

TEST REPORT

Product Name : M5Stamp UWB
Brand Name : 
Model : M5STACK Stamp UWB
Series Model : N/A
FCC ID : 2AN3WM5STAMPUWB
Applicant : **M5Stack Technology Co., Ltd**
Address : Block A10, Expo Bay South Coast, Fuhai Street, Bao'an District, Shenzhen, China
Manufacturer : **M5Stack Technology Co., Ltd**
Address : Block A10, Expo Bay South Coast, Fuhai Street, Bao'an District, Shenzhen, China
Standard(s) : FCC CFR Title 47 Part 15 Subpart F
Date of Receipt : May 22, 2026
Date of Test : May 23, 2026~ June 30, 2026
Issued Date : July 01, 2026

Issued By: **Dongguan Yaxu (AiT) Technology Limited**

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Reviewed by: Emiya Lin
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Note: This device has been tested and found to comply with the standard(s) listed, this test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory. This report shall not be reproduced except in full, without the written approval of Dongguan Yaxu (AiT) Technology Limited. If there is a need to alter or revise this document, the right belongs to Dongguan Yaxu (AiT) Technology Limited, and it should give a prior written notice of the revision document. This test report must not be used by the client to claim product endorsement.

Dongguan Yaxu (AiT) Technology Limited

No.22, Jinqianling 3rd Street, Jitigang, Huangjiang, Dongguan, Guangdong, China.



Report Revise Record

Report Version	Issued Date	Notes
M0	July 01, 2026	Initial Release

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1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

[FCC Rules Part 15F](#): Ultra-Wideband Operation.

[ANSI C63.10: 2020](#): American National Standard for Testing Unlicensed Wireless Devices

1.2 Test Summary

FCC Requirements		
FCC Part 15.207	AC Power Conducted Emission	PASS
FCC Part 15.519(b)& 15.521	UWB Bandwidth	PASS
FCC Part 15.207&15.519(c) &15.519(d)	Radiated emissions	PASS
FCC Part 15.519(e)	Peak Power	PASS
FCC Part 15.519(a)(1)	Cessation Time	PASS
FCC Part 15.203	Antenna Requirement	PASS

1.3 Test Facility

Test Laboratory: Dongguan Yaxu (AiT) Technology Limited

No.22, Jinqianling 3rd Street, Jitigang, Huangjiang, Dongguan, Guangdong, China

The test facility is recognized, certified or accredited by the following organizations:

CNAS-Registration No: L6177

Dongguan Yaxu (AiT) technology Limited is accredited to ISO/IEC 17025:2017 general Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the competence of testing and calibration laboratories) on April 18, 2022

FCC-Registration No.: 703111 Designation Number: CN1313

Dongguan Yaxu (AiT) Technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC-Registration No.: 6819A CAB identifier: CN0122

The 3m Semi-anechoic chamber of Dongguan Yaxu (AiT) Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6819A

A2LA-Lab Cert. No.: 6317.01

Dongguan Yaxu (AiT) Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

1.4 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Dongguan Yaxu (AiT) Technology Limited's quality system according to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Yaxu (AiT) laboratory is reported:

Test	Measurement Uncertainty	Notes
Power Line Conducted Emission	9KHz~30MHz ± 1.20 dB	(1)
Radiated Emission	9KHz~30MHz ± 3.10 dB	(1)
Radiated Emission	30MHz~1GHz ± 3.75 dB	(1)
Radiated Emission	1GHz~18GHz ± 3.88 dB	(1)
Radiated Emission	18GHz~40GHz ± 3.88 dB	(1)
RF power, conducted	30MHz~6GHz ± 0.16 dB	(1)
RF power density, conducted	± 0.24 dB	(1)
Spurious emissions, conducted	± 0.21 dB	(1)
Temperature	$\pm 1^{\circ}\text{C}$	(1)
Humidity	$\pm 3\%$	(1)
DC and low frequency voltages	$\pm 1.5\%$	(1)
Time	$\pm 2\%$	(1)
Duty cycle	$\pm 2\%$	(1)

The report uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty Multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%

2 GENERAL INFORMATION

2.1 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

2.2 General Description of EUT

Product Name:	M5Stamp UWB
Model/Type reference:	Stamp UWB
Serial Model:	N/A
Power ratings:	DC 3.3V from host
Hardware Version:	N/A
Software Version:	N/A
Sample(s) Status:	AiTDG-260522004-1(Normal sample) AiTDG-260522004-2(Engineer sample)
UWB:	
Operation frequency band:	6240MHz to 6739MHz, 7737MHz to 8237MHz,
Center frequency:	6489.6MHz, 7987.2MHz
Modulation:	Pulse Modulation, Frequency Hopping
Channel number:	1
Antenna type:	PCB antenna
Antenna gain:	-2.10dBi
Remark: The above DUT's information was declared by manufacturer. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.	

2.3 Description of Test Modes and Test Frequency

The Applicant provides communication tools software to control the EUT for staying in continuous transmitting (Duty Cycle more than 98%) and receiving mode for testing.

All test performed at the low, middle and high of operational frequency range of each mode.

Operation Frequency:

Channel	Frequency (MHz)
05	6489.6
09	7987.2

2.4 Special Accessories

Follow auxiliary equipment(s) test with EUT that provided by the manufacturer or laboratory is listed as follow:

Description	Manufacturer	Model	Serial No.	Provided by	Other
Notebook	Lenovo	T450s	TP00049A	Test lab	/
Adapter	Lenovo	A17-065N2A	SA10J20161	Test lab	/

2.5 Equipment List for the Test

Conducted Emission measurement						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
☒ 1	EMI Test Receiver	R&S	ESPI	100771	2024.09.25	2025.09.24
☒ 2	LISN	R&S	NNLK 8129	8130179	2024.09.24	2025.09.23
☒ 3	ISN	TESEQ	T800	29429	2024.09.26	2025.09.25
☒ 4	Pulse Limiter	R&S	ESH3-Z2	102789	2024.09.24	2025.09.23
☒ 5	CE Software	EZ	EZ-EMC_CE	Ver.AIT-03A	N/A	N/A

Radiation Emission measurement						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
☒ 1	EMI Measuring Receiver	R&S	ESR	101160	2024.09.25	2025.09.24
☒ 2	Low Noise Pre Amplifier	SCHWARZBECK	BBV 9745	00282	2024.09.25	2025.09.24
☒ 3	Low Noise Pre Amplifier	CESHENG	CSKJLNA231 016A	CSKJLNA23 1016A	2024.09.25	2025.09.24
☒ 4	Spectrum Analyzer	R&S	FSV40	101470	2024.09.23	2025.09.22
☒ 5	Passive Loop	ETS	6512	00165355	2024.08.29	2026.08.28
☒ 6	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9168	01434	2024.08.29	2027.08.28
☒ 7	Broadband Horn Antenna	Schwarzbeck	BBHA 9120D	452	2024.08.29	2027.08.28
☒ 8	Horn Antenna 15-40GHz	SCHWARZBECK	BBHA9170	BBHA91703 67	2024.08.28	2027.08.27
☒ 9	6dB Attenuator	JFW	50FPE-006	4360846-949-1	2024.09.24	2025.09.23
☒ 10	RE Software	EZ	EZ-EMC_RE	Ver.AIT-03A	N/A	N/A

