

FCC - TEST REPORT

Report Number : **60.792.17.014.01B** Date of Issue : July 24, 2017

Model : **HG01106A-US-RX, HG01106B-US-RX,
HG01106C-US-RX, HG01106D-US-RX**

Product Type : **Wireless Weather Station**

Applicant : Lidl US Trading, LLC

Address : 3500 S. Clark Street, Arlington, Virginia, United States

Production Facility : DIGI MAX TECHNOLOGY LIMITED

Address : Room 708, Building 3, Xinyuan B area, Jinshan Industrial District,
Fuzhou, China

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including Appendices : 29

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2 Description of Equipment Under Test

Description of the Equipment Under Test

Product: Wireless Weather Station

Model no.: HG01106A-US-RX, HG01106B-US-RX,
HG01106C-US-RX, HG01106D-US-RX

FCC ID: 2AJ9O-HG116RX

Rating:

1. 3.0VDC (3 x 1.5VDC size "AA" batteries)
2. 100-240VAC for AC/DC adaptor
Model: 6301-US-A
 1. Input: 100-240VAC, 50/60Hz, 0.5A
 2. Output: 5.0VDC, 1A

Frequency: 433.92MHz

3 Summary of Test Standards

Test Standards
FCC Part 15 Subpart B 10-1-16 Edition Federal Communications Commission, PART 15 — Radio Frequency Devices, Subpart B — Unintentional Radiators

4 Details about the Test Laboratory

Site 1

Company name: TÜV SÜD Hong Kong Ltd.
3/F, West Wing, Lakeside 2,
10 Science Park West Avenue,
Science Park, Shatin, Hong Kong

Site 2

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13 Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2,
Shenzhen 518052, P.R.China
FCC Registration Number: 502708

Emission Tests	
Test Item	Test Site
FCC Part 15 Subpart B	
FCC Title 47 Part 15.109 Radiated Emission 30MHz-1000MHz	Site 2
FCC Title 47 Part 15.107 Conduct Emission 150kHz-30MHz	N/A

4.1 Test Equipment Site List

Radiated emission Test – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	15-July-17
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	15-July-17
Horn Antenna	Rohde & Schwarz	HF907	102294	15-July-17
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	15-July-17
3m Semi-anechoic chamber	TDK	9X6X6	----	29-May-19

4.2 Measurement System Uncertainty

Measurement System Uncertainty Emissions

System Measurement Uncertainty	
Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.83dB; Vertical: 4.91dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-25000MHz	Horizontal: 4.89dB; Vertical: 4.88dB;

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	10-15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FCC Title 47 Part 15.107 Conduct Emission 150kHz-30MHz	16-17	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

6 General Remarks

Remarks

AC and DC operation conditions have been tested. Only worst case data is shown.

Client informs that the HG02832C-US-RX and HG02832D-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, HG02832A-US-RX and HG02832B-US-RX. The difference lies only on different color and different outlook of the different models. (Client's conformation letter shown at appendix C)

EMC Tests were performed on model: HG02832A-US-RX and HG02832B-US-RX

SUMMARY:

- All tests according to the regulations cited on page 5 were

■ - Performed

□ - **Not** Performed

- The Equipment Under Test

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

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

Sample Received Date: May 9, 2017

Testing Start Date: May 10, 2017

Testing End Date: June 21, 2017

- TÜV SÜD HONG KONG LTD. -

Reviewed by:



CHAN Kwong Ngai
EMC Test Engineer



Prepared by:



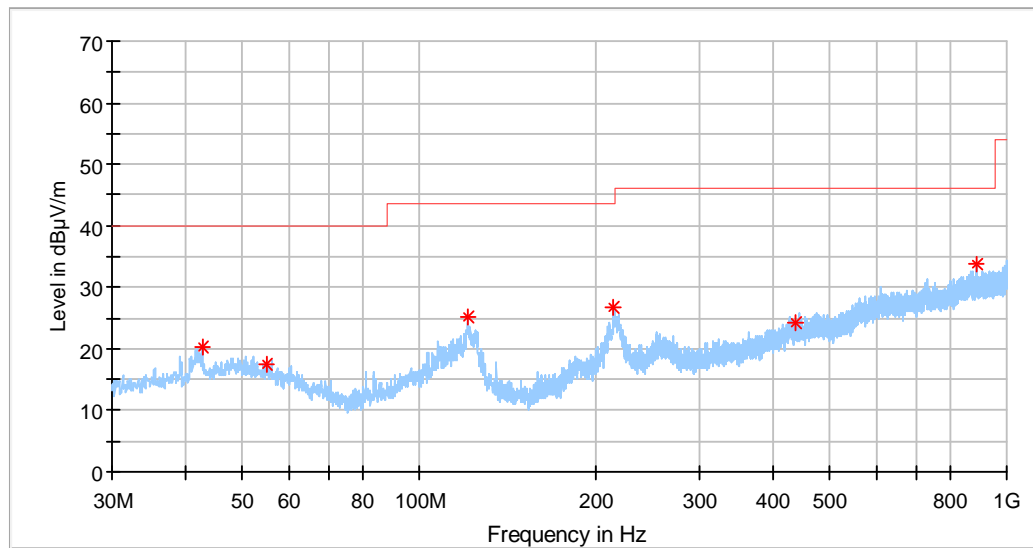
CHAN Kwan Ho Alex
EMC Project Engineer

7 Emission Test Results

7.1 Radiated Emission

EUT: HG02832A-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Horizontal
 Comment: 120VAC / 60Hz (From external adaptor)

