



Test report No: 2420031R-0E3012110014-A

## FCC TEST REPORT

### Compliance with Canada Interference-Causing Equipment Standard ICES-003

|                                                          |                                                                                     |
|----------------------------------------------------------|-------------------------------------------------------------------------------------|
| Product Name                                             | Intel Wi-Fi 7 BE201, Intel® BE201D2WP                                               |
| Trademark                                                | Intel                                                                               |
| Model and /or type reference                             | BE201D2W, BE201D2WP                                                                 |
| Applicant's name / address                               | Intel Corporation SAS / 425 rue de Goa - Le Cargo B6 -<br>06600, Antibes, France    |
| Manufacturer's name / address                            | Intel Corporation SAS / 425 rue de Goa - Le Cargo B6 -<br>06600, Antibes, France    |
| Test method requested, standard                          | FCC CFR Title 47 Part 15 Subpart B:2022 Class B<br>ICES-003 Issue 7:2020, Class B   |
| Verdict Summary                                          | IN COMPLIANCE                                                                       |
| Documented By<br>(Senior Adm. Specialist / Leven Huang ) |  |
| Approved By<br>( Director / Vincent Lin )                |  |
| Date of Report                                           | 2024/02/01                                                                          |
| Date of Issue                                            | 2024/07/11                                                                          |
| Report No.                                               | 2420031R-0E3012110014-A                                                             |
| Report Version                                           | V2.0                                                                                |

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Product Photos: Please refer to the file: 2420031R-Product Photos

## Competences and Guarantees

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DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

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The results presented in this Test Report apply only to the particular item under test established in this document.

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## General conditions

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1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

### **Revision History**

| <b>Report No.</b>       | <b>Version</b> | <b>Description</b>                                                     | <b>Issued Date</b> |
|-------------------------|----------------|------------------------------------------------------------------------|--------------------|
| 2420031R-0E3012110014-A | V1.0           | Initial issue of report.                                               | 2024-03-06         |
| 2420031R-0E3012110014-A | V2.0           | Added product name: Intel®<br>BE201D2WP and model<br>number BE201D2WP. | 2024-07-11         |

## 1. General Information

### 1.1. EUT Description

|                   |                                       |
|-------------------|---------------------------------------|
| Product Name      | Intel Wi-Fi 7 BE201, Intel® BE201D2WP |
| Trademark         | Intel                                 |
| Model No.         | BE201D2W, BE201D2WP                   |
| EUT Max Frequency | 7125MHz                               |
| EUT Rated Voltage | DC 3.3V                               |
| EUT Test Voltage  | AC 120V / 60Hz                        |

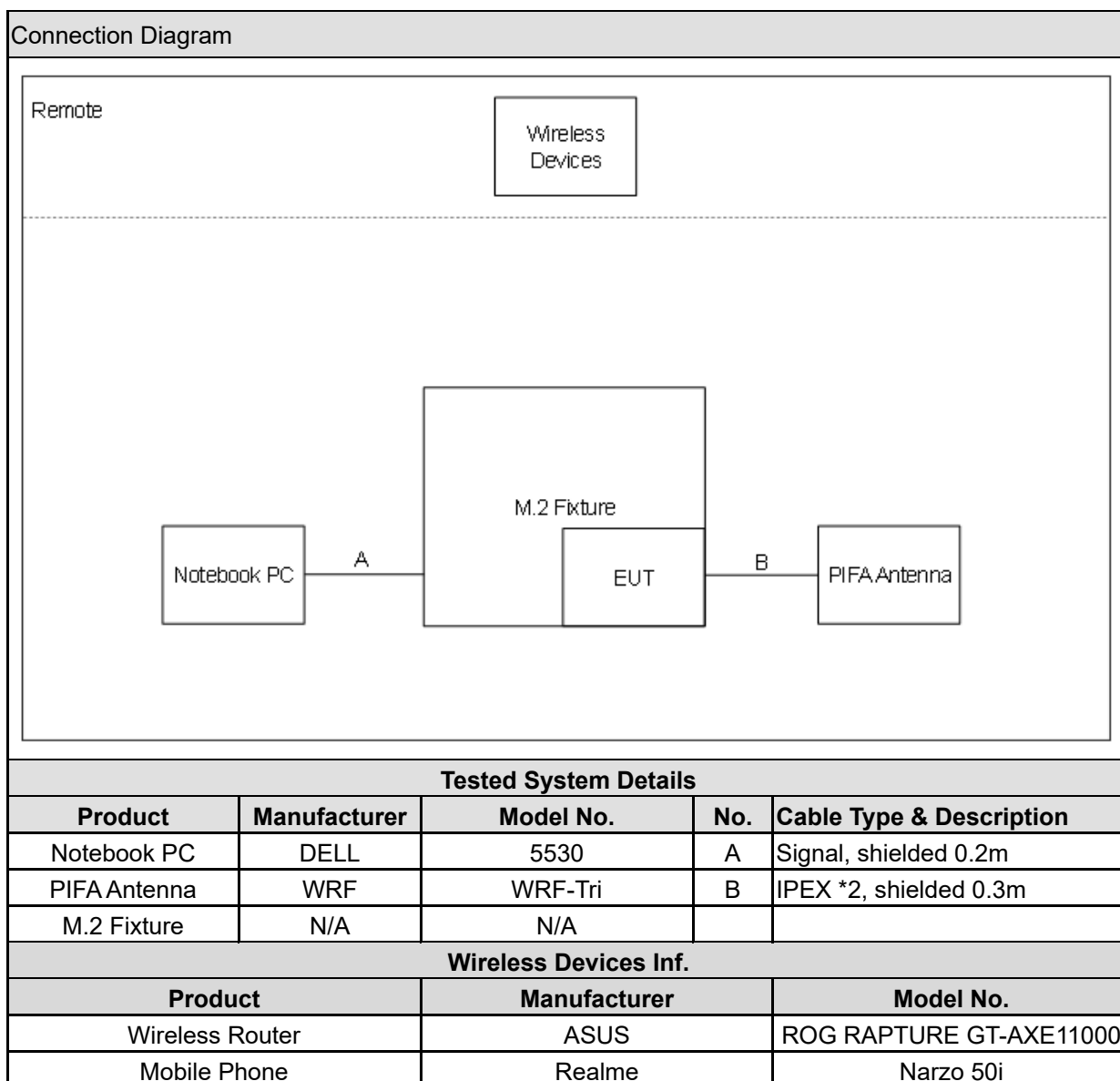
Note: The EUT is including two models for different marketing purpose.

## 1.2. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

|                                     |        |
|-------------------------------------|--------|
| Pre-Test Mode                       |        |
| Mode 1: Normal Operation(BT + WiFi) |        |
| Final Test Mode                     |        |
| Emission                            | Mode 1 |

### 1.3. Configuration & Details of Tested System



Note:

- ☒ Use Full system setup configuration determines Worst-Case Mode.
- ☐ Use 2dB law program determines Max. Cable Configuration and Worst-Case Mode.
- ☒ Radiated emission item test: Performed using the Horn Antenna 3dB Beamwidth to 3m from the EUT size sufficient to cover the procedure.
- ☒ Radiated emission item test: Performed using the Horn Antenna 3dB Beamwidth non 3m distance sufficient to cover the size of the EUT program.

