

**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<br>Federal Communications Commission, PART 15 — Radio Frequency Devices,<br>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 |
| <b>FCC Part 15 Subpart B</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<br>30MHz-1000MHz    | Horizontal: 4.83dB;<br>Vertical: 4.91dB; |
| Uncertainty for Radiated Emission in 3m chamber<br>1000MHz-25000MHz | Horizontal: 4.89dB;<br>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<br>Radiated Emission 30MHz-1000MHz | 10-15 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| FCC Title 47 Part 15.107<br>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:



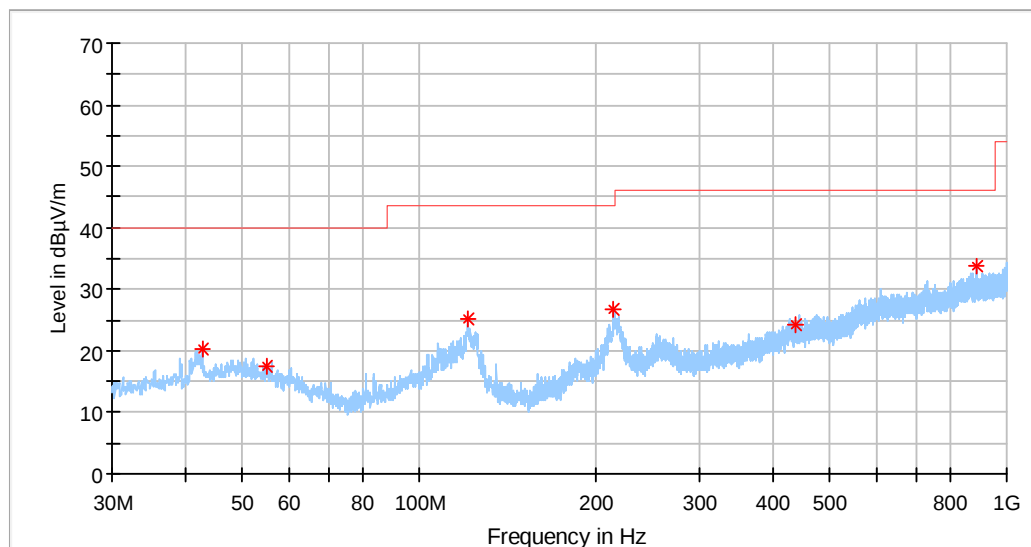
CHAN Kwan Ho Alex  
EMC Project Engineer

## 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 |

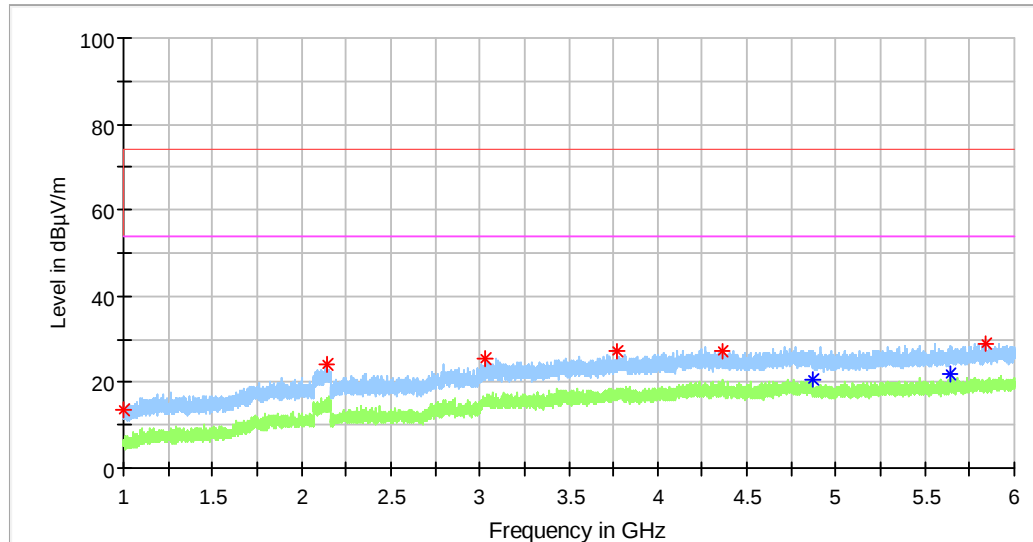


| Frequency (MHz) | QuasiPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|--------------------|----------------|-------------|
| 42.610000       | 20.25              | 40.00          | 19.75       |
| 54.795625       | 17.61              | 40.00          | 22.39       |
| 121.301250      | 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

