



Test report No: 23B0618R-0E3012110014-A

## FCC TEST REPORT

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

Product Name	Notebook PC
Trademark	TONGFANG
Model and /or type reference	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)
Applicant's name / address	TONGFANG HONGKONG (SUZHOU) LIMITED / No. 10 Plant, Jianwu Phase III, Western Zone, Comprehensive Bonded Zone, No. 200, Suhong Middle Road, Suzhou Industrial Park
Manufacturer's name / address	TONGFANG HONGKONG (SUZHOU) LIMITED / No.10 Plant, Jianwu Phase III, Western Zone, Suzhou Industrial Park, 215000 Suzhou City, Jiangsu Province, China
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart B:2021, Class B ICES-003 Issue 7:2020, Class B
Verdict Summary	IN COMPLIANCE
Documented By (Senior Adm. Specialist / Leven Huang )	
Approved By (Director / Vincent Lin )	
Date of Report	2023/11/20
Date of Issue	2023/12/26
Report No.	23B0618R-0E3012110014-A
Report Version	V2.0

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Product Photos: Please refer to the file: 23B0618R-Product Photos

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## Competences and Guarantees

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

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

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

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

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

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## General conditions

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

## Revision History

Report No.	Version	Description	Issued Date
23B0618R-0E3012110014-A	V1.0	Initial issue of report.	2023-12-04
23B0618R-0E3012110014-A	V2.0	Modify antenna Model name.	2023-12-26

## 1. General Information

### 1.1. EUT Description

Product Name	Notebook PC
Trademark	TONGFANG
Model No.	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)
EUT Max Frequency	5.8GHz
EUT Rated Voltage	19Vdc, 3.42A
EUT Test Voltage	AC 120V / 60Hz

Component	
Power Adapter (1)	MFR: FSP, M/N: FSP065-RBBN3 INPUT: 100-240V~, 1.5A, 50-60Hz OUTPUT: 19V=3.42A, 65.0W Cable Out: Non-shielded, 1.5m, with one ferrite core bonded.
Power Adapter (2)	MFR: CHICONY, M/N: A18-065N3A INPUT: 100-240V~, 1.7A, 50-60Hz OUTPUT: 19V=3.42A, 65.0W Cable Out: Non-shielded, 1.5m, with one ferrite core bonded.
Power Cable	Non-Shielded, 1.8m

Keypart List				
No.	Item	Manufactory	Model	Specification
1	CPU (1744BGA)	Intel	i5-1240P	1.7GHz
		Intel	i7-1260P	2.1GHz
2	DDR	Samsung	M471A1K43EB1	DDR4 8GB 3200
		Goldkey	GKE800SO102408	DDR4 8GB 3200
		Samsung	M471A2K43EB1	DDR4 16GB 3200
3	SSD	Samsung	MZVL2512HCJQ	512GB
		Phison	PM8512GPKTCB59TF	512GB
		Samsung	MZVL21T0HCLR	1TB
		Phison	PM8001TPKTCB59TF	1TB
4	Panel	BOE	NV140FHM-N48	14"/1920*1080/60Hz
		Sharp	LQ140M1JW61	14"/1920*1080/60Hz
		Innolux	N140HCA-EAC	14"/1920*1080/60Hz
		LG	LP140WFH-SPD1	14"/1920*1080/60Hz
		BOE	NV140FHM-N66	14"/1920*1080/60Hz
		Innolux	N140HCE-EN2	14"/1920*1080/60Hz
5	Battery	Getac	11.4,4.1,LP,VK,BK,PF4WN,GTC,4H	46wh 3S1P
		BMS	TFM21L20J0J8522	46wh 3S1P
		Getac	11.6,4.47,LP,LW,BK,PHID1	53wh 3S1P
6	Adapter	FSP	FSP065-RBBN3	65W
		Chicony	A18-065N3A	65W
7	WLAN	INTEL	WLAN+BT,AX201NGW	802.11abgn+acR2+ax MIMO 2x2
8	Webcam	Chicony	CKFKH7321005811LH	--
		Chicony	CKFKH5721005810LH	--
9	Motherboard	Tongfang	MBAPH4AUX110T	--
10	Antenna	WGT	ANTRP4F123-0301	WLAN,PH4AUXF,TRI BAND_MAIN,WGT
		WGT	ANTRP4F123-0302	WLAN,PH4AUXF,TRI BAND_AUX,WGT