RF Conducted measurement						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
☒ 1	Spectrum Analyzer	Agilent	N9020A	MY53421570	2024.09.25	2025.09.24
☐ 2	Power Sensor	Agilent	8481A	MY41097697	2024.09.25	2025.09.24
☐ 3	Vector Signal Generator	Agilent	N5182A	MY50143009	2024.09.25	2025.09.24
☐ 4	Analog signal generator	Agilent	E8257	MY51554256	2024.09.25	2025.09.24
☐ 5	Const Temp. & Humidity Chamber	Eastlab	YH-HW-408L	23051109	2024.09.24	2025.09.23
☐ 6	Wideband Radio communication tester	R&S	CMW500	1201.0002K50	2024.09.24	2025.09.23
☒ 7	DC power supply	ZHAOXIN	RXN-305D-2	28070002559	2024.09.24	2025.09.23
☐ 8	RF Test box	TST	TSTPASS	21033016	2024.09.25	2025.09.24
☐ 9	RF Software	TST	TSTPASS	Version 2.0	N/A	N/A
☐ 10	RF Software	Cesheng	WCN Regulary	Ver 25.03.2901	N/A	N/A

Note: ☐ is not applicable in this Test Report. ☒ is applicable in this Test Report.

3 TEST CONDITIONS AND RESULTS

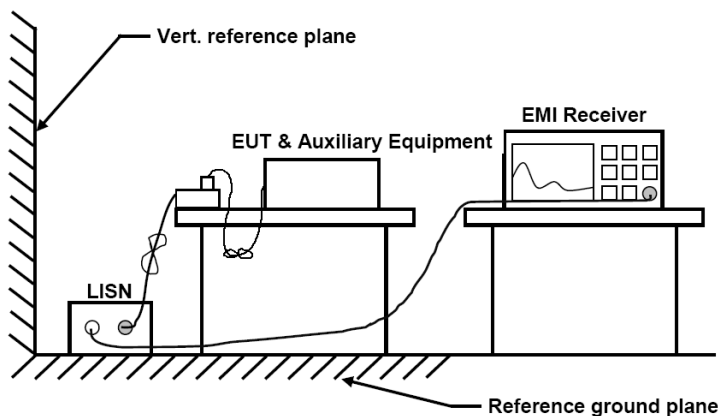
3.1 Conducted Emissions Test

LIMIT

Frequency range (MHz)	Limit (dBuV)	
	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 CONFIGURATION



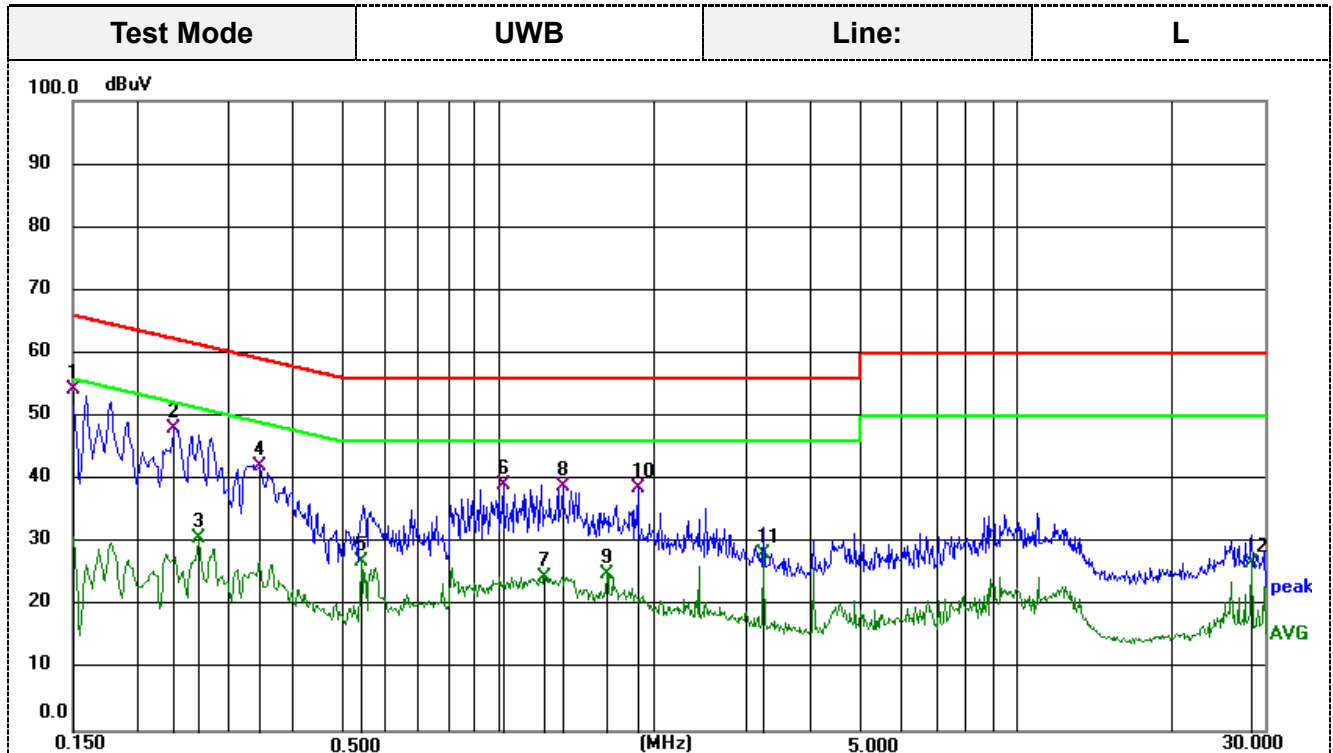
TEST PROCEDURE

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 C63.10:2020.
2. Support equipment, if needed, was placed as per ANSI C63.10:2020.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10:2020.
4. The 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.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST RESULTS

Remark:

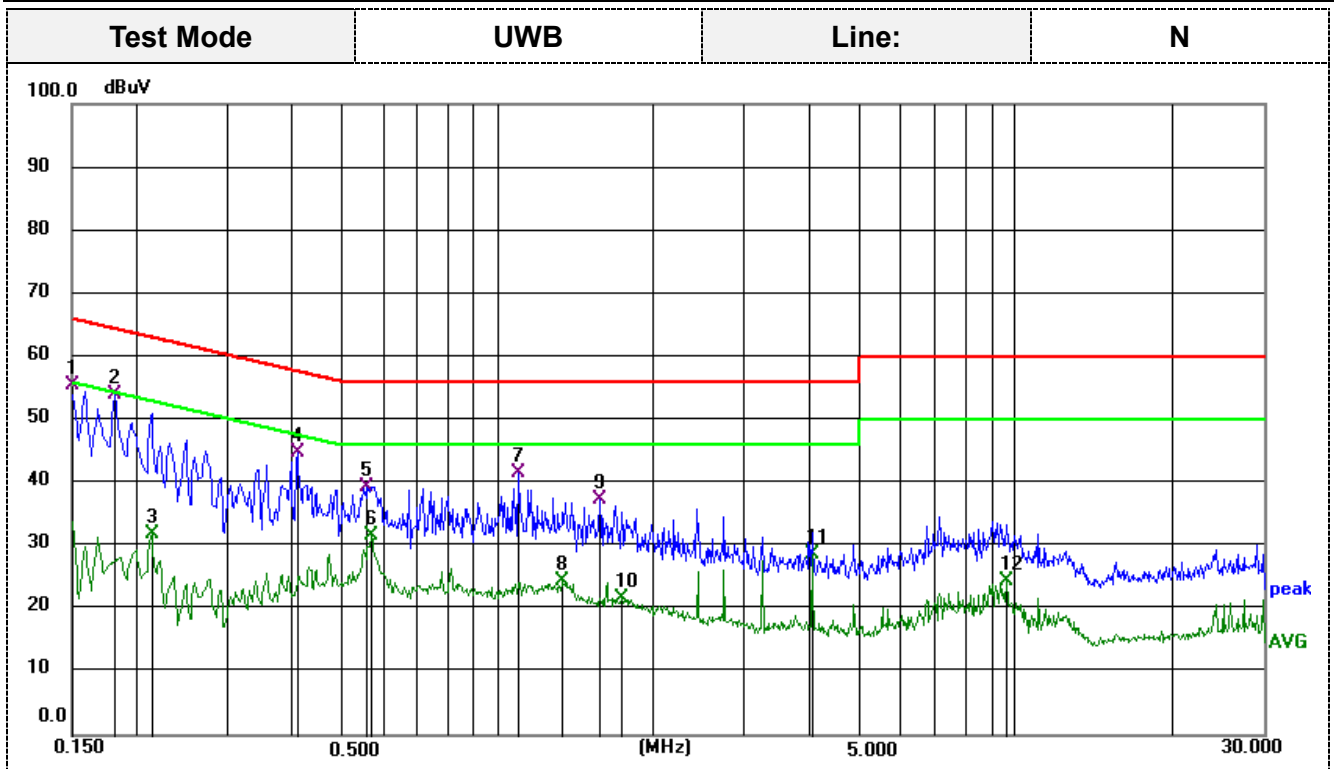
- Both 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz power supply have been tested, only the worst result of 120 VAC, 60 Hz was reported as below:
- Both CH05 and CH09 were tested and recorded worst at CH05.



Remark: Correct Factor = Insertion loss of LISN + Cable loss + Insertion loss of Pulse Limiter;
Measurement Result = Reading Level + Correct Factor;

Margin = Measurement Result- Limit

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	41.92	12.29	54.21	66.00	-11.79	QP
2	0.2353	37.06	11.06	48.12	62.26	-14.14	QP
3	0.2625	19.62	11.07	30.69	51.35	-20.66	AVG
4	0.3435	30.90	11.06	41.96	59.12	-17.16	QP
5	0.5413	15.93	11.06	26.99	46.00	-19.01	AVG
6	1.0182	28.06	11.07	39.13	56.00	-16.87	QP
7	1.2255	13.47	11.06	24.53	46.00	-21.47	AVG
8	1.3245	27.68	11.06	38.74	56.00	-17.26	QP
9	1.6170	13.98	11.05	25.03	46.00	-20.97	AVG
10	1.8510	27.60	11.04	38.64	56.00	-17.36	QP
11	3.2370	17.14	11.02	28.16	46.00	-17.84	AVG
12	28.3290	14.54	12.20	26.74	50.00	-23.26	AVG



Remark: Correct Factor = Insertion loss of LISN + Cable loss + Insertion loss of Pulse Limiter;

Measurement Result = Reading Level + Correct Factor;

Margin = Measurement Result - Limit

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	43.32	12.18	55.50	66.00	-10.50	QP
2	0.1814	43.10	10.98	54.08	64.42	-10.34	QP
3	0.2130	20.83	10.98	31.81	53.09	-21.28	AVG
4	0.4062	33.90	10.99	44.89	57.73	-12.84	QP
5	0.5594	28.45	11.00	39.45	56.00	-16.55	QP
6	0.5685	20.63	11.00	31.63	46.00	-14.37	AVG
7	1.0992	30.57	11.00	41.57	56.00	-14.43	QP
8	1.3332	13.35	10.99	24.34	46.00	-21.66	AVG
9	1.5765	26.33	10.99	37.32	56.00	-18.68	QP
10	1.7295	10.77	10.99	21.76	46.00	-24.24	AVG
11	4.0470	17.45	11.09	28.54	46.00	-17.46	AVG
12	9.5550	13.34	11.01	24.35	50.00	-25.65	AVG

3.2 Radiated Emissions

Limit

- (1) The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following RMS average limits based on measurements using a 1 MHz resolution bandwidth.

Frequency in MHz	EIRP in dBm	Radiated (dB μ V/m)	Measurement distance(m)
960-1610	-75.3	20	3
1610-1990	-63.3	32	3
1990-3100	-61.3	34	3
3100-10600	-41.3	54	3
Above 10600	-61.3	34	3

Note: EIRP convert to dB μ V/m follow the formula $EIRP = E_{meas} + 20\log(d_{meas}) - 104.7$ according to ANSI C63.10-2020.

- (2) In addition to the radiated emission limits specified in the table in paragraph (d) of this section, transmitters operating under the provisions of this section shall not exceed the following RMS average limits when measured using a resolution bandwidth of no less than 1 kHz.

Frequency in MHz	EIRP in dBm	Radiated (dB μ V/m)	Measurement distance(m)
1164-1240	-85.3	10	3
1559-1610	-85.3	10	3

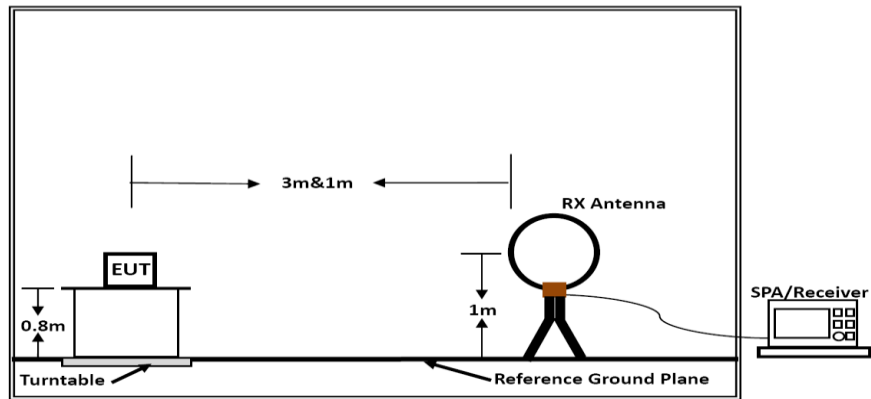
Note: EIRP convert to dB μ V/m follow the formula $EIRP = E_{meas} + 20\log(d_{meas}) - 104.7$ according to ANSI C63.10-2020.

