TEST REPORT

Report No.	CISRR250819147
Project No.	CISR250819147
FCC ID	2BNJR-V5
Applicant	Guangzhou Junxingcheng Electronic Technology Co.,Ltd.
Address	Room.201, 2nd Floor, Building C, NO.15, Wenyong Road Xindun Village, Xintang Town, Zengcheng District, Guangzhou City, China
Manufacturer	Guangzhou Junxingcheng Electronic Technology Co.,Ltd.
Address	Room.201, 2nd Floor, Building C, NO.15, Wenyong Road Xindun Village, Xintang Town, Zengcheng District, Guangzhou City, China
Product Name	ATTACK SHARK V5 MOUSE
Trade Mark	ATTACK SHARK
Model/Type reference	V5
Listed Model(s)	V2Ultra, V3, V3PRO, R11Ultra, RS6Ultra, V6, RS3Ultra, X11SE, M2
Standard	Part 15 Subpart C Section 15.249
Test date	August 19, 2025 to August 25, 2025
Issue date	August 27, 2025
Test result	**Complied**

Jimmy Huang

Prepared by: Jimmy Huang

GenryLong

Approved by: Genry Long

The test results relate only to the tested samples.

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1. REPORT VERSION

Version No.	Issue date	Description
00	August 27, 2025	Original

2. SUMMARY OF TEST RESULT

Report clause	Test Item	Standard Requirement	Result
5.1	Antenna Requirement	15.203	PASS
5.2	AC Conducted Emission	15.207	PASS
5.3	20 dB Bandwidth	15.215 (c)	PASS
5.4	Radiated Band Edge Emission	15.205/15.209/15.249(d)	PASS
5.5	Radiated Spurious Emission	15.249(a)(c)(e)/15.205/15.209	PASS

Note:

– The measurement uncertainty is not included in the test result.

3. SUMMARY

3.1. Product Description

Main unit information:	
Product Name:	ATTACK SHARK V5 MOUSE
Trade Mark:	ATTACK SHARK
Model No.:	V5
Listed Model(s):	V2Ultra, V3, V3PRO, R11Ultra, RS6Ultra, V6, RS3Ultra, X11SE, M2
Model difference:	The difference between different models is that in this application, due to different sales channels and different model names.
Power supply:	Input: DC 5V
Hardware version:	N/A
Software version:	N/A
Accessory unit (AU) information:	
AU-1	DC 3.7V

3.2. Radio Specification Description

Technology:	2.4G
Modulation:	GFSK
Operation frequency:	2402MHz~2480MHz
Channel number:	16
Antenna type:	PCB Antenna
Antenna gain:	1.9dBi

Channel list:

CH1	**2402 MHz**	CH9	2445 MHz
CH2	2414 MHz	CH10	2450 MHz
CH3	2424 MHz	CH11	2455 MHz
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CH8	**2440 MHz**	**CH16**	**2480 MHz**

3.3. Modification of EUT

No modifications are made to the EUT during all test items.

3.4. Testing Site

Laboratory Name	Shenzhen Bangce Testing Technology Co., Ltd.
Laboratory Location	101, building 10, Yunli Intelligent Park, Shutianpu community, Matian Street, Guangming District, Shenzhen, Guangdong, China
FCC registration number	736346

3.5. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS (dBuV/m) = RA (dBuV) + AF (dB/m) + CL (dB) – AG (dB)

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

3.6. DISTURBANCE Calculation

The AC mains conducted disturbance is calculated by adding the 10dB Pulse Limiter and Cable Factor and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

CD (dBuV) = RA (dBuV) + PL (dB) + CL (dB)

Where CD = Conducted Disturbance	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	PL = 10 dB Pulse Limiter Factor

4. TEST CONFIGURATION

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

4.1. Test frequency list

Channel	Frequency (MHz)
CH-L	2402
CH-M	2440
CH-H	2480

4.2. Test mode

No	Test mode	Description
TM1	TX mode	Keep the EUT in continuously transmitting mode with GFSK modulation at lowest, middle and highest channel.
TM2	Link mode	Keep the EUT in Bluetooth linking mode with AE.
TM3	Charging mode	Keep the EUT in charging status

4.3. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Item	Equipment name	Trade Name	Model No.
1	PC	Lenovo	ThinkPad
2	Adapter	Guangdong Sangu Technology Co. ltd	SG-0501000AU

4.4. Test sample information

Type	sample no.
Engineer sample	CISR250819147--S01
Normal sample	CISR250819147--S01

4.5. Testing environmental condition

Type	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar

4.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty

1	AC Conducted Emission	1.63dB
2	20dB Bandwidth	0.002%
3	Radiated Band Edge Emission	3.76dB for 30MHz-1GHz 3.80dB for above 1GHz
4	Radiated Spurious Emission	3.76dB for 30MHz-1GHz 3.80dB for above 1GHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4.7. Equipment Used during the Test

AC Conducted Emission

Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	Rohde&schwarz	ESCI7	100853	2025-01-08	2026-01-07
2	Artificial power network	Schwarzbeck	NSLK8127	8127-01096	2025-01-08	2026-01-07
3	8-wire Impedance Stabilization Network	Schwarzbeck	NTFM 8158	8158-00337	2025-01-08	2026-01-07
4	Artificial power network	Schwarzbeck	ENV216	/	2025-01-08	2026-01-07

20 dB Bandwidth

Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	MXG RF Signal Generator	Agilent	N5181A	MY50145362	2025-01-08	2026-01-07
2	Spectrum analyzer	R&S	FSV-40N	102130	2025-01-08	2026-01-07
3	Vector Signal Generator	Agilent	N5182A	MY50142364	2025-01-08	2026-01-07
4	Power Meter	WCS	WCS-PM	WCSPM230405A	2025-01-08	2026-01-07

Radiated Band Edge Emission
Radiated Spurious Emission

Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	Rohde&schwarz	ESCI7	100853	2025-01-08	2026-01-07
2	Amplifier	Tonscend	TAP9K3G40	AP23A8060270	2025-01-08	2026-01-07
3	Prime amplifier	Tonscend	TAP01018050	AP23A8060280	2025-01-08	2026-01-07
4	9*6*6 anechoic chamber	SKET	9.3*6.3*6	N/A	2024-09-02	2027-09-01
5	Spectrum analyzer	Agilent	N9020A	MY50530263	2025-01-08	2026-01-07
6	Spectrum analyzer	R&S	FSV-40N	102130	2025-01-08	2026-01-07

7	Bilog Antenna	Schwarzbeck	VULB 9163	1463	2023-01-09	2026-01-08
8	Horn Antenna	SCHWARZBECK	BBHA 9120 D	2487	2023-01-09	2026-01-08
9	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	/	2023-01-09	2026-01-08
10	RF Cable	Tonscend	Cable 1	/	2025-01-08	2026-01-07
11	RF Cable	Tonscend	Cable 2	/	2025-01-08	2026-01-07
12	RF Cable	SKET	Cable 3	/	2025-01-08	2026-01-07
13	L.I.S.N.#1	Schwarzbeck	NSLK8127	/	2025-01-08	2026-01-07
14	L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	2025-01-08	2026-01-07
15	Horn Antenna	SCHWARZBECK	BBHA9170	1130	2023-01-09	2026-01-08
16	Preamplifier	Tonscend	TAP18040048	AP21C806126	2025-01-08	2026-01-07
17	Variable-frequency power source	Pinhong	PH1110	/	2025-01-08	2026-01-07
18	6dB Attenuator	SKET	DC-6G	/	2025-01-08	2026-01-07
19	Antenna tower	SKT	Bk-4AT-BS	AT2021040101-V1	2025-01-08	2026-01-07

5. TEST CONDITIONS AND RESULTS

5.1. Antenna Requirement

Standard Applicable	**FCC CFR Title 47 Part 15 Subpart C Section 15.203:** An intentional radiator shall be designed to ensure that no antenna other than that furnished by the response-ble party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
Description	The EUT antenna is PCB antenna (1.9dBi), the directional gain of the antenna less than 6dBi. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used.Antenna structure please refer to the EUT internal photographs antenna photo.

Remark: The antenna gain is provided by the customer , if the data provided by the customer is not accurate, Shenzhen Bangce Testing Technology Co., Ltd. does not assume any responsibility.

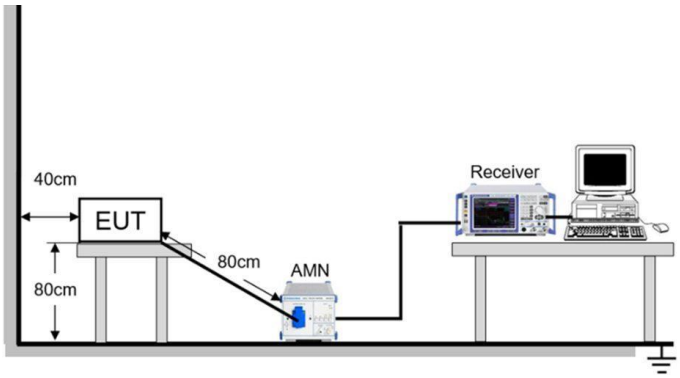
5.2. AC Conducted Emission

Test Requirement:	Refer to 47 CFR 15.207(a), Except as shown in paragraphs (b)and (c)of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).
Test Limit:	Frequency of emission (MHz) / Conducted limit (dBμV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 *Decreases with the logarithm of the frequency.
Test Method:	ANSI C63.10-2020 section 6.2
Procedure:	1. The EUT was setup according to ANSI C63.10 requirements. 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. 3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. 4. The peripheral devices are also connected to the main power through a LISN. (Refer to the block diagram of the test setup and photographs) 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source. 6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz. 8. During the above scans, the emissions were maximized by cable manipulation.