#### **1.4. EUT Exercise Software**

|   |                                                 |
|---|-------------------------------------------------|
| 1 | Setup the EUT and simulators as shown on 1.3.   |
| 2 | Turn on the power of all equipment.             |
| 3 | All the features of the EUT operation normally. |

## 2. Technical Test

### 2.1. Summary of Test Result

- ☒ No deviations from the test standards  
☐ Deviations from the test standards as below description:

| Emission           |                                                                                                                                                               |                |           |         |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|---------|
| Performed Item     | Normative References                                                                                                                                          | Test Performed | Test Site | Verdict |
| Conducted Emission | FCC CFR Title 47 Part 15 Subpart B:2022, Class B<br>ICES-003 Issue 7:2020, Class B<br>CISPR 22:2008, ANSI C63.4-2014<br>ANSI C63.4a-2017, CAN/CSA-CISPR 32:17 | Yes            | HY-SR09   | Pass    |
| Radiated Emission  | FCC CFR Title 47 Part 15 Subpart B:2022, Class B<br>ICES-003 Issue 7:2020, Class B<br>CISPR 22:2008, ANSI C63.4-2014<br>ANSI C63.4a-2017, CAN/CSA-CISPR 32:17 | Yes            | HY-CB05   | Pass    |

Note:

1. Test Site information refers to test Laboratory Information.

|                  |                                                                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Laboratory: | DEKRA Testing and Certification Co., Ltd.<br>Linkou Laboratory                                                                                              |
| Address:         | No.5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C                                                                                  |
| Phone number:    | +886-2-8601-3788                                                                                                                                            |
| Fax number:      | +886-2-8601-3789                                                                                                                                            |
| Test Site        |                                                                                                                                                             |
| LK:              | No.5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C                                                                                  |
| FS:              | No.6, Lane 75, Wenlin St., Linkou Dist., New Taipei City, 244017, Taiwan, R.O.C<br>No. 85, Wenlin St., Linkou Dist., New Taipei City, 244017, Taiwan, R.O.C |
| HY:              | No.26, Huaya 1 st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C                                                                                    |

## 2.2. List of Test Equipment

### Conducted Emission / HY-SR09

| Instrument                      | Manufacturer | Type No.    | Serial No. | Cal. Date  | Due Date   |
|---------------------------------|--------------|-------------|------------|------------|------------|
| EMI TEST RECEIVER               | R&S          | ESR3        | 102917     | 2023/12/4  | 2024/12/3  |
| Two-Line V-Network              | R&S          | ENV216      | 101493     | 2023/12/1  | 2024/11/30 |
| Two-Line V-Network              | R&S          | ENV216      | 101492     | 2023/12/12 | 2024/12/11 |
| Impedance Stabilization Network | TESEQ        | ISN T800    | 61676      | 2023/6/17  | 2024/6/16  |
| Impedance Stabilization Network | TESEQ        | ISN T8-Cat6 | 61286      | 2023/6/15  | 2024/6/14  |
| Impedance Stabilization Network | TESEQ        | ISN ST08    | 61833      | 2023/6/19  | 2024/6/18  |
| Coaxial Cable                   | SUHNER       | RG 400      | HC001-RG   | 2023/5/31  | 2024/5/30  |

Note : ISN T800 for LAN 10Mbps to 1Gbps, T8-Cat6 for LAN above 1Gbps, ST08 for Shielded LAN

Test Software version : e3 V9

**Note: Test Receiver Detector: Quasipeak and Average Bandwidth: 9kHz**

### Radiated Emission (Below 1GHz) / HY-CB05

| Instrument               | Manufacturer | Type No.         | Serial No. | Cal. Date | Due Date  |
|--------------------------|--------------|------------------|------------|-----------|-----------|
| Trilog-Broadband Antenna | Schwarzbeck  | VULB 9168        | 1398       | 2023/6/5  | 2024/6/4  |
| EMI Test Receiver        | R&S          | ESR7             | 102502     | 2023/3/28 | 2024/3/27 |
| Coaxial Cable            | ROSNO        | R-Test<br>EW0630 | HC003R     | 2023/6/19 | 2024/6/18 |
| Coaxial Cable            | ROSNO        | R-Test<br>EW0630 | HC005R     | 2023/6/19 | 2024/6/18 |
| Preamplifier             | SGH          | SGH0301-P        | 20220411-1 | 2023/6/26 | 2024/6/25 |
| NSA                      | DEKRA        | N/A              | N/A        | 2023/8/24 | 2024/8/23 |

Test Software version : e3 V9

**Note: Test Receiver Detector: Quasipeak Bandwidth: 120kHz**

### Radiated Emission (Above 1GHz) / HY-CB05

| Instrument                        | Manufacturer | Type No.         | Serial No.  | Cal. Date | Due Date  |
|-----------------------------------|--------------|------------------|-------------|-----------|-----------|
| Double Ridged Guide Horn Antenna  | RF SPIN      | DRH18-E          | 210504A18ES | 2023/5/26 | 2024/5/25 |
| Horn Antenna                      | COM-POWER    | AH-840           | 101088      | 2023/10/4 | 2024/10/3 |
| EMI Test Receiver                 | R&S          | ESR7             | 102502      | 2023/3/28 | 2024/3/27 |
| Signal Analyzer                   | R&S          | FSV3044          | 101245      | 2023/4/17 | 2024/4/16 |
| Coaxial Cable                     | ROSNO        | R-Test<br>EW0630 | HC003R      | 2023/6/19 | 2024/6/18 |
| Coaxial Cable                     | ROSNO        | R-Test<br>EW0630 | HC005R      | 2023/6/19 | 2024/6/18 |
| Coaxial Cable                     | ROSNO        | R-Test<br>EW0630 | HC004R      | 2023/6/19 | 2024/6/18 |
| Preamplifier                      | SGH          | SGH118-HS        | 20220411-2  | 2023/4/26 | 2024/4/25 |
| Microwave Preamplifier with cable | SGH          | SGH184           | 20220411-3  | 2023/4/26 | 2024/4/25 |
| VSWR                              | DEKRA        | N/A              | N/A         | 2023/8/23 | 2024/8/22 |

Test Software version : e3 V9

### 2.3. Measurement Uncertainty

| Test Items                     | Uncertainty   |
|--------------------------------|---------------|
| Conducted Emission             | $\pm 2.40$ dB |
| Radiated Emission (Below 1GHz) | $\pm 5.50$ dB |
| Radiated Emission (Above 1GHz) | $\pm 4.70$ dB |

## 2.4. Test Environment

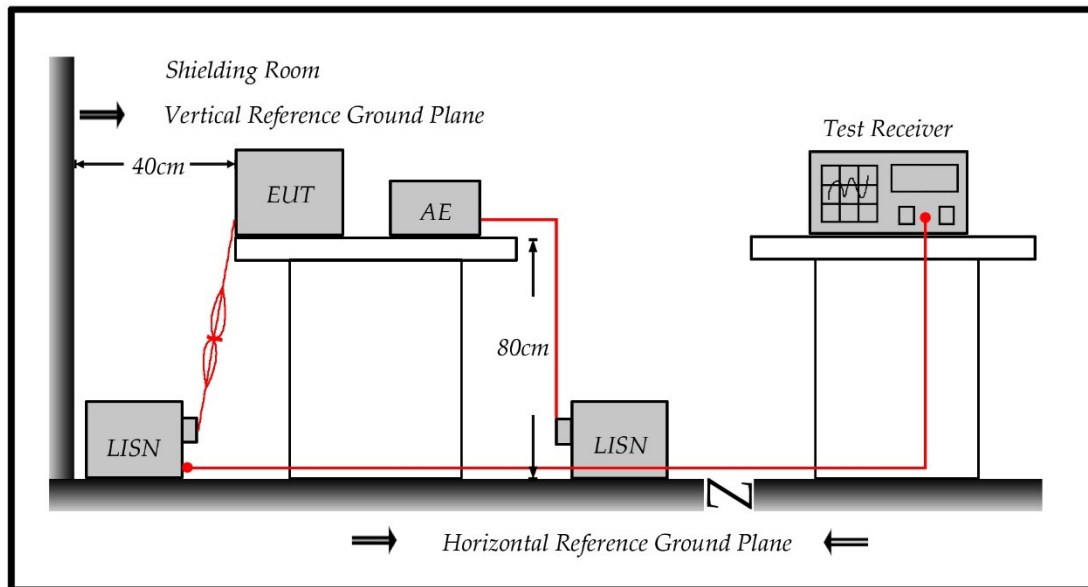
| Performed Item     | Items            | Required |
|--------------------|------------------|----------|
| Conducted Emission | Temperature (°C) | 10-40    |
|                    | Humidity (%RH)   | 10-90    |
| Radiated Emission  | Temperature (°C) | 10-40    |
|                    | Humidity (%RH)   | 10-90    |

