



Verification of Compliance

The products

EUT : **MagCore Plus II/Plus II Dx**
Trade Name : **MagCore**
Model No. : **MagCore Plus II/Plus II Dx**

which produced by

RBC Bioscience Corp.

**3F., No.132, Ln. 235, Baoqiao Rd., Xindian Dist., New Taipei City 23145,
Taiwan**

Regulation Applied : FCC 47 CFR Part 15 Subpart B

I HEREBY CERTIFY THAT : The data shown in this report were made in accordance with the procedures given in ANSI C63.4 and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.



Licher Chen

Signature

Licher Chen, Section Manager
EMC Dept. II of ELECTRONICS
TESTING CENTER, TAIWAN

Report Number : 19-12-RBO-050

Date of Issue: Mar. 02, 2020

- Note:
1. The result of the testing report relate only to the item tested.
 2. The testing report shall not be reproduced expect in full, without the written approval of ETC.
 3. The report must not be used by the client to claim product endorsement by any agency of the U.S. Government.

ELECTRONICS TESTING CENTER, TAIWAN
NO. 34, LINGFU VIL., LINKOU DIST.,
NEW TAIPEI CITY, TAIWAN, 24442, R.O.C.

TEL:(02)26023052
INT:+886-2-26023052
FAX:(02)26010910
INT:+886-2-26010910



Designation Number: TW1060



FCC Part 15 Subpart B TEST REPORT

of

E.U.T. : MagCore Plus II/Plus II Dx

Model No. : MagCore Plus II/Plus II Dx

for

APPLICANT : RBC Bioscience Corp.

ADDRESS : 3F., No.132, Ln. 235, Baoqiao Rd., Xindian Dist., New
Taipei City 23145, Taiwan

Test Performed by

ELECTRONICS TESTING CENTER (ETC) , TAIWAN

NO. 34. LIN 5, DINGFU VIL., LINKOU DIST.,
NEW TAIPEI CITY, TAIWAN, 24442, R.O.C.

TEL : (02)26023052 FAX : (02)26010910

[http:// www.etc.org.tw](http://www.etc.org.tw) ; e-mail:emc@etc.org.tw

Report Number : 19-12-RBO-050

TEST REPORT

Applicant : RBC Bioscience Corp.
3F., No.132, Ln. 235, Baoqiao Rd., Xindian Dist., New Taipei City 23145, Taiwan

Manufacturer : RBC Bioscience Corp.
3F., No.132, Ln. 235, Baoqiao Rd., Xindian Dist., New Taipei City 23145, Taiwan

Description of Device :

- a) Type of EUT : MagCore Plus II/Plus II Dx
- b) Trade Name : MagCore
- c) Model No. : MagCore Plus II/Plus II Dx
- d) Power Supply : 100-240V, 50/60Hz, 400W

Regulation Applied: FCC 47 CFR Part 15 Subpart B

I HEREBY CERTIFY THAT: The data shown in this report were made in accordance with the procedures given in ANSI C63.4-2014 and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.

- Note: 1. The result of the testing report relate only to the item tested.
2. The testing report shall not be reproduced expect in full, without the written approval of ETC.
3. The report must not be used by the client to claim product endorsement by any agency of the U.S. Government.

Date Test Item Received : Dec. 23, 2019
Date Test Campaign Completed : Jan. 16, 2020
Date of Issue : Mar. 02, 2020

Test Engineer : Ken Hu
(Ken Hu, Engineer)

Check By : Max Wu
(Max Wu , Supervisor)

Approve & Authorized : Licher Chen
Licher Chen, Section Manager
EMC Dept. II of ELECTRONICS
TESTING CENTER, TAIWAN



Table of Contents	Page
1 GENERAL INFORMATION	1
1.1 Product Description and Operation	1
1.2 Characteristics of Device	1
1.3 Test Methodology	1
1.4 Test Facility	1
2 PROVISIONS APPLICABLE	2
2.1 Definition	2
2.2 Requirement for Compliance	3
2.3 Labeling Requirement	4
2.4 User Information	5
3 SYSTEM TEST CONFIGURATION	7
3.1 Justification	7
3.2 Devices for Tested System	7
3.3 Configuration of Tested System	7
3.4 Measurement Uncertainty	8
3.5 Deviation Statement	8
4 RADIATED EMISSION MEASUREMENT	9
4.1 Applicable Standard	9
4.2 Measurement Procedure	9
4.3 Measuring Instrument	10
4.4 Radiated Emission Data	11
4.5 Field Strength Calculation	15
4.6 Photos of Radiation Measuring Setup	16
5 CONDUCTED EMISSION MEASUREMENT	18
5.1 Description	18
5.2 Measurement Procedure	18
5.3 Conducted Emission Data	19
5.4 Result Data Calculation	22
5.5 Conducted Measurement Equipment	22
5.6 Photos of Conduction Measuring Setup	23
ANNEX A: PHOTOS	A1~A10

1 GENERAL INFORMATION

1.1 Product Description and Operation

- a) Type of EUT : MagCore Plus II/Plus II Dx
- b) Trade Name : MagCore
- c) Model No. : MagCore Plus II/Plus II Dx
- d) Power Supply : 100-240V, 50/60Hz, 400W
- e) Highest Frequency : 1GHz

1.2 Characteristics of Device

MagCore Plus II/Plus II Dx

1.3 Test Methodology

For EUT, both conducted and radiated emissions were performed according to the procedures in ANSI C63.4-2014.

Measurement Software

Software	Version	Note
e3	Version 6.100618f	Radiated Emission Test
e3	Version 6.100421	Conducted Emission Test

1.4 Test Facility

The open area test site and the conducted measurement facility used to collect the test data is located at NO. 34. LIN 5, DINGFU VIL., LINKOU DIST., NEW TAIPEI CITY, TAIWAN, 24442, R.O.C.

This site is accredited for measuring devices subject to Declaration of Conformity (DOC) under Parts 15 & 18 via APEC TEL MRA.

FCC Designation Number: TW1060

Expiration date: Oct. 08, 2021.

2 PROVISIONS APPLICABLE

2.1 Definition

FCC§15.3(z) Unintentional radiator:

A device that intentionally generates and radio frequency energy for use within the device, or that sends radio frequency signals by conduction to associated equipment via connecting wiring, but which is not intended to emit RF energy by radiation or induction.

FCC§15.3(k) Digital device (Previously defined as a computing device):

An unintentional radiator (device or system) that generates and uses timing signals or pulses at a rate in excess of 9,000 pulses (cycles) per second and uses digital techniques; inclusive of telephone equipment that uses digital techniques or any device or system that generates and uses radio frequency energy for the purpose of performing data processing functions, such as electronic computations, operations, transformations, recording, filing, sorting, storage, retrieval, or transfer. A radio frequency device that is specifically subject to an emanation requirement in any other FCC Rule part or an intentional radiator subject to subpart C of this part that contains a digital device is not subject to the standards for digital devices, provided the digital device is used only to enable operation of the radio frequency device and the digital device does not control additional functions or capabilities.

