



# FCC TEST REPORT

**Test report  
On Behalf of  
EMPYRE LLC  
For**

**Wireless mouse**

**Model No.: ATLAS CUSTOM VI, M198proW**

**FCC ID: 2A6D9-ATLASCUSTOM**

**Prepared for :** EMPYRE LLC  
1381 North Road, Green Bay, WI 54313, USA

**Prepared By :** Shenzhen HUAKE Testing Technology Co., Ltd.  
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**Date of Test:** Apr. 01, 2022 ~ Apr. 12, 2022

**Date of Report:** Apr. 12, 2022

**Report Number:** HK2204011349-E

**TEST RESULT CERTIFICATION**

**Applicant's name** ..... : EMPYRE LLC  
**Address** ..... : 1381 North Road, Green Bay, WI 54313, USA  
**Manufacturer's Name** ..... : ZODIC Technology Co.,Ltd  
**Address** ..... : B209, Block A and B, ChuangJinyihao, District 28, Dalang  
Community, Xin'an Street, Bao'an District, Shenzhen, China

**Product description**

**Trade Mark:** EMPYRE  
**Product name** ..... : Wireless mouse  
**Model and/or type reference** : ATLAS CUSTOM VI, M198proW  
**Standards** ..... : FCC Rules and Regulations Part 15 Subpart C Section 15.249  
ANSI C63.10: 2013

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**Date of Test** ..... :  
**Date (s) of performance of tests** ..... : Apr. 01, 2022 ~ Apr. 12, 2022  
**Date of Issue** ..... : Apr. 12, 2022  
**Test Result** ..... : Pass

Testing Engineer :

(Gary Qian)

Technical Manager :

(Eden Hu)

Authorized Signatory :

(Jason Zhou)



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**\*\* Modified History \*\***

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	Apr. 12, 2022	Jason Zhou





## 1. TEST SUMMARY

### 1.1 TEST PROCEDURES AND RESULTS

DESCRIPTION OF TEST		RESULT
CONDUCTED EMISSIONS TEST	§ 15.207	COMPLIANT
RADIATED EMISSION TEST	§ 15.249 (a) / §15.209	COMPLIANT
BAND EDGE	§ 15.249 (d) / §15.209	COMPLIANT
OCCUPIED BANDWIDTH MEASUREMENT	§ 15.215 (c)	COMPLIANT
ANTENNA REQUIREMENT	§ 15.203	COMPLIANT

### 1.2 INFORMATION OF THE TEST LABORATORY

Shenzhen HUAKE Testing Technology Co., Ltd.

Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization :

A2LA Accreditation Code is 4781.01.

FCC Designation Number is CN1229.

Canada IC CAB identifier is CN0045.

CNAS Registration Number is L9589.

### 1.3 MEASUREMENT UNCERTAINTY

Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty(9kHz-30MHz) = 3.08dB, k=2

Radiated emission expanded uncertainty(30MHz-1000MHz) = 4.42dB, k=2

Radiated emission expanded uncertainty(Above 1GHz) = 4.06dB, k=2



## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless mouse
Model Name	ATLAS CUSTOM VI
Serial Model	M198proW
Model Difference	All model's the function, software and electric circuit are the same, only with a product color, appearance and model name different. Test sample model: ATLAS CUSTOM VI
FCC ID	2A6D9-ATLASCUSTOM
Antenna Type	PCB Antenna
Antenna Gain	-1dBi
Equipment	Wireless mouse
Operation frequency	2402-2480MHz
Number of Channels	16CH
Modulation Type	GFSK
Power Source	DC 3.7V from Battery or DC 5V from Type-C
Power Rating	DC 3.7V from Battery or DC 5V from Type-C



## 2.2 Carrier Frequency of Channels

Description of Channel:					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2402	7	2436	13	2463
2	2407	8	2439	14	2466
3	2414	9	2441	15	2473
4	2419	10	2445	16	2480
5	2422	11	2453		
6	2426	12	2459		

## 2.3 Operation of EUT during testing

Operating Mode

The mode is used: **Transmitting mode**

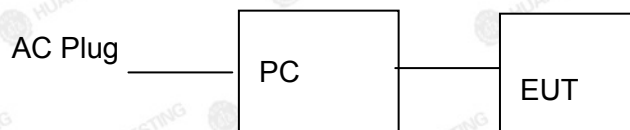
Low Channel: 2402MHz

Middle Channel: 2441MHz

High Channel: 2480MHz

## 2.4 DESCRIPTION OF TEST SETUP

Operation of EUT during conducted testing:



Operation of EUT during radiation testing:



- PC information  
Model: TP00067A  
Input: DC20V, 2.25-3.25A  
Output: 5VDC, 0.5A

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. The worst case is X position



## 2.5 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	R&S	ENV216	HKE-002	Feb. 18, 2022	1 Year
2.	Receiver	R&S	ESR-7	HKE-010	Feb. 18, 2022	1 Year
3.	RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 18, 2022	1 Year
4.	Spectrum analyzer	R&S	FSP40	HKE-025	Feb. 18, 2022	1 Year
5.	Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 18, 2022	1 Year
6.	Preamplifier	Schwarzbeck	BBV 9743	HKE-006	Feb. 18, 2022	1 Year
7.	EMI Test Receiver	Rohde & Schwarz	ESCI 7	HKE-010	Feb. 18, 2022	1 Year
8.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	HKE-012	Feb. 18, 2022	1 Year
9.	Loop Antenna	Schwarzbeck	FMZB 1519 B	HKE-014	Feb. 18, 2022	1 Year
10.	Horn Antenna	Schwarzbeck	9120D	HKE-013	Feb. 18, 2022	1 Year
11.	Pre-amplifier	EMCI	EMC051845S E	HKE-015	Feb. 18, 2022	1 Year
12.	Pre-amplifier	Agilent	83051A	HKE-016	Feb. 18, 2022	1 Year
13.	EMI Test Software EZ-EMC	Tonscend	JY3120-B Version	HKE-083	Feb. 18, 2022	N/A
14.	Power Sensor	Agilent	E9300A	HKE-086	Feb. 18, 2022	1 Year
15.	Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 18, 2022	1 Year
16.	Signal generator	Agilent	N5182A	HKE-029	Feb. 18, 2022	1 Year
17.	Signal Generator	Agilent	83630A	HKE-028	Feb. 18, 2022	1 Year
18.	Shielded room	Shiel Hong	4*3*3	HKE-039	Dec. 17, 2020	3 Year
19.	High gain antenna	Schwarzbeck	LB-180400KF	HKE-054	Feb. 18, 2022	1 Year





