



Shenzhen GUOREN Certification Technology Service Co., Ltd.

101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community,  
Fenghuang Street, Guangming District, Shenzhen, China

## FCC PART 15 SUBPART C TEST REPORT

### FCC PART 15.247

Report Reference No.....: GRCTR260102009-01

FCC ID.....: 2BN3C-FLUXX26PRO

Compiled by

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Date of issue.....: Apr. 17, 2026

Testing Laboratory Name.....: Shenzhen GUOREN Certification Technology Service Co., Ltd.

Address.....: 101#, Building K & Building T, The Second Industrial Zone, Jiazitang  
Community, Fenghuang Street, Guangming District, Shenzhen,  
China

Applicant's name.....: SINO MEGWELL TECH INC

Address.....: 20153 PASEO DEL PRADO WALNUT California United States

Test specification.....:

Standard.....: FCC Part 15.247

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Test item description.....: Smart EBike

Trade Mark.....: MEGAWHEELS/AOTOS

Manufacturer.....: SINO MEGWELL TECH INC

Model/Type reference.....: Flux X26 PRO

Listed Models .....: /

Firmware Version.....: V1.0

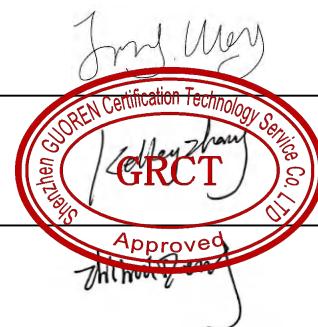
Hardware Version.....: V1.0

Modulation .....: GFSK

Frequency.....: From 2402MHz to 2480MHz

Ratings.....: 54.6V---4.5A(charged by Power Adapter) or  
46.8V---21Ah(By Li-ion rechargeable battery)

Result.....: PASS



TEST REPORT

Equipment under Test : Smart EBike

Model /Type : Flux X26 PRO

Listed Models : /

**Applicant** : **SINO MEGWELL TECH INC**

Address : 20153 PASEO DEL PRADO WALNUT California United States

**Manufacturer** : **SINO MEGWELL TECH INC**

Address : 20153 PASEO DEL PRADO WALNUT California United States

|              |      |
|--------------|------|
| Test Result: | PASS |
|--------------|------|

The test report merely corresponds to the test sample.  
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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## 1 TEST STANDARDS

The tests were performed according to following standards:

[FCC Rules Part 15.247](#): Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

[ANSI C63.10-2020+COR. 1-2023+C63.10A-2024 + ERRATA TO C63.10A-2024](#): American National Standard for Testing Unlicensed Wireless Devices

[KDB558074 D01 V05r02](#): Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247

## 2 SUMMARY

### 2.1 General Remarks

|                                |   |               |
|--------------------------------|---|---------------|
| Date of receipt of test sample | : | Jan. 06, 2026 |
| Testing commenced on           | : | Jan. 06, 2026 |
| Testing concluded on           | : | Apr. 17, 2026 |

### 2.2 Product Description

|                                                                                                                                                                                                                                                       |                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Product Name:                                                                                                                                                                                                                                         | Smart EBike                                                                                                                        |
| Model/Type reference:                                                                                                                                                                                                                                 | Flux X26 PRO                                                                                                                       |
| Listed Models:                                                                                                                                                                                                                                        | /                                                                                                                                  |
| Power supply:                                                                                                                                                                                                                                         | 54.6V $\overline{\text{---}}$ 4.5A(charged by Power Adapter) or 46.8V $\overline{\text{---}}$ 21Ah(By Li-ion rechargeable battery) |
| Adapter Information:                                                                                                                                                                                                                                  | M/N:GCA300-5460450-F<br>Input:100-240V~50/60Hz 4.0A<br>Output:54.6V $\overline{\text{---}}$ 4.5A 245.7W                            |
| Testing sample ID:                                                                                                                                                                                                                                    | GRCTR260102009-1# (Engineer sample),<br>GRCTR260102009-2# (Normal sample)                                                          |
| <b>Bluetooth</b>                                                                                                                                                                                                                                      |                                                                                                                                    |
| Supported type:                                                                                                                                                                                                                                       | Bluetooth low Energy                                                                                                               |
| Modulation:                                                                                                                                                                                                                                           | GFSK                                                                                                                               |
| Operation frequency:                                                                                                                                                                                                                                  | 2402MHz to 2480MHz                                                                                                                 |
| Channel number:                                                                                                                                                                                                                                       | 40                                                                                                                                 |
| Channel separation:                                                                                                                                                                                                                                   | 2 MHz                                                                                                                              |
| Antenna type:                                                                                                                                                                                                                                         | PCB antenna                                                                                                                        |
| Antenna gain*(Supplied by the customer):                                                                                                                                                                                                              | 2.48 dBi                                                                                                                           |
| Remark:*When the information provided by the customer was used to calculate test results, if the information provided by the customer is not accurate, shenzhen GUOREN Certification Technology Service Co., Ltd. does not assume any responsibility. |                                                                                                                                    |

### 2.3 Equipment Under Test

#### Power supply system utilised

|                      |   |                                                                   |                                   |
|----------------------|---|-------------------------------------------------------------------|-----------------------------------|
| Power supply voltage | : | <input type="radio"/> 230V / 50 Hz                                | <input type="radio"/> 120V / 60Hz |
|                      |   | <input type="radio"/> 12 V DC                                     | <input type="radio"/> 24 V DC     |
|                      |   | <input checked="" type="radio"/> Other (specified in blank below) |                                   |

54.6V $\overline{\text{---}}$ 4.5A(charged by Power Adapter)

### 2.4 Short description of the Equipment under Test (EUT)

This is a Smart EBike.

For more details, refer to the user's manual of the EUT.

### 2.5 EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

|     |                 |
|-----|-----------------|
| ○ / | M/N: /          |
|     | Manufacturer: / |

## 2.6 EUT operation mode

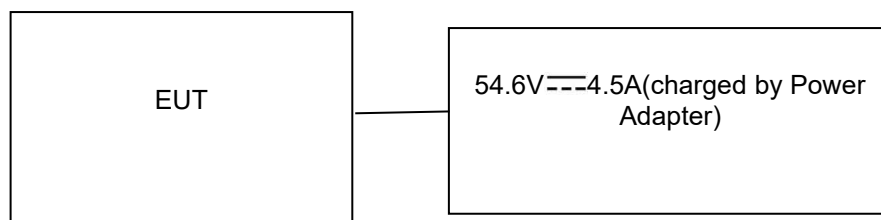
The Applicant provides communication tools software(662x\_FCC\_Rev1.7R Version 1.0.0.0) to control the EUT for staying in continuous transmitting (Duty Cycle more than 98%) and receiving mode for testing .There are 40 channels provided to the EUT and Channel 00/19/39 were selected to test.

### Operation Frequency:

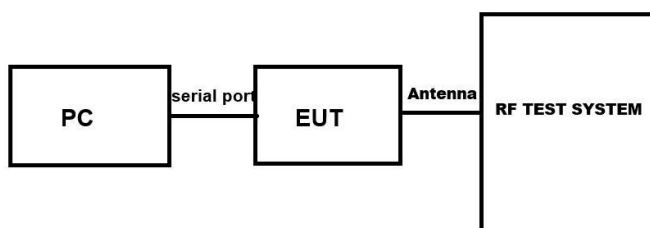
| Channel   | Frequency (MHz) |
|-----------|-----------------|
| <b>00</b> | <b>2402</b>     |
| 01        | 2404            |
| 02        | 2406            |
| ⋮         | ⋮               |
| <b>19</b> | <b>2440</b>     |
| ⋮         | ⋮               |
| 37        | 2476            |
| 38        | 2478            |
| <b>39</b> | <b>2480</b>     |

## 2.7 Block Diagram of Test Setup

AC Power Conducted Emission & Radiated Emissions(below 1GHz&above1GHz)&Band Edge(Radiated)



RF Measurement



## 2.8 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for the device filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules.

## 2.9 Modifications

No modifications were implemented to meet testing criteria.

