

**FCC - TEST REPORT**

Report Number : **60.792.19.005.01E01** Date of Issue : July 9, 2019

Model : **HG05124A-US-RX, HG05124B-US-RX**

Product Type : **WIRELESS WEATHER STATION**

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 : 15

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## 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 WEATHER STATION

Model no.: HG05124A-US-RX, HG05124B-US-RX

FCC ID: 2AJ9O-HG05124RX

Rating

1. Adapter power source:100-240V AC 50/60Hz input, 5V DC, 500mA output
2. Battery power source: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	12-13	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 **HG05124B-US-RX** have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction with **WIRELESS WEATHER STATION, HG05124A-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: **HG05124A-US-RX**.

This submittal(s) (test report) is intended for **FCC ID: 2AJ90-HG05124RX**, 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.

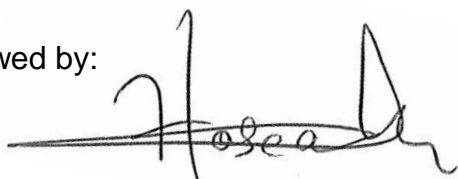
□ - **Does not** fulfill the general approval requirements.

Sample Received Date: May 29, 2019

Testing Start Date: June 6, 2019

Testing End Date: June 19, 2019

Reviewed by:



Hosea CHAN  
EMC Project Engineer

Prepared by:



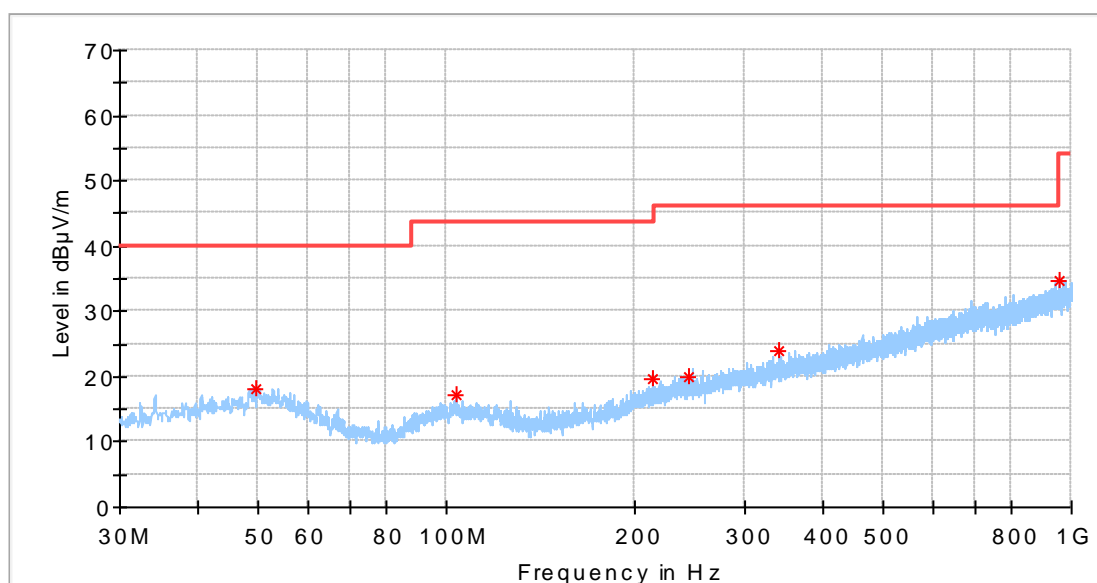
Eric LI  
EMC Senior Project Engineer

## 7 Emission Test Results

### 7.1 Radiated Emission

EUT: HG05124A-US-RX  
 Op Condition: 433MHz Rx mode  
 Test Specification: FCC 15.109  
 Comment: 3V DC, Antenna: Horizontal

