

# FCC TEST REPORT

**Job No.** : GPEM2012001386EH

**Applicant Name** : GolfzonDeca Inc

**Equipment Under Test (EUT) :**

**Product Name** : GPS Golf Rangefinder

**Model Name** : GOLFBUDDY aim W11 Premium

**FCC Authorization Type** : Certification

**Applied Standards** : FCC Part 15 Subpart B, Class B  
ANSI C63.4a:2017

**Date of Receipt** : November 25, 2020

**Date of Test** : November 25, 2020 ~ January 6, 2021

**Date of Issue** : January 7, 2021

**Test Results** : Complied

**Tested by**

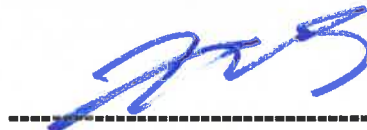
:



Luther Choi

**Reviewed by**

:



Sean Hur

**This test report does not assure KOLAS accreditation.**

- 1) The results of this test report are effective only to the items tested.
- 2) The SGS Korea is not responsible for the sampling, the results of this test report apply to the sample as received.

**Remarks :**

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The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full

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## Revision History

| Revision | Report number        | Description |
|----------|----------------------|-------------|
| 0        | F690501-RF-EMH000960 | Initial     |
|          |                      |             |

## 1. General Information

### 1.1 Client Information

Applicant : GolfzonDeca Inc  
Address : 253, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Manufacturer : Shenzhen huaxin communication co., Ltd  
Address : 5F, Building B5, Xujingchang Industrial Park, No.39, Haoye Road, Xin he Community, Fu hai Street, Baoan District, Shenzhen

### 1.2 Test Laboratory

Name and Address : SGS Korea Co., Ltd.  
Giheung 1 Lab : 35, Giheungdanji-ro 121beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea, 17086  
Giheung 2 Lab : 23, Giheungdanji-ro 24beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea, 17086

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### 1.3 General Information of E.U.T.

| Classification           | Specification                                                                                                                                      |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name             | GPS Golf Rangefinder                                                                                                                               |
| Model Name               | GOLFBUDDY aim W11 Premium                                                                                                                          |
| Alt. Model Name          | GOLFBUDDY aim W11                                                                                                                                  |
| Model Description        | Alt Model have differences in appearance color and screen differences when booting S/W<br>- Basic Model : Black Color<br>- Alt. Model : Navy Color |
| FCC ID                   | 2ALG4AIMW11P                                                                                                                                       |
| Serial No.               | W11CA1B00011S                                                                                                                                      |
| Test Power               | AC 120 V, 60 Hz                                                                                                                                    |
| Rated Power              | DC 3.7 V                                                                                                                                           |
| Internal Clock Frequency | 2.4 GHz                                                                                                                                            |
| Port                     | Micro USB 5 pin                                                                                                                                    |
| Function                 | Golf Field course wrist watch                                                                                                                      |
| Screen brightness        | 1 ~ 5 Step                                                                                                                                         |
| Screen off time          | (10~60) s                                                                                                                                          |

### 1.4 Operating Modes and Conditions

| Operating mode      | Operating Condition                                                            |
|---------------------|--------------------------------------------------------------------------------|
| 1) Charge           | The EUT is being charged through the AC-DC Adapter.                            |
| 2) SD Card + Charge | The EUT and the laptop are sending and receiving data and the EUT is charging. |

### 1.5 Peripheral Equipments

| Description   | Model      | Serial No.      | Manufacturer             |
|---------------|------------|-----------------|--------------------------|
| AC-DC Adapter | EP-TA20EBE | R37MC9X0PC1SE3  | Samsung Electronics Inc. |
| Laptop        | NT740U5L   | 0MMN91GH900125T | Samsung Electronics Inc. |

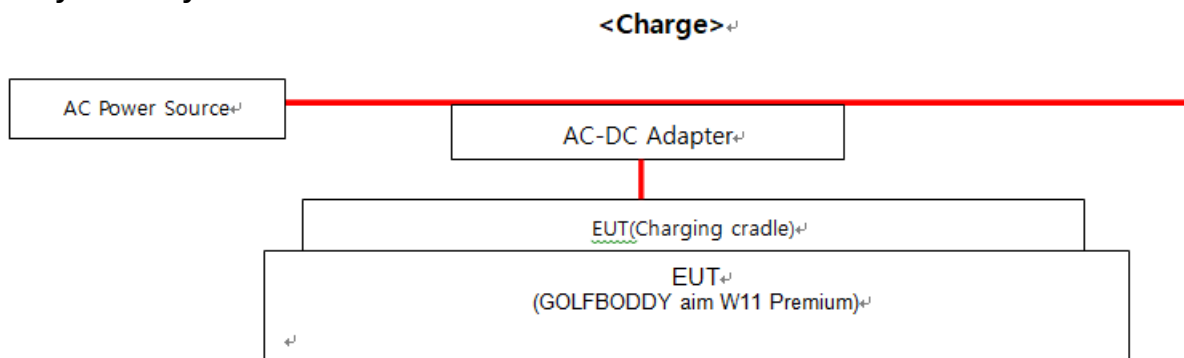
### 1.6 Cable List

| Start                           |                | END                             |                | Cable Spec. |          | Used core |
|---------------------------------|----------------|---------------------------------|----------------|-------------|----------|-----------|
| Name                            | I/O Port       | Name                            | I/O Port       | Length (m)  | Shield   |           |
| <Test Mode 1>                   |                |                                 |                |             |          |           |
| EUT(Charging cradle)            | -              | EUT (GOLFBODDY aim W11 Premium) | -              | -           | -        | -         |
|                                 | Micro USB 5pin | AC-DC Adapter                   | USB A Type     | 0.5         | Unshield | No        |
| AC-DC Adapter                   | AC IN          | AC Power Source                 | -              | -           | -        | -         |
| <Test Mode 2>                   |                |                                 |                |             |          |           |
| EUT (GOLFBODDY aim W11 Premium) | -              | EUT(Charging cradle)            | -              | -           | -        | -         |
| Laptop                          | USB A Type     |                                 | Micro USB 5pin | 0.5         | Unshield | No        |
| AC Power Source                 | -              | Laptop Adapter                  | AC IN          | 1.0         | Unshield | No        |
| Laptop                          | DC IN          |                                 | DC OUT         | 0.8         | Unshield | No        |