### **3 TEST ENVIRONMENT**

#### **3.1 Address of the test laboratory**

**Shenzhen GUOREN Certification Technology Service Co., Ltd.**

101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community, Fenghuang Street, Guangming District, Shenzhen, China

#### **3.2 Test Facility**

The test facility is recognized, certified, or accredited by the following organizations:

**FCC-Registration No.: 920798    Designation Number: CN1304**

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

**A2LA-Lab Cert. No.: 6202.01**

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

**ISED#: 27264    CAB identifier: CN0115**

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

**CNAS-Lab Code: L15631**

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories for the Competence of Testing and Calibration Laboratories.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

#### **3.3 Environmental conditions**

During the measurement the environmental conditions were within the listed ranges:

|                    |              |
|--------------------|--------------|
| Normal Temperature | 15-35 °C     |
| Relative Humidity  | 30-60 %      |
| Air Pressure       | 950-1050mbar |

### 3.4 Summary of measurement results

| Test Specification clause | Test case                                    | Test Mode | Test Channel                                                                                                                            | Recorded In Report |                                                                                                                                         | Test result |
|---------------------------|----------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|
| §15.247(e)                | Power spectral density                       | GFSK      | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | GFSK               | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | complies    |
| §15.247(a)(2)             | Spectrum bandwidth<br>– 6 dB bandwidth       | GFSK      | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | GFSK               | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | complies    |
| §15.247(b)(3)             | Maximum output<br>Peak power                 | GFSK      | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | GFSK               | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | complies    |
| §15.247(d)                | Band edge compliance conducted               | GFSK      | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Highest                                               | GFSK               | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Highest                                               | complies    |
| §15.205                   | Band edge compliance radiated                | GFSK      | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Highest                                               | GFSK               | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Highest                                               | complies    |
| §15.247(d)                | TX spurious emissions conducted              | GFSK      | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | GFSK               | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | complies    |
| §15.247(d)                | TX spurious emissions radiated               | GFSK      | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | GFSK               | <input checked="" type="checkbox"/> Lowest<br><input checked="" type="checkbox"/> Middle<br><input checked="" type="checkbox"/> Highest | complies    |
| §15.209(a)                | TX spurious Emissions radiated<br>Below 1GHz | GFSK      | -/-                                                                                                                                     | GFSK               | -/-                                                                                                                                     | complies    |
| §15.107(a)<br>§15.207     | Conducted Emissions<br>< 30 MHz              | GFSK      | -/-                                                                                                                                     | GFSK               | -/-                                                                                                                                     | complies    |

Remark:

1. The measurement uncertainty is not included in the test result.
2. We tested all test mode and recorded worst case in report.
3. N/A means “not applicable”.

### 3.5 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01” Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1” and TR-100028-02 “Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 “ and is documented in the Shenzhen GUOREN Certification Technology Service Co., Ltd.quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen GUOREN Certification Technology Service Co., Ltd.:

| Test                   | Range       | Measurement Uncertainty | Notes |
|------------------------|-------------|-------------------------|-------|
| Radiated Emission      | 30~1000MHz  | 4.06 dB                 | (1)   |
| Radiated Emission      | 1~18GHz     | 5.14 dB                 | (1)   |
| Radiated Emission      | 18-40GHz    | 5.38 dB                 | (1)   |
| Conducted Disturbance  | 0.15~30MHz  | 2.14 dB                 | (1)   |
| Max output power       | 30MHz~18GHz | 0.54 dB                 | (1)   |
| Power spectral density | /           | 0.56 dB                 | (1)   |
| Spectrum bandwidth     | /           | 1.2%                    | (1)   |

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

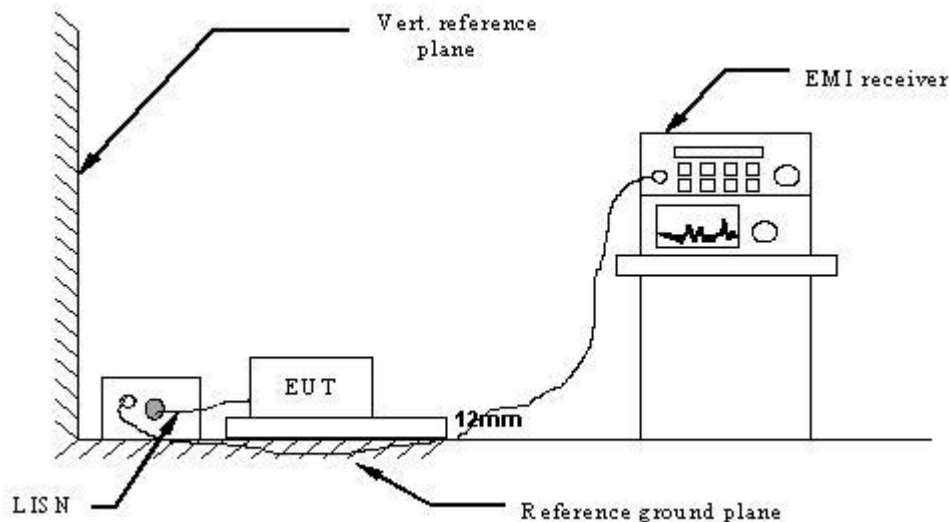
### 3.6 Equipments Used during the Test

| Test Equipment             | Manufacturer           | Model No.   | Equipment No. | Calibration Date | Calibration Due Date |
|----------------------------|------------------------|-------------|---------------|------------------|----------------------|
| LISN                       | R&S                    | ENV216      | GRCTEE009     | 2025/09/11       | 2026/09/10           |
| LISN                       | R&S                    | ENV216      | GRCTEE010     | 2025/09/11       | 2026/09/10           |
| EMI Test Receiver          | R&S                    | ESPI        | GRCTEE017     | 2025/09/11       | 2026/09/10           |
| EMI Test Receiver          | R&S                    | ESCI        | GRCTEE008     | 2025/09/11       | 2026/09/10           |
| Spectrum Analyzer          | Agilent                | N9020A      | GRCTEE002     | 2025/09/11       | 2026/09/10           |
| Spectrum Analyzer          | R&S                    | FSP         | GRCTEE003     | 2025/09/12       | 2026/09/11           |
| Vector Signal generator    | Agilent                | N5181A      | GRCTEE007     | 2025/09/11       | 2026/09/10           |
| Analog Signal Generator    | R&S                    | SML03       | GRCTEE006     | 2025/09/11       | 2026/09/10           |
| Climate Chamber            | QIYA                   | LCD-9530    | GRCTES016     | 2025/09/11       | 2026/09/10           |
| Ultra-Broadband Antenna    | Schwarzbeck            | VULB9163    | GRCTEE018     | 2023/09/28       | 2026/09/27           |
| Horn Antenna               | Schwarzbeck            | BBHA 9120D  | GRCTEE019     | 2023/09/28       | 2026/09/27           |
| Loop Antenna               | Zhinan                 | ZN30900C    | GRCTEE020     | 2023/10/15       | 2026/10/14           |
| Horn Antenna               | Beijing Hangwei Dayang | OBH100400   | GRCTEE049     | 2023/09/28       | 2026/09/27           |
| Amplifier                  | Schwarzbeck            | BBV 9745    | GRCTEE021     | 2025/09/11       | 2026/09/10           |
| Amplifier                  | Taiwan chengyi         | EMC051845B  | GRCTEE022     | 2025/09/11       | 2026/09/10           |
| Temperature/Humidity Meter | Huaguan                | HG-308      | GRCTES037     | 2025/09/11       | 2026/09/10           |
| Directional coupler        | NARDA                  | 4226-10     | GRCTEE004     | 2025/09/11       | 2026/09/10           |
| High-Pass Filter           | XingBo                 | XBLBQ-GTA18 | GRCTEE053     | 2025/09/11       | 2026/09/10           |
| High-Pass Filter           | XingBo                 | XBLBQ-GTA27 | GRCTEE054     | 2025/09/11       | 2026/09/10           |
| Automated filter bank      | Tonscend               | JS0806-F    | GRCTEE055     | 2025/09/11       | 2026/09/10           |
| Power Sensor               | Agilent                | U2021XA     | GRCTEE070     | 2025/09/11       | 2026/09/10           |
| Cable                      | Times                  | Cable-CE    | GRCTEE086     | 2025/09/11       | 2026/09/10           |
| Cable                      | Times                  | Cable-RE-1  | GRCTEE087     | 2025/09/11       | 2026/09/10           |
| Cable                      | Times                  | Cable-RE-2  | GRCTEE088     | 2025/09/11       | 2026/09/10           |
| EMI Test Software          | ROHDE & SCHWARZ        | ESK1-V1.71  | GRCTEE060     | N/A              | N/A                  |
| EMI Test Software          | Fera                   | EZ-EMC      | GRCTEE061     | N/A              | N/A                  |

## 4 TEST CONDITIONS AND RESULTS

### 4.1 AC Power Conducted Emission

#### TEST CONFIGURATION



#### TEST PROCEDURE

- 1 Where floor-standing equipment is not typically installed with its base in direct electrical contact with, or connected to, a metal floor or grid, the EUT shall not be placed in direct electrical contact with the test site (or turntable) reference ground plane. If necessary to prevent direct metallic contact of the EUT and the reference ground plane, insulating material (up to 12mm thick) shall be placed under the EUT.
- 2 Support equipment, if needed, was placed as per ANSI C63.10-2020+COR. 1-2023+C63.10A-2024 + ERRATA TO C63.10A-2024.
- 3 All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10-2020+COR. 1-2023+C63.10A-2024 + ERRATA TO C63.10A-2024.
- 4 The EUT received power from variable frequency power supply, the AC 120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5 All support equipments received AC power from a second LISN, if any.
- 6 The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7 Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
- 8 During the above scans, the emissions were maximized by cable manipulation.

