China

FCC - TEST REPORT

Report Number	:	**60.792.19.004.01E01**	Date of Issue	:	June 28, 2019
Model	:	**HG04522A-US-RX, HG04522B-US-RX**			
Product Type	:	**Wireless Doorbell**			
Applicant	:	Lidl US, LLC			
Address	:	3500 S Clark Street, ARLINGTON VA 22202			
Production Facility	:	PUTIAN DIOR INDUSTRIAL CO., LTD.			
Address	:	Linan Industrial Area, Xianyou County, Putian, Fujian, China			
Test Result	:	■**Positive** ☐**Negative**			
Total pages including Appendices	:	12			

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TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch reports apply only to the specific samples tested under stated test conditions. Construction of the actual test samples has been documented. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. The manufacturer/importer is responsible to the Competent Authorities in Europe for any modifications made to the production units which result in non-compliance to the relevant regulations. TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch issued reports.

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1 Table of Contents

2 Details about the Test Laboratory

Details about the Test Laboratory

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2, Nanshan District,
518052 Shenzhen, CHINA
FCC Registration Number :514049

Telephone: 86 755 8828 6998

Fax: 86 755 8828 5299

3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product:	Wireless Doorbell
Model no.:	HG04522A-US-RX, HG04522B-US-RX
FCC ID:	2AJ9O-HG04522RX
Rating:	3V DC (2 x 1.5V AA battery)
Remark:	433.92MHz (Rx)

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
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4 Summary of Test Standards

Test Standards
FCC Part 15 Subpart B 10-1-18 Edition Federal Communications Commission, PART 15 — Radio Frequency Devices, Subpart B — Unintentional Radiators

All the tests were performed using the procedures from ANSI C63.4(2014).

5 Summary of Test Results

Emission Tests				
FCC Part 15 Subpart B				
Test Condition	Pages	Test Result		
		Pass	Fail	N/A
FCC Title 47 Part 15.109 Radiated Emission 30MHz-1000MHz	8-11	☒	☐	☐
FCC Title 47 Part 15.107 Conduct Emission 150kHz-30MHz (1)	NIL	☐	☐	☒

Remark:
(1) Conducted Emission testing is not applicable for battery operated device.

System Measurement Uncertainty	
Items	**Extended Uncertainty**
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.91dB; Vertical: 4.89dB;
Uncertainty for Conducted Emission at AC Power Line 150kHz-30MHz	3.21dB

6 General Remarks

Remarks

Client informs that the **HG04522B-US-RX** have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction with **Wireless Doorbell**, **HG04522A-US-RX**. The difference lies only on the different color of the different models. (Client's conformation letter shown at appendix A)

EMC Tests were performed on model: **HG04522A-US-RX**.

This submittal(s) (test report) is intended for **FCC ID: 2AJ9O-HG04522RX**, complies with Section 15.107, 15.109 of the FCC Part 15, Subpart B rules.

SUMMARY:

- All tests according to the regulations cited on page 6 were

■ - Performed

☐ - **Not** Performed

- The Equipment Under Test

■ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: May 8, 2019

Testing Start Date: May 10, 2019

Testing End Date: May 28, 2019

Reviewed by: Prepared by:

Hosea CHAN
EMC Project Engineer

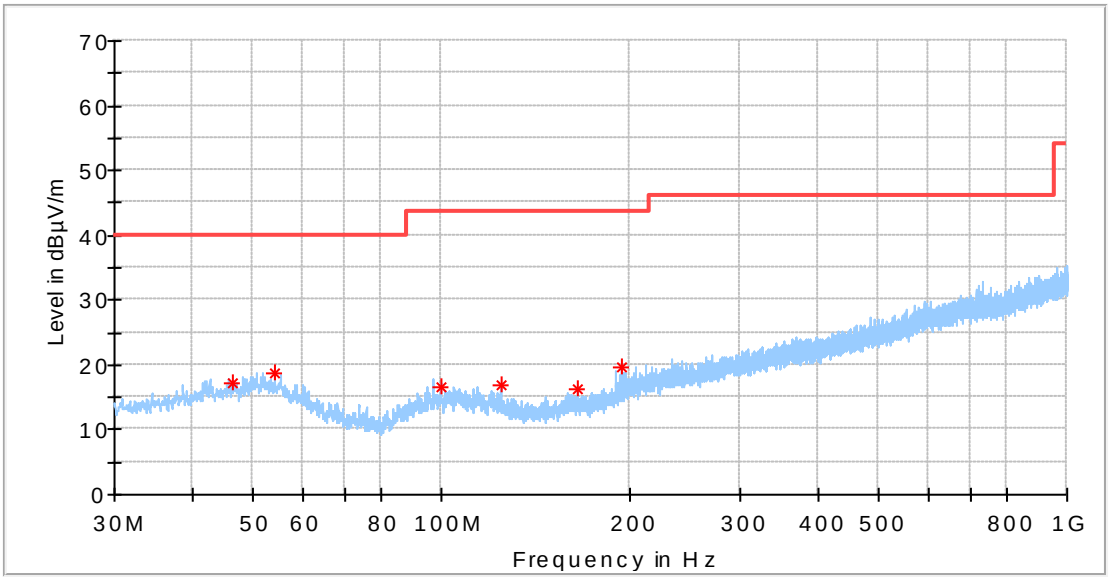
Eric LI
EMC Senior Project Engineer

7 Emission Test Results

7.1 Radiated Emission

EUT: HG04522A-US-RX
Op Condition: 433MHz Rx mode
Test Specification: FCC 15.109
Comment: 3V DC, Antenna: Horizontal