Operating Environment:					
Temperature :	22.5 °C	Humidity:	56.7 %	Atmospheric Pressure:	103 kPa

Pre test mode:	TM1, TM2, TM3
Final test mode:	TM1, TM2, TM3

Test Setup Diagram



Test Result

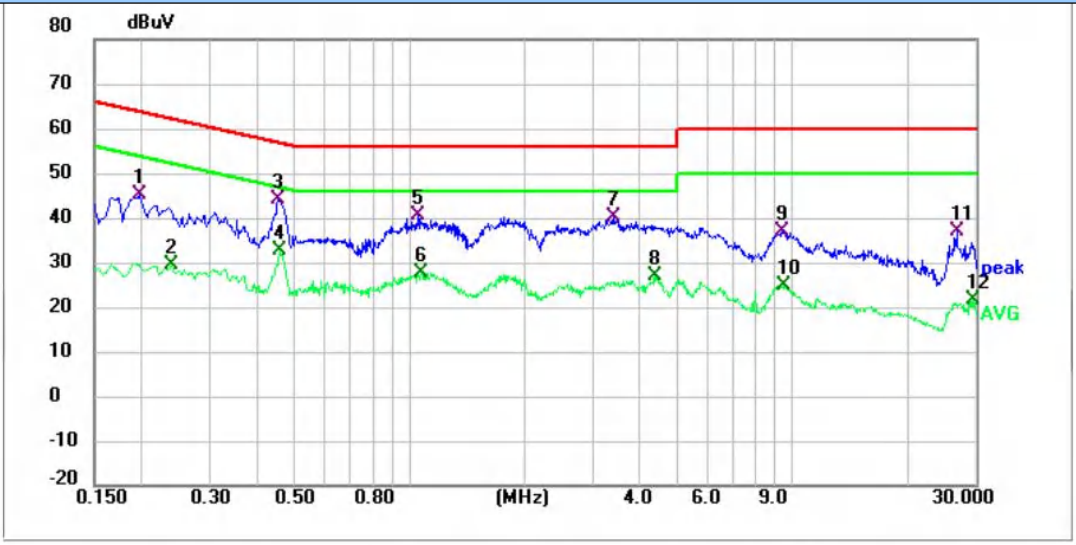
Pass

Test Data

Note:

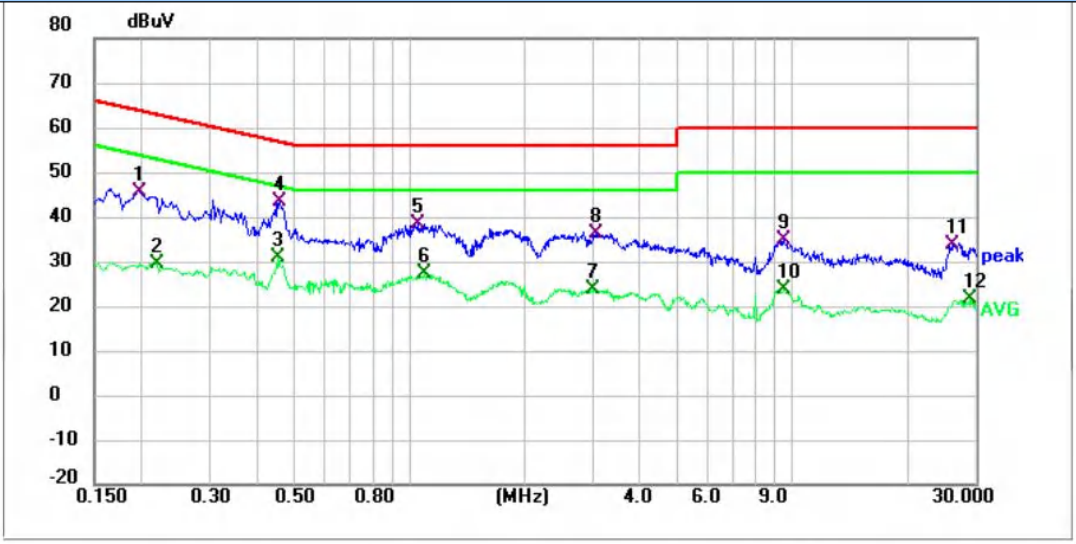
Have pre-scan all test mode, found TM3 mode which it was worst case, so only show the worst case's data on this report.

Mode3 / Line: Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1980	34.98	10.17	45.15	63.69	18.54	QP
2	0.2380	19.24	10.16	29.40	52.17	22.77	AVG
3 *	0.4540	33.97	10.15	44.12	56.80	12.68	QP
4	0.4580	22.59	10.15	32.74	46.73	13.99	AVG
5	1.0580	30.19	10.19	40.38	56.00	15.62	QP
6	1.0740	17.43	10.19	27.62	46.00	18.38	AVG
7	3.4340	29.94	10.33	40.27	56.00	15.73	QP
8	4.3659	16.62	10.36	26.98	46.00	19.02	AVG
9	9.3860	26.61	10.37	36.98	60.00	23.02	QP
10	9.4940	14.46	10.37	24.83	50.00	25.17	AVG
11	26.8580	25.87	10.93	36.80	60.00	23.20	QP
12	29.7780	10.69	10.88	21.57	50.00	28.43	AVG

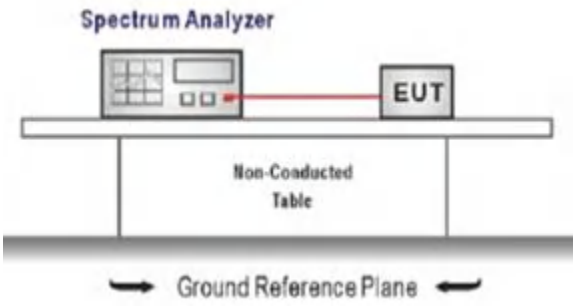
Mode3 / Line: Neutral



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1980	35.51	10.13	45.64	63.69	18.05	QP
2	0.2180	19.21	10.14	29.35	52.89	23.54	AVG
3	0.4540	20.90	10.12	31.02	46.80	15.78	AVG
4 *	0.4580	33.30	10.12	43.42	56.73	13.31	QP
5	1.0500	28.26	10.16	38.42	56.00	17.58	QP
6	1.0980	16.99	10.16	27.15	46.00	18.85	AVG
7	3.0100	13.53	10.29	23.82	46.00	22.18	AVG
8	3.0780	26.01	10.29	36.30	56.00	19.70	QP
9	9.4860	24.49	10.37	34.86	60.00	25.14	QP
10	9.5460	13.27	10.37	23.64	50.00	26.36	AVG
11	26.0540	22.90	10.92	33.82	60.00	26.18	QP
12	29.1060	10.70	10.85	21.55	50.00	28.45	AVG

Note:
1). Result = Reading +Correct (Insertion Loss + Cable Loss + Attenuator Factor)
2). Margin = Result - Limit

5.3. 20 dB Bandwidth

Limit:	--
Test configuration:	
Test procedure:	1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously 3. Use the following spectrum analyzer settings: Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW Sweep = auto, Detector function = peak, Trace = max hold 4. Measure and record the results in the test report.

Operating Environment:					
Temperature:	22.2 °C	Humidity:	56.3 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1				
Final test mode:	TM1				

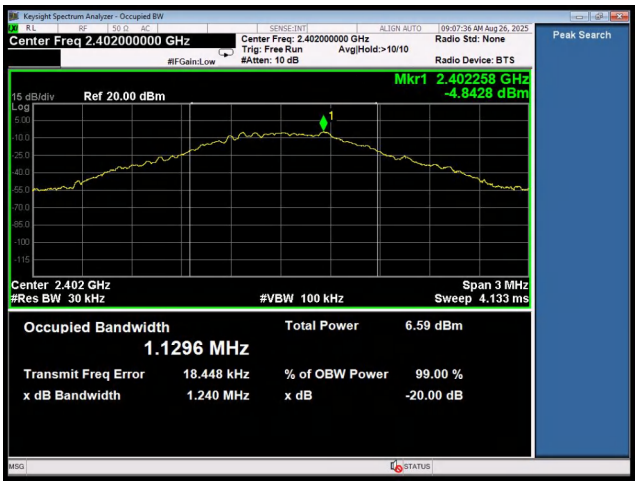
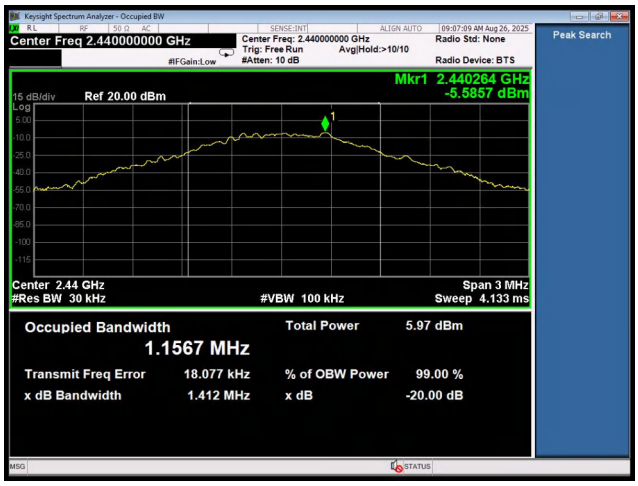
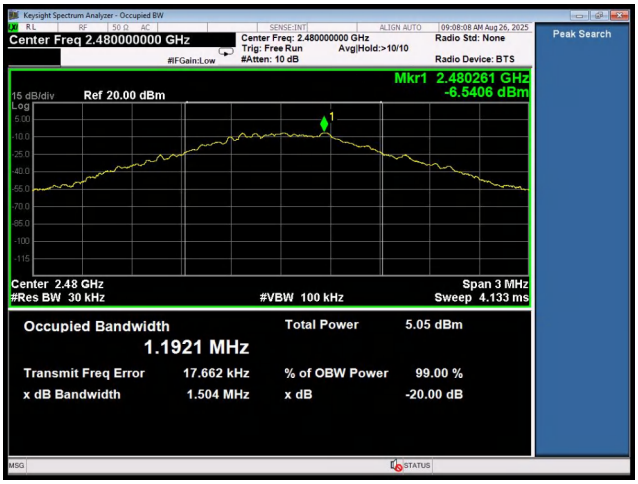
Test Setup Diagram

Test Result

Pass

Test Data

Test Result of 20dB Bandwidth Measurement		
Test Frequency(MHz)	20dB Bandwidth(MHz)	Limit(MHz)
2402	1.240	Non-Specified
2440	1.412	Non-Specified
2480	1.504	Non-Specified

20dB Bandwidth	
	
2402MHz	2440MHz
	
2480MHz	

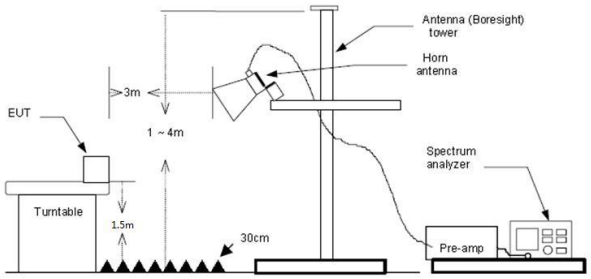
5.4. Radiated Band edge Emission

Limit:

FCC CFR Title 47 Part 15 Subpart C Section 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.