#### AC Power Conducted Emission Limit

For intentional device, according to § 15.207(a) AC Power Conducted Emission Limits is as following:

| Frequency range (MHz) | Limit (dBuV) |           |
|-----------------------|--------------|-----------|
|                       | Quasi-peak   | Average   |
| 0.15-0.5              | 66 to 56*    | 56 to 46* |
| 0.5-5                 | 56           | 46        |
| 5-30                  | 60           | 50        |

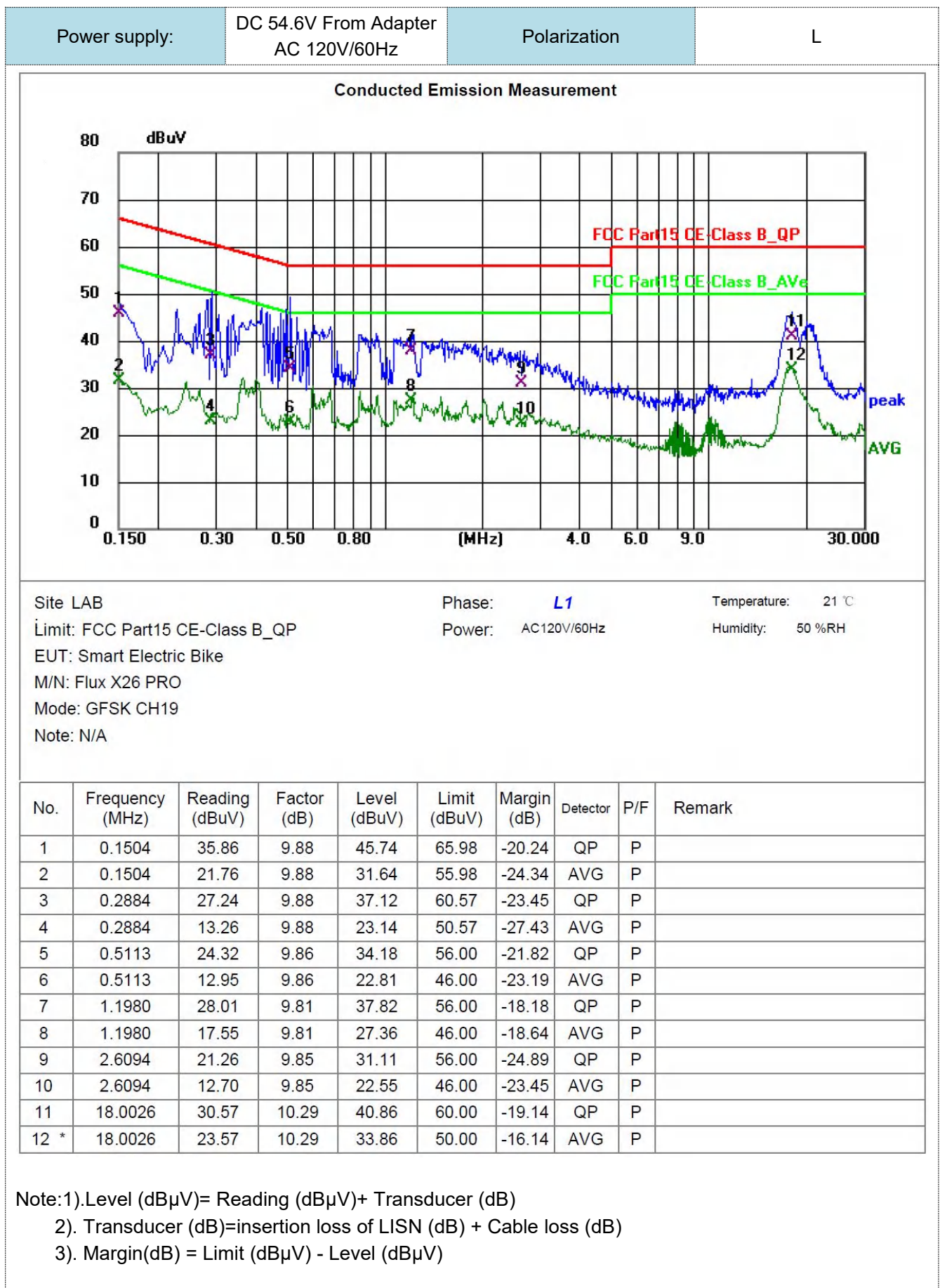
\* Decreases with the logarithm of the frequency.

#### TEST RESULTS

Remark:

1. GFSK was tested at Low, Middle, and High channel and recorded worst mode at Middle channel:

2. Both 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz power supply have been tested, only the worst result of 120 VAC, 60 Hz was reported as below:



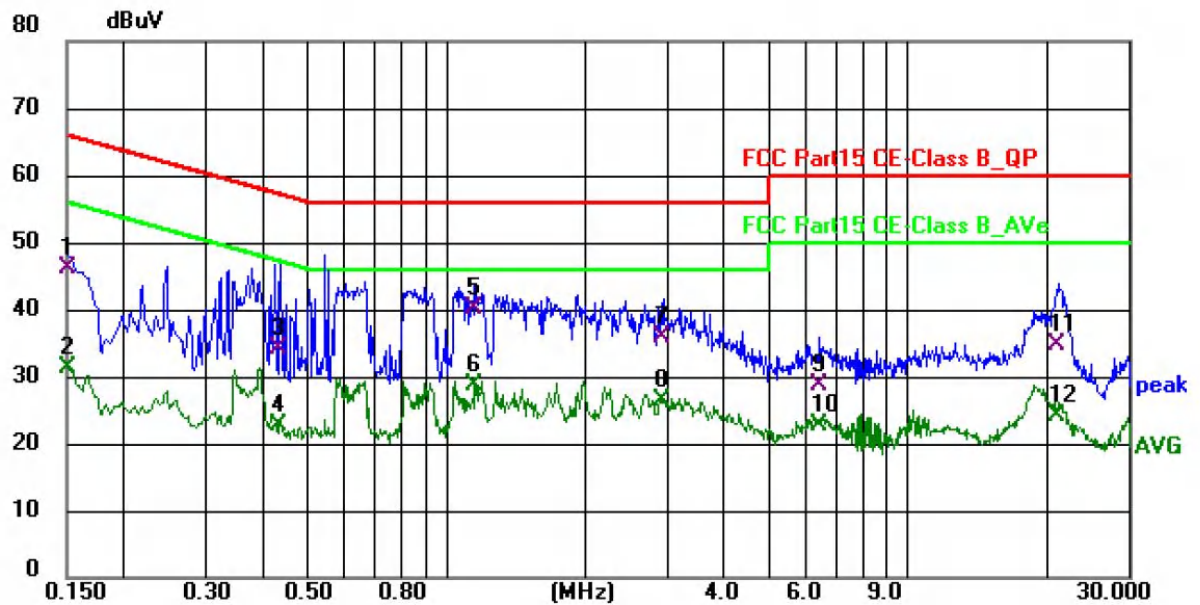
Power supply:

DC 54.6V From Adapter  
AC 120V/60Hz

Polarization

N

## Conducted Emission Measurement



Site LAB

Phase: N

Temperature: 21 °C

Limit: FCC Part15 CE-Class B\_QP

Power: AC120V/60Hz

Humidity: 50 %RH

EUT: Smart Electric Bike

M/N: Flux X26 PRO

Mode: GFSK CH19

Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F | Remark |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|-----|--------|
| 1   | 0.1501          | 36.21          | 9.87        | 46.08        | 65.99        | -19.91      | QP       | P   |        |
| 2   | 0.1501          | 21.29          | 9.87        | 31.16        | 55.99        | -24.83      | AVG      | P   |        |
| 3   | 0.4301          | 24.40          | 9.87        | 34.27        | 57.25        | -22.98      | QP       | P   |        |
| 4   | 0.4301          | 12.75          | 9.87        | 22.62        | 47.25        | -24.63      | AVG      | P   |        |
| 5 * | 1.1460          | 30.23          | 9.87        | 40.10        | 56.00        | -15.90      | QP       | P   |        |
| 6   | 1.1460          | 18.93          | 9.87        | 28.80        | 46.00        | -17.20      | AVG      | P   |        |
| 7   | 2.9284          | 26.11          | 9.87        | 35.98        | 56.00        | -20.02      | QP       | P   |        |
| 8   | 2.9284          | 16.67          | 9.87        | 26.54        | 46.00        | -19.46      | AVG      | P   |        |
| 9   | 6.4044          | 18.89          | 9.87        | 28.76        | 60.00        | -31.24      | QP       | P   |        |
| 10  | 6.4044          | 12.85          | 9.87        | 22.72        | 50.00        | -27.28      | AVG      | P   |        |
| 11  | 21.1091         | 24.23          | 10.38       | 34.61        | 60.00        | -25.39      | QP       | P   |        |
| 12  | 21.1091         | 13.71          | 10.38       | 24.09        | 50.00        | -25.91      | AVG      | P   |        |

Note:1).Level (dBuV)= Reading (dBuV)+ Transducer (dB)