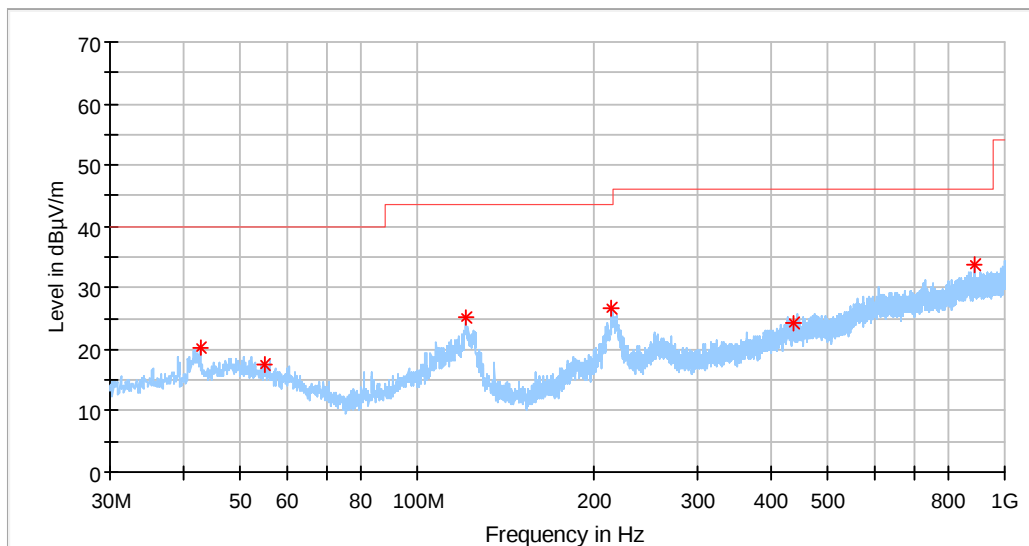


| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-----------------|------------------|------------------|----------------|-------------|
| 1000.000000     | 13.47            | ---              | 54.00          | 40.53       |
| 2145.000000     | 24.05            | ---              | 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  
☒ Passed  
☐ Not Passed

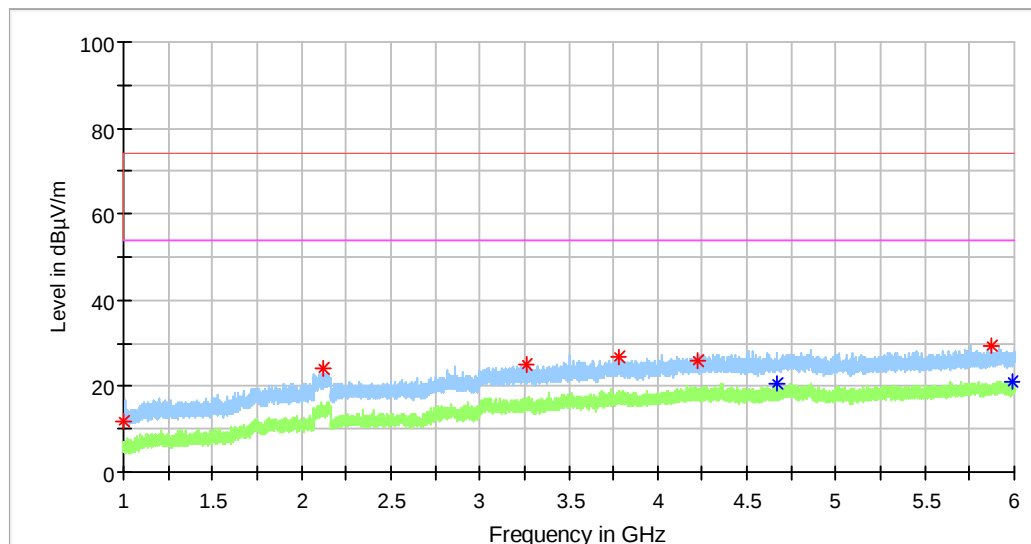


| Frequency (MHz) | MaxPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|------------------|----------------|-------------|
| 42.610000       | 20.25            | 40.00          | 19.75       |
| 54.795625       | 17.61            | 40.00          | 22.39       |
| 121.301250      | 25.10            | 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

