

Test Report No.:

1160037913a 001

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Client: Hangzhou Hikvision Digital Technology Co., Ltd.
No.555 Qianmo Road,Binjiang District Hangzhou310052,China

Test item(s): Network keyboard

Test Model No(s): DS-1200KI

Reference Style No(s). DS-1006KI, DS-1X0XK, DS-1X0XKI

Sample Receiving date: 2017-06-20, 2017-07-25

Delivery condition: Apparent good, Samples tested as received

Test specification:

Test result:

Overall results according to tests performed

1. Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Bis(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate (DIBP) **Pass**
According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU last amended by (EU) 2015/863

Other Information:

Test period: 2017-06-20 ~ 2017-07-12, 2017-07-25 ~ 2017-07-27

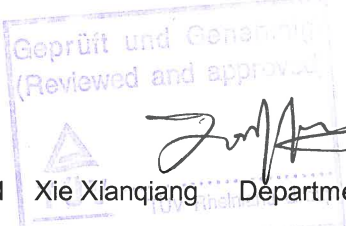

According to customer's requirement, only the appointed materials have been tested.

The testing items in the report were subcontracted to the lab which complied with ISO17025.

For and on behalf of
TÜV Rheinland / CCIC (Ningbo) Co., Ltd.

2017-07-31 Xie Xianqiang Department Manager

Date Name/Position



Test result is drawn according to the kind and extent of tests performed.

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

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1. Screening Test by XRF Spectroscopy

 Test Method: Cadmium, Lead, Mercury, Chromium, Bromine
 -With reference to IEC 62321-3-1: 2013

Testing Period: 2017-06-20 ~ 2017-07-12, 2017-07-25 ~ 2017-07-27

Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB: 1000 PBDE: 1000
1(black plastic shell)	n.d.	n.d.	n.d.	n.d.	n.d.
2(black plastic button)	n.d.	n.d.	n.d.	n.d.	n.d.
3(gray rubber)	n.d.	n.d.	n.d.	n.d.	n.d.
4(metal)(logo)	n.d.	n.d.	n.d.	n.d.	N.A.
5(label)	n.d.	n.d.	n.d.	n.d.	n.d.
6(gray rubber)	n.d.	n.d.	n.d.	n.d.	n.d.
7-1(white adhesive tape)	n.d.	n.d.	n.d.	n.d.	n.d.
7-2(black adhesive tape)	n.d.	n.d.	n.d.	n.d.	n.d.
8(white plastic film)	n.d.	n.d.	n.d.	n.d.	n.d.
9(white plastic film)	n.d.	n.d.	n.d.	n.d.	n.d.
10-1(Screen protection film)	n.d.	n.d.	n.d.	n.d.	n.d.
10-2(gray plastic sheet) (display screen)	n.d.	n.d.	n.d.	n.d.	n.d.
10-3(glass)(display screen)	n.d.	n.d.	n.d.	n.d.	N.A.
10-4(silver plastic sheet) (display screen)	n.d.	n.d.	n.d.	n.d.	n.d.
11(data line)	n.d.	n.d.	n.d.	n.d.	n.d.
12(transparent plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
13-1(black coating)	n.d.	n.d.	n.d.	n.d.	n.d.
13-2(metal)	n.d.	n.d.	n.d.	n.d.	N.A.
14(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
15(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
16-1(SMD resistor)	n.d.	n.d.	n.d.	n.d.	n.d.
16-2(soldering tin)	n.d.	213(P)	n.d.	n.d.	N.A.
17(SMD LED)	n.d.	n.d.	n.d.	n.d.	n.d.
18(soldering tin)	n.d.	191(P)	n.d.	n.d.	N.A.
19(PCB)	n.d.	n.d.	n.d.	n.d.	n.d.
20-1(black plastic)	n.d.	n.d.	n.d.	n.d.	d(^1)
20-2(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
21-1(white plastic)	n.d.	n.d.	n.d.	n.d.	d(^1)
21-2(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.

Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB: 1000 PBDE: 1000
22-1(black plastic)	n.d.	n.d.	n.d.	n.d.	d(^1)
22-2(metal)(plug pins)	n.d.	340 (P)	n.d.	n.d.	N.A.
22-3(metal)(terminal)	n.d.	n.d.	n.d.	n.d.	N.A.
23-1(blue plastic jacket) (electrolytic capacitor)	n.d.	n.d.	n.d.	n.d.	n.d.
23-2(aluminium tube)	n.d.	n.d.	n.d.	n.d.	N.A.
23-3(inner core)	n.d.	n.d.	n.d.	n.d.	N.A.
23-4(black rubber stopper)	n.d.	n.d.	n.d.	n.d.	n.d.
23-5(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
24(inductance)	n.d.	n.d.	n.d.	n.d.	n.d.
25-1(green plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
25-2(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
25-3(metal)(binding post)	d(^1)	d(^1)	n.d.	n.d.	N.A.
25-4(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
26(self-restoring fuse)	n.d.	n.d.	n.d.	n.d.	n.d.
27-1(silvery metal)	n.d.	n.d.	n.d.	n.d.	N.A.
27-2(white plastic support)	n.d.	n.d.	n.d.	n.d.	d(^1)
27-3(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
28-1(white plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
28-2(black plastic)	n.d.	n.d.	n.d.	n.d.	N.A.
28-3(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
29-1(silvery metal)	n.d.	n.d.	n.d.	n.d.	N.A.
29-2(metal)(studs)	n.d.	n.d.	d(^2)	n.d.	N.A.
29-3(silvery metal)(copper nut)	d(^1)	d(^1)	n.d.	n.d.	N.A.
29-4(black plastic)	n.d.	n.d.	n.d.	n.d.	d(^1)
29-5(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
30-1(blue plastic)	n.d.	n.d.	n.d.	n.d.	d(^1)
30-2(LED)	n.d.	n.d.	n.d.	n.d.	n.d.
30-3(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
31-1(black plastic shell)	n.d.	n.d.	n.d.	n.d.	d(^1)
31-2(Buzzer piece)	n.d.	n.d.	n.d.	n.d.	N.A.
31-3(metal)(T-iron)	n.d.	n.d.	n.d.	n.d.	N.A.
31-4(magnet rign)	n.d.	n.d.	n.d.	n.d.	N.A.
31-5(copper coil)	n.d.	n.d.	n.d.	n.d.	n.d.
31-6(PCB)	n.d.	n.d.	n.d.	n.d.	d(^1)
31-7(SMD resistor)	n.d.	n.d.	n.d.	n.d.	n.d.

Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB: 1000 PBDE: 1000
31-8(SMD audion)	n.d.	n.d.	n.d.	n.d.	n.d.
31-9(soldering tin)	n.d.	127(P)	n.d.	n.d.	N.A.
31-10(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
32(white plastic)(connector)	n.d.	n.d.	n.d.	n.d.	d(^1)
33-1(SMD resistor)	n.d.	n.d.	n.d.	n.d.	n.d.
33-2(soldering tin)	n.d.	236(P)	n.d.	n.d.	N.A.
34(SMD capacitor)	n.d.	n.d.	n.d.	n.d.	n.d.
35(SMD diode)	n.d.	n.d.	n.d.	n.d.	n.d.
36(SMD audion)	n.d.	n.d.	n.d.	n.d.	n.d.
37(SMD zener diode)	n.d.	7(c)-I	n.d.	n.d.	N.A.
38(IC)	n.d.	n.d.	n.d.	n.d.	n.d.
39(IC)	n.d.	n.d.	n.d.	n.d.	n.d.
40(IC)	n.d.	n.d.	n.d.	n.d.	n.d.
41(network transformer)	n.d.	n.d.	n.d.	n.d.	n.d.
42(crystal oscillator)	n.d.	n.d.	n.d.	n.d.	n.d.
43(PCB)	n.d.	n.d.	n.d.	n.d.	d(^1)
44(soldering tin)	n.d.	278(P)	n.d.	n.d.	N.A.
45-1(red plastic button)	n.d.	n.d.	n.d.	n.d.	d(^1)
45-2(silvery metal cover)	n.d.	n.d.	n.d.	n.d.	N.A.
45-3(black plastic shell)	n.d.	n.d.	n.d.	n.d.	d(^1)
45-4(metal)(reed)	n.d.	n.d.	n.d.	n.d.	N.A.
45-5(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
46(label)	n.d.	n.d.	n.d.	n.d.	n.d.
47(IC)	n.d.	n.d.	n.d.	n.d.	n.d.
48(label)	n.d.	n.d.	n.d.	n.d.	n.d.
49(white plastic)	n.d.	n.d.	n.d.	n.d.	d(^1)
50(heat shrink tubing)	n.d.	n.d.	n.d.	n.d.	n.d.
51(yellow wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
52(brown wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
53(green wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
54(blue wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
55(black wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
56(red wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
57(white wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
58(label)	n.d.	n.d.	n.d.	n.d.	n.d.

Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB: 1000 PBDE: 1000
59(silvery metal)	n.d.	n.d.	d(^2)	n.d.	N.A.
60(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
61(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
62#(gold metal)(copper nut)	d(^1)	d(^1)	n.d.	n.d.	N.A.
63(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
64(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
65(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
66(black rubber)	n.d.	n.d.	n.d.	n.d.	n.d.
67(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
68(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
69-1(silvery metal)	n.d.	n.d.	d(^2)	n.d.	N.A.
69-2(magnet)	n.d.	n.d.	n.d.	n.d.	N.A.
70-1(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
70-2(gold metal)(copper)	d(^1)	d(^1)	n.d.	n.d.	N.A.
71(metal)(spring)	n.d.	n.d.	d(^2)	n.d.	N.A.
72(metal)(snap ring)	n.d.	n.d.	d(^2)	n.d.	N.A.
73(silvery metal)	n.d.	n.d.	d(^2)	n.d.	N.A.
74(silvery metal)	n.d.	n.d.	d(^2)	n.d.	N.A.
76(green wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
77#(red wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
78(black wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
79#(white wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
80#(brown wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
81-1(white plastic)	n.d.	n.d.	n.d.	n.d.	d(^1)
81-2(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
81-3(soldering tin)	n.d.	365(P)	n.d.	n.d.	N.A.
82(soldering tin)	n.d.	421(P)	n.d.	n.d.	N.A.
83(PCB)	n.d.	n.d.	n.d.	n.d.	d(^1)
84(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
85(silvery metal)	n.d.	n.d.	n.d.	n.d.	N.A.
86(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
87-1(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
87-2(magnet)	n.d.	n.d.	n.d.	n.d.	N.A.
88(gold metal)(copper)	n.d.	d(^1)	n.d.	n.d.	N.A.
89(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.

Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB: 1000 PBDE: 1000
90(silvery metal)	n.d.	n.d.	d(^2)	n.d.	N.A.
91(metal)(spring)	n.d.	n.d.	d(^2)	n.d.	N.A.
92(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
93(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
94-1(black plastic button (switch))	n.d.	n.d.	n.d.	n.d.	n.d.
94-2(black plastic shell)	n.d.	n.d.	n.d.	n.d.	n.d.
94-3(metal)(reed)	n.d.	n.d.	n.d.	n.d.	N.A.
94-4(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
94-5(soldering tin)(switch)	n.d.	459(P)	n.d.	n.d.	N.A.
95(soldering tin)(SMD)	n.d.	501(P)	n.d.	n.d.	N.A.
96(soldering tin)(wiring)	n.d.	331(P)	n.d.	n.d.	N.A.
97(PCB)	n.d.	n.d.	n.d.	n.d.	d(^1)
98(black plastic shell)	n.d.	n.d.	n.d.	n.d.	d(^1)
99(label)	n.d.	n.d.	n.d.	n.d.	n.d.
100(metal)(plug pins)	d(^1)	d(^1)	n.d.	n.d.	n.d.
101(black plastic sheet)	n.d.	n.d.	n.d.	n.d.	n.d.
102(black plastic bushing)	n.d.	n.d.	n.d.	n.d.	n.d.
103-1(black wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
103-2(copper wire)	n.d.	n.d.	n.d.	n.d.	N.A.
104-1(black plastic frame)	n.d.	n.d.	n.d.	n.d.	n.d.
104-2(soldering tin)	n.d.	145(P)	n.d.	n.d.	N.A.
105-1(silvery metal)	n.d.	n.d.	n.d.	n.d.	N.A.
105-2(black plastic support)	n.d.	n.d.	n.d.	n.d.	d(^1)
106(black wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
107(white wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
108(soldering tin)	n.d.	354(P)	n.d.	n.d.	N.A.
109-1(magnet ring)	n.d.	n.d.	n.d.	n.d.	N.A.
109-2(vernished wire)	n.d.	n.d.	n.d.	n.d.	n.d.
110-1(black plastic jacket (electrolytic capacitor))	n.d.	n.d.	n.d.	n.d.	n.d.
110-2(aluminum tubing)	n.d.	n.d.	n.d.	n.d.	N.A.
110-3(inner core)	n.d.	n.d.	n.d.	n.d.	n.d.
110-4(black rubber)	n.d.	n.d.	n.d.	n.d.	n.d.
110-5(metal)(pins)	n.d.	n.d.	n.d.	n.d.	N.A.
111(capacitor)	n.d.	n.d.	n.d.	n.d.	n.d.

Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB: 1000 PBDE: 1000
112(diode)	n.d.	n.d.	n.d.	n.d.	d(^1)
113(photocoupler)	n.d.	n.d.	n.d.	n.d.	d(^1)
114-1(yellow tape)(transformer)	n.d.	n.d.	n.d.	n.d.	N.A.
114-2(magnet)	n.d.	n.d.	n.d.	n.d.	N.A.
114-3(black plastic)(coil rack)	n.d.	n.d.	n.d.	n.d.	n.d.
114-4(copper coil)	n.d.	n.d.	n.d.	n.d.	n.d.
115-1(metal)(cooling fin)	n.d.	n.d.	n.d.	n.d.	N.A.
115-2(MOSFET)	n.d.	n.d.	n.d.	n.d.	d(^1)
115-3(metal)(screw)	n.d.	n.d.	d(^2)	n.d.	N.A.
116-1(Transparent plastic label)	n.d.	n.d.	n.d.	n.d.	n.d.
116-2(silvery metal)	n.d.	n.d.	n.d.	n.d.	N.A.
116-3(yellow tape)	n.d.	n.d.	n.d.	n.d.	N.A.
116-4(magnet)	n.d.	n.d.	n.d.	n.d.	N.A.
116-5(black plastic)(coil rack)	n.d.	n.d.	n.d.	n.d.	n.d.
116-6(copper coil)	n.d.	n.d.	n.d.	n.d.	n.d.
117(piezoresistor)	n.d.	n.d.	n.d.	n.d.	n.d.
118(protective tube)	n.d.	n.d.	n.d.	n.d.	n.d.
119-1(SMD resistor)	n.d.	n.d.	n.d.	n.d.	n.d.
119-3(soldering tin)(SMD)	n.d.	230(P)	n.d.	n.d.	N.A.
120(SMD capacitor)	n.d.	n.d.	n.d.	n.d.	n.d.
121(IC)	n.d.	n.d.	n.d.	n.d.	n.d.
122(soldering tin)(wiring)	n.d.	185(P)	n.d.	n.d.	N.A.
123(soldering tin)(THC)	n.d.	166(P)	n.d.	n.d.	N.A.
124(PCB)	n.d.	n.d.	n.d.	n.d.	d(^1)
125(specification)	n.d.	n.d.	n.d.	n.d.	n.d.

