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Applicant: Address:

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

Sample Name: Wireless sport earbuds

Sample Model: P326.23X
Sample Received Date: Nov. 25, 2016
Completed Date: Nov. 30, 2016

Test Requested and Conclusion(s):

No.	Test Sample	Standard and Requirement	Conclusion(s)
1	Submitted sample	RoHS Directive 2011/65/EU	PASS

Test Result(s): Please refer to next page(s).



Havin Zhou / P & C Department Manager

DongGuan Precise Testing and Certification Corp. Ltd.



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Test Result(s):

RoHS - Lead (Pb)/Cadmium(Cd)/Mercury(Hg)/Hexavalent Chromium(Cr^{6+})/PBBs/PBDEs Method: IEC 62321: 2008, analyzed by EDXRF & AAS & ICP-AES & GC-MS & UV-Vis.

Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
4	Hg	BL		PASS
1	Cr ⁶⁺	BL		PASS
	PBBs	DI		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
2	Hg	BL		PASS
2	Cr ⁶⁺	BL		PASS
	PBBs	DI		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
2	Hg	BL		PASS
3	Cr ⁶⁺	BL		PASS
	PBBs	5.		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
4	Hg	BL		PASS
4	Cr ⁶⁺	BL		PASS
	PBBs	DI		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
_	Hg	BL		PASS
5	Cr ⁶⁺	BL		PASS
	PBBs	DI		PASS
	PBDEs	BL		PASS



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
C	Hg	BL		PASS
6	Cr ⁶⁺	BL		PASS
	PBBs	BL		PASS
	PBDEs	DL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
7	Hg	BL		PASS
7	Cr ⁶⁺	BL		PASS
	PBBs	DI		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
0	Hg	BL		PASS
8	Cr ⁶⁺	BL		PASS
	PBBs	BL		PASS
	PBDEs			PASS
	Pb	BL		PASS
	Cd	BL		PASS
0	Hg	BL		PASS
9	Cr ⁶⁺	BL		PASS
	PBBs	D!		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
10	Hg	BL		PASS
10	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
44	Hg	BL		PASS
11	Cr ⁶⁺	BL		PASS
	PBBs	c.		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
12	Cr ⁶⁺	BL		PASS
	PBBs	D		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
13	Cr ⁶⁺	BL		PASS
	PBBs	15.1	N.D.	PASS
	PBDEs	IN	N.D.	PASS
	Pb	BL		PASS
	Cd	BL		PASS
14	Hg	BL		PASS
14	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
45	Hg	BL		PASS
15	Cr ⁶⁺	BL		PASS
	PBBs	Di		PASS
	PBDEs	BL		PASS



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
16	Cr ⁶⁺	BL		PASS
	PBBs	c.		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
47	Hg	BL		PASS
17	Cr ⁶⁺	BL		PASS
	PBBs	D		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
18	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
19	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
20	Cr ⁶⁺	BL		PASS
	PBBs	D.		PASS
	PBDEs	BL		PASS



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
04	Hg	BL		PASS
21	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
22	Cr ⁶⁺	BL		PASS
	PBBs	D		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
23	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
0.4	Hg	BL		PASS
24	Cr ⁶⁺	BL		PASS
	PBBs	INI	N.D.	PASS
	PBDEs	IN	N.D.	PASS
	Pb	BL		PASS
	Cd	BL		PASS
25	Hg	BL		PASS
25	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
26	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
07	Hg	BL		PASS
27	Cr ⁶⁺	BL		PASS
	PBBs	D.		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
28	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
29	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
30	Cr ⁶⁺	BL		PASS
	PBBs	DI		PASS
	PBDEs	BL		PASS



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
0.4	Hg	BL		PASS
31	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
32	Cr ⁶⁺	BL		PASS
	PBBs	D		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
22	Hg	BL		PASS
33	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
24	Hg	BL		PASS
34	Cr ⁶⁺	BL		PASS
	PBBs	BL		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
2F	Hg	BL		PASS
35	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			

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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
36	Cr ⁶⁺	BL		PASS
	PBBs	D		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
0.7	Hg	BL		PASS
37	Cr ⁶⁺	BL		PASS
	PBBs	D .		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
38	Cr ⁶⁺	BL		PASS
	PBBs	5.		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
39	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
40	Cr ⁶⁺	BL		PASS
	PBBs	BL		PASS
	PBDEs	DL DL		PASS