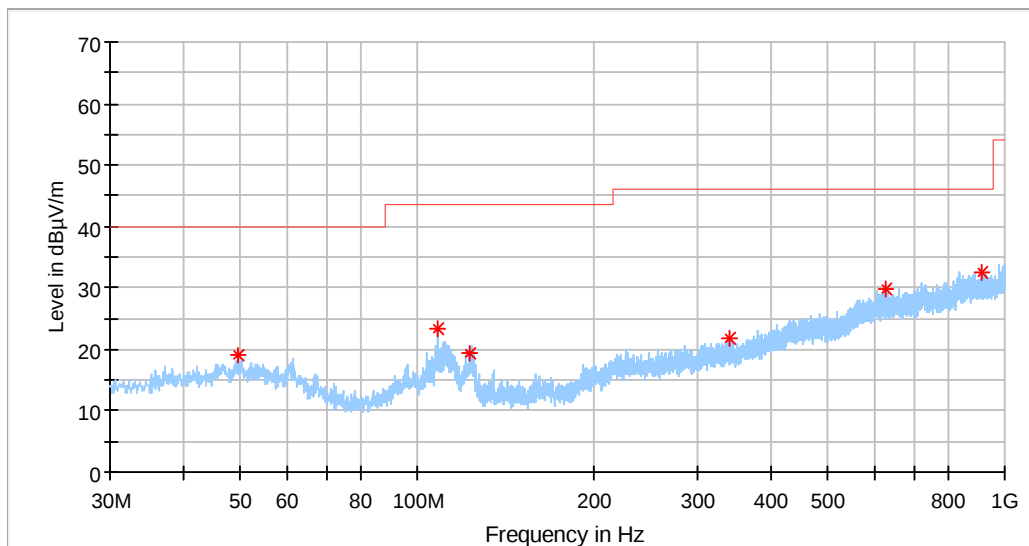


| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-----------------|------------------|------------------|----------------|-------------|
| 1000.000000     | 11.84            | ---              | 54.00          | 42.16       |
| 2118.541667     | 24.06            | ---              | 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

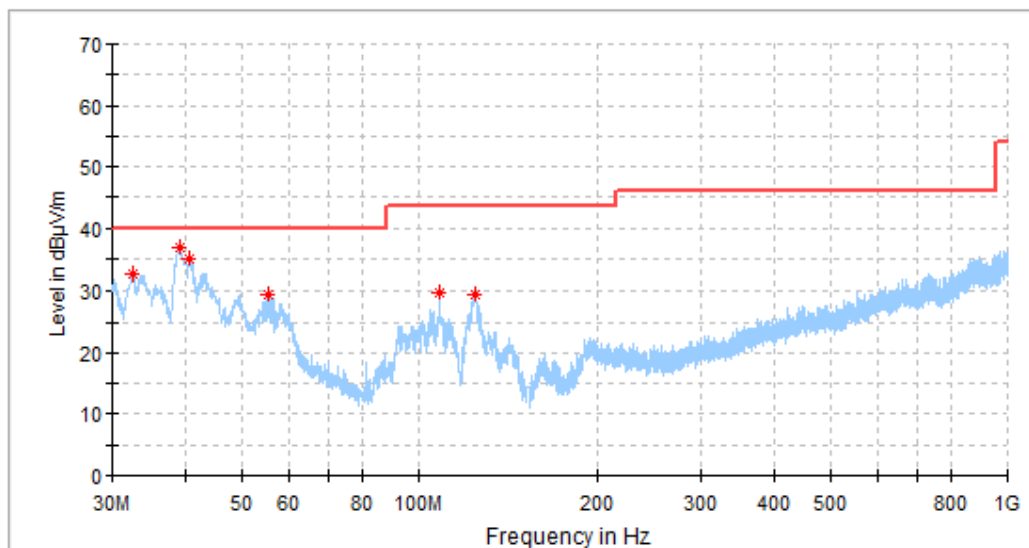


| Frequency (MHz) | QuasiPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|--------------------|----------------|-------------|
| 49.642500       | 19.13              | 40.00          | 20.87       |
| 108.509375      | 23.35              | 43.50          | 20.15       |
| 122.756250      | 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

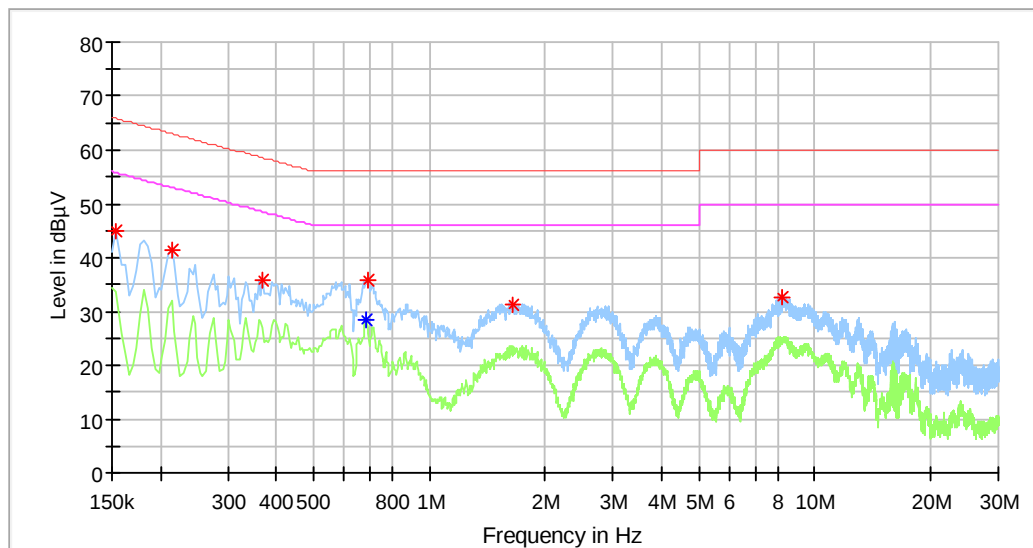


| Frequency (MHz) | QuasiPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|--------------------|----------------|-------------|
| 32.606875       | 32.64              | 40.00          | 7.36        |
| 39.162812       | 36.24              | 40.00          | 3.76        |
| 40.670000       | 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 |