- (3) Radiated emissions at or below 960 MHz shall not exceed the emission levels in §15.209.

Frequency (MHz)	Distance (Meters)	Radiated (dB μ V/m)	Radiated (μ V/m)
0.009-0.49	3	$20\log(2400/F(KHz)) + 40\log(300/3)$	$2400/F(KHz)$
0.49-1.705	3	$20\log(24000/F(KHz)) + 40\log(30/3)$	$24000/F(KHz)$
1.705-30	3	$20\log(30) + 40\log(30/3)$	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200

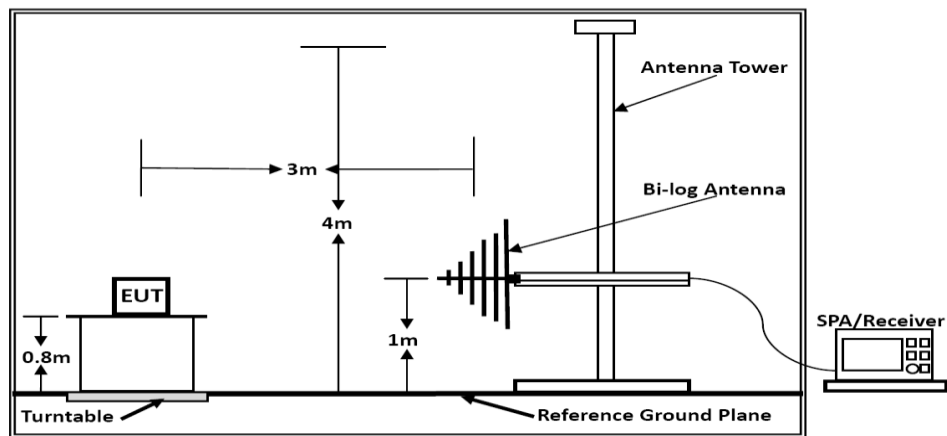
TEST CONFIGURATION

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



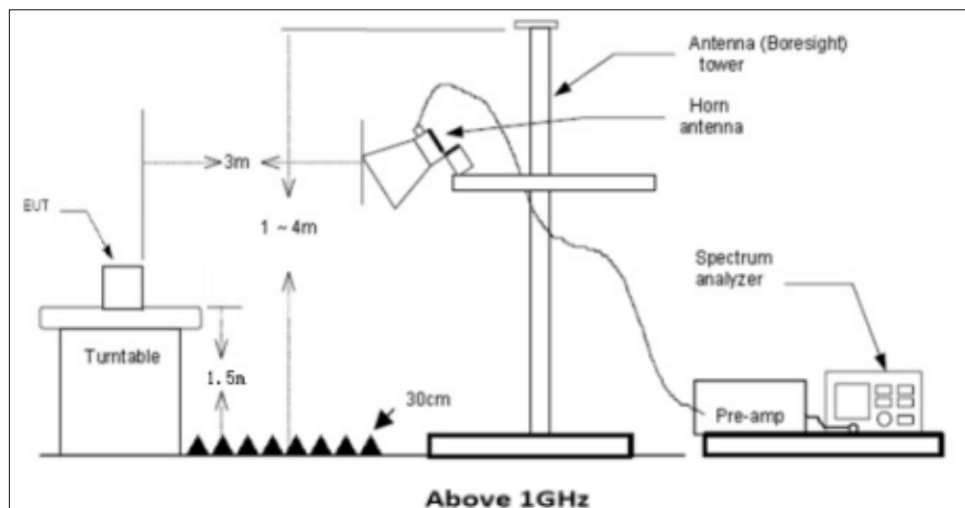
Below 30MHz

(B) Radiated Emission Test Set-Up, Frequency below 1000MHz



Below 1GHz

(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



Above 1GHz

Test Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane when testing frequency range 9 KHz –1GHz; the EUT was placed on a turn table which is 1.5m above ground plane when testing frequency range above 1GHz.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360° to acquire the highest emissions from EUT.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measurements have been completed.
5. Radiated emission test frequency band from 9KHz to 40GHz.
6. The distance between test antenna and EUT as following table states:

Test Frequency range	Test Antenna Type	Test Distance
9KHz-30MHz	Active Loop Antenna	3
30MHz-1GHz	Ultra-Broadband Antenna	3
1GHz-18GHz	Double Ridged Horn Antenna	3
Above 18GHz	Horn Antenna	1

7. Setting test receiver/spectrum as following table states:

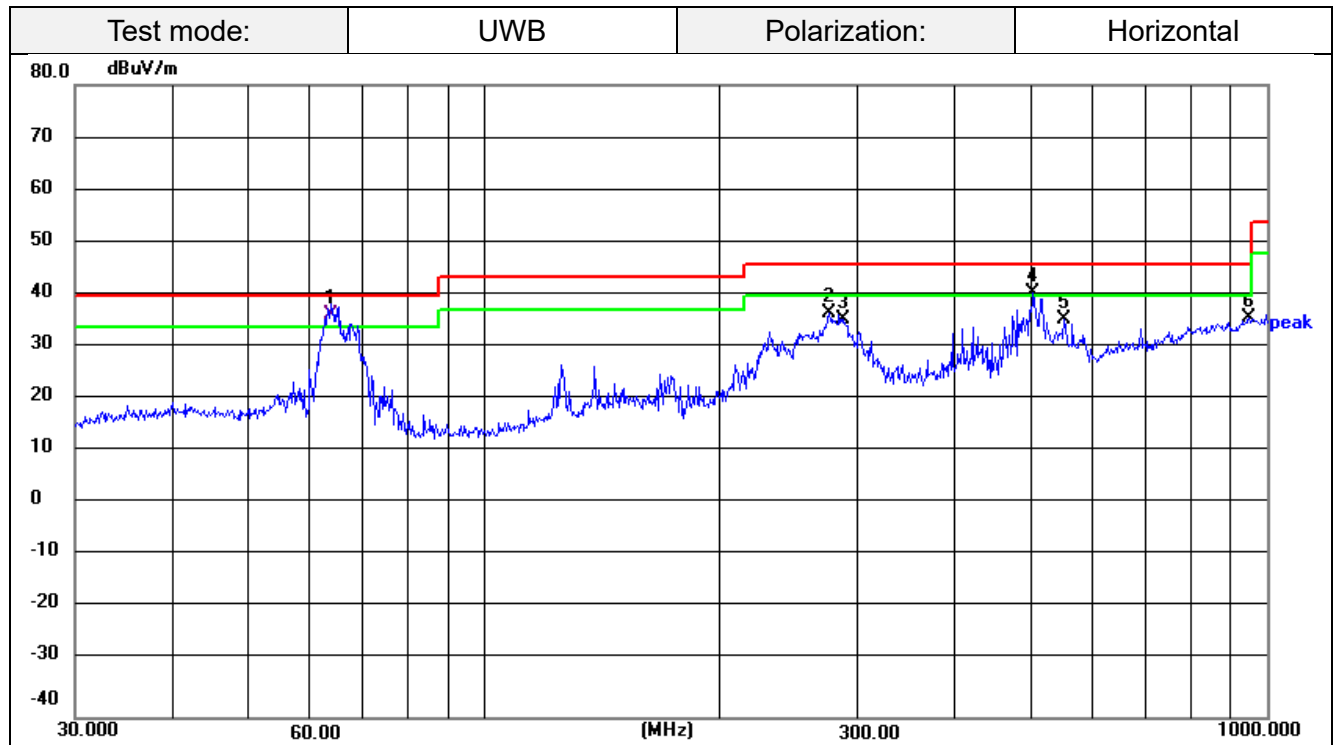
Test Frequency range	Test Receiver/Spectrum Setting	Detector
9KHz-150KHz	RBW=200Hz/VBW=3KHz, Sweep time=Auto	QP
150KHz-30MHz	RBW=9KHz/VBW=100KHz, Sweep time=Auto	QP
30MHz-960MHz	RBW=120KHz/VBW=1000KHz, Sweep time=Auto	QP
960MHz-1610MHz	RBW=1MHz/VBW=3MHz, Sweep time=Auto	RMS
1610 MHz -1990 MHz	RBW=1MHz/VBW=3MHz, Sweep time=Auto	RMS
1990 MHz -3100 MHz	RBW=1MHz/VBW=3MHz, Sweep time=Auto	RMS
3100 MHz -10600 MHz	RBW=1MHz/VBW=3MHz, Sweep time=Auto	RMS
Above 10600 MHz	RBW=1MHz/VBW=3MHz, Sweep time=Auto	RMS
1164-1240	RBW=1KHz/VBW=3KHz, Sweep time=Auto	RMS
1559-1610	RBW=1KHz/VBW=3KHz, Sweep time=Auto	RMS