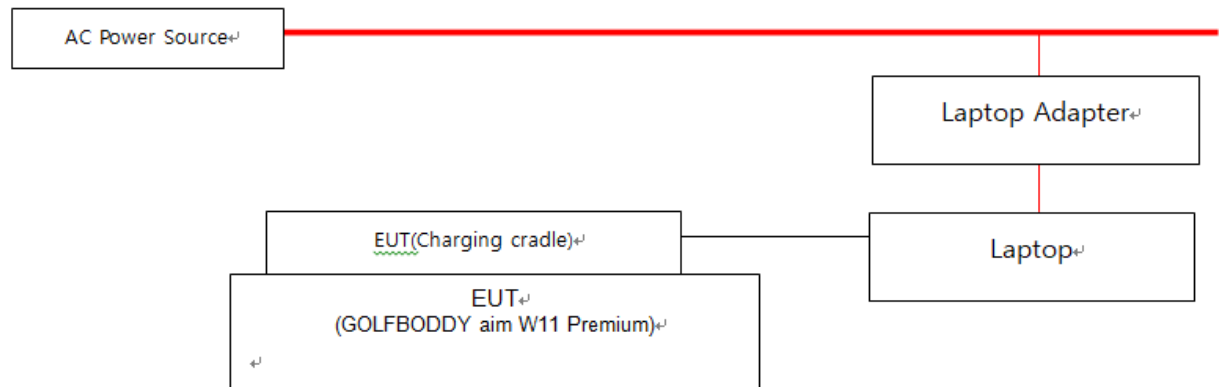
### 1.7 System Configurations

| Description                | Model                     | Serial No. | Manufacturer | Note                              |
|----------------------------|---------------------------|------------|--------------|-----------------------------------|
| Main Board                 | W10_V_0_45_20201017       | -          | -            | -                                 |
| LCD                        | -                         | -          | -            | -                                 |
| Cable                      | -                         | -          | -            | -                                 |
| Charging cradle Main Board | W10_USB_CHG_V.10_20181110 | -          | -            | -                                 |
| Micro SD Card              | SanDisk EDGE 16GB         | -          | -            | FCC: BEJ-LCW004, IC: 2703N-LCW004 |
| Antenna                    | DY09V7.04                 | -          | -            | -                                 |
| Battery                    | I12Y20AZWDB               | -          | -            | -                                 |

### 1.8 Test System Layout



### <SD Card+Charge>



## 1.9 Modifications

- There was no modified item during the test.

## 1.10 Applicable Standards for Testing

| Standards               | Status     | Deviation    |
|-------------------------|------------|--------------|
| FCC Part 15 : Subpart B | Applicable | No Deviation |

## 1.11 Summary of Test Results

| Test Item          | Standards                            | Results  |
|--------------------|--------------------------------------|----------|
| Conducted Emission | FCC Part 15 Subpart B Section 15.107 | Complied |
| Radiated Emission  | FCC Part 15 Subpart B Section 15.109 | Complied |

Note : Test methods of all test items are performed according to the basic standards in this table.

# EMISSION

## 2.1 Test Results

| Test Items         | Standards                            | Test Results    |
|--------------------|--------------------------------------|-----------------|
| Conducted Emission | FCC Part 15 Subpart B Section 15.107 | <b>Complied</b> |
| Radiated Emission  | FCC Part 15 Subpart B Section 15.109 | <b>Complied</b> |

## 2.2 Test Method and Limits

### 2.2.1 Test Method

| Test Items         | Measuring Frequency Range | RBW     | Measuring Distance |
|--------------------|---------------------------|---------|--------------------|
| Conducted Emission | 0.15 MHz ~ 30 MHz         | 9 kHz   | -                  |
| Radiated Emission  | 30 MHz ~ 1 GHz            | 120 kHz | 10 m & 3 m         |
|                    | Above 1 GHz               | 1 MHz   | 3 m                |

Note : 10 m method of radiated emission measurement is only applied to Class A equipment over the frequency range of 30 MHz ~ 1 GHz. Except this, 3 m method is applied to Class B equipment over the frequency range of 30 MHz ~ 1 GHz and Class A and Class B equipment above 1 GHz.

### 2.2.2 Test Limits

#### -Conducted Emission Limits

| Frequency Range    | Limits(dB $\mu$ V) |          | Class          |
|--------------------|--------------------|----------|----------------|
|                    | Quasi-peak         | Average  |                |
| 0.15 MHz ~ 0.5 MHz | 79                 | 66       | <b>Class A</b> |
| 0.5 MHz ~ 30 MHz   | 73                 | 60       |                |
| 0.15 MHz ~ 0.5 MHz | 66 to 56           | 56 to 46 | <b>Class B</b> |
| 0.5 MHz ~ 5 MHz    | 56                 | 46       |                |
| 5 MHz ~ 30 MHz     | 60                 | 50       |                |

Note : The lower limit shall apply at the transition frequencies. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

#### -Radiated Emission Limits below 1 GHz

| Frequency Range   | Limits(dB $\mu$ V/m) | Class                            |
|-------------------|----------------------|----------------------------------|
|                   | Quasi-peak           |                                  |
| 30 MHz ~ 88 MHz   | 39.0                 | <b>Class A<br/>(10 m method)</b> |
| 88 MHz ~ 216 MHz  | 43.5                 |                                  |
| 216 MHz ~ 960 MHz | 46.4                 |                                  |
| 960 MHz ~ 1 GHz   | 49.5                 |                                  |
| 30 MHz ~ 88 MHz   | 40.0                 | <b>Class B<br/>(3 m method)</b>  |
| 88 MHz ~ 216 MHz  | 43.5                 |                                  |
| 216 MHz ~ 960 MHz | 46.0                 |                                  |
| 960 MHz ~ 1 GHz   | 54.0                 |                                  |

#### -Radiated Emission Limits above 1 GHz (3 m method)

| Frequency Range | Limits(dB $\mu$ V/m) |      | Class          |
|-----------------|----------------------|------|----------------|
|                 | Average              | Peak |                |
| Above 1 GHz     | 59.5                 | 79.5 | <b>Class A</b> |
| Above 1 GHz     | 54.0                 | 74.0 | <b>Class B</b> |

Note : The limits of class A equipment is extrapolated using an extrapolation factor of 20 dB/decade because it was measured at 3 m distance not 10 m distance.

## 2.3 Conducted Disturbance

The initial preliminary exploratory scans were performed over the measuring frequency range (0.15 MHz to 30 MHz) using a max hold mode incorporating a Peak detector and Average detector and using the software of EMC32 (Version V10.40.10 from R&S). The final test data was measured using a Quasi-Peak detector and CISPR Average detector.