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

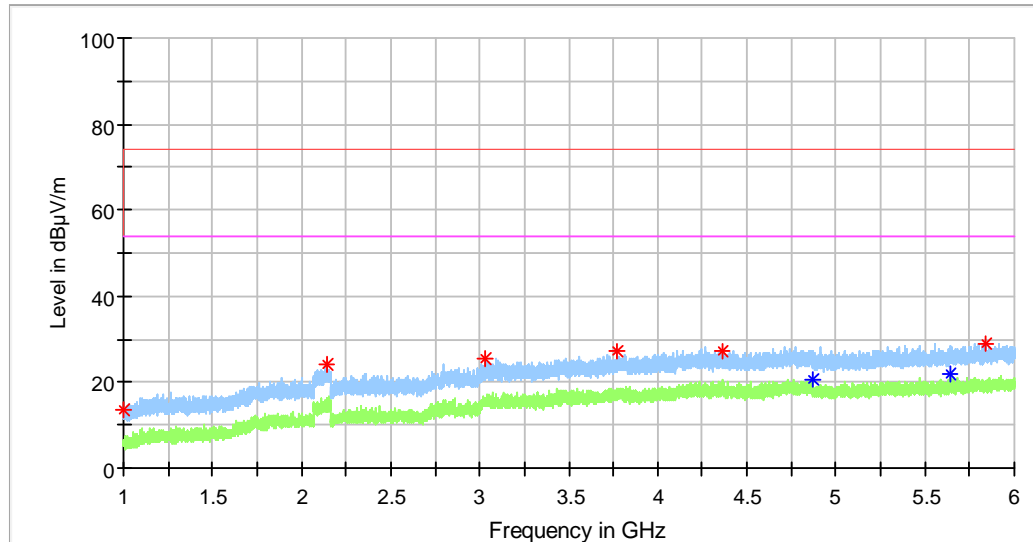


Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)
42.610000	20.25	40.00	19.75
54.795625	17.61	40.00	22.39
121.301250	25.10	43.50	18.40
214.239375	26.83	43.50	16.67
436.672500	24.28	46.00	21.72

Radiated Emission

EUT: HG02832A-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Horizontal
 Comment: 120VAC / 60Hz (From external adaptor)

Test Result
☒ Passed
☐ Not Passed

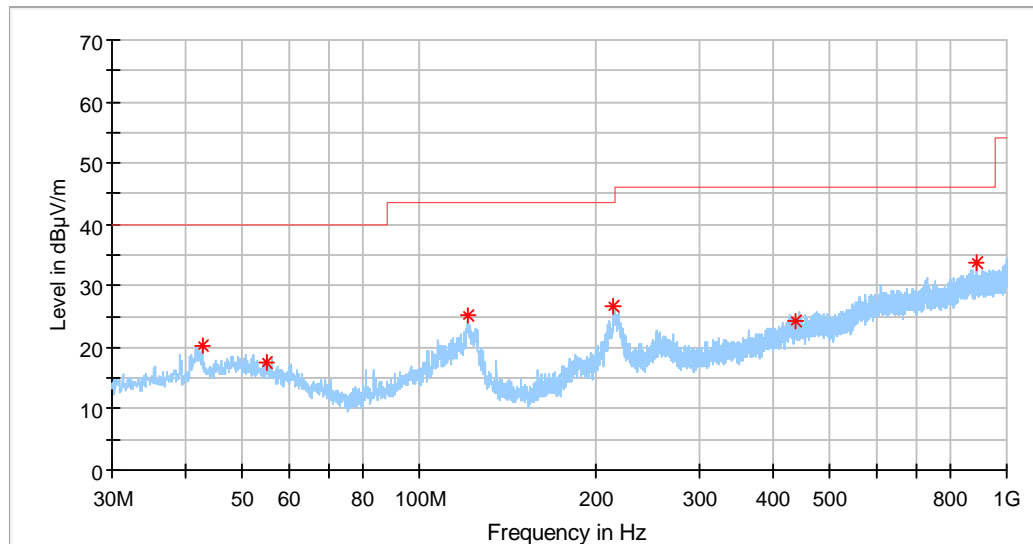


Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1000.000000	13.47	---	54.00	40.53
2145.000000	24.05	---	74.00	49.95
3034.166667	25.59	---	74.00	48.41
3772.708333	27.14	---	74.00	46.86
4356.875000	27.37	---	74.00	46.63
4864.375000	---	20.71	54.00	33.29
5637.916667	---	21.91	54.00	32.09
5842.083333	28.84	---	74.00	45.16

Radiated Emission

EUT: HG02832A-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Vertical
 Comment: 120VAC / 60Hz (From external adaptor)

