TEST REPORT

Report No.	:	WTF25F07173503C
Job No.	:	FSW2507160869CJ
Applicant	:	Mid Ocean Brands B.V.
Address	:	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer	:	111033
Sample Name	:	Apple Find My luggage tag, Smart Apple Find My PU wallet
Sample Model	:	MO2599, MO2697
Test Requested	:	With reference to EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863, to determine the Pb, Cd, Hg, Cr^{6+}, PBBs, PBDEs, DBP, BBP, DEHP, DIBP content in the submitted sample.
Test Method	:	Refer to next page (s)
Test Conclusion	:	**Pass**
Date of Receipt Sample	:	2025-07-16
Testing Period	:	2025-07-16 to 2025-07-24
Date of Issue	:	2025-07-25
Test Result	:	Refer to next page (s)

Prepared By:
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Signed for and on behalf of
Waltek Testing Group (Foshan) Co., Ltd.

WTF25F07173503C

Swing Liang
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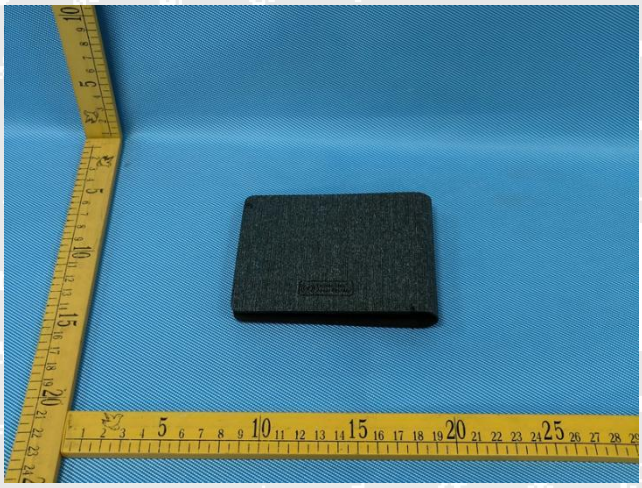
Sample photo:

MO2599

MO2599



MO2697

MO2697

Test Results:

1. Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs

Test Method/Equipment:

1) With reference to IEC 62321-2:2021, disassembly, disjunction and mechanical sample preparation
2) With reference to IEC 62321-3-1:2013, screening –Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry
3) With reference to IEC 62321-4:2013+AMD1:2017 CSV, determination of Mercury by ICP-OES
4) With reference to IEC 62321-5:2013, determination of Lead and Cadmium by ICP-OES
5) With reference to IEC 62321-7-2: 2017 and IEC 62321-7-1: 2015, determination of Hexavalent Chromium by UV-Vis
6) With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS

Part No.	Part Description	Result of XRF					Result of Wet Chemical Testing (mg/kg)
		Cd	Pb	Hg	Cr	Br	
1	Black synthetic leather	BL	BL	BL	BL	BL	NA
2	Black-grey synthetic leather	BL	BL	BL	BL	BL	NA
3	Silvery metal buckle with black surface	BL	BL	BL	BL	--	NA
4	Silvery metal buckle with black surface	BL	BL	BL	BL	--	NA
5	Silvery metal buckle with black surface	BL	BL	BL	BL	--	NA
6	Black synthetic leather	BL	BL	BL	BL	BL	NA
7	Transparent plastic sheet with adhesive	BL	BL	BL	BL	BL	NA
8	Yellow transparent plastic sheet with adhesive	BL	BL	BL	BL	BL	NA
9	Silvery double faced adhesive tape	BL	BL	BL	BL	BL	NA
10	Brown paper shell	BL	BL	BL	BL	BL	NA
11	Coppery metal wire	BL	BL	BL	BL	--	NA
12	Brown plastic adhesive tape	BL	BL	BL	BL	BL	NA
13	Chip IC	BL	BL	BL	BL	BL	NA