Test configuration:

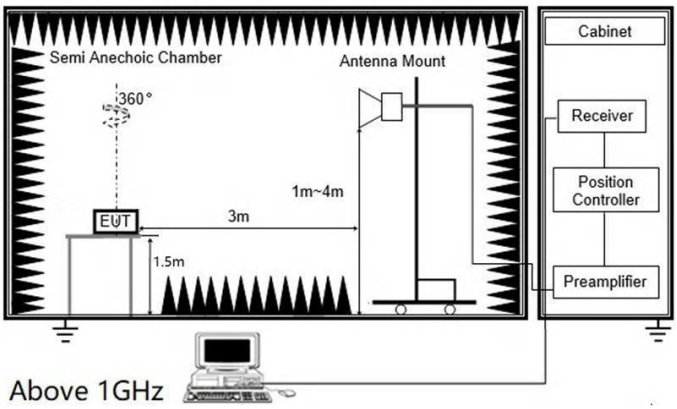


Test procedure:

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. Thisis repeated for both horizontal and vertical polarization of the antenna. In order to find themaximum emission, all of the interface cables were manipulated according to ANSI C63.10 on radiated measurement.
5. Use the following spectrum analyzer settings:
   a) Span shall wide enough to fully capture the emission being measured
   b) Set RBW=100kHz for <1GHz, VBW=3*RBW, Sweep time=auto, Detector=peak, Trace=max hold
   c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement
   d) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=Average, Trace=RMS for Average measurement

Operating Environment:					
Temperature:	22.2 °C	Humidity:	56.5 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1, TM2, TM3				
Final test mode:	TM1, TM2, TM3				

Test Setup Diagram



Test Result

Pass

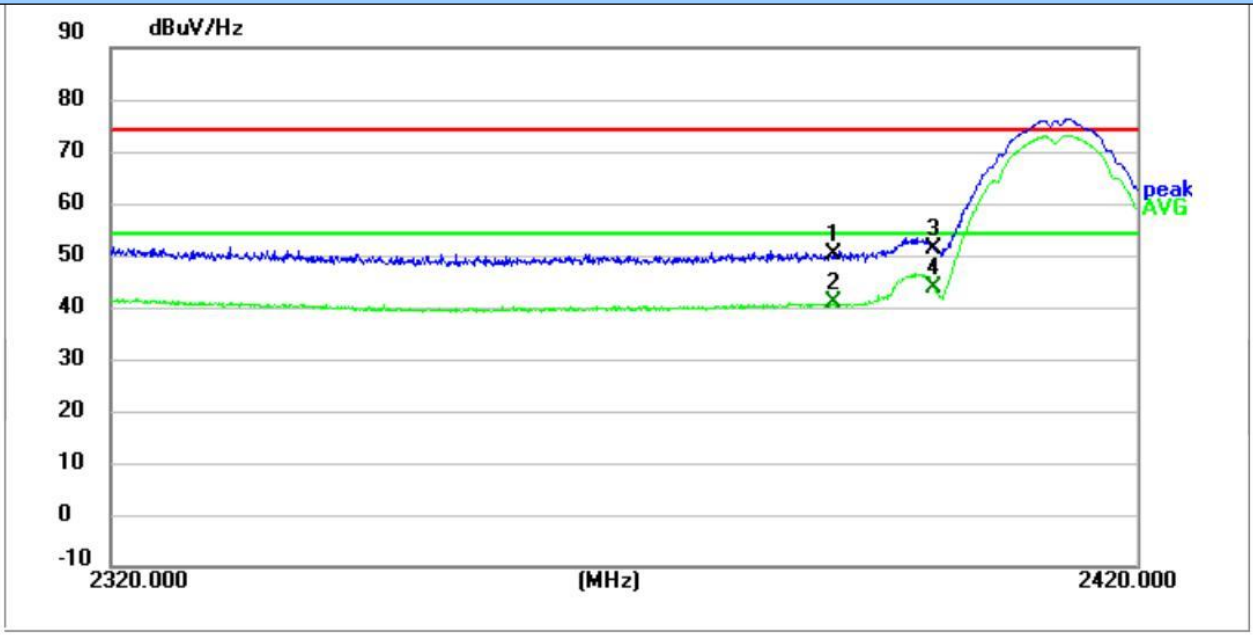
Test Data

Note:

1) Level= Reading + Factor; Factor =Antenna Factor+ Cable Loss- Preamp Factor
2) Margin = Limit - Level
3) Average measurement was not performed if peak level is lower than average limit
4) Have pre-scan all test mode, found TM1 mode which it was worst case, so only show the worst case’s data on this report.
5) The other emission levels were very low against the limit.

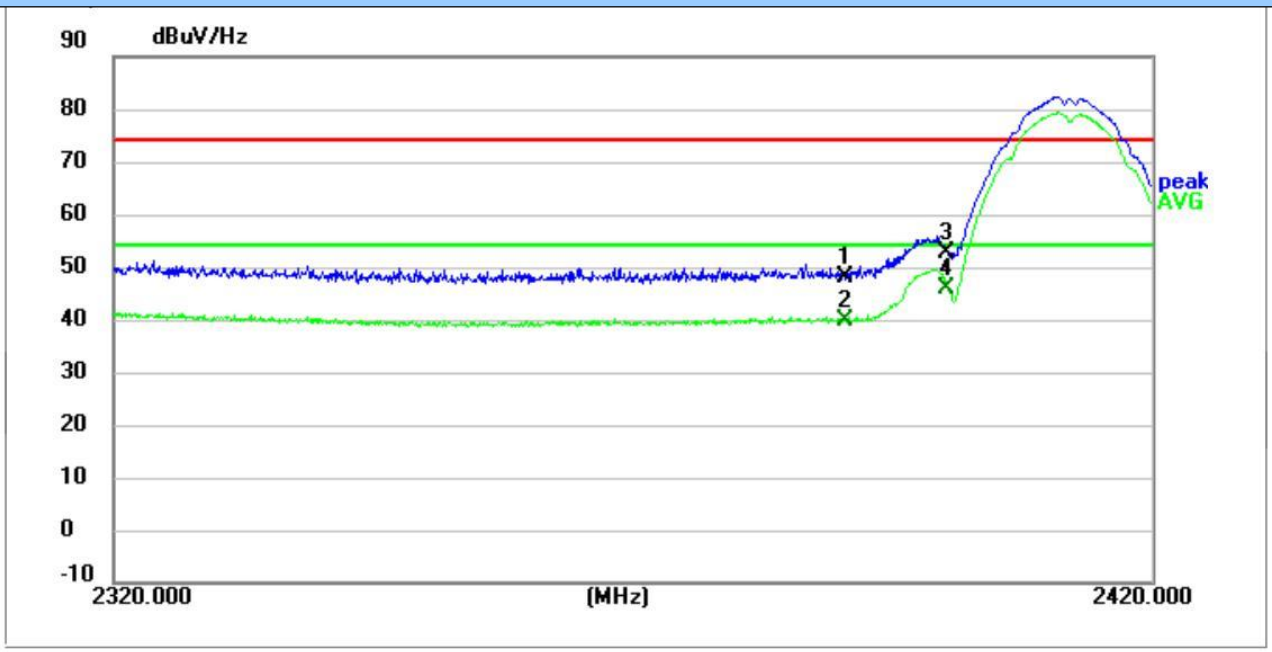
Have pre-scan all test mode, found TM1 mode which it was worst case, so only show the worst case’s data on this report.

Mode1 / Polarization: Horizontal / CH: L



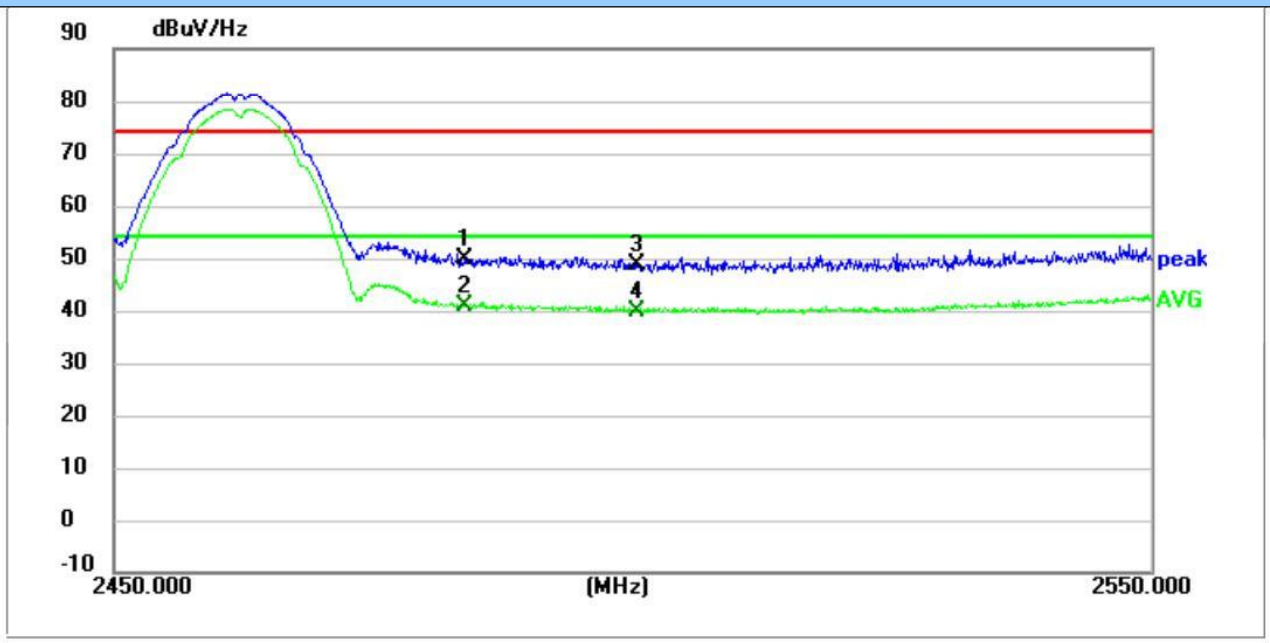
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2390.0000	47.71	2.34	50.05	74.00	23.95	peak
2	2390.0000	38.40	2.34	40.74	54.00	13.26	AVG
3	2400.0000	48.83	2.38	51.21	74.00	22.79	peak
4 *	2400.0000	41.22	2.38	43.60	54.00	10.40	AVG