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
4.4	Hg	BL		PASS
41	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
42	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
43	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
4.4	Hg	BL		PASS
44	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
A.F.	Hg	BL		PASS
45	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			



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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
46	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			

Note:

- 1. mg/kg = milligram per kilogram (ppm).
- 2. N.D. = Not Detected (<RL).
- 3. RL(Reporting Limit): 5 mg/kg for Pb/ Cd/ Hg/ Cr⁶⁺(Nonmetal material); 5 mg/kg for PBBs & PBDEs.
- 4. Negative = Absence of Cr^{6+} .
- 5. Positive = Presence of Cr⁶⁺: the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.
- "*" = It is the result on total Cr and Br while test substances are Cr⁶⁺ and PBBs & PBDEs. 6.
- 7. "#" = Result are obtained by EDXRF for primary screening, if the result exceeds the below limit (BL), and further chemical testing.
- "E" = This material is tin-lead solder or copper alloy proved by client, lead in tin-lead solder or copper alloy is exempted on the requirements of RoHS directive (EU Directive 2002/95/EC).

Screening limits in mg/kg for regulated elements in various matrices

Elements	Polymer	Metal	Composite Materials
Dh	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(700-3σ)<x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(500-3σ) <x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<>
Pb	OL	OL	OL
Cd	BL≤(70-3σ) <x<(130+3σ)≤< th=""><th>BL≤(70-3σ)<x<(130+3σ)≤ ol<="" th=""><th>LOD<x<(150+3σ)≤ol< th=""></x<(150+3σ)≤ol<></th></x<(130+3σ)≤></th></x<(130+3σ)≤<>	BL≤(70-3σ) <x<(130+3σ)≤ ol<="" th=""><th>LOD<x<(150+3σ)≤ol< th=""></x<(150+3σ)≤ol<></th></x<(130+3σ)≤>	LOD <x<(150+3σ)≤ol< th=""></x<(150+3σ)≤ol<>
- Gu	OL	DE3(70-30) -X - (130 130) 3 OE	EOD (130130)30E</td
Ца	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(700-3σ)<x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(500-3σ) <x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<>
Hg	OL	OL	OL
Cr	BL≤(700-3σ) <x< th=""><th>BL≤(700-3σ)<x< th=""><th>BL≤(500-3σ)<x< th=""></x<></th></x<></th></x<>	BL≤(700-3σ) <x< th=""><th>BL≤(500-3σ)<x< th=""></x<></th></x<>	BL≤(500-3σ) <x< th=""></x<>
Br	BL≤(300-3σ) <x< th=""><th>1</th><th>BL≤(250-3σ)<x< th=""></x<></th></x<>	1	BL≤(250-3σ) <x< th=""></x<>

BL = Below Limit, OL = Over Limit, IN = Inconclusive, LOD = Limit of Detection

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Test Material	List	
The following materials apply only to the samples submitted for chemical testing.		
Material No.	Description	Location
1	Black soft plastic	Ear hook (black)
2	Yellow soft plastic	Ear hook (yellow)
3	Bright black plastic	Earphone shell (two)
4	Black plastic	Earphone shell、switch、key(two)
5	Black soft plastic	Earbuds (two)
6	Black soft plastic	USB socket scarfskin(two)
7	Black plastic	Earphone wire scarfskin (black)
8	Yellow plastic	Earphone wire scarfskin (yellow)
9	White paper with black printing	Earphone wire label (two)
10	Silvery metal	USB wire both ends socket shell (two)
11	Black plastic	USB wire both ends socket trailer card (two)
12	Black plastic	USB wire scarfskin (two)
13	White plastic	USB socket inner (two)
14	Silvery metal	USB wire both ends socket pin (two)
15	Black plastic	USB socket inner (two)
16	Black plastic	USB wire inner scarfskin (two)
17	Red plastic	USB wire inner scarfskin (two)
18	Copper metal	USB wire inner core (two)
19	Silvery metal net	Earphone inner shell (two)
20	Black sponge with glue	Inner horn (two)
21	Silvery metal	Inner horn shell (two)
22	Transparent plastic	Inner horn dust cover (two)
23	Copper metal	Inner horn voice coil (two)
24	White epoxy resin plate with green coating	Inner PCB board (two)
25	Black ceramic	Inner PCB board integrated circuit (two)
26	Copper metal	Inner PCB board (two)
27	Yellow adhesive tape	Inner PCB board key (two)
28	Silvery metal	Inner PCB board key (two)
29	Silvery metal	Inner PCB board crystal oscillator (two)