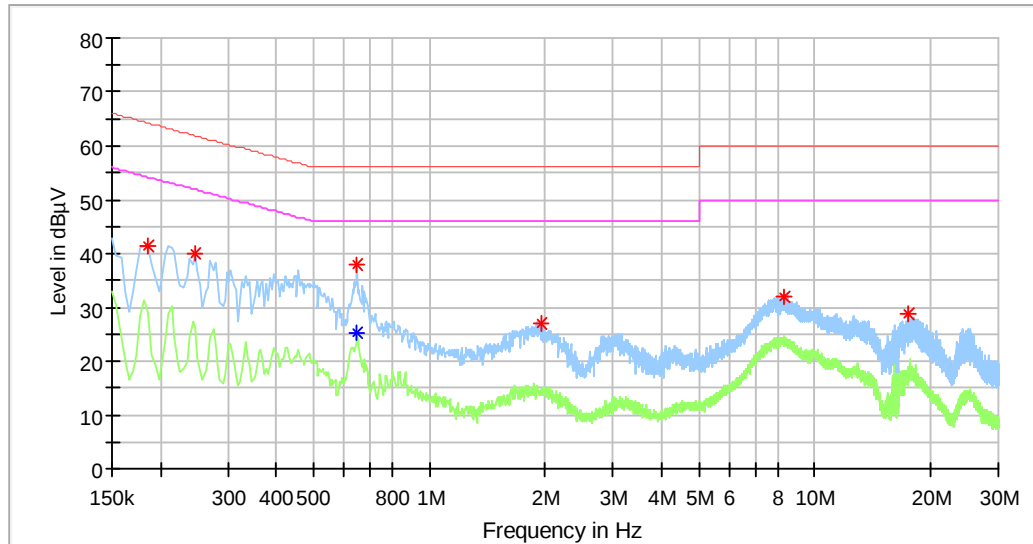


| Frequency (MHz) | QuasiPeak (dBμV) | Average (dBμV) | Limit (dBμV) | Margin (dB) |
|-----------------|------------------|----------------|--------------|-------------|
| 0.154000        | 44.99            | ---            | 65.78        | 20.79       |
| 0.214000        | 41.27            | ---            | 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 |

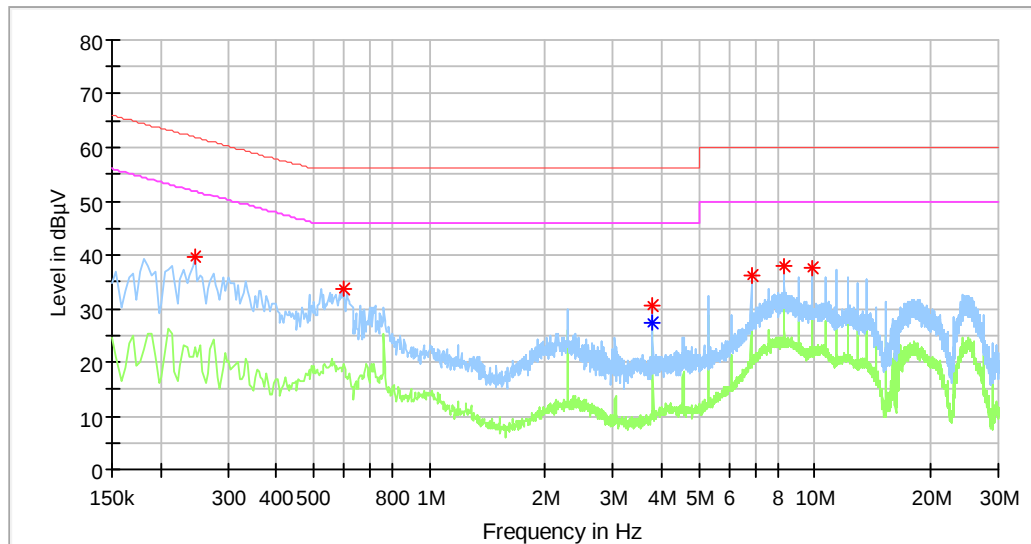


| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) |
|-----------------|------------------|----------------|--------------|-------------|
| 0.186000        | 41.38            | ---            | 64.21        | 22.83       |
| 0.246000        | 40.04            | ---            | 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 |