Mode1 / Polarization: Vertical / CH: L



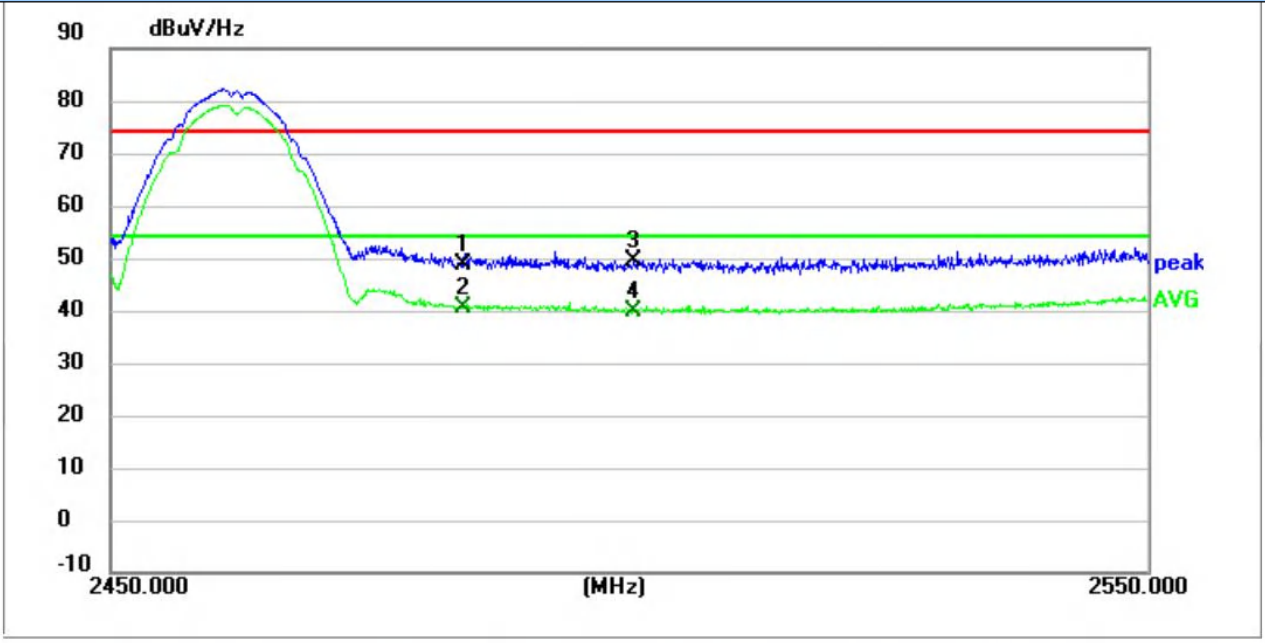
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2390.0000	45.79	2.34	48.13	74.00	25.87	peak
2	2390.0000	37.56	2.34	39.90	54.00	14.10	AVG
3	2400.0000	50.30	2.38	52.68	74.00	21.32	peak
4 *	2400.0000	43.52	2.38	45.90	54.00	8.10	AVG

Mode1 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2483.5000	47.22	2.66	49.88	74.00	24.12	peak
2 *	2483.5000	38.32	2.66	40.98	54.00	13.02	AVG
3	2500.0000	46.11	2.80	48.91	74.00	25.09	peak
4	2500.0000	37.02	2.80	39.82	54.00	14.18	AVG

Mode1 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2483.5000	46.07	2.66	48.73	74.00	25.27	peak
2 *	2483.5000	38.00	2.66	40.66	54.00	13.34	AVG
3	2500.0000	46.58	2.80	49.38	74.00	24.62	peak
4	2500.0000	37.20	2.80	40.00	54.00	14.00	AVG

5.5. Radiated Spurious Emission

Limit:

FCC CFR Title 47 Part 15 Subpart C Section 15.209

Frequency	Limit (dBuV/m)	Value
0.009 MHz ~0.49 MHz	2400/F(kHz) @300m	Quasi-peak
0.49 MHz ~ 1.705 MHz	24000/F(kHz) @30m	Quasi-peak
1.705 MHz ~30 MHz	30 @30m	Quasi-peak

Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3

Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3)

FCC CFR Title 47 Part 15 Subpart C Section 15.249

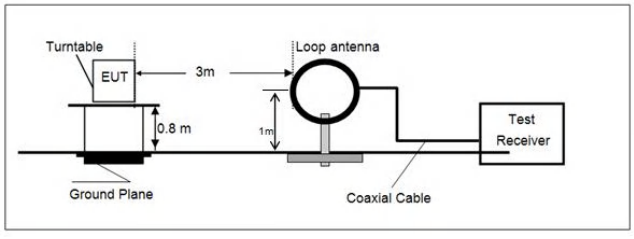
As shown in § 15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the Antenna azimuth.

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

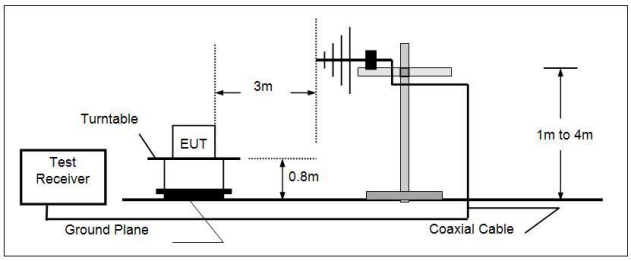
Frequency	Limit (dBuV/m @3m)	Value
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz~1GHz	54.00	Quasi-peak
Above 1GHz(Field strength of fundamental)	94.00	Average
	114.00	Peak
Above 1GHz(Field strength of harmonics)	54.00	Average
	74.00	Peak

Test configuration:

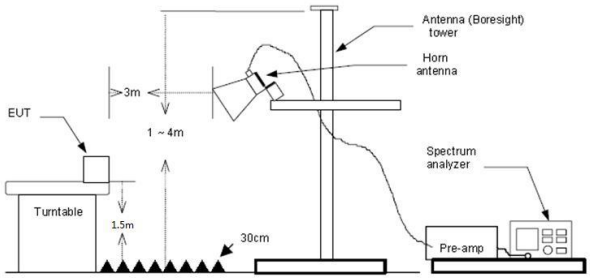
9kHz~30MHz



30 MHz ~ 1 GHz



Above 1 GHz



Test procedure:

1. The EUT was setup and tested according to ANSI C63.10.
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
   a) Span shall wide enough to fully capture the emission being measured;
   b) Below 1 GHz:
      RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;
      If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
   c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement
   d) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=Average, Trace=RMS for Average measurement

Operating Environment:					
Temperature :	22.2 °C	Humidity:	56.5 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1, TM2, TM3				
Final test mode:	TM1, TM2, TM3				

Test Result

Pass

Test Data

Note:

1) Level= Reading + Factor/Transd; Factor/Transd =Antenna Factor+ Cable Loss- Preamp Factor
2) Margin = Limit – Level
3) Average measurement was not performed if peak level is lower than average limit(54 dBuV/m) for above 1GHz.
4) The other emission levels were very low against the limit.
5) This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in X position.

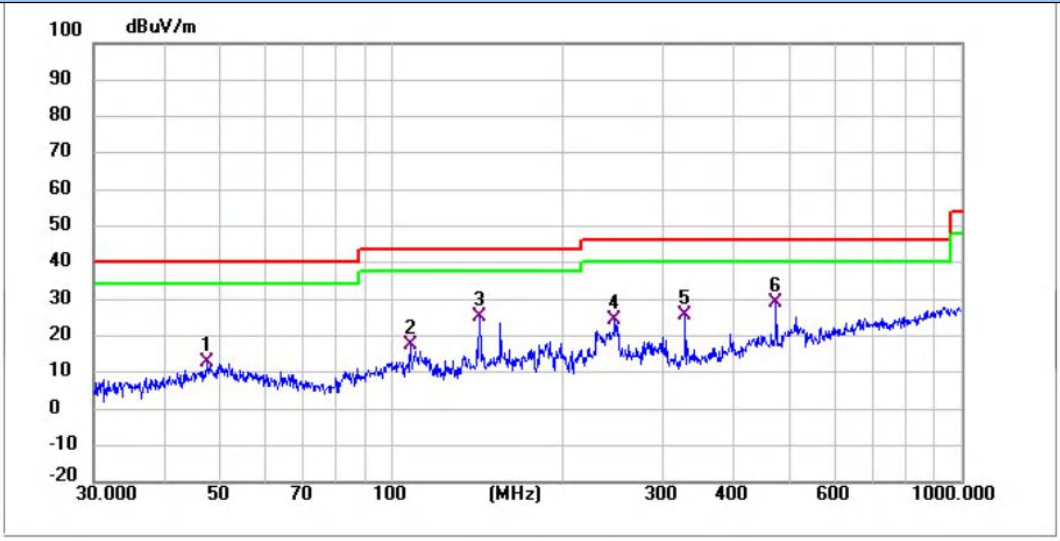
For 9 kHz ~ 30 MHz

The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

For 30 MHz ~ 1000 MHz

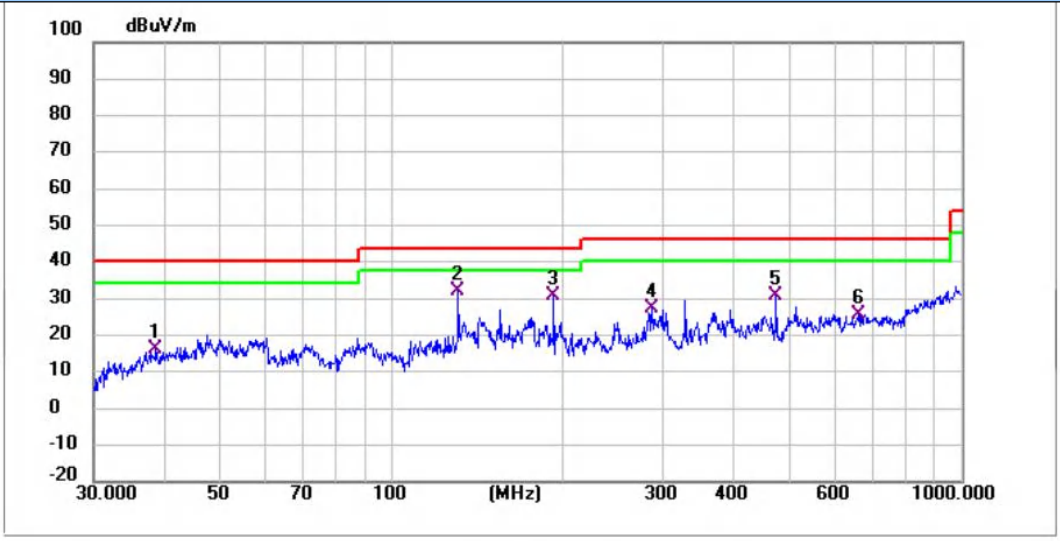
Have pre-scan all test mode, found TM1 mode CH00 which it was worst case, so only show the worst case's data on this report.

