



TEST REPORT

测试报告

LAB NO. 报告号码 : (9315)260-0517-R1

DATE 完成日期 : Oct 19, 2015

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The report is amendment of and supersedes the previous report (9315)260-0517 dated Oct 09, 2015

APPLICANT :

申请人公司名称

CONTACT PERSON : Mr. William chen
联系人名称

DATE OF SUBMISSION : Sep 17, 2015
样品收取日期

TEST PERIOD : Sep 17, 2015 to Oct 09, 2015
所需工作周期

NO. OF WORKING DAYS : 13
所需工作日

SAMPLE DESCRIPTION : Laser Presenter
样品描述

Color: 颜色 /

Style No/ Model no.: 款号 RS-095

P.O. No.: /
订单号

Country of Origin: /
来源地

Country of Destination: /
目的地

MANUFACTURER :
制造商

RW



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SUMMARY OF TEST RESULTS

测试结果摘要

TEST REQUESTED 测试项目	CONCLUSION 结 论	REMARK 备 注
Compliance Test - European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)	PASS	

BUREAU VERITAS CONSUMER PRODUCTS SERVICES (GUANGZHOU) CO., LTD

NINA REN
SECTION MANAGER

REMARK

If there are questions or concerns on this report, please contact the following persons:

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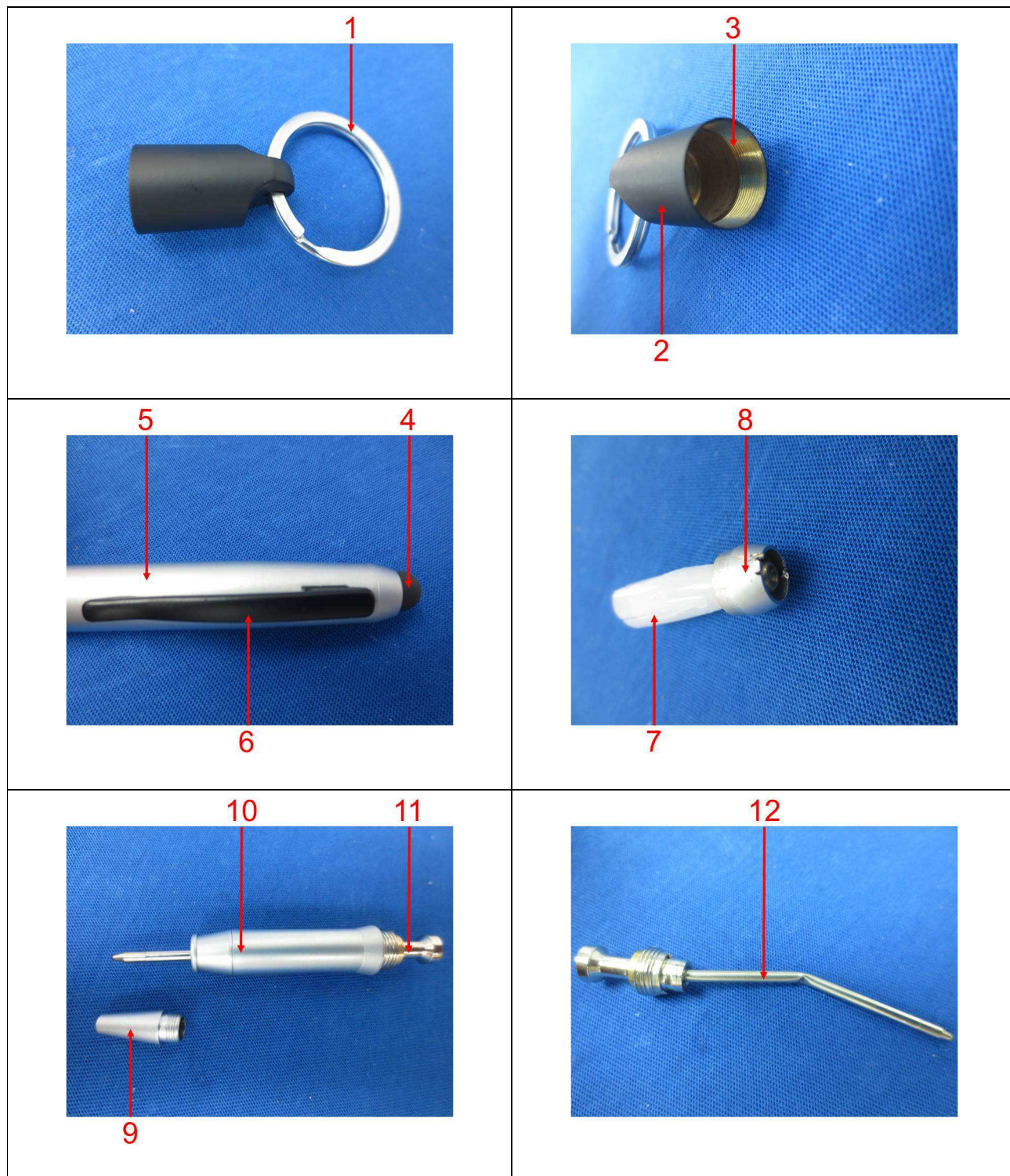