TEST RESULTS

Remark:

1. Radiated emission test from 9 KHz to 10th harmonic of fundamental was verified, and no emission found except system noise floor in 9 KHz to 30MHz and not recorded in this report.
2. For below 1GHz test, Both CH05 and CH09 were tested and recorded worst at CH05.

For 30MHz-1GHz



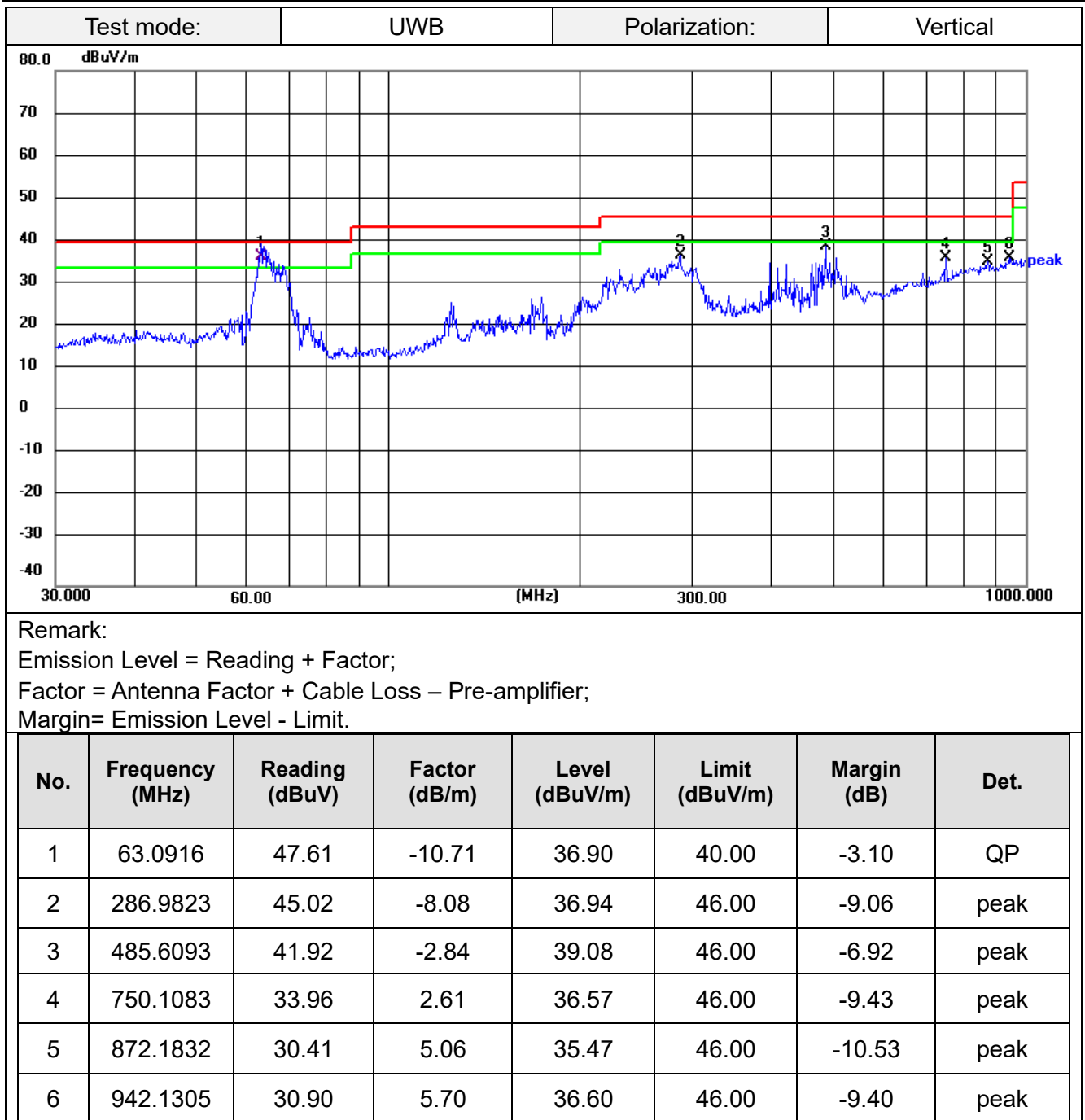
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	63.7588	47.27	-10.77	36.50	40.00	-3.50	QP
2	276.1235	45.49	-8.69	36.80	46.00	-9.20	peak
3	287.9904	43.56	-8.06	35.50	46.00	-10.50	peak
4	502.9395	42.98	-2.46	40.52	46.00	-5.48	peak
5	550.9480	38.26	-2.76	35.50	46.00	-10.50	peak
6	948.7610	29.92	5.89	35.81	46.00	-10.19	peak



Above 960MHz

Test Channel:		CH05		Polarity:	Horizontal	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
1164MHz≤f≤1240MHz & 1559MHz≤f≤1610MHz						
1183.00	15.85	-17.15	-1.30	10	-11.30	AVG
1196.90	14.39	-17.35	-2.96	10	-12.96	AVG
1225.95	16.61	-17.1	-0.49	10	-10.49	AVG
1569.00	17.12	-16.59	0.53	10	-9.47	AVG
1590.50	14.43	-16.43	-2.00	10	-12.00	AVG
1608.00	18.76	-16.31	2.45	10	-7.55	AVG
F>960MHz(except for above frequency range)						
1115.35	32.87	-16.17	16.70	20	-3.30	AVG
1531.75	33.10	-16.86	16.24	20	-3.76	AVG
1872.65	36.63	-16.01	20.62	32	-11.38	AVG
2857.45	34.56	-11.22	23.34	34	-10.66	AVG
4377.45	23.19	-7.2	15.99	54	-38.01	AVG
6785.00	16.45	-1.37	15.08	54	-38.92	AVG
13912.75	21.29	6.12	27.41	34	-6.59	AVG