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

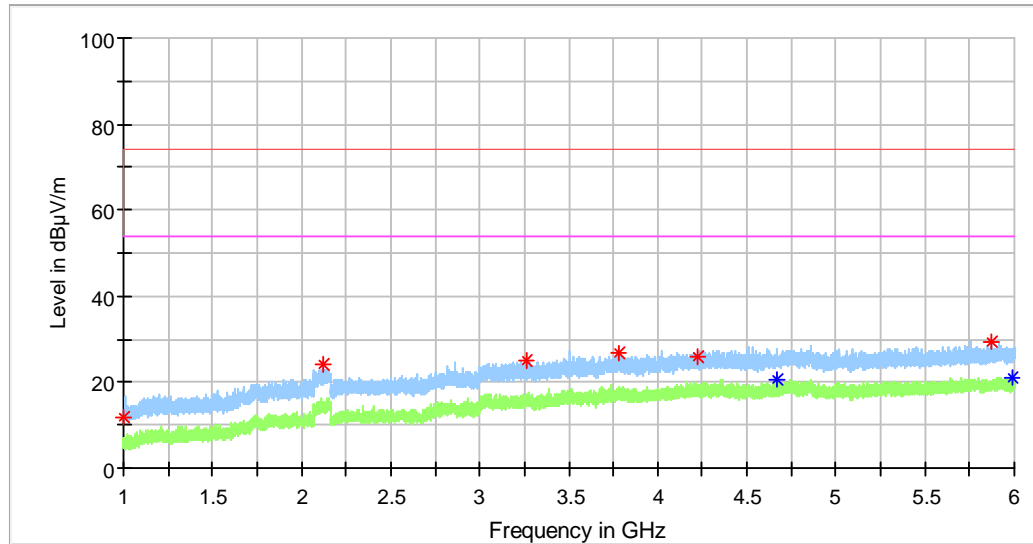


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)
42.610000	20.25	40.00	19.75
54.795625	17.61	40.00	22.39
121.301250	25.10	43.50	18.40
214.239375	26.83	43.50	16.67
436.672500	24.28	46.00	21.72
887.480000	33.81	46.00	12.19

Radiated Emission

EUT: HG02832A-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Vertical
 Comment: 120VAC / 60Hz (From external adaptor)

Test Result
☒ Passed
☐ Not Passed

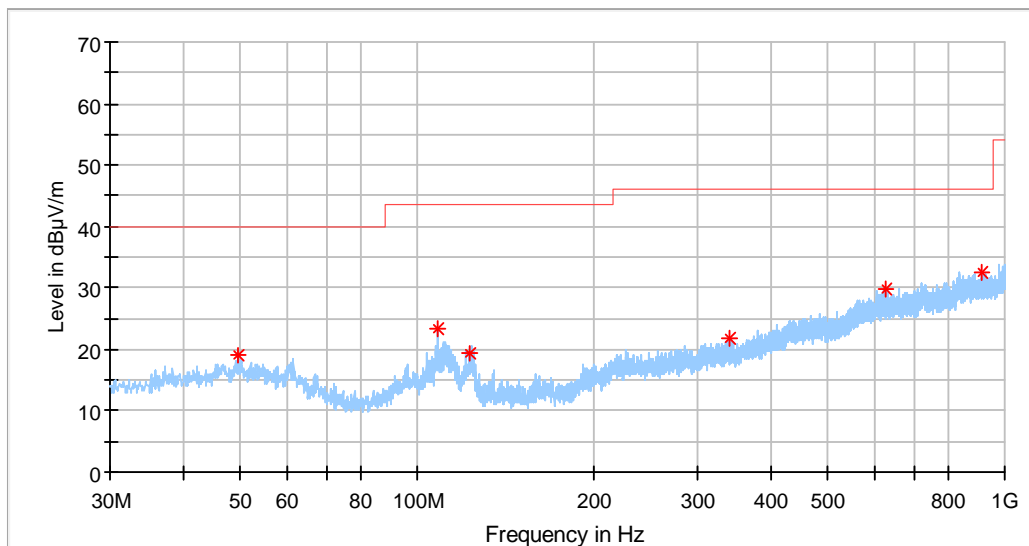


Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1000.000000	11.84	---	54.00	42.16
2118.541667	24.06	---	74.00	49.94
3264.166667	24.86	---	74.00	49.14
3785.208333	26.85	---	74.00	47.15
4222.291667	26.04	---	74.00	47.96
4667.916667	---	20.75	54.00	33.25
5877.916667	29.54	---	74.00	44.46
5986.041667	---	21.24	54.00	32.76

Radiated Emission

EUT: HG02832A-US-RX
 Op Condition: Clock Mode
 Test Specification: Antenna: Horizontal
 Comment: 120VAC / 60Hz (From external adaptor)

Test Result
☒ Passed
☐ Not Passed

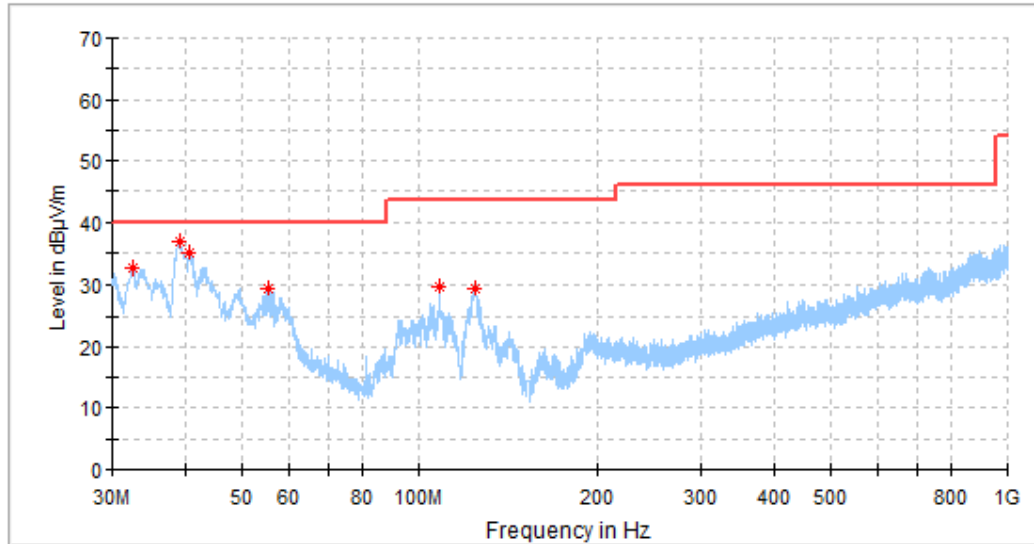


Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)
49.642500	19.13	40.00	20.87
108.509375	23.35	43.50	20.15
122.756250	19.37	43.50	24.13
339.248125	21.89	46.00	24.11
625.943750	29.82	46.00	16.18
914.336875	32.59	46.00	13.41

