

FCC PART 15C TEST REPORT FOR CERTIFICATION

On Behalf of

Shenzhen Jiteng Network Technology Co.,Ltd

Mini PC

A Series; A 5; A 6; A 7; A x ( x=0-9 )

FCC ID: 2AY4C-GM06

GEEKOM

Prepared for : Shenzhen Jiteng Network Technology Co.,Ltd  
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Report Number : ACS-F23071

Date of Test : Mar.23~May.16, 2023

Date of Report : Jun.07, 2023

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Appendix A. Photograph of Test

Appendix B. Photo of the EUT

TEST REPORT

Applicant : Shenzhen Jiteng Network Technology Co.,Ltd  
 Manufacturer : Shenzhen Jiteng Network Technology Co.,Ltd  
 Product : Mini PC  
 FCC ID : 2AY4C-GM06  
 (A) Model No. : A Series; A 5; A 6; A 7; A x ( x=0-9 )  
 (B) Brand : GEEKOM  
 (C) Test Voltage : DC 19V From Adapter 100V/50Hz

Tested for comply with:

FCC CFR47 Part 15 Subpart C  
 Test procedure used: ANSI C63.10: 2020;  
 KDB 558074 D01v05r02

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1074. No modifications were required during testing to bring this product into compliance.

This report applies to single evaluation of one sample of above mentioned product and shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Mar.23~May.16, 2023 Report of date: Jun.07, 2023

Prepared by : Jasmine Ning Reviewed by : Thomas Chen  
 Jasmine Ning / Assistant Thomas Chen / Assistant Manager



Approved & Authorized Signer : Signature: Sunny Lu / Manager

## 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	Standard	Results
Power Line Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.10 :2020	PASS
Radiated Emission Test	FCC Part 15: 15.209 FCC Part 15: 15.205 FCC Part 15: 15.247(d) ANSI C63.10 : 2020	PASS
Conducted Spurious Emissions	FCC Part 15: 15.247(d) ANSI C63.10 : 2020	PASS
Carrier Frequency Separation Test	FCC Part 15: 15.247(a)(2) ANSI C63.10 : 2020	PASS
6dB Bandwidth Test	FCC Part 15: 15.247(b)(3) ANSI C63.10 : 2020	PASS
Maximum Peak Output Power Test	FCC Part 15: 15.247(d) ANSI C63.10 : 2020	PASS
Band Edge Compliance Test	FCC Part 15: 15.247(e) ANSI C63.10 : 2020	PASS
Power Spectral Density Test	FCC Part 15: 15.207 ANSI C63.10 :2020	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

Note: Measurement uncertainty affection to the result is considered, the EUT is technically compliant with standard requirements.

## 2. GENERAL INFORMATION

### 2.1. Description of Equipment Under Test

Applicant	Shenzhen Jiteng Network Technology Co.,Ltd
Applicant Address	No.1202,Bitian Pavilion,Bizhong Garden,No.10 Bibo First Street,Bibo Community, Huangbei Street,Luohu District,Shenzhen City, China
Manufacturer	Shenzhen Jiteng Network Technology Co.,Ltd
Manufacturer Address	No.1202,Bitian Pavilion,Bizhong Garden,No.10 Bibo First Street,Bibo Community, Huangbei Street,Luohu District,Shenzhen City, China
Product	Mini PC
Model No.	A Series; A 5; A 6; A 7; A x (x=0-9) Model differences (Declared by the Applicant): Some component part difference, As for Radio part: these model's RF module are the same.
Test Model	A Series
Brand	GEEKOM
Power supply#1	Manufacturer: SHENZHEN XINSPower TECHNOLOGY CO., LTD M/N:A1001-1904740DI INPUT:100-240V~50/60Hz 2.5A OUTPUT:19.0V; 4.74A 90.0W DC Cable: Shielded, Undetachable, 1.5m
Power supply#2	Manufacturer: MOSO POWER SUPPLY TECHNOLOGY CO., LTD M/N: MS-Z6320R190-120D0-E INPUT:100-240V~50/60Hz 2.0A OUTPUT:19.0V; 6.32A 120.0W DC Cable: Shielded, Undetachable, 1.5m
Power supply#3	Manufacturer: Shenzhen Honor Electronic Co.,Ltd. M/N: ADS-110CL-19-3 190090G INPUT: AC 100-240V~50/60Hz 1.5A max OUTPUT:19.0V; 4.74A 90.06W DC Cable: Shielded, Undetachable, 1.5m
Power Cable	Unshielded, Detachable, 1.3m (3C)
FCC ID	2AY4C-GM06
Sample Type	Prototype production
Date of Receipt	Mar.13, 2023
Date of Test	Mar.23~May.16, 2023
Remark: This report only for BLE.	

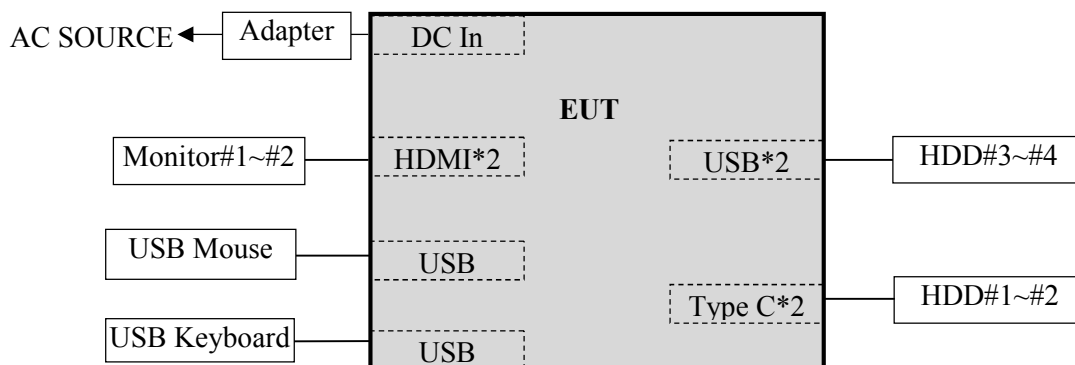
2.2.Feature of Equipment Under Test

Product Feature & Specification		
Product	Mini PC	
Test Model	A Series	
Power Source	<input checked="" type="checkbox"/> Commercial Power	100-240V~50/60Hz
	<input checked="" type="checkbox"/> External Power Source	DC 19.0V
	<input type="checkbox"/> Lithium battery	DC V, mAh
	<input type="checkbox"/> UM battery	DC V
Bluetooth		
Radio	BDR +EDR; BLE	
Frequency Range	2402-2480MHz	
Type of Modulation	GFSK, $\pi/4$ DQPSK, 8DPSK	
Data Rate	1Mbps, 2Mbps, 3Mbps	
Quantity of Channels	79/40	
Channel Separation	1MHz/2MHz	
2.4GHz Wi-Fi		
Support Modes	802.11b/g/n20/ax20/ax40/n40(RU is not support for 802.11ax mode)	
Frequency Range	2412-2462MHz	
Type of Modulation	802.11b(DSSS): CCK, QPSK, BPSK; 802.11g/n(OFDM): 64QAM,16QAM, QPSK, BPSK 802.11ax(OFDM): 64QAM,16QAM, QPSK, BPSK, 1024QAM	
Data Rate	802.11b: 1/2/5.5/11 Mbps; 802.11g: 6/9/12/18/24/36/48/54 Mbps; 802.11n: up to 300Mbps 802.11ax: up to 574Mbps	
Channel Separation	5MHz	
5GHz Wi-Fi		
Support Modes	802.11a/n20/n40/ac20/ac40/ac80 /ax20/ax40/ax80 (RU is not support for 802.11ax mode)	
Frequency Range	5180-5240MHz, 5500-5700MHz, 5260-5320MHz, 5745-5825MHz	
Type of Modulation	802.11a/n (OFDM): QPSK, BPSK, 16QAM, 64QAM 802.11ac (OFDM): QPSK, BPSK, 16QAM, 64QAM,256QAM 802.11ax (OFDM): QPSK, BPSK, 16QAM, 64QAM,256QAM, 1024QAM	
Data Rate	802.11a: 6/9/12/18/24/36/48/54 Mbps; 802.11n: up to 300Mbps; 802.11ac: up to 867Mbps; 802.11ax: up to 1201Mbps	
Channel Separation	20MHz	
Antenna System		
Type of Antenna	PIFA	
Antenna Peak Gain (NUCBC02)	Bluetooth Peak Gain: 0.54dBi 2.4GHz Peak Gain: ANT 0(MAIN): 0.44dBi; ANT 1(AUX): 0.54dBi Band 1 Peak Gain: ANT 0(MAIN): 2.47dBi; ANT 1(AUX): -0.7dBi Band 4 Peak Gain: ANT 0(MAIN): 2.09dBi; ANT 1(AUX): 0.03dBi	
Antenna Peak Gain (NUCAL02)	Bluetooth Peak Gain: 1.47dBi 2.4GHz Peak Gain: ANT 0(MAIN): 1.23dBi; ANT 1(AUX): 1.47dBi Band 1 Peak Gain: ANT 0(MAIN): 3.28dBi; ANT 1(AUX): 4.39dBi Band 4 Peak Gain: ANT 0(MAIN): 7.53dBi; ANT 1(AUX): 5.95dBi	

### 2.3. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number
1.	Monitor#1	---	Lenovo	---	--
		Power Cord(3C): Unshielded, Detachable, 1.8m HDMI Cable: Shielded, Detachable, 1.8m			
2.	Monitor#2	---	DELL	P2421	--
		Power Cord(3C): Unshielded, Detachable, 1.8m HDMI Cable: Shielded, Detachable, 1.8m			
3.	USB Keyboard	ACS-EMC-K03R	DELL	SK-8120	CN-ODJ365-71616-2 BE-0DCE-A00
		USB Cable: Shielded, Undetachable, 2.0m			
4.	USB Mouse	ACS-EMC-M03R	DELL	M0C5UO	512023253
		USB Cable: Shielded, Undetachable, 1.8m			
5.	HDD#1	---	WD	WDBC3C0010BSL	WX51A794028Y
		Data Cable: Shielded, Detachable, 0.4m			
6.	HDD#2	---	WD	WDBC3C0020BSL	WXF1A19JNX5E
		Date Cable: Shielded, Detachable, 0.4m			
7.	HDD#3	ACS-EMC-HDD34	WD	WD My Book Studio	WCAV4302542
		Data Cable: Shielded, Detachable, 0.4m			
8.	HDD#4	ACS-EMC-HDD35	WD	WD My Book Studio	WCAV5D02502
		Date Cable: Shielded, Detachable, 0.4m			

### 2.4. Block Diagram of connection between EUT and simulators for power line conducted emission and radiated emission test:



**(EUT: Mini PC)**



**2.5. Test information**

A special software (Mass Production Kit V1.0.48) was used to control EUT work in Continuous TX mode (GFSK modulation), and select test channel.

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)	Channel	Frequency (MHz)
Tx Mode GFSK modulation	1,2	Low :CH 0	2402
	1,2	Middle: CH19	2440
	1,2	High: CH39	2480
Note: use the data rate which has the maximum power for the test.			

2.6. Test Facility

Site Description  
Name of Firm

: Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Kefeng Road, Science & Technology Park,  
Nanshan District , Shenzhen, Guangdong, China

EMC Lab.

- : Certificated by ISED, Canada  
Company Number: 5183A  
CAB identifier: CN0034  
Valid Date: Mar.31, 2024
- : Certificated by FCC, USA  
Designation No.: CN5022  
Valid Date: Mar.31, 2024
- : Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Valid Date: Mar.31, 2024

2.7. Measurement Uncertainty (95% confidence levels, k=2)

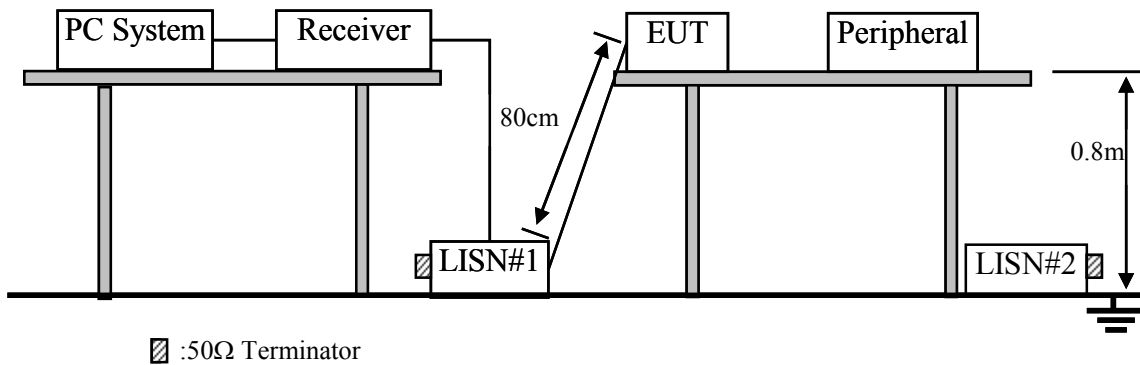
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	$\pm 2.6\text{dB}(150\text{kHz to } 30\text{MHz})$
Uncertainty for Radiation Emission test in 3m chamber	$\pm 3.8\text{dB}(30\sim 200\text{MHz, Polarization: H})$
	$\pm 3.8\text{dB}(30\sim 200\text{MHz, Polarization: V})$
	$\pm 4.0\text{dB}(200\text{M}\sim 1\text{GHz, Polarization: H})$
	$\pm 4.0\text{dB}(200\text{M}\sim 1\text{GHz, Polarization: V})$
Uncertainty for Radiation Emission test in 3m chamber(1GHz-25GHz)	$\pm 4.0\text{dB}(1\sim 6\text{GHz, Distance: } 3\text{m})$
	$\pm 4.0\text{dB}(6\sim 25\text{GHz, Distance: } 3\text{m})$
Uncertainty for Radiated Spurious Emission test in RF chamber	$\pm 3.7\text{dB}(30\text{MHz}\sim 1000\text{MHz})$
	$\pm 3.3\text{dB}(1\sim 26.5\text{GHz})$
Uncertainty for Conduction Spurious emission test	$\pm 2.0\text{dB}$
Uncertainty for Output power test	$\pm 0.8\text{dB}$
Uncertainty for Bandwidth test	$\pm 4.6\%$
Uncertainty for DC power test	$\pm 0.1\%$
Uncertainty for test site temperature and humidity	$\pm 0.6^\circ\text{C}$
	$\pm 3\%$

### 3. POWER LINE CONDUCTED EMISSION TEST

#### 3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	1# Shielding Room	AUDIX	N/A	N/A	Nov.09,22	5 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.01,23	1 Year
3.	L.I.S.N.#1	Rohde & Schwarz	ENV216	102160	Oct.08,22	1 Year
4.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1628-5	Apr.01,23	1 Year
5.	RF Cable	Eastsheep	RG223	190424	Oct.08,22	1 Year
6.	Terminator	Hubersuhner	50Ω	No.1	Apr.02,23	1 Year
7.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

#### 3.2. Block Diagram of Test Setup



#### 3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

- Notes: 1. \* Decreasing linearly with logarithm of frequency.  
 2. The lower limits shall apply at the transition frequencies.  
 3. Emission Level (dBμV) = Factor (L.I.S.N.) (dB) + Cable Loss (dB) + Reading (Receiver) (dBμV)

#### 3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

Mini PC (EUT)

Model No. : A Series  
 Serial No. : N/A

Support Equipment: As Tested Supporting System Details, in Section 2.3.

### 3.5. Operating Condition of EUT

Setup the EUT as shown as Section 3.2.

Turn on the power of EUT.

PC run test software to control EUT work in Tx mode.

### 3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via AC unit connected to the power mains through a line impedance stabilization network (L.I.S.N. #1). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

### 3.7. Power Line Conducted Emission Test Results

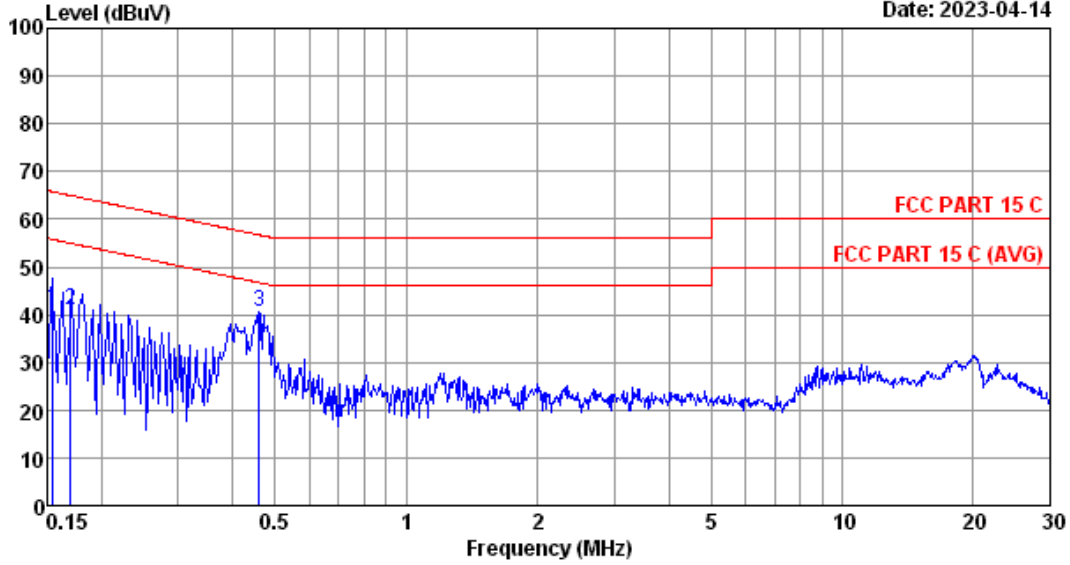
**PASS.** (All emissions not reported below are too low against the prescribed limits.)

**BLE-1Mbps:**

Data: 3

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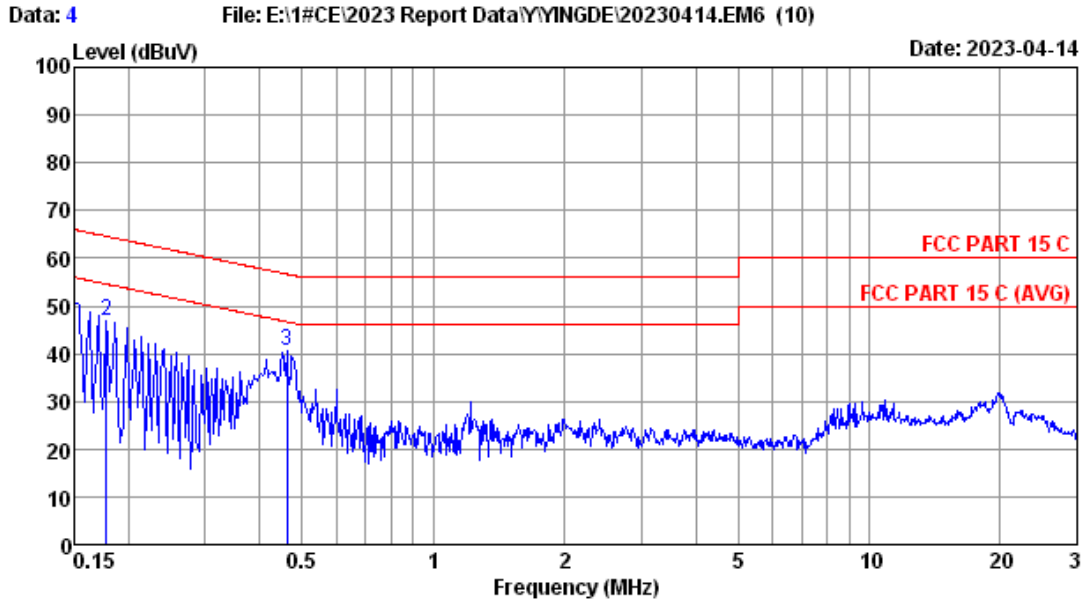
Date: 2023-04-14



Site no :1# CE Data No :3  
 Dis./Lisn :2022 ENV216-N  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE1M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.154	9.60	0.01	31.20	40.81	65.78	24.97	QP
2	0.170	9.60	0.01	31.20	40.81	64.96	24.15	QP
3	0.459	9.60	0.01	30.98	40.59	56.71	16.12	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



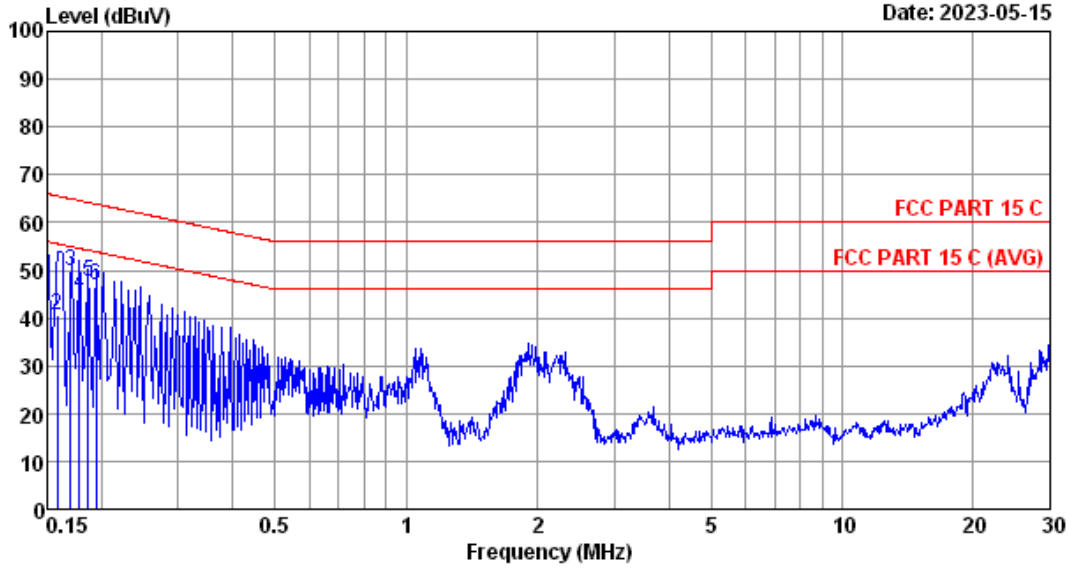
Site no :1# CE Data No :4  
 Dis./Lisn :2022 ENV216-L  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE1M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	9.60	0.01	41.00	50.61	66.00	15.39	QP
2	0.178	9.60	0.01	37.14	46.75	64.59	17.84	QP
3	0.461	9.60	0.01	31.10	40.71	56.67	15.96	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Data for metal appearance:

