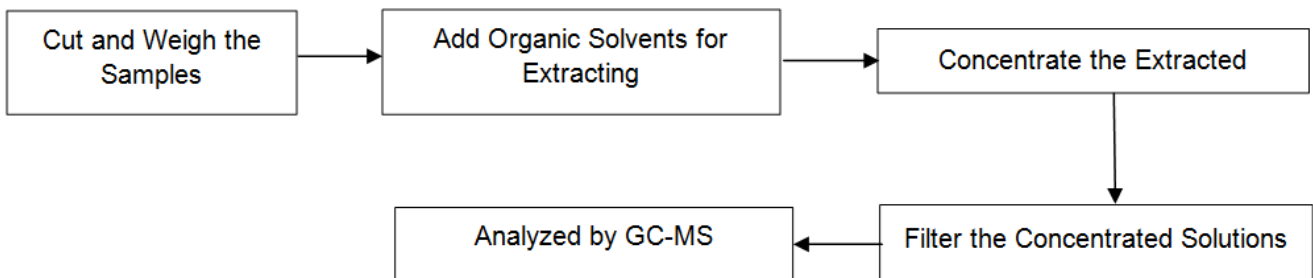
Date: Jul. 10, 2019

Page 8 of 13

Hexavalent Chromium (Metal)



3. PBBs & PBDEs, Phthalates





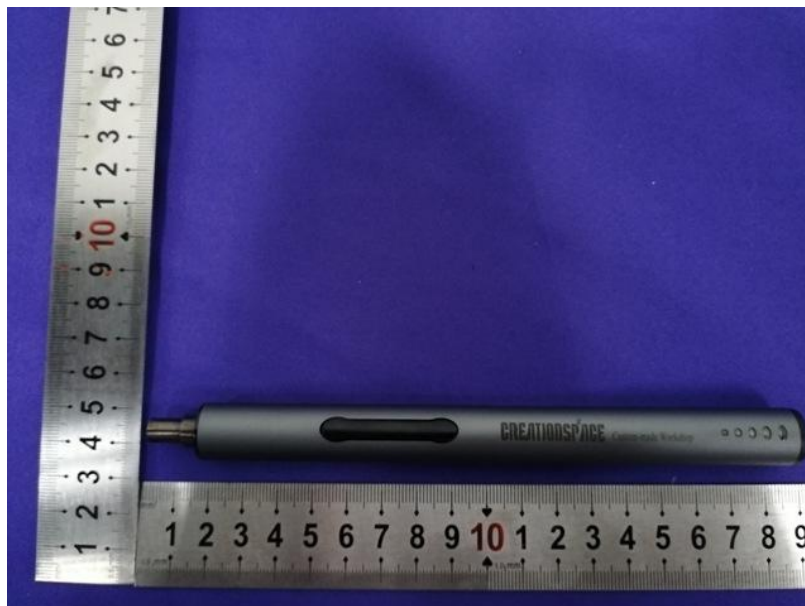
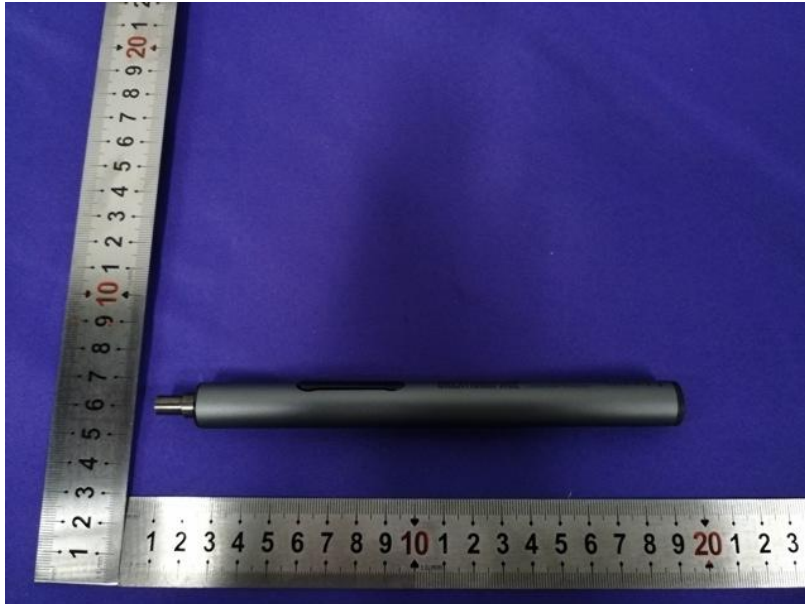
Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 9 of 13

Photo(s) of Sample:





Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 10 of 13





Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 11 of 13



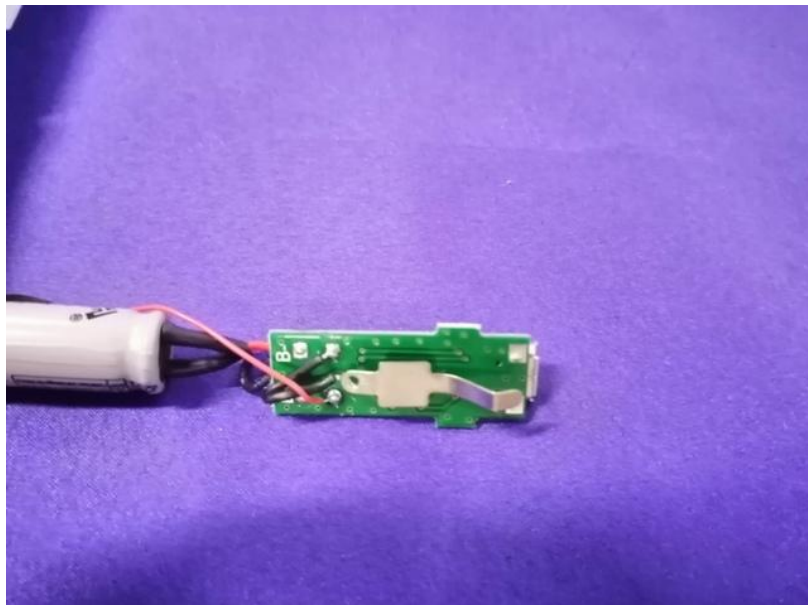
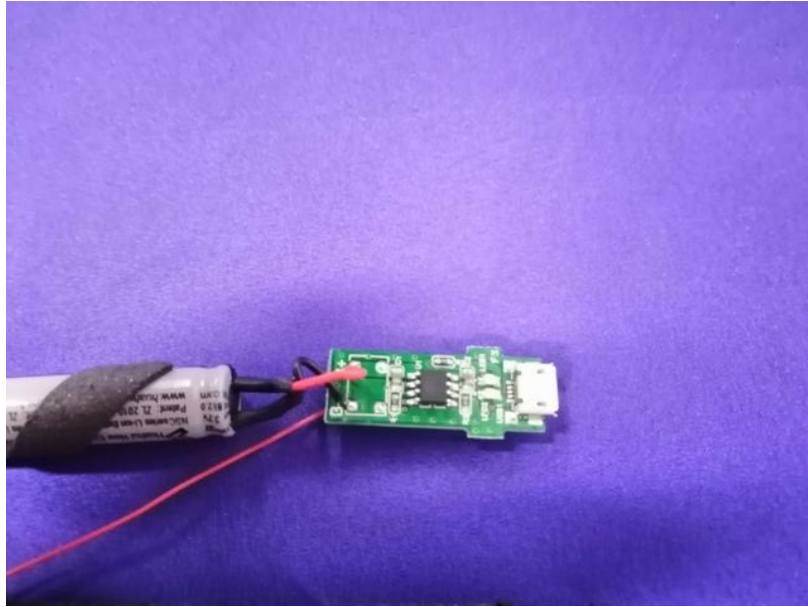


Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 12 of 13



ShenZhen SJS Testing Technology Co., Ltd.

3rd Floor, Building A, Hongfenghua Internet Creative Park, Huangtian Community, Hangcheng Street, Baoan District, Shenzhen, China

Telephone: +86 (0) 755 2778 4461

Fax: +86 (0) 755 2778 4461

E-Mail: service@sjslab.com

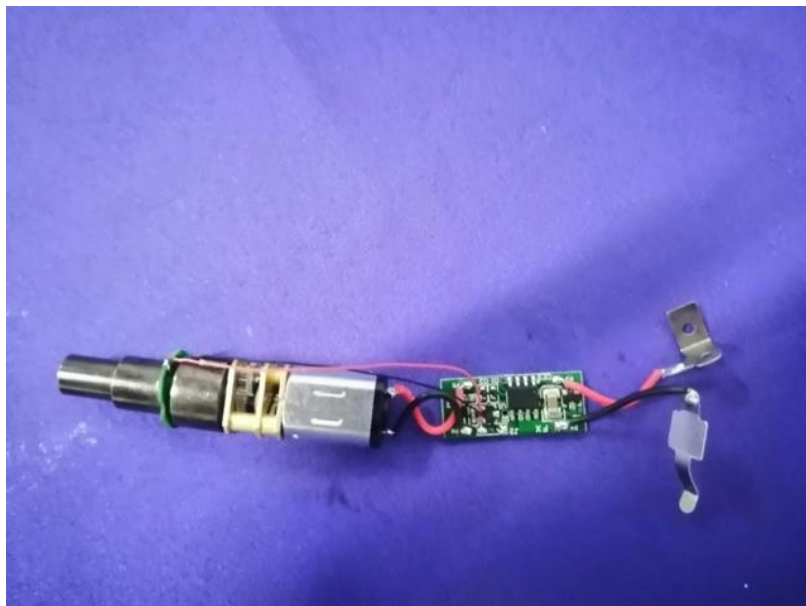


Test Report

Report No.: SJS20190700200R01

Date: Jul. 10, 2019

Page 13 of 13



End of Report