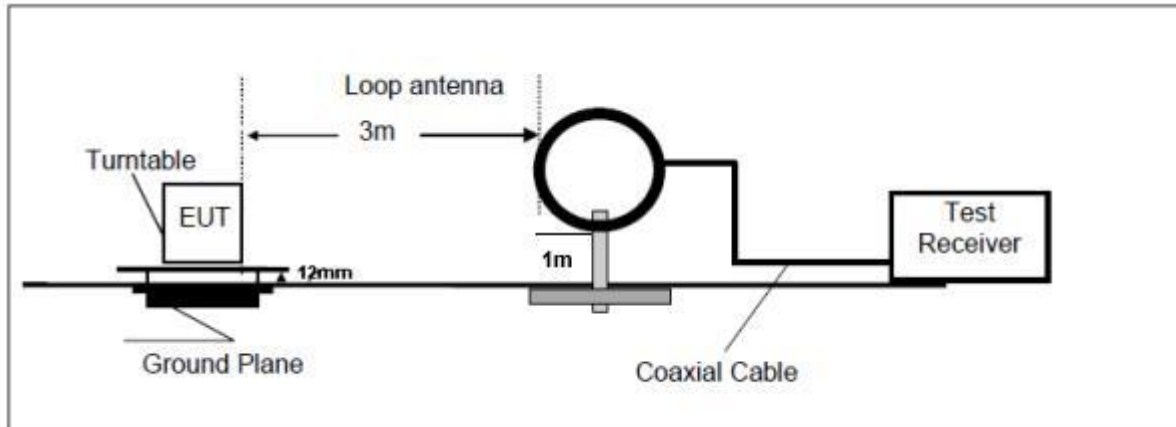
2). Transducer (dB)=insertion loss of LISN (dB) + Cable loss (dB)

3). Margin(dB) = Limit (dBuV) - Level (dBuV)

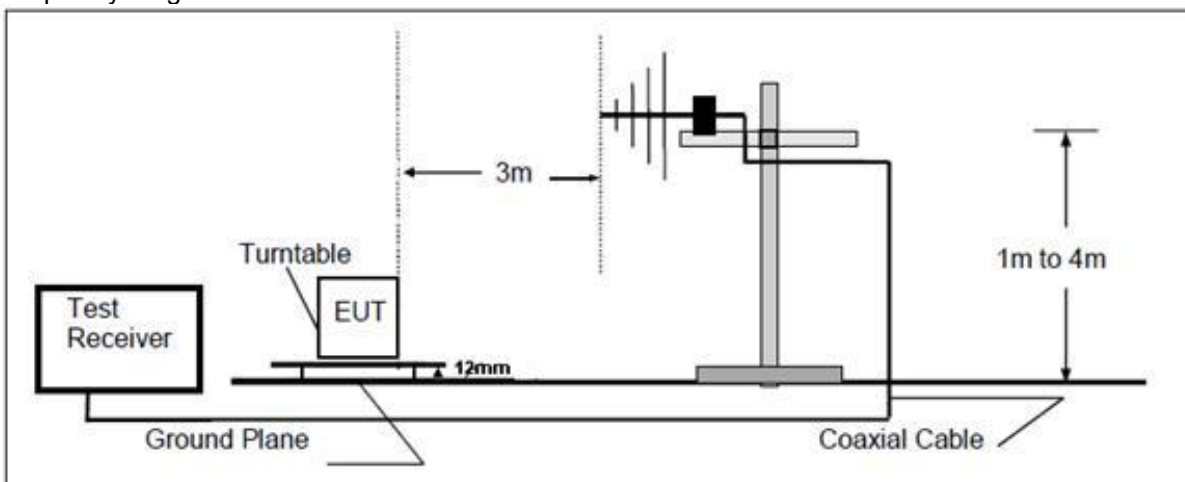
## 4.2 Radiated Emissions and Band Edge

### TEST CONFIGURATION

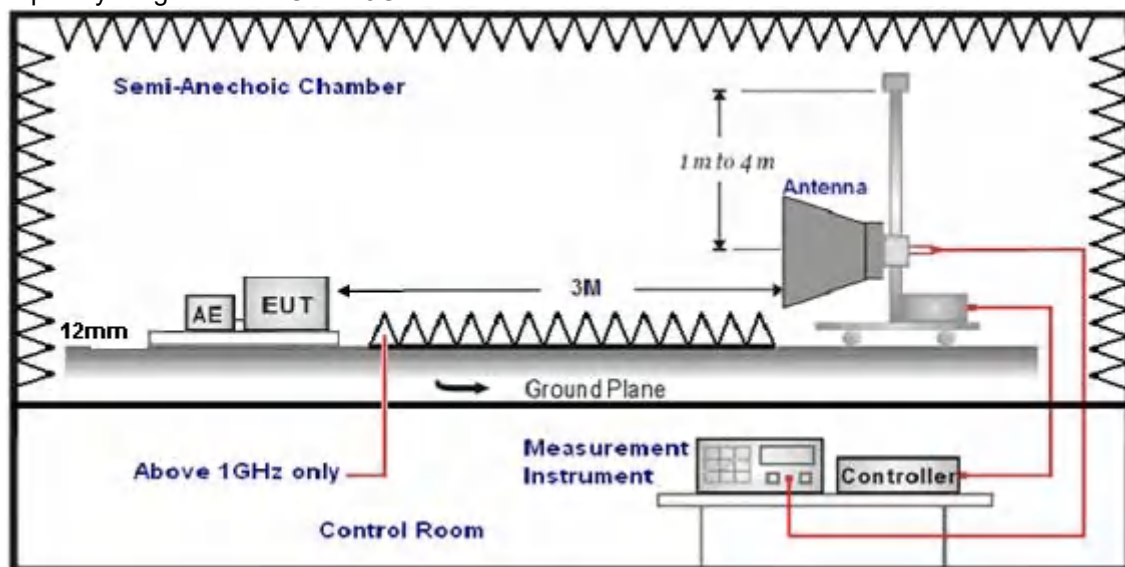
Frequency range 9 KHz – 30MHz



Frequency range 30MHz – 1000MHz



Frequency range above 1GHz-25GHz



**TEST PROCEDURE**

1. The EUT was placed on a turn table which is 12mm above ground plane when testing frequency range 9 KHz – 25GHz.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360° to acquire the highest emissions from EUT.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measurements have been completed.
5. Radiated emission test frequency band from 9KHz to 25GHz.
6. The distance between test antenna and EUT as following table states:

| Test Frequency range | Test Antenna Type          | Test Distance |
|----------------------|----------------------------|---------------|
| 9KHz-30MHz           | Active Loop Antenna        | 3             |
| 30MHz-1GHz           | Ultra-Broadband Antenna    | 3             |
| 1GHz-18GHz           | Double Ridged Horn Antenna | 3             |
| 18GHz-40GHz          | Horn Antenna               | 1             |

7. Setting test receiver/spectrum as following table states:

| Test Frequency range | Test Receiver/Spectrum Setting                                                                            | Detector |
|----------------------|-----------------------------------------------------------------------------------------------------------|----------|
| 9KHz-150KHz          | RBW=200Hz/VBW=3KHz, Sweep time=Auto                                                                       | QP       |
| 150KHz-30MHz         | RBW=9KHz/VBW=100KHz, Sweep time=Auto                                                                      | QP       |
| 30MHz-1GHz           | RBW=120KHz/VBW=1000KHz, Sweep time=Auto                                                                   | QP       |
| 1GHz-40GHz           | Peak Value: RBW=1MHz/VBW=3MHz,<br>Sweep time=Auto<br>Average Value: RBW=1MHz/VBW=10Hz,<br>Sweep time=Auto | Peak     |

**Field Strength Calculation**

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

|                           |                                            |
|---------------------------|--------------------------------------------|
| Where FS = Field Strength | CL = Cable Attenuation Factor (Cable Loss) |
| RA = Reading Amplitude    | AG = Amplifier Gain                        |
| AF = Antenna Factor       |                                            |

$$\text{Transd} = \text{AF} + \text{CL} - \text{AG}$$

**RADIATION LIMIT**

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emission from intentional radiators at a distance of 3 meters shall not exceed the following table. According to § 15.247(d), in any 100kHz bandwidth outside the frequency band in which the EUT is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of desired power.

The pre-test have done for the EUT in three axes and found the worst emission at position shown in test setup photos.

| Frequency (MHz) | Distance (Meters) | Radiated (dBµV/m)                            | Radiated (µV/m)       |
|-----------------|-------------------|----------------------------------------------|-----------------------|
| 0.009-0.49      | 3                 | $20\log(2400/F(\text{KHz})) + 40\log(300/3)$ | $2400/F(\text{KHz})$  |
| 0.49-1.705      | 3                 | $20\log(24000/F(\text{KHz})) + 40\log(30/3)$ | $24000/F(\text{KHz})$ |
| 1.705-30        | 3                 | $20\log(30) + 40\log(30/3)$                  | 30                    |
| 30-88           | 3                 | 40.0                                         | 100                   |
| 88-216          | 3                 | 43.5                                         | 150                   |
| 216-960         | 3                 | 46.0                                         | 200                   |
| Above 960       | 3                 | 54.0                                         | 500                   |

**TEST RESULTS**

Remark:

1. This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in X position.
2. GFSK was tested at Low, Middle, and High channel and recorded worst mode at Middle channel below 1GHz. GFSK was tested and recorded worst mode above 1GHz
3. Radiated emission test from 9 KHz to 10th harmonic of fundamental was verified, and no emission found except system noise floor in 9 KHz to 30MHz and not recorded in this report.