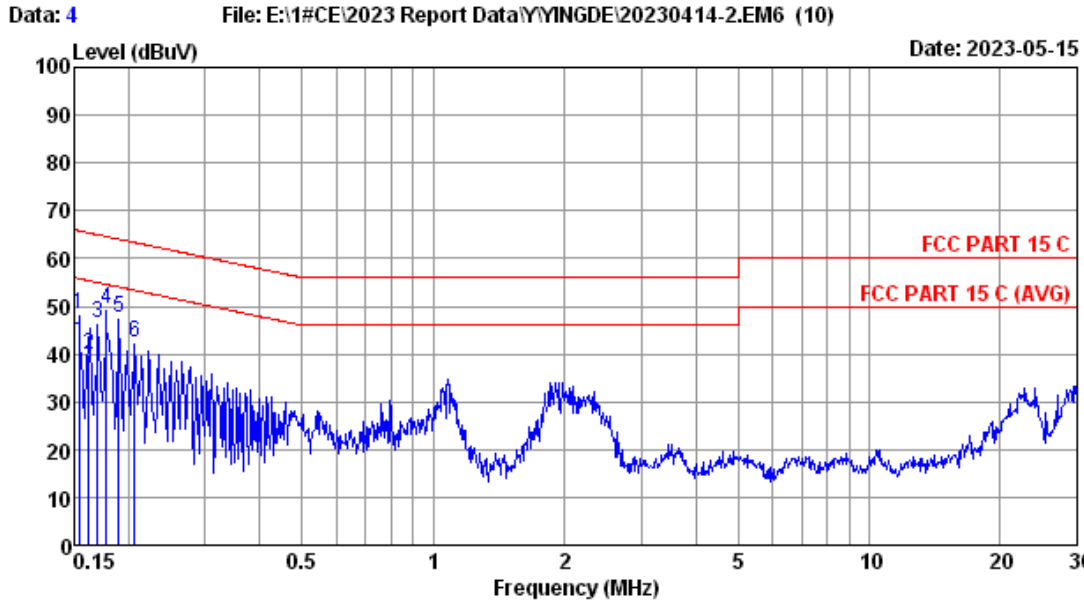
Data: 3 File: E:\1#CE\2023 Report Data\YINGDE\20230414-2.EM6 (10) Date: 2023-05-15



Site no :1# CE Data No :3  
 Dis./Lien :2022 ENV216-L  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE1M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	9.60	0.01	30.80	40.41	66.00	25.59	QP
2	0.158	9.60	0.01	30.90	40.51	65.57	25.06	QP
3	0.170	9.60	0.01	40.20	49.81	64.96	15.15	QP
4	0.178	9.60	0.01	35.30	44.91	64.58	19.67	QP
5	0.186	9.60	0.01	37.90	47.51	64.21	16.70	QP
6	0.194	9.60	0.01	37.20	46.81	63.86	17.05	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



Site no :1# CE Data No :4  
 Dis./Lisn :2022 ENV216-N  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE1M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.154	9.60	0.01	38.70	48.31	65.78	17.47	QP
2	0.162	9.60	0.01	30.10	39.71	65.36	25.65	QP
3	0.170	9.60	0.01	36.80	46.41	64.96	18.55	QP
4	0.178	9.60	0.01	39.80	49.41	64.58	15.17	QP
5	0.190	9.60	0.01	38.10	47.71	64.04	16.33	QP
6	0.206	9.60	0.01	33.00	42.61	63.37	20.76	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

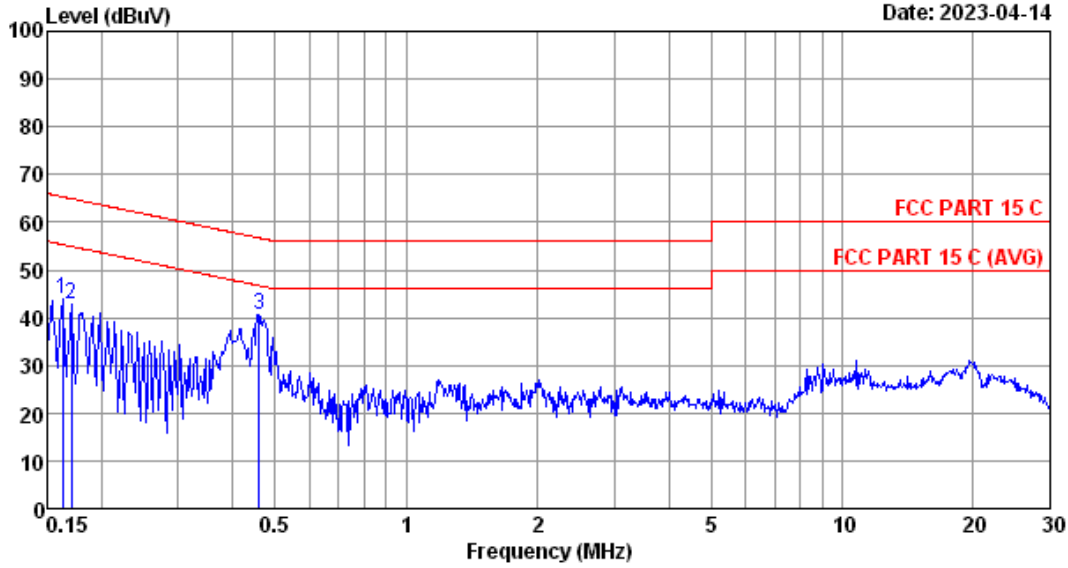


**BLE-2Mbps:**

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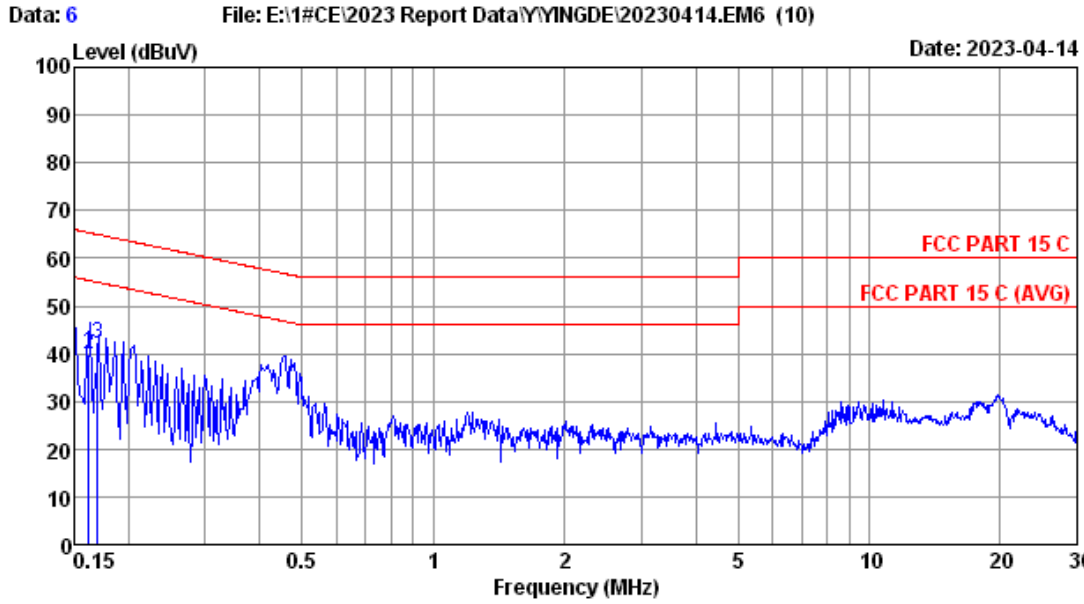
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Site no :1# CE Data No :5  
 Dis./Lien :2022 ENV216-L  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE2M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	9.60	0.01	34.39	44.00	65.34	21.34	QP
2	0.170	9.60	0.01	33.08	42.69	64.94	22.25	QP
3	0.459	9.60	0.01	31.11	40.72	56.71	15.99	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



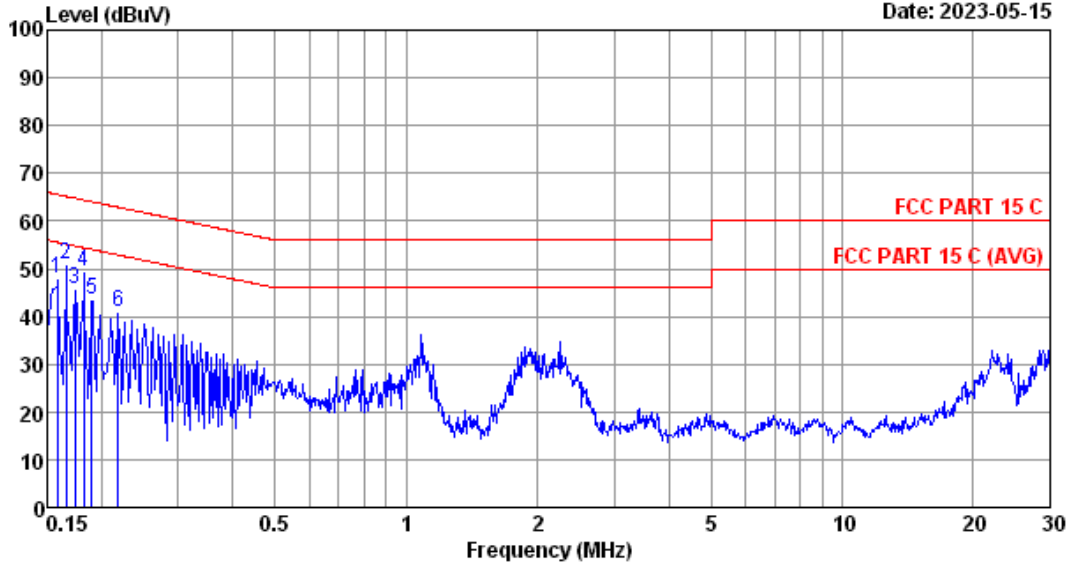
Site no :1# CE Data No :6  
 Dis./Lisn :2022 ENV216-N  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE2M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	9.60	0.01	31.00	40.61	66.00	25.39	QP
2	0.162	9.60	0.01	30.20	39.81	65.36	25.55	QP
3	0.170	9.60	0.01	32.30	41.91	64.96	23.05	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Data for metal appearance:

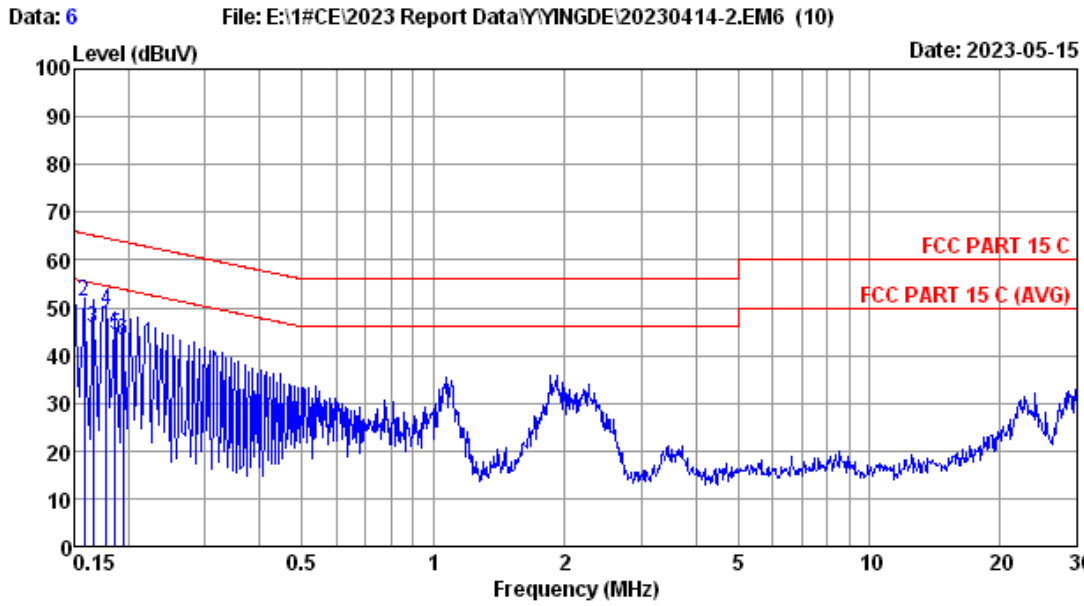
Data: 5 File: E:\1#CE\2023 Report Data\YINGDE\20230414-2.EM6 (10) Date: 2023-05-15



Site no :1# CE Data No :5  
 Dis./Lisn :2022 ENV216-N  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE2M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.158	9.60	0.01	38.20	47.81	65.57	17.76	QP
2	0.166	9.60	0.01	41.30	50.91	65.16	14.25	QP
3	0.174	9.60	0.01	36.20	45.81	64.77	18.96	QP
4	0.182	9.60	0.01	39.70	49.31	64.39	15.08	QP
5	0.190	9.60	0.01	34.10	43.71	64.04	20.33	QP
6	0.218	9.60	0.01	31.50	41.11	62.89	21.78	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



Site no :1# CE Data No :6  
 Dis./Lisn :2022 ENV216-L  
 Limit :FCC PART 15 C  
 Env./Ins. :23.5°C/52% Engineer :Sucy  
 Power Rating :AC 120V/60Hz  
 Test Mode :BLE2M TX Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	9.60	0.01	39.10	48.71	66.00	17.29	QP
2	0.158	9.60	0.01	41.70	51.31	65.57	14.26	QP
3	0.166	9.60	0.01	36.00	45.61	65.16	19.55	QP
4	0.178	9.60	0.01	39.90	49.51	64.58	15.07	QP
5	0.186	9.60	0.01	34.60	44.21	64.21	20.00	QP
6	0.194	9.60	0.01	33.60	43.21	63.86	20.65	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

## 4. RADIATED EMISSION MEASUREMENT

### 4.1. Test Equipments

Frequency range below 30MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber(NSA)	AUDIX	N/A	N/A	Aug.12,22	5 Year
2.	10m Chamber(SE)	AUDIX	N/A	N/A	Sep.16,22	5 Year
3.	Loop Antenna	Schwarzbeck	FMZB 1513-60B	1513-60B015	Feb.08,23	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR3	102891	Oct.10,22	1 Year
5.	RF Cable	SPUMA	CFD400NL-LW	NO.4	Apr.02,23	1 Year
6.	Amplifier	EMCI	EMC9135	980348	Feb.23,23	1 Year
7.	Signal Analyzer	Rohde & Schwarz	FSV30	103669	Oct.09,22	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397221	Apr.02,23	1 Year
9.	Coaxial Switch	Anritsu	MP59B	6201397220	Apr.02,23	1 Year
10.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

Frequency range: 30~1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3m Chamber(NSA)	AUDIX	N/A	N/A	Aug.11,22	5 Year
2.	3m Chamber(SE)	AUDIX	N/A	N/A	Sep.16,22	5 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.06,22	1 Year
4.	Signal Analyzer	Rohde & Schwarz	FSV30	103670	Apr.01,23	1 Year
5.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	01317	Oct.28,22	1 Year
6.	NSA Cable	HUBER+SUHNER	CFD400NL-LW	No.3	Oct.09,22	1 Year
7.	Coaxial Switch	Anritsu	MP59B	6201397223	Apr.06,22	1 Year
8.	EMI Test Receiver	Rohde & Schwarz	ESR3	101931	Apr.06,22	1 Year
9.	Amplifier	HP	8447D	2944A11159	Apr.06,22	1 Year
10.	Coaxial Switch	Anritsu	MP59B	6201397223	Apr.02,23	1 Year
11.	EMI Test Receiver	Rohde & Schwarz	ESR3	101931	Apr.01,23	1 Year
12.	Amplifier	HP	8447D	2944A11159	Apr.02,23	1 Year
13.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

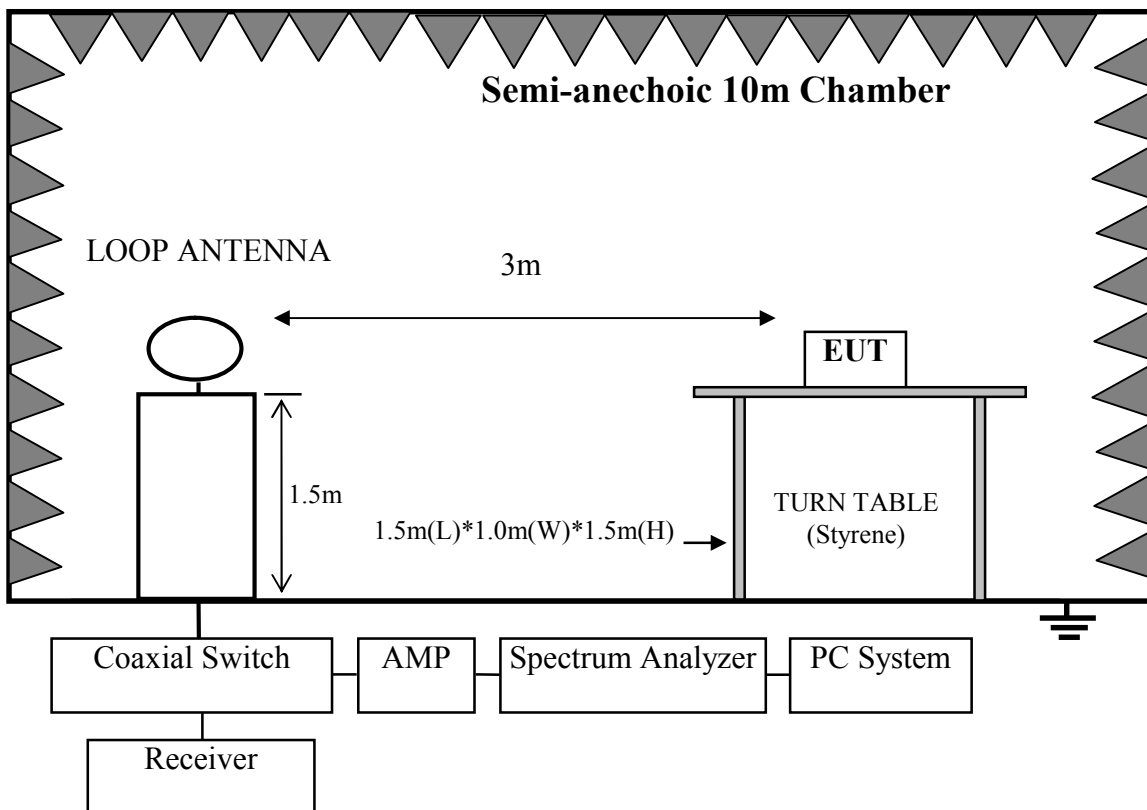
Frequency range: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3mChamber(Svswr)	AUDIX	N/A	N/A	Aug.09,22	5 Year
2.	3mChamber(SE)	AUDIX	N/A	N/A	Sep.16,22	5 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.06,22	1 Year
4.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.01,23	1 Year
5.	Amplifier	Agilent	83017A	MY53270084	Oct.09,22	1 Year
6.	RF Cable	EMCI	EMC104-SM-S M-15000	190407	Jul.01,22	1 Year
7.	Test Software	AUDIX	e3	6.100913a	N/A	N/A
8.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	Aug.12,22	1 Year

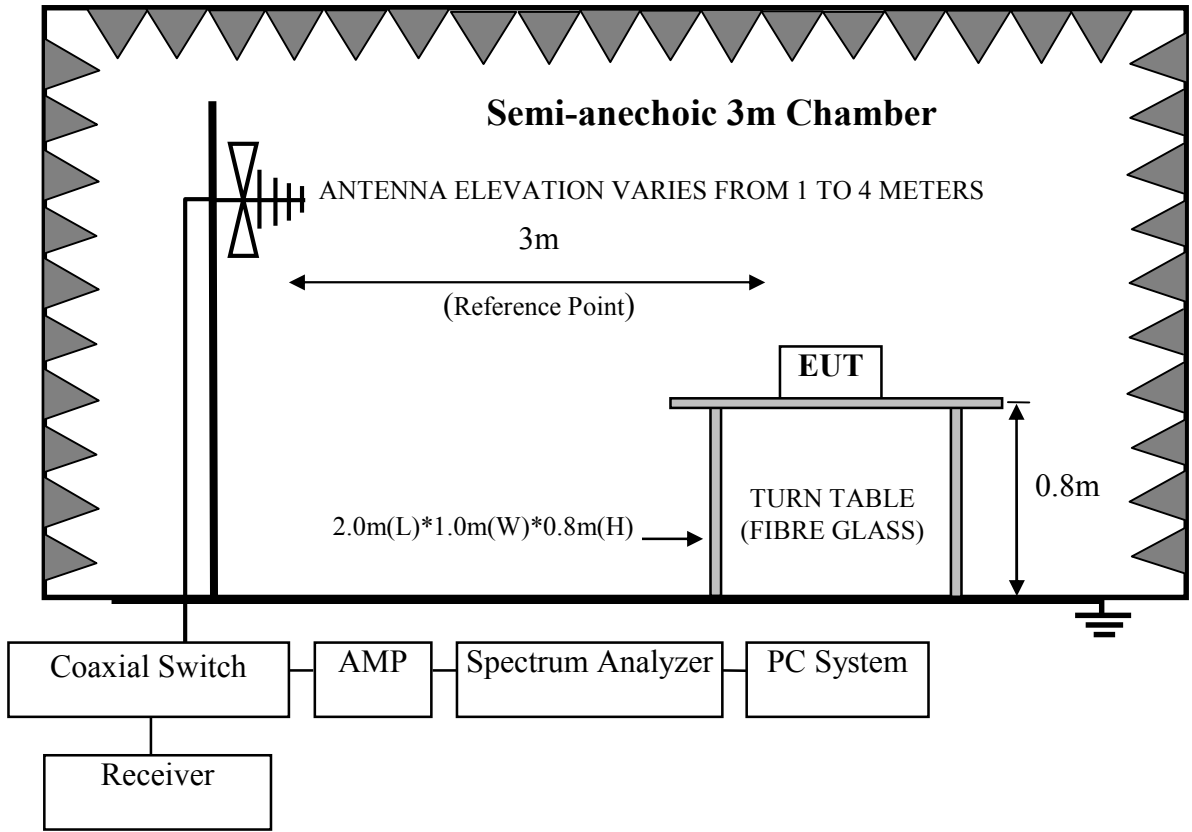
Note: N/A means Not applicable.

4.2. Block Diagram of Test Setup

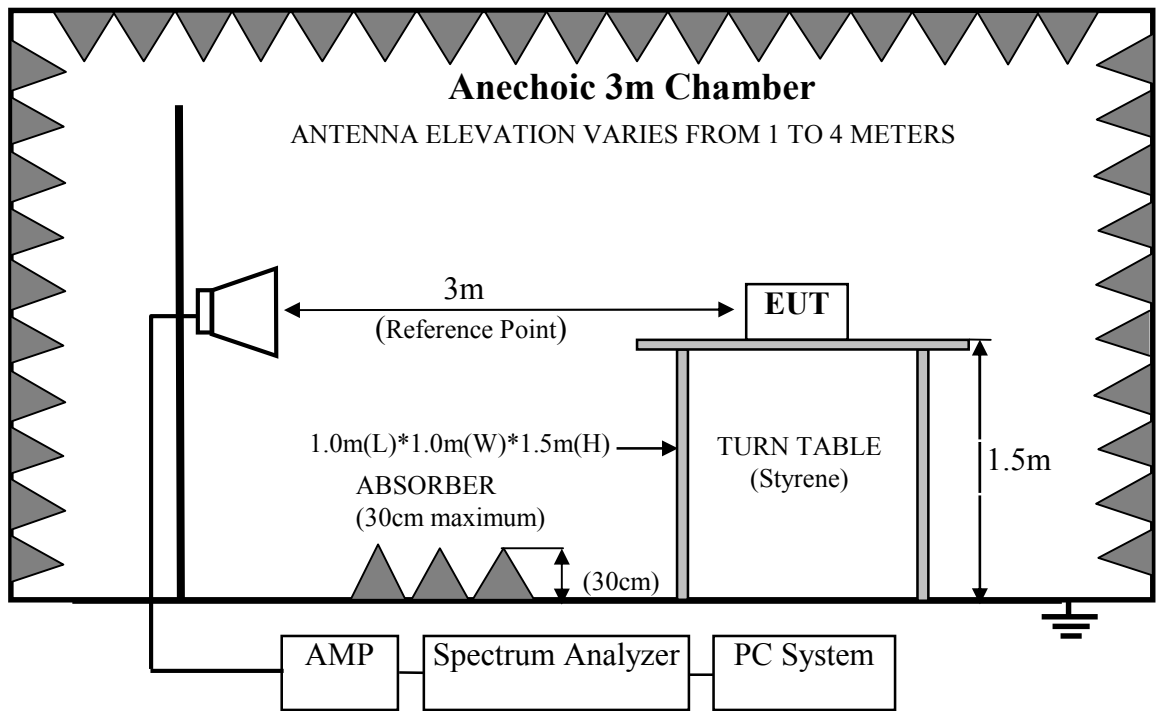
For frequency below 30MHz



For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz



4.3. Radiated Emission Limits Standard:

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000MHz	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

- Remark :
- (1) Emission Level ( $\text{dB}\mu\text{V}/\text{m}$ ) = Reading (Receiver) ( $\text{dB}\mu\text{V}$ ) + Antenna Factor ( $\text{dB}/\text{m}$ ) + Cable Loss ( $\text{dB}$ )  
 Emission Level ( $\text{dB}\mu\text{V}/\text{m}$ ) = Reading (Spectrum) ( $\text{dB}\mu\text{V}$ ) + Antenna Factor ( $\text{dB}/\text{m}$ ) – Amp Factor ( $\text{dB}$ ) + Cable Loss ( $\text{dB}$ )(above 1000MHz)
  - (2) The smaller limits shall apply at the cross point between two frequency bands.
  - (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.
  - (4) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

Mini PC (EUT)

- Model Number : A Series
- Serial Number : N/A

4.5. Operating Condition of EUT

Setup the EUT and simulator as shown as Section 4.2.