Abbreviation:

Pb	denotes Lead
Cd	denotes Cadmium
Hg	denotes Mercury
Cr	denotes Chromium
Cr(VI)	denotes Chromium(VI)
Br	denotes Bromine
PBBs	denotes Total Polybrominated Biphenyls
PBDEs	denotes Total Polybrominated Diphenyl Ethers
<	denotes less than
N.A.	denotes Not Applicable
n.d.	denotes Not Detected
d	denotes Detected

Remark:

(^1) The screening result was found in the inconclusive region (X), thus the further wet chemistry tests are suggested.

(^2) The Chromium (VI) content in surface layer has been confirmed with reference to IEC 62321-7-1: 2015.

XRF Screening limits for different materials:

Materials	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
Metallic material	P≤ 60 < X ≤140 < F	P≤ 640 < X	P≤ 670 < X≤1360 < F	P≤ 660 < X≤1340 < F	NA
Polymeric material	P≤ 60 < X ≤140 < F	P≤ 640 < X	P≤ 670 < X≤1360 < F	P≤ 660 < X≤1340 < F	P≤ 290 < X
Electronic material	P≤ 40 < X ≤160 < F	P≤ 440 < X	P≤ 470 < X≤1640 < F	P≤460 < X≤1540 < F	P≤ 240 < X

2. Confirmation Test by Wet Chemistry

Test Method: Total Cadmium, Lead, Mercury, Chromium
 -Ref. to IEC 62321-4: 2013 & IEC 62321-5: 2013
 Chromium (VI)
 - For Metal material – Ref. to IEC 62321-7-1: 2015
 - For Plastic or Electronic material – Ref. to IEC 62321: 2008 Annex C
 - For Leather material – Ref. to ISO 17075: 2007
 PBBs, PBDEs – Ref. to IEC 62321-6: 2015
 Testing Period: 2017-06-20 ~ 2017-07-12, 2017-07-25 ~ 2017-07-27

Material list:

Material No.	Material	Color	Test Plan
			A=Test HM only B=Test FR only C=Test HM+FR
14	metal	silvery	A
15	metal	silvery	A
20-1	plastic	black	B
21-1	plastic	white	B
22-1	plastic	black	B
25-2	metal	silvery	A
25-3	metal(copper)	gold metal with silvery plating	A
27-2	plastic	white	B
29-2	metal	silvery	A
29-3	metal(copper)	gold metal with silvery plating	A
29-4	plastic	black	B
30-1	plastic	blue	B
31-1	plastic	black	B
31-6	PCB	green	B
32	plastic	white	B
43	PCB	green	B
45-1	plastic	red	B
45-3	plastic	black	B
49	plastic	white	B
59	metal	silvery	A
62#	metal(copper)	gold	A

Material No.	Material	Color	Test Plan
			A=Test HM only B=Test FR only C=Test HM+FR
67	metal	black	A
68	metal	silvery	A
69-1	metal	silvery	A
70-2	metal(copper)	gold	A
71	metal	silvery	A
72	metal	silvery	A
73	metal	silvery	A
74	metal	silvery	A
81-1	plastic	white	B
83	PCB	green	B
88	metal(copper)	gold	A
90	metal	silvery	A
91	metal	silvery	A
92	metal	silvery	A
93	metal	silvery	A
97	PCB	green	B
98	plastic	black	B
100	metal(copper)	gold metal with silvery plating	A
105-2	plastic	black	B
112	electronic material	black	B
113	electronic material	black	B
115-2	electronic material	black	B
115-3	metal	silvery	A
124	PCB	earth yellow/green	B

Abbreviation: HM (Heavy metal) = Cd, Pb, Hg, Cr (VI)
 FR (Flame Retardant) = PBBs, PBDEs

Test result:

	Cd	Pb	Cr (VI)	Hg	PBBs	PBDEs
Maximum Permissible Limit ppm (mg/kg)	100	1000	1000	1000	1000	1000