Note: Computer terminals and peripherals that are intended to be connected to a computer are digital devices.

FCC§15.3(h) Class A digital device:

A digital device that is marketed for use in a commercial, industrial or business environment, exclusive of a device which is marketed for use by the general public or is intended to be used in the home.

FCC§15.3(i) Class B Digital Device:

A digital device that is marketed for use in a residential environment notwithstanding use in commercial, business and industrial environments. Examples of such devices include, but are not limited to, personal computers, calculators, and similar electronic devices that are marketed for use by the general public.

Note: The responsible party may also qualify a device intended to be marketed in a commercial, business or industrial environment as a Class B device, and in fact is encouraged to do so, provided the device complies with the technical specifications for a Class B digital device. In the event that a particular type of device has been found to repeatedly cause harmful interference to radio communications, the Commission may classify such a digital device as a Class B digital device, regardless of its intended use.

2.2 Requirement for Compliance

(1) Conducted Emission Requirement

Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

Frequency MHz	Quasi Peak dB μV	Average dB μV
0.15 - 0.5	66-56*	56-46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

* Decreases with the logarithm of the frequency

(2) Radiated Emission Requirement

For unintentional device, according to FCC §15.109(a), the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency MHz	Distance Meters	Radiated dB μV/m	Radiated μV/m
30 - 88	3	40.0	100
88 - 216	3	43.5	150
216 - 960	3	46.0	200
Above 960	3	54.0	500

For unintentional device, according to CISPR Radiated Emission Limits class B is as following:

Frequency MHz	Distance Meters	Radiated dB μV/m
30 to 230	10	30
230 to 1000	10	37

2.3 Labeling Requirement

According to FCC §15.19

(a) In addition to the requirements in part 2 of this chapter, a device subject to certification, or Supplier's Declaration of Conformity shall be labeled as follows:

(3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

(4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

(5) When the device is so small or for such use that it is impracticable to label it with the statement specified under paragraph (a) of this section in a font that is four-point or larger, and the device does not have a display that can show electronic labeling, then the information required by this paragraph shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device.

According to FCC §2.1074

(a) Devices subject only to Supplier's Declaration of Conformity shall be uniquely identified by the party responsible for marketing or importing the equipment within the United States. However, the identification shall not be of a format which could be confused with the FCC Identifier required on certified equipment. The responsible party shall maintain adequate identification records to facilitate positive identification for each device.

(b) Devices subject to authorization under Supplier's Declaration of Conformity may be labeled with the following logo on a voluntary basis as a visual indication that the product complies with the applicable FCC requirements. The use of the logo on the device does not alleviate the requirement to provide the compliance information required by §2.1077.



2.4 User Information

According to FCC §15.105

(a) For a Class A digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

(d) For systems incorporating several digital devices, the statement shown in paragraph (a) or (b) of this section needs to be contained only in the instruction manual for the main control unit.

(e) In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

According to FCC §15.21

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

According to FCC §2.1077

(a) If a product must be tested and authorized under Supplier's Declaration of Conformity, a compliance information statement shall be supplied with the product at the time of marketing or importation, containing the following information:

- (1) Identification of the product, e.g., name and model number;
- (2) A compliance statement as applicable, e.g., for devices subject to part 15 of this chapter as specified in §15.19(a)(3) of this chapter, that the product complies with the rules; and
- (3) The identification, by name, address and telephone number or Internet contact information, of the responsible party, as defined in §2.909. The responsible party for Supplier's Declaration of Conformity must be located within the United States.

(c) The compliance information statement shall be included in the user's manual or as a separate sheet. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form. The information may be provided electronically as permitted in §2.935.

3 SYSTEM TEST CONFIGURATION

3.1 Justification

The system was configured for testing in a typical fashion, as a customer would normally use it.

For radiated emission measuring, the EUT was rotated to obtain the maximum level of radiated emissions. The antenna was varied in height from 1 to 4 meters above ground to obtain the maximum signal strength. Measurement was performed under the condition that a computer program was exercised to simulate data communication of EUT. Three highest emissions were verified with varying placement of the connected cable to maximize the emission from EUT.

3.2 Devices for Tested System

Description	Manufacturer	Model	Cable
MagCore Plus II/Plus II Dx *	RBC Bioscience Corp.	MagCore Plus II/Plus II Dx	1.8m Unshielded AC Power Line

Remark “*” means equipment under test.

3.3 Configuration of Tested System

Please Refer to test setup photos.

3.4 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz ~ 30MHz	±2.5dB(Mains)
Conducted emission at telecommunication ports	150kHz ~ 30MHz	±2.22dB(Voltage)
		±2.88dB(Current)
Radiated emissions	30MHz ~ 1GHz	±3.90dB($30\text{MHz} \leq f \leq 300\text{MHz}$)
		±3.95dB($300\text{MHz} < f \leq 1\text{GHz}$)
	Above 1GHz	±4.42dB($1\text{GHz} \leq f \leq 18\text{GHz}$)
		±4.86dB($18\text{GHz} \leq f \leq 40\text{GHz}$)

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

The test result(s) does not consider the uncertainty of measurement when the test standard(s) and/or test method which refer by the labs has the limit or judgments for the test result(s).

3.5 Deviation Statement

(If any deviation from additions to or exclusions from test method must be stated)

4 RADIATED EMISSION MEASUREMENT

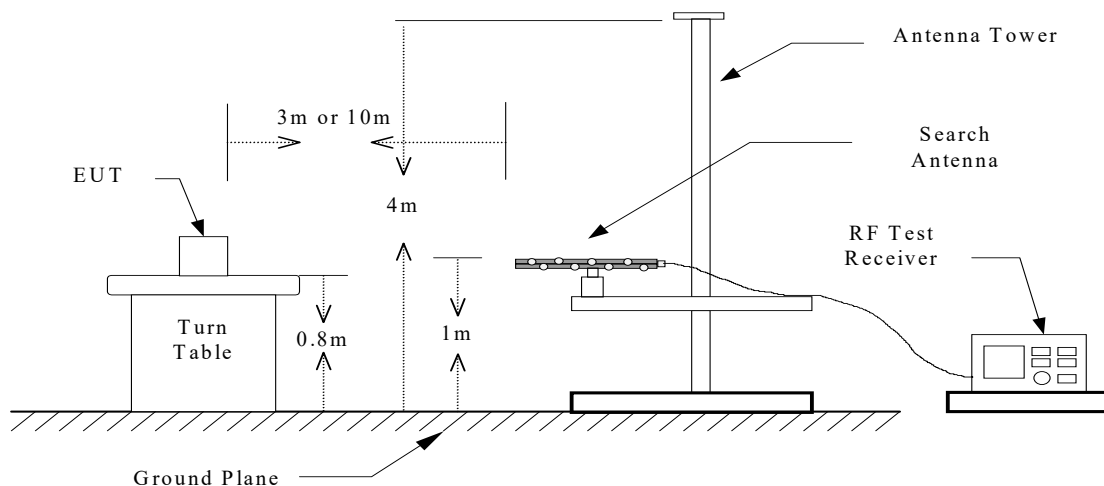
4.1 Applicable Standard

For unintentional radiator digital devices, the radiated emission shall comply with §15.109(a). And according to §15.109 (g), as an alternative to the radiated emission limits is CISPR 22.

