

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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1 Table of Contents

1 Table of Contents.....	2
2 Details about the Test Laboratory	3
3 Description of the Equipment Under Test	4
4 Summary of Test Standards	5
5 Summary of Test Results.....	6
6 General Remarks	7
7 Emission Test Results	8
7.1 Radiated Emission.....	8
7.2 Conducted Emission	10
8 Test Equipment List	11
9 Appendix A - General Product Information	12

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.107 Conduct Emission 150kHz-30MHz (1)	NIL	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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: 2AJ90-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.

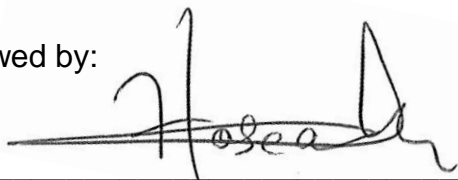
□ - **Does not** fulfill the general approval requirements.

Sample Received Date: May 8, 2019

Testing Start Date: May 10, 2019

Testing End Date: May 28, 2019

Reviewed by:



Hosea CHAN
EMC Project Engineer

Prepared by:



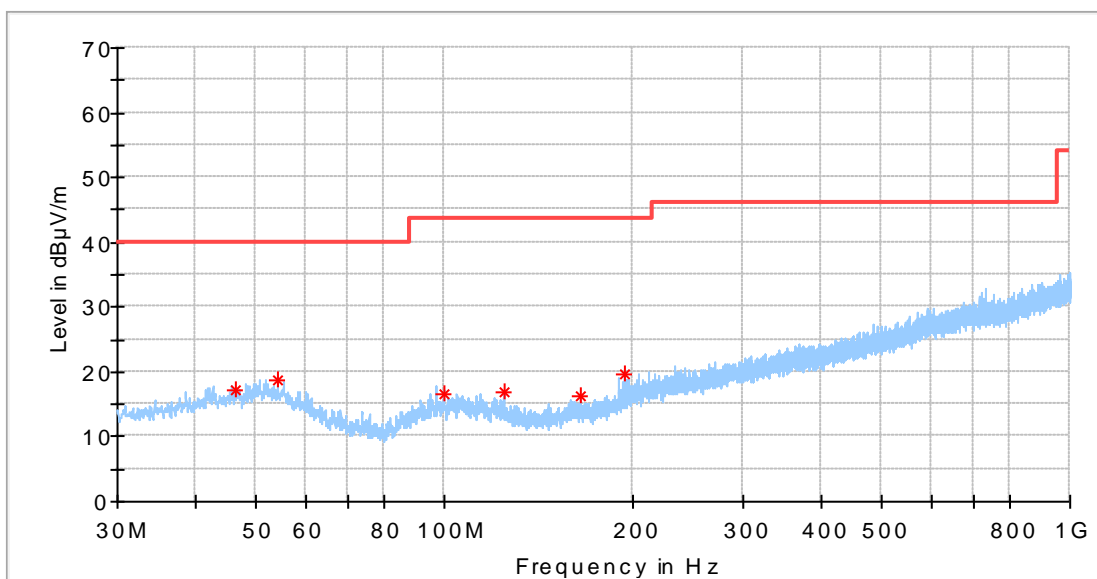
Eric LI
EMC Senior Project Engineer

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	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

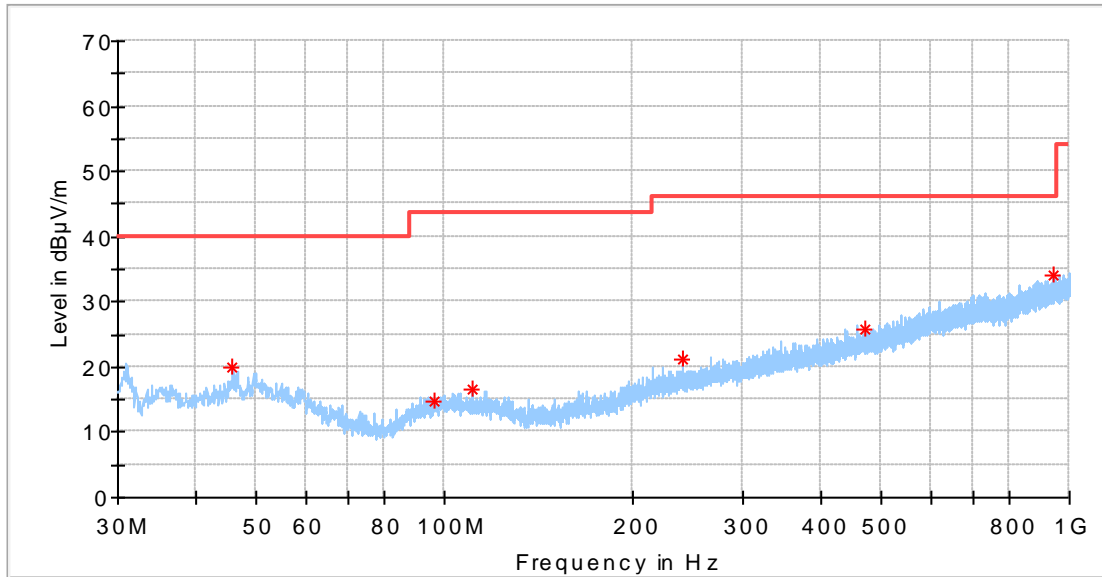


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Corr. (dB)
46.247500	17.30	40.00	-22.70	17.5
54.250000	18.81	40.00	-21.19	17.2
99.597500	16.49	43.50	-27.01	15.8
124.271875	16.78	43.50	-26.72	14.3
164.587500	16.21	43.50	-27.29	14.3
193.748125	19.66	43.50	-23.84	15.5

Radiated Emission

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

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	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	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	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(VT94 20)	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

9 Appendix A - General Product Information

Declaration letter of model difference

To: TÜV SÜD HKG Ltd.

Attention:

From:

Date: July 9, 2019

Fax No:

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)