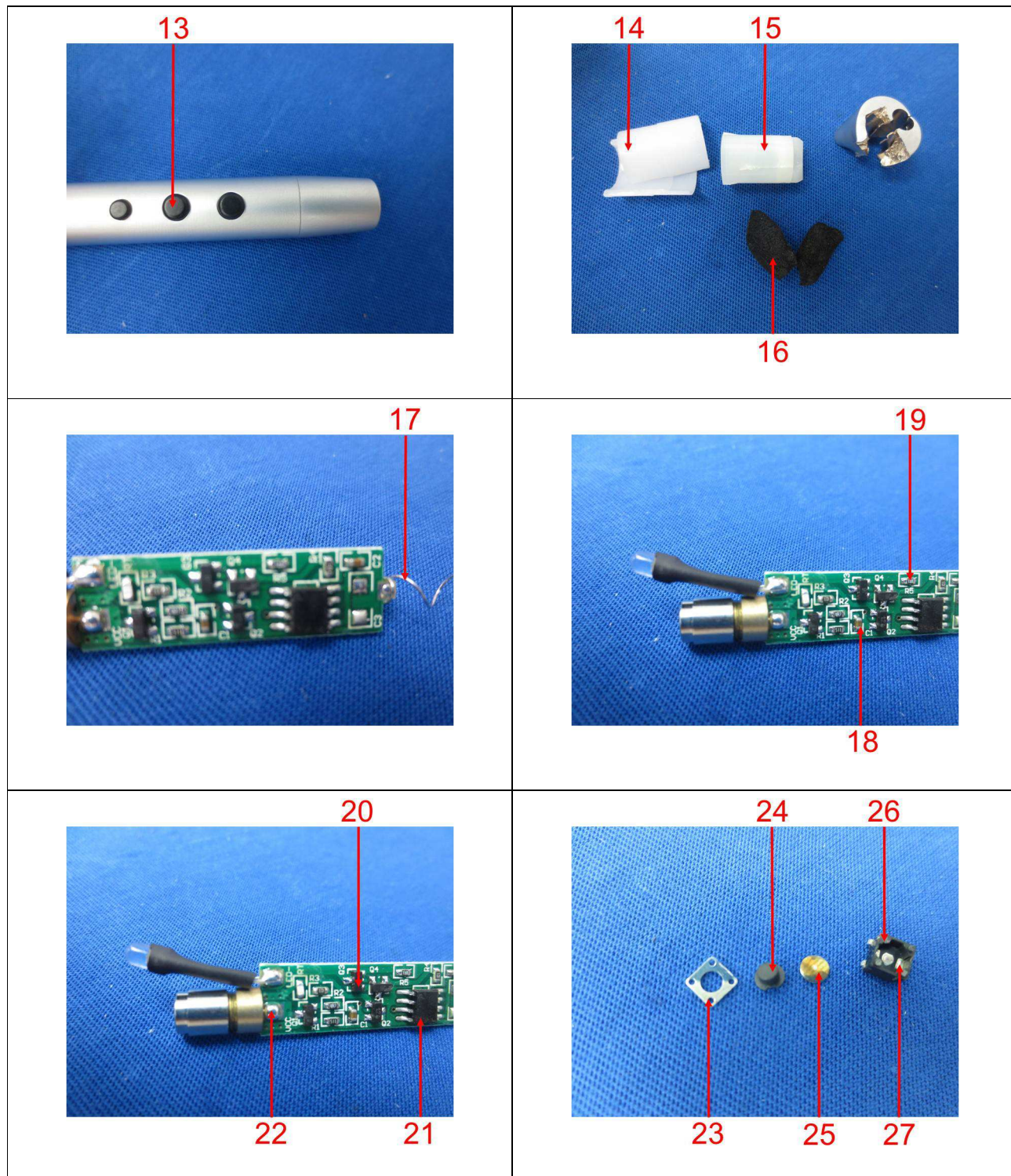
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