Test Result
☒ Passed
☐ Not Passed

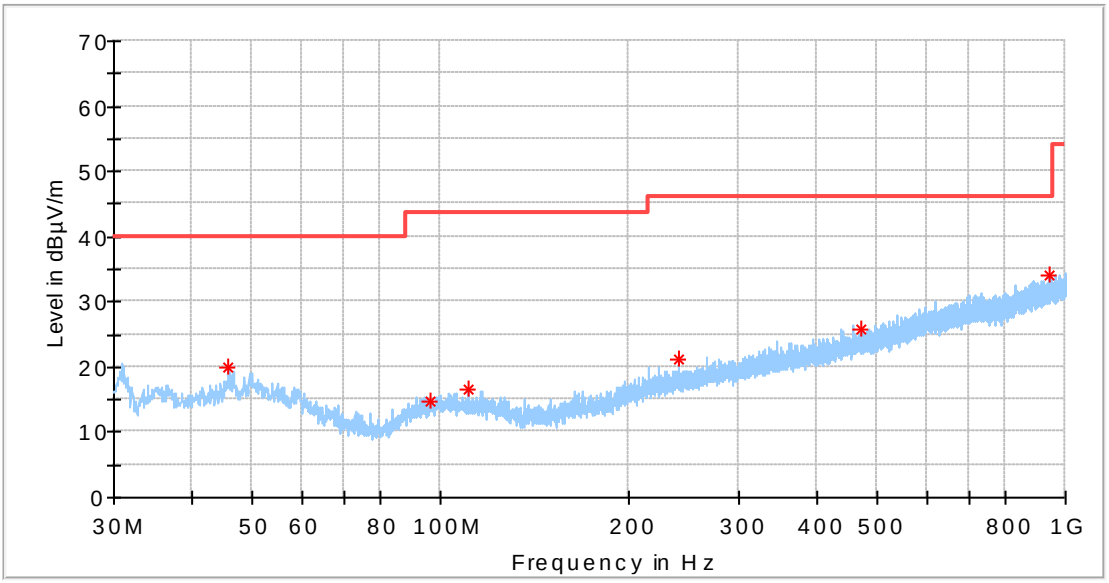


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Corr. (dB)
46.247500	17.30	40.00	-22.70	17.5
54.250000	18.81	40.00	-21.19	17.2
99.597500	16.49	43.50	-27.01	15.8
124.271875	16.78	43.50	-26.72	14.3
164.587500	16.21	43.50	-27.29	14.3
193.748125	19.66	43.50	-23.84	15.5

Radiated Emission

EUT: HG04522A-US-RX
Op Condition: 433MHz Rx mode
Test Specification: FCC 15.109
Comment: 3V DC, Antenna: Vertical

Test Result
☒ Passed
☐ Not Passed



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Corr. (dB)
45.823125	20.05	40.00	-19.95	17.4
96.202500	14.65	43.50	-28.85	15.3
110.813125	16.49	43.50	-27.01	15.4
240.126250	21.08	46.00	-24.92	18.0
469.531250	25.83	46.00	-20.17	23.4
943.194375	34.10	46.00	11.90	30.7

7.2 Conducted Emission

EUT:	HG04522A-US-RX
Op Condition:	433MHz Rx mode
Test Specification:	FCC15.107
Comment:	NIL

Test Result
☒ Passed
☐ Not Passed

EUT is a battery operated device, thus Conducted Emission testing is not applicable for it.

8 Test Equipment List

Radiated emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	2019-7-6
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	2019-6-28
Horn Antenna	Rohde & Schwarz	HF907	102294	2019-6-28
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	2019-7-6
Signal Generator	Rohde & Schwarz	SMY01	839369/005	2019-7-6
Attenuator	Agilent	8491A	MY39264334	2019-7-6
3m Semi-anechoic chamber	TDK	9X6X6	----	2020-7-7
Test software	Rohde & Schwarz	EMC32	Version 9.15.00	N/A

Conducted Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 3	101782	2019-7-6
LISN	Rohde & Schwarz	ENV4200	100249	2019-7-6
LISN	Rohde & Schwarz	ENV432	101318	2019-7-6
LISN	Rohde & Schwarz	ENV216	100326	2019-7-6
ISN	Rohde & Schwarz	ENY81	100177	2019-7-6
ISN	Rohde & Schwarz	ENY81-CA6	101664	2019-7-6
High Voltage Probe	Rohde & Schwarz	TK9420(VT9420)	9420-584	2019-6-30
RF Current Probe	Rohde & Schwarz	EZ-17	100816	2019-6-30
Attenuator	Shanghai Huaxiang	TS2-26-3	080928189	2019-7-6
Test software	Rohde & Schwarz	EMC32	Version9.15.00	N/A

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9 Appendix A - General Product Information

Declaration letter of model difference

To: TÜV SÜD HKG Ltd.

Attention:
From:
Fax No:

Date: July 9, 2019
Total Page (Cover Included): 1

Declaration Letter

Subject:

We:

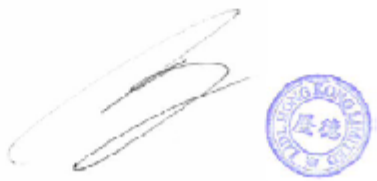
Officially notify TÜV SÜD HKG Ltd. that the << HG04522B-US>> have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction, with Wireless door bell KAT, 2 assorted , HG04522A-US. The difference lies only in color and model of the different models.

<<Additional Model >>: HG04522B-US

<<Main Test Model >>: HG04522A-US

<<Product>>: Wireless Doorbell

Applicant: Lidl US, LLC



9-Jul, 2019
(Date)

(Applicant's authorized signature and company Chop)