Mode1 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	47.3255	42.22	-29.25	12.97	40.00	27.03	QP
2	107.8877	47.96	-30.61	17.35	43.50	26.15	QP
3	142.8243	59.34	-34.05	25.29	43.50	18.21	QP
4	246.8149	52.90	-28.40	24.50	46.00	21.50	QP
5	327.8873	51.92	-26.44	25.48	46.00	20.52	QP
6 *	473.8347	51.64	-22.70	28.94	46.00	17.06	QP

Mode1 / Polarization: Vertical / CH: L

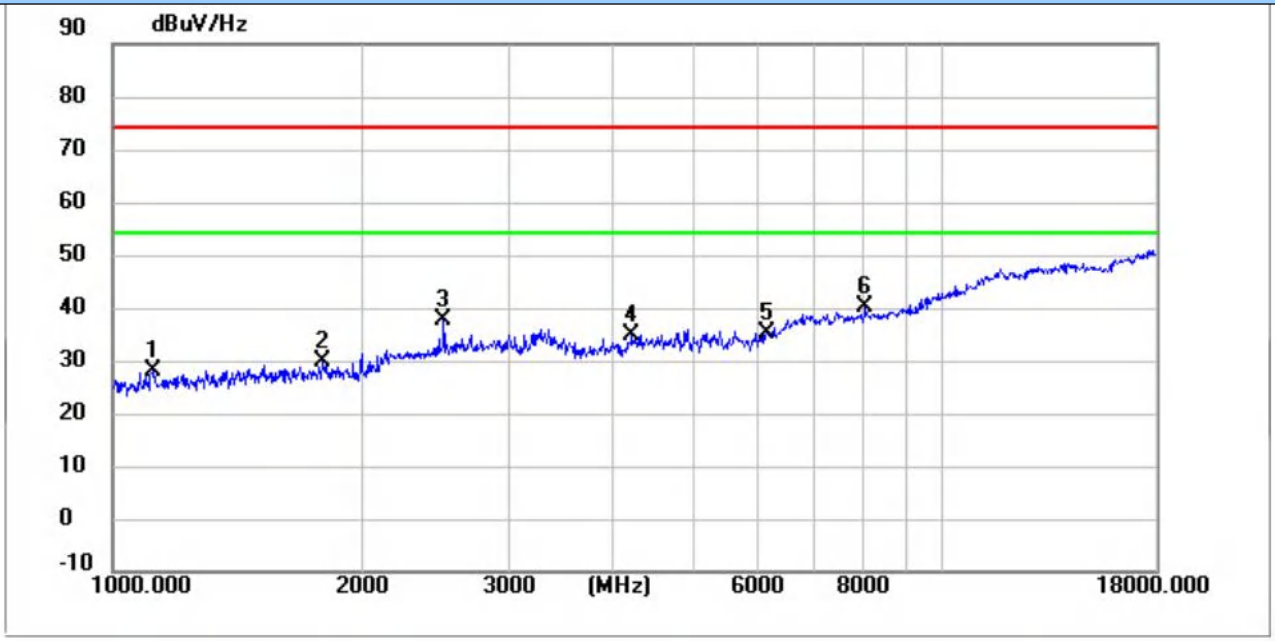


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	38.6160	47.43	-31.17	16.26	40.00	23.74	QP
2 *	130.8369	66.16	-34.04	32.12	43.50	11.38	QP
3	192.4183	61.13	-30.53	30.60	43.50	12.90	QP
4	285.9777	55.00	-27.62	27.38	46.00	18.62	QP
5	473.8346	53.64	-22.70	30.94	46.00	15.06	QP
6	658.8360	43.72	-17.95	25.77	46.00	20.23	QP

For 1 GHz ~ 25 GHz

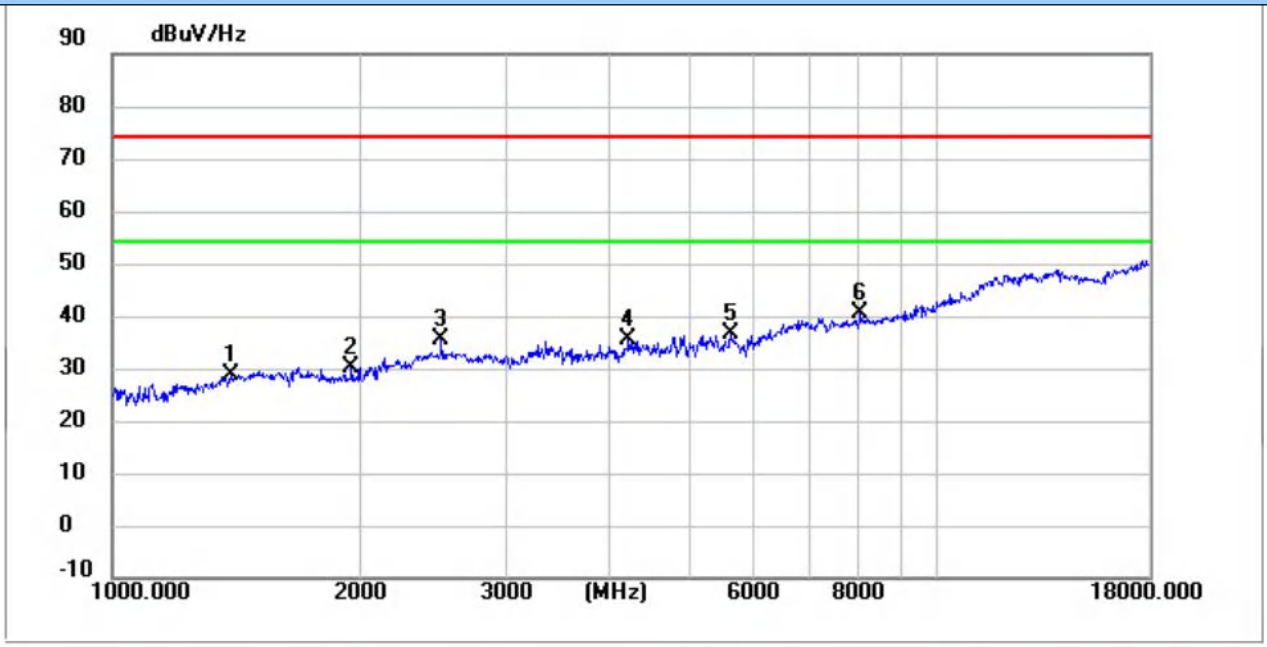
Have pre-scan all test mode, found TM1 mode which it was worst case, so only show the worst case's data on this report.

Mode1 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1119.0000	49.78	-21.70	28.08	74.00	45.92	peak
2	1797.3000	49.25	-19.53	29.72	74.00	44.28	peak
3	2504.5000	54.49	-16.90	37.59	74.00	36.41	peak
4	4230.0000	46.77	-11.77	35.00	74.00	39.00	peak
5	6135.7000	39.92	-4.57	35.35	74.00	38.65	peak
6 *	8075.4000	33.50	6.59	40.09	74.00	33.91	peak

Mode1 / Polarization: Vertical / CH: L

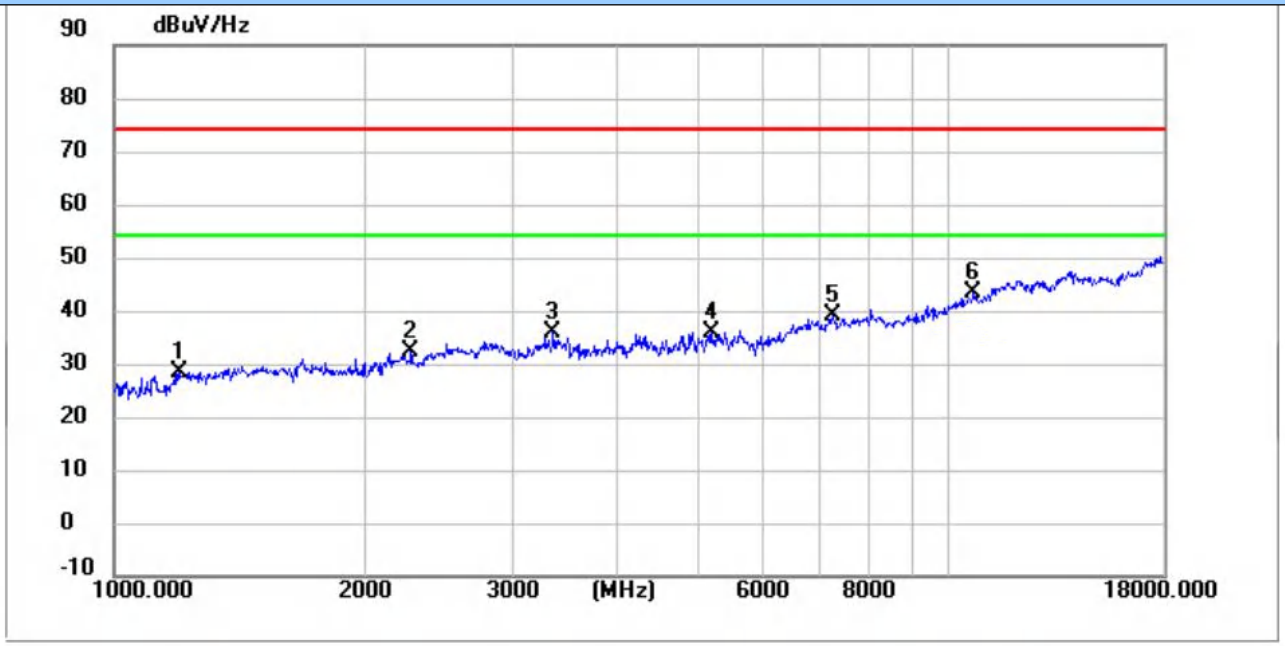


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1391.0000	49.83	-21.12	28.71	74.00	45.29	peak
2	1953.7000	49.45	-19.10	30.35	74.00	43.65	peak
3	2504.5000	52.49	-16.90	35.59	74.00	38.41	peak
4	4230.0000	47.27	-11.77	35.50	74.00	38.50	peak
5	5608.7000	43.20	-6.62	36.58	74.00	37.42	peak
6 *	8075.4000	34.00	6.59	40.59	74.00	33.41	peak