Test Channel:		CH05		Polarity:	Vertical	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
1164MHz≤f≤1240MHz & 1559MHz≤f≤1610MHz						
1168.05	15.05	-16.93	-1.88	10	-11.88	AVG
1203.40	15.37	-17.36	-1.99	10	-11.99	AVG
1221.70	16.97	-17.15	-0.18	10	-10.18	AVG
1563.30	18.01	-16.63	1.38	10	-8.62	AVG
1589.25	14.07	-16.44	-2.37	10	-12.37	AVG
1602.45	18.44	-16.35	2.09	10	-7.91	AVG
F>960MHz(except for above frequency range)						
1072.85	24.05	-16.2	7.85	20	-12.15	AVG
1361.05	25.49	-15.86	9.63	20	-10.37	AVG
1929.00	35.06	-15.16	19.90	32	-12.10	AVG
3012.25	33.69	-11.62	22.07	34	-11.93	AVG
5849.40	19.26	-4.02	15.24	54	-12.69	AVG
6785.20	17.00	-1.37	15.63	54	-8.66	AVG
11841.80	20.00	5.23	25.23	34	-8.77	AVG

Test Channel:		CH09		Polarity:	Horizontal	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
1164MHz≤f≤1240MHz & 1559MHz≤f≤1610MHz						
1183.30	14.39	-17.15	-2.76	10	-12.76	AVG
1197.90	15.32	-17.36	-2.04	10	-12.04	AVG
1225.35	16.89	-17.11	-0.22	10	-10.22	AVG
1560.25	16.14	-16.65	-0.51	10	-10.51	AVG
1587.50	16.62	-16.45	0.17	10	-9.83	AVG
1602.00	16.80	-16.35	0.45	10	-9.55	AVG
F>960MHz(except for above frequency range)						
1042.50	33.57	-16.48	17.09	20	-2.91	AVG
1306.90	31.37	-16.21	15.16	20	-4.84	AVG
1738.30	35.31	-16.07	19.24	32	-12.76	AVG
2210.60	35.65	-13.56	22.09	34	-11.91	AVG
3934.50	25.05	-9.29	15.76	54	-38.24	AVG
8326.35	16.86	0.85	17.71	54	-36.29	AVG
11756.05	23.51	4.26	27.77	34	-6.23	AVG

Test Channel:		CH09		Polarity:	Vertical	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
1164MHz≤f≤1240MHz & 1559MHz≤f≤1610MHz						
1185.95	15.30	-17.19	-1.89	10	-11.89	AVG
1189.65	15.40	-17.24	-1.84	10	-11.84	AVG
1221.00	16.76	-17.16	-0.40	10	-10.40	AVG
1566.30	18.25	-16.61	1.64	10	-8.36	AVG
1588.40	16.50	-16.45	0.05	10	-9.95	AVG
1594.80	17.65	-16.4	1.25	10	-8.75	AVG
F>960MHz(except for above frequency range)						
1060.55	23.95	-16.31	7.64	20	-12.36	AVG
1520.05	25.33	-16.94	8.39	20	-11.61	AVG
1961.25	35.30	-14.53	20.77	32	-11.23	AVG
2937.35	36.16	-11.16	25.00	34	-9.00	AVG
4572.60	24.83	-7.5	17.33	54	-11.73	AVG
8266.85	17.55	0.94	18.49	54	-6.93	AVG
13198.75	20.23	6.05	26.28	34	-7.72	AVG

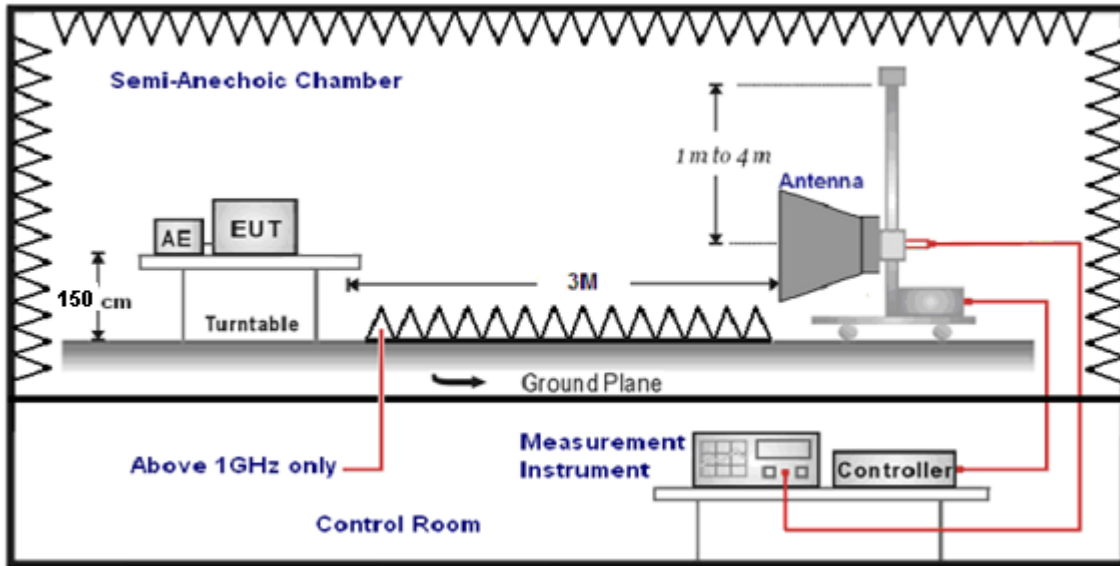
3.3 Peak Power

LIMITS

The peak EIRP limit is 0 dBm(RBW=50MHz).

If a resolution bandwidth other than 50 MHz is Employed, the peak EIRP limit shall be $20 \log (RBW/50)$ dBm where RBW is the resolution bandwidth in megahertz that is employed.