4.2 Measurement Procedure

1. Setup the configuration per figure 1.
2. For emission frequencies measured below 1 GHz, a pre-scan is performed in a shielded chamber to determine the accurate frequencies of higher emissions will be checked on a open test site.
3. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0 ° to 360 ° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading. A RF test Wireless Microphone Receiver is also used to confirm emissions measured.
4. Repeat step 3 until all frequencies need to be measured were complete.
5. Repeat step 4 with search antenna in vertical polarized orientations.
6. Check the three frequencies of highest emission with varying the placement of cables associated with EUT to obtain the worse case and record the result.

Figure 1: Frequencies measured below 1 GHz configuration



4.3 Measuring Instrument

The following instrument are used for radiated emissions measurement:

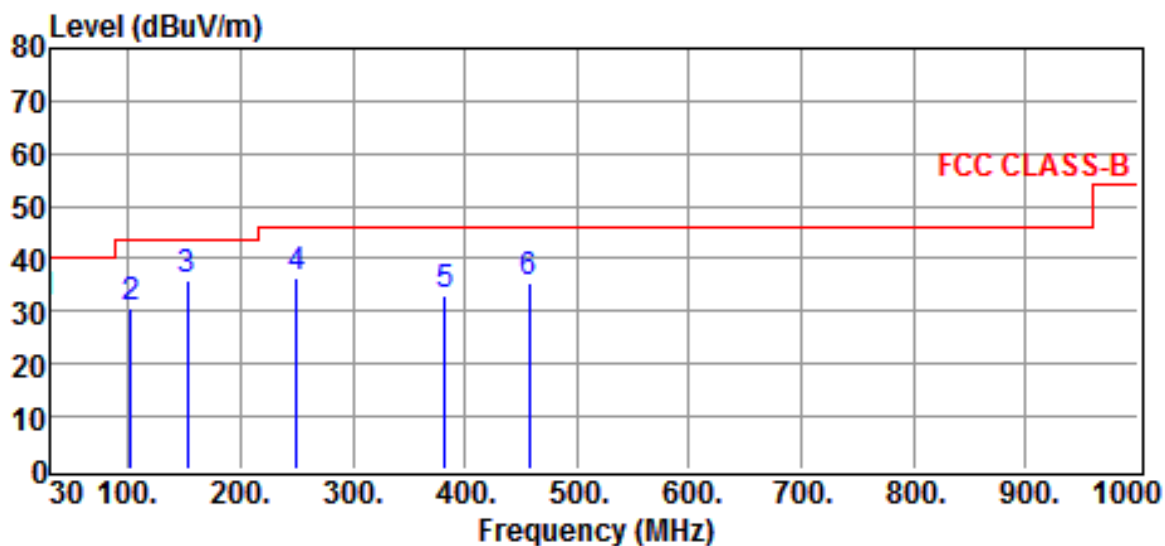
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Keysight	N9038A	2019/11/21	2020/11/20
Amplifier	HP	8447D	2019/05/06	2020/05/05
Amplifier	HP	8449B	2019/10/04	2020/10/03
Bilog Antenna with 6dB Pad	ETC & JYEBAO	MCTD 2786 & FAT-NM5NF5T3G2W6	2019/08/20	2020/08/19
Double Ridged Antenna	EMCO	3115	2019/10/22	2020/10/21

Note: The standards used to perform this calibration are traceable to NML/ROC, NIST/USA and NPL/UK.

Measuring instrument setup in measured frequency band when specified detector function is used:

Frequency Band (MHz)	Instrument	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	RF Test Receiver	Quasi-Peak	120 kHz	1 MHz
	Spectrum Analyzer	Peak	100 kHz	100 kHz
Above 1000	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz

4.4 Radiated Emission Data

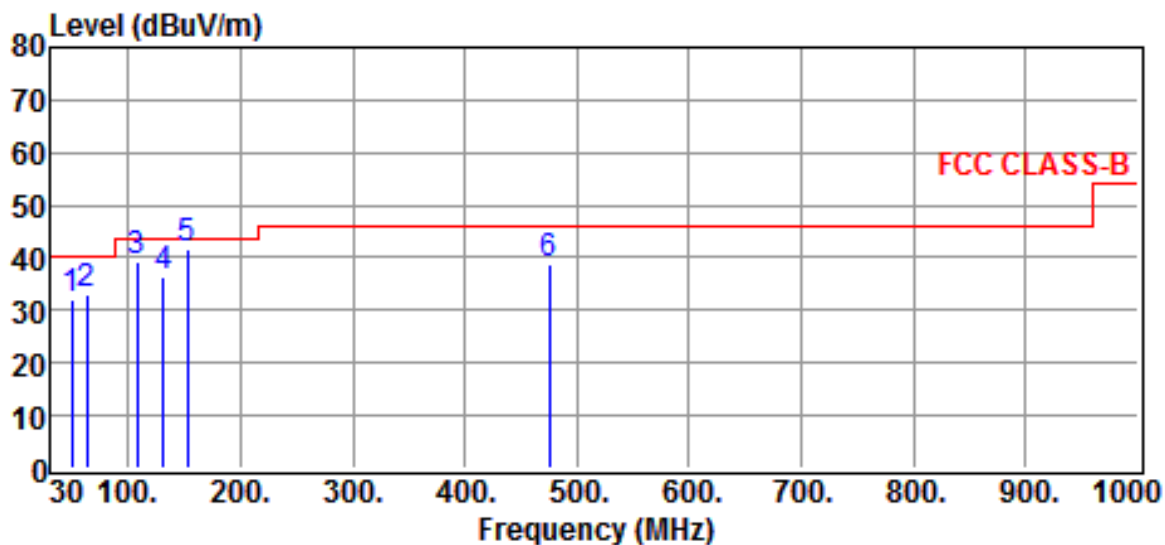


Site	:Chamber #2	Date	:2020-01-08
Limit	:FCC CLASS-B	Ant. Pol.	:HORIZONTAL
EUT	:MagCore Plus II	Model	:MagCore Plus II
Power Rating	:120Vac/60Hz	Temp.	:24 °C
Engineer	:Ken Hu	Humi.	:48 %
Test Mode	:AutoRun mode		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
30.0000	32.72	-1.22	31.50	40.00	-8.50	QP
101.7800	40.25	-9.54	30.71	43.50	-12.79	QP
152.2200	43.62	-7.58	36.04	43.50	-7.46	QP
250.1900	41.57	-5.02	36.55	46.00	-9.45	QP
382.1100	34.40	-1.41	32.99	46.00	-13.01	QP
457.7700	35.71	-0.37	35.34	46.00	-10.66	QP