### 3. Conducted Emission

#### 3.1. Test Specification

According to Standard : FCC Part 15 Subpart B, ICES-003 Issue 7

#### 3.2. Test Setup



#### 3.3. Limit

| Conducted emissions limits (AC mains power terminals)                         |                           |                        |                           |                        |
|-------------------------------------------------------------------------------|---------------------------|------------------------|---------------------------|------------------------|
| Frequency range (MHz)                                                         | Class A Quasi-peak (dBuV) | Class A Average (dBuV) | Class B Quasi-peak (dBuV) | Class B Average (dBuV) |
| 0.15 – 0.5                                                                    | 79                        | 66                     | 66 to 56                  | 56 to 46               |
| 0.5 – 5                                                                       | 73                        | 60                     | 56                        | 46                     |
| 5 – 30                                                                        | 73                        | 60                     | 60                        | 50                     |
| Note:                                                                         |                           |                        |                           |                        |
| 1. The more stringent limit applies at transition frequencies.                |                           |                        |                           |                        |
| 2. The limit level in dBuV decreases linearly with the logarithm of frequency |                           |                        |                           |                        |

### 3.4. Test Procedure

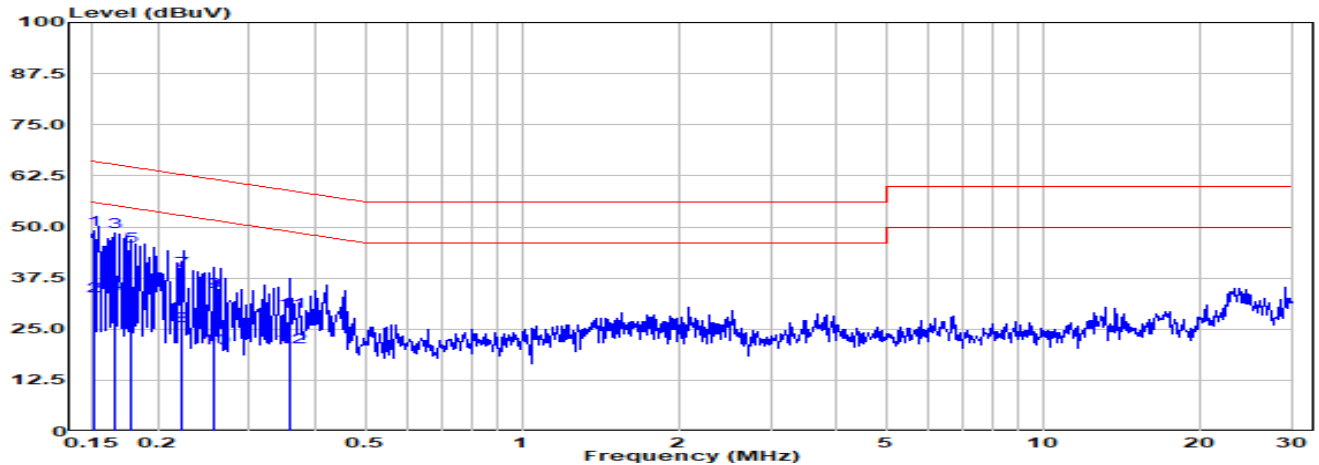
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed on conducted measurement.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

### 3.5. Test Result

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-SR09    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-21 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Phase          | Line         | Temperature (°C) | 23         |
| Test Condition | --           | Humidity (%RH)   | 68         |

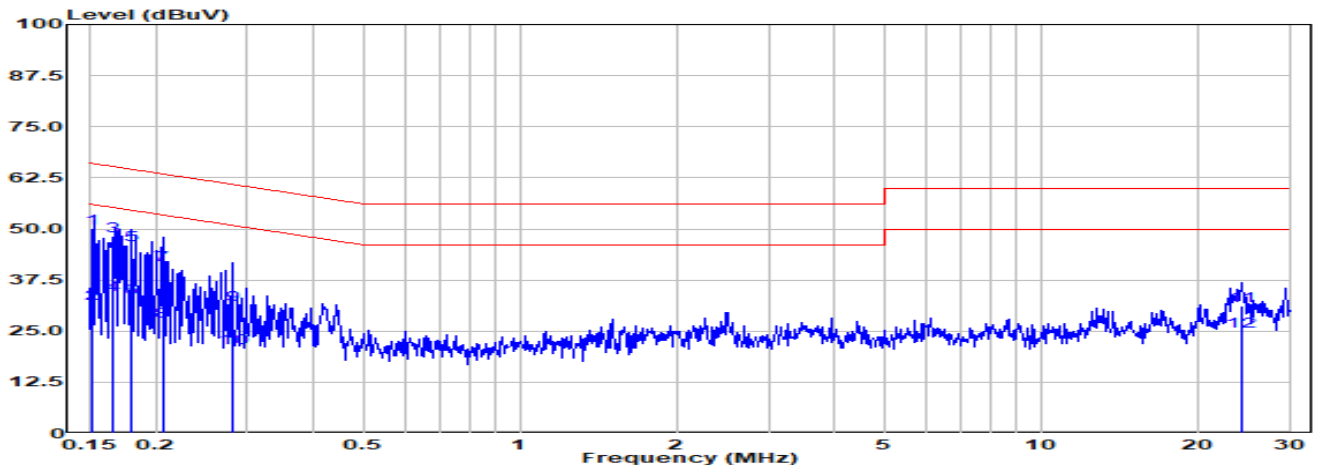


| No | Frequency (MHz) | Emission Level (dBuV) | Limit (dBuV) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB) | Detector Type |
|----|-----------------|-----------------------|--------------|-------------|----------------------|---------------------|---------------|
| 1  | 0.151           | 49.36                 | 65.92        | -16.57      | 39.76                | 9.60                | QP            |
| 2  | 0.151           | 33.18                 | 55.92        | -22.74      | 23.58                | 9.60                | Average       |
| 3  | 0.166           | 48.82                 | 65.15        | -16.33      | 39.22                | 9.60                | QP            |
| 4  | 0.166           | 33.49                 | 55.15        | -21.66      | 23.89                | 9.60                | Average       |
| 5  | 0.178           | 45.25                 | 64.60        | -19.35      | 35.64                | 9.61                | QP            |
| 6  | 0.178           | 28.69                 | 54.60        | -25.91      | 19.08                | 9.61                | Average       |
| 7  | 0.223           | 39.31                 | 62.71        | -23.40      | 29.69                | 9.61                | QP            |
| 8  | 0.223           | 25.67                 | 52.71        | -27.03      | 16.06                | 9.61                | Average       |
| 9  | 0.256           | 34.18                 | 61.57        | -27.39      | 24.56                | 9.62                | QP            |
| 10 | 0.256           | 20.22                 | 51.57        | -31.35      | 10.61                | 9.62                | Average       |
| 11 | 0.359           | 29.21                 | 58.74        | -29.53      | 19.59                | 9.62                | QP            |
| 12 | 0.359           | 20.60                 | 48.74        | -28.15      | 10.98                | 9.62                | Average       |