### 3. CONDUCTED EMISSIONS TEST

#### 3.1 Conducted Power Line Emission Limit

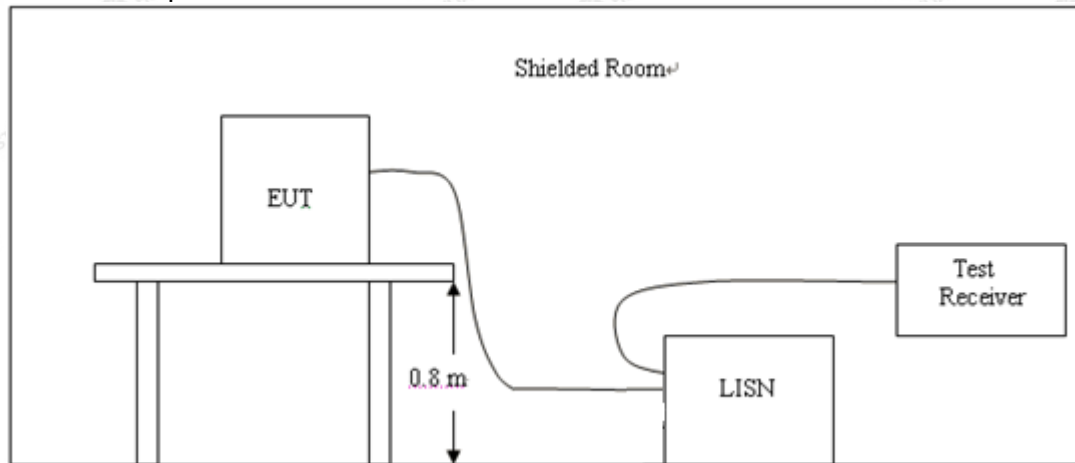
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

Frequency (MHz)	Maximum RF Line Voltage (dBμV)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

\* Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

#### 3.2 Test Setup



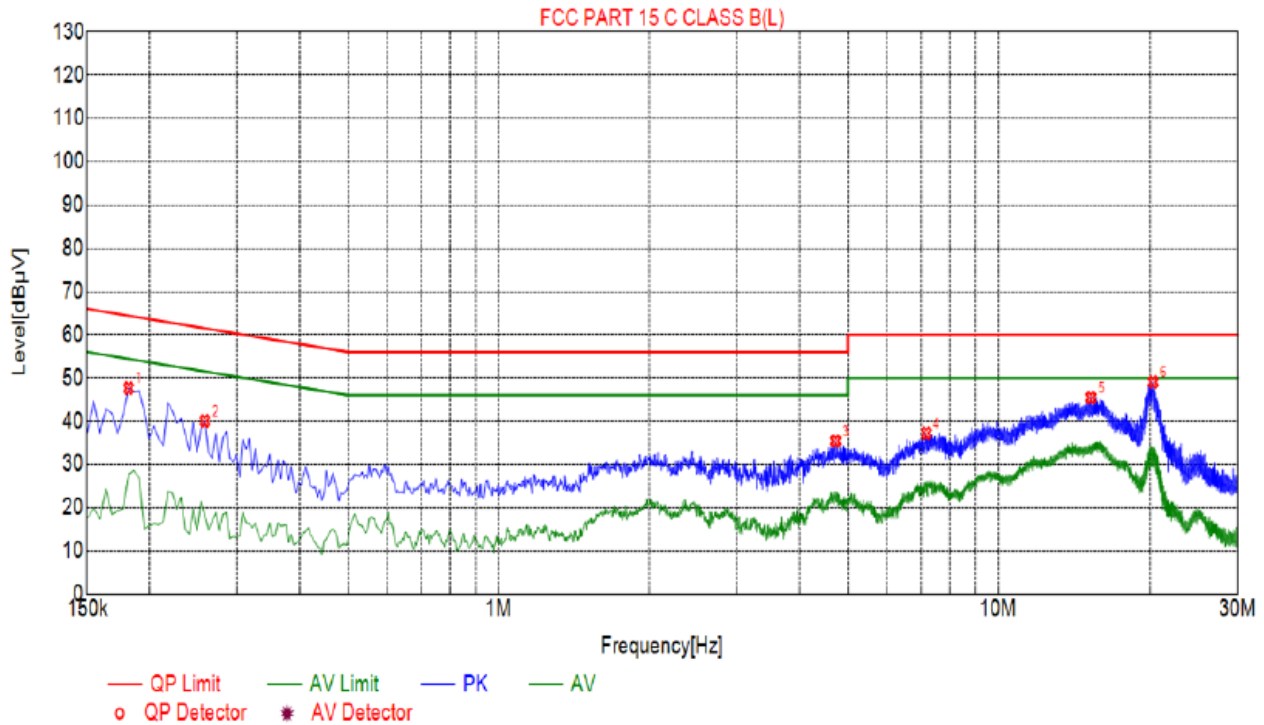
#### 3.3 Test Procedure

- 1, The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2, Support equipment, if needed, was placed as per ANSI C63.10.
- 3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4, If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5, All support equipments received AC power from a second LISN, if any.
- 6, The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7, Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.