### 2.3.1 Test Equipments

| Equipment         | Model   | Manufacturer   | Serial No | Cal Due. Date |
|-------------------|---------|----------------|-----------|---------------|
| EMI TEST RECEIVER | ESU26   | R&S            | 100493    | 2021.08.25    |
| 2-LINE V-NETWORK  | ENV216  | R&S            | 101180    | 2021.08.22    |
| PULSE LIMITER     | ESH3-Z2 | R&S            | 100283    | 2021.08.22    |
| Shield Room       | -       | SY CORPORATION | -         | -             |

### 2.3.2 Test Site

Shield Room in Giheung 1 Laboratory

### 2.3.3 Environment Conditions

Temperature : (Minimum 20.3, Maximum 24.0) °C

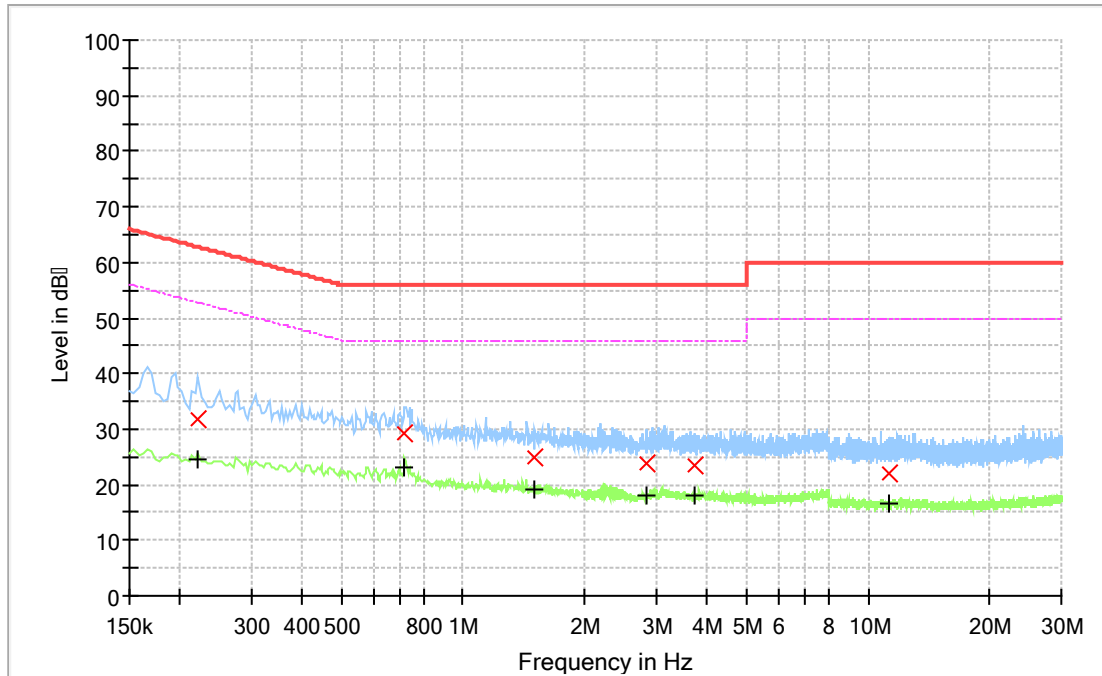
Humidity : (Minimum 30.0, Maximum 33.0) %R.H.

Atmospheric Pressure : (Minimum 102.0, Maximum 102.2) kPa

**Test Date** : November 25, 2020 & January 6, 2021

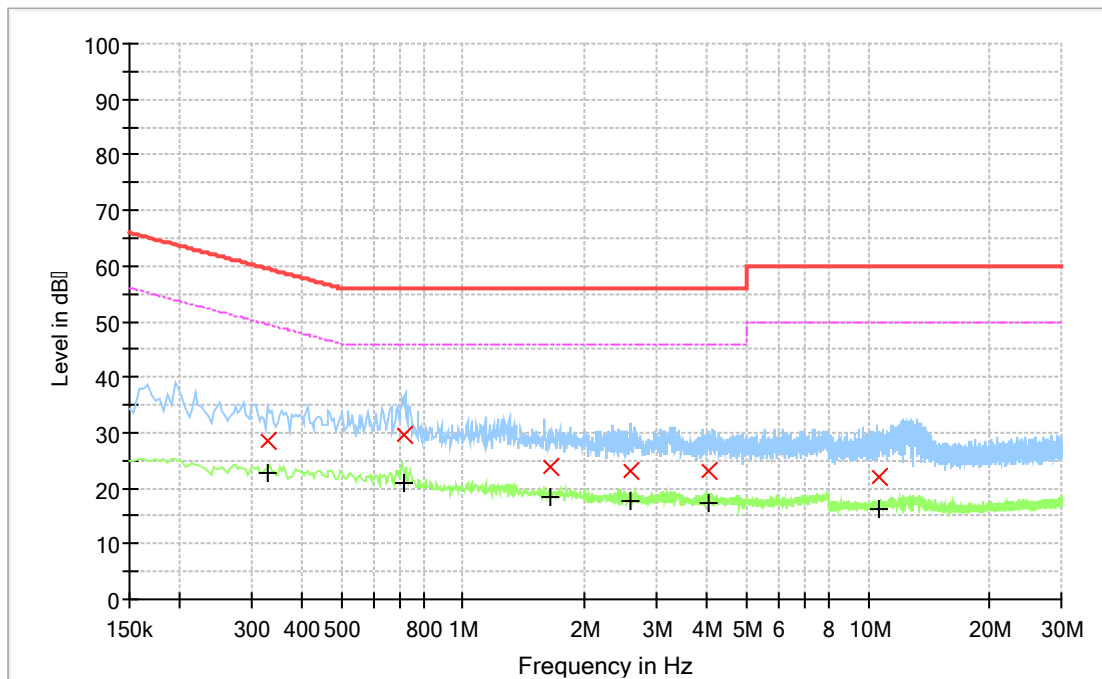
## 2.3.4 Test Results

- Test Mode: 1)



