

# Shenzhen Reecoo Electronic Co., Ltd.

## EMC TEST REPORT

### SCOPE OF WORK:

FCC Part 15B & ICES-003 EMC report

### Model:

DVX34

### REPORT NUMBER

220401619SHA-001

### ISSUE DATE

July 6, 2022

### DOCUMENT CONTROL NUMBER

TTRFFCCPART15b\_V1

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Report no. 220401619SHA-001

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**FCC ID** : 2AZMB-DVX34

#### Summary

The equipment complies with the requirements according to the following standard(s) or Specification:

**47CFR Part 15 (2020):** Radio Frequency Devices (Subpart B)

**ANSI C63.4 (2014):** American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

**ICES-003 Issue 7: October 2020:** Information Technology Equipment (including Digital Apparatus).

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### Revision History

Report No.	Version	Description	Issued Date
220401619SHA-001	Rev. 01	Initial issue of report	July 6, 2022

## Measurement result summary

TEST ITEM	FCC REFERENCE	IC REFERENCE	RESULT
Power line conducted emission	15.107	3.2.1	Pass
Radiated emission	15.109	3.2.2	Pass

Notes: 1: NA =Not Applicable

## 1 GENERAL INFORMATION

### 1.1 Description of Equipment Under Test (EUT)

Product Name : Automatic battery-powered vacuum cleaner

Type/Model : DVX34

Description of EUT : EUT is an automatic battery-powered vacuum cleaner with WIFI function. The WIFI module has been approved, FCC ID:2AATL-6188SUF, IC: 12425A-6188SUF, There is only one model, we test it and list the worst results in the report.

Rating : Input: 20V DC 1,0A  
Docking station (CH1822):  
Input: 100-240V~, 50-60Hz, 0.5A  
Output: 20V DC, 1A  
Docking station (CH1918):  
Input: 120V~, 50-60Hz, 8A  
Output: 20V DC, 1A

Brand name : yeedi

Category of EUT : Class B

EUT type : ☐ Table top  
☒ Floor standing

Highest operating frequency : Refer to user's manual

Sample received date : June 15, 2022

Date of test : June 15, 2022~ June 20, 2022

## 1.2 Description of Test Facility

Name : Intertek Testing Services Shanghai  
Address : Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China  
Telephone : 86 21 61278200  
Telefax : 86 21 54262353

The test facility is : CNAS Accreditation Lab  
recognized, certified, Registration No. CNAS L0139  
or accredited by these FCC Accredited Lab  
organizations Designation Number: CN1175  
IC Registration Lab  
Registration code No.: 2042B-1  
VCCI Registration Lab  
Registration No.: R-4243, G-845, C-4723, T-2252  
A2LA Accreditation Lab  
Certificate Number: 3309.02

Subcontractor: Name: Shenzhen UnionTrust Quality and Technology Co., Ltd.  
Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng Science and Technology Park, Longhua District, Shenzhen, China  
Telephone: +86 (0) 755 2823 0888  
Telefax: +86 (0) 755 2823 0886  
CNAS Accreditation Lab: Registration No. CNAS L9069  
Designation Number: CN1194  
A2LA Accreditation Lab: Certificate Number: 4312.01

## 2 TEST SPECIFICATIONS

### 2.1 Standards or specification

**47CFR Part 15 (2020):** Radio Frequency Device: Subpart B

**ANSI C63.4 (2014):** Interim Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40GHz.

**ICES-003 Issue 7: October 2020:** Information Technology Equipment (including Digital Apparatus).



## 2.2 Mode of operation during the test

Within this test report, EUT was tested under all available operation modes and tested under its rating voltage and frequency. Other voltage and frequency is specified if used.

There are 4 working modes:

With the docking station CH1918

1. Charging mode

2. Cleaning mode& Charging mode

With the docking station CH1822

3. Charging mode

4. Working mode

Mode 2, mode 3 and mode 4 were selected as the worst mode to be tested, there are two battery packages (S10-LI-144-5200 and S11-LI-144-2600), two side brush motors (RC500-KN/11550/DV and JLS-500K-11565A), two roller brush motors (XCR380SH21140 and JMRF-380SH-21140A) and three drive motors (XCR5230-QE, XCR5230-SE, 1050198). we tested all of them and listed the worst results in this report.

## 2.3 Test software list

Test Items	Software	Manufacturer	Version
Conducted emission	ESxS-K1	R&S	V2.1.0
Radiated emission	ES-K1	R&S	V1.71

## 2.4 Test peripherals list

Item No.	Name	Brand and Model	Description
-	-	-	-

## 2.5 Record of climatic conditions

Test Item	Temperature (°C)	Relative Humidity (%)	Pressure (Kpa)
Conducted emission	24	53	NA
Radiated Emission	23	53	NA

Notes: NA =Not Applicable

## 2.6 Instrument list

Radiated Emission Test - 3M Chamber						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
<input checked="" type="checkbox"/>	3m Chamber & Accessory Equipment	ETS-Lindgren	3m	Euroshiedpn-CT001270-1317	22-Jan-2021	21-Jan-2024
<input checked="" type="checkbox"/>	Loop Antenna	ETS-Lindgren	6502	00202525	11-Nov-2021	10-Nov-2023
<input checked="" type="checkbox"/>	Broadband Antenna	ETS-Lindgren	3142E	00201566	11-Nov-2021	10-Nov-2023
<input checked="" type="checkbox"/>	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-Lindgren	3117-PA	00201541	30-Apr-2021	29-Apr-2023
<input checked="" type="checkbox"/>	Pre-amplifier	ETS-Lindgren	118385	00201874	6-Nov-2021	5-Nov-2022
<input checked="" type="checkbox"/>	Receiver	ROHDE & SCHWARZ	ESIB26	100114	5-Nov-2021	4-Nov-2022
<input checked="" type="checkbox"/>	Band Reject Filter(2400MHz~2500 MHz)	Micro-Tronics	BRM50702	G248	6-Nov-2021	5-Nov-2022
<input checked="" type="checkbox"/>	Band Reject Filter(5150MHz~5880 MHz)	Micro-Tronics	BRM50716	G186	6-Nov-2021	5-Nov-2022
<input checked="" type="checkbox"/>	Multi device Controller	ETS-Lindgren	7006-001	00160105	N/A	N/A
<input checked="" type="checkbox"/>	Test Software	Audix	e3	Software Version: 9.160323		
Conducted Emission Test						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
<input checked="" type="checkbox"/>	LISN	R&S	ESH2-Z5	860014/024	5-Nov-2021	4-Nov-2022
<input checked="" type="checkbox"/>	LISN	ETS-Lindgren	3816/2SH	00201088	5-Nov-2021	4-Nov-2022
<input checked="" type="checkbox"/>	Receiver	R&S	ESR7	101181	5-Nov-2021	4-Nov-2022
<input checked="" type="checkbox"/>	Pulse Limiter	R&S	ESH3-Z2	0357.8810.54	5-Nov-2021	4-Nov-2022
<input checked="" type="checkbox"/>	ISN	Schwarzbeck	NTFM 8158	NTFM 8158#113	5-Nov-2021	4-Nov-2022
<input checked="" type="checkbox"/>	Shielding room	ETS-Lindgren	843	Euroshiedpn-CT001270-1246	5-Nov-2021	4-Nov-2024
<input checked="" type="checkbox"/>	Test Software	Audix	e3	Software Version: 9.160323		

## 2.7 Measurement Uncertainty

Measurement	Frequency	Expanded Uncertainty (k=2) ( $\pm$ )
Conducted emission at mains ports	9kHz ~ 150kHz	3.52 dB
	150kHz ~ 30MHz	3.19 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	4.90 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.02 dB
	6GHz ~ 18GHz	5.28 dB