Turn on the power of all equipments.

Let EUT work in BLE Tx mode.

4.6. Test Procedure

**Frequency below 30MHz:**

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)\*2.4m(W)\*0.3m(H) on the ground . The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horn antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10 on radiated emission Test.



This test was performed with EUT in X, Y, Z position, and the worse case was found reported in report.

The bandwidth of the EMI test receiver is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz.

This device is pulse Modulated, a duty cycle factor was used to calculated average level based measured peak level.

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

#### 4.7. Radiated Emission Test Results

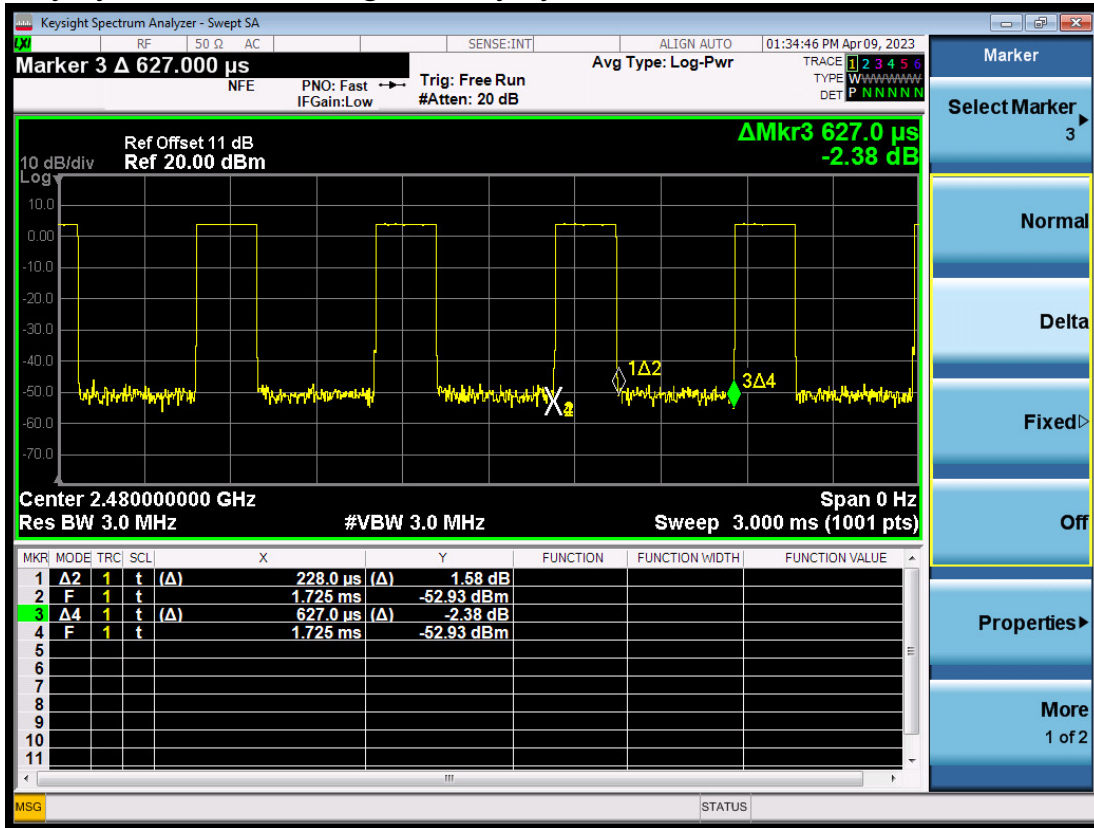
**PASS.**

All the emissions from 30MHz to 25GHz were comply with the 15.209 Limit.

Note: The duty cycle factor for calculate average level is 1Mbps -8.79dB for BLE, 2Mbps -9.10dB for BLE and average limit is 20dB below peak limit, so if peak measured level comply with average limit, the average level was deemed to comply with average limit.

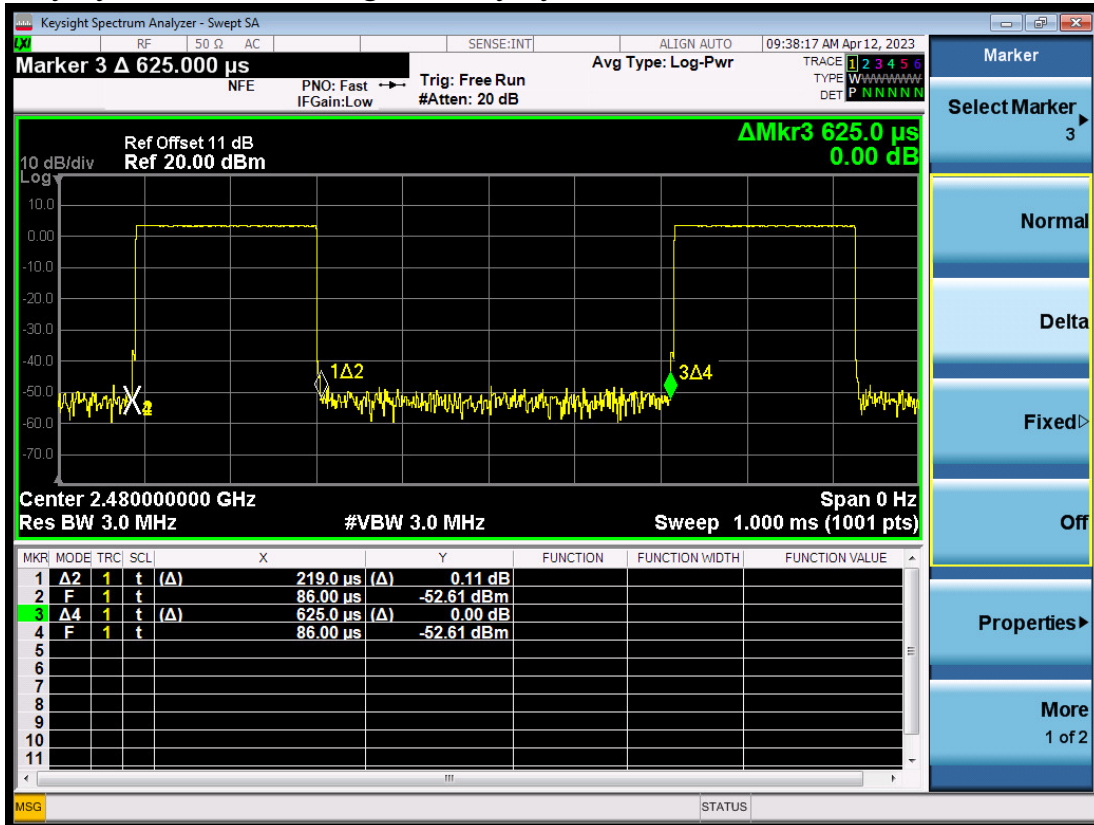
1Mbps:

$$\text{Duty cycle factor} = 20\log (1/\text{duty cycle}) = -8.79\text{dB}$$

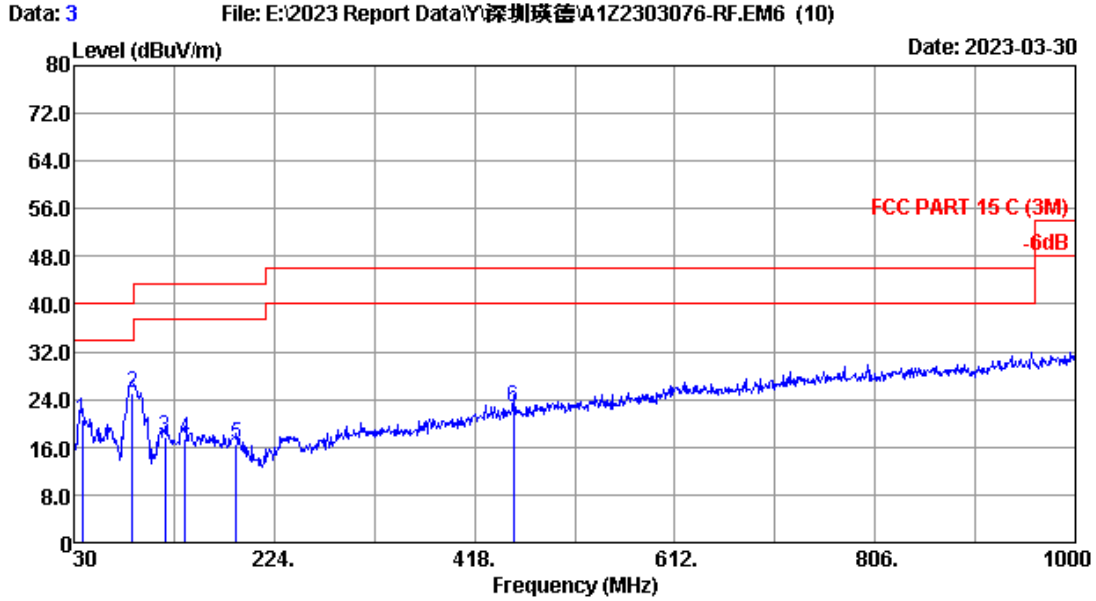


2Mbps:

$$\text{Duty cycle factor} = 20\log (1/\text{duty cycle}) = -9.10\text{dB}$$



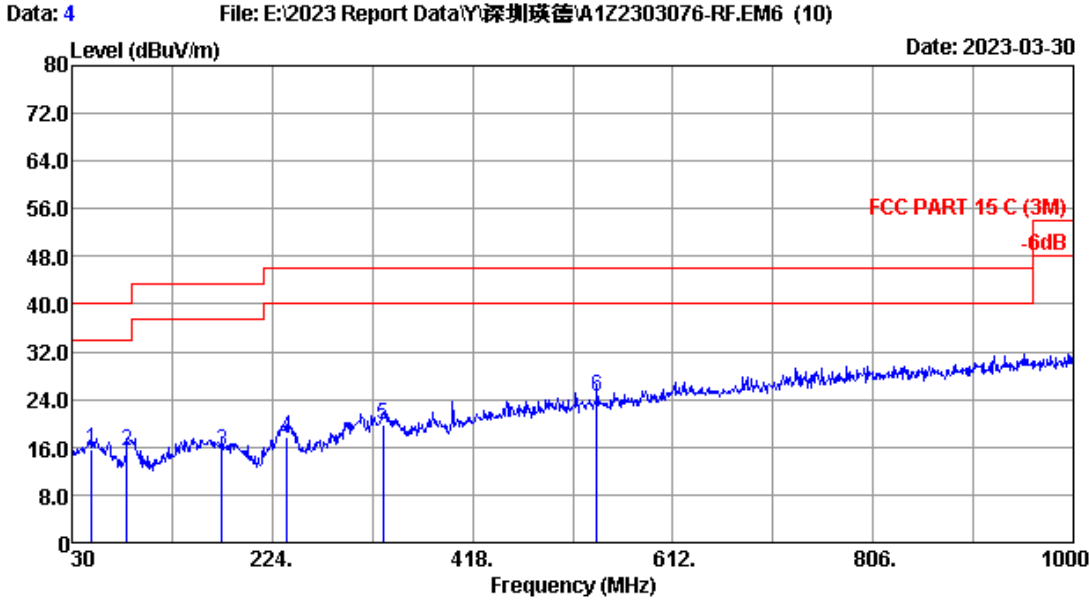
Frequency: 30MHz~1GHz  
1Mbps:



Site no. : 3m Chamber Data no. : 3  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 23.4°C/53% Engineer : Abel  
 Test Mode : BLE 1M TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	37.760	19.20	0.61	0.71	20.52	40.00	19.48	QP
2	86.260	13.80	0.95	10.35	25.10	40.00	14.90	QP
3	118.270	16.50	1.09	-0.01	17.58	43.50	25.92	QP
4	137.670	18.70	1.17	-2.42	17.45	43.50	26.05	QP
5	187.140	16.80	1.37	-1.77	16.40	43.50	27.10	QP
6	455.830	23.18	2.24	-2.59	22.83	46.00	23.17	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

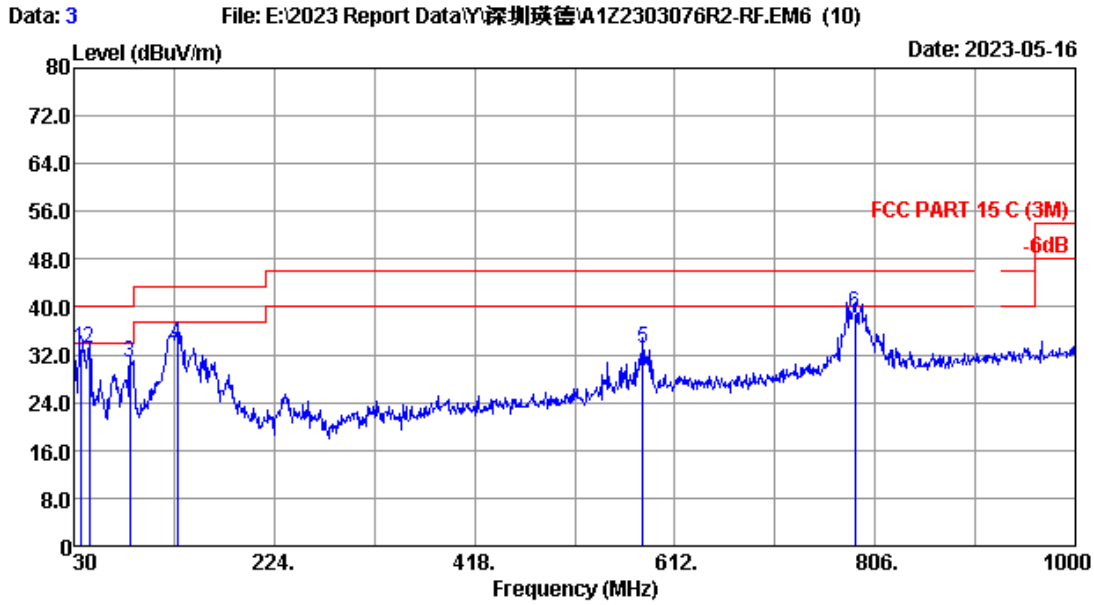


Site no. : 3m Chamber Data no. : 4  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 23.4\*C/53% Engineer : Abel  
 Test Mode : BLE 1M TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	49.400	19.70	0.70	-4.77	15.63	40.00	24.37	QP
2	83.350	14.10	0.93	0.30	15.33	40.00	24.67	QP
3	175.500	18.10	1.33	-3.98	15.45	43.50	28.05	QP
4	238.550	17.50	1.55	-1.22	17.83	46.00	28.17	QP
5	331.670	20.20	1.88	-2.18	19.90	46.00	26.10	QP
6	538.280	24.12	2.49	-2.18	24.43	46.00	21.57	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

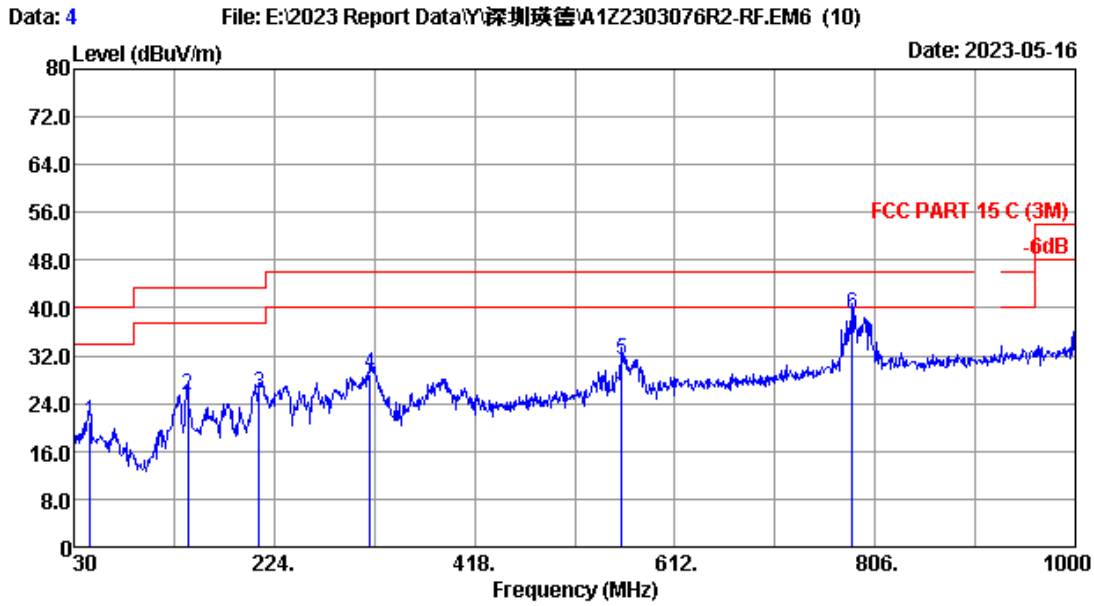
Data for metal appearance:



Site no. : 3m Chamber Data no. : 3  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol.: VERTICAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 26.4°C/58% Engineer : Abel  
 Test Mode : BLE1M TX Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	36.790	19.00	0.60	13.60	33.20	40.00	6.80	QP
2	44.550	19.70	0.66	12.69	33.05	40.00	6.95	QP
3	84.320	14.00	0.94	15.69	30.63	40.00	9.37	QP
4	129.910	17.80	1.14	15.07	34.01	43.50	9.49	QP
5	580.960	24.92	2.61	5.42	32.95	46.00	13.05	QP
6	786.600	28.00	3.16	7.71	38.87	46.00	7.13	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

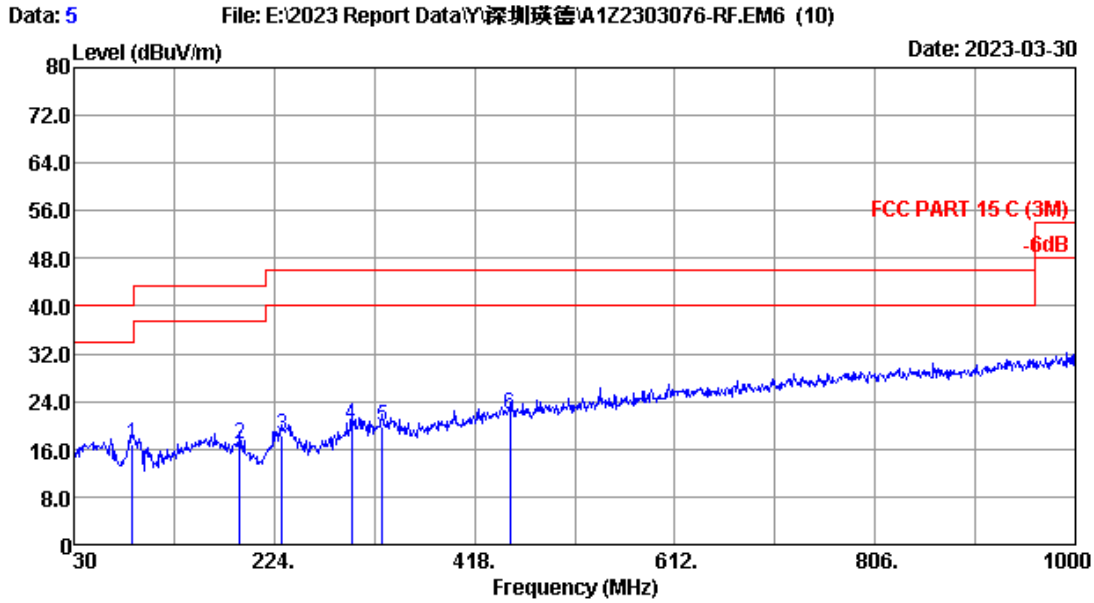


Site no. : 3m Chamber Data no. : 4  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 26.4\*C/58% Engineer : Abel  
 Test Mode : BLE1M TX Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	45.520	19.80	0.67	0.45	20.92	40.00	19.08	QP
2	140.580	19.00	1.19	5.22	25.41	43.50	18.09	QP
3	209.450	15.70	1.45	8.44	25.59	43.50	17.91	QP
4	317.120	19.98	1.84	6.99	28.81	46.00	17.19	QP
5	560.590	24.45	2.55	4.23	31.23	46.00	14.77	QP
6	783.690	27.98	3.15	7.71	38.84	46.00	7.16	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

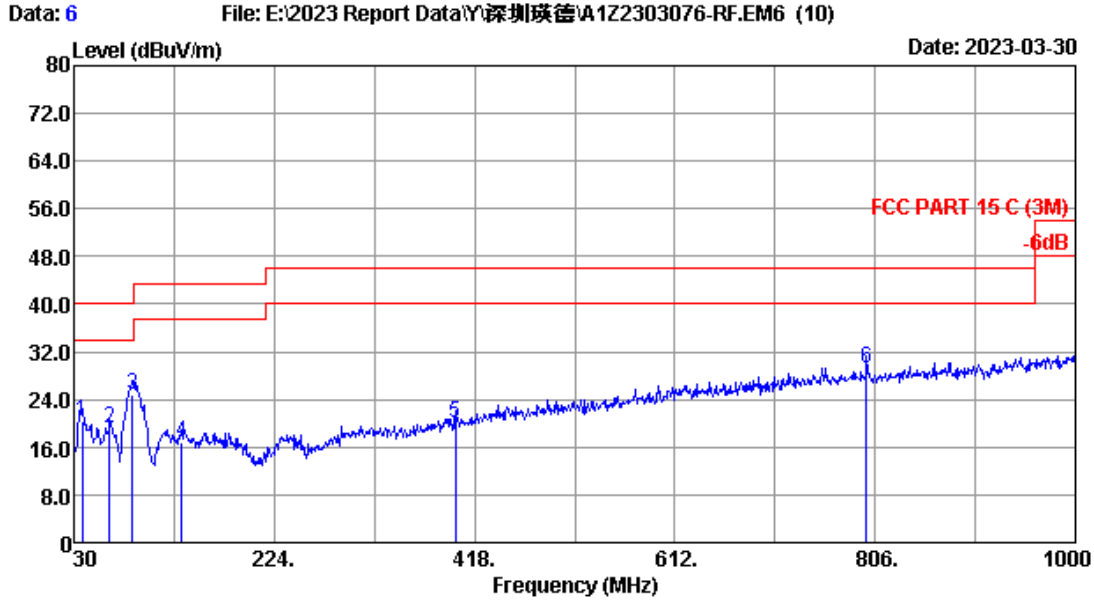
2Mbps:



Site no. : 3m Chamber Data no. : 5  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol.: HORIZONTAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 23.4\*C/53% Engineer : Abel  
 Test Mode : BLE 2M TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	86.260	13.80	0.95	2.09	16.84	40.00	23.16	QP
2	191.020	16.60	1.39	-1.04	16.95	43.50	26.55	QP
3	231.760	16.62	1.53	0.06	18.21	46.00	27.79	QP
4	298.690	19.36	1.79	-0.95	20.20	46.00	25.80	QP
5	328.760	20.20	1.87	-2.32	19.75	46.00	26.25	QP
6	451.950	23.14	2.23	-3.43	21.94	46.00	24.06	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 6  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 23.4\*C/53% Engineer : Abel  
 Test Mode : BLE 2M TX

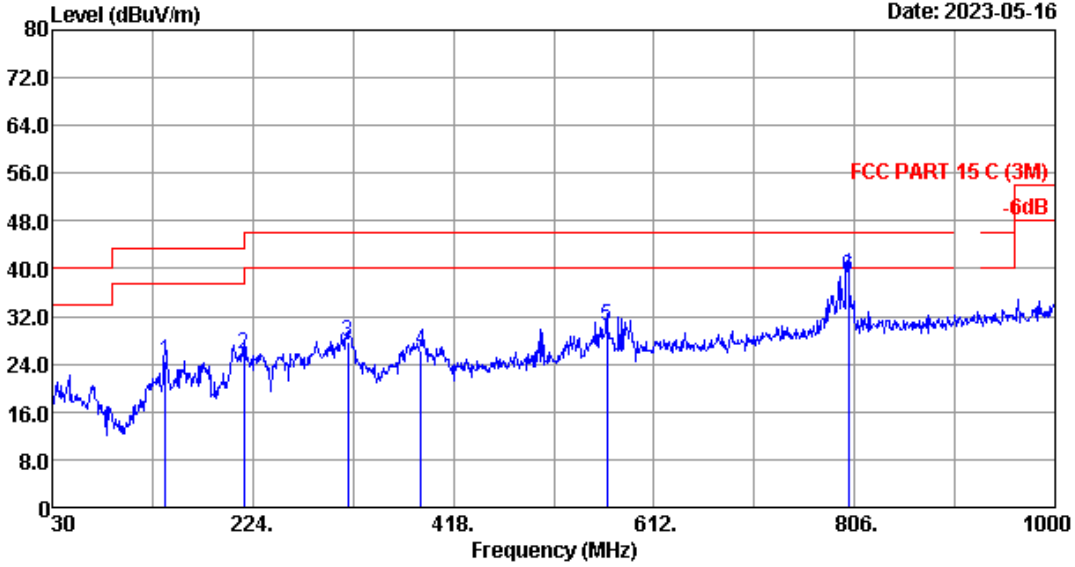
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	37.760	19.20	0.61	0.61	20.42	40.00	19.58	QP
2	64.920	18.50	0.81	-0.25	19.06	40.00	20.94	QP
3	86.260	13.80	0.95	10.17	24.92	40.00	15.08	QP
4	134.760	18.50	1.16	-2.74	16.92	43.50	26.58	QP
5	399.570	21.50	2.06	-3.39	20.17	46.00	25.83	QP
6	797.270	28.18	3.19	-2.03	29.34	46.00	16.66	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Data for metal appearance:

Data: 5 File: E:\2023 Report Data\Y\深圳瑞德\A1Z2303076R2-RF.EM6 (10) Date: 2023-05-16

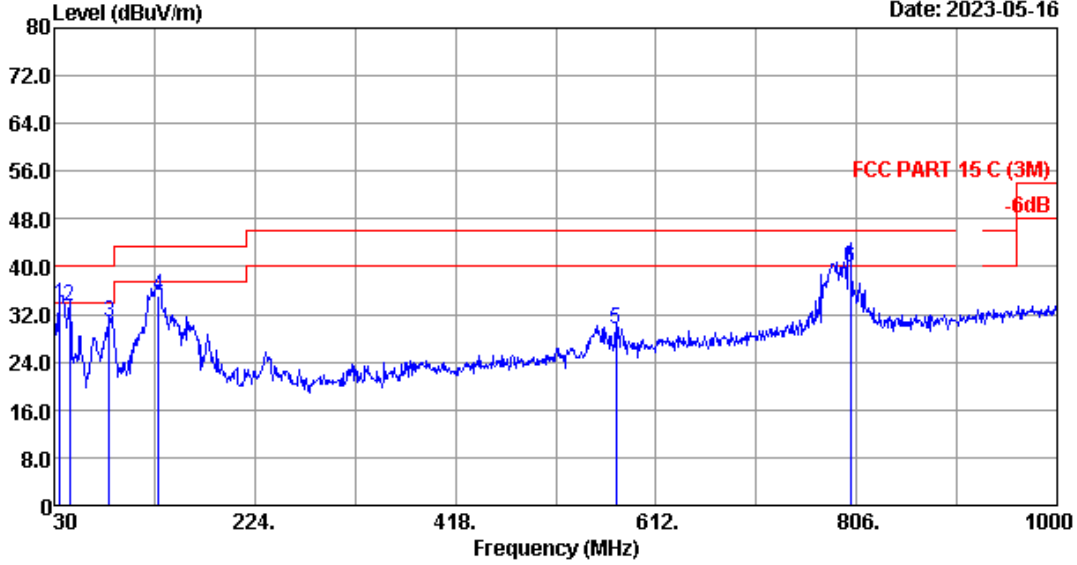


Site no. : 3m Chamber Data no. : 5  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 26.4°C/58% Engineer : Abel  
 Test Mode : BLE2M TX Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	139.610	19.00	1.18	4.20	24.38	43.50	19.12	QP
2	215.270	15.80	1.47	8.29	25.56	43.50	17.94	QP
3	316.150	19.94	1.83	5.89	27.66	46.00	18.34	QP
4	386.960	21.34	2.03	2.80	26.17	46.00	19.83	QP
5	566.410	24.70	2.56	3.15	30.41	46.00	15.59	QP
6	800.180	28.30	3.20	7.04	38.54	46.00	7.46	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

Data: 6 File: E:\2023 Report Data\Y\深圳瑞德\A1Z2303076R2-RF.EM6 (10) Date: 2023-05-16

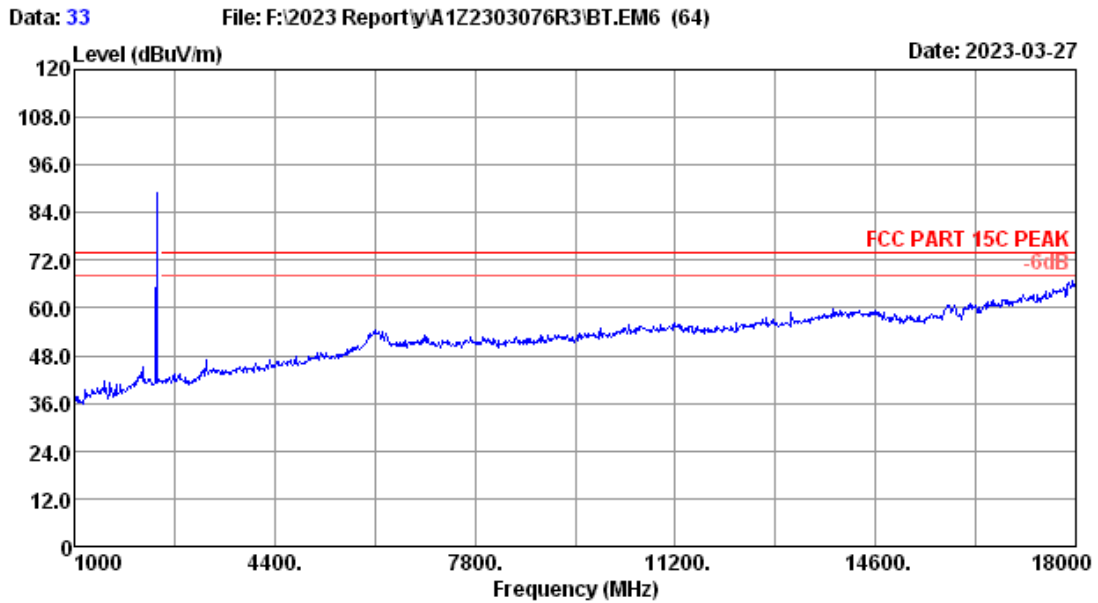


Site no. : 3m Chamber Data no. : 6  
 Dis. / Ant. : 3m 2022 VULB 9168-01317 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 26.4\*C/58% Engineer : Abel  
 Test Mode : BLE2M TX Mode

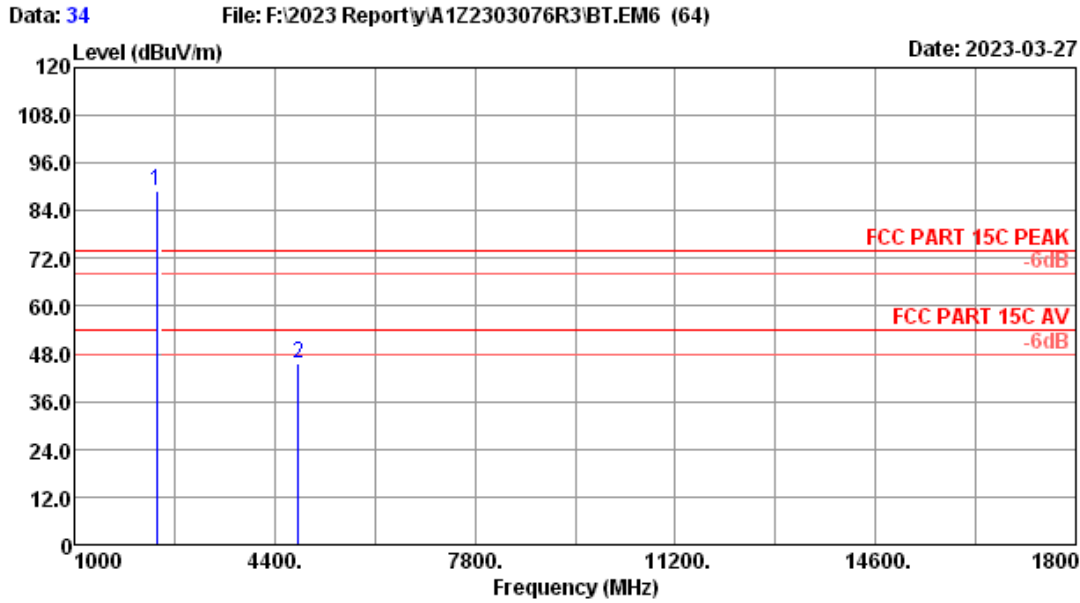
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	35.820	18.90	0.60	14.25	33.75	40.00	6.25	QP
2	44.550	19.70	0.66	13.01	33.37	40.00	6.63	QP
3	83.350	14.10	0.93	15.66	30.69	40.00	9.31	QP
4	130.880	17.90	1.15	15.98	35.03	43.50	8.47	QP
5	573.200	24.76	2.58	2.05	29.39	46.00	16.61	QP
6	799.777	28.30	3.20	8.42	39.92	46.00	6.08	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz  
1Mbps:



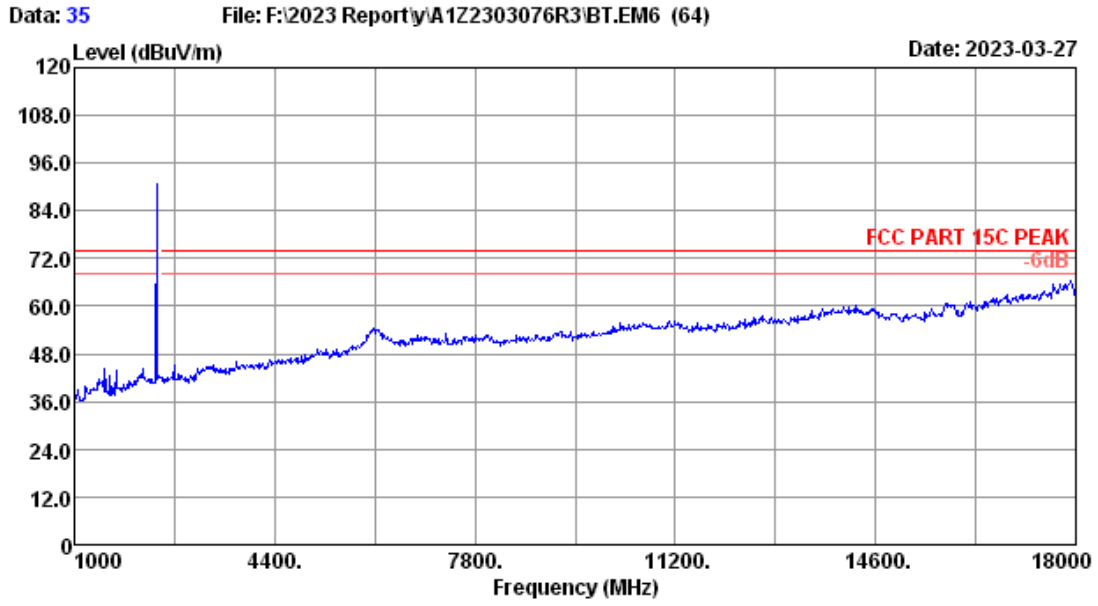
Site no.	: 3m Chamber	Data no.	: 33
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2402MHz TX		



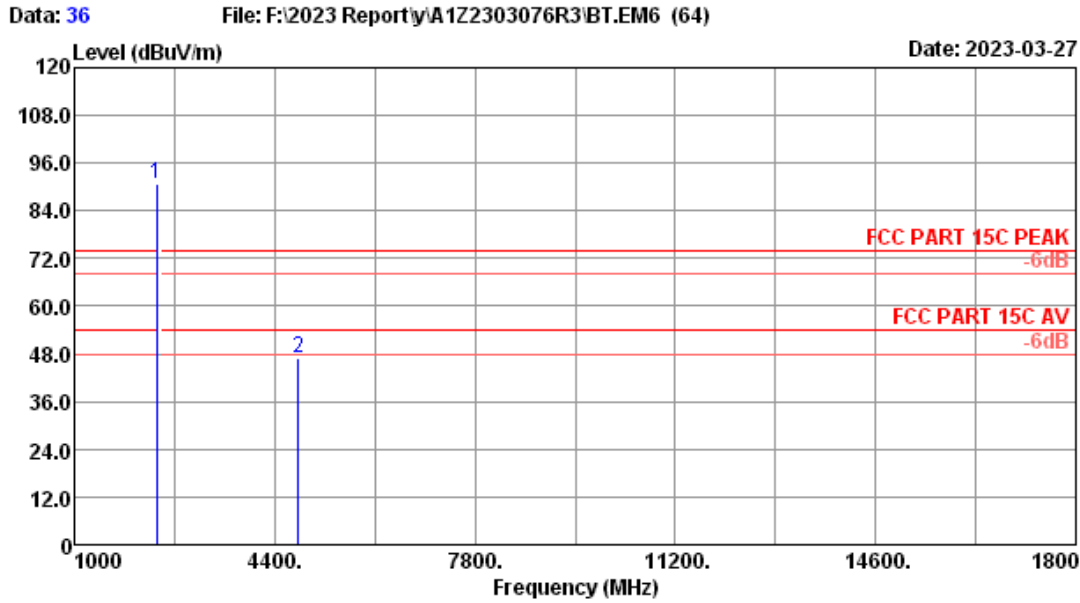
Site no. : 3m Chamber Data no. : 34  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE1M 2402MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	93.29	34.36	88.92	-----	-----	Peak
2	4804.00	31.20	3.33	44.94	33.68	45.79	74.00	28.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



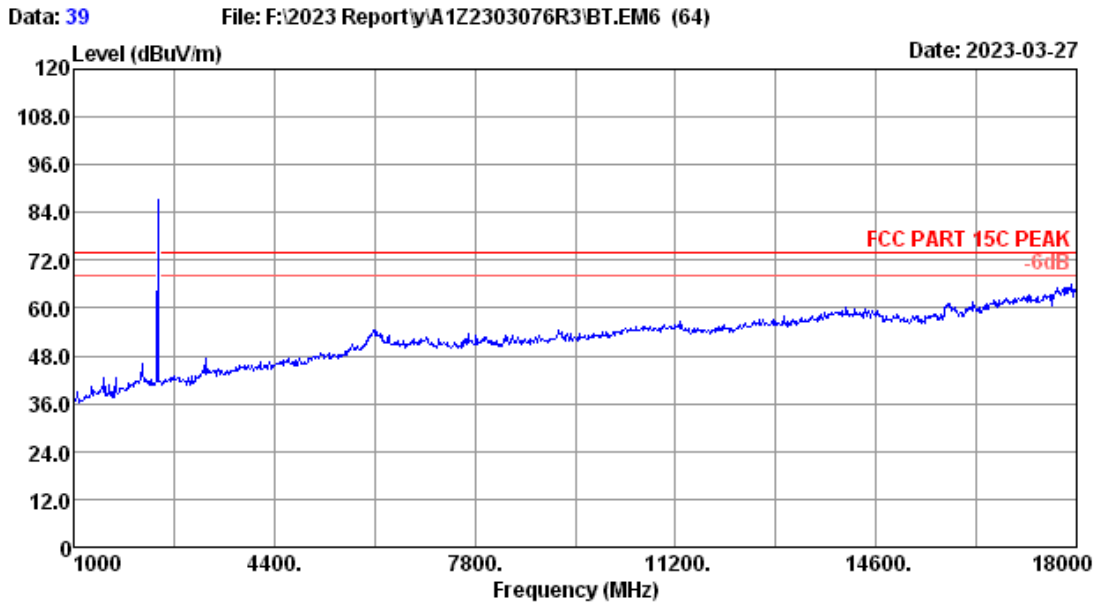
Site no.	: 3m Chamber	Data no.	: 35
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2402MHz TX		



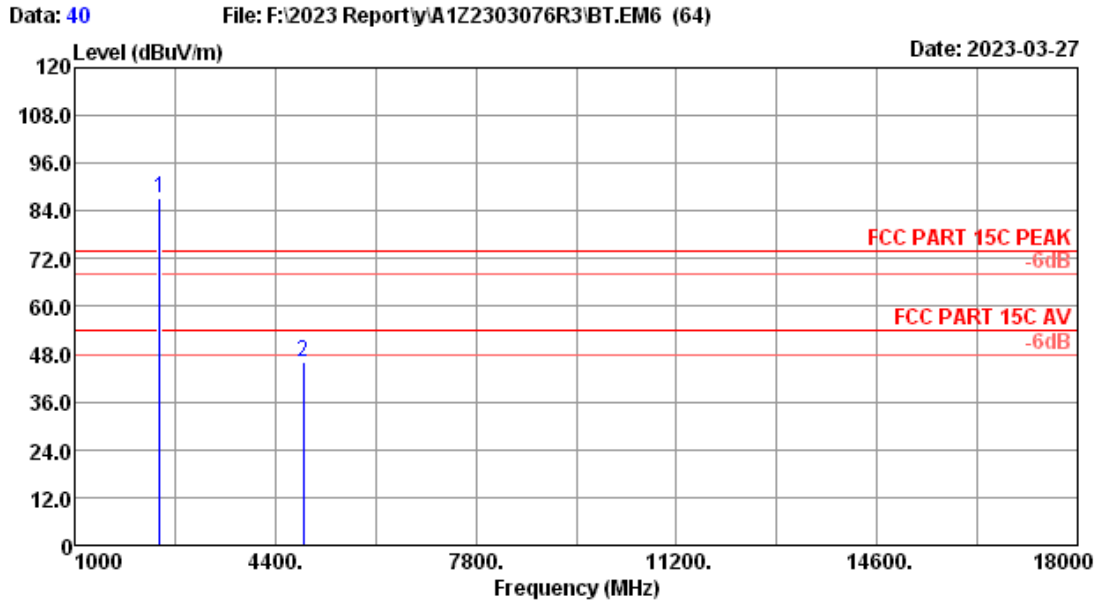
Site no. : 3m Chamber Data no. : 36  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE1M 2402MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	95.34	34.36	90.97	-----	-----	Peak
2	4804.00	31.20	3.33	45.96	33.68	46.81	74.00	27.19	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: RF Chamber	Data no.	: 39
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK	Pressure	: 101.7kPa
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Power Rating	:		
Test Mode	: BLE1M 2440MHz TX		
	:		

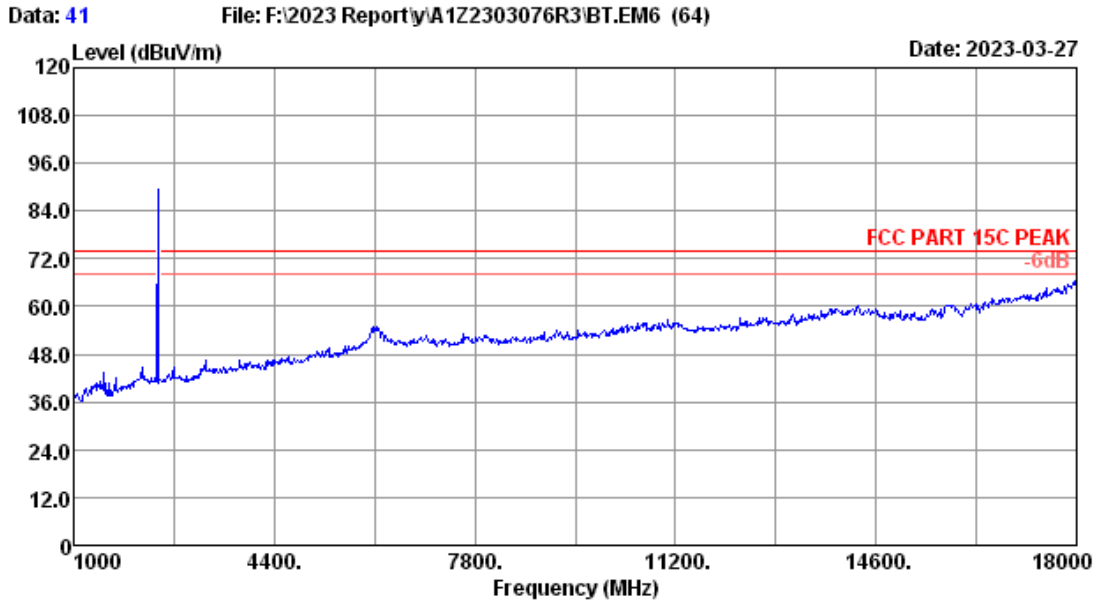


Site no. : RF Chamber Data no. : 40  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pressure : 101.7kPa  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Power Rating :  
 Test Mode : BLE1M 2440MHz TX

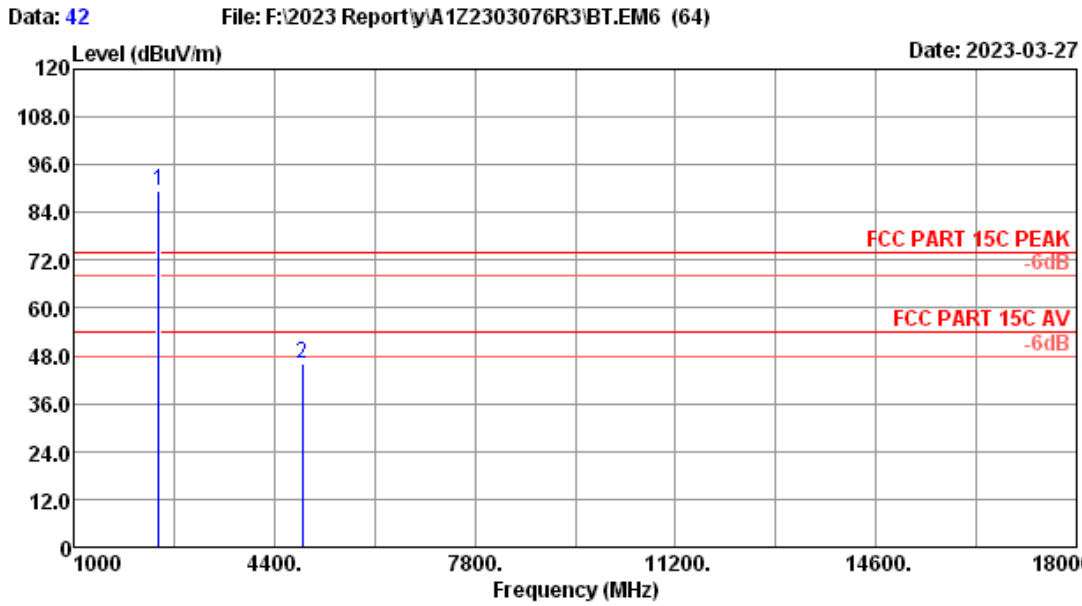
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	91.58	34.36	87.34	-----	-----	Peak
2	4880.00	31.43	3.35	44.80	33.69	45.89	74.00	28.11	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.