Test Result

☒ Passed☐ Not Passed

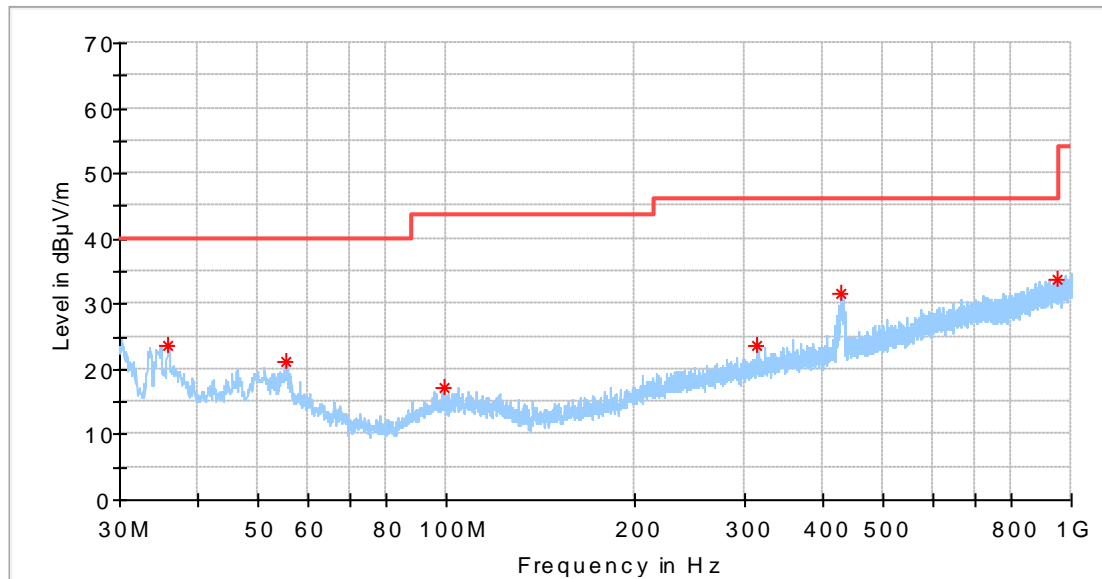
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB)
49.460625	18.18	40.00	-21.82	18.1
103.901875	17.16	43.50	-26.34	15.7
213.996875	19.64	43.50	-23.86	17.0
244.491250	19.97	46.00	-26.03	18.2
341.127500	23.86	46.00	-22.14	21.0
953.500625	34.76	46.00	-11.24	30.8



## Radiated Emission

EUT: HG05124A-US-RX  
 Op Condition: 433MHz Rx mode  
 Test Specification: FCC 15.109  
 Comment: 3V DC, Antenna: Vertical

Test Result  
☒ Passed  
☐ Not Passed



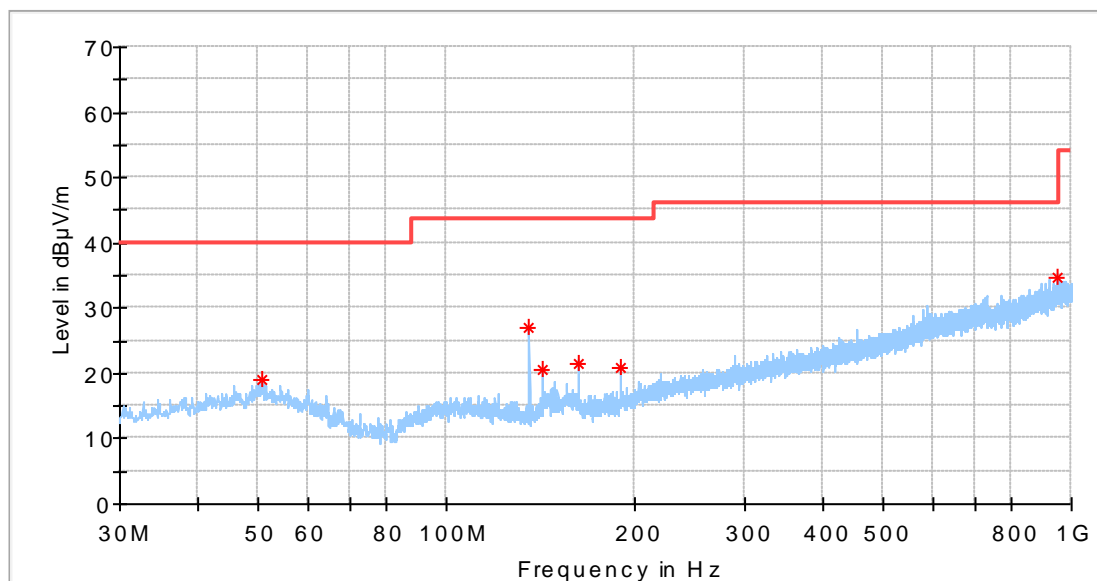
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB)
35.880625	23.54	40.00	-16.46	15.2
55.462500	21.12	40.00	-18.88	17.0
98.870000	17.04	43.50	-26.46	15.7
312.815625	23.68	46.00	-22.32	20.3
428.063750	31.75	46.00	-14.25	22.7
946.468125	33.80	46.00	-12.20	30.7

## Radiated Emission

EUT: HG05124A-US-RX  
 Op Condition: 433MHz Rx mode  
 Test Specification: FCC 15.109  
 Comment: 120V AC, Antenna: Horizontal