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ()
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

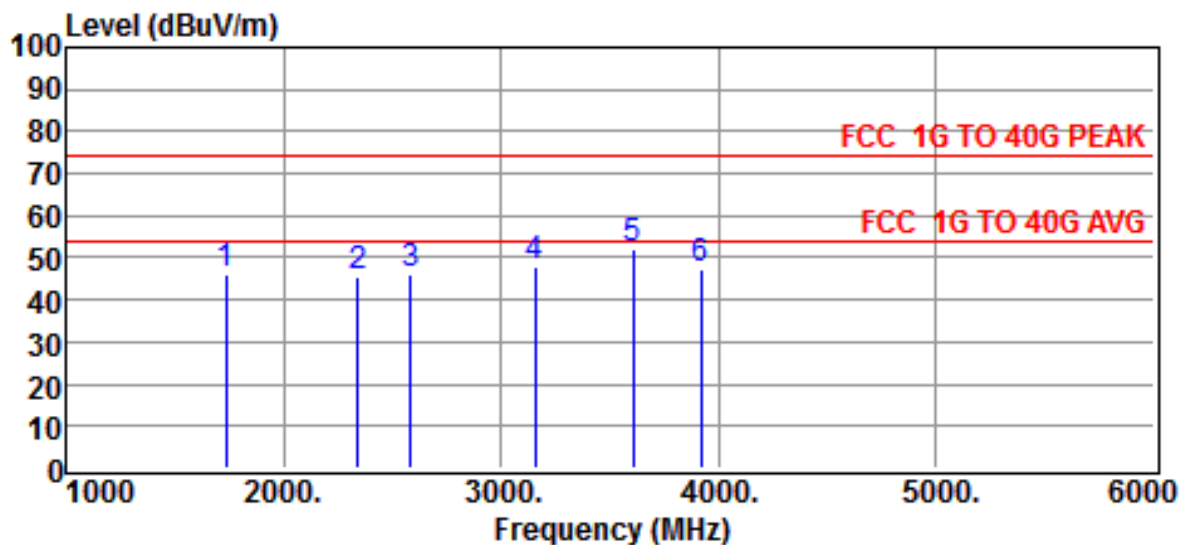


Site	:Chamber #2	Date	:2020-01-08
Limit	:FCC CLASS-B	Ant. Pol.	:VERTICAL
EUT	:MagCore Plus II	Model	:MagCore Plus II
Power Rating	:120Vac/60Hz	Temp.	:24 °C
Engineer	:Ken Hu	Humi.	:48 %
Test Mode	:AutoRun mode		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
49.4000	42.31	-10.42	31.89	40.00	-8.11	QP
62.9800	47.24	-14.35	32.89	40.00	-7.11	QP
107.6000	48.22	-8.98	39.24	43.50	-4.26	QP
131.8500	44.15	-7.59	36.56	43.50	-6.94	QP
152.2200	49.44	-7.58	41.86	43.50	-1.64	QP
475.2300	38.78	-0.06	38.72	46.00	-7.28	QP

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ()
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

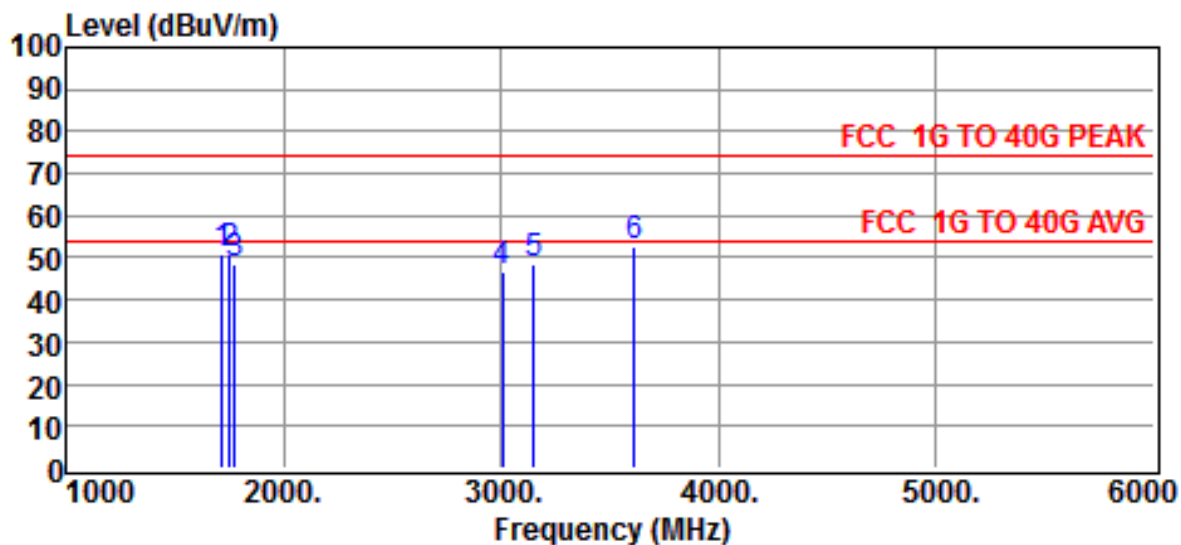


Site :Chamber #2 Date :2020-01-08
 Limit :FCC 1G TO 40G PEAK Ant. Pol. :HORIZONTAL
 EUT :MagCore Plus II Model :MagCore Plus II
 Power Rating :120Vac/60Hz Temp. :24 °C
 Engineer :Ken Hu Humi. :48 %
 Test Mode :AutoRun Mode

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
1735.0000	50.42	-4.02	46.40	74.00	-27.60	Peak
2340.0000	46.37	-1.05	45.32	74.00	-28.68	Peak
2585.0000	46.76	-0.43	46.33	74.00	-27.67	Peak
3155.0000	45.25	2.88	48.13	74.00	-25.87	Peak
3605.0000	44.73	7.57	52.30	74.00	-21.70	Peak
3920.0000	44.80	2.69	47.49	74.00	-26.51	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ()
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.