## 3.4 Test Result

Test Specification: Line



## Suspected List

NO.	Freq. [MHz]	Level [dBμV]	Factor [dB]	Limit [dBμV]	Margin [dB]	Reading [dBμV]	Detector	Type
1	0.1815	47.64	20.06	64.42	16.78	27.58	PK	L
2	0.2580	40.06	20.04	61.50	21.44	20.02	PK	L
3	4.7265	35.41	20.26	56.00	20.59	15.15	PK	L
4	7.1835	37.22	20.19	60.00	22.78	17.03	PK	L
5	15.2385	45.46	19.96	60.00	14.54	25.50	PK	L
6	20.2965	49.04	20.12	60.00	10.96	28.92	PK	L

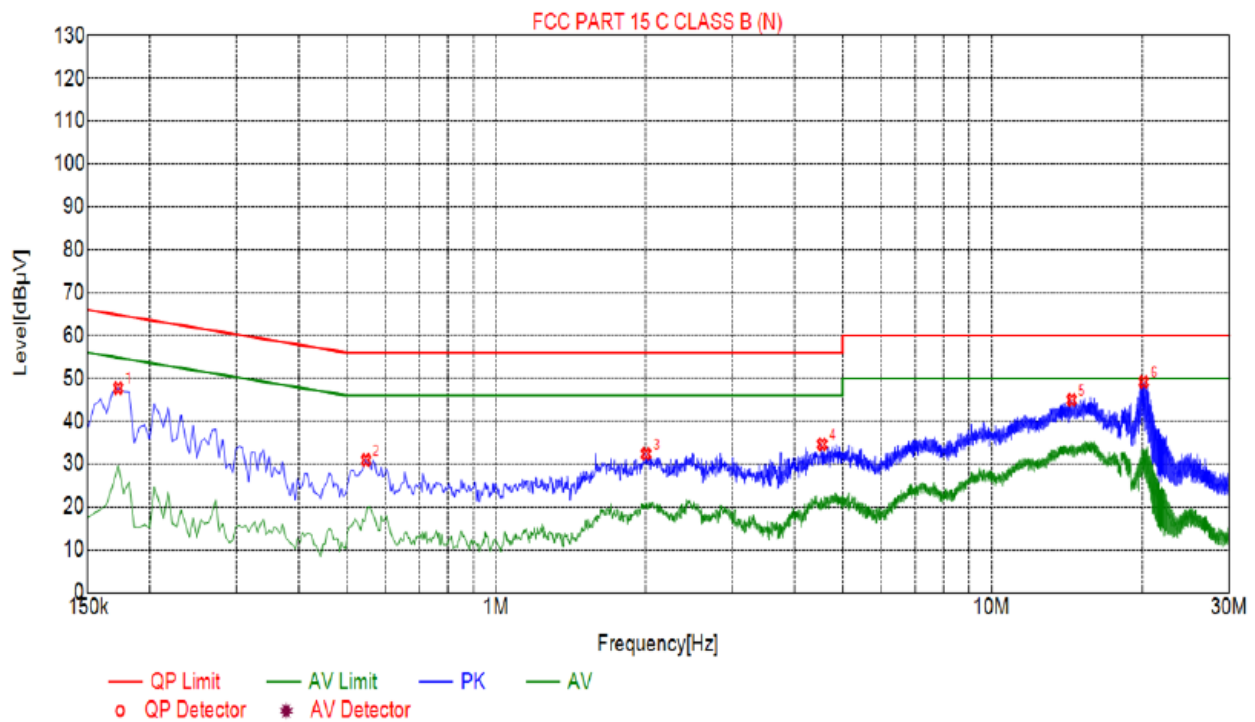
Remark: Margin = Limit – Level

Correction factor = Cable lose + LISN insertion loss

Level=Test receiver reading + correction factor



## Test Specification: Neutral



## Suspected List

NO.	Freq. [MHz]	Level [dBμV]	Factor [dB]	Limit [dBμV]	Margin [dB]	Reading [dBμV]	Detector	Type
1	0.1725	47.72	20.04	64.84	17.12	27.68	PK	N
2	0.5460	30.88	20.06	56.00	25.12	10.82	PK	N
3	2.0085	32.32	20.14	56.00	23.68	12.18	PK	N
4	4.5510	34.60	20.25	56.00	21.40	14.35	PK	N
5	14.4150	44.96	19.95	60.00	15.04	25.01	PK	N
6	20.1570	49.17	20.11	60.00	10.83	29.06	PK	N