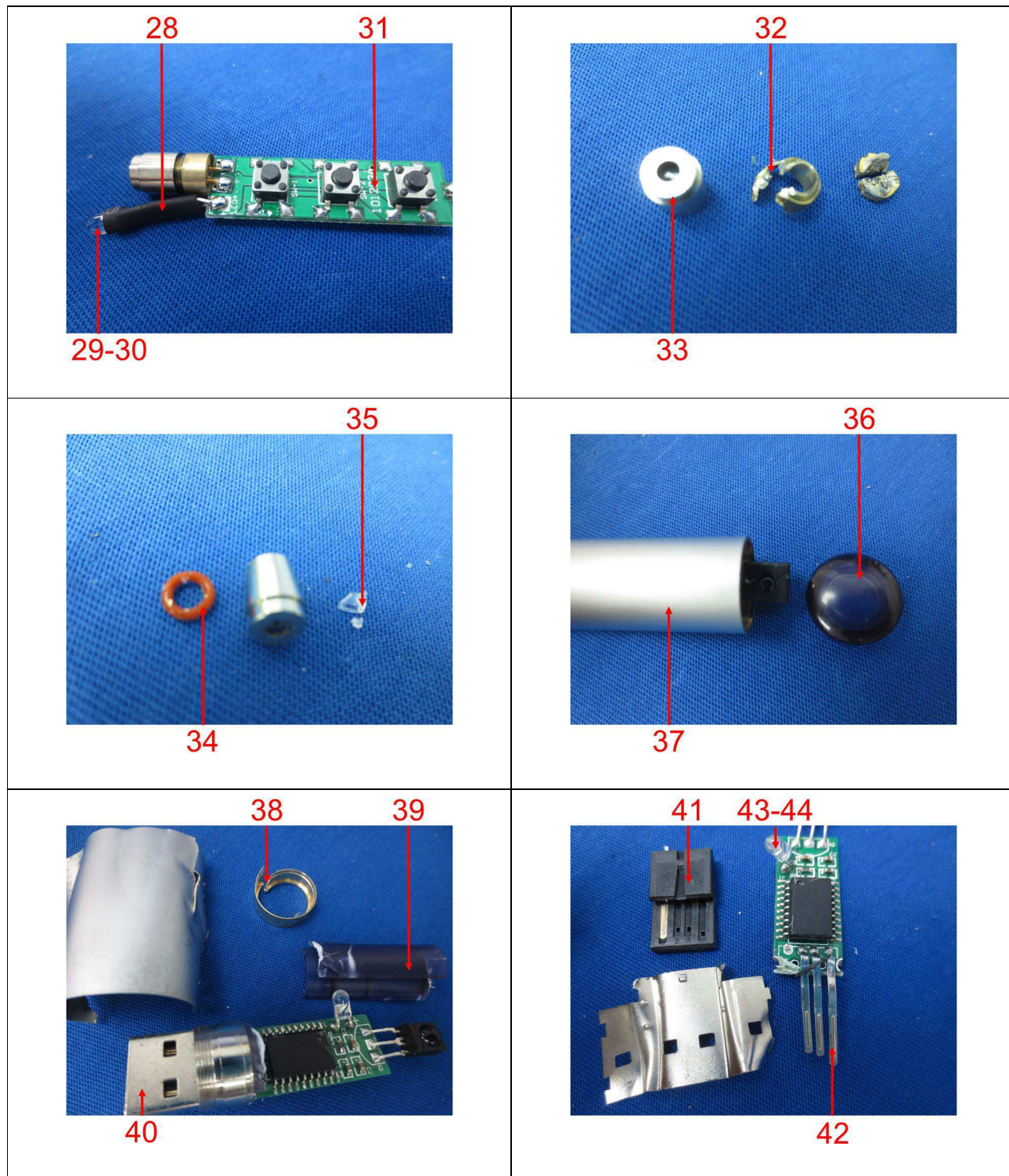
Photo of the Submitted Sample
递交样品照片