**For 30MHz-1GHz****Horizontal****Radiated Emission Measurement**

Site

Polarization: **Horizontal**

Temperature: 25.5 (C)

Limit: FCC Part15 RE-Class B\_30-1000MHz

Power: AC120V/60Hz

Humidity: 56 %RH

EUT: Smart Electric Bike

Distance:

M/N: Flux X26 PRO

Mode: GFSK CH19

Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 46.3402         | 40.79          | -17.53        | 23.26          | 40.00          | -16.74      | peak     | 200         | 355            | P   |        |
| 2   | 93.1132         | 50.35          | -20.21        | 30.14          | 43.50          | -13.36      | peak     | 200         | 44             | P   |        |
| 3 * | 138.3873        | 58.08          | -22.07        | 36.01          | 43.50          | -7.49       | peak     | 200         | 35             | P   |        |
| 4   | 174.0596        | 53.02          | -21.07        | 31.95          | 43.50          | -11.55      | QP       | 200         | 340            | P   |        |
| 5   | 282.9852        | 48.22          | -17.43        | 30.79          | 46.00          | -15.21      | peak     | 100         | 329            | P   |        |
| 6   | 378.5843        | 50.30          | -16.07        | 34.23          | 46.00          | -11.77      | peak     | 100         | 359            | P   |        |

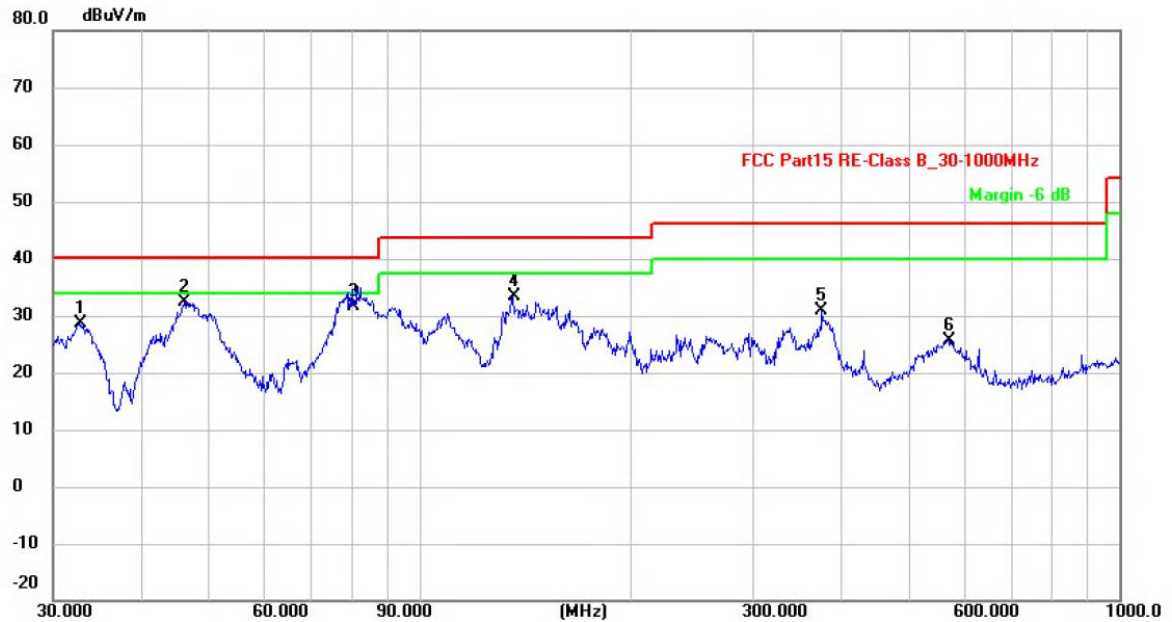
Note:1).Level (dBuV/m)= Reading (dBuV)+ Factor (dB/m)

2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Level (dBuV/m) - Limit (dBuV/m)

## Vertical

## Radiated Emission Measurement



Site

Polarization: **Vertical**

Temperature: 25.5 (C)

Limit: FCC Part15 RE-Class B\_30-1000MHz

Power: AC120V/60Hz

Humidity: 56 %RH

EUT: Smart Electric Bike

Distance:

M/N: Flux X26 PRO

Mode: GFSK CH19

Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 32.8493         | 48.44          | -19.73        | 28.71          | 40.00          | -11.29      | peak     | 100         | 346            | P   |        |
| 2 * | 46.1779         | 50.01          | -17.54        | 32.47          | 40.00          | -7.53       | peak     | 100         | 289            | P   |        |
| 3   | 80.5289         | 54.08          | -22.54        | 31.54          | 40.00          | -8.46       | QP       | 100         | 164            | P   |        |
| 4   | 135.9822        | 55.72          | -22.26        | 33.46          | 43.50          | -10.04      | peak     | 100         | 63             | P   |        |
| 5   | 375.9385        | 46.95          | -16.11        | 30.84          | 46.00          | -15.16      | peak     | 100         | 189            | P   |        |
| 6   | 570.6100        | 38.51          | -12.87        | 25.64          | 46.00          | -20.36      | peak     | 100         | 80             | P   |        |

Note:1).Level (dBuV/m)= Reading (dBuV)+ Factor (dB/m)

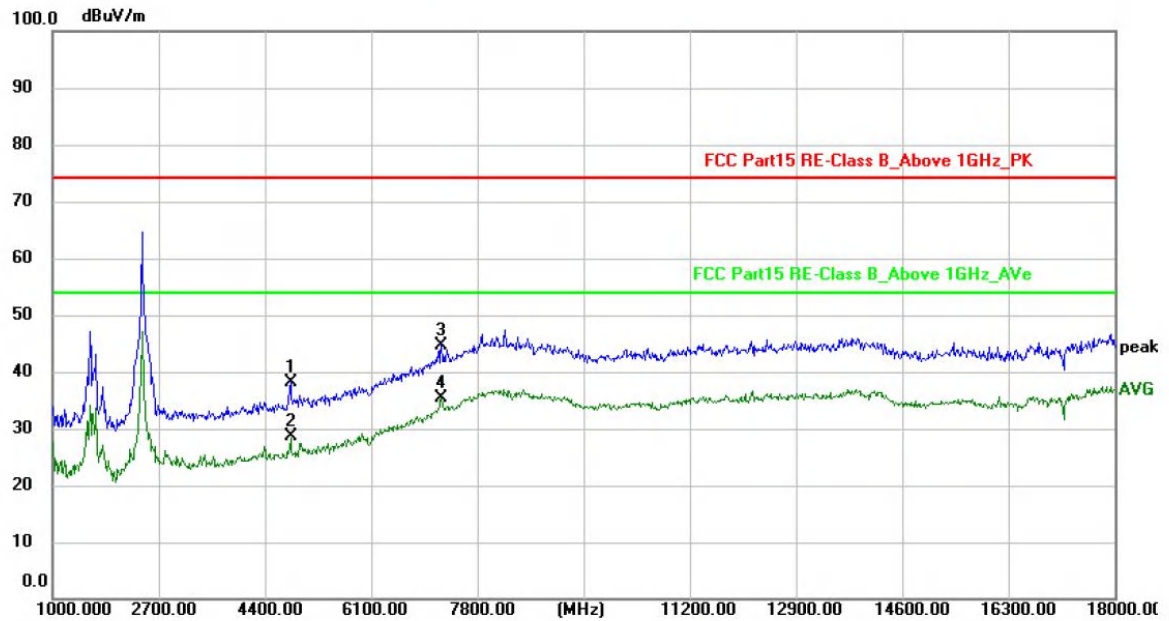
2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Level (dBuV/m) - Limit (dBuV/m)

For 1GHz to 25GHz

Horizontal

## Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: 25.5 (C)  
 Limit: FCC Part15 RE-Class B\_Above 1GHz\_PK Power: AC120V/60Hz Humidity: 56 %RH  
 EUT: Smart EBike Distance:  
 M/N: Flux X26 PRO  
 Mode: GFSK CH00  
 Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 4804.000        | 59.26          | -21.16        | 38.10          | 74.00          | -35.90      | peak     | 100         | 166            | P   |        |
| 2   | 4804.000        | 49.67          | -21.16        | 28.51          | 54.00          | -25.49      | AVG      | 100         | 166            | P   |        |
| 3   | 7206.000        | 59.17          | -14.42        | 44.75          | 74.00          | -29.25      | peak     | 100         | 300            | P   |        |
| 4 * | 7206.000        | 49.87          | -14.42        | 35.45          | 54.00          | -18.55      | AVG      | 100         | 300            | P   |        |