Site :Chamber #2 Date :2020-01-08
 Limit :FCC 1G TO 40G PEAK Ant. Pol. :VERTICAL
 EUT :MagCore Plus II Model :MagCore Plus II
 Power Rating :120Vac/60Hz Temp. :24 °C
 Engineer :Ken Hu Humi. :48 %
 Test Mode :AutoRun Mode

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
1720.0000	55.07	-4.12	50.95	74.00	-23.05	Peak
1755.0000	55.03	-3.88	51.15	74.00	-22.85	Peak
1775.0000	52.10	-3.68	48.42	74.00	-25.58	Peak
3005.0000	46.00	0.73	46.73	74.00	-27.27	Peak
3150.0000	45.24	3.05	48.29	74.00	-25.71	Peak
3610.0000	45.32	7.08	52.40	74.00	-21.60	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ()
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

B. Emission frequencies below 30MHz (9kHz - 30MHz)

According to exploratory test no any obvious emission were detected from 9kHz to 30MHz.

4.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor, High Pass Filter Loss and Cable Loss, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation calculation is as follows:

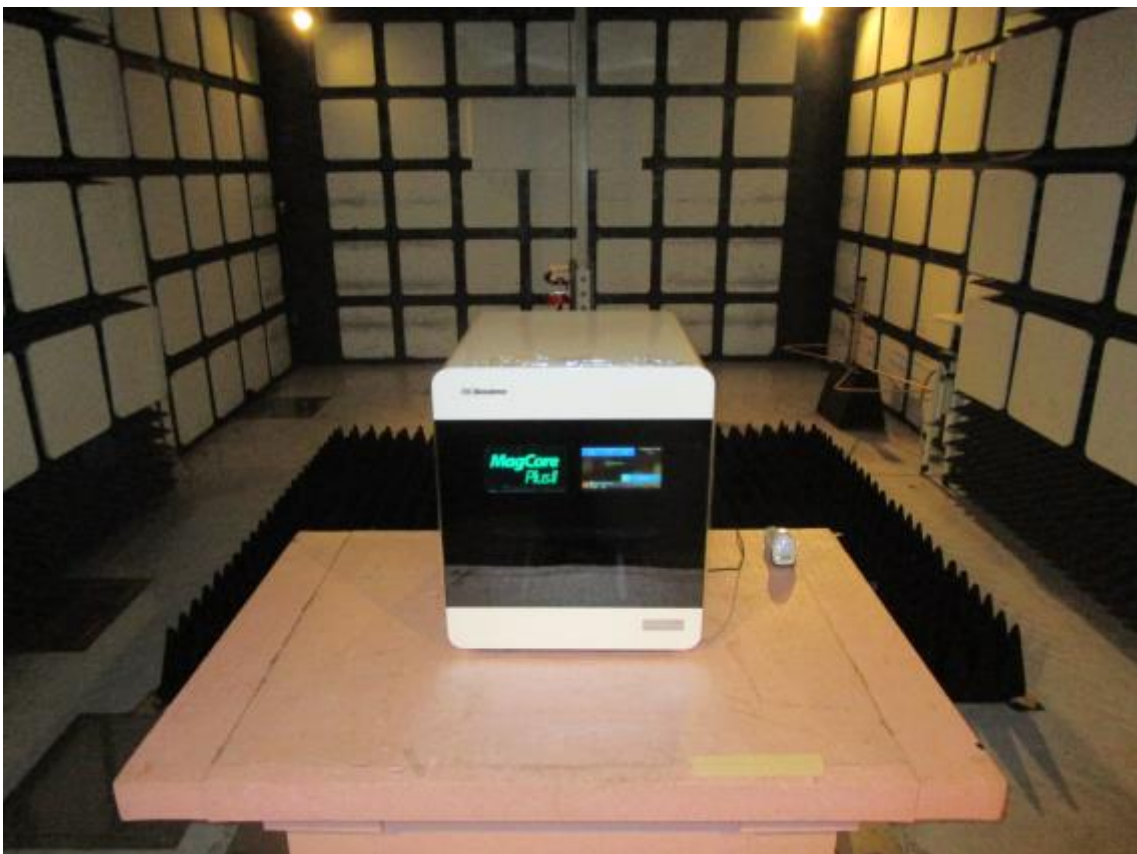
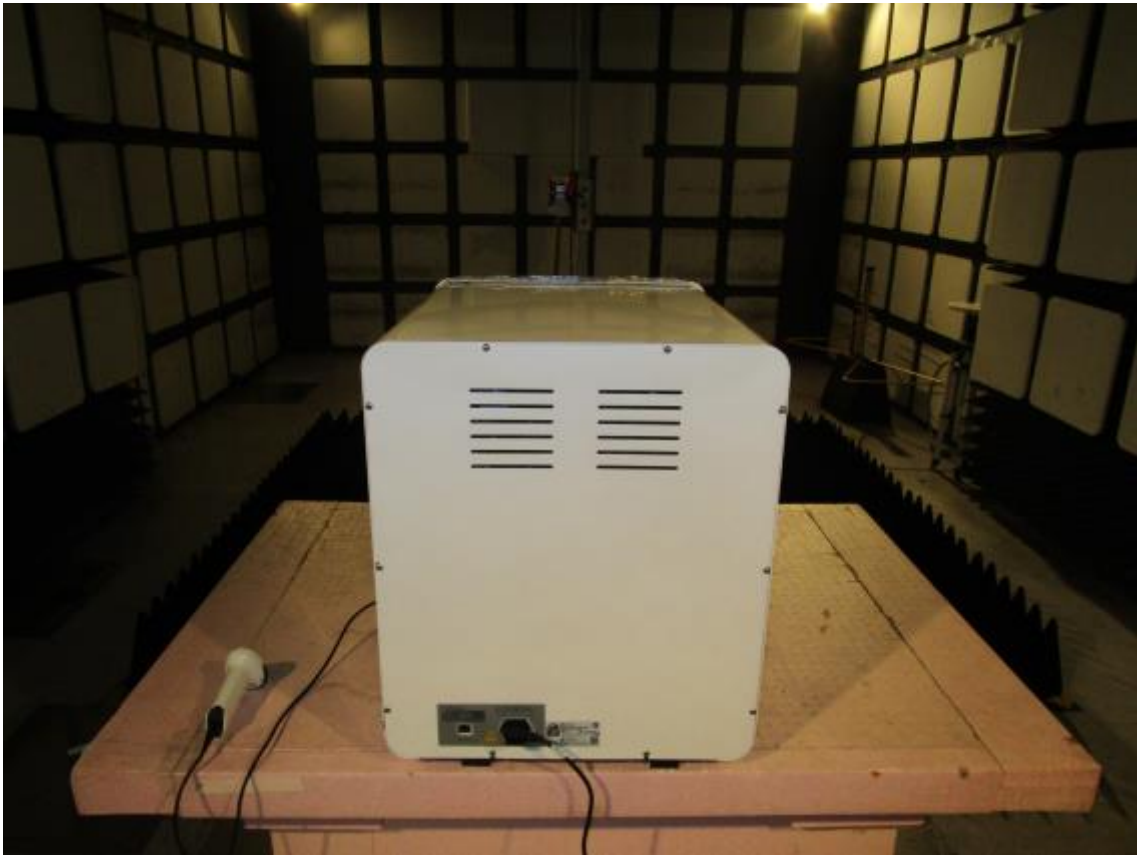
$$\mathbf{Result = Reading + Corrected Factor}$$

where

$$\text{Corrected Factor} = \text{Antenna FACTOR} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