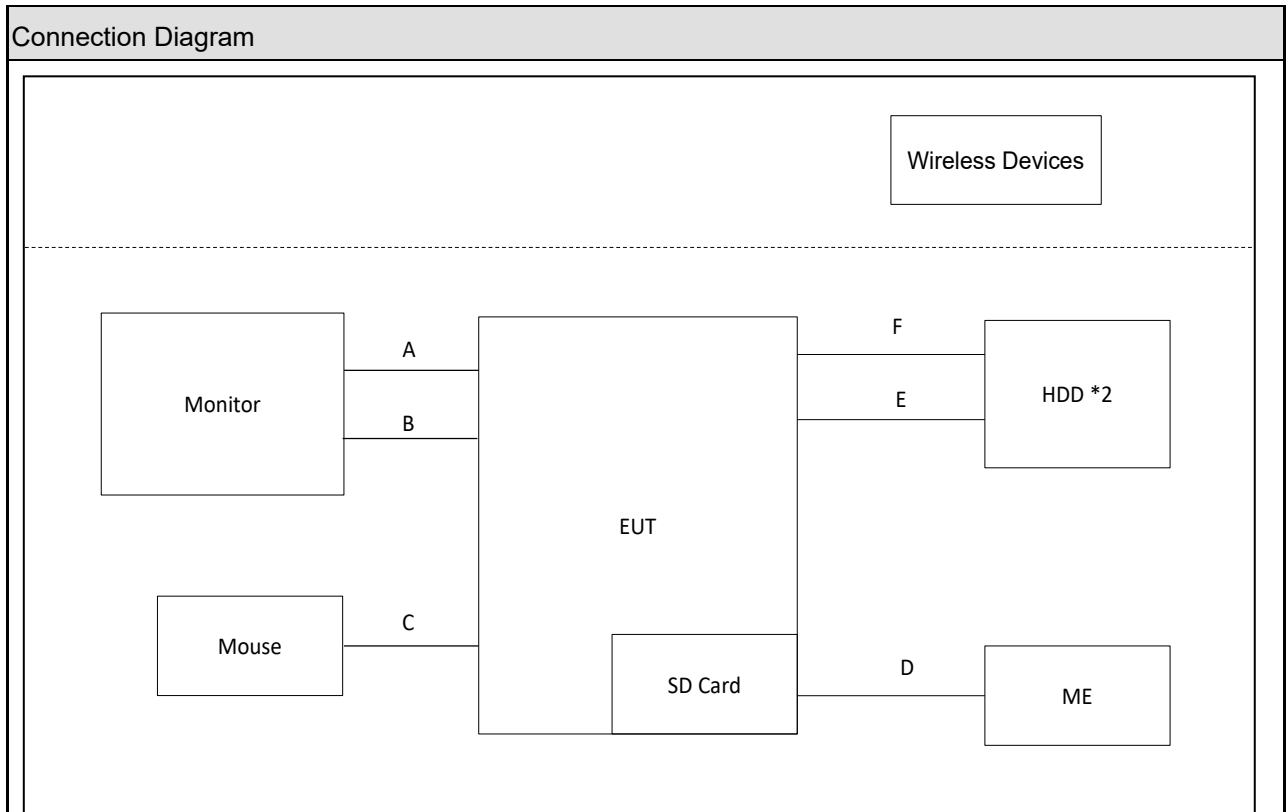
## 1.2. Mode of Operation

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

Pre-Test Mode	
Mode 1	
Mode 2	
Mode 3	
Mode 4	
Final Test Mode	
Emission	Mode 1

Item	SPEC	1	2	3	4
Resolution	LCD 1920*1080/60 + HDMI 3840*2160/60Hz(Extend)			V	V
	LCD 1920*1080/60 + HDMI 3840*2160/60Hz(Extend) + TBT1 3840*2160/60Hz(Extend)		V		
	LCD 1920*1080/60 + HDMI 3840*2160/60Hz(Extend) + TBT2 3840*2160/60Hz(Extend)	V			
CPU	Intel i7-1260P @ 2.1GHz	V	V	V	V
DDR	Samsung/M471A2K43EB1	V	V	V	V
SSD	Samsung/MZVL21T0HCLR	V	V	V	V
Panel	BOE/NV140FHM-N48	V	V	V	V
Battery	Getac/11.6,4.47,LP,LW,BK,PHID1	V	V	V	V
WLAN	INTEL/AX201NGW	V	V	V	V
Webcam	Chicony/CKFKH5721005810LH	V	V	V	V
Motherboard	Tongfang/MBAPH4AUX110T	V	V	V	V
Antenna	WGT/ANTRP4F123-0301	V	V	V	V
	WGT/ANTRP4F123-0302	V	V	V	V
TBT1	Monitor		V		
	W/R	V			
	Load(5V/3A,1.7Ω)			V	
	Charger				V
TBT2	Monitor	V			
	W/R		V		
	Load(5V/3A,1.7Ω)				V
	Charger			V	
Adapter	Chicony/A18-065N3A	V	V		
USB Type C Adapter	AUKEY/PA-B7			V	V

### 1.3. Configuration & Details of Tested System



Tested System Details				
Product	Manufacturer	Model No.	No.	Cable Type & Description
Monitor	Dell	U2723QE	A	HDMI, shielded 1.8m
			B	Type C, shielded 1.8m
USB Mouse	Microsoft	1113	C	USB, shielded 1.8m, core *1
ME	VPB	QC-31	D	Audio, non-shielded 1.2m
USB HDD *2	DonKen	GK-HDD-01	E	Type C, shielded 1.8m
			F	USB, shielded 0.5m
SDHC Card 64GB	SanDisk	SanDisk Extreme SDXC UHS-I		

Tested System Details		
Product	Manufacturer	Model No.
Wireless Router	ASUS	ROG RAPTURE GT-AXE11000
Wireless Router	ASUS	RT-AC58U
Base Station	R&S	CMW500
UXM 5G Wireless Test Platform	Keysight	E7515B
GPS Simulator	Oroila	GSG-5

**Note:**

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



#### 1.4. EUT Exercise Software

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

## 2. Technical Test

### 2.1. Summary of Test Result

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

Emission				
Performed Item	Normative References	Test Performed	Test Site	Verdict
Conducted Emission	FCC CFR Title 47 Part 15 Subpart B:2021, Class B ICES-003 Issue 7:2020, Class B CISPR 22:2008, ANSI C63.4-2014 ANSI C63.4a-2017, CAN/CSA-CISPR 32:17	Yes	LK-SR01	Pass
Radiated Emission	FCC CFR Title 47 Part 15 Subpart B:2021, Class B ICES-003 Issue 7:2020, Class B CISPR 22:2008, ANSI C63.4-2014 ANSI C63.4a-2017, CAN/CSA-CISPR 32:17	Yes	LK-Site06 LK-CB05	Pass

Note:

1. Test Site information refers to test Laboratory Information.

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

## 2.2. List of Test Equipment

### Conducted Emission / LK-SR01

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Due Date
EMI Test Receiver	R&S	ESR3	102041	2023/7/6	2024/7/5
Two-Line V-Network	R&S	ENV216	101478	2023/9/13	2024/9/12
Two-Line V-Network	R&S	ESH3-Z5	836679/023	2023/7/7	2024/7/6
Impedance Stabilization Network	TESEQ	ISN T800	30303	2023/8/3	2024/8/2
Impedance Stabilization Network	TESEQ	ISN T8-Cat6	65513	2023/6/19	2024/6/18
Impedance Stabilization Network	TESEQ	ISN ST08	56935	2023/6/19	2024/6/18
Coaxial Cable	SUHNER	RG 400	LC016-RG	2023/6/17	2024/6/16

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

Test Software version : e3 V9

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

### Radiated Emission / LK-Site06

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Due Date
Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	00674	2023/7/6	2024/7/5
EMI Test Receiver	R&S	ESR3	102187	2023/5/3	2024/5/2
Coaxial Cable	SUHNER	RG 214	LC006A-RG LC006B-RG	2023/5/27	2024/5/26
Coaxial Switch	Anritsu	MP59B	6201454660	2023/5/27	2024/5/26
Preamplifier	Jet-Power	EMC9135	980715	2023/5/27	2024/5/26
NSA	DEKRA	N/A	N/A	2023/5/27	2024/5/26

Test Software version : e3 V9

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

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

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Due Date
Double Ridged Guide Horn Antenna	ETS-Lindgren	3117	00202723	2023/10/30	2024/10/29
Horn Antenna	COM-POWER	AH-840	101043	2023/5/11	2024/5/10
EMI Test Receiver	R&S	ESU26	100433	2023/4/19	2024/4/18
Signal Analyzer	R&S	FSV40	101176	2023/4/27	2024/4/26
Coaxial Cable	SUHNER	SUCOFLEX 104	LC034-SF	2023/6/19	2024/6/18
Coaxial Cable	SUHNER	SUCOFLEX 106	LC031-SF	2023/6/19	2024/6/18
Coaxial Cable	ROSNOL	MP533A	AC025-MP AC031-MP	2023/6/19	2024/6/18
Microwave Preamplifier	EMCI	EMC051845SE	980359	2022/12/20	2023/12/19
Microwave Preamplifier with cable	EMCI	EMC184045SE	980370	2023/4/7	2024/4/6
VSWR	DEKRA	N/A	N/A	2023/6/21	2024/6/20

Test Software version : e3 V9

### **2.3. Measurement Uncertainty**

#### Conducted Emission

The measurement uncertainty is evaluated as  $\pm 2.00$  dB.

#### Radiated Emission(Under 1GHz)

The measurement uncertainty is evaluated as  $\pm 3.35$  dB.