#### Remark:

1. "\*" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=LISN Factor+Cable Loss).
3. Margin=Emission Level-Limit

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-SR09    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-21 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Phase          | Neutral      | Temperature (°C) | 23         |
| Test Condition | --           | Humidity (%RH)   | 68         |



| No | Frequency (MHz) | Emission Level (dBUV) | Limit (dBUV) | Margin (dB) | Reading Level (dBUV) | Correct Factor (dB) | Detector Type |
|----|-----------------|-----------------------|--------------|-------------|----------------------|---------------------|---------------|
| 1  | 0.151           | 50.08                 | 65.95        | -15.87      | 40.44                | 9.64                | QP            |
| 2  | 0.151           | 31.69                 | 55.95        | -24.25      | 22.05                | 9.64                | Average       |
| 3  | 0.166           | 48.12                 | 65.15        | -17.04      | 38.47                | 9.64                | QP            |
| 4  | 0.166           | 33.82                 | 55.15        | -21.33      | 24.18                | 9.64                | Average       |
| 5  | 0.180           | 46.07                 | 64.50        | -18.43      | 36.43                | 9.64                | QP            |
| 6  | 0.180           | 32.98                 | 54.50        | -21.52      | 23.34                | 9.64                | Average       |
| 7  | 0.206           | 41.28                 | 63.37        | -22.08      | 31.64                | 9.64                | QP            |
| 8  | 0.206           | 27.46                 | 53.37        | -25.91      | 17.82                | 9.64                | Average       |
| 9  | 0.280           | 31.41                 | 60.82        | -29.41      | 21.76                | 9.65                | QP            |
| 10 | 0.280           | 20.79                 | 50.82        | -30.03      | 11.14                | 9.65                | Average       |
| 11 | 24.210          | 31.25                 | 60.00        | -28.75      | 20.78                | 10.47               | QP            |
| 12 | 24.210          | 24.81                 | 50.00        | -25.19      | 14.34                | 10.47               | Average       |

## Remark:

1. "" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=LISN Factor+Cable Loss).
3. Margin=Emission Level-Limit

### 3.6. Test Photograph

Test Mode : Mode 1

Description : Front View of Conducted Test



Test Mode : Mode 1

Description : Back View of Conducted Test



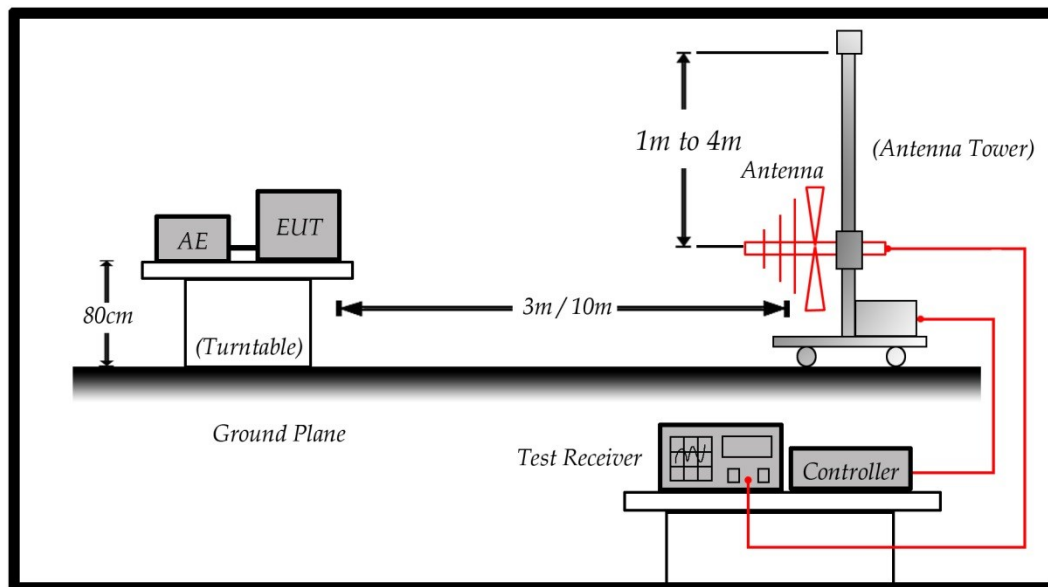
## 4. Radiated Emission

### 4.1. Test Specification

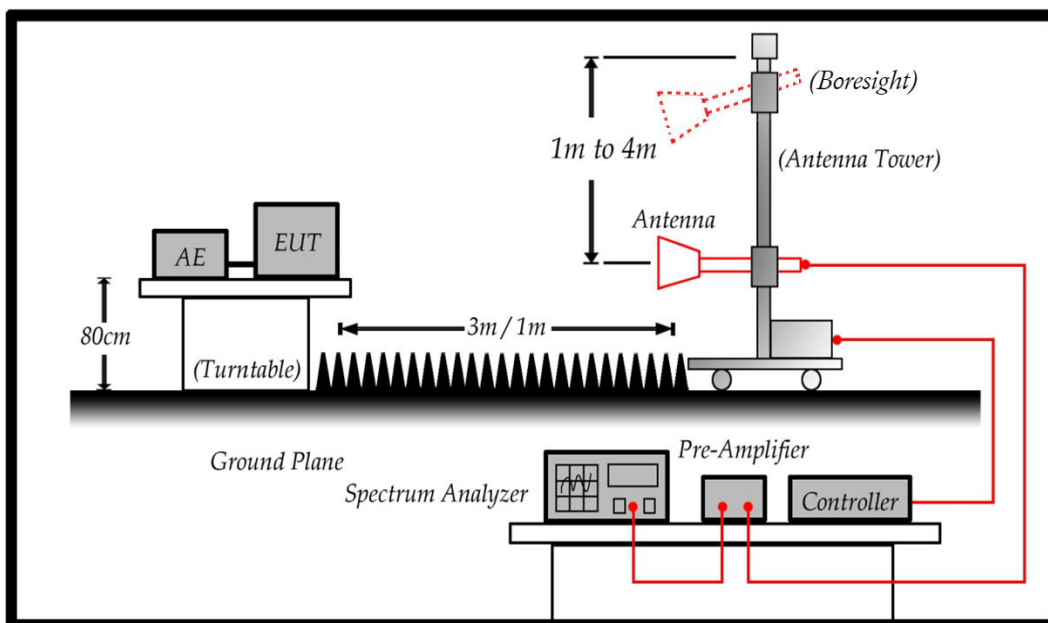
According to Standard : FCC Part 15 Subpart B, ICES-003 Issue 7