Material No.	Ppm (mg/kg)					
	Cd	Pb	Cr ^{VI}	Hg	PBBs	PBDEs
	MDL (mg/kg)					
	2	2	2	2	--(^3)	--(^3)
20-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
21-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
22-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
25-3	24	25467 ^[6(c)]	N.A.	N.A.	N.A.	N.A.
27-2	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
29-3	14	23541 ^[6(c)]	N.A.	N.A.	N.A.	N.A.
29-4	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
30-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
31-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
31-6	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
32	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
43	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
45-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
45-3	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
49	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
62#	N.D.	713	N.A.	N.A.	N.A.	N.A.
70-2	55	17537 ^[6(c)]	N.A.	N.A.	N.A.	N.A.
81-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
83	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
88	N.A.	26343 ^[6(c)]	N.A.	N.A.	N.A.	N.A.
97	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
98	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
100	15	26681 ^[6(c)]	N.A.	N.A.	N.A.	N.A.
105-2	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
112	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
113	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.

Material No.	Ppm (mg/kg)					
	Cd	Pb	Cr [^]	Hg	PBBs	PBDEs
	MDL (mg/kg)					
	2	2	2	2	--(^3)	--(^3)
115-2	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
124	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.

Material no.	Hexavalent Chromium Content ($\mu\text{g}/\text{cm}^2$) ^(*)
	RL: 0.10 $\mu\text{g}/\text{cm}^2$
14	Negative
15	Negative
25-2	Negative
29-2	Negative
59	Negative
67	Negative
68	Negative
69-1	Negative
71	Negative
72	Negative
73	Negative
74	Negative
90	Negative
91	Negative
92	Negative
93	Negative
115-3	Negative

Abbreviation:

Pb	denotes Lead
Cd	denotes Cadmium
Hg	denotes Mercury
Cr	denotes Chromium
Cr(VI)	denotes Chromium(VI)
PBBs	denotes Total Polybrominated Biphenyls
PBDEs	denotes Total Polybrominated Diphenyl Ethers
N.D.	denotes Not Detected
MDL	denotes Method Detection Limit
N.A.	denotes Not Applicable
^	The total Chromium have been determined

Remark:

1. Component(s)/ materials(s) with an area of less than 2mm x 2mm will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.
2. For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.
3. Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.
4. All other materials will be sampled and tested at one test point representatively.

(*1) The total chromium content in Metal sample was found to be exceeded the maximum permissible limit (1000mg/kg). Thus, the Chromium (VI) content in surface layer have been confirmed with reference to IEC 62321-7-1: 2015 Annex.

	Chromium (VI) concentration	Qualitative result
Negative	<0.1µg/cm ²	The sample is negative for Cr(VI). –The Cr(VI) concentration is below the limit of quantification. The coating is considered a non Cr(VI) based coating.
Inconclusive	≥0.1µg/cm ² and ≤0.13 µg/cm ²	The result is considered to be inconclusive. –Unavoidable coating variations may influence the determination. Recommendation: if additional samples are available, perform a total of 3 trials to increase sampling surface area. Use the averaged result of the 3 trails for the final determination.
Positive	>0.13 µg/cm ²	The sample is positive for Cr(VI). –The Cr(VI) concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

(*2) The total chromium content in plastic sample or electronic sample was found to be exceeded the maximum permissible limit (1000mg/kg). Thus, the Chromium (VI) content have been confirmed with reference to IEC 62321: 2008 Annex C.

(*3) The total chromium content in leather sample was found to be exceeded the maximum permissible limit (1000mg/kg). Thus, the Chromium (VI) content have been confirmed with reference to ISO 17075: 2007.

(^3) The method detection limit for each individual PBBs and individual PBDEs are:

Method Detection Limit in ppm (mg/kg)		
PBBs	Monbromobiphenyl	5
	Dibromobiphenyl	5
	Tribromobiphenyl	5
	Tetrabromobiphenyl	5
	Pentabromobiphenyl	5
	Hexabromobiphenyl	5
	Heptabromobiphenyl	5
	Octabromobiphenyl	5
	Nonabromobiphenyl	5
	Decabromobiphenyl	5
PBDEs	Monbromodiphenyl ether	5
	Dibromodiphenyl ether	5
	Tribromodiphenyl ether	5
	Tetrabromodiphenyl ether	5
	Pentabromodiphenyl ether	5
	Hexabromodiphenyl ether	5
	Heptabromodiphenyl ether	5
	Octabromodiphenyl ether	5
	Nonabromodiphenyl ether	5
	Decabromodiphenyl ether	5

6(c) Copper alloy containing up to 4 % lead by weight.