Test channel:2402MHz

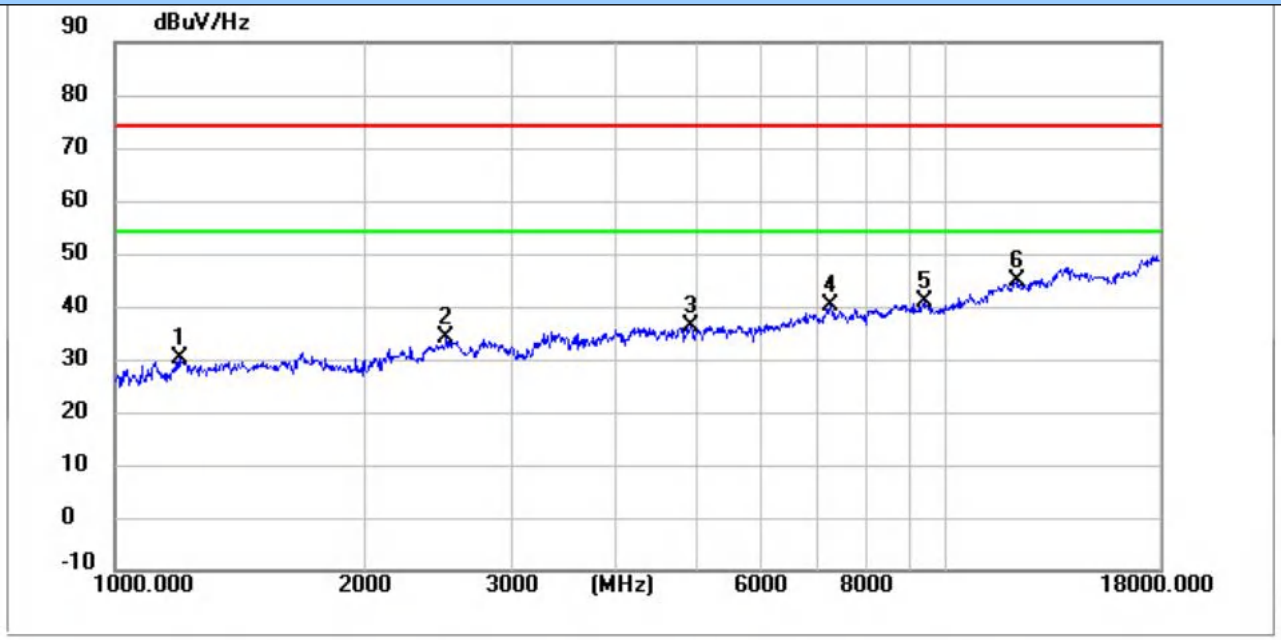
Freq. (MHz)	Reading (dBuv)	Ant. Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)	Level (dBuv)	Limit (dBuV/m)	Margin (dB)	Remark	Polarity
2402.00	92.24	29.18	4.02	38.35	-5.15	87.09	114	26.91	Peak	Horizontal
2402.00	80.93	29.18	4.02	38.35	-5.15	75.78	94	18.22	Average	Horizontal
2402.00	81.19	29.18	4.02	38.35	-5.15	76.04	114	37.96	Peak	Vertical
2402.00	66.91	29.18	4.02	38.35	-5.15	61.76	94	32.24	Average	Vertical

Mode1 / Polarization: Horizontal / CH: M



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1198.9000	50.03	-21.46	28.57	74.00	45.43	peak
2	2271.6000	49.91	-17.63	32.28	74.00	41.72	peak
3	3351.1000	49.58	-13.85	35.73	74.00	38.27	peak
4	5180.3000	43.81	-8.05	35.76	74.00	38.24	peak
5	7259.4000	34.58	4.54	39.12	74.00	34.88	peak
6 *	10688.3000	30.92	12.43	43.35	74.00	30.65	peak

Mode1 / Polarization: Vertical / CH: M

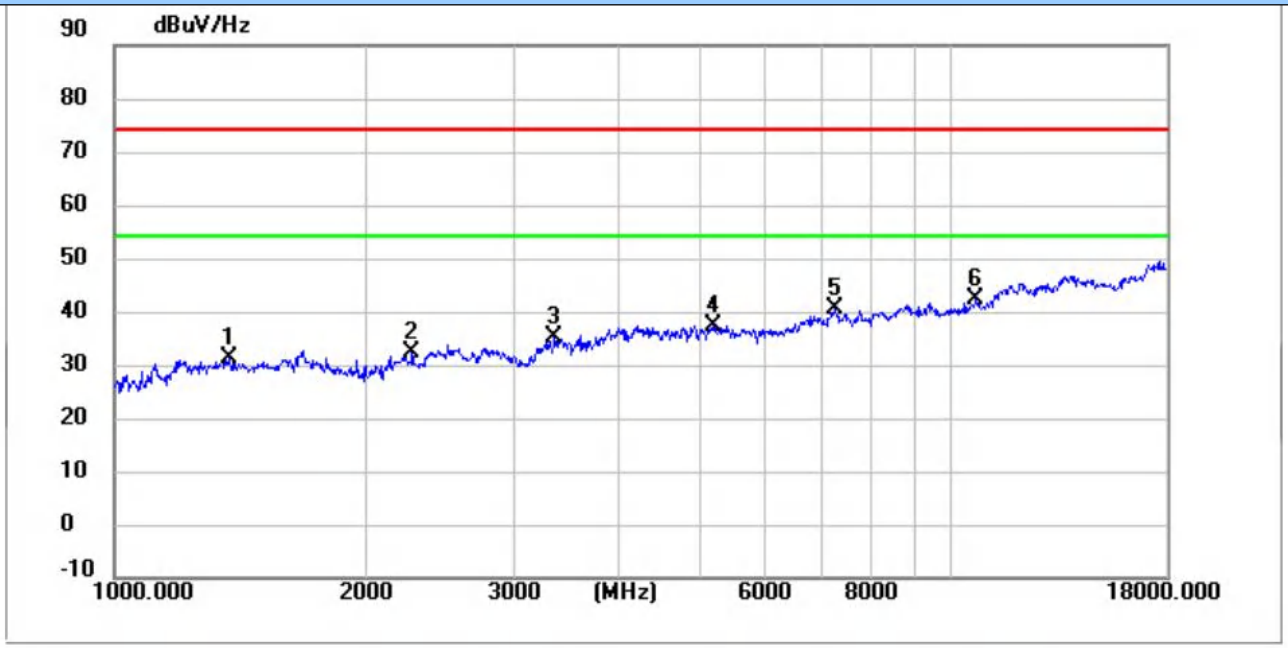


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1198.9000	51.53	-21.46	30.07	74.00	43.93	peak
2	2504.5000	50.99	-16.90	34.09	74.00	39.91	peak
3	4930.4000	45.43	-9.20	36.23	74.00	37.77	peak
4	7259.4000	35.58	4.54	40.12	74.00	33.88	peak
5	9413.3000	31.36	9.58	40.94	74.00	33.06	peak
6 *	12121.4000	30.09	14.56	44.65	74.00	29.35	peak

Test channel:2440MHz

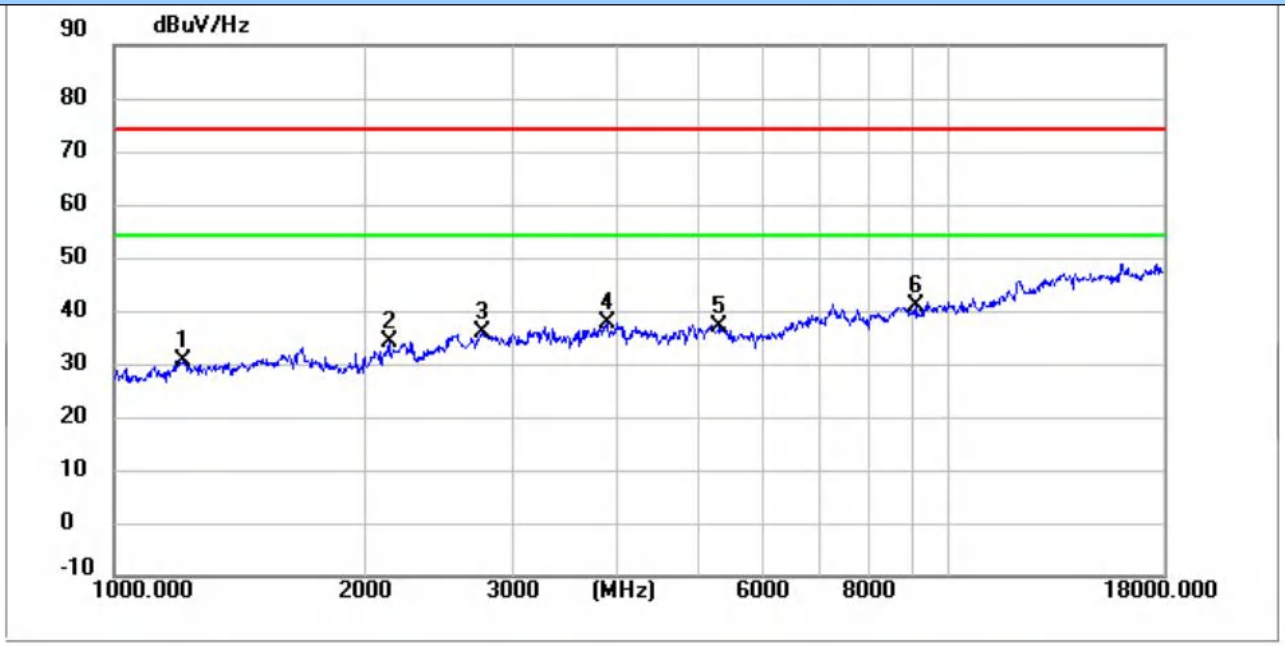
Freq. (MHz)	Reading (dBuv)	Ant. Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)	Level (dBuv)	Limit (dBuV/m)	Margin (dB)	Remark	Polarity
2440.00	91.21	29.23	4.02	38.2	-4.95	86.26	114	27.74	Peak	Horizontal
2440.00	80.93	29.23	4.02	38.2	-4.95	75.98	94	18.02	Average	Horizontal
2440.00	82.12	29.23	4.02	38.2	-4.95	77.17	114	36.83	Peak	Vertical
2440.00	69.05	29.23	4.02	38.2	-4.95	64.10	94	29.90	Average	Vertical