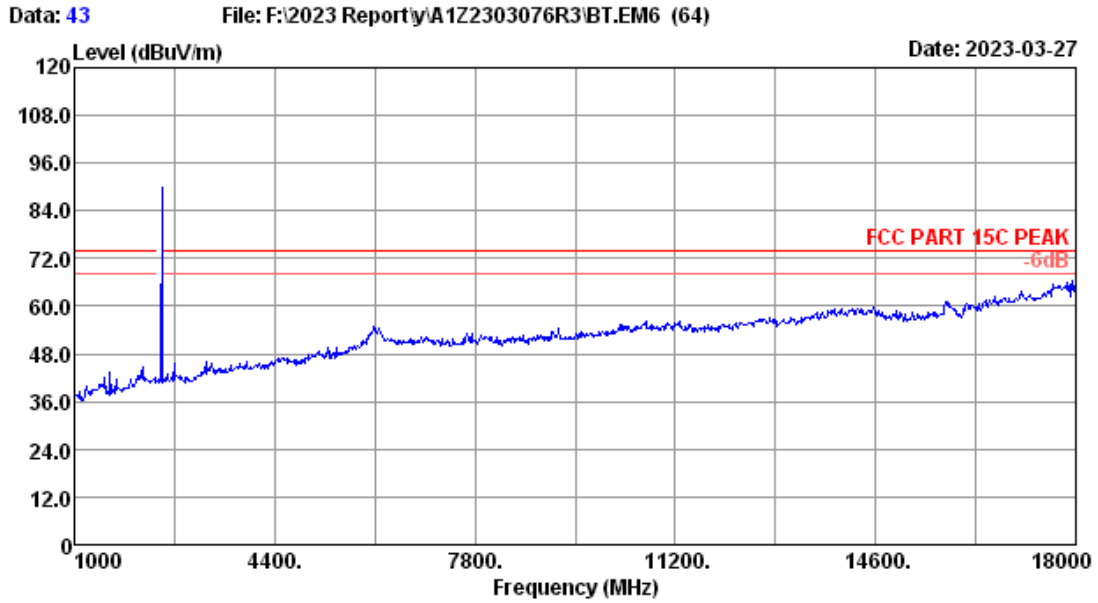
Site no.	: RF Chamber	Data no.	: 41
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK	Pressure	: 101.7kPa
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Power Rating	:		
Test Mode	: BLE1M 2440MHz TX		
	:		



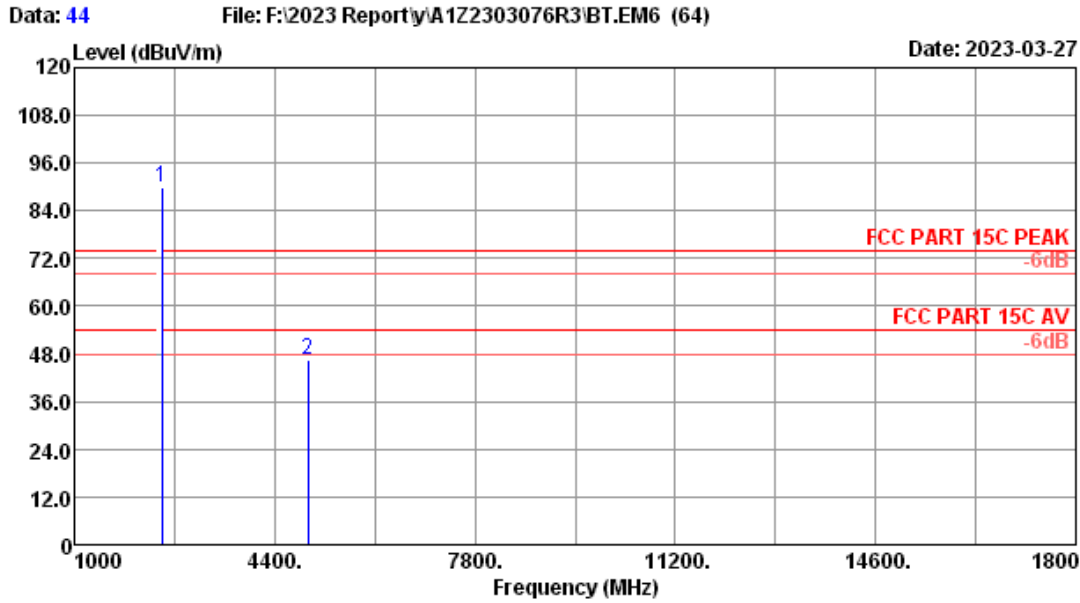
Site no. : RF Chamber Data no. : 42  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pressure : 101.7kPa  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Power Rating :  
 Test Mode : BLE1M 2440MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	93.76	34.36	89.52	74.00	15.52	Peak
2	4880.00	31.43	3.35	45.17	33.69	46.26	48.00	-1.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



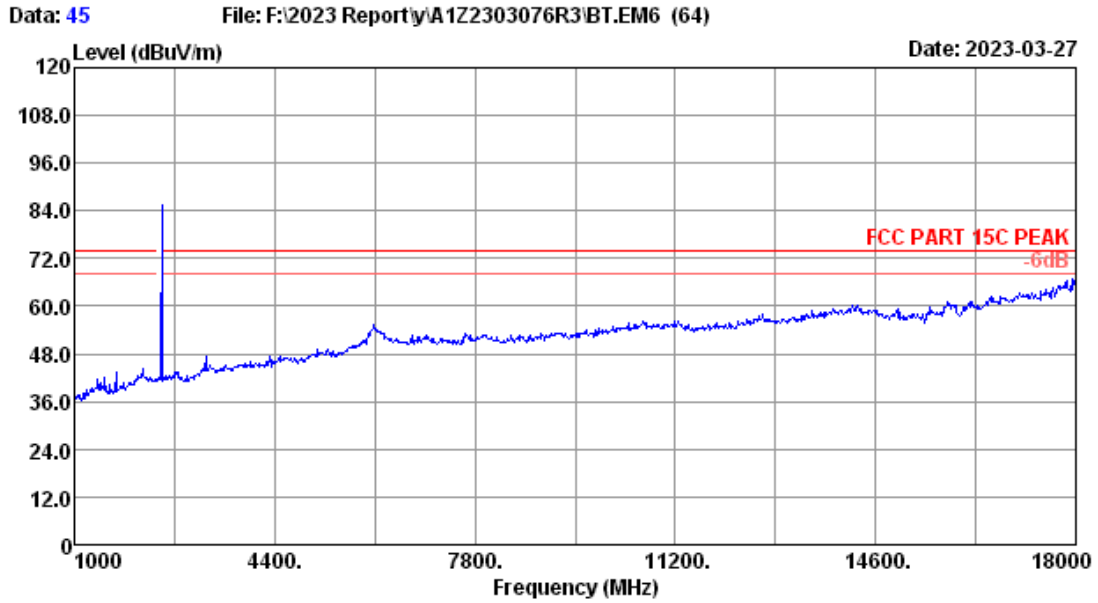
Site no.	: 3m Chamber	Data no.	: 43
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2480MHz TX		



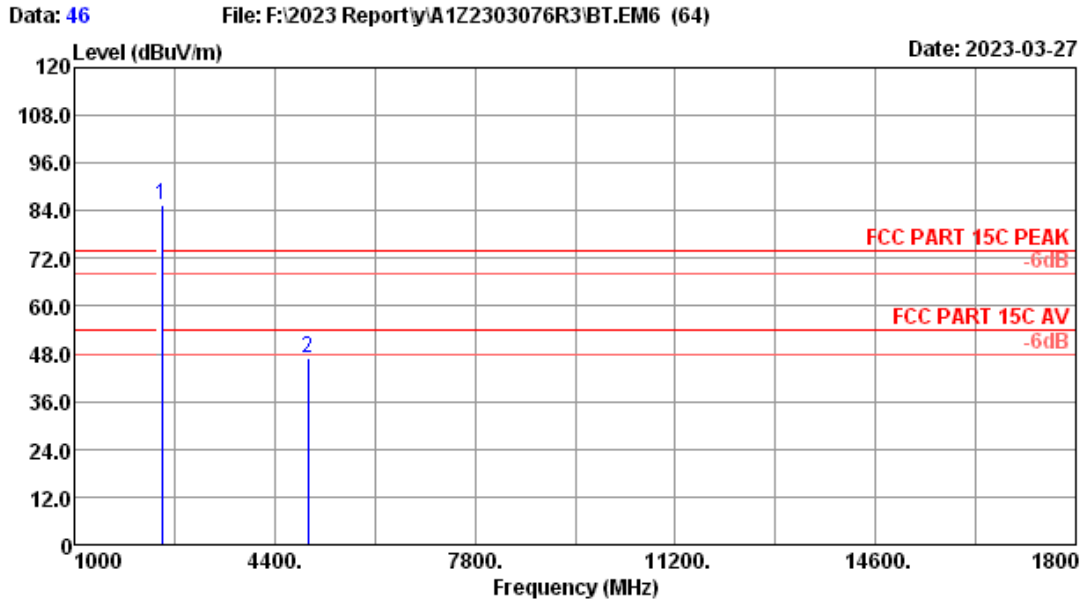
Site no. : 3m Chamber Data no. : 44  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE1M 2480MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	93.93	34.35	89.72	-----	-----	Peak
2	4960.00	32.03	3.39	44.77	33.69	46.50	74.00	27.50	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 45
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2480MHz TX		



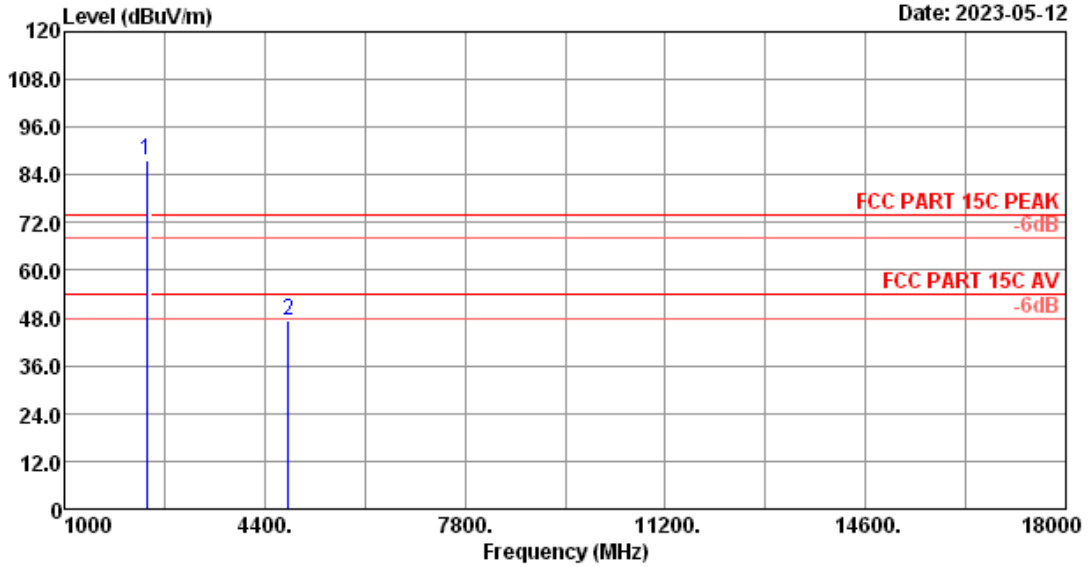
Site no. : 3m Chamber Data no. : 46  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE1M 2480MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	89.53	34.35	85.32	-----	-----	Peak
2	4960.00	32.03	3.39	45.33	33.69	47.06	74.00	26.94	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

Data for metal appearance:

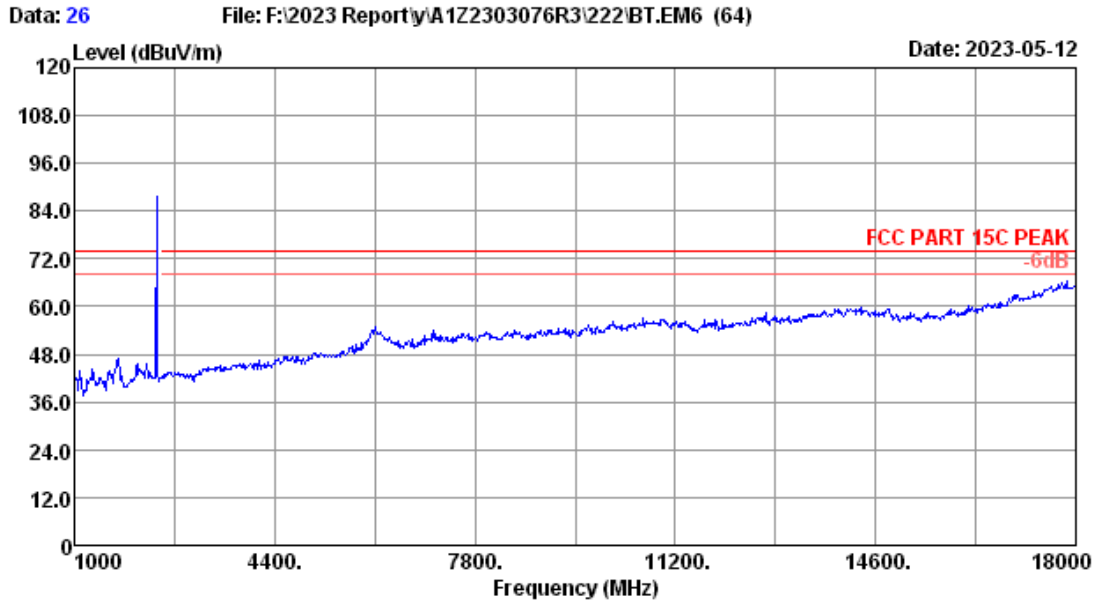
Data: 25 File: F:\2023 Report\A1Z2303076R3\222\BT.EM6 (64) Date: 2023-05-12



Site no. : 3m Chamber Data no. : 25  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE1M 2402 MHz TX  
 :  
 :

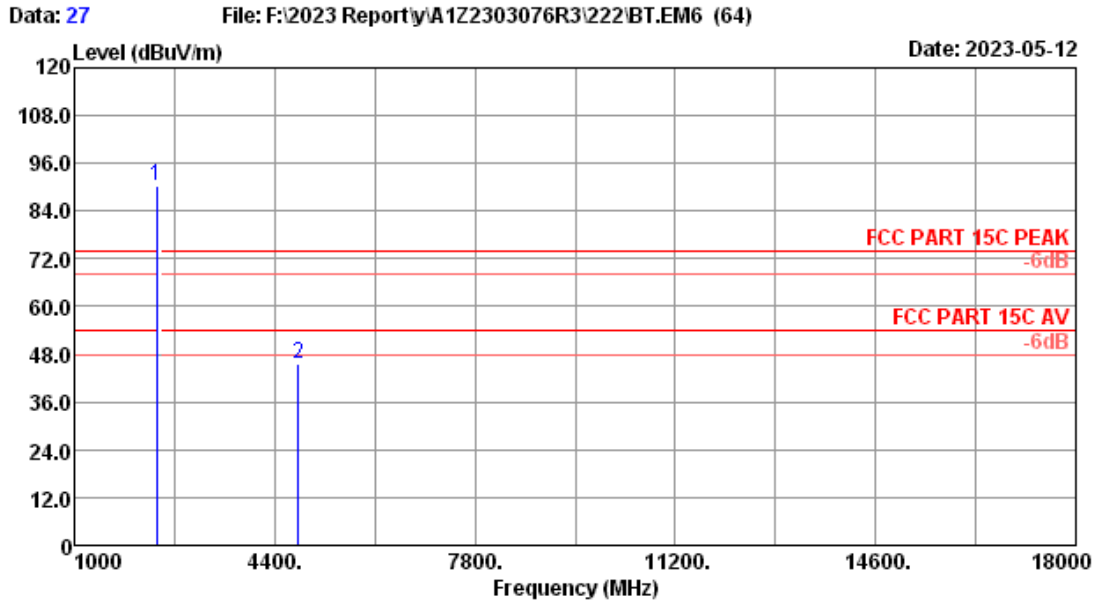
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	34.36	92.04	87.67	-----	-----	Peak
2	4804.00	31.20	3.33	33.68	46.36	47.21	74.00	26.79	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 26
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2402 MHz TX		
	:		
	:		

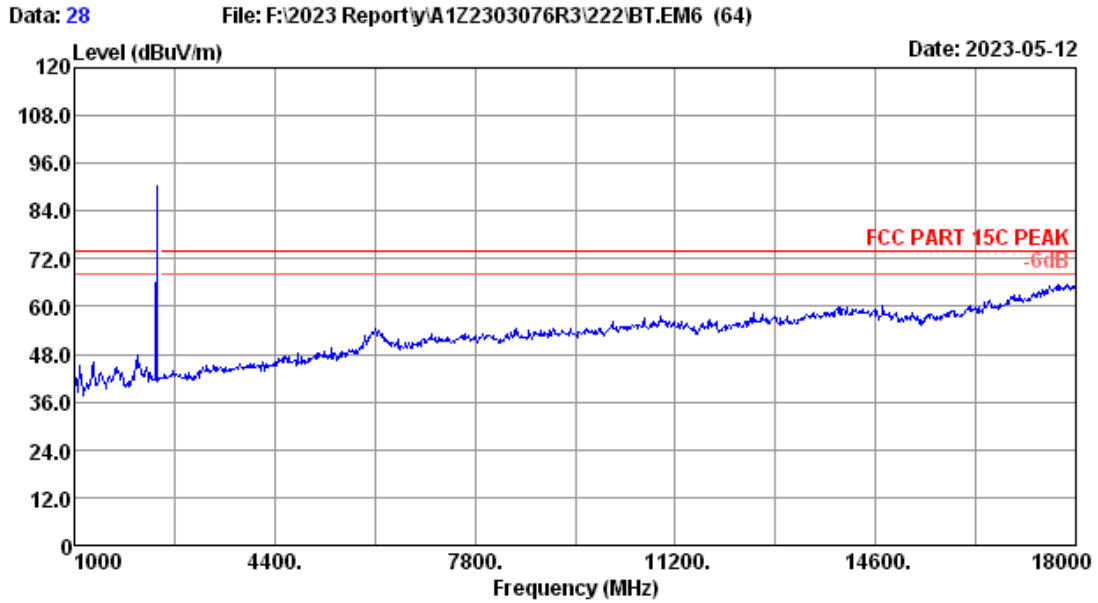




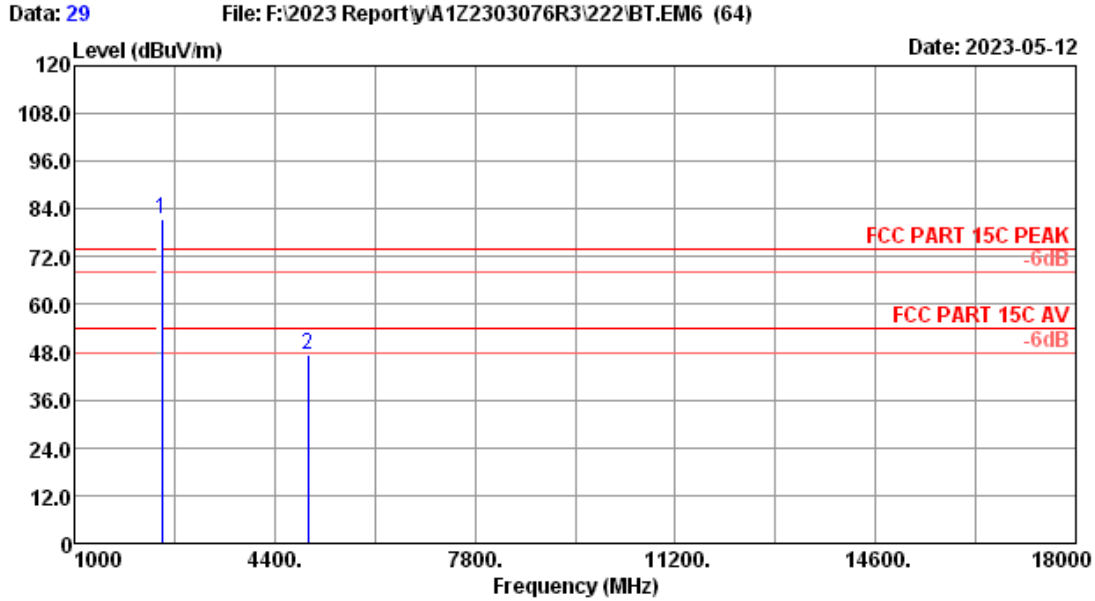
Site no. : 3m Chamber Data no. : 27  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE1M 2402 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	34.36	94.59	90.22	-----	-----	Peak
2	4804.00	31.20	3.33	33.68	44.60	45.45	74.00	28.55	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



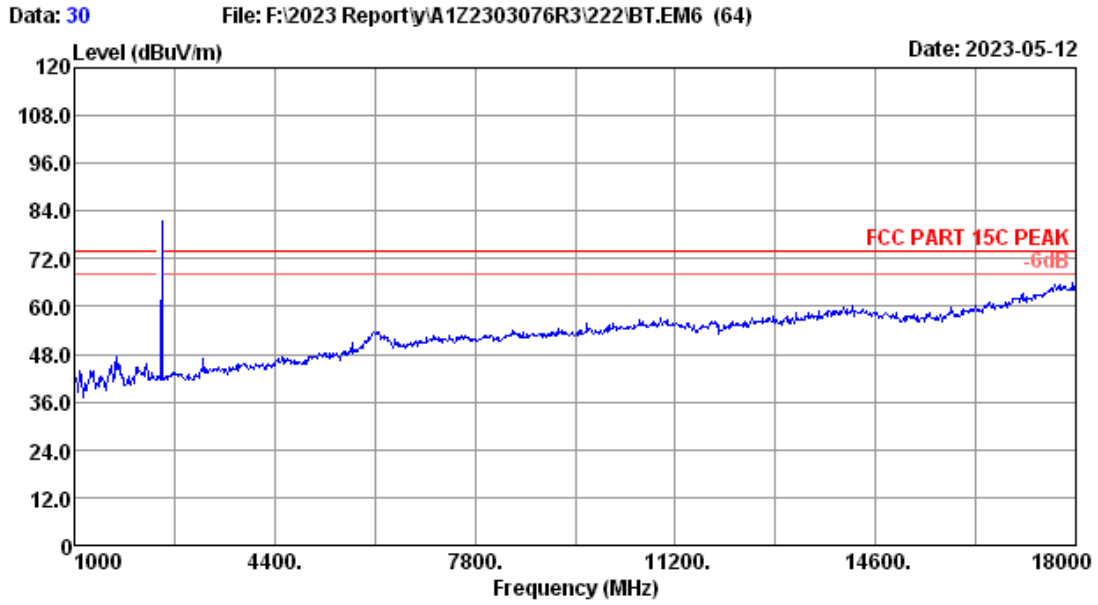
Site no.	: 3m Chamber	Data no.	: 28
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2402 MHz TX		
	:		
	:		