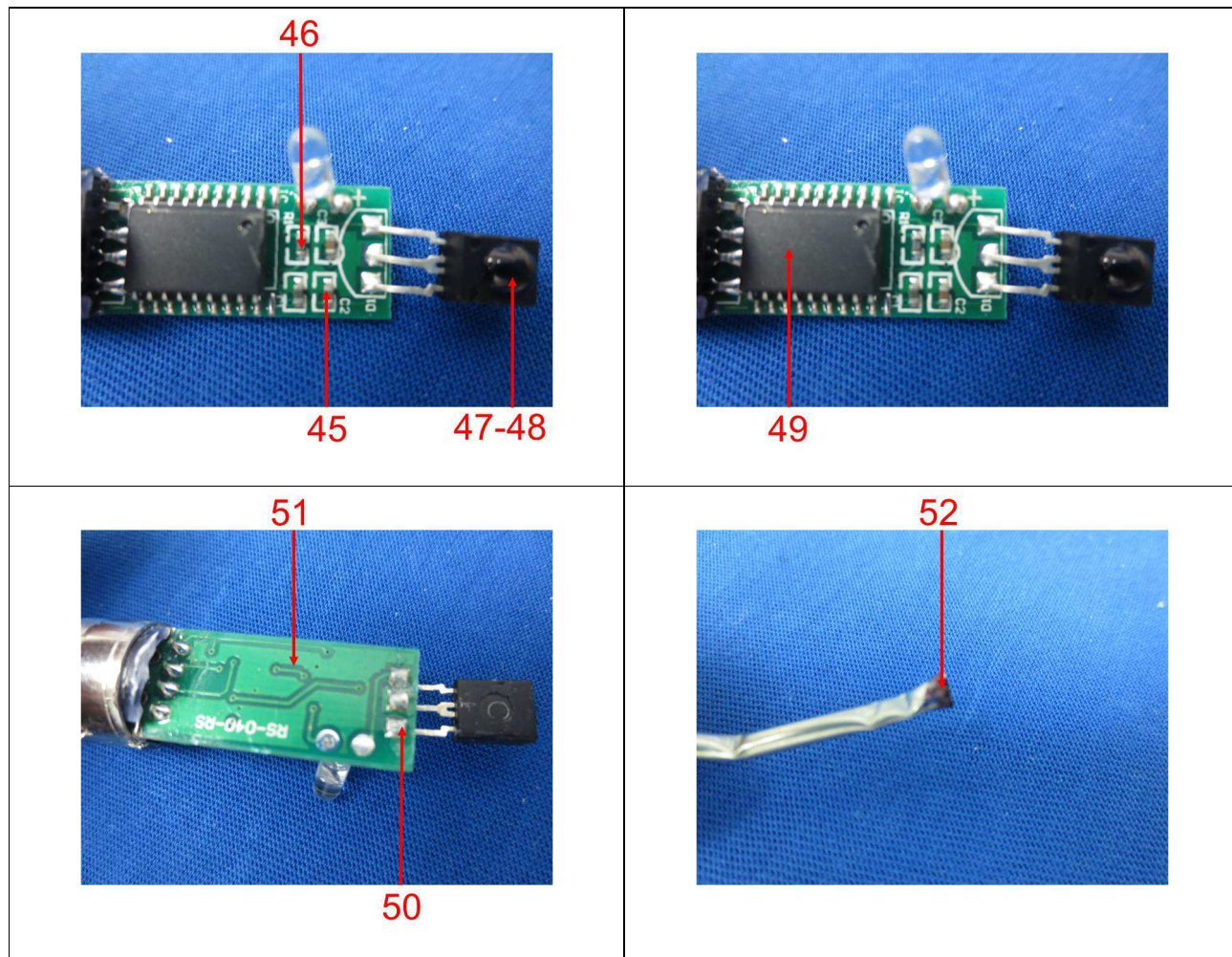


Photograph of test item(s)
 样品图片











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TEST RESULT

测试结果

Compliance Test - European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : See Appendix.

Test Item(s)	Item / Component Description(s)	Location(s)	Style(s)
1	Silvery/ coppery plated silvery metal	key ring	-
2	Black coating	cover	-
3	Golden metal	cover	-
4	Black soft plastic	push button	-
5	Silvery plated golden metal	barrel	-
6	Silvery/ coppery plated silvery metal	clip	-
7	Translucent plastic	inner tube, cover	-
8	Golden metal	ring	-
9	Silvery plated coppery metal	point	-
10	Silvery plated golden metal	barrel	-
11	Silvery plated golden metal	solenoid	-
12	Silvery metal	ink cartridge	-
13	Black plated golden metal	button	-
14	White plastic	tube, barrel	-
15	Translucent plastic	tube, barrel	-
16	Black foam with adhesive	cushion	-
17	Silvery metal	spring	-
18	Brown body	SMD capacitor, PCB	-
19	Black body	SMD resistor, PCB	-
20	Black body	transistor"Q4", PCB	-
21	Black body	IC"U1", PCB	-
22	Silvery solder	PCB	-
23	Silvery metal	plate, tack switch	-
24	Black plastic	button, tack switch	-
25	Silvery plated coppery metal	plate, tack switch	-
26	Black plastic	case, tack switch	-