### 4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



#### 4.3. Limit

Test shall not exceed the following value:

| FCC Part 15 Subpart B Paragraph 15.109 Limits (dBuV/m) |              |        |
|--------------------------------------------------------|--------------|--------|
| Frequency (MHz)                                        | Distance (m) | dBuV/m |
| 30-88                                                  | 3            | 40     |
| 88-216                                                 | 3            | 43.5   |
| 216-960                                                | 3            | 46.0   |
| 960-1000                                               | 3            | 54     |
| 1000-40000                                             | 3            | 54     |
| 18000-40000                                            | 1            | 63.5   |

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
3. RF Voltage (dBuV/m) =  $20 \log$  RF Voltage (uV/m)

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| Radiated emissions limits (30 MHz to 1 GHz)                       |                                   |                                    |                                   |                                    |
|-------------------------------------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|
| Frequency range (MHz)                                             | Class A (3 m) Quasi-peak (dBuV/m) | Class A (10 m) Quasi-peak (dBuV/m) | Class B (3 m) Quasi-peak (dBuV/m) | Class B (10 m) Quasi-peak (dBuV/m) |
| 30-88                                                             | 50.0                              | 40.0                               | 40.0                              | 30.0                               |
| 88-216                                                            | 54.0                              | 43.5                               | 43.5                              | 33.1                               |
| 216-230                                                           | 56.9                              | 46.4                               | 46.0                              | 35.6                               |
| 230-960                                                           | 57.0                              | 47.0                               | 47.0                              | 37.0                               |
| 960-1000                                                          | 60.0                              | 49.5                               | 54.0                              | 43.5                               |
| Note: The more stringent limit applies at transition frequencies. |                                   |                                    |                                   |                                    |

## Required highest measurement frequency for radiated emissions

| Highest internal frequency ( $F_x$ )                                                                               | Highest measured frequency               |
|--------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| $F_x \leq 108 \text{ MHz}$                                                                                         | 1 GHz                                    |
| $108 \text{ MHz} < F_x \leq 500 \text{ MHz}$                                                                       | 2 GHz                                    |
| $500 \text{ MHz} < F_x \leq 1 \text{ GHz}$                                                                         | 5 GHz                                    |
| $F_x > 1 \text{ GHz}$                                                                                              | $5 \times F_x$ up to a maximum of 40 GHz |
| Note: $F_x$ is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test. |                                          |

| Radiated emission limits at 3 m distance (at and above 1 GHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                        |                          |                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------|--------------------------|-----------------------|
| Frequency range (GHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Class A Average dB(uV/m) | Class A) Peak dB(uV/m) | Class B Average dB(uV/m) | Class B Peak dB(uV/m) |
| 1 - $F_M$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 60                       | 80                     | 54                       | 74                    |
| Note: <ol style="list-style-type: none"> <li>The highest measurement frequency, <math>F_M</math>, in GHz, shall be determined as per table 3.</li> <li>The measurement bandwidth shall be 1 MHz or greater.</li> <li>These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.</li> <li>The test site shall have been validated at the distance used for radiated emission measurements on the ITE or digital apparatus under test.</li> </ol> |                          |                        |                          |                       |

#### 4.4. Test Procedure

##### FCC Part 15 Subpart B

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground.

The turn table can rotate 360 degrees to determine the position of the maximum emission level and the antenna (boresight antenna tower) can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

| Highest frequency generated or used in the device or on which the device operates or tunes (MHz) | Upper frequency of measurement range (MHz)                                      |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Below 1.705                                                                                      | 30                                                                              |
| 1.705 – 108                                                                                      | 1000                                                                            |
| 108 – 500                                                                                        | 2000                                                                            |
| 500 – 1000                                                                                       | 5000                                                                            |
| Above 1000                                                                                       | 5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower |

On any frequency or frequencies below or equal to 1000 MHz, the radiated limits shown are based on measuring equipment employing a quasi-peak detector function and above 1000MHz, the radiated limits shown are based measuring equipment employing an average detector function.

When average radiated emission measurement are included emission measurement Above 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

For class A, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and above 1GHz.

For class B, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and 3 meters for above 1GHz.

The bandwidth below 1GHz setting on the field strength meter (Test Receiver) is 120 kHz and above 1GHz is 1MHz.

### **ICES-003 Issue 7**

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground.

The turn table can rotate 360 degrees to determine the position of the maximum emission level and the antenna (boresight antenna tower) can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

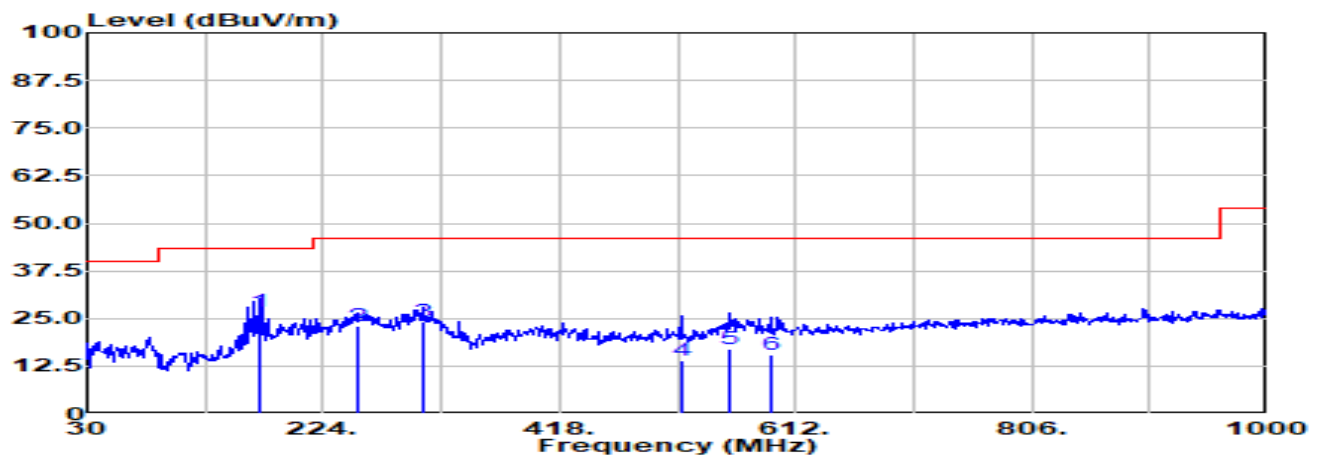
On any frequency or frequencies below or equal to 1000MHz, the radiated limits shown are based on measuring equipment employing a quasi-peak detector function and above 1000MHz, the radiated limits shown are based measuring equipment employing an peak & average detector function.

The measurement distance between the EUT and antenna is 3 meters or 10 meters for under 1GHz and 3 meters for above 1GHz.