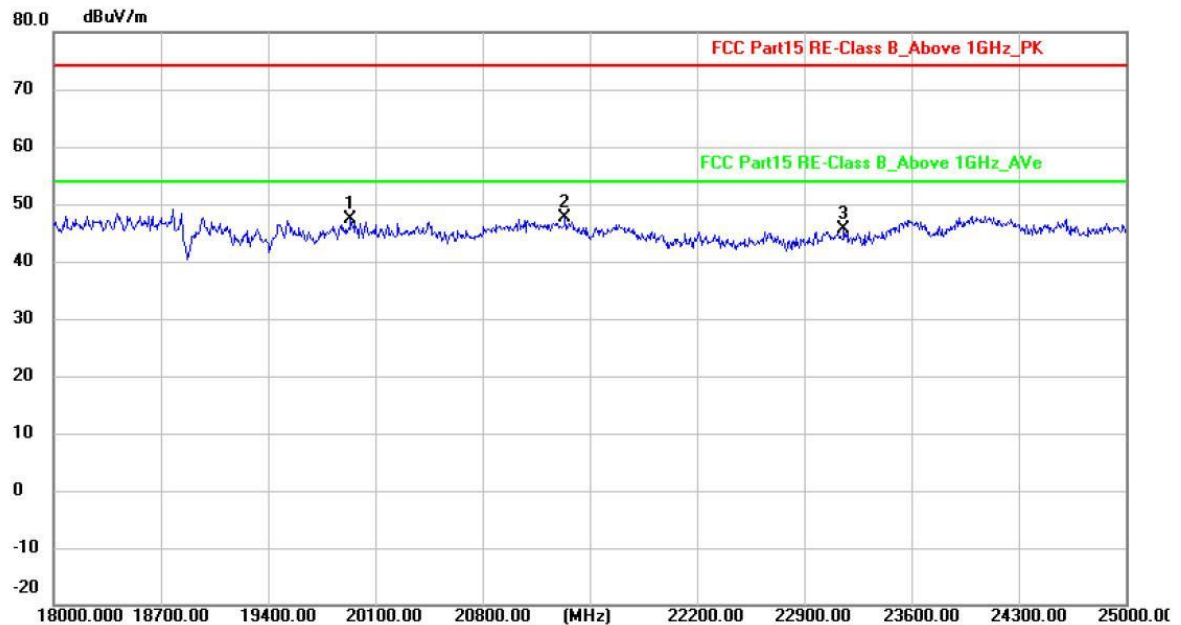
Note: 1). Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)

2). Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier

3). Margin value = Limit value - Emission level

## Horizontal

## Radiated Emission Measurement



Site: Polarization: **Horizontal** Temperature: 25.5 (C)  
 Limit: FCC Part15 RE-Class B\_Above 1GHz\_PK Power: AC120V/60Hz Humidity: 56 %RH  
 EUT: Smart EBike Distance:  
 M/N: Flux X26 PRO  
 Mode: GFSK CH00  
 Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 19939.000       | 41.40          | 5.88          | 47.28          | 74.00          | -26.72      | peak     | 100         | 296            | P   |        |
| 2 * | 21339.000       | 40.94          | 6.60          | 47.54          | 74.00          | -26.46      | peak     | 100         | 49             | P   |        |
| 3   | 23159.000       | 38.18          | 7.41          | 45.59          | 74.00          | -28.41      | peak     | 100         | 72             | P   |        |

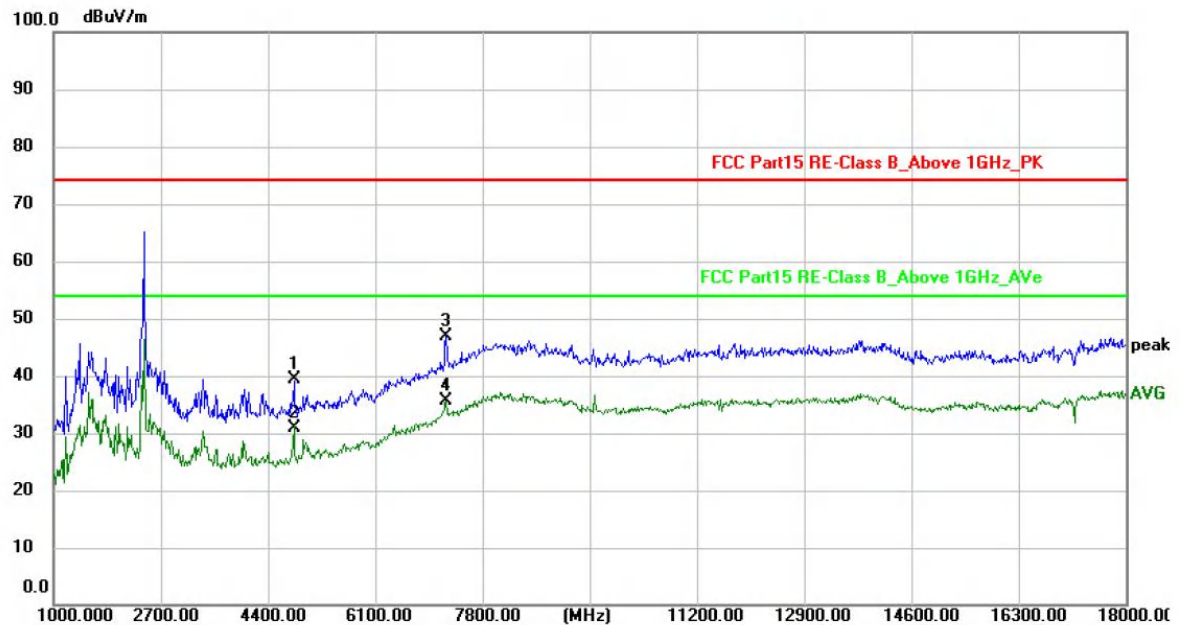
Note: 1). Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)

2). Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier

3). Margin value = Limit value - Emission level

## Vertical

## Radiated Emission Measurement



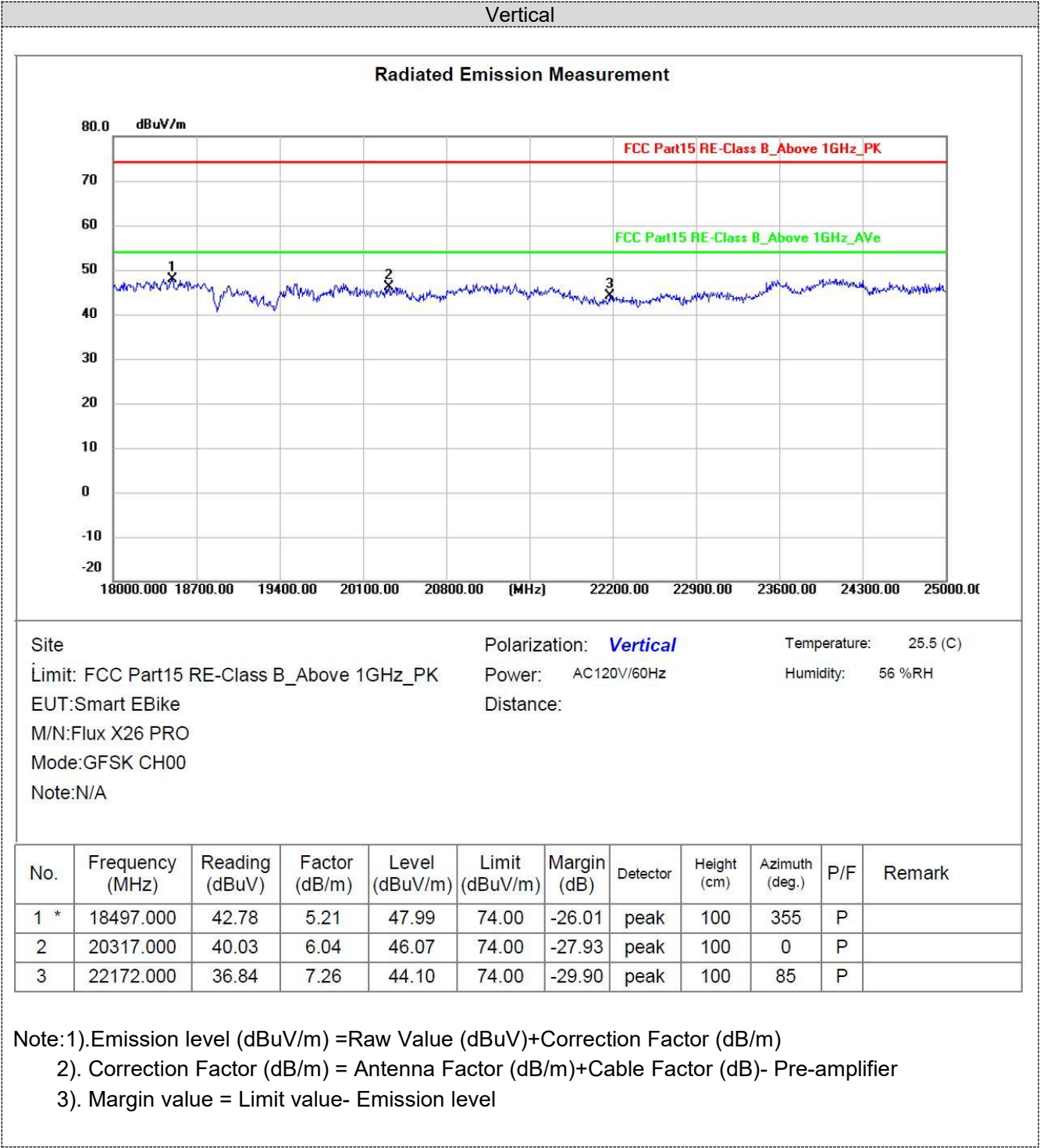
Site: Polarization: **Vertical** Temperature: 25.5 (C)  
 Limit: FCC Part15 RE-Class B\_Above 1GHz\_PK Power: AC120V/60Hz Humidity: 56 %RH  
 EUT: Smart EBike Distance:  
 M/N: Flux X26 PRO  
 Mode: GFSK CH00  
 Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 4804.000        | 60.55          | -21.16        | 39.39          | 74.00          | -34.61      | peak     | 100         | 59             | P   |        |
| 2   | 4804.000        | 51.97          | -21.16        | 30.81          | 54.00          | -23.19      | AVG      | 100         | 59             | P   |        |
| 3   | 7206.000        | 61.33          | -14.42        | 46.91          | 74.00          | -27.09      | peak     | 100         | 6              | P   |        |
| 4 * | 7206.000        | 50.05          | -14.42        | 35.63          | 54.00          | -18.37      | AVG      | 100         | 6              | P   |        |