Remark: Margin = Limit – Level

Correction factor = Cable lose + LISN insertion loss

Level=Test receiver reading + correction factor



## 4 RADIATED EMISSION TEST

### 4.1 Radiation Limit

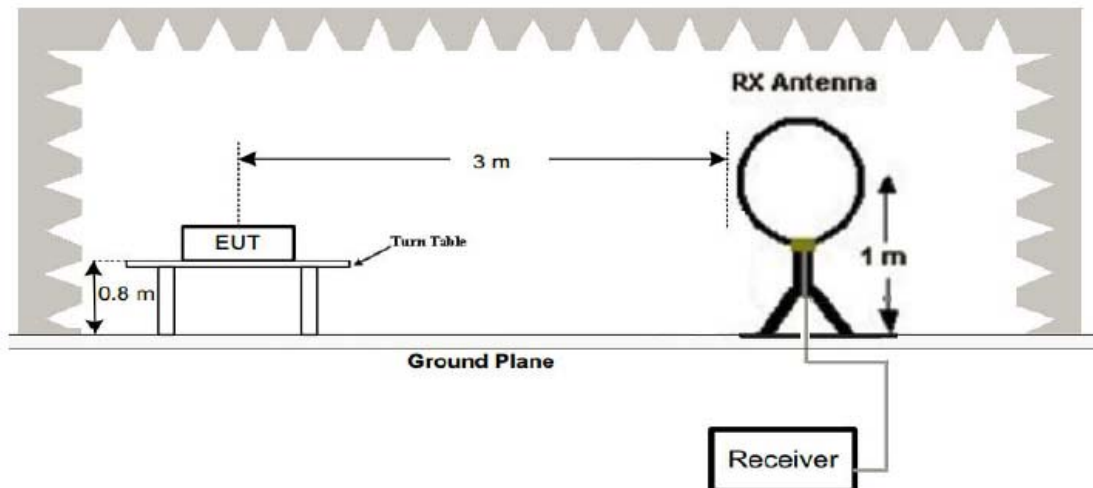
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dB $\mu$ V/m)	Radiated ( $\mu$ V/m)
30-88	3	40	100
88-216	3	43.5	150
216-960	3	46	200
Above 960	3	54	500

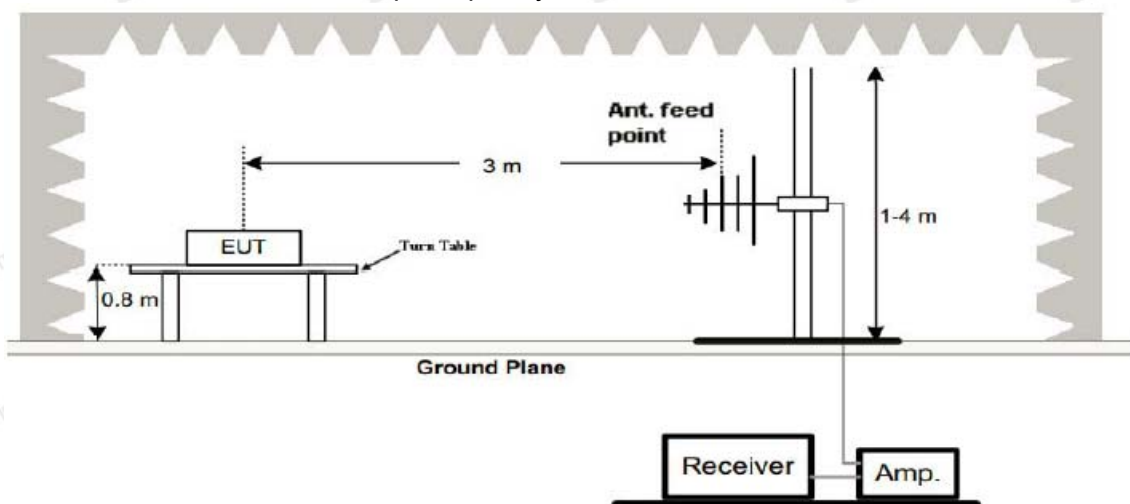
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

### 4.2 Test Setup

#### (1) Radiated Emission Test-Up Frequency Below 30MHz



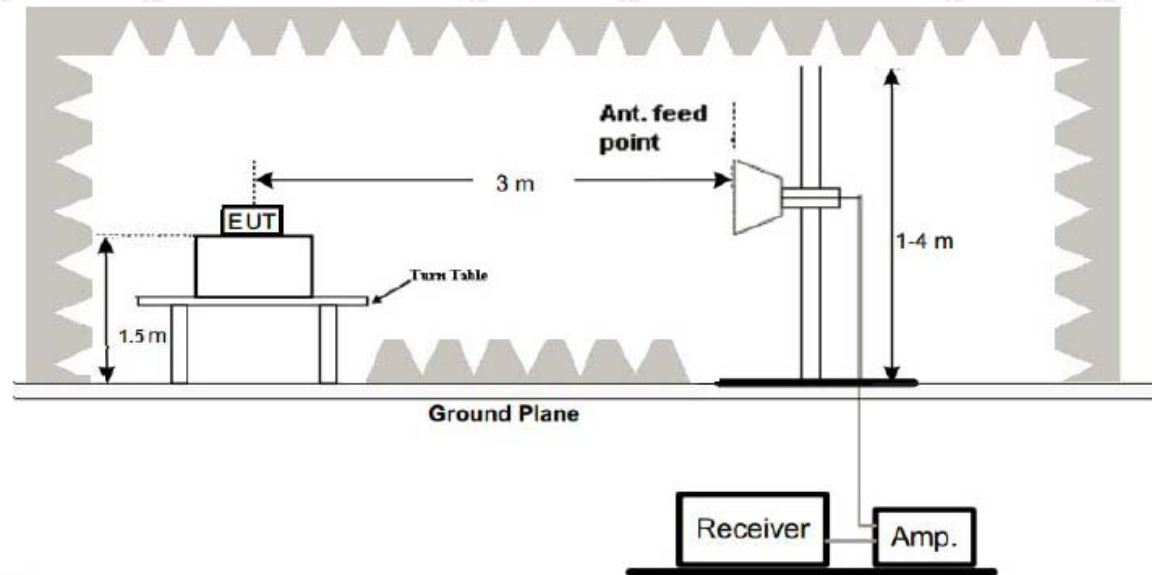
#### (2) Radiated Emission Test-Up Frequency 30MHz~1GHz







### (3) Radiated Emission Test-Up Frequency Above 1GHz



#### 4.3 Test Procedure

1. Below 1GHz measurement the EUT is placed on turntable which is 0.8m above ground plane. And above 1GHz measurement EUT was placed on low permittivity and low tangent turn table which is 1.5m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a).