The bandwidth below 1GHz setting on the field strength meter (Test Receiver) is 120 kHz and above 1GHz is 1MHz

#### 4.5. Test Result

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Horizontal   | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |

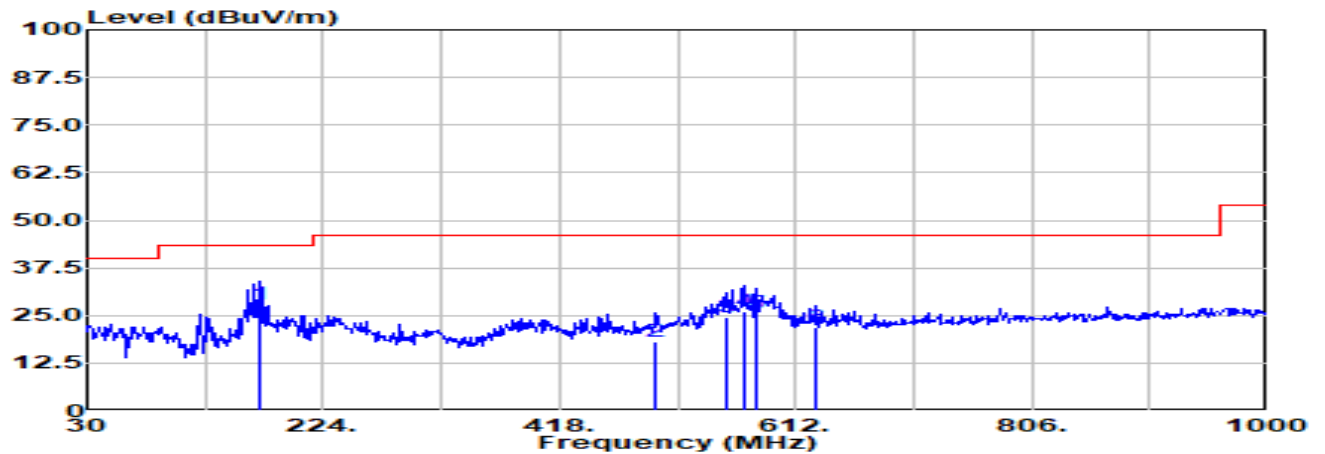


| No | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 171.100         | 26.95                   | 43.50          | -16.55      | 51.50                | -24.55                | 100          | 349          | QP            |
| 2  | 252.130         | 22.83                   | 46.00          | -23.17      | 47.90                | -25.07                | 100          | 293          | QP            |
| 3  | 306.450         | 24.28                   | 46.00          | -21.72      | 47.80                | -23.52                | 100          | 195          | QP            |
| 4  | 518.000         | 13.80                   | 46.00          | -32.20      | 31.70                | -17.90                | 100          | 85           | QP            |
| 5  | 558.650         | 17.03                   | 46.00          | -28.97      | 34.20                | -17.17                | 100          | 170          | QP            |
| 6  | 591.630         | 15.38                   | 46.00          | -30.62      | 31.80                | -16.42                | 100          | 125          | QP            |

Remark:

1. "" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Vertical     | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |

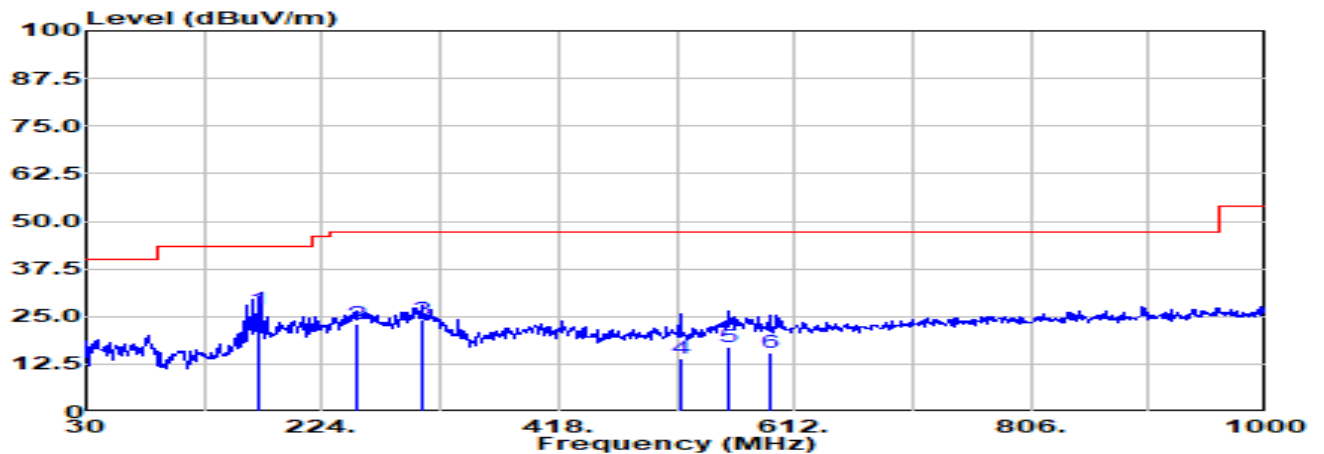


| No | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 170.900         | 27.85                   | 43.50          | -15.65      | 52.40                | -24.55                | 100          | 274          | QP            |
| 2  | 497.540         | 18.05                   | 46.00          | -27.95      | 36.40                | -18.35                | 100          | 326          | QP            |
| 3  | 554.770         | 24.45                   | 46.00          | -21.55      | 41.70                | -17.25                | 100          | 240          | QP            |
| 4  | 569.320         | 25.86                   | 46.00          | -20.14      | 42.70                | -16.84                | 100          | 0            | QP            |
| 5  | 580.960         | 25.64                   | 46.00          | -20.36      | 42.30                | -16.66                | 100          | 353          | QP            |
| 6  | 629.460         | 21.82                   | 46.00          | -24.18      | 37.50                | -15.68                | 100          | 346          | QP            |

## Remark:

1. "" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Horizontal   | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |

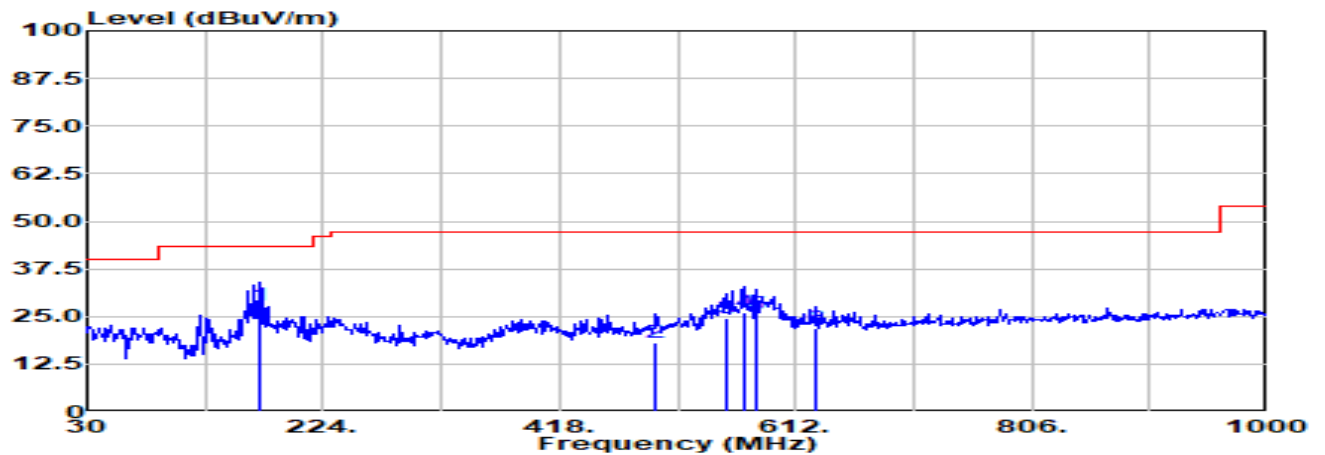


| No | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 171.100         | 26.95                   | 43.50          | -16.55      | 51.50                | -24.55                | 100          | 349          | QP            |
| 2  | 252.130         | 22.83                   | 47.00          | -24.17      | 47.90                | -25.07                | 100          | 293          | QP            |
| 3  | 306.450         | 24.28                   | 47.00          | -22.72      | 47.80                | -23.52                | 100          | 195          | QP            |
| 4  | 518.000         | 13.80                   | 47.00          | -33.20      | 31.70                | -17.90                | 100          | 85           | QP            |
| 5  | 558.650         | 17.03                   | 47.00          | -29.97      | 34.20                | -17.17                | 100          | 170          | QP            |
| 6  | 591.630         | 15.38                   | 47.00          | -31.62      | 31.80                | -16.42                | 100          | 125          | QP            |