27	Silvery plated golden metal	contact plate, tack switch	-
28	Grey printed black soft plastic	heat shrinkable tube	-
29	Transparent body	LED, PCB	-
30	Silvery plated golden metal	pin, LED	-
31	Green PCB		-
32	Golden metal	ring, infrared-emitting diode	-
33	Silvery plated golden metal	cover, infrared-emitting diode	-
34	Red soft plastic	cushion ring, infrared-emitting diode	-
35	Transparent glass	infrared-emitting diode	-
36	Purple/ transparent plastic	cork, USB connector	-
37	Purple/ transparent plastic	cork, USB connector	-
38	Silvery plated golden metal	cover, USB connector	-
39	Golden metal	ring, USB connector	-



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40	Purple/ transparent plastic	plate, USB connector	-
41	Silvery metal	plate, USB connector	-
42	Black plastic	insulator, USB connector	-
43	Transparent body	LED, USB connector	-
44	Silvery plated golden metal	pin, LED, USB connector	-
45	Brown body	SMD capacitor, USB connector	-
46	Black body	SMD resistor, USB connector	-
47	Black body	Infrared Receiver	-
48	Silvery plated coppery metal	pin, Infrared Receiver	-
49	Black body	IC, USB connector	-
50	Silvery solder	PCB, USB connector	-
51	Green PCB	USB connector	-
52	Black/ red oil	barrel	