4.6 Photos of Radiation Measuring Setup





5 CONDUCTED EMISSION MEASUREMENT

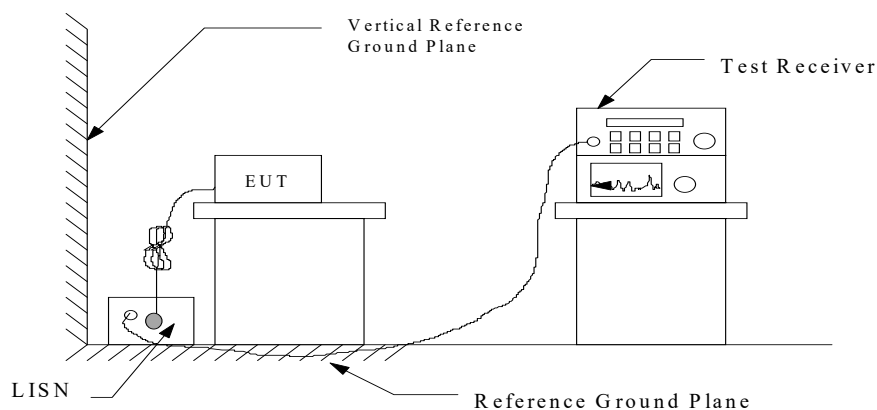
5.1 Description

For unintentional and intentional device, Line Conducted Emission Limits are in accordance to § 15.107(a) and §15.207(a) respectively. Both Limits are identical specification.

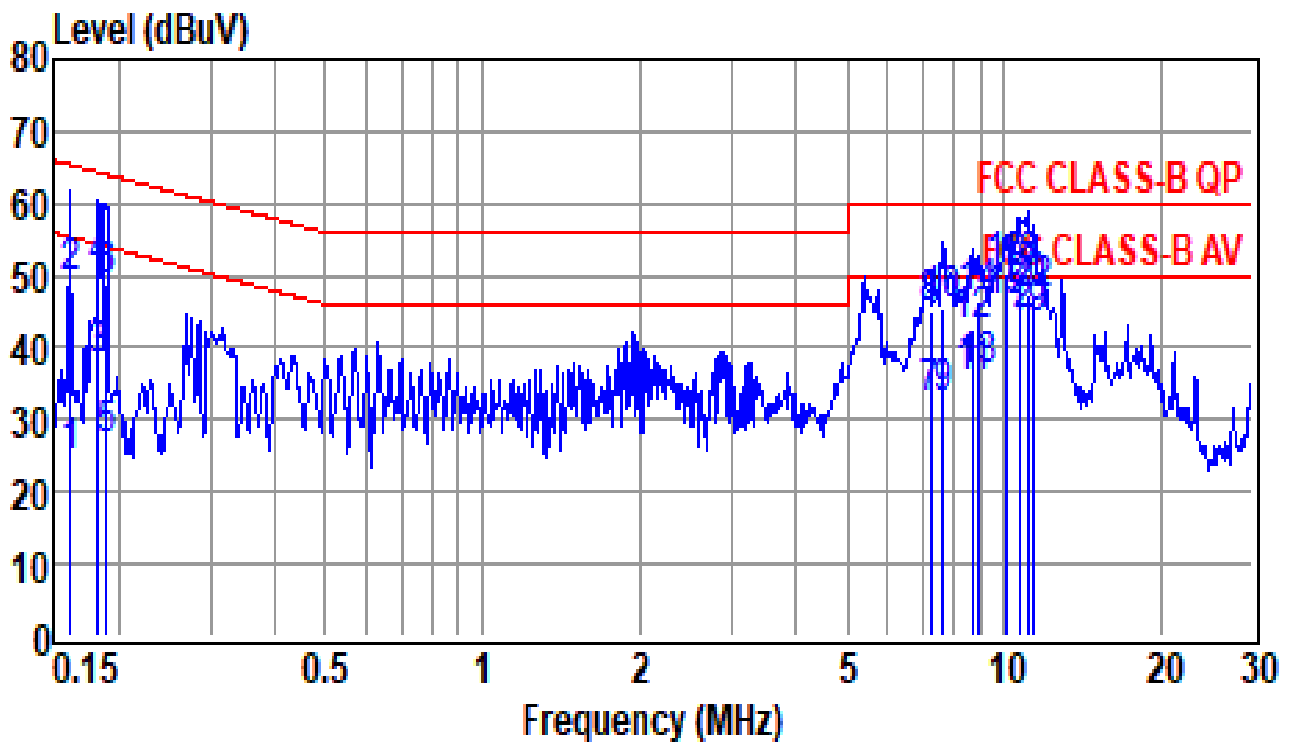
5.2 Measurement Procedure

1. Setup the configuration per figure 3.
2. A preliminary scan with a spectrum monitor is performed to identify the frequency of emission that has the highest amplitude relative to the limit by operating the EUT in selected modes of operation, typical cable positions, and with a typical system configuration.
3. Record the 6 or 8 highest emissions relative to the limit.
4. Measure each frequency obtained from step 3 by a test Wireless Microphone Receiver set on quasi peak detector function, and then record the accuracy frequency and emission level. If all emissions measured in the specified band are attenuated more than 20 dB from the limit, this step would be ignored, and the peak detector function would be used.
5. Confirm the highest three emissions with variation of the EUT cable configuration and record the final data.
6. Repeat all above procedures on measuring each operation mode of EUT.