## Remark:

1. "\*" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Vertical     | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |

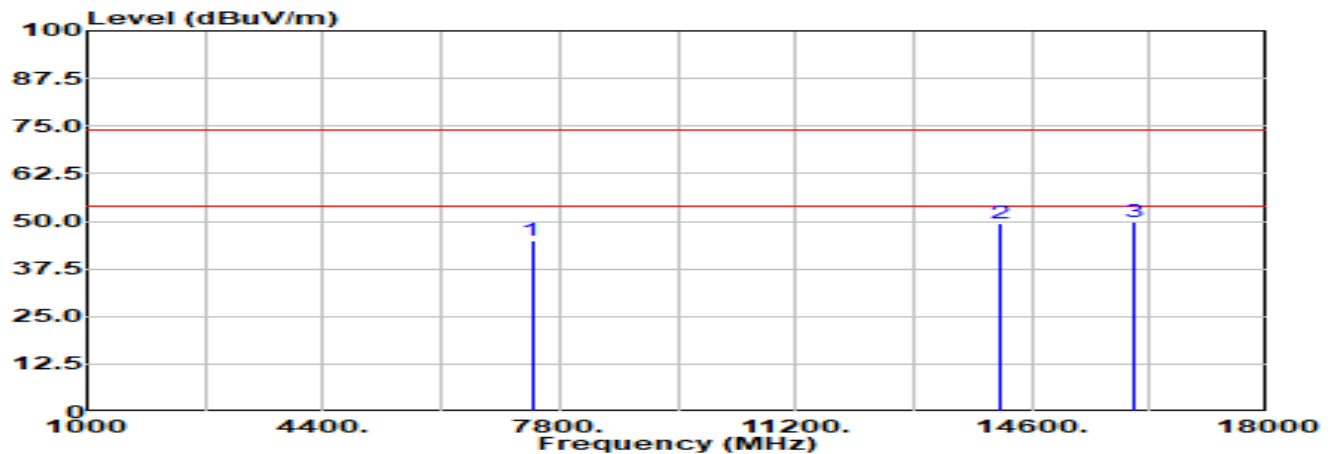


| No | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 170.900         | 27.85                   | 43.50          | -15.65      | 52.40                | -24.55                | 100          | 274          | QP            |
| 2  | 497.540         | 18.05                   | 47.00          | -28.95      | 36.40                | -18.35                | 100          | 326          | QP            |
| 3  | 554.770         | 24.45                   | 47.00          | -22.55      | 41.70                | -17.25                | 100          | 240          | QP            |
| 4  | 569.320         | 25.86                   | 47.00          | -21.14      | 42.70                | -16.84                | 100          | 0            | QP            |
| 5  | 580.960         | 25.64                   | 47.00          | -21.36      | 42.30                | -16.66                | 100          | 353          | QP            |
| 6  | 629.460         | 21.82                   | 47.00          | -25.18      | 37.50                | -15.68                | 100          | 346          | QP            |

## Remark:

1. "\*" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Horizontal   | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |

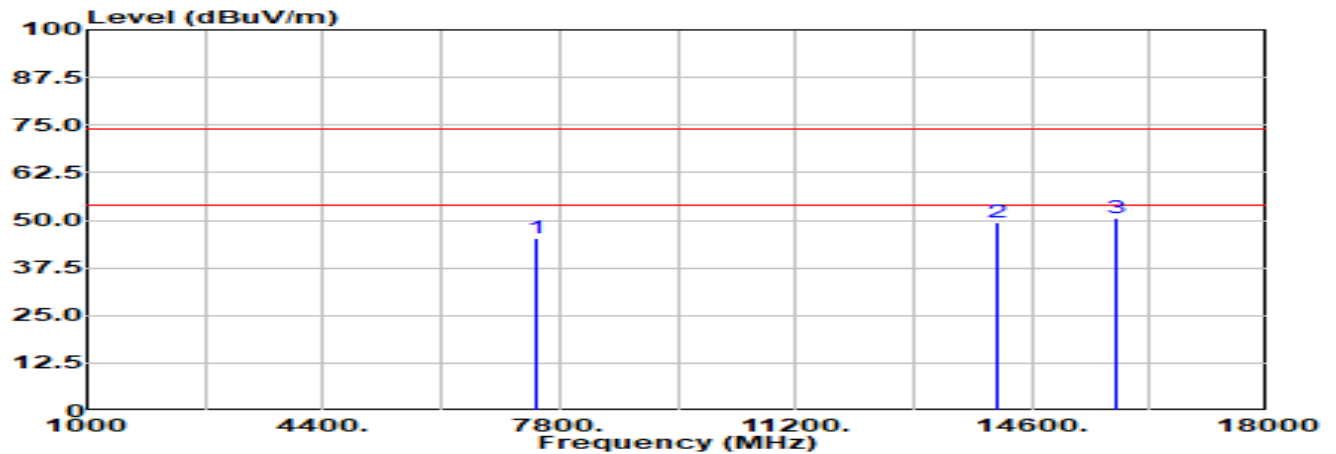


| No | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 7403.333        | 45.00                   | 74.00          | -29.00      | 44.75                | 0.25                  | 100          | 157          | Peak          |
| 2  | 14135.330       | 49.41                   | 74.00          | -24.59      | 40.87                | 8.54                  | 100          | 32           | Peak          |
| 3  | 16084.670       | 49.85                   | 74.00          | -24.15      | 41.26                | 8.59                  | 100          | 0            | Peak          |

## Remark:

1. "" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Vertical     | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |

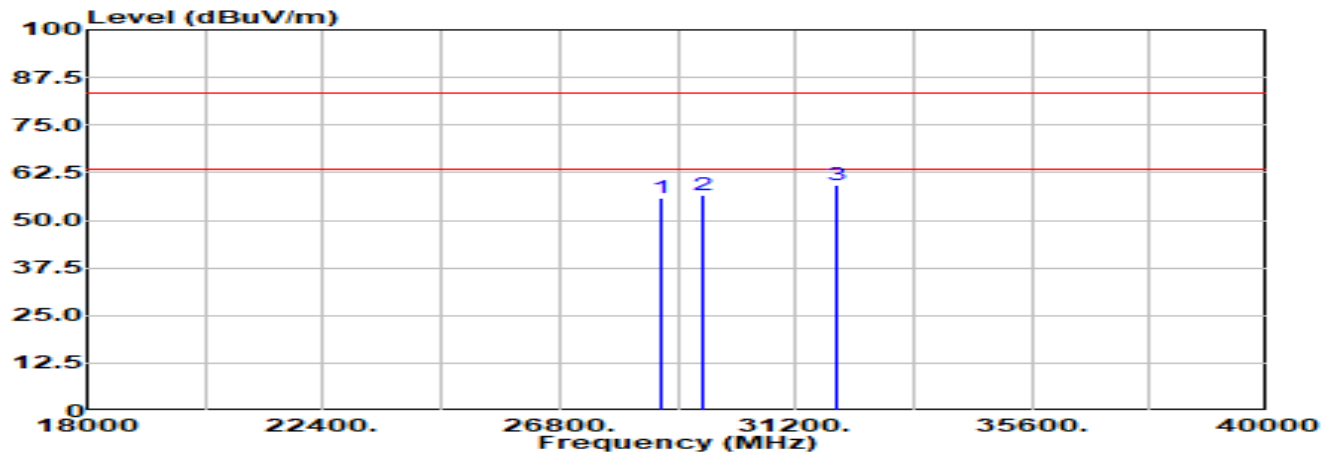


| No | Frequency (MHz) | Emission Level (dBUV/m) | Limit (dBUV/m) | Margin (dB) | Reading Level (dBUV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 7465.667        | 45.16                   | 74.00          | -28.84      | 44.88                | 0.29                  | 100          | 124          | Peak          |
| 2  | 14107.000       | 49.44                   | 74.00          | -24.56      | 41.00                | 8.45                  | 100          | 33           | Peak          |
| 3  | 15835.330       | 50.42                   | 74.00          | -23.58      | 41.76                | 8.66                  | 100          | 232          | Peak          |