Mode1 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1375.7000	52.25	-21.15	31.10	74.00	42.90	peak
2	2271.6000	49.91	-17.63	32.28	74.00	41.72	peak
3	3351.1000	49.08	-13.85	35.23	74.00	38.77	peak
4	5180.3000	45.31	-8.05	37.26	74.00	36.74	peak
5	7259.4000	36.08	4.54	40.62	74.00	33.38	peak
6 *	10688.3000	29.92	12.43	42.35	74.00	31.65	peak

Mode1 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1210.8000	52.10	-21.44	30.66	74.00	43.34	peak
2	2133.9000	52.17	-18.06	34.11	74.00	39.89	peak
3	2762.9000	51.53	-15.58	35.95	74.00	38.05	peak
4	3898.5000	50.18	-12.60	37.58	74.00	36.42	peak
5	5314.6000	44.59	-7.60	36.99	74.00	37.01	peak
6 *	9112.4000	32.33	8.62	40.95	74.00	33.05	peak

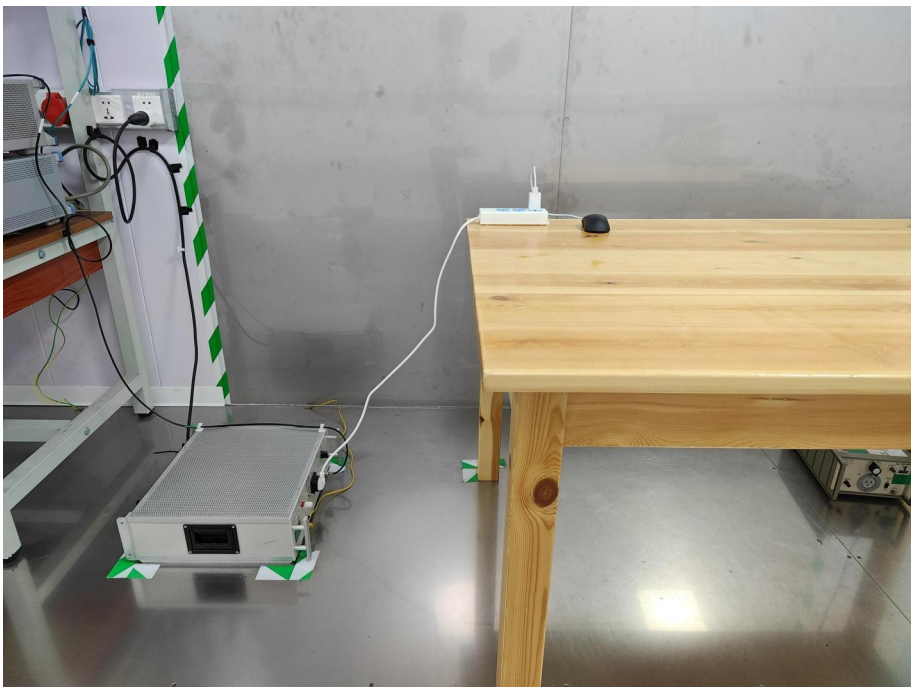
Test channel:2480MHz

Freq. (MHz)	Reading (dBuv)	Ant. Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)	Level (dBuv)	Limit (dBuV/m)	Margin (dB)	Remark	Polarity
2480.00	94.67	29.2	4.02	38.3	-5.08	89.59	114	24.41	Peak	Horizontal
2480.00	81.02	29.2	4.02	38.3	-5.08	75.94	94	18.06	Average	Horizontal
2480.00	82.45	29.2	4.02	38.3	-5.08	77.37	114	36.63	Peak	Vertical
2480.00	68.12	29.2	4.02	38.3	-5.08	63.04	94	30.96	Average	Vertical

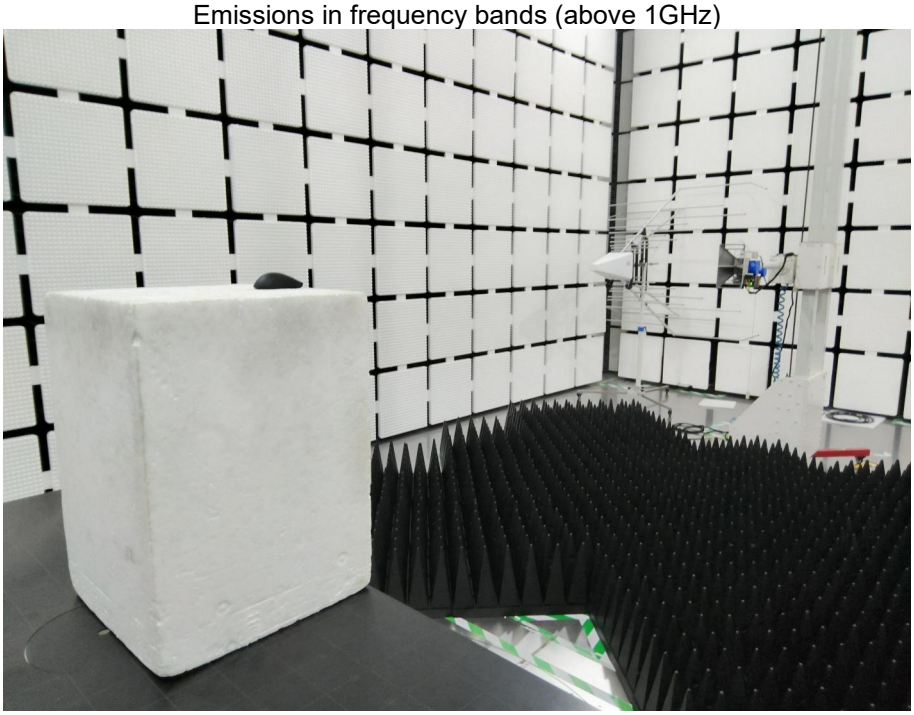
Note:
1) Level= Reading + Factor; Factor =Antenna Factor+ Cable Loss- Preamp Factor
2) Margin = Limit – Level
3) Average measurement was not performed if peak level is lower than average limit (54dBuV/m) for above 1GHz.

6. TEST SETUP PHOTOS

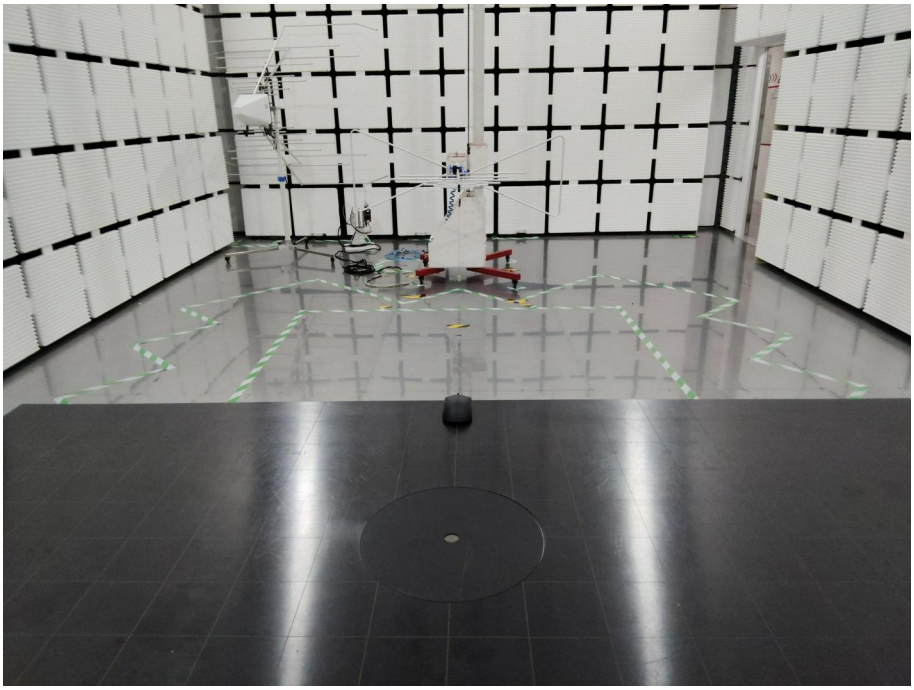
Conducted Emission at AC power line



Band edge emissions (Radiated)
Emissions in frequency bands (above 1GHz)