### 3 Conducted emission

Test result: **PASS**

#### 3.1 Limits

##### 3.1.1 Limits for conducted emission of class A device

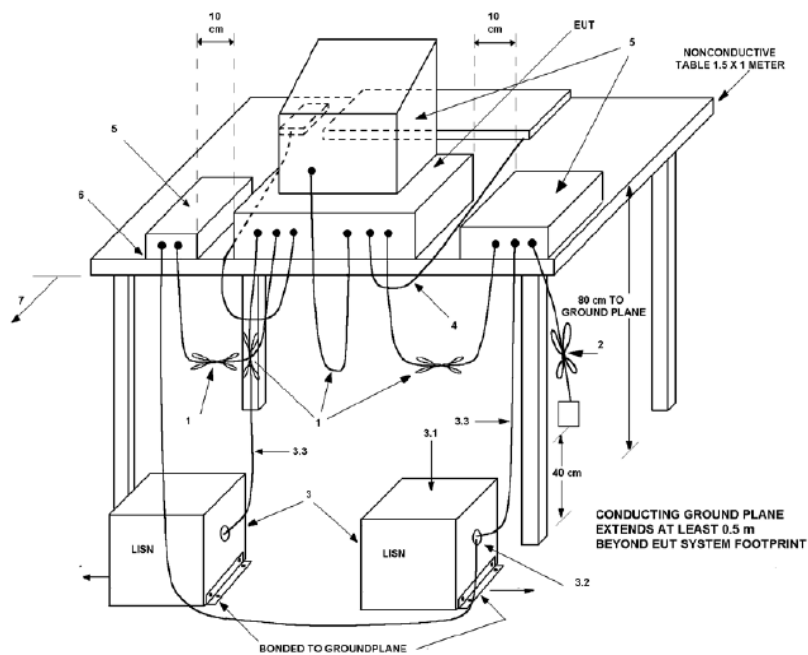
Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0.15 ~ 0.5	79	66
0.5 ~ 30	73	60
Note: If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out.		

##### 3.1.2 Limits for conducted emission of class B device

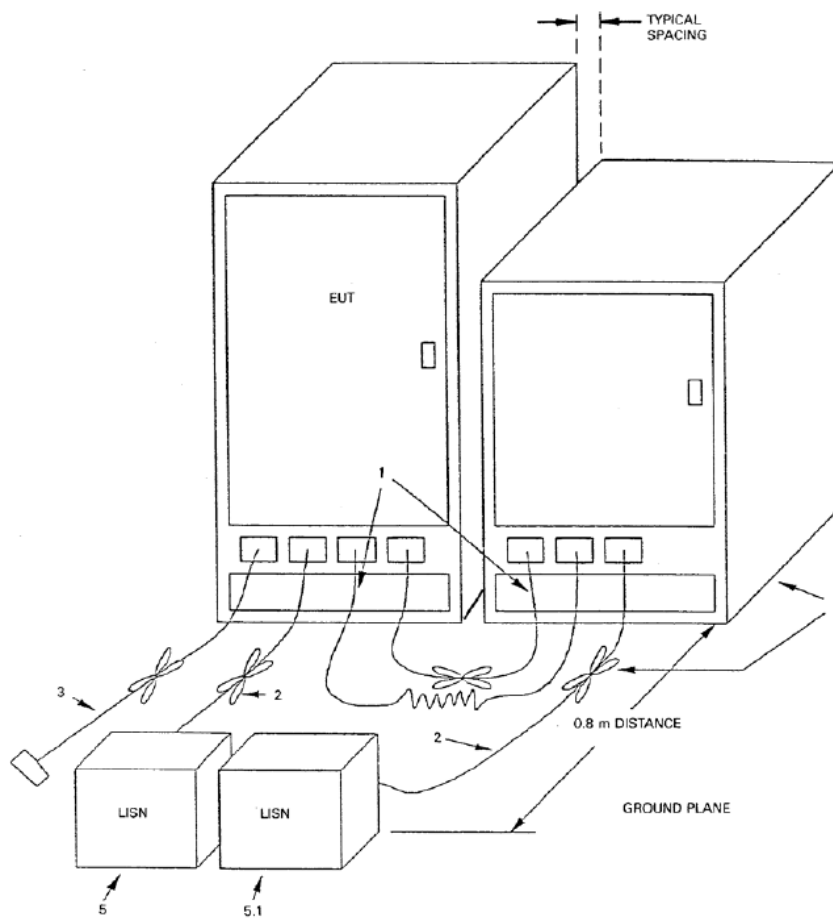
Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 ~ 56 *	56 ~ 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50
Note: 1. * Means the limit decreasing linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz 2. If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out.		

### 3.2 Test setup

☐ For table top equipment



☒ For floor standing equipment



### **3.3 Test Setup and Test Procedure**

Measurement was performed in shielded room, and instruments used were following clause 4 and clause 5 of ANSI 63.4.

Detailed test procedure was following clause 7.3 of ANSI 63.4.

EUT arrangement and operation conditions were according to clause 6 and clause 7 of ANSI 63.4.

Frequency range 150kHz – 30MHz was checked and EMI receiver measurement bandwidth was set to 9 kHz.