Radiated Emission

EUT: HG02832A-US-RX
 Op Condition: Clock mode
 Test Specification: Antenna: Vertical
 Comment: 120VAC / 60Hz (From external adaptor)

Test Result
☒ Passed
☐ Not Passed

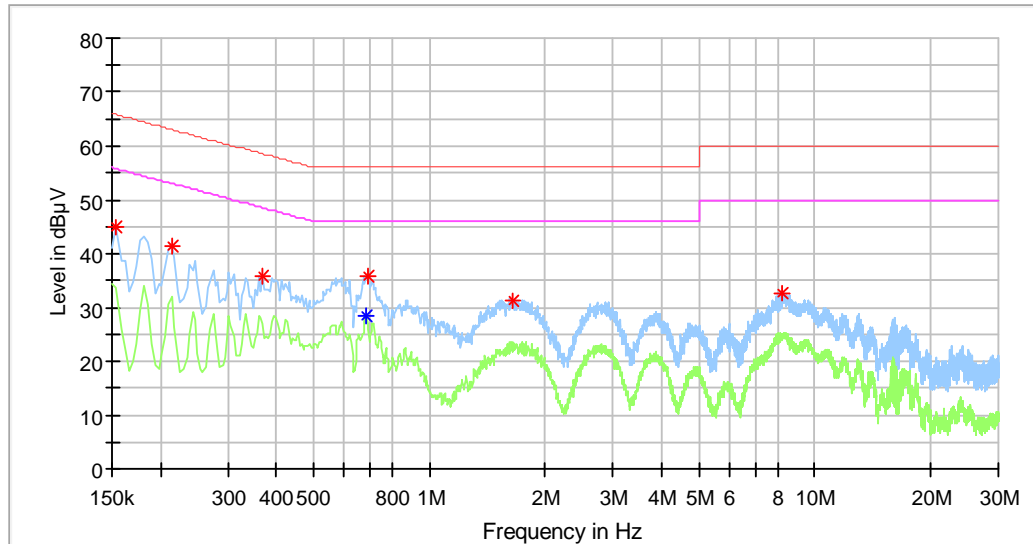


Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)
32.606875	32.64	40.00	7.36
39.162812	36.24	40.00	3.76
40.670000	34.91	40.00	5.09
55.220000	29.36	40.00	10.64
108.509375	29.81	43.50	13.69
124.878125	29.48	43.50	14.02

7.2 Conducted Emission

EUT: HG02832B-US-RX
 Op Condition: Receive Mode
 Test Specification: AC Mains, L Line
 Comment: 120VAC, 60Hz (From external adaptor)

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

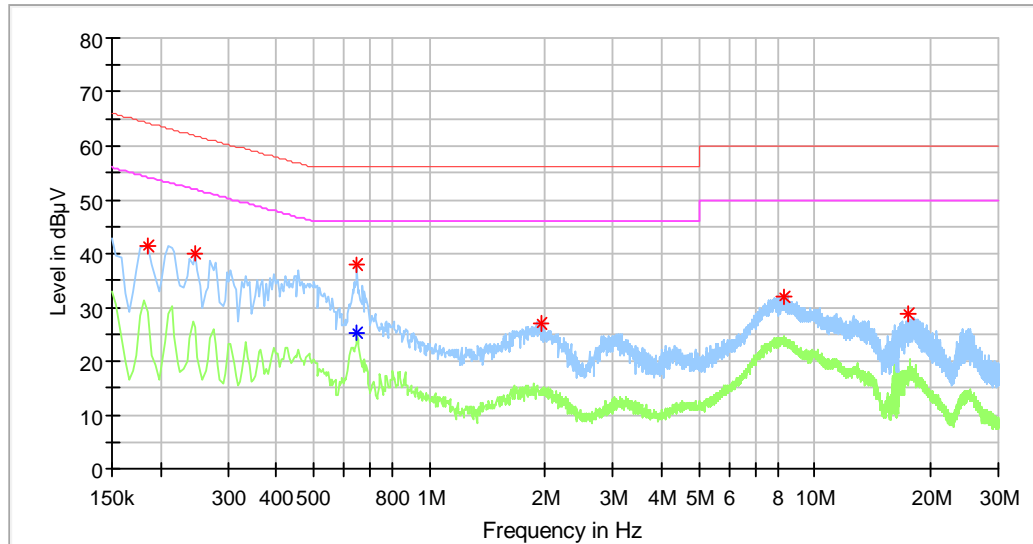


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)
0.154000	44.99	---	65.78	20.79
0.214000	41.27	---	63.05	21.78
0.370000	35.86	---	58.50	22.64
0.686000	---	28.43	46.00	17.57
0.690000	35.67	---	56.00	20.33
1.650000	31.25	---	56.00	24.75
8.258000	32.70	---	60.00	27.30

Conducted Emission

EUT: HG02832B-US-RX
 Op Condition: Receive Mode
 Test Specification: AC Mains, N Line
 Comment: 120VAC, 60Hz (From external adaptor)