#### Radiated Emission(Above 1GHz)

The measurement uncertainty is evaluated as  $\pm 4.64$  dB.

## 2.4. Test Environment

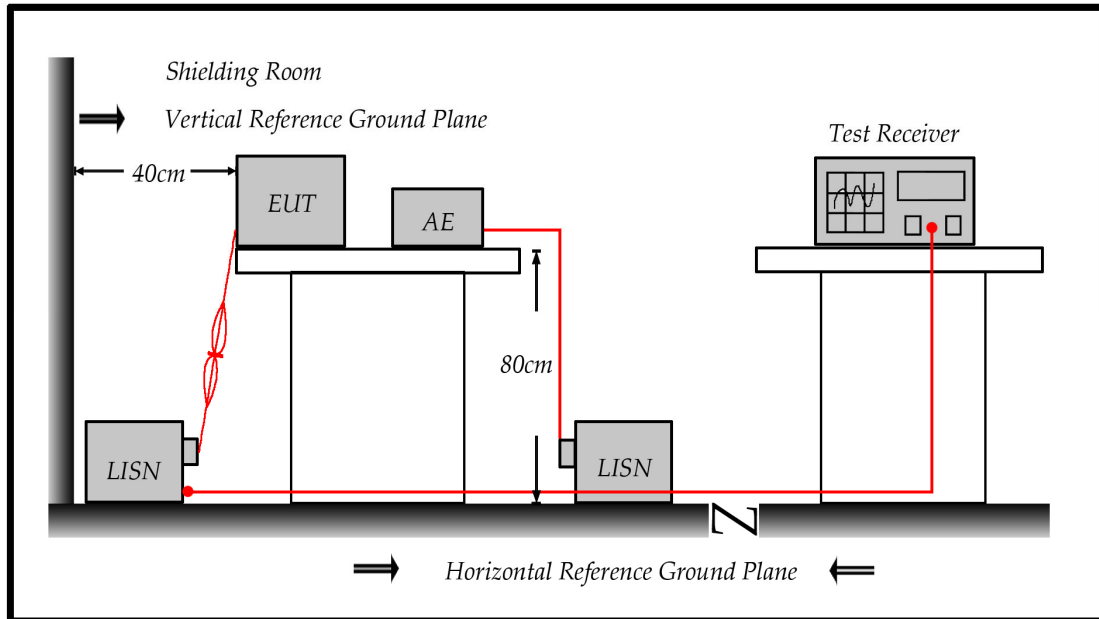
Performed Item	Items	Required
Conducted Emission	Temperature (°C)	10-40
	Humidity (%RH)	10-90
Radiated Emission	Temperature (°C)	10-40
	Humidity (%RH)	10-90

### 3. Conducted Emission

#### 3.1. Test Specification

According to Standard : FCC Part 15 Subpart B & ICES-003

#### 3.2. Test Setup



#### 3.3. Limit

Conducted emissions limits (AC mains power terminals)				
Frequency range (MHz)	Class A Quasi-peak (dBuV)	Class A Average (dBuV)	Class B Quasi-peak (dBuV)	Class B Average (dBuV)
0.15 – 0.5	79	66	66 to 56	56 to 46
0.5 – 5	73	60	56	46
5 – 30	73	60	60	50

Note:

- The more stringent limit applies at transition frequencies.
- The limit level in dB $\mu$ V decreases linearly with the logarithm of frequency

### 3.4. Test Procedure

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

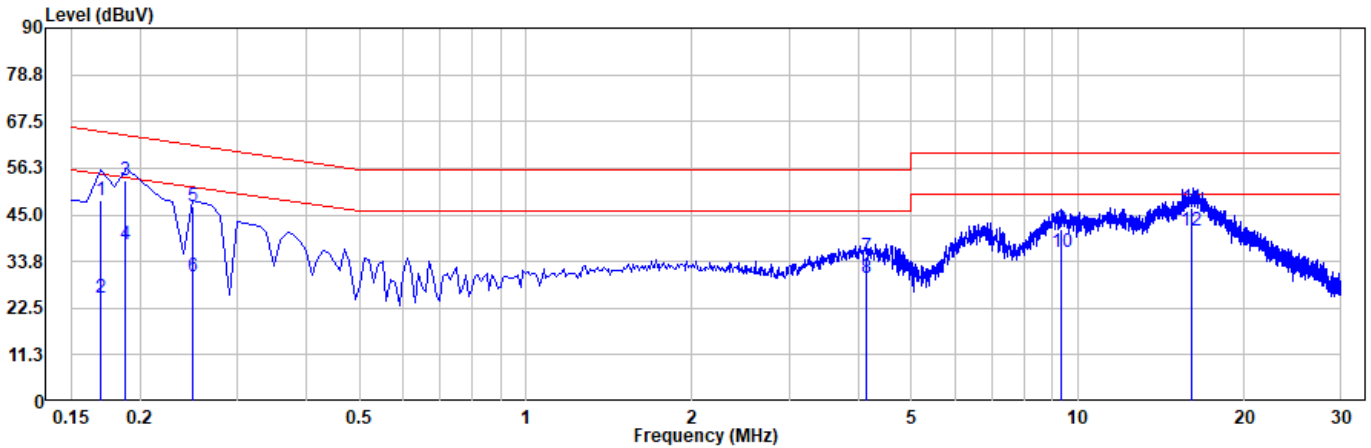
(Please refers to the block diagram of the test setup and photographs.)

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

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

### 3.5. Test Result

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-SR01
Test Voltage	AC 120V/60Hz	Test Date	2023-11-25
Test Mode	Mode 1	Engineer	Jackal Chen
Phase	Line	Temperature (°C)	23.5
Test Condition	--	Humidity (%RH)	56