Figure 3 : Conducted emissions measurement configuration



5.3 Conducted Emission Data



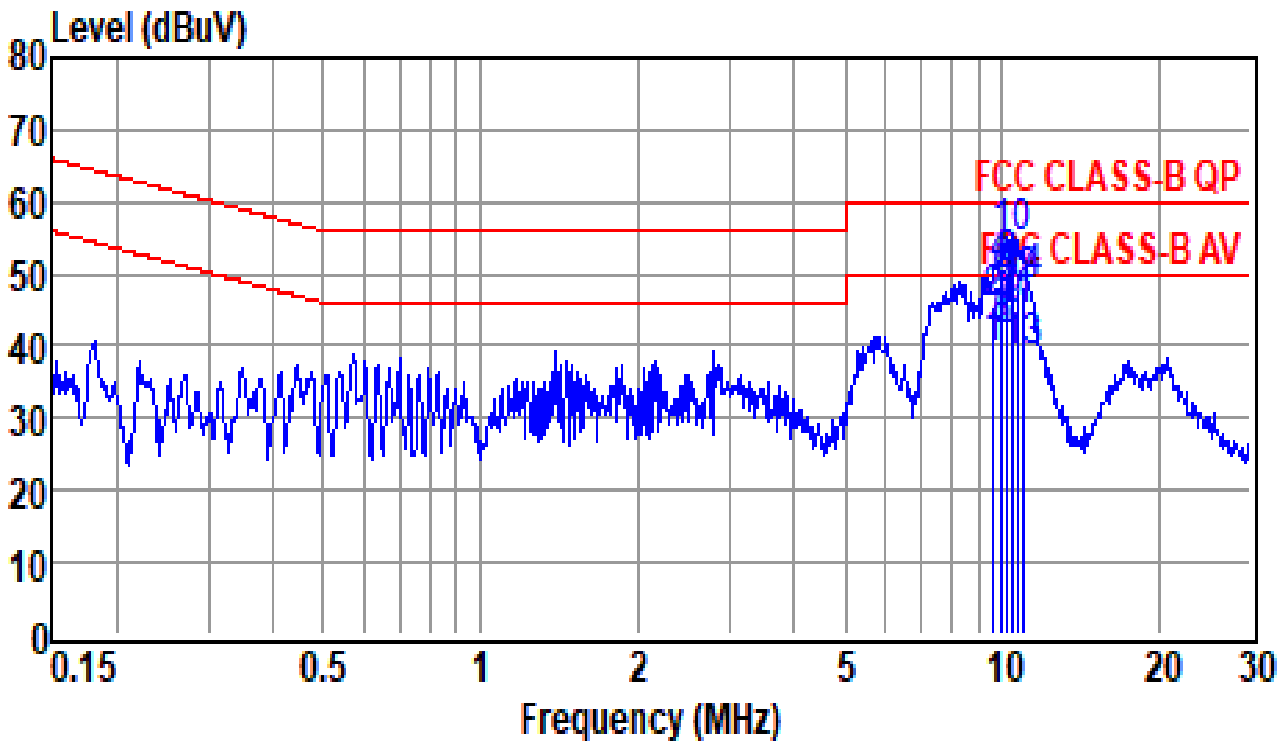
Site	: conducted #1	Date	: 2020-01-09
Condition	: FCC CLASS-B QP	LISN	: NEUTRAL
Tem / Hum	: 22 °C / 42%	Test Mode	: AutoRun mode
EUT	: MagCore Plus II	Power Rating	: 120Vac/60Hz
Engineer	: Ken Hu	Memo	:

Freq (MHz)	Reading (dBUV)	Factor (dB)	Emission Level (dBUV)	Limit Line (dBUV)	Over Limit (dB)	Remark
0.1616	14.55	9.98	24.53	55.38	-30.85	Average
0.1616	39.41	9.98	49.39	65.38	-15.99	QP
0.1835	27.66	9.97	37.63	54.33	-16.70	Average
0.1835	40.13	9.97	50.10	64.33	-14.23	QP
0.1894	17.06	9.97	27.03	54.06	-27.03	Average
0.1894	38.77	9.97	48.74	64.06	-15.32	QP
7.2520	22.37	10.14	32.51	50.00	-17.49	Average
7.2520	34.68	10.14	44.82	60.00	-15.18	QP
7.6460	22.44	10.14	32.58	50.00	-17.42	Average
7.6460	35.37	10.14	45.51	60.00	-14.49	QP
8.7290	25.11	10.14	35.25	50.00	-14.75	Average
8.7290	32.40	10.14	42.54	60.00	-17.46	QP
8.9640	26.45	10.14	36.59	50.00	-13.41	Average
8.9640	36.52	10.14	46.66	60.00	-13.34	QP

10.0720	35.63	10.15	45.78	50.00	-4.22	Average
10.0720	40.32	10.15	50.47	60.00	-9.53	QP
10.6760	38.59	10.16	48.75	50.00	-1.25	Average
10.6760	40.07	10.16	50.23	60.00	-9.77	QP
11.0800	33.41	10.18	43.59	50.00	-6.41	Average
11.0800	37.43	10.18	47.61	60.00	-12.39	QP
11.4380	33.72	10.18	43.90	50.00	-6.10	Average
11.4380	36.95	10.18	47.13	60.00	-12.87	QP

Note :

1. Result = Reading + Factor
2. Factor = LISN Factor + Cable Loss+ Pulse Limiter Factor



Site	: conducted #1	Date	: 2020-01-09
Condition	: FCC CLASS-B QP	LISN	: LINE
Tem / Hum	: 22 °C / 42%	Test Mode	: AutoRun mode
EUT	: MagCore Plus II	Power Rating	: 120Vac/60Hz
Engineer	: Ken Hu	Memo	:

Freq (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV)	Limit Line (dBuV)	Over Limit (dB)	Remark
9.6540	29.39	10.09	39.48	50.00	-10.52	Average
9.6540	35.65	10.09	45.74	60.00	-14.26	QP
9.9130	32.02	10.09	42.11	50.00	-7.89	Average
9.9130	40.20	10.09	50.29	60.00	-9.71	QP
10.0190	31.61	10.09	41.70	50.00	-8.30	Average
10.0190	38.50	10.09	48.59	60.00	-11.41	QP
10.2330	35.65	10.09	45.74	50.00	-4.26	Average
10.2330	40.10	10.09	50.19	60.00	-9.81	QP
10.5080	34.61	10.09	44.70	50.00	-5.30	Average
10.5080	44.51	10.09	54.60	60.00	-5.40	QP
10.7330	34.45	10.11	44.56	50.00	-5.44	Average
10.7330	37.89	10.11	48.00	60.00	-12.00	QP
10.9630	28.93	10.11	39.04	50.00	-10.96	Average
10.9630	38.28	10.11	48.39	60.00	-11.61	QP

Note :

1. Result = Reading + Factor
2. Factor = LISN Factor + Cable Loss+ Pulse Limiter Factor

5.4 Result Data Calculation

The result data is calculated by adding the LISN Factor to the measured reading. The basic equation with a sample calculation is as follows:

$$\mathbf{RESULT = READING + LISN FACTOR}$$

Assume a Wireless Microphone Receiver reading of 22.5 dB μ V is obtained, and LISN Factor is 0.1 dB, then the total of disturbance voltage is 22.6 dB μ V.

