

TEST REPORT

Client company : APPLE- AV GROUP CO., LIMITED

Client address : FLAT/RM1701, 17F, HENAN BLDG., 90 JAFFE RD., WANCHAI, HONG KONG

Manufacturer : SHENZHEN Duolesheng ELECTRONICS CO., LTD

Address : The First Floor To Fifth Of Building A, Tianxin Industrial Park, Gushu,
Bao'An District, Shenzhen, China

Report on the submitted samples said to be:

Sample Name : PORTABLE SPEAKER

Trade Mark : N/A

Style/ Item No. : See ANNEX 1

Sample Receiving Date : October 9, 2025

Testing Period : October 9, 2025 ~ October 16, 2025

Results : Please refer to next page(s).

Summary of Test Results:

TEST REQUEST

CONCLUSION

A RoHS Directive (EU) 2017/2102 amending Annex II to Directive 2011/65/EU.

POSITIVE

Signed for and on behalf of AOCE

Written By:

Sunny Su

Sunny Su
File administrators

Approved by:

Alice Zhou

Alice Zhou
Manager

ANNEX 1

BSP104	BSP105	BSP106	BSP107	BSP108
BSP103	AP-W177	King2	TRAGLO47610	AP-W177-1
AP-W113ZL	VS-275BT	VS-355BT	AP-W176	AP-W176-1
AP-2401	AP-2402	AP-2403	AP-2404	AP-2405
AP-2406	AP-2407	AP-2408	AP-2409	AP-2410
AP-2411	AP-2412	AP-2413	AP-W161	AP-W305
AP-2501	AP-2502	AP-2503	AP-2504	AP-2505
AP-2506	AP-2507	AP-2508	AP-2509	AP-2510
AP-2511	AP-2512	AP-2513	AP-2601	AP-2602
AP-2603	AP-2604	AP-2605	AP-2606	AP-2607
AP-2608	AP-2609	AP-2610	AP-2611	AP-2612
AP-2613	AP-2801	AP-2802	AP-2803	AP-2804
AP-2805	AP-2806	AP-2807	AP-2808	AP-2809
AP-2810	AP-2811	AP-2812	AP-2813	AP-G281
AP-W183	AP-W279	AP-G559	AP-W151	AP-W185
AP-W157	AP-W178	AP-2121	AP-W190	AP-G367
AP-G364	AP-G552	AP-G563	AP-G564	AP-G565
AP-G313	AP-G559	BBPS-2400	BBPS-1600	DPS80
CUBE 20	BBPS-1600.2	BBPS-2400.2	DPS60	DPS40
DPS20	DPS100			

Results:

A. EU RoHS Directive 2011/65/EU and its amendment directives on XRF

Test method: With reference to IEC 62321-3-1:2013, Screening by X-ray Fluorescence Spectroscopy (XRF)

Seq. No.	Tested Part(s)	Results				
		Pb	Cd	Hg	Cr	Br
1	Black plastic enclosure	BL	BL	BL	BL	BL
2	Green plastic enclosure	BL	BL	BL	BL	BL
3	Black metal enclosure	BL	BL	BL	BL	BL
4	Gray plastic enclosure	BL	BL	BL	BL	BL
5	Silver metal screw	BL	BL	BL	BL	BL
6	Black button	BL	BL	BL	BL	BL
8	Black wire	BL	BL	BL	BL	BL
9	White plastic USB interface	BL	BL	BL	BL	BL
10	Silver metal USB interface	BL	BL	BL	BL	BL
11	Battery	BL	BL	BL	BL	BL
12	Loudspeaker	BL	BL	BL	BL	BL
13	Microphone	BL	BL	BL	BL	BL
14	Chips of resistance	BL	BL	BL	BL	BL
15	Chips of capacitance	BL	BL	BL	BL	BL
16	PCB	BL	BL	BL	BL	BL
17	Solder on PCB	BL	BL	BL	BL	BL

Note:

-- = Not Conducted
* = Screening by XRF and detected by chemical method. The test results of chemical method please refer to next pages.

- i Results were obtained by XRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) are recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013.

Element	Unit	Non-metal	Metal	Composite Material
Cd	mg/kg	$BL \leq 70 - 3\sigma < X < 130 + 3\sigma \leq OL$	$BL \leq 70 - 3\sigma < X < 130 + 3\sigma \leq OL$	$BL \leq 50 - 3\sigma < X < 150 + 3\sigma \leq OL$
Pb	mg/kg	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 500 - 3\sigma < X < 1500 + 3\sigma \leq OL$
Hg	mg/kg	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$	$BL \leq 500 - 3\sigma < X < 1500 + 3\sigma \leq OL$
Cr	mg/kg	$BL \leq 700 - 3\sigma < X$	$BL \leq 700 - 3\sigma < X$	$BL \leq 500 - 3\sigma < X$
Br	mg/kg	$BL \leq 300 - 3\sigma < X$	--	$BL \leq 250 - 3\sigma < X$

Note:

BL = Below Limit
OL = Over Limit
X = Inconclusive

- ii The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition.
- iii The maximum permissible limit is quoted from the document 2005/618/EC amending RoHS directive 2011/65/EU:

RoHS Restricted Substances	Maximum Concentration Value (mg/kg) (by weight in homogenous materials)
Cadmium (Cd)	100
Lead (Pb)	1000
Mercury (Hg)	1000
Hexavalent Chromium (Cr(VI))	1000
Polybrominated biphenyls (PBBs)	1000
Polybrominated diphenylethers (PBDEs)	1000
Bis(2-ethylhexyl) phthalate(DEHP)	1000
Butyl benzyl phthalate(BBP)	1000
Dibutyl phthalate(DBP)	1000
Diisobutyl phthalate(DIBP)	1000

Disclaimers:

This XRF Screening report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes.

The result shown in this XRF screening report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.

B. The Test Results of Chemical Method:

Test method:

Lead & Cadmium Content:

With reference to IEC 62321-5:2013, by acid digestion and analysis was performed by inductively coupled plasma atomic emission spectrometer (ICP-AES)

Mercury Content:

With reference to IEC 62321-4:2013, by acid digestion and analysis was performed by inductively coupled plasma atomic emission spectrometer (ICP-AES)

Hexavalent Chromium Content:

With reference to IEC 62321-7-1:2013, by alkaline digestion and analysis was performed by UV-visible spectrophotometer (UV-Vis)

PBBs & PBDEs Content:

With reference to IEC 62321-6:2015, by solvent extraction and analysis was performed by gas chromatographic-mass spectrometer (GC-MS)

Phthalates Content:

With reference to IEC 62321-8:2017, by gas chromatography-mass spectrometry (GC-MS)

1) The test results of Lead (Pb)

Item	Unit	MDL	Results		Limit
			(1)	(2)	
Lead Content (Pb)	mg/kg	2	38	21	1000 mg/kg
Conclusion	/	/	Pass	Pass	/

2) The test results of PBBs & PBDEs

Item	Unit	MDL	Results		Limit
			1	2	
Polybrominated Biphenyls (PBBs)					
Monobromobiphenyl	mg/kg	5	N.D.	N.D.	
Dibromobiphenyl	mg/kg	5	N.D.	N.D.	
Tribromobiphenyl	mg/kg	5	N.D.	N.D.	
Tetrabromobiphenyl	mg/kg	5	N.D.	N.D.	
Pentabromobiphenyl	mg/kg	5	N.D.	N.D.	
Hexabromobiphenyl	mg/kg	5	N.D.	N.D.	
Heptabromobiphenyl	mg/kg	5	N.D.	N.D.	
Octabromobiphenyl	mg/kg	5	N.D.	N.D.	
Nonabromodiphenyl	mg/kg	5	N.D.	N.D.	
Decabromodiphenyl	mg/kg	5	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	1000 mg/kg
Polybrominated Diphenylethers (PBDEs)(Mon-Deca)					
Monobromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Dibromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Tribromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Tetrabromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Pentabromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Hexabromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Heptabromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Octabromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Nonabromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Decabromodiphenyl ether	mg/kg	5	N.D.	N.D.	
Total content	mg/kg	/	N.D.	N.D.	1000 mg/kg

Item	Unit	MDL	Results					Limit
			(1)	(2)	(3)	(4)	(5)	
Dibutyl Phthalate(DBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Benzylbutyl Phthalate(BBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Diisobutyl phthalate(DIBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg

Item	Unit	MDL	Results					Limit
			(6)	(7)	(8)	(9)	(10)	
Dibutyl Phthalate(DBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Benzylbutyl Phthalate(BBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Diisobutyl phthalate(DIBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg

Item	Unit	MDL	Results					Limit
			(11)	(12)	(13)	(14)	(15)	
Dibutyl Phthalate(DBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Benzylbutyl Phthalate(BBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg
Diisobutyl phthalate(DIBP)	mg/kg	50	N.D.	N.D.	N.D.	N.D.	N.D.	1000 mg/kg

Item	Unit	MDL	Results					Limit
			(16)	(17)	--	--	--	
Dibutyl Phthalate(DBP)	mg/kg	50	N.D.	N.D.	--	--	--	1000 mg/kg
Benzylbutyl Phthalate(BBP)	mg/kg	50	N.D.	N.D.	--	--	--	1000 mg/kg
Bis(2-ethylhexyl) Phthalate(DEHP)	mg/kg	50	N.D.	N.D.	--	--	--	1000 mg/kg
Diisobutyl phthalate(DIBP)	mg/kg	50	N.D.	N.D.	--	--	--	1000 mg/kg

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Note:

- N.D. = Not Detected or less than MDL
- mg/kg = ppm
- MDL = Method Detection Limit
- Photo appendix is included.

Appendix

Photograph of Sample



Fig.1



Fig.2



Fig.3



Fig.4



Fig.5



Fig.6

AOCE authenticate the photo on original report only

***** End of Report *****