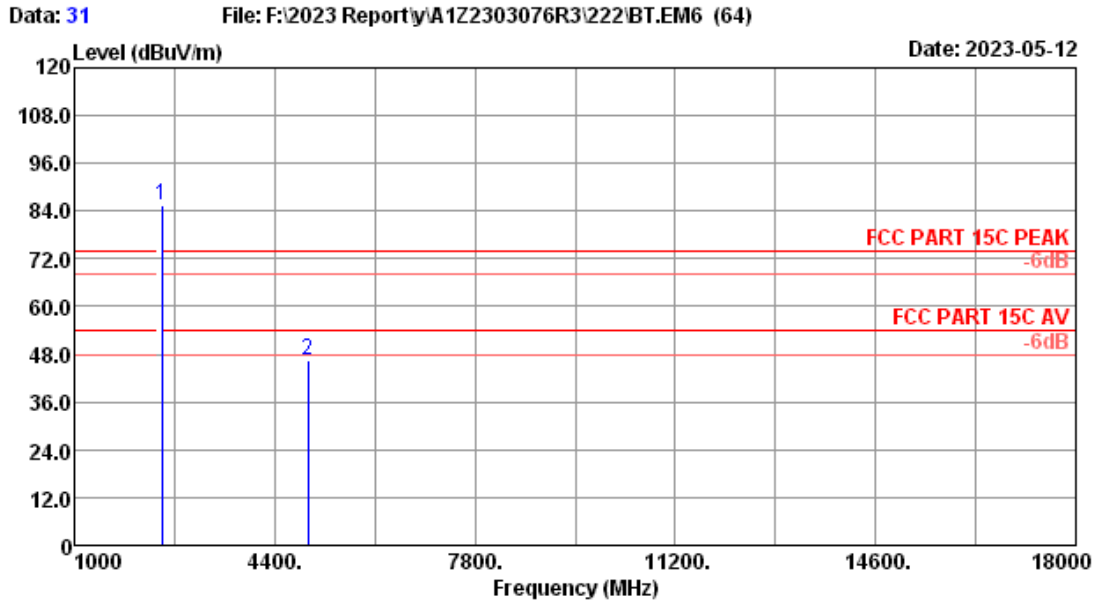
Site no. : 3m Chamber Data no. : 29  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE1M 2480 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	34.35	85.83	81.62	-----	-----	Peak
2	4960.00	32.03	3.39	33.69	45.79	47.52	74.00	26.48	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



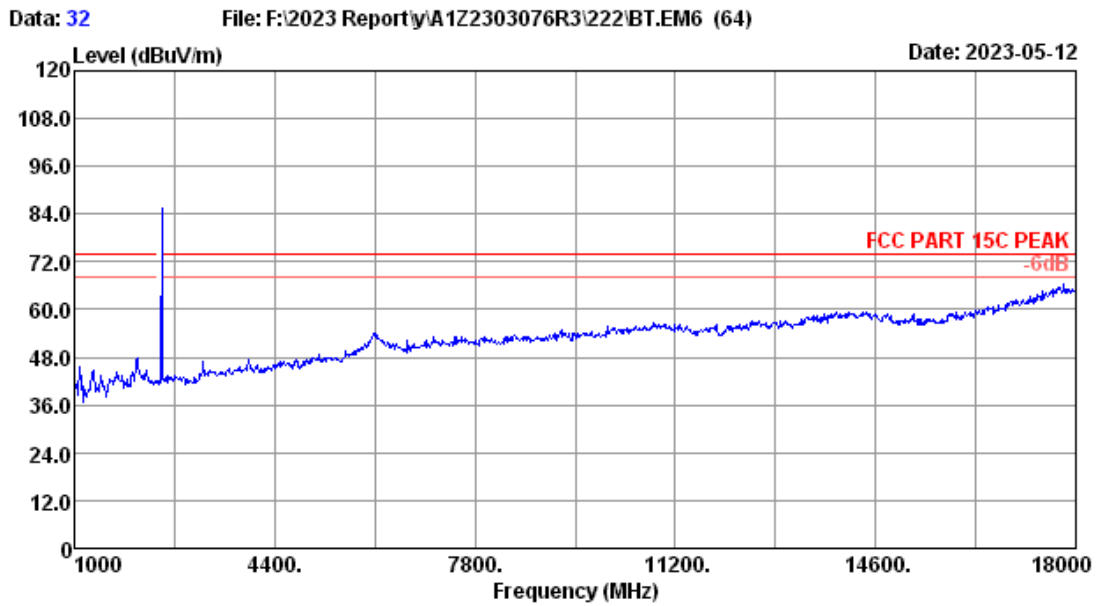
Site no.	: 3m Chamber	Data no.	: 30
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2480 MHz TX		
	:		
	:		



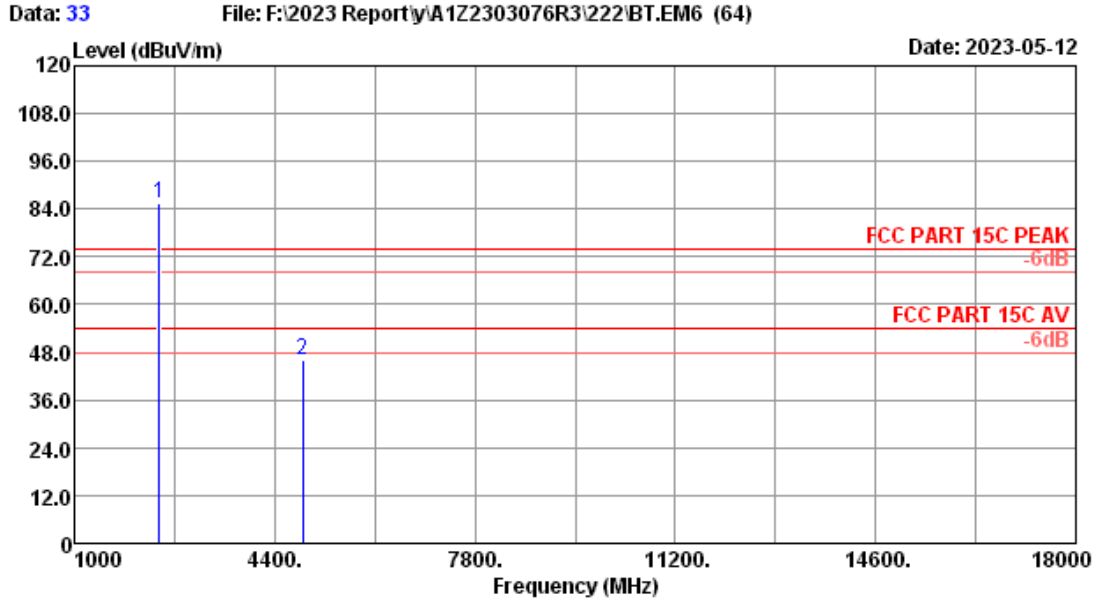
Site no. : 3m Chamber Data no. : 31  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE1M 2480 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	34.35	89.68	85.47	-----	-----	Peak
2	4960.00	32.03	3.39	33.69	44.96	46.69	74.00	27.31	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



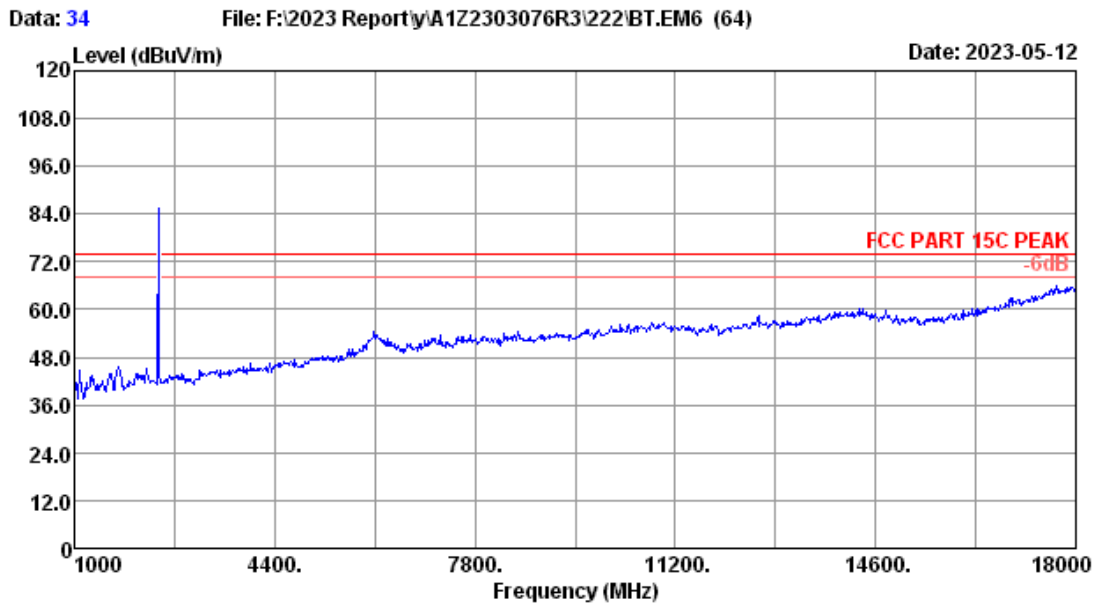
Site no.	: 3m Chamber	Data no.	: 32
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2480 MHz TX		
	:		
	:		



Site no. : 3m Chamber Data no. : 33  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE1M 2440 MHz TX  
 :  
 :

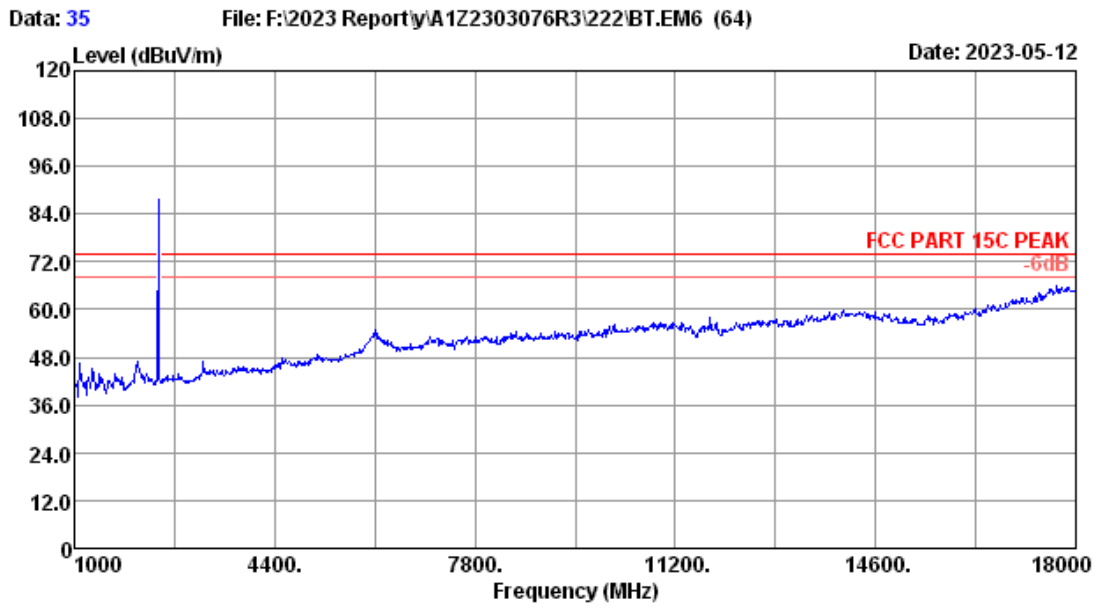
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	34.36	89.48	85.24	-----	-----	Peak
2	4880.00	31.43	3.35	33.69	44.88	45.97	74.00	28.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

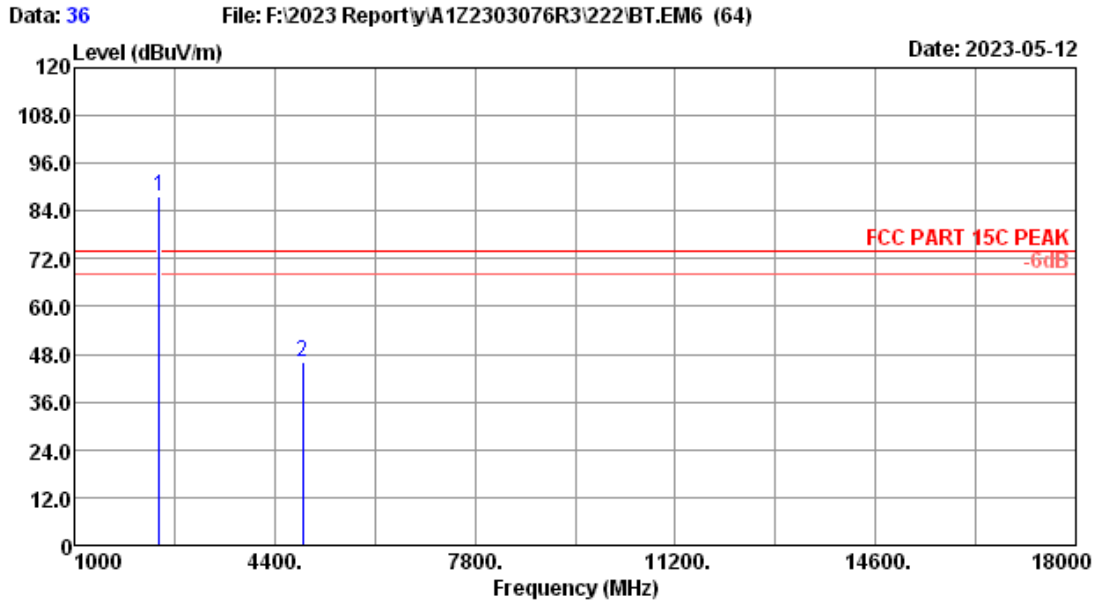


Site no.	: 3m Chamber	Data no.	: 34
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2440 MHz TX		
	:		
	:		





Site no.	: 3m Chamber	Data no.	: 35
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE1M 2440 MHz TX		
	:		
	:		



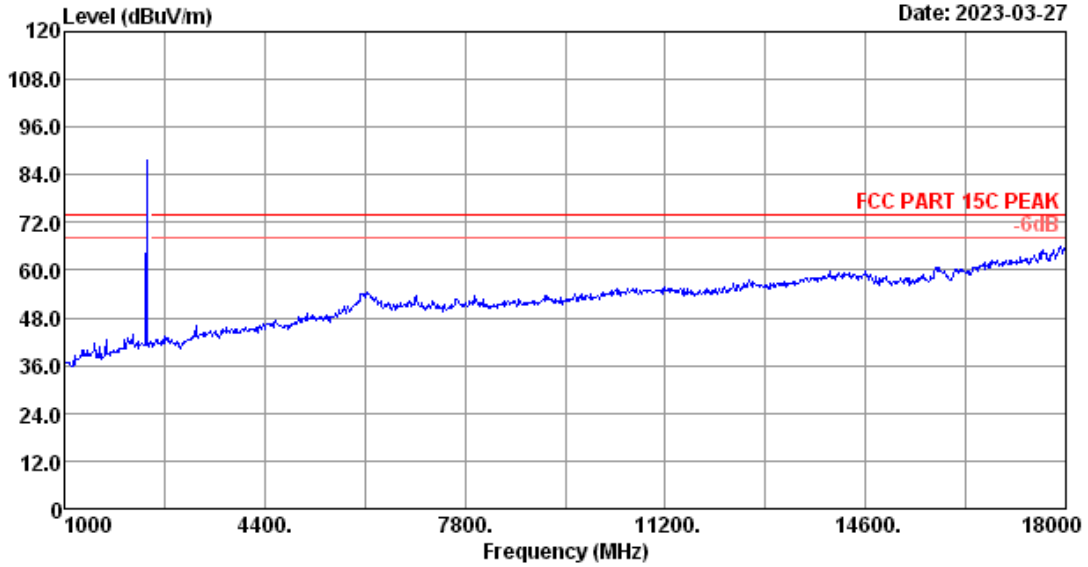
Site no. : 3m Chamber Data no. : 36  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE1M 2440 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	34.36	92.03	87.79	-----	-----	Peak
2	4880.00	31.43	3.35	33.69	45.14	46.23	74.00	27.77	Peak

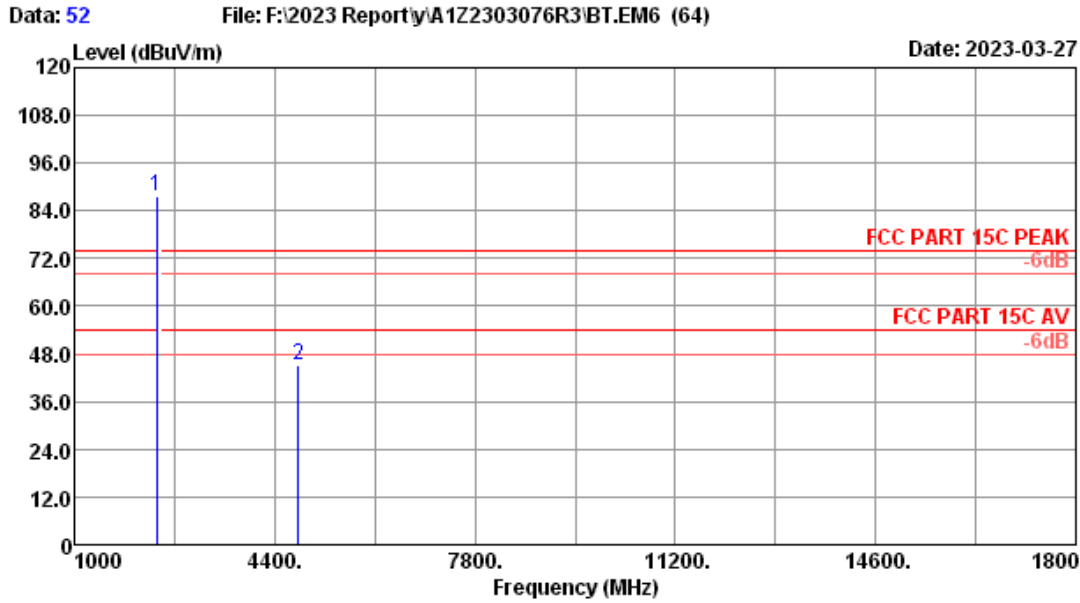
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

2Mbps:

Data: 51 File: F:\2023 Report\y\A1Z2303076R3\BT.EM6 (64) Date: 2023-03-27



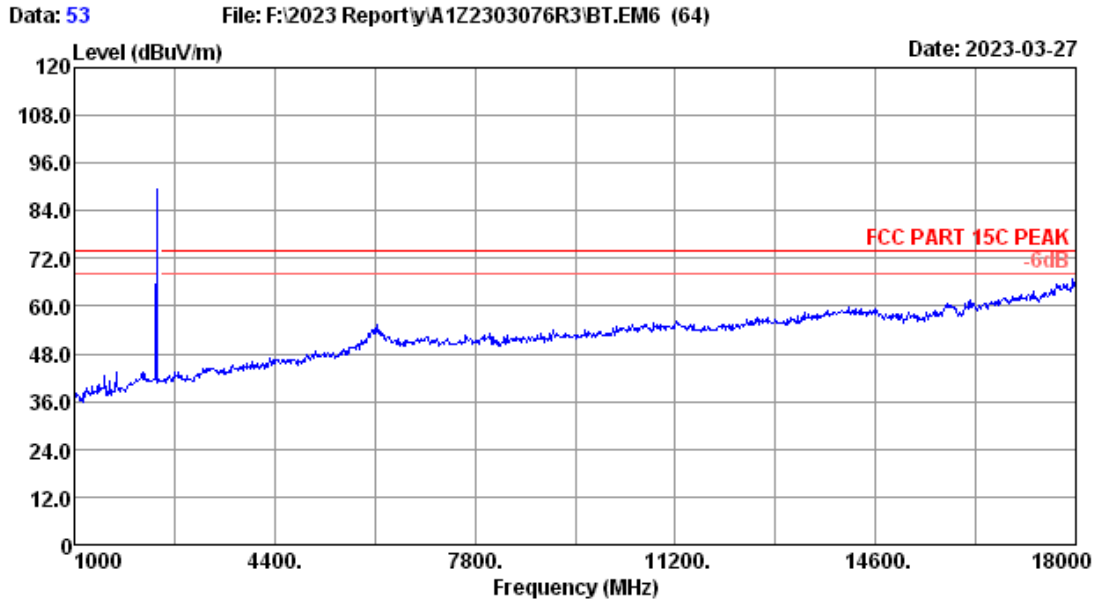
Site no.	: 3m Chamber	Data no.	: 51
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2402MHz TX		



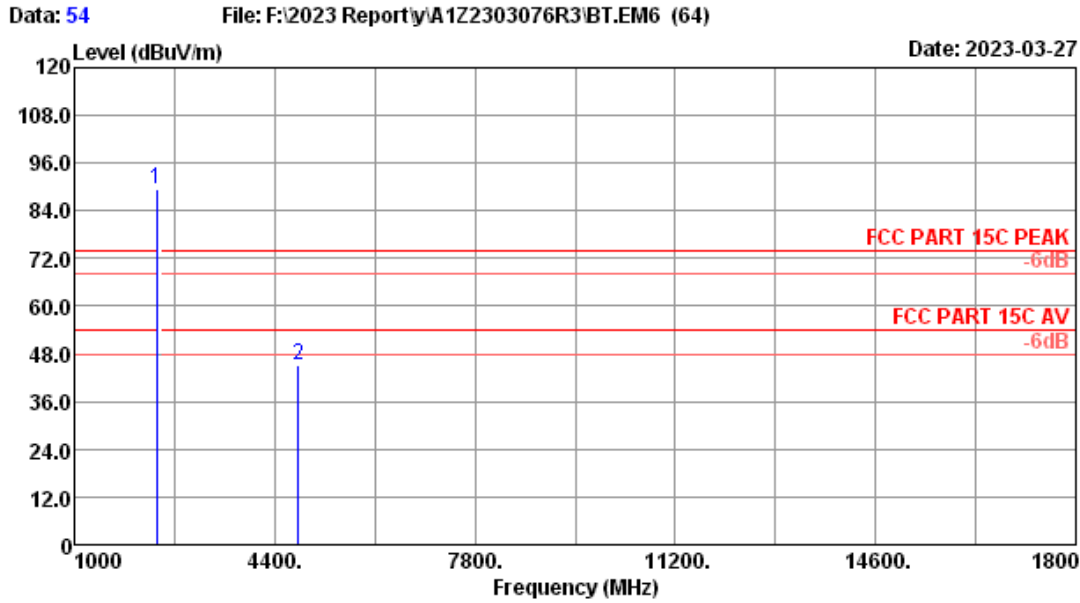
Site no. : 3m Chamber Data no. : 52  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE2M 2402MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	92.20	34.36	87.83	-----	-----	Peak
2	4804.00	31.20	3.33	44.45	33.68	45.30	74.00	28.70	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