TEST CONFIGURATION



TEST PROCEDURE

1. Set the EUT in Continuous transmitting mode
2. The EUT was placed on a turn table which is 1.5m above ground plane.
3. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360° to acquire the highest emissions from EUT.
4. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
5. Setting test receiver/spectrum as following table states:

Test Frequency range	Test Receiver/Spectrum Setting	Detector
6240-6739MHz 7737-8237MHz	RBW=1MHz/VBW=3MHz Sweep time=Auto	Peak

TEST RESULTS

CH05

Frequency(MHz):		6240-6739MHz		Polarity:	Horizontal	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
6334	57.15	-4.15	53.00	61.23	-8.23	PEAK

Frequency(MHz):		6240-6739MHz		Polarity:	Vertical	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
7869.00	58.67	-4.15	54.52	61.23	-6.71	PEAK

CH09

Frequency(MHz):		7737-8237MHz		Polarity:	Horizontal	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
8141	52.80	-0.27	52.53	61.23	-8.70	PEAK

Frequency(MHz):		7737-8237MHz		Polarity:	Vertical	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
8141	53.20	-0.27	52.93	61.23	-8.30	PEAK

Note:

1. EIRP limit = $20\log(1\text{MHz}/50\text{MHz}) = -33.97\text{dBm}$.

2. EIRP limit is convert to dBμV/m follow the formula $\text{EIRP} = E_{\text{meas}} + 20\log(d_{\text{meas}}) - 104.7$ according to ANSI C63.10-2020.

3.4 UWB bandwidth

Limit

The UWB bandwidth of a device operating under the provisions of this section must be contained between 3100 MHz and 10,600 MHz.

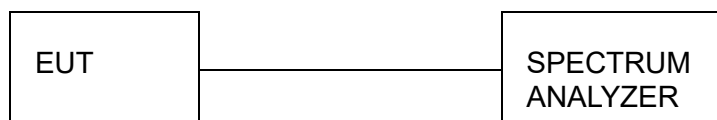
The upper boundary is designated f_H and the lower boundary is designated f_L . The frequency at which the highest radiated emission occurs is designated f_M . Center frequency. The center frequency, f_C , equals $(f_H + f_L)/2$. Per section 15.519(b), the UWB bandwidth of a UWB system operating under the provisions of this section must be contained between 3100 MHz and 10600MHz.

Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

The -10dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 10dB. The UWB Bandwidth is measured at the 10 dB point($f_H - f_L$).

Test Configuration

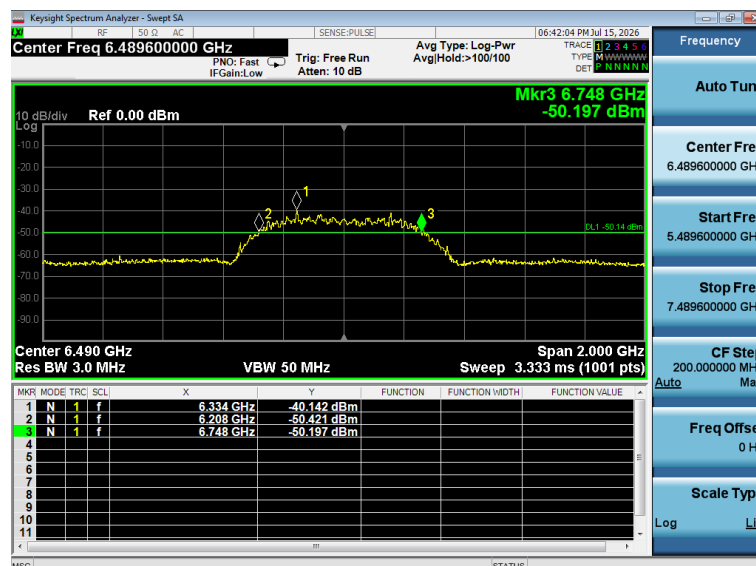


Test Results

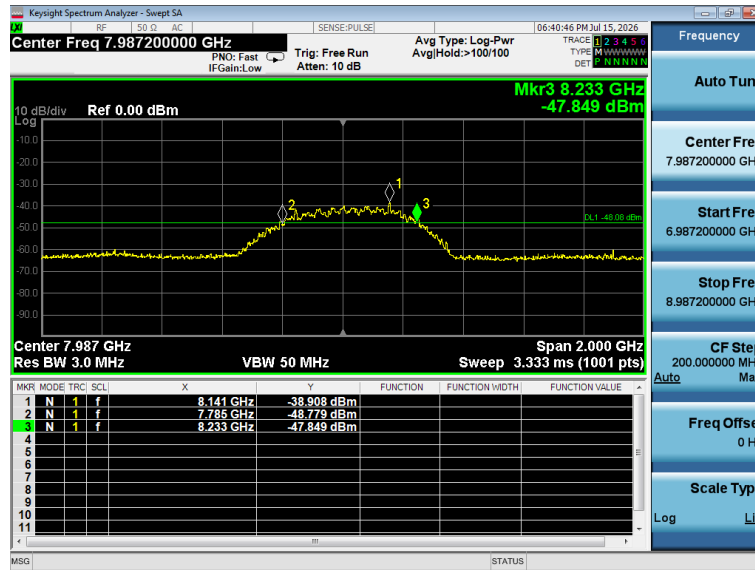
Channel	f_M (MHz)	f_L (MHz)	f_H (MHz)	f_C (MHz)	-10dB Bandwidth (MHz)	Limit	Result
CH05	6334	6208	6748	6478	540	Within 3100 MHz-10,600 MHz	Pass
CH09	8141	7785	8233	8009	448	Within 3100 MHz-10,600 MHz	Pass

Test plot as follows:

CH05



CH09



Note: The EUT will stop working after one cycle of normal operation, and will not work again within 10s.

3.6 Antenna Requirement

Standard Applicable

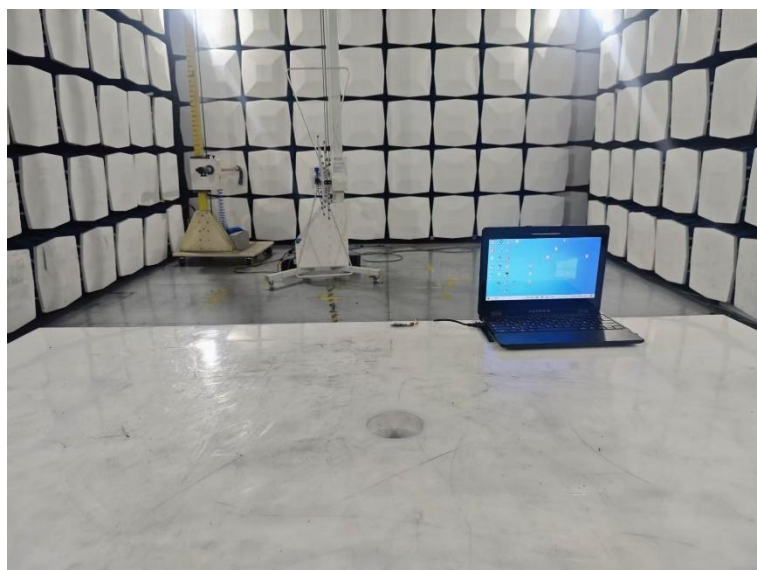
For intentional device, according to FCC 47 CFR Section 15.203:

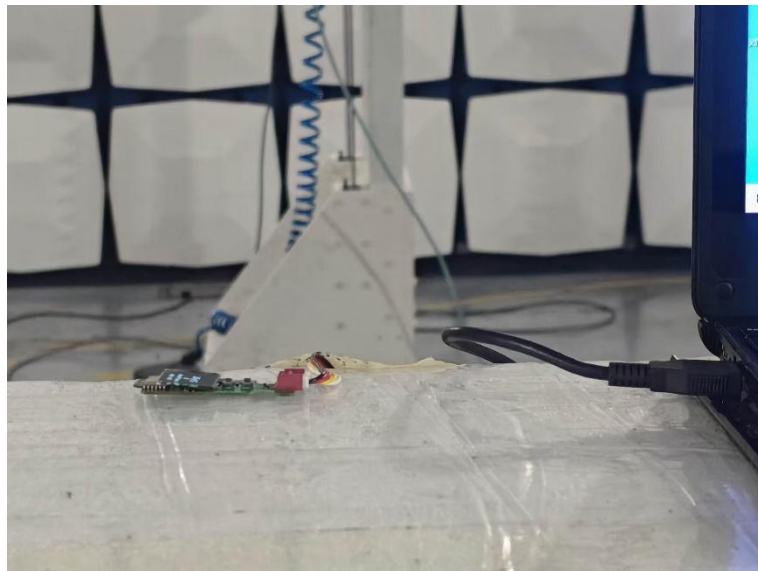
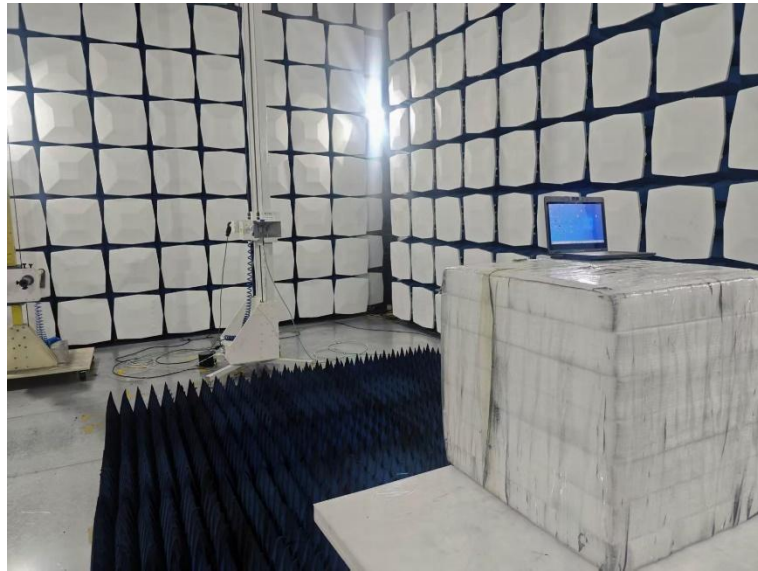
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Test Result:

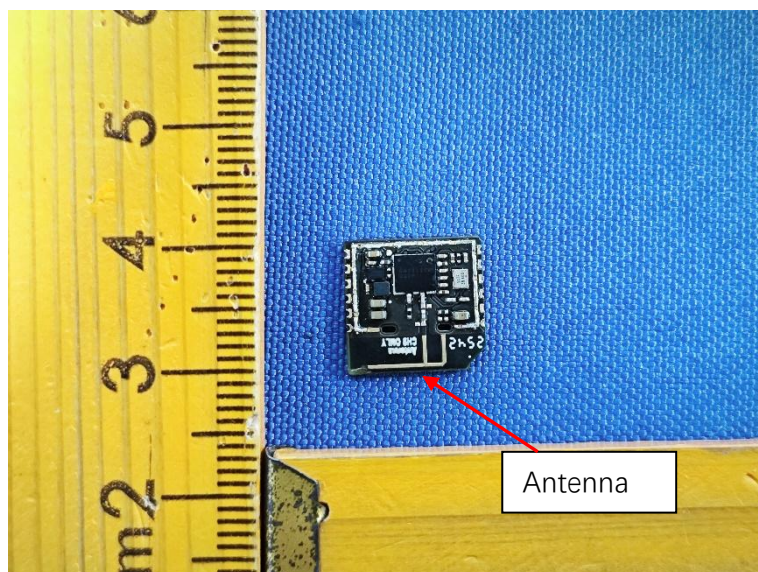
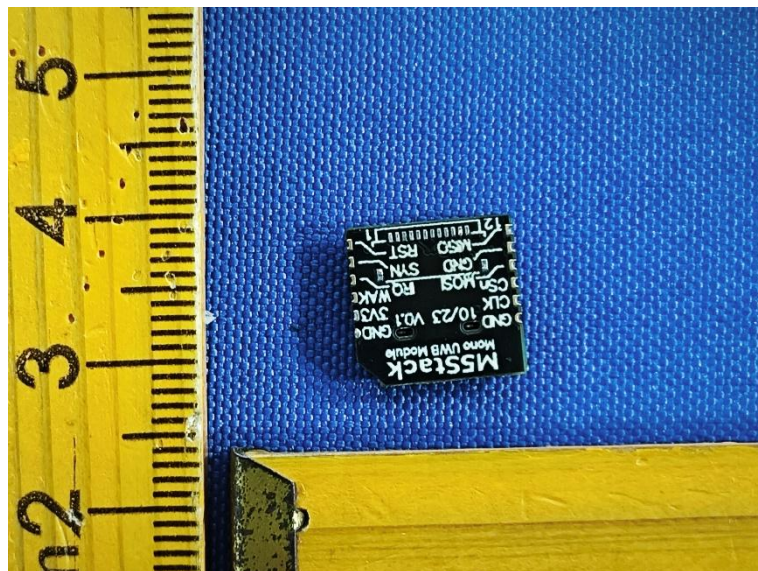
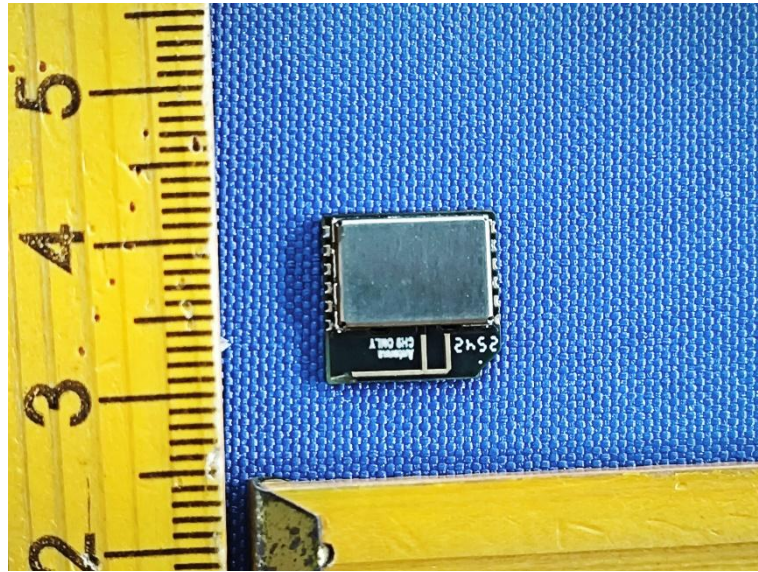
The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -2.10dBi.

4 Test Setup Photographs of EUT





5 Photos of EUT



***** End of Report *****