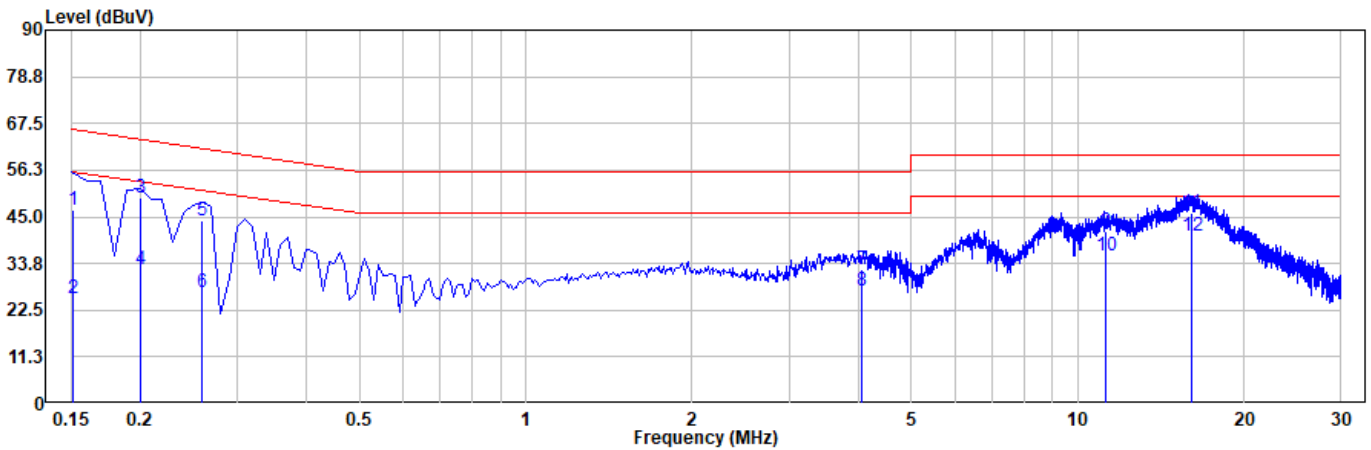
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.170	48.49	64.98	-16.48	38.74	9.75	QP
2	0.170	24.88	54.98	-30.10	15.12	9.75	Average
3	0.188	53.28	64.11	-10.83	43.53	9.75	QP
4	0.188	37.86	54.11	-16.26	28.10	9.75	Average
5	0.249	47.07	61.78	-14.71	37.32	9.76	QP
6	0.249	30.09	51.78	-21.68	20.34	9.76	Average
7	4.144	35.03	56.00	-20.97	25.05	9.97	QP
8	4.144	29.94	46.00	-16.06	19.97	9.97	Average
9	9.330	41.57	60.00	-18.43	31.39	10.18	QP
10	9.330	36.10	50.00	-13.90	25.93	10.18	Average
11	16.034	46.72	60.00	-13.28	36.36	10.35	QP
12*	16.034	41.05	50.00	-8.95	30.70	10.35	Average

Remark:

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



Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-SR01
Test Voltage	AC 120V/60Hz	Test Date	2023-11-25
Test Mode	Mode 1	Engineer	Jackal Chen
Phase	Neutral	Temperature (°C)	23.5
Test Condition	--	Humidity (%RH)	56



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.151	46.71	65.94	-19.22	37.04	9.67	QP
2	0.151	25.51	55.94	-30.43	15.83	9.67	Average
3	0.201	49.63	63.56	-13.93	39.95	9.68	QP
4	0.201	32.15	53.56	-21.41	22.47	9.68	Average
5	0.260	44.10	61.44	-17.35	34.41	9.69	QP
6	0.260	26.85	51.44	-24.59	17.16	9.69	Average
7	4.070	32.15	56.00	-23.85	22.26	9.89	QP
8	4.070	27.10	46.00	-18.90	17.21	9.89	Average
9	11.249	41.51	60.00	-18.49	31.36	10.15	QP
10	11.249	35.79	50.00	-14.21	25.64	10.15	Average
11	16.092	45.96	60.00	-14.04	35.67	10.29	QP
12*	16.092	40.34	50.00	-9.66	30.05	10.29	Average

Remark:

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

### 3.6. Test Photograph

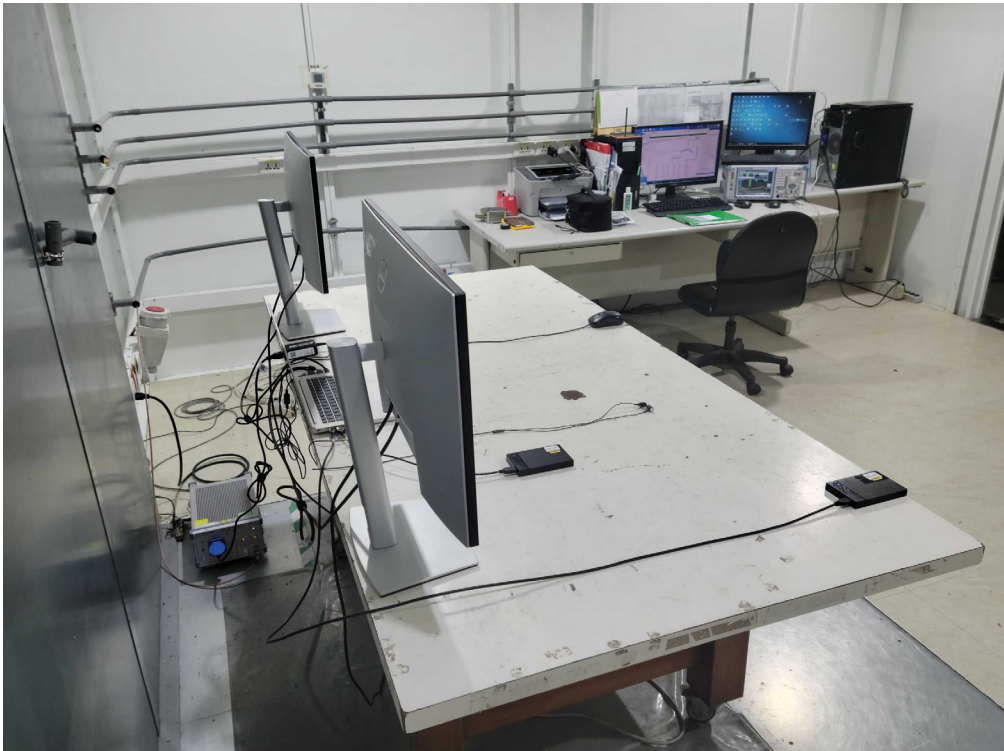
Test Mode : Mode 1

Description : Front View of Conducted Test



Test Mode : Mode 1

Description : Back View of Conducted Test



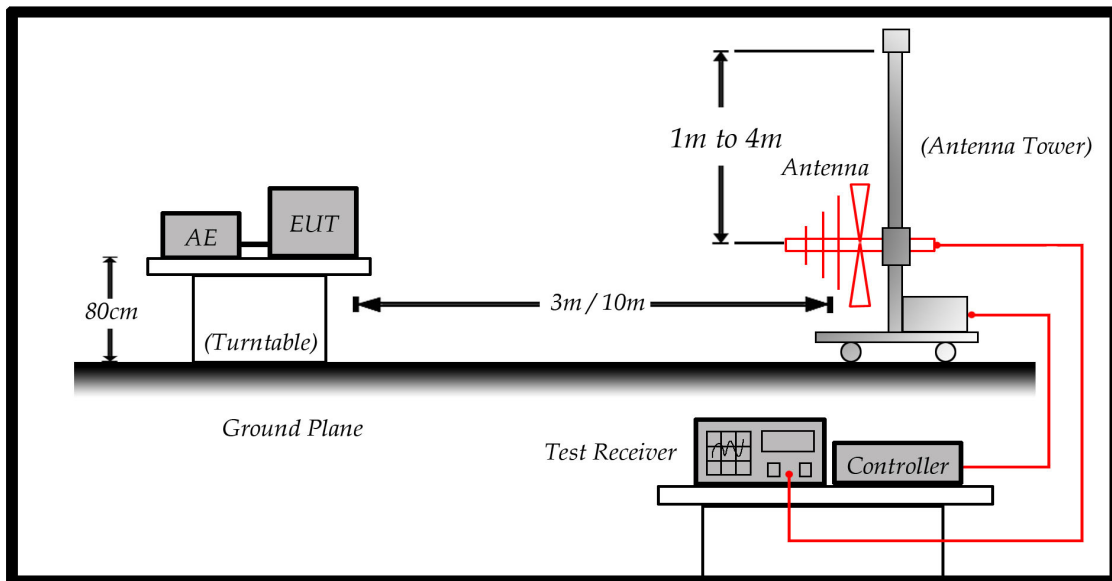
## 4. Radiated Emission

### 4.1. Test Specification

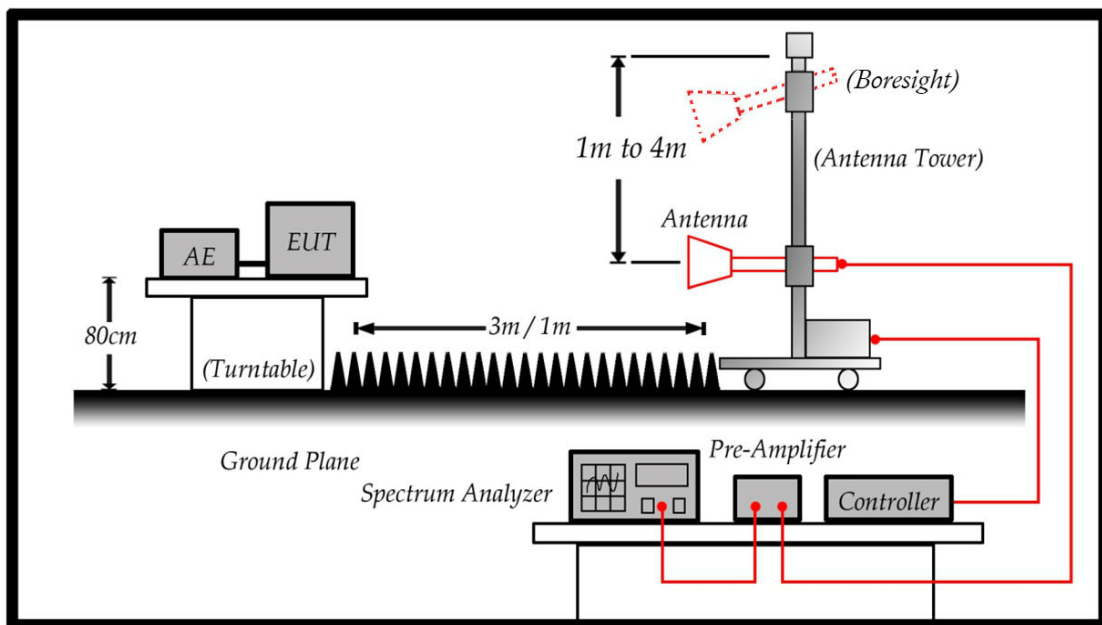
According to Standard : FCC Part 15 Subpart B & ICES-003

### 4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



### 4.3. Limit

Test shall not exceed the following value:

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

Remark:

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

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Radiated emissions limits (30 MHz to 1 GHz)				
Frequency range (MHz)	Class A (3 m) Quasi-peak (dBuV/m)	Class A (10 m) Quasi-peak (dBuV/m)	Class B (3 m) Quasi-peak (dBuV/m)	Class B (10 m) Quasi-peak (dBuV/m)
30-88	50.0	40.0	40.0	30.0
88-216	54.0	43.5	43.5	33.1
216-230	56.9	46.4	46.0	35.6
230-960	57.0	47.0	47.0	37.0
960-1000	60.0	49.5	54.0	43.5

Note: The more stringent limit applies at transition frequencies.

## Required highest measurement frequency for radiated emissions

Highest internal frequency ( $F_x$ )	Highest measured frequency
$F_x \leq 108$ MHz	1 GHz
$108$ MHz $< F_x \leq 500$ MHz	2 GHz
$500$ MHz $< F_x \leq 1$ GHz	5 GHz
$F_x > 1$ GHz	$5 \times F_x$ up to a maximum of 40 GHz

Note:  $F_x$  is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test.

Radiated emission limits at 3 m distance (at and above 1 GHz)				
Frequency range (GHz)	Class A Average dB(uV/m)	Class A) Peak dB(uV/m)	Class B Average dB(uV/m)	Class B Peak dB(uV/m)
$1 - F_M$	60	80	54	74

Note:

- The highest measurement frequency,  $F_M$ , in GHz, shall be determined as per table 3.
- The measurement bandwidth shall be 1 MHz or greater.
- 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.
- The test site shall have been validated at the distance used for radiated emission measurements on the ITE or digital apparatus under test.

#### 4.4. Test Procedure

##### FCC Part 15 Subpart B

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

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

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

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

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

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

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

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

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

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

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

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

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

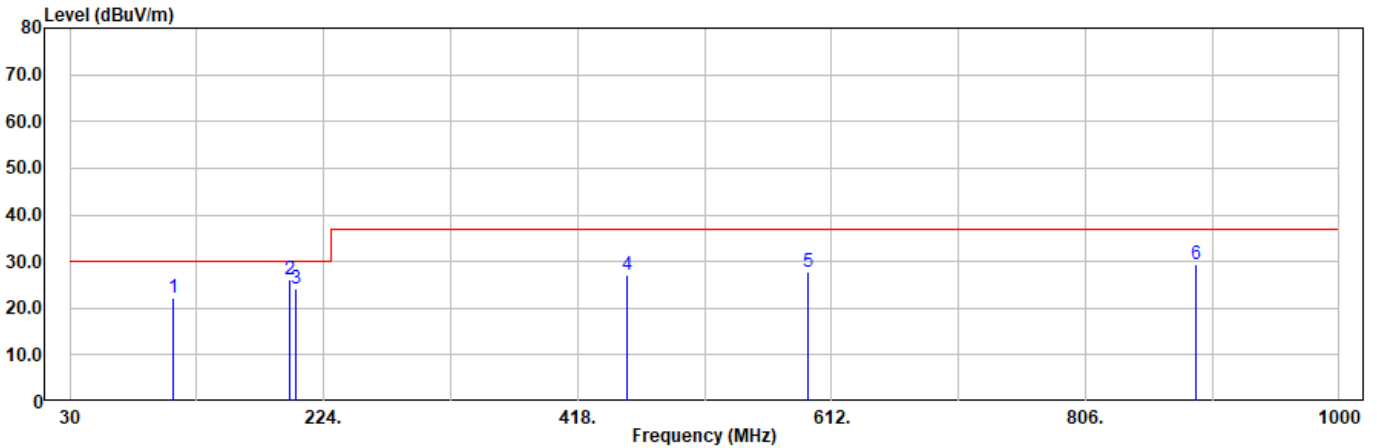
On any frequency or frequencies below or equal to 1000MHz, the radiated limits shown are based on measuring equipment employing a quasi-peak detector function and above 1000MHz, the radiated limits shown are based measuring equipment employing an peak & average detector function.