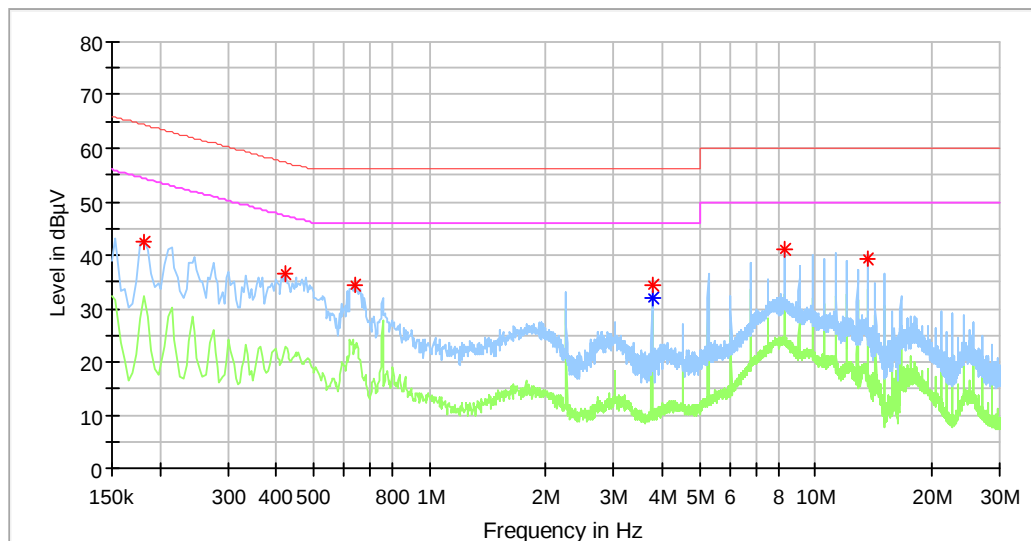


| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) |
|-----------------|------------------|----------------|--------------|-------------|
| 0.246000        | 39.61            | ---            | 61.89        | 22.28       |
| 0.598000        | 33.78            | ---            | 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       |