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

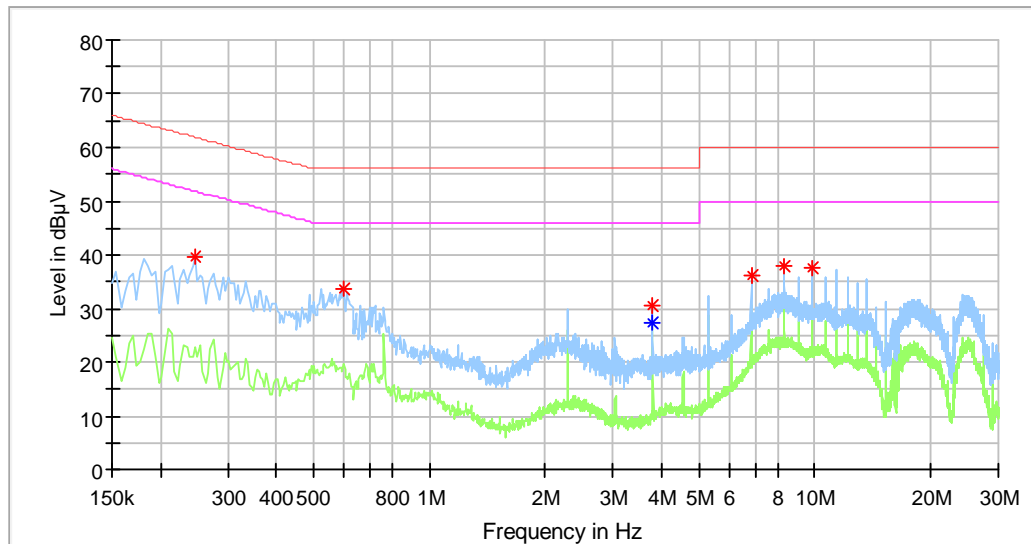


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)
0.186000	41.38	---	64.21	22.83
0.246000	40.04	---	61.89	21.85
0.650000	---	25.40	46.00	20.60
0.650000	37.98	---	56.00	18.02
1.958000	26.92	---	56.00	29.08
8.306000	32.01	---	60.00	27.99
17.390000	28.62	---	60.00	31.38

Conducted Emission

EUT: HG02832B-US-RX
 Op Condition: Clock mode
 Test Specification: AC Mains, L Line
 Comment: 120VAC, 60Hz (From external adaptor)

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

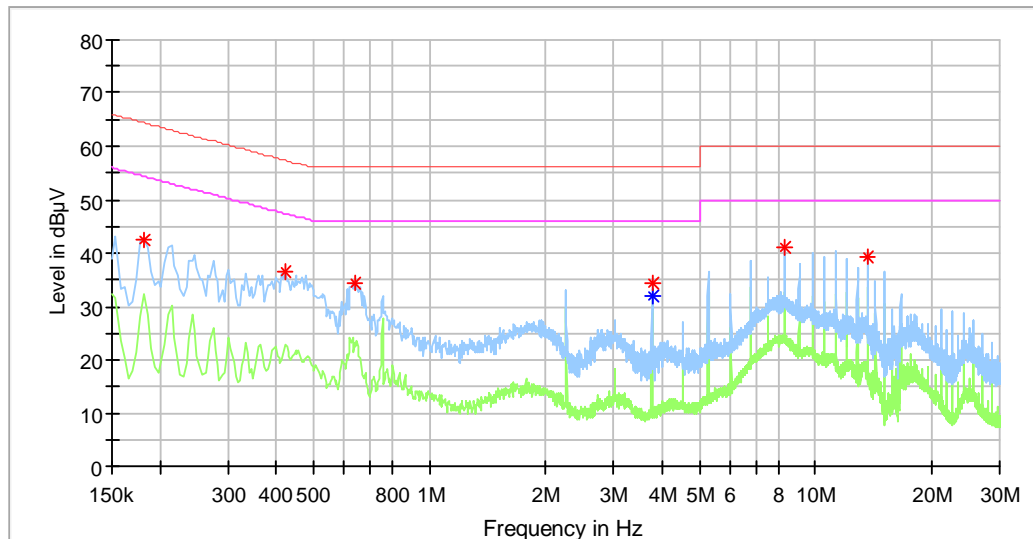


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)
0.246000	39.61	---	61.89	22.28
0.598000	33.78	---	56.00	22.22
3.802000	30.42	---	56.00	25.58
3.802000	---	27.20	46.00	18.80
6.842000	36.26	---	60.00	23.74
8.362000	37.94	---	60.00	22.06
9.882000	37.45	---	60.00	22.55

Conducted Emission

EUT: HG02832B-US-RX
 Op Condition: Clock mode
 Test Specification: AC Mains, L Line
 Comment: 120VAC, 60Hz (From external adaptor)

Test Result
☒ Passed
☐ Not Passed



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)
0.182000	42.53	---	64.39	21.86
0.422000	36.40	---	57.41	21.01
0.638000	34.38	---	56.00	21.62
3.770000	---	31.93	46.00	14.07
3.770000	34.33	---	56.00	21.67
8.298000	41.22	---	60.00	18.78
13.594000	39.44	---	60.00	20.56