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

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

### 4.5. Test Result

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-Site06
Test Voltage	AC 120V/60Hz	Test Date	2023-11-25
Test Mode	Mode 1	Engineer	John Wu
Polarity	Horizontal	Temperature (°C)	27.1
Test Condition	--	Humidity (%RH)	51



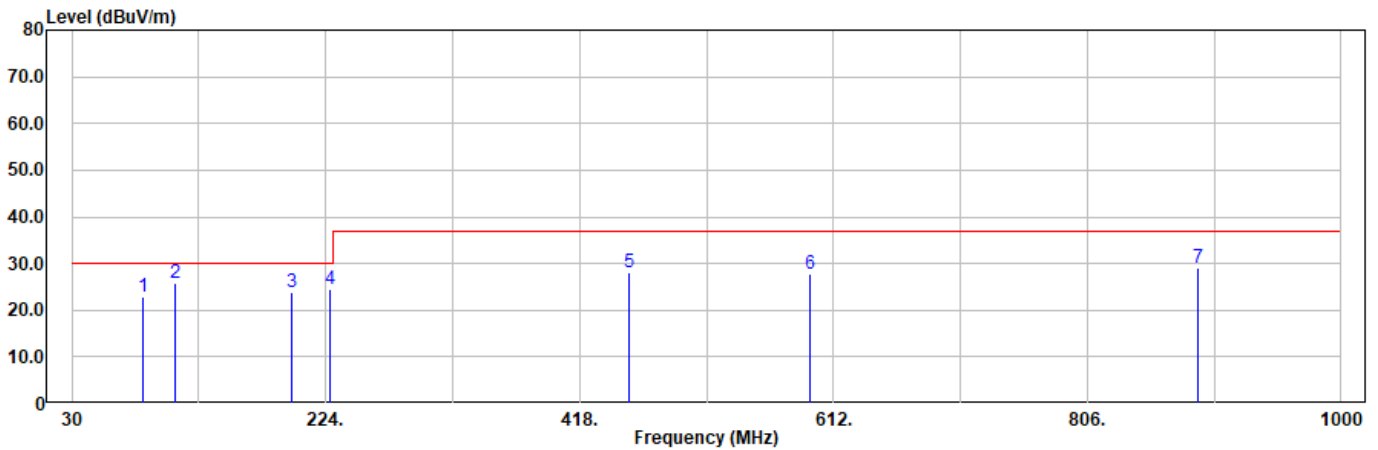
No	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Reading Level (dBUV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	108.540	22.29	30.00	-7.71	40.20	-17.91	400	76	QP
2*	198.650	26.03	30.00	-3.97	42.40	-16.37	400	158	QP
3	202.750	24.25	30.00	-5.75	40.60	-16.35	400	32	QP
4	456.000	27.16	37.00	-9.84	34.30	-7.14	201	117	QP
5	594.000	27.71	37.00	-9.29	31.70	-3.99	186	123	QP
6	891.000	29.41	37.00	-7.59	27.70	1.71	100	32	QP

Remark:

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



Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-Site06
Test Voltage	AC 120V/60Hz	Test Date	2023-11-25
Test Mode	Mode 1	Engineer	John Wu
Polarity	Vertical	Temperature (°C)	27.1
Test Condition	--	Humidity (%RH)	51

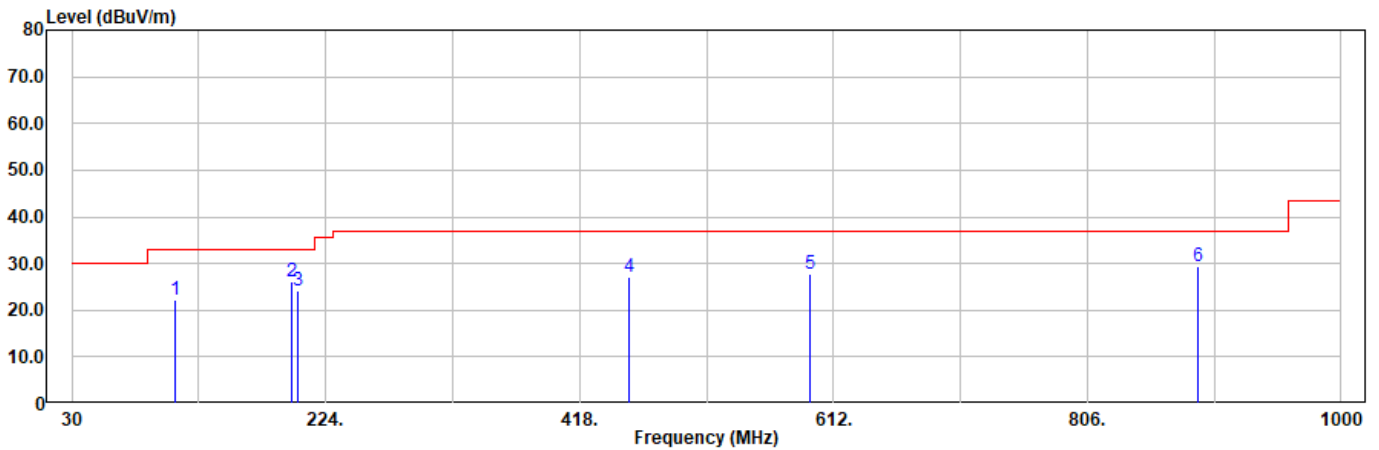


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	83.960	22.89	30.00	-7.11	43.70	-20.81	100	63	QP
2*	108.810	25.95	30.00	-4.05	43.80	-17.85	100	78	QP
3	198.550	23.94	30.00	-6.06	40.30	-16.36	100	-153	QP
4	227.320	24.61	30.00	-5.39	40.80	-16.19	100	-47	QP
5	456.000	28.16	37.00	-8.84	35.30	-7.14	261	143	QP
6	594.000	27.91	37.00	-9.09	31.90	-3.99	265	23	QP
7	891.000	29.21	37.00	-7.79	27.50	1.71	184	102	QP

Remark:

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

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-Site06
Test Voltage	AC 120V/60Hz	Test Date	2023-11-25
Test Mode	Mode 1	Engineer	John Wu
Polarity	Horizontal	Temperature (°C)	27.1
Test Condition	--	Humidity (%RH)	51