## Remark:

1. "" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Horizontal   | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |

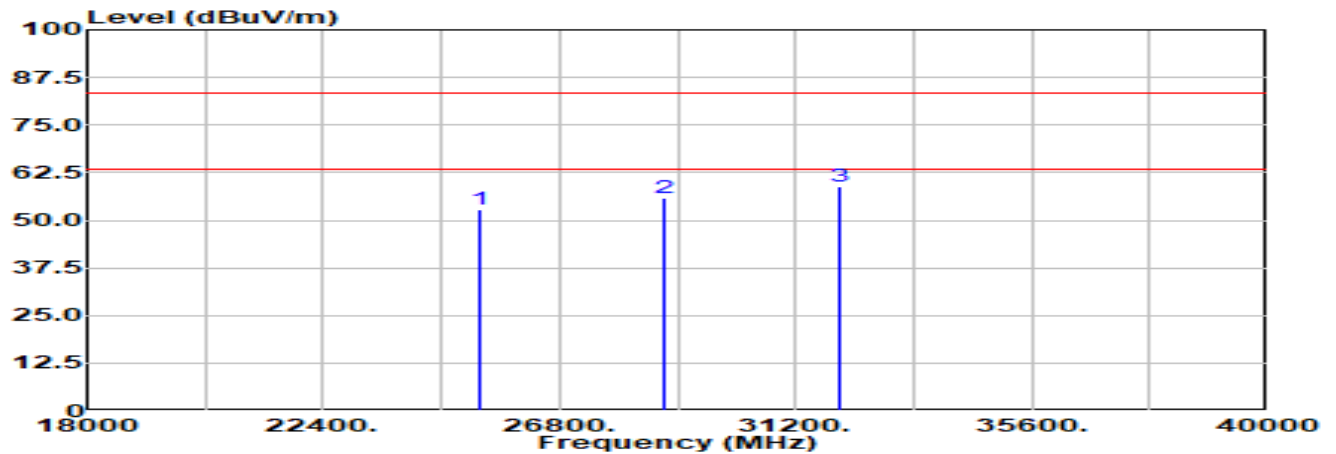


| No | Frequency (MHz) | Emission Level (dBUV/m) | Limit (dBUV/m) | Margin (dB) | Reading Level (dBUV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 28697.500       | 55.87                   | 83.50          | -27.63      | 41.29                | 14.58                 | 100          | 164          | Peak          |
| 2  | 29495.000       | 56.45                   | 83.50          | -27.05      | 40.68                | 15.77                 | 100          | 172          | Peak          |
| 3  | 31948.000       | 59.11                   | 83.50          | -24.39      | 41.80                | 17.31                 | 100          | 151          | Peak          |

## Remark:

1. "" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

|                |              |                  |            |
|----------------|--------------|------------------|------------|
| Model No       | BE201D2W     | Site             | HY-CB05    |
| Test Voltage   | AC 120V/60Hz | Test Date        | 2024-02-22 |
| Test Mode      | Mode 1       | Engineer         | Monica Wu  |
| Polarity       | Vertical     | Temperature (°C) | 21         |
| Test Condition | --           | Humidity (%RH)   | 56         |



| No | Frequency (MHz) | Emission Level (dBUV/m) | Limit (dBUV/m) | Margin (dB) | Reading Level (dBUV) | Correct Factor (dB/m) | Ant Pos (cm) | TT Pos (deg) | Detector Type |
|----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|--------------|--------------|---------------|
| 1  | 25331.500       | 52.79                   | 83.50          | -30.71      | 39.49                | 13.31                 | 100          | 254          | Peak          |
| 2  | 28736.000       | 56.02                   | 83.50          | -27.48      | 41.34                | 14.68                 | 100          | 330          | Peak          |
| 3  | 32019.500       | 58.81                   | 83.50          | -24.69      | 41.52                | 17.29                 | 100          | 118          | Peak          |

## Remark:

1. "" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.

#### 4.6 Test Photograph

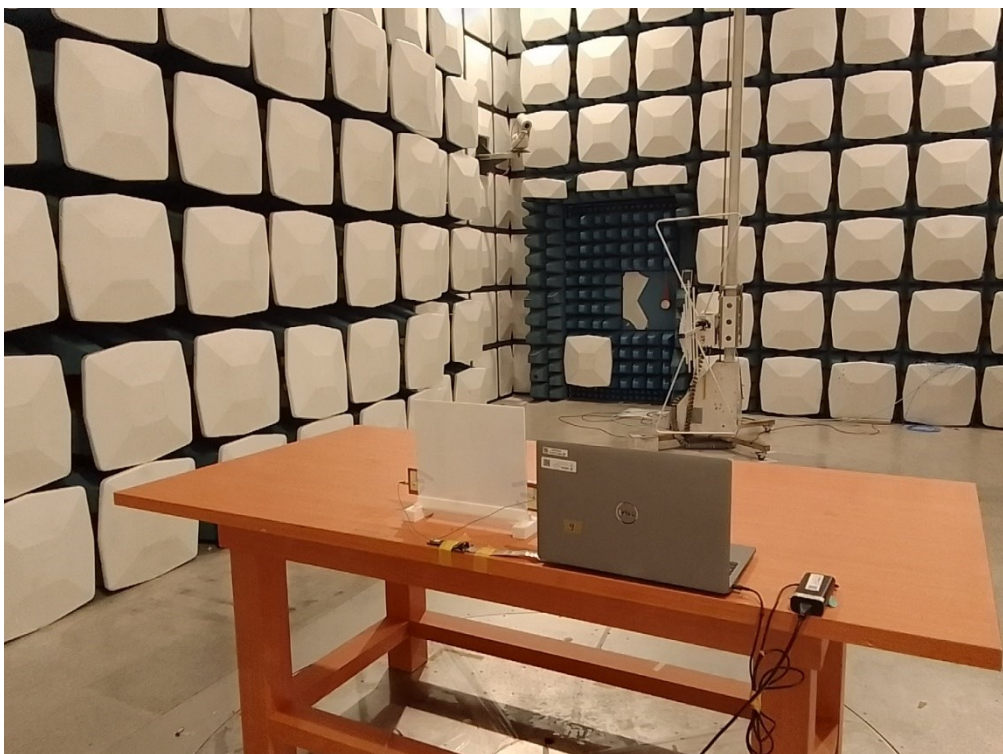
Test Mode : Mode 1

Description : Front View of Radiated Test



Test Mode : Mode 1

Description : Back View of Radiated Test



Test Mode : Mode 1

Description : Front View of High Frequency Radiated Test

