TEST REPORT

APPLICANT	:	NINGBO HOMEMATE PRODUCTS CO.,LTD
ADDRESS	:	HOMEMATE PLAZA NO.1066 SANWU ROAD, ZHENGHAI, NINGBO
SAMPLE DESCRIPTION	:	24KEY IR CONTROL 5V USB RGB LED STRIP
ITEM NO.	:	638197,HM-RGB
SAMPLE RECEIVED DATE	:	27 - Sep - 2024
SAMPLE RESUBMISSION DATE	:	21 - Oct - 2024
TURN AROUND TIME	:	27 - Sep - 2024 to 29 - Oct - 2024
TEST SPECIFICATION	:	Total concentration of Lead, Cadmium, Mercury, Chromium VI, Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs) , Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP) , Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) in accordance with EC Directive 2011/65/EU and its amendment Directive (EU) 2015/863 (RoHS)
CONCLUSION	:	Based on the analysis on the submitted sample(s), the test results do comply with the concentration limits as specified in Annex II to Directive 2011/65/EU and its amendment Directive (EU) 2015/863.

The following test item(s) was/were performed on submitted sample(s) and/or component(s) appointed by applicant.

Eurofins（Hangzhou）contact information
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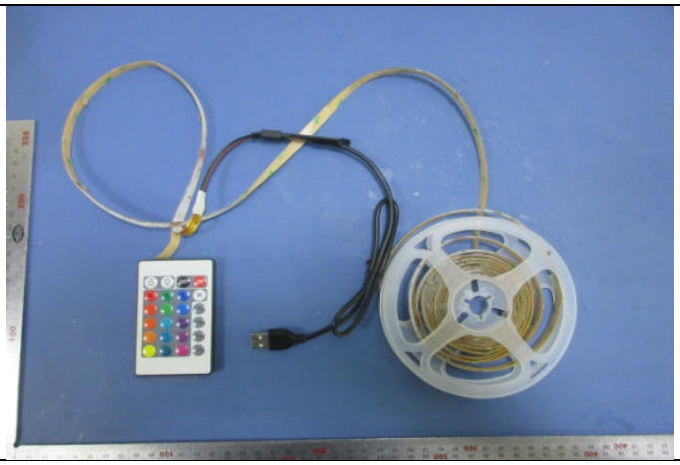
Sales specialist: John.Zhang@cpt.eurofinscn.com/ +86 15381027188

********** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) **********

Signed for and on behalf of
Eurofins Product Testing Service (Hangzhou) Co., Ltd

Lincoln Shi
Operation Manager

SAMPLE PHOTO(S)



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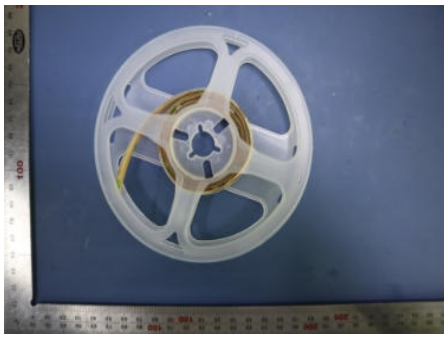
COMPONENT PHOTO(S)



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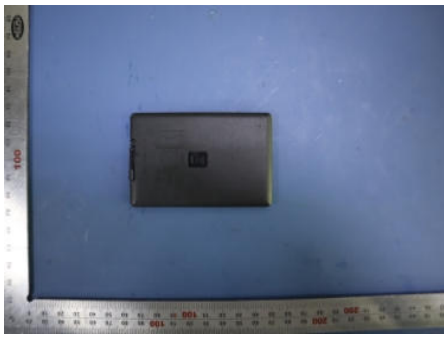

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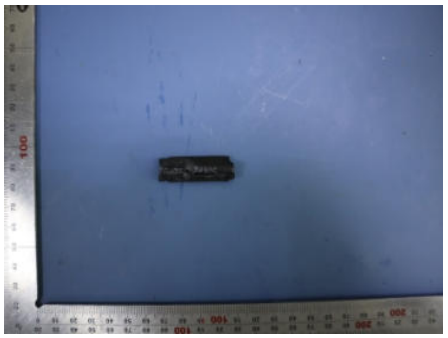