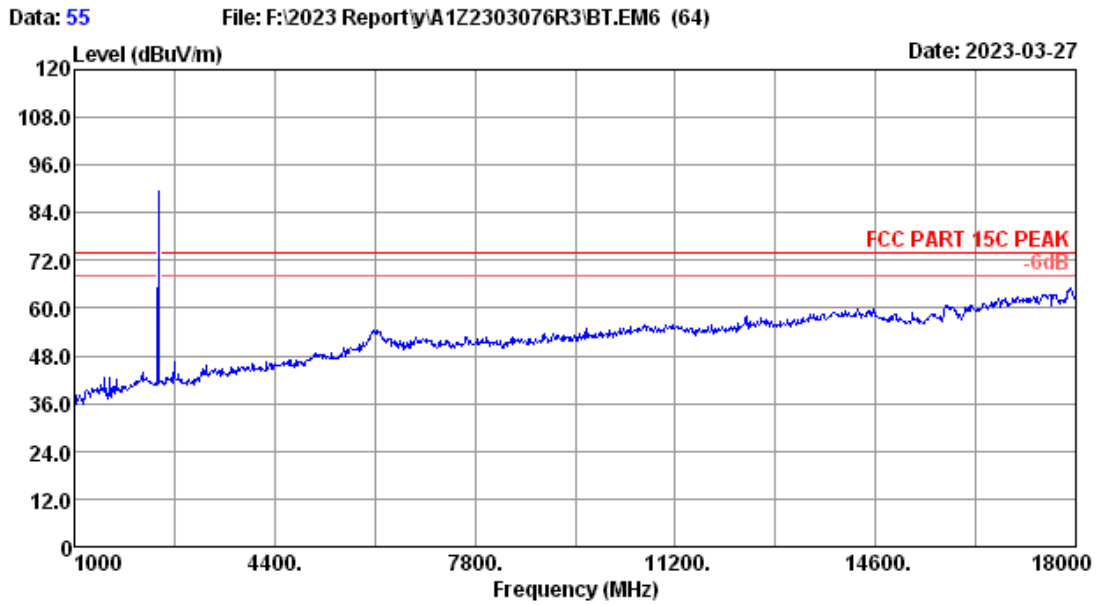
Site no.	: 3m Chamber	Data no.	: 53
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2402MHz TX		



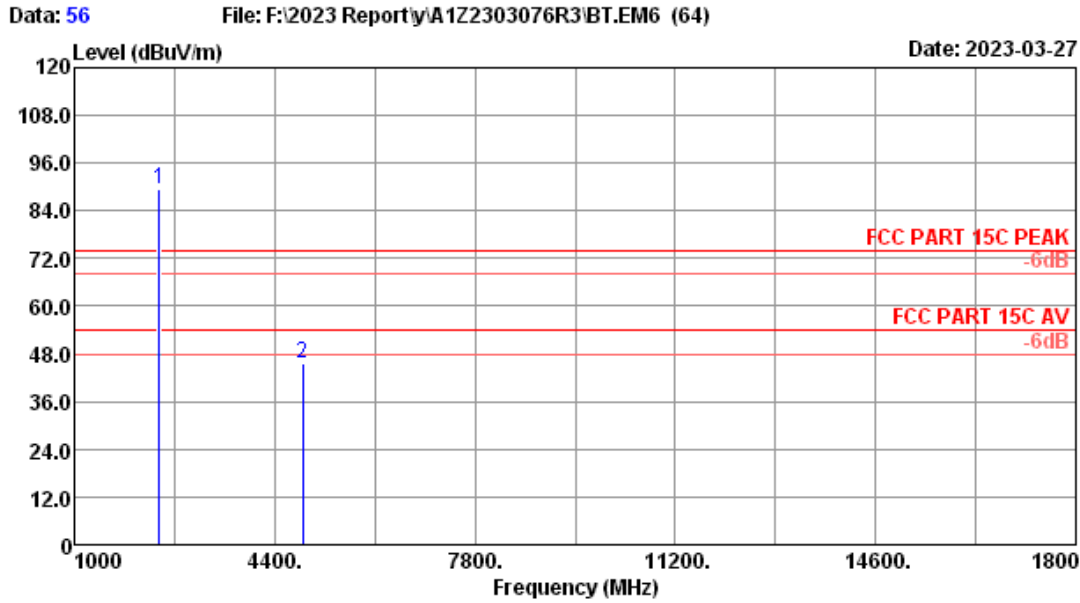
Site no. : 3m Chamber Data no. : 54  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE2M 2402MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	93.92	34.36	89.55	-----	-----	Peak
2	4804.00	31.20	3.33	44.29	33.68	45.14	74.00	28.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 55
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2440MHz TX		

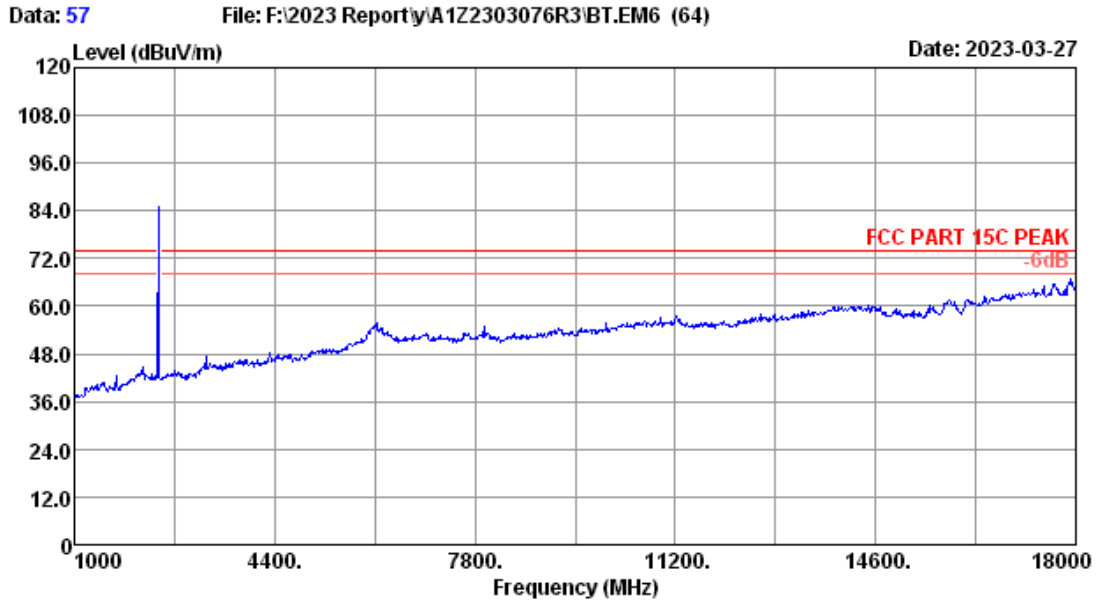


Site no. : 3m Chamber Data no. : 56  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE2M 2440MHz TX

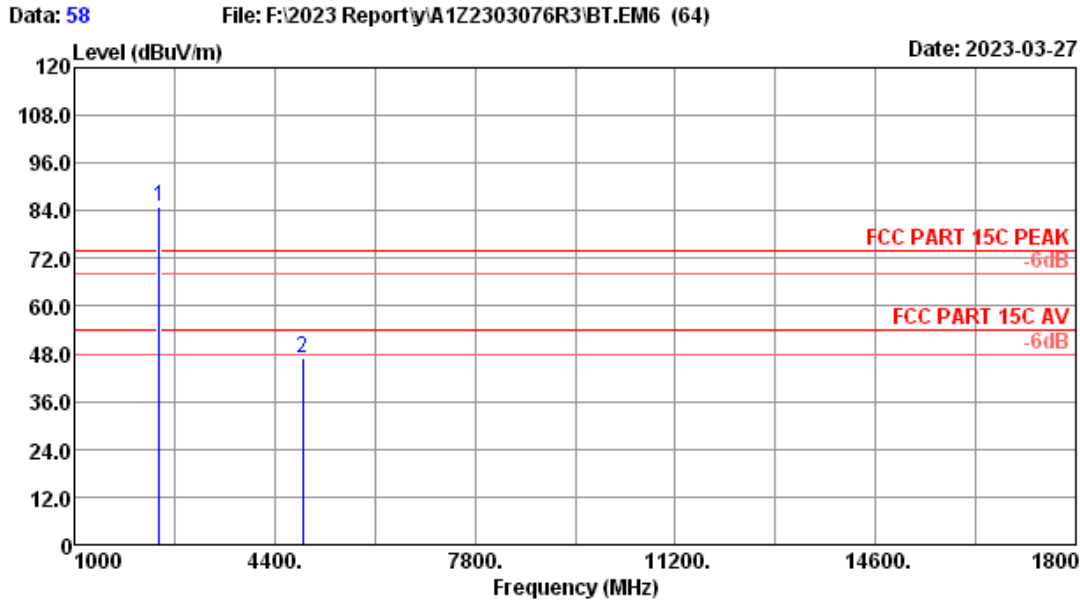
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	93.69	34.36	89.45	-----	-----	Peak
2	4880.00	31.43	3.35	44.67	33.69	45.76	74.00	28.24	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.





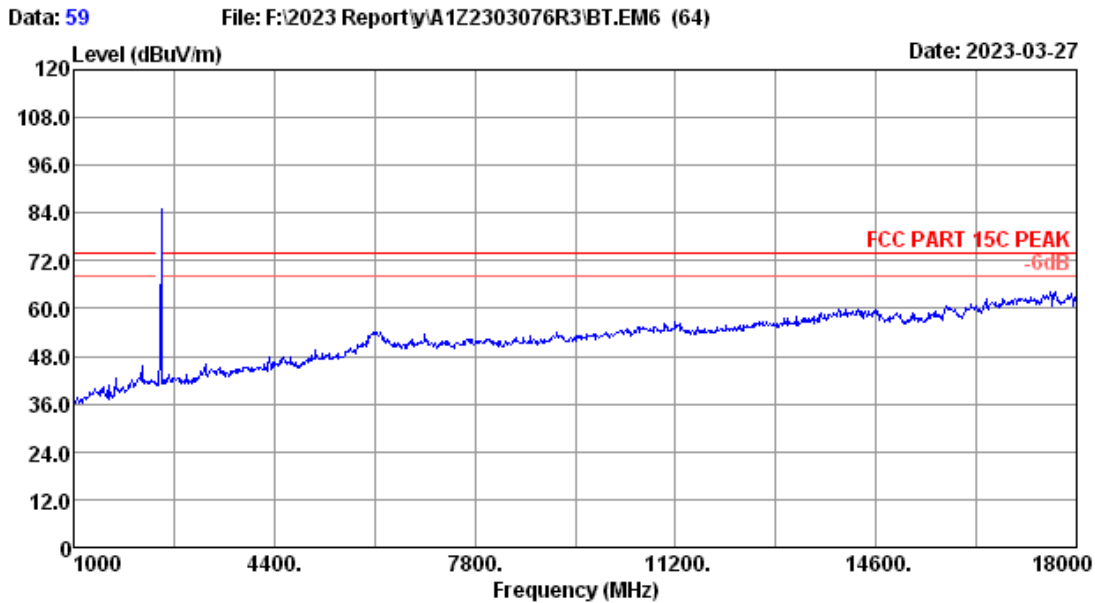
Site no.	: 3m Chamber	Data no.	: 57
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2440MHz TX		



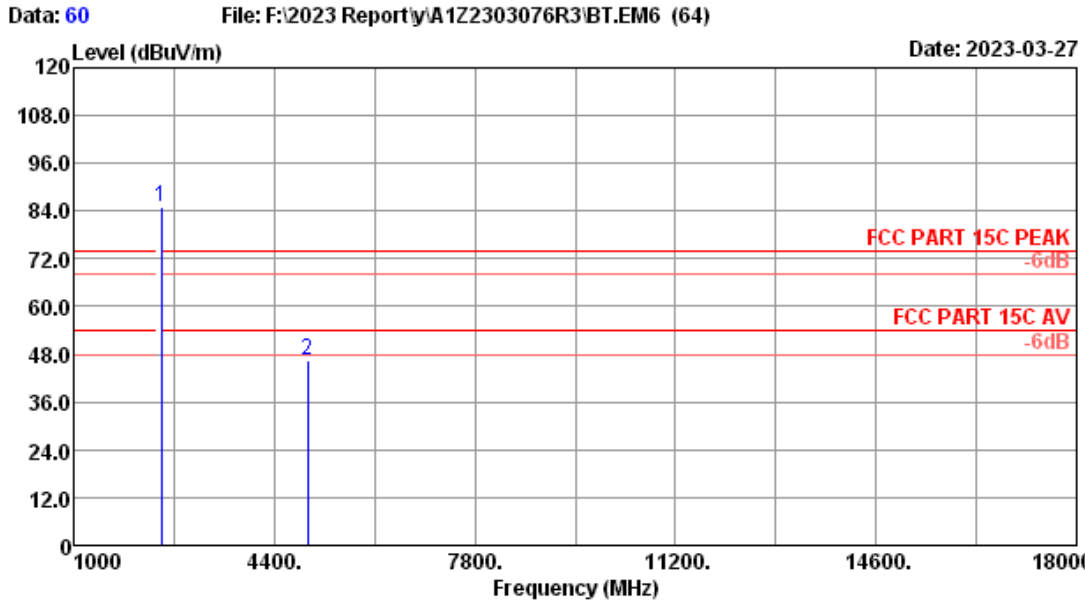
Site no. : 3m Chamber Data no. : 58  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE2M 2440MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	89.36	34.36	85.12	74.00	11.12	Peak
2	4880.00	31.43	3.35	45.85	33.69	46.94	48.00	-1.06	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



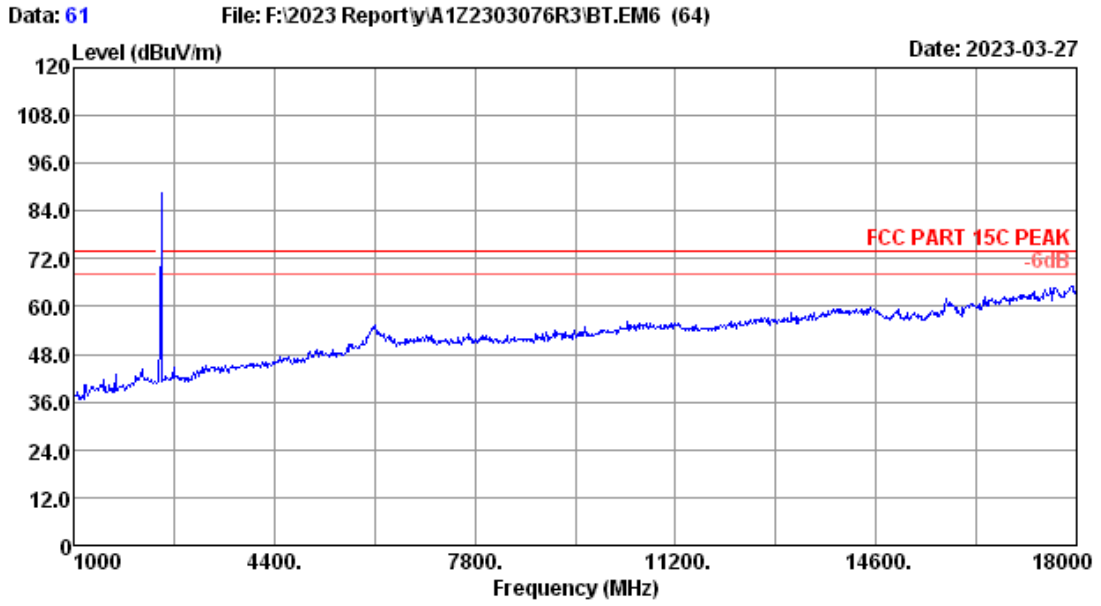
Site no.	: 3m Chamber	Data no.	: 59
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2480MHz TX		



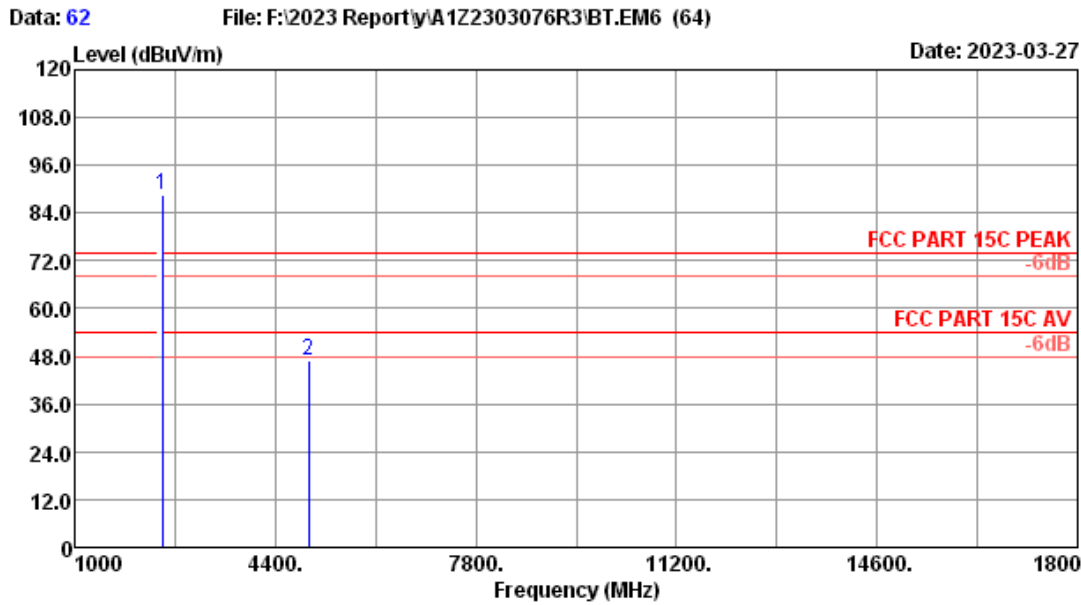
Site no. : 3m Chamber Data no. : 60  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE2M 2480MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	89.28	34.35	85.07	-----	-----	Peak
2	4960.00	32.03	3.39	44.71	33.69	46.44	74.00	27.56	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 61
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2°C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2480MHz TX		



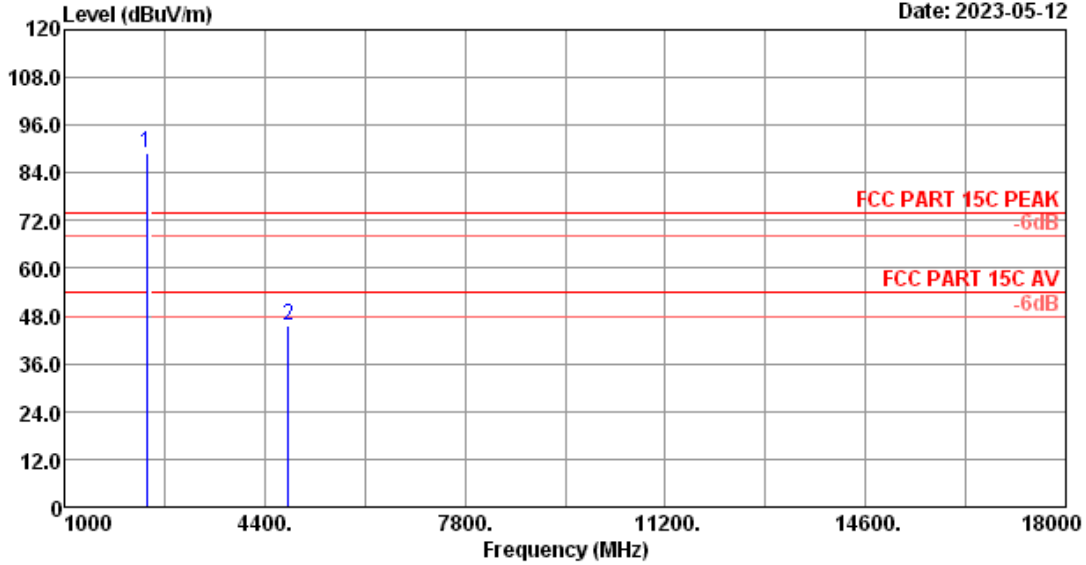
Site no. : 3m Chamber Data no. : 62  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2°C/52.5% Engineer : nier  
 Test Mode : BLE2M 2480MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	92.66	34.35	88.45	-----	-----	Peak
2	4960.00	32.03	3.39	45.16	33.69	46.89	74.00	27.11	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

Data for metal appearance:

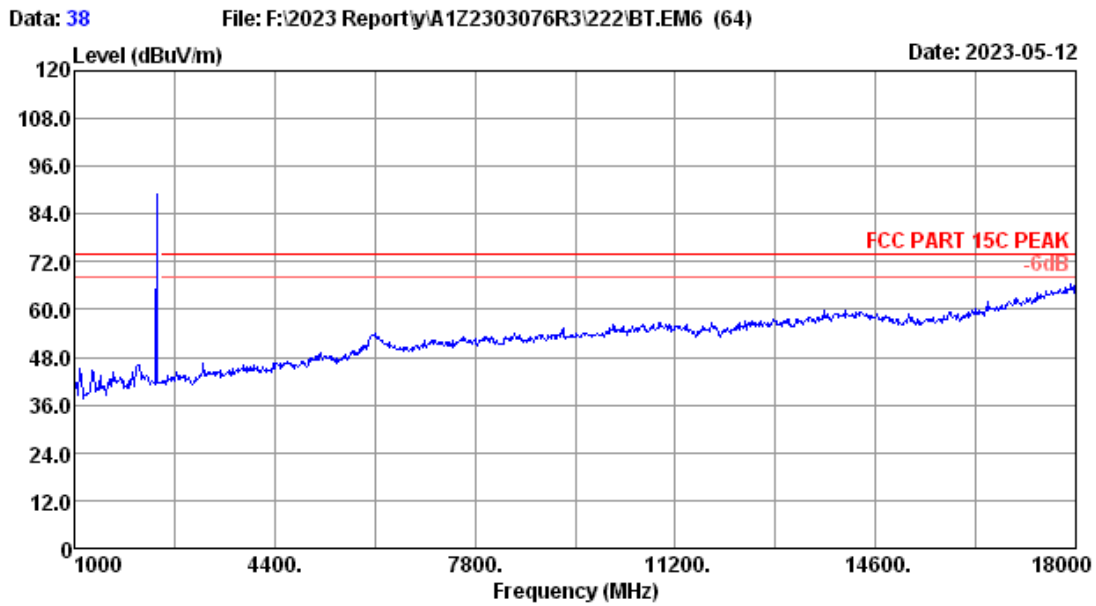
Data: 37 File: F:\2023 Report\A1Z2303076R3\222\BT.EM6 (64) Date: 2023-05-12



Site no. : 3m Chamber Data no. : 37  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE2M 2402 MHz TX  
 :  
 :