### Final Result

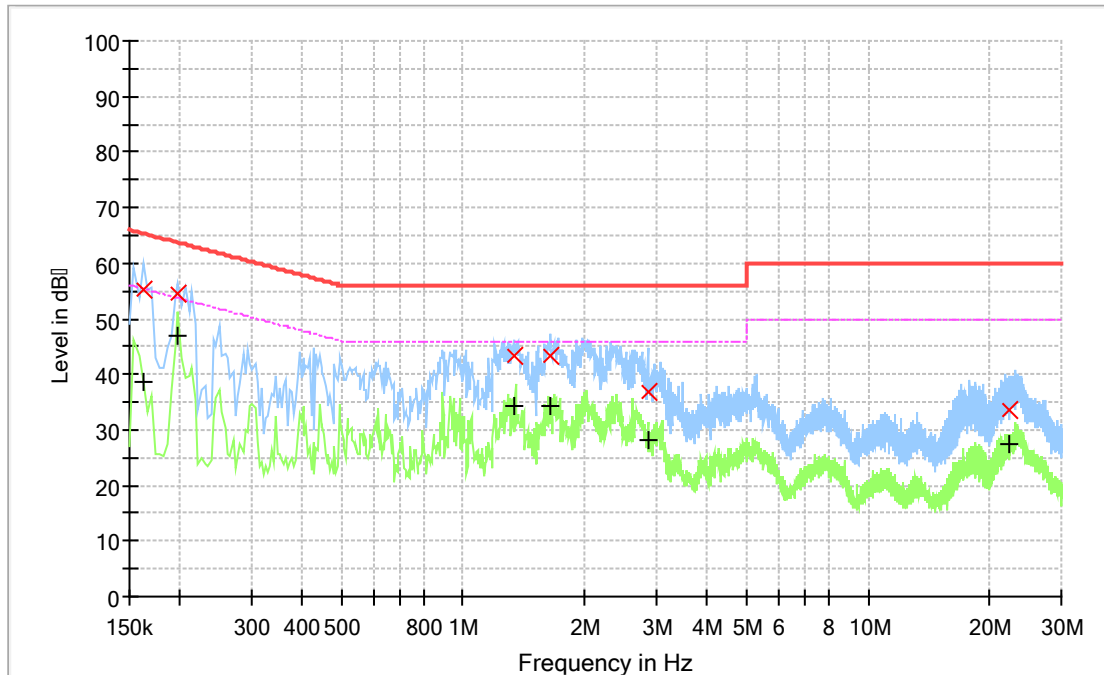
| Frequency (MHz) | QuasiPeak (dB $\mu$ V) | CAverage (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------------|-----------------------|--------------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.222 000       | ---                    | 24.64                 | 52.74              | 28.10       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 0.222 000       | 31.82                  | ---                   | 62.74              | 30.92       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 0.718 000       | ---                    | 22.95                 | 46.00              | 23.05       | 15 000.0        | 9.000           | L1   | ON     | 19.9       |
| 0.718 000       | 29.30                  | ---                   | 56.00              | 26.70       | 15 000.0        | 9.000           | L1   | ON     | 19.9       |
| 1.506 000       | ---                    | 19.15                 | 46.00              | 26.85       | 15 000.0        | 9.000           | L1   | ON     | 19.8       |
| 1.506 000       | 24.81                  | ---                   | 56.00              | 31.19       | 15 000.0        | 9.000           | L1   | ON     | 19.8       |
| 2.834 000       | ---                    | 17.98                 | 46.00              | 28.02       | 15 000.0        | 9.000           | L1   | ON     | 19.9       |
| 2.834 000       | 23.65                  | ---                   | 56.00              | 32.35       | 15 000.0        | 9.000           | L1   | ON     | 19.9       |
| 3.726 000       | ---                    | 17.88                 | 46.00              | 28.12       | 15 000.0        | 9.000           | L1   | ON     | 20.0       |
| 3.726 000       | 23.45                  | ---                   | 56.00              | 32.55       | 15 000.0        | 9.000           | L1   | ON     | 20.0       |
| 11.230 000      | ---                    | 16.52                 | 50.00              | 33.48       | 15 000.0        | 9.000           | L1   | ON     | 20.2       |
| 11.230 000      | 22.17                  | ---                   | 60.00              | 37.83       | 15 000.0        | 9.000           | L1   | ON     | 20.2       |



# Final Result

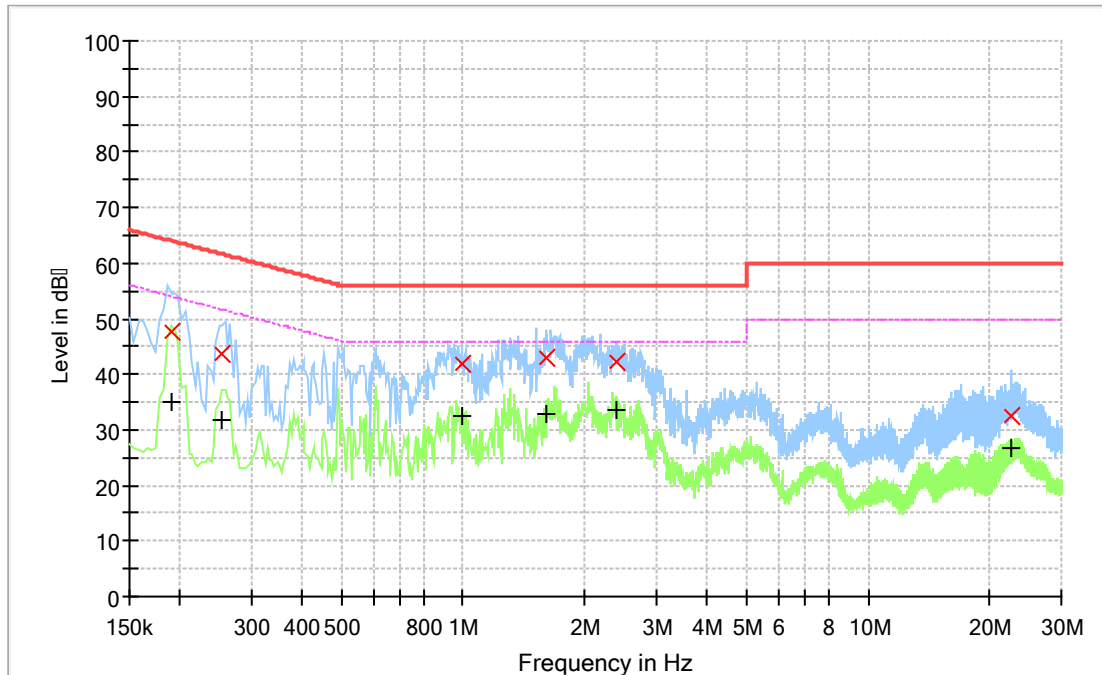
| Frequency (MHz) | QuasiPeak (dB $\mu$ V) | CAverage (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------------|-----------------------|--------------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.330 000       | ---                    | 22.83                 | 49.45              | 26.62       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 0.330 000       | 28.46                  | ---                   | 59.45              | 30.99       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 0.718 000       | ---                    | 21.03                 | 46.00              | 24.97       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 0.718 000       | 29.63                  | ---                   | 56.00              | 26.37       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 1.650 000       | ---                    | 18.46                 | 46.00              | 27.54       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 1.650 000       | 24.00                  | ---                   | 56.00              | 32.00       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 2.586 000       | ---                    | 17.59                 | 46.00              | 28.41       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 2.586 000       | 23.08                  | ---                   | 56.00              | 32.92       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 4.030 000       | ---                    | 17.45                 | 46.00              | 28.55       | 15 000.0        | 9.000           | N    | ON     | 19.9       |
| 4.030 000       | 23.15                  | ---                   | 56.00              | 32.85       | 15 000.0        | 9.000           | N    | ON     | 19.9       |
| 10.666 000      | ---                    | 16.13                 | 50.00              | 33.87       | 15 000.0        | 9.000           | N    | ON     | 20.2       |
| 10.666 000      | 21.85                  | ---                   | 60.00              | 38.15       | 15 000.0        | 9.000           | N    | ON     | 20.2       |