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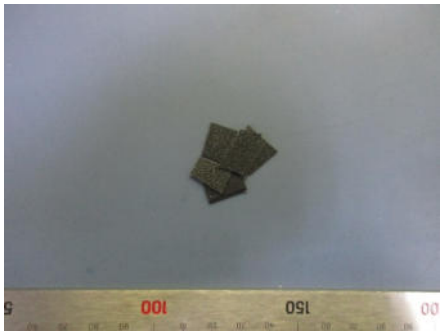

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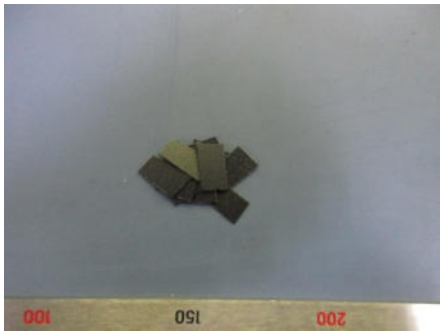

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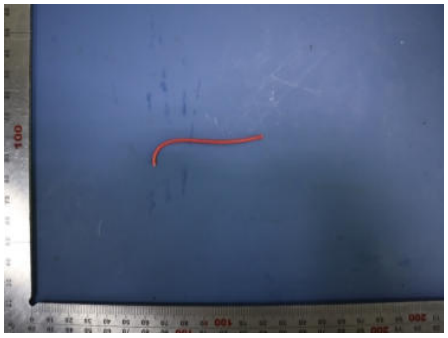

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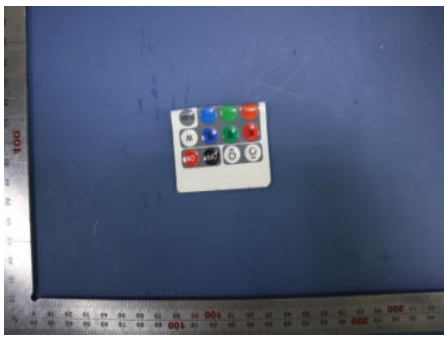

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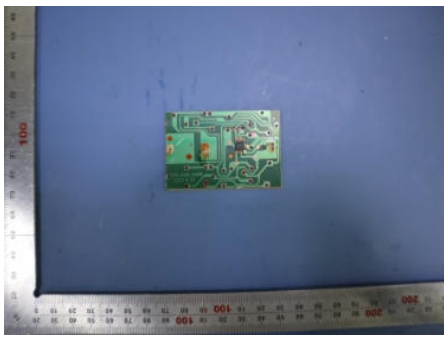

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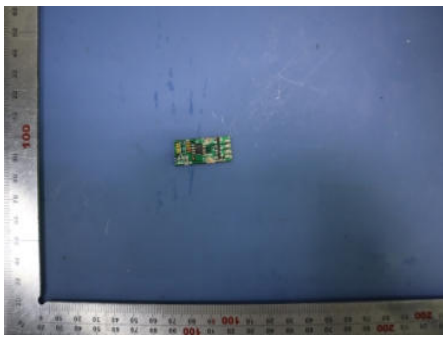

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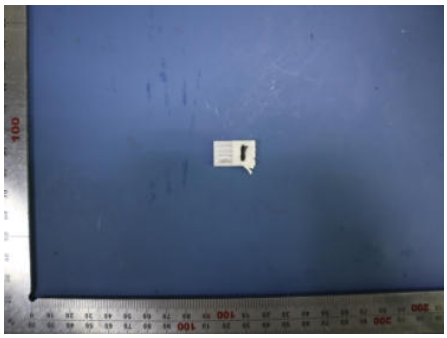

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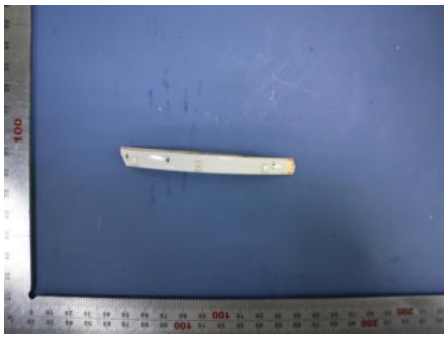

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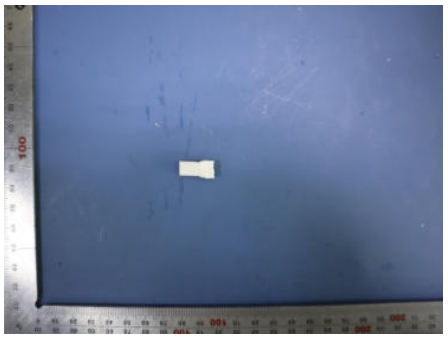