#### Note:

For battery operated equipment, the equipment tests shall be performed using a new battery.

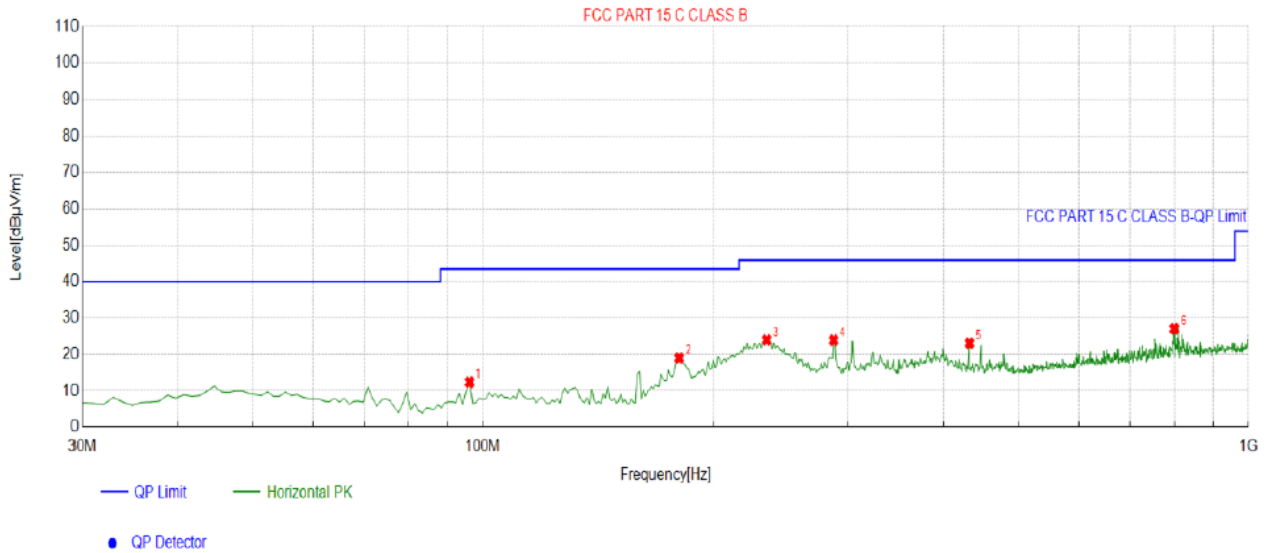
#### 4.4 Test Result

PASS



## Below 1GHz Test Results:

Antenna polarity: H

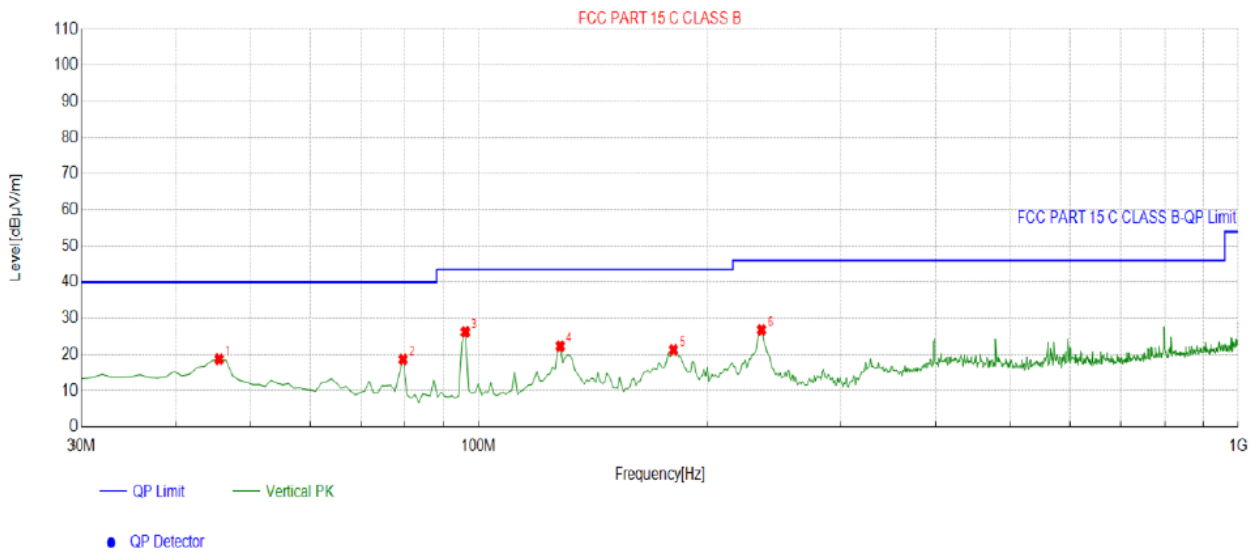


Suspected List									
NO.	Freq. [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	96.0260	-16.06	28.44	12.38	43.50	31.12	100	90	Horizontal
2	180.5005	-16.81	35.79	18.98	43.50	24.52	100	2	Horizontal
3	234.8749	-14.09	38.06	23.97	46.00	22.03	100	276	Horizontal
4	287.3073	-12.95	36.86	23.91	46.00	22.09	100	358	Horizontal
5	431.9820	-9.76	32.86	23.10	46.00	22.90	100	232	Horizontal
6	799.9800	-3.12	30.16	27.04	46.00	18.96	100	217	Horizontal

Remark: Factor = Cable loss + Antenna factor – Preamplifier; Level = Reading + Factor; Margin = Limit – Level