Part No.	Part Description	Result of XRF					Result of Wet Chemical Testing (mg/kg)
		Cd	Pb	Hg	Cr	Br	
14	Golden metal sheet	BL	BL	BL	BL	--	NA
15	Solder	BL	IN	BL	BL	--	Pb :234
16	Black plastic shell(button)	BL	BL	BL	BL	BL	NA
17	Golden metal part(button)	BL	BL	BL	IN	--	Cr^{6+} : Negative
18	Silvery metal shell(button)	BL	BL	BL	IN	--	Cr^{6+} : Negative
19	Silvery metal sheet(button)	BL	BL	BL	IN	--	Cr^{6+} : Negative
20	Chip capacitor(brown)	BL	BL	BL	BL	BL	NA
21	White soft plastic ring with adhesive	BL	BL	BL	BL	BL	NA
22	Silvery ceramic sheet	BL	**OL**	BL	BL	--	***Pb : 1.37×10^5**
23	Black PCB	BL	BL	BL	BL	IN	PBBs : ND PBDEs : ND
24	Chip diode	BL	BL	BL	BL	BL	NA
25	Chip crystal oscillator	BL	BL	BL	BL	BL	NA
26	Chip capacitor(white)	BL	BL	BL	BL	BL	NA
27	Chip resistor	BL	**OL**	BL	IN	BL	***Pb : 4943** Cr^{6+} : ND
28	Chip EC	BL	BL	BL	BL	BL	NA
29	Chip EC	BL	BL	BL	BL	IN	PBBs : ND PBDEs : ND
30	Chip LED	BL	BL	BL	BL	BL	NA
31	Transparent plastic sheet	BL	BL	BL	BL	BL	NA

Part No.	Part Description	Result of XRF					Result of Wet Chemical Testing (mg/kg)
		Cd	Pb	Hg	Cr	Br	
32	Black-grey synthetic leather	BL	BL	BL	BL	BL	NA
33	Black fabric sheet	BL	BL	BL	BL	BL	NA

2. Phthalates

Test Method/Equipment:

1) With reference to IEC 62321-8:2017, determination of DBP, BBP, DEHP, DIBP by GC-MS

Serial No.	Part No.	Result (mg/kg)			
		DBP	BBP	DEHP	DIBP
T01	1+2+6+32△	ND	ND	ND	ND
T02	7+8+16+31△	ND	ND	ND	ND
T03	9	ND	ND	ND	ND
T04	10	ND	ND	ND	ND
T05	12	ND	ND	ND	ND
T06	13+20+24+25+26△	ND	ND	ND	ND
T07	21	ND	ND	ND	ND
T08	23	ND	ND	ND	ND
T09	27+28+29+30△	ND	ND	ND	ND
T10	33	ND	ND	ND	ND
T11	3	--	--	--	--
T12	4	--	--	--	--
T13	5	--	--	--	--
T14	11	--	--	--	--
T15	14	--	--	--	--
T16	15	--	--	--	--
T17	17	--	--	--	--
T18	18	--	--	--	--
T19	19	--	--	--	--
T20	22	--	--	--	--

Remark:

(1) Results are obtained by XRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (for Cr^{6+}) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1: 2013 (unit: mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	BL ≤ (70-3σ) < IN < (130+3σ) ≤ OL	BL ≤ (70-3σ) < IN < (130+3σ) ≤ OL	LOD < IN < (150+3σ) ≤ OL
Pb	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (500-3σ) < IN < (1500+3σ) ≤ OL
Hg	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (500-3σ) < IN < (1500+3σ) ≤ OL
Cr	BL ≤ (700-3σ) < IN	BL ≤ (700-3σ) <IN	BL ≤ (500-3σ) < IN
Br	BL ≤ (300-3σ) < IN	--	BL ≤ (250-3σ) < IN

BL= Below Limit OL= Over Limit LOD = Limit of Detection

(2) "IN" expresses the inconclusive region, and further chemical testing to confirm whether it complies with the requirement of RoHS Directive.

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

(4) mg/kg =milligram per kilogram=ppm, μg/cm^2= Micrograms per square centimetre.

(5) ND = Not Detected or lower than limit of quantitation.

(6) NA = Not Applicable, as the XRF screening test result was below the limit or as the XRF screening directly determine that test result was over the limit, it was not need to conduct the wet chemical testing.

(7) -- = Not Regulated

(8) LOQ = Limit of quantitation.

Test Items	Pb	Cd	Hg	Cr^{6+}		PBB	PBDE	DBP	BBP	DEHP	DIBP
Units	mg/kg	mg/kg	mg/kg	mg/kg	μg/cm^2	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOQ	2	2	2	8	0.1	5	5	50	50	50	50

The LOQ for single compound of PBBs and PBDEs is 5mg/kg, LOQ of Cr^{6+} for polymer and composite sample is 8mg/kg and LOQ of Cr^{6+} for metal sample is 0.1μg/cm^2.

(9) According to IEC 62321-7-1:2015, determined of Cr^{6+} on metal sample by boiling water extraction test method, and result is shown as Positive/Negative.

Boiling water extraction:

Negative = Absence of Cr^{6+} coating, the detected concentration in boiling water extraction solution is less than 0.10μg/cm^2.

Positive = Presence of Cr^{6+} coating, the detected concentration in boiling water extraction solution is greater than 0.13μg/cm^2.