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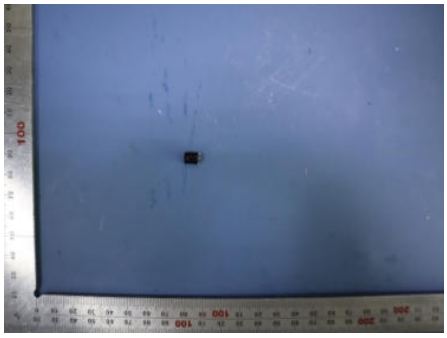

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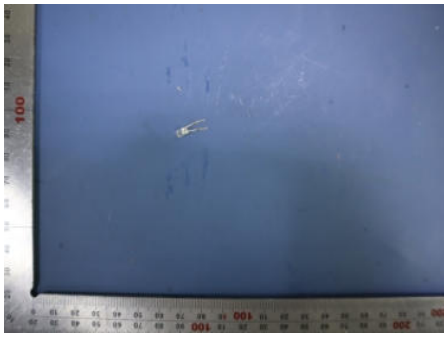

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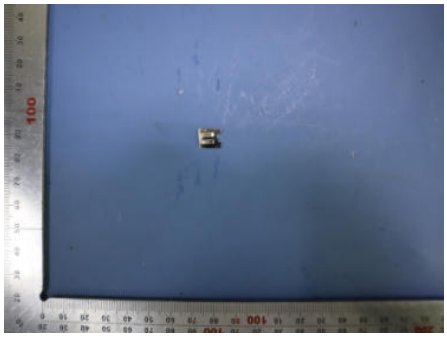

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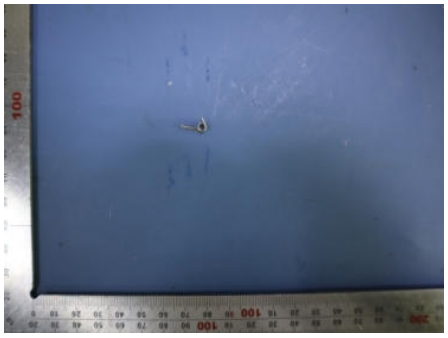

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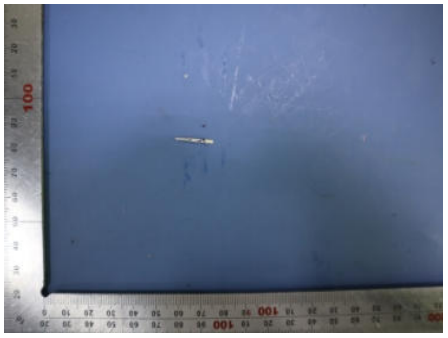

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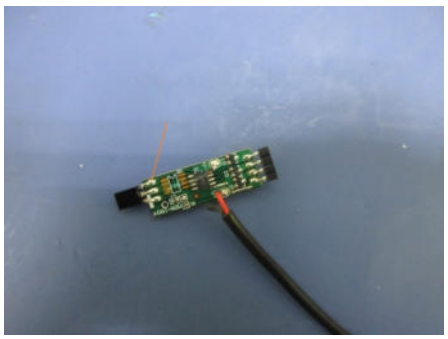

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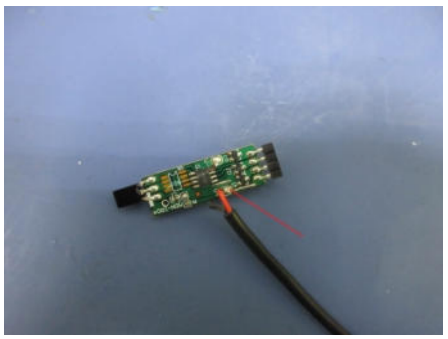

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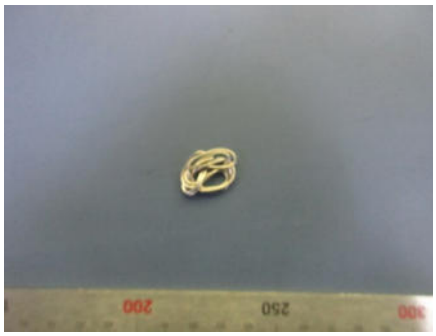
TO BE CONTINUED