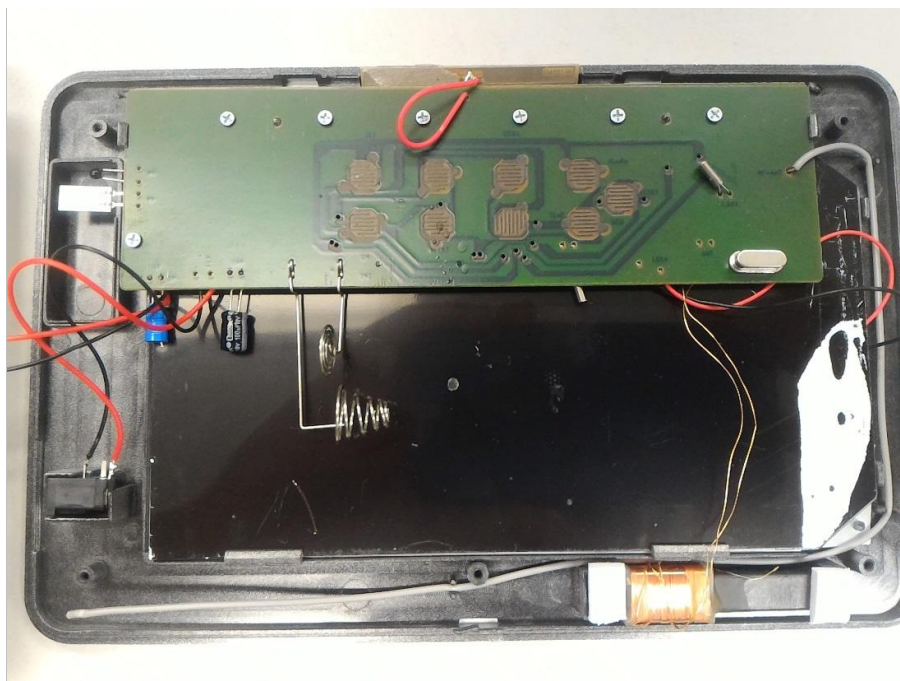
## 8 Appendix A - Photographs of EUT



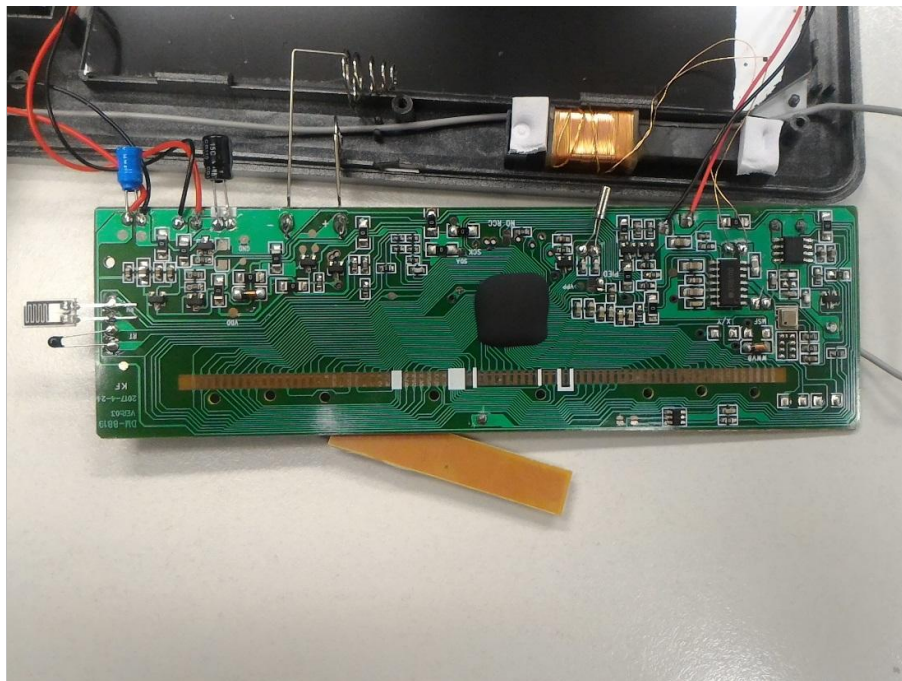
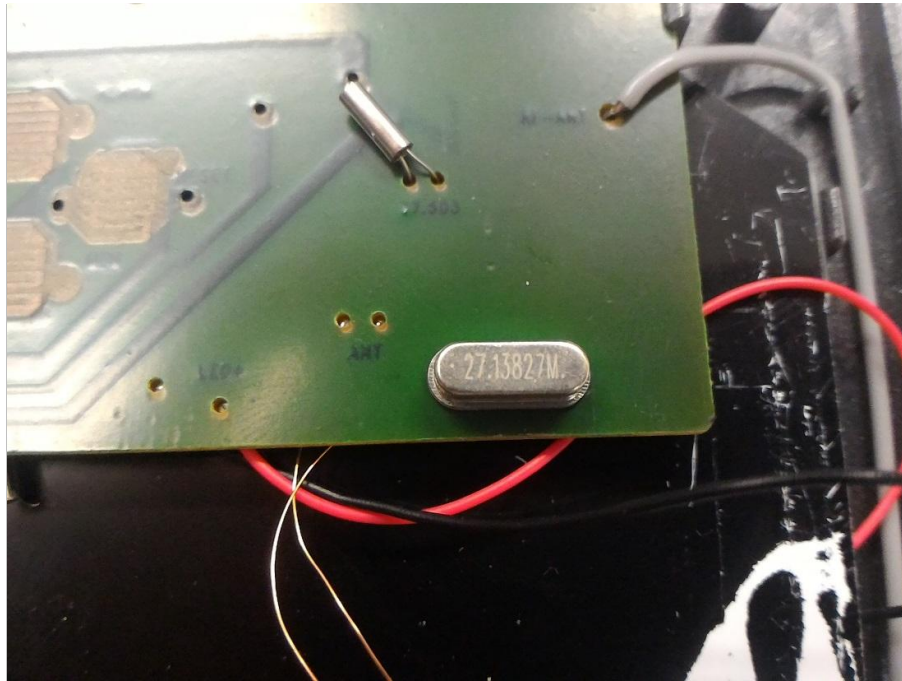
## Appendix A