Antenna polarity: V



Suspected List									
NO.	Freq. [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	45.5355	-13.65	32.38	18.73	40.00	21.27	100	131	Vertical
2	79.5195	-19.38	38.06	18.68	40.00	21.32	100	321	Vertical
3	96.0260	-16.06	42.28	26.22	43.50	17.28	100	95	Vertical
4	128.0681	-18.29	40.64	22.35	43.50	21.15	100	234	Vertical
5	180.5005	-16.81	38.14	21.33	43.50	22.17	100	333	Vertical
6	235.8458	-14.05	40.88	26.83	46.00	19.17	100	171	Vertical

Remark: Factor = Cable loss + Antenna factor – Preamplifier; Level = Reading + Factor; Margin = Limit – Level

Remark:

- (1) Measuring frequencies from 9 KHz to the 1 GHz, Radiated emission test from 9KHz to 30MHz was verified, and no any emission was found except system noise floor.
- (2) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.



Above 1 GHz Test Results:  
CH Low (2402MHz)

Horizontal:

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2402	100.65	-5.84	94.81	114	-19.19	peak
2402	88.72	-5.84	82.88	94	-11.12	AVG
4804	61.35	-3.64	57.71	74	-16.29	peak
4804	43.33	-3.64	39.69	54	-14.31	AVG
7206	56.52	-0.95	55.57	74	-18.43	peak
7206	43.97	-0.95	43.02	54	-10.98	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2402	102.65	-5.84	96.81	114	-17.19	peak
2402	86.97	-5.84	81.13	94	-12.87	AVG
4804	59.33	-3.64	55.69	74	-18.31	peak
4804	45.15	-3.64	41.51	54	-12.49	AVG
7206	58.97	-0.95	58.02	74	-15.98	peak
7206	45.65	-0.95	44.7	54	-9.3	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						



**CH Middle (2441MHz)****Horizontal:**

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2441	101.27	-5.71	95.56	114	-18.44	peak
2441	86.41	-5.71	80.7	94	-13.3	AVG
4882	60.35	-3.51	56.84	74	-17.16	peak
4882	43.01	-3.51	39.5	54	-14.5	AVG
7323	56.87	-0.82	56.05	74	-17.95	peak
7323	42.06	-0.82	41.24	54	-12.76	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

**Vertical:**

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2441	103.25	-5.71	97.54	114	-16.46	peak
2441	87.71	-5.71	82	94	-12	AVG
4882	58.62	-3.51	55.11	74	-18.89	peak
4882	73.69	-3.51	70.18	54	16.18	AVG
7323	56.88	-0.82	56.06	74	-17.94	peak
7323	42.33	-0.82	41.51	54	-12.49	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						



## CH High (2480MHz)

## Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2480	103.78	-5.65	98.13	114	-15.87	peak
2480	87.87	-5.65	82.22	94	-11.78	AVG
4960	58.14	-3.43	54.71	74	-19.29	peak
4960	42.68	-3.43	39.25	54	-14.75	AVG
7440	56.89	-0.75	56.14	74	-17.86	peak
7440	42.22	-0.75	41.47	54	-12.53	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

## Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2480	102.41	-5.65	96.76	114	-17.24	peak
2480	82.72	-5.65	77.07	94	-16.93	AVG
4960	59.34	-3.43	55.91	74	-18.09	peak
4960	46.15	-3.43	42.72	54	-11.28	AVG
7440	58.32	-0.75	57.57	74	-16.43	peak
7440	42.01	-0.75	41.26	54	-12.74	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

## Remark :

- (1) Measuring frequencies from 1 GHz to the 25 GHz .
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.
- (7) All modes of operation were investigated and the worst-case emissions are reported.



## 5 BAND EDGE

### 5.1 Limits

FCC PART 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

### 5.2 Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW to 1MHz and VBM to 3MHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength. The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW to 1MHz and VBW to 3MHz, to measure the conducted peak band edge.



## 5.3 Test Result

**PASS**

Radiated Band Edge Test:

Operation Mode: TX CH Low (2402MHz)

Horizontal (Worst case)

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2310	55.02	-5.81	49.21	74	-24.79	peak
2310	/	-5.81	/	54	/	AVG
2390	56.31	-5.84	50.47	74	-23.53	peak
2390	/	-5.84	/	54	/	AVG
2400	55.98	-5.84	50.14	74	-23.86	peak
2400	/	-5.84	/	54	/	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2310	58.71	-5.81	52.9	74	-21.1	peak
2310	/	-5.81	/	54	/	AVG
2390	56.35	-5.84	50.51	74	-23.49	peak
2390	/	-5.84	/	54	/	AVG
2400	56.23	-5.84	50.39	74	-23.61	peak
2400	/	-5.84	/	54	/	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						





Operation Mode: TX CH High (2480MHz)  
Horizontal (Worst case)

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.50	55.24	-5.65	49.59	74	-24.41	peak
2483.50	/	-5.65	/	54	/	AVG
2500.00	57.41	-5.65	51.76	74	-22.24	peak
2500.00	/	-5.65	/	54	/	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.50	56.38	-5.65	50.73	74	-23.27	peak
2483.50	/	-5.65	/	54	/	AVG
2500.00	54.27	-5.65	48.62	74	-25.38	peak
2500.00	/	-5.65	/	54	/	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						
Remark: All the other emissions not reported were too low to read and deemed to comply with FCC limit.						



## 6 OCCUPIED BANDWIDTH MEASUREMENT

### 6.1 Test Setup

Same as Radiated Emission Measurement

### 6.2 Test Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set EUT as normal operation.
3. Based on ANSI C63.10 section 6.9.2: RBW= 20KHz. VBW= 62 KHz, Span=4MHz.
4. The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.