COMPONENT PHOTO(S)



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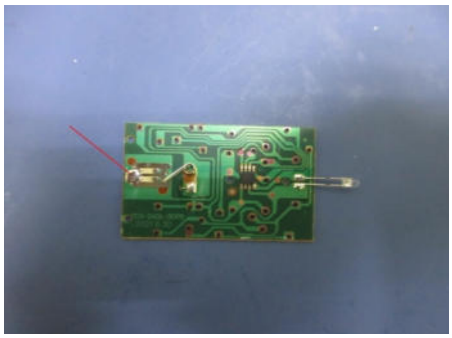

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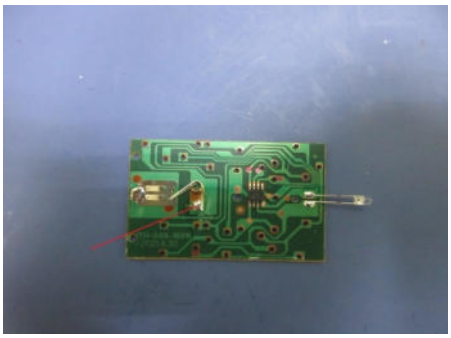

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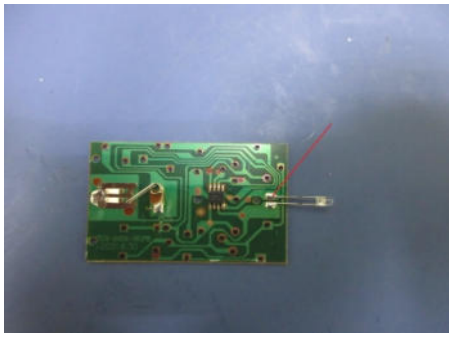

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TO BE CONTINUED

TEST RESULT

Part 1

A. Screening Test by XRF Spectroscopy

As specified by client, to analyze the contents of Lead, Cadmium, Mercury, Chromium, Bromine in the submitted sample by XRF. Screening limits in mg/kg for regulated elements in various matrices according to IEC 62321-3-1:2013

No.	Component	Test Results (mg/kg)				
		Cd	Pb	Hg	Cr	Br
		Limit (mg/kg)				
		100	1000	1000	Cr(VI): 1000	PBB:1000 PBDE:1000
1	Translucent plastic blocks	BL	BL	BL	BL	BL
2	Black plastic blocks	BL	BL	BL	BL	NC
3	Black heat shrink sleeve	BL	BL	BL	BL	BL
4	Black plastic plug 1	BL	BL	BL	BL	BL
5	Black plastic plug 2	BL	BL	BL	BL	BL
6	Black wire leather jacket	BL	BL	BL	BL	BL
7	Black wire sheath	BL	BL	BL	BL	BL
8	Red wire sheath	BL	BL	BL	BL	BL
9	Blue/red/green/black wire skin	BL	BL	BL	BL	BL
10	Multi-color soft plastic stickers	BL	BL	BL	BL	BL
11	Green Circuit Board 1	BL	BL	BL	BL	BL
12	Green board 2	BL	BL	BL	BL	BL
13	White plastic tongue	BL	BL	BL	BL	BL
14	White/transparent strip light	BL	BL	BL	BL	BL
15	White heat shrink sleeve	BL	BL	BL	BL	BL
16	Black transistor	BL	BL	BL	BL	NC
17	Transparent plastic lamp beads	BL	BL	BL	BL	NC
18	Silver metal block 1	BL	BL	BL	NC	NA
19	Silver metal block 2	BL	BL	BL	NC	NA
20	Silver metal springs	BL	BL	BL	NC	NA
21	Silver metal pins	BL	BL	BL	NC	NA
22	Copper-colored wire	BL	BL	BL	NC	NA
23	Silver solder 1	BL	BL	BL	NC	NA
24	Silver Solder 2	BL	BL	BL	NC	NA
25	Silver Solder 3	BL	NC	BL	NC	NA
26	Silver solder 4	BL	BL	BL	NC	NA
27	Silver solder 5	BL	BL	BL	NC	NA
28	Silver Solder 6	BL	BL	BL	NC	NA

TO BE CONTINUED

TEST RESULT

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
	NA	denotes Not Applicable
	NC	denotes Not Conclusive
	BL	denotes Below limit