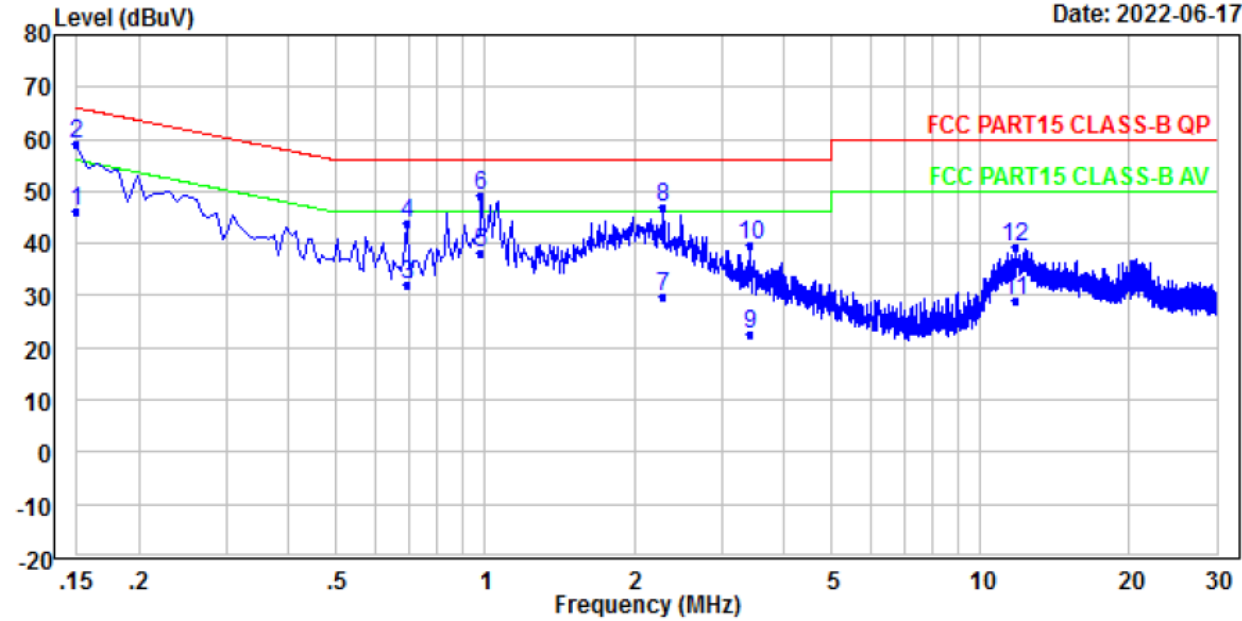
### 3.4 Test Protocol

#### Test Curve of mode 2

120V~

L-Line

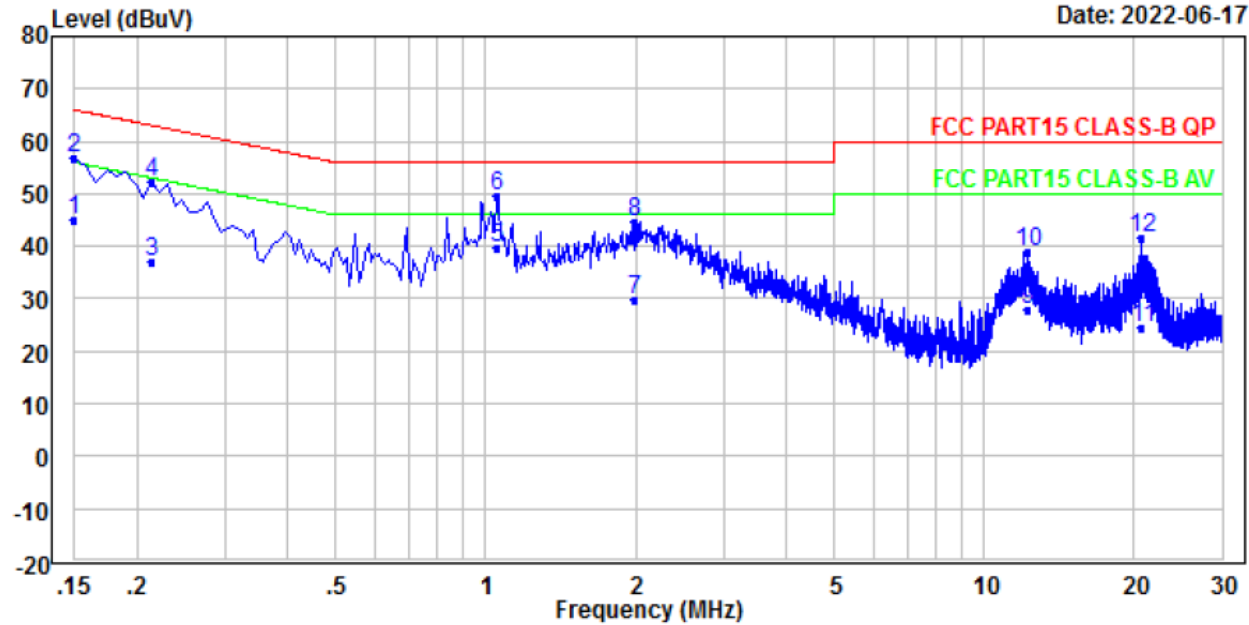
Date: 2022-06-17



Freq	Read Level	LISN Factor	Cable Loss	Aux Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
0.150	35.96	0.24	0.01	9.86	46.07	56.00	-9.93	Average
0.150	48.96	0.24	0.01	9.86	59.07	66.00	-6.93	QP
0.694	21.88	0.28	0.00	9.86	32.02	46.00	-13.98	Average
0.694	33.88	0.28	0.00	9.86	44.02	56.00	-11.98	QP
0.982	28.10	0.29	0.00	9.86	38.25	46.00	-7.75	Average
0.982	39.10	0.29	0.00	9.86	49.25	56.00	-6.75	QP
2.294	19.67	0.34	0.04	9.84	29.89	46.00	-16.11	Average
2.294	36.67	0.34	0.04	9.84	46.89	56.00	-9.11	QP
3.429	12.42	0.40	0.07	9.82	22.71	46.00	-23.29	Average
3.429	29.42	0.40	0.07	9.82	39.71	56.00	-16.29	QP
11.724	18.54	0.68	0.07	9.93	29.22	50.00	-20.78	Average
11.724	28.54	0.68	0.07	9.93	39.22	60.00	-20.78	QP

N-Line

Date: 2022-06-17



Freq	Read Level	LISN Factor	Cable Loss	Aux Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
0.150	34.74	0.25	0.01	9.86	44.86	56.00	-11.14	Average
0.150	46.74	0.25	0.01	9.86	56.86	66.00	-9.14	QP
0.214	27.09	0.25	0.00	9.87	37.21	53.05	-15.84	Average
0.214	42.09	0.25	0.00	9.87	52.21	63.05	-10.84	QP
1.054	29.51	0.36	0.00	9.86	39.73	46.00	-6.27	Average
1.054	39.51	0.36	0.00	9.86	49.73	56.00	-6.27	QP
1.982	19.58	0.37	0.03	9.84	29.82	46.00	-16.18	Average
1.982	34.58	0.37	0.03	9.84	44.82	56.00	-11.18	QP
12.196	17.08	0.70	0.07	9.95	27.80	50.00	-22.20	Average
12.196	28.08	0.70	0.07	9.95	38.80	60.00	-21.20	QP
20.690	13.57	0.89	0.06	10.03	24.55	50.00	-25.45	Average
20.690	30.57	0.89	0.06	10.03	41.55	60.00	-18.45	QP