7(c)-I 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

3. BBP, DBP, DEHP, DIBP content

Test method: Organic solvent extraction, analyzed by GCMS (Ref. to DIN EN 62321-8: 2014 (IEC 111/321/CD: 2013))

Testing Period: 2017-06-20 ~ 2017-07-12, 2017-07-25 ~ 2017-07-27

Test result:

	BBP	DBP	DEHP	DIBP
Maximum permissible Limit (mg/kg)	1000	1000	1000	1000

Test No.	Material No.	(mg/kg)			
		BBP	DBP	DEHP	DIBP
		RL (mg/kg)			
		50	50	50	50
T001	1+2+12	n.d.	n.d.	n.d.	n.d.
T002	3+6+66	n.d.	n.d.	n.d.	n.d.
T003	5+46+48	n.d.	n.d.	n.d.	n.d.
T004	7-1+7-2	n.d.	n.d.	n.d.	n.d.
T005	8+9	n.d.	n.d.	n.d.	n.d.
T006	10-1+10-2+10-4	n.d.	n.d.	n.d.	n.d.
T007	11	n.d.	n.d.	n.d.	n.d.
T008	13-1	n.d.	n.d.	n.d.	n.d.
T009	19+43+83	n.d.	n.d.	n.d.	n.d.
T010	20-1+21-1+22-1	n.d.	n.d.	n.d.	n.d.
T011	23-1+23-4	n.d.	n.d.	n.d.	n.d.
T012	25-1+29-4+30-1	n.d.	n.d.	n.d.	n.d.
T013	45-1+45-3+49	n.d.	n.d.	n.d.	n.d.
T014	50	n.d.	n.d.	n.d.	n.d.
T015	51+52+53	n.d.	n.d.	n.d.	n.d.
T016	54+55+56	n.d.	n.d.	n.d.	n.d.
T017	57+76+78	n.d.	n.d.	n.d.	n.d.
T018	58+99+116-1	n.d.	n.d.	n.d.	n.d.
T019	60+61+63	n.d.	n.d.	n.d.	n.d.
T020	64+65+70-1	n.d.	n.d.	n.d.	n.d.
T022	77#+79#+80#	n.d.	n.d.	87	n.d.
T023	84+86+87-1	n.d.	n.d.	n.d.	n.d.
T024	89+94-1+94-2	n.d.	n.d.	n.d.	n.d.
T025	98+107	n.d.	n.d.	n.d.	n.d.
T026	102+104-1	n.d.	n.d.	n.d.	n.d.
T027	103-1+106+107	n.d.	n.d.	n.d.	n.d.
T028	110-1+110-4	n.d.	n.d.	n.d.	n.d.
T029	114-1+116-3	n.d.	n.d.	n.d.	n.d.
T030	97+124	n.d.	n.d.	n.d.	n.d.

Test No.	Material No.	(mg/kg)			
		BBP	DBP	DEHP	DIBP
		RL (mg/kg)			
		50	50	50	50
T031	125	n.d.	n.d.	n.d.	n.d.

Abbreviation: BBP= Benzylbutyl phthalate
 DBP= Dibutyl phthalate
 DEHP= Bis(2-ethylhexyl) phthalate
 DIBP= Diisobutyl phthalate
 n.d.= Not Detected (< Reporting Limit)
 RL = Reporting Limit
 N.A. = Not Applicable
 mg/kg= milligram per kilogram

Hangzhou Hikvision Electronics Co., Ltd. declared that:
 The models DS-1006KI, DS-1X0XK, DS-1X0XKI and test model DS-1200KI are the same serials, all components were made by the same raw material but different in shapes and sizes. Hangzhou Hikvision Electronics Co., Ltd. will be responsible for this statement.

Sample Photo(s):



Test item: Network keyboard

Tested model: DS-1200KI