XRF Screening limits for different materials:

Element	Polymers	Metals	Composite Material
Cd	BL ≤(70-3σ) ＜X ＜ (130+3σ) ≤ OL	BL ≤ (70-3σ) ＜ X ＜ (130+3σ) ≤OL	LOD＜X＜ (150+3σ) ≤OL
Pb	BL ≤ (700-3σ) ＜X ＜ (1300+3σ) ≤OL	BL ≤ (700-3σ) ＜ X ＜ (1300+3σ) ≤ OL	BL ≤ (500-3σ) ＜ X ＜ (1500+3σ) ≤ OL
Hg	BL ≤ (700-3σ) ＜ X ＜ (1300+3σ) ≤ OL	BL ≤ (700-3σ) ＜ X ＜ (1300+3σ) ≤ OL	BL ≤ (500-3σ) ＜X ＜ (1500+3σ) ≤OL
Br	BL ≤(300-3σ) ＜ X	/	BL ≤ (250-3σ) ＜ X
Cr	BL ≤ (700-3σ) ＜X	BL ≤ (700-3σ) ＜X	BL≤(500-3σ) ＜X

Note:
BL= Below limit
X = The region where further investigation is necessary
OL = Over limit
3σ = The repeatability of the analyzer at the action level
LOD = Limit of detection
XRF testing results are only used for reference.

TO BE CONTINUED

TEST RESULT

B. Confirmation Test by Wet Chemistry

Tested Item(s)	Test Method	Measured Equipment	MDL
Lead (Pb) /Cadmium (Cd)	IEC 62321-5:2013	ICP-OES	10 mg/kg
Mercury (Hg)	IEC 62321-4:2013/AMD1:2017	ICP-OES	10 mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321-7-1:2015	UV-Vis	0.01μg/cm^2
	IEC62321-7-2:2017		10 mg/kg
Polybrominated Biphenyls （PBBs）	IEC 62321-6:2015	GC-MS	50 mg/kg
Polybrominated DiphenylEthers (PBDEs)			

Component No.	Boiling-water-extraction for Cr(VI) (*1)
18	Negative
19	Negative
20	Negative
21	Negative
22	Negative
23	Negative
24	Negative
25	Negative
26	Negative
27	Negative
28	Negative

Remark:

(*1) The screening result of Chromium (VI) was found in the inconclusive region, Thus the Chromium(VI) content in surface layer have been confirmed with reference to IEC 62321-7-1:2015.
Negative – The Cr(VI) concentration is below 0.10μg/cm^2.The coating is considered a non-Cr(VI) based coating.

TO BE CONTINUED

TEST RESULT

Component No.	Test Results (mg/kg)					
	Cd	Pb	Hg	Cr (VI)	PBBs	PBDEs
	Limit (mg/kg)					
	100	1000	1000	1000	1000	1000
2	-	-	-	-	ND	ND
16	-	-	-	-	ND	ND
17	-	-	-	-	ND	ND
25	-	30	-	-	-	-

Note:

The sample had been dissolved totally tested for Lead, Cadmium, Mercury.
MDL = method detection limit
ND = not detected (<MDL)
mg/kg = ppm = parts per million
$\mu g/cm^2$ = micrograms per square centimeter

TO BE CONTINUED

TEST RESULT

Part 2

Diisobutyl phthalate (DIBP), Bis (2- ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP) and Dibutyl phthalate (DBP)

Test specification : Total concentration of Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP) , Dibutyl
phthalate (DBP) and Diisobutyl phthalate (DIBP) in accordance with EC Directive 2011/65/EU and its amendment Directive (EU) 2015/863 (RoHS)

Test method : IEC 62321-8:2017

Limit : Annex II to Directive 2011/65/EU and its amendment Directive (EU) 2015/863

Component	Test Results (%)			
	DIBP	DEHP	BBP	DBP
	Limit (%)			
	0.1%	0.1%	0.1%	0.1%
1+2+3	ND	ND	ND	ND
4+5+6	ND	ND	ND	ND
7+8+9	ND	ND	ND	ND
10+11+12	ND	ND	ND	ND
13+14+15	ND	ND	ND	ND
16+17	ND	ND	ND	ND

Note:
ND = Not Detected (＜0.005%)
0.1% equals to 1000 mg/kg

According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.

END OF THE REPORT