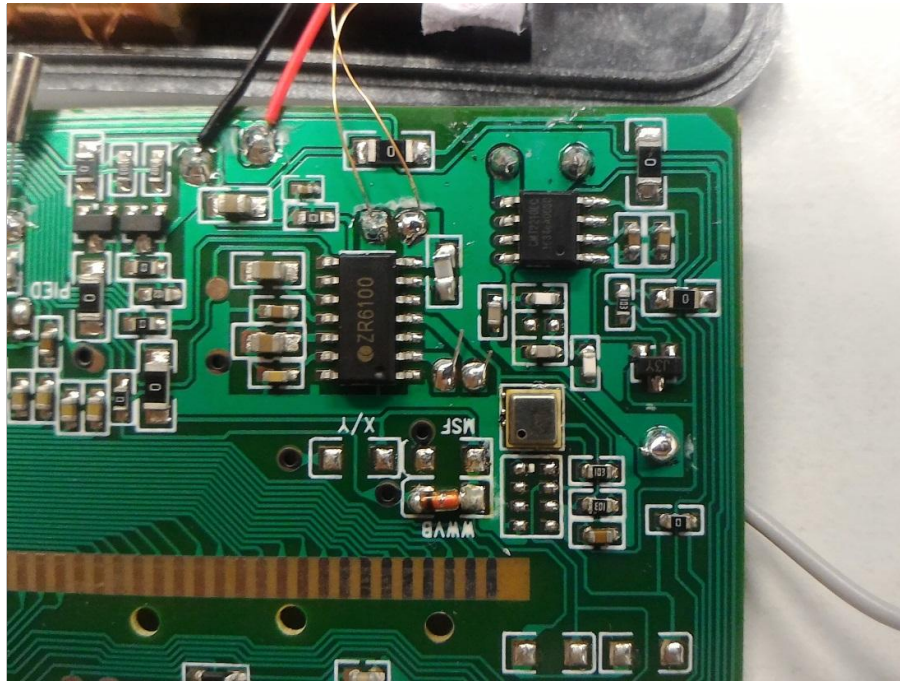
## Appendix A



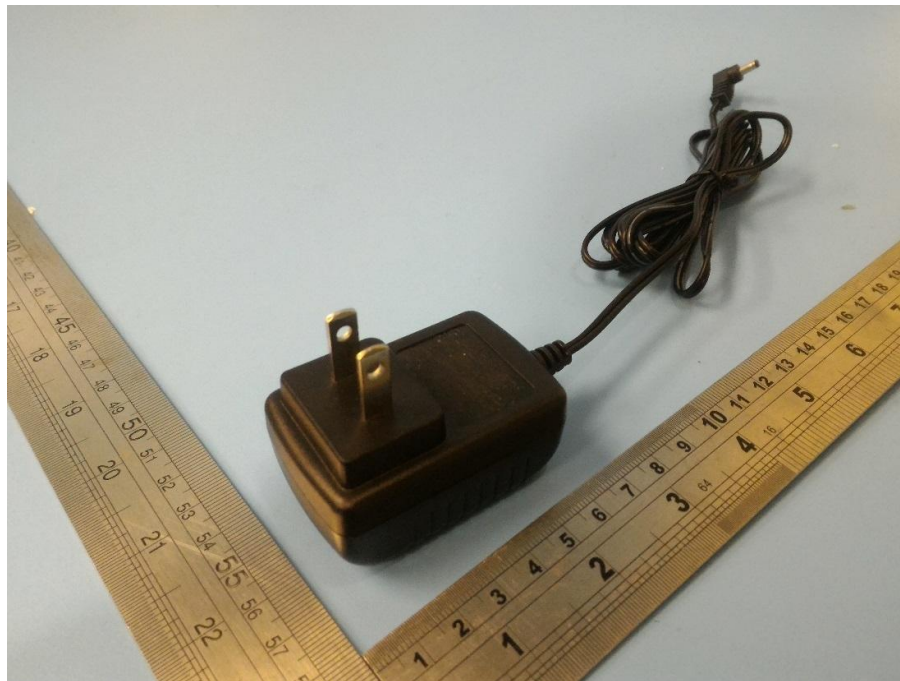
## Appendix A



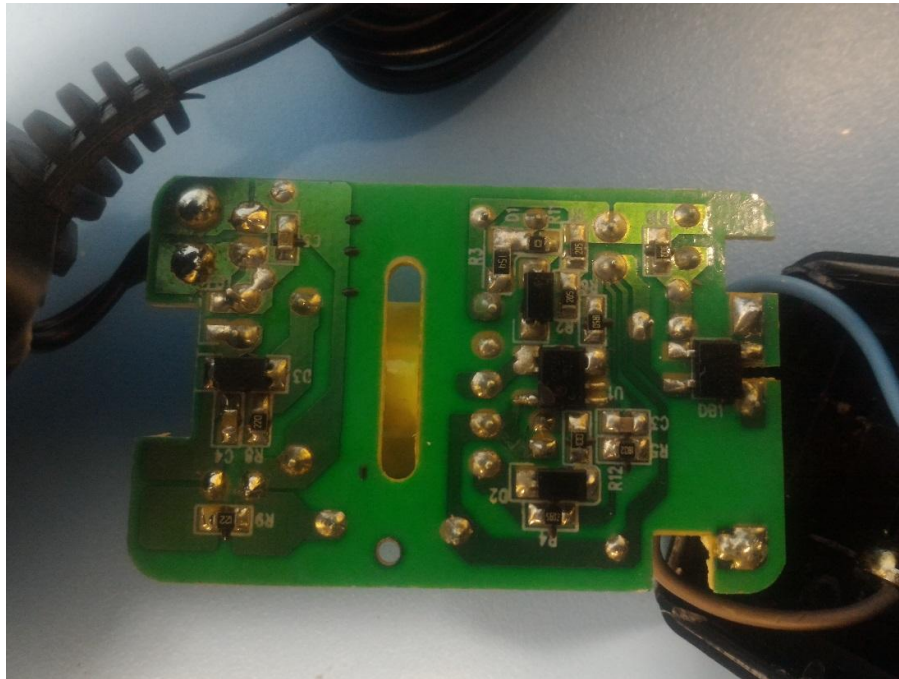
## Appendix A



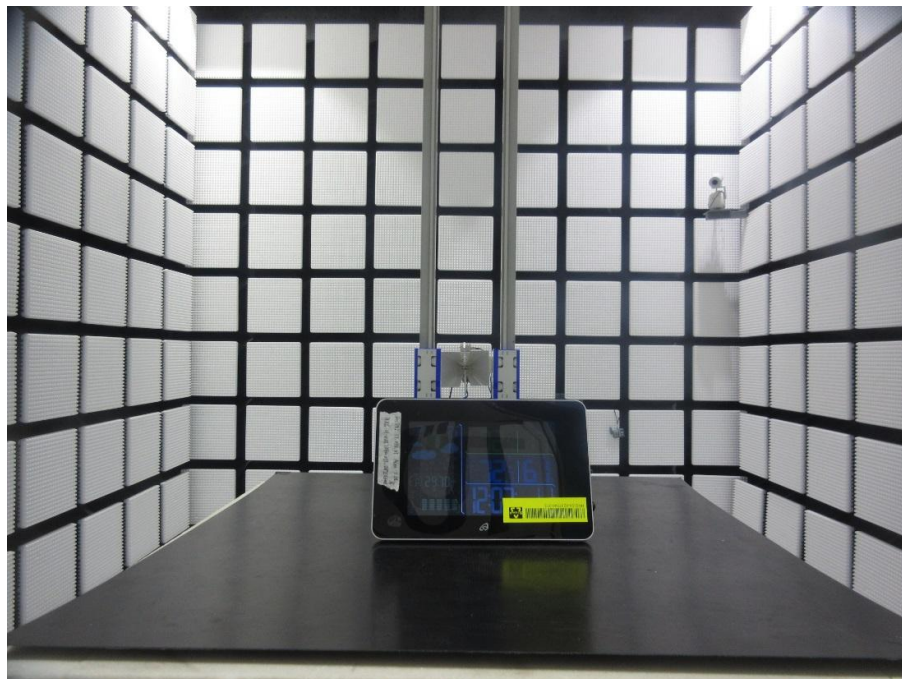