Note: 1). Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)

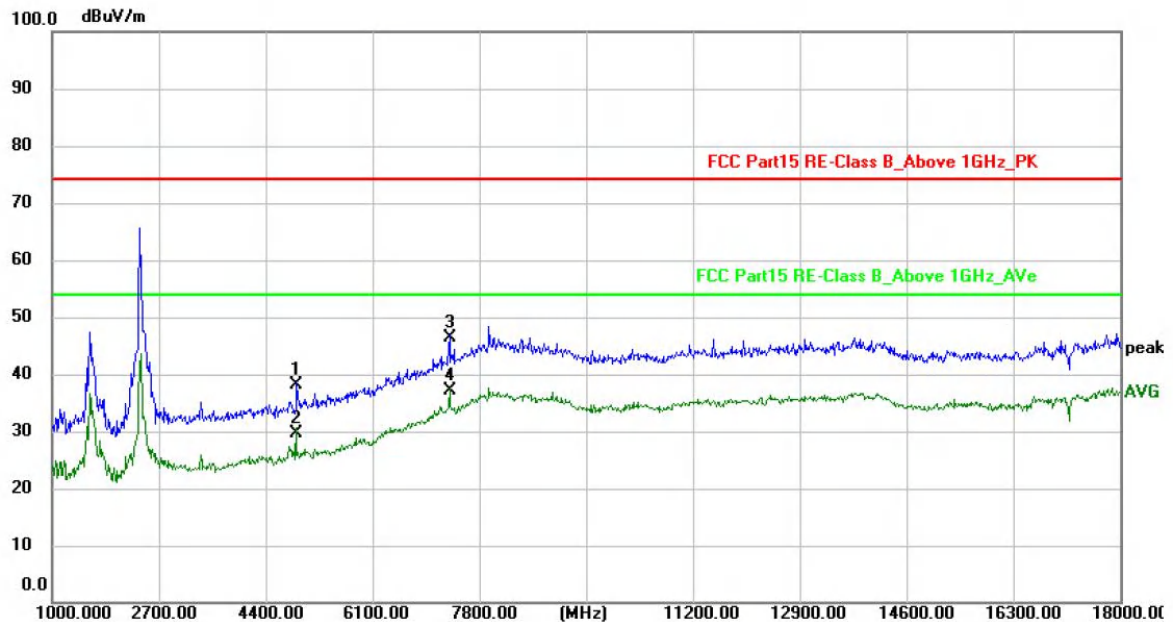
2). Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier

3). Margin value = Limit value - Emission level



## Horizontal

## Radiated Emission Measurement



Site: Polarization: **Horizontal** Temperature: 25.5 (C)  
 Limit: FCC Part15 RE-Class B\_Above 1GHz\_PK Power: AC120V/60Hz Humidity: 56 %RH  
 EUT: Smart EBike Distance:  
 M/N: Flux X26 PRO  
 Mode: GFSK CH19  
 Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 4880.000        | 58.54          | -20.31        | 38.23          | 74.00          | -35.77      | peak     | 100         | 55             | P   |        |
| 2   | 4880.000        | 60.04          | -20.31        | 29.73          | 54.00          | -24.27      | AVG      | 100         | 55             | P   |        |
| 3   | 7320.000        | 59.73          | -13.36        | 46.37          | 74.00          | -27.63      | peak     | 100         | 87             | P   |        |
| 4 * | 7320.000        | 50.46          | -13.36        | 37.10          | 54.00          | -16.90      | AVG      | 100         | 87             | P   |        |

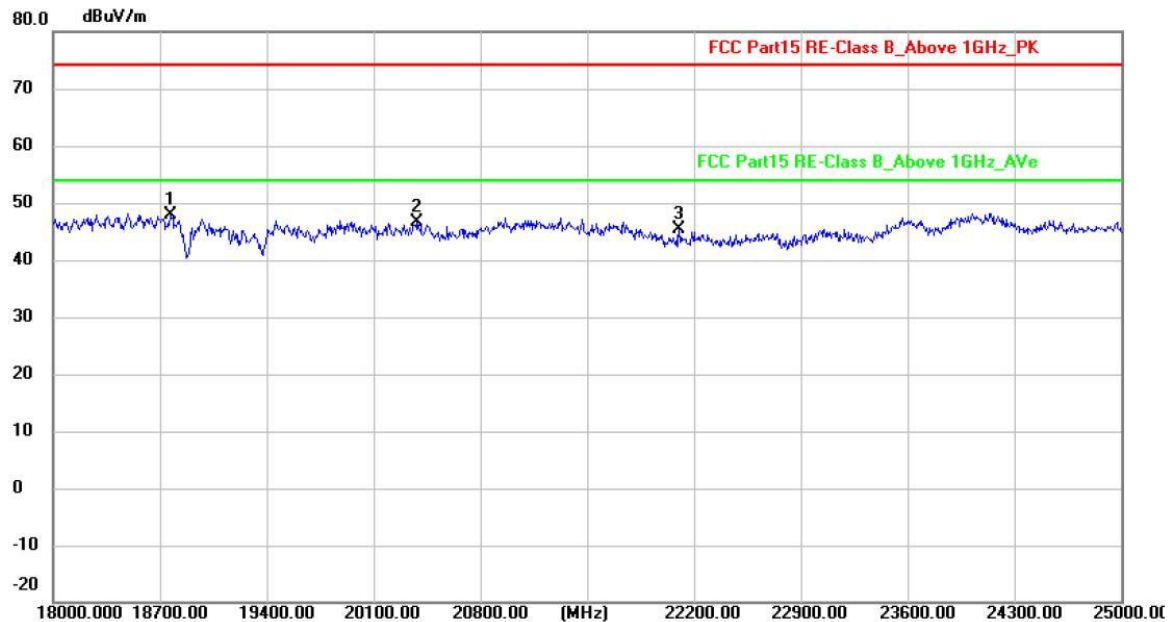
Note: 1). Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)

2). Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier

3). Margin value = Limit value - Emission level

## Horizontal

## Radiated Emission Measurement



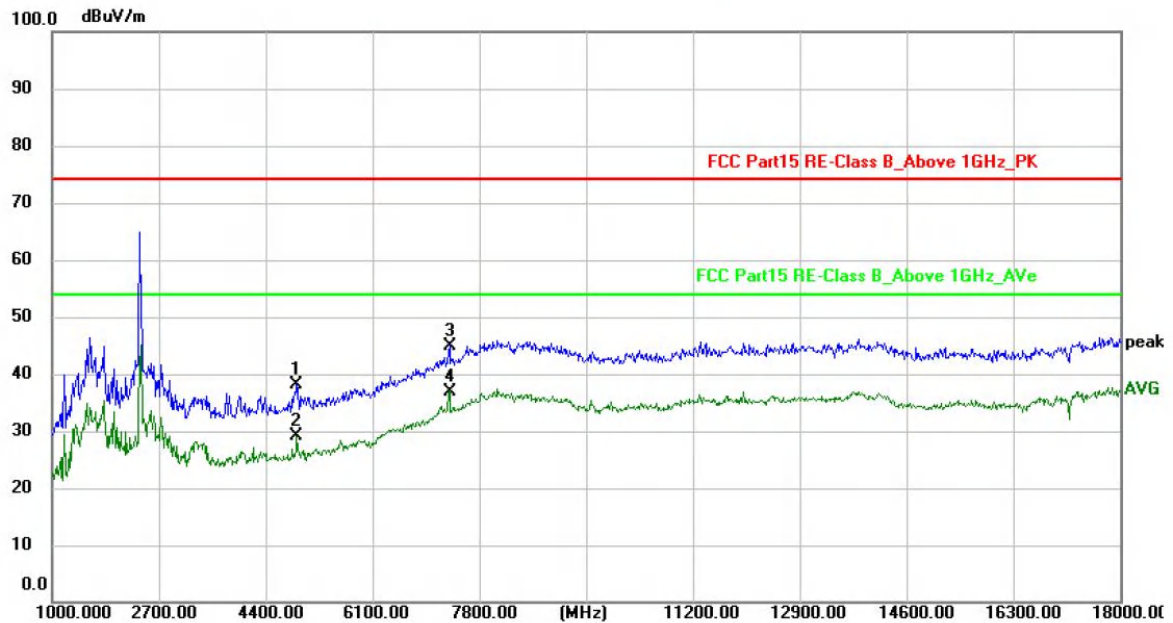
Site: Polarization: **Horizontal** Temperature: 25.5 (C)  
 Limit: FCC Part15 RE-Class B\_Above 1GHz\_PK Power: AC120V/60Hz Humidity: 56 %RH  
 EUT: Smart EBike Distance:  
 M/N: Flux X26 PRO  
 Mode: GFSK CH19  
 Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1 * | 18770.000       | 42.47          | 5.29          | 47.76          | 74.00          | -26.24      | peak     | 100         | 221            | P   |        |
| 2   | 20380.000       | 40.66          | 6.06          | 46.72          | 74.00          | -27.28      | peak     | 100         | 311            | P   |        |
| 3   | 22102.000       | 38.18          | 7.25          | 45.43          | 74.00          | -28.57      | peak     | 100         | 1              | P   |        |