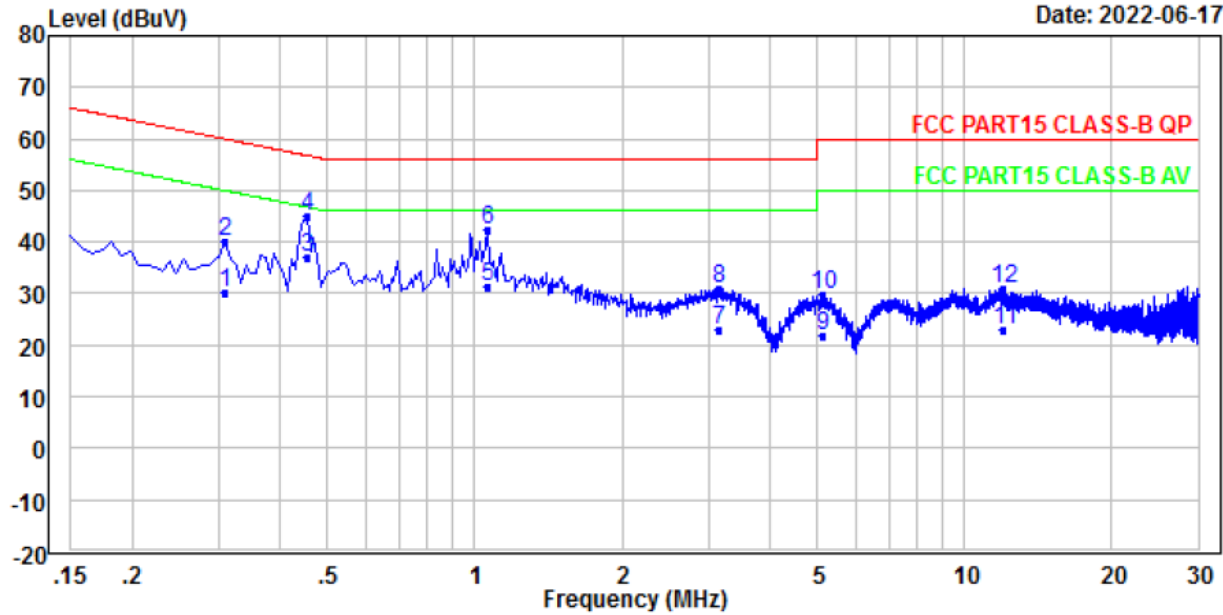


## Test Curve of mode 3

120V~

L-Line

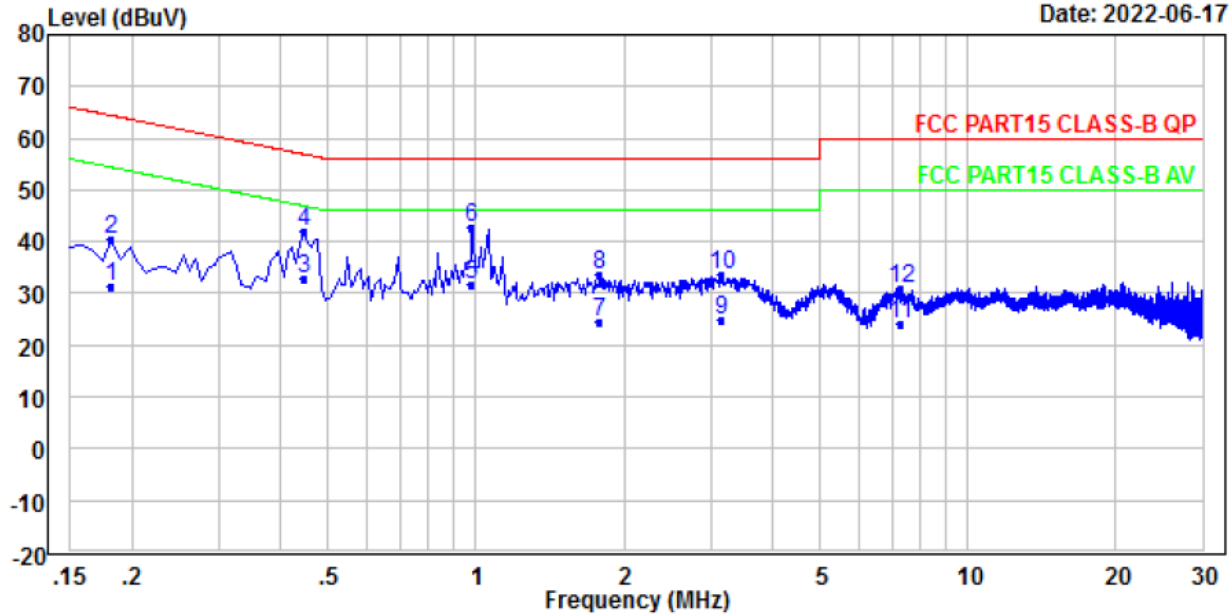
Date: 2022-06-17



Freq	Read Level	LISN Factor	Cable Loss	Aux Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
0.310	20.00	0.26	0.00	9.87	30.13	49.97	-19.84	Average
0.310	30.00	0.26	0.00	9.87	40.13	59.97	-19.84	QP
0.454	26.73	0.28	0.00	9.86	36.87	46.80	-9.93	Average
0.454	34.73	0.28	0.00	9.86	44.87	56.80	-11.93	QP
1.062	21.18	0.36	0.00	9.86	31.40	46.00	-14.60	Average
1.062	32.18	0.36	0.00	9.86	42.40	56.00	-13.60	QP
3.165	12.78	0.38	0.06	9.82	23.04	46.00	-22.96	Average
3.165	20.78	0.38	0.06	9.82	31.04	56.00	-24.96	QP
5.125	11.47	0.42	0.11	9.80	21.80	50.00	-28.20	Average
5.125	19.47	0.42	0.11	9.80	29.80	60.00	-30.20	QP
12.044	12.10	0.69	0.07	9.94	22.80	50.00	-27.20	Average
12.044	20.10	0.69	0.07	9.94	30.80	60.00	-29.20	QP

N-Line

Date: 2022-06-17



Freq	Read Level	LISN Factor	Cable Loss	Aux Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
0.182	21.26	0.24	0.00	9.87	31.37	54.39	-23.02	Average
0.182	30.26	0.24	0.00	9.87	40.37	64.39	-24.02	QP
0.446	22.73	0.26	0.00	9.86	32.85	46.95	-14.10	Average
0.446	31.73	0.26	0.00	9.86	41.85	56.95	-15.10	QP
0.982	21.59	0.29	0.00	9.86	31.74	46.00	-14.26	Average
0.982	32.59	0.29	0.00	9.86	42.74	56.00	-13.26	QP
1.782	14.26	0.31	0.02	9.84	24.43	46.00	-21.57	Average
1.782	23.26	0.31	0.02	9.84	33.43	56.00	-22.57	QP
3.165	14.42	0.40	0.06	9.82	24.70	46.00	-21.30	Average
3.165	23.42	0.40	0.06	9.82	33.70	56.00	-22.30	QP
7.285	13.47	0.55	0.10	9.84	23.96	50.00	-26.04	Average
7.285	20.47	0.55	0.10	9.84	30.96	60.00	-29.04	QP

Remark: 1. Correct Factor = LISN Factor + Cable Loss + Aux Factor, the value was added to Original Receiver Reading by the software automatically.  
2. Level = Original Receiver Reading + Correct Factor  
3. Over Limit = Level - Limit  
4. If the PK Corrected Reading is lower than AV limit, the AV test can be elided.

Example: Assuming LISN Factor = 10.00dB, Cable Loss = 2.00dB, Aux Factor = 9.00dB  
Original Receiver Reading = 10.00dBuV, Limit = 66.00dBuV.  
Then Correct Factor = 10.00 + 2.00 + 9.00 = 21.00dB;  
Level = 10dBuV + 21.00dB = 31.00dBuV;  
Over Limit = 31.00dBuV - 66.00dBuV = -35.00dB.

## 4 Radiated emission

Test result: **PASS**

### 4.1 Radiated emission limits

#### 4.1.1 Limits for radiated emission of class A device

FCC

Frequency (MHz)	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 10m
30 ~ 88	39
88 ~ 216	43.5
216 ~ 960	46.4
Above 960	49.5

Note: for the measurement distance other than 3m and 10m, the limit is varied according to 20dB/10 decades.

IC

Frequency (MHz)	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 10m	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 3m
30 ~ 88	40.0	50.0
88 ~ 216	43.5	54.0
216 ~ 230	46.4	56.9
230 ~ 960	47.0	57.0
960 ~ 1000	49.5	60.0

Note: The more stringent limit applies at transition frequencies.

Frequency (GHz)	Permitted limit in dB $\mu$ V/m (Peak) of Measurement Distance 3m	Permitted limit in dB $\mu$ V/m (Average) of Measurement Distance 3m
1 ~ $F_M$	80.0	60.0

Note: These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.

#### 4.1.2 Limits for radiated emission of class B device

##### FCC

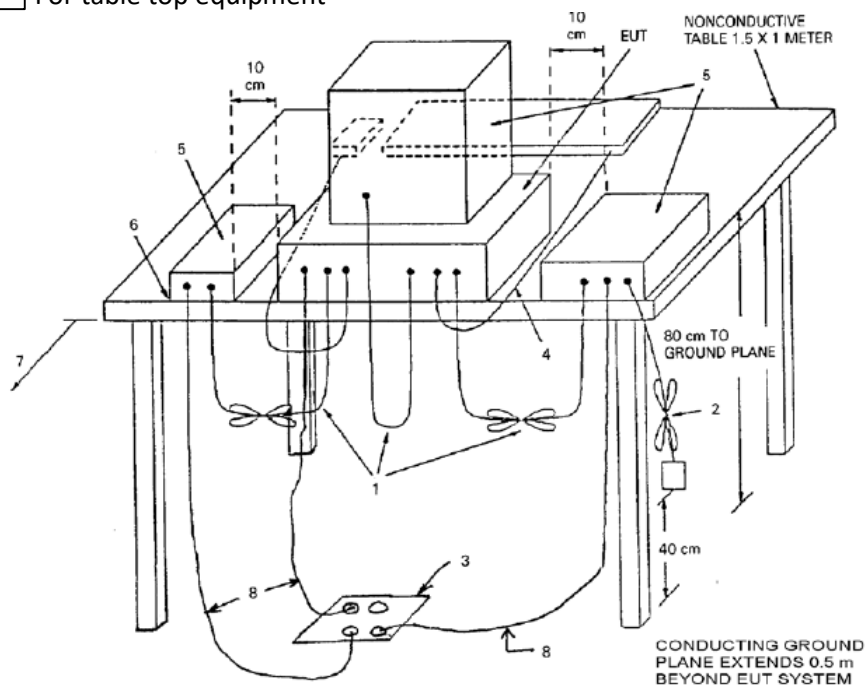
Frequency (MHz)	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 3m
30 ~ 88	40.0
88 ~ 216	43.5
216 ~ 960	46.0
Above 960	54.0
Note: for the measurement distance other than 3m and 10m, the limit is varied according to 20dB/10 decades.	