Information on storage conditions and production date of the tested sample is unavailable and thus Cr^{6+} results represent status of the sample at the time of testing.

(10)RoHS Requirement

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr^{6+})	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)
Dibutyl phthalate (DBP)	0.1% (1000 mg/kg)
Benzyl butyl phthalate (BBP)	0.1% (1000 mg/kg)
Di(2-ethylhexyl) phthalate (DEHP)	0.1% (1000 mg/kg)
Di-iso-butyl phthalate (DIBP)	0.1% (1000 mg/kg)

(11) Abbreviation:

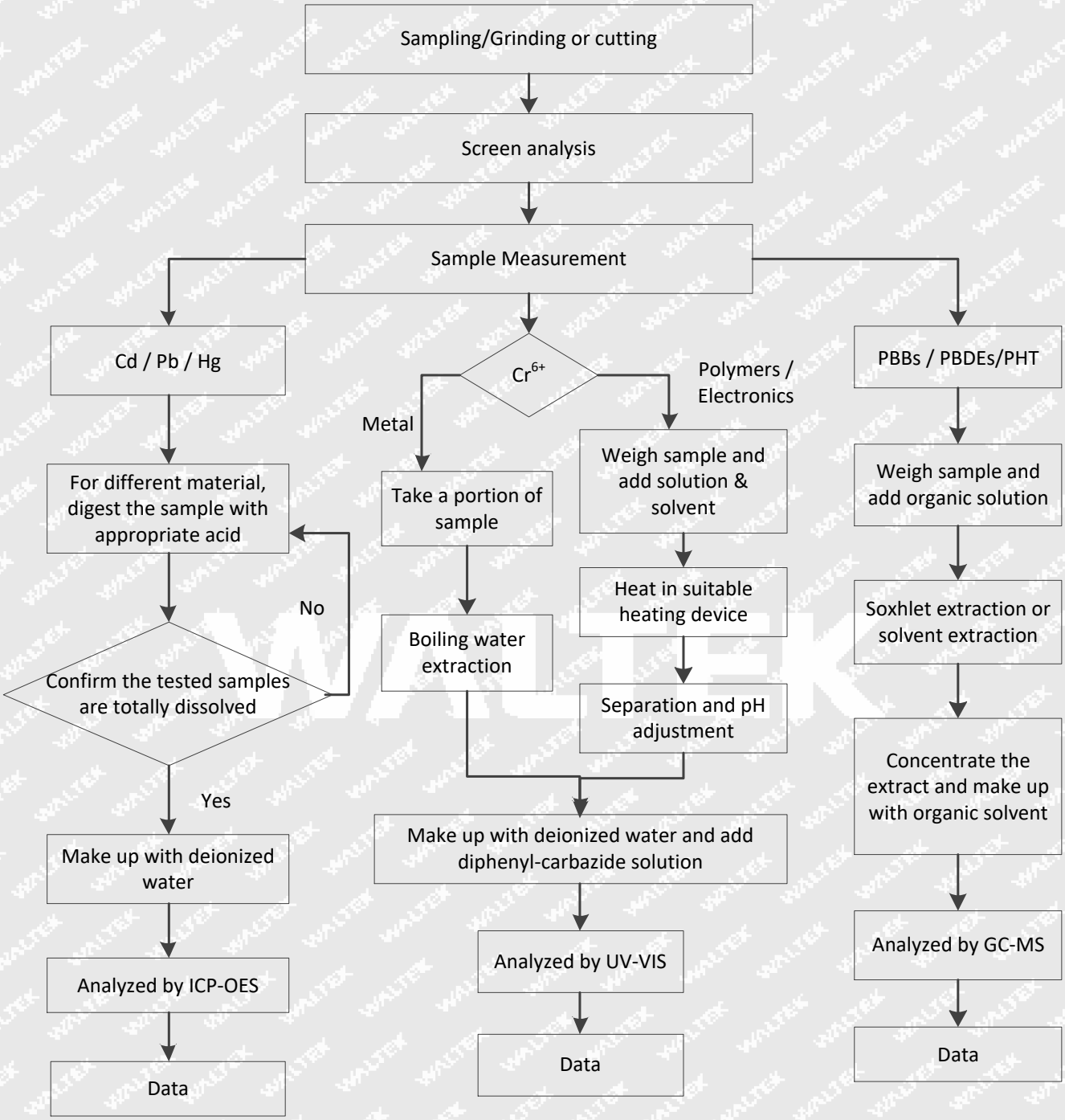
"Pb" denotes Lead, "Cd" denotes Cadmium, "Hg" denotes Mercury, "Cr" denotes Chromium, "Cr^{6+}" denotes Hexavalent Chromium, "Br" denotes Bromine, "PBBs" denotes Total Polybrominated Biphenyls, "PBDEs" denotes Total Polybrominated Diphenyl Ethers.