### 6.3 Measurement Equipment Used

Same as Radiated Emission Measurement

### 6.4 Test Result

**PASS**

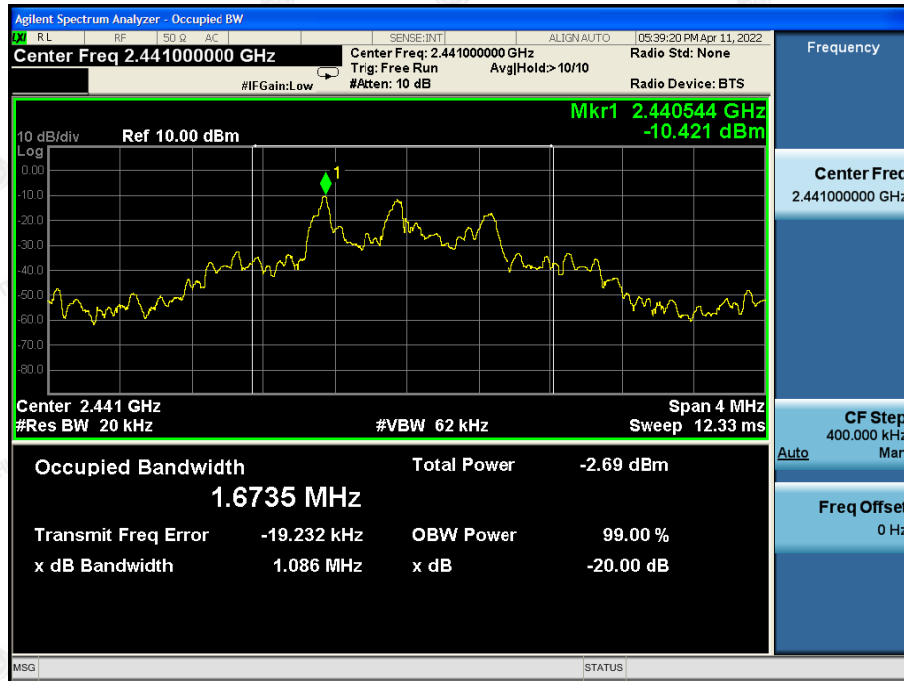
Frequency	20dB Bandwidth (MHz)	Result
2402 MHz	1.100	<b>PASS</b>
2441 MHz	1.086	<b>PASS</b>
2480 MHz	1.083	<b>PASS</b>

CH: 2402MHz

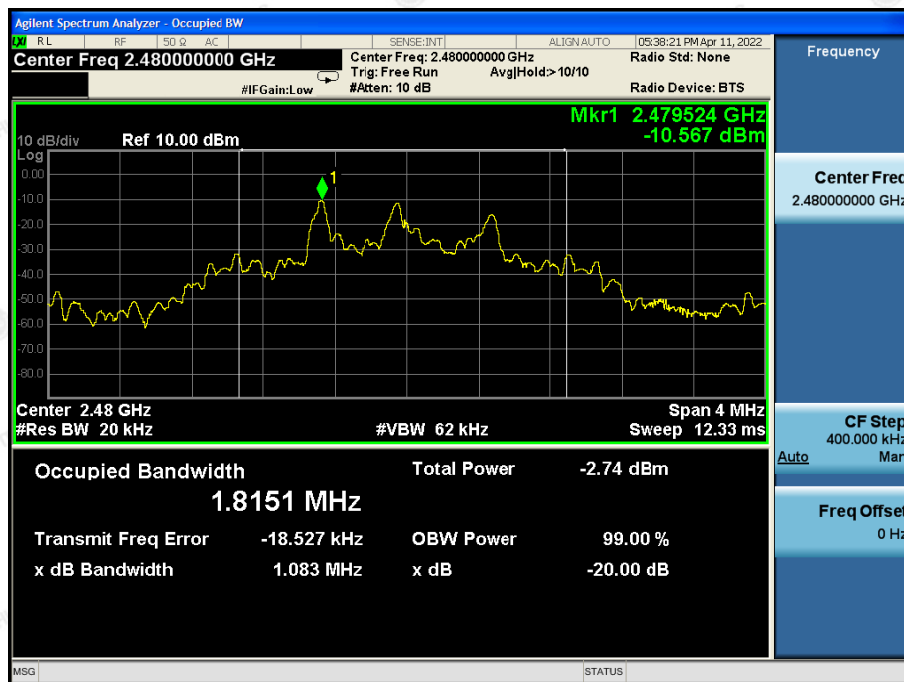




## CH 2441MHz



## CH 2480MHz







## 7 ANTENNA REQUIREMENT

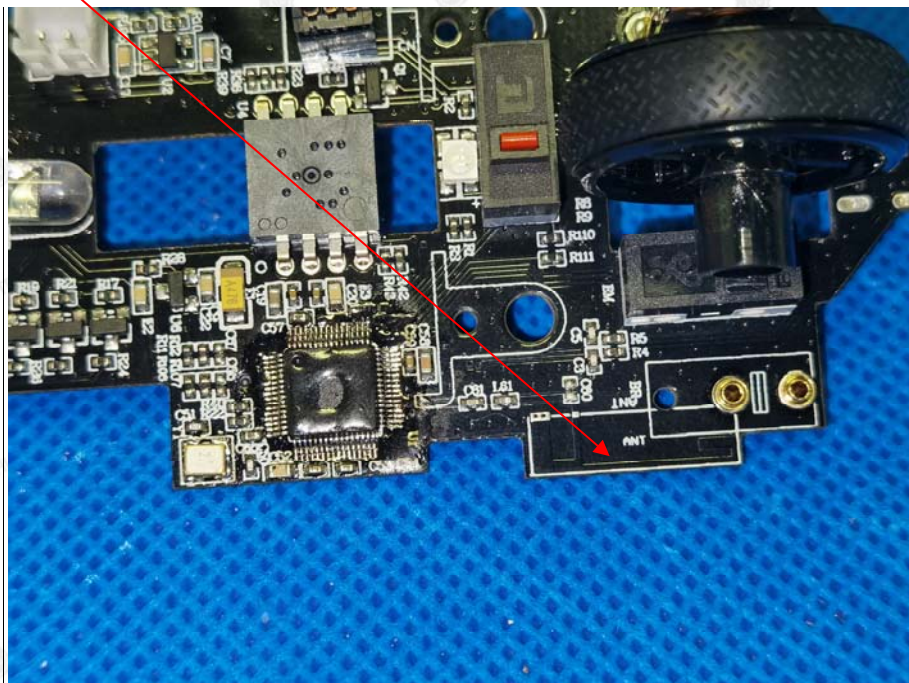
### Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