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30	Black plastic	Inner PCB board key (two)
31	Silvery metal	Inner PCB board key base (two)
32	White plastic	Inner PCB board key base (two)
33	Silvery metal	Inner PCB board USB socket shell (two)
34	Black plastic	Inner PCB board USB socket inner (two)
35	Silvery metal	Inner PCB board USB socket pin (two)
36	Beige adhesive tape	Inner electric wire (two)
37	Black plastic	Inner electric wire scarfskin (two)
38	Red plastic	Inner electric wire scarfskin (two)
39	Silvery metal	Inner electric wire core (two)
40	Brown adhesive tape	Inner battery (two)
41	Silvery aluminum foil with black printing	Inner battery scarfskin (two)
42	Red varnished wire	Earphone wire core (two)
43	Blue varnished wire	Earphone wire core (two)
44	Green varnished wire	Earphone wire core (two)
45	Copper varnished wire	Earphone wire core (two)
46	Silvery metal	Square head bolts (two)

Photo(s) of Sample:



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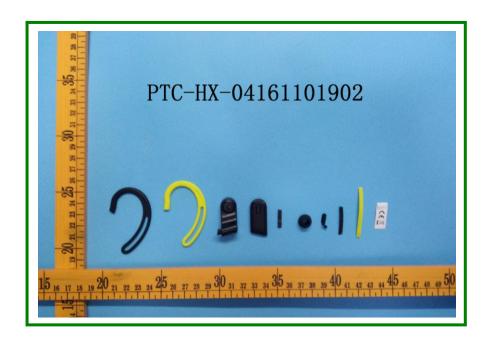
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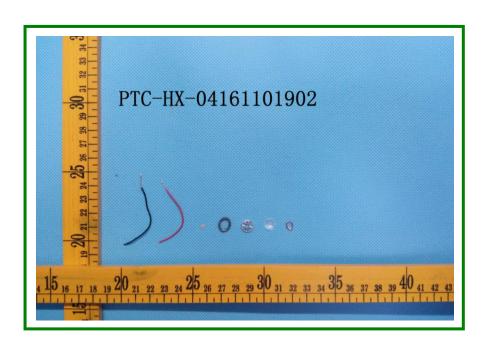
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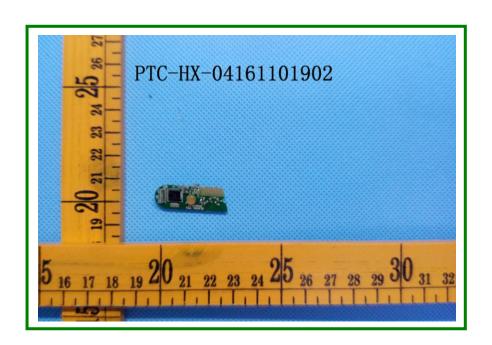


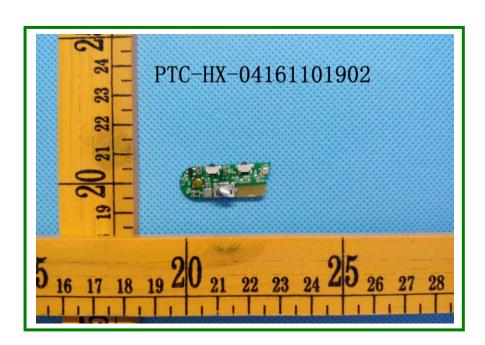
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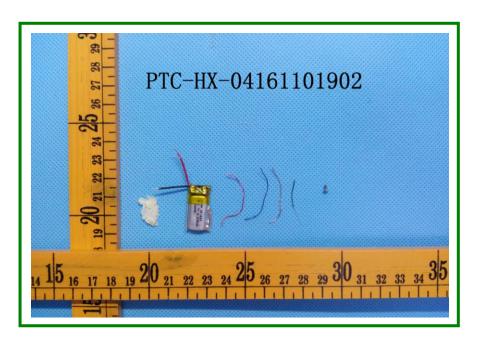
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