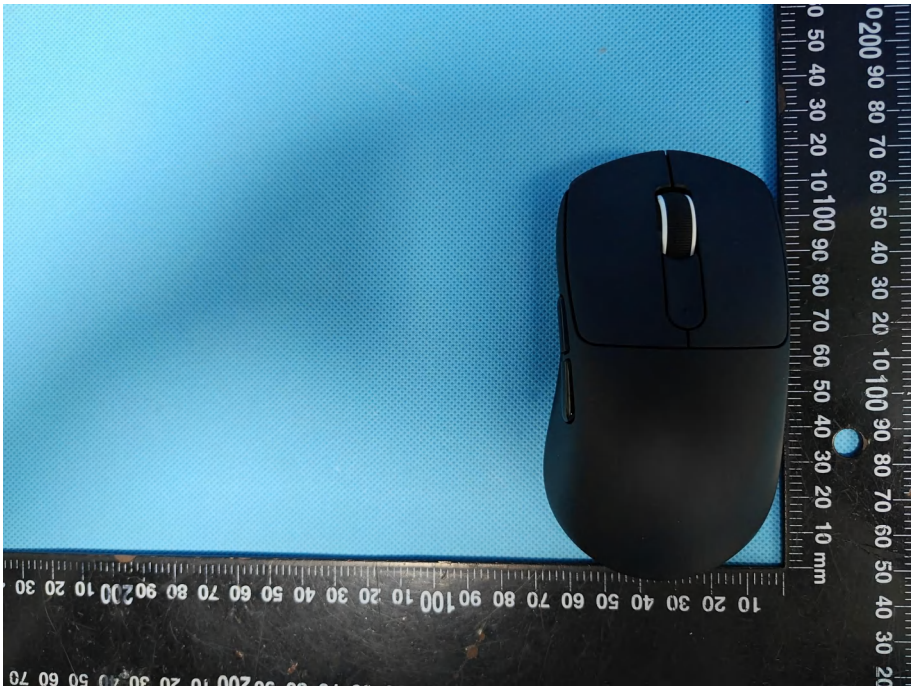


Emissions in frequency bands (below 1GHz)



7. EXTERNAL AND INTERNAL PHOTOS

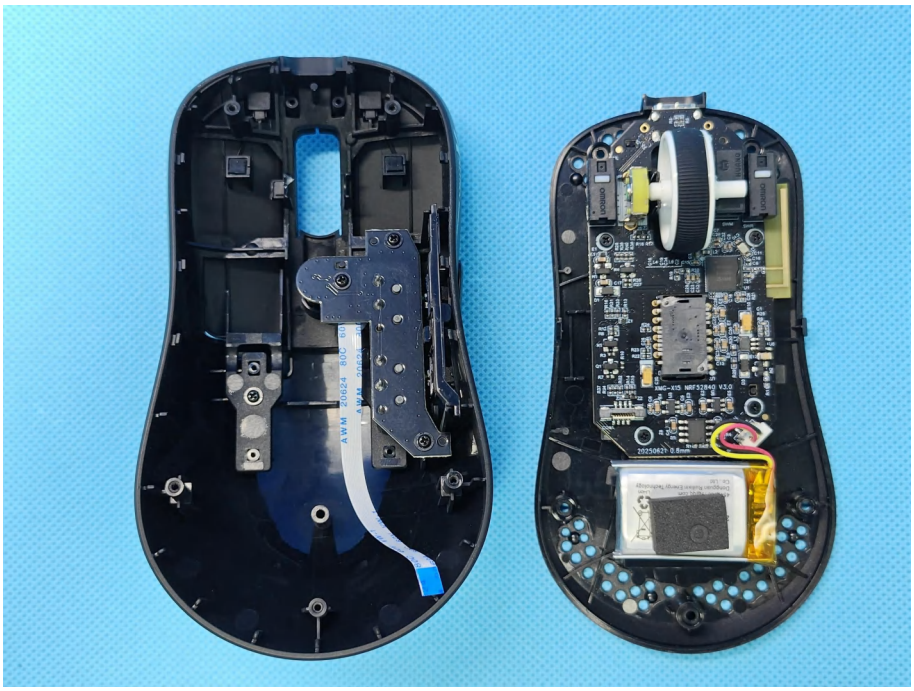
7.1 External photos

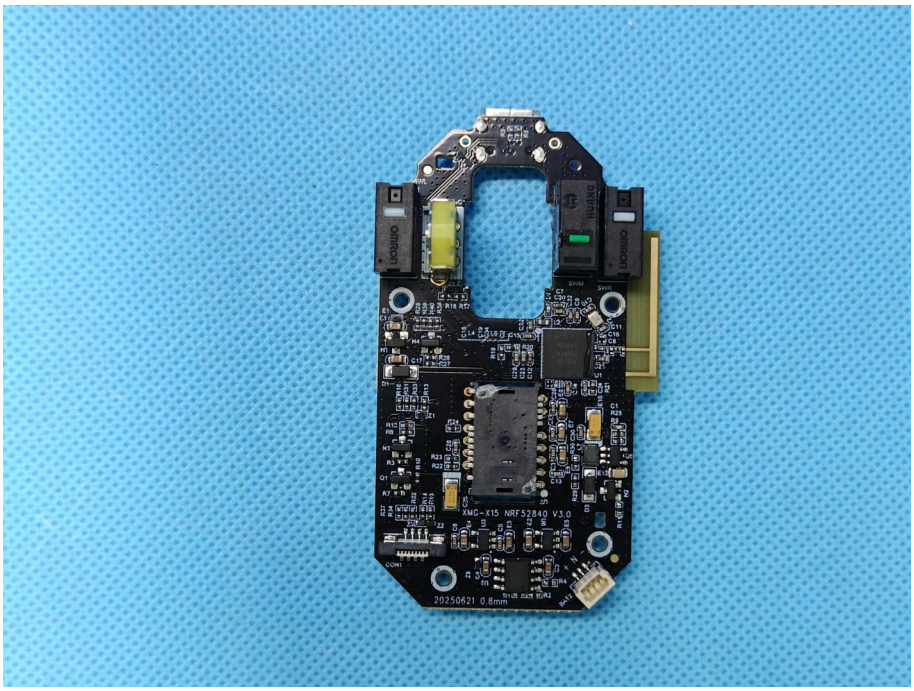


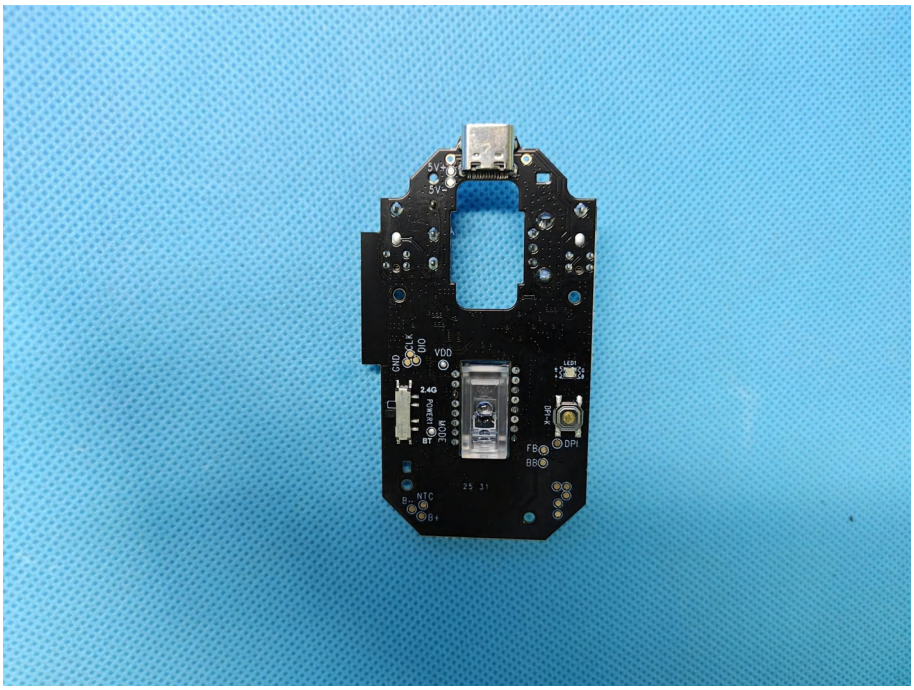

V5


V5
2.4G
OFF
BT
DPI
ANATEL
RoHS
S/N: 202508
Made in China

7.2 Internal photos



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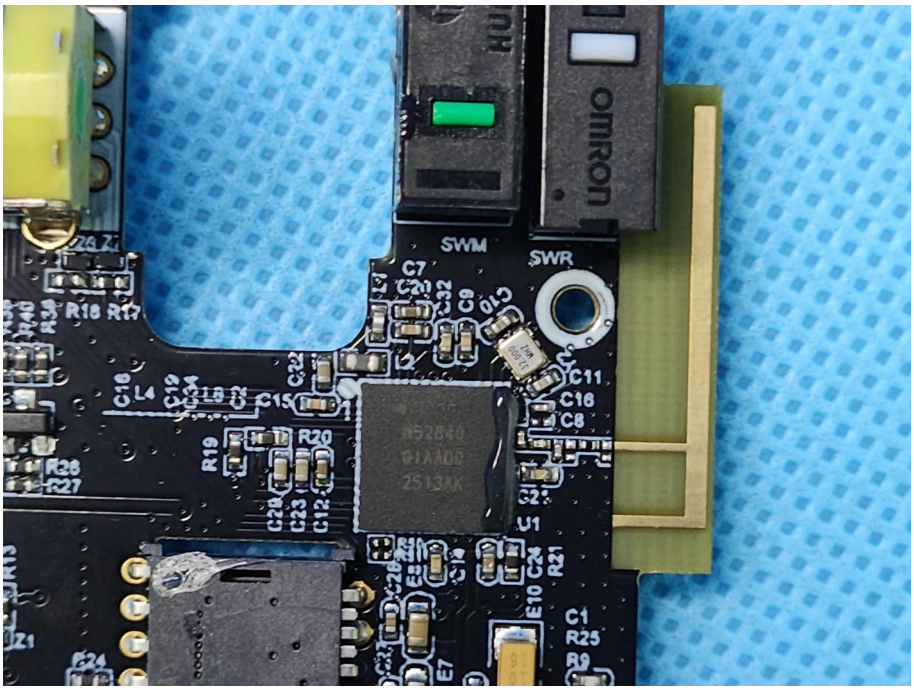
5V-
CLK
DIO
GND
VDD
2.4G
BT
DPI
FB
BB
NTC
B+


OMRON
SWM
SWR
C7
C11
C16
C8
R18
R17
R19
R20
R28
R27
U1
C1
R25

------End of the report------