##### IC

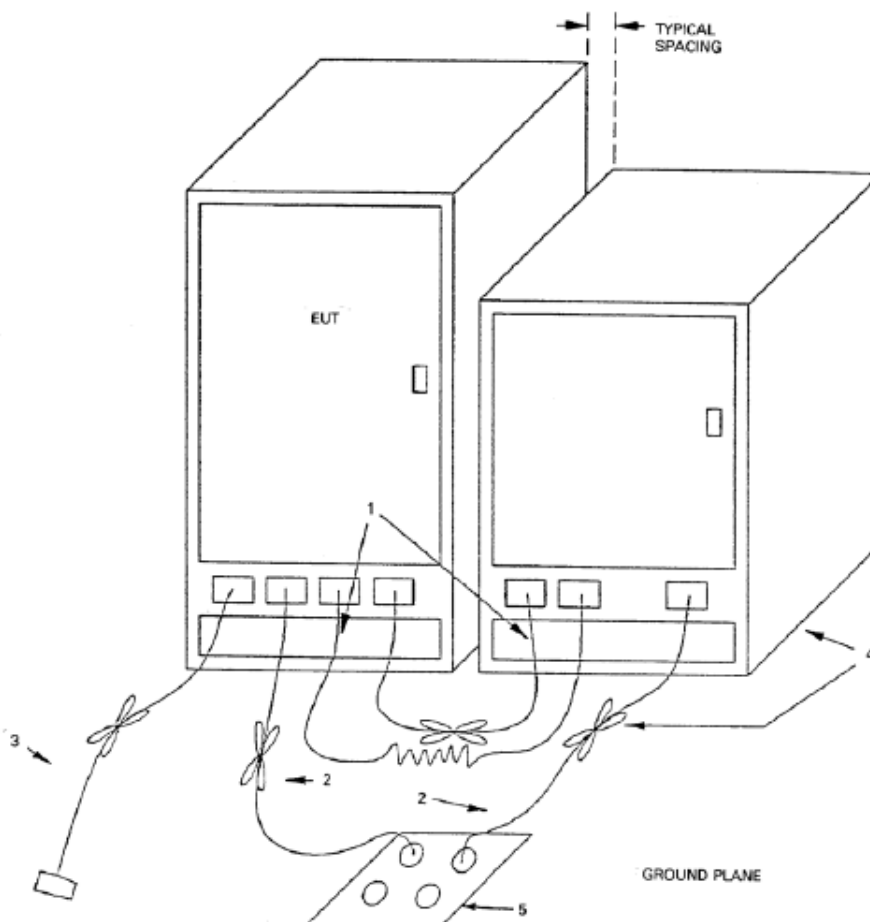
Frequency (MHz)	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 10m	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 3m
30 ~ 88	30.0	40.0
88 ~ 216	33.1	43.5
216 ~ 230	35.6	46.0
230 ~ 960	37.0	47.0
960 ~ 1000	43.5	54.0
Note: The more stringent limit applies at transition frequencies.		

Frequency (GHz)	Permitted limit in dB $\mu$ V/m (Peak) of Measurement Distance 3m	Permitted limit in dB $\mu$ V/m (Average) of Measurement Distance 3m
1 ~ $F_M$	74.0	54.0
Note: These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.		

## 4.2 Block diagram and test set up

☐ For table top equipment

☒ For floor standing equipment



### 4.3 Test Setup and Test Procedure

The measurement was performed in a semi-anechoic chamber. While testing for spurious emission higher than 1GHz, the pre-amplifier (and high pass filter if necessary) is equipped just at the output terminal of the antenna.

The distance from EUT to receiving antenna is 3 meters.

Measurement was performed according to clause 4 and clause 5 of ANSI 63.4.

Test procedure was according to clause 8.3 of ANSI 63.4.

EUT arrangement and operate condition were according to clause 6 and clause 8 of ANSI 63.4.

The radiated emission was measured using the test receiver with the resolutions bandwidth set as:

RBW = 100kHz, VBW = 300kHz (30MHz~1GHz)

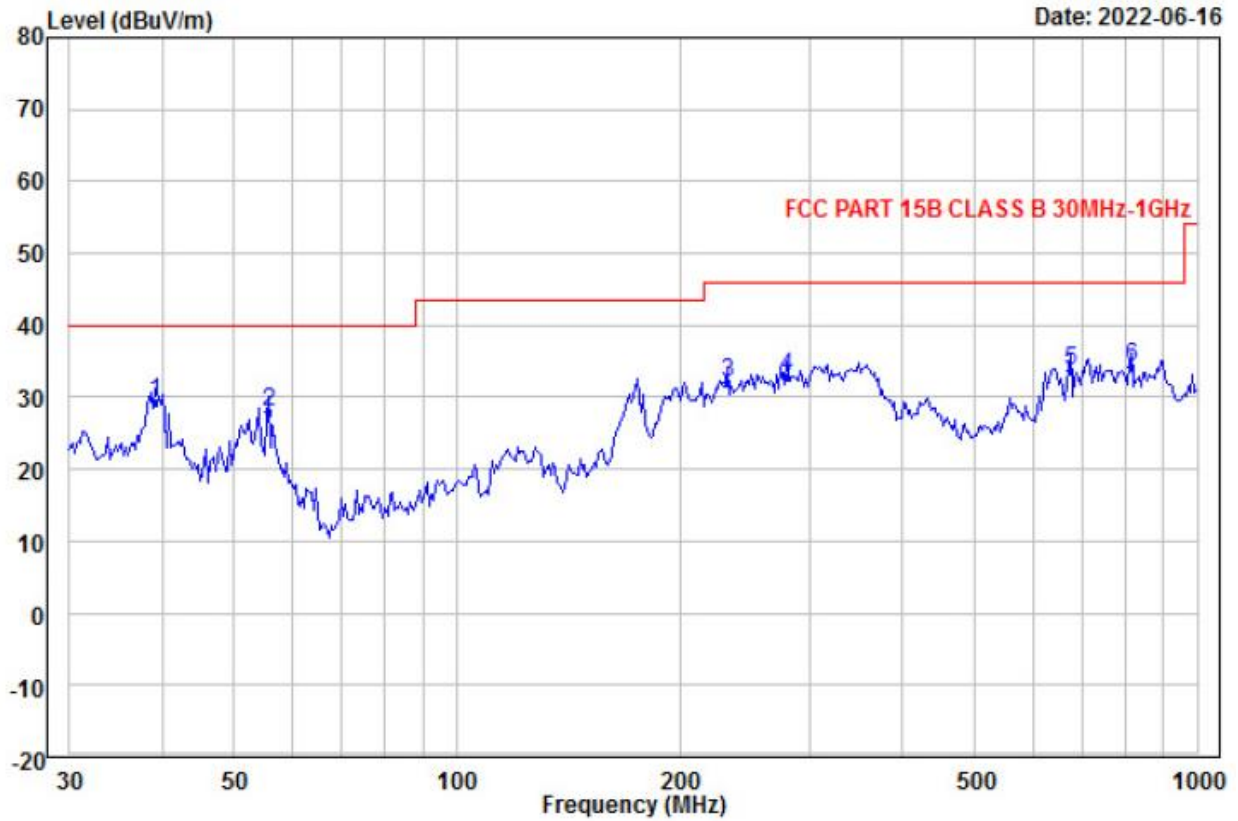
RBW = 1MHz, VBW = 3MHz (>1GHz for PK)

Highest internal frequency (Fx)	Highest measured frequency $F_M$ for radiated measurement	Measured Bandwidth
$F_x \leq 108 \text{ MHz}$	1 GHz	120kHz
$108 \text{ MHz} < F_x \leq 500 \text{ MHz}$	2 GHz	1MHz
$500 \text{ MHz} < F_x \leq 1 \text{ GHz}$	5 GHz	1MHz
$F_x > 1 \text{ GHz}$	$5 \times F_x$ up to a maximum of 40 GHz	1MHz
Note: 1. $F_x$ is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test.		