- Test Mode: 2)



#### Final Result

| Frequency (MHz) | QuasiPeak (dBμV) | CAverage (dBμV) | Limit (dBμV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.162 000       | ---              | 38.80           | 55.36        | 16.56       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 0.162 000       | 55.07            | ---             | 65.36        | 10.30       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 0.198 000       | ---              | 46.90           | 53.69        | 6.80        | 15 000.0        | 9.000           | L1   | ON     | 19.8       |
| 0.198 000       | 54.62            | ---             | 63.69        | 9.07        | 15 000.0        | 9.000           | L1   | ON     | 19.8       |
| 1.338 000       | ---              | 34.38           | 46.00        | 11.62       | 15 000.0        | 9.000           | L1   | ON     | 19.6       |
| 1.338 000       | 43.39            | ---             | 56.00        | 12.61       | 15 000.0        | 9.000           | L1   | ON     | 19.6       |
| 1.638 000       | ---              | 34.47           | 46.00        | 11.53       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 1.638 000       | 43.34            | ---             | 56.00        | 12.66       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 2.854 000       | ---              | 28.31           | 46.00        | 17.69       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 2.854 000       | 36.92            | ---             | 56.00        | 19.08       | 15 000.0        | 9.000           | L1   | ON     | 19.7       |
| 22.274 000      | ---              | 27.32           | 50.00        | 22.68       | 15 000.0        | 9.000           | L1   | ON     | 20.0       |
| 22.274 000      | 33.56            | ---             | 60.00        | 26.44       | 15 000.0        | 9.000           | L1   | ON     | 20.0       |



### Final Result

| Frequency (MHz) | QuasiPeak (dB $\mu$ V) | CAverage (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------------|-----------------------|--------------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.190 000       | ---                    | 34.98                 | 54.04              | 19.06       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 0.190 000       | 47.83                  | ---                   | 64.04              | 16.21       | 15 000.0        | 9.000           | N    | ON     | 19.8       |
| 0.254 000       | ---                    | 31.83                 | 51.63              | 19.79       | 15 000.0        | 9.000           | N    | ON     | 19.6       |
| 0.254 000       | 43.62                  | ---                   | 61.63              | 18.01       | 15 000.0        | 9.000           | N    | ON     | 19.6       |
| 0.990 000       | ---                    | 32.48                 | 46.00              | 13.52       | 15 000.0        | 9.000           | N    | ON     | 19.7       |
| 0.990 000       | 41.95                  | ---                   | 56.00              | 14.05       | 15 000.0        | 9.000           | N    | ON     | 19.7       |
| 1.598 000       | ---                    | 32.96                 | 46.00              | 13.04       | 15 000.0        | 9.000           | N    | ON     | 19.7       |
| 1.598 000       | 43.08                  | ---                   | 56.00              | 12.92       | 15 000.0        | 9.000           | N    | ON     | 19.7       |
| 2.386 000       | ---                    | 33.75                 | 46.00              | 12.25       | 15 000.0        | 9.000           | N    | ON     | 19.7       |
| 2.386 000       | 42.17                  | ---                   | 56.00              | 13.83       | 15 000.0        | 9.000           | N    | ON     | 19.7       |
| 22.458 000      | ---                    | 26.61                 | 50.00              | 23.39       | 15 000.0        | 9.000           | N    | ON     | 20.2       |
| 22.458 000      | 32.51                  | ---                   | 60.00              | 27.49       | 15 000.0        | 9.000           | N    | ON     | 20.2       |

Measurement Uncertainty : 4.84 dB (The confidential level is about 95 %,  $k=2$ )

Note1 : • Line ( L1 ) : Hot • Line ( N ) : Neutral

- Margin = Limit – Quasi Peak or CAverage
- Corr. = LISN Factor + Cable loss + Pulse Limiter Factor

Ex) In case

Freq ; 0.5 MHz, level ; 30 dB( $\mu$ V), CL ; 0.2 dB, LISN ; 9.5 dB, P/L: 9.8 dB

Result = Level + CL + LISN + P/L

= 30 + 0.2 + 9.5 + 9.8

= 49.5

Margin = Limit – Result

= 79 - 49.5

= 29.5

## 2.4 Radiated Emission

The initial preliminary exploratory scans were performed over the measuring frequency range (30 MHz to 13 GHz) using a max hold mode incorporating a Peak detector and using the software of EMC32 (Version V10.40.10 from R&S). The final test data was measured using a Quasi-Peak detector below 1 GHz and Peak and CISPR-Average detector above 1 GHz.

Measurements were made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna height was varied from 1 m to 4 m and the EUT was rotated 360° to find the maximum emitting point for each frequency.