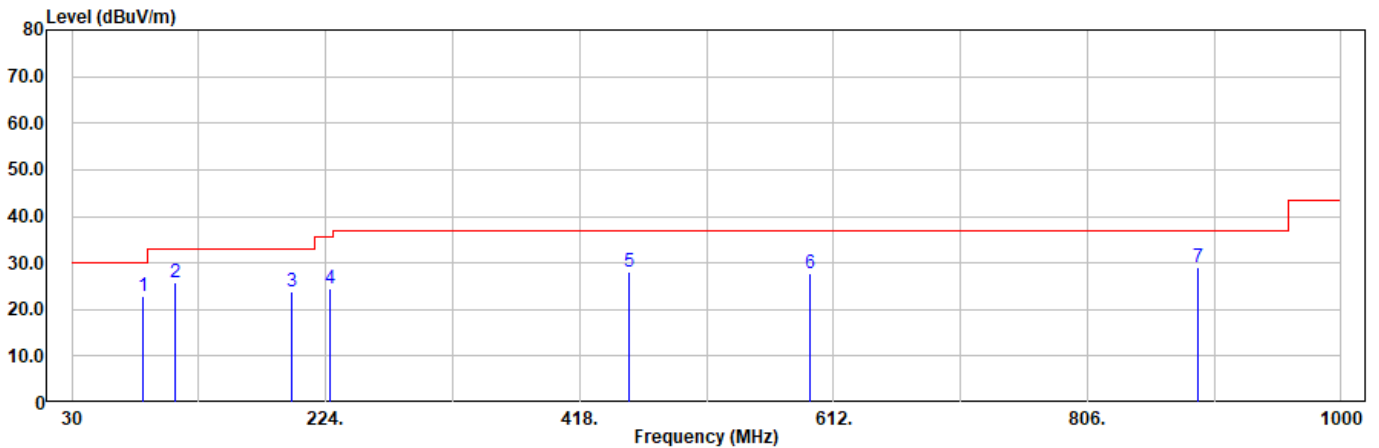


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	108.540	22.29	33.10	-10.81	40.20	-17.91	400	76	QP
2*	198.650	26.03	33.10	-7.07	42.40	-16.37	400	158	QP
3	202.750	24.25	33.10	-8.85	40.60	-16.35	400	32	QP
4	456.000	27.16	37.00	-9.84	34.30	-7.14	201	117	QP
5	594.000	27.71	37.00	-9.29	31.70	-3.99	186	123	QP
6	891.000	29.41	37.00	-7.59	27.70	1.71	100	32	QP

Remark:

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

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-Site06
Test Voltage	AC 120V/60Hz	Test Date	2023-11-25
Test Mode	Mode 1	Engineer	John Wu
Polarity	Vertical	Temperature (°C)	27.1
Test Condition	--	Humidity (%RH)	51

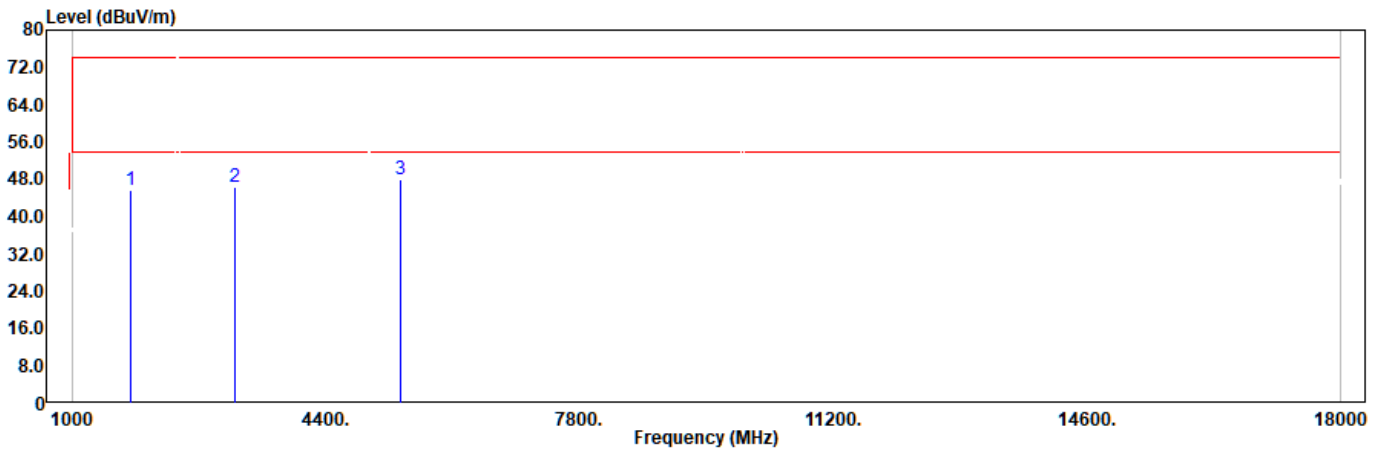


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1*	83.960	22.89	30.00	-7.11	43.70	-20.81	100	63	QP
2	108.810	25.95	33.10	-7.15	43.80	-17.85	100	78	QP
3	198.550	23.94	33.10	-9.16	40.30	-16.36	100	-153	QP
4	227.320	24.61	35.60	-10.99	40.80	-16.19	100	-47	QP
5	456.000	28.16	37.00	-8.84	35.30	-7.14	261	143	QP
6	594.000	27.91	37.00	-9.09	31.90	-3.99	265	23	QP
7	891.000	29.21	37.00	-7.79	27.50	1.71	184	102	QP

Remark:

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

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-CB05
Test Voltage	AC 120V/60Hz	Test Date	2023-11-28
Test Mode	Mode 1	Engineer	Nilk Chen
Polarity	Horizontal	Temperature (°C)	21.7
Test Condition	--	Humidity (%RH)	62

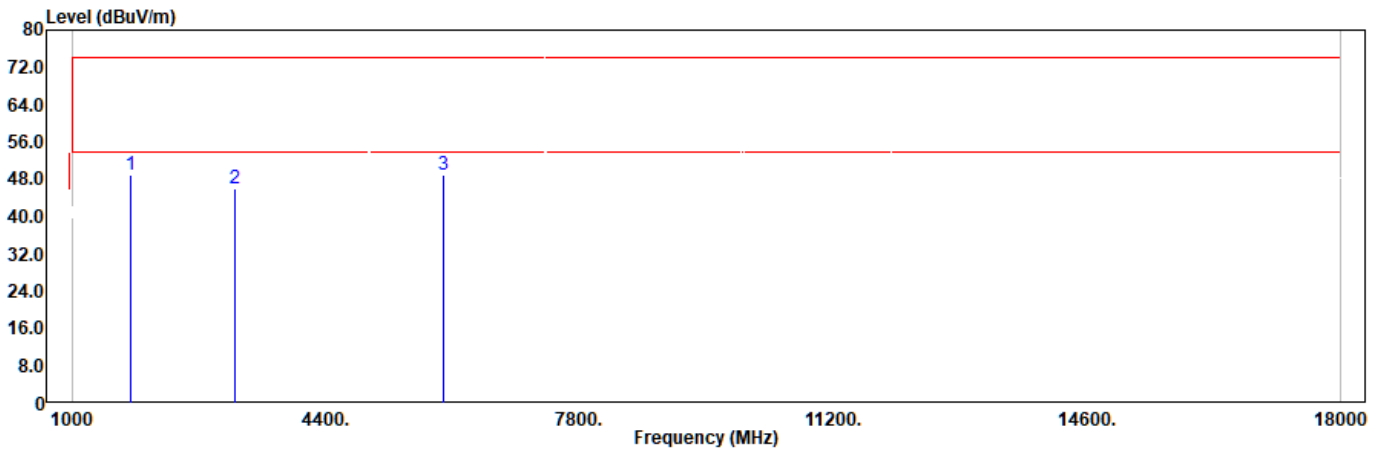


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	1782.000	45.68	74.00	-28.32	55.83	-10.15	140	-57	Peak
2	3193.000	46.30	74.00	-27.70	50.92	-4.62	100	177	Peak
3*	5403.000	47.84	74.00	-26.16	47.78	0.06	150	-86	Peak

Remark:

1. "\*" means this data is the worst margin; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.
4. The above 1 GHz test. When PEAK measures level less than AV limit by 20 dBuV, its average is not measured separately.