#### 4.4 Test Protocol

##### Test Curve of mode 2

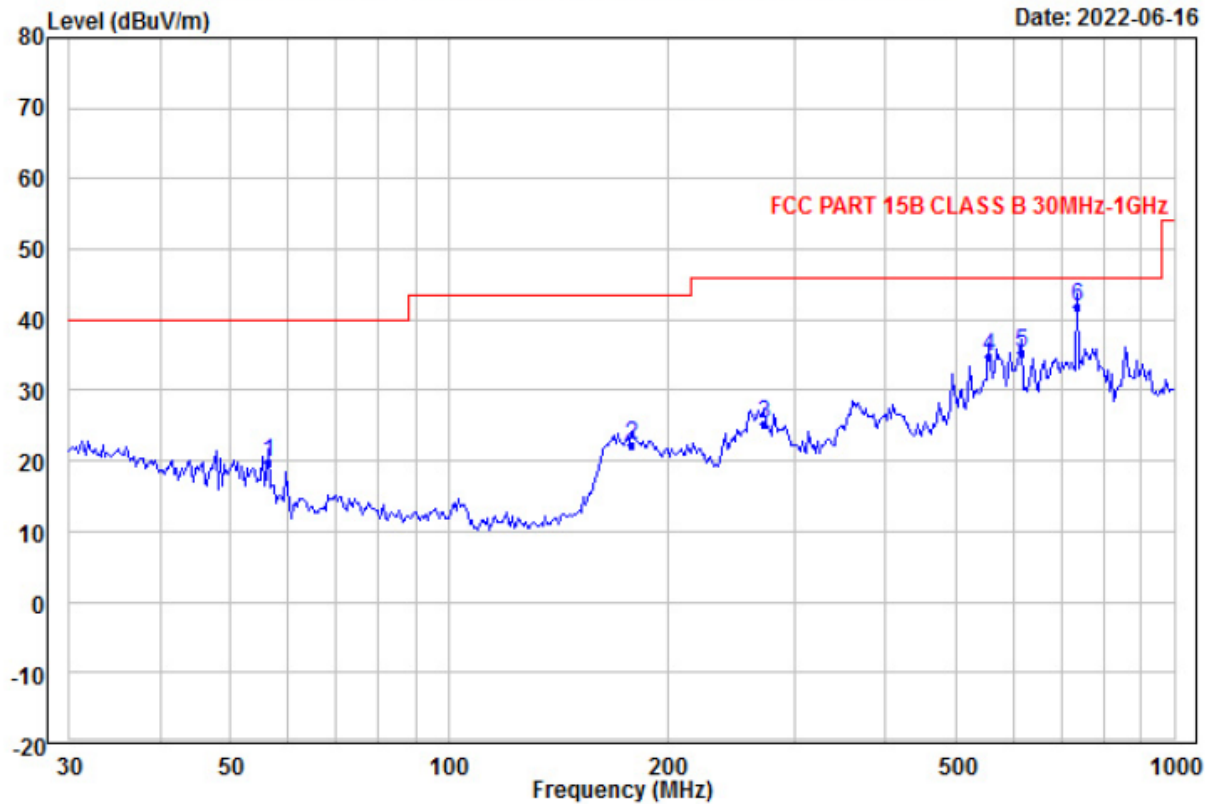
Horizontal



Freq	Read Level	Ant Factor	Preampl Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
39.182	36.94	20.31	28.80	0.00	0.86	29.31	40.00	-10.69	QP
55.678	45.22	10.76	28.77	0.00	0.82	28.03	40.00	-11.97	QP
231.853	42.18	16.51	28.14	0.00	1.50	32.05	46.00	-13.95	QP
278.331	40.39	18.97	28.03	0.00	1.60	32.93	46.00	-13.07	QP
674.677	33.03	27.79	29.40	0.00	2.34	33.76	46.00	-12.24	QP
815.635	31.61	29.11	29.13	0.00	2.60	34.19	46.00	-11.81	QP



Vertical



Freq	Read Level	Ant Factor	Preamp Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
56.466	36.94	10.70	28.76	0.00	0.82	19.70	40.00	-20.30	QP
178.770	32.02	17.21	28.31	0.00	1.35	22.27	43.50	-21.23	QP
272.525	33.00	18.75	28.05	0.00	1.59	25.29	46.00	-20.71	QP
554.171	36.43	25.47	29.38	0.00	2.17	34.69	46.00	-11.31	QP
615.774	35.64	26.70	29.44	0.00	2.29	35.19	46.00	-10.81	QP
734.037	40.01	28.64	29.31	0.00	2.44	41.78	46.00	-4.22	QP

**Test data of 1G~25GHz:**

Antenna Polarization	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit	Detector
H	1000.00	*	74.00	*	PK
	5000.00	*	74.00	*	PK
	10000.00	*	74.00	*	PK
	15000.00	*	74.00	*	PK
	20000.00	*	74.00	*	PK
	25000.00	*	74.00	*	PK
V	1000.00	*	74.00	*	PK
	5000.00	*	74.00	*	PK
	10000.00	*	74.00	*	PK
	15000.00	*	74.00	*	PK
	20000.00	*	74.00	*	PK
	25000.00	*	74.00	*	PK

Note: \* means the emission level is 20dB or more lower than the relevant limit.

Remark: 1. Correct Factor = Antenna Factor + Cable Loss +Aux Factor - Preamp Factor

2. Level = Original Receiver Reading + Correct Factor

3. Over Limit = Level - Limit

4. If the PK Corrected Reading is lower than AV limit, the AV test can be elided.

Example: Assuming Antenna Factor = 20.00dB/m, Cable Loss = 2.00dB, Aux Factor = 0.00dB,

Preamp Factor = 28dB,

Original Receiver Reading = 30.00dBuV, limit = 40.00dBuV/m.

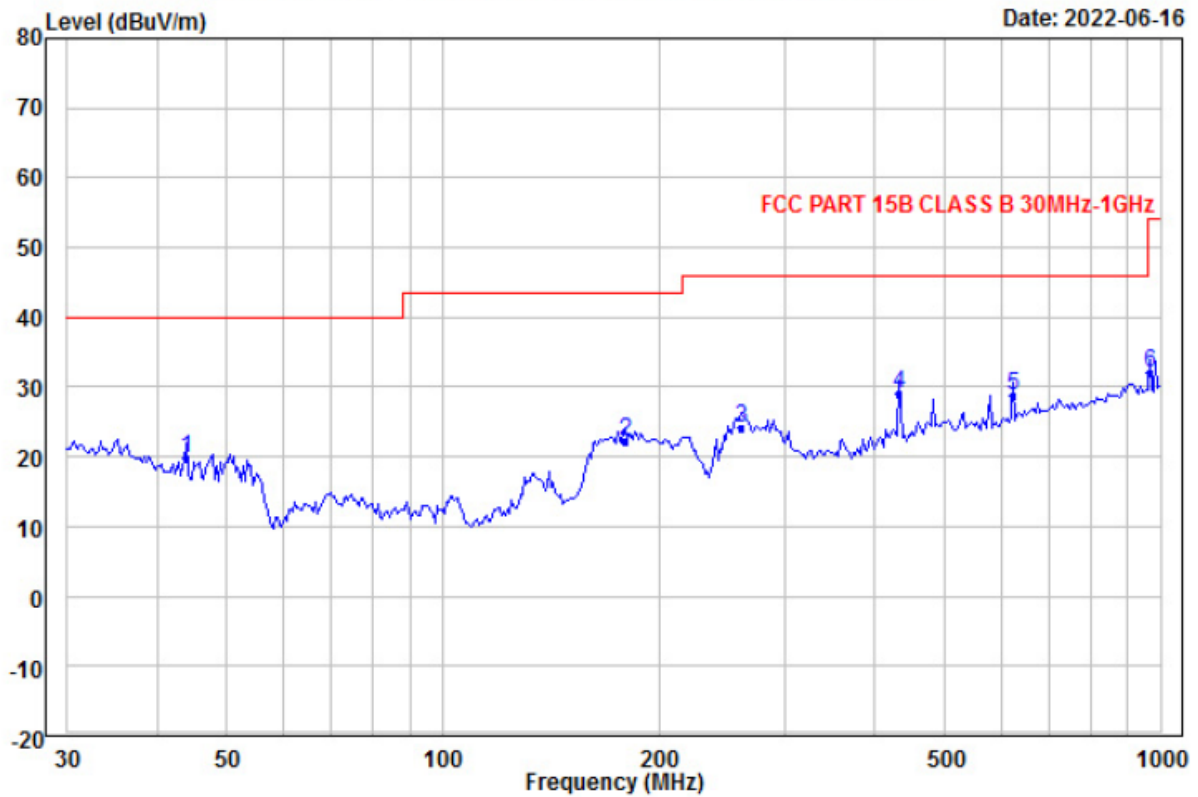
Then Correct Factor = 20.00 + 2.00 +0.00dB - 28.00 = -4.00dB/m;

Level = 30dBuV - 4.00dB/m = 26.00dBuV/m;

Over Limit = 26.00dBuV/m – 40.00dBuV/m = -14.00dB.