Note: 1). Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)  
 2). Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier  
 3). Margin value = Limit value - Emission level

## Vertical

## Radiated Emission Measurement



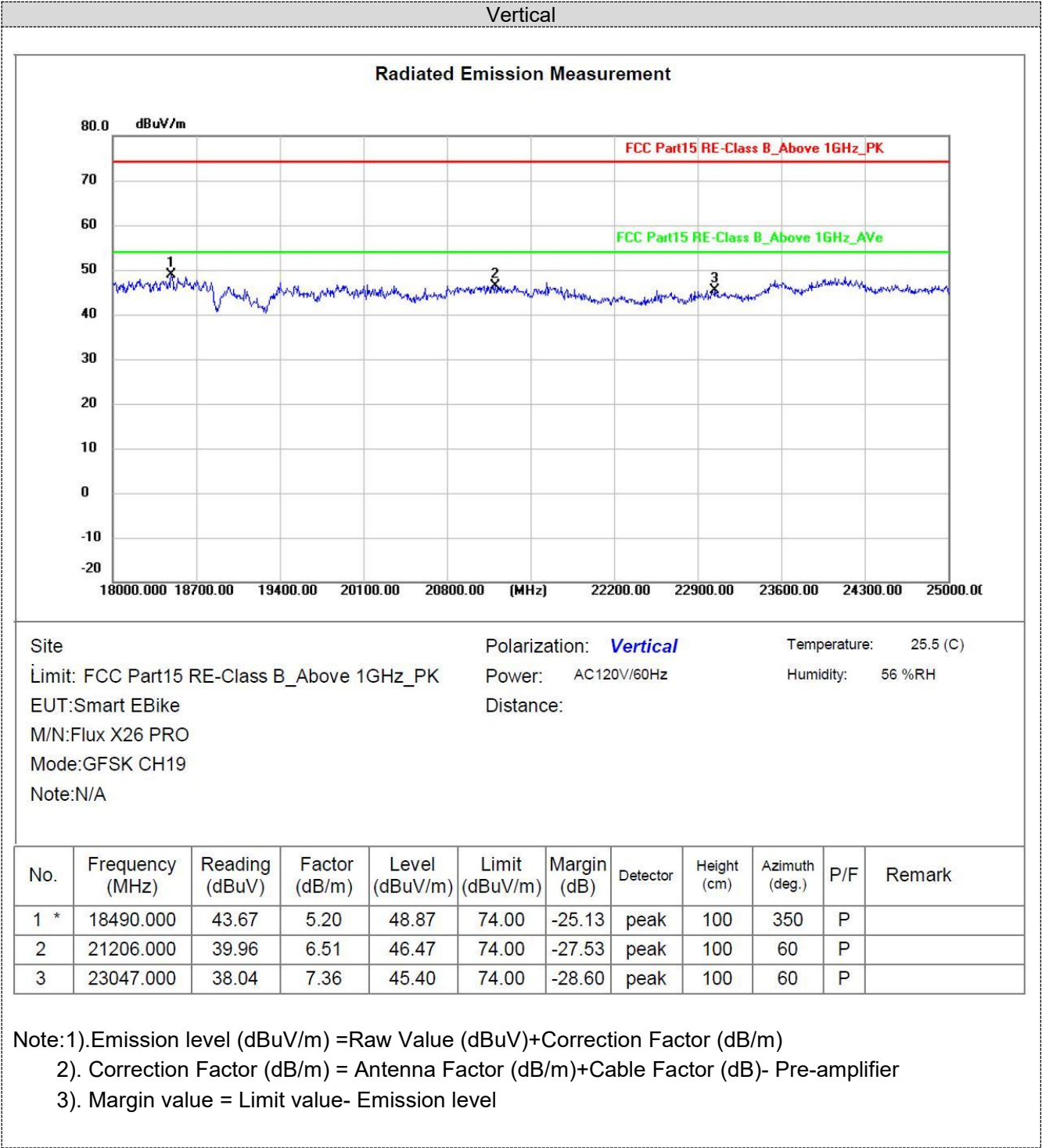
Site Polarization: **Vertical** Temperature: 25.5 (C)  
 Limit: FCC Part15 RE-Class B\_Above 1GHz\_PK Power: AC120V/60Hz Humidity: 56 %RH  
 EUT: Smart EBike Distance:  
 M/N: Flux X26 PRO  
 Mode: GFSK CH19  
 Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 4880.000        | 58.39          | -20.31        | 38.08          | 74.00          | -35.92      | peak     | 100         | 48             | P   |        |
| 2   | 4880.000        | 49.35          | -20.31        | 29.04          | 54.00          | -24.96      | AVG      | 100         | 48             | P   |        |
| 3   | 7320.000        | 58.24          | -13.36        | 44.88          | 74.00          | -29.12      | peak     | 100         | 5              | P   |        |
| 4 * | 7320.000        | 50.27          | -13.36        | 36.91          | 54.00          | -17.09      | AVG      | 100         | 5              | P   |        |

Note: 1). Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)

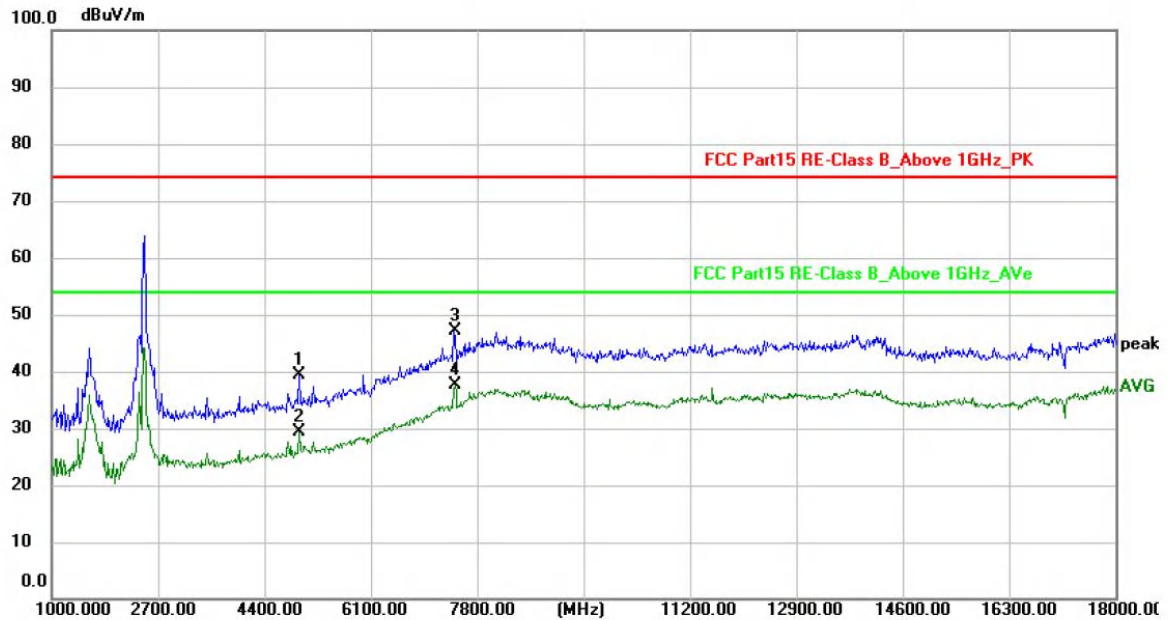
2). Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier

3). Margin value = Limit value - Emission level



## Horizontal

## Radiated Emission Measurement



Site

Polarization: **Horizontal**

Temperature: 25.5 (C)

Limit: FCC Part15 RE-Class B\_Above 1GHz\_PK

Power: AC120V/60Hz

Humidity: 56 %RH

EUT: Smart EBike

Distance:

M/N: Flux X26 PRO

Mode: GFSK CH39

Note: N/A

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|-------------|----------------|-----|--------|
| 1   | 4960.000        | 58.82          | -19.53        | 39.29          | 74.00          | -34.71      | peak     | 100         | 2              | P   |        |
| 2   | 4960.000        | 48.98          | -19.53        | 29.45          | 54.00          | -24.55      | AVG      | 100         | 2              | P   |        |
| 3   | 7440.000        | 60.24          | -13.2         | 47.04          | 74.00          | -26.96      | peak     | 100         | 277            | P   |        |
| 4 * | 7440.000        | 50.92          | -13.2         | 37.72          | 54.00          | -16.28      | AVG      | 100         | 277            | P   |        |

Note: 1). Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)

2). Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier

3). Margin value = Limit value - Emission level