"DBP" denotes Dibutyl phthalate, "BBP" denotes Benzyl butyl phthalate (BBP), "DEHP" denotes Bis(2-ethylhexyl)-phthalate, "DIBP" denotes Diisobutyl phthalate, "PHT" denotes Phthalates.

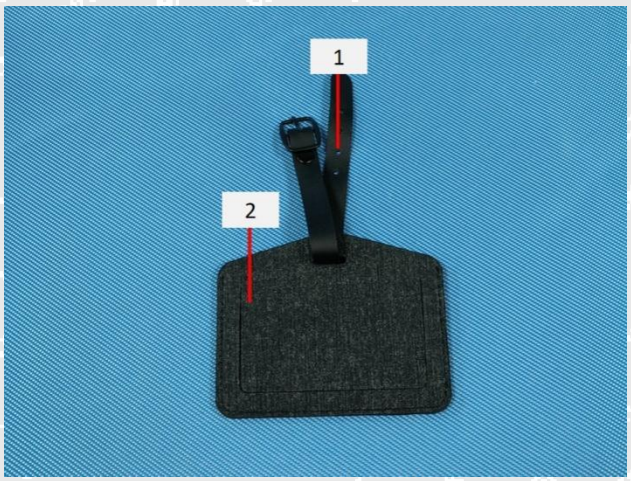
(12) "△"=As per applicant's requirement, the testing was conducted based on mixed components by weight in equal ratio, results are calculated by the minimum weight of mixed components.

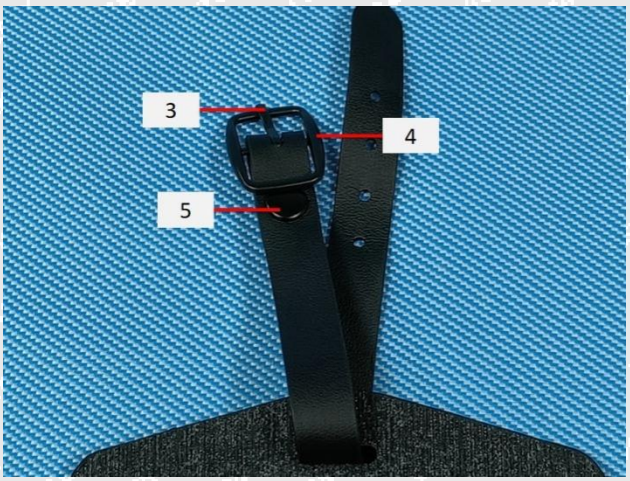
(13)* = According to the declaration from client, the source of lead in test sample is from the glass or ceramic material of that electronic component which is exempted by Directive 2011/65/EU ANNEX III-7(c)-I.

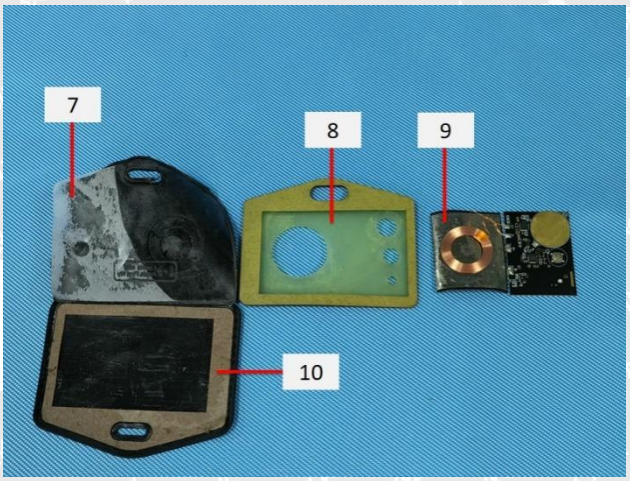
Testing Flow chart:

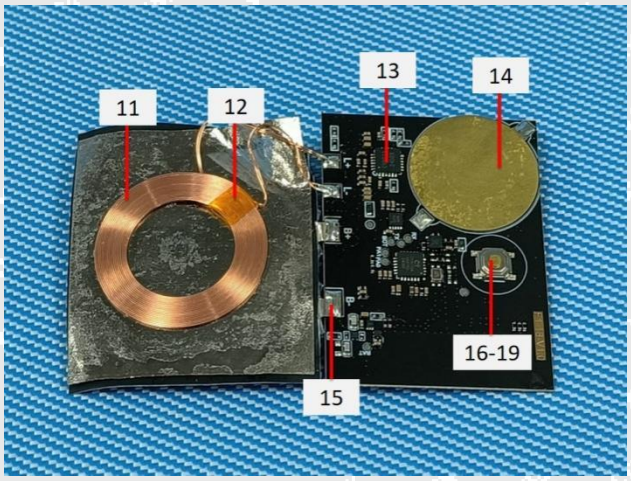


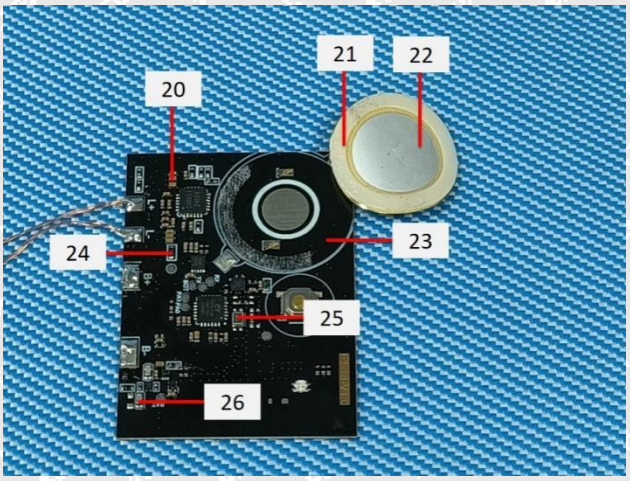
Photograph of parts tested：

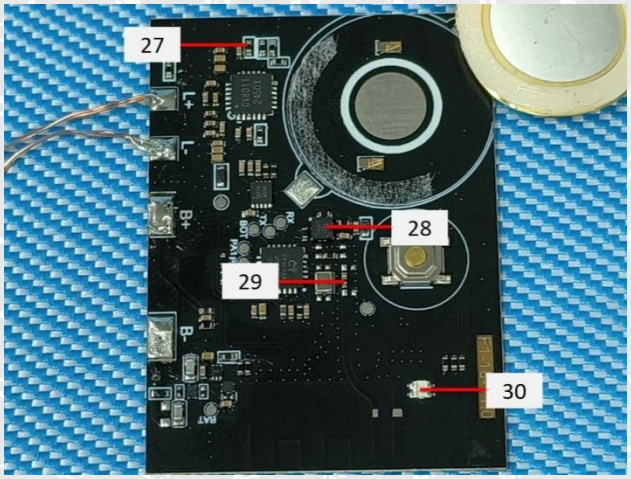








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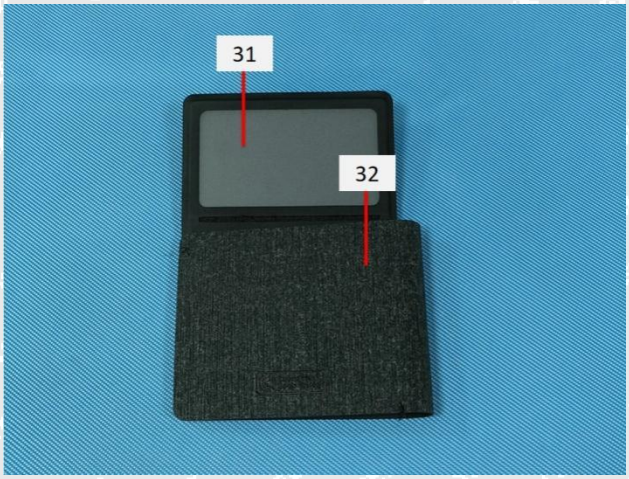
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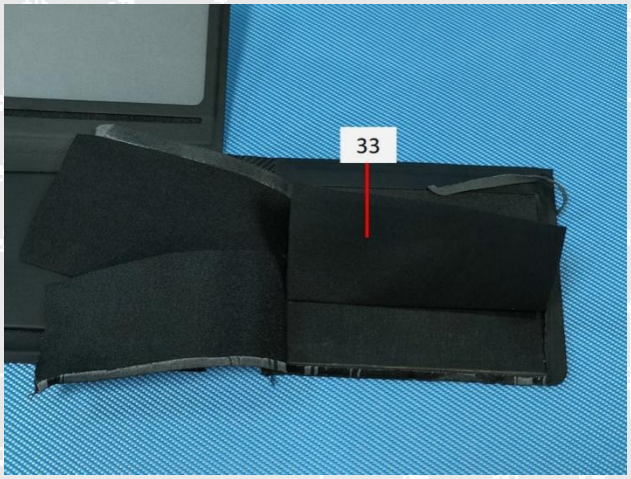
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Remarks:

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====== End of Report ======