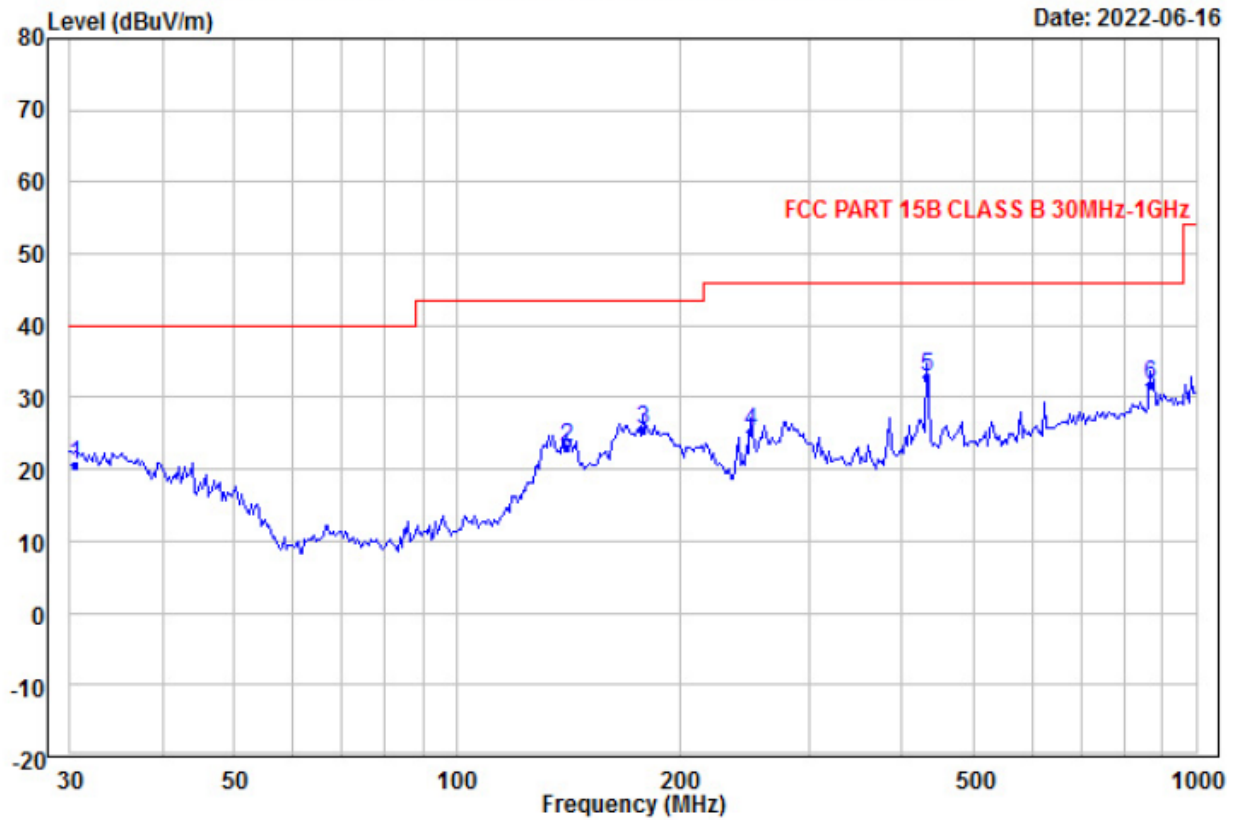
Test Curve of mode 3

Horizontal



Freq	Read Level	Ant Factor	Preamp Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
43.845	30.30	17.54	28.79	0.00	0.85	19.90	40.00	-20.10	QP
180.030	32.28	16.90	28.31	0.00	1.35	22.22	43.50	-21.28	QP
261.273	32.36	18.30	28.07	0.00	1.56	24.15	46.00	-21.85	QP
433.340	33.33	22.57	28.86	0.00	1.95	28.99	46.00	-17.01	QP
624.490	28.97	26.88	29.43	0.00	2.29	28.71	46.00	-17.29	QP
965.474	27.30	30.40	28.71	0.00	3.06	32.05	54.00	-21.95	QP

Vertical



Freq	Read	Ant	Preamp	Aux	Cable	Level	Limit	Over	Remark
MHz	dBuV	Factor	Factor	Factor	Loss	dBuV/m	dBuV/m	dB	
30.425	25.05	23.72	28.81	0.00	0.63	20.59	40.00	-19.41	QP
140.777	38.69	11.62	28.48	0.00	1.20	23.03	43.50	-20.47	QP
178.770	35.19	17.21	28.31	0.00	1.35	25.44	43.50	-18.06	QP
250.486	34.06	17.74	28.10	0.00	1.54	25.24	46.00	-20.76	QP
433.340	37.11	22.57	28.86	0.00	1.95	32.77	46.00	-13.23	QP
868.886	28.03	29.88	28.98	0.00	2.71	31.64	46.00	-14.36	QP

**Test data of 1G~25GHz:**

**Test data of 1G~25GHz:**

Antenna Polarization	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit	Detector
H	1000.00	*	74.00	*	PK
	5000.00	*	74.00	*	PK
	10000.00	*	74.00	*	PK
	15000.00	*	74.00	*	PK
	20000.00	*	74.00	*	PK
	25000.00	*	74.00	*	PK
V	1000.00	*	74.00	*	PK
	5000.00	*	74.00	*	PK
	10000.00	*	74.00	*	PK
	15000.00	*	74.00	*	PK
	20000.00	*	74.00	*	PK
	25000.00	*	74.00	*	PK

Note: \* means the emission level is 20dB or more lower than the relevant limit.

Remark: 1. Correct Factor = Antenna Factor + Cable Loss + Aux Factor - Preamp Factor

2. Level = Original Receiver Reading + Correct Factor

3. Over Limit = Level - Limit

4. If the PK Corrected Reading is lower than AV limit, the AV test can be elided.

Example: Assuming Antenna Factor = 20.00dB/m, Cable Loss = 2.00dB, Aux Factor = 0.00dB,

Preamp Factor = 28dB,

Original Receiver Reading = 30.00dBuV, limit = 40.00dBuV/m.

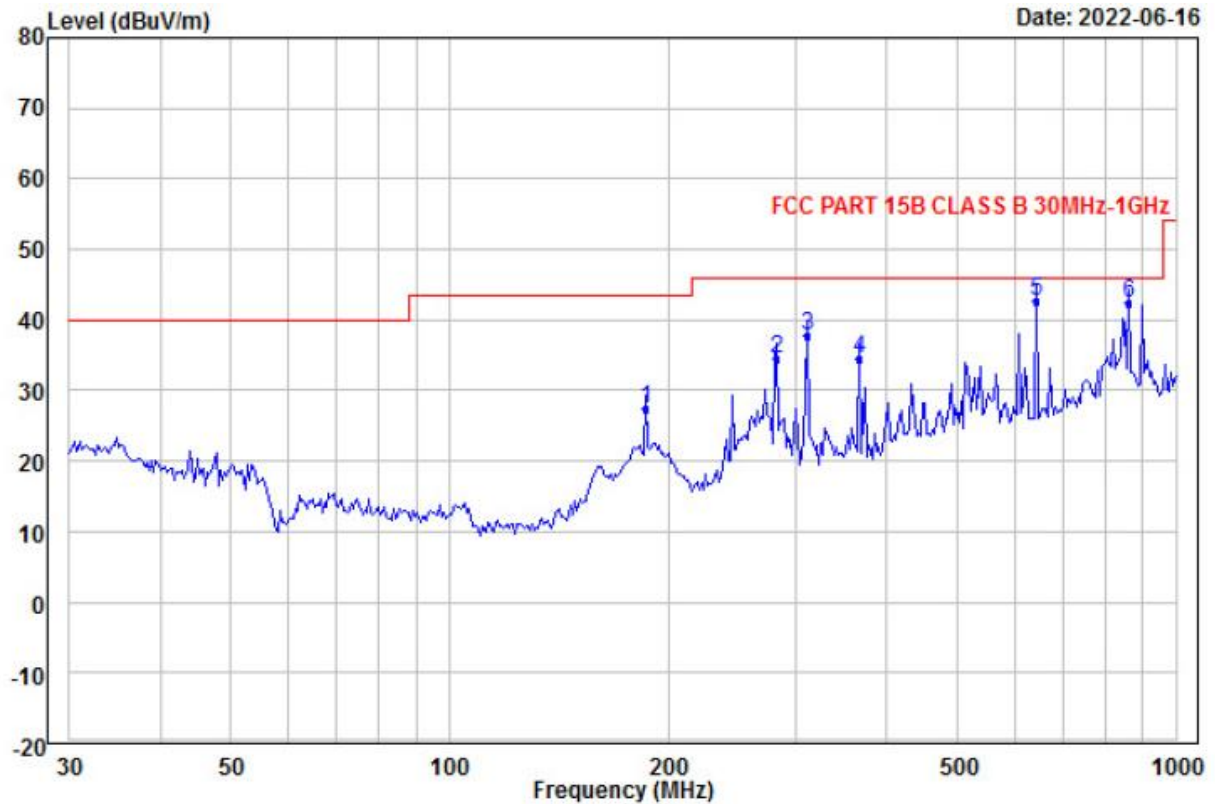
Then Correct Factor = 20.00 + 2.00 + 0.00dB - 28.00 = -4.00dB/m;