### Test Result

☒ Passed

☐ Not Passed


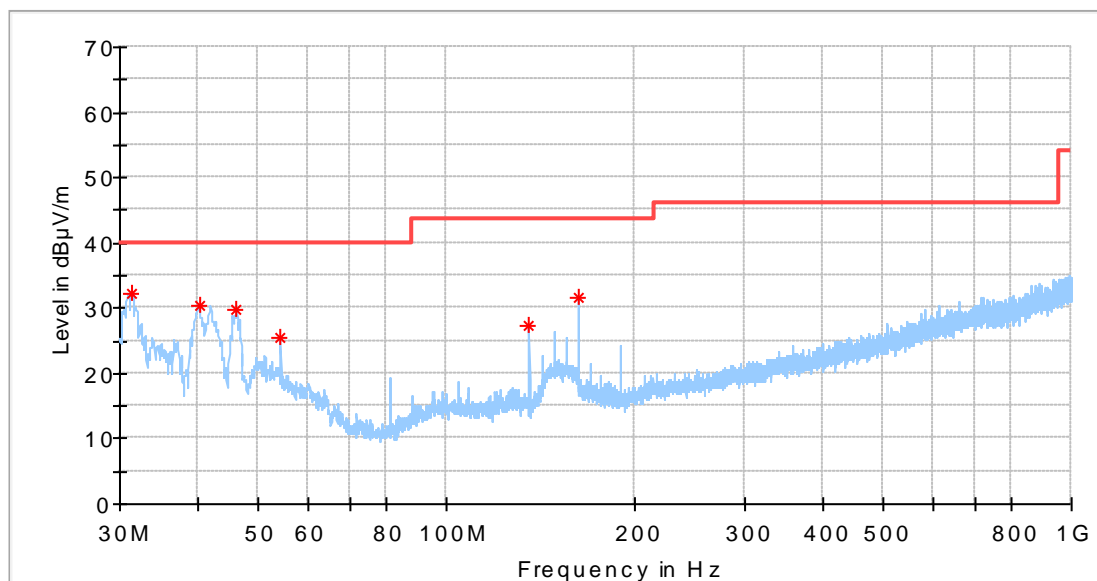
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Corr. (dB)
50.733750	19.02	40.00	-20.98	18.0
135.669375	27.05	43.50	-16.45	13.4
142.459375	20.67	43.50	-22.83	13.3
162.768750	21.51	43.50	-21.99	14.2
189.928750	20.86	43.50	-22.64	15.2
948.105000	34.58	46.00	-11.42	30.8

## Radiated Emission

EUT: HG05124A-US-RX  
 Op Condition: 433MHz Rx mode  
 Test Specification: FCC 15.109  
 Comment: 120V AC, Antenna: Vertical

### Test Result

☒ Passed  
☐ Not Passed

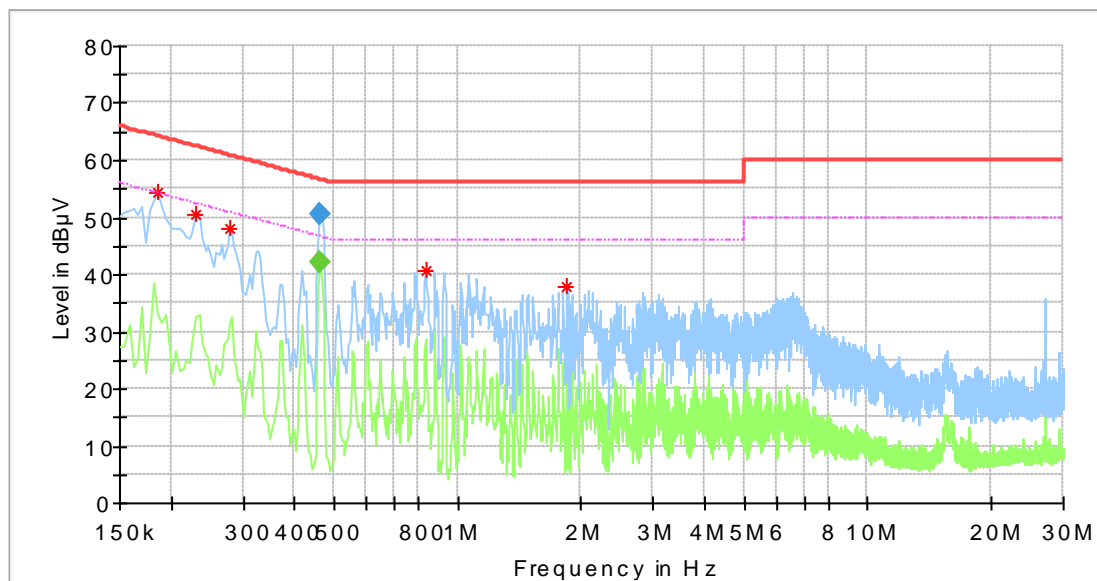


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Corr. (dB)
31.394375	32.37	40.00	-7.63	14.2
40.185000	30.32	40.00	-9.68	16.2
46.126250	29.65	40.00	-10.35	17.5
54.250000	25.56	40.00	-14.44	17.2
135.669375	27.42	43.50	-16.08	13.4
162.829375	31.66	43.50	-11.84	14.2