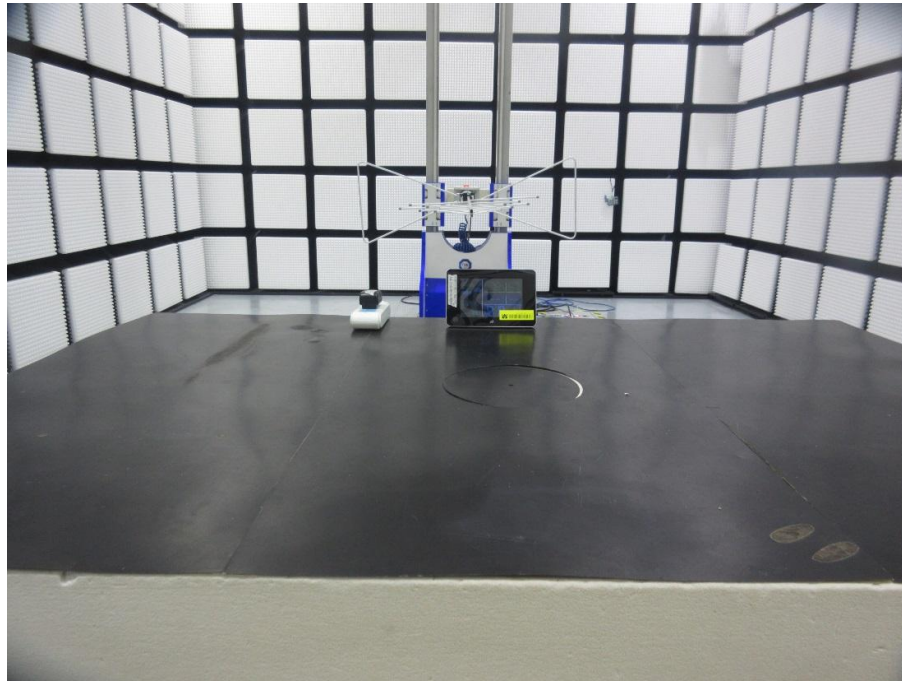
## Appendix A



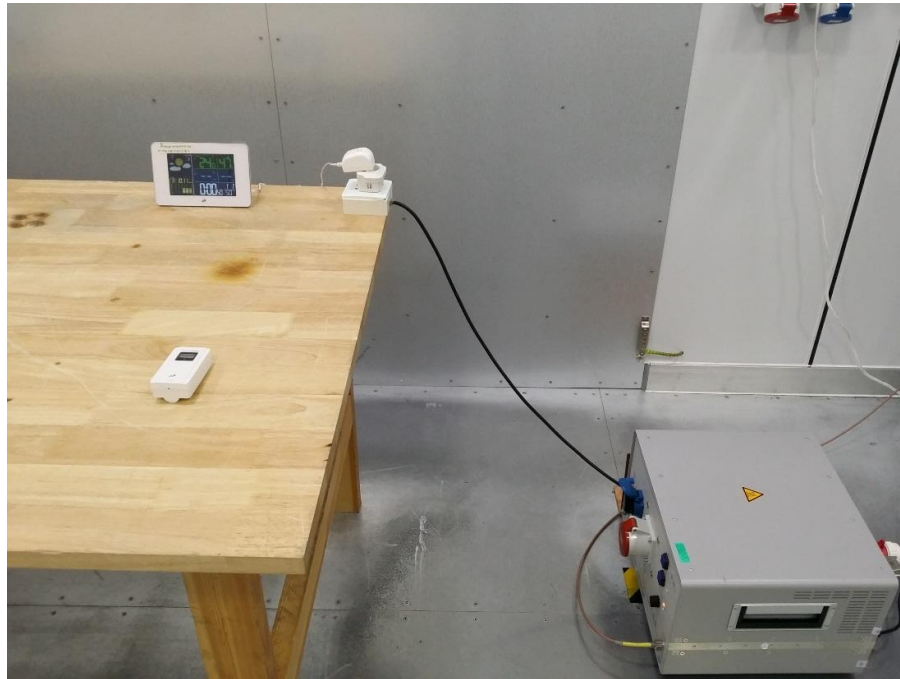
## Appendix A



## 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'