$$\text{RESULT} = 22.5 + 0.1 = 22.6 \text{ dB } \mu \text{ V}$$

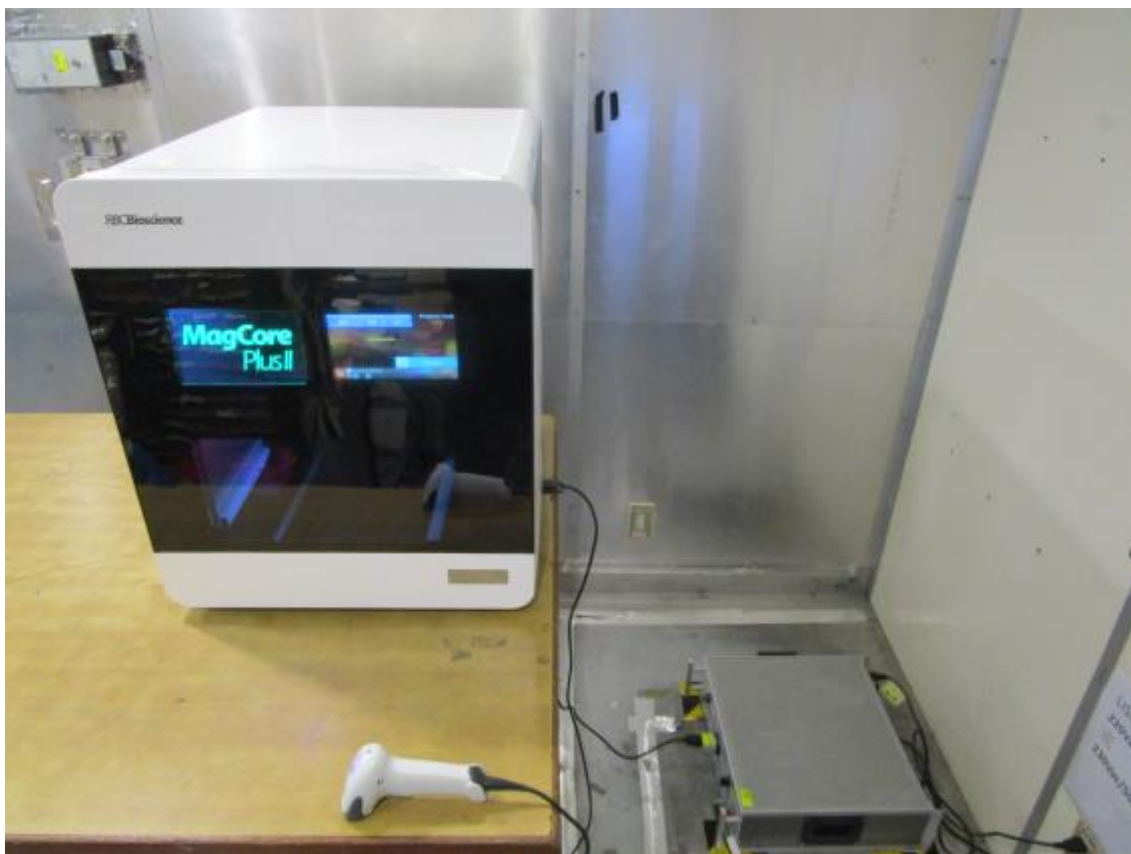
$$\begin{aligned} \text{Level in } \mu \text{ V} &= \text{Common Antilogarithm}[(22.6 \text{ dB } \mu \text{ V})/20] \\ &= 13.48 \mu \text{ V} \end{aligned}$$

5.5 Conducted Measurement Equipment

The following test equipment are used during the conducted test.

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2020/01/08	2021/01/07
LISN	Schwarzbeck	NSLK 8127 PLC	2019/12/17	2021/12/16
PLUSE LIMITER	Schwarzbeck	VTSD 9561 F-N	2019/06/12	2020/06/11

5.6 Photos of Conduction Measuring Setup



ANNEX A: PHOTOS

1. Outside view 01 of EUT



2. Outside view 02 of EUT



3. Outside view 03 of EUT



4. Outside view 04 of EUT



5. Outside view 05 of EUT



6. Outside view 06 of EUT



7. Outside view 07 of EUT



8. Outside view 08 of EUT



1. Internal view 01 of EUT



2. Internal view 02 of EUT



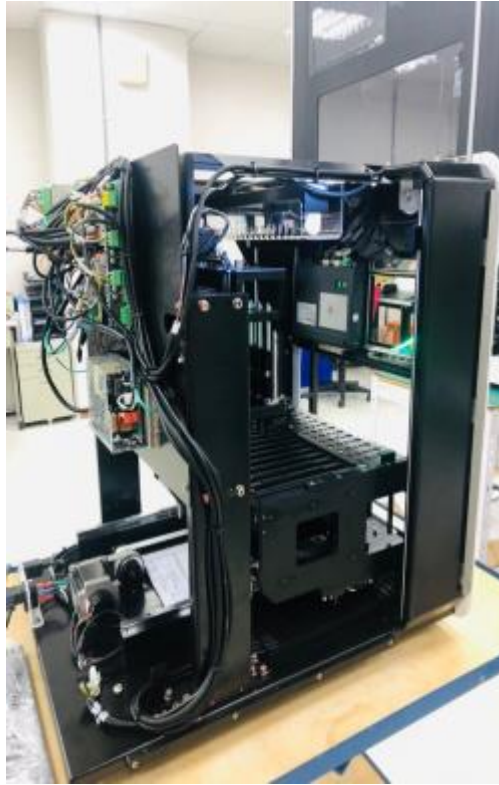
3. Internal view 03 of EUT



4. Internal view 04 of EUT



5. Internal view 05 of EUT



6. Internal view 06 of EUT



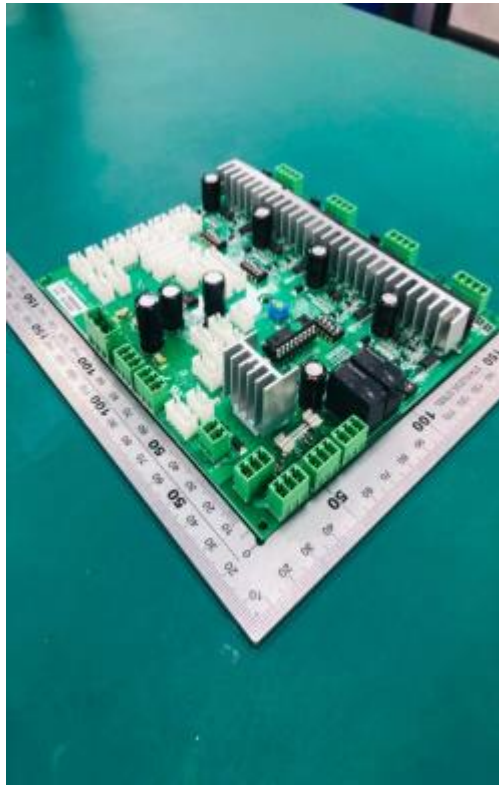
7. Top view of PCB



8. Bottom view of PCB



9. Side view of PCB



10. Side view of PCB



11. Side view of PCB



12. Side view of PCB