### 2.4.1 Test Equipments

| Equipment                  | Model     | Manufacturer | Serial No  | Cal Due. Date |
|----------------------------|-----------|--------------|------------|---------------|
| EMI TEST RECEIVER          | ESU40     | R&S          | 100075     | 2021.08.18    |
| BILOG ANTENNA              | VULB 9163 | SCHWARZBECK  | 9163-390   | 2021.01.23    |
| TRILOG ANTENNA             | VULB 9162 | SCHWARZBECK  | 186        | 2021.07.09    |
| Double Ridged Horn Antenna | HF907     | R&S          | 102578     | 2021.01.24    |
| AMPLIFIER                  | 8447D     | HP           | 2727A05297 | 2021.07.10    |
| Microwave Preamplifier     | PAM-118A  | Com-Power    | 551074     | 2021.10.13    |
| 3m SEMI-ANECHOIC CHAMBER   | -         | Will Tech    | -          | -             |

### 2.4.2 Test Site

3m SEMI-ANECHOIC CHAMBER in Giheung 2 Laboratory

### 2.4.3 Environment Conditions

#### ①Below 1 GHz

Temperature : (minimum 21.0, maximum 25.0) °C

Humidity : (minimum 34.0, maximum 37.0) % R.H.

Atmospheric Pressure : (minimum 101.7, maximum 101.9) kPa

**Test Date:** November 27, 2020 & December 21, 2020

#### ②Above 1 GHz

Temperature : (minimum 21.0, maximum 25.0) °C

Humidity : (minimum 34.0, maximum 37.0) % R.H.

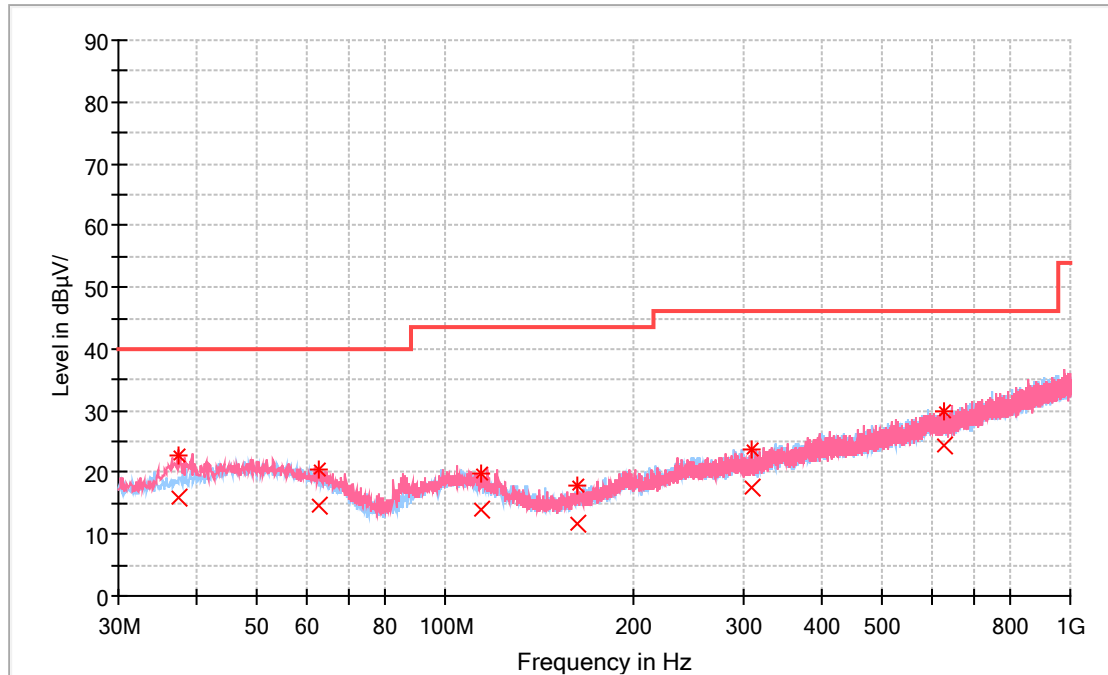
Atmospheric Pressure : (minimum 101.7, maximum 101.9) kPa

**Test Date:** November 27, 2020 & December 21, 2020

## 2.4.4 Test Results

### ①Below 1 GHz

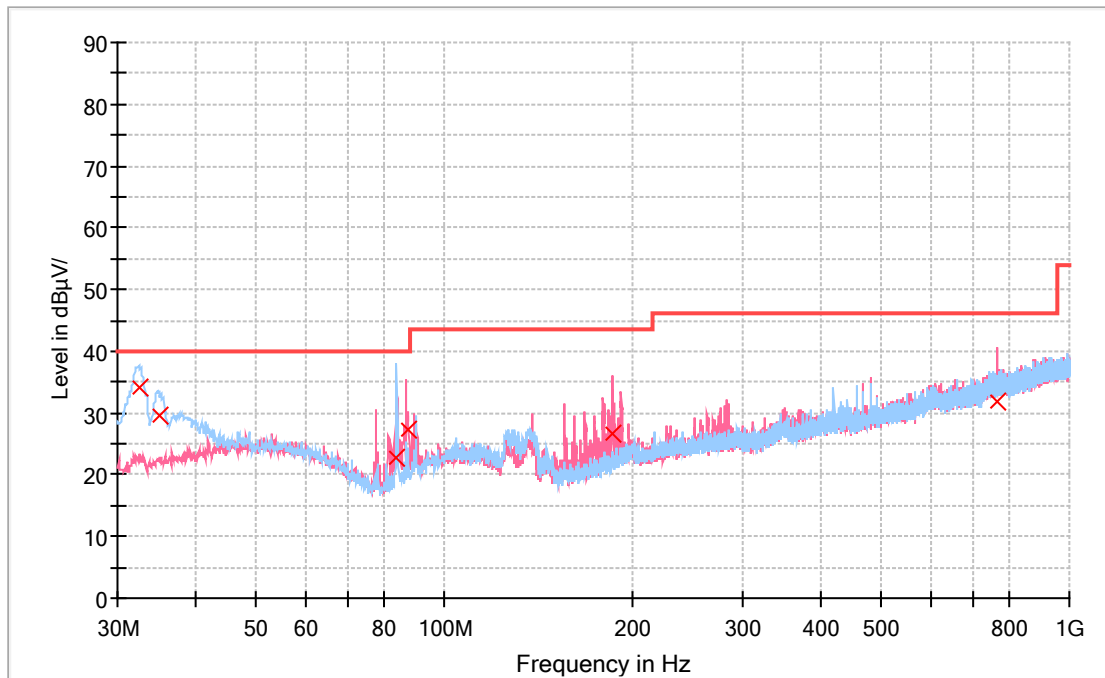
● Test Mode: 1)