### Antenna Connected Construction

The antenna used in this product is a PCB Antenna which permanently attached. It conforms to the standard requirements, The directional gains of antenna used for transmitting is -1dBi.

### ANTENNA

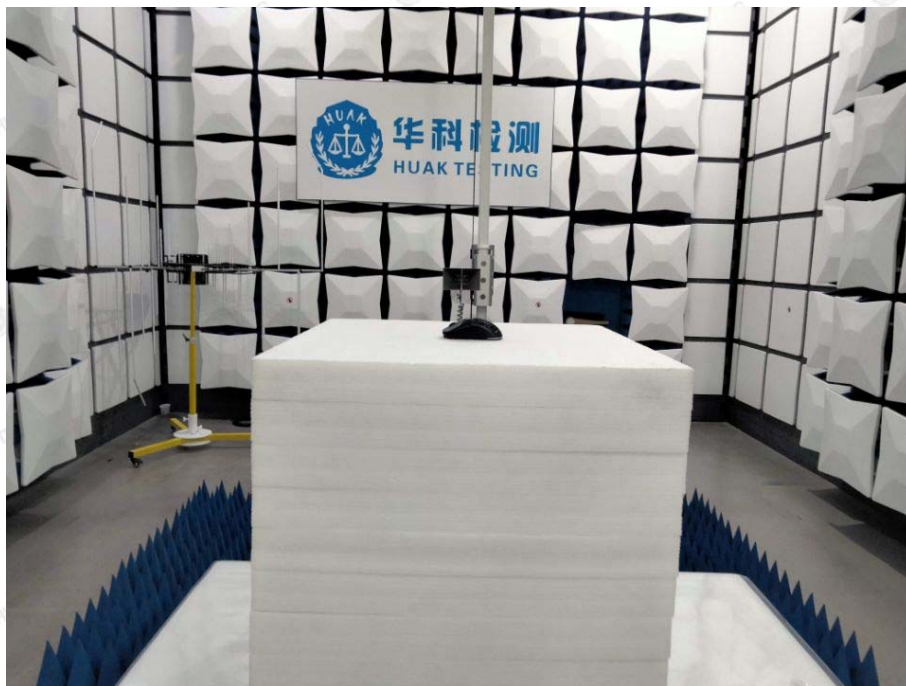
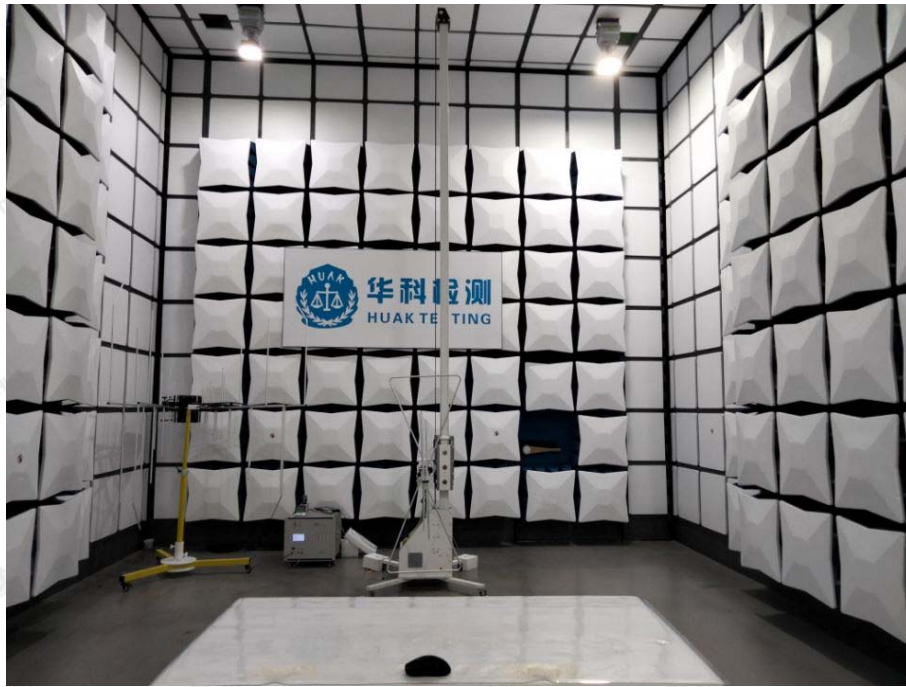






## 8 PHOTOGRAPH OF TEST

### 8.1 Radiated Emission



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by HUAKE, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.cer-mark.com>.

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## 8.2 Conducted Emission





## 9 PHOTOS OF THE EUT

Reference to the report: ANNEX A of external photos and ANNEX B of internal photos

-----End of test report-----