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-CB05
Test Voltage	AC 120V/60Hz	Test Date	2023-11-28
Test Mode	Mode 1	Engineer	Nilk Chen
Polarity	Vertical	Temperature (°C)	21.7
Test Condition	--	Humidity (%RH)	62

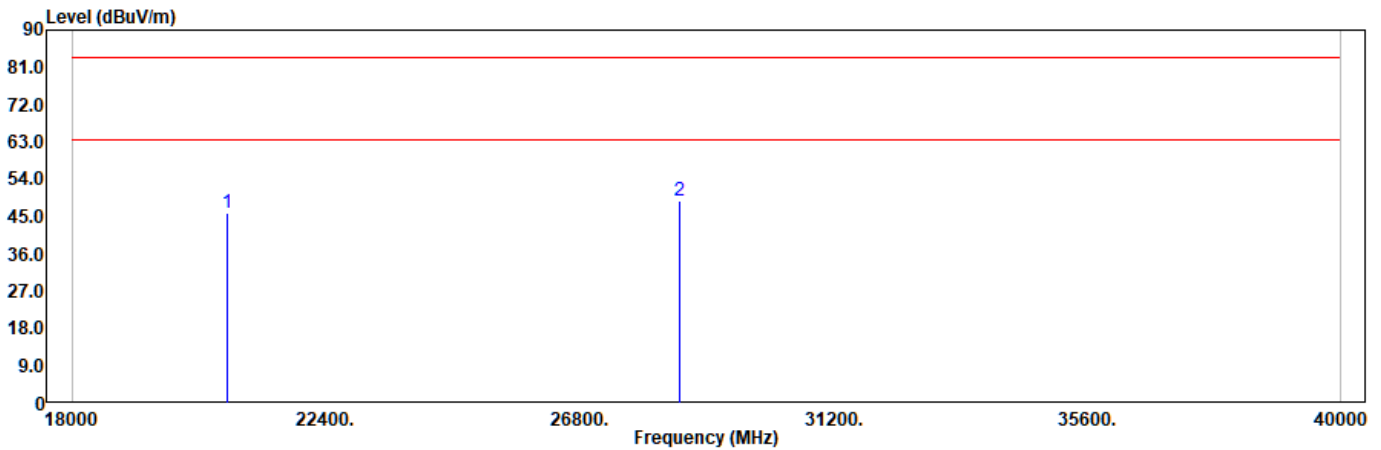


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1*	1782.000	49.04	74.00	-24.96	59.19	-10.15	150	124	Peak
2	3193.000	46.07	74.00	-27.93	50.69	-4.62	110	-88	Peak
3	5981.000	48.87	74.00	-25.13	47.91	0.96	100	6	Peak

Remark:

1. "\*" means this data is the worst margin;"!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.
4. The above 1 GHz test. When PEAK measures level less than AV limit by 20 dBuV, its average is not measured separately.

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-CB05
Test Voltage	AC 120V/60Hz	Test Date	2023-11-28
Test Mode	Mode 1	Engineer	Nilk Chen
Polarity	Horizontal	Temperature (°C)	21.7
Test Condition	--	Humidity (%RH)	62

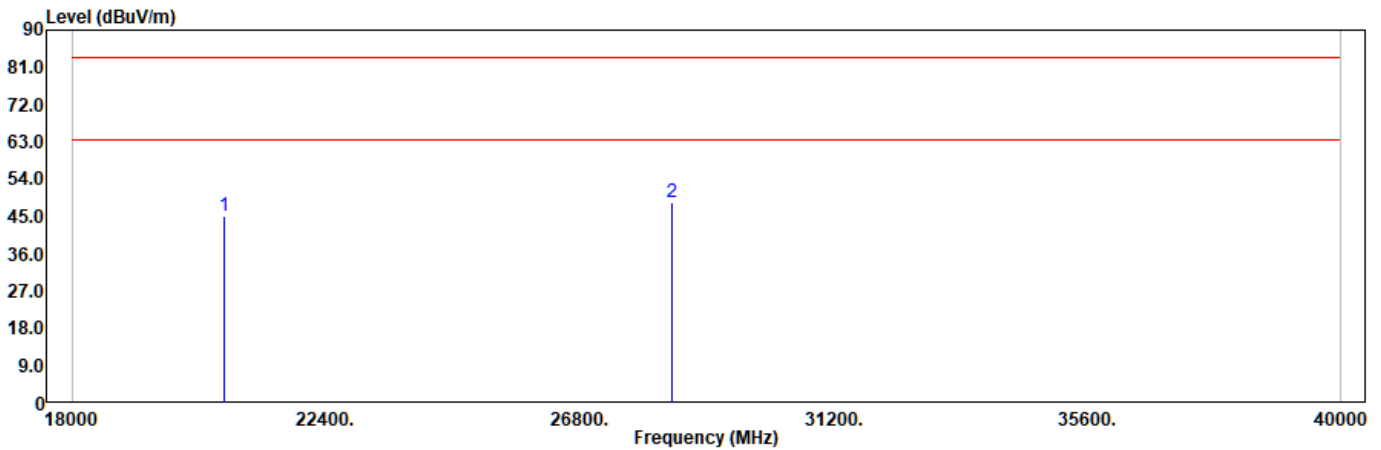


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	20684.850	45.84	83.50	-37.66	45.52	0.32	100	91	Peak
2*	28528.200	48.78	83.50	-34.72	44.36	4.42	100	-43	Peak

Remark:

1. "\*" means this data is the worst margin;"!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.
4. The above 1 GHz test. When PEAK measures level less than AV limit by 20 dBuV, its average is not measured separately.

Model No	PH4AXXF (X can be 0-9,A-Z,a-z,- or blank for marketing purpose)	Site	LK-CB05
Test Voltage	AC 120V/60Hz	Test Date	2023-11-28
Test Mode	Mode 1	Engineer	Nilk Chen
Polarity	Vertical	Temperature (°C)	21.7
Test Condition	--	Humidity (%RH)	62



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	20649.280	45.19	83.50	-38.31	45.03	0.16	100	-55	Peak
2*	28397.160	48.51	83.50	-34.99	43.93	4.58	100	122	Peak

Remark:

1. "\*" means this data is the worst margin;"!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss-Pre Amp).
3. Margin=Emission Level - Limit.
4. The above 1 GHz test. When PEAK measures level less than AV limit by 20 dBuV, its average is not measured separately.

#### 4.6. Test Photograph

Test Mode : Mode 1

Description : Front View of Radiated Test



Test Mode : Mode 1

Description : Back View of Radiated Test





Test Mode : Mode 1

Description : Front View of High Frequency Radiated Test