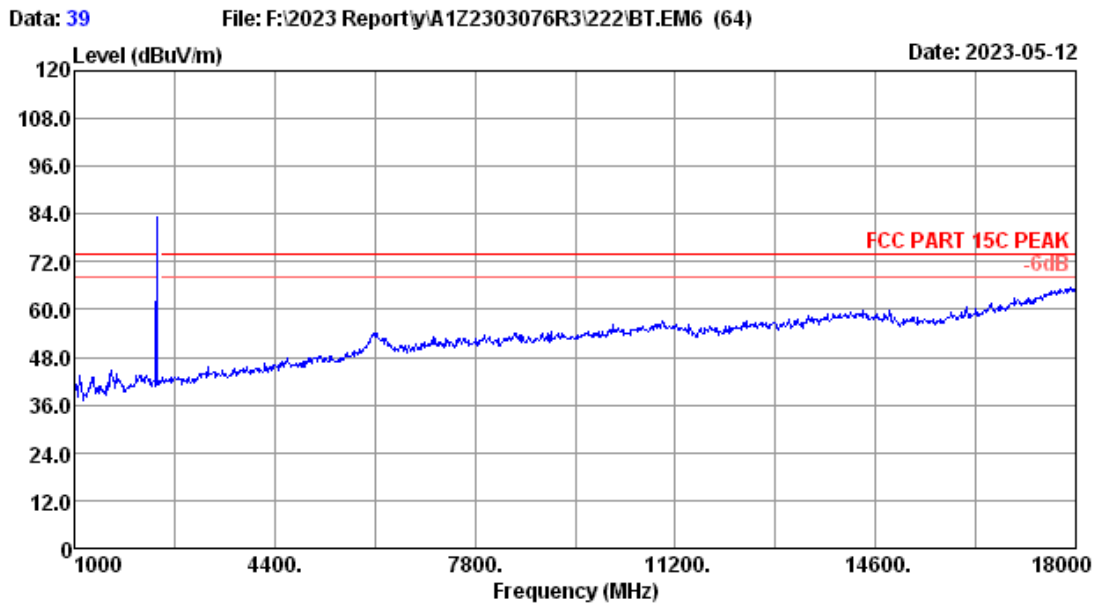
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	34.36	93.24	88.87	-----	-----	Peak
2	4804.00	31.20	3.33	33.68	44.82	45.67	74.00	28.33	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

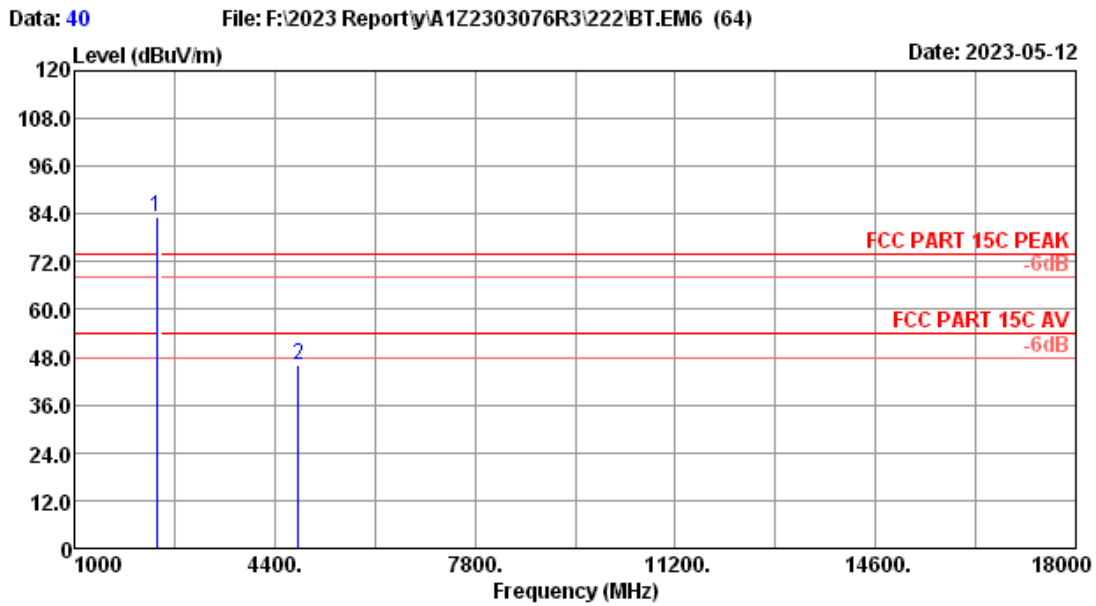


Site no.	: 3m Chamber	Data no.	: 38
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2402 MHz TX		
	:		
	:		





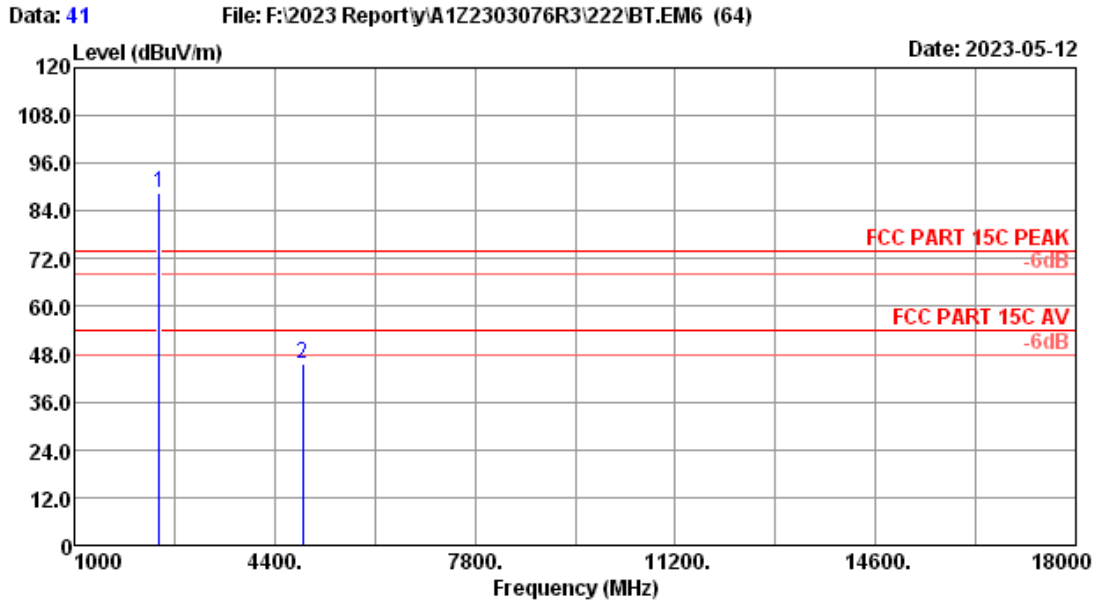
Site no.	: 3m Chamber	Data no.	: 39
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2402 MHz TX		
	:		
	:		



Site no. : 3m Chamber Data no. : 40  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE2M 2402 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.70	2.29	34.36	87.58	83.21	-----	-----	Peak
2	4804.00	31.20	3.33	33.68	45.15	46.00	74.00	28.00	Peak

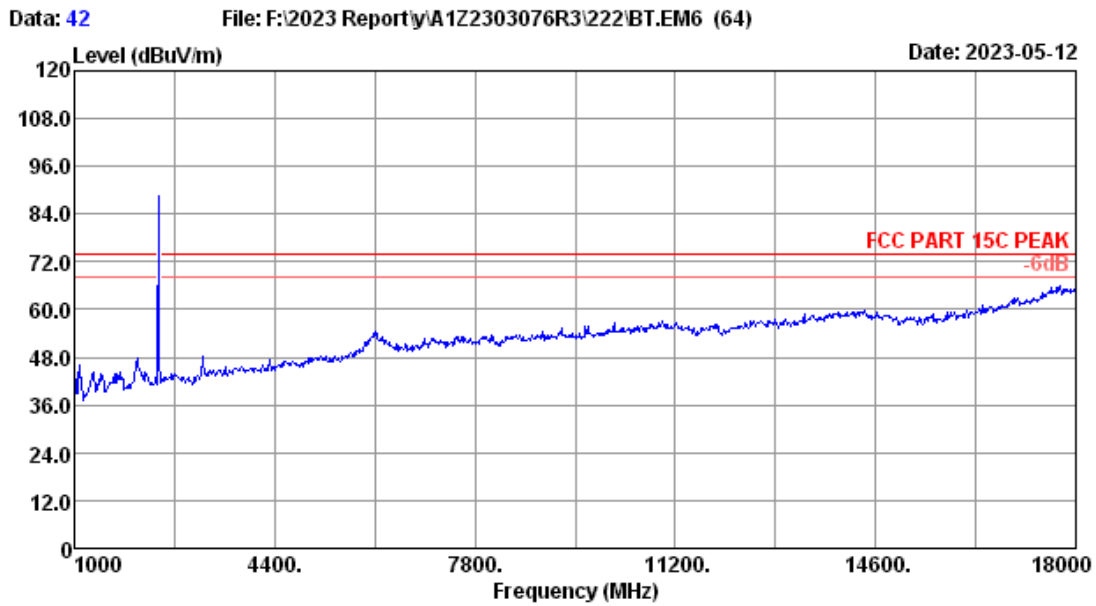
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



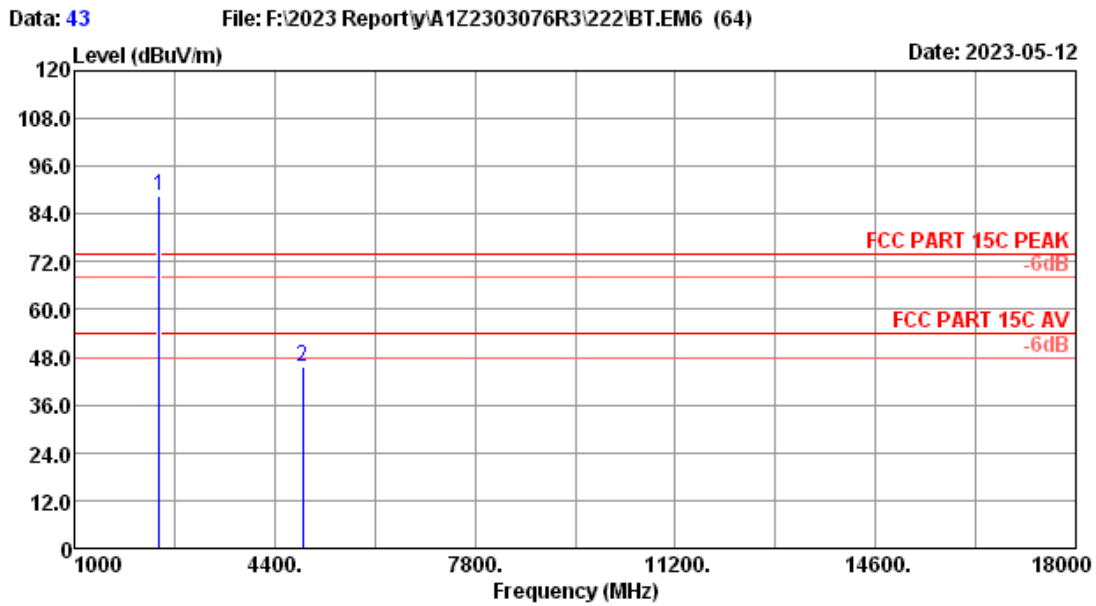
Site no. : 3m Chamber Data no. : 41  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE2M 2440 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	34.36	92.84	88.60	-----	-----	Peak
2	4880.00	31.43	3.35	33.69	44.47	45.56	74.00	28.44	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



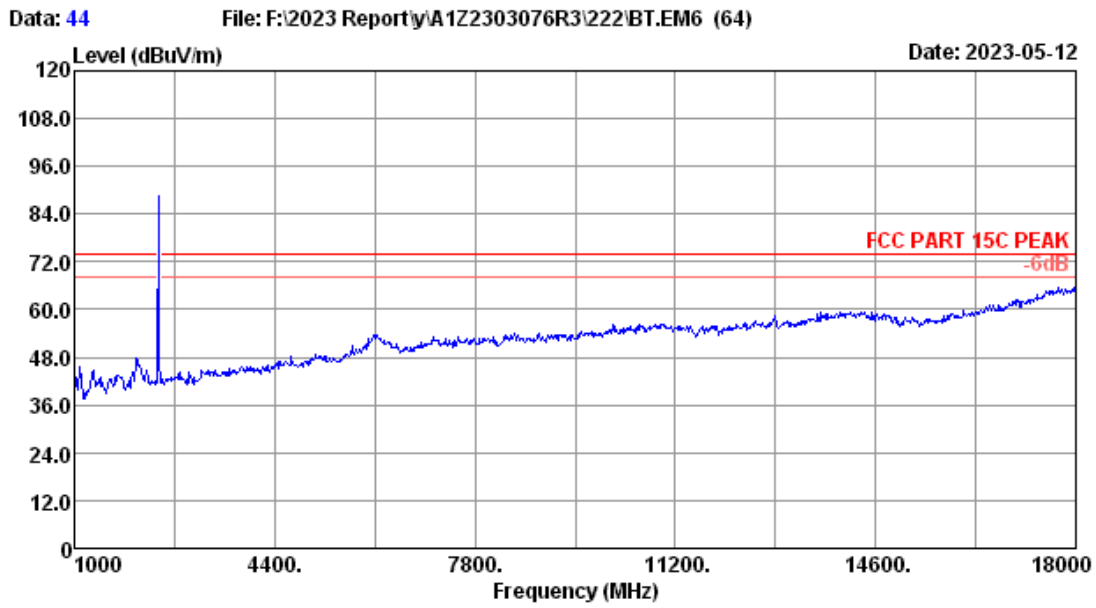
Site no.	: 3m Chamber	Data no.	: 42
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2440 MHz TX		
	:		
	:		



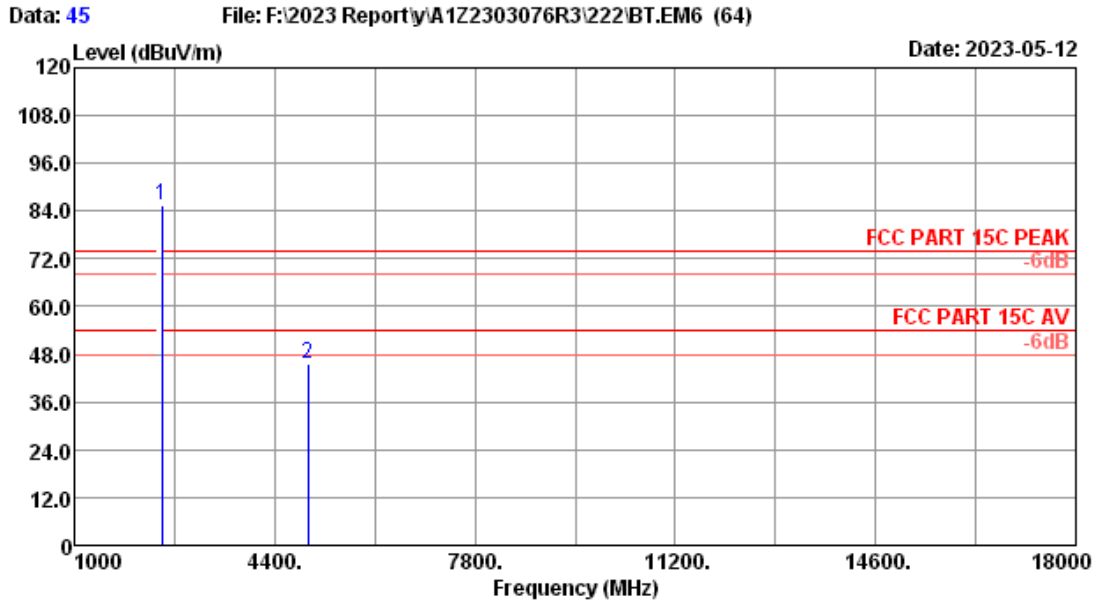
Site no. : 3m Chamber Data no. : 43  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE2M 2440 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.00	27.80	2.32	34.36	92.65	88.41	-----	-----	Peak
2	4880.00	31.43	3.35	33.69	44.30	45.39	74.00	28.61	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



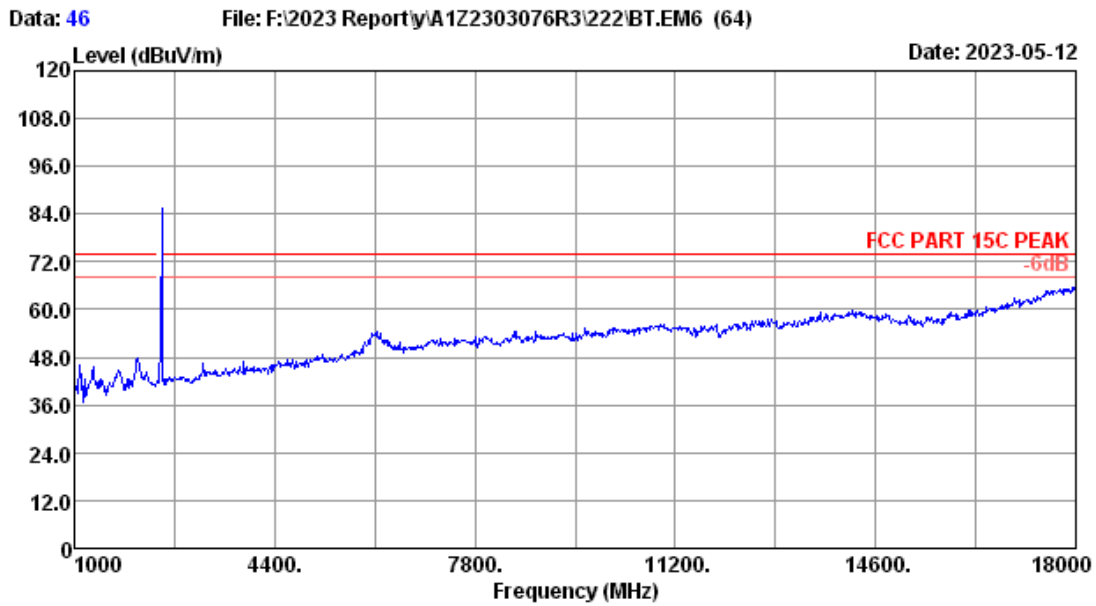
Site no.	: 3m Chamber	Data no.	: 44
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2440 MHz TX		
	:		
	:		



Site no. : 3m Chamber Data no. : 45  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE2M 2480 MHz TX  
 :  
 :

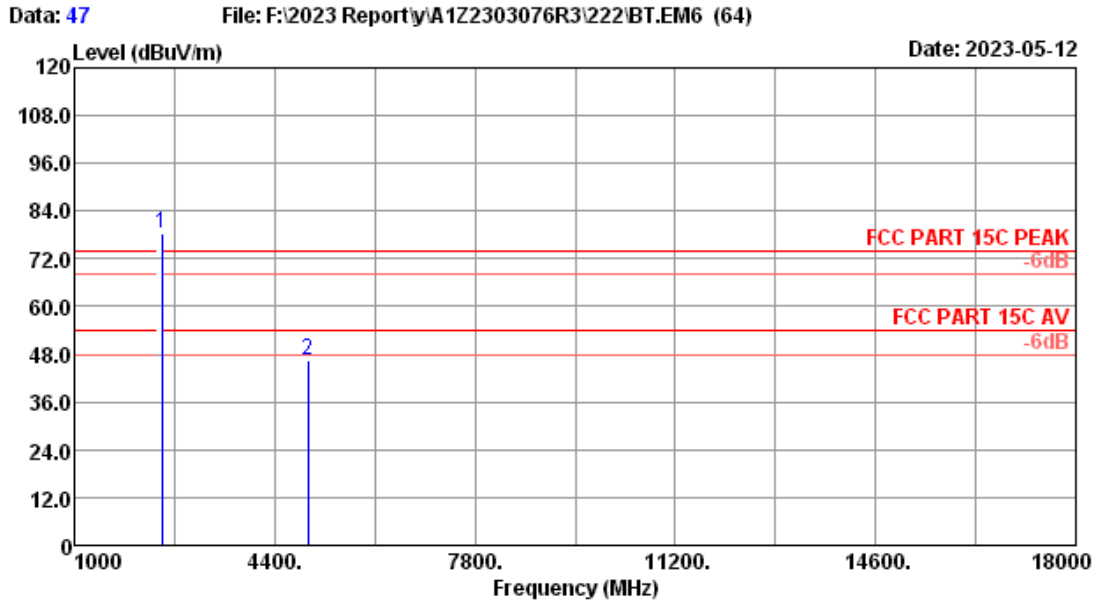
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	34.35	89.70	85.49	-----	-----	Peak
2	4960.00	32.03	3.39	33.69	44.06	45.79	74.00	28.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 46
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2480 MHz TX		
	:		
	:		

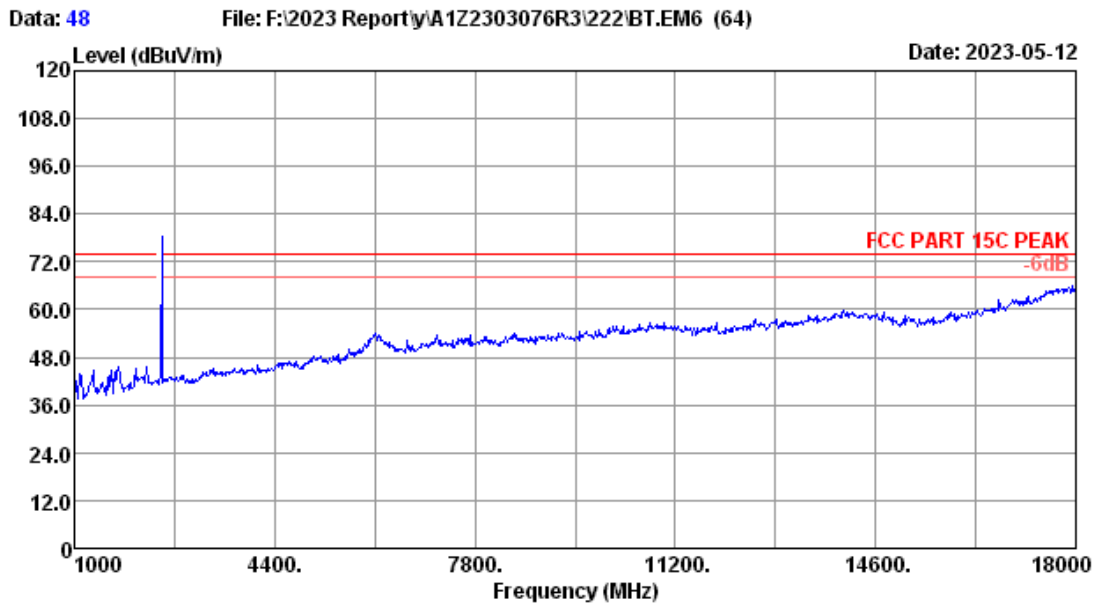




Site no. : 3m Chamber Data no. : 47  
 Dis. / Ant. : 3m 2022 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.2\*C/52.5% Engineer : nier  
 Test Mode : BLE2M 2480 MHz TX  
 :  
 :

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.80	2.34	34.35	82.72	78.51	-----	-----	Peak
2	4960.00	32.03	3.39	33.69	44.55	46.28	74.00	27.72	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 48
Dis. / Ant.	: 3m 2022 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.2*C/52.5%	Engineer	: nier
Test Mode	: BLE2M 2480 MHz TX		
	:		
	:		

## 5. CONDUCTED SPURIOUS EMISSIONS

### 5.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.02,23	1 Year
2.	RF Cable	eastsheep	141-SMA-JJ-1000	NO.1	Jul.01,22	1 Year

### 5.2. Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator 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 the desired power. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30dB instead of 20dB.

### 5.3. Test Procedure

Use the test method described in ANSI C63.10:

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions With peak detector.

### 5.4. Test result

**PASS** (The testing data was attached in the next pages.)

EUT: Mini PC		
M/N: A Series		
Test date: 2023-04-09~12	Pressure: 101.3±1.0 kpa	Humidity: 53.5±3.0%
Tested by: Nier	Test site: RF site	Temperature:25.4±0.6 °C