### Final Result

| Frequency (MHz) | QuasiPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 37.469 000      | 15.77              | 40.00          | 24.23       | 15 000.0        | 120.000         | 100.0       | V   | 146.0         | -7.4       |
| 62.980 000      | 14.48              | 40.00          | 25.52       | 15 000.0        | 120.000         | 300.0       | V   | 330.0         | -7.4       |
| 114.099 000     | 13.95              | 43.50          | 29.55       | 15 000.0        | 120.000         | 100.0       | H   | 41.0          | -7.5       |
| 162.987 000     | 11.82              | 43.50          | 31.68       | 15 000.0        | 120.000         | 400.0       | H   | 32.0          | -9.5       |
| 309.360 000     | 17.62              | 46.00          | 28.38       | 15 000.0        | 120.000         | 200.0       | V   | 104.0         | -3.7       |
| 629.266 000     | 24.31              | 46.00          | 21.69       | 15 000.0        | 120.000         | 200.0       | H   | 66.0          | 1.7        |

● Test Mode: 2)



Final Result

| Frequency (MHz) | QuasiPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 32.625 000      | 33.96              | 40.00          | 6.04        | 15 000.0        | 120.000         | 100.0       | H   | 15.0          | -5.1       |
| 34.959 000      | 29.65              | 40.00          | 10.35       | 15 000.0        | 120.000         | 105.0       | H   | 0.0           | -4.6       |
| 84.012 000      | 22.61              | 40.00          | 17.39       | 15 000.0        | 120.000         | 354.0       | H   | 247.0         | -6.8       |
| 87.476 000      | 27.32              | 40.00          | 12.68       | 15 000.0        | 120.000         | 359.0       | V   | 152.0         | -5.9       |
| 185.576 000     | 26.71              | 43.50          | 16.79       | 15 000.0        | 120.000         | 250.0       | V   | 321.0         | -3.5       |
| 767.976 000     | 31.82              | 46.00          | 14.18       | 15 000.0        | 120.000         | 105.0       | V   | 186.0         | 8.2        |

Measurement Uncertainty (Horizontal) : 4.22 dB (The confidential level is about 95 %, k=2)

Measurement Uncertainty (Vertical) : 4.27 dB (The confidential level is about 95 %, k=2)