See Analytes and their corresponding Maximum Allowable Limit in Appendix

-	Result						
Parameter	Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Chromium VI (Cr VI)	PBBs	PBDEs	Conclusion
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
Test Item(s)	-	-	-	-	-	-	-
1	ND	ND	ND	ND	NA	NA	PASS
2	ND	ND	ND	ND	ND	ND	PASS
3	30800* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
4	ND	ND	ND	ND	ND	ND	PASS
5	ND	ND	ND	Negative*	NA	NA	PASS
6	ND	ND	ND	Negative*	NA	NA	PASS
7	ND	ND	ND	ND	ND	ND	PASS
8	34200* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
9	25000* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
10	ND	ND	ND	Negative*	NA	NA	PASS
11	15100* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
12	ND	ND	ND	ND	ND	ND	PASS
13	26800* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
14	ND	ND	ND	ND	ND	ND	PASS
15	ND	ND	ND	ND	ND	ND	PASS
16	ND	ND	ND	ND	ND	ND	PASS
17	ND	ND	ND	ND	NA	NA	PASS
18	>1500 [#]	ND	ND	ND	ND	ND	EXEMPTED [#]
19	>1500 [#]	ND	ND	ND	ND	ND	EXEMPTED [#]
20	ND	ND	ND	ND	ND	ND	PASS
21	ND	ND	ND	ND	ND	ND	PASS
22	ND	ND	ND	ND	NA	NA	PASS
23	ND	ND	ND	ND	NA	NA	PASS
24	ND	ND	ND	ND	ND	ND	PASS
25	ND	ND	ND	Negative*	NA	NA	PASS
26	ND	ND	ND	ND	ND	ND	PASS
27	ND	ND	ND	ND	NA	NA	PASS
28	ND	ND	ND	ND	ND	ND	PASS
29	ND	ND	ND	ND	ND	ND	PASS

-	Result						
Parameter	Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Chromium VI (Cr VI)	PBBs	PBDEs	Conclusion
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
Test Item(s)	-	-	-	-	-	-	-
30	ND	ND	ND	ND	NA	NA	PASS
31	ND	ND	ND	ND	ND*	ND*	PASS
32	30500* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
33	28000* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
34	ND	ND	ND	ND	ND	ND	PASS
35	ND	ND	ND	ND	NA	NA	PASS
36	ND	ND	ND	ND	ND	ND	PASS
37	ND	ND	ND	ND	NA	NA	PASS
38	31400* [#]	ND	ND	ND	NA	NA	EXEMPTED [#]
39	ND	ND	ND	ND	ND	ND	PASS
40	ND	ND	ND	ND	NA	NA	PASS
41	ND	ND	ND	ND	ND*	ND*	PASS
42	ND	ND	ND	ND	NA	NA	PASS
43	ND	ND	ND	ND	ND	ND	PASS
44	ND	ND	ND	ND	NA	NA	PASS
45	ND	ND	ND	ND	ND	ND	PASS
46	ND	ND	ND	ND	ND	ND	PASS
47	ND	ND	ND	ND	ND	ND	PASS
48	ND	ND	ND	ND	NA	NA	PASS
49	ND	ND	ND	ND	ND	ND	PASS
50	<500	ND	ND	ND	NA	NA	PASS
51	ND	ND	ND	ND	ND*	ND*	PASS
52	ND	ND	ND	ND	ND	ND	PASS

Note / Key :

ND = Not detected
NR = Not requested
% = percent
Detection Limit : See Appendix.

">" = Greater than
mg/kg = milligram(s) per kilogram = ppm = part(s) per million
10000 mg/kg = 1 %

NA = Not Applicable

Remark :

- The testing approach is listed in table of Appendix.
- * denotes as reported result(s) was (were) performed by wet chemistry method. Others were screened by XRF. For XRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as total bromine. Also, the XRF result(s) may be different to the actual content based on various factors including, but not limit to, sample size, thickness, area, non-uniformity composition, surface flatness.
- Only selected example(s) is (are) indicated on the photograph(s) in Comment.
- According to European Council Directive 2011/65/EU, Article 5 "Adaptation of the Annexes to scientific and technical progress", exemption(s) should be granted to the materials and components of Test Item(s) in the lists in Annexes III and IV of this directive.
- [#]According to Annex III of European Council Directive 2011/65/EU, exemptions were granted a few materials and Clause 7(c)-I is reiterated here "Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.". Test Item(s) 18, 19 was (were) claimed as is by client (received as is). Therefore, this (these) Test Item(s) containing the found lead level should be exempted.
- [#]According to Annex III of European Council Directive 2011/65/EU, exemptions were granted a few materials and Clause 6(c) is reiterated here "Copper alloy containing up to 4 % lead by weight.". Test Item(s) 3, 8, 9, 11, 13, 32, 33, 38 was (were) claimed as is by client (received as is). Therefore, this (these) Test Item(s) containing the found lead level should be exempted.