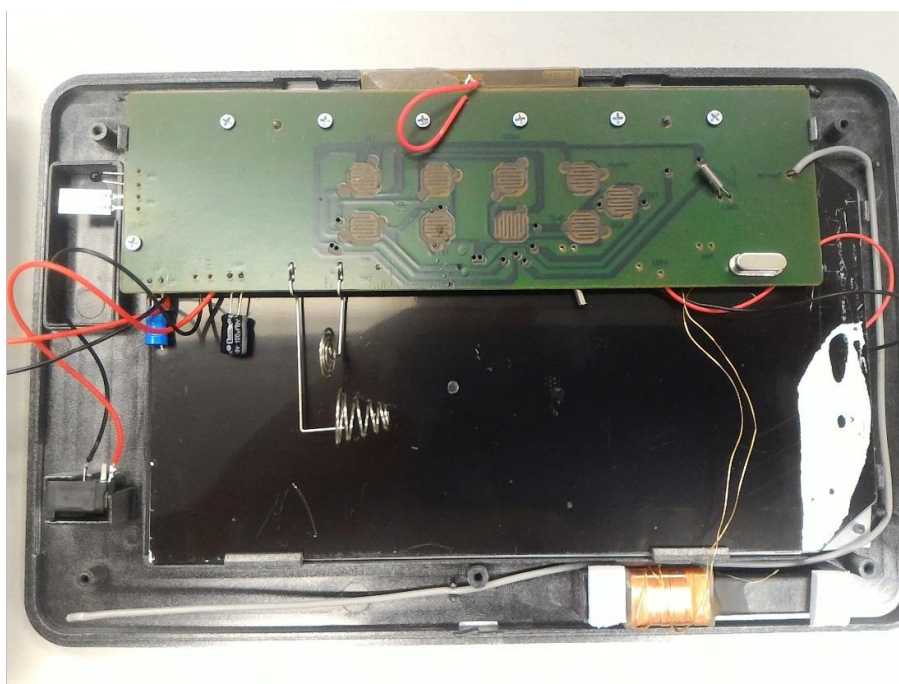
8 Appendix A - Photographs of EUT



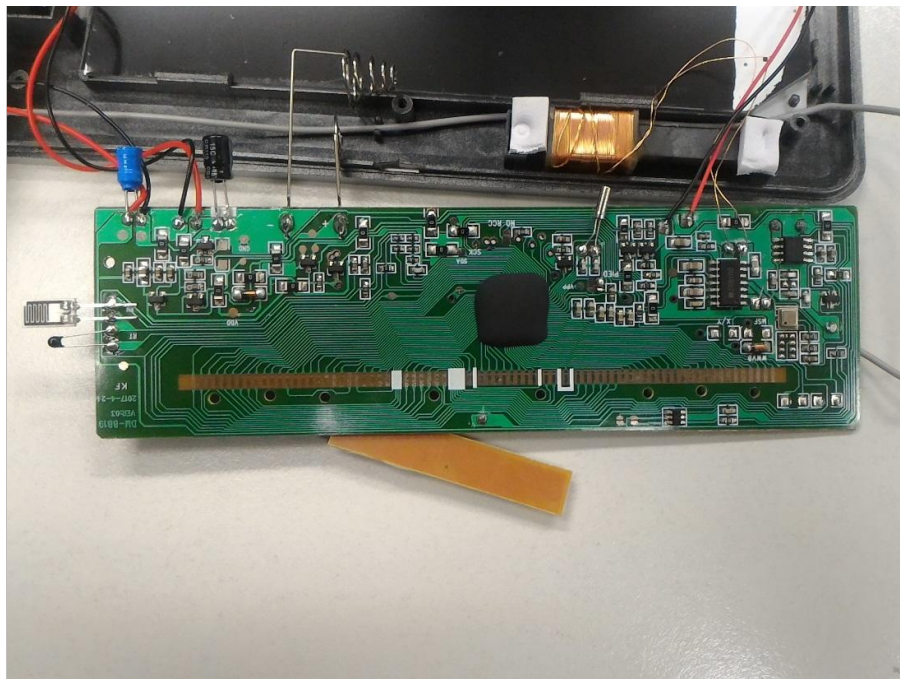
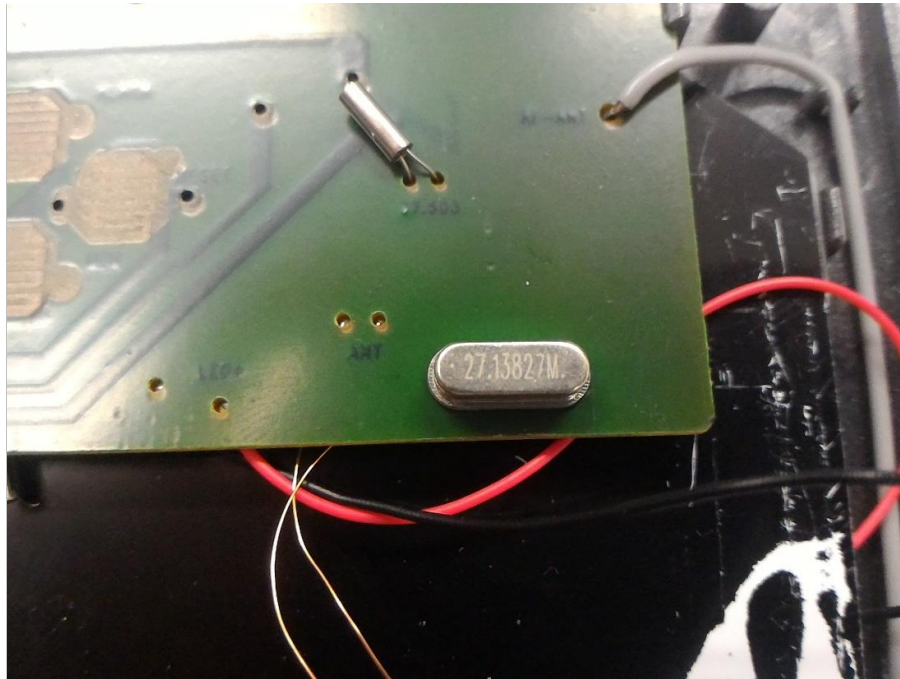
Appendix A