Level = 30dBuV - 4.00dB/m = 26.00dBuV/m;

Over Limit = 26.00dBuV/m - 40.00dBuV/m = -14.00dB.

Test Curve of mode 4

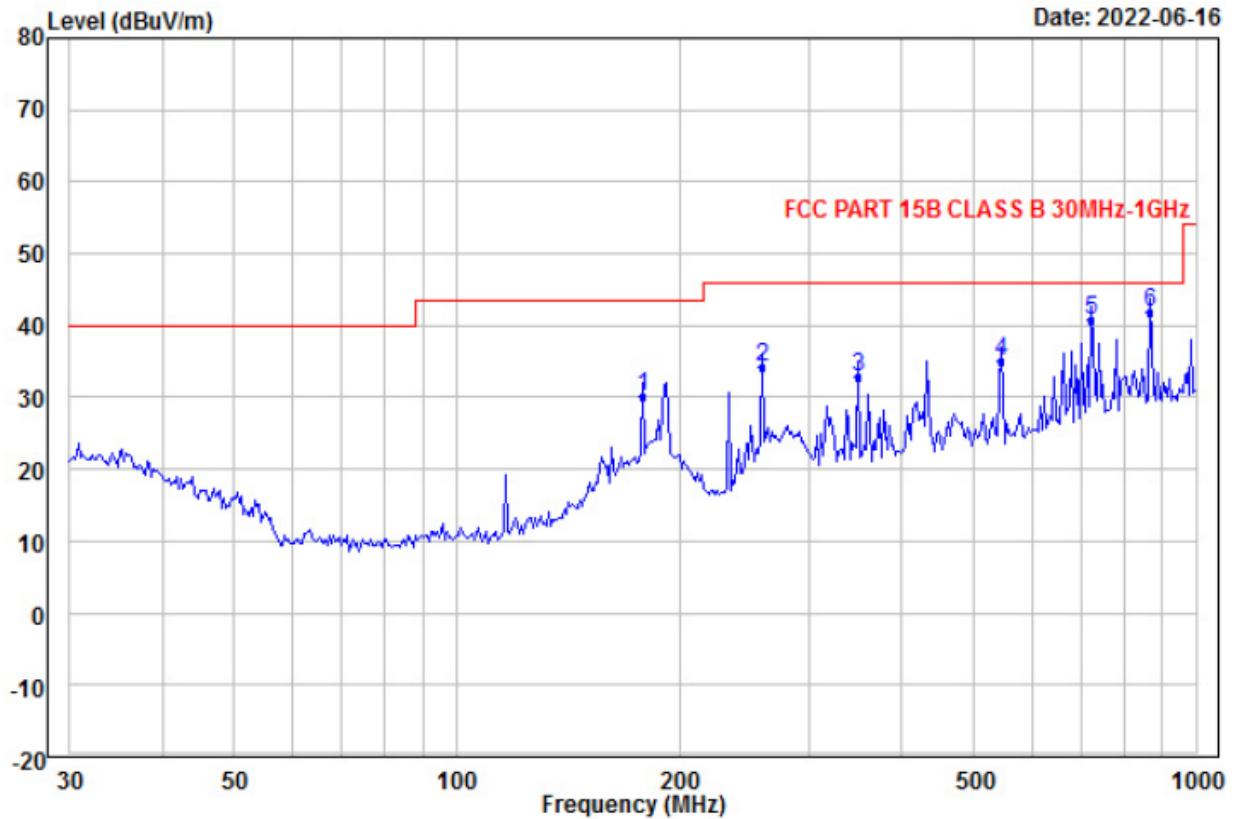
Horizontal



Freq	Read Level	Ant Factor	Preamp Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
186.468	37.60	16.61	28.28	0.00	1.38	27.31	43.50	-16.19	QP
282.270	41.80	19.15	28.02	0.00	1.61	34.54	46.00	-11.46	QP
311.452	43.76	20.36	28.06	0.00	1.68	37.74	46.00	-8.26	QP
366.087	39.68	21.49	28.42	0.00	1.82	34.57	46.00	-11.43	QP
642.292	42.52	27.39	29.42	0.00	2.31	42.80	46.00	-3.20	QP
862.802	38.87	29.80	29.00	0.00	2.70	42.37	46.00	-3.63	QP



Vertical



Freq	Read Level	Ant Factor	Preamp Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
178.770	39.88	17.21	28.31	0.00	1.35	30.13	43.50	-13.37	QP
259.443	42.54	18.19	28.08	0.00	1.56	34.21	46.00	-11.79	QP
348.515	37.97	21.34	28.30	0.00	1.77	32.78	46.00	-13.22	QP
546.437	36.76	25.37	29.37	0.00	2.16	34.92	46.00	-11.08	QP
723.793	38.96	28.70	29.33	0.00	2.42	40.75	46.00	-5.25	QP
868.886	38.27	29.88	28.98	0.00	2.71	41.88	46.00	-4.12	QP

**Test data of 1G~25GHz:**

**Test data of 1G~25GHz:**

Antenna Polarization	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit	Detector
H	1000.00	*	74.00	*	PK
	5000.00	*	74.00	*	PK
	10000.00	*	74.00	*	PK
	15000.00	*	74.00	*	PK
	20000.00	*	74.00	*	PK
	25000.00	*	74.00	*	PK
V	1000.00	*	74.00	*	PK
	5000.00	*	74.00	*	PK
	10000.00	*	74.00	*	PK
	15000.00	*	74.00	*	PK
	20000.00	*	74.00	*	PK
	25000.00	*	74.00	*	PK

Note: \* means the emission level is 20dB or more lower than the relevant limit.

Remark: 1. Correct Factor = Antenna Factor + Cable Loss + Aux Factor - Preamp Factor

2. Level = Original Receiver Reading + Correct Factor

3. Over Limit = Level - Limit

4. If the PK Corrected Reading is lower than AV limit, the AV test can be elided.

Example: Assuming Antenna Factor = 20.00dB/m, Cable Loss = 2.00dB, Aux Factor = 0.00dB,

Preamp Factor = 28dB,

Original Receiver Reading = 30.00dBuV, limit = 40.00dBuV/m.

Then Correct Factor = 20.00 + 2.00 + 0.00dB - 28.00 = -4.00dB/m;

Level = 30dBuV - 4.00dB/m = 26.00dBuV/m;

Over Limit = 26.00dBuV/m - 40.00dBuV/m = -14.00dB.



## Appendix I: Photograph of equipment under test

Internal and External Photos refere to the Internal and External Photos documents

\*\*\*\*\***\*END of the report\***\*\*\*\*\*