END

APPENDIX

List of Analytes and their Corresponding Test Methods, Detection Limit and Maximum Allowable Limit [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

Compliance Test for European Parliament and Council Directive 2011/65/EU						
No.	Name of Analytes	Detection Limit (mg/kg)				Maximum Allowable Limit (mg/kg)
		X-ray fluorescence (XRF) ^[a]			Wet Chemistry	
		Plastic	Metallic / glass / ceramic	Others		
1	Lead (Pb)	100	200	200	10 ^[b]	1 000
2	Cadmium (Cd)	50	50	50	10 ^[b]	100
3	Mercury (Hg)	100	200	200	10 ^[c]	1 000
4	Chromium (Cr)	100	200	200	NA	NA
5	Chromium VI (Cr VI)	NA	NA	NA	3 ^[g, h] / 10 ^[d] / See ^[e, i]	1 000 / Negative ^[j]
6	Bromine (Br)	200	NA	200	NA	NA
7	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	NA	NA	NA	Each 50 ^[f]	Sum 1 000
8	Polybromodiphenyl ethers (PBDEs) - Bromodiphenyl ether (MonoBDE) - Dibromodiphenyl ether (DiBDE) - Tribromodiphenyl ether (TriBDE) - Tetrabromodiphenyl ether (TetraBDE) - Pentabromodiphenyl ether (PentaBDE) - Hexabromodiphenyl ether (HexaBDE) - Heptabromodiphenyl ether (HeptaBDE) - Octabromodiphenyl ether (OctaBDE) - Nonabromodiphenyl ether (NonaBDE) - Decabromodiphenyl ether (DecaBDE)	NA	NA	NA	Each 50 ^[f]	Sum 1 000

NA = Not applicable

^[a] Test method with reference to International Standard IEC 62321-3-1: 2013.

^[b] Test method with reference to International Standard IEC 62321-3-5: 2013.

^[c] Test method with reference to International Standard IEC 62321-3-4: 2013.

^[d] Polymers and Electronics - Test method with reference to European Standard EN 62321: 2009, Annex C.

^[e] Metal - Test method with reference to European Standard EN 62321: 2009, Annex B^[i].

^[f] Test method with reference to European Standard EN 62321: 2009, Annex A.

^[g] Leather - Test method International Standard ISO 17075: 2007.

^[h] Other Than Metal, Leather, Polymers and Electronics - Test method with reference to International Standard ISO 17075: 2007.

^[i] The principle of this method was evaluated and supported by two studies organized by IEC TC 111 WG3. These studies were focused on detecting the presence of Cr VI in the corrosion protection coatings on metallic samples. Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Parliament and Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Parliament and Council Directive 2011/65/EU, Article 4(1).

^[j]



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Testing Approach [Compliance Test for European Parliament and Council Directive 2011/65/EU] :
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The testing approach was with reference to the following document(s).

- | | |
|---|---|
| 1 | International Standards IEC 62321-1: 2013 and IEC 62321-2: 2013 |
| 2 | “RoHS Enforcement Guidance Document Version 1” by EU RoHS Enforcement Authorities Informal Network. (May 2006) |
| 3 | “RoHS Regulations - Government Guidance Notes” by United Kingdom Department for Business Innovation & Skills. (February 2011) |
| 4 | “Final Report to RoHS substances (Hg, Pb, Cr(VI), Cd, PBB and PBDE) in electrical and electronic equipment in Belgium” by Belgium Federal Public Service Health, Food Chain Safety and Environment. (November 2005) |

END 结束