Note : ● POL H = Horizontal

● POL V = Vertical

● Margin = Limit – Quasi Peak

● Corr. = Antenna Factor + Cable loss – Amplifier Gain

Ex) In case

Freq ; 100 MHz, level ; 30 dB(μV/m), AF ; 10 dB/m, CL ; 4 dB, Amp ; 25 dB

Result = Level + AF + CL – Amp

= 30 + 10 + 4 - 25

= 19

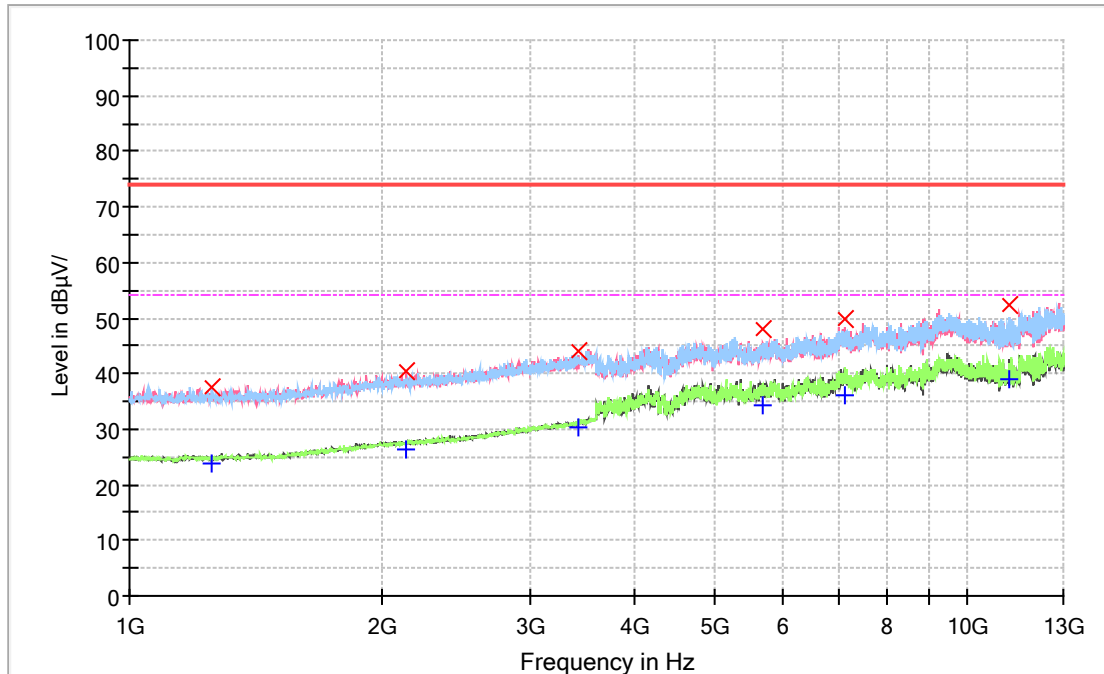
Margin = Limit – Result

= 43.5 – 19

= 24.5

## ②Above 1 GHz

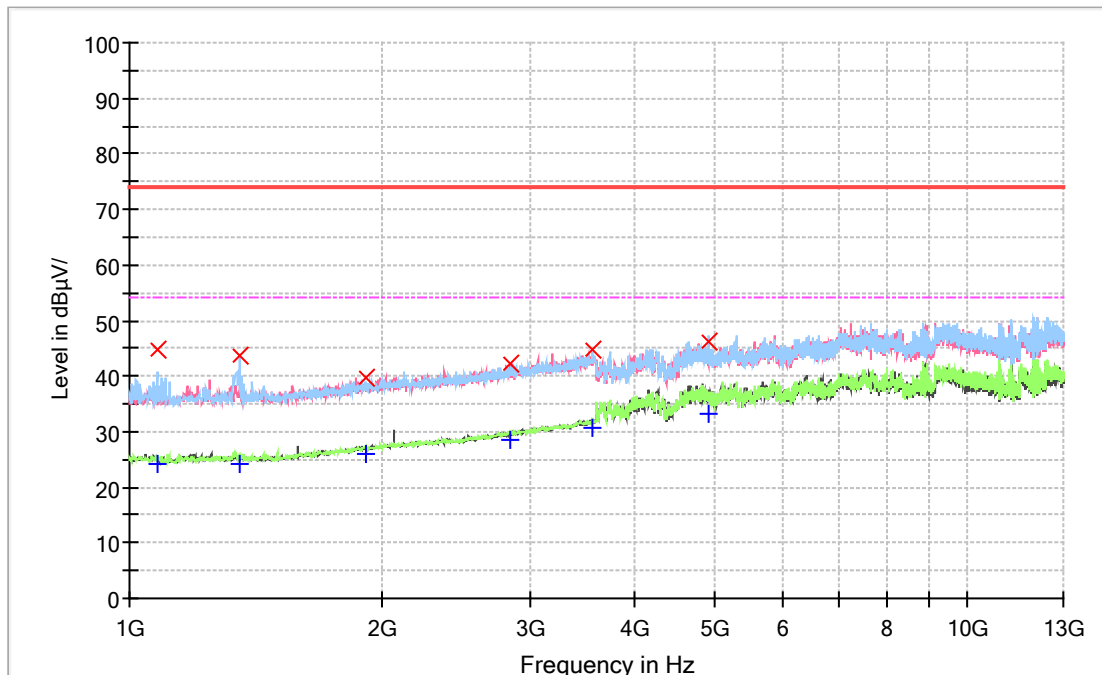
●Test Mode: 1)



## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Coverage (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 1 251.600 000   | 37.54            | ---               | 74.00          | 36.46       | 15 000.0        | 1 000.000       | 300.0       | H   | 2.0           | -9.5       |
| 1 251.600 000   | ---              | 23.84             | 54.00          | 30.16       | 15 000.0        | 1 000.000       | 300.0       | H   | 2.0           | -9.5       |
| 2 135.600 000   | ---              | 26.46             | 54.00          | 27.54       | 15 000.0        | 1 000.000       | 300.0       | V   | 230.0         | -7.3       |
| 2 135.600 000   | 40.44            | ---               | 74.00          | 33.56       | 15 000.0        | 1 000.000       | 300.0       | V   | 230.0         | -7.3       |
| 3 437.800 000   | 43.97            | ---               | 74.00          | 30.03       | 15 000.0        | 1 000.000       | 200.0       | V   | 105.0         | -4.4       |
| 3 437.800 000   | ---              | 30.20             | 54.00          | 23.80       | 15 000.0        | 1 000.000       | 200.0       | V   | 105.0         | -4.4       |
| 5 690.300 000   | ---              | 34.25             | 54.00          | 19.75       | 15 000.0        | 1 000.000       | 300.0       | V   | 153.0         | 1.6        |
| 5 690.300 000   | 47.98            | ---               | 74.00          | 26.02       | 15 000.0        | 1 000.000       | 300.0       | V   | 153.0         | 1.6        |
| 7 125.100 000   | 49.71            | ---               | 74.00          | 24.29       | 15 000.0        | 1 000.000       | 100.0       | V   | 357.0         | 3.3        |
| 7 125.100 000   | ---              | 36.27             | 54.00          | 17.73       | 15 000.0        | 1 000.000       | 100.0       | V   | 357.0         | 3.3        |
| 1 1201.700 000  | 52.47            | ---               | 74.00          | 21.53       | 15 000.0        | 1 000.000       | 200.0       | V   | 139.0         | 6.2        |
| 1 1201.700 000  | ---              | 38.95             | 54.00          | 15.05       | 15 000.0        | 1 000.000       | 200.0       | V   | 139.0         | 6.2        |

●Test Mode: 2)



#### Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Coverage (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 1 079.900 000   | ---              | 24.23             | 54.00          | 29.77       | 15 000.0        | 1 000.000       | 100.0       | H   | 310.0         | -9.5       |
| 1 079.900 000   | 44.90            | ---               | 74.00          | 29.10       | 15 000.0        | 1 000.000       | 100.0       | H   | 310.0         | -9.5       |
| 1 350.200 000   | 43.74            | ---               | 74.00          | 30.26       | 15 000.0        | 1 000.000       | 200.0       | H   | 206.0         | -9.5       |
| 1 350.200 000   | ---              | 24.24             | 54.00          | 29.76       | 15 000.0        | 1 000.000       | 200.0       | H   | 206.0         | -9.5       |
| 1 916.300 000   | 39.59            | ---               | 74.00          | 34.41       | 15 000.0        | 1 000.000       | 200.0       | H   | 0.0           | -7.8       |
| 1 916.300 000   | ---              | 25.85             | 54.00          | 28.15       | 15 000.0        | 1 000.000       | 200.0       | H   | 0.0           | -7.8       |
| 2 851.300 000   | 42.09            | ---               | 74.00          | 31.91       | 15 000.0        | 1 000.000       | 100.0       | V   | 16.0          | -5.7       |
| 2 851.300 000   | ---              | 28.50             | 54.00          | 25.50       | 15 000.0        | 1 000.000       | 100.0       | V   | 16.0          | -5.7       |
| 3 561.900 000   | ---              | 30.77             | 54.00          | 23.23       | 15 000.0        | 1 000.000       | 300.0       | H   | 301.0         | -4.1       |
| 3 561.900 000   | 44.82            | ---               | 74.00          | 29.18       | 15 000.0        | 1 000.000       | 300.0       | H   | 301.0         | -4.1       |
| 4 904.900 000   | 46.34            | ---               | 74.00          | 27.66       | 15 000.0        | 1 000.000       | 300.0       | H   | 65.0          | 0.1        |
| 4 904.900 000   | ---              | 33.31             | 54.00          | 20.69       | 15 000.0        | 1 000.000       | 300.0       | H   | 65.0          | 0.1        |

Measurement Uncertainty (Horizontal) : 4.02 dB (The confidential level is about 95 %, k=2)

Measurement Uncertainty (Vertical) : 4.18 dB (The confidential level is about 95 %, k=2)

Note : ● POL H = Horizontal

● POL V = Vertical

● Margin = Limit – Quasi Peak

● Corr. = Antenna Factor + Cable loss – Amplifier Gain

Ex) In case

Freq ; 100 MHz, level ; 30 dB(μV/m), AF ; 10 dB/m, CL ; 4 dB, Amp ; 25 dB

Result = Level + AF + CL – Amp

= 30 + 10 + 4 - 25

= 19

Margin = Limit – Result

= 43.5 – 19

= 24.5

- End of Test Report -