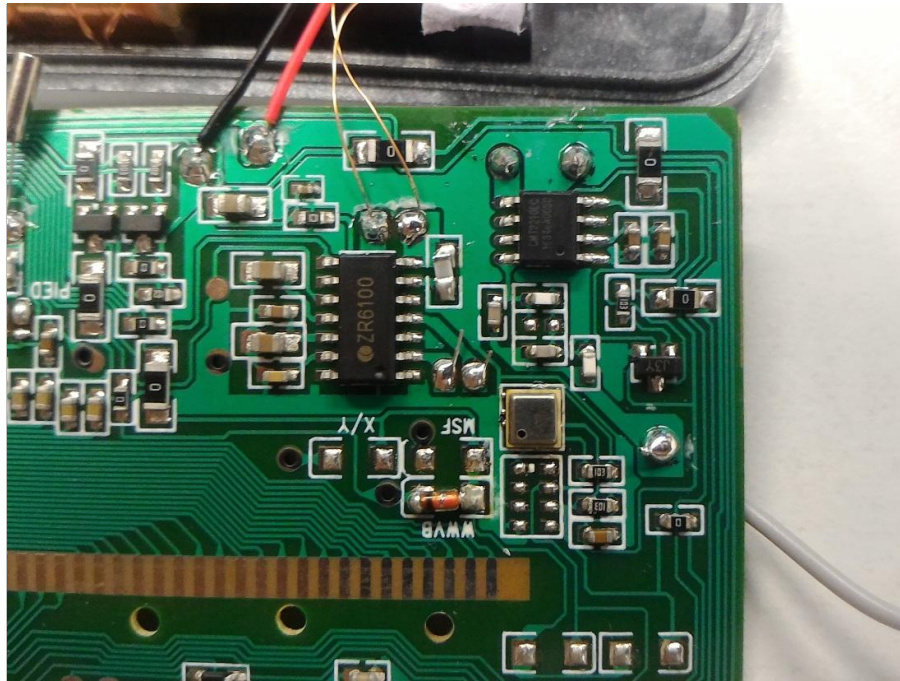
Appendix A



Appendix A



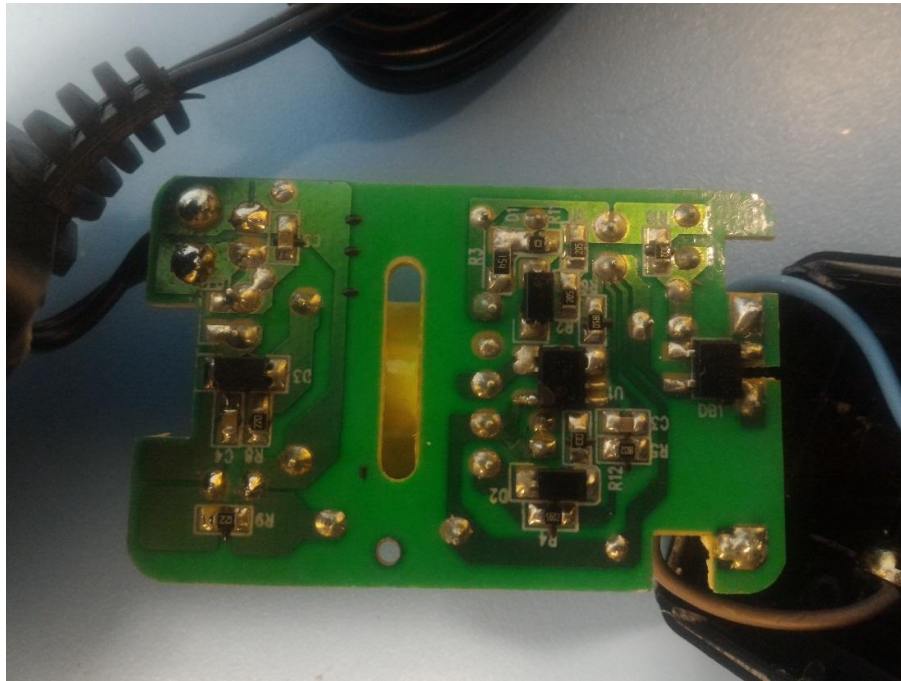
Appendix A



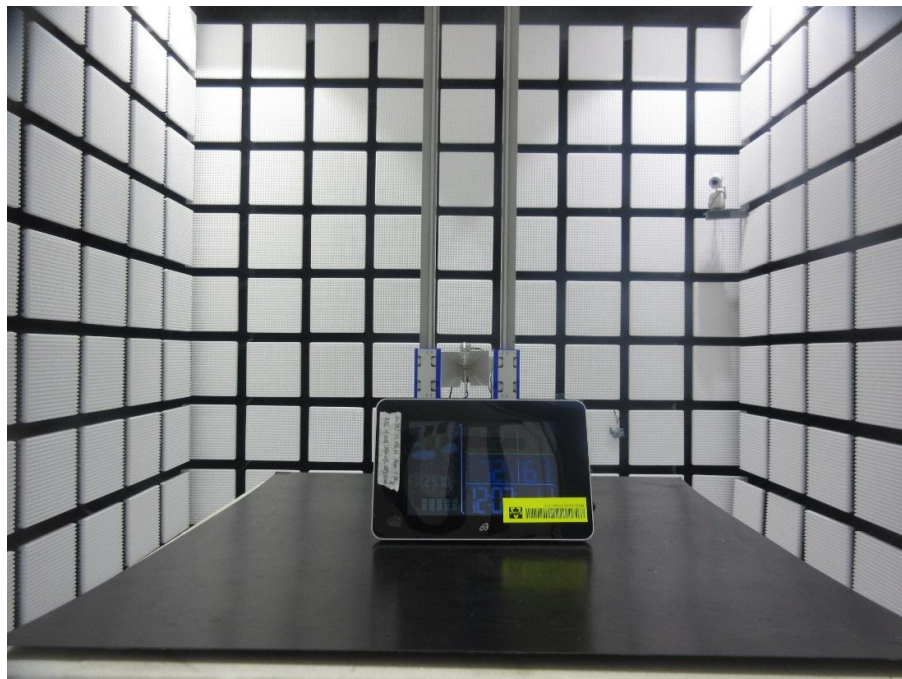
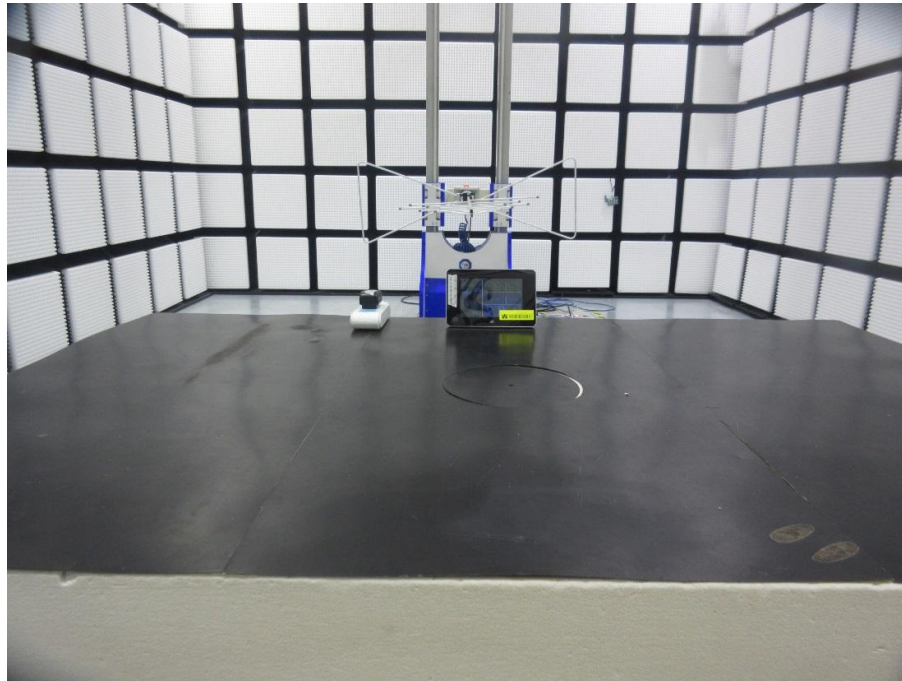
Appendix A



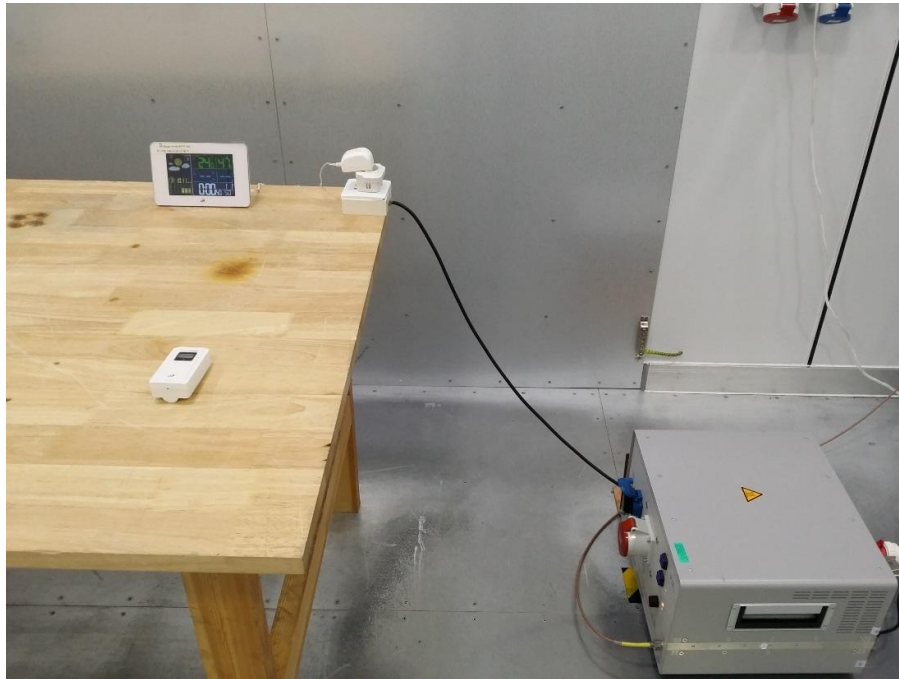
Appendix A



9 Appendix B - Setup Photographs of EUT



Appendix B



10 Appendix C - General Product Information



LIDL US LLC, 3500 S Clark Street, Arlington, VA 22202

To: TÜV SÜD HKG Ltd.

Attention: **Mr. Edmond Fung**

From:

Fax No:

Date: July 9, 2017

Total Page (Cover Included): 1

Declaration Letter

Subject: Declaration Letter for Model Number

We:

Officially notify TÜV SÜD HKG Ltd. that the <<Additional Model>> have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction, with <<PRODUCT>>, <<Main Test Model>>. The different lies only on different color and different outlook of the different models.

<<Additional Model >>: HG02832C-US-RX, HG02832C-US-TX, HG02832D-US-RX, HG02832D-US-TX

<<Main Test Model >>: HG02832A-US-RX, HG02832A-US-TX, HG02832B-US-RX, HG02832B-US-TX

<<Product>>: Wireless Weather Station

Applicant:

09/Jul/2017
(Date)

David
MATTER

(Applicant's authorized signature and company Chop)

Digitally signed by David MATTER
DN: cn=David MATTER, o=LIDL,
ou=LLC,
email=david.matter@lidl.us, c=US
Date: 2017.07.09 19:00:25 -04'00'