## 7.2 Conducted Emission

EUT: HG05124A-US-RX  
 Op Condition: 433MHz Rx mode  
 Test Specification: FCC15.107  
 Comment: 120V AC, L Line

Test Result

☒ Passed☐ Not Passed

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Corr. (dB)
0.186000	54.34	---	64.21	-9.87	10.2
0.230000	50.54	---	62.45	-11.91	10.2
0.278000	48.00	---	60.88	-12.87	10.2
0.461500	50.94	---	56.66	-5.72	10.3
0.834000	40.80	---	56.00	-15.20	10.3
1.850000	37.72	---	56.00	-18.28	10.3

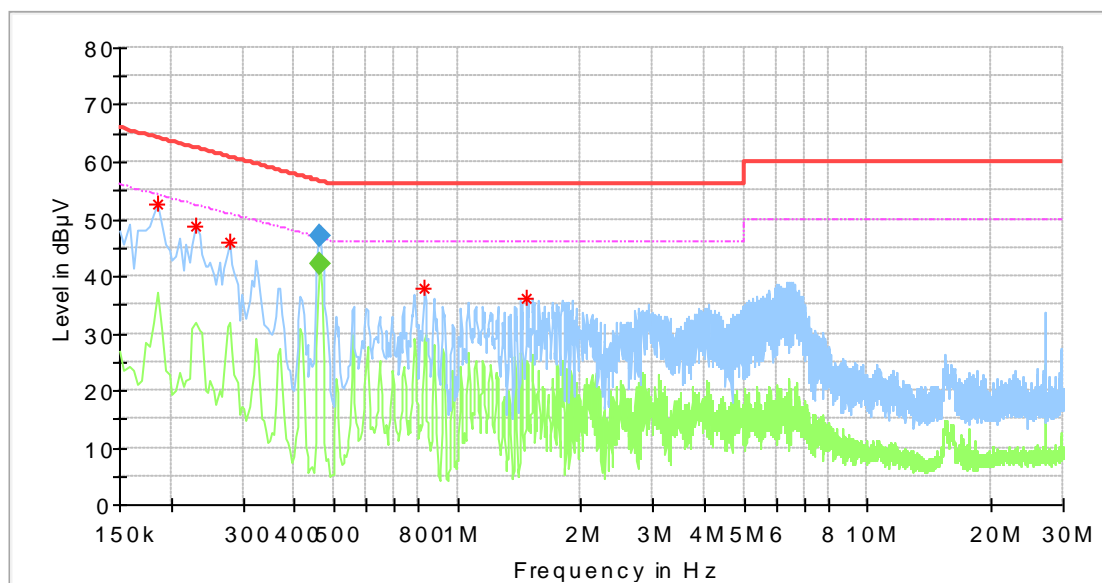
### Final\_Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Corr. (dB)
0.461500	---	42.04	46.67	-4.63	10.3
0.461500	50.56	---	56.67	-6.11	10.3

## Conducted Emission

EUT: HG05124A-US-RX  
 Op Condition: 433MHz Rx mode  
 Test Specification: FCC15.107  
 Comment: 120V AC, N Line

Test Result  
☒ Passed  
☐ Not Passed



Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Corr. (dB)
0.186000	52.47	---	64.21	-11.74	10.2
0.230000	48.64	---	62.45	-13.80	10.2
0.278000	46.10	---	60.88	-14.78	10.2
0.461500	47.49	---	56.66	-9.17	10.3
0.830000	37.76	---	56.00	-18.24	10.3
1.474000	36.29	---	56.00	-19.71	10.3

### Final\_Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Corr. (dB)
0.461500	---	42.03	46.67	-4.64	10.3
0.461500	46.88	---	56.67	-9.79	10.3

## 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	Version 9.15.00	N/A

## 9 Appendix A - General Product Information

### Declaration letter of model difference

To: TÜV SÜD HKG Ltd.

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Attention:

From:

Date: 18-Jul, 2019

Fax No:

Total Page (Cover Included): 1

#### Declaration Letter

Subject:

We:

Officially notify TÜV SÜD HKG Ltd. that the HG05124B-US have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction, with Wireless weather station, HG05124A-US. The difference lies only in color and model of the different models.

<<Additional Model >>: HG05124B-US

<<Main Test Model >>: HG05124A-US

<<Product>>: Wireless weather station

Applicant: Lidl US, LLC

18-Jul, 2019  
(Date)



(Applicant's authorized signature and company Chop)